



Fairbanks North Star Borough
Department of Community Planning
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For Office Use Only Received By: _____ Date Submitted: _____
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NON-RESIDENTIAL STRUCTURES FLOODPLAIN PERMIT APPLICATION

File No. FP _____

FEES: None

Applicant:	Property Owner:
Contact Name:	Name:
Business Name:	Mailing Address:
Mailing Address:	City, State & Zip Code:
City, State & Zip Code:	Phone:
Contact Number:	Cell:
E-mail:	E-mail:

Property Information:		
Parcel Description (i.e. Lot, Block, Subdivision):		
Street Address with City, State & Zip Code:		
Parcel Account Numbers (PAN):	Flood Zone(s): Property: _____ Building Site: _____	Estimated Cost of Project:
BFE for Building Site:	Datum used for BFE: <input type="checkbox"/> 1929 NGVD <input type="checkbox"/> 1988 NAVD	Was fill added to the property? When? <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____
Existing Use & Structures:		

Proposed Project / Use: Check boxes for all applicable project elements.			
<input type="checkbox"/> NEW STRUCTURE	<input type="checkbox"/> ADDITION	<input type="checkbox"/> CLEARING	<input type="checkbox"/> WET FLOODPROOFING
<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> ALTERATION	<input type="checkbox"/> GRADING	<input type="checkbox"/> DRY FLOODPROOFING
<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> DEMOLITION	<input type="checkbox"/> FILL	<input type="checkbox"/> STORAGE TANKS
<input type="checkbox"/> CRITICAL FACILITY	<input type="checkbox"/> RELOCATION	<input type="checkbox"/> PAVING	<input type="checkbox"/> GAS, TYPE: _____
<input type="checkbox"/> HISTORIC STRUCTURE		<input type="checkbox"/> EXCAVATION	<input type="checkbox"/> LIQUID, TYPE: _____
<input type="checkbox"/> SUBSTANTIAL DAMAGE/IMPROVEMENT		<input type="checkbox"/> OTHER: _____	
Description of Proposed Use (please be specific, attach pages if necessary):			

I certify that (I am) (I am authorized to act for) the owner of the property. I certify that the information included in this application is to the best of my knowledge true and complete. I can be notified of the decision at the above (email) (address).

APPLICANT SIGNATURE: _____ DATE: _____

By signing this application, the land owner or agent hereby grants the FNSB the right to enter onto the above described location to inspect the work proposed, in progress, and/or work completed.

Please read and initial:

- _____ I certify that I have received all necessary permits (if applicable) from those governmental agencies from which approval is required by federal or state law, including but not limited to Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 USC 1344 (wetlands regulations), Fish & Habitat Permit, DEC Permit, etc. and have submitted a copy of them with this application.
- _____ I certify all materials under the Base Flood Elevation (BFE) are flood resistant materials and have provided documentation with this application.
- _____ I understand that the Floodplain Permit **expires** 180 days after issue date if construction has not been started. Construction includes substantial improvement, repair, reconstruction, rehabilitation, addition, placement, or other improvement.
- _____ I understand that an Elevation Certificate for "finished construction" for a structure or other certificate/report that states the development complies with FNSB Title 15 Floodplain Management Regulations is required at completion of construction.
- _____ I understand an application for a Certificate of Compliance must be made no later than 60 days after obtaining an elevation certificate for "finished construction" or floodproofing certificate for a structure or other certificate/report that states the development complies with FNSB Title 15 Floodplain Management Regulations.
- _____ I understand that a final inspection is required when development is completed to verify the project was conducted in accordance with the Floodplain Permit and the "finished construction" Elevation Certificate or other Certification.
- _____ I understand to receive the Certificate of Compliance all work must be completed: i.e. doors, windows, flood openings, mechanical, electrical, and plumbing, final grading, paving, etc. along with all required documentation submitted.

For Internal Use Only:

Completed Application: <input type="checkbox"/> Application <input type="checkbox"/> Building Plans <input type="checkbox"/> Site Plan <input type="checkbox"/> Copies Federal/State Permits <input type="checkbox"/> Reports <input type="checkbox"/> Detailed Descriptions <input type="checkbox"/> Elevations <input type="checkbox"/> Certifications <input type="checkbox"/> CLOMR <input type="checkbox"/> Notifications <input type="checkbox"/> Op Plans <input type="checkbox"/> Floodproofing Certification	Completed Application Date:	Development in SFHA: <input type="checkbox"/> Yes <input type="checkbox"/> No Development in Regulatory Floodway: <input type="checkbox"/> Yes <input type="checkbox"/> No	Basement / Sub-Grade Crawlspace: <input type="checkbox"/> Yes <input type="checkbox"/> No Flood Openings: <input type="checkbox"/> Yes <input type="checkbox"/> No Flood Proofing: <input type="checkbox"/> Yes <input type="checkbox"/> No
Substantial Improvement/Damage: <input type="checkbox"/> Project Cost \$ _____ <input type="checkbox"/> Market Value \$ _____ <input type="checkbox"/> Previous Cost \$ _____ <input type="checkbox"/> Yes <input type="checkbox"/> No	Permit Issued Date:	Inspections: Foundation staked: _____ Foundation complete: _____ Finished construction: _____	Elevation Certificate: Certificate of Compliance:

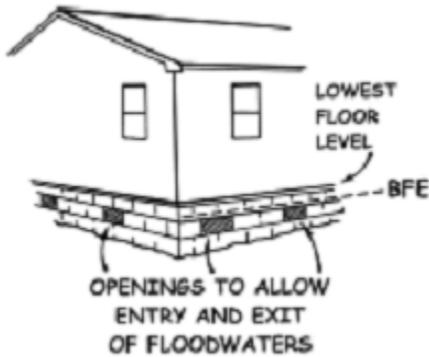
SITE DETAILS

Please fill in this form to accommodate the floodplain permit application.

TYPE OF CONSTRUCTION

(Please check the box for how the structure is being constructed.)

Elevation Certificate Diagram Number (see Appendix B, EC Diagrams): _____



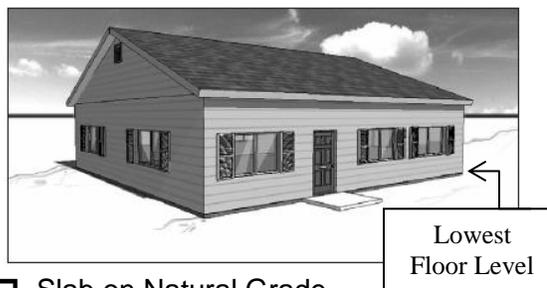
Foundation Stem Walls



Fill



Piers, Piles and Posts

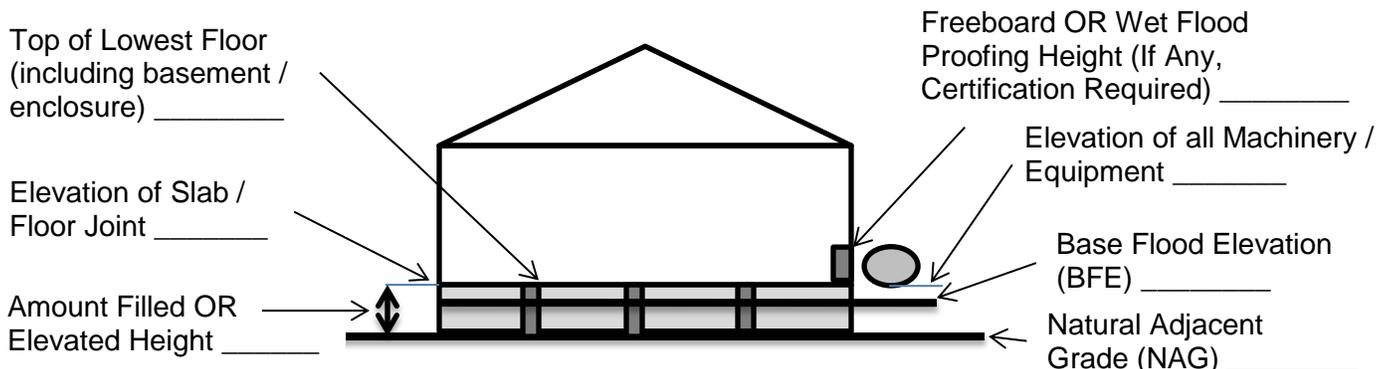


Slab on Natural Grade

Other (please submit drawing and describe): _____

ELEVATION CALCULATIONS IN RELATION TO MEAN SEA LEVEL

(Please fill in the blanks and circle datum used 1929 NGVD or 1988 NAVD)



SITE DETAILS

Please fill in this form to accommodate the floodplain permit application.

TANK(S) DIAGRAM

(Please sketch a picture showing how the tanks are installed including all elevations, size of tank, type of tank, anchoring system, etc.)

