

Stormwater Wastewater Facility

April 28, 2023

Building Design and Construction Division



Agenda

1. Construction Progress Update
2. Milestone Schedule & Work
3. Site utilization - Phase 1 / Phase 2 Transition
4. User Requested Changes
5. Building 1 Highlights



Construction Activities - Phase 1

- Building 2 - Shops – Pouring stepped foundations and stems for retaining wall; installing damp proofing and foundation drains.
- Building 4 - Equipment Storage – Installing concrete masonry walls; erecting steel for roof frame.
- Building 6 – Enclosed parking– Continuing framing of the PEMB structure, install of PEMB envelope and masonry.
- Building 7 - Vehicle Wash - Pouring concrete walls of a Vehicle Wash; pouring exterior slab-on-grade, installing trench drain at Vector Decant area
- Building 8 - Fuel Island – Installing manhole next to fuel station, running conduits.



Construction Activities



Notice-to-proceed issued: March 15, 2022

Look-Ahead:

- Phase 1:
 - Building 2 slab on grade, framing and envelope.
 - Building 4 and 5 roofing and structural steel.
 - Building 6 envelope.
 - Building 7 slab on grade.
- Phase 2:
 - Fill in of existing pond and E&S.
 - Building 1 & site features
- Phase 3:
 - Transition of existing WCD operations into Building 1
 - Demolition of Existing WCD building & remaining site/landscape work



Construction Progress Photos

BUILDING 2



Pouring a stepped foundation

BUILDING 4



Backfilling soil and compacting

BUILDING 6



Continue framing PEMB structure, cleaning the slab

BUILDING 7



Concrete walls framing around Vector Decant area

BUILDING 7



Installing trench drain in Vector decant

BUILDING 8



Installing manhole near a fuel station

Construction Progress Photos

BUILDING 2



Damp proofing and foundation drains

BUILDING 4



CMU wall with supporting steel

BUILDING 6



Exterior ground face CMU.

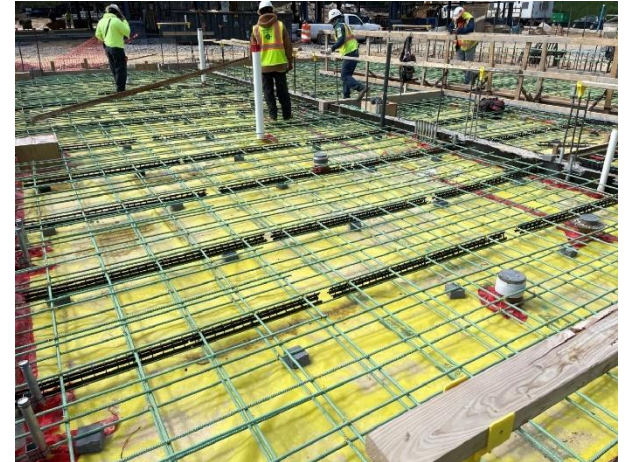
BUILDING 7



Underground conduits and piping



Steel reinforcement and gravel at slab



Vapor barrier placement at slab

Construction Aerial Views



Proposed Construction Phasing

Proposed Schedule*







- Start: March 2022
- Phase 1 End: Early 2024
- Phase 2 End: Fall 2025
- Phase 3 End: Spring 2026
- Completion: Summer 2026

