

City of West Linn
PRE-APPLICATION CONFERENCE
SUMMARY NOTES

February 5, 2009

SUBJECT: Flood Management Permit to build an addition to a single family home at 5725 River St.

ATTENDEES: Applicant: Homer Wadsworth
Staff: Peter Spir (Associate Planner)
Citizen's representative: Sally McLarty

The following is a summary of the meeting discussion provided to you from staff meeting notes. Additional information may be provided to address any "follow-up" items identified during the meeting. These comments are PRELIMINARY in nature. Please contact the Planning Department with any questions regarding approval criteria, submittal requirements, or any other planning-related items. Please note disclaimer statement below.

Project Details

The applicant proposes to construct an addition to an existing sunroom at the rear or riverside of the house. The addition would measure 18 X 15 feet. The addition would keep 16 feet from the top of the bank. The required setback is 15 feet so this setback will meet code and so no Willamette River Protection permit is needed.

The property is in the 100 year floodplain and partially in the 1996 flood boundaries. Thus a Flood Management Area Permit per CDC Chapter 27.010 and 27.020 is required. The 100 year floodwaters are expected to reach an elevation of 48 feet above sea level. Our code requires that the finished floor of the addition be at least one foot above flood elevation. Thus, the finished floor elevation of the addition must at an elevation of 49 feet. In this case the sun room will be elevated at the level of the second floor (12 feet above grade) and supported by posts. There will be no enclosed or liveable space at grade. Given the fact that "at grade" elevation of 5725 River Street is 40-41 feet and the addition will be at be at 52-53 feet, the addition will be well above the floodwaters. Therefore the addition will have no impact on any flooding.

Typically the applicant would be required to produce signed stamped plans by an Engineer or Architect showing how any enclosed crawl space underneath the addition would have hydrostatically controlled doors/louvers that would allow the unimpeded flow of flood water. Given the fact that there will be no enclosed space and the addition is 2-3 feet above the 100 year flood elevation, a waiver of that requirement is reasonable.

Process

A Flood Management permit is required. The deposit fee is \$1,050. A completed application form is required.

For the Flood Management permit the submittal requirements of CDC Section 27.050 must be addressed. If some of this is considered not applicable (N/A), the applicant may request a waiver of that code section in a letter addressed to the Planning Director. The letter must identify which code section is to be waived, and most importantly, why it should be waived or why it is not applicable.

The application must include full point-by-point response to the approval criteria of CDC Section 27.060. No waivers of the approval criteria are allowed; N/A is not an acceptable response. You must explain why the specific approval criteria are not applicable. The applicant should request a waiver of the requirement for a stamped and signed certification by a professional civil engineer or architect licensed to practice in the state of Oregon that the design will not adversely impact the floodwater flow and velocity since it constitutes no impedance or barrier to the floodwaters.

Critical to the application are drawings to scale (1:20 and provide a lineal scale) showing a profile or elevation of the proposed addition. We will also need a "plan view" or overhead drawing to scale of the addition(s). Staff recommends eliminating any architecture/aesthetic cladding on the support posts of the addition to minimize their size and further reduce impacts on floodwaters.

27.050 THE APPLICATION (SUBMITTAL REQUIREMENTS)

Applications for a flood management area permit must include the following:

- A. A pre-application conference as a prerequisite to the filing of the application.*
- B. An application initiated by the property owner, or the owner's authorized agent, and accompanied by the appropriate fee.*
- C. An application submittal that includes the completed application form and three copies of written responses addressing CDC Sections 27.060, 27.070, 27.080 (if applicable), and 27.090 (if applicable), three copies of all maps and plans at the original*

scale, and three copies of all maps and plans reduced to a paper size not greater than 11 x 17 inches.

- D. *A map of the parcel indicating the nature of the proposed alteration and its relationship to property zones, structures, trees, and any other pertinent features of the parcel.*
- E. *Information regarding the elevation of the site prior to development, the base flood elevation data for subdivisions (if applicable), and a description of water course alterations, if proposed.*
- F. *A topographic map of the site at contour intervals of five feet or less showing a delineation of the flood management area, which includes, but is not limited to, areas shown on the Flood Management Area map. The City Engineer or Building Official, as applicable, may, at his/her discretion, require the map to be prepared by a registered land surveyor to insure accuracy. A written narrative explaining the reason why the owner wishes to alter the floodplain shall accompany the site plan map.*
- G. *The elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;*
- H. *The elevation in relation to mean sea level to which any structure has been flood proofed (non-residential only).*

27.060

APPROVAL CRITERIA

The Planning Director shall make written findings with respect to the following criteria when approving, approving with conditions, or denying an application for development in flood management areas.

