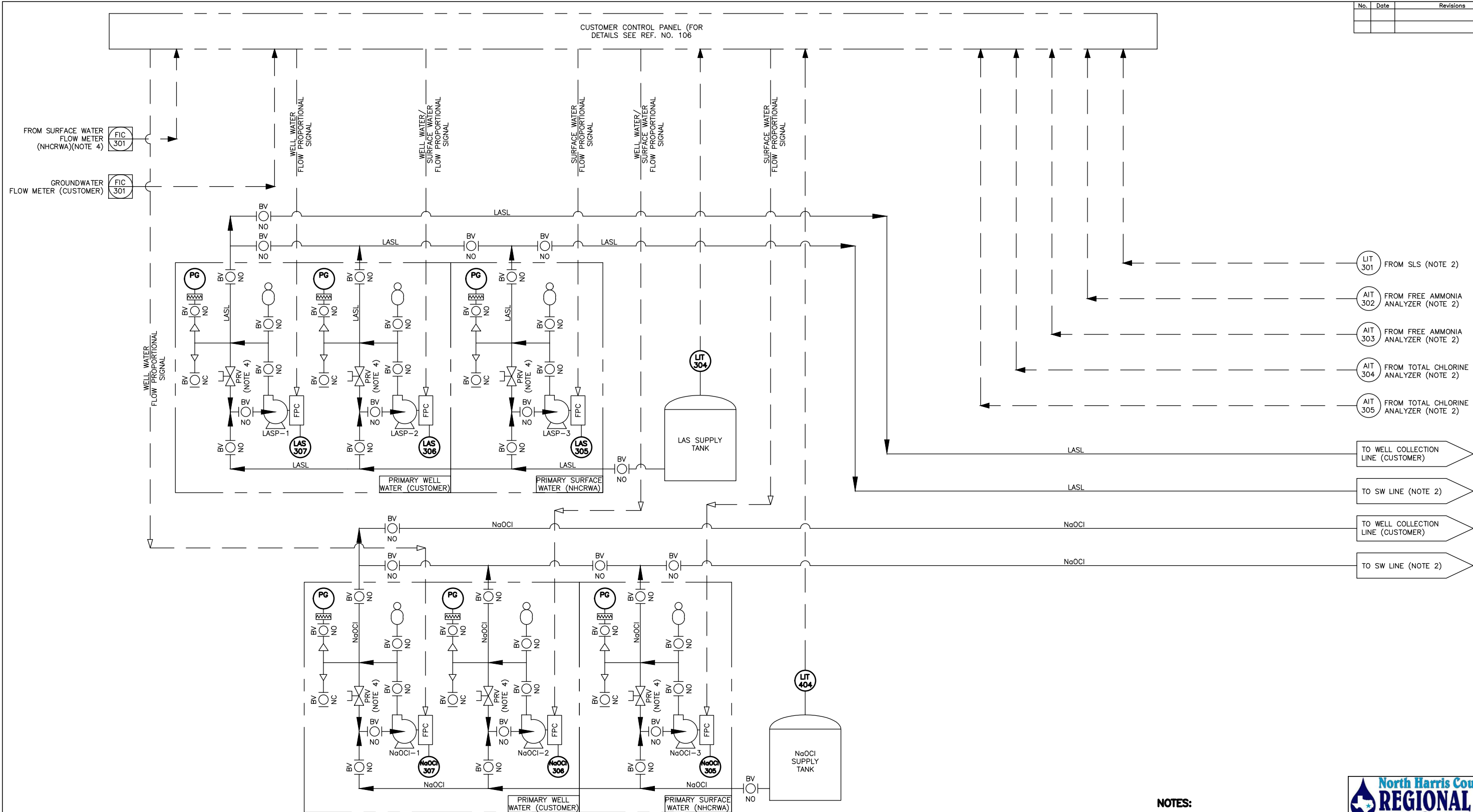








No.	Date	Revisions	App.



