Mercer Island Public Safety and Maintenance Facility

Presentation Agenda

I. Background

II. The Design Process

III. Schematic Design Overview

IV. Design Strategies and Project Actions

V. Project Cost Estimate

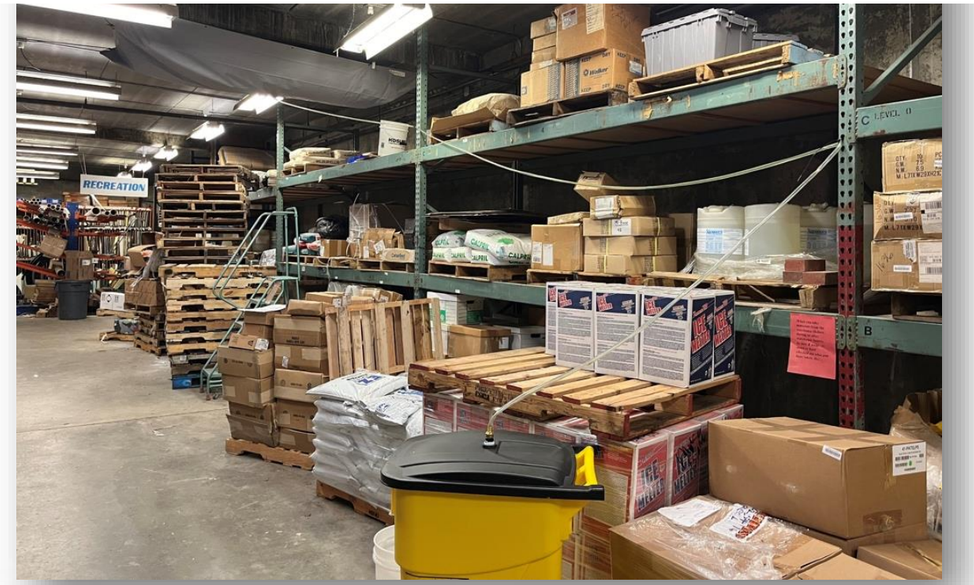
Background

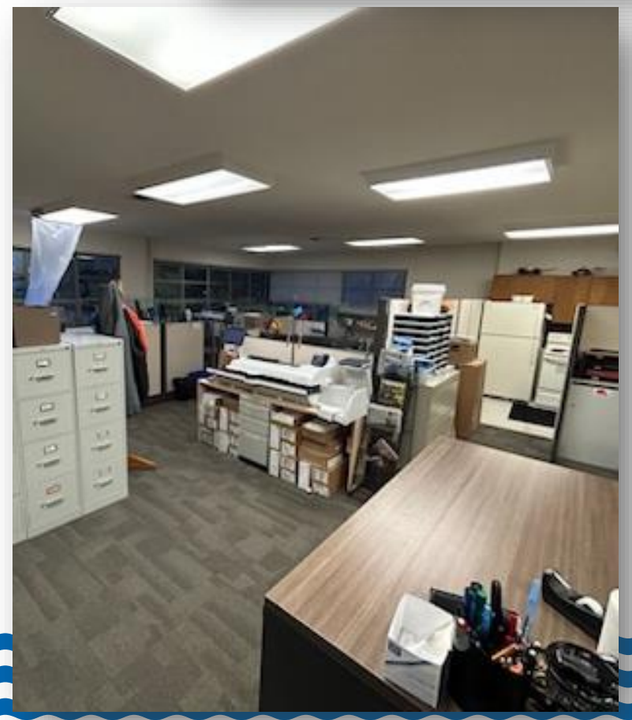
City Hall Permanent Closure

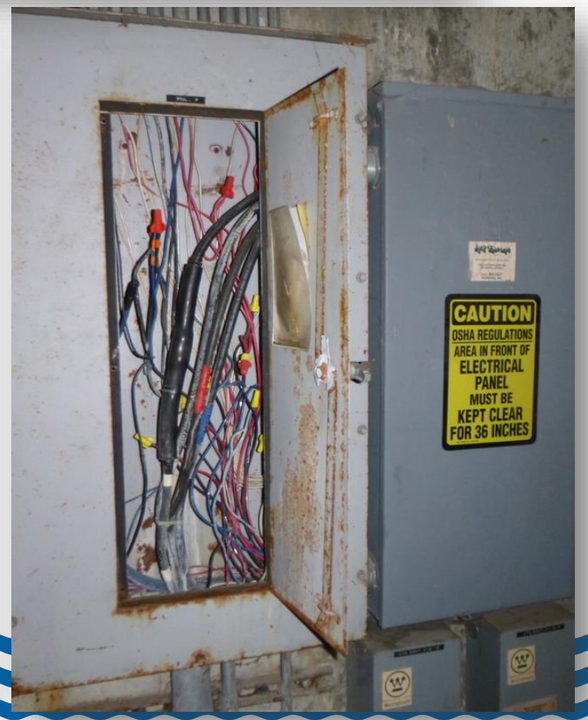
- In April 2023 staff identified broken tiles containing asbestos, leading to the emergency closure of City Hall.
- The City Hall building was at (or beyond) its expected lifespan. The building was originally constructed in 1957 and was last renovated in 1988. City Hall did not meet current new construction energy or building code requirements.
- Almost all interior walls had been identified as at risk of failure in the event of seismic activity unless reinforced.
- The age and condition of City Hall meant there was not a high return on investment for the significant cost of abating and remodeling the building.
- Council permanently closed City Hall in October of 2023 and gave direction for design of Public Safety and Maintenance Facility in March 2024.

Public Works Building

- Constructed in 1980. 64 year-round and 15 to 20 seasonal employees.
- Multiple systems are failing or in need of significant repair or investment.
- Does not meet certain codes or industry standards.
- Inadequate work areas and support facilities.
- Facility is undersized and poorly laid out.
- City Manager recommended the City Council prioritize the Public Works Building for replacement.







Project Need

The Police Department is currently operating out of four temporary portable trailers in the parking lot of the former City Hall. The Police Department needs a new facility to continue providing high quality law enforcement services to residents.

The Public Works Department is responsible for infrastructure maintenance and repairs, and emergency services; new facilities are needed to maintain and improve operations and emergency services.

The Design Process

To-date, the design process for the PSM Facility has included two phases of work.

The Pre-Design Phase, completed in 2024, confirmed the general programming and conceptual framework for the PSM Facility.

Following Pre-Design, work shifted to the Schematic Design Phase. This phase focuses on translating initial concepts into preliminary plans that define the project's overall scope, layout, and key features. This phase establishes the general arrangement of spaces, major systems, and the relationship of the facility to the site. Key to the Schematic Design Phase is the development of early cost estimates, and the use of those estimates to conduct value analysis (value engineering) reviews to enhance project efficiency and overall project value.

PRE-DESIGN: ACTIVITIES IN 2024

The Pre-Design phase focused on programming and space-relationship workshops with city staff, and existing conditions and critical areas surveys. In addition to bi-weekly project meetings, the design team conducted the following activities:

Year	Month	Activity
2023	October	Departmental programming workshops
	November	Space needs review
2024	March	Departmental space-relationships workshop 1
	April	Departmental space-relationships workshop 2
	May	**City Council presentation**
	June	City department location planning and sequencing
	September	MIPD and EOC programming and space-relationship review

SCHEMATIC DESIGN: ACTIVITIES IN 2024 & 2025

The Schematic-Design phase focused on site and facility layout, with a continued focus on program refinement and efficiency, and value engineering review. In addition to bi-weekly project meetings, the design team conducted the following activities:

Year	Month	Activity
2024	October	Design review workshop
		Police department facility tours
	November	Design review workshop
	December	Design review workshop
		Public works facility site tour
2025	January	Design review workshop
	February	**City Council presentation**
		Design review workshop
	March	**City Council presentation**
		MIPD design review workshops
		Public Works, IT/GIS, and CSC design review workshops
	April	**City Council presentation**
		Design review workshop
		MIPD design review workshops
	May	**City Council presentation**
		Value analysis workshop
		Design and cost estimate review workshop
	June	**City Council presentation**

PSM PROGRAMMING AND DESIGN MEETINGS

Over the course of project Pre-Design and Schematic Design, the Design Team has held programing and design meetings with City Staff and Police Department Staff, to review, edit, and refine spaces, functional space-relationships, and overall project design.

CITY OF MERCER ISLAND FACILITY TOUR

The PSM design team and the City's Public Works Department walked the facility site to discuss how the Public Works teams use the facility and yard space for equipment and materials storage, and daily operations.

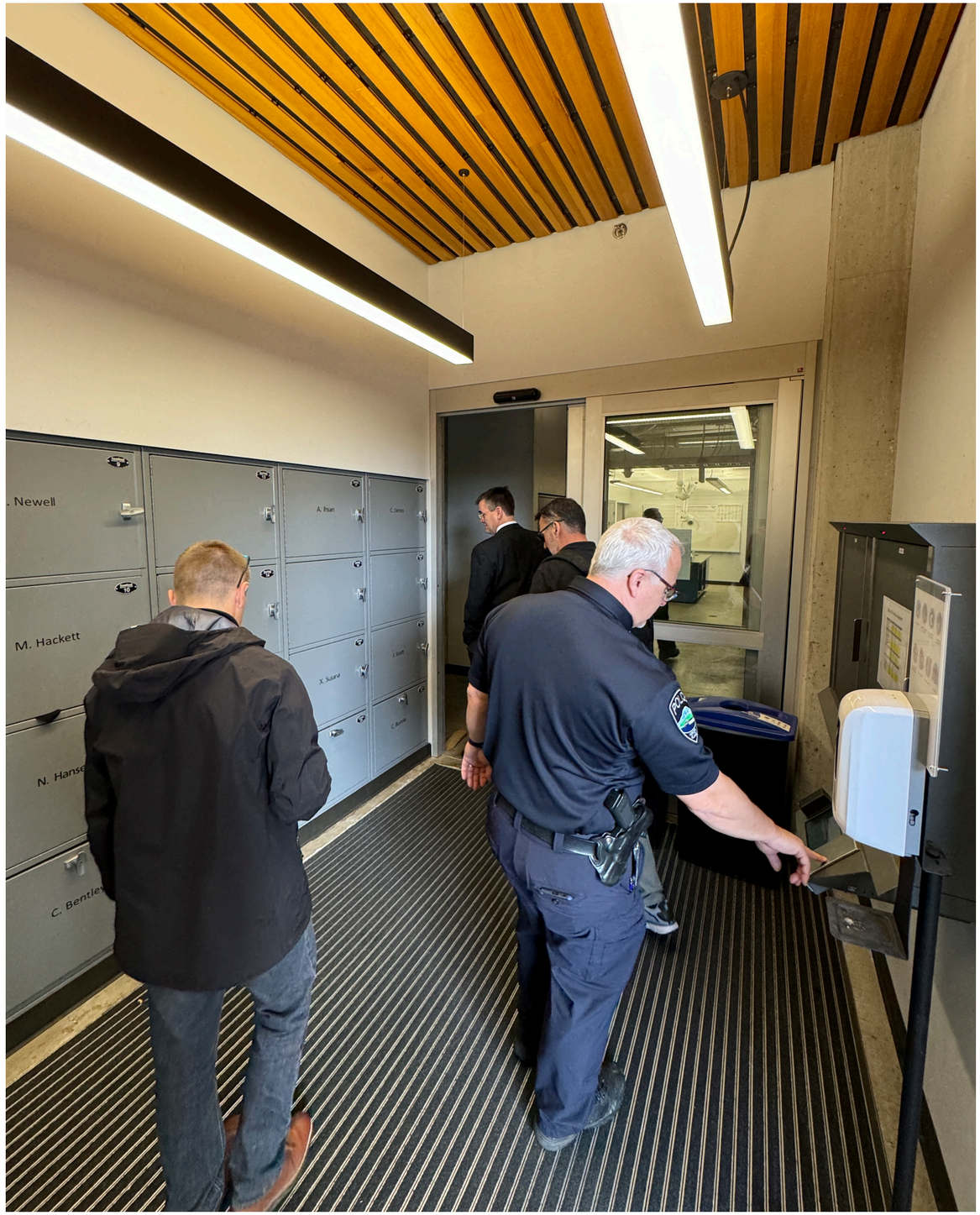
The PSM design team also led a site tour of the City Hall and Public Works Building properties for all design-team sub-consultants working on the project. The discussion focused on site conditions and opportunities, technical considerations, and potential site programming.

REGIONAL POLICE DEPARTMENT FACILITY TOURS

City staff, council members, and design team members toured regional police departments, including:

- Shoreline PD
- University of Washington PD
- Kirkland PD

The team heard about both successes and “lessons learned” from the construction and renovation of these police facilities to help inform work on Mercer Island’s facility.



REGIONAL PUBLIC WORKS FACILITY TOUR

Council members, city staff, and design team members toured the Kitsap County Public Works Facility

The tour and discussion included:

- Private and open office spaces, shared workspaces, and training space layouts.
- Circulation, building, and yard accommodation for large vehicles and equipment.
- Covered storage, lighting, and security.
- Shared spaces for meals, hygiene, nursing, and team-building.

Schématic Design

Project Brief

The PSM Project will provide space for the Mercer Island Police Department, Emergency Operations Center, Public Works Department, IT and GIS Departments, and the Customer Service Counter hosting Customer Service, Utility Billing, and Permits.

The project encompasses 7 acres of land and provides two primary buildings, related site structures, and covered areas to house and protect MIPD staff and vehicles, and public works staff, vehicles, heavy equipment, tools, raw materials, waste, and recyclables.

The project will be a Risk Category IV structure. This type of facility is a lifeline to the community in the most extreme circumstances, and the departments proposed to be working out of this facility are critical to remain operational during a catastrophic event.

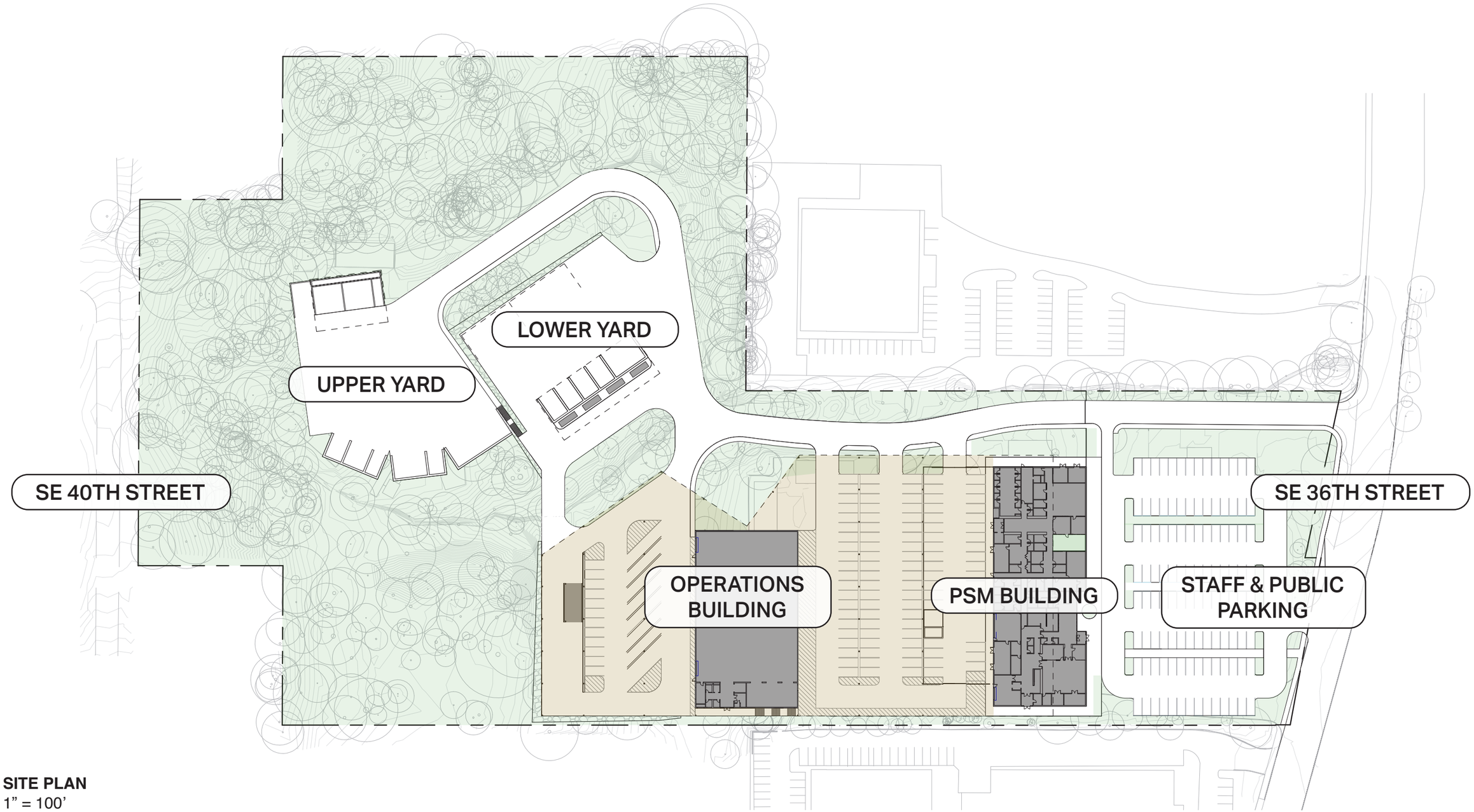
The project budget is estimated at $103,902,076 including facility construction costs, site construction costs, project soft costs, and state and local sales tax.

EXISTING CONDITIONS: AERIAL PHOTOGRAPH OF THE PROJECT SITE

This photograph illustrates the existing city-owned site, with the property line indicated in white. This slide is oriented with North to the right of the page, and is provided for reference purposes.

PROPOSED SITE PLAN: PSM FACILITY SITE PLAN

This site plan illustrates the site layout for facilities and operational areas. Buildings and covered operations areas are consolidated on the eastern portion of the site, opening the western portions of the site for yard functions.



SITE PLAN
1” = 100’

PHOTO RENDERING: PROPOSED PSM FACILITY SITE ORGANIZATION

Design Strategies

Throughout the design process, five design strategies emerged from site observation and operational and programmatic reviews with city staff.

Protecting Equipment, Vehicles, and Staff, and Promoting Efficient Operations

EXISTING CONDITIONS: PHOTOGRAPHS OF THE EXISTING SITE HIGHLIGHT CURRENT CHALLENGES

EXISTING CONDITIONS: LACK OF PROTECTION FOR MERCER ISLAND POLICE DEPARTMENT FUNCTIONS

This photograph illustrates the lack of adequate weathering cover and protection at the old sallyport, adjacent to the now closed City Hall Building, that was used by the Mercer Island Police Department for the secure transfer of in-custody individuals.

EXISTING CONDITIONS: LACK OF PROTECTION FOR MERCER ISLAND POLICE DEPARTMENT FUNCTIONS

This photograph illustrates the absence of weathering cover, personal protection, and the lack of a secure transfer area, at the temporary trailers that currently house the Mercer Island Police Department.

EXISTING CONDITIONS: LACK OF WEATHERING COVER

This photograph illustrates conditions within the Public Works Operations Yard. Existing structures, designed 45-years ago, are inadequately sized for today's vehicles and equipment, resulting in continuous exposure to the elements.

EXISTING CONDITIONS: LACK OF WEATHERING COVER

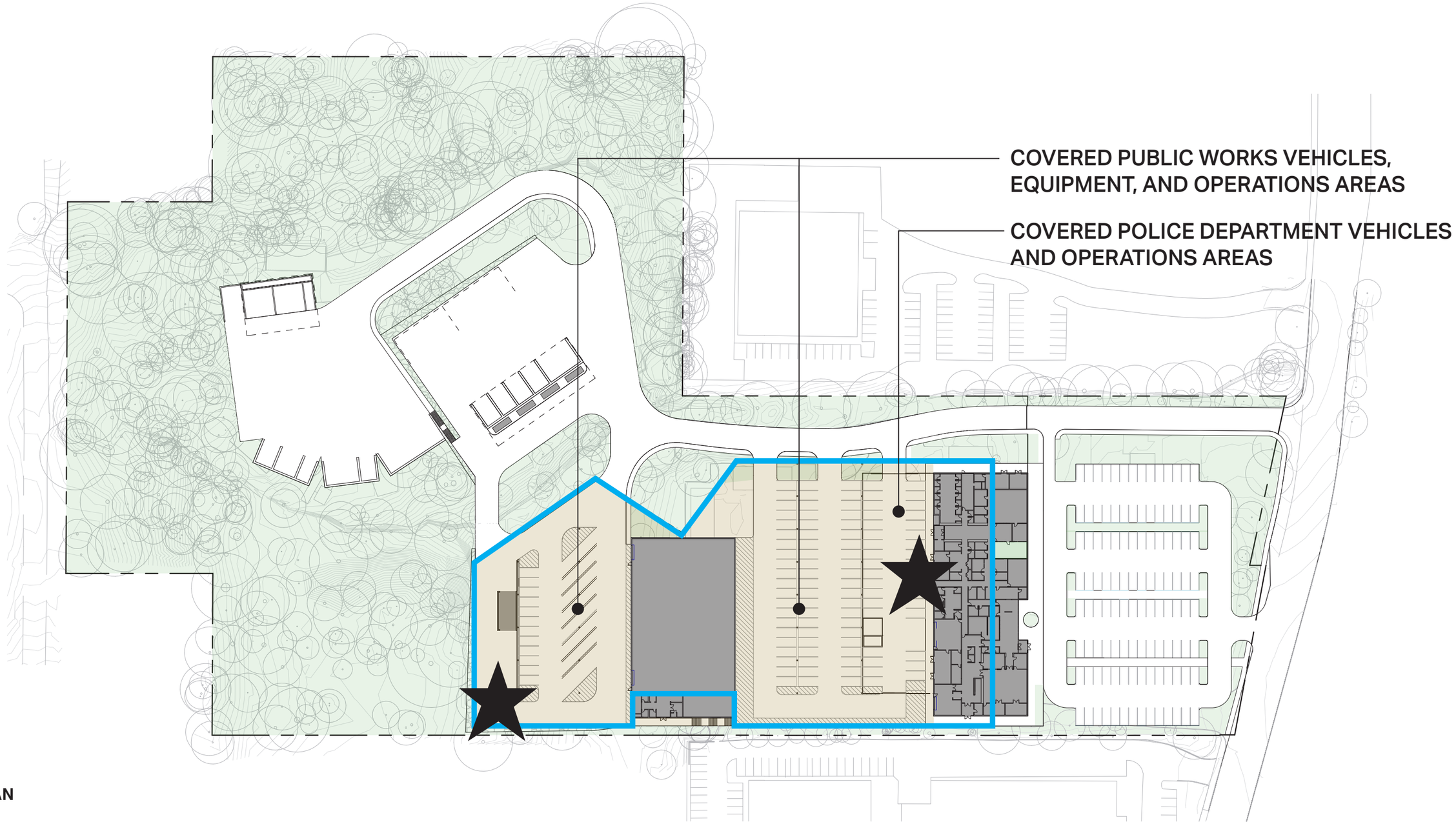
This photograph illustrates the existing Public Works Operations Yard during a storm event. The lack of weathering cover means that city staff must clear operational areas in the Public Works yard before crews can mobilize to serve the community.

