



CITY OF LAGUNA NIGUEL
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CITY OF LAGUNA NIGUEL STANDARD GRADING NOTES – FORM 303

Standard Grading Notes to be included on the Title Sheet of the Grading Plans.

1. All work shall be in accordance with the Grading Code of the City of Laguna Niguel and any special requirements of the permit. A copy of the Grading Code and Manual shall be retained on the job site while work is in progress. When referenced on the plans, a copy of OC Public Works Standard Plans shall also be retained on the site.
2. Grading shall not be started without first notifying the City Grading Inspector, a Pre-Grade Meeting on the site is required before start of grading with the following people present: Owner, Grading Contractor, Civil Engineer, Soil Engineer, Geologist, City Grading Inspector and when required the Archaeologist, Biologist, Paleontologist, and Orange County Fire Authority (OCFA). The required inspections for grading will be explained at this meeting.
3. An approved copy of the Grading Plan shall be on the permitted site while work is in progress.
4. Cut and fill slopes shall be no steeper than 2' horizontal to 1' vertical (2:1).
5. Fills shall be compacted throughout to a minimum of 90% relative density. Aggregate base for asphaltic areas shall be compacted to minimum of 95% relative density. Maximum density shall be determined by California Building Code Standard No. 70-1 or approved equivalent, and field density by California Building Code Standard No. 70-2 or approved equivalent.
6. Areas to receive fill shall be properly prepared and approved in writing by the Soil Engineer and the Building Official prior to placing fill.
7. Fills shall be benched into competent material per OC Public Works Standard Plan No. 1322.
8. All existing fills shall be approved by the Building Official or removed prior to placing additional fills.
9. Any existing irrigation lines and cisterns shall be removed, or crushed in place, and approved by the Building Official and Soil Engineer.
10. Stockpiling of excess material shall be approved by the Building Official prior to excavation.
11. The Civil Engineer, as a condition of rough grade approval, shall provide blue top with accompanying witness stake, set at the center of each pad reflecting the pad elevation for precise permits and a blue top with witness stake set at the drainage swale high point reflecting the high point elevation.

12. All trench backfills shall be tested and approved by the Soil Engineer per the Grading Code.
13. After clearing and prior to the placement of fill in canyons, the Engineering Geologist and Soil Engineer shall inspect each canyon for areas of adverse stability and to determine the presence or absence of subsurface water or spring flow. If needed, subdrains will be designed and constructed prior to the placement of fill in each respective canyon.
14. Subdrain outlets shall be completed at the beginning of the subdrain construction.
15. The exact location of the subdrains shall be surveyed in the field for line/grade and reflected on as-graded plans.
16. All cut slopes shall be investigated both during and after grading by the Engineering Geologist to determine if any slope stability problems exist. Should excavation disclose any geological hazards or potential geological hazards, the Engineering Geologist shall submit recommended treatment to the Building Official for approval.
17. Where support or buttressing of cut and natural slopes is determined to be necessary by the engineering Geologist and Soil Engineer, the Soil Engineer shall submit design, locations, and calculations to the Building Official prior to construction. The Engineering Geologist and Soil Engineer shall inspect and control the construction of the buttressing and certify to the stability of the slope and adjacent structures upon completion.
18. When cut pads are brought to near grade, the Engineering Geologist shall determine if the bedrock is extensively fractured or faulted and will readily transmit water. If considered necessary by the Engineering Geologist and Soil Engineer, a compacted fill blanket will be placed.
19. The Engineering Geologist shall perform periodic inspections and submit a complete report and map upon completion of the rough grading.
20. The compaction report and approval from the Soil Engineer shall indicate the type of field-testing performed. Each test shall be identified with a method of obtaining the in-place density, whether sand cone or drive ring 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.
21. The Soil Engineer and Engineering Geologist shall perform sufficient inspections and be available during grading and construction to verify compliance with the plans, specifications, and the code within their purview.
22. The Civil Engineer shall be available during grading to verify compliance with the plans, specifications, code and any special conditions of the permit within their purview.
23. The permittee is responsible for dust control measures.
24. Sanitary facilities shall be maintained on the site.
25. The location and protection of all utilities is the responsibility of the permittee.

