

Local Network Solutions was founded in 2009. With over 30 years of experience in the industry focusing on enterprise network solutions. We offer hardware and software-based solutions as well as ongoing support and consulting services. In addition to our premise-based hardware solutions we offer internet and Wide Area Network solutions to meet your specific needs.

We believe that our design meets the requirements discusses the most robust network possible. This network design will provide both the solution to your immediate challenges as well as the long-term support options to meet your business needs.

We welcome the opportunity to answer any additional questions and look forward to the opportunity to provide the best possible solution available at a cost-effective pricing and support strategy.

Thank you for the opportunity to respond to your business needs. We look forward to serving as your network support in the years to come.

Sincerely,

Milan Atanackovic Local Network Solutions, Inc. Principal Solutions Architect M 330.418.5521 Milan@localnetworksolutions.com



Network Security & Redesign:

Our redesign shifts focus away from the police department as a core headend and leans more on Milford datacenter and City Hall datacenter as the new core of the network. This approach improves network security and redundancy. Delivering critical infrastructure connectivity can be improved with this dual headend design.

This design improves the ability to expand future growth of the city network without sacrificing network security and connectivity. The network will be ready to support the next smart city project without the worry of capacity or design.

Critical network elements such as the firewall and core switching network are dual homed between the Milford datacenter and City Hall datacenter improving security, uptime, and network availability.

Implementation:

Creating two new datacenters will reduce the reliance on the police department and provide the ability to upgrade the firewalls by placing one in each datacenter. This will provide high-availability (active/active) internet connectivity. The new firewall cluster will be the new source for allowing communications between locations and filtered internet access. This greatly improves internet security along with better network management control.

The new core switched network will be split between datacenters. This will provide for a single or dual-homed connection to and from the city internal network along with external city connections. This fiber switched network provides 48+ Layer 2 10G connections with upgrades to 40G/100G for future projects.



Equipment Procurement:

- (2) Juniper EX4600-40F-AFO Core Upgrade
- (2) Juniper SVC-ND-EX460040F JCARE Next Day Support
- (8) EX-SFP-10GE-LR Optics for network connectivity
- (6) EX40GBASE QSFP+ Core Switch connectivity
- (1) Juniper EX2300-C 12P Water Department
- (1) Juniper EX2300-C 12P Barlow Community Center
- (1) Juniper EX2300-C 12P Parks Department
- (1) Juniper EX2300-C 12P Sign Shop
- (4) SVC-ND-EX23-C12P JCARE Next Day Support
- (1) Juniper EX2300 24P Spare unit
- (1) SVC-ND-EX23-24P JCARE Next Day Support
 - o \$43,950.28
- (2) Firewall upgrade
 - o TBD

Equipment Installation & Network Redesign Scope of Work:

- Network core installation and provisioning
- Redesign network segmentation (vlans) and IP routing provisioning
- Redesign of Milford Datacenter and City Hall Datacenter
- Redesign remote locations, connectivity, and provisioning
- Support firewall installation and connectivity to core
- Providing best practices for network deployment and security
- Providing support for the City of Hudson network connectivity requirements
- M-F 8x5
 - o \$20,890.00

Project Total:

• \$64,840.28