Capitol Building Planning Commission

NMCD – Capital Projects

November 12, 2013

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November 12, 2013

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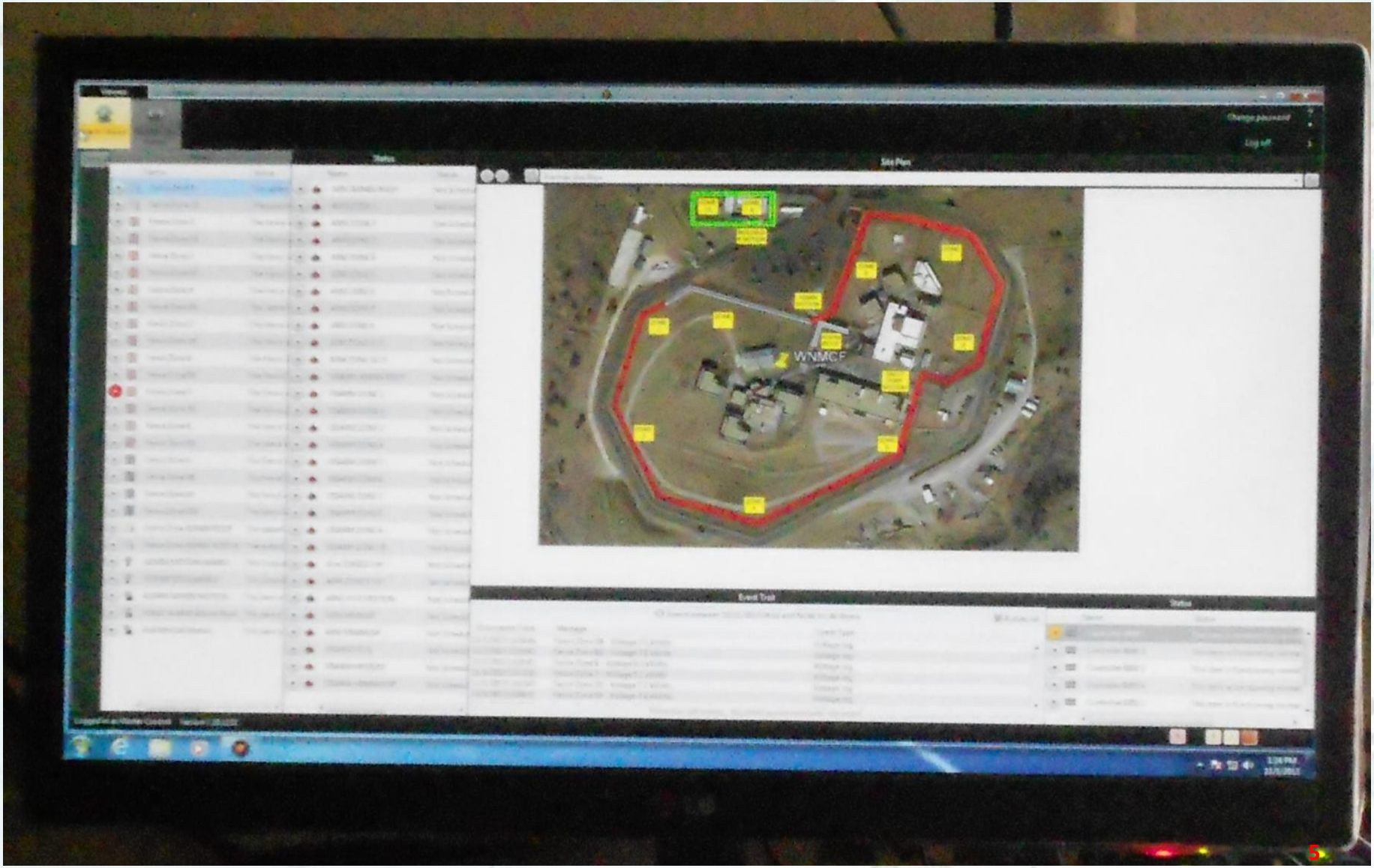
Prison Security

- Fences with razor wire
- Automated Sensors
  - Stun Fences
  - Metal Detectors
  - Cell Phone Detectors
- Electronic Cell Doors
- Video Surveillance
- Perimeter Lighting

