

Sustainability at McGough

McGough's Capabilities and Approach to Sustainable Practices



BRIGHTGREEN



McGough

BRIGHT GREEN MCGOUGH: SMART SUSTAINABILITY PRACTICES

MCGOUGH IS THE PREMIER CONSTRUCTION SUSTAINABILITY EXPERT IN MINNESOTA. MCGOUGH CONSTRUCTION HAS BUILT SEVERAL “GREEN” PROJECTS SPECIFICALLY DESIGNED AND CONSTRUCTED TO REDUCE NEGATIVE ENVIRONMENTAL IMPACTS, USING ENERGY, WATER AND OTHER RESOURCES WITH MAXIMUM EFFICIENCY.

MCGOUGH AND BRIGHT GREEN™

Because of our extensive experience with “green” construction, and our knowledge of sustainable building practices and products, McGough has created the Bright Green sustainability program. Bright Green is transforming McGough’s internal operations and serves as an important resource for owners, architects, developers and others who are interested in green design and construction.

Bright Green explores techniques for reducing waste and applying eco-friendly operating practices. We’ve adopted green strategies throughout our company to test cleaning products and utilize advanced recycling strategies. This focus on energy conservation and minimizing waste, which is implemented in McGough’s offices, enables us to export these practices to our construction sites and provide useful advice to our clients.



BRIGHT GREEN AND MCGOUGH’S CENTER OF EXCELLENCE

The centerpiece of Bright Green is our *Center of Excellence*. The Center of Excellence provides information for our clients who are considering the implementation of criteria developed by the *U.S. Green Building Council (USGBC)* or adopting proven practices that reduce the negative environmental impacts of building design and construction.



The Center draws upon outside research and industry data, as well as lessons learned “on the ground” from McGough Construction projects. Indeed, McGough is a long-standing member of the USGBC and is a founding sponsor of the local Mississippi Headwaters Chapter in Minnesota. The principals of the Center of Excellence maintain active roles in local chapter committees, enabling us to stay well-informed about the most recent developments in sustainable design and construction.

BRIGHT GREEN MCGOUGH: SUSTAINABILITY ANALYSIS

THE CENTER OF EXCELLENCE AS A RESOURCE

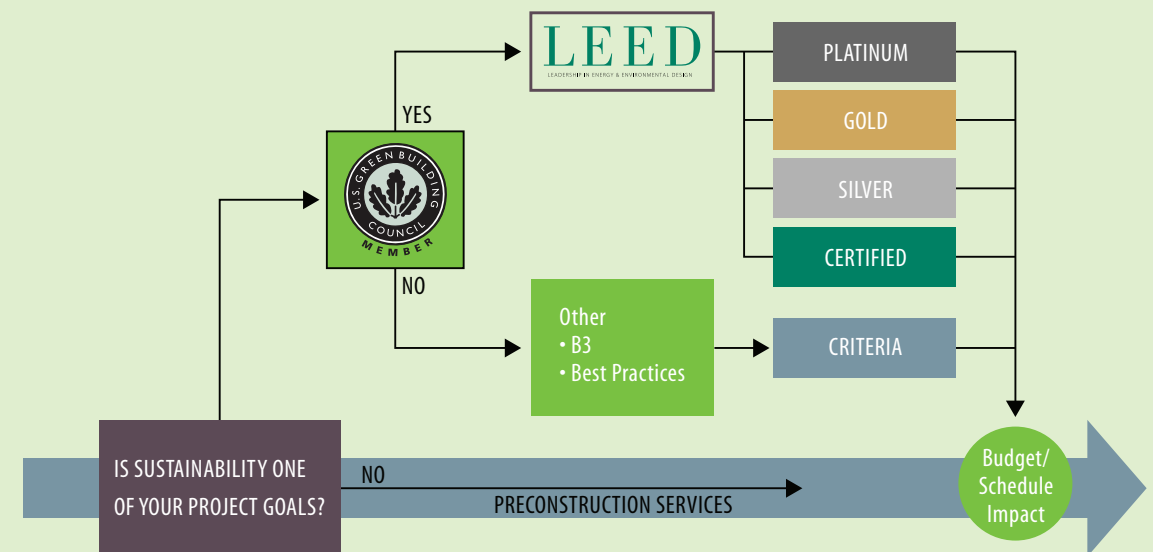
The Center’s preconstruction and planning segment provides valuable information to design teams that are in the process of deciding about a project’s site orientation, building form, materials and systems.

The chart below, the *Sustainability Decision-Making Matrix*, illustrates the methodology that McGough’s Center of Excellence uses to inform our clients about sustainable design and construction opportunities.

We understand that a green strategy may not be the best approach for every project, so we begin by asking our clients a simple question:

IS SUSTAINABILITY ONE OF YOUR PROJECT GOALS?

