BOW MAR WATER AND SANITATION DISTRICT

WATER SYSTEM

GENERAL REQUIREMENTS

Revised for website: April 12, 2022

WATER SYSTEM STANDARDS AND SPECIFICATIONS TABLE OF CONTENTS

PAGE

FORWARD	AUTHORITY, ORGANIZATION, AND CONTROL	iv
DEFINITIONS		v
ABBREVIATIONS		xiii
CHAPTER 1	WATER SYSTEM ADMINISTRATIVE STANDARDS	
1.01	Water System Plan Submittal Procedures and General Requirements	1-1
1.02	Easements and Licenses	1-11
1.03	Water System Construction Procedures and General	
	Requirements	1-17
1.04	Water System Construction Acceptance Procedures and General Requirements	1 21
1.05	Responsibility of the Applicant, Design Engineer, and Contractor	
1.06	Relocation of District Facilities	
CHAPTER 2	WATER SYSTEM TECHNICAL STANDARDS	
2.01	Denver Water 16 th Edition Engineering Standards	.2-1
CHAPTER 3	MATERIAL SPECIFICATIONS	
3.01	Denver Water 16 th Edition Engineering Standards	.3-1
CHAPTER 4	STANDARD DRAWINGS	
4.01	Denver Water 16 th Edition Engineering Standards	. 4-1
CHAPTER 5	EXHIBITS	
Α	Owner/Applicant Information Form	.5-1
В	Application and Agreement for Water Main Extensions	5-2
C C	Easement Preparation and Submittal Procedures and	
	Checklist	5-19

CHAPTER 5	EXHIBITS (continued)	
D	Sample Easement Agreement Forms	
	PUD/PBG 30-foot minimum easement form	5-27
	Exclusive 30-foot minimum easement form	5-31
	Non-exclusive 50-foot minimum easement form	5-35
	Distributor Performance Non-exclusive easement form	5-39
Ε	Easement Certification Form	5-45

BOW MAR WATER AND SANITATION DISTRICT WATER SYSTEM STANDARDS AND SPECIFICATIONS

FORWARD

AUTHORITY

These Standards and Specifications are promulgated by the Board of Directors of Bow Mar Water and Sanitation District. Administration of the Standards and Specifications including interpretation, enforcement, revision, waiver, and variance is delegated by the Board of Directors to the District Manager or his appointed representative. Any variance request must be submitted in writing to the District Manager for review.

EFFECTIVE DATE

These Standards and Specifications shall be effective on August 1, 2011 and shall supersede all former Water System Standards and Specifications of the Bow Mar Water and Sanitation District.

REVISIONS, AMENDMENTS OR ADDITIONS

These Standards and Specifications may be revised, amended, or added to from time to time. Such revisions, amendments or additions shall be binding and in full force and effect upon adoption by the Board of Directors of Bow Mar Water and Sanitation District.

BOW MAR WATER AND SANITATION DISTRICT CONTROL

These Standards and Specifications shall apply to the installation, operation, and maintenance of all water facilities under the ownership and/or control of Bow Mar Water and Sanitation District.

Notwithstanding any variance from these Standards and Specifications that occurred or was authorized in the past, or that may be authorized in the future, Bow Mar Water and Sanitation District shall not be restricted or limited in the exercise of its lawful powers. No action in violation of these Standards and Specifications direct or indirect, of or by any person, including

any owner, operator, or agent of an owner or operator of any water facility in making any connection, disconnection, repair, or otherwise doing work with respect to any water facility served with water from the Bow Mar Water and Sanitation District system, shall continue after discovery of such violation, or the enforcement of corrective action as to such violation.

ORGANIZATION AND INTERPRETATION OF STANDARDS AND SPECIFICATIONS

These Standards and Specifications are composed of Administrative Procedures and Requirements, Technical Engineering Standards, Material Specifications, Standard Drawings and Construction Plan Notes and Exhibits. The interpretation of any section, or of differences between sections, shall be made by the District Manager or an appointed representative, and their interpretation shall be binding and controlling in its application.

Whenever there is a conflict between these Standards and Specifications and any referenced standard, specification or code the most stringent requirement shall apply and shall mean the latest edition.

DEFINITIONS

As used in these Standards and Specifications, unless the context shall otherwise require, the words defined in this paragraph shall have the meanings herein ascribed:

<u>Air-Gap</u>: The unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank, plumbing fixture, or other device, and the flood level rim of said vessels. An approved air-gap will be at least double the diameter of the supply pipe, measured vertically, above the top of the overflow rim of the overflow rim of the vessel, and in no case less than one inch.

American Backflow Prevention Association (ABPA) Certified Backflow Prevention

<u>Assembly Tester</u>: An individual with the proven ability to field test backflow prevention assemblies to the satisfaction of the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC FCCCHR) program. The certified individual is required to perform field tests and prepare reports on backflow prevention assemblies and shall be conversant in applicable laws, rules and regulations and experienced in plumbing or pipe fitting.

American Society of Sanitary Engineering (ASSE) Backflow Prevention Assembly Tester: An individual who has the proven ability in field testing backflow prevention assemblies to the satisfaction of the ASSE Series 5000 program. The certified individual is required to perform field tests and prepare reports on backflow prevention assemblies and shall be conversant in applicable laws, rules and regulations and experienced in plumbing or pipe fitting. **Applicant for System Extension:** Any person, association, corporation, entity, or government agency desiring water service for premises under their control and having entered into an agreement for extension of water mains with the District; often a subdivider or developer. Also referred to as Applicant.

Atmospheric Vacuum Breaker: A backflow prevention assembly that is constructed with a 90 degree elbow and a hood that allows air to enter the system through a poppet valve that drops allowing air to enter when atmospheric pressure drops; it thereby breaks the siphon. This type of assembly is NOT approved by Denver Water.

Back Pressure: Backflow caused by a pump, elevated tank, boiler, pressure in pipe, or any means that could create greater pressure within a piping system than that which exists within the potable water supply.

Backflow: The flow of water or other liquids, mixtures, gases, or substances into the distribution pipes of a potable water supply, from any source other than its intended source.

Backflow Prevention: The prevention of the flow of any foreign liquids, gases or substances into the pipe lines of a potable supply of water by the installation of backflow prevention assemblies or the air-gap method.

Backpressure: An elevation in pressure in the downstream piping system that can cause a reversal in the normal direction of flow at a particular point. The elevation in pressure can be caused by pumping, air pressure, steam or the elevation of piping.

Backsiphonage: A form of backflow that is a result of negative or sub-atmospheric pressure within the water system.

Board: The Board of Directors of Bow Mar Water and Sanitation District.

<u>Certified Welder:</u> A skilled welder, welding operator or tacker who has had adequate experience in the method of materials to be used and is qualified under the provisions of the American Welding Society Standard (AWS) D1.1 using test position 6G.

Welders shall be qualified by an independent, local, approved testing agency not more than six months prior to commencing work. Machine and electrodes similar to those used in the work shall be used in qualification tests.

<u>**Commercial Property</u>:** Real estate zoned for business and/or industrial use that consists of six or more units with a domestic, fireline or dedicated water irrigation service tap (defined as such for cross-connection purposes).</u>

<u>Consumer:</u> Any person, firm, or corporation using or receiving water from the water system of the Bow Mar Water and Sanitation District.

<u>Containment by Isolation</u>: The installation of a low hazard USC FCCCHR Double Check Valve backflow prevention assembly (containment) and a high hazard USC FCCHR Reduced Pressure Principle backflow prevention assembly (isolation). They shall be installed on a designated branch line and are acceptable as a means of protecting private plumbing and the public water supply. Installation is at the discretion of the District.

<u>Contamination</u>: Potable water quality impairment by sewage, industrial fluids, waste liquids, compounds or other materials to a degree that creates an actual or potential hazard to public health.

<u>Contractor</u>. In the context of these Standards and Specifications, a Contractor employed by an Applicant for a distribution system extension.

Control Valve: A valve used to isolate conditions downstream from the meter on a specified branch line within a private plumbing system (irrigation system, boiler, fireline, etc.). This type of valve may also be referred to as an Isolation Valve.

<u>**Cross-Connection Control**</u>: An administered program that is designed to protect the public health, public drinking water supply and recycled distribution system by the regulation and monitoring of the installation and maintenance of backflow prevention assemblies on a potable water service connection.

Containment Protection: The installation of a USC FCCCHR approved backflow prevention assembly on a dedicated water service line that protects the public water system from an actual or potential cross-connection within a private plumbing system. Examples of potential cross-connections are listed in Section 2.03.

Isolation Protection: The installation of a USC FCCCHR approved backflow prevention assembly within a building or facility's private plumbing system near the source(s) of pollution or contamination in order to protect the internal plumbing from an actual or potential cross connection; refer to Section 2.03.

Degree of Hazard: Refers to a pollutant (non-health risk) or contaminant (health risk) hazard and is determined by the conditions within a system. (See Low Hazard and High Hazard)

Denver Water: The plant, facilities, system, assets, and personnel controlled by the Denver Board of Water Commission pursuant to its Charter authority.

Detector Check Valve: An assembly that records low-volume water usage through a fireline service that is accepted and approved by the District and Denver Water. The Detector Check Valve may be combined with an appropriate backflow prevention assembly to form a Double Detector Check Valve Assembly or a Reduced Pressure Detector Check Valve Assembly.

Design Engineer: A civil engineer licensed to practice in the State of Colorado who is employed by the Applicant to perform engineering services.

Distribution Main: 12-inch or smaller diameter pipe that is installed in public streets or appropriate rights-of-way and used for the distribution of water to consumers.

Distribution Main Valves: Valves on Distribution Mains that are direct buried (as opposed to Transmission Main Valves that must be contained within a vault).

Distribution System: Mains of 12-inch and smaller diameter pipe, together with all appurtenant and necessary valves, fire hydrants, taps, meters, service pipes, and associated materials, property, and equipment receiving potable water from conduits and transmission mains distributing it to individual consumers.

District: The Bow Mar Water and Sanitation District.

District Engineer: The engineering firm authorized by the Bow Mar Water and Sanitation District to provide engineering services on behalf of the District.

District Manager: The Chief executive officer of the District designated as such by the District's Board of Directors.

Domestic Service: Pipes, fittings and appurtenances that are needed to convey water from the tap on District facilities to the plumbing of consumer premises for human consumption.

Double Check (DC) Valve: An assembly composed of two independently acting approved check valves between two tightly closing resilient seated shutoff valves attached at each end and fitted with properly located resilient seated test cocks. This type of assembly is used on direct or indirect water connections through which pollutants may enter the potable water system in backflow conditions.

Dual Water Supply Agreement: An agreement between the District, Denver Water and a Property Owner declaring that the premises has or may have sources of water supply other than the District's potable system. The Property Owner agrees that they will NOT cause or permit the presence of any condition or uncontrolled connection, either actual or potential, at the premises documented on the agreement. The property owner shall, at their cost, install a USC FCCHR backflow prevention assembly on the domestic service line supplied to the premises and shall hire an ABPA or ASSE certified tester to test the assembly upon installation and annually thereafter. A copy of the test reports shall be submitted to Denver Water's Cross-Connection Control Section.

<u>Fireline</u>: Pipe, fittings and appurtenances for the conveyance of water from Distribution Mains to the consumer for fire protection purposes, specifically for automatic sprinkler systems. For the purposes of these Standards, the fireline extends from the corporation stop tapping valve or tee on the water main to the edge of the public right-of-way or easement that contains the water main.

Head Loss: The measure of the reduction in the total head of the liquid as it moves through a system. In the District's system, head loss constraints are: 2 feet per thousand in distribution mains, 1.5 feet per thousand in transmission mains and 1 foot per thousand in conduits.

High Hazard: A vulnerability from a facility's private plumbing system that would constitute a health risk to the internal plumbing and/or public water system by the introduction of a contaminant such as sewage, industrial fluids, waste liquids, compounds or other materials, the introduction of which would cause a poisoning of the water supply or the spread of disease.

Hvdrant Branch: The portion of piping that extends from the water main to the fire hydrant.

<u>Hydraulic Grade Line</u>: In pipelines flowing under pressure, the hydraulic grade line is the level to which water would rise in a vertical tube (open to atmospheric pressure) at any point along the pipeline.

Industrial Piping System: Any system used by a consumer for the transmission or confinement, or storage of any fluid, solid, or gaseous substance other than an approved water supply, including all pipes, conduits, tanks, receptacles, fixtures, equipment and appurtenances used to produce, convey or store substances which are or may be polluted or contaminated.

Irrigation Service: Pipes, fittings and appurtenances that are used to convey water from the tap on the District's facilities to the plumbing of consumer premises that is only used for irrigation.

Isolation Valve: A valve used to isolate conditions downstream from the meter on a specified branch line within a private plumbing system (irrigation system, boiler, fireline, etc.). This type of valve may also be referred to as a Control Valve.

Low Hazard: A vulnerability that is NOT considered a public health risk from a facility's private plumbing system. It may constitute a nuisance, be aesthetically objectionable or could cause damage to the internal plumbing and/or public water system.

<u>Main Extensions</u>: Extensions to the water distribution system owned and controlled by the Bow Mar Water and Sanitation District.

Multi-Family Residential: A dwelling with three or more units with a domestic, fireline and/or dedicated water service tap (defined as such for cross-connection purposes).

Non-Toxic Substance: Any substance of a non-poisonous nature that may create a minor or moderate hazard to the domestic water system.

<u>Pollution:</u> An impairment of the quality of the water to a degree which does not create an actual hazard to the public health, but which does adversely and unreasonably affect such waters for domestic use.

Pressure Vacuum Breaker: A vacuum breaker designed to prevent backsiphonage only. It consists of a spring loaded check valve, a spring loaded inlet opening, a tightly closing shut off valve on each side of the assembly and two appropriately located test cocks. This type of assembly shall NOT be subjected to backpressure.

Reduced Pressure Principal Assembly: A testable assembly comprised of two internally loaded, independently operating check valves with a hydraulic, automatic operating, differential relief valve located between the check valves. The assembly is specifically designed to maintain a continual zone of reduced pressure between the two check valves. The relief valve shall be located between two tightly closing upstream and downstream (resilient seated) shut-off valves, and four properly located test cocks for the testing of the valves. This assembly is used for the protection of the potable water supply wherever a direct or indirect connection is made to a point of use involving any substance that may present a health hazard. The unit shall be a USC FCCCHR approved backflow prevention assembly designed to protect against a non-health and/or health hazard condition.

Service Line: Pipe, fittings and appurtenances that are used for the conveyance of water from the distribution mains to the consumer for domestic use or for irrigation. For the purposes of these Standards, the service line extends from the corporation stop or tee on the water main to the first valve inside the premises after the water meter; i.e., to the stop-and-waste valve adjacent to the building for an outside meter set, the meter outlet valve for an inside meter set or the irrigation control valve for an irrigation service.

<u>Single Family Residential</u>: A single unit dwelling (defined as such for cross connection purposes).

Stop Box: A valve box, service box or curb box that is set over the property line valve or curb stop on a domestic water service.

Stub-in: A tap made for the purpose of installing service lines prior to the paving of streets. Any such connection shall include the fittings that are necessary to extend the service line to the valve at the property line. The conversion of a stub-in to an active service line shall be subject to conditions of the the District's stub-in agreement.

Tap: Physical connection to a District water main which, together with appropriate permits, effects water service to individual customers.

Toxic Substance: Any substance (liquid, solid, or gaseous) including raw sewage and lethal substances which, when introduced into the water supply system, creates or may create a danger to the health and well-being of the consumer.

Transition Main: A 16 inch or 20 inch diameter pipe receiving recycled or potable water from a conduit and distributing it to individual consumers.

<u>**Transmission Main Valves**</u>: 16-inch and 20-inch valves that must be contained within a vault (as opposed to Distribution Main Valves that are direct buried).

Water Feature: A structural design element that is NOT intended for human contact; it is supplied by potable or recycled water and is located indoors or outdoors with items ranging from fountains, pools, ponds, cascades, waterfalls and streams normally powered by pumps. The use of recycled water is subject to approval of the District, Denver Water and the Colorado Department of Public Health and Environment; agreements for use shall be signed in conformance with the District requirements.

