Technology Education Department Advanced Technical Drawing - Architectural

PROJECT ANALYSIS

FOR

Mercedes Benz Dealership

ΒY

Landon Kowalski

STATEMENT OF THE PROBLEM

To design a 48,000 square foot indoor golf facility near downtown Arlington Heights. The building will be called Golf Nation and will contain an artificial putting green, an artificial chipping green, a hitting range, and a café style restaurant. The site will need to have ample parking, the lot has over 35,000 square feet for parking. The structure is to have a flat roof, concrete walls, and an open floor plan. The total cost for the project must not exceed \$7 million and must be completed by December 17, 20009.

I. CLIENT DATA

- A. Company Name: LJK Architecture
- B. Owner or Contact Person: Landon Kowalski
- C. Street Address: 360 Butternut Drive
- D. City: Buffalo Grove State: IL Zip Code: 60089
- E. Product or Services: Architectural Designer
- II. BUILDING SITE DATA
 - A. Lot Dimensions 240 ft X 730 ft Area 83,000 sq. ft.
 - B. Existing Contours flat land
 - C. Existing Landscape black top parking lot
 - D. Existing Easements per city
 - E. Location of Lot (Address) 2020 Northwest Highway, Arlington Heights, IL

III. PERSONNEL DATA & NEEDS

- A. Number of Occupants 24
 - 1. Salaried Employees \$22,000 a year

- 2. Hourly Employees \$10 an hour
- 3. Part-time Employees \$9 an hour
- B. List of Personnel by Position
 - 1. Job Title Manager Qty. 2
 - a. Responsibilities of Job supervising employees, planning events, working at computer, and talking on phone.
 - b. Equipment Needed for Job chair, desk, computer, phone, enclosed office, printer, and file cabinets.
 - 2. Job Title Custodian Qty. 3
 - a. Responsibilities of Job cleaning floors, bathrooms, offices, and tables of café.
 - b. Equipment Needed for Job floor polisher, vacuum cleaner, towels, and disinfectant spray.
 - 3. Job Title Bartender Qty. 2
 - a. Responsibilities of Job serve customers beverages and food at bar
 - b. Equipment Needed for Job glasses/ cups, soda tap, cas register, and alcohol.
 - 4. Job Title Waiter/ Waitress Qty. 4
 - a. Responsibilities of Job take customer food orders, bring food to customers, and give customers the bill.
 - b. Equipment Needed for Job small notebook for taking orders and cash register.
 - 5. Job Title golf ball picker Qty. 3
 - a. Responsibilities of Job pick up all golf balls from hitting range and chipping green, rake sand bunker, and refill golf ball buckets at hiting stations.
 - b. Equipment Needed for Job golf ball picker, golf ball buckets, and sand trap rake.
 - 6. Job Title Greeter/ Doorman Qty. 3
 - a. Responsibilities of Job to greet people that are entering the building and checking people in.

- b. Equipment Needed for Job front desk and computer
- 7. Job Title Cashier Qty. 4
- a. Responsibilities of Job process purchases made from the golf shop or the restaurant.
- b. Equipment Needed for Job cash register, one in restaurant and one in the golf shop.
- 8. Job Title Chef/ Cook Qty. 3
- a. Responsibilities of Job cook/ prepare food ordered by customers.
- b. Equipment Needed for Job oven with stove top, sink, counter space, food supplies, deep fryer, and cooking utensils.

IV. CUSTOMER NEEDS

- A. Outside of Building covered entrance, advertising signs, sidewalks, garden area with a pond, and parking spaces.
- B. Inside of Building café with bar, lobby, restrooms, 3 employee offices, golf shop, hitting range, putiing green, and chipping green.
- V. BUILDING DESIGN DATA
 - A. Approximate Shape Desired rectangle
 - B. Maximum Length & Width Allowed 500 ft X 100 ft.
 - C. Number of Levels Desired one level
 - D. Square Footage Desired 48,000 square feet
 - E. Style of Building Desired traditional style

VI. BUILDING MATERIALS DESIRED

- A. Exterior Walls block concrete
- B. Roofing Cook county Roofing Co.
- C. Soffit or Trim Wide Flange J Channel trim
- D. Windows Andersen Casement windows
- E. Glazing of Windows clear
- F. Exterior Doors Andersen Commercial Entry doors

- G. Roof Drainage System AWD Sheet Drain
- H. Interior Walls 2×4 with $\frac{1}{2}$ " gyp. board
- I. Interior Doors Andersen arched top interior doors
- J. Interior Trim wood trim
- K. Cabinetry Thomasville maple office cabinets
- L. Hardware wood and aluminum hardware
- M. Floor Coverings Armstrong vinyl tile floors
- N. Wall Coverings drywall with light brown/tan paint
- O. Ceilings Armstrong white ceiling panels
- P. Lighting Kichler ceiling lights

VII. SPACE NEEDS

- A. Public Areas (Type & Sq.Ft.)
 - 1. Café = 1,000 sq ft
 - 2. hiiting range = 10,000 sq ft.
 - 3. putting and chipping green = 10,000 sq ft
 - 4. golf shop = 1,000 sq ft
 - 5. lounge = 500 sq ft
- B. Employee Areas (Type & Sq.Ft.)
 - 1. kitchen/ bar = 1,000 sq ft
 - 2. 3 offices = 300 sq ft each
- C. Mechanical Areas (Type & Sq.Ft.)
 - 1. 2 bathrooms = 500 sq ft each
- D. Storage Areas (Type & Sq.Ft.)
 - 1. golf ball and picker storage room= 300 sq ft
 - 2. janitor closet = 100 sq ft

VIII. MECHANICAL EQUIPMENT & SPECIAL FEATURES

- A. Heating System Kenmore multi-room air conditioner
- B. Cooling System Kenmore multi-room air conditioner
- C. Electronic Air Cleaner Kenmore Electrostatic air cleaner
- D. Water Heater Kenmore LP gas water heater
- E. Humidifier Kenmore 12 gallon humidifier
- F. Dehumidifier Kenmore 70 pint dehumidifier
- G. Central Vacuum Cleaner Kenmore Ebony Canister Vacuum
- H. Intercom System 5 channel wireless intercom system
- I. Security System ADT small business secruity system
- J. Skylights Velux skylights
- K. Atriums none