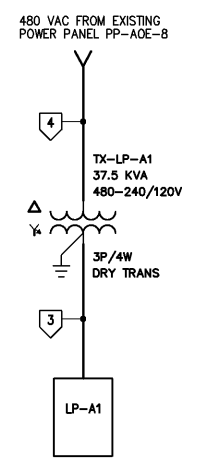


- NOTES**
- ALL RECEPTACLES IN LAB AREAS SHALL BE GFCI.
 - THE EXISTING REFRIGERATORS ARE TO REMAIN CONNECTED TO THEIR EXISTING CIRCUITS.
 - ALL EXISTING LOADS SUPPLIED FROM EXISTING LIGHTING PANELBOARDS THAT ARE NOT DEMOLISHED AS A PART OF THE LABORATORY MODIFICATIONS SHALL REMAIN IN SERVICE AFTER ALL MODIFICATIONS ARE COMPLETE.
 - THE EXISTING PP-AOE-8 IS LOCATED IN THE BASEMENT AT THE LOCATION SHOWN ON THIS DRAWING. THE EXISTING PP-AOE-8 IS A GENERAL ELECTRIC, 480VAC, 3 PHASE, 3 WIRE, 225A, TYPE NHB. THE CONTRACTOR SHALL FURNISH AND INSTALL ONE NEW 100AF/100AT CIRCUIT BREAKER IN PP-AOE-8 TO SUPPLY TX-LP-A1. THE CONTRACTOR SHALL FURNISH AND INSTALL A NEW 100AF/50AT CIRCUIT BREAKER IN PP-AOE-8 TO SUPPLY THE AUTOCLAVE BOILER.
 - THE WIREMOLD SHALL BE A NON-METALLIC SURFACE RACEWAY SYSTEM. ALL WIREMOLD COMPONENTS SHALL BE UL LISTED. WIREMOLD SHALL BE HUBBELL WALLTRACK OR EQUAL.
 - THE CONTRACTOR SHALL FURNISH AND INSTALL NETWORK/TELEPHONE CONNECTION WALLPLATES AS SHOWN ON THIS DRAWING. THE NETWORK/TELEPHONE CONNECTION WALLPLATES SHALL HAVE A SINGLE RJ-11 RECEPTACLE FOR TELEPHONE CONNECTION AND THREE RJ-45 RECEPTACLES FOR NETWORK CONNECTIONS. FOR ALL THREE NETWORK CONNECTIONS, ONE RJ-45 CONNECTION SHALL BE CONNECTED TO THE PLANT SCADA NETWORK, ONE WILL BE CONNECTED TO THE CITY NETWORK, AND THE REMAINING RJ-45 RECEPTACLE SHALL BE A SPARE. THE CONTRACTOR SHALL FURNISH AND INSTALL SPARE WIRE FROM THE SPARE RJ-45 RECEPTACLE TO THE NETWORK EQUIPMENT AREA. THE SPARE WIRE SHALL BE COILED AND BOUND AND STORED ABOVE THE CEILING ABOVE THE NETWORK EQUIPMENT. THE CONTRACTOR SHALL FURNISH AND INSTALL CATEGORY 6 NETWORK CABLE FROM EACH CONNECTION TO THE NETWORK AND TELEPHONE EQUIPMENT AREAS AS SHOWN ON THE DETAIL ON DRAWING E901. THE CONTRACTOR SHALL INSTALL THE NETWORK CABLE WITH ENOUGH SLACK SO THAT CONNECTIONS TO THE NETWORKING EQUIPMENT AND TELEPHONE EQUIPMENT CAN BE MADE WITHOUT SPLICING. EACH NETWORK AND TELEPHONE CABLE SHALL BE LABELED WITH A UNIQUE NUMBER AT BOTH ENDS. THE CABLE IDENTIFICATION SYSTEM SHALL BE A "BRADYMARKER" XC PLUS PRINTER WITH "BRADYSLEEVE" WIRE MARKING SLEEVES, OR EQUAL. THE TELEPHONE AND NETWORKING EQUIPMENT WILL BE PROVIDED BY OTHERS.

