## ORDINANCE NO. 5042

TITLE: AN ORDINANCE AMENDING ORDINANCE NO. 4447, WHICH ADOPTED THE CITY OF ALBANY COMPREHENSIVE PLAN AND COMPREHENSIVE PLAN MAP, AND AMENDING ORDINANCE NO 4441, WHICH ADOPTED THE CITY OF ALBANY DEVELOPMENT CODE AND THE CITY OF ALBANY ZONING MAP RELATIVE TO FLOODPLAIN MANAGEMENT REGULATIONS, ADOPTING FINDINGS, AND DECLARING AN EMERGENCY.

WHEREAS, the City of Albany is amending its entire Development Code to improve the clarity and readability of the standards; and

WHEREAS, changes to Goal 7 of the Comprehensive Plan and Article 6 of the Development Code are needed to eliminate ambiguous language and to add additional requirements; and

WHEREAS, the Planning Commission following a public hearing on April 5, 1993, conditionally recommended approval of the proposed amendments to the Comprehensive Plan and Development Code (Case Nos. CP-01-93 and DC-01-93) relative to existing Goal 7: Flood Hazards and Hillsides and existing Article 6 Special Purpose Districts; and

WHEREAS, a notice of the City Council public hearing has been published and posted, and caused notice to be given; and

WHEREAS, the Albany City Council held a public hearing on April 14, 1993 and members of the public were given an opportunity to be heard.

NOW, THEREFORE, THE PEOPLE OF THE CITY OF ALBANY DO ORDAIN AS FOLLOWS:

Section 1: The Albany Comprehensive Plan, Goal 7: Flood Hazards and Hillsides is hereby amended as shown in Exhibit "A."

Section 2: The Albany Municipal Code, Title 20, known as the "City of Albany Development Code," Article 6 Special Purpose Districts and Article 22 called Definitions are hereby amended as shown on Exhibit "B."

Section 3: The Findings attached as Exhibit "C" are hereby adopted in support of these amendments to the Comprehensive Plan and the Development Code.

Section 4: These amendments will be known as Comprehensive Plan Amendment No. CP-01-93, and Development Code Amendment No. DC-01-93.

Section 3: A copy of this ordinance will be forwarded to the Department of Land Conservation and Development.

Section 4: Emergency Clause - Inasmuch as this ordinance is necessary for the immediate preservation of the peace, health, and safety of the citizens of this city of Albany, Oregon, an emergency is hereby declared to exist; and this ordinance shall be in full force and effect immediately upon its passage by the Council.

> April 14, 1993 Passed by the Council: April 14, 1993

April 14, Effective Date:

Approved by the Mayor:

Mayor

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## PROPOSED CHANGES TO THE COMPREHENSIVE PLAN APRIL 1993

# GOAL 7: FLOOD HAZARDS & HILLSIDES GOALS, POLICIES, & IMPLEMENTATION METHODS

GOAL: Protect life and property from natural disasters and hazards.

#### **POLICIES:**

- Continue to participate in the National Flood Insurance Program and Community Rating System and comply with applicable standards.
- 2. Restrict new development (including fill) from locating within floodways which would result in an increase in base-year flood levels. If it can be determined that there will be no increase in base-year flood levels, then the following uses may be considered:
  - a. Public and private parks and recreational uses.
  - b. Other uses which would not involve the construction of permanent or habitable structures.
  - c. Water-dependent structures such as docks, piers, bridges, and floating marinas.
- 3. Concurrent with new development, and when appropriate, secure dedications and easements adequate for channel maintenance and conveyance of storm water along natural drainageways and where identified on adopted master plans, secure easements for public open space, and future recreation use along all floodways and natural permanent drainageways.
- 4. Recognize that development within areas subject to flooding is subject to regulations to protect life and property and that certain types of development may not be allowed.
- 5. Ensure that development proposals in the flood fringe and adjacent to drainageways are consistent with Federal Emergency Management Agency (FEMA) and other applicable local regulations in order to minimize potential flood damage. Development proposals in areas subject to flooding may be reviewed according to the following criteria:
  - a. Proposed development activities shall not change the flow of surface water during flooding so as to endanger property in the area. Special engineering reports on the changes in water flow and potential damage which may be caused as a result of proposed activities may be required. If necessary, local drainage shall be improved to control increased runoff that might increase the danger of flooding to other property.
  - b. Impacts on significant fish and wildlife habitat have been considered and appropriate protection measures included in project design.
  - c. Problems of ponding, poor drainage, high water table, soil instability, or exposure to other flood hazards have been identified and mitigated. Evaluations and mitigating measures shall be based on a base year flood and wet season characteristics.
  - d. If adjacent to a designated floodway, the development shall be designed to use the natural amenities of the floodway including open space, scenic views and vegetation in accordance with an approved site plan.

DRAFT floodcom March 29, 1993 Page 1

- 6. Locate and construct all public utilities and facilities such as sewer, gas, electrical, and water systems to minimize or eliminate flood damage. Require that new or replacement water supply systems and/or sanitary sewer systems be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and require on-site waste disposal systems to be located to avoid impairment of them or contamination from them during flooding.
- 7. Ensure that any filling or construction within the floodplain meets the following criteria:
  - a. Require that a fill permit is issued prior to any fill activity involving 50 or more cubic yards of material and all fill is engineered and compacted to applicable standards. Fill areas for dwellings shall have engineering certification that loading rates are adequate for dwellings.
  - b. Within the Urban Growth Boundary it shall be demonstrated that fill is necessary to allow an approved development activity to occur and that the amount of fill proposed is the minimum necessary to meet FEMA standards.
  - c. The lowest finished floor elevation shall be built at least one (1) foot above the base-year flood level. Special engineering reports or structural work may be required.
  - d. Require property owners or developers to file a certification approved by the local community permit official, registered professional engineer, architect, or surveyor indicating elevation of the surrounding grade or lowest habitable floor (including basement) of all new residential structures. This information shall be maintained to indicate compliance with Federal Emergency Management Agency (FEMA) regulations.
- 8. For construction, remodeling, or major repairs to structures (including prefabricated and mobile homes) within the floodplain, review building permits to ensure that:
  - a. Building location and grading are designed to protect the structure during a base year flood.
  - b. Construction materials and utility equipment are resistant to flood damage.
  - c. Construction methods and practices will minimize flood damage.
  - d. Where appropriate, structures are designed or modified to prevent flotation, collapse, or lateral movement of the structure.
- 9. Development approval within the flood fringe shall be reviewed to protect property and public safety and significant natural values.
- 10. The City may provide density bonuses which encourage the protection and preservation of flood fringe areas.
- 11. Prior to annexation of hillside areas, adopt hillside development regulations for slope areas in excess of 12% in order to protect against geologic mass movement, excessive erosion and storm water runoff, and protection of important natural vegetation.
- 12. Require development and divisions and planned developments in slope areas to:
  - a. Minimize cut and fill requirements.
  - b. Ensure that the location and design of streets, structures, and other development give full consideration to natural contours, drainage patterns, and vegetation features of the site.
  - c. Protect against temporary and long-term erosion,
  - d. Control storm drainage to minimize the amount and rate of storm water flowing onto adjacent property and city streets.

