

ELEMENT 5. DESIGN AND PERFORMANCE PROVISIONS

This SSMP element describes the City’s design and performance provisions for its wastewater collection system that are required for the Design and Performance Provisions element of the WDRs. The major items discussed in this element are as follows:

- Regulatory Requirements
- Design Standards and Standard Construction Specifications
- Installation Inspection Procedures and Standards

REGULATORY REQUIREMENTS

The requirements for the Design and Performance Provisions element of the WDRs are listed in Table 5-1.

Table 5-1. Design and Performance Provisions Element Requirements

WDR Paragraph Number	Description of Requirement	Required Component
D-13-v(a)	Design Standards and Standard Construction Specifications	Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems
D-13-v(b)	Installation Inspection Procedures and Standards	Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

DESIGN STANDARDS AND STANDARD CONSTRUCTION SPECIFICATIONS

The City has design and construction standard specifications for the installation of new sewer systems, and for the rehabilitation and repair of existing sewer systems. These are in a City document entitled City of Vacaville Standard Specifications and Standard Drawings, adopted September 11, 1990 with revisions through June 23, 2015.

Sewer design standards are contained in Design Standards Section DS 6, Sanitary Sewer System, revised February 13, 2007. Standard sewer construction specifications are contained in Construction Standards Section CS 9, Sanitary Sewer, revised February 13, 2007.

The latest version of the Standard Specifications is posted on the City’s internet site and revised periodically: <https://www.ci.vacaville.ca.us/departments/public-works/standard-specifications-drawings>

Additional City sewer design parameters and criteria are documented in the draft Wastewater Facilities Master Plan prepared March 2018. The design of pump stations is coordinated between Public Works design team or Engineering Consultant with Utilities Department Engineering staff. .

INSTALLATION INSPECTION PROCEDURES AND STANDARDS

Installation inspection procedures and standards are documented primarily in the Construction Standards Section CS 9 of the Standard Specifications. Inspection procedures for lift station CIP projects are documented in the project contract specifications by Public Works with collaboration from Utilities Department. The Public Works – Construction section is tasked to provide in-house construction inspection services. When required, specialized inspection services are contracted directly or through a Construction Management Company.

EXHIBIT 5-A



ESTABLISHED 1850

City of Vacaville

Standard Specifications and Standard Drawings

ADOPTED: September 11, 1990
with Revisions through June 23, 2015

CITY STANDARD REVISIONS

<i>Standard Spec or Drawing No.</i>	<i>Description of Revision</i>	<i>Date Approved</i>
5-06	Requirements updated for Christy B36 utility box	10/1/15
5-05	Requirements updated for Christy B36 utility box	10/1/15
Title Page	Revision date has been updated to 6/23/2015	6/23/2015
3-25	Added Residential Traffic Circle specification	6/23/2015
Title Page	Revision date has been updated to 4/9/12	4/9/2012
3-04A	Stop bar on minor street was moved from 4' to 14' – illustrative only.	4/9/2012
3-24	Stop bar was moved from 4' to 14' and Note 4 was modified.	4/9/2012
Title Page	Revision date has been updated	4/22/2011
3-04B	Extra line was removed from the drawing to eliminate confusion	4/22/2011
3-10	Note was added under the Transverse Joints Table	4/22/2011
3-11	Added line showing measurement now 5' from bottom of driveway to hydrant, etc. rather than top of driveway	4/22/2011
3-12E	Added line showing measurement now 5' from bottom of driveway to hydrant, etc. rather than top of driveway	4/22/2011
3-13A	Added line showing measurement now 5' from bottom of driveway to hydrant, etc. rather than top of driveway	4/22/2011
3-13B	Added line showing measurement now 5' from bottom of driveway to hydrant, etc. rather than top of driveway	4/22/2011
3-15B	Title changed from Alternate to Retrofit Accessible Ramp Type B	4/22/2011
3-15C	Added item number 2 under Note	4/22/2011
7-06	Added Slurry to the box for theft protection	4/22/2011

**CITY OF VACAVILLE
DEPARTMENT OF PUBLIC WORKS**

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EXHIBIT 5-B

Wastewater Facilities Master Plan

Prepared for
City of Vacaville

March 2018



001-21-15-61

WEST YOST ASSOCIATES
consulting engineers

 This report printed on 50% post-consumer paper



Wastewater Facilities Master Plan

Prepared for

City of Vacaville

Project No. 001-21-15-61



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3/22/18

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