

CHAPTER 5 BUILDING AND CONSTRUCTION ⁵⁸⁷

Article 5-10

DEVELOPMENT

- 5-10-1 Right-of-way Permits and Encroachments
- 5-10-2 Uniform Standard Specifications and Details
- 5-10-3 Storm Drain Design
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- 5-10-5 Grading And Dust Control Regulations ⁵⁹⁴
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Requirements ⁵⁷¹
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Article 5-10-4 Blasting Operations ^{354 483}

A. Scope

This Ordinance applies to the possession, storage, and use of explosive materials used in conjunction with permitted blasting operations conducted within the Town of Paradise Valley.

B. Definitions

Approved as applied to a material device, or mode of construction, means approved by the Town Engineer.

1. "Attended" shall mean an unobstructed view of the on-site explosive material storage.
2. "Artificial Barricade" an artificial mound or revetted wall of earth of a minimum thickness of one (1) foot, or any other approved barricade that offers equivalent protection. ⁴⁸³
3. "Certification of Fitness" shall mean the documentation and results of any examinations to prove the applicant has been found satisfactory to use or transport explosives.
4. "Explosive Materials" shall mean Class A, Class B, and Class C explosives, including detonators, detonating cord, and blasting agents, used in conjunction with blasting operations.

C. Blasting Contractor Requirements

Prior to applying for a permit to conduct blasting operations within the Town limits, the blasting contractor shall submit the following documentation to the Town Engineer.

1. A copy of a valid Federal Explosives User's Permit or Federal Explosives License.
2. A copy of the license issued by the State of Arizona Registrar of Contractors for the type of blasting operations proposed to be conducted by the contractor as follows:
 - a. A. General Engineering. Construction in connection with fixed works requiring specialized engineering knowledge and skill, including streets and roads, power and utilities plants, dams and hydroelectric plants, sewage and waste disposal plants, bridges, tunnels, and over-passes. Also included are the scopes of work allowed by all other engineering classifications.
 - b. A-3, Blasting. The use of explosive and explosive devices for the purposes of excavation, demolition, geological exploration, mining, or any related blasting. Included is any drilling, boring, or earthwork required for the placement of explosive charges, the erection of temporary shelters, artificial barricades and associated protective devices, equipment, and enclosures.
 - c. AE. (As restricted by Registrar.)
 - d. C-15, Blasting. Use of explosives for movement of earthen materials or for demolition (residential in accordance with State of Arizona Registrar of Contractor definition.)

D. Licensing

The applicant shall be a minimum of 21 years of age and shall require a minimum of two (2) years' experience in the conduct of blasting operations. Experience shall include the understanding of blasting designs, drilling of holes, loading of holes, decking stemming, and wiring methods.

E. Certification of Fitness

Any person requesting to conduct blasting operations within the Town shall first present a current and valid Certificate of Fitness Card issued by the City of Phoenix.

F. Blasting Site Permit

A blasting site permit shall be applied for with the Town Engineer to conduct a blasting operation at a specific site. The permit shall be valid for a period not to exceed 90 calendar days, and shall be applied for a minimum of ~~five (5)~~ fifteen (15) work days prior to the

proposed blasting date. Permit fees for blasting site permits shall be in accordance with the Paradise Valley Fee Schedule.

G. Certificate of Insurance ⁴⁸³

The applicant shall furnish the Town of Paradise Valley with a valid Certificate(s) of Insurance on a standard insurance industry ACORD form, subject to approval by the Town Attorney as to form and limits of coverage. The Certificate shall be issued by an insurance company authorized to transact business in the State of Arizona, or be named on the listed Unauthorized Insurers maintained by the Arizona Department of Insurance. The following information shall be identified:

1. The contractor and property owner shall be named as the insured. If the insurance is provided by an individual, company, or partnership other than the contractor, the contractor shall be named as an additional insured.
2. The Town of Paradise Valley, a municipal corporation, shall be named as an additional insured and Certificate Holder.
3. General liability limits, including contractual liability, in the amount of \$5,000,000 combined single limit.

