Residential Addition Permit Submittal Checklist

Applications for construction of a **Residential Addition** are reviewed by the Building and Inspection Services Division, Planning Division and Public Works Department for compliance with applicable ordinances and design criteria and are required to be approved by these and other entities prior to issuance of a building permit. The following list of documents or information is required at the time of submission of application for permit:

- Completed City of Wheat Ridge **Permit Application** form containing the following:
  - Property owner name, address and contact information
  - Contractor and subcontractor information – (***A general contractor currently licensed with the City of Wheat Ridge, possessing a minimum Class 3 license, or Homeowner Contractors License, is required at the time of submission and all subcontractors must be disclosed and currently licensed in the appropriate licensing class prior to issuance of a building permit)***
  - Detailed description of work to be performed
  - Contract value of all work to be performed
  - Printed name and signature of individual submitting application

- A copy of the **Property Deed** or other document(s) verifying residency/ownership *may* be required prior to acceptance of an application or issuance of a permit
- A **Site Plan** as defined below ***and*** either an **Improvement Location Certificate** or an **Improvement Survey Plat** as set forth in Community Development Department Policy Admin 27
- Completed, original **Proof of Submission for Permitting/Plan Review Form** from each of the water and sanitation districts which govern property location
- Two (2) sets of minimum **24" x 36" construction plans** containing:

  - ***Site Plan*** – must be "to-scale" and be an accurate depiction of the site based on ILC or ISP including scale, north arrow, property line locations, identification of streets and alleys, access points, all existing and proposed improvements including structures, fences, existing decks and paved areas, proposed setbacks for construction to foundation walls, the location and types of all erosion control measures to be employed, the location and dimensions including grade for any proposed swale(s), berm(s), or other features necessary to control the site drainage, and location of 100-year floodplain, if applicable. Also include site data table showing existing and proposed lot coverage for building landscaped and hard-surfaced areas in square footage and percentage of total site area. If construction is stepped or terraced, include the elevations of the major building corners for use in calculation of average building height.
  - ***Architectural Elevations*** - must be "to scale" and accurately depict all proposed elevations including materials to be used and measurements to top of ridge and midpoint of roof
  - ***Floor Plan(s)*** drawn to scale including room dimensions, door and window schedules, appliance and fixture locations

- ***Structural plan(s)*** bearing the seal of State Of Colorado licensed Structural Engineer for foundation system, framing, and any miscellaneous structural components
- ***Mechanical plan(s)*** depicting any connections to existing systems and accompanied by heat/cool load calculations and demonstration of compliance with adopted energy code
- ***Electrical plan(s)*** depicting load calculations, service entrance and location, connection to existing system(s), outlet, switch and fixture locations
- ***Plumbing plan(s)*** containing isometric drawing(s) that include connection to existing systems and fixture schedule
- ***Detail drawings*** of other systems and components as necessary to facilitate review

Residential Addition Permit Submittal Requirements for Public Works Department

(For questions related to the requirements contained within this section, please contact Public Works at 303-235-2861)

Please be advised of the following engineering requirements:

- Any reference to "Engineer" herein denotes a State of Colorado licensed professional engineer with civil engineering qualifications.
- All new construction shall comply with the City of Wheat Ridge *Site Drainage Requirements*. (Please visit the Public Works, Development Review page on the City's website to obtain the latest copy of the *Site Drainage Requirements*).
- If the lot is part of a new or recent subdivision (10 years old or newer), a detailed Drainage, Grading & Erosion Control Plan from an Engineer that conforms to the drainage and grading found on the originally approved Final Drainage Report/Plan for the subdivision, shall be required prior to issuance of the Building Permit. A Final Acceptance Inspection by the City, and a Drainage Certification Letter from the Engineer stating the site was graded and the drainage will function in conformance with the original Final Drainage Report/Plan for the subdivision shall be required prior to issuance of the Certificate of Occupancy.
- If the proposed area of disturbance is one acre or more in size, a Drainage Letter from an Engineer describing how the site drainage will function and what water quality measures will be employed with the project, a Drainage, Grading, and Erosion Control Plan accompanied by a Stormwater Management Plan (SWMP), and a Colorado Discharge Permit System (CDPS) Permit issued by the State of Colorado, shall be submitted for review and approval prior to issuance of the Building Permit. A Final Acceptance Inspection by the City, and a Drainage Certification Letter from the Engineer stating the site grading was completed per the approved Drainage, Grading, & Erosion Control Plan and that the site will drain per the approved Drainage Letter, shall be required prior to issuance of the Certificate of Occupancy.
- If the subject property is located within the regulated floodplain, a Floodplain Special Exception Permit ("Floodplain Permit") must be applied for and processed through the Community Development Department (303.235.2846). Depending on the magnitude of the development within the floodplain, the Floodplain Permit may be approved administratively

