



Philadelphia International Airport (PHL) Northeast Philadelphia Airport (PNE)

Milton Robinson – Interim Vice-President of Facilities Maintenance

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City of Philadelphia,
Department of Aviation



PHILADELPHIA INTERNATIONAL AIRPORT
NORTHEAST PHILADELPHIA AIRPORT



Department of Aviation's 'Facilities Maintenance'



PHLPNE

PHILADELPHIA INTERNATIONAL AIRPORT
NORTHEAST PHILADELPHIA AIRPORT

Who We Are



The PHL Facilities Maintenance Unit is responsible for maintaining the Airport's 3.3 million square foot terminal complex that operates 24/7 and is located on a 2,599-acre site.

Other Facilities Quick Facts

- about 910 Acres of airfield pavement requiring maintenance and snow removal
- about 1000 Acres of grass to cut
- about 70 lane miles of roadway and parking lots to maintain and plow
- over 1.1 M SF of terrazzo to maintain
- over 430,000 SF of carpet
- approximately 750,000 SF of glass to clean
- 47 sets of public restrooms (men's, women's, family care)
- 3 thermal plants with total 8 boilers (500-750 HP each = 55 MW) and 10 chillers (1200-2000 tons each = 55.4 MW)
- about 325 air handling units total on rooftops and about 120 units in mechanical rooms
- about 130 cabinet unit/garage door heaters
- over 200 exhaust fans
- 3 high voltage substations (13,200 V)
- 3 field lighting vaults
- over 7000 airfield lights and 441 lighted signs
- about 110 elevators, 56 escalators and 26 moving walkways maintained under contract
- Over 9,000 fire alarm points/devices
- about 1200 CCTV cameras and over 1300 Access Controlled Doors
- about 1000 PA speakers, 160 zones and 180 Mic Stations

Who We Are



MAINTENANCE ADMINISTRATION

Handles purchasing, invoices, snow weather related documentation, the maintenance contract with FMC, budget record keeping, all facility related uniforms, as well as clerical support for all our facility shops, and Job Control

BUILDING MAINTENANCE

All physical building and general maintenance requirements – plumbing, building equipment, fencing, doors/locks, carpentry, painting and signage

UTILITY MAINTENANCE

Building management systems, thermal plants and HVAC mechanical systems

ELECTRICAL SERVICES

Both high and low voltage electrical distribution and equipment for the terminal complex, roadways and airfield lighting systems

ELECTRONIC SERVICES

Special systems such as fire alarm, access control hardware, CCTV hardware, flight information displays, public address systems, surface sensors and CO/NOx detection equipment

PAVEMENT & GROUNDS

All exterior cleaning and clearing functions such as exterior trash removal, power washing, grass cutting and snow removal as well as pavement maintenance

CUSTODIAL SERVICES

Housekeeping, window washing and interior cleaning functions in the public circulation and common use areas, as well as the City Administrative Offices

CENTRAL SUPPLIES & SERVICES

Manages ordering, storing, inventorying and distribution of materials and supplies necessary to operate and maintain PHL & PNE. This function is performed in conjunction with Finance for inventory control.

Who We Are



Maintenance Administration

- Facilities Manager, Assistant Facilities Managers
- Clerical Staff
- Maintenance Coordinators - Job Control (call and work order center)
- Staff Engineers - FMC Contract Administration
- Liaison to City Office of Fleet Management
- FY24 Budget \$30.7M (not including staff) – mostly Facilities Maintenance Contracts (FMC)

Who We Are



Building Maintenance

- Building Maintenance Mechanics – plumbing, doors, locks, signs, pumps, fence
- Painters - airfield, roadway and terminal interior
- Carpenters, Brick Mason, Sign Fabricators
- 38 current staff
- FY24 Budget \$1.06M (not including staff)

Utility Maintenance

- HVAC Mechanics – air handlers, door heaters, temperature controls, pumps
- Stationary Engineers – thermal plants (chillers, boilers, pumps)
- 26 current staff
- FY24 Budget \$822K (not including staff)

Who We Are



Electrical Services

- Electricians – electrical distribution, substations, airfield lights and signs, interior and exterior lighting, electrical motors and operators
- 19 current staff
- FY24 Budget \$820K (not including staff)



Electronic Services

- Electronic Technicians – fire alarm, access control, CCTV, FIDS monitors, PA system, CO/NOx detection, pavement surface sensors
- 22 current staff
- FY24 Budget \$894K (not including staff)



Who We Are



Custodial Services

- Custodial Workers
- Window Washers
- Semi-skilled Laborers
- 200 current staff
- FY24 Budget \$2.24M (not including staff)



Pavements & Grounds

- Equipment Operators – grass cutters, snow equipment, trash truck, loaders, dump trucks, bucket trucks
- Semi-skilled Laborers
- 65 current staff
- FY24 Budget \$790K (not including staff)



Who We Are



Central Supplies & Services

- Stores Workers
- Semi-skilled Laborer
- Equipment Operator
- 13 current staff
- FY24 Budget \$232k (not including staff)

What We Do



Pavement & Grounds

Pavement and Grounds (P&G) work is accomplished through a staff of trades person and other skilled employees. Among its many activities is the responsibility of the snow removal equipment.

