GENERATOR SPECIFICATIONS		ELECTRICAL SY	MBOL LEC
A. NATURAL GAS FUEL ENGINE DRIVEN GENERATOR SET SHALL BE KOHLER (BASIS OF DESIGN), CUMMINS, GENERAC, OR EQUIVALENT.	Ь	110V RECEPTACLE	ЦШ
× STANDBY POWER RATED 400 KW/500 KVA AT 80% POWER FACTOR. × 208/120 VOLTS, 3 PHASE, 4 WIRE, 60HZ, 1800 RPM.	∯	QUAD-PLEX RECEPTACLE	
× GENERATOR SET SHALL INCLUDE ENGINE, ALTERNATOR AND CONTROLLER FURNISHED BY A SINGLE SUPPLIER AND U.L. 2200 LISTED AS A COMPLETE ASSEMBLY INCLUDING ALL STANDARD EQUIPMENT.	₩P	WATER PROOF WITH WR TYPE RECEPTACLE	
× LEVEL 2 SYSTEM. × MAXIMUM INSTANTANEOUS VOLTAGE DIP – 10% OR LESS.	∯ GFI	GROUND FAULT CIRCUIT	
<ol> <li><u>KOHLER INTEGRATED CONTROL SYSTEM, (U.L. 508 LISTED) INCLUDING:</u> <ul> <li>a. AC VOLTS, AMPS, HERTZ, KW, POWER FACTOR AND PERCENT LOAD READOUTS.</li> <li>b. COMPLETE ENGINE MONITOR AS REQUIRED BY N.F.P.A. 110.</li> <li>c. OVER/UNDER VOLTAGE MONITORING AND SHUT DOWN.</li> </ul> </li> </ol>	₩	RECEPTACLE MOUNTED ABOVE COUNTER VERIFY MOUNTING HEIGHT WITH OWNER/ARCHITECT PRIOR TO ROUGH IN	
d. OVER CURRENT AND SHORT CIRCUIT MONITORING AND SHUT DOWN.	۲	SPECIAL PURPOSE OUTLET (VERIFY)	
<ul> <li>2) <u>ENGINE</u>:         <ul> <li>a. ENGINE JACKET WATER HEATER THERMOSTAT CONTROLLED, U.L. LISTED, RATED 2000 WATTS AT 208/240/480 VOLTS, SINGLE PHASE.</li> </ul> </li> </ul>	$\Phi$	FLOOR RECEPTACLE WITH COVER PLATE, FLUSH WITH FLOOR	
b. ELECTRONIC/ISOCHRONOUS GOVERNOR. c. FLEXIBLE FUEL LINES.	$( \bigoplus)$	CEILING RECEPTACLE	\$
d. LOW PROFILE CRITICAL GRADE EXHAUST SILENCER WITH STAINLESS, FLEXIBLE EXHAUST COUPLINGS. e. LEAD ACID STARTING BATTERIES, CABLES AND RACKS AS REQUIRED BY N.F.P.A. 110.	МФ	FLOOR RECEPTACLE/TELE/FAX/DATA WITH COVER PLATE, FLUSH WITH FLOOR	\$3 \$4
3) <u>ALTERNATOR:</u> a. STANDARD 12 LEAD RECONNECTABLE ALTERNATOR.		FLOOR TELE/FAX/DATA PORT WITH COVER PLATE, FLUSH WITH FLOOR	\$D
<ul> <li>b. CLASS "H" INSULATION, 125°C TEMPERATURE RISE.</li> <li>c. PERMANENT MAGNET EXCITER.</li> <li>d. ALTERNATOR SET BREAKERS.</li> </ul>		TELE/FAX/DATA PORT **	\$m
1. BREAKER G-1: 1600 AMP/3P CIRCUIT BREAKER WITH SOLID STATE TRIP UNIT INCLUDING LONG TIME.	$\bigtriangleup$	TELEPHONE (LAND LINE) 米米 MOUNTED AT +5'AFF	۲
SHORT TIME, AND INSTANTANEOUS (LSI), DELAYS AND TRIP FUNCTIONS, AND GROUND FAULT ALARM.	$\mathbf{v}$	CEILING TELE/FAX/DATA PORT **	CR
