

**SUMMARY OF MAJOR CHANGES
TO STANDARD DETAILS FOR CONSTRUCTION
DATED SEPTEMBER 2021**

Section II - Miscellaneous Details

Revised Standard Details:

M/7.0 Updates to Earth Tunnel Subsurface Borros Point Settlement Indicator

New Standard Details:

M/7.2 New Slope Movement Indicator Inclinometer Detail

Deleted Details:

M/1.0 CONVENTIONAL SIGNS – a more up to date listing of standards can be found in cad format on wsscwater.com website

Section III-Sewer Details

Revised Standard Details:

S/3.0 Removed reference to C905 in accordance with specifications.

S/3.01 Removed reference to C905 and added DR21 to allow for pipe bursting materials.

S/8.1 Removed reference to C905 in accordance with specifications. Added information for maximum cover over differing pipe materials.

Section IV-Water Details

Revised Standard Details:

W/2.4 Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.

W/2.6 Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell. Revised the Mesh screen from 1” screen to ½” screen.

W/3.0 Revised location of weld-on connection into existing water main.

W/3.02 Revised location of weld-on connection into existing water main.

W/3.08 Revise the Title from Special Detail to Standard Detail

W/4.2 Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.

W/4.3 Revised details with Plug Valves instead of Gate Valves. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.

- W/4.5 Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.
- W/4.6 Revise detail and notes to reference minimum of 1% slope toward the headwall or flap valve of pressure relief valve piping.
- W/4.7 Two valves changed from gate valves to plug valves. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.
- W/5.0 Revised from 1” to 2” remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell. Added reference to M/16.1 for ladder extension.
- W/5.0a Modify Thrust blocking to match thrust blocking revised in 2016.
- W/5.0b Revised from 1” to 2” remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. . Revised notes referencing conduit for clarity. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell. Added reference to M/16.1 for ladder extension.
- W/5.0c Revised from 1” to 2” remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised Vault to be 10’X6’ on one of these notes which conflicted with the other. Revised notes referencing conduit for clarity. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.
- W/5.0d Modify Thrust blocking to match thrust blocking revised in 2016.
- W/5.0e Revised note 1 and added note 2 for clarity. Revised name of detail for clarity.
- W/5.0f Revised 4” flg. X 4” quick-connection cam and groove female coupler to 4” female cam and groove quick connect coupler X 4” FNPT. Added lockout/tagout that states “for meter services only”.
- W/5.0g Revised from 1” to 2” remote conduit. Removed MJ solid sleeve. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.
- W/5.0h Revised 4” flg. X 4” quick-connection cam and groove female coupler to 4” female cam and groove quick connect coupler X 4” FNPT. Added lockout/tagout that states “for meter services only”.
- W/5.0i Revised from 1” to 2” remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. Revised sump to be 12” RCP sump w/ concrete plug or 12” push-on joint DIP with bell w/ concrete plug at bell.
- W/5.1 Revised from 1” to 2” remote conduit. Added notes 5 and 6 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity.
- W/5.1a Modify Thrust blocking to match thrust blocking revised in 2016. Added gate valves to the plan view.
- W/5.5 Added opening dimension for 30” in square or 36” inch square.
- W/5.6 Change minimum depth from 14” to 16” minimum.