SUBMITTAL REQUIREMENTS/CHECKLIST (all elevations in relations to Mean Sea Level (MSL))
STRUCTURES: Non-Residential, Addition, Alteration, Relocation, Demolition, Replacement, Historic Structures, and Critical Facility
(See Appendix A, Construction Standards)

ALL STRUCTURES

- Site plan drawn to scale showing the nature, **location, dimensions, and elevation** (1929 NGVD or 1988 NAVD) of the property located within the floodplain, existing or proposed structures, adjacent roads, lot dimensions, location of special flood hazard area, locations of proposed fill, location of storage of materials including fuel, location of drainage facilities, and water bodies. **Elevations used for the site plan shall use the same vertical datum for the Elevation Certificate.**
 - Lot dimensions
 - Location of adjacent roads with road names
 - Show flood zone boundaries (floodway and flood fringe) with source (name of water body i.e. Chena River)
 - Location of existing/proposed buildings
 - Location of existing/proposed septic tanks and drain fields
 - Location of outside in-ground or above-ground tanks (fuel, propane, water, etc.)
 - Base Flood Elevation (BFE) with elevation datum indicated
 - Location of placement of earthen fill and dimensions
 - Location of storage of materials with dimensions of area
 - Location of drainage facilities and drainage pathways
 - Show elevation contours

- Site Details in 1988 NAVD:
 - Proposed elevation of the **lowest floor, including basements/crawlspaces** of all structures including garages.
Residential: _____ . Non-Residential: _____ .
Other _____ :
 - Proposed elevation of **ALL machinery service the structure including furnaces, hot water heaters, air conditioning, ductwork, well head, and utility meters.**
Furnace: _____ . Hot Water Heater: _____ .
Well Head: _____ . Utility Meter: _____ .
Ductwork: _____ . Air Conditioning: _____ .
Venting: _____ . Outside Electric: _____ .
Other _____ : _____ .
Other _____ :

- Building Plans include:
 - Evidence that the proposed structure will be adequately protected from inundation, in a manner describe in FNSBC 15.04.110 (see **Appendix A, Construction Standards**)
 - Highest and lowest adjacent grade
 - Diagram number for Elevation Certificate (see **Appendix B, EC Diagrams**)
 - Basement / sub-grade crawlspace (include all measurements and square footage)
 - Attached decks and stairs
 - **Foundation plan showing sufficient flood openings including the garage**
 - Lowest floor including basement at or above BFE (bathrooms/toilets, laundry rooms, workshops not allowed below BFE)
 - Elevated on piers, posts, columns or walls (what type and elevation)
 - **Materials below BFE resistant to flood damage**
 - Mechanical equipment elevated above BFE
 - Pipes and conduit waterproofed
 - **Permanent flood openings in foundation walls beneath BFE**
 - When using solid walls, take care to ensure that hydrostatic or hydrodynamic pressure does not damage the walls
 - **Elevated on fill (how much in feet above natural grade)**
 - A CLOMR-F is required prior to placement of fill and a LOMR-F is required after placement of fill from FEMA prior to receiving the Certificate of Compliance. Describe the extent to which any watercourse will be altered or relocated as a result of the proposed construction. Certify that the proposed construction will not affect the carrying capacity of the Flood Plain. Certification shall be by a Registered Professional Engineer.

- Fill is prohibited in the regulatory floodway
- Engineered fill
 - Top of fill at or above BFE
 - Fill protected from erosion and scour
 - Fill installed in layers and compacted
 - Fill is properly sloped and protected from erosion and scour during flooding
 - Fill extends 10-15 feet beyond walls before it drops below BFE
 - Fill does not cause drainage to flow on to neighbors properties
 - Side slopes one foot (1') vertical to one and a half foot (1.5') horizontal
- Machinery/equipment servicing the building elevated above BFE and anchored (location, elevation, details)
- Electrical panel elevated above BFE (location and elevation)
- Buried electrical lines water tight, flood proofed conduits
- Utilities anchored and elevated above BFE or protected from floodwaters (location, details, elevation) (see **Appendix C, Utilities in the Special Flood Hazard Area**)
- Indoor tanks above BFE or anchored (location, details, and elevation)
- Openings/vents above BFE (location and elevation)
- **Types of water-resistant materials used below BFE (labeled)
- Water supply systems designed to minimize or eliminate infiltration of flood waters into the system
- Sanitary sewage systems designed to minimize or eliminate infiltration of flood waters into the systems (i.e. backflow valves, watertight enclosures, etc.) and discharges from the systems into flood waters and onsite waste disposal systems be located to avoid impairment to them or contamination from them during flooding
- Detailed plans for outside fuel tanks, propane tanks, water tanks, sewage holding tanks, etc. including size of tank (see **Appendix D, Outside Tanks in the Special Flood Hazard Area**). Site Detail Page Enclosed in Package.
 - Above ground: on the ground or elevated off the ground
 - Submit size and dimensions of tank
 - Vent tube and filler tube above the BFE
 - Legs of tank securely anchored in concrete slab or platform
 - Type of hold-down straps anchored into slab or platform
 - Below ground: installation pictures required to receive Certificate of Compliance
 - Engineered installation
 - Submit size and dimensions of tank
 - Depth of tank
 - BFE level
 - Vent tube and filler tube above the BFE
 - Type of hold-down straps anchored into slab or earth augers
 - Metal protective manhole with lid for nozzles
 - Watertight containment sump
 - Concrete vault
 - Frost, scour and erosion line
 - Backfill
 - Insulation material between tank and hold-down straps (fiberglass tank)
 - Compacted fill material
 - Hold down rods
 - Anchor bolts
 - Reinforcing bars
 - Concrete counterweight
 - Turnbuckles
 - Case-in-place concrete
- Copy of State and/or Federal Permits (if applicable):
 - U.S. Army Corps of Engineers 404 Wetlands Permit – permits for wetland filling
 - U.S. Army Corps of Engineers Section 10 – permits for work in navigable waterways
 - U.S. Army Corps of Engineers 401 Water Quality Certification
 - U.S. Coast Guard – permits for bridges and causeways that may affect navigation
 - U.S. Fish and Wildlife Service – consultations required, Sections 7 & 10 of the Endangered Species Act of 1973
 - U.S. Fish and Wildlife Service Fish and Game Habitat Permit
 - Alaska Department of Environmental Conservation 401 Certificate of Reasonable Assurance
 - Alaska Department of Environmental Conservation Alaska Pollutant Discharge Elimination System Construction

