

PROJECT SCOPE

The proposed project scope includes the renovation of the second floor for the Orange County Code Enforcement Offices at the Cassady Building. The renovation includes the replacement of restrooms, offices, conference room and open areas. The mechanical, plumbing and technology will be updated according to room modification and required to accommodate the new work and new ceiling. The electrical work will include replacement of generator, transformer, transfer switch, gear and electrical panels on the entire building. No other exterior work shall be required for this project.

VICINITY MAP



Orange County Government Capital Projects Division **Orange County Code Enforcement Office Renovations**



ARCHITECTURE RHODES+BRITO ARCHITECTS, INC 605 EAST ROBINSON ST, SUITE 750 ORLANDO, FL 32801 PH. (407) 648-7288

2450 West 33rd Street, Orlando, Florida 32839

BID DOCUMENTS May 30, 2018

Orange County Government

400 East South Street, Suite 500

BOARD OF COUNTY COMMISSIONERS

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PROJECT DESIGN TEAM

TECHNOLOGY **TECHNOLOGY RESEARCH & CONSULTING** 437 GASTON FOSTER ROAD ORLANDO, FL 32807 PH: (407) 273.6004 CONTACT: LARRY J. TROBOUGH, RCDD

ELECTRICAL C&S COMPANIES 605 EAST ROBINSON ST ORLANDO, FL 32801 PH: (407) 422.1118 LEED AP

MECHANICAL **C&S COMPANIES** 605 EAST ROBINSON ST ORLANDO, FL 32801 PH: (407) 422.1118 LEED AP





Capital Projects Division Orlando, FL 32801



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EACH SHEET IS DIVIDED INTO A GRID. AN ALPHA-NUMERIC GRID COORDINATE SYSTEM IS USED TO ORGANIZE THE DRAWING TITLES DRAWING TITLES ARE NUMBERED ACCORDING TO ITS LOCATION ON THE GRID. THE LOWER LEFT HAND CORNER GRID OF THE DRAWING IS USED AS THE IDENTIFICATION NUMBER (SEE DIAGRAM).

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UNDERCUT UNDERWRITERS LABORATORY UNFINISHED UNLESS NOTED OTHERWISE



WOOD WIRED GLASS WALL HUNG WHEEL BUMPER WROUGHT IRON WINDOW WIRED MESH WITHOUT WATER PROOFING WATER REPELLENT WATER STOP WAILINGTOF WIDTH WALL TO WALL WELDED WIRE FABRIC

DRAWING INDEX

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	-
GENERA	L
<u>REV.</u> NO.	SHEET NAME
G000	COVER SHEET
G001	GENERAL INFORMATION
G011	EXISTING FLOOR PLAN LEVEL 01
G012	EXISTING FLOOR PLAN LEVEL 02
G015	PHASING PLAN
G040	PARTITION TYPES
G041	CEILING TYPES AND UL DETAILS
G202	LIFE SAFETY PLAN LEVEL 02
Total Sheets: 8	
ARCHITE	CTURAL
AD101	DEMOLITION PLAN AND RCP DEMO PLAN LEVEL 01

9

AD202	DEMOLITION PLAN LEVEL 02
AD222	REFLECTED CEILING DEMOLITION PLAN LEVEL 02
AD230	DEMOLITION DETAILS
A101	FLOOR AND REFLECTED CEILING PLANS LEVEL 01
A202	FLOOR PLAN LEVEL 02
A222	REFLECTED CEILING PLAN LEVEL 02
A401	RESTROOMS ENLARGED PLANS AND ELEVATIONS
A402	RESTROOMS ELEVATIONS AND DETAILS
A501	WALL AND CEILING DETAILS
A541	WALL, FLOOR AND RESTROOMS DETAILS
A600	FINISH FLOOR PLAN
A601	FINISH SCHEDULE AND DETAILS
A710	DOOR SCHEDULE AND DETAILS
A800	MILLWORK ELEVATIONS AND DETAILS
A900	EQUIPMENT PLAN
Total Sheets: 16	

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FIRE PROTECTION

XFP-201	SECOND FLOOR SPRINKLER DEMOLITION
FP-201	SECOND FLOOR SPRINKLER LAYOUT
Total Sheets: 2	

PLUMBING

P-100	GENERAL NOTES, SYMBOLS AND ABREVIATIONS
XP-201	SECOND FLOOR PLUMBING DEMOLITION
P-201	SECOND FLOOR PLUMBING
P-401	ENLARGED RESTROOM PLUMBING
Total Sheets: 4	

MECHANICAL

M-100	LEGEND, ABBREVIATIONS AND GENERAL NOTES
M-101	FIRST FLOOR HVAC NEW WORK PLAN
M-102	SECOND FLOOR HVAC NEW WORK PLAN
M-103	HVAC WORK PLAN- CHILLER YARD
M-501	DETAIL SHEET
M-601	SCHEDULES
M-701	HVAC CONTROLS
MD-101	FIRST FLOOR HVAC NEW WORK PLAN
MD-102	SECOND FLOOR HVAC DEMO PLAN
Total Sheets: 9	

ELECTRICAL

1	E-100	LEGEND, ABBREVIATIONS, AND GENERAL NOTES
	E-201	SECOND FLOOR LIGHTING PLAN
1	E-221	SECOND FLOOR POWER PLAN - NEW WORK
	E-222	FIRST FLOOR POWER PLAN
	E-401	PANEL SCHEDULES
	E-402	PANEL SCHEDULES
	E-501	ONE-LINE DIAGRAM AND DETAILS
	ED-100	SECOND FLOOR POWER PLAN - DEMO
Total SI	neets: 8	

TECHNOLOGY

T001

TD202

T201

T202 T601

T801

T901

T902

Grand total: 8

SYMBOL LEGEND AND SHEET INDEX - SYSTEMS
DEMO FLOOR PLAN LEVEL 02 -SYSTEMS
FLOOR PLAN LEVEL 01 -SYSTEMS
FLOOR PLAN LEVEL 02
ENLARGED PLAN SYSTEMS
RISER DIAGRAM - FIRE ALARM
DETAILS
DETAILS

WATER CLOSET

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TYPICAL

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GENERAL INFORMATION
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CHECK BY:AC/MBDATE:May 30, 2018PROJECT NUMBER:15012-0020
G001



CONSTRUCTION PHASING PLAN LEGEND

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CONSTRUCTION PHASING PLAN GENERAL NOTE

- 1. ALL CONSTRUCTION PHASES TO BE COORDINATED WITH AND APPROVED BY OWNER PRIOR TO BEGINING OF DEMOLITION AND CONSTRUCTION.
- 2. THE BUILDING WILL BE FULLY IN USE AND OPERATIONAL DURING CONSTRUCTION.
- 3. PROVIDE DUST BARRIER ACCESS CONTROL ON EVERY CONSTRUCTION PHASE OF THE PROJECT.
- 4. THE DUST BARRIER WILL NEED TO FULLY ISOLATE THE DUST ELEMENTS FROM BUILDING OPERATIONS.

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	IPTION	WIDTH	REF DESIGN
S1G 1 5/8" N	ITL STUDS, NOT RATED	2 1/4"	
S3G 3 5/8" N	ITL STUDS, NOT RATED	4 1/4"	
S6G 6" MTL	STUDS, NOT RATED	6 5/8"	

GENERAL PARTITION TYPE NOTE

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1 REFER TO LIFE SAFETY PLANS FOR LOCATION AND EXTENTS OF RATED WALLS.

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- 2 PARTITION FINISH LEVEL: LEVEL 4 FINISH FOR ALL WALLS. 3 AT EXISTING WALLS, CONCEAL ALL CONDUIT AND DEVICES ADDED OR REPLACED AT THESE WALLS. REFER TO ELECTRICAL DRAWINGS FOR LOCATIONS.
- 4 PROVIDE THROUGH-PENETRATION FIRESTOP SYSTEMS AND THROUGH-PENETRATION FIRESTOP DEVICES, SEALANTS AND RELATED PRODUCTS FOR FIRE-RATED FLOOR AND WALL PENETRATIONS (AND SEALING TOP OF RATED WALLS TO DECK). THIS WORK ALSO INCLUDES FIRESTOPPING AT PENETRATIONS THROUGH ALL FIRE-RATED WALLS AND FLOORS. ALL RATED WALL PENETRATIONS SHALL MAINTAIN THE INTEGRITY OF THE WALL ASSEMBLY. PROVIDE FIRESTOP SEALANT BETWEEN CMU AND STUD WALL CONSTRUCTION AT ALL FIRE RATED/SMOKE TIGHT RATED
- WALLS. 5 THE FOLLOWING STATEMENT SHALL BE STENCILED ON ALL FIRE WALLS, SMOKE BARRIERS AND PARTITIONS USING 3" HIGH LETTERING - COLOR, RED: "FIRE PARTITION - PROTECT ALL OPENINGS" (AT FIRE RATED WALLS), AND " SMOKE PARTITION PROTECT ALL OPENINGS" (AT SMOKE PARTITIONS). PLACE STATEMENT WITHIN 15 FEET OF EACH END OF WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION - PLACED ABOVE CEILING HEIGHT AND IN CONCEALED LOCATIONS.
- 6 SEE INTERIOR ELEVATIONS AND REFLECTED CEILING PLANS FOR HEIGHTS, QUANTITY AND TYPE OF ALL FINISHES LOCATED ON
- PARTITIONS AND WALLS. 7 GYPSUM BOARD TO BE INSTALLED A MINIMUN OF 1/2" ABOVE THE FLOOR SLAB - TYPICAL.

EXAMPLE WALL TYPE (S3U-A-S) = 3-5/8" FULL HEIGHT, NOT RATED, INSULATED METAL STUD WALL

KEY IV (FIRST QUAD) PRIMARY WALL MODIFIER

WALL HEIGHTS

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- A TO UNDERSIDE OF DECK
- **B** TO 6" ABOVE CEILING, UNO C TO UNDERSIDE OF CEILING
- D 4'-0" LOW WALL HEIGHT, SEE DETAIL A1/G040
- E INFILL EXISTING OPENING
- F METAL STUD WALL INFILL ABOVE EXISTING WALL AND 6" ABOVE CEILING
- H INFILL EXISTING EXTERIOR WALL BELOW WINDOW SILL

KEY V (SECOND QUAD) SECONDARY WALL MODIFIER

- SOUND ATTENUATION INSULATION WITH STC 50.
- N RESILIENT CHANNELS WITH GYP BOARD AND SOUND INSULATION OF STC 55.
- L LEAD LINED GYP BOARD (W/ SOUND INSULATION) V VAPOR BARRIER
- M FOAM-IN-PLACE INSULATION
- H SAND FILLED T CEMENT TILE BACKER BOARD AT TILE LOCATIONS

ADDITIONAL NOTES

1. 4" x 4" CONCRETE CURB AT BOTTOM OF WALL REFER TO DETAIL C5/A501

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PARTITION T	YPES
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CHECK BY: DATE:	AC/MB May 30, 2018
PROJECT NUMBER:	15012-0020
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Н	UNRESTRAINED ASSEMBLY RATING - 1 HR ANSI/UL 263 DESIGN NO. I501
0	
G	
0	 Perimeter Channels — Used to support steel studs at both ends of wall structure. legs and formed from min. No. 20 MSG galv. steel (0.0329 in. thick bare metal thickne to wall structure with fasteners spaced not greater than 24 in. O.C. at both the top an Maximum clear span from vertical leg to vertical leg of the perimeter channels is 8 ft., Steel Studs — Min. 6 in. wide with min. 1-5/8 in. legs containing folded back flang MSG galv. steel (0.0329 in. thick bare metal thickness). Studs to be cut 1/2 in. to 3/4
F	between the vertical legs of the perimeter channels. Studs spaced a max. 16 in. O.C. faced side shall be secured to the perimeter channel with one 1/2 in. long pan-head si end of the horizontal barrier to terminate the assembly at the adjoining wall. These er adjoining wall in the same manner as the perimeter channels (Item1). 3. Steel Strap — Min 4 in. wide formed from min. No. 20 MSG galv. Steel (0.0329 in. Secured perpendicular to the studs at the centerline of the span using two 1/2 in. long overlap one full stud bay at splice locations. As an alternate to the steel strap, Perime substituted and installed in the same manner as the steel straps. If a continuous piece
0	installed on each side of the centerline of the span and overlap one full stud bay. 4. Gypsum Board* — Three layers of nom. 5/8 in. thick, 46 to 54 in. wide, gypsum l perpendicular to the steel studs. Base layer installed with end joints in adjacent rows secured to studs and perimeter channels with 1-1/4 in. long Type S steel screws space installed with end joints in adjacent rows staggered min. 32 in. Boards secured to the 1-5/8 in. long Type S steel screws spaced max. 16 in. O.C. Middle layer joints stagger joints Face layer installed with end joints in adjacent rows staggered min. 32 in. Boards perimeter channels with 2-1/4 in. long Type S steel screws spaced max. 12 in. O.C. Fa in. from middle layer joints.
E	AMERICAN GYPSUM CO — Types AGX-1, AG-C, LightRoc. 5. Joint Tape and Compound — Not Shown - (Optional- Not Required On Joints. Required On Sc dry or premixed joint compound, applied in two coats to joints and screw heads; paper tape, nom. in first layer of compound over all joints. * Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions emp Certification (such as Canada), respectively.
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Features:

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SYSTEM NO.W-L-1003 SEPTEMBER 03, 2004 (FORMERLY SYSTEM NO. 147) F RATINGS - 1 AND 2 HR (SEE ITEM 1) T RATING - 0 HR

SECTION A-A

- 1. Wall Assembly The 1 Or 2 Hr Fire-rated Gypsum Wallboard/stud Wall Assembly Shall Be Constructed Of the Materials And In the Manner Described In the Individual U300 Or U400 Series Wall Or Partition Design In the UI Fire Resistance Directory And Shall Include the Following Construction
- A. Studs Wall Framing May Consist Of Either Wood Studs Or Steel Channel Studs. Wood Studs To Consist Of Nom 2 By 4 In. Lumber Spaced 16 In. Oc With Nom 2 By 4 In. Lumber End Plates And Cross Braces. Steel Studs To Be Min 3-1/2 In. Wide By 1-3/8 In. Deep Channels Spaced Max 24 In. Oc.
- B. Gypsum Board* Nom 5/8 In. Thick, 4 Ft. Wide With Square Or Tapered Edges. The Gypsum Wallboard Type, Thickness, Number Of Layers, Fastener Type And Sheet Orientation Shall Be As Specified In the Individual U300 Or U400 Series Design In the UI Fire Resistance Directory. Max Diam Of Opening is 15 In. The Hourly F Rating Of the Firestop System is Equal To the Hourly Fire Rating Of the Wall Assembly In Which It is Installed.
- 2. Through Penetrant One Metallic Pipe, Conduit Or Tubing To Be Installed Either Concentrically Or Eccentrically Within the Firestop System. The Space Between Pipes, Conduits Or Tubing And the Steel Sleeve (item 3a) Shall Be Min Of 0 In. (point Contact) To Max 2-3/8 In. Pipe, Conduit Or Tubing To Be Rigidly Supported On Both Sides Of Wall Assembly. The Following Types And Sizes Of Metallic Pipes, Conduits Or Tubing May Be Used:
- A. Steel Pipe Nom 12 In. Diam (or Smaller) Schedule 10 (or Heavier) Steel Pipe. B. Iron Pipe - Nom 12 In. Diam (or Smaller) Service Weight (or Heavier) Cast Iron Soil Pipe, Nom 12 in. Diam (or Smaller) or Class 50 (or Heavier) Ductile Iron Pressure Pipe.
- C. Conduit Nom 6 In. Diam (or Smaller) Steel Conduit Or Nom 4 In. Diam (or Smaller) Steel Electrical Metallic Tubing. D. Copper Tubing - Nom 6 In. Diam (or Smaller) Type L (or Heavier) Copper Tubing. E. Copper Pipe - Nom 6 In. Diam (or Smaller) Regular (or Heavier) Copper Pipe.
- 3. Firestop System Installed Symmetrically On Both Sides Of Wall Assembly. The Details Of the Firestop System Shall Be As Follows.
- A. Steel Sleeve Cylindrical Sleeve Fabricated From Min 0.019 In. Thick (no. 28 Gauge) Galv Sheet Steel And Having a Min 2 In. Lap Along the Longitudinal Seam. Length Of Steel Sleeve To Be Equal To Thickness Of Wall Plus 1 To 4 In. Such That, When Installed, the Ends Of the Sleeve Will Project Approximately 1/2 To 2 In. Beyond the Surface Of the Wall On Both Sides Of the Wall Assembly. Sleeve Installed By Coiling the Sheet Steel To a Diam Smaller Than the Through Opening, Inserting the Coil Through the Openings And Releasing the Coil To Let It Uncoil Against the Circular Cutouts In the Gypsum B. Packing Material - Min 1 In. Thickness Of Mineral Wool Batt Insulation Firmly Packed Into Steel Sleeve On Both Sides Of the Wall Assembly As Permanent Forms. Packing Material To Be Recessed Min 1/2 In. From End Of Steel Sleeve (flush With Or Recessed Into Gypsum Wallboard Surface) On Both Sides Of Wall Assembly.
- B1. Packing Material (not Shown) As An Alternate To Item B, Nom 1 In. Thick Polyethylene Backer Rod May Be Used. The Backer Rod is To Be Recessed Within the Steel Sleeve a Min Of 1 In. From Each Surface Of Wall.
- C. Fill,void Or Cavity Materials* Caulk Or Sealant When Mineral Wool Batt Insulation is Used, Applied To Fill the Steel Sleeve To a Min Depth Of 1/2 In. On Both Sides Of Wall Assembly. When Backer Rod is Used, a Min Thickness Of 1 In. Of Cp-25wb+ Caulk is Required Flush With Surface Of Wall. A Nom 1/4 In. Diam Continuous Bead Of Caulk Or Sealant Shall Be Applied Around the Circumference Of the Steel Sleeve At Its Egress From the Gypsum Wallboard Layers On Both Sides Of the Wall Assembly. 3m Company - Cp 25wb+ Caulk Or Fb-3000 Wt Sealant or equal
- *Bearing the UL Classification Marking

. Min. 6 in. deep with min. 2 in. ess). Perimeter channels attached nd bottom of the vertical leg. , 2-1/4 in.

ges and formed from min. No. 20 in. less than the clear span At each end of the stud, the unteel screw. Studs are used at each nd studs shall be secured to the

 thick bare metal thickness). g pan-head steel screws. Strips to ter Channels (Item 1) may be ce is not used, the abutted legs are

board installed with long dimension staggered min. 32 in. Boards ed max. 16 in. O.C. Middle layer studs and perimeter channels with red a min. 16 in. from base layer ds secured to the studs and ace layer joints staggered a min. 16

crew Heads), - Vinyl, . 2 in. wide, embedded

ploying the UL or cUL

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SYSTEM NO.W-L-5039 September 07, 2004 F Ratings - 1 and 2 Hr (See Item 1) T Ratings - 3/4, 1 and 1-1/2 Hr (See Item 2)

<u>SECTION A-A</u>

1. Wall Assembly - The 1 Or 2 Hr Fire-rated Gypsum Wallboard/stud Wall Assembly Shall Be Constructed Of the Materials And In the Manner Specified In the Individual U300 Or U400 Series Wall Or Partition Designs In the UI Fire Resistance Directory And Shall Include the Following Construction Features:

A. Studs - Wall Framing May Consist Of Either Wood Studs Or Steel Channel Studs. Wood Studs To Consist Of Nom 2 By 4 In. Lumber Spaced 16 In. Oc. Steel Studs To Be Min 3-5/8 In. Wide And Spaced Max 24 In. Oc.

B. Gypsum Board* - Nom 5/8 In. Thick, 4 Ft Wide With Square Or Tapered Edges. The Gypsum Wallboard Type, Number Of Layers, Fastener Type And Sheet Orientation Shall Be As Specified In the Individual Wall And Partition Design. Max Diam Of Opening In Wallboard Layers is 8-1/2 In.

The Hourly F Rating Of the Firestop System is Equal To the Hourly Fire Rating Of the Wall

Assemblv. 2. Metallic Pipe - Nom 4 In. Diam (or Smaller) Schedule 10 (or Heavier) Steel Pipe Or Type L (or Heavier) Copper Tube. One Pipe To Be Installed Either Concentrically Or Eccentrically Within the Firestop System. Pipe To Be Rigidly Supported On Both Sides Of Wall Assembly.

3. Pipe Covering* - Nom 1/2 To 2 In. Thick Hollow Cylindrical Heavy Density Glass Fiber Units For 1 Hr Rated Assemblies, Nom 1/2 To 1-1/2 In. Thick Cylindrical Heavy Density Glass Fiber Units For 2 Hr Rated Assemblies, Jacketed On the Outside With An All Service Jacket. Longitudinal Joints Sealed With Metal Fasteners Or Factory-applied Ssl Tape. Transverse Joints Secured With Metal Fasteners Or With Butt Tape Supplied With the Product. The Annular Space Between the Insulated Pipe And the Edge Of the Through Opening Shall Be Min Zero In. (continuous Point Contact) To Max 1-1/4 In.

The Hourly T Rating is 0 Hr When Pipe Covering Less Than Nom 1-1/2 In. Thick is Used. When 1-1/2 In. Thick Pipe Covering is Used, the Hourly T Rating is 1 Hr When Installed In 1 Hr Rated Walls. When 1-1/2 In. Thick Pipe Covering is Used In 2 Hr Rated Wall, the T Rating is 1 Hr When Copper Tube is Used And 1-1/2 Hr When Steel Pipe

See Pipe And Equipment Covering - Materials (brgu) Category In the Building Materials Directory For Names Of Manufacturers. Any Pipe Covering Material Meeting the Above Specifications And Bearing the UI Classification Marking With a Flame Spread Index Of 25 Or Less And a Smoke Developed Index Of 50 Or Less May Be Used.

4. Fill, void Or Cavity Materials* - Caulk Or Sealant -Min 5/8 In. Thickness Of Caulk Applied Within Annular Space Flush With Each Surface Of Wall. A Min 1/2 In. Diam Bead Of Caulk Shall Be Applied To the Pipe Insulation/ Wallboard Interface At the Point Contact Location On Both Sides Of Wall.

3M COMPANY - CP-25 WB+ caulk or FB-3000 WT sealant or equal *Bearing the UL Classification Marking

NONBEARING WALL RATING - 1 HR DESIGN NO. U465

2 3 4 5

1. Floor and Ceiling Runners - (not shown) - Channel shaped runners, 3-5/8 in. wide 1-1/4 in. legs, formed from min No. 25 MSG galv steel, attached to floor and ceiling with fasteners spaced 24 in. OC max.

2. Steel Studs - Channel shaped, 3-5/8 in. wide (min), 1-1/4 in. legs, 3/8 in. folded returns, formed from min No. 25 MSG galv steel spaced 24 in. OC max.

3. Batts and Blankets* - (Optional) - Mineral wool or glass fiber batts partially or completely filling stud cavity. See Batts and Blankets (BZJZ) category for names of Classified companies.

3A. Fiber, Sprayed* - As an alternate to Batts and Blankets (Item 3) - Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 3.0 lb/ft3. Alternate application method: The fiber is applied with U.S. Greenfiber LLC Type AD100 hot melt adhesive at a nominal ratio of one part adhesive to 6.6 parts fiber to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. Nominal dry density of 2.5 lb/ft3. U S GREENFIBER L L C - Cocoon2 Stabilized or Cocoon-FRM (Fire Rated Material) 3B. Fiber, Sprayed* - As an alternate to Batts and Blankets (Item 3) and Item 3A - Spray applied cellulose insulation material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. NU-WOOL CO INC - Cellulose Insulation

4. Gypsum Board* - 5/8 in. thick, 4 ft wide, attached to steel studs and floor and ceiling track with 1 in. long, Type S steel screws spaced 8 in. OC. along edges of board and 12 in. OC in the field of the board. Joints oriented vertically and staggered on opposite sides of the assembly. When attached to item 6 (resilient channels) or 6A (furring channels), wallboard is screw attached to furring channels with 1 in. long, Type S steel screws spaced 12 in. OC.

AMERICAN GYPSUM CO - Types AG-C, AGX-1, AGX-7. BEIJING NEW BUILDING MATERIALS CO LTD - Type DBX-1. BPB AMERICA INC - Types 1, EGRG, ProRoc Type X, ProRoc Type C.

BPB CANADA INC - ProRoc Type C, ProRoc Type X or ProRoc Type Abuse-Resistant. CANADIAN GYPSUM COMPANY - Types AR, C, IP-AR, IP-X1, IP-X2, IPC-AR, SCX, SHX, WRC or WRX.

G-P GYPSUM CORP, SUB OF GEORGIA-PACIFIC CORP - Types 5, 9, C, DAP, DD, DA, DGG, DS, GPFS6. LAFARGE NORTH AMERICA INC - Types LGFC2, LGFC2A, LGFC6, LGFC6A,

LGFC-C, LGFC-C/A. NATIONAL GYPSUM CO - Types FSK, FSK-C, FSK-G, FSW-C, FSW-G, FSW, FSW-3 , FSW-5. PABCO GYPSUM, DIV OF PACIFIC COAST BUILDING PRODUCTS INC - Type PG-C or PG-9

PANEL REY S A - Type PRX. SIAM GYPSUM INDUSTRY (SARABURI) CO LTD - Type EX-1

4a. Gypsum Board* - (as Alternate To Item 4) - Nom 5/8 In. Thick Gypsum Panels With Beveled, Square Or Tapered Edges, Applied Vertically Or Horizontally. Vertical Joints Centered Over Studs And Staggered One Stud Cavity On Opposite Sides Of Studs. Horizontal Edge Joints And Horizontal Butt Joints On Opposite Sides Of X1, Studs Need Not Be Staggered Or Backed. Panels Attached To Steel Studs And Floor Runner With 1 In. Long Type S Steel Screws Spaced 8 In. Oc When Applied Horizontally, Or 8 In. Oc Along Vertical And Bottom Edges And 12 In. Oc In the Field When Panels Are Applied Vertically. Canadian Gypsum Company - Types Ar, C, Ip-ar, Ip-x1, Ip-x2, Ipc-ar, Scx, Shx, Wrc Or Wrx. United States Gypsum Co - T Ype Ar, C, Frx-g, Ip-ar, Ip-x1, Ip-x2, Ipc-ar, Scx, Shx, Wrc Or Wrx. Usg Mexico S A De C V - Type Ar, C, Ip-ar, Ip-x1, Ip-x2, Ipc-ar, Scx, Shx, Wrc Or Wrx.

4b. Gypsum Board* - (as An Alternate To Items 4 Or 4a) - Nom 3/4 In. Thick, 4 Ft Wide, Installed As Described In Item 4a With Screw Length Increased To 1-1/4 In. Canadian Gypsum Company - Types Ar, Ip-ar. United States Gypsum Co - Types Ar, Ip-ar. Usg Mexico S A De C V - Types Ar, Ip-ar.

5. Joint Tape And Compound - Vinyl, Dry Or Premixed Joint Compound, Applied In Two Coats To Joints And Screw Heads; Paper Tape, 2 In. Wide, Embedded In First Layer Of Compound Over All Joints. As An Alternate, Nominal 3/32 In. Thick Gypsum Veneer Plaster May Be Applied To the Entire Surface Of Classified Veneer Baseboard. Joints Reinforced.

6. Resilient Channel - (optional-not Shown) - 25 Msg Galv Steel Resilient Channels Spaced Vertically Max 24 In. Oc, Flange Portion Attached To Each Intersecting Stud With 1/2 In. Long Type S-12 Panhead Steel Screws.

6a. Steel Framing Members (not Shown)* - As An Alternate To Item 3, Furring Channels And Resilient Sound Isolation Clip As Described Below:

A. Furring Channels - Formed Of No. 25 Msg Galv Steel. 2-3/8 In. Wide By 7/8 In. Deep, Spaced 24 In. Oc Perpendicular To Studs. Channels Secured To Studs As Described In Item B. Ends Of Adjoining Channels Are Overlapped 6 In. And Tied Together With Double Strand Of No. 18 Swg Galv Steel Wire Near Each End Of Overlap. As An Alternate, Ends Of Adjoining Channels May Be Overlapped 6 In. And Secured Together With Two Self-tapping #6 Framing Screws, Min. 7/16 In. Long At the Midpoint Of the Overlap, With One Screw On Each Flange Of the Channel.

B. Steel Framing Members* - Used To Attach Furring Channels (item A) To Studs (item 1). Clips Spaced 48 In. Oc., And Secured To Studs With 1-5/8 In. Wafer Or Hex Head Type S Steel Screw Through the Center Grommet. Furring Channels Are Friction Fitted Into Clips. Pac International Inc - Type Rsic-1.

*Bearing the UL Classification Mark

5/8" GYP BD ON 3 5/8" METAL STUD -TYPE 'X' GYPSUM BOARD AT TOP FOR FIRE WALL CLOSURE EXISTING FIRE RATED WALL TO BE REMOVED EXISTING FIRE RATED CEILING EXISTING" A.F.F. BOTTOM OF CEILING 1-HOUR RATED CEILING UL 263 EXISTING ELECTRICAL ROOM S3R1 PARTITION TYPE AS SCHEDULED RATED CEILING DETAIL A9

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SCALE: 1" = 1'-0"

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	Consultants Sconsultants
	Orange County Government Capital Projects Division
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-	Maximiano Brito, RA, AIA FL Reg. No. AR0015108BID DOCUMENTS NOT FOR CONSTRUCTIONDATESUBMISSION / REVISIONNO.
	DEMOLITION PLAN LEVEL 02
	SCALE:AS INDICATEDDRAWN BY:ACCHECK BY:AC/MBDATE:May 30, 2018PROJECT NUMBER:15012-0020
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E3 AD230

C3 AD230

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E5

AD230

AD230

DEMOLITION IMAGE SCALE: 12" = 1'-0"

G7 AD230 7

DEMOLITION IMAGE SCALE: 12" = 1'-0"

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DEMOLITION IMAGE SCALE: 12" = 1'-0"

E7 AD230

C7 AD230

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SCALE: 12" = 1'-0"

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DEMOLITION IMAGE SCALE: 12" = 1'-0"

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SCALE: 12" = 1'-0"

DEN	NOLITION KEYNOTES	#	KEYNOTE NUM
		(NOT ALL NO	DTES APPLY TO SHE
1	EXISTING 1HR RATED PARTITION TO REMAIN CONSTRUCTION - TYPICAL.	I. PROTECT FR	Rom Damage Durin
2	THE HATCHED AREA INDICATES AREAS NOT	IN SCOPE OF \	Nork.
3	PREPARE EXSITNG SURFACES TO RECEIVE	NEW CONSTRU	JCTION - TYPICAL.
4	REMOVE ALL ACCOUSTICAL CEILING TILES A DAMAGE DURING DEMOLITION.	ND GRID - PRC	TECT WALL FROM
5	REMOVE WALLS AS REQUIRED TO RECIEVE WALL FROM DAMAGE - TYPICAL.	NEW WORK - P	ROTECT ADJACENT
6	LIGHT FIXTURES TO BE REMOVED - REFER T ADDITIONAL INFORMATION.	O ELECTRICAL	DRAWINGS FOR
7	EXISTING DUCTWORK, PIPING AND HVAC UN MECHANCAL DRAWINGS FOR ADDITIONAL IN	IT TO BE REMO IFORMATION.	OVED. REFER TO
8	REMOVE EXISTING DOORS AND PREPARE SURFER TO ARCHITECTURAL FLOOR PLAN.	JRFACE FOR N	EW CONSTRUCTION
9	EXISTING DOOR TO REMAIN. PROTECT FROM	/I DAMAGE DUF	RING CONSTRUCTION
10	EXISTING EXTERIOR CURTAIN WALL SHALL F ARE TO BE REMOVED AND REPLACED. EXIS REMOVED AND REPLACED. PREPARE GLAZI CONSTRUCTION. PROTECT GLAZING AND CU CONSTRUCTION. REPAIR ANY CURTAIN WAL ITEMS. REPAIR GLAZING IF DAMAMGE DURIN	Remain and e) Ting Window Ng Surface F Urtain Wall F L Damage Af ⁻ Ng Construc	KISTING GLAZING FIL BLINDS ARE TO BE FOR NEW FROM DAMAGE DURI FER REMOVAL OF TION.
11	EXISTING MECHANICAL ROOM TO REMAIN. F CONSTRUCTION, REFER ELECTRICAL AND M ADDITIONAL INFORMATION.	PROTECT FROM	M DAMAGE DURING RAWINGS FOR
12	EXISTING EXIT STAIRS TO REMAIN CLEAR OF CONSTRUCTION. CLEAR PATH TO BE MAINT	ANY DEBRIS I AIN FOR THE C	DURING CCUPIED BUILDING.
13	WATER HEATER TO BE REMOVED. RETURNE TO PLUMBING DRAWINGS FOR ADDITIONAL I	D TO OWNER I NFORMATION.	F NOT REUSED. REF
14	REMOVE EXISTING WALL FOR NEW DOOR/OF SURFACES TO RECIEVE NEW CONTRUCTION	Pening. Patch I.	I AND PREPARE
15	FIRE ALARM STROBE TO BE REMOVED. REFE DRAWINGS FOR ADDITIONAL INFORMATION.	ER TO SYSTEM	S AND ELECTRICAL
16	EXISTING RESTROOM FIXTURES AND PARTITE ENTIRETY - SEE PLUMBING DRAWINGS FOR	FIONS TO BE RI ADDITIONAL IN	EMOVED IN THEIR FORMATION - TYPIC
17	MILWORK TO BE REMOVED IN ITS ENTIRETY CONSTRUCTION - TYPICAL.	- PREPEARE S	URFACES FOR NEW
18	EXISTING MOVABLE WALL PANEL TO BE REM	IOVED IN THEI	R ENTIRETY - TYPICA
19	EXISTING RAIN LEADER - PROTECT FROM DA TYPICAL	AMAGE DURING	CONSTRUCTION -
20	EXISTING ELECTRICAL PANEL TO BE RELOCAD DRAWINGS FOR ADDITIONAL INFORMATION.	ATED. REFER T	O ELECTRICAL
21	EXISTING DRINKING FOUNTAIN TO BE REMO	VED IN THEIR E	ENTIRETY.
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22 REMOVE EXISTING FLOORING DOWN TO STRUCTURAL SLAB. PREPARE SURFACE AREA FOR NEW CONSTRUCTION - TYPICAL.

