PLANNING COMMISSION REGULAR MEETING  
Tuesday January 10, 2023 AT 6:30 PM  
CORDOVA CENTER COMMUNITY ROOMS A & B

AGENDA

1. CALL TO ORDER
2. ROLL CALL
   Commissioners Tom McGann, Chris Bolin, Trae Lohse, Mark Hall, Sarah Trumblee, Tania Harrison, and Kris Ranney
3. APPROVAL OF AGENDA
4. APPROVAL OF CONSENT CALENDAR  
   a. Record unexcused absence for Chris Bolin from the December 13, 2022 Regular meeting  
   b. Minutes of October 11, 2022 Public Hearing  
   c. Minutes of November 8, 2022 Regular Meeting
5. DISCLOSURES OF CONFLICTS OF INTEREST AND EX PARTE COMMUNICATIONS
6. CORRESPONDENCE
7. COMMUNICATIONS BY AND PETITIONS FROM VISITORS  
   a. Guest Speakers  
   b. Audience comments regarding agenda items (3 minutes per speaker)
8. PLANNER’S REPORT
9. UNFINISHED BUSINESS  
10. NEW BUSINESS  
    a. Chair Election
    b. Vice Chair Election
11. AUDIENCE COMMENTS
12. COMMISSION COMMENTS
13. ADJOURNMENT

You may submit written public comments via email to planning@cityofcordova.net, mail comments to City of Cordova, PO Box 1210, Cordova, AK 99574, or delivered to City Hall directly. Written public comments must be received by 4:00 p.m. on the day of the meeting.
1. CALL TO ORDER

Vice Chair Mark Hall called the Planning Commission Regular Meeting to order at 6:30 PM on October 11, 2022 in Cordova Center Community Rooms A & B.

2. ROLL CALL

Present for roll call were Commissioners Mark Hall, Tom McGann, Chris Bolin, Tania Harrison, and Trae Lohse

Nancy Bird, and Sarah Trumblee were absent.

Staff present was City Planner Kevin Johnson.

3. APPROVAL OF AGENDA

M/McGann S/Bolin to approve the agenda.
Upon voice vote, motion passed 5-0.
Yea: Hall, McGann, Bolin, Harrison, Lohse
Absent: Bird, Trumblee

4. APPROVAL OF CONSENT CALENDAR

a. Record excused absence for Tania Harrison & Trae Lohse from the August 18, 2022 Regular meeting
b. Record unexcused absence for Nancy Bird from the August 18, 2022 Regular meeting

M/Bolin S/Harrison to approve the agenda.
Upon voice vote, motion passed 5-0.
Yea: Hall, McGann, Bolin, Harrison, Lohse
Absent: Bird, Trumblee

5. DISCLOSURES OF CONFLICTS OF INTEREST AND EX PARTE COMMUNICATIONS

None

6. CORRESPONDENCE

Johnson told the commission that nothing had been received.

7. COMMUNICATIONS BY AND PETITIONS FROM VISITORS

a. Guest Speakers - None
b. Audience comments regarding agenda items - None

8. PLANNER’S REPORT

Johnson summarized the items found in his report under agenda item 8.

9. UNFINISHED BUSINESS

There was no unfinished business

10. NEW BUSINESS

a. Resolution 22-05 – 2023 Capital Improvement Projects List

M/McGann  S/Lohse Move to approve Resolution 22-05

McGann said that the description of item number 5 “Parking and Walkway Upgrades for North Harbor” should be expanded upon to better match the Port Infrastructure Development Grant proposal the city submitted in 2022 as it included more upgrades than just pedestrian and parking changes.

M/McGann  S/Bolin to amend the main motion to include updating item number 5 so that its description more closely match the project description for the city’s 2022 PIDP grant application. 

Upon voice vote, amendment to the main motion passed 5-0.

Yea: Hall, McGann, Bolin, Harrison, Lohse

Absent: Bird, Trumblee

Hall called for the vote on the main motion as amended

Upon voice vote, motion as amended passed 5-0.

Yea: Hall, McGann, Bolin, Harrison, Lohse

Absent: Bird, Trumblee

b. Housing – Residential Zoning, ADU, Density, Infill Development

Johnson began by explaining that he wanted to use this time to gauge the commissions feelings towards different zoning topics to determine which avenues to pursue first as staff and the commission begin down the road to updating the zoning code. He asked the commission to take this time to discuss the different topics in the memo such as outright allowing ADUs, decreasing parking requirements to allow for more lot space to be utilized for buildings, reducing minimum lot size and more.

Lohse commented that he thought that smaller lot sizes could be appropriate in some areas of town. He also said that he was supportive of making ADU development easier.

McGann said that the minimum lot size should be reduced as most lots are already on the smaller size within the original townsite area. He also commented that he was not sure that removing parking requirements would be beneficial.

Harrison that she was interested in looking into smaller lot sizes, townhome developments, and just an overall increase in densities allowed.

Bolin said that he was mostly in agreement with all of the other commissioners’ comments.
11. AUDIENCE PARTICIPATION

No Comments

12. COMMISSION COMMENTS

No Comments

13. ADJOURNMENT

M/McGann S/Harrison to adjourn the Regular Meeting. With no objection, the meeting was adjourned.

Approved:

____________________________
Nancy Bird, Chair

____________________________
Kevin Johnson, City Planner
1. **CALL TO ORDER**

With Chair *Nancy Bird* calling into the meeting, for ease of running the meeting, Vice Chair *Mark Hall* called the Planning Commission Regular Meeting to order at 6:30 PM on November 8, 2022 in Cordova Center Community Rooms A & B.

2. **ROLL CALL**

Present for roll call were Commissioners *Nancy Bird, Mark Hall, Tom McGann, Tania Harrison, Sarah Trumblee, and Trae Lohse*

*Chris Bolin* and *Tania Harrison* were absent.

Staff present was City Planner *Kevin Johnson*.

3. **APPROVAL OF AGENDA**

*M/Trumblee S/Bird* to approve the agenda.

Upon voice vote, motion passed 5-0.

Yea: *Bird, Hall, McGann, Trumblee, Lohse*

Absent: *Bolin, Harrison*

4. **APPROVAL OF CONSENT CALENDAR**

a. Record excused absence for Nancy Bird from the October 11, 2022 Regular meeting

b. Record unexcused absence for Sarah Trumblee from the October 11, 2022 Regular meeting

c. Minutes of August 18, 2022 Public Hearing

d. Minutes of August 18, 2022 Regular Meeting

*M/Trumblee S/McGann* to approve the agenda.

Upon voice vote, motion passed 5-0.

Yea: *Bird, Hall, McGann, Trumblee, Lohse*

Absent: *Bolin, Harrison*

5. **DISCLOSURES OF CONFLICTS OF INTEREST AND EX PARTE COMMUNICATIONS**

None

6. **CORRESPONDENCE**

*Johnson* told the commission that nothing had been received.

7. **COMMUNICATIONS BY AND PETITIONS FROM VISITORS**
a. Guest Speakers - None  
b. Audience comments regarding agenda items - None

8. PLANNER’S REPORT

Johnson summarized the items found in his report under agenda item 8.

9. UNFINISHED BUSINESS

There was no unfinished business

10. NEW BUSINESS

a. Plat Approval for Plat of Tract D ATS 220

M/McGann S/Lohse Move to approve the Plat of Tract D ATS 220

McGann said that everything had been talked over at the land disposal meeting and that this plat looks to be in line with what was discussed then.

Hall said that he did have a couple small items to be added to the plat for clarity. He said that the west boundary of the Copper River Highway should be extended down to the bottom of the page, a label for the highway should be added, and that the AKDOT standard note regarding driveway connections should be added.

M/Hall S/McGann to amend the main motion to require the plat be modified to add a label for the Copper river highway, the west boundary line of the highway be extended further south, and that the AKDOT driveway note be added before recording.

Upon voice vote, amendment to the main motion passed 5-0.

Yea: Bird, Hall, McGann, Trumblee, Lohse
Absent: Bolin, Harrison

Hall called for the vote on the main motion as amended

Upon voice vote, motion as amended passed 5-0.

Yea: Bird, Hall, McGann, Trumblee, Lohse
Absent: Bolin, Harrison

11. AUDIENCE PARTICIPATION

No Comments

12. COMMISSION COMMENTS

Bird said that she had not decided on if she would be reapplying for the Planning Commission and that if she does, she would not be able to be Chair next year if she does reapply.

McGann thanked Bird for all of her work that she has done on the episcopal church

13. ADJOURNMENT
M/McGann S/Trumblee to adjourn the Regular Meeting.
With no objection, the meeting was adjourned.

Approved:

____________________________
Nancy Bird, Chair

____________________________
Kevin Johnson, City Planner
Staff is assisting with the preliminary design work for the Second Street STIP grant which was awarded in April of 2020. This grant is for the construction of sidewalks along both sides of Second, from Copper River Highway to Adams Ave along with curb and gutters for stormwater improvements, along with other upgrades. The STIP grant administered by the State DOT. This means that they act as the project manager and the city only needs works alongside them to ensure the design matches our needs. Once the preliminary design is firmed up it will be provided to the Commission for your comments.

Commissioner McGann has requested that an item be placed on the next meeting’s agenda to discuss the Public Safety Building. Staff will prepare information about the current plans and drawings, costs estimates, tsunami inundation levels and more.

The Cordova Trails Covered Spaces Project is pursuing an ATAPS grant to construct a covered space at the trailhead of the Breakwater Trail to compliment the south harbor rebuild. They are working on their initial plans and will be coming to the Planning Commission and City Council to request a resolution of support to include in their grant application. Myself, and Duncan Chisholm the Parks Director, have meet with the group to discuss their initial idea. Initially this looks like something that their group would organize the funding and construction of, and then would transfer it to the city / Parks Department for ownership and maintenance. More information to come at the February meeting.
AGENDA ITEM # 9a  
Planning Commission Meeting Date: 1/10/2023

PLANNING COMMISSION COMMUNICATION FORM

FROM:   Kevin Johnson, City Planner
DATE:   1/10/23
ITEM:   Resolution 23-1 CMC 19.04 – Flood Protection Code Update
NEXT STEP:  Make a Recommendation to City Council on the Proposed Code Update

_____ INFORMATION
_____ MOTION
__X__ RESOLUTION

I.  REQUEST OR ISSUE:
FEMA is requiring updates to the city’s floodplain protection code to remain in compliance with the requirements of FEMA’s Flood Insurance Program standards. Commission should review the attached draft ordinance and vote on a resolution making a recommendation to the City Council on the proposed updates.

