CITY OF JOPLIN
COUNCIL AGENDA ITEM

ITEM
Council Bill 2024-105: AN ORDINANCE approving a Purchase Order to be issued to MagneGrip® for the purchase and installation of a MagneGrip® Diesel Exhaust Extraction System for removal of vehicle and apparatus exhaust emissions.

MEETING DATE
January 16, 2024

ORIGINATING DEPT
Central Garage

ATTACHMENTS
CB2024--105 Ordinance; Exhibit A: Equipment Purchase and Demolition Payment Quotation; and system images

REVIEWED BY
Assistant City Manager: Tony Robyn; City Attorney: Peter Edwards; Finance Director: Leslie Haase; City Manager: Nick Edwards

SUMMARY
This Council Bill authorizes the City to enter into an agreement with MagneGrip® for the purchase and installation of a MagneGrip® Diesel Exhaust Extraction System and approves issuance of a purchase order for same.

BACKGROUND
The existing Central Garage exhaust capture system is an original 1980 belt driven piece of equipment. The system has been repeatedly repaired for many years and has ultimately failed, resulting in unsafe working conditions. The associated underfloor ducting is old technology and has collapsed in multiple locations becoming a safety issue resulting in poor capture and ventilation of vehicle exhaust fumes. The new system utilizes modern above-floor ducting. The replacement system came in under budget and utilized the State of Missouri HGACBuy Cooperative Purchasing Program pricing, an approved competitive bidding procedure for municipalities.

FUNDING SOURCE
Currently, this item is a budgeted expense in the Central Garage Facility Improvements
Acct #505-7870-500-8015.

RECOMMENDATION
Staff recommends adoption of this Council Bill on an emergency basis; That the City hereby declares that this Ordinance, being an Ordinance dealing with a general appropriation, is considered an emergency within the meaning of Section 2.12(4) of the Home Rule Charter of the City of Joplin, Missouri, and, as such, this Ordinance shall become effective immediately upon its passage. Specifically, this ordinance approves the contractor to start work immediately in order to quickly replace this operational safety system.

DATE: December 18, 2023

PROPOSAL FOR: Joplin Central Garage
1301 West 2nd Street
Joplin, MO 64801

ATTENTION: Tony Robyn, Assistant City Manager

REF: HGAC Contract No. FL03-21

PROJECT SCOPE: Provide and Install a MagneGrip® Diesel Exhaust Extraction System for removal of apparatus exhaust emissions.

EQUIPMENT & MATERIALS, DEMO, & LABOR PRICE:

Nine Drop MagneGrip® Hose Reel Exhaust System
Package Includes:

- (8) 500430-53 5" x 30' Hose Reel
- (1) 500700-01 Swing Arm 6" x 10' with Hood for Welding Area
- (2) 600372-01 AirHAWK 265 Portable Air Purification Units
- (5) 500100-02 MagneGrip® Fan, 1HP-3PH rated at 550 CFM at 6" SP
- (5) 540500-01 On/Off Panel 1HP-1PH
- (5) 500152-01 6" Rain Cap
- (1) CF363-5 MagneGrip® Fan, 5HP-3PH rated at 3300 CFM at 6" SP
- (1) 540505-02 On/Off Panel 5HP-3PH
- (1) 500157-12 12" Up-blast Back Draft Damper Type Rain Cap
- (1) 500510-01 Top Stack Cane
- Class 2 Spiral Duct, Fittings, and Hangers
- Shipping to Job Site
- Equipment is 100% American Made by an ISO9001-2015 Company
- Women's Business Enterprise (WBE)
- Women's Owned Small Business (WOSB) Certified

EQUIPMENT PRICE.....$61,320.00

Demolition of Existing Systems
PRICE.....$4,095.00

Labor to Install Systems
LABOR PRICE.....$51,595.00

TERMS:

- One MagneGrip® Tailpipe Adapter and installation is included with each hose drop assembly. All vehicles that require Tailpipe Adapters must be made available to MagneGrip technicians at the time of system installation. Additional adapters upon request. Call for pricing.
- MagneGrip provides wall penetration only for exhaust duct, if required. Roof penetrations, flashing, curbing and sealing will be at the customer's expense.
- Pricing includes standard permits and business licensing fees, if required. Price does not include any state, sales, or special taxes, engineered stamped drawings or services, seismic engineering, or electrical/structural load calculations.
- Electrical subpanels and modifications required to bring service to code are excluded if required unless otherwise indicated in the proposal.
- Upon approval, please submit a signed copy of this proposal and a tax exemption certificate. Projects are invoiced per station upon shipment of equipment. Payment is due upon completion of the project.
- Proposal is valid for 90 days.

HGAC Contract No. FL03-21

(Joplin MO Central Parking Garage Proposal 12-20-23)

SUBMITTED BY:

Jillian Beveridge
Regional Sales Manager

Cell: 913-225-4035
Email: jbeveridge@magnegrip.com

ACCEPTED BY:

Company: _____

Authorized Signature: _____

Print: _____ Title: _____

PO#, If Required: _____ Date: _____

MAINTENANCE SHOPS FLEET GARAGES

TRUCK / BUS / RV REPAIR FACILITIES

VOCATIONAL WORKSHOPS

MagneGrip Group

EXHAUST REMOVAL and AIR PURIFICATION SYSTEMS





ELIMINATE DIESEL SOOT AND GASES

"DON'T BREATHE CANCER-CAUSING EXHAUST FUMES"

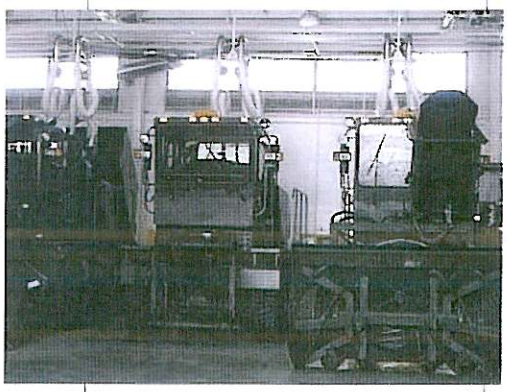
MagneGrip Group



Toxic gases contaminate the air

Soot particles cling to walls and clothing, and are absorbed by the skin. The EPA states there are more than 40 hazardous pollutants in diesel exhaust emissions—some ***known to cause cancer*** in humans. Also, exhaust fume may contribute to other conditions such as inflammatory respiratory diseases and cardiovascular disorders.

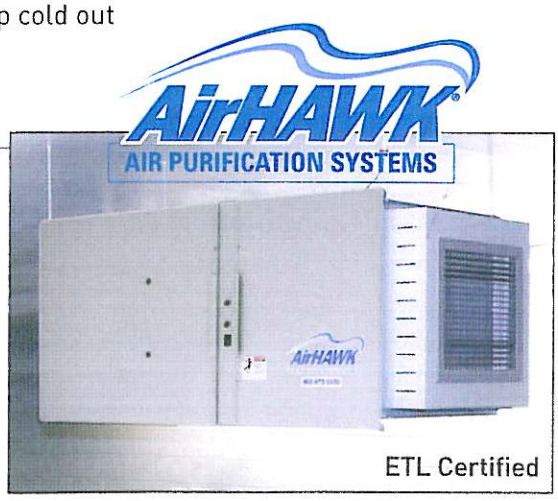
MagneGrip Exhaust Removal Systems connect to vehicles/equipment exhaust pipes or stacks to prevent exhaust fume escaping into the facility. Connected to the system, vehicles/equipment can operate inside and dangerous exhaust fume will not contaminate the air.



HEALTHIER WORK ENVIRONMENT

- Connects quickly and easily
- No fumes escape into work area
- Keeps soot off walls, clothing, skin
- Shop stays cleaner, smells better
- Protects employees from diesel contaminants
- Reduces cancer and respiratory illness risks.
- Lights stay clean, technicians see better
- Close doors in winter to keep cold out

Air Purification Air cleaning units are ceiling mounted to remove toxic gases, soot particles, mold spores, viruses and other airborne contaminants. They remove or neutralize contaminants and return purified air into the facility. **Combination system:** Air cleaning units can be combined with hose-type exhaust removal.