- 13. The City may reduce standard densities (increases in minimum lot sizes and lot area per unit) and alternatively encourage cluster development through the PUD process, with greater slopes receiving the greater density reduction and cluster development incentive.
- 14. Encourage open space alternatives to urban level development in areas subject to flooding such as park and recreation areas, agriculture, natural areas and wildlife habitat.
- 15. Within the city limits portion of the Urban Growth Boundary, maintain regulations pertaining to excavation and grading.
- 16. When approving development in the flood fringe follow FEMA guideline that states: "In mapping a floodway it is assumed that all floodplain areas outside the floodway will eventually be filled in or otherwise obstructed. Consequently there is no need for a case by case hydraulic analysis of each proposed development in the fringe areas." (Source: FEMA, The Floodway: A Guide for Community Permit Official).

#### **IMPLEMENTATION METHODS:**

- 1. Define floodway, floodplain, and open space zoning boundaries on 1" to 100' topographical maps and adopt them as the official floodplain maps.
- 2. Periodically hold workshops involving local realtors, developers, government officials, and property owners to provide information about city and federal flood management regulations.
- 3. Adopt Chapter 70 of the Uniform Building Code, modifying the Code if necessary in minimal slope areas.
- 4. Require contractors to identify approved fill sites for disposing of material used for public works projects.
- 5. Require proposed hillside development to provide for the preservation and, if possible, enhancement of the site's natural features during all phases of the design and development process. This includes consideration of soils, vegetation, hydrology, wildlife habitat, views and visual orientation, both from the site and to the site, and unusual or unique natural features.
- 6. Revegetate any exposed soil not under continuous construction and on slopes which are greater than 20% slope with temporary or permanent vegetation such that it is not left exposed for more than 60 days in the period between October 1 and April 1.
- 7. Revegetate any exposed soil which is greater than 20% slope in a manner to re-establish vegetation within a 6-month period from issuance of a Certificate of Occupancy. If irrigation is not provided, then the exposed soil must be planted with species which can survive without irrigation. Vegetative cover or any alternative cover (rock, masonry, etc.) must be maintained in perpetuity.
- 8. In all slope areas, collect, control, and direct all impervious surface drainage from roofs, driveways, and parking areas to a City storm drain or other City-approved drainage system.
- 9. Require that all cutexcavation and fill work and structural foundation work be approved by a registered engineer whenever the slope is greater than 30% or where there exists probability of

DRAFT floodcom March 29, 1993 Page 3 geologic hazards such as perched water tables and/or landslide areas. Where appropriate, such approval shall include information from a soils engineer and engineering geologist.

10. Increase minimum lot sizes (or minimum lot area per unit) on hillside areas, allowing higher densities for cluster developments approved through Planned Unit Development as outlined in the following table:

Slope %	Standard Dev.	(R-1S-6.5 Lot)	PUD Devel.	(R-1S-6.5 Ave)
13 to 20	1.25	8125	1.00	6500
21 to 25	1.50	9750	1.15	7475
26 to 30	2.00	13000	1.40	9100
31 & above	3.00	19500	2.00	13000

- 11. Review development proposals in areas subject to flooding on the basis of adopted flood regulations and whether benefits associated with the development would outweigh problems and hazards that could result.\*
- 12. When necessary, apply conditions of approval for development within the flood fringe such as:
  - a. Regulations of site grading including measures to balance cut and fill.
  - b. Protection of significant open space areas, wildlife habitat, and existing vegetation.
  - c. Dedication of public access, rights of way, or easements.
  - d. Channel improvements and stabilization.
  - e. Special construction or construction measures such as flood proofing.
- 13. As a part of a Storm Water Drainage Master Plan for North Albany, identify, as needing protection, key swales and drainages that serve a vital role in the overall storm water drainage and flood water management system in North Albany.

#### RECOMMENDATION:

1. Encourage Linn and Benton Countyies to adopt and enforce excavation and fill regulations based on Chapter 70 of the Uniform Building Code and City of Albany requirements and apply those regulations for areas inside the Urban Growth Boundary.

