Management and Leadership

☒ Environmental Team

MSA’s environmental team consists of key members within our organization that are working on the LEED certification project for Oriole Park at Camden Yards and the B&O Warehouse. In addition, we work with our LEED consultant and recycling consultant who meet with us bi-weekly to discuss the process, where we stand, and what credits we can achieve. Our mission is not only to accomplish LEED certification, but to ensure that the Camden Yards Sports Complex operates as efficiently and sustainably as possible.

☒ Annual Environmental Goals

One major goal that we strive to attain is the State of Maryland recycling minimum of 30%. M&T Bank Stadium has made that minimum for the past couple of years, 46% in 2016; however, it took some work at Oriole Park. In 2016, we made 32% which is up from 19% in 2015. That was a major accomplishment for us as well as our stadium partners.

☒ Environmentally Preferable Purchasing

Below is the sustainable purchasing policy and criteria used by the Maryland Stadium Authority:
SECTION 3: PERFORMANCE METRIC

Sustainable Purchasing of Ongoing Consumables
The Maryland Stadium Authority mandates that at least 60% of the Stadium’s total ongoing consumables purchases (by cost) are to be sustainable. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases contain at least 10% postconsumer or 20% postindustrial material.
- Purchases contain at least 70% material salvaged from off-site or outside the organization.
- Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
- Purchases contain at least 50% rapidly renewable material.
- Purchases contain at least 50% Forest Stewardship Council (FSC) certified wood.
- Purchases contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project.
- Batteries are rechargeable and contain low levels of mercury and heavy metals.

Sustainable Purchasing of Durable Goods
The term “durable goods” refers to higher-cost-per-unit materials that are replaced infrequently and/or may require capital outlays to purchase. These products may include, but are not limited to: office equipment (such as computers, monitors, printers, copiers, fax machines), appliances (refrigerators, dishwashers, water coolers), external power adaptors, televisions, and furniture. The purchasing criteria for these products fall into the following two categories.

Electronics and Appliances
The Maryland Stadium Authority mandates that at least 40% of total purchases of furniture (by cost) must be sustainable. Sustainable purchases are those that meet one or more of the following criteria:

- Purchases must contain at least 10% post consumer or 20% post industrial material.
- Purchases must contain at least 70% material salvaged from off-site or outside the organization.
- Purchases contain at least 70% material salvaged from on-site, through an internal organization materials and equipment reuse program.
- Purchases contain at least 50% rapidly renewable material.
- Purchases contain at least 50% Forest Stewardship Council (FSC) certified wood.
- Purchases contain at least 50% material harvested and processed or extracted and processed within 500 miles of the project.

Furniture
The Maryland Stadium Authority mandates that at least 40% of total purchases of electric powered equipment (by cost) must be sustainable. Sustainable purchases are those that meet one or more of the following criteria:

- The purchased equipment is ENERGY STAR® qualified (for product categories with developed specifications).
- The purchased equipment (either battery- or corded) replaces conventional gas-powered equipment.

Sustainable Purchasing: Facility Alterations and Additions (when applicable)
The Maryland Stadium Authority mandates that at least 30% of the Stadium’s total facility alteration purchases (by cost) are to be sustainable. Sustainable purchases are those that meet one or more of the following criteria:

- Adhesives and sealants have VOC content less than the current VOC content limits of SCAQMD Rule 3168, or sealants used as fillers meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.
- Paints and coating have VOC emissions not exceeding the VOC and chemical component limits of Green Seal’s Standard GS-11 requirements.
- Non-carpet finished flooring is FloorScore-certified and constitutes a minimum of 25% of the finished floor area.
- Carpet meets the requirements of the CRI Green Label Plus Carpet Testing Program.
- Carpet cushion meets the requirements of the CRI Green Label Testing Program.
- Composite panels and agrifiber products contain no added urea-formaldehyde resins.

Sustainable Purchasing: Toxic Material Source Reduction - Reduced Mercury in Lamps
To reduce the mercury level in lamps the Maryland Stadium Authority is committed to purchasing lamps the manufacture specified low mercury content or NEMA partner bulbs. 90% of the Stadium’s total welder purchases (by cost) are to be manufacture specified low mercury content or NEMA partner bulbs.

