

Sep 22, 2022 -- 3:58pm -- USER: ScottGroshans
C:\Users\ScottGroshans\OneDrive\Documents\Projects\202200038 - Crash Champions Lees Summit - Rose\Bases-CAO\202200038_MECH.dwg
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LINE TYPES LEGEND:

- NEW
--- NEW — ON ROOF
- - - EXISTING
- - - EXISTING — ON ROOF
- - - - DEMOLITION

DUCTWORK LEGEND:

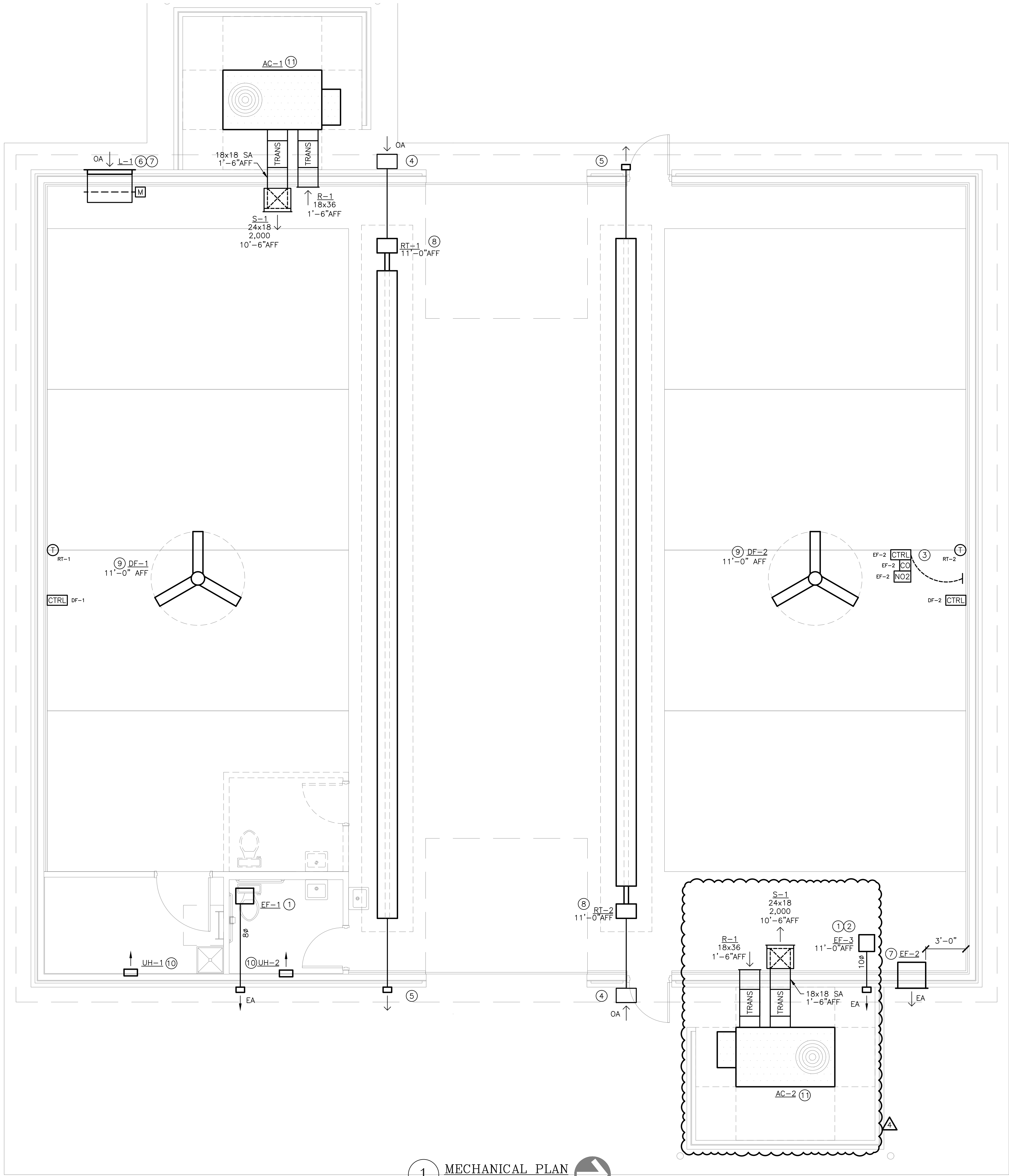
- DUCT (SINGLE LINE)
= DUCT (DOUBLE LINE)
○ → ROUND O/A OR S/A DOWN
⊗ → ROUND O/A OR S/A UP
○ → ROUND E/A OR R/A DOWN
⊗ → ROUND E/A OR R/A UP
▭ → RECTANGULAR O/A OR S/A DOWN
▭ → RECTANGULAR O/A OR S/A UP
▭ → RECTANGULAR E/A OR R/A DOWN
▭ → RECTANGULAR E/A OR R/A UP
⊗ O/A OR S/A DIFFUSER
▭ E/A OR R/A GRILLE
⊗ → AIR DEVICE WITH FLEX DUCT CONNECTION
⊗ → AIR DEVICE WITH HARD DUCT CONNECTION
⊗ → FLEXIBLE CONNECTION TO EQUIPMENT
↓ DUCT BREAK/CONTINUATION
= MANUAL BALANCING DAMPER
M MOTOR-OPERATED DAMPER
⊗ BACKDRAFT DAMPER
F FIRE DAMPER
S FIRE/SMOKE DAMPER
S SMOKE DAMPER
T THERMOSTAT
CO CARBON MONOXIDE SENSOR
CTRL CONTROLLER
NO2 NITROGEN DIOXIDE SENSOR

