MEMORANDUM

To:	Jeremy Fontaine, Associate Planner; City of San Diego Transportation & Storm Water Department (TSW)
From:	Shelley Lawrence, Biologist- Balk Biological & Shannon Brown, Project Engineer - Dudek
Subject:	Pre-Construction Memorandum for the 3405 Kite Street Pipe Repair Project in the City of San Diego, California
Date:	February 10, 2020
cc:	Mayra Medel & Christine Rothman- TSW; Scott Gressard- Dudek; Vipul Joshi- Dudek; Michelle Balk- Balk Biological
Attachment(s):	Figures 1, 2, & 3 Photo Documentation Report

This memorandum serves as a report of the existing conditions on the site and outlines the work area for the proposed pipe repair project (project) at 3405 Kite Street, as shown on Figures 1, 2, and 3 and Attachment A, Photo Documentation Report.

I. PROJECT LOCATION AND DESCRIPTION

As described by the City of San Diego's (City) TSW, the project is located on a City-owned paper street adjacent to 3405 Kite Street and 3410 Jackdaw Street (Figures 1 and 2). The existing pipeline system carries storm water from Kite Street to Jackdaw Street. As part of the proposed project, the City will complete a full conditional assessment of the failed storm drain pipe. To do so, the City will further expose the failed pipe and inspect the downstream drainage system via closed-circuit television (CCTV).

Following the CCTV investigation, up to 50 feet of damaged portions of the exposed storm drain pipe will be removed and replaced with 18-inch high density polyethylene (HDPE) or lined with a cured-in-place pipe liner. The cured-in-place pipe liner will be pulled through the existing downstream CMP using the excavated trench and a downstream cleanout to access the system. If a steam cured liner is to be used, any liquid discharge from the operation will be collected at the downstream access point and disposed of properly. Installation of the 18-inch HDPE shall consist of a crushed rock base, pipe bedding, pipe, and backfill. Base, bedding, and backfill material will be delivered to the site via 12-yard dump truck, and the HPDE pipe via F450 Crew truck. The new HDPE pipe will be cut to size on site with a portable electric handsaw or gas-powered cutoff saw, connected with clamp fittings, and dropped into the trench using an excavator or crane. The pipe will be connected to an existing inlet structure located at the top of the slope at the intersection of Kite Street and West Upas

Street and to the existing downstream corrugated metal pipe (CMP) located on the slope adjacent to the proposed trench. The existing CMP continues down-slope, terminating at the cleanout on the corner of Jackdaw Street and West Upas Street. The pipe will be connected through use of a concrete pipe collar. A concrete pump connected to a concrete truck stationed in the staging area on Kite Street will pump the concrete material for the concrete collar. Up to 360 cubic yards of bedding and backfill material will be compacted in small, 24-inch lifts, using an excavator with a sheep's foot attachment for the deeper sections, and a gas-powered vibrator plate, or a gas-powered tamper, for sections closer to the surface.

Multiple 90-pound bags of concrete mix will be mixed on site utilizing wheelbarrows, and the wooden posts for the M-9 barrier will be set in concrete. In addition, any damage to the existing concrete curb inlet structure will be repaired. Work could include minor concrete patching or rebuilding of the 6' by 4' concrete lid with up to 2 cubic yards of concrete.

Prior to the beginning of any on site construction activities, construction Best Management Practices (BMPs) will be installed to prevent any non-storm water discharges from leaving the site. Construction BMP measures will be implemented per the City of San Diego's Storm Water Standards Manual. The site will be secured daily with temporary chain link fencing. Any construction BMPs that are removed during the workday will be replaced at the end of every day. A street sweeper will be utilized at the end of every day at a minimum, and as needed. Any excess construction material and BMPs will be removed from the site prior to the end of the project. Exposed areas will be revegetated with iceplant (*Carpobrotus edulis*) using plugs from the surrounding area and stabilized with a hydraulic mulch or soil binder. Access and staging will occur within the paved roadway at Kite Street, West Upas Street, and Jackdaw Street. The proposed work will be completed by a City of San Diego crew of 14 people. Work will take place between 7:00 a.m. and 4:00 p.m. and will take approximately ninety days to complete.

II. SURVEY METHODS

A reconnaissance level field survey of the proposed project area was conducted on October 29, 2019, by Balk Biological biologists Shelley Lawrence and Brynne Mulrooney to confirm the existing conditions of the site (Table 1). The biological survey was conducted in accordance with the City's Guidelines for Conducting Biological Surveys (Appendix I, City of San Diego 2012) and included vegetation mapping, a flora and fauna species list, and an assessment for jurisdictional waters. A total of nine photo points were established throughout the project to document pre-construction conditions within the project site (Attachment A).

