AGENDA REPORT

Meeting Date: May 2, 2017

Item Number: D-9

To: Honorable Mayor & City Council

From: David Schirmer, Chief Information Officer

Subject: Beverly Hills Fiber to the Premise Initiative

Attachments:
1. Agreements
2. Ordinance

RECOMMENDATION

Staff recommends Council consider approval of awarding bids and various agreements for the construction, construction management, development, business support system software implementation and maintenance services, purchase of equipment, and other related services in connection to the City's Fiber to the Premise (FTTP) initiative. Staff is also recommending approval of a pole use agreement with Southern California Edison and an appropriation of funds for the Fiber to the Premise initiative and an Ordinance amending the Beverly Hills Municipal Code to exclude City's Fiber to the Premise program from the regulation of cable, video, and telecommunication service providers; and that the City Council find the Project exempt from the California Environmental Quality Act.

INTRODUCTION

The Fiber to the Premise initiative provides high-speed, high-quality broadband Internet service to residents, students and businesses in our City through enhanced infrastructure.

A 30-month period of information gathering, assessment and study around the City of Beverly Hills' Fiber to the Premise initiative is now complete. At the February 21, 2017 City Council meeting staff presented strategies to the Council in key areas that included the recommendation that Council consider approval of:

- A funding strategy
- An ordinance modifying municipal code to permit the City to offer video services
- Agreements with various companies to facilitate the implementation of FTTP

- An agreement for the use of Southern California Edison (SCE) poles in areas of the City served by overhead power poles.

Staff received Council input and direction to move forward with the Fiber to the Premise initiative and this item represents the approval of the first phase construction agreements, a pole lease agreement, project funding, and an Ordinance of the City of Beverly Hills.

The agreements listed in the table below represent an initial set of contracts required for Phase I work for the Fiber to the Premise initiative.

Phase I Vendors	Cost	Purpose
Henkels and McCoy	$13,497,067.71	Primary construction contractor
Uptown	$3,600,000.00	Construction management, staffing services
Aureon	$235,000.00	Call center support
Great Lakes Data Systems	$319,301.00	Customer management, provisioning software
Calix	$3,472,659.68	Electronics for fiber
Thermobond	$1,833,474.10	Fiber enclosures
Southern California Edison	$55,000.00	Pole use agreement
Phase I Total	$23,012,502.49	

DISCUSSION

The Fiber to the Premise project consists of providing broadband internet infrastructure to the residents and businesses of the City of Beverly Hills.

The project involves the installation of new and upgraded fiber connections as well as billing and customer support services for the end users of the system.

The system will require placing an estimated 100 miles of fiber optic cable linking homes, schools and businesses using both aerial and underground construction. It is expected that system construction will take between 24 and 36 months. Given that Council previously authorized the completion of engineering work and the development of design documents, work can begin as early as summer of 2017 with the first customers being ready to come online early next calendar year. The operational component of the project is anticipated to begin in earnest in 2018.

To minimize disruption whenever possible, new conduit will be placed using the least impactful construction techniques that include horizontal directional drilling and/or micro trenching. The project will take advantage of *existing* infrastructure whenever possible to save money, time and minimize disruption to the community. When new infrastructure is required, that construction will often serve to not only facilitate FTTP, but also enhance core City infrastructure to the long-term benefit of all.

Outreach

For overall project success, communication with the public is key. Communications and marketing around the Fiber initiative must be highly responsive to residents and businesses. In addition to the typical communications, we plan to provide real-time updates to our community as the program is rolled out.

Public outreach sessions will be part of the construction project plan. Weekly customer meetings and daily coordination with project engineers will minimize issues. Installation of communication boxes in the right of way will be coordinated with feedback and input from neighboring property owners. During construction, a tracking system will be implemented to monitor outstanding customer issues. Utilization of the City website, social media, door hangers and call in numbers will all be used to deliver the message of coming services and project status.

Proposed Vendors
Below is a description of the various vendors by function and details of the selection process.

HENKLES & MCCOY (H&M) is anticipated to serve as the primary construction contractor responsible for building the physical plant of the system for both underground and overhead. Henkles & McCoy were the low bidder among a field of four respondents. Additionally, H&M has significant relevant experience in the local market primarily serving as a key contractor in Southern California Edison's pole replacement program. Below is a description of the responses received from the RFP.

Four responses were received for Bid #16-21.

