DPW Bureau of Solid Waste

FY 2025-2030 CIP

January 18, 2024

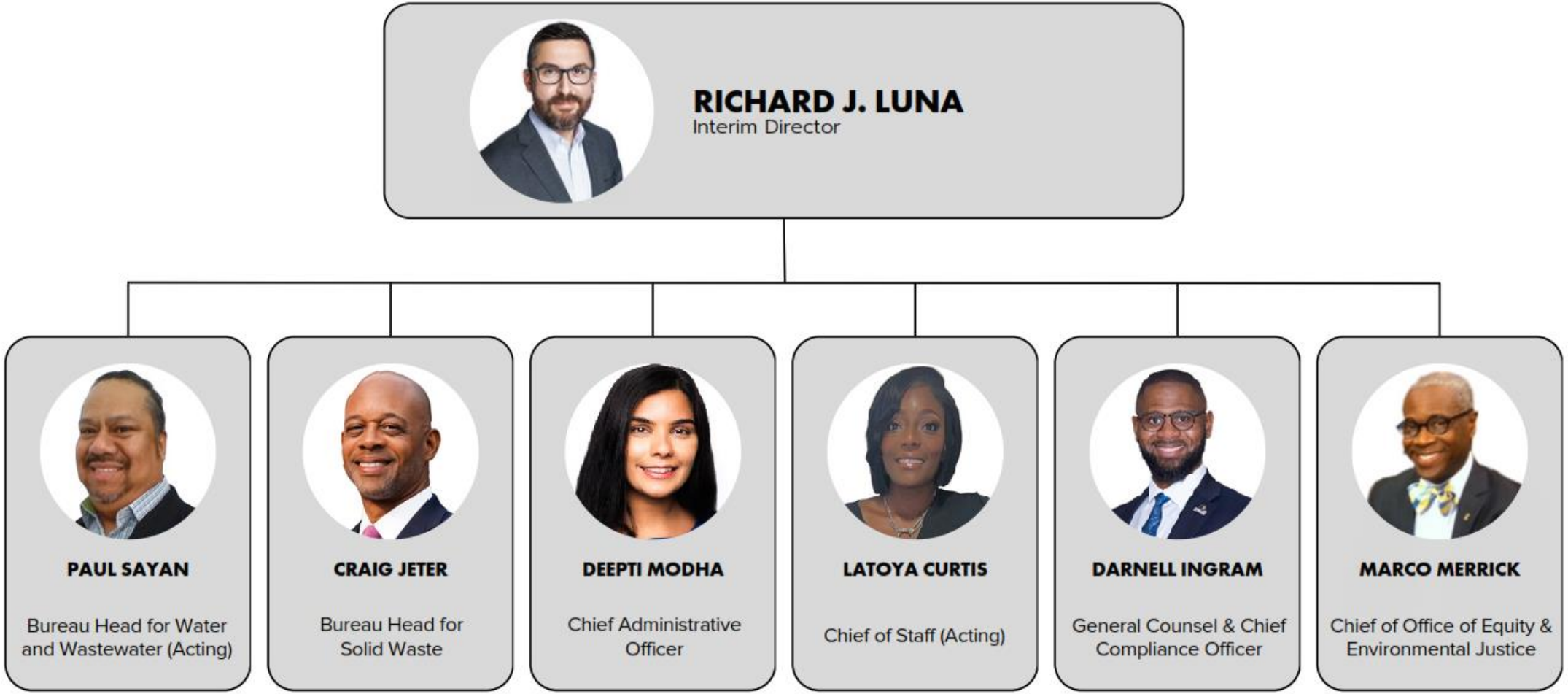
BALTIMORE CITY
DEPARTMENT OF PUBLIC WORKS

Department of Public Works

Mission: We support the health, environment, and economy of the City and region by providing customers with safe drinking water and keeping our neighborhoods and waterways clean.

