

Memorandum

September 16, 2015

To: Community Advisory Committee

From: Kevin Cook, Multnomah County Planner

Re: Parking Lot Item #19 (utility infrastructure in the rural unincorporated county serving urban development).

OVERVIEW

19	6/24/15 CAC	Can we prohibit public utility infrastructure in the rural county that is solely intended to serve urban developments?
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To address the issue it is helpful to further define the concern behind the question. Staff is aware of some specific examples of utility infrastructure that may cause concern; those examples are discussed below. It is important to note that the examples given below do not include examples of regional infrastructure such as regional power lines, water lines, and gas lines, so this memo does not address regional utility infrastructure that serves both rural and urban development.

Each example of utility infrastructure of concern provides an analysis, which generally focuses on the appropriateness of rural lands serving urban developments. The analysis does not address other concerns such as visual impacts.

ANALYSIS

POWER SUBSTATIONS.

While there are different types of substations, the focus here is on the type that typically serves customers at the neighborhood level. These types of substations are a necessary part of the electrical distribution system where voltage is transformed from high to low in order to serve consumers at the neighborhood level. Users include residential, commercial, industrial, public streetlights and traffic signals. Electric power may flow through several substations between generating plants and consumer, and may be changed in voltage in several steps. As areas urbanize, new substations are often added as part of the support infrastructure.

The Portland area regional urban growth boundary (UGB) maintains a sharp line between urban and rural land uses. It is very typical to find relatively dense subdivisions adjacent to rural farmland that contains only a single farm house and a barn or two.

When a subdivision is developed, the developer typically seeks to maximize the number of lots created and the number of residential units built, while striving to create a desirable place to live for future buyers. It is therefore logical to assume that a developer would prefer that a substation

be located somewhere outside of the boundaries of the new subdivision (though developers must work with the utility providers who well may have their own preferences and criteria for siting a facility).

In this particular scenario, it is reasonable to ask whether rural lands should be dedicated for power substations that primarily serve urban areas, but it is also important to recognize that there are many variables involved in locating substations, such as proximity to the regional power lines, security, public safety, noise and environmental impacts. Any policy addressing the location of power substations should include the appropriate level of flexibility given the variables involved in locating a power substation.

WATER STORAGE TANKS.

Water storage tanks serving urban water districts, or even cities, are often located outside of the urban area being served because higher elevation sites are useful in order to take advantage of gravity when feeding water into the distribution system. While water towers serve the same purpose, it may be more cost effective to take advantage of natural topography.

Similar to the discussion above, it is fair to consider the appropriateness of rural lands primarily serving urban uses, but again, any policy should include enough flexibility to consider the likely multiple variables involved in siting such infrastructure.

SEWER LINES.

Urban sewer lines are generally prohibited from being located outside the UGB. A goal exception (Goal 11) must be obtained in order to connect to an urban sewer system outside of an urban growth boundary. These types of goal exceptions are rare given the limited scenarios (such as an insurmountable health/safety concern) in which a goal exception could be granted. The rural reserve designation further narrows the likelihood of receiving a Goal 11 exception.

It may be possible however to connect one area within a UGB to another by placing a sewer line that crosses through unincorporated areas so long as no connections are allowed along the rural portion of the line.

While sewer lines are typically located below ground, they are sometimes exposed in areas of stream crossings such as underneath bridges. The concern is that a sewer failure may cause environmental harm.

Staff recommends that any policy addressing sewer lines crossing areas outside the UGB should contain a degree of flexibility regarding the siting considerations.

CELL TOWERS.

While there are older examples of cell towers that many consider unsightly, new cell towers are required to be fully screened or employ concealment technology. Furthermore, cell towers cannot be located on EFU land unless it can be demonstrated that there is no practical

alternative. Cell towers serve all users in the vicinity (urban and rural), therefore, staff does not recommend including cell towers in a policy strictly addressing urban utility infrastructure sited on rural lands.

CONCLUSION

There are many types of utility facilities and many factors involved in siting them. Staff understands the desire to restrict use of rural lands for utility facilities that solely or primarily serve development within the UGB, but these concerns should be considered in context with the needs of the utility providers servicing the public.

Utility developments require review through the Community Service Permit process which includes public notice and a public hearing. In light of the permit process already in place, the CAC should consider whether a policy is warranted and, if so, the policy should allow for variables, which may necessitate locating utility facilities outside of the UGB.