

WESTINGHOUSE ELECTRIC COMPANY CORPORATE HEADQUARTERS BUILDING ONE CRANBERRY, PA

BUILDING INFORMATION

OCCUPANCY: OFFICE
SIZE: 434,800 SQ FT
HEIGHT: 5 LEVELS, 87'-6" TALL
BUILD TIME: FEB 2008-MAY 2009
COST: \$80 MILLION
DELIVERY: DESIGN-BID-BUILD



MECHANICAL/ELECTRICAL/LIGHTING

TWO GAS FIRED BOILERS SERVE TO HEAT THE BUILDING WITH CAPACITIES OF 1265 CFM AND 960 CFM.

SIX AHU'S WITH VARYING CAPACITY SERVE THE BUILDING AND VAV UNITS.

480/277V, 3 PHASE, 3 WIRE PRIMARY, 208/120V 3 PHASE 4 WIRE SECONDARY DELTA-WYE DRY TYPE TRANSFORMERS.

MAINLY FLOURESCENT LIGHTING TO CONTRIBUTE TO LEED CERTIFICATION.

GENERATOR PROTECTION ON CAMPUS FOR ALL CONTROLS.



PROJECT TEAM

OWNER: WELLS REAL ESTATE FUNDS
ARCHITECT: IKM, INC.
STRUCTURAL/MECH: LLI ENGINEERING
CIVIL: CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
CONSTRUCTION: TURNER CONSTRUCTION COMPANY

STRUCTURAL

STRUCTURAL STEEL FRAMING WITH 2" COMPOSITE STEEL DECK AND 2-1/2" CONCRETE SLAB

TYPICAL BAY SIZE IS 45'-0"

MOMENT CONNECTIONS RESIST WIND FORCES

SLAB ON GRADE, GRADE BEAMS, AND CASSION FOUNDATION SYSTEM

ARCHITECTURE

SITE IS ON 83 ACRES IN CRANBERRY, PA

LEED CERTIFICATION GOAL

BIO-RETENTION PARKING LOT

BRICK FAÇADE IS TEXTURED TO CREATE VERTICAL ELEMENT WHILE POLISHED CONCRETE BLOCK EMPHASIZES IMPORANTANCE.

POWERFUL ENTRANCE MAKES USE OF TWO-STORY ATRIUM

FLOOR-TO-FLOOR HEIGHT OF 14'-0", ENTRANCE LEVEL IS 18'-0".

ROOF SYSTEM CONSISTS OF AN EDPM SYSTEM WITH A MEMBRANE OVER 1/2" PROTECTION BOARD OVER TAPERED INSULATION OVER 5/8" GWB ON THE ROOF DECKING.

JESSICA L. LAURITO | STRUCTURAL OPTION

SPONSORED BY TURNER CONSTRUCTION COMPANY

WWW.ENGR.PSU.EDU/AE/THESIS/PORTFOLIOS/2009/JLL5004/