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**FOR IMMEDIATE RELEASE**

**Inaugural ECoBLEND Award Winner: Hiawatha Maintenance Facility**

**August 31, 2012. Minneapolis.** Linden Hills Power & Light today announces the inaugural winner of the ECoBLEND award. Judges Mike Otto and Mike Lucas selected:

The Hiawatha Maintenance Facility, owned by the City of Minneapolis Property Services

1911 East 26th Street, Minneapolis MN 55407.

Architect(s)/ Designer(s): Marc Partridge

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The judges were impressed with the commitment to ecologically sound practices while simultaneously showing sensitivity to the neighborhood in the design. Mike Lucas commented, “I appreciated the effort the designers made to blend in with neighborhood, treating the original 1914 brick building as the facility’s primary perspective.” Mike also applauded the massive recycling (including benches made of shredded money) and focus on repurposing items (including using onsite wood) rather than simply landfilling the demolition waste.

Mike Otto said, “I’m impressed with their approach to the geothermal and the heat sink materials that were used.” Lucas agreed, also pointing out the innovative idea to reuse an existing tunnel system as a water management feature.

No residential construction or remodel projects were awarded.

**About ECoBLEND:**  
[ECoBLEND](http://www.blendaward.org/index.html) is part of the city wide B.L.E.N.D. award, which encourages and rewards builders, architects, and home owners to blend newly remodeled or constructed homes and businesses into the fabric of Minneapolis neighborhoods.The EcoBLEND Awards were created to reward builders, architects and homeowners for incorporating **eco-friendly design and sustainable building practices** into new and remodeled projects in Minneapolis. **CEREMONY:** BLEND and ECoBLEND awards will be awarded on September 25th at 7pm, 2720 W 43rd St, Minneapolis MN 55410.

**About the Judges:**   
**Mike Lucas, Project Manager**: Mike believes that sustainability and aesthetics aren't mutually exclusive, as evidenced in the beauty found in the house he built on Abbott Ave S in 2005. Interest in that project along with encouragement by friends led Mike to start a design/build company ([the gudhouse company](http://www.thegudhousecompany.com/)) that promotes that philosophy. Mike's talent with design, plus his project management skills is reflected in his projects.

**Mike Otto, Green Builder**: Mike started [his contracting company](http://www.fairandsquareremodel.com/) in 1992. Over the years, he developed a strong belief in good design and sustainable building methods and materials. In addition to remodeling, he spends a lot of time educating clients and the general public about the foundations of good design and sustainability with an emphasis on why they are essential to residential construction.

**About Hiawatha Maintenance Facility**

Hiawatha Maintenance Facility, a LEED Platinum, award-winning public-works complex, transformed an unsightly, partly historic public-works facility in Minneapolis, MN, into an attractive and exceedingly green maintenance complex. The site, owned by the City of Minneapolis since 1906, is home to seven public works departments that operate 24/7. The design removed all but two of the 18 existing buildings to transform this derelict site while simultaneously creating a new model operation among these separate, but similar, departments. The completed 60,000 sf facility includes two-story office/support space, maintenance bays, interior and exterior storage, a covered tent structure for the salt/sand operation and a fixed canopy over the fuel island.

**How Project Incorporates Sustainable Building Practices**

At project inception, there was a stated intention among all members of the team to exceed the requisite certification level and to pursue LEED Platinum following the mantra “reduce/reuse/recycle.” Environmentally, over 90% of construction waste (over 1300 tons) was diverted from landfill through recycling, and nearly 12% of the project’s construction cost was spent utilizing reused materials.

Regional materials (26%) and FSC – certified wood (74%) were used extensively – including the reuse of wood roof deck from the existing building as interior wainscoting and locally-reclaimed trees removed due to storm or insect damage, re-invented as furniture and trim. A crushing operation was established on the site to crush all demolished concrete, brick, CMU and asphalt for use as road base, mulch and mow-strips, and pervious fill in the leech field. By cost, more than 20% of the materials in the building were harvested or manufactured within 500 miles of the project site. Ultimately about 96% of all the construction and demolition waste, by weight, was diverted from landfills.

