

# CUP-6-17

Conditional Use Permit Request for  
Explosive Material Storage at  
3640 S. Cactus Road



**City of Apache Junction**  
**Planning and Zoning Commission**  
**August 22, 2017**



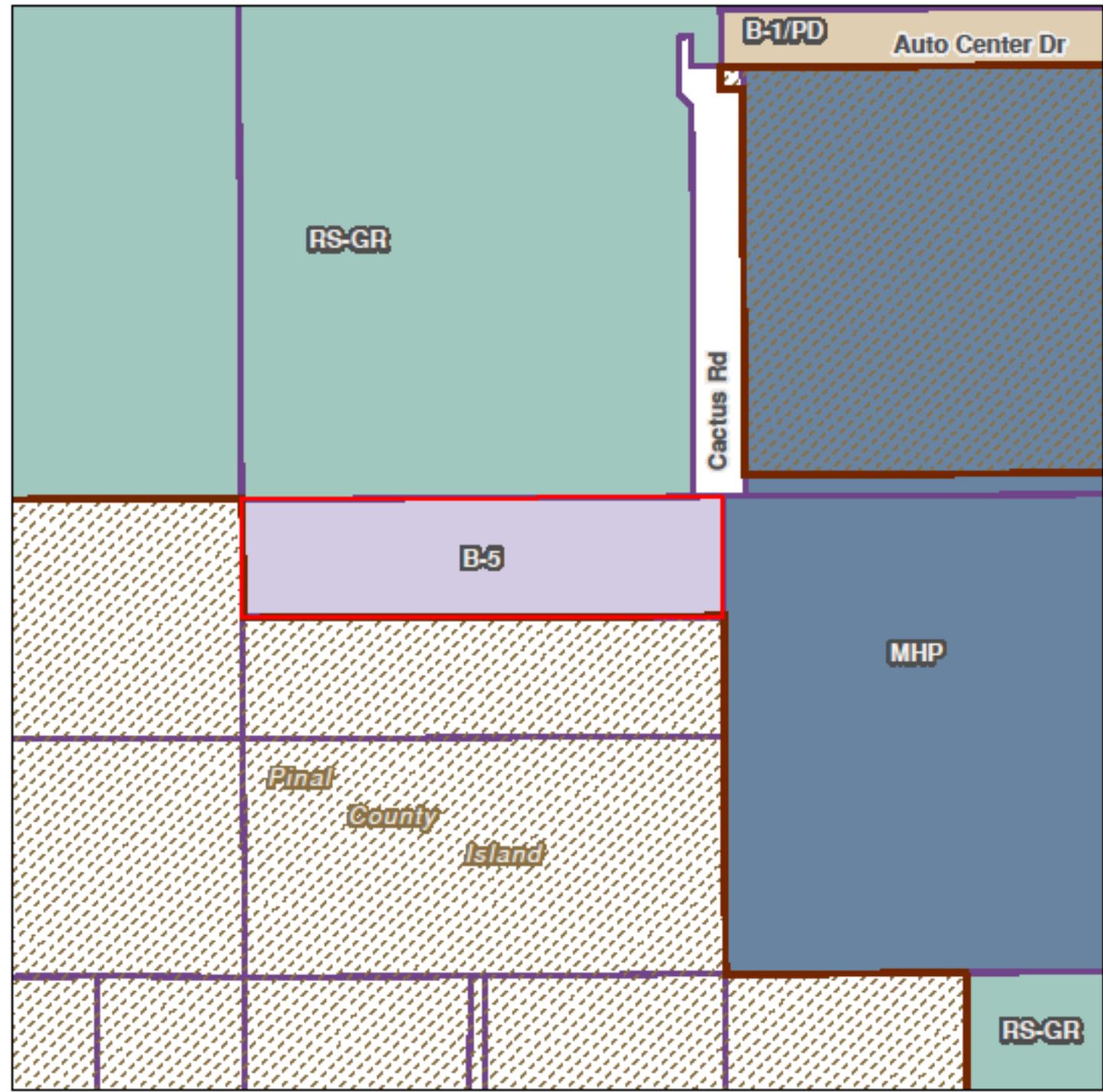


# CUP-6-17 Zoning Map

Properties to west and south:  
zoned industrial (Pinal County)

East: Manufactured Home Park

North: vacant zoned single-  
family residential (slated for  
commercial development)



**City of Apache Junction**  
**Zoning Exhibit**  
**CUP-6-17**

**LEGEND**  
Subject Site (Red outline)  
Parcel (Purple outline)

**Zoning**  
B-1/PD (Light brown hatched)  
B-5 (Purple hatched)  
MHP (Blue)  
RS-GR (Light green)

**DISCLAIMER:** This exhibit was produced without benefit of a field survey and is not intended to represent a survey document of any kind. Distances shown hereon are approximate. Parcel lines shown hereon are approximate and may not reflect the exact position or alignment of parcel lines, roadway center lines, or easement lines.

