

COACHELLA VALLEY WATER DISTRICT

P.O. Box 1058
Coachella, California



STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF

WELL HEAD METER ASSEMBLIES

STANDARD SPECIFICATIONS
THROUGH DECEMBER 2008


COACHELLA VALLEY WATER DISTRICT
POST OFFICE BOX 1058
COACHELLA, CALIFORNIA 92236

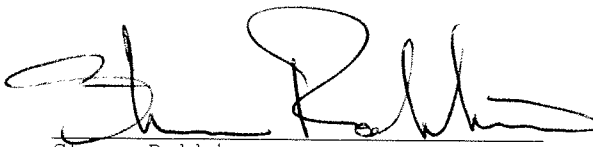
STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF
WELL HEAD METER ASSEMBLIES

Engineering Department
December 2008

Standard Specification for the Construction of
Well Head Meter Assemblies

Submitted by: Carrie Oliphant
Carrie Oliphant
Engineering Manager

Reviewed by: 
Mark L. Johnson
Director of Engineering

Approved by: 
Steve Robbins
General Manager-Chief Engineer

DECEMBER 2008

COACHELLA VALLEY WATER DISTRICT

Well Head Meter Specifications

This specification covers the materials, equipment and installation work necessary to specify, furnish, fabricate, install and test well head flow metering devices.

1.1 The meter is required to be of the direct drive propeller or paddle type. The propeller type meter shall have a minimum of 3 vanes within the flanged flow tube and be constructed with a magnetic drive with a sealed housing for 150 psi working pressure. The paddle type meter shall be an insertion type with a non-magnetic paddle wheel as the only moving part. The digital flow meter register shall read in units of cubic feet per second (cfs) or gallons per minute (gpm) and will be equipped with a six digit totalizer reading in units of acre-feet. The meter will comply with all applicable provisions of the C700 series American Water Works Association (AWWA) Standards and will be accurate to within a range of 2 percent.

1.2 The meter will be installed per CVWD Drawing Nos. Irr. 101 A or B and shall be from one of the following District-approved manufacturers with the corresponding model number:

<u>Item No.</u>	<u>Manufacturer</u>	<u>Model No.</u>	<u>Remote Read Model*</u>
1	Water Specialties	ML-04-D	FC-100
2	McCrometer	MW500 Series w/ Electronic Register	FC-100
3	Badger/Data Industrial	SDI Series (Stainless Steel)	SDI0xxB22-0200