<u>Water Main or Distribution Main:</u> A 12 inch or smaller diameter pipe along public streets or appropriate rights-of-way used for distributing water to individual consumers.

<u>Water Play Feature</u>: A structural design element (e.g. interactive fountain) intended for recreational use (human contact) that is supplied with potable water normally powered by pumps. The use of irrigation, fire and/or recycled water is prohibited.

<u>Water-Potable:</u> Water from any source which has been investigated by the health agency having jurisdiction, and which has been approved for human consumption.

<u>Water-Nonpotable:</u> Water such as treated domestic wastewater, groundwater and well water which is suitable for various beneficial uses excluding human consumption.

Water Supply-Auxiliary: Any water source or system other than the public water supply that may be available in the customer's building or premise.

<u>Water Supply-Unapproved:</u> A water supply, which has not been approved for human consumption by the official health authority having jurisdiction.

<u>Water System-Consumer:</u> Any water system located on the consumer's premises whether supplied by a public potable water system or an auxiliary water supply.

<u>Water Service Connections:</u> The terminal end of a service connection from Platte Canyon's water system; i.e., where Bow Mar loses jurisdiction and quality control over the water at its point of delivery to the customer's water system. The service connection will mean the downstream end of the meter. There should be no unprotected takeoffs from the service line ahead of any meter or a backflow prevention device located at the point of delivery to the customer's water system. Service connection will also include water service connection from a fire hydrant, fireline, and any other temporary or emergency water service connection from Platte Canyon's potable water system.

Welder: See Certified Welder.

ABBREVIATIONS

AASHTO:	American Association Of State Highway And Transportation Officials	
ABPA:	American Backflow Prevention Association	
<u>AC</u> :	Asbestos Cement or Alternating Current	
AFBMA:	Anti-Friction Bearing Manufacturers Association	
<u>AG</u> :	Air-gap	
ANSI:	American National Standard Institute, Inc.	
<u>ASC</u> :	Automatic Sprinkler Connection	
ASSE:	American Society of Sanitary Engineering	
ASTM:	American Society Of Testing And Materials	
<u>AV</u> :	Air Valve	
<u>AVE</u> :	Avenue	
<u>AWG</u> :	American Wire Gauge	
<u>AWS</u> :	American Welding Society	
AWWA:	American Water Works Association	
<u>BFV</u> :	Butterfly Valve	
<u>BLDG</u> :	Building	
<u>BO</u> :	Blowoff	
<u>BOT</u> :	Bottom	
<u>BP</u> :	Backpressure	
<u>BFPA</u> :	Backflow Prevention Assembly	
BRG:	Bearing	

<u>BS</u> :	Backsiphonage	
<u>BV</u> :	Ball Valve	
<u>CAD</u> :	Computer Aided Drafting	
<u>CBI</u> :	Containment by Isolation	
<u>CHKV</u> :	Check Valve	
<u>CI</u> :	Cast Iron	
<u>CL</u> :	Centerline	
<u>DC</u> :	Direct Current, Double Check Valve	
DCDA:	Double Check Detector Assembly	
DI :	Ductile Iron	
<u>ERT</u> :	Encoder-Receiver-Transmitter	
ESMT:	Easement	
<u>FL</u> :	Flow Line	
FLG :	Flange	
<u>FMCT</u> :	Fireline Meter And Compound Torrent	
<u>GV</u> :	Gate Valve	
HGL:	Hydraulic Grade Line	
<u>HYD</u> :	Hydrant	
<u>IBC</u> :	International Building Code	
<u>ID</u> :	Inside Diameter	
<u>ID</u> : <u>IEEE</u> :	Inside Diameter Institute Of Electrical And Electronics Engineers	

<u>IRR</u> :	Irrigation	
<u>ISA</u> :	Instrument Society Of America	
<u>KVA</u> :	Kilo-Volt-Amperes	
MEE:	Machined Each End	
<u>MH</u> :	Manhole	
<u>MJ</u> :	Mechanical Joint	
MOA:	Machined Over All	
<u>MSS</u> :	Manufacturer's Standardization Society Of Valve And Fittings	
<u>NEC</u> :	National Electrical Code	
<u>NEMA</u> :	National Electrical Manufacturer's Association	
<u>NFPA</u> :	National Fire Protection Association	
<u>NPT</u> :	National Pipe Thread	
<u>NSF</u> :	National Sanitation Foundation	
<u>OC</u> :	On Center	
<u>OD</u> :	Outside Diameter	
<u>OSHA</u> :	Occupational Safety And Health Administration	
<u>PL</u> :	Property Line	
<u>PRV</u> :	Pressure Regulating Valve	
<u>PSF</u> :	Pounds Per Square Foot	
<u>PSI</u> :	Pounds Per Square Inch	
PUD/PBG:	Planned Unit Development/Planned Building Group	
<u>PVB</u> :	Pressure Vacuum Breaker	

<u>PVC</u> :	Polyvinyl Chloride	
<u>ROW</u> :	Right(s)-of-Way	
<u>RPDA</u> :	Reduced Pressure Detector Assembly	
<u>RP</u> :	Reduced Pressure Principle	
<u>SAE</u> :	Society Of Automotive Engineers	
<u>SAN</u> :	Sanitary Sewer	
<u>SCADA</u> :	Supervisory Control and Data Acquisition	
<u>SD</u> :	Storm Drain, Supply Duct	
<u>SST</u> :	Stainless Steel	
<u>ST</u> :	Street	
<u>STD</u> :	Standard	
<u>STL</u> :	Steel	
<u>STRM</u> :	Storm Sewer	
<u>SWV</u> :	Stop & Waste Valve	
<u>TOP</u> :	Top of Pipe	
<u>TYP</u> :	Typical	
<u>UBC</u> :	Uniform Building Code	
<u>UMC</u> :	Uniform Mechanical Code	
<u>UPC</u> :	Uniform Plumbing Code	
USC FCCCHR:	University of Southern California Foundation for Cross-Connection Control and Hydraulic Research	
<u>VB</u> :	Valve Box	
WOG:	Water-Oil-Gas	

<u>WRA</u> :	Water Reducing Agent
<u>WSC</u> :	Water Service Contractor
<u>WSP</u> :	Working Steam Pressure
<u>WTR</u> :	Water
<u>WWF</u> :	Welded Wire Fabric
<u>W/</u> :	With
<u>W/O</u> :	Without
<u>YD</u> :	Yard

Chapter 1

$W {\rm Ater}\, S {\rm ystem}\, A {\rm dministrative}\, S {\rm tandards}$

1.1 <u>WATER SYSTEM PLAN SUBMITTAL PROCEDURES AND GENERAL</u> <u>REOUIREMENTS</u>

All plans for water main extensions, improvements and modifications shall be submitted to the Bow Mar Water and Sanitation District for review and approval before any construction may occur. All plans must be approved by the District manager, District engineer, Denver Water Department, and applicable fire department prior to initiation of construction. Plans shall be submitted and reviewed in accordance with the following procedures and requirements.

A.Submittals

In order to initiate construction plan review the following items must be submitted to the District.

1. Construction Plans

Three sets of water system construction plans stamped and signed by a Professional Engineer licensed to practice in the State of Colorado. All plans and specifications submitted shall be in strict compliance with the Standards and Specifications contained herein and shall meet any special conditions that may be reasonably required. The design and installation of all facilities shall ensure development of an integrated water system. No work shall commence on any facilities until the plans and specifications are approved in writing by Bow Mar Water and Sanitation District, Denver Water Department and the fire department having jurisdiction in the area. Plans and specifications should not be submitted for work that will not be installed within six months of the approval date.

- a. Three sets of detailed plans and specifications for system extensions shall be submitted to the District for approval. The copies shall meet the requirements stated below:
 - 1. A cover sheet containing:
 - a. The Project Name as well as the Section, Township and Range of its location.
 - b. Name of the engineering firm.
 - c. Engineering firm's mailing address, email address, telephone and fax number.
 - d. A general location map showing major roads within the project location.
 - e. An index of the sheets within the plan set.

- f. A list of the abbreviations and sysmbols and construction notes used along with identification of their meaing. (NOTE: *This list can become a separate drawing in the set at the discretion of the engineering firm*).
- g. Fire flow data.
- h. Fire Department signature block.
- i. Summary of quantities table.
- 2. Water main in plan view (24" x 36" drawing) showing:
 - a. Location and dimensions of dedicated street, easements, and right-of-way.
 - b. Lots to be served.
 - c. Existing or proposed curb and gutter.
 - d. The proposed alignment of the water main and the location of all proposed water facilities such as valves, fire hydrants, fittings, etc.
 - e. A profile shall also be required on this plan for all transmission mains 16 inches in diameter and larger, and all water mains and transmission mains to be constructed within unpaved easements.
 - f. Proposed upstream and downstream hydraulic gradients on pressure regulating valves.
 - g. Proposed elevation, upstream and downstream hydraulic grade line and pressure on PRVs.
 - h. Meter location for domestic connections.
 - i. Location and size of taps, services, stub-ins, curb stops or property line valves and meters for firelines, domestic connections and irrigation services. Indicate irrigation and fire service lines to differentiate them from domestic services. A typical detail may be used, provided exceptions to the typical detail are clearly identified on the plan.
 - j. Dimensions from existing valves to proposed connections.
 - k. Existing water mains (valves, hydrants, size and type of pipe).

- 1. Isolation valves between proposed hydrants.
- m. Domestic, fireline and irrigation services, including tap, curb stop or property line valve, and meter location shall be called out by size and service line to backflow prevention assembly. If a backflow prevention assembly is NOT required, show the service line to five feet past the meter pit or vault. If the curb stop/valve or meter pit/vault will be in a paved area, include a letter requesting variance that justifies why it is needed.
- n. Backflow prevention assembly, including type, diameter and dimension in relationship to the meter and installation type.
- 3. Combined utilities plan view (separate from the water main plan) containing or showing:
 - a. Location and dimensions of dedicated streets, easements and rights-of-way.
 - b. Lots to be served.
 - c. All existing or proposed curb and gutter
 - d. Existing and proposed utilities including but not limited to sanitary sewer mains, storm sewer mains, electrical, cable television and telephone conduits and natural gas distribution mains.
 - e. Existing or proposed obstructions such as vaults, catch basins, traffic islands, etc.
 - f. The proposed alignment of the water mains and the location of all proposed facilities, (i.e. valves, fire hydrants, fittings, etc.).
 - g. Meter location for domestic connections.
 - h. Location and size of taps, services, stub-ins, curb stops or property line valves and meters for firelines and domestic connections. A typical detail may be used, provided exceptions to the typical detail are clearly identified on the plan.
- 4. Typical street cross-sections showing:
 - a. Property lines or easement lines.

- b. Street curb and gutter, and existing or proposed utilities complete with dimensions to the property lines or easement lines.
- 5. Centerline profile of the streets showing:
 - a. Official street grades.
 - b. Existing ground line.
 - c. Existing and proposed utility crossings of the proposed water main.
 - d. Separation between water main and other utilities.
 - e. Top of pipe profile of proposed 16-inch and larger transmission mains, and top of pipe profile of 12-inch water mains and all water mains within easements, if requested by the District.
- 6. A detail sheet showing all pertinent facility details such as: rodding, hydrant assemblies, blow-off installations, proposed crossings, etc. (see Chapter 4, Standard Drawings).
- 7. Plans shall meet the following requirements:
 - a. Information on the drawings shall be clear and legible. the District reserves the right to reject any plans deemed to be unreadable.
 - b. Plans shall be Architectural D (24"x36") size or ANSI D (22"x34") size.
 - c. Drawings shall contain a title block in the lower right hand corner that contains pertinent information: project title, drawing scale, preparation date and a revision block to note the date of subsequent plan revisions.
 - d. Drawings shall have the seal and signature of the Engineer of Record.
 - e. Drawings shall be English Units at a scale shown on an Engineering Scale between 1'' = 20'; 1'' = 30'; 1'' = 40'.
 - f. Drawings (where applicable) shall contain a North Arrow with orientation to the top or left of the sheet preferred; however, the

orientation may be rotated in order to provide additional coverage and a larger, more readable plan.

- Drawings shall bear the District's approval stamp. g.
- 8. Additionally, all plans shall:
 - Be made from actual field surveys by a land surveyor a. registered in the State of Colorado, referenced to land corners or other official survey control points and be of sufficient accuracy so that the facilities can be accurately staked for installation and can be readily located after installation for maintenance, tapping and control.
 - Show the approved permanent water source which can supply b. sufficient water for chlorination, flushing, and hydrostatic testing and the anticipated water demand for this purpose.
 - Show sufficient adjacent area to identify the relationship c. between proposed new facilities and existing facilities.
 - Contain the following statement and appropriate signature on d. the cover sheet of the plans (insert the name of the fire department having jurisdiction):

"All fire hydrants shall be installed according to District and Denver Water Department Standards. The number and location(s) of fire hydrant(s) and fire flow as shown in this water main installation is correct as specified by the Fire Department.

Fire Flow = g.p.m.

Signature of Fire Chief or Designated Representative

____/___/____ Date Signed

Contain the signature and stamp of the Professional Engineer e. registered in the State of Colorado responsible for the design of the system extension.

- 9. The Specifications shall:
 - a. State that the trench shall be excavated and the pipe exposed for inspection at any location on the project if so ordered by the District or Denver Water Department.
 - b. State that sterilization and flushing of all mains shall be inspected by the District's inspector and that the water shall be tested by a laboratory approved by the District and Denver Water. One copy of the certified laboratory test results shall be submitted to the District's inspector.
- 10. Submittals for planned development complexes shall additionally show all existing and proposed structures, driveways, and parking facilities, on both the water main plan and combined plan.
- 11 After final District approval (prior to construction), the final water main Plans and Specifications shall be delivered to the District. Submittals shall include the following:
 - a. AutoCAD Drawing files.
 - b. One set of detailed bond Plans Architectural D (24"x36") size and Specifications.
 - c. A title block on each sheet in the lower right hand corner that contains pertinent information concerning the map, including the project title, scale and date.
 - d. Lettering shall be mechanical or legible equivalent.
 - e. Horizontal scale shall be between 1'' = 20'; 1'' = 30'; 1'' = 40'.
 - f. Aerial photography of the plan view is NOT acceptable.

Dedicated streets, easements and planned development complexes shall conform to the requirements of other Sections of these Standards. The copy of the recorded subdivision plat furnished in the final submittal, a recorded copy of the deed for the property involved, or a recorded copy of an easement shall be furnished to the District.

2.Applications and Agreements for Water Main Extensions

Four copies of the District's Application and Agreement for Water Main Extensions. All copies must be signed as originals by individuals authorized to sign on behalf of the Applicant.

3.Pavment of Plan Review and Construction Inspection Fees

Payment of applicable District and Denver Water Department plan review and construction inspection fees. A fee schedule is available from the District upon request. Fees are subject to change without notice.

4.Subdivision Plat

One sepia mylar of the recorded subdivision plat. If the plat has not been recorded, two blue line copies of the most current preliminary plat shall be submitted. A sepia mylar of the recorded plat must be furnished as soon as it becomes available.

5. Easement Checklist

Two copies of the District's easement checklist together with all supplemental information specified in Section A.2. This information is required for all facilities to be constructed outside of dedicated public rights of way.

6.Soils Information

Geotechnical information specifying the resistivity of the soil may be required at the sole discretion of the District.

7.County Approvals

A written statement from a representative of the appropriate county planning department stating that none of the proposed facilities lie within or impact a Flood Plain Overlay Zone or Geo-Hazard Area. In the event facilities do lie within, or impact, a Flood Plain Overlay Zone District or Geo-Hazard Area, proof that the Applicant has applied for a Flood Plain Development Permit or Geo-Hazard Development Permit will be required. In addition, the Applicant must furnish a statement from the appropriate county approving the design of the facilities impacting the Flood Plain or Geo-Hazard Area.

