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## EXHIBIT C MAINTENANCE AND OPERATION

### STANDARD OPERATING PROCEDURE for the EMERGENCY WATER INTERCONNECTION between the CITY OF COPPELL and CITY OF GRAPEVINE, TX Rev. NOVEMBER 28, 2022

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This document describes the standard operating procedure to activate the emergency interconnect located on Bethel Road between the Cities of Coppel and Grapevine. A summary of the system, important components, maintenance information, and order of operation is provided.

#### **SYSTEM INFORMATION**

The interconnection between the City of Coppel and City of Grapevine is to be used for emergency scenarios to provide water between the two cities. Both the City of Coppel and the City of Grapevine are able supply water through the interconnect. The emergency demand for this system is a maximum of 2.0 million gallons a day (MGD). This interconnection is located along Bethel Road near the City of Grapevine City Limits.

The interconnection will consist of a magnetic flow meter, isolation valves, and sampling ports housed in a concrete vault. The associated water line is 12" PVC pipe beyond the limits of the vault and 12" ductile iron pipe within the vault. A 12" mag meter provides bi-directional flow measurements and logs the flow data for local download and reporting. The receiving city will take custody of the water at the location of the flow meter. Valves on both sides of the meter are to be closed whenever an emergency water supply is not required.

#### **MAINTENANCE INFORMATION**

The City of Coppel will be responsible for maintenance and operation of the water line, including related appurtenances such fire hydrants and valves, from the interconnection meter to the south of the vault. The City of Grapevine will be responsible for the operation and maintenance of the water line and related appurtenances from the interconnection meter to the west of the vault on Bethel Road. The two cities will have equal and shared ownership of the meter vault. However, it will be the responsibility of the City of Coppel to maintain the meter. Both cities are permitted to access the meter vault for operation but must notify the other party in advance. All other requirements outlined in the Interlocal Agreement between the City of Coppel and the City of Grapevine apply.

Bi-annual inspection and lubrication of all components is recommended. Valves should be operated regularly and according to manufacturer recommendations to ensure proper operation. Fire hydrants should follow routine maintenance as outlined in *AWWA M17: M17*

*Fire Hydrants: Installation, Field Testing, and Maintenance (5<sup>th</sup> edition)*. Fire hydrants should be flushed for several minutes at least twice a year. 2-inch corporation stops are provided on either side of the meter for chlorine residual sampling. If the flow measurements are unstable or the meter sensor is displaying an error, recalibrate the sensor according to the manufacturer's specifications or contact technical support.

### **IMPORTANT COMPONENTS**

Referring to the plan sheets, important components include:

- A. 12" Gate Valve 1 (outside vault)
- B. 12" Gate Valve 2 (outside vault)
- C. Two-way magnetic flow meter
- D. 12" Gate Valve 1 (inside vault)
- E. 12" Gate Valve 2 (inside vault)
- F. Fire Hydrant Assembly 1 (Coppell)
- G. Fire Hydrant Assembly 2 (Grapevine)
- H. 6" Gate Valve 1 (for FH assembly)
- I. 6" Gate Valve 2 (for FH assembly)
- J. 2" Corp Stop 1 (Coppell)
- K. 2" Corp Stop 2 (Grapevine)
- L. 12" Removable DI Spool Piece

### **STANDARD OPERATING PROCEDURE**

The standard operating procedure established below should be followed to activate the emergency interconnection. If the City of Grapevine is providing water to the City of Coppell, the Operating Procedure for the emergency interconnection shall be as follows:

1. Ensure the 12" Gate Valve west of the meter vault is open
2. Open the 12" Gate Valve inside the meter vault west of the meter
3. Open the 12" Gate Valve inside the meter vault east of the meter
4. Open the 6" Gate Valve that is part of fire hydrant assembly on the City of Grapevine's side of the interconnect
5. Flush the water line from through City of Grapevine Fire Hydrant for at least five (5) minutes
6. Close the 6" Gate Valve on City of Grapevine Fire Hydrant
7. Use Corp Stop on City of Coppell side of the meter vault to take any necessary water samples
8. With the interconnection now open, verify the magnetic flow meter is correctly reading the flow according to the manufacturer's preferred operating procedure

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When the interconnection is not needed, the deactivation process shall be as follows:

1. Open the 6" Gate Valves that are part of both fire hydrant assemblies
2. Close 12" Gate Valves inside the meter vault
3. Close the 6" Gate Valves that are part of both fire hydrant assemblies
4. If the interconnection meter will not be used for a period, replace the magnetic flow meter with an 12" Removable DI Spool Piece