

REQUEST FOR PROPOSAL

The City of Mounds View (“City”) is soliciting proposals for Professional Services to update, replace, and add audio, video, and control components to the Council Chambers facilities used by the members of the City Council, Commissions, and staff. The current system was reassembled in 2005 with fresh cabling after a remodel of City Hall, although most of the electronics are from 1998 or older. While a few pieces of equipment have been upgraded over the past few years, the equipment has degraded and shows signs of wear and tear.

This RFP will more clearly define the requested services and the selection procedure for the application. For your convenience, we have briefly outlined the procedure below:

ANTICIPATED PROJECT TIMELINE

RFP available on the City’s website or via email	September 19, 2018
Notification of Interest	Strongly Encouraged
Open House for prospective contractors	September 26, 2018 9:00 a.m.–12:00 p.m.
Open House for prospective contractors	September 27, 2018 1:00 p.m.–4:30 p.m.
Deadline for written questions regarding RFP	October 2, 2018, 12:00 p.m.
City’s response to questions due to Contractors	October 8, 2018, 5:30 p.m.
RFP Proposal Due Date	October 25, 2018, 4:30 p.m.
Potential interviews of considered contractors	October 29–November 2, 2018
Request for City Council to award contract	November 13, 2018
Project Completion Date–Estimated	January 31, 2019

If you have any questions regarding this schedule, or the contents of the RFP package, please do not hesitate to contact Vanessa Van Alstine, Cable Television Coordinator at (763) 717-4045 or vanessa.van.alstine@moundsviewmn.org.

CITY COUNCIL CHAMBER AUDIO/VIDEO SYSTEM UPDATE

DUE DATE: October 25, 2018 by 4:30 p.m.

LATE PROPOSALS WILL NOT BE ACCEPTED

SUBMISSION REQUIREMENTS

- Submit proposals electronically, via email to Finance Director Mark Beer, mark.beer@moundsviewmn.org. Please use the subject line “RFP – Mounds View AV Project.”
- All documents submitted shall be in PDF format.
- Proposals must bear electronic signatures. (Scanned signatures are acceptable)
- If your proposal is in excess of 10 MB and undeliverable, please make appropriate arrangements to deliver an electronic copy via thumb drive. No paper copies will be accepted.

SUBMISSION RESTRICTIONS

- No oral, text, fax, or telephone proposals or modifications will be considered.
- Proposals received after the established deadline will not be accepted.

QUESTIONS OR REQUESTS FOR CLARIFICATION

- Any request for clarification or other questions concerning this RFP or attachments must be submitted no later than October 2, 2018, at 12:00 p.m. via e-mail to vanessa.van.alstine@moundsviewmn.org.
- All responses will be e-mailed to Contractors who have provided notification of interest by 5:30 p.m. on October 8, 2018.

NOTIFICATION OF INTEREST

Although not required, it is suggested to send a Notification of Interest to the City's project contact, Cable Television Coordinator Vanessa Van Alstine, via email to vanessa.van.alstine@moundsviewmn.org. Building plans, any addendum, and responses to questions will be sent to Contractors who have provided Notification of Interest.

ABOUT THE CITY

The City of Mounds View, with a population of 13,327 and home to 5,211 households, is a third ring suburb just 10 miles north of Minneapolis and St. Paul in Ramsey County, neighbors to Blaine, Arden Hills, New Brighton, Fridley, and Spring Lake Park. Located at the juncture of Interstate 35W and Mounds View Boulevard, Mounds View is known for large wooded residential lots and life-cycle housing in the highly esteemed Mounds View School District.

1. SYSTEM DESCRIPTION

A. Functions in the Chambers

i. Meeting at dais

Meetings at the dais are the traditional type of government meetings with the Council or Commission members, as well as some staff, sitting at the dais. The dais has nine (9) seats, each with a microphone but no individual monitors. Members of the audience and some staff present from the podium. A document camera mounted on the ceiling shows the field of the side table of the podium. Cable at the dais for a connection to a laptop (VGA, 3.5mm audio, and HDMI). Monitors on each side wall that can show document camera, laptop, or program video. Sound reinforcement - dais, audience, and laptop. Ceiling microphones to cover three (3) areas - audience left and right, and awards. Try to get people to use microphones, but these are places that things happen, want to be able to hear events if they take place.

Examples of meetings at the dais include City Council; Economic Development Authority Meeting; Economic Development Commission Meeting; Parks, Recreation and Forestry Commission Meeting; and Planning Commission Meeting.

ii. Round table

There are also meetings held in the round. The chairs are moved to the side of the room and tables are brought in. The set up varies depending on the meeting and expected number of participants. The table-base gooseneck microphones will be moved from the dais to the tables. A few boundary mics could be used to fill in parts of the table in a large set up. A cable needs to reach any spot at the table for connection to a laptop (VGA, 3.5mm audio, and HDMI). Monitors on each side wall that can show document camera, laptop, or program video. Sound reinforcement - microphones for the audience, and laptop.

Examples of round table meetings include City Council Work Sessions, Charter Commission Meeting, Comprehensive Plan Taskforce Meeting, and some Planning Commission Meetings.

iii. Presentation

A few times a year there are large public presentations. Typically the chairs have been turned to face the side wall to see the existing screen. The podium is moved next to the screen. In the case of the Town Hall meeting, Council and staff are seated at the dais and may speak from there. Presenters are at the podium. There is a wireless microphone for audience questions, which will complicate sound reinforcement.

Examples include the Town Hall Meeting and Neighborhood Presentations. There are also Candidates Forums every two (2) years that have had a variety of set ups.

iv. Training

The room is used in a variety of ways by staff. These events are not televised, but there should be easy access to presentation features. A laptop connected to the first monitor mirrors to the second without the user having to fiddle with anything. Staff should be able to select from the document camera, laptop, or a camera to appear on the screen. Sometimes a VoIP telephone is brought in and plugged into an existing network jack for teleconferencing. We have not been planning for wireless connection of laptops.

v. Interviews

The Council Chambers are used as a studio for interviews and magazine shows since it's the space available. Chairs and décor are brought in to disguise the space. In the past the high-angle of the fixed camera positions has been tolerated as part of the off label use of the space. With this installation, the cameras should be mounted on a plate or in a way that allows for quick removal from the ceiling position. A set of wall plates with connections to allow for up to four (4) of the cameras to be connected. There will need to be another set of plates or mounting devices compatible with tripods for use of the cameras in the Chambers.

vi. Other

As the largest space at City Hall, the Council Chambers are also used for a variety of uses. There are regular non-televised meetings using up to 8 tables in a large square, staff lunches, staff meetings, bid openings, public works construction meetings. Installations of all A/V and presentation equipment should be done in a way to not interfere with flexible use of the space, and to prevent wear and damage to the equipment.