B.Engineering

All plans and specifications submitted to the District for review, comment, and approval of a water system extension or modification shall be prepared by, or under the direct supervision of a professional engineer registered by the State of Colorado. Said professional engineer shall be responsible for preparation of the design plans, determining the material specifications and conducting the field survey. All submitted plans and specifications shall include the professional engineer's seal prior to approval for construction.

The applicant, contractor, and professional engineer associated with said plans shall be responsible for the adequacy and satisfactory performance of the designs and the installation of all items therein, and any failure or unsatisfactory performance of the system, so constructed, shall not be a cause for action against the District. The District does not perform engineering services for any person or entity in connection with its review of plans. Approval of plans by the District signifies only that the plans meet the minimum requirements of these Standards and Specifications based upon the information provided to the District by the professional engineer and/or owner/developer and makes no finding, representation, or warranty that the system and associated components will perform any certain function.

If the professional engineer responsible for the plans disagrees with any changes made to the submitted plans that may be required by the District as a result of the District's review of the plans, such disagreement must be brought to the attention of the District for resolution prior to construction of the project set forth in said plans. The seal of the professional engineer on plans so corrected and approved for construction will signify that he has reviewed, approved and authorized said corrected plans for construction.

C.Surveying

Line and grade for water mains shall be established by a professional engineer or by a surveyor licensed to practice in the State of Colorado or his authorized representative. All work shall be done in workmanlike manner.

Correct alignment and elevation of the water mains as shown on the approved drawings is the responsibility of the professional engineer. Inspection of the staked alignment and elevations by the District does not relieve the professional engineer in any manner from the responsibility for field errors. Sufficient pipe shall be staked to ensure continual work progress. Except as specified below, no pipe shall be installed without line and grade stakes set by the professional engineer or land surveyor.

Exception: If a main is to be extended in an existing street and if the professional engineer who prepared the plans can show that the finished grade of the street is to remain unchanged, no grade stakes need to be set. The main shall be installed with $4\frac{1}{2}$ feet of cover.

D.Plan Review Process

Upon receipt of all information described under section A.1.1, the District will initiate review of the construction plans and other pertinent information. The plans will be reviewed by the District and the District engineer. If modifications to the plans are required, the plans will be returned to the design engineer for revision.

Upon approval of the plans by the District, they will be submitted to the Denver Water Department for review and approval. If further modifications are required, the plans will be returned by Denver Water to the District for return to the design engineer. When revised, the plans must be returned to the District for review prior to re-submittal to the Denver Water Department.

<u>NOTE</u>: The approval of water system construction plans signifies only that the plans meet the minimum requirements of the District's Standards and Specifications based on the information provided by the design engineer, Applicant, and contractor. Approval is not a representation or warranty that the system and associated components will perform any certain function.

Approved plans will be stamped with the District stamp and be signed by the District manager and District engineer.

E. Expiration of Plan Approval

Plans and specifications are approved for a six month period only. If construction has not begun within this six month period, or if it has been halted and not restarted prior to expiration of the approval period, the plans must be resubmitted for review and approval.

F.Preconstruction Meeting

When construction plans and all other pertinent information has been approved by the District and Denver Water, the approved plans will be retained by the District until a preconstruction meeting is held. The preconstruction meeting will be scheduled by the District upon request of the contractor, design engineer, or Applicant.

Representatives of the Applicant, contractor, design engineer, Denver Water, District, and/or District engineer must be in attendance at the preconstruction meeting.

<u>G.Authorization to Proceed</u>

Authorization to commence construction will be granted by the District upon approval of plans by the District and the Denver Water Department, payment of applicable District

and Denver Water Department construction inspection fees, and completion of the preconstruction meeting.

A copy of the construction plan review and construction inspection fee schedule is available upon request. Fees are subject to change without notice.

1.2 EASEMENTS AND LICENSES

<u>A.General</u>

The following procedures have been developed to provide guidelines for the timely submittal and processing of easements granted to the District and licenses granted by the District. The guidelines are designed to provide the District with accurate and uniform drawings, legal descriptions, ownership and title information and specifications. Submittals that do not follow these procedures and required submittals will not be considered.

All information referenced in the submittal section of these procedures must be presented to, and processed by the District prior to approval of construction plans. Submittals must be accompanied by the District's Easement Preparation and Submittal Procedures Checklist (Exhibit A).

B.Granting an Easement to the District

When an Applicant or property owner is required to grant permanent easements to the District for the installation of water mains, the following procedures shall be followed:

1. <u>**Procedure**</u>: The following items shall be submitted in one complete package to the District with the initial submittal of water plans as described in Section A.1.1.

Partial submittals or those not conforming to these requirements will be returned to the submitting party with a request to complete the submittal. Construction plans will not be approved until all items have been received and processed.

- a. The District's Easement Preparation and Submittal Procedures Checklist identifying the full and legal name of the property owner granting the easement and the names and titles of the persons authorized to sign the easement agreement and those who will attest the authorized signer, if applicable.
- b. Property Description:

Two copies of the written legal description of the easement shall be signed and sealed by a licenses surveyor in the State of Colorado. Property descriptions that do not comply with the following format are not acceptable and shall be returned to the plan preparer.

- 1. <u>Size: 8¹/₂ x 11 inches (letter-size) documents.</u>
- 2. Font: Except for the title, text within the description shall not be **bold face**, *italics*, or ALL CAPS.

- 3. <u>Title: All caps and shall be referred to as the "Property Description" at the top of the document.</u>
- 4. Caption: The Section number and aliquot part, tract, or government lot thereof; Township; Range; Principal Meridian; County; and City or Town if applicable; and State must be included. A "Subdivision, Lot and Block" description shall be used when appropriate. Any Deeds along with its corresponding date and recording information shall be used when appropriate (i.e. Reception No., Book and Page).
- 5. Basis of Bearing: The basis of bearing shall appear as the first element in the body of the description. Descriptions will be written to proceed from the Point of Commencement to the Point of Beginning. The Point of Commencement should be an aliquot corner (or tract corner) in the Public Land Survey System, with its position marked by an acceptable found monument.
 - a) Whenever possible, parcels should be tied to monuments for which the District has established coordinate values. These corner locations have been compiled from information obtained from various municipal and other entities in the metropolitan area. No claim is made as to the accuracy of the information contained therein. If the submitter has found discrepancies in the information, or has tied to corners not included in the database, he/she is encouraged to submit the location and monument description information so that the database may be kept as up to date as possible.
 - b) An Acceptable Monument shall comply with 38-51-104 Colorado Revised Statues (CRS), and Rules for Professional Land Surveying Practice 6.4 from the Bylaws and Rules of the State Board of Licensure for Architects, Professional Engineers and Professional Land Surveyors.
 - 1) Examples of possible basis of bearing wording:
 - Commencing at the northeast corner of Section 5, whence the north ¹/₄ bears (bearing), said line being the basis of bearing for this description.
 - Commencing at the Northeast corner of Section 5, and considering the North line of said Northeast ¹/₄ to bear (bearing), said line forming the basis of bearings for this legal description.

- 6. Body: Descriptions shall be written so that the parcel is described in a clockwise direction.
 - a) Point of Beginning (aliquot descriptions excepted).
 - b) Descriptions of existing lines or bounds being followed or encountered, such as, but not limited to, aliquot, ROW, platted lot, and deed lines, shall be identified.
 - c) Courses shall be reported in bearings and distances. Right angles or deflection angles are discouraged. Distances are to be US Survey feet at ground level.
 - d) Curves shall be identified as being to the left or right. The "concave northerly" style of usage, instead of left or right, is discouraged.
 - e) Curve information must include radius, central angle, arc length, bearing to the radius point, chord bearing and distance.
 - f) All curves must be tangential when creating/describing a new parcel, whose lines run independent of previously legally defined lines, unless absolutely necessary. In cases where curves are not tangential, they must be identified as such, at both the start and/or the finish, as appropriate.
 - 1) Examples of possible curve wording:
 - Thence along the arc of a non-tangent curve to the left, whose radius point bears (bearing) from the point of curvature, having a central angel of (angel) and a radius of X feet, an arc distance of X feet (chord bears (bearing), a distance of X feet).
 - g) When existing (deed, plat, easement, ROW, etc.) lines are used, full recording information must be included for the document creating said line (County, Reception number, book & page, date, file & map, etc.).
 - h) Area shall be reported in acres, to three decimal places, followed, parenthetically, by the area in square feet to zero decimal places. Customarily "more or less" is appended to this square footage value. Areas for parcels smaller than 0.5 acres should be reported in square feet only.

- 7. Approval Block: A signature block identifying the surveyor and the name of his/her company is required, in compliance with 38-35-106.5 CRS.
- 8. Closure Calculations: The closer calculation sheet must be included, showing the closure as the description is written. Geometrick closure of the parcel must exceed 1:20,000.
- c. AutoCAD Drawing:

An electronic copy of the AutoCAD Drawing file shall be submitted with the recorded easement, made in model space, NOT paper space using the layers, line types, colors, templates, and pen sizes as defined in Section <u>A.2.4</u>.

- 1. Drawings that do not comply with this Section are not acceptable..
- 2. Size: Overall $8\frac{1}{2} \times 11$ inches.
- 3. Title Block: Shall be established by the individual Distributor.
- 4. Scale: The drawing shall be to an appropriate recognized civil engineering scale. The scale used shall be large enough so that all dimensions are clearly shown. Whenever possible, the entire easement should be on one sheet. Break lines, except in the land corner, ties, are not acceptable.
- 5. Tie: Parcels shall have a direct tie, or one with a maximum of two courses, to the two nearest available recognized land corners (i.e., section corner, quarter section corner, range point). If the easement is located within a plat subdivision, a tie shall be made to a lot corner, tract corner, or subdivision corner of that subdivision.

Basis of bearings shall be established using NAD83 State Plane Coordinates projected to ground values with project scale factor, elevation factor and combined factor represented. The State Plane Coordinate information shall be clearly indentified on the AutoCAD Drawing.

2. <u>Document Preparation</u>: The District will prepare the easement agreement on a standard District form and return the document to the grantor for signatures.

3. <u>Construction</u>: The construction of the water main shall not be authorized to commence until the easement is accepted by the District and the easement agreement has been recorded.

C.Obtaining a License to Use or Cross District Property or District Easements

When requesting permission to use or cross District property, an Applicant shall request a revocable license for routine right angle utility crossings of strip properties and easements, or for temporary uses. The following procedures shall be followed:

1. <u>**Procedure**</u>: A letter requesting the District's permission to use or cross its property shall be submitted to the District's. The letter of request shall contain the exact name of the company, corporation, partnership, etc., that will own, operate, and maintain the proposed facilities, the names and titles of the persons authorized to sign the agreement, and include the following enclosures:

- a. A legal description and survey drawing meeting the following requirements. Drawings that do not comply with these requirements are not acceptable:
 - 1. <u>Size</u>: Overall 8¹/₂ x 11 inches as shown in Denver Water Engineering Standards Section 4.06 (copy is available upon request).
 - 2. <u>Title Block</u>: Dimensions and lettering as shown in Denver Water Engineering Standards Section 4.06 (copy is available upon request). The initials of the person who prepared the drawing shall be entered in the area marked "DRN."
 - 3. <u>Scale</u>: The drawings shall be to an appropriate recognized engineering scale. The scale used must be large enough so that all dimensions are clearly shown. Whenever possible, the entire crossing should be on one drawing. Break lines, except in the land corner ties are not acceptable.
 - 4. <u>Tie</u>: All crossings shall have a direct tie, or one with a maximum of two courses, to the nearest available recognized land corner (i.e., section corner, quarter section corner, range point, or the nearest available intersection of two dedicated public road right-of-way lines).

Basis of bearings shall be established using NAD83 State Plane Coordinates, with the State Plane Coordinate information clearly identified on the drawing.

- 5. All distances shown on the drawing shall be to the nearest hundredth of a foot.
- 6. All drawings shall have a typical profile of the crossing as shown on the specimens.
- b. A check payable to Bow Mar Water and Sanitation District for the applicable license preparation fee shall accompany the letter of request. If the request for the License Agreement, after the District's review, is denied, one-

half of the applicable, then-current licensing fee will be returned. The remaining half will be retained to cover associated review and administrative costs.

c. Requests should include prints of the plans of the overall job in the area of the crossing, when available, and prints of new or proposed subdivisions whenever this information would clarify or identify the location of the request.

2. <u>Document Preparation</u>: The District will prepare the License Agreement on a standard District License Agreement form and return the document to the Licensee for signatures. A copy of the completed Licensed Agreement shall be kept at the job site at all times.

3. <u>Instructions for Preparation of District Exhibit Drawings</u>: All easement exhibits shall be prepared in compliance with Denver Water Engineering Standards Section 4.06 Specimen Sheets Illustrating Procedures. A copy of said Section 4.06 is available at http://www.denverwater.org/docs/assets/B4903F70-E or upon request from the District.

1.3 <u>WATER SYSTEM CONSTRUCTION PROCEDURES AND GENERAL</u> <u>REOUIREMENTS</u>

Construction may commence pending approval of water system construction plans and completion of the preconstruction meeting. The District and Denver Water require a minimum of 48 hours notice prior to initiation of construction.

<u>A.Preconstruction Meeting Minutes</u>

Minutes of the preconstruction meeting will be sent to all parties in attendance and other interested parties. The Applicant shall ensure compliance with all provisions and requirements stipulated in the minutes. Any questions or disagreements with the minutes must be brought to the attention of the District inspector in writing. The terms and conditions outlined in the preconstruction meeting minutes will be final unless modified in writing by the District.

B.Placing Survey Line

Hubs, stakes, or appropriate approved survey control markers shall be set on an offset line to mark the location of the centerline of the water main. Centerline hubs and stakes may be used in addition to the offset hubs and stakes; however, they may not be set in place of the offset hubs and stakes. Normal practice is to set the offset hubs and stakes 5 to 10 feet off the centerline of the water main.

Survey points shall be set a maximum distance of 100 feet apart. All valves, crosses, tees, horizontal and vertical bends, and fire hydrants shall be staked for location and grade. Points of curvature and points of tangency of curves, as well as points on the curve, shall be staked for location and grade. All stakes shall be flagged to increase their visibility.

Stakes shall be positioned so that the survey hub is between the stake and the water main. The side of the stake facing the water main shall be marked to show the point being referenced and the distance from the hub to the centerline of the water main. The back side of the stake shall be stationed. Grade stakes shall be set at each hub and shall state the vertical distance from the top of the hub to the top of the pipe. This vertical distance will be based on the fact that the distance from the official street elevation to the top of the pipe shall be $4\frac{1}{2}$ feet.

C.Inspections

Installation of all new water facilities within the District shall be inspected by the District inspector and a designated representative of Denver Water.

Problems which may require sound field judgment, in lieu of strict interpretation of the specifications, shall be resolved by the Design engineer and the Contractor to the satisfaction of the District and Denver Water.

District personnel are not responsible for Contractor work site safety compliance or enforcement of applicable safety regulations and standards, including OSHA compliance regulations on the work site.

All appropriate permits shall be on the job-site and shall be available for inspection by the District inspector before starting and during construction.

The District shall not supervise nor set out work or give line and grade stakes.

All materials used shall be subject to the inspection and acceptance of the District at all times and shall not be used prior to inspection and approval by the District. Failure or neglect on the part of the District to condemn or reject work materials not in accordance with these Standards and Specifications shall not be construed to imply acceptance should their inferiority become evident at any time.

Inspection should in no way be considered a guarantee of the contractor's work. Construction inspection does not relieve the contractor of his obligation to construct facilities in accordance with these Standards and Specifications, and the approved construction plans.

After receipt of approved plans from the District, the Contractor shall give <u>at least 48</u> <u>hours</u> notice to the District and Denver Water prior to starting construction.

During construction, no work is allowed to be backfilled, including bedding material above the spring line of the pipe, until the construction has been inspected and accepted by the District inspector.

The Applicant is responsible for reimbursement of all costs related to the District's construction inspection.

