

SOUTH JORDAN CITY PLANNING COMMISSION REPORT

Meeting Date: 02-14-2023

Issue: SCHOPPE INC-OFFICE/WAREHOUSE
SITE PLAN AND CONDITIONAL USE PERMIT
Address: 11581 S. Redwood Road
File No: PLSPR202200225 and CUP202200226
Applicant: Tyler Howland

Submitted by: Greg Schindler, City Planner

Staff Recommendation (Motion Ready): Approve applications SPR202200225 and PLCUP202200226 for a site plan and granting a conditional use permit for “equipment light repairs and service enclosed within a building” located at 11581 S. Redwood Rd.

ACREAGE: Approximately 0.85 acre
CURRENT ZONE: MU-SOUTH
(Redwood Road, Mixed Use – South Center) Zone
CURRENT USE: Vacant
FUTURE LAND USE PLAN: EC (Economic Center)

NEIGHBORING ZONES/USES: North – MU-SOUTH / Unique Auto Repair
South – MU-SOUTH / Sparkles Express Carwash
West – Riverton City / Office Building
East – MU-SOUTH (PD) / Townhomes

SITE PLAN STANDARD OF REVIEW:

All proposed commercial, office, industrial, multi-family dwelling or institutional developments and alterations to existing developments shall meet the site plan review requirements outlined in Chapter 16.24 and the requirements of the individual zone in which a development is proposed. All provisions of Title 16 & 17 of South Jordan City Code, and other City requirements shall be met in preparing site plan applications and in designing and constructing the development. The Planning Commission shall receive public comment regarding the site plan and shall approve, approve with conditions or deny the site plan.

CONDITIONAL USE REVIEW:

A use is conditional because it may have unique characteristics that detrimentally affect the zone and therefore are not compatible with other uses in the zone, but could be compatible if certain conditions are required that mitigate the detrimental effect.

To impose a condition on a use, the detrimental effect must be identified and be based on upon substantial evidence, not simply a suspicion or unfounded concern. Any condition must be the least restrictive method to mitigate the detrimental effect.

The Planning Commission shall approve a conditional use permit application if reasonable conditions are proposed, or can be imposed, to mitigate the reasonably anticipated detrimental effects of the proposed conditional use in accordance with applicable standards.

The Planning Commission may deny a conditional use permit application if the reasonably anticipated detrimental effects of a proposed conditional use cannot be substantially mitigated by the proposal or the imposition of reasonable conditions to achieve compliance with applicable standards.

Further, City Code § 17.84.090 provides:

I. COMPLIANCE AND REVOCATION:

- A. A conditional use may be commenced and operated only upon:
 - 1. Compliance with all conditions of an applicable conditional use permit;
 - 2. Observance of all requirements of this title relating to maintenance of improvements and conduct of the use or business as approved; and
 - 3. Compliance with all applicable local, State, and Federal laws.
- B. A conditional use permit may be revoked by the City Council at any time due to the permittee's failure to commence or operate the conditional use in accordance with the requirements of subsection A of this section.

BACKGROUND:

The applicant is representing the Bunting Family Limited Partnership, owners of Schoppe Inc., an HVAC ductwork fabrication and installation company, proposing to construct a new building to conduct their business operations. The building will be located at 11581 S. Redwood Road and include two stories of office area (approx. 3,920 sq. ft.) and warehouse/assembly area (approx. 10,775 sq. ft.).

STAFF FINDINGS, CONCLUSION & RECOMMENDATION:

Findings:

- The Director of Planning has determined that the warehouse/fabrication assembly qualifies as “equipment repair and service” requiring approval of a conditional use permit in the MU-SOUTH zone and the use is appropriate at this location.
- Staff has identified noise emanating from a compressor located within the building as a potential detrimental effect.
- The potential detrimental effect will be mitigated through the location of the compressor. The applicant has provided information showing that the sound decibel level at the source is 66 dB (similar to a running car). However, by locating the compressor within the building and at a distance of 163.2 ft. from the east property line (nearest residential use) the decibel level at the property line is expected to be about 31 dB (similar to whispering or a running refrigerator).
- Based on the square footage of the uses within the building, 26 parking spaces are required. The proposed site plan indicates there will be 29 spaces on site.

- As required by Section 17.54.180 of the City Municipal Code, the developer will install an landscape a 12 ft. wide park strip along Redwood Road as well as an 8 ft. wide sidewalk.
- The proposed landscaping and irrigation meet the City's adopted water efficiency standards for commercial developments.
- The Architectural Review Committee reviewed the proposed building elevation drawings and materials on January 25, 2023 and recommended approval to the Planning Commission.

Conclusion: Staff identified one possible detrimental effect related to the proposed business, which has been mitigated by placing the compressor originally to be located outside of the building, now inside the building.

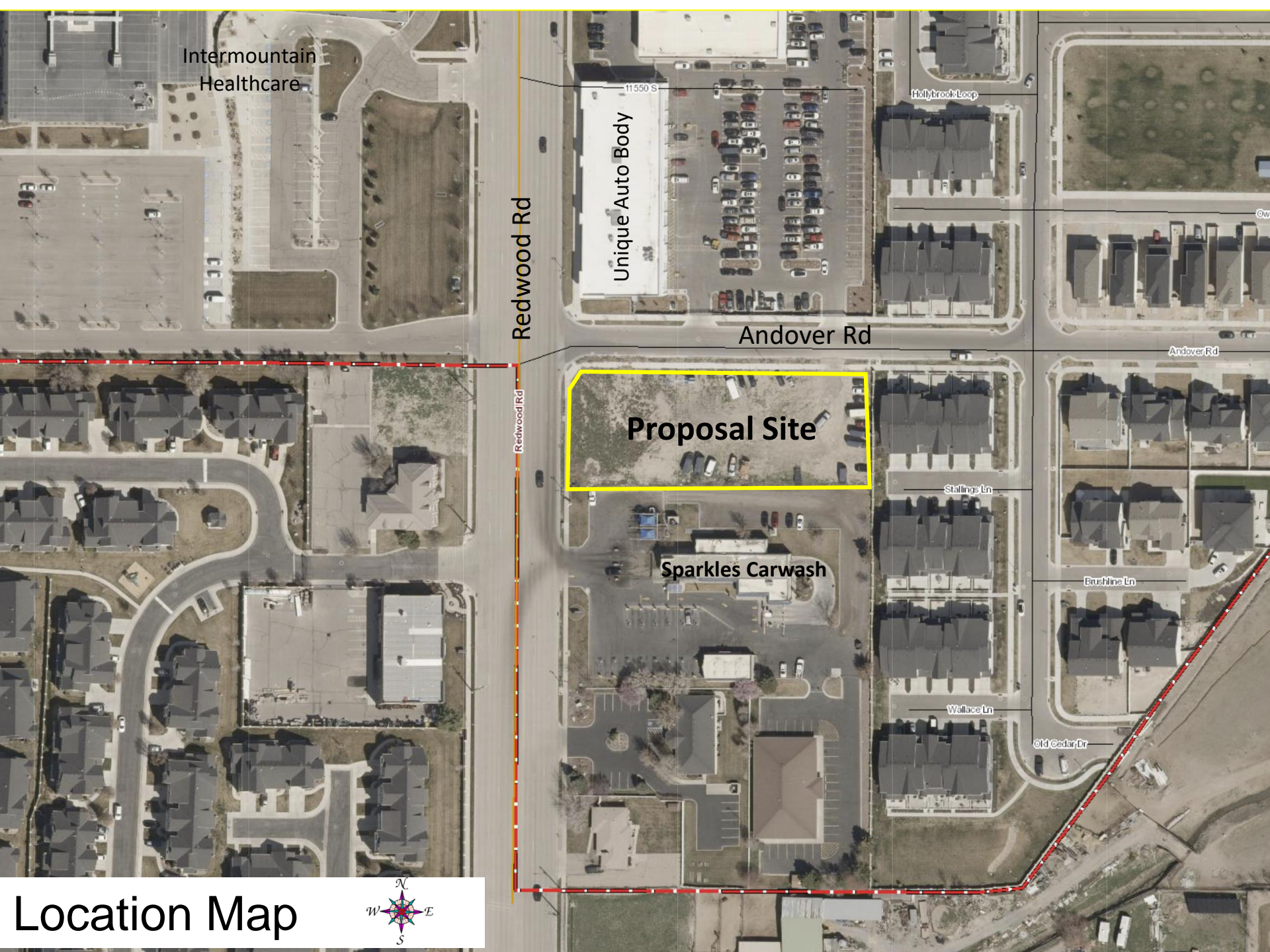
Recommendation: based on the Findings and Conclusion listed above, staff recommends that the Planning Commission take comments at the public hearing and approve **a conditional use permit for "equipment light repairs and service enclosed within a building" to locate at 11581 S. Redwood Road**, unless, during the hearing, facts are presented that contradict these findings or new facts are presented, either of which would warrant further investigation by staff.