Design Strategies

Strategy 1: Cover more vehicles, equipment, and work areas to protect equipment and staff, and promote efficient operations, no matter the weather.

DIAGRAM: WEATHERING COVER

This diagram illustrates the location of proposed weathering cover consolidated with building roof structures. These weathering covers protect Police Department and Public Works vehicles, equipment, and staff, and promote efficient operations during inclement weather. Two views highlight this design condition.



SITE PLAN
1” = 100’

PHOTO RENDERING: PROPOSED POLICE DEPARTMENT COVERED PARKING AND DEPLOYMENT ENTRANCE

Weathering cover for the Police Department provides protection for shift-change activities- including evidence transfer and processing, and in-custody transfers.

PHOTO RENDERING: PROPOSED PUBLIC WORKS VEHICLE AND EQUIPMENT OPERATIONS AREAS

The new facility covers vehicles, equipment, and work areas to protect city assets and city staff, and promotes efficient operations.

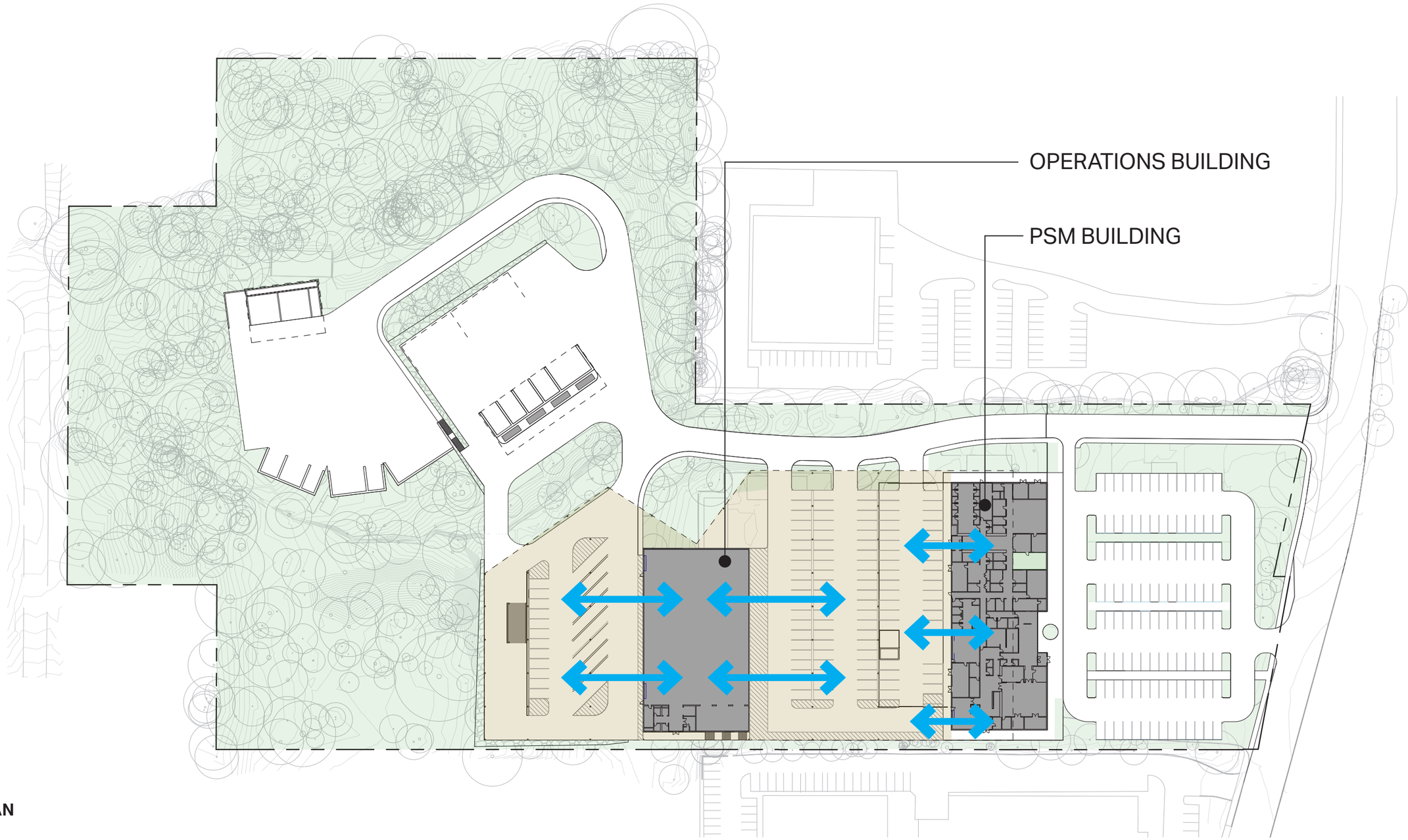
Design Strategies

Strategy 1: Cover more vehicles, equipment, and work areas to protect equipment and staff, and promote efficient operations, no matter the weather.

Strategy 2: Co-locate buildings with covered areas for operational efficiency, and for structural cost effectiveness.

DIAGRAM: CONSOLIDATING BUILDINGS AND WEATHERING COVER

Consolidating buildings and weathering cover streamlines daily workflow between vehicles and stored materials and equipment.



SITE PLAN
1” = 100’

PHOTO RENDERING: PROPOSED BUILDINGS ARE CO-LOCATED WITH COVERED OPERATIONAL AREAS

This view illustrates the covered vehicle areas between the Operations Building (at left) and the PSM Building (at right). Buildings are positioned alongside weathering covers for efficient and protected work-flow between interior and exterior operations.

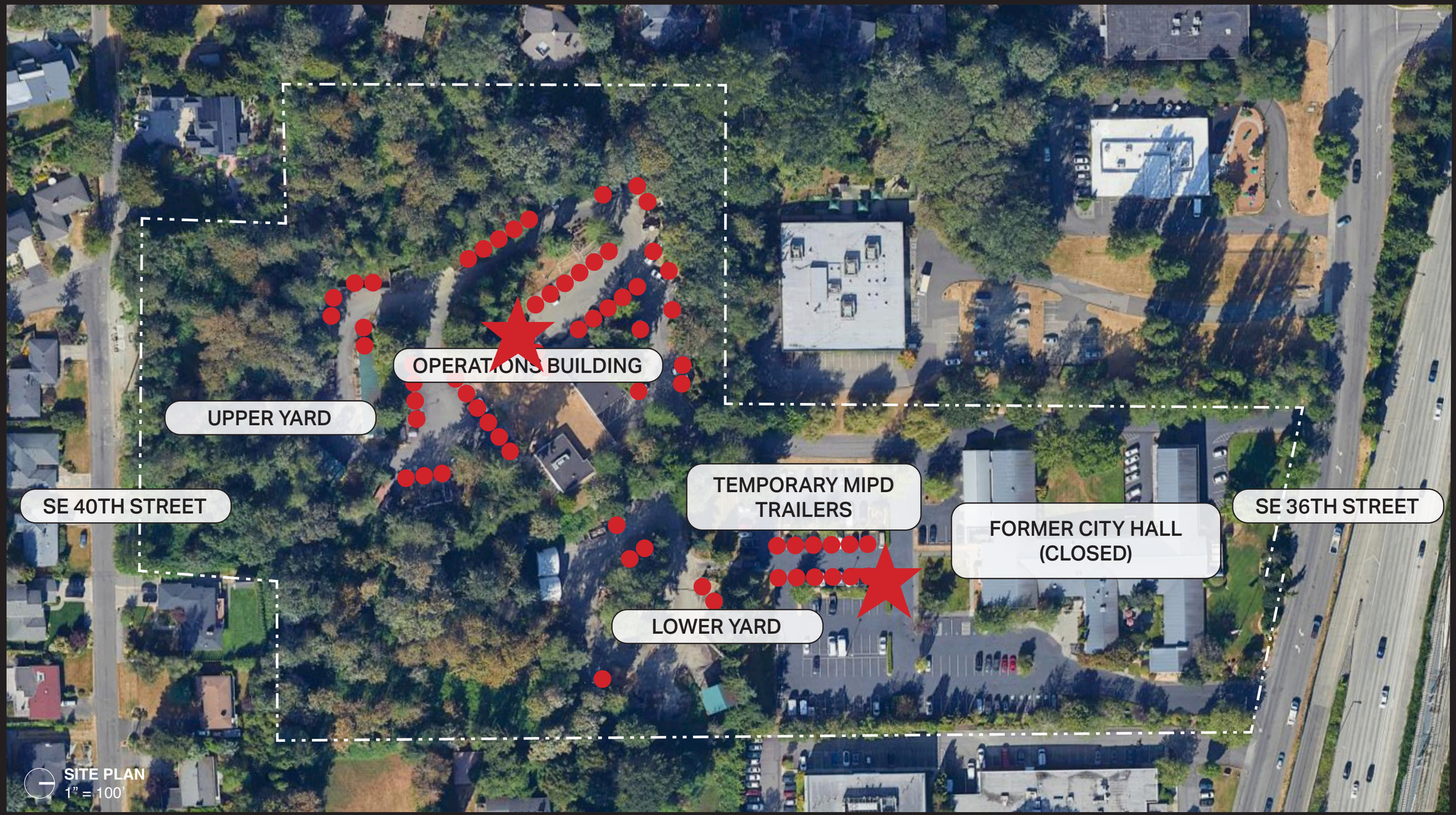
PHOTO RENDERING: PROPOSED WAREHOUSE, WORKSHOP, AND MACHINE-SHOP SPACES

This view illustrates the interior of the warehouse within the Operations Building. Interior equipment, tool, and material storage spaces open directly onto covered exterior loading zones to promote efficient operations.

Parking and Vehicular Circulation

EXISTING CONDITIONS: CURRENT CITY VEHICLE PARKING ON SITE

This map illustrates the location of parked vehicles on site. The 1980's site layout did not anticipate the current quantity of vehicles, and as a result, many vehicles are parked in drive-aisles or in front of other vehicles or equipment.

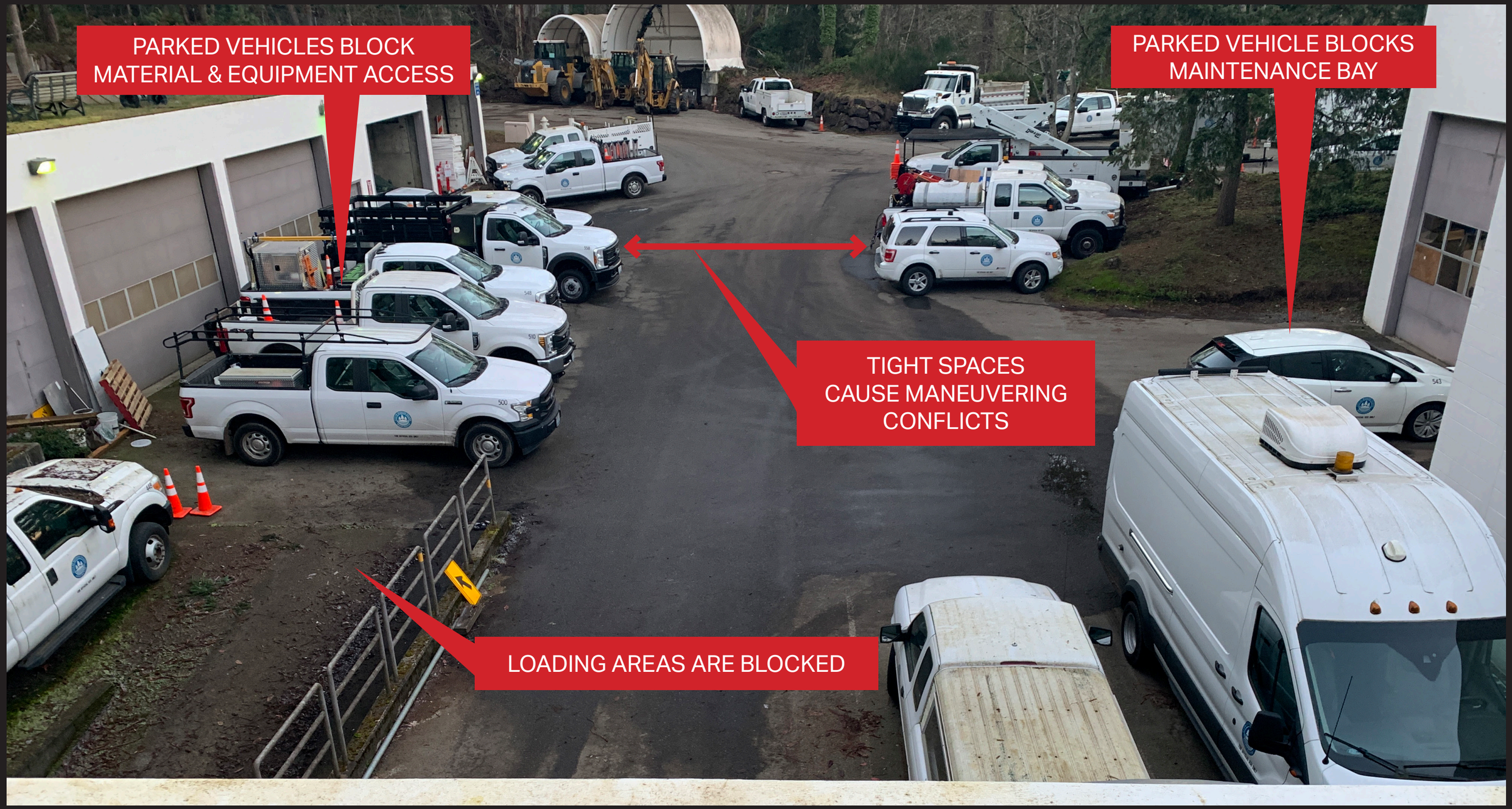


EXISTING CONDITIONS: LACK OF CLARITY FOR POLICE VEHICLE PARKING AND CIRCULATION

This site photograph depicts existing police vehicle parking adjacent to the temporary portable trailers utilized for police operations. Parking for police vehicles is marked,but not secured, and circulation routes are mixed with publicly accessible drives.

EXISTING CONDITIONS: CONGESTED VEHICLE PARKING AND DRIVE-AISLES

This site photograph depicts existing vehicle parking that encroaches on areas required for drive-aisles and maneuvering. In some cases, multiple vehicles must be moved to access or maneuver needed equipment.



EXISTING CONDITIONS: VEHICLE CIRCULATION AND TWO-WAY TRAFFIC CONFLICTS

This map illustrates vehicular circulation routes across the site. The combination of two-way circulation, dead-end legs, and ad-hoc parking results in a number of vehicle circulation conflicts that impact daily operations.

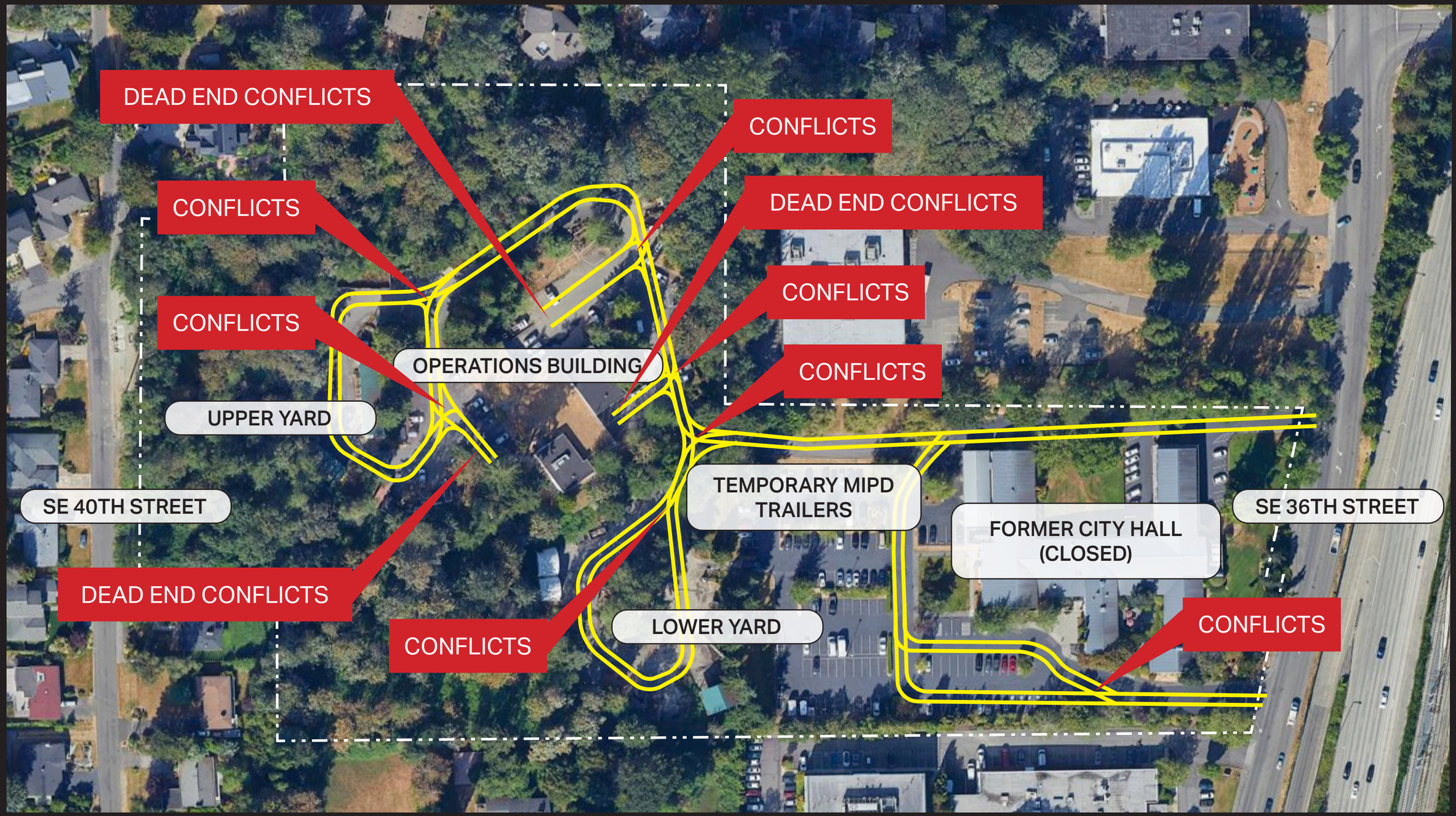
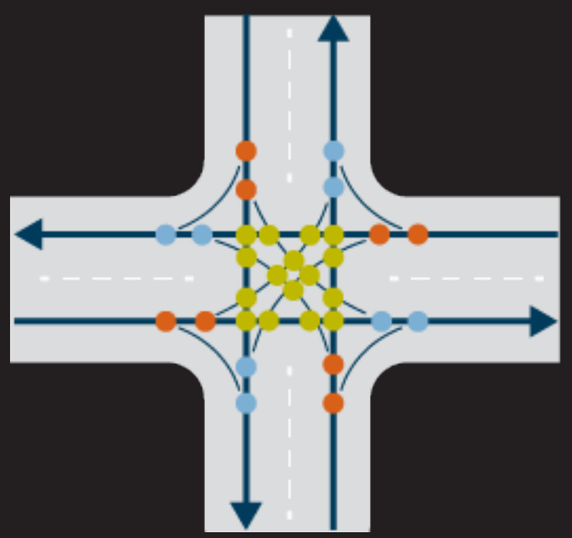


DIAGRAM: SIMPLIFYING VEHICULAR CIRCULATION

One-way circulation reduces potential vehicle conflicts. The diagrams below compare intersection types to illustrate the reduction in vehicle conflicts between traditional intersections and one-way roundabouts. With a four-fold reduction in potential vehicle conflicts, one-way circulation should be employed wherever possible on-site.

TRADITIONAL INTERSECTION



32 POTENTIAL VEHICLE CONFLICTS

VS

ONE-WAY ROUNDABOUT INTERSECTION

8 POTENTIAL VEHICLE CONFLICTS

Design Strategies

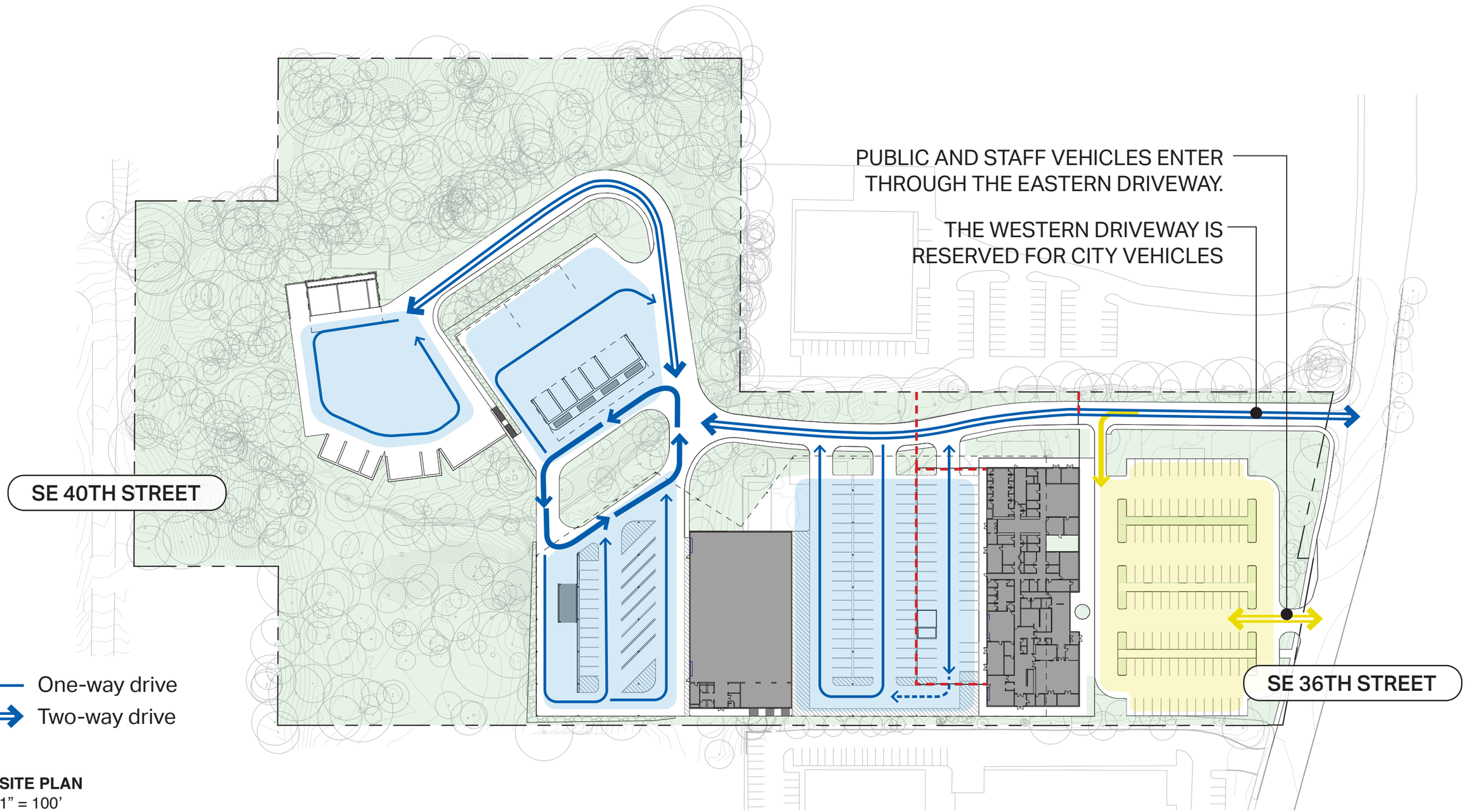
Strategy 1: Cover more vehicles, equipment, and work areas to protect equipment and staff, and promote efficient operations, no matter the weather.

Strategy 2: Collocate buildings with covered areas for operational efficiency, and for structural cost effectiveness.

Strategy 3: Prioritize one-way circulation and normalize vehicle parking to reduce conflicts and operational impacts.

DIAGRAM: VEHICULAR CIRCULATION OVERVIEW

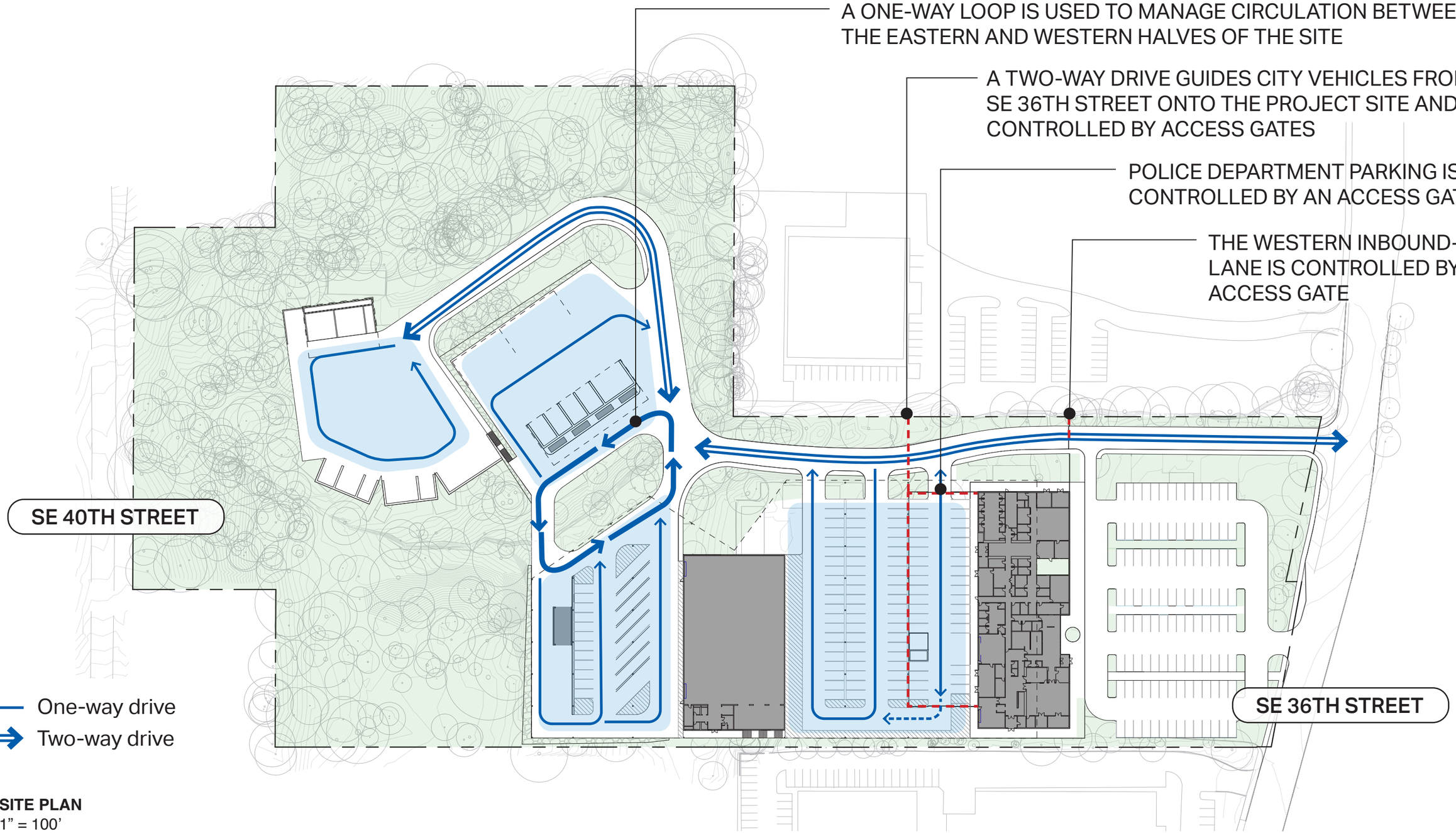
This site plan illustrates vehicular circulation for City of Mercer Island vehicles, and staff and public personal vehicles.



SITE PLAN
1” = 100’

DIAGRAM: CITY VEHICLES CIRCULATION OVERVIEW

This site plan illustrates vehicular circulation for City of Mercer Island vehicles.



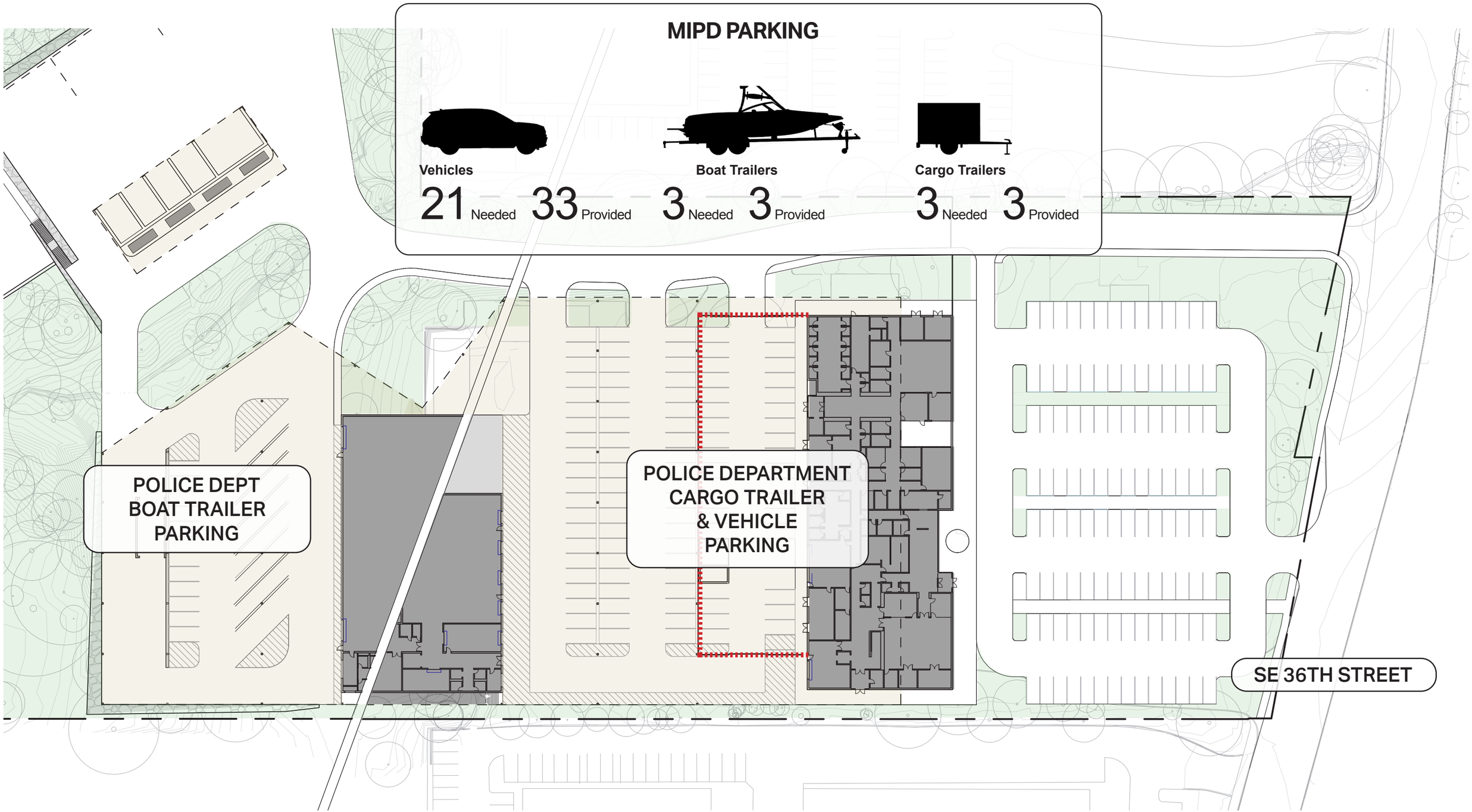
SITE PLAN
1” = 100’

PHOTO RENDERING: PROPOSED CITY VEHICLE ENTRY DRIVE INTO THE PSM FACILITY

This view illustrates the western driveway for use by Police Department and Public Works vehicles.

DIAGRAM: POLICE DEPARTMENT VEHICLE PARKING AREAS

A total of 36 parking spaces are provided, within a secure enclosure, for Police Department vehicles.

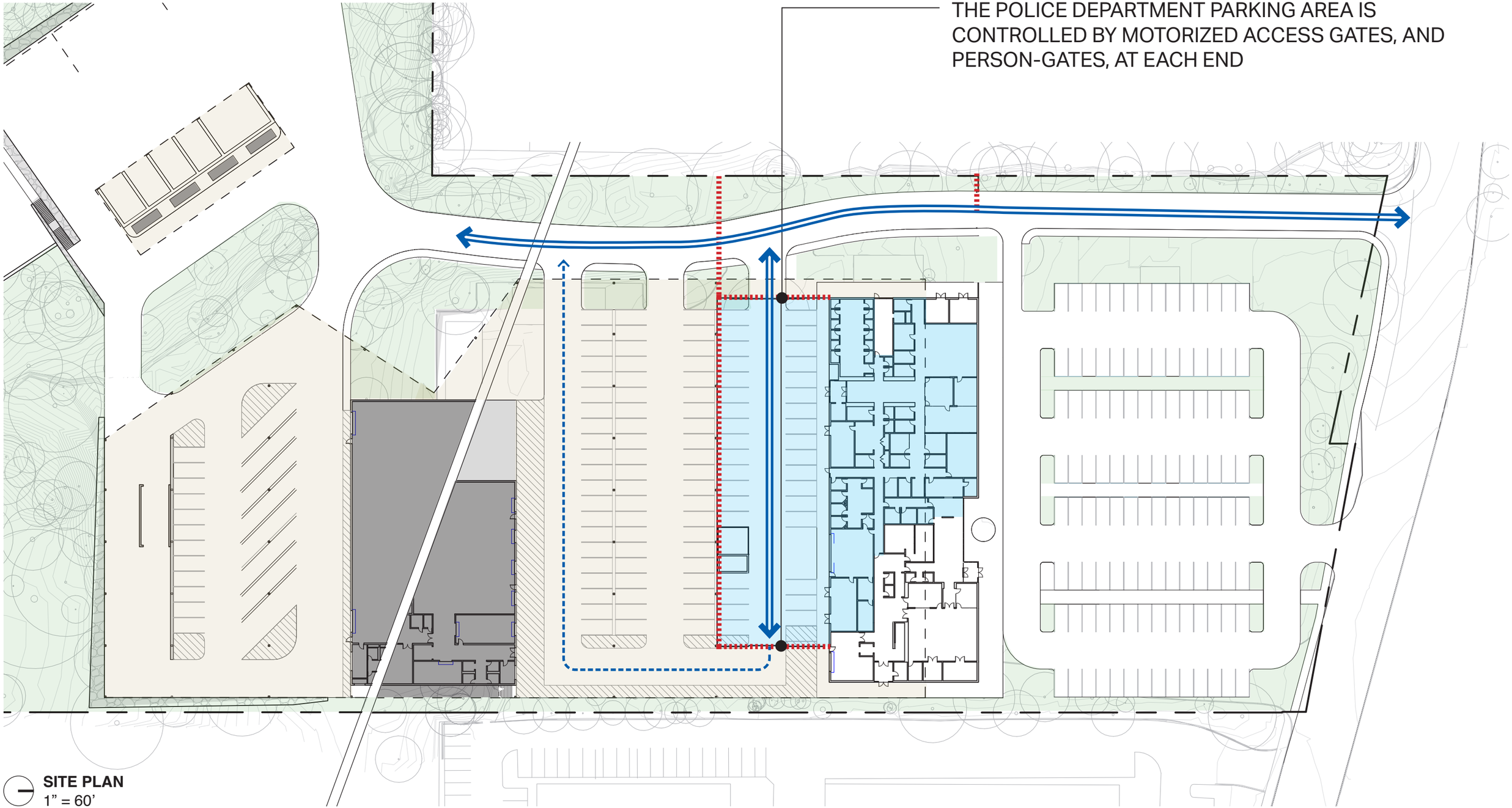


REFERENCE FACILITY PHOTOGRAPH: REGIONAL POLICE DEPARTMENT TOURS

This photograph depicts a police vehicle parking lot and deployment area that, while secured by perimeter fencing, the presence of an adjacent two-story public parking garage presents personal and operational security issues for officers.

DIAGRAM: POLICE DEPARTMENT SECURE PARKING AND DEPLOYMENT AREA

Police department vehicles, equipment, and facility entrances are located within a secure enclosure to provide for the safety and security of officers, evidence, and individuals in-custody.



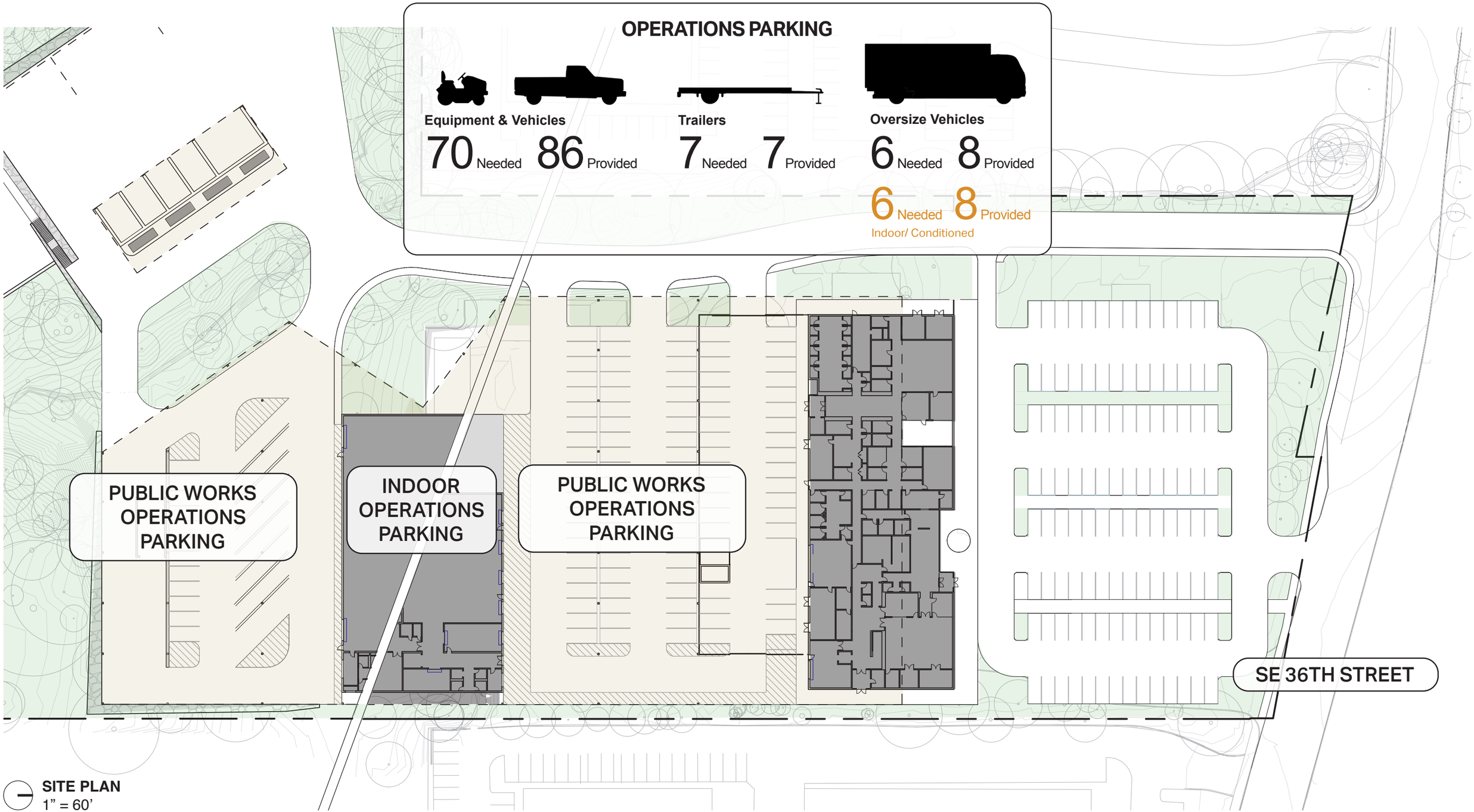
SITE PLAN
1” = 60’

PHOTO RENDERING: PROPOSED POLICE DEPARTMENT SECURE PARKING AND DEPLOYMENT AREA

The Police Department parking and deployment area is separated from the remainder of the facility by a gated, secure enclosure.