Vision: To be a strong proponent and protector of our environment and the health and vitality of our communities.

Organization Chart



Equity in All That We Do

Attention to services (provisions, specific needs customers & communities)

Collaboration with DPW Community Liaisons in the Office of Strategic Alliances

Equity initiatives (programs, observances, holidays, celebrations across race, religion, culture, nationality, ethnicity and identities)

Partnerships with Universities, National Water Utility & Environmental Advocacy organizations, City Agencies, Businesses, community and Non-profits

FY 2024 Operating Budget

DPW's Fiscal 2024 funding allocation is $676,846,271.

The breakdown of DPW's funding across the bureaus is below*:

DPW Bureaus	FY 24 Funding	%
Bureau of Solid Waste	114,142,068	17%
Bureau of Water & Wastewater	551,882,505	82%
DPW Administration	10,821,698	2%

*Funding amounts provided by WorkDay which may differ from funding allocations found in Baltimore City's Fiscal 2024 Ordinance of Estimates due to budget amendments and/or revisions.

FY 2024 Capital Budget

DPW's Fiscal 2024 funding allocation is $600,084,000.

The breakdown of DPW's funding across the bureaus is below:

DPW Bureaus	FY 24 Funding	%
Bureau of Solid Waste	10,750,000	2%
Bureau of Water & Wastewater	589,334,000	98%

FY 2024 CIP

Total: $10.75 million

Title	PRJ #	Request ($)
Aerated Static Pile Compost Facilities	PRJ002933	5,000,000
Quarantine Road Landfill Expansion	PRJ000188	3,000,000
Solid Waste Regulatory Compliance	PRJ002515	2,000,000
Eastside Transfer Station	PRJ002517	500,000
Solid Waste Facility Improvements	PRJ002510	250,000

Bureau of Solid Waste

Bureau Assets

Landfill

- Quarantine Road
- Pennington Landfill (closed)
- Monument Landfill (closed)
- Woodberry Landfills (closed)

