



**DATE:** September 13, 2018

**TO:** Council Technology Application Committee

**FROM:** Director of Information Technology  
Interim Director of Public Works

**SUBJECT** Review of Proposed Dig-Once Ordinance and Policy

### **RECOMMENDATION**

That the Council Technology Application Committee (CTAC) reviews and comments on the proposed Dig-Once Ordinance and associated policy. Specifically, staff seeks direction from CTAC regarding the standards and requirements outlined in this staff report and proposed ordinance and policy.

### **SUMMARY**

The City Council adopted a Fiber Master Plan in July 2017. This plan directs the City to adopt a dig once policy. Dig once policies generally require the coordination of excavation projects between a municipality and a telecommunication or utility provider and mandate the installation of City owned telecommunication infrastructure such as conduit and fiber for broadband internet. This item provides a proposed Dig Once Ordinance (Attachment II) and Dig Once Policy (Attachment III) for consideration by the CTAC in accordance with the City's Fiber Master Plan.

### **BACKGROUND**

In July 2017, the City Council adopted a Fiber Master Plan (Attachment IV) to set the overarching goals and objectives for deploying a fiber-optic network throughout the Industrial Corridor. Specifically, this plan recommends that the City take the following actions:

- Consider a dark fiber business model
- ***Adopt a dig-once policy***
- Audit its infrastructure and records
- Implement a records management system
- Construct a fiber segment to connect an internet pop
- Expand FTTP to select Industrial Corridor areas
- Signal to the private sector through a procurement process
- Lease dark fiber strands to select industrial corridor customers.

The City Council adopted a dark fiber model with the adoption of the Fiber Master Plan. A current audit of infrastructure and records is currently on-going as a part of the FY2019 Capital Improvement Plan. Design work for the fiber loop within the Industrial Corridor is on-going as a part of the Highspeed Hayward project funded by the Economic Development Administration's \$2.7M grant.

In June 2018, the City entered into an agreement with Magellan Advisors following a competitive request for proposals process, to develop and update the City's wireless telecommunications regulations, right of way ordinance, and master license agreements with telecommunication companies.

Representatives from Magellan Advisors will be present at this meeting to answer any questions the CTAC may have.

## **DISCUSSION**

Dig-Once Policies are a current best practice for municipalities entering the fiber infrastructure space. These policies encourage cooperation and coordination between cities and a variety of utility providers and telecommunication companies. Their implicit goals are to:

- Protect newly and recently paved roads and sidewalks;
- Ensure efficient, non-duplicative placement of infrastructure in the Public Right of Way (PROW);
- Minimize the impact of construction on residential and commercial communities;
- Reduce overall costs of all underground work in the PROW by capitalizing on significant economies of scale;
- Enhance the uniformity of construction; and
- Leverage construction for the deployment of a public communications network.

These policies leverage public and private projects to expand the City's conduit and fiber network in an efficient manner.

The technology surrounding the internet and its physical plant is changing rapidly. It is for this consideration that the proposed dig-once ordinance is broken into two components. The individual ordinance mandates higher-level dig-once requirements and references a "Dig-Once Policy" that provides more technical, minimum standards at an administrative level. This structure will afford the Public Works department the ability to adjust regulations as this technology changes.

### *Ordinance Overview*

This ordinance applies to any applicant who applies for an excavation permit within the PROW.

### Noticing Requirements

The City will be responsible for or may require an applicant to notify all telecommunications service providers of an impending excavation and afford those entities the opportunity to utilize the excavation to install, upgrade, co-locate, repair, or improve their telecommunications facilities during the excavation project. This notice must be provided at least thirty (30) days prior to the start of the excavation. Those entities participating in the joint trench are responsible for their proportionate share of costs including but not limited to the costs of permitting.

### Moratorium

Excavations under this ordinance shall not take place more than once on a particular City street within a 5-year period.