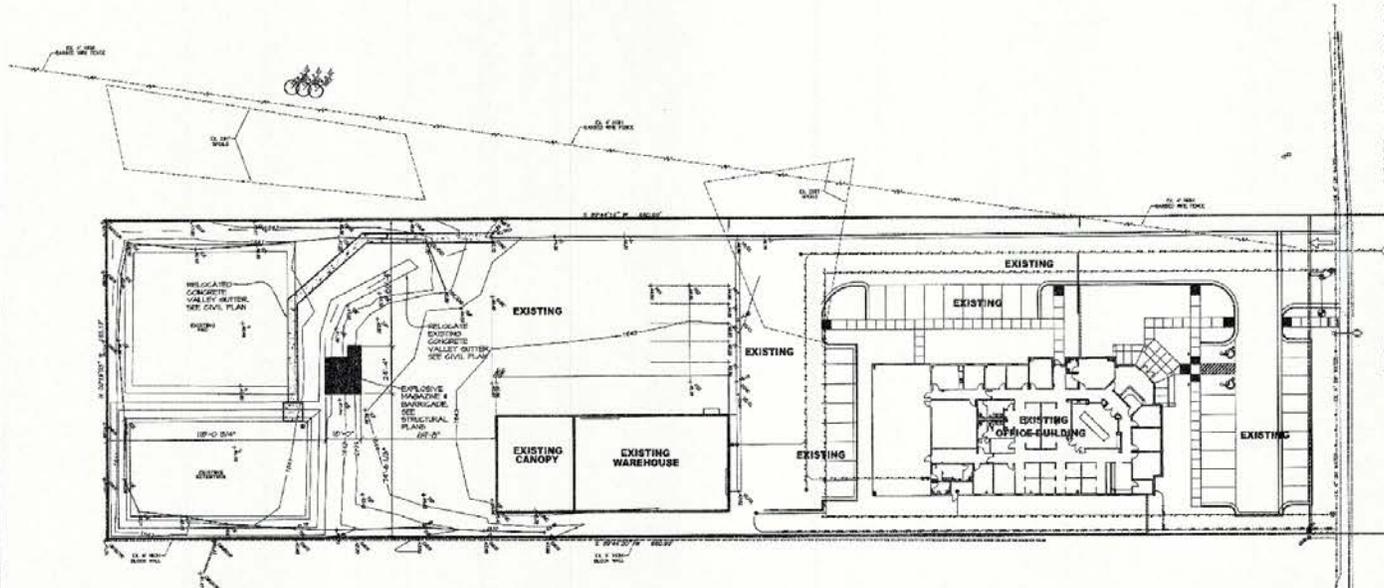
July 24, 2017  
0 50 100 150 200 400 Feet  
Created By: Joseph Kline

The inset map shows the location of the subject site (indicated by a red square) within the City of Apache Junction. Labeled streets include Michelle Blvd, Lost Dutchman Blvd, Suspension Blvd, Apache Trl, Broadway Ave, Southern Ave, Berklina Ave, Tomahawk Rd, Goldleaf Trl, Meridian Dr, and Tomahawk Dr. A north arrow and a scale bar are also present.

# CUP-6-17 Site Plan

Proposal:  
Place ATF approved  
magazine storage  
container and  
barricade to store  
explosive material  
for fracturing.

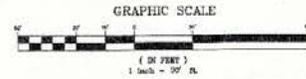
## SITE PLAN for: WESTERN INDUSTRIAL 3640 S. CACTUS RD., APACHE JUNCTION, AZ 85119



A.P.N. : 102-20-009E2  
ADDRESS: 3640 S. CACTUS RD.

**SITE PLAN**

SCALE: 1" = 30'-0"



**PROJECT INFO**

<b>OWNER</b>	WESTERN INDUSTRIAL RESOURCE GROUP PO BOX 8089 3640 S. CACTUS RD. APACHE JUNCTION, ARIZONA 85119 PHONE: 480-294-2386 FAX: 480-294-2386
<b>ARCHITECT</b>	JANE G. HANDESSVANG/STREET DESIGN PROFESSIONALS LLC 3542 EAST HAZLETT LN, STE. 101 MESA, ARIZONA, 85205 PHONE: 480-984-7890 FAX: 480-984-7890
<b>BUILDING CODES</b>	APACHE JUNCTION CITY CODE CHAPTER 1 CONFORMITY WITH THE APACHE JUNCTION CITY CODE, VOLUME 1 & LAND DEVELOPMENT CODE, CHAPTER 13.0000 ORDINANCE 2008 INTERNATIONAL BUILDING CODE 2008 INTERNATIONAL FIRE CODE 2008 NATIONAL ELECTRIC CODE ARIZONA STATE CODE
<b>SITE &amp; BUILDING INFORMATION</b>	
<b>PROJECT DESCRIPTION:</b>	A CONCRETE BARRICADE ENCLOSURE FOR A TYPE 2 EXPLOSIVES MAGAZINE
<b>ZONING:</b>	B-8
<b>SITE ADDRESS:</b>	3640 S. CACTUS RD, APACHE JUNCTION, AZ 85119
<b>LEGAL DESCRIPTION:</b>	THE NORTH HALF OF THE NORTH HALF OF THE NORTHEAST QUARTER OF THE EIGHTEENTH QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18 TOWNSHIP 1 NORTH RANGE 8 EAST, OF THE 36-1 AND 36-2 RIVER BASIN AND 36-300-0000
<b>ADDRESSING PARCEL #:</b>	102-20-009E
<b>ALLOWABLE HEIGHT &amp; AREA:</b>	1 STORY + 1000 SF 2000-SQ-FEET 300
<b>OCCUPANCY:</b>	1H EXPLOSIVES DIVISION U1
<b>CONSTRUCTION TYPE:</b>	1B
<b>BUILDING SF:</b>	264 SF.
<b>BUILDING AREA:</b>	1H OCG - 264 SF.
<b>OCCUPANT LOAD:</b>	ACCESSORY STORAGE 36-6000 GROSS + 120 OR 2 OCCUPANTS (1 ENTRY REQUIRED PER TABLE 1001)
<b>EXIT TRAVEL DISTANCE:</b>	100'-0"
<b>PROPOSED BARRICADE HEIGHT:</b>	10'-0"
<b>BUILDING SETBACKS:</b>	FRONT - 20'-0" SIDE - 10'-0" REAR - 10'-0"
<b>GLAZING OCCUPIED STRUCTURE ON ADJACENT PROPERTY:</b>	264 SF.
<b>SITE AREA:</b>	10480 SF. OR 2306 ACRES