5) <u>ENVIRONMENTAL REQUIREMENTS</u> a. MUST COMPLY WITH CURRENT EPA TIERED LEVELS. b. CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE ENVIRONMENTAL AND EMISSION REDUCTION	TV	TELEVISION JACK **	A
SYSTEMS, INCLUDING BUT NOT LIMITED TO, CATALYTIC CONVERTERS. c. CONTRACTOR/MANUFACTURER SHALL PREPARE AND PROVIDE COMPLETE PERMITTING APPLICATIONS	J	JUNCTION BOX	IG
FOR BUILDING AND ENVIRONMENTAL AGENCY APPROVALS.		POWER POLE	ASW
<ul> <li>6) <u>ACCESSORIES AND SERVICES</u> <ul> <li>a. FLOAT EQUALIZER TYPE BATTERY CHARGER WITH ALARMS AS REQUIRED BY N.F.P.A. 110.</li> <li>b. LEAD ACID STARTING BATTERIES, CABLES AND RACKS AS REQUIRED BY N.F.P.A. 110.</li> <li>c. BREAK GLASS STATION FOR EMERGENCY SHUT-DOWN, ONE IN THE MAIN LOBBY OFFICE AREA,</li> </ul> </li> </ul>	JP	RECESSED JUNCTION BOX FOR SYSTEM FURNITURE POWER	CM AC
ONE IN EACH OF THE MAIN ELECTRICAL ROOMS, AND ONE AT THE GENERATOR. d. START UP AND ACCEPTANCE TESTING AS REQUIRED BY N.F.P.A. 110 AND CONDUCTED BY FACTORY TRAINED TECHNICIANS.	J <sup>T/D</sup>	RECESSED JUNCTION BOX FOR SYSTEM FURNITURE TELEPHONE/DATA	UC
e. SPRING TYPE VIBRATIONS ISOLATORS, HEAVY DUTEY, GREATEST SOUND/VIBRATION ATTENUATION. f. 6 SETS OF OPERATIONS, PARTS AND INSTALLATION MANUALS.	(EF)	EXHAUST FAN	AFF
g. ONE YEAR, 1500 HOUR COMPREHENSIVE WARRANTY. h. REMOTE ANNUNCIATOR AS REQUIRED BY N.F.P.A. 110. (LOCATE PER DRAWINGS)	T	THERMOSTAT	VIF TGB
<ul> <li>i. CERTIFIED FACTORY TESTING.</li> <li>j. ALL ACCESSORIES REQUIRED TO HAVE A COMPLETE AND OPERATIONAL SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.</li> </ul>	•	REMOTE ALARM TEST STATION	<b>TT</b> (E)
k. PROVIDE SIGNED AND SEALED HOLD DOWN CALCULATIONS, HVHZ ANALYSIS AND PRODUCT DATA, ALL REQUIRED N.O.A.'S AND ASSEMBLY WIND LOAD CALCULATIONS.	(S) <sup>DD</sup>	SMOKE DUCT DETECTOR	()
I. CONTRACTOR TO PROVIDE SPECIALTY ENGINEER SERVICES TO DESIGN ANY BULK FUEL OIL SYSTEM PIPING, FUEL FILL STATIONS, PUMPING,	T	STEP DOWN TRANSFORMER	(RE)
CONTROLS. SUBMIT AS SHOP DRAWING SUBMITTAL, SIGNED AND SEALED BY CONTRACTOR'S DELEGATED ENGINEER.	[CCP]	CENTRAL CONTROL PANEL	NO SYMBOL
m. PROVIDE MANUFACTURER PROJECT SPECIFIC LOAD MODELING CALCULATIONS VALIDATING PERFORMANCE REQUIREMENTS AND SELECTION OF GENERATOR SYSTEM. CONTRACTOR SHALL VERIFY ALL FIELD CONTROLLER, HORSEPOWER, LOAD DATA, AND SUBMIT TO GENERATOR MANUFACTURER FOR LOAD MODELING CALCULATIONS AND EQUIPMENT SELECTION.		ALL SYMBOLS MAY NOT BE USED FOR TH OVIDE 1"C WITH PULL WIRE UNLESS OTHER	