120/240 VOLTS 1Ø, 3 WIRE										LP-A1										TYPE: MOUNT: SURFACE	
										MAIN BKR 200A 2 P											
		WIRE		CKT BKR		VOLT AMPERE				WIRE		CKT BKR		VOLT AMPERE						DESCRIPTION	
DESCRIPTION				TRIP POLE NO		#A #B						TRIP POLE NO		#A #B							
CONFERENCE/ OFFICE LIGHTS				20 1 1		1650						1050 2 1		20						STORAGE LIGHTS	
OFFICE LIGHTS				20 1 3		1500						900 4 1		20						BALANCE ROOM/ LAB LIGHTS	
OFFICE LIGHTS				20 1 5		1650						960 6 1		20						BACTERIOLOGICAL LAB LIGHTS	
CHEM. LAB LIGHTS				20 1 7		1500						1350 8 1		20						CHEM. LAB LIGHTS	
RECEPTACLES LAB				20 1 9		1440						1500 10 1		20						EXISTING DISHWASHER NO.1	
FUME HOOD EXHAUST FAN				20 1 11		750						2300 12 2		30						MUFFLE FURNACE	
FREEZER				20 1 13		1000						2300 16 1		20						MUFFLE FURNACE HOOD	
ICE MAKER				20 1 15		1000						500 18 1		20						REFRIGERATOR	
FUME HOOD SUPPLY FAN				20 1 17		750						1000 20 1		20						RECEPTACLES LAB	
RECEPTACLES BACTERIOLOGICAL LAB				20 1 19		1080						1260 22 1		20						RECEPTACLES BACTERIOLOGICAL LAB	
INCUBATOR RECEPTACLE				20 1 21		1000						900 24 1		20						FUME HOOD LIGHTS AND RECEPT.	
RECEPTACLES LAB				20 1 23		1440						500 26 1		20						STORAGE/ SAMPLE/ VEST. LIGHTS	
RECEPTACLES LAB				20 1 25		1260						1200 28 1		20						EMERGENCY LIGHTS	
AUTOCLAVE				20 1 27		1500						1200 30 2		20						240VAC FUME HOOD RECEPTACLE	
RECEPTACLES STORAGE ROOM				20 1 29		540						2000 32		20							
DISHWASHER NO.2				30 2 31		2100						2000 34 1		20						SPARE	
																				SPARE	
GLASSWARE DISHWASHER				30 2 35		2100														SPARE	
																				SPARE	
SPARE				20 1 39																SPARE	
SPARE				20 1 41																SPARE	
NEMA 12 TVSS																					
				TOTAL		13490 12970						10910 10010		TOTAL							
				PHASE TOTAL		24400 22980						TOTAL LOAD									

CONDUIT AND WIRE LEGEND (NUMBERS REFERENCE THIS SHEET ONLY)	
NO.	DESCRIPTION
1	2#12, #12GND, 1/2"C
2	2#10, #10GND, 1/2"C
3	3#4/0, #4GND, 3"C
4	2#1, #6GND, 2"C
5	2#3, #8GND, 1"C



POWER PLAN
1/4"=1'-0"

<table><tr><td>DESIGNED</td><td>BRL</td></tr><tr><td>DRAWN</td><td>DJG</td></tr><tr><td>CHECKED</td><td></td></tr><tr><td>PROJ. ENGR.</td><td>DAN</td></tr><tr><td>DATE</td><td>BY</td></tr><tr><td>APPROVED</td><td></td></tr></table>	DESIGNED	BRL	DRAWN	DJG	CHECKED		PROJ. ENGR.	DAN	DATE	BY	APPROVED		<table><tr><td colspan="2">THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769</td><td colspan="2">THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649</td></tr></table>	THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769		THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649		<table><tr><td colspan="2">RECORD DRAWING</td><td colspan="2">HAZEN AND SAWYER Environmental Engineers & Scientists 4011 WestChase Blvd, Raleigh, North Carolina 27607</td></tr></table>	RECORD DRAWING		HAZEN AND SAWYER Environmental Engineers & Scientists 4011 WestChase Blvd, Raleigh, North Carolina 27607		<table><tr><td colspan="2">CITY OF ROANOKE VIRGINIA</td><td colspan="2">REGIONAL WATER POLLUTION CONTROL PLANT PROCESS TRAIN IMPROVEMENTS</td></tr></table>	CITY OF ROANOKE VIRGINIA		REGIONAL WATER POLLUTION CONTROL PLANT PROCESS TRAIN IMPROVEMENTS		<table><tr><td colspan="2">OPERATIONS/LABORATORY BUILDING MODIFICATIONS</td><td colspan="2">ELECTRICAL</td></tr><tr><td colspan="2">POWER PLAN, PANEL SCHEDULE, & WIRING DIAGRAM</td><td colspan="2">CONTRACT NUMBER C</td></tr></table>	OPERATIONS/LABORATORY BUILDING MODIFICATIONS		ELECTRICAL		POWER PLAN, PANEL SCHEDULE, & WIRING DIAGRAM		CONTRACT NUMBER C		<table><tr><td colspan="2">THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.</td><td colspan="2">DATE JANUARY 2004</td></tr><tr><td colspan="2"></td><td colspan="2">H & S JOB NUMBER 30788C</td></tr><tr><td colspan="2"></td><td colspan="2">DRAWING NUMBER E902</td></tr></table>	THE SCALE BAR SHOWN BELOW MEASURES ONE INCH LONG ON THE ORIGINAL DRAWING.		DATE JANUARY 2004				H & S JOB NUMBER 30788C				DRAWING NUMBER E902	
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