



## Development and Infrastructure Services Department

### Permitting Division

11000 N La Cañada Drive, Oro Valley, Arizona 85737 • 520-229-4815 • 520-742-1022 (Fax)

## TYPE 1 GRADING PERMIT CHECKLIST

**Notice to Permit Holder** - It is the applicant/owner's responsibility to ensure all private rules and regulations of the subdivision are adhered to. Contact your HOA or property management to determine applicable requirements. **Initial Here** \_\_\_\_\_

### 1.0 General Information

- 1.1 Fill out the Grading Statement on page 2 of the Building Permit Application.
- 1.2 Provide a Grading/Site Plan with the application. See below for Grading /Site Plan requirements.
- 1.3 A Town of Oro Valley Floodplain Use Permit is required for grading or other improvements within a 100-year floodplain.
- 1.4 A Town of Oro Valley Right-Of-Way Permit is required for all construction related activity in Town right-of-way. This includes driveway connections and utility trenching.
- 1.5 Detailed review and permitting of septic systems is by the Pima County Department of Environmental Quality. It is the applicant's responsibility to coordinate directly with PCDEQ.
- 1.6 A drainage report is required for structures and grading that may affect or be affected by a 100-year floodplain or erosion hazard setback. Other drainage related situations may require a drainage analysis with supporting calculations as needed on a case by case basis.

### 2.0 Grading /Site Plan Requirements

- 2.1 Grading/Site Plan Format:
  - Plan is to measure 24"x36". Other sizes are acceptable on a case by case basis.
  - Label plan "Grading/Site Plan".
  - Utilize a standard engineering scale, typically 1"=10' or 1"=20'.
  - Provide a north arrow and bar scale.
  - Grading/Site Plan to be tied to a benchmark of known elevation and location. Include this information on the plan.
  - Grading/Site Plan to be prepared by an Arizona Registrant for the following conditions:
    - Average cross-slope of building pad region is greater than 6%.
    - Average cross-slope of parcel is 15% or greater.
    - Parcel has sloped areas greater than 25%.
- 2.2 Grading/Site Plan Content – Existing Conditions:
  - Show exterior boundaries of parcel in a heavy solid line type. Provide metes and bounds per recorded final plat or other recorded instrument.
  - Show and label existing topography at 1 or 2 foot contour intervals.
  - Show and label adjacent existing roadways and indicate as either public or private.
  - Show and label all existing recorded parcel restrictions such as floodplain limit lines, erosion hazard setback lines, conservation areas, easements, etc.
  - Show and label existing utilities.
  - Maintain existing drainage patterns for flows entering and exiting the site.
- 2.3 Grading Site/Plan Content – Proposed Conditions:
  - Show and label proposed topography at 1 or 2 foot contour intervals. Ensure that proposed contour lines tie back into existing contour lines.
  - Show the locations of toe and top of new slopes.
  - Show and label all proposed structures to be constructed.
  - Indicate the finished floor elevation (FFE) and finished pad elevation of any proposed residential building. For proposed attached garages, only an FFE is required.