B. System Operators

i. Experienced video producer, manual controls

Because of the variety of ways the Council Chambers are used, there needs to be the traditional production tools for an experienced video producer to set up and broadcast live meetings, live-to-tape shows, and facilitate any requests. This means a video switcher (1/ME is fine), separate camera controller with presets, audio console, along with the associated monitors, test equipment, and computer graphics. A touch-screen only, template driven solution is not adequate for the unusual room uses.

ii. Staff with some video training, touchscreen in Control Room

In the past there has been a part-time meeting producer who covered some City meetings. There are staff tasked with back up duties for meeting coverage. These users would typically work with standard meetings at the dais or tables, and not the more unusual set ups. While they could be trained to use the video switcher, audio console and camera controller, these operators will likely be more comfortable with a touchscreen with a selection of templates for the various regularly-occurring meetings. There should be a preset for each meeting that brings up photo stills of the meeting participants. Camera presets should match.

iii. Staff participating in meeting, touchscreen in Council Chambers

New in this system is a workflow in which the staff liaison with some of the Commissions will be providing minimal television coverage of the meeting while also participating. There should be a touchscreen or iPad in the Council Chambers. It needs to be available at one of the seats of the dais, but it would be useful if the interface were also available from the table. There would be a preset for each meeting. The options are very simple - wide shot of the dais, 1-shot of the chairperson, 1-shot of the staff presenter, 1-shot of the podium, wide shot of the audience, document camera, laptop. The staff operator would be selecting from the limited set of choices. Audio would need to take care of itself - auto-mixing. If the control interface were able to start/stop the recording of the meeting that would be a bonus, otherwise staff need to go into the Control Room before the meeting to press record on the record devices and go back in after the meeting to press stop.

iv. Staff using presentation system only

Other staff and guests should be able to use the presentation features in the Council Chambers without needing access to the Control Room or assistance from cable staff. There needs to be control to make it easy for users to plug in a computer (VGA or HDMI) and have the screen auto-select the source. By default the laptop should be mirrored to the second screen. They need to be able to select the document camera, and be able to control the zoom, focus, and iris. They need to control the volume of the audio sources.

C. General Scope of Work

The scope of this project is to design, furnish, and install all equipment, hardware, cabling, installation, and programming to provide a complete upgraded and integrated 1080p high definition audio/video presentation and cablecast system for the Council Chambers in the Mounds View City Hall.

Changes are not planned for the millwork, carpet, or furnishings in Council Chambers.

With few exceptions, noted on a list of owner furnished equipment, all equipment, mounting hardware, and cabling should be replaced. The AV equipment ranges from 12 to over 20 years old, and many components are failing. The Contractor shall be responsible for removing the existing production system equipment and delivering the equipment and a complete inventory to the location designated by designated City staff.

D. Council Chambers

Video Input – PTZ Cameras [CAM01, CAM02, CAM03, CAM04, CAM05]

Decommission the existing five (5) camera SD recording system. Cabling was installed in 2005 and includes three (3) analog video with BNC connectors, one (1) Cat-5, and one (1) power cable to the present location of five (5) Panasonic AW-E560 cameras. Use existing cabling if salvageable, otherwise pull cables and install five (5) new PTZ cameras. The cameras should be mounted in the four (4) corners of the room, with a fifth camera in the east wall. The existing locations are fine, although a slightly lower mount, if possible, would reduce the high-angle “security camera” effect. All cameras should be fed Sync to provide system timing.

The concept design uses Panasonic AW130 cameras but we are open to comparable cameras, such as Sony. We are not interested in Vaddio cameras. Cameras should be controllable both through a separate camera controller, such as the Panasonic AW-RP120, and through software to allow for the template-driven touchscreens.

Systems are subject to a hard power cycle because of monthly generator testing. Since PoE+ power does not allow the cameras to be powered down when not in use, provide for a centralized power switch to be able to power down the cameras.

Video Input - PTZ Cameras on Tripods

At least four (4) of the cameras should be mounted with a quick release to allow easy remounting on tripods to support interview and other non-meeting functions in the Council Chambers. Pull cabling and install wall plates at a convenient location, possibly near the new monitor locations on the north or south walls, to connect cable harnesses. Provide four (4) cable harnesses of a length to comfortably reach anywhere in the room to support necessary connections, including sync, network/PoE+, and video output. There are four (4) OFE tripods, one each of Bogen 3011, 3021, 3160, 3046. They may require mounting plates to work with the new PTZ cameras. The tripods just need to support the cameras; all camera movement will be through the PTZ interface. New tripods could be specified if that is a more reasonable alternative to finding mounting hardware for the OFE tripods.

Video Input - Document Camera [CAM06]

Decommission the existing ceiling-mounted document camera and install a new document camera. The concept plan used a sixth PTZ camera of the same type as the rest of the system, in part to allow for future flexibility. This functionality could also be provided by a special-purpose document camera mounted in the ceiling roughly the present location. Control of zoom, focus, and iris must be available both to staff in the Council Chambers and to a meeting operator in the Control Room. The documents used with this camera are frequently letter size paper, but range from 4" x 6" photographs to 24" x 36" maps and large presentation boards.

The document table is a pull-up side table on the podium, which is used both by staff and the public. Some of the documents are quite large. For those reasons, we haven't thought that an Elmo-type document presenter is the right solution.

Video & Audio Input - Laptop [OFE PC03, PC04, PC05]

There is currently a single too-short wired connection at the front of the dais that will be removed. Connections for OFE laptops should be provided in two (2) locations. At the dais, provide a connection for a laptop between seats 1 and 2. It should support HDMI video and audio as well as VGA video with 3.5mm audio. The second location should be a wall plate near the monitor on the north wall, supporting HDMI video and audio as well as VGA video with 3.5mm audio. Provide at least 25 feet of cable (HDMI, VGA + 3.5mm). This supports meetings at the tables, the Town Hall meeting, and training applications.

