



# Residential Permits for Window Well Design

PDS

Engineering Services Division

ES Policy # 4-01

## ***2000 International Building Code's Impact on Engineered Plot Plans. (effective January 1, 2001)***

*All residential basements must provide emergency egress and if this egress is provided through a window, any resulting window wells must be reviewed for flooding potential. For properties which involve a flood plain or engineered swales, extra precautions might be required for the window well surrounding this emergency egress point and this information must be provided on the plot plan.*

**Water Resistant Window Well (WRWW):** The City of Overland Park has approved a window well design which must be used when drainage and flood water conditions dictate a need for greater protection. (The construction details may be obtained from Building Safety.) When this type of window well is constructed, the top of the window well is considered the "minimum low opening."

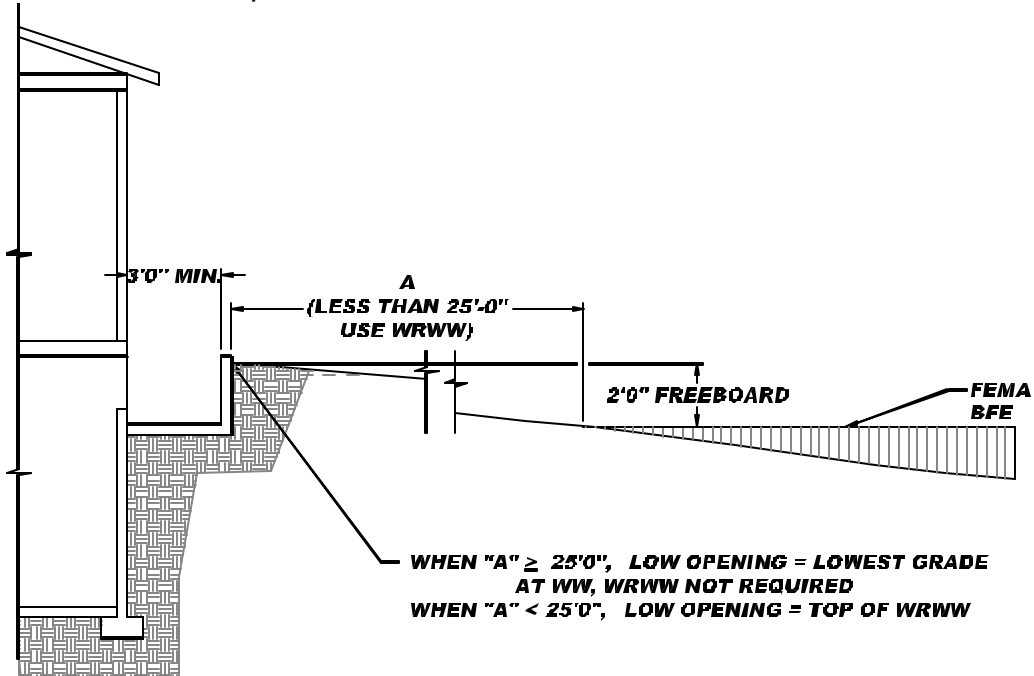
Water resistant window wells must be identified and located on the residential plot plan, along with the minimum low elevation for the top of the window well wall. Building Safety will inspect all WRWWs.

Water resistant window wells are required:

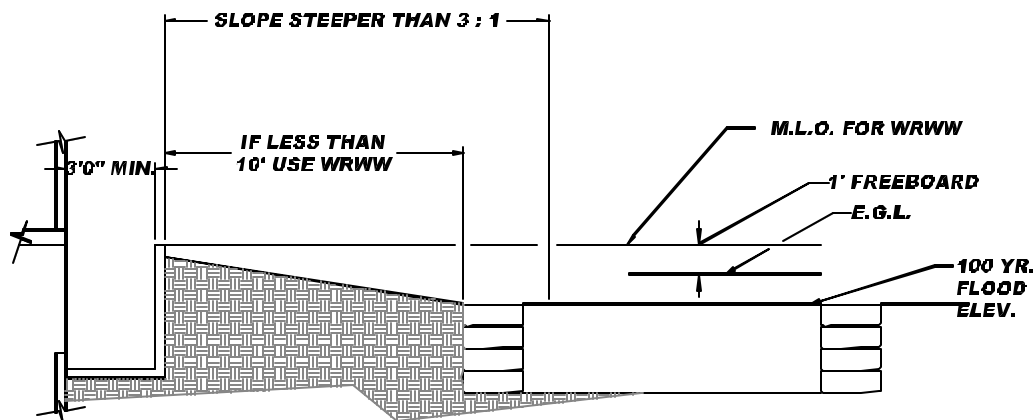
- 1) When the "the F.E.M.A. Base Flood Elevation plus 2 feet" is within 25 feet of the window well.
- 2) If the edge of an engineered swale is closer to the window well than 10 feet AND the swale side slope is steeper than 3:1, or is vertical. (This includes the situation where the distance between the edge of swale and window well is less than 10 feet and any of the grade in that area is steeper than 3:1.)
- 3) If the projected flow for the engineered swale exceeds 50 cfs and the edge of the swale is less than 15 feet from the window well.

Water resistant window wells may not be used as an integral part of an engineered swale. Swales are to be designed to carry the entire 100 year overflow, however the Energy Grade Line Elevation may be above the swale cross section. The edge of an engineered swale is where the 100 year flood water surface intersects the ground.