- Henkels and McCoy, Inc. (Low Bid) $9,436,551.90 (base pricing) + $2,860,515.81 (requested pricing for optional work) + $1,200,000 (contingency) = **$13,497,067.71 (total)**
- Tetra Construction $15,840,688.90 (base pricing)
- HP Communications $12,822,012.00 (base pricing)
- MP Nexlevel of California, Inc. $26,579,905.88 (base pricing)

UPTOWN SERVICES, INC. is a consulting firm specializing in the provision of broadband by municipalities. The company has been working with the City for a number of years on the FTTP project. Uptown will be providing Construction management, implementation management, and staffing services totaling $3,600,000. Advantages of utilizing Uptown include:

- Familiarity with the project
- Specialized services
- Originally selected as part of a RFP process

AUREON CONTACT CENTER, INC. will serve as the City's customer contact center, first line technical support of Helpdesk Services in connection with the City's broadband internet services. Support will be provided 24 hours per day, 7 days a week, including holidays. Annual cost for this service is $235,000. Although this function was originally anticipated to be filled by in-house staff, Aureon allows for specialized customer service,

peak-call flexibility, and dedicated Beverly Hills personnel at a lower cost than in-house resources.

GREAT LAKES DATA SYSTEMS, INC. offers Operations and Business Support Systems (OBSS) and all in one billing and customer management solution and service activation for the FTTP initiative. Total cost for one-year implementation, and two-year licensing and hosting services is $319,301.

- Great Lakes Data Systems was the only bidder for Bid #16-25.

CALIX, INC. will provide equipment, which includes optical line terminals (OLT's) related DC power systems and dual-purpose optical network units (ONU's) (auto sensing GPON or Active Ethernet) and provide all software necessary for a fully functional system at the time of implementation. Total costs including City-requested options are $3,472,659.68.

- Calix was the only bidder to Bid #16-29.

THERMO BOND BUILDINGS LLC is a manufacturing business serving the specialized enclosure needs of telecommunications companies and wireless network operators throughout the United States. Thermo Bond will provide telecommunication shelters / cabinets and engineering design plans for these enclosures. Total costs including City-requested options are $1,833,474.10.

- Thermo Bond Buildings, LLC was the only bidder for Bid #16-24.

SOUTHERN CALIFORNIA EDISON, INC. will provide space on their power poles for necessary fiber optic attachments. Total initial lease costs are $55,000. The project calls for City equipment to be placed on approximately 1,900 SCE poles. The majority of that work will take place in alleyways, which will not require prolonged lane closures for major streets, as mitigating traffic disruption is a critical consideration. In order to utilize the SCE poles, the City will need to enter into a pole agreement with Southern California Edison. This agreement is fairly rigid and allows little room for modification. However, in working with Edison staff, it was determined that some 17 municipalities and other agencies have entered into this same agreement. In contacting these agencies, the consensus was that SCE is a reasonable partner, and no significant issues were reported. These agencies include:

- City Of Pomona
- City Of Los Angeles
- City Of Gardena
- City Of Santa Barbara
- City Of San Bernardino
- City Of Oxnard
- City Of Monterey Park
- Cathedral City
- City Of South Gate
- City Of La, Dept. Water/Power
- Cucamonga County Water District
- County Of Orange
- La County Internal Service Dept.
- Carpentaria County Water District
- Tulare County Solid Waste Department

- Tehachapi-Cummings County
- La County Public Works/Flood Control

Additionally, Edison representatives provided an excerpt from their internal procedures manual that addresses many of the City's concerns. An sample of the text is included below.

TENANT NOTIFICATION FORM (TNF) KEY POINTS

A Tenant Notification Form (TNF) is to advise tenants of work being planned by SCE and the action needed from them to complete the job. Tenants are obligated to cooperate in accordance with their Pole License/Pole Use Agreement.

Key Points

DO: Send the TNF to the Tenant/Renter, by mail or email, along with the FIM or WO Map, at least 60 days in advance of future work and any special requirements

DO: Email JPO a copy of the TNF along with the FIM or WO Map as an attachment. **Only send in a hard copy of the TNF with Map(s) if the email file is too large**

DO: Contact the Renter by phone or meet in the field to ensure a proper and timely response. Field Meet request may be entered on "Other" field.

DO: Keep a copy of Tenant Notification Form in Work Order Jacket.

DO: Set reasonable "Start/Completion work dates" and notify the Renter of timeline changes promptly

While this agreement is not ideal, staff is comfortable in recommending that Council consider approval of the SCE pole use agreement.

