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**MUNICIPAL INSPECTION REQUIREMENTS AND RECORD 06/17/2019**

MUNICIPAL NO.2019-059285 FOLIO: 3220130010620

JOB SITE ADDRESS 15550 NW 59 AVE

PROPOSED USE WAREHOUSE

LEGAL 13 52 40 25.32 AC SUB OF PB 2-17

APPLICATION TYPE ALTER EXTERIOR 0 SQFT 0 UNITS 0 FLOORS

OWNER NAME CATERPILLAR TRACTOR CO

CONTRACTOR

QUALIFIER

PERMIT TYPE MUNICIPAL BLDG

CATEGORIES 0001 MUNICIPAL GENERAL BUILDING

DATE: 6/17/2019 PROCESS NUMBER: M2019014215 NEW *AMOUNT PAID 402.46

DERM 1 ASBESTOS REVI 175.00 DERM 1 UP FRONT FEE- 80.00

DERM 1 MIN COMM REV(90.00 FIRE 100000 ALTERATIONS & 237.90

FIRE 100000 FIRE UPFRT FE 34.32 RSUR 2 RER 7.5% SUR 13.88

UBS1 1 BLDG 7.5% UPF 1.88 UPMU 1 UPFRONT FEE F 25.00

URS1 1 RER 7.5% UPFR 6.00

6/14/2019 11:40 BNZWEB1 181906140701 WEBIPAS 402.46

MUNICIPAL INSPECTION REQUIREMENTS AND RECORD 06/17/2019

MUNICIPAL NO.2019-059285 PROCESS NO. M2019014215 FOLIO: 3220130010620

JOB SITE ADDRESS 15550 NW 59 AVE

PROPOSED USE WAREHOUSE

REQUIRED INSPECTIONS INIT DATE

FIRE

0001 FIRE INSPECTIONS RECOMMENDED

200 FIRE HYDRANTS

208 FIRE TCO INSPECTION

211 PRELIMINARY

209 FIRE FINAL

_____	_____
_____	_____
_____	_____
_____	_____

MUNICIPAL INSPECTION REQUIREMENTS AND RECORD 06/17/2019

MUNICIPAL NO.2019-059285 PROCESS NO. M2019014215 FOLIO: 3220130010620

JOB SITE ADDRESS 15550 NW 59 AVE

PROPOSED USE WAREHOUSE

TO SCHEDULE A FIRE INSPECTION, PLEASE VISIT THE WEB AT
 WWW.MIAMIDADE.GOV/BUILDING OR WWW.MIAMIDADE.GOV/FIRE. YOU WILL
 NEED TO PROVIDE YOUR TEN DIGIT MUNICIPAL INSPECTION NUMBER AND
 INSPECTION TYPE. THE INSPECTION TYPE CAN BE FOUND ON YOUR
 INSPECTION REQUIREMENTS AND RECORDS CARD.

IF YOU HAVE ANY QUESTIONS OR CONCERNS REGARDING AN INSPECTION,
 SCHEDULING A PRELIMINARY INSPECTION, OR LOAD BANK TEST

INSPECTION, PLEASE CALL FIRE PREVENTION AT 786-331-4800.

IF YOU HAVE ANY QUESTIONS OR CONCERNS REGARDING A PLAN REVIEW,
PLEASE CALL FIRE ENGINEERING AT (786) 315-2771.

****BE ADVISED THIS IS NOT A PERMIT. PERMIT IS TO BE ISSUED BY
YOUR CORRESPONDING MUNICIPAL BUILDING DEPARTMENT.**

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MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES
<http://www.miamidade.gov/building/home.asp>
6/14/2019 11:40:36 AM

Tracking #	Process #	Permit #
3219014215	M2019014215	2019059285

THIS COPY OF PLANS MUST BE AVAILABLE ON BUILDING SITE OR AN INSPECTION WILL NOT BE MADE.

Review	Disposition	Reviewer	Date
DERM	A	Julio Diaz	6/14/2019 11:33:05 AM
FIRE	A	Lilia Rodriguez	6/6/2019 1:31:09 PM
PWIF	N	Melina Idarraga	5/30/2019 8:57:48 AM

Disclaimer.

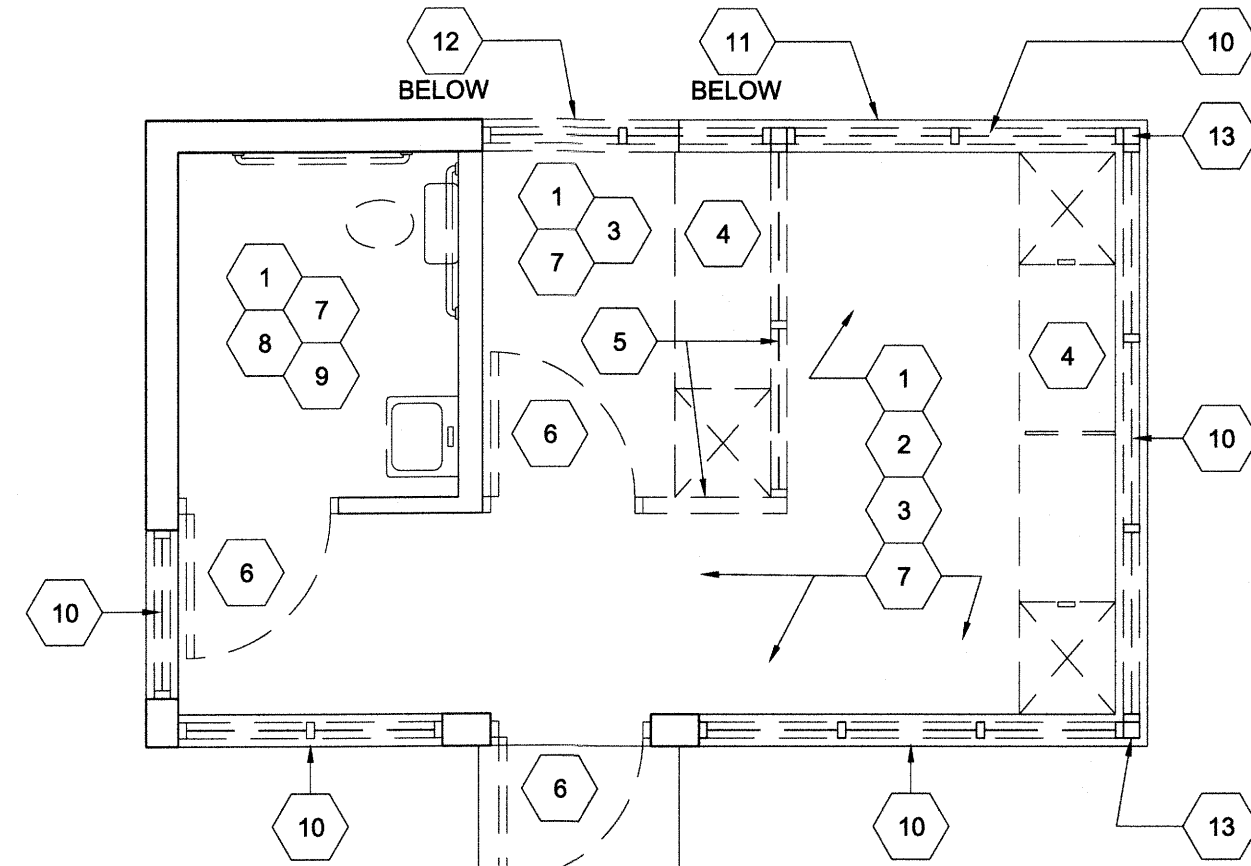
Subject to compliance with all Federal, State, and County Laws, rules and regulations. Miami-Dade County assumes no responsibility for accuracy of or results of these plans.

NOTICE: In addition to the requirements of this permit, there may be additional restrictions applicable to the property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies or federal agencies.

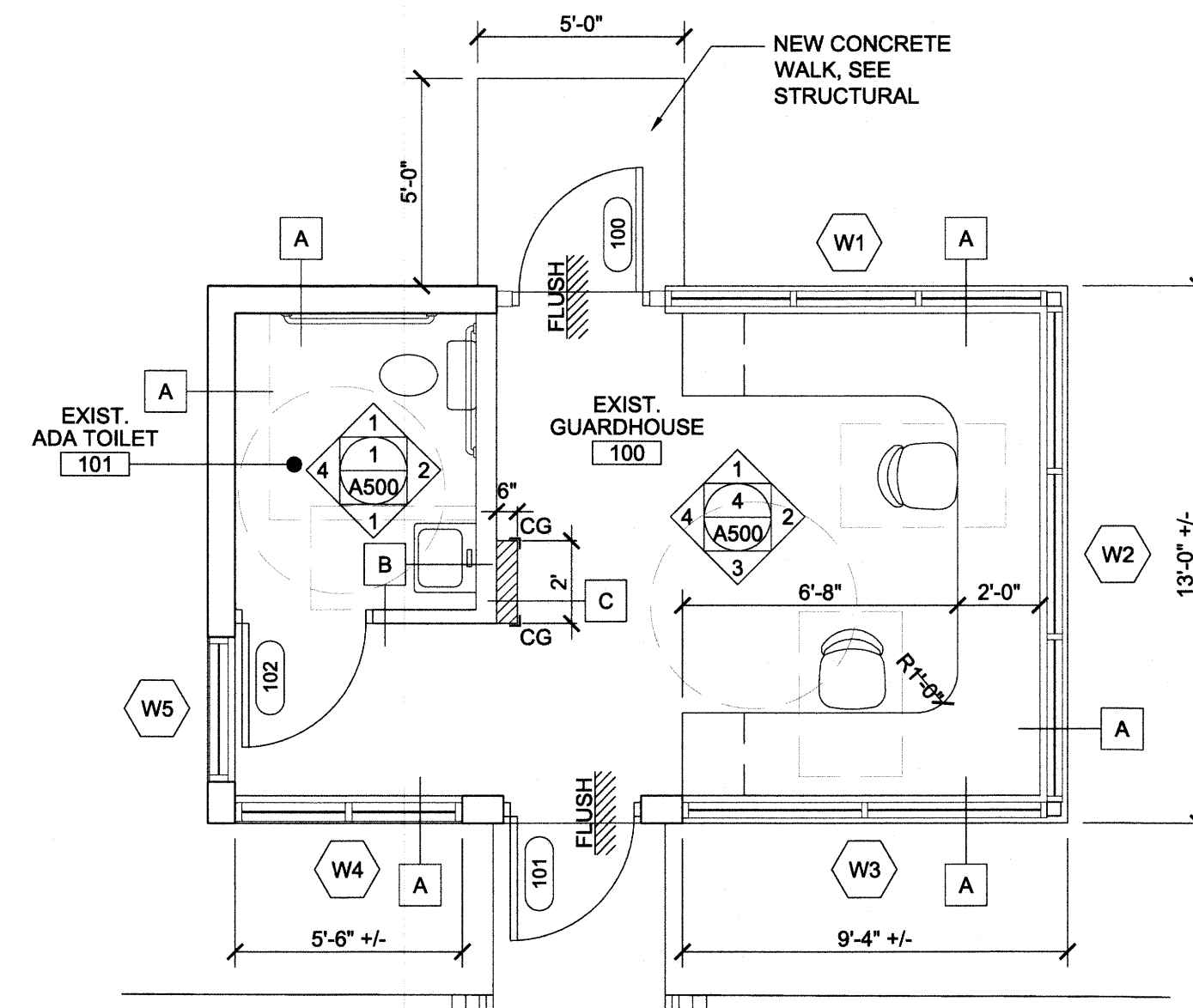
Stamp Name	Trade	Disposition	Stamp Description
Approved	FIRE	A	Approved
Approved As Noted	FIRE	P	Approved as noted. See comments, markups and stamps.
Disapproved	DERM	D	Disapproved
Approved	DERM	A	Approved

- 1 ALL EXISTING FLOOR FINISHES TO BE REMOVED DOWN TO STRUCTURAL SLAB. SLAB TO BE PREPARED TO RECEIVE NEW FINISHES.
- 2 REMOVE EXISTING GWB FINISH FROM THE CBS WALLS. PREPARE EXISTING CBS WALLS TO RECEIVE NEW FURRING AND GWB FINISH.
- 3 REMOVE EXISTING WALL BASE. PREPARE WALLS TO RECEIVE NEW BASE AS NOTED IN FINISH SCHEDULE.
- 4 REMOVE EXISTING CASEWORK.
- 5 EXISTING PARTITION AND GLAZING TO BE REMOVED.
- 6 EXISTING DOOR AND FRAME TO BE REMOVED.
- 7 EXISTING CEILING, CEILING TILE, CEILING GRID TO BE REMOVED.
- 8 REMOVE ALL WALL FINISHES AND SUBSTRATE IN EXISTING TOILET ROOM. PREPARE FOR NEW SUBSTRATE AND TILE MOUNTED TO EXISTING STUDS.
- 9 ALL PLUMBING FIXTURES, FINISHES, AND ACCESSORIES TO BE REMOVED.
- 10 EXTERIOR WINDOWS AND DOORS TO BE REMOVED. PREPARE EXISTING OPENINGS TO RECEIVE IMPACT RESISTANT WINDOWS AND DOORS, AS NOTED IN PROJECT SCHEDULES.
- 11 EXISTING WALL UNIT AIR UNIT TO BE REMOVED. FILL OPENING WITH CONCRETE JOINT AND PATCH WITH NEW TEXTURED STUCCO TO MATCH EXISTING.
- 12 CUT PORTION OF EXISTING CBS WALL UNDER EXISTING STOREROOM WINDOWS TO ACCOMMODATE NEW STOREROOM DOOR.
- 13 EXISTING STEEL COLUMNS TO REMAIN.

1. ALL AREAS IMPACTED BY CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION.
2. REFER TO MEP DRAWINGS FOR ADDITIONAL ITEMS TO BE DEMOLISHED.

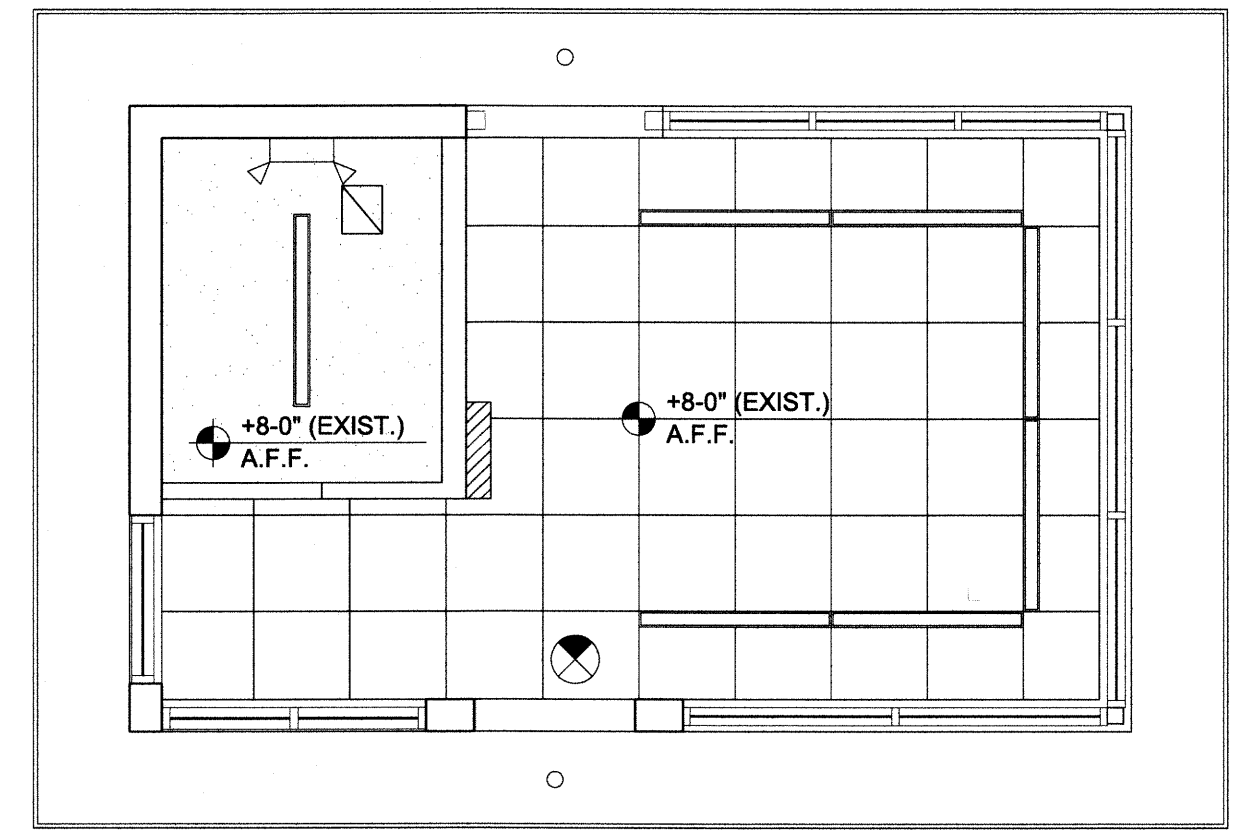


	EXISTING CMU WALL
	INTERIOR MTL. STUD/GWB. PARTITION
	EXISTING INTERIOR MTL. STUD/GWB. PARTITION
	NEW DOOR SYMBOL
	WALL TYPE TAG - REFER TO SHEET A500
	EXTERIOR WINDOW TYPE



	(4"x4") RECESSED LIGHT FIXTURE (SEE ELECT.)
	(4"x4") SURFACE-MOUNTED LIGHT FIXTURE
	GWB CEILING/SOFFIT W/ PAINT FINISH
	ACOUSTICAL CEILING TILE
	RECESSED DOWN LIGHTING FIXTURE (SEE ELECT.)
	ILLUMINATED EXIT SIGN (SEE ELECT.)
	EMERGENCY LIGHTING (SEE ELECT.)
	RETURN AIR GRILLE (SEE MECH.)
	SUPPLY AIR GRILLE (SEE MECH.)

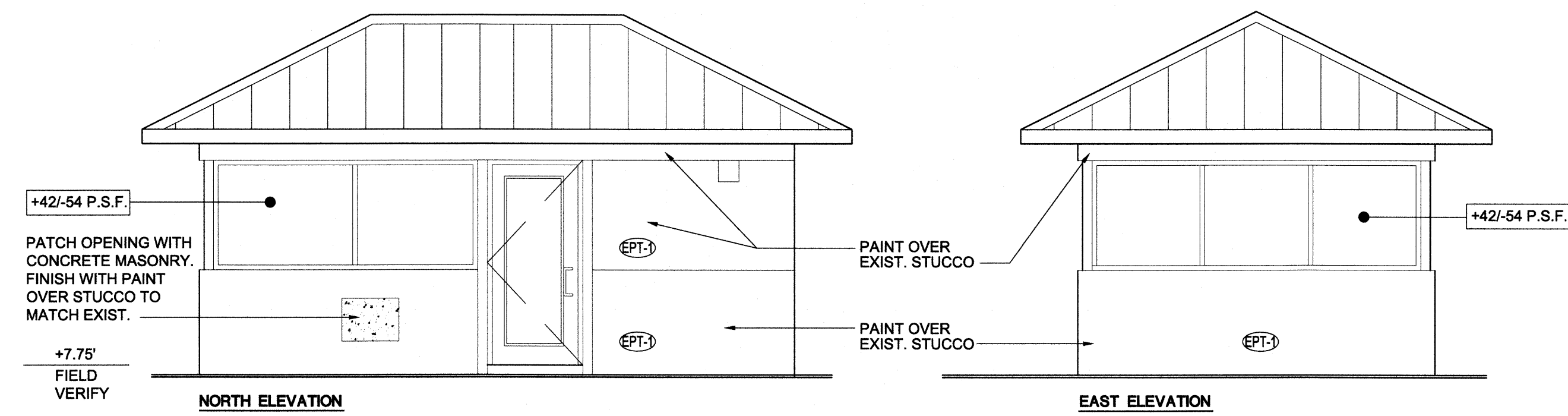
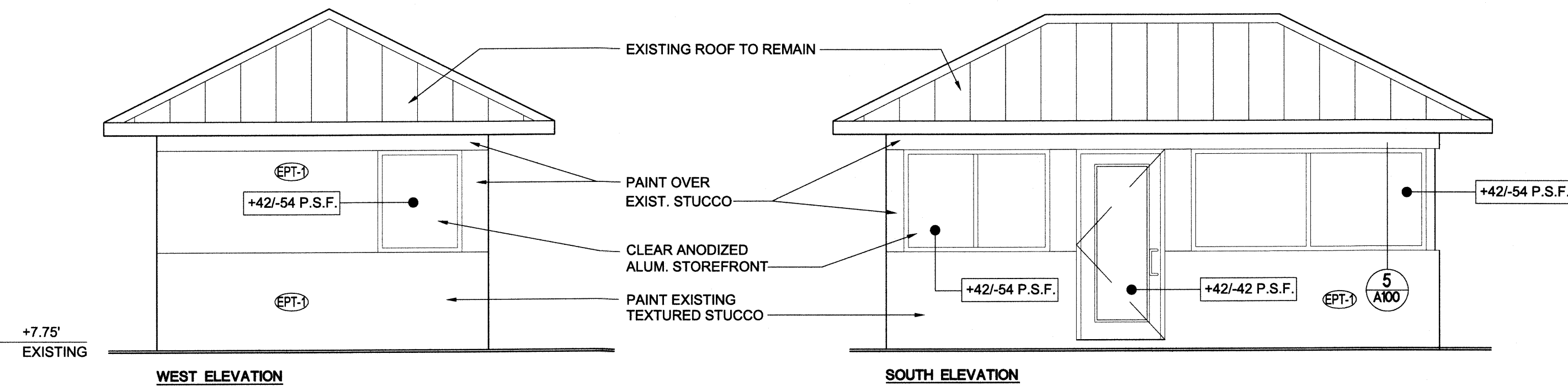
1. REFER TO FINISH SCHEDULE ON SHEET A500 FOR CEILING FINISHES.
2. REFER TO ELECTRICAL DRAWINGS FOR CEILING MOUNTED ELECTRICAL ITEMS AND MECHANICAL DRAWINGS FOR CEILING/SOFFIT MOUNTED HVAC ITEMS.
3. PROVIDE PROPER BACKING FOR ALL CEILING-MOUNTED ITEMS. COORDINATE LOCATION W/ OWNER, AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.



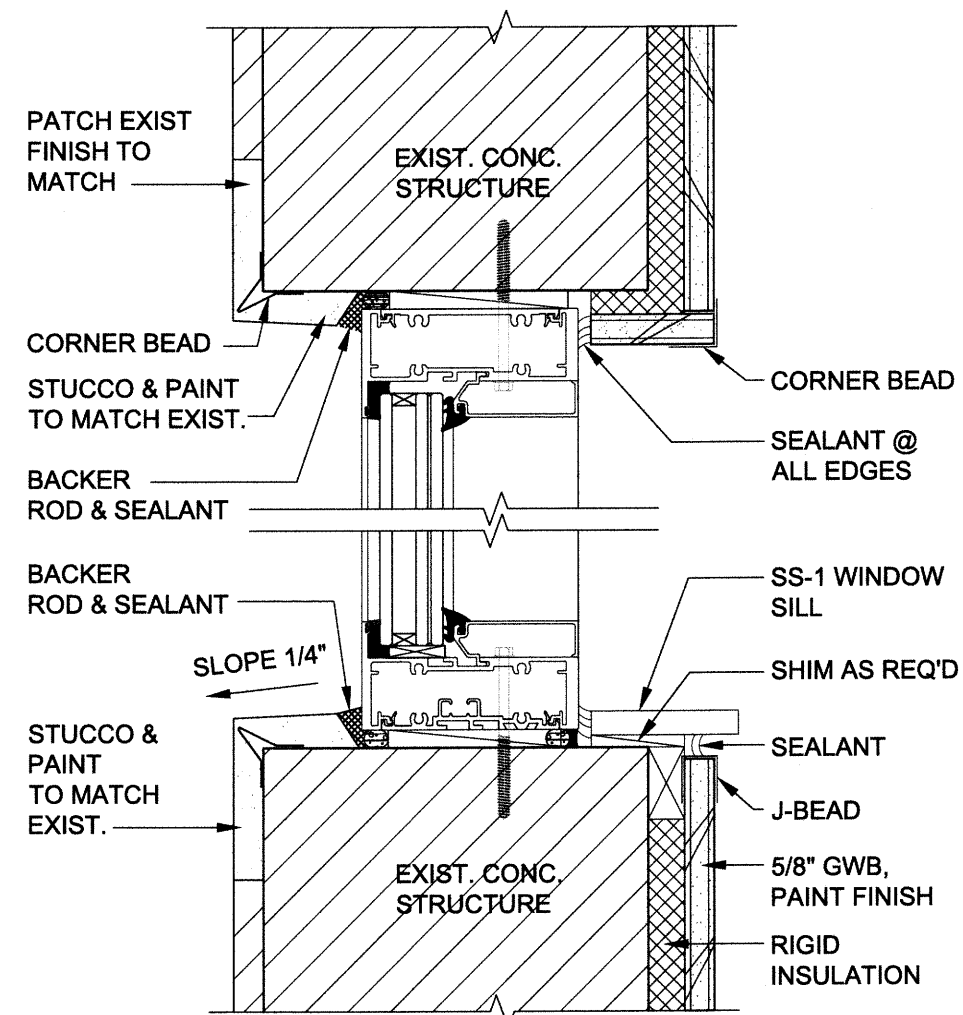
1	Demolition Plan	
A100	Scale: 1/4"= 1'-0"	

2	Proposed Floor Plan	
A100	Scale: 1/4"= 1'-0"	

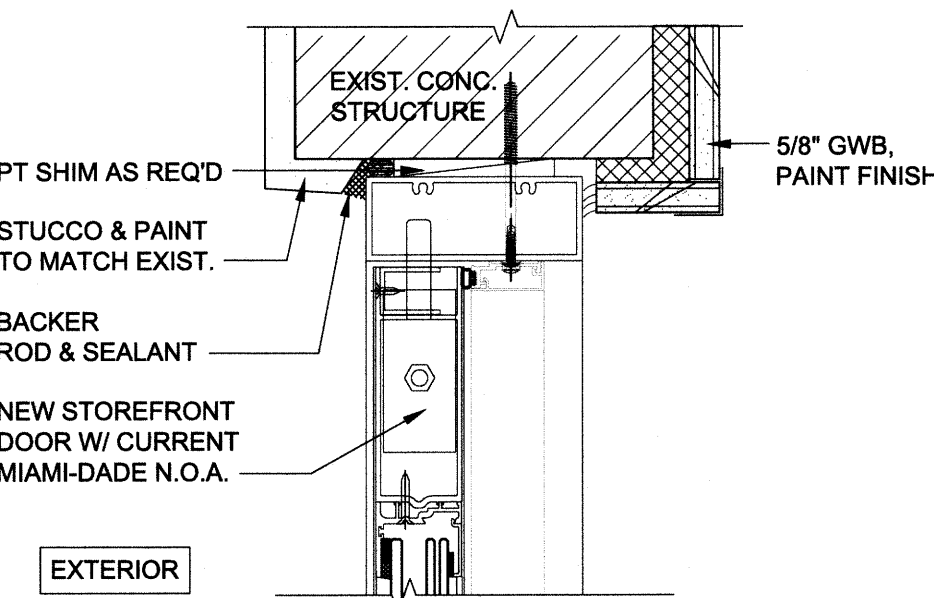
3	Proposed Reflected Ceiling Plan	
A100	Scale: 1/4"= 1'-0"	



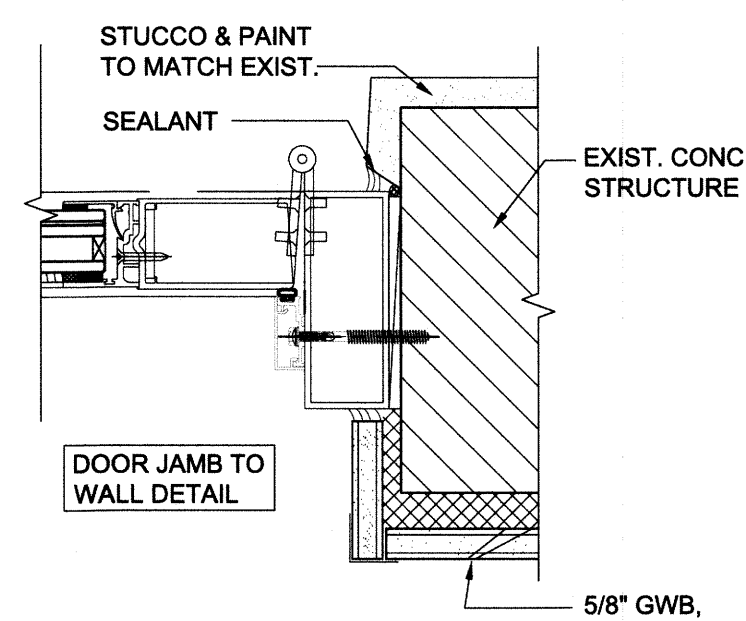
4	Building Elevations
A100	Scale: 1/4"= 1'-0"



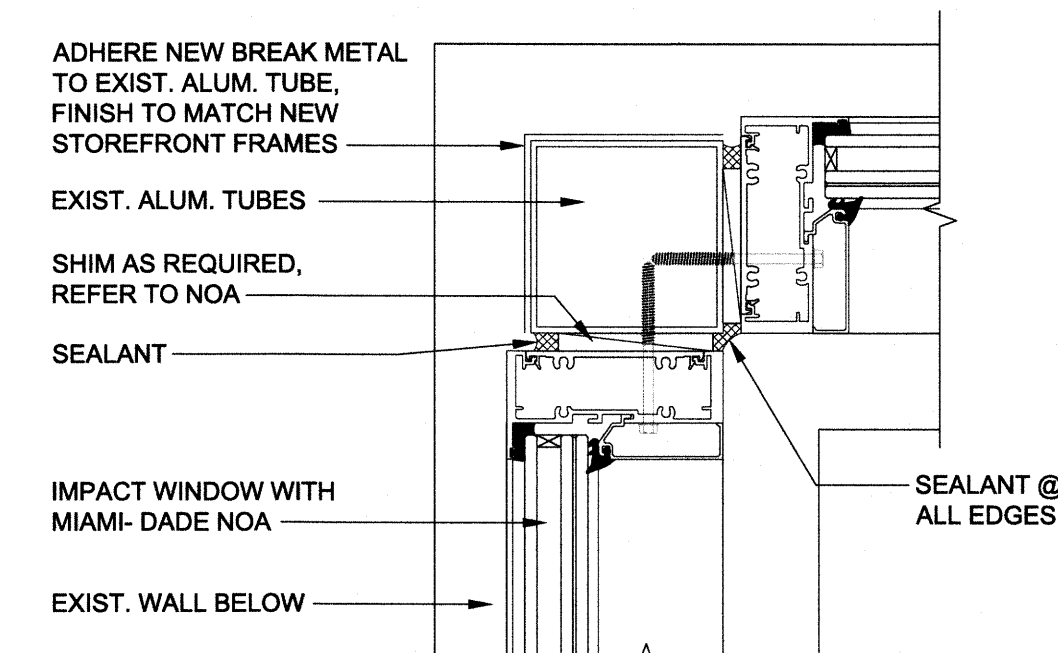
6	Storefront Door Head Detail
A100	Scale: 3"= 1'-0"