ALTERNATIVES:

- Approve the Application with conditions.
- Deny the Application.
- Schedule the Application for a decision at some future date.

SUPPORT MATERIALS:

- Aerial Map
- Zoning Map
- Site Plan
- Landscape Plan
- Building Elevations and Floor Plans
- Letter regarding Business Operations and Sound



Intermountain
Healthcare

Unique Auto Body

11550 S

Hollybrook Loop

Redwood Rd

Andover Rd

Andover Rd

Proposal Site

Stallings Ln

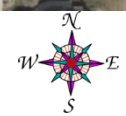
Sparkles Carwash

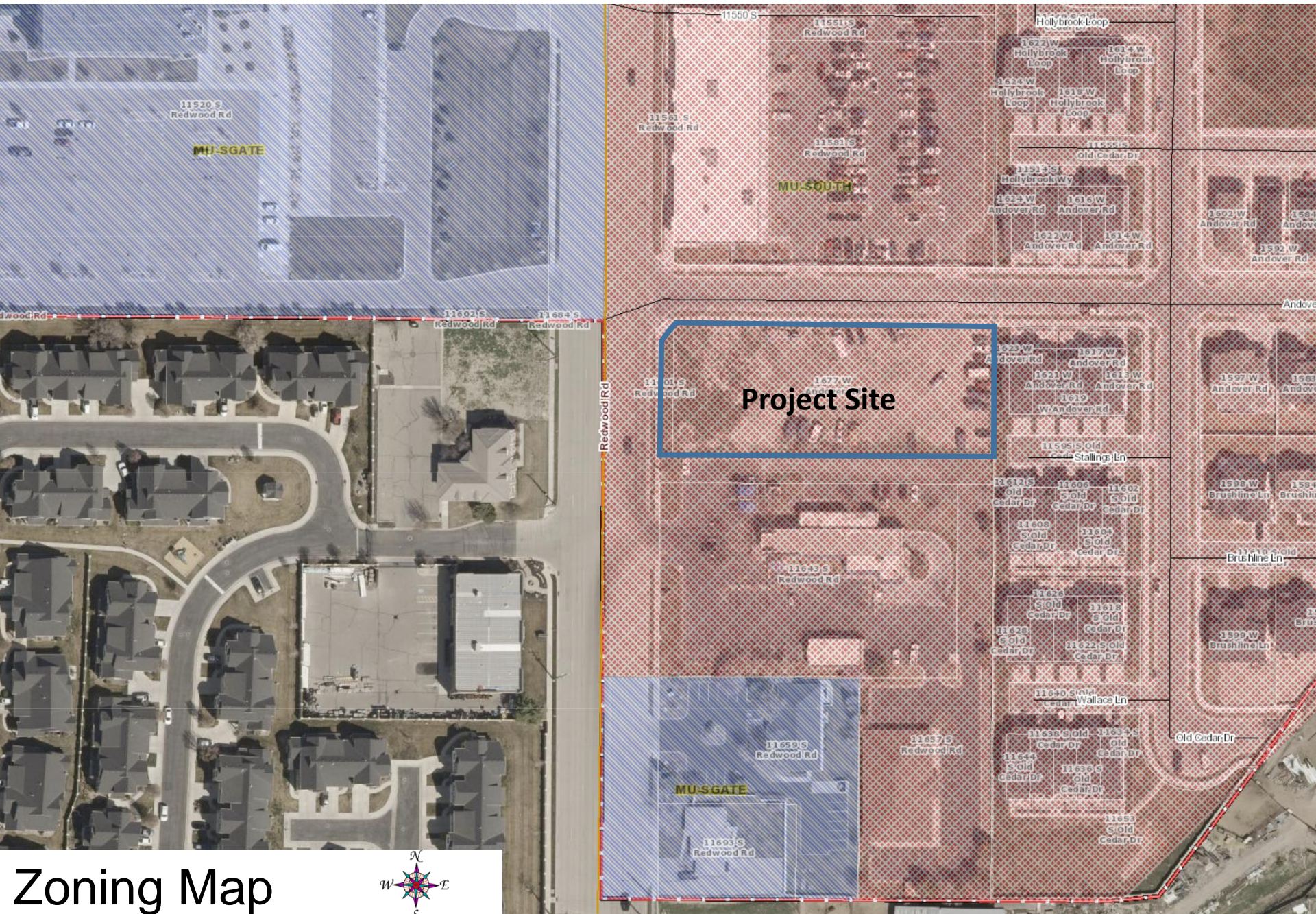
Brushline Ln

Wallace Ln

Old Cedar Dr

Location Map

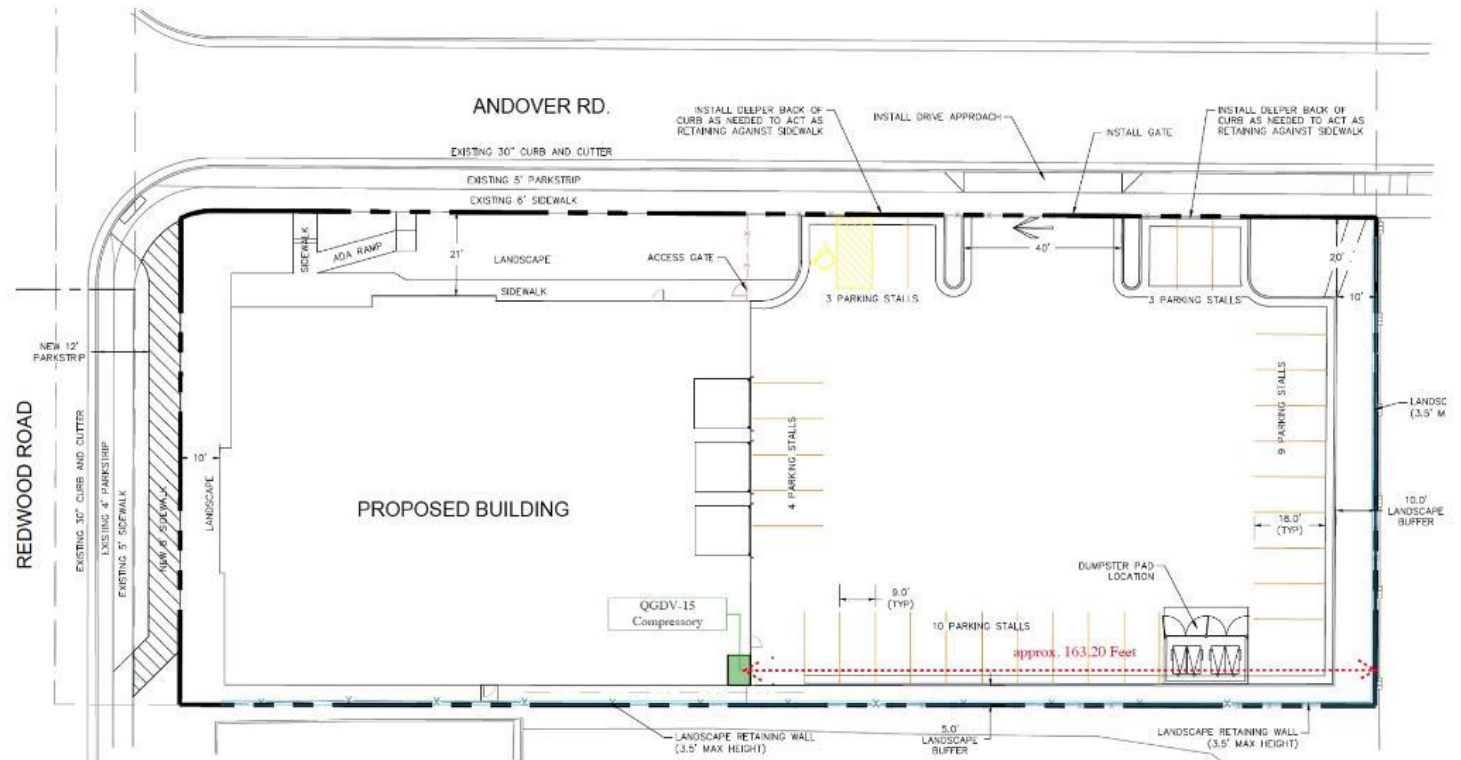




Zoning Map

SCHOPPE

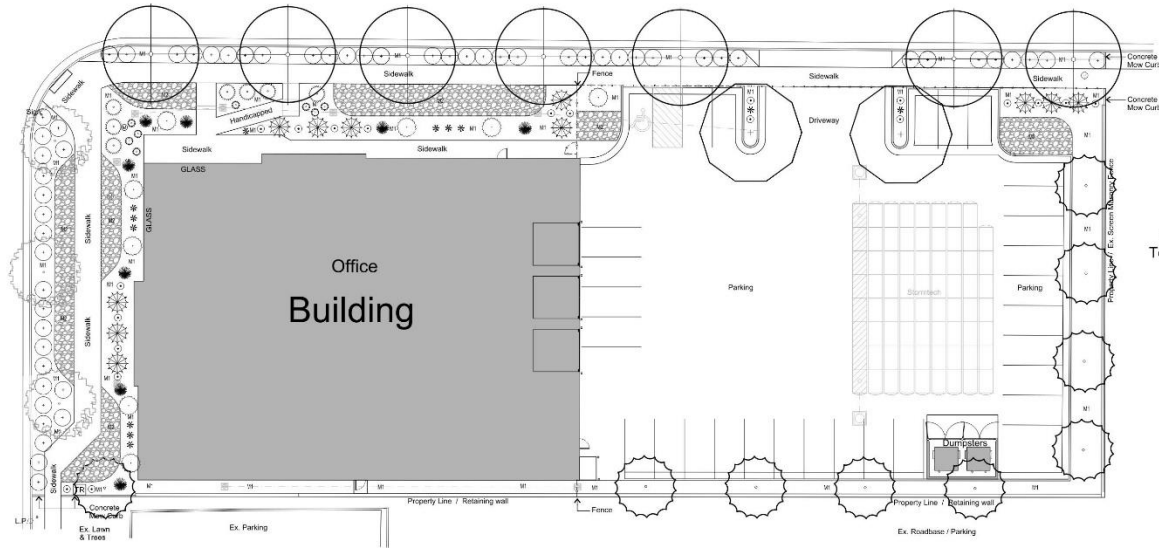
SITE PLAN



Redwood Road

Unique
Collision Repair Center

Andover Road



Existing
Townhouses

SHRUBS, PERENNIAL & GRASS LEGEND

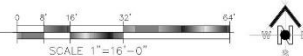
| Symbol | Type | Scientific Name / Common Name | Root Ball Size | Planting Size | Mature Size |
|--------|-----------|--|----------------|---------------|--------------|
| | | | | Height Width | Height Width |
| ● | Evergreen | Pinus murrayana 'Dunkel' Dwarf Mugo Pine | 5 - Gal | 12" 18" | 4' 4' |
| ● | Evergreen | Juniperus horizontalis 'Blue Chip' Blue Chip Juniper | 5 - Gal | 4" 18" | 1' 5' |
| ● | Deciduous | Prunus x coccinea Double Flowering Plum | 5 - Gal | 24" 12" | 6' 6' |
| ● | Evergreen | Juniperus sabina 'Buffalo' Buffalo Juniper | 5 - Gal | 18" 18" | 12" 4' |
| ● | Deciduous | Rosa Double Knockout Double Knockout Rose | 5 - Gal | 24" 12" | 3' 2' |
| ● | Grass | Calamagrostis s. acutiflora 'Karl Foerster' Foerster Grass | 1 - Gal | 18" 6" | 4' 3' |
| ● | Grass | Pennisetum setosius 'Hawaii' Hawaii Fountain Grass | 5 - Gal | 12" 6" | 30" 30" |