**EXPLOSIVE MAGAZINE NOTES**

2008 IFC 3501-4.2 LIGHTING  
GREEN LIGHTS ARE NECESSARY WITHIN A MAGAZINE. ELECTRIC SAFETY  
PLANS, LIGHTS OR ELECTRICAL SAFETY LANTERNS SHALL BE USED, EXCEPT  
AS PROVIDED IN IFC 3501.4.2

2008 IFC 3504-4.2 SIGNS AND PLACARDS  
PROPERTY SIGN WHICH TYPE 1 MAGAZINES AND OUTDOOR MAGAZINES  
OF TYPES 2, 4 AND 5 ARE LOCATED SHALL BE POSTED WITH SIGN  
STATING "EXPLOSIVES ARE STORED HERE". THESE SIGNS SHALL BE ON  
CONCRETE OR METAL WITH A MINIMUM HEIGHT OF 3 INCHES WITH A  
MINIMUM WIDTH OF 3 INCHES. THE SIGNS SHALL BE LOCATED TO  
MINIMIZE THE POSSIBILITY OF A BULLET HIT AT THE SIGN WITHIN THE  
MAGAZINE.

**SHEET INDEX**

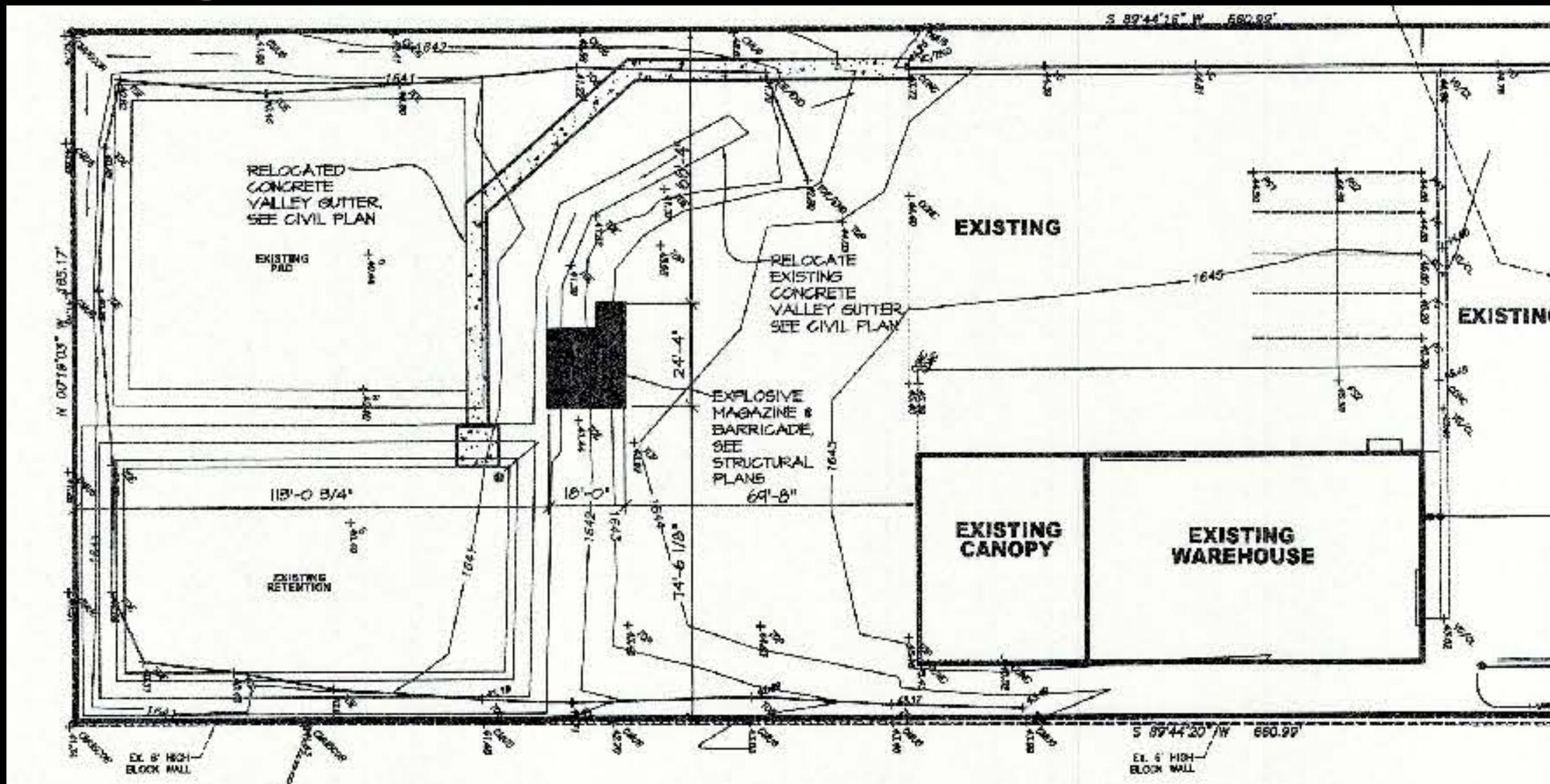
A1	ARCHITECTURAL SITE PLAN
2 of 2	CIVIL AS BUILT VALLEY UTILITY
B	STRUCTURAL PLAN