II.  RECOMMENDED ACTION / NEXT STEP:
Recommended Motion: “I move to approve Resolution 23-01 recommending to the City Council to repeal and replace Cordova municipal code chapter 19.04 “Flood Protection” with chapter 19.04 “Floodplain Management” in order to maintain compliance with National Flood Insurance Program Standards”

III.  FISCAL IMPACTS:
This update should have minimal fiscal impact in terms of staff and city resources. Staying in compliance with the Flood Insurance Program is a fiscal benefit to the city as it keeps us in good standing with FEMA to
receive disaster relief funds if necessary, after a disaster.

IV. **BACKGROUND INFORMATION:**

In 2015 the city adopted codes regulating FEMA identified floodplains. The adoption of these codes served two main purposes, first to protect life and property and the second was to make our community eligible for flood insurance and disaster relief.

In the summer of 2022, a FEMA representative visited for a compliance check. During this check it was determined that some items within our code require updating. These updates are required for our city to remain in compliance with FEMA’s flood insurance program. Other changes were suggested but not required. After reviewing the suggested changes, staff suggests adopting those as well as they help provide clarity to our floodplain permitting process and consistency when working on floodplain permitting with FEMA.

Attached is a FEMA review table showing the specific required and suggested changes. These changes are reflected in the draft ordinance also attached.

V. **LEGAL ISSUES:**

Legal has reviewed the draft ordinance and made minor adjustments regarding the appeal process so that it aligns with our current process for zoning appeals.

VI. **CONFLICTS OR ENVIRONMENTAL ISSUES:**

The updates to this code do not change the status of any legally constructed structures within the established floodplain.

VII. **ATTACHMENTS:**

A. Resolution 23-1
B. Draft Ordinance
C. Existing Code
D. FEMA Review Sheet
A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CORDOVA, ALASKA, RECOMMENDING TO THE CITY COUNCIL OF THE CITY OF CORDOVA, ALASKA TO REPEAL AND REPLACE CORDOVA MUNICIPAL CODE CHAPTER 19.04 “FLOOD PROTECTION” WITH CHAPTER 19.04 “FLOODPLAIN MANAGEMENT” IN ORDER TO MAINTAIN COMPLIANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM STANDARDS.

WHEREAS, the National Flood Insurance Act of 1968, as amended (“NFIA”) authorizes the Federal Emergency Management Agency (“FEMA”) to establish and carry out the National Flood Insurance Program (“NFIP”) to provide flood insurance against losses resulting from physical damage or loss of property to eligible persons; and

WHEREAS, under the NFIA, FEMA may only grant flood insurance to properties within communities that have adopted and enforce adequate land use and control measures that regulate floodplains as established by FEMA regulations located at 44 CFR 60.3, 60.4, and 60.5; and

WHEREAS, FEMA Floodplain Specialist for FEMA Region 10, in which Cordova is located, has reviewed Cordova’s Code and provided the City Planner required changes to Chapter 19.04 to maintain NFIA compliance and NFIP eligibility; and

WHEREAS, the Planning Commission has reviewed the proposed Chapter 19.04 amendments required by the NFIA regulations; and

WHEREAS, the Planning Commission has determined it is in the City’s best interest to make the necessary amendments to maintain compliance with NFIA requirements in order to maintain its eligibility for the NFIP to protect the community from losses related to significant flooding events; and

WHEREAS, the Planning Commission recommends to City Council that it pass and approve the repeal and replacement of Chapter 19.04.

NOW, THEREFORE BE IT RESOLVED THAT the Planning Commission of the City of Cordova, Alaska hereby recommends to the City Council of the City of Cordova, Alaska to repeal and replace Chapter 19.04 of the Cordova Municipal Code.

PASSED AND APPROVED THIS 10TH DAY OF January, 2023

______________________________
XXX, Chair

ATTEST:

______________________________
Kevin Johnson, City Planner
CITY OF CORDOVA, ALASKA

ORDINANCE ____

AN ORDINANCE OF THE COUNCIL OF THE CITY OF CORDOVA, ALASKA,
REPEALING CORDOVA MUNICIPAL CODE CHAPTER 19.04 “FLOOD
PROTECTION” AND ENACTING CHAPTER 19.04 “FLOODPLAIN MANAGEMENT”
TO ADOPT NATIONAL FLOOD INSURANCE ACT LAND USE CRITERIA SET
FORTH IN FEDERAL REGULATION AS REQUIREMENTS FOR NATIONAL FLOOD
INSURANCE PROGRAM ELIGIBILITY AND AMENDING CMC 1.28.05 TO UPDATE
THE FINE SCHEDULE TO REFLECT CHANGES TO CHAPTER 19.04.

WHEREAS, the National Flood Insurance Act of 1968, as amended (“NFIA”) authorizes
the Federal Emergency Management Agency (“FEMA”) to establish and carry out the National
Flood Insurance Program (“NFIP”) to provide flood insurance against losses resulting from
physical damage or loss of property to eligible persons; and

WHEREAS, under the NFIA, FEMA may only grant flood insurance to properties within
communities that have adopted and enforce adequate land use and control measures that regulate
floodplains as established by FEMA regulations located at 44 CFR 60.3, 60.4, and 60.5; and

WHEREAS, the City Council of the City of Cordova has determined that participation in
the NFIP is necessary to provide residents the opportunity to apply for insurance through the
Program; and

WHEREAS, FEMA Floodplain Specialist for FEMA Region 10, in which Cordova is
located, has reviewed Cordova’s Code and provided the City Planner required changes to Chapter
19.04 to maintain NFIA compliance and NFIP eligibility; and

WHEREAS, it has been determined that is in the best interests of the City to adopt the
definitions and requirements of the NFIA and to incorporate those changes into Chapter 19.04 of
the Cordova Municipal Code to maintain compliance with the NFIA and NFIP eligible status.

NOW, THEREFORE, BE IT ORDAINED by the Council of the City of Cordova, that:

Section 1. Cordova Municipal Code 1.28.085(C), “Minor offense fine schedule”, is amended to
read as follows:

C. The following violations of this code are amenable to disposition without court
appearance upon payment of a fine in the amount listed below:

…

Environment
Failure to comply with the requirements of this Chapter  

500.00

Section 2. Chapter 19.04 of the Cordova Municipal Code, “Flood Protection”, is repealed and reenacted as Chapter 19.04 “Floodplain Management”, to read as follows:

Chapter 19.04 – FLOODPLAIN MANAGEMENT

19.04.010 Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

"Alteration of watercourse” means any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

"Appeal" means a request for a review of the City Manager’s interpretation of any provisions of this chapter.

"Area of shallow flooding" means a designated Zone AO, AH, AR/AO or AR/AH (or VO) on a community’s Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"Area of special flood hazard" means the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as Zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). “Special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

"Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year.

"Base flood elevation (BFE)" means the elevation to which floodwater is anticipated to rise during the base flood.

"Basement" means any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.

“Building” see “Structure”.

"Development" means any manmade change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.
"Existing manufactured (mobile) home park or manufactured (mobile) home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured (mobile) home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured (mobile) home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of the ordinance codified in this chapter.

"Expansion to an existing manufactured (mobile) home park or manufactured (mobile) home subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured (mobile) homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

"Flood" or "flooding" means (a) A general and temporary condition of partial or complete inundation of normally dry land areas from:

1. The overflow of inland or tidal waters; and/or
2. The unusual and rapid accumulation of runoff of surface waters from any source.
3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a)(1) of this definition.

“Flood elevation study” means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards.

"Flood insurance rate map (FIRM)” means the official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

"Flood insurance study (FIS)" see “Flood elevation study”.

“Floodplain or flood-prone area” means any land area susceptible to being inundated by water from any source. See "Flood or flooding."
“Floodplain administrator” is the title assigned in federal regulation for the city official who is designated to administer and enforce the floodplain management regulations. The City has designated the City Manager as floodplain administrator, and refers to the City Manager by title throughout this chapter.

“Floodplain management” means the operation of an overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

“Floodplain management regulations” means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

"Flood proofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities, structures, and their contents.

"Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height. Also referred to as “Regulatory Floodway.”

“Functionally dependent use” means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

"Habitable floor" means any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A flood used only for storage purposes is not a "habitable floor."

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

“Historic structure” means any structure that is:

1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or

4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

   a. By an approved state program as determined by the Secretary of the Interior; or

   b. Directly by the Secretary of the Interior in states without approved programs.

"Letter of map amendment (LOMA)" means an amendment to the currently effective FEMA map which establishes that a property is not located in a special flood hazard area. A LOMA is issued only by FEMA.

"Letter of map revision (LOMR)" means an official amendment to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

"Lowest floor" means the lowest floor of the lowest enclosed area (including “Basement”). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of any other requirements.

"Manufactured (mobile) home" means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

“Manufactured Home Park or Subdivision” means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

“Mean sea level” means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

"Modular building" means a building that is usually transported to its site on a steel frame or special trailer because it does not have a permanent chassis like a manufactured (mobile) home.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

"New manufactured (mobile) home park or manufactured (mobile) home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured (mobile) home lots for rent or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and
the construction of streets) is completed on or after the effective date of the ordinance codified in this chapter.

"One-hundred-year flood" means a flood of a magnitude which can be expected to occur on the average of once every one hundred years. It is possible for this size flood to occur during any year. The odds are one to a hundred that this size flood will occur during a given year, but there is a one percent chance that a flood will occur each year. Also known as the "one percent flood", and the NFIP "base flood."

"Recreational vehicle" means a vehicle which is:

1. Built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light-duty truck; and
4. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

"Special flood hazard area (SFHA)" see “Area of special flood hazard”.

