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June 21, 2024

Dale Martin, City Manager
City of Flagler Beach
P,O. Box 70
Flagler Beach, FL 32136

Re: DC BLOX/request for submarine cable landing easements

Dear Mr. Martin:

DC Blox has requested that the City of Flagler Beach convey utility easements over city owned property to permit the installation of telecommunications infrastructure and landing of up to eight submarine cable systems. You have requested advice regarding issues involved in a submarine cable landing project from the local government's perspective so that the city can make an informed decision regarding the conveyance of easements for such facilities. I have reviewed the plans provided by the requesting parties. I am pleased to offer my insight and observations regarding the requested easements. I have based my input on personal professional experience on prior projects in Florida and on sources available to me.

Background

Currently, over 95% of international communication is carried by submarine fiber optic cables linking the continents. Traditionally, a cable system would be proposed and financed by large communication carriers such as AT&T or by a consortium of carriers who in turn would sell or trade capacity on such systems. In the last several years, individual corporations such as Google and Facebook have initiated construction of their own systems, avoiding the need to purchase capacity for global operations. Since the 1970's, dozens of international communications systems have been landed in Florida. Currently, several new systems are in various stages of development. The interactive website www.submarinecablemap.com provides an excellent inventory of existing and planned systems.

An initial, basic consideration for an international communications system proposing a landing in Florida is securing a landing site. This is typically accomplished by purchasing easements for the necessary landing facilities on oceanfront property at locations that provide access to the larger land-based telecommunications infrastructure ("Beach Landing"). Facilities typically located at the Beach Landing include one or more underground vaults where a subsea cable will be anchored (the "Beach Manhole"/ "BMH"), one or more steel conduits @ 6 inches

in diameter installed underground by horizontal directional drilling ("HDD") extending from the BMH to a point 1500-4000 feet offshore, and an "Ocean Ground Bed"/ "OGB" comprised of anodes buried underground to provide electrical grounding for each cable system landing at the facility. Once the landing facilities are in place, the shore end of future cables are delivered by specialized cable ships, connected to a pully mechanism installed in the seaward end of an available conduit and pulled back to the BMH.

From the BMH, buried conduits of various sizes will be installed, typically in public road rights of way, from the BMH to a cable landing station ("CLS"). These facilities and the fiber optic cables installed within are called the "fronthaul". The CLS is a building housing communications equipment where the submarine cable is integrated into the terrestrial network. The CLS's are typically built by the international communications system to service the system being landed and potentially other systems landed at the Beach Landing site. Increasingly, these CLS's are being built and promoted as "Data Centers" that perform higher levels of function than the traditional CLS.

DCBlox Proposal

DC Blox has proposed a Data Center to be constructed in the City of Palm Coast. It has requested that the City of Flagler Beach convey easements at two separate locations to enable construction of Beach Landing sites with a combined eight conduits, four at each location, and the supporting facilities described above. The eight conduits proposed would allow the landing of up to eight international or domestic submarine communication systems. This is consistent with historical practice in Florida, where the initial telecommunications system proposing a landing installs additional conduits beyond the conduit needed for the proposed system. The additional conduits are reserved either for the landing party's own future use or for conveyance. These additional existing conduits have become sought after and valuable commodities. The purchase of an existing conduit by a proposed communications project eliminates the need for feasibility studies, site acquisition, land use approvals, state and federal permitting and construction of a landing facility, a time consuming, expensive and potentially risky process. The owner of such surplus conduits can also market access to an existing CLS, Data Center or Internet Access Point ("IAP"). Although difficult to assess precisely because of the multiple variables involved, based on available information regarding conveyances occurring in California and Florida, the willing buyer/seller value appears to be between $2.5 million to $5.5 million per installed conduit.

The eight offshore conduits are proposed to be installed by horizontal directional drilling ("HDD"). This process can be expected to take approximately thirty days to complete at each proposed site. The proposed facilities at the Beach Landing sites are typical. The fronthaul proposed by DC Blox consists of two separate routes through the City of Flagler Beach from the Beach Manholes to the proposed Data Center. The north fronthaul is @12,190' long. It consists of four six-inch HDPE ducts to be buried in the ROW. The south fronthaul is @8,560' long, in the same configuration. Both fronthaul routes include installation of precast concrete manholes measuring 6'H x 5'W x 7'L every 800' along the fronthaul routes.

Policy Considerations

The decision to convey easements over public property for construction and operation of international communications infrastructure is of course discretionary. Once easements are conveyed, the city's use of the property subject to the easements is limited; the city could not interfere with the uses granted by the easements. On past projects, where use of public property has been proposed, local government staff and governing commissions /councils have expressed the following concerns:

1. Encumbrance of valuable beachfront property with little perceived public benefit.

2. Inconvenience to city residents from noise and vibration during HDD operations, particularly at night.

3. Inconvenience to residents from trenching/HDD work in rights of way from fronthaul construction. Any required road or lane closures are typically a matter of particular concern,

4. Staff and elected officials being burdened fielding complaints and concerns of residents regarding construction activity, both at the Beach Landing site and along the fronthaul route.