TREE LEGEND

| Symbol | Plant Type | Scientific Name / Common Name | Planting Size | Planting Size | Mature Size |
|--------|------------|--|---------------------|---------------|--------------|
| | | | Height | Width | Height Width |
| ● | Deciduous | Syringa reticulata Japanese Tree Lilac | 2" Cal. Container | 7' 3' | 25' 25' |
| ● | Deciduous | Quercus rubra 'Staminal' Staminal Tree Oak | 1.5" Cal. Container | 7' 2' | 50' 50' |
| ● | Deciduous | Ulmus americana Lookout Elm | 2" Cal. Container | 8' 3' | 40' 30' |
| ● | Deciduous | Aster tataricus Tatarian Maple | 1.5" Cal. Container | 7' 2' | 25' 18' |
| ● | Evergreen | Flaco alba 'Copeland' Dwarf Norway Spruce | 5" Top Container | 6' 2' | 10' 6' |

LANDSCAPE PLAN

SCALE 1"=16'-0"



KEY

| | |
|----|--|
| M1 | CRUSHER FINES 3/8" Minus Tan Color - Geneva Rock Draper |
| CR | CRUSHED ROCK 2-4" Dia. Basalt - Dark Brown |
| CC | CONCRETE MOW CURB 6"x4" See Civil Drawings |

LANDSCAPE NOTES

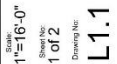
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM THE BUILDING AND OUT OF ALL AREAS OF THE LANDSCAPE BEFORE PROCEEDING WITH LANDSCAPE PLANTING.
- ALL AREAS LABELED M1 TO RECEIVE A LIGHT COLORED TAN, 3/8" CRUSHER FINES. INSTALL 2.5" DEEP AFTER PLANTING. RAKE SMOOTH, LIGHTLY MOISTEN AND COMPACT WITH A WATER FILLED ROLLER OR A HAND TAMPER. DO NOT INSTALL FABRIC IN THIS AREA. SUBMIT SAMPLES FOR OWNER APPROVAL BEFORE INSTALLATION.
- ALL AREAS LABELED M2 TO RECEIVE A DARKER COLORED 2-4" CRUSHED ROCK. INSTALL A MINIMUM OF 3" DEEP. INSTALL WETTED BARRIER FABRIC UNDER THIS ROCK. USE DENSITY 4.1 GZ. FABRIC OR APPROVED EQUAL.
- ALL AREAS LABELED M3 TO RECEIVE 6" OF TOPSOIL. THIS TOPSOIL MAY BE IMPORTED OR, IF AVAILABLE, STOCKPILED TOPSOIL FROM THE SITE. SAVE SUFFICIENT TOPSOIL FOR LANDSCAPING IF IT IS AVAILABLE AND SUITABLE. AREAS LABELED M2 DO NOT NEED TOPSOIL.
- CALL BLUE STAKES TO LOCATE AND MARK UTILITY LINES AT LEAST TWO (2) DAYS BEFORE PERFORMING ANY DIGGING ON THIS SITE. CONTACT THE TOWN'S REPRESENTATIVE FOR INFORMATION ON THE LOCATION OF ANY UTILITIES NOT MARKED BY BLUE STAKES. I.E. LIGHT POLE CONDUIT AND WIRING.
- ALL LANDSCAPE TO RECEIVE A NEW AUTOMATIC IRRIGATION SYSTEM AS PER SOUTH JORDAN CITY CODE.
- MOW CURBS TO BE POURED IN PLACE CONCRETE. THEY NEED TO BE 6" WIDE AND 8" DEEP.
- MAINTAIN LANDSCAPE AND IRRIGATION FOR A PERIOD OF 30 DAYS FOLLOWING SUBSTANTIAL COMPLETION. AT THE END OF THE 30 DAYS A FINAL INSPECTION WILL NEED TO BE MADE TO ASSURE COMPLIANCE WITH THE CONTRACT DOCUMENTS. AT THIS TIME THE OWNER WILL NEED TO BE INSTRUCTED ON THE IRRIGATION SYSTEM OPERATION AND RECOMMENDED CARE FOR THE PLANT MATERIALS.
- PLANT MATERIALS WILL NEED TO BE WARRANTED FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE. ANY DEAD OR STRESSED PLANTS WILL NEED TO BE REPLACED AT NO CHARGE TO THE OWNER.

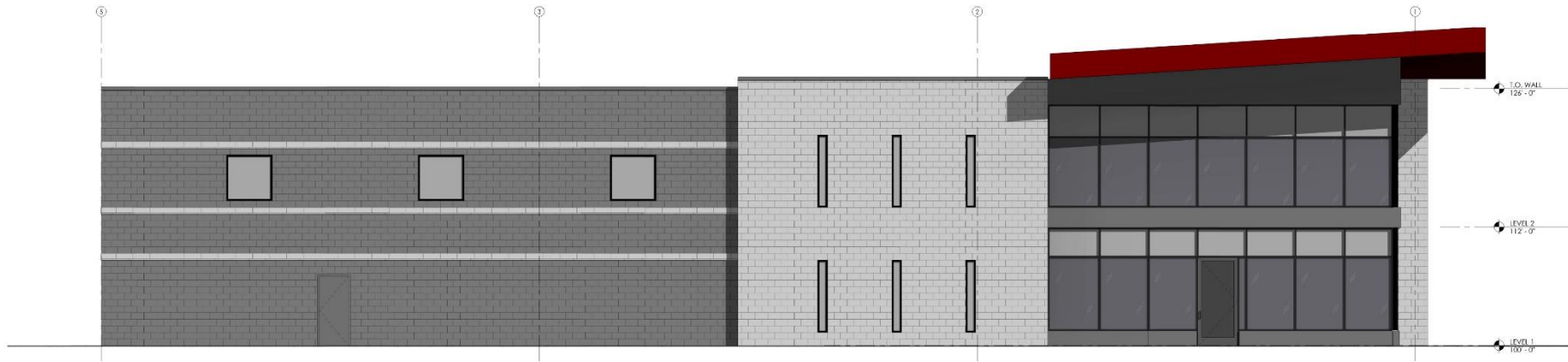
TREE REQUIREMENT

PARKING LOT TREES
1 Tree / 3 Stalls = 9 Trees
1 Tree / 500 SF = 13 Trees
OTHER OPEN SPACE
1 Tree / 40' = 10 Trees
TOTAL TREES REQUIRED = 32 TREES
Note: 11 Evergreen Trees Included.

