

APPENDIX E

APPROVED MATERIALS LISTS

APPROVED MATERIALS LISTS

1. Approved Drainage Materials List
2. Approved Water Materials List
3. Approved Wastewater Materials List
4. Approved Paving Materials List
5. Approved Traffic Materials List
6. Approved Suppliers of Pre-Cast Concrete Screening Walls

The Engineer shall verify the current edition of the approved materials lists with the Engineering Division.

City of Mesquite
 Approved Materials List for Drainage
 Last Revised - May 20, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|-------------------------------|------------------------|--------------|------------------------------------------|-------------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Storm Drain | | | | | | |
| Storm Sewer | <= 15" | | PVC, SDR 26 | ASTM D3034 | | |
| | | ADS | N-12, HDPE, Double Wall, Smooth Interior | ASTM F2648 | | |
| | > 15" | | Reinforced concrete pipe, Class III | ASTM C76 | | Spigot end coated with asphaltic primer for better adhesion of Butyl rubber sealant. Class IV or greater may be required depending on surface loads and depth of pipe. |
| Gaskets | > 20' from structure | Ram-Nek | Preformed Flexible Plastic Gaskets | | | Sufficient quantity must be used to achieve squeeze out |
| | <= 20' from structures | | O-ring gasket | ASTM C443 | | |
| Manholes, Junction Structures | Ring & Cover | Bass & Hays | 380-24P | | | |

City of Mesquite
Approved Materials List for Water
Last Revised - November 11, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|------------------------|---------------|-----------------------|---------------------------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Water Pipe | | | | | | |
| Water Main | 4" to 18" Dia | | PVC, Class 305, DR 14 | AWWA C900 | Designed for minimum working pressure of 200psi and minimum field test pressure of 200 psi; HS-20 Live Load; HDPE and PVC shall be blue in color | Push on joints: ASTM D-3139; Gaskets: ASTM F477; Fusible PVC and Certa-Lok are acceptable PVC pipe materials |
| | | | HDPE, Class 333, DR7 | ASTM F714, PE 4710 | | |
| | > 12" Dia | | Ductile Iron, Class 52 | AWWA C151 | | Interior cement mortar lining and exterior asphaltic coating in accordance with AWWA C104; Wrapped with polyethylene wrap |
| | | >16" Dia | | Reinforced Concrete Cylindrical Pipe (RCCP) | | AWWA C303/C304 |
| Water Services | <1" Dia | | Type K Copper | | | |
| | | | Type K Copper | | | |
| | >=1" Dia | Rehau Municipex | PEX-A | AWWA C904, ASTM F876 | Blue Color | Cross-linked polyethylene; Stainless steel stiffeners shall be used; Install with 12 gauge detectable tracing wire with HDPE coating |
| Fire Hydrants | | | | | | |
| Fire Hydrants | | Mueller | Super Centurion 250-A423 | | Manufactured within 2 years of install date; 1~ 4" Steamer Nozzle; 2 ~ 2.5" Hose Nozzles; 1" Pentagon Operating Nut Turns Counter - Clockwise to Open; Install without chains | |
| | | American Darling | B-84B-5 | | | |
| | | Waterous | Pacer WB67 | | | |
| | | Kennedy | K81A Guardian | | | |
| | | Clow | Medallion | | | |
| | | M&H | Model 129, 929 | | | |
| Fire Hdyrant Paint | Aluminum | Flynt | | | | |
| | Blue | Groco | GRO-LAC, QDM, Part No. 766-1010-01 | | | |
| | Yellow | Groco | GRO-LAC, QDM, Part No. 766-2115-01 | | | |
| Valves | | | | | | |
| Valves | >= 6" | Mueller | Resilient Seat | | Valves >24" shall be horizontal installation valves | |
| | | Mueller | Resilient Wedge | | | |
| | | American Darling | Resilient Wedge | | | |
| | | US Pipe & Foundry | Metro-Seal Resilient Wedge | | | |
| | | American Flow Control | Series 2500 Resilient Wedge | | | |
| | | Kennedy | Resilient Wedge | | | |
| | | Clow | Resilient Wedge | | | |
| | | MH | Resilient Wedge Gate Valve | | | |
| | | American | AVK Resilient Seated Gate Valve Series 25, 4"-12" | | | |
| | > 36" | Mueller | Butterfly | | Butterfly only allowed with approval of City of Engineer | |
| | | American Darling | Butterfly | | | |
| Pratt | | Butterfly | | | | |
| Air Release Valves | | Vent-O-Mat | 025 RBX 2521 (1") / 050 RBX 2521 (2") | | | |
| Valve Stacks and Boxes | | Bass & Hays | Model 2436S | | | |

