NORTH FORT BEND WATER AUTHORITY

June 22, 2009

To: The City of Fulshear, Texas; Utility Districts located within the North Fort Bend Water Authority; their Attorneys, Operators, and Engineers

From: North Fort Bend Water Authority

Re: Surface Water Conversion Requirements for Connection to the North Fort Bend Water Authority Transmission Line

This fall the North Fort Bend Water Authority (the Authority) will begin construction of water transmission mains that will bring surface water purchased from the City of Houston to several Districts within the Authority. The purpose of this memo is to inform Districts of the requirements for connecting to the Authority water line and provide information on water plant controls. The District should have received a schedule by which the MUD must be prepared to receive surface water. That information is now posted on the Authority website.

Disinfection

The surface water purchased from the City of Houston will already have been disinfected with chloramines. Chloramines are used to significantly reduce the byproducts of disinfection such as trihalomethanes and haloacetic acids. Chloramines also have a longer lasting disinfection residual.

Mixing of surface water treated with chloramines and groundwater that has been treated with chlorine has the potential for taste, odor, and health problems. As a result, Districts receiving water from the Authority are required to convert all facilities to chloramine disinfection prior to receiving surface water. This includes water plants and remote wells that do not have a direct connection to the Authority's line but discharge in the same distribution system. The Authority encourages early conversion to chloramines.

Disinfection facilities shall be designed to the TCEQ standards. These standards require notification to the TCEQ and the District's customers about modifications to the disinfection system. The District shall be responsible for making these required notifications. The TCEQ has issued guidance on the "Use of Chloramines" that can be found at:

http://www.tceq.state.tx.us/files/49.pdf_4322511.pdf

The Authority has adopted a reimbursement policy for the design and construction of disinfection facilities and plant connections. This information has been provided previously to you and is also available on the Authority's website. Districts are encouraged to meet with the Authority's engineer during the preliminary phases of design to assure compliance with the Authority's reimbursement policy. The District must submit their plant modifications to the Authority's engineer prior to bidding to be eligible for reimbursement.

Plant Piping

The Authority will design and construct a surface water line that will physically enter the District's water plant site where the Authority will also construct a water meter and control valve station. These facilities will be owned, maintained and operated by the Authority. The District and the Authority will work together to select a location on the water plant site suitable for the Authority's needs. Typical size requirements are approximately 15 feet by 40 feet but existing circumstances may require a different configuration. A typical schematic layout for the surface water connection is attached for reference.

The District will be responsible for design, construction, and maintenance of the yard piping, connections to tanks, other tank modifications (e.g., overflow, venting, air gap/air break), conduit runs, and chloramines disinfection system downstream of the water meter and control valve station.

Controls

Surface water from the Authority will be the District's primary source of water. The District will maintain its groundwater supply as a secondary source for peaking and in the event that the Authority's water service is interrupted or ceases for any reason. It is anticipated that the Authority's surface water facilities will deliver, on average, 90% of the annual supply for converted districts.

The Authority will construct a control cabinet located at the meter station. The District will provide power, a telephone line, certain water plant signal inputs, and control of the water well as listed below:

1. 120 volt single phase power.
2. 2-wire level transmitters with 4-20mA output for each GST.
3. Well pump interrupt contact installed in the auto run controls for each on-site well and each remote well providing water to the water plant. This contact is "allow" or "disallow" only and all other water plant well controls including well stop probes, pressure switches, flow switches, etc. are to be retained and utilized by the water plant.
4. A hand/on/auto selector switch located in the water plant autosensory controls to select surface water utilization.
5. Dedicated telephone "land line" for use by the Authority.

When the water plant selects the "auto" mode for surface water all on-site and remote wells will be inhibited from auto operation and surface water flow to the GST will be controlled by the Authority and based upon GST level. Should GST level fall to below 2/3 of full GST level, all

on-site and remote well auto operation will be allowed and surface water flow by the Authority will continue.

