RURAL WATER DISTRICT NO. 7 JOHNSON COUNTY, KANSAS

WATER MAIN EXTENSION POLICIES

1. GENERAL

When any person or entity desires that a water main extension (hereafter "Water Main Extension") be extended to any property within Rural Water District No. 7 boundaries, that person or entity (hereafter "Applicant") shall petition Rural Water District No. 7 (hereafter the "District") for such an extension. Such petition shall be made by written application (hereafter "Application") on a form approved and provided by the District. Policies for preparation and submittal of the Application and for making deposits discussed below can be obtained at the District's office, 534 W. Main, Gardner, Kansas.

2. APPLICATION PROCESS

At the time an Applicant submits an Application, the following will, at the discretion of the District, occur:

- A. The Applicant will submit with its Application, a fee for the cost of the preparation of a preliminary report to be prepared by the District or the District's engineer. The amount of such fee will be determined by the District's Manager.
- B. The District or the District's engineer will prepare the preliminary report, which will evaluate the Applicant's Application and the Water Main Extension requested. Once the preliminary report is completed, the District's Manager will present it and the Applicant's Application to the District's Board. If and when the District's Board takes action on the Applicant's Application, such action will be communicated to the Applicant by the District. If the District's Board chooses to approve an Applicant's Application, it may attach to such approval, any conditions it deems reasonable.
- C. If the Board approves an Applicant's Application, the Applicant will then have a period of 60 days in which to decide whether it wishes to enter into a Water Main Extension Agreement with the District; provided, however, that such 60-day time period may be extended at the District's discretion if Applicant makes a written request to the District's Manager for such an extension. Such Agreement will incorporate the provisions of these Water Main Extension Policies.

3. POST-AGREEMENT PROCESS WHEN APPLICANT PROVIDES DESIGN AND CONSTRUCTION

In the event an Applicant wishes to sign a Water Main Extension Agreement and such Applicant wishes to contract for and oversee the construction of the Water Main Extension, the following shall apply:

A. Applicant will, simultaneously with the execution and delivery to the District of a signed Water Main Extension Agreement, pay to the District, 10% of the Probable Project Cost of the Water Main Extension. Probable Project Cost shall be the amount estimated by the District to be the construction, engineering and inspection costs of the Water Main Extension. Such 10% of the Probable Project Cost shall be to compensate

the District for the following, all of which shall collectively be referred to herein as the "Expenses": engineering expenses, legal expenses, inspection expenses, printing expenses and other costs to be incurred by the District that are related to the Water Main Extension.

- B. If the actual amount spent by the District for Expenses is less than the funds deposited by Applicant, the District shall, within 45 days after completion of the project, pay to the Applicant the difference in such amounts. If the actual amount spent by the District for Expenses is greater than the funds deposited by Applicant, Applicant shall, within 45 days after completion of the project, pay to the District the difference in such amounts.
- C. Following the signing of the Water Main Extension Agreement, the District will inform Applicant of the time period in which Applicant will prepare or cause to be prepared, engineering and design drawings and reports, (hereinafter "Documents") for the Water Main Extension. Applicant will then prepare the Documents and submit both digital and hard copies of the same, in a format acceptable to the District, to the District for consideration. The Documents will be prepared by a registered professional engineer having a valid Kansas registration and such engineer's seal shall be affixed to the appropriate Documents. Such engineer must have appropriate experience in the design and installation of water mains. The District will provide a review of the design drawings and will send to Applicant all changes, (in a "redlined" document), necessary to achieve compliance with the District's Construction Standards. The Applicant's engineer will make such changes and provide appropriate copies of the final drawings to the District and Applicant's contractor.
- D. Within a reasonable time after Applicant has submitted the Documents to the District, Applicant will proceed with due diligence to obtain necessary easements for the construction of the Water Main Extension. The location and width of such easements will be as mutually agreed between Applicant and the District. Construction of the Water Main Extension shall not begin until all easements are obtained, and recorded copies are provided to the District. Applicant will, to the extent it owns land through which the Water Main Extension will run, grant or obtain all water line easements needed for installation of the Water Main Extension or any future maintenance of the Water Main Extension. Applicant will also grant easements to the District within any property Applicant owns, and as the District deems necessary, for the District to provide adequate corridors for the operation and maintenance of the District's water system.
- E. If and when the Documents are approved by the District, they will be presented to the Kansas Department of Health and Environment (hereinafter "KDHE") by a Kansas licensed professional engineer for review and approval. Applicant's engineer will make any changes to the Documents that are required by KDHE and will submit revised Documents to KDHE as may be required.
- F. If and when the Documents are approved by KDHE, Applicant will proceed to select a contractor ("Contractor") to construct the Water Main Extension. Such Contractor may be selected through a competitive bidding process or otherwise, as determined by Applicant. The District, however, must approve any Contractor chosen by Applicant and has the unequivocal right to disapprove any Contractor chosen by Applicant.