### Project Applicability

All construction, reconstruction, and repaving of a City right-of-way shall include a provision for the installation of a public utility infrastructure, such as conduit, tube, duct, or other device designed for enclosing telecommunications wires, fibers, or cables, wherever practical and feasible. Such infrastructure shall be installed in accordance with City regulations, requirements and specifications, including but not limited to the Hayward Municipal Code, as directed by the Director of Public Works or his/her designee. Such excavation shall not take place more than once on a particular City street within a 5-year period.

### Policy Maintenance and Exemptions

The Department of Public Works will be responsible for the enforcement and maintenance of this policy. Furthermore, the Director of Public Works or their designee may exempt a project from the requirements of this ordinance in cases where it is not practical or feasible. Cost cannot be a determining factor for project feasibility or practicality. These determinations may be appealed to the City Manager.

### Incremental Costs

The Department of Public Works shall be responsible for determining the incremental costs of installing City communications infrastructure. These incremental costs are the costs associated with adding City communications infrastructure to any excavation project, including the cost of the materials needed by the City and any additional labor costs.

## *Policy Overview*

### De-Minimis Excavation Standard

Under the current draft, the Dig Once Policy requirements are applicable to all excavation projects that have a minimum continuous open trench length of 300 feet. For reference, C Street between Watkins Street and Foothill Blvd. is approximately 355 linear feet.

All excavations that meet this standard will be required to include the installation of two 3-inch diameter conduits that meet the material and design specifics as determined by the Dig Once Policy.

### Design Standards

The Dig Once Policy provides design standards for the installation of conduit and fiber. Conduits referenced above must be:

- Made of PVC Schedule 40 material
- Laid to a depth of not less than 18 inches below grade in concrete sidewalk areas, and not less than 24 inches below finished grade in all other areas when feasible, or the maximum feasible depth otherwise
- Install a minimum of 3-foot radius sweeps and bends,
- Contain tracer wire and external warning ribbon tape a minimum of 3-inches above the conduit.

### Ownership and Documentation of Infrastructure

All conduits installed under this policy will be owned by the City. All conduits installed will be documented in the City's geographic information system (GIS) whenever feasible.

### Interagency Cooperation

The PROW permittee should make a documented effort to work with other utility agencies to co-locate infrastructure in the same trench whenever feasible. Additionally, each agency/utility shall participate in periodic coordination meetings as requested by the City for the purpose of coordinating activity between public works projects and utility projects in the PROW.

The full draft dig-once ordinance and policy can be found in Attachments II and III respectively.

## **ECONOMIC IMPACT**

Improved broadband connectivity within the City will help to support business attraction efforts. While the existence of fiber is only one of many site selection factors (such as lease

rents, building configuration, traffic patterns, etc.), being able to market Hayward's broadband connectivity to the business community at-large not only helps satisfy a site selection criterion, it will strengthen the City's reputation as a center for innovation and growth.

## **FISCAL IMPACT**

There is no immediate fiscal impact associated with implementing this policy. However, given its requirements, it may increase the cost of certain roadway improvement projects marginally due to the added required installation of conduit and fiber. These increases may be reduced through the sharing of associated costs with other telecommunication providers who utilize the same trench. Additionally, this increase in costs may be offset through revenue associated with the wireless telecommunication facility ordinance update.

## **STRATEGIC INITIATIVES**

This agenda item supports the Complete Communities Strategic Initiative. The purpose of the Complete Communities Strategic Initiative is to create and support structures, services, and amenities to provide inclusive and equitable access with the goal of becoming a thriving and promising place to live, work and play for all.

Goal 1: Improve quality of life for residents, business owners, and community members in all Hayward neighborhoods.

Objective 4: Create resilient and sustainable neighborhoods.

Goal 3: Develop a regulatory toolkit for policy makers

Objective 1: Update, streamline, and modernize zoning & codes.

## **NEXT STEPS**

Staff will incorporate the feedback on the draft policy and ordinance and present the updated documents to Council for adoption at a later date.

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Approved by:



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Kelly McAdoo, City Manager