



MEMORANDUM

DATE: March 20, 2023
TO: Honorable Mayor and City Councilmembers
FROM: Dave Perrault, City Administrator
SUBJECT: Assisted Hearing Technology

| | | |
|------------------|----------------|-----------------|
| Budgeted Amount: | Actual Amount: | Funding Source: |
| N/A | \$8,586.42 | Cable Fund |

For Council Consideration

Council should consider providing direction on whether or not to move forward with assisted hearing technology modifications to the City Council Chambers.

Background

Staff was previously directed by the City Council to move forward with securing a proposal to add a T-Coil System to the City Council Chambers to assist people with T-Coil enabled hearing aids. The cost for the implementation was estimated around \$25,000. Since that worksession, Staff had worked with NineNorth on having Electronic Design review the Chambers and put together an actual contract for work. During their review, they noted a “hum” in the Council Chambers that they cannot mitigate. This hum would likely interfere with a T-Coil system and is no longer their recommendation.

As a secondary option, they have proposed a Wi-Fi system. This system would work in tandem with someone’s smart phone, but a user could also use a T-Coil Neck Loop that would be compatible with the system (example below). A normal user would need to download the specific app for the system used in the Council Chambers, the signal would be transmitted from the Wi-Fi system to the phone and from the phone to the hearing aids. Or if a person had T-Coil hearing aids, they could wear the neck loop and pick up the audio.



A third option would be to use existing equipment, and anyone could request a hip-pack to be used during Council meetings. Although we do have a sign noting hearing equipment is available in the Chambers, we could make a larger, more obvious sign alerting people that equipment is available upon request.

It should be noted that this equipment is only facilitating audio that is directly going into microphones on the dais or elsewhere in the chambers, normal conversations held in the chambers would not be picked up by this system (or any other system).

Budget Impact

The revised proposal for the Wi-Fi system is \$8,586.42, this amount would be paid by the Cable Fund, and is not currently budgeted. Future changes are going to be needed in the fund regardless if this project moves forward or not to keep the fund solvent.

Attachment

Attachment A: Electronic Design Proposal

PROPOSAL

Arden Hills Council Chamber Assisted Listening System

City of Arden Hills

1245 Hwy 96 W
Arden Hills, MN 55112

Project #: 6-Z-9004

Revision: 0

Modified: 2/16/2023

Presented By:

Electronic Design Company

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www.EDCSOLUTIONS.com

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SCOPE OF WORK

Electronic Design Company (EDC) is pleased to provide the following quote.

The sections below outline our proposed design assumptions, scope of work, responsibilities of both EDC and the facility, project costs and our general terms and conditions.

Thank you for considering Electronic Design Company for your project. We look forward to working with you on this project and in the future.

Scope of Work:

- EDC to provide, configure and install a Wi-Fi-based assistive listening system for the council chambers.
 - A streaming server and network switch will be installed in the equipment rack in the AV control room adjacent to the chambers.
 - A Wi-Fi access point will be mounted on the wall in the chambers, on the wall that is shared with the AV control room. This can be mounted high up, above the dropped ceiling level so that it is out of sight (for the most part). A single CAT6 cable will be routed from this device back to the network switch in the equipment rack.
 - The streaming server will be connected to the network switch and have one input from the client's existing Symetrix DSP. This output will be configured and controlled by the client, as they have full access and programming capability to the DSP.
 - The access point will be configured for the task and a name for the Wi-Fi network that is created will be dictated by the client (e.g., "Arden Hills Council Audio").
 - Four Wi-Fi receivers will be provided and connected to the streaming audio service. These receivers will each have a traditional set of headphones and a neck-loop for using it with T-coil hearing aids.
 - Training will be held with the client's representatives to instruct them on operation, basic troubleshooting, and maintenance of the system.