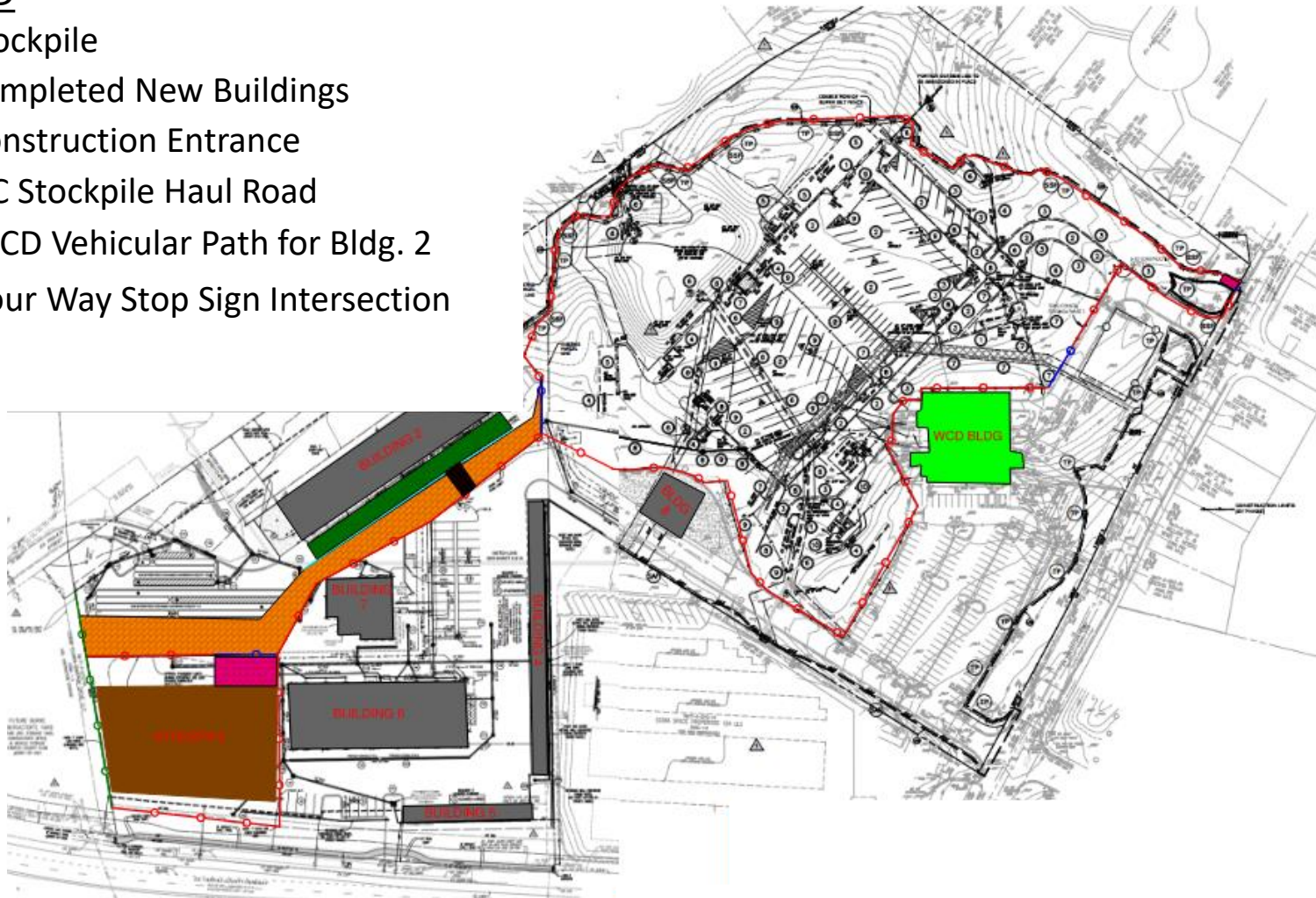
*Schedule may be impacted by unforeseen conditions including weather.



PHASE 1 / PHASE 2 TRANSITION

LEGEND

-  Stockpile
-  Completed New Buildings
-  Construction Entrance
-  GC Stockpile Haul Road
-  WCD Vehicular Path for Bldg. 2
-  Four Way Stop Sign Intersection



Major User Requested Changes - Status

- Building 7 - Vector decant area redesign
 - User authorized, design complete , construction underway
- Building 4 - additional GFCI outlet locations
 - design complete, Change Order under review
- Building 1 Changes:
 - Upper Lobby to office area wall soundproofing
 - Flagpole change
 - Issued request for proposal
- Landscaping modifications (mainly for Phase 2 Area) and SW enhancements
 - Under review by SWPD and additional verification by civil consultant
- Future EV infrastructure under consideration
- Items evaluated and no further action:
 - Building 1 - enclosed office for HR with windows in lieu of cubicles
 - Building 1- revisit the cafeteria layout, possible modification

