



TOWN OF ACTON PUBLIC WORKS FACILITY

DPW Building Committee Meeting

September 26, 2024

Introductions



Project Team

Town of Acton; DPW Committee, Town Manager's Office,
Department of Public Works

Weston & Sampson; *Architecture & Engineering*

The Green Engineer; *Sustainable Design Consulting*

PMA Consultants; *Owner's Project Manager*

TCi/Tortora Consulting, Inc; *Construction Cost Estimating*



1. BACKGROUND

A Community Priority & Select Board Goal Since 2020

- **2020 Short Term Goal #2.** Support the Department of Public Works Facility building feasibility study and identify a preferred option for next steps which may include a new building, renovation, and/or expansion.
- **2021 Short Term Goal #6.** Form a Department of Public Works Building Study Committee, inclusive of the Department of Public Works building, Transfer Station and Recycling Center Complex
- **2022 Short Term Goal #4.** Advance the design for the new Department of Public Works facility and prioritize the relocation of the existing fuel station.
- **2023 Long Term Goal #1.** Construction of the Department of Public Works building
- **2024 Short Term Goal #3** Bring DPW facility project to Town Meeting in May of 2025. Get approval, move forward

1. BACKGROUND

Progress Since 2020

- **May 17, 2021** - Presentation of Feasibility Study for Department of Public Works Facility and Transfer Station to the Select Board
- **January 10, 2022** - Select Board established Department of Public Works Facility Study Committee
- **October 19, 2022** - DPW Facility Study Committee presented report and recommendations to the Select Board
- **April 1, 2023** - Public tour of the existing DPW facility (View a video of the tour using the link below)
- **May 1, 2023** - Annual Town Meeting voters approved Article 6 funding \$1.225M for design of new facility on the existing location
- **July 10, 2023** - Select Board established a Public Works Facility Building Committee
- **May 5, 2024** - Annual Town Meeting voters approved funding to construct a new and relocated fuel depot on the DPW facility site
- **July 2, 2024** - the Select Board voted to set a goal to bring the DPW facility project to Town Meeting in May of 2025 and seek approval to move the project forward



AGENDA

- 01 Introductions & Background**
- 02 Why a New Facility?**
- 03 Project Challenges**
- 04 Opportunities & Benefits**
- 05 Completed to Date - Status Update**
- 06 Remaining Schematic Design Schedule**
- 07 Proposed Future Schedule**

Why a New Facility



2. WHY A NEW FACILITY

Backbone of the Community

The DPW touches the lives of the residents everyday by maintaining the infrastructure that the community relies on. Divisions include:

Administration & Engineering: Management of Town Records; Permitting; Maintain Stormwater Infrastructure; Management of Public Sewer Connections and Public Right-of-Ways Construction; Support of Town Boards, Committees and other Departments

Highway: Maintenance of Roadways; Construction of Sidewalks & ADA Ramps; Drainage Inspection & Repair; Installation of Road Signs; Support Transfer Station & Recycling Facility

Trees & Grounds: Tree Care & Preservation of Town Properties (Tree Warden); Plantings & Removal

Fleet Maintenance: Maintenance and Repair of all Town Vehicles and Equipment

*** Support Other Departments' Operations:** Cemetery, Recreation, Operations, Conservation, Emergency Response

***Other Community Amenities:** Town Fueling Station, Transfer Station Recycle Program, Residential Salt & Sand, Hazardous Waste Drop Off Day; Pop-Up Health Clinic; Meeting Spaces

Hazardous Waste Day 2024



2. WHY A NEW FACILITY

First Responders

The DPW is a critical first responder that is on call 24 hours a day to handle storm events & emergencies:

Snow and ice removal operations

Hurricane / windstorm cleanup

Removal of road hazards

Oil spills / accidents

Emergency road repairs

Emergency response / consequence management

Support other emergency departments



2. WHY A NEW FACILITY

Quick History

- 1969 newspaper article approving construction of a new Public Works Facility. Construction Cost = \$265,000 or \$10.62 SF
- Original designed building total = 36,000 SF
- Final constructed building total = 19,000 SF

wide a hearing on the proposal

Continued on page 14

Public Works Facility for Acton Discussed at Selectmen's Mtg.

ACTON — The Board of Selectmen met Tuesday with the Town Building-Land Acquisition Committee and the Town Engineer and the Highway Superintendent to discuss plans to be submitted to the Town Meeting for the construction of a public works facility.

Plans of a building 24,000 square feet in area with a 12,000 square foot second floor to contain under-cover parking for highway department vehicles, work areas, and offices for various town personnel were reviewed and discussed.

After considerable discussion it was tentatively agreed that the proposal to be taken to the town in March would be the construction of a one floor, 24,000 square foot building at an estimated cost of \$265,000. The Town Building-Land Acquisition Committee reportedly expressed the policy that beyond the planning of the building, the project should be

directed by the Town Building Committee.

During the discussion the Selectmen were informed that the two-story proposal, containing 36,000 square feet, would cost an estimated \$400,000. Although considerable concern was expressed over the cost of the total facility, several men involved in the discussion cau- chined against the construction of a facility that would no longer be adequate before it was paid for.

L-O-A-N-S

Homeowners — Consolidate your bills to \$7,500. Slash high monthly payments up to 65%. Loans from 1 - 10 years. No penalty for prepayment.

SUMNER .
INVESTMENT
Framingham - 872-8922

2. WHY A NEW FACILITY

Undersized for Current and Future Operations

Town Population has Increased by 10,000
Since Facility Opened in 1970:

- Increase in Road Miles to Maintain
- Increase in Responsibilities and Employees
- Increase in Size and Quantity of Fleet Assets

Negatively impacts:

- Response Time
- Employee Safety and Training
- Vehicle and Equipment Life

Acton Town Population has Grown:

- 1960: 7,238
- 1970: 14,770
 - 104% increase since 1960
- 2020: 24,010
 - 62% Increase since 1970
 - 232% increase since 1960

2. WHY A NEW FACILITY

Building is Past its Useful Life

- Facility Does Not Meet Current Codes
 - Building, Energy Conservation, Accessibility, OSHA, Environmental
- More Than 50 Years Old; Requires Costly Upgrades and Repairs
- Operational Inefficiencies; Undersized for Current and Future
- Energy Inefficiencies; Large Carbon Footprint
- Unsafe / Unhealthy Work Conditions
- Structural Deficiencies