### **AUTOMATIC RECEPTACLE CONTROL NOTE - ASHRAE 90.1**

CONTRACTOR TO PROVIDE ALL DUPLEX RECEPTACLES WITHIN THE PROJECT (PRIVATE OFFICES, OPEN OFFICES, COMPUTER CLASSROOMS) AS SPLIT-WIRE TO ENSURE TOP RECEPTACLE WILL BE SWITCHED AND IS WIRED THRU LIGHTING RELAY PANEL OR A TIME SWITCH, TO COMPLY WITH SECTION 8.4 OF ASHRAE 90.1 STANDARD, INCLUDING SECTION 8.4.2, AUTOMATIC RECEPTACLE CONTROL, APPLICABLE SECTIONS OF FLORIDA BUILDING CODE EC C405.7. THE BOTTOM RECEPTACLE SHALL REMAIN LIVE. PROVIDE FACTORY IMPRINTED RECEPTACLES WITH PERMANENT LABELING (LEVITON SERIES OR PPROVED EQUIVALENT)

## SPECIAL PURPOSE OUTLET NOTES

CONTRACTOR IS CAUTIONED TO OBTAIN COMPLETE EQUIPMENT PRODUCT DATA FROM ARCHITECT, PRIOR TO BIDDING AND ROUGH-IN. 2. CONTRACTOR SHALL PROVIDE NEMA OUTLET TO MEET PROJECT AND EQUIPMENT REQUIREMENTS. . CONTRACTOR TO PROVIDE MATCHING NEMA CAP/CORD AS REQUIRED.

NOTES:

## **UL LISTING AND NRTL CERTIFICATIONS NOTE**

CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE DOCUMENTATION AND CERTIFICATIONS FOR ANY EQUIPMENT THAT HE PROPOSES WITH A NRTL (NATIONALLY RECOGNIZED TESTING LAB) LISTING AND LABELING EQUIVALENT TO THE BASIS OF DESIGN UL LISTING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ACCEPTABILITY BY THE LOCAL AHJ AND AGENCIES FOR THE NRTL LISTING AND CERTIFICATION FOR THE PRODUCTS HE PROPOSES AND DEMONSTRATE SUCH AS PART OF THE PRODUCT DATA SUBMISSION AND INSTALLATION.

AUTOMATIC TRANSFER SWITCH SPECIFICATIONS			
MANUFACTURER - KOHLER OR EQUIVALENT ATS = 120/208V 3Ø,4W 1600A MIN, WCR = 65,000A UMBRELLA RATING SERVICE ENTRANCE RATED CIRCUIT BREAKER TYPE TRANSFER SWITCHES ARE NOT ACCEPTABLE. <u>MICROPROCESSOR CONTROLLER</u> -LCD DIGITAL VOLTAGE -LCD DIGITAL COUNTER -LCD DIGITAL FREQUENCY AND ROTATION METERS -ADJUSTABLE TIME DELAYS; TDES, TDNE, TDEN AND TDEC -OVER/UNDER FREQUENCY AND VOLTAGE MONITOR FOR EMERGENCY AND NORMAL SERVICE -TEST SWITCH, MAINTAINED TYPE TO SIMULATE NORMAL SOURCE FAILURE -TOUCH PAD FOR PROGRAMMING CONTROLLER -STATISTICAL SYSTEM TO MONITOR NUMBER OF TRANSFERS, FAILURES FROM POWER OUTAGES, TOTAL NUMBER OF DAYS NORMAL AND EMERGENCY AVAILA AND EVENT LOG UP TO 99 PAST EVENTS (TYPE OF EVENT AND REASON) -LED INDICATING LIGHTS FOR SOURCE AVAILABLE AND SOURCE SUPPLYING -NO LOAD OR LOAD STANDARD EXERCISER WITH OVERRIDE			
	GENERATOR NOTES		
I. GENERATOR EXHAUST SHALL NOT BE INSTALLED WITHIN 10'-0" OF ANY OPENING-OPERA SOFFIT VENT. 2. THE GENERATOR EXHAUST MAY NOT DISCHARGE ON THE ADJACENT PROPERTY. 3. DECIBEL LEVEL SHALL NOT EXCEED MIN. LEVEL AT NEAREST PROPERTY LINE, AS ESTABI DRDINANCE. 4. MOUNTING & ANCHORAGE FOR WIND LOADS-BY OTHERS. SEE NOTE # 10.	MATERIALS FOR PERIMETER STRUCTURAL MUNICIPALITY REQUIREMENTS AND NEC AR		

# ELECTRICAL SYMBOL LEGEND FUSE DISCONNECT ELECTRICAL CIRCUIT BREAKER FACTORY INSTALLED DISCONNECT ELECTRICAL PANEL ELECTRICAL METER LIGHTING CONTROL TIME CLOCK/PANEL TELEPHONE BOARD SWITCH \$3 3-WAY SWITCH \$4 4-WAY SWITCH SD DIMMER SWITCH \$m MANUAL MOTOR STARTER

NO SYMBOL NEW

SENSOR DOOR OPENER/CARD READER \*\* BY OTHERS ALARM BY OTHERS 米 米

ISOLATED GROUND

PUSH BUTTON

ABOVE SHOW WINDOW

CEILING MOUNTED

ABOVE COUNTER UNDER COUNTER

ABOVE FINISHED FLOOR

VERIFY IN FIELD

TELEPHONE GROUND BAR

EXISTING - COORDINATE REPLACING COVER PLATES W/ OWNER/ARCH

RELOCATED EXISTING - COORDINAT REPLACING COVER PLATES W/

ITH PULL WIRE UNLESS OTHERWISE NOTED. STUB UP 6" ABOVE CEILING.