26. Approved protective measures and temporary drainage provisions shall be used to protect adjoining properties during grading.
27. Any existing water wells shall be abandoned in compliance with the specifications approved by County of Orange, Human Services Agency, Division of Environmental Health.
28. Any existing oil wells shall be abandoned in compliance with the Orange County Oil Code to the approval of OC Public Works/Regulations Special Service Section.
29. Any existing cesspools and septic tanks shall be abandoned in compliance with the California Plumbing Code to the approval of City Planning/Building & Safety Divisions.
30. Prior to final approval, the Civil Engineer shall certify to the Building Official the amount of earth moved during the grading operation.
31. The permittee shall comply with the Grading Code requirements when an excess of 5,000 cubic yards of each is transported to or from a permitted site on public roadways.
32. Asphalt concrete shall be constructed per the requirements of OC Public Works Standard Plan No. 1805.
33. Aggregate base section shall be constructed per OC Public Works Standard No. 1804.
34. All concrete structures that come in contact with the on-site soils shall be constructed with type V cement, unless deemed unnecessary by soluble sulphate-content tests conducted by the Soil Engineer.
35. Export soil must be transported to a legal dump or to a permitted site approved by the City Grading Inspector.
36. Slopes exceeding 5' in height shall be planted with approved plant material. In addition, slopes exceeding 15' in height shall be provided with an approved irrigation system, unless otherwise approved by the Planning Division.
37. The Grading Contractor shall submit a statement of compliance to the approved Grading Plan prior to final approval.
38. Asphalt sections must be per Code: Parking stalls = 3" A/C over 6" A/C, Drives 3" A/C over 10" (Comm.) 12" (Industrial). Or: Prior to rough grade release for Building Permits by the City Grading Inspector, the Soil Engineer shall submit for approval, pavement section recommendations based on 'R' Value analysis of the sub-grade soils, and expected traffic indices.
39. Preliminary soil and geology reports and all subsequent reports as approved by the City Grading Division are considered a part of the approved grading plan.

40. All existing drainage courses through this site shall remain open until facilities to handle storm water are approved and functional; however, in any case, the permittee shall be held liable for any damage due to obstructing natural drainage patterns.
41. Grading operations including maintenance of equipment within one-half mile of a human occupancy shall not be conducted between the hours of 8 p.m. and 7 a.m. daily, on Sunday or on a Federal Holiday.
42. Roof gutters shall be installed to prevent roof drainage from falling on manufactured slopes.
43. The permittee shall be given reasonable notice to the owner of adjoining lands and buildings prior to beginning excavations which may affect the lateral and subjacent support of the adjoining property. The notice shall state the intended depth of excavation and when the excavation will commence. The adjoining owner shall be allowed at least 30 days and reasonable access of the permitted property to protect his structure, if he so desires, unless otherwise protected by law.

EROSION CONTROL

44. In case of emergency, call: _____ Work Phone: _____
(Name) Home Phone: _____
45. Sediments from areas disturbed by construction shall be retained on-site using an effective combination of erosion and sediment controls to the maximum extent practicable, and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, sidewalks, gutters, drain inlets or adjacent properties via runoff, vehicle tracking or wind.
46. All sediment and construction debris which is tracked or deposited onto public or private sidewalks, gutters or paved roads shall be removed on a daily basis by sweeping or vacuuming and disposed of properly. Sediment and construction debris **shall not** be washed into the storm drain system, including the gutter and storm drain inlets.
47. Sandbags, gravel bags or other effective filter or trap-type barriers shall be used where appropriate to intercept and slow the flow of runoff from the construction site and to trap sediment before it enters the storm drain system, including gutters and inlets. All on-site storm drain inlets shall be protected and off-site inlets shall be protected in areas where construction activity tracks sediment on paved areas or where inlets receive runoff from disturbed areas.
48. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of temporary devices when rain is imminent.
49. Erosion control devices shall not be moved or modified without the approval of the Building Official.

50. During the wet season, between October 1st and April 30th, erosion control protective devices and measures shall be in place at the end of each working day when the 5-Day probability-of-rain exceeds 40%. During the remainder of the year, the erosion control protective devices and measures shall be onsite and ready for installation when the 5-Day probability-of-rain exceed 50% and in place at the end of each day when the 48 hour probability-of-rain exceeds 50%.
51. After a rainstorm all silt and debris shall be removed from streets, check berms and basins.
52. Graded areas on the permitted area perimeter must drain away from the face of slopes at the conclusion of each working day. Drainage to be directed toward de-silting facilities.
53. All bare slopes, including manufactured slopes, shall be provided with protective erosion control measures.
54. Erosion control systems are dynamic and will change based on changes in site development and weather conditions. Therefore, upon inspection, additional erosion and sediment control measures maybe required by the City Grading Inspector to minimize erosion and sediment transport from areas of the site to streets, sidewalks, gutters, drain inlets or adjacent properties.
55. The permittee and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition.
56. The permittee and contractor shall inspect the erosion control work and insure that the work is in accordance with the approved plans.

