TO: DSG Staff
FROM: Scott Greenberg, Development Services Group Director
DATE: January 9, 2013
RE: Interpretation of Existing Grade for Calculation of Basement Area Exclusion
CC: City Attorney

ISSUES
The Mercer Island City Code allows for the exclusion from gross floor area calculations of basement areas below existing grade. When a lot has been developed, it is difficult to establish existing grade, which is the grade prior to development. Administrative Code Interpretation #04-04 addresses this issue as it relates to Average Building Elevation. The purpose of this Administrative Code Interpretation is to clarify existing grade as it pertains to basement area exclusion from Gross Floor Area calculations.

FINDINGS
1. The Code Official, pursuant to MICC 19.15.010(C)(5)(a) of the Mercer Island City Code (MICC), is authorized to make this administrative interpretation subject to the procedures established by MICC 19.15.020(L).

2. Pursuant to Mercer Island City Code (MICC) 19.02.010(E)(1), “the gross floor area of a single-family structure shall not exceed 45 percent of the lot area.” MICC 19.16.010(G) defines “gross floor area” as:

   The total square footage of floor area bounded by the exterior faces of the building.

   1. The gross floor area of a single-family dwelling shall include:
      a. The main building, including but not limited to attached accessory buildings.
      b. All garages and covered parking areas, and detached accessory buildings with a gross floor area over 120 square feet.
      c. That portion of a basement which projects above existing grade as defined and calculated in Appendix B of this development code.

3. Appendix B to Title 19 allows an applicant to exclude “that portion of the basement floor area from the Gross Floor Area which is below grade.” Appendix B clarifies that
the basement exclusion area must be below “existing grade.” Existing grade is defined by MICC 19.16.010(E) as “the surface level at any point on the lot prior to alteration of the ground surface.”

4. MICC 19.16.010(A) defines “alteration” as “any human-induced action which adversely impacts the existing condition of the area, including grading, filling, dredging, draining, channeling and paving (including construction and application of gravel).”

5. The phrase “prior to alteration” is problematic. As discussed in Administrative Code Interpretation #04-04, in the absence of a survey of the original condition of the lot, it may be impossible to determine the degree of alteration. Complicating this issue is that many lots were altered (grading, tree removal) years prior to the original development.

6. Portions of a property typically remain undeveloped during single family residential construction, and therefore, are likely to retain the contour present before the most recent development. While it may be impossible to establish grade prior to all lot alterations, it is feasible to interpolate the approximate topographic elevations of the lot previous to the most recent development.

7. MICC 19.16.010(E) stipulates that existing grade is measured from the surface level at any point on the ground surface. While the MICC does not define “ground”, the Merriam-Webster dictionary states that “ground” can be defined as “the surface of the earth.”

8. Appendix B of the MICC states that for the purpose of establishing basement area exclusion, “wall segment coverage” is measured on the exterior walls.

CONCLUSIONS

1. Without concrete evidence or verification from a previous survey document, as accepted by the City Code Official, the existing grade underlying the existing structure will be used as the elevation for the proposed development.

2. Existing grade, for the purpose of calculating basement area exclusion without a survey of the pre-development conditions, shall be interpreted as the elevation of a point on the surface of the earth immediately adjacent to or touching a point on the exterior wall of a proposed structure.

3. If a current survey document is available, the applicant may establish existing grade by interpolating elevations within the proposed footprint from existing elevations outside of the proposed footprint. The survey document must be prepared by either a Washington registered civil engineer or land surveyor, and must be accepted by the City Code Official.

4. The final determination for existing grade on a lot shall be the decision of the Code Official.