



Agenda Report

2725 Judge Fran Jamieson
Way
Viera, FL 32940

Consent

F.9.

3/17/2026

Subject:

Authorization, Re: Advertise Invitations to Bid for the replacement of a SCADA tower on County-owned property located at 10001 North Wickham Road, Melbourne, FL 32940, replacing the current tower, owned by the Federal Aviation Authority (FAA), which serves as a control point of the Brevard County SCADA system in the central area.

Fiscal Impact:

The cost of the tower is estimated to cost \$350,000, funded by Utility Services funds. If the construction of the tower is awarded to a wireless carrier, there will be no impact on the Utility Fund. By exercising this option, after the abatement period, it will provide, through a collocation agreement, a revenue source for the Utility Services Department.

Dept/Office:

Utility Services

Requested Action:

Requesting Board authorization to:

1. Advertise via Invitations to bid (ITB) for the replacement of the SCADA tower on County-owned property located at 10001 North Wickham Rd., Melbourne, FL 32940.
2. Include in the ITB an option for a wireless carrier to construct the tower for the County at their expense. This option should include a twenty-year colocation agreement with a rental abatement period to cover the cost of the tower, including a base fee and annual fee increase. And authorize the revenue of that agreement, after the abatement period, to be redirected to the Utility Services Department to continue supporting the SCADA network and the maintenance of the tower.
3. Authorize the County Manager or designee to execute the contract with the awarded vendor, its renewals, documents, administrative or budget actions, subject to approval by the County Attorney's Office, Risk Management, and Purchasing.

Summary Explanation and Background:

On September 7, 2010, the Brevard County Board of County Commissioners executed a Lease Agreement with the Federal Aviation Authority (FAA) and National Oceanic and Atmospheric Administration (NOAA) for a tower site at the South-Central Regional Wastewater Plant property located at 10001 North. The original FAA tower is a 390-foot lattice structure that houses several antennas for the Brevard County SCADA system. This tower requires upgrades to meet current building codes. Although the FAA acknowledged the necessity of replacing the existing structure due to its failure to comply with current FCC regulations and building codes, they opted to deconstruct it and relocate their operations to a different federal property. This decision by the FAA left the County needing to build a new, shorter structure to ensure that the SCADA system can continue to

operate effectively in the central area of Brevard.

Over the past several years, the expansion of the residential area in Viera West has increased the demand for improved wireless services to accommodate the growing population. Several wireless carriers have approached the County regarding a collocation agreement for the existing tower. This has prompted us to consider proposing the construction of a new tower funded by private enterprise. This option would provide the County with an additional revenue source, after the abatement period, to help support the SCADA system and the Utility Services Department.

The recommendation to the Board is to include a 20-year agreement, with a baseline annual fee at no less than \$27,000, and a minimum annual increase of 3% or the CPI-Urban increase, whichever is greater. The awarded vendor shall comply with all applicable local, state, and federal licensing requirements.

The Communications Act prohibits local and state governments from regulating the placement, construction, and modification of personal wireless service facilities based on the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations concerning such emissions and those facilities comply with local zoning authorities.

A FAQ on radio frequency exposure and wireless facilities is part of the agenda packet for additional information.

Clerk to the Board Instructions:

E-mail the Clerk memo to karina.perez@brevardfl.gov and mail the original to the Utility Services Department.



Kimberly Powell, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972
Kimberly.Powell@brevardclerk.us

March 18, 2026

M E M O R A N D U M

TO: Edward Fontanin, Utility Services Director Attn: Karina Perez

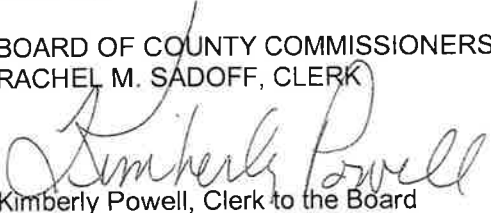
RE: Item F.9., Advertise Invitations to Bid for the Replacement of a Supervisory Control and Data Acquisition (SCADA) Tower on County-owned Property Located at 10001 North Wickham Road, Melbourne, FL 32940, Replacing the Current Tower, owned by the Federal Aviation Authority (FAA), which Serves as a Control Point of the Brevard County SCADA System in the Central Area

The Board of County Commissioners, in regular session on March 17, 2026, advertised via Invitations To Bid (ITB) for the replacement of the SCADA tower on County-owned property located at 10001 North Wickham Road, Melbourne, FL 32940; include in the ITB an option for a wireless carrier to construct the tower for the County at their expense, including this option should include a twenty-year colocation agreement with a rental abatement period to cover the cost of the tower, including a base fee and annual fee increase; authorized the revenue of that agreement, after abatement period, to be redirected to the Utility Services Department to continue supporting the SCADA network and the maintenance of the tower; and authorized the County Manager, or his designee, to execute the contract with the awarded vendor, its renewals, documents, administrative or budget actions, subject to approval by the County Attorney's Office Risk Management, and Purchasing.

