

## APPROVED MATERIALS LIST

Relating to Section 1.15 of "Design and Construction Standards for Wastewater Collection Systems 2009", *latest edition*:

Revised July 29, 2011

Revised September 21, 2011

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To: Distribution

From: Materials Committee, *Boyd Duchene (Chairman)*

Interested parties who wish to be considered for this list please send a packet of information containing 4 submittal copies for review to Materials Committee Chairman at Clark County Water Reclamation address. Remember to add your contact information.

Interested parties who wish to point out incorrect designations or other needed typing corrections should contact the Materials Committee Chairman at **(702) 668-8205**.

*The Approved Materials noted below are for Developer projects, and is provided to expedite any submittal process.*

### I. APPROVED PIPE

(PVC solid wall sewer pipe)

Pipe Size

(Inches)

ASTM Wall Thickness

Min.

4-15 D3034 SDR35

18-30 F679 "T-1" or "T-2"

Approved cell classifications (defined in ASTM D-1784):

12454(A, B, or C) all sizes

12364(A, B, or C) all sizes

13364(A, B, or C) all sizes

(Additional Sewer Pipe)

PVC Pressure Pipe AWWA C-900

PVC Pressure Pipe AWWA C-905 (Case by case basis)

VCP (Vitrified Clay Pipe)

(Small Diameter Sewer Pipe, Up to 15-inch diameter)

- CCFR (Hobas Centrifugally Cast Fiberglass Pipe), 12" through 72".

- CHDPEP – Corrugated High Density Polyethylene Pipe AASHTO Type S 18” through 60”.
- Diamond Plastics Corp, solid wall PVC, 18" through 27", (Cell Class 12364C).
- Diamond Plastics Corp, Pro-21 closed profile PVC Sewer Pipe, Size 21" through 60".
- Diamond Plastics Corp, solid wall PVC, (Cell Class 12364C).
- Korflo Pipe, Sizes 18” through 36”.
- Lamson Vylon HC Closed Profile PVC Pipe, 21" through 48".
- Meyer Polymer Concrete Pipe, installed by direct burial & installed by microtunneling/jacking, provided that the microtunneling contractors shall be experienced and use slurry microtunneling machines only.
- Polymer Pipe Technology Inc, Interpipe reinforced polymer concrete jacking pipe, Size 24" to 144", cylindrical.
- Polymer Pipe Technology Inc, Interpipe reinforced polymer concrete pipe, Size 24" to 144", cylindrical, pipe class to be designed but in no case less than Class III, installed by direct burial.
- PWPipe, Solid Wall PVC (Large Diameter Sewer Pipe, Greater than 15-inch diameter).
- PWPipe, Solid Wall PVC, Size 18" through 24".
- P.W. Rib Pipe, ASTM 794, 18" through 48" (Cell Class 12364B).
- Vinyltech Corp, Solid Wall PVC, King’s Joint, (Cell Class 12454B).
- Ultra-Corr PVC Sewer Pipe, Size 24"-36".
- Ultra Rib PVC, 18" through 30".
- SaniTite - Poly propylene 30” – 60” Triple Wall Pipe
- SaniTite - HDPE 30” – 60” Dual Wall Pipe

## II. APPROVED M.H. COMPONENTS & ACCESSORIES

- Alhambra Foundry Co., 24" M.H. frame & cover, type A-1310.
- D&L 24" M.H. frame and cover, Model A-1075.
- D&L 24” M.H. hinged locking frame and cover A-3100.
- D&L 30" M.H. frame and cover, Model A-1251.
- D&L 36” M.H. frame and cover, Model A-1426/E-1426
- East Jordan Iron Works1033Z Hinge Co Round Frame w/slotted Flange Assembly.
- East Jordan Iron Works1033Z1 HingeCo Round Frame w/solid Flange Assembly.
- East Jordan Iron Works1034Z HingeCo Round Frame w/slotted Flange Assembly.
- East Jordan Iron Works1034Z1 HingeCo Round Frame w/solid Flange Assembly.
- Geneva Pipe Precast M.H. components, 48" & 60" - Precast bases & cones.
- GSE Studliner for Manholes and Wetwells.
- Hydro Conduit –

