



TO: Development Review Commission

FROM: Debra Andreades, Senior Planner

SUBJECT: LU 14-0031

DATE: July 25, 2014

The Development Review Commission (DRC) held the initial public hearing to review the request for approval of a Master Plan, on June 16, 2014. Upon request from the Forest Highlands Neighborhood Association, the Commission continued the hearing to July 7th and left the record open for written testimony only, until June 27th with rebuttal until July 1st.

At the July 7th hearing, the applicant requested that the DRC re-open the hearing and the DRC again continued the hearing to August 4th to allow additional testimony on drainage. The public testimony and discussion on August 4th will be limited to the drainage issue only.

The applicant has submitted a revised drainage report, Exhibit F-13. The Engineering Department has reviewed the report and provided an evaluation (Exhibit F-14). Engineering staff notes that the primary changes to the drainage design include the following:

1. The previous proposal to provide retention on the individual lots has been eliminated, and the two storm water detention facilities on the project site have now been sized to detain runoff from both the public improvements as well as the pervious and impervious surfaces associated with the individual lots. No infiltration will be incorporated into the storm disposal design.
2. Water quality treatment will still be provided on the individual lots. These facilities will be flow-through type rain gardens or planters without infiltration. Water quality treatment will be required to be provided on the lots, and the water quality treatment flow-through facilities will have overflows that will route the storm water to the public conveyance systems that will lead to the two detention facilities on the project site.

The revised storm design concept meets the Drainage standard, LOC 50.06.006.3.b, ensuring that there will be no adverse impacts to adjoining properties. Engineering staff notes that the revised drainage design will provide a more suitable design than the previous design, as outlined in Exhibit F-14, due to the sloped character of the site with low infiltration rates. In addition, individual detention facilities will not be constructed on each individual lot, thus, eliminating additional maintenance responsibility for future home owners in the development.

As indicated in the discussion in Exhibit F-14, the Engineering Department recommends modifying one condition of approval. Following are the conditions of approval, as amended:

A. Prior to Approval of any Partition Application Subsequent to this Approval, the Applicant/Owner Shall:

Note: As provided for in the Development Agreement, building permits may be obtained to construct up to two single family dwellings per parcel (after the second (2014) partition is approved) prior to recordation of the third (2015) partition plat, as a means to facilitate construction in preparation for featuring the development as the 2015 Portland Homebuilder's Association "Street of Dreams," that will take place in the summer of 2015. However, the Development Agreement does not permit occupancy of any dwelling on these parcels until the 2015 partition plat is recorded and each dwelling is on its own lot.

1. Submit engineered construction plans for the public improvements along Goodall and Knaus Roads for review and approval by Clackamas County. The plans shall be designed to Clackamas County standards.
2. If prior to construction of the public improvements on Goodall and Knaus Roads, the design, maintenance and permitting authority for these roads have been transferred to the City of Lake Oswego, the applicant may request (as substantial conformance to the county requirements for street improvements) to construct to the City of Lake Oswego street standards, as provided below. In that event, the applicant shall submit construction drawings for the public and site improvements for review and approval by the City Engineer. Drawings shall conform to the City's most current design standards and the drafting specifications. Receiving construction plan approval is not a pre-requisite for recording the final plat. The plans shall include the following:
 - a. Design of the public street frontage improvements along Goodall and Knaus Roads showing the following elements:
 - i. Widen the pavement along the east side of Goodall Road and north side of Knaus Road along the entire site frontage to achieve a 14-foot wide shared travel lane (measured from the existing painted yellow centerline) and a minimum 3-foot wide, compacted crushed rock shoulder.
 - ii. An 8-foot wide drainage swale along the entire site frontage on Goodall and Knaus Roads. Stormwater quality facilities can be incorporated into the swale design. [Note: maintenance for water quality facilities shall be the responsibility of the Homeowner's Association.]
 - iii. An 8-foot wide drainage swale along the site frontage on Goodall and Knaus Roads and a 6-foot wide asphalt pedestrian pathway behind the drainage swale along the site frontage on these roads. A culvert shall be provided at any pedestrian crossings where the pathway will connect back to the edge of road, at any driveway approaches and at the new public street intersections. The right-of-way shall be located a minimum of one foot away from the back of the pathway.
 - iv. Undergrounding the existing overhead utilities along the entire site frontage along Goodall Road. If new franchise utilities are needed along the site frontage of Knaus Road, they shall be installed underground either in the right-of-way or within a 10-foot public utility easement (or less if accepted by the franchise utilities) along the

frontage of the site.