City OFE laptops are Windows devices. The current computer has VGA video output, but is scheduled to be replaced; the new computer will have HDMI output. To support BYOD applications, the City will acquire HDMI adapters for DisplayPort, Mini DisplayPort, and DVI as needed.

We're wide open to options on how to pull this off, but it would be ideal if the speaker at the dais could have control without having to ask the Control Room operator to cue their source.

Audio from a laptop (HDMI or 3.5mm) must be available to be in production and sound reinforcement.

Audio Input – Dais Microphones [MIC01, MIC02, MIC03, MIC04, MIC05, MIC06, MIC07, MIC08, MIC09, MIC10]

Decommission the nine (9) existing gooseneck microphones mounted at the dais and the cabling. Supply ten (10) desk-top mounted gooseneck microphones with new cabling. The microphone table-base should include a hold-to-mute (cough) button with no latching and a light to indicate muting. The wiring to the dais should terminate in jacks, not directly wired, so the microphones can also be used at the tables or other functions in the Chambers. The concept design used the Shure MX418D/S. Nine (9) of the microphones will be installed into the current locations. The tenth microphone can be added at the north end of the dais as a new position 10 for overflow seating. There is existing conduit for the audio wiring from the Control Room under the floor of the elevated dais, ending between seats 6 and 7. The dais panels unscrew to allow access.

Audio Input – Table Microphones [MIC01, MIC02, MIC03, MIC04, MIC05, MIC06, MIC07, MIC08, MIC09, MIC10, MIC24]

For meetings at the tables, the ten (10) dais desk-top mounted gooseneck microphones will be unplugged and moved to the tables. An additional boundary microphone, Shure MC391 in the concept design, could be used as well when additional coverage is expected. The microphones will be connected to a stage box.

Audio Input – Podium Microphone [MIC11]

Gooseneck microphone mounted on the podium should be replaced with similar. One issue with the current microphone is that presenters who turn to face the audience, talk while standing at the document side table, or are much taller or shorter are not heard well. Perhaps a more omnidirectional pickup pattern could help?

Presently the mic cable is dropped through the bottom of the podium and run across the floor to an XLR jack at the front of the dais.

Audio Input – Ceiling Microphones [MIC12, MIC13, MIC14]

The current system does not have ceiling microphones. The concept design includes at least three (3) new ceiling microphones to capture audio in portions of the room that are not covered well. While staff and members of the audience and staff should come to the podium with any comments, people do make comments from the audience area which are not captured on the meeting recordings. Ceiling microphone(s) on each side could help with coverage.

The area between the podium and dais is often used for ceremonial purposes, such as swearing in officers and making awards, but has no audio coverage. Meeting participants have helped by pointing the gooseneck microphones towards the gap, but they have also damaged microphones by bending them too much.

These microphones would be intended for recording and not part of the sound reinforcement to avoid feedback issues.

Audio Input – Wireless Microphones [MIC-RX01, MIC-TX01, MIC-TX02, MIX22(W), MIC 23(W), MIC-RX02]

Audio system should include a wireless microphone set including a receiver, handheld microphone, and lavalier microphone. The handheld and lavalier microphones do not need to be in use at the same time. There must be a compatible portable receiver available to be able to use the same wireless microphones with a camcorder in the field. Select a frequency range that is a good fit for City Hall and avoid a frequency range that could be subject to spectrum auction. Concept design included Shure SLX124/85/SM58-G5 kit with a Shure FP5-H5 portable receiver.

The handheld microphone will mostly be used for presentations and audience participation at events such as the Town Hall meeting and candidates' forums. The lavalier microphone will mostly be used for training and interviews.

Audio Stage Box [MIX03]

Provide a stage box to allow microphones in temporary locations including the microphones at the tables, and lavalier and handheld microphones, to be connected. The concept design included an Allen & Heath AB168.

Monitors/AV Presentation [MON01, MON02, PRES01, PRES02]

Decommission the projector and screen. Projector will be repurposed as a portable projector for staff use. Pull cabling and install flat screen monitors on the north and south walls. The Council Chambers are marked showing the size of 70", 75", and 80" diagonal monitors in the space for scale. The preference is for larger monitors, but the price increases rapidly. Propose costs for each size.

The exact location of the monitors is open for discussion. They will serve both people at the dais and in the audience. Placement factors include sight lines, protection of the equipment from the audience, mounting height above the audience chairs, protrusion from the wall, and ADA considerations. AC power will need to be provided at these locations, along with AV cabling.

The monitor on the north wall MON01 should have a wall plate allowing a laptop to connect (HDMI with embedded audio, as well as VGA + 3.5mm audio). Exact location of RJ-45 jacks will be coordinated with city during installation.

For meetings, the monitors will be separately routed, showing program video, document camera, or the laptop.

For training and other non-televised uses of the room, the preference is that a laptop connected to the wall plate by the north monitor would be automatically mirrored to the south monitor MON02. Persons using the room for non-televised purposes should not need access to the Control Room.

Proposal should include pricing options for Presentation System control. At a minimum it will include a wired touch screen control in the Control Room and a way to control presentation sources in the Council Chambers. Options for controlling system from the Lectern, Dais input locations and from a wireless interface from any location

in the Council Chambers. This wireless option could include a manufacture hardware panel, a dedicated low cost consumer tablet or via a secure application installed on city staffs' smartphone. Please include pros and cons for each wireless option.

Pull two (2) sets of cables to the SE corner of the room. One set is to support a future monitor in the chambers facing the dais. The other set is for a monitor MON03 (OFE) in the lobby of the building. The lobby monitor provides for overflow for large events such as the Town Hall meeting.

Sound Reinforcement [SPKR01, SPKR02, SPKR03, SPKR04, SPKR05, SPKR06, SPKR07]

Decommission the existing speakers in the Chambers. The existing speakers are only used for laptop audio because of feedback issues whenever the microphones are up. Sound quality is poor, there is a persistent hum, and the sound system requires access to the Control Room.

Install a new multi-zone sound reinforcement system. This is one of the areas that needs more attention paid to the design, including the number of zones, placement of zones in the room, number of speakers needed per zone, acoustics of the space, and the mix-minus. The concept design shows five (5) zones:

Dais, two (2) speakers. For the people seated at the dais. Should include the podium microphone, laptop audio, not much of themselves.

