

## CITY OF YORBA LINDA ENGINEERING DEPARTMENT GRADING NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CITY OF YORBA LINDA GRADING ORDINANCE, ORANGE COUNTY GRADING MANUAL, THE CITY ENGINEER, AND ANY SPECIAL REQUIREMENTS OF THE PERMIT.
2. NO GRADING SHALL START WITHOUT FIRST NOTIFYING THE CITY ENGINEER 48 HOURS PRIOR TO COMMENCEMENT OF WORK.
3. PRIOR TO ANY LAND DISTURBANCE, CLEARING, GRUBBING, OR DEMOLITION, APPROVAL MUST BE OBTAINED FROM THE CITY BUILDING OFFICIAL.
4. THE PERMITTEE OR DESIGNEE SHALL NOTIFY THE CITY ENGINEER WHEN THE GRADING OPERATION IS READY FOR EACH OF THE FOLLOWING INSPECTIONS.
  - A. INITIAL INSPECTION. WHEN THE PERMITTEE IS READY TO BEGIN WORK, BUT NOT LESS THAN 48 HOURS BEFORE ANY GRADING OR LAND DISTURBANCE IS STARTED.
  - B. TOE INSPECTION. AFTER THE NATURAL GROUND IS EXPOSED AND PREPARED TO RECEIVE FILL BUT BEFORE FILL IS PLACED.
  - C. EXCAVATION INSPECTION. AFTER THE EXCAVATION IS STARTED BUT BEFORE THE VERTICAL DEPTH OF THE EXCAVATION EXCEEDS 10 FEET.
  - D. FILL INSPECTION. AFTER THE FILL PLACEMENT IS STARTED BUT BEFORE THE VERTICAL HEIGHT OF THE FILL EXCEEDS 10 FEET.
  - E. DRAINAGE DEVICE INSPECTION. AFTER FORMING OF TERRACE DRAINS, DOWNDRAINS OR AFTER PLACEMENT OF PIPE IN SUBDRAINS BUT BEFORE ANY CONCRETE OR FILTER MATERIAL IS PLACED.
  - F. ROUGH GRADING. WHEN ROUGH GRADING IS COMPLETE, THIS INSPECTION MAY BE CALLED FOR AT THE COMPLETION OF ROUGH GRADING WITHOUT THE NECESSITY OF THE CITY ENGINEER HAVING PREVIOUSLY REVIEWED AND ACCEPTED THE REPORTS.
  - G. FINAL. WHEN ALL WORK, INCLUDING INSTALLATION OF ALL DRAINAGE STRUCTURES AND OTHER PROTECTIVE DEVICES IS COMPLETE AND THE AS-GRADED PLAN, PROFESSIONAL CERTIFICATIONS AND THE REQUIRED REPORTS ARE SUBMITTED.
5. CUT OR FILL SLOPES SHALL BE NO STEEPER THAN 2 HORIZONTAL TO 1 VERTICAL AND SHALL HAVE NOT LESS THAN 90% COMPACTION OUT TO THE FINISHED SURFACE. FILL SHALL BE COMPACTED THROUGHOUT TO A MINIMUM RELATIVE COMPACTION OF 90%. TESTING SHALL BE IN ACCORDANCE WITH ASTM TEST METHODS D1556, D1557, D2937, D2922 AND D3017.
6. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND ACCEPTED BY THE CITY INSPECTOR AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF FILL.
7. FILL SHALL BE BENCHED INTO COMPETENT MATERIAL AS PER DETAIL ON PLAN.
8. ALL EXISTING FILL SHALL BE ACCEPTED BY THE CITY ENGINEER OR REMOVED BEFORE ANY ADDITIONAL FILLS ARE ADDED.
9. FILL AREAS SHALL BE CLEARED OF ALL VEGETATION AND DEBRIS, SCARIFIED TO DEPTH AS DETERMINED BY THE GEOTECHNICAL ENGINEER AND INSPECTED BY THE CITY INSPECTOR AND GEOTECHNICAL ENGINEER PRIOR TO THE PLACEMENT OF FILL.
10. ANY EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED OR CRUSHED IN PLACE AND BACKFILLED, AND ACCEPTED BY THE CITY ENGINEER AND GEOTECHNICAL ENGINEER.
11. ALL SLOPES IN EXCESS OF FIVE (5) FEET IN HEIGHT (MEASURED VERTICALLY) SHALL BE PLANTED AND IRRIGATED TO THE SATISFACTION OF THE CITY ENGINEER. THIS WORK SHALL COMMENCE IMMEDIATELY AFTER ROUGH GRADE APPROVAL OR AT A TIME DIRECTED BY THE CITY ENGINEER.
12. THE STOCKPILING OF EXCESS MATERIAL SHALL BE ACCEPTED BY THE CITY ENGINEER PRIOR TO EXCAVATION.
13. DESIGN ENGINEER, AFTER ROUGH GRADE COMPLETION, SHALL CERTIFY THAT PAD ELEVATIONS ARE AS PER THE ACCEPTED GRADING PLAN OR ACCEPTED REVISED GRADING PLAN, IF CHANGES TO OBTAIN DIRT BALANCE ARE MADE DURING GRADING OPERATION.
14. DESIGN ENGINEER, AFTER FINAL GRADE COMPLETION, SHALL CERTIFY THAT PRECISE GRADE ELEVATIONS ARE PER THE ACCEPTED GRADING PLAN OR ACCEPTED REVISED GRADING PLAN.
15. ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY THE SITE GEOTECHNICAL ENGINEER PER THE GRADING CODE.
16. THE ENGINEERING GEOLOGIST AND GEOTECHNICAL ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUB-SURFACE WATER OR SPRING FLOW. IF NEEDED, DRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
17. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.
18. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE AND GRADE.
19. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEM EXISTS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING

GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE CITY ENGINEER FOR ACCEPTANCE.

20. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND GEOTECHNICAL ENGINEER, THE GEOTECHNICAL ENGINEER WILL SUBMIT DESIGN LOCATION AND CALCULATIONS TO THE CITY ENGINEER PRIOR TO THE CONSTRUCTION. THE ENGINEERING GEOLOGIST AND GEOTECHNICAL ENGINEER WILL INSPECT THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
21. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURES OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND GEOTECHNICAL ENGINEER, A COMPACTED FILL BLANKET SHALL BE PLACED.
22. THE ENGINEERING GEOLOGIST SHALL PERFORM PERIODIC INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING.
23. THE FINAL COMPACTION REPORT AND CERTIFICATION FROM THE GEOTECHNICAL ENGINEER SHALL IDENTIFY THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, DRIVE RING, OR NUCLEAR GAUGE. IF A NUCLEAR GAUGE IS USED AT LEAST ONE SAND CONE OR DRIVE RING TEST SHALL BE TAKEN PER 10 NUCLEAR GAUGE TESTS TO CONFIRM THE CALIBRATION OF THE GAUGE USED AND SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
24. THE GEOTECHNICAL ENGINEER AND ENGINEERING GEOLOGIST SHALL PERFORM SUFFICIENT TESTS AND INSPECTIONS AND BE AVAILABLE DURING GRADING AND CONSTRUCTION TO VERIFY COMPLIANCE WITH THE PLANS, SPECIFICATIONS, AND CODE WITHIN THEIR PURVIEW.
25. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR THE QUALITY OF HIS WORK AND SHALL SUBMIT A STATEMENT OF COMPLIANCE WITH THE ACCEPTED GRADING PLANS PRIOR TO FINAL APPROVAL.
26. DUST SHALL BE CONTROLLED BY WATERING. SUFFICIENT WATER OR MATERIAL SHALL BE APPLIED TO ALL CONSTRUCTION ACCESS ROADS.
27. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE WITH SECOND CONTAINMENT AND PLACED ON LEVEL GROUND. SECOND CONTAINMENTS SHALL BE DRAINED AFTER STORM EVENTS.
28. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE PERMITTEE.
29. ACCEPTED PROTECTIVE MEASURES AND TEMPORARY DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJOINING PROPERTIES DURING THE GRADING PROJECT.
30. ALL CONCRETE AND GUNITE SHALL BE TREATED WITH A MOISTURE LOSS RETARDANT FOR CURING.
31. ANY WATER WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE SPECIFICATIONS ACCEPTED BY THE CITY BUILDING OFFICIAL.
32. ANY OIL WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE ORANGE COUNTY OIL CODE AND ACCEPTED BY THE CITY BUILDING OFFICIAL.
33. ANY EXISTING CESSPOOLS AND SEPTIC TANKS SHALL BE ABANDONED IN COMPLIANCE WITH THE UNIFORM PLUMBING CODE AND ACCEPTED BY THE CITY BUILDING OFFICIAL.
34. PRIOR TO FINAL ACCEPTANCE, THE DESIGN CIVIL ENGINEER SHALL CERTIFY TO THE CITY ENGINEER THE NUMBER OF YARDS OF CUT, FILL AND IMPORT MOVED DURING THE GRADING OPERATION.
35. THE PERMITTEE SHALL COMPLY WITH THE GRADING CODE REQUIREMENTS FOR ENGINEERED GRADING WHEN AN EXCESS OF 5,000 CUBIC YARDS OF EARTH IS MOVED ON PUBLIC ROADWAYS FROM THE SITE OF EARTH GRADING OPERATION.
36. ALL PUBLIC ROADWAYS MUST BE CLEANED DAILY OF ALL DIRT, MUD AND DEBRIS DEPOSITED ON THEM TO THE SATISFACTION OF THE CITY ENGINEER.
37. ALL CONSTRUCTION VEHICLES OR EQUIPMENT, FIXED OR MOBILE, OPERATED WITHIN 1,000 FEET OF A DWELLING SHALL BE EQUIPPED WITH PROPERLY OPERATING AND MAINTAINED MUFFLERS.
38. ALL OPERATIONS SHALL COMPLY WITH THE CITY MUNICIPAL CODE AND ORANGE COUNTY CODIFIED ORDINANCES, DIVISION 6 (NOISE CONTROL).
39. STOCKPILING AND/OR VEHICLE STAGING AREAS SHALL BE LOCATED AS FAR AS PRACTICABLE FROM DWELLINGS AND WITHIN THE LIMITS OF THE PROJECT BOUNDARY.
40. GRADING OPERATIONS INCLUDING MAINTENANCE OF EQUIPMENT WITHIN 1 1/2 MILES OF HUMAN OCCUPANCY SHALL NOT BE CONDUCTED BETWEEN THE HOURS OF 7 P.M.-7 A.M. DAILY, OR ON A SUNDAY OR ON A FEDERAL HOLIDAY.