OWNER/ARCH

RECEPTACLES ARE TO BE MOUNTED AT 18" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED. SWITCHES ARE TO BE MOUNTED AT 48" ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.

INDICATE KW, KVA,

+ SUPPLYING ELEVATOR(S) POSITION HEDULES

## CONTRACTOR GENERAL CONDITIONS NOTES

- 1. RFI'S: CONTRACTOR SHALL SUBMIT RFI'S WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND. 2. SUBMITTALS AND PRODUCT DATA: CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMISSIONS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND
- INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT. 3. SHOP DRAWINGS: CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE
- CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT. 4. LAYOUT AND COORDINATION DRAWINGS: CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS. PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL CONFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS
- WILL FIT, FUNCTION AS INTENDED, BE FREE OF INTERFERENCES AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES. 5. DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.
- 6. SUBSTITUTIONS: A. CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS.
- B. PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM. PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN
- C. PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION, INCLUDE INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT
- D. PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPTION, AFTER THOROUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACTOR DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED.
- E. CONSULTANT'S EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR OR APPROVED BY THE OWNER SHALL BE COMPENSATED TO THE CONSULTANT BY THE CONTRACTOR.
- 7. AS-BUILT DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND OWNER AT PROJECT CLOSEOUT. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.
- 8. INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS- CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

## **KITCHEN NOTES**

CONTRACTOR TO VERIFY ALL KITCHEN ELECTRICAL REQUIREMENTS PRIOR TO BID/CONSTRUCTION. VERIFY CONNECTION TYPE FOR ALL EQUIPMENT ITEMS & REFRIGERATION EQUIPMENT PRIOR TO BID & INSTALLATION.

2. VERIFY TYPE OF ELECTRICAL CONNECTION WITH MANUFACTURER'S SPECS PRIOR TO INSTALLATION. VERIFY MOUNTING HEIGHTS OF EQUIPMENT'S ELECTRICAL OUTLETS WITH MANUFACTURER'S SPECS PRIOR TO INSTALLATION. 3. ALL ITEMS UNDER HOOD THAT REQUIRE ELECTRICAL CONNECTION TO HAVE

SHUNT TRIP BREAKERS. SEE HOOD DETAIL. 4. ELECTRICAL DEVICES SHALL NOT BE IN THE AIR STREAM OF THE HOOD

EXHAUST. 5. ALL 110V, 15A AND 20A, KITCHEN SERVICE RECEPTACLES ARE TO BE GFCI PROTECTED PER NEC 210.8(B)(2), PROVIDE GFCI PROTECTION AT BREAKER FOR ALL RECEPTACLES LOCATED UNDER THE HOOD. ALL RECEPTACLES AND JUNCTION BOXES THAT HAVE HEIGHT REQUIREMENTS ARE MEASURED ABOVE FINISHED FLOOR.

5. THE HOODS ARE PROVIDED BY OTHERS - CONTRACTOR TO VERIFY ELECTRICAL & ANSUL REQUIREMENTS WITH HOOD DRAWINGS PRIOR TO BID/CONSTRUCTION.

7. VERIFY VOLTAGE OF ALL KITCHEN EQUIPMENT PRIOR TO ORDERING.

# FLOOD ZONE

CONTRACTOR TO CONFIRM WITH ARCHITECT ALL FLOOD ZONE LEVELS, BFE AND DFE DESIGN DATUMS CONTRACTOR SHALL INSTALL ALL SYSTEMS ABOVE FLOOD DATUMS.