Early in design, the team salvaged components from the demolition of a local Mississippi River bridge and incorporated them into the design. The former bridge deck now comprises the fence that runs the length of the site on the west side. On site, ccondemned buildings and asphalt were crushed and recycled for permeable site substrate and Gravel-Pave was installed as a “beta” test for future Public Works sites.

The design aggressively manages stormwater runoff due to the site’s proximity to the Mississippi River, Minneapolis’ stormwater policies, and the need for an abnormally high percentage of hard surfaces for vehicular and material storage. Stormwater retention and percolation on the site is self-contained by collecting runoff in underground tunnels that originally connected buildings. Bioswales and permeable paving were employed for portions of the parking lot to manage runoff.

**How Project Incorporates Environmentally Friendly Elements**

Daylighting and views are integral to the building’s design. The existing brick building was built prior to air conditioning, so it had a long, thin footprint to take advantage of natural ventilation. By separating the 3 main building volumes with a glass connector, the existing footprint could be exploited to maintain the daylight from those original windows while also taking advantage of their inherent views. Lighting and temperature systems respond to occupancy and environmental levels, adjusting for the facility’s wide range of intensive use vs. “skeleton crew” building occupancy. The facility is also the beta site for Minneapolis Property Services’ initiative to green buildings through a building maintenance program utilizing environmentally friendly cleaners and paper products.

**HIAWATHA MAINTENANCE FACILITY : ECO BLEND AWARD SUBMISSION – 2012**

**RESOURCE EFFICIENCY**

1. Describe any re-use of products or building materials that you used.

We deconstructed the metal building onsite to reuse as the fuel island canopy, used existing tunnels used as stormwater retention, reused historic bridge driving surface as site fencing, recycled plastic geo-grid and crushed site demo material for permeable parking surfaces and removed and reclaimed city trees as interior trim.

1. Describe any recycling you did on your project.

We recycled the majority of demolition elements onsite, diverted 94.6% of construction waste, achieved 11.6%  
 material reuse and achieved 21.5% recycled content: 20% (post-consumer + 1/2 post-industrial).

1. Did you use any locally sourced or locally manufactured materials? If so describe?

We used pavers manufactured locally from local recycled tires and lumber salvaged from local elm trees that are being removed by Minneapolis Park Board due to the current Dutch Elm infestation.

1. Did you use product with recycled content? If so explain where or how.

We used recycled material throughout the facility. Benches by ShetkaWorks from shredded money through contract with Federal Reserve and the fuel island canopy is a re-invention of a metal building structure salvaged from the site. We also installed Gravel-Pave as a beta test for future Public Works sites.

1. Describe any internal set-ups/systems that will increase/enhance recycling, composting, waste-reduction, or otherwise increase ongoing resource efficiency opportunities.

The City has adopted a recycling plan for all recyclables. This building has recycling centers throughout and each workstation is equipped with a garbage can that is approximately 1 quart

6. Describe any other resource efficiency activities or elements not covered above. N/A

**WATER CONSERVATION**

1. Did you use low flow plumbing fixtures? If so please describe where and what brands?

We used Sloan Solis ultra-lo flow faucets and flush valves, Symmons showerheads and WC (dual-flush 0.8/ 1.28 gpf) and urinals (0.125 gpf), which are specifically designed to clean properly with minimal flow.

1. Did your project require landscaping? If so, did you use native plant species in your landscaping? Yes. We used native plant species to create a bio-diverse landscape. Except for the “lawn” at the entry, all other green areas are planted as wildflower prairie which will support wildlife and minimize city maintenance.
2. Did you use drought resistant grasses? Yes. There is no on-site irrigation.
3. Did you install a drip irrigation system? Did you choose not to install an irrigation system?   
   The majority of the site is planted with native plants that grow naturally in this region, so irrigation is not needed. We planted rain garden areas with trees to encourage evapotranspiration and make the area more water-tolerant.
4. Did you install a on demand water heater?

Yes, the eyewashes have instantaneous heaters to deliver code-required temperatures. Water is provided by PVI, hi-efficiency, sealed combustion water heaters.

6. Describe any other water conservation-related activities or elements not covered above.

We converted existing tunnels to facilitate on-site storm water retention and percolation and achieved 53.5% water use reduction, exceeding the 30% LEED mandate.

**INDOOR ENVIRONMENTAL QUALITY**

1. Did you use no-formaldehyde materials including insulation?

Yes. This was confirmed with LEED-approved air testing prior to occupancy.