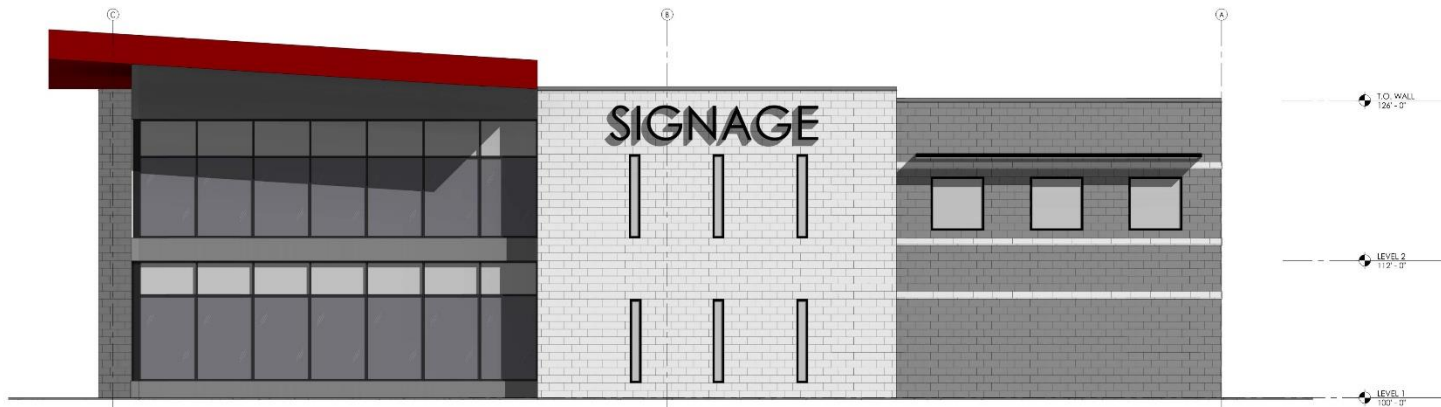


LANDSCAPE ARCHITECT

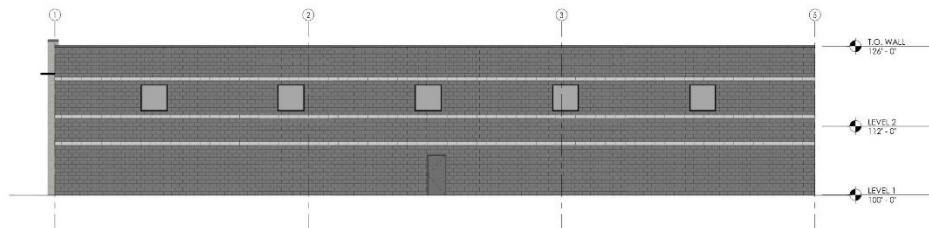




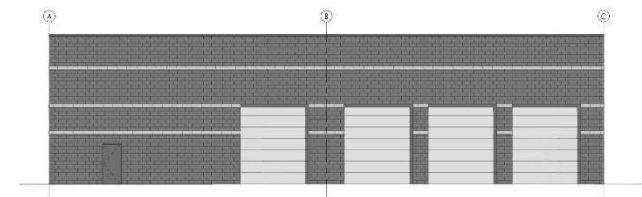
1 NORTH ELEVATION
104' x 112'



4 WEST ELEVATION
104' x 112'



3 SOUTH ELEVATION
104' x 112'



1 EAST ELEVATION
104' x 112'







February 6, 2023

City of South Jordan
Attn: Greg Schindler, AICP
City Planner
1600 W. Towne Center Drive
South Jordan, Utah 84095

RE: Schoppe Inc. - PLSPR202200225

Dear Mr. Schindler,

I am drafting this letter, along with a few exhibits, to provide you more information regarding the potential sound impact that the proposed development will have on the existing neighborhood to the East. This development will be occupied by its owner Schoppe, Inc. I will attempt to mitigate concerns Staff and Planning Commission may have in relation to the potential sounds generated by Schoppe's staff, equipment, customers, and vendors.

Schoppe's Staff

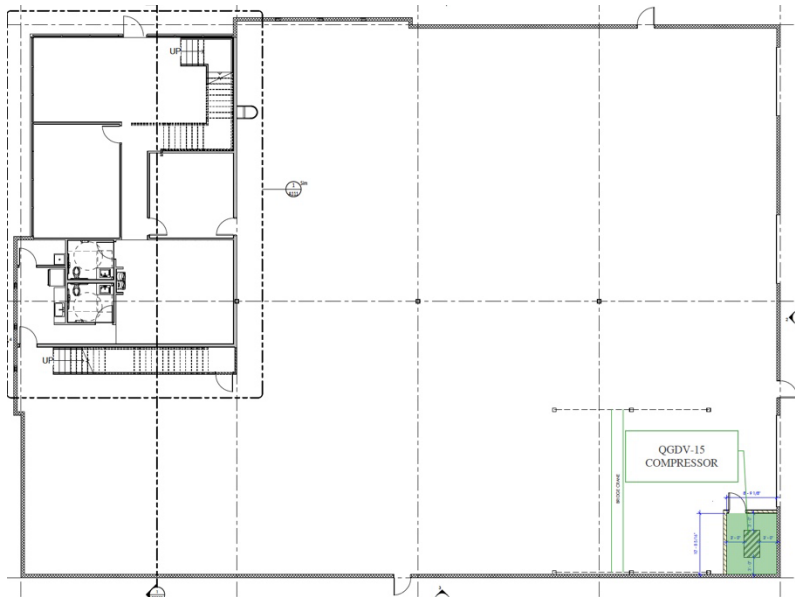
Schoppe employs 20-40 individuals Full-Time with approximately 8-10 of those employees working at the proposed development. Its operating hours are Monday through Friday from 7:30 a.m. to 5:00 p.m.

Schoppe has been incorporated since 1878 and is a heating and air conditioning contractor. They primarily perform work for public entities along the Wasatch Front such as BYU, The University of Utah, multiple school districts, Intermountain Healthcare, and many others.

Schoppe's Equipment

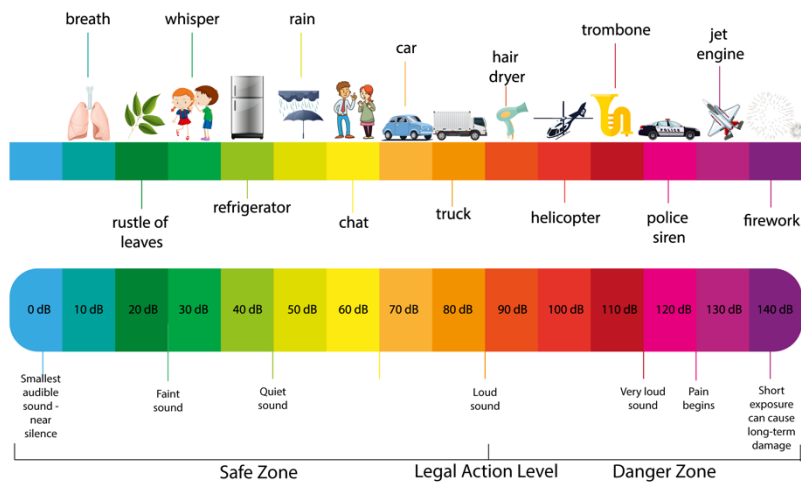
The warehouse component of the proposed building houses several pieces of equipment for the fabrication and assembly of various heating and air conditioning components. A full list of equipment can be found on Exhibit A. The loudest piece of equipment that is consistently used is the Quincy Air Compressor QGDV 15 (the "Compressor"). Exhibit B details the manufacturer specs of the Compressor as well as links to videos and other information. Historically, the Compressor at Schoppe's existing location has run for approximately 30 minutes per day, and some days not at all. It is an "on-demand" piece of equipment.