WNMCF – Outdated Fence

WNMCF – Stun Fence Master Control



WNMCF - New Stun Fence

WNMCF - New Stun Fence

WNMCF - Stun Fence

CNMCF – Cell Doors Master Control

CNMCF – Cell Doors Control Screen

CNMCF – Cell Door Screen- Open/Close

CNMCF – Slider-Type Cell Door

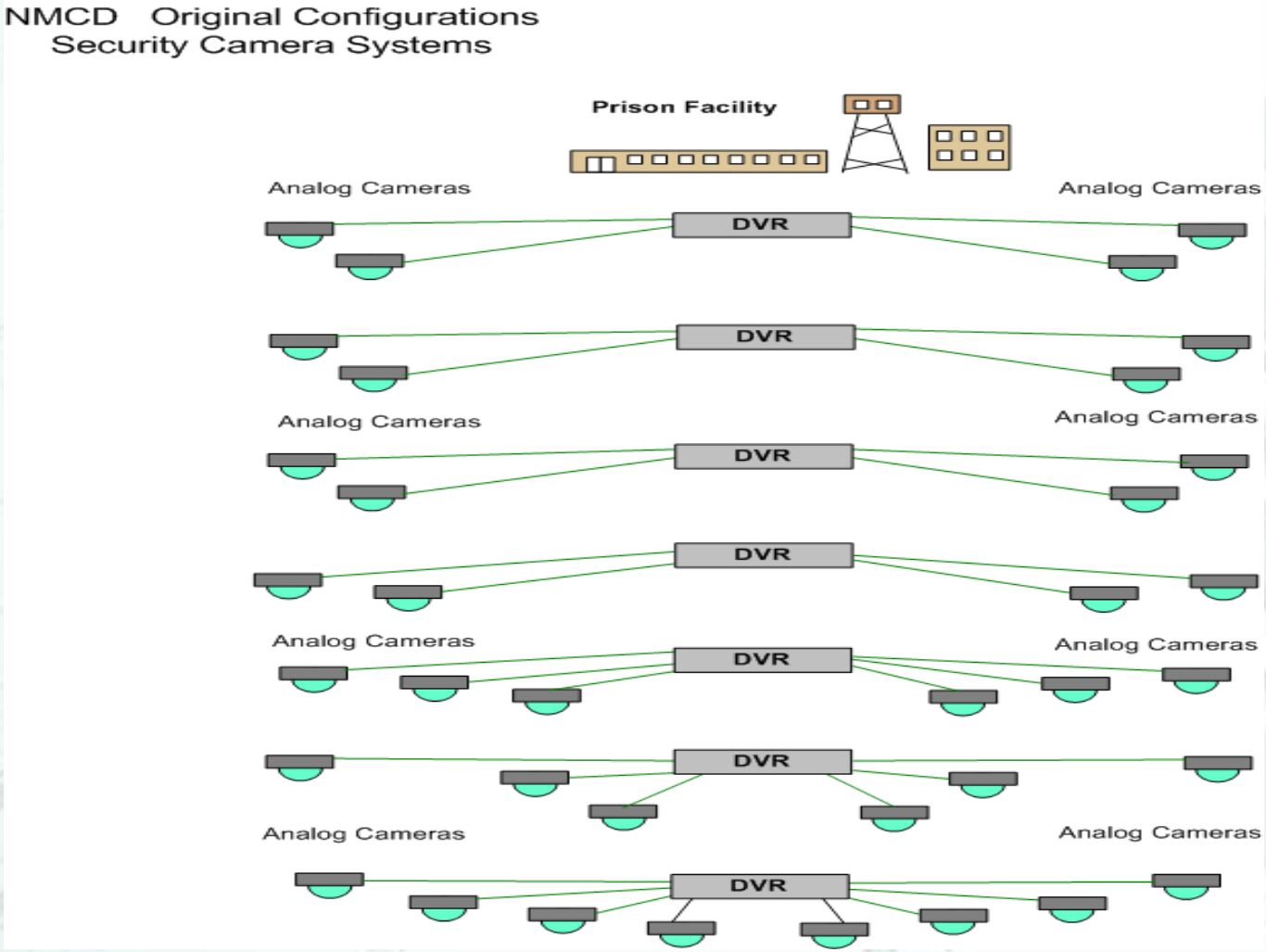
Video Surveillance - Statewide

- Current CCTV systems are failing statewide
- Analog Technology is outdated
- Implement new technology using POE IP cameras
- Use as much existing infrastructure to minimize cost
- Use a Hybrid approach instead of a rip and replace approach

