



September 9, 2014

Kevin Johnson  
Project Manager  
Parks and Recreation Department  
City of Austin  
919 W. 28 ½ Street  
Austin, Texas 78705

Re: Austin Memorial Park Assessment

### **A Brief History and Organizational Summary**

The Austin Memorial Cemetery building was designed by San Antonio Architect W.H. Chambers. It was constructed before the cemetery opening in 1928. The original program of the building consisted of the caretaker's residence and office, service tower and maintenance building. The one story building and higher tower structure were organized to create a main entrance to the cemetery grounds with the service tower on the west side of the entry gate, and the office and residence on the east side (see figures 1 and 2), with a stone wall extending to the southeast corner and terminating with a lantern pilaster. A Spanish Revival style colonnade offers views to the gardens on either side, and connects the former residence to the office and vault which are contained in a taller belltower structure (see figure 10 & 11/A1.2). In 1979 a small wood framed storage addition was constructed on the north end of the main office. (see figure 9/A1.2).

Currently the building functions as the nerve center of the City of Austin Cemetery Office with funeral arrangements conducted out of the former residence and maintenance functions happening in the original office. The original stand alone service tower has been converted into male and female restrooms for cemetery visitors, and storage for the main office. To the north of the office building, across the lawn is located the original maintenance building and yard.

### **Building Construction**

The main office building is supported by wood beams on stone piers; the system appears to be in good condition. (reference attached structural report) Walls are wood framed with local limestone exterior cladding which also appears to be in good condition as there are no signs of severe cracking or distress. (see attached exterior elevations) A storage addition added in the 1970's is also wood framed and finished with pre grooved plywood.

The roof is also wood framed with red composition shingle. The roof design makes use of gables on the southwest, northeast and sunroom ends, with a hip negotiating the ridge elevation change at the northeast. (reference roof plan dwg 3/A1.1). The bell tower that houses the maintenance office and vault is of similar construction to the main house except with a hip roof topped with a bell tower cupola.

The main house has wood floors throughout with the exception of the addition where it is carpeted. Interior walls are finished with gypsum wall board, with the exception of the sunroom where the limestone cladding is exposed, and portions of the storage room addition which are also exposed limestone at the existing building sides, and plywood on the remaining sides. (reference figures 3-8 dwg A1.1) The ceiling consists of 12x12 acoustical tiles in the waiting area and reception with gypsum wall board in the offices. Window and door frames are constructed of wood, with the exception of the storage addition where the windows are aluminum framed. Windows in the sunroom and south offices also feature divided light half-moon transom windows. (reference figures 13 and 16, A1.3, A1.4)

## Building Materials and Conditions

### Limestone and Mortar

The locally sourced limestone used throughout the main building is consistent throughout, it is uncoursed, rough finished, and in generally good condition. There are several small examples of filler materials added such as different stone types and clay tiles but these are few and far between and in the authors opinion add to the handmade character of the building.

As stated in previous report, The mortar used in the project is inconsistent and varies it appears that different types of mortar were used in the original construction as workers likely made due with materials on site. Other mortar types appear as patches and do not match the original, this type appears as a yellow mortar with a fine grain. (see figure A)

### Pitting

Limestone is classified as a sedimentary rock and is an inherently soluble material. This solubility can lead to pitting which is evident throughout the limestone. The holes range in size from tiny pinholes to large ¼” to ½” crater like holes.

(see figure B)



Figure A –Limestone with yellow mortar patch, note the variation in limestone surface from smooth to rough



Figure B – Limestone exterior exhibiting pitting

**Biological growth**

Biological growth is present in several locations at the building, it is most apparent on the north side of the residence, and in areas below windows (specifically below HVAC units), the rear wooden stairs from the sunroom and in low areas near the grade. It is observed as dark stained areas that lighten as they go up. (see figure C)



Figure C – Biological Growth below window south side of sunroom

**Limestone Landscape Wall**

The Limestone landscape wall that runs north-south is a defining feature of the site and is need of stabilization. It appears to have shifted from soil movement. The shift has resulted in a cracked wall with the southern portion of the wall leaning to the east. (see figure D)



Figure D –large crack at landscape wall

**Concrete and Cast Stone**

Concrete is used throughout the buildings in a number of ways: windowsills, bases for the small balconets at the southern elevation, and topping for the stone walls and columns at the lanterns.

Cast Stone is used for two of the defining features of the building: the defining lanterns that flank the entrance, and the Spanish revival twist columns that define the Arcade.

**Cracking and Breakage**

The most severe cracking and breakage in the cast stone occurs at the eastern lantern which appears to be completely broken with its weight holding it in place. The columns below exhibit some minor hairline cracks but the damage is superficial and the structurally the columns are fully functioning; however the cracks in the columns should be monitored. (see figure E)



Figure E – Broken cast Stone Lantern

**Chipping**

The most severe chipping occurs at the lower leading edge of the concrete balconets. (see figure F)



Figure F – Chipping at concrete balconet

**Weathering**

The capitals at the arcade columns appear to have suffered from the detrimental effects of weathering. The condition is inconsistent and appears mostly on the north side of the columns. It is observed as erosion of the finer detailed portions of the column capital (see figure G)



Figure G – Weathering and Erosion at column capital

**Biological growth and general cleanliness**

The cast stone columns on the south side appear to have a combination of biological growth and dirt giving the tops a dark and dirty appearance. (see figure H)



Figure H – Stained column capital, a result of biological growth and dirt

**Wrought Iron**

Wrought Iron railings appear in three places at the building; at the balconets on the southside of the main office and at either side of the arcade. The balconet railings are more ornate and appear to be original, The top rails have suffered from corrosion and are in need of repair, while the other simpler rails are in adequate shape. (see figure J,J1,J2)



Figure J



Figure J1



Figure J2

- Figure J- Wrought Iron rails at north side
- Figure J1- Decorative original rail at South side balconet
- Figure J2- Corrosion at balconet rail

**Wood Trim and Windows**

The exterior trimwork at the building consists mostly of painted wood. It exists at the windows, doors and roofline. The bell enclosure at the tower top is also constructed of wood. The most severe rot at the building is present in the south side of the bell tower office above the window AC unit. (see figure K) Other wood damage includes pieces of trim at the roofline pulling away from the roof.

At the west side of the building there is a window missing and the void has been replaced with a plywood board (see figure K1). The balance of the windows are generally in average to poor condition, and are in need of removal/replacement of rotted parts, and general refurbishment.



Figure K



Figure K1

Figure K-Rotted wood trim at window and missing glass

Figure K1- Missing window at west side

**Main Office Code General Code Assessment**

**Occupancy Load and Restroom Calculation**

At present the main cemetery office does not meet 2009 Uniform Plumbing Code Standards for minimum plumbing Facilities. The occupancy classification for the Cemetery headquarters is a business, and based on the existing total square footage of 1,694SF, one toilet and one lavatory do not meet code.

2012 International Building Code 2012 Uniform Plumbing Code City of Austin Amendments Ordinance # 20130606-093

1694 SF business occupancy (100 gross)  $1694/100=17$  occupants

$17/2= 8.5$  male 8.5 Female

Male

- 1 water closet
- 1 lavatory

Female

- 1 water closet
- 1 lavatory

1 drinking fountain or accessible breakroom sink for public and employee use

**Texas Accessibility Standards**

At present the existing building and site currently contain several noncompliant items.

**Level Changes**

The entry to the office is 7" higher than the sidewalk requiring a step (see figure L)

The level change at the office entry door currently has a threshold that has approximately a 1 1/2" change in level.

*303.4 Ramps.*

*Changes in level greater than 1/2 inch (13 mm) high shall be ramped, and shall comply with 405 or 406.*



Figure L- Non-compliant Step and Threshold at Office Entry

**Parking and Access Aisles**

Existing Parking Space was installed prior to 2012 Texas Accessibility Standards and does not meet current accessibility guidelines (see figure M)

*Advisory 502.3 Access Aisle.*

*Accessible routes must connect parking spaces to accessible entrances. In parking facilities where the accessible route must cross vehicular traffic lanes, marked crossings enhance pedestrian safety, particularly for people using wheelchairs and other mobility aids. Where possible, it is preferable that the accessible route not pass behind parked vehicles. (see figure M)*

*502.3 Parking Space Access Aisle*

The existing handicapped parking space access aisle is not the proper size.