After numerous design considerations, Schoppe is proposing to install the Compressor *inside* of the building, within an enclosure, as depicted in Illustration 1 below. Previous submittals have shown the Compressor installed outside of the building within an enclosure.



- Illustration 1 -

The sound level of the Compressor is 66 decibels as shown within the spec sheet of Exhibit B. Below is an illustration of common sounds and where they fall on a traditional decibel sound scale:



- Illustration 2 -

As Illustration 2 shows, the sound level for this Compressor is greater than that of two individuals chatting but less than that of a standard size car.

Sound Levels at the Eastern Property Line

Sound attenuation is the reduction of sound energy as it travels through a medium such as air. The amount of sound attenuation that occurs will depend on various factors such as the type of air compressor, the location and surrounding environment, and the presence of any barriers or obstacles between the Compressor and the location where the sound is being measured.



In general, sound energy decreases with distance as it spreads out and becomes dispersed, resulting in a reduction in sound pressure level.

To better illustrate what the approximate sound levels of the Compressor (and other noise) will be, assuming no barriers and no enclosures, at the eastern boundary line I have calculated the estimated sound attenuation below. I used the Inverse Square Law for purposes of calculating the attenuation. The Inverse Square Law states that the sound pressure level decreases proportional to the inverse square of the distance from the source. This is represented mathematically as follows:

$$SPL_2 = SPL_1 - 20 \log (R_2/R_1)$$

SPL_1 = Sound Pressure Level at the Compressor

SPL_2 = Sound Pressure Level at the eastern property line

R_1 = Distance standing from the Compressor

R_2 = Eastern property line distance from the Compressor

Under this scenario, using the Inverse Square Law defined above, there is an assumption that there are no obstructions, no walls and equal sound output from all sides of the Compressor. It's as though the Compressor is sitting in the open, approximately 163.2 feet from the eastern property line (R_2). While it's not descriptive of what will be constructed (there will be barriers and walls built around the Compressor), it is informative as to the quiet nature of the Compressor at 66 dB (SPL_1) when standing at a standard distance of 3 feet (R_1). Using the equation above we calculate the sound level at the eastern boundary line (SPL_2) as 31.29 dB as shown below:

$$SPL_2 \text{ dB} = 66 \text{ dB} - 20 \log (3 \text{ ft} / 163.20 \text{ ft})$$

As shown above, the sound level of the Compressor at the eastern property line is estimated to be 31.29 dB. This sound level is similar to that of a refrigerator or a whisper as shown above. In Illustration 2.

On February 6, 2023, I made measurements of sound at the eastern property line of the proposed development. I utilized a Tadeto SL720 Sound Level Meter which complies with IEC61672-I Class2 of the International Committee. The time and sound levels are depicted below in Illustration 3.

| Time of Day | Minimum Sound Reading | Maximum Sound Reading |
|-------------|-----------------------|-----------------------|
| 8:12 AM | 52.1 dB | 56.5 dB |
| 8:15 AM | 55.3 dB | 61.4 dB |
| 12:47 PM | 51.5 dB | 61.5 dB |
| 12:53 PM | 51.8 dB | 60.7 dB |

- Illustration 3 -



Schoppe's Customers

Schoppe traditionally receives very little customer traffic. Most customer interaction is done on a job site, at the general contractor's offices, or at the customer's offices. Any customer traffic would be during normal business operating hours only.

Schoppe's Vendors

Schoppe receives deliveries like those of other similar operating businesses. UPS/FedEx/Amazon make deliveries almost daily.

Regular vendors make deliveries 1-2 times per week of materials delivered in small to medium size box trucks.

The largest deliveries are coils of sheet metal. These are delivered by an open-bed semi-trailer. This is a single delivery every 2-3 months.

While I am not a licensed engineer, it is my understanding that the noise output by Schoppe will be less than that of its neighbors to the north and to the south. It's loudest piece of equipment, the Compressor, will have a sound level at the eastern property line of less than 32 dB when you account for enclosures and sound-proofing techniques. That is like the sound of your refrigerator when you're standing next to it. It's employees, customers and vendors create a minimal sound disturbance based on the number of trips to and from the proposed development. It is my opinion that the sound output from Schoppe will be minimal and unnoticeable unless inside the actual facility. If you have any questions about the exhibits below feel free to reach out to me at your convenience.

Sincerely,

Tyler Howland

Tyler Howland



EXHIBIT A

1. Quincy Air Compressor QGDV 15 (Loudest piece of machinery. Fully enclosed) - [Quincy Link](#)
 2. Accurl 8X3200 - [Accurl Hydraulic Machine](#)
 3. Tennsmith MSE-16 - [Tennsmith Mechanical Shears](#)
 4. Iowa Precision Coil Line ESB6016 - [Iowa Precision Coil Feed Machine](#)
 5. Vicon Plasma Cutter HVAC520 - [Vicon 520 Plasma Cutting Table](#)
 6. JMT Press Brake JM-R - [JMT R-Series Press Brake Features](#) | [JMTUSA](#)
-



EXHIBIT B

[Link to Quincy Air Compressor Videos](#)

Compressor Specs:

QGD & QGDV Series



QGD & QGDV Series

Rotary Screw Air Compressors | 15-60 HP



Quality Comes in All Shapes and Sizes – But Just One Color.

Quincy has the Compressed Air Solution for your Application.

Since 1920, Quincy's trademark blue compressors have been hard at work building our company's reputation for quality and performance in the world's most demanding applications and harshest environments.

We're Still Making History.

Today, you'll find that same leadership in Quincy's next-generation compressed air solutions that feature everything from smart controls to green technologies. We know that your company is counting on our reputation. That's why every Quincy product is designed, constructed and proven to deliver exceptional customer value before it is worthy of wearing the Quincy name.

Our Promise to You.

As a customer, you can always count on Quincy for a low cost of ownership through stable air pressure, easy maintenance and longer equipment life. And we back it all with one of the strongest manufacturer warranties in the industry. No shortcuts and no substitutions. That's the quality of Quincy.

Proven Performance. Next-Level Efficiency. Low Cost of Ownership.

The QGD & QGDV Series represent the ongoing evolution of proven compressed air technology. Packed with the latest innovations, premium features and almost a century of compressed air experience, these models offer improved features and benefits.

These units are even more quiet, durable and efficient in a way that lowers your total cost of ownership. That's the value of true innovation and the signature Quincy quality.

- **Choice of Drive Systems**

Reliable fixed or variable speed drive options to match the needs of your application.

- **Greater Installation Flexibility**

Smaller footprint designed to operate with reduced noise and vibration levels, making it suitable for nearly all applications.