During a major winter storm event, PHL deploys more than 200 pieces of heavy equipment including snowplows, backhoes, loaders, brooms, snow blowers and chemical trucks.

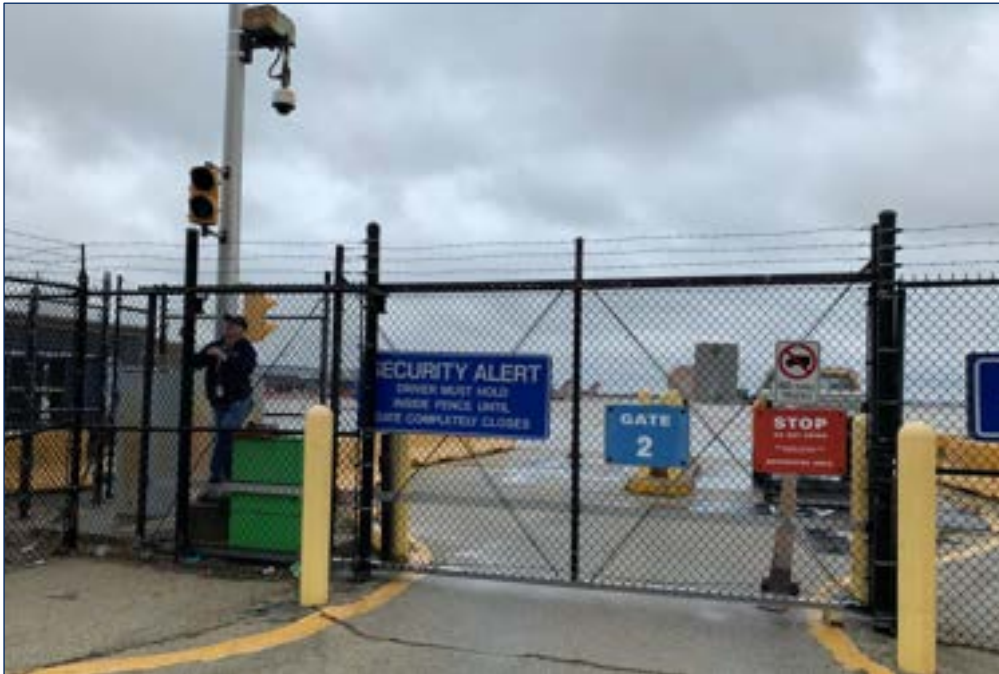


What We Do



Building Maintenance

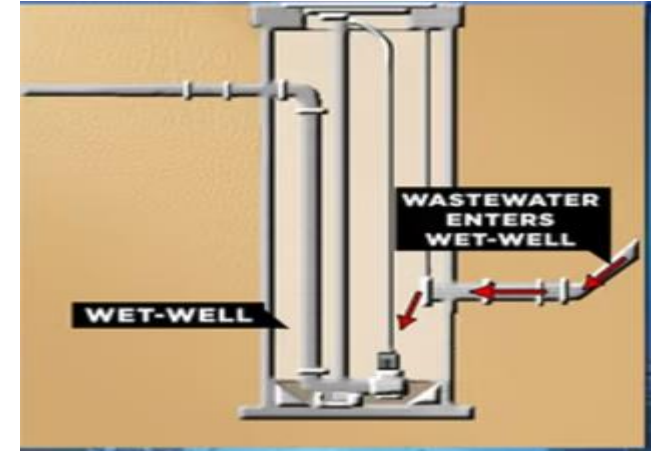
The Building Maintenance unit includes, building maintenance, carpentry, sign shop, lock shop and paint shop. Among its many responsibilities are maintaining the plumbing throughout the facility including all public restrooms, doors, locks, signage, vehicle gates, painting, passenger seating and many other items.



What We Do



Building Maintenance



What We Do



HVAC

The HVAC unit is charged with maintaining the climate within the facility, including outlying buildings. They control and maintain 450 air handlers, 130 cabinet unit, garage door heaters and space heaters as well as over 200 exhaust fans. They also maintain over 50 stand alone and split AC systems.