PIPING / EQUIPMENT / INSTRUMENTATION LEGEND										SYMBOL LEGEND	
AE	ANALYZER ELEMENT	CA	COUPLING ADAPTOR	FM	FLOW METER	LASP	LIQUID AMMONIA SULFATE PUMP	NaOCL	SODIUM HYPOCHLORITE		DIAPHRAGM SEAL
AIT	ANALYZER INDICATOR TRANSMITTER	DR	DRAIN LINE	FS	FLOW SWITCH	NC	NORMALLY CLOSED	NaOCLP	SODIUM HYPOCHLORITE PUMP		FLOW PACED CONTROLLER
		ESVC	ELECTRIC SOLENOID VALVE - CLOSE	FITQ	FLOW TOTALIZER	NO	NORMALLY OPEN	SV	SOLENOID VALVE		
BCV	BALL CHECK VALVE	ESVC	ELECTRIC SOLENOID VALVE - OPEN	GV	GATE VALVE	PG	PRESSURE GAUGE	SW	SURFACE WATER		INJECTOR
BV	BALL VALVE			GST	GROUND STORAGE TANK	PIT	PRESSURE INDICATOR TRANSMITTER	SWL	SURFACE WATER LINE		
BFV	BUTTERFLY VALVE	EV	ELECTRIC VALVE	H	HEATER	PRV	PRESSURE RELIEF VALVE	TS	TEMPERATURE SWITCH		PULSATION DAMPENER
CV	CHECK VALVE			LAH	LEVEL ALARM - HIGH	PS	PRESSURE SWITCH	XT	VALVE POSITION TRANSMITTER		
CW	CHLORINATED WATER	EVNH	ELECTRIC VALVE - AMMONIA	LAL	LEVEL ALARM - LOW	SDR	SAMPLE DRAIN LINE	WL	WATER LINE		ROTAMETER
CL	CHLORINATOR	EVCL	ELECTRIC VALVE - CHLORINE	LIT	LEVEL INDICATOR TRANSMITTER	SL	SAMPLE LINE	WI	WEIGHT INDICATOR		
CBP	CHLORINE BOOSTER PUMP	FCV	FLOW CONTROL VALVE	LS	LEVEL SWITCH	WCL	WELL COLLECTION LINE				STATIC MIXER & INJECTION POINT
CG	CHLORINE GAS LINE	FE	FLOW ELEMENT	LAS	LIQUID AMMONIA SULFATE	SLS	SANITARY SEWER LIFT STATION FOR SAMPLE BYPASS FLOW				
CS	CHLORINE SOLUTION LINE	FIC	FLOW INDICATOR CONTROLLER	LASL	LIQUID AMMONIA SULFATE LINE						

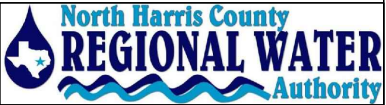
**DESIGN ENGINEER NOTES:**

A. DESIGN ENGINEER WILL UPDATE DRAWINGS AS NEEDED PER MANUFACTURER RECOMMENDATIONS.


B. V1 REFERS TO THE SYSTEM THAT HAS SEPARATE ANALYZERS FOR FREE AMMONIA AND TOTAL CHLORINE. V2 REFERS TO THE SYSTEM THAT HAS A COMBINED FREE AMMONIA AND TOTAL CHLORINE ANALYZER. DESIGN ENGINEER WILL DELETE THE DRAWINGS FOR THE SYSTEM THAT WAS NOT CHOSEN.

C. DESIGN ENGINEER WILL REMOVE V1 OR V2 FROM THE DRAWING TITLES.

- NOTES:**
- FOR TYPICAL LAS AND NaOCL(BLEACH) SYSTEM EQUIPMENT LAYOUT, SEE REF. NO. 80 & 81.
  - SEE REF. NO. 60.
  - IF BYPASS AND PRV ARE REQUIRED BY METERING PUMP MANUFACTURER, MANUFACTURER WILL PROVIDE INTERLOCK TO SHUT OFF PUMP WHEN PRV OPENS.
  - SEE REF. NO. 105



**SODIUM HYPOCHLORITE & LIQUID AMMONIA SULFATE PROCESS SCHEMATIC-V1**

APPROVED BY: 

DESIGN MANAGER

EFF. DATE: 12/22/2020

REF. NO. 76