- G. Once the Contractor has been chosen by Applicant and approved by the District, Applicant shall provide Contractor with a construction contract acceptable to the District. The construction contract will contain provisions allowing the District to issue change orders to the contract; which will allow additions or deletions to the work to be performed under the contract, as the District deems necessary. (If a change order is necessary to provide integrity to the proposed construction, the Applicant will be responsible for the expense of such change order. If a change order is issued to provide the District improved quantity or flow, the District will be responsible for such expense.) Applicant shall also provide Contractor with bond, permit and insurance forms and requirements acceptable to the District. The contract shall be signed by Contractor, the bond, permit and insurance forms shall be completed by Contractor and the abovenamed requirements shall be met by Contractor. (Bond forms will include a copy of a performance bond from the Contractor in favor of the Applicant and a two-year maintenance bond from the Contractor in favor of the District. Insurance policies held by the contractor shall name the District as an additional insured for the Water Main Extension project.) The signed contract and completed bond, permit and insurance forms shall be returned to the District and approved by the District before construction begins. In addition, Contractor shall submit four copies of shop drawings to the District and such drawings must be approved by the District before construction begins.
- H. A pre-construction conference between the District, Applicant, Contractor, utility companies and other interested parties shall also be held before construction begins. Following successful completion of such conference, and receipt of authorization to proceed from the District, Applicant shall proceed with due diligence to have the Contractor construct the Water Main Extension. Both Applicant and the Contractor shall comply with all District Rules and Regulations, Policies and Procedures, Bidding and Construction Standards and any other similar rules, policies, procedures, standards or the like, enacted by the District and relating to such construction. Such compliance shall include, but not be limited to the following: i) allowing the District and its representatives reasonable access to all construction sites and activities; and ii) coordinating with the District for inspection during water main installation.
- I. During construction, the District or its representative will inspect the construction and installation of the Water Main Extension. The Contractor will maintain current field records of work performed and will note any changes to project design by notation on drawings kept at the job site. The District will also maintain a set of drawings and will record notes of field changes performed at the job site. Both the Contractor's drawings and the District's drawings will be submitted to the Applicant's engineer for preparation of "Conformed to Construction Records" drawings for the District's records. After review of the same by the District, the Applicant's engineer will make any changes and submit to the District, one set of "reproducibles" and two sets of prints. The Applicant's engineer will also provide the District with computer drawing files of the project in an acceptable file format.
- J. Applicant shall pay the Contractor all amounts due the Contractor for such construction and shall indemnify and hold the District harmless for and against any claims made by the Contractor against the District for amounts not paid to the Contractor.
- K. If, before a construction contract award is made, the Applicant wishes to abandon the project and so notifies the District in writing, and if the Applicant's deposited

funds exceed the money expended by the District for Expenses, the District shall forthwith repay to Applicant the difference between such deposited funds and the amount of money expended by the District for Expenses If the Applicant's deposited funds are less than the amount of money expended by the District for Expenses, Applicant shall forthwith repay to the District, the difference between its deposited funds and such Expenses.

4. POST-AGREEMENT PROCESS WHEN DISTRICT PROVIDES DESIGN AND CONSTRUCTION

In the event an Applicant wishes to sign a Water Main Extension Agreement, but such Applicant does *not* wish to contract for and oversee the construction of the Water Main Extension, the following shall apply:

- A. Applicant will simultaneously with the execution and delivery to the District of a signed Water Main Extension Agreement, pay to the District 25% of the Probable Project Cost.
- B. Within a reasonable time after the signing of the Water Main Extension Agreement, such time being a time that is appropriate under the circumstances, the District will prepare the Documents for the Water Main Extension.
- C. Within a reasonable time after the District has finished preparing the Documents, Applicant will proceed with due diligence to obtain necessary easements for the construction of the Water Main Extension. The location and width of such easements will be as mutually agreed between Applicant and the District. Construction of the Water Main Extension shall not begin until all easements are obtained, and recorded copies are provided to the District. Applicant will, to the extent it owns land through which the Water Main Extension will run, grant or obtain all water line easements needed for installation of the Water Main Extension or any future maintenance of the Water Main Extension. Applicant will also grant easements to the District within any property Applicant owns, and as the District deems necessary, for the District to provide adequate corridors for the operation and maintenance of the District's water system.
- D. Within a reasonable time after the District has finished preparing the Documents, it will submit them to the Kansas Department of Health and Environment (hereinafter "KDHE") for review and approval.
- E. If and when the Documents are approved by KDHE, Applicant will deposit with the District, the remaining portion of the Probable Project Cost. If at any time, the District determines that the Probable Project Cost will not be sufficient to pay for all actual project costs, Applicant shall also promptly deposit with the District the difference between the deposited funds and the expected project costs. All amounts deposited by Applicant shall be retained by the District, without interest, but subject to reimbursement as hereinafter provided.
- F. After Applicant deposits the remaining portion of the Probable Project Cost, the District will proceed to select a Contractor to construct the Water Main Extension. Such Contractor may be selected through a competitive bidding process or otherwise, as determined by the District in its reasonable discretion.

- G. If, before a construction contract award is made, the Applicant wishes to abandon the project and so notifies the District in writing not later than five (5) business days after the bid opening, and if the Applicant's deposited funds exceed the money expended by the District for Expenses, the District shall forthwith repay to Applicant the difference between such deposited funds and the amount of money expended by the District for Expenses If the Applicant's deposited funds are less than the amount of money expended by the District for Expenses, Applicant shall forthwith repay to the District, the difference between its deposited funds and such Expenses.
- H. The District will proceed with due diligence to have the Contractor construct the Water Main Extension.
- I. The District will make periodic and final payments to the Contractor from the amounts deposited with the District by Applicant. If, after completion of the Water Main Extension and determination of the total actual cost of the project, (hereinafter "Total Project Cost") such Total Project cost is less than the funds deposited by Applicant, the District shall forthwith repay to the Applicant the difference between the Total Project Cost and the total amount of funds deposited by Applicant.
- J. If, after completion of the Water Main Extension and determination of the Total Project Cost, such Total Project Cost is greater than the funds deposited by Applicant, the Applicant shall forthwith pay to the District the difference between the Total Project Cost and the total amount of funds deposited by Applicant.

5. DISTRICT'S RIGHT TO WATER LINE

Once installed, the Water Main Extension and all engineering and construction documents related thereto, shall be the property of the District, free of any interest of the Applicant and free of any liens and encumbrances whatsoever, and thereafter the District shall have sole responsibility for the same. Provided, however, that Contractor and/or Applicant shall remain responsible for their obligations named in any applicable performance bonds. The District shall have the right to repair or replace the Water Main Extension at any time. The District shall have the right to extend any main installed pursuant to the terms of these Water Main Extension Policies and to extend any lines connected to such lines, in or to other lands, streets, or avenues and Applicant or any customer shall not by reason thereof, be entitled to any repayment.

6. DESIGN AND INSTALLATION

All decisions to be made in connection with the manner of design and installation of the Water Main Extension, the type of materials to be used, and the maintenance thereof shall be and shall remain at the exclusive discretion and under the sole control of the District.

7. PRIVATE WATER DISTRIBUTION AND SERVICE LINES

Applicant is responsible for all installation and costs of installing all private water distribution lines and service lines required to serve land within the property to be served by the Water Main Extension.

8. SYSTEM IMPROVEMENTS

Nothing herein contained shall be construed as to prohibit the District from installing at its own expense, transmission, fire and reinforcing mains.

WATER MAIN EXTENSION PROCEDURES

1. GENERAL

The District's Water Main Extension Policies set forth the instances in which the District will have primary responsibility for design and construction and the instances in which the applicant will have primary responsibility for design and construction. Set forth below are process outlines for each of those instances.

2. PROCEDURES – WHEN APPLICANT PROVIDES DESIGN AND CONSTRUCTION

- A. District's General Responsibilities Unless otherwise provided in the District's Water Main Extension Policies and related policies, procedures and regulations or unless other allowances are made by the District, the District will:
 - 1. Provide Applicant (developer or property owner) with:
 - a. Water Main Extension Policies
 - b. Water Main Extension Procedures
 - c. Water Main Extension Application
 - d. Water Main Extension Agreement
 - e. Water Main Extension Easement Policies
 - 2. Provide Applicant upon request:
 - a. Policies for Preparing Water Main Extension Design and Bidding Documents
 - b. Water Main Extension Drawing Standards
 - c. Water Main Size, Routing, Connection and Material Policy
 - 3. Advise Applicant of District planning that may affect Water Main Extension sizing.