DESIGN T-480-984-7890 F-480-984-2839  
**PROFESSIONAL S.I.L.L.C.**  
4542 E. MCKELLIPS RD., STE. 101, MESA, AZ 85215

EXPLOSIVE STORAGE FOR:  
WESTERN INDUSTRIAL  
3640 S. CACTUS RD., APACHE JUNCTION, AZ 85119

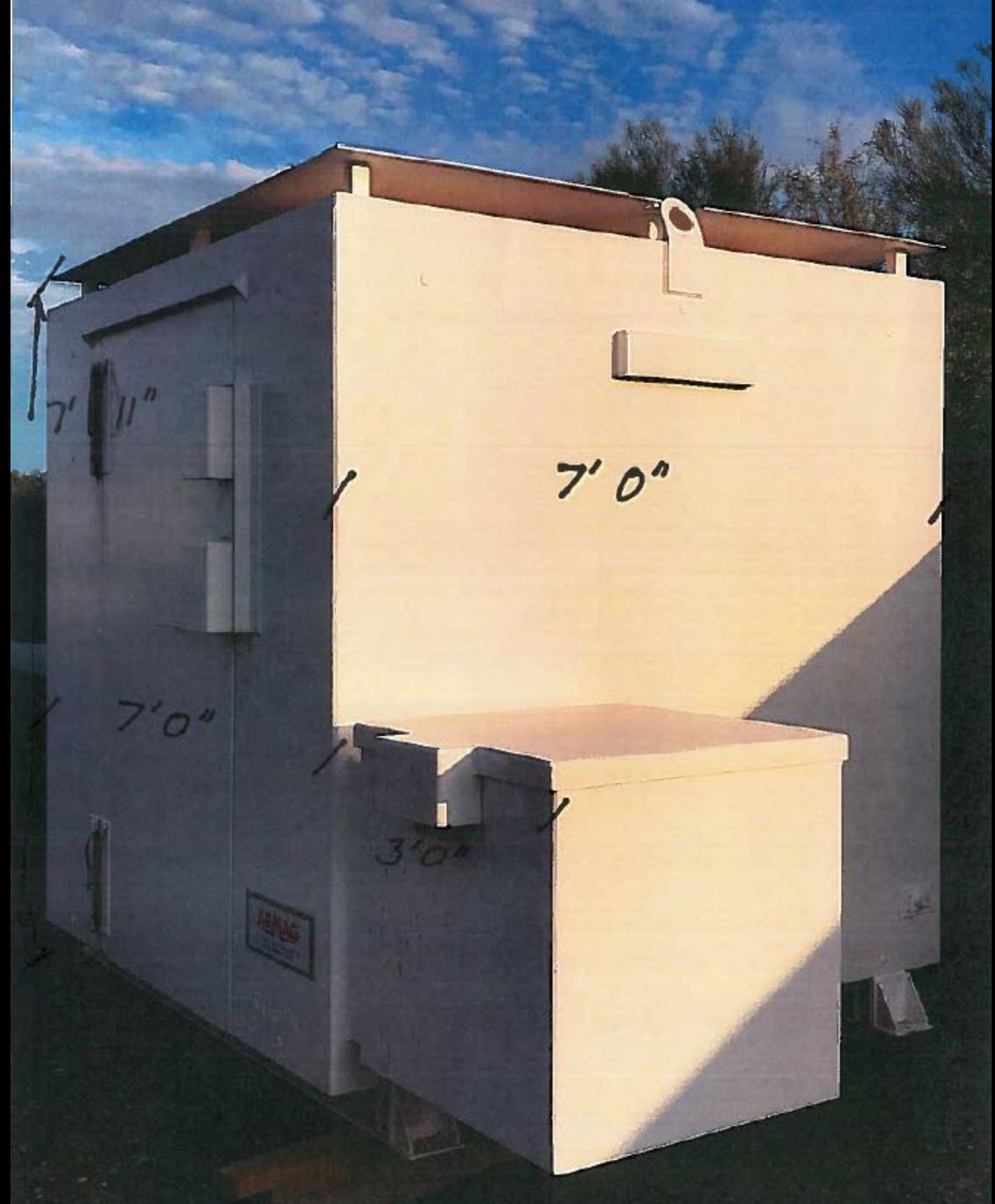
SHEET A1  
SITE PLAN  
DATE 12-16-16 DWG. BY  
PROJECT NO 1622