23 EXISTING STRUCTURAL COLUMNS TO REMAIN AND PROTECT FROM DAMAGE DURING CONSTRUCTION.

24 EXISTING FLOOR DRAIN TO BE CAP IN. REFER TO PLUMBING FOR ADDITIONAL INFORMATION.

25 EXISTING IDF ROOM TO REMAIN IN ITS LOCATION. EXISTING CABLE AND TRAYS TO BE PROTECT DURING CONSTRUCTION.

26 EXISTING FIRE ALARM TO BE REMOVE AND REINSTALLED, REFER TECHNOLOGY DRAWINGS

27 EXISTING LIGHTING, SPRINKLER HEAD AND CEILING TO REMAIN IN PLACE AND PROTECT FROM DAMAGE DURING CONSTRUCTION.

28 EXISTING DUCTWORK TO BE RELOCATED. REFER TO MECHANCAL DRAWINGS FOR ADDITIONAL INFORMATION.

29 PREPARE SLAB FOR RELOCATION OF HIGH DENSITY STORAGE SYSTEM IN THIS AREA. REFER TO THE FLOOR AND EQUIPMENT PLAN FOR MORE INFORMATION.

GENERAL DEMOLITION NOTES

- A DRAWINGS REPRESENT EXISTING CONDITIONS BASED ON LIMITED EXISTING AS-BUILT DRAWINGS AND SITE OBSERVATIONS. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATIONS OF ALL ACTUAL CONDITIONS AND DIMENSIONS THE CONTRACTOR WILL BE PRESUMED TO HAVE INSPECTED THE SITE AND TO HAVE READ AND BE THOROUGHLY FAMILIAR WITH THE CONSTRUCTION DOCUMENTS AND SPECIFICATIONS. THE FAILURE OR OMISSION OF ANY CONTRACTOR TO EXAMINE ANY FORM, INSTRUMENT OR DOCUMENT SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION IN RESPECT TO THIS PROJECT
- THIS SHEET INDICATED GERERALLY WHERE DEMOLITION OF EXISTING CONSTRUCTION IS TO OCCUR. THE DEMOLITION SHOWN ON THIS SHEET IS NOT INTENDED TO LIMIT OR FULLY DEFINE THE SCOPE OF ITEMS TO BE REMOVED, NOR IS IT INTENDED TO REPRESENT ALL EXISTING FEATURES. THE CONTRACTOF SHALL BE RESPONSIBLE FOR SURVEYING THE AREA OF DEMOLITION IN ORDER TO BECOME FAMILIAR WITH EXISTING CONSTRUCTION WHERE DEMOLITION IS TO OCCUR. THE CONTRACTOR IS TO NOTIFY THE OWNER IN WRITING OF ANY CONFLICTING CONDITIONS AND DISCREPANCIES PRIOR TO START OF
- DEMOLITION. D DEMOLITION DRAWINGS MAY NOT INDICATE ALL ITMES TO BE REMOVED OR TO REMAIN. COORDINATE DEMOLITION OF WALLS, EQUIPMENT, UTILITIES, ETC., AND
- ITEMS TO REMAIN WITH OTHER DISCIPLINES. CONTRACTOR SHALL VERIFY ALL UTILITIES (SHOWN OR NOT SHOWN ON CONSTRUCITON OR CUTTING INTO ANY WALL. PERMANENET PROCEDURES ARE TO BE MADE TO REROUTE OR BYPASS UTILITES TO AVOID DISRUPTION OR SURVEYING OF UTILITES CONTRACTOR SHALL NOT REQUEST ADDITIONAL CHARGES FOR SUCH UTILITES THAT ARE CLEARLY VISIBLE (WITHOUT DEMOLITION)
- F PRIOR TO START OF DEMOLITION THE CONTRACTOR SHALL SURVEY THE AREA OF DEMOLITION IN THE PRESENCE OF THE OWNER REPRESENTATIVE(S) TO IDENTIFY EXISTING ITEMS TO REMAIN, TO BE SALVAGE, TO BE REMOVED AND REISNTALLED DIRING CONSTRUCTION. DAMAGE OR OTHERWISE NOT IN "LIKE NEW" CONDITIONS, THOSE ITMES AND THEIR CONDITION ARE TO BE LISTED IN A "DAMAGE SURVEY" ACCEPTED BY BOTH OWNER AND CONTRACTOR. ANY ITEMS IDENTIFIED AS EXISTING TO REMAIN, TO BE SALVAGED, TO BE REMOVED AND REINSTALLED DURING CONSTRUCTION AND SHALL BE THE CONTRACTORS RESPONSIBILITY TO
- REPAIRS, OR REPLACE AT NO ADDITIONAL COST TO THE OWNER. G WHERE EXISTING WALL MOUNTED DEVICES, FIXTURES, EQUIPMENT, ETC., ARE SCHEDULE TO BE REMOVED, STORED AND RESINTALLED DURING CONSTRUCTION, CONTRACTOR SHALL COORDINATE STORAGE WITH OWNER AND SHALL PROTECT THOSE ITMES FROM DAMAGE DURING CONSTRUCTION. H CONTRACTOR IS TO PROVIDE ALL PERMITS AND COMPLY WITH ALL APPLICABLE
- ORDINANCES, REGULATIONS AND CODES IN THE REMOVAL AND DISPOSAL OF MATERIAL. DISPOSAL OF ALL RUBBISH AND DEBRIS IS TO BE IN AN ENVIRONMENTALLY SAFE MANNER IN ACCORDANCE WITH ALL APPLICABLE LOCAL CODES AND JURISDICTIONS.
- J CONTRACTOR SHALL NOT USE THE EXISTING ELEVATOR FOR THE REMOVAL OF CONSTRUCTION TRASH AND FOR CONSTRUCTION ITEMS. PRIOR TO START OF DEMOLITION THE CONTRACTOR SHALL SURVEY THE ELEVATOR IN THE PRESENCE OF THE OWNER REPRESENTATIVE(S) TO IDENTIFY EXISTING CONDITIONS DURING CONSTRUCTION. IF DAMAGE OR OTHERWISE NOT IN "LIKE NEW" CONDITIONS, THOSE ITMES AND THEIR CONDITION ARE TO BE LISTED IN A "DAMAGE SURVEY" ACCEPTED BY BOTH OWNER AND CONTRACTOR. ANY ITEMS IDENTIFIED AS DAMAGED DURING CONSTRUCTION AT THE EXISTING ELEVATOR, SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIRS, OR REPLACE AT NO ADDITIONAL

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COST TO THE OWNER.

<u>NOTE</u>: REFER TO ELECTRICAL AND TECHNOLOGY DRAWINGS FOR SCOPE OF WORK.

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REFLECTED CEILING KEYNOTES (#-) KEYNOTE NUMBER (NOT ALL NOTES APPLY TO SHEET)

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PROVIDE 24"x24" CEILING ACCESS PANELS AS REQUIRED PER OWNER, REFER TO OWNER FOR LOCATIONS 2 THE HATCHED AREA INDICATES AREAS NOT IN SCOPE OR WORK, NIC.

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3 OPERABLE PARTITION WALL - BASIS OF DESIGN BY HUFCOR UNISPAN - FURNISHED AND INSTALLED BY CONTRACTOR.

REFLECTED CEILING LEGEND

	2'x2' RECESSED DIRECT / INDIRECT LED TROFFER
	4' SUSPENDED DIRECT / INDIRECT LED LINEAR PENDANT
)[]	8' SUSPENDED DIRECT / INDIRECT LED LINEAR PENDANT
	4' RECESSED LINEAR LED DIRECT WALL WASH FIXTURE
۲	SPRINKLER HEAD
\bigcirc	WIRELESS ACCESS POINT
⊗	WALL MOUNTED EXIT SIGN LIGHT FIXTURE
×	CEILING MOUNTED EXIT SIGN LIGHT
<u>(F)</u>	WALL MOUNTED STROBE LIGHT
V F	WALL MOUNTED HORN STROBE LIGHT
\sum	HVAC EXHAUST FAN
\sum	HVAC SUPPLY DIFFUSER
	HVAC RETURN AIR DIFFUSER
	2x2 ACCESS PANEL
+++	2x2 CEILING GRID (ACP TYPE)
$ \begin{array}{c} \begin{array}{c} & & \\ & & \\ & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \end{array} , \begin{array}{c} & & \\ & & \\ \end{array} , \end{array} , \begin{array}{c} & & \\ \end{array} , \end{array} , \begin{array}{c} & & \\ \end{array} , \end{array} , \end{array} , \end{array} $, \end{array} , \end{array}	GYP. BD CEILING (GB TYPE)

REFLECTED CEILING GENERAL NOTES

- A CONTRACTOR TO PROTECT EXISTING MECHANICAL UNITS AND DUCTWORK TO REMAIN DURING EXTENT OF CONSTRUCTION. COORDINATE WITH ENGINEER
- DRAWINGS AND SPECIFICATION MANUAL. B EXISTING CEILING TO REMIAN, GC TO REPLACE CEILING TILES THAT ARE DAMAGED DURING CONSTRUCTION. MATCH EXISTING TILE.
- SPRINKLERS, EXIT SIGNS, AND SPEAKERS SHALL BE LOCATED IN ALIGNMENT W/ LIGHT FIXTURES AND OTHER CEILING ELEMENTS. WHERE THERE ARE NO LIGHT FIXTURES, AND/OR SPRINKLERS SHALL BE CENTERED IN CEILING TILE. SPRINKLERS SHALL BE FULLY CONCEALED WITH WHITE CAPS. CONTRACTOR TO COORDINATE.
- D G.C. TO COORDINATE THE ALIGNMENT OF THE CEILING GRID AND PARTITIONS. E ACCESS PANELS SHALL BE IDENTIFIED TO ARCHITECT PRIOR TO INSTALLATION. F COORDINATED WITH MECHANICAL UNITS, FIRE SPRINKLERS, STRUCTURAL BEAMS, AND LIGHT FIXTURES AGAINST EXISTING CONDITIONS. VERIFY THAT DIMENSIONS ARE CONSISTENT WITH REQUIREMENTS INDICATED IN THE DOCUMENTS. REFER ANY DIMENSIONAL INCONSISTENCIES TO THE ARCHITECT
- FOR RESOLUTION PRIOR TO THE START OF PARTITION CONSTRUCTION. I GC TO COORDINATE SECURITY ITEMS WITH OWNER.

	BEGGIAI HON	MODEL	in a dor no ronent
А	36" STRAIGHT GRAB BAR	B-5806 36W	BOBRICK WASHROOM EQUIPMENT, INC.
В	42" STRAIGHT GRAB BAR	B-5806 42W	BOBRICK WASHROOM EQUIPMENT, INC.
С	CHANNEL FRAME MIRROR 18 X 30	B-165 1830	BOBRICK WASHROOM EQUIPMENT, INC.
D	CHANNEL FRAME MIRROR 24 X 36	B-165 2436	BOBRICK WASHROOM EQUIPMENT, INC.
Е	CHANNEL FRAME MIRROR 24 X 60	B-165 2460	BOBRICK WASHROOM EQUIPMENT, INC.
F	RECESSED MULTI-ROLL TOILET TISSUE DISPENCER	B-4388	BOBRICK WASHROOM EQUIPMENT, INC.
G	RECESSED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE	B-4369	BOBRICK WASHROOM EQUIPMENT, INC.
Н	SURFACE MOUNTED SEAT COVER DISPENCER	B-4221	BOBRICK WASHROOM EQUIPMENT, INC.
J	SURFACE MOUNTED SOAP DISPENSER	B-2013	BOBRICK WASHROOM EQUIPMENT, INC.
К	RECESSED SANITARY NAPKIN DISPOSAL	B-4353	BOBRICK WASHROOM EQUIPMENT, INC.
М	HORIZONTAL RECESSED BABY CHANGING STATION - GREY INTERIOR	KB110-SSRE	BOBRICK WASHROOM EQUIPMENT, INC.
N	UTILITY SHELF WITH MOP/BROOM HOLDERS AND RAG HOOKS	B-239	BOBRICK WASHROOM EQUIPMENT, INC.

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OPANGE COUNTY
<u>GOVERNMENT</u> <u>FLORIDA</u>
Orange County Government
Capital Projects Division
Orange County Code Enforcement Office Renovations2450 West 33rd Street, Orlando, Florida 32839ALL REPRODUCTION AND INTELLECTUAL
Seal Maximiano Brito, RA, AIA FL Reg. No. AR0015108 BID DOCUMENTS NOT FOR CONSTRUCTION DATE SUBMISSION / REVISION NO.
RESTROOMS ENLARGED PLANS AND ELEVATIONSSCALE:AS INDICATEDDRAWN BY:MA/ACCHECK BY:AC/MBDATE:May 30, 2018
PROJECT NUMBER: 15012-0020

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

INTERIOR ELEVATION

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

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ACCESSIBILITY CODES FOR FINAL DESIGN.

SCALE: 3" = 1'-0"

NOT ALL ACCESSORIES MAY BE USED IN PROJECT; HALF-TONED/GREYED-OUT ITEMS ARE NOT USED IN PROJECT. **<u>NOTE</u>**:

TOILET ACCESSORIES

MARK	DESCRIPTION	MODEL	MANUFACTURER
Α	36" STRAIGHT GRAB BAR	B-5806 36W	BOBRICK WASHROOM EQUIPMENT, INC.
В	42" STRAIGHT GRAB BAR	B-5806 42W	BOBRICK WASHROOM EQUIPMENT, INC.
С	CHANNEL FRAME MIRROR 18 X 30	B-165 1830	BOBRICK WASHROOM EQUIPMENT, INC.
D	CHANNEL FRAME MIRROR 24 X 36	B-165 2436	BOBRICK WASHROOM EQUIPMENT, INC.
E	CHANNEL FRAME MIRROR 24 X 60	B-165 2460	BOBRICK WASHROOM EQUIPMENT, INC.
F	RECESSED MULTI-ROLL TOILET TISSUE DISPENCER	B-4388	BOBRICK WASHROOM EQUIPMENT, INC.
G	RECESSED PAPER TOWEL DISPENSER AND WASTE RECEPTACLE	B-4369	BOBRICK WASHROOM EQUIPMENT, INC.
Н	SURFACE MOUNTED SEAT COVER DISPENCER	B-4221	BOBRICK WASHROOM EQUIPMENT, INC.
J	SURFACE MOUNTED SOAP DISPENSER	B-2013	BOBRICK WASHROOM EQUIPMENT, INC.
K	RECESSED SANITARY NAPKIN DISPOSAL	B-4353	BOBRICK WASHROOM EQUIPMENT, INC.
М	HORIZONTAL RECESSED BABY CHANGING STATION - GREY INTERIOR	KB110-SSRE	BOBRICK WASHROOM EQUIPMENT, INC.
Ν	UTILITY SHELF WITH MOP/BROOM HOLDERS AND RAG HOOKS	B-239	BOBRICK WASHROOM EQUIPMENT, INC.

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LEVEL 02 12' - 10"

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COUNTERTOP FRAMING LAYOUT AT MEN RESTROOM

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SCALE: 1" = 1'-0"

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FLOOR DRAIN DETAIL

SCALE: 3" = 1'-0"

SEMI-RECESSED AED CABINET SCALE: 1 1/2" = 1'-0"

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	PT1 12 RB1		

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							EXISTING ST	RUCTURE OOR TILE
0								YL TILE
E								
						E1 601	LVT TO CE	RAMIC FLO
0							EXISTING ST	RUCTURE
С							ESD RUBBER TRANSITION CARPET AS S	TILE SCHEDULED
\bigcirc						C1 601	C	ARPET TO
С								
							EXISTING ST	RUCTURE NCRETE SLAB SCHEDULED
0								
В						<u>B1</u>	CAR	PET TO CC
					A	601		
0							EXISTING ST	KUCTURE ′L TILE
А								
						A1 601	CARPET T	O LVT TRA

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	FINISH SCHEDULE								
ROOM		WALL FINISH							
NUMBER	ROOM NAME	FLOOR FINISH	BASE FINISH	NORTH	SOUTH	EAST	WEST	CEILING FINISH	REMARKS
LEVEL 02									
210	LOBBY	LVT1	RB2	PT1	PT1	PT1	PT1	ACP1	
210A	EXIST STOR	ERT1	RB3	PT1	PT1	PT1	PT1	ACP1	
210B	EXIST STOR	ERT1	RB3	PT1	PT1	PT1	PT1	ACP1	
220	CORRIDOR	LVT1	RB2	PT1	PT1	PT1	PT1	ACP1	
221	WOMEN RESTROOM	CFT1	CTB1	PT1	PT1	PT1	PT1	ACP1	
222	JAN CL	EXPC	RB3	PT1	PT1	PT1	PT1	EXPOSED	
223	MEN RESTROOM	CFT1	CTB1	PT1	PT1	PT1	PT1	ACP1	
225	BREAK ROOM	LVT1	RB2	PT1	PT1	PT1	PT1	ACP1	
230	RECEPTION AREA	CPT1	RB1	PT1	PT1	PT1	PT1	ACP1	
231	PRINTING ROOM	LVT1	RB2	PT1	PT1	PT1	PT1	ACP1	
232	ASSISTANT MANAGER OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
234	MANAGER OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
235	OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
236A	CONFERENCE ROOM A	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
236B	CONFERENCE ROOM B	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
237	CORRIDOR	CPT1	RB1	PT1	PT1	PT1	PT1	ACP1	
240	ADMIN SUPPORT OPEN OFFICE AREA	CPT1	RB1	PT1	PT1	PT1	PT1	ACP1	
241	EXIST IDF RM	ERT1	RB3	PT1	PT1	PT1	PT1	ACP1	
242	PROGRAM COORD VENDOR SERVICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
242A	STOR RM	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
243	PROGRAM COORD SUPPORT SERVICES	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
243A	STOR CL	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
250	OPEN OFFICE AREA	CPT1	RB1	PT1	PT1	PT1	PT1	ACP1	
251	SENIOR INSPECTOR OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
251A	STOR CL	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
252	SENIOR INSPECTOR OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
253	SENIOR INSPECTOR OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
254	EXIST IDF RM	ERT1	RB2	PT1	PT1	PT1	PT1	ACP1	
255	SENIOR INSPECTOR OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	
256	CHIEF INSPECTOR OFFICE	CPT2	RB1	PT1	PT1	PT1	PT1	ACP1	

CARPET TO RUBBER

SCALE: 3" = 1'-0"

CARPET TO CONCRETE

SCALE: 3" = 1'-0"

FINISH SCHEDULE LIST

FINISHES LISTED BELOW ARE BASIS OF DESIGN, SUBSTITUTIONS MUST MATCH THE SELECTED COLOR WAY AND HAVE A SIMILAR PATTERN. ALL SUBSTITUTIONS MUST BE REVIEWED AND APPROVED BY ORANGE COUNTY CAPITAL PROJECTS AND ORANGE COUNTY PROCUREMENT

CARPET

(CPT2)

DIVISION.

(CPT1) MNF: STYLE: SIZE:

25cm x 1m HN820 i2 104235 EARTH GENERAL CARPET

ESD RUBBER TILE

MNF:

STYLE:

SIZE: COLOR:

NOTE:

LOCATION:

(ERT1)

(PL1)

(PL2)

(PL3)

MNF:

COLOR:

MNF:

COLOR:

MNF: COLOR:

NUMBER:

LOCATION: NOTES:

NUMBER:

LOCATION:

MNF: STYLE: SIZE:

SERIES:

COLOR:

(LVT1)

(REFER TO FLOOR PLAN FOR OVERALL DIRECTION)

METHOD: NON DIRECTIONAL

METHOD: ASHLAR

INTERFACE #1242202500 50cm x 50cm BERLIN i2 6710 LOAM LOCATION: CONFERENCE ROOM AND OFFICES

INTERFACE

#124980AK0H

CERAMIC WALL TILE

(CWT1)

CAESAR CONTRACT SOLUTIONS SLAB COLLECTION

CERAMIC FLOOR TILE (CFT1)

CAESAR CONTRACT SOLUTIONS WIDE COLLECTION WIDE STEEL

12"x24" LOCATION: RESTROOMS

CERAMIC TILE BASE

(CTB1)

MNF:

SERIES: COLOR: SIZE:

SCHLUTER SYSTEMS SCHLUTER-DILEX-EHK STAINLESS STEEL U9/09 TILE BASE AND WALL CORNERS

AT RESTROOMS

CERAMIC TILE TRIM

LOCATION:

SCHLUTER SYSTEMS SCHLUTER-DECO-SG SERIRES STAINLESS STEEL LOCATION: COUNTERTOP CORNERS AT RESTROOMS

CARPET TO LVT TRANSITION

SCALE: 3" = 1'-0"

LUXURY VINYL TILE

USF CONTRACT 50DLR6007 7" x 59" STRATUM EIRIS COLLECTION MORCHELLA LOCATION: PRINTING AND BREAK ROOM

> **ROPPE - Q6 QUICKSIX** ESD RUBBER 24"x24" TILE F407 TIERRA

IDF ROOMS RUBBER WELDING BEAD COLOR-194 BURNT UMBER

PLASTIC LAMINATE FORMICA

HARTH 5342-SP BREAK ROOM LOWER AND UPPPER CABINETS

FORMICA COLORADO SLATE SPARKLE 7014-42 BREAK ROOM COUNTERTOP EDGEBAND TO BE MATCH COLORADO SLATE SPARKLE

FORMICA ELEMENTAL OXIDE 6471-58 RESTROOM COUNTERTOP EDGEBAND TO MATCH ELEMENTAL OXIDE

FORMICA GRAPHITE 837-58 RESTROOM COUNTERTOP BOTTOM BASE

(RB1)

MNF: STYLE: COLOR: HEIGHT: LOCATION:

(RB3)

HEIGHT:

LOCATION:

MNF: STYLE: COLOR:

SHAW CONTRACT 148VS 00039 SHADOW 4" H USE WITH ERT1

SHERWIN WILLIAMS

SHERWIN WILLIAMS

SHERWIN WILLIAMS

SHERWIN WILLIAMS

GRAYS HARBOR

FOLKSTONE

EGGSHELL

SW6005

SW6236

EGGSHELL

MINDFULL GRAY

GENERAL LOCATION SEMI-GLOSS - AT RESTROOMS

FIRST STAR

EGGSHELL

SW7646

SW7016

SHAW CONTRACT

00039 SHADOW

USE WITH CARPET

CPT1 AND CPT2

SHAW CONTRACT

STRAIGHT

6" H

00760 CLAY

USE WITH LVT1

STRAIGHT

6" H

PAINT _____

(PT1) MNF: COLOR: NUMBER: FINISH: LOCATION:

(PT2) MNF: COLOR: NUMBER: FINISH: SEMI-GLOSS LOCATION: DOOR & FRAME

(PT3) MNF: COLOR: NUMBER: FINISH:

LOCATION: ACCENT (PT4) MNF:

COLOR: NUMBER: FINISH: EGGSHELI LOCATION: ACCENT

(PT5) MNF: COLOR: NUMBER:

SHERWIN WILLIAMS jHIGH REFLECTED WHITE SW7757 FINISH: EGGSHELL LOCATION: SOFFITS

ACOUSTICAL CEILING PANEL

(ACP1) MNF:

SERIES

STYLE:

SIZE: EDGE: COLOR: GRID: NOTE:

ARMSTRONG FINE FISSURED #1728 24" x 24" x 5/8" SQUARE LAY-IN WHITE 15/16" GENERAL CEILING USE

WINDOW TREATMENT

(WT1)

MNF: TYPE:

STYLE:

COLOR:

DRAPE, INC ROLLER SHADES WITH CABLE GUIDE

ASSEMBLY (MANUALLY OPERATED) SINGLE ROLLER, RECESSED MOUNT 00M166 LINEN/SABLE-COCOA M SCREEN CONVENTIONAL BY MERMET LOCATION: EXISTING EXTERIOR CURTAIN WALLS

TOILET COMPARTMENTS

(TC1)			
MNF: SERIE	A: S: C W BI	SI ACCURATE PARTITIONS OLOR-THRU PHENOLIC ITH OVERHEAD BRACING RUSHED STAINI ESS STEE	IN
COLO LOCA	R: G TION: W	RAY MIST #3450C OMEN RESTROOMS	-
(TC2)			
MNF: SERIE	S: C	SI ACCURATE PARTITIONS DLOR-THRU PHENOLIC ITH OVERHEAD BRACING	IN
COLO	BI R: BI	RUSHED STAINLESS STEE _ACK #2000C	L

BRUSHED STAINLESS STEEL BLACK #2000C MEN RESTROOMS LOCATION:

OPERABLE PARTITIONS

(OP1)

HUFCOR

MNF:	ΗL
SERIES:	UN
COLOR:	F٨
	M
POCKET DOC	R:T)
COLOR:	GF
FINISH:	SA
LOCATION:	CC

UNISPAN FABRIC - FUSION PATTERN 44-538 IETAL TRIM - LIGHT GREY TYPE 3

REY AME AS OPERABLE PARTITION FABRIC ATION: CONFERENC ROOM

4 0 5 0 6 0 7							
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					DOOR	SCHEDULE
					DO	OR
MARK	ROOM NUMBER	ROOM NAME	DOOR SIZE	THICK	MAT'L	FINISH
EVEL 02			L	L L		
221	221	WOMEN RESTROOM	36" x 84"	1 3/4"	SC	PNT
222	222	JAN CL	30"x 84"	1 3/4"	SC	PNT
223	223	MEN RESTROOM	36" x 84"	1 3/4"	SC	PNT
225	225	BREAK ROOM	36" x 84"	1 3/4"	SC	PNT
231	231	PRINTING ROOM	36" x 84"	1 3/4"	SC	PNT
232	232	ASSISTANT MANAGER OFFICE	36" x 84"	1 3/4"	SC	PNT
234	234	MANAGER OFFICE	36" x 84"	1 3/4"	SC	PNT
235	235	OFFICE	36" x 84"	1 3/4"	SC	PNT
236A	236A	CONFERENCE ROOM A	36" x 84"	1 3/4"	SC	PNT
236B	236B	CONFERENCE ROOM B	36" x 84"	1 3/4"	SC	PNT
241	241	EXIST IDF RM	36" x 84"	2"	SC	PNT
242	242	PROGRAM COORD VENDOR SERVICE	36" x 84"	1 3/4"	SC	PNT
242A	242A	STOR RM	36" x 84"	1 3/4"	SC	PNT
243	243	PROGRAM COORD SUPPORT SERVICES	36" x 84"	1 3/4"	SC	PNT
243A	243A	STOR CL	30"x 84"	1 3/4"	SC	PNT
251	251	SENIOR INSPECTOR OFFICE	36" x 84"	1 3/4"	SC	PNT
251A	251A	STOR CL	36" x 84"	1 3/4"	SC	PNT
252	252	SENIOR INSPECTOR OFFICE	36" x 84"	1 3/4"	SC	PNT
253	253	SENIOR INSPECTOR OFFICE	36" x 84"	1 3/4"	SC	PNT
254	254	EXIST IDF RM	36" x 84"	2"	SC	PNT
255	255	SENIOR INSPECTOR OFFICE	36" x 84"	1 3/4"	SC	PNT
256	256	CHIEF INSPECTOR OFFICE	36" x 84"	1 3/4"	SC	PNT
257A	257	ELECTRICAL CL	2 x 36" x 84"	2"	SC	PNT

DOOR MATERIAL ABBREVIATIONS

AL	ALUMINUM
DBL	DOUBLE DOORS
HM	HOLLOW METAL DOOR/ OR FRAME
Х	INDICATES LABEL, CLOSER OR ELECT. LOCK IS INCLUDED
N/A	NOT APPLICABLE
STL	STEEL

- STEEL SOLID CORE WOOD DOOR ACCESS CONTROL CARD READER
- GLAZING SOUND TRANSMITTING COEFFICIENT FACTORY FINISH STC FF

PNT PAINTED

SC

CR

GL

GLAZING MATERIAL TYPES

G1 1/2" CLEAR TEMPERED GLASS EXISTING GLAZING AT EXTERIOR CURTAIN WALLS

NOTE: WINDOW FILM TO BE INSTALLED AT THE EXISTING GLAZING AT EXTERIOR CURTAIN WALLS. BASIS OF DESIGN TO BE 3M SCOTCHSHIELD SAFETY AND SECURITY WINDOW FILM ULTRA NIGHT VISION SERIES -ULTRA PRESTIGE 50 - COMMERCIAL GRADE WITH ENERGY EFFICIENCY.

DOOR SCHEDULE NOTES

BRONZE.

