



## MOBOTIX and Bergen County Courthouse and Jail

### Maximum Security for Courthouse and Jail

Designed by architect James Reilly Gordon circa 1911, the Bergen County Courthouse is a fine example of the Beaux Arts classicism that typifies the civic architecture of the period. Its imposing design reflects the pride and confidence in government that characterized public buildings in the early twentieth century.

The Bergen County Jail in New Jersey serves the community as a central reception and processing center for pre-trial male and female adult detainees whose confinement is necessary to ensure a court appearance. The facility also provides for the detention of both sentenced and unsentenced prisoners in a minimum, medium and maximum-security environment.

Technology overall is state-of-the-art in the facility, featuring computer control of all inmate housing areas, an integrated perimeter security system, a site-wide duress/panic alarm system and a computerized Control Center. However, the Bergen County Courthouse and Jail had some particular challenges that their analog CCTV cameras simply could not meet. One of those challenges was that these cameras did

not offer the level of image quality to identify persons in the holding cells or in the courthouse. In addition, they wanted a more detailed view of the complete area. The jail also needed higher resolution images and cameras that could not only integrate with their network but also open and close doors and gates, survey wider areas than their current cameras, and not be adversely affected by extreme temperature and weather conditions. “We spend the taxpayers’ money wisely, so we needed a system that meets all our needs with maximum cost efficiency” says Leo P McGuire, Sheriff of Bergen County. “My teams critically analyzed the market before any decision was made.”

After discussions with MOBOTIX, Bergen County officials became convinced that MOBOTIX had the ideal system - in terms of highly intelligent, advanced digital imaging and extremely sturdy camera design - to enable better overall surveillance of both the courthouse holding cell and the interior and exterior portions of the county jail.