Table 1
Survey Conditions

Date	Time	Personnel	Survey Conditions
10/29/2019	1300-1415	Shelley Lawrence and Brynne Mulrooney	Mostly Sunny; 3-8 mph winds; 68º Fahrenheit

The project site was accessible and surveyed by foot. Vegetation communities were mapped on site and classified following the City of San Diego Multiple Species Conservation Program and San Diego Biology Guidelines (SDBG), which are derived primarily from Holland (1986), as adopted in the City Land Development Code, Biology Guidelines (City of San Diego 2012) (Figure 3). The project site was evaluated for jurisdictional waterway features. All flora and fauna species observed were recorded (list available upon request), and the site was evaluated for the potential to support special-status wildlife and plant species.

III. RESULTS/IMPACTS

Vegetation Communities/Land Cover Types Impacted by the Project

Two land cover type will be temporarily impacted during project construction: ornamental plantings and developed land (Figure 3). Land cover types are described in detail below, and acreages are presented in Table 2.

Table 2
Vegetation Communities and Land Cover Types Impacts Proposed by the Project

Vegetation Community/Land Cover Type	Subarea Plan Tier	Temporary (acres)	Permanent (acres)
Land Covers			
Ornamental Plantings	IV	0.03	0
Developed Land	IV	0.09	0
	Total:	***0.12***	***0***

Ornamental Plantings

Ornamental plantings, also described as non-native vegetation (Oberbauer et al. 2008), includes trees, shrubs, and annual species that are not native to California. Ornamental plantings on the project site largely consists of iceplant (*Carpobrotus edulis*) as a planted groundcover. Ornamental plantings is considered Tier IV sensitive vegetation community according to the SDBG (City of San Diego 2018).

Developed Land

Developed land consists of areas that have been constructed upon or otherwise physically altered to an extent that native vegetation communities are no longer supported (Oberbauer 2008). Developed land may be characterized by the presence of structures such as residential or commercial buildings, pavement or hardscape such as roads or bike paths, and areas landscaped with ornamental or erosion controlling vegetation, often requiring irrigation. Onsite, the developed land was comprised of the street pavement associated with the staging area. Developed land is considered Tier IV sensitive vegetation community according to the SDBG (City of San Diego 2018).

Jurisdictional Waterway Features

Wetland and water features were not present within the project site; therefore, the project site does not support jurisdictional waters, including waters and wetlands of the United States subject to the jurisdiction of the United States Army Corps of Engineers; streams or riparian vegetation subject to the jurisdiction of the California Department of Fish and Wildlife; isolated waters subject to the jurisdiction of the Regional Water Quality Control Board per Section 401 of the Clean Water Act; or wetlands subject to the City of San Diego's Environmentally Sensitive Lands Regulations.

Special-Status Plants and Wildlife

No special-status plant or wildlife species were identified during the reconnaissance survey of the project site. Should work be scheduled to occur during the breeding season (January 15 to September 15), nesting surveys will be conducted by a qualified biologist within suitable habitat and the appropriate measures will be taken should nesting birds be identified in the project vicinity. Therefore, no impacts to sensitive wildlife are expected.

