

# Utility Infrastructure Plan

## Section 4

## UTILITY INFRASTRUCTURE PLAN

Buildout of MEREDITH INTERNATIONAL CENTRE requires the installation of water, sewer, drainage, and other utility infrastructure, as described in this section. All utility infrastructure improvements shall be constructed in accordance with applicable City of Ontario design standards and specifications.

### A. DOMESTIC WATER

Ontario Municipal Utilities Company provides domestic water service to the Specific Plan area as part of its service to Zone 1212. As shown on Figure 4-1, *Water Infrastructure Plan*, the MEREDITH INTERNATIONAL CENTRE property is served by water lines installed beneath North Vineyard Avenue, East 4th Street, and Inland Empire Boulevard.

Concurrent with the realignment of Inland Empire Boulevard through the Specific Plan area between the Cucamonga Creek Channel and East Vineyard Avenue, an 18-inch water line is planned to be installed beneath the newly aligned segment of Inland Empire Boulevard. In addition, approximately 400 feet of 6-inch diameter water line installed beneath North Vineyard Avenue at the time the 2015 Specific Plan Amendment was prepared is planned to be upsized to a 12-inch diameter line in conjunction with buildout of the Specific Plan and relocation of the Inland Empire Boulevard/North Vineyard Avenue intersection. New 12-inch diameter water lines are planned beneath the alignments of Del Rio Place and East Jay Street, which provide service to the industrial land uses within Planning Area 1. Due to locally high water pressure,

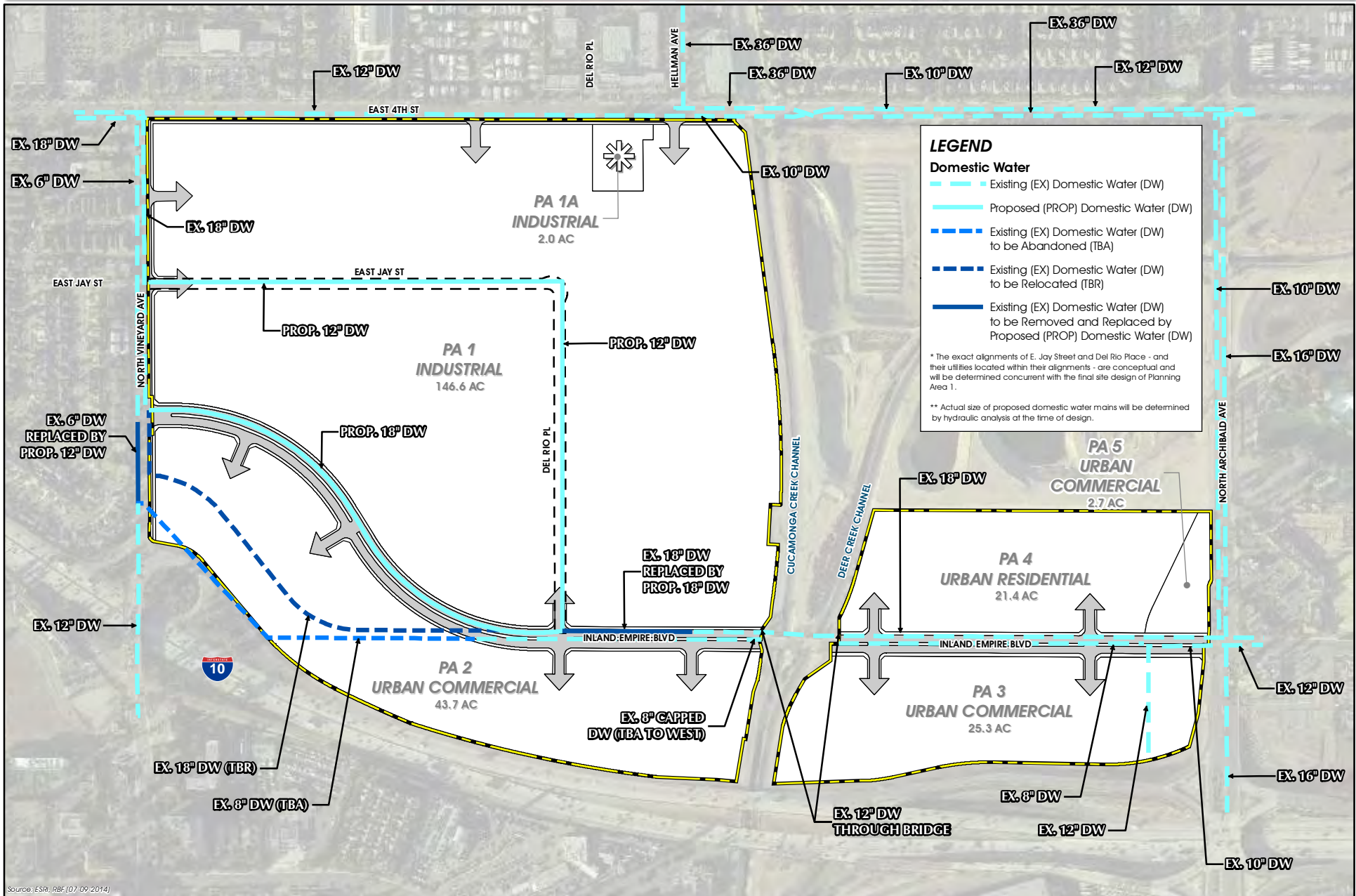
pressure reducers may be required to service buildings in the Specific Plan area.

