

#### **City of Henderson**

# **Department of Utility Services Technical Services**

#### **Approved Materials List**

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#### **City of Henderson Approved Materials List Overview**

The design and construction of all water distribution and wastewater collection facilities within the City of Henderson must comply with the guidelines set forth in the <u>Uniform Design and Construction Standards</u> and the <u>Design and Construction Standards for Wastewater Collection Systems</u> along with the <u>City of Henderson's Addenda</u> for both documents. The Approved Materials List outlines all standard products and materials used in water distribution and wastewater collection systems, for pipe sizes up to and including 16-inches in diameter (water) and 15-inches in diameter (sewer).

All products and materials used in conjunction with water and sewer mains larger than this will be reviewed on a case-by-case basis and therefore shall be incorporated into the specific design of that system. It is not the intent of the Approved Materials List document to incorporate the types of products and materials used under those circumstances.

This document is not intended to replace or amend any adopted design and construction standards. Instead, the information contained within this document is provided as a replacement for product shop drawings that may be required for a developer project. Contact the Approved Materials List (AML) Committee for clarification where a conflict exists between this document and adopted design and construction standards.

All emergency temporary repairs will be completed at the discretion of the City of Henderson representative at the site. All permanent repairs will be completed in accordance with all applicable standards and the City's Approved Materials List.

A completed Approved Materials List New Product Application is required for any new product submittals to the AML Committee. The City will work with all parties involved to coordinate any product changes, additions or deletions but the City is not responsible for any supplier's standing inventory affected by revisions to this list. Any samples provided as part of the New Product Application process must be picked up by supplier within 60 days from approval/rejection of product

For questions regarding this document or inquiries on how a new product may be approved for inclusion on the Approved Materials List, please contact the AML Committee at 702-267-2514

The AML can be found at - <a href="http://www.cityofhenderson.com/development services">http://www.cityofhenderson.com/development services</a> center/applications forms.php from this web page make the selection of Utility Services Forms.