2. WHY A NEW FACILITY

Reuse of Existing Facility Considered and Rejected

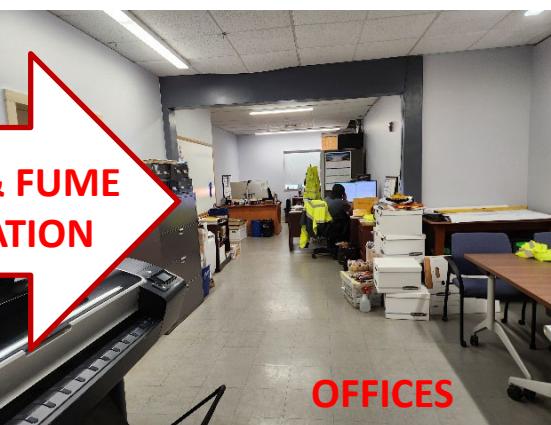
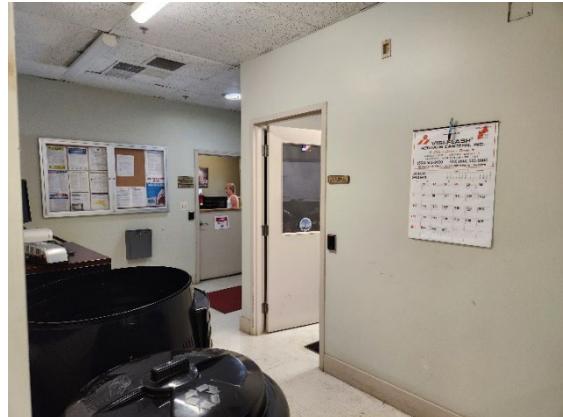
- Renovate existing 19,000 SF building with additions and separate Fleet Storage Garage
- Fleet Maintenance & Wash Bay noise and headlights directed at abutters
- Less efficient internal arrangement of program elements and separate Fleet Storage Garage
- Extensive and expensive upgrades required to renovate existing building to meet current building and energy code requirements



Existing Conditions – Structural Deterioration



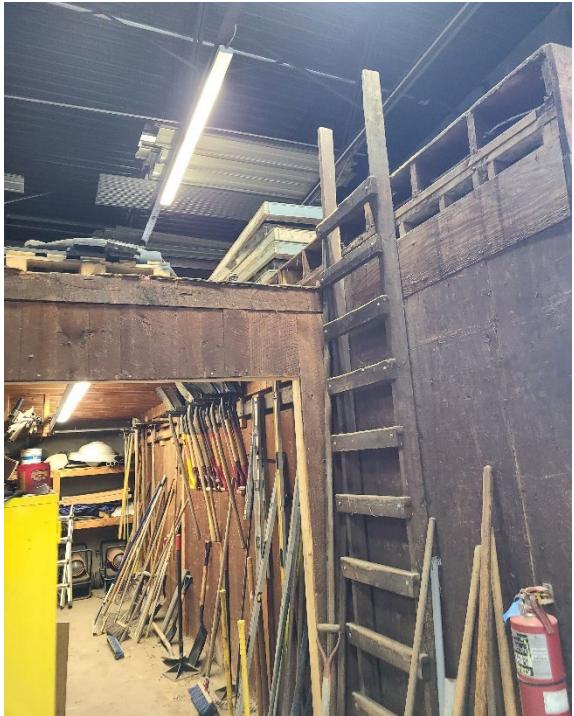
Existing Conditions – Offices & Employee Facilities



NOISE & FUME
MIGRATION

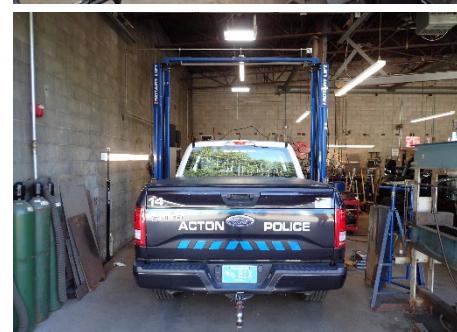
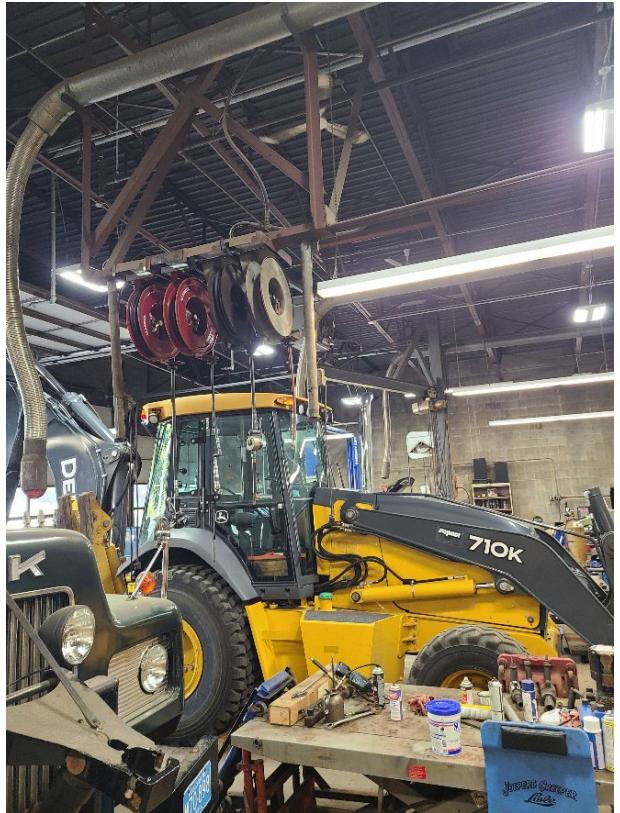
- NOT ADA COMPLIANT
- LACK OF WOMEN'S
LOCKER ROOM FACILITIES