*502.3.1 Width.*

*Access aisles serving car and van parking spaces shall be 60 inches (1525 mm) wide minimum.*

*502.3.2 Length.*

*Access aisles shall extend the full length of the parking spaces they serve.*

*502.3.3 Marking.*

*Access aisles shall be marked so as to discourage parking in them.*



Figure M - Non-Compliant Access Aisle

**Restrooms**

The restroom was designed as a residential bathroom to serve the original caretakers residence; it now serves the restroom for the office and consequently has multiple accessibility clearance issues. Male and female restrooms for cemetery visitors are currently housed in the half service tower; the octagonal plan of the tower does not easily allow for T.A.S. compliant clearance spaces, additionally there is no accessible route to the restrooms. (see figure N)

*603.2.1 Turning Space.*

*Turning space complying with 304 shall be provided within the room.*

*603.2.2 Overlap.*

*Required clear floor spaces, clearance at fixtures, and turning space shall be permitted to overlap.*

*603.2.3 Door Swing.*

*Doors shall not swing into the clear floor space or clearance required for any fixture. Doors shall be permitted to swing into the required turning space.*

*604.2 Location.*

*The water closet shall be positioned with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches (405 mm) minimum to 18 inches (455 mm)*

*maximum from the side wall or partition, except that the water closet shall be 17 inches (430 mm) minimum and 19 inches (485 mm) maximum from the side wall or partition in the ambulatory accessible toilet compartment specified in 604.8.2.*

*Water closets shall be arranged for a left-hand or right-hand approach. Figure 604.2 Water*

*Closet Location*

*604.3 Clearance.*

*Clearances around water closets and in toilet compartments shall comply with 604.3.*

*604.3.1 Size.*

*Clearance around a water closet shall be 60 inches (1525 mm) minimum measured perpendicular from the side wall and 56 inches (1420 mm) minimum measured perpendicular from the rear wall*



Figure N- Non-Compliant Clearance at Main Office Restrooms



Figure O- Non-Compliant Route to Service tower restrooms

### Maintenance Building Organization and Construction

The Maintenance Building is located to the north of the main office to the south of the spoils yard, it is connected to the main office with a sidewalk and one must pass through a lockable gate to enter the area. The building is rectangular shaped and organized by two limestone ends at the north and south connected by a wood framed garage storage area. (see figure 1/A1.5, A1.6, A1.7).

Currently the area at the south end of the maintenance building houses a small storage room/office with a hall/ storage area and small restroom. The interior walls are finished with a wood paneling, likely added in the 1970's renovation, and painted wall board, floor is carpet with VCT at restroom, and the ceiling was finished with tiles which since have fallen away (see figure P, P1, P2) This end of the structure is supported with a wood pier and beam system.

The maintenance and garage area that connects the north and south portions is wood framed with a concrete slab floor. The foundation slab appears to be 3 separate slabs likely poured at three separate times, the first section supports the breakroom area, second section supports the garage area A, and the third section garage area B. The wood framed roof is exposed in the garage areas and appears to be in good condition.

The north end of the maintenance building is currently used as a break room for the maintenance workers at the site. The stone wall at the north side has five wood framed windows (see figure Q) while the south wall between the break room and the garage has stone returns with a wood framed wall between separating the two areas. The returns extend into the garage area and support the framing above. (see figure R, R1)

The exterior limestone at the maintenance building, suffers similar issues as the limestone at the main building especially in regards to pitting. The areas of limestone close to grade are darker and more stained, and on the east side there is much more biological growth and associated staining specifically adjacent to the HVAC line sets. There is also a large 6-10" hole at grade on the east side. (see figure S,S1)

The exterior of the central garage area is finished with a wood based T 1 -11 siding likely added in the 1970's. It is in poor shape, specifically at grade and at the east side of the building. The siding also appears to have pulled away from the stone at certain connections, likely due to shifting of the building.



Figure P



Figure P 1



Figure P2

Figure P shows ceiling condition at hallway,  
 Figure P1 showing storage area leading to restroom,  
 Figure P2 showing restroom floor with damaged VCT tiles.



Figure Q- Interior of Break room area showing the five windows on the north end of the building



Figure R



Figure R1

R -Interior of Garage area showing Stone returns and inside of wall at the north end of the garage area.  
R1- East side of maintenance building showing deteriorated T-1 11 and stone connection



Figure S



Figure S1

S- Biological growth and consequent staining due to moisture, likely from HVAC  
S1- Hole at east side of stone wall

Sincerely,

Charles Melanson, Architect

Tom Hatch, FAIA



**September 9, 2014**

Charlie Melanson  
Hatch + Ulland Owen  
1010 E. 11<sup>th</sup> Street  
Austin, Texas 78702

Re: Assessment of Office Building with adjacent Tower, and Maintenance Building at Austin Memorial Park Cemetery  
Austin, TX

## **Office Building with adjacent Tower**

At your request, a representative of this office visited the office building with its adjacent tower at Austin Memorial Park Cemetery on June 11<sup>th</sup>, 2014 to observe and provide a general structural assessment. The scope of the assessment focuses on the current structural condition of the building and noting any areas with structural deficiencies. This office's opinions regarding the structural integrity of the existing components are based upon observed conditions of the structure and structural experience with similar structures. A visual, practical, and non-destructive observation was performed of the structure's present condition by this office and provides in this report a discussion of observed items and a rendered opinion. This assessment was not a complete code or compliance inspection nor does it cover items or conditions that may be discovered only by invasive methods. Additionally, this assessment is not intended to be technically exhaustive, nor is it intended to reveal all existing or potential defects.

### **General Overview**

The office building is a one-story building built in the 1920's and originally was the home of the cemetery caretaker. A storage area was added to the original structure at some later date. The main structure was observed to be comprised of conventionally framed walls with a composite shingle roof supported on a structurally elevated floor system comprised of wood joists and beams. The wood framing bears on built up stone pilasters at interior bearing locations. At the perimeter, the wood framing appears to bear on load bearing masonry foundation walls. A portion of the masonry continues up along the exterior wood walls as veneer.

The storage area appeared to be constructed in a similar manner excepting that some type of masonry block, probably CMU or cinder block, was used to construct the pilasters to support the elevated floor system at interior bearing locations. The tower, which houses two restrooms and a storage room, is built out of the same stone used on the office building with a clay tile roof and slab-on-grade foundation. The interior partition walls are assumed to be wood. During the course of the site visit several pictures (labeled Figure X) were taken and are appended to this report in Appendix A.

### **Foundation Assessment**

The elevated wood floor framing was observed for both the main building foundation and the storage room foundation. As can be seen in Figures 1 and 2 the elevated framing system for both areas are in good condition. It was not verified that the beams framing into the masonry block pilasters had positive

attachment to the pilasters. As can be seen in Figure 2 and Figure 3, both types of pilasters appear to be in good condition. No cracks in the interior of architectural finishes were observed that would be indicative of differential structural movement of the foundation in either the main building or the storage room.

The slab-on-grade foundation of the tower appeared to be in good condition with some minor, superficial cracking in the ladies restroom. However, there were no observed signs of structural distress in either the exterior or interior walls of the tower.

It is our opinion that both foundation systems are performing well and do not require any structural repair. We do recommend that some type of positive attachment between the wood beams and masonry pilasters be verified to exist and if none are present, that a Simpson Strong-Tie product be provided to achieve the positive attachment.

### **Roof Framing Assessment**

We were able to gain access to the attic and review the roof framing. The roof framing appeared to be in good condition, see Figure 4. The ridge beam frames into a built up stone pilaster that does not continue all the way to the foundation. The ceiling joists were unable to be directly observed due to ceiling insulation and MEP equipment, however they appear to be in good condition based on the general levelness and lack of cracking in the architectural finishes on the ceilings. The interior of the standalone office and vault were unable to be observed, however the exterior appeared to be in good condition.

The roof framing of the tower was unable to be observed, but based on the lack of cracking in the architectural finishes of the ceiling they would appear to be in good condition.

### **Conclusion**

In summary, the two structures assessed during the site visit are in good structural condition and do not require any structural repair work to be done, at this time.

### **Maintenance Building**

At your request, a representative of this office visited the maintenance building at Austin Memorial Park Cemetery on September 3, 2014 to observe and provide a general structural assessment of this building in similar fashion as the assessment for the office.

### **General Overview**

The maintenance building is a one-story building built in the 1920's. It appears to have originally been two buildings with load bearing masonry walls separated by an open breezeway but connected by a continuous wood frame roof. The open breezeway was probably used as a covered drop off location for guests at the cemetery, but it has since been enclosed by the addition of wood frame walls on both sides. A separate slab on grade type foundation at the former breezeway area has been added. The two original enclosed areas appear to have different foundation systems. The current break room for the maintenance staff has a slab on grade type foundation while the maintenance office has an elevated floor system of 2x wood decking supported by 2x wood joists. As the floor system is not elevated far from the top of grade (8"-12" maximum) the joists appear to span from exterior wall to exterior wall of the building. During the course of this site visit several pictures (labeled Figure X) were taken and are appended to this report in Appendix A.

### **Foundation Assessment**

The foundation for this building consists of a mixture of slab-on-grade systems in the current break room, tool and site storage areas, and an elevated wood floor framing system at the office.

The slab-on-grade foundation appears to be in adequate condition in the break room; however, a large crack through the mortar joint at the perimeter wall was observed both on the interior and the exterior sides (see Figures 5 and 6). Given the lack of distress or cracking in any of the finishes this crack does not appear to pose a threat to the structural integrity of the building.

The slab-on-grade foundation in the tool storage area appears to be in good condition though it does exhibit some surface cracking, measured approximately 0.2 in deep. Given the shallowness of the crack observed at the rear of the foundation it is unlikely that it is affecting the structural integrity of the area. The slab-on-grade foundation in the site storage area appears to be composed of several individual slab sections. It was unclear if the slabs had been structurally tied together. At least two of the slabs sections were in major disrepair, exhibiting large cracks that went all the way through the slab. It is our opinion that the cause of the damage could more readily be ascribed to the use of the area as heavy storage for site equipment rather than differential movement or settling of the slab itself.