Chambers center, one (1) speaker. Presentation sources for round table meetings. Please note that different table configurations are used.

Chambers left, one (1) speaker. Mostly for audience at meetings at the dais. Dais microphones, podium microphone, and presentation sources. Audience for meetings in the round.

Chambers right, one (1) speaker. Mostly for audience at meetings at the dais. Dais microphones, podium microphone, and presentation sources. Audience for meetings in the round.

Lobby, two (2) speakers. All microphones and presentation sources play in the lobby for audience overflow. This zone is only used for events with large audiences.

Some setups have a wireless microphone for audience questions which could cause feedback issues as the mic moves through the room and different zones.

Audio for non-televised presentations should be easy for participants to control from the Council Chambers, with no access to the Control Room. Interviews and other productions using the Council Chambers as a studio space would have no sound reinforcement for the best quality recorded audio.

Goals for the sound system: people at the dais can hear presentation sources and people speaking at the podium. People in the audience can hear people at the dais and podium and presentation sources. Having in-room sound reinforcement provides an incentive for people to properly use the microphones. There have been issues in the

past with people not using microphones because they confuse sound reinforcement with feeds into the production system. “Is this thing on?”

While a hearing assist system was not budgeted for this project, please plan for such a system, like a Williams Sound 2-user system, to be added in a few years. Indicate on documentation a connection point for a hearing assist system.

Speaker Timer [TIME01]

Existing process: Staff uses timer function on phone. Not visible to meeting participants.

Install a speaker timer system. Control functions accessible from Dais seat 2, and possible another location in the Chambers for events at the tables. The time remaining must be user controllable. Time remaining should be visible to people at the dais, the audience, and the podium. Used for public comment in meetings, and events such as candidates forums. The D'San Limitimer looks clunky but could work. The City of St. Louis Park has a much more attractive installation using Crestron equipment. Photos of that installation are included in the resources.

On Air Light/Control Room Communications [ONAIR01]

Existing process: Control Room has no direct connection to the Council Chambers. Staff walks around the Chambers, down three (3) hallways and through an access-controlled door, to give a 30 seconds warning in person. The on air signal is made by pounding on the wall between the Control Room and Council Chambers. While there is a microphone in the Control Room connected to the sound reinforcement in the Council Chambers, it is never used because of the existing feedback and hum issues with the sound reinforcement system.

Install an on air light and communications system to the Control Room. An “on air” light, controllable from the Control Room, and visible to everyone in the Council Chambers could be added. We need to see some design ideas and are open to suggestion on placement. The light should be easily seen in the room, it would be better to keep it out of the camera shots as much as possible.

Install a microphone for the Control Room operator to make announcements to the Council Chambers in a way that does not cause feedback issues.

Meeting Control System

New in this system is a workflow in which the staff liaison with some of the Commissions will be providing minimal television coverage of the meeting while also participating. There should be a touchscreen or iPad in the Council Chambers. It needs to be available at one of the seats of the dais, likely seat #2, but it would be useful if the interface were also available from the table. There would be a preset for each meeting. The options are very simple – wide shot of the dais, 1-shot of the chairperson, 1-shot of the staff presenter, 1-shot of the podium, wide shot of the audience, document camera, laptop. The staff operator would be selecting from the limited set of choices. Audio would need to take care of itself – auto-mixing. If the control interface

were able to start/stop the recording of the meeting that would be a bonus, otherwise staff need to go into the Control Room before the meeting to press record on the record devices and go back in after the meeting to press stop.

E. Control Room

Decommission the existing control consoles, hardware, and wiring in the Control Room. With few exceptions, everything in the AV system will be replaced. The Control Room will have flat-panel monitors mounted on the wall, a new control for the control surfaces, and a small desktop and/or portable rack for equipment needed in the Control Room. As much equipment as possible will be located in a rack in the adjacent Computer Room.

Confirm that the existing AC power available is sufficient to support the control room equipment and coordinate with trades if installation of additional AC circuits is necessary.

Video Switcher [SWIT03, SWIT04]

Install a new switcher/graphics system, preferably Broadcast Pix or Ross model, possibly a TriCaster. At a minimum, the switcher must have video inputs for 5 cameras, a document camera, and laptop available without “shift” access. There needs to be a way to switch the alternate camera inputs for the secondary location on tripods. System should have at least 1/ME. The concept design shows a Ross Carbonite Black Solo (Chassis) and Carbonite Black CB9 Panel.

Most video switchers have default computer graphics software. There needs to be some CG provision for meeting graphics, but the basic software level probably will suffice. Meeting graphics have the name and date of the meeting along with the agenda items. In the old system, the CG was the source for both meeting graphics and the channel bulletin board. The bulletin board function is being moved to an OFE Tightrope Carousel system.

The solution must have a GUI option for the less experienced users as described above. The GUI should be easy-to-use for the meeting operator, and easy for video staff to create and update meeting and other program templates.

All program video shall be distributed to the recording devices, presentation system, cablecast transmission equipment, and lobby monitors.

Camera Control [CAMCT]

Provide a camera controller for the PTZ cameras for manual control of at least pan-tilt-zoom, focus, iris, and white balance. There should be a minimum of 10 presets per camera. The camera controller should also show tally information. The concept design shows a Panasonic AW-RP120 PTZ controller.

Audio Board [MIX01]

Provide an audio console with enough fader strips for the most complicated production, presently the Town Hall meeting. A 16 channel mixer should be fine. The

concept design shows an Allen & Heath GLD-80. Audio controls should include volume fader, mute, PFL, pan, EQ, for manual audio control of unusual productions.

There should also be digital signal processing to support good quality meeting audio with little to no input from the staff. For meetings controlled only by staff liaison in the room, the microphones should adjust levels themselves, as well as presentation audio sources. Similar for the touchscreen in the Control Room.

The audio programming of the DSP is one of the areas of the concept plan that was not fleshed out. The existing system is only a manual audio console. The experienced staff desires that the new system have the same type of control over inputs, levels, and EQ, and that the set-up has the flexibility for unusual productions in the Chambers. However, the audio system needs to take care of itself and deliver good quality audio of the microphones and laptop audio for the meetings covered by less experienced staff in the Control Room or a meeting participant in the Council Chambers. There should be a way to mute the cablecast and recorded audio before and after the meetings. Please ask follow-up questions as useful to determine the type of functionality and control needed from the DSP.