"Start of construction" means the first placement of permanent construction of a structure (other than a manufactured (mobile) home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation. Permanent construction does not include preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For manufactured (mobile) homes not within a manufactured (mobile) home park or manufactured (mobile) home subdivision, "start of construction" means the affixing of the manufactured (mobile) home to its permanent site. For manufactured (mobile) homes within manufactured (mobile) home parks or manufactured (mobile) home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the manufactured (mobile) home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

"Structure" means a walled and roofed building, and includes mobile homes, manufactured homes, and gas and liquid storage tanks or containers that are principally above ground.

"Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent of the market value of the structure before the damage occurred. All structures that are determined to be
substantially damaged are automatically considered to be substantial improvements, regardless of
the actual repair work performed. If the cost necessary to fully repair the structure to its before
damage condition is equal to or greater than fifty percent of the structure's market value before
damages, then the structure must be elevated (or floodproofed if it is non-residential) to or above
the base flood elevation (BFE), and meet other applicable NFIP requirements.

"Substantial improvement" means any reconstruction, rehabilitation, addition or other
improvement of a building, the cost of which equals or exceeds fifty percent of the market value
of the building before the "start of construction" of the improvement. Substantial improvement
includes buildings that have incurred "substantial damage," regardless of the actual repair work
performed. The term does not, however, include either any project for improvement of a building
to correct existing state or local code violations or any alteration to a "historic building," provided
that the alteration will not preclude the building's continued designation as a "historic building."

"Variance" means a grant of relief by a participating community from the terms of its floodplain
management regulations.

“Violation” means the failure of a structure or other development to be fully compliant with the
community’s floodplain management regulations. A structure or other development without the
elevation certificate, other certifications, or other evidence of compliance required in this chapter
is presumed to be in violation until such time as that documentation is provided.

19.04.020 Statutory authority.

These regulations are adopted by the City Council pursuant to authority vested in that body
by the Charter of the City and by AS 29.35.010 and AS 29.35.260 as amended.

19.04.030 Findings of fact.

A. The flood hazard areas of the City are subject to periodic inundation which may
result in loss of life and property, health and safety hazards, disruption of commerce
and governmental services, extraordinary public expenditures for flood protection
and relief, and impairment of the tax base, all of which adversely affect the public
health, safety and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in areas of
special flood hazards which increase flood heights and velocities, and when
inadequately anchored, damage uses in other areas. Uses that are inadequately flood
proofed, elevated or otherwise protected from flood damage also contribute to the
flood loss.

19.04.040 Purpose.
It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

A. To protect human life and health;
B. To minimize expenditure of public money and costly flood control projects;
C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
D. To minimize prolonged business interruptions;
E. To minimize damage to public facilities and utilities such as water mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their action.
I. To participate in and maintain eligibility for national flood insurance and disaster relief.

19.04.050 Reduction of flood losses.

In order to accomplish its purposes, this chapter includes methods and provisions for:

A. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
C. Controlling the alteration of natural flood plains, stream channels and natural protective barriers, which help accommodate or channel flood waters;
D. Controlling filling, grading, dredging and other development which may increase flood damage; and
E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

19.04.060 Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

A. Considered as minimum requirements;
B. Liberally construed in favor of the governing body; and
C. Deemed neither to limit nor repeal any other powers granted under state statutes.

19.04.070 Applicability.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the City.

19.04.080 Compliance required.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations.

19.04.090 Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Cordova," dated December 16, 2015, with accompanying flood insurance maps is adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at City Hall.

19.04.100 Development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 19.04.090. The permit shall be for all structures including manufactured (mobile) homes, as set forth in Section 19.04.010, and for all other development including fill and other activities also as set forth in Section 19.04.010. Application for a development permit shall be made on forms furnished by the City and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

A. Elevation in relation to the FIS and FIRM, of the lowest floor (including basement) of all structures;
B. Elevation in relation to the FIS and FIRM to which any structure has been flood proofed;

C. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section 19.04.260; and

D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

19.04.110 City Manager—Administration.

The City Manager is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

19.04.120 City Manager—Duties generally.

Duties of the City Manager shall include, but not be limited to, those set forth in Sections 19.04.130 through 19.04.170.

19.04.130 City Manager—Permit review.

The City Manager shall:

A. Review all development permits to determine that the permit requirements of this chapter have been satisfied;

B. Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

19.04.140 City Manager—Use of other base flood data.

When base flood elevation data has not been provided in accordance with Section 19.04.090, the City Manager shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer Sections 19.04.250 and 19.04.260.

19.04.150 City Manager—Further information to be obtained.

The City Manager shall:

A. Obtain and record the actual elevation (in relation to the FIS and FIRM) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;
B. For all new or substantially improved flood-proofed structures:
   1. Verify and record the actual elevation (in relation to the FIS and FIRM), and
   2. Maintain the flood proofing certifications required in Section 19.04.100.C;

C. Obtain and maintain the following for public inspection and make available as needed:
   1. Certification required by Section 19.04.250 and Section 19.04.270 (lowest floor elevations for all structures, bottom of the lowest horizontal structural member (if applicable), and service facilities/mechanical equipment);
   2. Certification required by Section 19.04.260 (lowest floor elevations or floodproofing of non-residential structures and service facilities/mechanical equipment);
   3. Certification required by Section 19.04.277;
   4. Certification required by Section 19.04.276;
   5. Records of all variance actions, including justification for their issuance;
   6. Improvement and damage calculations.

19.04.160 City Manager—Alteration of watercourse.

The City Manager shall:

A. Notify adjacent communities and the State Department of Community and Regional Affairs prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

B. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

C. Notify the Federal Insurance Administrator in writing of acquisition by means of annexation, incorporation or otherwise, of additional areas of jurisdiction.

19.04.170 City Manager—Interpretation of FIRM boundaries.

The City Manager shall make interpretations where needed, as to exact location of the boundaries of the areas of special hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the
boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 19.04.280.

19.04.180 Standards and specifications—Generally.

In all areas of special flood hazards the standards set forth in Sections 19.04.190 through 19.04.230 are required.

19.04.190 Subdivision proposals.

A. All subdivision proposals shall be consistent with the need to minimize flood damage.

B. All subdivision proposals shall have public utilities and facilities such as sewer, electrical, and water systems located and constructed to minimize flood damage.

C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

D. Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty lots or five acres, whichever is less.


Where elevation data is not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high—water marks, photographs of past flooding, etc., where available.

19.04.210 Anchoring.

A. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

B. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:

1. Over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than fifty feet long requiring one additional tie per side;

2. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobile homes less than fifty feet long requiring four additional ties per side;
3. All components of the anchoring system be capable of carrying a force of four thousand eight hundred pounds; and,

4. Any additions to the mobile home be similarly anchored.

C. An alternative method of anchoring may involve a system designed to withstand a wind force of ninety miles per hour or greater. Certification must be provided to the City Manager that this standard has been met.

19.04.220 Construction materials and methods.

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

19.04.230 Utilities.

A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding.

19.04.240 Standards and specifications—Areas of special flood hazard.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 19.04.090 or Section 19.04.140, the provisions set forth in Sections 19.04.250 through 19.04.270 are required.

19.04.250 Residential construction.

A. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.
B. A garage attached to a residential structure, constructed with the garage floor slab below the Base Flood Elevation, must be designed to allow for the automatic entry and exit of flood waters.

19.04.260 Nonresidential construction.

New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

A. Be flood proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

B. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

C. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in Section 19.04.150B.

19.04.265 – Accessory structure construction (detached garages & storage structures).

Accessory structures, both residential and nonresidential, used solely for parking of vehicles or storage may be constructed such that the floor is below the Base Flood Elevation, provided the structure is designed and constructed in accordance with the following requirements based on the floodplain zone;

   1. Use of the accessory structure must be limited to parking of vehicles or storage;
   2. The portions of the accessory structure located below the Base Flood Elevation must be built using flood resistant materials;
   3. The accessory structure must be adequately anchored to prevent flotation, collapse and lateral movement;
   4. Any machinery or equipment servicing the accessory structure must be elevated or floodproofed to or above the Base Flood Elevation;
   5. The accessory structure must comply with floodway encroachment provisions in Section 19.04.276 and
   6. The accessory structure must be designed to allow for the automatic entry and exit of flood waters in accordance with Section 19.04.277.
Detached garages, storage structures and other accessory structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 19.04.250(A), (B), or (C) as appropriate.

Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the City Manager for verification.

19.04.266 – Standards for storage of materials and equipment.

A. The storage or processing of materials that could be injurious to human, animal or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

B. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

19.04.270 Manufactured (mobile) homes.

A. Manufactured (mobile) homes shall be anchored in accordance with Section 19.04.210.

B. For new manufactured (mobile) home parks and manufactured (mobile) home subdivisions; for expansions to existing manufactured (mobile) home parks and manufactured (mobile) home subdivisions; for existing manufactured (mobile) home parks and manufactured (mobile) home subdivisions where the repair reconstruction or improvement of the streets, utilities and pads equal or exceeds fifty percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for manufactured (mobile) homes not placed in a manufactured (mobile) home park or manufactured (mobile) home subdivision, require that:

1. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the manufactured (mobile) home and the bottom of the I-beam will be at or above the base flood level;

2. Adequate surface drainage and access for a hauler are provided; and,

3. In the instance of elevation on pilings, that:

   a. Lots are large enough to permit steps;

   b. Piling foundations are placed in stable soil no more than ten feet apart; and
c. Reinforcement is provided for pilings more than six feet above the ground level.

C. No manufactured (mobile) home shall be placed in a floodway, except in an existing manufactured (mobile) home park or existing mobile home subdivision.


In A1-30, AH, and AE zones, all recreational vehicles to be placed on a site must:

A. Be elevated and anchored; or

B. Be on the site for less than one hundred eighty consecutive days; and

C. Be fully licensed and highway ready.

D. Meet the permit requirements of Section 19.04.100 and the applicable elevation and anchoring requirements for manufactured homes in Section 19.04.270.