DIAGRAM: PUBLIC WORKS VEHICLE PARKING AREAS

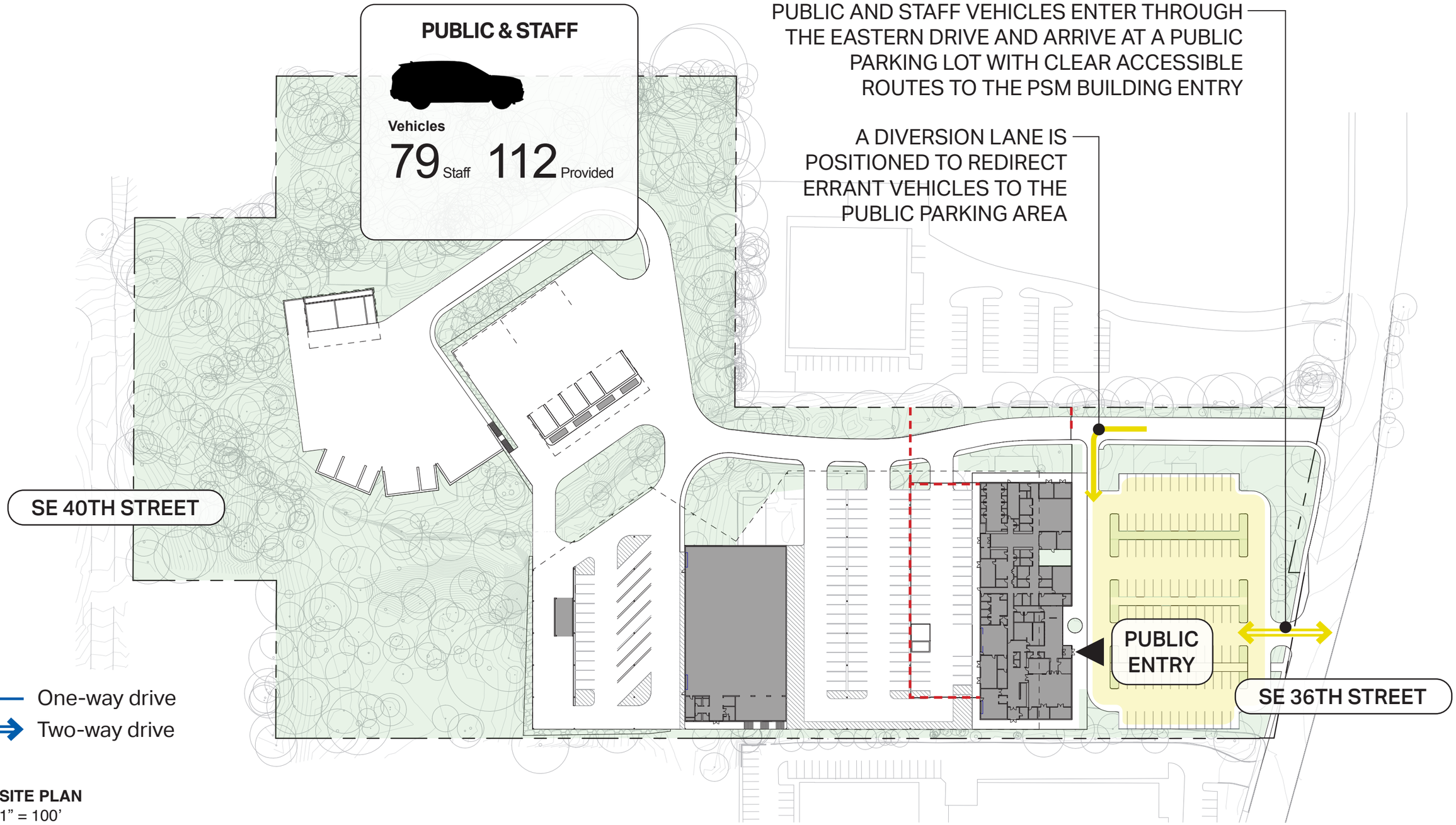
Parking areas are normalized, and standardized, to accommodate vehicles used by the Public Works department.



SITE PLAN
1” = 60’

DIAGRAM: PUBLIC AND STAFF DRIVEWAY AND PARKING AREA

This site plan illustrates vehicular circulation for staff and public personal vehicles.



SITE PLAN
1” = 100’

PHOTO RENDERING: PROPOSED PUBLIC PARKING AND THE PSM BUILDING

This view illustrates the relationship between the public and staff parking lot and the main entry to the PSM building.

Site Organization

EXISTING CONDITIONS: PUBLIC WORKS YARD VEHICLES, MATERIALS, AND EQUIPMENT ORGANIZATION

This map is the product of a site-walk and illustrates the challenge faced by Public Works Staff. Yard operations are constrained by facilities designed 45-years ago, forcing an ad-hoc organization of vehicles, materials, and equipment on-site.

Site Photograph

Vehicle or equipment

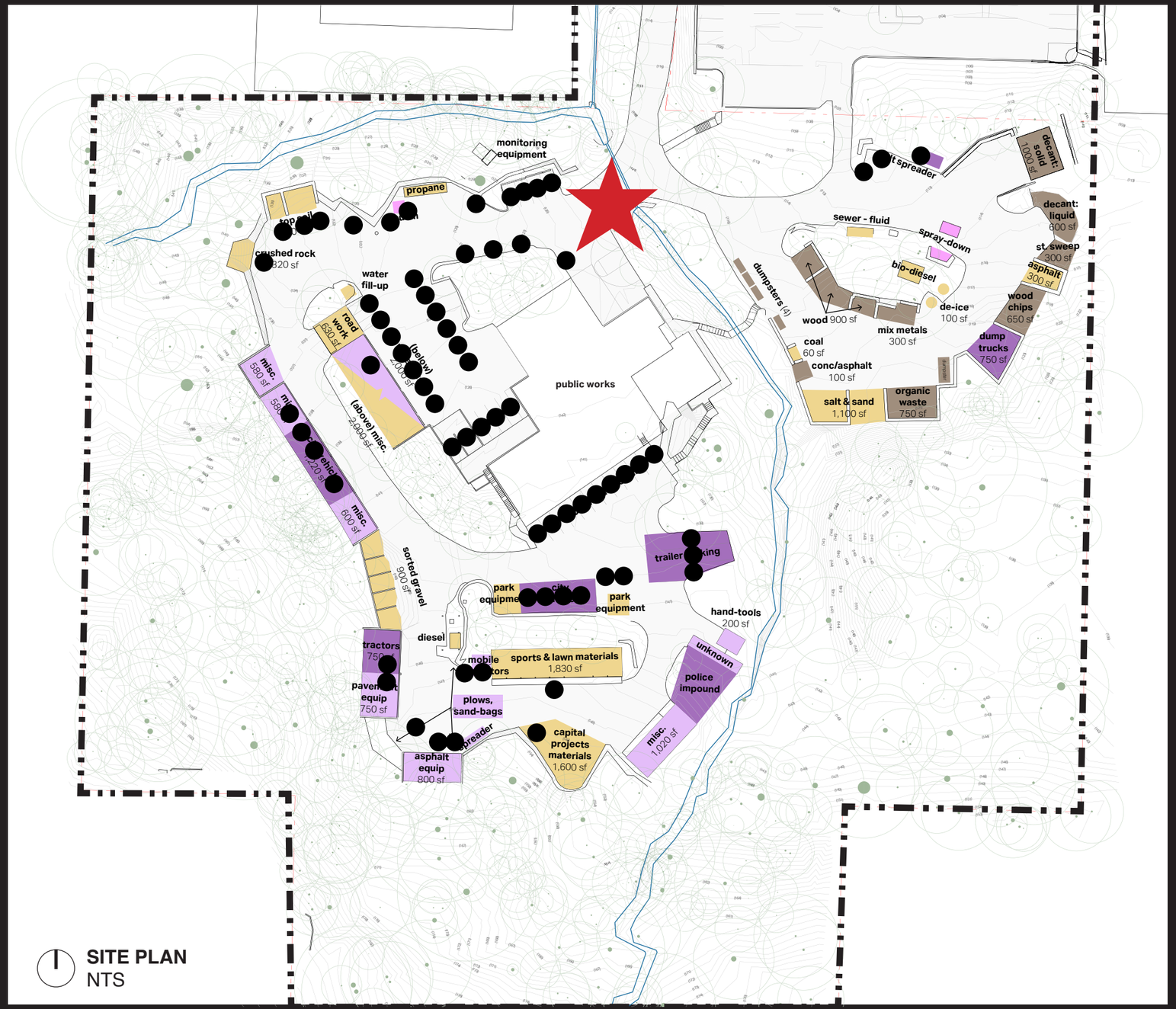
Operations area

Vehicle storage

Tool storage

Material storage

Waste storage



EXISTING CONDITIONS: THE PUBLIC WORKS SITE IS OVER PARKED AND VERY CONGESTED

This photograph illustrates typical parking congestion on the Public Works site. Vehicles are parked wherever space permits, resulting in tight conditions with limited maneuverability.

EXISTING CONDITIONS: DIFFICULT TO ACCESS VEHICLES AND EQUIPMENT

This photograph illustrates vehicles and equipment that are stored where space permits. Access is often obstructed by other vehicles or equipment, causing operational delays.

DIAGRAM: AN EXAMPLE OF MATERIAL STORAGE CHALLENGES

This diagram highlights the storage of raw materials—like salt, sand, gravel, and rock—that must be stored in three different areas of the yard, requiring trips between these locations to gather or redistribute materials for use.

- Operations area
- Vehicle storage
- Tool storage
- Material storage
- Waste storage

Building Organization

Design Strategies

Strategy 1: Cover more vehicles, equipment, and work areas to protect equipment and staff, and promote efficient operations, no matter the weather.

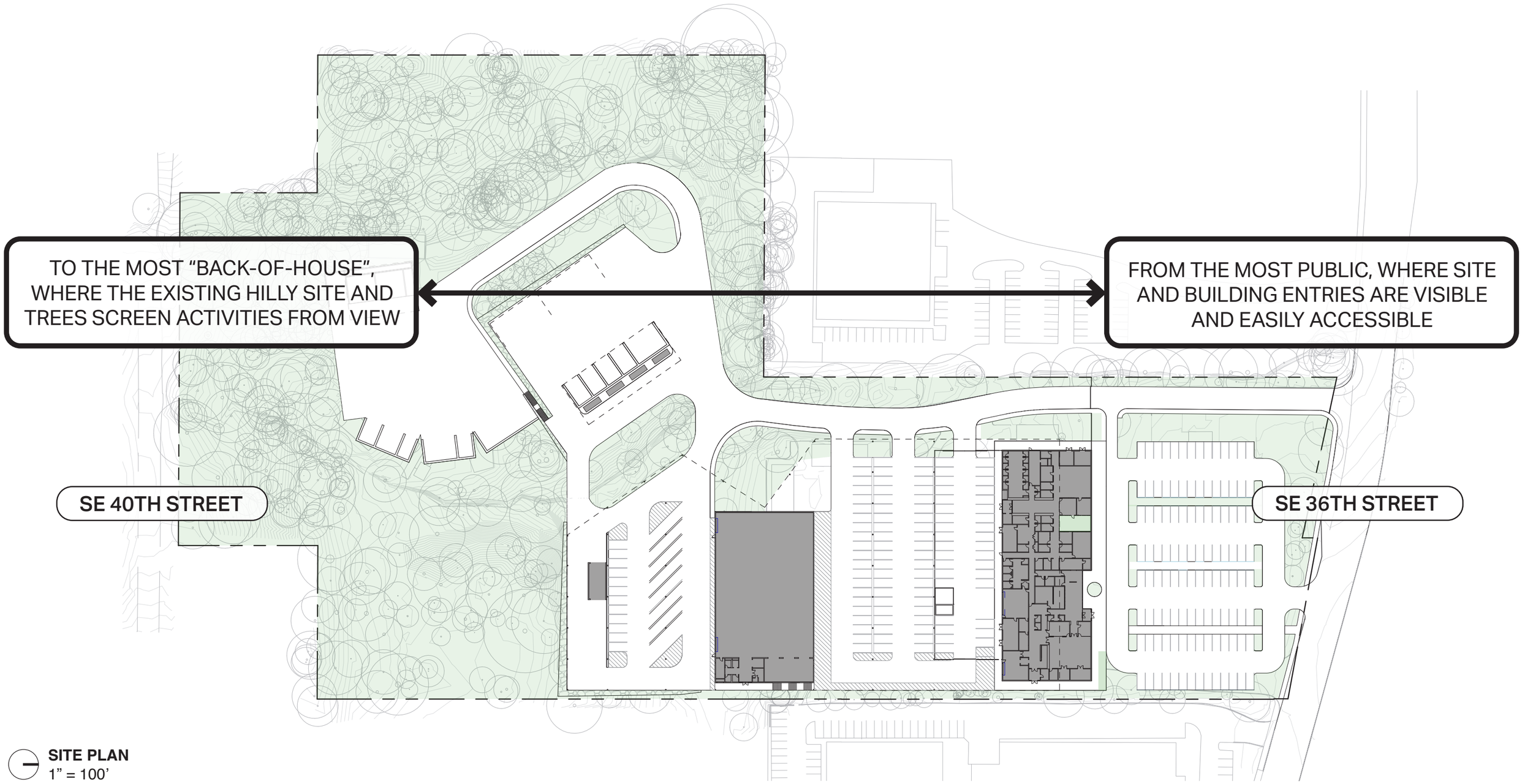
Strategy 2: Collocate buildings with covered areas for operational efficiency, and for structural cost effectiveness.

Strategy 3: Prioritize one-way circulation to reduce conflicts and operational impacts.

Strategy 4: Organize the site into zones for clear and efficient use.

DIAGRAM: SITE ORGANIZATION FROM NORTH TO SOUTH

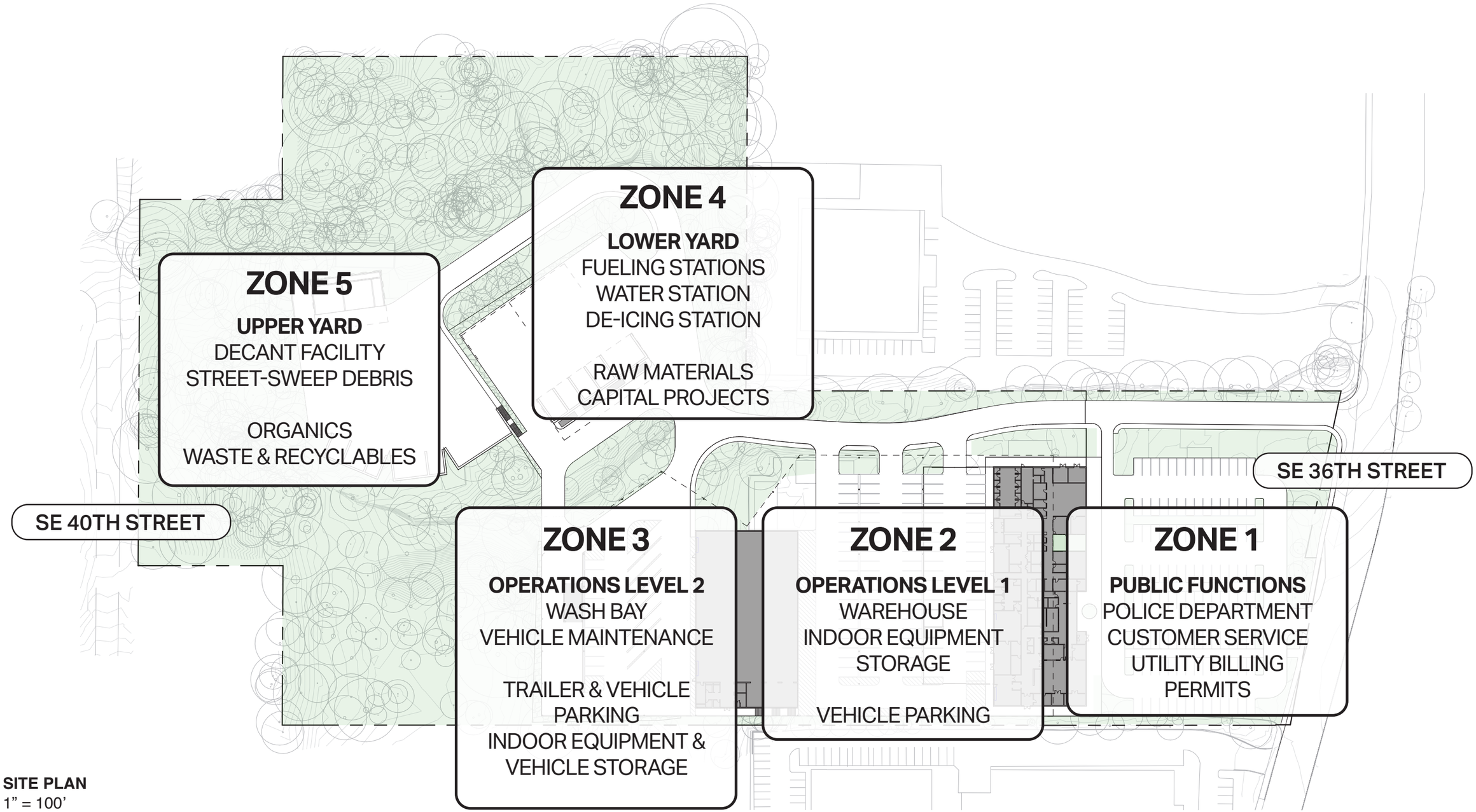
The site organization locates PSM public parking, public entries, and essential public-facing services—the Police Department, Customer Service, and Utility Billing—nearest to SE 36th Street, and "back-of-house" functions such as the decant facility and debris transfer deeper into the site where existing topography and dense vegetation can buffer public works activities.



SITE PLAN
1" = 100'

DIAGRAM: PSM FACILITY SITE ZONING PLAN

This diagram illustrates the zoned organization of the Public Works site.



SITE PLAN
1” = 100’

DIAGRAM: PUBLIC WORKS SITE LOWER AND UPPER YARDS

This diagram illustrates the organization of the lower and upper yards for public works operations.

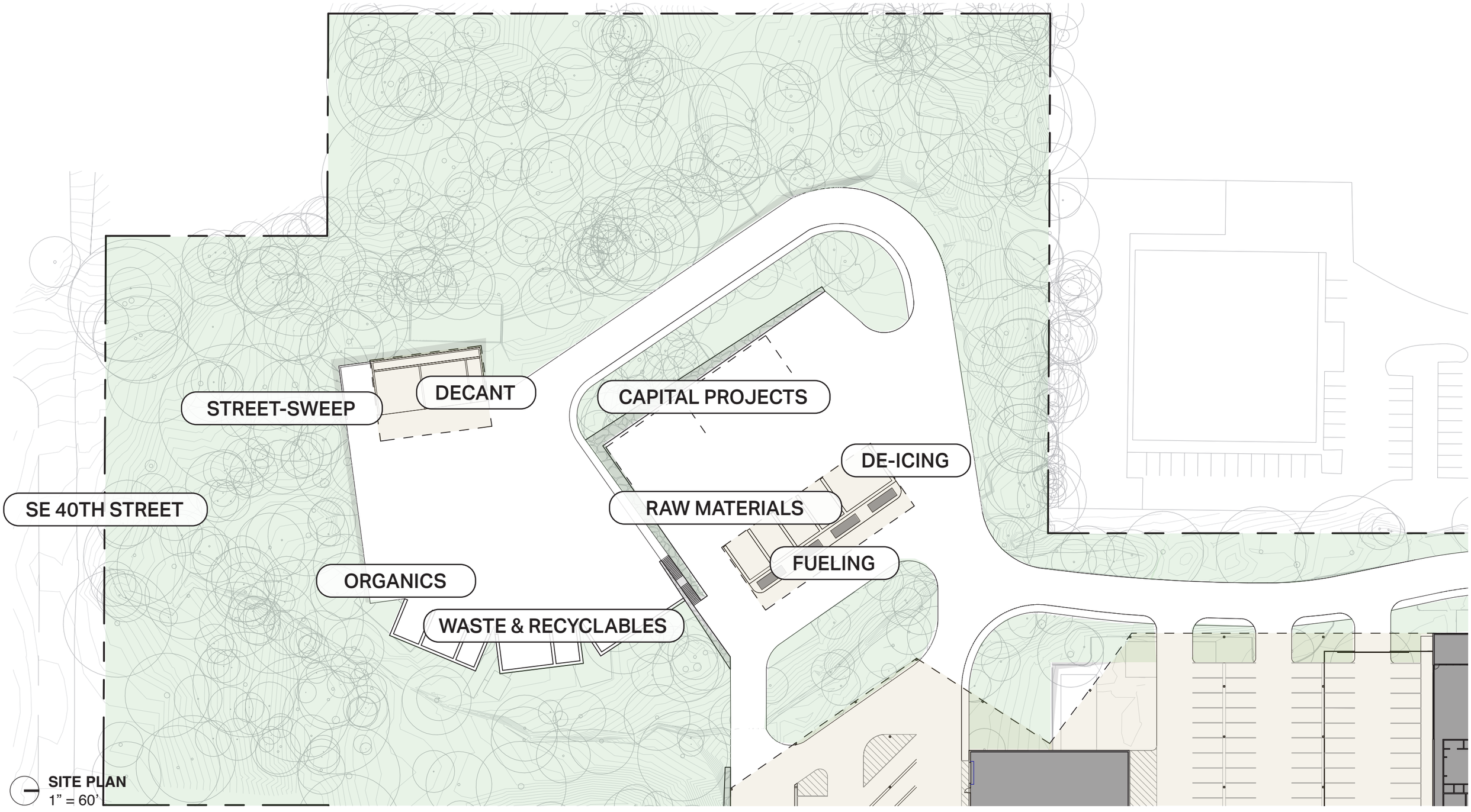


PHOTO RENDERING: PROPOSED LOWER YARD RAW MATERIALS STORAGE

This view illustrates the raw material storage bays in the Lower Yard. Raw materials include soil, sand, gravel and rock and are used in infrastructure projects, street repair, and parks maintenance throughout the city.

PHOTO RENDERING: PROPOSED UPPER YARD DECANT FACILITY

This view illustrates the decant facility located in the Upper Yard.

Design Strategies

Strategy 1: Cover more vehicles, equipment, and work areas to protect equipment and staff, and promote efficient operations, no matter the weather.

Strategy 2: Collocate buildings with covered areas for operational efficiency, and for structural cost effectiveness.

Strategy 3: Prioritize one-way circulation to reduce conflicts and operational impacts.

Strategy 4: Organize the site into zones for clear and efficient use.

Strategy 5: Organize the buildings into zones that maximize shared spaces, promote efficient operations for staff, and create clearly accessible spaces for public services.