by the City's floodplain administrator or it may have to be presented to and approved by the Board of Adjustment (BOA) for their ruling as required by the Municipal Code of Laws. With the Floodplain Permit a Flood Study from an Engineer is typically submitted for review and approval by the City of Wheat Ridge floodplain administrator. Upon approval of the Flood Study by the floodplain administrator, the Floodplain Exception Permit can be presented to the Board of Adjustment as necessary. Upon approval of the Floodplain Permit, either administratively or by the BOA, depending on the magnitude of the development within the floodplain, a Stormwater Management Plan (SWMP) may need to be submitted for review and approval prior to issuance of the Building Permit. A Final Acceptance Inspection by the City, a Drainage Certification from the Engineer stating the site grading was completed per the approved Grading & Erosion Control Plan and that the drainage will function per the approved Flood Study, shall be required. The Drainage Certification Letter shall be accompanied by As-Built Plans from the Engineer in support of the statements made in the Letter and providing sufficient elevation information to prove the structure was constructed least one (1) foot above the Base Flood Elevation (BFE) as referenced in the approved Flood Study, shall be required prior to issuance of the Certificate of Occupancy.

- If no curb, gutter, and sidewalk exist across the property frontage, these public improvement items must be constructed with the project if the cost of the addition amounts to 50% or more of the value of the existing structure, or unless otherwise directed by City staff. If improvements are to be constructed with the project they must be clearly identified on the Site Plan and the standard City details for the improvements shall be included in the Building Permit Plan Set. (Note: PDF and AutoCAD DWG files of the City's standard details are available free of charge on the City's website). If the Director of Public Works determines it to be impractical or not in the best interest of the City or downstream properties that the missing improvements be constructed at the time of the project, cash funds will be taken in lieu of construction for the required improvements. Any required public improvements shall be completed or funds taken in lieu of construction prior to issuance of the Certificate of Occupancy. For further information regarding the public improvements required please contact either a Planner with the Community Development Department at 303.235.2846, or the Development Review Engineer with the Public Works Department at 303.235.2864.
- If the Right-of-Way (ROW) along the property frontage is insufficient to construct required public improvements or to maintain the existing improvements, and the cost of the new addition amounts to 50% or more of the value of the existing structure, the necessary ROW area will be determined by City staff and the area shall be dedicated by the property owner to the City. All ROW dedications shall be submitted and approved by City Council prior to issuance of the Certificate of Occupancy. The Public Works Department (303.235.2861) will provide the standard deed form and assist the property owner complete the dedication upon request.

****APPLICATIONS THAT ARE INCOMPLETE OR LACKING SUBMITTAL DOCUMENTS WILL NOT BE ACCEPTED BY THE BUILDING DIVISION.****

FOR OFFICE USE ONLY
Date:
Plan/Permit #
Plan Review Fee:

City of Wheat Ridge
COMMUNITY DEVELOPMENT

Building & Inspection Services Division
7500 W. 29th Ave., Wheat Ridge, CO 80033
Office: 303-235-2855 * Fax: 303-237-8929
Inspection Line: 303-234-5933
Email: permits@ci.wheatridge.co.us

Building Permit Application

***** Please complete all highlighted areas on both sides of this form. Incomplete applications may not be processed. *****

