#### **RESOLUTION No. 20-85**

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING A WORK ORDER BETWEEN THE CITY OF DORAL AND TGSV ENTERPRISES, INC, FOR THE PROVISION OF CONSTRUCTION SERVICES FOR THE POLICE DEPARTMENT REAL TIME INFORMATION CENTER IN AN AMOUNT NOT TO EXCEED \$184,122.00; AUTHORIZING THE CITY MANAGER TO EXPEND BUDGETED FUNDS IN FURTHERANCE HEREOF; PROVIDING FOR IMPLEMENTATION; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, as the City continues to grow, there is a need for the City's Government Center to adapt and transform in order to ensure staff can provide the community a better service and to accommodate the needs of a growing City staff; the topics of securing the facility, upgrading the security systems, and improving operating practices have been a top priority; and

WHEREAS, in order to provide the highest quality service to the community, the DPD must always remain vigilant; and

WHEREAS, in September 11, 2019, the Mayor and the City Council Members approved a budget transfer to secure funding for the DPD RTIC Information Technology (IT) needs via Resolution No. 19-212 (approved 4-0, 1 absentee); and

WHEREAS, in addition, on October 8, 2019, the Mayor and the City Council Members adopted Resolution No. 19-257 (approved 4-0, 1 absentee) approving a budget transfer towards the design and installation of the Uninterrupted Power Supply (UPS) that will serve the RTIC and the Emergency Operation Center (EOC); and

**WHEREAS,** the Public Works Department (PWD) reached out to Wolfberg Architect which is the original Architect of Record (AOR) of the Police and Public Works facility, including all design modifications and expansions that the building has had including but not limited to the Public Works/Police Conversion, the Police/Public Works Expansion, and the new Doral Emergency Operations Center EOC; and

**WHEREAS,** the City of Doral selected a pool of pre-qualified General Contractor Firms through the publicly advertised Request for Qualification (RFQ 2019-37); and

**WHEREAS,** the PWD received a proposal from TGSV, a pre-approved contractor by the Request for Qualification process RFQ 2019-37, for the construction of the improvements, in an amount not to exceed \$184,122.00.

WHEREAS, the Scope of Services for this work order includes the construction of the Police Department RTIC as per the set of construction documents prepared by the AOR; and

WHEREAS, the PWD respectfully requests authorization from the Mayor and the City Council Members to authorize the City Manager to expend available funds in the Public Works Fund – "Construction in Progress" Account, Account No. 001.80005.500650; and

#### NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF DORAL AS FOLLOWS:

**Section 1. Recitals.** The above recitals are confirmed, adopted, and incorporated herein and made part hereof by this reference.

**Section 2. Approval.** The Work Order between the City of Doral and TGSV . for the provision of construction services for the Police Department Real Time Information

Center (RTIC) in an amount not to exceed \$184,122.00, a copy which is attached as Exhibit "A", is hereby approved.

**Section 3. Authorization**. The City Manager is authorized to execute the Work Order and expend budgeted funds on behalf of the City in furtherance hereof.

**Section 4.** Implementation. The City Manager and the City Attorney are hereby authorized to take such further action as may be necessary to implement the purpose and the provisions of this Resolution.

Section 5. Effective Date. This Resolution shall take effect immediately upon adoption.

The foregoing Resolution was offered by Councilmember Mariaca who moved its adoption.

The motion was seconded by Councilmember Cabral and upon being put to a vote, the vote

was as follows:

Mayor Juan Carlos BermudezYesVice Mayor Christi FragaYesCouncilwoman Digna CabralYesCouncilman Pete CabreraYesCouncilwoman Claudia MariacaYes

PASSED AND ADOPTED this 13 day of May, 2020.

S BERMUDEZ, MAYOR JUAN CAI

ATTEST

CONNIE DIAZ, MMG CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:

LUIS FIGUEREDO, ESQ. CITY ATTORNEY

# EXHIBIT "A"



May 1, 2020

City of Doral 8401 NW 53 Terrace Doral, FL 33166 Attn: Mr. Luis Sanchez

#### **RE: City of Doral UPS for RTCI & EOC**

Dear Mr. Sanchez,

We are pleased to submit this proposal for construction of **City of Doral UPS for RTCI & EOC** located at **6100 NW 99<sup>th</sup> Avenue Doral, FL.** This proposal is based on **Wolfberg Alvarez** drawings as Scheduled on **Exhibit** "**A**" and in the following qualifications:

#### INCLUSIONS:

#### **DIVISION 1: GENERAL REQUIREMENTS**

- Trash removal and dumpster cost;
- All work being performed during regular working hours (Monday thru Friday 7:00 AM to 4:00PM);
- Proposal is only valid for 45 days from date of issuance.
- Dumpster fees;
- Construction power, water and toilets (sanitary services) are by Owner
- Parking fees are excluded; parking provided by Owner
- Safety as per OSHA standards;
- Progress and final cleaning;
- Insurance coverage as required
- Performance and payment bond is excluded
- Actual on-site Construction duration is to be 10 weeks (70 Calendar Days) from date we start work. This does not include procurement.
- NOTE: Equipment has approximate 6 to 8-week lead time, so we will commence work once material is ordered and delivery date is confirmed. That is not included in work schedule, this would fall under procurement.



#### **DIVISION 2: Demolition**

• All demolition per plans and specification.

#### **DIVISIONS 3: CONCRETE**

• No work included for this scope

#### **DIVISION 4: MASONRY**

• No work included for this scope

#### **DIVISION 5: METALS**

• No work included for this scope

#### **DIVISION 6: CARPENTRY**

• All millwork and furniture to be provided by Owner, and must be delivered and installed as required for Electrical work to be installed.

#### **DIVISION 7: THERMAL AND MOISTURE PROTECTION**

• Fire safing allowance of \$500 is included for any unforeseen penetrations

#### **DIVISION 8: WINDOWS AND DOORS**

• No work included for this scope. Sliding door to be provided by Owner. Add alternate allowance is provided should Owner elect for TGSV to provide.

#### **DIVISION 9: FINISHES**

- Temporary barrier made of Visqueen and zip wall in included.
- Drywall and plywood is included per contract documents
- All flooring, floor prep and base board to be provided by Owner.
- Painting per contract documents is included.
- No replacement or modification of acoustical ceiling (or any ceilings) is included.

#### **DIVISION 10: SPECIALTIES**

• No work included for this scope

#### **DIVISION 11: EQUIPMENT**

• No work included for this scope



#### **DIVISION 12: FURNISHINGS**

• No work included for this scope

#### **DIVISION 13: SPECIAL CONSTRUCTION**

• No work included for this scope

#### **DIVISION 14: CONVEYING SYSTEMS**

• No work included for this scope

#### **DIVISION 15: MECHANICAL**

Fire Protection

• No work included for this scope

#### **Plumbing**

• No work included for this scope

#### <u>HVAC</u>

• No work included for this scope

#### **DIVISION 16: ELECTRICAL**

- Electrical work per plans and specifications.
- NOTE: Sheet E7.01 Room #100 could not be located on plans. We included 100 feet of conduit.
- No fire alarm, telephone, network, low voltage work is included in this proposal.
- No light fixture repair, relocation or replacement is included.

#### BASE PRICE: \$184,122 (One Hundred Eighty Four Thousand One Hundred Twenty Two Dollars)

ADD Alternate for Glass Sliding Door (Allowance as no specifications Provided):Aluminum Framed Add:\$8,580.00Frameless Add:\$8,250.00



#### EXCLUSIONS:

#### **DIVISION 1: GENERAL REQUIREMENTS**

- All Permit fees;
- Impact fees;
- Engineering fees;
- Permanent utilities connection fees;
- Cost of plan revision or any cost due to plan revisions;
- Builder's risk insurance and deductible cost. To be provided by Owner;
- Testing;
- Parking fees;
- Performance and payment bond cost
- Overnight site security.

#### **DIVISION 2: DEMOLITION**

- Asbestos Abatement at existing structures (no asbestos report has been provided in the Bid Documents).
- Removal and disposal of contaminated materials

#### **DIVISION 13: SPECIAL CONSTRUCTION**

 All office walls, partitions, glass, doors, etc. for the office space are excluded. To be provided by Owner.

Do not hesitate to contact us if you have any questions.

Sincerely,

Richard Gomez Vice President



**EXHIBIT "A" – Drawings** 

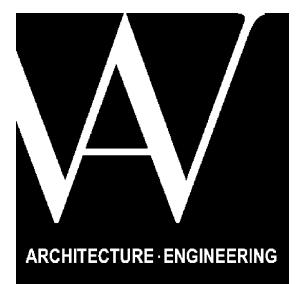
6100 N.W. 99th AVENUE, DORAL, FL 33178



# **CITY COUNCIL**

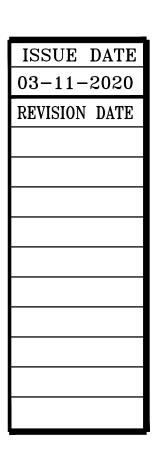
JUAN CARLOS BERMUDEZ, MAYOR CHRISTI FRAGA, VICE MAYOR DIGNA CABRAL, COUNCILWOMAN PETE CABRERA, COUNCILMAN CLAUDIA MARIACA, COUNCILWOMAN

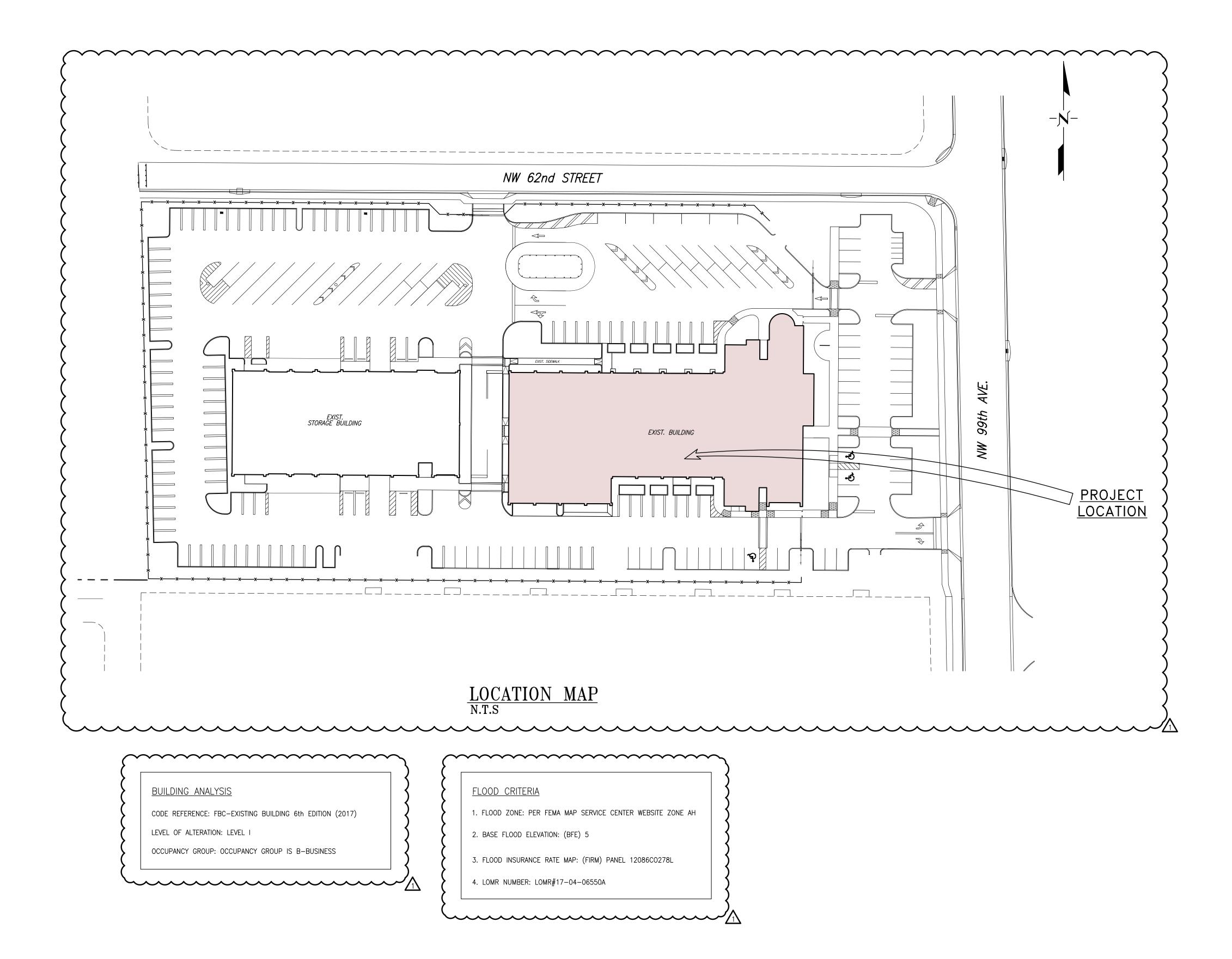
WOLFBERG ALVAREZ



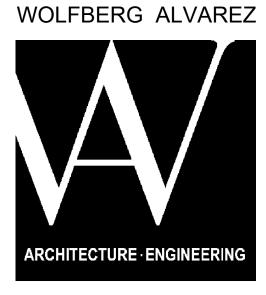
75 VALENCIA AVE., SUITE 1050 CORAL GABLES, FLORIDA 33134 V 305.666.5474 F 305.666.4994 WOLFBERGALVAREZ.COM AA 002416 EB 002354

# WA PROJECT No: 21917.00





	INDEX OF DRAWINGS				
		Permit Set 03/11/2020 Revision No1 04/ 21 /2020			
SHEET	DESCRIPTION				
	GENERAL				
G0.00	COVER SHEET				
G1.00	INDEX OF DRAWINGS / LOCATION MAP				
	ARCHITECTURE				
A3.01	COMPREHENSIVE FLOOR PLAN				
A3.02	PARTIAL FLOOR PLANS - WALL ELEVATIONS				
	ELECTRICAL				
E1.01	LEGEND				
E1.02	GENERAL ELECTRICAL NOTES				
E2.01	COMPREHENSIVE FLOOR PLAN				
E4.01	POWER PARTIAL FLOOR PLAN				
E4.02	POWER PARTIAL FLOOR PLAN				
E7.01	ELECTRICAL RISER DIAGRAM				
E9.01	PANEL SCHEDULES				