B. Process Overview

- 1. Applicant submits Application and applicable fee for preliminary report.
- 2. District prepares preliminary report and submits the same to District's Board.
- 3. If Application is approved, District notifies Applicant.
- 4. Within appropriate time period, Applicant decides whether to sign Water Main Extension Agreement.
- 5. Once Agreement is signed, Applicant deposits 10% of Probable Project Cost.
- 6. Within appropriate time period, Applicant prepares engineering and design drawings and reports ("Documents") and submits the same to the District.

- 7. Applicant begins to obtain necessary easements.
- 8. If Documents are approved by the District, they are submitted to KDHE.
- 9. If Documents are approved by KDHE, Applicant selects District-approved Contractor.
- 10. Applicant provides Contractor with District-approved contract, bond forms, permit forms and insurance forms.
- 11. Contractor signs contract, properly completes forms and returns forms to the District.
- 12. If the District approves signed contract and completed forms, Applicant submits shop drawings and pre-construction conference is held.
- 13. After successful conference, Contractor constructs Water Main Extension.

3. PROCEDURES – WHEN DISTRICT PROVIDES DESIGN AND CONSTRUCTION

- A. District's General Responsibilities Unless otherwise provided in the District's Water Main Extension Policies and related policies, procedures and regulations or unless other allowances are made by the District, the District will:
 - 1. Provide Applicant (developer or property owner) with:
 - a. Water Main Extension Policies
 - b. Water Main Extension Procedures
 - c. Water Main Extension Application
 - d. Water Main Extension Agreement
 - e. Water Main Extension Easement Policies
 - 2. Provide Applicant upon request:
 - a. Policies for Preparing Documents
 - b. Water Main Extension Drawing Standards
 - c. Water Main Size, Routing, Connection and Material Policy
 - Advise Applicant of District planning that may affect Water Main Extension sizing.

B. Process Overview

- 1. Applicant submits Application and applicable fee for preliminary report.
- 2. District prepares preliminary report and submits the same to District's Board.

- 3. If Application is approved, District notifies Applicant.
- 4. Within appropriate time period, Applicant decides whether to sign Water Main Extension Agreement.
- 5. Once Agreement is signed, Applicant deposits 25% of Probable Project Cost.
- 6. Within appropriate time period, District prepares engineering and design drawings and reports ("Documents").
- 7. Applicant begins to obtain necessary easements.
- 8. Documents are submitted to KDHE.
- 9. If Documents are approved by KDHE, Applicant deposits remaining 75% of Probable Project Cost.
- 10. District selects Contractor.
- 11. Contractor signs contract, properly completes forms and returns forms to the District.
- 12. If the District approves signed contract and completed forms, Contractor constructs Water Main Extension.

POLICIES FOR PREAPARING WATER MAIN EXTENSION DESIGN AND BIDDING DOCUMENTS

1. GENERAL

When a property owner wishes to have a Water Main Extension constructed within the boundaries of Rural Water District No. 7, the following policies will aid in an orderly preparation of design documents and construction of facilities.

2. PRELIMINARY

- A. Applicant will submit to District office three (3) hard copies and one (1) copy, in an acceptable digital format, of a preliminary (or final) plat approved by appropriate government agency. Applicant will also furnish information on required fire flows and water demands anticipated by the Applicant. This information will be accompanied by the appropriate fee and a completed Water Main Extension Application to initiate preparation of a preliminary report.
- B. District will provide to Applicant one copy of the preliminary report, Probable Project Cost and Water Main Extension Agreement form for later submission.
- C. Applicant may purchase one or more copies of District's Construction Standards. These documents will be incorporated as a part of the construction documents.
- D. District may provide policies on easement and legal description requirements and other data required for preparation of water main extension drawings and specifications.
- E. District will provide information on water main extension sizing that is affected by planning. The District may provide other known requirements or recommendations specific to the proposed extension.

3. PRE-DESIGN SUBMITTALS

- A. If Applicant wishes to proceed with the project, Applicant must sign a Water Main Extension Agreement and either deposit with the District twenty-five percent (25%) of the Probable Project Cost or ten percent (10%) of the Probable Project Cost dependent on the engineering and construction options the Applicant chooses.
- B. The Applicant shall submit with Agreement three (3) hard copies and one (1) copy, in an acceptable digital format, of the following:
 - 1. Design drawings for the proposed development showing streets and storm drains, sanitary sewers, grading, lighting and any other utilities.
 - 2. A preliminary plat, legal survey or legal description of easements and permanent rights-of-way on property crossed by proposed water main outside of development site or otherwise not shown on development site plat. Both

permanent and temporary construction easements will be shown or described.