- W/5.7 Change minimum depth from 14" to 16" minimum.
- W/5.8 Change minimum depth from 14" to 16" minimum.
- W/5.9 Change minimum depth from 14" to 16" minimum.
- W/5.9a Change minimum depth from 14" to 16" minimum. Redrew restrained cap or plug.
- W/5.15 Change minimum depth from 14" to 16" minimum.
- W/5.15a Change minimum depth from 14" to 16" minimum.
- W/6.1 Reference to C905 replaced with C900.
- W/7.1 Drawing revised to meet new plumbing code.
- W/7.2a Add note 9 referencing pipe material between ball valve. Add information about 90 degree sweep to note 6. Change remote conduit to 1". Show 90 degree bend as two 45 degree bends. Replace sealed "closed" with security wire by wssc on the bypass piping and replace with "tamper resistant and lockable type ball valve. Remove union next to meter. Remove reference to copper water service throughout drawing since other materials are now allowed.
- W/7.2b Add note 9 referencing pipe material between ball valve. Add information about 90 degree sweep to note 6. Change remote conduit to 1". Show 90 degree bend as two 45 degree bends. Replace sealed "closed" with security wire by wssc on the bypass piping and replace with "tamper resistant and lockable type ball valve. Remove union next to meter. Remove reference to copper water service throughout drawing since other materials are now allowed.
- W/7.3a Add note 9 referencing pipe material between ball valve. Add information about 90 degree sweep to note 6. Change remote conduit to 1". Show 90 degree bend as two 45 degree bends. Replace sealed "closed" with security wire by wssc on the bypass piping and replace with "tamper resistant and lockable type ball valve. Remove union next to meter. Remove reference to copper water service throughout drawing since other materials are now allowed.
- W/7.3b Add note 9 referencing pipe material between ball valve. Add information about 90 degree sweep to note 6. Change remote conduit to 1". Show 90 degree bend as two 45 degree bends. Replace sealed "closed" with security wire by wssc on the bypass piping and replace with "tamper resistant and lockable type ball valve. Remove union next to meter. Remove reference to copper water service throughout drawing since other materials are now allowed.
- W/7.3b Add note 9 referencing pipe material between ball valve. Add information about 90 degree sweep to note 6. Change remote conduit to 1". Show 90 degree bend as two 45 degree bends. Replace sealed "closed" with security wire by wssc on the bypass piping and replace with "tamper resistant and lockable type ball valve. Remove union next to meter. Remove reference to copper water service throughout drawing since other materials are now allowed.
- W/7.4 Replace Mechanical coupling with strapping on Plan and Elevation with Mechanical Joint Solid Sleeve. Change remote reader from 1" to 2". Remove 90 degree bend and replace with 2-45 degree bends. Revise note 6 to include reference to 90 degree sweep. Added note 9 to replace existing valve "sealed closed with security wire by wssc" to tamper resistant and lockable type ball valve.
- W/7.5 Replace Mechanical coupling with strapping on Plan and Elevation with Mechanical Joint Solid Sleeve. Change remote reader from 1" to 2". Remove 90 degree bend and replace with 2-45 degree bends. Revise note 6 to include reference to 90 degree sweep. Added note 9 to replace existing valve "sealed closed with security wire by wssc" to tamper resistant and lockable type ball valve.

- W/7.6 Replace Mechanical coupling with strapping on Plan and Elevation with Mechanical Joint Solid Sleeve. Change remote reader from 1" to 2". Remove 90 degree bend and replace with 2-45 degree bends. Revise note 6 to include reference to 90 degree sweep.
- W/7.7 Replace Mechanical coupling with strapping on Plan and Elevation with Mechanical Joint Solid Sleeve. Change remote reader from 1" to 2". Remove 90 degree bend and replace with 2-45 degree bends. Revise note 6 to include reference to 90 degree sweep.
- W/8.0 Updated list of suppliers in accordance with specifications.
- W/8.1 Modify the distance from paved section as 12' max/ 4' min in accordance with the design manual. Updated list of suppliers in accordance with specifications.
- W/10.2 Added optional 6" stub with 6" flange gate valve and blind flange for NDT. Removed polyethylene encasement from the pipe.
- W/10.3 Polyethylene encasement removed from pipe. Revised opening to be 36 inch rather than 30 inch. Note 3 added referencing Detail W/2.8 for PE encasement.
- W/10.4 Added option for 36 inch diameter openings.
- W/10.5 Polyethylene encasement removed from pipe. Revised opening to be 36 inch rather than 30 inch.
- W/10.7 Added option for 36 inch diameter openings.
- W/14.0 Revised from 1" to 2" remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. Fix reference for continuation. Revised sump to be 12" RCP sump w/ concrete plug or 12" push-on joint DIP with bell w/ concrete plug at bell. Added reference to M/16.1 for ladder extension.
- W/14.0a Revised from 1" to 2" remote conduit. Added notes 7 and 8 for sweep and contractor and meter installer termination points. Revised notes referencing conduit for clarity. Fix reference for continuation. Revised sump to be 12" RCP sump w/ concrete plug or 12" push-on joint DIP with bell w/ concrete plug at bell. Added reference to M/16.1 for ladder extension.
- W/14.0b Removed reference to 2-45 MJ vertical bends. Removed reference to strapping tee to thrust block referencing detail B/3.1. Fixed reference to W/13.0. Removed reference in table to FM meter

New Standard Details:

- W/5.0j Fire Hose Connection in Traffic Areas for FM Meter Ultrasonic and Detector check Precast vault layouts
- W/14.1a 4-inch Ultrasonic Meter with Check Valve Vault
- W/14.1b 6-inch and 8-inch ultrasonic Meter with Check Valve Vault
- W/14.1c 10-inch Ultrasonic Meter with Check Valve Vault

Deleted Details:

- W/7.8 Detector check assembly is no longer allowed with revised plumbing code.