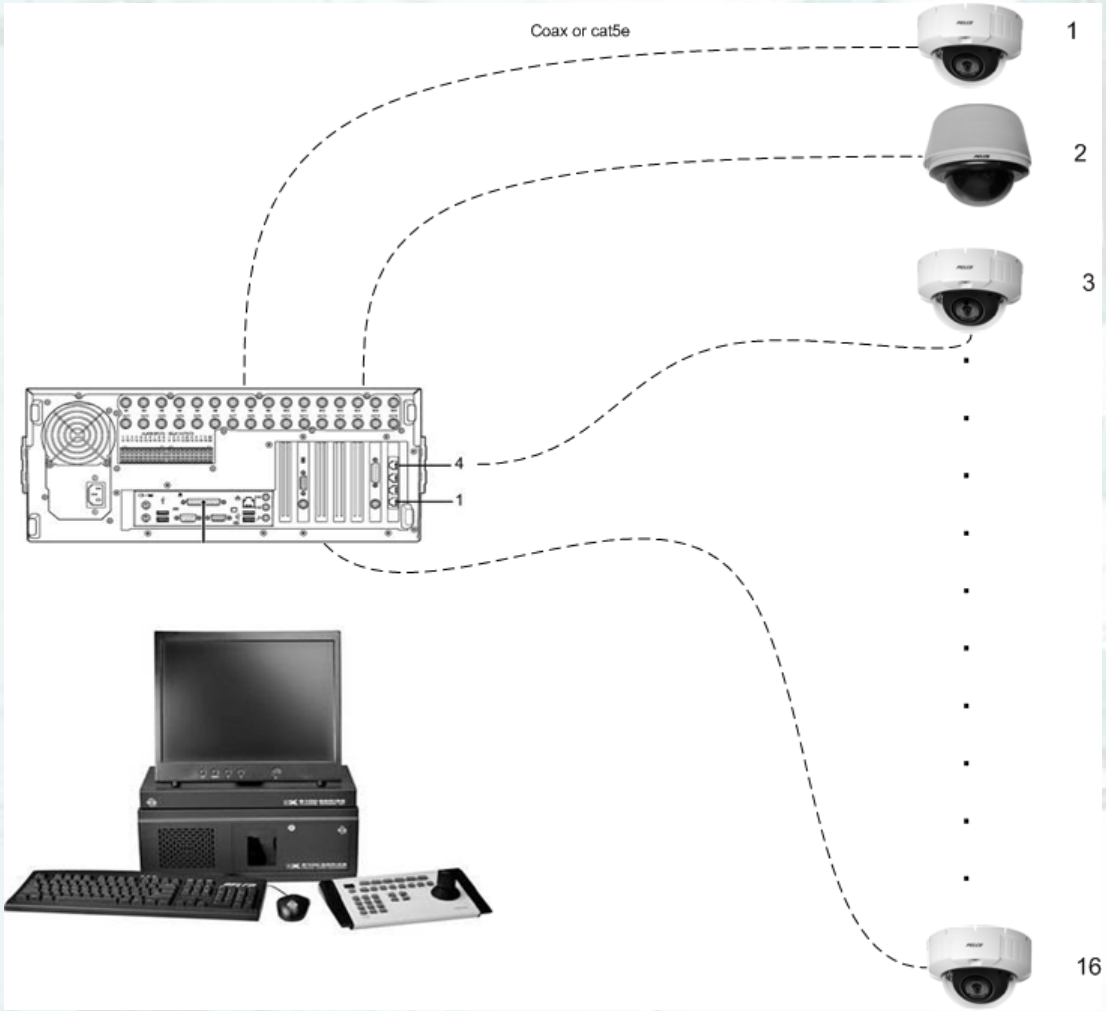
Current Technical Model

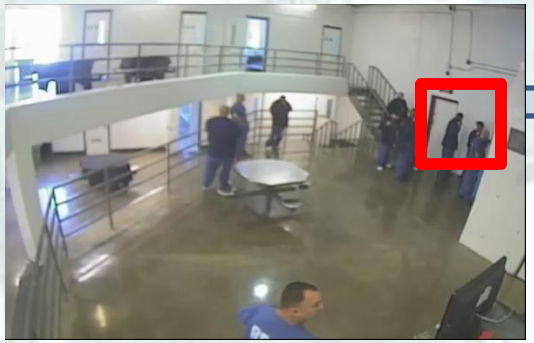
- For past 10+ years NMCD has invested in CCTV analog technology
- Use of multiple 16 Channel Analog Digital Video Recorders (16 Cameras per DVR) per facility statewide.
- Capturing 1-4 Frames per second
- Video recording retention time around 30 days
- Multiple analog PTZ (Pan Tilt Zoom) cameras
- Multiple analog 4CIF cameras
- Miles of Coax and CAT 5e infrastructure has been installed to accommodate existing cameras

Current Technical Model



Current Technical Model





State Wide Video Surveillance Project

New Mexico Corrections Dept

Business Problem

- Analog Technology is outdated
- Analog video is not very clear.
- Digital Video Recorders (DVR) are failing at a high rate
- Only 16 cameras per DVR can be recorded at one time
- Limited DVR hard drive size limits length of recording capabilities. Cannot retain video for any length of time
- Decreased frames per second and failing DVRs result in a loss of evidence within video