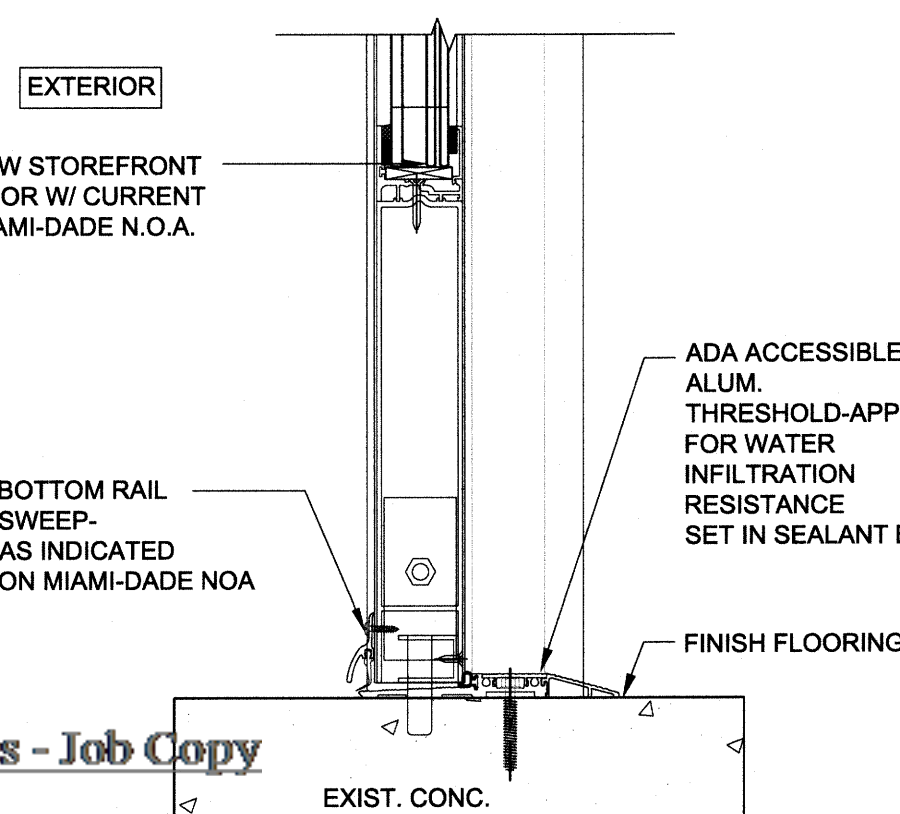
8	Storefront Door Jamb to Wall Detail
A100	Scale: 3"= 1'-0"



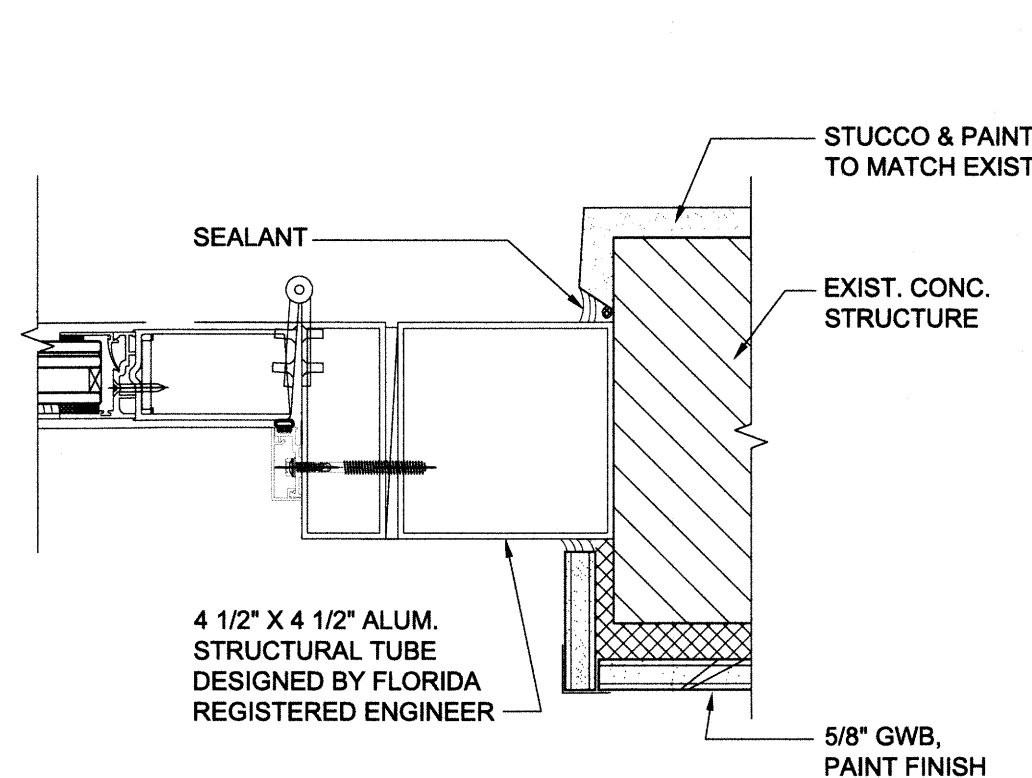
10	Storefront at Exist. Tube Detail
A100	Scale: 3"= 1'-0"



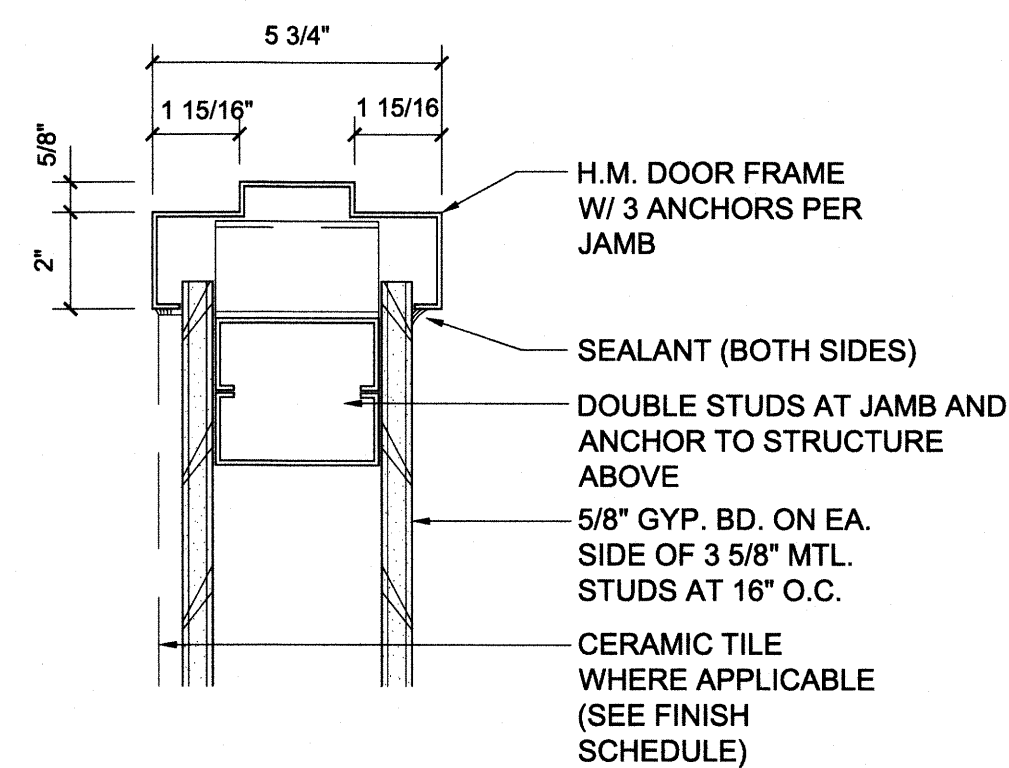
7	Storefront Door Sill Detail
A100	Scale: 3"= 1'-0"



9	Storefront Door Jamb to Tube Detail
A100	Scale: 3"= 1'-0"



11	Hollow Metal Frame Detail
A100	Scale: 3"= 1'-0"



DOOR SCHEDULE															
MARK	ROOM NO.	ROOM DESCRIPTION	TYPE	DOORS				DOOR MATERIAL	FIRE RATING LABEL	FRAME		THRESHOLD		HARDWARE GROUP	REMARKS
				NO./DR.	W.	HT.	TH.			DETAIL	MATERIAL	DETAIL	MATERIAL		
100	100	EXIST. GUARDHOUSE	A	1	3'-0"	7'-0" *	-	ALUM./GL.	-	9/A100	ALUM.	7/A100	ALUM.	HW-1	
101*	100	EXIST. GUARDHOUSE	A	1	3'-0" *	7'-0" *	-	ALUM./GL.	-	8/A100	ALUM.	7/A100	ALUM.	HW-1	
102	101	EXIST. ADA TOILET	B	1	3'-0"	7'-0"	1-3/4"	SCW	-	11/A100	HM	-	-	HW-2	
* MATCH EXISTING MASONRY OPENINGS															
NOTES & GENERAL INFORMATION:															
1. HARDWARE SETS DESCRIBE HARDWARE FOR EACH DOOR AS LISTED IN THE SCHEDULE.				2. ALL HARDWARE SETS TO HAVE SILENCERS- HAGER 307D, GRAY				3. ALL LOCKSETS ARE TO BE LEVER STYLE AND ALL HARDWARE SHALL COMPLY W/ THE REQUIREMENTS OF THE FLORIDA ACCESSIBILITY CODE AND ADA.				4. DOOR OPENING FORCES FOR HINGED DOORS ARE TO COMPLY WITH THE FOLLOWING: INTERIOR DOORS- 5 LBF			

HARDWARE SETS

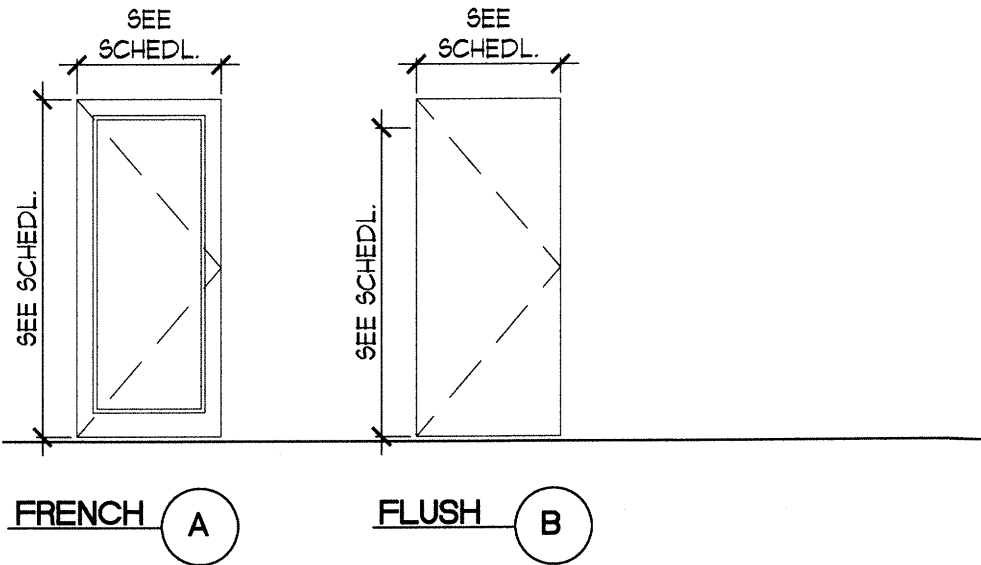
- HW-1

HARDWARE TO MEET MIAMI-DADE NOA AND AS FOLLOWS:
1 CONTINUOUS ALUMINUM GEARED HINGE, PEMKO FM-SLI
1 THREE POINT LOCK SYSTEM, SERIES 2222, REGENT HARDWARE, RADIUS FACEPLATE, CL FINISH
2 DOOR PULL, 1" ROUND, IVES 8190 EZHD 10" STD
1 SURFACE CLOSER, LCN 4021
1 ADA-COMPLIANT THRESHOLD, APPROVED FOR WATER INFILTRATION, AS SHOWN IN NOA
- HW-2

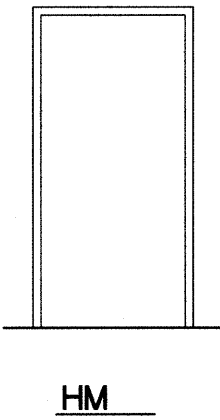
4 HINGES, 4 1/4 X 4 1/4", HAGER BB1279
1 LOCKSET, PRIVACY, SCHLAGE S40PD, JUPITER LEVER
1 FLOOR STOP, IVES FS 436

HARDWARE FINISHES:
SATIN CHROME
SCHLAGE-626
LCN-US 26D
IVES-US 26D

DOOR TYPES



FRAME TYPES



ABBREVIATIONS

- ALUM.

HM.

GL.

LAM

SCW

LAM
- ALUMINUM

HOLLOW METAL

GLASS

LAMINATE

SOLID CORE WOOD

LAMINATE P-X

1

Door Schedule

A501

Scale: NTS

STOREFRONT SCHEDULE

- WINDOW:

ALDORA SERIES FRONT-SET ALUMINUM WINDOW WALL SYSTEM-L.M.I

MIAMI DADE PRODUCT CONTROL # 19-0124.06
- DOOR:

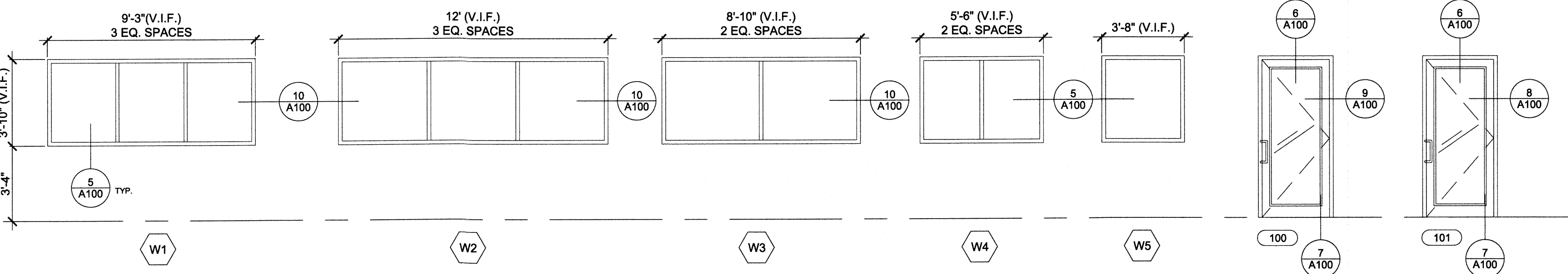
ALDORA SUMMIT ALUM. ENTRANCE OUTSWING FRENCH DOOR - L.M.I.

MIAMI-DADE PRODUCT CONTROL #17-1926.16
- FINISH + GLAZING INFORMATION:

- CLEAR ANODIZED ALUMINUM FRAMES

- 1 1/4" LAMINATED-INSULATED GLASS - SB70XL ON 1/4" SOLEXIA (LOW-E COATED), 1/2" AIR SPACE - AIR (5%) / ARGON (95%), 1/2" INSULATED GLASS UNIT W/ 0.000 SSP INTERLAYER

- SHADING COEFFICIENT: 0.30 / U-VALUE: 0.50



2

Storefront Elevations

A501

Scale: NTS

FINISH SCHEDULE															
ROOM NO.	ROOM DESCRIPTION	FLOOR	BASE	WALLS								CEILING			REMARKS
				NORTH	FINISH	EAST	FINISH	SOUTH	FINISH	WEST	FINISH	MATERIAL	FINISH	HEIGHT	
100	EXIST. GUARDHOUSE	PCT-1	RB-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	GWB-1	PT-1	ACT-1	ACT-1	ETR	SEE NOTES BELOW
101	EXIST. ADA TOILET	PCT-1	PCT-2	GWB-2	PCT-2	GWB-2	PCT-2	GWB-2	PCT-2	GWB-2	PCT-2	GWB-1	PT-2	ETR (+8'-0)	SEE NOTES BELOW

- NOTES & GENERAL INFORMATION:
- GWB-1 BASIS OF DESIGN: USG SHEETROCK BRAND GLASS-MAT PANELS (5/8").
 - GWB-2 BASIS OF DESIGN: USG DUROCK BRAND GLASS-MAT TILE BACKERBOARD.
 - PROVIDE SOLID SURFACING (SS-1) AT ALL WINDOW SILLS.

FINISH SELECTIONS:

- ATC-1

ACOUSTICAL TILE CEILING
ARMSTRONG OPTIMA TEGULAR, 24 X 24, WHITE
GRID: ARMSTRONG PRELUDE 15/16"
- CG

CORNER GUARD
INPRO CORP 150 SURFACE MOUNT CORNER GUARD,
3" WING W/ ALUMINUM RETAINER
COLOR: SILVER 0105
- EPT-1

EXTERIOR PAINT
- PCT-1

PORCELAIN CERAMIC TILE - FLOOR
CROSSVILLE SHADES COLLECTION
COLOR NAME: AV248 THUNDER, UNPOLISHED, 12 X 24
- PCT-2

PORCELAIN CERAMIC TILE - WALL
CROSSVILLE SHADES COLLECTION
COLOR NAME: AV244 MIST, HONED FINISH, 12 X 24
- PL-1

PLASTIC LAMINATE
WILSONART PREMIUM LAMINATE W/ AEON
COLOR: PHANTOM CHARCOAL 8214K-28
- PT-1

PAINT - FIELD COLOR
SHERWIN-WILLIAMS SW 7668, MARCH WIND, EGG SHELL
- PT-2

PAINT - CEILING
SHERWIN-WILLIAMS SW 7757, HIGH REFLECTIVE WHITE, FLAT
- RB-1

RUBBER BASE
TARKETT (JOHNSONITE) MILLWORK BASE - MW 48 H
STYLE: MANDALAY - COLOR: GREY WG, 48 - HEIGHT: 4 1/2"
- SS-1

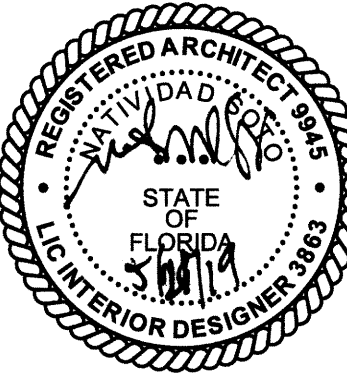
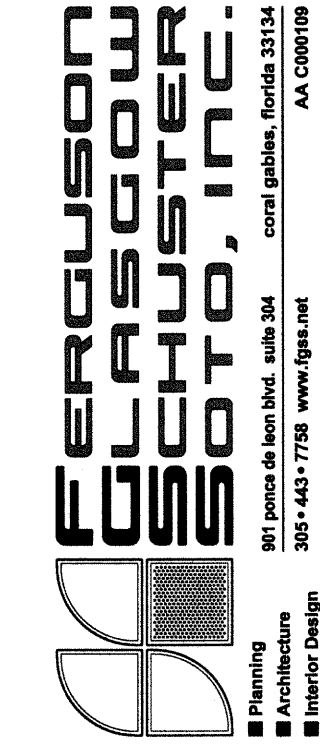
SOLID SURFACE
WILSONART KIMBERLITE 9215CE

3

Finish Schedule

A501

Scale: NTS



South Guardhouse Renovations
Caterpillar Inc.
Miami Distribution Center
15550 NW 59 Ave
Miami Lakes, FL 33014

REVISIONS		REMARKS
NO.	DATE	

PROJ. NO.: 17-04
DRAWN BY:
DATE: 05/07/2019

SCHEDULES

A501



June 11, 2019

Mr. Kevin Levy
TURNER CONSTRUCTION COMPANY - MIAMI
7235 Corporate Center Drive, Suite G
Miami, Florida 33126

Re: **Renovation Asbestos Survey Report**
Caterpillar Miami Distribution Center
Security Guard House
15550 NW 59th Avenue
Miami Lakes, Florida 33014
PSI Project No.: 07842825

Dear Mr. Levy:

In accordance with our signed agreement dated June 6, 2019, Professional Service Industries, Inc. (PSI) has performed a Renovation Asbestos Survey of the above referenced property. Please find one copy of the final report enclosed.

Thank you for choosing PSI as your consultant for this project. If you have any questions, or if we can be of additional service, please call us at 305-471-7725.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Adel G. Guerrero
Project Manager
Industrial Hygiene Services

Michael Rothenburg
Florida Licensed Asbestos Consultant #EA41
Principal Consultant – Asbestos

E. John Emerson, CSP, CIEC
Department Manager
South Florida Environmental Group

AGG/MR/EJE

Enclosures

Miami Dade County Department of Regulatory And Economic Resources - Job Copy

3219014215 - 6/14/2019 11:40:36 AM

Asbestos Report rsk 19-06-12.pdf

**RENOVATION ASBESTOS SURVEY
REPORT**

FOR

**CATERPILLAR MIAMI DISTRIBUTION CENTER
SECURITY GUARD HOUSE
15550 NW 59 AVENUE
MIAMI LAKES, MIAMI-DADE COUNTY, FLORIDA**

PREPARED FOR

**TURNER CONSTRUCTION COMPANY - MIAMI
7325 CORPORATE CENTER DRIVE
SUITE G
MIAMI, FL 33126**

PREPARED BY

**PROFESSIONAL SERVICE INDUSTRIES, INC.
7950 NW 64TH STREET
MIAMI, FLORIDA 33166
TELEPHONE 305-471-7725**

PSI PROJECT NO. 07842825

June 11, 2019



Miami Dade County Department of Regulatory And Economic Resources - Job Copy

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Asbestos Report rsk 19-06-12.pdf

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3. ASSESSMENT ACTIVITIES.....	4
3.1 RECORD DOCUMENT REVIEW.....	4
3.2 Asbestos INSPECTION	4
4. CONCLUSIONS	6
4.1 ASBESTOS CONTAINING MATERIALS	6
5. WARRANTY	8

LIST OF APPENDICES & FIGURES

- APPENDIX A: LABORATORY ANALYTICAL REPORTS (ACM)
APPENDIX B: PERSONNEL AND LABORATORY CERTIFICATIONS
APPENDIX C: ASBESTOS FIELD DATA WORK SHEET

1. EXECUTIVE SUMMARY

Professional Service Industries, Inc. (PSI) was retained by Turner Construction Company - Miami to perform a survey for asbestos-containing material at the Caterpillar Miami Distribution Center security guard house located at 15550 NW 59 Avenue, in Miami Lakes, Miami-Dade County, Florida. These services were conducted at the request of the client for the planned renovations.

PSI's scope of work was limited to asbestos materials inspection effected by the planned renovation activities. The inspection was conducted on June 6, 2019 by U.S. Environmental Protection Agency (EPA) accredited inspector Mr. Phillip Williams of PSI, under the direction of PSI Principal Consultant Mr. Michael Rothenburg.

Based on the methodologies described in this report, ACM was not identified in any of the samples collected from the subject site.

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Asbestos Report rsk 19-06-12.pdf



2. INTRODUCTION

A renovation survey of the Caterpillar Miami Distribution Center security guard house located at 15550 NW 59 Avenue, in Miami Lakes, Miami-Dade County, Florida. has been conducted by PSI to identify ACM within the subject areas. The survey was conducted on June 6, 2019.

The survey was generally conducted in four phases as follows:

- **Phase 1 – Record Document Review-** Drawings, floor plans, historical data or other documents provided to PSI or made available on site were evaluated for the general construction history and layout of the facility. Other documents such as maintenance records, operation and maintenance plans, and laboratory results, etc., provided to PSI or made available on site were also reviewed. This data was used to focus the walk through and scope of work to be followed over the course of our visual inspection and sampling.
- **Phase 2 – Visual Inspection-** A visual inspection of the facility was conducted to identify, quantify and assess the condition of suspect ACM materials that could represent an environmental concern. The inspection team accessed each area and recorded suspect ACM, suspect materials. Each material or impacted material was visually estimated for total quantity within the space.
- **Phase 3 – Sample Collection and Analysis-** Asbestos samples were collected for each suspect homogeneous area and were submitted to PSI's accredited laboratory for analysis by Polarized Light Microscopy (PLM).
- **Phase 4 - Project Report -** This report outlines the assessment findings based on the interviews, testing results and field observations. The report also discusses other observations concerning the workplace as they impacted the sampling events. This report includes a discussion of sampling methodology, locations, analytical methods, results, and conclusions.

2.1 AUTHORIZATION

Authorization to perform this survey was given by a signed contract between Turner Construction Company - Miami and PSI, dated June 6, 2018.

2.2 SITE DESCRIPTION

The subject site consisted of an existing security guard house at the Caterpillar Miami distribution center located at 15550 NW 59th Avenue in Miami Lakes, Florida. Structural components consist of a wood ceiling deck, concrete block walls and a concrete floor slab. Interior finishes consist of drywall walls, ceramic floor and wall tile, vinyl floor tile and lay-in ceiling tiles.

The area surveyed occupies approximately 260 square feet of floor space.

2.3 PROJECT BACKGROUND

The survey was conducted on the building for future renovation activities. PSI was provided site plans for review prior to conducting the survey.

~~Miami Dade County Department of Regulatory And Economic Resources - Job Copy~~

~~3219014215 - 6/14/2019 11:40:36 AM~~

~~Asbestos Report rsk 19-06-12.pdf~~

2.4 PURPOSE AND SCOPE

The purpose of this survey was to determine the presence of ACM in the referenced facility which is scheduled for future renovation.

The survey was completed in general accordance with the authorized scope of work as identified in the contract between PSI and the client.

3. ASSESSMENT ACTIVITIES

The visual inspection and sampling activities were conducted on June 6, 2019 by Mr. Phillip Williams of PSI. Prior to the commencement of the survey activities, the client provided site contact information and assisted in providing access to the facility.

3.1 RECORD DOCUMENT REVIEW

PSI was provided drawings, floor plans, historical data, maintenance records, previous survey reports, laboratory reports or other documents for information regarding construction history and building materials for review.

3.2 ASBESTOS INSPECTION

PSI's inspector accessed each door area of the subject site to identify suspect homogenous areas of ACM. Suspect ACM were categorized into homogeneous areas on the basis of color, texture, appearance, use and apparent construction era (where available). Each homogeneous area was given a unique material description. Quantities were visually estimated by the inspectors.

In addition to identification of each material and quantities, the inspectors also determined friability for suspect ACMs. A friable material is defined as any material able to be crushed, crumbled, pulverized or reduced to a powder by hand pressure when dry. The inspectors used a hand pressure test to determine friability. Each material was further assessed for overall condition. Conditions were rated as good, fair or poor. Materials in good condition included those materials which were in the same condition as when installed showing only minor age deterioration. Materials in fair condition included those materials which had apparent age deterioration and minor damage; however, the matrix of the material remained substantially intact. Materials in poor condition included all materials with damage or significant damage and evidence that the material's matrix has failed or has begun to fail.

PSI's asbestos inspectors, under the supervision of a Principal Consultant developed a sampling scheme for suspect ACM at the facility.

- PSI did not sample any system which presented a hazard to the inspection team such as energized electrical systems or within confined spaces.
- PSI analyzed 31 samples by PLM.

Samples were submitted to EMSL's asbestos laboratory in North Miami, Florida. EMSL's laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP), accreditation No. 200204-0. Samples were analyzed by Polarized Light Microscopy (PLM) 600/R-93/116 July 1993: "Method for the Determination of Asbestos in Bulk Building Materials.", which is the EPA recommended method for bulk sample analysis. The U.S. National Institute of Standards and Technology (NIST) accredits PSI's laboratory under the NVLAP for the analysis of bulk asbestos.

Samples were dried, homogenized, and representative portions were examined with a stereo binocular microscope. If no asbestos is found in a sample, "NAD" (No Asbestos Detected) is reported. If asbestos is found in a sample, the percentage and type of asbestos is reported.

If a material is found to contain 10% or less asbestos via visual estimation, it can be treated as non-asbestos-containing per EPA Regulations, if verified to contain 1% or less asbestos by the

Point Count Quantification Procedure. If not point counted, a sample in which asbestos was visually detected and estimated (including trace to $\leq 1\%$) must be assumed to be greater than 1% and treated as ACM. Please refer to the laboratory analyses for a more detailed description of the microscopic analysis of individual samples. Samples were not quantified by the Point Count Procedure in this Asbestos Survey.

4. CONCLUSIONS

PSI has performed a Renovation ACM Survey of the subject site in general accordance with the signed agreement between Turner Construction Company - Miami and PSI dated June 6, 2019. Based on the results of this assessment, the following conclusions have been developed.

4.1 ASBESTOS CONTAINING MATERIALS

During the visual inspection, PSI tested 18 homogenous areas of suspect ACM and collected 31 samples representing these materials. A complete detail of all suspect materials, locations, quantities and conditions may be found in the following table and in the appendices of this report. The following data is a summary of materials sampled as part of this survey.

Homogeneous Area Description	Location(s) in the facility	Friable (F/NF)	Total Estimated Quantity	Percent Asbestos
Drywall w/ Joint Compound	Throughout guard house walls	NF	2,100 SF	DW-NAD JC-NAD
2 x 2' Ceiling Tile	Throughout guard house	F	260 SF	NAD
Ceramic floor tile grout	Throughout guard house	NF	100 SF	NAD
Door caulking	Throughout guard house	NF	5 SF	NAD
Ceramic wall tile grout	Restroom	NF	20 SF	NAD
Sink caulking	Restroom	NF	25 SF	NAD
Drywall ceiling	Restroom	NF	60 SF	DW-NAD JC-NAD
Window caulking	Exterior	NF	60 SF	NAD
Door caulking	Exterior	NF	40 SF	NAD
Concrete pad	Exterior	NF	260 SF	NAD
Stucco	Exterior	NF	2,100 SF	NAD
Cement block	Exterior	NF	2,100 SF	NAD
Cement block mortar	Exterior	NF	700 SF	NAD
Red cement tile	Roof	NF	300 SF	NAD
Red cement tile mortar	Roof	NF	50 SF	NAD
White caulking	Roof fascia	NF	10 SF	NAD
Clear caulking	Exterior Wall at unit	NF	2 SF	NAD

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Homogeneous Area Description	Location(s) in the facility	Friable (F/NF)	Total Estimated Quantity	Percent Asbestos
White compound	Exterior-Wall ac unit	NF	2 SF	NAD

Notes: NF=Non-Friable, SF= Square Feet, NAD= No Asbestos Detected, DW=Drywall, JC=Joint Compound, F=Friable

Data Interpretation

A material is considered an ACM if at least one sample from the homogenous area is confirmed to contain greater than one percent asbestos (>1.0%) under laboratory analysis. In addition, the U.S. Occupational Safety and Health Administration (OSHA) construction standard considers all thermal systems insulation and surfacing materials in a facility constructed prior to 1981 to be presumed asbestos containing (PACM) and all flooring to be assumed asbestos containing unless it is demonstrated through laboratory analysis to contain 1.0% asbestos or less. The EPA National Emission Standards for Hazardous Air Pollutants further classifies ACM as regulated (RACM), Category I non-friable ACM or Category II non-friable ACM.

