

As-Built Grading Plans for Residential Subdivisions

PDS

Engineering Services Division

ES Policy # 3-06

The City requires “As-Built” grading plans to be submitted and approved before building permits are issued.

The following is the policy and procedure for “As-Built” grading plans:

1. The Planning and Development Services Department will withhold building permits until an “As-Built” grading plan has been submitted and approved. The one exception is the release of model home permits in accordance with the current Policy #2-01 titled “Residential Permits for Model Homes.”
2. “As-Built” grading plans shall be sealed by a registered engineer or land surveyor in the State of Kansas and will include the following information:
 - Rear lot corner elevations.
 - Front lot curb chip (top of curb) elevations.
 - Swale flow line at all property line crossings.
 - Top elevation of drainage structures and sanitary manholes.
 - Proposed high points (not necessarily an elevation).
 - Large drainages, lakes, and other major drainageways: 100-year water surface elevation, ultimate energy grade line at property corners and minimum low opening for each lot.
 - FEMA Special Flood Hazard Areas: Base Flood Elevation (BFE), ultimate energy grade line at property corners and lowest adjacent grade (LAG) requirements for each lot.
 - Top of berm elevations downstream from area inlets. Spot elevations required with the center elevation 6 inches above the inlet top.
 - Top of Weir elevations and minimum width information for any proposed weirs.
 - Future thoroughfare ROW grades at 50 foot intervals and adjacent property corners, if applicable. Stationing for right of way grades shall be based upon the approved [Preliminary Engineering Study](#).
 - Label lots with Foundation Investigation Requirements with the acronym **FIR** for lots with the following conditions:
 - o Fill – fill of six feet or more from the predevelopment condition.

- o Slope – existing or proposed slopes 4:1 or greater
 - o Existing drainage way – filled in ponds and stream beds.
 - Minimum 2.5% slopes in unpaved areas. The minimum slope requirement must be met both before and after homes are constructed and should must be accounted for in the design.
 - Swale and weir sections with hydraulic calculations and drainage area information.
 - Drainage arrows showing future drainage path around homes.
 - Indicate “As-Built” in the title block and prominently on the plan sheet.
 - As built elevations must show the “plan grade” struck out and the “as-built” elevation shown, even if the elevation doesn’t change.
 - Alter contours if grading has been significantly changed from the proposed plan. Minor grading changes do not require modification of contours.
3. The Engineering Services Division will review the “As-Built” grading plan under the same criteria as used in reviewing the original grading plan.
4. **Effective for PIP permits issued after May 1, 2019:** In order to help ensure construction of Americans with Disabilities Act (ADA) compliant sidewalks ramps, any sidewalk ramps and pedestrian street crossings constructed with the public improvements shall include the following as-built information at the locations shown on Figure 1.
- Design and as-built elevations at locations shown.
 - Calculated slopes between all as-built elevations.
 - Transverse lengths between sidewalk elevation shots.
 - As-builts shall meet Overland Park Standard Detail “Sidewalk and Sidewalk Ramp Detail A, B and C” requirements.

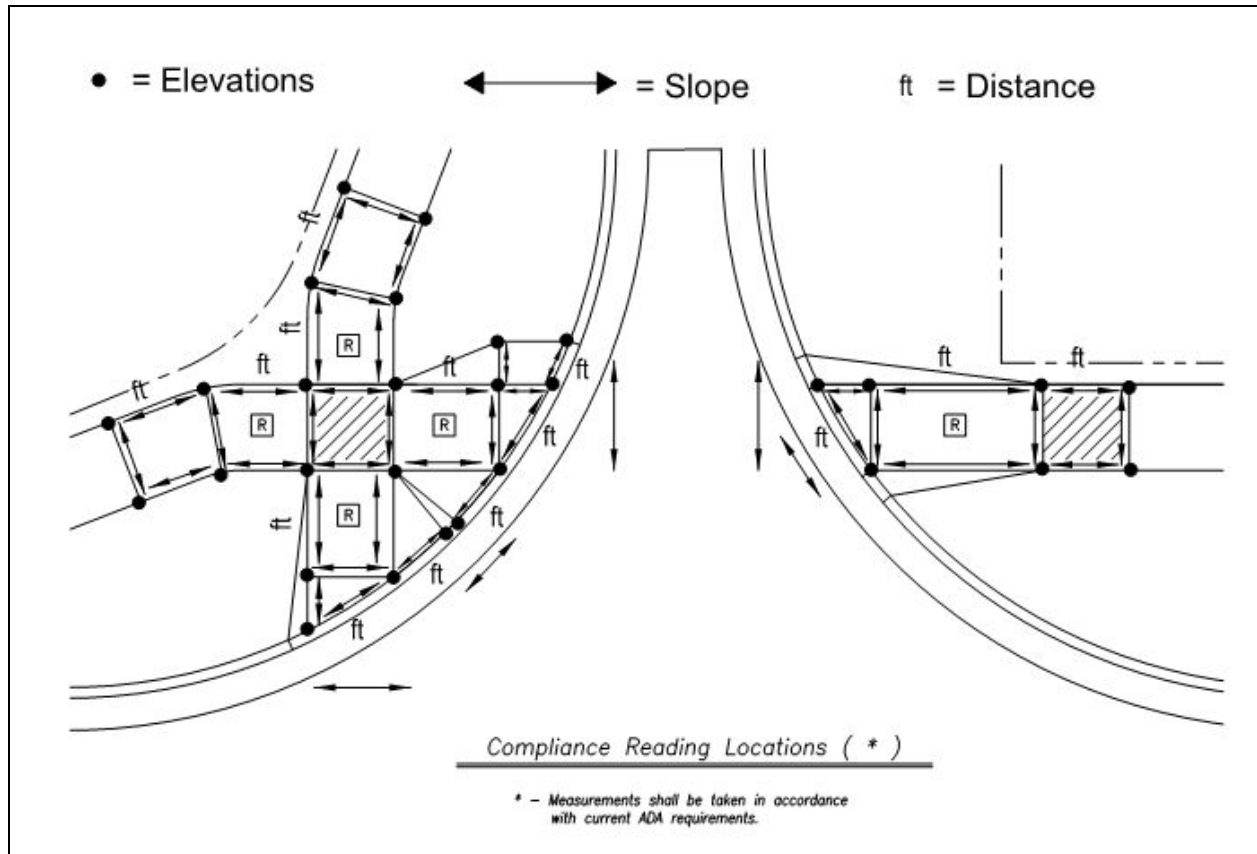


Figure 1 - Compliance Reading Locations for Sidewalk Ramps and Pedestrian Street Crossings in the Public Street Right of Way.

5. In addition to the “As-Built”, the following items are required prior to release of the subdivision for building permits:
 - a. Verification by the project inspector that the project is substantially complete, including all traffic control signage, and initial stabilization of all disturbed areas.
 - b. Verify that Building Safety Division has received the Water Service Availability Letter (i.e. Water Letter) from Water District #1.

Once “As-Built” grading plans are approvable, Engineering Services staff prepares a “Codes Letter” which outlines special conditions for each lot. The developer and design engineer are provided copies of the “Codes Letter” when

lots are released to Building Safety for building permit review and release. Codes Letters are also posted to the [City's website](#) for use by plot plan preparers.

For questions, please contact the Engineer of the Day at (913) 895-6223 or eod@opkansas.org.

Orig 03-09-2001
Rev 06-08-2005
Rev 06-10-2009 – ESL
Rev 02-5-2019-SAB