- Jackmen Industries Manhole Frame Adjusting System (with a #4 circumferential rebar only).
- Jensen Precast 48" diameter, 5" wall components and eccentric cones.
- Lane Copolymer Polypropylene M.H. Step P-14850.
- M.A. Industries Polypropylene M.H. Step PS2-PFS.
- Bowco Industries Inc – M.H Step 81213R
- Multiplexx Liner, by Terre Hill Composites.
- Nation Castings 36" M.H. frame (Ring8526) and Outer & Inner covers both Concentric & Eccentric
- Neenah Manhole Frame & Cover.
- Norfolk Casting Corporation M.H. frame and cover, Model NC-8575.
- NPC, Inc., KOR-N-SEAL I and II Pipe to Manhole Connectors w/ 304 Series stainless steel external clamps & w/ 305 Series stainless steel bolt assembly.
- Olson Precast, 72" x 30" diameter M.H. Cone.
- Olson Precast cones, 30" & 36" H for 48" pipe, 24" H for 48" to 60" transition pipe with 6" walls.
- PAMREX 24-inch Manhole Cover and Frame.
- Pipeline Components Inc, 24" M.H. frame & cover.
- Pont-A-Mousson GTS M.H. Frame & Cover, 23.625" clear opening.
- Pont-A-Mousson Paris S Frame & Cover, 31-1/2" clear opening.
- Press-Seal Gasket Corp, Press-Boot Pipe to Manhole Connector w/ glass reinforced nylon expansion ring, in following sizes: Max. Pipe O.D. Size (inches) = Up to 10.5".
- Press-Seal Gasket Corp, PSX Positive Seal Pipe to Manhole Connector w/ Type 304 stainless steel expansion ring, in following sizes: Pipe Size (inches) = Up to 36".
- Rexus 24-inch Manhole Cover and Frame.
- Rockway Precast M.H. components, 48" & 60" - Precast bases & shorty cones.
- South Bay Foundry, 24" M.H. frame & cover, Model #SBF-1310.
- South Bay Foundry, 30" M.H. frame & cover, Model #SBF-1252-4, both locking and nonlocking.
- South Bay Foundry, 24" M.H. frame & cover, Model #SBF-1310, Locking Manhole Cover.
- Spanish Fork Foundry Drwg. #110, Standard M.H. ring and cover.
- Speed-Crete Blue Line 1397-V.
- Sun Coast Environmental, Poly-Triplex Liner System.
- W.R. White, 48" & 60" precast concrete M.H. bases.
- W.R. White, 60" x 48" M.H. reducer.
- Wyn-Stik ES45 or Wyn-Stik ES21 epoxy, for epoxying M.H. steps in place.

**THOSE EPOXY SPRAY ON LINER PRODUCTS ON THE APPROVED MATERIALS LIST ARE MEANT TO BE USED ON EXISTING MANHOLES ONLY.**

**III. APPROVED PIPE ACCESSORIES**

- DFW Plastics, Inc. - Non Shear Repair Coupling, 4" through 8".
- DPW/HPI - Flexible Tee and Wye Saddle.
- Fowler Inserta Tee Products.
- Hurco Multi size Mandrell (Contractor must provide proving ring for checking accuracy).
- Hurco Stationary Type Mandrell.
- Romac Industries, Style "CB" Sewer Saddle.
- Ameron International, T-Lock PVC Sheet Liner
- Raven Lining Systems – Raven 405 – Spray on Epoxy Liner ( Approved on a Case by Case basis )
- Sauereise – SewerGard No. 210S - Spray on Epoxy Liner ( Approved on a Case by Case basis )
- Permacast – COR+GARD - Spray on Epoxy Liner ( Approved on a Case by Case basis )
- Warren Environmental 301-14 Spray on Epoxy Liner & 301-18 Epoxy Mastic ( Approved on a Case by Case basis )

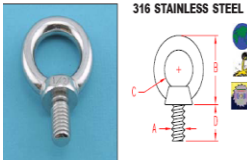
**IV. COLLECTION SYSTEM REHABILITATION (Manholes)**

- Meyer Polymer Concrete Pipe, gravity sanitary sewers, rehabilitated by sliplining.

**V. MISC. PRODUCTS**

- Cell-Crete Corp. or Elastizell Corporation of America - Elastizell EF / Cellar Concrete Grout – Approved for use as pipeline fill, all other applications, such as light weight fill, need to be engineered and approved through CCWRD Engineering.
- Machine Eye Bolt 1/2” – 316 Stainless Steel concrete imbed to be used inside manholes to hang equipment.

**MACHINE EYE BOLT**  
316 STAINLESS STEEL



ITEM	A	B	C	D	WLL	WT
(size)	(in)	(in)	(in)	(in)	(lb)	(lb)
S0316-0007	1/4"	1.09"	0.62"	0.53"	400	0.05
S0316-0008	5/16"	1.34"	0.75"	0.58"	700	0.07
S0316-0010	3/8"	1.69"	0.95"	0.71"	1,000	0.13
S0316-0013	1/2"	2.00"	1.14"	0.86"	2,000	0.30
S0316-0016	5/8"	2.42"	1.32"	1.02"	3,200	0.45
S0316-0020	3/4"	2.79"	1.57"	1.14"	4,700	0.79
S0316-0025	1"	3.54"	1.95"	1.31"	7,500	1.65

**NOTE:**  
THREADS ARE "UNC".

- Tempo Omni Electronic Marker ball system