ACCESS-CONTROLLED CARD READER AT THIS LOCATION; REFER TO ELECTRICAL / TECHNOLOGY DRAWINGS FOR ADDITIONAL INFORMATION 2. FIRE-RATED DOOR LOUVER WITH ADJUSTABLE Z-BLADE - COLOR

DOOR / HARDWARE GENERAL NOTES:

- A ALL DOORS SHALL COMPLY WITH THE CLEARANCES FOR APPROACHES PER "ADA" REQUIREMENTS B ALL HARDWARE SHALL BE UNLOCKED IN THE DIRECTION OF EGRESS, REGARDLESS OF OTHER LOCK FUNCTIONS. C ALL GLAZING SHALL BE SAFETY IMPACT GLASS TO COMPLY WITH FBC SECTION 2406.2 D CAULK DOOR JAMB AND HEADS WHERE GAPS EXCEEDS 1/16" TYPICAL. E DOORS SHALL OPERATE FREELY WITHOUT BINDING. F DOOR FRAMES SHALL BE SECURED RIGIDLY IN PLACE AND BRACED TO FLOOR AND STRUCTURE ABOVE TO PREVENT BREAK OUT TO PARTITIONS. G DOOR UNDERCUTS SHALL BE KEPT TO A MINIMAL DIMENSION AND SHALL BE UNIFORM THROUGHOUT PROJECT, U.N.O. INSTALLATION OF ALL DOORS AND HARDWARE SHALL MEET MIN. "ADA" REQUIREMENTS. IF ANY CONFLICTS ARISE, THE ITEM MUST BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO CONSTRUCTION. PROVIDE THREE JAMB ANCHORS AND ONE BASE ANCHOR PER JAMB AT GYPSUM WALLBOARD PARTITIONS, TYP. PROVIDE FRAME ROUGH OPENINGS AS RECOMMENDED BY FRAME MANUFACTURER. K PROVIDE STANDARD DOOR FRAME PROFILES AS REQUIRED TO MEET ADJACENT CONDITIONS. PROVIDE ANCHORS AND ACCESSORIES AS REQUIRED (REQD.) FOR CONDITIONS AS RECOMMENDED BY THE MANUFACTURER (MFR.) M ERECT ALL DOOR FRAMES AND ADJACENT WALLS TO CONFORM TO THE APPLICABLE PLAN CONFIGURATIONS. NOTIFY ARCHITECT OF ANY CONFLICTS PRIOR TO INSTALLATION OF DOOR FRAMES AND ADJACENT WALLS. N REFER TO FINISH SCHEDULE FOR ALL FINISH MATERIALS AND FINISH LOCATIONS P ALL SURFACES EXPOSED TO VIEW ARE TO BE PAINTED PER SPECIFICATIONS Q ALL DOORS TO BE 1 3/4' THICK UNLESS NOTED OTHERWISE R REFER TO SPECIFICATIONS FOR DOOR AND FRAME MATERIALS AND REQUIREMENTS
- S FIELD VERIFY ALL OPENING DIMENSIONS PRIOR TO WORK

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SPRINKLER SYSTEM IMPAIRMENT NOTES:

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- PRIOR TO REMOVING ANY FIRE PROTECTION SYSTEM FROM SERVICE THE FIRE PROTECTION CONTRACTOR SHALL NOTIFY THE OWNER, LOCAL FIRE DEPARTMENT AND CODE ENFORCEMENT
- DURING ANY FIRE PROTECTION SYSTEM OUTAGES THE BUILDING SHALL BE PROVIDED WITH A FIRE WATCH AS REQUIRED BY THE FIRE CODE OF FLORIDA. THE SOLE RESPONSIBILITY OF THE
- THE FIRE DEPARTMENT CONNECTION SHALL BE AFFIXED WITH A OUT OF SERVICE SIGN WHENEVER THE SPRINKLER SYSTEM MAIN CONTROL VALVE IS CLOSED. THE SIGN SHALL BE PROVIDED INSTALLED AND POLICED BY THE FIRE PROTECTION CONTRACTOR.
- THE SYSTEM IMPAIRMENT FOR THE RENOVATION SHALL BE CONDUCTED AS A PRE-PLANNED IMPAIRMENT. TO MINIMIZE THE IMPAIRMENT TIME ALL NECESSARY TOOLS AND MATERIALS SHALL BI ASSEMBLED ONSITE PRIOR TO REMOVING THE SYSTEM FROM SERVICE. WITHIN 24 HOURS OF RESTORING ANY FIRE PROTECTION SYSTEM TO SERVICE THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE IN WRITING TO THE OWNER, LOCAL FIRE DEPARTMENT AND CODE ENFORCEMENT OFFICIAL CERTIFICATION THAT THE FOLLOWING HAS BEEN IMPLEMENTED:
- THE IMPAIRMENT TAG HAS BEEN REMOVED THE OWNER AND OR OCCUPANT HAVE BEEN INSTRUCTED ON THE OPERATION OF THE SYSTEM.

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GENERAL NOTES

SPRINKLER SYSTEM GENERAL NOTES:

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- 1. SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND THE FIRE CODE OF FLORIDA. CONTRACTOR IS RESPONSIBLE FOR FINAL SPRINKLER SYSTEM LAYOUT. CONTRACTOR SHALL PROVIDE ALL MATERIALS REQUIRED FOR A FULLY OPERATIONAL SPRINKLER SYSTEM. DRAWINGS HEREIN REPRESENT A COORDINATED SPRINKLER LAYOUT. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH OTHER BUILDING
- SYSTEMS & DEVICES WHETHER SHOWN OR NOT. CONTRACTOR SHALL ENSURE EXISTING SYSTEM HYDRAULIC CALCULATIONS REMAIN UNALTERED BY WORK OF THIS SCOPE.
- SPRINKLER SYSTEM HYDRAULIC CALCULATIONS SHALL INCORPORATE A MINIMUM 10% SAFETY FACTOR. ALL SPRINKLERS IN AREAS WITH ACT SHALL BE MOUNTED CENTER OF TILE IN 2' x 2' GRIDS, AND CENTERED IN 1/2 OF TILE IN 2' x 4' GRIDS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR CEILING FINISHES/TYPES.
- SPRINKLERS SHALL BE QUICK RESPONSE TYPE UNLESS OTHERWISE NOTED. ALL PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE APPROPRIATELY FIRE STOPPED.

SYMBOL LEGEND

PENDENT SPRINKLER SIDEWALL SPRINKLER

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GENERAL NOTES

- 1. ALL PIPE DIMENSIONS ARE NOMINAL.
- ALL WORK SHALL CONFORM TO ALL APPLICABLE RULES, REGULATIONS, AND LOCAL CODES.
- CONTRACTOR SHALL FIELD VERIFY ALL PIPE LOCATIONS AND DIMENSIONS INDICATED ON PLANS.
- CONTRACTOR SHALL PERFORM NECESSARY CUTTING AND PATCHING REQUIRED TO INCORPORATE WORK, UNLESS NOTED OR SHOWN OTHERWISE ON PLANS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL PENETRATIONS RELATED TO PLUMBING SCOPE.
- ITEMS OF SPECIFIC MANUFACTURERS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PRINTED INSTRUCTIONS AND/OR MANUFACTURERS REPRESENTATIVE'S DIRECTIONS. CONTRACTOR TO INSTALL ALL NECESSARY SUPPORTS, HANGERS, BRACES, STRUTS, ETC. WHETHER SHOWN OR NOT, TO PROVIDE A COMPLETE, SAFE AND DURABLE SYSTEM.
- COORDINATE WORK OF THIS CONTRACT WITH OTHER CONTRACTORS AND EXISTING CONDITIONS.
- 9. PROVIDE FITTINGS, ELEVATION CHANGES, TRANSITIONS AND OFFSETS REQUIRED, WHETHER SHOWN OR NOT, TO AVOID CONFLICTS WITH WORK OF OTHER TRADES AND EXISTING CONDITIONS.

SYMBOL LEGEND

$\stackrel{\backslash \! \! /}{\curvearrowright}$	AIR VENT	\bigcirc	PRESSURE GAUGE
	CHECK VALVE		PUMP
\bowtie	ISOLATION VALVE		STRAINER
\bullet	CONNECT TO EXISTING		THERMOMETER
<u>(</u>	PIPE BREAK		THERMOSTATIC MIXING VALVE
<u> </u>	PIPE DOWN	$\langle \! \langle \! \rangle \rangle$	TEMPERATURE & PRESSURE RELIEVE VALVE
\bigcirc —	PIPE UP	ı ı	UNION

ABBREVIATIONS

- AFF ABOVE FINISHED FLOOR
- BOP BOTTOM OF PIPE
- DCW DOMESTIC COLD WATER
- DHW DOMESTIC HOT WATER
- EX EXISTING
- SAN SANITARY
- V VENT
- W WASTE

PLUMBING SCHEDULES

			BASIS OF DESIC	GN (OR APPROVED EQUAL)			
MARK	QTY	DESCRIPTION	MANUFACTURER	MODEL	CW CONN (IN)	HW CONN (IN)	WASTE CONN
EWC-1	1	ELECTRIC WATER COOLER	ELKAY	ERFP28FK	1/2	-	1-1/2
FCO-1	1	FLOOR CLEANOUT	WATTS	CO-1204-R	-	-	4
FD-1	8	3" FLOOR DRAIN WITH STRAINER	ZURN INDUSTRIES	Z415-3IC-6B	-	-	3
LAV-1	5	COUNTER-MOUNTED LAVATORY	SLOAN	SS-3002	1/2	1/2	2
LAV-2	2	WALL-MOUNTED LAVATORY	AMERICAN STANDARD	DECORUM	1/2	1/2	2
MB-1	1	MOP BASIN	FLORESTONE	MODEL 96	1/2	1/2	3
SK-1	1	COUNTER-MOUNTED SINK	ELKAY	LR2522	1/2	1/2	2
UR-1	1	0.5/1.0 GPF URINAL	AMERICAN STANDARD	WASHBROOK FLOWISE	3/4	-	2
WC-1	3	1.6 GPF WATER CLOSET	AMERICAN STANDARD	MILLENIUM FLOWISE	1-1/4	-	-
WC-2	2	1.6 GPF ADA WATER CLOSET	AMERICAN STANDARD	MILLENIUM FLOWISE	1-1/4	-	-

MARŁ	K MANUFACTURER	DESCRIPTIC	ON	CAPACI	TY (GAL)	VOLTAGE	POWER (V
EWH-	1 RHEEM	TANK WATER HE	EATER	1	10	277	2000
		EXPANSION	N TANK SCHEDULE				
MARK	DESCRIPTION	TANK VOLUME (GAL)	ACCEPTANCE	E VOLUME (GAL)	MANUFACTURER	MODEL	
EXP-1	4.4 GAL EXPANSION TANK	4.4		3.2	AMTROL	THERM-X-TROL ST	r - 12
		PUMP SCHEDULE					
MARK	ΜΔΝΙ ΙΕΔΟΤΙ ΙΒΕΒ		MODEL		HEAD (ET)	_	
	TACO		IL-006	4	6	_	

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WALL -

- CHROME 1/4 TURN STOP

- CHROME ESCUTCHEON

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PIPE HANGER DETAIL

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DOMESTIC WATER HEATER DETAIL SCALE: NOT TO

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4 DOMESTIC PLUMBING RISER SCALE: NOT TO SCALE

3 SANITARY PLUMBING RISER SCALE: NOT TO SCALE

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CUH

CABINET UNIT HEATER

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FIL

FILTER

ABBR	EVIATIONS
AMP	AMPERES
AAD	AUTOMATIC AIR E

	AAD	AUTOMATIC AIR DAMPER	dB	DECIBELS	FSD	COMBINATION FIRE/SMOKE DAMPER
	ACCU	AIR COOLED CONDENSING UNIT	DB	DRY BULB TEMPERATURE	FMS	FLOW MEASURING STATION
	ACU	AIR CONDITIONING UNIT	DC	DUST COLLECTOR	FPM	FEET PER MINUTE
	ACV	AIR CONTROL VALVE	DIA	DIAMETER	FT	FEET
	AFF	ABOVE FINISHED FLOOR	DN	DOWN	GAL	GALLONS
	AHU	AIR HANDLING UNIT	DP	DEWPOINT TEMPERATURE	GC	GENERAL CONTRACTOR
	APD	AIR PRESSURE DROP	DSD	DUCT SMOKE DETECTOR	GPM	GALLONS PER MINUTE
	AS	AIR SEPARATOR	DWH	DOMESTIC WATER HEATER	GR	GRAINS
	В	BOILER	DX	DIRECT EXPANSION	HD	HEAD
	BD	BYPASS DAMPER	EAT	ENTERING AIR TEMPERATURE	HP	HORSEPOWER
	BDD	BACK DRAFT DAMPER	EC	EXPANSION COMPENSATOR	HPC	HIGH PRESSURE CONDENSATE
	BHP	BRAKE HORSE POWER	EDB	ENTERING DRY BULB TEMPERATURE	HPS	HIGH PRESSURE STEAM
	BOD	BOTTOM OF DUCT	EDH	ELECTRIC DUCT HEATER	HR	HUMIDITY RATIO, HOUR
	ВТ	BUFFER TANK	EF	EXHAUST FAN	HRU	HEAT RECOVERY UNIT
	BTU	BRITISH THERMAL UNIT	EFF	EFFICIENCY	HUM	HUMIDIFIER
	BTUH	BRITISH THERMAL UNIT PER HOUR	ENC	ENCLOSURE	HWC	HOT WATER COIL
	С	COMMON	ERU	ENERGY RECOVERY UNIT	HWS	HOT WATER SUPPLY
	CCU	CEILING CASSETTE UNIT	ESP	EXTERNAL STATIC PRESSURE	HWR	HOT WATER RETURN
	CD	COLD CONDENSATE DRAIN	ET	EXPANSION TANK	HX	HEAT EXCHANGER
	CFM	CUBIC FEET PER MINUTE	EWB	ENTERING WET BULB TEMPERATURE	HZ	HERTZ
	СН	CHILLER	EWT	ENTERING WATER TEMPERATURE	IN	INCH
	CHW	CHILLED WATER	EXH	EXHAUST AIR	IND	INDUCTION UNIT
	CGR	CHILLED GLYCOL RETURN	EXIST	EXISTING	KW	KILOWATT
	CGS	CHILLED GLYCOL SUPPLY	F	FAN	LAT	LEAVING AIR TEMPERATURE
	CWS	CHILLED WATER SUPPLY	°F	FAHRENHEIT	LB	POUND
	CWR	CHILLED WATER RETURN	F&T	FLOAT AND THERMOSTATIC TRAP		
	CO	CLEANOUT	FC	FLEXIBLE CONNECTION		
	CONV	CONVECTOR	FCU	FAN COIL UNIT		
	CP	CONDENSATE PUMP	FD	FIRE DAMPER		
	СТ	COOLING TOWER				

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SUPPLY AIR

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	STWIDOLS)	
	GENERAL		
		RETURN	I WATER
		RETURN	I WATER
		REMOV	ALS
		DISCON	INECT FROM EXISTING
ACITY	\bigcirc	CONNE	CT TO EXISTING
	\bigcirc	TEMPE	RATURE SENSOR WITH LOCKING GUARD
	P	PRESS	URE SENSOR
/ENT	Μ	DAMPE	R MOTOR
	- /~	DIRECT	ION OF AIRFLOW
٨D	DUCTW	ORK	
TY		RETURN	IDIFFUSER
SURE		SUPPLY	DIFFUSER
		LINEAR	DIFFUSER
		SQUARE	TO ROUND DUCT TRANSITION
MF		SQUARE	E MAIN TO ROUND BRANCH TAKE-OFF
	FC	FLEXIBL	E DUCT CONNECTOR
		POSITIV	ELY PRESSURIZED DUCT OUT OF THE PLA
		POSITIV	ELY PRESSURIZED DUCT INTO THE PLANE
		NEGATI	VELY PRESSURIZED DUCT OUT OF THE PL
		NEGATI	VELY PRESSURIZED DUCT INTO THE PLAN
TURE		SQUARE	ELBOW WITH TURNING VANES
IT		MANUAL	_ VOLUME DAMPER
ЭН	AAD		
	► +	AUTOW/	
DROP	TYPE NECH CFM (TYPI	<u>(SIZE</u> CAL OF)	DIFFUSER DESIGNATION (SEE DIFFUSER
1			UNIT WITH HEATING AND COOLING
		HEATING	
	UNIT MAX. CFM		UNIT WITH AIR FLOW
	UNIT		UNIT WITH HEATING OR COOLING
	UNIT		GENERAL EQUIPMENT DESIGNATION
	(#)		KEYNOTE
	G		FIRE DAMPER

ENLARGED PLAN & DETAIL CALL OUT

VIEW SHEET

LDB	LEAVING DRY BULB TEMPERATURE	SA
LPC	LOW PRESSURE CONDENSATE	SF
LPS	LOW PRESSURE STEAM	SS
LV	LOUVER	SD
LWB	LEAVING WET BULB	SH
LWT	LEAVING WATER TEMPERATURE	SP
MAX	MAXIMUM	SQ
MAU	MAKEUP AIR UNIT	SR
MBH	1000 BTUH	TD
MCA	MINIMUM CIRCUIT AMPACITY	TD
MIN	MINIMUM	ΤG
MOP	MAXIMUM OVERCURRENT PROTECTION	TH
MV	MANUAL VENT	TSF
NC	NORMALLY CLOSED	TYF
NIC	NOT IN CONTRACT	UV
NO	NORMALLY OPEN, NUMBER	V
OA	OUTSIDE AIR	٧A
Р	PUMP	VD
PD	PRESSURE DROP	VIF
PG	PROPYLENE GLYCOL	VP
PH	PHASE	VS
PSI	POUNDS PER SQUARE INCH	UH
RA	RETURN AIR	WB
RH	RELATIVE HUMIDITY	WC
RHC	REHEAT COIL	WF
RPM	REVOLUTION PER MINUTE	WO
RTU	ROOF TOP UNIT	WF
		WF
		W٧

SUPPLY FAN
SOLIDS SEPARATOR
SMOKE DAMPER
SENSIBLE HEAT CAPACITY
STATIC PRESSURE
SQUARE
STATIONARY ROOF VENT
TRIPLE DUTY VALVE
TOTAL DYNAMIC HEAD
TRANSFER GRILLE
TOTAL HEAT CAPACITY
TOTAL STATIC PRESSURE
TYPICAL
UNIT VENTILATOR
VOLT
VARIABLE AIR VOLUME
VOLUME DAMPER
VERIFY IN FIELD
VACUUM PUMP
VARIABLE SPEED DRIVE
UNIT HEATER
WET BULB TEMPERATURE
WALL CASSETTE UNIT
WATER FLOW SWITCH
WATER GAUGE
WALL HEATER
WATER PRESSURE DROP
WELDED WIRE MESH
ZONE DAMPER

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- **GENERAL NOTES:**
- 1. ALL WORK SHALL CONFORM TO ALL APPLICABLE RULES, REGULATIONS AND CODES, INCLUDING, BUT NOT LIMITED TO FLORIDA ENERGY CODE, 2017 ED., FLORIDA BUILDING CODE, 2017 ED. AND OSHA.
- FIELD VERIFY ALL DIMENSIONS PRIOR TO DUCTWORK FABRICATION OR ANY OTHER MECHANICAL WORK. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT, PIPING, DUCTWORK, AND PADS WITH OTHER CONTRACTORS. PROVIDE FITTINGS, ELEVATION CHANGES, TRANSITIONS, AND OFFSETS REQUIRED, WHETHER SHOWN OR NOT, TO AVOID CONFLICTS WITH WORK OF OTHER CONTRACTS.
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL HVAC PENETRATIONS (PIPING, DUCTWORK, ETC) IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE AND WHERE SHOWN OR SPECIFIED.
- 4. ITEMS OF SPECIFIC MANUFACTURER'S SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S REPRESENTATIVES DIRECTIONS.
- 5. MECHANICAL CONTRACTOR TO INSTALL ALL NECESSARY STIFFENERS, BRACES, STRUTS, ETC, WHETHER SHOWN OR NOT, TO PROVIDE A COMPLETE, SAFE, AND DURABLE SYSTEM.
- 6. DIMENSIONS SHOWN "AFF" INDICATE THE ACTUAL CLEAR DIMENSIONS FROM THE BOTTOM OF THE UNIT TO THE FINISHED FLOOR ELEVATION; UNLESS INDICATED OTHERWISE.
- 7. SUPPORT AND EQUIPMENT DETAILS MAY VARY TO SUIT EQUIPMENT AND PARTS SUPPLIED.
- 8. WELD ALL STEEL ANGLE JOINTS UNLESS OTHERWISE SHOWN.
- 9. PROVIDE NECESSARY BY-PASSES AND BALANCING MEANS AS REQUIRED TO ASSURE PROPER SYSTEM OPERATION.
- 10. ALL DUCT DIMENSIONS SHOWN ARE "SIDE SEEN" BY "SIDE NOT SEEN" AND ARE THE CLEAR INSIDE DIMENSIONS UNLESS OTHERWISE NOTED.
- 11. PROVIDE ACCESS DOORS AND CLEARANCES FOR EASY ACCESS TO ALL FIRE DAMPERS, SMOKE DAMPERS, CONTROL DAMPERS, LOUVERS, FILTERS, COILS, AND FANS.
- 12. BRANCH DUCTS TO REGISTER SHALL BE THE SAME SIZE AS REGISTER UNLESS INDICATED OTHERWISE.
- 13. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, FOR PRECISE LOCATION OF DIFFUSERS AND REGISTERS.
- 14. PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH TAKE-OFFS AND WHERE SHOWN. WHERE DIFFUSER BALANCING DAMPER IS INACCESSIBLE, PROVIDE A CONCEALED REMOTE OPERATOR SIMILAR TO YOUNG REGULATOR 270-301 BESIDE DIFFUSER/GRILLE.
- 15. PROVIDE ALL CONTROL AND INTERLOCK WIRING REQUIRED OR SPECIFIED THAT IS NOT PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 16. COORDINATE WITH ELECTRICAL CONTRACTOR AND FIRE PROTECTION CONTRACTOR REGARDING THE RESPONSIBILITIES FOR SUPPLYING, INSTALLING AND WIRING OF HVAC-RELATED DISCONNECT SWITCHES, STARTERS, SAFETY INTERLOCKS, EMERGENCY SHUTDOWN AND WIRING.
- 17. WORK ON M-SERIES DRAWINGS IS BY THE MECHANICAL CONTRACTOR (MC) UNLESS OTHERWISE NOTED.
- 18. VERIFY ALL LOCATIONS, DIMENSIONS, EQUIPMENT ARRANGEMENTS, CLEARANCES AND ELECTRICAL CHARACTERISTICS IN THE FIELD PRIOR TO BID. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. 19. PRIOR TO CUTTING THROUGH FLOORS AND WALLS THE CONTRACTOR SHALL VERIFY THE
- LOCATIONS OF ALL STRUCTURAL MEMBERS, JOISTS, AND OR COLUMNS. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. DO NOT CUT ANY STRUCTURAL MEMBERS UNLESS SPECIFICALLY DIRECTED TO DO SO.
- 20. THE MECHANICAL CONTRACTOR SHALL REMOVE DUCTWORK BACK TO A POINT WHICH WILL ALLOW THE INSTALLATION OF SUPPORT STEEL THAT IS REQUIRED / RELATED TO THE HVAC EQUIPMENT (IE RTU INSTALLATION). THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR IN THE LOCATIONS WHICH WILL REQUIRE MECHANICAL SUPPORT STEEL.
- 21. ALL EXISTING TO REMAIN DIFFUSERS AND DUCT SYSTEMS TO BE REBALANCED TO CFM INDICATED
- 22. PATCH AND SEAL DUCT WHERE BRANCHES / TAKEOFFS HAVE BEEN REMOVED AND NO NEW CONNECTION IS NEEDED.
- 23. CAP AND SEAL PIPING WHERE BRANCHES / TAKEOFFS HAVE BEEN REMOVED AND NO NEW CONNECTION IS NEEDED.
- 24. EXISTING BUILDING BAS (BUILDING AUTOMATED SYSTEM) CONTROLS ARE OPERATIONAL AND ACTIVE. CONTRACTOR TO MAIN WORKING CONDITION AND RETURN AT EXISTING OR BETTER OPERATIONAL STATE. CONTRACTOR IS RESPONSIBLE FOR THE OPERATION OF THE SYSTEM AND ANY DAMAGE TO THE EQUIPMENT DURING CONSTRUCTION; INCLUDING ALL EXISTING LOW/HIGH VOLTAGE WIRING. ALL NEW BAS CONTROLS SHALL ADHERE TO LOCAL COUNTIES STANDARDS & SPECIFICATIONS.
- 25. TEST, ADJUST, AND BALANCE ALL NEW/AFFECTED HVAC EQUIPMENT. NOTE: CONTRACTOR SHALL PROVIDE A COMPLETE TEST AND BALANCE FOR ALL UNITS BEING REPLACED OR MODIFIED TO DETERMINE AIR FLOW RATES.

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

GENERAL DEMOLITION NOTES:

1. COORDINATE DEMOLITION WITH OTHER CONTRACTORS.

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2. CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH OCCUPIED BUILDING AREAS. SERVICE TO OTHER PARTS OF BUILDING SHALL REMAIN ACTIVE.

3. DISCONNECT, CAP, AND IDENTIFY DESIGNATED UTILITIES WITHIN DEMOLITION AREAS.

4. DEMOLISH IN AN ORDERLY AND CAREFUL MANNER, PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS AND PARTITIONS TO REMAIN. 5. EXCEPT WHERE NOTED OTHERWISE, REMOVE DEMOLISHED MATERIALS FROM SITE. DO NOT DISPOSE OF ANY MATERIAL ON SITE.

6.REMOVE DEMOLISHED MATERIAL FROM SITE AS WORK PROGRESSES. UPON COMPLETION OF WORK LEAVE AREAS IN CLEAN CONDITION.

7. COMPLETELY REMOVE ALL PIPING, DUCTWORK, HANGERS, ETC..

8. PROVIDE REINSULATION TO EXISTING DISTRIBUTION AND SERVICES SCHEDULED TO REMAIN IN USE.

9. DEMOLITION SHALL INCLUDE REMOVAL OF ALL STRAPS, HANGERS, CLAMPS, CHANNEL, AND OTHER DEVICES USED FOR SUPPORTING EQUIPMENT.

10. DRAIN, VENT, OR DISCHARGE MECHANICAL SYSTEMS PRIOR TO DISASSEMBLY. 11. IN MECHANICAL SYSTEMS BEING REMOVED, BLANK OFF, PLUG, OR CAP ALL BRANCH LINES (DUCTWORK OR PIPING) SCHEDULED FOR DEMOLITION WHERE THEY TIE INTO MAIN LINES TO REMAIN.

12. DEMOLITION INCLUDES REMOVAL OF EQUIPMENT, SELECTED DUCTWORK, PIPING, ECT... THE DEMOLITION DRAWINGS SHOW THE GENERAL SCOPE OF ITEMS TO BE REMOVED. IT IS THE MECHANICAL CONTRACTORS RESPONSIBILITY TO REMOVE ALL ASSOCIATED EQUIPMENT AND MATERIALS THAT ARE NOT SPECIFICALLY IDENTIFIED TO BE REUSED, TO PRODUCE A CLEAN AND WORKABLE SYSTEM.

13. REMOVE ALL OBSOLETE, FREE HANGING AND OPEN OR DEAD ENDED AIR, GLYCOL PIPING OR DUCT. 14. THE MECHANICAL DRAWINGS ARE DIAGRAMMATICAL. IT IS NOT POSSIBLE OR THE

INTENT TO SHOW ALL PIECES OF THE SYSTEMS BEING REMOVED AND/OR INSTALLED UNDER THE CONTRACT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE A COMPLETE, RELIABLE AND WORKING SYSTEM. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO DEMOLISH ALL MATERIALS ASSOCIATED TO REMOVALS TO PROVIDE A "LIKE NEW" APPEARANCE WITHIN THE SPACES (IE NO HANGARS, TUBING

15.ALL BUILDING AUTOMATED SYSTEM COMMUNICATIONS/CONTROL WIRES TO BE REMOVED BY JOHNSON CONTROLS INC. COORDINATE WITH OWNER DURING DEMOLITION.

KEY NOTES:

ETC. ABANDONED IN PLACE UNLESS DIRECTED TO DO SO).

- EXISTING DUCTWORK AND FIRE DAMPER SERVING ELECTRICAL ROOM TO BE DEMOLISHED. SEE REFERENCE PHOTOS 1&2, THIS SHEET FOR REFERENCE.
- 2 EXISTING EXHAUST FAN "EF-23", EXHAUST GRILLE, THERMOSTAT, DUCTWORK AND FIRE DAMPER TO REMAIN.

MAIN LINES TO REMAIN.

GENERAL DEMOLITION NOTES:

1. COORDINATE DEMOLITION WITH OTHER CONTRACTORS.

2. CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH OCCUPIED BUILDING AREAS. SERVICE TO OTHER PARTS OF BUILDING SHALL REMAIN ACTIVE.

3. DISCONNECT, CAP, AND IDENTIFY DESIGNATED UTILITIES WITHIN DEMOLITION AREAS.

4. DEMOLISH IN AN ORDERLY AND CAREFUL MANNER, PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS AND PARTITIONS TO REMAIN.

5. EXCEPT WHERE NOTED OTHERWISE, REMOVE DEMOLISHED MATERIALS FROM SITE. DO NOT DISPOSE OF ANY MATERIAL ON SITE.

6.REMOVE DEMOLISHED MATERIAL FROM SITE AS WORK PROGRESSES. UPON COMPLETION OF WORK LEAVE AREAS IN CLEAN CONDITION.

7. COMPLETELY REMOVE ALL PIPING, DUCTWORK, HANGERS, ETC..

8. PROVIDE REINSULATION TO EXISTING DISTRIBUTION AND SERVICES SCHEDULED TO REMAIN IN USE.

9. DEMOLITION SHALL INCLUDE REMOVAL OF ALL STRAPS, HANGERS, CLAMPS, CHANNEL, AND OTHER DEVICES USED FOR SUPPORTING EQUIPMENT.

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15.ALL BUILDING AUTOMATED SYSTEM COMMUNICATIONS/CONTROL WIRES TO BE REMOVED BY JOHNSON CONTROLS INC. COORDINATE WITH OWNER DURING DEMOLITION.

KEY NOTES:

- DEMOLISH EXISTING DUCTWORK, AIR TERMINALS AND MECHANICAL EQUIPMENT TO EXTENTS SHOWN UNLESS OTHERWISE NOTED.
- 2 EXISTING VAV UNIT TO BE RELOCATED.
- $\overline{3}$ EXISTING THERMOSTAT TO BE RELOCATED.
- $\langle 4 \rangle$ EXISTING THERMOSTAT TO BE REMOVED.
- $\overline{5}$ EXISTING FIRE DAMPER/ FIRE-SMOKE DAMPER TO BE REMOVED.
- 6 REMOVE EXISTING TRANSFER GRILLE AT LOCATION SHOWN.
- $\overline{7}$ EXISTING LINEAR DIFFUSER TO BE RELOCATED.
- 8 EXISTING DUCTWORK AND MECHANICAL EQUIPMENT TO BE RELOCATED.
- (9) EXISTING RETURN GRILLE TO BE RELOCATED.

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1. REFER TO M-100 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES. 2. CONTRACTOR SHALL COORDINATE DUCT ROUTING WITH STRUCTURAL MEMBERS. 3. COORDINATE DESTRUCTIVE DEMOLITION, IF REQUIRED, WITH OWNER. 4. FOR ALL DUCTWORK TURNS, PROVIDE RADIUS ELBOWS. IF IMPEDED BY SPACE CONSTRAINTS, MILTERED ELBOWS WITH TURNING VANES MAY BE USED. 5. CONTRACTOR SHALL OPERATE EXISTING FIRE DAMPERS SHOWN AND REPLACE FUSIBLE LINKS. 6. CONTRACTOR SHALL REBALANCE ALL EXISTING SUPPLY DIFFUSERS TO CFM VALUES INDICATED.

7. CONTRACTOR SHALL REBALANCE EXISTING VAV BOXES TO VALUES INDICATED. SEE M-601 FOR EXISTING VAV SCHEDULES.

KEY NOTES:

- 1 NEW 8X8 SUPPLY DUCTWORK OF OFF EXISTING SUPPLY DUCTWORK. COORDINATE WALL PENETRATION WITH NEW ELECTRICAL EQUIPMENT LOCATIONS.
- 2 NEW FIRE DAMPER SIMILAR TO RUSKIN "DFD35" OR EQUAL. FIRE DAMPER TO BE MAINTAINED THROUGH SIDEWALL GRILLE.
- BALANCE EXHAUST FAN "EF-23" TO ORIGINAL AIRFLOW OF 375 CFM.

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Orange County Code Enforcement Office Renovations 2450 West 33rd Street,
ALL REPRODUCTION AND INTELLECTUAL
Seal 02/13/18
MATTHEW P. MCQUINN 72488
BID DOCUMENTS
DATE SUBMISSION / REVISION NO.
FIRST FLOOR HVAC NEW WORK PLAN
SCALE: AS INDICATED
CHECK BY: M. MCQUINN DATE: 05/30/2018
PROJECT NUMBER: 15012-0011
M-101

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INDICATED. SEE M-601 FOR EXISTING VAV SCHEDULES.