According to a water supply assessment prepared by Ontario Municipal Utilities, the annual domestic water demand of MEREDITH INTERNATIONAL CENTRE is approximately 775 acre-feet.

### B. RECYCLED WATER

Ontario Municipal Utilities supplies recycled water to the Specific Plan area as part of its service to Zone 1270. As shown on Figure 4-2, *Recycled Water Infrastructure Plan*, MEREDITH INTERNATIONAL CENTRE is served by a 24-inch diameter recycled water line installed beneath East 4th Street and a 12-inch diameter line installed beneath Inland Empire Boulevard, east of North Archibald Avenue. An expansion of the recycled water system is planned to occur in association with the development of MEREDITH INTERNATIONAL CENTRE. The conceptual recycled water plan for MEREDITH INTERNATIONAL CENTRE provides for the following improvements: a 12-inch diameter line installed beneath North Vineyard Avenue between East 4th Street and the southwest corner of the Specific Plan area (terminating at the Interstate 10 right-of-way); a 12-inch diameter line installed beneath Inland Empire Boulevard beginning at North Vineyard Avenue and extending east to join the existing recycled water line east of North Archibald Avenue; and an 8-inch diameter line installed beneath North Archibald Avenue beginning at Inland Empire Boulevard and extending approximately 650 feet north. Installation of recycled water infrastructure is designed to occur concurrent with the associated roadway improvements. Due to locally high water pressure, pressure reducers may be required to service the Specific Plan area.

# MEREDITH INTERNATIONAL CENTRE



Source: ESRI, RBF (07-09-2014)

