ABBREVIATIONS

A	AMPERE
AC	ALTERNATING CURRENT
ACR	CONTROL RELAY "A" (TYP)
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AI	ANALOG INPUT (PLC)
AIC	AMPERE INTERRUPTING CAPACITY
AL	ALUMINUM
AO	ANALOG OUTPUT (PLC)
ASYM	ASYMMETRICAL
ATC	AUTOMATIC TEMPERATURE CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
BFG	BELOW FINISHED GRADE
BKR	BREAKER
BOS	BOTTOM OF STEEL
C	CONDUIT
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CCF	CARTON CANISTER FILTER
CI	CONTROL INTERLOCK
CKT	CIRCUIT
CP	CONTROL PANEL
CR	CONTROL RELAY
CPT	CONTROL POWER TRANSFORMER
CT	CURRENT TRANSFORMER
CU	COPPER
DACT	DIGITAL ALARM COMMUNICATOR TRANSMITTER
DB	DIRECT BURIED
DBH	DIESEL BLOCK HEATER
DC	DIRECT CURRENT
DI	DIGITAL INPUT (PLC)
DISC	DISCONNECT
DN	DOWN
DO	DIGITAL OUTPUT (PLC)
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EG	EQUIPMENT GROUND
EH	ELECTRICALLY HELD
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EO	ELECTRICALLY OPERATED
EP	EXPLOSION PROOF CL 1 DIV 1 GR D
EPR	ETHYLENE PROPYLENE RUBBER
EQUIP	EQUIPMENT
ES	EMERGENCY STOP
EWC	ELECTRIC WATER COOLER
EWH	ELECTRIC WATER HEATER
EX	EXTERIOR
EXTG	EXISTING
F	FIELD
FA	FIRE ALARM
FAA	FIRE ALARM ANNUNCIATOR
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FC	FOOT-CANDLE
FE	FLOW ELEMENT
FIT	FLOW INDICATOR TRANSMITTER
FLUOR	FLUORESCENT
FS	FLOW SWITCH
FTR	FIN TUBE RADIATOR
FU	FUSE
FWE	FURNISHED WITH EQUIPMENT
FVNR	FULL VOLTAGE NON REVERSING
FVR	FULL VOLTAGE REVERSING
GCP	GENERATOR CONTROL PANEL
GEN	GENERATOR
GF	GROUND FAULT
GFI	GROUND FAULT CIRCUIT INTERRUPTER
GND	GROUND
HH	HAND HOLE
HID	HIGH INTENSITY DISCHARGE
HIT	HIGH INTENSITY TUNGSTEN
HOA	HAND-OFF-AUTOMATIC
HP	HORSE POWER
HPS	HIGH PRESSURE SODIUM
HTR	HEATER
HV	HIGH VOLTAGE
HVAC	HEATING VENTILATING AIR CONDITIONING
HWV	HOT WATER VALVE
HZ	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
INCAND	INCANDESCENT
JB	JUNCTION BOX
K	KILO
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPERE
KVAR	KILOVOLT-AMPERE REACTIVE
KW	KILOWATT
KWH	KILOWATT-HOUR
L	LOCAL
LA	LIGHTING ARRESTER
LCS	LOCAL CONTROL STATION
LE	LEVEL ELEMENT
LI	LEVEL INDICATOR
LIT	LEVEL INDICATOR TRANSMITTER
LP	LIGHTING PANEL
LPS	LOW PRESSURE SODIUM
LSW	LIGHT SWITCH
LS	LEVEL SWITCH =LOW, H=HIGH, LL=LOW LOW, HH=HIGH HIGH
LT	LEVEL TRANSMITTER
LTG	LIGHTING
LV	LOW VOLTAGE
MC	METAL CLAD
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CIRCUIT PROTECTOR
MFR	MANUFACTURER
MI	MINERAL INSULATED
MH	MANHOLE
MLO	MAIN LUG ONLY
MO	MECHANICALLY OPERATED
MOD	MOTOR OPERATED DAMPER
MOV	MOTOR OPERATED VALVE
MTD	MOUNTED
MTS	MANUAL TRANSFER SWITCH
MVA	MEGAVOLT-AMPERE
NC	NORMALLY CLOSED
NEG	NEGATIVE
NEU	NEUTRAL
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OH	OVERHEAD
OL	OVERLOAD
OOA	ON-OFF-AUTOMATIC
OSY	OUTSIDE STEM AND YOKE VALVE (FA SYSTEM)
P	POLE
PB	PUSHBUTTON
PC	PERSONAL COMPUTER
PE	PRESSURE ELEMENT
PF	POWER FACTOR
PH	PHASE
PIT	PRESSURE INDICATOR TRANSMITTER
PLC	PROGRAMMABLE LOGIC CONTROLLER
PNL	PANEL
PRI	PRIMARY
PT	POTENTIAL TRANSFORMER
PT	PRESSURE TRANSMITTER
PVC	POLYVINYL CHLORIDE
QI	LOAD KW INDICATOR
R	REMOTE
RGS	RIGID GALVANIZED STEEL CONDUIT
RIL	RED INDICATING LIGHT (TYP) B=BLUE, G=GREEN, A=AMBER
RSC	RIGID STEEL CONDUIT
RTD	RESISTANCE TEMPERATURE DETECTOR
RVSS	REDUCED VOLTAGE SOLID STATE
S	SURFACE
SEC	SECONDARY
SF	SUPPLY FAN
SHLD	SHIELDED CABLE
SI	SPEED INDICATOR
SN	SOLID NEUTRAL
SP	SPARE
STP	SHIELDED TWISTED PAIR
STT	SHIELDED TWISTED TRIPLET
SV3	3 WAY VALVE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
SYM	SYMMETRICAL
T	TRANSFORMER
TB	TERMINAL BLOCKS
TOS	TOP OF STEEL
TS	THERMOSTAT
TC	COOLING THERMOSTAT
TD	TEL DIALER
TDR	TIME DELAY RELAY
TE	TEMPERATURE ELEMENT
TEL	TELEPHONE
TF	FREEZE STAT
TH	HUMIDISTAT
TIT	TEMPERATURE INDICATING TRANSMITTER
TL	TEMPERATURE LOW
TOA	THERMOSTAT OUTSIDE AIR
TRANSF	TRANSFORMER
TS	THERMOSTAT
TS	TEMPERATURE SWITCH
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
UG	UNDERGROUND
UH	UNIT HEATER
UPS	UNINTERRUPTABLE POWER SUPPLY
V	VOLT
VA	VOLT-AMPERE
VAR	VOLT-AMPERE REACTIVE
VFD	VARIABLE FREQUENCY DRIVE
VPS	VACUUM PRESSURE SWITCH
W	WIRE
WH	WATT HOUR
WM	WATT METER
WP	WEATHERPROOF
XLP	CROSS LINKED POLYETHYLENE
ZSC	LIMIT SWITCH CLOSED
ZSO	LIMIT SWITCH OPEN