Transfer Station

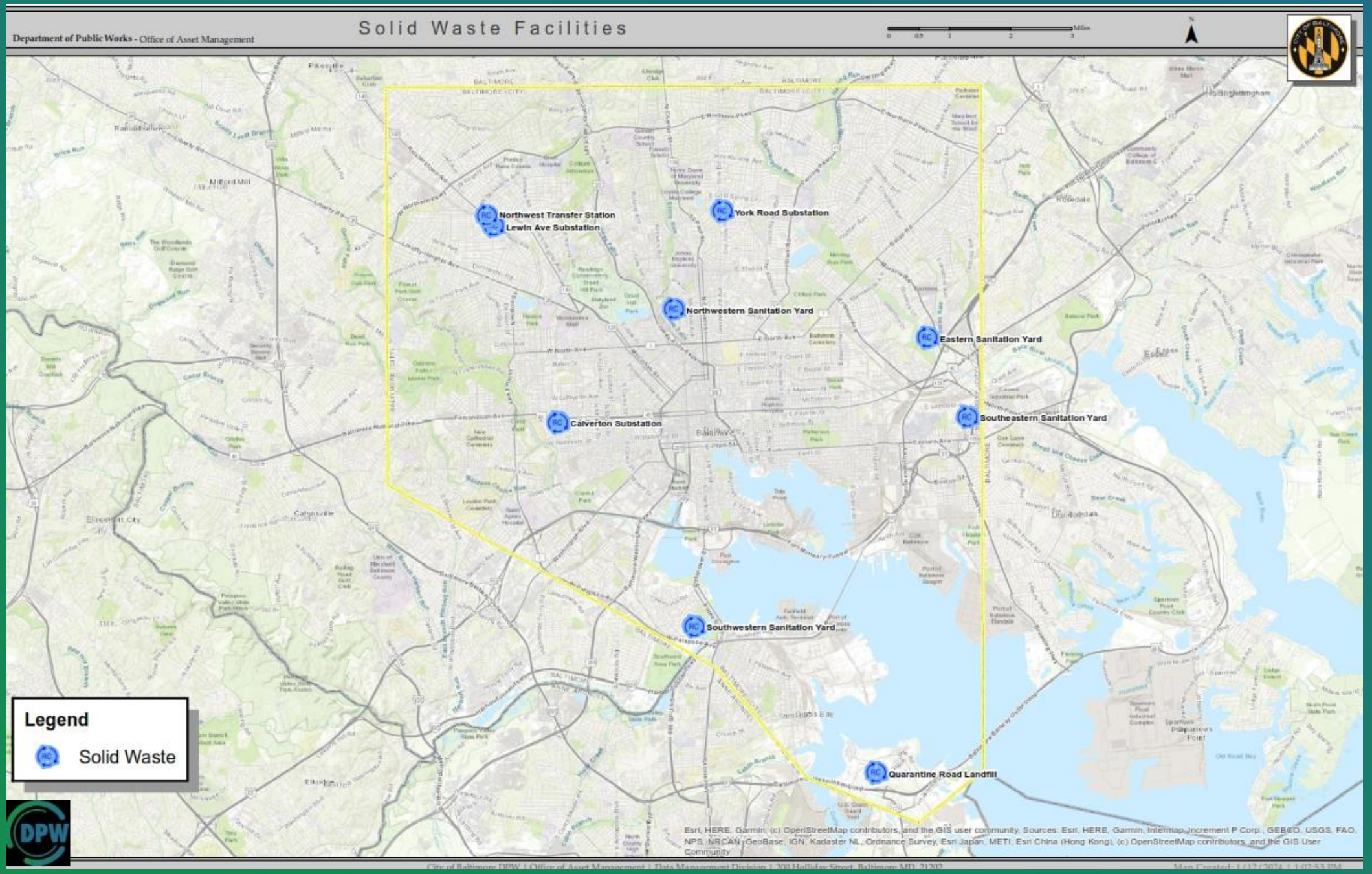
- Northwest

Solid Waste Sanitation Yard

- Kane Street
- Reedbird
- Bowleys Lane

Residential Drop-Off Center

- Sisson Street
- Bowleys Lane


Department of Public Works - Office of Asset Management
Solid Waste Facilities
Northwest Transfer Station
Lewin Ave Substation
York Road Substation
Northwestern Sanitation Yard
Eastern Sanitation Yard
Calverton Substation
Southeastern Sanitation Yard
Southwestern Sanitation Yard
Quarantine Road Landfill
Legend
Solid Waste
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City of Baltimore DPW | Office of Asset Management | Data Management Division | 200 Holliday Street, Baltimore MD, 21202
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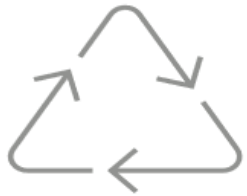
Recent Accomplishments

Eastside Transfer Station



- Task proposal and contract between the Northeast Maryland Waste Disposal Authority was submitted and approved to design and construct the Eastside Transfer Station and compost facility at the current Bowley's Lane solid waste site.
- Completed parking lot replacement as a part of immediate repairs to the site

Improvements on Quarantine Road Landfill (QRL)

- Improvements were completed on the maintenance of stormwater basins
- Completed the removal of trees and large vegetation in accordance with the Maryland Department of the Environment requirements.

Eastern Sanitation Yard Updates/ Eastside Transfer Station MOU

Completed parking lot replacement as a part of immediate repairs to the site and task proposal and contract between the Northeast Maryland Waste Disposal Authority was submitted and approved to design and construct the Eastside Transfer Station and compost facility at the current Bowley's Lane solid waste site.

PRJ002517

Total cost – $2,000,000

Funding Sources – GO Bonds

Completion Date – October 2023

Quarantine Road Landfill Tree Removal

Completed the removal of trees and large vegetation in accordance with the Maryland Department of the Environment requirements.

