

APPROVED LIST OF MATERIALS

PART 27 - APPROVED LIST OF SUPPLIERS & MATERIALS FOR W&S CONSTRUCTION

The Superintendent of the Water and Sewer Division shall maintain the approved materials list. The amendment of the list shall be the result of an Evaluation and recommendation of a committee of operations, maintenance, and engineering staff of DPW Division

periodically designated by the Deputy Director of Public Works. The list shall be utilized by contractors, suppliers, designers, and County staff when identifying materials which have been approved for use in the County water and sewer systems. This list of approved materials shall be utilized in construction or maintenance when the project specifications do not contain enough detail to identify every item. This list of approved materials is to be used or referenced in designs unless a material not contained in the list is otherwise approved for use in a specification package.

The supplier of a material not on the list may request inclusion of a product by pursuing the following evaluation procedures;

- I. Materials must be presented with a request for inclusion in the approved materials list. The request may initially be for an individual or limited number of projects.
2. Five (5) copies of fact sheets, specifications, laboratory test results, drawing and significant information on applicability of use of the product must be presented before a request will be considered.
3. Documentation of approval for use for the proposed application by other local, state or federal water and sewer operations and construction agencies must be presented.
4. Depending on the nature of the product, factory visits and on-site visits to locations where the material or product is being utilized in construction and/or operation may be required as part of the evaluation process.
5. If evaluation of the aforementioned information is acceptable, the product may be approved for use on a trial basis in a developer-funded or County capital project. NOTE; Large quantities or extensive use in the trial installation will normally not be allowed.
6. The County reserves the right to have the product tested by an independent agency to assure that it meets the minimum requirements established in the Standard Specifications. In the event that the product does not meet the minimum requirements, the manufacturer will be responsible for all associated cost including, but not limited to, the test performed and any additional testing Cecil County, Should the product not pass a retest, the product will be removed from the Approved Materialist.
7. If the trial installation produces satisfactory results, then after an appropriate time for observation, the material or product may be utilized on a limited basis.
8. Pending continued satisfactory performance and evaluation during the trial installation and limited use periods, the material or product may be added to the list of approved suppliers.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

1. PIPE, DUCTILE IRON (D.I.P)

| <u>Sti^P Joint</u> | <u>Restrained Joint.</u> |
|------------------------------|--------------------------|
| U.S. Pipe & Fdy. | T.R. Flex |
| Griffin | Snap Lock |
| American | Flex Ring |
| McWane | Super Lock |
| Atlantic States | |
| Clow | |

Spe^cial Thickness Class

Note: 3" - 6" Class 52
 8" - 12" Class 52
 14" & above Class 52

2. PIPE, POLYVINYL CHLORIDE WATER

North American Pipe
J.M. Eagle
National Pipe & Plastic
Diamond

Note: Rubber Ring Slip Joint Only
 3" or smaller - SDR-21-200 psi
 4"-12"-DR-14-200 psi

3. PIPE, CAST IRON (C.I.P.)

Not approved.

4. PIPE, WATER SERVICE

(3/4", 1", 1-1/4", 1 1/2", 2")

Copper Tubing-Type K (All Sizes)
Halstead
Reading
CerrO
Mueller Tubing Company
Howell Metals
Cambridge-Lee

5. FIRE HYDRANT, 5-114" VALVE
OPENINGS - MECHANICAL JOINT

M&H Reliant Style 929
Mueller Centurion A-423
Kennedy Guardian K-81-A
American B-84-B
Clow-Medallion-F-2545
U.S. Pipe Metropolitan 250 Model 94

6. PAINT FOR FIRE HYDRANTS
"SCHOOL BUS YELLOW"

Duron Dura Clad Single Component Waterborne Urethane. Gloss Finish #9020002 Sherman-Williams - Yellow #F75KX-Y0042-2252 Bruning Silathane II-OSHA Yellow #5220-35