Touchscreen Monitor [MON12]

Provide a touchscreen monitor for PC01. This touchscreen would host the GUI meeting interface for occasional staff with some training. Templates would be for the regularly occurring city meetings. This touchscreen would also be configured with Ross Dashboard panels and other settings that would be helpful for the regular production staff during productions with more manual control.

Monitors [MON04, MON05, MON06, MON07, MON08, MON09, MON10, MON11]

Install flat screen monitors on the east wall of the Control Room. Mounting hardware should allow for tilt and pivot function, and allow access to cables for future maintenance.

[MON08] Multiviewer 1 and [MON09] Multiviewer 2 are for the video source windows, and other functions of the switcher. The concept drawing assumed 43" class monitors. The size and number of monitors can change as long as all of the necessary PIP functions of the video switcher, including the five (5) PTZ cameras, document camera, laptop, preview, program, and CG are present.

There should be separate monitors for [MON04] preview, [MON05] program, and [MON06] test (utility routable). These need to be non-scaled 1080p to be able to make good quality judgements of the video signal. The small window in a multiviewer does not allow enough resolution to be able to see focus detail clearly.

There should be separate confidence monitors for the subscriber return feeds for [MON07] Comcast and [MON11] CenturyLink. The converter boxes are OFE.

Supply a monitor for the [MON10] computer graphics interface. This is a second monitor for PC01, to allow viewing of the CG interface independently of the touchscreen video switching GUI.

Coordinate with trades on installation of additional AC circuits to support wall-mounted monitors. The concept design assumed the addition of one (1) 15A circuit with four (4) duplex outlets to support the monitors. There is presently a duplex outlet in the ceiling tile above the current rack that may be repurposed.

Speakers [SPKR08, SPKR09]

Decommission existing loudspeakers on east wall of Control room. Install monitor loudspeakers on the east wall of the Control Room for operator monitoring of program audio. Level control could come from the audio mixer.

Control Desk [DESK01]

Provide furniture for the control surfaces in the Control Room, including the audio mixing board, video switcher panel, camera controller, a talkback mic, and touchscreen monitor, keyboard and mouse for the PC. A desk that allowed for height adjustments and operation as sitting/standing would be a bonus, but may not be practical with the wall monitor heights. Some of the traditional video furniture could be overkill for this application. It mostly needs to be a desk large enough to allow a single operator to run all of the equipment.

Portable or Desktop Rack [RACK02]

Provide mounting in the form of a portable and/or desktop rack for equipment that needs to be located in the Control Room. This could include:

[REC02, REC03] Video Recorders: Two (2) OFE Panasonic DMR-EH69 Hard drive/DVD recorder will be reused for local recording backup.

[REC01] Video Recorder: Provide an AJA HELO H.264 streaming and recording device for digital file recordings. This device will also be used by CTV North Suburbs master control to originate the web stream feed, and they have specified the AJA HELO..

[AUD02, AUD03] Audio Meter: Two (2) OFE Dorrough 40-A Analog audio meter mounted in 40-D - Dual Rackmount

[AUD01] Audio Monitor: Concept design indicated Fostex RM-3, which provided headphone monitoring of program audio as well as digital meters. Monitoring via speakers would use wall mounted speakers instead of the Fostex.

[UPS02] UPS: Uninterruptible power supply for Control Room equipment sized to run signal critical items for 15 minutes.

[ROUT03] Router Control Panel: Concept design indicated Ross RCP-ME. The concept design used a 34x34 router that allows maximum flexibility in routing any source to any output.

[CBL01, CBL02, CBL03] Cable Boxes: OFE cable boxes for Comcast and CenturyLink subscriber return feed.

[WFV01] Waveform/Vectorscope: Concept design indicated Blackmagic Design SmartScope Duo 4K.

[PC01] Computer: OFE computer to support GUI video switcher interface, computer graphics software, control software such as Ross Dashboard, and similar. Purchasing of this computer will be done by the City in coordination with our IT support from the City of Roseville. Specification of a desktop computer model adequate to meet the requirements for the AV specialty software should be included with design. The City has standardized on Dell, so a suitable model from Dell would be preferred.

F. Computer Room

For cooling and sound isolation, as many of the electronics as possible will be installed in an OFE 42 RU rack in the Computer Room adjacent to the Control Room. The Computer Room has been upgraded with a new split ductless air conditioner in support of the new AV equipment.

Coordinate with trades on installation of additional AC circuits to support the equipment in the rack. The concept design assumed the addition of two (2) fourplex outlets with a total of 30A capacity for AV use. A hole will need to be drilled in the wall between the Computer Room and the Control Room to allow for cables for the monitors and control surfaces. City staff will make the opening after the Contractor identifies the preferred location and necessary size.

The bundle of cables coming into the rack needs to be long enough for the entire rack to be moved up to 10 feet. Wiring of the rack must include a service loop such that each piece of equipment can be removed from the front or rear of the rack with at least 24" of cable slack. Velcro ties are preferred over zip ties in wiring the rack to allow for future maintenance.

Include surge protection for all equipment. The building experiences monthly tests of the backup generator with manual cutover, which has meant a hard power cycle for equipment.

Network [NET01, NET02, NET03]

Install Poe/PoE+ network routers with sufficient capacity to power the PTZ cameras and enough ports to handle all equipment in the new system.

Cabling will be Category 6A. All network cabling to be tested by installer.

Concept design specified two (2) Netgear GS728TP-100NAS along with a 48-port patch panel. There should be additional capacity for future device connections. This network switch will also connect to the OFE transport to master control in Roseville. The video LAN will be isolated from the City network. Network port assignments may be suggested by technical staff at CTV North Suburbs for coordination with their installations at other locations.

System Router [ROUT01, ROUT02]

Concept design specified Ross NK-3G34 and RCP-IPS for IP interface with a remote panel in the Control Room. The 34x34 router allowed any source to be routed to any output for maximum flexibility, with some space for future system additions.

Video Switcher [SWIT01, SWIT02, CONV11, CONV12, CONV13]

Concept design specified Ross CBF-109 with redundant power supply.

CONV11, CONV12, CONV13 are Ross SHC-9642 SDI to HDMI converters for three (3) inputs of the Carbonite Black Solo switcher.

