

# City of Bullhead City Development Services Department

## Grading Permit Submittal Requirements

**ENGINEERED GRADING.** Grading quantities of 3,000 cubic yards or more. Plans shall be prepared by a qualified, licensed Arizona registrant.

**REGULAR GRADING.** Grading quantities less than 3,000 cubic yards unless the Building Official determines that special conditions or unusual hazards exist, in which case grading shall conform to the requirements for engineered grading.

**EXEMPT GRADING:** Grading less than 50 cubic yards and less than 12 inches of fill in a self-contained area, provided there is no danger to the public, and that such grading will not adversely affect adjoining properties.

Per IBC Appendix J, as amended by the City of Bullhead City, an excavation or fill or combination thereof over 50 cubic yards, or 12" or more of fill shall require a Grading permit. The required information for the submittal varies depending on the scope of work to be performed. Per IBC Section J104.1 Submittal requirements shall show the existing grade and finished grade in contour intervals of sufficient clarity to indicate the nature and extent of the work and show in detail that it complies with the requirements of this code. The plans shall show the existing grade on adjoining properties in sufficient detail to identify how grade changes will conform to the requirements of this code. This requirement applies to both the excavating and filling of a parcel.

In addition to the contour plan mentioned above all grading permits that include fill shall require a soils report. Per IBC Section J104.3, the required soils report shall be prepared by registered design professional, registered in the State of Arizona, and shall identify the nature and distribution of existing soils; conclusions and recommendations for grading procedures; soil design criteria for any structures or embankments required to accomplish the proposed grading; and, where necessary, slope stability studies, and recommendations and conclusions regarding site geology. Special inspection is required for all permitted fills and will include the daily log, compaction reports and pad certification. Copies of all reports shall be submitted to the City of Bullhead City at the completion of the grading prior to final approval.

## **CITY OF BULLHEAD CITY GRADING ORDINANCE**

### **Chapter 15.40 GRADING AND DUST CONTROL**

#### Sections:

- 15.40.010 Plans and specifications.
- 15.40.020 Soils engineering report--Contents.
- 15.40.030 Engineering geology report--Contents.
- 15.40.040 Cuts.
- 15.40.050 Fills.
- 15.40.060 Dust control--Grading permit required.
- 15.40.070 Dust control--Grading permit not required.
- 15.40.080 Permit application--Review.
- 15.40.090 Inspection of grading and dust control operations.

#### **15.40.010 Plans and specifications.**

- A. Each application for a grading permit shall be accompanied by two sets of plans and specifications. Supporting data consisting of a soils engineering report and an engineering geology report shall also be required by the building official for all multiple-family, commercial and industrial projects. The plans, specifications and reports shall be prepared and signed by a civil engineer registered in the state of Arizona.
- B. Grading permits shall not be issued in floodplain areas until a floodplain development permit has been issued.
- C. Plans shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the nature and extent of the work proposed and show in detail that they will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations.
- D. The first sheet of each set of plans shall include the name(s), address(es), and phone numbers of the property owner(s), the person who prepared the plans, and the person(s) responsible for the implementation of the dust control plan.
- E. The grading plans shall include the information set forth below:
  - 1. A vicinity map that shows the entire project site/facility boundaries, acres to be disturbed with linear dimensions, nearest public roads, north arrow, and planned exit locations onto paved areas accessible to the public.
  - 2. Accurate contours of existing ground and details of terrain and area drainage.