The elevated floor framing was observed to be in good condition as can be seen in Figure 7. There were no observed signs of structural distress, such as cracks in the interior architectural finishes which would indicate either settlement or differential movement of the elevated floor framing system.

### Roof Framing Assessment

The roof framing was most easily observed in the tool and site storage areas. The ridge beam, rafters, and exposed ceiling joists all appeared to be in good structural condition, with no noted deficiencies.

### Conclusion

In summary, the maintenance building appears to be in good structural condition and does not require any structural repair work to be done. Both the crack through the mortar in the exterior of the masonry wall in the break room and the damaged slab on grade areas in the site storage room can be repaired at the owner's discretion as they do not appear to be causing any distress to the structure at this time.

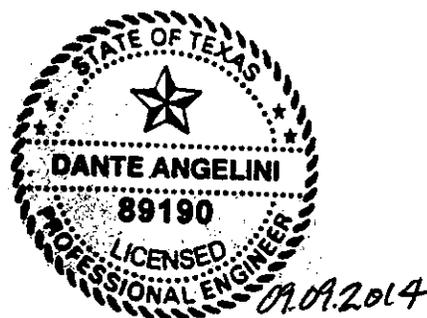
Sincerely,



Nikki Wernli, P.E.  
TX License No. : 110400



Dante Angeline, P.E.



## Appendix A



Figure 1 – Main Building elevated framing



Figure 2 – Storage elevated framing



Figure 3 – Main building pilaster



Figure 4 – Main building attic



Figure 5 – Exterior Mortar Joint Crack



Figure 6 – Interior Mortar Joint Crack



Figure 7 – Maintenance Office Elevated Floor Framing



**Austin Memorial Park Cemetery  
2800 Hancock Austin, TX 78737**

**EXISTING CONDITIONS ASSESSMENT REPORT**

***Prepared for:***

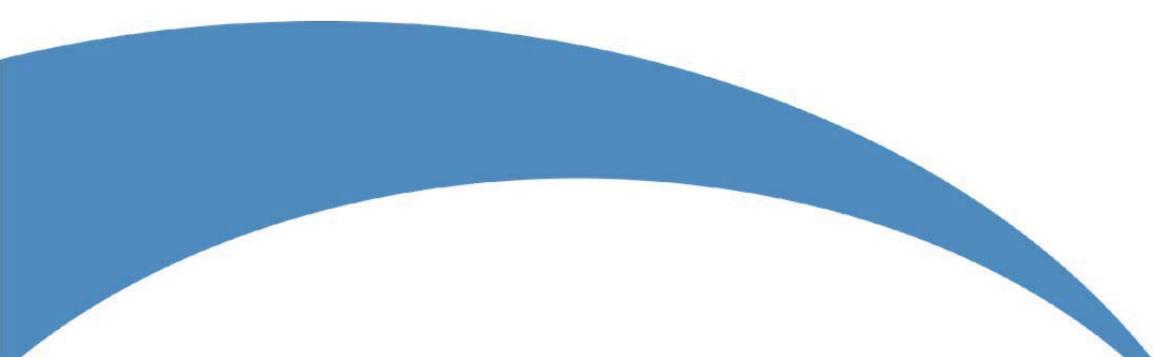
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Firm Registration No. 1141

September 9, 2014



September 9, 2014

Tom Hatch  
Hatch + Ulland Owen Architects  
1010 East 11th Street  
Austin, TX 78702

Re: **Austin Memorial Park Cemetery  
Existing Conditions Assessment Report**

Mr. Hatch,

We have enclosed an Existing Conditions Assessment Report for the Austin Memorial Park Cemetery Facility. We are available for any questions regarding the report. Please let me know if we may be of any assistance during your review of the report.

Thank you for the opportunity to consult on this project. We hope that this report will aide in the setting of budgets and the definition of the design scope of work.

Sincerely,



09/09/2014

Lynn C. Brown, P.E., LEED AP, QcXP  
Vice President - MEP Engineering Department

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## EXECUTIVE SUMMARY

The scope of work for the Austin Memorial Park Cemetery facility includes the assessment of the condition of the existing HVAC systems, plumbing fixtures, and electrical systems.

- **General:** The City of Austin Parks and Recreation Department has requested the condition of the facilities at the Austin Memorial Park Cemetery be documented to assist in determining scope and budget of future renovations.
- **Mechanical:** Condition of HVAC systems across the site varies. The main office building has been recently upgraded but the restroom exhaust system requires minor repair. Systems at the maintenance out-building and tower restrooms are defunct and will require major renovation.
- **Plumbing:** Conditions of plumbing systems vary from recently renovated to nonoperational. Fixtures in areas other than the main office will need to be renovated for compliance with water-saving regulations and Texas Accessibility Standards (TAS) requirements.
- **Electrical:** Condition of electrical systems appears to be in good working order. Lighting in the main office, in particular, and across the site overall would benefit from being updated with higher efficiency fixtures for additional energy savings.

## EXISTING CONDITIONS ASSESSMENT

The purpose of this report is to provide an assessment of the existing conditions of the mechanical, plumbing and electrical (MEP) systems at the Austin Memorial Park facilities.

### **Mechanical:**

The main office building is served by a 5-ton central air-conditioning system with gas furnace which was installed in the fall of 2013. **See Exhibit 1.** Air is distributed to all regularly occupied spaces through insulated ductwork routed in the attic. Although the system is new, a leak or overflow in the condensate line has occurred. Further investigation and repair is necessary to avoid further damage. This new central system replaced existing window terminal air conditioner units which had not been removed at the time of our site visit on June 18, 2014. **See Exhibit 2.** Window terminal air conditioner units should be evacuated of refrigerant and disposed of properly.

Restroom exhaust is provided by an in-line ceiling mounted exhaust fan. The exhaust fan is controlled by a wall switch but did not energize when the switch was moved to the "On" position.

The maintenance office is conditioned by a 1.5-ton Daikin ductless heat pump split system which was also installed in the fall of 2013. **See Exhibit 3.** The air handling unit is wall mounted and appears to provide adequate cooling for the space. Insulated condensate piping and electrical conduit are exposed. **See Exhibit 4.** No outside air is provided by mechanical means for ventilation purposes. While the operable window area in the room meets the requirements for natural ventilation by the City of Austin adopted Uniform Mechanical Code, the 2012 Uniform Mechanical Code requires a mechanical ventilation system in conjunction. Thus, the new ductless air handling is not in compliance with the latest adopted codes.

The maintenance out-building is conditioned by an air-conditioner and gas furnace which appears to be over 15 years old and that is reported to be non-functional. **See Exhibit 5.** The single-occupant restroom has no mechanical exhaust.

The tower men's and women's restrooms are exhausted by means of a combination heat, light, fan unit. **See Exhibit 6.** Each element is separately switched however, neither the fan nor the heater energized when the switch was moved to the "On" position. The combination heat, light, fan unit is in poor condition and likely beyond its useful life.

Condition of HVAC systems across the site varies. The main office building has been recently upgraded but the restroom exhaust system requires minor repair. Systems at the maintenance out-building and tower restrooms are defunct and will require major renovation.

### **Plumbing:**

The restroom in the main office was remodeled in the fall of 2013 according to office personnel. Plumbing fixtures appear to be in good working order. **See Exhibits 7 & 8.**

The single-occupant restroom in the maintenance out-building is provided with only cold domestic water. The lavatory and toilet are in poor condition. The floor has obvious water damage likely caused by plumbing leaks from the water closet.

The tower men's and women's restrooms plumbing fixtures are in poor condition due to years of public use and should be replaced. **See Exhibits 9 & 10.**

Conditions of plumbing systems vary from recently renovated to nonoperational. Fixtures in areas other than the main office will need to be renovated for compliance with water-saving regulations and Texas Accessibility Standards (TAS) requirements.

### **Electrical:**

In the main office, the reception and open office areas are lighted by means of 1x4 and 2x4 linear fluorescent fixtures. In addition, the reception area has a decorative, incandescent pendant fixture. Private offices in the main office are lighted by ceiling mounted incandescent fixtures with frosted glass diffusers. **See Exhibit 11.** The sunroom is lighted by a pendant mount incandescent fixture. **See Exhibit 12.** The restroom is lighted by an incandescent vanity fixture. The closets are provided with compact fluorescent service lights but are lacking wire-guards. Additionally, no egress or emergency lighting has been provided.

The maintenance office is lighted by 2-1x4 linear fluorescent surface mounted fixtures.

Exterior façade lighting around the main office was updated with LED wall pack fixtures. **See Exhibit 13.**

Receptacles throughout the main office building and maintenance office appear to be in good condition. Conduit to receptacles is exposed.

The main office is served by one 150A 120/240V/1 $\phi$  exterior electrical panel – Panel ‘A’ with 20 - 20A/1P circuit breakers, 2 - 20A/2P circuit breakers, and 6 - 1P spaces. **See Exhibit 14.**

The maintenance out-building is lighted by linear fluorescent fixtures. The areas being used as office and storage are lighted by 1x4 and 2x4 linear fluorescent fixtures. **See Exhibit 15.** The garage areas are lighted by 8’-0” fluorescent strip lights.

The maintenance out-building is served by one 200A 120/240V/1 $\phi$  electrical panel. **See Exhibit 16.**

Condition of electrical systems appears to be in good working order. Lighting in the main office, in particular, and across the site overall would benefit from being updated with higher efficiency fixtures for additional energy savings.