Terminal Frame [FRAM01, FRAM01-PS, CARD01, CARD02, CARD03, CARD04, CARD05, CARD06]

Provide a frame with appropriate cards to support the design goals. The concept design specified Ross openGear OG3-FR-CN with redundant power supply. Provide network connectivity for configuration and monitoring functions of the sync pulse generator, distribution amplifier, and converter openGear cards.

CARD01, Ross QEA-8809-R2H, for camera distribution.

CARD02, Ross SPG-8260, sync pulse generator.

CARD03, CARD04, Ross UDA-8705A-R2, utility distribution amplifier for black burst distribution. Sync is also to be fed to any other equipment that has a Sync input.

CARD05, CARD05-ACC, Decimator Design DMON-9S with rear module, multiviewer for second monitor.

CARD06, Ross MUX-8258-B, Mux Card to mux program audio onto program video.

Scan Converter [SCAN01]

Concept design specified Ensemble Designs BEM-4-H. Scan Converter with HDCP for the presentation computer.

Presentation Support [PRES03, PRES06]

The concept design indicated an Atlona AT-UHD-CAT-4 HDBaseT Distribution Amplifier [PRES03] and Atlona AT-UHD-SW-5000ED 5 port video/audio switch [PRES06]. The presentation system is one of the identified holes in the existing concept design, so more attention should be paid to the plan for presentation support.

Room Audio Equalization [EQ01, EQ02, EQ03]

Concept design specified Behringer DEQ2496 for equalization of room audio.

Audio Amplifier for Sound Reinforcement [AMP01]

Concept design specified QSC CX108V 8-channel power amplifier to drive the speakers in the Council Chambers and lobby.

Rackmount Audio Interface [MIX02]

Concept design specified Allen & Heath AH-AR-2412 rackmount audio interface for the GLD-80 audio mixing console. The hard-wired audio connections such as the dais microphone jacks, ceiling microphones, wireless receiver, and presentation audio would be connected to the rackmount audio interface.

Makito Transport [CTV01]

Currently transport of the meeting audio and video for cablecast distribution is via a Haivision Makito device owned and maintained by CTV North Suburbs. Signal goes from the Control Room to NSCC master control and then to Comcast and CenturyLink, the cable operators. Playback servers and web VOD functions are also housed at CTV North Suburbs.

VHS Decks [LEG01, LEG02]

Unless needed for other equipment, preserve space in the rack for one (1) or two (2) OFE legacy VHS decks. The decks are 3 RU. One deck [LEG01] is shown in the concept design with an analog-SDI converter so tapes can be played back.

Uninterruptible Power Supply [UPS01]

Provide a UPS for Control Room equipment sized to keep equipment on a critical signal path powered for 15 minutes.

Video Storage Server [STOR01]

A 2 RU video storage server (OFE) will be housed in the rack and connected to the video LAN. A volume on the device will be the record target for [REC01] the AJA HELO. Allow 2 RU of space adjacent if possible for a future expansion box.

G. Additional Items

The lighting in the Council Chambers was not designed for television. Changing the lighting was not budgeted for this project. Suggestions as how to make the best of the existing lights, or low cost upgrades, would be welcome.

The Council Chambers are a bit of a fishbowl, with glass doors to the lobby along the east side of the room. There are no light treatments on the doors or windows. The light temperature changes throughout the day. Meetings held in the morning are subject to blinding low-angle light in the winter. Non-meeting interviews have been interrupted. While this project was budgeted assuming no cosmetic updates in the chambers, suggestions on glass treatments for the east windows and doors would be welcome.

Optional addition of an “on air” light outside of the Council Chambers along the lobby wall which could be controlled with the same control as the in-the-room “on air” light.

Add an emergency kill switch to interrupt live video going out to the cable television audience in the event of an emergency. This could be a 2x1 switch before the Makito transport device to master control at CTV North Suburbs. One input would be the program audio and video output. The second input would be a full screen graphic/logo (possibly from the production switcher) with no audio. This should not affect recordings.

Provide any combination of additional equipment, cabling, and configuration necessary for the system to function properly.

Recommend any additional improvements to the video system that are not mentioned in the Request for Proposals for consideration by the City.

The City reserves the right to identify the preferred system and may purchase this capability separately.

2. EXISTING EQUIPMENT

The additional information includes a spreadsheet listing existing equipment that will be reused, such as the Panasonic DMR-EH69 hard drive recorders, equipment that could be reused such as rack shelves, and some equipment that will be purchased separately.

3. INSTALLATION AND TESTING

A. All equipment shall be tested and pre- configured by contractor before delivery and subsequent onsite installation. Configuration shall be completed as specified by City staff or their designated representative. Installation and configuration of all equipment bid includes all connections, installation, configuration, and coordination with local cable carrier to implement a complete working video production, recording and playback system.

B. The work to be provided by Contractor shall include labor, materials, equipment, and services necessary or reasonably incidental to the installation of a complete and fully functional production, recording and playback system.

C. All materials supplied for this project must be new and completely tested before installation and cut- over.

D. Storage space on the premise will be limited. Therefore, equipment and materials deliveries, storage, and work must be planned accordingly.

E. All station equipment and cable installers must have received professional training and be certified for this purpose.

F. Contractor shall be responsible for the preparation and implementation of a comprehensive cut- over plan which includes a schedule of tasks and dates by which they must be accomplished. The cut- over plan must be included with the proposal package. This plan shall include, but not necessarily be limited to, specifying:

- i. Equipment delivery
- ii. Installation tasks
- iii. Anticipated “down time,” if any

G. Equipment requirements to include equipment racks and Control Room furniture. Design must be approved by the City.

H. Equipment shall be firmly held in- place and comply with all building code requirements. Fastenings and supports shall be adequate to support their loads with ample safety factors.

I. Installation of the system must be accomplished in the safest possible manner to protect the property of the City of Mounds View and its employees and their health.

J. The Contractor shall have workers' compensation insurance coverage that meets the requirements of Minnesota law (if required by statute). The Contractor shall execute the City's workers' compensation form.

K. Care must be exercised during installation to avoid damage to all in- place wiring and equipment. Connections shall be made with approved mechanical connectors. Any wiring and connections installed by the contractor shall be installed in strict accordance with National Electric Codes (NEC) and accepted practices.

L. All audio, video, control and power distribution cabling and connectors should be high-quality in line with standard practice.

