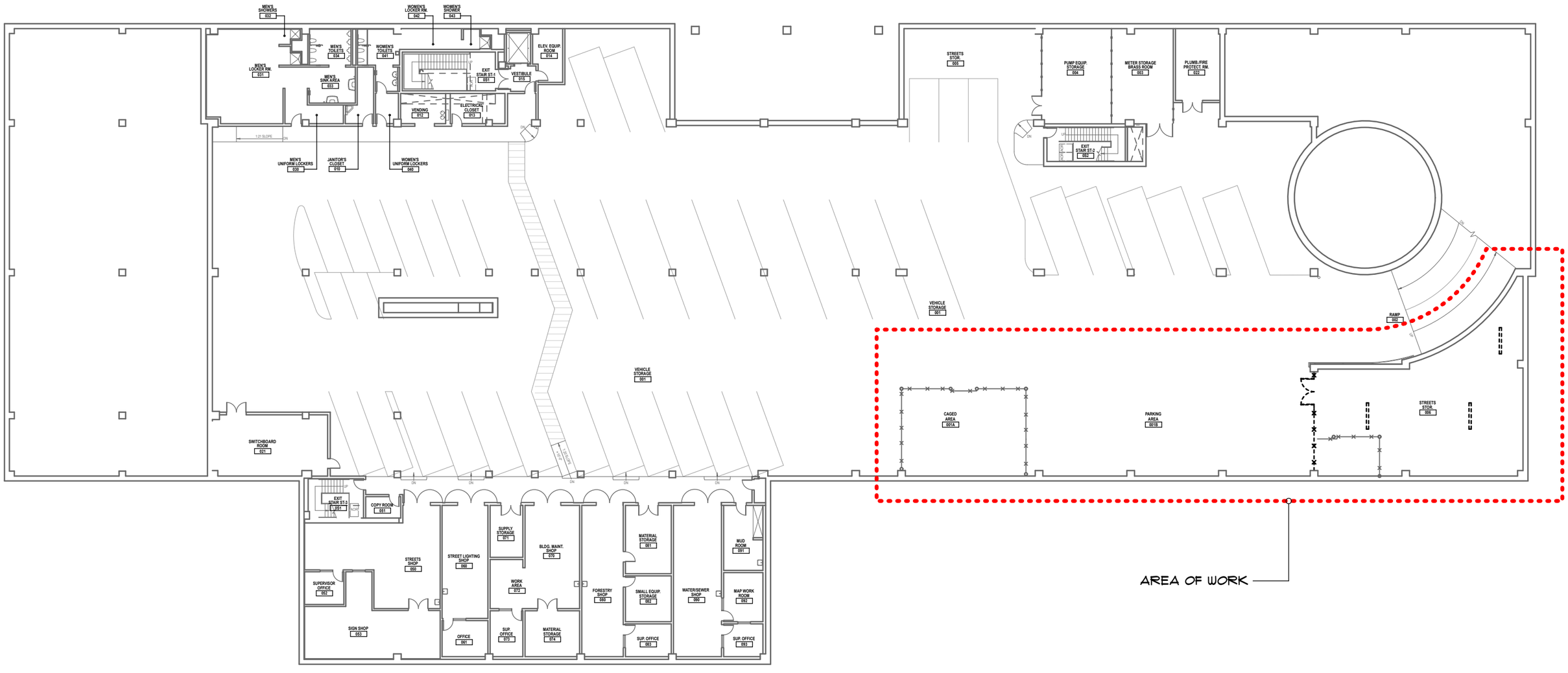
STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



N

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

Actual size to read at scale
2 IN
1 IN
0 IN

OAK PARK PUBLIC WORKS FACILITY
COMPOSITE BASEMENT PLAN

SCALE: 1" = 30'