19.04.276 – Floodways.

Located within the special flood hazard areas established in Section 19.04.090 are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

A. Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;

B. If Section 19.04.276 is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Section 19.04.240.

C. Encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations may be permitted, provided that City of Cordova first applies for and fulfills the requirements for a Conditional Letter of Map Revision (CLOMR), and receives approval from the Federal Insurance Administrator to revise the FIRM and FIS in accordance with Section 19.04.160.

All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for meeting this requirement must meet or exceed the following criteria:

For non-engineered openings:

A. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

B. The bottom of all openings shall be no higher than one foot above grade;

C. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

Alternatively, a registered engineer or architect may design and certify engineered openings.

Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the City Manager for verification.

19.04.280 – Appeals.

A. The planning commission as established by the City shall hear and decide appeals and requests for variances from the requirements of this chapter.

B. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the City Manager in the enforcement or administration of this chapter.

C. Further appeal of any action or decision of the planning commission may be taken by any person or party aggrieved pursuant to the procedures set forth in Section 18.64.030.


The variance criteria set forth in this section are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants or the property owners.
It is the duty of the City to help protect its citizens from flooding through enforcement of this chapter. This need is so compelling and the implications of the cost of insuring a structure built below the Base Flood Elevation are so serious that variances from the flood elevation or from other requirements of this chapter are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this chapter are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

19.04.282 – Variance applications.

An application for a variance under this chapter shall be submitted, considered, and decided in accordance with the procedures set forth in Section 18.64.020.

19.04.283 – Conditions for variances.

A. Variances shall only be issued:

1. Upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing code;

2. For the repair, rehabilitation or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure;

3. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;

4. Upon a showing of good and sufficient cause;

5. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;

6. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 19.04.010 in the definition of “Functionally Dependent Use.”

B. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
C. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the Base Flood Elevation, provided the procedures of Sections 19.04.180 have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.


A. In considering variance applications under this chapter, the Planning Commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

1. The danger that materials may be swept onto other lands to the injury of others;

2. The danger of life and property due to flooding or erosion damage;

3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;

4. The importance of the services provided by the proposed facility to the community;

5. The necessity to the facility of a waterfront location, where applicable;

6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;

7. The compatibility of the proposed use with existing and anticipated development;

8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

9. The safety of access to the property in time of flood for ordinary and emergency vehicles;

10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,

11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water system and streets and bridges.
B. Any applicant to whom a variance is granted shall be given written notice over the signature of the City Planner that:

1. The issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, and

2. Such construction below the base flood elevation increases risks to life and property.

C. The City Manager shall maintain a record of all variance actions, including justification for their issuance.

19.04.290 - (Reserved).


Violation of the provisions of this Chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall be subject to abatement as outlined in Section 8.08.030. Each day a violation occurs is a separate violation. The minimum penalty for a single violation of this chapter is specified in Chapter 1.28 of this Code. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to prevent or remedy any violation.

19.04.300 Conflict of provisions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions; however, where this chapter and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

19.04.310 Liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

Section 3. This ordinance shall be effective thirty (30) days after its passage and publication. This ordinance shall be enacted in accordance with Section 2.13 of the Charter of the City of Cordova, Alaska, within ten (10) days after its passage.
1st reading: January 18, 2023
2nd reading and public hearing: 

PASSED AND APPROVED THIS _____ DAY OF __________________, 2023.

__________________________________________
David Allison, Mayor

ATTEST:

__________________________________________
Susan Bourgeois, CMC, City Clerk
Chapter 19.04 - FLOOD PROTECTION

19.04.010 - Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

A. "Appeal" means a request for a review of the city manager's interpretation of any provisions of this chapter or a request for a variance.

B. "Area of shallow flooding" means a designated AO or AH zone on the flood insurance rate map (FIRM). The base flood depths range from one to three feet; a clearly defined channel does not exist; the path of flooding is unpredictable and indeterminate; and, velocity flow may be evident.

C. "Area of special flood hazard" means for regulatory purposes, the areas designated as subject to the "one-hundred-year flood," "base flood," and "one percent flood" on the flood insurance rate maps issued by the National Flood Insurance Program (NFIP) and other flood hazard studies used by the city for similar purposes. Also known as "special flood hazard area."

D. "Base flood" means a flood that has a one percent chance of occurring in any given year as determined by NFIP guidelines. Also known as "one percent flood" and "one-hundred-year flood."

E. "Base flood elevation (BFE)" means the elevation of surface water resulting from a flood that has a one percent chance of occurring in any given year. The elevation of the base flood.

F. "Basement" means any area of the building, including any sunken room or sunken portion of a room, having its floor below ground level (subgrade) on all sides.

G. "Development" means any manmade change to improved or unimproved real estate, including, but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

H. "Existing manufactured (mobile) home park or manufactured (mobile) home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured (mobile) home lots for rent or sale for which the construction of facilities for servicing the lot on which the manufactured (mobile) home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of the ordinance codified in this chapter.

I. "Expansion to an existing manufactured (mobile) home park or manufactured (mobile) home subdivision" means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured (mobile) homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

J. "Flood" or "flooding" means a general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is the policyholder's property) from:

1. The overflow of inland or tidal waters; and/or
2. The unusual and rapid accumulation of runoff of surface waters from any source.

K. "Flood insurance rate map" (FIRM) means the official map on which the Federal Insurance Administration
has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

L. "Flood insurance study (FIS)" means the official report provided by the Federal Insurance Administration that includes flood profiles, the flood boundary-floodway map and the water surface elevation of the base flood.

M. "Floodproofing" means any combination of structural and nonstructural additions, changes, or adjustments to structures, which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitation facilities, or structures with their contents.

N. "Floodway" means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

O. "Freeboard" means an additional amount of height above the base flood elevation used as a factor of safety (e.g., two feet above the base flood) in determining the level at which a structure's lowest floor must be elevated or flood proofed to be in accordance with state or community floodplain management regulations.

P. "Habitable floor" means any floor usable for living purposes, which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used only for storage purposes is not a "habitable floor."

Q. "Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

R. "Historic building" means any building that is listed individually in the National Register of Historic places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; or certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary of the Interior to qualify as a registered historic district; or individually listed in a state inventory of historic places in states with preservation programs that have been approved by the Secretary of the Interior; or individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:

1. By an approved state program as determined by the Secretary of the Interior; or
2. Directly by the Secretary of the Interior in states without approved programs.

S. "Letter of map amendment (LOMA)" means an amendment to the currently effective FEMA map which establishes that a property is not located in a special flood hazard area. A LOMA is issued only by FEMA.

T. "Letter of map revision (LOMR)" means an official amendment to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.

U. "Lowest floor" means the lowest floor of the lowest enclosed area (including a basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building's lowest floor provided that such enclosure is not built so as to render the structure in violation of any other requirements.

V. "Manufactured (mobile) home" means a structure built on a permanent chassis, transported to its site in one or more section, and affixed to a permanent foundation. "Manufactured (mobile) home" does not
include recreational vehicles.

W. "Modular building" means a building that is usually transported to its site on a steel frame or special trailer because it does not have a permanent chassis like a manufactured (mobile) home.

X. "New construction" means structures for which the "start of construction" commenced on or after the effective date of the ordinance codified in this chapter.

Y. "New manufactured (mobile) home park or manufactured (mobile) home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured (mobile) home lots for rent or sale for which the construction of facilities for servicing the lot (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of the ordinance codified in this chapter.

Z. "One-hundred-year flood" means a flood of a magnitude which can be expected to occur on the average of once every one hundred years. It is possible for this size flood to occur during any year. The odds are one to a hundred that this size flood will occur during a given year, but there is a one percent chance that a flood will occur each year. Also known as the "one percent flood", and the NFIP "base flood."

AA. "Recreational vehicle" means a vehicular-type unit primarily designed as temporary living quarters for recreational, camping, or travel use, which either has its own motive power or is mounted on or drawn by another vehicle. Also known as camper, and travel trailer.

AB. "Special flood hazard area (SFHA)" means an area having special flood, mudflow, or flood-related erosion hazards, and shown on a flood hazard boundary map or a flood insurance rate map. Also the area subject to inundation by the "base flood", "one percent flood" and "one-hundred-year flood". Also known as "area of special flood hazard."

AC. "Start of construction" means the first placement of permanent construction of a structure (other than a manufactured (mobile) home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation. Permanent construction does not include preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For manufactured (mobile) homes not within a manufactured (mobile) home park or manufactured (mobile) home subdivision, "start of construction" means the affixing of the manufactured (mobile) home to its permanent site. For manufactured (mobile) homes within manufactured (mobile) home parks or manufactured (mobile) home subdivisions, "start of construction" is the date on which the construction of facilities for servicing the site on which the manufactured (mobile) home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

AD. "Structure" means a walled and roofed building, and includes mobile homes, manufactured homes, and gas and liquid storage tanks or containers that are principally above ground.

AE. "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed fifty percent of the market value of the structure before the damage occurred. All structures that are determined to be substantially
damaged are automatically considered to be substantial improvements, regardless of the actual repair work performed. If the cost necessary to fully repair the structure to its before damage condition is equal to or greater than fifty percent of the structure's market value before damages, then the structure must be elevated (or floodproofed if it is non-residential) to or above the base flood elevation (BFE), and meet other applicable NFIP requirements.

AF. "Substantial improvement" means any reconstruction, rehabilitation, addition or other improvement of a building, the cost of which equals or exceeds fifty percent of the market value of the building before the "start of construction" of the improvement. Substantial improvement includes buildings that have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either any project for improvement of a building to correct existing state or local code violations or any alteration to a "historic building," provided that the alteration will not preclude the building's continued designation as a "historic building."

AG. "Variance" means a grant of relief by a participating community from the terms of its floodplain management regulations.

(Ord. 507 (part), 1979: prior code § 15.400.2).

(Ord. No. 1136, § 1, 10-7-2015)

19.04.020 - Statutory authority.

The Legislature of the state has in Alaska Statute 29.33.070 delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry.