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1. REFER TO M-100 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES. 2. CONTRACTOR SHALL COORDINATE DUCT ROUTING WITH STRUCTURAL MEMBERS. 3. COORDINATE DESTRUCTIVE DEMOLITION, IF REQUIRED, WITH OWNER. 4. FOR ALL DUCTWORK TURNS, PROVIDE RADIUS ELBOWS. IF IMPEDED BY SPACE CONSTRAINTS, MILTERED ELBOWS WITH TURNING VANES MAY BE USED. 5. CONTRACTOR SHALL OPERATE EXISTING FIRE DAMPERS SHOWN AND REPLACE FUSIBLE LINKS. 6. CONTRACTOR SHALL REBALANCE ALL EXISTING SUPPLY DIFFUSERS TO CFM VALUES INDICATED. 7. CONTRACTOR SHALL REBALANCE EXISTING VAV BOXES TO VALUES

KEY NOTES:

- PROVIDE AND INSTALL NEW VAV TERMINAL UNIT AT LOCATION SHOWN. CONTRACTOR SHALL MAINTAIN MANUFACTUER AND N.E.C. REQUIRED CLEARANCES.
- 2 RELOCATE EXISTING VAV TERMINAL UNIT TO LOCATION SHOWN. CONTRACTOR SHALL MAINTAIN MANUFACTUER AND N.E.C. REQUIRED CLEARANCES. CONTRACTOR TO ENSURE VAV IS IN GOOD WORKING ORDER.
- 3 EXISTING MECHANICAL EQUIPMENT AND DUCTWORK TO BE RELOCATED AT LOCATION SHOWN. REBALANCE AIR TERMINALS TO CFM VALUES INDICATED.
- 4 OFFSET SUPPLY DUCTWORK AT LOCATION SHOWN TO AVOID CLASHES WITH NEW ROOM PARTITION COMPONENTS AND STRUCTURAL MEMBERS.

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GENERAL NOTES:

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- 1. REFER TO M-100 FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES.
- 2. COORDINATE DEMOLITION WITH OTHER CONTRACTORS. 5. CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH OCCUPIED
- BUILDING AREAS. SERVICE TO OTHER PARTS OF BUILDING SHALL REMAIN ACTIVE.
- 4. DISCONNECT, CAP, AND IDENTIFY DESIGNATED UTILITIES WITHIN DEMOLITION AREAS.
- 5. DEMOLISH IN AN ORDERLY AND CAREFUL MANNER, PROTECT EXISTING SUPPORTING STRUCTURAL MEMBERS AND PARTITIONS TO REMAIN.
- 6. EXCEPT WHERE NOTED OTHERWISE, REMOVE DEMOLISHED MATERIALS FROM SITE. DO NOT DISPOSE OF ANY MATERIAL ON SITE.
- 7.REMOVE DEMOLISHED MATERIAL FROM SITE AS WORK PROGRESSES. UPON COMPLETION OF WORK LEAVE AREAS IN CLEAN CONDITION.
- 8. COMPLETELY REMOVE ALL PIPING, DUCTWORK, HANGERS, ETC.. 9. PROVIDE REINSULATION TO EXISTING DISTRIBUTION AND SERVICES
- SCHEDULED TO REMAIN IN USE. 10. DEMOLITION SHALL INCLUDE REMOVAL OF ALL STRAPS, HANGERS, CLAMPS,
- CHANNEL, AND OTHER DEVICES USED FOR SUPPORTING EQUIPMENT. 11. DRAIN, VENT, OR DISCHARGE MECHANICAL SYSTEMS PRIOR TO DISASSEMBLY.
- 12. IN MECHANICAL SYSTEMS BEING REMOVED, BLANK OFF, PLUG, OR CAP ALL BRANCH LINES (DUCTWORK OR PIPING) SCHEDULED FOR DEMOLITION WHERE THEY TIE INTO MAIN LINES TO REMAIN.
- 13. DEMOLITION INCLUDES REMOVAL OF EQUIPMENT, SELECTED DUCTWORK, PIPING, ECT... THE DEMOLITION DRAWINGS SHOW THE GENERAL SCOPE OF ITEMS TO BE REMOVED. IT IS THE MECHANICAL CONTRACTORS RESPONSIBILITY TO REMOVE ALL ASSOCIATED EQUIPMENT AND MATERIALS THAT ARE NOT SPECIFICALLY IDENTIFIED TO BE REUSED, TO PRODUCE A CLEAN AND WORKABLE SYSTEM.
- 14. REMOVE ALL OBSOLETE, FREE HANGING AND OPEN OR DEAD ENDED AIR, GLYCOL PIPING OR DUCT.
- 15. THE MECHANICAL DRAWINGS ARE DIAGRAMMATICAL. IT IS NOT POSSIBLE OR THE INTENT TO SHOW ALL PIECES OF THE SYSTEMS BEING REMOVED AND/OR INSTALLED UNDER THE CONTRACT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROVIDE A COMPLETE, RELIABLE AND WORKING SYSTEM. IT IS ALSO THE CONTRACTORS RESPONSIBILITY TO DEMOLISH ALL MATERIALS ASSOCIATED TO REMOVALS TO PROVIDE A "LIKE NEW" APPEARANCE WITHIN THE SPACES (IE NO HANGARS, TUBING ETC. ABANDONED IN PLACE UNLESS DIRECTED TO DO SO).
- 16.ALL BUILDING AUTOMATED SYSTEM COMMUNICATIONS/CONTROL WIRES TO BE REMOVED BY JOHNSON CONTROLS INC. COORDINATE WITH OWNER DURING DEMOLITION.

KEY NOTES:

- DISCONNECT EXISTING 4" CHWS&R LINES AT EXISTING SHUT-OFF VALVES.
- $\langle 2 \rangle$ EXISTING EXPANSION TANK TO BE DEMOLISHED .
- $\langle 3 \rangle$ EXISTING AIR SEPERATOR TO BE DEMOLISHED.
- 4 EXISTING CHEMICAL FEED TO ASSEMBLY REMAIN. DISCONNECT PIPING AT EXISTING SHUT-OFF VALVES.
- $\overline{5}$ EXISTING CONCRETE HOUSEKEEPING TO REMAIN.
- $\overline{6}$ EXISTING CHILLER TO BE DEMOLISHED.
- $\langle 7 \rangle$ NEW AIR COOLED CHILLER. REFER TO M-601 FOR SCHEDULE. 8 ROUTE NEW 4" CHWS&R LINES FROM CHILLER TO EXISTING CHWS&R CONNECTIONS. SEE DETAIL 7, SHEET M-501 FOR HYDRONIC ACCESSORIES. PROVIDE WITH 2" FOAMGLAS INSULATION WITH ALL PURPOSE JACKET AND 0.032" EMBOSSED ALUMINUM JACKET WITH STAINLESS STEEL STRAPS. SEAL JACKET SEAM AND LOCATE AT BOTTOM OF PIPE TO LOWER CHANCE OF RAIN PENETRATION THROUGH JACKET.
- 9 PROVIDE AND INSTALL NEW AIR SEPERATOR. REFER TO AIR SEPERATOR SCHEDULE ON SHEET M601.
- PROVIDE AND INSTALL NEW CHILLED WATER EXPANSION TANK. REFER TO EXPANSION TANK SCHEDULE ON SHEET M601. MOUNTAIN EXPANSION TANK ON EXISTING CONCRETE HOUSEKEEPING PAD.
- PROVIDE AND INSTALL NEW 3-WAY CONTROL VALVE IN PLACE OF EXISTING 3-WAY CONTROL VALVE. SEE M601 FOR CONTROL VALVE SCHEDULE.
- 12 PROVIDE AND INSTALL NEW 2-WAY CONTROL VALVE IN PLACE OF EXISTING 3-WAY CONTROL VALVE. SEE M601 FOR CONTROL VALVE SCHEDULE.

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EXISTI	NG VA	V TERMIN	AL UNI	T SC	CHEDUL	.E
	MAXIMUM					ELECTRICAL
MARK	CFM	MANUFACTURER	MODEL NO.	SIZE	ESP (in. wc.)	DATA (V/PH/W)
VV-A 150	250 CFM	TITUS	AESV3000	6	0.4	120/1/60
VV-A 250	250 CFM	TITUS	AESV3000	6	0.4	120/1/60
VV-A 300	300 CFM	TITUS	AESV3000	6	0.4	120/1/60
VV-A 340	400 CFM	TITUS	AESV3000	6	0.4	120/1/60
VV-B 450	800 CFM	TITUS	AESV3000	8	0.4	120/1/60
VV-B 700	700 CFM	TITUS	AESV3000	8	0.4	120/1/60
VV-D 1000	1000 CFM	TITUS	AESV3000	12	0.4	120/1/60
VV-D 1080	1500 CFM	TITUS	AESV3000	12	0.4	120/1/60
VV-E 1315	2000 CFM	TITUS	AESV3000	14	0.4	120/1/60

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EXISTING FAN TERMINAL UNIT SCHEDULE

							ELEC	TRIC HEAT	ING COIL		FAN SEC	TION	
	SUPPLY					PRIMARY			NO. OF		STATIC	MOTOR	
MARK	CFM	AREA SERVED	MANUFACTURER	MODEL NO.	SIZE	AIR CFM	KW	V/PH/W	STEPS	FAN CFM	PRESSURE	HP	VOLTAGE
FT-2-1	1200 CFM	ATRIUM- OPEN TO BELOW	TITUS	MFV3000	12	1200	6	480/3/60	2	400	0.5	1/4	277
FT-2-3	825 CFM	WOMEN'S RESTROOM/ MEN'S RESTROOM/ STOR 33	TITUS	MFV3000	12	825	4	480/3/60	2	400	0.5	1/4	277
FT-2-4	1260 CFM	STOR 33 WEST	TITUS	MFV3000	12	825	6	480/3/60	2	400	0.5	1/4	277
FT-2-5	550 CFM	STOR 33 WEST	TITUS	MFV3000	6	550	3	480/3/60	1	400	0.5	1/4	277
FT-2-6	1260 CFM	STOR 33/ SENIOR INSPECTOR 46/ SENIOR INSPECTOR 45	TITUS	MFV3000	12	1260	6	480/3/60	2	500	0.5	1/4	277
FT-2-7	575 CFM	STOR 33/ SENIOR INSPECTOR 43/ PRINTING 35	TITUS	MFV3000	12	940	2	480/3/60	1	400	0.5	1/4	277
FT-2-8	950 CFM	MANAGER 8	TITUS	MFV3000	12	950	2	480/3/60	1	400	0.5	1/4	277
FT-2-9	300 CFM	STOR 33 CORRIDOR/ OFFICE 31	TITUS	MFV3000	8	300	2	480/3/60	1	400	0.5	1/10	277
FT-2-10	600 CFM	CONFERENCE ROOMS 7	TITUS	MFV3000	10	600	2	480/3/60	1	400	0.5	1/4	277
FT-2-11	800 CFM	CONFERENCE ROOMS 7	TITUS	MFV3000	12	800	2	480/3/60	1	400	0.5	1/4	277
FT-2-12	800 CFM	CONFERENCE ROOMS 7	TITUS	MFV3000	12	800	2	480/3/60	1	400	0.5	1/4	277
FT-2-14	620 CFM	STOR 33 SOUTHEAST	TITUS	MFV3000	10	620	2	480/3/60	1	400	0.5	1/4	277
FT-2-15	885 CFM	STOR 33 SOUTHEAST	TITUS	MFV3000	12	885	4	480/3/60	2	400	0.5	1/4	277
FT-2-16	630 CFM	STOR 33 SOUTHEAST	TITUS	MFV3000	10	630	4	480/3/60	2	400	0.5	1/4	277
FT-2-17	1350 CFM	STOR 33 EAST	TITUS	MFV3000	12	1350	4	480/3/60	2	400	0.5	1/4	277
FT-2-18	1000 CFM	PROGRAM COORD./ VENDOR SERVICE 42	TITUS	MFV3000	12	1015	4	480/3/60	2	400	0.5	1/4	277
FT-2-19	400 CFM	ATRIUM- OPEN TO BELOW	TITUS	MFV3000	8	400	4	480/3/60	2	300	0.5	1/10	277

	DIFFUSER/RETURN	GRILLE SCHEDU	JLE	
MARK / LEGEND	ТҮРЕ	MFG.	MODEL	NOTES
NECK SIZE	ROUND NECK, SQUARE CEILING SUPPLY DIFFUSER	PRICE	ASCD	2,3,4,5,6,7
NECK SIZE18x12 S2 MARK QUANTITY TYP (2) 200 CFM	SIDEWALL RECTANGULAR SUPPLY GRILLE	PRICE	520	1,5,7
LENGTH — 48" S3 MARK QUANTITY TYP – (2) 200 – CFM	JET-SLOT TYPE 21, SINGLE SLOT LINEAR SUPPLY GRILLE	PRICE	JS215	4,5,6,7
NECK SIZE22x22 R1 MARK QUANTITY TYP (2) 200 CFM	CEILING OR SIDEWALL RETURN AIR GRILLE	PRICE	635	1,2,4,5
NECK SIZE <u>22x22</u> E1 MARK QUANTITY TYP (2) 200 CFM	CEILING OR SIDEWALL EXHAUST AIR GRILLE	PRICE	635	1,2,4,5
1.PROVIDE WITH OPPOSED ENOTES:2.PROVIDE 24x24 FULLY LOU3.FACTORY INSULATED BACK4.COORDINATE BORDER TYP5.COORDINATE FINISH WITH	BLADE VOLUME DAMPER. IVERED FACE LAYIN MODULE WHERE LOCATED KS ON ALL CEILING DIFFUSERS MUST BE PROVI PES WITH ARCHITECTURAL FLOOR PLAN AND RE ARCHITECTURAL.	IN LAYIN CEILING OR SI DED. EFLECTED CEILING PLAI	USPENDED FROM DUCTWORK	٢.

6. WHERE DIFFUSER BALANCING DAMPER IS INACCESSIBLE, PROVIDE A CONCEALED REMOTE OPERATOR SIMILAR TO YOUNG REGULATOR 270-301 BESIDE DIFFUSER/GRILLE.

7. PROVIDE WITH FACTORY INSULATED SUPPLY PLENUM

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MARK VV-A-1 VV-A-2 VV-B-1

SERVICE	SMACNA PRESSURE CLASS	MATERIAL	ALLOWABLE SEAMS	SEALING REQUIREMENTS	INSULATION	REMARKS
SUPPLY AIR DUCTS						
FROM AHU CONNECTION TO 20 FEET DOWNSTREAM ON SUPPLY SIDE FOR VAV SYSTEMS	+ 3*	DOUBLEWALL ROUND / FLAT OVAL OR RECTANGULAR COMPLETE WITH PERFORATED INNER LINER AND MYLAR FILM SEPARATING INSULATION FROM AIR STREAM	GROOVED, STANDING, SINGLE- CORNER, DOUBLE-CORNER AND PITTSBURGH-LOCK AND ALL OTHER ROLLED MECHANICAL SEAMS	MASTIC WITH EMBEDDED FABRIC OR GASKETS	1" THICK INTERNALLY LINED	
FROM 20 FEET DOWNSTREAM OF AHU TO TERMINAL UNIT FOR VAV SYSTEMS	+ 3*	SINGLE WALL SHEET METAL ROUND / FLAT OVAL OR RECTANGULAR	GROOVED, STANDING, SINGLE- CORNER, DOUBLE-CORNER AND PITTSBURGH-LOCK AND ALL OTHER ROLLED MECHANICAL SEAMS	MASTIC WITH EMBEDDED FABRIC OR GASKETS	CONCEALED - 2" THICK EXTERNAL WRAP EXPOSED - 1-1/2" RIGID BOARD	
DOWNSTREAM OF VAV TERMINALS	+ 1*	SINGLE WALL SHEET METAL	GROOVED, STANDING, SINGLE- CORNER, DOUBLE-CORNER AND PITTSBURGH-LOCK AND ALL OTHER ROLLED MECHANICAL SEAMS	MASTIC WITH EMBEDDED FABRIC OR GASKETS	CONCEALED - 2" THICK EXTERNAL WRAP EXPOSED - 1-1/2" RIGID BOARD	
RETURN AIR DUCTS						<u>.</u>
ALL RETURN AIR DUCTWORK	- 2*	SINGLE WALL SHEET METAL	GROOVED, STANDING, SINGLE- CORNER, DOUBLE-CORNER AND PITTSBURGH-LOCK AND ALL OTHER ROLLED MECHANICAL SEAMS	MASTIC WITH EMBEDDED FABRIC OR GASKETS	CONCEALED - 2" THICK EXTERNAL WRAP EXPOSED - 1-1/2" RIGID BOARD	
EXHAUST AIR DUCTS						
GENERAL BATHROOM EXHAUST DUCTS	- 1*	SINGLE WALL SHEET METAL	GROOVED, STANDING, SINGLE- CORNER, DOUBLE-CORNER AND PITTSBURGH-LOCK AND ALL OTHER ROLLED MECHANICAL SEAMS	MASTIC WITH EMBEDDED FABRIC OR GASKETS	NONE	
GENERAL NOTES: (1) ALL DUCTWORK IS TO BE FABRICATED, SI (2) DUCTWORK TO BE G90 GALVANIZED SHEE (3) REFER TO DUCTWORK SPECIFICATION SE REMARKS: NONE	UPPORTED AND INSTALLED PER S T METAL, UNLESS OTHERWISE NO CTION FOR FURTHER INFORMATIC	MACNA STANDARDS AND FLORIDA ME DTED. ON REGARDING PRESSURE CLASS, MA	CHANICAL CODE REQUIREMENTS.	ED.		

			DESIGN	CAPACIT	Y (TONS)		E	VAPORATC	R		СОМ	PRESSO	۲	EER		ELECT	RICAL			WEIGHT		
NO.	LOCATION	TYPE	AMBIENT (°F)	ACTUAL	NOMINAL	FLUID	EWT (°F)	LWT (°F)	GPM	WPD (FT HD)	TYPE	QTY	# OF CIRCUITS	(SEER)	VOLTS	PHASE	MCA	MOCP	(DB)	(LBS)	[MANUFACTURER]	REMARKS
ACC-1	CHILLER YARD	R410A	95	118.4	120	WATER	44	56	231.5	10.2	SCROLL	4	2	10.32	480	3	273	300	95	10700	TRANE CGAM120	ALL
(1) PROVIDE WI) PROVIDE WITH ULTRA LOW SOUND COMPRESSOR SOUND ENCLOSURES.																					

(2) PROVIDE WITH LOW SOUND CONDENSER FANS WITH VARIABLE SPEED DRIVE.

(3) PROVIDE WITH MICROCHANNEL CONDENSER COIL, ALUMINUM FINS/COPPER TUBES. (4) PROVIDE WITH LOUVERED CONDENSER HAIL GUARDS.

(5) PROVIDE WITH INTEGRAL DUAL 7.5 HP, 60 FT. WG. EXTERNAL PUMP PACKAGE.

(6) THE CHILLER NTO EXISTING BAS CONTROL SYSTEM. WORK TO BE PERFORMED BY JOHNSON CONTROLS INC. COORDINATE WITH OWNER DURING CONSTRUCTION. (7) CHILLER SHALL BE MOUNTED ON EXISTING CONCRETE HOUSEKEEPING PAD. PROVIDE NEOPRENE PADS AT CHILLER CONNECTION POINTS. (8) APPROVED MANUFACTURERS: TRANE, MCQUAY, DAIKIN.

(9) CHILLER TO BE PROVIDED WITH BACNET CARD FOR BUILDING CONTROL COMPATIBILITY. CARD TO BE INSTALLED BY MANUFACTURER PRIOR TO DELIVERY.

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VAV UNIT SCHEDULE												
MANFACTURER	MODEL NO.	TYPE- SEE NOTE 1	SIZE	MAX.	MIN.	HEATING	KW	V/PH/W	NO. OF STEPS			
PRICE	SDV	V	6	200	50	100	1.0	120/1	2			
PRICE	SDV	V	6	100	50	50	1.0	120/1	2			
PRICE	SDV	V	8	600	125	300	1.0	120/1	2			

GENERAL NOTES (APPLIES TO ALL UNITS):

1.VAV TYPE: "V"- SINGLE DUCT VARIABLE VOLUME TERMINAL UNIT, "P"- FAN-POWERED PARALELL TERMINAL

UNIT. 2.PROVIDE A MINIMUM OF (2) STAGES OF ELECTRIC HEAT.

3.TIE VAV INTO EXISTING BAS CONTROL SYSTEM. WORK TO BE PERFORMED BY JOHNSON CONTROLS INC. COORDINATE WITH OWNER DURING CONSTRUCTION.

4. NEW CONTROLLERS SHALL MATCH EXISTING OR BE COMPATIBLE WITH EXISTING SYSTEM.

5. NEW VAVS TO FOLLOW MATCH EXISTING VAV SEQUENCE OF OPERATION.

PACKAGED AIR COOLED CHILLER SCHEDULE

	AIR SEPARATOR SCHEDULE												
UNIT NO.	LOCATION	SYSTEM SERVED	GPM	CONNECTION SIZE (IN)	COALESCING MEDIUM	BODY CONST. MAT'L	BASIS OF DESIGN [MANUFACTURER]	REMARKS					
AS-1	CHILLER YARD	CHILLED WATER	231.5	4	COPPER	STEEL	SPIROTHERM VSR-400						

EXPANSION TANK SCHEDULE

UNIT NO.	ORIENTATION	TANK VOLUME (GAL)	ACCEPT VOLUME (GAL)	DIMEN	SIONS DIA	FLUID	PIPE MATERIAL	ASME PRESSURE RATING	BASIS OF DESIGN [MANUFACTURER]	REMARKS
EX-1	CHILLER YARD	34	23	29.1	20	WATER	STEEL	125	TACO CA-90	(1)
REMARK	S:									

(1) BLADDER TYPE

CONTROL VALVE SCHEDULE

P TAG.	MFR.	GPM	QTY.	MODEL	DESCRIPTION	Cv
ГU-1	BELIMO	72.8	1	B340-AFR24-MFT	1-1/2" 3-WAY MODULATING CHARACTERIZED CONTROL VALVE, NORMALLY OPEN, FAIL OPEN	37
ГU-2	BELIMO	72.8	1	B240-AFR24-MFT	1-1/2" 2-WAY MODULATING CHARACTERIZED CONTROL VALVE, NORMALLY OPEN, FAIL OPEN	37

rhodes + brito
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Orange County Government
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Enforcement Office
Renovations
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Seal 04/29/16
MATTHEW P. MCQUINN 72488
BID DOCUMENTS
DATE SUBMISSION / REVISION NO.
SCHEDULES
SCALE:AS INDICATEDDRAWN BY:P. ROWAN
CHECK BY: M. MCQUINN DATE: 05/30/2018
PROJECT NUMBER: 15012-0011
M-601

BI - Zone Override
AI - Zone Temp
AI - Zone Setpoint Adjust

Single Air Cooled Chiller

Chiller - Run Conditions: The chiller shall be enabled to run whenever it is commanded to be enabled by the chiller manager program. The chiller shall run subject to its own internal safeties and controls.

Emergency Shutdown:

Chilled Water Pump Lead/Standby Operation:

The lead pump shall start prior to the chiller being enabled and shall stop only after the chiller is disabled. The pump(s) shall therefore have: • A user adjustable delay on start. • AND a user adjustable delay on stop.

The delay times shall be set appropriately to allow for orderly chilled water system start-up, shutdown and sequencing.

The two pumps shall operate in a lead/standby fashion. • The lead pump shall run first.

• On failure of the lead pump, the standby pump shall run and the lead pump shall turn off. The designated lead pump shall rotate upon one of the following conditions (user selectable): manually through a software switch • if pump runtime (adj.) is exceeded daily

 weekly monthly

Alarms shall be provided as follows:

 Chilled Water Pump 1 • Failure: Commanded on, but the status is off.

Running in Hand: Commanded off, but the status is on.

• Runtime Exceeded: Status runtime exceeds a user definable limit.

VFD Fault.

 Chilled Water Pump 2 • Failure: Commanded on, but the status is off.

Running in Hand: Commanded off, but the status is on.

 Runtime Exceeded: Status runtime exceeds a user definable limit. VFD Fault.

Chilled Water Differential Pressure Control: period to meet the requirements of actual field conditions.

The controller shall modulate chilled water pump speed to maintain a chilled water differential pressure of 12lbf/in2 (adj.). The VFD minimum speed shall not drop below 30% (adj.).

Alarms shall be provided as follows:

• High Chilled Water Differential Pressure: If the chilled water differential pressure is 25% (adj.) greater than setpoint. • Low Chilled Water Differential Pressure: If the chilled water differential pressure is 25% (adj.) less than setpoint.

Chilled Water Minimum Flow Control: Last air handling unit has three-way valve intended to flow minimum gpm through chiller.

Chiller: The chiller shall be enabled a user adjustable time after pump statuses are proven on. The chiller shall therefore have a user adjustable delay on start.

The chiller shall run subject to its own internal safeties and controls.

Alarms shall be provided as follows: Chiller Failure: Commanded on, but the status is off.

• Chiller Running in Hand: Commanded off, but the status is on. • Chiller Runtime Exceeded: Status runtime exceeds a user definable limit.

Chilled Water Supply Temperature - Setpoint Reset:

The chilled water supply temperature setpoint shall reset to a lower value as the facility's chilled water valves open beyond a user definable threshold (90% open, typ.). Once the chilled water coils are satisfied (valves closing) then the chilled water supply temperature setpoint shall gradually rise over time to reduce cooling energy use.

Chilled Water Temperature Monitoring:

The following temperatures shall be monitored:

 Chilled water supply. Chilled water return.

Alarms shall be provided as follows: High Chilled Water Supply Temp: If the chilled water supply temperature is greater than 55°F (adj.). • Low Chilled Water Supply Temp: If the chilled water supply temperature is less than 38°F (adj.).

2. Variable Air Volume - Terminal Unit

Run Conditions - Scheduled: The unit shall run according to a user definable time schedule in the following modes: Occupied Mode: The unit shall maintain •

A 74°F (adi.) cooling setpoint • A 70°F (adj.) heating setpoint. •

Unoccupied Mode (night setback): The unit shall maintain •

• A 85°F (adj.) cooling setpoint.

A 55°F (adj.) heating setpoint.

Alarms shall be provided as follows:

Low Zone Temp: If the zone temperature is less than the heating setpoint by a user definable amount (adj.). Zone Setpoint Adjust:

The occupant shall be able to adjust the zone temperature heating and cooling setpoints at the zone sensor. Zone Optimal Start:

period. Zone Unoccupied Override:

A timed local override control shall allow an occupant to override the schedule and place the unit into an occupied mode for an adjustable period of time. At the expiration of this time, control of the unit shall automatically return to the schedule.

Reversing Variable Volume Terminal Unit - Flow Control: The unit shall maintain zone setpoints by controlling the airflow through one of the following:

Occupied: When zone temperature is greater than its cooling setpoint, the zone damper shall modulate between the minimum occupied airflow (adi.) and the maximum cooling airflow (adj.) until the zone is satisfied. When the zone temperature is between the cooling setpoint and the heating setpoint, the zone damper shall maintain the minimum required zone ventilation (adi.). • When zone temperature is less than its heating setpoint, the controller shall enable heating to maintain the zone temperature at its heating setpoint. Additionally, if warm air is available from the AHU, the zone damper shall modulate between the minimum occupied airflow (adj.) and the maximum heating airflow (adj.) until the zone is satisfied.

Unoccunied: When the zone is unoccupied the zone damper shall control to its minimum unoccupied airflow (adj.). When the zone temperature is greater than its cooling setpoint, the zone damper shall modulate between the minimum unoccupied airflow (adj.) and the maximum cooling airflow (adj.) until the zone is satisfied. • When zone temperature is less than its unoccupied heating setpoint, the controller shall enable heating to maintain the zone temperature at the setpoint. Additionally, if warm air is available from the AHU, the zone damper shall modulate between the minimum unoccupied airflow (adj.) and the auxiliary heating airflow (adj.) until the zone is satisfied.

Electric Reheating Stages:

user definable (adj.) minimum runtime.

The reheating shall be enabled whenever: Outside air temperature is less than 65°F (adi.). • AND the zone temperature is below setpoint." •

AND sufficient airflow is provided. •

Discharge Air Temperature: The controller shall monitor the discharge air temperature.

Alarms shall be provided as follows:

• High Discharge Air Temp: If the discharge air temperature is greater than 120°F (adi.). • Low Discharge Air Temp: If the discharge air temperature is less than 40°F (adj.).

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The chiller shall shut down and an alarm generated upon receiving an emergency shutdown signal status.

The two chilled water pumps shall run anytime the chiller is called to run. The chilled water pump shall also run for freeze protection whenever the outside air temperature is less than a user definable setpoint (adj.).

The controller shall measure chilled water differential pressure and modulate the lead chilled water pump VFD to maintain its chilled water differential pressure setpoint. The following setpoints are recommended values. All setpoints shall be field adjusted during the commissioning

The delay time shall be set appropriately to allow for orderly chilled water system start-up, shutdown and sequencing.

The chilled water supply temperature setpoint shall reset using a trim and respond algorithm based on cooling requirements.

High Zone Temp: If the zone temperature is greater than the cooling setpoint by a user definable amount (adj.).