*Where applicable

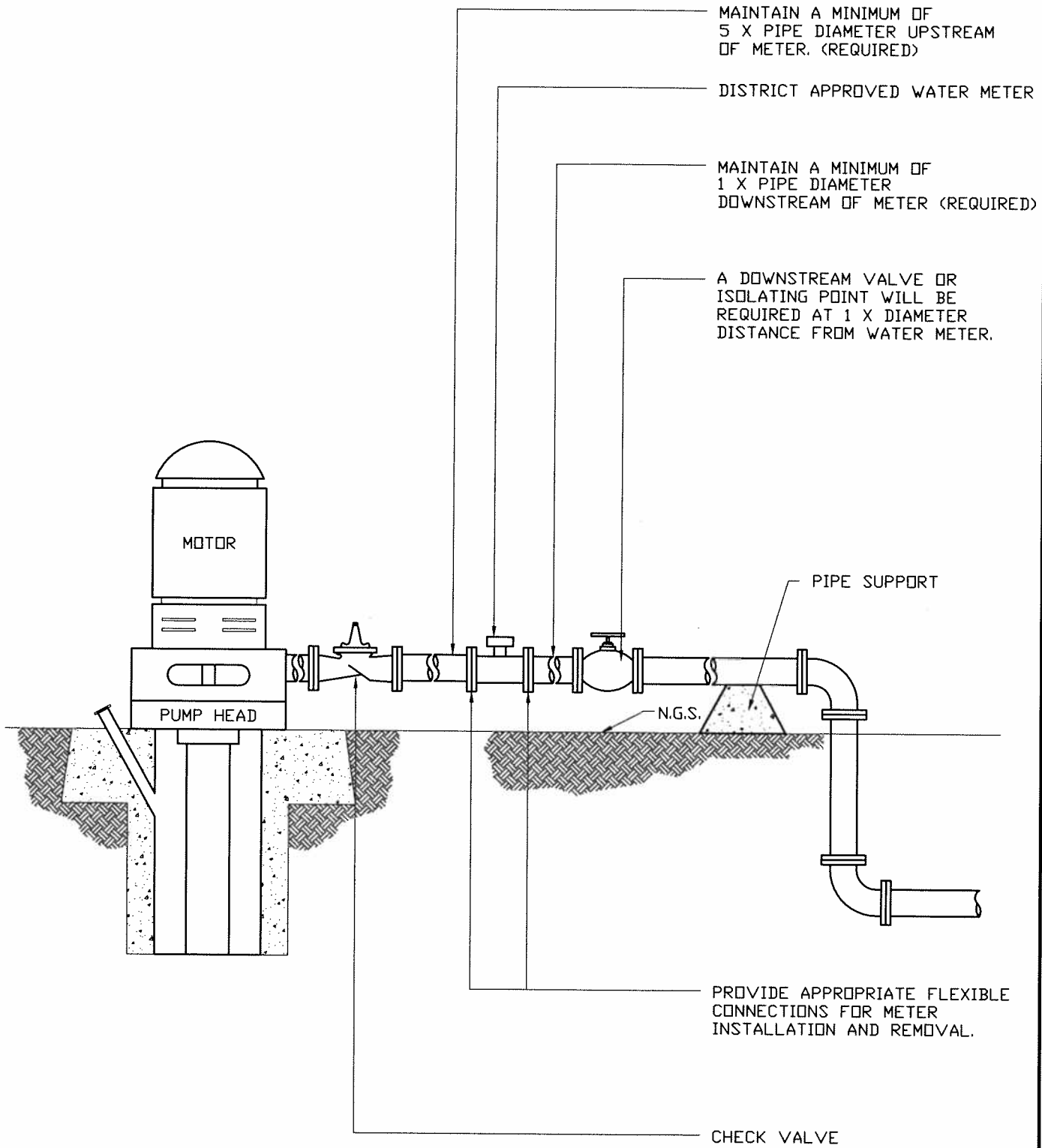
x Dependent on connection and pipe size

1.3 The meter shall be installed per the manufacturer's recommendations and is required to match flow ranges outlined below:

Flow Ranges, GPM

<u>Meter size</u>	<u>Flow range</u>	
	<u>Minimum</u>	<u>Maximum</u>
4-inch	55	500
6-inch	120	1,200
8-inch	150	1,500
10-inch	180	2,000
12-inch	200	3,000
14-inch	300	4,000

1.4 Volumetric testing of all meters is required to be performed and approved by the manufacturer prior to shipment. The complete meter head assembly will be accuracy tested in the same pipe size and same tube that the meter will be mounted in. The test will be at the minimum, maximum and intermittent manufacturer's specified flow ranges of the meter. The amount of water used to conduct the test must be left on the totalizer. Prior to shipping, a tag is required to be attached to the meter showing the totalizer reading after the test.

