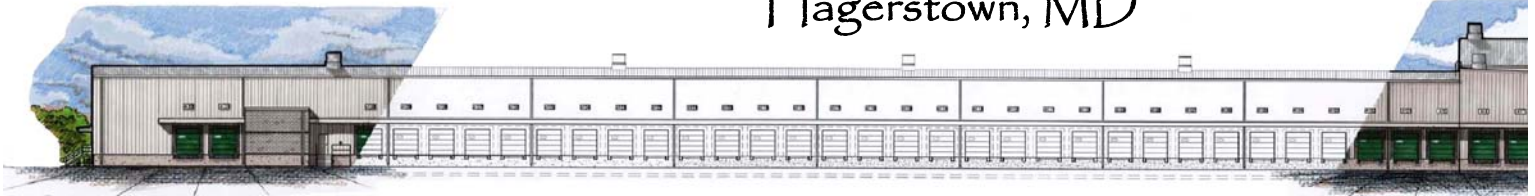


FedEx Ground Distribution Center Hagerstown, MD



OWNER

- FedEx Ground -

ARCHITECT / ENGINEERS

- The Osborn Engineering Company -

PRIME CONTRACTORS

- Gilbane Building Company -

- Butler Construction -

- HK Systems Uhs -

ELECTRICAL SYSTEM

- ◆ (2) - 15kV transformers with 480/277V at 2500 kVa
- ◆ Main Distribution Switchboard: 4000A, 480/277V, 3Ø, 4W
- ◆ (1) - Diesel powered emergency generator with an output of 480/277V, 3-phase at 250kVa
- ◆ (2) - 18kVa Uninterruptible Power Supplies:
- ◆ Static uninterruptible power supply will be three phase, on-line, static-type, complete with transient voltage surge suppression and input harmonics reduction

LIGHTING SYSTEM

- ◆ Site lighting consists of 15, 1000W, 480V metal halide lighting fixtures plus 8, 400W, 480V metal halide light fixtures
- ◆ Interior lighting consists of high pressure-sodium lamps with an auxiliary, instant on, quartz system

PROJECT STATISTICS

- ◆ Lot Size: 114 Acres
- ◆ One main structure with five additional outbuildings
- ◆ Main Building Size: 475,000 s.f.
- ◆ Est. Project Cost: \$75,000,000
- ◆ Delivery Method: Multiple Prime
- ◆ Actual Begin: Oct. 1, 2003
- ◆ Fully Operational: 2006

PROJECT BACKGROUND

As part of a \$1.8 billion network expansion plan to nearly double average daily hub package volume capacity in North America, FedEx Ground, an operating unit of FedEx Corporation, has chosen a 114-acre site in Hagerstown, MD as the location for a new 475,000 square-foot distribution hub to be opened by 2006.



The site for the new Hagerstown hub was chosen for its proximity to customers' distribution centers and major highways as well as its access to a strong local employee base. The facility will initially process about 30,000 packages an hour and is expected to house a workforce of 400 full- and part-time employees and independent contractors when it opens in 2006. At full capacity, the new hub will process up to 45,000 packages per hour and could employ more than 1,000 workers.

STRUCTURAL SYSTEM

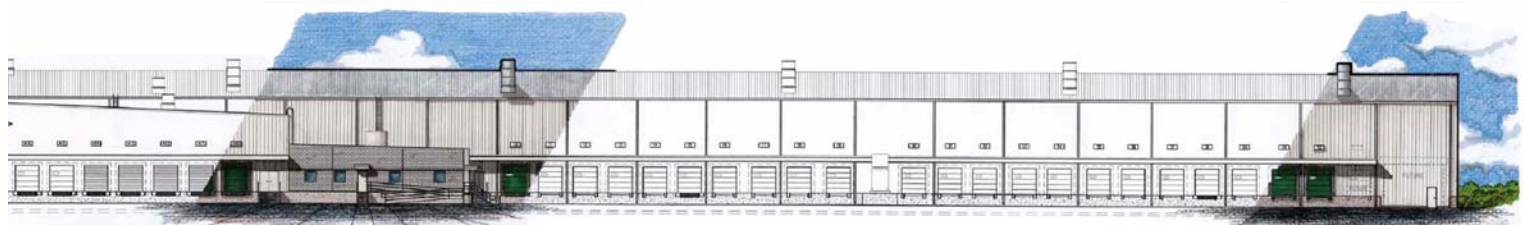
- ◆ Foundation system utilizes both continuous and isolated footings
- ◆ 4000 psi slab-on-grade installed in the unload / load areas, corridor and local city area
- ◆ Pre-engineered steel structure
- ◆ Service platform utilizes ADA compliant steel grating in conjunction with slab-on-deck

CONVEYING SYSTEM

- ◆ State of the art conveying system will be designed and installed by HK Systems

FIRE PROTECTION SYSTEM

- ◆ Fire suppression system is a dry pipe system including a mechanical smoke exhaust system with heat vents and draft curtains.
- ◆ Smoke detection system includes photoelectric detectors, ionization detectors and duct smoke



Lucas Klock

Construction Management

www.arche.psu.edu/thesis/2005/lok101