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

Sketch Title/Subject:
COMPOSITE BASEMENT PLAN

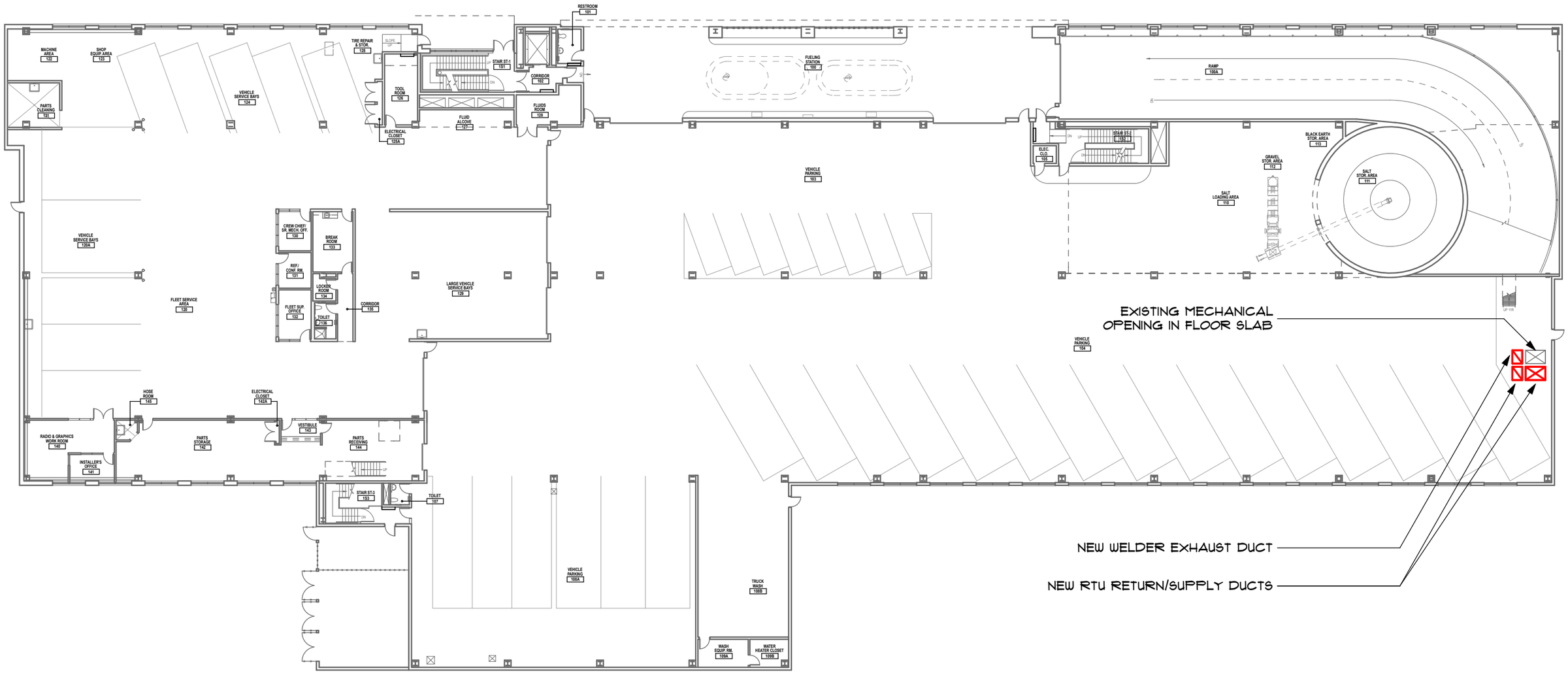
Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK1.0

STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



Actual size to read at scale
2 IN
1 IN
0 IN

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

N

OAK PARK PUBLIC WORKS FACILITY
COMPOSITE FIRST FLOOR PLAN

SCALE: 1" = 30'

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

Sketch Title/Subject:
COMPOSITE FIRST FLOOR PLAN

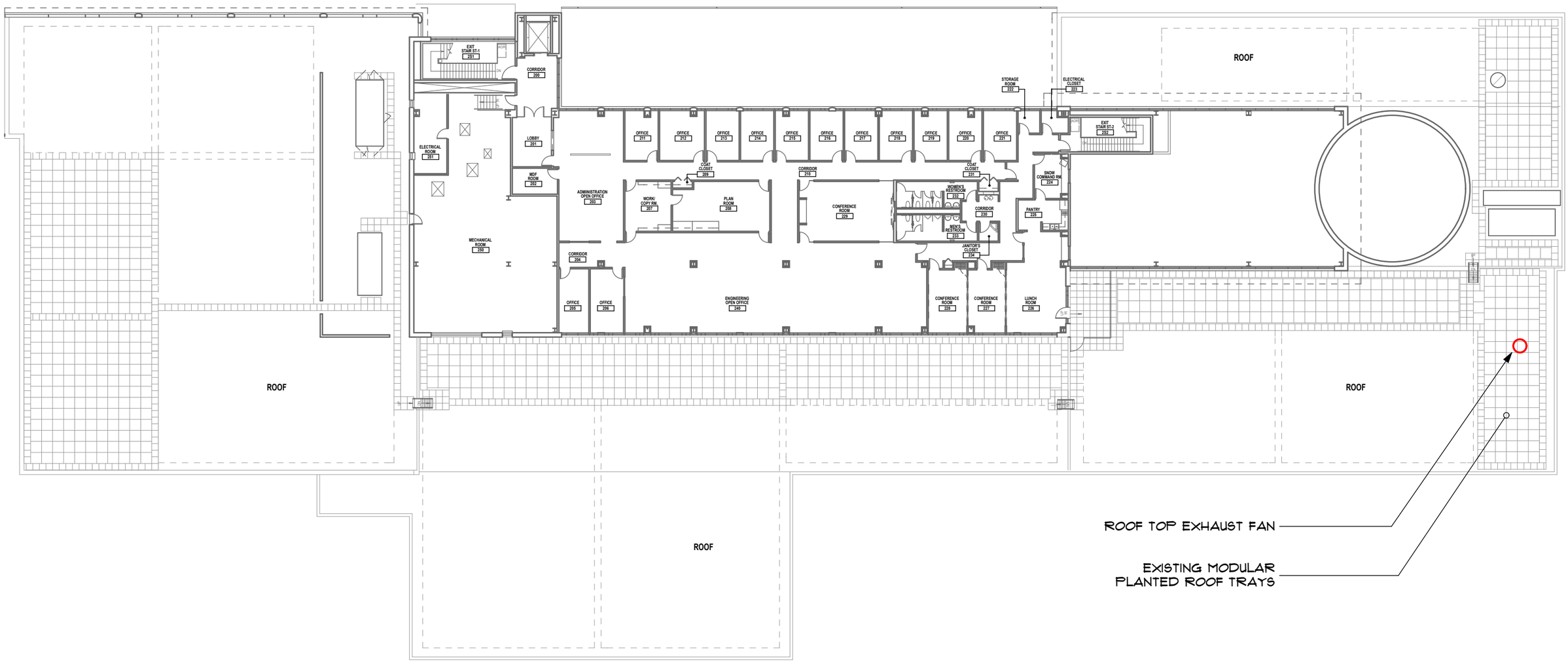
Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK1.1

STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



N

2 IN
Actual size to read at scale
1 IN
0 IN

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

OAK PARK PUBLIC WORKS FACILITY
COMPOSITE SECOND FLOOR/ROOF PLAN

SCALE: 1" = 30'

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

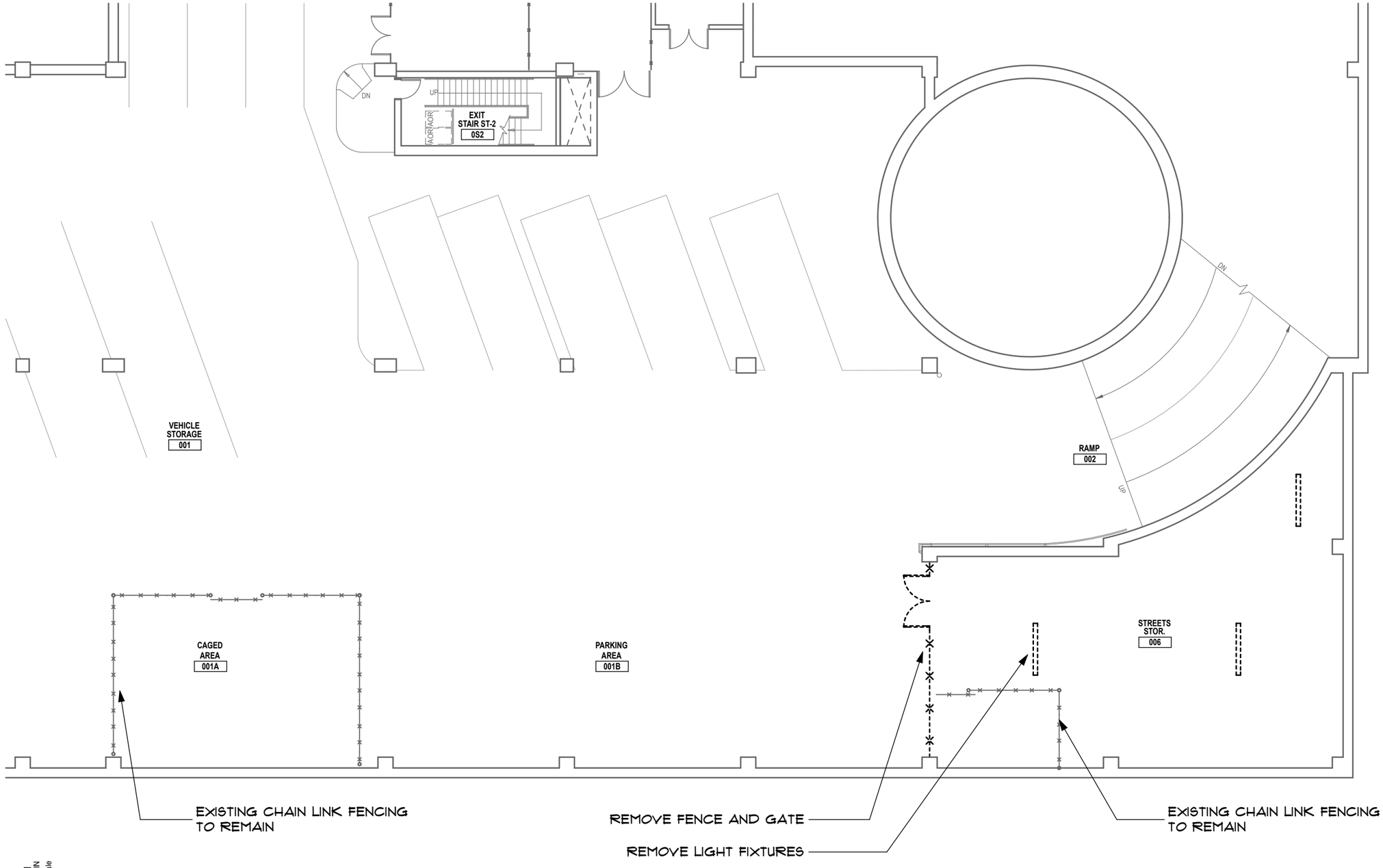
Sketch Title/Subject:
COMPOSITE SECOND FLOOR/ ROOF PLAN
Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK1.2

STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



Actual size to read at scale
2 IN
1 IN
0 IN

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

N

DEMOLITION PLAN

SCALE: 1/16" = 1'-0"