**GENERAL ELECTRICAL NOTES** 

- DO NOT SCALE THE ELECTRICAL DRAWING. REFER TO THE ARCHITECTURAL PLAN EXACT LOCATION OF ALL EQUIPMENT AND CONFIRM WITH OWNERS REPRESENTAT SHALL REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR PROJECT COORD
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EDITIONS CURRENTLY ADOP AUTHORITIES HAVING JURISDICTION OF THE FOLLOWING: THE NATIONAL ELECTRIC NFPA 72, NFPA 75, THE FIRE PREVENTION CODE INCLUDING NFPA 1 & NFPA 101, NFF AND THE FFPC.
- UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER, WITH "THHN" II #10 AND SMALLER. CONDUCTORS LARGER THAN #10 SHALL HAVE "THWN" INSULA CONDUCTORS IN WET LOCATIONS MUST HAVE "THWN" INSULATION. ALL CONDUCT SMALLER MAY BE SOLID. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED MUST COMPLY WITH ARTICLE 310 OF THE N.E.C.
- OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS. 5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK MAKE, QUICK
- ENCLOSURES AS REQUIRED BY EXPOSURE. THESE PLANS DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION, THE CONTR
- TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING
- THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDED A ARTICLE 250, NATIONAL ELECTRICAL CODE. THE GROUNDING SYSTEM SHALL BE TH PROVIDED TO MEASURE A MAXIMUM OF 5 OHMS. PROVIDE A COPY OF THE TEST RE
- 8. ALL MATERIALS SHALL BE NEW AND SHALL BEAR U.L. LABELS WHERE APPLICABL 9. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A WORKMANSHIP MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AN ENGINEER/ARCHITECT MUST BE A CONDITION OF THE SUBCONTRACTOR.
- 10. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF COMPANY, TELEPHONE COMPANY, AND BROADBAND PROVIDER.
- 11. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE PROVIDE CIRCUITS TO SUIT JOB CONDITIONS, BALANCE LOADS ON EACH PHASE.
- SEE NOTES ON PLANS FOR OTHER REQUIREMENTS.
- 13. FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS CALLED FOR ON PLANS OWNFR
- 14. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE OF CONSTRUCTION.
- 15. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHAR INCLUDE REPLACEMENT OR REPAIR OF ANY PHASE OF THE INSTALLATION WHICH N 16. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC
- PROPERTY DAMAGE FOR THE DURATION OF THE WORK. 17. CHECK ALL EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND CURRENT BEFORE CON AND START UP.
- 18. ELECTRICAL CONTRACTOR SHALL CHECK AND VERIFY EQUIPMENT FURNISHED AGAI OR INTENDED AND REVISE BRANCH CIRCUITS AS MAY BE REQUIRED WITH PRIOR AP ENGINEER/ARCHITECT.
- ALL SYSTEMS AND ROUGH-IN SHALL BE CONCEALED IN FINISHED AREAS. COORDIN
- 20. THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH EQUIPMENT SPECIFIED BY DIVISION 16 AND OTHER DIVISIONS. WHERE THE CONTRA SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUB ACCEPTED BY THE A/E AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORREC ELECTRICAL SYSTEM NECESSARY IN ORDER TO ENSURE A COMPLETE AND OPERA OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DECISI PRODUCTS OR MODIFY DESIGN REQUIRING A/E SERVICES, THE A/E RESERVES THE F COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.
- 21. CONTRACTOR SHALL PROVIDE A CONTROLS TRADE SUBCONTRACTOR TO DESIGN AN CONTROLS TO MEET THE PROJECT REQUIREMENTS.

# AIR CONDITIONING EQUIPMENT AND CONTROLS SPECIFICATION

- ELECTRICAL CONTRACTOR SHALL INSTALL ALL CONTROL RACEWAY (CONDUIT), WIF CONNECTIONS FTC. IN ACCORDANCE WITH WIRING DIAGRAMS ON AIR EQUIPMENT. 2 A/C / FLECTRICAL PLANS OR DIAGRAMS FLIRNISHED BY MANUFACTURER OF THE F
- ALL POWER WIRING FOR THE AIR CONDITIONING EQUIPMENT SHALL BE FURNISHED, CONNECTED UNDER THIS SECTION OF THE SPECIFICATION. 4. MECHANICAL CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR ALL AIR CONDIT
- ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONNECTIONS TO AIR CONDITIONING MANUFACTURERS SPECIFICATIONS. AIR CONDITIONING EQUIPMENT INCLUDES CONDENSER, COMPRESSOR AND FAN, FAN (
- ELECTRICAL STRIP HEATER, THERMOSTAT, ETC.

