



# City of Culver City

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## Staff Report Details (With Text)

**File #:** 15-765      **Version:** 2      **Name:** Approval of Final Plans and Specifications and Authorization to Advertise for Bids for the MUNICIPAL FIBER NETWORK

**Type:** Minute Order      **Status:** Consent Agenda

**File created:** 4/26/2016      **In control:** City Council Meeting Agenda

**On agenda:** 5/9/2016      **Final action:**

**Title:** CC - (2) Approval of Final Plans and Specifications and Authorization to Publish a Notice Inviting for Bids for the Construction of the Municipal Fiber Network, Project No. PT-003; (2) Waiver of Formal Bidding Procedures for the Purchase of Fiber and Related Construction Materials; and (3) Approval of a Related Agreement with MOX Networks for the Purchase of Fiber and Related Construction Materials in an Amount Not-to-Exceed \$1,700,000.

**Sponsors:**

**Indexes:**

**Code sections:**

**Attachments:** 1. Staff Report Item A-1 Nov 9 2015 Municipal Fiber Network.pdf

Date	Ver.	Action By	Action	Result
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**CC - (2) Approval of Final Plans and Specifications and Authorization to Publish a Notice Inviting for Bids for the Construction of the Municipal Fiber Network, Project No. PT-003; (2) Waiver of Formal Bidding Procedures for the Purchase of Fiber and Related Construction Materials; and (3) Approval of a Related Agreement with MOX Networks for the Purchase of Fiber and Related Construction Materials in an Amount Not-to-Exceed \$1,700,000.**

**Contact Person/Dept:** Michele Williams, CIO/Information Technology Department and Mate Gaspar/Public Works

**Phone Number:** 310-253-5959 and 310-253-5602

**Fiscal Impact:** Yes ☐ No ☒

**General Fund:** Yes ☒ No ☐

**Public Hearing:** ☐

**Action Item:** ☐

**Attachments:** Yes ☒ No ☐

**Commission Action Required:** Yes ☐ No ☒ **Date:**

**Public Notification:** (E-Mail) Meetings and Agendas - City Council (05/03/16); MOX Networks (Jason Misicka, Director of Sales) on April 28, 2016

**Department Approval:** Charles D. Herbertson (04/28/16)

## RECOMMENDATION

Staff recommends the City Council

1. Approve the Final Plans and Specifications and authorize the publication of a Notice Inviting Bids for the construction of the Municipal Fiber Network, Project No. PT-003 (Project); and
2. Waive formal bidding procedures for the purchase of fiber and related Construction Materials; and
3. Approval of an Agreement with MOX Networks for the purchase of fiber and related construction materials in an amount not-to-exceed \$1,700,000.

## **BACKGROUND**

Since 2013, staff has been consulting with the Culver City business community about their needs for enhanced broadband connectivity. On November 9, 2015, the City Council took several actions related to the design, development, operations, and maintenance of the Municipal Fiber Network (Network). The Network would, among other things, provide the necessary infrastructure to facilitate the provision of high-speed Internet service to the City organization (for municipal purposes), to qualified businesses in the target service areas, and to the Culver City Unified School District.

## **DISCUSSION**

One of the actions taken by the City Council on November 9, 2015 was the approval of the Consultant Agreement for Services Relating to the City of Culver City's Municipal Fiber Network (Consultant Agreement) between the City and MOX Networks (MOX), whereby MOX agrees to provide consulting services to the City with regard to the design and development of the Network.

MOX (an affiliate of NantWorks) is a business located in Culver City. The company has significant expertise in building global, custom fiber networks for data intensive organizations. The MOX team has an average of 15 years of industry specific experience in telecommunications, global fiber network architecture and design, global data center strategies, and network deployments.

The Project final design plans and specifications for the Network have now been finalized. The plans and specifications were prepared by MOX and its sub-consultants through the City Council-approved Consultant Agreement.

This Project will provide the necessary fiber optic communication system for the City of Culver City's Municipal Fiber Network. This Network consists of three independent rings, North, Central and South Rings and Ring tie pathways that connect all of the Rings together. It also includes the laterals to three newly constructed hub locations at NantWorks at 9920 Jefferson, Culver Studios at 9336 Washington and Fire Station# 3 at 6030 Bristol Parkway.

