

MEMORANDUM

TO: Jason Brown, County Administrator

FROM: Richard B. Szpyrka, P.E., Public Works Director

SUBJECT: NexusWorx – Fiber Documentation System - Pilot Project

DATE: February 6, 2017

BACKGROUND

Indian River County Public Works Department recently activated “NexusWorx” a secure web-portal based system for municipal fiber optic infrastructure documentation, fiber mapping, and fiber record keeping, for all IRC fiber optic network assets. IRC does not have a reliable or detailed system of in-house fiber optic network connectivity documentation. The lack of an in-house fiber optic network documentation system results in many hours of unnecessary IRC staff labor, fiber optic repair costs, and extended service restoration delays during County fiber optic emergency repair processes, and also during new County fiber optic deployment / development projects.

NexusWorx is a municipal fiber documentation system that will be fully managed, controlled, and directly accessible by authorized IRC staff, and not through an intermediate or “proxy” organization. NexusWorx is a licensed application, using secure hosted web-portal services, network hardware supported and maintained by Byers Engineering, Inc. The database and all information entered into the NexusWorx application will be the property of the County, and not that of an outside organization, as with other proxy based systems of municipal or corporate fiber documentation.

The NexusWorx application currently in use by IRC is a Municipal version that is secure, and only IRC will have access. This application is not currently shared with other outside agencies. County does have the option of sharing this application with IRC Fiber Consortium members in the future. IRC currently assists all IRC Fiber Consortium member organizations with troubleshooting and repairs of the shared resource fiber network; which is of mutual benefit to all IRC Consortium members (IRC School District, and City of Vero Beach, in addition to the County).

The proposed “Pilot Project” entails the collection of all IRC field fiber data, by Byers Engineering Inc. within a specified area of the County (see the attached Exhibit) to include all of the following:

- * Fiber assets including all underground fiber optic handholds, fiber pull boxes, fiber patch panel housings, IRC traffic fiber cabinets, underground and aerial fiber optic splice enclosures - information detailing the point-to-point fiber optic splice connections contained within each fiber optic splice housing, - within the specified Pilot Project area.
- * Fiber assets including all fiber optic patch panel connections within County and shared resource IRC Consortium building sites - information detailing the point-to-point fiber jumper connections at each fiber optic patch panel, - within the specified Pilot project area.
- * After the fiber network field data has been collected, Byers Engineering Inc. will enter and configure all of the collected fiber infrastructure data into the NexusWorx application that will be directly managed by IRC staff at completion of the process.

Byers Engineering Inc.'s NexusWorx application is the only application known to the County that is capable of building a fiber documentation and management database that is owned and directly controlled by the County, is specific to, and available only for County use, and not other members of the Fiber Consortium, or any other outside organization. To staff's knowledge, there is no other available system and selection of NexusWorx on a sole source basis is justified on the basis of interchangeability with our existing fiber network. The Florida Department of Transportation currently uses this application for their fiber optic network management and documentation systems throughout the State of Florida

FUNDING

The project cost of \$59,750, although not currently budgeted, will be funded with a budget amendment from MSTU/Reserve for Contingency to MSTU/Telecommunications/Other Professional Services- Acct # 00423487- 033190

RECOMMENDATION

Staff recommends that the Board of County Commissioners approve the NexusWorx – Fiber Documentation System - Implementation and Pilot project.

ATTACHMENT

Byers NexusWorx Proposal
Pilot Project Area Map

AGENDA ITEM FOR 02/21/17