If construction work is halted for more than three (3) workings days, 24 hour notice must be given to the District's inspector prior to restarting construction.

D.Contractors

The District reserves the right to pre-qualify all contractors working on facilities owned by the District of facilities that are to be conveyed to the District.

No work shall commence until a preconstruction meeting has been conducted and the installing contractor has an approved set of plans and specifications in his possession. All work shall be performed in strict compliance with the compliance with the approved

plans and specifications and shall be inspected by the District. Any modifications, field changes, etc., to the approved plans must be approved by the District and Denver Water prior to proceeding with the work.

Contractors performing all work for both main extensions and private pipe extensions shall be competent, licensed firms with adequate manpower and equipment to accomplish the work in accordance with these specifications. A representative of the contractor shall be present at the job-site whenever work is being conducted by subcontractors.

If construction work is halted for more than three (3) working days, 24 hours notice must be given to the District's inspector prior to restarting construction. This requirement may be waived at the discretion of the District manager.

<u>E. Guarantee of Workmanship. Materials and Equipment</u>

The Contractor and Surety on the Maintenance Bond shall be jointly responsible for a period of one year following the final acceptance of work performed. They are responsible for the satisfactory repair or replacement of work, material, services and equipment which becomes defective during this period, as a result of faulty materials, faulty installation or improper handling of material and equipment installed by the Contractor.

F.Phasing of Construction

Unless designated on the approved construction plans or approved in the preconstruction meeting minutes, phasing of a construction project will generally not be allowed. A desire to obtain acceptance and release for water taps on only a portion of a construction project designated on the approved plans requires the written approval of the District manager. A request for said approval must be submitted in writing and should include a description and drawing of the exact limits of the phased construction. The provision of looped water service and compliance with the District's integrated water system will be strongly considered in the District's review of the proposed phased construction.

G.Acceptance of Construction

Applicants are cautioned that all construction is undertaken at their risk. Approval of construction plans does not constitute a guarantee that construction will be accepted nor a guarantee that facilities will be conveyed to the District. Nor does approval of construction plans and inspection of construction guarantee that a project will meet any intended purposes or obligations.

Only acceptance of construction and initiation of probationary maintenance as designated by the District's execution of the Application and Agreement for Water Main Extensions shall constitute acceptance by the District of the constructed facilities.

1.4 <u>WATER SYSTEM CONSTRUCTION ACCEPTANCE PROCEDURES AND</u> <u>GENERAL REOUIREMENTS</u>

Pending completion of construction, the District will accept the facilities for probationary maintenance in accordance with the following procedures and requirements.

A.Conditions for Acceptance of Construction

The following conditions must be met and information submitted and approved by the District prior to approval of construction and release of any water main for service.

- 1. The water main(s) and all appurtenances have been installed to the satisfaction of the District Inspector, all notes and field measurements have been made, and two full size blue line prints and two full size reproducible mylar prints of the as-built drawings have been supplied to, and approved by, the District Inspector.
- 2. The water mains have been successfully tested to the requirements designated in the technical specification section of this publication.
- **3.** All compaction test results required by the District inspector have been submitted and accepted.
 - 4. All easements have been accepted and recorded by the District.
- 5. The Applicant has submitted a letter to the District inspector documenting the construction costs for the project.
- 6. The District Easement Certification form including drawings identifying the "as constructed" location of water mains and appurtenances within the boundaries of recorded easements has been submitted and accepted by the District inspector. Certification drawings must be signed and stamped by a registered Land surveyor licensed to practice in the State of Colorado. The drawings are in addition to the full size "as built" drawings described in Section A.3.1.1.

Examples of easement certification submittals are available upon request.

- 7. One full size reproducible mylar copy of the recorded subdivision plat has been provided.
- 8. All plan review and construction inspection fees have been paid.
- **9.** A maintenance bond or letter of credit as specified in the Application and Agreement for Water Main Extensions has been submitted to, and approved by, the District.

10. The Applications and Agreements for Water Main Extensions have been signed by the District manager for construction approval and initiation of probationary maintenance.

B.Execution of Application and Agreement for Water Main Extension

Upon District approval of all items listed in section A.3.1 above, the Applications and Agreements for Water Main Extensions will be dated and signed by the District manger. Execution of the Applications shall constitute District acceptance of the facilities for probationary maintenance and initiation of the warranty period.

The probationary maintenance and warranty period shall be as designated in the Applications and Agreements for Water Main Extensions. The Applicant guarantees all facilities against failure for a minimum period of one year from the date of acceptance. In addition, the condition and operability of the valve boxes, valves, manholes, and fire hydrants remains the Applicant's responsibility until streets are paved and all facilities inspected and accepted by the District.

C.Maintenance During Warranty

Maintenance performed by the District during the warranty period consists of inspection and routine maintenance of the facilities. All remedial repairs and non-routine maintenance remains the responsibility of the Applicant. Failure of the Applicant to have all repairs carried out when requested by the District shall result in the District conducting the repairs at the Applicants expense.

D.Issuance of Water Taps Permits

No water tap permits shall be issued nor water taps allowed until the Applications and Agreements for Water Main Extensions have been executed for acceptance of construction.

E.Final Acceptance

Final acceptance and conveyance of the facilities to Bow Mar shall occur as specified in the Applications and Agreements for Water Main Extensions, but no sooner than one year after probationary acceptance or after street paving, whichever is later. Final acceptance shall be subject to reinspection of all facilities by the District and correction of any deficiencies by the Applicant.

After proper notice, failure of the Applicant to correct deficiencies found during final inspection shall be cause for the District to correct the deficiencies at Applicant expense.

1.5 <u>RESPONSIBILITY OF THE APPLICANT, DESIGN ENGINEER, AND</u> <u>CONTRACTOR</u>

The following summarizes the responsibilities of the Applicant, design engineer and contractor.

A.Responsibility for Design

The Applicant is responsible for ensuring that the water system construction plans are designed to accommodate the water service requirements of the planned development. The District reviews construction plans in order to promote compliance with the minimum standards of the District and does not guarantee the adequacy of the plans to perform any certain function nor to protect against any specific condition applicable to the proposed construction site.

The District is not performing engineering services for the Applicant. It is the responsibility of the Applicant, his engineer and contractor to prepare the design and plans, determine the material specifications and soil conditions, and construct the project in accordance with the specifications of the Bow Mar Water and Sanitation District and Denver Water Department.

B.Preconstruction Meeting

The contractor shall be responsible for arranging a preconstruction meeting prior to the start of any construction. Representatives of the District, District engineer, Applicant, design engineer, contractor, and Denver Water must be represented at this meeting.

C. Notice of Initiation of Construction

The contractor is responsible for notifying the District at least 48 hours prior to the start of any construction. If work is suspended for any period of time after initial start-up, the contractor must notify the District's inspector 24 hours prior to re-starting construction, unless waived by the District inspector.

D.Construction in Accordance with Approved Plans

The contractor is responsible for performing construction in accordance with District standards and specifications and the construction plans approved by the District. The contractor must notify the District's inspector of any modifications to the approved plans prior to accomplishing construction contemplated by the modifications. Failure of the District to approve proposed changes in writing will require that construction be completed in accordance with the approved plans.

<u>E. Verifying Location of Existing Facilities</u>

At all points of connection of new water mains to existing mains, the contractor will be responsible for excavating and verifying the location of existing mains prior to the installation of new facilities.

F. Termination of Service to Existing Customers

If it is necessary to shut down any portion of the existing water system and thereby terminate service to existing customers, the contractor must notify the District inspector at least 48 hours prior to the need to terminate service. The District will advise customers of the impending water outage and determine the appropriate measures required to satisfy the customer's needs during the outage. The contractor shall be fully responsible for carrying out the temporary water supply measures prescribed by the District. All necessary arrangements to provide temporary water service must be made by the contractor prior to termination of service. Use of District labor and materials to supply temporary water service will be charged to the Applicant.

G. Operation of Existing Valves

All existing values shall be operated only by District personnel. <u>THE CONTRACTOR</u> <u>IS NOT PERMITTED TO OPERATE EXISTING VALVES WITHOUT THE</u> <u>APPROVAL OF THE DISTRICT'S INSPECTOR.</u>

H.Inspections

No pipe or appurtenance shall be backfilled, nor covered with bedding material, above the spring line of the pipe prior to inspection and acceptance by the District's inspector. It is the sole responsibility of the contractor to ensure that all construction is inspected before backfilling. Any pipe covered prior to inspection and acceptance shall be excavated by the contractor to allow for inspection. This shall be accomplished at no expense to the District.

I. Repairs During Warranty Period

The Applicant shall be responsible for providing repair services to all portions of the construction project during the warranty period. The District reserves the right to perform any cleaning, repairs, or other maintenance, during the warranty period at the expense of the Applicant.

The Applicant shall be responsible for the correct alignment, cleanliness, and operation of all valve boxes, valves, fire hydrants, and manholes during the warranty period or until

the street is paved, whichever is longer. Written notification of deficiencies discovered during this period will be provided by the District. If the deficiencies are not corrected during the prescribed time limits, the corrections shall be completed by the District at the expense of the Applicant.

J. Payment of Plan Review and Construction Inspection Fees

The Applicant is responsible for payment of all fees associated with the District's and the Denver Water's plan review and construction inspection services. Fee schedules are available from the District and Denver Water upon request. Fees are subject to change without notice.

K.Variance to District Specifications

The Applicant may request a variance to materials specifications in writing. Such requests will be reviewed by the District engineer and the District manager on a case by case manner.

1.6 <u>RELOCATION OF DISTRICT FACILITIES</u>

The following provisions shall apply to requests to relocate existing District facilities.

A.Responsibility for Relocation Costs.

The cost to relocate any existing District owned facility or facilities shall be the responsibility of, and paid by, the entity engaging in the activity that necessitates the relocation, including, but not limited to, any county, city, town, special district, regulated public entity or private party.

B. Definition.

"Cost of relocation" includes all costs and expenses properly attributable to the requested relocation, including, but not limited to, costs for survey, right-of-way acquisition, design engineering, inspection, materials, construction, permits and licenses, transportation, administrative overhead, and any reasonable costs necessarily incurred to modify or repair any other District facility where such repair or modification is made necessary by the relocation.

C.Increased Capacity.

Nothing herein contained shall prevent the District from requiring an increase in the capacity of or the over-sizing of the relocated facility; provided, however, that should the same occur, the District will be responsible for paying that share of the relocation cost attributable to said increase in capacity or over-sizing.

D.Performance of the Work.

The District shall have the right to design and construct, or cause to be designed and constructed, the facility or facilities to be relocated, all costs to be paid by the party requesting relocation in accordance with this policy statement. The District, at its option, may allow the party requesting relocation to design and construct the relocation of any District facility, provided the same is done pursuant to a written agreement entered into between the District and the relocating party, which is approved by the District's Board of Directors, and which allocates the cost of relocation in accordance with this policy statement.

E. Determination of the Extent and Necessity for Relocation.

In all cases, the necessity and extent of any relocation of District facilities shall be made by the District.

F.Policy Considerations.

The allocation of relocation costs is intended to be fair and equitable to all parties and promote sound public policy by distributing said costs to the beneficiaries of the new project rather than adding them to the costs previously assumed by the District's taxpayers and customers. In addition, by imposing relocation costs upon the entity that seeks to disturb the status quo, the District seeks to:

- 1. Deter over-zealous and needless project planning by creating an economic incentive to avoid unnecessary utility relocations;
- 2. Recognize and promote the District's legitimate monetary and budgetary expectations with regard to the construction of its facilities and the useful life thereof;
- 3. Recognize the physical, legal and practical limitations and constraints on the District to defray the cost of relocations required by other entities; and
- 4. Reduce waste and the allocation of scarce resources.

<u>G.Procedure for Requesting Relocation.</u>

The following procedures shall apply to all requests to relocate water mains and appurtenances owned by the Bow Mar Water and Sanitation District. In all cases the necessity and extent of the relocation of facilities shall be determined by the District.

- 1. A written request for relocation of a District owned water main or appurtenance shall be submitted to the District Manager. The letter shall contain at least the following information.
 - a. Name, address, telephone number and contact person for the party requesting relocation.
 - b. Description of facility to be relocated.
 - c. Location of existing facility.
 - d. Proposed location and description of relocated facility, if known.
 - e. Reason for proposing relocation.
 - f. Requested time schedule for accomplishing the relocation.
 - g. Ownership of property where existing facility is located and ownership of property proposed for the relocated facility.

- h. Disposition of existing facility (abandoned in place or removed).
- 2. If the District determines that it may be possible to accommodate the relocation request a meeting will be scheduled between the District and the requesting party to discuss specific details regarding the proposed relocation.
- 3. Following the meeting between the requesting party and District representatives, the District will decide at its sole discretion whether it is in the best interest of the District to design and relocate the facility or if the party requesting relocation will be allowed to design and relocate the facility. <u>However, regardless of who designs and relocates District facilities, all costs associated with the relocation including, but not limited to, administrative, engineering, legal, construction materials, and labor costs shall be the responsibility of the party requesting said relocation.</u>
- 4. At the discretion of the District a Utility Relocation Agreement defining the rights, duties, and obligations of the District and the party requesting relocation shall be prepared by the District's attorney.
- 5. The relocation will proceed in accordance with the Utility Relocation Agreement.

$C_{\text{HAPTER}} \, 2$

$W {\rm Ater}\,S {\rm ystem}\,T {\rm echnical}\,S {\rm tandards}$

WATER SYSTEM TECHNICAL STANDARDS

Note: Bow Mar Water and Sanitation District has adopted the Material Specifications of Denver Water as set forth in Denver Water Engineering Standards, 16th Edition effective July 29, 2021. The specifications are provided for standardization purposes only and represent minimum design standards that may require revision for specific applications.

These technical standards are available on the Denver Water website at:

denverwater.org/contractors/construction-information/design-standards/engineeringstandards

$\frac{CHAPTER 3}{\Box}$

$W {\rm ATER}\,S {\rm YSTEM}\,M {\rm ATERIAL}\,S {\rm PECIFICATIONS}$

MATERIAL SPECIFICATIONS

<u>Note</u>: Bow Mar Water and Sanitation District has adopted the Material Specifications of Denver Water as set forth in Denver Water Engineering Standards, 16th Edition effective July 29, 2021. The specifications are provided for standardization purposes only and represent minimum design standards that may require revision for specific applications.

These material specifications are available on the Denver Water website at:

denverwater.org/contractors/construction-information/design-standards/engineering-standards

$C_{\text{HAPTER}}\,4$

Standard Drawings

STANDARD DRAWINGS

Note: Bow Mar Water and Sanitation District has adopted the Standard Drawings of Denver Water as set forth in Denver Water Engineering Standards, 16th Edition effective July 29, 2021. The Standard Drawings are provided for standardization purposes only and represent minimum design standards that may require revision for specific applications.

These drawings are available on the Denver Water at:

https://www.denverwater.org/contractors/construction-information/design-standards/engineeringstandards

Chapter 5

Exhibits

EXHIBIT A

Bow Mar Water and Sanitation District

Owner/Applicant Information Form

Construction of water and sanitary sewer mains within Bow Mar Water and Sanitation District requires submittal of Application and Agreement for Water and/or Sanitary Sewer Main Extension forms. The Applications will be prepared by the District upon receipt of the documentation described herein. The applications must be executed exactly as the applicant is doing business.

No water or sanitary sewer construction may commence until all documents listed on the Plan Review Checklist are approved by the District and construction plans are stamped and signed by the District engineer and District manager.

Please complete the following and return to the District accompanied with the required documentation. If the Applicant is doing business in a form of organization not listed below, please contact the District for instructions on the information required. To promote efficiency in processing construction plans, you are encouraged to designate a local representative to respond to questions and receive comments regarding the plans and other required documents.

Fax No.:	
Fax No.:	
Fax No.:	
Fax No.:	
	Fax No.: Fax No.:

Form of Organization

Please complete the appropriate section below:

CORPORATION

If Application will be executed by a Corporation, please provide the following:

Name of Corporation:

State in which Corporation is registered:

Registered Agent for Corporation:

Name of Corporate Officer authorized to sign Applications:

Name of Corporate Officer who will attest signature of above:

A COPY OF THE ARTICLES OF INCORPORATION OR CERTIFICATE OF INCORPORATION MUST BE RETURNED WITH THIS FORM.

