

1 **BURLINGTON CITY COUNCIL MEETING NOVEMBER 8 1984**

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4 **STEVE LADD (CITY PLANNER):** Council is aware that we have until January 3rd to
5 adopt the new Floodplain Management Ordinance, satisfying various criteria in order to stay
6 in the Flood Insurance Program.

7 **MAYOR RAY HENERY: (INTERRUPTING)** Excuse me just a moment. I didn't declare
8 the opening of the public hearing. At this time I would declare the hearing open.

9 **LADD:** So Mr. Kersey and Bob Boudinot and I have been working with Skagit County and
10 the city of Mt. Vernon to try and come up with a method of floodplain management that will
11 be consistent between the adjacent local governments. And will also satisfy FEMA and
12 hopefully even the Department of Ecology. And we have good reason to believe that it will
13 satisfy those agencies, this ordinance. The ordinance is divided into parts and just going-by
14 the table of contents the section on Administrative Provisions. Ah, what may be of interest
15 there is the fact that administration is by the City Supervisor. And there is an appeals
16 procedure that you might want to look at to. Those are administrative provisions and checks
17 and balances, interpretations, that sort of thing.

18 The most crucial part of the ordinance is section 2, regulations on development and the
19 floodplain areas which on these maps here consist of the I guess you would say the white and
20 blue areas. Breakdown into three different types of classifications as for as this ordinance
21 goes. There is what I will explain in a minute called the CONVEYANCE AREA. And there
22 is the FLOODWAY and there is this third area, which is not neither of those. Which in order

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1 to give it a name we will call it the FLOOD FRINGE. And the first part of this section is
2 general to all areas of the floodplain. It applies to anything in any of the three of those and
3 that's on page six. It starts on page 4. Most significant thing there is the elevation for flood
4 proofing of structures. We're going by the FEMA elevations here and I'm sure you heard
5 about the discrepancy between the FEMA and DOE. Well that has been resolved. To the
6 extent that we utilize FEMA but we go one foot above. One foot above FEMA. And there
7 are various good reasons for going one foot above, I think. Besides the fact that that is what
8 is going to be required to satisfy the DOE, there are various other reasons for going one foot
9 above that we can go into if you're more interested. So there is the elevation requirement and
10 the other things that are standard are pretty much in place now in turns of flood plain
11 management requirements, for mobile homes and utilities and so forth.

12 On top on the next page there is a clause called Prohibition Against Encroachment. Which
13 is required that we put this in here to. And uh, it's a little bit hard to explain exactly or
14 predict what it is going to mean or do but the City is prohibited from allowing any
15 development that will raise floodwaters more than one foot at any spot. We cannot do that so
16 we have to say so in the ordinance. We are not going to allow that to happen.

17 Now the CONVEYANCE AREA. The regulations require that we allow somehow for
18 floodwaters to pass through the city. Conventionally that would be with a FLOODWAY.

19 But in Burlington it was not feasible to designate that **except in the vicinity of the dikes.** So
20 the proposal here for your consideration is something called the CONVEYANCE AREA.
21 The CONVEYANCE AREA is two fold in terms of what it consists of. If you want to go
22 back to page one of the ordinance that's the definition. So it might pay for you to do that.

23 The CONVEYANCE AREA consist of any part of the floodplain which is three feet or more

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1 below the depth of the floodplain elevation. Essentially that is gages slough and you can see
2 GAGES SLOUGH in the blue corridor running from upper right to lower left. That's
3 determined by elevation. So that is a CONVEYANCE AREA.

4 And B a band of conveyance area that is along the dike **landward of the dike**. Those two are
5 conveyance areas. In the conveyance area there is more restriction on development. To sum
6 it up all this really says is that you can develop as much as you really want to and anything
7 you want to except it cannot impede flood flows, in a significant way. So in the things that
8 are allowed in the conveyance area on page six. There a lot of relative minor things that we
9 feel will not cause any significance impedance to flood waters so we are allowing all these
10 minor things to happen. Minor structures, minor fills, normal maintenance and repair,
11 replacement in kind, underground improvements and so forth. These are things that FEMA
12 will allow us to allow. And then there are two other clauses. H and I that get into other ways
13 to allow development. H relates to what we refer to as a cut and fill provision where if you
14 put a new development in this CONVEYANCE AREA that would block flood flows by fill
15 or building. If you remove something else it would have a balancing effect. And I is
16 elevated structures. And gets into criteria for passage for flood waters and gets into criteria
17 for strength of those pilings or parallel foundations walls, fast breakaway walls and so forth.