The unit shall use an optimal start algorithm for morning start-up. This algorithm shall minimize the unoccupied warm-up or cool-down period while still achieving comfort conditions by the start of scheduled occupied

The controller shall measure the zone temperature and stage the reheating to maintain its setpoint. To prevent short cycling, there shall be a user definable (adj.) delay between stages, and each stage shall have a

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	LEGEND	GENERAL NOTES
		1. ALL ELECTRICAL WORK SHALL CONFORM TO APPLI
н	DUPLEX RECEPTACLE, MOUNT 18" AFF UNLESS OTHERWISE NOTED	NATIONAL ELECTRICAL CODES.
	GROUND FAULT CIRCUIT INTERRUPTER TYPE, MOUNT 48" AFF	MANUFACTURER.
	<pre>Y UNLESS OTHERWISE NOTED</pre>	WITH MANUFACTURER'S PRINTED INSTRUCTIONS A REPRESENTATIVE'S DIRECTIONS.
	SINGLE POLE TOGGLE SWITCH SINGLE POLE TOGGLE SWITCH WITH DUAL TECHNOLOGY OCCUPANCY SENSOR	4. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCAT DRAWINGS.
0	\$ ³ THREE-WAY TOGGLE SWITCH	5. ALL AREAS DISTURBED BY WORK SHALL BE RESTO ORIGINAL OR AS DETERMINED BY THE OWNER.
	COMBINATION MOTOR STARTER/CIRCUIT BREAKER DISCONNECT SWITCH	6. NEW FLUORESCENT LAMPS SHALL MATCH EXISTING
	FUSED DISCONNECT SWITCH NON FUSED DISCONNECT SWITCH	7. EXIT SIGNS TO BE WIRED TO NEAREST EMERGENC UNSWITCHED PHASE CONDUCTOR.
	SURFACE MOUNTED PANEL	8. EMERGENCY LIGHTING TO BE WIRED TO SEPARATE RELAY TO SENSE POWER LOSS.
G	XXX BRANCH CIRCUIT HOME RUN WITH CIRCUIT NUMBER SEE	9. COORDINATE WITH OWNER FOR METERING OF CIR 10. THE ELECTRICAL CONTRACTOR SHALL COORDINAT
	SCHEDULES FOR DETAILS WALL MOUNTED LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE	EQUIPMENT WITH OTHER CONTRACTORS. 11. THE CONTRACTOR SHALL PROVIDE RACEWAYS, WI
	2'X4' LUMINAIRE. LETTER DENOTES TYPE. SEE LUMINAIRE SCHEDULE	12. ALL ELECTRICAL CONDUIT AND CONDUCTORS DISC
		REUSED SHALL BE REMOVED. 13. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING C
\bigcirc	A 2'X2' LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE	WORK. IF ONLY A PORTION OF AN EXISTING CIRCUI DEMOLITION, CONTINUITY SHALL BE MAINTAINED TO CIRCUIT.
	2'X4' EMERGENCY FIXTURE, PROVIDE EMERGENCY BALLAST AND CIRCUIT	14. ALL BRANCH CIRCUITS SHALL CONSIST OF 2 #12 AW GROUND, UNLESS OTHERWISE SHOWN.
	AHEAD OF ASSOCIATED SWITCHING 1'X4' EMERGENCY FIXTURE, PROVIDE EMERGENCY BALLAST AND	15. ALL RACEWAYS SHALL BE RUN IN NEAT AND WORK PROPERLY SUPPORTED
	A CIRCUIT AHEAD OF ASSOCIATED SWITCHING	16. ALL RACEWAY RUNS, PRIOR TO TERMINATION AT B DURING THE COURSE OF CONSTRUCTION BUT NO
F	A 2'X2' LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE CONNECTED TO EMERGENCY POWER SUPPLY, SEE PANEL SCHEDULE	COVERS ARE IN PLACE. NO CONDUCTORS SHALL E CONSTRUCTION WORK, WHICH MIGHT DAMAGE THI COMPLETED. 17. CONTRACTOR TO PROVIDE NYLON PULL CORD IN A
		18. ALL CUTTING AND PATCHING AS A RESULT OF NEW SHALL BE PERFORMED IN A WORKMANLIKE MANNE SHAPE, SIZE AND TEXTURE ADJACENT TO AND/OR (SURFACES.
		19. THE ELECTRICAL DRAWINGS ARE SCHEMATIC ONLY AND DETAILS OF ELECTRICAL EQUIPMENT. CONDUI
		20. CONSTRUCTION DOCUMENTS REPRESENT THE CO NOT THE INTENT OF THE DRAWINGS AND SPECIFIC, EVERY DETAIL OF THE ELECTRICAL CONSTRUCTION EQUIPMENT AND LABOR FOR A COMPLETE AND FUL
		SYSTEM. 21. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING C DIMENSIONS SHOWN ON DRAWINGS AND SHALL NO OF ANY DISCREPANCIES PRIOR TO THE START OF V
E	FLORIDA BUILDING CODE, 6TH ED. (2017)	22. THE ENGINEER HAS MADE EVERY EFFORT TO PROF TRADES AND IT IS THE RESPONSIBILITY OF EACH IN OF THEIR BASE BID) TO THOROUGHLY REVIEW ALL WORK IS TO BEGIN. IN CASE OF A CONFLICT, NOTIF
		IMMEDIATELY TO COORDINATE ANY DISCREPANCY. 23. ALL ELEVATIONS NOTED ON THE CONTRACT DRAW
0	AC ABOVE COUNTER JB JUNCTION BOX ACCU AIR COOLED CONDENSING UNIT KA KILO AMP	24. CONTRACTOR SHALL REPAIR AND REFINISH ALL CO AND RELATED AREAS AFFECTED BY RENOVATION V CONDITION AS NEW AND IN AN ACCEPTABLE MANNI NO ADDITIONAL COST TO OWNER
_	AFF ABOVE FINISHED FLOOR KV KILO VOLT AFG ABOVE FINISHED GRADE KVA KILO VOLT AMP AU AT UNIT KWHD KILOW WATT-HOUR DEMAND METER	25. IF ASBESTOS IS ENCOUNTERED DURING CONTRAC
	BFG BELOW FINISHED GRADE LP LIGHTING PANEL CDP CLOCK DISTRIBUTION PANEL NC NORMALLY CLOSED CH CHULER NEMA NATIONAL ELECTRICAL MANUEACTURERS	26. ALL PROJECT SUBMITTALS SHALL BE SUBMITTED A
	CLL CONTRACT LIMIT LINE ASSOCIATION CT CURRENT TRANSFORMER NO NORMALLY OPEN	SERVICE.
С	DP DISTRIBUTION PANEL PF POWER FEEDER DPM DISTRIBUTION PANEL MAIN PT POTENTIAL TRANSFORMER	CONDUCTORS, ETC. SHOWN ON THE DRAWINGS SH INSTALLED BY THE CONTRACTOR UNLESS SPECIFIC
	EF EXHAUST FAN PUV PANEL-UNIT VENTILATOR EMT ELECTRIC METALLIC TUBING REM REMARKS EP EXPLOSION PROOF RGS RIGID GALVANIZED STEEL CONDUIT	28. CONTRACTOR SHALL REVIEW AND COORDINATE TH WITH OTHER TRADES, EQUIPMENT SUPPLIERS AND
	FA FIRE ALARM UV UNIT VENTILATOR FACP FIRE ALARM CONTROL PANEL VFD VARIABLE FREQUENCY DRIVE FC FAN COIL WP WATER PROOF	29. ALL WIRE SHALL BE STRANDED COPPER CONDUCT THHN/THWN, UNLESS OTHERWISE NOTED. ALL INTE ELECTRICAL METALLIC TUBING (EMT) RIGID METAL
	FD/SD FIRE DAMPER/SMOKE DAMPER GF GROUND FAULT INTERRUPTER TYPE GND GROUND	METAL CONDUIT (FMT), UNLESS OTHERWISE NOTEI
0		CIRCUIT AT ALL ELECTRICAL EQUIPMENT, PULL AND ELECTRICAL TERMINATIONS PROVIDED OR ASSOCI
		31. WHERE CONDUITS PENETRATE FIRE RATED WALLS INSTALL FIRE STOPPING THAT IS AN UNDERWRITER OR A DESIGN AND INSTALLATION THAT CONFORMS
	DLIVIOLITION NOTES	32. CONTRACTOR SHALL PATCH AND REPAIR ALL DAMA WHERE EQUIPMENT WAS REMOVED OR MODIFIED.
	1. THE CONTRACTOR SHALL VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE BUILDING AND SITE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSAL SO AS TO BECOME FAMILIAR WITH EXISTING WORK. SUBMISSION	33. ALL NEW CONDUITS TO BE CONCEALED IN WALL WI CEILING TO BE PAINTED TO MATCH SURROUNDING
С	OF A PROPOSAL WILL BE CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS REQUIRED BECAUSE OF DIFFICULTIES ENCOUNTERED WILL	34. ALL BRANCH CIRCUIT SHALL BE CONCEALED UNLES
	NOT BE RECOGNIZED. IT IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS EXIST AND NEW WORK MAY NOT BE FIELD LOCATED EXACTLY AS SHOWN ON THE DRAWINGS. COORDINATION WITH OTHER TRADES IN	35. REFER TO ARCHITECTURAL RCP FOR REFERENCE EXISTING, OR TO BE RELOCATED.
	EQUIPMENT ROUTING AS DETERMINED DURING CONSTRUCTION AND AS DIRECTED BY THE ARCHITECT/ENGINEER MAY BE NECESSARY AND ALL REQUIRED COORDINATION BETWEEN TRADES SHALL BE CONSIDERED AS	36. REFER TO E-601 SHEET FOR SECTION VIEWS OF ST
	PART OF THIS CONTRACT. IT IS ALSO UNDERSTOOD THAT THE PLANS ARE NOT COMPLETELY TO SCALE. FIELD VERIFY DIMENSIONS OF ALL EXISTING CONDITIONS, PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.	
0	2. ALL DEVICES AND EQUIPMENT NOT SHOWN AND IN AREAS OUTSIDE OF THE SCOPE OF WORK SHALL REMAIN ACTIVE UNLESS OTHERWISE NOTED.	EXISTING CONDITIONS G
	INSTALL TEMPORARY SERVICES AS REQUIRED TO MAINTAIN CONTINUITY TO EXISTING DEVICES AND EQUIPMENT THAT REMAIN. 3.	1. VISIT AND CAREFULLY EXAMINE THOSE PORTIONS OF THE AFFECTED BY THIS WORK BEFORE SUBMITTING PROPOSA RECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFF
	ALL EQUIPMENT AND MATERIAL REMOVED AND NOT REUSED SHALL BE TURNED OVER TO THE OWNER OR AT THE OWNERS REQUEST DISPOSED OF BY THE CONTRACTOR.	AFFECT EXECUTION OF THE WORK. SUBMISSION OF A PRO CONSTRUED AS EVIDENCE THAT SUCH EXAMINATION HAS
	4. ALL ELECTRICAL DEVICES THAT ARE REMOVED SHALL BE REMOVED AS DIRECTED BY THE OWNER, AND CEILING OR WALL SHALL BE PATCHED OR	DIFFICULTIES ENCOUNTER WILL NOTE BE RECOGNIZED.
В	PAINTED AS DIRECTED BY ARCHITECT. 5. ALL EXISTING ELECTRICAL EQUIPMENT IS NOT SHOWN. IT IS THE	IS TO BE UNDERSTOOD THAT UNFORESEEN CONDITIONS I WORK MAY NOT BE FILED LOCATED EXACTLY AS SHOWN (COOPERATION WITH OTHER TRADES IN BOUTING AND/OR
	CONTRACTORS RESPONSIBILITY TO BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BID, AND INCLUDE IN HIS BID THE REMOVAL OF ALL EQUIPMENT, CONDUIT, WIRE, ETC. THAT IS NOT BEING REUSED BACK TO ITS	DETERMINED DURING CONSTRUCTION AND AS DIRECTED ARCHITECT/ENGINEER, MAY BE NECESSARY. IT IS ALSO UP THE PLANS ARE NOT COMPLETELY TO SCALE. THIS CONTR
	6. SOURCE. ALL CONCRETE, WALL PATCHING, CEILING REPAIR, AND OTHER GENERAL	VERIFY DIMENSION OF ALL SITE UTILITIES, ETC. PRIOR TO
0	WORK REQUIRED FOR INSTALLING THE ELECTRICAL SYSTEMS AND TO REPAIR TO "LIKE NEW CONDITION" TO BE PROVIDED AND INSTALLED BY ELECTRICAL 7. CONTRACTOR. (COORDINATE WITH GENERAL CONTRACTOR).	CIRCUITS TO IDENTIFY CIRCUITS SERVING AREA WITHIN SU PROVIDE UPDATED TYPEWRITTEN PANEL SCHEDULES AT WORK.
	PROVIDE AND INSTALL ANY ADDITIONAL HANGERS/SUPPORTS REQUIRED TO 8. ACCOMMODATE ANY EQUIPMENT RELOCATION. COORDINATE ALL CEILING MOUNTED DEVICES WITH ARCHITECTURAL REFLECTED CEILING AND WORK OF ALL OTHER TRADES	 REMOVE EXISTING POWER, LIGHTING, SYSTEMS, MATERIA WHICH ARE MADE OBSOLETE OR WHICH INTERFERE WITH OF THE PROJECT.
	9. REUSE EXISTING RACEWAY AND OUTLETS WITHIN EXISTING WALL PARTITIONS WHERE POSSIBLE WHERE EXISTING RACEWAY CANNOT BE DELISED	 REINSTALL ANY SUCH POWER, LIGHTING, SYSTEMS, MATE EQUIPMENT WHICH ARE REQUIRED TO REMAIN ACTIVE FO FULLY FUNCTIONAL.
А	CONTRACTOR TO PROVIDE NEW RACEWAYS EQUIVALENT TO THE DESIGN INTENT. FINAL APPROVAL TO BE MADE BY THE ARCHITECT, ENGINEER, OR OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.	 EXISTING OUTLET BOXES AND CONDUIT WHICH ARE LOCA NEW WORK MAY BE REUSED FOR NEW DEVICES AND WIRI ALL CONDUIT AND WIRE REMOVED SHALL BE TAKEN BACK
		 SUFFLI UNLESS UTHERWISE NUTED. INSTALL A BLANK COVER PLATE WHERE REQUIRED. ALL UNUSED RACEWAYS WITHIN ACCESSIBLE SPACES SHAREMOVED. REMOVE ALSO ASSOCIATED CONDUCTORS, JUNE ASTENEDS AND SUPPORTS

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<u>DTES</u>	ELECTRICAL SPECIFICATIONS - DIVISION 26
SHALL CONFORM TO APPLICABLE STATE, LOCAL, AND CODES.	SECTION 26000 - GENERAL PROVISIONS
RISTICS SHALL BE VERIFIED WITH EQUIPMENT	A. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT FOR A COMPLETE AND PROPERLY OPERATING ELECTRICAL SYSTEM. INCLUDE NECESSARY FEES AND PERMITS WITHIN BASE BID.
UFACTURERS SHALL BE INSTALLED IN STRICT ACCORDANCE PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S ECTIONS.	B. CODES AND STANDARDS: ALL ELECTRICAL WORK SHALL BE IN STRICT COMPLIANCE WITH THE PROVISIONS OF THE LOCAL GOVERNMENT AUTHORITY, AND THE NATIONAL ELECTRIC CODE, 2011 EDITION. ALL MATERIALS SHALL BE NEW AND FREE FROM DEFECTS, AND SHALL BEAR THE UNDERWRITER'S LAROPATORIES LAREL OR DE LARELED OR HISTED
L FIELD VERIFY ALL LOCATIONS AND DIMENSIONS SHOWN ON	WITH AN APPROVED NATIONALLY RECOGNIZED ELECTRICAL TESTING AGENCY.
3Y WORK SHALL BE RESTORED TO A CONDITION EQUAL TO MINED BY THE OWNER.	C. CONTRACTOR SHALL THOROUGHLY INVESTIGATE SITE BEFORE BIDDING. NO CHANGES WILL BE ALLOWED IN CONTRACT PRICE FOR WORK
IPS SHALL MATCH EXISTING IN COLOR AND TYPE.	D. ALL ELECTRICAL WORK SHALL BE DONE IN A NEAT AND WORKMANLIKE
NDUCTOR.	E. CONTRACTOR SHALL SCHEDULE ALL DOWN-TIME WITH THE OWNER
IER EOR METERING OF CIRCUITS TO TEMANT SPACE	PRIOR TO BEGINNING THE WORK. PREMIUM/OVERTIME RATES MAY BE REQUIRED AND MUST BE INCLUDED IN BASE BID.
ACTOR SHALL COORDINATE THE INSTALLATION OF ALL	F. CONTRACTOR SHALL THOROUGHLY REVIEW CONSTRUCTION DOCUMENTS. WHEN CONFLICTS ARISE WITHIN CONSTRUCTION DOCUMENTS. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO
R CONTRACTORS. L PROVIDE RACEWAYS, WIRING, AND CONNECTIONS FOR ALL	SUBMITTING A BID. SUBMISSION OF A BID SHALL INDICATE THAT CONTRACTOR THOROUGHLY REVIEWED CONSTRUCTION DOCUMENTS.
INTERLOCK. IT AND CONDUCTORS DISCONNECTED AND NOT TO BE	CONTRACTOR SHALL INCLUDE THE MOST STRINGENT (COSTLY) REQUIREMENTS WITHIN BASE BID.
OVED.	G. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING MANUFACTURERS, SUB-CONTRACTORS, VENDORS, AND SUPPLIERS
ON OF AN EXISTING CIRCUIT IS BEING REMOVED FOR Y SHALL BE MAINTAINED TO THE REST OF THE REMAINING	 WITH A COPY OF THESE SPECIFICATIONS. H. GUARANTEE ALL ELECTRICAL SYSTEM MATERIALS AND WORKMANSHIP
HALL CONSIST OF 2 #12 AWG CONDUCTORS PLUS 1 #12 AWG	TO BE FREE FROM DEFECTS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AND PROPERLY CORRECT LATENT DEFECTS ARISING WITHIN THIS PERIOD UPON NOTIFICATION BY THE
E RUN IN NEAT AND WORKMAN-LIKE MANNER AND SHALL BE	OWNER'S REPRESENTATIVE WITHOUT ADDITIONAL COMPENSATION.
IOR TO TERMINATION AT BRANCH PANEL, SHALL BE CAPPED	CONSTRUCTION AND PRIOR TO ACCEPTANCE OF THIS WORK, LEAVE THE PREMISES "BROOM CLEAN" INSOFAR AS AFFECTED BY ELECTRICAL
F CONSTRUCTION BUT NOT UNTIL WIRES ARE PULLED IN AND NO CONDUCTORS SHALL BE PULLED INTO RACEWAYS UNTIL WHICH MIGHT DAMAGE THE RACEWAYS, HAS BEEN	J. EQUIPMENT AND DESIGN OF SYSTEMS INDICATED ON THE DESIGN
	DRAWINGS AND WITHIN THESE SPECIFICATIONS SHALL BE CONSIDERED AS "SPECIFIED STANDARD" OF QUALITY. NO SUBSTITUTIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER AT LEAST 10
HING AS A RESULT OF NEW CONSTRUCTION OR DEMOLITION	DAYS PRIOR TO BID DATE. K. ANY DEVIATION FROM SPECIFIED EQUIPMENT THAT AFFECT THE
RE ADJACENT TO AND/OR CONTIGUOUS WITH FINISHED	INSTALLATION, OPERATION, PERFORMANCE, QUALITY OR LONGEVITY OF THE ELECTRICAL SYSTEMS AS DEFINED HEREIN, SHALL BE REPLACED BY THE ELECTRICAL CONTRACTOR WITH NO ADDITIONAL COST TO THE
NGS ARE SCHEMATIC ONLY. COORDINATE EXACT LOCATIONS RICAL EQUIPMENT, CONDUITS, ETC, WITH THE OWNER.	OWNER. IN ADDITION, ELECTRICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH FLOOR PLANS SHOWING PHOTOMETRIC CALCULATIONS FOR ANY FLECTRICAL CONTRACTOR FURNISHED LICHTING FIXTURE
ENTS REPRESENT THE CONSULTANT'S DESIGN INTENT. IT IS DRAWINGS AND SPECIFICATIONS TO IDENTIFY EACH AND	CHANGES FOR APPROVAL AT LEAST 10 DAYS PRIOR TO BID DATE.
LECTRICAL CONSTRUCTION. PROVIDE ALL NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL ELECTRICAL	A. RACEWAYS AND FITTINGS: ALL RACEWAYS AND FITTINGS SHALL BE
ELD VERIFY ALL EXISTING CONDITIONS, LOCATIONS, AND	GALVANIZED RIGID STEEL OR INTERMEDIATE METAL CONDUIT WITH LOCKNUTS AND BUSHINGS, WITH THE EXCEPTION THAT WHERE SPECIFICALLY ALLOWED BY THE NATIONAL ELECTRICAL CODE AND
PRIOR TO THE START OF WORK.	APPLICABLE LOCAL CODES. ELECTRICAL METALLIC TUBING (E.M.T) MAY BE USED FOR ALL INTERIOR EXPOSED AND CONCEALED WORK WHERE IT IS NOT SUBJECT TO PHYSICAL DAMAGE OR CORROSION. FITTINGS
E EVENT ELFORT TO PROPERLE ADDRESS ALL RELATED ESPONSIBILITY OF EACH INDIVIDUAL CONTRACTOR (AS PART HOROUGHLY REVIEW ALL DESIGN DOCUMENTS BEFORE	SHALL BE STEEL COMPRESSION TYPE. INSTALL EXPANSION FITTINGS IN RACEWAYS A MAXIMUM OF 200 FEET APART OR WHEREVER STRUCTURAL EXPANSION JOINTS ARE CROSSED.
ASE OF A CONFLICT, NOTIFY THE ARCHITECT/ENGINEER INATE ANY DISCREPANCY.	B. CONDUCTORS: FEEDER AND BRANCH CIRCUIT CONDUCTORS SHALL BE
ON THE CONTRACT DRAWING ARE RELATIVE TO THE S NOTED OTHERWISE.	ALUMINUM SHALL BE PERMITTED UNLESS STHERWISE NOTED). NO ALUMINUM SHALL BE PERMITTED UNLESS SPECIFICALLY NOTED OTHERWISE. INSTALL ALL WIRING IN CONDUIT OR APPROVED
PAIR AND REFINISH ALL CONTRACTOR RELATED DAMAGES FECTED BY RENOVATION WORK BACK TO THEIR ORIGINAL IN AN ACCEPTABLE MANNER TO OWNER / ARCHITECT, WITH	BRANCH CIRCUITS OVER 100 FEET IN LENGTH TO ACCOUNT FOR VOLTAGE DROP. PROVIDE #10 AWG GROUND TO CORRESPOND. ALL
) OWNER.	BRANCH CIRCUITS SHALL CARRY A GROUNDING EQUIPMENT CONDUCTOR, AND BE WIRED WITH COLOR-CODED WIRE WITH THE SAME COLOR USED FOR A PHASE THROUGHOUT. COLOR-CODE SHALL BE AS
CONTACT THE OWNER.	FOLLOWS:
LS SHALL BE SUBMITTED AND RETURNED MARKED REVIEWED D PRIOR TO ORDERING/ INSTALLATION OF ANY PRODUCT /	NEUTRAL - WHITE; GROUND - GREEN.
SUME THAT ALL ELECTRICAL EQUIPMENT, RACEWAYS, DWN ON THE DRAWINGS SHALL BE FURNISHED AND	VIBRATION SHALL BE MADE UP WITH GREENFIELD IN DRY LOCATIONS AND WITH JACKETED, LIQUID-TIGHT, FLEXIBLE, GALVANIZED STEEL
RACTOR UNLESS SPECIFICALLY NOTED AS 'EXISTING'.	EQUIPMENT WHERE SHOWN ON DRAWINGS. ALL DIMENSIONS SHOWN ON THE DRAWINGS ARE FROM FINISHED FLOOR TO THE CENTER OF THE
QUIPMENT SUPPLIERS AND THE OWNER.	DEVICE UNLESS OTHERWISE INDICATED. STANDARD MOUNTING HEIGHTS ARE AS FOLLOWS:
THERWISE NOTED. ALL INTERIOR CONDUITS SHALL BE ('UBING (EMT), RIGID METAL CONDUIT (RMC) OR FLEXIBLE	DEVICES HEIGHT AFF AT DEVICE CENTER 1. ELECTRICAL OUTLETS 18" 2. ELECTRICAL OUTLETS ABOVE COUNTER 42"
INLESS OTHERWISE NOTED.	COMMUNICATION OUTLETS 18" LIGHT SWITCHES 42" THERMOSTATS SEE MECHANICAL SPECIFICATIONS
CAL EQUIPMENT, PULL AND JUNCTION BOXES AND DNS PROVIDED OR ASSOCIATED WITH THIS CONSTRUCTION.	D. MATERIALS SHALL BE NEW AND UNUSED AND THE CATALOGUED PRODUCTS OF MANUFACTUREDS RECUILABLY ENCACED IN THE
TRATE FIRE RATED WALLS OR FLOORS, FURNISH AND THAT IS AN UNDERWRITER'S LABORATORIES LISTED SYSTEM LLATION THAT CONFORMS TO THE FLORIDA BUILDING CODE.	PRODUCTS OF MANUFACTURERS REGULARLY ENGAGED IN THE PRODUCTION OF SUCH MATERIALS. THE MATERIALS SHALL BE OF THE MANUFACTURER'S LATEST STANDARD DESIGN THAT COMPLIES WITH
TCH AND REPAIR ALL DAMAGED SURFACES AND AREAS	E. LIGHTING FIXTURES SHALL BE AS SHOWN ON THE DRAWING AND SHALL
BE CONCEALED IN WALL WHERE POSSIBLE. ALL CONDUITS IN	BE FURNISHED WITH LAMPS INSTALLED. F. ALL GROUNDING SHALL CONFORM TO ARTICLE 250 OF THE NEC, THE
ALL BE CONCEALED UNLESS OTHERWISE NOTED.	DRAWINGS, AND THE LOCAL CODE ENFORCEMENT AUTHORITIES HAVING JURISDICTION.
RAL RCP FOR REFERENCE AS TO WHICH FIXTURES ARE NEW, OCATED.	G. FIREPROOF ALL OPENINGS IN FIRE RATED WALLS BY AN UL APPROVED SYSTEM.
FOR SECTION VIEWS OF STACKED RECEPTACLE LOCATIONS.	H. PROVIDE FOR REVIEW AND APPROVAL FIVE (5) COPIES OF CUT SHEETS AND SCHEDULES FOR ALL ELECTRICAL EQUIPMENT FURNISHED BY THE
	EACH CATEGORY WITH SPACE FOR ENGINEER'S STAMP AND COMMENTS. LOOSE CUTSHEETS WILL BE REJECTED.
IDITIONS GENERAL NOTES	I. CONDUIT PENETRATIONS THROUGH FIRE RATED PARTITIONS SHALL BE SEALED USING APPROVED FIRE STOPPING COMPOUND. REFER TO
THOSE PORTIONS OF THE BUILDING AND SITE	ARCHITECTURAL FLOOR PLAN FOR LOCATION OF FIRE RATED PARTITIONS.
DRE SUBMITTING PROPOSALS, SO AS TO NG CONDITIONS AND DIFFICULTIES THAT WILL DRK. SUBMISSION OF A PROPOSAL WILL BE	J. ELECTRICAL CONTRACTOR MAY COMBINE CIRCUITS IN A COMMON RACEWAY AS LONG AS CONDUCTORS ARE DERATED AS PER NEC TABLE 310-15. SHARED NEUTRAL SHALL NOT BE ALLOWED.
T SUCH EXAMINATION HAS BEEN MADE AND JIPMENT OR MATERIALS REQUIRED BECAUSE OF _ NOTE BE RECOGNIZED.	K. ELECTRICAL CONTRACTOR SHALL INCLUDE CUTTING AND PATCHING FOR THE INSTALLATION OF HIS/HER WORK WITHIN BASE BID
ATED ARE TAKEN FROM FIELD INVESTIGATION. IT NFORESEEN CONDITIONS EXIST AND NFW	L. CLEAN ALL LIGHT FIXTURES, LAMPS AND LENSES AND PANELBOARD
TED EXACTLY AS SHOWN ON THE DRAWINGS. ADES IN ROUTING AND/OR BURIAL DEPTHS, AS	M. PROVIDE DISK FILE ON CAD 2009 RELEASE WITH "AS BUILT" ELECTRICAL
NECESSARY. IT IS ALSO UNDERSTOOD THAT ELY TO SCALE. THIS CONTRACTOR IS TO FIELD	DRAWINGS AT THE COMPLETION OF THE PROJECT. N. CONTRACTOR REPRESENTS THAT HIS BID IS BASED UPON THE
ALL TRACE LIGHTING AND POWER BRANCH	MANUFACTURER'S MATERIALS AND EQUIPMENT DESCRIBED IN THE CONTRACT DOCUMENTS.
S SERVING AREA WITHIN SCOPE OF WORK. FEN PANEL SCHEDULES AT COMPLETION OF	
HTING, SYSTEMS, MATERIAL, AND EQUIPMENT	
	BID ALIEKNAIE:
RED TO REMAIN ACTIVE FOR THE FACILITY TO BE	1. PROVIDE COST ADD TO PERFORM ARC FLASH CALCULATION OF NEW PANELS.
CONDUIT WHICH ARE LOCATED PROPERLY FOR DR NEW DEVICES AND WIRE.	
/ED SHALL BE TAKEN BACK TO THE SOURCE OF OTED.	
E WHERE REQUIRED.	
N ACCESSIBLE SPACES SHALL BE COMPLETELY DCIATED CONDUCTORS, JUNCTION BOXES,	

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Orange County Code Enforcement Office Renovations
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BID DOCUMENTS
DATESUBMISSION / REVISIONNO.03/13/2018Permit Review Responses1Revision 11
LEGEND, ABBREVIATIONS, AND GENERAL NOTES
SCALE:AS INDICATEDDRAWN BY:M. LARUE
CHECK BY: T. COMER DATE: 05/30/2018 PROJECT NUMBER: 15012-0011
E-100

REFERENCED NOTES

- PROVIDE NEW 0-10V DIMMER OCCUPANCY SWITCH FOR NEW LIGHTING SWITCH LEGS. DESIGN SPEC TO BE LUTRON Z101, OR APPROVED EQUAL.
- 2 PROVIDE LIGHTING CONTROL PANEL FOR OVERALL CONFERENCE ROOM DIMMING CONTROL.
- PROVIDE NEW CEILING MOUNTED OCCUPANY SENSORS. DESIGN SPEC TO BE LEVITON ODC10-MDW, OR APPROVED EQUAL.

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E-221	SCALE: 1/2" = 1'-0"			E-221	7
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Enforcement Office Renovations
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74060 BID DOCUMENTS
DATE SUBMISSION / REVISION NO.
03/13/2018 Permit Review Responses 1 Revision 1
SECOND FLOOR
POWER PLAN - NEW WORK
SCALE:AS INDICATEDDRAWN BY:M. LARUE
CHECK BY: T. COMER DATE: 05/30/2018
PROJECT NUMBER: 15012-0011
E-221

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GENERAL NOTES

1. U.O.N. ALL MECHANICAL EQUIPMENT IS EXISTING TO REMAIN. REFER TO SHEET M-601 FOR NEW EQUIPMENT SPECIFICATIONS.

2. ALL NEW ELECTRICAL EQUIPMENT SHALL INCLUDE AN ARC FLASH HAZARD SIGN PER NEC 110.16.

ALL NEW ELECTRICAL EQUIPMENT SHALL INCLUDE A LABEL AS INDICATED IN DETAIL #5 ON SHEET E-501. 4. REFER TO PANEL SCHEDULES ON SHEET E-402 FOR

ADDITIONAL BRANCH CIRCUIT INFORMATION. ALL PANELBOARD SURGE SUPPRESSION EQUIPMENT IS EXISTING TO REMAIN. DISCONNECT AND RECONNECT TO

NEW PANELBOARDS. PRIOR TO DEMOLITON, CONTRACTOR TO MEET WITH OWNER FOR EACH PANEL AND DETAIL SYSTEMS AFFECTED AND ANTICIPATED DOWNTIMES FOR OWNER

APPROVAL. PRIOR TO DEMOLITION, CONTRACTOR SHALL COORDINATE AND MEASURE EXISTING CONDUIT

PENETRATION INTO EXISTING PANELBOARDS WITH NEW PANELBOARD DIMENSIONS AND KNOCKOUTS. CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFYING

CONDUIT AS NEEDED FOR RECONNECTION TO NEW PANELS. 9. REFER TO SHEET E-501 FOR ONE-LINE DIAGRAM.

BRANCH PANELS FED DOWNSTREAM FROM FEEDER PANELS SHALL BE REPLACED FIRST TO MINIMIZE AFFECTED SYSTEMS DURING DOWNTIMES.

10. PRIOR TO REPLACEMENT DURING CONTRACTOR PRELIMINARY VISUAL INSPECTION OF PANEL INTERIORS, IF IT IS OBSERVED THAT FEEDER CONDUCTORS ARE IN POOR CONDITION, CONTRACTOR SHALL NOTIFY OWNER

REFERENCED NOTES

PANEL HVA:

EXISTING: PANEL 'HVA' IS AN EXISTING 480/277V 3-PHASE, 4-WIRE PANELBOARD IN ELECTRICAL ROOM #127. 'HVA' IS 225A RATED WITH A 225A MAIN BREAKER. 'HVA' SERVES TRANSORMER 'A' LOCATED ADJACENT TO THE PANEL SERVING PANEL 'A'.

REPLACEMENT: PROVIDE NEW 480/277V, 30 SPACE, 225A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 225A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL HAVE A MINIMUM 10 KAIC SHORT CIRCUIT RATING. BREAKERS SHALL BE UL-LISTED FOR KAIC RATING TO MATCH PANELBOARD. ENCLOSURE SHALL BE 14"-20" WIDE.

(2) <u>PANEL A:</u>

EXISTING: PANEL 'A' IS AN EXISTING 208/120V 3-PHASE, 4-WIRE PANELBOARD IN ELECTRICAL ROOM #127. 'A' IS 225A RATED WITH A 225A MAIN BREAKER.

REPLACEMENT: PROVIDE NEW 208/120V. 42 SPACE. 225A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 225A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL BE RATED FOR USE AS SERVICE EQUIPMENT. PROVIDE WITH A MINIMUM 10 KAIC SHORT CIRCUIT RATING WITH BREAKERS MATCHING PANEL SHORT CIRCUIT RATING. ENCLOSURE SHALL BE 14"-20" WIDE.

PANEL AA:

EXISTING: PANEL 'AA' IS AN EXISTING 208/120V 3-PHASE, 4-WIRE PANELBOARD IN ELECTRICAL ROOM #127. 'A' IS 225A RATED WITH A 225A MAIN BREAKER.

REPLACEMENT: PROVIDE NEW 42 SPACE, 225A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 150A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL BE RATED FOR USE AS SERVICE EQUIPMENT. PROVIDE WITH A MINIMUM 10 KAIC SHORT CIRCUIT RATING WITH BREAKERS MATCHING PANEL SHORT CIRCUIT RATING. ENCLOSURE SHALL BE 14"-20" WIDE.

$\langle 4 \rangle$ <u>PANEL AB:</u>

EXISTING: PANEL 'AB' IS AN EXISTING 208/120V 3-PHASE, 4-WIRE PANELBOARD IN ELECTRICAL ROOM #127. 'AB' IS 100A RATED WITH A 100A ON-BOARD MAIN BREAKER FED THROUGH BY PANEL 'AA'.