GENERAL PARTNERSHIP

If Application will be executed by a General Partnership, please provide the following:

Name of Partnership:

Name of <u>all_general partners</u>:

Name and title of partner(s) who will sign Applications (if fewer than all general partners will sign application, please submit documentation authorizing the individual(s) who do sign):

A COPY OF A RECORDED TRADE NAME AFFIDAVIT FOR THE GENERAL PARTNERSHIP MUST BE RETURNED WITH THIS COMPLETED FORM.

LIMITED PARTNERSHIP

If Application will be executed by a Limited Partnership, please provide the following:

Name of Limited Partnership:

Name(s) of general or managing partners:

Name(s) of limited partners:

Name(s) of general partner who will sign Applications (if fewer than all general partners are listed, please submit documentation in the form of a certificate of limited partnership or other document authorizing said individual to sign):

A STAMPED COPY OF THE CERTIFICATE OF LIMITED PARTNERSHIP FILED WITH THE COLORADO SECRETARY OF STATE MUST BE RETURNED WITH THIS FORM.

LIMITED LIABILITY COMPANY

If Applications will be signed by a limited liability company, please provide the following:

Name of limited liability company:

Name and title of individual(s) who will sign Applications:

A DATE STAMPED COPY OF THE ARTICLES OF ORGANIZATION FILED WITH THE COLORADO SECRETARY OF STATE FOR THE LIMITED LIABILITY COMPANY MUST BE RETURNED WITH THIS FORM.

INDIVIDUAL

If Application will be executed by an individual, please provide the following:

Name of individual:

S:\data\WPDOCS\FORM\Word Files\PC Owner-Applicant Information Form.FORM.doc Revised: April 26, 2011

EXHIBIT B

APPLICATION AND AGREEMENT FOR EXTENSION OF WATER MAINS

THIS APPLICATION AND AGREEMENT ("Agreement") is made and entered into in quadruplicate original between ________ (hereinafter referred to as "Applicant"), whose address is _______ and BOW MAR WATER AND SANITATION DISTRICT, a quasi-municipal corporation of the State of Colorado (hereinafter referred to as "District"), whose address is 8739 West Coal Mine Avenue, Littleton, Colorado 80123, and whose telephone number is (303) 979-2333.

WITNESSETH:

WHEREAS, Applicant may retain a contractor to install the water mains and related appurtenances which are the subject of this Agreement; and

WHEREAS, Applicant and District desire to execute an agreement setting forth the terms and conditions pursuant to which such water mains and related appurtenances will be conditionally accepted by the District and allowed to connect to the District's public water system and, if finally accepted by the District, shall become a part of the District's public water system for all purposes including maintenance.

NOW, THEREFORE, the parties hereto agree as follows:

- 1. <u>Definitions</u>.
 - 1.1 The term "water lines" and "water distribution mains" shall mean the water lines and related appurtenances such as valves, valve boxes and fire hydrants, etc., as shown and only as shown on Applicant's approved plans; provided, however, the term "water lines" shall not under any circumstances, include private service lines.

- 1.2 "Approved Plans" means the set of plans and specifications approved for construction by the District's consulting engineer and/or Denver Water, as applicable, dated _____, 20____.
- 1.3 "Project" shall mean the water lines as shown on Applicant's Approved Plans.
- 1.4 "Applicable Governmental Authority" shall mean the District or any governmental, municipal or quasi-municipal entity that has jurisdiction with respect to the Project.

2. <u>Approved Plans.</u>

Applicant covenants the Project will be constructed in accordance with the Approved Plans and any approved modifications or additions made thereto. Further, Applicant warrants that the Project will be constructed in a workmanlike manner and that, once constructed, the Project will be fit for its intended purpose.

Applicant further warrants that the Project will be constructed upon real property owned by Applicant or upon real property upon which Applicant has permission to enter for the purpose of constructing the Project and performing all of Applicant's warranty and other obligations contained herein.

3. <u>Supervision of Work.</u>

The District shall have no responsibility to supervise or direct construction of the Project. Applicant or Applicant's contractor will supervise and direct construction of the Project and will be responsible for the means, methods, techniques, sequences and procedures of construction.

4. <u>Applicant's Warranty.</u>

a) Applicant warrants and guarantees to the District that, without exception, the Project will be free from any defects (including but not limited to defects in materials and workmanship) for a period of one (1) year from the date of conditional acceptance by District or until the date the Project is finally accepted by the District, whichever period is longer. No exceptions shall be permitted to this warranty provision.

b) The Applicant additionally agrees that during the one (1) year period subsequent to the date of conditional acceptance of the Project by District, Applicant will promptly perform all work and supply all materials or cause its contractor to perform all work and supply all materials necessary to remove, replace, maintain or repair the Project constructed hereunder when said work is required by the District for any reason, notwithstanding that said work does not arise out of any negligent or willful acts or omissions of the Applicant or Applicant's contractor. In the event any of the maintenance and/or repair obligations required under this subparagraph (b) are not performed within twenty (20) days following written notice to Applicant, the District may cause said maintenance and/or repairs to be performed and charge the costs thereof to Applicant. Applicant agrees to pay all District bills for maintenance and repairs of the Project within thirty (30) days after receipt of the District invoice, together with all costs of collection, including reasonable attorney's fees and interest thereon at the rate of 1.5 percent per month on amounts that are past due.

c) Applicant agrees that any work required by the District hereunder, whether performed by Applicant or Applicant's contractor or by the District in the event of the refusal or inability of Applicant and/or Applicant's contractor to perform the work until the Project is finally accepted by the District, shall not impair or void the Applicant's warranty and guarantee under this paragraph 4 or any other obligation or liability of the Applicant imposed by law or contract.

d) Applicant further agrees that in emergency situations, the District shall have the right to perform whatever maintenance or repairs the District determines are necessary to protect the public health and safety without giving advance written notice to Applicant. Applicant agrees to pay all costs incurred by the District in performing emergency repairs and maintenance within thirty (30) days after receipt of the District's invoice thereof, together with all costs of collection, including reasonable attorney's fees and interest thereon at the rate of 1.5 percent per month on amounts that are pas due. The term "emergency" shall mean any situation where, in the District's determination, the public health or safety would be jeopardized or endangered by waiting for Applicant or Applicant's contractor to initiate and perform the needed maintenance and/or repairs.

5. <u>Additional Security.</u>

To induce the District to execute this Agreement and to provide additional assurance that Applicant will fully perform all of Applicant's warranty, maintenance and repair obligations contained herein, and as a precondition of the District's approval of the Project for conditional acceptance as described in paragraph 9, Applicant agrees to deliver to District as a condition precedent to the District's conditional acceptance of the Project, additional warranty security in a form and amount as described in subparagraphs 5a, 5b, or 5c below.

a) A fully executed Warranty and Maintenance Bond in the form attached hereto as Exhibit "A" issued by a surety acceptable to the District and in an amount to be determined by the District, but in no event greater than one hundred percent (100%) of the Project construction cost as determined by the District in the reasonable exercise of its discretion. Until the Project is finally accepted by the District, the performance of any warranty, maintenance or repair work upon the Project by the Applicant, Applicant's contractor or the District, shall under no circumstances, release, discharge or modify in any way Applicant's obligations under the Warranty and Maintenance Bond.

b) An Irrevocable Letter of Credit issued by an institution acceptable to the District and in an amount to be determined by the District, but in no event greater than one hundred percent (100%) of the Project construction cost as determined by the District in the reasonable exercise of its discretion. Until the Project is finally accepted by the District, the performance of any warranty, maintenance or repair work upon the Project by the Applicant, Applicant's contractor or the District, shall under no circumstances, release, discharge or modify in any way Applicant's obligations under the Letter of Credit.

c) A cash deposit in an amount to be determined by the District, but in no event greater than one hundred percent (100%) of the Project construction cost as determined by the District in the reasonable exercise of its discretion. Said sum shall be held by the District as a security deposit for the faithful performance by Applicant of all of Applicant's warranty and maintenance obligations under this Agreement. If Applicant defaults with respect to any of its warranty or maintenance obligations hereunder, including but not limited to those obligations as set forth in Paragraph 4 above, District may, (but shall not be required to) use, apply, or retain all or any part of the deposit for the payment of any amount which District for any other loss or damage which District may suffer by reason of Applicant's default. District will not segregate the cash deposit from its other funds and District shall be entitled to all interest, if any, earned on said deposit. The District shall return the security deposit less any amount or amounts thereof that had been applied to Applicant's warranty and maintenance obligations hereunder within sixty (60) days after the water lines and related appurtenances are finally accepted by the District.

6. <u>Inspection.</u>

The District and its representatives will at all times have access to the construction site and will be permitted to inspect the work, materials and any relevant documents or records necessary for the purpose of determining whether the Project is constructed in accordance with the Approved Plans. All inspections, tests, and reviews shall be conducted at the sole cost of the Applicant and shall be paid by the Applicant within thirty (30) days of invoice by the District.

7. <u>Ownership.</u>

Until dedicated to and conditionally accepted by the District, the Project shall be owned by Applicant and Applicant shall have full and complete responsibility for the Project including the safety conditions at the construction site. By way of explaining and not limiting the foregoing provisions of this Paragraph 7, Applicant agrees that until the District conditionally accepts the Project in accordance with the provisions of Paragraph 10 below, the District shall have no obligation pursuant to Section 9-1.5-103 C.R.S., to locate any water main or related appurtenance that is a part of the Project. Until conditional acceptance of the Project by District, said locate obligation, if any, shall be the sole responsibility of Applicant.

8. <u>Tap Permits.</u>

No water tap permits shall be issued or sold for connection to the Project and no such taps shall be made to the Project until the District has conditionally accepted the Project in the manner as set forth in paragraph 9 below.

9. <u>Conditions to Conditional Acceptance.</u>

Each of the following conditions shall be a condition precedent which must be satisfied before the District will conditionally accept the Project:

a) <u>Approved Plans.</u> The District, in its sole discretion, is satisfied that the Project has been constructed in accordance with the Approved Plans; and

b) <u>Easements.</u> The District is satisfied that all easements have been obtained for the Project and that the Project as constructed is located within said easements or other suitable public rights-of-way; and

c) <u>Record Drawings.</u> Receipt by the District of record drawings for the Project, certified compaction test results, and any survey certifications that the District's manager may require; and

d) <u>Additional Security.</u> The receipt of any security in addition to the security required by paragraph 5 b) above, that the District deems necessary for whatever reason; and

e) <u>Disconnection of Abandoned Lines</u>. The disconnection and removal, or in lieu thereof, the acceptance of ownership by Applicant of any existing water lines and related facilities to be abandoned by District in connection with the water mains to be installed hereunder. Any such disconnection and removal shall be in accordance with the District's standards, specifications, and requirements for disconnection; and

f) <u>Compliance with Geotechnical Recommendations</u>. If there are expansive soils in the area of the Project, and the District determines it is necessary, receipt by the District, at no expense to the District, of a written certification from a qualified soils engineer acceptable to the District, that the water mains are installed in accordance with the recommendations provided to the District by Kumar & Associates; and

g) <u>Contemplated Use.</u> Without in any way being limited by the specificity of the foregoing, the District, in its sole discretion, is satisfied that there are no matters outstanding which would prohibit or unreasonably interfere with the use of the Project for its intended purpose.

10. <u>Conditional Acceptance.</u>

Conditional acceptance shall be accomplished only by the District's manager and/or engineer, if applicable, affixing his or their signatures to the Agreement in the space provided for on page 11. As of the date of conditional acceptance, all of Applicant's right, title and interest in and to the Project, including but not limited to, all mains, pipelines, valves, and related parts and materials which compromise the Project, shall automatically and immediately pass to and be conveyed to the District with no additional transfer proceedings or documents being necessary; provided, however, that the Applicant's shall remain obligated to perform said Applicant's warranty, maintenance and repair obligations for a period of one (1) year from the date of conditional acceptance or until the Project is finally accepted by the District, whichever period is longer.

11. <u>Contractor Warranties.</u>

Applicant may cause its contractor to warrant and guarantee to District Contractor's work performed on the Project. Any such warranty by Applicant's Contractor shall be in addition to and not in lieu of Applicant's warranty and guarantee obligations to District as set forth in this Agreement.

12. <u>Conditions to Final Acceptance.</u>

One (1) year from the date of conditional acceptance, the District's manager and/or consulting engineer, as the case may be, will inspect the Project for final acceptance. Each of the following conditions shall be a condition precedent which must be satisfied before the District shall finally accept the Project:

a) <u>Full Performance.</u> Applicant has faithfully and fully performed its obligations under this Agreement.

b) <u>No Damage</u>. There has been no damage or destruction to the Project; and it there has been damage or destruction, the same has been repaired, and the cost of such repair has been paid by Applicant.

c) <u>Compliance with Approved Plans</u>. Any deviation in the construction of the Project from the Approved Plans has been corrected. Without in any way limiting the generality of the foregoing sentence, attention shall be paid to assure that all fire hydrants, valve vaults, valve boxes, manholes and manhole covers are at finished grade and that all valve boxes are centered over the valve operating nut and are free and clear of sand, gravel, stones or other foreign material, and that all fire hydrants are operational.

d) <u>Contemplated Use.</u> Without in any way being limited by the specificity of the foregoing, the District, in its sole discretion, is satisfied that there are no matters which would prohibit or unreasonably interfere with the use of the Project for its intended purpose.

13. <u>Final Acceptance.</u>

Final acceptance shall be accomplished only by the District's manager and/or engineer, as the case may be, affixing his or their signatures to this Agreement in the space provided on Page 11. As of the date of final acceptance, the District accepts the Project for all purposes, including maintenance and repairs and the Applicant's obligation to pay for same shall cease; provided, however, that Applicant's indemnification obligation as set forth in paragraph 15 below shall survive final acceptance.

14. <u>Valve Boxes.</u>

Notwithstanding any other provision contained in the Agreement to the contrary, if the water lines that are subject to this Agreement are installed in private or public streets and the surface of the street is not paved by the time of final acceptance, Applicant shall remain responsible of raising the valve boxes to finished street grade in accordance with applicable County specifications when the street is paved. Applicant shall notify the District when the work to raise the valve boxes is complete so that the District may inspect the work. As part of the work on the valve boxes, Applicant shall insure that the valve boxes are clean of debris and are operational. If the Applicant does not raise the valve boxes as required herein, the District may perform the work at Applicant's sole cost and expense within thirty (30) days after notice to Applicant. Applicant shall make payment to the District within thirty (30) days after invoice. In the event payment is not timely made, Applicant agrees to pay all costs of collection (including reasonable attorneys fees) together with interest on the unpaid delinquent amount at the rate of 1.5 percent per month or part thereof.

15. <u>Indemnification.</u>

Applicant shall defend, indemnify and hold harmless the District, its officers, agents and employees, from all claims and demands or liability of whatsoever kind or nature, (including attorneys' fees) arising out of or encountered in connection with the construction of the Project or its operation or maintenance, whether such claim, demand or liability is caused in any way by Applicant, its agents or employees, or by Applicant's contractor or subcontractor, their agents or employees, or by any product or materials installed on the Project by Applicant, its contractors; excepting only such injury or harm as may be caused solely and exclusively by the District's negligence.

This indemnification shall extend to all claims, demands or liabilities, (including reasonable attorney's fees) for injury to persons, property or financial loss occurring before final acceptance of the Project as well as for a period of three (3) years after the date of final acceptance of the Project.

16. <u>No Duty No Reliance.</u>

The District, by its review and approval of the plans for the Project, does not assume any duty of care with respect to the Applicant or the Project. It is the Applicant's sole responsibility to prepare and design the plans and select the materials for the Project in accordance with the District's specifications and all applicable District rules and regulations. It is also Applicant's sole responsibility to construct the Project in accordance with the Approved Plans.