UNDERGROUND STORAGE TANK REMOVAL

57. In the event that soil contamination is discovered during excavation and removal of an existing tank, work shall be stopped until a site assessment and mitigation plan has been prepared, submitted and approved by HCA/Environmental Health and the Grading section.
58. Issuance of a grading permit does not eliminate the need for permits from other agencies with regulatory responsibilities for construction activities associated with the work authorize on this plan.

SPECIAL NOTE

59. Survey monuments shall be preserved and referenced before construction and replaced after construction pursuant to Section 8771 of the Business and Professional Code.”

WATER QUALITY

60. Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment controls to the maximum extent practicable; and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, sidewalks, gutters, drain inlets or adjacent properties via runoff, vehicle tracking or wind.

61. All sediment and construction debris which is tracked or deposited onto public or private sidewalks, gutters or paved roads shall be removed on a daily basis by sweeping or vacuuming and disposed of properly. Sediment and construction debris shall not be washed into the storm-drain system, including the gutter and storm-drain inlets.
62. Sandbags, gravel-bags or other effective filter or trap-type barriers shall be used where appropriate to intercept and slow the flow of runoff from the construction site and to trap sediment before it enters the storm-drain system, including gutters and inlets. All on-site storm-drain inlets shall be protected and off-site inlets shall be protected in areas where construction activity tracks sediment on paved areas or where inlets receive runoff from disturbed areas.
63. Water and/or other dust palliative and stabilization methods should be used to prevent or alleviate dust nuisances (dust control) generated by construction activities. Covering small stockpiles of soil and debris or areas with un-stabilized soil is an alternative to applying water or other dust palliatives.
64. Construction-related materials, wastes, spills or residues shall be retained on site to minimize transport from the site to streets, sidewalks, gutters, drain inlets or adjoining properties by wind or runoff.
65. To prevent the discharge of pollutants from material delivery and storage to the storm-water system or watercourses, all materials shall be properly stored to prevent soil contamination and contact with storm-water runoff, which may include appropriate covers, containment areas or surfaces and indoor storage.
66. Stockpiles of soil, paving materials, and pressure-treated wood shall be managed to prevent air and water pollution. Stockpiles should be located 50' away from concentrated flows of storm water, watercourses and drain inlets. Prior to the onset of precipitation, stockpiles shall be covered and protected by a temporary perimeter sediment barrier at all times.
67. Hazardous-material waste, including but not limited to petroleum products, roofing tar, paints, solvents, stains, acids, wood preservatives, septic wastes and asphalt products, shall not be allowed to enter the storm-drain system or watercourses and shall be properly transported, used, stored and disposed as required by federal and state law. Paint brushes and equipment for water-and oil-based paints shall be cleaned within a contained area and shall not be allowed to contaminate site soil, watercourses or storm-drain systems. Water-based paints shall be rinsed into the sanitary-sewer system; and thinners, solvents, excess oil-based paints and sludge shall be disposed as hazardous waste.
68. Cementaceous products such as concrete, mortar or stucco from concrete trucks, portable mixers and miscellaneous containers shall not be washed-out into the storm-drain system or watercourses. Designated washout areas shall be located at least 50' from concentrated flows of storm water, watercourses and storm-drain inlets, and runoff from washout-areas shall be contained by constructing a temporary pit or berm area large enough to capture the liquid and solid waste materials.

69. Saw-cut-cement concrete and asphalt-concrete slurry shall not be allowed to enter the storm-drain system or watercourses. Residue from grinding operations shall be picked up by means of a vacuum attachment to the grinding machine and not allowed to flow across the pavement or be left on the surface of the pavement.
70. Prior to discharge of groundwater and associated waste, the discharger shall make application to the San Diego Regional Water Quality Control Board and obtain coverage under Order No. R9-2008-0002, Discharges From Groundwater Extraction to Surface Waters in the San Diego Region Except San Diego Bay.