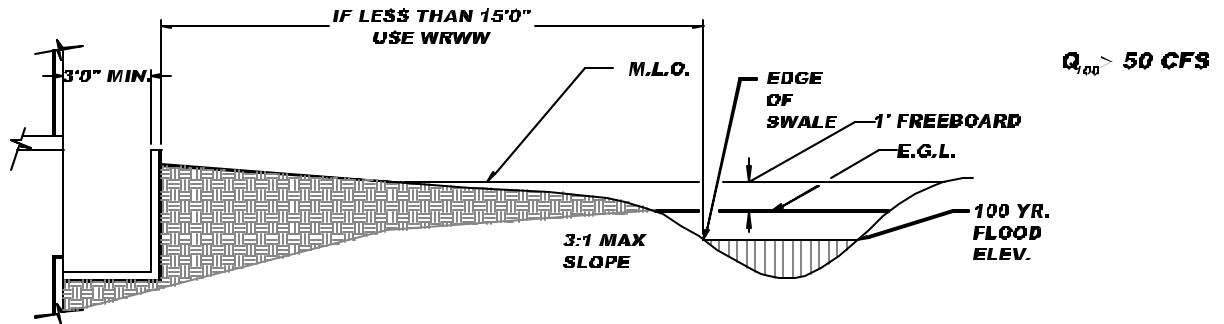
**All other approved window wells:** The "minimum low opening" is measured from the lowest grade immediately adjacent to the window well. Engineering Services will inspect these window wells prior to issuance of a TCO.



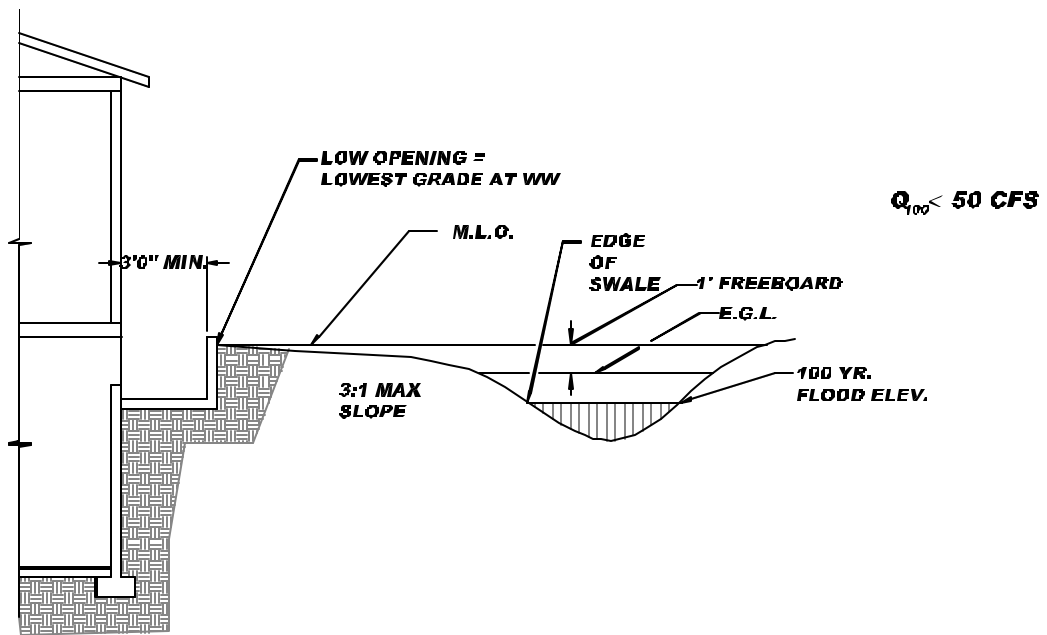
**F.E.M.A. FLOODPLAIN**



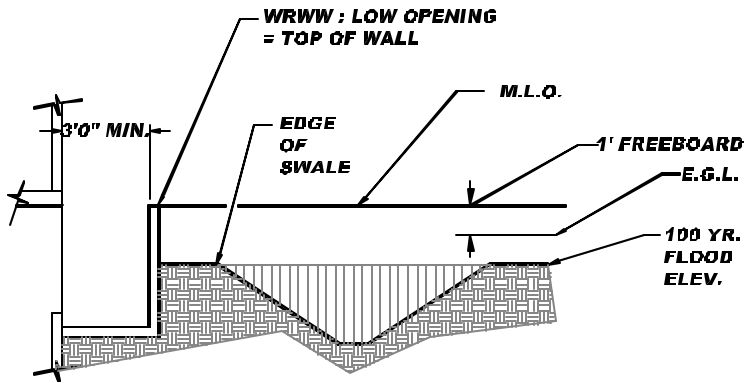
**ENGINEERED SWALE WITH STEEP SIDE SLOPES**



**ENGINEERED SWALE CAPACITY GREATER THAN 50 CFS**



**ENGINEERED SWALE NOT REQUIRING WRWW**



**ENGINEERED SWALE REQUIRING WRWW**

**ABBREVIATIONS**

**WRWW = WATER RESISTANT WINDOW WELL**  
**WW = WINDOW WELL**  
**EGL = ENERGY GRADE LEVEL**  
**MLO = MINIMUM LOW OPENING**  
**BFE = BASE FLOOD ELEVATION**  
**FEMA = FEDERAL EMERGENCY MANAGEMENT AGENCY**

 **EARTH**

 **100 YR FLOOD ELEV**