# **VOLTAGE DROP NOTE**

THE CONTRACTOR, AS PART OF HIS PRICING AND BIDDING, SHALL INCLUDE ALL LABOR, MA AND TERMINATIONS INCLUDING FPL AND UTILITY REQUIREMENTS AND APPROVALS FOR A TERMINATIONS, TO SATISFY THE PROJECT REQUIREMENTS. IT IS SOLELY THE CONTRACTO VERIFY AND INCLUDE ALL HIS BRANCH CIRCUIT, FEEDER, AND SERVICE CONDUCTOR CONDU LENGTHS AND ROUTING BASED ON HIS PROPOSED INSTALLATION MEANS AND METHODS. AS THE BASIS OF DESIGN LENGTHS, ARE MERELY AN APPROXIMATION BY THE CONSULTAI SHALL USE THOSE BASIS OF DESIGN CONDUCTOR LENGTHS AND WIRING SIZES AS THE. MIN REQUIREMENTS FOR THE PROJECT BIDDING. THE CONTRACTOR, PRIOR TO BIDDING, SHALL PROPOSED LENGTHS, MAKE ANY AND ALL ADJUSTMENTS AS MAY IMPACT THE ELECTRIC. EQUIPMENT FOR CODE COMPLIANCE AND CONSTRUCTABILITY, AND DOCUMENT ALL PROPOS ADJUSTMENTS TO THE ARCHITECT AS PART OF HIS BID RESPONSE. THE CONTRACTOR SH SCALED PROPOSED ROUTINGS FOR SERVICES AND FEEDERS, QUANTITIES AND CONDUCTOR BUILDING FOR RACKING, DUCTBANK CROSS SECTIONS FOR CLEARANCES AND COORDINATE INTERFERENCES, ETC. CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION TO THE ARCHITI LATER THAN 3 WEEKS AFTER NOTICE TO PROCEED.

ALL KITCHEN EQUIPMENT, INCLUDING HOODS & WALK IN COOLER/FREEZE SPECIFICATIONS TO BE VERIFIED BY CONTRACTOR DURING BIDDING PROC EQUIPMENT REQUIREMENTS MAY RESULT IN MODIFICATIONS TO MECHANI ELECTRICAL. AND PLUMBING PLANS.

KITCHEN HOOD UNDER SEPARATE PERMIT, COORDINATE ALL REQUIREMEN HOOD COMPANY.

NUFACTURER SHALL PROVIDE ALL DESIGN, DRAWINGS, LABOR, AND DECKING OR MAINTENANCE ACCESS PLATFORM TO SATISFY LOCAL RTICL 404-ACCESSIBILITY AND GROUPING. DESIGN AND DRAWINGS TURAL ENGINEER. PROVIDE SHOP DRAWING SUBMISSIONS DETAILING THE

IGAGE AN INDEPENDENT STRUCTURAL ENGINEER P.E. TO DESIGN THE AGE TO MEET THE PROJECT REQUIREMENTS. THE STRUCTURAL ENGINEER MENTS, CALCULATIONS, DRAWINGS AND ASSOCIATED RVICES. THE STRUCTURAL ENGINEER SHALL PROVIDE COMPLETE DESIGN N, ANY REQUIRED STRUCTURAL PADS AND/OR STEEL, ANY REQUIRED NFRASTRUCTURE, WIND RESISTANCE CALCULATIONS AND HOLD DOWN N MUST PROVIDE A PROPER FOUNDATION TO SUPPORT THE GENERATOR CE AND TO PREVENT DAMAGING OR ANNOYING LEVELS OF VIBRATION ING STRUCTURE. IN ADDITION, THE INSTALLATION SHOULD ASSURE THAT THE GENERATOR SET DOES NOT ALLOW VIBRATION FROM THE GENERATOR PORTION OF THE EQUIPMENT OR BUILDING.

> PRIOR TO SUBMITTING THE BID, **INFORM THE ARCHITECT AND THI** THE EXISTING CONDITIONS AND THE ENGINEER AND THE ARCHITE FROM VERIFIABLE EXISTING CON **NO CHANGES SHALL BE MADE TO RECORD. ALL CHANGES SHALL BE** NOT FOR BID UNTIL PERMIT HAS