Existing Conditions – Inefficient & Unsafe Storage



MAKESHIFT / NON-CODE COMPLIANT STORAGE AND MEZZANINES

Existing Conditions – Fleet Maintenance



Existing Conditions – Storage Overflow & Public Amenities



Existing Conditions – Stacked Fleet Storage & Outdoor Equipment Storage



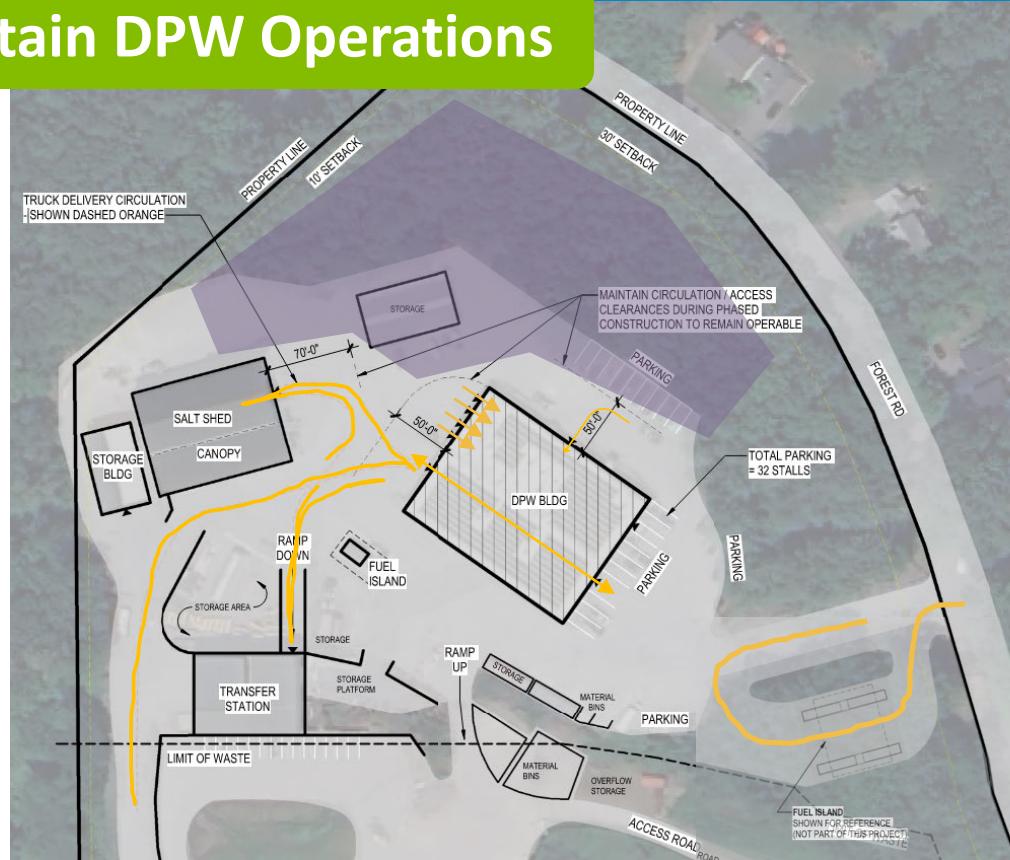
Challenges



3. CHALLENGES

Phased Construction to Maintain DPW Operations

- Existing Buildings
- Fuel Island
- Transfer Station
- Site Circulation

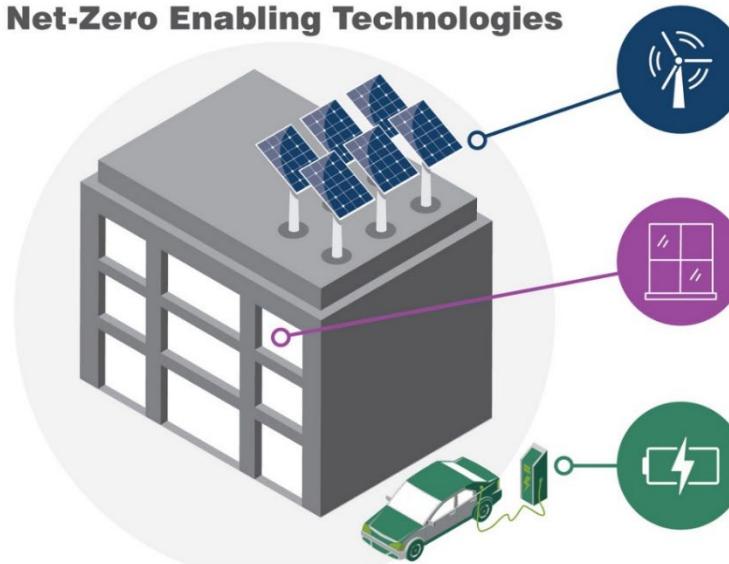


3. CHALLENGES

Energy Goals

- Municipal Opt-In
Specialized
Stretch Energy
Code Compliance
- Fossil-fuel Free
Town Bylaw
- Anticipation of
Future Fleet
Electrification

Net-Zero Enabling Technologies



Renewable Energy
Ex. Solar photovoltaics and hot water, wind

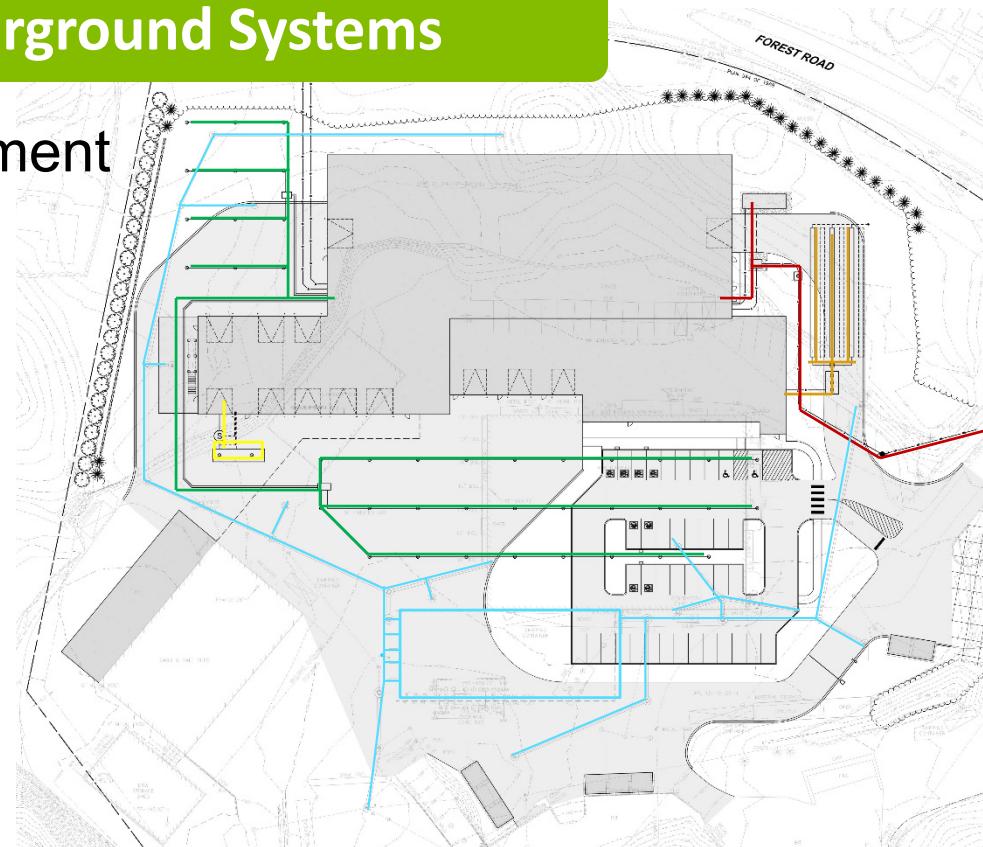
Energy Efficiency
Ex. heat pumps, triple glazed windows, high R value insulation