PRJ002515

Total cost - $980,000

Funding Sources – GO Bonds

Completion Date – December 2023

Quarantine Road Landfill: Compliance Projects

Project Highlights

Stormwater Management, Erosion and Sediment control and Leachate issues are a continuous in landfills that can result in contaminated stormwater discharge if they are not immediately addressed. The Bureau of Solid Waste requires CIP funding to procure an experienced on-call contractor to provide emergency SWM, E&S control, waste and leachate management services

Leachate seep at Cell 6 NW slope (inactive area)

Repaired leachate seep area at cell 6 North west slope (inactive area)

QRL cell 6 area (upper E slope) graded and hydro-seeded for soil stabilization as per MDE compliance requirement.

Riser replaced at Sediment basin 5 at Cell 6 North facing slope base.

FY 2025 Solid Waste CIP Requests

Project Name	Project #	Source	Appropriation (in millions)
Eastside Transfer Station	PRJ002517	State Grant	$ 16.50
Quarantine Road Landfill	PRJ000188	GO Bonds	$ 3.00
Solid Waste Facility Improvements	PRJ002510	GO Bonds	$ 1.50
Quarantine Road Landfill Compliance	PRJ003016	GO Bonds	$ 1.50
Total Funding Needed:			**$ 22.50**

Eastside Transfer Station

Project Highlights

The construction of a second Eastside Transfer Station will expand operational capacity, alleviate pressure from the Northwest Transfer Station, and allow crews to return to their routes and tasks more quickly than before. The project will also include development of a compost facility, new resident and small hauler drop-off areas and staff facilities.

Project Finance

Current design and construction costs are $23.5 M

Project Timeline / Roadmap

The current timeline for design and construction is three (3) years

Quarantine Road Relocation

Legend: Expansion Area Original Rd Realigned Rd

Project Highlights

Quarantine Road Landfill (QRL) is expected to reach capacity by FY 2027. This project aims to increase its capacity to 2048 by expanding over the Quarantine Road. It will involve relocating the existing road and utilities, which will be achieved in collaboration with DOP, DOT and BGE.

Project Finance

Current expansion costs are $99.0 M, but resource and supply chain issues will likely influence the final construction cost.

Project Timeline / Roadmap

The initial expansion begins with construction for road relocation beginning in FY 2025. First cell construction will begin in FY 26 and finish in FY 28

Southeastern Sanitation Yard Renovation

Project Highlights

Renovate the Kane Street facility including parking, landscaping and drainage, electrical, lighting, HVAC, alarms and sensors, office space, locker Rooms/lavatory, storage space, fueling stations, security, ventilation (Airborne illness) & space concerns.

