CITY OF RANCHO PALOS VERDES
GRADING PLAN CHECK
GRADING DRAINAGE AND SHORING PLAN CHECK LIST
(310) 544-5280
www.rpvca.gov

Address:____________________________________ Plan Check #________

Plan Check By:_________________________Date:________________________

Listed Items Require Correction and/or Clarification

Note: In space provided, please indicate where the correction appears on the plans.

**GRADING**

1.______ Indicate the name, address and telephone number of the Architect and/or Engineer on plans. Architect and/or Engineer shall sign and wet stamp 2 sets on final plans.

2.______ Show the North Arrow with plans drawn to scale and include numbering on each page.

3.______ Show the legal description and street address on the plans.

4.______ Add note on plans that all work is to comply with the 2019 California Building Code, Appendix J, and the requirements of the RPV Municipal Code available online at

5.______ Clearly show all property lines, dimensions and bearings.

6.______ Locate all existing and proposed structures.

7.______ All slopes 2:1 (cut or fill) or greater specifically called out on plans.

8.______ Please provide a cut/fill index which includes all grading quantities.

9.______ Provide a Haul Route to be approved by the Public Works Department.

10.______ Topographical survey of entire lot shall depict the natural grade, the grade as it currently exists, and the proposed finished grade. Survey must be signed by a land surveyor and must extend thirty (30) feet beyond the property lines except where the lot fronts on a street or unimproved street right-of-way, in which case the survey must extend to the centerline of same. Contours must be at one foot intervals.
11. ________ Show elevations of all improvements on the plot plan including the following:
    _____ grading
    _____ finish roof ridge
    _____ roof sheathing
    _____ patio slabs, decks, walks and driveway
    _____ swales, catch basins and other drainage devices

12. Incorporate geotechnical engineering/geology recommendations into the grading plan including:
    benching of fills
    subdrains
    terrace swales
    planting
    show a section through fills
    show cut/fill transitions and relation to proposed improvements

13. ________ Where slopes are steeper than five to one and the height is greater than 5 feet, benching into
    sound bedrock or other competent material is required as determined by soils engineer. Bench shall be 10 feet minimum in width. (NOTE ON PLANS).

14. ________ Provide details for any retaining walls that are required to complete the grading operation.
    Include french drains, top-of-wall swales and wall backfill material. Cross reference all
    detached yard retaining walls to appropriate details.

15. ________ Obtain geotechnical engineering report approval from the city soils consultant.

16. ________ Provide an engineering geotechnical and geology report signed by a registered engineering
    geologist. A review fee will be required by the City.

17. ________ Provide an erosion control and Sediment Retention Plan.

18. ________ Show Best Management Practices. Provide a storm water pollution prevention plan (SWPP) for
    sites of 1 acre or more.

19. ________ Show all on and off-site utilities, proposed tie-ins which affect or are affected by this project.
    Note on plans that contractor must contact utilities for tie-ins and contact public works for
    excavation in City property.

20. ________ Show closet fire hydrant, water meter and other sources of water. Give size and GPM on Fire
    Flow Availability Form (see attached).

21. ________ Detail dust control measures and specify that measures are to continue throughout the grading
    operation.

22. ________ Provide a bond or other security in accordance with RPVMC, Appendix 1 and J of the CBC.

23. ________ Please provide a note on plans: A pre-grading meeting shall be held prior to commencement of
    grading. This meeting shall be attended by the grading contractor, soils or geologic engineer,
    city inspector and the general/grading contractor and/or owner’s representative and shall be
    held at the site prior to any grading.
24. Incorporate final planning conditions of approval onto the plans. Print the Planning conditions onto the plans so they are made a part of the plan set.
Incorporate the following notes on the plans:

25._______
   ______ All grading inspections must be made by the consulting geologist and geotechnical engineer.
   ______ An as graded soils and geology report must be submitted and approved prior to building permit issuance.
   ______ Foundation and/or retaining wall excavations must be inspected and approved by the consulting geologist and geotechnical engineer prior to placing of steel and concrete.

26._______ Provide a note on plans that certification of grading and drainage shall be provided on city form which is available on the Building and Safety website at http://ca-ranchopalosverdes.civicplus.com/289/Building-Safety

27._______ Permits or approvals must be obtained or fees paid to the following agencies prior to permit issuance: ( ) geology and soils section approval of initial reports, ( ) Planning Department Stamp & Approval of Final Plans ( ) Geology Review Fee ( ) Cal-OSHA permit ( ) Public Works Department approval. ( ) Other __________________________

28._______ Add note on plans that a final as-graded report shall include the following information:
   ______ Fill compaction and shear test data
   ______ Location of the compaction and shear test data plotted on a copy of the grading plan.
   ______ Amount of natural or existing fill removal if unsatisfactory materials have been encountered.
   ______ Verification by the geotechnical engineer that the fill material shear values met or exceeded design values utilized in the geotechnical report.
   ______ Items required as part of the conditions of grading plan approval.
   ______ Any changed subsurface conditions requiring design changes.
   ______ Analyses demonstrating that, based on any changed design, the site will be safe for the intended use and will be in conformance with state and city codes.

29._______ Provide note on Plans “Certification of Waste Disposal shall be received on City form prior to Final.”

**DRAINAGE**

Drainage plan check comments are not included since this is under separate review by outside consultant.

1._______ Provide a plot plan and section showing lot drainage.

2._______ All drainage to be conveyed in a minimum 6 inch diameter rigid pipe. (Exception: 4 inch diameter rigid pipe allowed for downspout inlets.

3._______ Show size and locations of drains for planters and planter walls.

4._______ When collection basins are used, the plans shall note that basin grates shall be a minimum of 10” x 10” with 50% openings.
5. Interceptor drains are required at the top of manufactured slopes with details included.

6. Show roof drain downspouts, including flow line of outlets.

7. Drainage over a manufactured slope is not permitted except in approved devices.

8. All elevations adjacent to building must reflect 2% minimum, 21% maximum grade away from a building pad.

9. Energy dissipaters are required where drains discharge onto natural ground. If a rip-rap is to be used, specify class and size and provide detail.

10. All concentrated drainage exceeding 4% gradient requires non-erosive device.

11. Show flow lines, show all elevations, show all swales and other drainage devices,
    a) Show all drainage patterns on the plans, Show all drain dispersal to an approved location.
    b) Show all elevations and drainage collection devices, pipe size, pipe material, and pipe thickness.
    c) Show if any water from offsite enters the property.
    d) Provide a legend on plans for any symbols or abbreviations shown on the plans.

12. The maximum gradient for sheet flow is 10%.

13. Specify planting of graded slopes.

**SHORING**

1. No grading is approved within 3 feet of a property line.

2. Show how neighboring properties will be supported during grading. Submit construction summary with timetable.

3. Shoring and/or other means of support to be approved by project geotechnical and structural consultant.

4. Note on plans: All required shoring shall be inspected and approved by the design professionals prior to commencement of project construction.

5. Note on plans: Submittal of copy of valid Cal-OSHA permit is required prior to permit issuance.

**Additional Comments:**

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Responding to the above statement does not guarantee that the plans will be approved. Responses to the above may raise further questions and require further changes of the plans.

**Corrections are complete when signed and dated by the plan checker.**
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