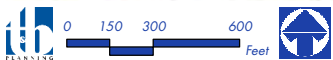
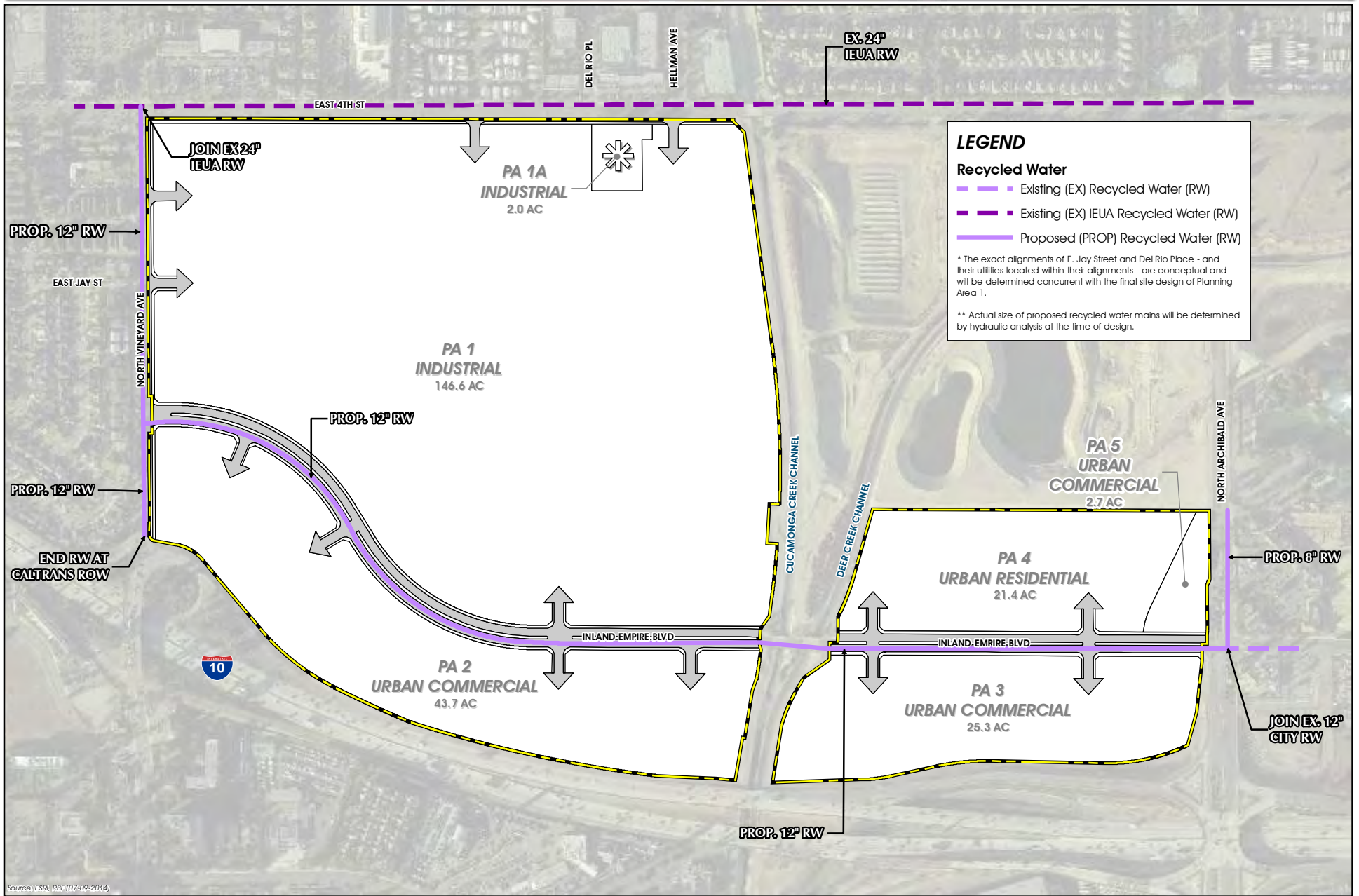


FIGURE 4-1

DOMESTIC WATER INFRASTRUCTURE PLAN



# MEREDITH INTERNATIONAL CENTRE



Source: ESRI, RBF (07-09-2014)

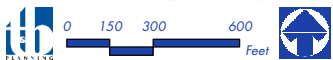


FIGURE 4-2

RECYCLED WATER INFRASTRUCTURE PLAN

## C. SANITARY SEWER<sup>1</sup>

The Specific Plan area is served by Ontario Municipal Utilities Company, which conveys wastewater to the Inland Empire Utility Agency (IEUA) for transmission to treatment facilities. As shown on Figure 4-3, *Sanitary Sewer Infrastructure Plan*, there is a 12-inch diameter pipe installed beneath North Vineyard Avenue, and an 8-inch diameter pipe installed beneath North Archibald Avenue. In addition, an existing 15-inch diameter pipe traverses Planning Area 3 approximately 300 feet west of North Archibald Avenue; this line conveys sewer flows from the 8-inch line beneath Inland Empire Boulevard south across Interstate 10 to treatment facilities.

IEUA system pipes are installed beneath Inland Empire Boulevard (24-inch diameter), and North Archibald Avenue (24- and 30-inch diameters), as illustrated on Figure 4-2. The IEUA sewer line beneath Inland Empire Boulevard is not available for domestic flows and, therefore, not available to service MEREDITH INTERNATIONAL CENTRE.