Energy Storage and Management
Ex. battery and thermal storage, microgrids, demand response programs

3. CHALLENGES

Site Constraints – Underground Systems

- Stormwater Management
- Geothermal Wells
- Utilities & Septic



Opportunities & Benefits

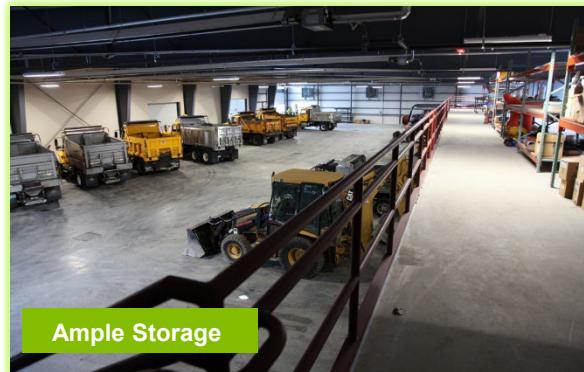


4. OPPORTUNITIES & BENEFITS

Operational Efficiencies & Occupant Health

- Increased Lifespan & Reduced Maintenance of DPW Assets
- Compliance with Codes & Regulations
- Improved Operational Efficiencies & Emergency Response Times
- Large Multi-Purpose Spaces Available for Town Use
- Improved Employee Training & Morale
- Safe & Healthy Interior Environment for DPW Employees
- Ability to Meet Demands of Today & the Next 50-75 Years

4. OPPORTUNITIES & BENEFITS



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4. OPPORTUNITIES & BENEFITS



Holden DPW; completed 2022

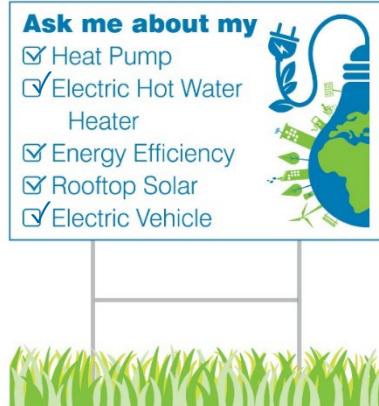
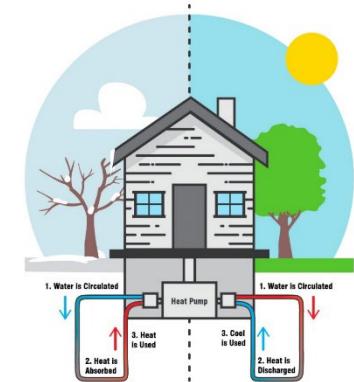
4. OPPORTUNITIES & BENEFITS

Sustainable Municipal Stewardship

- Fossil Free Municipal Building; Town Bylaw Compliance
- Mass Saves Rebates; Low EUI, Geothermal Renewables
- Improve Stormwater Management > Water Quality
- Possible LEED Silver Certification
- Resiliency – Energy Storage?

Site Specific	Site EUI	Incentives			
		Payable at end of Construction		Payable at end of 1 yr. post occupancy	
		Construction Incentive \$/sf	Heat Pump Adder*	Post Occ. Inc. \$/sf	Adder for getting under ZNE EUI target
Tier 1 - ZNE Level	25 or less (or site-specific target)	\$2.00	Air Source Heat Pumps: \$800/ton Variable Refrigerant Flow (VRF): \$1200/ton Ground Source Heat Pumps: \$4500/ton"	\$ 1.50	\$0.05/EUI point reduction/sf

Mass Save – Target EUI & Incentives



Project Status Update

Completed to Date



5. PROJECT STATUS UPDATE

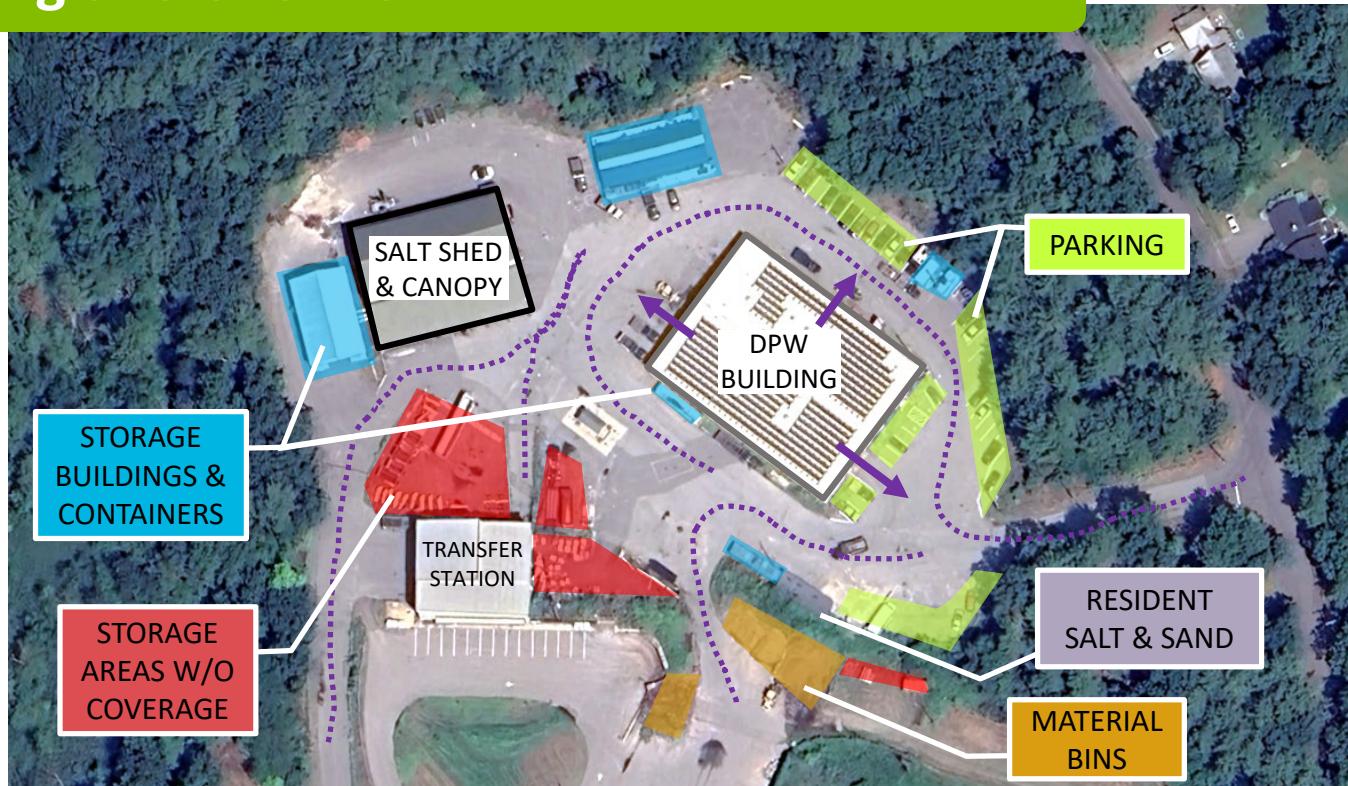
Review & Confirmation – Staffing & Fleet