Based on the methodologies described in this report, ACM was not identified in any of the samples collected from the subject site.

If additional suspect ACM is identified during any future renovation activities, work should be halted, and a Florida Licensed Asbestos Consultant retained to assess the materials.

5. WARRANTY

The information contained in this report is based upon the data furnished by the Client and observations and test results provided by PSI. These observations and results are time dependent, are subject to changing site conditions, and revisions to Federal, State and local regulations.

PSI warrants that these findings have been promulgated after being prepared in general accordance with generally accepted practices in the asbestos, lead-based paint and hazardous materials abatement industries.

No other warranties are implied or expressed.

Use by Third Parties

This report was prepared pursuant to the contract PSI has with Turner Construction Company - Miami. That contractual relationship included an exchange of information about the subject site that was unique and between PSI and its client and serves as the basis upon which this report was prepared. Because of the importance of the communication between PSI and its client, reliance or any use of this report by anyone other than Turner Construction Company - Miami, for whom it was prepared, is prohibited and therefore not foreseeable to PSI.

Reliance or use by any such third party without explicit authorization in the report does not make said third party a third-party beneficiary to PSI's contract with the client. Any such unauthorized reliance on or use of this report, including any of its information or conclusions, will be at third party's risk. For the same reasons, no warranties or representations, expressed or implied in this report, are made to any such third party.

Unidentifiable Conditions

This report is necessarily limited to the conditions observed and to the information available at the time of the work. Due to the nature of the work, there is a possibility that there may exist conditions which could not be identified within the scope of work or which were not apparent at the time of our site work. This report is also limited to information available from the client at the time it was conducted. The report may not represent all conditions at the subject site as it only reflects the information gathered from specific locations.

**APPENDIX A:
ASBESTOS FIELD DATA WORKSHEET**

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EMSL Order Number (*Lab Use Only*):

FAX (305) 650-0578

EMIL ANALYTICAL, INC.

171903583

Page 1 of 1 pages 2

171903583

Page 2 of 2

Client: Turner
Project Name: Caterpillar security bldg
Inspector(s): Phill Williams

Building Unit:
PSI Project No. 07842845
Date 06/06/2019

Homogenous Area	Sample No.	Material Location	Material Description	Total Quantity	(F/NF)	Condition	Lab Results
1	1	Interior walls	Drywall + Joint Compound	2100sf	N/F	Good	
	2						
	3						
2	4	Interior Ceiling tile	Ceiling tile	2600sf	N/F	Good	
	5						
3	6	Interior floor tile/grout	tile grout beige	100sf	N/F	Good	
	7						
4	8	Interior door caulk	Interior door caulk white	5sf	N/F	Good	
5	9	Bathroom wall tile grout	tile grout white	20sf	N/F	Good	
6	10	Bathroom sink	Sink caulk white	25sf	N/F	Good	
7	11	Bathroom ceiling	Drywall + Joint compound	60sf	N/F	Good	
8	12	Window caulk	Window caulk grey	60sf	N/F	Good	
	13						
9	14	Exterior door caulk	Door caulk grey		NF	Good	
10	15	Building pad	concrete	260sf	NF	Good	
	16						
11	17	Exterior walls	stucco	2100sf	NF	Good	
	18						
	19						
12	20	Exterior walls	Cement Block	2100sf	NF	Good	
	21						
	22						
13	23	Exterior walls	Mortar	700sf	NF	Good	
	24						
	25						
	26	Roof tile	Cement tile	300sf	NF	Good	
	27						
	28	Roof Mortar	Mortar	50sf	NF	Good	
	29	Roof fascia (wood)	caulk white	10sf	NF	Good	
17	30	AC unit	caulk clear	2sf	NF	Good	
18	31	AC unit	Compound white	2sf	NF	Good	

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APPENDIX B:
LABORATORY ANALYTICAL REPORTS (ACM)

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EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order: 171903583

Customer ID: PSI59

Customer PO:

Project ID:

Attention: John Emerson
PSI (Miami)
7950 NW 64th St.
Miami, FL 33166

Phone: (305) 471-7721

Fax: (305) 593-1915

Received Date: 06/06/2019 3:12 PM

Analysis Date: 06/07/2019

Collected Date: 06/06/2019

Project: Caterpillar Security 07842825

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos % Type
			% Fibrous	% Non-Fibrous	
1-Drywall 171903583-0001	Drywall + Joint Compound	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1-Joint Compound 171903583-0001A	Drywall + Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2-Drywall 171903583-0002	Drywall + Joint Compound	Brown/White Non-Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2-Joint Compound 171903583-0002A	Drywall + Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3-Drywall 171903583-0003	Drywall + Joint Compound	Brown/White Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
3-Joint Compound 171903583-0003A	Drywall + Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4 171903583-0004	Ceiling Tile	Brown/White Fibrous Heterogeneous	55% Cellulose 5% Glass	40% Non-fibrous (Other)	None Detected
5 171903583-0005	Ceiling Tile	Brown/White Fibrous Heterogeneous	55% Cellulose 5% Glass	40% Non-fibrous (Other)	None Detected
6 171903583-0006	Tile Grout	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
7 171903583-0007	Tile Grout	Beige Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8 171903583-0008	Door Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9 171903583-0009	Tile Grout	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10 171903583-0010	Sink Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11-Drywall 171903583-0011	Drywall + Joint Compound	Brown/White Fibrous Heterogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
11-Joint Compound 171903583-0011A	Drywall + Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12-Drywall 171903583-0012	Drywall + Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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Initial report from: 06/07/2019 13:50:38



EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order: 171903583

Customer ID: PSI59

Customer PO:

Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos % Type
			% Fibrous	% Non-Fibrous	
13	Window Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0013					
14	Door Caulk	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0014					
15	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0015					
16	Concrete	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0016					
17	Stucco	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0017					
18	Stucco	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0018					
19	Stucco	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0019					
20	Cement Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0020					
21	Cement Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0021					
22	Cement Block	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0022					
23	Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0023					
24	Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0024					
25	Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0025					
26	Cement Tile	White/Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0026					
27	Cement Tile	White/Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0027					
28	Mortar	White/Red Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0028					
29	Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0029					
30	Caulk	Clear Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0030					
31	Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
171903583-0031					

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Initial report from: 06/07/2019 13:50:38



EMSL Analytical, Inc.

19501 NE 10th Ave. Bay A N. Miami Beach, FL 33179

Tel/Fax: (305) 650-0577 / (305) 650-0578

http://www.EMSL.com / miamilab@emsl.com

EMSL Order: 171903583

Customer ID: PSI59

Customer PO:

Project ID:

Analyst(s)

Edgar Rodriguez (7)

Mary Hamel (28)

Kimberly A. Wallace

Kimberly Wallace, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart 1 of 40 CFR (previously EPA 600/M4-82-020 "Interim Methods for the determination of asbestos in air") and the 1991 final version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All data are subject to audit and may be subject to review by the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Initial report from: 06/07/2019 13:50:38

**APPENDIX C:
PERSONNEL AND LABORATORY CERTIFICATIONS**

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M·E·T·A

Mayhew Environmental Training Associates
INCORPORATED

Certificate # ME8B1100B6AA284C9

Phillip Williams

has on 1/16/2019, in Tampa, FL
completed the requirements for asbestos accreditation under Section 206 of TSCA Title II, 15 USC 2646

3-day Asbestos Building Inspector Initial

as approved by FL
and the US EPA under 40 CFR 763 (AHERA)
from 1/14/2019 to 1/16/2019 and passed the associated exam on 1/16/2019
with a score of at least 70%

Jamison Bear
Instructor

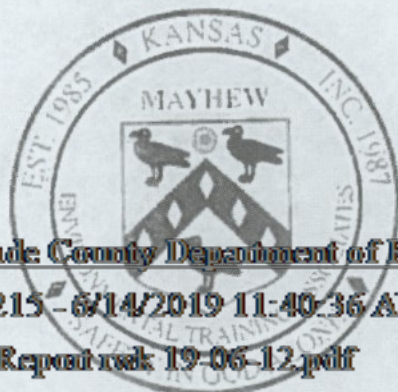
Thomas Mayhew
President

Training Provider #: FL49-0001221

Course #: 0002839

FL License #:

SSN: XXX-XX-1012



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P.O. Box 786 - Lawrence, KS. 66044 - 800.444.6382

www.metaenvironmental.net

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 101350-0

PSI
Pittsburgh, PA

*is accredited by the National Voluntary Laboratory Accreditation Program for specific services,
listed on the Scope of Accreditation, for:*

Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to joint ISO-ILAC-IAF Communique dated January 2009).*

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Effective Dates



[Signature]
For the National Voluntary Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2005

PSI

PSI, Inc.

850 Poplar Street

Pittsburgh, PA 15220

Ms. Catherine McNamee

Phone: 412-922-4010 x286 Fax: 412-922-4014

Email: cathy.mcnamee@psiusa.com

<http://www.psiusa.com>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 101350-0

Bulk Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A01	EPA – 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples
18/A03	EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

Airborne Asbestos Analysis

<u>Code</u>	<u>Description</u>
18/A02	U.S. EPA's "Interim Transmission Electron Microscopy Analytical Methods-Mandatory and Nonmandatory-and Mandatory Section to Determine Completion of Response Actions" as found in 40 CFR, Part 763, Subpart E, Appendix A.

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[Signature]
For the National Voluntary Laboratory Accreditation Program

**Department of Regulatory and Economic Resources
Miami-Dade County
Plan Review Summary**

Process Number: M2019014215

FINAL CORE REVIEW DATE: 6/4/2019

**OVERALL STATUS: Disapproval -
Report**

PROJECT DETAILS:

FOLIO: 32-2013-001-0620

ADDRESS: 15550 NW 59 AVE, , FL

PERMIT TYPE DESC.:

CONTACT DETAILS:

NAME: KEVIN LEVY

EMAIL:

PHONE #: 7865142561

DISAPPROVAL CODES:

Disapproval Code 01: 0295 - Requires Air Section approval for Asbestos. Contact the Downtown office at (305) 372-6925

TASK	REVIEWED BY	STATUS DATE	STATUS
Initial Core Review	Julio Diaz	06/03/2019	Reviewed

Comments: PERMIT FOR RENOVATION OF EXISTING GUARDHOUSE. DEMOLITION OF EXISTING SECURITY OFFICE/REPLACEMENT OF STOREFRONT WINDOWS AND DOORS/RESTROOM FIXTURES AND ACCESSORIES/FLOOR AND WALL FINISHES/CASEWORK/CEILINGS/LIGHT FIXTURES/NEW STOREFRONT DOOR/NEW ELECTRICAL AND MECHANICAL IMPROVEMENTS AT EXISTING INDUSTRIAL WAREHOUSE. (CATERPILLAR MIAMI/CPP)

CITY OF MIAMI LAKES PROCESS #BLC20192192.

THIS INDUSTRIAL WAREHOUSE PREVIOUSLY APPROVED BY DERM UNDER CU#U2003004241 AND PLANS #C2001114334.

RECORDS SHOW NFC ON SITE. EXISTING NFC COVENANT UNDER CATERPILLAR, INC.

THIS PROPERTY FALLS UNDER 2-SOILS (MARGATE FINE SAND AND URBAN LAND)

IW5-AASO #10889 (UP TO DATE)

NO INCREASE FOR DERM NO ALLOCATION LETTER REQUIRED.

FOR 295: REFER TO ASBESTOS SECTION COMMENTS.

ASBES Review	Eligio Gonzalez	06/04/2019	Disapproved
---------------------	-----------------	------------	-------------

Comments: An asbestos survey by a Florida licensed asbestos consultant is required.

Final Core Review	Julio Diaz	06/04/2019	Disapproval - Report
--------------------------	------------	------------	----------------------

Comments: 6/4/19

FOR 295: REFER TO ASBESTOS SECTION COMMENTS.

PLAN CONDITIONS:

NO CONDITIONS

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DERM_COMMENTS_06-04-2019 CATERPILLAR MIAMI.pdf

Examiner Date Time Stamp Disq. Trade Stamp Name

Julio Diaz 6/4/2019 9:19:37 AM D DERM Disapproved

PLAN REVIEW FEES (FEES ARE SUBJECT TO CHANGE PENDING FINAL APPROVAL):

FEE CODE	DESCRIPTION	USER	DATE	UNIT	TOTAL
D034	FastTrack Fee	ADMIN	05/31/2019	1	\$80.00
D034R	FastTrack Fee	ADMIN	05/31/2019	1	(\$80.00)
Total					\$0.00

FOR MORE INFORMATION PLEASE CONTACT:

YOUR DERM CORE REVIEWER: diazju@miamidade.gov

DERM PERMITTING AND INSPECTION CENTER, 11805 SW 26 ST, 786-315-2800

DERM OVERTOWN TRANSIT CENTER, 701 NW 1 CT, 305-372-6899

Coastal: dermcrr@miamidade.gov

EQCB: eqcb@miamidade.gov

Specialty Engineering Reviews (industrial, storage tanks, industrial waste pretreatment, asbestos, paving & drainage, trees): dermengreviews@miamidade.gov

Tree Permit applications: dermtreeprogram@miamidade.gov

Water Control: dermwatercontrol@miamidade.gov

Wetlands: dermwetlands@miamidade.gov

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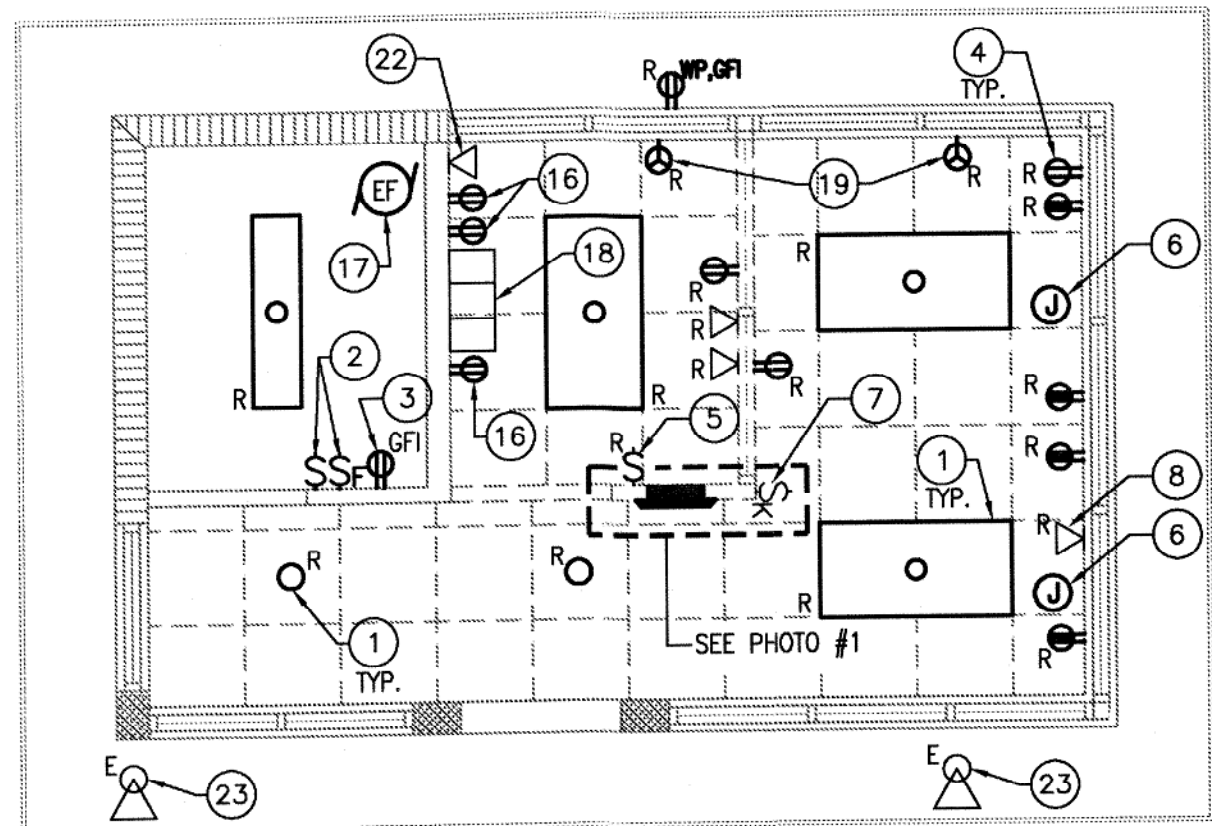
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DERM COMMENTS_06-04-2019 CATERFILLAR MIAMI.pdf

Examiner Date Time Stamp Disp Trade Stamp Name

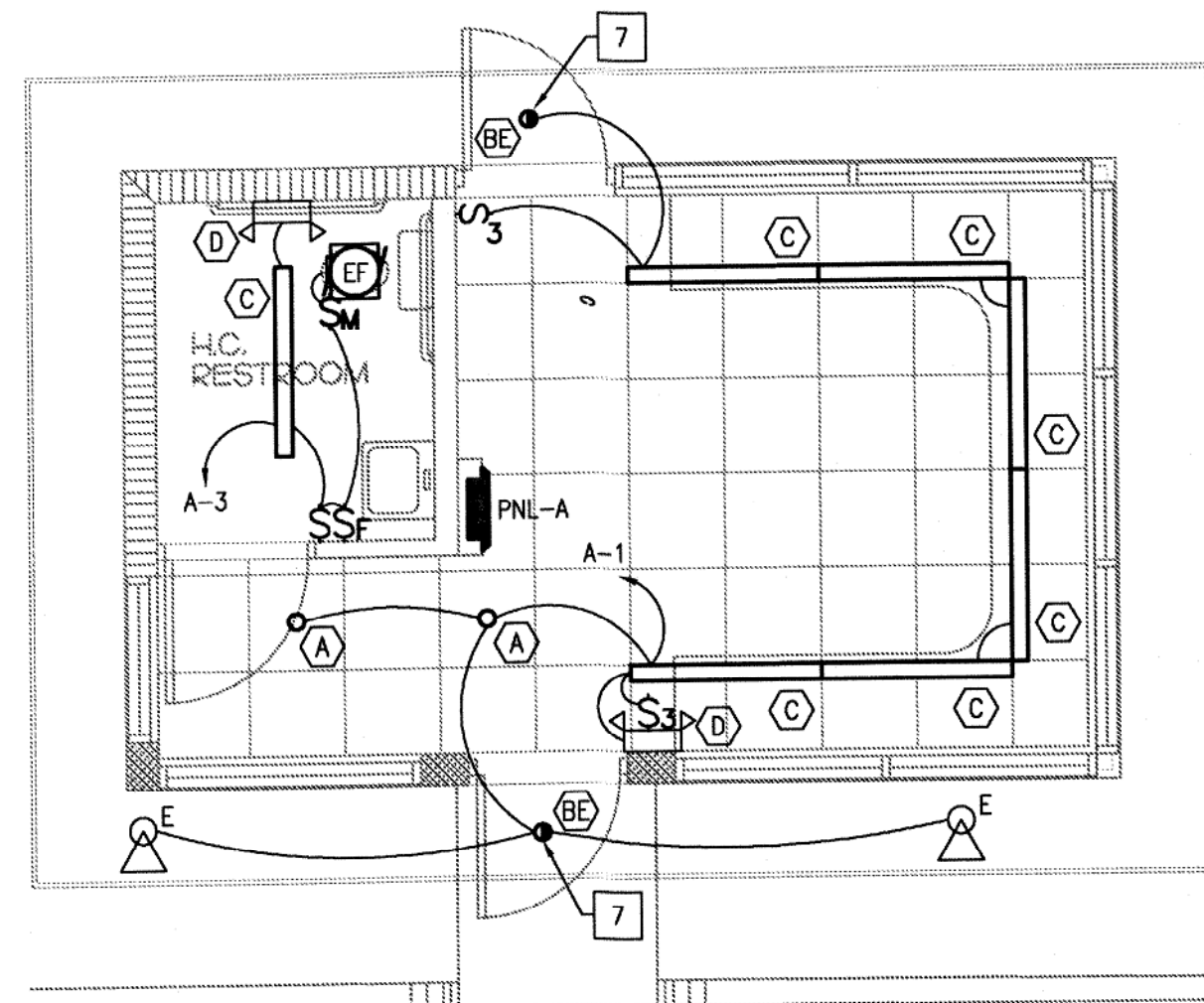
Julio Diaz 6/4/2019 9:19:37 AM D DERM Disapproved