The Project will include the construction of new 2 - 2" diameter SDR11 conduit. There will also be areas where 4 -2" SDR 11 conduit will be installed. These areas comprise mainly on Culver Boulevard, Jefferson Boulevard, Lafayette Place, and Duquesne Avenue in the North and Central Rings and on Bristol Parkway in the South Ring. The Project includes the construction of new hand

holes (pull boxes) and underground vaults.

In addition the Project will install Fiber Cable throughout the conduit and ring systems. This work includes the placement of cable, slack, racking of all existing and new handhold cables. Additionally there will be splicing of loose tube fibers, testing, and turn up of the fiber optic system. Complete testing, OTDR traces along with power meter and light source reading of each ring and the testing of both sides of the ring ties between the three hub locations will be conducted.

In order to minimize traffic impacts, weekend work hours will be required to complete the work on portions of Culver Boulevard, Jefferson Boulevard, and Duquesne Avenue.

The CCTV project, PL-004, will construct conduits along several of the same alignments as proposed in this Project. MOX has requested that the CCTV project also install 2 -2 inch diameter conduits in order to provide cost savings to the City. This cost will be tracked separately and paid for by the Municipal Fiber Network project.

The bid schedule will include the following items.

288 Count Fiber on Core Fiber Design (**THE BASELINE**)

288 Count Fiber w/ Additional 2" Conduit

576 and 432 Hybrid w/ Additional 2" Conduit

576 Count Fiber w/ Additional 2" Conduit

Based on the bid amounts and available budget, the City Manager will recommend to the City Council the amount of fiber optic lines to install in the conduits.

#### Anticipated Project Schedule

- Project Bid Period May 10 - June 2, 2016
- Construction Award June 27, 2016
- Start of Construction August 2016
- Construction Completion August 2017 or February 2018.

#### ***Waiver of Formal Bidding for Purchase of Fiber & Related Construction Materials***

MOX has access to distribution channels that supply fiber construction materials at very competitive pricing. In an effort for the City to obtain the lowest possible pricing, MOX provided an estimate for the Bill of Materials. Staff conducted an informal bid to compare the costs provided by MOX. Staff contacted two vendors to obtain quotes. One vendor did not respond and the other vendor stated that they could only provide a partial quote as some of the items were unavailable. Staff contacted another vendor who had retail pricing available on their website and found that many of the items were unavailable and the pricing ranged from 30%-50% higher compared to the pricing from MOX. Staff has engaged in significant research to ensure that the City is receiving the best possible pricing for the construction materials. The findings of this research confirm that there is a supply shortage for fiber (and related components such as conduit) given market demands. The high demand for

fiber throughout the industry has resulted in a six to nine month lead-time from order to delivery. Ordering fiber through one of these two vendors would potentially delay the Network Project. In comparison, MOX has advised that they would be able to provide the fiber construction materials within four months, which aligns with the construction project schedule should the City Council approve proceeding with the construction.

Based on the above facts, staff is recommending that the City Council waive formal bidding requirements for this purchase, pursuant to Culver City Municipal Code Section 3.07.075.E.3, since compliance with the formal bidding requirements would be contrary to the best interest of the City and impractical, as it would likely result in higher materials costs and a delay to the Network Project. Staff further recommends the City Council approve an agreement with MOX for the purchase of these materials in an amount not-to-exceed \$1,700,000, based on current estimates.

### **FISCAL ANALYSIS**

Engineer's estimate and amount budgeted for labor and not materials:

20580000.730100.PT003 Improvements	\$ 3,740,000
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### **ATTACHMENTS**

1. Plans and Specifications for the project are available on the City's Website at <http://www.culvercity.org/city-hall/city-government/city-departments/public-works>
2. City Council report dated November 9, 2015, Municipal Fiber Project

### **RECOMMENDED MOTIONS**

That the City Council:

1. Approve the Final Plans and Specifications and authorize the publication of a Notice Inviting Bids for the construction of the Municipal Fiber Network, Project No. PT-003;
2. Waive the formal bidding procedures, in accordance with Culver City Municipal Code Section 3.07.075.E.3, for the procurement of fiber and related construction materials;
3. Approve an agreement with MOX Networks for the purchase of fiber and related construction materials in an amount not-to-exceed \$1,700,000;
4. Authorize the City Attorney to review/prepare the necessary documents; and
5. Authorize the City Manager to execute such documents on behalf of the City.