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

Sketch Title/Subject:
DEMOLITION PLAN

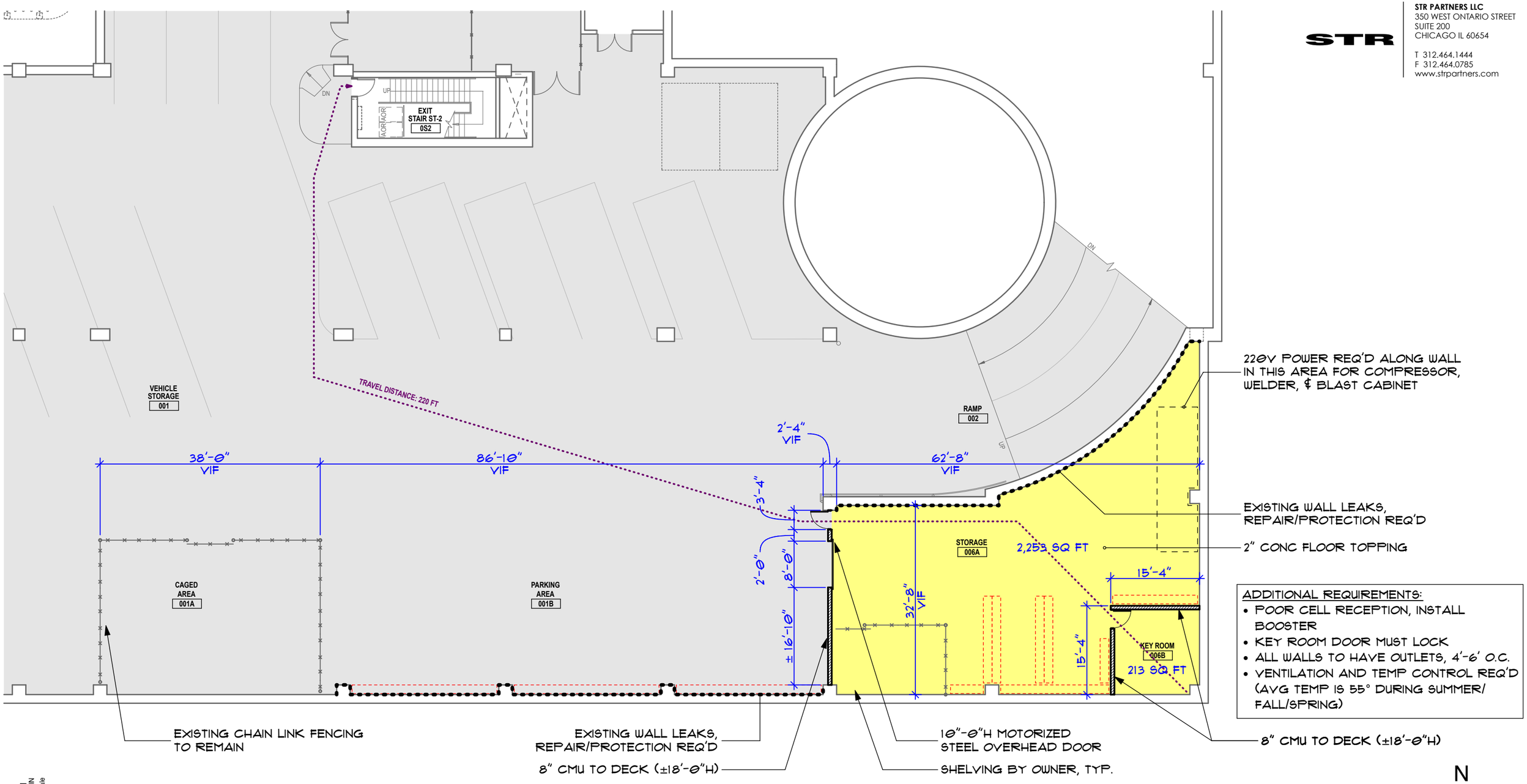
Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK2.0

STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



ADDITIONAL REQUIREMENTS:
- POOR CELL RECEPTION, INSTALL BOOSTER
- KEY ROOM DOOR MUST LOCK
- ALL WALLS TO HAVE OUTLETS, 4'-6' O.C.
- VENTILATION AND TEMP CONTROL REQ'D (AVG TEMP IS 55° DURING SUMMER/ FALL/SPRING)

N

2 IN
Actual size to read at scale
1 IN
0 IN

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

CONSTRUCTION PLAN

SCALE: 1/16" = 1'-0"