GROUNDING

- GROUND ROD
- EXOTHERMIC WELD CONNECTION
- BOLTED CONNECTION
- G — BARE COPPER CONDUCTOR RUN EXPOSED
- G — BARE COPPER CONDUCTOR EMBEDDED IN CONCRETE OR BURIED

SECURITY SYSTEM

	DESCRIPTION
SACP	SECURITY ALARM CONTROL PANEL
K WP	SECURITY SYSTEM FUNCTION KEYPAD WEATHERPROOF
D OH	DOOR CONTACT OVERHEAD DOOR TYPE
W	GLASS BREAK CONTACT, GLASS MOUNTED TYPE
G A	AREA GLASS BREAK DETECTOR
IR A	INFRARED INTRUDER SENSOR

POWER

	DESCRIPTION
200/3	UNFUSED SAFETY SWITCH, RATING AS NOTED POLES AMPERES
30/15/3	FUSED SAFETY SWITCH, RATING AS NOTED POLES FUSE AMPERE RATING SWITCH AMPERE RATING
1	MAGNETIC MOTOR STARTER, RATING AS NOTED NEMA SIZE
	COMBINATION TYPE MAGNETIC MOTOR STARTER, RATING AS NOTED
	PUSHBUTTON OR SELECTOR SWITCH STATION
	MAINTAINED RED MUSHROOM-HEAD EMERGENCY STOP P.B.
	SOLENOID
R	RELAY
MOD	MOTOR OPERATED DAMPER
C	LIGHTING OR POWER CONTACTOR
CB	ENCLOSED CIRCUIT BREAKER
T	THERMOSTAT
C	COOLING ONLY
F	FREEZESTAT
D	DUCT-MOUNTED
	UTILITY METER
	PANELBOARD, SURFACE MTD.
	PANELBOARD, FLUSH MTD.
	EQUIPMENT, TERMINAL, OR CONTROL CABINET
	MOTOR
T	TRANSFORMER
	PAD MOUNTED TRANSFORMER
EWH	ELECTRIC WATER HEATER
H	ELECTRICAL HANDHOLE
J	JUNCTION BOX
PS	PRESSURE SWITCH
E	ELECTRIC ACTUATED VALVE
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
P	PHOTOELECTRIC CELL