**Recommendations:**

The main office building needs minimal renovation of the MEP systems. Recommended repairs or upgrades include repairing the restroom exhaust fan, investigating and repairing the air handler condensate leakage, and updating lighting fixtures to be high efficiency fluorescent or LED. Further in the maintenance office, the ductless air handling unit should be modified such that ventilation air would be supplied to the space. The existing ductless air handling unit may not have the capacity to condition the outside air for ventilation purposes. If this is the case, a new air handling unit would need to be provided.

The maintenance out-building MEP systems need major renovation in coordination and conjunction with architectural repairs and renovation.

The tower men’s and women’s restrooms require major renovation due to age and public use. We recommend new, vandal-resistant, low-flow and low-flush plumbing fixtures meeting the requirements of the ADA and the Texas Accessibility Standard be provided. Furthermore, we recommend a new combination lighting and exhaust system be installed.

It should be noted that while individual MEP components such as plumbing fixtures and lighting fixtures may be compliant with current codes, broader architectural code conflicts may require more extensive renovation to MEP systems than would be necessary if only considering the MEP components themselves. For example, individual plumbing fixtures complying with the Texas Accessibility Standard (TAS) may have to be replaced or reused if the restroom itself is renovated for TAS compliance.

## EXHIBITS



Exhibit 1 - Main Office Condensing Unit



Exhibit 2 - Packaged Window Unit



Exhibit 3 - Maintenance Office Condensing Unit



Exhibit 4 - Maintenance Office Ductless Air Handling Unit



Exhibit 5 - Maintenance Out-Building Condensing Unit



Exhibit 6 - Combination Heat, Light, & Fan unit



Exhibit 7 - Main Office Restroom



Exhibit 8 - Main Office Restroom



**Exhibit 9 - Tower Restroom Lavatory**



Exhibit 10 - Tower Restroom Water Closet



**Exhibit 11 - Typical Incandescent Light Fixture with Frosted Diffuser**



**Exhibit 12 - Pendant Mount Incandescent Light Fixture in Sunroom**



Exhibit 13 - Exterior LED Wall Pack



Exhibit 14 - Main Office Electrical Panel 'A'



Exhibit 15 - Maintenance Out-Building Fluorescent Lighting

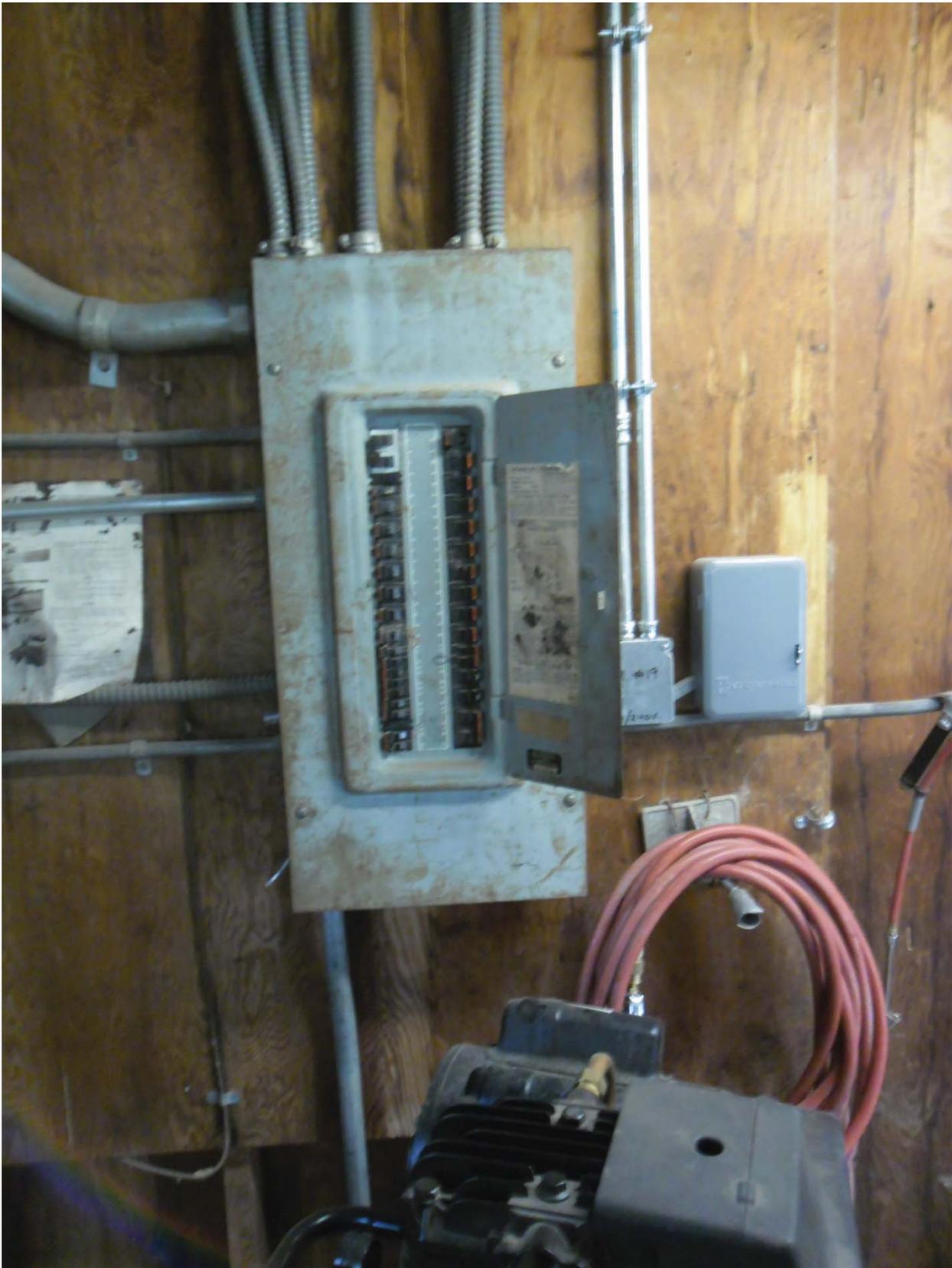


Exhibit 16 - Maintenance Out-Building Electrical Panel

END OF ASSESSMENT REPORT



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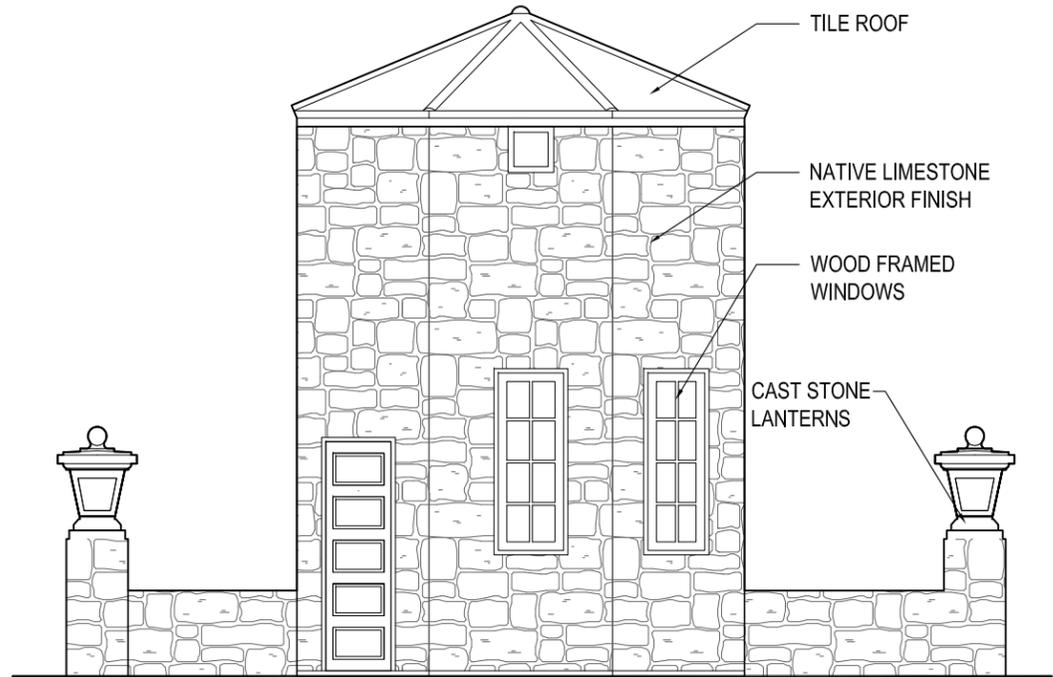
# Austin Memorial Park Study