(Ord. 507 (part), 1979: prior code § 15.400.1.1).

19.04.030 - Findings of fact.

A. The flood hazard areas of the city are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

B. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

(Ord. 507 (part), 1979: prior code § 15.400.1.2).

19.04.040 - Purpose.

It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

A. To protect human life and health;

B. To minimize expenditure of public money and costly flood control projects;

C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at
the expense of the general public;
D. To minimize prolonged business interruptions;
E. To minimize damage to public facilities and utilities such as water mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their action.
(Ord. 507 (part), 1979: prior code § 15.400.1.3).

19.04.050 - Reduction of flood losses.

In order to accomplish its purposes, this chapter includes methods and provisions for:

A. Restricting or prohibiting uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
B. Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
C. Controlling the alteration of natural flood plains, stream channels and natural protective barriers, which help accommodate or channel flood waters;
D. Controlling filling, grading, dredging and other development which may increase flood damage; and
E. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.
(Ord. 507 (part), 1979: prior code § 15.400.1.4).

19.04.060 - Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

A. Considered as minimum requirements;
B. Liberally construed in favor of the governing body; and
C. Deemed neither to limit nor repeal any other powers granted under state statutes.
(Ord. 507 (part), 1979: prior code § 15.400.3.5).

19.04.070 - Applicability.

This chapter shall apply to all areas of special flood hazards within the jurisdiction of the city.
(Ord. 507 (part), 1979: prior code § 15.400.3.1).

19.04.080 - Compliance required.

No structure or land shall hereafter be constructed, located, extended, converted or altered without full compliance with the terms of this chapter and other applicable regulations.
19.04.090 - Basis for establishing the areas of special flood hazard.

The areas of special flood hazard identified by the Federal Insurance Administration in a scientific and engineering report entitled "The Flood Insurance Study for the City of Cordova," dated December 16, 2015, with accompanying flood insurance maps is adopted by reference and declared to be a part of this chapter. The flood insurance study is on file at city hall.

19.04.100 - Development permit.

A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 19.04.090. The permit shall be for all structures including manufactured (mobile) homes, as set forth in Section 19.04.010, and for all other development including fill and other activities also as set forth in Section 19.04.010. Application for a development permit shall be made on forms furnished by the city and may include, but not be limited to: plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Specifically, the following information is required:

A. Elevation in relation to the FIS and FIRM, of the lowest floor (including basement) of all structures;
B. Elevation in relation to the FIS and FIRM to which any structure has been flood proofed;
C. Certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet the flood proofing criteria in Section 19.04.260; and
D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

19.04.110 - City manager—Administration.

The city manager is appointed to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

19.04.120 - City manager—Duties generally.

Duties of the city manager shall include, but not be limited to, those set forth in Sections 19.04.130 through 19.04.170.
19.04.130 - City manager—Permit review.

The city manager shall:

A. Review all development permits to determine that the permit requirements of this chapter have been satisfied;

B. Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.

(Ord. 507 (part), 1979: prior code § 15.400.4.3—1).

19.04.140 - City manager—Use of other base flood data.

When base flood elevation data has not been provided in accordance with Section 19.04.090, the city manager shall obtain, review and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer Sections 19.04.250 and 19.04.260.

(Ord. 507 (part), 1979: prior code § 15.400.4.3—2).

19.04.150 - City manager—Further information to be obtained.

The city manager shall:

A. Obtain and record the actual elevation (in relation to the FIS and FIRM) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement;

B. For all new or substantially improved flood-proofed structures:
   1. Verify and record the actual elevation (in relation to the FIS and FIRM), and
   2. Maintain the flood proofing certifications required in Section 19.04.100.C;

C. Maintain for public inspection all records pertaining to the provisions of this chapter.

(Ord. 507 (part), 1979: prior code § 15.400.4.3—3).

(Ord. No. 1136, § 1, 10-7-2015)

19.04.160 - City manager—Alteration of watercourse.

The city manager shall:

A. Notify adjacent communities and the State Department of Community and Regional Affairs prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.

B. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

(Ord. 507 (part), 1979: prior code § 15.400.4.3—4).

19.04.170 - City manager—Interpretation of FIRM boundaries.
The city manager shall make interpretations where needed, as to exact location of the boundaries of the areas of special hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 19.04.280.

(Ord. 507 (part), 1979: prior code § 15.400.4.3—5).


In all areas of special flood hazards the standards set forth in Sections 19.04.190 through 19.04.230 are required.

(Ord. 507 (part), 1979: prior code § 15.400.5.1).

19.04.190 - Subdivision proposals.

A. All subdivision proposals shall be consistent with the need to minimize flood damage.

B. All subdivision proposals shall have public utilities and facilities such as sewer, electrical, and water systems located and constructed to minimize flood damage.

C. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.

D. Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty lots or five acres, whichever is less.

(Ord. 507 (part), 1979: prior code § 15.400.5.1-4).


Where elevation data is not available, applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high—water marks, photographs of past flooding, etc., where available.

(Ord. 507 (part), 1979: prior code § 15.400.5.1—5).

19.04.210 - Anchoring.

A. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.

B. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:

1. Over-the-top ties be provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, with mobile homes less than fifty feet long requiring one additional tie per side;

2. Frame ties be provided at each corner of the home with five additional ties per side at intermediate points, with mobile homes less than fifty feet long requiring four additional ties per side;

3. All components of the anchoring system be capable of carrying a force of four thousand eight hundred pounds; and,

4. Any additions to the mobile home be similarly anchored.
C. An alternative method of anchoring may involve a system designed to withstand a wind force of ninety miles per hour or greater. Certification must be provided to the city manager that this standard has been met.

(Ord. 507 (part), 1979: prior code § 15.400.5.1—1).

19.04.220 - Construction materials and methods.

A. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.

B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.

(Ord. 507 (part), 1979: prior code § 15.400.5.1—2).


A. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.

B. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.

C. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

D. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located to prevent water from entering or accumulating within the components during conditions of flooding.

(Ord. 507 (part), 1979: prior code § 15.400.5.1—3).

(Ord. No. 1136, § 1, 10-7-2015)

19.04.240 - Standards and specifications—Areas of special flood hazard.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Section 19.04.090 or Section 19.04.140, the provisions set forth in Sections 19.04.250 through 19.04.270 are required.

(Ord. 507 (part), 1979: prior code § 15.400.5.2).

19.04.250 - Residential construction.

New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.

(Ord. 507 (part), 1979: prior code § 15.400.5.2-1).


New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:
A. Be flood proofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;

B. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and

C. Be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the official as set forth in Section 19.04.150B.

(Ord. 507 (part), 1979: prior code § 15.400.5.2-2).

19.04.270 - Manufactured (mobile) homes.

A. Manufactured (mobile) homes shall be anchored in accordance with Section 19.04.210.

B. For new manufactured (mobile) home parks and manufactured (mobile) home subdivisions; for expansions to existing manufactured (mobile) home parks and manufactured (mobile) home subdivisions; for existing manufactured (mobile) home parks and manufactured (mobile) home subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equal or exceeds fifty percent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and for manufactured (mobile) homes not placed in a manufactured (mobile) home park or manufactured (mobile) home subdivision, require that:

1. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the manufactured (mobile) home and the bottom of the I-beam will be at or above the base flood level;

2. Adequate surface drainage and access for a hauler are provided; and,

3. In the instance of elevation on pilings, that:
   a. Lots are large enough to permit steps;
   b. Piling foundations are placed in stable soil no more than ten feet apart; and
   c. Reinforcement is provided for pilings more than six feet above the ground level.

C. No manufactured (mobile) home shall be placed in a floodway, except in an existing manufactured (mobile) home park or existing mobile home subdivision.

(Ord. 507 (part), 1979: prior code § 15.400.5.2-3).

(Ord. No. 1136, § 1, 10-7-2015)

Editor's note—Ord. No. 1136, § 1, adopted October 7, 2015, amended § 19.04.270, to read as set out herein. Previously § 19.04.270 was titled "Mobile homes."

19.04.275 - Recreational vehicles.

In A1-30, AH, and AE zones, all recreational vehicles to be placed on a site must:

A. Be elevated and anchored; or

B. Be on the site for less than one hundred eighty consecutive days; and

C. Be fully licensed and highway ready.

(Ord. No. 1136, § 1, 10-7-2015)
19.04.276 - Floodways.

Development in floodways shall not increase upstream flood elevations. For streams and other watercourses where FEMA has provided base flood elevations (BFEs), but no floodway has been designated, the community shall review floodplain development on a case-by-case basis to ensure that increases in water surface elevations do not occur and identify the need to designate a floodway if adequate information is available.

(Ord. No. 1136, § 1, 10-7-2015)

19.04.277 - Equalizing hydrostatic load.

For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are used solely for parking of vehicles, building access, or storage in an area other than a basement and which is subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing the entry and exit of floodwaters in accordance with the specifications in NFIP.

(Ord. No. 1136, § 1, 10-7-2015)

19.04.280 - Appeals.

A. The planning commission as established by the city shall hear and decide appeals and requests for variances from the requirements of this chapter.

B. The planning commission shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the city manager in the enforcement or administration of this chapter.

C. Those aggrieved by the decision of the planning commission, or any taxpayer, may appeal such decision to the Superior Court, as provided in AS 29.33.070.

D. In passing upon such applications, the planning commission shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger to life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in times of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site; and
11. The costs of providing governmental services during and after flood conditions, including maintenance and public utilities and facilities such as sewer, gas, electrical and water systems, and street and bridges.

E. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the items in subsection D of this section have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

F. Upon consideration of the factors in subsection D of this section and the purposes of this chapter, the planning commission may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

G. The city manager shall maintain the records of all appeal actions and report variances to the Federal Insurance Administration upon request.

(Ord. 507 (part), 1979: prior code § 15.400.4.4—1).

19.04.290 - Variances.

A. Variances may be issued for reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.

B. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

C. Variances shall only be issued upon determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

D. Variances shall only be issued upon:
   1. A showing of good and sufficient cause;
   2. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
   3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 19.04.280D, on conflict with existing local laws on ordinances.

E. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(Ord. 507 (part), 1979: prior code § 15.400.4.4-2).

19.04.300 - Conflict of provisions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants, or deed restrictions; however, where this chapter and another ordinance, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(Ord. 507 (part), 1979: prior code § 15.400.3.4).
19.04.310 - Liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man—made or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this chapter or any administrative decision law-fully made thereunder.

(Ord. 507 (part), 1979: prior code § 15.400.3.6).
Community & CID: Cordova, 020037
Ordinance # & Date: 19.04
Reviewer: Mitch Paine, FEMA Region 10
Review date: 5/27/2022

Criteria & Model Ordinance Reference

Section 1.0: Statutory Authorization, Findings of Fact, Purpose, and Objectives

<table>
<thead>
<tr>
<th>Federal Code Citations, Markups, and Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not mandatory to adopt section 1.0</td>
</tr>
</tbody>
</table>

1.1 Statutory Authorization
The State of Alaska has delegated the responsibility to local governmental units to adopt floodplain management regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the (Community Name), does ordain as follows:

19.04.020

1.2 Findings of Fact
A. The flood hazard areas of (Community Name) are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.

B. These flood losses may be caused by the cumulative effect of obstructions in areas of special flood hazards that increase flood heights and velocities, and when inadvertently anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated, or otherwise protected from flood damage also contribute to the flood loss.

19.04.030

1.3 Statement of Purpose
It is the purpose of this ordinance to promote public health, safety, and general welfare, and to minimize public and private losses due to flooding in flood hazard areas by provisions designed to:
1) Protect human life and health;
2) Minimize expenditure of public money for costly flood control projects;
3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4) Minimize prolonged business interruptions;
5) Minimize damage to public facilities and utilities, such as water and gas mains; electric, telephone and sewer lines; and streets and bridges located in flood hazard areas;
6) Help maintain a stable tax base by providing for the sound use and development of flood hazard areas so as to minimize blight areas caused by flooding;
7) Notify potential buyers that the property is in a special flood hazard area;
8) Notify those who occupy flood hazard areas that they assume responsibility for their actions; and
9) Participate in and maintain eligibility for flood insurance and disaster relief.

19.04.040, but would suggest including item 9) from the model ordinance

1.4 Methods of Reducing Flood Loss
In order to accomplish its purposes, this ordinance includes methods and provisions for:
1) Restricting or prohibiting development which is dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities,
2) Requiring that development vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel floodwaters;
4) Controlling filling, grading, dredging, and other development which may increase flood damage; and
5) Preventing or regulating the construction of flood barriers that unnaturally divert floodwaters or may increase flood hazards in other areas.

19.04.050

Section 2.0 – Definitions

- Alteration of watercourse: Any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

- Appeal: A request for a review of the interpretation of any provision of this ordinance or a request for a variance.

- Area of shallow flooding: A designated zone AO, AH, AR/AO or AR/AH (or VO) on a community’s Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow. Also referred to as the sheet flow area.

- Area of special flood hazard: The land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). “Special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

- Base flood: The flood having a 1% chance of being equaled or exceeded in any given year (also referred to as the “100-year flood”).

44 CFR 59.1 Not mandatory to adopt all definitions as shown. Asterisks denote a definition specifically in 44 CFR 59.1.

Yes

ASCE 24: The most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

Yes, but must change to match model ordinance

Yes, but would suggest including the reference to specific flood zone language
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
<th>Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Flood Elevation (BFE)</td>
<td>The elevation to which floodwater is anticipated to rise during the base flood.</td>
<td>Yes</td>
</tr>
<tr>
<td>Basement</td>
<td>Any area of the building having its floor sub-grade (below ground level) on all sides.</td>
<td>Yes</td>
</tr>
<tr>
<td>Breakaway wall</td>
<td>A wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces, without causing damage to the elevated portion of the building or supporting foundation system.</td>
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</tr>
<tr>
<td>Coastal High Hazard Area</td>
<td>An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as zone V1-30, VE or V.</td>
<td>Yes</td>
</tr>
<tr>
<td>Critical Facility</td>
<td>A facility for which even a slight chance of flooding might be too great. Critical facilities include (but are not limited to) schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste.</td>
<td>Yes</td>
</tr>
<tr>
<td>Development</td>
<td>Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials located within the area of special flood hazard.</td>
<td>Yes</td>
</tr>
<tr>
<td>Elevation Certificate</td>
<td>An administrative tool of the National Flood Insurance Program (NFIP) that can be used to provide elevation information, to determine the proper insurance premium rate, and to support a request for a Letter of Map Amendment (LOMA) or Letter of Map Revision based on fill (LOMR-F).</td>
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</tr>
<tr>
<td>Elevated Building</td>
<td>For insurance purposes, a non-basement building that has its lowest elevated floor raised above ground level by foundation walls, shear walls, post, piers, pilings, or columns.</td>
<td>Yes</td>
</tr>
<tr>
<td>Essential Facility</td>
<td>This term has the same meaning as “Essential Facility” defined in ASCE 24. Table 1-1 in ASCE 24-14 further identifies building occupancies that are essential facilities.</td>
<td>Yes</td>
</tr>
<tr>
<td>Existing Manufactured Home Park or Subdivision</td>
<td>A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the community.</td>
<td>Yes</td>
</tr>
<tr>
<td>Expansion to an Existing Manufactured Home Park or Subdivision</td>
<td>The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).</td>
<td>Yes</td>
</tr>
<tr>
<td>Flood or Flooding</td>
<td>1) A general and temporary condition of partial or complete inundation of normally dry land areas from: a) The overflow of inland or tidal waters. b) The unusual and rapid accumulation or runoff of surface waters from any source. c) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (1)(b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current. 2) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (1)(a) of this definition.</td>
<td>Yes</td>
</tr>
<tr>
<td>Flood elevation study</td>
<td>An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).</td>
<td>Yes, identified as FIS, but should change to match model ordinance</td>
</tr>
<tr>
<td>Flood Insurance Rate Map (FIRM)</td>
<td>The official map of a community, on which the Federal Insurance Administrator has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).</td>
<td>Yes</td>
</tr>
<tr>
<td>Flood Insurance Study (FIS)</td>
<td>See “Flood elevation study”.</td>
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</tr>
<tr>
<td>Floodplain or flood prone area</td>
<td>Any land area susceptible to being inundated by water from any source. See &quot;Flooding.&quot;</td>
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</tr>
<tr>
<td>Floodplain administrator</td>
<td>The community official designated by title to administer and enforce the floodplain management regulations.</td>
<td></td>
</tr>
<tr>
<td>Floodplain management regulations</td>
<td>Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance and erosion control ordinance) and other application of police power. The term describes such state or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.</td>
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<tr>
<td>Flood proofing</td>
<td>Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.</td>
<td>Yes, but would suggest changing to match model ordinance</td>
</tr>
<tr>
<td>Definition</td>
<td>Answer</td>
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<tr>
<td>Yes, but must change to match model ordinance</td>
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</tr>
<tr>
<td>*Functionally dependent use: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long term storage or related manufacturing facilities.</td>
<td>No, but must include if allowing variances</td>
<td></td>
</tr>
<tr>
<td>*Historic structure: Any structure that is:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;</td>
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<tr>
<td>2. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;</td>
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<tr>
<td>3. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or</td>
<td></td>
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<tr>
<td>4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. By an approved state program as determined by the Secretary of the Interior or</td>
<td></td>
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<tr>
<td>b. Directly by the Secretary of the Interior in states without approved programs.</td>
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<tr>
<td>*Lowest Floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage in an area other than a basement area, is not considered a building’s lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance (i.e. provided there are adequate flood ventilation openings).</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>*Manufactured Dwelling: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle.”</td>
<td>Yes</td>
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<tr>
<td>Manufactured Dwelling Park or Subdivision: A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.</td>
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<tr>
<td>Mean Sea Level: For purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which Base Flood Elevations shown on a community’s Flood Insurance Rate Map are referenced.</td>
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<tr>
<td>*New construction: For floodplain management purposes, “new construction” means structures for which the “start of construction” commenced on or after the effective date of a floodplain management regulation adopted by COMMUNITY NAME and includes any subsequent improvements to such structures</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>New Manufactured Home Park or Subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of adopted floodplain management regulations adopted by the community.</td>
<td>Yes</td>
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</tr>
<tr>
<td>Reasonably Safe from Flooding: Development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.</td>
<td></td>
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</tr>
<tr>
<td>*Recreational Vehicle: A vehicle, 1 irritated on a single chassis; 2)400 square feet or less when measured at the largest horizontal projection; 3) Designed to be self-propelled or permanently towable by a light duty truck; and 4) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.</td>
<td>Yes, but must change to match model ordinance</td>
<td></td>
</tr>
<tr>
<td>*Start of construction: Includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days from the date of the permit. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.</td>
<td>Yes</td>
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</tbody>
</table>
### Section 3.0 – General Provisions

#### 3.1 Lands to Which This Ordinance Applies

This ordinance shall apply to all special flood hazard areas within the jurisdiction of [Community Name].

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Flood Elevation</td>
<td>44 CFR 59.22(a)</td>
</tr>
<tr>
<td>Violation: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.</td>
<td>No, but would suggest including</td>
</tr>
<tr>
<td>Water Dependent: A structure for commerce or industry that cannot exist in any other location and is dependent on the water by reason of the intrinsic nature of its operations</td>
<td></td>
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</tbody>
</table>

#### 3.2 Basis for Establishing the Areas of Special Flood Hazard

The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report titled "The Flood Insurance Study (FIS) for [exact title of study]" dated [date], with accompanying Flood Insurance Rate Maps (FIRMs) dated [date], are hereby adopted by reference and declared to be a part of this ordinance. The FIS and FIRM panels are on file at [list the address or the building, i.e. Borough Administration Building, Department of Planning, Public Works etc.].

<table>
<thead>
<tr>
<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.090</td>
</tr>
</tbody>
</table>

#### 3.3 Compliance

All development within special flood hazard areas is subject to the terms of this ordinance and other applicable regulations.