LIGHTING FIXTURES

	DESCRIPTION
37Mh	FLUORESCENT FIXTURE, 2x4 SURFACE TROFFER TYPE CIRCUIT (37) FIXTURE (M) SWITCH (h)
	FLUORESCENT FIXTURE, STRIP, OPEN REFLECTOR, ENCLOSED OR WRAPAROUND TYPE
	INCANDESCENT WALL MOUNTED FIXTURE
	INCANDESCENT CEILING FIXTURE
	INCANDESCENT LIGHT WITH GLOBE AND GUARD
	H.I.D. WALL MOUNTED FIXTURE
	H.I.D. CEILING FIXTURE
	EXIT SIGN, CEILING MOUNTED ARROW INDICATES EGRESS DIRECTION SHADING INDICATES SIGN FACE
	EXIT SIGN, WALL MOUNTED SHADING INDICATES SIGN FACE
	EMERGENCY LIGHTING BATTERY UNIT WITH 2 LAMP HEADS
	REMOTE EMERGENCY LIGHTING 1 OR 2 LAMP HEADS
	POLE MOUNTED SITE LIGHT

WIRING

	DESCRIPTION
	WIRING, CONCEALED IN FINISHED AREAS, EXPOSED WHERE PERMITTED BY SPECIFICATIONS
	WIRING INSTALLED IN OR BELOW FLOOR SLAB
LP1-2	HOME RUN TO PANEL (CKT. NO. AS SHOWN)
P101	HOME RUN (NO. REFERS TO COND. & WIRE SCHED.)
DC	DC WIRING
3C#12 W/GND, .75"C	CONDUIT AND WIRE
	CONDUIT DOWN
	CONDUIT UP

SINGLE LINE DIAGRAM

	DESCRIPTION
	SAFETY DISCONNECT SWITCH
	TRANSFORMER
CT	CURRENT TRANSFORMER
CPT	POTENTIAL TRANSFORMER
100AF / 70AF	FRAME SIZE CIRCUIT BREAKER TRIP AMPS
	SURGE CAPACITOR
	LIGHTNING ARRESTER
	COMBINATION MOTOR STARTER AND BREAKER
	AUTOTRANSFORMER-TYPE MOTOR STARTER
	REVERSING MOTOR STARTER
	TWO-SPEED TWO-WINDING MOTOR STARTER
	REDUCED VOLTAGE SOLID-STATE MOTOR STARTER
	DELTA CONNECTION
	WYE CONNECTION
	GROUND CONNECTION
5	MOTOR (HP AS SHOWN)
	GENERATOR
N E	TRANSFER SWITCH
ES	EMERGENCY STOP MUSHROOM SWITCH (RED)
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
A	METER A - AMMETER V - VOLTMETER W - WATTMETER WH - WATT HOURMETER KWH - KILOWATT HOUR VAR - VAR METER HZ - FREQUENCY METER PF - POWER FACTOR METER

SCHEMATIC DIAGRAM

	DESCRIPTION
MS	MANUAL MOTOR STARTER, O/L, RIL FRACTIONAL H.P.
CR	CONTROL RELAY
M	MOTOR CONTACTOR
	CONTACT NORMALLY OPEN
	CONTACT NORMALLY CLOSED
	OVERLOAD HEATER ELEMENT
	SINGLE POLE SINGLE THROW SWITCH
	SELECTOR SWITCH
	START PUSHBUTTON, MOMENTARY CONTACT
	STOP PUSHBUTTON, MOMENTARY CONTACT
	RED MUSHROOM-HEAD MAINTAINED-TYPE EMERGENCY STOP PUSHBUTTON
	LIMIT SWITCH
	TEMPERATURE SWITCH
	FLOAT SWITCH
	PRESSURE SWITCH
	TIMED CONTACT
R	PILOT LIGHT, LETTER INDICATES COLOR G - GREEN R - RED A - AMBER
	FUSE