Environmental Review

This Project has been assessed in accordance with the authority and criteria contained in the California Environmental Quality Act [Public Resources Code Sections 21000, et seq. (CEQA)], the State CEQA Guidelines (California Code of Regulations, Title 14, Sections 15000, et seq.) and the City's Local CEQA Guidelines. Projects consisting of the minor alteration, repair, maintenance of existing facilities and/or the constructions of small structures are categorically exempt from CEQA. Therefore, staff recommends that the City Council find that the Project is exempt from CEQA pursuant to CEQA Guidelines Sections 15301, 15303 and 15304(f).

Section 15301 provides an exemption for existing facilities, including for the "operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination."

The installation of the fiber and the proposed shelters/cabinets that would be required in order for the City to provide high speed internet services represents negligible or no expansion of existing facilities as it would not expand the City's street or the City network

of power/lighting poles on which the fiber and cabinets would be installed. The minor boring and trenching of public streets and rights of way associated with the Project qualifies as a minor alteration to exiting public facilities pursuant to Section 15301. The installation of fiber connecting individual properties to the public utility system is also exempt from CEQA pursuant to Section 15301, as the connections represent no expansion of use, are very small in scale whether bored or connected by aboveground wire, and provide public utility services to the individual properties.

The FTTP network will be segmented into seven service areas. These locations are distributed around the serving area based on population density and future growth. Each serving area will constitute a deployment phase in the build-out and launch of the new network. The proposed locations are Fire Station 2 (Coldwater Park), Fire Station 3 (Doheny Dr.), Roxbury Park Maintenance Yard, La Cienega Park Maintenance Yard, Beverly Canon Garage, South Beverly Drive Garage and the Information Technology Data Center.

Section 15303 of Title 14 of the California Code of Regulations provides exemptions for the construction of small structures, facilities, or equipment. The installation of the cabinets (120" width x 38.25" depth x 66" height ") and the shelters (8'width x 12' length x 9' height) that are required to house equipment for the Project are exempt from CEQA pursuant to Section 15303, as they represent the construction of small structures, facilities or equipment.

Further, the minor trenching and restoration of the public streets that may be necessary during the construction of the Project would also be exempt pursuant to CEQA Guidelines Section 15304 (f) for minor trenching when the surface is restored. Therefore, staff recommends that the City Council find that the project is exempt from further environmental review under CEQA for the reasons stated above.