2800 Hancock Drive, Austin, Texas

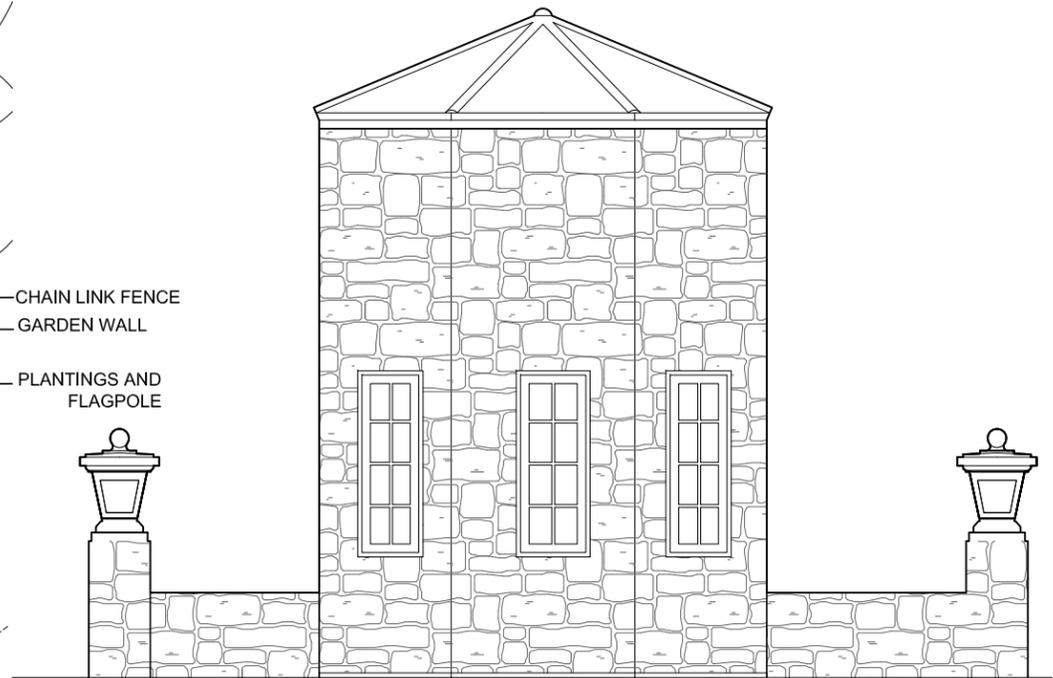
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SitePlan  
A1.0



02 Service Tower North Elevation  
SCALE: 3/16" = 1'-0"



03 Service Tower South Elevation  
SCALE: 3/16" = 1'-0"



Figure 1 - South facing Elevation at Belltower and Main office



Figure 2 - Service Tower and wall at west side of entry

01 Site Plan  
SCALE: 1/32" = 1'-0"



Figure 3 - Storage room addition interior



Figure 4 - Office 1



Figure 5 - Doors at Sunroom interior



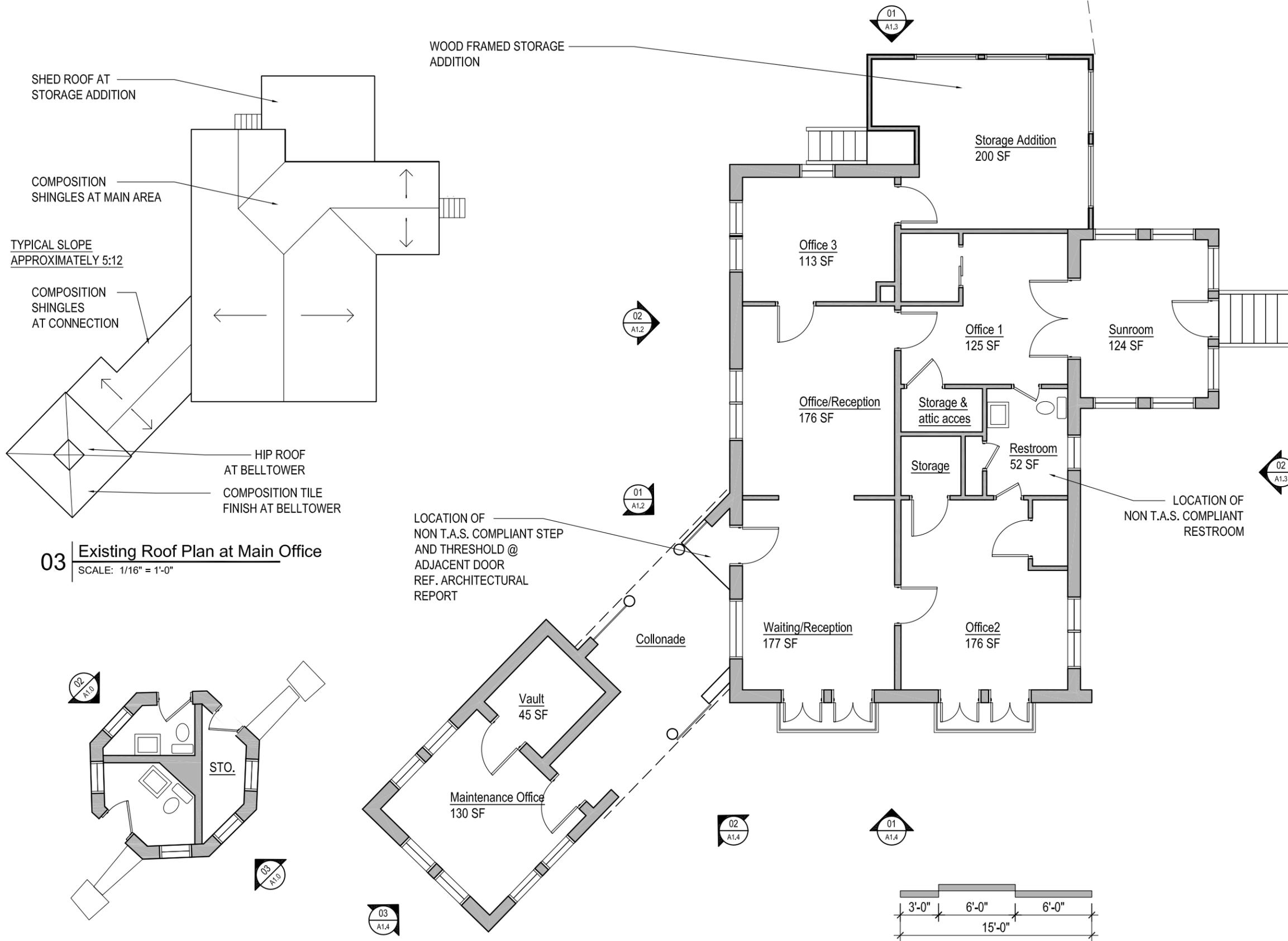
Figure 6 - Office 2



Figure 7 - Reception Office looking towards Office 3



Figure 8 - Reception Office looking towards Reception



**03** Existing Roof Plan at Main Office  
SCALE: 1/16" = 1'-0"

**02** Floor Plan @ Service Tower  
SCALE: 1/8" = 1'-0"

**01** Floor Plan  
SCALE: 1/8" = 1'-0"



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FloorPlan  
**A1.1**

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Figure 9 - Storage Addition at North end

FOUNDATION ACCESS



02 West Elevation  
SCALE: 3/16" = 1'-0"

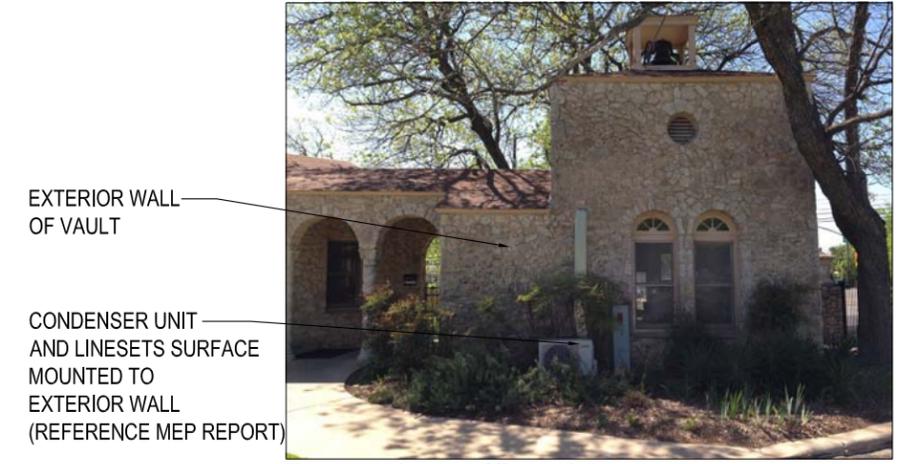
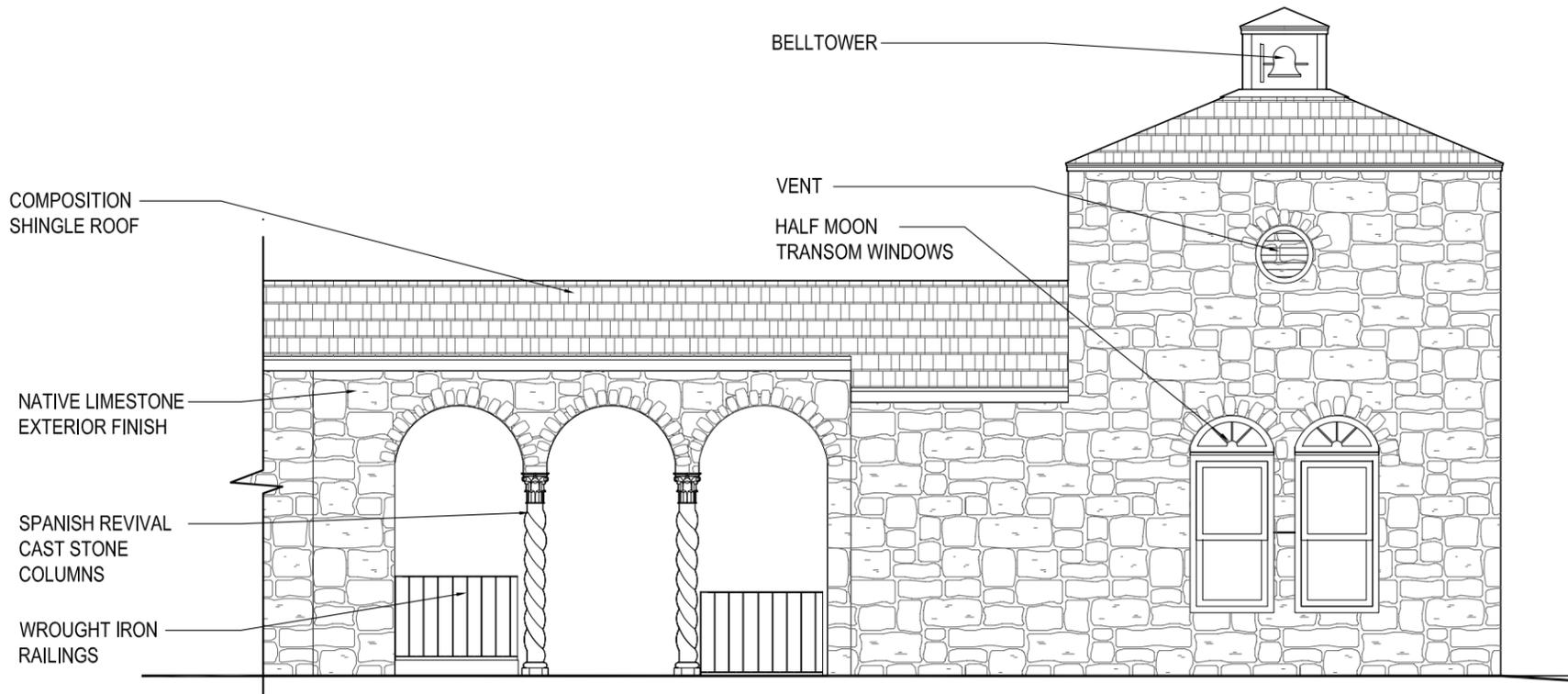