WIRING DEVICES

	DESCRIPTION
	20 AMPERE, 120 VOLT DUPLEX RECEPTACLE
	GFI 20 AMPERE, 120 VOLT DUPLEX RECEPTACLE
+48"	INDICATES INCHES AFF MOUNTING HEIGHT
WP	WEATHERPROOF
IG	ISOLATED GROUND
CTR	COUNTER TOP
	20 AMPERE, 120 VOLT QUAD RECEPTACLE
	20 AMPERE, 120 VOLT SINGLE RECEPTACLE
	CLOCK OUTLET
30	SINGLE SPECIAL PURPOSE RECEPTACLE INDICATES AMPERE SIZE
	PLUGMOLD
S	SINGLE POLE WALL SWITCH
DP	DOUBLE POLE SWITCH
3	THREE WAY SWITCH
4	FOUR WAY SWITCH
P	NEON PILOT LIGHT
WP	WEATHERPROOF
K	KEY OPERATED
EP	EXPLOSION PROOF
D	DIMMER SWITCH
T	MOTOR RATED

TELEPHONE/PAGING/INTERCOM SYSTEM

	DESCRIPTION
S	PAGING SPEAKER, CEILING MTD.
	PAGING HORN, WALL MTD.
	TELEPHONE OUTLET RJ11
TD	TELEPHONE RJ11/DATA RJ45
W	WALL MOUNTED

FIRE ALARM SYSTEM

	DESCRIPTION
F	MANUAL PULL STATION
F	AUDIO/VISUAL ALARM STATION (ADA COMPLIANT)
L	VISUAL ALARM (ADA COMPLIANT)
S	SMOKE DETECTOR
H 135°	HEAT DETECTOR TEMP RATING
SD	DUCT-MOUNTED SMOKE DETECTOR, REMOTE ALARM & TEST
FACP	FIRE ALARM SYSTEM CONTROL PANEL
FI	FIROMATIC SWITCH
TS	SPRINKLER SYSTEM TAMPER SWITCH
FAA	FIRE ALARM ANNUNCIATOR
FS	SPRINKLER SYSTEM FLOW SWITCH

NEMA CLASSIFICATIONS FOR ELECTRICAL EQUIPMENT AND ENCLOSURES

(UNLESS OTHERWISE NOTED)

ROOM NO.	ROOM NAME	NEMA RATING
	HYPOCHLORITE BUILDING	
C101	STORAGE ROOM	4X
C102	CHEMICAL FEED ROOM	4X
C103	ELECTRICAL ROOM	1
C104	CL2 RESIDUAL/ANALYSIS ROOM	4X
	BISULFITE BUILDING	
D101	STORAGE ROOM	4X
D102	CHEMICAL FEED ROOM	4X
D103	ELECTRICAL ROOM	1
D104	BOILER ROOM	12
D105	TRUCK DOCK	4X
	CHLORINE CONTACT TANK	4X
	GENERAL OUTDOOR	4X

GENERAL NOTES

1. ALL CONDUIT AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE CURRENT NATIONAL ELECTRICAL CODE.

2. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT AND STRUCTURES. CONDUITS SHALL BE CONCEALED IN WALLS, AND ABOVE ANY SUSPENDED CEILINGS WHERE APPLICABLE. EXPOSED CEILING CONDUITS SHALL BE PERMITTED WHERE SUSPENDED CEILINGS ARE NOT USED. EXPOSED CONDUITS SHALL BE INSTALLED PARALLEL TO BEAMS AND WALLS.

3. CONDUITS SHALL BE PROPERLY TERMINATED WITH NEAT CONNECTIONS TO ALL ASSOCIATED EQUIPMENT.

4. CONTROL AND INSTRUMENTATION CONDUIT SIZES AND NUMBER OF CONDUCTORS ARE TO BE DETERMINED FROM SCHEMATIC DIAGRAMS, INSTRUMENTATION DIAGRAMS, AND/OR SPECIFICATIONS, IF NOT DIRECTLY SHOWN ON POWER PLANS. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL AND INSTRUMENTATION EQUIPMENT. MODIFICATIONS REVIEWED BY THE ENGINEER WITH NO EXCEPTIONS TAKEN, MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND SPECIFICATIONS. EACH CONTROL AND INSTRUMENTATION CONDUIT SHALL ALSO CONTAIN 10 PERCENT SPARE CONDUCTORS, WITH A MINIMUM OF TWO SPARES, UP TO THE LIMIT OF CONDUIT FILL AS SPECIFIED BY THE NATIONAL ELECTRICAL CODE. INSTRUMENTATION SHIELDED CABLES SHALL BE INSTALLED IN RGS CONDUIT. SEPARATE FROM OTHER POWER WIRING.

