

CIP Construction Semiannual Report

Fiscal Year 2019 July 1 to December 31, 2018



Public Works Department – Construction Management & Field Services Division

February 2019

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Introduction

Purpose and Scope

This report summarizes the construction-related activity of the Public Works Department Construction Management & Field Services (CMFS) Division during the period of July 1 through December 31, 2018, and provides a summary of management changes and process improvements, an update on significant CIP projects, and a spotlight profile of the Construction Storm Water Section.

CMFS continues to provide construction management and inspection services for CIP projects designed by either PWD staff or consultants. The size and complexity of projects can range from the installation of a new street light to the demolition and replacement of an existing four-lane bridge. Annual CIP expenditures increased from \$482 million in Fiscal Year 2017 to \$545 million in Fiscal Year 2018. The level of spending is expected to continue to increase as construction related to the Pure Water project ramps up.

CMFS also provides inspections for private work performed in the City's Right of Way (ROW). In the last three years, the average number of permits pulled for inspection was approximately 2,200 per fiscal year. Permits range in complexity from a home improvement to a developer's triggered road widening project

Performance Statistics

CMFS inspected projects representing \$1.2 billion in contract value and executed 1,250 private inspection permits in the first half of Fiscal Year 2019. Table 1 summarize the Notices to Proceed (NTP) and Notices of Completion (NOC) filed during this first half of Fiscal Year 2019:

| Council District | NTPs | NOCs |
|-------------------------|--------------|------|
| 1 | 5 | 2 |
| 2 | 13 | 2 |
| 3 | 10 | 3 |
| 4 | 6 | 2 |
| 5 | 1 | 1 |
| 6 | 2 | 2 |
| 7 / | 7 | 2 |
| 8 | 2 | 3 |
| 9 | 4 | 13 |
| Total | 50 | 30 |
| Construction Cost Value | \$84 million | |

Table 1: CIP NTPs and NOCs in Q1 and Q2 Fiscal Year 2019

Note: Some projects are in multiple Council Districts.

Table 2 summarizes performance statistics for the first half of Fiscal Year 2019.

| Table 2 | |
|--|-------------|
| Tests performed by the City test Lab | 32,178 |
| Linear miles surveyed for CIP projects | 95 |
| Traffic Control Permits issued | 164 |
| Miles of sewer pipeline under construction | 43 |
| Miles of resurfacing inspected | 62 |
| Total number of public / private projects under construction | 370 / 1,250 |

Management Update

CMFS Organization and Staffing

The Public Works Department Construction Management & Field Services Division (CMFS) has gone through significant structural changes since the previous semi-annual report was presented to the Infrastructure Committee in July 2018. In order to help streamline the delivery of the CIP program and Right of Way (ROW) permit inspections, the teams responsible for providing survey services, lab services, and traffic control were moved to the newly created Engineering and Technical Services (ETS) Division.

CMFS staffing currently stands at 178 Full Time Equivalents (FTEs), including a net increase of 18.3 new FTE positions in Fiscal Year 2019. A total of 110 ETS staff support CMFS.

Construction Management Consulting Firms

CMFS maintains multiple consultant contracts in order to manage an aggressive CIP program. Under the contracts, consultants may be assigned the full project responsibility, or limited responsibility to supplement City staff in specific areas of expertise. Projects supported by consultant contracts include water and wastewater pipelines, buildings, bridges, roadway paving, and facilities.

The three existing As-Needed Construction Management Services Contracts, originally awarded in July 2016 with an initial value of \$4 million each, were amended in 2018 to increase their capacity to \$7 million each. Table 3 describes the current status of the As-Needed contracts.

| | Ū / | | |
|---------------------------------|---------------|-----------------------|--------------------|
| Existing As-Needed Construction | # of Task | Cumulative Task Order | Remaining Contract |
| Management Contracts | Orders Issued | Value | Capacity |
| Harris & Associates | 30 | \$6,263,628.22 | \$736,371.78 |
| Arcadis U.S., Inc. | 18 | \$6,205,137.43 | \$794,862.57 |
| Louis Berger U.S., Inc. | 18 | \$6,870,427.88 | \$129,572.12 |
| Total | 66 | \$19,339,193.53 | \$1,660,806.47 |

Table 3. Status of Existing Construction Management Contracts

CMFS issued a Request for Proposal (RFP) in December 2017 to provide new construction management services to augment the in-house staff. A total of 11 firms responded and ten were interviewed. Based on the evaluation criteria specified in the RFP, Arcadis U.S., Inc., Kleinfelder Construction Services, and Louis Berger U.S., Inc. were selected. The new as-needed contacts are valued at \$15 million each and were presented to the Active Transportation and Infrastructure Committee in January 2019 and will be presented to Council in February 2019.