PUBLIC SAFETY AND MAINTENANCE BUILDING PROGRAM

Four critical departments will occupy the proposed Public Safety and Maintenance Building. These departments are the foundation for basic city operations and public safety.

Mercer Island Police Department

Emergency Operations Center

Public Works, IT, & GIS Departments

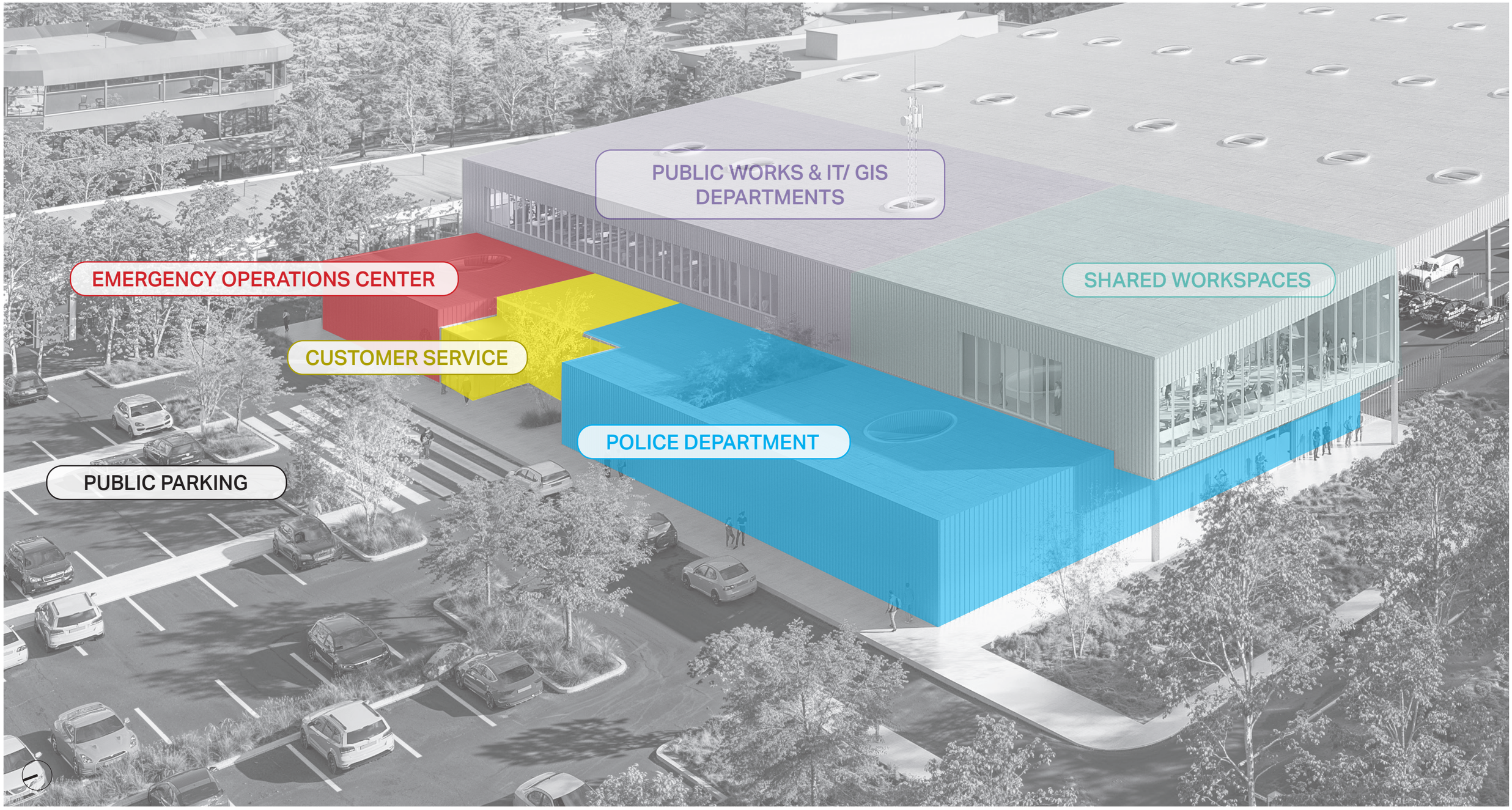
Customer Service Counter

These four departments have requirements that overlap and offer opportunities for shared facilities to maximize functionality and minimize the square footages required, reducing costs. Throughout project planning, these common spaces are referred to as:

Shared work spaces

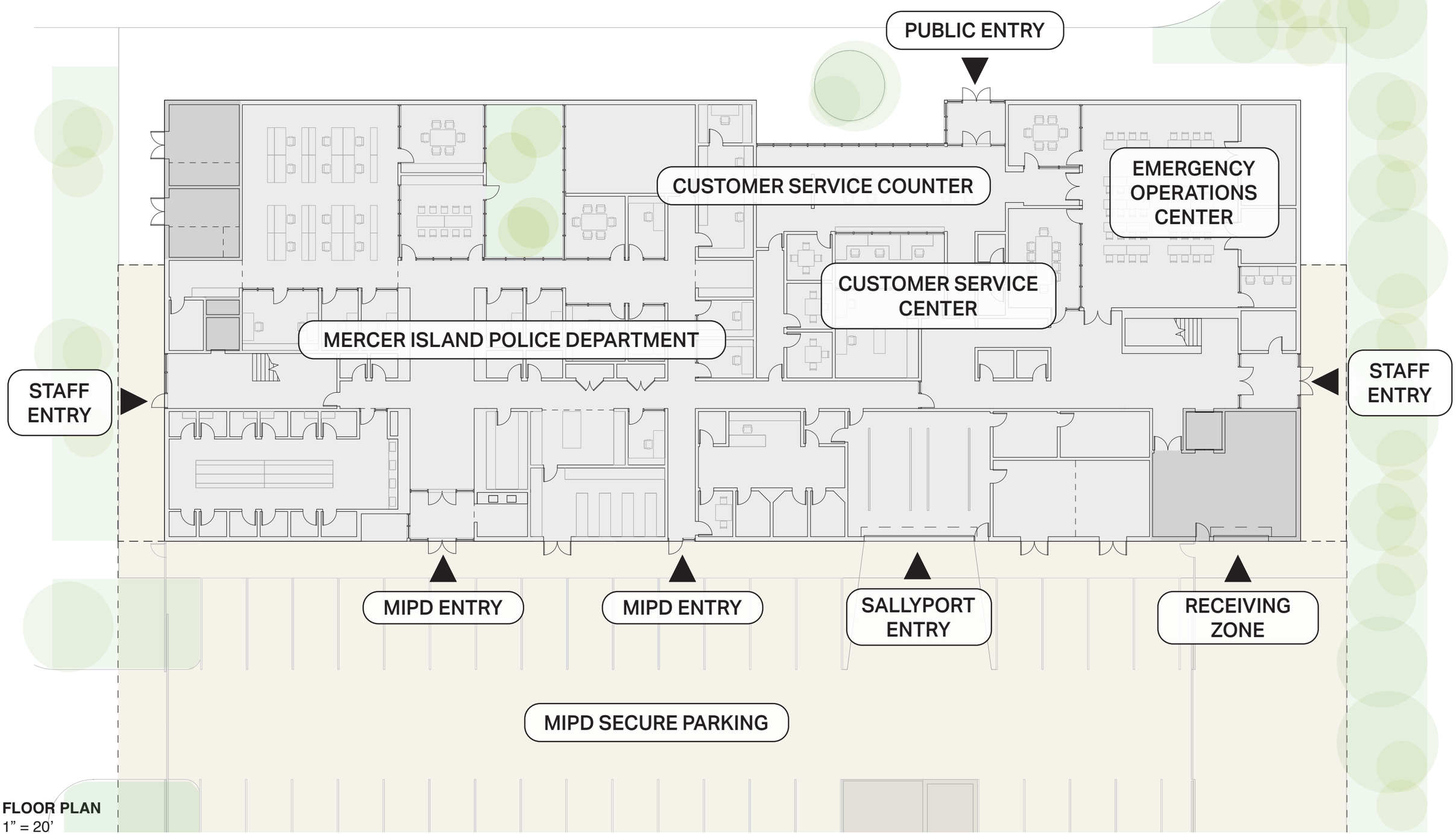
DIAGRAM: PUBLIC SAFETY AND MAINTENANCE BUILDING GROUND FLOOR PROGRAM ZONES

This zone diagram illustrates the programmatic organization of the Public Safety & Maintenance Building, highlighting programs located on the first floor.



PROPOSED FLOOR PLAN: PUBLIC SAFETY AND MAINTENANCE BUILDING GROUND FLOOR

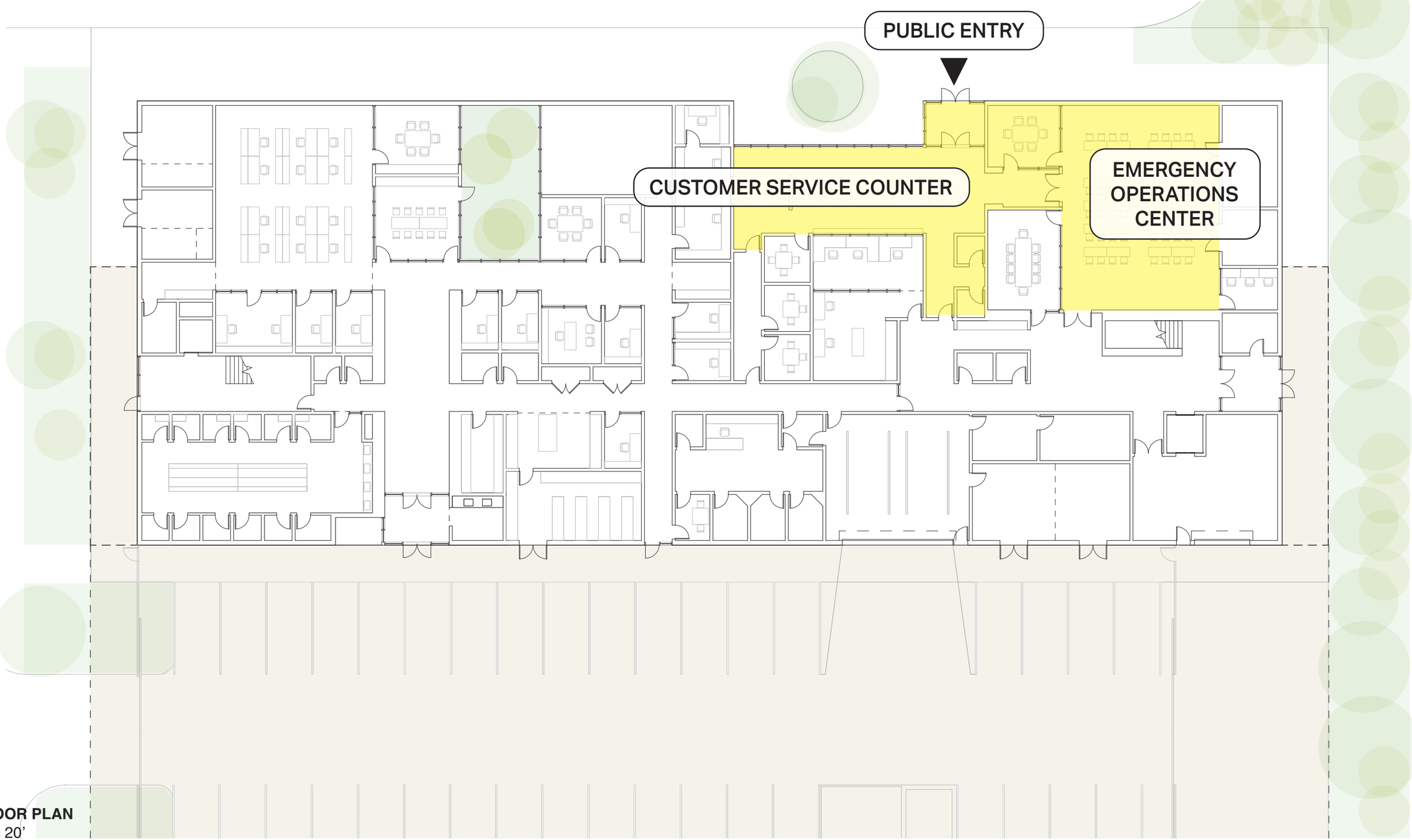
The ground floor building area equals 23,000 gross square feet (GSF).



FLOOR PLAN
1” = 20’

PROPOSED FLOOR PLAN: CUSTOMER SERVICE AND PUBLIC ACCESS AREAS

Public access areas encompass 3,350 gross square feet (GSF) on the ground floor of the building.



FLOOR PLAN
1” = 20’

PHOTO RENDERING: PROPOSED PSM BUILDING PUBLIC ENTRY

This view illustrates the public entry to the PSM Building as seen from the public parking lot.

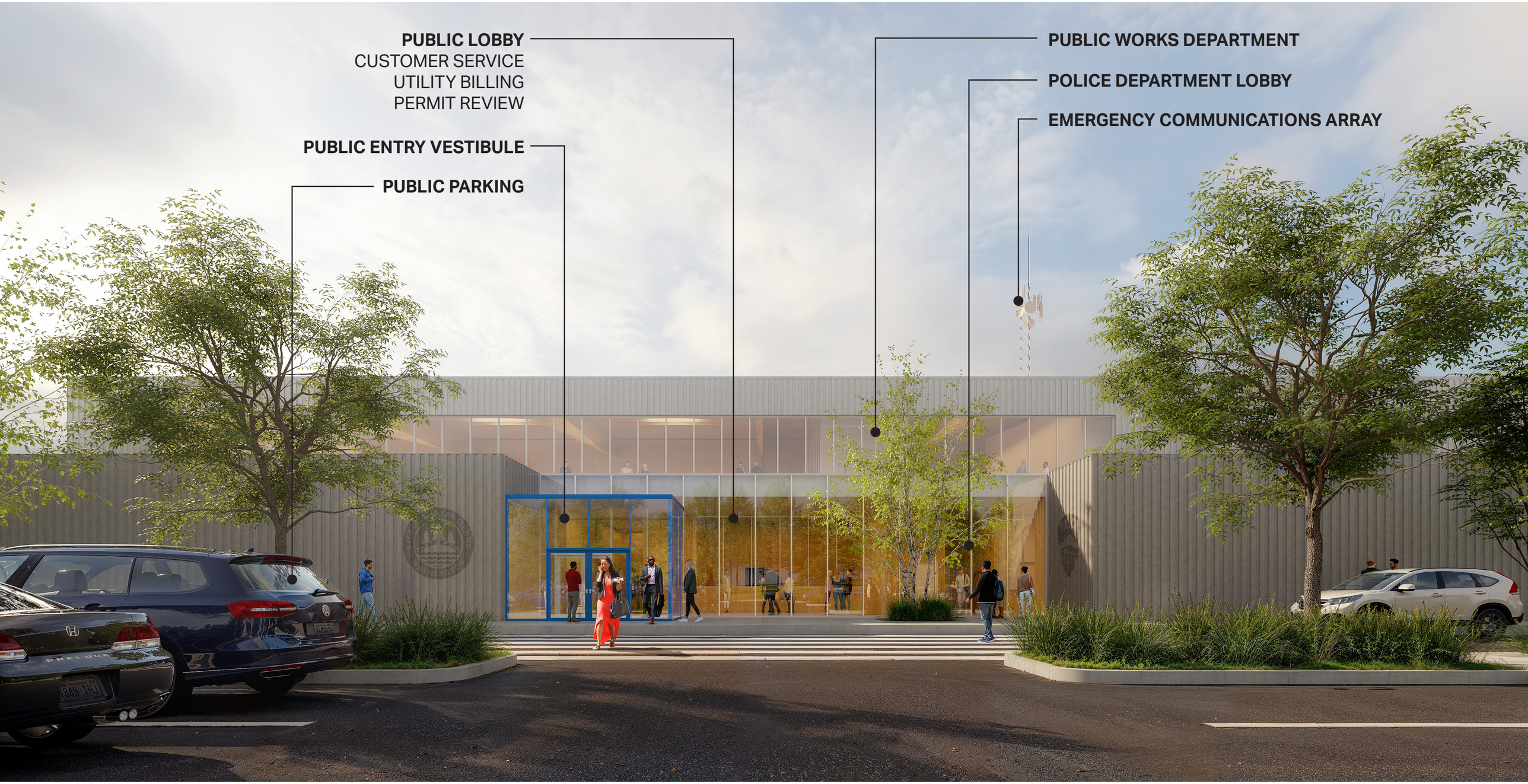
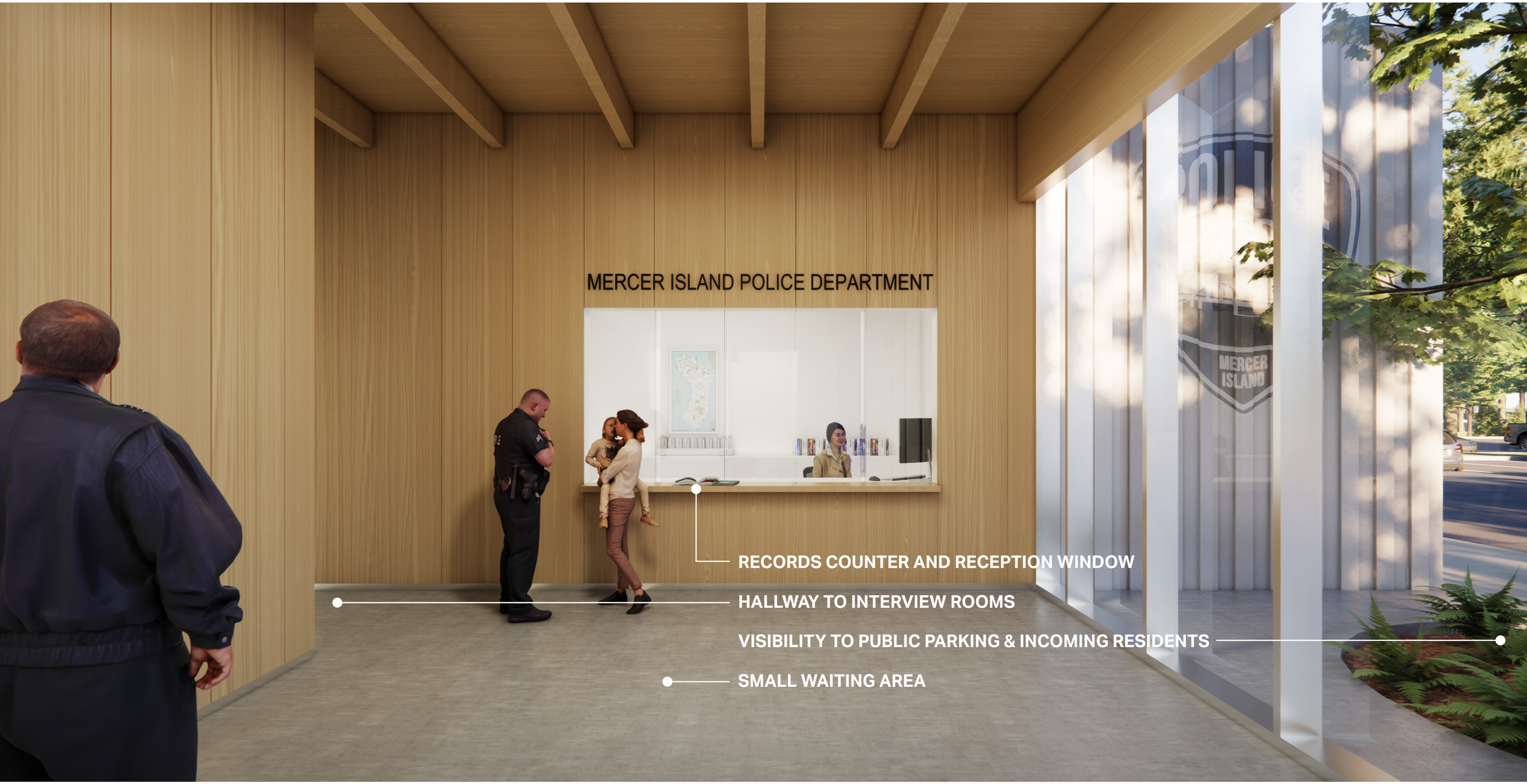


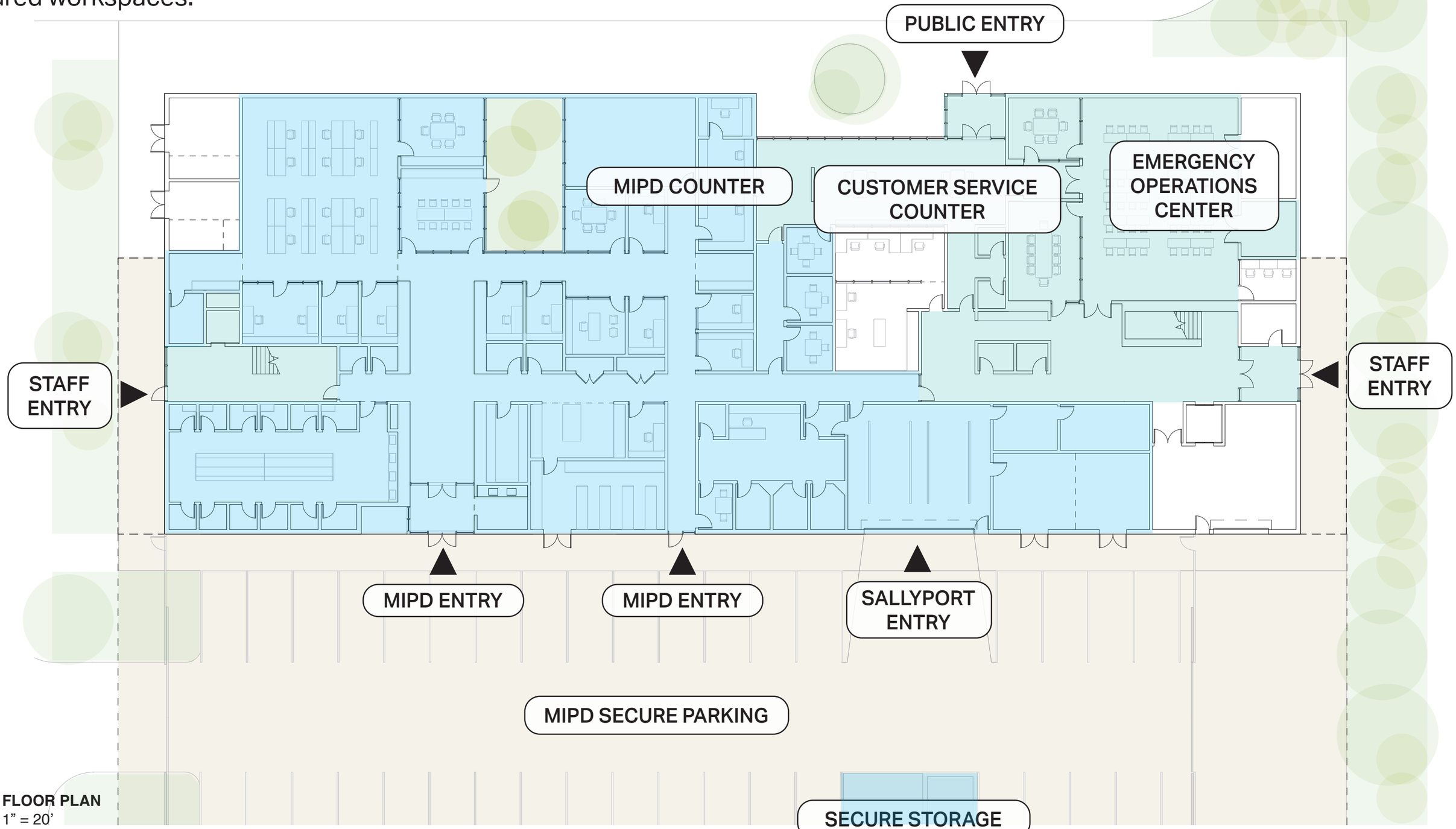
PHOTO RENDERING: PROPOSED PSM BUILDING POLICE DEPARTMENT LOBBY

This view illustrates the Police Department Lobby and records counter inside the PSM Building.



