



CITY OF  
**PALO  
ALTO**

## City Council Staff Report

**From: City Manager**

**Report Type: CONSENT CALENDAR**

**Lead Department: IT Department**

**Meeting Date: November 27, 2023**

Staff Report:2310-2129

### TITLE

Approval of a License Agreement with Equinix, LLC for a Three-Year Term in an Amount Not-to-Exceed \$536,528, and Authorization of a Contingency Amount Not-To-Exceed \$106,900 for Related, Additional but Unforeseen Services Which may Develop During the Project; CEQA Status - Not a Project

### RECOMMENDATION

Staff recommends that Council:

- 1) Approve and authorize the City Manager or designee to execute the license of a Private Cage agreement, included here as Attachment A, with Equinix, LLC (“Equinix”) for a Term Not-to-Exceed Three Years and a Total Not-to-Exceed Amount of \$536,528 for the City of Palo Alto Fiber Optic Utility to lease a fiber optic private cage with kVa power access and termination services at the Palo Alto Internet Exchange (“PAIX”).
- 2) Authorize the City Manager or designee to approve and execute any amendments to the agreement for additional services that might develop during the license period, the total value of which shall not exceed \$106,900.

### BACKGROUND

The City Council provided direction to staff to proceed with Phase 1 of the fiber to the premises (FTTP) expansion project on Dec. 19, 2022, CMR 14800<sup>1</sup>. In Phase 1, FTTP would be built out in selected areas of the city, and expanded gradually. On November 7, 2023<sup>2</sup>, staff presented an update on plans related to advancing a FTTP pilot program and construction alignment with Electric Grid Modernization to the Council’s Finance Committee. Upgrading overhead lines in 90% of Palo Alto neighborhoods through electric grid modernization and piloting the build out of Palo Alto Fiber to the home supports a reliable, sustainable and connected community.

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<sup>1</sup> City Council, December 19, 2022; SR# 14800,  
<https://portal.laserfiche.com/Portal/DocView.aspx?id=59132&repo=r-704298fc>

<sup>2</sup> Finance Committee, November 7, 2023; SR# 2309-2082,  
<https://cityofpaloalto.primegov.com/Portal/viewer?id=0&type=7&uid=5be5ee8c-815c-45be-baec-140d7780fb0c>

As discussed in the development of an FTTP service, “fiber huts” will be necessary to build out the network and provide connectivity both through the dark fiber backbone through FTTP.

Originally constructed by the Digital Equipment Corporation in 1996 as one of the first internet exchange points (IXPs) in the world, the Equinix data center (SV8) is a neutral data center independent of any one Internet Service Provider (ISP) or telecommunications carrier. This center serves as an internet exchange point (IXP) providing the physical infrastructure through which over 70 ISPs and content delivery networks (CDNs) exchange internet traffic between their networks. It was (and still locally) called the “Palo Alto Internet Exchange (PAIX),” and the city has been leasing fiber optic access and termination services at PAIX since the inception of the City’s fiber network.

There is a highly competitive Palo Alto commercial fiber optic marketplace served by multiple telecommunication companies and Internet Service Providers (ISPs). Many of these entities control independently owned overhead and/or underground fiber optic systems. These systems are also accessed by third-party ISP-service resellers using leased capacity on the fiber optic networks.

## **ANALYSIS**

To support FTTP Phase 1 in 2024, a data center is required to provide internet services. Equinix is the best option to serve as the Data Center and one of two Fiber Huts for the Fiber Project. City Hall was a potential option, but PAIX provides a superior alternative due to timing, cost, construction, and future flexibility considerations.

A private cage will provide a secure space for the infrastructure required to operate the fiber and ISP for the FTTP, and the Equinix data center (SV8) has a private cage available that meets the requirements to host the data center and fiber hut for the FTTP project. This contract will secure the space from November 2023 through November 2026, at the rate of \$14,848 per month. The SV8 data center, as discussed above, is a built facility that multiple companies secure space at for their data center needs. Space comes available as companies depart or move services to alternative options such as the cloud and is only available until another customer secures a contract for use. At this time, the space the city needs to support the FTTP project is available and if the city does not secure this space now, there is no guarantee another space will be available in the future. The impact of not securing this space could further delay the FTTP project in providing internet access to the community and businesses.

Benefits of a private cage with racks vs racks in an open or shared space:

- Dedicated space to support the infrastructure for FTTP and Backbone
- Privacy/Security – Only people that are approved by the city will be allowed access.
- Reliability – Reduced likelihood of damage to infrastructure by third parties.
- Operational efficiency – Full control of cross connects and cable management between racks.

Due to negotiating for the private cage, the per rack cost is approximately \$100.00 – \$200.00 less a month than the shared cages. This agreement does not have a termination clause for the initial term of 36 months. Staff anticipate needing that time for the build out of the FTTP project, however, should the services no longer be needed during this term, the City would likely be responsible for these costs.

In addition, this recommends the additional of funding in the amount of \$109,900 for additional services such as additional power, cross connects to peer with other ISP's and fiber cables. This capacity is recommended to ensure flexibility as the City beings Phase 1 of the FTTP build out and any unforeseen issues in this new line of service.

### **FISCAL/RESOURCE IMPACT**

Funding for the first year of this agreement is included in the FY 2024 Adopted Fiber Optic Fund operating budget with subsequent years subject to the annual appropriation of funds. If the pilot is successful and the FTTP project continues, this will become an ongoing cost with funding in subsequent years subject to Council's approval of each fiscal year's budget appropriation.

### **STAKEHOLDER ENGAGEMENT**

This has been coordinated with internal stakeholders including the Utilities Department, and in consultation with Magellan/Entrust, the City's professional services partner in the development of the FTTP project. Through the Utilities Advisory Commission and the Finance Committee, the community has had the opportunity to hear updates on the status of the FTTP project and provide feedback on the project.

### **ENVIRONMENTAL REVIEW**

This activity is not a project under California Environmental Quality Act (CEQA) as defined in CEQA Guidelines, section 15378, because it has no potential for resulting in either a direct or reasonably foreseeable indirect physical change in the environment.

### **ATTACHMENTS**

Attachment A: 36-Month License Agreement with Equinix

### **APPROVED BY:**

Darren Numoto, Chief Information Officer