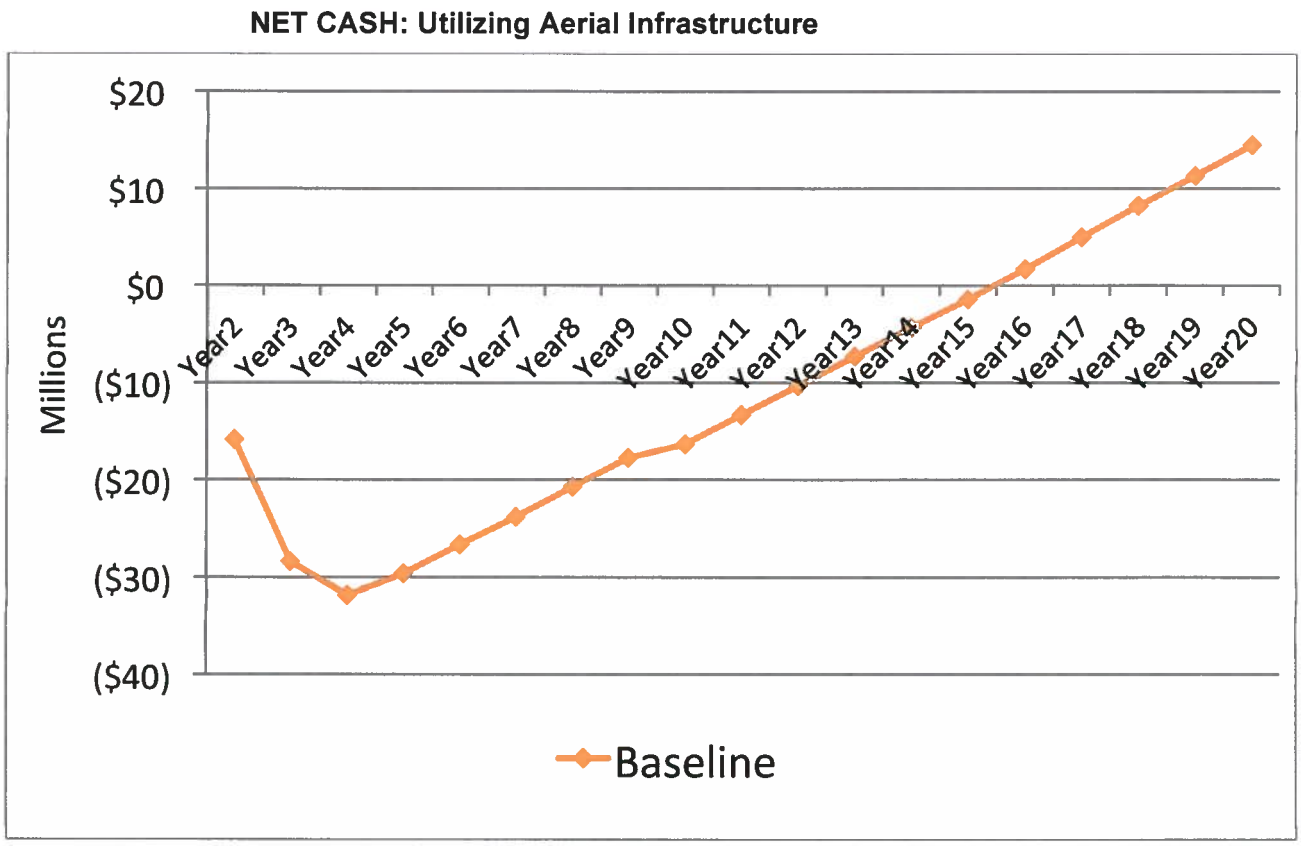
FISCAL IMPACT

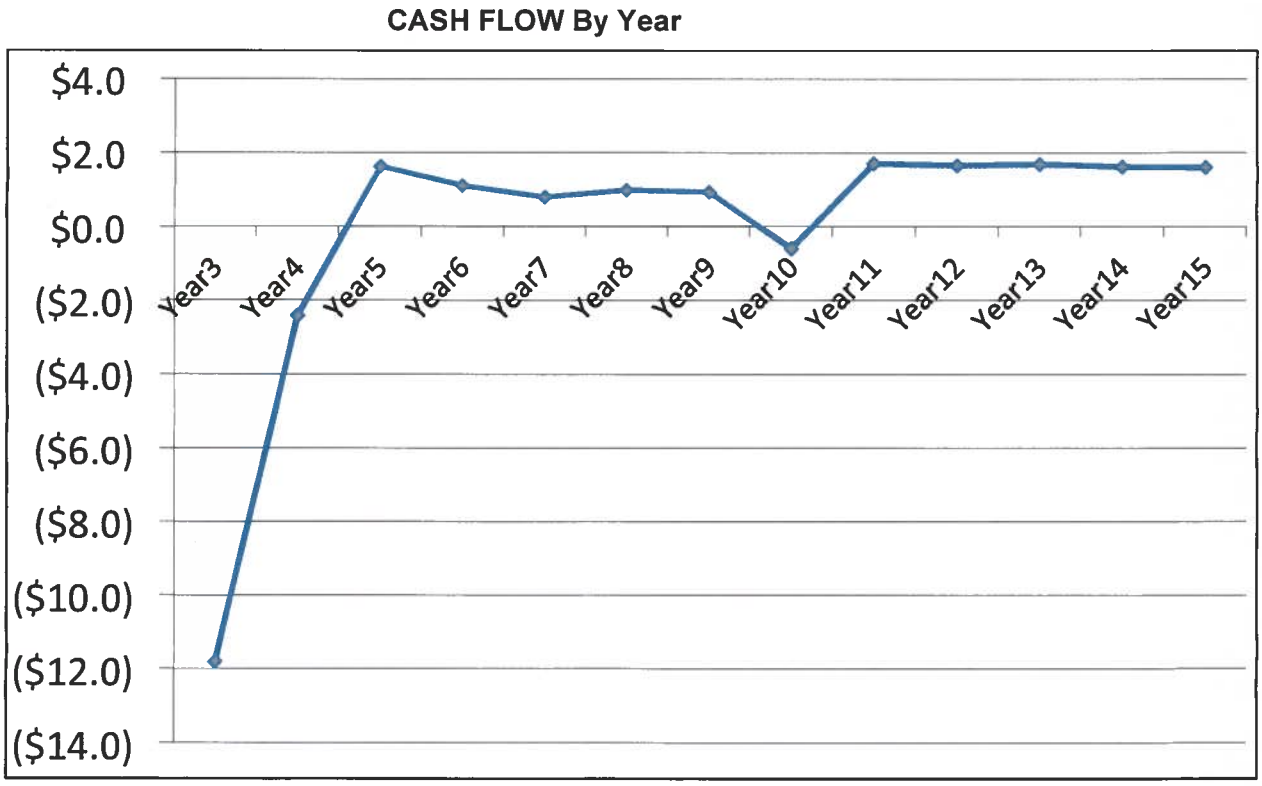
As initially envisioned, the five-year project cost for this initiative remains at $32 million. This is the same number that Council approved as part of the 2016-2017 CIP budget process, and as presented at the February 2017 Council meeting.