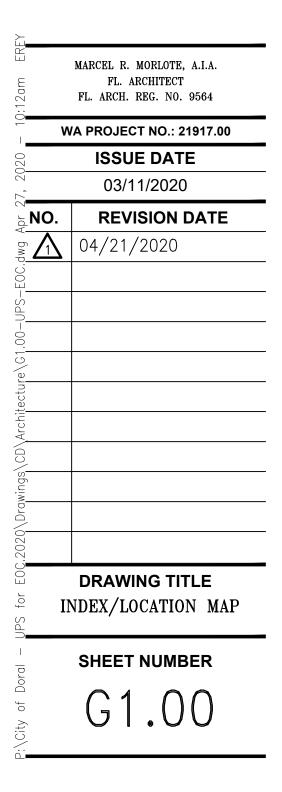


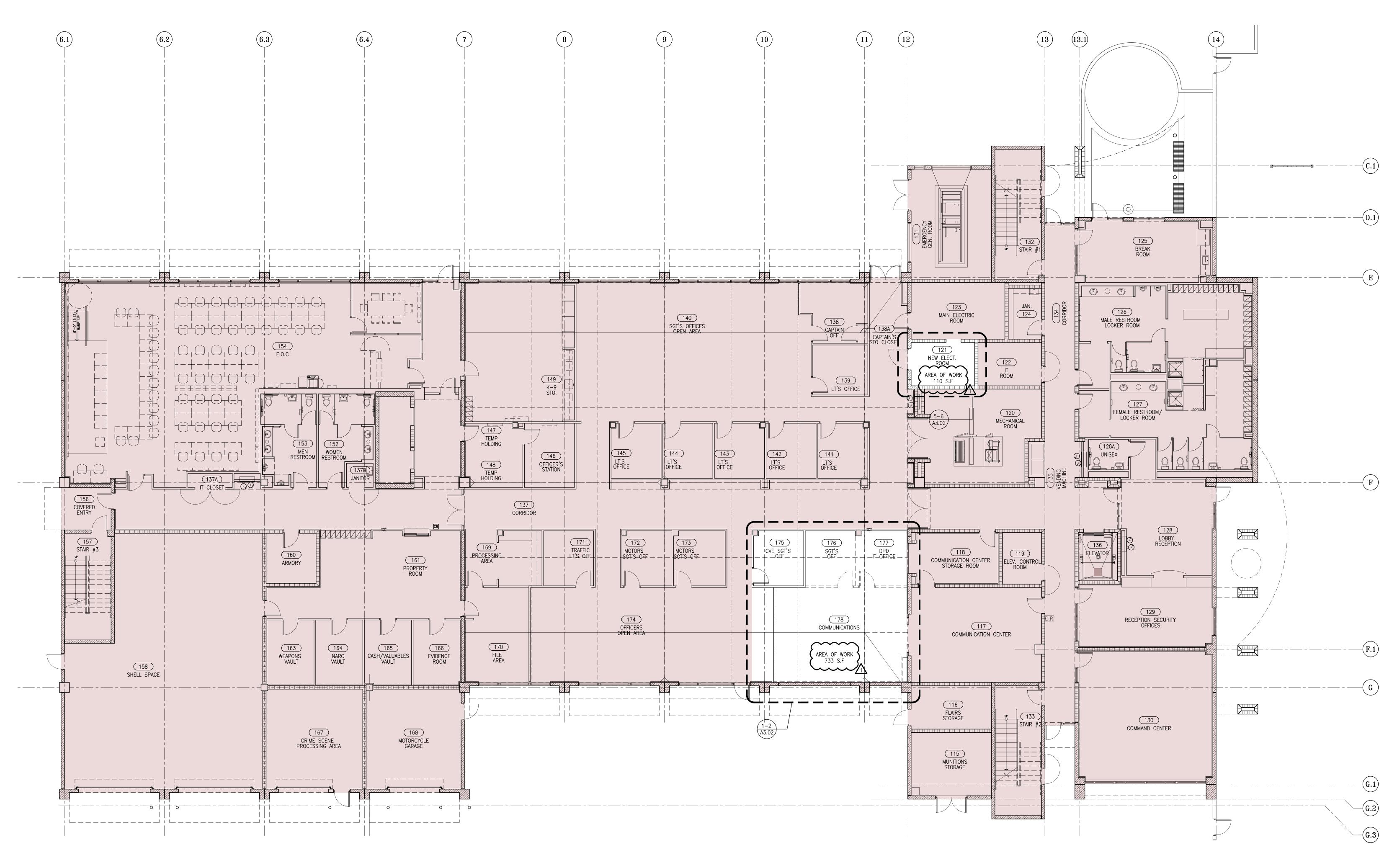
75 VALENCIA AVE., SUITE 1050 CORAL GABLES, FLORIDA 33134 V 305.666.5474 F 305.666.4994 WOLFBERGALVAREZ.COM AA 002416 EB 002354





SEAL





INDICATES EXISTING AREAS TO REMAIN-NO WORK.

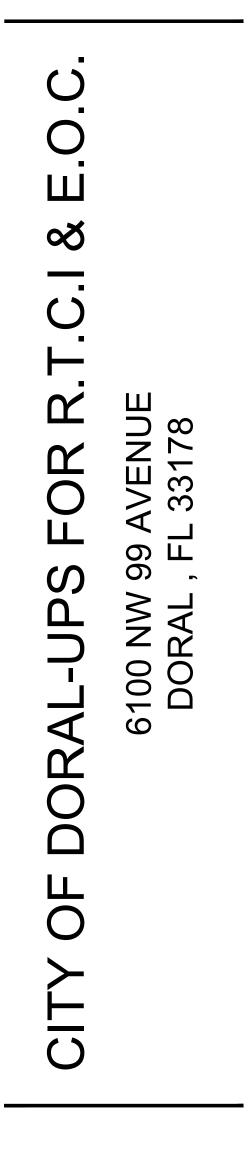
<u>SCOPE OF WORK</u> SCOPE OF WORK IS TO REMOVE PARTITION FOR TWO OFFICES TO CREATE A LARGER COMMUNICATIONS SPACE ADD SYSTEMS FURNITURE, TV'S AND A UPS FOR R.T.C.I AND E.O.C.

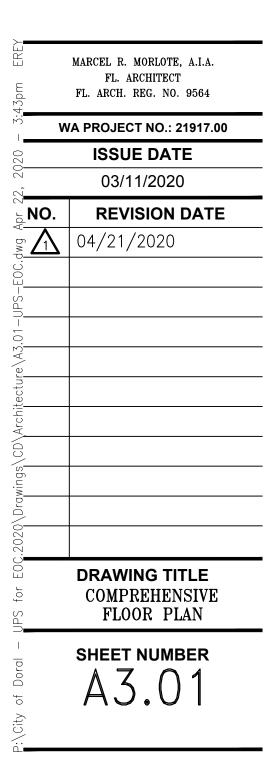
1 COMPREHENSIVE FLOOR PLANA3.01 SCALE: 1/8"=1'-0"

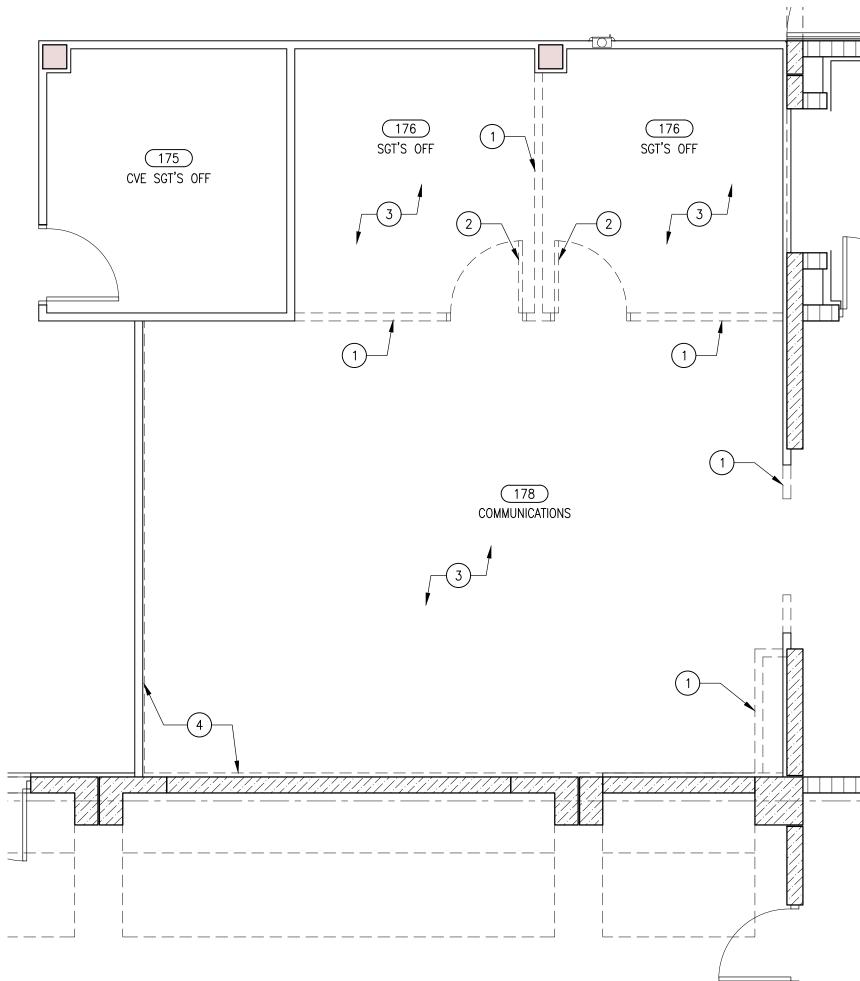


**V** 305.666.5474 **F** 305.666.4994 WOLFBERGALVAREZ.COM AA 002416 EB 002354

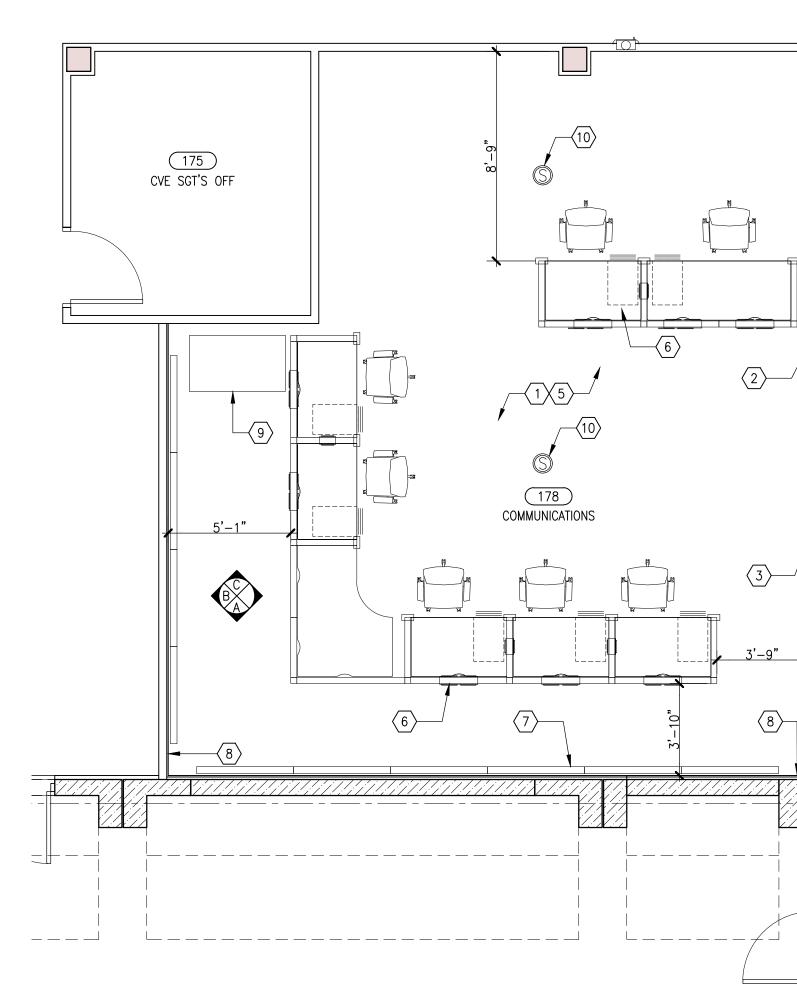






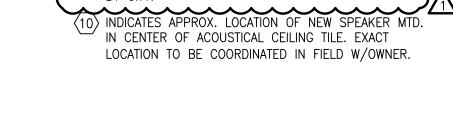


 $\underbrace{1}_{A3.02} \underbrace{PARTIAL}_{SCALE: 1/4"=1'-0"} FLOOR PLAN-DEMOLTION$ 



2 PARTIAL FLOOR PLAN-PROPOSED A3.02 SCALE: 1/4"=1'-0"

### To the best of the Architect's or Engineer's knowledge, the plans and specifications comply with the applicable fire-safety standards as determined by the local authority in accordance with F.B.C. section 110.8.4.4 and Chapter 633, Florida Statutes.



- $\langle 8 \rangle$  INSTALL 3/4" FIRE RETARDANT PLYWOOD ON EXIST. MTL STUDS/FURRING (FROM FIN. FLOOR TO CEILING) INSTALL NEW 5/8" GYP.BD. AND BASE.  $\langle 9 \rangle$  NEW 28"x48" IT CABINET PROCURED AND INSTALLED
- $\langle 7 \rangle$  INDICATES WALL MTD. MONITORS. MONITORS PROCURED AND INSTALLED BY CITY.
- 6 PREFABRICATED WORK STATIONS AND SEATING PROCURED AND INSTALLED BY CITY.

ELECTRICAL COMPONENTS.

BY CITY.