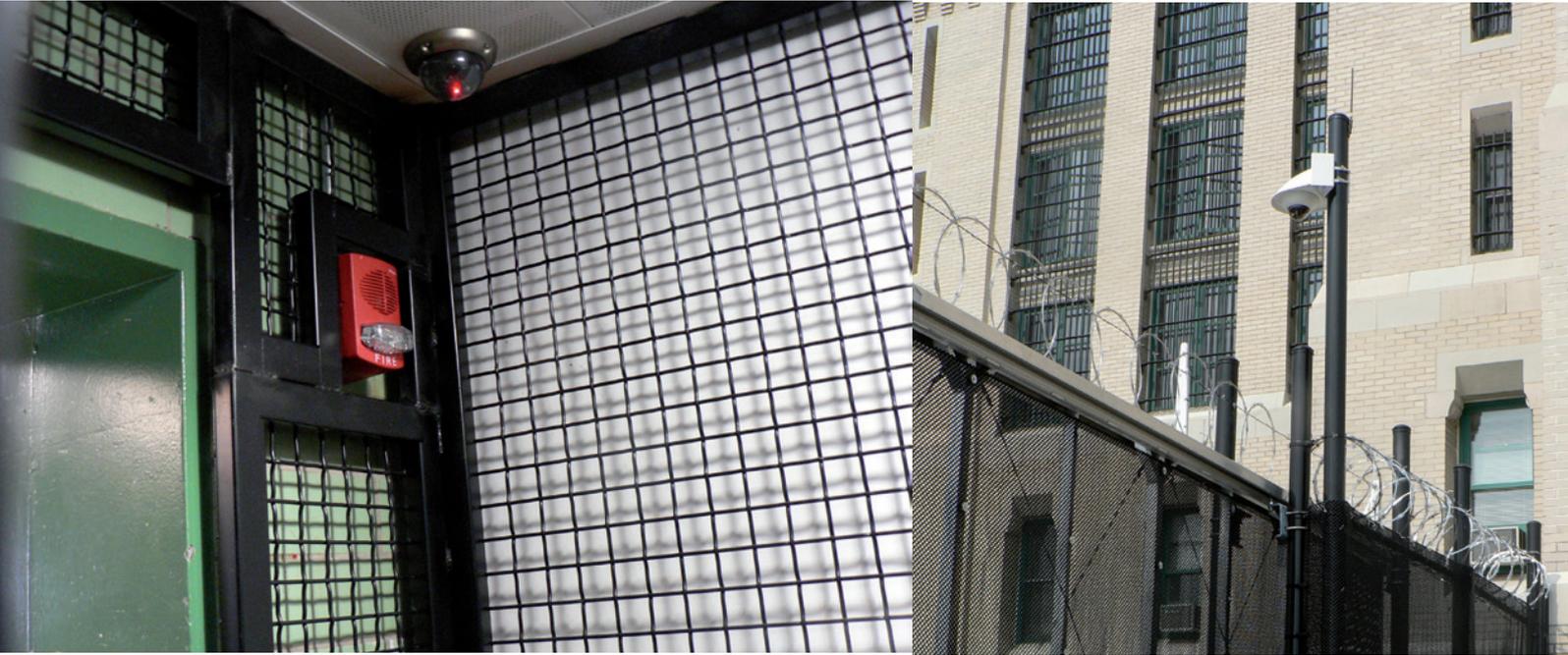
#### Installation

Bergen County purchased 80 cameras, with most of those being used at the jail and the others at the courthouse. With both indoor and outdoor locations, the complete variety of MOBOTIX cameras are on the job. The original estimated amount of cameras was significant reduced by the use of dual lens D12Di cameras and Hemispheric Q22 cameras with 180 degree views.

#### Image quality

One of the things that impressed Bergen County most about MOBOTIX was the exceptional quality of their video surveillance camera high-resolution images. “We had never seen such clear images from video surveillance cameras,” said Phil Lisk, Director of Information Technologies for the Bergen County Sheriff’s Office. “Even under very critical light situations, with extreme back light, we are able to see crisp clear images from the cameras in the courthouse and the jail.”

The reason for that clarity is that MOBOTIX provides fully digital, intelligent IP (digital) video camera systems, not (converted) analog CCTV



90 MOBOTIX cameras watch every inch of the Courthouse, the Sheriff's Office and the Jail, guaranteeing safety for visitors and staff.

## Full Coverage in High Resolution

cameras. Instead of the typical 288 vertical lines of resolution recorded by DVR'S, MOBOTIX cameras record up to 1536 lines/3 megapixels of resolution, which is 30 times more than the analog standard currently offered in the industry, and even more than HDTV.

### Durable design

Bergen County had particular concerns related to the extreme cold in the winter and how that could affect outside cameras. MOBOTIX cameras are built to withstand all sorts of weather conditions and hostile environments: from -30 to +60 °C (-22 to +140 °F) without additional cooling or heating, allowing Power over Ethernet (PoE) all year round. The fiberglass reinforced and shock-resistant MOBOTIX cameras protect the network cable and connections against vandalism as well as severe weather conditions. There is no worry in this case about deterioration due to camera lenses fogging over, or the system

getting damaged from the rain, heat or cold weather. "It was a great relief to know these cameras would not require any additional maintenance in outdoor winter conditions, such as blowers or heaters," said Phil Lisk. "In a high security environment, knowing that the cameras will be operative regardless of the elements is a crucial part of safe operations."