MEETS OR EXCEEDS ALL REGULATORY STANDARDS: OSHA, NIOSH, EPA, ASHRAE, NFPA.

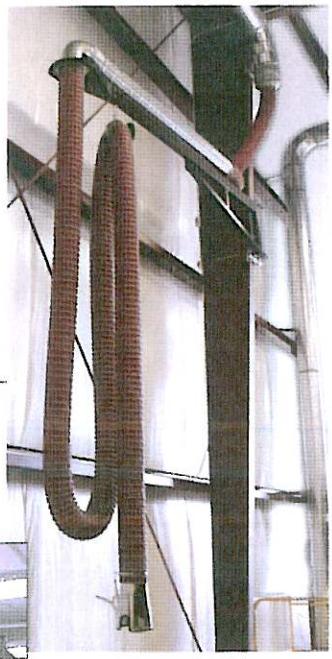
UNITS AVAILABLE FOR EVERY APPLICATION

Airports ▪ Auto Body Shops ▪ Automotive Plants ▪ Bus Terminals ▪ Computer Rooms ▪ Conference Facilities ▪ EMS Facilities ▪ Factories ▪ Fire Departments ▪ Garages ▪ Hospitals ▪ Inside Loading Docks ▪ Laboratories ▪ Locker Rooms ▪ Maintenance Facilities ▪ Manufacturing Facilities ▪ Office Buildings ▪ Printing Facilities ▪ Recreation Centers ▪ Sanding/Grinding Shops ▪ Sports Arenas ▪ Veterinary Clinics ▪ Woodworking Shops



Attaches to all types of vehicles

OTR Trucks, Delivery Vans, Buses, Off-Road Heavy Equipment, Farm Equipment, etc.



For large installations, multiple hose drops connect to a central duct system. Hoses can also be mounted on aluminum tracks and positioned to fit any parking or work station configuration.

OPTIONAL EQUIPMENT

Pivotal-arm Extension Arm swivels to move hose to best position. Steel construction arm is available in different lengths and diameters, and with flexible-joint options.



Hose Reels Holds the flexible exhaust hose above vehicle parking area. Motor operated or spring retractable: Several styles and options available. High temperature hoses to 2000 + degrees.



High Efficiency Fans AMCA construction-standard fans have spark-resistant curved blades for maximum efficiency. Totally enclosed self-lubricating motor operates automatically.

Inline Particulate Filter GREEN OPTION. Positions in exhaust removal ductwork to capture carbon particles before discharging outside. Factory assembled. Aluminized steel housing.



MagneGrip Group



Stack Adapter Makes Connecting Easy

Connecting to the exhaust removal system is easy with MagneGrip's lightweight Stack Adapter. It fits all stacks—whether straight, angled at 45 degrees or at 90 degrees.

- Weighs only 19 pounds—easy to position
- Made of durable aluminum construction
- Three handles make lifting easy
- Eliminates employees climbing ladders
- Will not scratch chrome exhaust stacks
- Reaches exhaust stacks 13 ft. and higher

SOLUTION FOR BLOWING OUT TURBO OIL

Make quick work out of a messy job! Place the MagneGrip Stack Adapter on the exhaust stack with a container under the bottom end of the adapter. In that way, the turbo oil blows through the Stack Adapter and into the receiving container. When finished, simply rinse out the Stack Adapter.

FREE SYSTEM DESIGN & COST ESTIMATE

CALL TODAY: 800-875-5440

www.magnegrip.com / Custom Systems

info@magnegrip.com

MagneGrip Group

EXHAUST REMOVAL and AIR PURIFICATION SYSTEMS

MADE IN USA

ISO 9001:2008 CERTIFIED

GSA Contract Holder GS-07F-0472W

AirHAWK®

AIR PURIFICATION SYSTEMS

BREATHE CLEAN AIR

WITHOUT PARTICULATES, TOXIC GASES, MICROBES AND VIRUSES







Protect First Responders' Health

When fighting fire, first responders protect themselves from toxins, soot, gases and fumes to avoid long term health concerns. In the firehouse, shouldn't they be protected against particulates and airborne viruses, bacteria and mold spores as well as toxins, soot, gases and fumes?