LIGHTING FIXTURES 1'x4' OR 1'x 8' STRIP LUMINAIRE/EMERGENCY 1'x4' FLUORESCENT LUMINAIRE, CEILING/WALL 1'x4' FLUORESCENT LUMINAIRE, BATTERY/EMERGENCY, CEILING/WALL 2'x2' FLUORESCENT LUMINAIRE, BATTERY/EMERGENCY 2'x4' FLUORESCENT LUMINAIRE, BATTERY/EMERGENCY CEILING MOUNTED LUMINAIRE, BATTERY/EMERGENCY CEILING LUMINAIRE, WALL MOUNTED LUMINAIRE,BATTERY/EMERGENCY FLOOD LIGHT LUMINAIRE EMERGENCY LIGHT LUMINAIRE LUMINAIRE IDENTIFICATION TAG SWITCHES SWITCH SWITCH, 2 POLE SWITCH, 3-WAY SWITCH - FAN SWITCH - KEYSWITCH MOTORIZED SWITCH LIGHTING CONTROL DEVICES TIMECLOCK (ASTRONOMICAL TIME SWITCH) POWER DISTRIBUTION 120/208V OR 120/240V PANELBOARD, SURFACE MOUNT 120/208V OR 120/240V PANELBOARD, RECESSED HOMERUN CIRCUIT. PANELBOARD AND CIRCUIT DESIGNATION ARE INDICATED. EQUIPMENT CONNECTION WITH FLEXIBLE CONDUIT. POWER DEVICES 20 A., 120 V., DUPLEX RECEPTACLE, GROUNDING TYPE, U.O.N. MOUNTED 18" A.F.F. 20 A., 120 V., QUAD RECEPTACLE, GROUNDING TYPE, U.O.N. MOUNTED 18" A.F.F. 20 A., 120 V., QUAD RECEPTACLE, GROUNDING TYPE, MOUNTED ABOVE COUNTER. SPECIAL PURPOSE RECEPTACLE 20 A., 120 V., DUPLEX RECEPTACLE, GROUND FAULT WITH CAST ALUMINUM WEATHERPROOF "IN USE" COVER MOUNTED 18" A.F.F. 20 A., 120 V., DUPLEX RECEPTACLE, GROUND FAULT MOUNTED 18" A.F.F. FIRE ALARM DETECTION SYSTEM SMOKE DETECTOR FIRE ALARM ANNUNCIATOR PANEL "FAAP" POWER DEVICES DISCONNECT SWITCH, "3" INDICATES NUMBER OF POLES; "60" = FRAME SIZE AND "*" DENOTES FUSE SIZE AS RECOMMENDED BY EQUIPMENT MANUFACTURER. JUNCTION BOX PULL BOX MOTOR TELECOMMUNICATION SYSTEMS COMBINATION TEL/DATA JACKS DATA JACKS	MISCELLANEOUS SYMBOL LEGEND DETAIL NUMBER DETAIL TITLE REFERENCE SHEET NUMBER WHERE DETAIL IS REFERENCED ADDITIONAL SHEET REFERENCES ABBREVIATIONS A, AMP AMPERES AE AUDIO ENHANCEMENT AFC ABOVE FINISHED CEILING AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AIC AMPERES INTERRUPTING CAPACITY AWG AMERICAN WIRE GAUGE BF BALLAST FACTOR BFC BELOW FINISHED CEILING BFG BELOW FINISHED GRADE C CONDUIT CAB CABINET CFL COMPACT FLUORESCENT CKT CIRCUIT CLG CEILING CL CENTERLINE CRI COLOR RENDERING INDEX CT's CURRENT TRANSFORMERS CU COPPER DISC DISCONNECT(ING) DWG DRAWING(S) E EXISTING TO REMAIN EA EACH EF EXHAUST FAN EMT ELECTRICAL METALLIC TUBING ENT ELECTRICAL NON-METALLIC TUBING EQUIP EQUIPMENT EUH ELECTRIC UNIT HEATER EW ELECTRIC WATER COOLER EW ELECTRIC WATER HEATER EXH EXHAUST EXIST EXISTING EXP EXPLOSION PROOF FA FIRE ALARM FBC FLORIDA BUILDING CODE FLA FULL LOAD AMPERES FLUOR FLUORESCENT FMC FLEXIBLE METALLIC CONDUIT GFCI/GFI GROUND FAULT CIRCUIT INTERRUPTER GFP GROUND FAULT PROTECTION GND GROUND HGT HEIGHT HID HIGH INTENSITY DISCHARGE HPS HIGH PRESSURE SODIUM HOA HAND-OFF-AUTOMATIC HP HORSEPOWER HVAC HEATING/VENTILATION/AIR CONDITIONING HV HIGH VOLTAGE IMC INTERMEDIATE METAL CONDUIT INC INCANDESCENT JB JUNCTION BOX kV KILO-VOLTS kVA KILO-VOLTS-AMPERES kVAR KILO-VOLTS-AMPERES REACTIVE kw KILO-WATTS kWH KILO-WATT-HOURS LFMC LIQUIDTIGHT FLEXIBLE METAL CONDUIT LFNC LIQUIDTIGHT FLEXIBLE NON METALLIC CONDUIT LTG LIGHTING m METER mm MILLIMETER MAX MAXIMUM MCB MAIN CIRCUIT BREAKER MCC MOTOR CONTROL CENTER MCCB MOLDED CASE CIRCUIT BREAKER MCP MOTOR CIRCUIT PROTECTOR MFR MANUFACTURER MH METAL HALIDE MIN MINIMUM MISC MISCELLANEOUS MTR MOTOR MTD MOUNTED MTG MOUNTING NC NORMALLY CLOSED NEC NATIONAL ELECTRICAL CODE NEMA NATIONAL ELECTROMECHANICAL MANUFACTURER'S ASSOCIATION NETA INTERNATIONAL ELECTRICAL TESTING ASSOCIATION NFPA NATIONAL FIRE PROTECTION ASSOCIATION NICET NATIONAL INSTITUTE FOR CERTIFICATION IN ENGINEERING TECHNOLOGIES NO NORMALLY OPEN NRTL NATIONALLY RECOGNIZED TESTING LAB OAR OWNER'S AUTHORIZED REPRESENTATIVE OCPD OVER-CURRENT PROTECTIVE DEVICE PNL PANEL PSI PULL STATION INSIDE PVC POLYVINYL CHLORIDE R EXISTING TO BE REMOVED REC, RECEPT RECEPTACLE RGS RIGID GALVANIZED STEEL SF SQUARE FEET SPD SURGE PROTECTIVE DEVICE SPDT SINGLE POLE DOUBLE THROW TEL TELEPHONE TYP TYPICAL UL UNITED LABORATORIES UON UNLESS OTHERWISE NOTED UTP UNSHIELDED TWISTED PAIR V VOLTS VA VOLT-AMPERES VFC VARIABLE FREQUENCY CONTROLLER W WATTS WP WEATHER PROOF XFMR TRANSFORMER	GENERAL 1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH 2017 NATIONAL ELECTRICAL CODE (N.E.C.) AND 2017 FLORIDA BUILDING CODE. 2. THE CONTRACTOR IS RESPONSIBLE FOR EVALUATING FIELD CONDITIONS BY VISITING THE SITE PRIOR TO COMMENCING/BIDDING WORK. 3. ALL MATERIALS SHALL BE U.L. LISTED. 4. ALL BRANCH CIRCUITS SHALL BE PROPERLY PHASE BALANCED. 5. CONTRACTOR SHALL SEAL ALL FLOOR/WALL OPENINGS WITH A U.L. LISTED FIRE RATED SEAL TO MATCH THE FLOOR/WALL RATING. 6. RISERS AND DRAWINGS ARE DIAGRAMMATIC ONLY. THEY DO NOT SHOW EVERY BEND, JUNCTION BOX, ETC., REQUIRED FOR THE INSTALLATION. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO PROVIDE A FULLY FUNCTIONING SYSTEM. 7. ALL PULL AND JUNCTION BOXES SHALL BE ACCESSIBLE AT ALL TIMES. 8. EXACT POINT AND METHODS OF CONNECTIONS SHALL BE DETERMINED IN FIELD. 9. ALL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER. 10. CONTRACTOR SHALL COORDINATE ALL HIS WORK WITH OTHER TRADES IN ORDER TO FURNISH AND INSTALL ALL WIRING AND RACEWAYS AS SHOWN ON THE AIR CONDITIONING DRAWINGS OR SPECIFICATIONS. IF AIR CONDITIONING DRAWINGS REFER TO MANUFACTURER'S WIRING DIAGRAMS, THE CONTRACTOR SHALL VERIFY WITH SAID MANUFACTURER ALL REQUIREMENTS AND INCLUDE ALL RELATED WORK IN HIS CONTRACT. 11. CONTRACTOR SHALL COORDINATE AND PARTICIPATE IN FINAL OPERATIONAL TESTING OF ALL SYSTEMS WITH OWNER REPRESENTATIVES AND THE ENGINEER OF RECORD. 12. REFER TO SPECIFICATION SECTIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. 13. THE CONTRACTOR SHALL USE CAUTION AND BE SOLELY RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES AND SYSTEMS PRIOR TO COMMENCING ANY EXCAVATION, CORE DRILLING, ETC... EMPLOY AN UNDERGROUND SERVICE LOCATOR FIRM TO ENSURE THAT EXISTING UTILITIES ARE ACCURATELY LOCATED AND THAT THEY WILL NOT BE DISTURBED. AT NO ADDITIONAL COST TO OWNER, CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES AND SYSTEMS WHICH OCCURS AS A RESULT OF OPERATIONS PERFORMED UNDER THIS CONTRACT. REPAIRS TO EXISTING SHALL BE MADE USING MATERIALS AND METHODS TO MATCH EXISTING CONSTRUCTION AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO RE-COVERING. 14. CONTRACTOR SHALL VERIFY THAT ALL CONDUITS BEING MODIFIED OR REMOVED SHALL BE DISCONNECTED FOR THEIR POWER SOURCE, PRIOR TO WORKING ON THEM. 15. ALL AIR CONDITIONING EQUIPMENT SHALL BE PROVIDED WITH HACR BREAKERS IN COMPLIANCE WITH CODE. CONTRACTOR SHALL VERIFY WITH ALL EQUIPMENT NAMEPLATES AND PROVIDE HACR BREAKERS AS REQUIRED. 16. ALL MOTORS SHALL BE PROVIDED WITH NEMA STANDARD STARTER. STARTER FOR THREE PHASE MOTORS ALSO SHALL INCLUDE A PHASE MONITORING CAPABLE OF SHUT-OFF THE MOTOR IN CASE OF PHASE FAILURE. 17. EXTERIOR LIQUID-TIGHT FLEX SHALL BE ULTRAVIOLET RESISTANT. 18. RACEWAYS SUPPORTS: OVERHEAD RACEWAYS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE. a. RACEWAYS SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES. b. RACEWAYS SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPING. c. RACEWAYS SHALL NOT BE SUSPENDED WITH WIRES ONLY. PROPER CONDUIT HANGERS ARE REQUIRED. d. WHEN POSSIBLE, RACEWAYS SHALL BE GROUPED AND SUSPENDED ON "TRAPEZE" SUPPORTS. 19. FITTINGS: a. FITTINGS FOR IMC AND RIGID CONDUITS SHALL BE THREADED. b. FITTINGS FOR EMT SHALL BE COMPRESSION TYPE (NO SET SCREWS OR INDENTER TYPES). 20. RACEWAY SIZE SHALL BE 3/4" MINIMUM FOR HOMERUNS. 21. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS. 22. ALL CONDUITS IN FINISHED AREAS SHALL BE CONCEALED. LIGHTING 1. ALL LUMINAIRES SHALL BE PROPERLY SUPPORTED IN ACCORDANCE WITH THE CEILING SYSTEM MANUFACTURER RECOMMENDATIONS AND LOCAL CODE REQUIREMENTS. 2. ALL FLUORESCENT LUMINAIRES THAT UTILIZE DOUBLE-ENDED LAMPS SHALL HAVE A DISCONNECTING MEANS EITHER INTERNAL OR EXTERNAL TO EACH LUMINAIRE AS REQUIRED BY N.E.C. 410.10.30 (G). 3. ALL HID SOURCES TO BE DELUXE WHITE OR PHOSPHOR COATED. CONDUITS 1. GALVANIZED RIGID CONDUIT OR INTERMEDIATE METAL CONDUIT MAY BE USED FOR ALL APPLICATIONS, EXCEPT WHERE INDICATED OTHERWISE, GALVANIZED RIGID CONDUIT MUST ALWAYS BE USED IN THE FOLLOWING APPLICATIONS: a. CAST IN FLOOR SLABS. b. ANYWHERE THERE IS EXPOSED CONDUIT, UP TO 8'-0" ABOVE FLOOR. c. ALL CONDUITS TRADE SIZE 2" AND ABOVE. d. THE MINIMUM BEND RADIUS FOR ALL UNDERGROUND CONDUITS SHALL BE 8 TIMES THE INTERNAL CONDUIT DIAMETER. 2. EMT CONDUITS MAY BE USED FOR THE FOLLOWING APPLICATIONS, UNLESS INDICATED OTHERWISE: a. INDOORS IN CONCEALED AREAS (IN PARTITIONS, ABOVE CEILING). b. EXPOSED IN STORAGE ROOMS AND IN MECHANICAL AND ELECTRICAL ROOMS. c. ABOVE 8'-0" IN AREAS OF EXPOSED CONDUIT. 3. EMT CONDUITS MAY NOT BE USED IN THE FOLLOWING APPLICATIONS: a. OUT-OF-DOORS. b. DAMP OR MOIST LOCATIONS. 4. FLEXIBLE METAL CONDUITS SHALL BE USED FOR ALL CONNECTIONS TO EQUIPMENT (TRANSFORMERS, AIR CONDITIONING EQUIPMENT, PUMPS, KITCHEN EQUIPMENT, ETC.) AND LIGHTING FIXTURES. NON-LIQUID-TIGHT FLEXIBLE CONDUIT MAY BE USED FOR THE FOLLOWING: a. INDOOR LIGHT FIXTURES. b. INDOOR TELE-POWER POLES. c. OTHER SIMILAR INDOOR LIGHT-DUTY APPLICATIONS. 6. EXTERIOR LIQUID-TIGHT FLEX SHALL BE ULTRAVIOLET RESISTANT. 7. RACEWAYS SUPPORTS: OVERHEAD RACEWAYS SHALL BE SUPPORTED FROM THE STRUCTURE ABOVE. a. RACEWAYS SHALL NOT BE SUPPORTED FROM CEILING SUSPENSION WIRES. b. RACEWAYS SHALL NOT BE SUPPORTED FROM DUCTWORK OR PIPING. c. RACEWAYS SHALL NOT BE SUSPENDED WITH WIRES ONLY. PROPER CONDUIT HANGERS ARE REQUIRED. d. WHEN POSSIBLE, RACEWAYS SHALL BE GROUPED AND SUSPENDED ON "TRAPEZE" SUPPORTS. 9. RACEWAY SIZE SHALL BE 3/4" MINIMUM FOR HOMERUNS. 10. ALL EMPTY CONDUITS TO BE PROVIDED WITH NYLON PULL STRINGS. 11. ALL CONDUITS IN FINISHED AREAS SHALL BE CONCEALED. EXPANSION JOINTS FITTINGS: 1. INSTALL EXPANSION FITTINGS IN EACH CONDUIT RUN EXPOSED TO SUNLIGHT THAT HAS STRAIGHT-RUN LENGTH THAT EXCEED 25' FEET. 2. INSTALL EXPANSION FITTINGS IN EACH CONDUIT RUN NO EXPOSED TO SUNLIGHT THAT HAS STRAIGHT-RUN LENGTH THAT EXCEED 100' FEET. 3. INSTALL EXPANSION FITTINGS IN EACH CONDUIT RUNNING ACROSS A STRUCTURE EXPANSION JOINT.	CONDUCTORS 1. MINIMUM BRANCH CIRCUIT WIRE SIZE SHALL BE #12 THWN (COPPER). 2. CONDUCTORS #6 AND LARGER SHALL BE THW. 3. ALL CONDUCTORS SHALL BE COPPER. 4. ALL CONDUCTORS SHALL BE RUN IN CONDUIT (METALLIC TYPE) FIRE ALARM WIRING SHALL COMPLY WITH ALL APPLICABLE CODES AND REQUIREMENTS 5. ALL BRANCH CIRCUITS TO HAVE A GREEN EQUIPMENT GROUNDING CONDUCTOR SIZED AS PER N.E.C. TABLE 250.122. 6. ALL CABLES SHALL BE RUN WITHOUT SPLICES EXCEPT OTHERWISE INDICATED. 7. CONTRACTOR SHALL INSTALL A PULL STRING IN ALL EMPTY CONDUITS AND INCLUDE TAGS IDENTIFYING EACH SYSTEM. 8. INSULATED CONDUCTORS SHALL BE COLOR CODED AS FOLLOWS: 120/208V SYSTEM 277/480V SYSTEM PHASE 'A' BLACK PHASE 'B' RED PHASE 'C' BLUE NEUTRAL WHITE GROUND GREEN GREY WITH WHITE TRACER GREEN UNLESS OTHERWISE NOTED, 120V, 20A BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED PER TABLE BELOW: DISTANCE WIRE SIZE 0'-60' #12 MIN THROUGHOUT CIRCUIT 61'-120' #10 MIN THROUGHOUT CIRCUIT 121'-240' #8 MIN THROUGHOUT CIRCUIT 240'+ #6 MIN THROUGHOUT CIRCUIT UNLESS OTHERWISE NOTED, 277V, 20A BRANCH CIRCUIT CONDUCTORS SHALL BE SIZED PER TABLE BELOW: DISTANCE WIRE SIZE 0'-140' #12 MIN THROUGHOUT CIRCUIT 141'-220' #10 MIN THROUGHOUT CIRCUIT 221'-340' #8 MIN THROUGHOUT CIRCUIT 341'+ #6 MIN THROUGHOUT CIRCUIT DEMOLITION GENERAL NOTES: 1. THE WORK THAT IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS AND EQUIPMENT PERMITS, FEES, INSPECTIONS, TEST, INSURANCE, ETC., REQUIRED FOR THE SELECTIVE DEMOLITION OF THE ELECTRICAL AND LOW VOLTAGE SYSTEMS SHOWN ON DRAWINGS AND INSTALLATION OF NEW SYSTEMS AS INDICATED. 2. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY PIECE OF EQUIPMENT WHICH MAY BE REQUIRED TO BE REMOVED OR METHOD OF DEMOLITION IN THE SPACE ALLOCATED, OR COORDINATION WITH EXISTING JOBSITE SPACE CONDITIONS. ANY WORK NOT MENTIONED HEREIN OR SHOWN ON THE DRAWINGS BUT CONSIDERED NECESSARY FOR THE COMPLETION OF THE DEMOLITION WORK IN A PROPER MANNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST. 3. DRAWINGS ARE NOT TO BE SCALED. UNLESS SPECIFIC DIMENSIONS ARE SHOWN, EXISTING JOBSITE CONDITIONS SHALL GOVERN EXACT LOCATION OF MECHANICAL EQUIPMENT AND APPURTENANCES TO BE REMOVED UNDER THIS CONTRACT. 4. THE NATURE OF THIS CONTRACT INVOLVES DEMOLITION OF EXISTING EQUIPMENT AND APPURTENANCES. THE CONTRACTOR, PRIOR TO BID, MUST INSPECT THE EXISTING FACILITIES AND CONDITIONS AT THE JOBSITE AND BECOME ACQUAINTED WITH CONDITIONS THAT WILL AFFECT WORK TO BE PERFORMED UNDER THIS CONTRACT. FAILURE TO BECOME ACQUAINTED WITH EXISTING SITE CONDITIONS PRIOR TO BIDDING IS NOT JUSTIFICATION FOR ADDITIONAL COSTS. 5. ALL DEMOLITION WORK INCLUDING THE REMOVAL, DISPOSAL OF MATERIALS AND EQUIPMENT AND STORAGE OF SALVAGED MATERIALS AND EQUIPMENT SHALL BE COORDINATED WITH OWNER DURING THE BIDDING PERIOD. OWNER WILL ADVISE WHICH ITEMS WILL BE SALVAGED AND STORED AT A DESIGNATED LOCATION. 6. ANY EQUIPMENT OR DEVICE TO REMAIN THAT IS REQUIRED TO BE TEMPORARILY DISCONNECTED DURING THE COURSE OF THE WORK MUST BE RECONNECTED AND TIED BACK TO THE EXISTING BUILDING SYSTEMS AND TESTED FOR CORRECT OPERATION. INTERRUPTION OF EXISTING FACILITIES AND/OR SERVICES SHALL BE KEPT TO A MINIMUM AND THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND EQUIPMENT REQUIRED WHENEVER TEMPORARY CONNECTIONS ARE NECESSARY TO MAINTAIN CONTINUITY OF SERVICES. COORDINATE ALL INTERRUPTIONS WITH OWNER PRIOR TO WORK. 7. ANY EXISTING BUILDING OR PORTION THEREOF THAT IS AFFECTED BY THE REMOVAL, RELOCATION, OR INSTALLATION OF ANY PIECE OF EQUIPMENT SHALL BE REPAIRED AND REFINISHED AS REQUIRED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY THE OWNER. 8. THE CONTRACTOR SHALL DO HIS OR HER CUTTING AND REMOVAL OF ALL RELATED WORK IN ALL LOCATIONS WHERE REQUIRED, EXCEPT WHERE SHOWN OR NOTED OTHERWISE. 9. WHERE DAMAGE TO MATERIALS AND EQUIPMENT WHICH HAVE BEEN DESIGNATED TO BE SALVAGED OCCURS, REPAIR AND OR REPLACEMENT OF THE DAMAGED ITEM(S) SHALL BE PROVIDED BY THE CONTRACTOR. THE REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE TO THE SATISFACTION OF OWNER. 10. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE INTERNATIONAL BUILDING CODE/FLORIDA BUILDING CODE AND WITH ALL LOCAL CODES AND ORDINANCES. 11. CIRCUITS AND INFORMATION INDICATED ARE BASED UPON AVAILABLE AS-BUILTS AND VISUAL SITE VISITS. CONTRACTOR SHALL VERIFY ALL CIRCUITS IN THE FIELD PRIOR TO START OF WORK AND SHALL IMMEDIATELY NOTIFY THE ENGINEER OF RECORD OF ANY DISCREPANCIES. 12. THE CONTRACTOR SHALL USE CAUTION AND BE SOLELY RESPONSIBLE FOR LOCATING ALL EXISTING UTILITIES AND SYSTEMS PRIOR TO COMMENCING ANY EXCAVATION, CORE DRILLING, ETC... EMPLOY AN UNDERGROUND SERVICE LOCATOR FIRM TO ENSURE THAT EXISTING UTILITIES ARE ACCURATELY LOCATED AND THAT THEY WILL NOT BE DISTURBED. AT NO ADDITIONAL COST TO OWNER, CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITIES AND SYSTEMS WHICH OCCURS AS A RESULT OF OPERATIONS PERFORMED UNDER THIS CONTRACT. REPAIRS TO EXISTING SHALL BE MADE USING MATERIALS AND METHODS TO MATCH EXISTING CONSTRUCTION AND SHALL BE APPROVED BY THE ENGINEER PRIOR TO RE-COVERING.
NOTE: SOME SYMBOLS MAY NOT BE USED.			



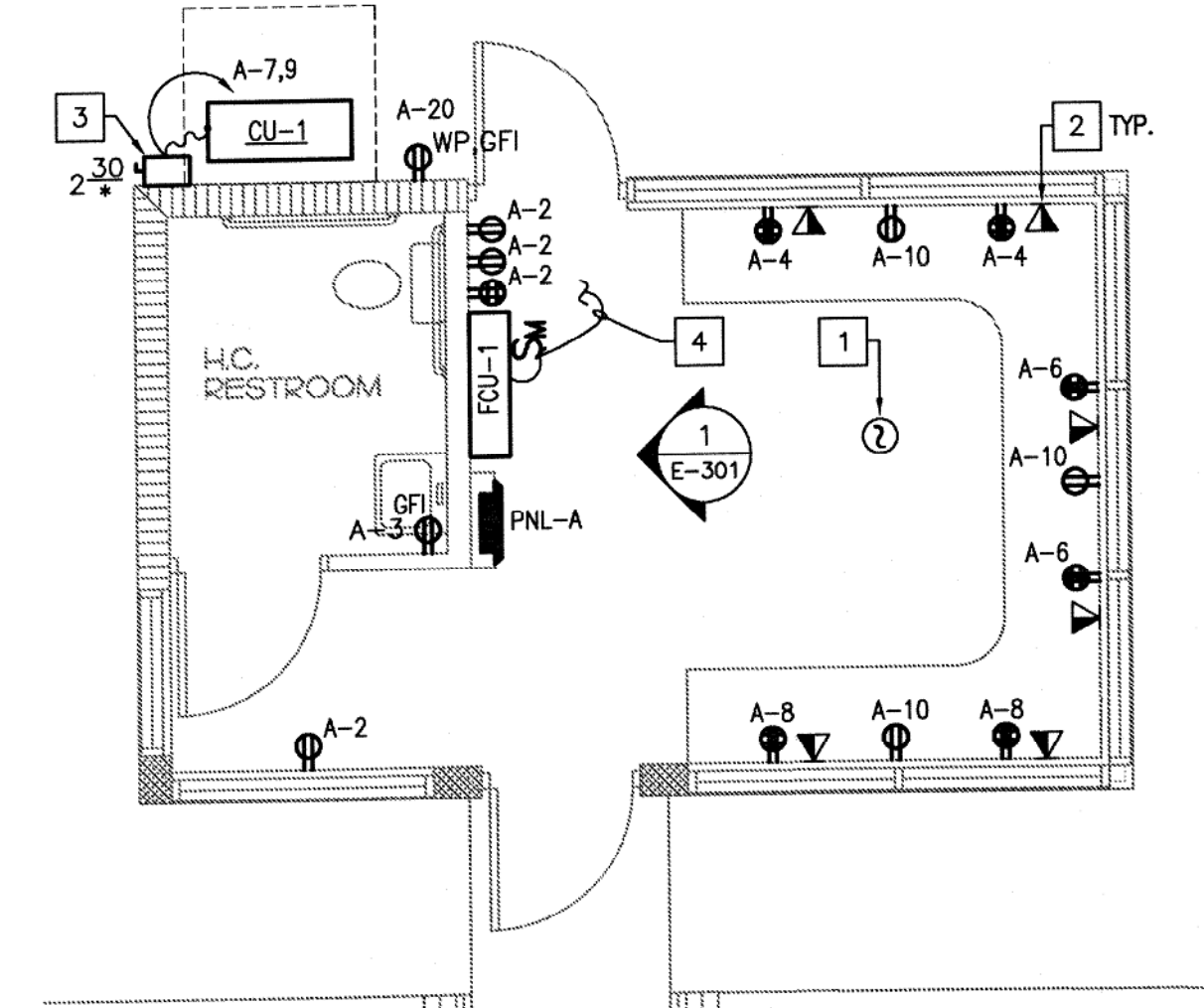
1 ELECTRICAL DEMOLITION PLAN

E-3.01 SCALE: 1/4"=1'-0"



2 LIGHTING PLAN

E-3.01 SCALE: 1/4"=1'-0"



3 POWER AND LOW VOLTAGE FLOOR PLAN

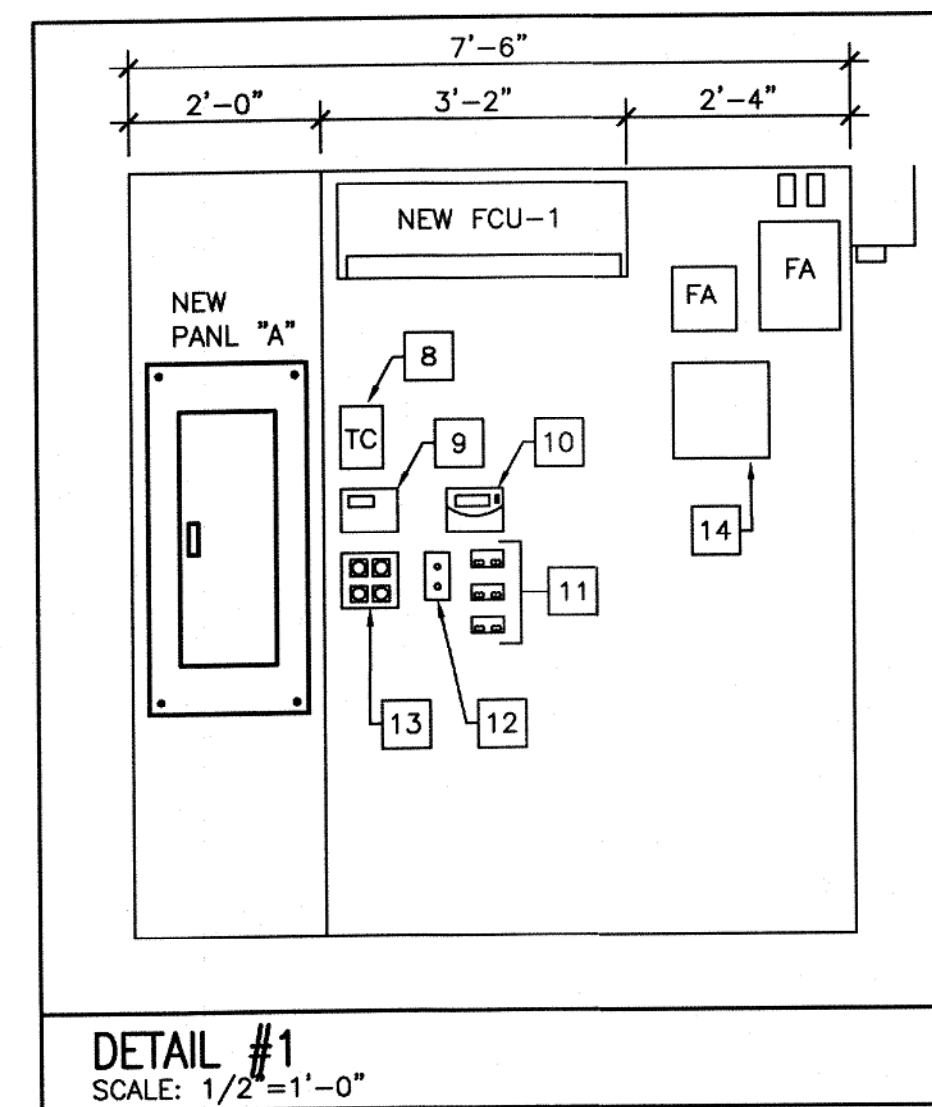
E-3.01 SCALE: 1/4"=1'-0"

DEMO CODED NOTES:

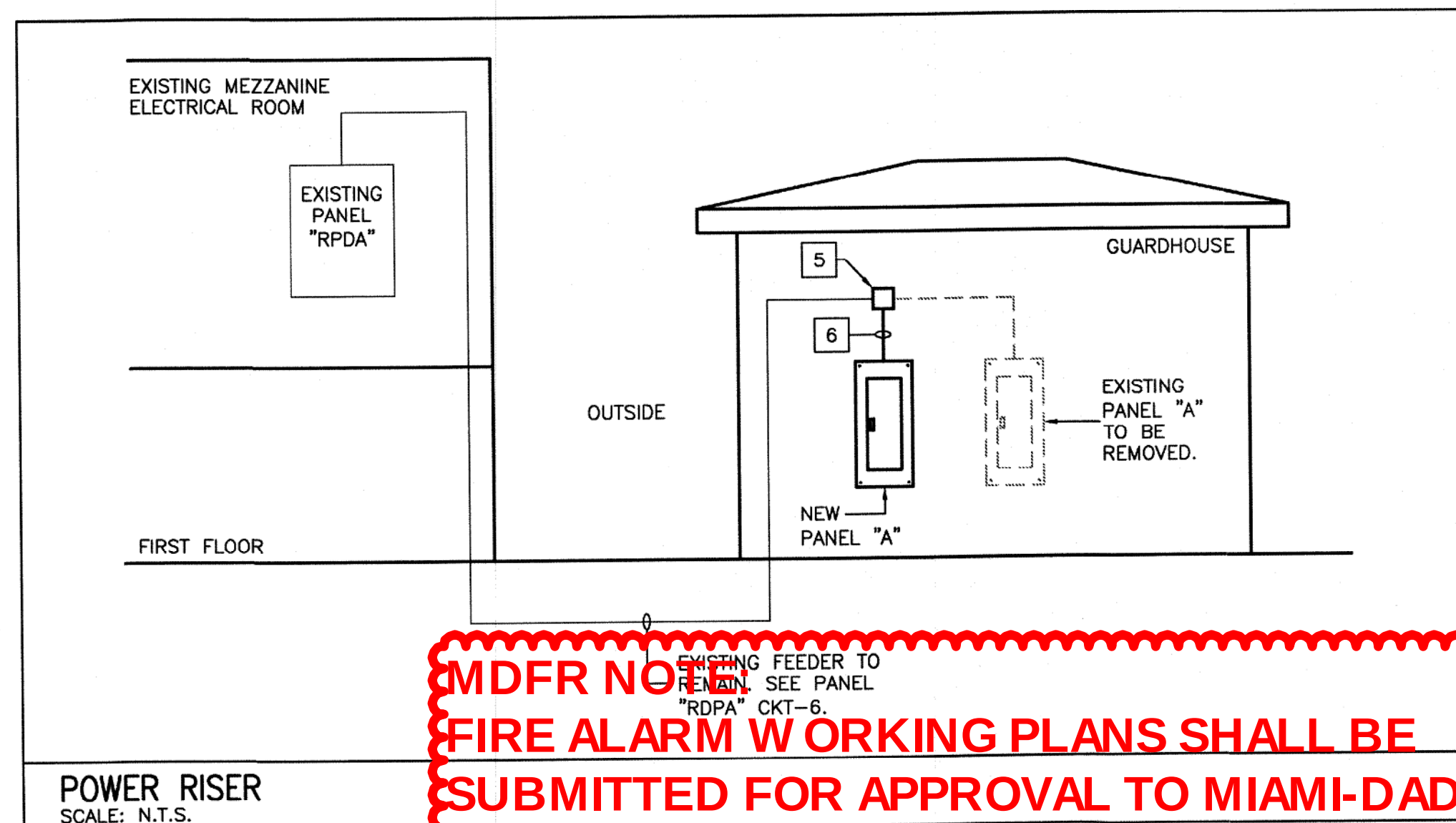
- EXISTING LIGHT FIXTURE TO BE REMOVED. CONTRACTOR SHALL REMOVE WIRE AND CONDUIT BACK TO SOURCE.
- EXISTING LIGHT / FAN SWITCH TO BE REPLACED BY NEW.
- EXISTING GFI RECEPTACLE TO BE REPLACED BY NEW.
- EXISTING RECEPTACLE TO BE REMOVED. CONTRACTOR SHALL REMOVE WIRE AND CONDUIT BACK TO SOURCE.
- EXISTING LIGHT SWITCH TO BE REMOVED. CONTRACTOR SHALL REMOVE WIRE AND CONDUIT BACK TO SOURCE.
- EXISTING J.BOX FOR MONITOR CONNECTION ABOUT CEILING. CONTRACTOR SHALL PRESERVE AND PROTECT TO BE CONNECTED THE EXISTING MONITOR ONCE THE NEW CEILING IS INSTALLED.
- EXISTING THREE (3) KEYSWITCHES TO BE RELOCATED. COORDINATE EXACT LOCATION WITH OWNER AND ARCHITECT.
- EXISTING DATA JACKS TO BE REMOVED.
- EXISTING SECURITY SYSTEM DEVICE TO BE RELOCATED.
- EXISTING 100A, 120/208V, 4W, 3 PHASE PANELBOARD TO BE REMOVED. CONTRACTOR SHALL IDENTIFY, TAG AND PRESERVE EXISTING CIRCUITS TO RE-CONNECT AT NEW PANEL. REFER TO RISER DIAGRAM AND PANEL SCHEDULE FOR DESCRIPTIONS.
- EXISTING TIMER SWITCH TO BE RELOCATED. CONTRACTOR SHALL IDENTIFY, TAG AND PRESERVE EXISTING CIRCUIT TO BE RECONNECTED.
- EXISTING FIRE ALARM ANNUNCIATOR TO BE RELOCATED.
- EXISTING FOUR (4) PUSH BUTTON TO BE RELOCATED.
- EXISTING GATE SWITCH TO BE RELOCATED.
- EXISTING LIGHT SWITCH TO BE REMOVED.
- EXISTING RECEPTACLE TO BE REPLACED AND RE-CONNECT TO NEW CIRCUIT AS SHOWN ON NEW WORK.
- EXISTING EXHAUST FAN TO BE REPLACED. CONTRACTOR MUST DISCONNECT AND RECONNECT ONCE THE NEW FAN IS INSTALLED.
- EXISTING EQUIPMENTS TO REMAIN. SEE PHOTO #2.
- EXISTING A/C SPECIAL RECEPTACLE TO BE REMOVED.
- EXISTING FIRE ALARM BOXES TO REMAIN.
- EXISTING SECURITY SYSTEM PANEL TO BE RELOCATED. SEE DETAIL #1.
- EXISTING DATA JACKS TO BE REPLACED.
- EXISTING LIGHT TO REMAIN. CONNECT TO NEW CIRCUIT AS SHOWN ON NEW WORK.

CODED NOTES:

- CONNECT TO EXISTING FIRE ALARM SYSTEM.
- PROVIDE 1" EMPTY CONDUIT WITH PULL WIRE FOR DATA/TEL CONNECTION. VERIFY FIELD CONDITIONS FOR REQUIRED ROUTING PRIOR BID.
- PROVIDE NEW NEMA 4X, DISCONNECT SWITCH FOR CU-1.
- 2-1" CONDUITS AND WIRING FOR POWER AND CONTROLS INTERCONNECTION BETWEEN OUTSIDE AND INDOOR UNITS. VERIFY CONDUIT AND WIRE SIZES WITH MANUFACTURER PRIOR TO INSTALLATION.
- PROVIDE NEW JUNCTION BOX AND TAP CONNECTORS TO INTERCEPT EXISTING FEEDER TO CONNECT NEW PANEL "A".
- PROVIDE 4#3, 1#8 (G) IN 1 1/2" CONDUIT.
- NEW EXTERIOR LIGHTS MUST BE CONTROLLED BY EXISTING TIMER SWITCH.
- NEW LOCATION OF EXISTING TIMER SWITCH.
- NEW LOCATION OF EXISTING FA ANNUNCIATOR "FAAP".
- NEW LOCATION OF EXISTING SECURITY SYSTEM DEVICE.
- NEW LOCATION OF EXISTING KEY SWITCHES.
- NEW LOCATION OF EXISTING GATE SWITCH.
- NEW LOCATION OF EXISTING FOUR (4) PUSH BUTTON.
- NEW LOCATION OF EXISTING SECURITY SYSTEM PANEL.



DETAIL #1
SCALE: 1/2"=1'-0"



POWER RISER
SCALE: N.T.S.

MDFR NOTICE
FIRE ALARM WORKING PLANS SHALL BE SUBMITTED FOR APPROVAL TO MIAMI-DADE FIRE DEPARTMENT BEFORE ANY FIRE ALARM SYSTEM IS INSTALLED OR REMODELED. FIRE ALARM DEVICES IN ADDITION TO THOSE SHOWN ON THIS PLAN MAY BE REQUIRED.