Property Address: _____

Property Owner *(please print)*: _____ **Phone**: _____

Property Owner Email: _____

Mailing Address: *(if different than property address)*

Address: _____

City, State, Zip: _____

Architect/Engineer: _____

Architect/Engineer E-mail: _____ **Phone:** _____

Contractor: _____

Contractors City License #: _____ **Phone:** _____

Contractor E-mail Address: _____

Sub Contractors:

Electrical:
W.R. City License #

Plumbing:
W.R. City License #

Mechanical:
W.R. City License #

Other City Licensed Sub:
City License #

Other City Licensed Sub:
City License #

Complete all information on BOTH sides of this form

☐ COMMERCIAL ☐ RESIDENTIAL

Description of work: (Check all that apply)

☐ NEW COMMERCIAL STRUCTURE
☐ NEW RESIDENTIAL STRUCTURE
☐ COMMERCIAL ADDITION
☐ RESDENTIAL ADDITION
☐ ELECTRICAL SERVICE UPGRADE
☐ COMMERCIAL ROOFING
☐ RESIDENTIAL ROOFING
☐ WINDOW REPLACEMENT
☐ COMMERCIAL ACCESSORY STRUCTURE (Garage, shed, deck, etc.)
☐ RESIDENTIAL ACCESSORY STRUCTURE (Garage, shed, deck, etc.)
☐ MECHANICAL SYSTEM/APPLIANCE REPAIR or REPLACEMENT
☐ PLUMBING SYSTEM/APPLIANCE REPAIR or REPLACMENT
☐ ELECTRICAL SYSTEM/APPLIANCE REPAIR or REPLACEMENT
☐ OTHER (Describe)_____

(For **ALL** projects, please provide a **detailed** description of work to be performed, including current use of areas, proposed uses, square footage, existing condition and proposed new condition, appliance size and efficiency, type and amount of materials to be used, etc.)

Sq. Ft./LF _____ **Btu's** _____ **Gallons** _____

Amps _____ **Squares** _____ **Other** _____

Project Value: (Contract value or the cost of **all** materials and labor included in the **entire** project)

$_____

OWNER/CONTRACTOR SIGNATURE OF UNDERSTANDING AND AGREEMENT

I hereby certify that the setback distances proposed by this permit application are accurate and do not violate applicable ordinances, rules or regulations of the City of Wheat Ridge or covenants, easements or restrictions of record; that all measurements shown and allegations made are accurate; that I have read and agree to abide by all conditions printed on this application and that I assume full responsibility for compliance with applicable City of Wheat Ridge codes and ordinances for work under any permit issued based on this application; that I am the legal owner or have been authorized by the legal owner of the property to perform the described work and am also authorized by the legal owner of any entity included on this application to list that entity on this application.

CIRCLE ONE: *(OWNER) (CONTRACTOR) or (AUTHORIZED REPRESENTATIVE) of (OWNER) (CONTRACTOR)*

PRINT NAME: _____ **SIGNATURE:** _____ **DATE:** _____

DEPARTMENT USE ONLY

ZONING COMMMENTS:
Reviewer:

OCCUPANCY CLASSIFICATION: _____

TYPE OF CONSTRUCTION: _____

SPRINKLERED: _____

BUILDING DEPARTMENT COMMENTS:
Reviewer:

OCCUPANT LOAD: _____

PUBLIC WORKS COMMENTS:
Reviewer:

PROOF OF SUBMISSION FORMS

Fire Department	☐ Received	☐ Not Required
Water District	☐ Received	☐ Not Required
Sanitation District	☐ Received	☐ Not Required

Building Division Valuation: $_____

City of Wheat Ridge
COMMUNITY DEVELOPMENT

SUB-CONTRACTOR AUTHORIZATION FORM

Project Address:_____ Permit #:_____
General Contractor:_____

Electrical Contractor

Company Name:_____ Phone #:_____
State License #:_____ Master #:_____

_____ _____
Signature of Authorized Agent Date

Plumbing Contractor

Company Name:_____ Phone #:_____
State License #:_____ Master #:_____
Wheat Ridge License #:_____

_____ _____
Signature of Authorized Agent Date

Mechanical Contractor

Company Name:_____ Phone:_____
Wheat Ridge License #:_____

_____ _____
Signature of Authorized Agent Date

***This application must be signed by each sub-contractor confirming the same.**

City of Wheat Ridge

CITY OF WHEAT RIDGE BUILDING AND INSPECTION SERVICES DIVISION

7500 W 29th Ave Wheat Ridge, CO 80033-8001 *p.* 303.235.2855. *f.* 303.237.8929

Proof of Submission for Permitting/Plan Review

A copy of this form must be completed by each agency indicated on the Permit Submittal Checklist for the project type and be attached to the Building Permit Application at the time of submission. Applications presented for submission without a completed Proof of Submission form from a required agency will not be accepted or processed.

