Policy Memorandum – ADMIN 3

To: Building Division Staff
From: Samir Ghosn
Deputy Community Development Director/Chief Building Official
Effective Date: March 10, 2020 (Original Effective Date: February 16, 1999)
Regarding: Grading Permit

For projects with sloping sites (exceeding three feet front to back) and/or projects involving excavation; the grading, shoring and monitoring plans must be submitted for plan check with the construction drawings. The grading permit for such projects will be issued with the building permit simultaneously.

NBMC 15.10.125 item 3 requires, projects with excavation greater than the depth of adjacent wall/fence foundation or any other adjacent structure, of any adjoining property, with grading so close as to endanger the building or other structure in any way, then the owner of the building or other structure must be notified at least 30 days prior to commencing any grading operations to allow the neighbor to take measures to protect and or document their structure(s).

Construction with a basement, or excavation closer than 3 ft. to property line, or when the distance from edge of excavation to the property line is less than the depth of excavation, requires the following:

1. Add the following note on the title page of the plans: “Contractor shall, use the City standard form ‘30-DAY NOTICE OF INTENT TO EXCAVATE’ to, notify adjacent property owners by certified mail 30 days prior to starting excavation or shoring. City standard form can be obtained at: http://www.newportbeachca.gov/home/showdocument?id=17395. Proof of certified delivery is required at the time of permit issuance.”

2. Shoring plans and calculations are required by a registered civil engineer. Provide a description of the process for installing shoring, construction of basement walls, and removal of shoring.

3. Site profiles along property lines are required to indicate existing grade on both sides of property lines, proposed grade(s), depth of over-excavation, top of retaining wall, bottom of retaining wall and depth of retaining wall footings.

4. Cross-sections are required at various locations showing excavation details drawn to scale with dimensions. Show all buildings and masonry walls on
adjacent property within a distance equal to the depth of the proposed excavation. Excavation, shoring, proposed retaining wall(s) with their sub drain devices including drain lines discharge location and their footings shall all be entirely within the proposed project’s property lines.

5. Slot-cutting method of excavation, provide supporting computations by a registered geotechnical engineer and a drawing showing the location of slots, their width and sequence of slot cuts. Slot cut to be at least 36” away from any property lines and not exceed 5 feet in depth.

6. where the distance from the edge of excavation to the property line of less than the depth of excavation, temporary continuous vertical cut need computations with a satisfactory slope stability factor of safety. The stability of the cut must be supported by laboratory data in a soils report. The total height of vertical cut must include the height of proposed retaining plus the footing and shear key depth.

7. Geotechnical engineer shall stamp and sign shoring plan(s) certifying design complies with the soils report and its recommendations.

8. Add the following note on the shoring drawing, “Licensed surveyor to provide monitoring of shoring horizontal displacements and vertical movements and monitor improvements on adjacent properties for any movements. Surveyors shall submit the results of any displacement in inches to the City inspector and the shoring engineer on a daily basis during excavation and shoring and weekly basis thereafter. Where dewatering is required, monitoring shall continue until dewatering is stopped.”

9. If bottom of excavation is at or below ground water level or sea level or below high tide, submit a dewatering plan and computations by a registered geotechnical engineer.
   a. Provide additional geotechnical information necessary for dewatering system design, soils report must include the following:
   b. Borings for soils investigation to extend a minimum of 20 ft. below bottom of proposed excavation, unless deeper boring are required due to poor soil, or other site conditions.
   c. Provide sieve analysis and permeability value for each soil formation layer to a depth of 20 ft. below bottom of excavation.
      i. Non-cantilevered retaining walls must be shored until the bracing element(s) is in place. Provide a design for wall shoring.
      ii. Cantilever shoring supporting hardscape improvements, foundations or swimming pool within a distance of less than half the shoring height shall be designed based on at rest earth pressure but no less than 60 pcf unless approved by the Chief Building Official.
      iii. Total Depth of embedment of shoring caissons shall include the vertical distance to the point of fixity but in no case be less than that outlined in CBC Section 1807.3.2.
iv. Sheet piles are not permitted for shoring due to potential damage resulting from vibration to adjacent properties.

v. Steel soldier pile used as permanent support component of retaining wall shall be protected from earth with 3" concrete cover. Alternate methods of protecting steel flange from corrosion require an application for “Alternate Materials and Methods” with supporting documents and method of protecting material from damage during lagging installation.

10. If crushed rock is used to support temporary shoring steel soldier pile, specify method of compaction for gravel fill and method of grouting hole created when steel pile is removed.