ANNOTATION LEGEND:

- ABC-1 EQUIPMENT / FIXTURE TAG
○ PLAN NOTE
⊗ CONNECT TO EXISTING
→ AIR FLOW DIRECTION
S-1 G/R/D TAG
80 NECK SIZE
300 AIR FLOW (CFM)

ABBREVIATIONS LEGEND:

- AFF ABOVE FINISHED FLOOR
APD AIR PRESSURE DROP
CFM CUBIC FEET PER MINUTE
EA EXHAUST AIR
EF EXHAUST FAN
ESP EXTERNAL STATIC PRESSURE
FPM FEET PER MINUTE
HC HEATING CAPACITY
HP HORSEPOWER
IN.WG INCHES WATER GAUGE
MAX MAXIMUM
MBH 1,000 BTUH
MIN MINIMUM
NC NOISE CRITERIA
OA OUTDOOR AIR
QTY QUANTITY
TSP TOTAL STATIC PRESSURE
VEL VELOCITY



1 MECHANICAL PLAN
SCALE: 1/4" = 1'-0"

MECHANICAL PLAN NOTES:

- ROUTE EXHAUST DUCT OF SIZE INDICATED ON PLAN FROM EXHAUST FAN THROUGH WALL AS SHOWN. PROVIDE WALL PENETRATION AND VENT CAP PER MANUFACTURER'S RECOMMENDATIONS. LOCATE DISCHARGE AT MINIMUM OF 10'-0" FROM ANY BUILDING OPENINGS OR OUTDOOR AIR INTAKES.
- SUSPEND INLINE EXHAUST FAN FROM STRUCTURE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- PROVIDE CARBON MONOXIDE / NITROGEN DIOXIDE DETECTION SYSTEM, MONOXIDENT MODEL # FDS-SA-CO-NO OR EQUAL, WITH CONTROLLER AND QUANTITY OR SENSORS AS RECOMMENDED BY THE MANUFACTURER. COORDINATE POWER REQUIREMENTS WITH ELECTRICAL CONTRACTOR.
- PROVIDE 4" COMBUSTION AIR INTAKE THROUGH WALL. TERMINATE WITH KIT FURNISHED WITH TUBE HEATER. REFER TO TUBE HEATER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR INTAKE MATERIAL REQUIREMENTS.
- PROVIDE 4" COMBUSTION AIR EXHAUST THROUGH WALL. TERMINATE WITH KIT FURNISHED WITH TUBE HEATER. REFER TO TUBE HEATER MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR COMBUSTION EXHAUST MATERIAL REQUIREMENTS.
- PROVIDE MOTOR OPERATED DAMPER IN LOUVER AS SHOWN. MATCH DAMPER SIZE TO LOUVER FACE DIMENSIONS. ACTUATOR TO BE 120 VOLT, SPRING CLOSED. INTERLOCK DAMPER WITH GAS DETECTION SYSTEM.
- INSTALL INDICATED EQUIPMENT AS HIGH AS POSSIBLE ON EXTERIOR WALL.
- INSTALL RADIANT TUBE HEATER WITH DEFLECTOR SHIELD DIRECTED AT 30° ANGLE TOWARDS EXTERIOR WALL.
- COORDINATE INSTALLATION OF HVLS FAN WITH OTHER TRADES. MAINTAIN OPERATIONAL AND MAINTENANCE CLEARANCES AS REQUIRED BY MANUFACTURER.
- LOCATE UNIT HEATER ON WALL WHERE SHOWN, MIN 1'-0" AFF. INSTALL PER MANUFACTURER'S REQUIREMENTS.

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PROPOSED BODY SHOP BUILDING FOR:
CRASH CHAMPIONS
451 SE OLDHAM PARKWAY
LEE'S SUMMIT, MISSOURI

NO.	DESCRIPTION	DATE
---	FOR PERMIT	06 / 14 / 2022
1	CITY COMMENTS	07 / 07 / 2022
2	CITY COMMENTS	07 / 13 / 2022
3	SHOP AC REVISION	09 / 19 / 2022
4	CITY COMMENTS	09 / 22 / 2022

PROJECT NUMBER 22009

DATE ISSUED: 06 / 14 / 2022

SHEET NUMBER

M1.0

MECHANICAL PLAN

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NEW UTILITY POLE MOUNT TRANSFORMERS (3) 37.5kva
ESTIMATED AVAILABLE
FCA ~ 13,139A

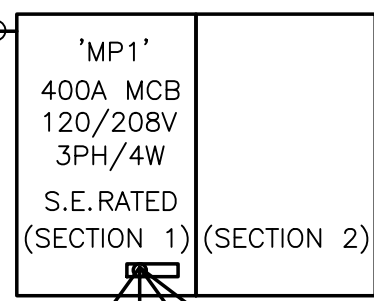
NOTE: FINAL AVAILABLE FAULT CURRENT SHALL BE DETERMINED BY EVERY.