The sanitary sewer system for MEREDITH INTERNATIONAL CENTRE is designed to utilize the 15-inch diameter pipe installed within Planning Area 3 as the discharge point for flows produced within the Specific Plan area. To make a connection to this line, a pipe that transitions from an 8-inch to 15-inch diameter is planned beneath Inland Empire Boulevard from just east of North Vineyard Avenue to just west of North Archibald Avenue. Planned 8-inch diameter lines beneath the alignments of East Jay Street and Del Rio Place will convey flows from Planning Area 1 and connect to the planned line beneath Inland Empire Boulevard.

An 8-inch diameter siphon may be required under the Cucamonga Creek Channel and Deer Creek Channel. Additional off-site improvements to the City's sanitary sewer system may be necessary downstream of the MEREDITH INTERNATIONAL CENTRE (to be determined by the City of Ontario as part of the final engineering process for implementing development).

Based on sewer demand rates given in the 2012 City of Ontario Sewer Master Plan, MEREDITH INTERNATIONAL CENTER sanitary sewer flows are estimated at 481,930 gallons per day (gpd).

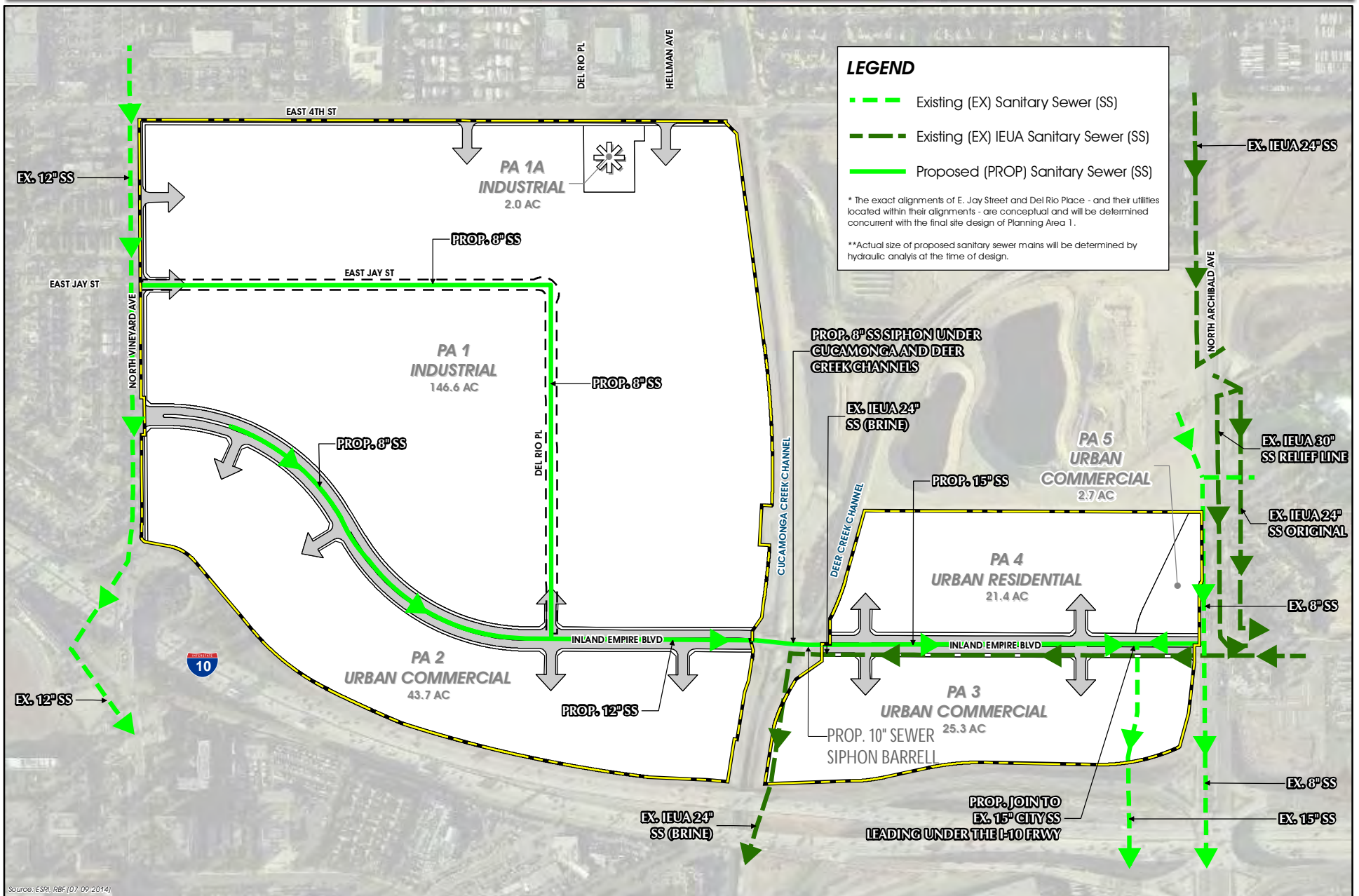
## D. CONCEPTUAL STORM DRAIN PLAN

The master storm drain plan for MEREDITH INTERNATIONAL CENTRE is shown on Figure 4-4, *Storm Drain Infrastructure Plan*.

