



OAKWOOD
COMMONS

A Sustainable Retail Experience



Oakwood Commons Sustainable Design Elements

A wide spectrum of sustainable design elements are fully integrated into Oakwood Commons. Rarely, if at all, have so many environmentally conscious techniques been utilized in one retail center. The result is a truly unique experience that puts the dynamic relationship between people and nature into practice.

Oakwood Commons...

what is it?

Oakwood Commons is an ecologically innovative 325,000 square foot retail power center anchored by a Walmart Supercenter that, using sustainable design, combines educational elements, low-impact development techniques, and environmentally conscious practices to create a truly unique shopping experience.

Retail Power Center...

what's unique?

Oakwood Commons is the first shopping center of its kind to fully integrate multiple sustainable design elements into an environmentally conscious retail complex. In addition to over 5.5 acres of created stormwater wetlands, nearly 700 linear feet of restored stream, over 35 different species of native plants, 2 acres of permeable pavement, one half acre of vegetated swales, and complete LED lighting in all parking areas, all buildings within Oakwood Commons will be LEED certified. Furthermore, Oakwood Commons is Northeast Ohio's first shopping center equipped with electric vehicle charging stations. Aside from the numerous sustainable design elements on site, Oakwood Commons has also donated 21 acres of land and \$400,000 for funding of improvements to the City of South Euclid to create a passive park, all at no cost to the city. This contribution increases the total public park space in the city by almost 50% and ensures accessible public open space for years to come.

Sustainable Design...

what's that?

The intention of sustainable design is to use innovative, skillful and ecologically conscious design techniques to eliminate negative impacts on the environment. A successful sustainable design will reduce the consumption of non-renewable resources, improve the overall quality of the immediate and surrounding environment, and create a relationship between guests and the natural environment. With the right techniques and a thoughtful approach, sustainable design cannot only improve the world around us, but can also change the way we live, work, & shop!

Oakwood Commons will use a number of sustainable design elements to improve the surrounding environment. Some of these include:

- Establishment funding of naturalized parkland
- Restoration of existing stream bed
- Permeable pavement
- Stormwater wetlands/water quality ponds
- EV Charging Stations
- Vegetated swales
- Native plantings
- Educational signage
- LED Lighting
- No chemical fertilization
- All LEED certified buildings

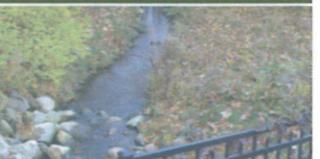
Vegetated Swales



Educational Signage



Stream Restoration



Donated Park



Native Plantings



Stormwater Wetland/
Water Quality Pond



LEED Certified Buildings



EV Charging Stations



Permeable Pavement



LED Lighting



Oakwood Commons is truly the first of its kind...

Oakwood Commons' environmentally sensitive shopping experience boasts numerous sustainable design elements...

Stormwater Wetland / Water Quality Pond

Oakwood Commons contains nearly 5.5 beautiful acres of stormwater wetlands/water quality ponds designed to far exceed local requirements. Specific features and benefits of this stormwater wetland include:



- Numerous native plants & wildflower seed mixes along with micro-pools will assist in the removal of pollutants from stormwater runoff through settling, and biological & ecological interactions

- Designed to store almost 50% more volume than is necessary for a 100 year storm event, far exceeding local requirements

- Reduced stormwater release rate, 70% less than maximum allowable by local standards

Donated 21 Acre Public Park

Oakwood Commons has donated over 21 acres of pristine land and \$400,000 for funding of improvements to the City of South Euclid to create a passive public park at no cost to the city. This gift increases the amount of parkland in South Euclid by almost 50% and ensures that this important community asset will remain open space for generations to come. Park amenities include:



- An amphitheater
- Nearly one mile of walking trails
- The preservation of numerous existing large native trees
- A nearly 5.5 acre stormwater wetland with educational opportunities
- Native plantings and wildflower meadows

Stream Restoration

Oakwood Commons contains nearly 700 linear feet of streams that drain into Nine Mile Creek. These streams will be improved dramatically both aesthetically & ecologically through a comprehensive native restoration. Improvements will include:

- Lengthening the stream with meanders in order to slow stream velocities and help create viable habitats for native plants & wildlife