ALL SERVICE ENTRANCE AND DISTRIBUTION EQUIPMENT SHALL BE RATED TO ACCOMMODATE AND SAFELY INTERRUPT AVAILABLE FAULT CURRENT. SERIES RATED EQUIPMENT PER NEC, UL AND MANUFACTURERS REQUIREMENTS IS ACCEPTABLE.

ELECTRICAL CONTRACTOR SHALL PROVIDE ENOUGH CONDUCTOR AND PVC CONDUIT TO EXTEND UP THE POLE. ALL WORK SHALL BE PER EVERY STANDARDS.

METER PER EVERY STANDARDS.

(2) 2" CONDUITS, EACH WITH (4) 250kcmil AL.



#1/0 CU (OR #3/0 AL) GROUND IN 3/4" C. TO BOND TO BUILDING STEEL, BUILDING WATER SERVICE, AND CONCRETE ENCASED ELECTRODE (FOOTING REBAR). ALSO PROVIDE (1) #6 CU CONNECTION TO DRIVEN GROUND ROD.

1 ELECTRICAL POWER PLAN
SCALE: 1/4" = 1'-0"

2 ELECTRICAL RISER PLAN
NO SCALE

ELECTRICAL GENERAL NOTES:

- REFER TO SHEET E3.0 FOR ELECTRICAL GENERAL NOTES.

ELECTRICAL PLAN NOTES:

- PROVIDE 120V CONNECTION TO OVERHEAD DOOR OPERATOR. MOUNT CONTROL STATION PROVIDED WITH DOOR IN LOCATION APPROVED BY OWNER ADJACENT TO OVERHEAD DOOR FOR PUSH-BUTTON CONTROLS. PROVIDE CONDUIT AND WIRING BETWEEN CONTROLLER AND OPERATOR. COORDINATE WITH DOOR INSTALLER FOR SPECIFIC ELECTRICAL REQUIREMENTS.
- PROVIDE DISCONNECT AND FLEX CONNECTION TO BODY SHOP EQUIPMENT. VERIFY EXACT LOCATION AND SPECIFIC REQUIREMENTS PRIOR TO ROUGH IN. COORDINATE WITH OWNER LOCATION AND PHASING TO RELOCATE EQUIPMENT.
- PROVIDE DISCONNECT AND FLEXIBLE CONNECTION TO SHOP WELDING EQUIPMENT. CONFIRM ACTUAL REQUIREMENTS WITH SHOP OWNER PRIOR TO ROUGH-IN.
- MOUNT 'CO' CONTROL PANEL ON WALL, AND ROUTE POWER WIRING TO EXHAUST FAN 'EF-2' AND MOTORIZED LOUVER 'L-1'. COORDINATE INSTALL WITH MECHANICAL CONTRACTOR. ALL FANS, LOUVERS & CONTROL DEVICES SHALL BE FURNISHED BY MECHANICAL. MOUNTING OF CONTROL PANEL AND ALL WIRING SHALL BE BY ELECTRICAL CONTRACTOR.
- PROVIDE JUNCTION BOX FOR POWER TO CIRCULATION FAN, AND INSTALL FAN CONTROL DEVICE. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. ALL FANS & CONTROL DEVICES SHALL BE FURNISHED BY MECHANICAL. MOUNTING OF CONTROL PANEL AND ALL WIRING SHALL BE BY ELECTRICAL CONTRACTOR.
- PROVIDE CONNECTION TO 1500 WATT 120V ELECTRIC WATER HEATER MOUNTED ABOVE THE CEILING. PROVIDE TOGGLE SWITCH DISCONNECT SWITCH.
- PROVIDE DISCONNECT AND FLEXIBLE CONNECTION TO AIR COMPRESSOR. COORDINATE HOOK-UP AND EXACT REQUIREMENTS WITH OWNER.
- CONNECT BATHROOM EXHAUST FAN ON TO SWITCHED BATHROOM LIGHTS.
- DUPLEX RECEPTACLE FOR SEPTIC TANK LEVEL MONITORING PANEL. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
- PROVIDE CONNECTION AND DISCONNECT ON MECHANICAL EQUIPMENT. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH MECHANICAL CONTRACTOR. REFER TO SHEET M2.0 FOR ADDITIONAL INFORMATION.

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ELECTRICAL POWER PLAN