- CONSTRUCTION PERIOD. 5 ACOUSTICAL CEILING CONFIGURATION, LIGHTING, FIRE SPRINKLERS, FIRE ALARM DEVICES AND HVAC TO REMAIN AS IS. COORDINATE W/ ELECTRICAL FOR AREAS REQUIRING SELECTIVE DEMOLITION FOR NEW
- INSTALLED BY CITY (NO LOCKING MECHANISM)  $\langle 4 \rangle$  provide temporary dust barrier during
- OTHER.  $\langle 2 \rangle$  PATCH WALLS/SIV 6510 LOYAL BLUE REPAINT ROOM IN ITS ENTIRETY. 3 NEW SLIDING DOORS FROM KI- PROCURED AND









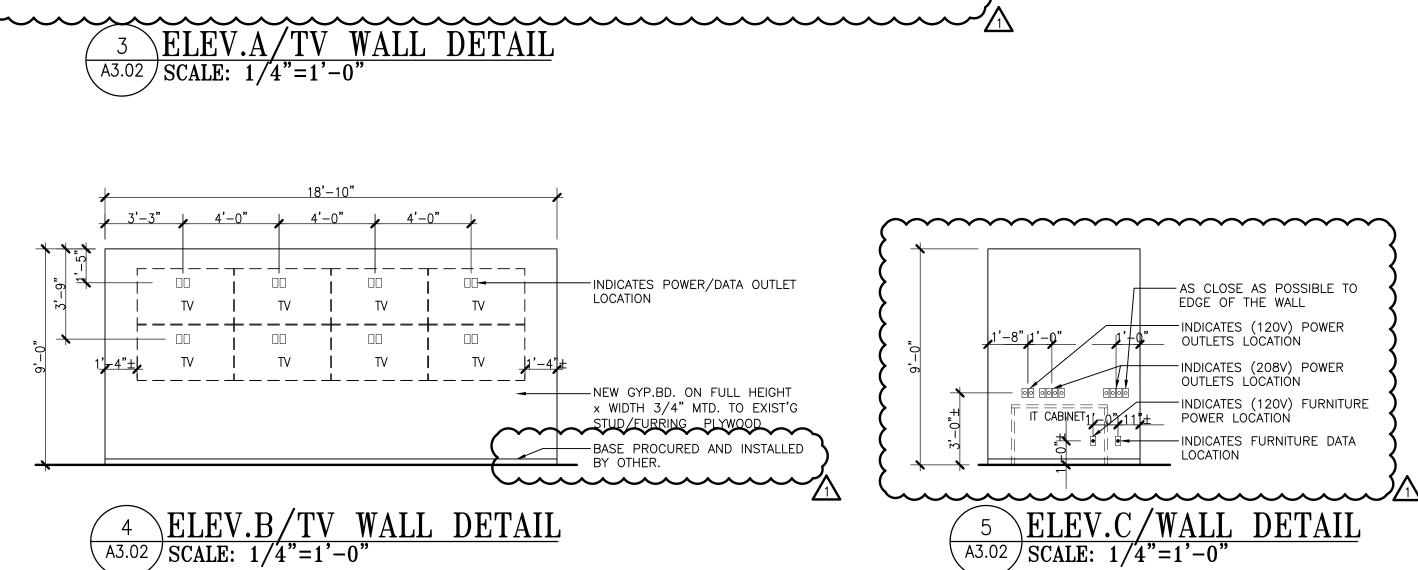
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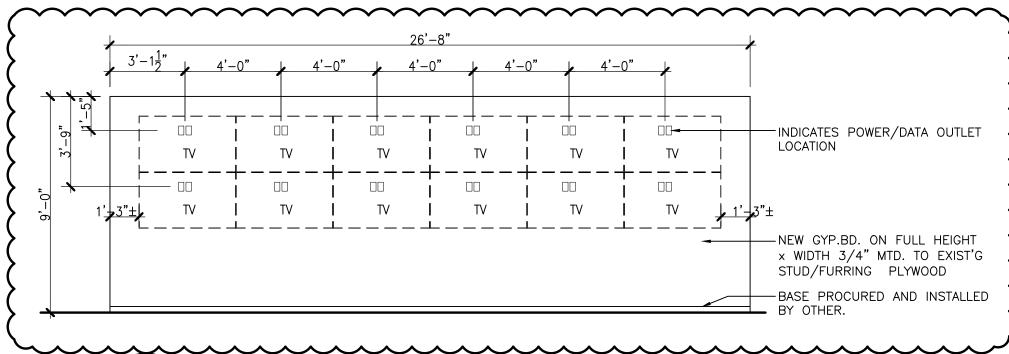
<u>2</u>

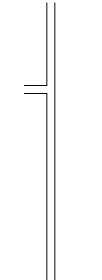
3'-9"

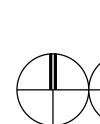
8

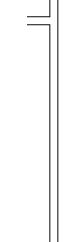
- 4 REMOVE DRYWALL IN ITS ENTIRETY ON ROOM 178 SIDE.
- (3) REMOVE FLOOR CARPET.
- 2 REMOVE DOOR AND FRAME (121,176,177) AND TURN OVER TO CITY.
- (1) PARTIALLY REMOVE PARTITION UP TO 8'-8" AFF. PATCH AS REQ'D.
- DEMOLITION NOTES:

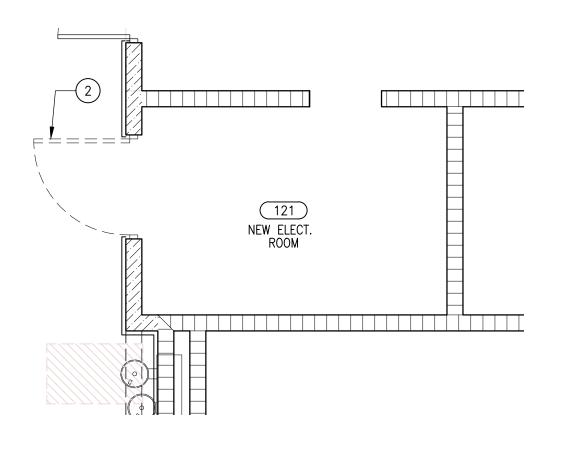




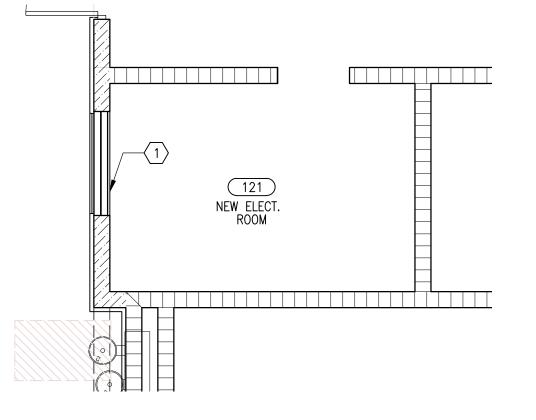








# 5 PARTIAL FLOOR PLAN-DEMOLITION A3.02 SCALE: 1/4"=1'-0"



 $\langle 1 \rangle$  BLOCK-UP OPENING W/5/8" GYP. BD. ON (2)3-5/8" MTL. STUDS GYP. BD. TO BE FLUSH ON EACH SIDE W/EXIST'G. PAINT TO

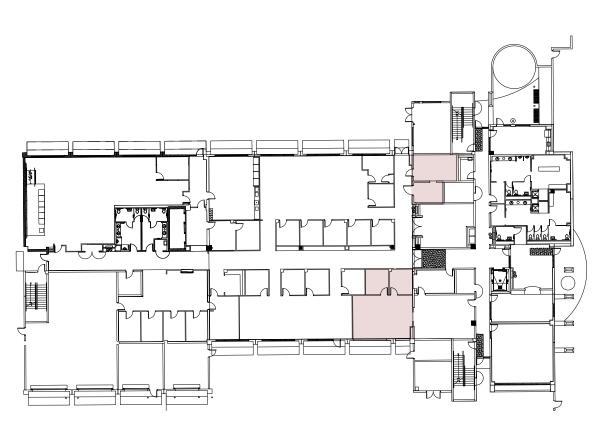
EXISTING.

MATCH ENTIRE WALL ON CORRIDOR SIDE AND INSTALL SECTION OF BASE TO MATCH

NEW WORK NOTES:

6 PARTIAL FLOOR PLAN A3.02 SCALE: 1/4"=1'-0"

 $\underbrace{\begin{array}{c}4\\A3.02\end{array}} ELEV.B/TV WALL DETAIL SCALE: 1/4"=1'-0"$ 



KEY PLAN

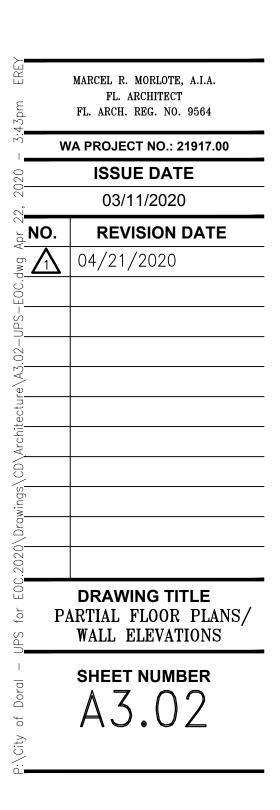


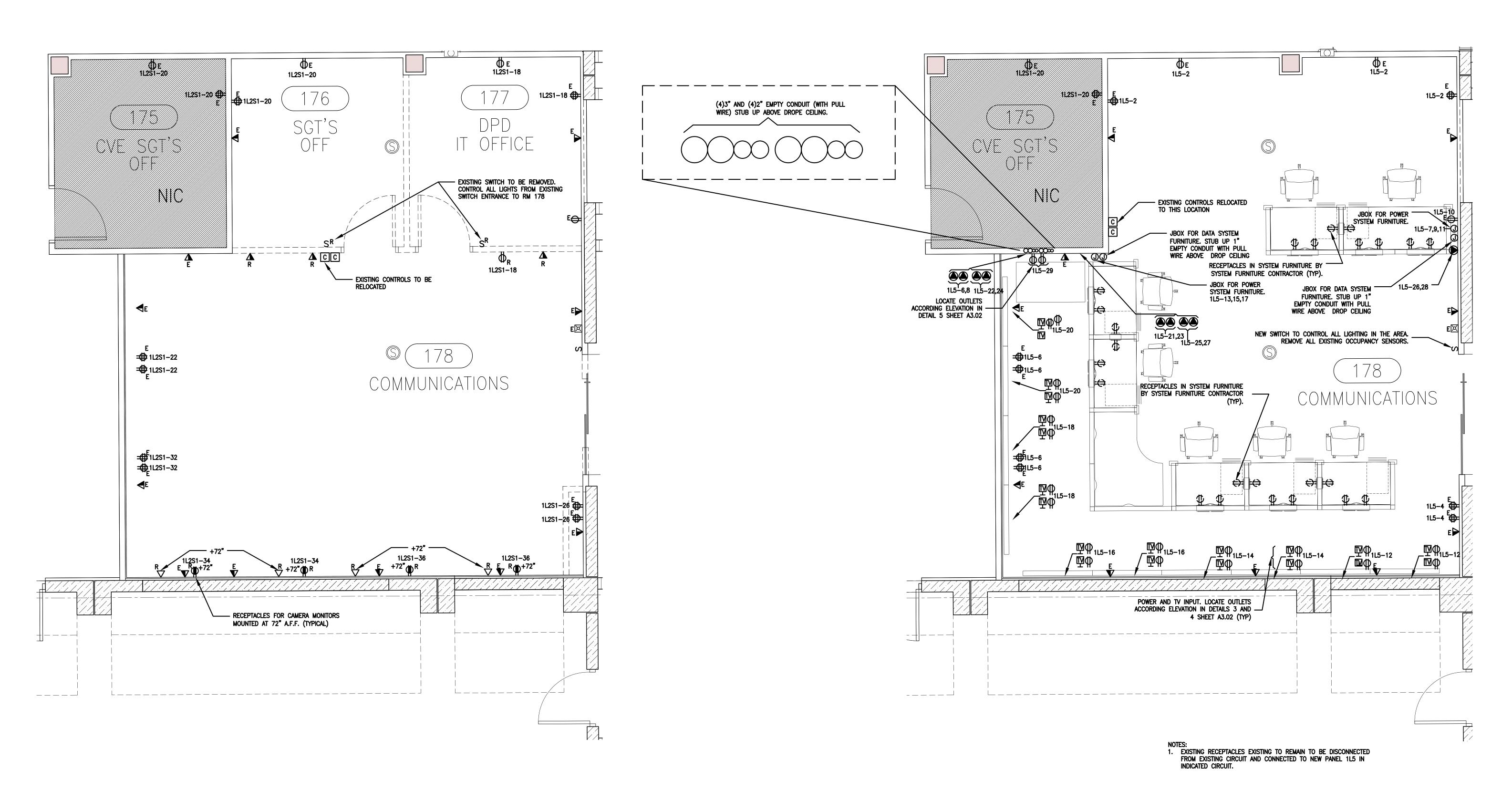


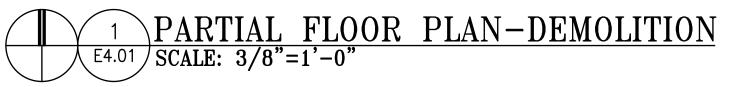






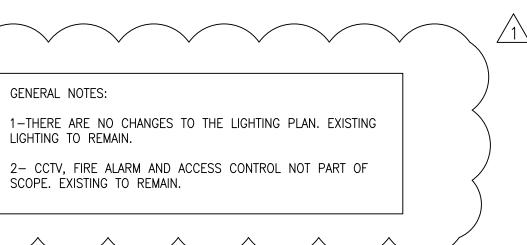




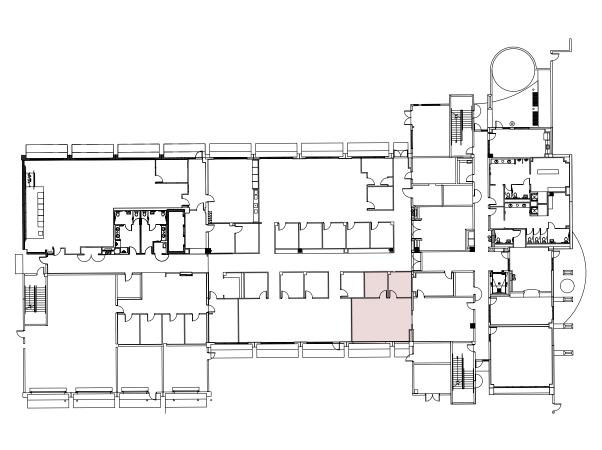


GENERAL NOTES: LIGHTING TO REMAIN.

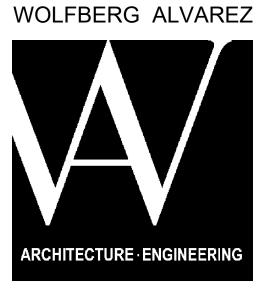
To the best of the Architect's or Engineer's knowledge, the plans and specifications comply with the applicable fire-safety standards as determined by the local authority in accordance with F.B.C. section 110.8.4.4 and Chapter 633, Florida Statutes.