3. Dedicate sufficient right-of-way to accommodate the above described future half-street improvements along Goodall and Knaus Roads, Condition A(2)(a). (Note: sufficient right-of-way dedication appears to have been provided per LU 13-0044. If it is determined in the final design of the street improvements that additional right-of-way is needed, the applicant shall dedicate sufficient right-of-way so that all public street frontage improvements are located entirely within the right-of-way to the satisfaction of the City Engineer).
4. Grant a 10- foot public utility easement (or less if acceptable to the franchise utility companies) along Goodall Road for undergrounding franchise utilities. If applicable (in the case of utilities located on private property), grant a 10-foot public utility easement (or less if acceptable to the franchise utility companies) along the site frontage of Knaus Road for undergrounding franchise utilities.
5. Submit engineered construction plans for the public utility improvements serving the development for review and approval by the City Engineer. Drawings shall conform to the road permitting authority's most current design standards and the drafting specifications. Receiving construction plan approval is not a pre-requisite for recording the final plat. The plans shall include the following:
 - a. Design to bring public sanitary sewer up Goodall Road to serve Lot 10 as shown on Exhibit E-4, approximately 475 feet north of Knaus Road, and also up the new internal street to serve Lots 9-14. Public sanitary sewers shall be located within the public right of way, and service laterals shall be provided directly to a lot, without crossing other lots with a private sewer easement.
 - b. Design to bring public sanitary sewer up Knaus Road and also up the new internal street to serve the remainder of the lots.
 - c. Design of an 8" public water main extension along Goodall Road up to the new internal street connection at Goodall Road, approximately 150 feet north of Knaus Road.
 - d. Design of an 8" public water main extension within the internal public street to loop the public system between Goodall and Knaus Roads.
 - e. Design of a public water main extension up Goodall Road from where the new internal street will connect to Goodall Road, to serve Lot 10 as shown on Exhibit E-4.
 - f. Design of public drainage facilities.
 - g. Design showing the location of the private water and sanitary services.
 - h. Design showing new fire hydrants as required by the Fire Marshal. Fire hydrants shall be installed per City standards.

- i. Design showing the new street light at the intersection of Goodall and Knaus Roads, and the new intersections created by the internal street connecting to Goodall and Knaus Roads.
 - j. Design of the new internal public street showing the following elements.
 - i. 55-feet of dedicated right-of-way.
 - ii. 26-foot roadway width (face-of-curb to face-of-curb).
 - iii. 5-foot concrete sidewalk on one side of the street, located at the back of the right-of-way. On the sidewalk side, the improvements behind the curb shall consist of a 3-foot level strip adjacent to the back of the curb, an 8-foot wide drainage swale/planter (or lawn where planters are not installed), a 1-foot wide level strip between the back of the swale/planter and sidewalk, a 5-foot sidewalk and a 1-foot level strip between the back of the walk and right-of-way line.
 - iv. On the non-sidewalk side of the street, the street shall be signed "no-parking." The improvements behind the curb shall consist of a 1-foot level strip adjacent to the back of the curb, an 8-foot wide drainage swale/planter (or lawn where planters are not installed), and a 1-foot wide level strip between the back of the swale/planter and right-of-way line.
 - v. Standard concrete curb and gutter on both sides of the street.
 - vi. Public 10-foot public utility easement (or less if acceptable to the franchise utility companies) along both sides of the right-of-way for undergrounding the franchise utilities.
 - vii. Eyebrow design to the satisfaction of the City Engineer.
 - viii. Street centerline profiles and grading design.
 - k. Adequate sight distance for the Knaus Road intersection with the new internal street can be achieved by removing vegetation within the AASHTO sight lines and constructed to allow the driver to be at the level of the roadway when positioned 15 feet back from the near side travel lane.
6. Submit a storm drainage report for all required storm improvements, prepared by a registered engineer, for review and approval of the City Engineer.
7. Submit for the Engineering staff review the Declaration of Covenant for Operation and Maintenance of Surface Water Management Facilities for the storm water facilities to be maintained by the Homeowner's Association (HOA). The facilities to be maintained by the HOA shall include the detention facilities serving the development, and the water quality planters/swales along the internal street, and all swales and planters along Goodall and Knaus Roads.