Audio cable (line level audio circuits): 22AWG, stranded conductor, twisted pair with overall shield and plenum rated jacket. Acceptable: Belden 9451/9451P, West Penn 25291B or prior approved equivalent.

Control cable (RS232): Multi-conductor, 18AWG with plenum rated jacket (and foil shield as required) sized as recommended by equipment manufacturer for specific control or remote control application.

DC power cable: 1 pair, 18AWG with plenum rated jacket, typ.

Network Cable (ethernet connectivity): 4 pair, UTP, Category 6 rated cable with plenum rated jacket. Acceptable: Belden, Hitachi, Mohawk or Approved equal.

Network Cable (Cresnet): Provide 4-conductor plenum rated cable as recommended and approved by manufacturer (Crestron).

Network Cable (production camera control): 4 pair, UTP, Category 6, plenum rated cable as coordinated with Owner. Acceptable manufacturers: Hitachi, Mohawk or equivalent.

Network Cable (digital video over twisted pair applications): 4 pair, Category 6 shielded cable with plenum jacket. Acceptable manufacturers: Extron, Mohawk or as approved by video product manufacturers.

SDI video cable: Serial digital video coaxial cable, plenum rated. Acceptable manufacturers: Belden, West Penn.

M. The Contractor shall perform all work in full compliance with local, state and federal health and safety regulations. Contractor shall immediately correct any dangerous condition caused or resulting from its work. If Contractor fails to correct, or to act diligently to correct any condition, which the City reasonably believes to be a hazard to persons or property, then immediately upon oral or written notice to any

supervisory or similar personnel of successful Contractor, the City may, but shall not be required to correct same at successful Contractor's expense. The City shall confirm in writing any oral notice given within five (5) day thereafter.

4. CHANGE ORDERS

The City shall have the right to request changes in the system configuration and shall furnish with reasonable promptness any required additional instructions by means of change orders, necessary for the execution of the work. The Contractor shall not perform work without written instructions. No changes shall be made, nor will changes, alterations, modifications, deviations, and/or additional orders be recognized or paid for, except upon prior written order of the City.

Additional change order assignments beyond the scope may be required as the City believes it to be in the best interest of the City. Change orders greater than \$10,000 is dependent on approval by the City Council, which can impact project timing otherwise staff is authorized to approve change orders under \$10,000.

5. SUBSTANTIAL COMPLETION

Project work to be coordinated with City staff as to minimize the impact on regularly scheduled City meetings. The preferred project completion would be no later than the end of January 2019. However, this time frame may be flexible based on Contractor timeline.

From the start of on-site work, the new system should be operational for meeting coverage within four (4) weeks. Liquidated damages of \$500/day commence within two (2) weeks if substantial completion is not met. Substantial completion should be completed by January 31, 2019. Completion of the punch list should be done within 90 days of substantial completion.

6. TRAINING AND DOCUMENTATION

Contractor will provide up to three (3) training sessions to cover complete operation of the updated system. The trainings should include specific operation of each of the components and how they will be used in a meeting setting. One of the trainings should be conducted under a mock meeting scenario. Training should also include creation and modification of GUI templates for the video switcher.

Contractor will provide two (2) printed training manual documents, one (1) digital PDF training manual document, and one (1) binder with operating manuals for all new/updated equipment. Two (2) sets of "D" size of As-Built drawings shall be provided to the City along with electronic PDF copies and DWG, or other editable format, files for each system. Provide copies of all configuration, software, template, and other files to allow City to update and modify programming of the system.

All cabling should be labeled on each end. Contractor will provide a spreadsheet of cable connections. Contractor will provide a spreadsheet with all equipment, serial numbers, IP addresses, and login credentials.

7. WARRANTY

The Contractor agrees that it will warrant the system to be free of defects of workmanship or products and will inspect and repair the system at no cost to the City within the first year after the acceptance of systems by the City. During the one year

period, the Contractor will respond to the City and remedy the problem within 24 hours of the City's contact, or within a longer timeframe, if approved by the City.

The Contractor's one year warranty period shall begin at the date of City acceptance of the project. It is the responsibility of the Contractor to request this acceptance in writing.

The City shall not be responsible for any additional charges (i.e. service, labor, shipping charges, trip charges, etc.) during the Contractor warranty period of any manufacturer warranty period of the installed electronics.

8. GENERAL

A. In developing these specifications, the Contractor must identify hardware and software components that will provide a complete, turn- key video production and video server system for the City of Mounds View that will meet the City's needs for a minimum of seven (7) years. The system must be easily expandable to accommodate new software, added features, or future needs.

B. The Contractor is responsible for all final engineering to ensure a complete and operational system. Contractor must submit a detailed written project plan identifying dates and steps required to completely install, configure, cut- over, and test the new system. The plan must address and include product delivery services and logistics including delivery schedules and return policies; product staging including equipment setup, configuration, burn- in and testing; onsite installation including equipment setup, configuration, connection, testing and removal and disposal of existing equipment. A training plan for technical staff and users must also be included. The written project plan is to be submitted and approved by City prior to installation.

C. All specified hardware and associated software purchased for this project must be provided and installed by the Contractor. It is incumbent upon Contractor to identify and include any additional equipment or installation services required to fully complete the project. Installation and testing will be overseen by City staff or designated Information Technology representatives.

D. Any additional cabling for television production systems, power protection, needed components such as UPS, computers, servers, or other devices and/or racking components are the responsibility of the Contractor. Any requests for design modification, equipment substitutions, or change orders shall be reviewed and approved by City staff or designated Information Technology representatives.

E. The right of general supervision by the City shall not make the Contractor an Agent of the City, and the liability of the Contractor for all damages to persons or to public property, arising from the Contractor's execution of the work, shall not be lessened because of such general supervision. The City shall supervise the Contractor only as to the result to be accomplished but not as to the means to accomplish such result.

F. Contractor shall provide hardware, software, and related components.

G. Installation of all hardware and software must be done with minimal disruption to City staff.

H. City staff will not be available to assist in any manner to install, configure, connect cables, etc. All connections and/or wiring including disconnecting old system shall be done by Contractor.

I. Configuration of hardware and installation of any software must be done in advance if possible.

J. Disconnection of existing equipment and installation of new equipment must be coordinated with City staff.

K. Contractor is responsible for coordinating interface and testing of signal path to CTV North Suburbs and others as necessary.