	ELECTRICAL SHEET INDEX	7 SIXTH STREET FLORIDA 33401 gliddenspina.com FL Lic. # AA26002399
N AND ELEVATIONS FOR	SHEET# DESCRIPTION	207 SIXTH S 207 SIXTH S WEST PALM BEACH, FLORIDA ph : 561.684.6844 • gliddenspi FL Lic. # AA2 i g n
ATIVES. CONTRACTOR ORDINATION.	E0.1 ELECTRICAL NOTES, LEGEND, & SPECS	207 SI H, FLC
OPTED BY THE LOCAL ICAL CODE (NFPA 70), NFPA 110, AND THE FBC,	E0.2 LIGHTING FIXTURE SCHEDULE, LEGEND, & NOTES	2 6844
NIFA IIV, AND THE FBC,	EPH1.1 SITE PHOTOMETRY PLAN	2 PALM BEAC <sup>1</sup> 561.684.6844
' INSULATION FOR SIZE LATION. ALL ICTORS #10 AND	ES1.1 SITE ELECTRICAL PLAN	T PAI
DED. ALL CONDUCTORS	E1.1 FIRST FLOOR POWER PLAN	
TH THREADED HUBS IN	E1.2 SECOND FLOOR POWER PLAN	De s
K BREAK, WITH	E2.1 FIRST FLOOR LIGHTING PLAN E2.2 SECOND FLOOR LIGHTING PLAN	erior AR13419
TRACTOR IS EXPECTED	EPH2.1 FIRST FLOOR PHOTOMETRY PLAN	+ + +
ND MEET ALL G ORDER.	EPH2.2 SECOND FLOOR PHOTOMETRY PLAN	A. Spina
AS REQUIRED IN TESTED AND SHALL BE	ER1.1 ELECTRICAL ROOF PLAN	cture cture
REPORT TO ENGINEER.	E3.1 ELECTRICAL RISER	v v v
BLE. A FIRST CLASS	E4.1 ELECTRICAL SCHEDULES	
AND ACCEPTANCE BY	E4.2 ELECTRICAL SCHEDULES	
F POWER, LIGHT	E5.1 ELECTRICAL DETAILS	
THE CONTRACTOR SHALL	E5.2 ELECTRICAL DETAILS	
	E6.1 ELECTRICAL SPECIFICATIONS	
NNS, OR AS SELECTED BY	SEE FIRE ALARM DRAWINGS MADE PART OF THE CONTRACT DOCUMENTS	
NCE WITH THE PROCESS	FBC NOTE	
ARGE AND SHALL H MAY BE DAMAGED.	1. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.1). PROVIDE OWNER WITH A RECORD SET DRAWING OF COMPLETE INSTALLATION DRAWINGS.	
LIC LIABILITY OF	2. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.2). PROVIDE OWNER WITH OPERATIONAL MANUALS AND MAINTENANCE MANUALS.	
CONNECTION TO CIRCUITS		
GAINST THOSE SPECIFIED APPROVAL OF	<b>LOW VOLTAGE NOTES</b> PROVIDE A STRUCTURED CABLING SYSTEM (SCS) FOR THE TV/CABLE/TELEPHONE DROPS, COORDINATE DESIGN, TY	
DINATE WITH ARCHITECT. TH THE BASIS OF DESIGN	OF CABLE, AND FINAL LOCATIONS WITH OWNER/ARCHITECT PRIOR TO CONSTRUCTION. CONTRACTOR TO DESIGN/BUILD AND COMPLY WITH NEC AND EIA/TIA STANDARDS.	
RACTOR ELECTS TO UBSTITUTION IS ECTIONS TO THE	FIRE RATING NOTE	
ATIONAL INSTALLATION CISION TO SUBSTITUTE HE RIGHT TO REQUEST	ALL DEVICES PENETRATING FIRE RATED WALLS SHALL BE PROVIDED WITH U.L. APPROVED FIRE RATED ASSEMBLIES (EQUAL TO WALL FIRE RATING – SEE ARCHITECTURAL DRAWINGS)	
AND INSTALL ALL	COORDINATION NOTES	] ເ
WIRE INSTALLATION,	CONTRACTOR TO COORDINATE ALL FINAL LOCATIONS, ANY TYPES OF ALL DEVICES, AND EQUIPMENT WITH ARCHITEC PRIOR TO BID AND ROUGH-IN.	da ER
E EQUIPMENT.	CONTRACTOR TO COORDINATE VARIOUS TRADES TO AVOID ABOVE CEILING CONFLICTS.	e NTER
D, INSTALLED AND		
AN COIL UNITS,	LIGHTING NOTES	NG CI UNG CI UNT, Funty, F