18 **And lastly there is the FLOODWAY which in the case of Burlington is only the area that**
19 **runs landward of the dike by fifty feet. When you're landward of the dike and your looking**
20 **towards the river essentially nothing can be built from that distance to the river.**

21 And the section III is the floodplain permit process and that section defines what all actions
22 would have to get a floodplain permit. And we've made an effort here to streamline this by
23 allowing exemptions to this floodplain permit procedure that FEMA has said that they will

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1 allow in order to not have to bother people with minor actions that won't have any significant
2 effect. That's the basic ordinance; can I answer any questions?

3

4 **MORRISON (CITY COUNCILMAN)** •••••Would you go over to the map and
5 (unitelligible).

6

7 **LADD.** . . .Well Bob has been all through this map and he will probably want to say more
8 about it than I will but this is the detailed topography that we have received and it has
9 allowed us to do all this mapping. It would have been impossible for us to come up with this
10 approach without the topographical information. And, the yellow is called Zone B and it is
11 out of the 100 year flood plain. I guess it is probably in the 500 year floodplain but that does
12 not matter. These areas do not have the floodplain management restrictions developed.

13 In white areas such as this that is in the 100 yr floodplain but it is less than three feet below.
14 Either that it may be a little bit deeper but it is not lined up in such a way as to have any help
15 in passing floodwaters anyway.

16 Now the blue here this is the area that follows the contour of three feet of depth of water in
17 the event of a 100 yr flood. This is a technical determination. It's trying not to be an
18 arbitrary line. And it uh varies in width but it runs thru the city in a fairly regular fashion.
19 That's the conveyance area where you can do minor things or you can cut and fill or you can
20 build in an elevated way so as not to impede the floodwaters. And part of this blue area well
21 essentially this blue area here is a conveyance area too the same thing but in the vicinity of
22 the dike itself that is the FLOODWAY and nothing can be built at all.

23 **UNIDENTIFIED SPEAKER.**Essentially is that blue line GAGES SLOUGH?

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1 **LADD.** . . . Yeah. This is GAGES SLOUGH.

2 **BOUDINOT.** . . . At this point I wonder if the members of the audience would be interested
3 in looking at the map.

4 NOTE: SHORT RECESS WHILE AUDIENCE LOOKED AT MAP.

5 **RAHEY (CITY COUNCILMAN).** . . . (Directed at Boudinot). . . .I would like a brief
6 outline or rationale (unintelligible) conveyance areas and floodways could be enlighten?

7 **BOUDINOT.** . . . Well first of all the uh there are sixteen panels that we have taped together
8 to make this map. There are a total of 28 panels that will cover the whole city. The area you
9 see covered here goes from Lafayette Road on the east and it will go all the way to Pulver
10 Road on the west. Take in the entire city of Burlington. On this map we have shown the city
11 limits as well as the FEMA base flood elevations contours and the COE base flood contours.
12 We're showing the Corps contours to show the relationship between the two. The DOE as
13 Steve mentioned had been using the COE elevations and has proposed a compromise to the
14 City of Burlington, the city of Mt Vernon and Skagit County. That if we adopt FEMA as our
15 base flood elevations we would require construction to one foot above FEMA elevations. In
16 this way we could process flood control zone permits thru the DOE, without their approval.

17 CONVEYANCE AREAS, we struggled with this for a long time and I think we talked about
18 this before the council before. Initially when FEMA approached the city six years ago we
19 were asked to designate a FLOODWAY. They told us we had to have one. And they would
20 not tell us where that would be or how big it would be and it would be very difficult to do.
21 Then we went thru a process where we considered other options like the density floodplain.
22 Thru many, many meetings we have came up with this CONVEYANCE AREA idea.

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1 CONVEYANCE AREA is similar to a FLOODWAY. There's no getting around it.
2 However, it does not totally restrict development in that area. It allows for development so
3 long as there is no blockage of flood flows. It does acknowledge that those areas have a
4 much higher probability of having floodwaters than other areas of the city.

