

Elevating Structures to Reduce Flood Damages

Guidelines for Property Owners



during



after



KING COUNTY
FLOOD CONTROL
DISTRICT



King County

Department of Natural Resources and Parks
Water and Land Resources Division



“As a parent your number one concern is that you want your children to feel safe. [The home elevation] didn’t just raise us out of water so our stuff doesn’t get damaged, it made a difference to my children and how they feel at home. And that’s huge!”

**- Danielle Duvall,
Kimball Creek, Snoqualmie River**

WELCOME!

Thank you for your interest in working with King County and the King County Flood Control District (FCD) to elevate your home, barn, or commercial property through federal, state, or local grant programs. Following are general guidelines to help you understand the Home Elevation Program. However, each project is unique and therefore some **additional requirements** not included here may be necessary while others included may not be needed.

Your role

You, the property owner, are responsible for hiring and managing all consultants or contractors needed to prepare studies, obtain permits, and construct the project. You are responsible for paying project costs up front and then submitting for a partial reimbursement from the FCD. Property owners must have sufficient funds to finance the project until partial reimbursement is received.

Our role

A Project Manager will manage your grant, your reimbursement request, and the transfer of funds from the grant funding agency to you, the property owner. We are also here to answer questions and help navigate the process. The FCD approves overall funding for this program to improve public safety. King County Water and Land Resources Division works with you to implement the home elevation.



Watch our video and get more information at www.kingcounty.gov/buyout-elevation

PROJECT “TO DO” LIST

A typical elevation project requires the following steps, some of which can be completed concurrently:

- 1. Sign an agreement with King County for the elevation project. *page 3*
- 2. Submit quarterly progress reports to King County. *page 3*
- 3. Provide an “as-built” drawing of the property’s septic system, if applicable. *page 3*
- 4. Provide a septic system review and approval from Public Health – Seattle & King County (Public Health), as applicable. *page 4*
- 5. Hire a consultant to prepare a geotechnical study or obtain an existing study. *page 5*
- 6. Provide a pre-construction Federal Emergency Management Agency (FEMA) elevation certificate. *page 5*
- 7. Hire an architect or engineer to prepare construction drawings. *page 6*
- 8. Obtain a building permit from King County, or appropriate local jurisdiction. *page 6*
- 9. Obtain bids from contractors for the construction phase of the project. *page 8*
- 10. Hire a contractor to complete the work. *page 8*
- 11. Oversee the construction project. *page 8*
- 12. File requests for cost reimbursement. *page 8*
- 13. Provide a post-construction FEMA elevation certificate. *page 8*
- 14. Obtain all final inspections from King County, or appropriate local jurisdiction. *page 9*
- 15. Submit documents to King County to be officially recorded. *page 9*
- 16. Contact your insurance company to request a flood insurance rate reevaluation. *page 11*

Agreement With King County for the Elevation Project

Participating property owners are required to sign an agreement that stipulates:

- the roles and responsibilities of the property owner and King County;
- the amount of funding available for the project;
- what is eligible and ineligible for grant reimbursement;
- the dates the grant funding is available;
- the area below the elevated first floor will **not** be converted to living space;
- the area below the elevated first floor will be maintained to allow for free flow of floodwaters; and
- a flood insurance policy will be maintained for the elevated structure.

Quarterly Progress Reports

To assure the project is completed during the grant performance period, the property owner is required to complete and submit quarterly progress reports (email updates are sufficient) to your Project Manager.

Septic System Design and Operation Verification

If your home is not served by a public sewer system, you will be required to provide a map, known as an “as-built” drawing, of any existing septic system on the property involved to verify its location.

An online search form for existing as-built drawings is available on the Public Health web site at www.kingcounty.gov/health/wastewater.

If an existing as-built drawing is not available, you will need to hire a Certified On-Site System Maintainer (OSM) to locate the septic system and prepare a drawing. Public Health maintains a list of certified OSMs on their web site but does not endorse any specific vendor. The OSM will conduct an operational check of your on-site septic system and prepare a report, which you will then submit to Public Health. Visit or call King County’s Environmental Health Services at 206-477-8050 for more information.

Septic System Inspection

Eastgate Environmental Health Services

14350 SE Eastgate Way

Bellevue, WA 98007

206-477-8050

www.kingcounty.gov/health/wastewater

Once you have an as-built drawing, you will need to apply for a permit to request that Public Health inspect your existing septic system and determine if any upgrades or repairs will be needed.*

The document you will need to complete is called an *Application for Health Department Approval of Building Permit*. Public Health charges a review fee for this service.

You are also required to identify the source of potable water for your property. To determine this, call your water department to request the official name of the water system for your property and the state identification number.

* **Note:** Repairs to your existing on-site septic system are **not reimbursable expenses under the grant**. If repairs are needed, grant reimbursement will be withheld until approval from Public Health is obtained. However, required upgrades necessary to bring the septic system up to current code requirements are a reimbursable expense under the grant.