Planning Area 1 drains in a southeasterly direction and the drainage ultimately flows into the Cucamonga Creek Channel. Basins for water quality and detention purposes are planned within Planning Area 1 to serve functional drainage purposes and may be supplemented by underground storm water chambers or dry wells if at-grade storm water storage space is limited. Flows discharged from Planning Area 1 will be conveyed east via a new storm drain pipe beneath Inland Empire Boulevard and discharged into the Cucamonga Creek Channel (via a new outlet connection).

Planning Area 2 drains easterly to an existing inlet connection to the Cucamonga Creek Channel adjacent to Interstate 10. No additional storm drain backbone infrastructure is needed to serve Planning Area 2.

1- As a result of the January 14, 2019 sewer study and its findings, the addition of residential units in the PA2 overlay resulted in a deficiency of the existing Inland Empire Siphon Crossing of the flood control channels. In order to address deficiencies, the project will be conditioned to pay a fee to participate in a capital improvement project. An additional 10-inch sewer siphon barrel is to be installed to upgrade the existing sewer siphon and to address the deficiency created.



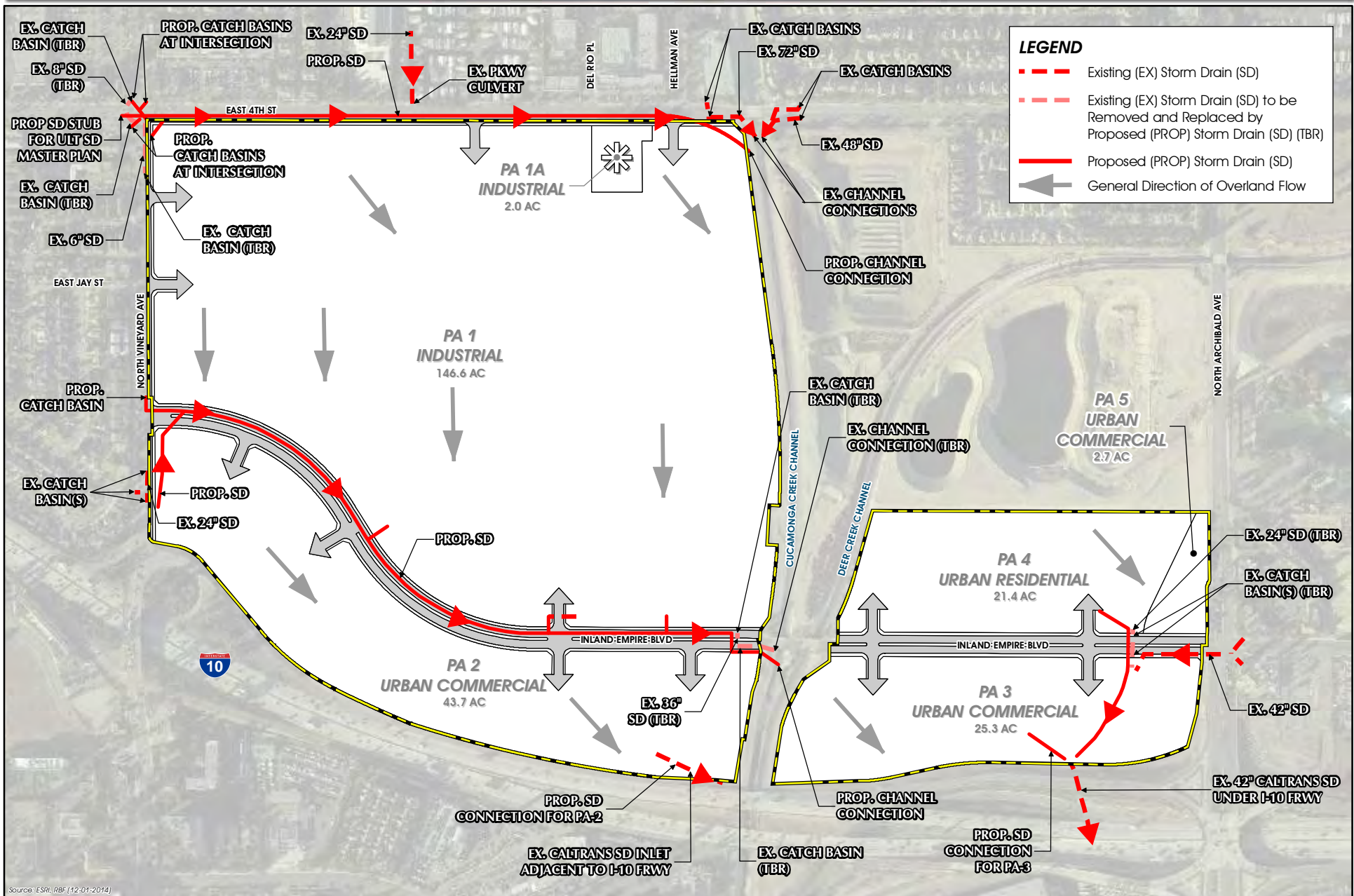
Source: ESRI, RBF (07-09-2014)



