



## Memorandum

**To:** Jana Fox, Associate Planner, City of Beaverton  
**From:** Steve Szigethy, Senior Planner, LUT Long Range Planning Division  
**Date:** September 25, 2013  
**Re:** Active Transportation Recommendations for Peterkort Properties

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Thank you for the opportunity to comment on active transportation considerations related to the development of the Peterkort properties along Barnes Road. This series of developments presents a unique opportunity to create a complete community connected by multi-modal transportation options in one of the most accessible locations on the west side. As such, we hope the development team, City of Beaverton, Washington County, ODOT and TriMet can work together to ensure that the transportation facilities serving the area are improved in ways that benefit all modes of travel and that preserve and enhance neighborhood livability.

Included in this memo are a series of recommendations related to pedestrian, bicycle and transit travel in and around the Peterkort Master Plan area. The recommendations are based on:

- system completeness, as indicated by gaps in the pedestrian/bicycle network;
- the safety, comfort and potential usage level of active transportation facilities in the area;
- local neighborhood input heard through the county's Transportation System Plan update; and
- recent planning work completed by the county, including the Washington County Bicycle Facility Design Toolkit and the Washington County Bicycle and Pedestrian Improvement Prioritization Project.

This memo is a supplement to the review letter provided by the county's Operations and Maintenance Division. Recommendations are divided into five categories: sidewalks, bikeways, pedestrian crossings, connectivity, and transit access. Elements of the Cedar Hills – Cedar Mill Community Plan are attached.

### **Sidewalks**

Washington County Resolution and Order 86-95 establishes the county's methodology for requiring safety improvements to mitigate the impacts of development. The county uses this methodology to condition development within unincorporated urban Washington County and to review development along county roads within cities. On-site and off-site sidewalks are included in this methodology. Appendix B, D.1.2.2.3 states,

*Sidewalks will be installed along the site's frontage, placed at ultimate location and grade, unless an exception is approved in accordance with the standard of the Community Development Code.*

Appendix B, D.2.2.2. 3 states,

*Off-site sidewalks which are needed to allow safe pedestrian travel from the development to an existing network of sidewalks or to an area of heavy pedestrian draw, such as a neighborhood commercial development, will be required.*



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The county recommends that these standards be applied to roads within the development impact area in both unincorporated Washington County and the City of Beaverton. These standards form the basis for the recommendations below.

- Missing sidewalks should be completed and substandard sidewalks (e.g. 5-6' curb tight) should be replaced along all development frontages. Washington County Road Design and Construction Standards call for a minimum of five-foot concrete sidewalks and 4.5-foot planter strips (or furnishing zones with tree wells) between the walkway and the curb. However, wider sidewalks may be more appropriate, as described in the next item.
- In the Washington County Transportation Plan, Barnes Road has a 'Boulevard Design Consideration' overlay between Baltic Avenue and the western edge of the Sunset Station area. Barnes Road is also designated as a 'Pedestrian Parkway' – the highest pedestrian functional class – in the draft Regional Active Transportation Plan. The county Transportation Plan states that in Boulevard Design Consideration corridors, "sidewalk widths and other design features such as planter areas shall be determined based on the applicable standards in the Community Plans [and] Community Development Code." (p 36). However, the Cedar Hills – Cedar Mill Community Plan does not have specific width recommendations.

Nevertheless, generous sidewalk widths and features in excess of local standards are encouraged along Barnes Road between Cedar Hills Boulevard and Highway 217 to help provide separation from the anticipated traffic volumes and new auxiliary lanes. Total sidewalk/planter/curb widths of 12 to 14 feet may be appropriate, including 6 to 8 feet of walking through-zone. Such widths would serve not just as a buffer from vehicle traffic, but also to meet pedestrian travel demand associated with the density and mix of uses proposed on both sides of Barnes Road.

- In coordination with ODOT (which has conditioning authority along Cedar Hills Boulevard between the westbound ramps and Butner Road), missing sidewalks should be completed along both sides of Cedar Hills Boulevard between Barnes Road and Butner Road, including underneath US 26. This effort should be coordinated with the installation of bike lanes and additional vehicle travel lanes in the same segment, as described in the next section. Pedestrian facility solutions discussed thus far include walkways situated between the overcrossing support columns and the abutments, and a grade-separated undercrossing of the double-lane westbound freeway ramp. These concepts are promising, though adequate safety and personal security must be ensured for any such separated walkway facilities, including lighting.