8. Submit a "Notice of Development Restrictions" to be recorded with the final plat for both the 2014 and 2015 partition plats for review and approval by staff. Attached exhibits shall be no larger than 8 ½" x 11" and shall not contain lettering smaller than 10 point font. The Notice shall include the following information:
 - a. As provided for in the Development Agreement (LU 14-0021), all setbacks, height, maximum lot coverage and floor area on individual lots shall be limited to those required of the R-7.5 zone on May 7, 2014.
 - b. Private Open Space easements on all lots as shown in Exhibit "A", shall be planted and maintained per the approved Landscape Plan to provide a scenic and aesthetic appearance of the open space. **No fencing is permitted along the front or side property lines of all lots within the open space easements.** Trees may be removed only after they have been shown to be hazardous pursuant to LOC 55.02.042 (4) to life or property by a certified arborist, and after a tree removal permit (including the requirement for planting replacement trees) has been obtained from the City. Improvements in this area, which are in keeping with the above purpose, including public utilities and pedestrian pathways must be approved by the City of Lake Oswego. No buildings or structures shall be allowed in these areas.
 - c. Lots 3-6 and Lots 8-16 are solar lots, subject to the requirements of LOC 50.06.007.2.c (protection from future shade). Development of structures or planting of non-exempt vegetation on these lots shall comply with the Solar Balance Point provisions of the Solar Access Ordinance. These requirements shall be binding upon the applicant and subsequent purchasers of these lots.
 - d. Lots 3, 6, and 10 are subject to the requirements of LOC 50.06.007 [Protected Solar Building Line], as depicted on Exhibit "B". The Protected Solar Building Line, if located closer to a property line than a required yard setback, shall not supersede the required yard setback.
 - e. Based on the fact that Highland Loop is over 10% grade and the Fire Code states that access roads shall not exceed 10% grade; the Code allows 15% grade if residential fire sprinklers are installed in the future homes. The Building Official may allow an alternative to the minimum requirements of the One-and Two-Family Dwelling Specialty Code as authorized by ORS 455.610, which may include, but is not limited to, installation of an automatic fire sprinkler system,. The owners or owners' representative shall offer an approved alternate method for fire suppression, such as an NFPA 13-D residential fire sprinkler system, to the satisfaction of the Fire Marshal and Building Official.
9. Submit CC&Rs of the homeowners association for review and approval of City staff that address the following:
 - a. Operation and Maintenance of Surface Water Management Facilities for the storm water facilities to be maintained by the HOA, including annual inspection and maintenance. The facilities to be maintained by the HOA include the

detention facilities serving the development, the water quality planters/swales along the internal street, and all swales and planters along Goodall and Knaus Roads.