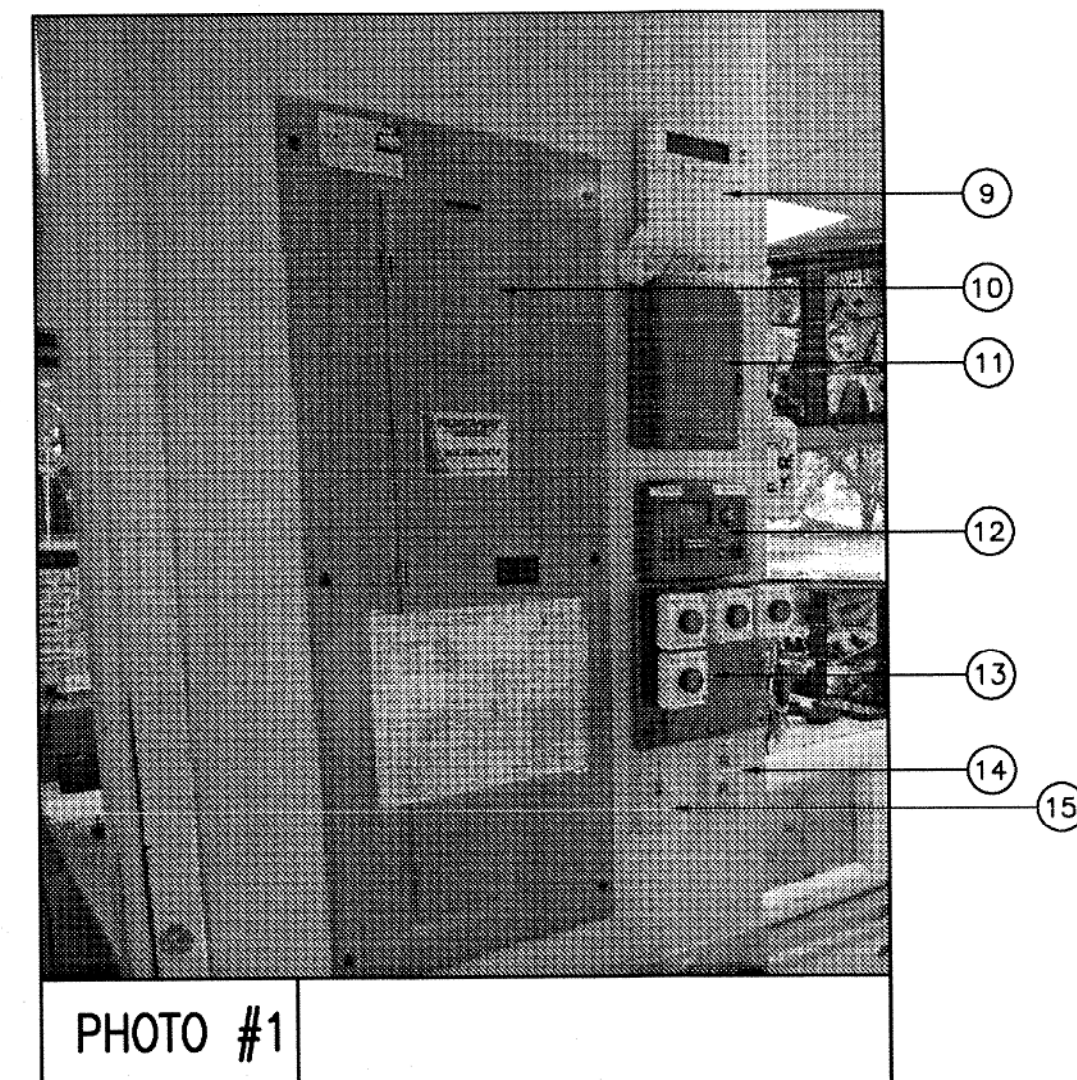


PHOTO #1

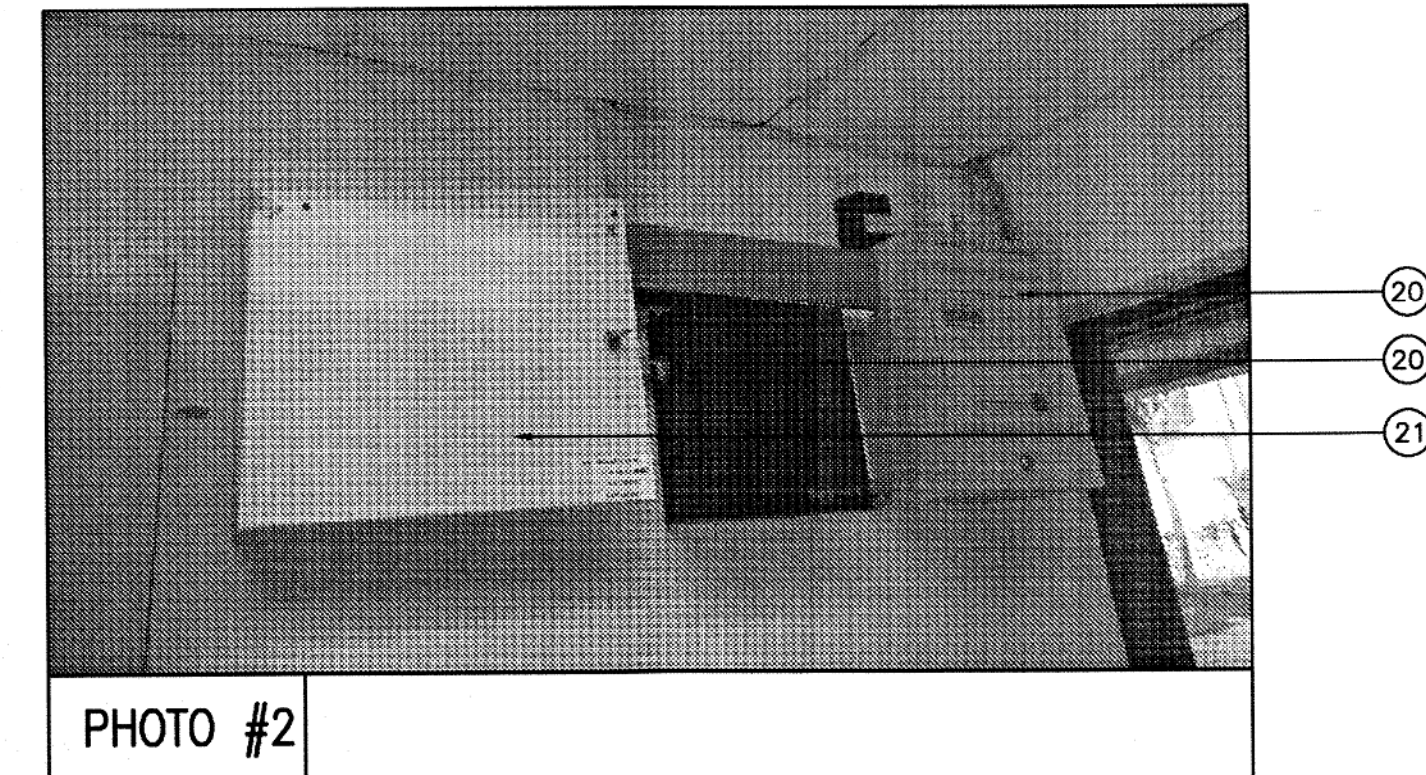
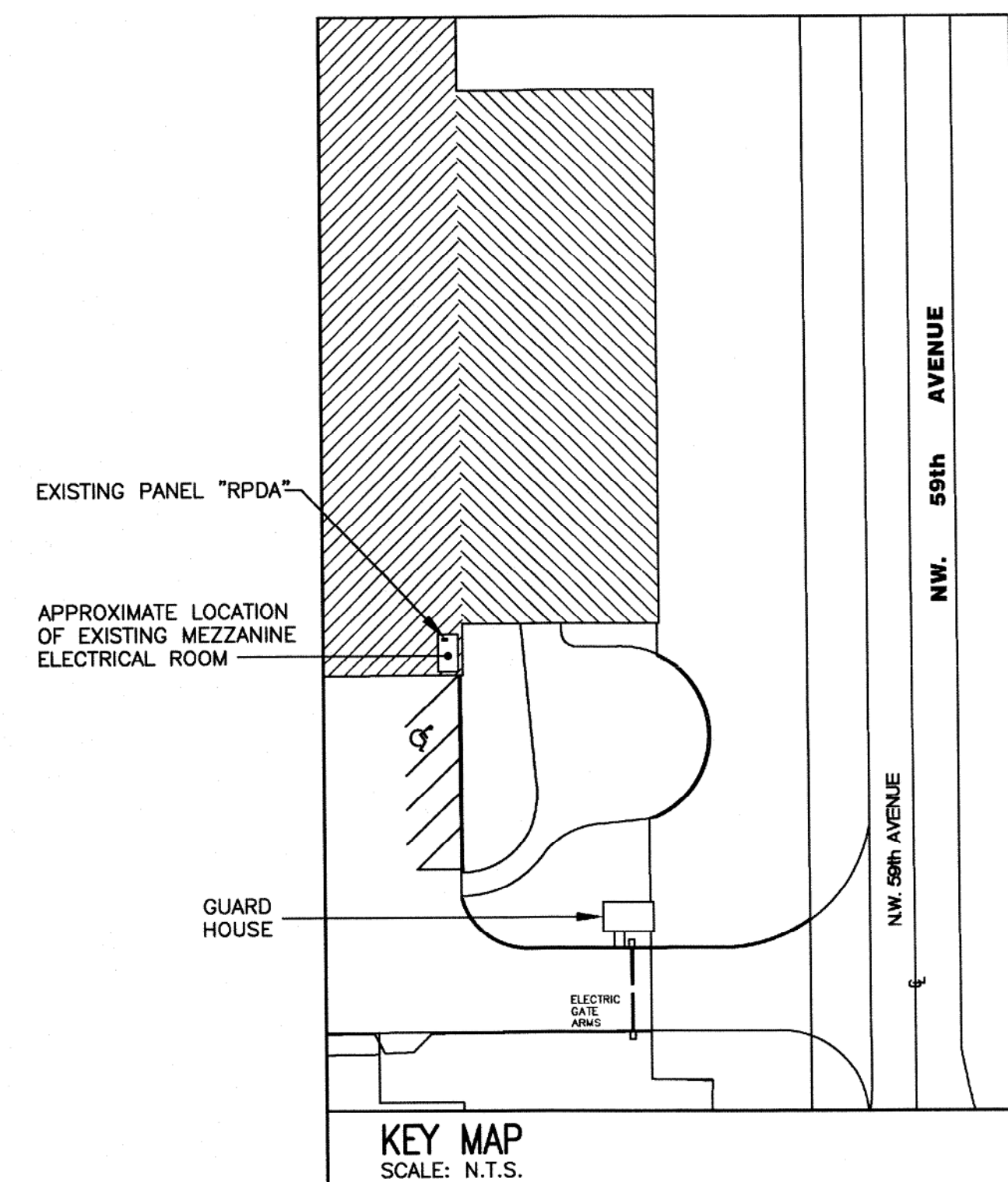


PHOTO #2



KEY MAP
SCALE: N.T.S.

BRIGGS & BRIGGS
PHOTO, INC.
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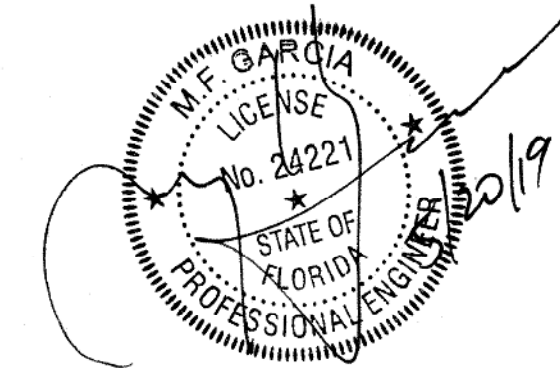
South Guardhouse Renovations
Caterpillar Inc.
Miami Distribution Center
15550 NW 59 Ave
Miami Lakes, FL 33014

REVISIONS
NO. DATE

PROJ. NO.: 17-04
DATE: 05/07/2019

DRAWN BY:
ELECTRICAL PLAN

E-301



Gartek
Project No. 3263.00
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*In my professional judgement and to the best of my knowledge and belief, these plans and specifications comply with applicable Building Codes. This document and the information it contains is the exclusive property of Gartek Engineering and may not be reproduced or used for other purposes other than the specific project for which it was prepared without the explicit consent of Gartek Engineering.

EQUAL TO: G.E. MOUNTING: SURFACE NEMA TYPE: 1				PANEL NAME: EXISTING "RCPA" AIC: EXISTING SUBFEED LUGS: N/A NEUTRAL RATING: 100%				VOLTAGE: 120/208V-3Ø-4W/ MAIN BUS: 600 A MAIN AMPS (OR MLO): 400 A MCB GFI PROTECTED: NO													
NOTES	CKT NO.	LOAD DESCRIPTION	CKT TYPE	PHASE (KVA)			CIRCUIT			PHASE (KVA)			CKT TYPE	LOAD DESCRIPTION	CKT NO.	NOTES					
				A	B	C	BKR	P	WIRE/COND*	P	BKR	A	B	C							
1	3	EXISTING PANEL "RPA1"	M	6.5			100	3	EXISTING	EXISTING	3	60	7.4	7.4		M	EXISTING PANEL " RPA2"	4	1		
	M			6.5																	
	M																				
1	9	EXISTING PANEL "RPA3"	M		3.87		100	3	EXISTING	EXISTING	3	60	3.34			M	EXISTING PANEL "CR1"	8	1		
	M			3.87																	
	M				3.87																
1	13	EXISTING PANEL "CR2"	M	3.34			100	3	EXISTING		3	35					SPARE	12			
	M			3.34																	
	M				3.34																
	M																				
	M		6.402																		
1	19	PANEL "A"	M			6.402	100	3	EXISTING	EXISTING	3	20		1.92		L	EXISTING SITE LIGHTING ROOF (THRU TIMER CLOCK)	16			
	M			6.402																	
	M																				
	M				6.402																
SUBTOTAL				20.11	20.11	20.11				12.66			12.66	12.66	98.32						
L = LIGHTING				5.76	1.25	1.00	CONN LOAD			DMD FCTR			TOTAL			TOTAL KVA					
R = RECEPT				0.00			ADJ FACTOR			NEC			0.00			99.76					
LM = LRGST MTR				0.00		7.25				1.00			0.00			276.9					
OM = OTHER MTRS				0.00		1.00				1.00			0.00								
OL = OTHER LOAD				0.00		1.25				1.00			0.00								
M = MISCELLANEOUS				92.56		1.00				1.00			92.56								
Sub-Total:				98.32									99.76								
(SUB-PNL LOADS, IF APPLICABLE, INCLUDED ABOVE)																					
NOTES: *REFER TO VOLTAGE DROP WIRE SIZING TABLE FOR RUNS GREATER THAN 60' **PROVIDE NEUTRAL WIRE FOR 2P AND 3P CIRCUITS WHERE REQUIRED BY MANUF. EXISTING LOAD IS BASED ON RECORD DRAWING.																					

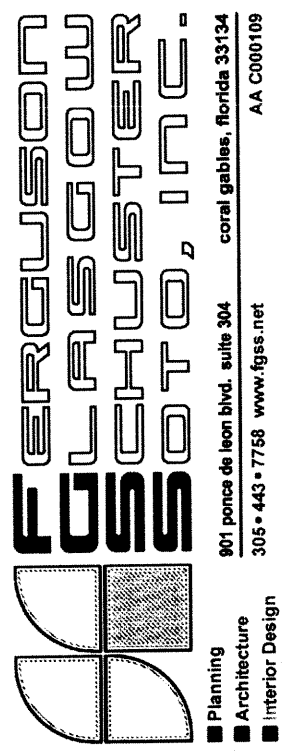
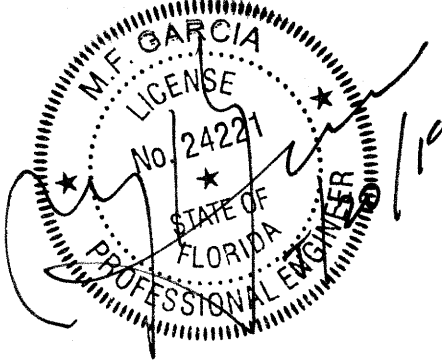
EQUAL TO: SIEMENS MOUNTING: SURFACE NEMA TYPE: 1				PANEL NAME: A AIC: 10,000 SUBFEED LUGS: N/A NEUTRAL RATING: 100%				VOLTAGE: 120/208V-3Ø-4W/ MAIN BUS: 125 A MAIN AMPS (OR MLO): 100 A MCB GFI PROTECTED: NO										
NOTES	CKT NO.	LOAD DESCRIPTION	CKT TYPE	PHASE (KVA)			CIRCUIT				PHASE (KVA)			CKT TYPE	LOAD DESCRIPTION	CKT NO.	NOTES	
				A	B	C	BKR	P	WIRE/COND*	P	BKR	A	B					C
	1	LIGHTING CIRCUIT	L	0.22			20	1	2#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20	1.2		R	GATE OUTLETS	2	
	3	RESTROOM	L		0.24		20	1	2#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20		0.72	R	GATE OUTLETS	4	
	5	SPARE					20	1	2#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20			R	GATE OUTLETS	6	
	7		OM	1.16					2#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20	0.72		R	GATE OUTLETS	8	
	9	CU-1	OM		1.16		15	2	3#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20		0.54	R	GATE OUTLETS	10	
1	11	BOLLARDS	M			0.72	20	1	-	-	1	20		0.72	M	BARRIER GATE	12	1
1	13	BOLLARDS	M	0.72			20	1	-	-	1	20	0.72		M	BARRIER GATE	14	1
1	15	BOLLARDS	M		0.72		20	1	-	-	1	20		0.72	M	BARRIER GATE	16	1
1	17	BOLLARDS	M			0.72	20	1	-	-	1	20			M	FLOODS LIGHTS	18	1
	19	SPACE							2#12, 1#12G, 3/4"	2#12, 1#12G, 3/4"	1	20	7.2		R	OUTDOOR RECEPTACLE	20	
	21	SPACE														SPACE	22	
	23	SPACE														SPACE	24	
	25	SPACE															26	
	27	SPACE									3	30				SURGE PROTECTOR	28	
	29	SPACE															30	
SUBTOTAL				2.1	2.12	1.44						9.84	1.98	2.16		19.64		19.21
L = LIGHTING				0.46		1.25												53.3
R = RECEPT				11.10														
OM = OTHER MTRS				0.00		1.25												
OL = OTHER LOAD				2.32		1.00												
M = MISCELLANEOUS				0.00		1.25												
Sub-Total:				5.76		1.00												
Sub-Total:				19.64														19.21
(SUB-PNL LOADS, IF APPLICABLE, INCLUDED ABOVE)																		
NOTES: *REFER TO VOLTAGE DROP WIRE SIZING TABLE FOR RUNS GREATER THAN 60' **PROVIDE NEUTRAL WIRE FOR 2P AND 3P CIRCUITS WHERE REQUIRED BY MANUF. 1. EXISING LOAD TO REMAIN. 2. 3.																		

LIGHTING FIXTURE SCHEDULE									
Type	Luminaire	Manufacturer and	Volts	LED Information		System	Mounting	Finish	Remarks
	Description	Catalog Number		No.	Lumens/Color/CRI	Watt			
A	4" LED DOWNLIGHT	LITHONIA LDN4 40/15 L04 AR LD MVOLT GZ10	MVOLT	N/A	1500 LUMENS, WHT LED ARRAY, 40K INCLUDED	20.4	RECESSED	MATTE	0-10V DIMMING TO 10% STANDARD ENERGY STAR COMPLIANT
BE	4" WP LED DOWNLIGHT WITH EMERGENCY BATTERY PACK	LITHONIA LDN4 40/15 L04 AR LD MVOLT GZ10 EL WL	120	N/A	1500 LUMENS, WHT LED ARRAY, 40K INCLUDED	20.4	RECESSED	DIFFUSE	0-10V DIMMING TO 10% STANDARD ENERGY STAR COMPLIANT
C	4"WW x 4" LONG LED RECESSED LUMINAIRE	FOCAL POINT FSMAL FL 625LF 40K 1C UNV LD1 G1 WH 4"	MVOLT	N/A	2568 LUMENS, WHT LED ARRAY, 40K INCLUDED	23	LAY-IN	WHITE	0-10V DIMMING
D	TWO HEAD EMERGENCY LIGHT	LITHONIA ELM2L	DUAL	2	2.2W/220LM EA. LED WHT ARRAY, 40K INCLUDED	4	WALL 7.6" AFF	WHITE	SUITABLE FOR DAMP LOCATION

Gartek
Gartek Engineering Corporation
7210 S.W. 39th Terrace, Miami, FL 33155 / (305)266-8997 Fax (305)264-9496
2700 N. 29th Ave., Ste. 108, Hollywood, FL 33020 / (954)404-8100 Fax (954)404-8133
6801 Lake Worth Road, Ste. 117, Greenacres, FL 33467 / (561)249-3431 Fax (561)249-3472
www.gartek-engineering.com
Certificate of Authorization #3144
Robert L. Betancourt, P.E. (Mechanical)
M. F. Garcia, P.E. (Electrical)

Project No. 3263.00
State of Florida #34788
State of Florida #24221

"In my professional judgement and to the best of my knowledge and belief, these plans and specifications comply with applicable Building Codes. This document and the information it contains is the exclusive property of Gartek Engineering and may not be reproduced or used for other purpose other than the specific project for which it was prepared without the explicit consent of Gartek Engineering."



South Guardhouse Renovations
Caterpillar Inc.
Miami Distribution Center
15550 NW 59 Ave
Miami Lakes, FL 33014

REMARKS

REVISIONS
NO DATE

PROJ. NO.: 17-04
DRAWN BY:
DATE: 05/07/2019

PANEL SCHEDULES

E-701

HVAC GENERAL NOTES AND SPECIFICATIONS.

1. GENERAL

A. BUILDING WILL BE FULLY OCCUPIED AND SHALL REMAIN FULLY OPERATIONAL AND FUNCTIONAL WITH OCCUPANTS DURING THE AIR CONDITIONING REPLACEMENT AND UPGRADES.

D. WORK SCHEDULE: CONTRACTOR SHALL COORDINATE HIS/HER WORK SCHEDULE TO PERFORM WORK AFTER NORMAL OPERATION HOURS (8:00 AM- 4:30 PM), DURING WEEKENDS, AND HOLIDAYS SCHEDULE. CONTACT AHJ FOR SCHEDULE. CONTRACTOR SHALL NOTIFY AHJ IN WRITING 48 HOURS IN ADVANCE OF ANY REQUIRED A/C SYSTEMS SHUT DOWNS. CONTRACTOR SHALL OBTAIN AHJ WRITTEN APPROVAL PRIOR TO PROCEEDING WITH ANY PARTIAL OR FULL A/C SHUT DOWNS.

E. THE WORK THAT IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS AND EQUIPMENT, PERMITS, FEES, INSPECTIONS, TESTS, INSURANCE, BONDS, FREIGHT AND DELIVERY CHARGES, ETC., REQUIRED FOR THE COMPLETION OF THE AIR CONDITIONING AND VENTILATION SYSTEMS REPLACEMENT AND UPGRADES AND ASSOCIATED ELECTRICAL, PLUMBING, FIRE PROTECTION SYSTEMS WORK SHOWN ON DRAWINGS.

F. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC; THEY DO NOT SHOW EVERY BEND, OFF-SET, ELBOW OR OTHER FITTINGS WHICH MAY BE REQUIRED FOR THE INSTALLATION IN THE SPACE ALLOCATED, OR FOR COORDINATION WITH OTHER TRADES. ACTUAL FIELD CONDITIONS WILL TAKE PRECEDENCE OVER THE ENGINEERING DRAWINGS. CONTRACTOR SHALL COORDINATE THE WORK SHOWN ON DRAWINGS AND SPECIFIED HEREIN AFTER WITH ALL OTHER TRADES ESPECIALLY ELECTRICAL, PLUMBING AND FIRE PROTECTION EXISTING SYSTEMS.

2. CODES AND STANDARDS

A. THE FOLLOWING CODES AND STANDARDS ARE CONSIDERED MINIMUM REQUIREMENTS FOR THE MECHANICAL, PLUMBING AND FIRE PROTECTION SCOPE OF WORK SHOWN ON DRAWINGS AND/OR SPECIFIED HEREIN AFTER. CONTRACTOR SHALL COMPLY WITH THE FOLLOWING (WHEN EDITION YEAR IS NOT LISTED THE LATEST CURRENT EDITION SHALL APPLY):

- 2017 EDITION OF THE FLORIDA CODES (SIXTH EDITION) INCLUDING BUT NOT LIMITED TO: MECHANICAL, PLUMBING, FUEL GAS, EXISTING BUILDING, AND RESIDENTIAL BUILDING.
- ASHRAE HANDBOOKS AND STANDARDS INCLUDING BUT NOT LIMITED TO: FUNDAMENTALS, HVAC APPLICATIONS, HVAC SYSTEMS AND EQUIPMENT, HVAC REFRIGERATION, AND ASHRAE-62 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY
- SMACNA DUCTWORK CONSTRUCTION, SUPPORTS AND INSTALLATION STANDARDS METAL, FLEXIBLE AND FIBROUS GLASS
- FLORIDA FIRE PREVENTION CODES
- NFPA HANDBOOKS AND STANDARDS INCLUDING BUT NOT LIMITED TO: NFPA-13 INSTALLATION OF SPRINKLER SYSTEMS, NFPA-70 NATIONAL ELECTRICAL CODE, NFPA-72 NATIONAL FIRE ALARM CODE, AND NFPA-90A INSTALLATION OF AIR CONDITIONING AND VENTILATION SYSTEMS
- UNDERWRITERS LABORATORIES INC.
- FLORIDA ACCESSIBILITY CODE
- LOCAL CITY AND/OR COUNTY ORDINANCES

3. SHOP DRAWINGS SUBMITTALS

A. CONTRACTOR SHALL SUBMIT DOUBLE LINE DUCTWORK SHOP DRAWINGS (1/4" = 1'-0") SHOWING BOTTOM OF DUCT ELEVATIONS FROM FINISH FLOOR SLAB AND REQUIRED DUCTS OFFSETS AND EQUIPMENT SHOP DRAWINGS. SHOP DRAWINGS SHALL BE COORDINATED BY CONTRACTOR WITH ALL TRADES INCLUDING STRUCTURAL, FIRE PROTECTION SPRINKLER LAYOUTS, LIGHTING, REFLECTIVE CEILING PLANS, PLUMBING, ARCHITECTURAL EXISTING LAYOUTS, ETC. PROVIDE SECTIONS DRAWN TO 1/4"=1'-0" SCALE OF ROOF EQUIPMENT LAYOUTS WITH SUPPORTS AND ELEVATIONS ABOVE FINISH ROOF, DUCT RISERS, EQUIPMENT SUPPORTS, ETC SHOP DRAWINGS SHALL ALSO BE PROVIDED. CONTRACTOR SHALL NOT PROCEED TO ORDER AND/OR INSTALL DUCTWORK, EQUIPMENT AND ACCESSORIES UNLESS SHOP DRAWING REVIEW PROCESS HAS BEEN COMPLETED AND REVIEWED BY THE ENGINEER OF RECORD (EOR) AND APPROVED BY THE OWNER REPRESENTATIVES. ALL DUCT DIMENSIONS ARE CLEAR INSIDE (ARISIDE) DIMENSIONS.

B. THE DRAWINGS ARE NOT TO BE SCALED, UNLESS SPECIFIC DIMENSIONS ARE SHOWN ON DRAWINGS. SITE CONDITIONS SHALL GOVERN EXACT LOCATION OF MECHANICAL EQUIPMENT AND APPURTENANCES. CONTRACTOR SHALL VISIT THE SITE TO CONFIRM UNIT LOCATION WITH EXISTING STRUCTURE AND EXISTING CONDITIONS AND EXISTING SYSTEMS. CONTRACTOR SHALL ATTEND A MANDATORY PRE-BID SITE VISIT TO FAMILIARIZE HIMSELF/HERSELF WITH ACTUAL EXISTING CONDITIONS.

C. HVAC EQUIPMENT, AIR DISTRIBUTION, FANS MATERIALS, ETC., SHALL BE AS LISTED HEREIN AFTER AND/OR SHALL BE AS SCHEDULED ON THE DRAWINGS.

D. MANUFACTURERS USED AS THE BASIS OF DESIGN ARE LISTED ON THE DRAWING'S SCHEDULES, ANY OTHERS MUST MEET OR EXCEED ALL SPECIFIED REQUIREMENTS, ANY SUBSTITUTIONS (WHERE ALLOWED BY "OR EQUAL" ON THESE DOCUMENTS) MUST BE ACCOMPANY BY A DETAILED COST AND EQUALITY COMPARISON OF ALL ITEMS INCLUDING ANY COST DIFFERENCES AND MUST BE SUBMITTED FOR EOR REVIEW TEN (10) WORKING DAYS PRIOR TO BIDS. IF "OR EQUAL" IS NOT LISTED AFTER THE MANUFACTURER'S NAME ON THESE DOCUMENTS, THE LISTED MANUFACTURER SHALL BE SUBMITTED, NO EXCEPTIONS ARE ALLOWED. NAMING ACCEPTABLE MANUFACTURERS DOES NOT RELIEVES THE CONTRACTOR FROM COMPLIANCE WITH ALL DESIGN NOTES AND NOTES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR IN WRITING PRIOR TO BIDS. FAILURE OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT WILL RESULT ON DISAPPROVAL OF ANY CHANGE ORDERS SUBMITTED AFTER BID IS AWARDED.

E. EOR WILL REVIEW CONTRACTOR SUBMITTALS TWO (2) TIMES PER ITEM. ITEMS REQUIRING SHOP DRAWING SUBMITTALS INCLUDES BUT ARE NOT LIMITED TO HVAC EQUIPMENT, DUCTWORK MATERIALS AND LAYOUTS, INSULATION, PIPING, SUPPORTS, AIR DISTRIBUTION, CONTROLS, PLUMBING, FIRE PROTECTION, STRUCTURAL SUPPORTS INCLUDING WIND CALCULATIONS, HEATERS, FANS, ETC. ANY ADDITIONAL REVIEWS DUE TO CONTRACTOR'S FAILURE TO SUBMIT ITEMS COMPLYING WITH THE BASIS OF DESIGN OR INCOMPLETE SUBMITTALS (ALL EQUIPMENT MUST BE IDENTIFIED WITH NUMBERS AND SPECIFIED CAPACITIES SHOWN ON DRAWING'S SCHEDULES, EFFICIENCIES AND ACCESSORIES MUST BE CLEARLY MARKED ON SUBMITTALS), WILL BE BILLED AT A RATE OF \$200 PER HOUR.

4. INTENT

A. IT IS THE INTENT OF THE PLANS AND THESE GENERAL NOTES TO PROVIDE A COMPLETE AND OPERATING INSTALLATION INCLUDING ALL NECESSARY ITEMS REQUIRED, EVEN THOUGH ITEMS ARE NOT INDICATED ON THE DRAWINGS OR IN THESE NOTES. WORK CONSIDER NECESSARY FOR THE COMPLETION OF THE WORK IN PROPER MANNER NOT SHOWN ON THE PLANS OR NOTES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR IN WRITING PRIOR TO BIDS. FAILURE OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT WILL RESULT ON DISAPPROVAL OF ANY CHANGE ORDERS SUBMITTED AFTER BID IS AWARDED.

