TELECOMMUNICATIONS TOWER PROJECT

Rock Ridge High School
43460 Loudoun Reserve Drive
Ashburn, VA 20148

Public Briefing
November 11, 2020
MI LESTONE COMMUNICATIONS

- 19 Years in Business
- 130+ Towers Constructed
- 60+ Public & Private Landowner Partners

Albemarle County Schools
Cumberland County Schools
Fairfax County Schools

Fauquier County Schools
Halifax County Schools
Lynchburg City
Manassas Park City Schools
Loudoun County
Loudoun County Schools
Prince William County Schools
Roanoke City
Stafford County
and more ...

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OVERVIEW

- Master License Agreement signed on Aug 2020
- Public-private revenue sharing partnership
- Space reserved for LCPS or County (public safety) use

PROCESS (via Reg 6350):

- Site Proposal / Assessment
- LCPS Review
- Public Briefing
- LCPS Finance and Facilities Committee
- LCPS School Board
- County Land Use Process
- Site License Agreement
- Site Development
AT&T’S OBJECTIVE

The site will improve the capacity and coverage levels in the area surrounding the proposed site as well as work with existing neighboring AT&T sites to handoff wireless signals which will improve service and reduce the number of dropped calls.
AT&T - FirstNet - LCPS

- In addition to operating its commercial wireless network, AT&T has partnered with FirstNet to deploy a separate mobile network dedicated to first responders and schools.

- Rock Ridge HS monopole will have both AT&T and FirstNet service.

- LCPS school safety and transportation personnel communicate via FirstNet and County radio systems.
  - 600+ FirstNet Ready devices currently in use across the school district.
PROPOSED SITE
SITE LOCATION

- Proposed site is adjacent to sports field complex, existing field lights (~90’ tall)

- Low development footprint
  - 74’ x 34’ compound
  - 10’ wide access road
  - 8’ chain link fence

- 140’ monopole, located within parcel interior
  - 521’ – 1519’ from closest property lines
SITE LOCATION
FACILITY COMPOUND EXAMPLES
• 140’ Monopole + 2’ rod

• AT&T is lead carrier at 135’ antenna centerline

• Tower built to serve at least 3 additional carriers in the future
PHOTO #1

ROCK RIDGE HS
PROPOSED MONOPOLE
THANK YOU

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RF SAFETY BASICS

• FCC sets the national standard (adopted recommendations from several national and international health and safety agencies)
• RF energy – non-ionizing v. ionizing
• Frequency, power, and proximity
• Propagation behavior (transmits outwards from panels well above ground)
• Results of RF testing/studies (Fairfax Schools and Milestone’s own routine RF testing show levels 100-1000x below safety limits)
• What do credible public health experts say?
RF SAFETY SUMMARY

- The World Health Organization states that no evidence of adverse health impact exists from 5G or any other wireless technology.
- The highest exposure near base stations is typically less than $1/1000^{th}$ of the exposure limits.
- There is no accepted science that indicates there is a risk from low levels of RF exposure.
Public safety organizations have weighed in on the subject

“Radiofrequency emissions from antennas used for cellular and PCS transmissions result in exposure levels on the ground that are typically thousands of times below safety limits. There is no reason to believe that such towers could constitute a potential health hazard to nearby residents or students.”

- Federal Communications Commission

EXPOSURE TO RF ENERGY

Everyday Exposure of RF Energy

SOURCE: Sitesafe (www.sitesafe.com)
MPE VS. DISTANCE
PROPAGATION MAPS
Existing AT&T coverage WITHOUT Rock Ridge HS Tower

Proposed Tower Location
Existing AT&T with Rock Ridge HS Tower
Loudoun County allows for telecommunication towers and monopoles by-right on properties zoned PD-GI. This would require review a Commission Permit, with review by County staff and final approval granted by the Planning Commission.

Due Diligence
- Survey
- FAA/FCC
- NEPA
- Phase I
- Balloon Fly
- Geotechnical analysis

Land Use
- Pre-application meeting
- Commission Permit application
- County Staff Review
- Planning Commission

Permitting
- Conduct bid walk with contractors & school representatives
- Submit Site Plan, Grading Permit and Building Permit applications
SITE MAINTENANCE AND SAFETY

- 4 visits per year for site maintenance
  - Remove trash, debris, weed, check signage
- 2-4 visits per year for carrier modifications
- Fenced and locked lease area
- Annual radio frequency testing to ensure site compliance with FCC regulations.
PHOTO LOCATION & VISIBILITY

BALLOON VISIBILITY

Positive line of sight Location
Negative line of sight Location

SITE
PHOTO #16

ROCK RIDGE HS
PROPOSED MONOPOLE
PHOTO #19

ROCK RIDGE HS
PROPOSED MONOPOLE
PHOTO #12

ROCK RIDGE HS
PROPOSED MONOPOLE