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

Sketch Title/Subject:
CONSTRUCTION PLAN

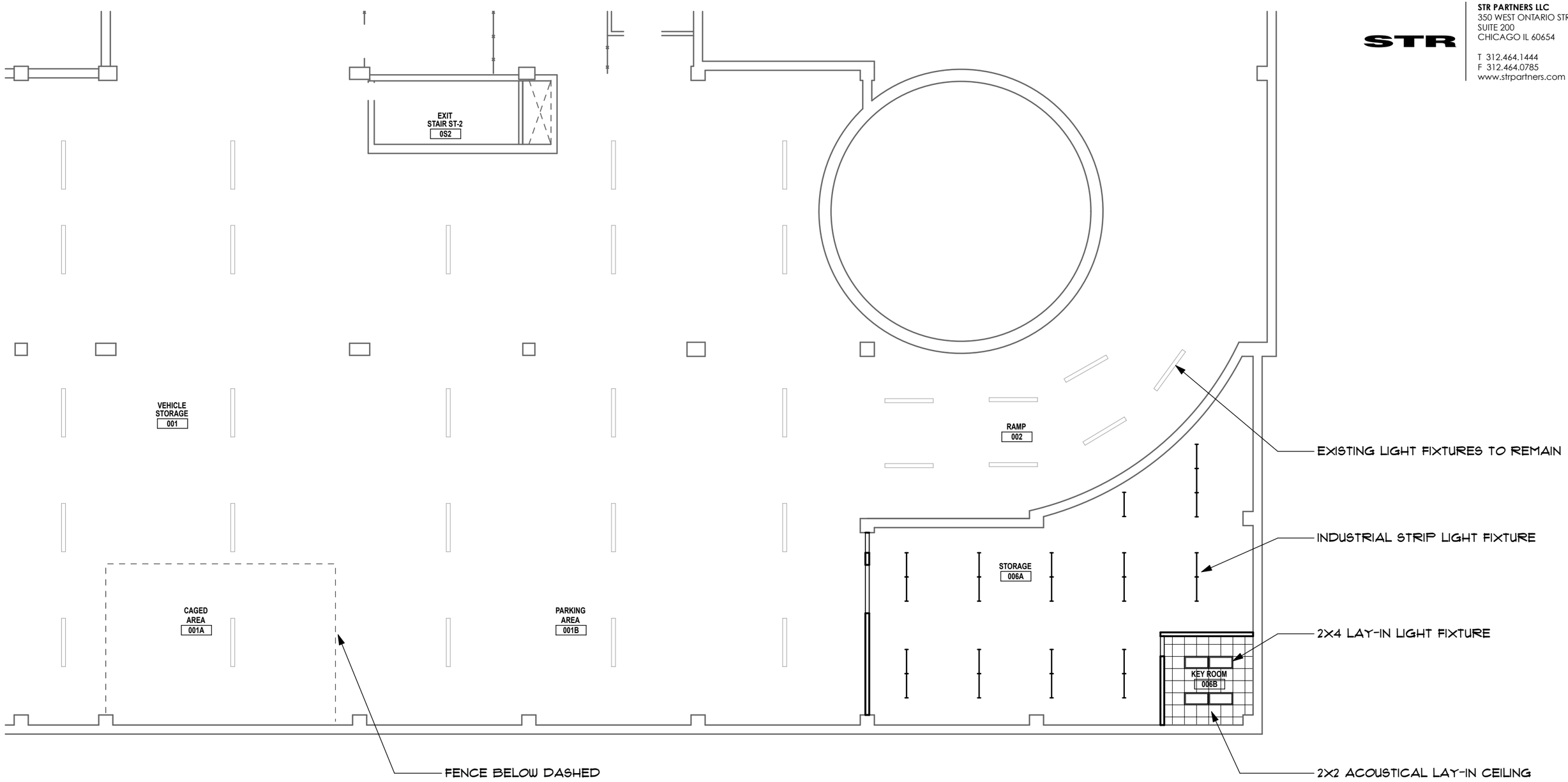
Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK2.1

STR PARTNERS LLC
350 WEST ONTARIO STREET
SUITE 200
CHICAGO IL 60654

T 312.464.1444
F 312.464.0785
www.strpartners.com



N

2 IN
Actual size to read at scale
1 IN
0 IN

IN-PROGRESS
NOT FOR CONSTRUCTION
9/29/17

REFLECTED CEILING PLAN

SCALE: 1/16" = 1'-0"

Project Name/Location:
D97 MAINTENANCE DEPARTMENT RELOCATION RENOVATION
201 South Boulevard
Oak Park, IL 60302

Sketch Title/Subject:
REFLECTED CEILING PLAN

Sheet Reference: n/a
Scale: AS NOTED
Date: 9/29/17

Issue For:
PRICING

Sketch No.
ASK2.2

HVAC, PLUMBING, FIRE PROTECTION, AND ELECTRICAL DESIGN AND PERFORMANCE CRITERIA

FOR

MAINTENANCE BUILDING AT

OAK PARK SCHOOL DISTRICT 97
OAK PARK, ILLINOIS

Architect:

STR Partners, LLC

350 W. Ontario Street, Suite 200

Chicago, IL 60654

Prepared By:

CS2 Design Group, LLC
837 Oakton Street
Elk Grove, IL 60007

September 29, 2017

HVAC SYSTEM

General

- The building's HVAC system shall be designed to meet the following minimum requirements at extreme design days based on ASHRAE documented environmental conditions for the building geographical location.

LOCATION	HEATING	COOLING	HUMIDITY
Parking area	50°F	NA	NA
Storage & Key Room	68°F	74°F	55%

Parking Area

- The parking area is ventilated by an existing electric heating, energy recovery, 100% outdoor air, air handling unit, that is to remain. This area is monitored by existing carbon monoxide sensors.
- The exhaust ductwork and associated grilles that are currently located within the existing storage space shall be relocated out of the storage and into the parking area. Carefully remove existing diffusers/grilles and store in a protected area for reinstallation. Remove entire existing 64X28 exhaust ductwork up to duct drop through the floor. Extend 64X28 ductwork out of storage room and into parking area (approx. 250'). Reinstall exhaust grilles at new location outside of storage room.
- Remove, retain and reinstall existing electric unit heater and thermostat, as required, in parking area. Extend power wiring to relocated unit. For additional information, refer to electrical.

