Project Deliverable 5: Infrastructure and Security

This assignment consists of one (1) section: an infrastructure document and a revised Gantt chart or project plan. You must submit both sections as separate files for the completion of this assignment. Label each file name according to the section of the assignment it is written for. Additionally, you may create and / or assume all necessary assumptions needed for the completion of this assignment.

The infrastructure which encompasses the network solution and security considerations is a major consideration for your company. Considering that the company will be expanding from one (1) floor to three (3) floors in the very near future you, as the CIO, are responsible for the design of the infrastructure and security protocols. You have been tasked with designing a network that is stable, redundant, and scalable. In addition, speed and reliability are important considerations. Assumptions should be drawn regarding network usage in relationship to network services and resources. All the established criteria that were set at the onset should be adhered to within your plan. The network solution that is chosen should support the conceived information system and allow for scalability. The network infrastructure will support organizational operations; therefore, a pictorial view of workstations, servers, routers, bridges, gateways, and access points should be used. In addition, access paths for Internet access should be depicted. Additionally, the security of the network should be in the forefront of your design because protecting your data is a primary consideration.

Section 1: Infrastructure Document

1. Write a four to six (4-6) page infrastructure document in which you:
* Justify and support the relationship between infrastructure and security as it relates to this data-collection and analysis company.
* Present the rationale for the logical and physical topographical layout of the planned network.
* Design a logical and physical topographical layout of the current and planned network through the use of graphical tools in Microsoft Word or Visio, or an open source alternative such as Dia. Note: The graphically depicted solution is not included in the required page length.
* Illustrate the possible placement of servers including access paths to the Internet, intrusion detection systems (IDS), and firewalls. Note: Facility limitations, workstations, databases, printers, routers, switches, bridges, and access points should be considered in the illustration.
* Create and describe a comprehensive security policy for this data-collection and analysis company that will:

Protect the company infrastructure and assets by applying the principals of confidentiality, integrity, and availability (CIA). Note: CIA is a widely used benchmark for evaluation of information systems security, focusing on the three (3) core goals of confidentiality, integrity, and availability of information.

Address ethical aspects related to employee behavior, contractors, password usage, and access to networked resources and information.

Your assignment must follow these formatting requirements:

* Be typed, double spaced, using Times New Roman font (size 12), with one-inch margins on all sides; citations and references must follow APA or school-specific format. Check with your professor for any additional instructions.
* Include a cover page containing the title of the assignment, the student’s name, the professor’s name, the course title, and the date. The cover page and the reference page are not included in the required assignment page length.
* Include charts or diagrams created in MS Visio or Dia as an appendix of the infrastructure document. All references to these diagrams must be included in the body of the infrastructure document.