7. RESILIENT SEAT/WEDGE
VALVES MECHANICAL JOINT (Flan^ed For
Interior Usej

Sizes Thru 30" (AWWA C-509-01)
U.S. Pipe V&H - USP-0-20 (4"-12")
Kennedy Kenseal (4"-12")
M&H Style 4067 (4"-12")
Clow Series F-6100 (4% 48")
Mueller Series A-2360-20 (4"-12")

Sizes 14" - 36" (AWWA C-515-02) U.S.
Pipe V&H - USP-1-20 (14"-48")
Kennedy Kenseal
M&H Style 7571
Clow Series F-6100
Mueller Series A-2361-20
American Flow Control Series 2500

Note: 1. Gearing required above 16"
 2. 3"-36" Non-Rising Stetn
 3. 3"-16" OS&Y

Sizes 24" and Above
Pre-approval required

Note: For valves use 304/316 S.S. bolts w/nut.

8. BUTTERFLY VALVES (24" & Larger)
(Valve Shabs-Horizontal)

Submit shop drawings.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

9. VALVE, COMBINATION AIR/VACUUM
RELEASE

Duo Matic/Kenetic *

1" on Mains thru 12"

Apco (Valve & Primer)143-C 142
Valmatic 201-C 101
Cla-Val Series 36

2" on Mains 14%20" (Where Specified)

Apco 145-C 144
Valmatic 202-C 102
Cla-Val Series 36

*Kenetic-Harford County Model

10. TAPPING SLEEVE ONLY (Mech. Joint)

U. S. Pipe

M&H Valve 6" -12"
Mueller 4"-12" H-619(A.C.)
Mueller 4"-24" H-615 (C.I., D.I.)
Tyler Pipe 4"-12" S-149 (for C.I.),
S-349 (for A.C.) 4" -12"
American Flow Control M.J. Sleeve -DJ.
4"-36"

14" and Greater For A/C Pipe (Pre-app. required)

JCM-414
Romac-FT42 5

Note: 1. S.S. nuts and bolts (bolts 304/316 s.s.)
2. Coating - Epoxy (fusion), E-coat

11. FITTINGS-MECHANICAL JOINT

(Flanged for Interior Use)

CEMENT/EPDXY LINED - D.I. 3" - 36"
E-coat

Star 3" - 48"

Tyler Fdy - 36"
Tyler Fdy./Union Fdy (C.I. upon request)
Clow-4" -30"
HarCo-PVC - Slip Joint with restraints
Union Fdy. (C.I. upon request)
Sigma 3" - 48"

Nota:

1. 48" Class 350 D.I (AWWA C-53)
2. For flanged fittings to have 304/316 S.S. bolts w/brass nut.

11. VALVE BOX SCREW-TYPE

36"- 48" (5-114")
(3" Valves & Larger & Blow-off)

Bingham & Taylor
Capital Foundry of Virginia, Inc. #564s
East Jordan

13. CURB-BOX 92D SCREW-TYPE (2-1/2"1

Bingham & Taylor
Ametek (County Use Only)

14. CURB-BOX LOCKING SCREW
TYPE (4-1/4")

Bingham & Taylor
Capital Foundry of Virginia, Inc. #NH-138-H-UP

15. FRAME & COVER FOR VALVE VAULT
AIR-RELEASE MANHOLD - 30" X 4"

East Jordaan
E.A. Quirin Fdy.
Neenah Fdy.

Frame-NF-T1225
Lid No. 1565-5001

16. METER VAULT (18"-_24")
(Pre-Cast Concrete)

Mayer Brothers, Inc.

17. 18" METER FRAME & COVER

Vestal
Ford Meter Box Company A-32-C
Bingham & Taylor 180-18-A
Capital Foundry of Virginia, Inc. #NfB-890
A.Y. McDonald

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

18. RETAINER GLAND DUCTILE IRON,
WEDGED (For D.I.P. Only)

EBAA Iron Mega-A-Lug
Uni-Flange/Ford Wedge Action-Series 1400
Mueller Company-Aqua Grip (4" -12")
(Fire Hydrant and Valve Only)
Star Grip — 3000 series
Sigma — SLD — one lock
Tuf-Grip-Tyler-Union Foundry

Note: epoxy nylon, mega-bond, a-coat, star bond.