- W/7.9 Detector check assembly is no longer allowed with revised plumbing code.
- W/12.0 Detector check assembly is no longer allowed with revised plumbing code.
- W/12.0a Detector check assembly is no longer allowed with revised plumbing code.
- W/14.0c Ultrasonic Meter Vault Piping layout (Elevation). Manufacturers are no longer requiring the bends in piping outside of the meter vault that maintained the meter constantly wet..

Section V-Blocking Details

Revised Standard Details

- B/1.8 Added option for ¼ degree bend in use only when blocking a riser. Additionally, rebar shown in Elevation and section view for the block.
- B/3.1 Fixed overlapping text. Changed reference for reinforcing details from B/3.1 to B/3.3. Revised note 1 to remove existing DIP or CIP instead of PCCP. Added rebar to both sides of the thrust block in accordance with the revised detail B/3.3.
- B/3.3 Added rebar to both faces of the block for bi-directional thrust blocking only. Removed reference to TSG and replaced with EESD for review. Revised table for Thrust block reinforcement to be “each way”.

Section VI – Corrosion Details

Revised Standard Details:

- C/2.2 Added 1” PVC to drawing referencing Note 6. Added note 6. Modified Wiring schedule for Permanent reference electrode for AWG wire size and type of insulation to “per manufacturer”.
- C/4.6 Added 1” PVC and Note 3
- C/6.0 Replaced existing note with note about first and second coat of polyken.

Added Standard Details:

- C/1.1a Ductile Iron Pipe Bonding of Fitting Joints
- C/1.2a Bonding of Existing Pipe with Cathodic Protection when Connecting to new Metallic Water Mains
- C/1.3a Ductile Iron Pipe Bonding Around Manhole
- C/1.7 Attachment of Bonding Wires for Crossing Water or Metallic Sewer Pipelines
- C/1.7a Attachment of Bonding Wires for Parallel Water or Metallic Sewer Pipelines
- C/1.7b Pipeline Junction box Detail (Typical)
- C/3.2b Insulating Spool
- C/4.0b Flush Mounted Test Station Terminal Block for Bonded Pipelines

Deleted Details:

C/7.8 – PVC AWWA C-900 Pipe Anode Protection for Fire Hydrant Lead Pipes – PVC not allowed for use with Fire Hydrant leads.

Section VIII-Sediment Control Details

Added Standard Details

SC/21.0 Concrete Washout Structure

SC/21.1 Concrete Washout Structure

Section IX-Procurement and Manufacturing Details

Revised Standard Details

P&M/1.0 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/1.1 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/1.2 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/2.2 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/2.3 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/2.4 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.
Added note to refer to specifications for Curb Box Rod since P&M/2.7 is being removed.

P&M/2.5 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations.

P&M/4.0 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations

P&M/4.1 Changes made to detail to account for new AMI program needs. Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations

P&M/4.2 Changes made to detail to account for new AMI program needs. Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations

P&M/4.3 Changes made to detail to account for new AMI program needs.

P&M/7.0 Replace Asphaltum or Coal Tar Pain with Solvent-based Asphalt Paint according to new regulations

Added Standard Details

P&M/4.0a Type “A” Meter Frames for Meter Housing

P&M/4.4 9” Standard Meter Covers

P&M/4.5 9” Traffic 2 Holes Meter Covers

P&M/4.6 9” Traffic Single Hole Meter Covers

P&M/4.7 12" Standard Single Hole Meter Covers

P&M/4.8 12" Standard Double Hole Meter Covers

P&M/4.9 12" Traffic Single Hole Meter Covers

P&M/4.10 12" Traffic Double Hole Meter Covers

P&M/4.11 21" Standard Single Hole Meter Covers

Deleted Details:

P&M/2.7 Curb Box Rod and Guide Ring – Guide Ring no longer used. Refer to specifications for Curb Box Rod.

P&M/9.0 Main Valve for Improved L.D.Wood Mathews Adapter type Fire Hydrant. – Manufacturer no long exists

P&M/10.4b Heavy Weight Manhole Frame & Cover

P&M/10.4b1 Heavy Weight Manhole Frame & Cover

P&M/11.1 Stand-up Meter Key