

# North Recovery Facility

This project diverted 38 tons of materials for reuse, including 10 tons of light salvage materials and 28 tons of beams.

## Deconstruction Case Study

Dismantling the past for a more valuable future.



*"It was great to see the RE Store giving some of the materials in the buildings a new life."*

- Robert Renouard, Project Manager, King County Facilities Management Division

### About the project

#### Project Background

- The 18 wood-framed buildings in Shoreline were built in the 1940s as a convalescent center for World War II veterans.
- The structures covered approximately 75,000 square feet.
- The building removal was bid as a straight demolition project, with deconstruction information provided in an addendum.
- The winning bid was more than half a million dollars lower than the county engineer's estimate of \$1.2 million.
- Demolition occurred between May and July 2005.

#### Resources Saved

- The salvage of reusable building materials saved the demolition contractor from paying disposal costs estimated between \$1,900 and \$3,000.
- Nearly 10 tons of light salvage materials, such as six-pane windows, large built-in cabinets with glass doors, and a gymnasium floor were recovered.
- 28 tons of beams of various sizes, measuring 8" x 12" or larger were salvaged.
- The estimated value of the recovered materials was approximately \$12,500 for the beams and about \$10,000 for the light salvage materials.
- It is estimated that about 8 percent of the feasibly salvageable materials from the North Recovery Facility were recovered for reuse.
- The use of hybrid deconstruction techniques, had they been employed, could likely have diverted more than 500 tons of material from the landfill and saved the contractor between \$26,000 and \$41,000 in disposal fees.



## King County

Department of  
Natural Resources and Parks  
**Solid Waste Division**

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### Challenges

- Contracting concerns and timing hindered salvage opportunities. A non-profit salvage organization provided a “wish list” of items to collect for reuse, but the group initially was not allowed to remove materials so as not to detract from the value for a demolition contractor. When the non-profit eventually was invited to salvage items from the site, its crew had very little time to do so.
- Destruction and theft reduced the materials available for salvage. Fire alarm equipment was pilfered, and all windows were smashed or safety reasons.

### Pre-Contract Steps Taken

- At the pre-bid meeting, bidders asked for more time for doing deconstruction and sorting; as a result, the time to accomplish the work was doubled to two months.
- Deconstruction/salvage and construction, demolition, and landclearing documents were distributed as an addendum to all companies that requested the bid specifications.
- The county deconstruction specialist was involved throughout the process.

### Lessons Learned & Recommendations

1. Require a specific recovery rate to help ensure a high level of salvage.
2. Provide sufficient time for deconstruction and salvage in the project schedule.
3. Write bid language and include documentation that make it clear to bidders how they can save money by practicing deconstruction.

### For more information, contact

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*This material will be provided in  
alternate formats upon request.*

**The King County Construction Works web site also provides helpful information:**

<http://www.metrokc.gov/dnrp/swd/construction-recycling/constructionworks.asp>