19. VALVENMETER VAULT, PRE-CAST
CONCRETE, LARGE

Mayer Brothers, Inc.
Terre-Hill
Atlantic Precast
*A.C. Miller/Fabcrete
Horne Concrete Const. LLC
*Pre-Piped Vault

20. PIPE COUPLING - FOR D.I.P., C-900, AC

*Dresser - Style 153 4"-12"
*Ford - Style FC 2"-24"
*Smith-Blair - Style 4412"-16"
*Viking-Johnson MaxiFit 1-1/2"-24"
*Viking-Johnson MaxiStep 1-1/2"-24"
*Romac - Style 501
Hymax — 2000 2" —16"

*Submit shop drawing for A.0 above 10" for approval

Note:

1. All couplings to be coated w/: epoxy (fusion), nylon, a-coat.
2. 304/316 s.s, nut and bolts,

21. PRE-CAST VAULT TO PIPE LINE
CONNECTOR

Atlantic Pre-Cast — A-Lock (<18° grade)
Z-Lock (<18° grade)
Terre-Hill Concrete Products — Dual Seal II
RX 101 Water Stop
Hail Mary Rubber Company — Star Seal

22. ALUMINUM METER VAULT DOORS
(H-20 Loading)

Bi1Co
Syracuse Castings
Just-Set Har. Co. Spec.

23. JOINT PROTECTOR
(Steel End Ring Concrete Pipe)

Flex-Protex Pipe Ring Protectors
MarMac Mfg. Company

24. SERVICE SADDLE

Ford Style FC-202
Romac 202N
Smith-Blair 317 Nylon-Coated
Mueller DN2S or DE2S
JCM -- 406
Power Seal-3417

- a. Specify type of pipe when ordering.
- b. All saddles to be epoxy, nylon, or high density fusion plastic, E-Coat,
- c. Pre-sized for PVC pipe.

25. INSIDE METER SETTING

5/8" Meter #1 Handvhorn:

Ford #HH1-34G
McDonald 42-1----TT33
Mueller 200-1412 (State Size)

3/4" Meter Kornerhorn:

Ford 02A-95277 w/2 ea. PJA4-44G
McDonald 41-3----PP55
w/2 ea. 4754 T (1" x 1-1/4")
Mueller 330-H1442----02 (State Size)

Sweat Joint

5/8" McDonald-43-1----SS33
3/4" N/A
5/8" Ford - #1 Copper Horn
3/4" N/A

Note: Plumbing Department Use Only

APPROVED DIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

26. CORPORATION STOP,
COMPRESSION JOINT

Above 1"

Ford FB-1000
Mueller B-25008
McDonald 4701-B-22

3/4"111

Ford F-1000
Mueller H-15008
McDonald 4701.22

27. CURBSTOP, THREADED

Ford B-11 Series
Mueller B-20283
McDonald 6101

28. CURBSTOP. COMPRESSION JOINT

Ford B-44 Series
Mueller B-25209
McDonald 6100-22 Mac-Pak

29. COUPLING. COPPER
COMPRESSION JOINT

Ford C-44 Series
Mueller H-15403
McDonald 4758-22

30. Y-BRANCH COMING.
COMPRESSION

Ford: 1" - 1" x 3/4" x 3/4" Y-44-243G
1/2" x 1" x 1" Y-44-264G

*Mueller: H-15343
*A.Y. McDonald 08YS22

*Specify size.