B. ALL HVAC EQUIPMENT, AIR DISTRIBUTION, CONTROLS, APPURTENANCES, ETC. SHALL BE AS SHOWN ON THE DRAWINGS WITH RESPECT TO CAPACITY, QUALITY PERFORMANCE, ACCESSORIES, ETC. APPROVED MANUFACTURER'S SUBSTITUTIONS MUST BE SUBMITTED PRIOR TO BIDS AS PER 3(C) ABOVE.

C. ALL MECHANICAL EQUIPMENT SHALL BE CONNECTED AND TESTED TO OPERATE UNDER BOTH NORMAL LOCAL UTILITY POWER AND EMERGENCY GENERATOR POWER WHERE APPLICABLE.

D. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR AND CONTROL CONTRACTOR AND SHALL PROVIDE ELECTRICAL WIRING, POINT TO POINT CONTROL DIAGRAMS, RELAYS, LOW VOLTAGE CONTROL WIRING AND TRANSFORMERS, MOTOR STARTERS, SEQUENCE OF OPERATION, ETC., AS REQUIRED FOR THE SCOPE OF WORK SHOWN OR SPECIFIED ON THESE DOCUMENTS.

5. DEFINITIONS:

A. PROVIDE - MEANS CONTRACTOR TO FURNISH AND INSTALL.

B. UNDER THIS SECTION - MEANS IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE DONE BY AND PAID FOR BY THE CONTRACTOR.

C. BY THIS SECTION - MEANS IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND IS TO BE DONE BY AND PAID FOR BY THE CONTRACTOR.

D. EOR - ENGINEER OF RECORD.

E. AHJ - AUTHORITY HAVING JURISDICTION.

F. O/A - OUTSIDE AIR VOLUME IN CFM

G. CFM - CUBIC FEET PER MINUTE

6. INDOOR AIR QUALITY PRECAUTIONS

A. THE CONTRACTOR SHALL ALLOW FOR NECESSARY VENTILATION DURING CONSTRUCTION TO AVOID INDOOR AIR POLLUTION. CONTRACTOR SHALL PROVIDE CONSTRUCTION FILTERS AND CHANGE THEM REGULARLY BUT NOT LONGER THAN A ONE WEEK PERIOD DURING THE CONSTRUCTION PERIOD. FILTERS SHALL BE INSTALLED IN RETURN AIR GRILLES AND AIR CONDITIONING UNITS. CONTRACTOR SHALL CLEAN AREAS ON A DAILY BASIS. ALL WORK IS TO BE DONE IN FULLY OCCUPIED FACILITIES. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH FACILITIES MAINTENANCE PERSONNEL AND SHALL OBTAIN WRITTEN APPROVAL TWO (2) DAYS PRIOR ANY AIR CONDITIONING OR ELECTRICAL POWER SHUT DOWNS.

B. THE CONTRACTOR SHALL PREPARE WRITTEN DIRECTIONS BY WHICH THE BUILDING OWNER OR ITS REPRESENTATIVES WILL BE ABLE TO OPERATE THE VENTILATION SYSTEMS AT ITS OPTIMAL LEVEL. INCLUDE OUTSIDE AIR DAMPER'S MARKING BASED ON MINIMUM RECOMMENDED VOLUMES ON A/C SCHEDULES AND CARBON MONOXIDE MAXIMUM CONCENTRATION LEVELS RECOMMENDED BY ASHRAE.

C. ALL OUTSIDE AIR DAMPERS MUST BE BALANCED AND PERMANENTLY MARKED BY CONTRACTOR AT THE REQUIRED MINIMUM OPENING POSITION TO MAINTAIN SCHEDULED ASHRAE 100 STANDARDS AND BUILDING POSITIVE AIR PRESSURE WHICH EVER IS THE LARGER O/A VOLUME.

7. OUTDOOR AIR QUALITY PRECAUTIONS

A. THE CONTRACTOR SHALL ALLOW FOR NECESSARY PRECAUTIONS DURING CONSTRUCTION AND THEREAFTER FOR THE INSTALLATION AND HANDLING OF REFRIGERANTS. THE CONTRACTOR SHALL PREPARE WRITTEN DIRECTIONS BY WHICH THE BUILDING OWNER OR ITS REPRESENTATIVE WILL BE ABLE TO HANDLE REFRIGERANT IN A SAFE AND APPROVED MANNER.

B. CONTRACTOR SHALL MEASURE AND DOCUMENT IN PARTS PER MILLION (PPM) THE ACTUAL LOCAL OUTSIDE AIR CARBON DIOXIDE (CO2) CONTAIN AT EACH OUTSIDE AIR INTAKE POINT(S) OR LOUVER(S) DURING TEST AND BALANCE OF THE AIR SYSTEM. TESTS SHALL BE TAKEN AT 8 AM, 12 NOON AND 5 PM DURING THE TEST AND BALANCE PERIOD.

8. AS BUILT DRAWINGS

A. CONTRACTOR SHALL SUBMIT TO EOR A COMPLETE "AS-BUILT" RECORD SET WITH ALL FIELD CHANGES MADE IN THE FIELD IDENTIFIED BY CIRCLED OR CLOUDDED AREAS WITH REVISION NUMBERS DATES AND REVISIONS DATES APPROVED BY OWNER. N.O. AND TWO N.C. AUXILIARY PROTECTION.

9. COORDINATION WITH OTHER TRADES AND OTHER REQUIREMENTS

A. CUT ALL OPENINGS, CHASES, TRENCHES, ETC. REQUIRED TO ACCOMMODATE THE WORK UNDER THIS DIVISION AND REPAIR ALL WALLS, ROOF, ETC. DAMAGED BY SUCH CUTTINGS. ALL WORK DONE UNDER THIS HEADING MUST CONFORM IN EVERY RESPECT TO FINISH AND QUALITY OF MATERIALS AND WORKMANSHIP SPECIFIED UNDER APPROPRIATE SECTIONS FOR THIS BUILDING.

B. CONTRACTOR SHALL VERIFY ELECTRICAL VOLTAGES WITH ELECTRICAL CONTRACTOR BEFORE ORDERING ANY MECHANICAL EQUIPMENT.

C. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF DUCTWORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FULL COORDINATION OF THIS WORK WITH THAT OF ALL OTHER TRADES.

D. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND SERVICE UNDER THIS CONTRACT, AND PROVIDE READY ACCESSIBILITY TO DAMPERS, VALVES AND OTHER APPARATUS, INCLUDING ANY PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.

E. VERIFY SIZES OF EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS, AND FURNISH TRANSITIONS AS REQUIRED.

F. LOCATE ALL OUTSIDE AIR INTAKES A MINIMUM OF 10'-0" CLEAR (HORIZONTALLY) FROM ALL PLUMBING VENTS AND EXHAUST AIR DISCHARGE LOCATIONS. LOWEST POINT OF EACH OUTSIDE AIR INTAKE ON ROOF SHALL BE A MINIMUM OF 24" ABOVE ROOF.

G. ALL WORK SHALL BE COORDINATED WITH THE WORK OF OTHER TRADES TO AVOID INTERFERENCE WITH PROGRESS OF CONSTRUCTION AND IN STRICT COMPLIANCE WITH ALL APPLICABLE CODES AND STANDARDS.

H. ALL INSTALLED OUTSIDE EQUIPMENT SHALL BE SECURED TO WITHSTAND HURRICANE FORCE WINDS AS PER LATEST EDITION OF THE FLORIDA BUILDING CODE.

I. MECHANICAL CONTRACTOR SHALL OBTAIN DRAWINGS WITH THE LATEST REVISIONS FROM ELECTRICAL, PLUMBING AND FIRE PROTECTION DESIGNERS AND SHALL COORDINATE THE MECHANICAL WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS WITH THE LATEST DRAWINGS AND REVISIONS PRIOR TO SUBMITTING SHOP DRAWINGS TO THE EOR. IN ADDITION THE MECHANICAL CONTRACTOR SHALL OBTAIN AS BUILT ARCHITECTURAL AND STRUCTURAL DRAWINGS AND LATEST REVISIONS AND SHALL COORDINATE THE MECHANICAL WORK SHOWN ON THESE DRAWINGS AND SPECIFICATIONS WITH THEIR LATEST DRAWINGS AND REVISIONS PRIOR TO SUBMITTING SHOP DRAWINGS TO THE EOR. CONTRACTOR SHALL PROVIDE AN OVERLAY COORDINATION DRAWING SHOWING ALL DISCIPLINES INSTALLED ABOVE CEILING AS A COORDINATION SHOP DRAWING. FAILURE TO PROVIDE THE REQUIRED OVERLAY SHOP DRAWING SHALL RESULT OF DISAPPROVAL OF ANY COORDINATION SPACE PROBLEMS AND RELATED CONTRACTOR'S ADDITIVE CHANGE ORDERS.

10. DUCTWORK:

A. SMACNA PRESSURE CLASS 2" WITH SEAL CLASS C (SHOP FABRICATED):

ALL VENTILATION DUCTWORK AND TOILET EXHAUST SYSTEMS SHALL BE SINGLE WALL GALVANIZED METAL CONSTRUCTION FABRICATED AND INSTALLED IN STRICT ACCORDANCE WITH S.M.A.C.N.A. STANDARD 2" W.G. PRESSURE CLASSIFICATION AND SEAL CLASS C FOR METAL AND FLEXIBLE DUCTWORK. ROUND DUCTS AND FITTINGS SHALL BE SPIRAL DUCT CONSTRUCTION. ROUND ELBOWS SHALL BE FULL RADIUS ELBOW SPACE PERMITTING. SNAPLOCK SEAMS ARE NOT ACCEPTABLE.

C. PROVIDE ACCESS DOORS ADJACENT TO EACH DAMPER TO ALLOW PROPER SERVICE. PROVIDE MIN. 1/2" SIZE LETTERING TO INDICATE LOCATION OF THE FIRE PROTECTION DEVICE IN ACCORDANCE WITH N.F.P.A. 90A. ACCESS DOORS TO BE INSTALLED AS PER S.M.A.C.N.A. STANDARDS AND SHALL CORRESPOND TO THE SAME PRESSURE CLASS AND LEAKAGE RATING OF THE DUCT SYSTEM WHERE IT IS INSTALLED.

D. PROVIDE DOUBLE THICKNESS AIR TURNING VENTS IN ALL 90 DEGREES RECTANGULAR DUCT ELBOWS. ALL ROUND ELBOWS SHALL BE FULL RADIUS ELBOW SPACE PERMITTING.

E. DUCTWORK SUPPORTS SHALL BE CONSTRUCTED OF SHEET METAL GALV., AND FASTENED TO STRUCTURE WITH STAINLESS STEEL SCREWS. ALL EQUIPMENT, DUCTWORK, ETC., SHALL BE SUPPORTED AS DETAILED AND/OR SPECIFIED. PROVIDE ADDITIONAL SUPPORTS AS REQUIRED IN ACHIEVING A VIBRATION-FREE, INSTALLATION.

F. DUCT SEALANTS SHALL BE NON-HARDENING RESILIENT TYPE WATER BASED SEALANTS, WITH UL LISTINGS.

H. ALL DUCT SIZES SHOWN ARE CLEAR INSIDE (ARISIDE) DIMENSIONS.

I. DUCT AIR LEAKAGE TEST WILL NOT BE REQUIRED IF TEST AND BALANCE REPORT QUANTITIES ARE WITHIN +/-10% OF SPECIFIED AIR VOLUMES SHOWN ON PLANS AND EQUIPMENT SCHEDULES. IF AIR VOLUMES MEASURED IN T & B REPORT ARE NOT WITHIN 10% OF VOLUMES SHOWN ON DRAWINGS, CONTRACTOR SHALL RE-SEAL DUCTWORK AND TEST ALL 2" CLASS DUCTWORK SECTIONS TO SMACNA STANDARDS UNTIL VOLUMES ARE WITHIN 10% OF THE SPECIFIED VALUES, AT NO ADDITIONAL COST TO THE OWNER.

J. FIELD FABRICATED FITTINGS ARE NOT ACCEPTABLE.

K. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE STRICTLY FOLLOWED.

L. EOR SHALL BE NOTIFIED IN ADVANCE (1 WEEK MINIMUM NOTICE) TO OBSERVE DUCT INSTALLATION BEFORE DUCTWORK IS COVERED AND INSULATION IS INSTALLED.

M. SUPPORT DUCTWORK AS RECOMMENDED BY SMACNA STANDARDS

11. INSULATION:

A. PIPING - CONDENSATE PIPING, REFRIGERANT SUCTION LINE PIPING AND REFRIGERANT HOT GAS PIPING SHALL BE INSULATED WITH 3/4" FIRE RATED FLEXIBLE NON SUT CLOSED CELL ELASTOMERIC INSULATION. FINISH WHERE EXPOSED WITH 2 COATS OF WHITE LATEX PAINT AS PER MANUFACTURER'S INSTRUCTIONS.

B. FLAME AND SMOKE RATING: ALL INSULATION PRODUCTS AND MATERIALS USED FOR THIS PROJECT SHALL HAVE A MAXIMUM FLAME SPREAD AND SMOKE DEVELOPED RATING OF 25/50 RESPECTIVELY IN ACCORDANCE WITH TESTS OUTLINED IN N.F.P.A. 255.

C. EOR SHALL BE NOTIFIED IN ADVANCE TO OBSERVE PIPING INSTALLATION BEFORE PIPING IS COVERED AND/OR INSULATION IS INSTALLED.

12. WARRANTIES

A. ALL EQUIPMENT AND MATERIALS SHALL BE GUARANTEED FOR THE PERIOD OF ONE YEAR. FURNISH ONE YEAR FREE SERVICE. COMPRESSORS SHALL CARRY MFR'S MIN. 5 YEARS FACTORY STANDARD WARRANTY AND 6 YEARS WHERE INDICATED. CONTRACTOR SHALL PROVIDE A SEPARATE EXTENDED FACTORY WARRANTY OPTION FOR ALL EQUIPMENT FOR OWNER'S REVIEW AND CONSIDERATION.

13. TESTING, BALANCING, AND COMMISSIONING:

A. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND INCLUDE THE COSTS AND THE SERVICES OF AN APPROVED AGENCY OR REGISTERED PROFESSIONAL TO COMMISSION THE HVAC SYSTEM AS REQUIRED PER 2017 FBC [EC] COMMERCIAL ENERGY EFFICIENCY SECTION C408. COMMISSIONING OF THE SYSTEM SHALL INCLUDE A COMMISSIONING PLAN, TEST AND BALANCE REPORT, FUNCTIONAL PERFORMANCE TESTING, PRELIMINARY COMMISSIONING REPORT, DOCUMENTATION REQUIREMENTS AND FINAL COMMISSIONING REPORT. ALL COMMISSIONING COST SHALL BE INCLUDED IN THE BIDS OF THE MECHANICAL SYSTEMS. COMMISSIONING WILL BE LIMITED TO THE AREA AND SCOPE OF WORK SHOWN ON CONTRACT DOCUMENTS.

B. CONTRACTOR SHALL BE RESPONSIBLE TO SECURE AND INCLUDE THE COSTS AND THE SERVICES OF AN INDEPENDENT TEST AND BALANCE AGENCY TO TEST AND BALANCE THE HVAC SYSTEM. THE A/C CONTRACTOR SHALL ACHIEVE VOLUMES AND PRESSURE RATES AS SHOWN ON PLANS AND SCHEDULES. THE TEST AND BALANCE SHALL BE PERFORMED BY AN INDEPENDENT T&B CONTRACTOR CERTIFIED BY THE A.A.B.C. AND/OR N.E.B.B. WITH FIVE YEARS (MINIMUM) EXPERIENCE IN TESTING AND BALANCING OF SYSTEMS. THE SUBMITTED TEST AND BALANCE REPORT SHALL BE ON OFFICIAL A.A.B.C. OR N.E.B.B. REPORT FORMS. ALL T&B COSTS SHALL BE INCLUDED IN THE BIDS OF THE MECHANICAL SYSTEMS. T&B WILL BE LIMITED TO THE AREA OF WORK SHOWN ON THIS CONTRACT DOCUMENTS.

C. BALANCE AIR SYSTEM TO DELIVER SPECIFIED QUANTITIES AT EACH UNIT WITHIN 10% USING A.A.B.C. PROCEDURES AND TESTS. SUBMIT AIR BALANCE TEST RESULTS FOR REVIEW PRIOR TO FINAL INSPECTION AND ACCEPTANCE. ALL FAN DRIVES SHALL BE ADJUSTED TO DELIVER THE SPECIFIED CFM AGAINST THE ACTUAL STATIC PRESSURE OF THE INSTALLATION.

D. ALL REFRIGERANT HIGH SIDE PIPING TO 275 PSIG, HOLD FOR 24 HOURS. LOW SIDE TO 150 PSIG, HOLD OR 24 HOURS. AFTER TESTING EVACUATE SYSTEM TO 28 INCHES OF MERCURY GAUGE PRESSURE WITH VACUUM PUMP. HOLD FOR 24 HOURS WITH PUMP OFF. BREAK VACUUM WITH OPERATING REFRIGERANT.

14. EQUIPMENT IDENTIFICATION:

A. ALL EQUIPMENT SHALL BE IDENTIFIED WITH THE SAME DESIGNATION SHOWN ON THE DRAWINGS. IDENTIFICATION SHALL BE WITH ENGRAVED PLASTIC NAMEPLATES USING 1" LETTERS ON EQUIPMENT HAVING CABINETS AND WITH BRASS TAGS WHERE CABINETS DO NOT EXIST. NAMEPLATES SHALL BE MINIMUM 2" x 4" SIZE FOR AIR HANDLING UNITS, CHILLERS, PUMP PACKAGES, INSTRUMENTS AND CONTROL PANELS.

B. ALL MOTOR OPERATED DAMPERS SHALL BE NUMBERED AND SHALL INDICATE FLOOR AND SYSTEM SERVED.

15. MOTOR STARTERS

A. STARTERS FOR MOTORS 1/2 H.P. AND LESS TO BE ACROSS THE LINE TYPE WITH HAND-OFF-AUTO SWITCH IN COVER.

B. STARTERS FOR MOTORS 3/4 H.P. AND LARGER TO BE ACROSS THE LINE TYPE WITH CONTROL CIRCUIT TRANSFORMER, FUSED CLF PRIMARY, OVERLOAD PROTECTION IN ALL THREE PHASES, AND HAND-OFF-AUTO SWITCH IN COVER. PROVIDE TWO N.O. AND TWO N.C. AUXILIARY PROTECTION.

C. STARTERS TO BE IN NEMA 1 ENCLOSURE (NEMA 3R WHERE EXPOSED TO THE WEATHER/EXTERIOR).

16. DAMPERS (RUSKIN IS THE BASIS OF DESIGN)

A. VOLUME CONTROL MANUAL AIR DAMPERS (MVD)
VOLUME CONTROL MANUAL BALANCING DAMPERS SHALL BE HEAVY DUTY OPPOSED BLADE TYPE AS MANUFACTURED BY RUSKIN MODEL CD50, FURNISH STAND OFF BRACKET AND HAND QUADRANT FACTORY FURNISHED.

D. DAMPERS ACCESSORIES AND ADDITIONAL REQUIREMENTS

ALL DAMPERS SHALL BE INSTALLED WITH MANUFACTURERS INSTALLATION OPTIONAL SUPPLEMENTS, EXPANSION CLEARANCES, SLEEVES, FASTENERS, MOUNTING ANGLES, BREAK-AWAY DUCT/SLEEVE CONNECTIONS, ACCESS DOORS, ETC., IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION REQUIREMENTS AND INSTRUCTIONS.
ALL DAMPERS SHOULD BE EXERCISED CHECKED AND OPERATED AT LEAST ONCE EVERY SIX (6) MONTHS TO ENSURE PROPER OPERATION. CONTRACTOR SHALL PROVIDE OWNER WITH A SEPARATE SEMI-ANNUAL DAMPER'S MAINTENANCE CONTRACT PROPOSAL FOR OWNER'S REVIEW AND APPROVAL.
ALL DAMPERS INSTALLED IN ROUND DUCTWORK SHALL BE (UL) TYPE 1 TRUE ROUND TYPE.
SEAL ALL JOINTS BETWEEN THE DAMPER FRAME AND THE DUCT AS PER MANUFACTURERS INSTRUCTIONS.

17. DUCTLESS A/C SPLIT SYSTEMS (MITSUBISHI IS THE BASIS OF DESIGN)

A. UNITS SHALL BE DUCTLESS WALL-MOUNTED COOLING-ONLY FACTORY FABRICATED PACKAGE AND SHALL BE COMPLETE WITH EVAPORATOR COIL, FAN, FILTERS, MOTORS, MOTOR STARTERS, ALL CONTROLS AND INTERLOCKS AND ALL ELSE REQUIRED FOR A COMPLETE OPERATING UNIT.

B. UNITS SHALL BE PROVIDED WITH INTEGRAL CONDENSER DRAIN FLOAT SWITCHES ON SECONDARY DRAIN CONNECTION TO SHUT DOWN UNITS IN CASE OF DRAIN CLOG.

C. UNITS SHALL BE AS MANUFACTURED BY MITSUBISHI

D. PROVIDE WIRELESS REMOTE, REFRIGERANT LINES SIZED AS PER MANUFACTURER'S RECOMMENDATIONS AND INSULATED WITH 1" FIRE RATED ARMAFLEX INSULATION WITH LINE-HIDE LINESET COVER SYSTEM, HIGH EFFICIENT FILTER ELEMENTS AND CONDENSATE AUXILIARY DRAIN PAN.

E. ALL HVAC/R EQUIPMENT COMPONENTS SHALL BE APPLIED WITH SURSIL R-10, INCLUDING EVAPORATOR COILS, DRAIN PANS, FANS, CABINETS (INSIDE AND OUTSIDE), PIPING, AND STRUCTURAL COMPONENTS OR EQUAL.

F. COATING SHALL HAVE A MAXIMUM VISCOSITY OF 0.97 AND A FINAL MEAN DRY THICKNESS OF 15 MICRONS. THE COATING SHALL BE GUARANTEED TO PENETRATE ALL MICRO-CAVITIES OF HEAT TRANSFER SURFACES LIKE EVAPORATOR AND CONDENSER COILS.

G. PROVIDE THE FOLLOWING TESTS DOCUMENTATION BY THIRD PARTY LABORATORIES:

THE COATING SHALL EXCEEDED 10,000 HOURS (417 CYCLES/DAY) IN A SALT-TEST CHAMBER BASED ON ASTM B-117, RATED BASED ON ASTM B537-70 (PRACTICE OF RATING).
THE COATING SHALL PASS THE IMPACT TEST ASTM D2794-04 WITH 39.68 INCH X LBS, WITHOUT CRACKING.
THE COATING SHALL PASS THE ABRASION TEST ASTM D3359-02, WITHOUT PEELING.
THE COATING SHALL PASS THE HARDNESS TEST ASTM D3363-05 WITH A SUPERIOR RESISTANCE TO 5H.
THE COATING SHALL PASS THE CONICAL MANDIC TEST ASTM D522 WITHOUT SIGNS OF CRACKING.
THE COATING SHALL BE EXPOSED AND SHALL PASS FOR COLORFASTNESS AND ACCELERATED LIFE TO LONG TERM UV EXPOSURE UNDER ASTM STANDARD G155.
THE COATING SHALL PASS ASTM G21 MOLD GROWTH TEST.

H. PROVIDE SIX YEARS WARRANTY ON COMPRESSORS BY MITSUBISHI AND ONE YEAR WARRANTY ON PARTS AND LABOR.

I. SECURE CONDENSING UNITS TO WITHSTAND HURRICANE FORCE WINDS AS PER LATEST EDITION OF THE FLORIDA BUILDING CODE.

18. FANS

A. PROVIDE FANS AS SHOWN ON SCHEDULES, MANUFACTURED BY LOREN COOK (BASIS OF DESIGN). GREENCHECK MAY BE SUBMITTED AS AN ALTERNATE MANUFACTURER FOR EOR REVIEW.

B. INSTALL FANS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

C. PROVIDE SPRING VIBRATION ISOLATORS FOR ALL INLINE FANS SUPPORTED FROM STRUCTURE.

D. LOCATE EXHAUST FANS DISCHARGE A MINIMUM OF 10'-0" (HORIZONTAL DISTANCE) AWAY FROM ANY OUTSIDE AIR INTAKE, OPERABLE WINDOW AND/OR DOOR.

E. PROVIDE CONTROL VOLTAGE TRANSFORMERS, THERMOSTATS, TEN MINUTE TIME-OFF DELAY RELAYS, SMOKE DETECTORS, MOTORIZED BACK DRAFT DAMPERS, TIME CLOCKS AS REQUIRED TO COMPLY WITH INTERLOCK REQUIREMENTS AND SEQUENCE OF OPERATION.

F. SEAL ALL STRUCTURAL ROOF AND WALL OPENINGS AIR AND WATER TIGHT.

19. REFRIGERANT PIPING:

A. REFRIGERANT PIPING SHALL BE TYPE ACR, HARD DRAWN, DEGREASED SCALED-AT THE MILL COPPER TUBING, CLEANED AND SEALED AT THE MILL FITTINGS SHALL BE ROUGH COPPER TYPE EQUAL TO MUELLER STREAMLINE. LONG RADIUS ELBOWS SHALL BE USED. PROVIDE ACCESSORIES INDICATED ON DRAWINGS.

B. SUCTION LINES SHALL BE SLOPED DOWN TOWARD COMPRESSOR. OIL TRAPS SHALL BE LOCATED AT ALL VERTICAL RISERS AGAINST FLOW IN SUCTION LINES.

C. REFRIGERATION SYSTEM CONNECTIONS SHALL BE OF THE SWEAT COPPER TYPE PROPERLY CLEANED & SILVER BRAZED WITH SIL-FOS OR EQUAL, CONNECTIONS TO VALVES, SIGHT GLASSES AND FLEXIBLE CONNECTIONS SHALL BE MADE WITH 95/5 SOLDER.

D. PIPING SHALL BE SIZED AND INSTALL AS PER MANUFACTURERS RECOMMENDATIONS AND INSTRUCTIONS FOR EQUIPMENT LOCATION AND LENGTH OF RUN SHOWN ON PLANS.

E. AFTER REFRIGERATION PIPING SYSTEMS ARE COMPLETED, CONTRACTOR SHALL PERFORM REQUIRED EVACUATION AND LEAK TESTS. NOTIFY ARCHITECT/ENGINEER 48 HOURS IN ADVANCE. SYSTEMS SHALL RUN UNTIL TEST HAVE BEEN MADE AND WITNESSED.

F. CONDENSATE DRAIN PIPING SHALL BE TYPE L DRAWN COPPER TUBBING WITH WROUGHT COPPER FITTINGS AND SOLDER JOINTS FOR 2" AND SMALLER PIPE DIAMETERS.

G. EOR SHALL BE NOTIFIED IN ADVANCE (1 WEEK MINIMUM NOTICE) TO OBSERVE PIPING INSTALLATION BEFORE PIPING IS COVERED AND/OR INSULATION IS INSTALLED.

20. AIR DISTRIBUTION DEVICES

A. ALL AIR DISTRIBUTION DEVICES SHALL BE OF EXTRUDED ALUMINUM CONSTRUCTION AS MANUFACTURED BY TITUS OR PRICE. REFER TO SCHEDULE ON DRAWINGS FOR MODEL NUMBERS. REFER TO FLOOR PLANS FOR SIZES.

B. ALL AIR DISTRIBUTION DEVICES SUPPLY, RETURN, AND EXHAUST SHALL BE FURNISHED WITH OPPOSED BLADE BALANCING DAMPERS.

21. CLOSE OUT DOCUMENTS

A. PROVIDE EOR WITH THREE (3) HARD BOUND SETS OF CLOSE OUT DOCUMENTS, INCLUDING BUT NOT LIMITED TO: AS-BUILT DRAWINGS, SYSTEM OPERATING INSTRUCTIONS, MAINTENANCE REQUIREMENTS FOR ALL EQUIPMENT AND CONTROLS, EQUIPMENT/WORKMANSHIP WARRANTIES AND GUARANTEES CERTIFICATES, TEST AND BALANCE REPORTS, CLOSED PERMITS, ETC.

B. PROVIDE EOR WITH ONE (1) ELECTRONIC CD COPY OF THE MECHANICAL AS BUILT DRAWINGS, INCLUDING CONTROLS IN ELECTRONIC AUTOCAD FORMAT.

END OF HVAC GENERAL NOTES AND SPECIFICATIONS.

DEMOLITION GENERAL NOTES

1. THE WORK THAT IS TO BE DONE UNDER THIS HEADING INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS AND EQUIPMENT PERMITS, FEES, INSPECTIONS, TEST, INSURANCE, ETC., REQUIRED FOR THE DEMOLITION OF THE CHILLED WATER SYSTEM SHOWN ON DRAWINGS OR LISTED HEREIN.

2. THE DRAWINGS ARE GENERALLY DIAGRAMMATIC. THEY DO NOT SHOW EVERY PIECE OF EQUIPMENT WHICH MAY BE REQUIRED TO BE REMOVED OR METHOD OF DEMOLITION IN THE SPACE ALLOCATED, OR FOR COORDINATION WITH EXISTING JOBSITE SPACE CONDITIONS. ANY WORK NOT MENTIONED HEREIN OR SHOWN ON THE DRAWINGS BUT CONSIDERED NECESSARY FOR THE COMPLETION OF THE DEMOLITION WORK IN A PROPER MANNER SHALL BE PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

3. DRAWINGS ARE NOT TO BE SCALED, UNLESS SPECIFIC DIMENSIONS ARE SHOWN, EXISTING JOBSITE CONDITIONS SHALL GOVERN EXACT LOCATION OF MECHANICAL EQUIPMENT AND APPURTENANCES TO BE REMOVED UNDER THIS CONTRACT.

4. THE NATURE OF THIS CONTRACT INVOLVES DEMOLITION OF EXISTING MECHANICAL EQUIPMENT AND APPURTENANCES AND THE CONTRACTOR, PRIOR TO BID, MUST INSPECT THE EXISTING FACILITIES AND CONDITIONS AT THE JOBSITE AND BECOME ACQUAINTED WITH CONDITIONS THAT WILL AFFECT WORK TO BE PERFORMED UNDER THIS CONTRACT.

5. ALL DEMOLITION WORK INCLUDING THE REMOVAL, DISPOSAL OF MATERIALS AND EQUIPMENT AND STORAGE OF SALVAGED MATERIALS AND EQUIPMENT SHALL BE COORDINATED WITH THE OWNER.

6. CONTRACTOR SHALL REMOVE EXISTING EQUIPMENT AND ACCESSORIES AS SHOWN ON PLANS. CONTRACTOR SHALL GUARANTEE A PROPER REMOVAL AND DISPOSAL OF ALL REMOVED EQUIPMENT ACCORDING TO ALL LOCAL CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL STATE AND FEDERAL GUIDELINES. COORDINATE UNIT DISPOSAL WITH PALM BEACH COUNTY REPRESENTATIVES.