- b. The ownership, use and specific responsibilities for the maintenance of landscaping in the open space easements on all lots. Lot owners shall be prohibited from making any alteration in the landscaping of the open space easement on the owner's lot, except with written approval of the HOA and the City of Lake Oswego.
 - c. Upon transfer of the homeowners' association from the developer to the homeowners within the development, the City shall be notified of the name and address of a contact person for the HOA.
 - d. Upon election of new officers for the HOA, the City shall be notified of the new contact person.
 - e. The City's right to enforce the provisions of the CC&Rs required, above, including the right to recover all expenses of enforcement, the right to lien the lots to secure enforcement expenses, "non-waiver" of enforcement, non-amendment or rescission of the provisions of the CC&Rs required, above, and indemnification to the City for claims arising from the failure to properly design, locate, construct, or maintain the open space easements or storm water facilities.
10. Provide a written agreement between the applicant and a certified arborist demonstrating that the arborist will review the final site, utility, grading and landscape plans to assure long term survival of the protected trees, and that he/she will be present on site at any time excavation, trenching, grading, root pruning or other activity occurring within the tree protection zone, to ensure proper protection of all trees to remain.
 11. Submit a final landscape plan that coincides with the Open Space Plan (Exhibit E-5) to the satisfaction of staff. Provide a note on the final landscape plan requiring all burlap or wire cages to be completely removed from root balls of all trees and shrubs before they are planted.
 12. Submit a monitoring and maintenance plan to maintain and monitor the mitigation trees and plants in the open space easements.
 13. Complete all public improvements or provide a financial guarantee to ensure their construction per LOC 50.07.003.9 or the applicable county requirements. The financial guarantee shall be based on an itemized engineer's estimate of the public improvements that is in turn based on plans that are far enough advanced to support the estimate, to the satisfaction of the City Engineer.
 14. Submit a preliminary title report or lot book report showing the status of title and any liens and encumbrances.
 15. Complete the public notice and election requirements prescribed in Section 40 of the City

Charter. The applicant/owner shall coordinate with City engineering staff to complete this process. A permit for road construction will not be issued until the Charter requirements have been met.

16. Record the CC&Rs, the Notice of Development Restrictions, the Landscape Monitoring and Maintenance Plan, and the Declaration of Covenant for Operation and Maintenance of Surface Water Management Facilities for the detention and storm water quality facilities serving the development.

B. Prior to the Issuance of any Grading or Building Permits to Construct any Structure on any Lot, (with the exception of permits which may be necessary for the renovation of the existing dwelling on Lot 9), the Applicant/Owner Shall:

1. Complete all public improvements as required by Conditions A(1) or A(2) and A(5) and A(6), above, and submit certified "as-built" drawings, and receive a certificate of completion and acceptance by the City.
2. ~~Submit a stormwater disposal plan for each lot. Installation of a subsurface infiltration facility or rain garden on the individual lots is an acceptable method for storm water disposal. Stormwater disposal facilities shall meet minimum setbacks of five feet from property lines and 10 feet from building foundations. Subsurface disposal systems (i.e., drywells, storm chamber systems or infiltration trenches) shall be engineered. Driveway runoff cannot be directed to a subsurface infiltration disposal system without Department of Environmental Quality (DEQ) approval. Any emergency overflow shall be conveyed to an approved point of disposal.~~
2. Submit a storm water plan for each lot to provide water quality treatment for the runoff from the impervious surface areas. The water quality facilities shall be flow-through type and shall not be infiltration facilities. The minimum setback is five feet from property lines. The overflow from each facility shall be conveyed to an approved point of disposal. Service laterals for the overflow pipes shall be 6-inch diameter within the right-of-way with a 6-inch diameter clean-out located at the right-of-way line.
3. Per LOC Chapter 52, apply for and obtain an approved erosion prevention and sediment control permit issued through the City of Lake Oswego, and install and maintain all BMPs as indicated in the permit. These measures shall remain in place as indicated throughout the development period.
4. Provide post-construction storm water management facility protection for the storm water quality swales in order to protect the facilities during home construction.
5. Demonstrate that driveway approaches comply with the "vision clearance triangle" standards. No vegetation, fence, or signage higher than 30 inches will be allowed within the area formed by 10-foot legs extending from the intersection of the driveway and the street travel lanes.
6. Driveway approaches along Goodall and Knaus Roads shall be asphalt and limited to 16 feet wide, irrespective of the number of garage doors facing the street. Culverts meeting City standards shall be located across the driveway approaches. The size of

the culvert shall be engineered to the satisfaction of the City Engineer, but shall not be less than 10 inches in diameter.