Applicant represents that Applicant has read thoroughly the Approved Plans for the Project, examined the Project site, and ascertained all soil, geological, groundwater and other conditions to be encountered which might affect the construction, operation and maintenance of the Project. Applicant agrees that it enters into the Project relying on its own investigation and information not on any statements or representations, if any, that have been made by the District, its officers, agents or employees.

If Applicant or Applicant's professional engineers disagrees with any part or portion of the Approved Plans for specifications for the Project, such disagreement shall be brought to the attention of the District Manager for resolution prior to the construction of the Project. Nothing herein contained shall be construed to place any obligations on the District to modify, deviate or change its standards and specifications as a result of any disagreement or objection lodged by the Applicant.

17. <u>Insurance.</u>

The following insurance coverages, issued by insurance companies acceptable to the District, shall be obtained, paid for and kept in full force and effect by Applicant until conditional acceptance of the Project, provided, however, that if Applicant contracts for the construction of the Project, then Applicant's Contractor shall cause the following insurance coverages, issued by insurance companies acceptable to the District, to be obtained, paid for and kept in full force and effect until conditional acceptance of the Project: a) Workmen's compensation insurance covering all workmen engaged in performance of the work on the Project in amounts not less than minimum coverage required by law, including employer liability coverage for not less than \$100,000.00;

b) Liability insurance, including automobile liability and property damage coverage on forms and written by companies that are acceptable to the District. Such policy or policies shall be written on an "occurrence" basis and maintained in minimum amounts of \$500,000.00 per occurrence, with a \$1 million general aggregate limit and a \$500,000.00 product/completed operations aggregate limit. Said policies shall contain an endorsement naming the District as an additional insured and providing that any insurance maintained by the District is excess and non-contributing with the insurance required hereunder.

c) Any policy of insurance required hereunder shall contain a contractual liability endorsement covering indemnity and defense obligations of Applicant and such other coverages as may reasonably be required by the District. Such policy will, among other things, make specific reference to this Agreement.

d) Any policy insuring against loss caused by physical damage to any portion or all of the Project, or to materials to be incorporated into the Project, or covering Applicant or Applicant's contractor's tools, supplies, machinery or equipment shall contain an endorsement providing that the insurer waives its right of subrogation against the District and any other named insured. Nothing contained in this paragraph shall give or create in any third party any claim or right of action against the District, except which may exist irrespective of this paragraph.

18. <u>Proof of Insurance.</u>

Prior to the commencement of any construction on the Project, Applicant or Applicant's Contractor as the case may be, shall furnish to the District certificates of insurance or copies of policies showing that such insurance required herein is in force and that the premiums due thereon have been paid and that the District is named as an additional insured. Such certification or policies shall provide that the insurance may not be cancelled, terminated or modified without fifteen (15) days advance notice thereof to the District. No policy shall contain any provisions for exclusion from liability other than the provisions for exclusion forming a part of the standard basic, unamended and unendorsed form of policy; provided, however, in no event shall any exclusions be permitted which conflict with any coverage required by this Agreement.

19. <u>Modification.</u>

This Agreement can be modified only by a written agreement signed by both parties hereto.

20. Interpretation of Agreement.

This Agreement and the Approved Plans are intended to supplement one another. However, in the event of a conflict, the conflict shall be brought to the attention of the District's manager, who shall have final authority to resolve any conflicts.

21. <u>Governing Law.</u>

This Agreement shall be construed in accordance with and governed by the laws of the State of Colorado.

22. <u>Assignment.</u>

Applicant may not assign this Agreement without the express written consent of the District.

IN WITNESS WHEREOF, this Agreement has been executed in quadruplicate by the parties hereto as of the day and year opposite their signatures.

GRANTOR:

By: _____

ACKNOWLEDGMENT

STATE OF COLORADO))ss. COUNTY OF _____)

The foregoing instrument was acknowledged before me this ____ day of _____, 2021 by

Witness my hand and official seal.

My Commission expires: _____

Notary Public

APPROVALS BY THE DISTRICT

a) Approval of Application:

Date: ___/___/____

Cynthia A. Lane P.E. District General Manager

b) Conditional Acceptance of Project:

Date: ___/___/

Cynthia A. Lane P.E. District General Manager

c) Final Acceptance of Project:

Date: ___/__/___

Cynthia A. Lane P.E. District General Manager

EXHIBIT A

BOW MAR WATER AND SANITATION DISTRICT WARRANTY

AND MAINTENANCE BOND

(Water Improvements)

	KNOW	ALL	MEN	BY	THESE	PRESENTS,	that	we	
						, hereinafter call	ed Principal	, and	
, hereinafter called Surety, are held and									
firmly bound unto the Bow Mar Water and Sanitation District, a quasi-municipal corporation of the									
State	of Colorado	, hereinafte	r called "	District", ir	n the sum of	f	d	ollars	

(\$_____), lawful money of the United States of America for the payment whereof the Principal and Surety bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly, by these presents:

WHEREAS, Principal has applied to the District for permission to install the water lines and related appurtenances generally described on Exhibit "A" which is attached hereto and incorporated herein by this reference (the "Project"), for the purpose of obtaining water service for a development known as ______; and

WHEREAS, as a condition of the District's approval of the Project, Principal and District have entered into the Application and Agreement for Extension of Water Mains attached hereto as Exhibit "B" (hereinafter called the "Contract") which Contract is by this reference made a part hereof; and

WHEREAS, the Contract contains: a) Principal's warranty that the Project will be free from defects for the period beginning with the date of conditional acceptance and ending with the date the project is finally accepted by the District; and, b) Principal's promise to maintain and repair the Project until the same has been finally accepted by the District and to raise the valve boxes to paved street level at such time the street is finally paved, even if the same occurs after final acceptance of the Project; and

WHEREAS, the approval of the Project by the District and Principal's authorization to proceed with the construction thereof is in part conditioned upon Principal's furnishing of an adequate warranty and maintenance bond to the District guaranteeing that Principal will perform or cause to be performed all of Principal's warranty, maintenance and other obligations that arise under the Contract from and after the date the same is conditionally accepted by District.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly, faithfully and fully perform all the undertakings, covenants, terms, conditions and agreements of said Contract arising after conditional acceptance of the Project by the District, including but not limited to Principal's maintenance, repair, warranty and valve box raising obligations; and shall also well and truly perform all undertakings, covenants, terms, conditions and agreements, of any and all duly authorized modifications of said Contract that may hereinafter be made, notice of which modifications to the Surety being hereby waived, then this obligation shall be null and void; otherwise it shall remain in full force and effect for a period of eighteen months from the date of this Bond as set forth below.

AND THE SAID SURETY, for value received, hereby stipulates and agrees that whenever the Principal shall be, and is declared by District in default of its post-conditional acceptance obligations under said Contract, the District having performed its obligations thereunder, the Surety may promptly remedy the default or shall promptly (1) perform the Principal's post-conditional acceptance obligations in accordance with the terms and conditions of the Contract, or (2) obtain a bid or bids for submittal to the District for completing said post-conditional acceptance obligations of the Principal in accordance with the terms and provisions of the Contract and upon a determination by the District and the Surety of the lowest responsible bidder, arrange for a contract between such bidder and the District and make available as work progresses (even though there should be a default or a succession of defaults under the Contract of completion arranged under this paragraph) sufficient funds to pay the cost of completion in an amount up to but not exceeding the dollar amount of this Bond.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the District named herein or the successors and assigns of the District. Any suit under this Bond must be instituted before the expiration of two years from the date on which the Project is finally accepted by the District under the Contract.

Nothing herein contained is intended to cause the Surety to guarantee that the Project will be constructed in the first instance. Surety's obligations hereunder arise only at such time as the Project is conditionally accepted by the District.

IN WITNESS WHEREOF, the Principal and Surety have executed this Bond as of this day of ______, 20 .

PRINCIPAL:

By:_____ Title:

[S E A L]

ATTEST:

[S E A L]

SURETY:

By:_____

PCWarrantyMaintenanceBond.water.FORM.doc revised: April 4, 2001

S:\data\WPDOCS\FORM\Word Files\PC Agreement For Extension Of Water Mains.FORM.doc

{00839478.DOC / 2 }18

EXHIBIT C

Bow Mar Water and Sanitation District Easement

Preparation and Submittal Procedures and Checklist

These procedures have been prepared in order to provide general guidelines for the submittal of information necessary for the preparation of water and sanitary sewer easements granted to Bow Mar Water and Sanitation District. This information generally includes legal descriptions and drawings, an overall easement drawing, and a title commitment. Information contained herein should be used in conjunction with the District's Water and Sewer System Standards and Specifications.

All information required in the submittal section of these procedures must be presented to the District prior to the approval of and release of construction plans. Submittals must be accompanied by this form with Part A completed by the Easement Grantor or his designated representative.

All legal fees and costs associated with preparation of the easement documents will be charged to the grantor.

<u>Submittal</u>

The following information must be presented in <u>two copies</u> to the Bow Mar Water and Sanitation District.

- 1. A <u>legal description</u> of each easement parcel. The legal description must conform to the requirement set forth in Section 1.02(B)(1)(b) of Bow Mar Water and Sanitation District's Water System Standards and Specifications.
- 2. A paper and electronic copy of a drawing for each easement parcel. The drawing shall conform to the requirements set forth in Section 1.02(B)(1)(c) of Bow Mar Water and Sanitation District's Water System Standards and Specifications.

Each separate property ownership requires a separate legal description and drawing. Legal descriptions and drawings shall be numbered consecutively as parcel number 1, parcel number 2, etc.

The acreage of the proposed easements shall be indicated on the legal descriptions and drawings.

3. An <u>overall survey drawing</u>, stamped by a registered land surveyor, showing the boundaries of the development, the proposed easements, and all existing easements, ditches, and structures.

If off site easements are requested and not shown on the overall survey drawing, a separate overall drawing indicating the relationship of offsite easements to the proposed development

shall be submitted. Encroachments and/or encumbrances on the proposed offsite easements, such as existing easements, ditches, and structures, must be identified on the overall drawing.

4. <u>Proof of ownership as described in Part A (below).</u>

Easement Checklist

Part A (to be completed by Grantor)

1. On the lines provided below, please type or print the name of the Grantor for each easement exactly as the Grantor's name appears on the Deed by which the Grantor took title to the property. If the Grantor is a corporation, please list the State in which the corporation was incorporated, plus the names of all officers. If Grantor is a general partnership, a copy of the recorded trade name affidavit must be furnished along with the names of the general partners. If Grantor is a limited partnership, a certificate of limited partnership must be furnished along with the names of the partners.

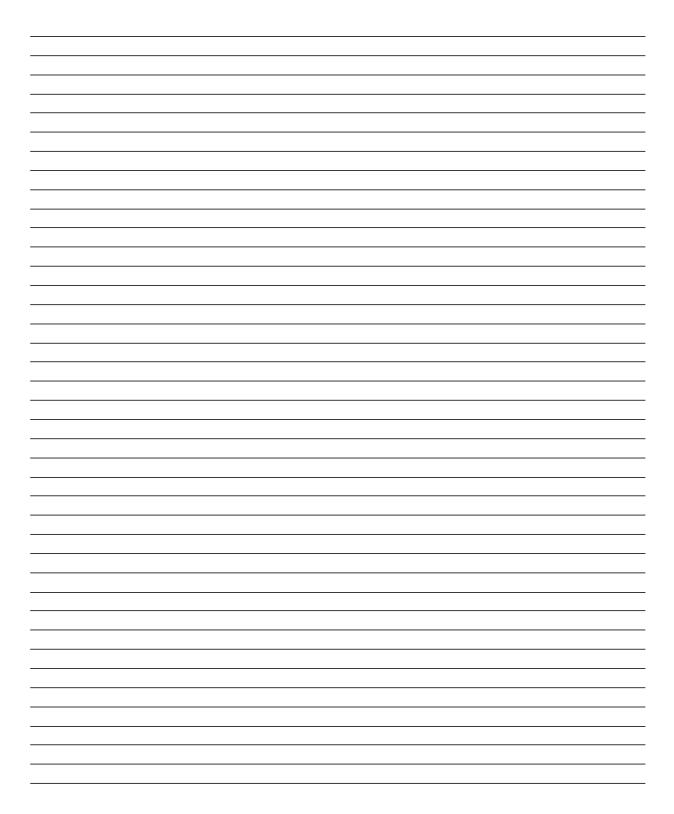
Easement No.	Name, title, address and telephone number of persons who will
	be signing Easement Deed

2. Please provide the name, address, and telephone number of the party to whom the prepared documents should be forwarded for signature.

Easement No(s).

Name, address and telephone number

3. A request is made to include the following special provisions within the Easement Deed. Please list by parcel number and explain the reasons such special provisions are desired.



4. Please list name, address, and telephone number for the party responsible for payment of costs associated with preparation of easement documents.

Part B (To be completed by District Representative)

1. Please provide the information requested below:

Easement Parcel	Water or Sewer Easement	Exclusive or Non-Exclusive

2. The legal descriptions, drawings, and proposed locations of utilities have been compared and reviewed, and are recommended for acceptance by the District.

(District Representative)

(Date Approved)

Part C (To be completed by District Representative)

1. Please state any special considerations or time constraints which should be brought to the attention of the District's attorney. Include a brief background statement describing location and extent of development as well as proposed points of connection to existing mains.

2. I have reviewed the proposed easements and recommend that they be accepted by the District.

(District Representative)

(Date Approved)

Part D (To be completed by District Representative)

1. For each easement, please provide the following information.

Easement No.	Date Recorded	County	Reception No. or Book and Page No.

2. Copies of all easements have been mailed to (please indicate date mailed):

(Date Mailed)	Grantor
(Date Maried)	
	District Attorney (with copy of Easement checklist)
(Date Mailed)	
	Denver Water Department (Water Easements Only)
(Date Mailed)	

(District Representative)

(Date Approved)

EXHIBIT D

Sample Easement Agreement Forms

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT, made and entered into as of the _____ day of _____, ____, by and between:

hereinafter called "Grantor", (whether grammatically singular or plural) and the:

hereinafter called "Distributor".

٠.

WITNESSETH:

For and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration to the Grantor in hand paid by the Distributor, the receipt whereof is hereby acknowledged, the Grantor hereby grants to the Distributor, its successors and assigns, the permanent right to enter, re-enter, occupy and use the described property to construct, maintain, repair, replace, remove, enlarge and operate one or more water pipelines and all underground and surface appurtenances thereto, including electric or other related control systems, underground cables, wires and connections and surface appurtenances. By way of example and not by way of limitation, the parties intend to include within the terms "pipelines" and "appurtenances" the following: mains and conduits, valves, vaults, manholes, control systems, ventilators, and the like, in, through, over and across the following described parcel of land situate, lying and being in the County of and State of Colorado, to-wit:

(For Legal Description, please see Exhibit "A", attached hereto and made a part hereof)

IT IS HEREBY MUTUALLY covenanted and agreed by and between the parties hereto as follows:

1. The Distributor shall have and exercise the right of ingress and egress in, to, over, through and across the above described property for any purpose needful for the full enjoyment of any other right of occupancy or use provided for herein. The easement area shall be free of obstacles throughout the length of the easement. Due to variations in topography, the easement and the pipe may take on an uphill or downhill direction having a slope of greater than 4%; however, sloping within the easement across its width may not exceed 4% to insure stability of maintenance equipment and vehicles. A slope across the width of the easement greater than 4% may be allowed upon prior written permission of the Distributor and Denver Water.

-1-

(DIST-PUD/PBG 30- FOOT MINIMUM- REV. 05-21-2010)

2. The Grantor shall not construct or place any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or plant any shrub, tree, woody plant or nursery stock, on any part of the above described easement. Any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or shrub, tree, woody plant or nursery stock, of any kind situated on the above described easement as of the date of this Agreement, may be removed by the Distributor without liability for damages arising therefrom.