Administrative Offices & Support Area - Building 1



Building 1 – North Façade



Building 1 – North Façade Main Entrance



Building 1 – South Façade Front Elevation



Administrative Offices & Support Area - Building 1



Building 1 – South Façade - Warehouse



Building 1 – North Plaza



Building 1 – North Façade – Mian Entrance



Building 1- Interior Views



Lobby View Section



Upper Lobby View



Building 1- Interior Views



Main Lobby



Open Office Typical



Training Room Typical



Kitchen Seating Area



Sustainability and Educational Features



Photovoltaics Panels



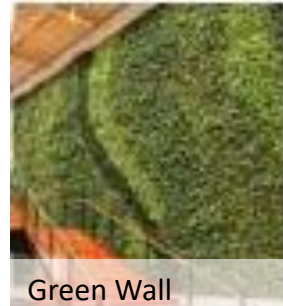
Green Roof



Stormwater Cistern



Rainwater Harvesting



Green Wall



Pervious Pavement Types



Geothermal

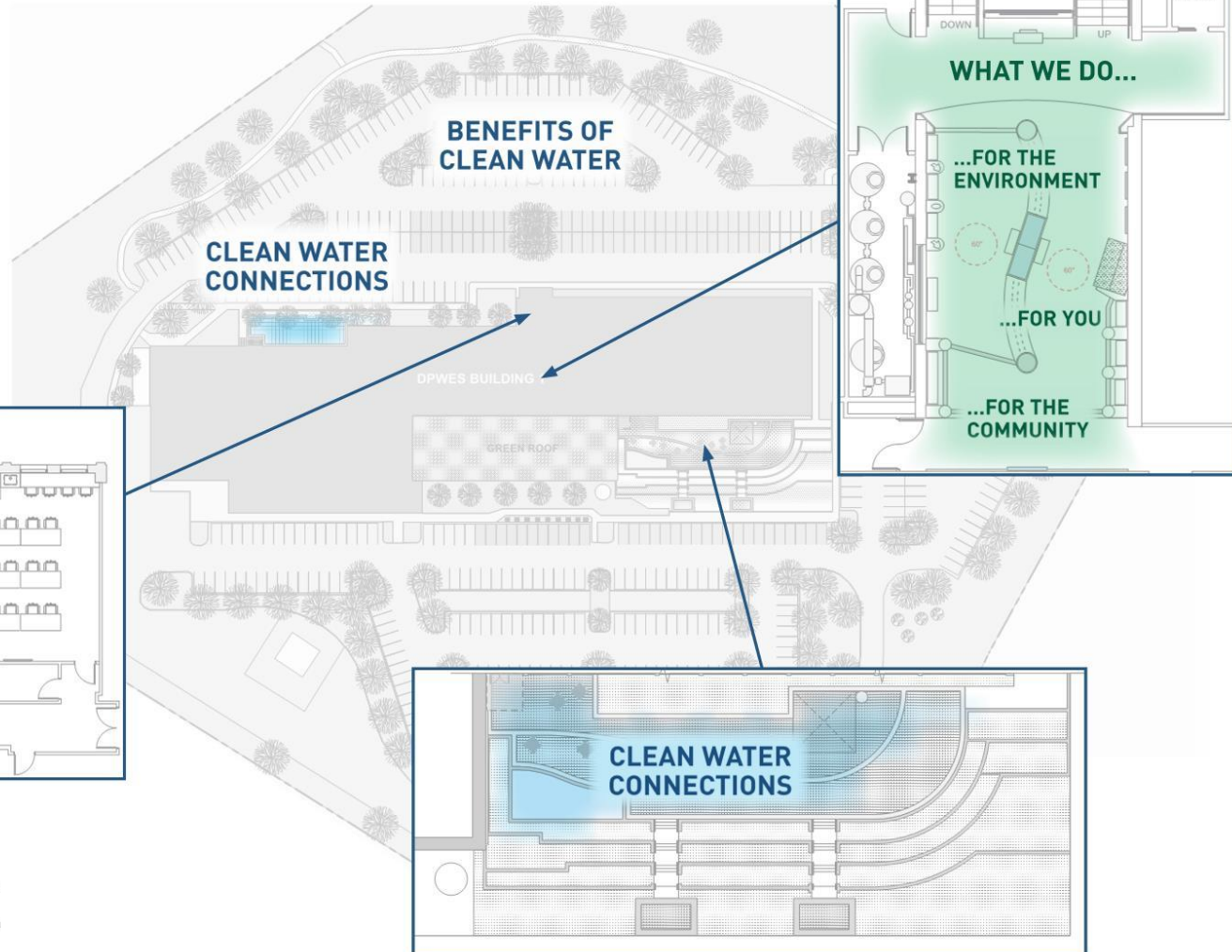
- Targeting LEED Gold Certification
- Green Roof
- Solar Ready-Photovoltaics Panels
- Electrical Vehicles Ready
- Geothermal
- Rainwater Harvesting
- Stormwater Cisterns
- Natural Landscaping
- Bioretention Facilities
- Pervious Pavement Types
- Green Wall
- Video Wall
- Education

Building 1 – Exhibit Design

OVERALL INTERPRETIVE FRAMEWORK

THE BIG IDEA

Clean water is vital to our lives and connects us all. The work done by the DPWES, along with your actions at home, ensures clean water for a healthy community and resilient natural environment.