	RSON APPROVED MATERIALS L		
ADDITIONS, Description	DELETIONS, & MODIFICATIONS  Action	Date	Category
Changed G&C Enclosures to Aquashield Enclosures	Manufacturer bought out	Jan-2024	Backflow Assembly Options
Changed EBAA 1100 Megalug to be approved up to 24-inch. Changed Ford Meter UFR1400 to be approved up to 24-inch.	Size change	Nov-2023	Valves & Joint Restraint
	Size change	Nov-2023	Valves & Joint Restraint
Changed Armorcast to Hubbell - Armorcast	Brand name change	Oct-2023	Meter Boxes
Removed CDR (Hubbell - CDR) from list	Removed from list	Oct-2023	Meter Boxes
Changed Christy to Oldcastle	Brand name change	Oct-2023	Meter Boxes
Neptune Mach 10 Ultrasonic Meters (3" through 12")	Added to List	Mar-2014	Water Meters
JM Eagle SDR35 Sewer Pipe	Added to List	Oct-2023	SDR35 Sewer Pipe (Gravity only)
Nungwon Type K copper	Added to List	Oct-2023	Copper Tubing/Laterals
Specified Fittings Gasketed Sewer Fittings	Added to List	Apr-2020	Manhole and Pipe Accessories
American Flow Control 2800-A, 2800-C	Added to List	Jan-2020	Tapping Sleeves
D&L A-1075, A-1366, A-1426		Jan-2020	Sewer Components
Removed all DFW Boxes and Lids, due to recurring issues in the field.		Dec-2019	Meter Box and Lid Options
Armorcast P6002001B, P6002002B, P6002003B Air Valve Housings	Added to List Added to List for repairs only, new	Jul-2019	Miscellaneous Items
Romac Industries Macro HP Extended Range Coupling	installs reviewed on case-by-case basis	Jul-2019	Water Main Coupling
	Added to List for repairs only, new installs reviewed on case-by-case		
Romac Industries Alpha & Alpha FC Modified model number for Hubbell-Quartzite 2" lid from PG 1730	basis	Jul-2019	Water Main Coupling
554450 to PG 1730 H60550, to accommodate the City's oval reader sensor.	Removed from the list	May-2019	Meter Box and Lid Options
Removed DFW 1324C Box and Lid, due to recurring issues in the	Removed from the list Added to List, requires partnering	May-2019	Meter Box and Lid Options
Quadex 100% Solids Epoxy for manhole lining, rehab	with local precast supplier (currently Olson Precast)	Apr-2019	Miscellaneous Items
Ford Meter Box 202BS tapping saddle	Approved for DIP	Jul-2018	Tapping Saddles
Removed Sigma Valve Box, as model 564-A doesn't seem to exist	Removed from the list	Jul-2018	Valve Cans & Lids
A.R.I. Combination Air Valve (D-060 & D-60-C-HF) 4" & 6"	Reinstated to the list	Apr-2018	Miscellaneous Items Miscellaneous Items
A.R.I. Combination Air Valve (D-060 & D-60-C-HF) 4" & 6"	Removed from the list	Mar-2018	
Vent-O-Mat - Combination Air Valve (RBX Series) 4"	Removed from the list	Mar-2018	Miscellaneous Items Manhole & Pipe Accessories
Romac Industries, Inc. Style "CB" Sewer Service Saddle	Removed from the list	Feb-2018	
Inserta Fittings (Fowler) Inserta Tee Service Saddle	Removed from the list	Feb-2018	Manhole & Pipe Accessories
Tyler Union 25# Water Lid with 4" Skirt	Added to List	Jan-2018	Valve Cans & Lids
Tyler Union Series 1000, 1500, 2000, 3000PP	Added to List	Jan-2018	Valves & Joint Restraint
Sigma PV-LOK Series PWP Bell Joint Restraint (4"-16")	Added to List	Jan-2018	Valves & Joint Restraint
Badger Meters FSAA-01 (all sizes)	Removed from the list	Feb-2018	Water Meters
Hersey Meters FM-3 (all sizes)	Removed from the list	Feb-2018	Water Meters
Metron-Farnier Spectrum 175, 260, 440 (all sizes) Neptune Technology Group Tru/Flo (all sizes)	Removed from the list	Feb-2018	Water Meters
	Removed from the list	Feb-2018	Water Meters
Neptune Technology Group Protectus III-SS (all sizes) Oldcastle Precast Precast Manholes (48", 60", 72")	Removed from the list	Feb-2018	Water Meters
	Added to the list	Nov-2017	Manhole Components
US Pipe TR Flex (6" - 16") Ford Meter Box FC2W Wide Range Coupling (6" - 16")	Added to the list	Nov-2017	Water Pipe
	Added to the list	Nov-2017	Fittings & Couplings
Ford Meter Box UFR 1500 Mechanical Joint Restraint (6" - 12") Cla-Val CRD-L (3/4" - 2")	Added to the list	Nov-2017	Valves & Joint Restraint
	Added to the list	Oct-2017	Miscellaneous Items
Accommodate new AMR lids	Revised model numbers	May-2017	Meter Box and Lid Options Sanitary Sewer Manhole Options
National Casting Corporation NC-2531R	Revised model number	May-2017	
Smith-Blair Top Bolt Coupling - Model 421	Added to the list	May-2017	Water Main Coupling Options
PowerSeal 341	Added to the list	Oct-2016	Tapping Saddle Options
Remove all 3" AVAR: 1. APCO/Willamette 147C; 2. Val-Matic 203C.2; 3. Vent-O-Mat 1631 RBX Series	Removed from the list	Mar-2016	Miscellaneous Items
Muller Company , LLC - Model A-2361 - (Ductile Iron Body)	Added to the list - replacing model A- 2360	Mar-2016	Water Main Valves & Joint Restraint
Muller Company A-2360 (Cast Iron Body)	Removed from the list Allow for Vertical Show	Mar-2016	Water Main Valves & Joint Restraint
American Flow Control Waterous (Pacer WB67) Change "Pacific States" to "McWane Ductile"	Configerations Name change	Nov-2015 Nov-2015	Fire Hydrant Options Water Main Pipes & Sewer Main Pipes
Team Industrial Services - Inserta Valve", Model RW-Gate, 4" to 12"	Suspended from AML	Nov-2015	Water Main Valves & Joint Restraint
U.S. Pipe TR-Flex (Gasket)	Suspended from AML	Nov-2015	Water Main Valves & Joint Restraint
Smith-Blair Model 111 Cam-Lock (DI: 4"-12")	Added to the list	Oct-2015	Water Main Valves & Joint Restraint
Smith-Blair Model 120 Cam-Lock (PVC: 4"-16")	Added to the list	Oct-2015	Water Main Valves & Joint Restraint
Smith-Blair Model 115 MJ Fittings & Push-On Joints PVC: 4"-16" & DI: 4"-12"	Added to the list	Jul-2015	Water Main Valves & Joint Restraint
Smith-Blair Model 165 Bell & Spigot Joints PVC: 4"- 16" & DI: 4"-12"	Added to the list	Jul-2015	Water Main Valves & Joint Restraint
A.R.I. Combination Air Valve (D-060 & D-60-C-HF) Tigre - ADS USA	Added to the list Added to the list	Jul-2015 Jul-2015	Miscellaneous Items Sewer Main Pipe Options
National Casting Corporation NC-2531 Change "Halstead" to "Wieland Copper Products, LLC"	Added to the list	Jul-2015	Sanitary Sewer Manhole Options
	Name change	Mar-2015	Water Service Tubing Options
Romac Series 600 Pipe Restraint	Added to the list	Nov-2014	Water Main Valves & Joint Restraint
Star Pipe Products - Star Flange 3200 (DIP) & 4200 (PVC)	Added to the list	Oct-2014	Water Main Valves & Joint Restraint
Jandec Marketing, LLC DFW Plastics, Inc.	Removed from the list	Sep-2014	Backflow Enclosure Options
	Added to the list	Sep-2014	Meter Box and Lid Options
Delete all 4-inch Combination Fire and Domestic Meters and update application for all meters	Updated / Removed from the list	Apr-2014	Water Meter Options
Manufacture changed from Strongwell to Hubbell	Updated List	Mar-2014 Mar-2014	Meter Box and Lid Options Water Meter Options & Manhole
Warren Epoxy and Master Meter Ultrasonic Meter (3"-12") Polymer Manholes	Added to the list Added to the list	Aug-2013	Lining Systems  Manhole Components
PlumbShield Plastic Coated Copper Tubing - 1/4"-2"	Added to the list	Jun-2013	Water Service Brass & Tubing
Badger Meters Model FSAA-01	Added to the list	Jun-2013	Water Meters
Polyethylene Water Service Tubing (1" - 2") Turbine, Compound and Fire Service Meters - Omni T2, C2 and F2 -	Removed from the list  Added to the list	Apr-2012 Jan-2012	Water Service Tubing Options Water Meters
8"-10"	Added to the list - replacing model	Jul-2011	
East Jordan Iron Works, Inc Watermaster Fire Hydrant -5CD250  Quality Rubber Company -Gripper Gaskets -Series 3"-24" (Boltless	5BR250 Added to the list	Jul-2011 Jul-2011	Fire Hydrants  Water Main Valves & Joint Restraint
restraint for DIP, valves, fittings) Star Pipe Co., Inc. – Stargrip Joint Restraint – Model 4000 – C900 4" –	Added to the list  Added to the list		Water Main Valves & Joint Restraint Water Main Valves & Joint Restraint
12" 3M – 4" Ball Marker – 1404-XR – U/G Utility Marking	Added to the list	Dec-2010 Dec-2010	Miscellaneous Items
Carson Industries – Meter Box / Lid – H1730-12 – Polymer Concrete	Added to the list	Dec-2010	Meter Box and Lid Options
Carson Industries – Meter Box / Lid – H1324-12 – Polymer Concrete	Added to the list	Dec-2010	Meter Box and Lid Options
Team Industrial Services - Inserta Valve", Model RW-Gate, 4" to 12"	Added to the list	Mar-2010	Water Main Valves & Joint Restraint
Sensus Metering Systems, Omni, f2, 4" to 6"	Added to the list	Mar-2010	Water Meters
EBAA Iron – PVC Joint Restraint, 2000PV, C900 & C9 05, 4" to 12"  EBAA Iron – PVC Joint Restraint, 1600, C900, 4" to 12"	Added to the list	Mar-2010	Water Main Valves & Joint Restraint
	Added to the list	Mar-2010	Water Main Valves & Joint Restraint
EBAA Iron – PVC Joint Restraint, 2800, C905, 14"  JM Eagle Pipe	Added to the list	Mar-2010	Water Main Valves & Joint Restraint
	Removed from list	Feb-2010	Water Main Pipe
PVC. Sewer Pipe Fittings	Added to the list	Dec-2009	Sewer
D & L Foundry & Supply M-8045-3	Added to the list	Oct-2009	Valve Cans & Lids
"Sensus" Model "C2", sizes 3" – 6" Metering Systems "Sensus" Model "T2", sizes 3" – 6" Metering Systems	Added to the list	Jun-2009	Water Meters
	Added to the list	Jun-2009	Water Meters
"Sensus" Model "SRH", sizes 3" – 6" meters Expanded Application Categories	Removed from the list	Aug-2009	Water Meters
	Revised and/or added	Dec-2008	Water Meters
Hersey 8x2 & 10x2 meter Metron 6" & 8" Enduro meter	Removed from the list	Dec-2008	Water Meters
	Removed from the list	Dec-2008	Water Meters
Fire hydrant guidelines added	Added web link to COH fire hydrant guidelines.	Dec-2008	Fire Hydrants
Fire hydrant suspended from AML - Kennedy K-81A	Suspended from AML	Dec-2008	Fire Hydrants
Griffin Pipe Products Co. Ductile Iron Water Pipe	Added to the list	Oct-2008	Water Main Pipe
North American Pipe Corp. C-900 PVC Pipe	Added to the list	Oct-2008	Water Main Pipe
Ford Meter Box 2" Blow-off	Added to the list	Oct-2008	Miscellaneous Items
Jensen Precast G5 Valve Box	Added to the list	Oct-2008 Oct-2008	Miscellaneous Items Sewer manhole components & lining
COR+GARD Epoxy Manhole Lining System	Added to the list  Revised the requirement for C-900		systems
C-900 Required at 20 feet depth of cover  North American Pipe Corp. SDR-35 Sewer Pipe	pipe from 15 feet to 20 feet.	Dec-2008	Sewer Main Pipe
	Added to the list	Dec-2008	Sewer Main Pipe
Griffin Pipe Products Co. Ductile Iron Sewer Pipe McWane Sure Stop 350 Joint Restraint Gasket	Added to the list	Dec-2008	Sewer Main Pipe
	Added to the list	Dec-2008	Water Main Valves & Joint Restraint
Maximum size change	Revise maximum size for all products from 20" to 16"	Oct-2007	All
Pipeline Products – Air-Vac Cover	Added to the list	Sep-2007	Miscellaneous Items Joint Restraint
Romac - RomaGrip and Sigma - One-Lok	Added to the list	Sep-2007	
Vent-O-Mat - Combination Air Valve	Added to the list	Sep-2007	Miscellaneous Items