7. CONTRACTOR SHALL GUARANTEE A PROPER REMOVAL AND DISPOSAL OF ALL REMOVED REFRIGERANT ACCORDING TO ALL LOCAL CODES AND ORDINANCES AND IN CONFORMANCE WITH ALL STATE AND FEDERAL GUIDELINES.

8. ANY EQUIPMENT OR DEVICE TO REMAIN THAT MIGHT HAVE TO BE DISCONNECTED BECAUSE OF THE REMOVAL OF ANY OTHER DEVICE MUST BE RECONNECTED AND TIED BACK TO THE EXISTING BUILDING SYSTEMS AND TESTED FOR CORRECT OPERATION. INTERRUPTION OF EXISTING FACILITIES AND/OR SERVICES SHALL BE KEPT TO A MINIMUM AND THE CONTRACTOR SHALL FURNISH ALL MATERIALS AND EQUIPMENT REQUIRED WHENEVER TEMPORARY CONNECTIONS ARE NECESSARY TO MAINTAIN CONTINUITY OF SERVICES. COORDINATE ALL INTERRUPTIONS WITH OWNER PRIOR TO WORK.

9. ALL BUILDING CONSTRUCTION AFFECTED BY THE REMOVAL, RELOCATION, INSTALLATION OF ANY PIECE OF EQUIPMENT SHALL BE REPAIRED AND REFINISHED AS REQUIRED TO MATCH EXISTING CONDITIONS OR AS DIRECTED BY THE ARCHITECTURAL DRAWINGS AND/OR SPECIFICATIONS.

10. CONTRACTOR SHALL INSPECT ALL EXISTING DUCTWORK TO BE REUSED AND MAKE NECESSARY REPAIRS TO ENSURE AN AIRTIGHT SYSTEM. AIR LEAKAGE RATES SHALL BE IN CONFORMANCE WITH THE CONTRACT SPECIFICATIONS. DUCTWORK INSULATION SHALL BE INSPECTED AND REPLACED IN AREAS WHERE THE INSULATION IS DETERIORATED, DAMAGED OR NOT CONTINUOUS TO ENSURE SWEATING DOES NOT OCCUR. ALL WORK AND MATERIALS SHALL BE IN CONFORMANCE WITH THE CONTRACT SPECIFICATIONS. INSPECT AND/OR REPAIR DUCT SUPPORTS TO ENSURE SECURE MOUNTING OF THE DUCT SYSTEM. ALL OPEN ENDS OF DUCTS SHALL BE COVERED AND TEMPORARILY SEALED DURING THE DEMOLITION WORK TO PREVENT THE INTRUSION OF DIRT, DUST AND CONSTRUCTION DEBRIS.

11. CONTRACTOR SHALL OBTAIN THE MOST RECENT ASBESTOS REPORT FROM OWNER AND SHALL COORDINATE HIS/HER DEMOLITION WORK WITH LATEST REPORT RECOMMENDATIONS.

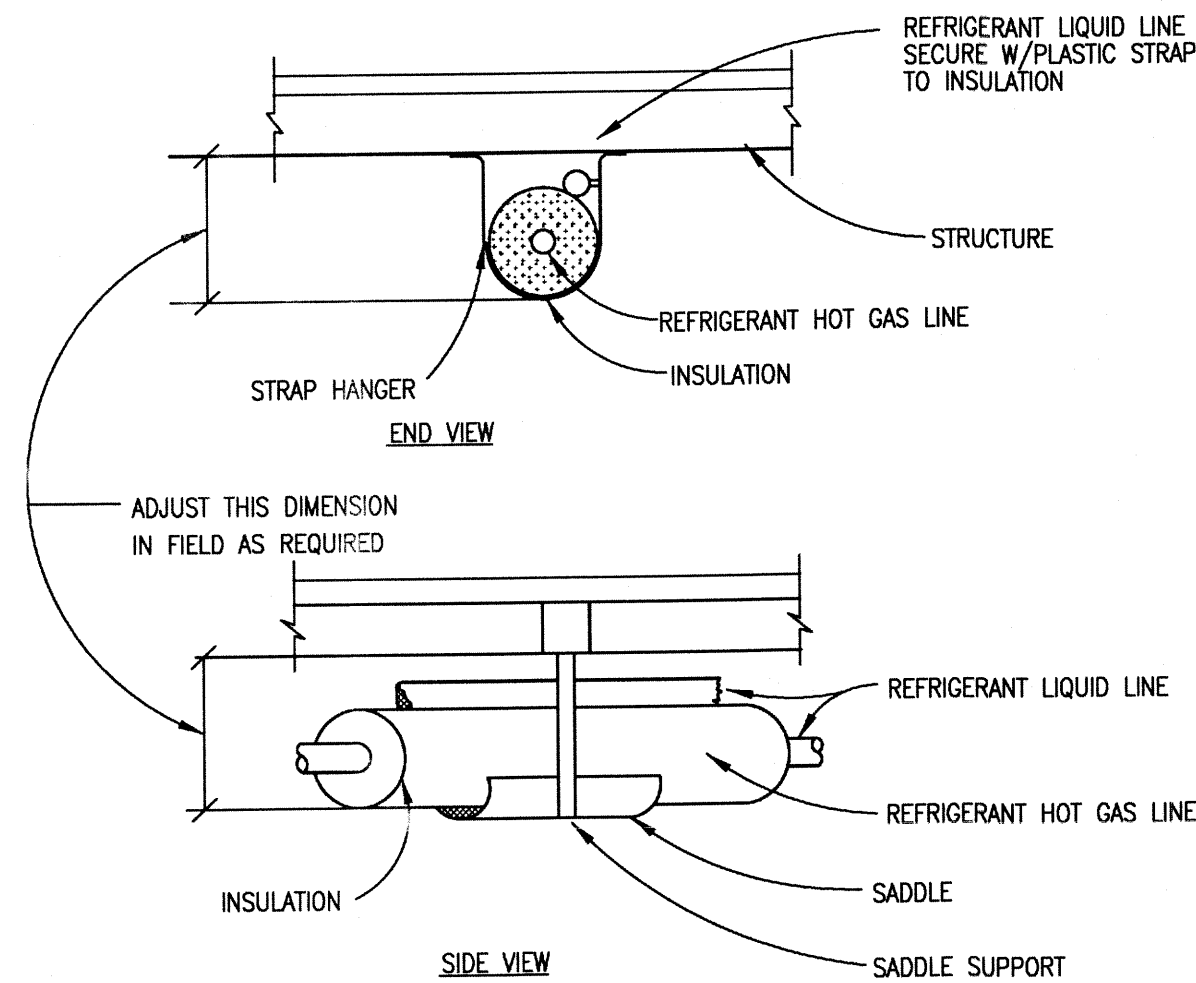
12. THE CONTRACTOR SHALL DO HIS OR HER CUTTING AND REMOVAL OF ALL RELATED WORK IN ALL LOCATIONS WHERE REQUIRED, EXCEPT WHERE SHOWN OR NOTED OTHERWISE. WHERE DAMAGE TO MATERIALS AND EQUIPMENT WHICH HAVE BEEN DESIGNATED TO BE SALVAGED OCCURS, REPAIR AND OR REPLACEMENT OF THE DAMAGED ITEM(S) SHALL BE PROVIDED BY THE CONTRACTOR. THE REPAIR OR REPLACEMENT OF DAMAGED ITEMS SHALL BE TO THE SATISFACTION OF OWNER.

13. CUT ALL OPENINGS, CHASES, TRENCHES, ETC. REQUIRED TO ACCOMMODATE THE WORK UNDER THIS DIVISION AND REPAIR ALL WALLS, ROOF, ETC. DAMAGED BY SUCH CUTTINGS. ALL WORK DONE UNDER THIS HEADING MUST CONFORM IN EVERY RESPECT TO FINISH AND QUALITY OF MATERIALS AND WORKMANSHIP SPECIFIED UNDER APPROPRIATE SECTIONS FOR THIS BUILDING.

14. CONTRACTOR SHALL VERIFY SPACE CONDITIONS AND DIMENSIONS AND SHALL COORDINATE WORK WITH ALL OTHER TRADES AT JOB SITE PRIOR TO FABRICATION AND INSTALLATION OF PIPING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FULL COORDINATION OF THIS WORK WITH THAT OF ALL OTHER TRADES.

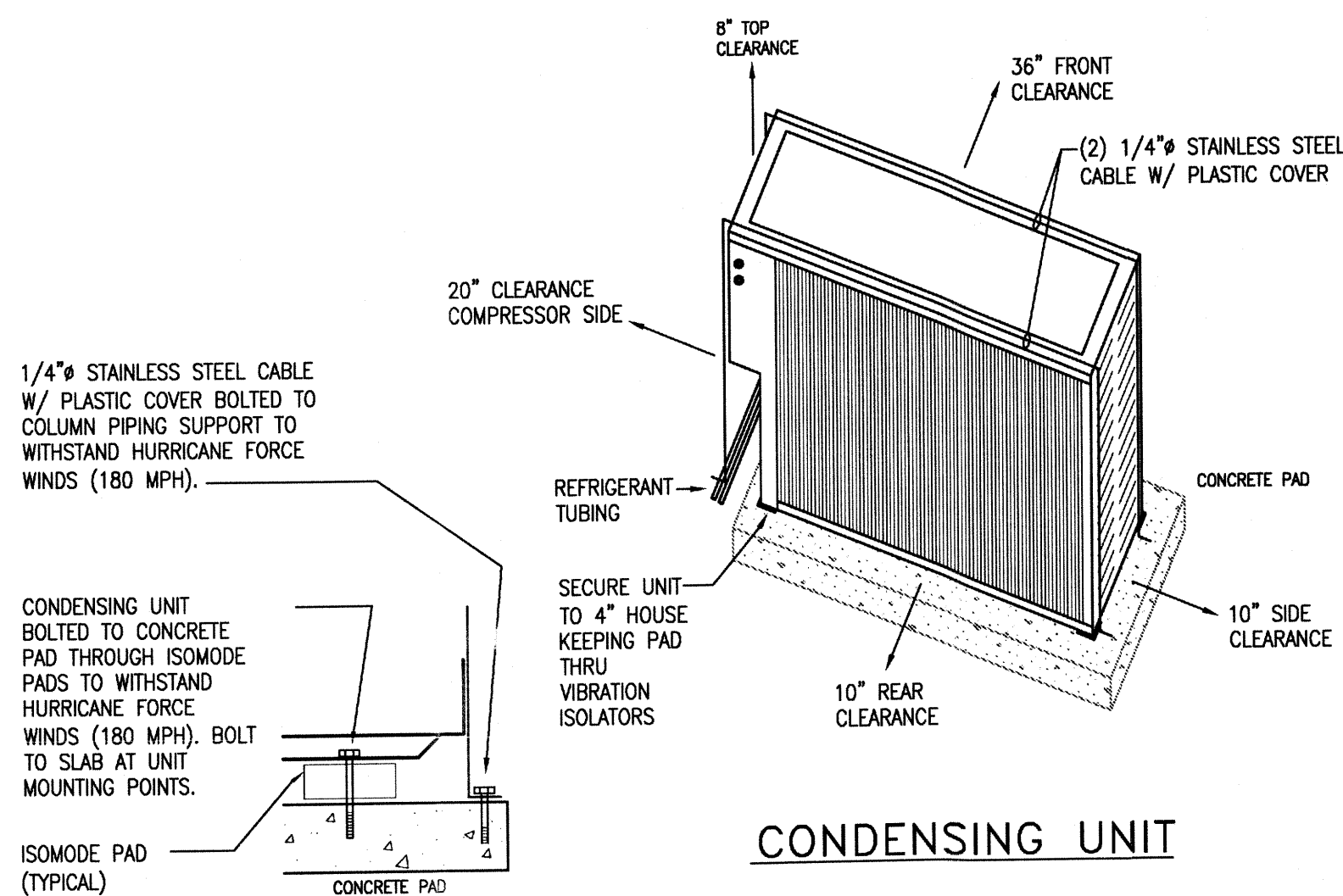
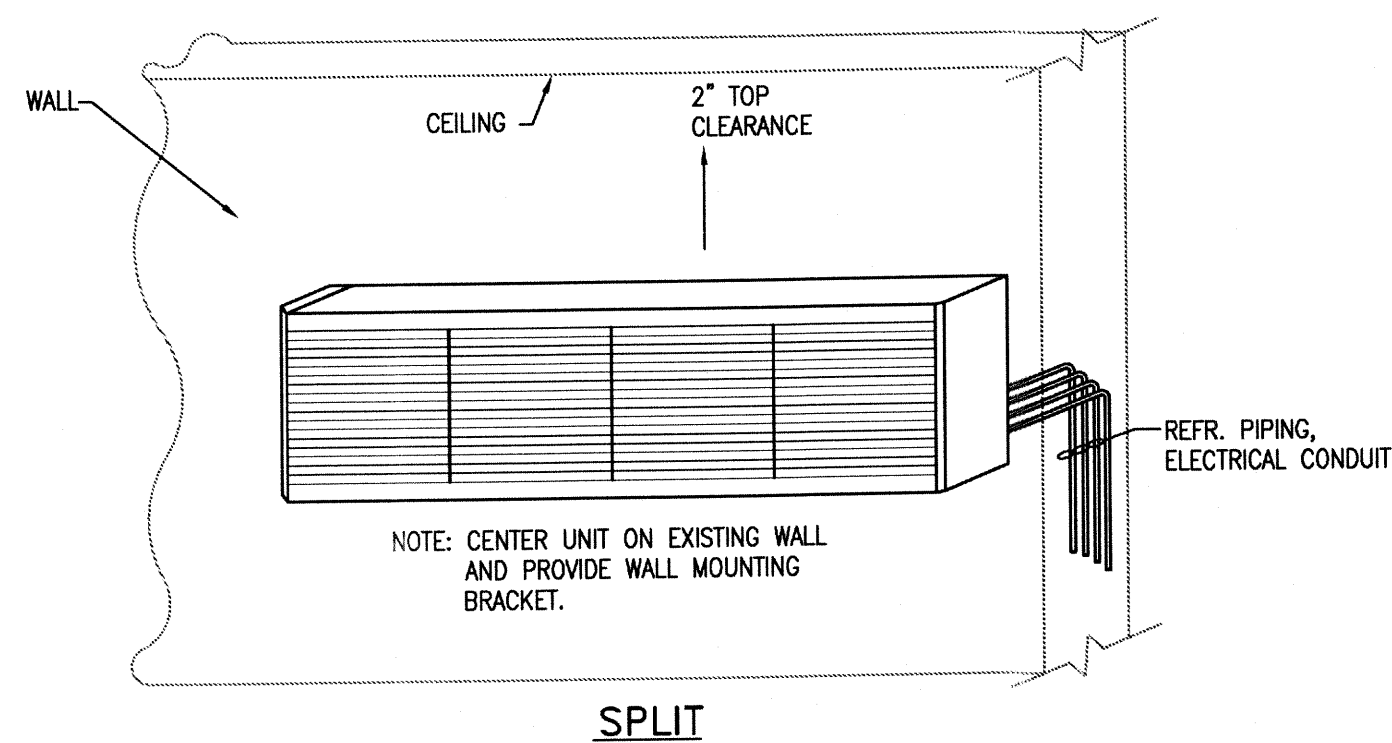
15. OBTAIN FULL INFORMATION REGARDING PECULIARITIES AND LIMITATIONS OF SPACE AVAILABLE FOR INSTALLATION OF THE EQUIPMENT AND MATERIALS UNDER THIS CONTRACT, AND PROVIDE READY ACCESSIBILITY TO DAMPERS, VALVES AND OTHER APPARATUS, INCLUDING ANY PART OF SYSTEM REQUIRED TO BE REACHED FOR MAINTENANCE AND OPERATIONS.

16. VERIFY SIZES OF EQUIPMENT CONNECTIONS WITH MANUFACTURER'S CERTIFIED DRAWINGS, AND FURNISH TRANSITIONS AS REQUIRED.

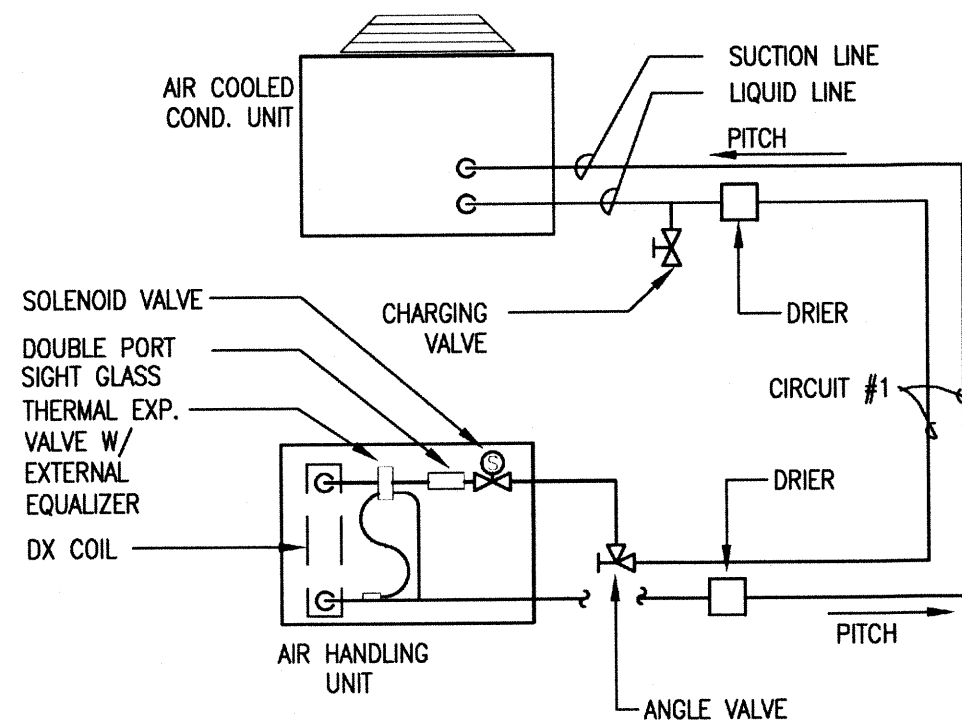


TYPICAL REFRIGERANT PIPING HANGER DETAIL
N.T.S. (TYPICAL)

- NOTES: 1.- PROVIDE ISOLATION BETWEEN DISSIMILAR METALS
2.- PROVIDE SADDLE PROTECTION AT EACH SUPPORT

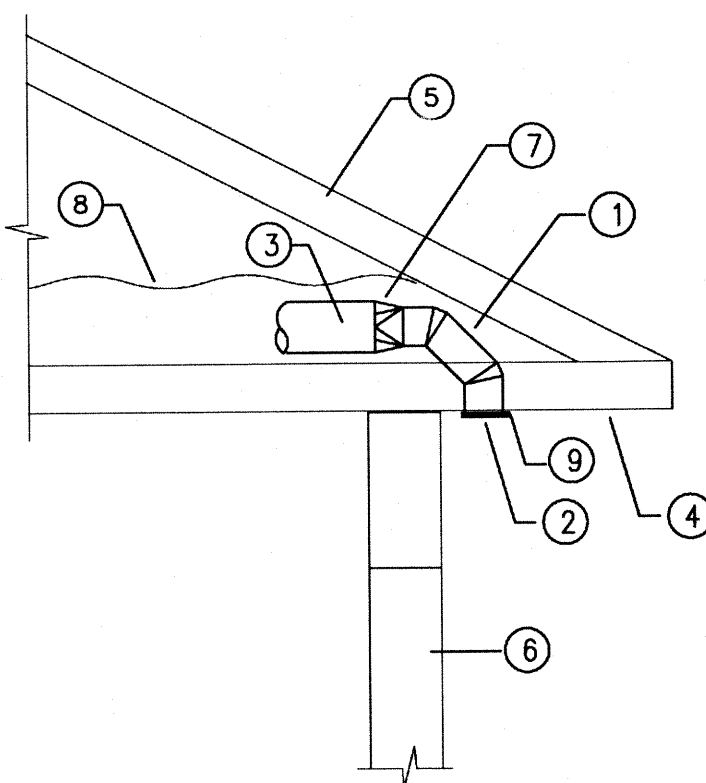


DUCTLESS SPLIT DETAIL
N.T.S. (TYPICAL)



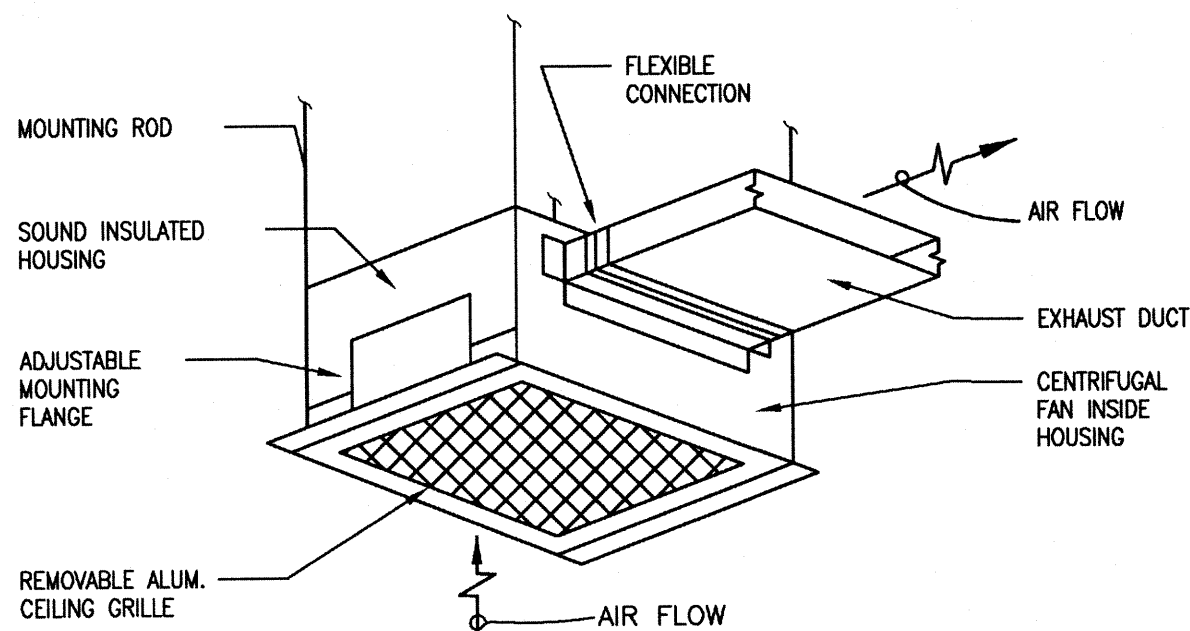
REFRIGERANT PIPING DIAGRAM
N.T.S. (TYPICAL)

- NOTES:
1. REFRIGERANT PIPING DIAGRAM SHOWN IS PER CIRCUIT. EACH SYSTEM TO HAVE MINIMUM OF TWO INDEPENDENT CIRCUITS.
2. PROVIDE REMOVABLE CORE SUCTION LINE DRIER ON EACH CIRCUIT. BASIS OF DESIGN: SPORLAN OR EQUAL.
3. REFRIGERANT PIPING SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH MFR'S. INSTRUCTIONS FOR EQUIPMENT LOCATIONS SHOWN ON DRAWINGS, INCLUDING ALL REQUIRED PIPING SPECIALTIES SUCH AS TXV VALVES, SOLENOID VALVES, FILTER DRIERS, ETC.

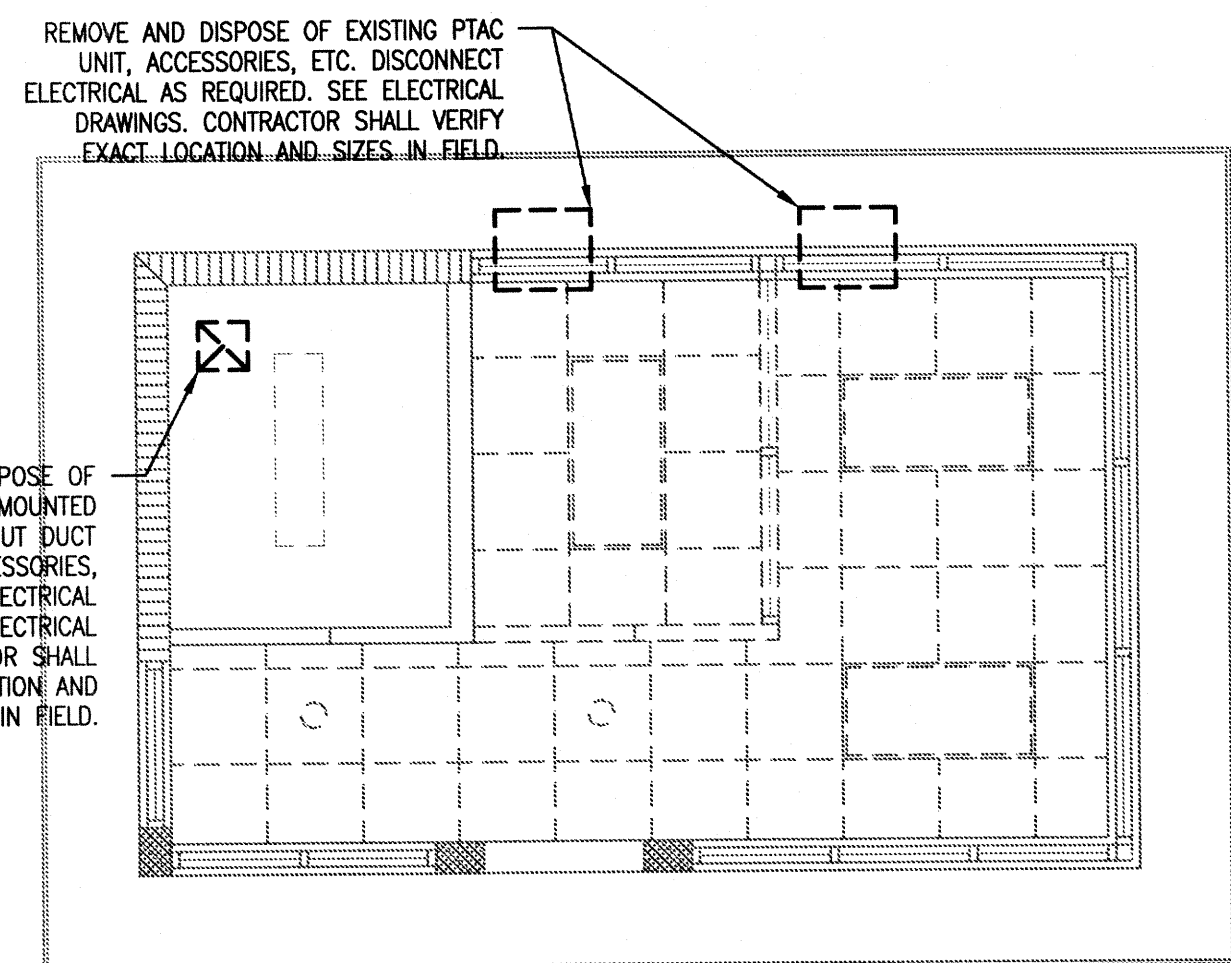


- 1 ELBOW DISCHARGE WITH GRILLE "GREENHECK" MODEL EL-10x3 OR EQUIVALENT (ALUMINUM CONSTRUCTION).
2 ALUMINUM LOWER GRILLE. PROVIDE INSECT SCREEN FOR TOILET EXHAUST FANS ONLY. BIRD SCREEN AT O/A INTAKE. NO BIRD OR INSECT SCREEN AT DRYER VENTS.
3 DUCTWORK (O/A OR EXHAUST), RE: MECH. PLANS.
4 ROOF EAVE.
5 EXISTING ROOF.
6 EXISTING EXTERIOR WALL.
7 TRANSITION.
8 ATTIC INSULATION.
9 WEATHERPROOF SEALANT ALL AROUND PENETRATIONS FOR A WEATHERTIGHT INSTALLATION - PAINT TO MATCH.

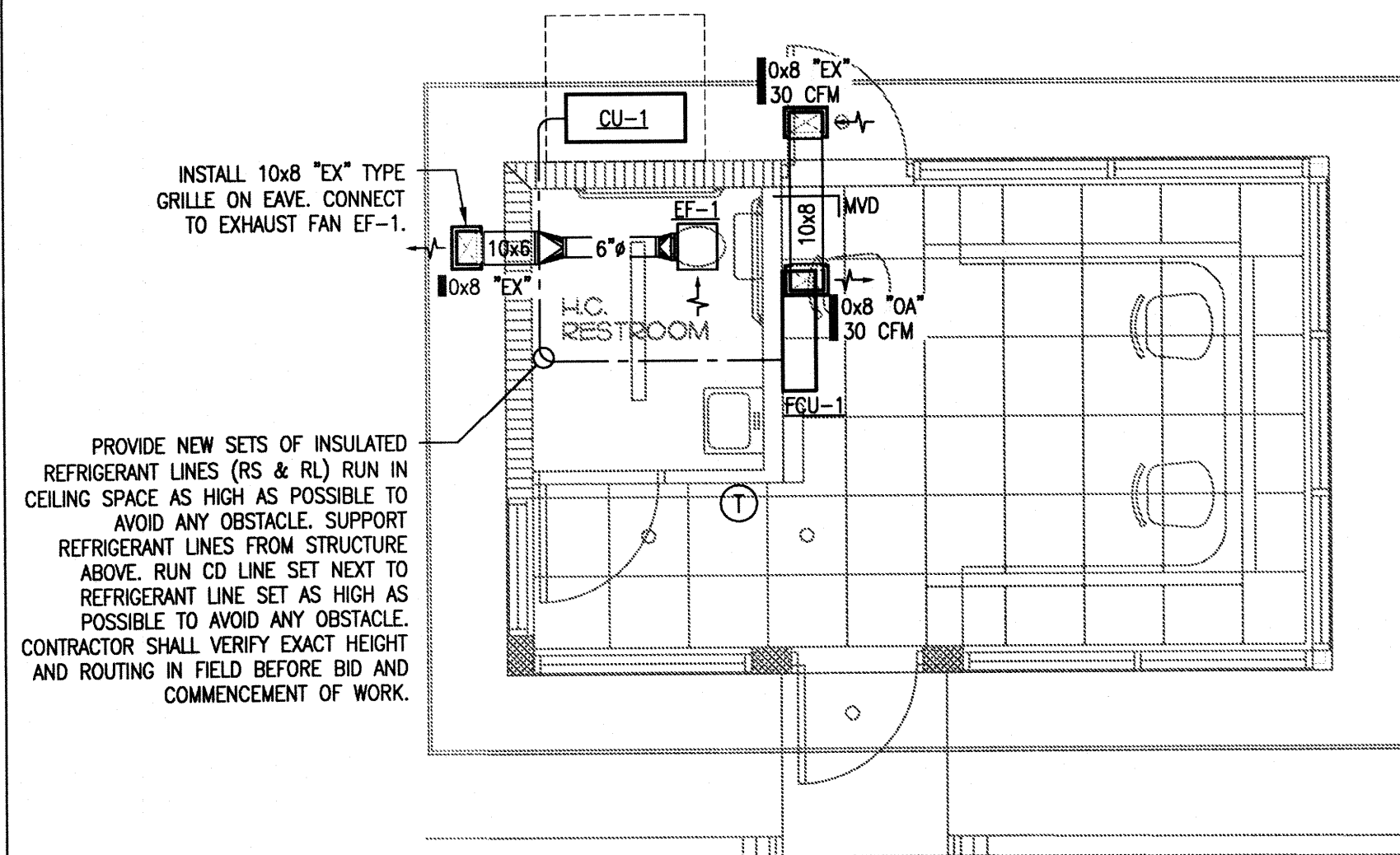
ELBOW DISCHARGE OR INTAKE WITH GRILLE DETAIL
N.T.S.