#### GLOSSARY (CONTINUED)

- COMPENSATORY CUT AND FILL. The excavating of material in one place and depositing of it as fill in an adjacent place. For floodplain management purposes, this is a policy requiring that for any proposed fill in the flood fringe areas, an equal amount of material is removed from the flood fringe in that area or adjacent to it. The reason for this is that the flood fringe is needed for storage of water in times of flooding; if the flood fringe is entirely filled in a given area, floodwaters may be displaced onto areas not currently in the floodplain.
- COST-EFFECTIVE For the purpose of energy conservation planning, cost-effective means any weatherization measure which would have a reasonable payback period for the consumer, usually identified as 15 to 20 years in which the measure would pay for itself.
- CRITERIA AND NON-CRITERIA POLLUTANTS Criteria pollutants are those air pollutants monitored by the DEQ, including suspended particulate, sulphur dioxide, carbon monoxide, ozone, nitrogen dioxide, and hydrocarbons. Theoretically, reliance on state and federal standards and monitoring of these pollutants could result in Albany meeting minimum air quality levels in the area. Non-criteria pollutants are those air pollutants for which no standards exist. In the Albany area these may include such industrial emissions as hydrogen chloride, methyl isobutyl keotone (MISK), chlorine, and phosgene. Some of these non-criteria pollutants are monitored by local industries but there is little available information on their long-term effects.
- CUTBANK Steep bank on the eroding, outside bend of a river. Albany's downtown is located on a south cutbank of the Willamette River.
- DENSITY The number of living units per acre of land. Density ranges in the Plan are:
  - 1. Low Density permits residential uses up to 10 units per net acre.
  - 2. Medium Density permits residential uses of 10-20 units per net acre.
  - 3. High Density permits 20-40 units per acre.
- **DEVELOPMENT** Any manmade change to improved or unimproved real estate, including but not limited to construction, installation, or change of a building or other structure, land division, establishment or termination of a right of access, storage on the land, drilling and site alteration such as that due to surface mining, dredging, paving, excavation, or clearing.
- DRAINAGEWAY Any natural or manmade watercourse, trench, ditch, swale or similar depression into which surface water flows.
- ENSURE Guarantee; make sure or certain something will happen.
- FINDINGS Written statements of fact, conclusions and determinations based on the evidence presented in relation to the approval criteria and used in the determination of discretionary acts by the approval authority.
- FLOOD A general and temporary condition of partial or complete inundation of normally dry land areas from:
  - (a) the overflow of inland or tidal waters; and/or
  - (b) the unusual and rapid accumulation of runoff of surface waters from any source.

DRAFT floodcom March 29, 1993 Page 5 Any relatively high stream flow which overtops the natural or artificial banks of any part of a stream or river and covers land not usually under water. The Intermediate Regional or Base Flood (often referred to as the hundred year flood) is a flood with a one percent chance of occurrence in any given year. This flood is mapped by the Army Corps of Engineers and is used by the Federal Emergency Management Agency and the City of Albany for purposes of regulating development within flood boundaries.

- FLOOD FRINGE Those areas outside the floodway but within the 100-year floodplain. Zone designations on Flood Insurance Rate Maps include A, AE, AO, and shaded X. The area bordering the floodway and within the floodplain and which acts as a reservoir for flood waters.
- FLOODPLAIN The combined area of the floodway and flood fringe as defined herein.
- FLOODWAY 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 increasing the water surface elevation more than one foot. These areas are identified on the Floodway maps issued by FEMA. The minimum area necessary for the passage of flood waters including the channel and adjacent land areas which must be reserved in order to discharge the 100 year flood without cumulatively increasing the water surface elevation more than one foot; or any area designated as a floodway on the Comprehensive Plan Map or Zoning Map, whichever is more restrictive.
- GOAL A general statement indicating a desired end, or the direction the City wishes to follow to achieve that end (see Plan Introduction for complete definition and relationship to other Plan statements and the City's obligation to take action).
- GROSS ACREAGE A total area exclusive of deductions such as for streets and roads or public and semi-public uses.
- HABITAT The specific kind of environment occupied by the individuals of a species.
- HISTORIC DISTRICTS Three historic districts have been identified within the city: Monteith, Downtown Commercial, and the Hackleman Districts. Monteith and Hackleman are residential districts. All three are listed on the National Registry of Historic Places and the State Inventory of Historic Resources. Property owners of historic rated properties within these districts are eligible for certain tax relief benefits while in exchange, are required to maintain the structure in an historically appropriate manner.
- HYDRAULIC Operated by the pressure created by forcing water or another liquid through a comparatively narrow pipe or orifice such as in a hydraulic pump.
- IMPACT The consequences of a course of action; effect of a goal, guideline, plan, or decision.
- IMPLEMENTATION METHOD A statement which outlines a specific project or standard to implement a goal or policy (see Plan Introduction for complete definition and relationship to other Plan statements and the City's obligation to take action).
- INTERMEDIATE REGIONAL FLOOD see Flood.
- LDN CONTOUR A line showing average noise level (or anticipated average noise level) for an area. The ldn sound level represents a mathematical formula which tends to average noise events and gives additional importance to sound generated at night.

LIFE CYCLE COSTING - An evaluation method through which all costs attributable to a project decision are considered, including the initial investment, recurring costs and revenues, and proceeds from ultimate sale or other means of disposal.

MAINTAIN - Support, keep, and continue in an existing state or condition without decline.

DRAFT floodcom March 29, 1993 Page 7

## PROPOSED CHANGES TO THE DEVELOPMENT CODE APRIL 1993

#### **FLOODPLAIN**

- 6.070 Purpose. It is the purpose of these regulations to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The floodplain district is intended to prevent development or uses which may result in water or erosion hazards, or which results in damaging increases in erosion or flood heights. All developments proposed within the floodplain district shall be subject to the provisions of Site Plan Review, floodplain district regulations, and if applicable, Willamette Greenway regulations. "Development," as defined in Article 22, includes cut and fill, residential and non-residential construction, manufactured housing, land divisions, and other forms of development. For graphic illustration of the relationships between terms used in this Section, refer to Figure 6-3.
- 6.071 <u>Development to Which These Regulations Apply</u>. "Development", as defined in Article 22, includes, but is not limited to, excavation and fill, residential and non-residential construction, manufactured housing, and land divisions.
- 6.080 Applicability. The floodplain-district regulations apply at a minimum to those City floodplains, floodways, and base flood elevations defined Lands to Which These Regulations Apply. These regulations shall apply to all areas within the City of Albany that are subject to inundation from a 100-year flood. These areas are depicted on federal Flood Insurance Rate Maps (FIRMs) and Floodway Maps by the letter A, AE, or AO.

These areas have been identified by the Federal Emergency Management Agency (FEMA) in the Flood Insurance Study for Albany (March 16, 1989), for Benton County (August 5, 1986), and the preliminary study for Linn County (September 29, 1986) (July 18, 1985). In addition, the City Council may adopt by resolution more current studies or boundary information approved by the Federal Emergency Management Agency (FEMA).

