DRAFT

Disclaimer: I have tried to pull together all the info that I can find on this topic and organize it in a way that points to a clearly defined strategy. I'm not an attorney and I'm not certain I have all the facts straight.

The Concern – New utility pole at the intersection of 46th St and 91st Ave.

Early in 2019 the City received permit applications from Crown Castle (CLEC) (Subcontractor to Verizon) to install 46 5G cellular communications (aka "small cell") transceivers on Mercer Island. In most cases these transceivers will be placed on existing utility poles. However, one application is asking to install a **new 35 foot tall utility pole** at the intersection of 46th St and 91St Ave. on the margin of the Ellis Pond park near the footpath. Note that the permit request does not explain how electricity will be sourced to this pole, an issue which may cause visual and or noise pollution beyond the pole and transceiver itself.

It is a reasonable assumption the locations proposed for the 46 new transceivers on Mercer Island were selected based purely on an algorithm for optimization of cellular coverage without regard for aesthetics or impact to neighborhoods.

This section of the neighborhood is fortunate to have no utility poles or electric lines in the air and many residents feel that this installation would negatively affect the quality and character of the neighborhood (as well as home values) to a significant degree. Since the pole is sited at the intersection, the pole would be in the direct line of site for everyone driving West on 46 St. Residents at the North end of 91st Ave. would have the pole effectively in their backyard. There is a possibility that a wire would have to be strung from another pole (perhaps the one at the intersection of 47th St and 91st Ave.) all the way up 91st St. to provide power to the new pole. In addition, it is fair to assume that this is not a one time event – there will be more requests to install more transceivers in the future as more carriers get into the game. We could see more new poles and/ or perhaps additional equipment on the proposed new pole.

Background

5G is the latest cellular technology and will be replacing 4G. 5G provides significantly faster data rates than 4G and is perceived to enable the next generation of wireless internet-based capabilities such as self driving cars, drone deliveries, tele-surgery, fast download of content like 3D movies, etc. The downside is that the range of 5G transceivers is less than that of 4G transceivers and so there will be many more (albeit smaller) small cell transceivers, noting however that small cell transceivers generally can be mounted on existing utility poles.

- Accenture estimates there will be approximately 750,000 new 5G transceivers installed across the US between 2018 and 2026.
- Original estimates of the range of a 5G transceiver were "several hundred feet". However, more recent estimates say "up to 2,000 feet".

To promote the adoption of 5G, the Federal Government (in the form of the Federal Communications Commission – FCC) has passed rules that limit the options that local municipalities have for denying

carriers a permit to install the required infrastructure (transceivers, new utility poles, electrical, enclosures, etc.) These rules include:

March 2018	Small cell equipment isn't subject to the same environmental (National Environmental Policy Act - NEPA) and historic preservation (National Historic Preservation Act - NHPA) processes as standard cell sites
Sept 26, 2018	• Cities are required to approve permits within 60 or 90 days of the initial filing date. • Cities are limited in the amount they can charge the carriers for the right to install small cell equipment.
Jan 14, 2019	Cities imposing aesthetic standards must impose standards that are: • reasonable • no more burdensome than those applied to other types of infrastructure deployments objective • published in advance
Date unclear	Municipalities cannot "effectively prohibit" small cell installations; i.e. create rules that unreasonably deny the right to install infrastructure.

Mercer Island Governance and Process

Note that about two years ago, Crown Castle installed many transceivers on Mercer Island on behalf of T-Mobile. This resulted in several disputes, some of which are documented on NextDoor. Since then the rules have evolved, community awareness has increased, and the City has updated the Mercer Island City Code. In particular, Mercer Island City Code has added or updated provisions in January 2019 that specifically address small cell installations (see https://mercerisland.municipal.codes/MICC/19.06 numbers 070 and 075). It appears that relevant clauses are:

- Reference MICC 19.06.075 "Small cell deployments - Design and Concealment"
  - A. Small Cell Deployment Design Standards – General Requirements
    - 12. The city may consider the cumulative visual effects of small cells mounted on poles, together with existing utility equipment, within the rights-of-way when assessing proposed siting locations **so as to not adversely affect the visual character of the city**. This provision shall not be applied to limit the number of permits issued when no **alternative sites are reasonably available** nor to impose a technological requirement on the service provider.
  - F. New Poles in the Rights-of-Way for Small Cell Facilities.
    - 1. New poles within the rights-of-way are only permitted if the applicant can establish that:
    - 2. The proposed small cell facility cannot be located on an existing utility pole or light pole, electrical transmission tower or on a site outside of the public rights-of-way such as a public park, public property, building, transmission tower or in or on a nonresidential use in a residential zone whether by roof or panel-mount or separate structure;

3. The proposed wireless communications facility receives approval for a concealment plan, as described in subsection G of this section;
4. The proposed wireless communications facility also complies with the Shoreline Master Program and SEPA, if applicable; and
5. No new poles shall be located in a critical area or associated buffer required by the city's **critical areas ordinance**, except when determined to be exempt pursuant to said ordinance. **[KKC – Ellis pond is a Critical Area]**

The City's small cell information site is here: https://letstalk.mercergov.org/small-cells and everyone is encouraged to look at it carefully. Note that it says "...the City does not anticipate the installation of any new poles."

Key Dates:

June 18, 2019	Mercer Island City Council Meeting with a hearing on issues related to small cell infrastructure. 7pm – 9pm
July 17, 2019	Expiration of City Ordinance 19C-02 which has put MICC 19.06.070 and 19.06.075 in place. Ramifications unclear.
August 17, 2019	**DEADLINE** for City to approve the permit

Proposed Strategy

1. Address a request to the City including:
    a. A list of all resident disputes that the City is aware of stemming from the T-Mobile installations by CLEC two years ago, including what role the City has in mitigating or brokering a settlement in each dispute
    b. Clarification on the City's role in providing oversight to CLEC's decisions and actions, and clarification regarding the City's right to renegotiate or cancel CLEC's contract to operate on Mercer Island in the case of CLEC's negligence.
    c. Clarification of the language on the City's information site: "...the City does not anticipate the installation of any new poles". Specifically on what basis is this statement made and how does it relate to our concern.
    d. Clarification that our understanding of the decision making process is correct and that we MICC 19.06.070 and MICC 19.06.075 are the entire basis for denying or approving this permit. Further, based on those sections, a statement from the City on whether the City expects to approve the permit or not.
    e. Citizen participation in the review process for this specific permit.
    f. Establish a citizen advisory committee to participate in the review process of all small cell permit applications going forward.
    g. Establish a joint working group between the City, the Citizen Advisory Committee, and CLEC to work through placement issues.
2. Lobby with the City to deny this permit based on the following reasons.

a. A new pole at that location negatively impacts the character and quality of this neighborhood to a significant degree, AND
b. The proposed site is in an associated buffer of a critical area, AND
c. There are reasonable alternative locations on existing utility poles that provide roughly the same coverage at a much lower impact to character and quality of the surrounding neighborhood and presumably at a lower cost of installation.

3. If the existing City rules do not allow for the City to deny this permit, then we lobby for the Mercer Island City Code be amended to provide language that justifies denying this permit.
    a. (Note: this approach is based on the advice of someone close to the issue).
4. Based on the advice of a person fighting an earlier T-Mobile installation and who posted on NextDoor, we should consider consulting with an attorney – the name and contact info for an expert in this field has been provided to me.

Additional Questions:

1) Does the city have tough enough ordinances to control the aesthetics, both on initial install and the long-term evolution? It seems from the application that Crown Castle is at least proposing to install the type of pole that hides the cabling down the interior of the pole. However, other Mercer Island neighborhoods have complained about the noise, and I wonder whether there are options to bury some of the equipment or require higher-end fans, etc.

2) Is there anything that can be done by the city to ensure that only one (shared) pole is erected in the neighborhood, and what are the aesthetic tradeoffs with a multi-operator pole vs. multiple single poles?

3) There is an approach to deployment called a Distributed Antenna System (DAS) that would allow multiple operators to install on a single pole rather than each operator installing their own pole, and the other hub equipment can be moved offsite and centralized such as at the existing 4G sites (leading to a more streamlined pole). This is not a one-off design for Ellis Pond but rather something that would need to be coordinated around the island. Perhaps the ship has sailed on that design, but I would ask the city whether DAS has been considered as an option for island deployment.