# $\begin{array}{c} 2 \\ \hline 2 \\ \hline 8 \\ \hline$



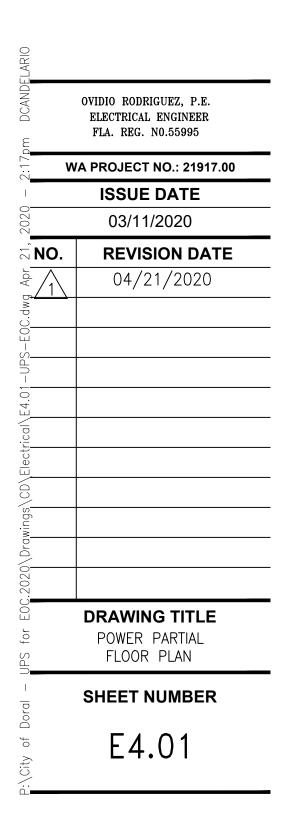
KEY PLAN

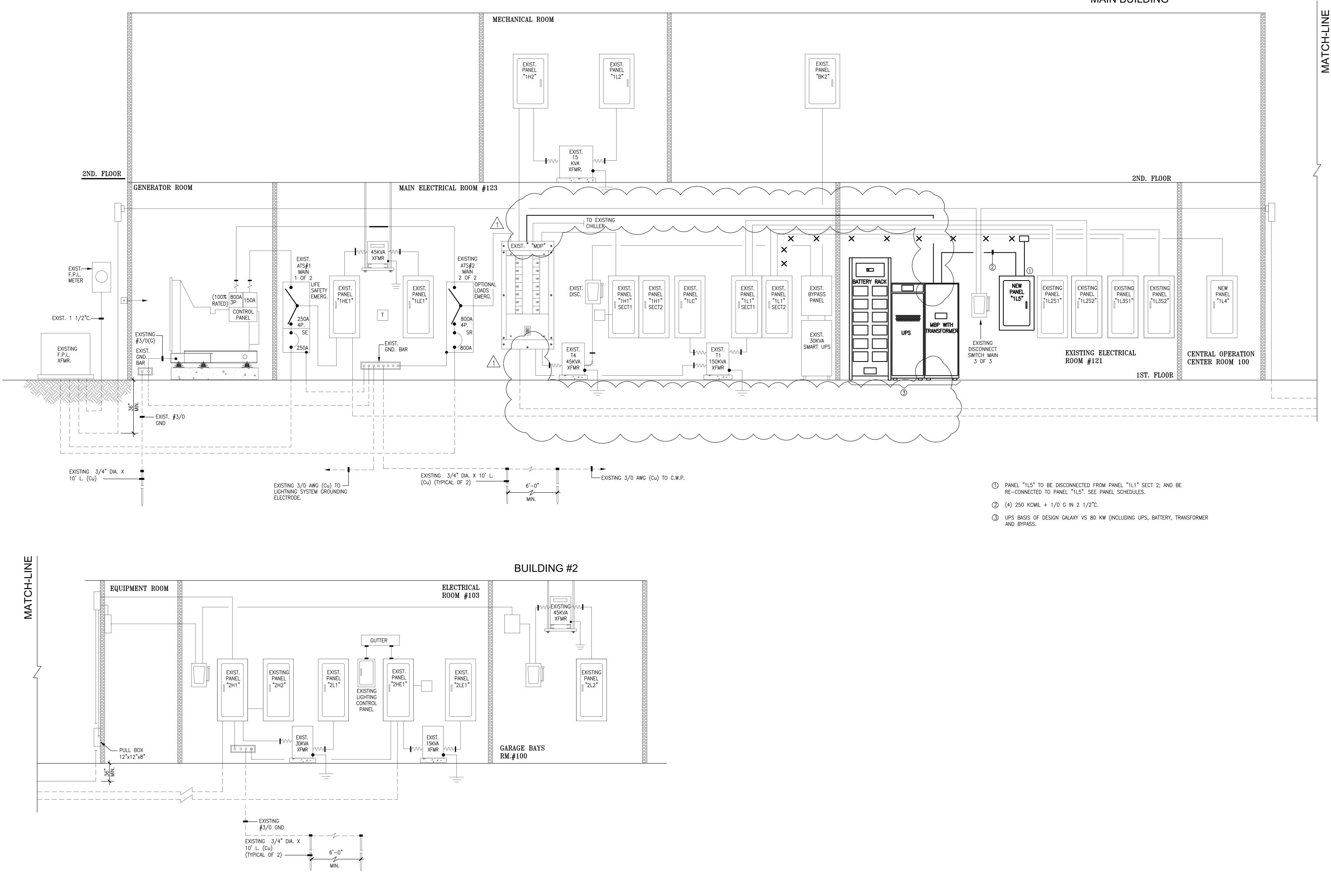








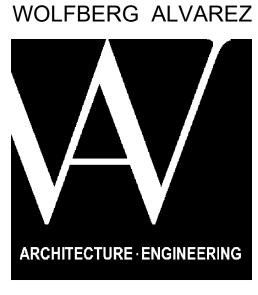




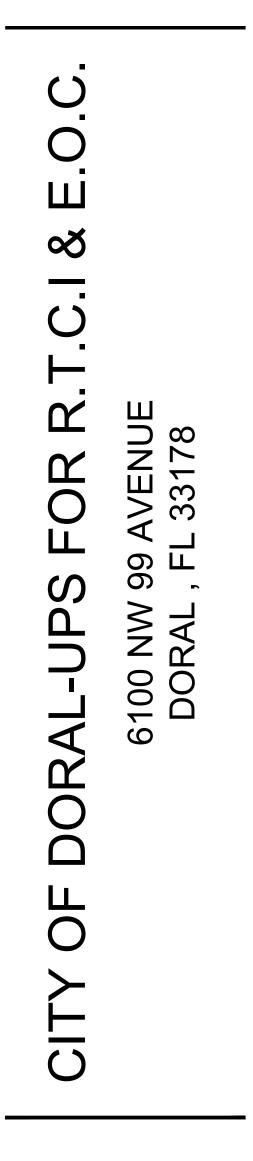
1 EXISTING ELECTRICAL RISER DIAGRAM

### MAIN BUILDING

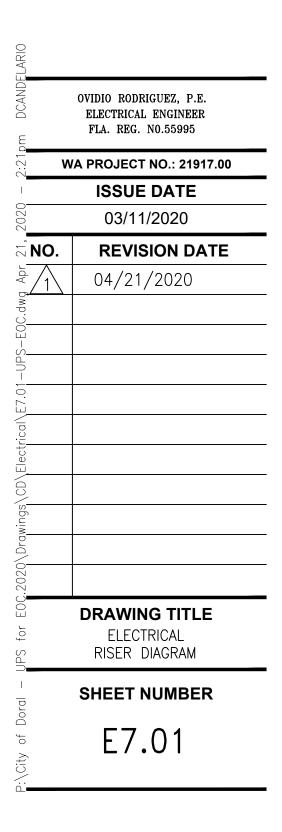
NOTE:
1- EXISTING INFORMATION TAKEN FROM "CITY OF DORAL POLICE FACILITY PUBLIC WORKS ADDITION" PROJECT NO. 21321, DATED 05-12-2014, BY WOLFBERG ALVAREZ & PARTNERS, AND "CITY OF DORAL CENTRAL OPERATIONS CENTER" PROJECT NO. 21814, DATED 11-14-2018, BY WOLFBERG ALVAREZ & PARTNERS.
2- EXISTING SHOWN LIGHT







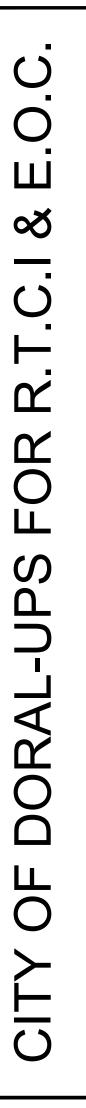




	ELECTRICAL SYMI	BOL LEGEND	
LIGHTING FIXTURES	POWER DEVICES	SECURITY	ABBREVIATIONS
·····································	$\ominus$ SINGLE WALL RECEPTACLE 18" U.O.N. $\ominus$ DUPLEX WALL RECEPTACLE FLUSH MTD. 18" U.O.N.	FULLY CONCEALED DOOR CONTACT	A, AMP AMPERES AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE
1'x4' FLUORESCENT LUMINAIRE, CEILING/WALL	DUPLEX WALL RECEPTACLE FLUSH MTD. 18" U.O.N.	EXP EXPLOSION-PROOF DOOR CONTACT	AIC AMPERES INTERUPTING CAPACITY AWG AMERICAN WIRE GAUGE
2'x2' FLUORESCENT LUMINAIRE	RECESSED DUPLEX WALL RECEPTACLE FLUSH MOUNTED	IDCP INTRUSION DETECTION CONTROL PANEL "IDCP"	BFG BELOW FINISHED GRADE
2'x4' FLUORESCENT LUMINAIRE	HORIZONTALLY 6" ABOVE COUNTER TOP, IN BATHROOM 48" A.F.F. U.O.N.	IDTC       INTRUSION DETECTION TERMINAL CABINET "IDTC"         INTRUSION TO EXISTING SECURITY SYSTEM KNOX	CAB CABINET CKT CIRCUIT CLG CEILING
1'x4' FLUORESCENT LUMINAIRE, BATTERY/EMERGENCY, CEILING/WALL	GFI A.F.F. U.O.N.	KB CONNECTION TO EXISTING SECURITY SYSTEM KNOX BOX WITH TAMPER SWITCH.	CL CENTERLINE
2'x2' FLUORESCENT LUMINAIRE,	AUTOMATIC SPLIT DUPLEX CONTROLLED WALL RECEPTACLE	AP READER ACCESS POINT	CO CARBON MONOXIDE DETECTOR CT'S CURRENT TRANSFORMERS C (COND.) CONDUIT
BATTERY/EMERGENCY	AUTOMATIC DUPLEX CONTROLLED WALL RECEPTACLE		CU COPPER DISC DISCONNECT(ING)
2'x4' FLÜORESCENT LUMINAIRE, BATTERY/EMERGENCY ADJUSTABLE FLOOD LIGHT	DUPLEX RECEPTACLE FOR TV LOCATED AT 84" AFF UNLESS TV NOTED OTHERWISE LOCATE IN COMMON BOX WITH CCTV ADJACENT TO TV BRACKET	C CAMERA MD MOTION DETECTOR	DWG DRAWING(S) D DATA E EXISTING TO REMAIN
	$\Theta_{\rm GFL}$ duplex receptacle flush mounted with ground fault	HK KEY PAD	EA EACH EF EXHAUST FAN
	CIRCUIT INTERRUPTER	SCP         SECURITY CONTROL PANEL           CR         PROXIMITY SENSOR CARD READER	ER EXISTING TO BE RELOCATED EQUIP EQUIPMENT
CEILING MOUNTED LUMINAIRE, BATTERY/EMERGENCY	WP/GFI WITH CAST ALUMINUM WEATHERPROOF "IN USE" COVER		EWC       ELECTRIC WATER COOLER         EWH       ELECTRIC WATER HEATER         =       EXH         EXH       EXHAUST
PWALL MOUNTED LUMINAIRE, BATTERY/EMERGENCY	RECESSED DUPLEX WALL RECEPTACLE FLUSH MOUNTED UPPER HALF SWITCHED 18" A.F.F. U.O.N.	INFORMATION TECHNOLOGY	EXIST EXISTING EXP EXPLOSION PROOF
DOUBLE FACE EXIT LIGHT ARROW INDICATES DIRECTION OF EGRESS	SPECIAL PURPOSE RECEPTACLE	HTV DATA/COMM OUTLET (2" EMPTY CONDUIT STUB UP ABOVE DROP CEILING)	FA FIRE ALARM FLUOR FLUORESCENT
	DUPLEX FLOOR RECEPTACLE	CEILING MOUNTED DATA/COMM OUTLET. (2" EMPTY CONDUIT STUB UP ABOVE DROPER CEILING)	FD FIRE DAMPER FD/SD COMBINATION FIRE/SMOKE DAMPER
SWITCHES		WALL MOUNTED DATA OUTLET (3/4" E.C. TO	GFCIGROUND FAULT CIRCUIT INTERRUPTERGFPGROUND FAULT PROTECTION
S TOGOLE SWITCH	POWER AND DATA/COMM FLOOR BOX.	NEAREST T.T.B. U.O.N.) $\bigcirc$ CEILING MOUNTED DATA OUTLET (3/4" E.C.	GND GROUND HD HAND DRYER
S <sub>3</sub> switch, 3-way	C DUPLEX RECEPTACLE CEILING MOUNTED	U NEAREST I.I.B. U.U.N.)	HGT HEIGHT HID HIGH INTENSITY DISCHARGE
SaSb SWITCH LEG a/b	POKE-THRU DEVICE.	<ul> <li>□ FLOOR MOUNTED DATA OUTLET</li> <li>▼ WALL MOUNTED TELEPHONE OUTLET (3/4" E.C. TO</li> </ul>	HPS HIGH PRESSURE SODIUM HP HORSEPOWER
S <sub>M</sub> motorized switch S <sub>K</sub> key switch	DISCONNECT SWITCH, NUMBER OF POLES AND RATING AS INDICATED ON PLANS	NEAREST T.T.B. U.O.N.)	HVAC HEATING/VENTILATING/ AIR CONDITIONING
S <sub>LV</sub> LOW VOLTAGE SWITCH	FUSED DISCONNECT SWITCH.	TELEPHONE FLOOR OUTLET. (1" EMPTY CONDUIT STUB UP ABOVE DROPER CEILING)	JB JUNCTION BOX KV KILO-VOLTS
SOR ILC #LS-G2 LOW VOLTAGE OVERRIDE SWITCH. "1" INDICATES NUMBER OF BUTTONS. REFER	STARTER/DISCONNECT SWITCH NUMBER OF POLES AND RATING AS INDICATED ON PLANS	COMBINED DATA/COMM OUTLET ON DWGS. (2" EMPTY CONDUIT STUB UP ABOVE DROPER CEILING)	KVA KILO-VOLTS-AMPERES KW KILO-WATTS
TO PLANS. Sos WATTSTOPPER #DSW-100 WALL MOUNT DUAL TECH	HO WALL JUNCTION BOX	DATA/COMM FLOOR OUTLET. (2" EMPTY CONDUIT STUB UP ABOVE DROPER CEILING)	
OCCUPANCY SENSOR	PB PULL BOX	DATA/COMM OUTLET (CEILING MOUNTED). (2" EMPTY	MCBMAIN CIRCUIT BREAKERMCCMOTOR CONTROL CENTERMHMETAL HALIDE
S <sub>D</sub> WATTSTOPPER #LMDM-101 DIGITAL DIMMING SWITCH	T TRANSFORMER	CONDUIT STUB UP ABOVE DROPER CEILING)	MIN MINIMUM MISC MISCELLANEOUS
S <sub>101</sub> WATTSTOPPER #LMSW-101 1-BUTTON SWITCH S <sub>102</sub> WATTSTOPPER #LMSW-102 2-BUTTON SWITCH	MOTOR		MTD MOUNTED MOD MOTOR OPERATED DAMPER
S <sub>103</sub> WATTSTOPPER #LMSW-103 3-BUTTON SWITCH	TT GROUND BUS BAR	S CEILING MOUNTED SPEAKER LOCATION.	NEC NATIONAL ELECTRICAL CODE NL NIGHT LIGHT
			PNL PANEL PVC POLYVINYL CHLORIDE
	-	FIRE ALARM DETECTION SYSTEM	PP         POWER POLE           R         EXISTING TO BE REMOVED
	POWER DISTRIBUTION	P MANUAL FIRE ALARM PULL STATION	RECRECEPTACLERGSRIGID GALVANIZED STEEL
		FIRE ALARM COMBINATION HORN/STROBE DEVICE (75 CANDELA MINIMUM, 110 CANDELA WHERE NOTED)	TEL TELEPHONE TYP TYPICAL
	PANELBOARD	FIRE ALARM COMBINATION HORN/STROBE DEVICE (75 CANDELA MINIMUM, 110 CANDELA WHERE NOTED)	UON UNLESS OTHERWISE NOTED V VOLTS
		"C" DENOTES CEILING MOUNTED	V VOLIS VA VOLT-AMPERES VP VANDAL PROOF
	CONDUIT AND WIRE RUN CONCEALED IN CEILING OR WALL.		WP         WEATHERPROOF/WEATHER-RESISTANT
	FLEXIBLE CONDUIT BRANCH CIRCUIT HOMERUN: LONG HASHMARK WITH FLAG DENOTES GROUND WIRE, LONG HASHMARK	C "C" DENOTES CEILING MOUNTED	XFMR TRANSFORMER
	FLAG DENOTES GROUND WIRE, LONG HASHMARK 1R1-1,3 FLAG DENOTES GROUND WIRE, LONG HASHMARK WITHOUT FLAG DENOTES NEUTRAL WIRE, SHORT HASHMARK DENOTES PHASE WIRE.	(I)     135" HEAT DETECTOR       (2)     SMOKE DETECTOR	NOTE: ALL SYMBOLS MAY NOT BE USED.
		DUCT SMOKE DETECTOR	
	MISCELLANEOUS SYMBOL LEGEND	FS FIRE ALARM SYSTEM CONNECTION TO FIRE SPRINKLER SYSTEM WATER FLOW SWITCH	
	DETAIL NUMBER	TS FIRE ALARM SYSTEM CONNECTION TO FIRE SPRINKLER SYSTEM WATER TAMPER SWITCH	
		FACP FIRE ALARM CONTROL PANEL "FACP"	
	XX.XX SCALE: XX.XX SCALE: XX.XX SHEET NUMBER WHERE DETAIL	FAAPFIRE ALARM ANNUNCIATOR PANEL "FAAP"FABPFIRE ALARM BOOSTER PANEL "FABP"	
	IS REFERENCED ADDITIONAL SHEET REFERENCES	ELECTROMAGNETIC DOOR HOLDER/RELEASE	
	DETAIL NUMBER	S FIRE ALARM SPEAKER CEILING MOUNTED	
	SHEET NUMBER WHERE DETAIL IS REFERENCED	CM FIRE ALARM CONTROL MODULE	