Date: _____

Project Address: _____

Name of Firm/Individual submitting documents: _____

Project Type/Description: _____

_____

_____

Signature of Firm Representative or Individual: _____

DO NOT WRITE BELOW THIS POINT - FOR AGENCY USE ONLY

I, _____, am a duly authorized representative of the agency indicated below and do, by my signature below, hereby acknowledge receipt of documents necessary for review and approval of the project indicated above.

Agency represented: (Please check one)

- o Wheat Ridge Fire Protection
- o Arvada Fire Protection
- o Wheat Ridge Water District
- o Consolidated Mutual Water District
- o Valley Water District
- o Denver Water
- o Wheat Ridge Sanitation District
- o Clear Creek Sanitation District
- o Fruitdale Sanitation District
- o Westridge Sanitation District
- o Other _____

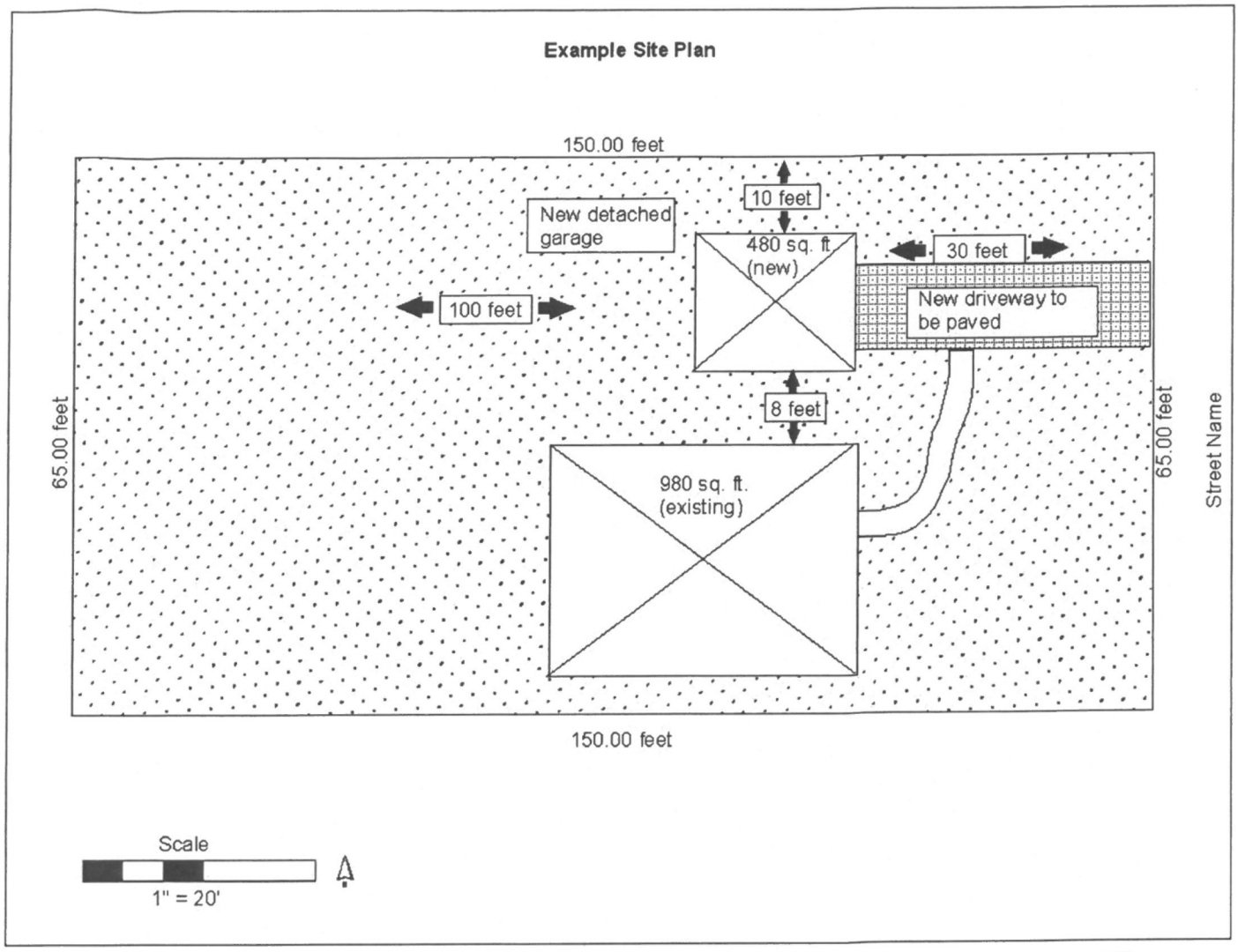
Agency Notes: _____

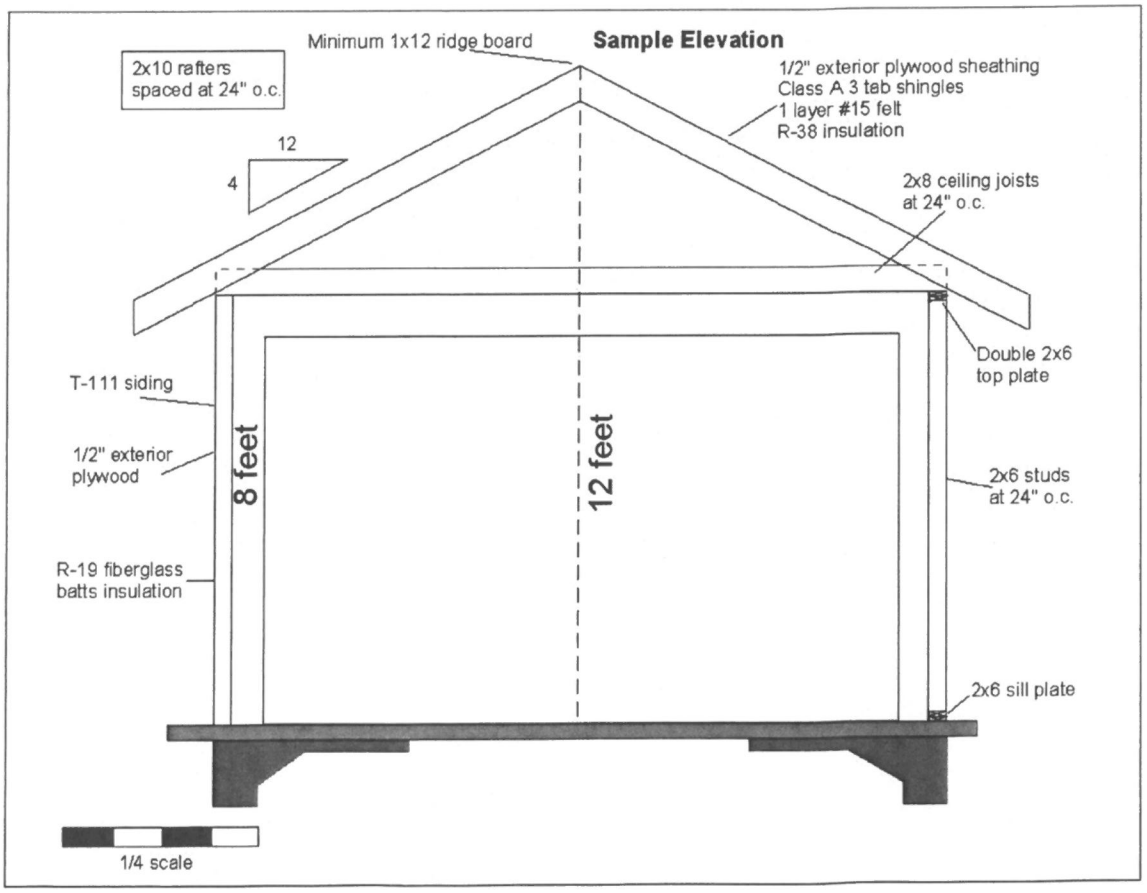
_____

_____

Signature: _____ Date: _____

(Agency Representative)


