RESOLUTION 2021 - 5

WHEREAS, the availability of a safe and pure source of water for the citizens of the City of Gothenburg is of vital importance; and

WHEREAS, the Nebraska Legislature has promulgated regulations requiring that cities formulate a water emergency plan, at Title 179, Chapter 2, Section 008.01 (C); and

WHEREAS, the City Council of Gothenburg has reviewed the Water Emergency Plan set forth on the attached Schedule.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GOTHENBURG, DAWSON COUNTY, NEBRASKA, as follows:

Section 1: The City of Gothenburg Water Emergency Plan, set forth on the schedule attached hereto, and incorporated herein by this reference, is hereby adopted and shall be in full force and effect from and after the March 16, 2021.

Section 2: The attached Water Emergency Plan should be distributed as set forth on page 9, and implemented immediately.

PASSED AND APPROVED THIS March 16, 2021

CITY OF GOTHENBURG,
DAWSON COUNTY, NEBRASKA

By Joyce E Hudson
Joyce Hudson, Mayor

ATTEST:

Misty Bussinger
Misty Bussinger, City Clerk

APPROVED AS TO FORM:

Michael Bacon, City Attorney

City of Gothenburg
Water Emergency Plan

Water is our most vital resource. As such, the City of Gothenburg has formulated an emergency plan to protect that resource. This plan has been prepared as required by Title 179, Chapter 2, 008.01C of the Nebraska State Statutes.

Any health-related contamination or any issues that may affect the public water supply system of the City of Gothenburg should be reported immediately to the following personnel in order of listing:

Shane Gruber	City Services Director	(308) 537-2027 or 529-2481
Gary Greer	City Administrator	(308) 537-3677 or 529-5019
City Office	(During Working Hours)	(308) 537-3668 or 537-3677
Police Dispatcher	(After Hours)	(308) 537-3608
Department of Health	24-hour Emergency Number	(402) 499-6922

The City Services Director shall be responsible for notifying the City Administrator; and the Nebraska Department of Health when necessary. If the City Administrator cannot be reached, the Director shall then contact the Mayor.

The City Administrator shall contact the Mayor, City Council, Clerk and City Attorney.

The following personnel should be contacted in order of listing regarding any issues in the supply system of the City of Gothenburg such as wells, water tower, water mains, fire hydrants or valves:

City Office	(During Working Hours)	(308) 537-3668 or 537-3677
Police Dispatcher	(After Hours)	(308) 537-3608
Shane Gruber	City Services Director	(308) 537-2027 or 529-2481
Gary Greer	City Administrator	(308) 537-3677 or 529-5019
Tim Lauer	Parks Manager	(308) 529-3384
Corey Cooper	Water/Sewer	(308) 537-4222
Allen Weidman	Water/Sewer	(308) 640-0504
Shawn Herfel	Water/Sewer	(308) 325-5421
Nolan Golter	Mechanic	(308) 529-2573
Mike Johnston	Streets/Utility	(308) 529-0314
Dane Ehlers	Streets/Utility	(308) 529-0854
Rob Will	Streets/Utility	(308) 529-7585
Mike Peters	WWTP Operator	(308) 627-5347
Stephan Wehtje	Streets/Utility	(308) 537-6034

Water Supply General Information Sheet

Utility Name:	City of Gothenburg
Public Water Supply ID Number (PWSID):	NE3104702
Water Source:	Groundwater
Population Served:	3578
Water Storage Tank Capacity:	500,000 Gallons
Average Daily Pumpage (Gallons per Day):	1,077,463
Treatment Processes:	None
System Phone Number:	308-537-3668
Fax:	308-537-3609
E-mail: sgruber@cityofgothenburg.org	
System's Designated Operator in Charge:	Shane Gruber

Backup Operators:
Tim Lauer, Corey Cooper, Allen Weidman, Shawn Herfel, Rob Will and Mike Peters