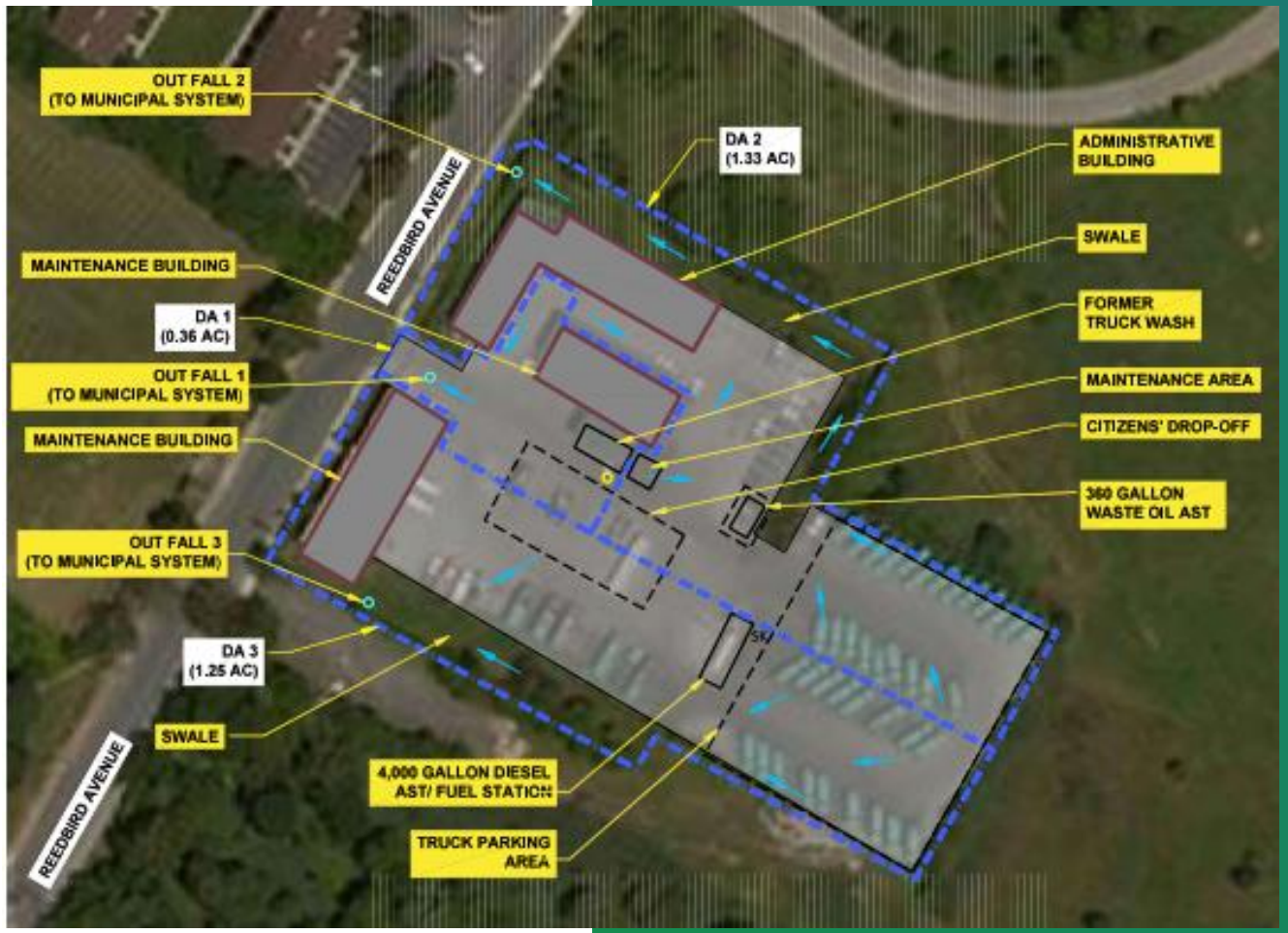
Project Finance

Current budget for design and construction costs are $7.8 M

Project Timeline / Roadmap

The current timeline for design and construction is three (3) years

Western Sanitation Yard Renovation



Project Highlights

Renovate the Reedbird Street facility including parking, landscaping and drainage, electrical, lighting, HVAC, alarms and sensors, office space, locker Rooms/lavatory, storage space, fueling stations, security, ventilation (Airborne illness) & space concerns.

