ITEM #50

ADDITIONAL MATERIAL

Regular Meeting

APRIL 16, 2019

SUBMITTED AT THE REQUEST OF

COUNTY ADMINISTRATION

BERTHA W. HENRY, County Administrator
115 S. Andrews Avenue, Room 409 • Fort Lauderdale, Florida 33301 • 954-357-7362 • FAX 954-357-7360

April 15, 2019

TO: Bertha Henry, County Administrator

FROM: Tracy Jackson, Director, Regional Emergency Services and Communications

Subject: Questions from Commissioner Geller on Radio Tower in West Lake Park

Please find responses to the questions that were submitted by Commissioner Geller on a potential public safety radio tower in West Lake Park. Additionally, there are 3 attached maps: (1) shows the park as it sits today; (2) with sea level rise projections of 1 ft and (3) with sea level rise projections of 2 ft. When using the map please note the following: Areas that are hydrologically connected to the ocean are shown in shades of blue (darker blue = greater depth).
Low lying areas that are hydrologically ***unconnected***, (but may flood), are displayed in green.

Question: What is the height of the tower and its effect on sea level rise?

Response: *The tower is 300' above ground level. The tower foundation is designed to withstand submersion. Currently, the tower foundation is 1' above ground level, which is standard. The site sits at an elevation of 2' above sea level, and it will be many years before any sea level rise projections reach this elevation. Even so, the tower foundation can be raised higher, and the tower legs can be easily encased in concrete at a later date to limit prolonged exposure to salt water.*

Temporary exposure of the tower steel to salt water due to flooding or storm surge is standard for towers that sit near the coast line. After any major storm inspection of the tower is required. In the event any corrosion is detected there are many options for mitigating the effects, including treating or replacing rusted areas.

Question: What is the height of the equipment building and its effect on sea level rise?

Response*: The shelter and generator are elevated to 6' above ground level on a chain wall platform, raising the total elevation to 9' above sea level. A chain wall is a form of raised foundation that help evaluate buildings above flood level.*

Question: What is the length of Battery Power?

Response: *The battery power is designed to run 8 hours, and the generator fuel tank is sized to run for 72 hours at full load before refueling is required. The power consumption does not typically run at full load, so actual run times can be expected to be longer.*

Question: Can we get to the building if the park floods and how?

Response: Yes. Depending on the access constraints this could potentially be done by high-water trucks, boat or airboat depending on the level of flooding. Since these are critical priority sites for public safety communications, the County utilizes various methods and means to get to sites expeditiously.

cc: Alphonso Jefferson, Jr., Assistant County Administrator

Area for Tower Site in West Lake Park

Sea Level Rise at 1 ft

Source: https://coast.noaa.gov/slr/#/layer/slr/1/-8919312.620426248/3003206.0640103104/15/satellite/none/0.8/2050/interHigh/midAccretion

Sea Level Rise at 2 ft

Source: https://coast.noaa.gov/slr/#/layer/slr/1/-8919312.620426248/3003206.0640103104/15/satellite/none/0.8/2050/interHigh/midAccretion