5. EACH CONDUIT TO CARRY GROUND WIRE(S) ACCORDING TO SPECIFICATION #16450, IN ADDITION TO NUMBER OF CONDUCTORS SHOWN ON DRAWINGS OR PER NOTE 4 ABOVE. ALL GROUNDING MUST CONFORM TO ARTICLE 250 OF CURRENT NATIONAL ELECTRICAL CODE.

6. MINIMUM CONDUIT SIZE SHALL BE .75"C. MINIMUM POWER WIRING SHALL BE 2C#12 AWG WITH GROUND, AND 2C#14 FOR CONTROL. INSTRUMENTATION CABLE SHALL BE 2C#16 TWS AND 3C#16 TWS FOR SPEED POTENTIOMETER. LIGHTING, RECEPTACLE, AND HVAC MAY BE .5" CONDUIT INSTALLED PER NEC. PROVIDE CONDUIT AND WIRING AS INDICATED.

7. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO FINISHED FLOOR SHALL NOT EXCEED 6'-6".

8. ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INSIDE OF EXTERIOR WALLS ABOVE GRADE, OR IN OTHER LOCATIONS CONSIDERED AS DAMP, SHALL BE MOUNTED TO MAINTAIN A 1/4" AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL.

9. ELECTRICAL EQUIPMENT LOCATIONS ARE APPROXIMATE ONLY. COORDINATE LOCATIONS WITH PROCESS PIPING, STRUCTURAL, AND HEATING AND VENTILATION DRAWINGS. CONTRACTOR SHALL COORDINATE MANUFACTURERS EQUIPMENT REQUIREMENTS WITH SPACE AVAILABLE. FINAL CONTROL PANEL LOCATIONS SHALL BE FIELD COORDINATED.

10. ALL FIELD CONTROL CONDUCTORS WILL TERMINATE AT INDIVIDUAL TERMINAL BLOCKS WITHIN THE CONTROL ENCLOSURE. SERIES AND PARALLEL CONNECTION OF FIELD CONTROL CONDUCTORS WILL BE MADE ONLY AT CONTROL PANEL OR MOTOR CONTROL CENTER TERMINAL BLOCKS.

11. GROUND ALL CONDUCTOR SHIELDS AT PANEL ONLY - DO NOT GROUND SHIELDS AT BOTH ENDS.

12. AT THE FOLLOWING LOCATIONS, UNLESS OTHERWISE NOTED, PULL, JUNCTION, TERMINAL, SWITCH, AND OUTLET BOXES SHALL BE CAST IRON WHERE STEEL CONDUIT IS TERMINATED; OR SHALL BE CAST ALUMINUM WHERE ALUMINUM CONDUIT IS TERMINATED:

A - AT LOCATIONS WHERE VAPORTIGHT LIGHTING FIXTURES AND/OR WATERTIGHT RECEPTACLES ARE INDICATED.
B - AT LOCATIONS ON OR IN ALL OUTSIDE WALLS.
C - OUTDOORS

13. NAMEPLATES SHALL CONFORM STRICTLY TO INSTRUCTIONS IN THE ELECTRICAL SPECIFICATIONS AND ON THE DRAWINGS. THE FOLLOWING SHALL HAVE NAMEPLATES:

A - ALL MAIN BREAKERS AND TIE BREAKERS.
B - ALL COMPARTMENTS OF MOTOR CONTROL CENTERS EXCLUDING UNUSED COMPARTMENTS

C - ALL LOCAL CONTROL STATIONS AT OR NEAR EQUIPMENT.
D - ALL PANELBOARDS.
E - GANGED LIGHT SWITCHES.

14. PIPE SLEEVES FOR CONDUITS PASSING FROM NON-HAZARDOUS AREAS TO HAZARDOUS AREAS SHALL HAVE CAULKING APPLIED TO MAKE THE INSTALLATION GASTIGHT.