Project Finance

Current budget for design and construction costs are $8.1 M

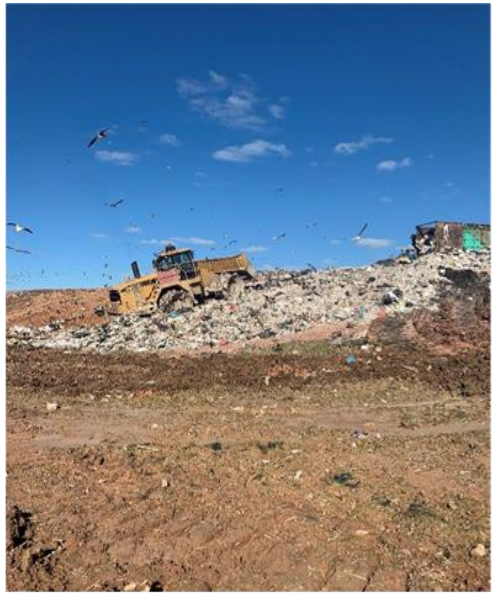
Project Timeline / Roadmap

The current timeline for design and construction is three (3) years

Quarantine Road Landfill: Compliance Projects

Project Highlights

Daily covering of waste is mandatory at the waste disposal site to ensure the site is meeting the waste disposal permit requirement. Placing a fluff layer at the base of any new cell will protect the cell liners and meet the MDE disposal permit requirement. Bureau of Solid Waste needs sufficient budget to continue these activities and satisfy periodic MDE inspections.



Waste grading to place daily cover at the Cell 2 area

Mattress disposed at the top of access ramp that BRESCO did not accept which need to cover with soil

Covering fluff layer on top of gravel above liner (Cell 6 N slope bottom)

New tipping face (started Mid Dec. 2022) along N facing slope, Cell 6

Future Solid Waste CIP Requests

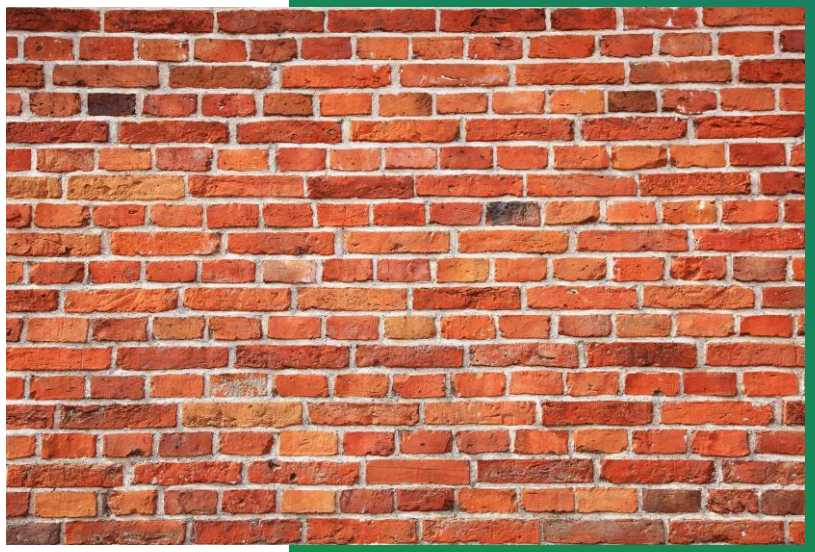
Project Name	Project #	FY26	FY27	FY28	FY29	FY30
Northwest Transfer Station	PRJ001572	$ .75				
Quarantine Road Landfill	PRJ000188	$ 3.00	$ 3.00			
Solid Waste Facility Improvements	PRJ002510	$ .75	$ 1.50			
Quarantine Road Landfill Compliance	PRJ003016	$ 1.50	$ 1.50	$ 1.50		
Solid Waste Regulatory Compliance	PRJ002515			$ 1.00	$ 1.00	$ 1.00
Construction & Demolition Recycling Center	PRJ003303			$ 1.00	$ 2.00	$ 2.00
Long Haul Transfer Solution	PRJ003117			$ 2.50	$ 3.00	$ 3.00

Long-Term Capital Needs

Project	Appropriation (in millions)
Long Haul Transfer Solution	$ TBD
Construction & Demolition Recycling Center	$ 25.00
Aerated Static Pile Compost Facility	$ 8.00