NFPA, EPA, NIOSH and most mechanical codes warn that diesel exhaust can cause serious health problems including cancer. The World Health Organization has classified diesel exhaust as a known carcinogen.

Diesel exhaust emissions have a mixture of different gases and some require special filtration materials for their removal. AirHAWK Air Purification Systems draw vehicle exhaust pollutants out of the air, trapping (or neutralizing) gases and particulates and then returning clean air to the facility.

The AirHAWK filtration process was developed by Sandia Laboratories and the National Renewable Energy Laboratory. This advanced technology, used by the US Department of Defense for destroying toxic organic compounds, is part of AirHAWK Air Purification Systems' units.



AirHAWK is your best choice

For fire/EMS facilities, most air cleaning systems remove particulates and some gas-phase pollutants that are released in diesel exhaust. AirHAWK offers the only system with the additional protection of Photo-Catalytic Oxidation and Ultraviolet Radiation to destroy toxic organic compounds (VOCs) and microbes. AirHAWK'S four-stage filtration process demonstrates why its air cleaning and purification performance is superior to all other systems.

30+ Years in Airflow Engineering Design

Unit placement and design of the air circulation pattern are critical to air purification and circulation effectiveness. The AirHAWK engineering team has more than 30 years of airflow design expertise. For each application, AirHAWK designs an effective air circulation pattern that provides continuous air purification and coverage for an entire area or facility.

No hoses, no hook ups, fully automatic

In the bay area, AirHAWK Air Purification Systems are ceiling mounted to avoid safety hazards. Hoses are not used and no vehicle or building modifications are needed. AirHAWK units are automatic and operate hands-free with no personnel interaction.

Meets or Exceeds Regulatory Standards

AirHAWK units meet or exceed the regulatory standards of NFPA, OASH, NIOSH, EPA and ASHRAE. AirHAWK is Assistance to Firefighters Grant compliant.

AirHAWK 3000 XL

Using the best technology available, energy-efficient AirHAWK 3000 XL removes more contaminants and disease-causing compounds than other air purification systems.



AirHAWK 3000 XL

LIMITED LIFETIME WARRANTY

Polluted air passes through AirHAWK 3000 XL's four-stage filtration process to remove harmful substances, such as particulates, toxic gases and other airborne contaminants. UV lamps kill viruses, bacteria and mold spores. Clean, purified air is then evenly dispersed back into the facility.

AirHAWK 2000 and AirHAWK 2000H units are also available.

Best Technology Features

- AirHAWK 3000 XL units are ETL certified to the UL 5-7 Standard and Canada Standard CSA C22.2.
- High efficiency blower motors: 1 hp PSC 208-230V or 1.75 hp ECM motor; 115/208-230V. Airflow: 2740/3000 CFM.
- Manual and remote activation features.
- System activation methods: Photo-Eye Sensors, Door Switches, Door Flags, CO/NO2 Sensors, Onboard Transmitters and other Custom Methods.
- Standard and Advanced Control panels for automatic operation.
- Illuminated "in operation" light and a separate indicator for filter replacement.
- 2-speed, 24/7 on-demand run capacity.
- Low amperage for low-cost efficiency.
- Ceiling-mounted.
- Meets or exceeds all regulatory standards: OSHA, NIOSH, EPA, ASHRAE.
- Also available:
  - AirHAWK 2000-H with .75 hp motor, 115V, 2000 CFM.
  - AirHAWK 2000 with 1 hp motor, 230V, 2740 CFM.