- A. *Development, excavation, and fill shall be performed in a manner to maintain or increase flood storage and conveyance capacity and not increase design flood elevations.*
- B. *No net fill increase in any floodplain is allowed. All fill placed in a floodplain shall be balanced with an equal amount of soil material removal. Excavation areas shall not exceed fill areas by*

more than 50 percent of the square footage. Any excavation below bankful stage shall not count toward compensating for fill.

- C. Excavation to balance a fill shall be located on the same parcel as the fill unless it is not reasonable or practicable to do so. In such cases, the excavation shall be located in the same drainage basin and as close as possible to the fill site, so long as the proposed excavation and fill will not increase flood impacts for surrounding properties as determined through hydrologic and hydraulic analysis.*
- D. Minimum finished floor elevations must be at least one foot above the design flood height or highest flood of record, whichever is higher, for new habitable structures in the flood area.*
- E. Temporary fills permitted during construction shall be removed.*
- F. Prohibit encroachments, including fill, new construction, substantial improvements, and other development in floodways unless certification by a professional civil engineer licensed to practice in the state of Oregon is provided demonstrating that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.*
- G. All proposed improvements to the floodplain or floodway which might impact the flood carrying capacity of the river shall be designed by a professional civil engineer licensed to practice in the state of Oregon.*
- H. New culverts, stream crossings, and transportation projects shall be designed as balanced cut and fill projects or designed not to significantly raise the design flood elevation. Such projects shall be designed to minimize the area of fill in flood management areas and to minimize erosive velocities. Stream crossings shall be as close to perpendicular to the stream as practicable. Bridges shall be used instead of culverts wherever practicable.*

- I. *Excavation and fill required for the construction of detention facilities or structures, and other facilities, such as levees, specifically shall be designed to reduce or mitigate flood impacts and improve water quality. Levees shall not be used to create vacant buildable land.*
- J. *The applicant shall provide evidence that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.*
(ORD 1522)

27.65 INTERPRETATION OF FLOOD BOUNDRIES

The Planning Director shall make interpretations, where needed, as to exact location of the boundaries of the flood hazard area (for example, where there appears to be a conflict between mapped boundaries and the actual filed condition). Any person contesting the location of the boundary may appeal the Planning Director's interpretation pursuant to Section 01.060 of this Code.

(ORD 1522)

27.070 CONSTRUCTION MATERIALS AND METHODS

- A. *All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage using methods and practices that minimize flood damage.*
- B. *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.*
- C. *New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.*
- D. *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.*

- E. *On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.*
- F. *All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.*

27.080

RESIDENTIAL CONSTRUCTION

- A. *New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to at least one foot above the base flood elevation.*
- B. *Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a professional civil engineer or architect licensed to practice in the state of Oregon, and must meet or exceed the following minimum criteria:*
 - 1. *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.*
 - 2. *The bottom of all openings shall be no higher than one foot above grade.*
 - 3. *Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry or exit of floodwaters.*
 - 4. *Fully enclosed areas below the base flood elevation shall only be used for parking, access, and limited storage.*
 - 5. *Service equipment (e.g., furnaces, water heaters, washer/dryers, etc.) is not permitted below the base flood elevation.*

6. *All walls, floors, and ceiling materials located below the base flood elevation must be unfinished and constructed of materials resistant to flood damage.*
- C. *Crawlspaces. Crawlspaces are a commonly used method of elevating buildings in Special Flood Hazard Areas (SFHAs) to or above the Base Flood Elevation (BFE), and are allowed subject to the following requirements:*
1. *The building is subject to the Flood-Resistant Construction provisions of the Oregon Residential Specialty Code.*
 2. *They shall be designed by a professional engineer or architect licensed to practice in the State of Oregon to meet the standards contained in the most current Federal Emergency Management Agency's (FEMA) Technical Bulletin.*
 3. *The building must be designed and adequately anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.*
 4. *Flood vent openings shall be provided on at least two sides that equalize hydrostatic pressures by allowing for the automatic entry and exit of floodwaters. The total area of the flood vent openings must be no less than 1 square inch for each square foot of enclosed area. The bottom of each flood vent opening can be no more than 1 foot above the lowest adjacent exterior grade. For guidance on flood openings, see FEMA Technical Bulletin 1-93, Openings in Foundation Walls.*
 5. *Portions of the building below the BFE must be constructed with materials resistant to flood damage. This includes not only the foundation walls (studs and sheathing), but also any, joists, insulation, or other materials that extend below the BFE. For more detailed guidance on flood-resistant materials see FEMA Technical Bulletin 2-93, Flood-Resistant Materials Requirements.*