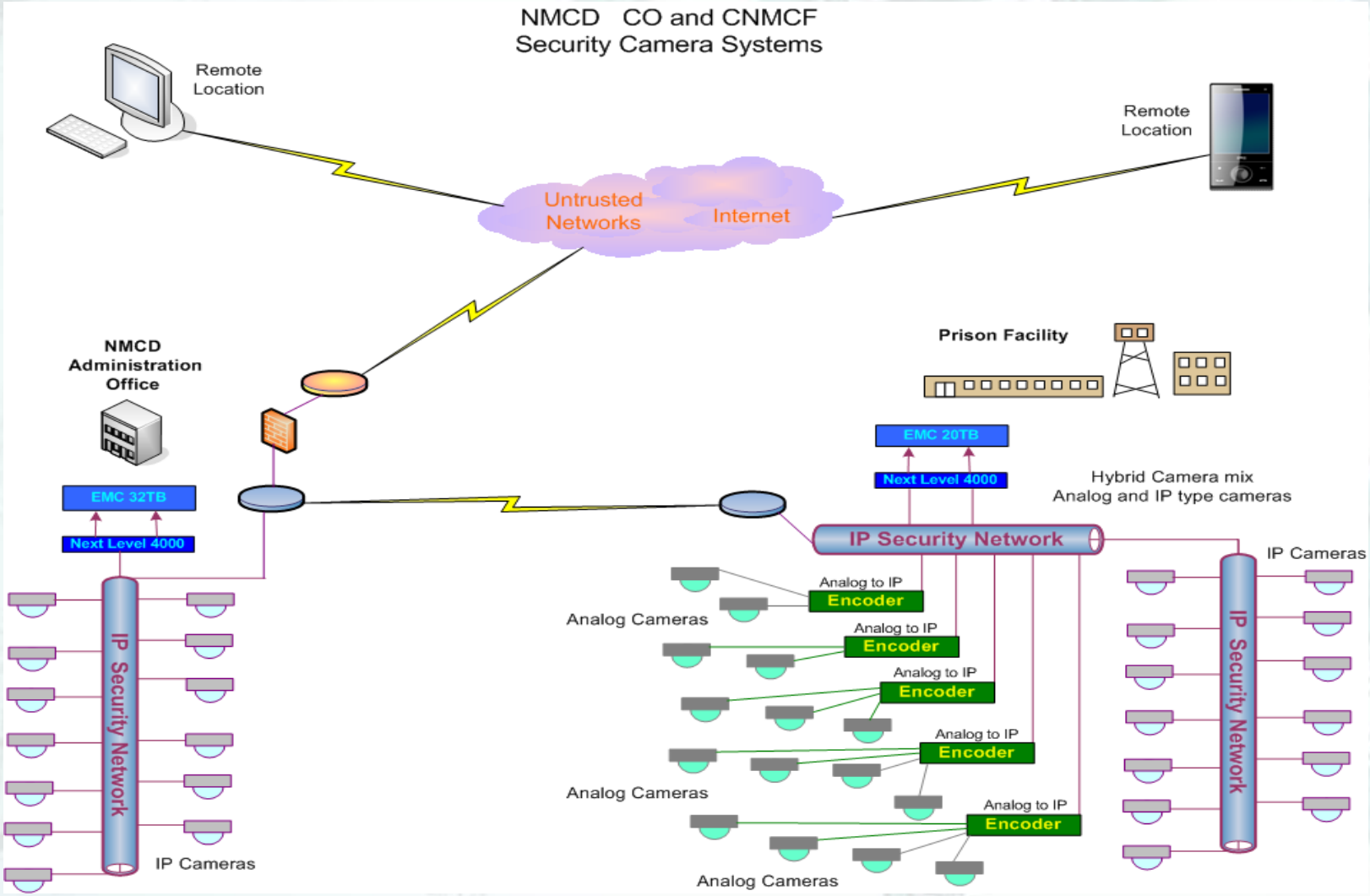
Business Problem

- Agency relies heavily on integrator to troubleshoot and maintain existing analog equipment
- Due to environmental conditions (Heat, Dust, etc.) the typical life expectancy of a DVR in a prison averages about 1 year. Average cost of 16 channel DVR - $15,000.
- NMCD spends on average $360 thousand to replace four DVR each year in each prison
- The use of PTZ cameras does not work in prison environment

Future Model

- Implement a unified solution combining video management and analytics into a single, easy-to-use networked platform
- No license renewals or software maintenance agreements.