CIP Project Bid Results

CMFS executed 50 NTPs with a construction value of \$84 million through December 31, 2018. It is expected that the CIP program will award over \$230 million in construction contracts by the end of Fiscal Year 2019 with awards going to pipeline group jobs, transportation projects, parks, and unique projects such as Plaza de Panama.

Contractor Evaluations

Contractor evaluations are completed for each CIP project to document their performance. Each evaluation covers six areas:

Contract Administration Compliance with Contract Documents Construction Safety Storm Water/BMP Compliance Cooperation/Professionalism/Communication and Public Outreach.

Evaluations are conducted at various stages in the project, typically at the 30% and 60% complete milestones, and at the end of each project. The overall rating for each evaluation will be either Outstanding, Above Satisfactory, Satisfactory, Needs Improvement, or Unsatisfactory. A final evaluation with an unsatisfactory overall rating has repercussions. Per City of San Diego Municipal Code Chapter 2, Article 2, Division 8, receipt of two unsatisfactory evaluations in a two year period may be grounds for debarment of the contractor for two years. There are additional levels of enforcement that could lead to permanent debarment.

During an Infrastructure presentation in July 2018, CMFS was asked to reach out to Council offices and include any documented community occurrences in the Contractor's final evaluation. CMFS has begun to reach out to the Council offices to request feedback, positive or not, regarding the contractor's efforts during construction. Any documented feedback received from the Council offices is considered for inclusion in the "Cooperation, Professionalism, Communication and Public Outreach" section of evaluation. CMFS has been working with the Council offices to aggregate their input on the process since November 2018.

CMFS completed 22 final evaluations, between July 1 and December 31, 2018. Table 4 summarizes the rating breakdown of the final evaluations:

| Outstanding | 1 |
|--------------------|----|
| Above Satisfactory | 5 |
| Satisfactory | 13 |
| Needs Improvement | 2 |
| Unsatisfactory | 1 |
| Total | 22 |

Table 4: Final Contractor Evaluation Summary

Modifications to Reimbursement Agreement Language

One of the duties that a City inspector assumes when managing a CIP project is to address the community impacts the project has during its construction. CMFS staff have many tools and resources available to help manage and mitigate those impacts by working with the contractor and making necessary adjustments.

In contrast, permit projects are scheduled and budgeted by the entity that requested the permit. The City provides inspection staff to ensure the conditions of the permit and current City standards are adhered to during the project, but the inspector does not manage its schedule or budget.

Reimbursement Agreements (RA) are permit projects that fall between a CIP project and a permit project in terms of CMFS involvement. Typically RA work is performed in the ROW as a condition of a larger development which has impacted the existing community. RA permit projects are advertised by the City, but managed by the developer. While RAs have been treated similarly to permit projects, CMFS has determined that the scope of these projects have a substantial impact to the community for extended periods of time, and are more comparable to a Public Works construction project than a typical private permit.

To help the City inspector better manage these projects, the RA language was modified to better align with the tools and resources CMFS staff use to manage CIP projects. In addition, language describing the default process due to non-performance was included. This, and a different compensation structure for work performed, will help the inspector better manage the permit and avoid long periods of inactivity by the developer once work has begun.

Process Improvements

Coring Rig

The City Test Lab recently acquired a new coring rig which will allow for soil samples to be taken to analyze the thickness of existing pavement sections. This will have a significant impact on how bid items for imported fill are calculated and will result in using a competitively bid import bid item instead of negotiating this value during construction.

Project Acceptance Task in Primavera Scheduling Software

CMFS scheduling software will include the actual project acceptance (the point when the asset managing department takes over ownership) in the project schedule. Including the project acceptance activity in the schedule will better indicate to the stakeholders when the asset will be available for use. Project acceptance occurs between the point when a project is partially in use and when the NOC has been filed with the County of San Diego.

VPM

During the calendar year 2018, CMFS formally announced its intent to move CIP project construction management from a paper process to the Virtual Project Management system (VPM) to allow for improved efficiencies and consistency. CMFS has been investing in the tools necessary to utilize this software in the field. CMFS will be using VPM for typical CIP project portfolios and more advanced software for larger projects that require more coordination by the end of Fiscal year 2019.