Your continued cooperation is always appreciated.

Sincerely,

BOARD OF COUNTY COMMISSIONERS
RACHEL M. SADOFF, CLERK


Kimberly Powell, Clerk to the Board

/ns

cc: County Manager
Budget
Finance



NOT PLATTED
THE VERA COMPANY
PARCEL ID 26-36-09-00-504
ORB 8556, PG 1306

NOT PLATTED
THE VERA COMPANY
PARCEL ID 26-36-17-00-253
ORB 8727, PG 1083

NOT PLATTED
COMMUNITY ASSOCIATION INC
PARCEL ID 26-36-17-00-8
DESC AS VERA VILLAGE 1 NORTH
SEMI-PARCEL IN ORB 8805 PG 2092

NOT PLATTED
A. DUDA & SONS INC
PARCEL ID 26-36-17-00-1
DESC AS VERA VILLAGE 1 NORTH
SEMI-PARCEL IN ORB 8805 PG 2092

NOT PLATTED
A. DUDA & SONS INC
PARCEL ID 26-36-17-00-1
ORB 8556, PG 1306

NOT PLATTED
A. DUDA & SONS INC
PARCEL ID 26-36-17-00-1
ORB 8556, PG 1306
CIVIL ACTION 96-16731-CA-1
ORB 4203 PG 2463 & ORB 5262 PG 3636

Property not under
Covenants

Property Under
Covenants



SECTION 18, TOWNSHIP 26 SOUTH, RANGE 35 EAST
CITY OF MELBOURNE
BREVARD COUNTY, FLORIDA

TOPOGRAPHIC AND
BOUNDARY SURVEY

L. S. Diversified
V-209
DATE: 11/11/2021
BY: [Signature]
CHECKED: [Signature]
SCALE: 1" = 100'
SHEET: 1 OF 1

Frequently asked questions about radio frequency exposure.

Do radio towers with cellular collocations pose a safety risk for humans?

The Federal Communications Commission's Radio Frequency (RF) exposure guidelines recommend a maximum permissible exposure level to the general public of approximately 580 microwatts per square centimeter from cellular and Personal Communication Service (PCS) antennas. Cellular antennas are usually collocated over 150 ft.; an individual would essentially have to remain in the main transmitting beam and within a few feet of the antenna for several minutes or longer to receive levels of RF near the FCC's guidelines. *(FCC Consumer Guide: Human Exposure to Radio Frequency Fields: Guidelines for Cellular Antenna Sites: For more information on consumer issues, visit the FCC's Consumer Help Center at www.fcc.gov/consumers.)*

What are the primary factors affecting the exposure levels?

Radio Frequency exposure is not a fixed quantity, it depends on several factors:

- Type of cellular site or PCS system/station.
- Type and the number of antennas transmitting at the same time.
- Power transmitted to the antennas.
- Height and tilt angle of the antennas.
- Distance from the antenna.

As with all forms of electromagnetic energy, the further we are from the antennas, the lower the power density from a cellular or PCS system.

Are there guidelines for human exposure to RF field?

The Federal Communications Commission (FCC) has jurisdiction over all registered transmitting services except those operated by the Federal Government. It follows recommendations from several non-government organizations, such as the American National Standards Institute (ANSI), the Institute of Electrical and Electronics Engineers, Inc. (IEEE), and the National Council on Radiation Protection and Measurements (NCRP).

The following figure shows the electromagnetic spectrum and the regulatory agencies.

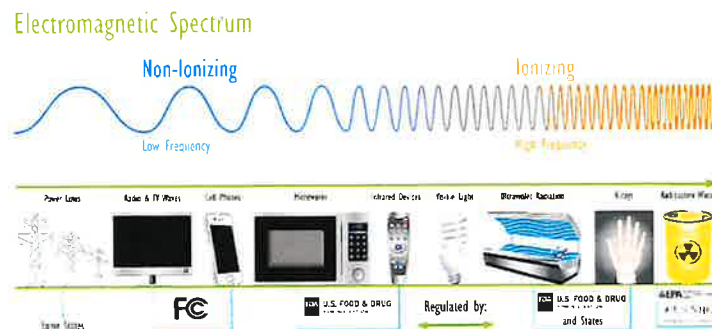


Figure 1: Electromagnetic Spectrum from United States Environmental Protection Agency | US EPA

Can the frequencies use by personal wireless services cause ionization?