“Home elevations reduce safety risks and property damage during a flood event. It not only saves the homeowner money but it also saves the region money in that we have fewer repetitive loss costs that we need to pay as well as our emergency costs are reduced.”

- Kathy Lambert, King County
Flood Control District Supervisor

Geotechnical Study* *

A geotechnical study identifies the properties of the soil where your home is located and is required to design a reinforced or replaced foundation for your structural elevation. King County and local cities require that the geotechnical study be prepared by a licensed geologist or professional engineer.

The Department of Permitting and Environmental Review (DPER) has established a preferred consultant program, and provides a list of consultants, or individuals, with a proven track record of high quality work in King County. The preferred consultants list is available on DPER's website at www.kingcounty.gov/property/permits/info/applying/consultants.aspx.

DPER maintains copies of geotechnical studies that have been completed in the past and there may be an existing study that can be used without having to complete a new one. Contact the DPER Customer Service line at 206-296-6600, or the appropriate local jurisdiction, and be prepared to provide your property tax lot number, which you can find on your yearly property tax statement.

FEMA Elevation Certificate* *

A FEMA elevation certificate is required at the beginning and end of your elevation project. The initial elevation certificate will determine the elevation of the existing first finished floor compared to the water surface elevation of the 100-year flood. Call the Water and Land Resources Division at 206-477-4727 to inquire if an elevation certificate for your structure is on file.

Once your house has been elevated and the new foundation installed, a revised elevation certificate will be required prior to the final building inspection to verify the first finished floor has been elevated to the appropriate height.

The elevation certificates must be completed by a licensed surveyor in the State of Washington.

Construction Drawings* *

Two critical factors must be taken into consideration to complete construction drawings: soils and the height the structure must be elevated. A geotechnical study will determine the strength of the soils supporting the structure and the FEMA elevation certificate will determine the height of the new foundation. With this information a qualified architect or engineer can design and draw the plans and details so that they reflect the required design and the standards of the International Building Code.

****Note:** You can find surveyors, geotechnical consultants, architects, and engineers in the phone book, online, or through recommendations from family, friends, or neighbors. Property owners who have been through the elevation process are also often willing to provide recommendations.

Building Permit

You will be required to obtain a building permit from King County's DPER, or the permitting agency of your local jurisdiction, to elevate your structure. The DPER web site provides details on how to apply for a permit. If you live in an incorporated city (e.g., North Bend or Snoqualmie) you will need to contact your city's building permitting department to see what permits may be required.

Your Project Manager can check to see if DPER will assign an individual to assist you with your building permit process. See below for information on how to contact DPER.



Address

King County Dept. of Permitting and Environmental Review
35030 SE Douglas St., Ste 210
Snoqualmie, WA 98065-9266
www.kingcounty.gov/permitting

Call

206-296-6600 Customer Service Phone Line
(9:30 a.m. to 3:30 p.m. on Monday, Tuesday, Thursday, and Friday)
206-296-6797 Permit application appointments
206-296-6659 Billing hotline
206-296-6696 Records center
206-296-6680 Code Enforcement

TTY

206-296-7217

Email

DDESWebInquiries@kingcounty.gov

Note: For property-specific questions, please provide parcel ID or address if known.

Map & Directions

www.kingcounty.gov/property/permits/about/dpermap.aspx

Customer Service Hours

Monday, Tuesday, Thursday, and Friday:
7:30 to 11:30 a.m. and 1 to 3 p.m.
Closed Wednesday



after

The living space of this house was elevated 3 feet to accommodate potential flooding.

Hiring a Contractor

A structural elevation project requires an itemized bid for the construction to be submitted to your Project Manager for review and approval. It is to your advantage to obtain several bids to find the one that fits best with your needs and with the project budget.

While many of the permit and technical study costs tend to be consistent from one project to the next, construction costs will vary depending on the condition of the existing foundation, the size of the house, soils, and other factors.

Not all contractors have the experience or equipment to perform elevation projects; be sure to inquire about other similar projects they have completed, and check references.

Overseeing Construction

You will be required to oversee the construction project and work with a general contractor of your choosing. As the property owner, it will be your responsibility to assure that the contractor is completing the project in accordance with the grant agreement and building permit.

Cost Reimbursement from Federal, State, and Local Grants

Property owners are required to pay for all work up front and obtain reimbursement from King County for eligible costs.

The costs eligible for reimbursement are specified in the agreement you sign with King County (see p. 3). Property owners will receive a standard form for requesting cost reimbursements from King County.

In addition to this form, property owners will be required to provide detailed documentation for each reimbursement request. An invoice alone is not sufficient – proof must be provided to demonstrate that the invoice was paid. This may be a statement showing the payment has been received, a copy of the check (front and back side), a receipt or any other documentation that would pass a financial audit. King County makes every effort to expedite reimbursement requests and reimburse property owners within a reasonable time – generally two to three weeks.