The Grantor, for itself, its successors and assigns, shall provide to the Distributor 3 any information within its possession about past and currently existing Environmental Contamination in the easement area. Such information shall include but not be limited to environmental studies, reports, samples, agreements, liens, letters and any remediation work that has been done or is ongoing to clean the area or is planned to occur. If contaminated soils exist in the easement area upon the effective date of this Agreement, for which the Grantor or its successors or assigns are responsible under applicable state or federal laws, the Grantor, at Grantor's sole expense, shall take Corrective Action to clean the contamination to the full width of the easement area and a depth of at least twelve (12) feet, if necessary. Contamination shall be cleaned to the appropriate state and federal standards set forth by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment or to the standards of Corrective Action plans for the property currently approved by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment. Grantor shall provide documents verifying Corrective Action to the Distributor prior to the installation of pipeline facilities.

4. To the extent it legally may, and as long as the Distributor was not negligent, the Grantor, for itself, its successors and assigns, shall indemnify the Distributor to the extent required by state and federal laws to indemnify the Distributor, against any liability, damages, costs, expenses, causes of action, claims, losses, settlements, fines and penalties, and reasonable attorneys' fees claimed by a third party against the Distributor relating to (1) the existence, mitigation, or remediation of Environmental Contamination in the easement area; (2) any Corrective Action in the easement area; (3) any Environmental Contamination in the easement area that occurs or is discovered after conveyance of the easement; or (4) the occurrence, disturbance, or movement of existing contaminated soils resulting directly or indirectly from any work conducted by the Distributor in exercise of the Distributor's functions.

5. As used in this Agreement, "Corrective Action" shall refer to risk assessment, active remediation, passive remediation, voluntary cleanup, investigation and/or monitoring of Environmental Contamination.

6. As used in this Agreement, "Environmental Contamination" means the presence within the easement area of any hazardous material, including but not limited to any substances defined as or included in the definition of "hazardous substance," "hazardous material" or "toxic substances" in the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 5101, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq., or any other federal,

(DIST-PUD/PBG 30- FOOT MINIMUM- REV. 06-21-2010)

- 2 -

state or local statute, law, ordinance, code, rule, regulation, order, decree or other requirement of governmental authority regulating, relating to or imposing liability or standard of conduct concerning any hazardous, toxic or dangerous substance or material, as now or at any time hereafter in effect, and in the regulations adopted, published and/or promulgated pursuant to said laws.

7. The water pipeline and all appurtenances shall be installed in accordance with then current Distributor and Denver Water Engineering Standards.

8. The Distributor shall have and exercise the right of subjacent and lateral support to whatever extent is necessary or desirable for the full, complete and unmolested enjoyment of the rights hereinabove described. It is specifically agreed between the parties that the Grantor shall take no action which would impair the earth cover over, or the lateral or subjacent support for any water pipeline or lines and appurtenances within the easement. Denver Water's Engineering Standards require no less than four and one-half feet ($4\frac{1}{2}$) and no more than ten-feet (10) of earth cover, measured vertically from the top of any pipeline or lines. Deviation from this requirement will be permitted only upon specific prior, written permission from Denver Water and the Distributor. If such modification undertaken by the Grantor requires alterations to any pipeline facility, such alteration shall be at the Grantor's expense.

9. The Grantor, at Grantor's sole expense, shall construct and maintain a private surfaced roadway over the entire easement herein described, excepting the portions that are for fire hydrants and fire hydrant "branch lines" only. Planters, islands, or medians are not permitted within the above-described easement, except as specified by Denver Water Engineering Standards and/or as specified in writing by the Distributor.

10. The Grantor retains the right to use the easement for ingress and egress, including vehicular traffic, insofar as such use and occupancy is consistent with and does not impair any grant herein contained. Parking within the easement is prohibited.

11. The Distributor agrees that other public utilities such as sanitary sewer, storm sewer, gas, and electric lines, may be installed in the above described easement as long as they do not interfere with the Distributor's rights herein granted and as long as piping crossing the waterline at the discretion of the Distributor is metallic or concrete or is encased in an acceptable material. Any piping or cable crossing the waterline must be installed in accordance with Denver Water's Engineering Standards. Any and all utilities which parallel the Distributor's facilities will not be permitted within ten-feet (10) of Distributor's water lines at least twenty-feet (20) of the easement width.

12. The Grantor, at Grantor's expense, shall be solely responsible for the maintenance of streets, surfacing, curbs, and gutters within the easement, except as specified in this paragraph. When the Distributor deems it necessary to reconstruct, repair, relocate, remove, replace, enlarge, operate or in any way maintain its water mains or pipes, and appurtenances thereto, the Distributor will backfill, compact and resurface the area of excavation, to include replacement of

(DIST-PUD/PBG 30- FOOT MINIMUM- REV, 06-21-2010)

- 3 -

asphalt and/or concrete pavement, curbs and gutters, damaged by the Distributor's activity, to the grade and condition existing immediately prior to excavation, as nearly as reasonable. The Distributor will exercise all reasonable means to prevent damage to pavement, curbs and gutters which are situated within the easement but outside of the immediate area of excavation. In the event said improvements are damaged due solely to Distributor negligence, the Distributor will repair and/or replace said improvements at its expense.

13. The Distributor is acquiring the rights in the subject property in order to insure to the Distributor a dominant easement for the exercise of the Distributor's functions, and that the exercise of any rights in the subject property other than those retained by the Grantor shall be within the discretion of the Distributor. The Distributor agrees to permit and authorize such other uses of the subject property, not reserved in the Grantor, as will not impair the Distributor's dominant rights, upon such terms, limitations, and conditions as the Distributor shall find reasonably necessary to protect its dominant right of occupancy of the subject property for the purpose of the Distributor without undue or unnecessary injury to or impairment of the estate retained by the Grantor.

14. If the Distributor abandons use and operation of the pipeline facilities laid pursuant to this easement, such abandonment shall not constitute abandonment of its rights under this easement.

15. The Grantor warrants that Grantor has full right and lawful authority to make the grant contained herein, and promises and agrees to defend the Distributor in the exercise of its rights hereunder against any defect in Grantor's title to the land involved or Grantor's right to make the grant contained herein.

16. Each and every one of the benefits and burdens of this Agreement shall inure to and be binding upon the respective legal representatives, heirs, executors, administrators, successors and assigns of the parties.

17. Unless special provisions are listed below and/or attached, the above constitutes the whole agreement between the parties and no additional or different oral representation, promise or agreement shall be binding on any of the parties with respect to the subject matter of this instrument. To the extent that any special provisions are in conflict with any other provisions, the special provisions shall control and supersede any other terms or provisions.

SPECIAL PROVISIONS:

(DIST-PUD/PBG 30- FOOT MINIMUM- REV. 06-21-2010)

- 4 -

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT, made and entered into as of the _____ day of _____, by and between:

hereinafter called "Grantor", (whether grammatically singular or plural) and the:

hereinafter called "Distributor".

WITNESSETH:

For and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration to the Grantor in hand paid by the Distributor, the receipt whereof is hereby acknowledged, the Grantor hereby grants to the Distributor, its successors and assigns, the **sole**, **exclusive** and permanent right to enter, re-enter, occupy and use the described property to construct, maintain, repair, replace, remove, enlarge and operate one or more water pipelines and all underground and surface appurtenances thereto, including electric or other related control systems, underground cables, wires and connections and surface appurtenances. By way of example and not by way of limitation, the parties intend to include within the terms "pipelines" and "appurtenances" the following: mains and conduits, valves, vaults, manholes, control systems, ventilators, and the like, in, through, over and across the following described parcel of land situate, lying and being in the County of to-wit:

(For Legal Description, please see Exhibit "A", attached hereto and made a part hereof)

IT IS HEREBY MUTUALLY covenanted and agreed by and between the parties hereto as follows:

1. The Distributor shall have and exercise the right of ingress and egress in, to, over, through and across the above described property for any purpose needful for the full enjoyment of any other right of occupancy or use provided for herein. The Distributor shall have the right to construct and maintain an all-weather roadway of varying width, as needed in the opinion of the Distributor, along the length of the easement. Both parties agree that the purpose of this roadway is to allow the Distributor vehicular access. The easement area shall be free of obstacles throughout the length of the easement. Due to variations in topography, the easement and the pipe may take on an uphill or downhill direction having a slope of greater than 4%; however,

-1-

(DIST.EXCLUSIVE 30-FOOT MINIMUM - REV. 06-21-2010)

sloping within the easement across its width may not exceed 4% to insure stability of maintenance equipment and vehicles. A slope across the width of the easement greater than 4% may be allowed upon prior written permission of the Distributor and Denver Water.

2. The Grantor shall not construct or place any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or plant any shrub, tree, woody plant or nursery stock, on any part of the above described easement. Any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or shrub, tree, woody plant or nursery stock, of any kind situated on the above described easement as of the date of this Agreement, may be removed by the Distributor without liability for damages arising therefrom.

3. The Grantor, for itself, its successors and assigns, shall provide to the Distributor any information within its possession about past and currently existing Environmental Contamination in the easement area. Such information shall include but not be limited to environmental studies, reports, samples, agreements, liens, letters and any remediation work that has been done or is ongoing to clean the area or is planned to occur. If contaminated soils exist in the easement area upon the effective date of this Agreement, for which the Grantor or its successors or assigns are responsible under applicable state or federal laws, the Grantor, at Grantor's sole expense, shall take Corrective Action to clean the contamination to the full width of the easement area and a depth of at least twelve (12) feet, if necessary. Contamination shall be cleaned to the appropriate state and federal standards set forth by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment or to the standards of Corrective Action plans for the property currently approved by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment. Grantor shall provide documents verifying Corrective Action to the Distributor prior to the installation of pipeline facilities.

4. To the extent it legally may, and as long as the Distributor was not negligent, the Grantor, for itself, its successors and assigns, shall indemnify the Distributor, to the extent required by state and federal laws to indemnify the Distributor against any liability, damages, costs, expenses, causes of action, claims, losses, settlements, fines and penalties, and reasonable attorneys' fees claimed by a third party against the Distributor relating to (1) the existence, mitigation, or remediation of Environmental Contamination in the easement area; (2) any Corrective Action in the easement area; (3) any Environmental Contamination in the easement area that occurs or is discovered after conveyance of the easement; or (4) the occurrence, disturbance, or movement of existing contaminated soils resulting directly or indirectly from any work conducted by the Distributor in exercise of the Distributor's functions.

5. As used in this Agreement, "Corrective Action" shall refer to risk assessment, active remediation, passive remediation, voluntary cleanup, investigation and/or monitoring of Environmental Contamination.

6. As used in this Agreement, "Environmental Contamination" means the presence within the easement area of any hazardous material, including but not limited to any substances

-2-

(DIST.EXCLUSIVE 30-FOOT MINIMUM - REV. 06-21-2010)

defined as or included in the definition of "hazardous substance," "hazardous material" or "toxic substances" in the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 5101, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq., or any other federal, state or local statute, law, ordinance, code, rule, regulation, order, decree or other requirement of governmental authority regulating, relating to or imposing liability or standard of conduct concerning any hazardous, toxic or dangerous substance or material, as now or at any time hereafter in effect, and in the regulations adopted, published and/or promulgated pursuant to said laws.

7. The water pipeline and all appurtenances shall be installed in accordance with then current Distributor and Denver Water Engineering Standards.

8. Fencing existing at the time of this agreement which is disturbed or destroyed by the Distributor or its agents in constructing its facilities shall be replaced by the Distributor to its original condition as nearly as reasonable; however, the Grantor shall not construct new fencing across or within the easement.

9. The Distributor shall have and exercise the right of subjacent and lateral support to whatever extent is necessary or desirable for the full, complete and unmolested enjoyment of the rights hereinabove described. It is specifically agreed between the parties that the Grantor shall take no action which would impair the earth cover over, or the lateral or subjacent support for any water pipeline or lines and appurtenances within the easement. Denver Water's Engineering Standards require no less than four and one-half feet and no more than ten feet of earth cover, measured vertically from the top of any pipeline or lines. Deviation from this requirement will be permitted only upon specific prior, written permission from Denver Water and the Distributor. If such modification undertaken by the Grantor requires alterations to any pipeline facility, such alteration shall be at the Grantor's expense.

10. After construction of any water pipeline or lines, the general surface of the ground, except as necessarily modified to accommodate appurtenances, shall be restored, as nearly as reasonable, to the grade and condition immediately prior to construction. Topsoil shall be replaced in cultivated and agricultural areas, and any excess earth resulting from installations by the Distributor shall be removed from the easement at the sole expense of the Distributor. The Distributor agrees that for a period of one year following construction which involves disturbance of the surface of the ground, the Distributor will maintain the surface elevation and quality of the soil by correcting any settling or subsiding that may occur as a result of the work done by the Distributor.

11. The Grantor has retained the right to the undisturbed use and occupancy of the subject property insofar as such use and occupancy is consistent with and does not impair any grant herein contained and except as herein otherwise provided.

12. The Distributor is acquiring the rights in the subject property in order to insure to the Distributor a dominant easement for the exercise of the Distributor's functions, and that the

- 3 -

(DIST.EXCLUSIVE 30-FOOT MINIMUM - REV. 06-21-2010)

exercise of any rights in the subject property other than those retained by the Grantor shall be within the discretion of the Distributor. The Distributor agrees to permit and authorize such other uses of the subject property, not reserved in the Grantor, as will not impair the Distributor's dominant rights, upon the payment of reasonable compensation to the Distributor and upon such terms, limitations, and conditions as the Distributor shall find reasonably necessary to protect its dominant right of occupancy of the subject property for the purpose of the Distributor without undue or unnecessary injury to or impairment of the estate retained by the Grantor.

13. If the Distributor abandons use and operation of the pipeline facilities laid pursuant to this easement, such abandonment shall not constitute abandonment of its rights under this easement.

14. The Grantor warrants that he has full right and lawful authority to make the grant contained herein, and promises and agrees to defend the Distributor in the exercise of its rights hereunder against any defect in his title to the land involved or his right to make the grant contained herein.

15. Each and every one of the benefits and burdens of this Agreement shall inure to and be binding upon the respective legal representatives, heirs, executors, administrators, successors and assigns of the parties.

16. Unless special provisions are listed below and/or attached, the above constitutes the whole agreement between the parties and no additional or different oral representation, promise or agreement shall be binding on any of the parties with respect to the subject matter of this instrument. To the extent that any special provisions are in conflict with any other provisions, the special provisions shall control and supersede any other terms or provisions.

SPECIAL PROVISIONS:

(DIST.EXCLUSIVE 30-FOOT MINIMUM - REV. 05-21-2010)

- 4 -

EASEMENT AGREEMENT

THIS EASEMENT AGREEMENT made and entered into as of the _____ day of _____, by and between:

hereinafter called "Grantor", (whether grammatically singular or plural) and the:

hereinafter called "Distributor".

WITNESSETH:

For and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable consideration to the Grantor in hand paid by the Distributor, the receipt whereof is hereby acknowledged, the Grantor hereby grants to the Distributor, its successors and assigns, the permanent right to enter, re-enter, occupy and use the described property to construct, maintain, repair, replace, remove, enlarge and operate one or more water pipelines and all underground and surface appurtenances thereto, including electric or other related control systems, underground cables, wires and connections and surface appurtenances. By way of example and not by way of limitation, the parties intend to include within the terms "pipelines" and "appurtenances" the following: mains and conduits, valves, vaults, manholes, control systems, ventilators, and the like, in, through, over and across the following described parcel of land situate, lying and being in the County of and State of Colorado, to-wit:

(For Legal Description, please see Exhibit "A", attached hereto and made a part hereof)

IT IS HEREBY MUTUALLY covenanted and agreed by and between the parties hereto as follows:

1. The Distributor shall have and exercise the right of ingress and egress in, to, over, through and across the above described property for any purpose needful for the full enjoyment of any other right of occupancy or use provided for herein. The Distributor shall have the right to construct and maintain an all-weather roadway of varying width, as needed in the opinion of the Distributor, along the length of the easement. Both parties agree that the purpose of this roadway is to allow the Distributor vehicular access. The easement area shall be free of obstacles throughout the length of the easement. Due to variations in topography, the easement and the pipe may take on an uphill or downhill direction having a slope of greater than 4%; however, sloping within the easement across its width may not exceed 4% to insure stability of

- 1 -

(DIST.NON-EXCLUSIVE 50-FOOT MINIMUM-REV. 06-21-2010)

maintenance equipment and vehicles. A slope across the width of the easement greater than 4% may be allowed upon prior written permission of the Distributor and Denver Water.