It is anticipated with this change, real time updates can be given to the project team to assist with approvals and changed conditions. This will allow for completed project documents to be stored electronically in lieu of hardcopy files.

Industry Outreach

CMFS continues to closely coordinate with the construction industry to seek input on current and new standards and regulations as well as announce upcoming project opportunities. CMFS hosted a paving workshop with the County of San Diego on November 2018 to coordinate upcoming street improvement work. The event was well attended by a range of industry participants from a variety of backgrounds and provided an opportunity to exchange key information about the transportation aspects of the CIP. CMFS also hosted construction industry meetings in July and October of 2018 to provide updates and discuss improvements made to CMFS processes.

Electronic Change Order Processing

PWD is routing change orders electronically via the OnBase document management system instead of the sequential hard-copy process. Electronic routing increases the integrity of the routing process while decreasing approval time. The average time of routing a change order was reduced by approximately 40% with opportunities for additional improvements.

Construction Management Training

CMFS has hosted three Construction Management Academies as part of its in-house professional development initiative. The academies provide mid-level technical, administrative, and financial training to key staff, ultimately enhancing the efficiency of the CIP program.

CMFS also regularly hosts tailgate training sessions on topics that reinforce best practices and to ensure consistency amongst its staff.

101 Ash St Quarterly Updates

The 101 Ash Street improvement project began construction in September 24, 2018. The scope of work consists of architectural, electrical, plumbing, asbestos mitigation, and mechanical tenant improvements to 19 floors of 101 Ash Street building. The original contractor schedule that was provided and approved estimates completion to be in summer 2019.

To date, the project is on schedule and is approximately 36% complete. Work has primarily focused on floors 1-7 and 16-18 where they have now reached the floor layout and framing stage. Other work taking place on other floors consists of HAVC systems and drywall installation. As this stage is



completed, the contractor will move on to the mechanical, plumbing and electrical work. In addition, work will begin on improvements to the exterior sidewalk of the building after the rainy season.

Abatement Work

Upon completion of construction, Real Estate Assets will coordinate with GMBI (vendor) to reinstall the existing furniture that was stored in the parking basement as well as purchase and install new furniture to prepare the building for occupancy.

Furniture Stored in Basement

Ultimately, the improvements made will increase occupancy and bring the building into compliance with Americans with Disabilities Act (ADA) standards. The project will maximize employee centralization to accommodate approximately 1,157 staff from various City departments.

| Project Costs through 5/14/2018 | \$1,340,485 |
|---------------------------------|---------------|
| Selected Scenario Capital Costs | \$22,187,160 |
| 10% Contingency | \$2,352,765 |
| Total Capital Costs | \$25,880,410 |
| | |
| Financing Costs | \$2,730,774 |
| Moving In Costs | \$1,510,960 |
| Total Financing & Moving Costs | \$4,241,734 |
| | |
| Total Costs | \$ 30,122,144 |

Table 5 - 101 Ash Street Project Improvement

| Table 0 – TOT ASH Street Project-To-Date Activity (through January 2019) | |
|--|--------------|
| Expenditures | \$5,329,090 |
| Pre-Encumbrances | \$343,845 |
| Encumbrances (nine vendors) | \$14,221,771 |
| FY19 Construction Expenditure Projections | \$18,809,398 |
| FY19 Furnishings, Fixtures, and Equipment Expenditure Projections | \$1,237,650 |

Table 6 – 101 Ash Street Project-To-Date Activity (through January 2019)

CIP Projects

Projects in Construction

CMFS has been working diligently to provide construction management and inspection services for approximately 370 CIP projects. A few examples are highlighted below.

La Jolla Coastal Boulevard Walkway



The Coast Boulevard Walkway project provides improved walkway access and enhanced landscaping. Impacts to pedestrians and traffic where mitigated during the summer construction period by implementing a constant reevaluation of approved detours for each phase of the project. The project was completed in December 2018.

West Mission Bay Drive Bridge



The new West Mission Bay Drive Bridge will replace the existing structure with a six lane bridge having a northbound and a southbound Class I bike facility and pedestrian sidewalks. Construction of the trestles is complete and the contractor has begun to drive in piles. The project is 9% complete and the new bridge is scheduled to be operational by early 2022.