# Enlarged Site Plan



# Elevation

- Magazine Storage Container
  - Larger container will hold explosive material (size: 7' X 7')
  - Smaller container will hold ignitors (size: 3' X 3')
- Container will have a barricade built around it.
  - 12" thick concrete walls, engineered (size: 18' X 24')
- Will only hold material on an as-needed basis
  - Maximum 125 pounds



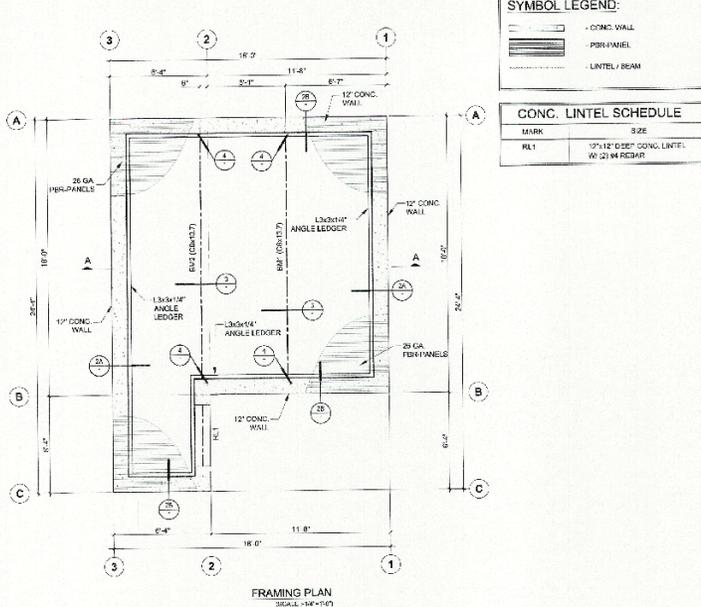
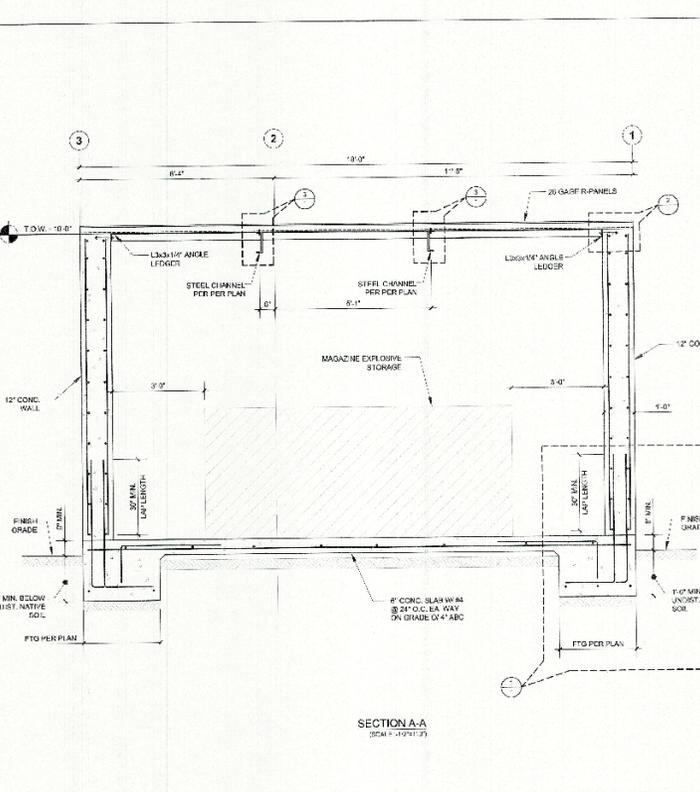
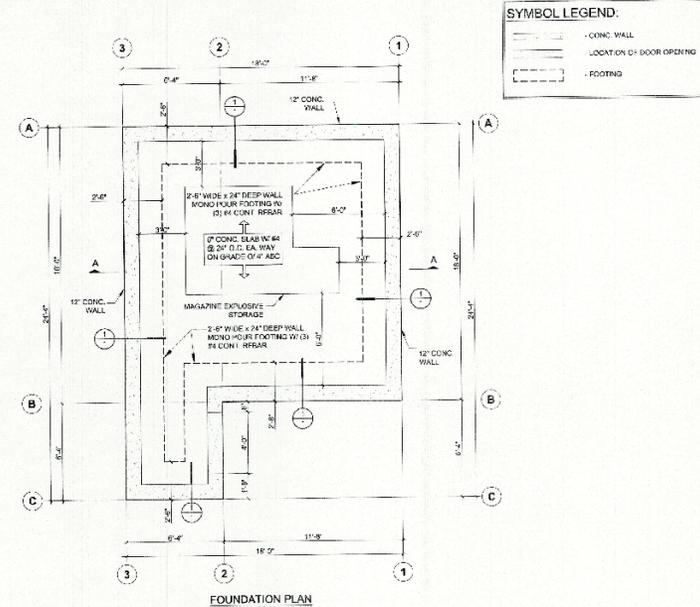
# Elevation

- Magazine storage container must meet ATF, NFPA, and ICC codes
- Will have inspections by Western Industrial on a weekly basis; daily when material is stored.
- ATF can inspect at a maximum of every 6 months.