31. CATHODIC PROTECTIVE CAP Nur
(Oversized)

Protector Cap
Trumbull Industries

32. DISMANTLING JOINT

Smith-Blair Series 975
Romac DJ-400

Note:

1. W/S.S. tie-rods and nuts, w/epoxy, nylon, or e-coat coating.
304/316 8.s. bolt w/brass nut.

33. FLANGE PIPE/ADAPTOR

Flanged end spool piece to be used, Minimum working pressure 200 psi

Dresser Style 227

Hymax
EBBA-2100 Series

Note:

1. Pre-approved only.
2. Epoxy, nylon, a-coat coating.
3. 304/316 s.s. bolt w/brass nut.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

34. INLET YOKE ANGLE VALVE

| | <u>5/8"</u> | <u>3/4"</u> | <u>1"</u> |
|---------------|-------------|--------------------|---------------------|
| Ford | AV94-31.3WG | AV94-324WG | AV91-444W w/C84-46G |
| Mueller | *H-14273 | *H-14278 w/H-15928 | *H-14278 w/H-15428 |
| A.Y. McDonald | 4602Y-22 | 4604Y w/4753-22 | 4644BY w/4753-22 |

"Specify size of service.

35. METER YOKE ASSEMBLY

| | <u>5/8"</u> | <u>3/4"</u> | <u>1"</u> |
|---------------|-------------|-------------|-----------|
| Ford | Y501 | Y503 | Y504 |
| Mueller | H-5010 | H-5030 | H-5040 |
| A.Y. McDonald | 14-1 | 14-3 | 14-4 |

36. OUTLET YOKE DUAL CARTRIDGE CHECK VALVE

| | <u>5/8"</u> | <u>3/4"</u> | <u>1"</u> |
|---------------|-------------|----------------------|----------------------|
| Ford | HHCA94-313 | HHCA91-323 w/C84-34G | HHCA91-444 w/C84-46G |
| Mueller | *H-14466-A | *H-14464-A w/H-15428 | *H-14464-A w/H-15428 |
| A.Y. McDonald | 12-3YT23 | *12.3YE33 w/4753-22 | *12-3YE44 w/4753-22 |

*Specify size of service,

37. EXPANSION CONNECTOR

| | <u>5/8 "</u> | <u>3/4"</u> | <u>1"</u> |
|---------------|--------------|-------------|-----------|
| Ford | EC-1 | EC-23 | EC-4 |
| Mueller- | --- | --- | --- |
| A.Y. McDonald | 14-1E | 14-2E | 14-4E |

38. YOKE GASKETS

| | <u>5/8 "</u> | <u>3/4"</u> | <u>1"</u> |
|---------------|--------------|-------------|-----------|
| Ford | GT 112 | GT 118 | GT 123 |
| Mueller | 500844 | 500845 | 311335 |
| A.Y. McDonald | 14-1G | 14-2G | 14-4G |

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION,

39. YOKE NUTS

| | <u>5/8 "</u> | <u>3/4"</u> | <u>1"</u> |
|----------------|--------------|-------------|-----------|
| Ford | YLN-1 | YLN-23 | YLN-4 |
| Mueller | 509326 | 509316 | 526268 |
| A. Y. McDonald | 14-1N | 14-2N | 14-4N |

40. THREADED BRASS FITTINGS

All Manufacturers

41. BALL VALVE BRASS

| | <u>3/4"</u> | <u>1"</u> | <u>1 1 / 2 "</u> | <u>2"</u> |
|----------------|-------------|------------|------------------|------------|
| Ford | B-11-333 | B-11-444 | B-11-666 | B-11-777 |
| Mueller | 20283+Size | 20283+Size | 20283+Size | 20283+Size |
| A. Y. McDonald | 6101+Size | 6101+Size | 6101+Size | 6101+Size |

42. LOCK-WING BALL VALVE BRASS

| | <u>3/4"</u> | <u>1"</u> | <u>1 1 / 2 "</u> | <u>2"</u> |
|----------------|--------------|--------------|------------------|--------------|
| Ford | B-11-333-W | B-11-444-W | B-11-666-W | B-11-777-W |
| Mueller | 20200-W+Size | 20200-W+Size | 20200-W+Size | 20200-W+Size |
| A. Y. McDonald | | | | |

43. DUST CAP

Niagara



44. 18" x 24" ADAPTOR RING

Ford Ext.-1
Vestal ER-1824
A. Y. McDonald - 74MX1

45. BRASS PIPE - THREADED

All Manufacturers

46. OUTSIDE DOMESTIC WATER SERVICE
COMPLETE (314")

See Standard Detail for material needed.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

47. OUTSIDE DOMESTIC WATER SERVICE
COMPLETE (1" 1

See Standard Detail for material needed.

