

Electrical:

- Interior lighting fixtures with dimmable ballasts work with light sensors to conserve energy by harvesting natural daylight entering the building through glass walls.
- Public spaces, such as meeting rooms and lobby, provided with automatic shut-off controls based on occupancy sensors and local override switches to conserve energy.
- Photo sensors and astronomical time clock switch provided to control automatic on/off operation of exterior security lights, walkway lights, and parking area lights to conserve energy.
- Each space enclosed by ceiling-height partitions has accessible controls to independently operate general lighting in each space to conserve energy.
- Task lighting fixtures provided with separate controls.
- State-of-the-art lighting fixtures with energy efficient lamps and electrical ballasts used throughout the building.
- All exit signs, step lights, and outdoor building sign lights specified with low power LED lamps.



Green Fixtures

Civil:

- Bioswale system to remove pollution and silt from surface water designed as main component to the storm water management system for the building.
- Bioswales located in three areas of the site: parking lot island, south side of building, south side of parking lot.
- Rainwater falling on entire site flows into the bioswale system and is treated before being released into the City of Novi storm detention basin.

Landscaping:

- All North American grown nursery stock with 90% Michigan native species used.
- Storm water management facilitated with bio filtering nursery stock.
- Entry canopy roof rain water is used to irrigate perimeter planting beds.
- Ground water irrigation well with 40% subsurface dripper lines energizes underground automatic irrigation system for Library and also provides irrigation for Fuerst Park.

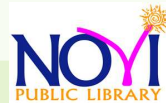
Saving Energy at Home:

- The Library checks out **Kill-A-Watt electricity usage meters** to the public.
- Track energy usage of appliances, even when “off” or in “standby”.
- Determine what appliances are worth keeping plugged in!
- Kill-A-Watt usage meters are available at the Library Checkout Desk.



Kill-A-Watt
Meter

For more detailed information, please contact the
Novi Public Library at:
(248) 349-0720 or
www.novilibrary.org



The NEW Novi Public Library

Green Building Initiatives



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Green Building Initiatives at the NEW Novi Public Library

The design and construction of the new Novi Public Library is not only state-of-the-art in its features and technology, but also in its green initiatives. Sustainable measures were incorporated into the building project to limit impact on natural environment, reduce operating costs, and maximize user comfort, providing an environmentally friendly and healthy space for the community. Below is a summary of these measures.



Going Green

General:

- Existing Library site redeveloped, rather than building on a new undeveloped site.
- Smaller building footprint (2-story vs. 1-story) maximizes green space.
- Convenient walkways provided to existing parking and throughout Civic Center complex, reducing the need for new surface parking.
- Easy access to existing bicycle paths and sheltered bicycle racks near Library entrance encourage biking.
- Erosion and sedimentation control plan used during construction.

Architectural:

- Passive solar energy incorporated through use of solar shading louvers.
- Building shading incorporated through use of overhanging roof profiles, where possible, to reduce heating loads—especially important for the western glass exposure.
- Insulated green-tinted reflective glass reduces heating and cooling loads.
- Roll-down shades incorporated to further reduce sun glare and solar heat build-up.
- Energy efficient insulation used in walls and roof greatly exceeds code requirements.
- Roofing finish chosen to reduce the heat-island effect of the Library.
- Low-emitting materials used for interior components to reduce indoor air contaminants.
- Materials and products containing a high percentage of recycled content used, where feasible, to reduce consumption of natural resources.
- FSC-certified wood products specified for interior finish carpentry to promote sustainable forestry practices.



Green Architecture

Mechanical:

- Carbon dioxide sensors detect the amount of space occupied to adjust ventilation.
- Variable air volume air distribution systems used to reduce fan operating costs as occupancy, outdoor conditions, and building interior loads vary.
- Environmentally friendly propylene glycol, in lieu of ethylene glycol, used in chilled water piping system.
- High efficiency air-cooled chiller uses refrigerant that has no chlorine or ozone depletion content and meets EPA's most stringent environmental guidelines.
- Economizer cooling system provides "free" cooling by using outdoor air whenever outdoor air temperature is below 55 degrees Fahrenheit.
- Hot water heating reset controls used to vary temperature of supply water according to outside air temperature.
- Direct-digital building automation system provided to control and monitor all building mechanical components, including chiller, air handling units, boilers, pumps, exhaust fans, variable air volume terminal units, and domestic hot water heating system.
- Water-efficient fixtures (low-flow toilets and faucets, waterless urinals) used to reduce consumption of potable water.



Green Controls