# CITY OF HENDERSON APPROVED MATERIALS LIST TAPPING SLEEVE OPTIONS

All tapping sleeves shall have a full circumferential gasket.

All carbon steel tapping sleeves shall be fusion-bonded epoxy coated.

The diameter of asbestos cement (AC) pipe varies among manufacturers.

It is important to measure the (AC) pipe diameter at the point where the sleeve will be installed.

	APPLICATION										
Manufacturer	Model Number	/.	900 21	9050	of Control	ast Hon estat	/	M Style Approval Date	Manufacturer Web Link		
American Flow Control	2800-C			•			Up To 24"	Up to Size on Size	•	Dec-2019	http://www.acipco.com/afc
American Flow Control	2800-A					•	Up To 24"	Up to Size on Size	•	Dec-2019	http://www.acipco.com/afc
Ford Meter Box Co.	FTSS	•		•	•	•	Up To 12"	Max 75% of pipe		Apr-1995	http://www.fordmeterbox.com
JCM Industries	JCM 432	•		•	•	•	Up To 24"	Max 75% up to 8"		May-2019	http://www.jcmindustries.com
Mueller Company, LLC	H-615	•		•	•		Up To 12"	Up to Size on Size	•	Apr-1995	http://www.muellercompany.com
Mueller Company, LLC	H-619					•	Up To 12"	Up to Size on Size	•	Apr-1995	http://www.muellercompany.com
Power Seal	3490 AS	•		•	•	•	Up To 24"	Max 75% of pipe		Jan-2001	http://www.powerseal.com
Romac Industries, Inc.	FTS425	•		•	•	•	Up To 24"	Up to Size on Size	•	May-2007	http://www.romac.com
Romac Industries, Inc.	SST III	•		•	•	•	Up To 24"	Max 75% of pipe		Apr-1995	http://www.romac.com
Smith-Blair, Inc.	623	•	•	•	•	•	Up To 24"	Up to Size on Size	•	May-2004	http://www.smith-blair.com
Smith-Blair, Inc.	664	•		•		•	Up To 24"	Max 75% of pipe		Jan-2001	http://www.smith-blair.com
Smith-Blair, Inc.	665	•		•	•	•	Up To 24"	Max 75% of pipe		Oct-2006	http://www.smith-blair.com



# CITY OF HENDERSON APPROVED MATERIALS LIST TAPPING SADDLE OPTIONS

All tapping saddles are required to be a double bolt style saddle.

This can either be a single strap or a double strap.

Bronze blades or straps are approved for ductile iron, cast iron and AC pipe only. Any saddle to be used on a main larger than 20 inches will be a case-by-case approval.

	APPLICATION											
Manufacturer	Model Number Call Call Out ile Aste Centent Tapping lipe Roptoral Date  Manufacturer Web Link											
A. Y. McDonald	3856	•					Up To 12"	May-2004	http://www.aymcdonald.com			
A. Y. McDonald	3846	•					Up To 12"	May-2004	http://www.aymcdonald.com			
Ford Meter Box Co.	202BS	•	•	•			Up To 20"	Apr-1995	http://www.fordmeterbox.com			
Ford Meter Box Co.	202B			•	•	•	Up To 20"	Apr-1995	http://www.fordmeterbox.com			
Jones	J-979			•	•	•	Up To 12"	Apr-1995	http://www.jamesjones.com			
Jones	J-969	•					Up To 12"	Apr-1995	http://www.jamesjones.com			
Mueller Company, LLC	BR2B			•	•	•	Up To 16"	Apr-1995	http://www.muellercompany.com			
Mueller Company, LLC	BR2S	•		•	•	•	Up To 16"	Apr-1995	http://www.muellercompany.com			
PowerSeal	3409	•		•		•	Up To 16"	Oct-2006	http://www.powerseal.com			
PowerSeal	3417AS	•	•	•	•	•	Up To 16"	Oct-2016	http://www.powerseal.com			
Romac Industries, Inc.	202BS	•	•	•	•	•	Up To 16"	Apr-1995	http://www.romac.com			
Smith-Blair, Inc.	325	•		•			Up To 12"	May-2004	http://www.smith-blair.com			



#### CITY OF HENDERSON APPROVED MATERIALS LIST WATER METER OPTIONS

ALL meters shall read in cubic feet and have encoded registers. All water meters 2 inches and smaller will be supplied and installed by the City of Henderson.

All water meters 3 inches and larger will be supplied and installed by the Contractor. Non-rising stem valves only are to be used in any meter vault.

ALL Neptune Protectus III Combination Fire and Domestic meters shall include Stainless Steel Strainers and Valve Covers.

Non-rising stem valves only are to be used in any meter vault.

