REQUIREMENTS FOR COMPACCTION OF FILL MATERIAL

Per Section R506.2.1 of the 2018 IRC regarding requirements for fill material used for concrete slab-on-ground floors: “Fill material shall be free of vegetation and foreign material. The fill shall be compacted to assure uniform support of the slab, and except where approved, the fill depths shall not exceed twenty-four (24”) inches for clean sand or gravel and eight (8”) inches for earth” also, Section R401.2 “Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice”. In addition the YCGO Grading 2014-9 Section 110.3 states “Detrimental amounts of organic material shall not be permitted in fills. No rock or similar irreducible material with a maximum dimension greater than twelve (12”) inches shall be buried or placed in fills.”

The following requirements shall be met for submittals of compaction reports for fill materials, either for footing placement on fill material, or fill inside the foundation walls of a residential structure when the foundation wall exceeds two (2’) feet in height and the area to be filled is fifty percent (50%) or more of the entire floor area. Compaction reports shall be done by an Arizona licensed engineering firm. Refer to Engineer’s Geotechnical report for all soils requirements.

1. Compaction reports shall accurately reflect the placement of fill in maximum twelve (12”) inch lifts with compaction tests performed on each lift.

2. Reports shall include dates, times, number of tests, specific locations of the tests in relation to the structure to be built on the site, and the results of the tests including any failure notifications. Subsequent reports should reflect actions taken to resolve any failures.

3. Compaction reports shall be written on forms showing the authorized agency along with the name of the certified individual performing the tests. If requested by Building Safety, the individual or firm performing the tests may be required to submit copies of their credentials to Yavapai County Development Services, Building Safety Unit.

4. Compaction reports shall include a summary letter from the firm performing the tests certifying the compaction results.

5. Approval of any foundation or slab grade inspection will be given only after the compaction reports and the special inspection reports from the Geotechnical Engineer have been received, reviewed and approved by either the building inspector or the building official.