48. WATER METERS

5/8" (As per Yearly Bid)
Badger Model 25
Hersey Products Model 430

3/4" (As per Yearly Bid)
Badger Model 35
Hersey Products Model 442

1" (As per Yearly Bid) - [Application Varies] Badger
Model 70
Hersey Products Model MVR-50

1-1 1/2" (As per Yearly Bid) - [Application Varies]
Badger Model 120
Hersey Products MVR-100

2" - [Application Varies]
Hersey Products, Inc.
Magnetic Vertical Turbine Rotor
(MVR Model 160)
Compound Magnetic Drive (MCT II)

3" - [Application Varies]
Hersey Products, Inc.
Magnetic Vertical Turbine Rotor
(MVR Model 350)
Compound Magnetic Drive (MCT II)

4"-10"x 12" - [Application Varies]
Hersey Products, Inc,
Fire Line and Master Detector
(MFM II-MVR, MFM II-MCTII)
MFMII - MVR
Magnetic Drive Vertical Rotor (MVR)

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER MAIN CONSTRUCTION

WATER METERS FOR FIRE FLOW

5/8" - NIA
1/4" - Hersey Meter Co. - FSMVR-30
1" - Hersey Meter Co. - FSMVR-50 1
1/2" - Hersey Meter Co. - FSMVR-100
2" - Hersey Meter Co. - FSMVR-160
3" - NIA
4" -10/12" - Hersey Meter Co. - MFM-II/FSMVR

49. BACKFLOW PREVENTORS

| | |
|------------------------------------|--------------|
| Conbraco Industries, Inc. | 'A" - 2" |
| Apollo Model DC-40-100H-FP4 Series | |
| Apollo Model RP-40-200H-FP4 Series | |
| Apollo Model DC-4SG-100H Series | 2 1/2" - 8" |
| Apollo Model DCDA-4SG-600H Series | 2 1/2" - 8" |
| Apollo Model RP-40-200H Series | 2 1/2" -10,, |
| Apollo Model RPDA-40-700H Series | 3" -10" |
| Apollo Model DC-4S-100H Series | 10" |
| Apollo Model DCDA-4S-600H Series | 10" |

Note:

1. Retest and certification required before operational approval.
2. All reduced pressure models require air gap funnel drain.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR SEWER MAIN CONSTRUCTION

1. PIPE. POLYVINYL CHLORIDE (PVCSP)

North American Pipe
J.M. Eagle
National Pipe & Plastic
Diamond

Note : 6" thru 15" Class SDR-35
4" Class SDR-26 Heavy Wall

2. PIPE. DUCTILE IRON

| <u>Slip Joint</u> | <u>Restrained Joint</u> |
|-------------------|-------------------------|
| U.S. Pipe & Fdy. | T.R. Flex Snap |
| Griffin | Lock Flex |
| American | Ring N/A |
| Mc Wane | NIA |
| Atlantic States | Super Lock |
| Clow | |

Special Thickness Class

Note: L 3" thru 6" Class 52
8" thru 12" Class 52
14" & above Class 52

2. Interior Lining
3. Pro-Tecto 401

3. FORCE MAIN SEWER PIPE

2"-3" - Rubber Ring Slip Joint
- SDR 21, Class 200 PVC

3" - D.I.P. Class 52
4"-12" - DR 14 - C-900 PVC -
D.I.P. - Class 52 Over 12"-
D.I.P. - Class 52

Note: 1. Refer to Water Main Materials for all force mains.
2. All D.I.P. is to be special thickness class.
3. Pro-Tecto 401-lining, double cement Lining.