- Show proposed finished grades at the following locations:
  - Building and patio slab corners.
  - At periodic intervals along channel or swale inverts.
  - Inlet and outlet invert elevations of pipes and area drains.
  - Grade breaks, high points, and low points.
  - Along proposed driveways to verify finished slope.
  - As needed to verify positive drainage. A minimum slope of 5% for a distance of 10' away from a foundation is generally required per International Residential Code Requirements (R401.3). For other locations, a minimum 0.5% slope is generally required for paved surfaces and minimum of 1% slope is generally required for unpaved areas.
- Show locations of all proposed retaining walls. Provide elevations for the top of retaining walls and at the bottom along finished grade. Supporting structural calculations and details prepared by an Arizona registrant is required for the following:
  - Retaining walls greater than 4-feet when measured from bottom of footing.
  - Retaining walls with site walls when the combined height is greater than 6-feet, measured from bottom of footing.
  - Any retaining walls with an applied surcharge load.
  - Site walls greater than 6-feet when measured from the top of footing.
- Indicate the locations of wall openings for surface drainage and label permanent erosion control devices to be used (e.g. riprap apron).
- Provide a limits of grading line to indicate all areas to be disturbed.
- Indicate the location of construction access to the site if other than an existing driveway or wall opening.
- Provide construction layout dimensions as needed.
- For proposed driveways, indicate the surfacing to be used such as asphalt, concrete, brick or aggregate. Per the Town Zoning Code, driveways are required to maintain a dust free condition.
- Show all proposed utilities from point of connection to proposed structures.
- House Connection Sewer (HCS) are to meet International Plumbing Code requirements. Indicate size, minimum slope, and location of HCS lines and cleanouts.
- Provide the rim elevation of the nearest upstream manhole to verify whether a backwater valve will be required on the HCS line. If a backwater valve is required, indicate as such on plan.
- Indicate the locations of permanent erosion control devices (e.g. splash blocks, riprap aprons, etc) at the base of down spouts, scuppers, canales, etc.
- Indicate the locations of interim erosion control devices (BMP) to be in place during construction (e.g. silt fence, waddle, etc). Provide a typical detail with installation information for the proposed device. All BMP's are to be placed within the limits of grading line.
- Provide a typical cross section(s) at critical areas where additional clarity may be required.
- Provide erosion control measures (e.g. riprap aprons) at runoff discharge locations where required.

#### 2.4 Additional Grading Information:

- Finished slopes must conform to the following Town Zoning Code restrictions:
  - 3:1 (horizontal: vertical) or flatter shall be revegetated.
  - Slopes 2:1 or flatter but steeper than 3:1 shall be stabilized with rock riprap over filter fabric.
  - Slopes steeper than 2:1 shall be stabilized with grouted riprap or retaining walls as appropriate. Slopes shall not exceed 1:1.
  - Alternative methods of stabilization may be allowed when supported by a geotechnical report prepared by an Arizona registrant.

- Cut, fill and slope setbacks must conform to the following Town Zoning Code restrictions:
  - The maximum depth of cut and fill shall not exceed six feet (6-feet) measured vertically from existing grade to finished grade. If terraced retaining walls are utilized, the maximum depth may be increased to eight feet (8-feet).
  - The top of a cut slope is to be set back from a property line a minimum of one-fifth (1/5) of the vertical height of the slope, with a minimum of two-feet (2-feet),

Please be aware that if the project is within a Planned Area Development (PAD), such as Rancho Vistoso, the PAD design standards shall govern if there is a conflict with the Town Zoning Code.

- The requirements of the Environmentally Sensitive Lands (ESL) or the Hillside Development Zone ordinances shall apply if applicable to the subject property.

### **3.0 Standard Grading Notes**

The following standard Grading Notes are to be included on the Site/Grading Plan:

1. Unimproved disturbed areas resulting from operations on this lot shall be restored to their natural state by utilizing drought-resistant vegetation as stated by the Town of Oro Valley Zoning Code. All utility trenches and/or leach fields are to be restored to their original natural conditions.
2. Excess soil generated from earthwork operations shall be removed from the site and lawfully disposed of, or, if allowed and approved by the Town Engineer, site material may be placed so as to become an integral part of the site development, all in accordance with hillside development regulations.
3. Cut and fill slopes and slope treatment to be in compliance with the requirements of the accepted geotechnical engineering investigation or the Town of Oro Valley Revegetation Requirements.
4. Excess soil material generated from the earthwork operations shall not be disposed of by pushing or placing said material into areas designated as 100-year floodplain areas.
5. The contractor is responsible for assuring proper and adequate drainage.
6. Elevation of finish pad shall be certified by a registered land surveyor prior to pouring foundations. A copy of certification must be approved by the Town of Oro Valley Inspection and Compliance Division prior to calling for building inspections.
7. Prior to any building finals, a final grading inspection must be obtained from the Town of Oro Valley. Call the Town of Oro Valley Inspection and Compliance Division at (520) 229-4898 for a final grading inspection at least 24 (twenty-four) hours in advance.