	1. ELECTRICAL CONTRACTOR TO VERIFY IF ANY LIGHTING FIXTURES REQUIRE STEP-DOWN TRANSFORMERS. QUANTITY AND LOCATION OF THE TRANSFORMERS TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION. CONSULT	
	ARCHITECT FOR LOCATIONS PRIOR TO BIDDING. PROVIDE ALL TRANSFORMERS AND INCLUDE IN BID.	ding ARN ch C
MATERIAL, EQUIPMENT RALL CONDUCTORING AND	2. ALL LIGHTING FIXTURES AND FANS TO BE SELECTED & LOCATED BY OWNER /ARCHITECT/INTERIOR DESIGNER, UNLESS OTHERWISE NOTED.	Building F PORTI Y LEARNII Westgate Beach Cou
TOR'S RESPONSIBILITY TO DUITING AND WIRING	3. ARCHITECT TO SET MOUNTING HEIGHTS FOR ALL FIXTURES WHERE APPLICABLE, UNLESS OTHERWISE NOTED.	
5. WIRING LENGTHS, SHOWN TANT. THE CONTRACTOR	4. CONTRACTOR TO PROVIDE LUMINAIRES TO CONFORM TO ENERGY CODE, THERMAL ENVELOPE RATINGS.	ARI ARI alm 171
MINIMUM, NOT LIMITED TO, L CONFIRM ALL HIS ICAL SYSTEMS AND	FLORIDA BUILDING CODE 2014 CONFORMANCE	
POSED CHANGES AND SHALL SUBMIT COMPLETE	1. CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL TO CONFORM TO FBC 2014 ENERGY COMPLIANCE, RELAT	THESE DRAWINGS ARE FOR THE EXCLUSIVE ED USE OF GLIDDEN SPINA + PARTNERS, INC.
ORING, SECTIONS THRU TED AS FREE OF ALL	SECTIONS, AND STANDARDS.	AND MAY NOT BE DUPLICATED, REPRODUCED OR USED IN ANY MANNER WITHOUT THE EXPRESS WRITTEN CONSENT OF GLIDDEN SPINA + PARTNERS, INC. ALL
ITECT FOR REVIEW NO	2. OWNER SHALL PROVIDE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT(CxA) TO PREPARE FUNCTIONAL TEST PROCEDURES (DOCUMENT SYSTEMS PERFORMANCE, WITNESS CONTRACTOR TESTING), AS REQUIRED BY	RIGHTS RESERVED.
	<ul><li>FBC FOR LIGHTING AND HVAC SYSTEMS.</li><li>3. CONTRACTOR SHALL PROVIDE SERVICES TO TEST, BALANCE AND COMMISSION THE SYSTEM VIA AN</li></ul>	Revisions:
ÆR,	INDEPENDENT AGENT FOR THE MECHANICAL SYSTEMS ENERGY PERFORMANCE.	
CESS.	4. CONTRACTOR TO PROVIDE COMPLETE CERTIFICATIONS AND CHECKLISTS AS REQUIRED BY FBC FOR HIS WORK RESPONSIBILITIES .	
IICAL,	UTILITY CONTACTS	_
NTS WITH	FPL REPRESENTATIVE - GREG SANTANDER TEL: 561-616-1601	
	EMAIL: GREG.SANTANDER@FPL.COM	Project no: 15435
	PERMIT / BID SET: 09/07/16	Date: 09.09.16 Drawn by: RB/SK/JS Project Architect: BJ
		B B C
		s s s s s s s s s s s s s s s s s s s
		GEND
	CONSULTING	Ś
HE ENGINEER OF ANY DISCRE	ELD VERIFY ALL EXISTING CONDITIONS AND       DEERFIELD BEACH, FLORIDA 33441         PANCY BETWEEN THESE DOCUMENTS AND       TEL: (561) 391-9292	
TECT, ARE NOT RESPONSIBLE	TO CORRECT THE SAME AS DIRECTED.Gertificate of Authorization No. 28107FOR ANY ADDITIONAL COSTS RESULTING R CONTRACT HAS BEEN AWARDED.Gertificate of Authorization No. 28107Ursula lafrate, P.E. Ligense #73122Stephen F. Rollin, P.E. Ligense #36428	EQ.1
	OR APPROVAL FROM THE ENGINEER OF DUNALD H. AUSTIN, JR., PE LICENSE #60651 JASON BARBER, P.E. LICENSE #73050	44 09.09.16 BID/PERMIT
S BEEN ISSUED.	DESIGNED BY: BJ/SK/JS PM: BJ P/N 1543	09.09.16 BID/PERMIT