Georgia Street Bridge



This project is 96% complete. Remaining work includes the applying the anti-graffiti coating and roadway striping. Completion is anticipated in late March 2019.

Chollas Building



This project will construct two new buildings, one two-story building for administration staff and a one-story maintenance shop. Several coordination challenges have been addressed by the project team including the discovery of burned waste not anticipated in the project area. Current work phase includes retaining wall construction, underground utilities and demolition of existing facilities. The project is 30% complete and the estimated project completion date is April 2020.



Rolling Hills Neighborhood Park

The Rolling Hills Neighborhood Park upgrades include ADA improvements, a playground, hardscape, site drainage and improvements, and slope stabilization of the park's northern slope. The contractor is working on the irrigation system, completing seating walls and planters, preparing the drainage system, and final grading. The project is currently 35% complete and is anticipated to be finalized by April 2019.

Mira Mesa Community Park Expansion Phase 1



The Mira Mesa Community Park expansion included multi-use fields, a comfort station, perimeter walking path, passive recreation areas, shade structures, children's play area, storm water facilities, security lighting, parking, traffic calming and street improvements. While the project met several challenges which delayed the completion date, the actual construction cost will be less than the original contract value. This project was substantially completed in October 2018.

SR 163/Friars Road



This project will alleviate the traffic delays along Friars Road and is being built under a cooperative agreement with Caltrans. The project is 42% complete and is anticipated to be finalized in October 2019.

Old Otay Mesa Road



The Old Otay Mesa Road project will widen and realign the existing two-lane road and add a bicycle lanes. Crews is coordinating with SDGE to raise the vaults during sidewalk construction and crews are working to complete the bio-retention area. CMFS is working with the Public Utilities Department to schedule upcoming tie-ins of 24" water main. The project is currently 87% complete and the estimated completion date is early 2019.

Fire Station 17



Fire Station 17 was completed at a total cost of \$7.01 million, a reduction of \$200,000 from the original contract amount.

Spotlight on Construction Storm Water Section

The Construction Storm Water (CSW) section supports resident engineers in ensuring construction projects are in compliance with the Municipal Storm Water Permit and the Construction General Permit. The team is currently made up of ten members with various backgrounds including civil, structural, environmental, and mechanical engineering, Computer Aided Drafting and Design, and Geographic Information Systems.



The CSW section is responsible for ensuring construction activities do not adversely impact downstream and onsite water resources. CSW reviews and approves water pollution control plans for City CIP projects and provide courtesy review for other City projects.

CSW works to protect water quality from onsite pollutant sources by requiring storm water Best Management Practices (BMPs) to be installed and correctly maintained, provides onsite BMP

inspections, and ensures grading and right of way permits are inspected at the minimum frequencies per the Municipal Storm Water Permit. CSW collects and prepares data for the Construction Management Program Section of the Jurisdictional Runoff Management Program Report on an annual basis.



CSW staff pride themselves on being a resource for resident engineers and contractors. CSW staff provides construction and permanent BMP inspection training to construction managers and resident engineers, and act as subject matter experts for National Pollutant Discharge Elimination System (NPDES) permit. They implement escalated enforcement on non-compliant construction sites and represent the City during the administrative citation appeal process.

CSW represents CMFS when providing and reviewing updates to the City Storm Water Standards Manual, and strives to ensure Storm Water requirements meet the needs of both the Storm Water Division and resident engineers.

Outlook

Currently 69 new CIP projects are expected to award in the remaining half of Fiscal Year 2019. With this new workload added to the current ongoing list of construction projects, it is anticipated a percentage of work will be managed by construction management consultants. CMFS will manage current workloads to ensure in-house resources are considered before approving staff augmentation with construction management consultants.

Work by private industry has not slowed the last three fiscal years, with an average of 2,200 permits issued each year. Over 1,250 private developments were inspected in the first half of Fiscal Year 2019. CMFS private permit inspections in the second half of Fiscal Year 2019 are expected to increase as new private construction projects are initiated and permit activity due to the 5G construction increases. Ongoing construction activity can pose coordination challenges with traffic control, operational shut downs, and community events. CMFS will work to identify and mitigate those impacts as early as possible. This work can only be inspected by City staff due to the current method of collecting permit fees.

CMFS will continue to look for innovative solutions to perform its work in an efficient manner that allows for more accurate updates to stakeholders and quality assurance of the contractors' operations as it continues to manage projects through the end of the Fiscal Year.