DIVISION	ADMIN	WORKFORCE	FUTURE	LOCKER	PARKING	FLEET INVENTORY
Administration & Engineering	8	-	1	-	9	Lg Vehicle 30
Highway	-	12	4	16	16	Sm Vehicle 9
Trees & Grounds	1	3	-	4	4	Equipment 16
Fleet Maintenance	-	3	-	3	3	Towed 31
Transfer Station	-	2	-	2	2	
TOTALS	9	20	5	25	34	

+ 6 for Visitors
40 parking spaces

5. PROJECT STATUS UPDATE

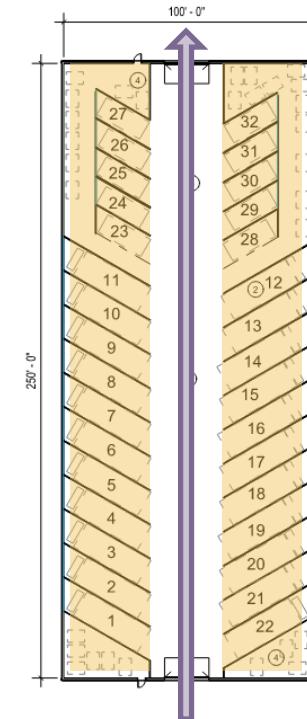
Existing Site Overview



5. PROJECT STATUS UPDATE

Review & Confirmation – Proposed vs. Existing

Program	Existing (SF)	Proposed (SF)
Administration & Employee Facilities	4,290	8,230
Workshops	1,585	3,540
Fleet Maintenance	5,150	7,380
Fleet Storage	8,150	26,250
Wash Bay	-	1,780
SUBTOTAL	19,175	47,180
Outbuildings & Storage Containers	6,800	-
Storage Areas w/o Coverage	5,750	