SECTION ICONS

Icons may be tied to each of these themes to help visitors understand where they are in the overall narrative. Although the specifics of the icon designs will be determined in the Design Development phase, initial ideas include the DPWES logo for *Who We Are*, a water droplet for *What We Do*, a pipe for *Clean Water Connections*, and a tree for *Benefits of Clean Water*.



Building 1 – Sample Exhibit Design

PLAN VIEW - NORTH LOBBY EXHIBIT SPACE

INTERPRETIVE GOALS

- How does the work done here impact my life at home and in my community?
- Why is clean water important to the natural environment?
- Who works at DPWES and what services do they provide?
- What can I do in my own home to help?

KEY

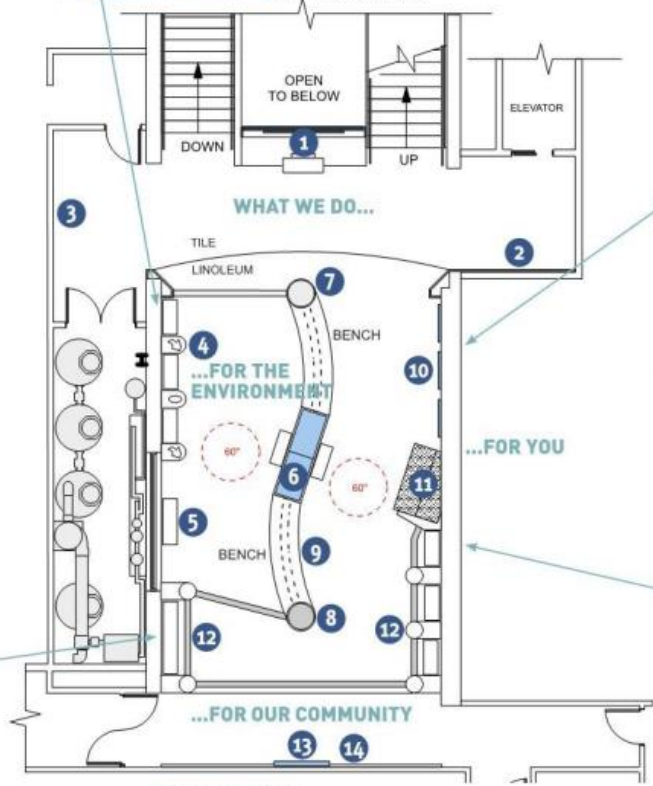
1. Dynamic Balcony Display
2. Wall Mural
3. Image Panels
4. Environment Interactive Wall
5. Rain Collection Reader Rail
6. Fish Tank
7. What Is Stormwater?
8. What Is Wastewater?
9. Bench
10. AV Interactive
11. Interactive House
12. Wastewater Treatment Process
13. AV Screen of Employees
14. Mural of Disciplines and Roles



BENCH



NATURE WALL
This interactive wall blends tactile models and mechanical interactives to highlight the waterways, fish, animals, benthics, and natural environment that benefit from clean water.



DYNAMIC BALCONY DISPLAY
A large logo on a glass wall sits atop the balcony overlooking the lower lobby. Edge lighting, subtle movement effects, or faint videos of workers bring the piece to life and draw attention to the upper balcony. Please [click this link](#) to learn more about this technique.



FISH TANK



AV INTERACTIVE
Three multi-touch monitors along the wall enable visitors to build an eco-friendly community. This activity can be completed individually or as a group. An attract screen will flow across all three screens to create a serene environment.



WASTEWATER TREATMENT PROCESS



HOUSE MODEL

1 FLOOR PLAN - Upper Lobby Exhibit Area
Scale: 3/32" = 1'-0" 0 1 2 3 4 FT

