

BEFORE THE LAND USE HEARINGS OFFICER
CLACKAMAS COUNTY, OREGON

Regarding an Appeal of a Planning Director Decision Approving an Application for a Floodplain Development Type 2 Permit for Construction of a Single Family Residence Within the Sandy River Floodplain.

Case File No: Z0229-22-F

A. SUMMARY

1. The applicant Michael Gregory has submitted four separate but substantially identical Floodplain Development Permits. The owner of each of the four subject properties is Gregory Management LLC, and these are four of six contiguous lots owned by Gregory Management LLC that are located west of the Sandy River and east of E. Brightwood Loop Rd., near its intersection with E. Miller Road, that the applicant intends to develop. The site address for the roughly 0.65-acre subject property of application file no. Z0228-22-F is 64297 E Brightwood Loop, Brightwood, OR 97011, within Clackamas County. The legal description for this subject property is T2S, R7E, Section 30BC, Tax Lot 3203. The site address for the roughly 0.65-acre subject property of application file no. Z0229-22-F is 64303 E Brightwood Loop, Brightwood, OR 97011, within Clackamas County. The legal description for this subject property is T2S, R7E, Section 30BC, Tax Lot 02700. The site address for the roughly 0.80-acre subject property of application file no. Z0230-22-F is 64309 E Brightwood Loop, Brightwood, OR 97011, within Clackamas County. The legal description for this subject property is T2S, R7E, Section 30BC, Tax Lot 3201. The site address for the roughly 1.71-acre subject property of application file no. Z0231-22-F is 64315 E Brightwood Loop, Brightwood, OR 97011, within Clackamas County. The legal description for this subject property is T2S, R7E, Section 30BC, Tax Lot 3202.
2. Each application is substantially identical, with the applicant proposing construction of a new single-family residence in the floodplain of the Sandy River on each of these four properties. The Comprehensive Plan Designation for the subject properties is Residential Recreational (RR). The subject properties are not located inside an urban growth boundary. Each of these applications were deemed complete on March 30, 2022. The 150-day timeline for final action on the application pursuant to ORS 215.427(1) is January 20, 2023.
3. The County's Planning Director¹ reviewed the applications, approving each by written decision issued on October 4, 2022, subject to a number of conditions of approval. The four individual applications Z00228-22-F, Z00229-22-F, Z00230-22-F, Z00231-22-F, and the four corresponding October 4, 2022 written decisions of approval, concern certain facts specific to each subject property such as its size, street address, legal description, Map & Taxlot, BFE (including elevation certificates), and File No. for each lot. Each application also has its own site plan and plans with specific details for each lot. The project descriptions, identified

¹ ZDO 1307.3(B) provides that the Planning Director includes "Any County staff member authorized by the Planning Director to fulfill the responsibilities assigned to the Planning Director by the [ZDO]." County Sr. Planner Steve Hanschka acted in this capacity.

standards and criteria, and related findings, discussion, and conditions of approval, are otherwise substantially identical.

4. On October 17, 2022 Michael P. Tehan via the Hoodland CPO submitted four separate, but substantially identical, written appeals of each of these four decisions. The appeals each provide the following reason(s): “Improper consideration of ZDO Section 703 requirements; Failure to acknowledge written comments on application.”
5. On December 1, 2022, Hearings Officer Carl Cox (the “Hearings Officer”) conducted a single combined public hearing to receive testimony and evidence about the four appeals challenging the County Planning Director’s approval of these four applications for Floodplain Development permit related to land use approval to develop each of the subject properties with a single-family residence. County staff recommended approval of the applications subject to conditions, consistent with the approval by the County Planning Director. The applicant provided testimony in support of the County’s recommended approval of the applications, and does not dispute the proposed conditions of approval. Appellant provided witness testimony and oral argument, submitted exhibits including photos, written materials, and written comments and arguments, and opposes the applications and proposed development of these properties.
6. Prior to ending the public hearing and closing the record, the Hearings Officer asked whether any of the parties or members of the audience wanted an opportunity to provide additional evidence, arguments, or testimony, stating in any case the record would remain open until 4:00 pm on December 1, 2022 to receive documents and statements referenced at the hearing and any comments submitted by that time. No one requested that the record remain open, and the applicant waived the final period. The Hearings Officer closed the hearing, stating that the record would close at 4:00 pm on December 1, 2022.

B. HEARING, RECORD HIGHLIGHTS, AND POST-HEARING SUBMITTALS

1. Notice of each of the four land use applications was sent to property owners within 500 feet, Community Planning Organizations (CPO)², and interested citizens and agencies. Numerous Public comments were received by the County, reviewed and considered by the Hearings Officer in advance of the hearing, with relevant portions summarized below:

Relevant Background Information, and Comments Submitted Prior to Hearing

2. On March 30, 2022, the Oregon Department of State Lands issued a Consent Order to Michael Gregory (applicant) in the matter of DSL Enforcement File No. 8440-ENF concerning removal and fill activities he performed within an unnamed wetland located at the site of the subject properties. Specifically, DSL determined that a spring fed wetland exists at the site, and between January 15, 2022 and March 30, 2022, Mr. Gregory was responsible for more than 50 cubic yards of removal and fill of material within this wetland without a permit or other authorization. The stipulated agreement requires Mr. Gregory to complete certain restoration activities, and pay a fine. (Exhibit 9)

² The Mt. Hood Corridor CPO is currently inactive.

3. On June 27, 2022, the Department of the Army's U.S. Army Corps of Engineers, Portland District issued a determination to the applicant Michael Gregory that certain work he performed within an unnamed wetland located at the site of the subject properties likely impacted areas under their jurisdiction, advising that further work may require permit authorization. This involved the same removal and fill activities that were the subject of the DSL Consent Order. Mr. Gregory submitted joint permit applications to the U.S. Army Corps of Engineers and Oregon Department of State Lands. (Exhibit 8)
4. On June 30, 2022, County staff completed review of Floodplain Development Permit Z0063-22-F, a proposal for a floodplain development permit for site preparation work only to include: 3,000 cubic yards of cut/fill grading (including vegetation removal), construction of a culvert and access driveways for eight properties. (Two of these eight original lots are no longer tax lots per approved lot line adjustments, leaving the six remaining contiguous lots.) No structural/single family residential development was proposed as part of this application. Staff noted that this application was for "after the fact" approval of development (grading, driveway, and culvert construction) that had already occurred on the site and was the subject of an active violation action by the County and also by the Oregon Department of State Lands. County Senior Planner Melissa Ahrens, acting in the capacity of Planning Director, denied the application for a number of reasons, including not containing engineering information, scaled plans, or detailed information about the proposed culvert and watercourse alteration, with the comments:

Not all necessary permits have been obtained from Oregon Department of State Lands and staff do not have enough information to determine if permits are required from the Army Corps of Engineers for the full floodplain development proposed in this application. This criteria is not met.

Since staff do not have accurate scaled plans of the proposed culvert or an analysis that would demonstrate that the flood carrying capacity of the watercourse is not diminished by the proposed watercourse alteration staff find that the proposed development is not consistent with this criteria. (Exhibit 6)
5. The applicant appealed the denial of Floodplain Development Permit Z0063-22-F. The County held a public hearing on August 4, 2022 and Ms. Ahrens presented information in support of its decision before the County Land Use Hearings Officer.³ Among other things, Ms. Ahrens noted that, with respect to ZDO 703 polices related to cut and fill, the application materials do not contain engineering information, scaled plans, or detailed information about the proposed culvert and watercourse alteration, pointing to the requirements of sections 703.10 and 703.11. The applicant Michael Gregory presented evidence and testimony in support of his application. Several interested individuals provided written comments, and several members of the public appeared at the hearing and provided testimony largely in opposition to the application. The applicant withdrew the entire application (not just the appeal) before a decision was made. (Exhibit 7)
6. County Sr. Planner Steve Hanschka prepared a Floodplain Detail Map dated October 11, 2022 showing the locations of the subject lots and the Sandy River, indicating base flood elevations for each lot, showing the locations for the Sandy River floodplain and Sandy River Floodway. Mr. Hanschka and County staff provided a copy of FEMA Flood Insurance Study (FIS) Flood Profile 129P, dated January 18, 2019, providing Base Flood Elevation (BFE) Analysis of the

³ I acted in the capacity of County Land Use Hearings Officer at this hearing.

Subject Lots. These exhibits state the following BFE for the subject properties for these four applications: TL 3203 (Z0228-22-F) BFE=1,137.5 feet; TL 2700 (Z0229-22-F) BFE=1,136 feet; TL 3201 (Z0230-22-F) BFE=1,135.1 feet; TL 3202 (Z0231-22-F) BFE=1,134 feet; Mr. Hanschka and County staff also provided a copy of FEMA FIS Flood Insurance Rate Map (FIRM) No. 41005C0382E, dated January 18, 2019, providing the FIRM for the subject area. (Exhibits 10, 11, 12)

7. Applicant Michael Gregory submitted a full site plan dated May 13, 2022 showing the locations of each lot, providing elevation data for each building site, showing elevation data for the crawlspace area, main floor, and deck areas for each proposed home, showing primary and replacement septic areas for each proposed home, locations for proposed driveways and utilities, and the approximate Flood Hazard Mark. The site plan also shows the location of the existing depression/marsh area, and approximately indicates the location of the access road to the site from Brightwood Loop Rd. and access easements serving each property. Mr. Gregory also submitted separate detailed site plans for each of the four lots proposed for development with single-family homes, prepared by Alan Mascord Design Associates, Inc. (Mr. Gregory also submitted site plans prepared by Alan Mascord Design Associates, Inc. for the two additional lots he intends to develop that are not among the four applications approved by the County and appealed here.) The four lots proposed for development are shown taking access directly from the easement. The two lots that are not included with these four applications will apparently take access over an as yet non-existent water crossing, requiring additional details and information not provided with these four applications, and not relevant here. (Exhibits 13, 14, 15, 16, 17, 18, 19)
8. County staff also provided a copy of the Clackamas County Dept. of Assessment & Taxation Tax Assessor's Map dated April 27, 2022 showing the subject properties and additional lots Mr. Gregory intends to develop. This map shows the Sandy River, and shows area development including nearby developed properties on both sides of the river. The applications also included a Final Property Line Adjustment (PLA) record of Survey dated March 3, 2022 and prepared by Ronald Alvin Bush, Registered Professional Land Surveyor. Mr. Gregory also submitted a Grading Cut & Fill Site Plan dated March 2022 that was also prepared by Ronald Alvin Bush, Registered Professional Land Surveyor. In addition, Mr. Gregory submitted construction plans with floodplain standards highlighted dated December 15, 2021 that was prepared by Alan Mascord Design Associates, Inc. and stamped by a licensed professional engineer. (Exhibits 20, 21, 22, 23)
9. County staff submitted numerous pages of email correspondence with staff that includes comments from the Applicant Mr. Gregory, the Appellant Mr. Tehan, and various other individuals, organizations and agencies, related to Mr. Gregory's activities on the subject properties and his plans to develop these sites. These comments included responses by Scott Kline, Hoodland Fire District #74 Division Chief/Fire Marshal, concerning water supply and access standards and requirements, with reference to the 2019 Oregon Fire Code. Mr. Hanschka clearly notes in these communications that the floodplain development permit applications are for the proposed four northerly building sites, based only on performance standards for new homes in the floodplain, and do not address requirements for approval for access, septic systems, or other items, and do not resolve the DSL violation issues or the culvert reconstruction/reinstallation. (Exhibits 24, 25, 26, 27, 38)

10. Among the email correspondence are several notes from the appellant, Michael Tehan, to various County staff (including Planning and Code Enforcement, among others), DSL staff, and staff with the US Army Corps of Engineers concerning Mr. Gregory's activities at the proposal sites and within the Sandy River floodplain, including work on the easement access road, clearing and grading of the proposed home sites, and dredging/filling within the wetlands at the site. Mr. Tehan asserts that some of Mr. Gregory's activities are occurring within the 150 foot PRCA boundary buffer, and inside a marked floodway boundary, with stumps now visible behind property boundary marker stakes. This correspondence included statements concerning Mr. Gregory's removing the culvert and rock armoring he had placed without permits and also Mr. Gregory's filling in of the channel crossing he had constructed with root wads and logs on site to continue using the crossing. Mr. Tehan contends this work should require a permit from the Corps. Army Corps of Engineers staff stated they were unable to pursue an unauthorized activity investigation at that time. DSL staff responded they were working on the portion within DSL's jurisdiction. (Exhibits 24, 25, 26, 27, 38)
11. Mr. Tehan's correspondence to the County also pointed to work Mr. Gregory has performed along the access road, asserting this is a private road on a neighbor's property, providing photographs showing an uncovered manhole cover for the Tim Rim pumping plant conduit buried in the road, and alleging that Mr. Gregory uncovered it, and has also dug a drainage ditch. Mr. Tehan contends that Mr. Gregory has no legal easement to use the road or rebuild it, contending these activities will affect the steep slopes, causing serious erosion and safety issues that may jeopardize adjacent properties. Photographs submitted by Mr. Tehan show grading work and tree/vegetation removal, show homesite prep, appear to show gravel fill/roadwork, show the partially uncovered manhole cover for the TimRim pumping plant conduit that is buried in the road, and show a newly dug drainage ditch. (Exhibits 24, 25, 26, 27, 38)
12. On September 8, 2022, Mr. Hanschka provided a direct description to Mr. Tehan concerning the County's review of the applications submitted by Mr. Gregory. Mr. Hanschka stated:

Michael, just a quick update to let you know that the four active floodplain development permits, of the total of six, are looking only at residential construction in the floodplain and, essentially, provide a set of performance standards for elevation of the homes, installation of flood vents, use of flood-resistant materials, etc., and may be approvable as is. Also, they are not accessed by the watercourse crossing, and do not address access issues, currently being addressed by our Transportation Engineering Division, or septic permitting, addressed through our Septic & Onsite Wastewater Program. In turn, the access issues, septic permitting requirements, resolution of the DSL wetland issues, etc., still remain. The remaining two, and still incomplete, floodplain development permits include two additional homes, along with the watercourse crossing and grading. The applicant has hired AKS Engineering to address the culvert design.
13. Mr. Hanschka also noted in a September 13, 2022 email that:

Indeed, the area is zoned for rural residential development, and we have no authority to prohibit development outside of the floodway, they are just subject to the prescriptive FEMA / County floodplain development standards, but honestly we have no way of prohibiting the development in terms of home construction.
14. Michael Tehan (appellant) resides on property adjacent to the proposal sites, and is strongly opposed to approval of these applications. Mr. Tehan provided numerous comments in

opposition to the County's approval of Floodplain Development Permit Applications Z0228-22, Z0229-22, Z0230-22, Z0231-22. Mr. Tehan asserts that his own property would be adversely affected by the proposal, asserting that approval is inconsistent with the intent and purpose of existing land use zoning and water protection laws. Mr. Tehan points to the clearing and grading activities completed by Mr. Gregory without permits or authorizations, further contending that some of this work would not be allowed even with a permit, such as removal of vegetation within the PRCA protected buffer and designated floodway, dredging and filling in jurisdictional wetlands in an active floodplain channel, also pointing to the violation notices issued to Mr. Gregory. Mr. Tehan points to the culvert and rock armoring the Mr. Gregory had installed for crossing the wetlands area on the site, and was required to remove. Mr. Tehan references discussion of Mr. Gregory building a temporary channel-spanning log crossing tentatively approved by DSL, reporting that Mr. Gregory used logs and debris to fill in a section of the wetland channel in order to drive his equipment across this area. (Exhibits 24, 25, 26, 27, 38)

15. Mr. Tehan points to the location of the proposal sites as within the 100-year floodplain, further asserting that it is within the floodway of the Sandy River as mapped by FEMA. Mr. Tehan points out that the Sandy River is known to move, stating that the old Sandy River channel used to be located in the floodplains where the proposal sites are located. Mr. Tehan contends that Section 704 applies to development of this property, and PRCA applications are required as the sites are within a quarter mile of the mean high-water line of the river. (Exhibits 24, 25, 26, 27)
16. Mr. Tehan points to the lost habitat of the Sandy River, in the floodplain area and riparian zone, from Mr. Gregory's activities and development of the site. Mr. Tehan provides several arguments directly related to the provisions of ZDO Section 703, asserting that flood danger will increase, and materials brought onto these sites may be swept onto other properties in a flood. Mr. Tehan points to concerns over contamination of the water supply, reporting his well is downstream of these sites, and septic failure from flooding may contaminate his water supply, also questioning the validity of the test septic perc pits performed for the proposal sites during the dry season and contending that during wet season flooding these sites will fill with water. Mr. Tehan describes raw sewage exposure from Timberline Rim septic pumping plant during flooding that will extend to these proposal sites located within the floodplain. (Exhibits 24, 25, 26, 27, 38)
17. Mr. Tehan contends that the existing floodplain, floodway, wetlands, and PRCA areas are important to the community and will be downgraded by development, whereas new housing facilities have no benefit to the local community. Mr. Tehan points out that the proposed residential homes are not water dependent uses, asserting there is abundant upland property in the area available for residential development that is not subject to flooding. Mr. Tehan contends the proposal is not consistent with objectives for County floodplain and floodway overlays, PRCA, state/federal regulations under the Clean Water Act or Oregon DSL Wetlands Planning and Conservation requirements. He also reports observing floodwaters from the Sandy River flowing through the site all winter in 2021 and 2022. (Exhibits 24, 25, 26, 27, 38)
18. Mr. Tehan points to the requirements of ZDO 316 for minimum lot sizes of two acres for residential development in the RR zone, noting none of the subject lots are two acres. He

further asserts that Mr. Gregory is building the homes as short-term rental properties, pointing to other requirements for approval of such uses. Mr. Tehan also points out that Mr. Gregory has already completed clearing and grading on the subject properties, seeking after-the-fact approval of unauthorized work completed without permits. For these and other reasons, Mr. Tehan contends that the subject applications should be denied. (Exhibits 24, 25, 26, 27, 38)

19. Kayla Keyser is a community resident and local real estate broker. Ms. Keyser is opposed to approval of these applications, commenting: "This developer clearly does not have the community's best interest in mind and doesn't give a rip about the importance of sustaining our wetlands and forests." (Exhibits 24, 25, 26, 27)
20. The Hoodland Community Planning Organization submitted a written comment stating that if any of these applications are approved, the CPO intends to appeal asserting that the County provided insufficient time to review and respond to the notice of these applications. (Exhibits 24, 25, 26, 27)
21. Gerald (Gerry) Murphy is a long-time member of the Timberline Recreation Club in Rhododendron that neighbors these subject properties. Mr. Murphy strongly opposes approval of the applications for numerous reasons. Among them, Mr. Murphy points to ZDO provisions for Principal River Conservation Area (PRCA) applications, asserting these should be required as part of this permitting process, noting that the property owner has identified active water channels flowing through the proposed construction sites. Mr. Murphy also points to the Clackamas County Tax Map and notes it identifies a historic Sandy River channel on the south edges of the proposed lots to be developed, reporting this becomes an active channel during high water events. Mr. Murphy describes the Upper Sandy River as not in a permanent channel, describing analysis by Clackamas County, Timberline Rim Recreation Club, OWEB, and others. Mr. Murphy also describes the necessary function of the floodplain areas along the river in absorbing the river's water and energy during high water events, pointing to the hardening of the floodplain with development as taking away more of the existing developed community's only defense. Mr. Murphy points to habitat provided by undeveloped areas of the floodplain/floodway and the importance of this remaining section, and negative effects of further development on fish and wildlife. Further, Mr. Murphy points to the importance of the floodplain in reducing wildfire risk, and effect of development on forest mortality. Mr. Murphy contends that over-development in critical areas such as this puts people's lives in danger. (Exhibits 24, 25, 26, 27)
22. Lynda Zangerle, President of the local HOA and resident of Timberline Rim Recreation Club, also strongly opposes approval of these applicants and submitted several comments. Ms. Zangerle contends that the applicant's proposal is a danger to the community, to potential buyers, to the environment, and to protected wildlife that inhabit the surrounding areas. Ms. Zangerle asserts that the applicant does not have direct access to the proposal site, further contending that the four sites are in the middle of a flood zone with active water channels. Ms. Zangerle points to the Clackamas County Tax Map showing a Sandy River Channel flowing on the south edges of the property. She contends that Principal River Conservation River Area applications should be submitted and will show that during high water events the proposed building sites and their inhabitants will be in danger from rising water levels and floods. (Exhibits 24, 25, 26, 27)

23. Ms. Zangerle references past flooding events resulting in serious property damage, and analysis of the Upper Sandy River showing that the only defense against the power and strength of the river is healthy and active flood plains that can absorb the power of the river and allow for the water to spread. Ms. Zangerle contends that hardening the floodplains with this development impairs this defense. Ms. Zangerle also points to habitat provided by undeveloped areas of the floodplain and the negative effects of further development on fish and wildlife, further pointing to the efforts and money spent keeping rivers and streams healthy, particularly critical areas such as this. Ms. Zangerle urges denial of the applications. (Exhibits 24, 25, 26, 27)
24. Kim London resides on property adjacent to the proposal sites, describing the road Mr. Gregory is using as a private egress that is on her property. Ms. London contends that Mr. Gregory has not been granted explicit access to this road (or at least has not provided documentation of such access) and is widening a portion of the road onto her property without permission. Ms. London further reports declining Mr. Gregory's offer to purchase this portion of her property. (Exhibits 24, 25, 26, 27)
25. Nicole Stenson has been a resident of the Timberline Rim HOA since 2013, and is also strongly opposed to approval of these applications. Ms. Stenson also points to the flooding events of the Sandy River, its known channel migration, and the essential function of natural floodplains to offset the force of the river flows and give wildlife, including salmon, shelter. Ms. Stenson reports that the Timberline Rim HOA contributed \$20,000 to help open a nearby levee placed by the Army Corps of Engineers that blocked a natural floodplain needed during flood events, comparing these properties to the areas of the floodplain that are the subject of these applications and the similar need to protect these floodplain areas and functions. Ms. Stenson asserts that the site is not actually developable and the applicant should be required to re-plant the properties. (Exhibits 24, 25, 26, 27)
26. On December 1, 2022, Mr. Gregory submitted a number of additional written comments and documents in support of the approval of his four applications, including: copies of email communications between himself and DSL staff corroborating his assertions that he discussed and obtained approval for using a temporary log bridge as a crossing of the wetlands area to move the fill he had placed; copies of email communications with County staff corroborating his assertions that no permits were required for road clearing or stump removal, or for *scrape and replace* of materials for roads and driveways, provided he only removed vegetation outside the 150 foot Principal River Conservation Area (PRCA) setback from the Sandy River; and, an updated Cut & Fill Map by Ronald A. Bush, Surveyor, noting a number of relevant details, including the location of the existing ordinary high water mark, locations of the proposal sites, the gravel road as traveled, and stating that "the layout of the cut/fill ratios appear to be balanced and equal elevations..." and including an approximate flood hazard mark. This updated map shows fill taken from areas on Proposed Lot 3 and Proposed Lot 4 and essentially moved to the four proposed home sites. (Exhibits 39, 40, 41)

December 1, 2022 Hearing

27. The Hearings Officer received testimony and evidence at the December 1, 2022 public hearing about this application. All exhibits and records of testimony are filed with the Planning Division, Clackamas County Department of Transportation and Development. The

public hearing was conducted virtually over the Zoom platform due to the coronavirus, with the County providing an explanation for virtual participation. At the beginning of the hearing, the Hearings Officer made the declaration required by ORS 197.763. The Hearings Officer disclaimed any *ex parte* contacts, bias, or conflicts of interest. The Hearings Officer stated that the only relevant criteria were those identified in the County's staff report, that participants should direct their comments to those criteria, and failure to raise all arguments may result in waiver of arguments at subsequent appeal forums.

28. At the hearing, County Sr. Planner Steve Hanschka discussed the staff decision and related exhibits. Mr. Hanschka provided a PowerPoint presentation with relevant background information concerning the applications, the County's review of those applications, and the County's decisions approving the applications. (Exhibit 28)
29. Mr. Hanschka noted that the applicant submitted applications for floodplain development permits for four new single-family residences in the floodplain of the Sandy River. The applications approved by the County concern the four northerly lots at the site, accessed from a primitive gravel road in an easement.
30. Jonny Gish, County Development & Engineering, provided additional background concerning the primitive road and access to the applicant's properties, noting that County Engineering has completed an engineering survey and the applicant's properties have legal easement access per the deeds, that is presumably this primitive road.
31. Mr. Hanschka stated there is an error in the staff report regarding a statement that the County received no comments concerning the applications, pointing out that the County actually received and responded to many comments. Mr. Hanschka shared an area vicinity map of the location, pointing out the location of the subject properties. He provided summaries of relevant background concerning the properties and these applications, pointing out that the entire site is within the floodplain of the Sandy River, and there is a marshy wetland depression area that traverses the approximate middle of the site. Mr. Hanschka discussed how the subject properties were reconfigured through Property Line Adjustment File No. Z0417-21-PLA to create six potentially buildable lots in the floodplain of the Sandy River with sufficient buildable area outside the unbuildable Regulatory Floodway.
32. Mr. Hanschka reiterated that this is not a subdivision; rather, these are six individual lots of record, each of which is and has been potentially buildable subject to all necessary permitting. Mr. Hanschka noted that the applicant submitted six separate floodplain development permits for individual homes on each lot. File Nos. Z0226-22-F, Z0227-22-F, Z0228-22-F, Z0229-22-F, Z0230-22-F & Z0231-22-F, all of which were deemed incomplete. Mr. Hanschka also noted that the applicant submitted additional floodplain development permit, File No. Z0063-22-F, to cover site development work, culvert installation, and grading for the overall site. Mr. Hanschka reported that this application was denied by County Staff, then appealed to the Hearings Officer by the applicant, then withdrawn by the applicant prior to a decision by the Hearings Officer.
33. Mr. Hanschka discussed that the applications under review in this case and being appealed to the Hearings Officer are Z0228-22-F, Z0229-22-F, Z0230-22-F & Z0231-22-F, which have now been deemed complete, each proposing a new single-family residence on each of these

four subject lots. Mr. Hanschka described access to the site by way of an existing primitive gravel road from E Brightwood Loop that winds its way to the site, with these four northerly lots (the subject of these four applications) accessed by way of an easement that approximately parallels the westerly property lines of the subject lots. He noted that applications Z0226-22-F and Z0227-22-F remain incomplete⁴, but these sites would be accessed from the same easement road. However, the access to these two properties would need to cross the marshy depression area over a culvert or bridge. Mr. Hanschka discussed how, to gain completeness, these two applications require applicant to submit permitting and engineering analysis for the culvert, and an updated site-wide grading plan, effectively addressing and updating the items were being evaluated under File No. Z0063-22-F. Mr. Hanschka also reported that it appears that no fill is being brought into the floodplain and therefore site grading/cut/fill is being done with existing material that is already onsite.