15. COORDINATE ELECTRICAL DEVICES WITH LAB EQUIPMENT AND FURNITURE ARRANGEMENT, WHERE APPLICABLE.

16. COORDINATE ELECTRICAL DEVICES WITH OFFICE/KITCHEN EQUIPMENT ARRANGEMENT, WHERE APPLICABLE.

17. CONTRACTOR SHALL PROVIDE ALL DISCONNECTS AND SERVICE RECEPTACLES FOR HVAC AS REQUIRED BY NEC.

18. CONTRACTOR SHALL PROVIDE ALL CONDUIT, WIRING, EQUIPMENT, AND CONTROL DEVICES AS INDICATED BY SCHEMATICS, SINGLE LINE DIAGRAMS, SCHEDULES, PLANS, SPECIFICATIONS, AND VENDOR DOCUMENTATION TO PROVIDE A COMPLETE WORKING SYSTEM. SINCE NOT ALL HOME RUNS ARE SHOWN ON PLAN, THE CONTRACTOR SHALL REFERENCE ALL SINGLE LINE AND SCHEMATIC DIAGRAMS, SCHEDULES, AND VENDOR DOCUMENTATION TO DETERMINE CONDUIT AND WIRING REQUIREMENTS.

19. PROVIDE CONDUIT FREEZE EXPANSION FITTINGS AT EACH BUILDING, TANK, STRUCTURE, AND FIXED POINT FOR ALL EXTERIOR CONDUIT SYSTEMS.

20. EXACT NUMBER, LOCATION, HORSEPOWER, VOLTAGE, AND PHASE OF ALL MOTORS AND DEVICES ASSOCIATED WITH THE CHEMICAL FEED SYSTEMS, AND OTHER EQUIPMENT SYSTEMS AS APPLICABLE, PROVIDED UNDER THIS CONTRACT SHALL BE COORDINATED WITH THE ACTUAL EQUIPMENT SUPPLIER. CONDUIT AND WIRING TO BE PROVIDED SHALL BE ADJUSTED ACCORDINGLY AT NO ADDITIONAL COST TO THE OWNER.

21. PROVIDE CONCRETE HOUSEKEEPING PADS (4" HIGH) UNDER FLOOR MOUNTED ELECTRICAL AND INSTRUMENTATION EQUIPMENT. PROVIDE SUBMITTAL SKETCH FOR ENGINEER REVIEW.

22. COORDINATE ELECTRICAL EMBEDMENTS WITH STRUCTURAL.

23. CONTRACTOR SHALL PROVIDE A COMPLETE WORKING OPERATING SYSTEM IN ACCORDANCE WITH ALL DRAWINGS, SPECIFICATIONS, CODES AND STANDARDS.

24. HANDHOLES SHALL BE PREMANUFACTURED ASSEMBLES SEPARATED FOR 480V AND 120V POWER. POWER CONDUIT UNDERGROUND SHALL BE SCHEDULE 80 PVC WITH RGS FITTINGS ABOVE GROUND. RGS FITTINGS SHALL EXTEND 2'-6" BELOW GROUND. INSTRUMENTATION AND CONTROL HANDHOLES SHALL BE SEGREGATED FOR INSTRUMENTATION AND 120 VOLT CONTROL.

NOTE:

1. ALL GENERAL NOTES, SYMBOL LISTS, AND ABBREVIATIONS SHALL BE CONSIDERED AS APPLICABLE TO ALL ELECTRICAL DRAWINGS FOR THIS PROJECT. SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY AND DO NOT INDICATE THEIR INCORPORATION IN THE DESIGN.

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PROGRESS PRINTS
ISSUED FOR REVIEW: 12-15-04
ISSUED FOR BIDDING: 2-18-05

VAULT LOCATION: FF 36
LAST WORKED ON:

FILENAME:

NO	REVISIONS	APP'D	DATE

DRAWN BY SLM
CHECKED BY DWL/PFB
DATE 2-18-05
APPROVED BY DWL/PFB
DATE 2-18-05
BOOK NO. -
PROJECT NO. 10301C
SCALE AS NOTED

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PORTLAND, MAINE
EAST END WWTF DISINFECTION AND DECHLORINATION SYSTEMS UPGRADE

ELECTRICAL LEGEND, ABBREVIATIONS AND NOTES

DWG E-1
25 OF 33