The following funding strategy has been developed by Staff and includes:

- $10 million of equity infusion from General Fund reserves previously earmarked by Council for the Fiber to the Premise project to be appropriated to the Information Technology Capital Improvement Project for the Fiber to the Premise initiative
- $17 million internal loan from Information Technology and other internal service funds
- $5 million in working capital from short-term internal loans from Information Technology and other internal service funds.

A finance model has been developed and refined, and the current working model delivers positive cash flow in Year 5, with the project net cash positive after year 16. The two graphs below illustrate 1): net cash over a 20-year period of the project and 2); cash flow over a 15-year period.


NET CASH: Utilizing Aerial Infrastructure
$20
$10
$0
($10)
($20)
($30)
($40)
Millions
Year2
Year3
Year4
Year5
Year6
Year7
Year8
Year9
Year10
Year11
Year12
Year13
Year14
Year15
Year16
Year17
Year18
Year19
Year20
Baseline


CASH FLOW By Year
$4.0
$2.0
$0.0
($2.0)
($4.0)
($6.0)
($8.0)
($10.0)
($12.0)
($14.0)
Year3
Year4
Year5
Year6
Year7
Year8
Year9
Year10
Year11
Year12
Year13
Year14
Year15

The project's finance model utilizes a number of input parameters that may be modified to yield differing financial results. The current baseline model assumes a residential internet service adoption rate maximum of 36%, a residential phone service adoption rate of 21%, and a residential television adoption rate of 26%. These input parameters were the results of market research of resident preferences taken from late 2014 and again in 2016. The trend in the telecommunications industry for phone and television service, however, is to move away from traditional landline and paid video service, to cellular phone service, and 'over-the-top' video services (such as Netflix). This trend is taken into account in the project's financial model with phone service eroding over time to 10%, and video service adoption rate eroding to 14%.

Taking a conservative financial approach, staff ran a number of scenarios through the financial model to better understand what a 'worst case' might look like. By reducing the adoption rates of the three services by varying amounts the payback timeframe ranges from 16 years to over 25 years. In one scenario, it was assumed that the adoption rate for both phone and video service was zero. In this case, an average $900,000 annual subsidy would be required to address operational and debt service shortfalls. In this scenario, however, a number of strategies could be deployed to address this deficit. The initial capital contribution could be increased, revenues could be increased through higher customer fees, and marketing strategies could be employed to increase penetration rates for internet customers above the assumed 36% mark.

Based on market research, and evidence from recent municipal implementations of similar systems, the above scenario is not anticipated to materialize. It is being presented here as a very conservative scenario. Staff is sensitive to the fact that this represents a new service to the community and that a commitment of this magnitude requires careful analysis that mixes prudence with progress

Conclusion

The Beverly Hills City Council, in recognition of the City's exceptionalism, has signaled their intent in previous Council meetings to offer high-speed internet services through the rollout of the Fiber to the Premise project. As a city *Driven by Innovation*, embracing technology in a prudent manner will be critical as we work to maximize the quality of life for residents and students; effectively serve existing business and attract new enterprises to our City; and improve the speed of communication between people and City agencies to the benefit of public safety and community-building. There are also economic development opportunities that would result in additional revenues to the City, but this cannot be quantified at this time.

Council will be advised if agreements for D-9: C (Calix, Inc.) and/or D-9: G (So Cal Edison, Inc.) are not signed by Tuesday, May 2, 2017.

Don Rhoads
Finance Approval

David Schirmer
Approved By