3. Limiting dimensions, elevations or finished contours to be achieved by the grading, and proposed drainage channels and related construction.
4. Detailed plans of all surface and subsurface drainage devices, walls, cribbing, dams and other protective devices to be constructed with, or as a part of, the proposed work together with a map showing the drainage area and the estimated runoff of the area served by any drains.
5. Location of any buildings or structures on the property where the work is to be performed and the location of any buildings or structures on land of adjacent owners which are within fifteen feet of the property or which may be affected by the proposed grading operations.
6. A dust control plan which is a technique, practice, or procedure used to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust. Control measures include, but are not limited to those measures listed below. A civil engineer is not required to prepare the dust control plan.
  - a. Pre-wetting.
  - b. Applying dust suppressants.
  - c. Limiting, restricting, phasing and/or rerouting motor vehicle access.
  - d. Reducing vehicle speeds and/or number of vehicle trips.
  - e. Appropriately using dust control implements.
  - f. Installing one or more grizzlies, gravel pads, and/or wash down pads adjacent to the entrance of a paved area accessible to the public to control carry-out and track out.
  - g. Keeping open-bodied haul trucks in good repair, so that spillage may not occur from beds, sidewalls, and tailgates.
  - h. Covering the cargo beds of haul trucks to minimize wind-blown dust emissions and spillage.
7. Information on the measures that will be used upon completion of the work for which the permit was issued, to prevent or minimize the generation, emission, entrainment, suspension, and/or airborne transport of fugitive dust.

#### **15.40.020 Soils engineering report--Contents.**

The soils engineering report required shall include data regarding the nature, distribution and strength of existing soils, conclusions and recommendations for grading procedures and design criteria for corrective measures when necessary, and opinions and recommendations covering adequacy of sites to be developed by the proposed grading. Any recommendations included in the report approved by the building official shall be incorporated in the grading plans or specifications.

#### **15.40.030 Engineering geology report--Contents.**

The engineering geology report required shall include an adequate description of the geology of the site, conclusions and recommendations regarding the effect of geologic conditions on the proposed development, and opinions and recommendations covering the adequacy of sites to be developed by the proposed grading. Any recommendations included in the report and approved by the building official shall be incorporated in the grading plans or specifications.

#### **15.40.040 Cuts.**

- A. Unless otherwise recommended in the approved soils engineering and/or engineering geology report, cuts shall conform to the provisions of this section.
- B. The slope of cut surfaces shall be no steeper than is safe for the intended use. Cut slopes shall be no steeper than two horizontal to one vertical.
- C. If such cuts exceed three feet at any time during construction activity on the property, specific measures to be employed to assure that such excavations are protected from public encroachment shall be noted on the grading plans. Such measures shall be approved by the building official and may include:
  - 1. Physical barriers, including berms, temporary fencing or other suitable obstruction;
  - 2. Warning lights, signs or banners, which shall clearly indicate the danger to trespassers of all ages;
  - 3. Where possible, stable trench coverings.
- D. Drainage and terracing shall be provided, as required by Section J109 of the 2006 International Building Code, as adopted by the city.

#### **15.40.050 Fills.**

- A. Unless otherwise recommended in the approved soils engineering report, fills shall conform to the provisions of this section. In the absence of an approved soils engineering report, these provisions may be waived for minor fills no greater than fifty cubic yards and not intended to support structures.
- B. Fill slopes shall not be constructed on natural slopes steeper than two to one.
- C. The ground surface shall be prepared to receive fill by removing vegetations, noncomplying fill, topsoil and other unsuitable materials, scarifying to provide a bond with the new fill, and where slopes are steeper than five to one and the height is greater than five feet, by benching into sound bedrock or other competent materials as determined by the soils engineer.

- D. The bench under the toe of a fill on a slope steeper than five to one shall be at least ten feet wide. The area beyond the toe shall be sloped for sheet overflow or a paved drain shall be provided.
- E. Where fill is to be placed over a cut, the bench under the toe of fill shall be at least ten feet wide but the cut must be made before placing fill and approved by the soils engineer and engineering geologist as a suitable foundation for fill. Unsuitable soil is soil which, in the opinion of the building official or the civil engineer or the soils engineer or the geologist, is not competent to support other soil or fill, to support structures or to satisfactorily perform the other functions for which the soil is intended.
- F. Detrimental amounts of organic material shall not be permitted in fills. Except as permitted by the building official, no rock or similar irreducible material with a maximum dimension greater than twelve inches shall be buried or placed in fills.
- G. All fills shall be compacted to a minimum of ninety percent of maximum density, as required by Section J107 of the 2006 International Building Code or equivalent, as approved by the building official.
- H. The slope of fill surfaces shall be no steeper than is safe for the intended use. Fill slopes shall be no steeper than two horizontal to one vertical.
- I. Drainage and terracing shall be provided and the area above fill slopes and the surfaces of terraces shall be graded and paved, as required by Section J109 of the 2006 International Building Code, as adopted by the city.