34. Mr. Hanschka also discussed the fact that the marshy wetland depression area that traverses the approximate middle of the site has been determined to contain jurisdictional wetlands regulated by the Oregon Department of State Lands (DSL). Mr. Hanschka pointed out that the applicant has incurred DSL Enforcement File No. 8440-ENF for disturbing these wetlands and installing a culvert over wetlands. He also reported that the applicant is in the process of addressing the Enforcement File through Joint Permit Application (JPA) Number 63868. Mr. Hanschka reported that the U.S. Army Corps of Engineers (USACOE) has stated that it will not by pursuing enforcement action. Mr. Hanschka states that it is not clear if the applicant will be able to meet all requirements to develop the entire site, noting that these four applications are limited in scope to addressing floodplain performance standards for siting a home in the floodplain area of the Sandy River.
35. Mr. Hanschka shared a County tax assessor map showing the subject properties, the other properties on the site, and showing nearby properties in the area. He also shared a Final Property Line Adjustment (PLA) Record of Survey showing all of the subject properties, and several of the nearby properties developed with residences. Further, Mr. Hanschka shared a Flood Insurance Rate Map (FIRM), a Base Flood Elevation (BFE) Lot Analysis, a Floodplain Detail Map, an Overall Site Plan, a Cut/Fill Grading Site Plan, and individual site plans for each application. Mr. Hanschka reiterated that the scope of these permits is narrow, addressing only FEMA and County floodplain development performance standards required for construction of new homes in the floodplain. He provided a summary review of these standards, noting that these standards are outlined in detail on the applicant's construction plans, and shared slides of each of the plans showing these items.
36. Mr. Hanschka reviewed the additional permitting requirements, noting the additional permitting that is required to make these proposals feasible, including:
 - Water supply for fire suppression; access; and home construction subject to Hoodland Fire District standards, in coordination with the County.
 - A Grading Permit from the County's Building Codes Division, required for all site grading/fill/cut.
 - A Building Permit for each home from the County's Building Codes Division that includes being subject to specific floodplain development standards of the Oregon Residential Specialty Code (ORSC).

⁴ These two applications had actually expired and were void at the time of the hearing.

- A Septic System Permit for each home from the County's Septic & Onsite Wastewater Program.
 - To address road improvements; driveway construction; stormwater; erosion control; and culvert installation and crossing, an Engineering Permit is required from the County's Transportation Engineering Division, subject to Clackamas County Roadway Standards and Fire Marshall approval.
 - Resolution of DSL Enforcement File and approval of JPA, regarding disturbance of wetlands and installation of culvert.
37. Mr. Hanschka states it is his understanding that there is no clearing activity on these sites (no vegetation removal or other grading work) within 150 feet of the mean high water mark, and therefore a PRCA review is not required for these applications. Mr. Hanschka stated that DSL marked the affected areas, and there is a survey corridor in place marking the PRCA boundary and the trees along this boundary.

Appellant

38. Michael P. Tehan is the appellant in this matter. He appeared at the hearing and provided testimony and argument in support of the appeals, strongly opposing approval of these applications. He contends that the applications should not be approved for several reasons. Mr. Tehan points to the disturbed wetlands area on the site, asserting that the applicant dredged and filled the entire area, visible through aerial photographs, engaging in unpermitted/unauthorized activity that changed the hydraulics of these wetlands. Mr. Tehan reports that after removal of the culvert as required, the applicant then made a log debris bridge to cross the wetlands, asserting that this also constitutes unauthorized work in the wetlands. Mr. Tehan questions the locations for septic fields to serve the proposed homes, pointed out that his own well is downstream from the sites. He also points to the applicant's alterations to the easement road used to access these properties. Mr. Tehan points to Mr. Gregory's removal of trees, asserting that this activity required an approved PRCA application in advance and should be treated as a code enforcement violation. Mr. Tehan also makes reference to the written comments he has submitted in opposition to these applications.

Applicant

39. Michael Gregory is the applicant. Mr. Gregory appeared for the hearing and provided testimony and advocacy in support of approving this application, and answered several questions about the application. Mr. Gregory noted that the lots of record were done through the County, and obtaining the Floodplain Permit is the first step to complete before applying for the other required permits. Mr. Gregory reports that the County's Code Enforcement staff have been to the site, and he is required to obtain a grading permit because DSL found he filled more than 50 cubic yards. With respect to the vegetation removal, however, Mr. Gregory asserts he discussed clearing the home sites with County staff and was informed that this activity did not require a permit because building the homes is a primary use of these residential zoned properties.
40. Mr. Gregory reported that the other two applications for the two lots requiring a culvert crossing are now void and he is not currently seeking to develop these two lots, but nevertheless is having AKS Engineering complete an additional wetlands study related to

development of these lots. Mr. Gregory asserts that he did receive permission from DSL to use the logs he placed as a temporary means for accessing those two properties. With respect to septic requirements, Mr. Gregory points out that these criteria are identified in the staff report. With respect to access to the site, Mr. Gregory notes that he in fact has an easement for the access road from Brightwood Loop to his properties. Mr. Gregory reports that he has spoken with the Fire Marshal, who will report back concerning safety requirements and acceptable means for meeting them, such as installation of fire sprinklers. Mr. Gregory asserts that the applications should be approved, pointing to the decision of the County's Planning Director that the applications meet all standards for approval.

Public

41. Gerald (Gerry) Murphy appeared at the hearing and provided public testimony strongly opposing approval of these applications, consistent with the written comments he submitted. Mr. Murphy is a member/resident of the Timberline Rim Rec. Club, and recounts witnessing two major destructive floods in this area that resulted in considerable property damage and loss of homes. Mr. Murphy references analysis performed showing that active floodplains are the best defense to flooding, that levees that were created, especially in upper areas, channel the flooding and these floodplain areas and even insignificant-seeming wetlands are important. Mr. Murphy contends that these proposals to develop within this floodplain area interfere with the restoration efforts and increase the flooding hazard.
42. Sarah Roberson appeared at the hearing and provided public testimony strongly opposing approval of these applications. Ms. Roberson is also a resident of Timberline Rim, noting that the subdivision she lives in was built on the floodplain and contending that her subdivision should never have been built. Ms. Roberson describes the flooding and destruction that people living along the Sandy River and within its floodplain experience, with flooded homes and structures, and the issues local residents face. Ms. Roberson also questions where the water needed by these proposed new homes will come from.
43. Marti Boone appeared at the hearing and provided public testimony strongly opposing approval of these applications. Ms. Boone is a member of the local Mt. Hood community, resides nearby in Welches, and is a board member of the local CPO. Ms. Boone reports making two visits to the site for these properties, finding the properties torn up and the trees felled, contending that Mr. Gregory's activities show no consideration or respect for the environment or neighbors. Ms. Boone testified that the applications were discussed and considered at a September 29, 2022 CPO meeting at which all participants expressed opposition, and stands behind Mr. Tehan's appeals.
44. Ryan Tercek appeared at the hearing and provided public testimony also strongly opposing approval of these applications, stating that he also stands with Ms. Boone and Mr. Tehan in opposing the applications. Mr. Tercek further provided descriptions of his own home and issues he contends with, including flooding of his home's crawlspace.

C. FINDINGS AND DISCUSSION

This matter involves the appeal of a Planning Director decision approving an application for a Floodplain Development permit for construction of a new single-family residence in the floodplain

of the Sandy River. The application was initially processed by the County under ZDO Section 1307 as a land use permit under the required Type II procedure for a Floodplain Development permit whereby the Planning Director is the initial decision review authority, and the Hearings Officer is the appeal review authority.⁵ The Planning Director⁶ approved the application and this appeal followed.

The evidence presented is reliable, probative and substantial evidence upon which to base a determination in these matters. The appeal discussed below is reviewed subject to the appeal procedures contained in ZDO 1307.13. These procedures provide for de novo review of the application whereby all issues of law and fact are heard anew, and no issue of law or fact decided by the lower-level review authority is binding on the parties in the hearing. The record of the initial proceedings shall, however, be made a part of the record of the appeal. New parties may participate, and any party may present new evidence and legal argument by written or oral testimony.

SECTION I: CONDITIONS OF APPROVAL:

The conditions listed are proposed by staff as necessary to ensure that approval criteria for this land use permit are satisfied. Where a condition relates to a specific approval criterion, the code citation for that criterion follows in parentheses. ***The Hearings Officer reviewed, adopted, and/or modified (as denoted by boldface type in italics) each of these proposed Conditions of Approval:***

1. General Conditions:

Approval of this land use permit is based on the submitted written narrative and plan(s) submitted to the file up to the date of this decision. No work shall occur under this permit other than which is specified within these documents. It shall be the responsibility of the property owner(s) to comply with this document(s) and the limitation of approval described herein.

The service of a certified surveyor and/or engineer is required for completing the remaining two (2) elevation certificates.

Approval Period: The approval of this Floodplain Development Permit is valid for four years from the date of the final written decision. If the County's final written decision is appealed, the approval period shall commence on the date of the final appellate decision. During this four-year period, the approval shall be implemented, or the approval will become void.

- i. "Implemented" means at least one major development permit shall be obtained and maintained, or if a major development permit is not required to complete the development contemplated by the approved FDP, "implemented" means all other necessary County development permits (e.g. grading permit, building permit for an accessory structure) shall be obtained and maintained.
 - a) A "major development permit" is:
 1. A building or manufactured dwelling placement permit for a new primary structure that was part of the FDP approval; or
 2. A permit issued by the County Engineering Division for parking lot or road improvements that were part of the FDP approval.

⁵ See Table 1307-1: Land Use Permits by Procedure Type.

⁶ ZDO 1307.3(B) provides that the Planning Director includes "Any County staff member authorized by the Planning Director to fulfill the responsibilities assigned to the Planning Director by the [ZDO]." County Sr. Planner Steve Hanschka acted in this capacity.

Time Extension: If the approval of this Floodplain Development Permit is not implemented within the initial approval period established by Subsection 703.09(F), a two-year time extension may be approved pursuant to Section 1310.

2. **General Approval Criteria:**

- A) Other Permitting Requirements: All necessary permits shall be obtained from those federal, state, or local governmental agencies from which prior approval is required.
- i. Approval shall be obtained from the Oregon Department of State Lands (DSL) for Permit No. 63868-RF.
 - ii. Resolution of DSL Enforcement File No. 8440-ENF shall be required.

Compliance with Subsections 703.10 and 703.11: The proposed development shall comply with the applicable provisions of Subsections 703.10 and 703.11, as outlined below.

3. **Elevation Certificate & Floodproofing Certificate Requirements:**

- A) All Elevated Structures:
- i. Prior to the approval of the foundation inspection, a second Elevation Certificate shall be submitted, verifying that the foundation shall be built, poured, configured, elevated, etc., in a manner that ensures that the Lowest Floor / first habitable floor, along with all applicable utilities, shall be elevated at least 2 feet above the BFE of 1,136 ft. NAVD88 (or 1 foot above BFE for ductwork).
 - ii. Prior to the final inspections for the building permit(s) for the proposed new home, a Final Elevation Certificate must be completed in its entirety, in accordance with the FEMA NFIP Elevation Certificate Instructions, and submitted to both the Planning and Building Code Divisions prior to the final building inspections. The building permit(s) cannot be finalized until the Planning Division has deemed the Final Elevation Certificate to be correct and complete, while confirming that the new home as built has, according to the Final Elevation Certificate, been built pursuant to the applicable FEMA NFIP and County floodplain development standards.

4. **County Permitting Requirements:**

- A) County-approved building and other development permits are required for the construction of the proposed new home. The construction of the home shall meet building code and the FEMA NFIP standards.
- i. Fire sprinklers may be required for the dwelling as determined by the County Building Codes Division in coordination with the Hoodland Fire District.
 - ii. A Grading Permit is required for all of the cut and fill site development work and culvert installation.
 - iii. An Erosion Permit is required for all of the site development work.
 - iv. All home construction shall meet the floodplain development requirements of the Oregon Residential Specialty Code (ORSC) 301.2.4.

- B) An Engineering Permit shall be obtained from the Transportation Engineering Division, which includes verification of access easement rights, pursuant to ZDO Subsection 1007.03 and the Clackamas County Roadway Standards, as outlined in the Advisory Notes listed below.
- C) As outlined in the Advisory Notes listed below, water supply and access are subject to the standards of the Hoodland Fire District, including:
 - i. The 2019 Oregon Fire Code Chapter 5, Appendices B, C & D
 - ii. The Oregon Fire Code Fire Code Applications Guide
- D) A septic system permit shall be obtained.
- E) The siting of the home shall comply with the applicable Dimensional Standards of the Recreational Residential (RR) zoning district outlined in Table 316-2 of ZDO Section 316.
- F) Pursuant to FEMA NFIP and County Building Code regulations, the building permit to construct the proposed new home, along with any other County development permits, shall be finalized in accordance with the permitting requirements of the County Building Codes Division and other applicable County agencies.