Precise floodplain district boundaries may be difficult to determine from the maps referred to above due to their large scale and lack of site specific studies. In such instances, the Director may apply FEMA base flood elevations to topographic maps or site surveys in order to determine actual boundaries. In the absence of FEMA base flood elevations, the Director may utilize other sources of floodplain and floodway data to determine base flood elevations and boundaries. However, when elevation data is not available through FEMA or another authoritative source and the

development consists of 4 or more lots, 4 or more structures, or 4 or more acres, the applicant shall generate and have certified by a registered engineer the base flood elevation. Any decision of the Director regarding a determination of a base flood elevation or interpretation of a district boundary may be appealed in accordance with Section 1.410 1.520 of this Code.

- 6.081 <u>Variances</u>. Variances from the terms of this section shall be granted only, when because of special circumstances applicable to the property, including size, shape, topography, location or surroundings, the strict application of this section deprives such property of privileges enjoyed by other property in vicinity and under identical zoning classifications. There will be no variance given to the standards for development in the floodway. Variances from the floodplain management regulations of this section shall be reviewed as a Type II procedure and shall be approved if the review body finds that all of the following criteria have been met:
  - (1) The applicant can show good and sufficient cause; and
  - (2) Failure to grant the variance would result in exceptional, non-financial hardship to the applicant; and
  - (3) Issuance of the 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; and
  - (4) The variance is the minimum necessary, considering the flood hazard, to afford relief; and

In addition, variances from the required lowest floor elevation may be granted if the review body find that the request meets the following criterion as well as those criteria listed above:

(1) The parcel is one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level.

Upon issuance of the variance, the Community Development Director will notify the applicant in writing that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance, and such construction below the base flood level increases risks to life and property.

6.085 <u>Definitions</u>. As used in this code the following words and phrases shall have the following meanings:

<u>Base Flood or 100 Year Flood:</u> The flood having a one percent chance of being equalled or exceeded in any given year. Map designation always includes the letter "A" (e.g. A, AE, AO).

<u>Federal Emergency Management Agency (FEMA):</u> The federal agency charged with implementing the National Flood Insurance Program. FEMA provides floodplain maps to the City of Albany.

<u>Flood:</u> A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) the overflow of inland or tidal waters; and/or
- (b) the unusual and rapid accumulation of runoff of surface waters from any source.

<u>Flood Fringe:</u> Those areas outside the floodway but within the 100-year floodplain. Zone designations on Flood Insurance Rate Maps include A, AE, and AO. Note Floodway Relationships diagram Fig. 6-3.

<u>Flood Insurance Rate Map (FIRM):</u> The official map on which FEMA has delineated both the areas of special flood hazards and the insurance risk premium zones.

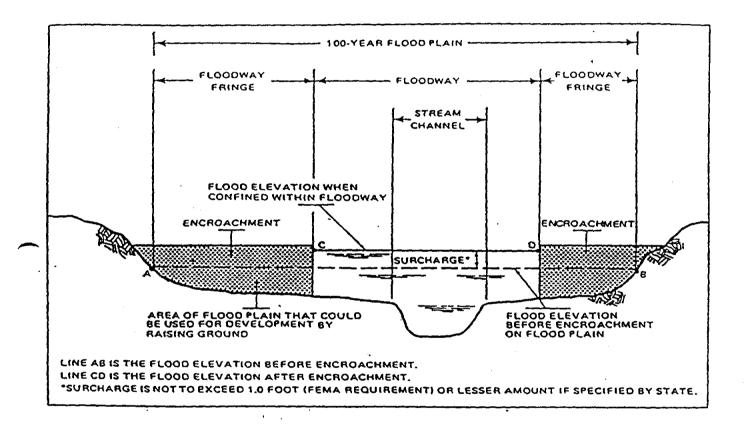
Floodplain: The combined area of the floodway and the flood fringe.

<u>Floodproofing</u>: Any combination of structural or nonstructural provisions, changes or adjustments to structures, land or waterway for the reduction or elimination of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents during a 100-year flood.

<u>Floodway:</u> 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 increasing the water surface elevation more than one foot. These areas are identified on the Floodway maps issued by FEMA. Note Floodway Relationships diagram Fig. 6-3.

Lowest Floor: The lowest floor of the lowest enclosed habitable area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking vehicles, building access or storage, in any 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 design requirements of this ordinance found in Section 6.134(1).

## FLOODWAY RELATIONSHIPS



<u>Permanent Foundation:</u> A natural or manufactured support system to which a structure is anchored or attached. A permanent foundation is capable of resisting flood forces and may include posts, piles, poured concrete or reinforced block walls, properly compacted fill, or other systems of comparable flood resistivity and strength.

<u>Special Flood Hazard Area:</u> Areas subject to inundation during the occurrence of the 100-year flood.

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 or the structure before the damage occurred.

<u>Substantial Improvement:</u> For the purposes of this section, and notwithstanding the provisions for nonconforming use and development pursuant to section 2.300 through 2.400, any repair, reconstruction, or 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:

- (a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or
- (b) Any alteration of a structure identified on the City's adopted Historic Inventory, provided that the alteration will not preclude the structure's continued designation as a historic structure.

<u>Watercourse:</u> Any natural or artificial stream, river, creek, ditch, channel, canal, conduit, culvert, drain, waterway, gully, ravine or wash in which water flows in a definite direction or course, either continuously or intermittently, and has a definite channel, bed and banks, and includes any area adjacent thereto subject to inundation by reason of overflow or flood water. This also includes any topographic feature not meeting the above definition which is identified in the Storm Water Drainage Master Plan for North Albany as needing preservation.

