DRAFT Methodology for RCRD Building Form and Analysis

June 10, 2013

STEP 1 | Determine recorded site plan area (for entitlement purposes) for each development project in the RCRD

a. For approved existing site plans, use site areas as documented in Zoning Office records for site plans;
b. For proposed site plans, use site areas as documented in accepted Final Site Plan or Phased Development Site Plan application materials
c. For existing by-right projects, use site areas as documented in real estate records for land parcels comprising assumed project boundaries

STEP 2 | Determine approximate buildable site area (the area defined by assumed back of sidewalk and boundaries with adjacent properties)

a. Begin with site plan area (for entitlement purposes) for each project site identified in STEP 1;
b. Using a CAD base map, overlay the following layers to establish a proposed block framework map:
    i. Land parcels and/or project boundaries for each site
    ii. Assumed street network, with existing and potential future street (vehicular and/or pedestrian) connections
    iii. Assumed sidewalk network, with widths based on RMTS or adjusted based on Realize Rosslyn work to date
c. Calculate remaining area of site excluding any portion of land is existing/potential public streets and sidewalks. This is the net buildable site area for each project site.

STEP 3 | Determine which sites will be modeled with alternatives for the building heights study, and which sites would be assumed as "fixed".

a. Generally, all sites with existing or approved "C-O Rosslyn" site plans or existing site plans with building heights of 300 feet or greater will be considered fixed, except as noted in part b.)
b. Sites within "C-O Rosslyn" zoned areas that had much of their site area used for density for other buildings in the same site plan will be included in modeling alternatives (e.g. International Place; Potomac Tower?), except for the Dominion Power Substation ;

c. All other sites in the RCRD will also be included in modeling alternatives;

STEP 4 | Determine a range of lot occupancy limits for purposes of modeling and testing (may vary by individual height zone), and adjust as needed through iterative testing.

a. For one building projects, lot occupancy can be the greatest (Q: do we need to determine a threshold for sites that are one building v multiple building projects?);
b. Determine standards for lot occupancy limits for multiple buildings of same use on the site;
c. Determine standards for lot occupancy limits for multiple buildings of different uses on the site;
d. Decide if RCRD-wide assumptions will be made on which sites may accommodate certain uses only.

STEP 5 | With the baseline assumptions established above (STEPS 1-4), begin more modeling analysis/testing by applying vertical plane rules. Run different height scenarios based on height assumptions, and see what results. Scenarios to study include:

a. "Existing policy/The Dome": Building heights are greatest at Central Place, distinct taper down to all edges;
b. "Current practice": Building heights are greatest at Central Place, and most other "C-O Rosslyn" buildings are between 285" and 300';
c. "1:1 Taper": Taper up to 300 feet is achieved across individual blocks along the perimeter of the RCRD, by applying a 1:1 taper starting from building heights just outside the RCRD boundary. (Potentially test tapers other than 1:1 under this scheme);
d. "Peaks and Valleys": Establish tapers within individual precincts (multiple blocks), for more gradual tapers across several streets and/or blocks, results in multiple clusters of height;
e. "The Spine"; additional height concentrated along Fort Myer Drive and Lynn Street corridor;
f. [Insert any other schemes that Goody Clancy has modeled to date; or plans to model];

STEP 6 | Fore the modeling/tests above; document the following list of information for each site:

a. Recorded site area (for entitlement purposes);
b. Adjusted site area (for net buildable land area purposes);
c. Entitled development/maximum GFA;
d. Modeled development/resulting GFA per building volume;
e. Modeled GFA as Gross FAR (based on recorded site area);

f. Effective GFA as Effective FAR (based on adjusted site area);
g. Average site elevation (in terms of above sea level);
h. Modeled building height above average site elevation;

STEP 7 | Illustrate Modeling Outcomes for Each Scenario:

a. Generic bulk and massing views provided for broadest, initial set of scenarios, focusing on modest angle aerial bird's eye views from multiple directions around the study area;
b. As iterations focus on more refined versions of scenarios, introduce more detailed imagery/visualization options to more effectively convey difference of outcomes between last remaining 2 to 3 scenarios, incorporating a mix of bird's eye view aerial perspectives as well as ground level views with more rendering detail;

STEP 8 | Based on outcomes found in STEPs 6 and 7, adjust any of the horizontal or vertical plane rules/methods, and test additional iterations;