1. Did you protect the furnace and duct work during construction?   
   Yes. Photographic evidence was included as part of LEED documentation.
2. Did you air the house out for 24 hours before using the space?

Yes, a full flush-out was done prior to occupancy.

4. Did you use no VOC or low-VOC paint? Yes, low-VOC finishes were used throughout the facility.

5. Did you use natural carpets (wool, sisal, etc.)

All carpet tile in the facility is the city’s standard - Milliken Remi, certified by NSF 140 and SmaRT. We used  
 natural linoleum flooring and recycled rubber flooring in all public and circulation spaces.

1. Describe any other indoor environmental quality activities or elements not covered above.
2. The new building is 28.53% less costly in total energy cost. We used occupancy and CO2 sensors in offices and motion sensors on garage doors and used daylight dimming and radiant in-floor heating in maintenance areas.

**ENERGY EFFICIENCY**

1. Did you add insulation? If so, what kind and where?   
   The existing structure is a 3-wythe brick wall that acts as a heat sink. The lower 1/3 of the wall was insulated on floors and covered in recycled wood from the site. All new walls are insulated to comply with MN Energy Code.
2. Did you do an energy audit before you started this project and after it was done – if so was there a difference in results? Explain. The building was modeled 3 times in design by the mechanical engineer as part of Xcel Design Assistance Program and Viridian as part of LEED documentation. The strategies incorporated into this building result in approximately $112,998/year savings above Code in energy costs.
3. Did you insulate your water lines? Yes
4. What percentage of lighting is CFL and/or LED? Compact fluorescents were used wherever possible in the facility – mostly in circulation and toilet/locker spaces.  In the office spaces and maintenance spaces where uniform light is required, we used fluorescent fixtures instead of HID.  This was primarily due to the ability to provide multi-level switching of lamps in order to take advantage of the daylighting in the building.
5. Did you make use of passive solar design? If yes, please describe.   
   Yes. 77% of the building is daylit as measured by LEED criterion for daylighting.

6. Did you incorporate photovoltaic technology? Geothermal? If yes, please describe.

There are no photovoltaics on the project. The building is heated and cooled by a geothermal system that satisfies the buildings needs down to -20. The facility was modeled by the local utility to reduce electrical consumption by 28.53%.

1. Did you use energy star rated appliances? Which ones?

Yes, all appliances are Energy Star rated residential grade. This includes refrigerator, freezer and stove and microwaves in the break room and undercounter refrigerator at coffee station.

8. Did you use energy star rated windows? If so, what percentage are energy star rated windows?

9. Did you install a high efficiency furnace? If yes, please describe. The geothermal system is backed up by  
 modulating hi-efficiency boilers that operate only if the geothermal cannot satisfy demand.

10. Describe any other energy efficiency activities or elements not covered above.

Office and personnel spaces were integrated within the walls of the existing brick building, while inadequacies of the original building have been improved to create a more engaging work environment.

**OTHER**

1. What design elements did you incorporate into your project to maintain or enhance the look and feel of your neighborhood and community?

The building design includes bolder gestures of Cor-Ten steel and burnished concrete masonry on the Hiawatha Avenue side to stand among the giant silos and manufacturing buildings. It also respects the scale and cadence of its residential neighbors by treating the original 1914 brick building as the facility’s primary perspective.

2. Please describe any eco-friendly element of your project that you feel was not covered above. N/A

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Describe any techniques or strategies put in place to encourage alternative transportation e.g. install showers, bike racks, lockers, provide GoTo passes or other. The site is accessible by public transportation and has preferred accommodations for bicycle, high-occupancy and alternate fuel commuting. Showers located in the building encourage employees to commute by biking or walking.

Did you use any reflective roofing materials? Yes, the roof is a white TPO membrane.

Describe any efforts to mitigate water run-off. The site was criss-crossed by a series of steam tunnels as part of its previous incarnation. These tunnels were capped, and the bottoms perforated in order to provide cisterns that percolated surface water back into the ground.

Have you implemented any green office cleaning strategies (including waste reduction)?

The City has adopted RESOLUTION 2006R-526, *Low Environmental Impact Cleaning Policy* which mandates the use of these products. This policy applies to the operation of this building.