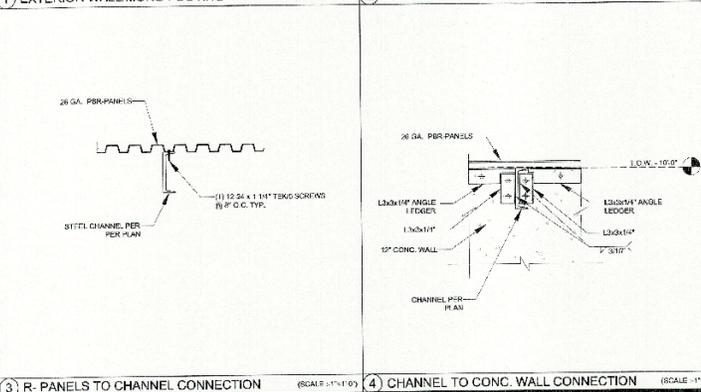
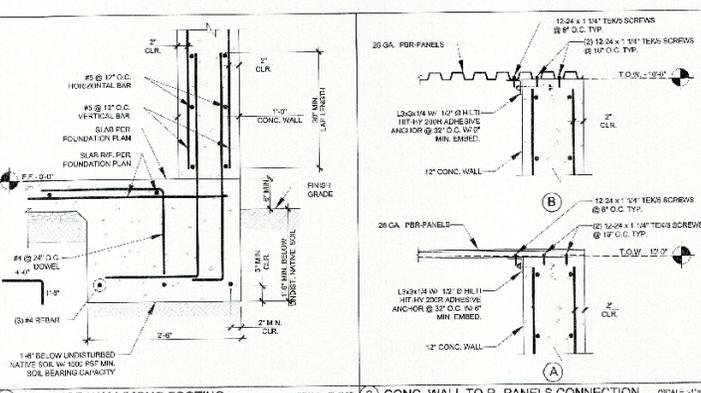
**GENERAL STRUCTURAL NOTES**  
IN ACCORDANCE WITH IBC 2012