5. **General Standards:**

- A) Anchoring: All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- B) Construction Materials and Methods, and Utilities:
 - i. Below-Grade Crawlspaces: The following standards shall apply to below-grade crawl spaces. For more detailed information, refer to FEMA Technical Bulletin 11-01, *Crawlspace Construction for Buildings Located in Special Flood Hazard Areas*. For flood insurance purposes, there is an additional charge that is added to the basic flood insurance policy premium for structures that are built on below-grade crawl spaces.
 - a) The building shall 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. Hydrostatic loads and the effects of buoyancy can usually be addressed through the openings required by Subsection 703.10(B)(1)(b). Because of hydrodynamic loads, crawl-space construction is prohibited in areas with flood velocities greater than 5 feet per second unless the design is reviewed by a qualified design professional, such as a professional engineer or licensed architect. Other types of foundations are recommended for these areas.
 - b) The crawl space shall have openings that equalize hydrostatic pressures by allowing the automatic entry and exit of floodwaters. The bottom of each flood vent opening shall be no more than one foot above the lowest adjacent exterior grade.

- c) Portions of the building below the base flood elevation (BFE) shall be constructed with materials resistant to flood damage. This includes not only the foundation walls of the crawl space used to elevate the building, but also any joists, insulation, or other materials that extend below the BFE. The recommended construction practice is to elevate the bottom of joists and all insulation above BFE.
- d) Any building utility systems within the crawl space shall be elevated above the BFE or designed so that floodwaters cannot enter or accumulate within the system components during flood conditions. Ductwork, in particular, shall either be placed above the BFE or sealed from floodwaters.
- e) The interior grade of a crawl space below the BFE shall not be more than 2 feet below the lowest adjacent exterior grade.
- f) The height of the below-grade crawl space, measured from the interior grade of the crawl space to the top of the crawl space foundation wall shall not exceed 4 feet at any point. The height limitation is the maximum allowable unsupported wall height according to the engineering analyses and building code requirements for flood hazard areas.
- g) There shall be an adequate drainage system that removes floodwaters from the interior area of the crawl space. The enclosed area shall be drained within a reasonable time after a flood event. The type of drainage system will vary because of the site gradient and other drainage characteristics, such as soil types. Possible options include natural drainage through porous, well-drained soils and drainage systems such as perforated pipes, drainage tiles, or gravel or crushed stone drainage by gravity or mechanical means.
- h) The velocity of floodwaters at the site should not exceed 5 feet per second for any crawl space. For velocities in excess of 5 feet per second, other foundation types should be used.

Flood-Resistant Materials & Utility Equipment: All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage, and using methods and practices that minimize flood damage. For more detailed information, refer to November 1999 FEMA Publication 348, *Protecting Building Utilities from Flood Damage*; and FEMA Technical Bulletin 2-93, *Flood-Resistant Materials Requirements*.

Water Supply Systems: New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

Sanitary Sewage Systems: New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the system into floodwaters.

Building Utilities: All equipment, machinery, appliances, and electrical boxes that pertain to electrical, ventilation, plumbing, and heating and air-conditioning systems and services, as well as outside fuel storage tanks, outside air-conditioning units, and

other interior or exterior service facilities, systems, equipment, machinery, appliances, and other utilities shall be elevated or floodproofed so as to prevent water from entering or accumulating within the components during conditions of flooding.

- i. Floodproofed facilities, systems, equipment, machinery, and appliances — except for waterproofed wires and cables, as well as waterproofed and sealed plumbing pipes and other plumbing services — shall be certified as such by a preliminary and final floodproofing certificate.
- ii. Except for manufactured dwelling electrical crossover connections, regulated pursuant to Subsection 703.11(A)(1), non-floodproofed facilities, systems, equipment, machinery, and appliances shall be elevated at least 2 feet above the BFE, except that duct systems may be elevated at least 1 foot above the BFE.

Onsite Wastewater Disposal Systems: Onsite wastewater disposal systems shall be located to avoid impairment to them or contamination from them during flooding consistent with Oregon Department of Environmental Quality regulations.

Professional Certification: A professional engineer or licensed architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications, and plans. Such certifications shall be provided to the County.

Fill: No fill is permitted to be brought on site, except that material for driveways can be brought on site, providing that the organic material scraped away for the driveway construction is taken off site, and thereby results in no gain of additional material in the floodplain, i.e. balanced cut and fill for driveway construction.

6. **Specific Standards for Lowest Floor Elevation, Flood Vents & Floodproofing in AE Zones with Designated Floodways:**

A) Residential Construction, Manufactured Dwelling Placement, and Elevated Commercial, Industrial & Institutional Construction:

- i. Lowest Floor Elevation of Site-Built Residential and Elevated Commercial, Industrial & Institutional Construction: The lowest floor, including basement, shall be elevated at least 2 feet above the BFE of 1,136 ft. NAVD88.
- ii. Limitations on Use of Areas below Lowest Floor for All Elevated Construction: Areas below the lowest floor shall be utilized solely for parking of vehicles, building access, storage and / or uses that are typical of a crawl space. None of the areas below the lowest floor shall be used for human habitation.
- iii. Flood Vents for All Elevated Construction: 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 shall either be certified by a professional engineer or licensed architect or shall meet or exceed the following minimum criteria. For more detailed

information, refer to FEMA Technical Bulletin 1-93, *Openings in Foundation Walls*.

- a) A minimum of two openings having a total net area of not less than 1 square inch for every square foot of enclosed area subject to flooding shall be provided, unless the applicant provides documentation from a professional engineer or licensed architect that a flood vent manufacturer's product can provide less than 1 square inch of opening for every square foot of enclosed area and still meet National Flood Insurance Program standards.
- b) The bottom of all openings shall be no higher than 1 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.

SECTION II: FINDINGS:

These applications are subject to Clackamas County Zoning and Development Ordinance (ZDO) Sections 202, 316, 703, 1007.03, 1307, and the County's Comprehensive Plan. The Planning Division has reviewed these sections of the ZDO in conjunction with these application proposals and makes the following proposed findings, conclusions, and related conditions of approval reviewed below. The findings below identify the standards and criteria that are relevant to this decision, state the facts relied upon in rendering the decision, and explain the justification for the recommended decision.

These findings and conclusions were reviewed, modified, and/or adopted by the Hearings Officer, with comments denoted by boldface type in italics. There are two specific issues raised in this appeal, the first of which is reviewed in additional detail within the relevant sections discussed below. The two issues raised and reviewed in this appeal are: (1) Improper consideration of ZDO Section 703 requirements; and (2) Failure to acknowledge written comments on application. Mr. Hanschka addressed this second issue by acknowledging that the County received numerous comments concerning these applications, and the staff reports approving them are in error where they state that no comments were received. This is a particularly disconcerting error for interested members of the public and the local community organizations opposed to these applications that should have their comments and concerns heard and considered in this process. I also note that many if not all of these comments were directly addressed by County staff through email correspondence. All of the written comments and testimony received were carefully reviewed and considered in this appeal process.

The appellant and opponents of the application make several other assertions, such as damage to trees, vegetation clearing, grading without permits, including within wetlands, and issues concerning work within the access easement, among other things, that are outside the scope of this hearing. In addition, numerous written comments and opposition testimony are directed towards the basic underlying issue of allowing any new development within these designated floodplain area, including valid questions concerning why development within the floodplain was allowed in the first place given the known hazards of these areas. There are numerous strong arguments, many reviewed and reported in the comments, testimony, and findings from the hearing, that no homes or other development should be allowed within the

designated floodplain for the Sandy River. The fact remains, however, that such development remains lawful on RR-zoned properties such as those that are the subject of these applications, and changing these laws is a matter of legislation. Thus, these arguments are also outside the scope of this hearing. This hearing concerns four applications seeking approval related to floodplain performance standards for four homes proposed for construction in the floodplain, and does not encompass relevant engineering, grading, septic, and building permits that are also required.

1. PROJECT OVERVIEW:

[Taken from Staff Report: the differences in each narrative for the individual applications Z00228-22-F, Z00229-22-F, Z00230-22-F, Z00231-22-F concern facts specific to each subject property such as its size, street address, legal description, the Map & Taxlot, BFE (including elevation certificates), and File No. for each lot. Each application also has its own site plan and plans with specific details for each lot. I find no factual differences between the applications that are relevant to the project narrative described below.]

The roughly 0.65-acre subject property is located west of the Sandy River and east of E Brightwood Loop Rd. near its intersection with E Miller Road. The subject lot is part of an overall site that consists of six lots, each of which are proposed to be developed with a single-family residence. The applicant originally submitted six individual floodplain development permits (File Nos. Z0226-22-F, Z0227-22-F, Z0228-22-F, Z0229-22-F, Z0230-22-F and Z0231-22-F) for development of a homesite on each lot, which were deemed incomplete. The applicant also submitted an additional floodplain development permit, File No. Z0063-22-F, to cover all of the site development work on the overall site. That permit was denied by staff, appealed to the Clackamas County Hearings Officer, then withdrawn by the applicant. Currently, File Nos. Z0228-22-F, Z0229-22-F, Z0230-22-F and Z0231-22-F have now been deemed complete, and are being actively reviewed. File Nos. Z0226-22-F and Z0227-22-F remain incomplete.

Staff stresses that this is not a subdivision. These are pre-existing, individual lots of record, which have sat vacant for years, and that predate the current Recreational Residential (RR) zoning with its 2-acre minimum lot size. Each of these lots has always been eligible for siting a single-family residence, subject to meeting all development and permitting requirements. The entire overall site is located in the floodplain of the Sandy River, and there is marshy wetland depression area that traverses the approximate middle of the site that has been determined to contain jurisdictional wetlands regulated by the Oregon Department of State Lands (DSL). The areas of proposed development are located more than 150 feet from the mean high water line of the Sandy River and, therefore, beyond the area of the Sandy Principal River Conservation Area (PRCA), where land use review is required under a PRCA Review.

An existing, primitive gravel road from E Brightwood Loop Rd. winds its way to the site, and the four (4) northerly lots — which are the subject of these applications, again being File Nos. Z0228-22-F, Z0229-22-F, Z0230-22-F and Z0231-22-F — would be accessed by way of an easement, within which the road is presumably located, that approximately parallels the westerly property lines of the subject lots, although it is yet unclear if the applicant has access rights to that easement and associated road. Homes on those lots would be sited in the westerly sector of the properties, and accessed from driveways.

The two (2) southerly lots would be accessed from the same easement / road, but would cross the marshy wetland depression area by way of a culvert, with homes sited in the more easterly sector of those sites. The culvert is existing, was installed without permits, and is currently the subject of a DSL removal-fill permit and enforcement file to legalize the installation of the culvert with the state and restore the wetland area. The review of the proposed new homes on the two (2) southerly lots that would cross the culvert — File Nos. Z0226-22-F and Z0227-22-F, still incomplete as previously noted — would be reviewed at a later date, following the permitting of the culvert and wetland restoration, and including the grading work associated with the culvert installation. There is information received indicating that the applicant has been making road improvements to the primitive gravel road, without verification of access easement rights and without obtaining the necessary Engineering Permit from the County Transportation Engineering Division.

This application — which in this case is the proposed new single-family residence being reviewed under File No. Z0229-22-F — does not address access easement rights; access improvements; fire department approval; driveway construction; septic system permitting; grading permitting; culvert installation and grading for the wetland crossing; along with other challenges and permitting requirements for developing the site. Nor does this application address the applicant's working with DSL to resolve the impacts to the wetlands and installation of the culvert. This application is solely addressing the FEMA and County floodplain development performance standards — such as elevation of first habitable floor; installation of flood vents; use of flood-resistant materials; anchoring, etc. — required for the construction of a new home in the floodplain.

As previously noted, the entirety of the overall site is located in the floodplain of the Sandy River. The floodplain is quite obviously the area of land adjacent to water bodies that floods during high weather events. Floodplains provide open areas for flood storage; vegetation for attenuation of flood forces; and beneficial habitat to a variety of aquatic species and vegetation that live and grow in riparian environments. Floodplains are arguably an unwise and unsafe area to develop, however in the United States, the Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program (NFIP) that sets performance standards for development in the 1 Percent Annual Chance Flood, or the area that has a 1 percent chance of flooding every year, commonly known as the 100-yr. floodplain, and shown on FEMA floodplain maps as the area inundated by flooding. In turn, local governments join the NFIP and implement those FEMA performance standards thereby allowing development in the floodplain subject to those standards. Membership in the NFIP provides residents the ability to purchase federally backed, reasonably affordable flood insurance for structures, which is required for all federally backed mortgages.

At the same time, local governments zone land to set allowable uses and activities on properties and, in the process, taken together, properties get zoned for residential development in the floodplain, as is the case with the subject properties. For years, the properties sat vacant and provided habitat and flood storage. Nonetheless, at any time, subject to sufficiently addressing the permitting and other challenges outlined above, each property could have been developed with a single-family residence subject to FEMA NFIP and County floodplain development standards. When the properties were put on the market, they could have been purchased by an individual or entity for purposes of them remaining undeveloped. However, this was not the case, and the applicant is now seeking to develop the properties under FEMA NFIP / County floodplain standards, and subject to RR zoning requirements, recognizing again the challenges to development outlined above, while also recognizing that work has already been done without permits.

It is widely known that the Sandy River is a highly volatile river system subject to annual flooding and erosion events, or channel migration. To paraphrase a comment from one adjacent property owner: The Sandy River originates on the glaciated flanks of Mt. Hood where it carves through many steep unstable canyons, picking up a substantial bedload, from silt and sand to large boulders and trees. The channel is braided and constantly shifting as natural landslides, erosion, beaver activity, and depositional processes regularly create new channels and islands, and the subject properties were at one time located in the primary channel of the Sandy River. Additionally, the area was apparently wiped out during the 1964 floods.