6.090 State and Federal Approval. City approval of any development use application within the floodplain is conditioned upon receipt of any required state or federal permits. Required state and federal permits include but are not limited to:

- (1) Permits and associated wetland development regulations administered by the Oregon Division of State Lands.
- (2) Permits administered by the U.S. Army Corps of Engineers.
- (3) All discharge permits covered by the U.S. Environmental Protection Agency and Oregon Department of Environmental Quality.
- 6.100 Floodway Restrictions. No development is allowed in any floodway except where the review body finds that the development will not result in any increase in flood levels during the occurrence of a base flood (the 100-year flood). Such finding shall be based upon applicant-supplied evidence certified by a registered professional engineer and upon documentation that one of the following three criteria have been met:
  - (1) The development does not involve the construction of permanent or habitable structures.
  - (2) The development is a public or private park or is a recreational use or municipal utility use.
  - (3) The development is a water-dependent structure such as a dock, pier, bridge, or floating marina.
    - If a floodway boundary is not designated on an official adopted City or FEMA map available to the City, the floodway boundary can be estimated from available data. Proposed development along such estimated floodway boundary shall not result in an increase of the base flood level greater than one foot as certified by a registered professional engineer.
- Alteration of the flood carrying capacity of a Watercourse prohibited. Any alterations of a watercourse must comply with Site Plan review criteria in Section 8.070 and be designed, constructed, and maintained to retain or improve the flood carrying capacity of the watercourse including, where possible, the containment of base year flood waters on open space lands. The Director will notify affected adjacent jurisdictions, and appropriate state and federal agencies prior to alteration of a watercourse. No development shall diminish the flood carrying capacity of a watercourse, without having first provided 30 day prior written notice to the City, any adjacent community, and the Natural Hazards Mitigation Office of Department of Land Conservation and Development.

- 6.120 General Information Requirements. In addition to the information required in other sections of this code, the application for site plan approval or for the particular type of development proposal (such as a subdivision, or Conditional Use) any development proposed in the floodplain district must include the following information:
  - (1) Elevations of the original contours.
  - (2) Final elevations of proposed fills and excavations.
  - (3) Base flood (100-year flood) elevations of the site.
  - (4) Location of any designated floodway and base flood boundary.
  - (5) Location of any designated wetlands and/or wildlife habitat (if applicable).
  - (6) Proposed elevation in relation to mean sea level of the lowest floor (including basement) of all structures (if applicable).
  - (7) Description of the extent to which a watercourse will be altered or relocated as a result of proposed development (if applicable).
  - (8) If floodproofing is required, the proposed description and elevation of floodproofing.
- 6.130 <u>Floodplain Review</u>. In addition to the Site Plan review criteria of 13.040, development within the floodplain district will be approved only upon determining that the following criteria have been satisfied:

#### GENERAL APPROVAL

- -(1) Demonstration can be made that the proposed development of floodplain lands is needed to provide buildable lands for the proposed use which cannot be satisfied with a lesser amount of floodplain encroachment.
- -(2) The proposed site or building will not, during potential future flooding, be so inundated by water as to result in injury to residents or serious damage to property or utilities.
- -(3) Any development will not change the flow of surface water during future flooding so as to endanger residents or property in the area. (Special engineering reports on the

- changes in water flow and potential damage which may be caused as a result of proposed activities may be required by the City.)
- (4) It shall be demonstrated that fill is necessary to allow an approved development activity to occur and that the amount of fill proposed is the minimum necessary to raise roadways to a level of at least one foot below the base year flood and to raise floor levels of habitable structures to at least one foot above the base year flood.
- 6.130 Land AND Division and Planned Development IVISION Standards. TANDARDS
  Land divisions and planned developments in the floodplain district shall be reviewed by the Planning Division as a part of the land use planning process. Notwithstanding other provisions of this code, all land division and planned development applications which contain land within the floodplain district shall be processed under the Type III process. In addition to the general review criteria for land divisions and planned developments in Article 11, applications within the floodplain district shall also be subject to the following standards:
  - (51) All land division proposals shall be consistent with the need to minimize flood damage.
  - (62) All land division proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
  - (73) All land division proposals shall have adequate drainage provided to reduce exposure to flood damage.
  - (84) Any lot created for development purposes must have adequate area created outside of the Floodplain-District floodway to maintain a buildable site area meeting the minimum requirements of this Code.
  - (5) Any new public or private street providing access to a residential development shall have a roadway crown elevation not lower than one foot below the 100-year flood elevation.
  - (6) All land divisions or planned developments in the floodplain district shall show the location of the 100-year flood contour line followed by the date the flood elevation was established. Where elevation data is not available, either through the Flood Insurance Study or from another authoritative source, and the development is four or more acres or results in four or more lots or structures, the elevation shall be determined and certified by a registered engineer. In addition, a statement located on or attached to the recorded map or plat shall read as follows: "Development of property within the 100-year floodplain as most currently established by the Federal

Emergency Management Agency or City of Albany may be restricted and subject to special regulations by the City."

- Manufactured Home Parks and Manufactured Home Subdivision Standards. Manufactured home parks and manufactured home subdivisions proposed in the floodplain district shall be reviewed by the Planning Division. Notwithstanding other provisions of this code, all manufactured home park and subdivision applications which contain land within the floodplain district shall be processed under a Type III process. In addition to the general review criteria applicable to manufactured home parks and subdivisions in Article 10, application for such within the floodplain district shall include an evacuation plan indicating alternate vehicular access and escape routes.
- 6.132 <u>Fill Standards.</u> Application for fill permits in the floodplain district shall be reviewed by the Building Official using Uniform Building Code Appendix 70. In addition to those standards set forth in UBC Appendix 70, all fill in the floodplain district shall be subject to the following standards:
  - (1) No fill shall be permitted in the floodway, except that which is allowed in section 6.100 Floodway Restrictions.
  - (2) Fill in the flood fringe shall not be subject to additional regulation beyond those applicable outside of the floodplain district unless such fill is specifically precluded by Title 18 (Building and Construction) and other sections of this code.
- 6.133 <u>Building DESIGN</u> Standards. TANDARDS Applications for building permits in the floodplain district shall be reviewed by the Building Official pursuant to locally adopted state building codes. In addition to building code criteria, all development in the floodplain district shall be subject to the following building standards:
  - (91) The lowest floor, including basement, of any proposed structure (including manufactured homes and non-residential structures) shall be placed at least one (1) foot above the base 100-year flood as determined by the latest Federal Insurance Study.
  - (10) Any public or private street providing access to a residential development shall have a roadway crown elevation not more than one foot below the base flood elevation.
  - (11) Problems of ponding, poor drainage, high water table, soil instability, or exposure to other flood hazards have been identified and mitigation proposed. Evaluations and mitigating measures shall be based on a base year flood and wet season characteristics. Drainage improvements shall adequately remove ponding and runoff

- waters-from and through the development site without adversely affecting other developed areas or potential development sites.
- (12) If adjacent to a designated floodway or wetlands, the development shall be designed to use the natural amenities of the floodway or wetlands (such amenities include open space, scenic views and vegetation) in accordance with an approved site plan.
- (13) Any possible impacts on fish and wildlife habitat have been considered and appropriate protection measures included in project design.