Dept. of Health/Human Services Rep.: Tony Martinez	(308) 530-4651
Dept of Health/Human Services: Andy Kahle, Field Services	(402) 471-0521
Emergency – 24 hours	(402) 499-6922
Justin Nelson, Compliance	(402) 471-0930
Sue Dempsey, Administrator	(402) 471-0510

Emergency Telephone Notification Listing

Basic Emergency Response Team

Position	Name	Work	Pager	Cellular	Fax	Home
City Services Director	Shane Gruber	308-537-2027	None	308-529-2481	308-537-3609	308-529-2481
City Administrator	Gary Greer	308-537-3677	None	308-529-5019	308-537-3609	308-529-5019
Mayor	Joyce Hudson	308-537-7151	None	308-529-1522	None	308-537-2773

Local Officials Outside the Utility

Position	Name	Work	Pager	Cellular	Fax	Home
Council President	Jeff Kennedy	308-537-7810	None	None	None	308-930-0212
Electrical Foreman	Nate Baker	308-537-2027	None	308-529-1129	308-537-2027	308-529-1129
Police Chief	Randy Olson	308-537-3608	None	308-529-1160	308-537-3609	308-537-4414

Local Officials Outside the Utility (Continued)

Position	Name	Work	Pager	Cellular	Fax	Home
City Physician	Dr. Garret Shaw	308-537-3661	None	None	None	
County Emg. Coordinator	Brian Woldt	308-324-2070	800-403-3760	308-325-0932	None	308-784-4430
Fire Chief	Mark Ballmer	308-537-7141	Police Dispatch	308-529-2972	308-537-3608	308-2576
City Attorney	Mike Bacon	308-537-7161	None	308-529-1492	308-537-7162	308-537-7461
Engineer	Reed Miller	800-658-4206	None	308-380-6994	308-234-1146	308-237-7406
City Clerk	Misty Bussinger	308-537-3677	None	308-325-6775	308-537-3609	308-325-6775
School Superintendent		308-537-3651	None	None	308-537-3963	

Other Contacts

Position	Name	Work	Pager	Cellular	Fax	Home
State Health Department	Tony Martinez	308-535-8387		308-530-4651	308-535-8175	
Nebraska Rural Water	Randy Hellbusch	402-461-2525		402-443-5353		
League of Municipalities	Lash Chafin	402-476-2829				
Midwest Assisstance Program	Tim Rutledge	402-862-3227		402-239-8392		
Red Cross	Kay Grinde	308-784-4343	800-689-8595	308-325-3137		308-784-4409
Gas Utility	Blackhills Energy	888-890-5554				Emergency 800-694-8989
KRVN	Dave Schroeder	308-324-2371				308-324-5902
KNOP	Jacque Harms	308-532-2222				
Culligan		308-784-2222				
Sargent Irrigation	Garry McCracken	308-872-6451		308-870-2456		

System Information

Total Service Connections: 1,515
Residential Connections: 1,321
Commercial Connections: 184
Industrial Connections: 10

DWR Well Registration Number	DOH Well Registration Number	City Identification Number	Location	Pumping Capacity (GPM)	HP	Depth (Feet)
*A-10615A	24702721	72-1	16th and Ave. G	1,000	100	175
A-10615D	24702722	72-2	7th and Cottonwood	1,000	100	186
G-72329	247002861	86-1	20th and Ave. A	1,200	100	398
A-10615C	24702901	90-1	1100 22nd Street	1,140	100	420

** NOTE: A-10615A is for Emergency Use Only – See Attachment 3

Range of Production: 4,000 GPM to 1,000 GPM
Average Summer Daily Demand: 2.8 MGD
Peak Daily Demand: 3.7 MGD
Average Winter Daily Demand: 0.626 MGD
System Total Storage Capacity: 0.5 MGD

Water Tower Location: 1100 22nd Street
Manufacturer: Pittsburgh – Des Moines Steel Company
Capacity: 500,000 gallons
Water Level Settings: High-500,000 Gal. 100% Low-200,000 Gal 40%
Sensor Elevation: 2734 feet
Sensor Location: GMV 90-1 Well House
Overflow Elevation: 2734.5 feet
Date Built: 1969
Last Date Inspected: 2016
Last Painted – Inspected 2019