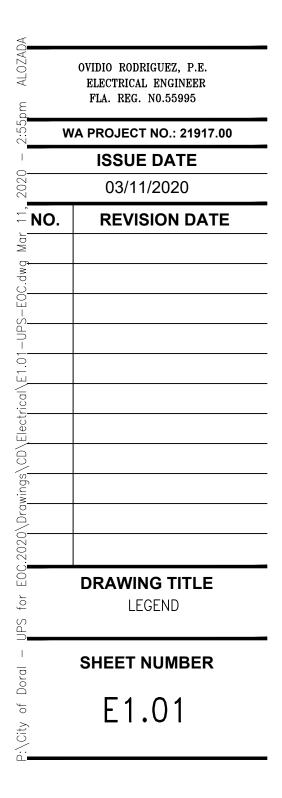






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## FIRE ALARM DEMOLITION NOTES:

- REFER TO GENERAL DEMOLITION NOTES.
- DISCONNECTION OF ANY FIRE ALARM DEVICE SHALL NOT MAKE INOPERATIVE THE SYSTEM, OR MODIFY THE ESTABLISHED SEQUENCE OF OPERATION. DISCONNECTION AND REMOVAL SHALL BE RESPONSIBILITY OF THE CONTRACTOR.
- SCHEDULE DEMOLITION WORK IN EXISTING BUILDING WITH THE OWNER REPRESENTATIVE ANY EQUIPMENT SHUT DOWN SHALL BE APPROVED BY THE OWNER REPRESENTATIVE PRIOR TO PROCEEDING. THE FACILITY WILL REMAIN IN OPERATION DURING DEMOLITION AND MODIFICATION. CONTRACTOR TO COORDINATE WORK W/CITY FIRE ALARM VENDOR/MONITORING SERVICE.

### **FIRE ALARM NOTES:**

AFTER COMPLETION OF WORK A RE-ACCEPTANCE TEST OF THE FIRE ALARM SYSTEM SHALL BE PERFORM AS SET FORTH IN NFPA 72.

### **COMMUNICATIONS NOTE:**

1. DATA AND TELEPHONE CABLING IS TO BE INSTALLED BY OTHERS, AND IS NOT PART OF THE SCOPE OF THIS PROJECT. WHERE DATA/TELEPHONE OUTLETS ARE SHOWN PROVIDE A 4"X 4" X MINIMUM 2-1/4" DEEP OUTLET BOX WITH SINGLE GANG MUD RING INSTALLED FLUSH WHERE POSSIBLE, AND A 1" CONDUIT WITH PULL STRING STUBBED UP INTO CEILING SPACE. CONDUIT ENDS SHALL BE REAMED AND TERMINATED WITH AN INSULATED BUSHING. FLEXIBLE CONDUIT SHALL NOT BE USED.

### **GENERAL DEMOLITION NOTES:**

- DEMOLITION IS BASED ON AS-BUILT DRAWINGS AND FIELD OBSERVATIONS. CONTRACTOR SHALL VISIT THE EXISTING SCOPE OF WORK AREA TO BECOME FAMILIAR WITH EXISTING CONDITION PRIOR TO COMMENCEMENT OF WORK AND SHALL EXAMINE ALL RELATED DRAWINGS TO AVOID CONFLICTS. ANY DISCREPANCIES IN PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER PRIOR TO BIDDING. ANY DISCREPANCIES NOTED AFTER BIDDING AND CONTRACT AWARD WILL BE THE RESPONSIBILITY OR THE CONTRACTOR.
- CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND DEVICES SHOWN ON PLANS. WIRING TO EQUIPMENT SHALL BE REMOVED. 3-CONDUIT AND BOXES IN EXISTING WALLS TO BE DEMOLISHED SHALL BE REMOVED.
- 4-CONDUIT AND BOXES SHOWN TO BE DEMOLISHED IN EXISTING WALLS TO REMAIN SHALL BE ABANDONED IN PLACE
- AND THE BOXES SHALL BE PROVIDED WITH BLANK COVERS. 5-CONDUIT IN EXISTING OR NEW CEILING THAT IS NOT INTENDED FOR REUSE SHALL BE REMOVED BACK TO THE PANEL FROM WHERE IT ORIGINATES.
- CONDUITS THAT HAD BEEN RUN IN THE EXISTING CONCRETE SLAB SHALL BE SAW-CUT OFF AS THEY ENTER THE SLAB AND THEN SEALED TO PREVENT MOISTURE ACCESS.
- PROVIDE ALL ELECTRICAL DEMOLITION WORK NECESSARY TO INSTALL NEW WORK. ELECTRICAL CONTRACTOR SHALL REROUTE AND RECONNECT ANY CIRCUITS THAT WILL REMAIN IN USE BUT INTERFERE WITH NEW CONSTRUCTION.
- B-CONDUCTORS THAT ARE NOT DEEMED REUSABLE SHALL BE REMOVED BACK TO THE NEAREST JUNCTION BOX. WHERE THE ENTIRE CIRCUIT IS TO BE REMOVED, THE CONDUCTORS SHALL BE REMOVED BACK TO THE PANEL BOARD FROM WHICH THEY EMANATE. - MAINTAIN CONTINUITY OF ALL EXISTING CIRCUITS TO REMAIN OR PORTIONS THEREOF AFFECTED BY NEW WORK.
- CONTRACTOR SHALL RECONNECT ANY EXISTING CIRCUIT TO THE REMAINING ELECTRICAL EQUIPMENT LOCATED DOWNSTREAM FROM THE POINT OF INTERRUPTION. 10-DISCONNECTION AND REMOVAL OF COMMUNICATION SHALL BE RESPONSIBILITY OF THE CONTRACTOR. DISCONNECTION
- OF SECURITY OR COMMUNICATION DEVICE SHALL NOT MAKE INOPERATIVE THE SYSTEM, OR MODIFY THE ESTABLISHED SEQUENCE OF OPERATION. 1-ALL MATERIALS REMOVED UNDER DEMOLITION AND NOT TO BE RELOCATED OR TURNED OVER TO OWNER SHALL BE
- REMOVED FROM SITE AND DISPOSED OF SITE MUST REMAIN CLEAN AT ALL TIMES. 12- CONTRACTOR SHALL EXERCISE CARE IN REMOVING DEMOLITION ITEMS, AND SHALL REPAIR OR REPLACE AT HIS COST, ANY DAMAGE CAUSED TO EXISTING CONSTRUCTION.
- 13- SCHEDULE DEMOLITION WORK IN EXISTING BUILDING WITH THE GC AND OWNER'S REPRESENTATIVE ANY EQUIPMENT SHUT DOWN SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO PROCEEDING. THE FACILITY WILL REMAIN IN OPERATION DURING ELECTRICAL DEMOLITION AND MODIFICATION.
- 14-WHERE EQUIPMENT AND MATERIAL IS REQUIRED TO BE REMOVED, ALL ASSOCIATED WORK SUCH AS STARTERS, DISCONNECT SWITCHES, CONDUIT, WIRING, SUPPORTS, AND ACCESSORIES SHALL BE REMOVED UON.
- 15-EXISTING ELECTRICAL EQUIPMENT NOT INDICATED ON DEMOLITION PLAN SHALL REMAIN CONNECTED FOR CONTINUED USE. 16-ALL WORK SHALL BE COORDINATED WITH GENERAL CONTRACTOR AND OTHER TRADE CONTRACTORS.
- 17- ALL WORK HEREIN DESCRIBED AND SHOWN ON DRAWINGS IS REQUIRED TO MAKE PROJECT COMPLETE IN EVERY RESPECT. THIS WORK INCLUDES ANY AND ALL PATCHING NECESSARY. PATCHING SHALL BE DONE TO THE COMPLETE SATISFACTION OF THE ARCHITECT, ENGINEER AND OWNER. ALL MATERIALS SHALL MATCH EXISTING.
- 18- ALL ALTERATIONS, DEMOLITION AND REMOVAL, CUTTING AND PATCHING AND OTHER WORK NECESSARY FOR CONSTRUCTION OF THIS CONTRACT SHALL BE PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER. THIS SHALL INCLUDE REMOVAL, REROUTING, ETC. OF ALL ELECTRICAL ITEMS REQUIRED TO COMPLETE INSTALLATION INTENDED.
- 19- PATCH OR REPLACE ALL DAMAGED FLOOR, WALL, CEILING, ETC. SURFACES ALTERED TO ACCOMMODATE THE NEW CONSTRUCTION. PATCHED SURFACES SHALL MATCH EXISTING ADJACENT SURFACES.
- 20- ALL CUTTING, PATCHING, DEMOLITION, REPAIRING, REPLACING ETC. NECESSARY UNDER THIS CONTRACT SHALL BE COORDINATED BY THE GENERAL CONTRACTOR. WHERE APPLICABLE COORDINATE WORK WITH UTILITY COMPANIES, LOCAL AND STATE AUTHORITIES HAVING JURISDICTION, OWNER'S REPRESENTATIVES AND ALL APPLICABLE CODES.
- 21- WHERE ALTERATIONS TAKE PLACE IN OCCUPIED AREAS, CONTRACTOR SHALL CLEAN UP DAILY, AND NOISE SHALL BE KEPT TO A MINIMUM.
- 22- NONE OF THE SERVICES TO EXISTING BUILDINGS SHALL BE DISRUPTED IN ANY WAY EXCEPT WITH THE WRITTEN

PERMISSION OF THE OWNER.

- 23- All equipment presently "hot" and required to be maintained shall be returned to this condition after performing THE CHANGES TO EXISTING BUILDING. REROUTE CONDUITS AND EXTEND OR REPLACE CIRCUITS AS REQUIRED. PERFORM WORK AT CONVENIENCE OF THE OWNER.
- 24- EXECUTE ALL WORK IN SUCH A MANNER TO AVOID INTERFERENCE WITH THE USE OF PASSAGE TO AND FROM ADJOINING BUILDING OR ARFAS
- 25- THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY DAMAGE TO EXISTING BUILDING AND TO CONTENTS THEREOF INCLUDING MACHINERY, FURNITURE, EQUIPMENT, ETC. AND DAMAGE TO BUILDINGS OR CONTENTS THEREOF DUE TO CONTRACTOR OPERATIONS. SHALL BE REPAIRED OF REPLACED AT DIRECTION OF ARCHITECT/ENGINEER, AND/OR OWNER, THE CONTRACTOR, AT NO EXTRA COST TO THE OWNER.
- 26- CONNECTION TO EXISTING STRUCTURES OR SYSTEMS SHALL BE MADE IN SUCH A MANNER THAT AS LITTLE TIME AS ABSOLUTELY POSSIBLE WILL BE TAKEN, AND CONTRACTOR WILL BE REQUIRED TO COORDINATE FULLY WITH OWNER IN CONNECTION WITH CONVENIENCE AND SAFETY OF ALL PERSONS INVOLVED, INCLUDING EMPLOYEES.
- 27- CONTRACTOR SHALL COORDINATE ALL WORK WITH OWNER TO DETERMINE OWNER'S REQUIREMENTS REGARDING ACCESS, TIME OF WORK, PROTECTION OF EXISTING CONDITIONS, ETC.
- 28- WHERE NEW WORK IS INDICATED IN EXISTING ELECTRICAL PANELBOARDS CONTRACTOR SHALL UPDATE ALL DIRECTORIES IN EXISTING PANELBOARDS AFFECTED BY THIS PROJECT: ELECTRONICALLY TRACING EXISTING CIRCUITS. CONTRACTOR SHALL PROVIDE NEW TYPEWRITTEN CIRCUIT DIRECTORIES FOR ALL PANELS SHOWN IN PROJECT. DIRECTORIES SHALL INCLUDE LOCATION AND TYPE OF EQUIPMENT BEING FED. CONTRACTOR SHALL ALSO PROVIDE AN ENGRAVED LABEL INDICATING PANEL NAME AND SOURCE OF POWER OF THE PANEL.
- 29- CONTRACTOR SHALL CHECK ALL EXISTING FEEDER AND BRANCH CIRCUITS BEING REROUTED INCLUDE A WIRE EQUIPMENT GROUNDING CONDUCTOR. WHERE EXISTING METALLIC RACEWAYS ARE USED AS GROUNDING CONDUCTOR; THE CONTRACTOR SHALL VERIFY THAT BOTH SIDES OF CONDUIT HAVE GROUNDING BUSHINGS AND A BONDING JUMPER AND SHALL TEST THE CONTINUITY OF GROUND FROM THE SOURCE TO THE TERMINATION. CONTRACTOR SHALL, WHERE EXISTING EQUIPMENT GROUNDING DOES NOT MEET CONDITIONS DESCRIBED, PROVIDE A WIRE AS EQUIPMENT GROUNDING CONDUCTOR.