In 2011, the Department of Geology & Mineral Industries (DOGAMI) developed channel migration hazard maps for the Sandy River, which were augmented and refined by Natural Systems Design in 2015, all of which show the subject properties to be located in high hazard zones. However, for better or worse, these maps are not adopted by the County and are not accounted for in the regulatory FEMA floodplain maps, or in the review of projects that are subject to floodplain development standards. At the same time, there is a substantial amount of existing development — including homes and infrastructure, that either predate floodplain development standards or were built under adopted floodplain development regulations following the County's entrance into the NFIP in the 1970s — that is sited in the midst of erosive, high hazard channel migration zones and historic river channels. In sum, subject again to meeting the challenges outlined above, development on the subject properties is feasible regardless of the degree of hazard or the habitat it has provided. That said, and to reiterate what has been outlined above, this decision is only addressing the performance standards for siting a home in the floodplain. A number of additional permitting requirements and other challenges, which are not the subject of this application, still remain before it is feasible to develop this lot or the overall site as a whole.

2. FLOODPLAIN MANAGEMENT DISTRICT (FMD) FINDINGS:

The findings below identify the standards and criteria that are relevant to this decision, state the facts relied upon in rendering the decision, and explain the justification for the decision.

703.01 FINDINGS OF FACT

A Floodplain Management District (FMD) is needed for the following reasons:

- A. Flood Losses Resulting from Periodic Inundation: The special flood hazard areas of the County are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the County's tax base, all of which adversely affect the public health, safety, and general welfare.
- B. General Causes of These Flood Losses: Flood losses are caused by:
 - 1. The cumulative effect of obstructions in special flood hazard areas that increase flood heights and velocities and, when inadequately anchored, damage land uses in other areas; and

2. The occupancy of special flood hazard areas by uses vulnerable to floods or hazardous to others that are inadequately floodproofed, inadequately elevated, or otherwise unprotected from flood damages.

703.02 PURPOSE

Section 703 is adopted to:

- A. Promote the public health, safety, and general welfare;
- B. Protect human life and health;
- C. Minimize public and private flood losses due to flooding in flood hazard areas;
- D. Minimize expenditure of public money for costly flood control projects;
- E. Minimize prolonged business interruptions;
- F. Help maintain a stable tax base by providing for the sound use and development of special flood hazard areas so as to minimize future flood blight areas;
- G. Restrict or prohibit uses that are dangerous to health, safety, or property in times of flooding or that cause increases in erosion, flood heights, or velocities;
- H. Minimize damage to public facilities and utilities—such as water and gas mains; electric, telephone, and sewer lines; streets; and bridges—located in special flood hazard areas;
- I. Require that uses vulnerable to floods, including public facilities that serve such uses, be provided with flood protection at the time of initial construction;
- J. Notify those who occupy special flood hazard areas that they assume responsibility for their actions;
- K. Protect individuals, as much as possible, from buying lands that are not suitable for intended purposes because of flood hazard, by ensuring to the degree possible that potential buyers are notified that property is in a special flood hazard area; and
- L. Minimize the need for rescue and relief efforts associated with flooding undertaken at the expense of the general public.

703.03 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by the FMD is considered reasonable for regulatory purposes and is based on engineering and scientific study. Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. Section 703 does not imply that areas outside the FMD or land uses permitted within the FMD will be free from flooding or flood damages. Section 703 shall not create liability on the part of the County, any officer or employee thereof, or the Federal Insurance Administration, for any flood

damages that result from reliance on the FMD or any administrative decision lawfully made hereunder.

703.04 APPLICABILITY

Section 703 applies to the FMD, which is applied to the special flood hazard areas (SFHAs) identified by the Federal Insurance Administration in a scientific and engineering report entitled, “The Flood Insurance Study for Clackamas County, Oregon & Incorporated Areas,” (FIS) dated January 18, 2019, with accompanying Flood Insurance Rate Maps (FIRMs).

- A. The FIS and FIRMs are hereby adopted by reference and declared to be a part of Section 703 and are on file at the County Department of Transportation and Development.
- B. The Planning Director shall make interpretations where needed, as to the exact location of the boundaries of the SFHA (for example, where there appears to be a conflict between a mapped boundary and actual field conditions, topography, and/or elevations). In areas where base flood elevation data have been provided, the Planning Director may require the applicant to submit an elevation certificate. To most precisely determine the base flood elevation of the subject area, the elevations provided by the FIS flood profiles in combination with the cross section lines on the FIRM shall supersede the base flood elevation lines and values identified on the FIRM.

*Per Map Number 41005C0382E, effective January 18, 2019, the subject property is located within the SFHA, therefore ZDO Section 703 applies to this development. With the available information at hand, particularly the site-specific elevation information, no interpretations of the boundary by the Planning Director are necessary. **The Hearings Officer concurs in this finding.***

703.05 DEFINITIONS

*Development in the FMD is subject to the definitions outlined in this Subsection. **The Hearings Officer adopts this finding.***

703.06 TYPE I USES

This section applies to Type I applications and is not applicable.

703.07 DEVELOPMENT IN THE FLOODWAY

No development is proposed or authorized in the floodway. The Hearings Officer concurs with this finding. Although the appellant and public commentators contend that the proposal site is within the floodway for the Sandy River, the submitted maps and surveys show that the site is not actually located within the floodway. I was persuaded that the proposal site for these four applications includes only areas within the designated floodplain.

703.08 DUTIES OF THE PLANNING DIRECTOR

The Planning Director is hereby appointed to administer and implement Section 703 by granting or denying development permit applications in accordance with its provisions. The Planning Director may delegate authority to implement these provisions. Duties of the Planning Director under Section 703 include:

- A. The Planning Director shall review floodplain development permits to determine if the proposed development adversely affects the flood carrying capacity of the special flood hazard area. For purposes of this subsection, "adversely affects" means that the cumulative effect of the proposed development and all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point.

*The area of the project is located within an AE Zone that includes a mapped Floodway. The Floodway is defined as the channel of the river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevations more than 1 foot. As long as the Floodway remains fully reserved and any encroachments achieve a "no-rise" condition, the cumulative effect of all existing and proposed development will not increase the water surface elevations of the base flood by more than 1 foot at any point. As previously noted, there will be no encroachment into the floodway. **The Hearings Officer concurs in this finding.***

- B. Within the special flood hazard area, when more detailed base flood elevation or floodway data is available outside of the adopted Flood Insurance Study (FIS) from a federal, state or other authoritative source — such as preliminary or draft information from a new study that will revise the FIS — the Planning Director may obtain, review, and reasonably utilize such data as long as it is more restrictive than the currently effective data. When the data pertains to a preliminary or draft FIS in Zone A, the Planning Director is required to reasonably utilize the data, and is allowed discretion in using this data only to the extent that the technical or scientific validity of the data in the draft or preliminary FIS is questioned by a qualified professional.

*There is no more detailed BFE or floodway data than the currently adopted and effective FIS. **The Hearings Officer concurs in this finding.***

- C. When base flood elevation data has not been provided (A zones), the Planning Director shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State, or other source, in order to administer the standards in Subsections 703.08, 703.10, and 703.11.

*The site is not in an A Zone. **The Hearings Officer concurs in this finding.***

- D. The Planning Director shall, where base flood elevation data is provided through the FIS, Flood Insurance Rate Map, or utilized pursuant to Subsections 703.08(B) or (C), obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basements and below-grade crawlspaces) of all new or substantially improved structures, and whether or not the structure contains a basement.

*The lowest floor elevation is being recorded on the three (3) required elevation certificates. **The Hearings Officer concurs in this finding.***

E. For all new or substantially improved structures, the Planning Director shall review an elevation certificate or a Federal Emergency Management Agency National Flood Insurance Program Floodproofing Certificate (for Non-Residential Structures) provided by the applicant and shall verify and record the actual elevation (in relation to mean sea level) and maintain the elevation and floodproofing certificates required.

1. In either case, the currently effective form shall be used, and it shall be completed in accordance with the accompanying instructions.
2. The determination regarding which certificate is required shall be made based on the nature of the development consistent with National Flood Insurance Program regulations.

*Three (3) elevation certificates are being reviewed. **The Hearings Officer adopts this finding.***

F. The Planning Director shall maintain for public inspection all records pertaining to the provisions of Section 703.

*All records pertaining to the provisions of Section 703 are on file and publically available at the offices of the County Planning Division, including those that pertain to this proposal. **The Hearings Officer concurs in this finding.***

G. The Planning Director shall review all floodplain development permits to determine if the proposed development activity qualifies as a substantial improvement.

*The proposed floodplain development permit is for new construction and not for a substantial improvement. **The Hearings Officer concurs in this finding.***

H. The Planning Director shall provide to building officials the regulatory flood protection elevation applicable to any building requiring a building permit.

*The building officials are being provided the regulatory flood protection elevation of the proposed new home. **The Hearings Officer concurs in this finding.***

I. The Planning Director shall notify adjacent communities, the State of Oregon Department of Land Conservation and Development, and other appropriate state and federal agencies prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Insurance Administration.

*No alteration of a watercourse is proposed in this application. **The Hearings Officer concurs in this finding.***

J. The Planning Director shall notify the Federal Emergency Management Agency (FEMA) within six months of project completion when an applicant had obtained a Conditional Letter of Map Revision (CLOMR) from FEMA, or when development altered a watercourse, modified floodplain boundaries, or modified

base flood elevations. This notification shall be provided as a Letter of Map Revision (LOMR).

*A CLOMR / LOMR is not required for this project. **The Hearings Officer concurs in this finding.***

703.09 FLOODPLAIN DEVELOPMENT PERMITS

Except as provided under Subsection 703.06, a floodplain development permit (FDP) shall be obtained for development laterally within the FMD before construction or development begins. The permit shall be for all structures, including manufactured dwellings, and for all development, including fill and other activities. Work that is necessary to protect existing structures, utility facilities, roadways, driveways, and stream banks in response to emergencies may be undertaken prior to obtaining an FDP, provided that an application is made within 90 days of water receding. The measures used for protection may not be able to be permitted. An FDP requires review as a Type II application pursuant to Section 1307, *Procedures*.

*The applicant has proposed a new home in the floodplain of the Sandy River for which a Floodplain Development Permit is required. **The Hearings Officer adopts this finding.***

- A. Submittal Requirements: In addition to the submittal requirements identified in Subsection 1307.07(C), an application for an FDP shall include:
1. A site plan drawn to scale, showing elevations of the site; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; and location and elevations of streets, water supply, sanitary facilities, and soil types; and other applicable information;
 2. Specifications for building construction and materials, loads and forces, and effect on soil bearing pressures, erosion control, floodproofing, filling, dredging, grading, channel improvement, storage of materials, water supply, and sanitary facilities;
 3. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
 4. Either an elevation certificate or a Federal Emergency Management Agency National Flood Insurance Program Floodproofing Certificate (for Non-Residential Structures).
 - a. In either case, the currently effective form shall be used, and it shall be completed in accordance with the accompanying instructions, and based on construction drawings and proposed site locations of development.
 - b. The determination regarding which certificate is required shall be made based on the nature of the proposed development consistent with National Flood Insurance Program regulations.

*The applicant has provided sufficient submittal materials under this Subsection to proceed with the application. **The Hearings Officer concurs in this finding, noting that plans were submitted stamped by a licensed professional engineer meeting the above requirements, three elevation certificates were submitted for each lot, and no watercourse is proposed to be altered or relocated. Related Conditions of Approval are adopted concerning meeting these standards and requirements.***

B. Factors of Consideration: In reviewing an application for an FDP, the following factors shall be considered:

1. The danger to life and property due to increased flood heights or velocities caused by encroachments;

*By definition, an encroachment is any form of development in the floodway. As previously noted, there will be no development in the floodway. **The Hearings Officer concurs in this finding. Appellant argues that the construction of these four additional residential structures, with associated infrastructure, will reduce the volume of flood storage capacity of these properties within the floodplain. This is true, as is true with all development within the floodplain. As discussed, development of these properties within the floodplain with residential homes is a legal, allowed use, despite the associated and known risks. As noted, the development proposed by these applications is a primary allowed use of these properties within the floodplain, and is not proposed to occur within the designated floodway for the Sandy River.***

2. The danger that materials may be swept on to other lands or downstream to the injury of others;

*The proposed new home will be anchored pursuant to applicable FEMA NFIP and County Building Code standards. **The Hearings Officer adopts this finding, noting that the plans submitted are stamped by a licensed professional engineer as meeting these requirements and standards. Appellant argues that existing residences immediately downstream of the subject properties (such as his own) would be harmed by the proposed new homes in the event of future flooding, contending that any new structures would become a source of materials and debris swept onto these adjacent properties and homes in the event of a flood. I am persuaded by the certification made by the licensed PE that the applicant's plans meet the requirements and standards for construction of these proposed homes within the floodplain.***

3. The proposed water supply and sanitation systems and the ability of those systems to prevent disease, contamination, and unsanitary conditions;

*The water supply and sanitation systems will be constructed and connected pursuant to federal, state and local standards, as required by the Oregon Department of Water Resources and County Septic & Onsite Wastewater Program. **The Hearings Officer adopts this finding and related Conditions of Approval. Appellant points to his own property's location immediately downstream from the subject properties, including the well that serves his home, and argues that septic drain fields serving the proposed new homes will***

be saturated or submerged for much of the year, potentially contaminating his well and property. Appellant further points to existing flooding problems during the winter months, asserting that the entire site is subject to raw sewage exposure when the Timberline Rim septic pumping plant floods and spills untreated sewage effluent. As noted, Conditions of Approval require that the water supply and sanitation systems meet federal, state, and local standards.