Priority of Service

- Fire Protection
- Hospitals and nursing homes
- Domestic (for limited use during the emergency)
- Commercial
- Industrial

Possible Emergencies and Disasters

Chemical or Bacteriological Contamination:

1. Notify the Nebraska Department of Health (402-499-6922 or names on emergency contact information sheet).
2. Locate, identify and isolate the source of contamination.
3. Notify all residents that are affected through radio, bank sign, newspaper and/or door-to-door communication. **If an MCL violation poses an acute (immediate) health risk, KRVN and KNOP TV must be notified within 72 hours.**
4. Call NDOH for sample bottles.
5. Flush and Disinfect.
6. When clear, notify all residents through proper communication such as radios and newspaper.

Taking the Water Tower Out of Service:

1. See Pages 4A, 4B. and Attachment #1

Water Main or Service Line Breaks/Construction Accidents

1. Locate Leak
2. Call Emergency Locate: 1-800-331-5666 or 811: ID#308-529-2481
3. If necessary, notify City Services Director or City Administrator in order of listing for damage assessment and/or coordination of repairs.
4. Check size and/or location on water map.
5. Put out signs and barricades, if necessary.
6. If possible, inform customers of the problem, that the water will be shut off, and the expected time of when the problem will be resolved.
7. Isolate leak using system valves; dig up; and repair and/or replace pipe.
8. Flush out pipe and if necessary, chlorinate pipe.
9. Return water line to service.

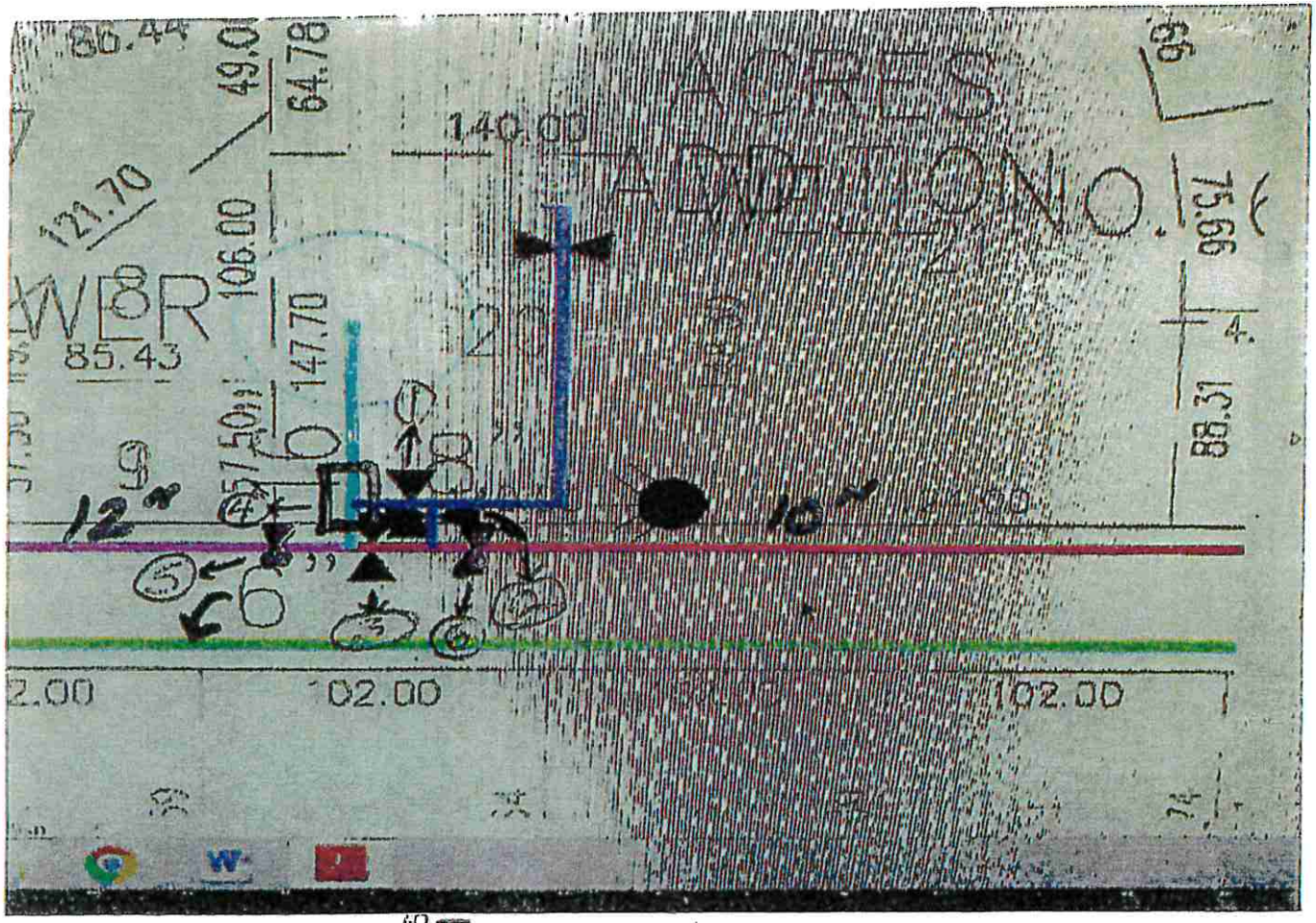
Personnel trained in confined space entry and trench safety:

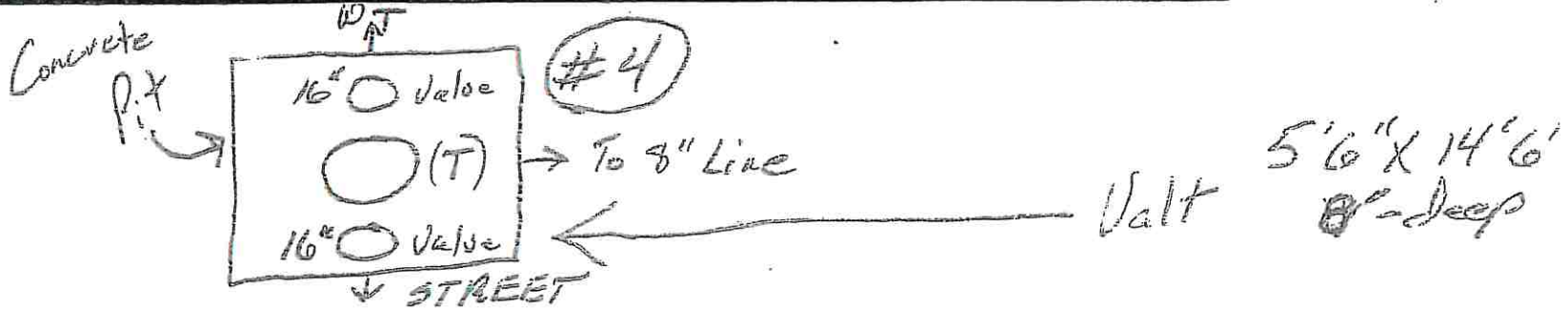
- Tim Lauer, Corey Cooper, Allen Weidman, Nolan Golter, Shawn Herfel, Rob Will, Mike Johnston and Mike Peters

(Attachment #1)

Valve Sizes/# of Turns

#1 - 8" / 26.5 Turns
#2 - 8" / 26.5 Turns
#3 - Not used.
#4 - Valve pit: 2 - 16" / 50 Turns each
#5 - 12" / 38.5 Turns
#6 - 10" / 33 Turns





Taking the Water Tower Out of Service: (See Attachment #1 for Valve Locations)

01. Put PSI relief valve on the fire hydrant at Avenue F and Northhaven Drive.
02. Adjust Wells Operation:
    a. GMW 72-2: Set VFD control switch to PSI.
    b. This well then is set to run up to 75 PSI maximum.
    c. GMW 86-1: Set VFD control to Auto.
    d. This Well then is set to run through the Scada system being monitored by water operator to a maximum of 70 PSI.
    e. GMW 90-1: Well is turned off through the Scada system.
    f. No adjustment is necessary on the VFD panel control switch.
03. Turn off Valve # 1 (8 inch valve) west of the fire hydrant closest to the concrete valve pit.
04. Turn off Valve #4 (South 16 inch valve in concrete valve pit).
05. All water system operating without water tower.