Example Site Plan
150.00 feet
10 feet
New detached garage
480 sq. ft. (new)
30 feet
New driveway to be paved
100 feet
8 feet
65.00 feet
65.00 feet
Street Name
980 sq. ft. (existing)
150.00 feet
Scale
1" = 20'


Sample Elevation
Minimum 1x12 ridge board
2x10 rafters spaced at 24" o.c.
1/2" exterior plywood sheathing
Class A 3 tab shingles
1 layer #15 felt
R-38 insulation
12
4
2x8 ceiling joists at 24" o.c.
Double 2x6 top plate
T-111 siding
1/2" exterior plywood
8 feet
12 feet
2x6 studs at 24" o.c.
R-19 fiberglass batts insulation
2x6 sill plate
1/4 scale

City of Wheat Ridge
COMMUNITY DEVELOPMENT

Community Development Department
Administrative Policy

SUBJECT:	**Surveying Requirement for Building Permits**
EFFECTIVE DATE:	**February 6, 2012**
APPROVED BY:	**Kenneth Johnstone, Community Development Director**
POLICY/PROCEDURE NO.:	**Admin 27**

STATEMENT OF ISSUES:

- Sections 26-105.C and Sections 5-43 and 5-76 establish the City's authority to require survey information in conjunction with building permits and other land use applications.
- The City of Wheat Ridge has not established formal policies on what level of survey work is required in conjunction with building permits and construction.
- Both the building code and zoning code establish specific minimum setbacks from perimeter property lines for different types of structures and different types of construction.
- Sections 26-801 through 26-810 establish the City's authority to require survey information in conjunction with building permits for projects that fall within the regulated floodplain.
- The City wishes to establish reasonable standards that allow property owners to demonstrate compliance with applicable floodplain regulations, minimum setbacks, maximum building heights, etc.
- It is the intent that the level of surveying being required (and the cost to the property owner or contractor) bears a relationship to two factors: 1) the extent of the work being proposed (relative cost of the project); and 2) the extent to which the proposal is at or near the minimum or maximum standard.

ADMINSTRATIVE POLICY:

Following are the City of Wheat Ridge's (City) land surveying requirements for all construction projects.

Accessory Structures (Residential and Commercial)

1. Site Plan/Survey submittal at time of building permit application.

Option 1: An existing Improvement Location Certificate* (ILC) or a recognized survey of the subject property is provided and used as the basis for the site plan.

Option 2: If no existing ILC is available, one could be obtained from a Professional Land Surveyor licensed in the state of Colorado. While an ILC is not as reliable as a land survey or an Improvement

Survey Plat* (ISP), it may be used to approximate the location(s) of the home and other structures/fences relative to the property boundaries.

Option 3: If an ILC is unavailable and the applicant does not wish to obtain one, the City will accept a site plan that is drawn to a measurable scale and accurately depicts the property boundary lines and the setbacks from all existing and proposed structures to those boundary lines. Please be advised the City of Wheat Ridge is not responsible for any property boundary disputes between adjoining owners. Should any discrepancies or encroachments arise as a result of the applicant's construction, a Professional Land Surveyor licensed in the state of Colorado and/or legal counsel should be consulted.

Note: Issuance of a building permit should not be construed as certifying that property boundaries, structures, fence locations, or easements are correctly shown.

2. Survey requirements prior to project completion. For the types of building permits described above additional follow-up surveys will not be required after construction is completed, provided that based upon field verification and inspection the structure has been built in substantial compliance with the approved building permit plans. All structures larger than 120 ft^2 constructed within the regulated floodplain must have certification that they are elevated at 1.0' above the 100-year base flood elevation.