Figure 10 - Maintenance Office and Belltower

EXTERIOR WALL OF VAULT

CONDENSER UNIT AND LINESETS SURFACE MOUNTED TO EXTERIOR WALL (REFERENCE MEP REPORT)



01 North West Elevation  
SCALE: 3/16" = 1'-0"

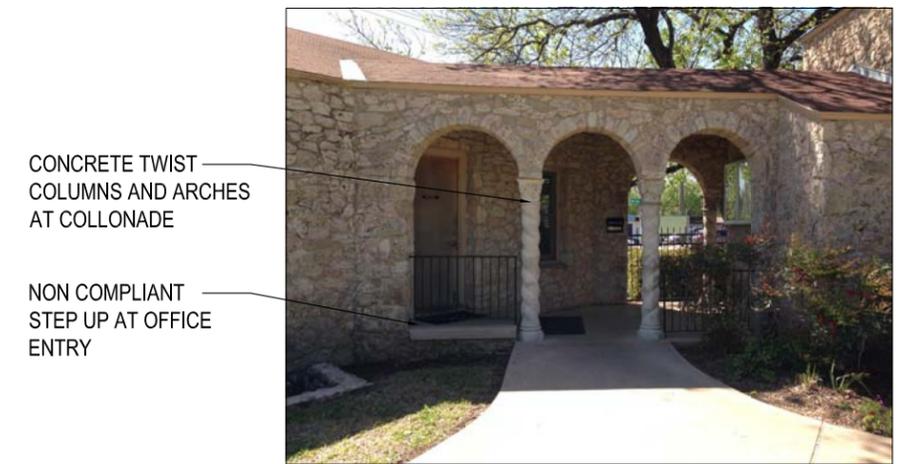


Figure 11 - Spanish Style Collonade

CONCRETE TWIST COLUMNS AND ARCHES AT COLLONADE

NON COMPLIANT STEP UP AT OFFICE ENTRY



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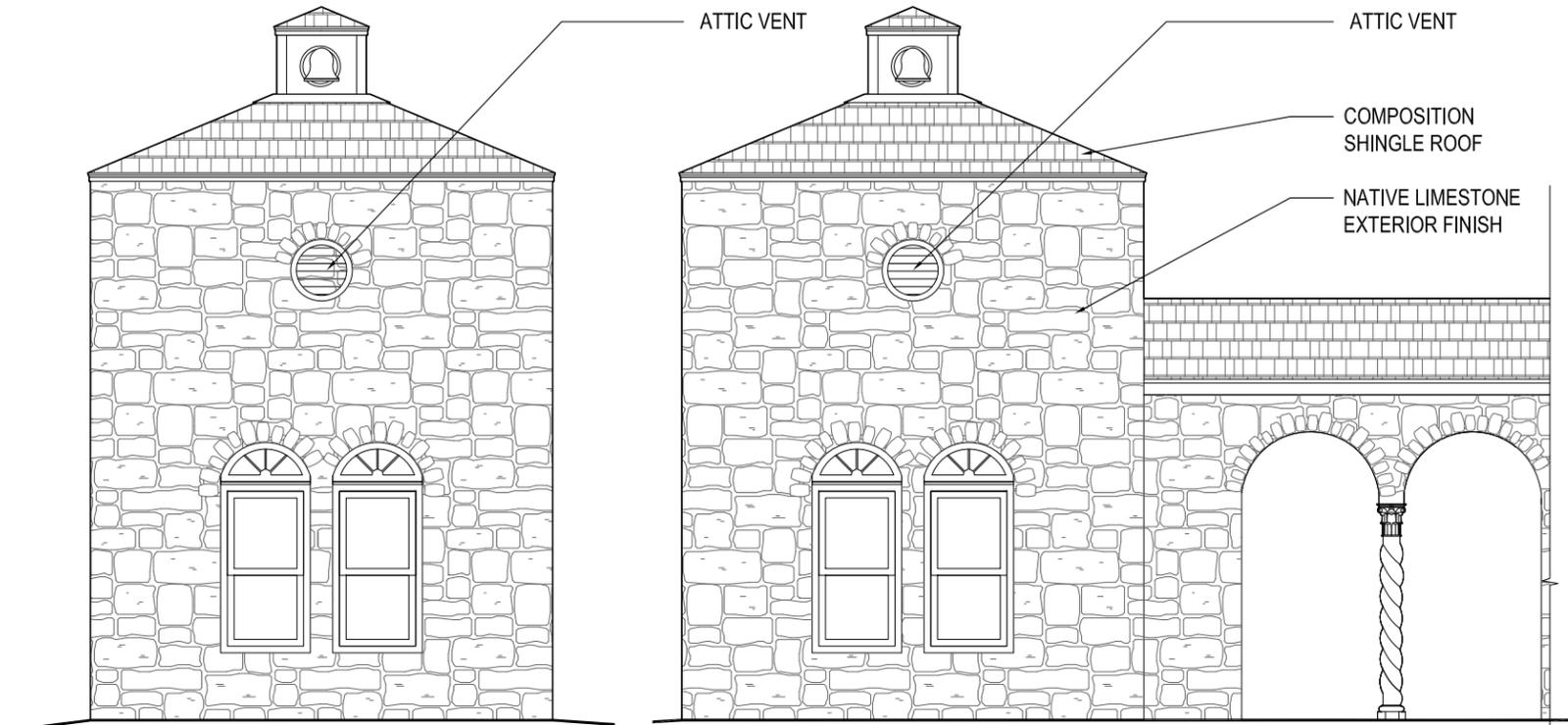
Elevations