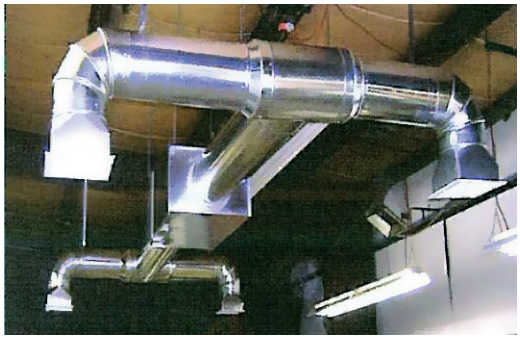


AirHAWK AH 1000



AIRHAWK AH 1000

The AH 1000 unit is independent of your existing HVAC system. The unit can be equipped with a decorative supply grille for surface mounting (below the ceiling). For areas where aesthetics are important the unit can be installed above a ceiling with supply and return grilles – virtually out of sight. Either method will provide for a cleaner and healthier environment for your personnel. UV technology kills diseases, mold spores, bacteria, and viruses to eliminate the spread of germs from one person to another. The AH 1000 has air changes up to 10 times an hour. Most HVAC systems change the air only one or two times an hour and offer no protection against germs.



TWO-YEAR WARRANTY ON PARTS

Does not include UV lamps or filters.

Best Technology Features

- AirHAWK AH 1000 is fitted to any room with a suspended ceiling using hard or flexible ductwork.
- Surface or wall mounted.
- The system can often accommodate adjoining rooms.
- Removes particulates, viruses, mold spores, bacteria, gases, odors, etc., and returns clean, purified air.
- Chassis is 18-guage galvanized steel.
- Motor and blower are 115 volts.
- Provides super quiet operation.
- Meets or exceeds all regulatory standards: OSHA, NIOSH, EPA, ASHRAE.

AirHAWK 265

AirHAWK AH 265 units are portable and free-standing and have the same filtration features and high level of particulate and germicidal protection as AirHAWK Air Purification Systems' larger units. AirHAWK AH 265 incorporates Photo-Catalytic Oxidation to convert toxic compounds, even carbon monoxide and nitrous oxide, into benign constituents such as carbon dioxide and water. The AH 265 has computerized controls with four modes of operation and seven-room sizes to ensure energy efficiency. A sensor detects toxic chemical fumes, high particulate counts, and gas leaks.



Best Technology Features

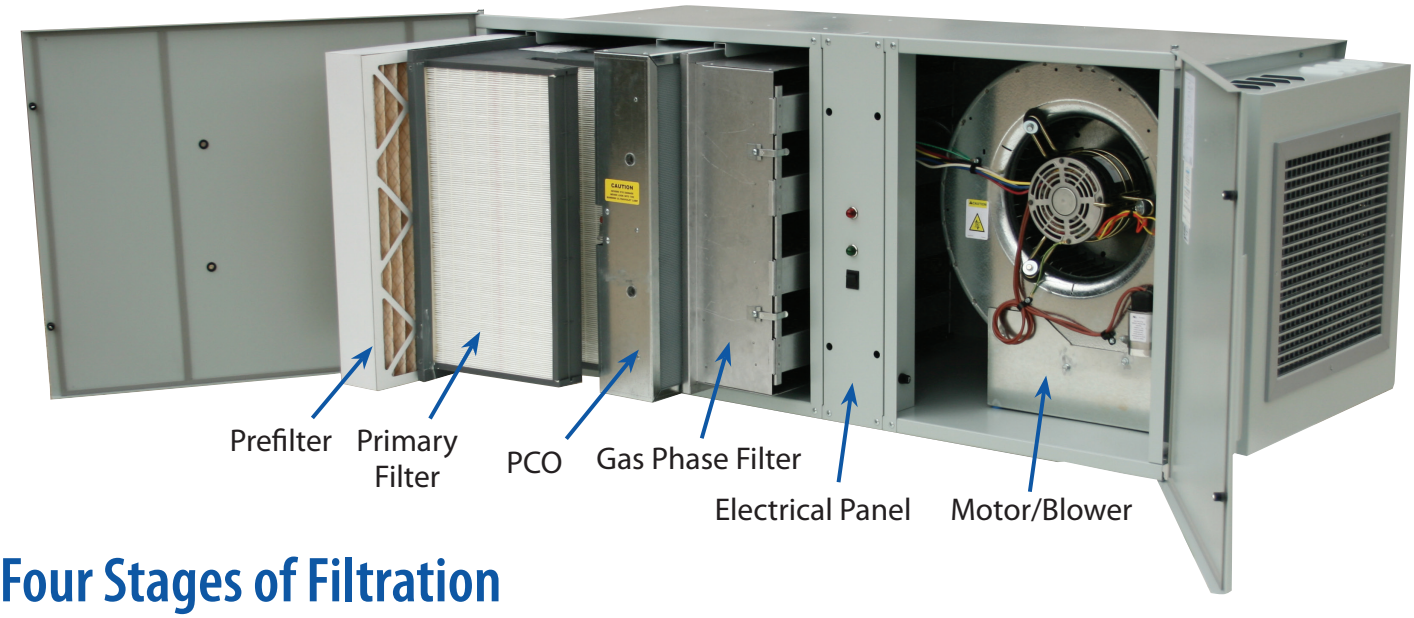
- Inlet and outlet grills with safety locks.
- Prefilter cleans air of particles larger than 5 microns.
- Two gas absorption layers remove toxic chemical and gases.
- Hospital grade filter removes allergens: pollen, mold, fungal spores, etc.
- Quiet, reversed-curved, motorized impeller with sealed ball bearings.
- Construction is high-impact ABS plastic.
- High output germicidal UV lamp kills viruses and bacteria.