6. *Utility systems within the crawlspace must be elevated above BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, must either be placed above the BFE or sealed from floodwaters. For further guidance on the placement of building utility systems in crawlspaces, see FEMA 348, Protecting Building Utilities From Flood Damage. Flood-resistant materials and utilities, access, and ventilation openings in crawlspaces are further addressed in this bulletin.*
7. *The interior grade of a crawlspace below the BFE must not be more than 2 feet below the lowest adjacent exterior grade (LAG).*
8. *The height of the below-grade crawlspace, measured from the interior grade of the crawlspace to the top of the crawlspace foundation wall must not exceed 4 feet at any point. This limitation will also prevent these crawlspaces from being converted into habitable spaces.*
9. *There must be an adequate drainage system that removes floodwaters from the interior area of the crawlspace. Possible options include natural drainage through porous, well-drained soils and drainage systems such as low-point drains perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity.*
10. *The velocity of floodwaters at the site should not exceed 5 feet per second for any crawlspace. For velocities in excess of 5 feet per second, other foundation types should be used.*
11. *For more detailed information refer to FEMA Technical Bulletin 11-01 or the most current edition.*
12. *The use of below grade crawlspaces to elevate the building to 1-ft. above the BFE may cause an increase in flood insurance premiums which, are beyond the control of the City.*

(ORD. 1565)

D. A poured slab placed over fill can be used to elevate the lowest floor of a structure above the base flood elevation. However, when a building site is filled, it is still in the floodplain and no basements are permitted.

- E. *Placing a structure on piers, piles, and posts is allowed provided supporting members are designed to resist hydrostatic and hydrodynamic forces.*

The City has 30 days to determine if the application is complete or not (most applications are incomplete). The applicant then has 180 days to make it complete, although usually it is complete within three months of the original submittal. Once complete, staff prepares public notice and schedules the decision date. There is no public hearing. This is a Planning Director's decision. The public notice period is 14 days and involves notifying all property owners within a 100-foot radius of the site. The Planning Director's decision becomes final after 14 days if no appeals are filed. If it were appealed, it would then go to City Council. The City has a total of 120 days to exhaust all local review and appeals. Subsequent appeals go to LUBA.