3. Any special conditions to supplement the District's Construction Standards.

4. SUPPLEMENTARY PRE-DESIGN SUBMITTAL INFORMATION

- A. The Applicant's design drawings shall be accompanied by information on the type of residential development (single or multi-family) or type of proposed industrial or commercial use. This information must be sufficiently detailed to reveal:
 - 1. Number and arrangement of dwelling units.
 - 2. Character of commercial or industrial water use, such as maximum demand rate, average and maximum day usage rates or any other pertinent features.
 - 3. Fire line protection requirements as dictated by appropriate governmental authority.

The District will use this information to verify the size and type of residential, commercial or industrial use water meters and the character of their installation. The sizing of water mains in excess of the minimum size may also be affected by this information.

- B. Grading plans, (one hard copy and one copy in digital format), for a property or development will be submitted with development drawings. Where grading plans are not required by political jurisdictions or otherwise required of the Applicant, development design drawings should show planned grade changes within 30 feet of the pipe alignment. Future grade changes would require the water main extension installation at a depth that will ensure a correct future cover depth.
- C. Where pipeline is proposed on existing District or other utility easement, the Applicant shall furnish a copy of such existing easements with the design submittals.

5. DESIGN DOCUMENT PREPARATION AND REVIEW

The District shall, upon receipt of satisfactory information from Applicant, proceed with design of water main extension documents (or review of the Applicant's design). Upon completion of design, District will submit two (2) copies of documents to Applicant for review. In the case of review, the District will return red-line drawings and comments to the Applicant for correction. The District, or Applicant, as applicable, will submit approved design documents to the Kansas Department of Health and Environment (KDHE) for their review and approval.

6. EXCEPTIONS TO STANDARDS OR POLICIES

The District will review and comment on any reasonable change the Applicant may wish to make at variance with the District's Standards or policies.

7. APPLICANT'S PROJECT AUTHORIZATION

When the Applicant wishes to proceed with construction of the Water Main Extension the Applicant shall, after review and approval of design documents, make a deposit equal to the amount of Probable Project Cost, less previous deposit. The Water Main Extension Agreement shall be accompanied by certified legal plat of development, showing dedicated utility easements, and recorded easements for any construction outside of the development.

8. BIDDING PROCEDURE (FOR DISTRICT BID PROJECTS)

The District will make design documents available to prospective bidders and other interested parties.

Bids will be taken on a date acceptable to both the Applicant and the District. The District will issue a Bid Invitation to known bidders in the area and any others that the Applicant wishes to be informed of the project, as long as they are acceptable to the District and can meet bidder requirements.

Bids and bidder qualifications will be reviewed by the District and by the Applicant, if desired, for award to an acceptable bidder, who may or may not be the low bidder. Upon acceptance of bids and prior to award of a contract, the Applicant will be required to deposit with the District any additional cost. After any necessary additional deposit is made, the District Board of Directors will award the contract at a scheduled meeting.

The District will proceed with preparation for and execution of a construction contract, provide observation during project construction and make progress payments to the Contractor. "Conformed to Construction Records" drawings will be prepared from information obtained during construction.

PROJECT ABANDONMENT

The Applicant may abandon the project by written notification received at the District Office by certified letter not later than five business days after the bid opening and before contract award. Upon project abandonment, the District will return Applicant's deposit less the amounts expended for engineering, surveying, testing, legal, administrative and all other project costs.

WATER MAIN EASEMENT POLICIES

1. EASEMENT REQUIREMENTS

Applicant shall provide all easements and rights-of-way necessary for Water Main Extension construction at no expense to the District. Such easements and rights-of-way must be acceptable to the District.

Within proposed developments, and if acceptable to the District, the pipeline may be laid within permanent road rights-of-way or utility easements where grades are established by curbs or other permanent construction. The pipeline will generally be located behind curbs in a corridor acceptable to the District. In some cases, permanent easements may be required within a proposed development to avoid construction obstructions.

Pipelines to be laid outside developments, parallel to existing roadways, will generally require easements. The permanent easement is to be parallel to existing road rights-of-way. Generally, these easements shall be 20 feet in width centered on a pipeline constructed approximately 65 feet from centerline of existing roadway or section line. The District may consider the construction of water mains in established right-of-way, if such right-of-way is of sufficient size and if such construction is allowed or permitted by local jurisdiction. Temporary construction easements will normally be required adjacent to permanent easements or road rights-of-way where the pipe is laid.