PROPOSED FLOOR PLAN: MERCER ISLAND POLICE DEPARTMENT

The Mercer Island Police Department utilizes 20,720 gross square feet (GSF), including the Emergency Operations Center and shared workspaces.



FLOOR PLAN
1” = 20’

REFERENCE FACILITY PHOTOGRAPH: REGIONAL POLICE DEPARTMENT TOURS

Interior workspaces, such as the officer's report writing room depicted in this photograph, are often located in the interior of the building, with no access to natural light.

REFERENCE FACILITY PHOTOGRAPH: REGIONAL POLICE DEPARTMENT TOURS

Workspaces that have windows generally require expensive bullet-proof glazing, and in each department toured, window shades were consistently drawn, for officer security and privacy from public view when working with sensitive information.

EXISTING CONDITIONS: MERCER ISLAND POLICE DEPARTMENT TEMPORARY PORTABLE TRAILERS

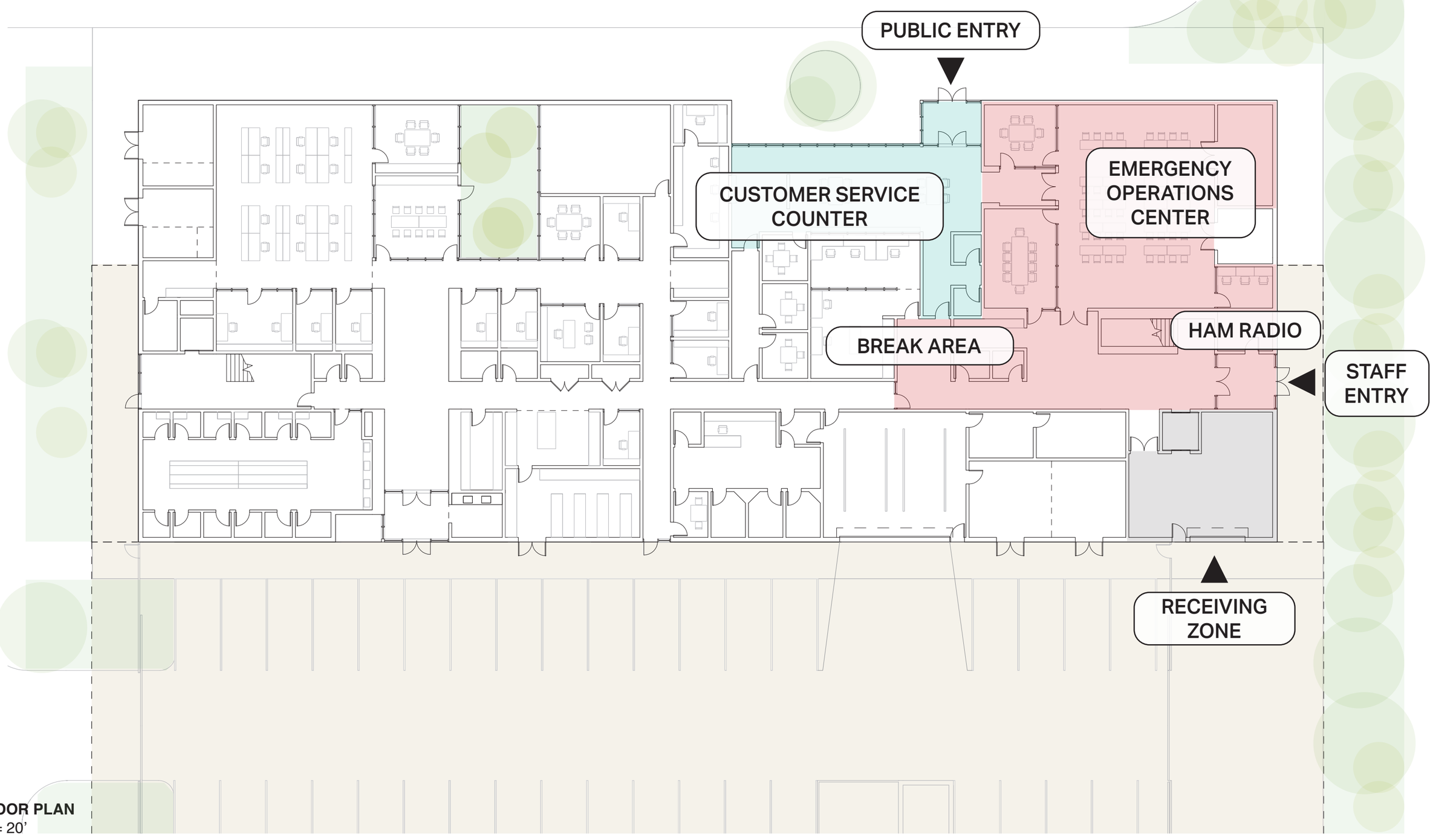
This photograph illustrates the temporary workspaces within the portable trailers currently used by the Police Department for office space and operations.

PHOTO RENDERING: PROPOSED INTERIOR VIEW OF THE MERCER ISLAND POLICE DEPARTMENT

This view illustrates the Police Department patrol report writing room, lunch and break room, and patrol briefing room in the ground floor of the PSM Building.

PROPOSED FLOOR PLAN: EMERGENCY OPERATIONS CENTER

The Emergency Operations Center utilizes 6,800 gross square feet (GSF), including shared workspaces.



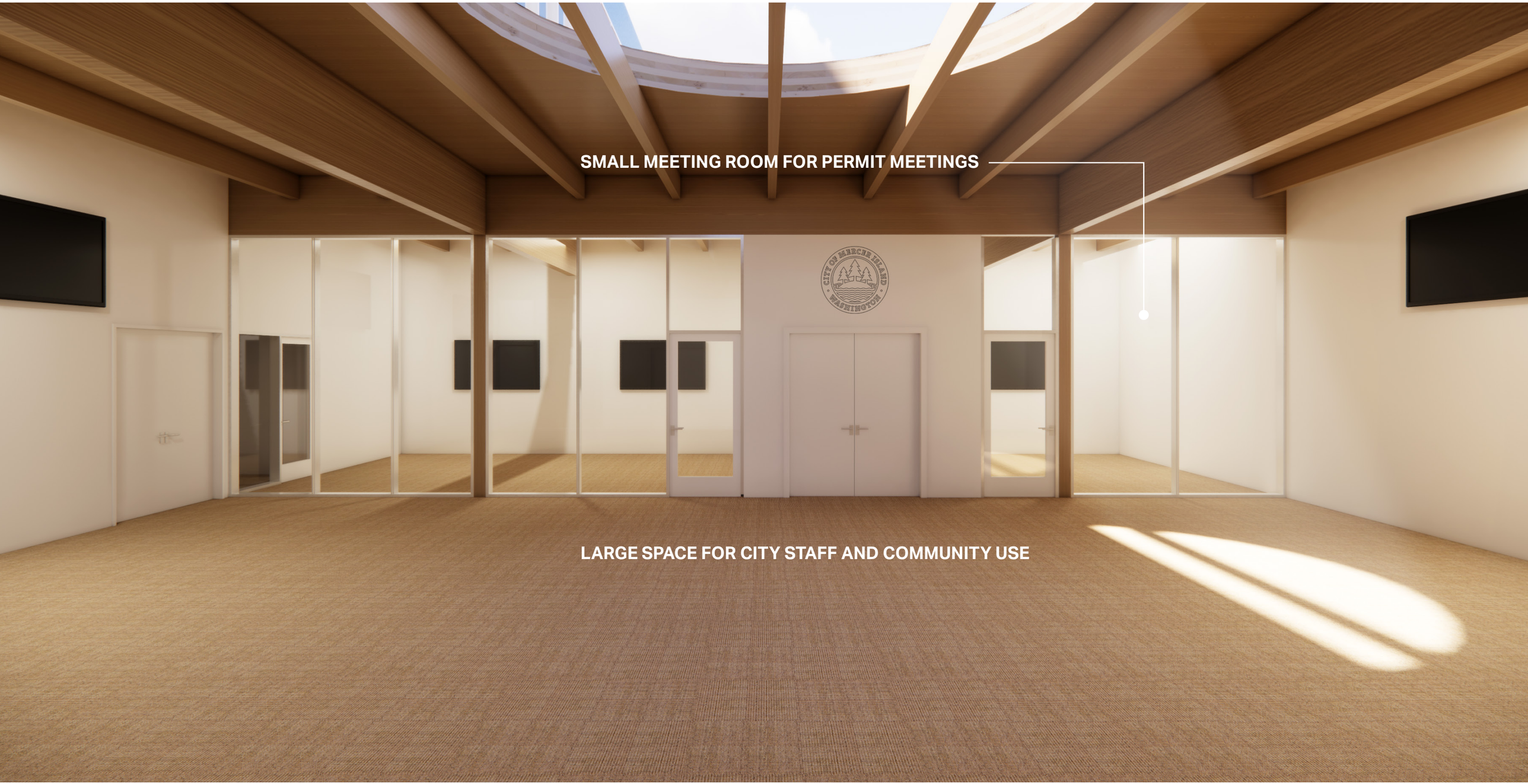
FLOOR PLAN
1” = 20’

PHOTO RENDERING: PROPOSED INTERIOR VIEW OF THE PROPOSED EMERGENCY OPERATIONS CENTER

This view illustrates the Emergency Operations Center (EOC).

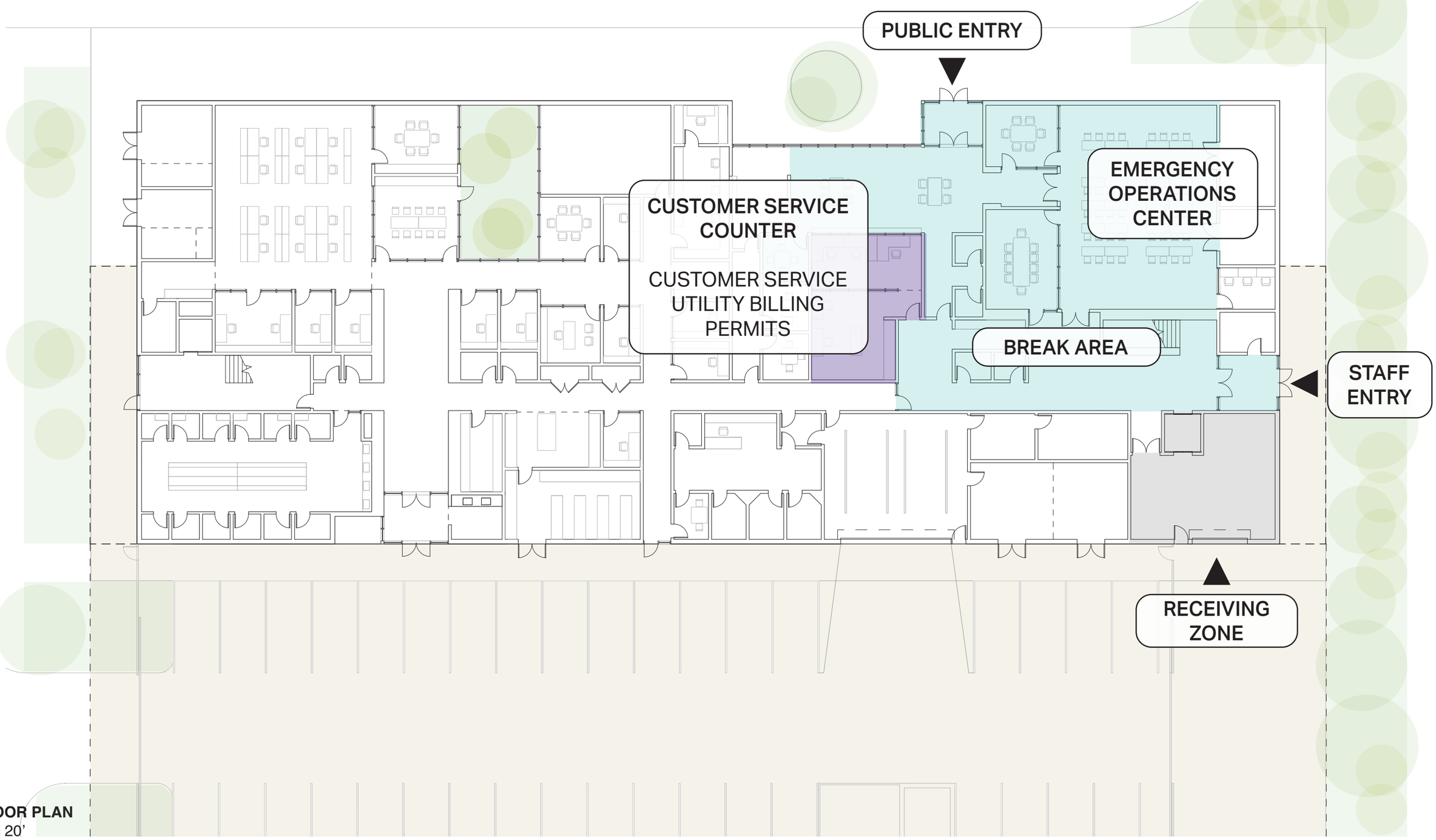
PHOTO RENDERING: PROPOSED VIEW OF THE EOC SPACE FOR MULTI-PURPOSE USE

The EOC is a flexible space that can be shared among city departments, for Public Works staff meetings and Police Department training. And when not in use by the city, the space could be available for community use.



PROPOSED FLOOR PLAN: CUSTOMER SERVICE COUNTER AND CITY STAFF AREAS

The Customer Service Counter and City Staff Areas share 7,000 gross square feet (GSF) on the ground floor of the building.



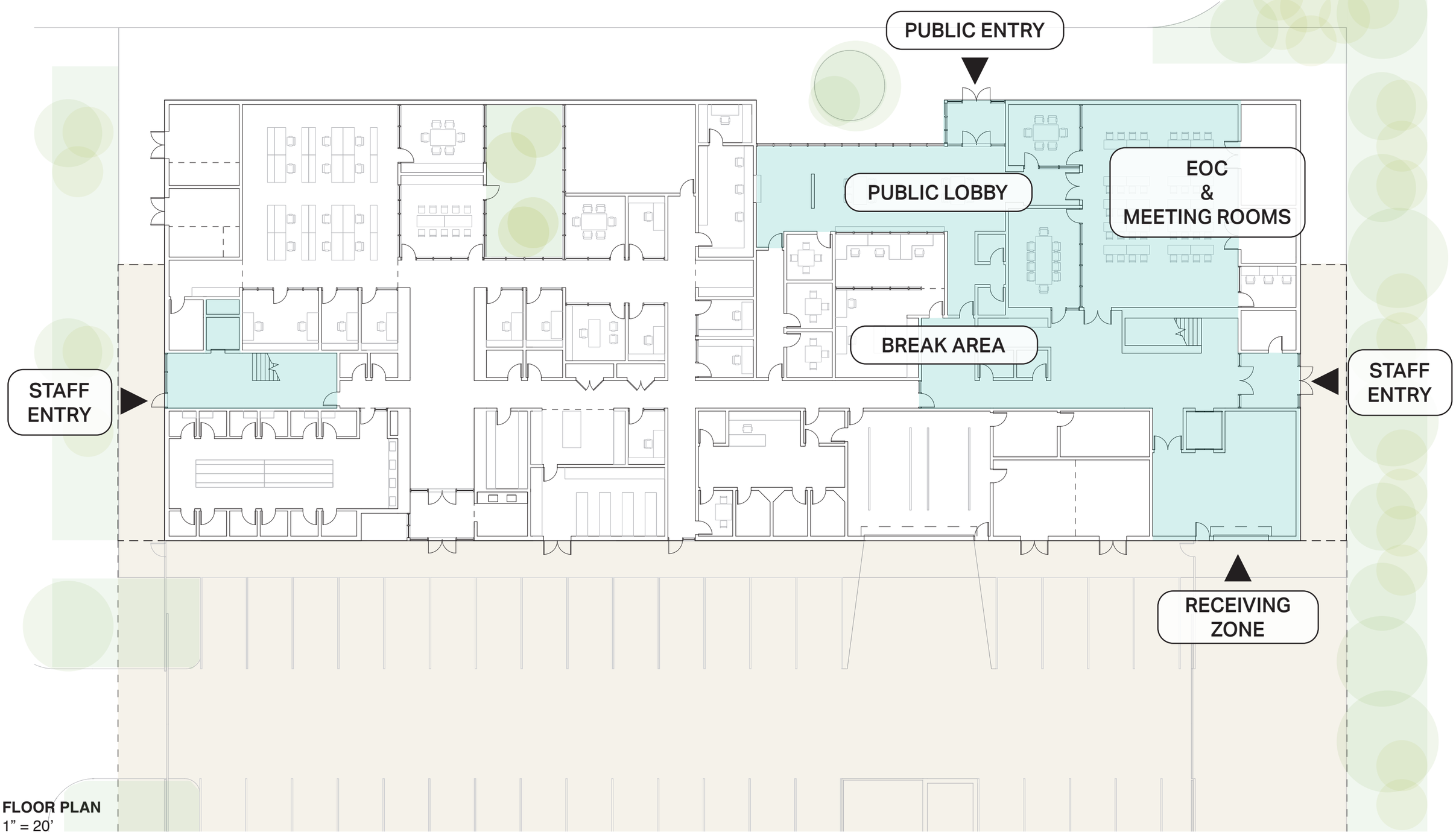
FLOOR PLAN
1” = 20’

PHOTO RENDERING: PROPOSED PUBLIC LOBBY AND CUSTOMER SERVICE COUNTER

The public lobby and Customer Service Counter are directly visible, and located on an easily accessible route, from the public parking lot.