If the answer to the question is either “yes” or “maybe,” the Center helps our clients to decide to pursue *Leadership in Energy & Environmental Design (LEED®)* Certification at one of four levels; incorporate sustainable features such as those mandated by Minnesota’s B3-MSBG; or explore the feasibility of other sustainable best practices. After this intensive analysis and having identified potential sustainable opportunities for the project, the Center tests their financial feasibility before offering recommendations to our clients.



BRIGHT GREEN MCGOUGH: PHASED PROJECT ACTIVITIES

The chart below illustrates the phased project activities following the sustainability analysis described previously. The three phases include Preconstruction Planning, Construction and Post-Occupancy led by Facilities Management Partners (FMP).

PHASE I: PRECONSTRUCTION PLANNING

Beginning with Preconstruction Planning, the Center makes recommendations to the design team regarding sustainable aspects of the project site; water efficiency; energy and atmosphere; materials and resources; and indoor environmental quality.

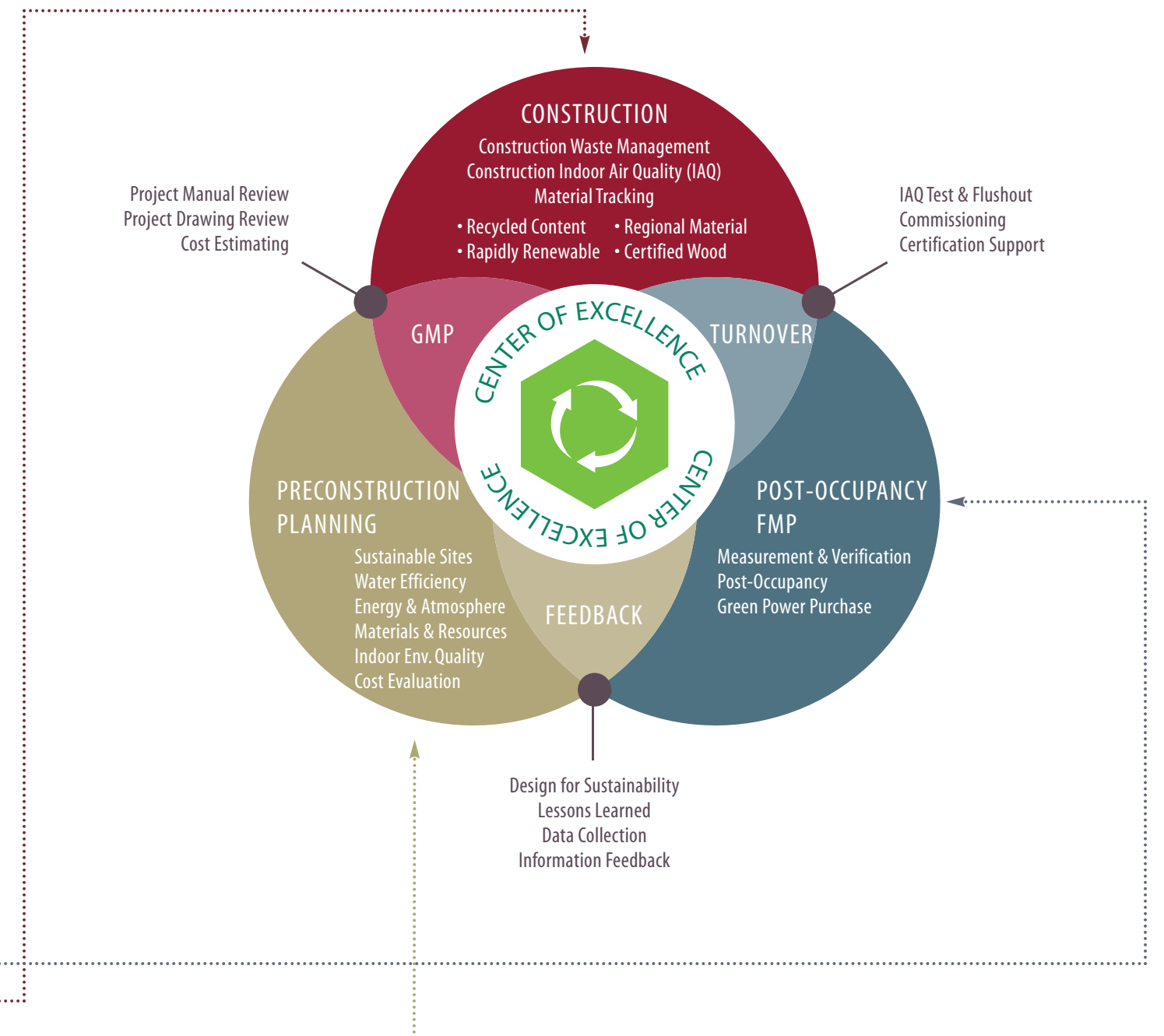
The Center provides ongoing LEED system cost evaluation to assist the team in assessing project budget impact. At the conclusion of this process, McGough proceeds with the project manual and drawing review, and undertakes cost estimating to calculate the project's Guaranteed Maximum Price (GMP).

PHASE II: CONSTRUCTION

At the inception of the next phase, Construction, the Center creates and implements the Construction Waste Management Plan; monitors actual recycling to ensure that waste management goals are met; conducts sustainability orientations for tradespeople as they arrive on the site; works closely with field staff and supervisors to ensure that sustainable practices are followed and goals are met; implements and enforces the Indoor Air Quality Plan; and verifies that sustainable materials have been delivered and installed in the building. When construction is complete, the Center may oversee testing of indoor air quality and the commissioning of the sustainable aspects of the project.

PHASE III: POST-OCCUPANCY, FMP

Finally, the Center, working with McGough Construction and FMP – McGough's Facility Management Partners division – assists in testing and verifying the green components of the building, as well as the purchase of sustainable power; use of green cleaning products; and recycling of waste materials. The process is completed at project close-out with data collection, a review of lessons learned from the project, and information feedback from project participants.



MCGOUGH SUSTAINABILITY EXPERIENCE HIGHLIGHTS

PARTIAL CLIENT LIST OF SUSTAINABLE PROJECTS

Bloomington Central Station
 Carleton College
 • Arts/Middle School
 Cotton Center III
 Ecolab Allan L. Schuman Corporate Center
 Great River Energy
 H.B. Fuller Company, Inc.

Karges Faulconbridge, Inc.
 Macalester College Institute for Global Citizenship
 Reflections at Bloomington Central Station
 United Family Health Clinic
 University of Minnesota
 • Nicholson Hall
 • Southeast Steam Plant
 • Minnesota Landscape Arboretum

Great River Energy (GRE)

Maple Grove, Minnesota

This 160,000-square foot corporate headquarters is **achieved LEED Platinum certification**, making it the first project in Minnesota to achieve the highest possible sustainability rating from the USGBC.

McGough has worked closely with the client and the design team to develop construction solutions that will support this aggressive goal. Among the unique features of the project are an innovative geothermal HVAC system and the recycling of GRE's own industrial by-product into both the concrete mix and carpet backing.



Ecolab Allen L. Schuman Corporate Center

Eagan, Minnesota

This project involved the renovation of the existing 480,000-square foot headquarters building, together with 25,000 square feet of new construction for Ecolab, the world-leading provider of cleaning, sanitizing and maintenance products.

The project has been registered under LEED, and Ecolab **anticipates achieving LEED Silver certification**.



Karges Faulconbridge, Inc. (KFI)

St. Paul, Minnesota

The 34,500-square foot building was the first project in Minnesota to be **awarded LEED Gold certification**, which it achieved in 2004.

The project converted a former neighborhood grocery store into the headquarters of this leading engineering firm, reusing the building shell. A geothermal well field, in combination with sophisticated HVAC systems, simultaneously heats and cools different parts of the building. The site also employs several stormwater best management practices to the benefit of the local watershed.



Reflections at Bloomington Central Station

Bloomington, Minnesota

Completed in 2006, Reflections' 263-unit condo project **achieved LEED certification, the first high-rise condominium** in Minnesota to receive this recognition.

Reflections is the first phase of Bloomington Central Station (BCS), a 50-acre transit-oriented development that is being designed and constructed to meet LEED Neighborhood Development criteria. BCS will be submitted once this Application Guide is formalized.



We have many LEED-accredited professionals representing all aspects of our Company – Development, Construction Project Managers, Estimators and Field Superintendents. Our experience with LEED projects is comprehensive and encompasses all major LEED categories. Examples of projects for each category are outlined below:

LEED-EB (EXISTING BUILDINGS) The Karges Faulconbridge Headquarters, St. Paul, MN, constructed by McGough, achieved LEED Gold Certification in 2004.

LEED-ND (NEIGHBORHOOD DEVELOPMENT) McGough staff is serving on the national USGBC committee developing this new LEED program currently in its Pilot Phase.

LEED-NC (NEW CONSTRUCTION) McGough has several LEED-NC projects underway. Reflections Condominiums is the first of several condominium projects on the Bloomington Central Station site in Bloomington, MN, that has achieved LEED Certification. McGough is the developer and general contractor. McGough is constructing a new headquarters for Great River Energy, Maple Grove, MN, and is seeking LEED Platinum certification.

LEED-CS (CORE AND SHELL) AND LEED-CI (COMMERCIAL INTERIORS) McGough Companies Southwest, Phoenix, AZ, is registered as a Core and Shell building. Construction will be complete in 2007 and the tenant fit-up will be built to the Commercial Interiors standards. McGough is a development partner and general contractor.



All of these USGBC approaches have distinct advantages to our clients. If you decide to include LEED certification as one of your project goals, we are available to help you select which one is best for you, and to guide the planning, design and construction process.

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