4. MANHOLE, PRECAST CONCRETE

Atlantic Precast
Concrete Pipe & Products
Terre-Hill
Monarch Products Company, Inc.
Hanson Products
Fredrick Precast

5. MANHOLE TO PIPE LINE CONNECTORS
(Grades >18% and >45%)

Z-Lok - A-Lok Products

6. MANHOLE TO PIPE LINE CONNECTORS
(<18%)

A-Lok - Atlantic Precast
Dual Seal II - Terre-Hill Concrete Products
Star-Seal (greater than 16")

7. BUILT IN-PLACE MANHOLE TO PIPE LINE CONNECTORS

A-Lok Field Kit - A-Lok Products
Z-Lok Field Kit - A-Lok Products

Note: 18% grade =10.2°
19.5% grade =11°

8. CORED MANHOLE GASKETS

A-Lok - A-Lok Products
Link-Seal - Thunderline Corp.
Z-Lok XP - A-Lok Products
Kor-N-Seal - National Pollution Control Systems, Inc. - Model S406-12APW w/two each S.S. Hands.

9. PLUGS - SEWER (Wing-Nut)

Cherne Industries Inc. - "Gripper"
R.C. Graham - "Hand-Tite"
Circle Gas Manufacturing

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR SEWER MAIN CONSTRUCTION

10. FITTINGS

Molded 4"-8"

Hat.Co-PVC
Multi-Fitting-PVC
(Thru 15")
Plastic-Trend-PVC
G.P.K. Products, Inc.

Fabricated 10"& Lamer

Multi-Fitting-18"-36"
Freedom-10"-36"
Nyoplast-10"-36"
B&H Inc.-10"-15"
G.P.K. Products, Inc, 10"-27"

PVC 6"-8" Wve, 45° Bend

Plastic Trends SDR-26
Hat.Co SDR-26
Multi-fitting — SDR-26
G.P.K. SDR-26

D.I.F. 6"-8" Wye, 45 Bend

Hai.Co
Hersey Products, Inc.

Note:

1. Fusion, bonded epoxy, nylon, ProTecto 4101, e-coat lining.
2. < 4" — Fusion bonded epoxy.
> 4" — Pro-Tecto 401.

11. PLASTIC STEP

M. A. Industries, Inc.

12. SADDLE

Geneco Seahitt (Specify type pipe)
Romac "CB" (Any type pipe)

Note: To be epoxy, nylon, or E-coated.

13. EIŠAMILOYMFor Manhole-420-lb.
Minimum, and Lamphole)

E.A. Quirin Bros.
East Jordan
Capital Foundry of Virginia, Inc.
MH-138-H-UP-locking (vandal proof)
MH-1653-water tight

14. FRAME & COVER, FOR MANHOLE
(Straight Wall-320 lb. min.)

Neenah Foundry Company
Frame Model No. 1565-2000
Lid Model No. 1565-5001
East Jordan Iron Works, Inc.
Model No. 1545Z 1

15. BRICK - SM GRADE

Redland Brick
Glen-Geary Brick Co.
Pine Hall Brick
Lawrenceville Brick
McAvoy Cobset Brick

16. GRADE RINGS (6" Maximum Height)
w/STEEL REINFORCEMENT

Atlantic Pre-Cast
Terra-Hill Products
Horne Concrete Const. LLC

17. MANHOLE PAINT FOR FRAME &
COVER (Off-Site)

Day-Glo
(Florescent Green Industrial Enamel)
DG215-18 (Signal Green)

18. MANHOLE PAINT FOR FRAME &
COVER (Off-Site)

(White Primer).
Coronado-Grip & Seal —116-11 White

19. CLEANOUT-PRE-FAH CONCRETE
(Why Junction Sox)

Horne Concrete Const. I.LC
Atlantic Pre-Cast

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR SEWER MAIN CONSTRUCTION,

20. ADAPTOR (From 6" House Connection to Cast-Iron Soil Pipe)

Fernco
Calder
IND Seal

26. CLEANOUT - HUB & CAP
(Penella Style 4" & 6")

Penella Industries - PVC w/Magnet
Jumbo Manufacturing Company -
Cast Iron w/Gasket
Circle Gas Manufacturing Company
-Cast Iron w/Gas
K.C. Snyder - "Rubber-Nek