IV. CONCLUSION

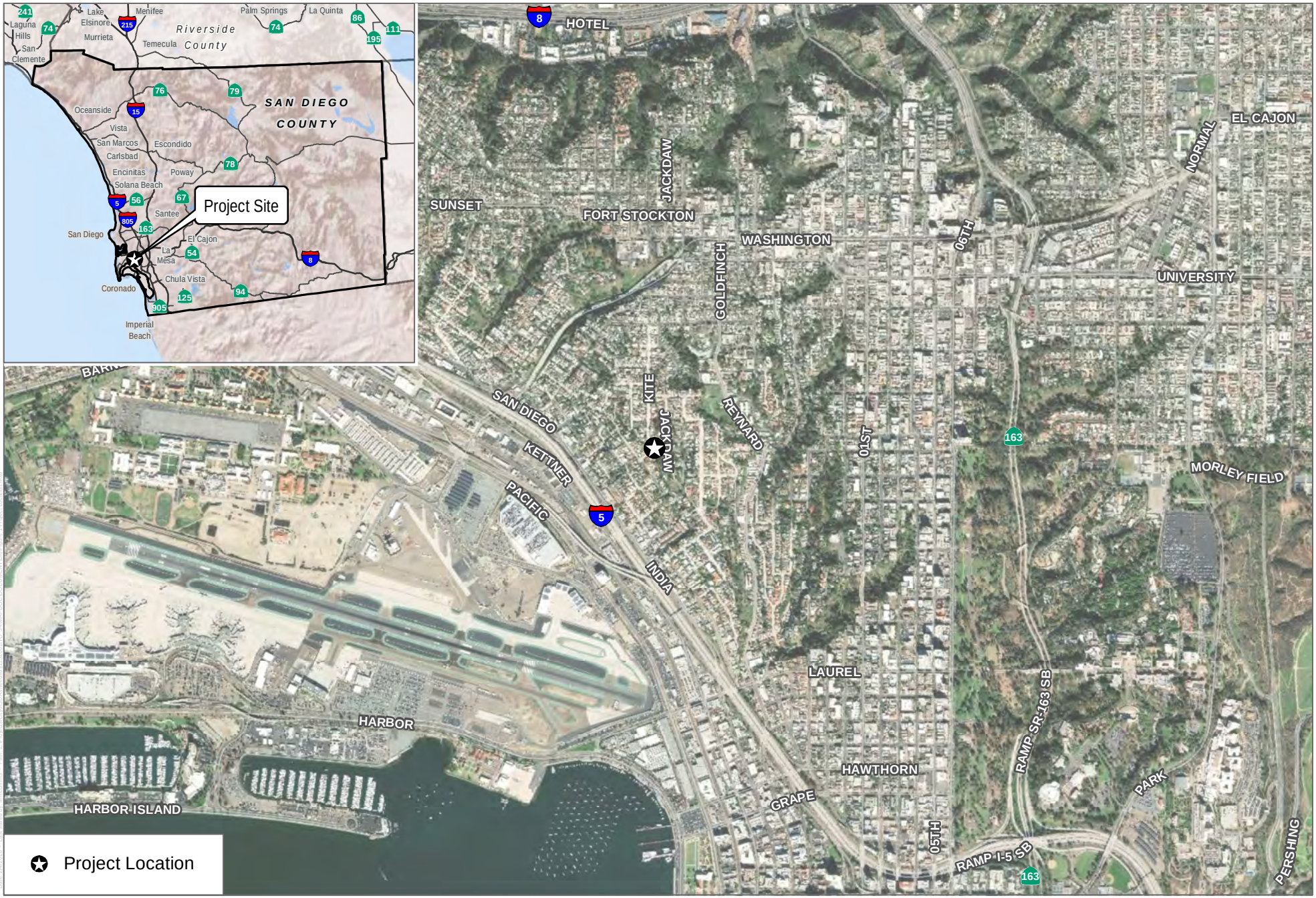
Temporary impacts associated with the proposed storm drain repair project are proposed to occur within the Tier IV land covers, ornamental plantings and developed land. No permanent impacts are proposed for the proposed storm drain repair project. Therefore, no mitigation is expected to be required for this project.

V. LITERATURE CITED

City of San Diego. 2018. San Diego Land Development Code Biology Guidelines. Amended February 1, 2018 by Resolution No. R-311507.

Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California.
Nongame-Heritage Program, California Department of Fish and Game.

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. March 2008. Accessed September 12, 2012. http://www.sdcanyonlands.org/canyon-groups/canyon-group-resources/canyon-enhancement-guide/189-canyonenhancement-planning-guide-materials.



SOURCE: DigitalGlobe 2017

DUDEK

0 1,000 2,000 Feet

FIGURE 1

Regional Location Map

3405 Kite Street Pipe Repair Project

SOURCE: SANGIS 2017

DUDEK

0 50 100 Feet

FIGURE 2

Project Vicinity Map

3405 Kite Street Pipe Repair Project

SOURCE: SANGIS 2017

DUDEK

0 50 100 Feet

FIGURE 3

Vegetation Map

3405 Kite Street Pipe Repair Project

ATTACHMENT A

Photo Documentation Report

Photo 1. Northeast-facing view of staging area at the corner of Kite Street and W. Upas Street.

Photo 2. West-facing view of storm drain pipe location.

Photo 3. East-facing view of storm drain pipe location.

Photo 4. Southwest-facing view of storm drain cleanout location.

Photo 5. North-facing view of the temporary impact area.

Photo 6. Southeast-facing view of storm drain inlet location.

Photo 7. East-facing view of failed storm drain pipe at sinkhole location.

Photo 8. West-facing view of failed storm drain pipe at sinkhole location.

Photo 9. North-facing view of existing concrete brow ditch**.**