General Permit

- Alaska Department of Natural Resources: _____
- Alaska Department of Public Safety, Fire and Life Safety: _____
- Other: _____
- Other: _____

****Non-Residential Structures – Additional Items for Dry Floodproofing**

- Registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction. Design plan submitted with application.
 - Certified flood-proofed elevation at least one-foot above BFE
 - Utility and sanitary facilities designed so that below the BFE the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy
- Proposed elevation to which any **nonresidential structure** has been floodproofed
Floodproofed: _____ (1929 NGVD or 1988 NAVD)
- Certification by a registered professional engineer or architect that the floodproofing methods for any **nonresidential structure** meet the floodproofing criteria in FNSBC 15.04.110(D). Floodproofing Certificate Form can be located at www.FEMA.gov/library/floodproof
- Submit Flood Emergency Operation Plan
- Submit Inspection and Maintenance Plan
- Signed agreement stating that the plans will be adhered to
- Documentation showing deed restriction was placed
- Evidence that other fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding comply with FNSBC 15.04.110(C)(2)

Substantial Damage / Substantial Improvement – Additional Items

- Substantial Damage / Substantial Improvement are cumulative. This means when the total cost equals or exceeds 50% of the market value of the structure, the structure is required to be brought into compliance with the current FNSB Title 15 code.
- Project types include remodeling, rehabilitation, building additions, repair or reconstruction
- Must be protected from damage by the base flood
- Lowest floor including basement is elevated to or above the BFE
- Detailed cost estimate for project prepared by a licensed general contractor or professional construction estimator
 - See **Appendix E, Substantial Damage / Improvement Cost List**
- Exemptions
 - Improvements to correct code violations
 - Historic buildings

Critical Facilities – Additional Items

- Located outside the limits of the Special Flood Hazard Area unless no feasible alternative site is available
 - Lowest floor elevated three feet (3') above the BFE or to the height of the 500-year flood, whichever is higher
 - Access to and from the critical facility should be protected to the height utilized above
 - Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters
 - Access routes elevated to or above the level of the BFE shall be provided to all critical facilities to the extent possible
- **More details on these items can be found in FEMA's Technical Bulletins at www.FEMA.gov/nfip-technical-bulletins**

Site Plan Requirements and Example

A SITE PLAN IS AN ACCURATE AND DETAILED MAP OF YOUR PROPERTY:

It shows the size, shape, location and special features of your property; and the size location of any buildings or other improvements to the property. Site plans show what currently exists on your property, and any changes or improvements you are proposing to make.

A SITE PLAN MUST CONTAIN THE FOLLOWING INFORMATION:

1. Legal description of the parcel, north arrow and scale
2. All property lines and their dimensions
3. Names of adjacent roads, location of driveways
4. Location of sloughs, rivers, lakes with setbacks indicated.
5. Location, size, shape of all buildings, existing and proposed, with elevation of lowest floor indicated.
For structures proposed in the floodplain, crawlspace grade is considered a "floor elevation"
6. Location and dimensions of existing or proposed on-site sewage systems.
7. Location of all propane tanks, fuel tanks or other liquid storage tanks.
8. Dimensions and depth of any fill on site.
9. A survey showing the **existing ground elevations/natural adjacent grade (NAG)** at location of building site(s).
10. Location of Special Flood Hazard Area with Flood Zone designation.
11. Location of storage of materials with dimensions of area and fencing if applicable.
12. Show elevation contours.
13. Location of drainage facilities and drainage pathways.

ELEVATION NOTE: All vertical datum will reference either NGVD 29 or NAVD 88. Assumed datum will not be acceptable unless the property is located in an area where vertical datum has not been published. For those areas where vertical datum has not been established, a site plan with contours, elevations using assumed datum, high water marks and existing water levels of sloughs, rivers, lakes or streams and proposed lowest floor elevations is required.