**GENERAL STRUCTURAL:**  
ALL STRUCTURAL DRAWINGS ARE PRELIMINARY PRIOR TO CITY/COUNTY APPROVAL. ANY COST ESTIMATES COMPLETED BY OWNER'S CONTRACTOR SHALL BE SUBJECT TO CITY/COUNTY APPROVAL. AT CLIENT'S OWN RISK, STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR ANY COSTLY WAIVES COMPLETED BY CLIENT PRIOR TO CITY/COUNTY APPROVAL. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS SUCH STANDARDS SHALL BE THE LATEST EDITION UNLESS OTHERWISE NOTED. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT IF APPLICABLE ON FRAMED CONSTRUCTION. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD (PER SQUARE FOOT) SHOWN BELOW.  
NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT AND GOVERNING BUILDING CODES.  
THE PERMANENT LATERAL LOAD RESISTANCE SYSTEM OF THIS BUILDING RELIES ON ROOF SHEATHING, FLOOR SHEATHING (ON TWO STORY HOUSES), AND EXTERIOR AND INTERIOR WALL SHEATHING AS IDENTIFIED ON THE SHEAR WALL PLAN. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ADEQUATE TEMPORARY LATERAL BRACING DURING CONSTRUCTION. THE TEMPORARY BRACING SHALL BE MAINTAINED UNTIL THE PERMANENT LATERAL LOAD RESISTANCE SYSTEM IS FULLY INSTALLED AND FASTENED AS SCHEDULED.  
**BUILDING CODES:**  
THESE PLANS ARE PREPARED UNDER THE IBC 2012, ASCE 07-10 AND SHALL COMPLY WITH OR EXCEED THE REQUIREMENTS OF THE CODE AND ITS AMENDMENTS.  
**DESIGN LOADS:**  
DECK LIVE LOAD = 20 PSF  
FLOOR DEAD LOAD = 5 PSF  
WIND LOAD = 1.5 MPH, EXP. 'C'  
**BLAST LOADING:**  
FRONT WALL IMPULSE IS = 489 PSF-MS  
REFLECTED OVER PRESSURE (P<sub>0</sub>) = 100 PSF  
**CONVENTIONAL FOUNDATIONS:**  
BOTTOMS OF SLABING FOOTINGS SHALL BEAR ON UNDISTURBED SOIL 1'-0" BELOW EXISTING GRADE.  
TYPICAL SOIL PRESSURE: 1500 psf PER TABLE 1806.2 OF IBC 2012.  
**CONCRETE:**  
SHALL MEET ALL THE REQUIREMENTS OF A.C.I. 308 TYPE I CEMENT FOUNDATION SUPPORTING WOOD SHALL EXTEND TO AT LEAST 6" ABOVE ADJACENT FINISHED GRADE (ECC. 1806.1). CONCRETE MIX DESIGN TO BE BASED ON VALUES SHOWN BELOW.  
MINIMUM 28 DAY CONCRETE COMPRESSIVE STRENGTH AS FOLLOWS:  
SLAB ON GRADE = 3000 psi, 6" THICK  
FOUNDATIONS = 3000 psi  
CONCRETE CAST IN PLACE WAIS = 3000 psi  
ALL PROCEDURES, PLACEMENT, FORMWORK, LAP ETC. TO CONFORM WITH LATEST A.C.I. STANDARDS. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED, EXCEPT THE SLABS ON GRADE NEED BE VIBRATED ONLY AROUND UNDER-FLUOR DUCTS, ETC. MAXIMUM SLUMP 4-1/2". ALL CONCRETE SLABS ON GRADE SHALL BE BOUNDED BY CONSTRUCTION JOINTS (KEYED OR SAW CUT) SUCH THAT THE INCLUDED JOINTS DOES NOT EXCEED 40 SQUARE FEET. KEYS OR CONSTRUCTION JOINTS NEED ONLY OCCUR AT EXPOSED EDGES DURING POURING (COLD JOINTS). ALL OTHER JOINTS MAY BE SAW-CUT OR MAY USE "2" STRIPS".  
**REINFORCING STEEL:**  
ASTM A307 ALL ANCHOR BOLTS - MINIMUM EMBEDMENT OF ALL BOLTS IN GROUT OR CONCRETE TO BE 7" WITH A 3" HOOK AT REBULDED END.  
ASTM A615 (F<sub>y</sub> = 60,000 PSI) DEFORMED BARS FOR ALL BARS.  
WIRE PER AISI 1042.  
LATEST AISC CODE AND DETAILING MANUAL APPLY.  
CLEAR CONCRETE COVERS ARE AS FOLLOWS:  
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 1-1/2"  
EXPOSED TO FATH OR WEATHER (S AND SKALLER) = 3/4"  
SLABS (IN ERROR) = 3/4"  
ALL OTHER PER LATEST EDITION OF AISC 318.  
UNLESS NOTED OTHERWISE, LAP SPLICES IN CONCRETE SHALL BE #4 BARS DIAMETERS. MINIMUM STAGGER ALL TYPICAL SPLICES A MINIMUM OF ONE LAP LENGTH. PROVIDE BENT CORNER BARS TO MATCH AND LAP WITH HORIZONTAL BARS AT CORNERS AND IN SECTIONS OF FOOTINGS AND WALLS. TYPICAL REINFORCING BAR SPACINGS GIVEN ARE MAXIMUM ON VERTICAL. REFER CHECKING TO FOUNDATION. SECURELY TIE ALL BARS IN LOCATION BEFORE PLACING CONCRETE. LAP WELDED WIRE FABRIC ON SPACING OF CROSS WIRES PLUS 2".  
**REINFORCING NOTES:**  
- REINFORCING MASONRY SHALL CONFORM TO ASTM A-476, GRADE 40 & BE LAPPED A MIN. OF 40 BAR DIA.  
- CONSTRUCTION JOINTS IN MASONRY SHALL NOT EXCEED 2'-0" UNLESS NOTED OTHERWISE ON THE DRAWINGS.  
- CONC. BLOCK UNITS - GRADE 1: Fr (Prime) = 1500 psi  
Fr (Minimum) = 750 psi  
GROUT - TYPE "X"  
MORTAR - TYPE "M"  
- PROVIDE BURST-WIRE (B) 10" O.C. VERTICAL IN HORIZONTAL JOINTS & GAUGE WIRE MINIMUM LAP REINFORCEMENT 10" SOLID GROUT ALL MASONRY CELLS FULL HEIGHT WHERE REBAR OCCURS.  
- LAP SPLICES SHALL BE #4 BARS DIAMETERS. DOWEL ALL VERTICAL REINFORCING TO FOUNDATION WITH DOWELS TO MATCH VERTICAL WALL OR COLUMN REINFORCING.  
**STRUCTURAL STEEL:**  
ALL STEEL SHALL BE ASTM A307 MINIMUM F<sub>y</sub> 40 KSI UNLESS OTHERWISE NOTED ON THE DRAWINGS. ALL CONNECTIONS SHALL BE WELDED OR BOLTED. SHOP AND FIELD FASTENINGS SHALL BE ASTM A307-485 (HIGH STRENGTH BOLTS). IN CONNECTION TYPE CONNECTIONS USE "KEYWAY-NUT" METHOD IN TIGHTENING ALL BOLTS.  
HOLES SHALL NOT BE CUT THROUGH BEAMS UNLESS INDICATED OR APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE STANDARD ANGLE F WALL ANCHORS FOR BEAMS RESTING ON MASONRY.  
STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH AISC MANUAL 13TH EDITION. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:  
W-SHAPE BEAMS AND COLUMNS - A302 (F<sub>y</sub> = 60 KSI)  
STEEL PLATE, BARS, CHANNELS AND ANGLE IR - A36 (F<sub>y</sub> = 36 KSI)  
STRUCTURAL PIPES - A53-GRAD 10" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 8" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 6" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 4" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 3" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 2" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 1 1/2" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 1" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 3/4" (F<sub>y</sub> = 30 KSI)  
A53-GRAD 1/2" (F<sub>y</sub> = 30 KSI)  
COMMON BOLTS - A307  
HIGH STRENGTH BOLTS - A325  
ANCHOR RODS - HOOKED, HEADED, THREADED AND NUTTED - F1554-GRAD 36 (F<sub>y</sub> = 36 KSI)  
ROTTED CONNECTIONS TO USE AISC-TYPE II, HIGH STRENGTH BOLTS IN BEARING TYPE CONNECTIONS TIGHTENED TO A SLIP CRITICAL CONDITION IN ACCORDANCE WITH HCSS SPECIFICATIONS.  
BOLTS IN MOMENT CONNECTIONS AND WIND RESISTING FRAMES SHALL BE ASTM A325-TYPE 5C. A SURFACE CONDITION BOLTS SHALL BE TENSIONED.  
SLIP CRITICAL: SLIP CRITICAL CONNECTIONS SHALL HAVE CONTACT SURFACES MEETING CLASS 2 SURFACE CONDITIONS BOLTS SHALL BE TENSIONED.  
SHOP CONNECTIONS TO BE WELDED OR BOLTED. FIELD CONNECTIONS TO BE BOLTED UNLESS OTHERWISE SHOWN. BOLTS ARE TO BE STANDARD ROUND HEAD (R) UNLESS OTHERWISE NOTED. SHORT BOLTS SHALL BE PERMITTED NORMAL TO THE LOAD DIRECTION IN SLIP CRITICAL AND BEARING TYPE CONNECTIONS AS PER AISC REQUIREMENTS.