FIGURE 4-3

SANITARY SEWER INFRASTRUCTURE PLAN





**FIGURE 4-4**  
**STORM DRAIN INFRASTRUCTURE PLAN**

Planning Areas 3, 4, and 5 drain southerly toward Interstate 10. A new storm drain pipe will convey storm water flows from these areas to an existing culvert that is located south of Planning Area 3 and travels under Interstate 10. A water detention basin is planned in Planning Area 3 and/or Planning Area 4 to detain incremental increases in storm water flows before discharge to the culvert under Interstate 10.

The storm drain plan is designed to assure that post-development storm water runoff flows within the MEREDITH INTERNATIONAL CENTRE Specific Plan area (on-site) do not exceed 80-percent of pre-development flows, except as allowed by the San Bernardino County Flood Control District and/or the United States Army Corps of Engineers.

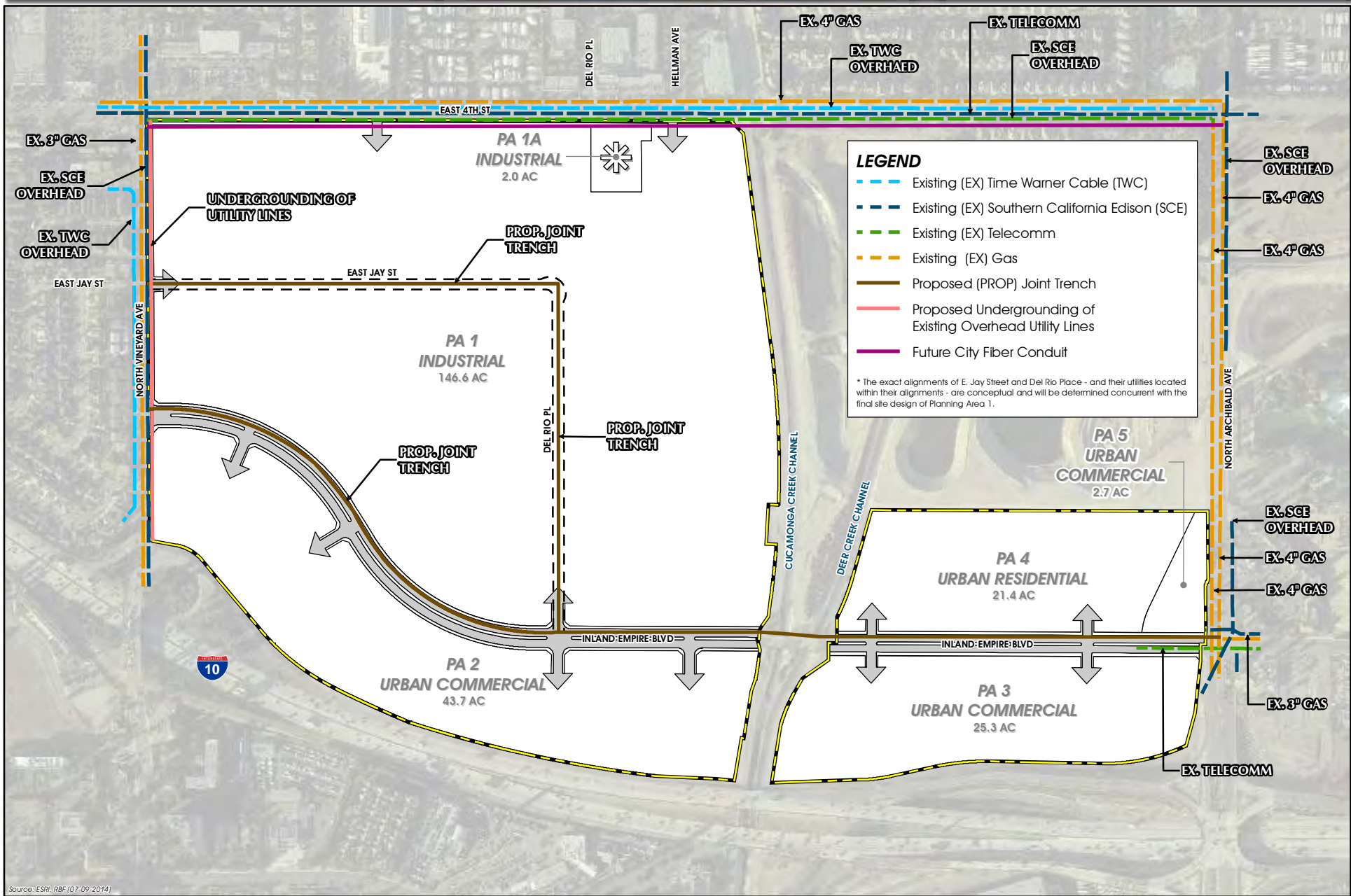
As part of development of MEREDITH INTERNATIONAL CENTRE, new storm drain improvements (e.g., storm drain pipe and catch basins) may be required within East 4th Street to capture storm drain flows that originate north (off-site) of the Specific Plan area. The potential storm drain improvements will convey storm water flows east where they would discharge into the Cucamonga Creek Channel at a new