2. The Grantor shall not construct or place any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or plant any shrub, tree, woody plant or nursery stock, on any part of the above described easement. Any structure or building, fence, retaining wall, street light, power pole, yard light, mail box, sign, trash receptacle, temporary or permanent, or shrub, tree, woody plant or nursery stock, of any kind situated on the above described easement as of the date of this Agreement, may be removed by the Distributor without liability for damages arising therefrom.

The Grantor, for itself, its successors and assigns, shall provide to the Distributor 3 any information within its possession about past and currently existing Environmental Contamination in the easement area. Such information shall include but not be limited to environmental studies, reports, samples, agreements, liens, letters and any remediation work that has been done or is ongoing to clean the area or is planned to occur. If contaminated soils exist in the easement area upon the effective date of this Agreement, for which the Grantor or its successors or assigns are responsible under applicable state or federal laws, the Grantor, at Grantor's sole expense, shall take Corrective Action to clean the contamination to the full width of the easement area and a depth of at least twelve (12) feet, if necessary. Contamination shall be cleaned to the appropriate state and federal standards set forth by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment or to the standards of Corrective Action plans for the property currently approved by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environment. Grantor shall provide documents verifying Corrective Action to the Distributor prior to the installation of pipeline facilities.

4. To the extent it legally may, and as long as the Distributor was not negligent, the Grantor, for itself, its successors and assigns, shall indemnify the Distributor to the extent required by state and federal laws to indemnify the Distributor, against any liability, damages, costs, expenses, causes of action, claims, losses, settlements, fines and penalties, and reasonable attorneys' fees claimed by a third party against the Distributor relating to (1) the existence, mitigation, or remediation of Environmental Contamination in the easement area; (2) any Corrective Action in the easement area; (3) any Environmental Contamination in the easement area that occurs or is discovered after conveyance of the easement; or (4) the occurrence, disturbance, or movement of existing contaminated soils resulting directly or indirectly from any work conducted by the Distributor in exercise of the Distributor's functions.

5. As used in this Agreement, "Corrective Action" shall refer to risk assessment, active remediation, passive remediation, voluntary cleanup, investigation and/or monitoring of Environmental Contamination.

6. As used in this Agreement, "Environmental Contamination" means the presence within the easement area of any hazardous material, including but not limited to any substances defined as or included in the definition of "hazardous substance," "hazardous material" or "toxic

-2-

(DIST, NON-EXCLUSIVE MINIMUM 50-FOOT - REV. 06-21-2010)

substances" in the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 5101, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq., or any other federal, state or local statute, law, ordinance, code, rule, regulation, order, decree or other requirement of governmental authority regulating, relating to or imposing liability or standard of conduct concerning any hazardous, toxic or dangerous substance or material, as now or at any time hereafter in effect, and in the regulations adopted, published and/or promulgated pursuant to said laws.

7. The water pipeline and all appurtenances shall be installed in accordance with then current Distributor and Denver Water Engineering Standards.

8. Fencing existing at the time of this Agreement which is disturbed or destroyed by the Distributor or its agents in constructing its facilities shall be replaced by the Distributor to its original condition as nearly as reasonable; however, the Grantor shall not construct new fencing across or within the easement.

9. The Distributor shall have and exercise the right of subjacent and lateral support to whatever extent is necessary or desirable for the full, complete and unmolested enjoyment of the rights hereinabove described. It is specifically agreed between the parties that the Grantor shall take no action which would impair the earth cover over, or the lateral or subjacent support for any water pipeline or lines and appurtenances within the easement. Denver Water's Engineering Standards require no less than four and one-half $(4\frac{1}{2})$ feet and no more than ten-feet (10) of earth cover, measured vertically from the top of any pipeline or lines. Deviation from this requirement will be permitted only upon specific prior, written permission from Denver Water and the Distributor. If such modification undertaken by the Grantor requires alterations to any pipeline facility, such alteration shall be at the Grantor's expense.

10. After construction of any water pipeline or lines, the general surface of the ground, except as necessarily modified to accommodate appurtenances, shall be restored, as nearly as reasonable, to the grade and condition immediately prior to construction. Topsoil shall be replaced in cultivated and agricultural areas, and any excess earth resulting from installations by the Distributor shall be removed from the easement at the sole expense of the Distributor. The Distributor agrees that for a period of one-year following construction which involves disturbance of the surface of the ground, the Distributor will maintain the surface elevation and quality of the soil by correcting any settling or subsiding that may occur as a result of the work done by the Distributor.

11. The Distributor agrees that other public utilities such as sanitary sewer, storm sewer, gas, and electric lines, may be installed in the easement as long as they do not interfere with the Distributor's rights herein granted and as long as piping crossing the waterline at the discretion of the Distributor is metallic or concrete or is encased in an acceptable material. Any piping or cable crossing the waterline must be installed in accordance with Denver Water Engineering Standards. Any and all utilities which parallel the Distributor's facilities will not be permitted within ten-feet (10) of Distributor's facilities without express prior permission from

- 3 -

(DIST, NON-EXCLUSIVE MINIMUM 50-FOOT - REV. 06-21-2010)

the Distributor. The intent is to reserve for the Distributor's water lines at least twenty-feet (20) of the easement width.

12. The Grantor has retained the right to the undisturbed use and occupancy of the subject property insofar as such use and occupancy is consistent with and does not impair any grant herein contained and except as herein otherwise provided.

13. The Distributor is acquiring the rights in the subject property in order to insure to the Distributor a dominant easement for the exercise of the Distributor's functions, and that the exercise of any rights in the subject property other than those retained by the Grantor shall be within the discretion of the Distributor. The Distributor agrees to permit and authorize such other uses of the subject property, not reserved in the Grantor, as will not impair the Distributor's dominant rights, upon the payment of reasonable compensation to the Distributor and upon such terms, limitations, and conditions as the Distributor shall find reasonably necessary to protect Distributor's dominant right of occupancy of the subject property for the purpose of the Distributor without undue or unnecessary injury to or impairment of the estate retained by the Grantor.

14. If the Distributor abandons use and operation of the pipeline facilities laid pursuant to this easement, such abandonment shall not constitute abandonment of its rights under this easement.

15. The Grantor warrants that Grantor has full right and lawful authority to make the grant contained herein, and promises and agrees to defend the Distributor in the exercise of its rights hereunder against any defect in Grantor's title to the land involved or Grantor's right to make the grant contained herein.

16. Each and every one of the benefits and burdens of this Agreement shall inure to and be binding upon the respective legal representatives, heirs, executors, administrators, successors and assigns of the parties.

17. Unless special provisions are listed below and/or attached, the above constitutes the whole agreement between the parties and no additional or different oral representation, promise or agreement shall be binding on any of the parties with respect to the subject matter of this instrument. To the extent that any special provisions added are in conflict with any other provisions, the special provisions shall control and supersede any other terms or provisions.

- 4 -

SPECIAL PROVISIONS:

(DIST.NON-EXCLUSIVE MINIMUM 50-FOOT - REV. 06-21-2010)

EASEMENT AGREEMENT

(Distributor Performance Non-Exclusive)

THIS EASEMENT AGREEMENT, effective the day of	, 20,
is made between	, hereafter
called "Grantor", (whether grammatically singular or plural) and	
hereinafter called "Distributor," whose legal address is	
WITNESSETH:	

IT IS HEREBY MUTUALLY CONVENANTED AND AGREED by and between the parties as follows:

 The Distributor shall have and may exercise the right of ingress and egress in, to, over, through and across the Property for any purpose needful for the full enjoyment of any other right of occupancy or use provided for herein.

2. Grantor shall neither cause nor permit the parking or storage of vehicles or other goods or equipment, or the construction or placement of any structure or building, street light, power pole, yard light, mailbox or sign, temporary or permanent, or the planting of any tree, woody plant or nursery stock, of any kind, on any part of the Property. Where paved roadways are installed on all or any part of the surface of the Property they shall be installed and maintained by Grantor on and over the entire width thereof, with no planters, islands or median structures. The lateral edges of the Property shall be clearly delineated by permanent surface features approved in advance by the Distributor. Any prohibited use or installation located on the Property as of or after the date of this Agreement, including utility installations not conforming to Paragraph 7 hereof, may be removed by the Distributor at Grantor's expense without liability for damages arising therefrom.

(DIST-PERFORMANCE-NON-EXC)-REV 02/17/2010

5-39

3. The Grantor, for itself, its successors and assigns, shall provide to the Distributor any information within its possession about past and currently existing Environmental Contamination in the easement area. Such information shall include but not be limited to environmental studies, reports, samples, agreements, liens, letters and any remediation work that has been done or is ongoing to clean the area or is planned to occur. If contaminated soils exist in the easement area upon the effective date of this Agreement, for which the Grantor or its successors or assigns are responsible under applicable state or federal laws, the Grantor, at Grantor's sole expense, shall take Corrective Action to clean the contamination shall be cleaned to the appropriate state and federal standards set forth by the U.S. Environmental Protection Agency and Colorado Department of Public Health and Environmental Protection Agency and Colorado Department. Grantor shall provide documents verifying Corrective Action to the Distributor prior to the installation of pipeline facilities.

4. To the extent it legally may, and as long as the Distributor or a third party was not negligent, the Grantor, for itself, its successors and assigns, shall indemnify the Distributor, to the extent required by state and federal laws to indemnify the Distributor or third parties, against any liability, damages, costs, expenses, causes of action, claims, losses, settlements, fines and penalties, and reasonable attorneys' fees claimed by a third party against the Distributor relating to (1) the existence, mitigation, or remediation of Environmental Contamination in the easement area; (2) any Corrective Action in the easement area; (3) any Environmental Contamination in the easement area that occurs or is discovered after conveyance of the easement; or (4) the occurrence, disturbance, or movement of existing contaminated soils resulting directly or indirectly from any work conducted by the Distributor in exercise of the Distributor's functions.

5. As used in this Agreement, "Corrective Action" shall refer to risk assessment, active remediation, passive remediation, voluntary cleanup, investigation and/or monitoring of Environmental Contamination.

6. As used in this Agreement, "Environmental Contamination" means the presence within the easement area of any hazardous material, including but not limited to any substances defined as or included in the definition of "hazardous substance," "hazardous material" or "toxic substances" in the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. § 9601, et seq., the Hazardous Materials Transportation Act, 49 U.S.C. § 5101, et seq., the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq., or any other federal, state or local statute, law, ordinance, code, rule, regulation, order, decree or other requirement of governmental authority regulating, relating to or imposing liability or standard of conduct concerning any hazardous, toxic or dangerous substance or material, as now or at any time hereafter in effect, and in the regulations adopted, published and/or promulgated pursuant to said laws.

7. Fences existing as of the date hereof which are disturbed or destroyed by the Distributor in the exercise of its rights hereunder shall be replaced by the Distributor to their original condition as nearly as may reasonably be done. Grantor shall not, however, construct or install new fencing across or within the Property without the written approval of the Distributor.

8. All pipelines installed within the Property shall be laid not less than four and one-half (4 $\frac{1}{2}$) feet below the surface of the adjacent ground.

 The Distributor shall have and exercise the right of subjacent and lateral support to whatever extent is necessary or desirable for the full, complete and unmolested enjoyment of the rights herein granted.

(DIST-PERFORMANCE-NON-EXC)-REV 02/17/2010

Grantor shall neither take nor permit any action which would impair the lateral or subjacent support for any water pipelines or appurtenances or cause the earth cover over any water pipeline within the Property to be less than four and one-half (4 ½) feet or more than ten (10) feet, measured vertically from the top of the pipeline. Grantor shall not modify the earth cover over a Distributor water pipeline without advance written authorization from the Distributor, which shall provide for full payment or reimbursement to the Distributor of all costs of adjusting Distributor facilities made necessary by such modification.

10. After any construction or other operations by the Distributor which disturb the surface of the Property, the Distributor will restore the general surface of the ground, including paving and authorized appurtenances, as nearly as may reasonably be done to the grade and condition it was in immediately prior to construction, except as necessarily modified to accommodate Distributor facilities. Topsoil shall be replaced in cultivated and agricultural areas, and any excess earth resulting from installations by the Distributor shall be removed from the Property at the sole expense of the Distributor. For a period of one year following disturbance of the surface of the Property by the Distributor, the Distributor will maintain the surface elevation and quality of the soil by correcting any settling or subsiding that may occur as a result of the work done by the Distributor.

11. Service lines from adjacent properties receiving service from Distributor facilities in the Property, and other public utilities such as sanitary sewer, storm sewer, gas, electric, telephone, and TV cable lines, may be installed in the Property, *provided* that they do not interfere with the Distributor's rights herein granted. Public utilities which cross the Property shall cross at approximately right angles, and utilities which parallel the Distributor's facilities shall not be located closer than ten (10) feet thereto. Except for utilities as herein authorized and for roadways, all surface and subsurface uses of the Property, including fences, must be approved in writing by the Distributor before installation.

12. Grantor retains the right to the undisturbed use and occupancy of the Property insofar as such use and occupancy are consistent with and do not impair any grant or covenant herein contained.

13. The Distributor is acquiring its rights in the Property in order to insure to it a dominant easement for the exercise of the Distributor's functions. The exercise of any rights in the Property other than those expressly retained by Grantor shall be within the discretion of the Distributor. The Distributor may permit and authorize such other uses of the Property not reserved in Grantor as will not impair the Distributor's dominant rights, upon payment of reasonable compensation to the Distributor and upon such terms, limitations and conditions as the Distributor shall find reasonably necessary to protect its dominant right of occupancy without undue or unnecessary injury to or impairment of the estate retained by the Grantor.

14. If the Distributor, by written instrument, abandons or releases its rights herein granted and ceases to use the same, all right, title and interest of the Distributor hereunder shall cease and terminate, and the Grantor or its successors in title shall hold the Property, as the same may then be, free from the rights so abandoned or released and shall own all material and structures of the Distributor so abandoned or released, but nothing herein shall be construed as working a forfeiture or abandonment of any interest derived hereunder and not owned by the Distributor at the time of the termination of the Distributor's rights.

15. Grantor warrants that it has full right and lawful authority to make the grant herein contained, and promises and agrees to defend the Distributor in the exercise of its rights hereunder against any defect in title or in Grantor's right to make said grant, subject to general taxes for the year this instrument is recorded, and subject further to easements, encumbrances, exceptions, limitations, restrictions and reservations contained in instruments of record prior to the date of this Agreement.

(DIST-PERFORMANCE-NON-EXC)-REV 02/17/2010

16. Each and every one of the benefits and burdens of this Agreement shall inure to and be binding upon the respective legal representatives, heirs, executors, administrators, successors and assigns of the parties hereto.

17. This writing constitutes the whole agreement between the parties and no additional or different oral representation, promise or agreement shall be binding on any of the parties hereto with respect to the subject matter of this instrument. Any special provisions added hereto which conflict with printed provisions set forth above shall control and supersede such conflicting printed provisions.

SPECIAL PROVISIONS:

(DIST-PERFORMANCE-NON-EXC)-REV 02/17/2010

EXHIBIT E

CERTIFICATION AS TO WATER AND SEWER LINE PLACEMENT IN EASEMENTS

for

(Name of Pro	ject)	
I,	ereby certify to the Location Certificated corded upon the public	(s) of the following
Was (were) prepared by me on the	day of	, 20 . I
further certify to the Bow Mar Water and Sanitation and sewer lines, including fire hydrants, installed in co as of, 20 recorded easements as shown on the attached Impro- lines located in dedicated public rights-of way.	onnection with the abov , are located within t	ve-referenced project, he boundaries of said

(STAMP)

By:

(Signature)

Type or Print Signature

License Number

Date