

ORCHARD PLAZA

Architectural Engineering Senior Thesis



GENERAL INFORMATION

Occupancy: Retail & Office
Completed: December 2006
Size: 144,000 SF
Levels: 6
Cost: \$18,500,000
Delivery Method: Design-Bid-Build

PRIMARY PROJECT TEAM

Owner: Millcraft Investments
Architect: STRADA
MEP: Allen & Shariff Corporation
Structural Engineer: Barber & Hoffman, Inc.
Civil Engineer: GAI Consultants Inc.

STRUCTURE

Deck: 2" 18 Gage (Composite deck)
Floor System: 4" Reinforced Concrete
Lateral System: Eccentrically Braced Frames
Framing System: W-shape columns, girders, beams
Foundation: Caissons & Grade Beams

ARCHITECTURE

Façade: Brick & Limestone veneer
Glazing: Individual windows & Curtain walls

MEP SYSTEMS

Lighting: Fluorescent, Halogen, & Incandescent lamps
HVAC System: Variable Air Volume with Rooftop Units

CHRISTOPHER DUARTE - STRUCTURAL

<http://www.engr.psu.edu/ae/thesis/portfolio/2014/cjd5213>