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

The proposed new home will be designed and constructed pursuant to applicable FEMA NFIP and County Building Code standards. The Hearings Officer adopts this finding, noting that the plans submitted are stamped by a licensed professional engineer as meeting these requirements. Appellant asserts that the entire site is in the floodway or floodplain and is at substantial risk of routine annual seasonal flooding, including catastrophic floods and associated damage. As referenced above, I am persuaded by the certification made by the licensed PE that the applicant's plans meet the applicable requirements and standards for construction of these proposed homes within the floodplain.

5. The importance to the community of the service provided by the proposed facility;

The proposed new home shall not provide a community service. The Hearings Officer concurs in this finding. Appellant also asserts that the new residential structures do not provide an important community service.

6. The requirements of the facility for a waterfront location;

The proposed new home does not exhibit a waterfront location. The Hearings Officer concurs in this finding. Appellant also notes that the proposed residential homes are not water dependent.

7. The availability of alternative locations not subject to flooding for the proposed use;

The entire site is subject to flooding. The Hearings Officer adopts this finding, noting not only the location within the designated floodplain but also the testimony and written comments received concerning the flooding that occurs at this location. As noted, however, development is allowed within the designated floodplain subject to meeting the requirements of this section, and a single-family home is a primary use of each of these properties. Appellant asserts that there is abundant upland property in the area that is available for residential development on sites not subject to flooding. I agree with the premise that there are alternative locations not subject to the flooding that will predictably occur at some point on these properties.

8. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;

*A Single-family residential home is permitted in the floodplain, subject to applicable floodplain development standards, on the subject lot. **The Hearings Officer concurs in this finding, noting also existing single-family residential home development on properties in the surrounding area. Appellant contends that the development of these properties is not compatible with existing natural forested wetland habitat. While this is true, I again note that the proposed residential development is a primary allowed use of these properties.***

9. The relationship of the proposed use to the Comprehensive Plan and floodplain management program for the area;

*The proposed new home can be sited and constructed in compliance with applicable policies of the Comprehensive Plan and with the floodplain management program for the area. **The Hearings Officer concurs in this finding. Appellant contends that the proposed development is not consistent with the stated objectives of the County floodplain and floodway zoning overlays, the PRCA overlay, or state and federal wetland regulations under the Clean Water Act or the Oregon Department of State Lands Wetlands Planning and Conservation requirements. As I discussed above, the floodplain regulatory scheme provides for development of these areas with residential structures provided such new homes can be sited and constructed in compliance with the applicable policies of the Comprehensive Plan and floodplain management program. Here, I find persuasive evidence submitted by the applicant that these four proposed home sites can be sited and constructed in compliance with these standards and requirements.***

10. The safety of access to property in times of flood for ordinary and emergency vehicles;

The entire site is located in the floodplain. The applicant is advised that the property may not be accessible by ordinary or emergency vehicles in times of flood. In addition, the Transportation Engineering Division regulates access requirements, and has provided comments dated September 29, 2022, listed below in the Advisory Notes, that outline the Clackamas County Roadway Standards that will, subject to an Engineering Permit, be required for improvements to the road access and construction of driveways, assuming that the applicant can verify legal access to the access easement.

The Hoodland Fire District also regulates access, along with water supply for fire suppression, and has provided comments dated September 29, 2022, stating that water supply and access are subject to the 2019 Oregon Fire Code Chapter 5, Appendences B, C, and D and the Fire Codes Application Guide. These are also listed below in the Advisory Notes.

The Hearings Officer concurs in these findings and adopts the related Conditions of Approval and Advisory Notes. Appellant points out that access to the site is via a private access roadway, describing it as a narrow one-lane road that is unimproved, and constrained, with blind corners and no pull-outs, with a steep gradient that requires all wheel drive during wet and snowy conditions,

contending there is no way to widen the road. Appellant also contends that access by construction equipment or emergency vehicles such as a fire engine would be extremely difficult or impossible. The September 29, 2022 comments by the County's Transportation Engineering Division concern access requirements, including improvements to the road providing access to the site. I note here that the easement document submitted by Mr. Gregory references a 30 foot wide easement. I find that, as conditioned, these requirements can be met.

11. Whether the proposed development activity represents a substantial improvement to an existing structure;

The proposed new home is not substantial improvements. The Hearings Officer adopts this finding. Appellant also points out that the site contains no existing structures and the proposal is not a substantial improvement.

12. Whether the proposed structure qualifies as a critical facility;

The proposed new home is not critical facility. The Hearings Officer adopts this finding. Appellant also asserts that the new residential structures and associated infrastructure do not qualify as critical facilities.

13. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site; and

BFE at the site varies between 1,140 ft. NAVD88 to 1,134 ft. NAVD88, while the mean velocity of floodwaters is 10.2 feet per second. Information was not available regarding duration, rate of rise and sediment transport. The Hearings Officer adopts these findings. Appellant provides anecdotal descriptions of his observations of the floodwaters from the Sandy River flowing through the subject site in the winters of 2021 and 2022. Appellant notes the effects to the Timberline Rim septic pump station and also references the flood damage and repair costs from the 1964 flood of the Sandy River.

14. Other factors that are relevant to the purpose of Section 703.

All other relevant factors to the Purpose of Section 703 have been considered. The Hearings Officer concurs in this finding.

- C. Approval Criteria: An FDP shall be subject to the following standards and criteria:

The applicable standards of this Subsection are non-discretionary, and outlined above as Conditions of Approval. The Hearings Officer concurs in this finding, adopting related Conditions of Approval.

- D. Conditions of Approval: The County may attach conditions of approval to an FDP if such conditions are deemed necessary to further the purpose of Section 703. Such conditions may include, but are not limited to:

*The applicable standards of this Subsection are non-discretionary, and outlined above as Conditions of Approval. **The Hearings Officer concurs in this finding, adopting the proposed Conditions of Approval.***

- E. Finalization of an FDP: If a preliminary elevation certificate was required for this structure, a second elevation certificate is required prior to approval of the foundation inspection. In addition, a building permit for that structure shall not receive a final approval or certificate of occupancy until the County approves a final elevation certificate or floodproofing certificate that is based on the as-built/finished construction.

*A Final Elevation Certificate is required by Condition. **The Hearings Officer adopts this finding and the related Conditions of Approval.***

- F. Approval Period: Approval of an FDP is valid for four years from the date of the final written decision. If the County's final written decision is appealed, the approval period shall commence on the date of the final appellate decision. During this four-year period, the approval shall be implemented, or the approval will become void.

*These standards are non-discretionary, and outlined above under the Conditions of Approval. **The Hearings Officer concurs in this finding, adopting the related Conditions of Approval.***

- G. Time Extension: If the approval of an FDP is not implemented within the initial approval period established by Subsection 703.09(F), a two-year time extension may be approved pursuant to Section 1310, *Time Extension*.

*These standards are non-discretionary, and outlined above under the Conditions of Approval. **The Hearings Officer concurs in this finding, adopting the related Conditions of Approval.***

703.10 GENERAL FMD STANDARDS

Development in the FMD shall comply with the following standards:

*The applicable standards of this Subsection are outlined above as Conditions of Approval. **The Hearings Officer adopts this finding and related Conditions of Approval.***

703.11 SPECIFIC STANDARDS

*The applicant has proposed a new single-family residence in an AE Flood Zone. The applicable standards of this Subsection are non-discretionary, and outlined above as Conditions of Approval. **The Hearings Officer adopts this finding and related Conditions of Approval.***

703.12 EXCEPTIONS

The Hearings Officer notes that no exceptions are proposed with this application.

703.13 VARIANCES

The Hearings Officer notes that no variances are proposed with this application.

ZDO SECTION 704 — RIVER AND STREAM CONSERVATION AREA (RSCA)

704.03 AREA OF APPLICATION

- A. Section 704 applies to land that is generally within a quarter mile of the mean high water line of the Clackamas, Sandy/Salmon, Molalla/Pudding, Roaring, Tualatin, and Zig Zag Rivers. These lands are classified as Principal River Conservation Areas and are identified on Comprehensive Plan Maps III-1a, Principal River Conservation Area Clackamas River Design Plan, III-1b, Principal River Conservation Area Sandy-Salmon River Design Plan, III-1c, Principal River Conservation Area Molalla River Design Plan, III-1d, Principal River Conservation Area Tualatin River Design Plan, and III-2, Scenic & Distinctive Resource Areas. The location of these rivers may vary from these maps, if more specific information is provided.

*The subject land is located within a quarter mile of the mean high water line of the Sandy River. Therefore Section 704 applies. **The Hearings Officer concurs in this finding.***

704.09 ADMINISTRATION OF SECTION 704

- A. Development and tree-cutting activities controlled by Section 704 in a Principal River Conservation Area (PRCA) shall be reviewed to ensure consistency with Section 704. Proposed developments on lands within 150 feet of the mean high water line shall be reviewed through a Type II application pursuant to Section 1307. For lands beyond 150 feet of the mean high water line, notice shall be sent to the U.S. Forest Service and Bureau of Land Management.

*The proposed development within the Sandy River PRCA is not located within 150 ft. of the mean high water line of the Sandy River. Therefore a Type II PRCA review subject to Section 1307 is not required. **The Hearings Officer concurs in this finding. Appellant has asserted that Mr. Gregory's activities have infringed on the floodway, and have involved work within this 150 foot buffer. The site plans show, however, that development associated with these four proposed home sites is not located within this area. I understand that there are existing issues remaining with respect to Mr. Gregory's activities in the wetlands area that traverses the entire site, but note that clearing of trees and vegetation is allowed in the areas shown for these home sites as shown on the applicant's site plans.***

ADVISORY NOTES

Advisory notes are not a part of the decision on this land use permit. The items listed below are not conditions of land use approval and are not subject to appeal. They are advisory and informational only but may represent requirements of other agencies/departments. As such, they may be required by these other agencies/departments in order to complete your proposed development.

1. The Hoodland Fire District has provided comments dated September 29, 2022, stating that water supply, access and home construction is subject to the 2019 Oregon Fire Code Chapter 5, Appendences B, C, and D, and Oregon Fire Code Metro Code Committee Fire Code Applications Guide, as listed below:

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Hanschka, Steve

From: Hanschka, Steve
Sent: Thursday, September 29, 2022 9:03 AM
To: Hanschka, Steve
Subject: Access Issues

From: Scott Kline [mailto:scottkline@hoodlandfire.org]
Sent: Thursday, September 29, 2022 8:44 AM
To: Hanschka, Steve <SteveHan@clackamas.us>; Gish, Jonny <JGish@clackamas.us>; Rozzell, Matthew <MRozzell@clackamas.us>
Subject: RE: Access Issues for Proposed Development Just east of 64291 E BRIGHTWOOD LOOP RD | File Nos. 20228-22-F, 20229-22-F, 20230-22-F, 20232-22-F

Warning: External email. Be cautious opening attachments and links.

Hi Steve and etal,

When Hoodland Fire is asked for water supply and access reviews before permits are issued by Clackamas County, I use the 2019 Oregon Fire Code Chapter 5, Appendences B, C, and D. Currently, I direct citizens to the Hoodland Fire District website to our Fire Codes Application Guide. This list out what requirements that I am requiring. It is in revision to bring it up to new standards and that all the other agencies have developed their own standards instead of the consensus document that I am still using. As for water supply, I work with the building code people when the single family home is over 3,600 square feet and fall under the Uniform Alternate Construction Standard (UACS) under OAR 918-480-0125.