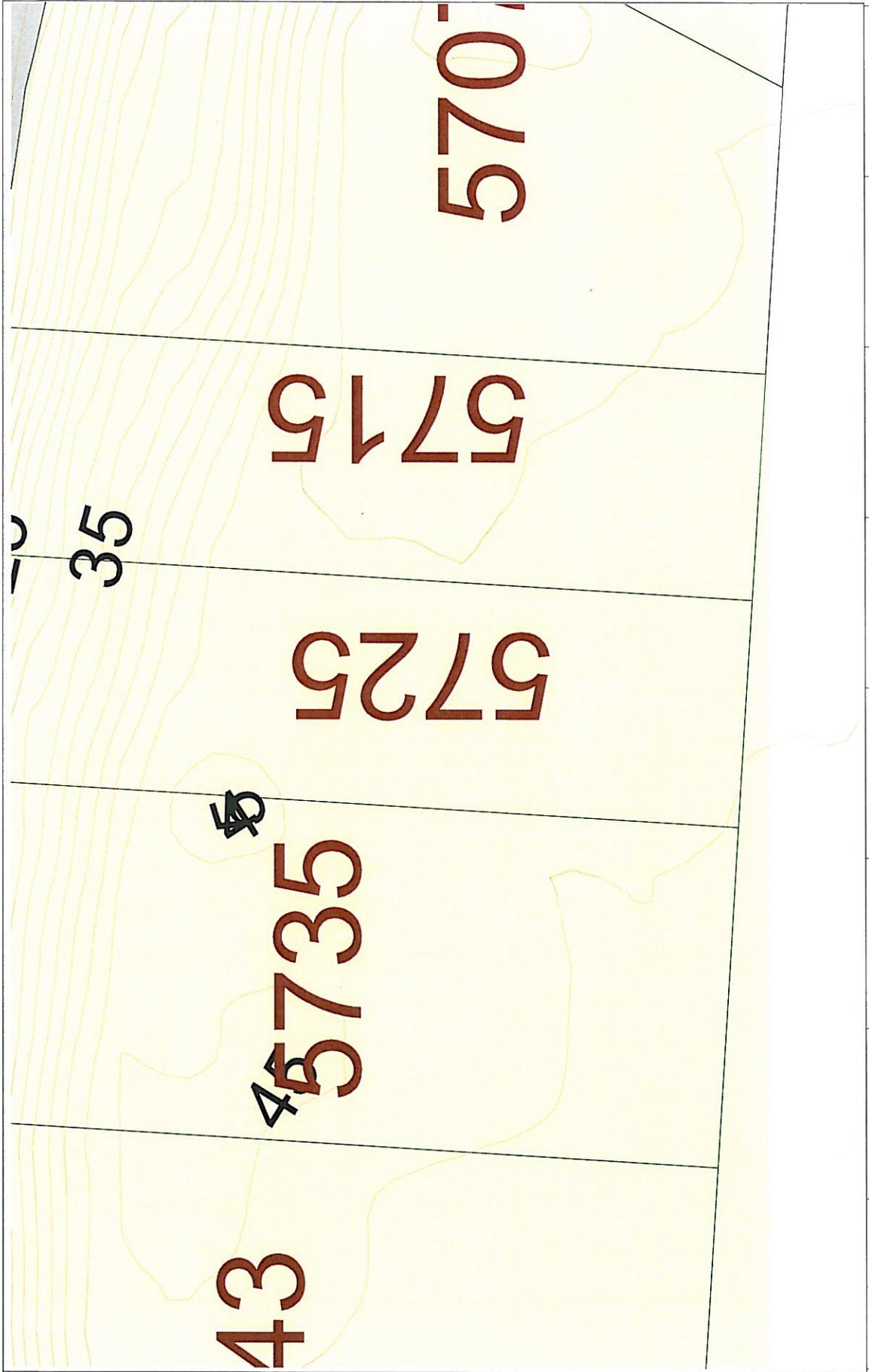
Once approved, the applicant has three years to construct the improvements and satisfy conditions of approval before approval lapses and is void.

The applicant shall be responsible for verifying if additional permits need to be obtained through the US Army Corps of Engineers and the Department of State Lands.

Typical land use applications can take 2-3 months from date of submittal.

DISCLAIMER: This summary discussion covers issues identified to date. It does not imply that these are the only issues. The burden of proof is on the applicant to demonstrate that all approval criteria have been met. These notes do not constitute an endorsement of the proposed application. Staff responses are based on limited material presented at this pre-application meeting. New issues, requirements, etc. could emerge as the application is developed. These pre-apps also have a limited "shelf life", so as new development code amendments are made; the proposed development concept may be affected or invalidated.

p:/devrve/pre-apps/pre app sumry-2-05-09-5725 RIVER ST-FLOODPROOF



Scale: 045 Feet

City of West Linn GIS (Geographic Information System), SnapMap Date: 2/3/2009

MAP DISCLAIMER:

This product is for informational purposes and may not have been prepared for, or be suitable for, legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

5 30 000m E

JOINS PANEL 0038

5 31 000m E

CITY OF GLADSTONE
410017

ZONE X

41

ZONE AE
CLACKAMAS

65

CLACKAMAS

GOAT ISLAND

CITY OF GLADSTONE
CITY OF WEST LINN

WILLAMETTE

RAPIDS

ZONE AE

RIVER

48

PROFILE
BASE
LINE

ZONE X

RIVER

STREET

LEWIS

HEAMER COURT

ROBERT MOORE ST

BOLTON STREET

WILLAMETTE DRIVE

1ST STREET

EASY

BROADWAY

DRIVE

STREET

COURT

STREET

HOOD

STREET

BURNS

STREET

AMY STREET

STREET

CASCADE STREET

GARDEN STREET

HOLLY

SINGLAIR STREET

STREET

GROVE STREET

STREET

RIVER

STREET

BELLA SUE

STREET

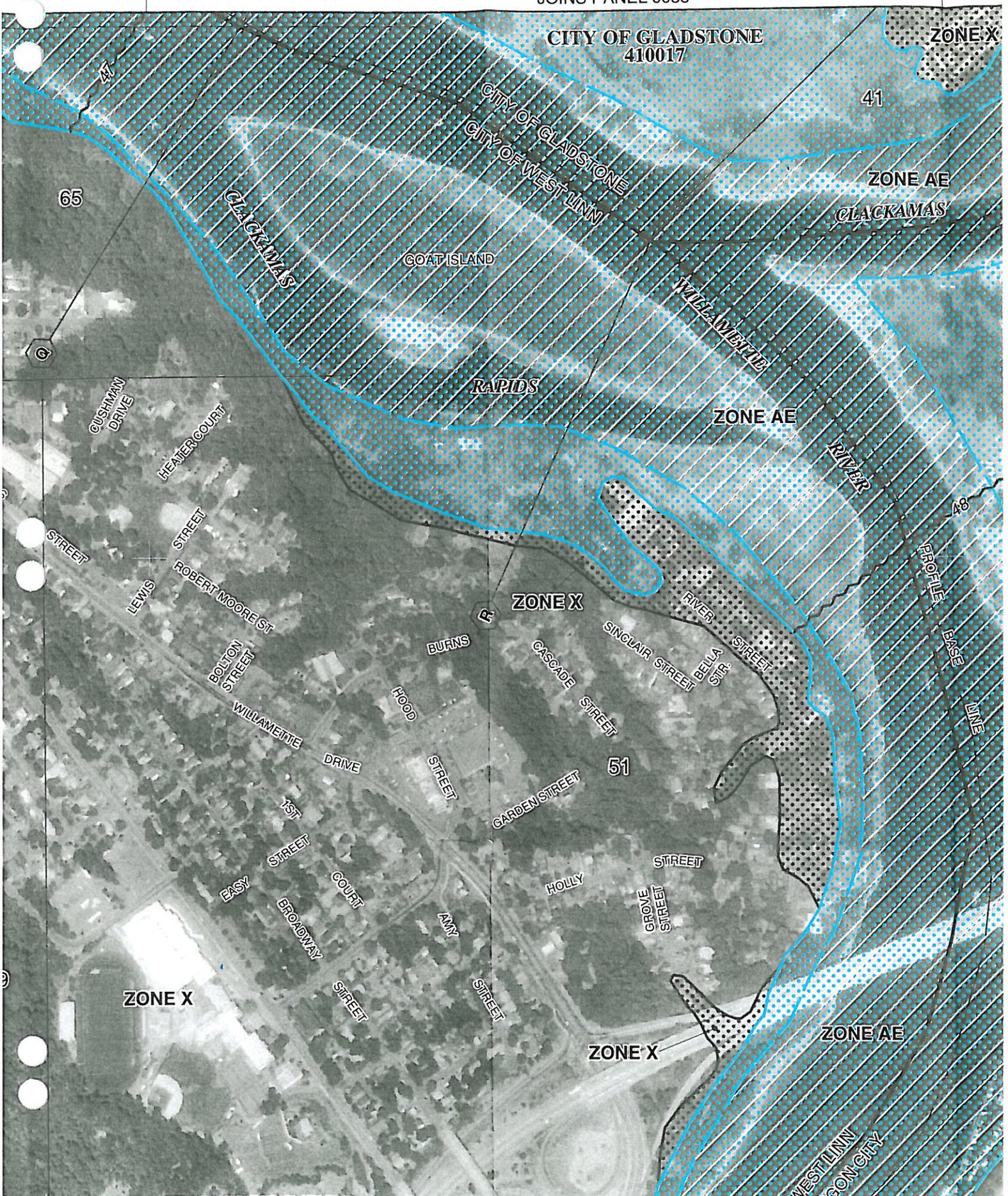
51

ZONE X

ZONE X

ZONE AE

WEST LINN
CON CITY



FIRM

FLOOD INSURANCE RATE MAP

CLACKAMAS COUNTY,

OREGON

AND INCORPORATED AREAS

PANEL 276 OF 1175

SEE MAP INDEX FOR FIRM PANEL LAYOUT
CONTAINS:

<u>COMMUNITY</u>	<u>NUMBER</u>	<u>PANEL</u>	<u>SUFFIX</u>
BLADSTONE, CITY OF	410017	0276	D
OREGON CITY, CITY OF	410021	0276	D
WEST LINN, CITY OF	410024	0276	D

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.