- Use of high performing unified storage with iSCSI to store video on a single platform array capable of 250TB disk growth
- Leverage current cabling infrastructure to convert current analog cameras to IP and implement IP H264 HD cameras
- Use of Power over Ethernet (POE) cameras eliminates running additional dedicated power for each camera
- Record full time video at 10-15 frames per second allowing smooth video for solid evidence
- Use of cameras that provide 180 or 360 degree viewing to help eliminate multiple camera scenarios for proper coverage

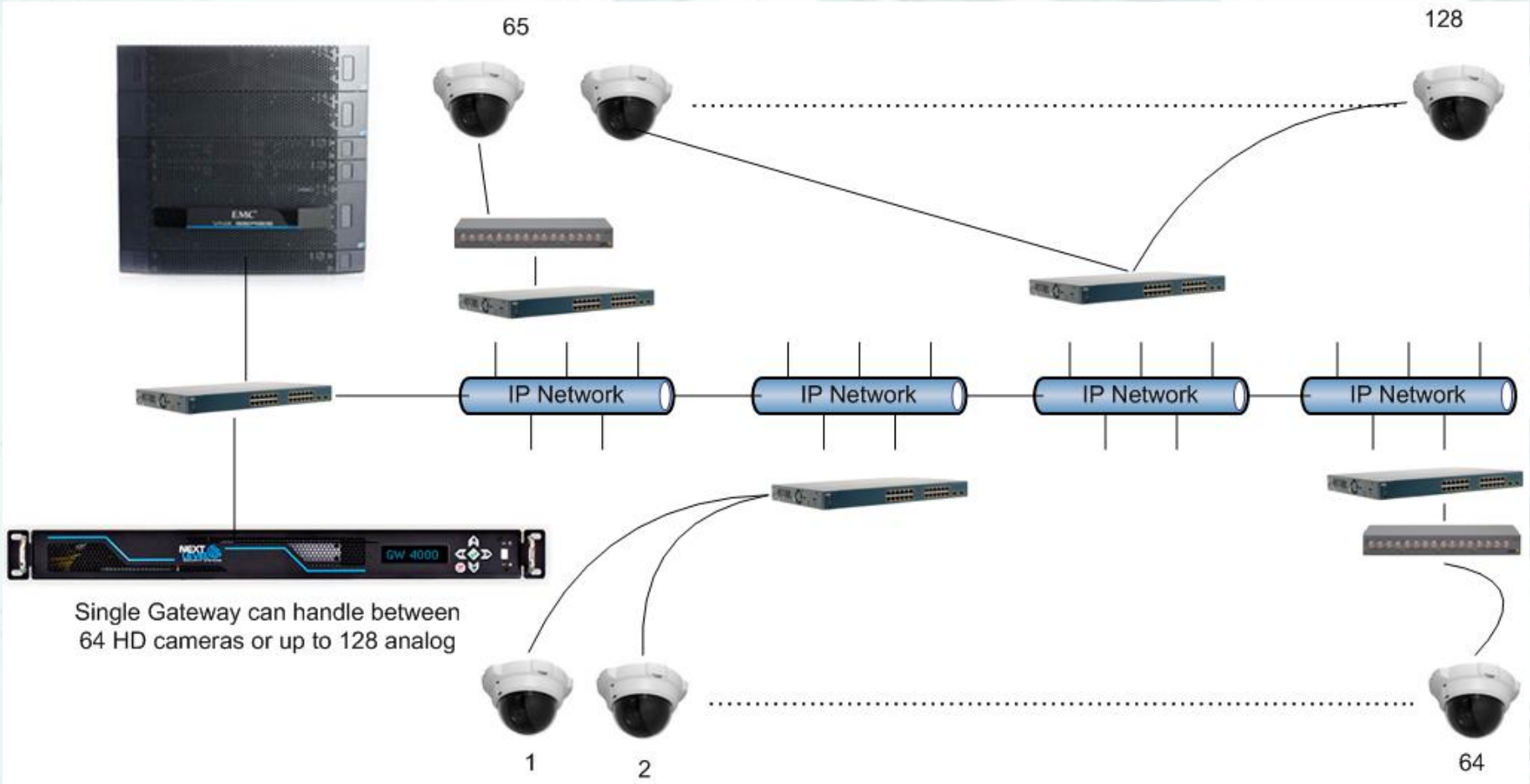
Future STATEWIDE Model
Currently installed At CO and CNMCF