Storage Room

- Carefully remove existing electric unit heater located in proposed storage room and relocate to parking area.
- Provide a new heating, cooling, and ventilation rooftop unit manufactured by Carrier Model#50HC (or equal). Rooftop unit shall be (approx.) 7.5 ton, 3000 cfm, high efficiency, 38KW electric heating, horizontal discharge, rooftop unit. Provide with power exhaust and building pressure sensor. Provide with outdoor air economizer with fault detection and diagnostics for ventilation. The unit shall be controlled by a Venstar model# T4900 programmable wall mounted thermostat. Rooftop unit shall meet all International Energy Conservation Code-2015 requirements.
- Option 1 – Locate rooftop unit on second floor roof. Provide an 18" high, insulated, prefabricated roof curb. Coordinate exact location with architect and owner. Provide Qduct (or equal) premanufactured and insulated exterior ductwork on four-sided ductwork supports, secured to the roof. Main ducts shall be routed down through the 1st floor in duct shafts (locations to be determined) to basement ceiling space.
- Option 2 – Locate rooftop unit on grade. Remove existing trees and shrubs (by others) to accommodate rooftop unit. Coordinate exact location with architect and owner. Provide concrete pad for mounting unit. Provide Qduct (or equal) premanufactured and insulated exterior ductwork on four-sided ductwork supports, secured to building. Main ducts shall be routed down through the building in duct shafts (or window wells - locations to be determined).
- Option 3 – Provide sound reducing, acoustical screening around rooftop unit. Maintain unit's air flow clearances and service clearances.

- Insulated supply and return ductwork (approx. 30X16) shall be mounted as high as possible along the back wall of storage room. Provide sidewall supply registers for distribution. Insulated return ductwork to be routed to a central return grille.
- An existing portable type air compressor shall be provided, piped and installed by the owner.
- An existing welder unit shall be provided by the owner. Provide a source capture extraction exhaust arm at the welding table. Provide exhaust ductwork and route up to roof in a ductwork shaft (at similar location as ventilation ductwork). Provide a Greenheck Model# SWB utility set exhaust fan (or equal) on roof, a minimum of 10'-0" away from any outdoor air intake locations. Provide roofing rails for mounting. Coordinate exact location with architect and owner. Additional make-up air shall be provided if required and shall be determined as design is finalized.
- An existing blast cabinet unit shall be provided by the owner. The owner shall provide and pipe, regulators, filter dryer, etc. any required compressed air devices to the blast cabinet.

Key Room

- Supply and return ductwork shall be routed to diffusers to condition this room. Provide 2'x2', ceiling mounted, thermally operated VAV supply diffuser(s), Acutherm Model# HC-TF (or equal). Provide a single return grille and duct to return main duct.

PLUMBING SYSTEM

- Provide (2) new hose bibs in the proposed new district parking area for vehicle wash downs. New hose bibs will have new cold water lines routed overhead to the existing north parking area to connect to the existing 1" cold water lines that supply existing hose bibs on columns C,10 and C,12.

FIRE PROTECTION SYSTEM

- Existing upright and/or existing pendent sprinkler heads in area of work to be modified as required for new wall configuration, new storage shelving, new overhead door, new equipment, etc. New sprinkler heads to be upright at areas of open structure (no lay-in ceiling), sidewall as require for overhead door and semi-recessed pendent in areas of lay-in acoustical ceilings. Adequate coverage will be provided under any ductwork that exceeds 48 inches in width.

ELECTRICAL SYSTEM

General

- Provide commissioning per 2015 International Energy Conservation Code.

Exterior

- Tap existing ComEd transformer and provide new 400 amp C/T cabinet (NEMA 3R) with main disconnect and self-contained ComEd approved meter; exact location per ComEd direction. From ComEd transformer to C/T cabinet, assume a length of thirty (30) feet w/ 3#600kcmil, 1#2GRD, 3-1/2"C. From C/T cabinet, assume a length of three-hundred feet w/ 3#600kcmil, 1#2GRD, 3-1/2"C. to new electrical distribution equipment in basement cage area. Estimated ComEd cost to be approximately five-thousand dollars ($5,000); this does not include the secondary feeders to new C/T cabinet then to new cage area – this will be work performed by the Electrical Contractor.

Parking Area

- Reinstall existing relocated electric unit heater (with associated equipment/components i.e. disconnect switch, nitrogen dioxide sensor, carbon monoxide sensor, and carbon dioxide sensor). Intercept and extend existing feeder (3#4, 1#8GRD, 1"C.) to new location – coordinate with Mechanical Contractor. Intercept and extend existing raceways for sensors to new locations – coordinate with Mechanical Contractor.
- At cage area, provide electrical equipment:
  - One (1) new 480Y/277V, 24-pole, 400 amp, main circuit breaker panel.
    - Provide one (1) 70A-3P C/B for 45kVA transformer.
    - Provide one (1) 80A-3P C/B for RTU.
    - Provide one (1) 15A-3P C/B for exhaust fan.
    - Provide one (1) 20A-1P C/B for lighting.
    - Provide blanks for remaining spaces for future.
  - One (1) new 45kVA transformer. NEMA 3R.
    - For primary side, provide 3#4, 1#8GRD, 1-1/4"C.
    - For secondary side, provide 4#1/0, 1#6GRD, 2"C. and separate 1#6, 3/4"C. for grounding.
  - One (1) new 208Y/120V, 30-pole, 150 amp, main circuit breaker panel.
    - Provide twenty-four (24) 20A-1P C/Bs.
    - Provide blanks for remaining spaces for future.