							APPLICATION		used in any meter vaar				
Meter Type	SIZE	Model	Dorne str.	it south Jorge Site	Confredate State Con	Heart & Industrie	dod Donestic	a Scanno de de la completa del completa de la completa de la completa del completa de la completa del la completa de la completa del la completa de la compl	one sit Corning of the solone	ric lries	iton JDRC	ase Referenced Date	Manufacturer Web Link
Turbine with Straine			1		ı		1				_	•	
Sensus	3"	OMNI T2			•		•			•	52	Jun-2009	http://www.sensus.com
Sensus	4"	OMNI T2			•		•			•	52	Jun-2009	http://www.sensus.com
Sensus	6"	OMNI T2			•		•			•	52	Apr-1995	http://www.sensus.com
Sensus	8"	OMNI T2			•		•			•	52	Apr-1995	http://www.sensus.com
Sensus	10"	OMNI T2			•		•			•	52	Apr-1995	http://www.sensus.com
Neptune	3"	HP			•		•			•	52	Oct-2006	http://www.neptunetg.com
Neptune	4"	HP			•		•			•	52	Oct-2006	http://www.neptunetg.com
Neptune	6"	HP			•		•			•	52	Oct-2006	http://www.neptunetg.com
Neptune	8"	HP			•		•			•	52	Oct-2006	http://www.neptunetg.com
Neptune	10"	HP			•		•			•	52	Oct-2006	http://www.neptunetg.com
Compound with Stra			·		•					1	_		
Sensus	3"	OMNI C2	•	•		•	•				50	Jun-2009	http://www.sensus.com
Sensus	4"	OMNI C2	•	•		•	•				50	Jun-2009	http://www.sensus.com
Sensus	6"	OMNI C2	•	•		•	•				50	Jun-2009	http://www.sensus.com
Combination Fire &	Domestic		_							1	•	•	
Sensus	6"	OMNI F2						•	•		55	Apr-1995	http://www.sensus.com
Sensus	8"	OMNI F2						•	•		55	Mar-2010	http://www.sensus.com
Sensus	10"	OMNI F2						•	•		55	Mar-2010	http://www.sensus.com
Ultrasonic Meter													
Master Meter	3"	Octave	•	•	•	•	•				54	Mar-2014	http://www.mastermeter.com
Master Meter	4"	Octave	•	•	•	•	•				54	Mar-2014	http://www.mastermeter.com
Master Meter	6"	Octave	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Master Meter	8"	Octave	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Master Meter	10"	Octave	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Master Meter	12"	Octave	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Neptune	3"	Mach 10	•	•	•	•	•				54	Mar-2014	http://www.mastermeter.com
Neptune	4"	Mach 10	•	•	•	•	•				54	Mar-2014	http://www.mastermeter.com
Neptune	6"	Mach 10	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Neptune	8"	Mach 10	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Neptune	10"	Mach 10	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com
Neptune	12"	Mach 10	•	•	•	•	•	•	•		54	Mar-2014	http://www.mastermeter.com



All meter box top sections and lid components shall be an approved material with a 20K or Tier 15 rating.

All lids are required to have a manufacturer casting stamp and have a manufacturer label on the inside wall of the box.

All 3/4" and 1" meters require a 1" meter box and 1 1/2" and 2" meters require a 2" meter box. All lids shall be stamped "Water".

Touch read hole size shall be 1 3/4" in diameter. The area around the touch read hole shall be recessed 1/8" to a diameter of 4 1/8" centered on the center of the touch read hole.

					APPLICATION		
Manufacturer	Model/Part Number	Component	Lid Size	Lid Markings	Approval Date	Manufacturer Web Link	Lid Configuration
Hubbell - Armorcast	A6001946PCX12	1" Box			Jan-2001	https://www.hubbell.com	•
Hubbell - Armorcast	A6001640PCX12	2" Box			Jan-2001	https://www.hubbell.com	
Oldcastle	SYN1324X12	1" Box			Oct-2006	http://www.christyconcrete.com	_
Oldcastle	SYN1730X12	2" Box			Oct-2006	http://www.christyconcrete.com	NON SKID - 4" - SURFACE/
Jensen Precast  Jensen Precast	100008589 100002034	1" Box 2" Box			Oct-2006 Oct-2006	http://www.jensenprecast.com/ http://www.jensenprecast.com/	4"
Hubbell - Quazite* Hubbell - Quazite*	PG1324B531 PG1730B568	1" Box 2" Box			Oct-2006 Oct-2006	https://www.hubbell.com https://www.hubbell.com	3/4"
Hubbell - Armorcast Hubbell - Armorcast Oldcastle Oldcastle	A6001969-H16 <sup>1</sup> A6001947T-H16 <sup>1</sup> SYN1324P SYN1730P	1" Lid 2" Lid 1" Lid 2" Lid	23 1/4" x 13 3/4" 30 1/2" x 17 1/2" 23 1/4" x 13 3/4" 30 1/2" x 17 1/2"	WATER WATER WATER WATER	Jan-2001 Jan-2001 Oct-2006 Oct-2006	https://www.hubbell.com https://www.hubbell.com https://oldcastleinfrastructure.com/ https://oldcastleinfrastructure.com/	PICK HOLE
Jensen Precast	100005027 1	1" Lid	23 1/4" x 13 3/4"	WATER	Oct-2006	http://www.jensenprecast.com/	_
Jensen Precast	100005030 1	2" Lid	30 1/2" x 17 1/2"	WATER	Oct-2006	http://www.jensenprecast.com/	LOGO LOGO
Hubbell - Quazite*	PG 1324 H59450 <sup>1</sup>	1" Lid	23 1/4" x 13 3/4"	WATER	Oct-2006	https://www.hubbell.com	
Hubbell - Quazite*	PG 1730 H60550 <sup>1</sup>	2" Lid	30 1/2" x 17 1/2"	WATER	Oct-2006	https://www.hubbell.com	

<sup>\*</sup>Formerly Strongwell

<sup>&</sup>lt;sup>1</sup>Accommodates AMR Sensor



# CITY OF HENDERSON APPROVED MATERIALS LIST FIRE HYDRANT OPTIONS

The main valve is 5 1/4".

The pumper nozzle is 4" Higbee Cut National Standard Thread.

The hose nozzle is 2 1/2" Higbee Cut National Standard Thread.

All hydrants shall have a 1 1/8" operating nut.

Some hydrants may be approved for a vertical shoe configuration.

This approval will be a project specific approval.

Any fire hydrant for new construction must be a new hydrant.

The relocation of existing hydrants is not approved within the City.

#### APPLICATION **Vertical Shoe Approval Configuration** Configuration Manufacturer **Model Number** Date **Manufacturer Web Link** American Flow Control WB67 Apr-1995 http://www.acipco.com/afc Pacer Yes Waterous http://www.clowvalve.com Clow Medallion F-2546 LVD Yes Apr-1995 http://www.ejiw.com East Jordan Iron Works 5CD250 Oct-2006 Mueller Super Centurion 250 A-423 Apr-1995 http://www.muellercompany.com Yes



Pacific States

Pacific States

U.S. Pipe

Thrust-Lock

MJ TJ

Field-Lok 350

#### CITY OF HENDERSON APPROVED MATERIALS LIST WATER MAIN VALVE OPTIONS

The minimum water main valve size is 6 inch.