- **Impressive Standard Features**

Units come well-equipped with premium components like a TEFC motor, Wye Delta starting, package pre-filtration and NEMA4 electrical enclosure as standard equipment.

- **Reduced Energy Costs**

Energy efficient technologies include an IE3/NEMA Class 1 efficiency motor, gear drivetrain, energy efficient airends, new Airlogic2 controller, and a special drivetrain-cooling canopy.

- **Simplified Maintenance**

New design features hinged, quick release panels with instant access to all consumables to minimize downtime and reduce maintenance costs.

- **Leading Warranty**

Quincy's "True Blue" 5-Year manufacturer warranty protection for the airend, motor, separator tank and cooler/heat-exchanger.

Intelligent Control for Maximum Efficiency

Quincy's Airlogic² controller delivers key information for easy monitoring and intuitive control with an intelligent unload cycle to optimize energy use for maximum efficiency.

- Automatic restart after power failure
- Dual pressure set point
- Program up to four different week-schedules for 10-week period
- Graphic service plan indication
- Remote control and connectivity functions
- Software available to control up to six compatible compressors



Online Visualization Capability is Standard

Airlogic² controllers allow you to freely monitor your Quincy compressor(s) from anywhere you have Internet access. Just enter a valid IP address in your computer browser and your status will be displayed in a read-only format.

- Built-in Internet monitoring capability
- No fees or subscription required
- Clear and easy to understand readout
- Icon-based display
- Browser-based online compressor status visualization
- LED status alerts for alarm, service needed, auto operation and power on

Quincy Ingenuity Reduces Your Maintenance Costs

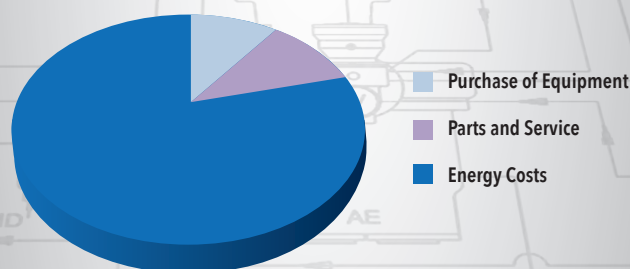
The QGD and QGDV have evolved with valuable input from our customers. As a result, we developed the "best in class" design for compressor serviceability. These units have several key features that promote simple maintenance and fast servicing to minimize downtime and labor costs, including:

- **Boltless Hinged Doors (Front and Back)**
Promotes quick and easy access to all user-maintained components; heat exchangers can be cleaned without removal
- **Fast Panel Access to Consumables**
Provides instant access to all consumables (air filter, oil filter, separator element, oil fill location) via a single panel
- **Large Roof Service Access**
Offers ample access for easy maintenance through easily removable roof panel
- **Spin-On Filters (15-30Hp)**
Allows for speedy oil and air filter changes without tools or disassembly

Determining Your Compressor's True Life Cycle Cost

Purchasing a compressor is an investment. How that investment continues to perform over its life, directly impacts your bottom line.

Total Life Cycle Cost





Quincy QGD 15-30 HP Fixed Speed Drive Rotary Screw Compressor

Standard Premium Features (15-30)

Quincy's QGD 15-30 hp fixed speed drive rotary screw compressors are designed for many small to medium-sized industrial applications that benefit from steady air generation in a small footprint design.

Standard equipment on the QGD 15-30 features many premium key components, including upgraded controls, pre-package air filtration and phase monitoring. These affordable rotary screw compressors are reliable and easy to maintain to deliver premium efficiency for a low cost of ownership.



Quincy QGD 40-60 HP Fixed Speed Drive Rotary Screw Compressor

Standard Premium Features (40-60)

The QGD 40-60 hp fixed speed drive rotary screw compressors offer additional horsepower from a fixed speed drive in a small footprint design. These units are well-suited for medium-sized industrial applications that require steady air production.

Standard equipment on the QGD 40-60 hp production includes premium key components, upgraded controls, pre-package air filtration and phase monitoring. These affordable rotary screw compressors are reliable and easy to maintain to deliver premium efficiency with a low cost of ownership.



Quincy QGDV 15-30 HP Variable Speed Drive Rotary Screw Compressor

Standard Premium Features (15-30)

Quincy's QGDV 15-30 hp offers the benefit of variable speed gear drive for small industrial applications with fluctuating compressed air demands. These units are up to 50% more energy efficient than fixed speed drives with an extensive flow range of 24% - 100%. This effectively reduces your compressor's lifecycle costs by an average of 37%. The QGDV 15-30 hp also removes peak current penalty during startup, minimizes system leakage and eliminates wasted idling times during operation. Together, these capabilities dramatically lower energy consumption throughout the life of the compressor.

Standard equipment on this model features premium key components like upgraded controls and prepackage filtration. These affordable rotary screw compressors are reliable and easy to maintain to deliver premium efficiency for an exceptionally low cost of ownership.

Compressor Model Features and Benefits Comparison

| Compressor Model | Compact Design | Fixed Speed Gear Drive | Variable Speed Gear Drive | TEFC Motor | Efficient WyeDelta Starting | Cooling Canopy Design | NEMA 4 Electrical Enclosure | Quiet Operation | Single Panel & Large Roof Service Access | Improved Specific Energy | Advanced Free Air Delivery |
|------------------|----------------|------------------------|--|----------------------------|-----------------------------|-----------------------|-----------------------------|-----------------|--|--------------------------|----------------------------|
| QGD 15-30 | • | • | | - IE3, NEMA Class 1 Rating | • | • | • | 66 - 69 dBA | • | • | • |
| QGD 40-60 | • | • | | - IE3, NEMA Class 1 Rating | • | • | • | 66 - 69 dBA | • | • | • |
| QGDV 15-30 | • | | - Danfoss Variable Speed Drive with Cubicle Vent Fan | - IE3, NEMA Class 1 Rating | | • | | 66 - 69 dBA | • | • | • |

Compressor Controls Features and Benefits Comparison

| Compressor Model | Clear & Simple Readout | Icon Based Display | Auto Run | General Alarm | Power On LEDs | Temp & Dewpoint Display | Service Indicator & Fault Mgmt. | Start/Stop Controls | Remote Start/Stop |
|--|------------------------|--------------------|----------|---------------|---------------|-------------------------|---------------------------------|---------------------|-------------------|
| Airlogic ² Control (QGD 15-30, QGD 40-60, QGDV 15-30) | • | • | • | • | • | • | • | • | • |

* Unit performance measured according to ISO 1217, Annex C, Edition 4:2009.