Putting the Water Tower Back Into Service:
(See Attachment #1 For Valve Locations)

01. Turn on Valve #1 (8 inch valve west of the fire hydrant closest to the concrete valve pit.
02. Turn on Valve #4 (South 16 inch valve in concrete valve pit).
03. Adjust Wells Operation:
    a. GMW 72-2: Set VFD control switch to AUTO.
    b. This well will then be run by the Scada System.
    c. GMW 86-1: VFD control is on AUTO.
    d. No adjustment necessary.
    e. This well will then be run by the Scada System.
    f. GMW 90-1: VFD control is set on AUTO.
    g. No adjustment necessary.
    h. This well will then be run by the Scada System.
04. Shut off fire hydrant at Avenue F and Northhaven Drive. Remove PSI relief valve from the hydrant and store at Shop.
05. All water system operating now with water tower.

Power Failure:

In the event of a power failure, the following actions should be followed:

1. Check with Gothenburg Dispatch and/or the electrical department to determine the possible length of time the outage will be.
2. If it is determined that there is a need for emergency backup of the well system, the natural gas driven motors at wells 72-2 and 90-1 shall be turned on.
3. Once power has been restored, these wells shall be returned to their normal operating mode.

Procedures for using the natural gas driven motors shall be as follows:

GMW 72-2 BACK-UP MOTOR OPERATING PROCEDURE

START UP:

01. **Contact Shane (308-529-2481) to disable the Scada System operation of the automatic operation of the well.**
02. Check gas motor over: oil, antifreeze, and general condition.
03. **Turn the main disconnect switch to ON on the gauge panel.**
04. **Turn on the Natural Gas Valve with attached crescent wrench.**
05. Pull the main disconnect handle next to the electric well motor down into the **OFF** position.
06. Open the red control panel box on the gas motor and turn **Test/Off/Auto** toggle switch to **AUTO.**
07. Turn the gas motor **Start/Stop Contact Toggle Switch** on the exterior of the red control panel box to **ON.**
08. Gas motor should start and warm up for approximately **110** seconds. Green light in red control panel box should be on, **Engine Running.**
09. After the warm up, the gas motor should engage the clutch and start the well. Close the red control panel box.
10. Slowly open the throttle in the well house building, **throttle now attached near the drive shaft metal shielding,** until the mechanical pressure gauge on the back side of the main water valve on the main line from the well runs around 75 psi.
11. **Monitor this as to try and maintain 75 psi as the well is pumping.**

If you have any problems, please contact Shane Gruber 308-529-2481.

SHUT DOWN:

01. Slowly close the throttle in the well house building, **throttle now attached near the driveshaft metal shielding,** slowing the gas motor to an idle.
02. Turn the gas motor **Start/Stop Contact Toggle Switch** on the exterior of the red control panel box to **OFF** position.
03. The gas motor should be idling and the clutch should release after the above switch has been turned off for approximately **42 seconds.**
04. The gas motor should then idle for approximately **110 seconds** to cool down and then shut off.
05. Open the gas motor red control panel box and turn the **Test/Off/Auto** toggle switch to **OFF.**
06. Close the red control panel box.
07. **Turn off the natural gas valve with the attached crescent wrench.**
08. **Turn the main disconnect switch on the gauge panel to OFF.**
09. Push the main electrical disconnect panel handle near the electric well motor into the **ON** position.
10. **Contact Shane (308-529-2481) to reset the operation of the well with the Scada System to operate it automatically.**

If you have any problems, please contact Shane Gruber 308-529-2481.