PROPOSED FLOOR PLAN: SHARED WORK SPACES

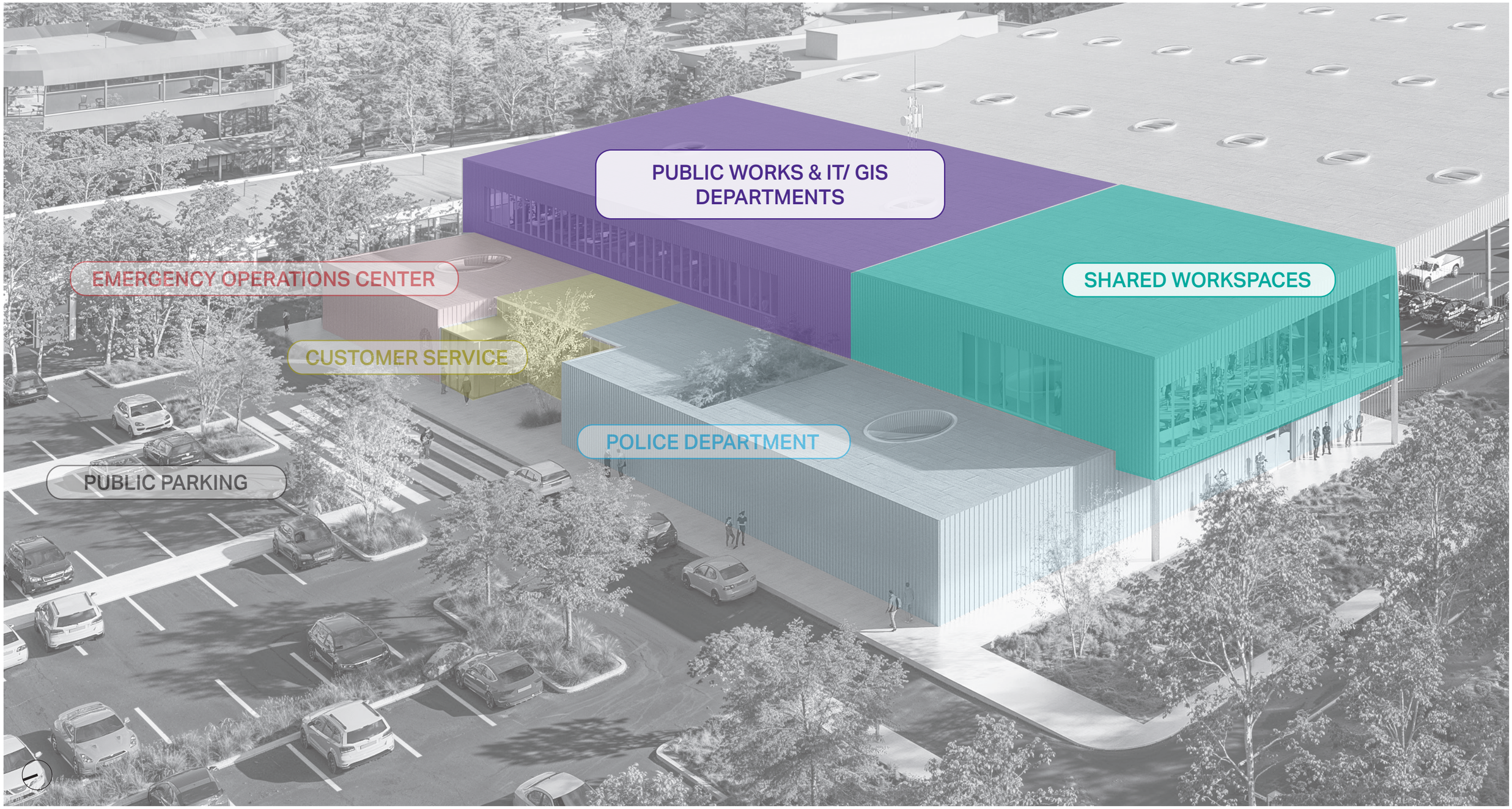
The ground floor includes 6,675 gross square feet (GSF) of space that is shared across all city departments.



FLOOR PLAN
1” = 20’

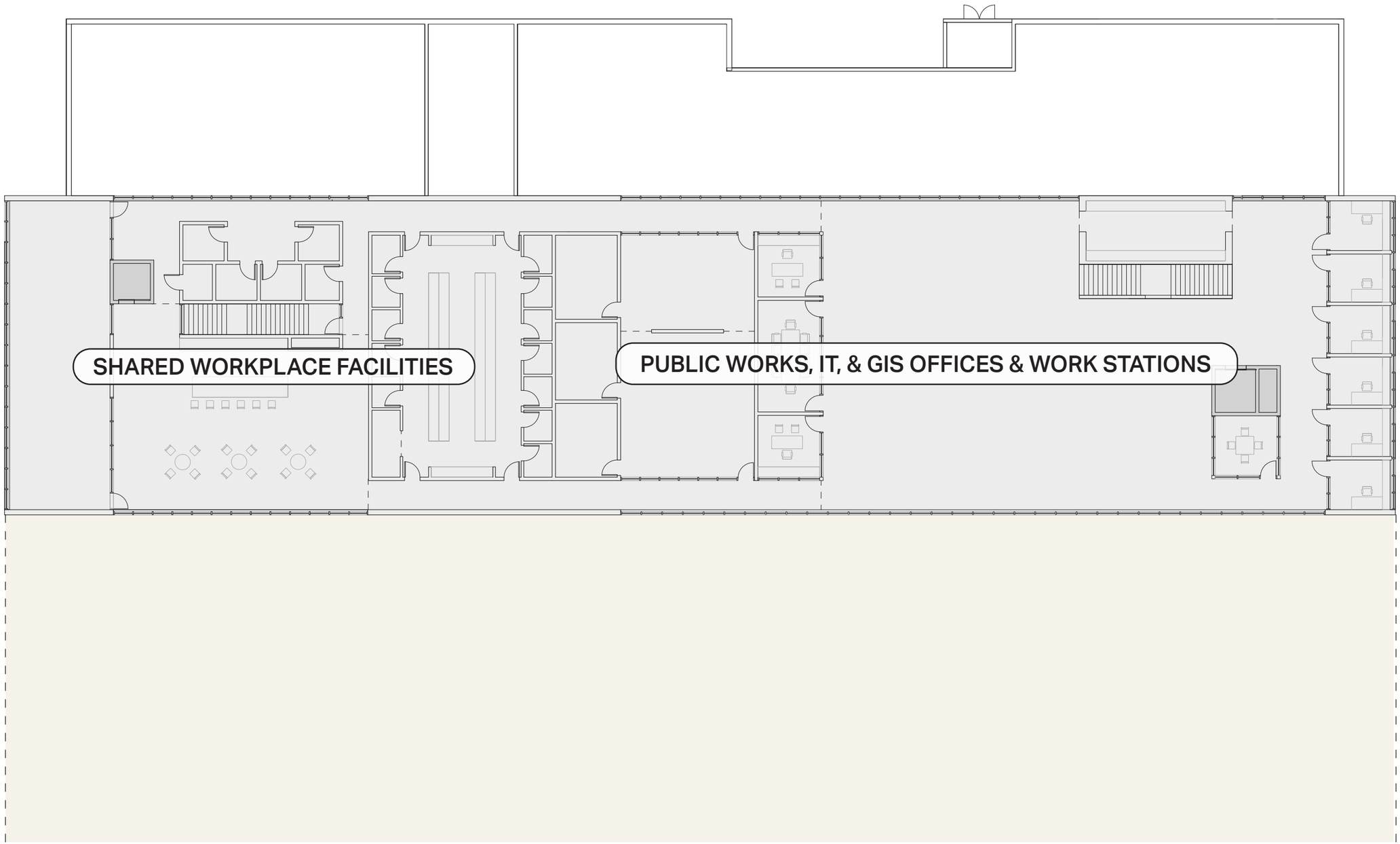
DIAGRAM: PUBLIC SAFETY AND MAINTENANCE BUILDING SECOND FLOOR PROGRAM ZONES

This zone diagram illustrates the programmatic organization of the Public Safety & Maintenance Building, highlighting programs located on the second floor.



PROPOSED FLOOR PLAN: PUBLIC SAFETY AND MAINTENANCE BUILDING SECOND FLOOR

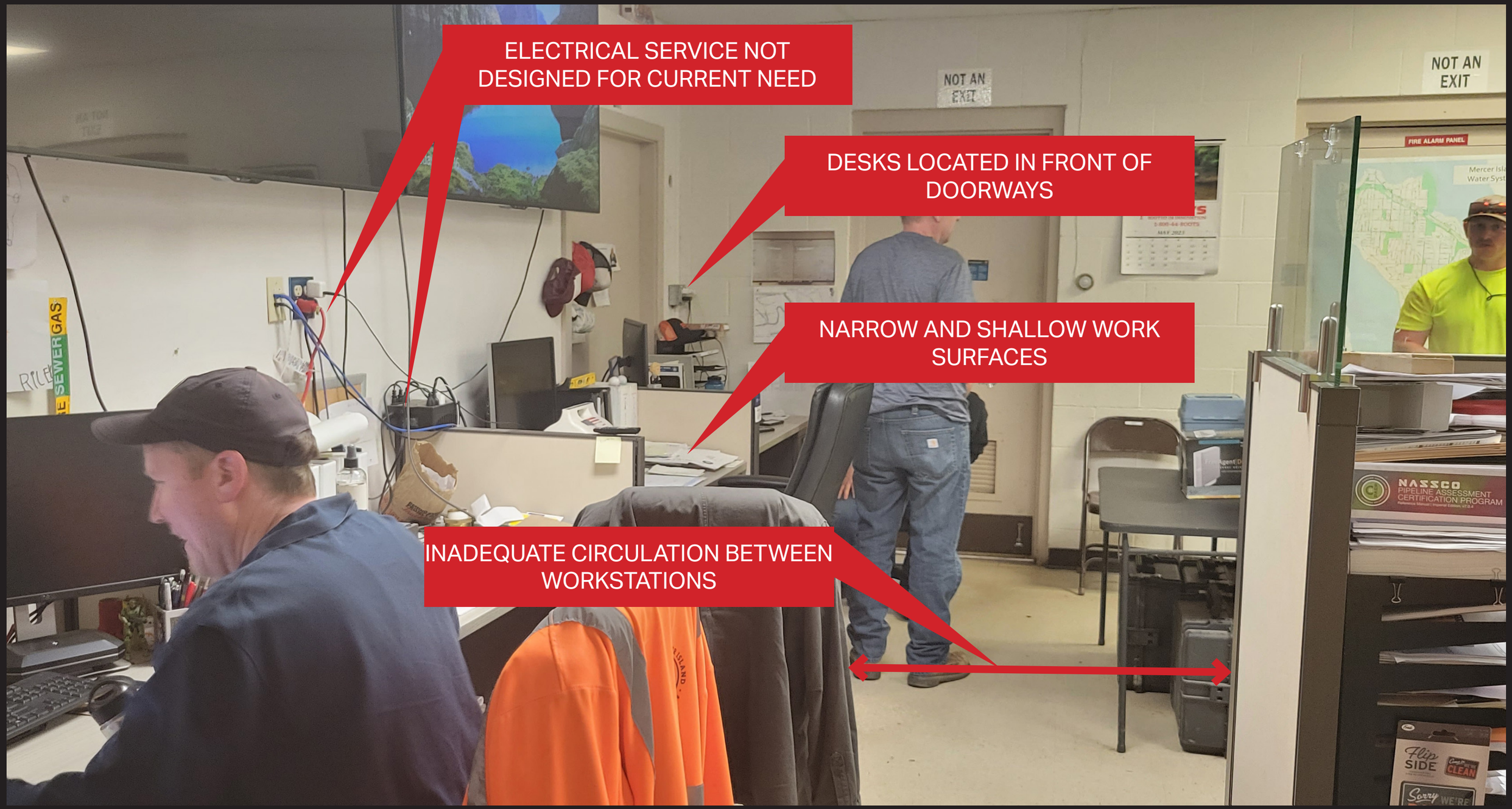
The second floor building area equals 16,400 gross square feet (GSF).



FLOOR PLAN
1” = 20’

EXISTING CONDITIONS: PUBLIC WORKS BUILDING INADEQUATE AND AD-HOC OFFICE SPACE

This photograph depicts the ad-hoc office spaces in the existing Public Works Building that illustrate the need for adequate workspace for staff.



EXISTING CONDITIONS: INADEQUATE, AND LACK OF CODE-REQUIRED, STAFF FACILITIES

This photograph depicts the portable toilets that have been located near the Public Works building to serve the increased occupant load; the original building was not designed to house the current number of staff.

EXISTING CONDITIONS: INADEQUATE SPACES FOR CURRENT OPERATIONS

This photograph from the existing Public Works Building depicts rooms originally constructed as restrooms or cleanup rooms, that are forced to do “double-duty” and incorporate incompatible uses, like server and communications infrastructure.

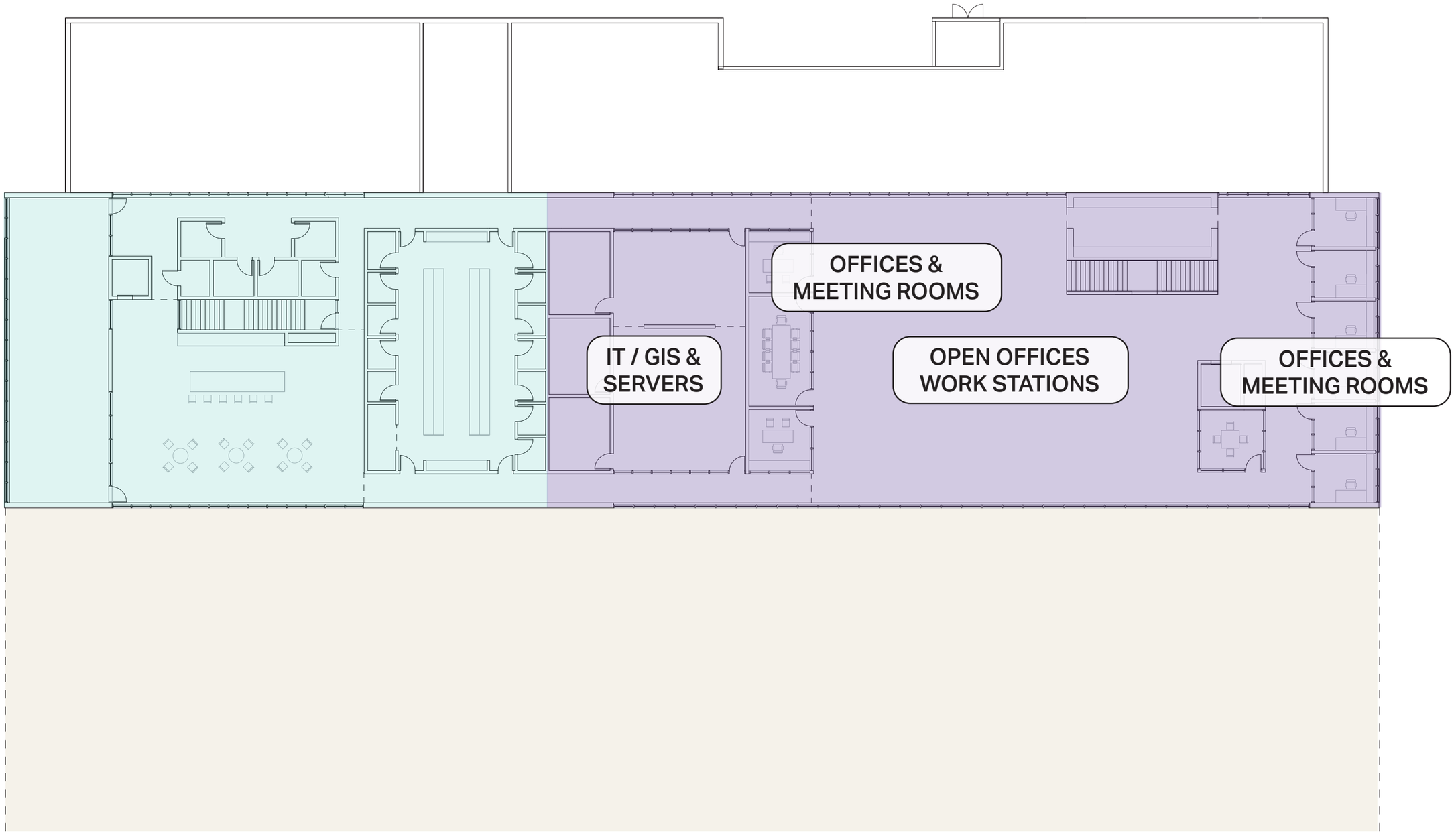
PROPOSED FLOOR PLAN: SHARED WORK SPACES

The second floor includes 6,400 gross square feet (GSF) of space that is shared across all city departments.

FLOOR PLAN
1” = 20’

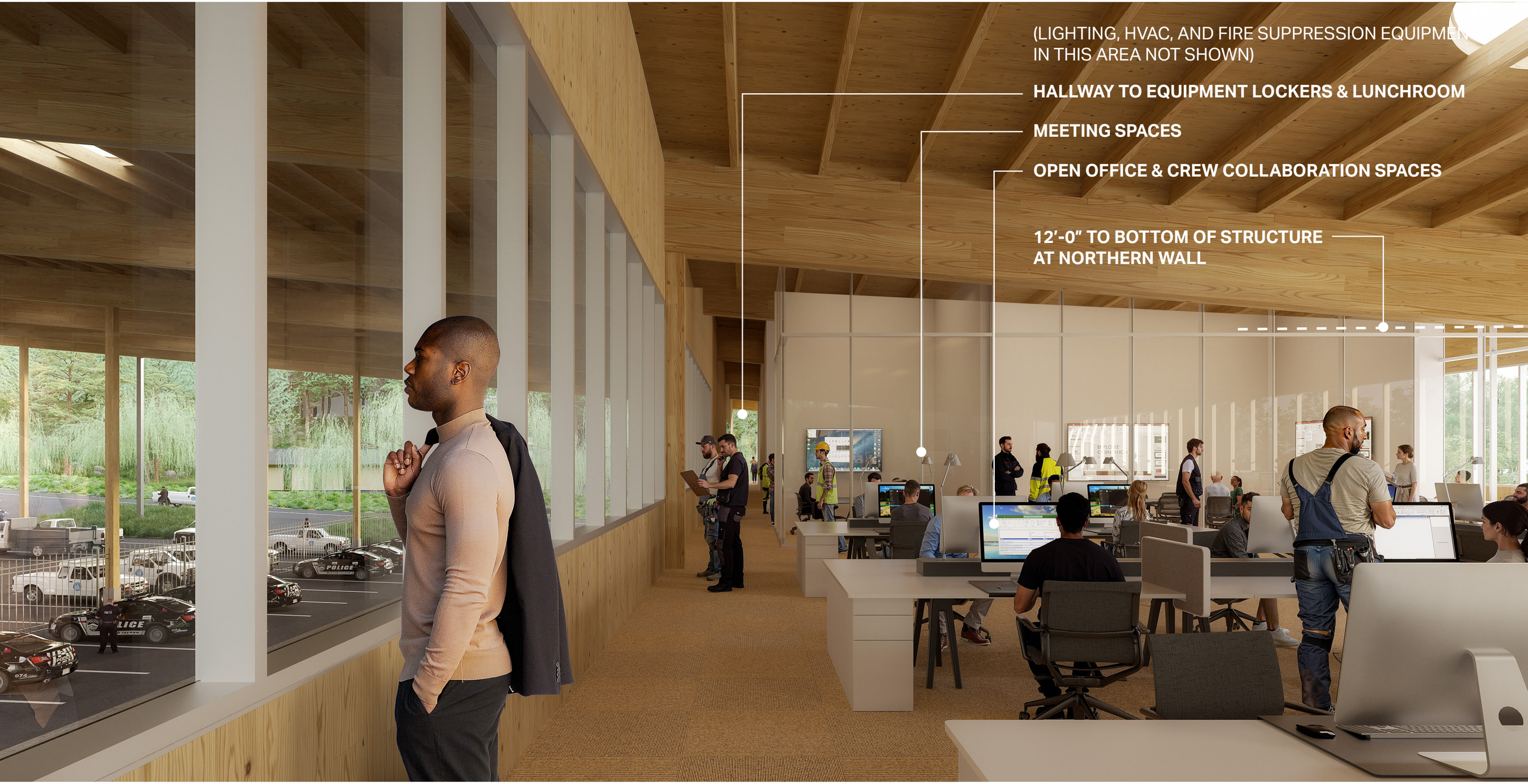
PROPOSED FLOOR PLAN: PUBLIC WORKS, IT, AND GIS DEPARTMENTS

Public Works, IT, and GIS departments on the second floor utilize 10,000 gross square feet (GSF) for dedicated meeting, office, and work stations, while utilizing the additional 6,400 GSF of shared workspaces on this floor on a daily basis.



FLOOR PLAN
1” = 20’

PHOTO RENDERING: PROPOSED INTERIOR VIEW OF THE PUBLIC WORKS OFFICES IN THE PSM BUILDING



OPERATIONS BUILDING PROGRAM

Unlike the PSM Building, which houses staff office and meeting spaces, the Operations Building is a two-story structure designed to house a wide range of operational functions for the Public Works department.

Operations Building Ground Floor

- A Warehouse for material, equipment, and tool storage.
- A workshop
- Warehouse and shop staff offices
- Cleanup, Restrooms, and Emergency Rinse Stations
- Emergency Operations Storage
- Building systems spaces

Operations Building Second Floor

- A high-bay structure to accommodate overhead gantries and the maintenance of vehicles on lifts
- Vehicle and equipment maintenance bays
- Maintenance Shop
- Cleanup, Restrooms, and Emergency Rinse Stations
- Maintenance and Yard Offices
- Indoor storage for oversize and expensive vehicles
- Indoor storage for select equipment

EXISTING CONDITIONS: THE PUBLIC WORKS WAREHOUSE

This photograph of the existing warehouse illustrates the storage challenges posed by this early 1980's facility. Relatively low ceiling clearances (12'-0") and eccentrically shaped rooms do not contribute to efficient storage or access.

EXISTING CONDITIONS: EMERGENCY OPERATIONS CENTER STORAGE

Emergency operations supplies are currently stored in an uninsulated shipping container located near the MICEC.

EXISTING CONDITIONS: LACK OF PROTECTION FOR EXPENSIVE VEHICLES AND EQUIPMENT

This photograph illustrates the expensive, and critical, city-owned vehicles—in this case a sewer VAC-Truck—that must be stored fully exposed to the elements, and to unnecessary wear.

KEEPING EXPENSIVE CITY-OWNED EQUIPMENT IN GOOD CONDITION

Adequate protection of Public Works Department VAC-Trucks offer an example of the need to protect expensive and essential operations vehicles from inclement weather.