All gate valves shall be resilient seated wedge type, fusion bonded epoxy coated to ANSI/AWWA C550. Gate valves shall comply with AWWA C509 or C515.

No butterfly valves shall be used for normal distribution applications.

		NO DUTTERTLY VE	iives snaii be us	seu ior normal di	stribution applications.					
		APP	LICATION							
Manufacturer	Model Number	Туре	Size	Approval Date	Manufacturer Web Link					
American Flow Control	2500 Series	Gate	6" - 16"	Jan-2001	http://www.acipco.com/afc					
Clow	2640	Gate	6" - 12"	Apr-1995	http://www.clowvalve.com					
Clow	2639	Gate	6" - 12"	Apr-1995	http://www.clowvalve.com					
Clow	2638	Gate	6" - 16"	Apr-1995	http://www.clowvalve.com					
East Jordan Iron Works	Flowmaster Series	Gate	6" - 16"	Mar-2005	http://www.ejiw.com					
Kennedy	8000 Series	Gate	6" - 12"	Apr-1995	http://www.kennedyvalve.com					
M&H	7000 Series	Gate	6" - 12"	Apr-1995	http://www.mh-valve.com					
M&H	4067	Gate	6" - 12"	Apr-1995	http://www.mh-valve.com					
Mueller Company, LLC	A-2361	Gate	6" - 16"	Mar-2016	http://www.muellercompany.com					
Waterous	500 Series	Gate	6" - 12"	Apr-1995	http://www.acipco.com/afc					
	1	CITY OF HENDERSON WATER MAIN JOINT RESTRAINT OPTIONS  Ductile Iron pipe and PVC are the only pipe materials approved within the City for any joint restraint system.  Gasket-type joint restraint systems are approved for straight runs of ductile iron pipe only, and are not to be used at any fitting or valve joint.								
EBAA Iron	MEGALUG 1100	Mechanical	4" - 24"		http://www.ebaa.com					
EBAA Iron	2000PV (PVC)	Mechanical	4" - 12"	Mar-2010	http://www.ebaa.com					
EBAA Iron	1600 (PVC)	Mechanical	4" - 12"	Mar-2010	http://www.ebaa.com					
EBAA Iron	2800 (PVC)	Mechanical	14"	Mar-2010	http://www.ebaa.com					
Ford Meter Box	Uni-Flange 1400	Mechanical	4" - 24"		http://www.fordmeterbox.com					
Ford Meter Box	UFR1500	Mechanical	6" - 16"	Jun-2017	http://www.fordmeterbox.com					
Romac Industries, Inc.	RomaGrip	Mechanical	4" - 16"	Sep-2007	http://www.romac.com					
Romac Industries, Inc.	600 Series	Mechanical	6" - 12"	Nov-2014	http://www.romac.com					
Sigma	One-Lok	Mechanical	4" - 16"	Sep-2007	http://www.sigmaco.com					
Sigma	PV-LOK Series PWP	Mechanical	4" - 16"	Jan-2018	http://www.sigmaco.com					
Smith-Blair, Inc.	Model 111 Cam-Lock (DI)	Mechanical	4" - 12"	Oct-2015	www.smith-blair.com					
Smith-Blair, Inc.	Model 120 Cam-Lock (PVC)	Mechanical	4" - 16"	Oct-2015	www.smith-blair.com					
Smith-Blair, Inc.	Model 115 Bell-Lock (DI)	Mechanical	4" - 12"	Jul-2015	www.smith-blair.com					
Smith-Blair, Inc.	Model 115 Bell-Lock (PVC)	Mechanical	4" - 16"	Jul-2015	www.smith-blair.com					
Smith-Blair, Inc.	Model 165 Bell-Lock (DI)	Mechanical	4" - 12"	Jul-2015	www.smith-blair.com					
Smith-Blair, Inc.	Model 165 Bell-Lock (PVC)	Mechanical	4" - 16"	Jul-2015	www.smith-blair.com					
Star Pipe Products	Star Flange Series 3200 (DI)	Mechanical	6" - 12"	Oct-2014	http://www.starpipeproducts.com					
Star Pipe Products	Star Flange Series 4200 (PVC)	Mechanical	6" - 12"	Oct-2014	http://www.starpipeproducts.com					
Star Pipe Products	Star Grip 3000 (DI)	Mechanical	4" - 16"	Dec-2010	http://www.starpipeproducts.com					
Star Pipe Products	Star Grip 4000 (PVC)	Mechanical	4" - 16"	Dec-2010	http://www.starpipeproducts.com					
Tyler Union	Series 1000 Tufgrip for DIP	Mechanical	4" - 16"	Jan-2018	http://www.tylerunion.com					
Tyler Union	Series 1500 Tufgrip Dual Wedge	Mechanical	4" - 16"	Jan-2018	http://www.tylerunion.com					
Tyler Union	Series 2000 Tufgrip for PVC Pipe	Mechanical	4" - 16"	Jan-2018	http://www.tylerunion.com					
Tyler Union	Series 3000PP PVC Pipe Bell Restraint	Mechanical	4" - 16"	Jan-2018	http://www.tylerunion.com					
American	Fast-Grip	Gasket	4" - 16"		http://www.acipco.com					
American	Flex-Ring	Gasket	4" - 16"		http://www.acipco.com					
McWane Pipe	Sure Stop 350	Gasket	3" - 16"	Dec-2008	http://www.mcwanepipe.com/					

4" - 12"

16"

4" - 16"

ttp://www.pscipco.com

http://www.pscipco.com

http://www.uspipe.com

Gasket

Gasket

Gasket



### CITY OF HENDERSON APPROVED MATERIALS LIST WATER MAIN PIPE OPTIONS

No thrust blocks shall be used on pipe above 12 inches in diameter.

Where required, an approved mechanical joint restraint must be used on all pipe larger than 12 inches.

Any pipe used on the discharge side of a fire pump must be minimum pressure class 200.

All ductile iron pipe shall be poly wrapped in a minimum of two wraps of 8 mils each for a total of 16 mils.

Ductile iron pipe will usually have a pressure class rating or a thickness class rating.