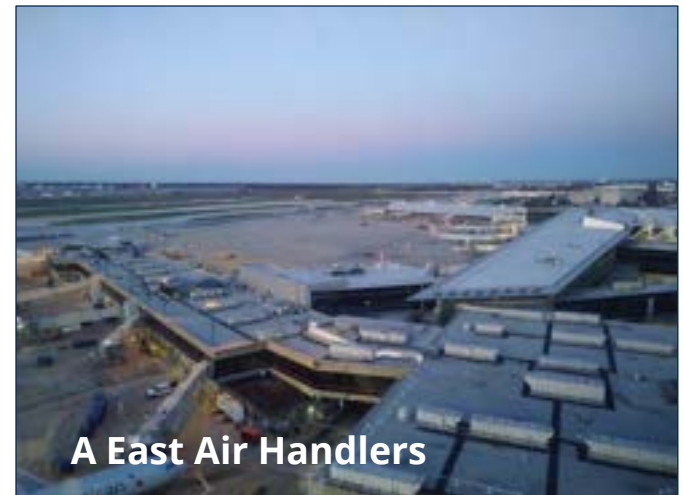
Central Utilities Building (CUB)



Terminal E
Hydronic Piping



Tunnel Exhaust Fan



A East Air Handlers

What We Do



Electrical Services

The Electrical Services Department is responsible for power distribution throughout the facility. Their primary focus is on Airfield Lighting. They also maintain the lights throughout the Terminals including Ramp Lights and Street Lights. In addition, they maintain the emergency generators and perform high voltage switching, as needed.

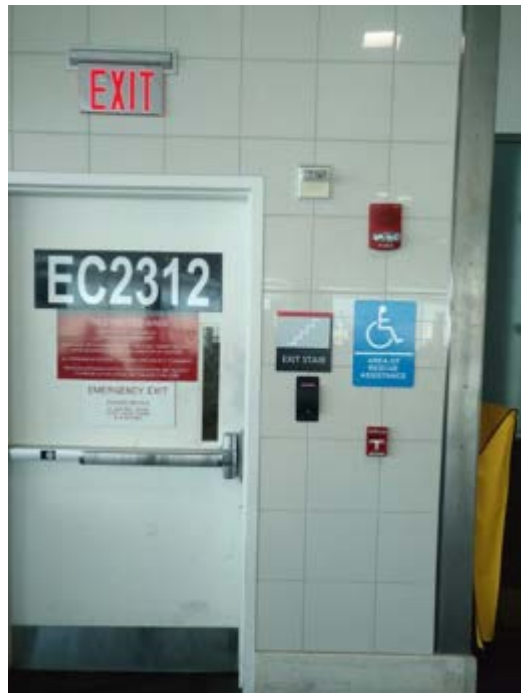


What We Do



Electronic Services

The Electronics Department is responsible for maintenance of the Airport's extensive systems for Access Control, Fire Alarm, PA System, Analog Closed-Circuit Television System and Multi-User Flight Information Monitors.

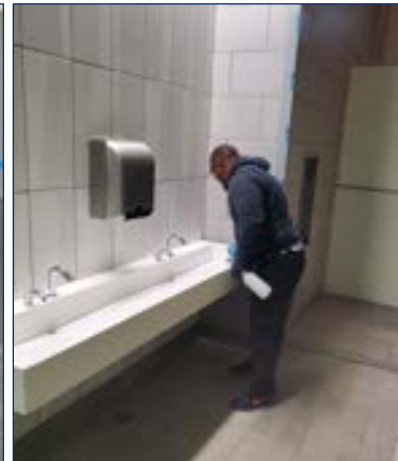
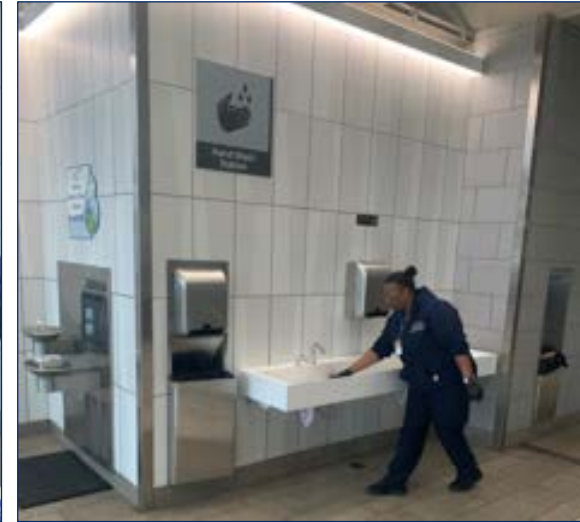


What We Do



Custodial Services

Custodial Services mission is to work diligently to provide our customers with superior service during their time spent at Philadelphia International Airport. We are committed to working together, with other agencies to provide PHL with the highest quality of cleanliness, restroom care and excellent customer service.