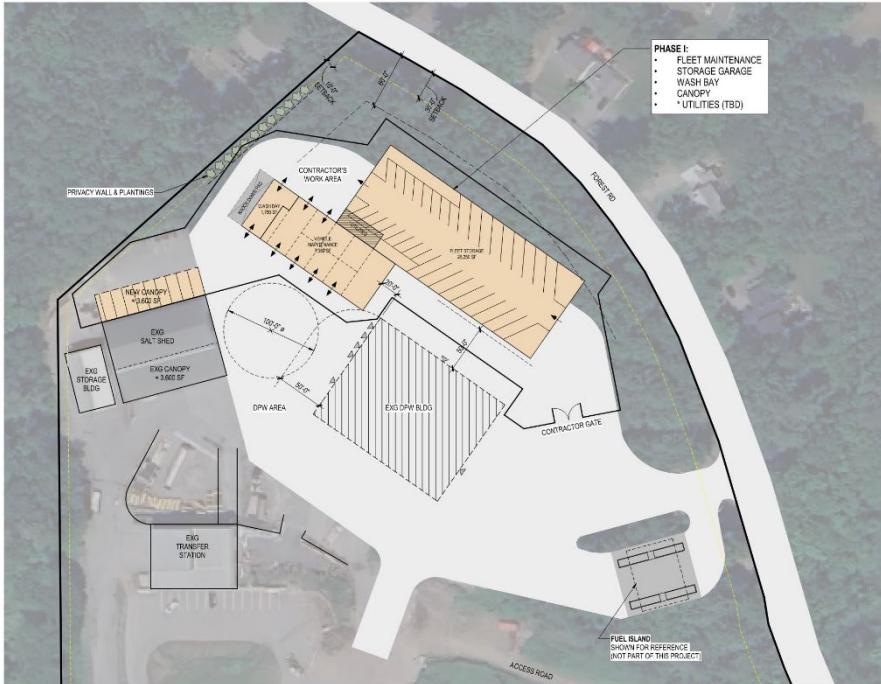
5. PROJECT STATUS UPDATE

Conceptual Design Charrette



5. PROJECT STATUS UPDATE

Preferred Conceptual Site Design – Phased Construction



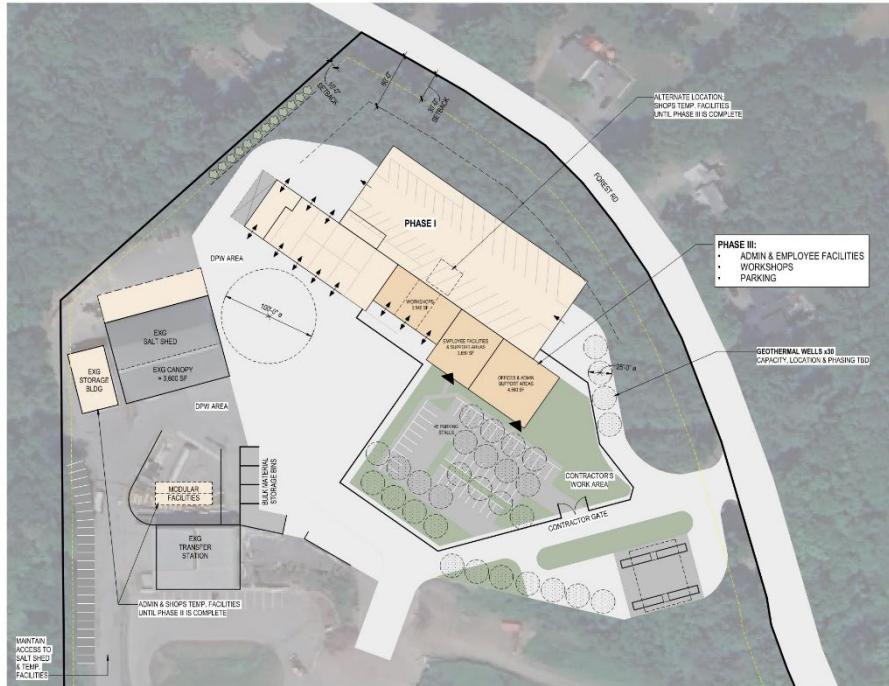
PHASE 1 – FLEET STORAGE, MAINTENANCE, WASH BAY, STORAGE CANOPY AND PRIVACY FENCE & PLANTINGS



PHASE 2 – DEMO EXISTING & TEMPORARY FACILITIES

5. PROJECT STATUS UPDATE

Preferred Conceptual Site Design – Phased Construction



PHASE 3 – OFFICES, EMPLOYEE FACILITIES & WORKSHOPS



COMPLETE

5. PROJECT STATUS UPDATE

Site/Civil, Utilities, Environmental, Industrial Equipment

Energy Charrette with Eversource, “The Green Engineer”, DPW, Town Sustainability Group, OPM and Design Team to Discuss LEED Certification, Utility Rebates, and Sustainability Goals of the Project.