REPLACEMENT: PROVIDE NEW 30 SPACE, 100A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 100A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL HAVE A MINIMUM 10 KAIC SHORT CIRCUIT RATING. BREAKERS SHALL BE UL-LISTED FOR KAIC RATING TO MATCH PANELBOARD. ENCLOSURE SHALL BE 14"-20" WIDE.

(5) <u>PANEL B:</u>

EXISTING: PANEL 'B' IS AN EXISTING 208/120V 3-PHASE, 4-WIRE PANELBOARD IN THE MAIN ELECTRICAL ROOM. 'B' IS 100A RATED WITH A 30A MAIN BREAKER. REPLACEMENT: PROVIDE NEW 18 SPACE, 100A RATED

LIGHTING AND APPLIANCE PANELBOARD WITH 30A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL HAVE A MINIMUM 10 KAIC SHORT CIRCUIT RATING. BREAKERS SHALL BE UL-LISTED FOR KAIC RATING TO MATCH PANELBOARD. ENCLOSURE SHALL BE 14"-20" WIDE.

$\langle 6 \rangle$ <u>PANEL EM:</u>

EXISTING: PANEL 'EM' IS AN EXISTING 208/120V 3-PHASE, 4-WIRE EMERGENCY PANELBOARD IN THE MAIN ELECTRICAL ROOM. 'EM' IS 100A RATED WITH A 60A MAIN BREAKER.

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REPLACEMENT: PROVIDE NEW 30 SPACE,100A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 60A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL HAVE A MINIMUM 10 KAIC SHORT CIRCUIT RATING. BREAKERS SHALL BE UL-LISTED FOR KAIC RATING TO MATCH PANELBOARD. ENCLOSURE SHALL BE 14"-20" WIDE. RENAME PANEL TO BE PANEL 'M'. RENAME TRANSFORMER SERVING TO BE TRANSFORMER 'M'.

$\langle 7 \rangle$ **PANEL HVEM**:

EXISTING: PANEL 'HVEM' IS AN EXISTING 480/277V 3-PHASE, 4-WIRE PANELBOARD IN THE MAIN ELECTRICAL ROOM. 'HVEM' IS 100A RATED WITH A 60A MAIN BREAKER.

REPLACEMENT: PROVIDE NEW 30 SPACE, 100A RATED LIGHTING AND APPLIANCE PANELBOARD WITH 60A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN NEMA 1 ENCLOSURE WITH HINGED FRONT. PANELBOARD SHALL HAVE A MINIMUM 10 KAIC SHORT CIRCUIT RATING. BREAKERS SHALL BE UL-LISTED FOR KAIC RATING TO MATCH PANELBOARD. ENCLOSURE SHALL BE 14"-20" WIDE. RENAME PANEL TO BE 'HVM'.

- $\langle 8 \rangle$ COORDINATE DIMENSIONS OF NEW DISTRIBUTION PANEL TO ALLOW FOR OVERNIGHT CROSSOVER OF EXISTING CIRCUITS TO NEW DISTRIBUTION PANEL IN ORDER TO AVOID DOWNTIME FOR THE EXISTING BUILDING.
- 9 PROVIDE WIREWAY IN EXISTING ELECTRICAL ROOM TO INTERCEPT EXISTING FEEDER CIRCUITS AND RE-ROUTE TO NEW DISTRIBUTION PANEL.
- $\langle 10 \rangle$ EXISTING SWITCHGEAR TO BE REPLACED. CONTRACTOR TO COORDINATE NEW SWITCH GEAR DIMENSIONS OF INTERIOR CONDUIT STUBUPS WITH NEW SWITCH GEAR TO ALLOW OVERNIGHT REPLACEMENT AND CONNECTION OF NEW GEAR.
- (11) PROVIDE NEW 800A AUTOMATIC TRANSFER SWITCH TO REPLACE EXISTING AUTOMATIC TRANSFER SWITCH. EXISTING CONDUIT TO BE REUSED WHERE POSSIBLE FROM EXISTING GENERATOR SITE INTO ELECTRICAL ROOM.
- 12 PROVIDE NEW 500KVA GENERATOR TO MATCH INCOMING ELECTRICAL SERVICE TO THE STRUCTURE. EXISTING CONDUIT AND MANUAL TRANSFER SWITCH TO ELECTRICAL ROOM TO BE REUSED WHERE POSSIBLE.
- 13 PROVIDE NEW 54 SPACE, 800A RATED POWER DISTRIBUTION PANELBOARD WITH 800A MAIN CIRCUIT BREAKER AND COPPER BUSSING IN A NEMA 3R ENCLOSURE FOR PANEL 'MDP' REPLACEMENT.
- (14) EXISTING CHILLER TO BE DEMOLISHED. DEMOLITION SHALL INCLUDE THE REMOVAL OF EXISTING DOUBLE THROW FUSED DISCONNECT SWITCH AND ALL WIRING AND CONDUIT BACK TO PANEL 'MDP1'. ADDITIONAL CHILLER PUMP CIRCUITS TO ALSO BE REMOVED COMPLETE BACK TO PANEL 'MDP1'.
- (15) EXISTING CHILLER FUSED DISCONNECT TO BE DEMOLISHED. PROVIDE NEW 400A RATED, NEMA 3R FUSED DISCONNECT SWITCH WITH 300A FUSES FOR NEW CHILLER. PROVIDE (3) # 350 KCMIL, (1) #4 G IN 3" CONDUIT BACK TO INDICATED BRANCH CIRCUIT. PROVIDE NEW 300A UL-LISTED CIRCUIT BREAKER RATED FOR USE IN EXISTING PANELBOARD. MAINTAIN PANEL SHORT CIRCUIT RATING.
- <16[\] PROVIDE NEW 400A RATED, NEMA 3R DOUBLE-THROW SWITCH FOR BYPASS TO TEMPORARY CHILLER TO MATCH EXISTING.
- (17) PROVIDE NEW 480V PRI 208/120Y SEC, 30KVA TRANSFORMER TO REPLACE EXISTING. CONTRACTOR TO VERIFY EXISTING EQUIPMENT GROUND CONDUCTOR. IF DISCONNECTED, RECONNECT TO NEAREST BUILDING STRUCTURAL STEEL EQUIPMENT GROUND CONDUCTOR SHALL BE (1) #8 AWG.

FIRST FLOOR ELECTRICAL ROOM PLAN

SCALE: 1/8" = 1'-0"

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CIRCUIT DESCRIPTION RECEPTACLE RECEPTACLE RECEPTACLE	42 POLE SPACES	3					MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE	225 A 2 2 5 5 7 5 7 5 7 5 7 5 7 5 7 5 7 7 7 7					li P,	NSTALLATION C LOCATION ELECT ANEL FEEDER T-1 NOTES	RICAL CL 257
RECEPTACLE RECEPTACLE RECEPTACLE	WIDE SIZE	CONDUIT	CB.	Polos	СКТ		•	B	ſ	СКТ	Polos	CB.	CONDUIT		
RECEPTACLE	1-#12, 1-#12, 1-#12 1-#12 1-#12 1-#12	3/4"	20 A	1 1	1	540 VA	900 VA	540 VA		2 4	1 1	20 A	3/4"	1-#10, 1-#10, 1-#10 1-#12 1-#12 1-#12	RECEPTACLE RECEPTACLE
DHWP-1	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A	1	5	60 VA	720 VA	900 VA	1080 VA	6	1	20 A 20 A 20 A	3/4" 3/4"	1-#10, 1-#10, 1-#10 1-#12, 1-#12, 1-#12	RECEPTACLE
RECEPTACLE	1-#10, 1-#10, 1-#10 1-#10, 1-#10, 1-#10	3/4" 3/4"	20 A 20 A	1	9 11		1080 VA	540 VA	720 VA	10 12	1	20 A 20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10	RECEPTACLE
RECEPTACLE RECEPTACLE	1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10	3/4" 3/4"	20 A 20 A	1	13 15	1440 VA	900 VA 1440 VA	0 VA		14 16	1	20 A	3/4"	1-#10, 1-#10, 1-#10	RECEPTACLE
RECEPTACLE RECEPTACLE	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A	1	17 19	1440 VA	0 VA	540 VA	0 VA	18 20	3	30 A			SURGE PROTECTOR
RECEPTACLE RECEPTACLE	1-#12, 1-#12, 1-#12 1-#8, 1-#8, 1-#8	3/4" 3/4"	20 A 20 A	1 1	21 23		1440 VA	720 VA 1440 VA	1440 VA	22 24	1 1	20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	RECEPTACLE RECEPTACLE
RECEPTACLE RECEPTACLE	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A	1	25 27	540 VA	1440 VA 540 VA	1440 VA		26 28	1 1	20 A 20 A	3/4" 3/4"	1-#8, 1-#8, 1-#8 1-#10, 1-#10, 1-#10	RECEPTACLE RECEPTACLE
RECEPTACLE RECEPTACLE	1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10	3/4" 3/4"	20 A 20 A	1	29 31	1440 VA	360 VA	1440 VA	720 VA	30 32	1	20 A 20 A	3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	
	1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A 20 A	1	33	900 \/A	480 VA	1440 VA	720 VA	34 36 38	1	20 A 20 A 20 A		 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	RECEPTACLE
	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4"	20 A 20 A 20 A	1 1 1	37 39 41	900 VA	900 VA	1440 VA 720 VA	1440 VA	40	1 1 1	20 A 20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	RECEPTACLE RECEPTACLE
			Tota Tota	al Load: I Amps:		11160 VA 93	10980 VA 3 A 92	13680 VA 2 A 1 ²	4 A	_					
480	225 AMPS /277 Wye VOLTS 3 PHASE 4 WIRE 40 POLE SPACES	6				PANI	EL HVB S MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE	CHEDUL	E				li P <i>i</i>	NSTALLATION HVB LOCATION ELECT ANEL FEEDER NOTES	RICAL CL 257
CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AMPS	Poles	скт		A	В	С	скт	Poles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
XFMR T-1	3-#6, 1-#6, 1-#10	1"	50 A	3	1 3	11160	980 VA 10980	1050 VA		2 4	1 1	20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	Lighting Lighting
Lighting	1-#12, 1-#12, 1-#12	3/4"	20 A	1	5 7	420 VA	144 VA	13680	543 VA	6 8	1 1	20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	Lighting Lighting
Lighting Lighting	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A	1	9 11		700 VA	108 VA 595 VA	281 VA	10 12	1 1	20 A 20 A	3/4" 3/4"	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	Lighting Lighting
TU-2-1, FTU-2-16, FTU-2-17, FTU-2-18			40 A	3	13 15 17 19 21	0 VA	0 VA 0 VA 0 VA 0 VA	0 VA 0 VA 0 VA	0 VA	14 16 18 20 22	3	40 A 			FTU-2-3, FTU-2-4, FTU-2-5, FTU-2-6, FT SPACE
SFAGE			30 A	3	23			0.1/4	0.VA	24	3	30 A			FTU-2-8, FTU-2-9, FTU-2-10, FTU-2- FTU-2-19
FTU-2-12, FTU-2-14, FTU-2-15					25	0 VA	0 VA			26					110210
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting	 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4"	20 A 20 A	1	25 27 29	0 VA	0 VA 2000 VA	A 0 VA 90 VA	0 VA	26 28 30					SPACE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting Unit	 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4" 3/4" 3/4"	20 A 20 A 20 A 20 A 20 A	1 1 1 1	25 27 29 31 33	0 VA 597 VA	0 VA 2000 VA 2000 VA 0 120 VA 120 VA	0 VA 0 VA 90 VA 0 VA	0 VA	26 28 30 32 34	3	 20 A			SPACE Surge Supressor
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting Unit SPARE SPARE SPARE	 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 	3/4" 3/4" 3/4" 	20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 al Load: I Amps:	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48	0 VA 2000 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 0 VA 14872 VA 3 A 55	0 VA 90 VA 0 VA 0 VA 0 VA 0 VA 5 A 5	0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40	 3 1 1 1	 20 A 20 A 20 A 20 A		 	SPACE Surge Supressor SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120	 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS	3/4" 3/4" 3/4" 	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota	1 1 1 1 1 1 1 al Load:	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 120 VA 0 VA 3 55 EL 'CA' S MAIN BREAKER LUGS	0 VA 90 VA 0 VA 0 VA 0 VA 0 VA 15121 VA 5 A 5 CHEDULI	0 VA 0 VA	26 28 30 32 34 36 38 40	 3 1 1 1	 20 A 20 A 20 A		 NSTALLATION CA LOCATION ELECT	SPACE Surge Supressor SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES	3/4" 3/4" 3/4" 	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota	1 1 1 1 1 1 1 al Load: I Amps:	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 120 VA 0 VA 3A 55 EL 'CA' SO MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE	0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 15121 VA 5 A 5 CHEDULI 100 A Type 1	0 VA 0 VA	26 28 30 32 34 36 38 40	 3 1 1 1	 20 A 20 A 20 A	 	 NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES	SPACE Surge Supressor SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120 120 CIRCUIT DESCRIPTION EXISTING VAV	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1-#12, 1-#12, 1-#12	3/4" 3/4" 3/4" 	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48 PAN	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 0 VA 14872 VA 3 A 55 EL 'CA' SO MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 VA	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 5 A 5 CHEDULI 100 A Type 1		26 28 30 32 34 36 38 40	 3 1 1 1 1 1 2 9 0 1	 20 A 20 A 20 A 20 A	 II P/ CONDUIT 3/4"	 NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1-#12, 1-#12, 1-#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120 120 CIRCUIT DESCRIPTION EXISTING EAST SIDE UPS	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1-#12, 1-#12, 1-#12 4 #12, 1-#12, 1-#12	3/4" 3/4" 3/4" S S CONDUIT 3/4" 	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 30 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2	25 27 29 31 33 35 37 39 : : : : : :	0 VA 597 VA 0 VA 13211 VA 48 PAN	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 3A 55 EL 'CA' S(MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 VA 0 VA	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 15121 ∨A 5 A 5 CHEDULI 100 A 100 A 1000 ∨A 1000 ∨A 0 ∨A 0 ∨A	0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40 	 3 1 1 1 1 1 1 Poles 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 P/ P/ CONDUIT 3/4" 3/4" 3/4"	NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12	RICAL CL 257 CIRCUIT DESCRIPTION VAV VV-A-1 VAV VV-A-2 EXISTING FDV
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 100 120 120 120 120 120 120 120 120 120	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE 42 POLE SPACES UNRE 512E 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4" 3/4" S S S S S S	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 30 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48 PAN	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 3A 55 EL 'CA' SO MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 VA 0 VA 0 VA 0 VA	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 5 A 5 CHEDULI 100 A 100 A 100 A 1000 ∨A 0 ∨A 0 ∨A	0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40 40 	 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 	NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10 1-#12, 1-#12, 1-#12	RICAL CL 257 CIRCUIT DESCRIPTION VAV VV-A-1 VAV VV-A-2 EXISTING WEST SIDE UPS
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 100 110 120 120 120 120 120 120 120 120	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4" 3/4" 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 20 A 30 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1	25 27 29 31 33 35 37 39 : : : : : : : : : : : : : : : : : :	0 VA 597 VA 0 VA 13211 VA 4 PAN 0 VA 1000 VA	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 0 VA 0 VA 3 A 55 EL 'CA' SO MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 0 ∨A 5 A 5 Type 1 100 A 1000 ∨A 0 ∨A 540 ∨A 0 ∨A 0 ∨A 540 ∨A	C 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40 	 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 I P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/	NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1-#12, 1-#12, 1-#12 1-#10, 1-#10, 1-#10 1-#12, 1-#12, 1-#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 100 110 120 120 120 120 120 120 120 120	1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 2 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12	3/4" 3/4" 3/4" S S S S S S S S S S S S	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA	0 VA 2000 VA 0 VA 120 VA 0 VA 0 VA 0 VA 3. 0 VA 55 0 VA 55 0 VA 55 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 1000 VA 0 VA 0 VA 0 VA 0 VA 0 VA 1000 VA 0 VA 0 VA 0 VA 0 VA 0 VA	0 VA 90 VA 0 VA 90 VA 0 VA 0 VA 10 VA 0 VA 15121 VA 15121 VA 5 A 5 5 Type 1 100 A 1000 VA 0 VA 1000 VA 0 VA 1000 VA 0 VA 1000 VA 0 VA 1000 VA 180 VA	C 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20	 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 I P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/	NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 100 100 100 100 100 100 100 100 100 10	1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 2 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12 1.#12, 1.#12 1.#12 1.#12, 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12 1.#12	3/4" 3/4" 3/4" 3/4" S S S S S S S S S S S S S	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 20 A 30 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3	25 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA	0 VA 2000 VA 2000 VA 120 VA 120 VA 120 VA 0 VA 0 VA 0 VA 14872 VA 14872 VA 3 A 55 EL 'CA' SO MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 15121 ∨A 5 A 15121 ∨A 5 A 5 Type 1 IO0 ∨A 100 A 0 ∨A 100 A 0 ∨A 100 A 0 ∨A 100 ∨A 0 ∨A 100 ∨A 0 ∨A 1100 ∨A 0 ∨A 0 ∨A 0 ∨A	C C 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA	26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24	 3 1 1 1 1 1 1 1 1 1 1 2 2 2 2 1 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/	 NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE CIRCUIT DESCRIPTION VAV VV-A-1 VAV VV-A-1 VAV VV-A-1 VAV VV-A-2 EXISTING FDV EXISTING FDV EXISTING WEST SIDE UPS EXISTING WEST SIDE UPS EXISTING HOT WATER HEATEF EXISTING HOT WATER HEATEF
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120 CIRCUIT DESCRIPTION EXISTING VAV EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV RECEPTACLE	1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12 1-#12, 1-#12, 1-#12	3/4" 3/4" 3/4" S S CONDUIT 3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 3/4"	20 A 20 A 20 A 20 A 20 A 20 A 20 A Tota Tota CB. AMPS 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td< td=""><td>25 27 29 31 33 35 37 39 : : : : : : : : : : : : : : : : : :</td><td>0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA 0 VA</td><td>0 ∨A 2000 ∨A 120 ∨A 120 ∨A 120 ∨A 0 ∨A 0 ∨A 14872 ∨A 14872 ∨A 3 A 53 EL 'CA' S MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 ∨A 1000 ∨A 0 ∨A 0 ∨A 1000 ∨A 1000 ∨A 1000 ∨A 1000 ∨A 0 ∨A</td><td>0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 15121 ∨A 5 A 5 Type 1 100 A 100 ∨A 0 ∨A 100 ∨A 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∨A 0 ∨A 100 ∨A 0 ∨A 1100 ∨A 0 ∨A 0 ∨A 0 ∨A</td><td>C 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 180 VA 180 VA</td><td>26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 28</td><td> 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1</td><td> 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A</td><td> P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/</td><td> NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12</td><td>SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE CIRCUIT DESCRIPTION VAV VV-A-1 VAV VV-A-1 VAV VV-A-1 VAV VV-A-2 EXISTING FDV EXISTING FDV EXISTING WEST SIDE UPS EXISTING WEST SIDE UPS EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PLOTTER (COPEN OFFICE PLOTTER (COPEN OFFICE PLOTTER (RM. 231) PRINTER/COPIER (RM. 231) SPARE</td></td<>	25 27 29 31 33 35 37 39 : : : : : : : : : : : : : : : : : :	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA 0 VA	0 ∨A 2000 ∨A 120 ∨A 120 ∨A 120 ∨A 0 ∨A 0 ∨A 14872 ∨A 14872 ∨A 3 A 53 EL 'CA' S MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE A 1000 ∨A 1000 ∨A 0 ∨A 0 ∨A 1000 ∨A 1000 ∨A 1000 ∨A 1000 ∨A 0 ∨A	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 15121 ∨A 15121 ∨A 5 A 5 Type 1 100 A 100 ∨A 0 ∨A 100 ∨A 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∨A 0 ∨A 100 ∨A 0 ∨A 1100 ∨A 0 ∨A 0 ∨A 0 ∨A	C 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 0 VA 180 VA 180 VA	26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 28	 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 1 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/	NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE CIRCUIT DESCRIPTION VAV VV-A-1 VAV VV-A-1 VAV VV-A-1 VAV VV-A-2 EXISTING FDV EXISTING FDV EXISTING WEST SIDE UPS EXISTING WEST SIDE UPS EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PLOTTER (COPEN OFFICE PLOTTER (COPEN OFFICE PLOTTER (RM. 231) PRINTER/COPIER (RM. 231) SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE 120, CIRCUIT DESCRIPTION EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV RECEPTACLE SPARE SPARE SPARE SPARE SPARE SPARE SPARE	1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 2.25 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1.#12, 1.#12, 1.#12 42 POLE SPACES UNRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 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0 ∨A 0 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A</td><td>0 VA 90 VA 0 VA 90 VA 0 VA 0 VA 10 VA 0 VA 15121 VA 15121 VA 5 A 15121 VA 5 A 0 VA 100 VA 0 VA 100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1000 VA 0 VA 11000 VA 0 VA 0 VA 0 VA</td><td>C C C C C C C C C C C C C C C C C C C</td><td>26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 30 32</td><td> 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td> 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A</td><td> P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/</td><td> NSTALLATION CA NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12</td><td>SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE EXISTING WEST SIDE UPS EXISTING WEST SIDE UPS EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PLOTTER (RM. 231) PRINTER/COPIER (RM. 231) SPARE SPARE SPARE SPARE</td></td<>	25 27 29 31 33 35 37 39 39 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 15 17 19 21 23 25 27 29 31	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA 0 VA 0 VA	0 ∨A 2000 ∨A 0 ∨A 120 ∨A 0 ∨A 0 ∨A 120 ∨A 0 ∨A 120 ∨A 0 ∨A 14872 ∨A 0 ∨A 14872 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 14872 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 11000 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A	0 VA 90 VA 0 VA 90 VA 0 VA 0 VA 10 VA 0 VA 15121 VA 15121 VA 5 A 15121 VA 5 A 0 VA 100 VA 0 VA 100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1100 VA 0 VA 1000 VA 0 VA 11000 VA 0 VA 0 VA 0 VA	C C C C C C C C C C C C C C C C C C C	26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 26 30 32	 3 1 1 1 1 1 1 1 1 1 1 1 2 2 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	 P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/ P/	NSTALLATION CA NSTALLATION CA LOCATION ELECT ANEL FEEDER NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#10, 1.#10, 1.#10 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE EXISTING WEST SIDE UPS EXISTING WEST SIDE UPS EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PLOTTER (RM. 231) PRINTER/COPIER (RM. 231) SPARE SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE CIRCUIT DESCRIPTION EXISTING VAV EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV EXISTING VAV RECEPTACLE SPARE S	1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.	3/4" 3/4" 3/4" S S S S S S S S S	20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <t< td=""><td>25 27 29 31 33 35 37 39 39 5 7 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 35 27 29 31 33 35</td><td>0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA 900 VA 0 VA</td><td>0 ∨A 2000 ∨A 0 ∨A 120 ∨A 0 ∨A 0 ∨A 120 ∨A 0 ∨A 120 ∨A 0 ∨A 120 ∨A 0 ∨A 14872 ∨A 0 ∨A 3 A 53 EL 'CA' S(MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE MAIN BREAKER 1005 MAIN BREAKER 1005 SC RATING 1005 NA 0 ∨A 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A</td><td>0 ∨ A 90 ∨ A 0 ∨ A 90 ∨ A 0 ∨ A 0 ∨ A 0 ∨ A 15121 ∨ A 5 A 15121 ∨ A 5 A 5 CHEDULI Image: Second Colspan="2">Second Colspan="2" Second Colspan="2"<</td><td>C C C C C C C C C C C C C C C C C C C</td><td>26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 6 30 32 34 36</td><td> 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td> 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A</td><td></td><td> NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12</td><td>SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE EXISTING HOT VATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (RM. 231) PRINTER/COPIER (RM. 231) SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE</td></t<>	25 27 29 31 33 35 37 39 39 5 7 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 35 27 29 31 33 35	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 900 VA 900 VA 900 VA 0 VA	0 ∨A 2000 ∨A 0 ∨A 120 ∨A 0 ∨A 0 ∨A 120 ∨A 0 ∨A 120 ∨A 0 ∨A 120 ∨A 0 ∨A 14872 ∨A 0 ∨A 3 A 53 EL 'CA' S(MAIN BREAKER LUGS GND. BAR SC RATING ENCLOSURE MAIN BREAKER 1005 MAIN BREAKER 1005 SC RATING 1005 NA 0 ∨A 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A	0 ∨ A 90 ∨ A 0 ∨ A 90 ∨ A 0 ∨ A 0 ∨ A 0 ∨ A 15121 ∨ A 5 A 15121 ∨ A 5 A 5 CHEDULI Image: Second Colspan="2">Second Colspan="2" Second Colspan="2"<	C C C C C C C C C C C C C C C C C C C	26 28 30 32 34 36 38 40 CKT 2 4 6 8 10 12 14 16 18 20 22 24 6 30 32 34 36	 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A		NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12	SPACE Surge Supressor SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE EXISTING HOT VATER HEATER EXISTING HOT WATER HEATER PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (OPEN OFFICE PRINTER/COPIER (RM. 231) PRINTER/COPIER (RM. 231) SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE
FTU-2-12, FTU-2-14, FTU-2-15 EWH-1 Lighting Lighting - Dwelling Unit SPARE SPARE SPARE SPARE I 20 CIRCUIT DESCRIPTION EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING EAST SIDE UPS VAV VV-B-1 EXISTING VAV EXISTING VAV EXISTING VAV RECEPTACLE SPARE	1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 225 AMPS /208 Wye VOLTS 3 PHASE 4 WIRE 42 POLE SPACES WIRE SIZE 1.#12, 1.#12, 1.#12 42 POLE SPACES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12	3/4" 3/4" 3/4" 3/4" S S S S S S S S S S S S S	20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td< td=""><td>25 27 29 31 33 35 37 39 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 35 27 29 31 33 35 37 39</td><td>0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 1000 VA 900 VA 0 VA 0 VA 0 VA</td><td>0 ∨A 2000 ∨A 0 ∨A 120 ∨A 0 ∨A 0 ∨A 120 ∨A 0 ∨A 14872 ∨A 3A 58 58 CA 0 ∨A 14872 ∨A 0 ∨A 14872 ∨A 0 ∨A 3A 58 CA 0 ∨A BAIN BREAKER LUGS GND. BAR SC RATING SC RATING ENCLOSURE 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A</td><td>0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 10 ∨A 15121 ∨A 5 A 15121 ∨A 5 A 5 Type 1 100 A 100 ∨A 0 ∨A 100 ∧A 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∨ 0 ∨A 100 ∨ 0 ∨A 1100 ∧ 0 ∨A 1100 ∧ 0 ∨A 1100 ∨ 0 ∨A 1100 ∨ 0 ∨A 0 ∨A 0 ∨A</td><td>C C C C C C C C C C C C C C C C C C C</td><td>26 28 30 32 34 36 38 40 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -</td><td> 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td> 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A</td><td></td><td> NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12</td><td>SPACE Surge Supressor SPARE EXISTING FDV EXISTING WEST SIDE UPS EXISTING HOT WATER HEATE PRINTER/COPIER (OPEN OFFIC PRINTER/COPIER (OPEN OFFIC PLOTTER (RM. 231) PRINTER/COPIER (OPEN OFFIC PLOTTER (RM. 231) SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE</td></td<>	25 27 29 31 33 35 37 39 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 5 7 9 11 13 35 27 29 31 33 35 37 39	0 VA 597 VA 0 VA 13211 VA 48 PAN 0 VA 1000 VA 1000 VA 900 VA 0 VA 0 VA 0 VA	0 ∨A 2000 ∨A 0 ∨A 120 ∨A 0 ∨A 0 ∨A 120 ∨A 0 ∨A 14872 ∨A 3A 58 58 CA 0 ∨A 14872 ∨A 0 ∨A 14872 ∨A 0 ∨A 3A 58 CA 0 ∨A BAIN BREAKER LUGS GND. BAR SC RATING SC RATING ENCLOSURE 1000 ∨A 0 ∨A 1000 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 180 ∨A 0 ∨A 0 ∨A 0 ∨A	0 ∨A 90 ∨A 0 ∨A 90 ∨A 0 ∨A 0 ∨A 10 ∨A 15121 ∨A 5 A 15121 ∨A 5 A 5 Type 1 100 A 100 ∨A 0 ∨A 100 ∧A 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∧ 0 ∨A 100 ∨ 0 ∨A 100 ∨ 0 ∨A 1100 ∧ 0 ∨A 1100 ∧ 0 ∨A 1100 ∨ 0 ∨A 1100 ∨ 0 ∨A 0 ∨A 0 ∨A	C C C C C C C C C C C C C C C C C C C	26 28 30 32 34 36 38 40 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 20 A 20 A 20 A 20 A 20 A 20 A 20 A 20 A		NSTALLATION CA NOTES WIRE SIZE 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12 1.#12, 1.#12	SPACE Surge Supressor SPARE EXISTING FDV EXISTING WEST SIDE UPS EXISTING HOT WATER HEATE PRINTER/COPIER (OPEN OFFIC PRINTER/COPIER (OPEN OFFIC PLOTTER (RM. 231) PRINTER/COPIER (OPEN OFFIC PLOTTER (RM. 231) SPARE SPARE SPARE SPARE SPARE SPARE SPARE SPARE

	Supply From: ATS Mounting: Enclosure: NEMA 3R	Phases: 3 Wires: 4	Mains Type: Mains Rating: 800 A MCB Rating:	
СКТ		Circuit Description	Trip	Poles
2 3	PANEL 'HVA'		225 A	3
4 5 6	PANEL 'HVB'		225 A	3
7 8 9	RTU-2		60 A	3
10 11 12	DISC. TRANSFER SWITCH		60 A	3
13 14 15	SPARE		40 A	3
16 17 18	XFMR B		20 A	3
19 20 21 22	RTU-1		50 A	3
23 24 25	XFMR PANEL F		40 A	3
26 27 28	ELEVATOR		70 A	3
29 30 31	FAN COIL 2		50 A	3
32 33 34	FAN COILS 1 & 4		40 A	3
35 36 37	FAN COILS 3, 5, 6		70 A	3
38 39 40	SURGE		50 A	3
41 42 43	SPARE		60 A	3
44 45 46	PANEL 'HVC'		400 A	3
47 48	Power		300 A	3

Notes: EXISTING CIRCUIT 40:41:42 FOR EXISTING CHILLER PUMPS TO BE REMOVED UPON DEMOLITION OF PUMPS AND MARKED AS 'SPARE' (AS SHOWN).