The above are minimum requirements and the District reserves the right to require additional easement coverage.

The Applicant will prepare easements for submittal with the Water Main Extension Agreement. When the District has reviewed these, the Applicant shall have them signed before a notary public and shall return them to the District for recording. The District will return one copy of each recorded easement to the Applicant.

WATER MAIN SIZE, ROUTING, CONNECTION AND MATERIAL POLICY

1. REQUIREMENTS

A. The size, routing and points of connection of the water main (or mains) and the material specifications shall be determined by the District upon considering adequate service to prospective consumers and the possible or contemplated future extensions of the main.

Water main extensions shall be of not less than 8-inch size along all established county or other main through-roads within the District, interconnecting water main loops and main water line arteries within subdivisions and developments. Water main extensions along roadways other than those mentioned above or as otherwise designated by the District may be constructed of 6-inch minimum size. Water mains larger than 8-inch may be required to serve large developments, industrial, commercial or other developments as determined by the District.

In special cases, the District may consider mains smaller than 6-inch, such as for short cul-de-sacs or similar arrangements.

Fire hydrants will be installed on water main extensions when required by District or other agencies and where water system main sizes will provide adequate fire flow suppression for their use.

- B. The District reserves the right to require a Water Main Extension of a size larger than that requested by Applicant. In the event the District requires such a larger line to meet needs of the District that are not directly related to Applicant, the District will pay any costs of the Water Main Extension that are in excess of the cost that would have been incurred had the line size been that which was requested by Applicant.
- C. The terminus of the water main (or mains) to be installed shall provide for looping of mains whenever possible. All dead-end mains shall extend to the far side of the property or the last lot being served, unless a lesser distance is determined adequate by the District and shall have a clean-out installed at the end.
- D. Construction Standards for material and installation procedures are on file at the District office, 534 W. Main, Gardner, Kansas, and are available for purchase by the public and interested parties.

WATER MAIN EXTENSION DRAWING STANDARDS

DRAWING PREPARATIONS

- A. Preparation of drawings relating to Water Main Extensions shall conform to the following requirements and guidelines.
 - 1. Drawings shall not exceed 24 inches by 36 inches in overall size. Standard District drawing sizes will be used. This will include the District's standard construction detail sheet with title block.
 - 2. Drafting media shall be ink on matte surface Mylar or equivalent plotter generated original drawings. Line work shall be dense enough to make quality prints. Media shall allow corrections and changes of lines and details.
 - 3. Original drawings and digital drawing files will be changed to reflect construction records and be used to make prints for operational purposes and to update District mapping. The District will store the reproducible original drawings and digital drawing files for accessibility for future use.
 - 4. Sheet title block shall indicate:
 - a) Name of development, subdivision or other description approved by the District.
 - b) Rural Water District No. 7
 - c) Name of Applicant
 - d) Name of engineer or engineering firm preparing drawings.
 - e) Kansas Engineering Registration Seal. This may be applied adjacent to the title block.
 - 5. Drawings of pipeline plan shall have a scale of 1-inch equals 50 feet. Detail plans of pipe alignment around structures or other obstructions may have a scale of 1-inch equals 20 feet, or less.
 - Details of pipeline connections and other fitting and valve locations shall have sufficient size and dimensions to convey meaning, but need not be to scale. Plan drawings and details shall have sufficient titles and north arrows to identify locations.
 - 6. Pipeline drawings may be drawn in part or entirely on standard plan and profile sheets. This may be needed to illustrate grading, separation from sanitary sewer and storm drain facilities, stream crossings, parallel or intersecting roadway profiles and other pertinent vertical location data.
 - 7. Water main extension easements must be shown on the pipeline drawings. Known and recorded existing utilities and easements should be shown where

- conflicts may arise or affect the construction. Rights-of-way of adjacent streets and roadways will also be shown.
- 8. When development grading plans have not been prepared by Applicant, proposed grading within 30 feet of the pipe alignment will be furnished for use on the design drawings. This can be done by profiles, contours (existing and proposed) or spot elevations (existing and proposed).
 - Where a Water Main Extension traverses property outside of Applicant's property, sufficient grade or contour information shall be provided to illustrate differences between pipe alignment profile and adjacent roadway and ditch elevations. This information shall be used in preparation of the water main extension drawings.
- 9. All drawings, including "Conformed to Construction Records" information will be provided to the District in computer digital form using an acceptable format.