#### APPLICATION

			Pressure	Thickness		Dimension	Approval	
Manufacturer	Model Number	Туре	Class	Class	Size	Ratio	Date	Manufacturer Web Link
Diamond Pipe Co	C 900	PVC	150		4" - 12"	DR 18	Apr-1995	http://www.dpcpipe.com
Vinyltech	C 900	PVC	150		4" - 12"	DR 18	Apr-1995	http://www.vtpipe.com
North American Pipe Corp.	C 900	PVC	150		4" - 12"	DR 18	Oct-1995	http://www.northamericanpipe.com/
Diamond Pipe Co	C 900	PVC	200		4" - 12"	DR 14	Apr-1995	http://www.dpcpipe.com
Vinyltech	C 900	PVC	200		4" - 12"	DR 14	Apr-1995	http://www.vtpipe.com
North American Pipe Corp.	C 900	PVC	200		4" - 12"	DR 14	Oct-1995	http://www.northamericanpipe.com/
American	Mechanical Joint Pipe	Ductile	350	Minimum 50	4" - 12"		Apr-1995	http://www.acipco.com
American	Fastite	Ductile	350	Minimum 50	4" - 12"		Apr-1995	http://www.acipco.com
McWane Ductile*	Tyton Joint	Ductile	350	Minimum 50	4" - 12"		Apr-1995	http://www.pscipco.com
McWane Ductile*	Mechanical Joint Pipe	Ductile	350	Minimum 50	4" - 12"		Apr-1995	http://www.pscipco.com
U.S. Pipe	Tyton Joint	Ductile	350	Minimum 50	4" - 12"		Apr-1995	http://www.uspipe.com
U.S. Pipe	TR Flex	Ductile	350		6" - 16"		Jun-2017	http://www.uspipe.com
American	Mechanical Joint Pipe	Ductile	250	Minimum 50	16"		Apr-1995	http://www.acipco.com
American	Fastite	Ductile	250	Minimum 50	16"		Apr-1995	http://www.acipco.com
McWane Ductile*	Tyton Joint	Ductile	250	Minimum 50	16"		Apr-1995	http://www.pscipco.com
McWane Ductile*	Mechanical Joint Pipe	Ductile	250	Minimum 50	16"		Apr-1995	http://www.pscipco.com
U.S. Pipe	Tyton Joint	Ductile	250	Minimum 50	16"		Apr-1995	http://www.uspipe.com
Griffin Pipe Products	Mechanical Joint Pipe	Ductile	250	Minimum 50	4" - 16"		Oct-2008	http://www.griffinpipe.com/

<sup>\*</sup>Formerly Pacific States



U. S. Pipe

210

4" - 12"

#### CITY OF HENDERSON APPROVED MATERIALS LIST WATER MAIN FITTING OPTIONS

This includes tees, bends, crosses, wyes, reducers, plugs and caps.

All water main fittings are required to be ductile Iron and have a minimum working pressure rating of 250 psi.

	and have a minimum working pressure rating of 250 psi.								
			APPLICATION						
Manufacturer	Model Number	Size		Approval Date	Manufacturer Web Link				
Clow		4" - 16"	Push-On & MJ Fittings		http://www.clowwatersystems.com				
Sigma		4" - 16"	Push-On & MJ Fittings		http://www.sigmaco.com				
Star Pipe Products		4" - 16"	Push-On & MJ Fittings		http://www.starpipeproducts.com				
Tyler/Union		4" - 16"	Push-On & MJ Fittings		http://www.tylerpipe.com				
U. S. Pipe		4" - 16"	Push-On & MJ Fittings		http://www.uspipe.com				
COUPLINGS			CITY OF HENDERSON APPROVED M WATER MAIN COUPLING OF		IST				
Dresser	38	4" - 12"			http://www.dressercouplings.com				
Ford Meter Box	FC1	4" - 12"			http://www.fordmeterbox.com				
Ford Meter Box	FC2W	6" - 16"	Wide Range Coupling	Jun-2017	http://www.fordmeterbox.com				
PowerSeal	3506	4" - 16"			http://www.powerseal.com				
Romac Industries, Inc.	501	4" - 16"			http://www.romac.com				
Romac Industries, Inc.	XR501	4" - 12"			http://www.romac.com				
Romac Industries, Inc.	Alpha and Alpha FC	4" - 12"	Wide Range Coupling - Approved for repairs, only. New installations to be reviewed on a case-by-case basis, and require approval from DUS.	Jul-2019	http://www.romac.com				
Romac Industries, Inc.	Macro HP	4" - 12"	Extended Range Coupling - Approved for repairs, only. New installations to be reviewed on a case-by-case basis, and require approval from DUS.	Jul-2019	http://www.romac.com				
Smith-Blair, Inc.	411	4" - 10"			http://www.smith-blair.com				
Smith-Blair, Inc.	421	4" - 16"	Top Bolt Wide Range Coupling	May-2017	http://www.smith-blair.com				
Smith-Blair, Inc.	441	4" - 16"			http://www.smith-blair.com				

http://www.uspipe.com



# CITY OF HENDERSON APPROVED MATERIALS LIST VALVE BOX & LID OPTIONS

The minimum valve can lid weight is 14 pounds for a 4" skirt and 16 pounds for a 2" skirt. The minimum valve can lid weight for a Right-of-Way larger than 60 feet is 22 pounds.

	APPLICATION											
Manufacturer	ltem	Model Number Approved for Approved Food Right Strate Lid Skift Regelt Lid Meeting Approved Date Manufacturer Web Link										
Bingham & Taylor	Valve Box Lid	CUL5LHVTSK4W	•	•	4"	25 lbs	Oct-2006	http://www.binghamandtaylor.com				
D & L Foundry & Supply	Valve Box Lid	M-8045-1		•	4"	14 lbs	Oct-2006	http://www.dlfoundry.us				
D & L Foundry & Supply	Valve Box Lid	M-8045-3	•	•	6"	25 lbs	Oct-2009	http://www.dlfoundry.us				
East Jordan Iron Works	Valve Box Lid	6800045	•	•	4"	23 lbs	Oct-2006	http://www.ejiw.com				
East Jordan Iron Works	Valve Box Lid	6800007		•	2"	17 lbs	Oct-2006	http://www.ejiw.com				
NEENAH	Valve Box Lid	1913		•	4"	14 lbs	Oct-2006	http://www.nfco.com				
Sigma	Valve Box Lid	VB 2600WLV-35		•	4"	15 lbs	Oct-2006	http://www.sigmaco.com				
Star Pipe Products	Valve Box Lid	VBLIDLV		•	4"	16.5 lbs	Oct-2006	http://www.starpipeproducts.com				
Tyler Union	Valve Box Lid	25#	•		4"	25 lbs	Jan-2018	http://www.tylerunion.com				
Bingham & Taylor	Valve Boxes	15B20	•				Oct-2006	http://www.binghamandtaylor.com				
D & L Foundry & Supply	Valve Box - Upper	M-8058	•				Oct-2006	http://www.dlfoundry.us				
D & L Foundry & Supply	Valve Box - Lower	M-8064	•				Oct-2006	http://www.dlfoundry.us				
East Jordan Iron Works	Valve Boxes	562-A	•				Oct-2006	http://www.ejiw.com				
Star Pipe Products	Valve Boxes	564-A	•				Oct-2006	http://www.starpipeproducts.com				
Tyler	Valve Boxes	6855	•				Oct-2006	http://www.tylerpipe.com				



### CITY OF HENDERSON APPROVED MATERIALS LIST BACKFLOW ASSEMBLY OPTIONS

Any backflow assembly listed on the most current Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California (USC) list of approved backflow assemblies is acceptable for use within the City of Henderson.