GMW 90-1 BACK-UP MOTOR OPERATING PROCEDURE

START UP:

01. **Contact Shane Gruber (308-529-2481) to disable the Scada System operation of the automatic operation of the well.**
02. Check gas motor over: oil, antifreeze, and general condition.
03. **Turn on the Natural Gas Valve with attached crescent wrench.**
04. Pull the main disconnect handle next to the electric well motor down into the **OFF** position.
05. Open the red control panel box on the gas motor and turn **Test/Off/Auto** toggle switch to **Test.**
06. Gas motor should start and warm up.
07. Go over the right hand side of the gas motor and disconnect the red wire from the starter solenoid that is on top of the starter. Let it hang.
08. Up by the alternator on the same side is a toggle switch in the **OFF** position. Place it into the **ON** position. These two operations allow the gas motor to continue to run.
09. After the warm up of about **60 seconds,** engage the clutch by hand and close the red control panel box.
10. Slowly open the throttle in the well house building, **throttle knob attached near the drive shaft metal shielding,** until the gas motor reaches **2000 rpm** on the gauge panel on the gas motor.
11. Monitor this and when the water tower gets full, which is indicated by the mechanical psi gauge that is on the northwest corner on the wall inside of the well house building reading **59 psi.** Slow the gas motor down with the hand throttle to an idle and let the gas motor continue to run until the next cycle of the water tower needing to be filled. On the same gauge this would be a reading **53 psi – 60% full** of water in the tower as to when the gas motor needs to be again throttled up to the **2000 rpm.**

If you have any problems, please contact Shane Gruber 308-529-2481.

SHUT DOWN:

01. Slowly close the throttle in the well house building, **throttle knob attached near the driveshaft metal shielding,** slowing the gas motor to an idle, if it is not idling already.
02. Disengage the clutch by hand.
03. Open the gas motor red control panel box and switch the **Test/Off/Auto** toggle switch to the **OFF** position.
04. Go to the right side of the gas motor by the alternator and switch the toggle to the **OFF** position. This will shut the gas motor off. Reconnect the red wire to the starter motor solenoid for the next time start.
05. **Turn off the natural gas valve with the attached crescent wrench.**
06. Push the main electrical disconnect panel handle near the electric well motor into the **ON** position.
07. **Contact Shane (308-529-2481) to reset the operation of the well with the Scada System to operate it automatically.**

If you have any problems, please contact Shane Gruber 308-529-2481.

Natural Disasters

Use a combination of the above procedures as needed depending upon the type of disaster and what parts of the system are affected.

Chemical Pumps

The City has installed chemical pumps in all of the wells. These pumps may be used to inject chorine into the water system if required by the presence of bacteriological contamination. Rules of injection shall be as follows:

1. Receive notification from the HHS of the need to chlorinate the system due to contamination.
2. Work with HHS representative to insure proper injection of chlorine into the system.

Chemical Pump Locations:	Well Houses 72-1, 72-2, 86-1, 90-1
Vendor:	Raines and Associates, Inc. 14243 "S" Street Omaha, NE 68137
Phone:	1-402-895-6336
Fax:	1-402-895-5324
Type of Pumps:	LMI A771-150FS Metering Pump
Capacity of Pump:	0.0 to 0.42 Gallons/Hour at 140 PSI
Analog to Digital Converter:	LMI MP-100
Corporation Stop and Nozzle Assembly:	LMI #10998
Wall Mount Bracket:	#34643

Water Shortage

In the case of a water shortage, the following shall occur: See attachment #4

Reporting Requirements

Any Condition that requires reporting than an emergency exists shall refer to Annex A-1, Annex A-2 and Annex A-4 of this plan.

Appendices

Attached under the appendices are various amounts of information to be used for reference is the City of Gothenburg is faced with a water emergency.