### **CONSTRUCTION STANDARDS**

- (142) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (15 3) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
- (16 4) Electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (17) All fill is engineered and compacted to City standards. Fill areas for structures shall have engineering certification that loading rates are adequate for the proposed structures.
- (48 5) All manufactured homes shall be on an adequately anchored, permanent foundation and be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, the use of over-the-top or frame ties to ground anchors (reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional details).
- (49 6) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement and shall be installed or constructed using materials, methods, and practices that minimize flood damage.
- (7) All new construction and substantial improvements shall replace or provide new water supply and systems to be designed to minimize or eliminate infiltration of flood waters into the system.

(8) All new construction shall have sanitary sewer systems designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood water. On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

#### **DOCUMENTATION**

- Property owners or developers shall file with the City a certificate whose format is acceptable to FEMA. This certificate must be approved by the Building Official, and prepared by a registered surveyor or professional engineer, architect or surveyor. The certificate must contain: 1) the actual elevation (in relation to mean sea level) of the lowest floor including basement of all new or substantially improved structures; 2) the elevation of any floodproofing; and 3) whether or not the structure contains a basement.
- (21-10) If flood hazard reduction methods are required as per Section 6.140(2), the property owners or developers shall file with the City certification by a registered professional engineer or architect that the flood hazard reduction methods meet or exceed FEMA standards.
- All land divisions or Planned Developments in the floodplain district shall show the location of the base year flood contour line followed by the date the flood elevation was established. Where elevation data is not available, either through the Flood-Insurance Study or from another authoritative source, and the development is four or more acres or results in four or more lots or structures, the elevation shall be determined and certified by a registered engineer. In addition, a statement located on or attached to the recorded map or plat shall read as follows: "Development of property within the 100 year floodplain as most currently established by the Federal Emergency Management Agency or City of Albany may be restricted and subject to special regulations by the City."
- 6.140 Flood Hazard Reduction Standards. All flood hazard reduction measures are required, as applicable, and must be certified as required in 6.1303 (209) and (2110) above to at least meet the following standards:
  - (1) For residential structures, fully enclosed areas below the lowest floor and lower than 1 foot above the base 100-flood level must meet or exceed the following minimum criteria:
    - (a) A minimum of two openings, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding, shall be provided.
    - (b) The bottom of all openings shall be no higher than one foot above grade.

- (c) Openings may be equipped with screens, louvers, or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.
- (2) Non-habitable construction and substantial improvements meeting the exceptions listed in 6.130 (9) and the certification requirements of 6.1303 (209) & (2110) can have the lowest floor and attendant utility and sanitary facilities located lower than one foot above the base 100-year flood elevation if:
  - (a) The structure is floodproofed so that below the base 100-year flood level the structure is watertight with walls substantially impermeable to the passage of water.
  - (b) The structure has structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
  - (c) The applicant is notified that flood insurance premiums will be based on rates that are one foot below the floodproofed level.
- 6.150 Warning and 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 as a result of failure of manmade structures and/or natural causes. This ordinance does not imply that the land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This ordinance does not create liability on the part of the City of Albany or any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.
- 6.160 Storage of Material and Equipment. No storage of material or equipment is allowed within floodway areas, unless the storage Storage within floodplain areas will can be approved only upon determination that the following criteria have been satisfied:
  - (1) Site Plan approval has been received.
  - (2) There is no storage or processing of material that is, in time of flooding, buoyant, flammable, toxic, explosive or otherwise could be injurious to human, animal, or plant life.
  - (3) The material or equipment is not subject to major damage by floods and is firmly anchored to prevent flotation or is readily removable from the area within the time available after flood warning.

The following deletions to the Definitions section of the Development Code (Article 22) move and revise floodplain management language to Article 6 Special Purpose Districts Sec. 6.085.

#### **ARTICLE 22**

#### **DEFINITIONS**

22.010 Definitions. As used in this Code, the following words and phrases shall have the following meanings:...

Flood: Any relatively high stream flow which overtops the natural or artificial banks of any part of a stream or river and that covers land not usually under water. The Intermediate Regional or Base Flood (often referred to as the hundred year flood) is a flood with a one percent chance of occurrence in any given year. This flood is mapped by the Army Corps of Engineers and is used by the Federal Emergency Management Agency and the City of Albany for purposes of regulating development within flood boundaries.

<u>Flood Fringe</u>: The area bordering the floodway and within the floodplain and which acts as a reservoir of flood waters.

Floodplain: The combined area of the floodway and floodfringe as defined herein.

Floodway: The minimum area necessary for the passage of flood waters including the channel and adjacent land areas which must be reserved in order to discharge the 100 year flood without cumulatively increasing the water surface elevation more than one foot; or any area designated as a floodway on the Comprehensive Plan Map or Zoning Map, whichever is more restrictive.