Additions (Residential and Commercial)

1. Site Plan/Survey submittal at time of building permit application.

1.1. The City requires an Improvement Location Certificate* (ILC) which shows evidence of the use of physically identified monument pins, fence lines, etc. on the ILC. The City reserves the right to reject any ILC that does not provide adequate field measurements to verify improvement locations and their relationship to the property boundary; and

1.2. A scaled site plan depicting the location of all existing and proposed structures will be required as part of your plan submittal for a building permit application. The site plan must have property boundary dimensions consistent with the ILC.

2. Survey requirements at time of foundation inspection. If the proposed addition contains occupiable space and will lie within two (2) feet of the minimum distance required for any zoning or building code fire separation setback, or any portion of the proposed addition lies within a regulated floodplain, the City requires, as part of the foundation inspection and prior to the first framing inspection, a completed, signed and sealed, *Foundation Setback and Elevation Certification* from a Professional Land Surveyor licensed in the state of Colorado, stating that the foundation was constructed in compliance with all applicable minimum setback and elevation requirements of the City.

3. Survey requirements prior to project completion or granting of a Certificate of Occupancy or Certificate of Completion. For the types of building permits described above additional follow-up surveys will not be required after construction is completed, provided that based upon field verification and inspection the structure has been built in substantial compliance with the approved

building permit plans. All new additions constructed within the regulated floodplain must have certification that the first floor elevation is 1.0' or more above the 100-year base flood elevation.

New Residential Construction

1. Site Plan/Survey submittal at time of building permit application.

1.1. The City requires an Improvement Location Certificate* (ILC) which shows evidence of the use of physically identified monument pins, fence lines, etc. on the ILC. The City reserves the right to reject any ILC that does not provide adequate field measurements to verify improvement locations with respect to the property boundary. An ILC will not be required as part of the building permit application for new construction on a platted lot of record with clearly established property lines, dimensions, and all bearings on the *Current City Datum*; and

1.2. A scaled site plan depicting the location of all existing and proposed structures will be required as part of your plan submittal for a building permit application. That site plan should have property boundary dimensions and bearings consistent with the ILC or subdivision plat.

2. Survey requirements at time of foundation inspection. If the proposed new residential structure is to lie within two (2) feet of the minimum distance required for any zoning or building code fire separation setback, or any portion of the proposed addition lies within a regulated floodplain, the City of Wheat Ridge requires as part of the foundation inspection and prior to first framing inspection a completed, signed and sealed, *Foundation Setback and Elevation Certification* from a Professional Land Surveyor licensed in the state of Colorado, stating that the foundation was constructed in compliance with all applicable minimum setback and elevation requirements of the City.

3. Survey requirements prior to project completion or granting of a Certificate of Occupancy. If the new structure will lie within two (2) feet of any required minimum zoning or building code fire separation setback an As-Built Survey or Improvement Survey Plat shall be required prior to issuance of any Certificates of Occupancy (CO). All new residential structures constructed within the regulated floodplain must have certification showing the first floor elevation to be 1.0' or more above the 100-year base flood elevation. In all other situations, provided that the work has been performed in substantial compliance with the approved building permit plans, no additional survey documentation will be required.

New Commercial Construction

1. Site Plan/Survey submittal at time of building permit application. A scaled site plan depicting the location of all existing and proposed structures will be required as part of your plan submittal for a commercial new construction building permit application. That site plan should have accurate property boundary dimensions and bearings based on field survey work and/or a subdivision plat.

2. Survey requirements at time of foundation inspection. As part of the foundation inspection and prior to first framing inspection a completed, signed and sealed, *Foundation Setback and Elevation Certification* from a Professional Land Surveyor licensed in the state of Colorado is required, stating

that the foundation was constructed in compliance with all applicable minimum setback and elevation requirements of the City.

3. Survey requirements prior to project completion or granting of a Certificate of Occupancy. An As-Built Survey, Improvement Survey Plat or ALTA/ACSM Land Title Survey shall be required prior to issuance of any Certificates of Occupancy (CO) to verify compliance with approved plans. All new commercial structures constructed within the regulated floodplain must have certification upon completion showing the first floor elevation to be 1.0' or more above the 100-year base flood elevation.

