

# State-of-the-Art Architecture Meets Cutting-Edge Technology with Vaddio Cameras

Duocom Selects Vaddio Cameras for \$1.5 million Vaughan, Ontario  
City Council Chamber Project



## PRODUCTS FEATURED IN INSTALLATION:

**WALLVIEW CCU HD-19**  
999-6947-000W

**WALLVIEW CCU HE100**  
999-6117-000

*“Vaddio cameras were a necessity,” explained Prashad. “If we didn’t use Vaddio cameras, the cameras would have been the weakest link in the chain. The quality in the projectors would have been negated. We wanted to pick out the highest quality camera that we could to take advantage of the rest of the design infrastructure.”*

By combining innovative architecture and audiovisual technology with the growing needs of one of Canada’s fastest-growing cities; Vaughan’s new 180,000-square-foot City Hall easily meets the needs of Vaughan’s growing population and enhances the delivery of municipal services. Vaddio cameras are buried throughout the city council chamber and committee rooms, in walls, above ceilings and in half-walls so they are unobtrusive – all part of the architect’s aesthetic that Canadian-based systems integrator, Duocom, had to work with.

### Why a New building?

Because the original City Hall building wasn’t large enough to house everyone, committee members were meeting all over the city. Nobody was under the same roof and there was no centralized place for people to meet.

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Old touch-to-talk microphones were daisy-chained along the table; the request-to-queue and voting system never worked. An analog recorder was used to record audio, but there were no cameras. It was a legacy system in use for 15 – 20 years.

“It was almost as if they were using what they had to get by,” explained Omar Prashad of Duocom. “It’s my assumption from the city that there’s no point in spending a bunch of money upgrading systems when you know down the line a few years you’re going to have a new building.”



According to the City of Vaughan, the previous Civic Centre was renovated in 1982 when Vaughan’s population was 36,815. Today, Vaughan’s population is 295,000, and is expected to increase to 418,000 by 2031. The old system just couldn’t withstand the rapid growth.

So through a month-long Needs Analysis process and a lot of input from different users and user groups, Duocom came up with a solution.

## The Council Chamber

From an AV perspective there are five or six significant areas – the most significant being the council chamber where regional counselors meet.

“Walk into the Council Chamber and you feel like you’re walking into a very contemporary architectural space,” says Prashad. “The tiered seating, custom wood walls and ceilings, flown in from Denmark, and the circular council desk definitely add to the ‘modern’ appeal.” The mayor sits in the middle of the circular table with the counselors on one side and senior management on the other. The AV system for the entire facility is controlled and routed through the council chamber with a centralized architecture for control and signal distribution.

The AV system, in this room alone, cost just under \$900,000. Two Christie High Lumens 1080p 3-chip projectors sit on opposite sides of the council chamber so everyone in the room has a direct view at all times. All signal routing is digital, utilizing Crestron’s Digital Media platform and control from numerous Crestron Touch Panel Displays. One sits at every desk allowing the counselors to vote, see results and make tabulations.

“Aside from the mayor, the counselors never sit in the same place,” explained Prashad. “And because during a six-hour council meeting any of the counselors could potentially be the chair of that meeting, a discrete login system for each touch panel had to be put into place.”

Each person has his/her own code. Unless you’re the designated chairperson, none are for control – just for voting and confidence monitors for whatever is on the projection screen. As opposed to the typical touch-to-talk mics, the chairperson has control over all of the mics and cameras, and is able to view the request-to-speak lists and queue on the panel in front of them.

## The Vaddio Solution

Vaddio WallVIEW HD-19 and HE-100 cameras are distinct inputs to the AV system, allowing their image to be broadcast throughout the facility or to be used in conjunction with the Polycom HD videoconferencing system, each

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picking up a different quadrant of the council table. One sits in the back picking up a full shot of the room. Another two sit back-right and back-left picking up opposite quadrants. The camera directly behind the mayor, faces the audience picking up the senior management team, anybody who's addressing the council from the podium and anyone in the audience should it be required.

"The Vaddio cameras can be used with and without an operator," added Prashad. "You can either have full pan/tilt/zoom control or you can recall presets through the Crestron control system. Our programmer had to basically create a revolutionary program that linked the Sennheiser microphone system and Biamp audio DSP system so that when a particular microphone was active, the information sends a signal to the camera to trigger the preset."

Because the AV system as a whole was very high-end – with digital switching at 1080p/60 and 3-chip DLP projectors at 8,000 Lumens, Vaddio cameras were a necessity, explained Prashad. "If we didn't use Vaddio cameras, the cameras would have been the weakest link in the chain. The quality in the projectors would have been negated; the switching infrastructure would have been negated. We wanted to pick out the highest quality camera that we could to take advantage of the rest of the design infrastructure."

The video can be broadcast from the council chamber to anywhere else in the building. If there is a high-interest council meeting, the public can view the event internally – or listen externally via Vaughan Radio. While only audio is exported to the residents

of Vaughan, Vaughan TV is in development stages. "We're probably going to incorporate a capture station with a media management server and stream the video," explained Prashad. "That's the next generation of this system so residents can log on to the media server and see what's happening in the council chamber from anywhere at any time."

"The Vaddio cameras give us a lot of control over color, color temperature, brightness – so when someone looks at the mayor who's raising taxes for the three year in a row, you see the facial expressions like you're watching a Blu-ray. There is no point in trying to save \$2,000 on cameras if the experience is going to be substandard and sub quality."

## Future Plans

No matter how much planning goes into a large installation, down the road there are going to be changes. Phase 1 is completed and Phase 2 and 3 are on the way, with an additional building and tunnel to connect them. "Over the course of 5 to 10 years this AV system will be three times the size it is today," Prashad predicts. "These are the fun projects because the applications allow us to use cutting-edge technology to solve user problems. That's fun for us because we can really push the limits on the latest technology and what our team can do with it."



Vaddio is the leading manufacturer and OEM distributor of specialty PTZ cameras, high-end camera control systems and custom furniture used in the broadcasting, audiovisual and videoconferencing industries.

The Duocom Systems Integration Teams specialize in the design, installation and support of multimedia audio visual systems for any application or environment. Their InfoComm Academy certified sales team will evaluate your requirements and provide solutions for your specific needs. They have the products and expertise for any type of teaching, digital signage, presentation, training, or mission critical application.