Wetlands Delineation

Geotechnical Borings and Test Pits

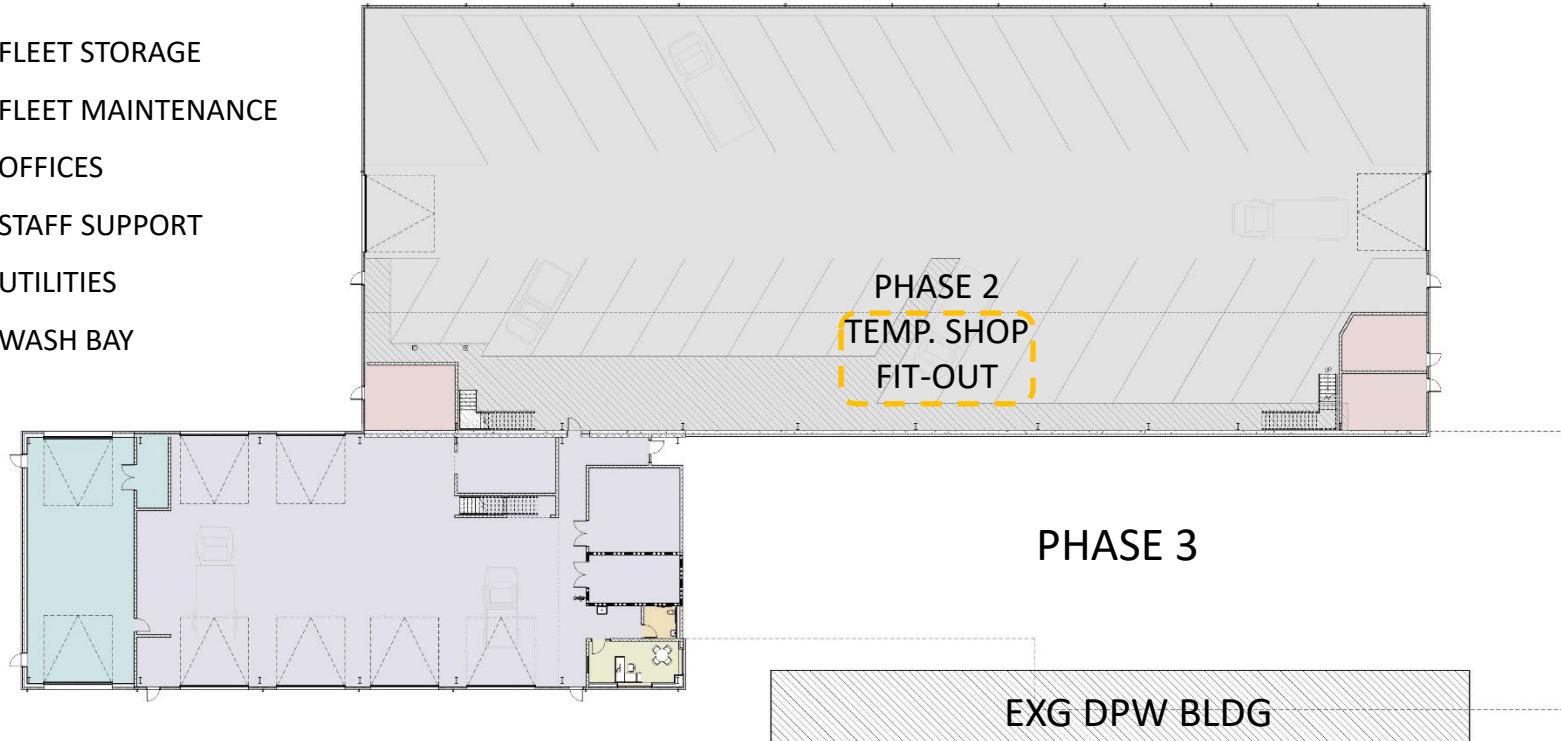
Industrial Equipment

- Inventory of Existing DPW equipment and tools
- Schematic layout

5. PROJECT STATUS UPDATE

Building Plans – Phase 1 + 2

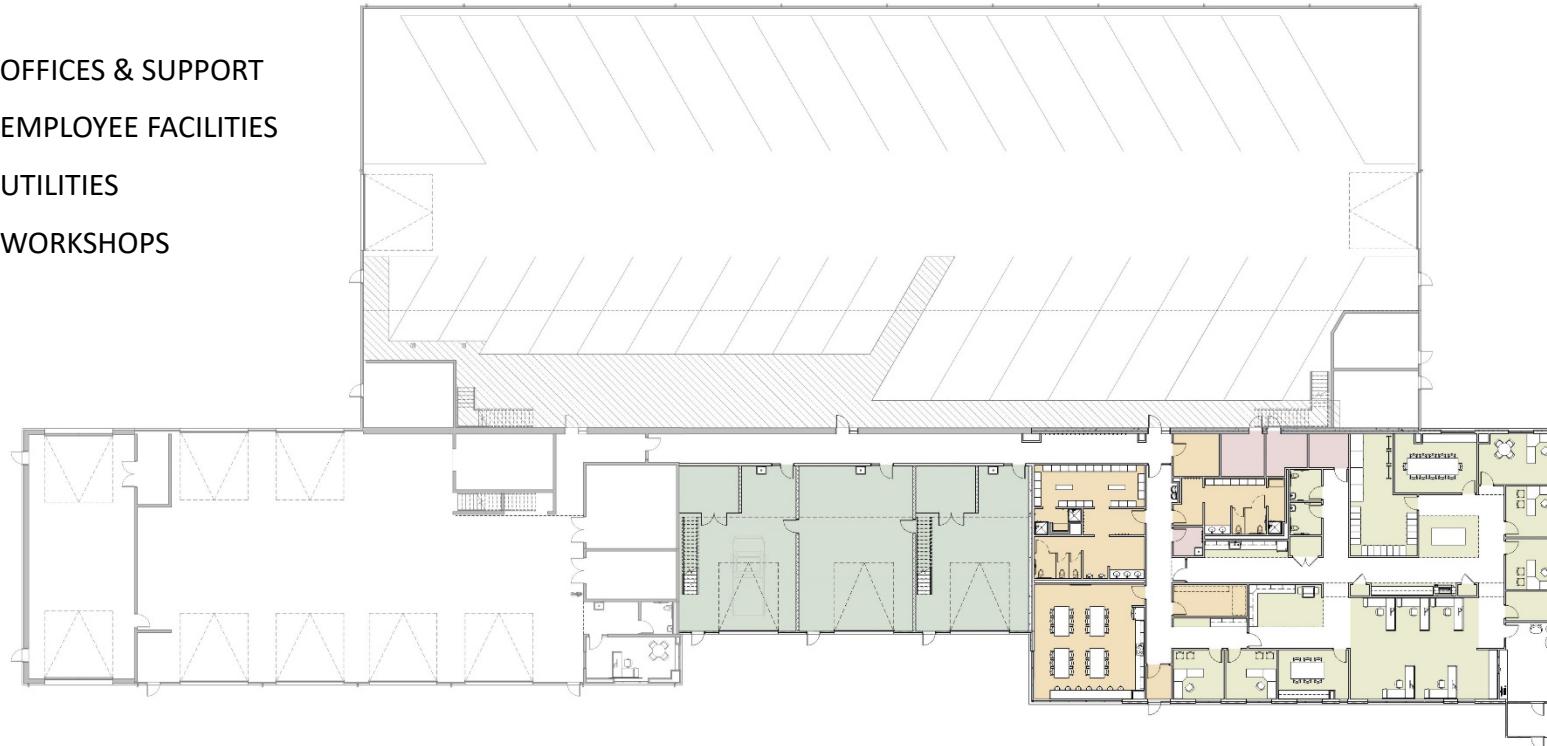
- FLEET STORAGE
- FLEET MAINTENANCE
- OFFICES
- STAFF SUPPORT
- UTILITIES
- WASH BAY