21. PVC RISER PIPE - CLEANOUT(SDR-26 Heavy Wall Sewed)

J.M. Eagle
National Pipe & Plastic
Diamond
North American Pipe

27. STAINLESS STEEL MANHOLE INSERT w/RELIEF VALVE

Southwestern Packing & Seal Company -
S.S. Rainstopper
Parson Environmental Products, Inc. -
Stainless Steel Manhole Insert

22. SOIL PIPE (Cast-Iron Heavy Duty) (Cleanout Riser 4")

Tyler
Charlotte

28. MANHOLE INSERT w/ODOR CONTROL

Calgon-"Sweet Street"
Parsons

23. RETAINER GLAND-WEDGED (For D.I.P.)

Ebba Iron Meg-A-Lug
Uni-Flange/Ford Wedge Action Series 1400
Star Grip — 3000 Series
Sigma
Tuf-Grip-Tyler-Union Foundry

Note: Coating - Epoxy, nylon, Mega-Bond, e-coat, star bond.

29. MANHOLE EXTERIOR JOINT WRAP —12"

Conseal — Con-Wrap CS-212
Press-Seal-EZ-Wrap

24. AIR & VACUUM VALVES

"Apco
*Val-Matic
*Cl-Va1

Note: As per shop drawing.

25. MASTIC ROPE SEAL (3/4")

K.C. Snyder — "Rubber-Nek"
Press Seal Gasket Corporation

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER AND SEWER MAIN CONSTRUCTION

- | | |
|--|---|
| <p>1. <u>STEEL CASING PIPE</u> Approved after shop drawing submittal.</p> <p>2. <u>LINER PLATE</u> Approved after shop drawing submittal,</p> <p>3. <u>DETECTOR TAPE</u> (3" Non-Metallic) Lineguard Allen Systems Linetec Empire Level</p> <p>4. <u>TRACER WIRE</u> (7 Strand No. 8 w/.045 PE Wall Blue) All Manufacturers</p> <p>5. <u>SOLDERLESS SPLIT BOTTOM CONNECTORS</u> Brass</p> <p>6. <u>SPLICING TAPE-UNDERGROUND</u> 3M</p> <p>7. <u>BITUMINOUS COATING</u> (Military Spec. C-18480) All Manufacturers</p> <p>8. <u>COAL TAR EPDXY</u> (16 Mil D.F.T. Min) All Manufacturers</p> <p>9. <u>NUN-SHRINK EPDXY GROUT</u> All Manufacturers</p> <p>10. <u>CATHODIC PROTECTIVE CAP NUTS</u> (Oversized) Protector Cap Trumbull Industries</p> | <p>11. <u>REPAIR CLAMPS</u> <u>4" -15" Two-Section</u> Smith-Blair 262 Ford Style FS2 Romac Style SS2 Powerseal Style 3122 AS 1 iymax – Easy Max <u>16" and above Three-Section</u> Ford Style FS3 Smith-Blair Style 263 Romac Style SS3 Powerseal Style 3123 AS</p> <p>12. <u>2-1/2" TRACER TEST 40X w/TERMINAL BLOCK</u> Bingham & Taylor – P-too Test Note: 1. Blue lid for water Green lid for sewer 2. Test location at fire hydrant</p> <p>13. <u>5" TERMINAL BOARD (three Terminals) w/Standard 4-1/4" Looping Curb-block</u> Bingham & Taylor -- Note: 1. Blue lid for water Green lid for sewer</p> <p>14. <u>INTERIOR MANHOLE COATING</u> Sentry Polymers, Inc. Epoxy Vinyl Ester (Semstone 5301)</p> <p>15. <u>PIPE SUPPORT/SPACER. FUR SLEEVE</u> PIPELINE Products, Inc. J-Four-M33-s.s. Raci-casing spacer.</p> |
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APPROVED LIST OF SUPPLIERS & MATERIALS
FOR WATER AND SEWER MAIN CONSTRUCTION

NOTE:

*The classes or designations of pipe shown on this list are the classes that are normally used in water and sewer construction in Cecil County

However, it is possible that the Contract Documents, Special Provisions and/or Plans may specify a class or designation that is different and/or greater than that shown on the list. In the event of such a discrepancy, then the Contract Documents, Special Provisions and/or Plans shall govern.