CEILING MOUNTED EXHAUST FAN DETAIL
N.T.S.



1 MECHANICAL FLOOR PLAN - DEMOLITION
M-4.01 SCALE: 1/4"=1'-0"



2 MECHANICAL FLOOR PLAN - NEW WORK
M-4.01 SCALE: 1/4"=1'-0"

NOTE: ALL SHEETS MUST BE REVIEWED

MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES

Herbert S. Saffir Permitting and Inspection Center

11805 SW 26th Street (Coral Way) • Miami, Florida 33175-2474 • (786) 315-2000

APPLICATION FOR MUNICIPAL PERMIT APPLICANTS

THAT REQUIRE PLAN REVIEW FROM MIAMI-DADE FIRE RESCUE

AND/OR ENVIRONMENTAL SERVICES

m2019014215 3219014215 BLC2019-2192

PROVIDE MUNICIPAL PROCESS NUMBER HERE			
LOCATION OF IMPROVEMENTS	Job Address <u>15550 NW 59th Ave. Miami Lakes, FL 33019</u>		CONTRACTOR INFORMATION
	Folio <u>32-20130010620</u>		
TYPE OF IMPROVEMENTS	Lot _____ Block _____		Current use of property <u>Commercial</u>
	Subdivision _____ PBpg _____		
PERMIT TYPE	Metes and bounds _____		Description of Work <u>Guardhouse renovation</u>
	☐ New Construction on Vacant Land ☒ Alteration Interior ☐ Alteration Exterior ☐ Relocation of Structure ☐ Enclosure ☐ Repair ☐ Repair Due to Fire		
REVIEW STATUS	☐ Demolish ☐ Shell Only ☐ Addition Attached ☐ Addition Detached ☐ Re-Roof ☐ Foundation Only ☐ Tent		Sq. Ft. <u>250</u> Units _____ Floors _____
	☒ MBLD* Category <u>01</u> ☐ MELE ☐ MPLU ☐ MLPG ☐ MMEC ☐ FIRE		
OWNER'S NAME	☐ Chg. Contractor ☐ Re-Issue ☐ Re-Stamp ☐ Revision ☐ Not Applicable for Fire		Value of Work <u>\$100,000</u>
	☒ MBLD* Category <u>01</u> ☐ MELE ☐ MPLU ☐ MLPG ☐ MMEC ☐ FIRE		
PERSON TO PICK UP PLANS	Name <u>Kevin Levy - Turner Construction</u> Address <u>7235 Corporate Center Dr. Suite G</u> City <u>Miami</u> State <u>FL</u> Zip <u>33126</u> Phone <u>786-514-2561</u>		OWNER'S NAME
	Name <u>Kevin Levy - Turner Construction</u> Address <u>7235 Corporate Center Dr. Suite G</u> City <u>Miami</u> State <u>FL</u> Zip <u>33126</u> Phone <u>786-514-2561</u>		
ARCHITECT / ENGINEER	Name <u>Kevin Levy - Turner Construction</u> Address <u>7235 Corporate Center Dr. Suite G</u> City <u>Miami</u> State <u>FL</u> Zip <u>33126</u> Phone <u>786-514-2561</u>		OWNER'S NAME
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FIRE SPECIAL REQUEST PLAN REVIEW (SRI)	I am requesting a Special Request Plan Review (SRI) to be scheduled as soon as possible. There is a minimum charge of one-hour. Please contact the Fire Department for current rate.		OWNER'S NAME
	1 st Request: _____ Date: _____ 2 nd Request: _____ Date: _____ 3 rd Request: _____ Date: _____		
OPTIONAL PLAN REVIEW (OPR)	I am requesting Optional Plan Review (OPR) to be scheduled as soon as possible at the rate of \$75 for each discipline. Additional review fees may apply.		OWNER'S NAME
	1 st Request: _____ Date: _____ 2 nd Request: _____ Date: _____ 3 rd Request: _____ Date: _____		

Miami Dade County Department of Regulatory And Economic Resources - Job Copy

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MDC Permit Application.pdf

GENERAL STRUCTURAL NOTES

- GENERAL:
- THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTLY DIAGRAMMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR DIMENSIONS. MEASUREMENTS, OR TO BE USED AS SHOP DRAWINGS OR PORTIONS THEREOF. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSIDERED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
 - THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVELS, CONDITIONS AND DIMENSIONS AT THE JOB SITE AND AS SHOWN ON THE DRAWINGS. THEY SHALL REPORT ANY ERRORS OR INCONSISTENCIES IN THE ABOVE TO THE ARCHITECT/ENGINEER (A/E) BEFORE COMMENCING WORK. THE CONTRACTOR AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.
 - A. THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 OF FLORIDA BUILDING CODE 2017 AND ALL LOCAL, STATE AND FEDERAL LAWS. THE A/E AND HIS EMPLOYEES ARE NOT RESPONSIBLE FOR SAFETY PROCEDURES ON THIS PROJECT. THIS IS THE CONTRACTOR'S RESPONSIBILITY.
 - B. PROVIDE ALL SHORING, BRACING AND SHEETING AS REQUIRED FOR THE PROPER EXECUTION OF THE WORK. REMOVE WHEN THE WORK IS COMPLETED.
 - C. PROVIDE AND MAINTAIN GUARD LIGHTS AT ALL BARRICADES, RAILINGS, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS AND ALL TRENCHES OR FITS ADJACENT TO PUBLIC WALKS OR ROADS.
 - D. AT ALL TIMES PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR HEAT) SO AS TO MAINTAIN ALL WORK MATERIALS, APPARATUS AND FIXTURES FREE FROM DAMAGE.
 - E. THE CONTRACTOR SHALL PAY FOR ALL DAMAGE TO ADJACENT STRUCTURES, SIDEWALKS AND TO STREETS OR OTHER PUBLIC PROPERTY OR TO ANY PUBLIC.
 - F. AT THE END OF THE DAYS WORK, COVER ALL WORK LIKELY TO BE DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION SHALL BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.
 - CONTRACTOR AGREES THAT HE WILL HOLD OWNER, A/E AND/OR ANY OF THEIR EMPLOYEES OR AGENTS HARMLESS FROM ANY AND ALL DAMAGE AND/OR CLAIMS WHICH MAY ARISE BY REASON OF ANY NEGLIGENCE ON PART OF CONTRACTOR, ANY OF HIS SUBCONTRACTORS AND/OR SUBCONTRACTORS, MATERIALS AND EQUIPMENT SUPPLIERS AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, IN PERFORMANCE OF THIS CONTRACT; AND IN CASE ANY ACTION IS BROUGHT THEREFORE AGAINST OWNER, A/E AND/OR ANY OF THEIR EMPLOYEES OR AGENTS, CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DEFENSE THEREOF AND UPON HIS FAILURE TO DO SO OR PROPER NOTICE, A/E AND/OR ANY OF THEIR EMPLOYEES OR AGENTS RESERVE THE RIGHT TO DEFEND SUCH ACTION AND CHARGE ALL COSTS THEREOF TO CONTRACTOR. IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE A/E IN WRITING OF SUCH OMISSIONS OR ERRORS PRIOR TO THE COMMENCEMENT OF ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR'S FAILING TO GIVE SUCH NOTICE, HE SHALL BE RESPONSIBLE AND SPONSOR OF THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND SHALL BE RESPONSIBLE FOR RECTIFYING THE SAME.
 - THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS TOGETHER WITH LOCATE STEPPED FOOTINGS, DERESSED SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, RISERS, BUT SETTING LEVELS, DIMENSIONS, ETC. POTENTIAL CONFLICTS SHALL BE COMMUNICATED TO THE A/E BEFORE PROCEEDING WITH THE WORK.
 - SUBMIT SHOP DRAWINGS FOR A/E REVIEW BEFORE STARTING FABRICATION.

- STRUCTURAL DESIGN CRITERIA:
- THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE AND OTHER CODES REFERENCED THERE-IN.
 - WIND LOAD CRITERIA:
BASIC WIND VELOCITY - 175 MPH AS PER ASCE 7-10 IN COMPLIANCE WITH FLORIDA BUILDING CODE 2017, LATEST EDITION.
EXPOSURE: C
INTERNAL PRESSURE: +/- 0.18.
Kd = 0.85
LIVE LOADS:

REINFORCING STEEL: (SHOP DRAWING REQUIRED)

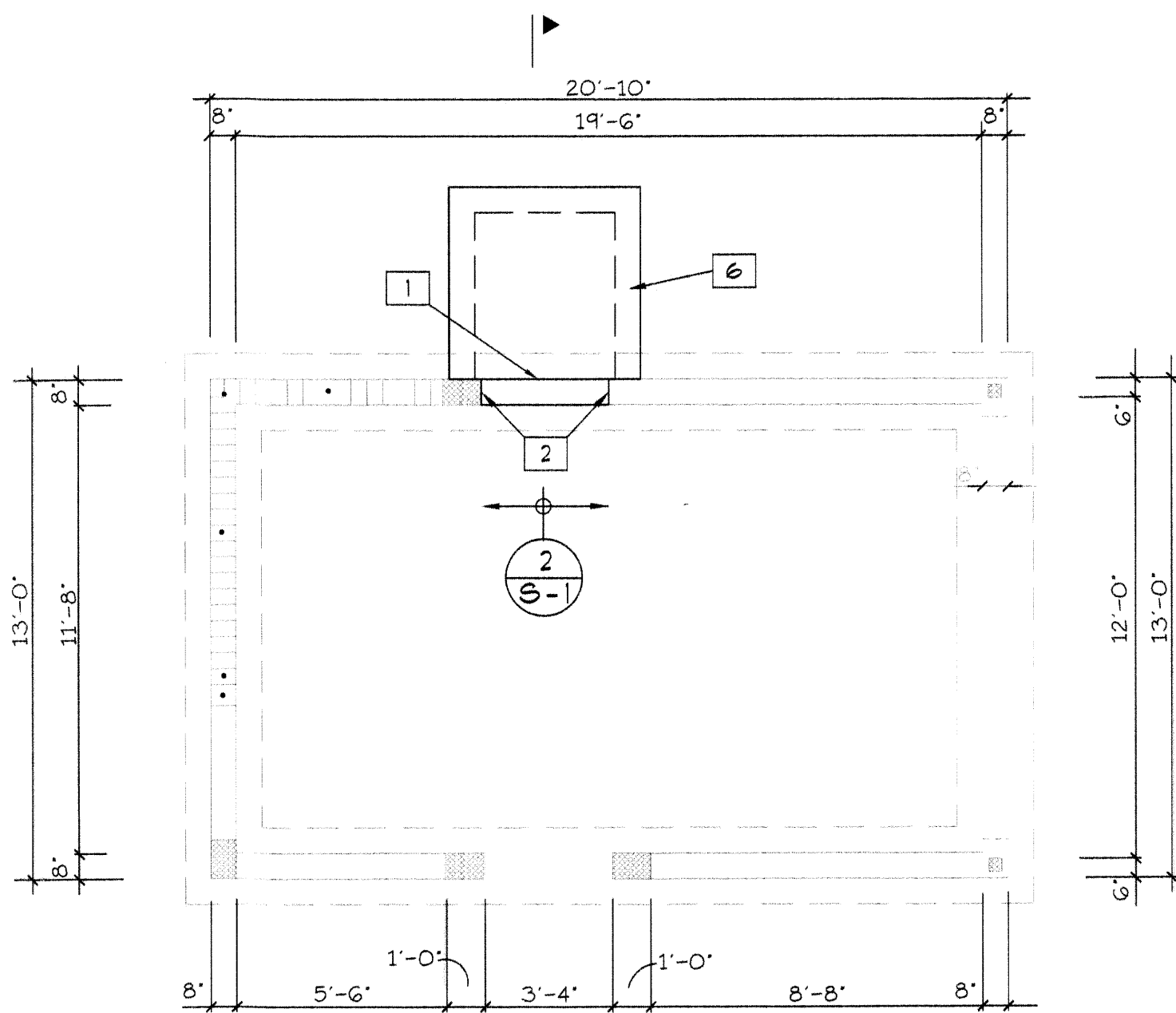
- TO BE NEW BILLET STEEL CONFORMING TO A.S.T.M. A615 GRADE 60 SPECIFICATIONS. FABRICATED IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE OF THE C.R.S.I. AND PLACED IN ACCORDANCE WITH A.C.I. 315 AND A.C.I. MANUAL OF ENGINEERING AND PLACING DRAWINGS FOR REINFORCED CONCRETE STRUCTURES.
- ALL DOWELS FOR COLUMNS AND WALLS TO BE SECURED IN POSITION PRIOR TO CONCRETING. DRILLING OR PUSHING THE DOWELS INTO POSITION IN WET CONCRETE IS NOT PERMITTED.

CONCRETE:

- CONCRETE DESIGN AND REINFORCEMENT IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 318). AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (A.C.I. 315).
- ALL CONCRETE WORK IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING" (ACI 301). PRODUCTION OF CONCRETE, DELIVERY, PLACING AND CURING TO BE IN ACCORDANCE WITH "HOT WEATHER CONCRETING" (A.C.I. 305R).
- FOR ALL CONCRETE TO BE PLACED IN SLABS (INCLUDING SLABS ON GRADE), THE SLUMP SHALL NOT EXCEED 4" ±1". NO WAIVERS OF THIS REQUIREMENT SHALL BE CONSIDERED. SLUMP FOR OTHER CONCRETE SHALL NOT EXCEED 5".
- ALL CONCRETE, $f_c = 3000$ P.S.I. CONCRETE TO BE REGULAR WEIGHT WITH A MAX WATER-CEMENTITIOUS RATIO OF 0.49.
- TAKE ONE SET OF 3 CYLINDERS FOR EVERY FIFTY CUBIC YARDS OR FRACTION THEREOF FOR EACH CLASS OF CONCRETE POURED EACH DAY. FOLLOW ASTM STANDARDS FOR SAMPLING AND TESTING. TEST ONE CYLINDER AT 3 DAYS AND 7 DAYS AND 3 AT 28 DAYS. IF ONE OF THE TWO 28 DAYS TESTS FALLS BELOW SPECIFIED STRENGTH, TEST THE THIRD CYLINDER AT 56 DAYS. TAKE ONE SLUMP TEST (ASTM C143) FOR EACH SET OF TEST CYLINDERS CAST.

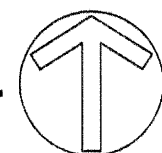
PRODUCT CONTROL APPROVAL:

- PRODUCT CONTROL APPROVAL IN ACCORDANCE WITH THE COUNTY SHALL BE SUBMITTED TO THE ARCHITECT FOR ALL MANUFACTURER-DESIGNED ITEMS INCLUDING DOORS, WINDOWS, AND ROOFING.
- ONLY PRODUCTS THAT HAVE BEEN PRE-APPROVED BY MIAMI-DADE COUNTY ARE ACCEPTABLE.

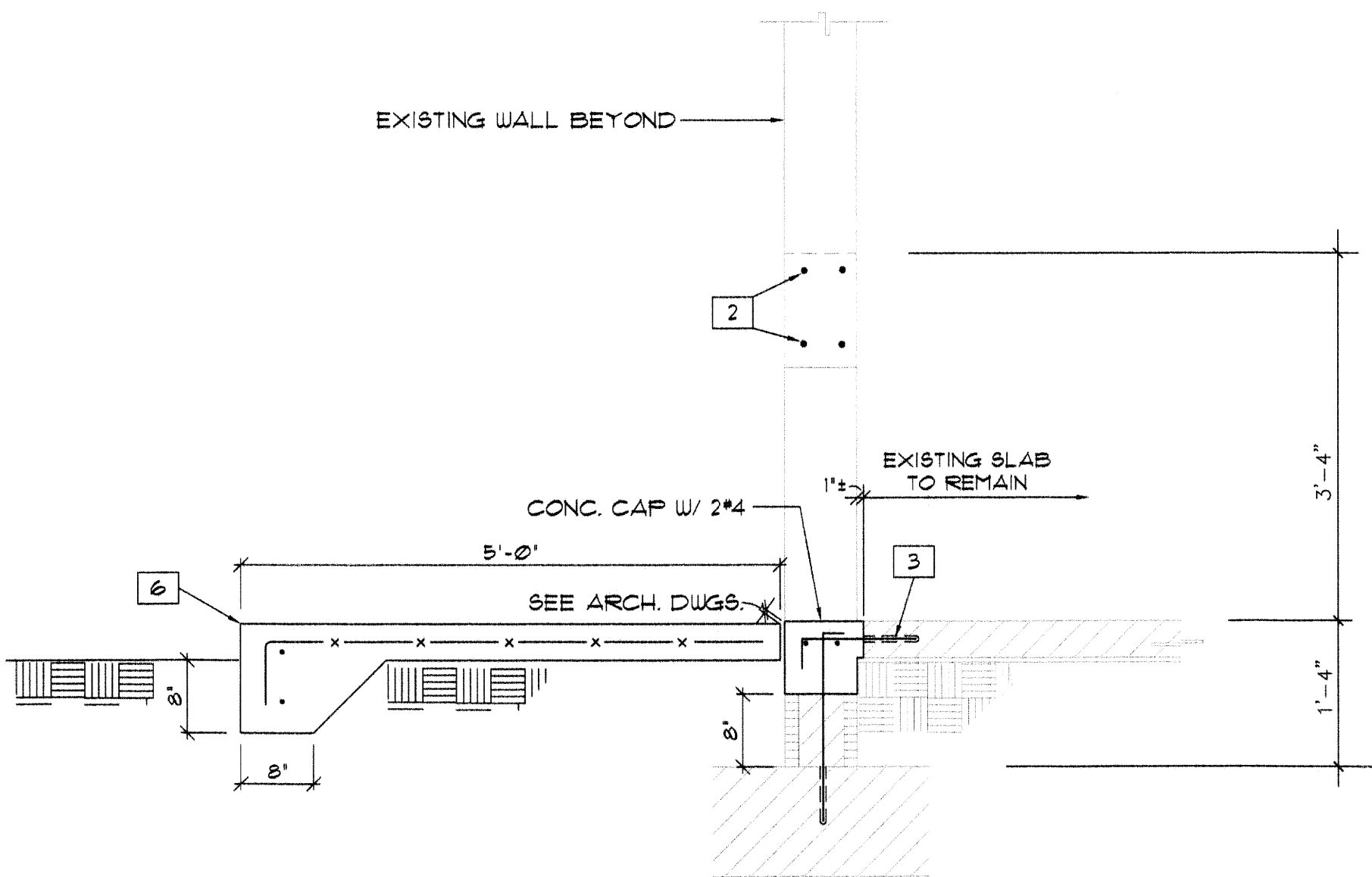


EXISTING FLOOR PLAN

SCALE: 1/4" = 1'-0"



- EXISTING 3'-4" MASONRY WALL REINFORCED WITH #4@8" O.C. & 8"x12" CAP WITH 4# HORIZONTAL TO BE REMOVED WITHOUT DAMAGING REMAINING STRUCTURE. SEE SECTION 1/5-1.
- GRIND 4# EXISTING REINFORCING 3/8" MIN. INTO EXISTING STRUCTURE AND APPLY 1/8" SIKATOP 123 ON CUT SURFACE.
- #3@12" DRILLED 4" INTO EXISTING SLAB AND SET IN EPOXY.
- #4@24" DRILLED 4" INTO EXISTING FOOTING IN CELLS FILLED WITH CONCRETE.
- EXISTING 8" HIGH MASONRY WALL TO REMAIN (FILL SOLID WITH CONCRETE)
- 8"x8" THICKENED EDGE ALL AROUND W/ 2#4 (PROVIDE CORNER BARS)



SECTION

3/4" = 1'-0"

2
S-1

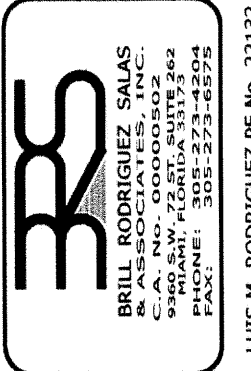
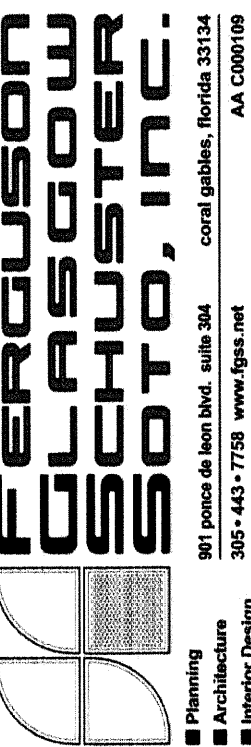
REVISIONS
NO. DATE

PROJ. NO.: 17-04
DRAWN BY:
DATE: 05/10/2019

STRUCTURAL FLOOR
PLAN, NOTES, AND
DETAILS

S100

South Guardhouse Renovations
Caterpillar Inc.
Miami Distribution Center
15550 NW 59 Ave
Miami Lakes, FL 33014



JOB COPY

BL2019-2192

15550 NW 59 Ave

M2019014215

3219014215

TOWN OF MIAMI LAKES				
THIS COPY OF PLANS MUST BE AVAILABLE ON BUILDING SITE OR NO INSPECTION WILL BE GIVEN				
SECTION	APPROVED		DISAPPROVED	
	BY	DATE	BY	DATE
ZONING				
LANDSCAPING				
PUBLICWORKS				
BUILDING				
UTILITIES				
HANDICAP				
STRUCTURAL				
ELECTRICAL				
PLUMBING				
MECHANICAL				
ENERGY				
FIRE				

1. This stamp is to be used by the Town of Miami Lakes, Florida, and is not to be used by any other entity. The Town of Miami Lakes is not responsible for the accuracy of the information provided on this stamp. The Town of Miami Lakes is not responsible for the accuracy of the information provided on this stamp. The Town of Miami Lakes is not responsible for the accuracy of the information provided on this stamp.



Address: 15550 NW 59 AVE
Folio #: 32-20130010620
MDC Process #: <u>M2019014215</u>
MDC Tracking #: <u>3219014215</u>
Job Description: GUARDHOUSE RENOVATION - CATERPILLAR

Master Permit #: BLC2019-2192

Sub Permit #: _____

Revision #: _____

OFFICE USE ONLY

ZONING	☐ Approved	Date	Disapproved	BUILDING	☐ Approved	Date	Disapproved	STRUCT.	☐ Approved	Date	Disapproved
	Date				Date				Date		
	Initials				Initials				Initials		
ROOFING	☐ Approved	Date	Disapproved	ELECT.	☐ Approved	Date	Disapproved	MECH.	☐ Approved	Date	Disapproved
	Date				Date				Date		
	Initials				Initials				Initials		
PLUMBING	☐ Approved	Date	Disapproved	FLOOD	☐ Approved	Date	Disapproved		☐ Approved	Date	Disapproved
	Date				Date				Date		
	Initials				Initials				Initials		

PLANS CHECKED-OUT

DATE	NAME

PLANS CHECKED-IN

DATE	NAME

	AMOUNTS
BASE PERMIT	
ZONING FEE	
CODE COMPLIANCE FEE	
TECHNOLOGY FEE	
DBPR SURCH. STATE	
DBPR SURCH. BUILDING	
SCANNING FEE	
WORK W/O PERMIT FEE	
UPFRONT FEE PAID	368.40

Miami Dade County Department of Regulatory and Economic Resources - Job Copy

3219014215 - 6/14/2019 11:40:36 AM

TCDL Permit Application.pdf Date: ____/____/____



6601 Main St • Miami Lakes, Florida, 33014
Office: (305) 827-4015 • Fax: (305) 558-9884
Website: www.miamilakes-fl.gov

BUILDING PERMIT APPLICATION

Job Address: 15550 NW 59th Ave. Miami Lakes, FL 33014

Unit #:

Folio #: 32-20130010620 Owner-Builder: ☐

Master Permit #: BLCW19-2192 Sub Permit #: _____ Revision #: _____

OWNER INFORMATION	LEGAL USE/WORK
NAME : Scott Turnbull	Current Use of Property: <u>Commercial</u>
Address: 15550 NW 59th Ave	Job Description <u>Guardhouse renovation</u>
City, State, Zip Miami Lakes, FL 33014	
Phone #: (305) 818-2700 Cell #: (309) 208-8072	JOB COST \$ <u>100,000</u> AREA/LENGTH: <u>250</u> <u>SFL</u>
Email Address: <u>Turnbull_Scott_A@cat.com</u>	Residential ☐ Multi-Family ☒ Commercial ☐ Industrial ☐
	Code in Effect: _____
	Occupancy: _____
	Construction Type: _____
	Flood Zone/B.F.E.: _____ F.F.E.: _____
CONTRACTOR INFORMATION	ARCHITECT/ENGINEER
Company Name: Turner Construction Company	Firm Name: <u>Ferguson Glasgow Schuster Soto, Inc.</u>
Qualifier Name: Ricardo Amaro	A/E of record: <u>Natividad Soto</u>
License # CGC1510469	License # <u>AM0009945</u>
Address 7235 Corporate Center Dr. <u>Suite G</u>	Address <u>901 Ponce de Leon Blvd. Suite 304</u>
City, State, Zip Miami, FL 33126	City, State, Zip <u>Coral Gables, FL 33134</u>
Phone #: (786) 621-9000 Cell #: 7862293024	Phone #: <u>305-443-7758</u> Cell #: _____
Email Address: <u>klevy@tcco.com</u>	Email Address: <u>nsoto@fgss.net</u>
Permit Type -- Check only One	
Change to Permit -- Check only One	
☒ Building ☐ Electrical ☐ Mechanical ☐ Plumbing/Gas	☐ Extension ☐ Renewal ☐ Revision
☐ Paving/Drainage ☐ Sign ☐ Roofing ☐ P/W	☐ Change Contractor ☐ Shop Drawing ☐ Cancellation

Application is hereby made to obtain a permit to do work and installation as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work will be performed to meet the standards, of all laws regulating construction in this jurisdiction. I understand that a separate permit must be secured for ELECTRICAL WORK, MECHANICAL, PLUMBING, SIGNS, WELLS, POOLS, RE-ROOFING, SHUTTERS, WINDOWS, FURNACES, BOILERS, HEATERS, TANKS, and AIR CONDITIONERS, etc. I understand that in signing this application I am responsible for the supervision and completion of the construction including scheduling of inspections and obtaining final inspections in accordance with the plans and specification WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR ATTORNEY OR LENDER BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT. OWNER/CONTRACTOR AFFIDAVIT: I Certify that all the foregoing information is accurate and that all work will be done in compliance with all applicable laws regulating construction and zoning.

X Scott Turnbull
Signature of Owner or Owner's Agent

Date 5/28/2019

X Ricardo Amaro
Signature of Qualifier

Date 05/10/19

Print Name of Owner or Owner's Agent

Print Name of Qualifier

STATE OF FLORIDA COUNTY OF MIAMI-DADE

STATE OF Florida COUNTY OF Miami-Dade

Sworn to and subscribed before me this MAY 28 2019

Sworn to and subscribed before me this May 10 20 19

Notary Public - State of Florida
My Commission # FF984630

Notary Public - State of Florida
My Commission # GC 120863

Personally known ☒ or I.D. ☐ (107) 288-0452
FloridaNotaryService.com

Personally known ☒ or I.D. ☐

NOTICE: In addition to the requirements of this permit, there may be additional deed restrictions enforced by the homeowner's associations that may be applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies.

NOTICE: In addition to the requirements of this permit, there may be additional deed restrictions enforced by the homeowner's associations that may be applicable to this property that may be found in the public records of this county, and there may be additional permits required from other governmental entities such as water management districts, state agencies, or federal agencies.

NOTE: This application will be void if there are no reviews after six(6) months.

MIAMI LAKES
Growing Beautifully

6601 Main St • Miami Lakes, Florida, 33014

Office: (305) 827-4015 • Fax: (305) 558-9884 Website: www.miamilakes-fl.gov

HOMEOWNER'S ASSOCIATION/COMMERCIAL/ARCHITECTURAL CONTROL
COMMITTEE ("HOA/ACC") AFFIDAVIT

****NOTE: Whether you have an HOA or not, it is a requirement to complete this affidavit as part of your permit application submittal package.****

The undersigned individual, being duly sworn, deposes and says that:

1. He/She is the owner of property located at 15550 NW 59th Ave. (identify address), which is part of the _____ (identify neighborhood/subdivision/Homeowner Association "HOA"/Architectural Control Committee "ACC" if applicable) and has submitted the attached building permit application to the Town of Miami Lakes; and
2. He/She is owner of property which may be subject to certain conditions and deed restrictions; and
3. He/She is fully informed regarding any applicable deed restrictions and HOA/ACC requirements for building on or making changes to their property; and
4. He/She is aware that the Town recommends, although not required, that the he/she secure any required approvals from their HOA/ACC, prior to submitting this building permit application; and
5. He/She acknowledges that the issuance of a building permit does not independently satisfy any applicable HOA/ACC approval requirements and that the Town does not enforce any deed restrictions upon said property.

Scott Turnbull
Signature

Scott Turnbull
Print Name

5/28/2019
Date

STATE OF FLORIDA)
) SS:
COUNTY OF MIAMI-DADE)

BEFORE ME, an officer duly authorized by law to administer oaths and take acknowledgments, personally appeared Scott Turnbull as owner of said property described herein, on this date executed the foregoing Affidavit for the purposes mentioned in the Affidavit. He/She is personally known to me or has produced _____ as identification.

IN WITNESS OF THE FOREGOING, I have set my hand and official seal at in the State and County aforesaid on this 28th day of MAY, 2019.

My Commission Expires: April 21, 2020



Miami Dade County Department of Regulatory And Economic Resources - Job Copy

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Note: Please be advised that in addition to any written recommendations from your homeowners association (HOA) this
TOML Permit Application.pdf