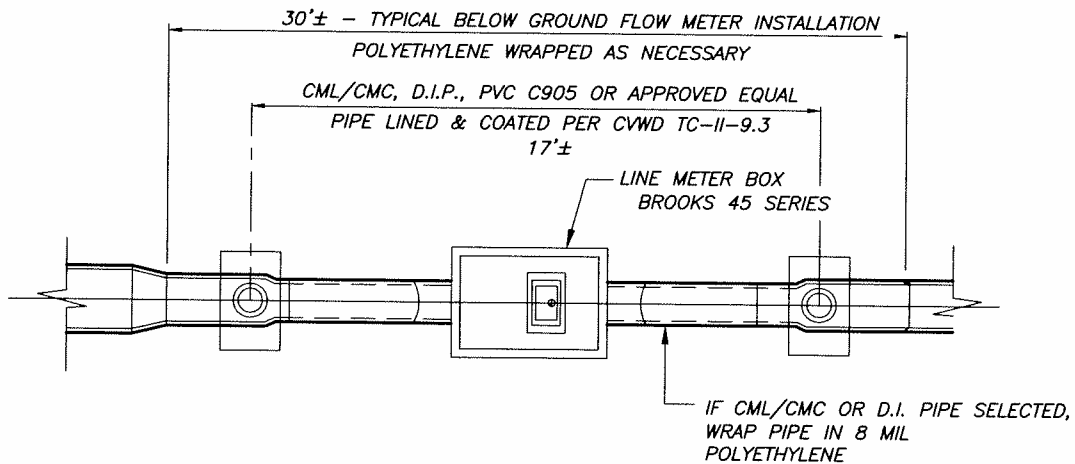
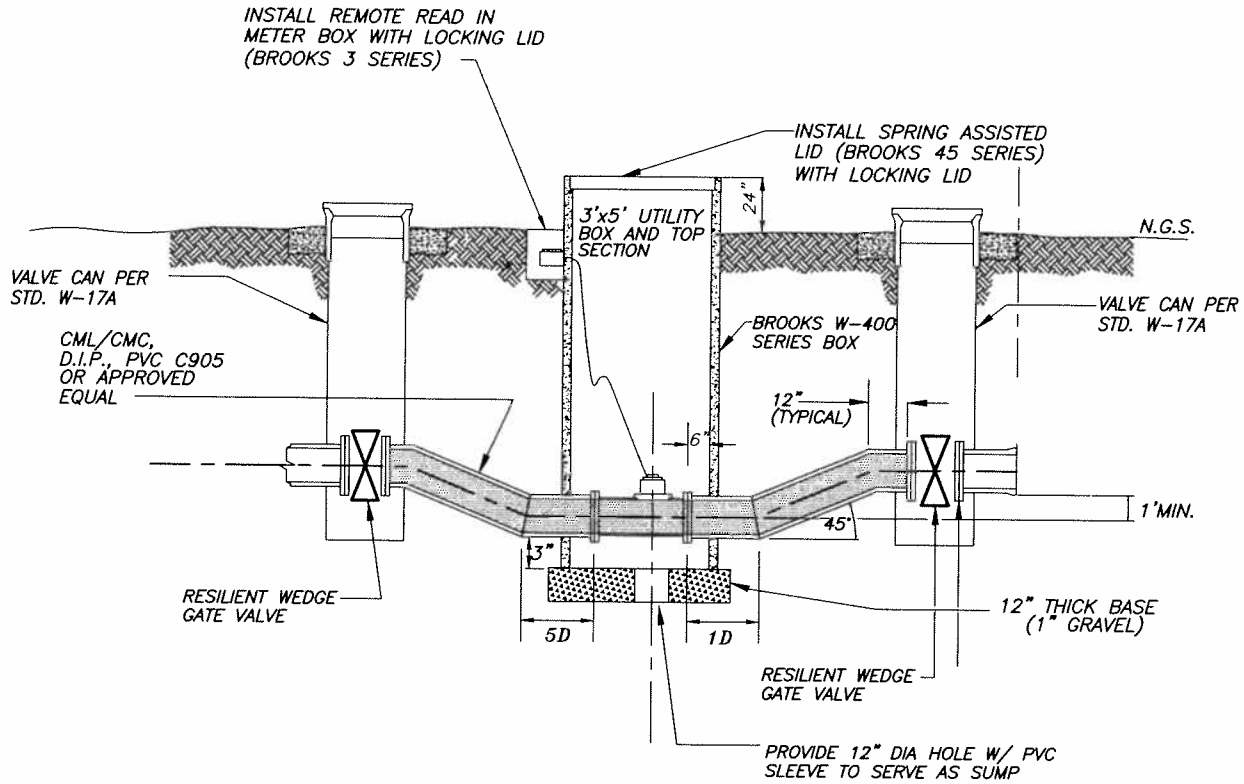


COACHELLA VALLEY COUNTY WATER DISTRICT

Drawn: Carlos Perez
 Checked: Michael Schaefer
 Submitted: _____
Director of Engineering
 Approved: _____
Gen. Mgr. - Chief Engineer
 Date: _____

**SCHEMATIC FLOW METER INSTALLATION
 (Above ground)
 (Not to scale)**

REVISION			
Date:			
By:			
Approved:			
DRAWING			
Irr. 101A			



COACHELLA VALLEY WATER DISTRICT

Drawn: CARLOS PEREZ
 Checked: MICHAEL SCHAEFER
 Submitted: _____
 Director of Engineering
 Approved: _____
 Gen. Mgr. - Chief Engineer
 Date: _____

SCHMATIC FLOW METER INSTALLATION
 (BELOW GROUND)
 (NOT TO SCALE)

REVISION			
Date:			
By:			
Approved:			
DRAWING			
Irr. 101 B			