** The Packer Head pipe procedure will not be used.

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR LOW PRESSURE SEWER CONSTRUCTION

1. PIPE HDPE

1 1/4" - 4" SDR-11 IPS EHMW PE3408
Performance Pipe Prod-Driscoplex 4300
Poly Pipe
Flying W
J.M. Eagle
Charter Plastic

2. PIPE-HDPE Fitting/Transition Pieces - Butt Fusion Type
(Pressure Rated to Match System Piping)

| | | |
|-------------------------|---------------|--------------------------|
| <u>Molded 1 1/4"-4"</u> | <u>D.I.P.</u> | <u>Brass 1 1/4" - 4"</u> |
| IPEX | HarCo | All Manuf. |
| Central Plastic | | |
| Charter Plastic | | |
| TEGG | | |
| Agru | | |
| Independent | | |

3. PIPE-PVC Pine Gasketed - (SDR-21-1 1/4"-4")

| | | |
|---------------------|-------------|--------------------------|
| | <u>D. .</u> | <u>Brass 1 1/4" - 4"</u> |
| National | HarCo | All Manuf. |
| Charlotte | | |
| Crestline | | |
| J.M. Eagle | | |
| Diamond | | |
| North American Pipe | | |

Note: 1. PVC pipe fittings for main line - match pipe material. 2.
D.L.P. fittings - lined w/epoxy, nylon, Pro-Tecto 401.

4. BALL VALVE CURB STOP - w/Female FPT End Connection (or Pack Joint)

| | <u>Manufacturer</u> | <u>Female IPT End</u> | <u>Pack Joint</u> |
|--------|---------------------|-----------------------|-------------------|
| 1 1/4" | Ford | B11-555 | N/A |
| | Mueller | H - 1 0 2 8 3 N/A | N/A |
| | McDonald 1 1/2" | | N/A |
| | Ford | B11-666 | 877-666 |
| | Mueller | 8-20283+Size | V-25226 |
| | McDonald | 6101 | 6100-44 |
| 2" | | B11-777 | |
| | Ford | 8-20283+Size | B77-777 |
| | Mueller | 6101 | V-25226 |
| | McDonald | | 6100-44 |

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR LOW PRESSURE SEWER CONSTRUCTION

5. SEWAGE GRINDER PUMPING UNIT and CONTROL PANEL

Environment/One Corporation

6. VALVE KEY EXTENSION

Genco

7. FITTINGS for LP 2-5-

| | | |
|--------|-------------------------|-------------------|
| D.I.P | <u>Brass Ball Valve</u> | Brass |
| HarCo | Ford | All Manufacturers |
| Hersey | Mueller | |
| | A.Y. McDonald | |

Note: D.I.P Fittings - Lined w/Fusion Bond Epoxy, Nylon, Pro-recto 401, E-Coat

8. ROADWAY BOXES - VALVE - 5'4" (SCRW Type)

Bingham & Taylor
Capital Foundry of Virginia, Inc. #5648
East Jordan

9. FIRE HOSE COUPLING w/ CAP - 2 W-Brass NST Thread

Potter-Roemer Red
Head/Dixon

14. NIPPLE/RISER - D.I.P/Brass2"-4" NPT Thread,

HarCo - D.I.P
Brass - All Manufacturers

11. CONCRETE VAULT - 24"

Mayer Brother, Inc.

12. TRACER WIRE

(7 Strand No. 8 w/.045 PE Wall Blue)

All Manufacturers

13. FRAME and COVER - 24" - 24" a 4" - Standard Sewer

East Jordan
Campbell Fdy.
E. A Quirin Fdy.
Neenah - Frame - NF-15652001
Lid

APPROVED LIST OF SUPPLIERS & MATERIALS
FOR LOW PRESSURE SEWER CONSTRUCTION

14. R/S GATE VALVE — 3" and greater *See water main construction for approved manufacturers.

15. ADJUSTMENT RING — 24"

East Jordan Infra-Riser