**15.40.060 Dust control--Grading permit required.**

- A. The person(s) responsible for the implementation of the dust control plan shall control dust during the excavation or grading operations in accordance with the dust control plan approved as part of the grading permit process.
- B. The person(s) responsible for the implementation of the dust control plan shall leave the property in a condition that shall prevent dust from arising.
- C. Failure to control dust in accordance with the dust control plan approved as part of the grading permit process shall be cause for immediate revocation of the permit for any work being conducted and/or enforcement action by the city.

**15.40.070 Dust control--Grading permit not required.**

- A. The person(s) performing excavation and/or grading operations for which a grading permit is not required shall be responsible for controlling dust during the excavation or grading operations.

- B. The person(s) responsible for the excavation and/or grading operations shall leave the property in a condition that shall prevent dust from arising.
- C. Failure of the person(s) responsible for the excavation and/or grading operations to control dust shall result in immediate enforcement action by the city. As a minimum, the person(s) responsible for the excavation and/or grading operations shall be directed to implement one or more of the dust control techniques, practices, or procedures set forth in this chapter.

#### **15.40.080 - Permit application—Review.**

The building official shall review all grading permit applications to assure compliance with the requirements of Appendix Chapter J of the 2018 International Building Code and any supplemental sections.

#### **15.40.090 - Inspection of grading and dust control operations.**

All grading and dust control operations for which a permit is required shall be subject to inspection by the building official. When required by the building official, special inspection of grading operations and special testing shall be performed.

### **GENERAL INFORMATION**

- See permit “Building and Zoning Permits Guide” for review timelines.
- Separate permits may be required for other related work such as retaining walls, etc.

### **PERMIT INFORMATION:**

- A twenty-four (24) hour inspection request line is available, call (928) 763-0172.
- The permit inspection card must be posted on the construction site at all times.
- The approved plans must be on the job site for all requested inspections.
- Prior to digging call Arizona 811; in AZ dial 811, out of state 1-800-STAKE-IT (1-800-782-5348)
- Temporary restroom facilities are required. A minimum three cubic yard trash receptacle may be required.

### **ADOPTED BUILDING CODES (with local amendments):**

Title	Code Year	BHC MC Chapter	Title	Code Year	BHC MC Chapter
International Building Code, ICC	2018	15.12	International Fire Code, ICC	2018	15.24
International Residential Code, ICC	2018	15.14	International Energy Conservation Code, ICC	2018	15.22
National Electric Code, NFPA	2017	15.20	International Existing Building Code, ICC	2018	15.26
International Mechanical Code, ICC	2018	15.28	International Swimming Pool and Spa Code, ICC	2018	15.30
International Plumbing Code, ICC	2018	15.32			
International Fuel Gas Code, ICC	2018	15.34	ADAAG Manual, ADA US Access Board	2010	NA

ICC International Code Council, NFPA National Fire Protection Association

The Arizona Department of Fire, Building and Life Safety adopted the 2018 International Fire Code. For additional information contact the Bullhead City Fire Department at (928) 758-3971.

For specific Planning & Zoning codes, Engineering codes, Building codes and local code amendments, along with plan submittal requirements applicable to various project types, review our informational handouts under **Departments** and the City's **Municipal Code** at [www.bullheadcityaz.gov](http://www.bullheadcityaz.gov).