TWO-YEAR WARRANTY ON PARTS

Does not include UV lamps or filters.

AirHAWK Has "Best Technology" Filtration

AirHAWK Air Purification Systems have a progressive filtration process that guarantees the highest level of pollution removal. With the most advanced air filtration available, each unit provides four stages of filtration with our unique, patented Photo-Catalytic Oxidation (PCO) process.



Four Stages of Filtration

1. **Prefilter:** Hazardous exhaust emissions are drawn into the AirHAWK filtration unit by the motor blower assembly. A pleated filter removes diesel exhaust particulate and is rated class 2, UL Standard 900.

2. **Primary Filter:** High-efficiency particulate (HEPA) filter has pleated, micro fiberglass media for high-capacity performance. Thermoplastic separators provide consistent spacing to ensure aerodynamic airflow.

3. **Photo-Catalytic Oxidizer (PCO):** Containing both ultraviolet lamps and a patented, specially coated grid, PCO helps protect against microbes, mold spores, organic compounds and viral germs. Available on AirHAWK 3000 XL model.

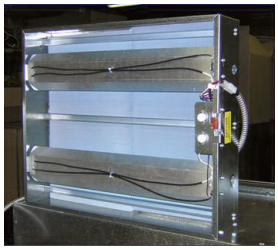


Photo-Catalytic Oxidizer

4. **Gas-Phase Filter:** As the air reaches the gas-phase filter, the active carbon filter traps and absorbs volatile organic compounds (VOCs) to remove them from a facility's breathing area.



Control Panel

Standard Control Panel has these features: Automatic on/off, Manual Run / Manual Stop, Adjustable Timer, LED Display, Remote Activation.

Advanced or Custom Panel includes all Standard Control Panel features, plus: Email Alerts, Maintenance Notification, CO / NO2 Audible and Strobe Light Warning, Continuous Run 24/7 and On Demand Run, Remote Fan Operation and other Custom Features.

Whole Bay Air Cleaning Systems



AirHAWK + MagneGrip = Maximum Protection

Fire departments and municipalities throughout the country are taking a hard look at the overwhelming statistics and warnings about firefighter and EMT health and how vehicle exhaust emissions increase cancer risk. Many fire departments are addressing the problem by combining two state-of-the-art systems from one company—MagneGrip Group—to ensure that their firefighter/EMTs have maximum protection.

MagneGrip Group is the only company that manufactures both source-capture exhaust removal systems (MagneGrip) using hose-and-nozzle that connect to the apparatus tailpipe, and air purification systems (AirHAWK) filtration units that suspend from the ceiling.