- Introduction of native trees, shrubs, and wildflower meadow mixes to improve biodiversity

- Addition of stream features including riffles, weirs, & plunge pools which will create a more natural and sustainable stream bed



Educational Signage

Educational signage will be placed throughout Oakwood Commons to serve as a sustainable guide for visitors. In addition to navigational signs at key locations that will help visitors find the sustainable design components, signage will be located at each component in order to:

- Educate visitors on how the entire system works and how the individual components work within the system

- Help visitors identify where the different sustainable design components are at work on the site

- Educate the visitors on why each component is beneficial to the environment



LED Lighting

Oakwood Commons will be one of the first retail centers of its size to employ LED (light emitting diode) lighting throughout all of the parking areas. Some of the many benefits of LED lighting include:

- Less energy consumption by using a smaller, more efficient light source

- Long life; LED lights on average last almost twice as long as fluorescent, and as much as 25 times as long as incandescent

- Less energy and maintenance costs



EV Charging Stations

Oakwood Commons is the first retail shopping center in Northeast Ohio to supply public charging stations for customers with electrical vehicles (EV). The 8 charging stations will also make Oakwood Commons one of the largest providers of charging stations in the Midwest. The benefits of EV charging stations include:

- The convenience of charging away from home which adds range to a visitor's vehicle

- Caters specifically to an environmentally conscious consumer base and draws customers in from outside typical draws

- Promotes the use of EV's which will lower the use of fossil fuels and help sustain the entire environment



Vegetated Swales

The stormwater quality at Oakwood Commons will be greatly improved by nearly one half acre of vegetated swales. Vegetated swales are broad, shallow channels, densely planted with a variety of trees, shrubs, and/or grasses. Benefits of these swales include:

- Cleansing of stormwater through the filtering of pollutants

- Reduction of runoff volume through infiltration

- A sustainable alternative to traditional storm sewers



Native Plants

Oakwood Commons will utilize over 35 different native species of trees & shrubs, 4 different native meadow & wildflower seed mixes, and 4 different native low maintenance turf species. Using plants native and adaptive to Northeast Ohio provides incredible benefits which include:

- Providing habitat for native wildlife species

- Preventing the introduction and spreading of invasive plant material

- Requiring less maintenance as well as the elimination of chemical fertilization and irrigation



Permeable Pavements

Oakwood Commons will be an educational showcase for sustainable surfaces, containing over 2 acres of permeable pavements. Permeable pavements are a solid surface, capable of withstanding heavy loads while allowing stormwater to filter through the surface into underlying soils. In addition to traditional permeable pavers, the site will utilize permeable concrete and permeable asphalt. Benefits include:

- Reduction of stormwater runoff thus reducing the threat of flooding and erosion

- Cleansing of pollutants from stormwater through infiltration



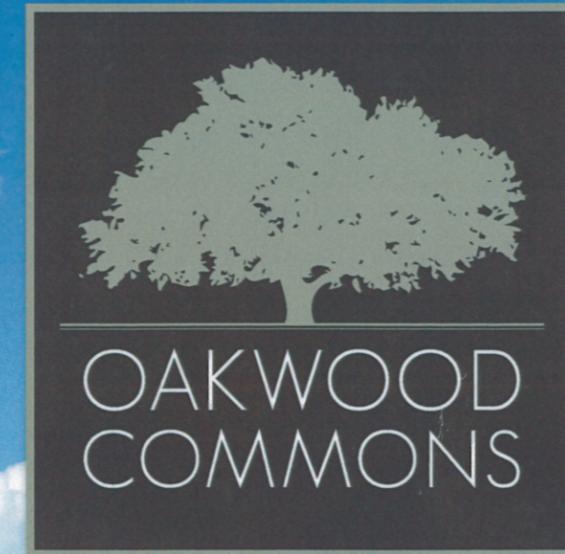
LEED Buildings

Every building in the Oakwood Commons shopping complex will be LEED certified. Benefits of LEED certification include:

- Authentication to clients, peers, and the public that Oakwood Commons' environmental goals are being met

- Operational and energy cost savings that further protect the environment

- Utilizing recycled & high tech materials to increase efficiency and lessen the impact on the environment



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