Summer Padgett Westlake Recreation Center Electrical/Lighting Option



# Introduction and Background:

The Westlake Recreation Center is located at 28955 Hilliard Boulevard in Westlake, Ohio. This facility serves as a park and recreation center for the citizens of Westlake. The building houses four swimming pools, a gymnasium, locker rooms, a fitness room, a multi-purpose room, a babysitting room, a community room and recreation department offices. The park has two baseball diamonds, two regulation soccer fields, a multi-purpose trail, and a restroom/concession building. The Use Group Classification is 'A-3.'

## **Project Team:**

- •Owner: City of Westlake
- •Architect: Van Dijk, Westlake, Reed, Leskosky
- •Structural Engineer: Barber and Hoffman, Inc
- •Mechanical/Electrical Engineers: Bacik Karpinski and Associate
- •Civil Engineer: KS Associates, Inc.
- •General Contractor & CM: Panzica Construction Co.
- •Landscape Architect: Behnke Associates, Inc.

## Size:

The total square footage of the recreation center is 82,710 square feet. The pool mechanical room is 1,500 square feet, the first floor is 69,200 square feet and the mezzanine is 12, 010 square feet.

## **Construction Dates:**

Construction started in the spring of 1996 and ended in the fall of 1998. The center opened in November of 1998 and the park area was completed in 2000.

## **Cost and Delivery:**

The construction cost of the project was \$15.3 million dollars and site development cost was \$2.8 million dollars. The delivery method was design-bid-build.

## Architecture:

The Aquatics area features 5 bodies of water; a six-lane lap pool, a relaxation pool, a diving well, a lazy river attached to a lily pad walk, two water slides and a tot play pool. The Fitness Room is a 5,500 square-foot air-conditioned exercise room which contains: treadmills, bikes, steppers, hikers, cross trainers (elliptical) cross country skiers, rowers, cycles, resistance equipment and a free weight area. The Gymnasium area features two high school size regulation maple hardwood floors. The Indoor Track is adjacent to the exercise room and located above the gymnasium and there are 3 lanes with a mondo-cushion surface. There 3 separate locker rooms. Unique to this area is the Family Locker room area. This is an area that incorporates 8 separate changing/ shower rooms for family use. There are also 2 bathrooms with age-appropriate toilets-which are handicap accessible. Lockers and benches are located in the common area. The separate Men and Women's locker rooms each offer a 12-person sauna, 175 lockers and 8 individual partitioned showers. The Multi-Purpose Room is a beautifully designed octagonal room with a floating,



#### Architecture cont.:

maple hardwood floor. Features include ballet bars, mirrors, sound elements to enhance acoustics and a panoramic view of the woods and outside walking trail. Community Rooms and the Conference Room are available for rental by members, Westlake Residents, and Corporations of Westlake. The Community Room has a capacity of 200 people in a theater-style setting or 160 for lunch or dinner. The room features floor length windows overlooking the lake and is professionally decorated with color-coordinated wall coverings and carpeting. The Conference Room can fit up to 16 individuals and is equipped with 12 executive type chairs around a wooden conference table. (City of Westlake Website)

### **Building Envelope/Structural:**

The foundation is slab-on-grade and the walls are CMU with a laid-brick exterior. There is one story above grade plus the mezzanine. The total height above the grade plane is 38'-0". The floor is composed of composite steel beams with metal decking. There is an exposed truss system in the gym and pool areas. The roof consists of steel beams with metal decking.

#### Mechanical:

The Recreation Center has a variable air volume (VAV) system. There are four 21000 CFM (cubic feet per minute) air-conditioning roof-top units (RTU) serving the gym, one 10000 CFM RTU serving the exercise room and one RTU that provides 3720 CFM to the locker rooms. There are a total of 21 Unit heaters, 6 Cabinet Unit Heaters and 21 Fans serving various areas of the building. There is an 11200 CFM air-handling unit (AHU) serving the office, two 3700 CFM AHUs serving the community room, and one 4800 cfm AHU serving the Multi-Purpose Room.

### **Electrical:**

Power to the Recreation Center is provided by the Illuminating Company, a subdivision of First Energy, in Cleveland, Ohio. There is a 200 AMP, 480Y/277V, 3Ø, 4-wire main switchboard that serves fourteen regular panels, a fusible mechanical distribution equipment panel, and a motor control center. There are 8 transformers ranging from 480 to 208Y/120V and 30-45 KVA. The motor control center is 400 amps, 480Y/277V and the mechanical panel is 480Y/277V, 1200 amps. There is a 10000 KVA utility owned transformer on the South side of the building and a 2000 amp main fused switch.