

APPROVED MATERIALS LIST

Interested parties who wish to be considered for this list should send a pack of information containing ten (10) submittal copies for review to the Materials Committee Chairman Boyd Duchene, Clark County Water Reclamation District, 5857 E. Flamingo Road, Las Vegas, NV 89122. Please make sure to provide your contact information.

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

The Approved Materials noted below are for Developer projects, and is provided to expedite any submittal process. For CCWRD CIP projects, "or equal" product(s) may be used, provided that they meet the following criteria:

- 1) The "or equal" substitution meets the same specification(s) requirements of the original approved product.
- 2) Provide product identification, manufacturer samples, and contact information of clients that have used the product, this list must include: agency, year of installation, location and application (wastewater, water, storm water, etc.).
- 3) The name, phone number and address of the manufacturer's representative.

I. APPROVED PIPE

(PVC Solid Wall Sewer Pipe); Pipe Size (inches); ASTM Wall Thickness Min. 4-15-D3034 SDR354, 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

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 126"
- 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).
- Fusible PVC - FPVC - C-900 (4'-12") - C905 (14" - 36")
- 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.
- North American Pipe Corporation - ASTM F679 Gravity Sewer - PVC 18"-36" PS-46 and PS-115
- North American Pipe Corporation - ASTM D3034 Gravity Sewer - PVC 4"-15" SDR-26 and SDR-35
- North American Pipe Corporation - AWWA C900 4"-12" DR-14, DR-18 & DR-25
- North American Pipe Corporation - AWWA C905 14"-24" DR-18, 14-36" DR-21 & DR-25 (Case by case basis)
- Northern Pipe Products - 20", 24" water, 21" and 24" - C905 water, ASTM D3034 and ASTM F 679 sewer main
- 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).
- Tigre-ADS SDR 26 Gasketed PVC 4"- 12" Fittings only & SDR 35 Gasketed PVC 4"-12" Fittings only
- 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".
- U.S.C.P.S. - FRPM Flowtite GRP Pipe, 12"- 156"
- SaniTite - Poly propylene 18"-24" Dual wall & 30" - 60" Triple Wall Pipe
- SaniTite - HDPE 30" - 60" Dual Wall Pipe

II. PIPE PATCHING PRODUCTS

- Linkpipe Inc.
- Pipe Patch - Source I Environmental
- Quicklock - Rausch

III. APPROVED M.H. COMPONENTS & ACCESSORIES

- Alhambra Foundry Co., 24" M.H. frame & cover, Type A-1310.
- ConSeal CS102
- 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 Works 1033Z Hinge Co Round Frame w/slotted Flange Assembly.
- East Jordan Iron Works - 3144Z/3144E Assembly - Outer 36 " cover - 00314420A02
- East Jordan Iron Works - 24" Heavy Duty H-20 Manhole cover - 00310059
- East Jordan Iron Works - ERGO Assembly - 00104040L01
- Geneva Pipe Polymer Manhole Precast M.H. components, 48", 60" & 72" - Precast bases & cones.
- Jackmen Industries Manhole Frame Adjusting System (with a #4 circumferential rebar only).
- Jensen Precast 48", 60" & 72" diameter, 5" wall components and eccentric cones.
- Bowco Industries Inc. - M.H Step 81213R.
- Nation Castings 36" M.H. frame (Ring8526) and Outer & Inner cover 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.
- Oldcastle Precast 48", 60" & 72" Cones, Risers, Bases, Flat tops – (Type V Cement only)
- PAMREX 24inch 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".
- Ram-Nek Joint Sealant
- 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 non-locking.
- 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.
- U.S. Composite Pipe Steel Reinforced Polymer Concrete Manhole 48", 60" & 72"
- 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.

IV. MANHOLE COATINGS

- Raven Lining Systems - Raven 405 - Spray on Epoxy Liner (approved on a case by case basis).
- Sauereise - SewerGard No. 210S & 210X - 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).
- SprayRoq – Polyurethane Protective Lining System
- Multiplexx Liner, by Terre Hill Composites.

V. APPROVED PIPE ACCESSORIES

- DFW Plastics, Inc. - Non Shear Repair Coupling, 4" through 8".
- DPW/HPI - Flexible Tee and Wye Saddle.
- Fowler Inserta Tee Products.
- GPK Couplings 4" - 15" & 18"- 36" SDR35
- GPK Couplings 4" - 24" C-900/C905
- Hurco Multi size Mandrell (Contractor must provide proving ring for checking accuracy).
- Hurco Stationary Type Mandrell.
- Romac Industries, Style "CB" Sewer Saddle.

- Top hat liner for lateral connections.

VI. COLLECTION SYSTEM REHABILITATION (Manholes)

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

VII. MISC. PRODUCTS

- Hydo Conduit - Various sized (case by case basis).
- Casing Chock 4810
- 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.
- OdorKnocker – 18” – 26” insert & media
- Tempo Omni Electronic Marker ball system.



** Interested parties who wish to make a correction regarding the above mentioned materials should contact the Approved Materials Committee Chairman, Boyd Duchene at (702) 668-8206).

*Current Modification Date: Oct 19, 16

*Prevision Modification Date: July 7, 2016