City of Mesquite
Approved Materials List for Water
Last Revised - November 11, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES | |
|--------------------------------------|------------------|----------------------------------------------------|------------------------------------------------|-------------------------|----------------------------------------------------------------------------------------------|--------------------------------|--|
| Fittings, Misc | | | | | | | |
| Tapping Sleeves | | Mueller | H304 | | Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange | | |
| | | Ford | FTSS, FTSS-MJ | | | | |
| | | Smith-Blair | 665, 665MJ | | | | |
| | | Dresser | 630 | | | | |
| | | PowerSeal | Model 3490 | | | | |
| | Romac Industries | SST III | | | | | |
| Restraint (Retainer) Glands | Ductile Iron | Uni-Flange | Series 1400 | | Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange | | |
| | | EBAA | Iron 1100 Series Megalug | | | | |
| | | Stargrip | Series 3000 | | | | |
| | | Tyler Union | Field Lock, Tufgrip 1000 | | | | |
| | | SIP Industries | EZ Grip | | | | |
| | PVC | Uni-Flange | Series 1500 | | | | |
| | | EBAA | Iron 2000PV Series Megalug | | | | |
| | | Stargrip | Series 4000 | | | | |
| | | Tyler Union | Tufgrip 2000 | | | | |
| | | SIP Industries | EZ Grip | | | | |
| | Napco | Certa-Lok AWWA C900 Restrained Joint Integral Bell | | | | | |
| | Sigma | One Lok | | | | | |
| Ductile Iron Fittings | | American Pipe | | | Require 3/4" NPT Brass Test Plug; Stainless Steel Tapping Sleeve with Stainless Steel Flange | | |
| | | Tyler Pipe Products | | | | | |
| | | Clow Products | | | | | |
| | | Star Pipe Products | Tees, bends, anchor nipples | | | | |
| | | Sigma/Nappco | Tees, bends, anchor nipples | | | | |
| | | Griffin Pipe Products | | | | | |
| | SIP Industries | | | | | | |
| Restraint (Internal Joint Restraint) | C900 PVC Pipe | Eagle | LOC 900 | | | | |
| | | Diamond | Lok-21 | | | | |
| Couplings | | Romac Industries, Inc. | Macro HP | | | | |
| Polyethylene Wrap | | | | AWWA C105, Method A | All ductile iron pipe and fittings shall be wrapped | For wrapping pipe - blue color | |
| Bores | | | | | | | |
| Casing Spacers | | Pipeline Seal and Insulator, Inc. | Model Ranger II | | | | |
| | | Power Seal | Model 4810 | | | | |
| Casing End Seals | | Advanced Product & Systems, Inc. | Model AW (wrap around) End Seal | | | | |
| | | CCI Pipeline Systems | Model ESW Wrap Around Neoprene Rubber End Seal | | | | |

City of Mesquite
Approved Materials List for Water
Last Revised - November 11, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|----------------------------|---------------------------------------------|---------------|------------------------------------------------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Service Connections | | | | | | |
| Corporation Valve (Stops) | 3/4", 1", 1.5", 2" | Mueller | B-25008 | | AWWA C800 equipped with ball valve; For Ductile Iron pipe - use threaded corp stop with Teflon tape wrap; | |
| | | Jones | J-1937-SG | | | |
| | | Ford | FB-1000-3-Q, FB-1000-4-Q, FB-1000-6-Q, FB-1000-7-Q | | | |
| | | A.Y. McDonald | 4701BQ | | | |
| Angle Valve (Stops) | 3/4", 1", 1.5", 2" | Mueller | B-24258 (3/4", 1"); B-24276 (1.5", 2") | | AWWA C800 equipped with ball valve and lock wing | |
| | | Jones | J-1963W-SG (3/4", 1"); J-1975W-SG (1.5", 2") | | | |
| | | Ford | BA43-332-WQ (3/4"), BA43-444-WQ (1"), BFA43-666-WQ (1.5"), BFA43-777-WQ (2") | | | |
| | | A.Y. McDonald | 4602BQ | | | |
| Service Saddles | For PVC, DI, CI Pipe: 3/4", 1", 1.5", 2" | Mueller | BR-2B, BR-2S | | AWWA C800 with AWWA taper threads outlet; CC Thread; Stainless Steel Bolt/Nut/Washer, with the exception of double strap | |
| | | Jones | J-979, J-969 | | | |
| | | Ford | 202B, 202BS | | | |
| | | A.Y. McDonald | 3825, 3845 | | | |
| | For AC Pipe | Ford | FS2 | | Tapped, Minimum 12.5" Length | |
| Meter Boxes | 3/4" Service | Bass & Hays | P34P14D-3LID2 | | HDPE Base Enclosure - With Slot; Not Traffic Rated; Cast Iron Ring with HDPE or Cast Iron Locking Lid | Nominal 18-inch diameter |
| | | DFW Plastics | DFW1814F1PS-1KA%F with DFW18AMR-1KA%F-LID | | | |
| | 1", 1.5", 2" Service | Bass & Hays | P55PP18D1S BH5C-LID1 | | | Nominal 30" diameter |
| | | DFW Plastics | DFW2818F-1BA MCK with DFW20AMRI-1BA MCK-LID | | | |