Note: Greater amounts than that stated above, may be required in certain cases as deemed necessary by the Town Engineer or his authorized representative.

4. A description of the operations covered under the insurance, relating to the blasting operations and storage of explosive materials if applicable.

H. Hold Harmless

The contractor shall submit a Hold Harmless Agreement in a form approved by the Town Attorney in favor of the Town for each blasting site location or permit applied for.

I. Documentation

A. The contractor shall submit a blasting schedule. The blasting schedule must identify the site's phased location (if applicable), the proposed number of holes, the date and time for the loading of shots and a time for the blast.

B. The contractor shall submit to the Town Engineer an accurately scaled drawing (1" = 100 feet) of the proposed blasting area identifying:

1. Property lines.
2. Proposed blasting location.

3. Structures within a ~~300~~500-foot radius of the proposed blasting site and the structure(s)' owner and street address, if applicable. Greater distances may be required in certain areas or under certain circumstances, as determined by the Town Engineer or his authorized representative.
 - a. Location of all aboveground and underground utilities, i.e., natural gas piping and lines, electric lines, phone lines, water lines.
 - b. At the time of application for a blasting site permit, the contractor shall submit proof that a pre-blast survey has been conducted of any and all structures within a ~~300~~500-foot radius of the proposed blasting area. Pre-blast surveys of the structures located at distances greater than a ~~300-foot~~500-foot radius may be required in certain areas or under certain circumstances, as determined by the Town Engineer or his authorized representative.
 - c. The blasting contractor or his authorized representative shall document whether there are structures within a ~~300-foot~~500-foot radius of the blasting area, in what form the pre-blast survey was conducted, and where a copy of the pre-blast survey can be located.
 - d. The contractor shall make a minimum of four (4) attempts to contact the owner/occupant of a structure in the pre-blast survey area. At least two (2) of the contacts shall be made during the day and two (2) of the contacts shall be made between 6 p.m. and 9 p.m. If unsuccessful, a notarized statement detailing the address, dates, times, and the name of the person making the contacts shall be submitted to the Town Engineer as part of the permit application package. Upon successful contact, a time stamped video recording of the existing condition of the exterior of the structure shall be created and made available to the Town provided owner of structure consents.
 - e. The pre-blast survey shall identify all existing damage, including cracks in walls, floors, and ceiling, cracks in and around windows, loose brick, and other defects found inside of and outside of buildings.
 - f. In addition to the information specified above, the applicant may be required to furnish, at his own expense, such additional information as may be required to evaluate the permit application. This may include, but is not limited to, the submission of a report prepared by a geological or geophysical engineer registered in the State of Arizona if the proposed blasting is to occur in a geologically sensitive area.
 - g. Failure to provide the required information at the time of permit application may cause the application to be returned to the contractor for resubmittal.

J. Blasting Site Permit Renewal

The contractor shall apply for blasting site permit renewal a minimum of two (2) work days prior to current permit expiration, and shall follow the requirements specified under "Blasting Site Permit," above. Permit fees for blasting permit renewal shall be in accordance with the Paradise Valley Fee Schedule.