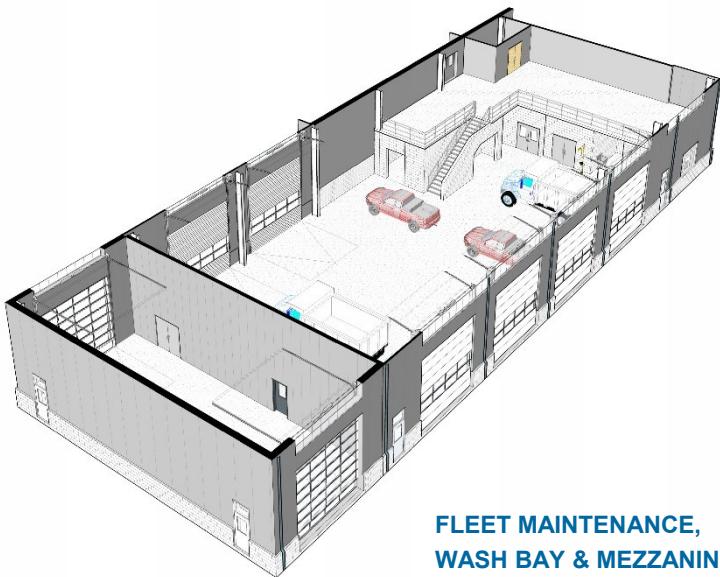
5. PROJECT STATUS UPDATE

Building Plans – Phase 3

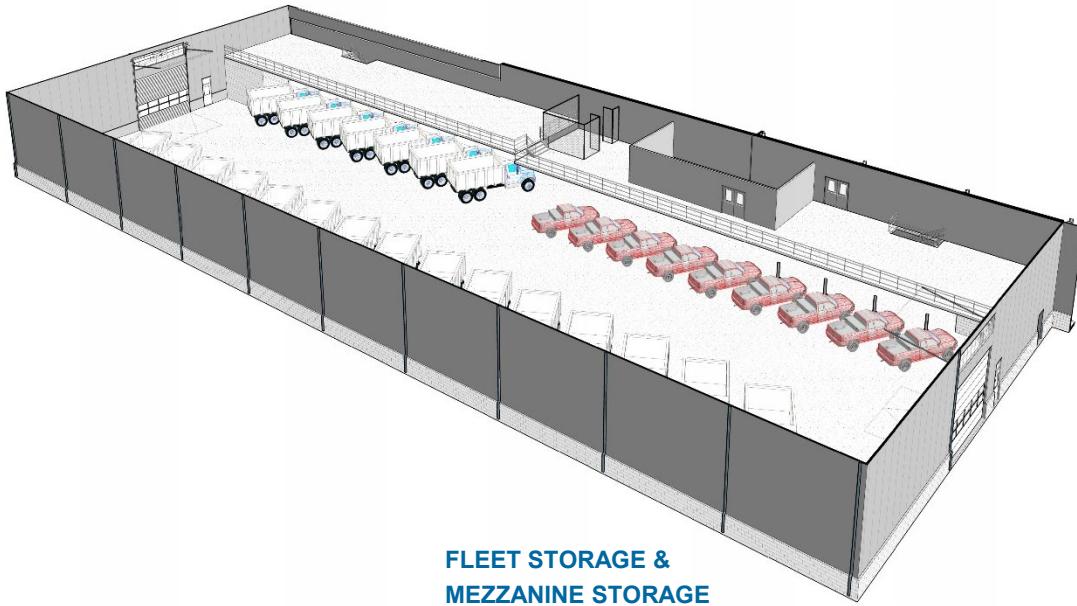
- OFFICES & SUPPORT
- EMPLOYEE FACILITIES
- UTILITIES
- WORKSHOPS



3D VIEWS – FLEET MAINTENANCE & VEHICLE & EQUIPMENT STORAGE

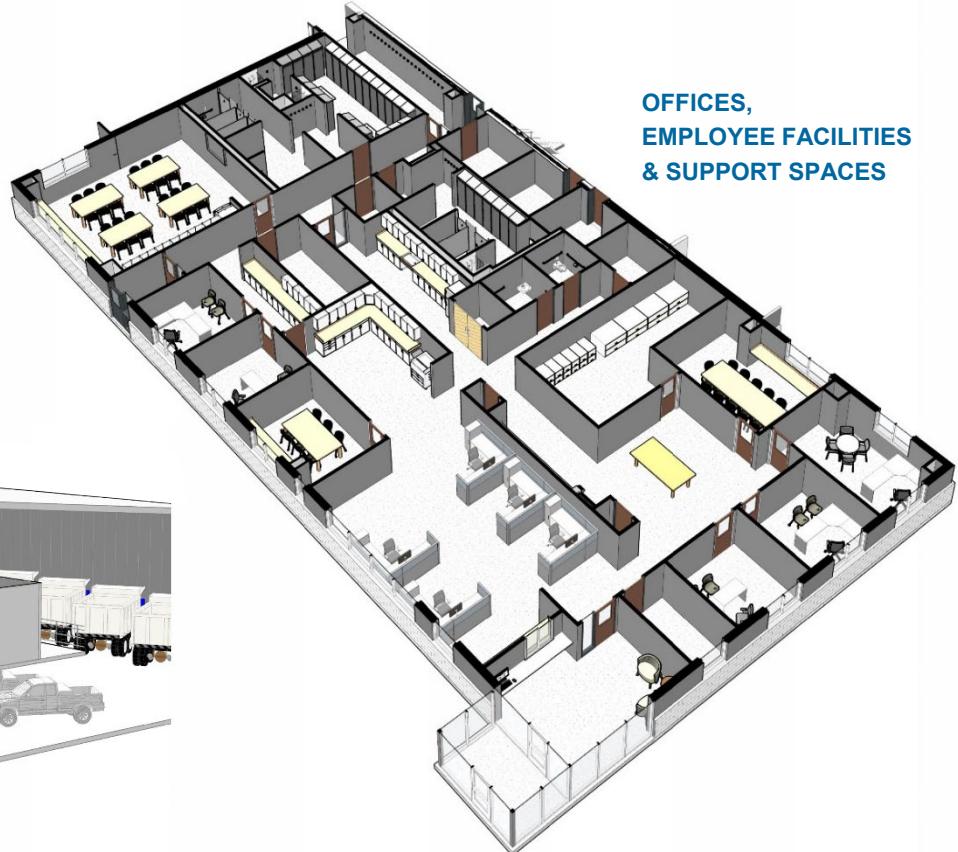


FLEET MAINTENANCE,
WASH BAY & MEZZANINE STORAGE

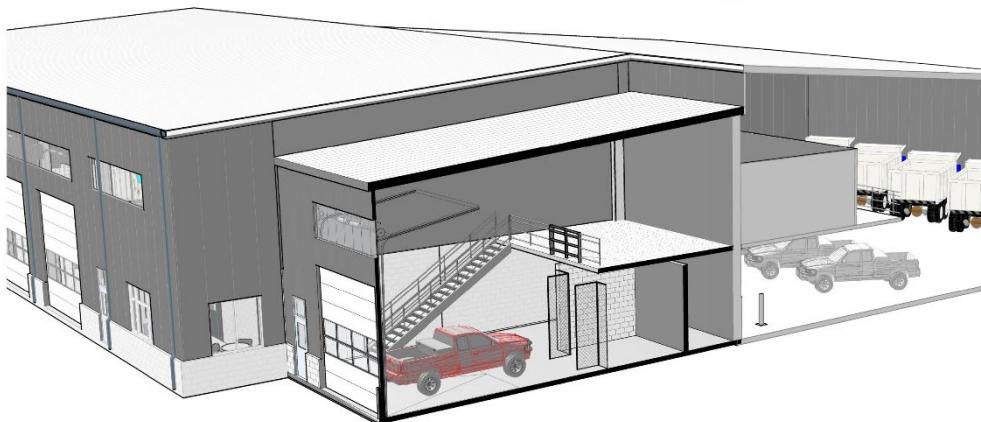


FLEET STORAGE &
MEZZANINE STORAGE

3D VIEWS – WORKSHOPS, ADMINISTRATION & EMPLOYEE SUPPORT



TYPICAL WORKSHOP, MEZZANINE STORAGE &
CONNECTION TO FLEET STORAGE



Remaining Schematic Design Schedule



6. REMAINING SCHEMATIC DESIGN SCHEDULE

UPCOMING MILESTONES

- ❑ October 4, 2024; Schematic Design Package to Independent Cost Estimator
- ❑ Week of October 18; Cost Estimate back from Estimator
- ❑ November 2024; Schematic Design Submittal to Town:
 - ❑ SD Level Architectural Plans, Elevations, and Building Sections
 - ❑ Site/Civil Plans
 - ❑ Industrial Equipment Plans
 - ❑ MEP-FP and Structural Engineering Design Narratives
 - ❑ Geotechnical Report
 - ❑ Schematic Design Cost Estimate
 - ❑ Sustainable Design Narrative

Proposed Future Schedule



7. PROPOSED FUTURE SCHEDULE

FUTURE MILESTONES

- Design Development/Permitting/Public Outreach: Nov 24-April 2025
- Annual Town Meeting for Final Design and Construction Funding: Spring 2025
- Construction Documents/Bidding: Summer-Fall 2025
- Construction (2-Years): Fall 2025 - Fall 2027



**Thank you!
Questions?**

westonandsampson.com



transform your environment