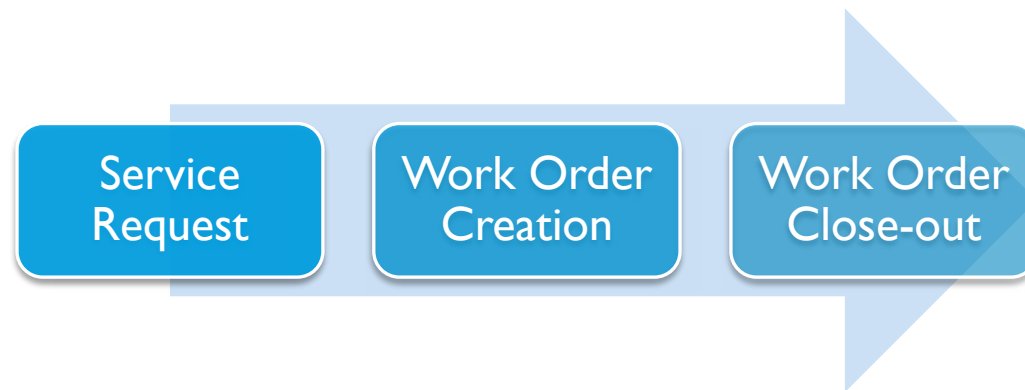
What We Do



Job Control

Job Control is your gateway for resolving Facilities-related issues at Philadelphia International Airport. We seek to improve the Airport experience for our passengers, stakeholders, and employees by immediately addressing maintenance and safety concerns as we receive them.

Our Maintenance Coordinators are equipped with the knowledge and resources to promptly diagnose problems, dispatch the appropriate maintenance crews to address those problems, and keep the Airport running smoothly and efficiently.



What We Do



Facilities Maintenance Contract (FMC)

In addition to these in-house capabilities, the Facilities Maintenance Unit also manages a facilities maintenance contract totaling almost \$28M annually. This contract supports specialty facility maintenance functions not performed by in-house staff such as elevators/escalators/moving walkways, glass, roof, boilers, chillers, switch gear, fire alarm testing, fire protection, runway rubber removal and landscaping as well as passenger transfer vehicles.



What We Do



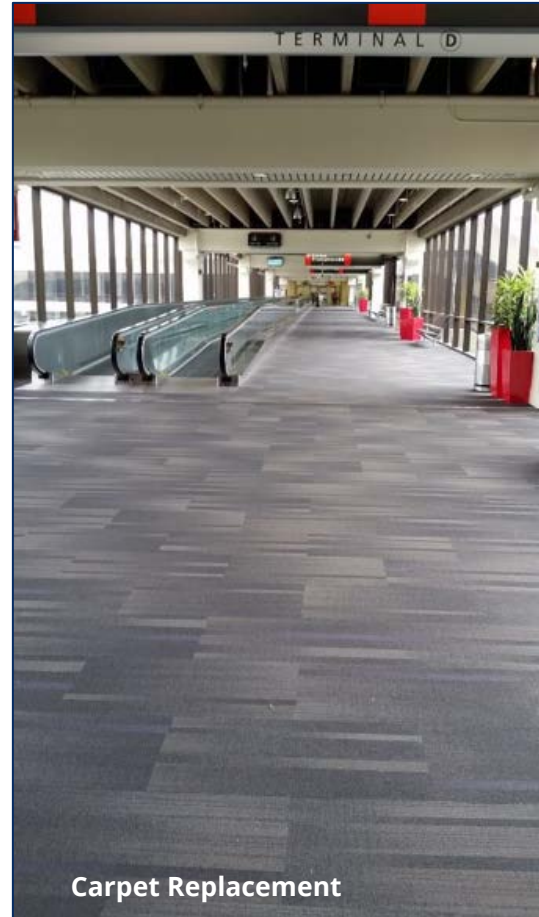
Facilities Maintenance Contract (FMC)



PTV's



Refurbishing Moving Sidewalks



Carpet Replacement



Landscaping

What We Do



Facilities Maintenance Contract (FMC)

Runway Surface Rubber Removal



Where We Are