Final Inspections

When you receive your building permit from DPER (see p. 6), or your local permitting agency, you will receive instructions on how to obtain your building inspections. You will need to provide documentation to your Project Manager once final inspection has been completed and the permit has been approved. The permitting agency will need the revised elevation certificate upon completion of construction to verify that the lowest finished floor is at least **3 feet above the 100-year flood elevation or 1 foot above the 500-year flood elevation**, whichever is higher. A copy of this final elevation certificate must also be provided to your Project Manager.

Recording Documents

As part of the building permit, you will be required to record a Critical Areas Notice on Title. The form is available at the DPER web site at: www.kingcounty.gov/property/permits/info/SiteSpecific/CriticalAreas.aspx

You will be provided with instructions on when and how to record that document during the permit review process. The King County Recorder's Office is located at:

King County Administration Building

500 Fourth Avenue, Suite 430
Seattle, WA 98104
206-477-6620
8:30 a.m. – 4 p.m.

You will also be required to record a Non-Conversion Agreement and Covenant and Flood Insurance Purchase Covenant. This document will be sent to you by your Project Manager to sign and have notarized. The Project Manager will record that document for you.

Other Considerations

Elevating a Fireplace and Chimney

Elevating an old fireplace and chimney is dependent on its condition. A structural engineer may be required to determine if the fireplace and chimney is structurally sound enough to be elevated and, if so, to design bracing to keep it in place during the elevation. Most old fireplaces and

chimneys are usually removed and replaced with new construction due to age and structurally unsafe conditions.

A fireplace or chimney that is not structurally sound is considered an existing deficiency; grant funding cannot be used to repair or replace the fireplace or chimney. Any fireplace or chimney repair or replacement cost is, therefore, the responsibility of the property owner.

Elevators

If a property owner has a disability requiring an elevator for accessibility, the cost of the elevator is considered an eligible expense. The property owner is required to provide written documentation from their doctor verifying the need for the elevator. The elevator must be installed in accordance with FEMA Technical Bulletin #4, Elevator Installation (2010). The elevator shaft must be constructed in accordance with FEMA Technical Bulletin #2, Flood Damage-Resistant Materials Requirements (2008). These technical bulletins are available at the FEMA website at: www.fema.gov/media-library/collections/4.

Cost Overruns

Property owners need to be aware that the project cost estimates used for grant preparation may be different from the actual costs and **you are responsible for all cost overruns.**

When King County reviews a project, every effort is made to accurately estimate the cost of the elevation project. Construction cost estimates are obtained from licensed contractors. However, without detailed construction drawings, it is difficult for a contractor to accurately identify all the costs that will be included in a construction project. In addition, there may be a year or more between when the grant application is prepared and when it is finally awarded, which means the cost of materials and labor may have changed. To address these issues, King County has implemented a two-phased process for home elevation projects.

Two-Phase Approval Process

The intent of a two-phased approval process is to obtain more accurate cost estimates so both parties have greater certainty and predictability about the project.

Phase 1 – This phase includes all activities up to construction: pre-construction elevation certificate; septic “as-built” drawings and septic inspection, as applicable; designs; building permits; and construction cost estimates.

Phase 2 – The second phase begins following King County’s review and approval of the construction cost estimate obtained at the end of Phase 1. Both you, as the homeowner, and King County, as the grant funder, have the opportunity to terminate the project at the end of Phase 1. For example, King County may terminate the project if costs appear to be inflated, if funding is no longer available, or the cost estimate does not meet benefit-cost analysis requirements.

Note: Once a Phase 2 notice to proceed is issued, additional funding beyond that identified in the homeowner/King County agreement will not be approved, unless unexpected and unusual circumstances have been encountered, and the WLR Division in its judgment determines that an amendment to the homeowner agreement providing for additional funding is warranted. Property owners often choose to include additional work in the project that is not directly related to the structural elevation project; **that additional work is not reimbursable.** You will be required to provide documentation of non-eligible work and invoices and payments to King County for auditing purposes.

Update your Flood Insurance

Once you have obtained your final elevation certificate that was prepared by a licensed surveyor, contact your insurance company. Provide them with a copy of the certificate and request that your flood insurance be reevaluated.

Be a Smart Consumer

It is always wise to research any consultant or contractor you are hiring for the first time. Consider checking with the Better Business Bureau to see if there are any existing consumer complaints on file or government actions taken. In addition, consider asking the contractors for references from other property owners.

BBB of Alaska, Oregon & Western Washington
www.bbb.org/alaskaoregonwesternwashington
info@thebbb.org, Phone: 206-431-2222



For more information: www.kingcounty.gov/buyout-elevation



The King County Flood Control District is a special purpose government created to provide funding and policy oversight for flood protection projects and programs in King County.

The Flood Control District's Board is composed of the members of the King County Council. The Water and Land Resources Division of the King County Department of Natural Resources and Parks develops and implements the approved flood protection projects and programs.

Alternative formats and interpreter services are available.
Please call 206-477-4800 or TTY: 711.