Reaseheath College ensures student safety with electronic security system

Reaseheath College, Cheshire, has solved its security requirements through intelligent use of an integrated electronic security system that gives the flexibility and reliability required of an educational institution. Staff and students alike have complimented the new arrangement that allows for free, secure movement around the campus, even out of hours.

Reaseheath College, situated in Nantwich, Cheshire, caters to 1000 full time and 6000 part time students. It is set amongst 500 acres of farms, parklands, lakes, woodland and sports facilities, including its own golf course. Courses range from Adventure Sports to Animal Care and new facilities are constantly being developed to keep pace with its continuing expansion.

Previously, the College had a limited number of Access Control systems and CCTV cameras on the site and they wanted to enhance their security arrangement. A driving factor in this move was the "National Minimum Care Standard" that the College is required to adhere to. The standard was introduced to regulate, and ensure that providers are competent in their duty of care and was applied in 2003 to further education colleges that accommodate students under 18.

Additionally, the College wanted to be able to monitor the huge site for any potential problems, and enable out of hours access to certain areas of the campus.

The sheer size of the 500-acre site was likely to be a challenge, but installer Castle Security Solutions was confident that they could tackle the project. They proposed an integrated CCTV and Access Control system, in conjunction with TDSi, which could provide the college with the perfect solution to their security issues. Castle Security

chose Norbain SD to supply the equipment, which currently forms the largest integrated Vista CCTV/TDSi Access Control solution in the UK.

"The service we've received from Norbain has been very impressive," says Chris McGuinness, managing director of Castle Security Solutions. "They were heavily involved in the specification process and we worked together to ensure that we had the best solution possible for the needs of the College."

In total, 27 internal and 14 external cameras were fitted throughout the campus. Vista VVRD4V8C vandal resistant domes were sited internally to ensure important access areas and rooms containing valuable equipment were monitored. "We went with the vandal resistant domes because some of the ceilings are quite low and the cameras could potentially be tampered with," says Mr McGuinness. "The Vista domes provided us with the high quality images we needed, even in varied lighting conditions."

Externally, a combination of static Baxall cameras and fully functional Denard domes were fitted around the campus to monitor the activity of students and staff on site during the day, and to record any unusual activity out of hours.

In order to control and monitor the movement of people around specific areas of the site and to provide cost effective integration between the Access Control and CCTV elements of the security system, TDSi technical and commercial personnel, in consultation with the College, recommended that an extension to the existing TDSi S Series based Access Control system be implemented. This was accomplished by upgrading and migrating to TDSi's eXguard Pro integrated security management system software platform. Additionally, 7 eXcel^{4} and 1 eXcel^{2} Controllers were added with 18 weatherproof TDSi Magnetic Stripe swipe readers. This upgrade and extension

ensured that the college could maximise the investment it had made in the original system while also enhancing the overall functionality of the system to deliver the solution that was required.

"We've always been very happy with the TDSi system we had in place and wanted to expand and upgrade to the most up to date system available," says John Basford, assistant student services manager of Reaseheath. "It's inevitable that students will lose their cards from time to time, and when they do, we can put a stop on the card and issue a new one." Particularly useful for Mr Basford is the facility to display the CCTV images and cameras on the site plans within the eXguard Pro software and to track a card around campus. If any card marked as lost is being used to try to gain access to an area, the camera will take a picture of the user and the system will then track their progress around the grounds, noting what areas they are attempting to access. "It's very rare that we have any incidents, but this system allows us to respond very quickly and efficiently should a problem occur," says Mr Basford.

Securing the whole of the 500-acre site wasn't going to be possible within the brief so a Vista camera was installed at the front gates to record the plates of any vehicle entering the site. If the College needs to review any of this information, the data is stored in the central control room and can be accessed at any time.

Although the installation went very smoothly in general, there was an issue with one camera that needed to be resolved. The camera, a Denard 2060 dome, was required to be pole mounted at six metres to ensure a clear view of the buildings and the areas between them. Unfortunately, the best area of view was also in close proximity to the point where power was provided to the entire site. The power company raised objections of the grounds of safety – "Initially it was felt that during installation and, indeed, during future service calls, the power to the site would have to be halted when work was carried out," says Mr McGuinness. "This was obviously not a very practical solution and we needed to find a compromise." After long discussions with the power company and the rejection of a number of options on both sides, a compromise was found and the pole was lowered to five metres. "It was a tricky job to get the power company to agree to have the camera anywhere in the vicinity," recalls Mr McGuinness. "It took a lot of explaining and persuasion on our part before they would agree to the new pole height."

The campus houses a blend of modern and listed buildings – from an 18th century manor house (Reaseheath Hall) to the newly built catering suite. This mix of structures, although aesthetically very pleasing, added another complication to the installation. "In some buildings we worked with ceiling tiles and partitions, but in the older buildings, installing the cabling and cameras was far more tricky," recalls Mr McGuinness.

Working with the College's own in-house team of electricians, Castle Security Solutions had to carefully plan where each cable would go, without detracting from the aesthetics of the buildings. "It was an extremely time consuming process as each cable had to be hidden and each camera positioned as discreetly as possible," says Mr McGuinness. "We spent a lot of time using fish wires to pull cables through very small areas and up through the building."

Being a busy campus, Castle Security Solutions needed to ensure that minimum disruption was caused by the installation. Students and staff needed to continue using the facilities and so Mr McGuinness and his team came up with a modular solution. "Each building was treated as an individual installation with up to four buildings being fitted at any one time," he explains. This allowed the installations to be very flexible and so, if one building was required for use by staff and students, they could continue working on one of the other buildings in that set. This not only minimised disruption, but also allowed Castle Security Solutions to keep to schedule. Once each individual building was installed, it was then integrated into the system.

The installation has been carried out to allow each area of the campus to be managed locally to reduce any drain on the IT network. All the buildings equipped with the new system have a Vista PVD1500DG 15" monitor and Vista Columbus DVR where they can view and record information being received. "We chose the Vista Columbus DVRs for the job because we know they'd be reliable and they are compatible with the TDSi system," explains Mr McGuinness. The equipment is then linked, via fibre optics, to the Central Control Room located in Student Services. Here, the entire Campus can be monitored, incorporating information coming in from the Access Control system.

"The students and staff are very pleased with the security arrangements," says Mr Basford. "They feel safe and secure, and the system is flexible enough to allow for problem-free movement around the campus, even out of hours." He goes on to say, "It has achieved exactly what Castle Security Solutions said it would and we've experience very few teething problems which is quite an achievement over such a huge site."

"It's been a pleasure working with Castle Security Solutions," adds Mr Basford. "They understood our requirements and came up with a practical and intelligent solution to meet our needs. I wouldn't hesitate to use them again."

About Castle Security Solutions

MD Chris McGuinness formed Castle Security Solutions in 1997. It is SSAIB accredited and offers integrated security systems, covering all aspects of security and visual management solutions in CCTV, remote monitoring, access control and EAS tagging systems. Located in Stafford, Castle Security Solutions covers the whole of the UK. All its engineers are enrolled on Industry Standard Training Courses and are fully qualified across the range of technologies.

They have a very wide range of clients in its portfolio, from Schools & Colleges to Chemical Plants, Quarries, National Distribution Centres, Bus Depots, Shopping Centres and as diverse as several privately owned mansions and Estates.

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