INSTALLATION	нν
LOCATION	
PANEL FEEDER	
NOTES	

oles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
1	20 A			LIGHT WEST WING
1	20 A			LIGHT EAST WING
1	20 A			LIGHT NORTH WING
1	20 A			LIGHT HALLWAY
1	20 A			LIGHT LOBBY
1	20 A			LIGHT SOUTH WING
3	110 A			75KVA TRANSORMER
3	20 A			VAV BOTH CONFERENCE ROOMS
3	30 A			SURGE SUPPRESSOR

		li P.	NSTALLATION A LOCATION ANEL FEEDER NOTES	
oles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
1	20 A			RECEPTACLE ROOM
2	40 A			EXISTING
1	20 A			EXISTING
1	20 A			EXISTING
1	20 A			EXISTING
3	30 A			SURGE SUPPRESSOR
1	20 A			RECEPTACLE RECEPTION 105 & 2ND FLOOR
1	20 A			RECEPTACLE RECEPTION 105 & 2ND FLOOR
1	20 A			RECEPTACLE ROOM 109, 132
1	20 A			CUBICLE ROOM 105
1	20 A			CUBICLE ROOM 105
1	20 A			CUBICLE ROOM 105
1	20 A			RECEPTACLE BREAKROOM
1	20 A			RECEPTACLE BREAKROOM

		li P <i>i</i>	NSTALLATION AA LOCATION ANEL FEEDER NOTES	
oles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
1	20 A			SPARE
1	20 A			TRAINING ROOM #131
1	20 A			RECEPTACLE ROOM #105
1	20 A			EXISTING
1	20 A			EXISTING
2	30 A			COPIER HALL #117
1	20 A			SPARE
1	20 A			RECEPTACLE ROOM #116, #118
1	20 A			RECEPTACLE HALL 117
3	50 A			A/C UNIT
1	20 A			SPARE
1	20 A			RECEPTACLE
3	50 A			SURGE SUPPRESSOR
		1		

		li P <i>i</i>	NSTALLATION AB LOCATION ANEL FEEDER NOTES	
les	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
2	30 A			RECEPTACLE TRAINING ROOM
2	30 A			RECEPTACLE TRAINING ROOM
	20 A			RECEPTACLE
2	30 A			RECEPTACLE TRAINING ROOM
}	30 A			SURGE SUPPRESSOR
2	20 A			RECEPTACLE
3	100 A			MAIN
		1]		

	100 AMPS 480/277 Wye VOLTS 3 PHASE 4 WIRE 30 POLE SPACES	5					MAIN BREAKER 60 A LUGS GND. BAR SC RATING ENCLOSURE Type 1										
CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AMPS	Poles	скт		A		3	c	;	скт	Poles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
					1	0 VA	0 VA					2					SPACE
MAIN			60 A	3	3			0 VA	0 VA			4	1	20 A			PARKING LOT LIGHTS
					5					0 VA	0 VA	6					SPACE
					7	0 VA	0 VA					8	1	20 A			A/C - 1
TRANSFORMER EM - 30 KVA			40 A	3	9			0 VA	0 VA			10	1	20 A			A/C - 1
					11					0 VA	0 VA	12	1	20 A			A/C - 1
EMER. LIGHTING 1ST FLOOR			20 A	1	13	0 VA	0 VA					14					SPACE
EMER. LIGHTING 2ND FLOOR			20 A	1	15			0 VA	0 VA			16					SPACE
					17					0 VA	0 VA	18					SPACE
SURGE SUPPRESSOR			30 A	3	19	0 VA	0 VA					20					SPACE
					21			0 VA	0 VA			22					SPACE
SPACE					23					0 VA	0 VA	24					SPACE
SPACE					25	0 VA	0 VA					26					SPACE
SPACE					27			0 VA	0 VA			28					SPACE
SPACE					29					0 VA	0 VA	30					SPACE
			Tota	I Load:		0 VA		0 VA		0 VA							
			Total	Amps:		C	A	0	A	0	A						

PANEL 'EM' SCHEDULE 100 AMPS MAIN BREAKER 60 A INS' 120/208 Wye VOLTS LUGS IUGS 3 PHASE GND. BAR PAN 4 WIRE SC RATING PAN 30 POLE SPACES ENCLOSURE Type 1														ISTALLATION EM LOCATION ANEL FEEDER NOTES			
CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AMPS	Poles	скт		A		в		с	скт	Poles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
					1	0 VA	0 VA					2	1	20 A			EXHAUST FAN 20
MAIN			60 A	3	3			0 VA	0 VA			4	0	10.4			
					5					0 VA	0 VA	6	2	40 A			HVC CONTROL
EXHAUST FAN 16			20 A	1	7	0 VA	0 VA					8	1	20 A			EXHAUST FAN 22
EXHAUST FAN 18			20 A	1	9			0 VA	0 VA			10	1	20 A			RECEPTACLE
RECEPTACLE			20 A	1	11					0 VA	0 VA	12	1	20 A			RECEPTACLE
RECEPTACLE			20 A	1	13	0 VA	0 VA					14					
RECEPTACLE			20 A	1	15			0 VA	0 VA			16	3	30 A			SURGE SUPPRESSOR
CHILLER CONTROL			20 A	1	17					0 VA	0 VA	18	1				
EMS			20 A	1	19	0 VA	0 VA					20	1	20 A			RECEPTACLE
ELEVATOR CAB LIGHTS			20 A	1	21			0 VA	0 VA			22	1	20 A			PHONE ROOM RECEPTACLE
ELEVATOR CAB LIGHTS			30 A	1	23					0 VA	0 VA	24	1	20 A			PHONE ROOM RECEPTACLE
FORENSIC RECEPTACLE			30 A	1	25	0 VA	0 VA					26	2	20.4			CADACE
GENERATOR CRANK HEATER			20 A	1	27			0 VA	0 VA			28	2	20 A			GARAGE
CHARGERS			20 A	1	29					0 VA	0 VA	30	1	20 A			PHONE ROOM RECEPTACLE
			Tota	I Load:		0 VA		0 VA		0 VA							
			Total	Amps:		0	A	C	A	0	A						

	120	100 AMPS 0/208 Wye VOLTS 3 PHASE 4 WIRE 18 POLE SPAC	ES		
C	CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AMPS	Po
	POLE LIGHT			20 A	1
	POLE LIGHT			20 A	1
	WALLPACK			20 A	1
	EXTERIOR LIGHT			20 A	1
	EXTERIOR LIGHT			20 A	1
	EXTERIOR LIGHT			20 A	1
	EXTERIOR LIGHT			20 A	1
	SPACE				

PANEL 'HVEM' SCHEDULE

		MAIN B G SC ENC	REAKER LUGS ND. BAR RATING LOSURE	30 A Type 1			INSTALLATION B LOCATION PANEL FEEDER NOTES									
кт		A	F	В	(0	скт	Poles	CB. AMPS	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION				
1	0 VA	0 VA					2	_								
3			0 VA	0 VA			4	3	30 A			SURGE SUPPRESSOR				
5	0.1/4	0.) (A			0 VA	0 VA	6		00.4							
/	U VA	UVA	0.1/4	0.1/4			8	1	20 A							
9			UVA	UVA	0.\/A	0.1/4	10	1	20 A			SPARE				
13	0.\/A	0.1/4			UVA	UVA	1/	1	20 A			SPARE				
15	0 17		0 VA	0 VA			16	1	20 A			SPARE				
17				0 1/1	0 VA	0 VA	18					SPACE				
	0 VA		0 VA		0 VA		1.0			1						
-	0 A 0 A 0 A											'				

1 · · · 2 · · · 3 · · · · 3 · · · 9

	1	0	2		3		\bigcirc	4	0	
		2	70500 - COMMUNICATIONS GENERAL SYMBOL LEGEND EXPOSED CONDUIT OR RACEWAY SYSTEM.	CONDUIT SIZE AS SHOWN	CABLE TYPE AS SHOWN	COMM	UNICATIONS GENER	AL SYMBOL LEGEND NOTES CO	NTINUED.	BI ING AND
			CONCEALED CONDUIT OR RACEWAY.	ON DRWGS. AS SHOWN ON DRWGS.	ON DRWGS. AS SHOWN ON DRWGS.	CABLIN UNDER CABLIN	IG, TO OUTLETS AND GROUND OR IN SLAI IG TO OUTLETS AND	DEVICES, SPECIFICALLY SHON B, HORIZONTAL CONDUIT RUNS OTHER DEVICES SHALL BE INS	VN AS BEING RC AND THE ASSC	DUTED CIATED GROUND
			CONDUIT OR RACEWAY INSTALLED UNDERGROUND OR BELOW SLAB.	AS SHOWN ON DRWGS.	AS SHOWN ON DRWGS.	AND HI ARE IN GEL-FII	DDEN IN CEILING CA STALLED BELOW GR LLED OR WATER BLC	VITIES OR OTHER INTERSTITIA ADE THEY SHALL BE RATED FO OCKED). WHERE THE CONTRAC	L SPACES. WHE R WET LOCATIC TOR DESIRES T	RE CABLES DNS (I.E. O ROUTE
Н			EXISTING CONDUIT OR RACEWAY TO REMAIN. NOTE: FOR PURPOSES OF CLARITY EXISTING	AS SHOWN ON DRWGS.	AS SHOWN ON DRWGS.	INSTEA WRITTI	ITS AND CABLING TO D OF IN CEILING CA EN APPROVAL OF TH	VITIES AS OUTLINED ABOVE, HE IE DESIGNER PRIOR TO ROUGH	OVE-GRADE SL/ E SHALL OBTAIN I-IN.	ABS, THE
			CONDUIT AND RACEWAYS ON DEMOLITION DRAWINGS ARE SHOWN WITH CONTINUOUS LINETYPE. DASHED LINETYPE IS SHOWN ON RENOVATION DRAWINGS TO DIFFERENTIATE			27. WH WALLS PANEL	ERE BOXES OR DEV CONTRACTOR SHAL WHERE CEILING OF	ICES ARE INSTALLED BEHIND IN LL PROVIDE AND INSTALL A PRO WALL IS RATED ACCESS PANE	IACCESSIBLE CI DPERLY SIZED A EL RATING SHAL	EILINGS OR ACCESS L MATCH
		9	EXISTING FROM NEW. 4" X 4" FLUSH OUTLET BOX WITH SINGLE GANG PLATE AND CONDUIT EXTENDED TO NEAREST	MIN. 3/4" UNLESS	N/A	WALL F 28. COI	RATING. NTRACTOR SHALL CO	OORDINATE ITEMS ABOVE THE	CEILING IN A M/	ANNER
0			ACCESSIBLE CEILING SPACE. INSTALLED AT 18" UNLESS NOTED OTHERWISE. WALL PLATE COLOR AS SPECIFIED BY ARCHITECT UNLESS NOTED	NOTED OTHERWISE		<u>EXISTI</u>	NG CONDITIONS	S AND MAINTAINS ACCESSIBIL	11.	
		•	4" X 4" FLUSH OUTLET BOX WITH SINGLE GANG PLATE. INSTALLED FLUSH IN CEILING. INSTALLED CENTERED IN CEILING THE WALL PLATE COLOR	MIN. 3/4" UNLESS	N/A	1. VERI 2. WHE	FY EXISTING CONDI	TIONS PRIOR TO COMMENCEME	INT OF ANY WO	RK. N IN THE
			AS SPECIFIED BY ARCHITECT UNLESS NOTED OTHERWISE. 4" X 4" FLUSH OUTLET BOX WITH SINGLE GANG	OTHERWISE MIN. 3/4"	N/A		ACT DOCUMENTS C VERY.	ONTRACTOR SHALL NOTIFY DE		ring upon
G			PLATE INSTALLED IN ACCESSIBLE AREA ABOVE CEILING. WALL PLATE COLOR AS SPECIFIED BY ARCHITECT UNLESS NOTED OTHERWISE.	UNLESS NOTED OTHERWISE		NECES IDENTII CONST	SARILY SHOWN. IT S FY EXISTING CIRCUI RUCTION. CONTRAC	CHALL BE THE CONTRACTOR'S F TRY AND DEVICES TO REMAIN A TOR SHALL REMOVE AND REIN	ESPONSIBILITY	' TO DURING G TO
			4" X 4" FLUSH OUTLET BOX WITH SINGLE GANG PLATE INSTALLED IN AN EXPOSED, ACCESSIBLE LOCATION. WALL PLATE COLOR AS SPECIFIED BY ARCHITECT UNUESS NOTED OTHERWISE	MIN. 3/4" UNLESS NOTED OTHERWISE	N/A	REMAII 4. DASI	N AS NECESSARY TO HED LINES (I.E) ACCOMPLISH THE WORK OF T) AND SYMBOLS REPRESENT E	HE PROJECT.	
		P	POWER POLE ATTACHED TO FLOOR OR FURNITURE. REFER TO ARCHITECTURAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL	N/A	AS SHOWN ON DRWGS.	OTHER	LINE TYPES REPRE	SENT WORK TO BE PROVIDED	AND INSTALLED	BY
		$\langle G \rangle$	INFORMATION] COMMUNICATIONS SYSTEMS GROUND BUS BAR BONDING CONDUCTOR CONNECTION TO	AS SHOWN ON DRWGS.	REFER TO DETAILS		27 10 00 - VOICE/DATA CA VOICE/DATA WORKS MOUNTED IN WALL 1	BLE INFRA. SYMBOL LEGEND TATION OUTLET. FLUSH 8" A.F.F UNLESS NOTED	CONDUIT SIZE 1" MIN.	CABLE T
0		ſ	EQUIPMENT. DOWN THROUGH INSIDE OF WALL TO FLOOR BELOW.	AS SHOWN ON DRWGS.	N/A		OTHERWISE. 4" X 4" (GANG PLATE. ONE (1 OUTLET TO NEARES AREA IN ROOM BEIN	DUTLET BOX WITH SINGLE) 1" CONDUIT ROUTED FROM T ACCESSIBLE CEILING		QUANTIT SHOWN DRAWIN
		СОММ	UP THROUGH INSIDE OF WALL TO FLOOR ABOVE.	AS SHOWN ON DRWGS.	N/A		ACCEPT UP TO SIX (6 PROVIDE AND INSTA NDICATED BY "X" AD	5) VOICE/DATA JACKS. LL QUANTITY OF JACKS JACENT TO SYMBOL ON		(IF NC QUANTI SHOW
		<u>GENE</u>	RAL		IOTES		PLANS FOR EACH DE AND INSTALL ONE (1 EIGHT CONDUCTORS	VICE LOCATION. PROVIDE) CABLE TO EACH JACK. ALL S OF EACH CABLE TO BE		ADJACEN SYMBOL PLANS TH PROVIDE
F		APPLY 2. REA	TO ALL COMMUNICATIONS GENERAL STRIBUL LEGEND AND D SPECIFICATIONS FOR ALL COMMUNICATIONS SYS	N THESE DRAWIN	NGS. ER		TWELVE INCHES (12" COILED INSIDE OUTL (15') IN COMMUNICAT) OF CABLE SLACK NEATLY ET BOX AND FIFTEEN FEET TONS ROOM. MAINTAIN		INSTAL BLANK STAINLE
			CABLE SECTIONS. REFER TO SPECIFICATIONS AS N LETE ALL WORK REQUIREMENTS.	ECESSARY TO P		F	CABLE BEND RADIUS PAIR UNTWISTING RE BY EIA/TIA.	S, JACKET REMOVAL, AND EQUIREMENTS AS REQUIRED		STEEL PL
		TRADE EQUIP KEEPII	THE CONTRACTOR'S RESPONSIBILITY TO COORDINES ON THE PROJECT. THE CONTRACTOR SHALL ENS MENT FOR ALL SYSTEMS DEVICES ARE INSTALLED NG WITH THE DESIGN INTENT. THE CONTRACTOR SI	SURE THAT DEVI LOGICALLY AND HALL ALSO ENSU	CES AND IN JRE THAT	AP	WIRELESS ACCESS F NSTALLED FLUSH IN OTHERWISE INSTALL SINGLE GANG PLATE	CEILING UNLESS NOTED .ED. 4" X 4" OUTLET BOX WITH AND CHASE NIPPLE ON BACK	1" MIN.	ONE (1 CATEGOF CABLE
0		ALL DE DIVISIO FIXTUR	EVICES AND EQUIPMENT ARE PROPERLY COORDINA ONS DEVICES AND EQUIPMENT (E.G. DOORS, WINDO RES, ETC. AS NECESSARY TO ENSURE A CORRECT A	ATED WITH OTHE OWS, MILLWORK AND FULLY COO	ER , LIGHTING RDINATED		SIDE FOR ROUTING (ACCEPT UP TO SIX (6 NSTALL QUANTITY C	CABLES. PLATE SHALL 6) DATA JACKS. PROVIDE AND 9F JACKS TO MATCH NUMBER		
		DEFIC	ENCIES SHALL BE AT THE CONTRACTOR'S SOLE EX	RECT COORDINA (PENSE. THE CONTRACTO	DR SHALL)) 1	OF CABLES. ALL EIGI CABLE TO BE PROPE MINIMUM OF TWELVE SLACK NEATLY COIL	HT CONDUCTORS OF EACH RLY TERMINATED. LEAVE A E INCHES (12") OF CABLE ED INSIDE OUTLET BOX		
		FIELD "J" TYF PENET	VERIFY THE ROUTING OF CABLES FOR VARIOUS SY PE HOOKS (I.E. VOICE, DATA, TV, ETC.). WHERE INST TRATES ABOVE CEILING WALLS (RATED OR NOT) TH	STEMS INSTALLI ALLED CABLING E CONTRACTOR	ED USING SHALL	1 F	MAINTAIN CABLE BEI REMOVAL, AND PAIR AS REQUIRED BY EIA	ND RADIUS, JACKET UNTWISTING REQUIREMENTS		
E		QUAN SPARE	DE AND INSTALL FIRESTOPPED SLEEVES FOR ROU TITY OF SLEEVES AS NECESSARY FOR INSTALLED C E FOR THE OWNER'S FUTURE USE.	TING OF CABLES CABLES PLUS ON	IE (1)		TELEPHONE OUTLET 18" A.F.F UNLESS NO GANG PLATE WITH D	T. FLUSH MOUNTED IN WALL TED OTHERWISE. SINGLE OUBLE GANG OUTLET BOX.	1" MIN.	ONE (1 CATEGOF CABLE
		5. "J" H PROVI INSTAI	IOOK TYPE ROUTING SHALL BE ACCOMPLISHED IN A DES A PATHWAY THAT IS ACCESSIBLE, INDEPENDE LLED CABLING (E.G. CABLES NOT LAYING ON OR SU	A LOGICAL MANN NTLY SUPPORTS IPPORTED BY OT	IER THAT S THER	1 H	ONE (1) CONDUIT RO NEAREST ACCESSIB BEING SERVED. PLA (6) VOICE/DATA JACK	LE CEILING AREA IN ROOM IE SHALL ACCEPT UP TO SIX		
		EQUIP SYSTE 6 REF	MENT, MATERIALS, ETC.), AND IS NOT IN CONFLICT EMS. J-HOOK SPACING SHALL NOT EXCEED FOUR FE	WITH OTHER BU EET (5'). DIAGRAMS, AND	ILDING DETAILS	e E	ONE (1) JACK. PROVI 6 CABLE. ALL EIGHT BE PROPERLY TERM	DE AND INSTALL ONE (1) CAT CONDUCTORS OF CABLE TO INATED. LEAVE A MINIMUM OF		
\bigcirc		AS NE SYSTE	CESSARY TO UNDERSTAND THE FULL INTENT AND SEMISL	SCOPE OF THE I	NDIVIDUAL	E	I WELVE INCHES (12" COILED INSIDE OUTL BEND RADIUS, JACKI JNTWISTING REQUIF) OF CABLE SLACK NEATLY ET BOX. MAINTAIN CABLE ET REMOVAL, AND PAIR REMENTS AS REQUIRED BY		
Ŭ		7. CON THE B PRICE CONTE	ITRACTOR SHALL EXAMINE AND BECOME FAMILIAR UILDING AND SITE AFFECTED BY THIS PROJECT PRI . SUBMISSION OF A BID PRICE WILL BE CONSIDERED RACTOR HAS BECOME FAMILIAR WITH THE EXISTING	WITH THOSE AR IOR TO SUBMITT D EVIDENCE THA G CONDITIONS A	EAS OF ING A BID IT THE ND	W N	EIA/TIA. WALL MOUNTED TEL MOUNTED IN WALL A	EPHONE OUTLET. FLUSH T 48" A.F.F UNLESS NOTED	1" MIN.	ONE (1 CATEGOF
		DIFFIC EQUIP BY THI	CULTIES THAT MAY AFFECT THE WORK OF THIS PRO MENT OR MATERIALS REQUIRED BECAUSE OF DIFF E CONTRACT WILL NOT BE ACCEPTABLE.	DJECT. CLAIMS FO	OR LABOR, JNTERED	i i i i i i i i i i i i i i i i i i i	OTHERWISE. SINGLE GANG OUTLET BOX. FROM OUTLET TO NE	GANG PLATE WITH DOUBLE ONE (1) CONDUIT ROUTED EAREST ACCESSIBLE CEILING		CABLE
		8. RAC APPLIO STRIN	EWAY, POWER AND GROUNDING REQUIREMENTS S CABLE SPECIFICATION SECTIONS. WHERE A CONFL GENT REQUIREMENT SHALL APPLY	SHALL COMPLY V ICT ARISES THE	VITH MOST		NSTALL TELEPHONE EIGHT CONDUCTORS PROPERLY TERMINA	WALL OUTLET PLATE. ALL OF EACH CABLE TO BE TED. LEAVE A MINIMUM OF		
D		9. WHE COND	ERE MINIMUM CONDUIT SIZE IS NOTED CONTRACTO UIT SIZE AND QUANTITY WITH SYSTEM INSTALLER P	OR SHALL CONFIF PRIOR TO BID. CO	RM ACTUAL DNDUITS		TWELVE INCHES (12" COILED INSIDE OUTL BEND RADIUS, JACKE) OF CABLE SLACK NEATLY ET BOX. MAINTAIN CABLE ET REMOVAL, AND PAIR		
		SHALL OTHEF CONTF QUAN	. BE SIZED IN ACCORDANCE WITH THE NATIONAL EL R CODES AND STANDARDS AS OUTLINED IN THE SPI RACTOR SHALL INCREASE CONDUIT SIZE AS NECES TITY AND SIZE OF CABLES TO BE INSTALLED. REFEF	LECTRIC CODE (N ECIFICATIONS. T SSARY BASED ON R TO SPECIFICAT	NEC) AND HE N TONS.		EIA/TIA. VOICE/DATA WORKS BOX. REFER TO VOIC	TATION OUTLET IN FLOOR CE/DATA WORKSTATION	1" MIN.	CATEGO
		10. PR AND A	OVIDE AND INSTALL CABLE/WIRING AS RECOMMENT PPLICABLE CODES AND STANDARDS, UNLESS OTHE	DED BY MANUFA ERWISE CALLED	CTURER FOR ON		OUTLET SYMBOL. RE DRAWINGS AND SPE STANDARD FLOOR B	FER TO ELECTRICAL CS FOR INFORMATION ON OXES. REFER TO DIVISION 27		QUANTITY SHOWN DRAWIN
0		DRAW SIZE C 11. SIZ	INGS OR IN SPECIFICATIONS. WHERE CONFLICTS E CALLED FOR SHALL BE USED. TE PATHWAYS AS RECOMMENDED BY MANUFACTUR	XISTING, THE LA	ABLE	E	CABLE TRAY SYSTEM ON DRAWINGS. REFE TRAY TYPE.	A. INSTALLED WHERE SHOWN ER TO SPECS FOR CABLE	N/A	N/A
		CODES SPECI SHALL	S AND STANDARDS, UNLESS OTHERWISE CALLED FO FICATIONS. WHERE CONFLICTS EXISTING, THE LARG . BE USED.	OR ON DRAWING GEST SIZE CALLI	as or in Ed for		WALL MOUNTED BAC	CKBOARD. 8' HIGH. BOTTOM	N/A	N/A
		12. SIZ MATEF	E TERMINAL CABINETS AS REQUIRED TO HOUSE AL RIALS, TERMINATIONS, AND FIFTY PERCENT (50%) S	L REQUIRED EQ	UIPMENT,		EDGE 4" A.F.F. INSTA SHOWN ON THE DRA SPECIFICATIONS FOI REQUIREMENTS.	LLED ALL AROUND ROOM AS WINGS. REFER TO R ADDITIONAL		
С		13. CO WHET COOR	NTRACTOR SHALL COMPLY WITH ALL APPLICABLE ON HER OR NOT SPECIFICALLY NOTED IN THE DRAWING DINATE WITH THE AUTHORITY HAVING JURISDICTIO	CODE REQUIREN GS AND SPECIFIC NN (AHJ) AS NECE	IENTS CATIONS. ESSARY.	•••	SYSTEM GROUND BU BONDING CONDUCTO TO BUILDING GROUN	JS BAR. INSTALL 2/0 AWG OR FROM GROUND BUS BAR IDING SYSTEMS.	N/A	N/A
		14. CO 15. EM	MPLY WITH ADA REQUIREMENTS. PTY RACEWAYS SHALL HAVE A NYLON PULLSTRING	G (150 LBS. MIN) I	NSTALLED.		COORDINATE WITH E VOICE/DATA FREE-S FOOTPRINT SECURE	ELECTRICAL. TANDING EQUIPMENT RACK D TO STRUCTURAL FLOOR R'S RECOMMENDATIONS	N/A	N/A
		16. ALI LOCAT	L RACEWAYS SHALL BE LABELED ON BOTH ENDS IN FION.	DICATING OTHEF	R ENDS		VOICE/DATA CABLE I	NFRASTRUCTURE SYSTEM	N/A	N/A
0		17. RA BE PRI INSTAI	CEWAY TERMINATIONS IN TERMINAL CABINETS OR OVIDED WITH BUSHINGS. BUSHINGS SHALL NOT BE LLATION PURPOSES.	WHERE EXPOSE MODIFIED OR CI	D SHALL UT FOR		EQUIPMENT CABINE FREE-STANDING. INS SHOWN ON DRAWING	F. FLOOR MOUNTED, STALLED IN LOCATION GS.		
		18. ALI TERMI	RACEWAY TERMINATIONS SHALL HAVE BUSHINGS	AND METALLIC	RACEWAY		OTHERWISE NOTED. SIZE AND QUANTITY SIZE OF CABLES INS	INCREASE MIN. CONDUIT PER NEC FOR QUANTITY AND TALLED.	HORIZONTAL 1" MIN. BACKBONE 4" MIN.	ON DRAWIN
		19. PR FLOOF RESIS	OVIDE FIRESTOPPING ON ALL CONDUITS PENETRAT R. FIRESTOPPING MATERIALS OR DEVICES SHALL HA TANCE RATING AS THE WALL OR FLOOR WHICH THE	TING A RATED W. AVE THE SAME F EY ARE TO PROT	ALL OR TRE ECT.		DATA SYSTEM CABLE OTHERWISE NOTED. SIZE AND QUANTITY	ES IN RACEWAY UNLESS INCREASE MIN. CONDUIT PER NEC FOR QUANTITY AND	HORIZONTAL 1" MIN. BACKBONE	AS SHO ON DRAWIN
В		20. SP UNLES DESIG	LICES IN COMMUNICATION SYSTEMS CABLES SHALI SS SPECIFICALLY NOTED ON DRAWINGS OR APPRON	L NOT BE ALLOW VED IN WRITING	/ED BY	VOICE/	SIZE OF CABLES INS	TALLED. STRUCTURE SYSTEM SYMBOL L	4" MIN. EGEND NOTES	
		21. ALI SHALL	L COMMUNICATION SYSTEMS OUTLETS WITH ASSO BE MOUNTED AT THE SAME HEIGHT AND ORIENTAT	CIATED POWER (TION AS POWER	OUTLETS OUTLETS	<u>GENER</u> 1. REFE	RAL ER TO COMMUNICAT	IONS GENERAL SYSTEM LEGEN	ID AND GENERA	L
		UNLES	SS SPECIFICALLY NOTED OTHERWISE. CATION OF DEVICES ON PLANS IS APPROXIMATE OF FIONS OF DEVICES WITH ARCHITECT AND DESIGNED	NLY. VERIFY EXA	ACT GH-IN	NOTES 2. WIRE TRAYS	E AND CABLE SHALL AS SHOWN ON THE	BE INSTALLED IN J-HOOK ASSE	MBLIES AND CA	BLE IGS.
0		23. CO	DINATE WITH MILLWORK AS NECESSARY.	/ICES WITH OTHI	ER WORK	WIRE A CEILING ACCES	ND CABLE INSTALLE GS, OR IN AREAS OP SIBLE (DROP) CEILIN	ED IN WALL CAVITIES, ABOVE IN EN TO STRUCTURE (E.G NOT IN IGS) SHALL BE IN CONDUIT. ALL	ACCESSIBLE ISTALLED ABOV BACKBONE CA	'E .BLING
		(I.E. MI 24. PR	ILLWORK, CABINETS, DOORS, WINDOWS ETC.) PRIO OVIDE AND INSTALL CABLE TO ALL OUTLETS AND D FICALLY NOTED OTHERWISE	IN TO ROUGH-IN.		SHALL 3. PRO MATER	BE IN A COMPLETE (VIDE AND INSTALL S HALS, CABLES PATH	YSTEM COMPLETE WITH ALL EC WAYS (I.E. RACEWAYS CONDU	QUIPMENT, DEV	ICES, C.),
		25. ALI OTHEF	L RACEWAYS AND CABLES TO BE CONCEALED UNLE RWISE OR APPROVED IN WRITING BY DESIGNER. SE	ESS SPECIFICALI EE SPECIFICATIO	LY NOTED NS AND	TERMIN 4. ALL	VOICE/DATA CABLE I	NG.		ES
•		GENE	RAL NOTES FOR ADDITIONAL INFORMATION.			SHALL REQUII PROVII	ве 4-11/16" X 4-11/16 RED TO ACCOMMOD, DED WITH FLUSH OU	TX 2-3/4" DEEP FLUSH BOXES V ATE WALL CONSTRUCTION. EAC TLET FACEPLATE.	ATH TRIM RING	as LL BE
A										