## **Bikeways**

- Missing bike lanes should be completed along all arterial/collector development frontages.
- The 2012 Washington County Bicycle Facility Design Toolkit recommends enhanced bikeway facilities such as buffered bike lanes or cycle tracks along roads with more than 10,000 ADT (Barnes currently experiences about 16,000 ADT). Opportunities should be explored to provide buffered bike lanes along Barnes Road between Cedar Hills Boulevard and Highway 217. The extra space needed to accommodate buffered bike lanes (typically an additional 2 or 3 feet on each side of the road) could be gained in several ways. In places where the curb would be reconstructed for another reason (such as adding turn or auxiliary lanes), the roadway could be widened further to accommodate the buffers. In segments without turn lanes, the width of the center lane could be reduced because left turns will most likely be eliminated through access management. Because Barnes Road is a series of curves, geometric transitions between different roadway profiles could be



nested within those curves.

- In coordination with ODOT, missing bike lanes should be completed along both sides of Cedar Hills Boulevard between Barnes Road and Butner Road, including underneath US 26. Motor vehicle-bicycle weaving or turning conflict locations should be provided an extra level of safety features. On the southbound (west) side, a signalized at-grade crossing (such as a rectangular rapid flash beacon) or a grade-separated crossing should be provided to assist pedestrians and bicyclists in crossing the double-lane westbound onramp to US 26. On the northbound (east) side, dashed striping and a colored bike lane should be considered in the two conflict areas.

The Cedar Hills bikeway gap underneath US 26 was a top-level need identified in the Washington County Bicycle and Pedestrian Improvement Prioritization Project, out of hundreds of links studied throughout the urbanized area. It was also part of a project nomination for 2016-2018 STIP funds that was ultimately not funded. It remains to be seen how bike lanes and sidewalks can fit underneath the overcrossing structure along with two travel lanes in each direction and double lefts southbound. All of these improvements should be planned together in coordination with ODOT and Washington County.

- In the near term, the northbound right turn lane on Cedar Hills Boulevard at Butner Road should be replaced with a shared bike/bus lane. This turning movement is well under capacity and the road space could be more efficiently used to fill part of the northbound bike lane gap and to serve the existing bus stop. However, in the long term, a third northbound travel lane is forecast to be necessary, in which case continuous bike lanes and sidewalks should be carefully integrated into the design.

## **Pedestrian Crossings**

The Peterkort Master Plan map shows two proposed new traffic signals along Barnes Road, resulting in a total of eight traffic signals between (and including) Cedar Hills Boulevard and Highway 217. While the county has concerns about traffic progression and access management based on this proposal, the signals would at least provide opportunities for pedestrian crossings.

With favorable spacing of pedestrian crossings, the concern then becomes the safety and comfort of those crossings. Community members have expressed concern about the safety of crossing Barnes Road to reach Sunset Transit Center and future land uses on the Sunset Station site. These concerns will likely grow if Barnes Road is widened to include auxiliary lanes and additional turn lanes, resulting in crossing distances greater than 100 feet.

One solution proposed by a community member is a grade-separated over- or under-crossing of Barnes Road connecting Sunset Transit Center with uses on the north side. While costly, a grade-separated pedestrian/bicycle crossing may be appropriate based on forecasted vehicle volumes, proposed roadway widths, and future pedestrian trip attractions to the transit center and commercial developments. Separating bike/ped movements also has the potential to improve intersection operations for vehicles.

A less costly approach is to maximize the safety and comfort of at-grade pedestrian crossings. This could include extra-wide marked crosswalks (like the 20'-wide crosswalks seen in New York City), pedestrian advance or "scramble" signal phases, pedestrian countdown signals, median refuge islands, or other features.

## **Connectivity**



Natural features and man-made barriers create a disconnected street and pedestrian network in the master plan area. Many surrounding areas, such as Deveraux Glen (Peterkort Woods) and the established West Haven neighborhood in unincorporated Washington County, would be within reasonable walking distance of Sunset Transit Center and the proposed development, if not for connectivity barriers that force circuitous routes and encourage driving.

The county has received comments from West Haven neighborhood residents supporting improved pedestrian connectivity in the area, but there are major concerns about new street connections creating vehicle cut-through traffic. As such, external connections should be carefully considered, and bike/ped/emergency vehicle-only options should be explored where practicable.