City of Mesquite
Approved Materials List for Wastewater
Last Revised - November 11, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|------------------------|----------------|--------------------------------------------------------------|--------------------------------------------------------------|-------------------------|----------------------|--------------------------------------------------------------|
| Sewer Pipes | | | | | | |
| Sewer Main | 4" to 15" Dia | | PVC, SDR-26 | ASTM D3034 | Green color | Fusible PVC and Certa-Lok are acceptable PVC pipe materials |
| | | | HDPE, DR 13.5 | ASTM F714, PE 4710 | | |
| | 18" to 30" Dia | | PVC, PS115 | ASTM F679 | | Fusible PVC and Certa-Lok are acceptable PVC pipe materials |
| | | Hobas Pipe, US Composite Pipe South and Ameron International | Fiberglass | ASTM D3262 / ASTM 4161 | | Must submit thickness design for wall thickness calculations |
| Aerial Crossing | | | Ductile iron pipe (CL 54) with Protecto 401 internal coating | | Green color | |
| Service Laterals | | | PVC | | Green color | Green color |

Manhole and Appurtenances

| | | | | | | |
|-----------------------------------------------------|-----------------------------|--------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Manhole Pipe connectors | | A-Loc | | | | |
| | | National Pollution Control Systems Inc. | KOR-N-SEAL 306 Series | | | |
| | | Press-Seal | PSX: Direct Drive | | | |
| Manhole Lids and Rings | Connectings Lines < 15" Dia | EJ USA, Inc. | 30-in ERGO XL SS (Product No. 00148026L01) | | 30" Clear Opening; AASHTO HS-20 Load Rated; Words and Logo per Standard Detail | Equipped with MPIC Pick Slot, elastomer T-Gasket in lid, infiltration plugs at hinge |
| | Connecting Lines ≥ 15" Dia | Manhole Rehab, Inc. Composite Access Products | Sewper Cover 3200 Product Series Composite Manhole Frame and Cover (Model CAP ONE - 30, bolt down) | | | |
| | Retrofit Work Only | EJ USA, Inc. | 24-in ERGO SS (Product No. NPR10-1213A) | | | Equipped with MPIC Pick Slot, elastomer T-Gasket in lid, infiltration plugs at hinge |
| Manhole Coating | | Raven Lining Systems | Raven 405 | | | 125 mils thick |
| Manhole Grade Rings | | LadTech Inc. | HDPE Adjustment Rings | | | |
| | | Cretex Seals | ARPRO Expanded Polypropylene | ASTM D3575 | | |
| | | EJ USA, Inc. | Infra-Riser | | | |
| Pre-Cast Manhole Ring Gasket | | Hydroconduit | Profile | | | |
| | | Hanson | CR 097 | | | |
| Geotextile Material Under Manhole | | Tencate | Mirafi 140N | | | |
| | | Propex Geosolutions | Geotex 401 | | | |
| Manhole Chimney Seals, Ring & Cover sealing systems | | Pipeline Seal & Insulator Inc. | Riser-Wrap | | | |
| | Retrofit Work Only | Cretex | Interior Chimney Seal with stainless steel self locking bands | | | for use with EJ USA, Inc. 24-in manhole lid only |
| Threaded Lid Anchor | | | | | | All manhole ring anchors must be embedded a minimum of 4.5-inches into concrete cone. All Stainless Steel Bolts Threads and Nuts must be coated with approved anti-seize compound: Permatex Nickel Anti-Seize or approved equal. |
| | | Hilti USA | KWIK BOLT 3 SS 304 5/8" or equal | | | |
| | | Simpson Strong-Tie | Strong Bolt 5/8" | | | |