**CONC. LINTEL SCHEDULE**

MARK	SIZE
RL1	17x12 CONC. LINTEL W/ 2# 4 REBAR



**ROARK CONSULTING LLC**  
...providing structural solutions to the world.  
75 W. Baseline Rd. Ste A 25-20 Gilbert, AZ 85234  
P: 480.490.0809 F: 480.490.1200  
Web: http://www.rockconsultants.com  
Mail: info@rockconsultants.com

**REVISIONS:**

NO.	DATE	DESCRIPTION
1.		
2.		
3.		
4.		
5.		

**PROJECT:**  
**EXPLOSIVE ENCLOSURE WESTERN INDUSTRIAL**  
3640 SOUTH CACTUS ROAD  
ARIZONA 85119

PROJECT # A21589  
DATE NOV. 16, 2015  
DRAWN PSC  
DESIGN LP  
CHECKED SAM  
SCALE AS NOTED

**SHEET TITLE:**  
**GENERAL STRUCTURAL NOTES, FOUNDATION, FRAMING PLANS, SECTION & DETAILS**

SHEET NO:  
**S-0.0**



# Public Input

- Applicant supplied a public participation summary of outreach (attached to staff report)
- Staff has received multiple calls and emails from property owners and renters nearby. The main concerns are explosion radius, property values, and theft.
- One nearby renter called staff to ask where the container is going on the site but was indifferent because regulations and requirements need to be met in order to store the material.
- Sign was posted at site, notices to property owners were sent out 300' around the subject site, and was advertised in newspaper.

# Planning & Zoning Commission Meeting 8/8/2017

- Seven (7) questions were asked by the commission for the applicant, an email with responses was attached to public hearing memo.
- Staff reached out to ATF, NFPA, ICC only ATF has responded so far.
- Police department will not require an extra patrol for Cactus Road.

# Applicant Requesting Continuance

- Applicant is requesting a continuance until the regularly scheduled Tuesday January 9<sup>th</sup>, 2018 public hearing date.
  - ATF is requiring further approval from their Washington DC office for the barricade structure.

# Analysis

Staff is recommending approval of the proposed explosive material magazine storage and barricade request.

- The current use of the property is permitted in the B-5 zoning district, the storage container requires a CUP.
- The use of the property does not correspond with the General Plan land use designation of “Community Commercial” but the surrounding properties to the west and south are zoned and used for industrial purposes.
- The proposal meets requirements for the criteria of a CUP, the addition of a barricade surrounding the magazine storage container further buffers the material from neighboring properties.
- The ATF, NFPA, and ICC have requirements specific to storing explosive material that must be met.

# Recommended Conditions

1. The applicant shall provide approval to staff from ATF for the barricade, before the container may be used to store material.
2. Upon approval of the CUP, a building permit will be required for the magazine storage container and the barrier and must meet ATF, NFPA and ICC standards along with applicable inspections by the building inspector and fire marshal.
3. The Apache Junction Police Department shall inspect the magazine once it is in place, before explosives are stored at the site.
4. The commission shall reserve the right to revoke a CUP for noncompliance with any condition prescribed as part of the permit approval.

# Questions and Discussion