K. Conducting Blasting Operations⁴⁸³

1. Any and all utility companies servicing the blasting area shall be advised of the blasting operation a minimum of ~~24 hours~~ five (5) work days prior to conducting the blasting operation.
2. Prior to conducting any blasting operations, the contractor shall request that the blasting area be blue-staked when buildings or structures are located within a ~~300~~500- foot radius of the proposed blast site.
3. Blasting operations shall be conducted on weekdays, between the hours of 8:00 a.m. and 5:00 p.m. No blasting operations shall be conducted at any time on Saturday, Sunday, or legal holidays, except by special written permission of the Town Engineer or his authorized representative. The special written permission shall be obtained by the contractor a minimum of two (2) working days prior to the proposed blasting date.
4. Explosive materials shall not be loaded into the ground until a valid blasting operations permit, issued by the Town Engineer is on site. This does not, however, prohibit the drilling of holes.
5. The contractor shall provide and install signs reading "BLASTING ZONE 1000 FEET" and "TURN OFF 2-WAY RADIOS AND CELLULAR TELEPHONES" on all roads within 1,000 feet of blasting operations.⁴⁸³
6. The Certificate of Fitness Cardholder shall be in attendance at the blast area when the explosive material are loaded into the ground and shall remain in attendance until the blasting operation is completed.
7. Type II magazines, as defined by Article 77 Section 203 of the Uniform Fire Code, shall be used for transporting explosive materials, except blasting agents, from storage magazines to the blasting area.⁴⁸³
8. The blasting contractor ~~shall~~ may be required to provide written notification to the owner/occupant of each building or structure within a ~~300~~500-foot radius of the blast site. The notification shall be required a minimum of ~~24 hours~~ five (5) work days prior to a blasting operation.
9. Seismic and/or air blast monitoring shall be conducted when buildings are located within a ~~300~~500-foot radius of the blasting site. Prior to blasting, contractor personnel monitoring seismic and/or air blasts, shall be submit a letter to the Town

Engineer or his authorized representative documenting the individuals who have received formal training on the equipment proposed to be used, the company name who provided the training, and the specific machine and model number the personnel where trained on.

10. An accurate blasting log shall be maintained by the individual holding the Certificate of Fitness to conduct blasting operations. The log shall contain the Town Engineer permit number, the location of the blasting operation, date and time of each blasting occurrence, the seismic and/or air blast readings received, if applicable, and the name of the individual who conducted the monitoring, if applicable, and any other pertinent information required by the Town Engineer.
11. A current copy of the blasting log shall be available at the blast site, and at the contractor's office. A copy of the blasting log shall be submitted to the Town Engineer within seven (7) calendar days after the expiration of the blasting permit or when requested by the Town Engineer or his authorized representative.
12. Failure to submit the blasting log within the required time frame may cause the Town Engineer or his authorized representative to discontinue permit issuance.
13. Explosives materials shall not be left lying around or in unlocked magazines where they may be accessible to children or unauthorized persons.
14. Empty containers which held explosive materials shall be removed from the site at the end of each work day and disposed of properly. Empty containers shall not be reused.
15. No explosive materials shall be left in the ground overnight.
16. After a blast, all wires shall be carefully traced and a search made for any unexploded explosive materials.
17. After waiting one (1) hour, all misfires shall be investigated by the Certificate of Fitness Cardholder who shall determine the safe method of disposal.
18. Blasting wires and any items or devices marked EXPLOSIVE or BLASTING CAP shall be removed from the site at the end of each blasting day and disposed of according to the manufacturers recommendations.
19. The mixing of blasting agent components is not permitted.
20. No person under the influence of intoxicants, narcotics, or controlled substances shall handle or use explosive materials in any manner.

21. Prior to the disposal of any explosive material, the manufacturer of the product shall be consulted for most current product information and the recommended method of disposal and/or destruction.

22. No explosive material shall be disposed of within the Paradise Valley Town limits.

23. Blasting mats or other means of protection shall be used to prevent fragments from being thrown and to control dust when blasting operations occur within 500 feet of any structures or roadways.

24. The Town Engineer, or designated inspector, shall be on site at the time of all blasting.

25. A video recording of the blasting shall be created and made available to the Town.

26. Prior to conducting blasting operations, the Town or third-party inspector shall verify the documentation provided in 5-10-4 (I)(A).

L. One-Day Supply of Explosive Materials On-Site⁴⁸³

1. One-day supply of explosive materials shall be the quantity required to conduct one (1) day blasting operations only.
2. No explosive materials shall be stored overnight and not more than a one-day supply shall be brought into the Town at anytime.⁴⁸³
3. A one-day supply of explosive material shall be transported to the blasting site in Type II magazine(s) as defined by Article 77 Section 203 of the Uniform Fire Code.⁴⁸³
4. Detonators shall not be stored with high explosives.
5. Explosive material storage shall be located a minimum of a 300-foot radius from the blasting site.
6. At no time shall the explosive be left unattended.