

# UTILITY WATER PLAN SUBMITTAL REQUIREMENTS

(WATER MAINS AND WATER SERVICES 2" OR LARGER)

EFFECTIVE DATE: JANUARY 1, 2019

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## SUBMITTAL

Please address all submittals to both Ryan Schmitz ([rschmitz@giud.com](mailto:rschmitz@giud.com)) and Jamie Royer ([jamie.royer@giud.com](mailto:jamie.royer@giud.com)).

Plans must be submitted digitally as PDF's. Scaling must be 1:20 or larger when printed full size (22" x 34"). Half size prints (11" x 17") should be 1:40 or larger. All PDF submittals MUST print to scale.

Plan and profile drawings shall bear the signature and stamp of a Professional Engineer registered in the State of Nebraska.

## REVIEW FEES

### 1. Engineer Review Fee

Consultant shall submit a check for 1% of the Engineers Estimate. The check must be delivered/mailed to 315 N. Jefferson in Grand Island at the same time that plans are submitted for review. Plans will not be reviewed prior to payment being received.

## COVER SHEET

### 1. Quantity Table

A quantity table with an Engineers Cost Estimate.

### 2. Location Map

A map depicting where the site is located with a legal description and physical address

### 3. Title Block

Title block must contain the City Project Number (to be assigned by City during plan review). A default placeholder of "WSYEAR-X" shall be used for submittal.

### 4. Approval Box

A signature approval box must be placed on either the cover sheet or plan sheet.

### 5. Sheet Index

An index must be included if multiple sheets compose the plan set.

### 6. Horizontal and Vertical Control

- Note vertical control, control point elevations, horizontal coordinates, datum used, and description of physical location
- Note horizontal control, coordinate system used, control point coordinates, and description of physical location.

## GENERAL NOTES

### 1. Polyethylene Encasement

All ductile iron pipes shall be 8 mil polyethylene encased unless waiver is granted by the Utility.

## 2. Grand Island Utilities Standard Notes

Note to include that all installations must conform to the most current version of the following standards:

- City of Grand Island – DIVISION VI – WATER MAINS
- City of Grand Island Utilities Department – WATER MAIN STANDARD PLANS

## 3. Water Main Taps

Note to include that water main taps:

- Must be made by the City Water Department at the expense of the Contractor.
- Contractor will be responsible for providing all necessary fittings and valves.
- Contractor will be responsible for excavating, backfilling, and restoring the location.
- Contractor will be responsible for pumping out the pit during installation.
- Contractor will be responsible for shoring pit (if deemed necessary by the Utility)
- Contractor will be responsible for thrust blocking all tapping valves.
- Contractor must coordinate installation with the Water Shop (308.385.5436) or a Utility Engineering Representative. Contact must be made at least 48 hours prior to commencement of work.

## 4. Testing & Sampling

Contractor shall be responsible for:

- For any plans approved on or after January 1, 2019, heterotrophic plate count testing will no longer be required. Coliform testing, however, will continue in accordance with current requirements.
- The rate for sampling is \$500 per set of samples for each round of sampling.
- The rate for chlorinating is \$0.25 per foot of pipeline for each round of chlorination.
- Contractor must supply tap, extension piping, and valving as directed by the Utility Department.
- Contractor may hire City personnel to chlorinate piping or choose to chlorinate piping him or herself. If Contractor chooses to self-chlorinate, a written notification must be delivered to the Grand Island Utilities Engineering Department at least 24 hours in advance of the activity taking place.
- If work is performed by multiple Contractors or performed in more than one stage, each phase will be subject to individual testing and related fees.

## 5. Water Services

- All water services, of any size, must be installed under the direction of a City of Grand Island licensed plumber.

# PLAN VIEW NOTES

## 1. Stationing

All Water Mains and Water Services must be stationed by one of the following methods:

- Stationed along the Water line in fifty (50) foot increments. Stationing must commence at the connection point with the existing watermain.
- Stationed by road centerline with offsets given for all PI's.

## 2. Device Notes

The following (at minimum) must be noted with stationing, quantity, and description:

- Valves
- Hydrants
- Fittings
- Pipe Deflections
- Thrust Blocks
- Retainer Glands
- Service Connections

## 3. Informational Notes

The following (at minimum) must be noted:

- Scale must be 1:20 or larger when printed full size (22" x 34"). Half size prints (11" x 17") should be 1:40 or larger. All PDF submittals MUST print to scale.
- North Arrow
- Other Utilities (with pipe/conduit size if known)
- Buildings
- Horizontal Distances shown from other Utilities or Foundations that are within 10' of all horizontal clearance requirements.
- Easements (with widths noted)
- Street Names

## PROFILE VIEW NOTES

### 1. Stationing

- Stationing shown in fifty (50) foot increments

### 2. Informational Notes

The following (at minimum) must be noted:

- Utility crossings shown with station and approximate location
- A note depicting (18" Min) at the location of all Storm Drain and Sanitary Sewer Crossings
- Flowline elevation of all Storm Drain and Sanitary Sewer Crossings
- Horizontal Scale (Must be 1:20 or larger)
- Vertical Scale must be noted
- Elevations on Grid
- Existing Grade
- Final Grade
- Note depicting full pipe length and type/size of pipe being installed

## DISTANCES FROM OTHER UTILITIES AND FOUNDATIONS

### 1. Horizontal Clearance

All Water Mains and Water Service Lines must have (at minimum):

- Ten (10) feet of clearance from all storm drain and sanitary sewer pipe.
- Ten (10) feet of clearance from all sanitary and storm drain structures (inlets, outfalls, etc.)
- Three (3) feet of clearance when paralleling any non-sewer utility pipe/conduit.
- Five (5) feet of clearance when paralleling the foundation wall of any structure.

### 2. Vertical Clearance

All Water Mains and Water Service Lines must have (at minimum):

- Eighteen (18) inches of clearance from all storm drain and sanitary sewer pipe.
- Eighteen (18) inches of clearance from all sanitary or storm drain structures (inlets, outfalls, etc.)

### 3. Clearance Variances

- If the required horizontal and/or vertical separation distances cannot be met, a letter of professional opinion must be provided detailing why it is not practical to provide required separation, what remediation will be provided, and why this remediation will protect the water quality. This letter must be sealed by a professionally licensed Nebraska Engineer.

## FIRE SERVICE ITEMS (SITE PLANS ONLY)

Provide the following information:

- Plans must conform to the National Fire Protection Association (NFPA) 13 and 24 standards.
- The location and size of the City main for the sprinkler system tap and the domestic water tap. Show the location of closest public fire hydrant in relation to the proposed construction.
- A post indicator valve (PIV) is required in fire service mains. The PIV shall be located not less than 40 feet from the building. Locating a PIV closer than 40' must meet the approval of the Grand Island Fire Department.
- Indicate size and type of backflow preventer and meter.
- An approved fire department connection must be on the street side of the building and / or be located such that the fire department is provided apparatus access and a hose can be attached without interference from any objects, fences, posts, buildings, etc.
- Where required, a pumper hydrant must be within 100 feet of the fire department standpipe connection.

- On fire service lines, hydrants shall be located not less than 40 ft (12.2 m) from the buildings to be protected.

## OTHER INFORMATION REQUIRED

### 1. Pipe Support Detail

When crossing under an existing water main with sanitary sewer, or another Utility, a pipe support detail must be provided as part of the plan set.

### 2. Traffic Control Plan

When working on or adjacent to a City street, a Temporary Traffic Control Plan must be submitted and approved by the Grand Island Public Works Dept. (308.385.5444 Ext. 260)