- 1. CODES AND REFERENCES:
- NATIONAL ELECTRIC (2014) CODE AND APPLICABLE NFPAS.
- APPLICABLE. ADA AMERICANS WITH DISABILITIES ACT EIA/TIA ELECTRICAL INDUSTRIES ASSOC. / TELECOMMUNICATIONS INDUSTRIES ASSOC. AMERICAN NATIONAL STANDARD INSTITUTE ANSI
- FACTORY MUTUAL FM INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS IEEE NATIONAL ELECTRICAL CONTRACTORS ASSOC., INC. NECA
- CONTRACTOR SHALL PROVIDE DIMENSIONED SHOP DRAWINGS TO ARCHITECT FOR APPROVAL.
- 3. VERIFY ALL DIMENSIONS PRIOR TO ANY FABRICATION OR INSTALLATION.
- PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.
- FROM DAMAGE.
- QUALITY OF EXISTING MATERIALS. CONCRETE FLOOR OPENINGS SHALL BE CORE DRILLED.
- CABLES HAVE BEEN INSTALLED.
- EXISTING CONDITIONS SHALL BE MADE AT NO ADDITIONAL COST TO OWNER.
- COORDINATE DELIVERY SCHEDULE OF MATERIAL.
- REVIEWED UNTIL SUBMITTAL IS COMPLETE.
- FOUR WIRE.
- LOCATIONS SHALL BE MADE WITHOUT ADDITIONAL COST.
- NFC
- HAVE A MEAN TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS (HANDLE TIE) IN THE PANEL WITH AN IDENTIFIED MULTI-POLE CIRCUIT BREAKER.
- 16. PROVIDE NYLON PULL STRINGS IN ALL EMPTY CONDUITS FOR FUTURE USE.
- 17. CONDUCTORS SHALL BE AS FOLLOWS UON: B. SOLID SIZE 10 AWG AND UNDER. STRANDED SIZE 8 AWG AND LARGER. C. PLAINLY MARKED AND COLOR CODED THROUGHOUT INSTALLATION. PHASE CONDUCTORS FOR ALL DATA BRANCH CIRCUITS.
- 18. CONDUCTORS COLOR CODING (UNLESS OTHERWISE REQUIRED BY APPLICABLE LOCAL CODES):

	A.	WIRING	FOR	208Y/	120	VOLTS	SYSTEM	SHALL	BE
		PHASE	"A"	-	В	LACK			
		PHASE	<b>"</b> B"	-	R	RED			
		PHASE	"C"	-	E	BLUE			
		NEUTRA	L	-	۱	NHITE			
		GROUN	D	-	Ģ	GREEN			
ł	B.	WIRING	FOR	480Y/	277	VOLTS	SHALL E	BE COD	ED:
		PHASE	"A"	-	В	ROWN			

PHASE "B"	-	PURPLE
PHASE "C"	-	YELLOW
NEUTRAL	-	GRAY
GROUND	-	GREEN

- AND CONNECTION POINTS.
- A. 120V-UPSIZE TO NEXT LARGER CONDUCTOR EVERY 100' OF CIRCUIT LENGTH. B. 277V-UPSIZE TO NEXT LARGER CONDUCTOR EVERY 150' OF CIRCUIT LENGTH.
- DEVICES SHALL BE ONE PIECE STANDARD GANG BOX. IDENTIFY BOXES AS REQUIRED PER N.E.C.

21. PULL AND JUNCTION BOXES SHALL BE OF STEEL CONSTRUCTION, SPOT OF SEAM WELDED AT JOINTS AND HOT DIPPED

# **GENERAL ELECTRICAL NOTES**

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CURRENT FLORIDA BUILDING CODE (2017), INCLUDING REFERENCED STANDARDS, AND ALL LOCAL ORDINANCES. INSTALLATION SHALL COMPLY WITH THE

A. ELECTRICAL WORK SHALL COMPLY WITH THE STANDARDS OF THE FOLLOWING ORGANIZATIONS, AS

2. PRIOR TO COMMENCEMENT OF WORK, THE CONTRACTOR MUST VERIFY MEASUREMENTS AT SITE. SUBMIT DISCREPANCIES AND DIFFERENCES TO ARCHITECT-ENGINEER FOR CONSIDERATION AND DECISION BEFORE PROCEEDING TO DO WORK. CONTRACTOR SHALL NOT SCALE DRAWINGS. WHERE DIMENSIONS ARE CRITICAL,

4. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND MATERIALS UNDER CONTRACT, AND PROVIDE READY ACCESSIBILITY TO ELECTRICAL EQUIPMENT, INCLUDING ANY

5. PROVIDE AN ACCURATE LAYOUT, GRADES AND ELEVATIONS: TAKE PROPER PRECAUTIONS TO PROTECT WORK AND EQUIPMENT

6. CUT ALL OPENINGS REQUIRED TO ACCOMMODATE THE WORK UNDER THIS CONTRACT, AND REPAIR ALL SURFACES, ETC., DAMAGED BY SUCH CUTTINGS. ALL WORK DONE UNDER THIS HEADING MUST CONFORM IN EVERY RESPECT FINISH AND

7. PROVIDE CODE APPROVED FIRE STOPPING AT ALL CONDUITS AND PENETRATIONS. SEAL TELECOMMUNICATION SLEEVES AFTER

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH OTHERS AS WELL AS PROVIDING TEMPORARY POWER. CHANGES AND MODIFICATIONS NECESSARY TO ENSURE COORDINATION AND AVOID CONFLICTS WITH OTHER TRADES AND/OR

9. ALL MATERIAL SHALL BE NEW AND LABELED AND LISTED ACCORDING NEC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO

10. ALL EQUIPMENT INSTALLED SHALL BE OF MANUFACTURE AND TYPE SPECIFIED. SUBMIT SHOP DRAWINGS AND PRODUCT DATA WITH ALL PERTINENT DATA AS SPECIFIED OR SCHEDULED. SUBMITTALS WITH INCOMPLETE INFORMATION WILL NOT BE

1. VERIFY EQUIPMENT SIZES, VOLTAGE AND CURRENT CHARACTERISTICS, ETC., BEFORE ORDERING ANY EQUIPMENT AND BEFORE ROUGHING-IN FOR EQUIPMENT TO BE SUPPLIED BY OTHERS. NOTIFY ENGINEER OF ANY CONFLICTS. ADVISE ALL TRADES AND OTHERS FURNISHING EQUIPMENT THAT NOMINAL CHARACTERISTICS ARE 480Y/277 AND 208Y/120 VOLTS, THREE PHASE,

12. CORRECTION OF ANY DEFECTS, REPAIR OF DAMAGE DURING CONSTRUCTION AS WELL AS ANY MINOR CHANGES IN OUTLET

13. CIRCUIT NUMBERS ARE FOR IDENTIFICATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR CORRECTLY PHASING THE CIRCUITS IN THE PANEL AND SHALL BALANCE THE LOAD ON THE PHASES UNDER NORMAL OPERATING CONDITIONS. PROVIDE TYPEWRITTEN PANEL BOARD DIRECTORIES INDICATING EACH SPECIFIC CIRCUIT DESIGNATION AND USE AS REQUIRED IN

14. ALL POWER AND LIGHTING CIRCUITS SHALL HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER NEC. 15. MULTIWIRE BRANCH CIRCUITS SHALL BE GROUPED AND IDENTIFIED. IN ADDITION, EACH MULTIWIRE BRANCH CIRCUIT SHALL

A. COPPER, 600 VOLTS MINIMUM RATED 75 DEGREES CENTIGRADE, MAXIMUM TEMPERATURE – INSULATION: THHN, THWN.

D. ALL NEUTRAL CONDUCTORS SHARED BY 2 OR MORE PHASE CONDUCTORS SHALL BE ONE AWG SIZE GREATER THAN THE

CODED AS FOLLOWS:

C. COLORS ON CONDUCTOR 6 AWG AND SMALLER SHALL BE INTEGRAL PART OF INSULATION. COLORS ON CONDUCTOR 4 AWG AND LARGER, EITHER COLOR CODING TAPE OR PAINTED WITH TWO COATS OF CORRECT COLOR PAINT AT ALL TERMINALS

19. ALL CIRCUITS SHOWN ARE BASED ON CIRCUIT ROUTING SHOWN ON DRAWINGS. CONTRACTOR SHALL UPSIZE CIRCUIT FOR COMPLIANCE WITH VOLTAGE DROP REQUIREMENTS BASED ON FIELD ROUTING ACCORDING TO THE FOLLOWING SCHEDULE:

C. 480V-UPSIZE TO NEXT LARGER CONDUCTOR EVERY 200' OF CIRCUIT LENGTH.

20. OUTLET BOXES SHALL BE GALVANIZED STEEL OR RUST RESISTANT MALLEABLE IRON ALLOY. OUTLET BOXES FOR WIRING

GALVANIZED AFTER FABRICATION. IDENTIFY PULL AND JUNCTION BOXES AS REQUIRED PER NEC.

22. SWITCHES AND DUPLEX CONVENIENCE RECEPTACLES SHALL BE OF SPECIFICATIONS GRADE, BACK OR SIDE WIRED, RATED AT 20 AMPS, 125 VOLT, COLOR AS SELECTED BY ARCHITECT. DUPLEX RECEPTACLES SHALL BE U-SLOTTED GROUNDING TYPE. G. WALL PLATE SHALL MATCH CORRESPONDING WIRING DEVICE. PLATE SECURING SCREWS SHALL BE METAL WITH HEAD COLOR TO MATCH PLATE FINISH. MATERIAL FOR WALL PLATE SHALL BE SMOOTH PLASTIC.

23. ALL PENETRATIONS THROUGH FLOORS AND WALLS SHALL BE SEALED WITH FIRE PROOFING MATERIAL TO PRESERVE THE FIRE RATING OF FLOORS AND WALLS.

24. COORDINATION WITH OTHER TRADES:

A. VISIT THE PROJECT SITE, EXAMINE THE CONDITION OF THE PREMISES, THESE PLANS AND ALL CONTRACT DOCUMENTS RELATING TO THE AREA OF WORK; AND REPORT ANY DISCREPANCIES OR OMISSIONS TO THE ENGINEER FOR RESOLUTION AND CLARIFICATION PRIOR TO SUBMISSION OF BIDS.

B. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH OTHER TRADES.

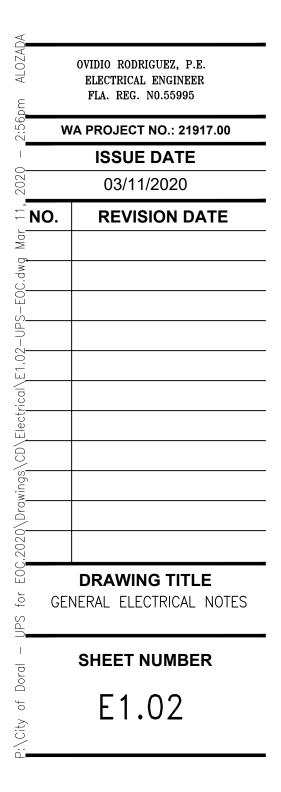
25. REFER TO COMPLETE SET OF DRAWINGS AND SPECIFICATIONS FOR WORK UNDER THIS CONTRACT.

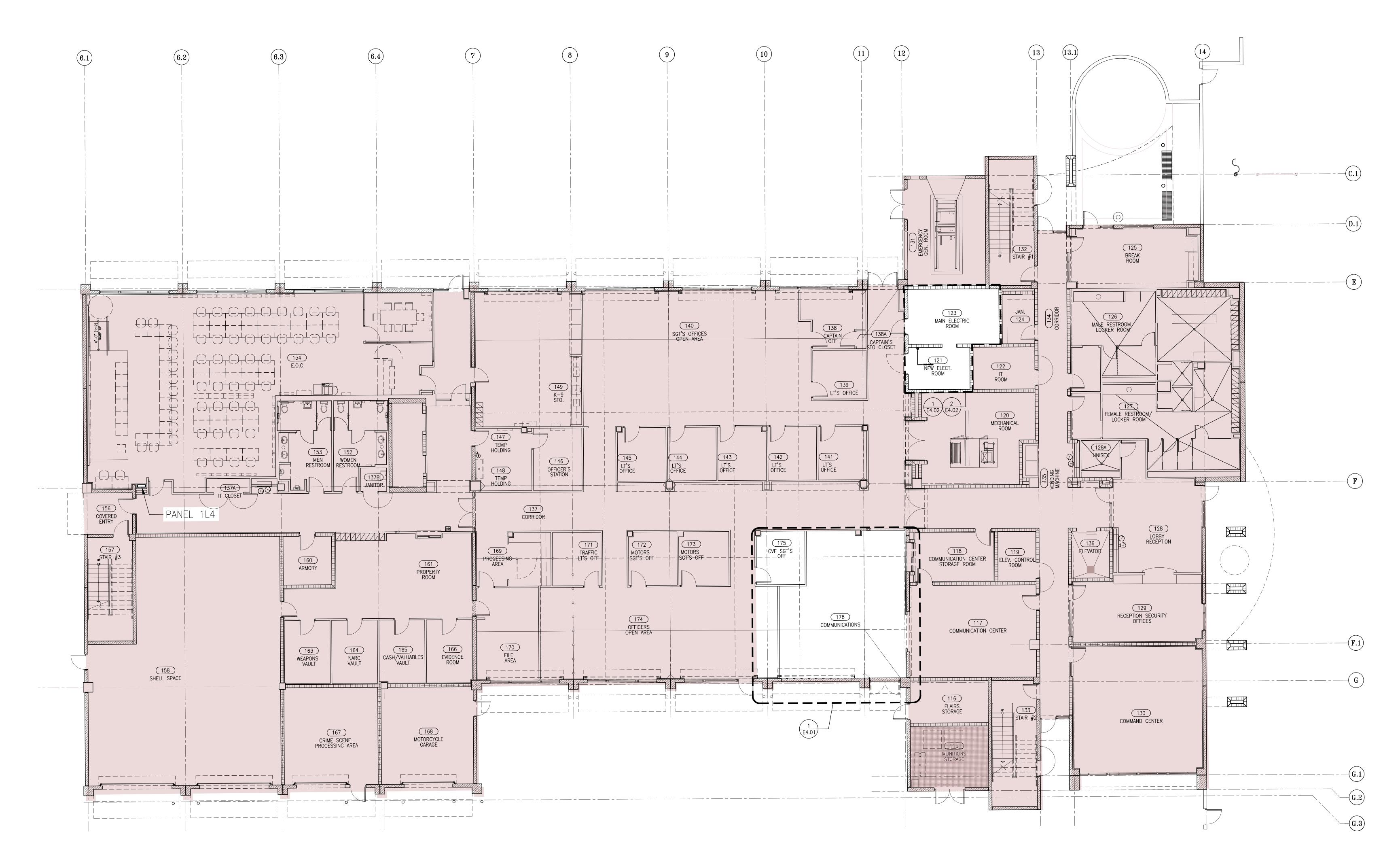
26. ALL ELECTRICAL WORK SHALL BE INSTALLED CONCEALED UNLESS OTHERWISE NOTED.





