

- 1) Desktop PCs
 - a. (45) standard PCs suitable sized to run MS Office 2016
 - b. (5) high end PCs well suited to run AutoCAD 2017
 - c. PC OS must be 64 bit and able to fully join an Active Directory domain
- 2) Fully managed switches capable of Gig speed
- 3) UPS devices for all servers, PCs, routers, switches, but not printers.
 - a. Must be calculated to give at least 60 mins runtime
- 4) (4) Servers
 - a. (2) Windows Server 2016
 - i. Redundant domain controllers
 - ii. Local forest root
 - b. (1) Member server
 - i. Local backup solution for all servers except Web
 - c. (1) Web server
 - i. In a DMZ
 - d. Common to all servers
 - i. Fault tolerant disk strategy
 - ii. Mounted in a single rack
 1. Detailed specifications of the rack
- 5) Internet
 - a. Redundant feed
 - b. Firewall
- 6) Administration
 - a. Network monitoring solution
 - i. Include hardware and software
 - b. Naming conventions
 - i. PCs
 - ii. Servers
 - iii. Routers / switches
 - iv. Usernames
 - c. IP Address Scheme
 - i. Must not conflict with the Main Office and must use IP Space wisely
 - d. Document Policies/Procedures/Guidelines for these items:
 - i. Individual unique accounts per user
 - ii. Password complexity standards
 - iii. Minimum necessary resource access permissions
 - iv. Prohibit account sharing

- 7) Connectivity to Main Office
 - a. 10 Mbps min point to point solution
 - b. The IP scheme of the main office is 172.16.0.0/16
- 8) Common to all
 - a. No consumer grade equipment or software
 - b. Open source is acceptable unless specified otherwise
 - c. More detail is better
 - i. Include Visio diagrams
 - 1. Assume a data center, wire closet(s), and cubicles
 - d. The cost must not exceed \$95,000, but any costs beyond \$60,000 need to be justified and explained.