Long Haul Transfer Solution

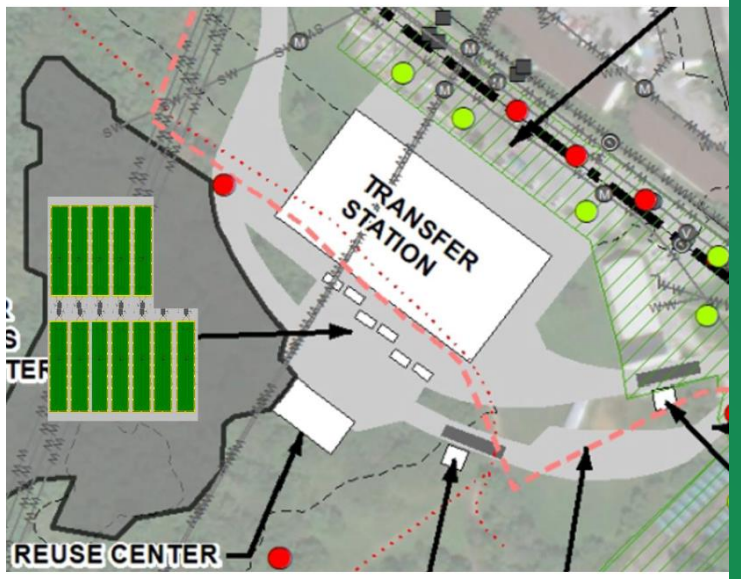
The Less Waste, Better Baltimore operations plan recommends that DPW construct a large rail transfer station (RTS) where operations can be consolidated and provided more efficiently. This facility would be built along a rail spur to allow for containerization and rail shipment of waste and could also be operated as a truck transfer station. Rail transfer from RTS would provide a more efficient, cost-effective, and environmentally friendly service than truck transfer and would allow waste to be sent to multiple regional landfills or even more distant facilities as needed. An RTS could accept waste from the commercial as well as residential sectors in Baltimore (and potentially surrounding counties) to help make it economically viable and would be sized to handle at least 530,000 tons/year.



Construction & Demolition Recycling Center

Construction and Demolition (C&D) waste accounts for 35% of the waste disposal stream and represents the greatest opportunity to divert waste from disposal to reuse and recycling, in order for the City to achieve its 90% waste reduction goal. Reducing waste disposal rates will eliminate the need for environmentally degrading disposal options we use now, namely incineration and landfilling. Reducing reliance on these facilities will also save the City the large cost of new or expanded facilities.