No, the CDC defines ionizing radiation as: “A form of energy that acts by removing electrons from atoms and molecules of materials that include air, water, and living tissue.” The following image shows that only frequencies over the visible light can affect the atoms in living things, like tissue and DNA genes. The radio frequency spectrum lies between 30 Hz and 300 GHz.

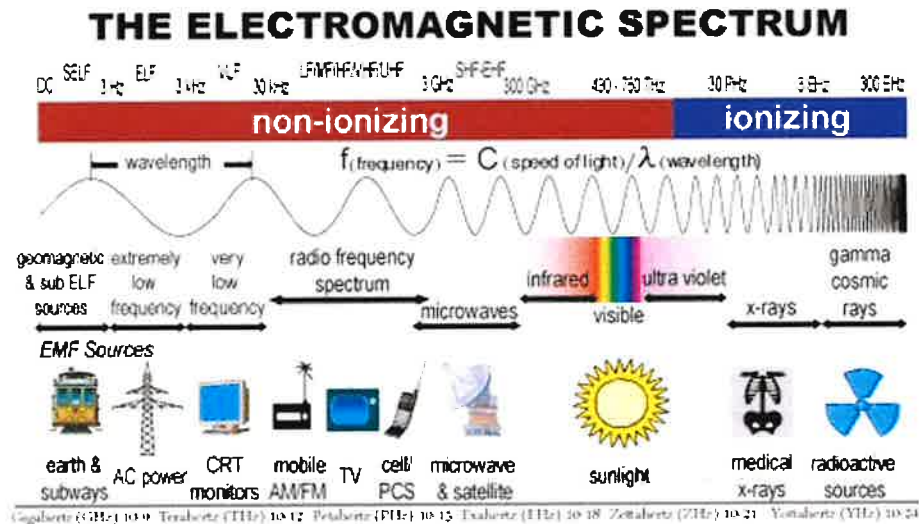


Figure 2: Wireless industry emission: From an Electromagnetic field monitoring and analysis study-2015

What are the state and local government limitations regarding personal wireless services?

The Communications Act prohibits local and state governments from discriminating or regulating in a manner that limits the provision of personal wireless services and to act on permits within a reasonable time.

By Section 332(c)(7)(B)(iv) of the Communications Act:

No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

By Section 1455 (a)(7) of the Communications Act:

A state or local government may not deny and shall approve any eligible facility request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station, and defines eligible facility requests as including requests for the collocation, removal, or replacement of transmission equipment.

Who establishes and regulates the licensing of personal wireless systems and antenna structures in the United States and its Possessions and Territories?

The Federal Communication Commission (FCC).

A new tower construction requires:

1. Approval from the Local Authority Having Jurisdiction (AHJ).
2. Compliance with FCC rules implementing the National Environmental Policy Act (NEPA).
3. Depending on its height and location, it may also require:
 - Federal Aviation Administration (FAA) notification
 - Antenna Structure Registrations (ASR) with the FCC

Can local authorities deny a request for tower siting?

Yes, local zoning authorities have all the authority over the placement of wireless facilities; **but they cannot deny any new facility based on RF emissions** if the licensee has complied with the FCC's regulations. (Section 332(c)(7)(B)(iv) of the Communications Act).

Are the tower locations selected randomly?

The short answer is no. Communication towers are not isolated silos; they are part of a network that provides wireless services to an area that integrates at higher levels. A lot of planning goes into determining the locations of towers for wireless communication systems. New tower structures are needed to extend the coverage and/or the capacity of the networks in an effective manner. The RF engineers determine the new optimal location and integrate the new site into the existing network, utilizing the type of sites based on the network's needs:

- Cell Tower Site: Coverage .5 to 25 miles.
- Rooftop Site: Coverage 1.5 to 25 miles.
- Small Cell: Coverage 1/10th of a mile to 2 miles per node.
- Outdoor Distributed Antenna System (DAS) Coverage: 1/10th of a mile to 1 mile per node.
- Indoor Distributed Antenna System (DAS) Coverage: In-Building.

Definitions

Collocation/Co-Location/cell tower colocation: The mounting of an antenna on an existing tower, building, or structure for communications purpose.

Tower: Any structure built for the sole and primary purpose of supporting antennas to provide FCC licensed services.

Personal wireless services: Include commercial mobile services, unlicensed wireless services, and common carriers wireless exchange access services. 47 U.S.C. §332(c)(7)(C)(i)