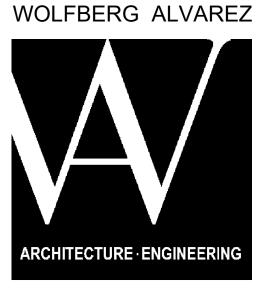




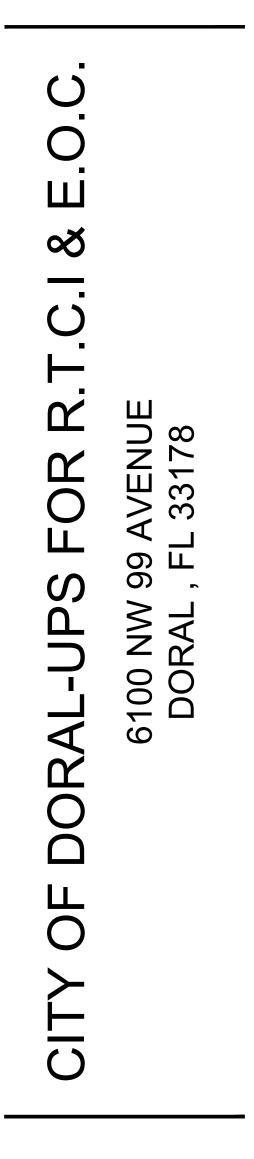


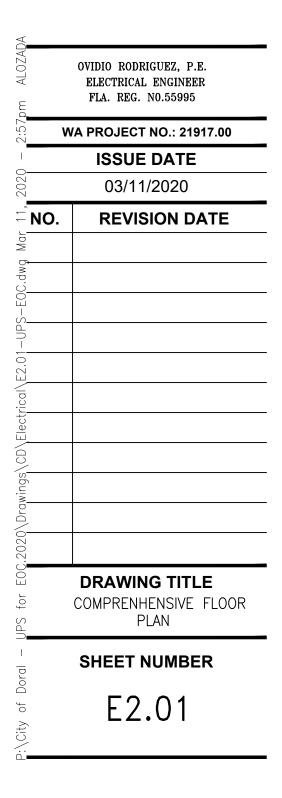
INDICATES EXISTING AREAS TO REMAIN-NO WORK.

 $\frac{1}{1} \underbrace{\begin{array}{c} \text{COMPREHENSIVE} \\ \text{E2.01} \end{array}}_{1/8"=1'-0"} FLOOR PLAN$ 









PANE		NAME:	"MDP" (EXISTING)		45,000 R	MS S	SYMMETR	ICAL A.I.C.				
	BOARD	TYPE:	MAIN LUGS ONLY		SURFAC	E MC	UNTED, N	IEMA 1 ENCLOSURE				
PANEL	LOCAT	ION:	MAIN ELECT. ROOM		480Y/277	VOL	TS, 3 PHA	SE, 4 WIRE, 60 Hz	800 AMP FRAME			
SUPPL	LIED FR	ROM:	ATS #1 MAIN 1 OF 3									
			T									
CKT	TRIP	NO.	WIRE / GND / COND	LOAD SERVED	LOAD	Ø	LOAD	LOAD SERVED	WIRE / GND / COND	NO.	TRIP	CKT
NO.	AMPS	POLES			VA	~	VA			POLES	AMPS	NO.
	INIP AMPSINO. POLESWIRE / GND / CONDLOAD SERVED703SPARE30033#300 , #3 GND, 3" CEXISTING CHILLER			A	65500							
1	70	3		SPARE		В	69200	EXIST. PANEL "1H1S1" AND "1H1S2"	4#600 , #3 GND, 4" C	3	400	2
						С	67400					
					41708	Α	36460					
7	300	3	3#300 , #3 GND, 3" C	EXISTING CHILLER 4170	41708	В	36460	EXIST. T1 - 150 KVA XFMR	3#250 , #4 GND, 3" C	3	250	8
					41708	C	36460					
					10000	A	20708					
13	70	3	3#4 , #8 GND, 1 1/2" C	EXIST. T4 - 45 KVA XFMR	10000	B	20708	EXIST. CHILLER	3#1 , #6 GND, 1 1/2" C	3	110	14
					10000	C	20708					
						A	22200					
19	30	3	4#10 , #10 GND, 3/4" C	EXIST. TVSS		В	27400	EXIST. PANEL "1H2"	4#3/0 , #6 GND, 2 1/2" C	3	200	20
						С	26000					
					7482	A	<u>16100</u>					
25	70	3	3#4 , #8 GND, 1 1/2" C	EXIST. ELEVATOR	7482	В	14900	NEW UPS	3#1/0 , #6 GND, 1 1/2" C	3	150	26
					7482	С	13900					
				DEMAND FACTOR = 669.4 kVA ESTIMA								
PHASE	E BALAN	NCE (KVA	A) - A: 220.2 , B: 227.9 , C: 3	223.7 DESIGN LOAD = 805 AMPERES,	TOTAL LOAI	D WIT	TH EXPANS	SION = 805 AMPERES				
NOTES	<u>S:</u>											

(1) SHADED AREAS REPRESENT EXISTING CIRCUITS NOT IN SCOPE.

DANE					40.000	10.0						
		D NAME:	"1H1 S2" (EXISTING)		,							
	LBOARD		MAIN LUGS ONLY				,	IEMA 1 ENCLOSURE				
	L LOCA		MAIN ELECTRICAL ROOM	M	480Y/277	VOL	IS, 3 PHA	SE, 4 WIRE, 60 Hz	400 AMP FRAME			
SUPF	LIED FF	ROM:	"MDP" THRU "1H1S1"									
01/7												
CKT	TRIP	NO.	WIRE / GND / COND	LOAD SERVED	LOAD	Ø	LOAD	LOAD SERVED	WIRE / GND / COND	NO.	TRIP	CKT
NO.	AMPS	POLES			VA		VA			POLES		NO.
10					2100	A	980	LIGHTING 1ST FL CORR. PDA (1)	2#10 , #10 GND, 3/4" C	1	20	44
43	20	3	3#12 , #12 GND, 3/4" C	CHILLLER W.P. (CHWP-1)	2100	В	1958	LIGHTING 1ST FL NE ADDITION(1)	2#10 , #10 GND, 3/4" C	1	20	46
					2100	С	1562	LIGHTING 1ST FL SE ADDITION (1)	2#10 , #10 GND, 3/4" C	1	20	48
49	20	1	2#10 , #10 GND, 3/4" C	VAV4-1 (1)	2000	Α	961	LIGHTING 1ST FL RM 100	2#10 , #10 GND, 3/4" C	1	20	50
51	20	1	2#10 , #10 GND, 3/4" C	VAV4-2 (1)	2500	В	1914	LIGHTING 1ST FL SW ADDITION(1)	2#10 , #10 GND, 3/4" C	1	20	52
53	20	1	2#10 , #10 GND, 3/4" C	VAV4-3 (1)	4000	С	3000	VAV4-9 (1)	2#10 , #10 GND, 3/4" C	1	20	54
55	20	1	2#10 , #10 GND, 3/4" C	VAV4-4 (1)	1500	Α	1500	VAV4-10 (1)	2#10 , #10 GND, 3/4" C	1	20	56
57	25	1	2#10 , #10 GND, 3/4" C	VAV4-5 (1)	5000	В	4000	VAV4-11 (1)	2#10 , #10 GND, 3/4" C	1	20	58
59	20	1	2#10 , #10 GND, 3/4" C	VAV4-6 (1)	2500	C	4000	VAV4-12 (1)	2#10 , #10 GND, 3/4" C	1	20	60
61	20	1	2#10 , #10 GND, 3/4" C	LIGHT (EXTERIOR ADDITION)(1)	2400	Α	3000	VAV4-13 (1)	2#10 , #10 GND, 3/4" C	1	20	62
63	20	1	2#10 , #10 GND, 3/4" C	VAV4-8 (1)	1500	B	5820					
65	20	1	2#10 , #10 GND, 3/4" C	VAV4-14 (1)	5000	C	5820	AHU -4 (15 HP ADDITION) (1)	3#10 , #10 GND, 3/4" C	3	30	64
67	20	1	2#10 , #10 GND, 3/4" C	VAV4-15 (1)	2000	Α	5820					
69	20	1	2#10 , #10 GND, 3/4" C	FUELING STA. CANOPY LIGHT	1020	В	900	LIGHT EXTERIOR ADDITION (1)	2#12 , #12 GND, 3/4" C	1	20	70
71	20	1		SPARE		С		SPARE		1	20	72
73	20	1		SPARE		Α	2771					
75	20	1		SPARE		В	2771	UPS-2 BATTERY (CONTROL)	3#12 , #12 GND, 3/4" C	3	20	74
77	20	1		SPARE		С	2771				1	
79	20	1		SPARE		Α						
81	20	1		SPARE		В		TVSS	4#10 , #10 GND, 3/4" C	3	30	80
83	20	1		SPARE		С						
TOTA	L CONNE	ECTED LC	AD = 75.9 kVA X 100% D	EMAND FACTOR = 75.9 kVA ESTIMATED	DEMAND	LOA	)					,

NOTES: (1) SHADED AREAS REPRESENT EXISTING CIRCUITS NOT IN SCOPE.

PANE	LBOARD	NAME:	"1L1 S2" (EXISTING)	
PANE	LBOARD	TYPE:	MAIN LUGS ONLY	
PANE	L LOCAT	ION:	MAIN ELECTRICAL ROC	M
SUPP	LIED FR	ROM:	"MDP" THRU "1L1S1"	
CKT	TRIP	NO.	WIRE / GND / COND	LOAD
NO.	AMPS	POLES	WIRE / GND / COND	LOAD
43	20	1	2#12 , #12 GND, 3/4" C	RECEPT. BA
45	20	1	2#12 , #12 GND, 3/4" C	RECEPT
47	20	1	2#12 , #12 GND, 3/4" C	RECEPT
49	20	1	2#12 , #12 GND, 3/4" C	RECEPT
51	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT F
53	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT F
55	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT F
57	20	1	2#12 , #12 GND, 3/4" C	VENDING
59	20	1	2#12 , #12 GND, 3/4" C	VENDING
61	20	1	2#12 , #12 GND, 3/4" C	RECE
63	20	1	2#10 , #10 GND, 3/4" C	COPY MACH
65	20	1	2#12 , #12 GND, 3/4" C	RECEPTA
67	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE
69	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE
71	20	1	2#12 , #12 GND, 3/4" C	VENDING MAG
73	20	1	2#12 , #12 GND, 3/4" C	VENDING MAG
75	20	1	2#12, #12 GND, 3/4" C	RECEPTAC
77	20	1	2#8 , #12 GND, 3/4" C	GAS PUMP #
79	20	1	2#8 , #12 GND, 3/4" C	GAS PUMP #
81	20	1	2#8 #12 CND 3/4" C	

PANELBOARD NAME: "1L2 S1" (EXISTING)

PANELBOARD TYPE: MAIN CIRCUIT BREAKER

NOTES: (1)SHADED AREAS REPRESENT EXISTING CIRCUITS NOT IN SCOPE.

	. Locat IED FR		NEW ELECTRICAL ROOM PANEL "1L1S1"	Л	208Y/120	VOL	TS, 3 PHA	SE, 4 WIRE, 60 Hz	225 AMP FRAME			
CKT	TRIP	NO.	WIRE / GND / COND	LOAD SERVED	LOAD	ø	LOAD	LOAD SERVED	WIRE / GND / COND	NO.	TRIP	CKT
NO. 1	AMPS 20	POLES	2#12 , #12 GND, 3/4" C	RECEPTACLES RMS. 138,139	VA 1080	Α	VA 540	RECEPTACLES RM. 141	2#12 , #12 GND, 3/4" C	POLES	AMPS 20	NO.
3	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	B	540	RECEPTACLES RM. 142	2#12 , #12 GND, 3/4" C	1	20	4
5	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	C	540	RECEPTACLES RM. 143	2#12 , #12 GND, 3/4" C	1	20	6
7	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	A	540	RECEPTACLES RM. 144	2#12 , #12 GND, 3/4" C	1	20	8
9	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	900	B	540	RECEPTACLES RM. 145	2#12 , #12 GND, 3/4" C	1	20	10
11	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	C	720	NEW EF-12	2#12 , #12 GND, 3/4" C	1	20	12
13	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	A	720	RECEPTACLES RM. 146	2#12 , #12 GND, 3/4" C	1	20	14
15	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	B	1000	COPY MACHINE RM. 140	2#12 , #12 GND, 3/4" C	1	20	16
17	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	1080	С		SPARE (2)		1	20	18
19	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	720	A	540	RECEPTACLES RMS. 175 (2)	2#12 , #12 GND, 3/4" C	1	20	20
21	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	720	В		SPARE (2)		1	20	22
23	20	1	2#12, #12 GND, 3/4" C	RECEPTACLES RM. 140	720	С		SPARE (2)		1	20	24
25	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES RM. 140	720	A		SPARE (2)		1	20	26
27	20	1	2#12, #12 GND, 3/4" C	NETWORK REPEATERS	360	В		SPARE (2)		1	20	28
29	20	1	2#12 , #12 GND, 3/4" C	PRINTER RM. 140	600	С		SPARE (2)		1	20	30
31	20	1	2#10 , #10 GND, 3/4" C	OVERHEAD DOOR	1800	A		SPARE (2)		1	20	32
33	20	1	2#10 , #10 GND, 3/4" C	OVERHEAD DOOR	1800	В		SPARE (2)		1	20	34
35	20	1	2#10, #10 GND, 3/4" C	OVERHEAD DOOR	1800	С		SPARE (2)		1	20	36
37	20	1	2#10, #10 GND, 3/4" C	OVERHEAD DOOR	1800	A						
39	20	1		SPARE		В		TVSS	3#10 , #10 GND, 3/4" C	3	30	38
41	20	1		SPARE		C						
TOTAL	CONNE	CTED LO	AD = 26.3 kVA X 70% DEI	MAND FACTOR = 18.5 kVA ESTIMATED	DEMAND L	OAD		· · · · · · · · · · · · · · · · · · ·	· ·			

PHASE BALANCE (KVA) - A: 10.6, B: 8, C: 7.6 DESIGN LOAD = 51 AMPERES, TOTAL LOAD WITH EXPANSION = 64 AMPERES <u>NOTES:</u> (1) SHADED AREAS REPRESENT EXISTING CIRCUITS NOT IN SCOPE. (2) LOADS MOVED TO NEW PANEL "1L5".

