GUIDELINES FOR PLOT PLAN REQUIREMENTS FOR NEW ONE AND TWO FAMILY DWELLINGS

Plot Plans for all new one and two family dwellings must be submitted to Building Safety and shall include the following:

1. Must Include the Seal of a Professional Engineer, Architect, or Land Surveyor Registered in the State of Kansas

   The plot plan must also include the following certification: “I, [Design Professional], certify that this plot plan has been field verified, and is in compliance with the approved subdivision grading plan unless otherwise noted.” Plot plans will be reviewed without a seal, however, they will not be approved without an original seal.

2. Plan Drawn to Scale with North Arrow.

3. Street Address, Subdivision Name (with Plat #), Lot and Block Number

4. Lot Dimensions Including all Easements

   Include dimensions of front, side and rear yards. Show all easements within the lot. Easements should be labeled to include type of easement and dimensions. Easements must EXACTLY match those shown on the plat and/or dedicated by separate instrument. Buildings and other structures, including including building overhangs and retaining walls cannot be located within a dedicated drainage easement containing a public storm sewer - see Governing Body Resolution No. 3800 for additional details.

5. Setbacks

6. Structures

   Include location and dimensions of house and other accessory buildings. Where applicable, locate and label porches, retaining walls, wing walls, and fireplaces.

7. Paved Areas
Indicate location and dimensions of all proposed driveways, walks, patios, and other paved areas. Public sidewalks should be located along streets 1 foot inside of the right-of-way line and in locations as noted in the approved subdivision grading plan. Driveways must conform to the following:

- Minimum of 2 feet away from property lines
- Driveway wings must not extend beyond side property line extension
- Minimum Width – 12.0 feet
- Maximum Width – 35.0 feet
- Maximum Yard Area – 35% of front yard area
- Maximum Width, Duplex Developments -- 35.0 feet
- Maximum Yard Area, Duplex Developments -- 50% of front yard area

8. Sanitary and Storm Sewer Structures (with elevations) and Associated Piping

General Elevation Information

A. Top of Foundation

Include the top of foundation elevation at all points, clearly indicating the location and elevation of any stair-stepping in the foundation walls.

B. Egress Window

All houses WITHOUT walkouts shall indicate an egress window whose sill is a maximum of 44 inches above the basement floor elevation. The plan must indicate either the elevation of the window sill (44” max. from floor) or the top of foundation wall at window (40” max from floor) and the top of the egress well where applicable.

C. Floor

Include elevation of basement floor, garage floor, and carport and accessory building floors where applicable.

D. Top of Finish Curb at Points of Extension of Lot Lines

Elevations shall conform to approved as-built grading plan, and with top of curb elevations indicated on adjacent lots. Tolerance +/- 0.10 foot.

E. Existing and Finish Grade at each Corner of Lot and at each Principal Corner of Structure.
Grading Plan with maximum contour interval of 2’ may be included in lieu of structure corner elevations. Plot plans shall conform with approved as-built grading plan AND adjacent approved plot plans. Grades at right-of-way must match typical street cross-section. Grades at rear lines must match adjacent property grades +/- 0.10 foot. Minimum allowable slope is 2.5%.

F. Finish Grade at Both Sides of Abrupt Changes of Grade such as Retaining Walls, Slopes, etc.

G. Walkouts and Daylight Windows

H. Include a note on the plan that 6 inches of clearance is required from the finished grade to the sill plate of the structure.

I. Provide sufficient grade away from the foundation of any building. The grade shall fall a minimum of 6 inches within the first 10 feet (5% grade).

Indicate acceptable location and theoretical minimum low opening (if applicable).

Additional Requirements for ENGINEERED PLOT PLANS ONLY

1. Sealed by a Licensed or Registered Professional Engineer or Land Surveyor

The FINAL engineered plot plan must include the seal of a professional engineer or land surveyor registered in the state of Kansas. The plot plan must also include the following certification: “I, [Design Professional], certify that this plot plan has been field verified, and is in compliance with the approved subdivision grading plan unless otherwise noted.” The plot plans will be reviewed without a seal, however, they will not be approved without an original wet seal.

