

Mercy Suburban Hospital -

Situation

"Green" Construction

L.E.E.D. Gold Certification

Challenges

Seeking L.E.E.D. Gold Certification

52,000 sf New Construction

Construction over Occupied and Operational Medical Facilities

L.E.E.D. = Leadership in Energy and Environmental Design

Erosion and Sedimentation Control

Minimum Energy Performance Requirements

Strict Air Quality Measures / Tests

Nationally, construction and demolition produce an estimated 136 Million tons of debris annually. The vast majority of this material is disposed of in landfills.

Solutions

Recycling these materials preserves the embodied energy of the materials, creates local jobs and saves landfill space.

The program targeted 9 materials for recycling.

- Rubble: (concrete/masonry waste) was processed into fill and aggregate products used for grading
- Wood: Sizable pieces were reclaimed to make crates, smaller pieces were processed for mulch.
- Metal: Recycled into new Steel.
- Drywall: Processed into a soil amendment used by farmers
- Cardboard: Recycled into new cardboard.
- Glass: Processed into fill products.
- Ceiling Tile: Recycled into new ceiling tile.
- Plastic: Recycled into new plastic products.

Detailed recycling and waste management reports provided

Results

JOHN S. MCMANUS INC. and Mercy Suburban Hospital teamed up to implement a construction waste management program on the construction of the new Mercy Suburban Hospital Patient Care Center.

The project produced 7,638,401 lbs of waste materials.

The recycling program successfully diverted 96.24% (7,351,461 lbs).

The recycling of wood, cardboard, metal and rubble alone saved an estimated 16,100 gallons of gasoline or over 900,000,000 btus.

Expecting LEED Gold certification.