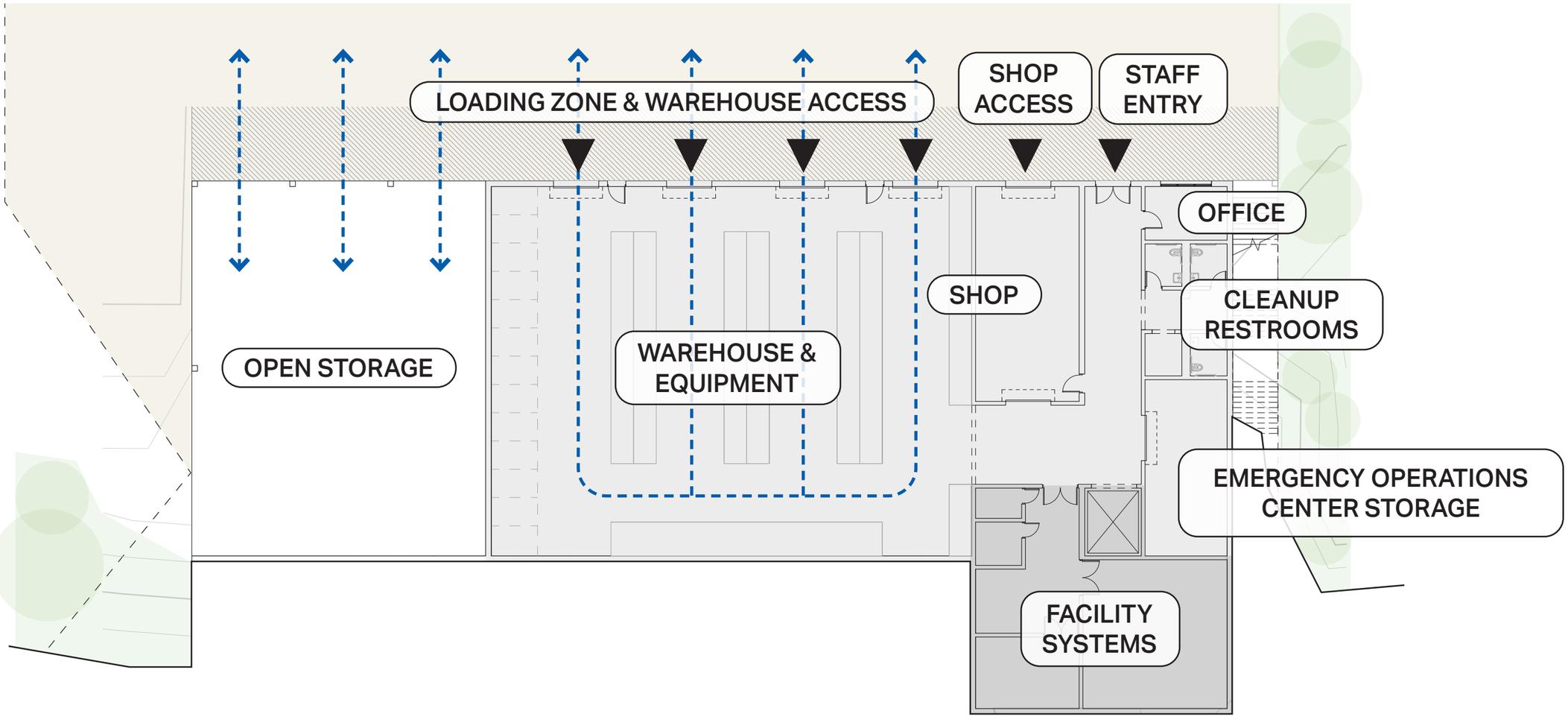
Heated storage prevents freezing damage:
Water is used in the operation of Vac-Trucks, and freezing temperatures can cause water in the tanks, pipes, valves, hoses, and other components, to freeze and expand. This expansion can lead to cracks, ruptures, and severe damage, resulting in costly repairs and downtime.

Maintaining Efficiency:
Cold weather affects the viscosity of fluids like engine oil and hydraulic oil. When these fluids become too thick, it can put extra strain on the truck's engine and hydraulic system, reducing their efficiency and reducing the lifespan of vehicle parts and components.

Extending truck lifespan:
Proper protection from the weather prevents long-term damage that can significantly shorten a Vac-Truck's lifespan.

PROPOSED FLOOR PLAN: OPERATIONS BUILDING GROUND FLOOR

The ground floor building area equals 10,000 gross square feet (GSF), with an additional 3,500 GSF of covered exterior storage. This floor houses the warehouse, workshop space, EOC storage, warehouse manager's office, and staff restrooms.



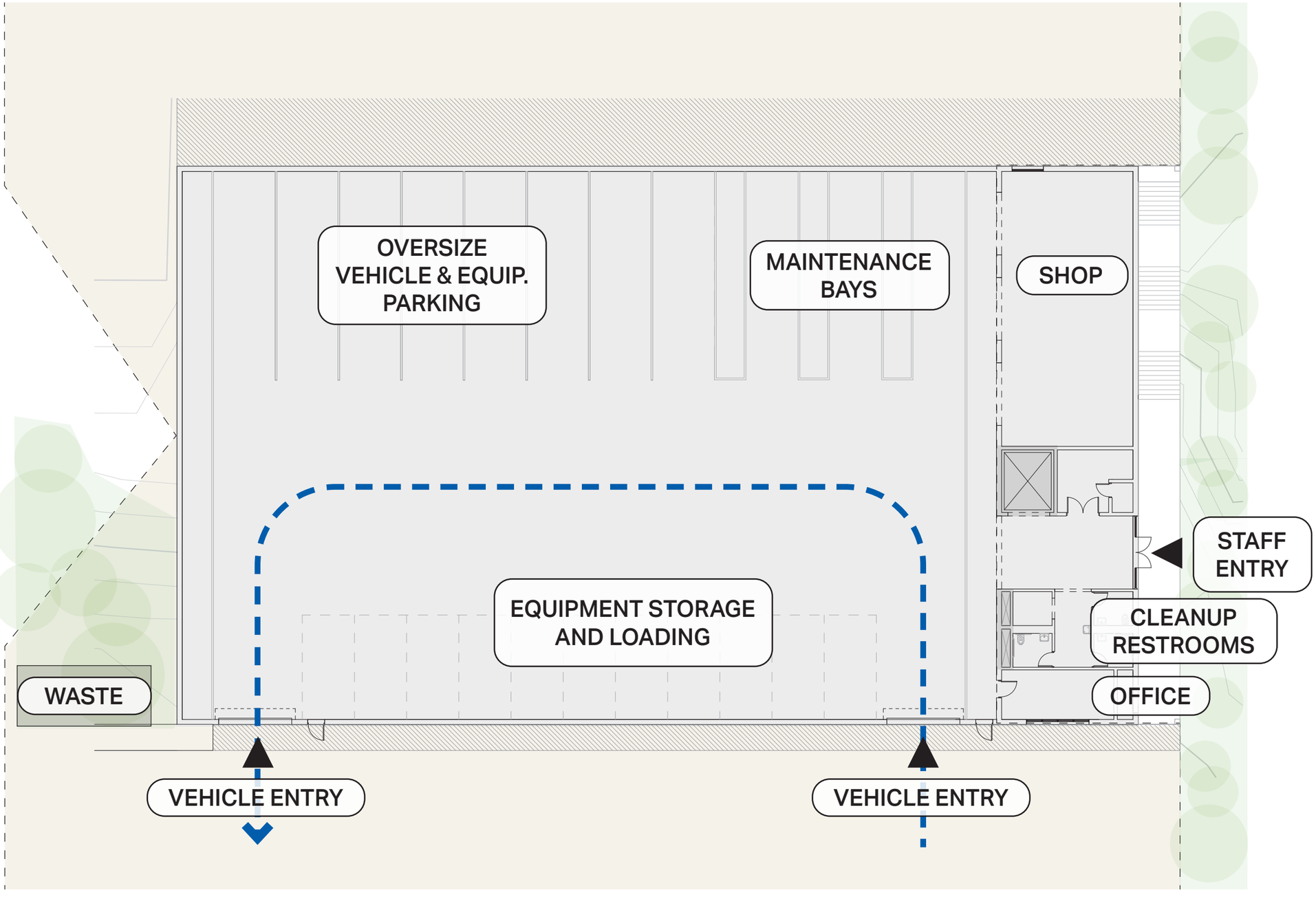
FLOOR PLAN
1" = 20'

PHOTO RENDERING: PROPOSED WAREHOUSE, WORKSHOP, AND MACHINE-SHOP SPACES

This view illustrates the interior of the warehouse within the Operations Building. Interior equipment, tool, and material storage spaces open directly onto covered exterior loading zones to promote efficient operations.

PROPOSED FLOOR PLAN: OPERATIONS BUILDING SECOND FLOOR

The second floor building area equals 19,000 gross square feet (GSF). This floor houses the high-bay vehicle and equipment storage, maintenance bays, maintenance shop, an operations office, and staff restrooms.



FLOOR PLAN
1” = 20’

PHOTO RENDERING: PROPOSED OPERATIONS BUILDING VEHICLE MAINTENANCE BAYS AND STORAGE AREA

Project Cost Estimate

PRELIMINARY COST ESTIMATE, FEBRUARY 4, 2025

A preliminary cost estimate was presented at the February 4, 2025 City of Mercer Island City Council Planning Session. That estimate identified a likely project budget range of $105,000,000 to $109,500,000.

PSM Facility	Basis	Cost Estimate Range	
		Low	High
Sitework	260,000 GSF	$ 25,500,000	
PSM Building	36,000 GSF	$ 29,000,000	$ 30,500,000
Operations Buildings	33,000 GSF	$ 19,000,000	$ 20,500,000
Phasing Premium	NA	$1,500,000	
Construction Cost (CC)		**$ 75,000,000**	**$ 78,000,000**
Soft Costs	30.00%	$ 22,500,000	$ 23,500,000
Subtotal Project		**$ 97,500,000**	**$ 101,500,000**
Sales Tax	10.20% on CC	$ 7,500,000	$8,000,000
Project Budget		**$ 105,000,000**	**$109,500,000**

PROGRAM NEEDS, SITE CONDITIONS, AND RELATED COSTS, APRIL 15, 2025

During the April 15, 2025 City of Mercer Island Council Meeting, the design team presented programmatic needs and related site constraints that were creating potential project cost increases.

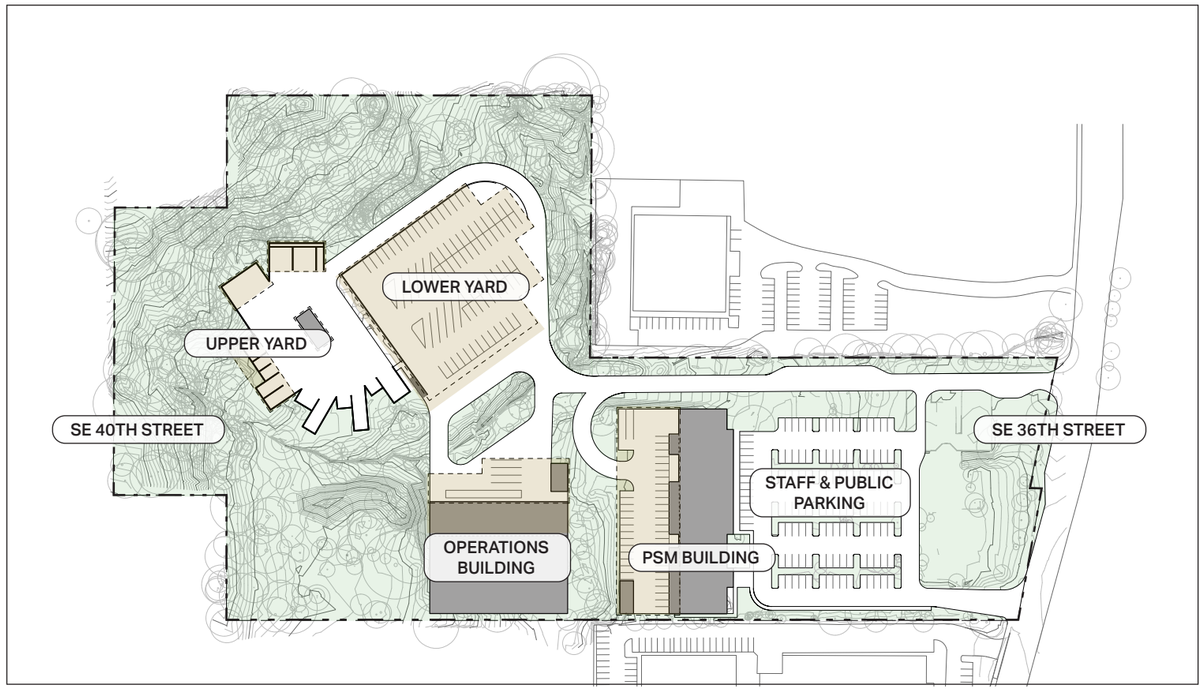
That presentation identified +/- $2,500,000 in estimated costs related to grade-cuts for site capacity ($3,800,000 fully loaded value), and between $1,000,000 and $2,000,000 in estimated costs related to the build-out of a concrete podium required for needed yard space ($1,500,000 to $3,000,000 fully loaded value).

Facility or Area	Basis	Cost Estimate Range	
		Low	High
Sitework	260,000 GSF	$ 25,500,000	
PSM Facility	36,000 GSF	$ 29,000,000	$ 30,500,000
Operations Facility	33,000 GSF	$ 19,000,000	$ 20,500,000
Phasing Premium	NA	$ 1,500,000	
Grade Cuts/ Retaining[3]		$ 3,800,000	
Concrete Podium[3]		$ 1,500,000	$ 3,000,000
Construction Cost (CC)		**$ 80,300,000**	**$ 84,800,000**
Soft Costs	30.00%	$ 24,000,000	$ 25,400,000
Subtotal Project		**$ 104,300,000**	**$ 110,200,000**
Sales Tax	10.20% on CC	$ 8,200,000	$ 8,600,000
Project Budget		**$ 112,500,000**	**$ 118,800,000**

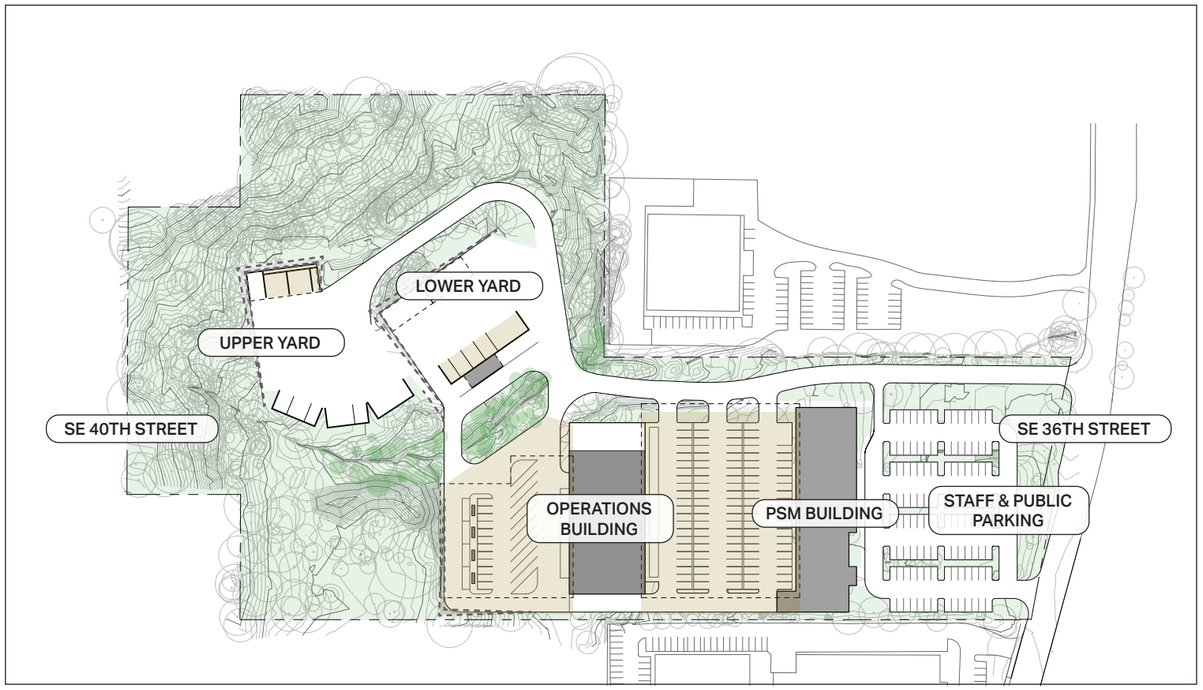
REORGANIZING THE PLAN, APRIL 15, 2025

During the April 15, 2025 City of Mercer Island Council Meeting, the Design Team presented, and the City Council approved, a proposal to reorganize the site to more efficiently locate buildings and site areas.

FEBRUARY 4, 2025



APRIL 15, 2025



City Council approval of the proposed site reorganization saved the City of Mercer Island between $7,500,000 and $9,300,000 and set the project on a path to realize further savings through continued Design Team work and a Value Engineering Review Process.

THIRD-PARTY VALUE ENGINEERING

An independent peer-review group was retained to conduct a value methodology-based review (aka value engineering) aimed at optimizing the PSM Facility design. The purpose of this value engineering review was to identify potential opportunities to enhance project efficiency and overall project value, such as reducing construction costs, improving facility performance, lowering long-term operating costs, reducing risk, and increasing sustainability.

This review was conducted over a four-week period and was done separately from the City's architectural and engineering team to ensure an unbiased assessment. This review resulted in several recommendations to reduce initial cost and a number of others that increased initial cost in service of lowering long-term operating costs or increase sustainability.

Only recommendations that reduced initial cost were reviewed for incorporation into the project design.

VALUE ENGINEERING COST SAVINGS

Seven recommendations were incorporated into the Schematic Design estimate.

Category & Description	Estimated Reduction
Site Development and Hazardous Waste Remediation Advance abatement/ remediation, demolition, and clearing of the existing City Hall building and site.	$ 222,352
Pedestrian Paving Omit portions of concrete sidewalk not directly tied to publicly accessible routes.	$ 25,742
Site Development Utilize cold-frame steel barrel vaults at materials storage in-lieu-of steel structured system.	$343,232
Water Supply Optimize hydrant layout and omit portions of 8” water main loop for reduced piping and trenching.	$121,654
Roof Construction Reduce square-footage of proposed roof by omitting roof covering over non-essential programmatic areas.	$628,091
Exterior Walls (lowering roof height) Lower roof height to minimum required, reduce square-footage of exterior wall surfaces and assemblies.	$282,603
Exterior Windows Reduce exterior window system sizes to meet storefront criteria (rather than curtain wall criteria), reduce glazing surface square-footage and assembly components	$969,910
Total Estimated Cost Reduction Incorporated	**$ 2,593,584**

Notes:

1. Estimated reduction values include Hard Construction Costs, Project Soft Costs, and State and Local Taxes.

CONSTRUCTION COSTS ESTIMATE SUMMARY

STRUCTURES SUMMARY

Category	Cost Estimate
Substructure	$ 1,208,010
Shell	$ 18,035,376
Interiors	$ 3,905,376
Services	$ 9,779,254
Equipment and Components	$ 205,595
	$ 33,133,360
General Requirements	$ 2,485,002
	$ 35,618,362
Design & Estimating Contingency	$ 3,918,020
Construction Contingency	$ 1,186,091
	$ 40,722,473
General Conditions	$ 2,850,572
Liability Insurance	$ 407,225
Payment & Performance Bond	$ 407,225
Overhead Profit & Fee	$ 2,496,018
	$ 46,883,513
Escalation to Q2 of 2027	$ 4,208,391
	$ 51,091,904
Rainwater/ Potable Storage & Use	$ 551,898
Total Estimated Costs	**$ 51,643,802**

SITEWORK SUMMARY

Category	Cost Estimate
Site Preparation	$ 1,208,010
Site Improvements	$ 7,470,217
Site Mechanical Utilities	$ 2,016,400
Site Electrical Utilities	$ 1,651,283
	$ 14,678,665
General Requirements	$ 1,097,730
	$ 15,776,395
Design & Estimating Contingency	$ 1,730,754
Construction Contingency	$ 532,947
	$ 18,031,096
General Conditions	$ 1,259,218
Liability Insurance	$ 179,888
Payment & Performance Bond	$ 179,888
Overhead Profit & Fee	$ 1,102,596
	$ 20,752,686
Escalation to Q2 of 2027	$ 1,859,024
	$ 22,611,710
Advance Demolition/ Remediation	$ 907,812
Total Estimated Costs	**$ 23,519,522**

SOFT COSTS ESTIMATE SUMMARY

Category	Basis % of Construction Budget, Calculated or Provided[1]	Cost Estimate
Permits, Inspections, & Testing	2.90%	$ 2,179,736
Design & Engineering	12.00%	$ 9,019,599
Furniture, Fixtures & Equipment	3.50%	$ 2,630,716
Information Technology	.93%	$ 700,000
Administrative & Project Management	2.66%	$ 2,011,257
1% for Art	1.00%	$ 739,633
Legal	.21%	$ 155,000
Project Contingency	5.00%	$ 3,758,166
Total Estimated Soft Costs	**28.20%**	**$ 21,194,108**

SCHEMATIC DESIGN COST ESTIMATE SUMMARY

Facility or Area	**Basis** Area or Percentage	**Cost Estimate**
Sitework Hard Costs	473,818 GSF	$ 23,519,522
Facilities Hard Costs	67,810 GSF	$ 51,643,802
Construction Budget		**$ 75,163,324**

Project Soft Costs[2]	28.20%	$ 21,194,108
Subtotal Project Budget		**$96,357,432**

Sales Tax	10.20%	$ 7,544,644
Project Budget		**$ 103,902,076**

Notes:

1. GSF = Gross Square Feet.
2. See Project Soft Cost Summary for additional information.

Mercer Island Public Safety and Maintenance Facility