2. Grading Plan (in addition to elevation information required for all plot plans, shown above)

- Maximum contour interval of 2’
- Must match adjacent property grades (+/- 0.1 foot vertical tolerance except where otherwise more restrictive) and/or approved subdivision grading plan
- Minimum allowable slope – 2.5%
- Maximum allowable slope – 3:1
- Indicate high point location and elevation at gradient breaks
- For retaining walls, indicate grade at both top and bottom of wall at both ends of wall and at 25-foot maximum intervals along the wall
- Include additional elevation benchmarks necessary to stake and check grading as necessary
3. Additional Requirements if Lot is Governed by a Single MLO/LAG/LF:

A. Minimum Low Opening (MLO), Lowest Adjacent Grade (LAG), or Lowest Floor (LF) elevation

Indicate a SINGLE MLO, LAG, or LF for the entire structure based on the FIRM elevation, flood study, lake, or MLO set by the Design Engineer. The MLO/ LAG or LF must be based on the appropriate freeboard at the most upstream point on the property. The design engineer has the discretion to set the MLO/LAG/LF higher than the minimum required by the City. The MLO applies to any openings in the foundation AND the foundation wall itself. The Lowest Adjacent Grade refers to elevation of the ground, sidewalk, or driveway next to a building after completion. The Lowest Floor elevation means the elevation of the lowest floor, including basement. The minimum freeboard requirement is the greater of the following:

- FEMA: 100-year Base Flood Elevation (water surface) plus 2.0 feet
- Flood Study: 100-year Energy Grade Line (EGL) plus 1.0 foot
- Lake: 100-year Water Surface Elevation plus 1.0 foot
- SPECIAL NOTE: If the BUILDING FOOTPRINT ITSELF lies within the 100-year FIRM boundary, the freeboard is 2.0 feet above the lowest floor, not the low openings in the foundation. If a building lot abuts the FEMA floodplain, then the lowest adjacent grade must maintain 2 feet of freeboard from the BFE.

B. 100-year Floodplain and Elevations

Show 100-year Energy Grade Line (EGL) for FEMA regulated streams, flood studies, and lakes at affected property corners. For these types of floodplains, the UPSTREAM PROPERTY CORNER EGL governs for house opening elevations.

4. Additional Requirements if Lot Contains, or is Adjacent to, an Engineered Drainage Swale:

A. Minimum Low Opening (MLO) for Engineered Swale

MLO elevations for swales can be indicated for individual openings, individual wall sections, OR for an entire structure. If indicated for the entire structure, the governing MLO must be based on the swale EGL as measured perpendicular to the UPSTREAM CORNER of the house.

If the intent is to assign individual MLO elevations for each opening, ALL individual openings must be clearly indicated, and the MLO must be based on the EGL of the swale perpendicular to the upstream side of the opening.
Swale “TYPICAL” Cross Section

Include typical cross section labeled as per the section cut designated on the swale. The typical section should include the design flow, dimensions, 100-year flood depth, 100-year EGL, and minimum slope.

B. Swale Elevations at Critical Locations

Include swale flowline and 100-year EGL at critical locations. These include the upstream side of structure openings, perpendicular to house corners, changes or stairstepping in the foundation wall height, and intersections with property lines of ALL adjacent lots. Do NOT call out MLO’s at locations where there are not openings, EXCEPT where they will be applied to the entire structure. MLO’s should be called out ONLY where an elevation inspection will occur. NOTE: The top of foundation WILL be considered an MLO if there is no other opening along that side of the structure and an elevation inspection WILL occur there.

C. Limits of Swale on Plan

Indicate the specific location and limits of the swale on the plan. Label the swale as required above. If the swale is located outside of the limits of the drawing, but its elevations still impact the site, show location and dimensions of off-site swales.

5. Water Resistant Window Wells (where required)

Call out the location and top of concrete window well elevation for any required Water Resistant Window Wells (WRWW). WRWW’s are required for the following conditions:

- When the FEMA Base Flood Elevation plus 2 foot freeboard area is within 25 feet of the window well.
- If the edge of an engineered swale is closer to the window well than 10 feet AND the swale side slope is steeper than 3:1 or is vertical.
- If the design 100-year flow in the swale exceeds 50 cfs AND the edge of the swale (at the 100-year water surface) is less than 15 feet from the window.
Example 1:
Example 2: