

## **Unit 9 Research 1: Network Design, Part 1**

### **Course Objectives and Learning Outcomes**

- Show competency in all outcomes for this course.

### **Assignment Requirements**

Now it is time for you to put your networking knowledge to work. Read through the Network Design: Kamazon.kom Network Upgrade information and make sure you understand the customer's requirements. Your instructor will act as Kamazon's representative, so if you have questions or need clarification on any part of the bid requirements, be sure to ask him/her.

Notice the list of deliverables toward the end of the information. Part 1 includes deliverables 1-4.

### **Required Resources**

- Computer with drawing, word processing, spreadsheet, and presentation software
- Internet access
- Printer

### **Submission Requirements:**

Deliverables 1, 2, 3, and 4 will be due in Unit 10 (unless otherwise noted by your instructor). See the specific requirements for these deliverables in the following bid information.



**Other Information:**

- Each department needs its own network/subnet.
- The management offices are located in an area of the building that has been designated a historic landmark, so it cannot be changed (no holes drilled in the walls or floors for cable drops).
- All other departments are located on floors that are entirely occupied by Kamazon. There are no permanent walls, and drop ceilings have been installed on these floors, so there are sufficient areas for cables to be installed without damaging any existing structures.
- Existing hubs need to be replaced with LAN switches.
- The company uses a national company as its WAN provider and pays for sufficient bandwidth to support its Web presence, so you do not have to include any WAN upgrades as part of your bid.

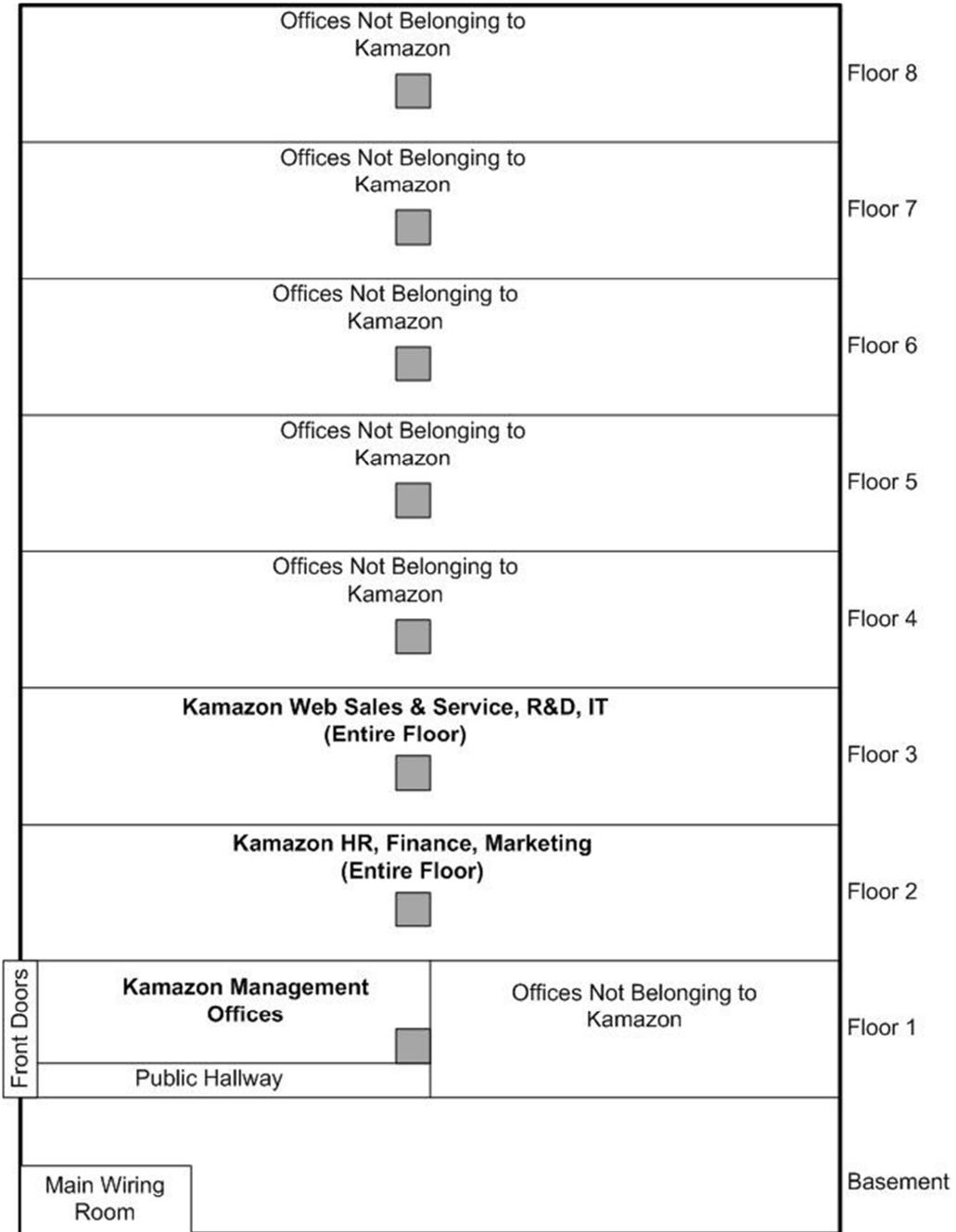
**Building Layout:**

See the attached building plan. Each floor is 100 feet wide by 100 feet long. Only Floor 1 has any interior walls; the other floors are open spaces (except where the elevators and stairs are located). Restrooms are located beside the elevators and stairs.

The management offices on Floor 1 are 80 wide feet x 50 feet long.

All telephone and ISP services for all customers in the building are located in the basement in the main wiring room. Kamazon's primary router and aggregating switch are also located in this wiring room.

# Building Plan



Each floor is 100 feet wide by 100 long

\* Elevators/Stairwells

**Bid Requirements/Deliverables:**

1. Drawings showing a map of cable runs and placement of wiring rooms for networking devices FOR EACH FLOOR made in MS Visio or another graphic drawing program.
2. Excel spreadsheet listing supplies and equipment with prices.
3. Excel spreadsheet listing installation labor costs, as well as any other labor costs you feel are appropriate to the bid.
4. Documentation in Word or Excel showing your proposed subnetting scheme.
5. Presentation using PowerPoint or other presentation software to be given to the customer.
6. Written report to be given to the customer that details your bid plan (this includes a copy of your presentation slides and a compilation of deliverables 1-4 neatly bound in a binder/report folder).

**Part 1:**

Deliverables 1, 2, 3, and 4 will be due in Unit 10 (unless otherwise noted by your instructor).

**Part 2:**

Deliverables 5 and 6 (presentation and report) will be due in Unit 11 (unless otherwise noted by your instructor).