MagneGrip® EXHAUST REMOVAL SYSTEMS

AirHAWK® AIR PURIFICATION SYSTEMS

This combination provides the most complete protection from engine diesel exhaust, off-gases from equipment and turnout gear used at the fire scene, toxic air blown in from the tarmac, and airborne contamination. This combination system provides greater liability protection for municipalities—and it best fits the intent of FEMA and NFPA recommendations.

Let us show you why more Fire Departments are choosing AirHAWK Air Purification Systems.

Proud Sponsor of Fire Fighter Cancer Foundation

MagneGrip Group

A DIVISION OF CLEAN AIR CONCEPTS

800-875-5440 | www.magnegrip.com

ISO 9001:2015 Certified | WBE/WOSB Certified

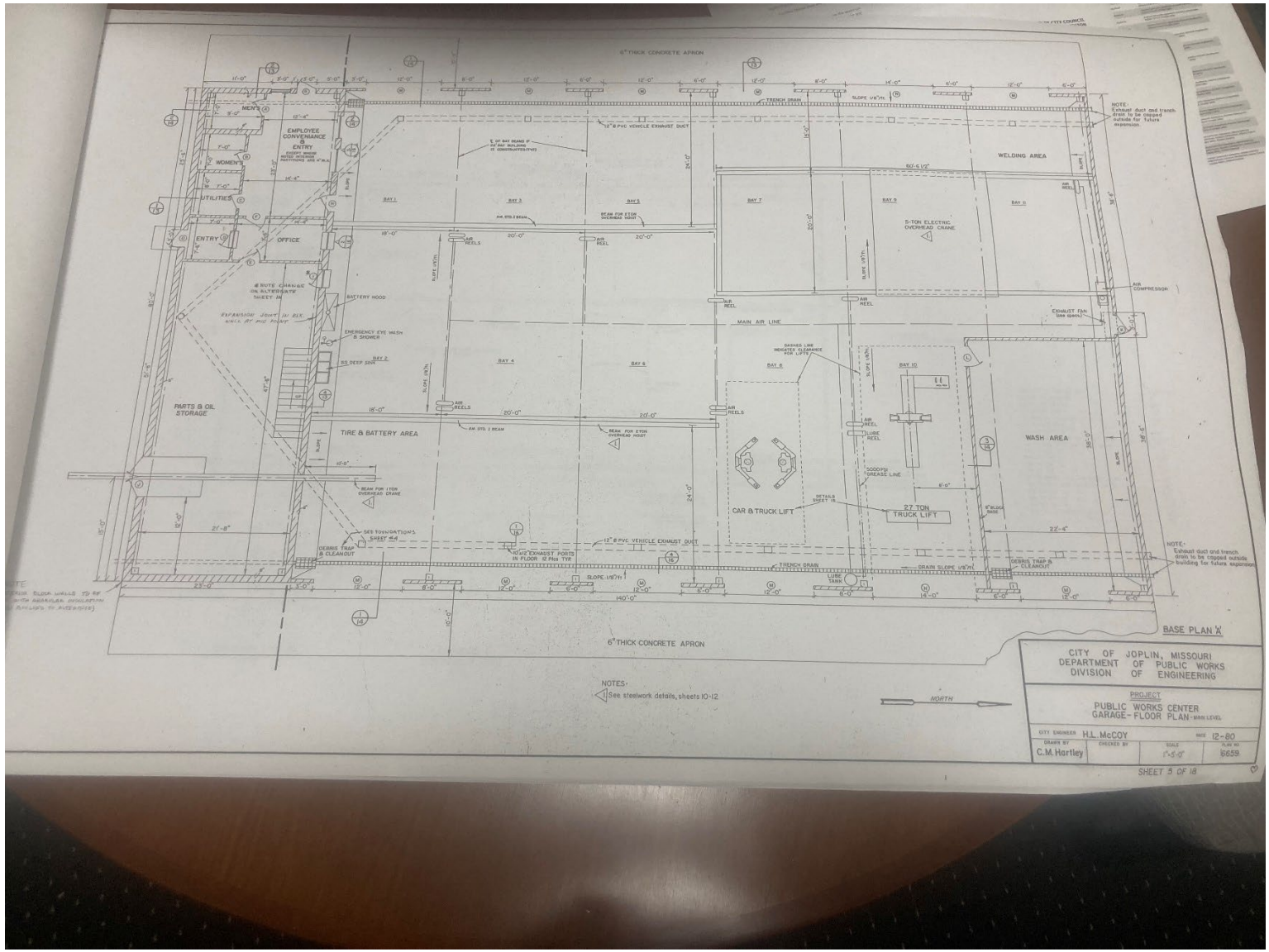
MADE IN USA

Replace Current 1980 Air Filtration System




AUTHORIZED
PERSONNEL
ONLY
BEYOND
THIS POINT
2


Spilfyter


6" THICK CONCRETE APRON
MEN'S
EMPLOYEE CONVENIANCE & ENTRY
WOMEN'S
UTILITIES
ENTRY
OFFICE
PARTS & OIL STORAGE
TIRE & BATTERY AREA
WELDING AREA
WASH AREA
CAR & TRUCK LIFT
27 TON TRUCK LIFT
5-TON ELECTRIC OVERHEAD CRANE
MAIN AIR LINE
AIR COMPRESSOR
EXHAUST FAN
TRENCH DRAIN
12"ø PVC VEHICLE EXHAUST DUCT
10"ø EXHAUST PORTS IN FLOOR @ Pos TYP
DEBRIS TRAP & CLEANOUT
LUBE TANK
5000PSI GREASE LINE
BATTERY HOOD
EMERGENCY EYE WASH & SHOWER
SS DEEP SINK
BEAM FOR 1TON OVERHEAD CRANE
SEE FOUNDATIONS SHEET #4
NOTE: Exhaust duct and trench drain to be capped outside for future expansion
NOTES: See steelwork details, sheets 10-12
NORTH
BASE PLAN 'A'
CITY OF JOPLIN, MISSOURI
DEPARTMENT OF PUBLIC WORKS
DIVISION OF ENGINEERING
PROJECT
PUBLIC WORKS CENTER
GARAGE - FLOOR PLAN - MAIN LEVEL
CITY ENGINEER H.L. McCOY
DATE 12-80
DRAWN BY C.M. Hartley
CHECKED BY
SCALE 1"-5'-0"
PLAN NO 8659