5. The permanent nature of the conveyances, preferring limited term easements or leases.

6. Potential damage to existing utility infrastructure such as water, gas and sewer facilities.

7. Construction timing relative to turtle nesting and the busy winter residential season.

8. Adequacy of compensation, including a desire for recurring revenue in lieu of or in addition to a single payment.

While the concerns expressed above can usually be adequately addressed by an entity requesting to purchase temporary construction and permanent utility easements, some local governments are simply declining to convey easements because of these concerns. Recent examples include the Town of Palm Beach declining to consider an AT&T request for landing a new system at an existing landing site, citing inconvenience to residents from fronthaul work and Lee County declining the request of a proposed international system to purchase easements to install two conduits, citing the "inherent value of the subject park/beach property." Additionally, while negotiations have not terminated, the City of Naples has not yet agreed to convey easements requested by the CSN-1 international communications system, notwithstanding a generous offer of compensation, discussed further in the next section.

Compensation

Early telecommunication systems were able to negotiate landing easements in Florida with little or no monetary compensation, reflecting the view that telecommunications infrastructure was a public utility similar to telephone service. However, beginning in 1998 or so, local governments in Florida began seeking monetary and other compensation. The State of Florida also began seeking "fair compensation" for the easements required over sovereign lands. In recent times, the cell tower experience has colored the view of many local governments, which now increasingly view the matter as a purely business proposition.

The following examples of paid or proposed compensation are provided. Unless noted, all examples are a matter of public record.

1. **City of Hollywood. 1998.** Compensation paid by AT&T to the City of Hollywood was provided in the form of public improvements, including building several miles of sidewalks and providing the city with its own dedicated terrestrial conduit @ ten miles in length. Estimated dollar value in 1998 was $400,000 to $600,000. This information is based on personal knowledge, as I represented AT&T.

2. **City of Boca Raton. 2000**. Compensation paid by Tyco Electronics Submarine Systems included an initial payment of $500,000 and annual payment of $185,000 , CPI adjusted. The easement agreement reflecting this compensation is attached.

3. **City of Sunny Isles. 2007**. Compensation paid to a private party of $950,000 by developers of the ARCOS telecommunications system for temporary construction and permanent easements for three conduits. This information is based on personal knowledge, as I represented the developers. The compensation is not public record. However, the amount can be calculated from the documentary stamp fee required for recording the easement.

4. **City of Naples. 2023.** As noted above, the City of Naples is considering a request by the developers of the CSN-1 cable system. Initially, $500,000 was offered as compensation for two conduits and associated landing facilities. In response to staff requesting recurring revenue, the proposal was revised to add two more conduits, with compensation of $500,000 for the initial installation of the CSN-1 cable and $500,000 for each additional cable landed at the facility. The City Council considered the request at a public meeting, agreeing to consider the request, but raised all the concerns noted above. The City Council further indicated that the asements would be limited to twenty-five years, with renewal options, and advised that increased compensation would need to be offered.

5. **City of Boca Raton. 2024**. Telxius, a developer of international subsea systems and data centers, is currently negotiating with the City of Boca Raton for easements in Spanish River Park to allow the installation of three conduits and the landing of the AMX-2 communications system. I am attempting to determine the amount of compensation being offered, and will update this report when available. The matter has not been heard yet by the City Commission.

6. **Bonita Springs. 2024**. The developer of the CSN-1 system is negotiating the purchase of temporary construction and permanent utility easements from private parties to permit the landing of that system. Two conduits are proposed. I am not at liberty at this time to publicly disclose the compensation being discussed.

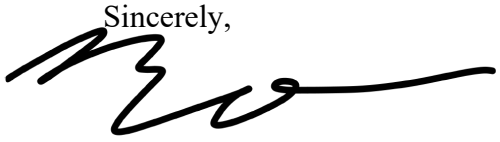
7. **State easement fees**. States issuing easements or leases allowing use of state lands assess fees for issued easements or leases. The State of Florida requires a one-time payment for easements of twenty-five years duration. At current rates, each conduit and associated cable would be assessed @ $150,000. The State of California State Lands Commission assesses lease fees of @ $120,000 per year, per conduit/cable.

I offer these examples as information only and not as suggested compensation. Compensation in any instance is a market-driven matter, reflecting what a willing buyer and seller agree upon.

I hope the insights offered are helpful as negotiations with the requesting parties progress. I am available to discuss any questions with individual commissioners if desired.

Should you need anything further, please let me know.

Sincerely,



Michael S. Tammaro