MAP NUMBER
41005C0276D

EFFECTIVE DATE
JUNE 17, 2008

Federal Emergency Management Agency

FIRM

FLOOD INSURANCE RATE MAP

CLACKAMAS COUNTY,

OREGON

AND INCORPORATED AREAS

PANEL 276 OF 1175

SEE MAP INDEX FOR FIRM PANEL LAYOUT
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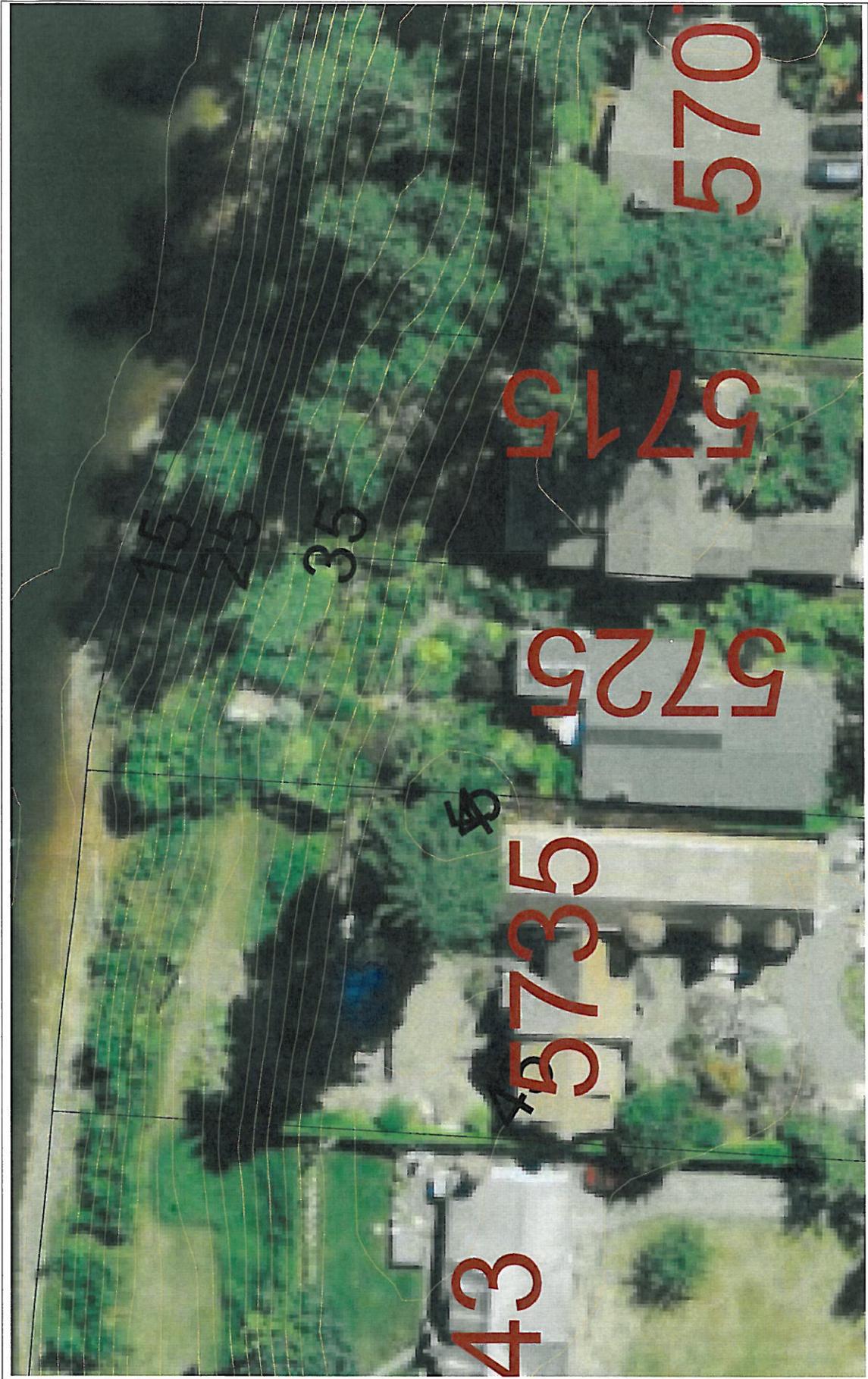