Definitions/Notes

Accessory Structure: Accessory structures are defined in Chapter 26 of the Wheat Ridge Code of Laws. However, for the purposes of the above regulations, please note that an accessory structure that is 120 SF or smaller, and not greater than one story, does not require a building permit and therefore is not generally subject to these requirements. However, minimum building and zoning setback requirements still apply and must be met. The City reserves the right to require land survey information to verify setback compliance for all accessory structures.

As-Built Survey: A site survey showing all improvements associated with the building permit within the bounds of the subject property. The As-Built Survey shall include distances from the perimeter boundary of the subject property to a minimum of four (4) opposing sides (front, rear, side, side) of the new structure(s) to confirm all setback requirements have been met. Please note As-Built Plans are less than an Improvement Survey Plat which requires additional information (please see below).

Foundation Setback and Elevation Certification: A form provided by the City for use by Professional Land Surveyors (P.L.S.) to certify the elevations and horizontal positioning of a building foundation. The measurements taken for the Certification ensure the foundation has been properly constructed prior to commencement of framing operations.

Improvement Location Certificate (ILC): A representation of the boundaries of a parcel of land and the improvements thereon, prepared pursuant to Sec. 38-51-108 C.R.S. An ILC is a basic, graphical depiction of a property, should not be construed as being a land survey plat, and is acceptable for use only in limited situations. Generally an ILC will be included with the original property closing paperwork, or there may be one on file with the Building Safety Division from a previous building permit for the property.

Improvement Survey Plat (ISP): As defined in Sec. 38-51-102, C.R.S.: Improvement survey plat means a land survey plat as defined in subsection (12) of this section resulting from a monumented land survey showing the location of all structures, visible utilities, fences, hedges, or walls situated on the described parcel and within five feet of all boundaries of such parcel, any conflicting boundary evidence or visible encroachments, and all easements, underground utilities, and tunnels for which properly recorded evidence is available from the county clerk and recorder, a title insurance company, or other sources as specified on the improvement survey plat.

Professional Land Surveyor (Surveyor): A person registered or licensed pursuant to part 2 of article 25 of title 12, CRS.

City of Wheat Ridge
COMMUNITY DEVELOPMENT

City of Wheat Ridge Municipal Building 7500 W. 29th Ave. Wheat Ridge, CO 80033-8001 P: 303.235.2846 F: 303.235.2857

FOUNDATION SETBACK AND ELEVATION CERTIFICATION

This form, including the Exhibit on the reverse side, must be fully completed by a Professional Land Surveyor licensed in the State of Colorado. This Certification must be submitted for review and approval prior to the placement of concrete and before proceeding with any further construction.

DATE: _____

PERMIT# _____

ADDRESS: _____

LOT _____, **BLOCK** _____, _____ **SUBDIVISION**

I hereby certify that the elevation and location of the structural foundation for the above property described above has been measured by me or directly under my supervision. The foundation setbacks and elevations for **all building corners** as stated herein have been found by me to be in compliance with all municipal setback and elevation requirements, and all civil engineering and Building Permit construction plans as approved by the City of Wheat Ridge.

The **MINIMUM SETBACK DISTANCES** from the property lines have been determined to be:

FRONT: _____ REAR: _____ SIDE: _____ SIDE: _____

The **MINIMUM ELEVATION** has been determined to be: _____ **(NAVD88)**.

The above measurements have been determined on the following location:

Check only one): _____ Top of foundation **prior** to placement of concrete

_____ Top of proposed foundation **subsequent** to placement of concrete

The setback and elevation measurement locations are identified on the attached exhibit.

Signed _____

Print _____ Date _____
Professional Surveyor

FOR OFFICE USE ONLY

Approved by:

_____ _____
Inspector Date

(Surveyor's Seal)

EXHIBIT

NOTICE TO SURVEYOR:

1. Elevations shall be shown for ALL foundation corners.
2. Foundation corners with minimum elevation and setback distance shall be identified.
3. Drawing must be properly oriented (North = top of page).
4. Show the roadway in front of the property.
5. If drawing is to-scale, provide the scale. If not to-scale show as N.T.S.