7. Driveway approaches along the internal public street shall conform to the following criteria. The maximum width of a driveway approach, measured where the edges of the driveway meet the right-of-way, shall be governed as follows:
 - a. Single-family residential with garage door(s) facing the street: 12 feet per garage or carport stall, or surface parking space, but not to exceed 30 ft.
 - b. Single-family residential with side-loading garage: 24 feet
 - c. On corner lots where the adjacent streets are fully improved to their anticipated ultimate width, the nearest edge of the proposed driveway to the intersection shall be no closer than 30 feet when measured from the projected curb of the street that is most parallel to the alignment of the proposed driveway.
8. Provide evidence from a traffic engineer that the driveway approaches are located and designed so that the driver entering or exiting the driveway can see approaching traffic for a sufficient distance to make a safe entrance and exit. American Association of State Highway and Transportation Officials (AASHTO) standards shall be used in determining compliance with this standard.
9. Pay all applicable System Development Charges pertaining to the development.
10. Apply for and obtain a verification tree removal permit for the 27 non-invasive trees. The verification tree removal permit submittal shall include an 8½" x 11" copy of the tree removal plan and a mitigation plan showing 27 replacement trees (and associated vegetation).

C. Prior to any Final Building Inspection or Occupancy of any Structure on any Lot, the Applicant/Owner Shall:

1. Install all street trees and mitigation trees and landscaping in the open space easement on the lot as required by Condition A(11), above, to the satisfaction of staff.
2. Provide a one-year guarantee (one 12-month growing season from the date of installation) for all landscape materials, including mitigation planting, pursuant to LOC 50.06.010.2. The guarantee shall consist of a security in the amount of 5% of the total landscaping cost.
3. Provide certification from the engineer of record that the storm water facility for each lot was constructed according to the design and is functioning properly.
4. Complete all private utility services, including water, storm, sanitary and franchise utilities.

Code Requirements:

1. **Expiration of Development Permit:** The development approved by this decision shall expire within five years following the effective date of the Development Agreement approved by LU 14-0021.
2. **Tree Protection:** Submit a tree protection plan and application as required by LOC 55.08.020 and 55.08.030 for review and approval by staff, including off-site trees that are within the construction zone. The plan shall include:
 - a. The location of temporary tree protection fencing, consisting of a minimum 6-foot high cyclone fence secured by steel posts around the tree protection zone, or as recommended by the project arborist and approved by the City.
 - b. A note stating that no fill or compaction shall occur within the critical root zones of any of the trees, or that if fill or compaction is unavoidable, measures will be taken as recommended by a certified arborist to reduce or mitigate the impact of the fill or compaction. The note shall also inform contractors that the project arborist shall be on site and oversee all construction activities within the tree protection zone.
 - c. A note that clearly informs all site contractors about the necessity of preventing damage to the trees, including bark and root zone. The applicant and contractor(s) shall be subject to fines, penalties and mitigation for trees that are damaged or destroyed during construction.
 - d. A sign shall be attached to the tree protection fencing which states that inside the fencing is a tree protection zone, not to be disturbed unless prior written approval has been obtained from the City Manager and project arborist.

Notes:

1. Goodall and Knaus Roads along the site frontage are under the design, maintenance, and permitting authority of Clackamas County. As a condition of approval, the applicant is required to improve the street to County standards. If the road authority jurisdiction for these roads is transferred from Clackamas County to the City of Lake Oswego prior to construction of the street improvements, the applicant may request approval from the City Engineer to construct the street improvements in conformance with applicable city street standards. If approved by the City Engineer, that would be considered to be in substantial conformance with the condition of approval.
2. The land use approval for this project does not imply approval of a particular design, product, material, size, method of work, or layout of public infrastructure except where a condition of approval has been devised to control a particular design element or material.
3. Development plans review, permit approval, and inspections by the City of Lake Oswego Planning and Building Services Department are limited to compliance with the Lake Oswego Community Development Code, and related code provisions. The applicants are advised to review plans for compliance with applicable state and federal laws and regulations that could relate to the development, i.e., Americans with Disabilities Act, Endangered Species Act. Staff may advise the applicants of issues regarding state and federal laws that staff member believes would be helpful to

the applicants, but any such advice or comment is not a determination or interpretation of federal or state law or regulation.