5 The Yellow areas are areas that are above the FEMA base flood elevation. And as such you
6 would not have to have flood insurance. The map that we received last December from
7 FEMA and I have a copy of it here identified those areas as ZONE B'S. Actually, those Zone
8 B's well I can only count four of them within the city. They are very limited in size. After
9 we get all of our maps together the city will be asking FEMA to re-evaluate our base flood
10 map and either issue an overall letter of map amendment. Incorporate all these areas that are
11 above base flood elevation as zone B's. That will have a great advantage to people who have
12 flood insurance or who are building or purchasing homes and have to get flood insurance for
13 financing purposes. In discussing this ordinance with the county and going over it with city
14 staff, I would make the recommendation that even within those yellow areas we still stick to
15 this one foot above FEMA BFE. The reason being, **this map does not represent the severity**
16 **of damage that could occur in a flooding event. At any place in our city we could have a**
17 **flood of a much greater magnitude than what these contours show!** As an example of that,
18 the intersection of Anacortes Street and Fairhaven Avenue, the COE flood studies I believe in
19 the early 1970's they have pictures that shows a person wading up to their thighs in water at
20 that intersection. Also down in front of our building the 600 block of Fairhaven there is a
21 rowboat right in front of our building. So floodwaters have been in those areas but now those
22 areas are called Zone B. Which are not in the floodplain according to FEMA. So I would
23 recommend for construction purposes elevation to one foot above the BFE. Even if you are

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1 in a zone B. There are a lot of advantages to having this one foot above. Not the least of
2 which will be greatly reduced flood insurance rates. As much as 40% less for your flood
3 insurance.

4 Going on to the CONVEYANCE AREAS. CONVEYANCE AREAS were determined by
5 that area along GAGES SLOUGH which was 3 feet below BFE. The reason that I used 3
6 feet, well several times when Chuck Steele was up here, and several times in conversations
7 with Mr. Steele and the DOE even with the COE in casual conversations that were mentioned
8 a flood three feet deep flowing at three feet per second a normal adult human cannot stand
9 up. Floodwaters flowing 3 ft deep at 3 feet per second.

10 NOTE: TAPE TURNED OVER

11 **BOUDINOT:**flowing down GAGES SLOUGH. The only way we described that area
12 was by elevation. If we start to describe the quantity of water and actually we have asked the
13 COE and DOE and FEMA to help us. Tell us how much water will be flowing down this
14 area during a 100 year flood and they can't do it or they won't do it. So we have described it
15 as an area of HIGH FLOOD HAZARD. And that's what our CONVEYANCE ZONES are.

16 Now along the dike I have shown a strip 500 feet wide. That 500 feet was recommended by
17 FEMA. We discussed everything from 500 feet to 200 feet to a thousand feet. And I would
18 hope that we can get some input especially from property owners who are impacted by these
19 conveyance zones so that by the time that the final ordinance is adopted we may have to
20 make some modifications in our thinking that we can come up with something that is
21 satisfactory to the majority of citizens of the city.

22 "The 50 feet, lets see I've got it up here as #3 on the list. Would mean that 50 feet from the

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1 toe of the dike you really can't do anything. The county now for several years has had this
2 requirement in its flood ordinance. That requirement was developed primarily for
3 maintenance of the dikes. To keep the dike area open. "Most of you can recall when we have
4 had floods or a flood fight teams have been out in the fields on the inside of the dikes putting
5 sandbags on boils. It is prudent to keep that area clear in order to fight floods. Maintain our
6 dikes. That also is a high hazard area in case the dike breaks. I think that pretty well recaps
7 what we've done to date. There will be and we are getting these maps on a weekly basis. I
8 would say that within two to three weeks we would have the entire city. And as such as far
9 as the schedule the draft ordinance has been submitted to FEMA and the DOE. The city
10 attorney also has to review that ordinance so he will have some input into it. But until we are
11 certain that FEMA and DOE are satisfied with our ordinance I think the City should not take
12 action on it. In addition, there are not too many people here tonight. I don't know whether
13 they just haven't heard about it but I would hope that the council would give the public
14 another opportunity to have input by continuing this public hearing, either at your second
15 meeting or your first meeting in December, take action on the ordinance.

16 **MAYOR HENERY.**Does the council have any questions of Bob?

17 **COUNCIL MORRISON.**I have a comment. This has been a difficult · process and has
18 been going on for a long time. I'm real glad to see that it has come along to this point.

19 **MAYOR HENERY.**Are there any comments from anyone in the audience?

20 **MOTION MADE AND CARRIED THAT MEETING BE CONTINUED TO NEXT**
21 **REGULAR COUNCIL MEETING. TUESDAY THE 20TH OF NOVEMBER.**