PHASE BALANCE (KVA) - A: 25, B: 29.5, C: 30.8 DESIGN LOAD = 91 AMPERES, TOTAL LOAD WITH EXPANSION = 114 AMPERES

#### 22,000 RMS SYMMETRICAL A.I.C. SURFACE MOUNTED, NEMA 1 ENCLOSURE 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz

#### EXISTING PANEL SECTION 2 400 AMP FRAME

CKT	TRIP	NO.	WIRE / GND / COND	LOAD SERVED	LOAD	ø	LOAD	LOAD SERVED	WIRE / GND / COND	NO.	TRIP	CK
NO.		POLES			VA		VA			POLES	AMPS	NC
43	20	1	2#12 , #12 GND, 3/4" C	RECEPT. BATTERY ROOM	1100	Α	7487					
45	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM	1100	В	7487	PANEL 1L3S1	4#4 , #8 GND, 1 1/4" C	3	80	4
47	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM	1100	С	7487					
49	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM	1100	Α	5866					
51	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM CEILING	1200	В	5866	PANEL 1L3S2	4#4 , #8 GND, 1 1/4" C	3	80	1
53	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM CEILING	1200	C	5866					
55	20	1	2#12 , #12 GND, 3/4" C	RECEPT. IT ROOM CEILING	1200	Α	720	FIRE CONTROL PANEL	2#12 , #12 GND, 3/4" C	1	20	
57	20	1	2#12 , #12 GND, 3/4" C	VENDING MACHINE	300	В	720	FIRE CONTROL PANEL	2#12 , #12 GND, 3/4" C	1	20	2
59	20	1	2#12 , #12 GND, 3/4" C	VENDING MACHINE	300	С						
61	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE	720	Α		SPARE		3	100	0
63	20	1	2#10 , #10 GND, 3/4" C	COPY MACHINE (RM. 100)	1200	В						
65	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE ROOF	720	C	1080	RECEPTACLES (RM. 103, 104)	2#10 , #10 GND, 3/4" C	1	20	
67	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE GARAGE BAY	540	Α	399	TV MONITORS (RM. 102)	2#12 , #12 GND, 3/4" C	1	20	0
69	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLE GARAGE BAY	540	В	900	CHARGING STATION (RM. 102)	2#12 , #12 GND, 3/4" C	1	20	
71	20	1	2#12 , #12 GND, 3/4" C	VENDING MACHINE (RM. 102)	300	С	180	COFFEE MACHINE (RM. 102)	2#12 , #12 GND, 3/4" C	1	20	
73	20	1	2#12 , #12 GND, 3/4" C	VENDING MACHINE (RM. 102)	300	A	1200	MICROWAVE (BREAK RM. 102)	2#10 , #10 GND, 3/4" C	1	20	
75	20	1	2#12 , #12 GND, 3/4" C	RECEPTACLES (RM. 101)	986	В	1200	MICROWAVE (BREAK RM. 102)	2#10 , #10 GND, 3/4" C	1	20	
77	20	1	2#8 , #12 GND, 3/4" C	GAS PUMP #1 (1/2 HP MAX)	1200	С	<mark>35</mark> 0	REFRIGERATOR (RM. 102)	2#12 , #12 GND, 3/4" C	1	20	
79	20	1	2#8 , #12 GND, 3/4" C	GAS PUMP #2 (1/2 HP MAX)	1200	A	350	FREEZER (RM. 102)	2#12, #12 GND, 3/4" C	1	20	
81	20	1	2#8 , #12 GND, 3/4" C	GAS PUMP #3 (1/2 HP MAX)	1200	В	360	RECEPT. ELEV. MACH. ROOM	2#12 , #12 GND, 3/4" C	1	20	
83	20	1	2#6 , #12 GND, 3/4" C	GAS PUMP #4 (3/4 HP MAX)	1700	С	200	FUEL MANAGMNT. SYST. PNL	2#12 , #12 GND, 3/4" C	1	20	
<b>DTAI</b>	CONNE	CTED LO	AD = 64.7 kVA X 91% DEI	MAND FACTOR = 59.2 kVA ESTIMATED D	DEMAND L	OAD						

#### 22,000 RMS SYMMETRICAL A.I.C. SURFACE MOUNTED, NEMA 1 ENCLOSURE 208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz

#### 100 AMP TRIP MAIN BREAKER 225 AMP FRAME

		MAXIMUM DEMAND (KW)	
		PER FPL ELECTRICAL	
ITEM	FPL STATEMENT DATE	STATEMENTS	AMI
ITEIVI	FPL STATEMENT DATE	ACCOUNT NO.	AIVI
		11708-57526	
		METER KV58510	
1	FEB 04	149	
2	MAR 05	140	
3	APR 03, 2019	144	
4	MAY 03, 2019	149	
5	JUN 04	161	
6	JUL 03, 2019	163	
7	AUG 03, 2019	170	
8	SEP 05, 2019	170	
9	OCT 04, 2019	174	
10	NOV 04, 2019	188	
11	DEC 04, 2019	170	
12	JAN 06, 2020	156	
М	AXIMUM DEMAND (11-04-2019) AT 125%	235	
	SERVICE MAIN OCPD		

PANE PANE	LBOARD LBOARD L LOCAT LIED FR	TYPE: ION:	"1L4 (EXISTING) MAIN CIRCUIT BREAKER CENTRAL OPERATIONS C "1L5"		22,000 RMS SYMMETRICAL A.I.C.FLUSH MOUNTED, NEMA 1 ENCLOSURE208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz208Y/120 VOLTS, 3 PHASE, 4 WIRE, 60 Hz225 AMP FRAME							
CKT NO.	TRIP AMPS	NO. POLES	WIRE / GND / COND	LOAD SERVED	LOAD VA	ø	LOAD VA	LOAD SERVED	WIRE / GND / COND	NO. POLES	TRIP AMPS	CKT NO.
1	20	1	2#12 , #12 GND, 3/4" C	VIDEO WALL (RM. 100)	1064	Α	840	COMPUTER NOTE-1 (ckt. 2-6)	2#12 , #12 GND, 3/4" C	1	20	2
3	20	1	2#12 , #12 GND, 3/4" C	VIDEO WALL (RM. 100)	1064	В	840	COMPUTER NOTE-1 (ckt. 2-6)	2#12 , #12 GND, 3/4" C	1	20	4
5	20	1	2#12 , #12 GND, 3/4" C	TV MONITORS (RM. 100)	1064	С	840	COMPUTER NOTE-1 (ckt. 2-6)	2#12 , #12 GND, 3/4" C	1	20	6
7	20	1	2#12 , #12 GND, 3/4" C	TV MONITORS (RM. 100)	1064	A	1400	COMPUTER NOTE-1 (ckt. 8-12)	2#12 , #12 GND, 3/4" C	1	20	8
9	20	1	2#12 , #12 GND, 3/4" C	TV MONITORS (RM. 100)	1064	В	1400	COMPUTER NOTE-1 (ckt. 8-12)	2#12 , #12 GND, 3/4" C	1	20	10
11	20	1	2#12 , #12 GND, 3/4" C	CHARGING STATION (RM. 100)	900	С	1120	COMPUTER NOTE-1 (ckt. 8-12)	2#12 , #12 GND, 3/4" C	1	20	12
13		1		SPACE		Α	1120	COMPUTER NOTE-1 (ckt. 14-18)	2#12 , #10 GND, 3/4" C	1	20	14
15		1		SPACE		В	1120	COMPUTER NOTE-1 (ckt. 14-18)	2#12 , #12 GND, 3/4" C	1	20	16
17		1		SPACE		С	1120	COMPUTER NOTE-1 (ckt. 14-18)	2#12, #12 GND, 3/4" C	1	20	18
19		1		SPACE		Α	1120	COMPUTER NOTE-1 (ckt. 20-24)	2#12, #12 GND, 3/4" C	1	20	20
21		1		SPACE		В	840	COMPUTER NOTE-1 (ckt. 20-24)	2#12, #12 GND, 3/4" C	1	20	22
23		1		SPACE		С	840	COMPUTER NOTE-1 (ckt. 20-24)	2#12, #12 GND, 3/4" C	1	20	24
25		1		SPACE		Α	840	COMPUTER NOTE-1 (ckt. 26-30)	2#12, #12 GND, 3/4" C	1	20	26
27		1		SPACE		В	840	COMPUTER NOTE-1 (ckt. 26-30)	2#12 , #12 GND, 3/4" C	1	20	28
29		1		SPACE		С	840	COMPUTER NOTE-1 (ckt. 26-30)	2#12, #12 GND, 3/4" C	1	20	30
31		1		SPACE		Α	840	COMPUTER NOTE-1 (ckt. 32-36)	2#12, #12 GND, 3/4" C	1	20	32
33		1		SPACE		В	840	COMPUTER NOTE-1 (ckt. 32-36)	2#12, #12 GND, 3/4" C	1	20	34
35		1		SPACE		С	840	COMPUTER NOTE-1 (ckt. 32-36)	2#12, #12 GND, 3/4" C	1	20	36
37	20	1	2#12 , #12 GND, 3/4" C	CLOCK	50	Α	1500		2#42 #42 CND 2/4# C		20	20
39	20	1	2#12 , #12 GND, 3/4" C	CARD READER	50	В	1500	APC-SMART UPS	2#12 , #12 GND, 3/4" C	2	20	38
41		1		SPACE		С	1500			0	00	10
43		1		SPACE		Α	1500	APC-SMART UPS	2#12 , #12 GND, 3/4" C	2	20	42
45		1		SPACE		В	1500	APC-SMART UPS	2#12 , #12 GND, 3/4" C	2	20	46
47		1		SPACE		С	1500	APC-SIVIARI UPS	2#12, #12 GND, 3/4 C	2	20	40
49		1		SPACE		A						
<mark>5</mark> 1		1		SPACE		В		SPD	3#10 , #10 GND, 3/4" C	3	30	50
53 TOTAI		1		SPACE		С						

NOTES: 1. REFER GENERAL ELECTRICAL NOTES №. 15.

PANELBOARD NAME:			"1L5" (NEW)									
PANELBOARD TYPE:			MAIN CIRCUIT BREAKER					MA 1 ENCLOSURE	250 AMP TRIP MAIN BREAKER			
PANEL LOCATION:			NEW ELECTRICAL ROOM			VOL	IS, 3 PHAS	SE, 4 WIRE, 60 Hz	250 AMP FRAME			
SUPP	LIED FF	ROM:	NEW UPS-2									
									-			1
CKT	TRIP		WIRE / GND / COND	LOAD SERVED	LOAD		LOAD	LOAD SERVED	WIRE / GND / COND	NO.	TRIP	CKT
NO.	AMPS	POLES			VA		VA			POLES		NO.
1	100	3	4#3 , #8 GND, 1 1/4" C	PANEL "1L4"	11300	Α	1080	RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	2
					11100	B	1260	RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	4
					10600	С	292	RECEP RM 178 IT SWITCH 9300	2#12 , #12 GND, 3/4" C	2	20	6
7	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 7-11)	540	Α	292			-	20	
9	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 7-11)	540	В		SPARE		1	20	10
11	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 7-11)	360	С	720	TV RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	12
13	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 13-19)	1080	Α	720	TV RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	14
15	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 13-19)	900	В	720	TV RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	16
17	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 13-19)	900	С	720	TV RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	18
19	20	1	2#12 , #12 GND, 3/4" C	SYS FURNITURE (1) (CKT 13-19)	292	Α	720	TV RECEP RM 178	2#12 , #12 GND, 3/4" C	1	20	20
21	20	2	2#12 , #12 GND, 3/4" C	RECEP RM 178 IT SWITCH 9300	292	В	292	RECEP RM 178 IT SWITCH 9300	2#12 , #12 GND, 3/4" C	2	20	22
21					292	С	292	RECEP RIVI 1/6 II SWITCH 9300	2#12, #12 GND, 3/4 C		20	22
25	20	2	2#12 , #12 GND, 3/4" C	RECEP RM 178 IT SWITCH 9300	292	Α	50		2#42 #42 OND 2/4# 0	2	20	26
					292	B	50	RECEP RM 178 IT SWITCH SG250	2#12 , #12 GND, 3/4" C			26
29	20	1	2#12, #12 GND, 3/4" C	RECEP RM 178	360	С						
31	20	1				Α						
33	20	1				В						
35	20	1				С						
37	20	1				Α						
39	20	1				В		TVSS	3#10 , #10 GND, 3/4" C	3	30	38
41	20	1				С						
									1	1	1	L

TOTAL CONNECTED LOAD = 46.3 kVA X 97% DEMAND FACTOR = 45 kVA ESTIMATED DEMAND LOAD NOTES:

PHASE BALANCE (KVA) - A: 11.3 , B: 11.1 , C: 10.6 DESIGN LOAD = 79 AMPERES, TOTAL LOAD WITH EXPANSION = 99 AMPERES

PHASE BALANCE (KVA) - A: 16.4, B: 15.4, C: 14.5 DESIGN LOAD = 125 AMPERES, TOTAL LOAD WITH EXPANSION = 156 AMPERES

(1) PROVIDE HANDLE TIE. REFER GENERAL ELECTRICAL NOTES No. 15.

NOTE-		MDP	LOAD	CALC
NOTE:		1H1S2	1L4	
1- EXISTING INFORMATION TAKEN FROM "CITY OF DORAL POLICE FACILITY PUBLIC WORKS ADDITION" PROJECT NO. 21321, DATED 05-12-2014, BY W'OLFBERG ALVAREZ & PARTNERS, AND "CITY OF DORAL CENTRAL OPERATIONS CENTER" PROJECT NO. 21814, DATED 11-14-2018, BY WOLFBERG ALVAREZ & PARTNERS.		1L1S2	1L5	
		1L2S1		