Location of Emergency Plan Copies

Agency	Person	Phone	Location	Copy #
DHHS	Tony Martinez	308-530-4651	200 S. Silber North Platte, NE 69101	1
County Emergency Coordinator	Brian Woldt	308-324-2070	709 N. Grant Lexington, NE 68850	2
City of Gothenburg	Gary Greer	308-537-3677	409 9th Street	3
City of Gothenburg	Shane Gruber	308-537-2027	1112 Avenue L	4
City of Gothenburg	Misty Bussinger	308-537-3677	409 9th Street	5
Nebraska Rural Water	Craig Matulha Circuit Rider	800-842-8039	3390 Ponderosa Wahoo, NE 68066	6
Gothenburg Police Dept.	Randy Olson	308-537-3608	405 9th Street Gothenburg, NE 69138	7
City Wells	Shane Gruber		All well locations	8, 9, 10, 11

City of Gothenburg
Water System Inventory

• Well 72-1(Emergency Use Only!)		
• Well 72-2		
• Well 86-1		
• Well 90-1		
• 500,000 Gallon Elevated Storage Tank		
• 194 Blocks Cast-iron Water Main	= 67,900 Ft.	= 13 Miles
• 90 Blocks Transit Water Main	= 31,500 Ft.	= 6 Miles
• 55 Blocks PVC Water Main	= 19,250 Ft.	= 4 Miles
• 170 Fire Hydrants		
• 294 Water Main Valves		
• 1,321 Residential Service Connections	389,048,160 Gallons	
• 184 Commercial Service Connections	54,190,290 Gallons	
• 10 Industrial Service Connections	2,945,550 Gallons	
• 1,515 Total Service Connections	446,184,000 Gallons	
• 4 - Electronic Metering Pumps		
• 1 – Fischer XLT-20 CE Leak Detector		
• Trench Shoring		
• Backhoe		
• Tapping Machine		
• Loader		
• 2 – Five Yard Dump Trucks		
• 3 – Water Service Pickups		
• 1 - Diesel Generator for lighting and or backup power		
• 2 - Backup Natural Gas Power Units		
• Assortment of many hand tools		
• 2 Bobcats – 1 Bobcat Jackhammer		
• 1 Bobcat Mini Excavator		

This plan has been approved by Resolution 2021-5 of the Gothenburg City Council.

Passed and approved on this day March 16, 2021

Signed: Joyce E Hudson
Mayor Joyce Hudson

Attest: Misty Bussinger
Misty Bussinger, City Clerk

Attachments

Attachment 1	Map for taking water tower out of service
Attachment 2	City of Gothenburg Wellhead Protection Maps
Attachment 3	Notice Regarding Use of 72-1 for Emergency Use
Attachment 4	Ordinance #881- Water Conservation, drought, emergency and shortage contingency plan.

Annexes

Annex A-1	Conditions requiring that an emergency exists
Annex A-2	Public Drinking Water Supply Emergency Notification Form
Annex A-4	Preliminary Damage Assessment Form

Appendices

Appendix A-3.2	Nebraska Natural Resource District Boundaries
Appendix A-3.3	Nebraska Department of Roads Districts
Appendix A-3.4	County Emergency Coordinators
Appendix B-1.1	American Red Cross
Appendix B-1.2	Nebraska Rural Electric Association Phone Listings
Appendix C-1	Chemical Suppliers
Appendix C-2	Bottled Water
Appendix C-3	Commercial Ice Suppliers
Appendix D-1	Air Compressors
Appendix D-2	Chemical Feed Equipment
Appendix D-3	Portable Generators
Appendix D-6	Pipe & Water System Equipment
Appendix D-8	Sandbags
Appendix E-1	Consulting Engineers
Appendix E-2	Heavy Equipment
Appendix E-3	Laboratories – Testing (Drinking Water)
Appendix E-4	Electric Motor Repair Contractors
Appendix E-6	Pumps – Service & Repair Contractors
Appendix E-7	Trucks & Bulk Water Trucks
Appendix E-9	Well Drillers
Appendix G-1	Transportation Resources
Appendix H-1/6	Radio and TV Stations
Appendix H-2/2	Nebraska Newspapers