ceptual Layout: Not to Scale. For discussion purposes only



Aerated Static Pile Compost Facilities

Project Highlights

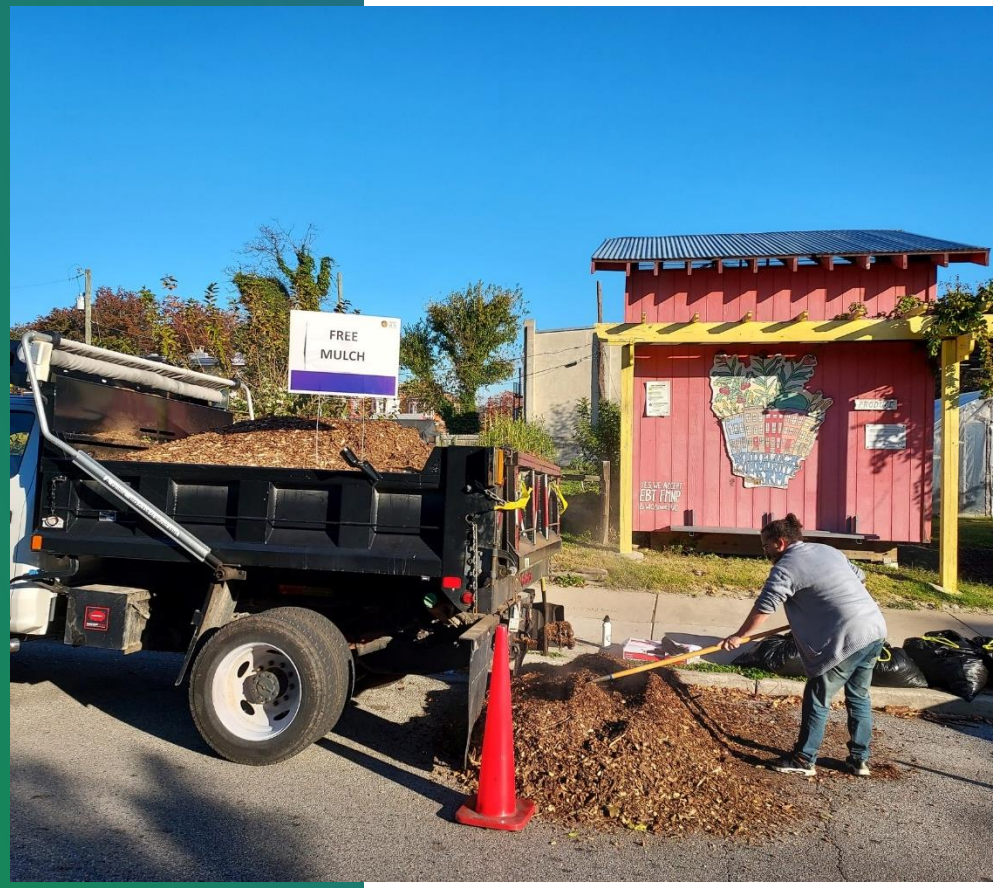
The "Less Waste, Better Baltimore" (LWBB) study recommends diversion of organic material by expanding the City's small-scale organics processing capacity by constructing four aerated static compost piles throughout the city. The first of the four will be constructed in conjunction with the Eastside Transfer Station at Bowley's lane site. DPW was selected for a $4 million EPA SWIFR Grant (IIJA program) Purpose is to build a solar-powered composting facility. The current level of funding will develop the site at 50% capacity, or ~12k tons per year throughput. The total Site capacity is estimated at 24k tons per year.

Project Finance

Current design and construction costs are $8 M

Project Timeline / Roadmap

The current timeline for design and construction is three (3) years for phase I development (at the 12k ton per year throughput).



10-Year Solid Waste Management Plan

The Baltimore City 10 Year Solid Waste Management Plan (SWMP) is a regulatory plan submitted to the Maryland Department of Environment (MDE) to map operational needs, constraints and improvements for waste management within the City for the next 10 years. The plan consolidates goals for managing the City's solid waste stream, assesses the existing solid waste collection systems, current and future disposal capacity needs, and how zero waste strategies like reuse, recycling, and composting are to be implemented.

General Goals & Objectives

1. Provide waste reduction and diversion opportunities, waste and recycling collection services, city residents.
2. Explore opportunities to increase the efficiency and cost effectiveness of the City's solid waste program.
3. Minimize improper waste disposal, illegal dumping, and littering.
4. Implement waste reduction and diversion strategies as outlined in the Less Waste Better Baltimore Plan, the City's long-term strategic master plan for improving solid waste management and recycling.
5. Increase the amount of waste that is diverted from disposal at Quarantine Road Landfill (QRL) and WIN Waste Innovations (WIN Waste).
6. Promote local and state legislation that supports waste diversion and source reduction.

Conclusion / Summary

The City's waste stream will continue to grow at an annual rate of 0.7% per year based on historical waste generation models. Investment in different strategies is necessary to provide the Department with the flexibility to manage the City's future waste needs.

The proposed FY 25 capital projects will support the Bureau's ability to:

- Continue to provide waste and recycling collection and disposal services;
- Quarantine Road Relocation and expansion of Quarantine Road landfill;
- Maintain regulatory compliance with State and Federal requirements;
- Create a healthy and safe work environment for employees; and
- Pursue waste diversion initiatives

Questions?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