Fluidmesh provided wireless network security infrastructure to ensure student and campus security.

It was a great challenge to find, despite the obstacles, a creative, cost-effective security solution for Keene State College, which needed a CCTV system to monitor its most remote parking area on campus and ensure student safety, particularly at night. Among the obstacles: the parking lot had no fibre backbone. There were also physical constraints including an old railroad trestle that splits the campus and isolates the lot as well as a bridge that crosses a stream. Neither the bridge nor trestle is owned by the college so attaching surveillance equipment to them was out of the question.

Solution:

Jim Casey, Senior Account Executive for MAC Systems, integrator on the project, adds: "We were able to come in under the clients' budget with the most creative and cost-effective solution. That solution was wireless mesh technology."

Project description at a glance:

MAC Systems, a Canton, Massachusetts-based integration company has engineered, installed
and maintained access control and security management systems for some 26 years, but this project, completed in August 2007, mark its very first using a wireless mesh network.

William Smith, Project Estimator for MAC Systems, attended a Fluidmesh Level I Training class several months earlier immediately saw the fit. Smith contacted Cosimo Malesci, Fluidmesh V.P. of Sales, and they visited the site. They faced the challenges highlighted above, but recognized one key factor working in their favour. They had line of sight. "We spotted, way across the athletic field, the Redfern Arts Building that had line of sight to a pole in the lot," Smith recounts. "We knew it was our path."

"We set up the mesh network in the parking lot which allowed us to mount the Fluidmesh 2200 radios to the poles in the lot," Smith notes. "We put two cameras on each pole which gave us coverage of nearly the entire lot. We connected the network from pole to pole and, at the end closest to the campus, we mounted a Fluidmesh 2200 radio to a pole that had full line of sight to the Redfern Arts building to access the campus network."

"Fluidmesh Networks and MAC Systems delivered a high-tech yet very affordable solution"

Bringing all the products in-house, MAC Systems engineering and design team prepared CAD drawings for the project. MAC Systems installers relied on Fluidmesh technical support to streamline its design of the model and when it was time to perform the install, the pre-assembled products were put on the trucks and brought to the job site.

"A mesh network provides a wireless infrastructure with a much higher level of redundancy compared to traditional wireless technology and, going this route also offered the client more bang for its buck. If we used point to point wireless systems they would get the camera to the building, but the client would have spent the money without the ability to later expand," Smith adds. "With Fluidmesh, the radios can be part of an integral network on the campus in the future so the client is buying a product that can be used and expanded."
Together, Fluidmesh Networks and MAC Systems delivered a high-tech yet very affordable solution that has Keene State College ultra-pleased and its students feeling much more secure. Amanda Warman, Keene State College’s Director of Campus Safety, sums it up well when she says: "The installation of the new CCTV system by MAC Systems was seamless. The expanded protection it lends to this area of our campus has greatly increased our ability to provide comprehensive security coverage while improving our students’ perception of safety here at Keene State College."