QGD Fixed Speed Technical Data

| Model No. | HP | KW | PSI | ACFM | Length | Width | Height | Lbs | dBA |
|-----------|----|----|-----|-------|--------|-------|--------|------|-----|
| QGD-15 | 15 | 11 | 100 | 82.3 | 56.4 | 33.1 | 50.3 | 1071 | 66 |
| QGD-15 | 15 | 11 | 125 | 70.1 | 56.4 | 33.1 | 50.3 | 1071 | 66 |
| QGD-15 | 15 | 11 | 150 | 61.8 | 56.4 | 33.1 | 50.3 | 1071 | 66 |
| QGD-20 | 20 | 15 | 100 | 102.7 | 56.4 | 33.1 | 50.3 | 1089 | 67 |
| QGD-20 | 20 | 15 | 125 | 97.2 | 56.4 | 33.1 | 50.3 | 1089 | 67 |
| QGD-20 | 20 | 15 | 150 | 79.8 | 56.4 | 33.1 | 50.3 | 1089 | 67 |
| QGD-25 | 25 | 18 | 100 | 124.0 | 56.4 | 33.1 | 50.3 | 1122 | 68 |
| QGD-25 | 25 | 18 | 125 | 109.8 | 56.4 | 33.1 | 50.3 | 1122 | 68 |
| QGD-25 | 25 | 18 | 150 | 102.3 | 56.4 | 33.1 | 50.3 | 1122 | 68 |
| QGD-30 | 30 | 22 | 100 | 145.4 | 56.4 | 33.1 | 50.3 | 1157 | 69 |
| QGD-30 | 30 | 22 | 125 | 132.2 | 56.4 | 33.1 | 50.3 | 1157 | 69 |
| QGD-30 | 30 | 22 | 150 | 118.4 | 56.4 | 33.1 | 50.3 | 1157 | 69 |

| Model No. | HP | KW | PSI | ACFM | Length | Width | Height | Lbs | dBA |
|-----------|----|----|-----|-------|--------|-------|--------|------|-----|
| QGD-40 | 40 | 30 | 100 | 214.4 | 51.2 | 35 | 70.5 | 1415 | 66 |
| QGD-40 | 40 | 30 | 125 | 192.6 | 51.2 | 35 | 70.5 | 1415 | 66 |
| QGD-40 | 40 | 30 | 150 | 175.0 | 51.2 | 35 | 70.5 | 1415 | 66 |
| QGD-50 | 50 | 37 | 100 | 247.1 | 51.2 | 35 | 70.5 | 1536 | 67 |
| QGD-50 | 50 | 37 | 125 | 229.7 | 51.2 | 35 | 70.5 | 1536 | 67 |
| QGD-50 | 50 | 37 | 150 | 214.4 | 51.2 | 35 | 70.5 | 1536 | 67 |
| QGD-60 | 60 | 45 | 100 | 295.2 | 51.2 | 35 | 70.5 | 1639 | 68 |
| QGD-60 | 60 | 45 | 125 | 273.3 | 51.2 | 35 | 70.5 | 1639 | 68 |
| QGD-60 | 60 | 45 | 150 | 249.2 | 51.2 | 35 | 70.5 | 1639 | 68 |

* Unit performance measured according to ISO 1217, Annex E, Edition 4:2009

| Integrated Air Treatment | High Efficiency Airend | Package Pre-Filtration | Cooling System | Microprocessor Controls | Centrifugal Blower | Oversized Cooler & Fan Combination | Air/Oil Circuit | True Blue 5-Year Warranty | Available Options |
|--------------------------|------------------------|-----------------------------------|---|-------------------------|--------------------|------------------------------------|--|---|-------------------|
| • | • | Pre-Filter - Cooler - Motor | - Independent Air/Oil Design - Elimination of Thermal Stress - Canada CRN | - Airlogic ² | • | • | - 4,000 hrs. Air Filter - 4,000 hrs. Oil Filter - 4,000 hrs. Separator | - Drive Motor - Airend - Separator Reservoir - Cooler/Heat Exchanger | - Dryer - Tank |
| • | • | • | - Independent Air/Oil Design - Elimination of Thermal Stress | - Airlogic ² | • | • | - 4,000 hrs. Air Filter - 4,000 hrs. Oil Filter - 8,000 hrs. Separator | - Drive Motor - Airend - Separator Reservoir - Cooler/Heat Exchanger | - Dryer |
| • | • | Pre-Filter - Cooler - Motor | - Independent Air/Oil Design - Elimination of Thermal Stress - Canada CRN | - Airlogic ² | • | • | - 4,000 hrs. Air Filter - 4,000 hrs. Oil Filter - 4,000 hrs. Separator | - Drive Motor - Airend - Separator Reservoir - Cooler/Heat Exchanger | - Dryer - Tank |

| Programmable Auto-Restart | Motor Start Limit | Max/Min Temp Default Settings | Online Monitoring | Pressure Display | Full Color Display | Smart Unload Cycle | Networked Unit Capability | Flexible Scheduling | Integrates w/ NetSync II System Controller |
|---------------------------|-------------------|-------------------------------|-------------------|------------------|--------------------|--------------------|---------------------------|--|--|
| • | • | • | • | • | • | • | 6 | - Up to 4 different weekly schedules over 10 weeks | • |

QGDV Variable Speed Technical Data

| Model No. | HP | KW | PSI | ACFM | Length | Width | Height | Lbs | DBA |
|-----------|----|----|-----|-------|--------|-------|--------|------|-----|
| QGDV-15 | 15 | 11 | 100 | 79.9 | 56.3 | 33.1 | 50.3 | 1052 | 66 |
| QGDV-15 | 15 | 11 | 125 | 72.3 | 56.3 | 33.1 | 50.3 | 1052 | 66 |
| QGDV-15 | 15 | 11 | 150 | 63.6 | 56.3 | 33.1 | 50.3 | 1052 | 66 |
| QGDV-20 | 20 | 15 | 100 | 102.6 | 56.3 | 33.1 | 50.3 | 1069 | 67 |
| QGDV-20 | 20 | 15 | 125 | 96.2 | 56.3 | 33.1 | 50.3 | 1069 | 67 |
| QGDV-20 | 20 | 15 | 150 | 87.1 | 56.3 | 33.1 | 50.3 | 1069 | 67 |

| Model No. | HP | KW | PSI | ACFM | Length | Width | Height | Lbs | DBA |
|-----------|----|----|-----|-------|--------|-------|--------|------|-----|
| QGDV-25 | 25 | 18 | 100 | 127.1 | 56.3 | 33.1 | 50.3 | 1135 | 68 |
| QGDV-25 | 25 | 18 | 125 | 117.6 | 56.3 | 33.1 | 50.3 | 1135 | 68 |
| QGDV-25 | 25 | 18 | 150 | 106.8 | 56.3 | 33.1 | 50.3 | 1135 | 68 |
| QGDV-30 | 30 | 22 | 100 | 154.5 | 56.3 | 33.1 | 50.3 | 1171 | 69 |
| QGDV-30 | 30 | 22 | 125 | 141.3 | 56.3 | 33.1 | 50.3 | 1171 | 69 |
| QGDV-30 | 30 | 22 | 150 | 124.8 | 56.3 | 33.1 | 50.3 | 1171 | 69 |

* Unit performance measured according to ISO 1217, Annex E, Edition 4:2009

Compressor
QGDV-15

Sound Level
66 dBA

EXHIBIT C

