

Individual Floodplain Development Permit (FDP) Checklist – Buildings



Boulder County
Colorado

In compliance with Article 4-400 of the Boulder County Land Use Code:

<http://assets.bouldercounty.org/wp-content/uploads/2017/02/land-use-code-article-04.pdf>

This checklist outlines the materials that must be submitted, as applicable, to Boulder County Land Use Department to obtain a Floodplain Development Permit for building projects. Additional data may be required.

- 1. Completed Floodplain Development Permit application
 - o <http://assets.bouldercounty.org/wp-content/uploads/2017/03/floodplain-development-permit-application.pdf>
- 2. Written description of the proposed development including engineer's report addressing standards in Boulder County Land Use Code Article 4-404
- 3. Location map, showing the specific areas and property(ies) where the work will be performed
 - o If temporary staging areas are not included on the project plans and are located in the Floodplain Overlay District, then a separate Individual FDP is required.
- 4. Adequate evidence of either direct ownership of the subject property or legal authority to act on behalf of the owner(s) of record
- 5. Substantial Improvement/Substantial Damage calculations, as applicable (*see attached memo*)
- 6. Plans stamped by a Professional Engineer registered in the State of Colorado, which include:
 - o Specifications for construction and building materials (including considerations for flood resistant materials when required, per FEMA Technical Bulletin 2);
 - o Description and locations of any proposed site, filling, dredging, grading, and/or channel improvements, as applicable;
 - o Location of any and all proposed materials storage and staging areas, as applicable;
 - o Location of the current regulatory Floodplain Overlay District boundaries, including both FEMA and/or Boulder County Floodplain information, as applicable;
 - o Plans that include the elevation, in feet referenced to the North American Vertical Datum of 1988, for the Lowest Finished Floor, Base Flood Elevation, and the Flood Protection Elevation to which the flood protection measures apply (see 4-405(A));
 - o For all new subdivision proposals and other developments (including, but not limited to, manufactured home parks) greater than either 50 lots or 5 acres that are located in Zone A, a **hydraulic analysis** that conforms to the requirements of 4-404.2(E). This analysis must also depict the Base Flood Elevations that Boulder County will use to determine Flood Protection Elevations for the proposed development;

For New Floodplain Construction:

- o Certification that the building or improvement is designed in accordance with the flood protection measures outlined in 4-405(C);
- o Where a Floodway has not been mapped, a **Floodway analysis**, consistent with 4-404.2(E)

For conforming existing buildings:

- o Certification that the building or improvement is designed in accordance with the flood protection measures outlined in 4-405(C)

For improvements to nonconforming existing buildings:

- o Certification that the building or improvement is designed in accordance with the flood protection measures outlined in 4-413;
- o Where a Floodway has not been mapped, a **Floodway analysis**, consistent with 4-404.2(E)

- 7. Elevation certificates and/or floodproofing certificates, as applicable
- 8. Any items or conditions required by the Floodplain Section of the Land Use Determination Letter



Land Use

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Costs for Substantial Improvements and Repair of Substantial Damage

From FEMA Publication P-758, May 2010 - *Substantial Improvement/Substantial Damage Desk Reference*

Included Costs:

Items that must be included in the costs of improvement or costs to repair are those that are directly associated with the building. The following list of costs that must be included is not intended to be exhaustive, but characterizes the types of costs that must be included:

- Materials and labor, including the estimated value of donated or discounted materials and owner or volunteered labor
- Site preparation related to the improvement or repair (foundation excavation, filling in basements)
- Demolition and construction debris disposal
- Labor and other costs associated with demolishing, moving, or altering building components to accommodate improvements, additions, and making repairs
- Costs associated with complying with any other regulation or code requirement that is triggered by the work, including costs to comply with the requirements of the Americans with Disabilities Act (ADA)
- Costs associated with elevating a structure to an elevation that is lower than the BFE
- Construction management and supervision
- Contractor's overhead and profit
- Sales taxes on materials
- Structural elements and exterior finishes, including:
 - Foundations (e.g., spread or continuous foundation footings, perimeter walls, chainwalls, pilings, columns, posts, etc.)
 - Monolithic or other types of concrete slabs
 - Bearing walls, tie beams, trusses
 - Joists, beams, subflooring, framing, ceilings
 - Interior non-bearing walls
 - Exterior finishes (e.g., brick, stucco, siding, painting, and trim)
 - Windows and exterior doors
 - Roofing, gutters, and downspouts
 - Hardware
 - Attached decks and porches
- Interior finish elements, including:
 - Floor finishes (e.g., hardwood, ceramic, vinyl, linoleum, stone, and wall-to-wall carpet over subflooring)
 - Bathroom tiling and fixtures
 - Wall finishes (e.g., drywall, paint, stucco, plaster, paneling, and marble)
 - Built-in cabinets (e.g., kitchen, utility, entertainment, storage, and bathroom)

Included Costs continued:

- Interior doors
- Interior finish carpentry
- Built-in bookcases and furniture
- Hardware
- Insulation
- Utility and service equipment, including:
 - HVAC equipment
 - Plumbing fixtures and piping
 - Electrical wiring, outlets, and switches
 - Light fixtures and ceiling fans
 - Security systems
 - Built-in appliances
 - Central vacuum systems
 - Water filtration, conditioning, and recirculation systems

Excluded Costs:

Items that can be excluded are those that are not directly associated with the building. The following list characterizes the types of costs that may be excluded:

- Clean-up and trash removal*
- Costs to temporarily stabilize a building so that it is safe to enter to evaluate required repairs
- Costs to obtain or prepare plans and specifications
- Land survey costs
- Permit fees and inspection fees
- Carpeting and recarpeting installed over finished flooring such as wood or tiling
- Outside improvements, including landscaping, irrigation, sidewalks, driveways, fences, yard lights, swimming pools, pool enclosures, and detached accessory structures (e.g., garages, sheds, and gazebos)
- Costs required for the minimum necessary work to correct existing violations of health, safety, and sanitary codes
- Plug-in appliances such as washing machines, dryers, and stoves

Additional Excluded Costs: (not specifically mentioned in FEMA P-758)

- Temporary Power
- Portable Toilets for use during construction
- Wastewater treatment systems and wells

* This refers only to trash and debris that were deposited during the event. Costs associated with the removal of damaged materials that were part of the structure are included costs.