SHEET 5 OF 18

COUNCIL BILL NO. 2024-105 ORDINANCE NO.

AN ORDINANCE approving the issuance of a Purchase Order to MagneGrip for the purchase and installation of a MagneGrip® Diesel Exhaust Extraction System for removal of vehicle and apparatus exhaust emissions, as budgeted in the Annual Budget of the City of Joplin for the Fiscal Year 2023-2024 as adopted by Council Bill No. 2023-158 on October 16, 2023; and containing an emergency clause.

WHEREAS, in the FY2023-2024 budget process, Council approved and budgeted funds to cover the replacement of a failed vehicle and equipment exhaust capturing system for the Central Garage.

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, as follows:

Section 1. That a Purchase Order issued to MagneGrip for the amount of One Hundred Seventeen Thousand, and Ten Dollars ($117,010.00), covering the purchase and installation of the new system, and the demolition and disposal fees of the old system, be and the same is, hereby approved.

Section 2. That the City hereby declares that this Ordinance, being an Ordinance dealing with a general appropriation, is considered an emergency within the meaning of Section 2.12(4) of the Home Rule Charter of the City of Joplin, Missouri, and, as such, this Ordinance shall become effective immediately upon its passage. Specifically, this ordinance approves the contractor to start work immediately in order to quickly replace this operational safety system.
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PASSED BY THE COUNCIL OF THE CITY OF JOPLIN, MISSOURI, this _____ day of _____, 2024, by a vote of _____.

_____
Douglas W. Lawson, Mayor

ATTEST:

_____
Holly Nagy, City Clerk

APPROVED AS TO FORM:

_____
Peter C. Edwards, City Attorney