## EXHIBIT "C"

#### FINDINGS OF APPROVAL FILE NOS. CP-01-93 AND DC-01-93

#### SYNOPSIS OF MAJOR FINDINGS

- 1) The City of Albany is proposing minor amendments to the floodplain management provisions of the Comprehensive Plan and Development Code.
- These changes were initiated becasue of a growing awareness that several of the existing provisions were quite ambiguous and subjective, and thus open to numerous interpretations.
- 3) The City is proposing several substantive changes which strengthen the regulations. They include the addition of several FEMA provisions; a tightening of development standards in the floodway; and the inclusion of a new policy recognizing the importance of key swales and other drainage ways.
- 4) The proposed amendments have been reviewed by the Department of Land Conservation and Development.
- 5) The City conducted an intensive, interactive land use planning process with North Albany citizens in 1992.
- The City has responded to citizens' concerns about protecting the environmental sensitivity of North Albany in the following manner:
  - the construction of a \$10 million sanitary sewer project;
  - the adoption of Appendix Chapter 70 of the Uniform Building Code to deal with fill permits;
  - the adoption of hillside standards in the Development Code;
  - the creation of an overlay district that includes Thornton Lake and the existing commercial "node.";
  - a requirement that single family development between Thornton Lake and the railroad tracks be done as a planned development;
  - a requirement that any land division application be accompanied by an engineering study addressing drainage impacts on adjoining properties;
  - the inclusion of a Storm Drainage Facilities Plan for North Albany in the 1993-1994
     Capital Improvements Program;
  - the proposed Comprehensive Plan policy calling for the identification and subsequent protection of key drainages and swales;
  - the proposed Development Code change that would require that all subdivision requests in the floodplain be sent to the Planning Commission for a public hearing.

7) FEMA prepared a Flood Insurance Study for Benton County (including North Albany) in 1986. The report contains detailed information on the floodway and floodway fringe. On page 18 the report states that "the floodway fringe encompasses the portion of the floodplain that could be completely obstructed without increasing the water surface elevation of the 100-year flood by more than 1.0 at any point.

#### **COMPREHENSIVE PLAN AMENDMENTS**

1. A legislative amendment is consistent with the goals and policies of the Comprehensive Plan, the statewide planning goals, and any relevant area plans adopted by the City Council.

#### **Findings**

The proposed Comprehensive Plan amendments are consistent with the following goals and policies of the Albany Comprehensive Plan, which has been found to be in conformance with the statewide planning goals:

Goal 7: FLOOD HAZARDS & HILLSIDES, the goal of this section reads, "Protect life and property from natural disasters and hazards." The proposed Comprehensive Plan amendments are all aimed at achieving this goal.

Policy 1: "Continue to participate in the National Flood Insurance Program and comply with applicable standards." The proposed changes are intended to bring the Comprehensive Plan into greater conformance with this program and its standards. In addition, we are proposing to add to the statement our intentions to continue to participate in the Community Rating System (CRS), which recognizes jurisdictions with exemplary floodplain management programs. Participation in this program provides lower flood insurance for properties in the city. We originally began participation in the CRS anticipating annexation of North Albany. Our participation not only involves ordinance standards, but outreach efforts to realtors and lenders.

Goal 10: HOUSING - "Provide a variety of development and program opportunities that meet the housing needs of all Albany's citizens. Albany has a serious shortage of developable lots. There are infill opportunities in the North Albany flood fringe. The fringe contains the only identified medium density opportunities in the North Albany portion of the UGB.

Goal 11: PUBLIC FACILITIES AND SERVICES - STORM DRAINAGE - "Work toward the elimination of existing drainage problems and minimize future drainage problems within the Albany Urban Growth Boundary area." Policy 1 reads, "Protect existing drainage systems and easements, allowing modification to existing open drainageways upon approval and in conformance with of Comprehensive Plan Policies." The proposed regulations were rewritten so that significant open drainageways will be preserved.

Goal 14: URBANIZATION - "Achieve stable land use growth which results in a desirable and efficient land use pattern. The North Albany portion of the flood fringe has an established development pattern. There are some vacant platted lots in the Springhill Drive area and opportunities for medium density residential development near the intersection of Highway 20 and North Albany Road.

Goal 1: CITIZEN INVOLVEMENT - "Ensure that local citizens and other affected groups, neighborhoods, agencies, and jurisdictions are involved in every phase of the planning process." In addition to the outreach efforts for these hearings, the City conducted an intensive interactive planning process with the North Albany neighborhood in 1992.

Goal 2: LAND USE PLANNING, Policy 2 reads, "Base approval of Comprehensive Plan amendments upon consideration of the following:

- a. Conformance with goals and policies of the Plan.
- b. Citizen review and comment.
- c. Applicable Statewide Planning Goals.
- d. Input from affected governmental units and other agencies (especially DLCD).
- e. Short- and long-term impacts of the proposed change.
- f. Demonstration of public need for the change.
- g. Demonstration that the proposed amendment will best meet the identified public need versus other available alternatives.
- h. Any additional information as required by the Planning Commission or City Council."

When drafting the proposed Comprehensive Plan amendments, these factors have been considered.

2. A legislative amendment is needed to meet changing conditions or new laws.

#### **Findings**

The proposed Comprehensive Plan amendments are in part a response to the change in circumstances which has occurred since the annexation of North Albany.

Some of the current policies, implementation methods and definitions are not appropriate to deal with development in the flood fringe. We were not aware of the confusion in our regulations until we started getting development requests in North Albany, where approximately one-third of the land area is in the floodplain.

In addition, the assumptions on which the City's floodplain management program are based have changed since the current Goals and Policies were written. The floodplain was once a homogeneous area that would be inundated by a flood with a one percent chance of occurring in any given year. Now FEMA has split that area into two distinct and different regions. One is the floodway, the essential area needed to carry flood waters downstream. This area usually includes the stream channel and some adjacent land. The second area defined by FEMA within the floodplain is the flood fringe. FEMA's floodplain management model assumes that this area will be entirely obstructed, and that the floodway is sized large enough to handle all flood waters displaced by these obstructions. Therefore, development can be allowed, subject to certain requirements.

A final change of circumstance also relates to the annexation of North Albany, which does not currently have a piped storm drainage system. We have added an implementation measure which proposes that key swale areas be identified as part of a proposed Storm Drainage Master Plan for North Albany.

#### DEVELOPMENT CODE AMENDMENTS

1. The proposed amendments better achieve the goals and policies of the Comprehensive Plan than the existing regulatory language.

#### Findings

The proposed Development Code amendments better achieve the goals and policies of the Comprehensive Plan, particularly those under Goal 7: FLOOD HAZARDS & HILLSIDES. The new Development Code language is intended to divide development into two categories: those that are land-use decisions, which require some amount of discretion, and those that have clear and objective standards. The following plan policies are particularly relevant:

Policy 2: "Restrict new development (including fill) from locating within floodways...." The

proposed changes further restrict development in the floodway over the current regulations. Proposed regulations would prohibit the creation of parcels which do not contain sufficient building area outside of the floodway. In addition, FEMA does not prohibit development in the floodway, only that any development shall not result in any increase in flood levels during the occurrence of the base flood discharge. Our Development Code would prohibit any development involving permanent structures or those developments that are not park facilities or water-dependant activities.