State Wide Video Surveillance Project

New Mexico Corrections Dept

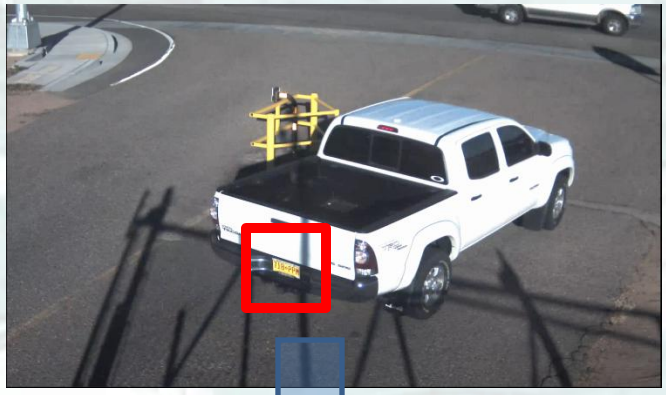
Future Statewide Model



Future Model – HD Megapixel Cameras

3MP Camera

5MP Camera



360 degree Camera

State Wide Video Surveillance Project

New Mexico Corrections Dept

Future Model – HD Megapixel Cameras

180 Degree Camera – Panoramic view

Implementation Schedule

- Central Office POC – Purchased and Implemented Next Level Gateway and 32 TB Video Storage - June 2013
- CNMCF POC – Purchased and Implemented Next Level Gateway, encoders, 20TB Video Storage – June 2013. Additional Gateways, storage and cameras need to be purchased for main Kitchen, LTCU, MHTC and the entire Level 1 (currently no cameras).
- RCC - Purchased a couple of Next Level Gateway, 20TB Video Storage – October 2013 – Awaiting delivery of product. To be implemented by December 2013.
- PNM – TBD - Awaiting future funding
- WNMCF – TBD - Awaiting future funding
- SNMCF – TBD - Awaiting future funding
- SCC – TBD - Awaiting future funding

Cost/Benefit Analysis

- Central Office POC – Replaced Verint Video System with Next Level Gateway and 32TB Video Storage - $40,000.
- CNMCF POC – Replaced 11 DVR's with Next Level Gateway, Encoders, 20TB Video Storage - $70,000. Additional monies will be required to purchase additional Next Level gateways in order to continue migration off DVR's in LTCU and MHTC. Main new kitchen and Level 1 Farm will be a new installation of video surveillance.
- RCC – Replacing Verint Video System with Next Level Gateways and 20TB Video Storage - $55,000. Additional Monies will be required to purchase additional video storage and cameras where required based on assessment.
- PNM – Integrator to replace all DVR's with encoders, POE switches, purchase new HD cameras, Next Level Gateways, and 150TB of Video Storage - $800 thousand compared to the $2.2 million FMD assessment.
- WNMCF – TBD
- SNMCF – TBD
- SCC - TBD