  ***Grounding for all electrical equipment as required per NEC.

Storage Room

- Demo existing receptacles and feeders. Re-feed any downstream items that remain outside of D97 space as required. Blank-off junction boxes at wall locations.
- Demo existing lighting fixtures and associated controls. Re-feed any downstream items that remain outside of D97 space as required. Blank-off junction boxes at wall locations.
- Provide two (2) audio-visual fire alarm devices – verify existing manufacturer. Tie-into existing building's fire alarm control panel.
- Provide cellular telephone service booster – Verizon.
- Provide power for motorized overhead steel door. Assume 120V, 1-phase, 1/2HP.
- Provide the following receptacles:
  - At North wall, approximate quantity of sixteen (16) GFI-type. These are spaced approximately 4'-6" O.C. Utilize four (4) circuits and alternate circuitry; no more than three (3) receptacles per circuit.
  - At East wall, provide three (3) dedicated 220V receptacles. Assume 208V, 3-phase w/ #10AWG conductors. This is for compressor, welder and blast cabinet. Exact equipment to be confirmed with D97; modify/adjust as required.
  - At South/West walls, approximate quantity of eighteen (18) GFI-type. These are spaced approximately 4'-6" O.C. Utilize five (5) circuits and alternate circuitry; no more than three (3) receptacles per circuit.

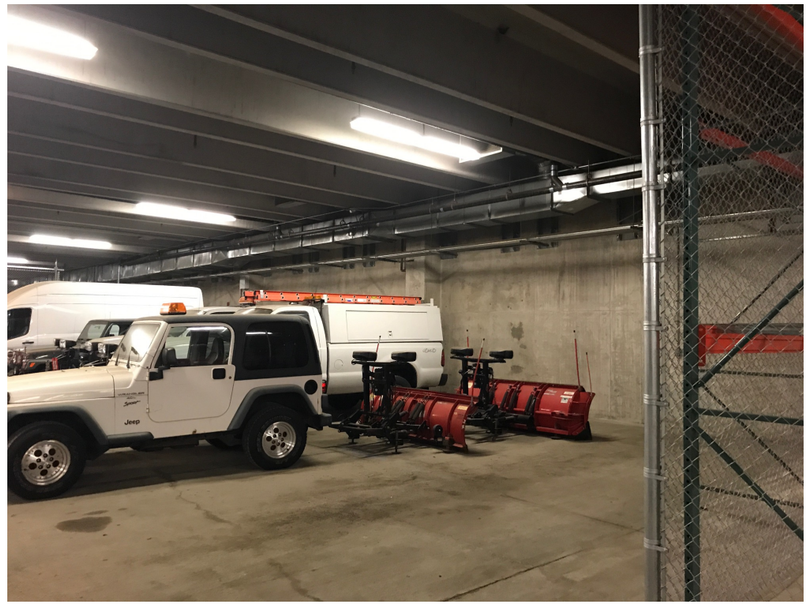
  ***Minimum #12AWG conductors; Contractor to upsize as required for voltage drop.
- Provide 480V, 3-phase power for new rooftop unit. Assume 3#2, 1#8GRD, 1-1/4"C.
- Provide 480V, 3-phase power for new exhaust fan. Assume 3#12, 1#12GRD, 3/4"C.
- Provide twenty-two (22) lensed striplight LED lighting fixtures as manufactured by Lithonia Lighting (or equal) model# 'CDS L48 MVOLT 40K 80CRI WH' w/ accessories (chain, cable or stem) for mounting.

- Provide one (1) feed-thru lighting relay panel with digital time clock and associated low-voltage control station as manufacturer by AcuityBrands (or equal) model# ‘GR1404 LT ENC SM NE1 GR1404 LT INT 4NCL DTC DV’. Assume 2-poles to be utilized with “checkerboard” pattern for switching/uniformity throughout the space. Exact on/off, programming, settings, etc. to be confirmed with D97; modify/adjust as required.

Key Room

- Provide four (4) 2x4 recessed LED lighting fixtures as manufactured by Lithonia Lighting (or equal) model# ‘2BLT4 40L ADP EZ1 LP840’
- Provide one (1) wall mounted, dual-technology, semi-automatic occupancy sensor as manufactured by AcuityBrands (or equal) model# ‘WSD PDT SA WH’.
- Provide receptacles, an approximate quantity of eight (8) GFI-type. Assume two (2) per wall. Utilize two (2) circuits and alternate circuitry; no more than four (4) receptacles per circuit.
  ***Minimum #12AWG conductors; Contractor to upsize as required for voltage drop.