* Price Includes Accessories

Design Exceptions / Notes:

- Previous information indicated a hum coming from an electrical source. EDC investigated the hum but could not track it to the source. Best advice is to install a Wi-Fi system that would not be affected by this electrical interference. Cost of tracking down the source of the hum is hard to estimate and could become costly.
- All network devices are programmed and fully tested at EDC on a dedicated and self-contained network using managed network parameters as provided by the Owner prior to installation. Additionally, EDC will provide all relevant network settings to the Owner's IT department if the newly provided audiovisual system is to reside on or is converged with the Owner's network. EDC is not responsible for troubleshooting the Owner's network or for delays due to integration issues beyond the project's contracted time allotment. If additional time is required, the Owner will be charged at the current hourly rates in the form of a change order.
- It should be assumed that any equipment not designed by the manufacturer for mounting to the building structure requires stamped rigging drawings from a certified structural engineer. Unless otherwise stated, Electronic Design Company (EDC) has not included stamped equipment rigging drawings in this proposal and they are the responsibility of the Owner. However, EDC can facilitate in the design of a rigged system or provide drawings at an additional cost, upon request.

Electronic Design Company shall:

- Provide and install all equipment as designed.
- Provide and install all wire, except ground wire.
- Provide all final connections at system head-end.
- Perform check-out and testing of system being installed.
- Provide the owner with manuals and instruction.
- Provide five-year warranty on parts and labor.

Client or their Subcontractors shall:

- Provide and install all ground wire.
- Provide analog audio output from the DSP to act as input to the streaming audio server. Client will be responsible for configuring this output within the DSP.
- Furnish electricity to head-end equipment as specified.
- Electrical service for operation of this system, as well as conduit and high voltage cable, is NOT included in this quotation.

Electronic Design Company will not be responsible for lost time or delays due to other parties or failure to gain access to work areas or systems. Unless other hours have been negotiated, all work will be completed during the normal business hours of 7:00 am and 3:30 pm; with the exception of normal holidays. Scheduling is subject to available personnel and product availability. Extra charges will be incurred by the customer if the project needs to be completed sooner than what is stated in the contract.

* Price Includes Accessories

Terms & Conditions:

Price is good for 30 days and includes applicable taxes. Price is F.O.B. job site. Terms are detailed on project summary page.

The design and/or intent of the above listed system specification is owned by Electronic Design Company and will not be disclosed to any party other than those intended by Electronic Design Company. Disclosure of this design/intent will subject the proprietor to consultant fees equivalent of 10% of the above listed design/build quotation. All materials guaranteed to be as specified. All work to be completed in a competent manner according to standard practices. Any alteration or deviation written or verbal from the above specifications involving extra costs will be executed and will become an extra charge over and above the quotation. All agreements are contingent upon strikes, accidents, or delays beyond our control. Thank you for considering Electronic Design Company (EDC) for this project, we are pleased to be of service to your organization.

* Price Includes Accessories

WiFi Option

- (1) EDC : Engineering
Engineering
- (1) EDC : Programming
Programming
- (1) EDC : Project Manager
Project Management
- (1) EDC : Training
Training
- (1) Listen Technologies : LA-167
Replacement Cushions for Stereo Headphones (10)
- (1) Listen Technologies : LA-304
Assistive Listening Notification Signage Kit
- (1) Listen Technologies : LW-100P-02
Listen EVERYWHERE 2 Channel Wi-Fi Audio Server
- (4) Listen Technologies : LWR-1020
Listen EVERYWHERE Wi-Fi Audio Receiver 1020
- (1) Luxul : SW-100-04P
4 Port Unmanaged PoE+ Switch
- (1) Luxul : XAP-810
High Power AC1200 Dual Band Wireless access points
- (1) Travel :
Travel Time and Expenses

* Price Includes Accessories

PROPOSAL

SUMMARY

Project Grand Total: \$8,586.42

Client: Patrick Cook

Date

Contractor: Electronic Design Company

Date

* Price Includes Accessories