Demonstration of Video Surveillance

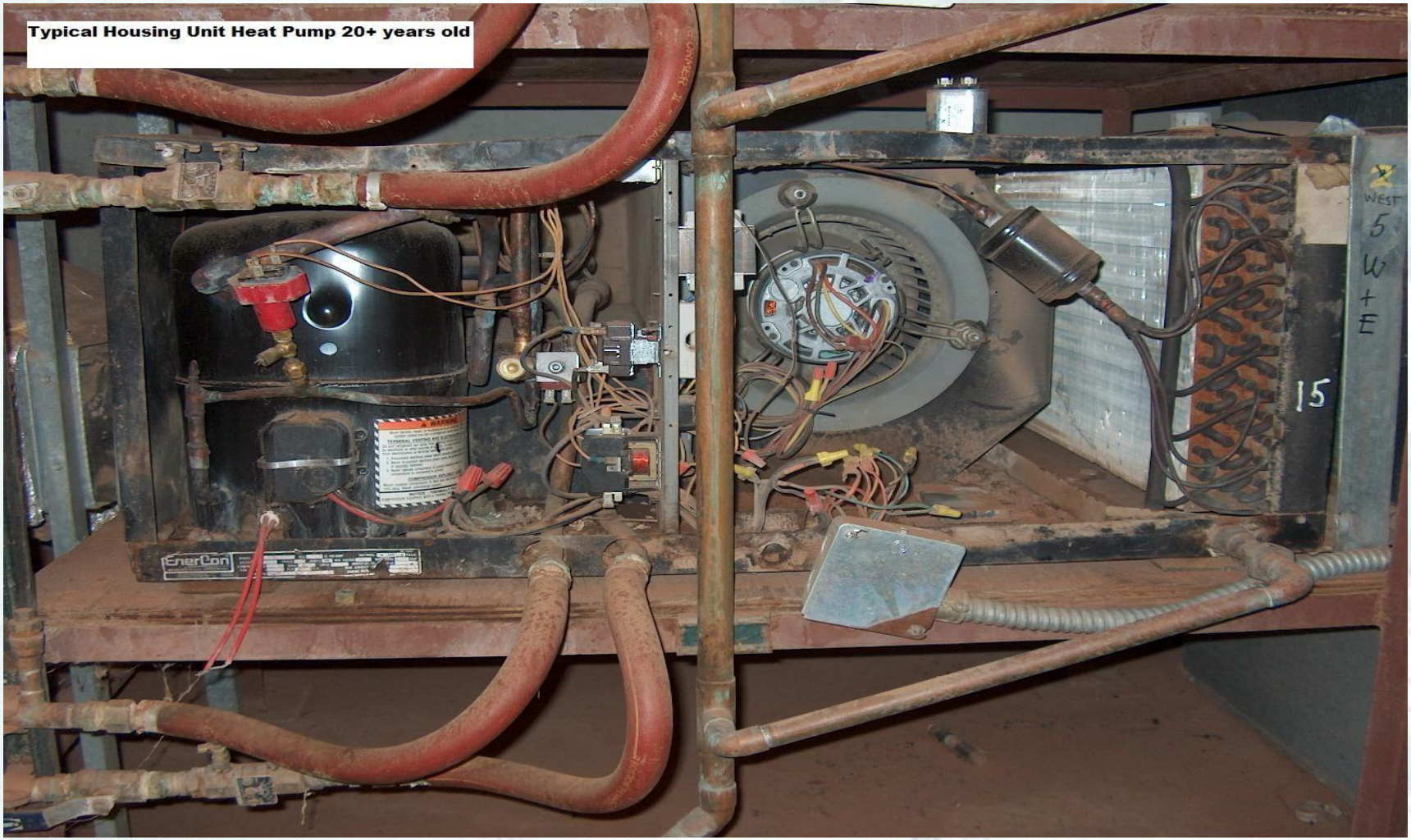
WNMCF – Leaking Roof

WNMCF – New Roof

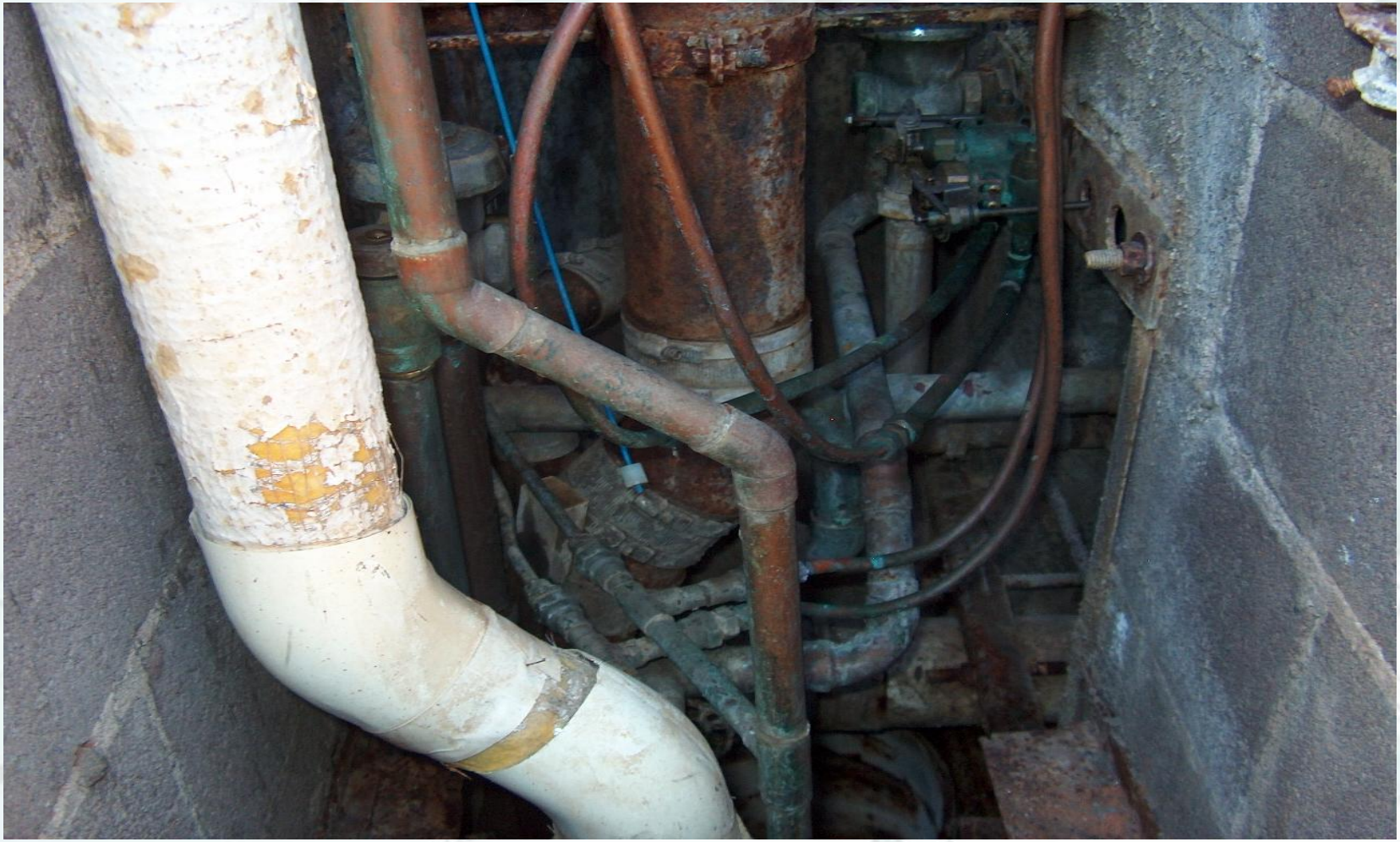
WNMCF - New Roof

SNMCF – Old HVAC
Heating and Cooling Ducts

SNMCF – Old HVAC Housing Unit Heat Pump



SNMCF – Old HVAC Housing Pipe Chase



SNMCF – HVAC Roof Top Units

SNMCF - HVAC Roof Top Units

SNMCF – HVAC
Roof Top System