<table>
<thead>
<tr>
<th>Requirement</th>
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<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.080</td>
</tr>
</tbody>
</table>

#### 3.4 Abrogation

This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this ordinance and another ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

<table>
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<th>Requirement</th>
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</thead>
<tbody>
<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.300</td>
</tr>
</tbody>
</table>

#### 3.5 Interpretation

In the interpretation and application of this ordinance, all provisions shall be:

1. Considered as minimum requirements;
2. Liberally construed in favor of the governing body; and,
3. Deemed neither to limit nor repeal any other powers granted under state statutes.

<table>
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<tbody>
<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.060</td>
</tr>
</tbody>
</table>

#### 3.6 Penalties for Noncompliance

Violation of the provisions of this ordinance by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall (insert applicable penalty(ies) per State/local law). Nothing herein contained shall prevent the [Community Name] from taking such other lawful action as is necessary to prevent or remedy any violation.

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<tbody>
<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.070</td>
</tr>
</tbody>
</table>

#### 3.7 Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of the COMMUNITY NAME, any officer or employee thereof, or the Federal Insurance Administrator for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

<table>
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<tbody>
<tr>
<td>Section 3.0 – General Provisions</td>
<td>19.04.310</td>
</tr>
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</table>

#### 3.8 Severability

This ordinance and the various parts thereof are hereby declared to be severable. Should any Section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the Section so declared to be unconstitutional or invalid.

<table>
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<tbody>
<tr>
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<td>19.04.300</td>
</tr>
</tbody>
</table>

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*Structure: For floodplain management purposes, a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

*Substantial Damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

*Substantial improvement: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage,” regardless of the actual repair work performed. The term does not, however, include either:
1. Any project for improvement of a structure to correct previously identified existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions; or
2. Any alteration of a “historic structure,” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.”

*Variance: A grant of relief by [COMMUNITY NAME] from the terms of a floodplain management regulation.
### 4.1 Designation of the Floodplain Administrator

The **INSERT INDIVIDUAL JOB TITLE** is hereby appointed to administer, implement, and enforce this ordinance by granting or denying development permits in accordance with its provisions. The Floodplain Administrator may delegate authority to implement these provisions.

#### 19.04.110

**Mandatory (44 CFR 59.22(b)(1))**

### 4.2 Duties and Responsibilities of the Floodplain Administrator

Duties of the floodplain administrator, or their designee, shall include, but not be limited to

#### 19.04.120

**Mandatory (44 CFR 60.1(b))**

**4.2.1 Permit Review**

Review all development permits to determine that:

- A. The permit requirements of this ordinance have been satisfied;
- B. All other required state and federal permits have been obtained;
- C. The site is reasonably safe from flooding;
- D. In areas where a floodway has not been designated, require that no new construction, substantial improvements or other development (including fill) shall be permitted within Zones A1-30 and AE unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. (Do not include item D if not applicable to community)

**19.04.130**

**Mandatory (44 CFR 60.1(b))**

**4.2.2 Use of Other Base Flood Data**

When Base Flood Elevation data has not been provided in accordance with Section 3.2 (or the numbering system used by the community), the Floodplain Administrator shall obtain, review and reasonably utilize any Base Flood Elevation data available from a federal, state or other source, in order to administer Section 5.0 (or the numbering system used by the community). Any such information shall be consistent with the requirements of the Federal Insurance Administrator.

**19.04.140, 19.04.200**

**Required verbatim (44 CFR 60.3(b)(4)); (44 CFR 60.3(b)(5)(i) and (iii)); (44 CFR 60.3(b)(5)(ii))**

**4.2.3. Obtain and Maintain for Public Inspection**

Obtain and maintain the following for public inspection and make available as needed:

- A. Certification required by Section 5.1.3.1 and Section 5.5 (or the numbering system used by the community) (lowest floor elevations for all structures, bottom of the lowest horizontal structural member (if applicable), and service facilities/mechanical equipment);
- B. Certification required by Section 5.1.3.2 (or the numbering system used by the community) (lowest floor elevations or floodproofing of non-residential structures and service facilities/mechanical equipment);
- C. Certification required by Section 5.1.3.4 (or the numbering system used by the community) (engineered flood openings);
- D. Certification required by Section 5.7.A (or the numbering system used by the community) (floodway encroachments);
- E. Records of all variance actions, including justification for their issuance;
- F. Improvement and damage calculations.

**19.04.150, but must include other pieces from the model ordinance**

**4.2.4 Notification to Other Entities**

Take actions on violations of this ordinance as required in Section 3.6 (or the numbering system used by the community) herein.

### 4.3 Establishment of Development Permit

**Mandatory (44 CFR 60.3(a)(1))**
A Development Permit shall be obtained before construction or development begins, including placement of manufactured homes, within any Special Flood Hazard Area established in Section 3.2 (or the numbering system used by the community). Application for a Development Permit may be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions and elevation of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required:

### 4.3.1 For A Zones (A, A1-30, AE, AH, AO)

- A. Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures. In Zone AO, elevation of existing highest adjacent grade and proposed elevation of lowest floor of all structures;
- B. Proposed elevation in relation to mean sea level to which any non-residential structure will be floodproofed;
- C. Certification by a registered professional engineer or architect that the floodproofing methods for any non-residential structure meet the floodproofing criteria in Section 5.1.3.2 (or the numbering system used by the community); and
- D. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

### 4.3.2 For V Zones (VE, V1-30, V)

- A. Proposed elevation in relation to mean sea level of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all structures, and whether such structures contain a basement;
- B. Base Flood Elevation data for subdivision proposals or other development, including manufactured home parks or subdivisions, greater than 50 lots or 5 acres, whichever is the lesser; and
- C. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

### 5.1 General Standards

In all special flood hazard areas, the following standards shall be adhered to:

#### 5.1.1 Anchoring

- A. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- B. All manufactured dwellings shall meet the anchoring standards of section 5.5.

#### 5.1.2 Construction Materials and Methods

- A. All new construction and substantial improvements shall be constructed with materials resistant to flood damage;
- B. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage; and
- C. All new construction and substantial improvement shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

#### 5.1.3 Elevation and Floodproofing

#### 5.1.3.1 Residential Construction

- A. Residential construction, new or substantial improvement, shall have the lowest floor, including basement, elevated to or above the Base Flood Elevation.
- B. In a Zone AO, the Base Flood Elevation is determined from the FIRM panel as the depth number specified. If no depth is specified, the required elevation is at minimum two (2) feet above highest adjacent grade.
- C. In Zones A, A1-30, and AH, the Base Flood Elevation is determined from the FIS and/or FIRM.
- D. A garage attached to a residential structure, constructed with the garage floor slab below the Base Flood Elevation, must be designed to allow for the automatic entry and exit of flood waters. See Section 5.1.3.4 (or the numbering system used by the community).

Upon completion of the structure, certification by a registered professional engineer or surveyor that the elevation requirements of the lowest floor, including basement, of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

#### 5.1.3.2 For V Zones (VE, V1-30, V)
Residential construction, new or substantial improvement, shall:
A. Be located landward of the reach of mean high tide;
B. Have the bottom of the lowest structural member of the lowest floor (excluding pilings and columns), elevated to or above the Base Flood Elevation;
C. Have the pile or column foundation and structure attached thereto be anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards;
D. Have the space below the lowest floor, usable solely for parking of vehicles, building access, or storage, either free of obstruction or constructed with non-supporting breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purposes of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot;
E. Prohibit the use of fill for structural support of buildings; and
F. Prohibit man-made alteration of sand dunes and mangrove stands.
A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.
Upon completion of construction, certification by a registered professional engineer or architect that these design standards have been satisfied, and certification by a registered professional engineer or surveyor that the elevation requirements of the bottom of the lowest structural member of the lowest floor, excluding pilings and columns, of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

### 5.1.3.2 Nonresidential Construction

For A Zones (A, AE, A1-30, AH, AO)

Non-residential construction, new or substantial improvement, shall have the lowest floor either elevated to conform with Section 5.1.3.1(A), (B), or (C) as appropriate (or the numbering system used by the community),
Or, together with attendant utility and sanitary facilities,
A. Be floodproofed below the elevation recommended under Section 5.1.3.1(A), (B), or (C) as appropriate (or the numbering system used by the community) so that the structure is watertight with walls substantially impermeable to the passage of water; and
B. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice meeting the provisions listed above.
Upon completion of the structure, certification by a registered professional engineer orveyor that the elevation requirements of the lowest floor, including basement, of this section have been satisfied shall be provided to the Floodplain Administrator for verification; or certification by a registered professional engineer or architect that the floodproofing design of this section is satisfied, including the specific elevation in relation to mean sea level to which such structures are floodproofed, shall be provided to the Floodplain Administrator for verification.

For V Zones (VE, V1-30, V)

Floodproofing of non-residential structures is prohibited. All structures must be elevated and constructed according to the requirements set forth in Section 5.1.3.1 (or the numbering system used by the community).

### 5.1.3.3 Appurtenant Structures (Detached Garages & Storage Structures)

For A Zones (A, AE, A1-30, AH, AO)

Appurtenant structures used solely for parking of vehicles or storage may be constructed such that the floor is below the Base Flood Elevation, provided the structure is designed and constructed in accordance with the following requirements:
A. Use of the appurtenant structure must be limited to parking of vehicles or storage;
B. The portions of the appurtenant structure located below the Base Flood Elevation must be built using flood resistant materials;
C. The appurtenant structure must be adequately anchored to prevent flotation, collapse and lateral movement;
D. Any machinery or equipment servicing the appurtenant structure must be elevated or floodproofed to or above the Base Flood Elevation;
E. The appurtenant structure must comply with floodway encroachment provisions in Section 5.7 (or the numbering system used by the community); and
F. The appurtenant structure must be designed to allow for the automatic entry and exit of flood waters in accordance with Section 5.1.3.4 (or the numbering system used by the community).
Detached garages, storage structures and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in Section 5.1.3.1(A), (B), or (C) as appropriate (or the numbering system used by the community).
Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

For V Zones (VE, V1-30, V)

Not included, but would suggest including
### 5.1.3.4 Flood Openings

All new construction and substantial improvement with fully enclosed areas below the lowest floor (excluding basements) that are usable solely for parking of vehicles, building access or storage, and which are subject to flooding, shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for meeting this requirement must meet or exceed the following criteria:

For non-engineered openings:
- A. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
- B. The bottom of all openings shall be no higher than one foot above grade;
- C. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

Alternatively, a registered engineer or architect may design and certify engineered openings. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

### 5.2 Standards for Storage of Materials and Equipment

A. The storage or processing of materials that could be injurious to human, animal or plant life if released due to damage from flooding is prohibited in special flood hazard areas.