A1.4



WINDOW UNIT A/C  
AT BELLTOWER OFFICE

Figure 15 - South Elevation at Belltower



03 SouthWest Elevation  
SCALE: 3/16" = 1'-0"

02 South Elevation  
SCALE: 3/16" = 1'-0"

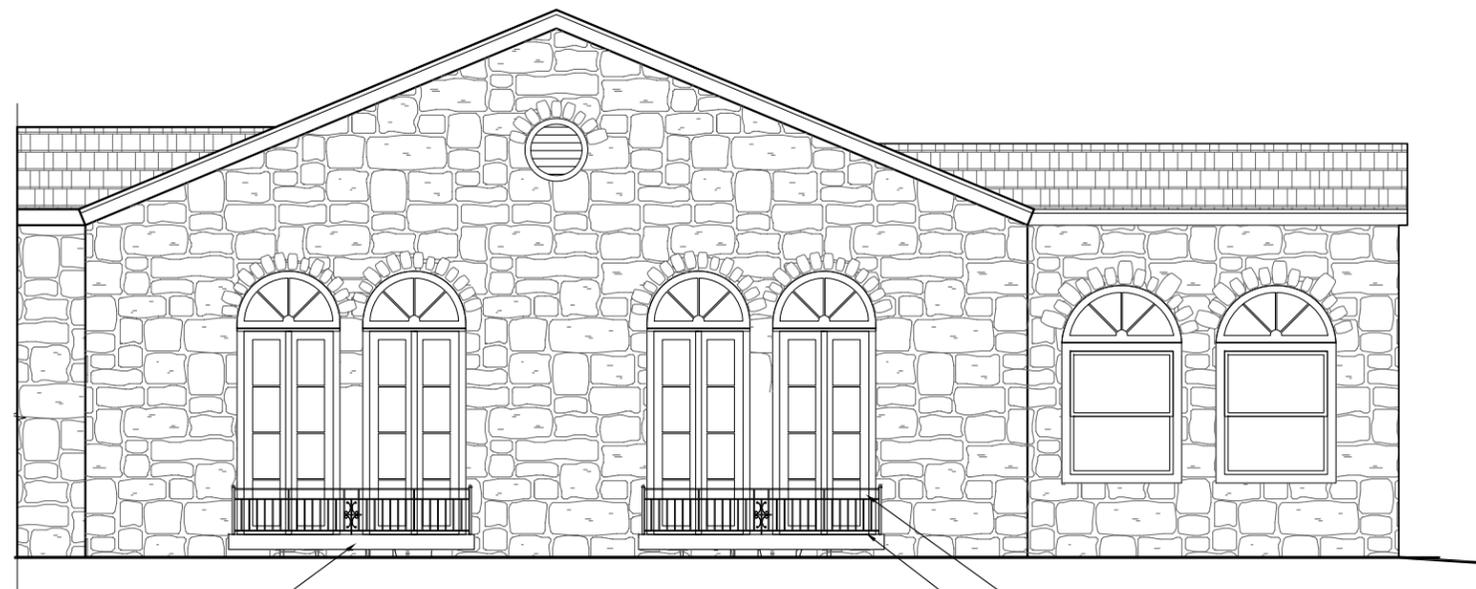


ATTIC VENT

GARDEN WALL

BALCONETS

Figure 16 - Southeast Elevation at main office showing half moon transoms.@ French doors

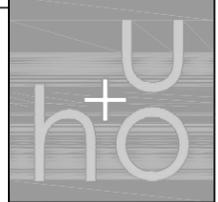


CONCRETE BALCONETS

01 South Elevation  
SCALE: 3/16" = 1'-0"

FRENCH DOORS W/HALF MOON TRANSOM

DECORATIVE IRON GUARD RAIL



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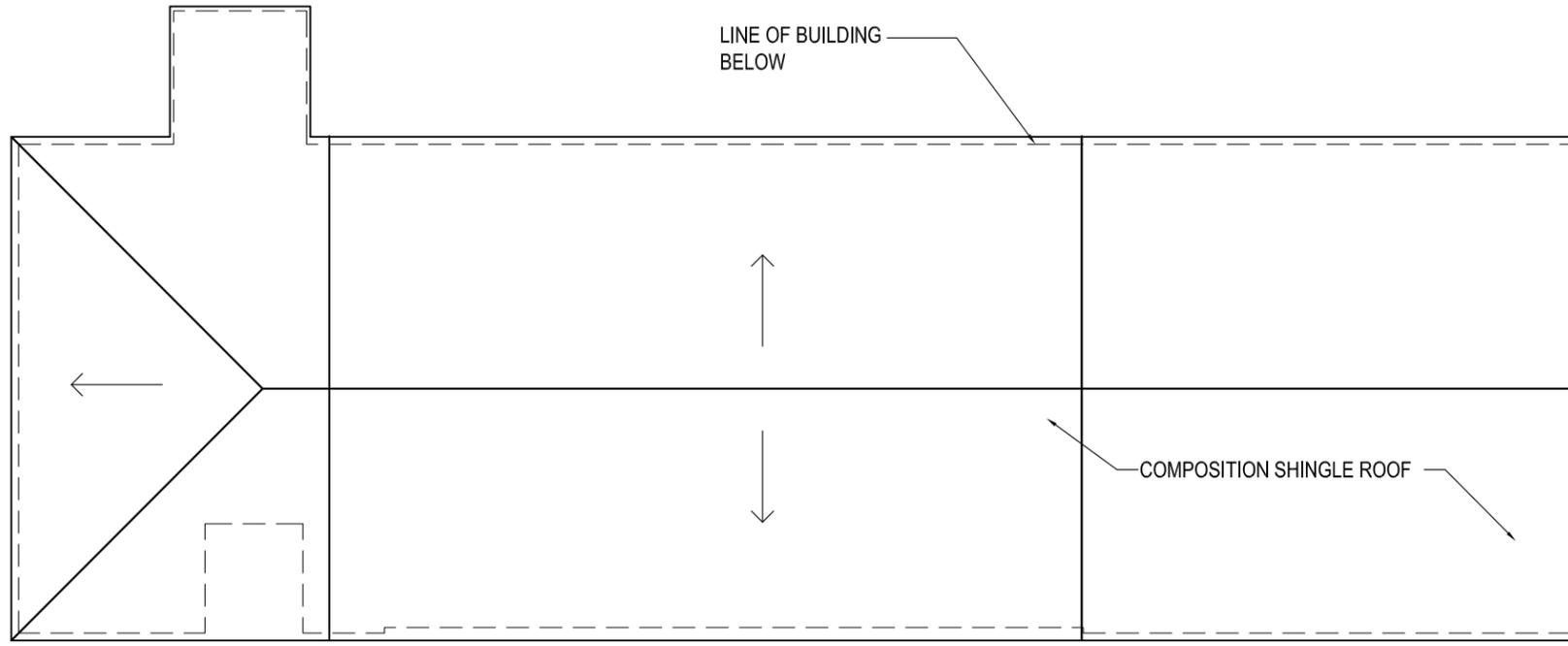
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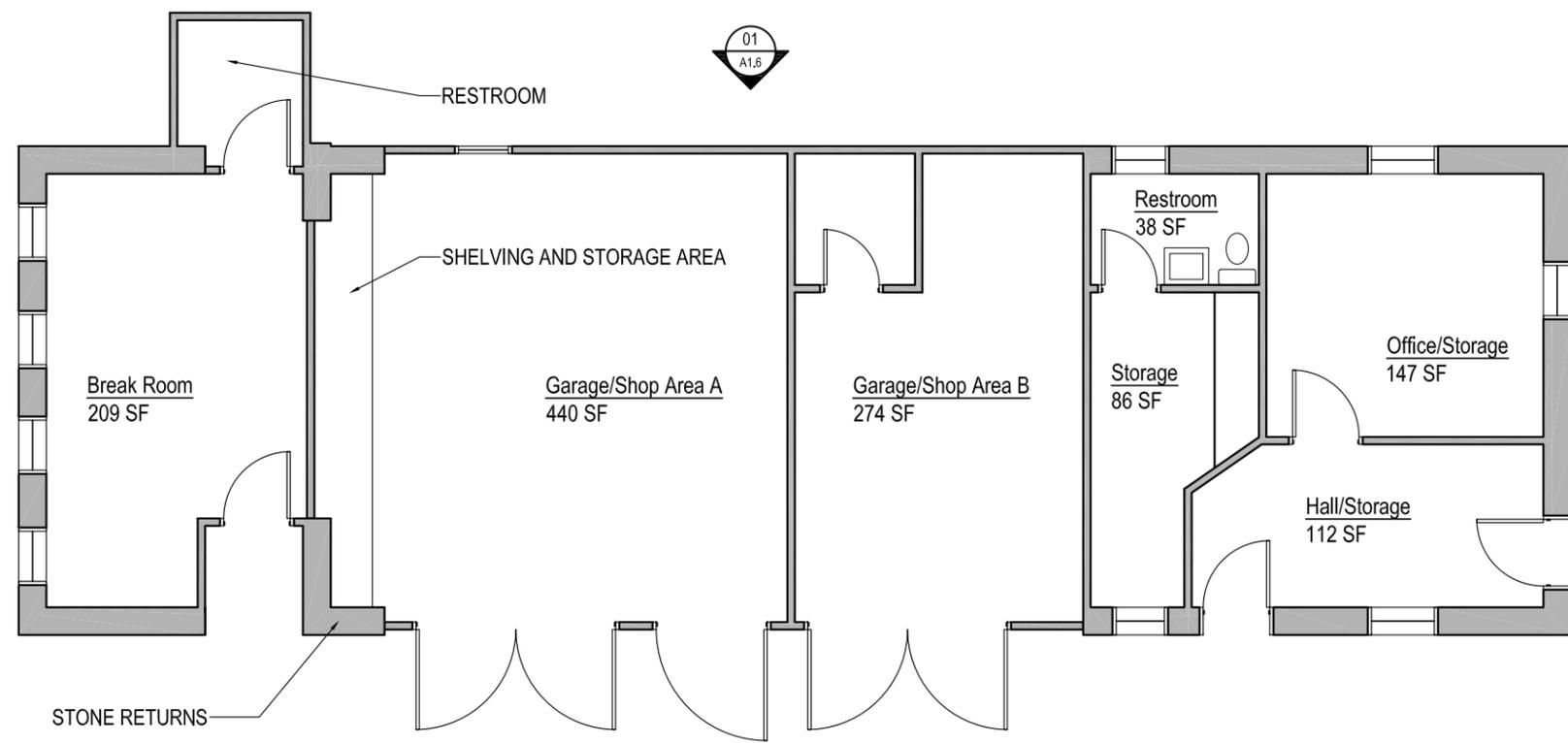
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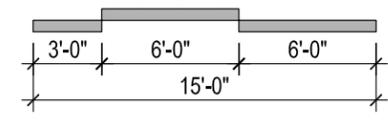
Maintenance Bldg  
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02 Maintenance Building Roof Plan  
SCALE: 1/8" = 1'-0"