Policy 5: "Ensure that development proposals in the flood fringe and adjacent to drainageways are consistent with FEMA and other applicable local regulations in order to minimize potential flood damage...." In forming the proposed changes, the FEMA Model Ordinance and Statutory Requirements were followed and in some cases exceeded. The review criteria established in this policy were considered in light of the proposed changes.

A major issue raised at the Planning Commission Hearing relates to this policy. The issue is whether or not the assumption that development in the flood fringe can be permitted with a negligible effect on public safety is valid or not. One aspect of floodplain management involves balancing the economic gain from floodplain development against the resulting increase in flood hazard. For purposed of the National Flood Insurance Program (NFIP). the floodway is used as a tool to assist local communities in this aspect of floodplain management. This tool enables communities to allow some development in the floodplain without increasing the hazard caused by flood waters. A State Water Resources Board publication titled OREGON'S FLOODPLAINS: A Status Report and Proposed Floodplain Management Program states that "inasmuch as development in this (flood fringe) area will not aggravate the flood problem appreciably, regulations need not prohibit structural development but should control floor elevations or require flood proofing to an elevation above that off a 100-year flood." An Army Corps of Engineers publications titled A Perspective on Floodplain Regulations for Floodplain Management further amplifies this approach by stating that permitted uses in the flood fringe would include "virtually all residential, commercial, industrial and other types of uses permitted by the underlying zoning ordinance provided uses are elevated on fill to or above the regulatory flood protection elevation." Elsewhere in this document the Corps describes a two-district ordinance approach which is generally what Albany's approach is. The Corps recomends, "Prohibition of most structural uses and fill in floodway areas. Most uses (are) permitted in flood fringe areas if elevated on fill or otherwise protected to the regulatory flood protection elevation. A two-district approach based upon quantified flood studies provides certainty in use of lands to the landowner and a strong factual base for judicial review of regulations." It is this uncertainty, present under the current regulations, that the proposed changes are attempting to remove.

Goal 10: HOUSING, Policy 1: "Ensure that there is an adequate supply of residentially zoned land in areas accessible to employment and public services to provide a variety of choices regarding type, location, density and cost of housing units commensurate to the needs of city residents." We are finding that the area most impacted by the current floodplain regulations is the Spring Hill neighborhood, which is the most intensely developed area in North Albany. In order to maximize the available land in this already developed area, we were able to clarify the regulations so as not to prohibit or overly burden single family development. All FEMA standards were met in doing this.

Policy 11: "Encourage residential development on already serviced and vacant residential lots or in areas within which services are available or can be economically provided." We are finding that the current floodplain regulations are, procedurally, too restrictive and do not encourage this. Most of the floodplain development that occurs in Albany will be in the Spring Hill area of North Albany which is mostly built out already.

Goal 6: WATER QUALITY, Policy 2 reads, "Cooperate with local, state and federal agencies that have primary responsibility to assist in minimizing the quantity of pollutants (from point or non-point sources) entering the surface streams, lakes and groundwater." The current floodplain regulations do not include FEMA mandated standards which require sanitary sewer systems to be designed to minimize or eliminate infiltration or discharges during flooding. The FEMA required language is proposed to be added to the Development Code (See Sec. 133(7) & (8)).

Goal 11: PUBLIC FACILITIES AND SERVICES, STORM DRAINAGE, Policy 1 reads, "Protect existing drainage systems and easements, allowing modification to existing open drainageways upon approval and in conformance with of Comprehensive Plan Policies." The proposed regulations were rewritten so that significant open drainageways will be preserved. In addition, in Article 12 of the Development Code (Public Improvements) we require that surface water drainage patterns and proposed storm drainage must be shown on every development proposal plan. All proposed storm sewer plans and systems must be approved by the City Engineer as part of the tentative plat or site plan review process. As for development not required to go through planning review (e.g. fill), the building department can require additional engineering studies regarding drainage impacts on adjoining properties.

Goal 14: URBANIZATION, Policy 1 reads, "Encourage Urban level development to locate within the city limits of the Albany Urban Growth Boundary....." The current regulations are not encouraging this, and may actually be contributing to the pressures for expansion of the UGB.

Goal 1: CITIZEN INVOLVEMENT, Policy 2 requires public participation. This amendment process will involve two noticed, public hearings held before the Planning Commission and the City Council. A notice of these hearings is being mailed to the individuals and agencies (approximately 75) on the Planning Division's mailing list. In addition, those developments with the greatest potential for cumulative effects, subdivisions, are proposed to be processed as a Type III land use decision which involves a public hearing before the Planning Commission.

2. The proposed amendments are consistent with Development Code policies on purpose and with the purpose statement for the base zone, special purpose district, or development regulation where the amendment is proposed.

#### **Findings**

The Development Code makes statements of purpose in Sec. 1.020. The proposed changes are consistent with these statements as follows:

The proposed changes are intended to:

- protect the health, safety and welfare of the citizens of Albany, not only those
  developing in the floodplain, but those impacted by development in the floodplain;
- satisfy FEMA requirements for participation in the National Flood Insurance Program;
- facilitate prompt review of development proposals by providing clear and specific standards;
- provide for public information, review and comment on proposals such as subdivisions, and recognize that such participation would prove valuable;
- insure that public and private facilities such as sewer and water are protected from damage and inundation in the event of a flood;
- set standards as required by FEMA for site and building improvements;

- require development that provides reasonable protection from flood hazards;
- protect constitutional property rights and due process by not being overly restrictive to those development which have little impact on the community, and by providing clear and objective standards.

The special purpose districts are intended to regulate development in areas where topographic or natural features, or proximity to an airport require that specific limitations or requirements be imposed. The proposed changes to the Floodplain Special District are intended to meet FEMA requirements for floodplain management and are applicable to all areas within the designated 100-year floodplain.