The [Cedar Hills – Cedar Mill Community Plan](#), which guided planning in the Sunset station area prior to annexation and is still applicable in unincorporated Washington County, includes several policies and maps that guide street and pedestrian connectivity in the area. The recommendations below are based on that plan and other connectivity considerations:

- **Brookside Drive to the Holly Site.** The Peterkort Master Plan shows a conceptual east-west street along the north edge of the development sites on Johnson Creek, from Cedar Hills Boulevard to the west end of Brookside Drive. This connection would be favorable for ped/bike connectivity. However, the Cedar Hills – Cedar Mill Community Plan specifically states, “SW Brookside shall be kept as a dead-end street due to topography” (Subarea – Westhaven, page 1). The street stub abuts the Holly Site but is located in unincorporated Washington County where the community plan still applies. A number of West Haven residents have asked the county to enforce the policy of keeping Brookside as a dead-end street. A compromise to consider is providing the street connection to Brookside with bollard-protected emergency vehicle and pedestrian/bicycle access only. Emergency service providers should be engaged in this discussion.
- **Spring Crest Drive to the Holly Site.** The Cedar Hills – Cedar Mill Community Plan recommends an off-street pathway connecting the west end of Spring Crest Drive to Barnes Road through the Holly Site.
- **Peterkort Woods to Holly Site.** A ped/bike connection across Johnson Creek from the existing Peterkort Woods / Deveraux Glen development to the Holly Site would encourage walking trips to the Sunset station area from the north.
- **Peterkort North Apartments to Johnson Creek SW site.** A ped/bike connection across Johnson Creek from the existing Peterkort North Apartments to the Johnson Creek SW site would encourage walking trips to bus stops and commercial development along Barnes Road.
- **95<sup>th</sup> Avenue to Spring Crest Drive.** An extension of 95<sup>th</sup> Avenue / Baltic Avenue between Barnes Road and Spring Crest Drive is shown on the Cedar Hills – Cedar Mill Community Plan, the Washington County Transportation Plan and the Regional Transportation Plan. This road connection would be very challenging to build due to elevation change and natural features. As part of the county’s TSP update, discussions are taking place as to whether this connection should be a full street or limited to bike/ped access (many West Haven neighborhood residents favor the latter). In either case, development of the Peterkort properties (as well as proposed expansion at Providence St Vincent Hospital) will create additional travel demand along this segment. An unofficial user-made trail is evidence of this demand.



- **Public access through development sites.** Public access – either streets, ped/bike accessways or stairways – should be required through all of the Peterkort properties. Particularly important is access to Sunset Transit Center through the Sunset Station site, as well as north-south access through the Holly, Johnson Creek SE and Johnson Creek SW sites, connecting Barnes Road with the proposed road along Johnson Creek. Public streets, accessways and stairways would facilitate pedestrian access to transit and the proposed commercial uses from neighborhoods to the north.

## **Transit Access**

Transit is a central feature of the Peterkort Master Plan site. Sunset Transit Center sees approximately 8,000 average weekday ons/offers – the second busiest transit exchange in Washington County, trailing only Beaverton Transit Center. Being able to reach Sunset Transit Center safely and conveniently on foot or bike would help reduce vehicle trips and parking demand in the area, and is a major intent of the pedestrian, bicycle and connectivity recommendations above. Improved bicycle access to the station would also leverage the Bike & Ride facility constructed several years ago in the Sunset Transit Center parking garage.

Barnes Road itself is also a major transit facility – the segment between Cedar Hills Boulevard and Sunset Transit Center currently accommodates four bus lines and as many as 22 buses per hour in the peak period. In the process of designing changes to Barnes Road, bus pull-outs or business access transit (BAT) lanes should be considered along Barnes Road. These facilities could be blended with other recommended features, such as the buffered bike lanes mentioned above, or the auxiliary lanes proposed by the development team.

Within the sidewalk area, bus stop locations should be designed to facilitate the installation of additional amenities such as benches and shelters.

## **Attachments:**

- Cedar Hills – Cedar Mill Community Plan (text document)
- Cedar Hills – Cedar Mill Community Plan: Special Area Streets, Street Corridor & Arterial Access Designations for the Cedar Mill Town Center and the Sunset Transit Center Area (map)
- Cedar Hills – Cedar Mill Community Plan: Pedestrian System Designations for the Cedar Mill Town Center and the Sunset Transit Center Area (map)