Miscellaneous

| | | | | | | |
|---------------------------|--|-------------|----------------|--|--|--|
| Double Cleanout Meter Box | | Bass & Hays | 3-LID2 (Sewer) | | | |
|---------------------------|--|-------------|----------------|--|--|--|

City of Mesquite
Approved Materials List for Paving
Last Revised - May 20, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|----------------------------|--------------|---------------------------|--------------------------------------------------------------------------------------------------|-------------------------|----------------------|----------------------------------------------------------------------------------------------|
| Pedestrian Elements | | | | | | |
| Detectable Warnings | | ADA Solutions, Inc. | (Wet Set) Replaceable Tactile Warning Surface Unit (glass and carbon fiber reinforced composite) | | | Color: Brick Red or Clay Red |
| | | ADA Solutions, Inc. | Cast-in-Place Composite Tactile Warning Tile Units (glass and carbon fiber reinforced composite) | | | Color: Brick Red or Clay Red |
| | | Strong Go Industries, LLC | Tech-Way Dome-Tiles (precast polymer concrete tiles) | | | Color: Terracotta; 24" x 24" or 24" x 30" or 24" x 36" with stainless steel anchoring system |
| | | Engineered Plastics, Inc. | Armor Tile Cast in Place Tile (vitrified polymer composite) | | | Color: Brick Red or Colonial Red |
| Miscellaneous | | | | | | |
| Root Barrier | | Deep Root | UB 24-2 | | | |

City of Mesquite
Approved Materials List for Traffic
Last Revised - May 20, 2019

| BASIC PRODUCT CATEGORY | SUB-CATEGORY | MANUFACTURER | MODEL, TYPE, OR STYLE APPROVED | GOVERNING SPECIFICATION | GENERAL REQUIREMENTS | NOTES |
|-------------------------|---------------------------------------------------------------------------------------------|------------------------------------------------------|--------------------------------|-------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Traffic Paint | | Ennis-Flint | | | YPT 12 Yellow; WPT 12 White | |
| | | Centerline Supply, LTD | | | | |
| | | Pathmark Traffic Products of Texas | | | | |
| | | Sherwin-Williams | | | | |
| | | TxDOT MPL - Traffic Paint | | | | |
| Pavement Markings | Prefabricated | Ennis-Flint | Premark | | | 8", 12", 24" wide stripes |
| | Thermoplastic | TxDOT MPL - Thermoplastic Pavement Marking Materials | | | | 4", 6" wide stripes |
| Raised Pavement Markers | | Apex Universal Inc. | | | | |
| | | Pac-Tec Inc. - Ray-O-Lite Division | | | | |
| | | Semex | | | | |
| | | 3M Company | | | | |
| | | Rayolite | | | | |
| Traffic Buttons | | Apex Universal Inc. | | | | |
| | | Artuk | | | | |
| | | Batterson LLP | | | | |
| | | Applied Ceramics Inc. | | | | |
| | | Pac-Tec Inc. - Ray-O-Lite Division | | | | |
| | | TrafCo Industries Inc. | | | | |
| | | Trantex Inc. | | | | |
| | | Ennis-Flint | | | | |
| Traffic Signs | Signs | | | | | High Intensity Grade Prismatic(HIP); School zone signs - Flourescent Yellow Green (FYG); Diamond Grade required on case-by-case basis |
| | Illuminated Street Name Signs - Mounting Hardware | Astro-Brac | | | | |
| | Sign Posts | | | | | |
| Traffic Signals | Conduit, Electrical Conductors, Ground Boxes, Electrical Services, Pedestal Pole Assemblies | TxDOT MPL - Illumination and Electrical Supplies | | | | |

City of Mesquite
Approved Suppliers of Pre-Cast Concrete Screening Walls

Revised: September 10, 2015

Note: Suppliers on this list have a product produced locally that meet the City of Mesquite General Design Standard for Pre-Cast Concrete Screening Walls

However, a project specific submittal with plans, specifications and supporting design calculations are still required.

All materials must be new and in good condition.

Subject to compliance with City of Mesquite General Design Standards (GDS) for Pre-Cast Concrete Screening Walls. Screening walls of brick or other material are generally prohibited except for limited repair of existing walls.

1. StoneTree® Fence/Wall System as manufactured by **Turner Pre-Cast Concrete Products**, Rhome, Texas; or approved other.

2. Verti-Crete Pre-Cast Concrete Walls as manufactured by **Hawk Construction Co., LLC.**, Princeton, Texas