The Responsible Party shall confirm that product purchases are sustainable and conform to the mandates of the USGBC and the Sustainable Purchasing Policy, and keep track of the purchasing orders, receipts, and product data sheets/MSDS necessary to document the extent of the sustainable purchases.
Environmental Restoration or Community Environmental Projects

Despite MSA participating in annual Community Service days which consist of cleaning up the Gwynns Falls Trail and planting trees in that area, we recently partnered with the National Wildlife Federation and created the Oriole Garden near the War Memorial on the Complex. Its purpose is to plant the types of plants that will attract Baltimore Orioles to the garden.

*Baltimore Sun article
*National Wildlife Federation article

Also, in previous years, we have enlisted the services of Greenstreet Academy during Baltimore Ravens’ game tailgating to engage fans in sustainable practices such as recycling their bottles and cans rather than throwing them into the trash. Just this month, we planted an additional 75 trees across the Complex by partnering with the Baltimore Tree Trust.

*MSA’s Environmental Initiatives
*Baltimore Tree Trust

**Waste**

**Recycling**

In order to decrease the amount of recyclable waste across the Complex, we deployed additional trash and recycling receptacles in each stadium and around the perimeter to encourage more employee and fan participation. Overhead signage and painted floor stencils were added in the Oriole Park loading dock to make the point of separation easier for the janitorial staff and stadium partners. After all was said and done, Oriole Park had a decrease of 87.65 tons of waste from 2015 to 2016.

Both stadiums recycle similar products, but the quantities vary based on number of games and events in each facility.

<table>
<thead>
<tr>
<th>Materials (in tons)</th>
<th>Oriole Park at Camden Yards</th>
<th>M&amp;T Bank Stadium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commingled items (glass, aluminum, etc.)</td>
<td>176.83</td>
<td>312.21</td>
</tr>
<tr>
<td>Waste oil/grease</td>
<td>82.32</td>
<td>25.60</td>
</tr>
<tr>
<td>Cardboard bales</td>
<td>213.66</td>
<td>172.70</td>
</tr>
<tr>
<td>White paper and shredding</td>
<td>13.35</td>
<td></td>
</tr>
<tr>
<td>Foodwaste/composting</td>
<td></td>
<td>30.44</td>
</tr>
<tr>
<td>Pallets</td>
<td></td>
<td>71.68</td>
</tr>
<tr>
<td>Food donation</td>
<td>10.76</td>
<td></td>
</tr>
</tbody>
</table>
Composting

M&T Bank Stadium has had much success with food composting over the past few years (over 30 tons per year). That practice has recently been introduced at Oriole Park, so we do not have measureable data for that stadium yet. Both stadiums underwent renovations on their fields in 2016. Oriole Park recycled 1000 tons of sod into topsoil during their upgrade and M&T Bank recycled over 2,500 tons of stadium turf and rubber pellets during their conversion to natural grass.

Hazardous Waste/Toxic Use Reduction

Both stadiums are extremely cautious of the products they purchase, use, and how they dispose of them. There are processes in place to either call in the appropriate contractor to thrown away or we use the MSDS sheets that explain how things should be discarded.

Energy

Energy Efficiency

You can only save money and utilities when you know where you are; therefore, we have installed 16 sub-meters to measure our utility usage in our substations. At any given time, we are able to access the database and look at any substation to see where its energy usage, natural gas, and steam are at both stadiums and the Warehouse. Oriole Park also upgraded the stadium sports lighting to energy-efficient LED lights in late 2016 which reduced energy consumption by 54% on lighting alone.

Transportation

Employee Commute

The State of Maryland allows complimentary use of public transportation for state employees with the appropriate identification. MSA has recently partnered with MTA to undergo a renovation of the Light Rail station next to the Warehouse. Part of that project includes installing a bike sharing depot also. That will allow a larger amount of employees and tenants to utilize multiple modes of public transportation.

Efficient Business Travel

MSA allows its employees to telework when possible which cuts down on vehicular traffic. We complete numerous meetings using teleconferencing equipment and even attend webinars form our offices.
Fleet Vehicles

We have installed 9 vehicle charging stations in the Complex parking lots.

Water

Water Conservation

In addition to the energy measurements, the new metering system mentioned above also measures chilled water and domestic water usage for all buildings on the Complex.

Stormwater Management and Site Design

We take a more vigilant approach to ensuring the products are not emptied into the drainage system, the janitorial staff walks the perimeter more often to make sure trash is not going into storm drains, and we installed the Oriole Garden to reduce run-off.

Green Building

LEED Gold


For more information, see www.mdstad.com/m-t-bank-stadium-achieves-leed-gold-certification

Other

The Maryland Stadium Authority is a member of the Green Sports Alliance.