PHOTO AT SOUTH WALL AT EAST END OF D97 AREA



PHOTOS GOING WEST

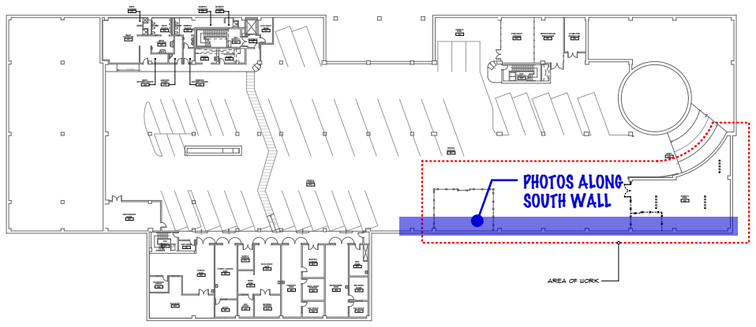


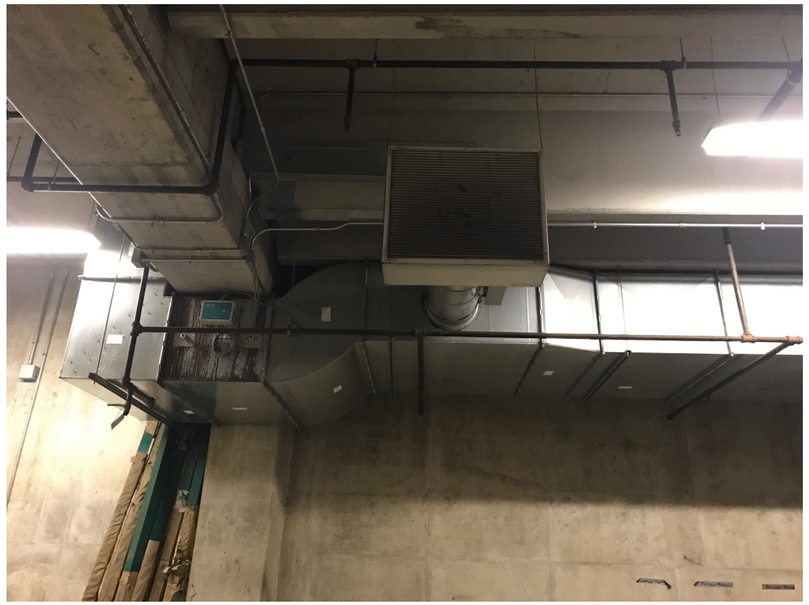
PHOTO KEY PLAN

NO SCALE

N

PHOTO AT SOUTH WALL AT WEST END OF D97 AREA

PHOTOS: 1



EAST WALL PHOTO 1

EAST WALL PHOTO 2

SOUTH WALL PHOTO 3

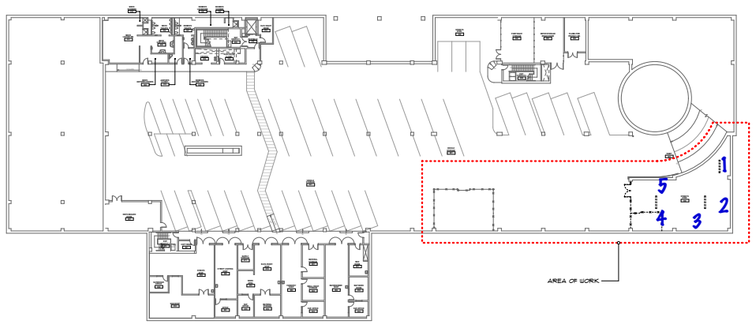
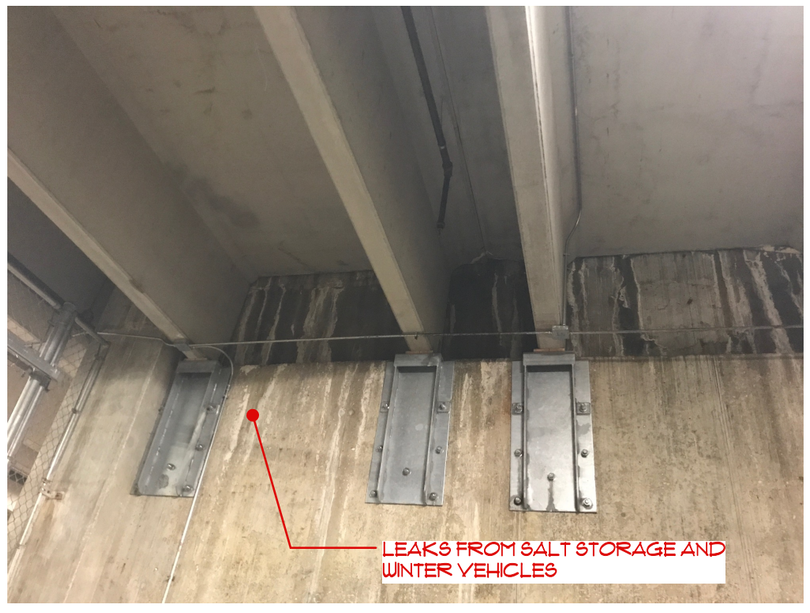


PHOTO KEY PLAN

NO SCALE

N

SOUTH WALL PHOTO 4



NORTH WALL PHOTO 5

PHOTOS: 2

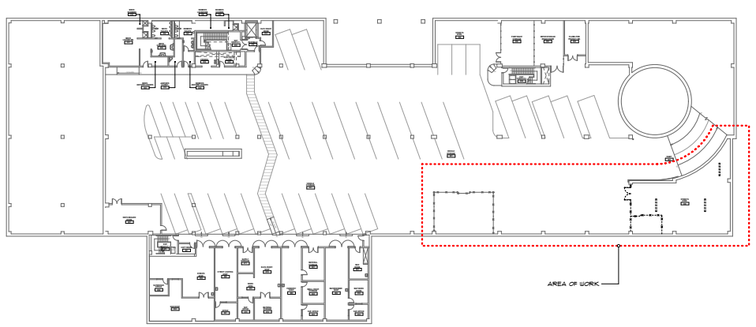


PHOTO KEY PLAN

NO SCALE

N

PHOTOS: 3