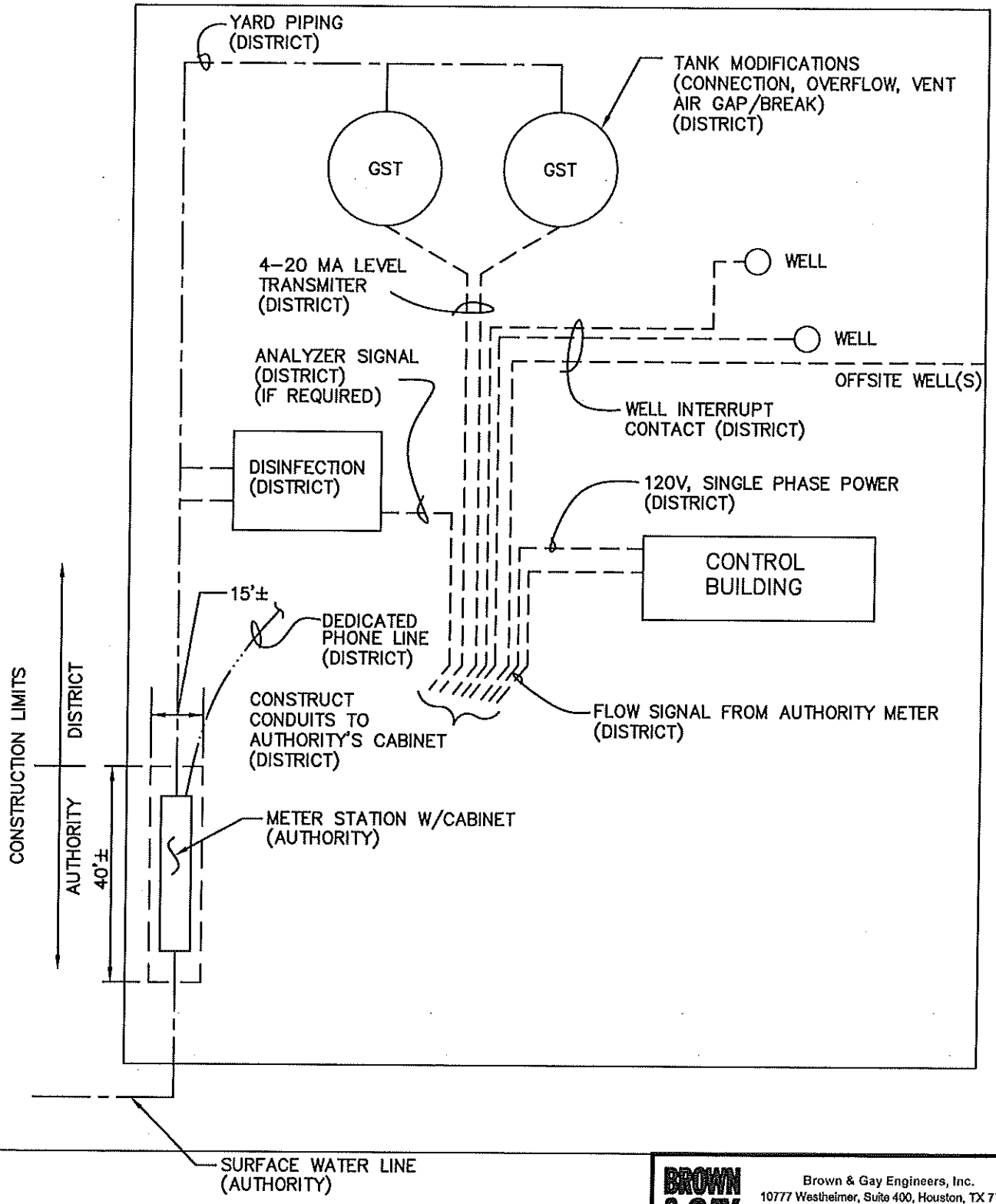
The Authority may at any time remove the availability of surface water due to low line pressure, inability to supply sufficient quantity of water, alarm conditions, maintenance, etc. Under such occurrences, all pump inhibit signals will be removed to allow full local well pump operations.

Signal Sharing

NFBWA flow signal and each GST level signal may be shared with the water plant. In each signal sharing case, loop burden imposed by the water plant shall not exceed a single 250 ohm load. Analyzer signal, if required for SCADA, NFBWA will not impose more than a single 250 ohm burden.

District Review

The District shall review each GST overflow installation and assure adequate sizing for venting and overflow capacity for conditions of full local pump flow capabilities *plus* full and unrestricted surface water flow. The District must meet TCEQ air gap/air break requirements.



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NORTH FORT BEND WATER AUTHORITY

TYPICAL WATER PLANT LAYOUT FOR SURFACE WATER CONNECTION

SCALE:	JOB #:	DATE:	EXHIBIT:
N.T.S.	NFB00-60	JUNE, 2009	1