01 Maintenance Building Floor Plan  
SCALE: 1/8" = 1'-0"



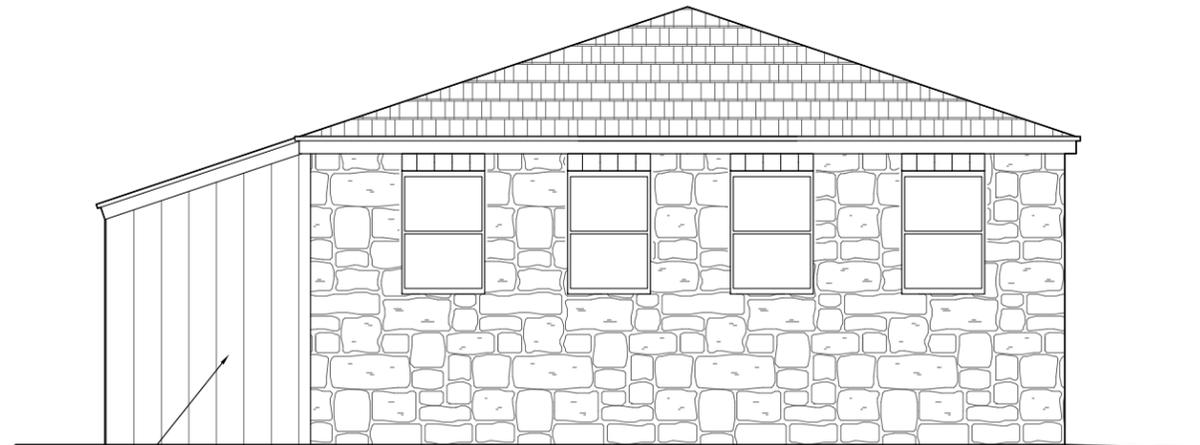
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WINDOWS AT BREAKROOM



Figure 21 - Original Stone Structure at North end of building



02 North Elevation  
SCALE: 3/16" = 1'-0"

CONDENSER UNIT AND  
LINESETS AT EXTERIOR



Figure 20 - Original Stone Structure South East end of building



Figure 19 - Original Stone Structure with replaced T-1 11 Exterior walls South East end of building

RESTROOM ADDITION

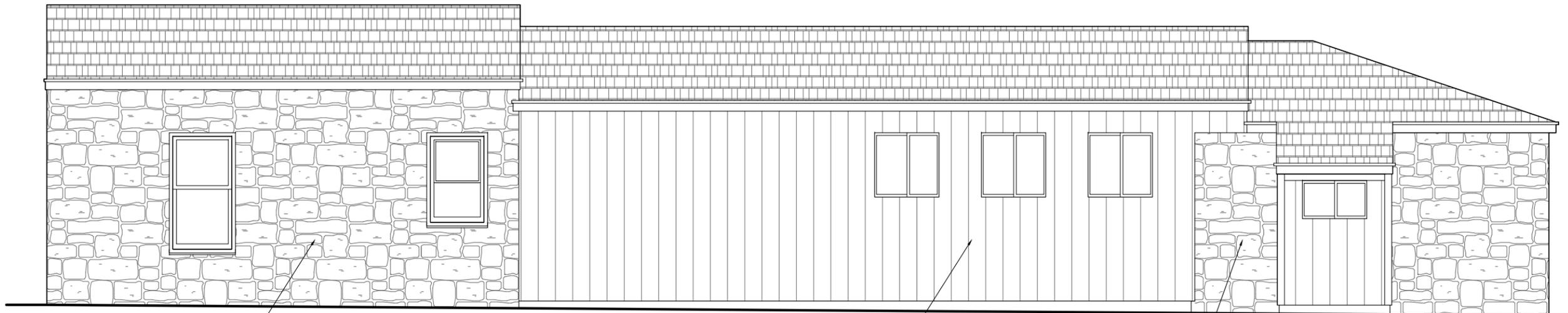
T-1 11 EXTERIOR SIDING



Figure 18 - Original Stone Structure with replaced T-1 11 Exterior walls at North East end of building, metal building in foreground



Figure 17 - Restroom Addition at Break Room with Composite patterned "T-1 11" exterior siding

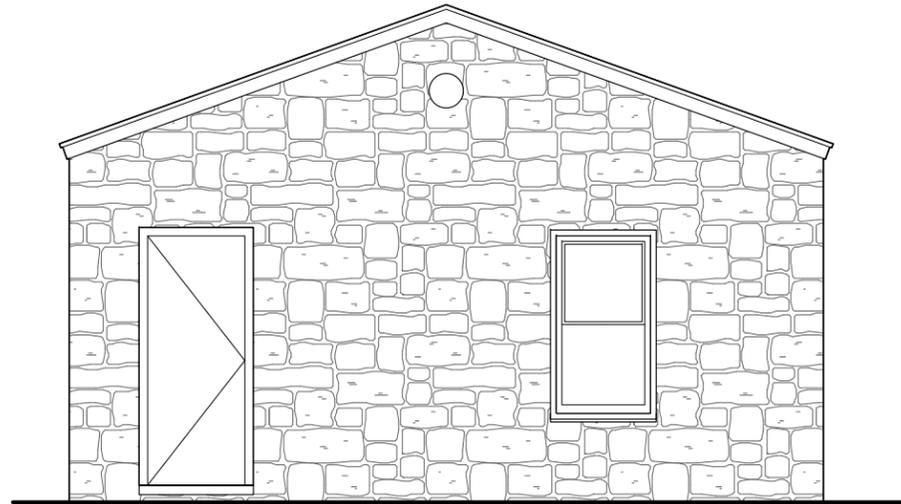
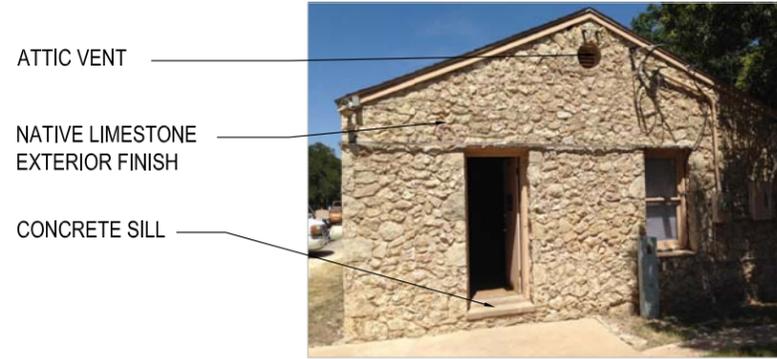


NATIVE LIMESTONE WALL AT  
STORAGE/OFFICE AREA

T-1 11 EXTERIOR SIDING

NATIVE LIMESTONE WALL AT  
BREAKROOM AREA

01 East Elevation  
SCALE: 3/16" = 1'-0"



02 South Elevation  
SCALE: 3/16" = 1'-0"



Figure 24 - North west corner of garage facing west



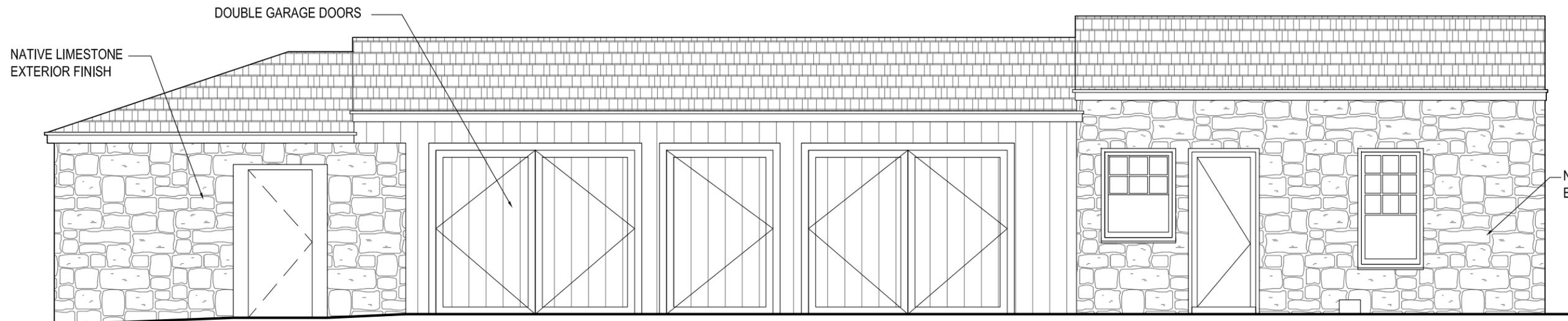
Figure 23 - Garage Area and Stone extension, note roof overlap at breakroom and garage connection



Figure 22 - Garage Area facing west



Figure 21 - Stone Office at South end facing west



01 West Elevation  
SCALE: 3/16" = 1'-0"

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