L. Contractor should be a licensed or certified dealer or have direct access to a licensed or certified dealer to accommodate requests related to equipment in the proposal. Contractor should be experienced in all aspects of the work and be able to demonstrate direct experience on recent systems of similar type, complexity, and size.

M. Any modifications, addenda, amendments or changes to this scope of work will be distributed to all potential contractors who have expressed Notification of Interest. Bidders are required to acknowledge receipt of any such addenda and attach it to the bid form.

9. PROPOSAL FORMAT

Contractors are encouraged to keep their proposals brief and relevant to the specific information requested herein. Proposals should be straightforward, concise and provide “layman” explanations of technical terms that are used.

Proposals must be presented in a format and order that corresponds to the numbering and lettering contained herein with minimal reference to supporting documentation so that proposals can be accurately compared.

All proposals should include the following:

1. Cover Letter

- a. Signed by an official authorized to bind the firm;
- b. Printed name, address, phone number, and email address of firm’s contact person;
- c. Location of firm’s main office;
- d. Location of the office that would service this project;
- e. A validity statement stating that all information and pricing provided in the proposal is valid for at least ninety (90) days; and
- f. A statement that any individual who will perform work for the City of Mounds View is free of any conflict of interest.

2. Company Background

- a. Number of years in business;
- b. Taxpayer Identification Number;
- c. Number of years working with government agencies;
- d. Resumes of the project manager and key personnel who will be responsible for performance of any contract resulting from this RFP;
- e. Firm ownership and, if incorporated, the state in which the firm is incorporated and the date of incorporation; and
- f. If the firm is a subsidiary of a parent company, identify the parent company.

3. References of Minnesota government agencies for similar services within the last three (3) years

- a. Client name, client project manager, telephone number and email address;
- b. Project description;
- c. Project start and end date;
- d. Staff assigned to each project by your firm; and
- e. Discussion of outcome.

4. Disclosure of any alleged significant prior or ongoing contract failures, any civil or criminal litigation or investigation pending, which involves the Proposer or in which the Proposer has been judged guilty or liable within the last five years. If there is nothing to disclose, Proposer must state as such in writing.

5. Description of Proposer's warranty/guarantee of work product.

6. Subcontracting any portions(s) of the Scope of Services is not preferable. However, if a Proposer can demonstrate to the City's satisfaction that it is in the best interest of the project to permit a portion of the service(s) to be subcontracted by Proposer, it may be considered. Provide details on the role of any subcontractor that will be used.

7. The proposal must include specific manufacturer names, models, specifications, quantities, and pricing for all pieces of equipment.

8. The proposal should include all costs, including but not limited to, installation labor, system programming labor, travel, trip charges, shipping, hardware installation materials, rack hardware, rack blanks, cables, cable number labeling, connectors, bonds, general system training, documentation, and all components not listed above needed to make all systems function as desired by the City of Mounds View. Pricing should include any necessary training costs and options for extended warranty.

9. Detail costs for initial build, first year, second year, third year, fourth year, fifth year, sixth year, and seventh year of ownership including warranty, software updates, maintenance agreements, and other costs. Provide information about replacement schedules for equipment.

10. Describe Contractor's availability and charges for servicing of equipment after the warranty period. Include information for an extended service proposal or per-incident basis.

Please note that as of January 1, 2014, local units of government in Minnesota such as cities are exempt from paying state and local sales tax. The City of Mounds View's Minnesota Department of Revenue Form ST3 Certificate of Exemption for Sales Tax is included as part of the support documents.

10. SELECTION PROCESS

Proposals shall be reviewed and rated based upon overall approach and pricing to the information requested by this RFP. Special consideration may be given to responses that have clearly demonstrated successful, innovative methodologies, while addressing projects similar in nature. Proposers are encouraged to submit examples of recent successes working with similar organizations. Closely ranked firms may be asked to

participate in a telephone or in- person interview or furnish evidence of capability and financial and insurance resources to adequately provide the service. The interview panel, which will be comprised of City staff, will make a recommendation for City Council consideration on November 13, 2018.

The City reserves the right to contact references and clients, perform background checks, and research Proposer's company profile or other information pertinent to the evaluation process. A contract will be prepared for signature which will also include any related insurance requirements.

The City reserves the right to modify or cancel this RFP process at any time with or without cause and without further notice.

11. ADDITIONAL CONDITIONS OF AWARD

Award of contract/agreement, if any, will be made in the best interest of the City of Mounds View and will be based upon various factors, including but not limited to the Proposer's qualifications, experience, references, and price structure.

The City reserves the right to waive any irregularities or informalities in any proposal or in the proposal procedure and may accept other than the lowest quotation offered.

After award of the contract/agreement or final rejection of all proposals, all responses become public information, subject to disclosure.

Within ten (10) days of the award of contract/agreement, the Contractor will furnish Performance and Payment Bonds in the amount of 100% of the contract as security for the construction and completion of the work in accordance with the terms of the contract/agreement.

Either party, without cause, may terminate this Agreement by thirty (30) days' written notice delivered to the other party. After termination, the City shall have no further obligation to the Contractor except to compensate the Contractor for the equipment and materials provided and services performed prior to the date of the notice of termination.

The laws of the State of Minnesota shall control this Agreement.

By entering into this Agreement, the City does not waive its entitlement to any immunities under statute or common law.

12. ANTICIPATED PROJECT TIMELINE

RFP available on the City's website or via email	September 19, 2018
Notification of Interest	Strongly Encouraged
Open House for prospective contractors	September 26, 2018 9:00 a.m.-12:00 p.m.
Open House for prospective contractors	September 27, 2018 1:00 p.m.-4:30 p.m.
Deadline for written questions regarding RFP	October 2, 2018, 12:00 p.m.
City's response to questions due to Contractors	October 8, 2018, 5:30 p.m.
RFP Proposal Due Date	October 25, 2018, 4:30 p.m.
Potential interviews of considered contractors	October 29-November 2, 2018
Request for City Council to award contract	November 13, 2018
Project Completion Date-<i>Estimated</i>	January 31, 2019

13. COMPENSATION SCHEDULE

Payment to the Contractor will be made in the following manner:

1. 40% upon delivery of equipment;
2. 40% upon substantial completion of all systems;
3. 10% upon completion of training; with
4. Final 10% of the contract price to be paid 35 calendar days after the filing of a notice of completion and upon acceptance of systems by the City.