Yours in Fire and Life Safety,



Scott C. Kline
Division Chief/Fire Marshal
Hoodland Fire District #74
69634 E. Highway 26
Welches, Oregon 97067
Office: 503-622-3256
Mobile: 503-459-1528
scottkline@hoodlandfire.org

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Oregon Fire Code Metro Code Committee

Fire Code Applications Guide

This guide is intended to provide assistance in the application of the fire code in the following jurisdictions:

**Banks Fire District
Boring Fire District
Canby Fire District
Clackamas County Fire District #1
Colton Fire District
Cornelius Fire Department
Estacada Fire District
Forest Grove Fire & Rescue
Gaston Fire District
Gladstone Fire Department**

**Gresham Fire & Emergency Services
Hillsboro Fire Department
Hoodland Fire District
Lake Oswego Fire Department
Molalla Fire District
Portland Fire & Rescue
Sandy Fire District
Silverton Fire District
Tualatin Valley Fire & Rescue
Washington Co. Fire District #2**

Revised 4/06

Jurisdiction Contact Information

Banks Fire District

300 Main Street
Banks, OR 97106
Ph. 503.324.6262
Fax 503.324.0523
www.banksfire.org

Boring Fire District

PO Box 85
Boring, OR 97009
Ph. 503.663.4638
Fax 503.663.5792
www.boringfire.com

Canby Fire District

P.O. Box 909
221 S. Pine St.
Canby, OR 97013
Ph. 503.266.5851
Fax 503.266.1320
www.canbyfire.org

Clackamas Co. Fire District #1

2930 S.E. Oak Grove Blvd.
Milwaukie, Oregon 97267
Ph. 503.742.2660
Fax 503.742.2860
www.clackamasfire.com

Colton Fire District

PO Box 71
20987 S. Hwy 211
Colton, OR
Ph. 503.824.2545
Fax 503.824.2546

Cornelius Fire Department

1355 N. Barlow Street
Cornelius, OR 97113
Ph. 503.357.3840
Fax 503.357.7545
www.ci.cornelius.or.us

Estacada Rural Fire District

PO Box 608
Estacada, OR 97023
Ph. 503.630.7712
Fax 503.630.7757
www.estacadafire.com

Forest Grove Fire & Rescue

1919 Ash St.
Forest Grove, OR
Ph. 503.992.3240
Fax 503.992.3243
www.ci.forest-grove.or.us

Gaston Fire District

102 E. Main
Gaston, OR 97119
Ph. 503.985.7575
Fax 503.985.7382

Gladstone Fire Department

555 Portland Ave.
Gladstone, OR 97027
Ph. 503.557.2775
Fax 503.656.4256
www.ci.gladstone.or.us

Gresham Fire & Emergency Services

1333 NW Eastman Pkwy.
Gresham, OR 97030
Ph. 503.618.2355
Fax 503.666.8330
www.ci.gresham.or.us

Hillsboro Fire Department

240 S. 1st Avenue
Hillsboro, OR 97123
Ph. 503.681.6166
Fax 503.681.6208
www.ci.hillsboro.or.us

Hoodland Fire District

69634 E. Hwy 26
Welches, OR 97067
Ph. 503.622.3256
Fax 503.622.3125
www.hoodlandfire.org

Lake Oswego Fire Department

P.O.Box 369
Lake Oswego, OR 97034
Ph. 503.635.0275
Fax 503.635.0376
www.ci.oswego.or.us

Molalla RFPD

320 N. Molalla Ave
Molalla, OR 97038
Ph. 503.829.2200
Fax 503.829.5794
www.molallafire.org

Office of State Fire Marshal

4760 Portland Rd NE
Salem, Or 97305
(503) 373-1540
www.oregon.gov/OOHS/SFM/

Portland Fire & Rescue

55 SW Ash St.
Portland, Oregon 97204
Ph. 503.823.3700
Fax 503.823.3710
<http://www.portlandonline.com/fire>

Sandy Fire District

17460 Bruns Ave.
Sandy OR 97055
Ph. 503.668.8093
Fax 503.668.7941
www.sandyfire.com

Silverton Fire District

819 Rail Way NE
Silverton, OR 97381
Ph. 503.873.5328
Fax 503.873.2805

Tualatin Valley Fire & Rescue

7401 SW Washo Ct. Ste 101
Tualatin, OR 97062
Ph. 503.612.7000
Fax 503.612.7003
www.tvfr.com

Washington Co. Fire District #2

31370 NW Commercial St.
North Plains, OR 97133
Ph. 503.647.9900
Fax 503.647.9351

Notes to Users

Local Development Codes

Check the local city or county development code to determine the applicability of roadway standards as it relates to conflicts with this guide and/or the adopted fire code.

ORS 368.039 Road standards adopted by local government supersede standards in fire codes; consultation with fire agencies.

(1) When the governing body of a county or city adopts specifications and standards, including standards for width, for roads and streets under the jurisdiction of the governing body, such specifications and standards shall supersede and prevail over any specifications and standards for roads and streets that are set forth in a uniform fire code adopted by the State Fire Marshal, a municipal fire department or a county firefighting agency.

(2) This section applies to specifications and standards for roads and streets adopted by the governing body of a county or city in a charter, acknowledged comprehensive plan or ordinance adopted pursuant to ORS chapter 92, 203, 221 or 368.

(3) Before adopting or amending any comprehensive plan, land use regulation or ordinance that establishes specifications and standards for roads and streets, a governing body of a county or city shall consult with the municipal fire department or other local firefighting agency concerning the proposed specifications and standards. The county or city governing body shall consider the needs of the fire department or firefighting agency when adopting the final specifications and standards.

Dispute Resolution Process

The Office of State Fire Marshal's (OSFM), Dispute Resolution Process allows an aggrieved party to dispute inspection findings of the local fire marshal. This process allows the aggrieved party to ask for a "second opinion" but does not supersede the local or State Fire Marshal's appeal process. The local fire marshal, through the OSFM, arranges a conference call with the aggrieved party and on-call code experts from other jurisdictions and industry. The on-call group discusses the case and the local fire marshal takes the group's second opinion into consideration when rendering a decision in writing to the aggrieved party. The goal of the OSFM is to conduct the conference call within 48 hours (two business days) for new construction and no more than seven business days for maintenance issues of the notice of dispute. Aggrieved parties who are not satisfied with the findings can appeal the decision to a local appeals board, if available, otherwise to the OSFM.

Preamble/Authority and Scope

The above jurisdictions have elected to administer and enforce the Oregon Fire Code under the authority granted to them by ORS 476.030 or ORS 476.060. The Oregon Fire Code is the International Fire Code, 2003 Edition, as published and copyrighted by the International Code Council, which has been amended and adopted by the Oregon State Fire Marshal's Office. In order to further the Oregon State Fire Marshal's goal of promoting fire code consistency throughout the state, the above jurisdictions have agreed to reduce local amendments.

Nevertheless, the above jurisdictions have prepared this Applications Guide to provide good faith guidance to building officials, contractors, business owners, the public, and fire marshals on local interpretations and practices that are considered to be in compliance with the Oregon Fire Code. The intent is to clarify aspects of the code that are vague or non-specific by addressing selected issues under normal conditions. This Applications Guide does not create or replace code provisions, and is not an adopted policy of the above jurisdictions. The reader is cautioned that the guidance detailed in this Applications Guide may or may not apply to their specific situation, and that the designated authority for each jurisdiction retains final authority to determine compliance.

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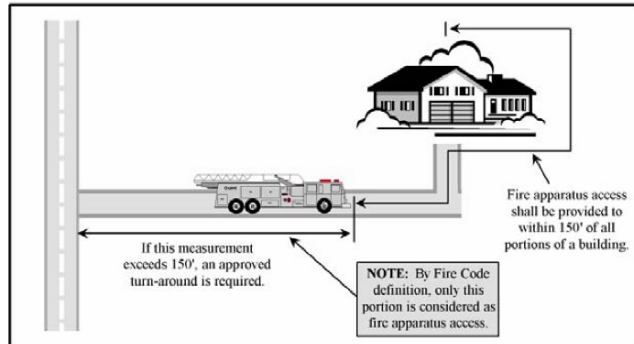
Fire Apparatus Access

FIRE APPARATUS ACCESS ROAD EXCEPTIONS: The requirements for fire apparatus access may be modified as approved by the fire code official where any of the following apply: (OFC 503.1.1 Exception)

- 1) Buildings are equipped throughout with an approved automatic fire sprinkler system (the approval of this alternate method of construction shall be accomplished in accordance with the provisions of ORS 455.610(5)).
- 2) Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
- 3) There are not more than two Group R-3 or Group U occupancies.

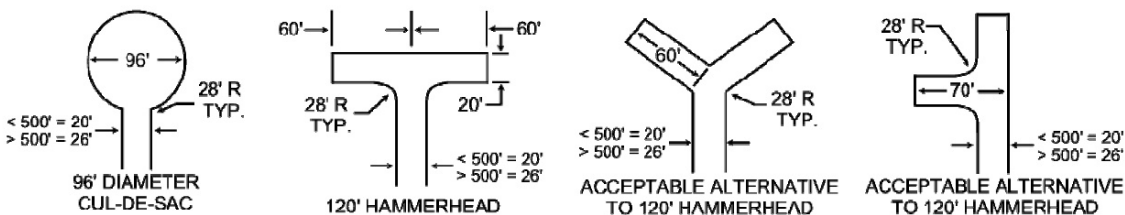
FIRE APPARATUS ACCESS ROAD DISTANCE FROM BUILDING AND TURNAROUNDS:

Access roads shall be within 150 feet of all portions of the exterior wall of the first story of the building as measured by an approved route around the exterior of the building. An approved turnaround is required if the remaining distance to an approved intersecting roadway, as measured along the fire apparatus access road, is greater than 150 feet. (OFC 503.1.1)

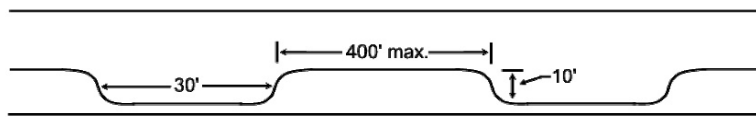


DEAD END ROADS: Dead end fire apparatus access roads in excess of 150 feet in length shall be provided with an approved turnaround. Dead end fire apparatus access roads in excess of 500 feet in length shall have a driving surface width of not less than 26 feet. Diagrams of approved turnarounds are shown below: (OFC 503.2.5)

⊕ Within the boundaries of Portland Fire & Rescue, the distance is 300 feet.



TURNOUTS: When a fire apparatus access road exceeds 400 feet in length, turnouts 10 feet wide and 30 feet long shall be provided in addition to the required road width and shall be placed no more than 400 feet apart, unless otherwise approved by the fire code official. These distances may be adjusted based on visibility and sight distances. (OFC Chapter 5)

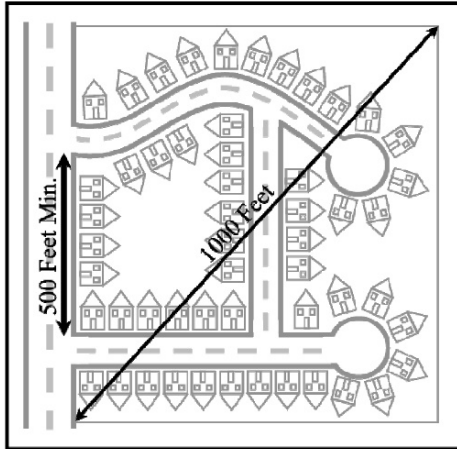


MULTIPLE ACCESS ROADS: Developments of one- and two-family dwellings where the number of dwelling units exceeds 30, multiple-family residential projects having more than 100 dwelling units and where vehicle congestion, adverse terrain conditions or other factors that could limit access, as determined by the fire code official, shall be provided with not less than two approved means of access. Exceptions may be allowed for approved automatic sprinkler system. The approval of fire sprinklers as an alternate shall be accomplished in accordance with the provisions of ORS 455.610(5). (OFC D106 & D107)

GRADE: Fire apparatus access roadway grades shall not exceed 10 percent. Intersections and turnarounds shall be level (maximum 5%) with the exception of crowning for water run-off. When fire sprinklers are installed, a maximum grade of 15% may be allowed. The approval of fire sprinklers as an alternate shall be accomplished in accordance with the provisions of ORS 455.610(5). (OFC D103.2)

⊕ This standard does not apply within the boundaries of Portland Fire & Rescue.

MULTIPLE ACCESS ROADS SEPARATION: Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses. (OFC D104.3 & D107.1)



FIRE APPARATUS ACCESS ROAD WIDTH AND VERTICAL CLEARANCE: Fire apparatus access roads shall have an unobstructed driving surface width of not less than 20 feet (26 feet adjacent to fire hydrants (OFC D103.1)) and an unobstructed vertical clearance of not less than 13 feet 6 inches. (OFC 503.2.1 & D103.1)

Note: When serving two or less dwelling units and accessory buildings, the driving surface may be reduced to 12 feet, although the unobstructed width shall be 20 feet. Turning radii for curves and turnarounds on reduced width roads shall be not less than 28 feet and 48 feet respectively, measured from the same center point.

AERIAL FIRE APPARATUS ROAD WIDTH: Buildings more than 30 feet in height shall have fire apparatus access roads constructed for use by aerial apparatus with an unobstructed driving surface width of not less than 26 feet. (OFC D105.2)

⊕ This standard does not apply within the boundaries of Portland Fire & Rescue.

SURFACE AND LOAD CAPACITIES: Fire apparatus access roads shall be of an all-weather surface that is easily distinguishable from the surrounding area and is capable of supporting not less than 12,500 pounds point load (wheel load) and 75,000 pounds live load (gross vehicle weight). Documentation from a registered engineer that the final construction is in accordance with approved plans or the requirements of the Fire Code may be requested. (OFC D102.1)

BRIDGES: Private bridges shall be designed and constructed in accordance with the State of Oregon Department of Transportation and American Association of State Highway and Transportation Officials *Standard Specification for Highway Bridges*. A building permit shall be obtained for the construction of the bridge if required by the building official of the jurisdiction where the bridge is to be built. The design engineer shall prepare a special inspection and structural observation program for approval by the building official. The design engineer shall give in writing final approval of the bridge to the fire district after construction is completed. Maintenance of the bridge shall be the responsibility of the party(ies) that use(s) the bridge for access to their property(ies). The fire district may at any time, for due cause, ask that a registered engineer inspect the bridge for structural stability and soundness at the expense of the property owner(s) the bridge serves. (OFC 503.2.6)

TURNING RADIUS: The inside turning radius and outside turning radius shall be not less than 28 feet and 48 feet respectively, measured from the same center point. (OFC 503.2.4 & Appendix D)

⊕ Within the boundaries of Portland Fire & Rescue, radii dimensions shall be 25 feet and 45 feet.

GATES: Gates securing fire apparatus roads shall comply with all of the following: (OFC D103.4)

- ♦ Minimum unobstructed width shall be 16 feet, or two 10 foot sections with a center post or island.
- ♦ Gates serving one- or two-family dwellings shall be a minimum of 12 feet in width.
- ♦ Gates shall be set back at minimum of 30 feet from the intersecting roadway.
- ♦ Gates shall be of the swinging or sliding type
- ♦ Manual operation shall be capable by one person
- ♦ Electric gates shall be equipped with a means for operation by fire department personnel
- ♦ Locking devices shall be approved.

