

Committee of the Whole

DISCUSSION OF CELLULAR ANTENNAS IN THE VILLAGE

September 12, 2017

Presentation Overview

- Overview and Opening Remarks
- Overview of Current Conditions
- Scan of Near-term Horizon
- Anticipated Technology Impacts
- Options for Consideration
- Discussion & Questions

Current Cellular Presence

- 1970's era 200,000 gallon elevated water tank
- Three wireless providers with equipment in/on tank
 - AT&T
 - Sprint
 - T-Mobile
- Additionally, public safety and village comm. equip.
- Structural and geotechnical analysis
 - Tank capable of supporting wind loads when full
 - Operational Limitation – Maintain $\geq 20,000$ gal.

Lease Agreements

	AT&T	Sprint	T-Mobile
Initial Lease	04/01/1999	02/01/1999	08/14/2000
Current Term Ends	March 2019	January 2019	March 2019
Term Status	In 2 nd renewal term	In 2 nd renewal term	In 2 nd renewal term
Termination Notice	18 –mo., end of term	18 –mo., end of term	18 –mo., end of term
Delivered Notice	08/03/2015	08/03/2015	08/03/2015
Equip. Change	By Notice	By Notice	By Notice

- Monthly lease payments
- Escalate 4% annually
- Annual revenue of \$134,354

View from Elevated Tank



View Inside Bell of Tank



Current Carrier Status

- T-Mobile
 - Initiated Structural Analysis
 - Anticipate Request for Antenna/equip. change
 - No plans filed or submitted
- AT&T
 - Finalizing structural review process
 - Request to chg. equip./add antenna (reduced area/wind)
 - Anticipate permit submittal in near future
- **Verizon** (requesting presence)
 - Structural analysis complete (tank)
 - Current focus – P/W, “stealth” monopole
 - Anticipate application submission – Special Use Permit – P/W
- Sprint – No current Requests

Current and Future Trends

- Changing Users and Needs
 - Data growth outpacing voice demand
 - Over-air utilization increasing
 - More people using phones and smart-phones
 - Cellular replacing traditional home phone
- Carriers rushing to adapt
 - Increasing equipment
 - Installing new equipment
 - Omnipresent blanket of connectivity

Current and Future Trends

- Shift toward expectation for ubiquitous coverage
 - Macro sites hitting capacity limits
 - Terrain and capacity drives micro-site deployment
 - In-car coverage no longer enough – basement connectivity
 - Small-cell deployment – regulations
- Carrier indication of continued need – macro site
- Vehicle connectivity
- Fiber-optic backbone
- Indications – increased dependence upon and need for wireless access – voice and data

Small Cell Examples



Potential Local Impact

- Existing Carriers
 - Continued equipment change out
 - Potential addition of micro-sites
- New requests for a presence
 - Verizon
 - Comcast?
- Push/pull – connectivity vs. aesthetics
- Small Wireless Facilities Deployment Act

Potential Discussion Points

- Potential initial questions....
- Future of Current Lease Agreements
 - Terminate?
 - Renegotiate?
 - Relocate?
- Addressing new requests for presence
 - Open to leasing village property?
 - Co-location or new site?
 - Public Works – remains preferred secondary site?
- Addressing micro / small wireless facilities
- Desire for guidelines document?

"Stealth" Examples



Valley
of
CS
South