outlet connection in the northeast corner of Planning Area 1. In addition, as part of development of MEREDITH INTERNATIONAL CENTRE, short segments of existing storm drain and catch basins within Inland Empire Boulevard may be removed.

## **E. DRY UTILITIES**

MEREDITH INTERNATIONAL CENTRE receives electricity service from Southern California Edison (SCE), natural gas service from the Southern California Gas Company, and cable service from Time Warner Cable. As shown on Figure 4-4, *Dry Utility Infrastructure Plan*, electricity, gas, and cable lines are installed in North Vineyard Avenue, East 4th Street, and North Archibald Avenue. New lines are planned to be installed in Inland Empire Boulevard, Jay Street, and Del Rio Place to fully service the Specific Plan area. Overhead utility lines that were in place along the east side of North Vineyard Avenue at the time the 2015 Specific Plan Amendment was prepared would be undergrounded in conjunction with development of the MEREDITH INTERNATIONAL CENTRE in accordance with applicable public utility standards and specifications and to the satisfaction of the Ontario City Engineer.



# MEREDITH INTERNATIONAL CENTRE



Source: ES&P, RBF (07-09-2014)

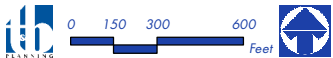


FIGURE 4-5

DRY UTILITY INFRASTRUCTURE PLAN