

# **Residential Lot Survey Program**

The review and inspection of individual lot horizontal dimensioning, grading, and drainage for single family detached homes and duplexes/paired homes will consist of a **three-step program** during the permitting and construction process. Those three steps are described in more detail as follows.

#### **Step 1: Plot Plan Certification**

- Along with the building permit submittal package, the applicant shall submit an electronic copy of the plot plan and a completed Residential Plot Plan Standards form. The proposed plot plan must contain the required information as listed on the Residential Plot Plan Standards form.
- The proposed plot plan <u>must</u> be accompanied by a Residential Plot Plan Standards form and the form <u>must</u> bear the seal of a Colorado licensed professional engineer or professional land surveyor.

#### **Step 2: Foundation Survey Certification**

- The contractor's survey firm will conduct a site inspection and survey of the foundation forms. The inspection shall be performed prior to the placement of wall/grade beam/PT slab concrete.
- This survey will verify that the in-place elements comply with those listed on the City's Foundation Survey Certification form and are within the allowed tolerances.
- If the in-place elements comply with the City's standards, as determined by the contractor's survey firm, the contractor can proceed with placement of the foundation concrete.
- An executed Foundation Survey Certification form is to be uploaded to the permit system.
- If the contractor's survey firm cannot execute the City's Foundation Survey Certification form due to issues in the field, the City is to be notified and provided with all relevant information regarding the out of compliance issue. Foundation concrete is <u>not</u> to be placed until the issue is resolved.

### Step 3: Final As-Built ILC/Grade Certification

- An as-built survey is to be performed that produces an ILC/grading certification that meets the City's requirements. The as-built grading survey is to be performed after soil amendment, soil till, and final grading has been done.
- The final as-built ILC and drainage certificate submitted to the City <u>must</u> bear the seal of a state licensed land surveyor. The as-built documents <u>must</u> be accompanied by a sealed Residential As-Built Lot Survey Standards form.
- Should the survey firm not be able to execute the City certification form, the asbuilt ILC and as-built grade certificate are to be submitted to the City along with an explanation as to what items do not comply with the City standards. A review of the documents by the City Engineering Division will then be required.
- Final inspections will not be passed until the as-built ILC, grade certificate, and City's Residential As-Built Lot Survey form have been received by the City, checked for completeness, and approved by the City.



## STEP 1: Residential Plot Plan Standards

Site Address:		Lot:
Block:	Filing:	Subdivision:

The proposed plot plan conforms to the Residential Plot Plan Standards as listed below.

- 1. North arrow, scale, and project specific benchmark are shown.
- 2. Dimensions of the lot are shown.
- 3. Location and size of all structures on the lot are shown, including the building outline, driveways, walkways and patios. Distances between structures on the same lot are shown. (Stoops and landings need not be dimensioned).
- 4. All portions of the structure comply with the setback requirements. Dimensions are provided (at the front, side, and rear yards) from the property line to portions of the structure, allowing verification of this requirement (including roof overhang, patio structures, chimneys, etc.). Horizontal dimensions to property line are provided at a minimum of two points per side, widely separated, on each side of the primary structure.
- 5. Location of water and sewer services are shown.
- 6. Location of water meter is shown.
- 7. Location and dimension of easements are shown.
- 8. Finished floor, lower floor, garage floor, and top of foundation elevations are shown.
- 9. Finish grade spot elevations at building corners, property corners, high grade point, and grade break locations are shown. Finish grade spot elevations along each property line are shown and are shown at a spacing not to exceed 20 feet between points.
- 10. Finish grade spot elevations are shown on adjacent properties, 20 feet from property lines, and are shown at a spacing not to exceed 20 feet between points.
- 11. Arrows indicating direction of drainage flow, with percentage slope labeled to within 1/10th of a percent accuracy, are shown. Enough arrows to adequately show lot drainage.
- 12. Minimum 2% slope provided on any part of the property and minimum 5% slope provided from the structure (or top of window well) for a minimum of 10 feet from the structure (or window well) or to the adjacent property line (if the building setback is less than 10 feet) or in accordance with the soils report recommendations. Any concrete slabs adjacent to structures may have a minimum slope of 2% and then follow the 5% criteria above.
- 13. No part of the lot shall exceed a maximum slope of 5 (horizontal): 1 (vertical). If slopes exceed these criteria, a landscape wall shall be installed. Landscape wall materials shall be in conformance with the approved Official Development Plan for the subdivision. Landscape berms not adjacent to structures on the property are not subject to these criteria and shall follow the City's "2004 Landscape Regulations."



- 14. Existing adjacent street flow line elevations are shown and are at a spacing not to exceed 20 feet between points.
- 15. A minimum of 12 inches plus 2% above the gutter flow line of the adjacent street to the top of the foundation (plus 12 inches to finished floor elevation) is provided. Any variance to these criteria must be approved by the City Engineer or Designee.
- 16. Locations of roof drains are shown.
- 17. Driveways do not exceed a maximum slope of 10% and provide a minimum slope of 2%, measured at the centerline of the driveway. Driveway slopes are shown.
- 18. Total irrigable area of the lot is provided. Irrigable area is defined as all portions of the lot without permanently installed hardscape, also equivalent to permeable area.

If there are any exceptions to the above, they must be approved by the City or corrected prior to the submittal of this certification. Contact the City Engineer with any exceptions 303-658-2120, <u>engineering@westminsterco.gov</u>.

Firm Name		Firm Address	
Citv	State		Zip Code
Survevor Name			
y			
Surveyor Signature			
Registration Number			Date

PLACE SEAL BELOW



## **STEP 2: Foundation Survey Certification**

Site Address:		Lot:		
Block:	Filing:	Subdivision:		

The foundation form check conforms to the items as listed below:

- 1. Information is being verified against a City approved stamped copy of the plot plan for this lot. Revisions not bearing the City stamp have not been verified and may not be used.
- 2. All portions of the primary structure comply with the setback requirements and have been verified at a minimum of two points per side, widely separated, on each side of the primary structure.
- 3. Foundation forms are set within a tolerance not to exceed 0.2 feet in both horizontal and vertical dimensions.
- 4. All property corners have been staked.
- 5. Gutter flow line elevations are within 0.2 feet of elevations shown on the City approved plot plan. Flow line elevations are to be measured off the site established benchmark.
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Firm Name	Firm Address		
City	State		Zin Code
City			
Surveyor Name			
Sun over Signature			
Registration Number			Date
PLACE SEAL BELOW			



## STEP 3: Residential As-Built Lot Survey Standards

Site Address:		Lot:
BIOCK:	Elling:	Subdivision:

The as-built survey/ILC conforms to the Residential As-Built Lot Survey Standards as listed below.

- 1. North arrow, scale, and project specific benchmark are shown.
- 2. Dimensions of the lot are shown.
- 3. Location and size of all structures on the lot are shown, including the building outline, driveways, walkways and patios. Distances between structures on the same lot are shown. (Stoops and landings need not be dimensioned).
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Firm Name	Firm Ad	dress
City	State	Zip Code
Surveyor Name		
Surveyor Signature		
Registration Number		Date

#### PLACE SEAL BELOW