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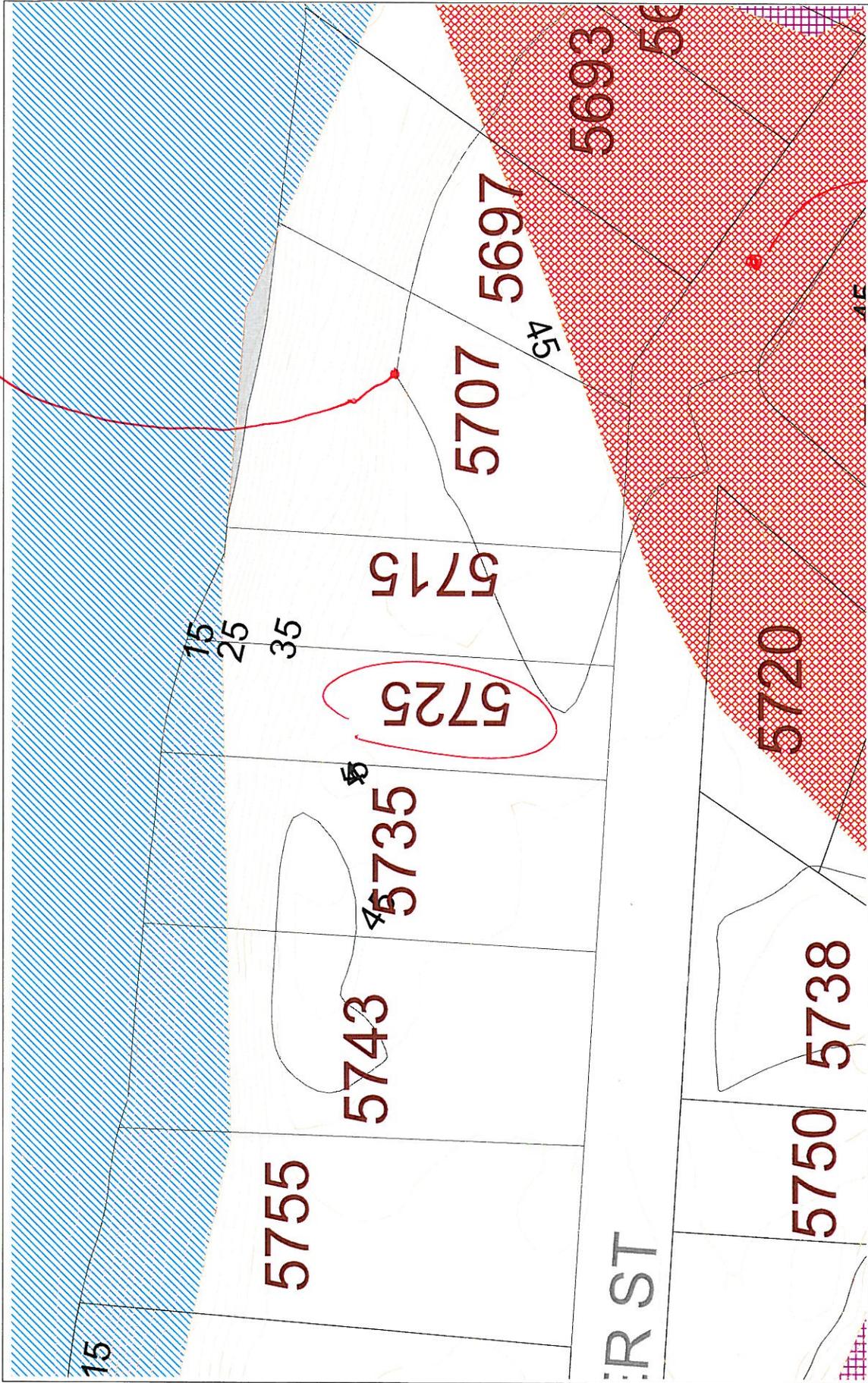


Scale: 045 Feet

City of West Linn GIS (Geographic Information System), SnapMap Date: 2/3/2009

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1996 Flood



Scale: 090 Feet

City of West Linn GIS (Geographic Information System), SnapMap Date: 2/3/2009

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