### Audio features

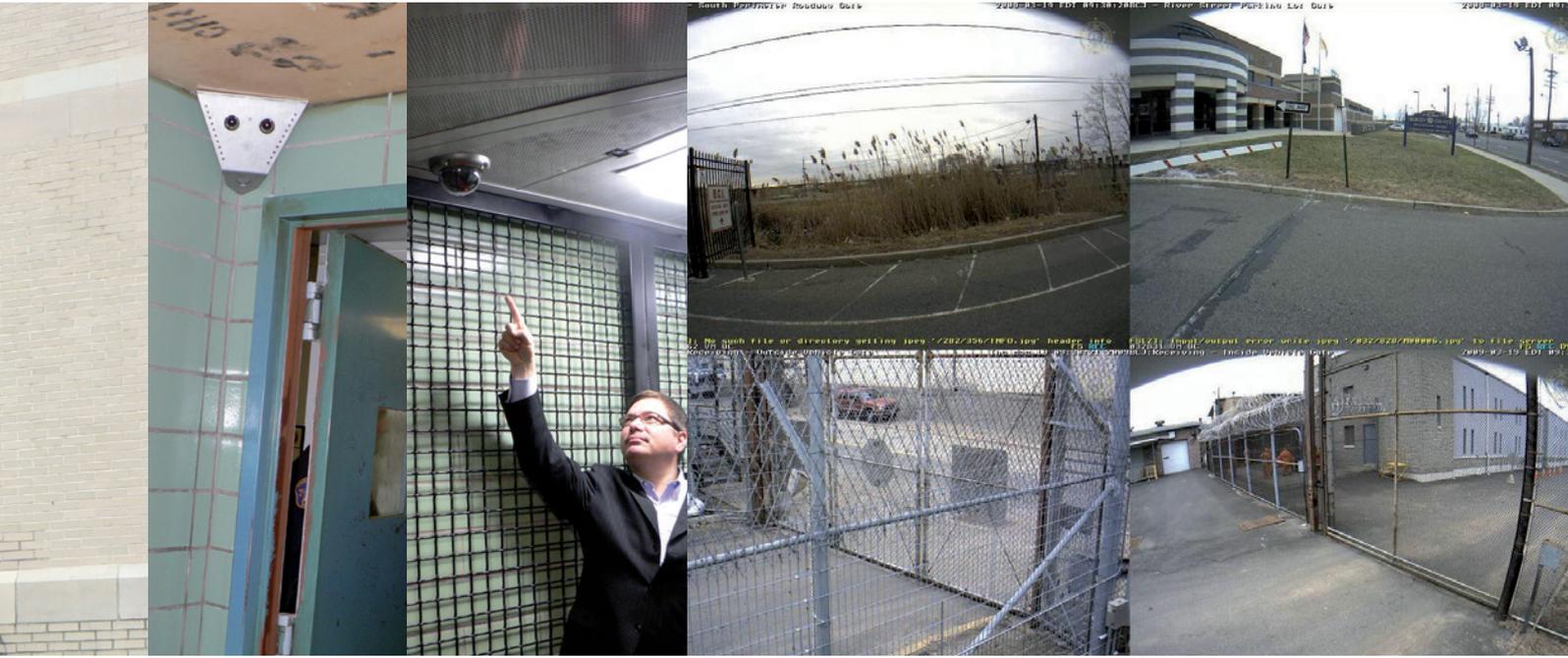
The fact that MOBOTIX cameras have both audio and video features introduces an interactive aspect that is a big advantage for Bergen County. "In a corrections setting, you need to see and hear what's going on, so this works very well for us," said Phil Lisk. MOBOTIX cameras can also be programmed to give an audio alert that warns inmates, guards or other employees away from particular areas.

### Ability to survey large areas

The dual lens feature of MOBOTIX cameras serves the Bergen County Jail's need to cover very large areas. It is essentially like having two cameras for the price of one with the added advantage of being able to view much wider or two separate areas. In addition, MOBOTIX is able to do this with no moving parts.

### Other advantages

Because MOBOTIX systems provide 30 times more detail than the average analog camera, one MOBOTIX camera can watch multiple targets and thereby reduce the total number of cameras required. Intelligent, direct storage management on an NAS or fileserver eliminates the need of digital video recorders and reduces the overall cost of storage by a ratio of 10 to 1. For Bergen County, this has translated into a much higher level of safety and security at a much lower cost. In addition, due to the the internal camera



ringbuffer overcoming wireless fluctuations, Mobotix cameras are an excellent fit with the wireless mesh system Bergen County uses for some of its outdoor cameras. In this case, cameras set on telephone poles bring the signal back on a mesh network, and can handle up to 25 Mbps of data. “By the way” says Phil Lisk “No other system that I have seen provides this kind of quality with such a low network load.”

### Next steps

Bergen County has begun with the installation of 80 MOBOTIX cameras. Due to its high level of satisfaction with the cameras, Bergen County expects to be installing many more over the next few months, so that the courthouse will have somewhere between 100 to 120 cameras and the jail between 200 to 300.



MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.

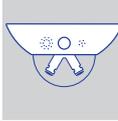
MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.

MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.

The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.

The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-6 watts.

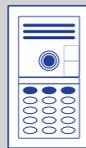
An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Dual optics for outdoors			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust, for extreme conditions	Dual flexible video camera	Dual modular video camera	Video camera DualThermal	Video camera DualThermal

Single lens for outdoors			
M25/26 Allround	S15M/26M FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust, for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular FixDome

For indoors			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° Hemispheric	Discreet, video analysis	Modular ceiling video camera	Vandalism-proof video camera

Door modules			MxDisplay+
Video camera	BellRFID	Keypad	Terminal
			

Door kit			
Dual module frame		Triple module frame	
			

Retailer information: