



Providing waste and recycling management consulting since **1980**.

### Key Experts:

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### Why we do it

Other than at home, we are likely to encounter recycling and trash collection while at a retail establishment or brick-and-mortar business. In fact, the way a store manages its waste can be considered a window into the level of environmental concern of a company. But waste management for businesses does not end with its trash or recycling containers, it begins there.

As a professional solid waste management consulting company, GBB helps many types of businesses enhance their waste collection, prevention, reuse, and recycling programs. We are attuned to the unique needs of retail corporations and how their waste programs vary widely based on their location and facility type (e.g., within a mall, shopping center, or stand-alone building). In addition to improving a collection program, we can help our clients save money, train staff, reduce or design out waste in the first place, & increase efficiency and diversion from landfills.

### Typical businesses and retail companies we work with:

- Retail Companies
- Hotels / Hospitality
- Restaurants
- Airports / Concessions
- Healthcare Facilities
- Distribution Centers
- Waste management companies and facilities

### What we do

The types of services we provide to commercial businesses with retail establishments can include:

- Front-of-house and back-of-house collection review
- Waste Management Coordination and Design Review for Construction, Renovation & Demolition Projects
- Sustainability and Circular Economy Organizational Strategy
- Zero Waste and Waste Minimization Planning
- Design for Recyclability and Circularity Analysis
- Supply Chain/Material Lifecycle Analysis and Synergies Review
- Procurement of Collection and Processing Contractor Services
- Waste Stream Composition and Quantity Analysis
- Local Ordinance Compliance Analysis and Futureproofing
- Stakeholder Education and Training

Learn more about GBB at www.gbbinc.com or call +1 (703) 573-5800.









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### **GBB Success Stories**

### Major Retail Client based in the United States

For a long-term project, GBB has been working with a retail client that adopted a broad environmental mission to minimize global resource use, and responsible waste management and prevention is fundamental to realizing their mission. When GBB initially began working with our client, our team was charged with helping achieve zero construction and demolition (C&D) waste from their national store renovation projects. During our initial exploration, it became evident that achieving this goal would require more than end-of-life management of building materials. Based on the knowledge we gained, GBB developed a robust Zero C&D Waste Program to help realize zero waste for all types of retail store projects, whether renovation or new construction. This program includes:

- Identifying opportunities for material reuse;
- Screening the suitability of building reuse organizations;
- Pre-qualifying recycling facilities;
- Deploying a C&D Materials Management Tool Kit for general contractor use;
- Developing C&D Materials Recovery Specifications and a C&D Materials Recovery Plan and separation Strategy to guide contractor best practices to achieve zero waste;
- Managing the application to and reporting requirements for the UL 2799 Zero Waste to Landfill validation certification; and,
- Working collaboratively with contractors to find outlets for difficult-to-divert materials.

"GBB's comprehensive approach to the development of this Master Plan will allow us to move seamlessly into the implementation phase. Your agency's collective industry experience and willingness to bring local engineering consultants alongside the process has proven to be invaluable..."

 Darwin J. Baas, Department of Public Works Director, Kent County, Michigan

Through several store renovation projects, GBB has provided C&D waste management coordination and helped achieve very high diversion rates. As time progressed, we refined our methodology, built valuable relationships, and delivered detailed specifications to construction contractors early in each project – the success of which is reflected in the client's steadily increasing diversion rates.

### Programmatic advancement opportunities

GBB has identified a variety of additional opportunities to advance our retail clients' environmental sustainability goals.

### Expand Zero C&D Waste Program

GBB created the Zero C&D Waste Program with store renovation projects in mind. However, the Program could easily be adapted and implemented in additional project scenarios: Expand Program to Additional Project Types, Expand Program to Additional Facility Types, Expand Program to Other Countries, and Pursue UL Certification for All Projects



#### Conduct Contractor Training and Education Programs

The Zero C&D Waste Program represents a substantial step forward for the expectations of the construction industry. The Program asks for the contractors to go above and beyond the norm, even according to the highest standards of sustainable building design and construction. Contractors will need training to achieve these ambitious goals, and GBB can conduct the training sessions needed to educate contractors on these new methods.



### Develop Sustainable Design Guidelines Tailored to Preservation

As part of our research, we have reviewed our client's corporate construction guidelines. GBB recommends similar guidelines be developed for renovation projects. While many of the principles will remain the same, the credits and details will differ for renovations, as renovation projects present different challenges and opportunities for sustainability.





### Perform Drawing Review for New Construction Projects

Achieving zero C&D waste requires much more than just end-of-life management of building materials. End-of-life management will have limited success if buildings and interior spaces are not designed to facilitate reuse, repair, remanufacturing, and recycling. GBB can conduct drawing reviews of designs and provide feedback on how materials and construction details can be modified to prevent waste and make it easier to recover valuable materials.



### Conduct Lifecycle Analyses for Building Materials

GBB can help make informed decisions about building material selection by conducting lifecycle analyses on its building materials. We can determine the best building materials to use in its facilities based on the environmental impact of the prospective materials from their raw material extraction and processing, manufacturing, transportation, and use, and finally to its end-of-life processing method.



#### Enhance Operational Zero Waste Program

Our client currently has a recycling program in place for the operation of its facilities. During the work GBB conducted, we observed that program implementation at the stores could benefit from enhancement. Universal programs such as these can be difficult to implement due to the wide variety of regulations and programs in individual jurisdictions. Programs must be regularly evaluated and updated to keep pace with changing consumer behaviors and diversion opportunities. Periodic staff education is also vital to the success of such programs.



### Procure Zero Waste Collection Services for company facilities, including retail stores

Evaluating collection service contracts is necessary for many of our client's retail stores. GBB routinely assists its clients with drafting Requests for Proposals (RFPs) and Requests for Qualifications (RFQs) for a variety of services and products, including material collection services. We also assist our clients with vendor response review and interviews, negotiations, contract review, and program implementation. All selected collection service providers must share the same diversion goals to be successful into the future.



### Pursue Organization-Wide Certification Programs

GBB stays informed on developments of various waste-related certification programs and recommended two such programs for our client to achieve recognition for its organization-wide efforts to reduce waste and make progress toward a circular economy. GBB can manage the application process for the certification if desired.



### TRUE Zero Waste

Total Resource Use and Efficiency (TRUE) is a certification program developed in 2013 that focuses on the entire material lifecycle responsibility of businesses, operations, and facilities. The TRUE Zero Waste certification system is a complement to LEED rating system. The program strives to ensure materials and products are reused/diverted. TRUE seeks to create a holistic zero waste culture among a company's leaders, employees, and total supply chain.



### Circulytics

The Ellen MacArthur Foundation, a UK-based non-profit that has emerged as the preeminent global thought leader on accelerating the transition to a circular economy, developed and tested Circulytics in 2019 and made it available publicly in 2020. Circulytics is a tool that organizations use to measure their progress toward circularity and uses a wide set of indicators to reveal the extent to which an organization has achieved circularity across its entire operations.



## Thought Leadership

A recent article on the topic by one of GBB's Consultants, Corinne Rico:

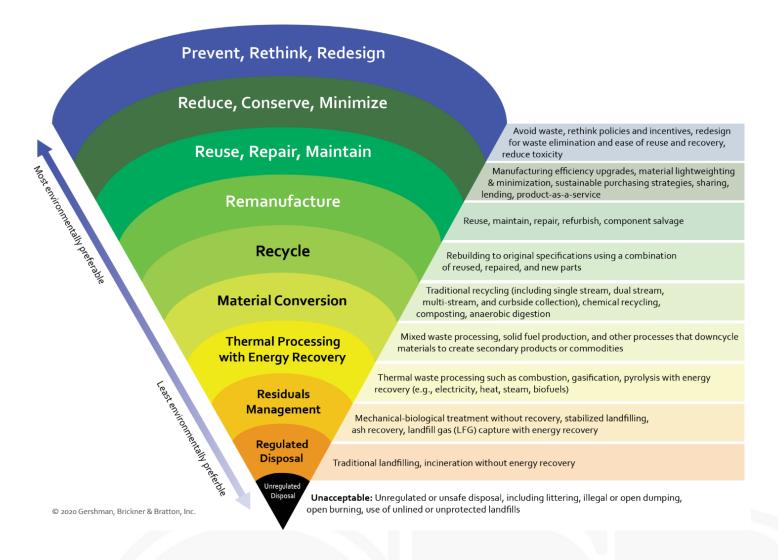
• (February 2020) Rico, Corinne, "<u>The importance of materials recovery coordination in construction & demolition</u>", published in Construction and Demolition Recycling magazine.

<sup>&</sup>lt;sup>1</sup> The circular economy is an economic model that aims to decouple economic growth from material and resource consumption through the three principles of: designing out waste and pollution, keeping products and materials in use, and regenerating natural systems.



## GBB's Sustainable Materials Management Hierarchy

Using past projects as a guide, GBB carefully analyses current and future demands to customize a solid waste management program that fits each client's unique social, economic, environmental, and political or market context. While clients' specific needs may vary, GBB typically strategically plans for, designs, and implements integrated materials management systems that are guided by and aligned with our Sustainable Materials Management Hierarchy, to keep materials circulating at their highest and best use.



Our commitment to **excellence, the highest quality work products,** and years of proven experience offer our clients the best results. When making recommendations, GBB maintains its objectivity by avoiding situations that could create a conflict of interest. GBB is independent of technology, financing, construction, and operational interests. We have earned our good reputation by understanding our clients' needs and working to achieve their goals.