B. Storage of other material or equipment may be allowed if not subject to damage by floods and if firmly anchored to prevent flotation, or if readily removable from the area within the time available after flood warning.

### 5.3 Standards for Water Supply and Waste Disposal Systems

A. All new or replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharge from systems into flood waters.

B. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

### 5.4 Development Proposals

All new development proposals, including subdivisions and manufactured home parks, shall:

A. Be consistent with the need to minimize flood damage;

B. Have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage; and

C. Provide adequate drainage to reduce exposure to flood hazards.

D. Include Base Flood Elevation data for all proposals greater than 50 lots or 5 acres, whichever is the lesser.

### 5.5 Standards for Manufactured Homes

#### 5.5.1 For A Zones (A, AE, A1-30, AH, AO)

All manufactured homes shall be installed using methods and practices which minimize flood damage. For the purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.

- A. Manufactured homes that are placed or substantially improved within Zone AO shall meet the residential construction standards in A Zones in Section 5.1.3.1 (or the numbering system used by the community).

- B. Manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community’s FIRM on sites:
  - a. Outside of a manufactured home park or subdivision,
  - b. In a new manufactured home park or subdivision,
  - c. In an expansion to an existing manufactured home park or subdivision, or
  - d. In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood,

   Be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

   C. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones A1-30, AH, and AE on the community’s FIRM that have not incurred substantial damage as the result of a flood are to be elevated so that either:
   - a. The lowest floor of the manufactured home is at or above the base flood elevation, or
   - b. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

   Upon completion of installation of the manufactured home, certification by a registered professional engineer or surveyor that the elevation requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

   Be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.

### 5.5.2 For V Zones (VE, V1-30, V)

- B. The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

Upon completion of installation of the manufactured home, certification by a registered professional engineer or surveyor that the elevation requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.
### 6.0 Variance Procedure

#### 6.1 Nature of Variances

The variance criteria set forth in this section of the ordinance are based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this ordinance would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants or the property owners.

It is the duty of the (governing body) to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the Base Flood Elevation are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

#### 6.2 Conditions for Variances

A. Manufactured homes placed or substantially improved within Zones V1-30, V, and VE on the community’s FIRM on sites:
   - Outside of a manufactured home park or subdivision,
   - In a new manufactured home park or subdivision,
   - In an expansion to an existing manufactured home park or subdivision, or
   - An existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood,

   Meet the standards of residential construction in V Zones in Section 5.1.3.1 (or the numbering system used by the community).

   B. Manufactured homes to be placed or substantially improved on sites in an existing manufactured home park or subdivision within Zones V1-30, V, and VE on the community’s FIRM that have not incurred substantial damage as the result of a flood are:
   - Meet the standards of residential construction in V Zones in Section 5.1.3.1 (or the numbering system used by the community); AND
   - Be elevated so that either:
     - The lowest floor of the manufactured home is at or above the base flood elevation, or
     - The manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

   Upon completion of installation of the manufactured home, certification by a registered professional engineer or surveyor that the elevation requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

#### 5.6 Standards for Recreational Vehicles

All recreational vehicles placed on site shall:
- Be on site for fewer than 180 consecutive days,
- Be fully licensed and ready for highway use. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- Meet the permit requirements of Section 4.0 (or the numbering system used by the community) of this ordinance and the applicable elevation and anchoring requirements for manufactured homes in Section 5.5 (or the numbering system used by the community).

#### 5.7 Floodways

Located within the special flood hazard areas established in Section 3.2 (or the numbering system used by the community) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions apply:

- Prohibit encroachments, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge;
- If Section 5.7 (A) (or the numbering system used by the community) is satisfied, all new construction and substantial improvements shall comply with all other applicable flood hazard reduction provisions of Section 5.0 (or the numbering system used by the community).
- Encroachments within the adopted regulatory floodway that would result in an increase in base flood elevations may be permitted, provided that (community name) first applies for and fulfills the requirements for a Conditional Letter of Map Revision (CLOMR), and receives approval from the Federal Insurance Administrator to revise the FIRM and FIS in accordance with Section 4.2.4.8 (or the numbering system used by the community).

#### 5.8 Manufactured Homes

- Manufactured homes to be placed or substantially improved on sites in a mobile home park or subdivision:
  - Meet the standards of residential construction in V Zones in Section 5.1.3.1 (or the numbering system used by the community).
- A manufactured home placed or substantially improved on a site that is outside of a mobile home park or subdivision:
  - Outside of a mobile home park or subdivision, or
  - In a new mobile home park or subdivision,
  - In an expansion to an existing mobile home park or subdivision, or
  - An existing mobile home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood,

   Meet the standards of residential construction in V Zones in Section 5.1.3.1 (or the numbering system used by the community).
A. Variances shall only be issued:
1. Upon a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public or conflict with existing local laws or ordinances;
2. For the repair, rehabilitation or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure; **
3. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;
4. Upon a showing of good and sufficient cause;
5. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;
6. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 2.0 (or the numbering system used by the community) of this ordinance in the definition of “Functionally Dependent Use.”

B. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.

C. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the Base Flood Elevation, provided the procedures of Sections 4.0 and 5.0 (or the numbering system used by the community) of this ordinance have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

### 6.3 Variance Criteria

A. In considering variance applications, the (Governing Body) shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:
1. The danger that materials may be swept onto other lands to the injury of others;
2. The danger of life and property due to flooding or erosion damage;
3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
4. The importance of the services provided by the proposed facility to the community;
5. The necessity to the facility of a waterfront location, where applicable;
6. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
7. The compatibility of the proposed use with existing and anticipated development;
8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
9. The safety of access to the property in time of flood for ordinary and emergency vehicles;
10. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site; and,
11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water system and streets and bridges.

B. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
1. The issuance of a variance to construct a structure below the Base Flood Elevation will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage, and
2. Such construction below the base flood elevation increases risks to life and property; and

C. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance.

**Optional or Higher Standards Included**
AGENDA ITEM # 10a
Planning Commission Meeting Date: 1/10/23

PLANNING COMMISSION COMMUNICATION FORM

FROM: Kevin Johnson, City Planner
DATE: 1/10/23
ITEM: Chair Election
NEXT STEP: Elect Chair

___ INFORMATION
X  MOTION
___ RESOLUTION

I. REQUEST OR ISSUE:

The Planning Commission consists of seven members. Pursuant to Section 3.40.030, a chair shall be selected annually from the members of the commission. The current chair seat is vacant as the former chair Nancy Bird is no longer a part of the Planning Commission as her term has expired and she did not seek to be reappointed to the commission.

II. RECOMMENDED ACTION / NEXT STEP:

Staff recommend the vice chair open nominations from the floor by stating: “Nominations are now in order for the office of chair of the Planning Commission.”

After the nomination process, a voice vote is recommended if there is only one nomination, or a roll call vote if there are multiple nominations.
III. FISCAL IMPACTS:

N/A

IV. BACKGROUND INFORMATION:

As soon as the floor is open for nominations, any member can bring forth a nomination. The member should know beforehand if the person he or she wishes to nominate is willing to serve.

When the nomination is from the floor:
- A member does not have to get recognition from the current chair to make a nomination.
- A person can nominate himself or herself.
- A nomination does not need a second.
- A member can’t nominate more than one person for an office until everyone has had the opportunity to make nominations.
- The current chair can continue presiding, even if he or she is one of the nominees for the office.
- After each nomination, the current chair repeats the name to the commission.

A motion to close nominations is not necessary. Usually the current chair closes nominations when no further nominations come forward.

If at any time during the nominating process a member realizes that he or she will be unable to serve if elected, the member should stand and request that his or her name be removed from nomination. Removing your name during the nomination process is better than waiting until after you are elected.

After the nominating process is finished, the members must vote on the proposed candidates. Members can take the vote for election by voice vote or roll call vote.

In the event there is a tie, the commission may choose a method to break the tie and vote until the tie is broken.

V. LEGAL ISSUES:

N/A

VI. CONFLICTS OR ENVIRONMENTAL ISSUES:

N/A

VII. SUMMARY AND ALTERNATIVES:

N/A
AGENDA ITEM # 10b
Planning Commission Meeting Date: 1/10/23

PLANNING COMMISSION COMMUNICATION FORM

FROM: Planning Staff
DATE: 1/10/23
ITEM: Vice Chair Election
NEXT STEP: Elect Vice Chair

_________ INFORMATION
X MOTION
_________ RESOLUTION

I. REQUEST OR ISSUE:

While the city’s code does not require a vice chair for the Planning Commission, this has been the practice in the past. Having a vice chair gives staff and public another point of contact and allows for meetings to run smoothly if the chair is absent. Staff recommends that the commission continue this practice. The current vice chair is Mark Hall.

II. RECOMMENDED ACTION / NEXT STEP:

Staff recommend the acting chair open nominations from the floor by stating: “Nominations are now in order for the office of vice chair of the Planning Commission.”

After nominations, a voice vote is recommended if there is only one nomination, or a roll call vote if there are multiple nominations.
III. **FISCAL IMPACTS:**

N/A

IV. **BACKGROUND INFORMATION:**

The procedure for vice chair election should be the same as for the chair.

V. **LEGAL ISSUES:**

N/A

VI. **CONFLICTS OR ENVIRONMENTAL ISSUES:**

N/A

VII. **SUMMARY AND ALTERNATIVES:**

N/A