All backflow assembly valves 3" and larger are required to be an Outside Stem & Yoke (OS&Y) configuration.

All City of Henderson backflow assemblies installed are privately owned and maintained.

Review the most current UDACS Table E and NAC 445A.67185 - 445A.6724

for requirements of each application.



#### CITY OF HENDERSON BACKFLOW ENCLOSURE OPTIONS

All enclosures are required to have ASSE 1060 Class II certification.

(freeze retardant enclosures with insulation)

All enclosures are required to have a manufacturer label showing manufacturer name and model number.

	APPLICATION									
Manufacturer	Model Number	Туре	Size	Approval Date	Manufacturer Web Link					
HydroCowl				Oct-2006	http://safe-t-cover.com					
Hot Box				May-2004	http://www.hubbellpowersystems.com/about/hotbox/					
Aquashield				Oct-2006	https://www.aquashieldenclosures.com/					
Safe-T-Cover				Oct-2006	http://safe-t-cover.com					



# CITY OF HENDERSON APPROVED MATERIALS LIST WATER SERVICE TUBING OPTIONS

UDACS Plates 1 and 3 are the only water service configurations used within the City.

			APPL	ICATION					
Manufacturer	Model Number	Туре	Size	Approval Date	UDACS Plate	Manufacturer Web Link			
Wieland Copper Products, LLC		Type K Copper	1" - 2"	Apr-1995	1 or 3	http://www.wielandcopper.com			
Cambridge-Lee		Type K Copper	1" - 2"	Apr-1995	1 or 3	http://www.camlee.com			
Cerro		Type K Copper	1" - 2"	Apr-1995	1 or 3	http://www.cerroflow.com			
Mueller Company, LLC	Streamline	Type K Copper	1" - 2"	Apr-1995	1 or 3	http://www.muellercompany.com			
Nungwon Metal Ind	Type K	Type K Copper	1" - 2"	Sep-2023	1 or 3	http://www.nwmmetal.com/			
Mueller Industries, Inc.	PlumbShield	Plastic Coated Copper	1" - 2"	Jun-2013	1 or 3	http://www.muellerindustries.com/			
	CITY OF HENDERSON WATER SERVICE BRASS OPTIONS  UDACS plates 1 and 3 are the only water service configurations used within the City.								
A.Y. McDonald				Jan-2001		http://www.aymcdonald.com			
Cambridge				May-2004	1 or 3	http://www.cambridgebrass.com			
Ford Meter Box				Apr-1995	1 or 3	http://www.fordmeterbox.com			
James Jones				Apr-1995	1 or 3	http://www.jamesjones.com			
Mueller Company, LLC				Apr-1995		http://www.muellercompany.com			



# CITY OF HENDERSON APPROVED MATERIALS LIST SEWER MAIN PIPE OPTIONS

Any sewer main not meeting minimum cover required by the standards shall be either C 900 PVC or lined Ductile, as required by the City.

Ероху

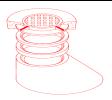
Any ductile iron pipe used for a sewer application is required to have a manufacturer-applied epoxy lining.

Any sewer main deeper than 20 feet shall be a minimum C-900 pipe.

All ductile iron pipe shall be poly wrapped in a minimum of two wraps of 8 mils each for a total of 16 mils.

	APPLICATION							
Manufacturer	Model Number	Туре	Pressure Class	Size	Dimension Ratio	Approval Date	Manufacturer Web Link	
Diamond Pipe Co	SDR 35	PVC		4" - 15"		Apr-1995	http://www.dpcpipe.com	
Vinyltech	SDR 35	PVC		4" - 15"		Apr-1995	http://www.vtpipe.com	
North American Pipe Corp.	SDR 35	PVC		4" - 12"		Oct-2008	http://www.northamericanpipe.com/	
JM Eagle	SDR35	PVC		4" - 12"		Sep-2023	https://www.jmeagle.com/	
Diamond Pipe Co	C 900	PVC	150	4" - 12"	DR 18	Apr-1995	http://www.dpcpipe.com	
Vinyltech	C 900	PVC	150	4" - 12"	DR 18	Apr-1995	http://www.vtpipe.com	
GPK Products, Inc	Fittings	PVC			SDR-35	Dec-2009	http://www.gpk-fargo.com/	
Tigre-ADS USA	Fittings (Gasketed Only)	PVC			SDR-35	Jul-2015	www.tigreadsusa.com	
	Any ductile iro	n pipe used for a	a sewer appl	ication is re	quired to be	epoxy lined.		
American	Mechanical Joint Pipe	Ductile	350	4" - 12"		Apr-1995	http://www.acipco.com	
American	Fastite	Ductile	350	4" - 12"		Apr-1995	http://www.acipco.com	
McWane Ductile*	Tyton Joint	Ductile	350	4" - 12"		Apr-1995	http://www.pscipco.com	
McWane Ductile*	Mechanical Joint Pipe	Ductile	350	4" - 12"		Apr-1995	http://www.pscipco.com	
U.S. Pipe	Tyton Joint	Ductile	350	4" - 12"		Apr-1995	http://www.uspipe.com	
Griffin Pipe Products	Mechanical Joint Pipe	Ductile	350	4" - 12"		Oct-2008	http://www.griffinpipe.com/	
The two epoxy products approved for ductile sewer pipe lining are: PROTECTO 401 and SP-2000M								

<sup>\*</sup>Formerly Pacific States



#### **SANITARY SEWER MANHOLE OPTIONS**

The standard manhole lid configuration is a 30" rough opening with a frame and a 24" lid.

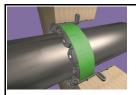
All sanitary sewer lids shall have CITY OF HENDERSON SANITARY SEWER cast into the lid.

All manhole frame openings shall be a minimum 21" clear.

All manhole lid and frame components shall have a minimum H-20 load rating.

Steps within manholes are no longer required or authorized.