NO PARKING SIGNS: Where fire apparatus roadways are not of sufficient width to accommodate parked vehicles and 20 feet of unobstructed driving surface, "No Parking" signs shall be installed on one or both sides of the roadway and in turnarounds as needed. Roads 26 feet wide or less shall be posted on both sides as a fire lane. Roads more than 26 feet wide to 32 feet wide shall be posted on one side as a fire lane.

Signs shall read "NO PARKING - FIRE LANE" and shall be installed with a clear space above grade level of 7 feet. Signs shall be 12 inches wide by 18 inches high and shall have red letters on a white reflective background. (OFC D103.6)



PAINTED CURBS: Where required, fire apparatus access roadway curbs shall be painted red and marked "NO PARKING FIRE LANE" at approved intervals. Lettering shall have a stroke of not less than one inch wide by six inches high. Lettering shall be white on red background. (OFC 503.3)

Firefighting Water Supplies

FIREFIGHTING WATER SUPPLY EXCEPTIONS: The requirements for firefighting water supplies may be modified as approved by the fire code official where any of the following apply: (OFC 503.1.1 Exception)

- 1) Buildings are equipped throughout with an approved automatic fire sprinkler system (the approval of this alternate method of construction shall be accomplished in accordance with the provisions of ORS 455.610(5)).
- 2) There are not more than two Group R-3 or Group U occupancies.

COMMERCIAL BUILDINGS - FIRE FLOW: The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be determined according to OFC Appendix B. The required fire flow for a building shall not exceed the available GPM in the water delivery system at 20 psi.

- ⊕ Within the boundaries of Lake Oswego Fire Department and Tualatin Valley Fire & Rescue the maximum allowed fire flow is 3,000 gpm @ 20 psi.
- ⊕ Within the boundaries of Gresham Fire Dept. the maximum allowed fire flow is 3,500 gpm @ 20 psi.

SINGLE FAMILY DWELLINGS - REQUIRED FIRE FLOW: The minimum available fire flow for one and two-family dwellings served by a municipal water supply shall be 1,000 gallons per minute. If the structure(s) is (are) 3,600 square feet or larger, the required fire flow shall be determined according to OFC Appendix B. (OFC B105.1)

RURAL BUILDINGS - REQUIRED FIRE FLOW: Required fire flow for rural and suburban areas in which adequate and reliable water supply systems do not exist may be calculated in accordance with National Fire Protection Association Standard 1142, 2001 Edition, when approved by the fire code official. Please contact the Fire Marshal's Office for special assistance and other requirements that may apply. (OFC B103.3)

ACCESS AND FIRE FIGHTING WATER SUPPLY DURING CONSTRUCTION: Approved fire apparatus access roadways and fire fighting water supplies shall be installed and operational prior to any combustible construction or storage of combustible materials on the site. (OFC 501.4)

PREMISE IDENTIFICATION: Buildings shall have address numbers or approved identification placed in a position that is plainly legible and visible from the access road fronting the property. Numbers shall contrast with their background and shall be a minimum of 4 inches high with a minimum stroke width of ½ inch. (OFC 505.1)

- ⊕ Check the local city or county development code for additional or alternative requirements.

Fire Hydrants

FIRE HYDRANTS – COMMERCIAL BUILDINGS: Where a portion of the building is more than 400 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the building, on-site fire hydrants and mains shall be provided. (OFC 508.5.1)

Note: This distance may be increased to 600 feet for buildings equipped throughout with an approved automatic sprinkler system.

FIRE HYDRANTS – ONE- AND TWO-FAMILY DWELLINGS & ACCESSORY STRUCTURES: Where a portion of a structure is more than 600 feet from a hydrant on a fire apparatus access road, as measured in an approved route around the exterior of the structure(s), on-site fire hydrants and mains shall be provided. (OFC 508.5.1)

FIRE HYDRANT NUMBER AND DISTRIBUTION: The minimum number and distribution of fire hydrants available to a building shall not be less than that listed in Table C 105.1. See page 9 for hydrant proximity to FDC. (OFC Appendix C)

- ⊕ Within the boundaries of Forest Grove Fire & Rescue the average fire hydrant spacing shall be 400 feet.

**TABLE C105.1
NUMBER AND DISTRIBUTION OF FIRE HYDRANTS**

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS ^{a, b, c} (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT ^d
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more ^e	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

- a. Reduce by 100 feet for dead-end streets or roads.
- b. Where streets are provided with median dividers which can be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis up to a fire-flow requirement of 7,000 gallons per minute and 400 feet for higher fire-flow requirements.
- c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.
- d. Reduce by 50 feet for dead-end streets or roads.
- e. One hydrant for each 1,000 gallons per minute or fraction thereof

Considerations for placing fire hydrants may be as follows: (OFC C104)

- ⊕ Existing hydrants in the area may be used to meet the required number of hydrants as approved. Hydrants that are up to 600 feet away from the nearest point of a subject building that is protected with fire sprinklers may contribute to the required number of hydrants. (OFC 508.5.1)
- ⊕ Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants unless approved by the fire code official.
- ⊕ Hydrants that are separated from the subject building by divided highways or freeways shall not contribute to the required number of hydrants. Heavily traveled collector streets only as approved by the fire code official.
- ⊕ Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the fire code official.
- ⊕ When evaluating the placement of hydrants at apartment or industrial complexes the first hydrant(s) to be placed shall be at the primary access and any secondary access to the site. After these hydrants have been placed other hydrants shall be sited to meet the above requirements for spacing and minimum number of hydrants.

FIRE HYDRANT NON-THREADED QUICK CONNECTORS: Non-threaded quick connectors shall be installed on all newly installed fire hydrants in the following jurisdictions:

Boring Fire District (4"); Sandy Fire District (4"); Forest Grove Fire & Rescue (4"); Lake Oswego Fire Dept.; Canby Fire District

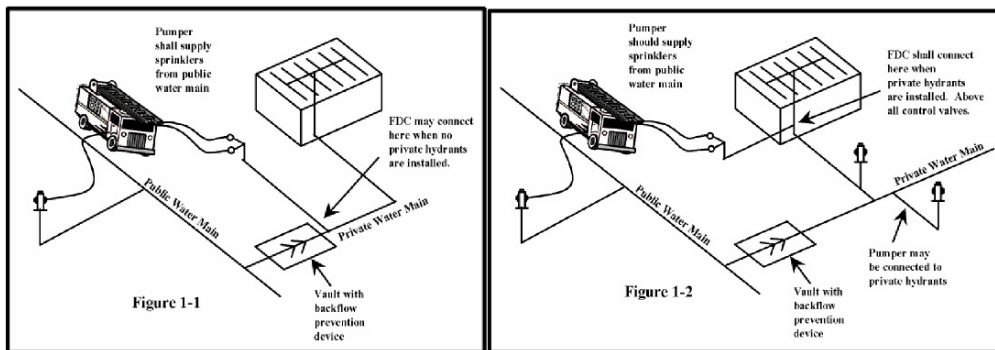
FIRE HYDRANT DISTANCE FROM AN ACCESS ROAD: Fire hydrants shall be located not more than 15 feet from an approved fire apparatus access roadway unless approved by the fire code official. (OFC C102.1)

REFLECTIVE HYDRANT MARKERS: Fire hydrant locations shall be identified by the installation of reflective markers. The markers shall be blue. They shall be located adjacent and to the side of the centerline of the access road way that the fire hydrant is located on. In case that there is no center line, then assume a centerline, and place the reflectors accordingly. (OFC 508.5.4)

FIRE HYDRANT/FIRE DEPARTMENT CONNECTION: A fire hydrant shall be located within 100 feet of a fire department connection (FDC). Fire hydrants and FDC's shall be located on the same side of the fire apparatus access roadway. (OFC C102.1 & NFPA 14)

FDCs shall normally be remote except when approved by the fire code official.

⊕ Within the boundaries of Portland Fire & Rescue, the maximum distance to a hydrant shall be 150 feet.

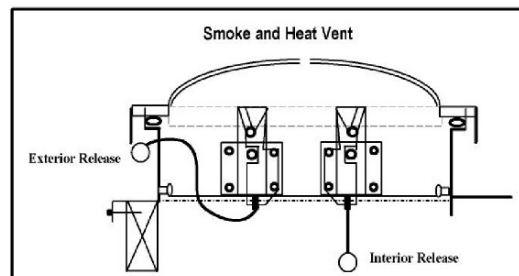


Key Boxes

KEY BOX: A key box for building access may be required. Please contact the appropriate jurisdiction for location requirements or for an order form and instructions regarding installation and placement. (OFC 506)

Smoke and Heat Vents

MANUAL RELEASE: Manual releases shall be provided for use during fire suppression operations. Individual exterior release mechanisms shall be provided for each vent.



Fire Watch

FIRE WATCH: Whenever a *required* fire alarm, detection or suppression system is out-of-service and a life hazard and or distinct fire hazard is present, the fire code official and/or the property owner or manager shall initiate a fire watch. A fire watch is defined as a temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department. Each affected area or building must be patrolled hourly and documented on a written log. Individuals assigned to fire watch duty must be provided with a means of communication such as a cell phone or two-way radio and their only duties shall be to perform constant patrols. The watch must remain in effect until repairs are made and the system(s) are back in-service. *When in doubt if a system is required or if a fire watch is needed, contact the local jurisdiction for consultation and or response.* (OFC, Section 901.7 & Section 202)

EXAMPLES:

The automatic smoke detection system in the Family Birth Center at the local Hospital is taken off-line due to unwanted false alarms and an alarm technician has been dispatched to evaluate the system. This is a required detection system and the patients occupy the floor. A fire watch is required and could be conducted by nursing and or security personnel.

The manual fire alarm system at a local Elementary School is initiating false alarms and is taken off line by school district personnel; the automatic smoke detection and fire sprinkler system are operational. It's Saturday afternoon and the building is not occupied. Although this is a required system, a fire watch is not required as the building is vacant.

The water main that serves a local apartment complex is damaged in a construction accident rendering the fire hydrants and residential fire sprinkler systems out-of-service. It's Sunday night and nearly all of the apartments are occupied. Both systems are required and a continuous fire watch is needed.

2. The Transportation Engineering Division has provided comments dated September 29, 2022, stating that access is subject to ZDO Subsection 703.09, ZDO Subsection 1007.03 and the Clackamas County Roadway Standards, as listed below:



**Clackamas County Planning and Zoning Division
Department of Transportation and Development**

Development Services Building
150 Beavercreek Road | Oregon City, OR 97045
503-742-4500 | zoninginfo@clackamas.us
www.clackamas.us/planning

TRANSPORTATION ENGINEERING FINDINGS & CONDITIONS

SECTION 1: SUMMARY

Date: 9/29/2022

File Nos. Z0228-002

Staff Contact: Jonny Gish

Map & Taxlot(s): 27E30BC03203

Site Address: O NO SITUS

Applicant: GREGORY, MICHAEL

Owner of Property: GREGORY MANAGEMENT

Zoning: RR-RECREATIONAL RESIDENTIAL

Proposal:

ZDO SECTION 703: FLOODPLAIN MANAGEMENT DISTRICT (FMD)

703.09 FLOODPLAIN DEVELOPMENT PERMITS

Except as provided under Subsection 703.06, a floodplain development permit (FDP) shall be obtained for development laterally within the FMD before construction or development begins. The permit shall be for all structures, including manufactured dwellings, and for all development, including fill and other activities. Work that is necessary to protect existing structures, utility facilities, roadways, driveways, and stream banks in response to emergencies may be undertaken prior to obtaining an FDP, provided that an application is made within 90 days of water receding. The measures used for protection may not be able to be permitted. An FDP requires review as a Type II application pursuant to Section 1307, Procedures

B. Factors of Consideration: In reviewing an application for FDP, the following factors shall be considered:

10. The safety of access to property in times of flood for ordinary and emergency vehicles:

Fact: The applicant is proposing the development of 5 contiguous lots along the Sandy River, which do not have any frontage along a County or public roadway. ZDO 1007.03 requires minimum easement or "flag-pole" widths set forth by the Clackamas County Roadway Standards and Fire Marshal approval when easements are proposed for vehicular access.

Fact: Clackamas County Roadway Standard Detail R100 requires a minimum easement width of 25-feet with more than 3 units are proposed. Further, R100 requires specific structural section and a minimum 20-foot wide travel width with fire apparatus turnaround per Standard Detail C350 for the access roadway centered within the required easement(s).

*Finding: The applicant has not provided any documentation of existing or ability to obtain legal access to a County or public roadway to provide "safe access to the property" as required by ZDO 703.09.B.10. Prior to any building permit issuance an Engineering Permit is required for public and/or private access. A recorded easement shall be submitted providing legal access to a County/public roadway. **This criteria has not been met.***

D. DECISION

Based on the findings, discussion, conclusions, and record in this matter, the Hearings Officer APPROVES application Z0229-22-F subject to conditions of approval.

Dated: January 10, 2023



Carl D. Cox
Clackamas County Hearings Officer

APPEAL RIGHTS

ZDO 1307.10(F) provides that, with the exception of an application for an Interpretation, the Land Use Hearings Officer's decision constitutes the County's final decision for purposes of any appeal to the Land Use Board of Appeals (LUBA). State law and associated administrative rules promulgated by LUBA prescribe the period within which any appeal must be filed and the manner in which such appeal must be commenced. Presently, ORS 197.830(9) requires that any appeal to LUBA "shall be filed not later than 21 days after the date the decision sought to be reviewed becomes final." This decision is "final" for purposes of a LUBA appeal as of the date of the decision appearing by my signature.