	ADDLICATION								
	APPLICATION								
						Approval			
Manufacturer	ltem	Model Number	Size	Size	Lid Weight	Date	Manufacturer Web Link		
Geneva Pipe	Precast Manhole Components		48"	60"		Apr-1995	http://www.geneva-pipe.com		
Jensen Precast	Precast Manhole Components		48"	60"		Apr-1995	http://www.jensenprecast.com		
Olson Precast	Precast Manhole Components		48"	60"		Apr-1995	http://www.olsonprecastcompany.com		
Oldcastle Precast	Precast Manhole Components		48", 60", 72"			Oct-2017	http://www.oldcastle.com/		
Geneva Polymer Products	Polymer Manhole		48" - 96"			Aug-2013	http://genevapolymerproducts.com/		
Alhambra Foundry	Manhole Frame & Cover	A-1310	24"		170 lbs	Apr-1995	http://www.alhambrafoundry.com		
D&L Foundry & Supply	Manhole Frame & Cover	1180	24"		142 lbs	Apr-1995	http://www.dlfoundry.us		
D&L Foundry & Supply	Cover within a Cover & Frame	A-1425	24" within a 36"			Apr-1995	http://www.dlfoundry.us		
D&L Foundry & Supply	Manhole Frame & Cover	A-1075	24"		134 lbs	Dec-2019	http://www.dlfoundry.us		
D&L Foundry & Supply	Manhole Frame & Cover	A-1366	32"			Dec-2019	http://www.dlfoundry.us		
D&L Foundry & Supply	Cover within a Cover & Frame	A-1425	24" within a 36"		142 lbs	Dec-2019	http://www.dlfoundry.us		
East Jordan Iron Works	Manhole Frame & Cover		24"		190 lbs	Oct-2006	http://www.ejiw.com		
East Jordan Iron Works	Cover within a Cover & Frame		24" within a 36"		180/195 lbs	Oct-2006	http://www.ejiw.com		
National Casting Corporation	Cover within a Cover & Frame	NC-2531R	24" within a 36"		147/314	Jul-2015			
South Bay Foundry	Manhole Frame & Cover	SBF-1310	24"		155 lbs	Apr-1995	http://www.southbayfoundry.com/		
South Bay Foundry	Cover within a Cover & Frame	SBF-1325	24" within a 36"		155/320 lbs	Apr-1995	http://www.southbayfoundry.com/		
	MANHOLE LINING SYSTEMS								
	All lining systems shall be applied by a manufacturer certified contractor according to the manufacturer's recommendations.  All lining systems require a copy of the certified spark test be supplied to the City of Henderson inspector.								
Raven Lining System						Oct-2006	http://www.ravenlining.com		
Quadex	Epoxy Manhole Lining System	Structure Guaru				Apr-2019	http://www.ravenlining.com		
Sauereisen Lining system	, ,	Corios				Oct-2006	http://www.sauereisen.com		
Poly-Triplex Lining System						Oct-2006	http://www.poly-triplex.com		
COR-Guard Epoxy Lining System						Dec-2008	http://www.corguard.net/index-2.html		
Warren Enviornmental	Epoxy Coating	S-301		-	-	Dec-2013	http://www.warrenenviro.com/		



# CITY OF HENDERSON APPROVED MATERIALS LIST SEWER MANHOLE & PIPE ACCESSORY OPTIONS

All bolt assemblies and clamps shall be stainless steel.
All pipe penetrations, 15 inches and smaller into an existing manhole, shall be core drilled.

	APPLICATION					
Manufacturer	Description	Comments	Approval Date	Manufacturer Web Link		
KOR-N-SEAL I	Pipe to manhole connectors		Apr-1995	http://www.trelleborg.com/en/Pipe-Seals-Milford/		
Link-Seal	Modular Seal		Oct-2006	http://www.linkseal.com/		
Multi Fittings	Pipe Fittings		Oct-2006	http://www.multifittings.com/Content/General/Home.aspx		
Newby Rubber	Manhole Stop Rings	Used with cast-in-place manholes only	Oct-2006	http://www.newbyrubber.com/		
Plastic Trends	Pipe Fittings		Oct-2006	http://www.plastictrends.com/		
Press-Seal	Press-Boot pipe to manhole connector with glass reinforced nylon expansion ring		Apr-1995	http://www.press-seal.com/		
Press-Seal	PSX Positive Seal pipe to manhole connector		Apr-1995	http://www.press-seal.com/		
Specified Fittings	Gasketed Sewer Fittings	Models 79349, 79350, 79920	Apr-2020	https://specifiedfittings.com/		



#### CITY OF HENDERSON APPROVED MATERIALS LIST MISCELLANEOUS ITEMS

APPLICATION								
Manufacturer	Model Number	Description	Size	Comments	Approval Date	Manufacturer Web Link		
A.Y. McDonald	6109BQ	•	2"	UDACS Plate 36	Oct-2006			
		Blow-Off/Flushing Valve				http://www.aymcdonald.com		
Jones	J1998	Blow-Off/Flushing Valve	2"	UDACS Plate 36	Oct-2006	http://www.jamesjones.com/		
Kupferly Foundry	TF550	Blow-Off/Flushing Valve	2"	UDACS Plate 36	Oct-2006	http://www.hydrants.com/		
APCO/Willamette	143C	Combination Air Valve	1"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.apcovalves.com		
APCO/Willamette	145C	Combination Air Valve	2"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.apcovalves.com		
APCO/Willamette	149C	Combination Air Valve	4"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.apcovalves.com		
A.R.I.	D-040	Combination Air Valve	1" & 2"		Jun-2007	http://www.airvalves.com/		
A.R.I.	D-060, D-060-C-HF	Combination Air Valve	4" & 6"	Must have 22 or 24 mesh stainless steel outer screen installed for discharge	Apr-2018	http://www.airvalves.com/		
Val-Matic	201C.2	Combination Air Valve	1"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.valmatic.com		
Val-Matic	202C.2	Combination Air Valve	2"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.valmatic.com		
Val-Matic	204C.2	Combination Air Valve	4"	Fusion bonded epoxy coated with all stainless steel internal parts	Oct-2006	http://www.valmatic.com		
				·				
Armorcast	P6002001B	Air Valve Enclosure		Per UDACS Plate 38	Jul-2019	http://www.armorcastprod.com/		
Armorcast	P6002001B	Air Valve Enclosure		Per UDACS Plate 38		http://www.armorcastprod.com/		
Armorcast	P6002003B	Air Valve Enclosure		Per UDACS Plate 38		http://www.armorcastprod.com/		
Steel fabricated	Steel fabricated	Air Valve Enclosure		Per UDACS Plate 38		http://fabricatedsteel.net/		
Hot Box	Vent Guard	Air Valve Enclosure			Oct-2006	http://www.hot-box.com		
Pipeline Products	1424 & 1830	Air Valve Enclosure		Neutral earth tone colors only	Sep-2007	http://pipelineproducts.com/main/		
Presto Products		Geoblock		Used with an alternative pavement system for sewer and water main access.	Oct-2006	http://www.prestoproducts.com		
Jensen Precast	G5	Valve Box	2"	For use with a 2" blow-off valve	Oct-2008	http://www.jensenprecast.com/		
Cla-Val	CRD-L	PRV	3/4", 1", 1-1/4", 1-1/2", 2"		Oct-2017	http://www.cla-val.com/		