		O 6		\bigcirc		7	\bigcirc	8	
Г						28 22 10 ACCESS			ΔΑΒΙ Ε ΤΥΡΕ
	S	CEILING MOUNTED SPEAKER ASSEMBLY. SPEAKER ASSEMBLY TO INCLUDE SPEAKER, TRANSFORMER, GRILLE, BACK BOX, AND TILE BRIDGE. SPEAKER ASSEMBLY TO BE MOUNTED FLUSH IN CEILING. WHERE INSTALLED IN CEILING TILES SPEAKER ASSEMBLY SHALL BE CENTERED	3/4" MIN.	ONE (1)TWISTED PAIR CABLE; AWG. SIZED FOR LOAD; SEE SPECS	D	DOOR CONTACT. I TOP OF DOOR HE, PROVIDE AND INS FOR SINGLE DOOF (1) DOOR CONTAC DOORS.	FLUSH MOUNTED. INSTALLED IN ADER ON SIDE OPPOSITE HINGE. TALL ONE (1) DOOR CONTACT RS. PROVIDE AND INSTALL ONE CT ON EACH LEAF OF DOUBLE	3/4" MIN.	PER EQUIP. MANUF.
	A	ON TILE. WALL MOUNTED AUDIO ATTENUATOR. SINGLE-GANG, STAINLESS STEEL PLATE WITH	3/4" MIN.	ONE (1)TWISTED	CR	CARDREADER. FL 48" A.F.F. UNLESS	USH MOUNTED. INSTALLED AT OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
		INTEGRAL STEPPED ATTENUATOR. SHALL INCLUDE ENGRAVED AND FILLED "VOLUME CONTROL" LABEL. FLUSH MOUNT. INSTALLED 48" A F F TO CENTER		AWG. SIZED FOR LOAD; SEE SPECS	MD	MOTION DETECTO MINIMUM 6" ABOV UNLESS OTHERW	DR. WALL MOUNTED. INSTALLED E DOOR HEADER TO CENTER ISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
	⊠ _X	VIDEO [INPUT] [OUTPUT] PLATE. SINGLE-GANG, STAINLESS STEEL OUTLET PLATE WITH VIDEO	1" MIN.	REFER TO BLOCK	ACP	ACCESS CONTRO WALL MOUNTED.	L SYSTEM CONTROL PANEL.	3/4" MIN.	PER EQUIP. MANUF.
_		WITH PATCH CORD. FLUSH MOUNTED. INSTALLED AT 18" A.F.F UNLESS OTHERWISE NOTED.		REFER TO	/ ^{AS} \	ACCESS CONTRO UNLESS OTHERWINATIONAL ELECTE	L SYSTEM CABLES IN RACEWAY ISE NOTED. SIZE CONDUIT PER RIC CODE FOR QUANTITY AND	HORIZONTAL 3/4" MIN./ BACKBONE 2"	AS SHOWN ON DRAWINGS
		CORD. SINGLE-GANG, STAINLESS STEEL OUTLET PLATE WITH RGBHV CONNECTOR. CONNECTOR STYLE TO MATCH CONNECTOR ON MONITOR. OUTLET TO BE INSTALLED FLUSH IN WALL UNLESS OTHERWISE NOTED. MONITOR MOUNTING HEIGHT TO BE 6'8" TO BOTTOM OF ASSEMBLY. OUTLET TO BE INSTALLED AT HEIGHT THAT IS CENTERED ON REAR OF MONITOR AT SAME HEIGHT AS POWER OUTLET. REFER TO SPECIFICATIONS.	VIDEO; ONE (1) 3/4" AUDIO MIN.	BLOCK DIAGRAM	ACCE <u>GENE</u> 1. REF 2. WIF SHOV	SIZE OF CABLES II SS CONTROL SYST RAL ER TO COMMUNIC RE AND CABLE SHA	INSTALLED. TEM SYMBOL LEGEND NOTES ATIONS GENERAL SYSTEM LEGEN ILL BE INSTALLED IN J-HOOK ASSEN NGS)] ABOVE ACCESSIBLE (DROP)	MIN. ND AND GENERAL EMBLIES [AND CA CELLINGS. WIRE	- NOTES. BLE TRAYS (AS AND CABLE
	Ve	VIDEO PROJECTOR WITH STRUCTURAL MOUNT, VIBRATION ISOLATORS, OUTLET PLATE, AND PATCH CORDS. TWO-GANG, STAINLESS STEEL OUTLET PLATE WITH RGBHV CONNECTORS. CONNECTOR STYLE TO MATCH CONNECTOR ON MONITOR. OUTLET TO BE INSTALLED FLUSH IN [CEILING] [TABLE] [WALL] UNLESS OTHERWISE NOTED. PROJECTOR TO BE [CEILING] [TABLE] [WALL] MOUNTED AS NOTED ON DRAWINGS. PROJECTOR MOUNTING HEIGHT TO BE AS REQUIRED FOR PROPER PROJECTION OF VIDEO IMAGE ON PROJECTION SCREEN.	ONE (1) 1" VIDEO; ONE (1) 3/4" CONTROL MIN.	REFER TO BLOCK DIAGRAM	3. PRO MATE PROG 4. MIN 5. CIR SHOV	ILLED IN WALL CAV CTURE (E.G NOT IN DUIT. ALL BACKBON OVIDE AND INSTALI RIALS, CABLES, PA RAMMING AND TES IMUM RACEWAY S CUIT ALL DEVICES	THES, ABOVE INACCESSIBLE CEIL ISTALLED ABOVE ACCESSIBLE (DI IE CABLING SHALL BE IN A COMPL L SYSTEM COMPLETE WITH ALL E THWAYS (I.E. RACEWAYS, CONDU STING. IZE SHALL BE 3/4". TO LOCAL RESPECTIVE EQUIPME NGS.	INGS, OR IN ARE ROP) CEILINGS) S ETE CONDUIT SY QUIPMENT, DEVIG JITS, BOXES, ETC	AS OPEN TO SHALL BE IN 'STEM. CES, .), _ CABINET AS
		AUDIO/VIDEO SYSTEM EQUIPMENT CABINET (AVEC). FLOOR MOUNTED, FREE-STANDING. INSTALLED IN LOCATION SHOWN ON DRAWINGS.	N/A	N/A	6. EAC	CH DEVICE TO BE P	PROVIDED WITH A DEDICATED HOL OWN ON THE DRAWINGS. DAISY-C	MERUN CABLE TO	O THE SYSTEM S (WITH THE
1	A	AUDIO SYSTEM CABLES IN RACEWAY UNLESS OTHERWISE NOTED. SIZE CONDUIT PER NATIONAL ELECTRIC CODE FOR QUANTITY AND SIZE OF CABLES INSTALLED.	3/4" MIN.	AS SHOWN ON DRAWINGS	7. CO ELEC AND N	ORDINATE CONNECT TRICAL SUB-CONTE MATERIALS AS REC	DNTACTS ON DUAL DOORS) SHAL CTIONS REQUIRED WITH DOOR HA RACTOR AS NECESSARY. PROVID QUIRED FOR A COMPLETE AND FU	ARDWARE INSTAL E AND INSTALL A LLY FUNCTIONAL	LER AND LL EQUIPMENT . SYSTEM.
/	$\langle ^{\sf V} \rangle$	VIDEO SYSTEM CABLES IN RACEWAY UNLESS	1" MIN.	AS SHOWN ON					
		NATIONAL ELECTRIC CODE FOR QUANTITY AND		DRAWINGS		28 31 00 - FIRE ALAF	RM SYSTEM SYMBOL LEGEND	CONDUIT SIZE	CABLE TYPE
/	<u>ر</u> م	SIZE OF CABLES INSTALLED. CONTROL SYSTEM CABLES IN RACEWAY UNLESS OTHERWISE NOTED. SIZE CONDUIT PER	3/4" MIN.	AS SHOWN ON		MOUNTED UNLES	E SMOKE DETECTOR. CEILING SS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
A		NATIONAL ELECTRIC CODE FOR QUANTITY AND SIZE OF CABLES INSTALLED. D/VIDEO SYSTEM SYMBOL LEGEND NOTES RAL		DRAWINGS	æ R,S	PHOTOELECTRIC PROVIDED AND IN FOR R AND INSTA WITH SAMPLING SURFACE MOUNT ACCESSIBLE WH	DUCT SMOKE DETECTOR. NSTALLED IN RETURN AIR DUCT ALLED IN SUPPLY AIR DUCT FOR S TUBES SIZED FOR THE DUCT. TED ON SIDE OF DUCT WHERE HERE DUCT DETECTORS ARE	3/4" MIN.	PER EQUIP. MANUF.

1. REFER TO COMMUNICATIONS GENERAL SYSTEM LEGEND AND GENERAL NOTES.

2. WIRE AND CABLE SHALL BE INSTALLED IN J-HOOK ASSEMBLIES ABOVE ACCESSIBLE (DROP) CEILINGS. WIRE AND CABLE INSTALLED IN WALL CAVITIES, ABOVE INACCESSIBLE CEILINGS, OR IN AREAS OPEN TO STRUCTURE (E.G NOT INSTALLED ABOVE ACCESSIBLE (DROP) CEILINGS) SHALL BE IN CONDUIT. ALL BACKBONE CABLING SHALL BE IN A COMPLETE CONDUIT SYSTEM.

3. PROVIDE AND INSTALL SYSTEM COMPLETE WITH ALL EQUIPMENT, DEVICES, MATERIALS, CABLES, PATHWAYS (I.E. RACEWAYS, CONDUITS, BOXES, ETC.), PROGRAMMING, AND TESTING.

4. MINIMUM RACEWAY SIZE SHALL BE 3/4" UNLESS OTHERWISE NOTED. 5. COORDINATE WITH THE FIRE ALARM SYSTEM INSTALLER TO PROVIDE A SIGNAL TO MUTE THE AUDIO SYSTEM UPON ALARM.

EXISTING CONDITIONS

6. PROVIDE ALL PROGRAMMING REVISIONS, FIRMWARE UPDATES, ETC. FOR EXISTING AUDIO/VIDEO EQUIPMENT AS REQUIRED TO ACCOMPLISH THE WORK OF THIS PROJECT.

	27 58 00 - TV DISTRIBUTION SYSTEM SYMBOL LEGEND	CONDUIT SIZE	CABLE TYPE
	TV DISTRIBUTION SYSTEM OUTLET WITH PATCH CORD. SINGLE-GANG STAINLESS STEEL PLATE WITH ONE (1) "F" TYPE CONNECTOR. FLUSH MOUNTED. INSTALLED AT 18" A.F.F UNLESS NOTED OTHERWISE.	3/4" MIN.	ONE (1) RG6 COAXIAL CABLE
,™\	TV DISTRIBUTION SYSTEM CABLES IN RACEWAY UNLESS OTHERWISE NOTED. SIZE CONDUIT PER NATIONAL ELECTRIC CODE FOR QUANTITY AND SIZE OF CABLES INSTALLED.	HORIZONTAL 3/4" MIN.; BACKBONE 2" MIN.	HORIZONTAL RG6 COAX; BACKBONE RG11 COAX

TV DISTRIBUTION SYSTEM SYMBOL LEGEND NOTES

<u>GENERAL</u>

1. REFER TO COMMUNICATIONS GENERAL SYSTEM LEGEND AND GENERAL NOTES. 2. WIRE AND CABLE SHALL BE INSTALLED IN J-HOOK ASSEMBLIES ABOVE ACCESSIBLE (DROP) CEILINGS. WIRE AND CABLE INSTALLED IN WALL CAVITIES, ABOVE INACCESSIBLE

CEILINGS, OR IN AREAS OPEN TO STRUCTURE (E.G NOT INSTALLED ABOVE ACCESSIBLE (DROP) CEILINGS) SHALL BE IN CONDUIT. ALL BACKBONE CABLING SHALL BE IN A COMPLETE CONDUIT SYSTEM.

3. PROVIDE AND INSTALL SYSTEM COMPLETE WITH ALL EQUIPMENT, DEVICES, MATERIALS, CABLES, PATHWAYS (I.E. RACEWAYS, CONDUITS, BOXES, ETC.), PROGRAMMING, AND TESTING.

4. ALL TV DISTRIBUTION SYSTEM WALL OUTLET BOXES SHALL BE PROVIDED WITH FLUSH OUTLET FACEPLATE.

5. PROVIDE AND INSTALL ONE (1) RG-6 CABLE FOR EACH ACTIVE CONNECTOR IN EACH TW DISTRIBUTION SYSTEM OUTLET. HOMERUN AS NOTED ON DRAWINGS.

D OF IN CEILING CAVITIES AS OUTLINED ABOVE, HE SHALL OBTAIN THE EN APPROVAL OF THE DESIGNER PRIOR TO ROUGH-IN.
ERE BOXES OR DEVICES ARE INSTALLED BEHIND INACCESSIBLE CEILINGS OF CONTRACTOR SHALL PROVIDE AND INSTALL A PROPERLY SIZED ACCESS WHERE CEILING OR WALL IS RATED ACCESS PANEL RATING SHALL MATCH ATING.
NTRACTOR SHALL COORDINATE ITEMS ABOVE THE CEILING IN A MANNER

EXISTING COMMUNICATIONS SYSTEMS DEVICES AND CABLING NOT SARILY SHOWN. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FY EXISTING CIRCUITRY AND DEVICES TO REMAIN AND PROTECT DURING FRUCTION. CONTRACTOR SHALL REMOVE AND REINSTALL EXISTING TO

OICE/DATA WORKSTATION OUTLET. FLUSH	1" MIN	CABLE THE
IOUNTED IN WALL 18" A.F.F UNLESS NOTED		CATEGORY 6
OTHERWISE. 4" X 4" OUTLET BOX WITH SINGLE		QUANTITY AS
SANG PLATE. ONE (1) 1" CONDULT ROUTED FROM		SHOWN ON
REA IN ROOM BEING SERVED. PLATE SHALL		DRAWINGS
CCEPT UP TO SIX (6) VOICE/DATA JACKS.		
ROVIDE AND INSTALL QUANTITY OF JACKS		SHOWN
NDICATED BY "X" ADJACENT TO SYMBOL ON 21 ANS FOR EACH DEVICE LOCATION, PROVIDE		ADJACENT TO
ND INSTALL ONE (1) CABLE TO EACH JACK. ALL		SYMBOL ON
IGHT CONDUCTORS OF EACH CABLE TO BE		PLANS THEN
ROPERLY TERMINATED. LEAVE A MINIMUM OF		INSTALL
WELVE INCHES (12") OF CABLE SLACK NEATLY		BLANK,
15') IN COMMUNICATIONS ROOM, MAINTAIN		STAINLESS
CABLE BEND RADIUS, JACKET REMOVAL, AND		STEEL PLATE)
AIR UNTWISTING REQUIREMENTS AS REQUIRED		
Y EIA/TIA.		
VIRELESS ACCESS POINT (WAP) OUTLET.	1" MIN.	ONE (1)
THERWISE INSTALLED, 4" X 4" OUTLET BOX WITH		CARLEGORIO
INGLE GANG PLATE AND CHASE NIPPLE ON BACK		0, 1022
IDE FOR ROUTING CABLES. PLATE SHALL		
CCEPT UP TO SIX (6) DATA JACKS. PROVIDE AND		
NSTALL QUANTITY OF JACKS TO MATCH NUMBER		
CABLE TO BE PROPERLY TERMINATED. LEAVE A		
INIMUM OF TWELVE INCHES (12") OF CABLE		
LACK NEATLY COILED INSIDE OUTLET BOX.		
AINTAIN CABLE BEND RADIUS, JACKET		
S REOLIIRED BY FIA/TIA		
	1" MIN	ONE (1)
8" A.F.F UNLESS NOTED OTHERWISE. SINGLE		CATEGORY 6
SANG PLATE WITH DOUBLE GANG OUTLET BOX.		CABLE
ONE (1) CONDUIT ROUTED FROM OUTLET TO		
EAREST ACCESSIBLE CEILING AREA IN ROOM		
SEING SERVED. PLATE SHALL ACCEPT OP TO SIX		
NE (1) JACK. PROVIDE AND INSTALL ONE (1) CAT		
CABLE. ALL EIGHT CONDUCTORS OF CABLE TO		
E PROPERLY TERMINATED. LEAVE A MINIMUM OF		
WELVE INCHES (12") OF CABLE SLACK NEATLY		
END RADIUS JACKET REMOVAL AND PAIR		
INTWISTING REQUIREMENTS AS REQUIRED BY		
IA/TIA.		
VALL MOUNTED TELEPHONE OUTLET. FLUSH	1" MIN.	ONE (1)
OUNTED IN WALL AT 48" A.F.F UNLESS NOTED		CATEGORY 6
ANG OUTLET BOX, ONE (1) CONDUIT ROUTED		CABLE
ROM OUTLET TO NEAREST ACCESSIBLE CEILING		
REA IN ROOM BEING SERVED. PROVIDE AND		
NSTALL TELEPHONE WALL OUTLET PLATE. ALL		
IGHT CONDUCTORS OF EACH CABLE TO BE		
WELVE INCHES (12") OF CABLE SLACK NEATLY		
COILED INSIDE OUTLET BOX. MAINTAIN CABLE		
END RADIUS, JACKET REMOVAL, AND PAIR		
INTWISTING REQUIREMENTS AS REQUIRED BY		
IA/TIA. /OICE/DATA WORKSTATION OUTLET IN ELOOR	1" MIN	
OX. REFER TO VOICE/DATA WORKSTATION	i iviira.	CABLES:
OUTLET SYMBOL. REFER TO ELECTRICAL		QUANTITY AS
RAWINGS AND SPECS FOR INFORMATION ON		SHOWN ON
TANDARD FLOOR BOXES. REFER TO DIVISION 27		DRAWINGS
AND 28 SPECS FOR SPECIALLY FLOOR BOXES.	N1/A	N1/A
DN DRAWINGS REFER TO SPECS FOR CABLE	N/A	N/A
RAY TYPE.		
VALL MOUNTED BACKBOARD, 8' HIGH, BOTTOM	N/A	N/A
HOWN ON THE DRAWINGS REFER TO		
PECIFICATIONS FOR ADDITIONAL		
REQUIREMENTS.		
YSTEM GROUND BUS BAR. INSTALL 2/0 AWG	N/A	N/A
ONDING CONDUCTOR FROM GROUND BUS BAR		
O BUILDING GROUNDING SYSTEMS.		
OICE/DATA FREE-STANDING FOUIPMENT RACK	Ν/Δ	NI/A
OOTPRINT SECURED TO STRUCTURAL FLOOR	IN/A	N/A
ER MANUFACTURER'S RECOMMENDATIONS.		
OICE/DATA CABLE INFRASTRUCTURE SYSTEM	ΝΙ/Λ	N1/A
QUIPMENT CABINET. FLOOR MOUNTED.	IN/A	IN/A
REE-STANDING. INSTALLED IN LOCATION		
HOWN ON DRAWINGS.		
OICE SYSTEM CABLES IN RACEWAY UNLESS	HORIZONTAL	AS SHOWN
THERWISE NOTED. INCREASE MIN. CONDUIT	1" MIN.	
DZE AND QUANTITY PER NEU FUR QUANTITY AND		DRAWINGS
THERWISE NOTED. INCREASE MIN CONDUIT	TURIZUNTAL 1" MIN	ON
IZE AND QUANTITY PER NEC FOR QUANTITY AND	BACKBONE	DRAWINGS
IZE OF CABLES INSTALLED.	4" MIN.	

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SYMBOL LEGEND

6

SCALE: NTS

INFORMATION.

MECHANICAL SYSTEMS

10

GENERAL

OR

	28 31 00 - FIRE ALARM SYSTEM SYMBOL LEGEND	CONDUIT SIZE	CABLE TYPE
ହ <mark>।</mark>	IONIZATION TYPE SMOKE DETECTOR. CEILING MOUNTED UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
₿ R,S	PHOTOELECTRIC DUCT SMOKE DETECTOR. PROVIDED AND INSTALLED IN RETURN AIR DUCT FOR R AND INSTALLED IN SUPPLY AIR DUCT FOR S WITH SAMPLING TUBES SIZED FOR THE DUCT. SURFACE MOUNTED ON SIDE OF DUCT WHERE ACCESSIBLE. WHERE DUCT DETECTORS ARE INSTALLED IN IN ACCESSIBLE LOCATION OR ABOVE TEN FEET CONTRACTOR SHALL PROVIDE AND INSTALL REMOTE TEST AND INDICATING STATION.	3/4" MIN.	PER EQUIP. MANUF.
B	MANUAL PULL STATION WITH KEY RESET AND DUAL ACTION OPERATION. FLUSH MOUNTED. INSTALLED 48" A.F.F TO TOP UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
	RATE OF RISE HEAT DETECTOR. CEILING MOUNTED UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
M	AUDIBLE HORN WITH INTEGRAL STROBE LIGHT. FLUSH MOUNTED. INSTALLED 80" A.F.F TO BOTTOM OF STROBE LENS UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
X	STROBE LIGHT. FLUSH MOUNTED. INSTALLED 80" A.F.F TO BOTTOM OF STROBE LENS UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
	AUDIBLE HORN. FLUSH MOUNTED. INSTALLED 80" A.F.F TO BOTTOM UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
9	ELECTRO-MAGNETIC, WALL MOUNTED DOOR HOLDER. WALL MOUNTED 4" BELOW TOP OF DOOR EDGE UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
P	ELEVATOR "DO NOT USE" LIGHT. INSTALLED ADJACENT TO PHASE 1 RECALL SWITCH. PROVIDE AND INSTALL PHENOLIC ENGRAVED WHITE LABEL WITH RED LETTER 1/8" HIGH THAT READS "DO NOT USE ELEVATOR".	3/4" MIN.	PER EQUIP. MANUF.
RTS	DUCT DETECTOR REMOTE TEST AND INDICATING STATION. INSTALLED WHERE SHOWN ON THE DRAWINGS AND WHERE REQUIRED BY CODE.	3/4" MIN.	PER EQUIP. MANUF.
AR]	ANALOG ADDRESSABLE RELAY. INSTALLED WITHIN THREE FEET OF DEVICE BEING CONTROLLED OR MONITORED.	3/4" MIN.	PER EQUIP. MANUF.
FCP	FIRE ALARM SYSTEM CONTROL PANEL. SURFACE MOUNTED IN COMMUNICATIONS OR ELECTRICAL ROOMS; FLUSH MOUNTED IN ANY OTHER SPACE. INSTALLED 6'0" A.F.F TO TOP UNLESS OTHERWISE NOTED.	BRANCH CIR. 3/4" MIN. BACKBONE 2" MIN.	PER EQUIP. MANUF.
FPS	FIRE ALARM SYSTEM REMOTE POWER SUPPLY. SURFACE MOUNTED. INSTALLED 6'0" A.F.F TO TOP UNLESS OTHERWISE NOTED.	3/4" MIN.	PER EQUIP. MANUF.
FTC	FIRE ALARM TERMINAL CABINET.	3/4" MIN.	PER EQUIP. MANUF.
$\langle F \rangle$	FIRE ALARM SYSTEM CABLES IN RACEWAY UNLESS OTHERWISE NOTED. SIZE CONDUIT PER NATIONAL ELECTRIC CODE FOR QUANTITY AND SIZE OF CABLES INSTALLED.	BRANCH CIR. 3/4" MIN. BACKBONE 2" MIN.	PER EQUIP. MANUF.

FIRE ALARM SYSTEM SYMBOL LEGEND NOTES

1. ALL WIRE AND CABLE SHALL BE IN A COMPLETE RACEWAY SYSTEM. INSTALL/SIZE RACEWAY SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS, NATIONAL ELECTRIC CODE, AND THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

WIRE AND CABLE SHALL BE INSTALLED IN J-HOOK ASSEMBLIES AND CABLE TRAYS (AS SHOWN ON THE DRAWINGS) ABOVE ACCESSIBLE (DROP) CEILINGS. WIRE AND CABLE INSTALLED UNDERGROUND, BETWEEN BUILDINGS, WITHIN WALLS, IN SPACES WITH CEILINGS EXPOSED TO STRUCTURE (E.G. NOT INSTALLED ABOVE ACCESSIBLE (DROP) CEILINGS), ABOVE INACCESSIBLE CEILINGS, OR WHERE INSTALLED BELOW CEILINGS SHALL BE IN CONDUIT. ALL BACKBONE CABLING SHALL BE IN A COMPLETE CONDUIT SYSTEM. INSTALL AND SIZE RACEWAYS IN ACCORDANCE WITH THE SPECIFICATIONS, NATIONAL ELECTRIC CODE (NEC), AND THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS.

2. PROVIDE AND INSTALL SYSTEM COMPLETE WITH ALL EQUIPMENT, DEVICES, MATERIALS, CABLES, PATHWAYS (I.E. RACEWAYS, CONDUITS, BOXES, ETC.), PROGRAMMING, AND TESTING.

3. MINIMUM RACEWAY SIZE SHALL BE 3/4".

4. ALL FIRE ALARM SYSTEM EQUIPMENT AND DEVICES SHALL BE ANALOG ADDRESSABLE. 5. EACH DEVICE TO BE INDIVIDUALLY ANNUNCIATED AT CONTROL PANEL.

6. PROVIDE REMOTE INDICATION OF TROUBLE AND ALARM OF ALL DUCT SMOKE DETECTORS IN LOCATIONS ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION.

7. COORDINATE INTERCONNECTION BETWEEN FIRE ALARM SYSTEM AND LIGHTING DIMMING SYSTEMS AS NECESSARY TO MEET CODE REQUIREMENTS.

8. COORDINATE WITH OWNER ON REQUIREMENTS FOR MONITORING THE FIRE ALARM SYSTEM AND PROVIDE AND INSTALL ALL REQUIRED EQUIPMENT AND MATERIALS.

9. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR FINAL ROOM NUMBERING PRIOR TO PROGRAMMING THE FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM PROGRAMMING SHALL REFLECT THE FINAL ROOM NUMBERING AS DISPLAYED ON THE INSTALLED SIGNAGE THROUGHOUT THE FACILITY. THE CONTRACTOR SHALL ENSURE THAT AS-BUILT DOCUMENTATION ALSO REFLECTS UPDATED ROOM NUMBERING

10. THE CONTRACTOR SHALL NOT INSTALL WALL MOUNTED FIRE ALARM CABINETS, POWER SUPPLIES ETC. ON PLYWOOD BACKBOARD. CONTRACTOR SHALL COORDINATE FIRE ALARM EQUIPMENT INSTALLATION WITH PLYWOOD BACKBOARD PRIOR TO INSTALLATION.

11. CONTRACTOR SHALL PROVIDE, INSTALL AND TERMINATE ALL ELECTRICAL AND FIRE ALARM SYSTEM EQUIPMENT INCLUDING. BUT NOT LIMITED TO, RACEWAYS, WIRE/CABLE. CIRCUIT BREAKERS, MODULES, RELAYS (UL LISTED FOR USE WITH FIRE ALARMS), ETC. NECESSARY TO SHUT DOWN ANY AIR HANDLING UNIT (AHU), SUPPLY FAN, FAN TERMINAL BOX (FTB) ETC. (I.E. ANY AIR MOVING EQUIPMENT) REQUIRED TO BE SHUT-DOWN BY THE FIRE ALARM SYSTEM. IN ADDITION, ELECTRIC DUCT HEATERS SHALL BE SHUT DOWN. THIS REQUIREMENT FOR CONNECTION OF THE FIRE ALARM SYSTEM TO ANOTHER DEVICE OR SYSTEM SHALL BE EXTENDED TO INCLUDE ANY APPLICABLE CODE OR STANDARD, DIRECTLY OR INDIRECTLY REFERENCED BY THE SPECIFICATIONS, THAT REQUIRES INTERFACE WITH THE FIRE ALARM SYSTEM FOR CONTROLS OR MONITORING OF AN AIR MOVING DEVICE IN ORDER TO PROVIDE AND COMPLETE CODE COMPLIANT FIRE ALARM SYSTEM. COORDINATE ALL WORK WITH MECHANICAL SYSTEMS SUB-CONTRACTOR PRIOR TO ROUGH-IN.

FIRE ALARM SYSTEM SYMBOL LEGEND NOTES CONTINUED

12. COORDINATE SHUT-DOWN OF ALL MECHANICAL AIR SYSTEMS (AHU'S, EXHAUST FAN'S, FAN TERMINAL BOXES ETC.) AND ELECTRIC DUCT HEATERS WITH MECHANICAL SYSTEMS SPECIFICATIONS, DRAWINGS, AND INSTALLER.

13. PROVIDE ALL WORK AND EQUIPMENT TO SHUT-DOWN ALL AIR MOVING EQUIPMENT AS REQUIRED BY APPLICABLE CODES.

14. VERIFY WITH MECHANCIAL SYSTEMS SUB-CONTRACTOR PRIOR TO ROUGH-IN LOCATION AND REQUIREMENTS FOR THE INTERFACE TO SHUT DOWN EQUIPMENT UPON FIRE ALARM SIGNAL.

15. UNITS REQUIRED TO BE SHUT DOWN BY THE STANDARDS MECHANICAL CODE AND NOT REQUIRED TO BE SHUT-DOWN BY THE FIRE ALARM SYSTEM ARE TO HAVE ALL WORK AND EQUIPMENT PROVIDED AND INSTALLED BY MECHANICAL SUB-CONTRACTOR.

16. WHERE REQUIRED FIRE ALARM INSTALLER SHALL PROVIDE AND INSTALL AN INDIVIDUAL ADDRESSABLE RELAY WITHIN THREE FEET (3') OF EACH PIECE OF EQUIPMENT (I.E. AHU, EXHAUST FAN TERMINAL BOX, ETC.) TO BE SHUT-DOWN UPON ALARM. DAISY-CHAINING MULTIPLE PIECES OF EQUIPMENT TO A COMMON RELAY OR MODULE SHALL NOT BE ACCEPTABLE. INTERFACING THE FIRE ALARM SYSTEM FOR SHUT-DOWN OF THE MECHANICAL SYSTEMS THROUGH THE CONTROL SYSTEM SHALL NOT BE ACCEPTABLE.

17. CONTRACTOR SHALL PROVIDE, INSTALL AND TERMINATE ALL ELECTRICAL AND FIRE ALARM SYSTEM EQUIPMENT INCLUDING, BUT NOT LIMITED TO, RACEWAYS, WIRE/CABLE, CIRCUIT BREAKERS, MODULES, RELAYS (UL LISTED FOR USE WITH FIRE ALARMS), ETC. NECESSARY FOR CONNECTION TO A SMOKE DAMPER, FIRE DAMPER, COMBINATION SMOKE/FIRE DAMPER OR ASSOCIATED DEVICE REQUIRED TO BE SHUT-DOWN BY THE FIRE ALARM SYSTEM. THIS REQUIREMENT FOR CONNECTION OF THE FIRE ALARM SYSTEM TO ANOTHER DEVICE OR SYSTEM SHALL BE EXTENDED TO INCLUDE ANY APPLICABLE CODE OR STANDARD, DIRECTLY OR INDIRECTLY REFERENCED BY THE SPECIFICATIONS, THAT REQUIRES INTERFACE WITH THE FIRE ALARM SYSTEM FOR CONTROLS OR MONITORING OF A

DEVICE IN ORDER TO PROVIDE AND COMPLETE CODE COMPLIANT FIRE ALARM SYSTEM. COORDINATE ALL WORK WITH MECHANICAL SYSTEMS SUB-CONTRACTOR PRIOR TO ROUGH-IN.

SPRINKLER SYSTEMS

18. CONTRACTOR SHALL PROVIDE, INSTALL AND TERMINATE ALL ELECTRICAL AND FIRE ALARM SYSTEM EQUIPMENT INCLUDING, BUT NOT LIMITED TO, RACEWAYS, WIRE/CABLE CIRCUIT BREAKERS, MODULES, RELAYS (UL LISTED FOR USE WITH FIRE ALARMS), ETC. NECESSARY FOR A TAMPER SWITCH, FLOW SWITCH, PRESSURE SWITCH, POST INDICATOR VALVE OR OR ANY OTHER FIRE PROTECTION DEVICE REQUIRE TO BE SHUT-DOWN BY THE FIRE ALARM SYSTEM. THIS REQUIREMENT FOR CONNECTION OF THE FIRE ALARM SYSTEM TO ANOTHER DEVICE OR SYSTEM SHALL BE EXTENDED TO INCLUDE ANY APPLICABLE CODE OR STANDARD, DIRECTLY OR INDIRECTLY REFERENCED BY THE SPECIFICATIONS, THAT REQUIRES INTERFACE WITH THE FIRE ALARM SYSTEM FOR CONTROLS OR MONITORING OF A DEVICE IN ORDER TO PROVIDE AND COMPLETE CODE COMPLIANT FIRE ALARM SYSTEM. COORDINATE ALL WORK WITH SPRINKLER SYSTEM DRAWINGS, SPECIFICATIONS AND INSTALLER PRIOR TO ROUGH-IN.

19. COORDINATE EXACT REQUIREMENTS FOR FIRE ALARM SYSTEM INTERFACE TO SPRINKLER SYSTEM WITH SPRINKLER SYSTEM INSTALLER PRIOR TO ROUGH-IN. PROVIDE ALL WORK AND MATERIALS AS REQUIRED.

GENERAL ELEVATOR NOTES 20. OPERATION OF ELEVATORS UNDER FIRE OR OTHER EMERGENCY CONDITION SHALL

CONFIRM TO THE REQUIREMENTS OF ANSI A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS (LATEST ADOPTED EDITION), AS INCORPORATED HEREIN BY REFERENCE.

21. WHEN AN AUTOMATIC SPRINKLER SYSTEM IS REQUIRED TO BE INSTALLED THROUGHOUT A BUILDING FOR COMPLETE FIRE PROTECTION COVERAGE. THE PROVISIONS OF ANSI 17.1 (LATEST ADOPTED EDITION), WHICH IS INCORPORATED HEREIN BY REFERENCE, SHALL BE APPLICABLE. WHEN AN AUTOMATIC SPRINKLER SYSTEM IS REQUIRED TO BE INSTALLED, THE AUTOMATIC SPRINKLER SYSTEM SHALL BE A PRE-ACTION SYSTEM AND SHALL BE INSTALLED IN THE ELEVATOR MACHINE ROOM AND ELEVATOR HOISTWAY. AN APPROVED FIXED TEMPERATURE (135 DEGREES F.) HEAT DETECTOR SHALL BE INSTALLED IN THE ELEVATOR MACHINE ROOM AND ELEVATOR HOISTWAY AS AN INTEGRAL PART OF THE PRE-ACTION SPRINKLER SYSTEM TO AUTOMATICALLY DISCONNECT THE MAIN POWER SUPPLY TO THE AFFECTED ELEVATORS PRIOR TO THE APPLICATION OF WATER. THE MAIN POWER SUPPLY SHALL NOT BE SELF-RESETTING. THE ACTIVATION OF SPRINKLERS OUTSIDE OF THE HOISTWAY OR MACHINE ROOM SHALL NOT DISCONNECT THE MAIN POWER SUPPLY. THE SPRINKLER HEAD LOCATED IN THE ELEVATOR MACHINE ROOM AND THE ELEVATOR HOISTWAY SHALL HAVE AN ACTIVATION TEMPERATURE GREATER THAN THE APPROVED FIXED TEMPERATURE HEAT DETECTOR.

22. IN ADDITION TO THE REQUIREMENTS OF ANSI A17.1 (LATEST ADOPTED EDITION), ONE OR MORE APPROVED SMOKE DETECTORS SHALL BE INSTALLED IN THE ELEVATOR HOISTWAY, ELEVATOR LOBBY AND THE ELEVATOR MACHINE ROOM MEETING THE REQUIREMENTS OF FLORIDA ADMINISTRATIVE CODE RULE 69A-47.011. THE ACTIVATION OF THE SMOKE DETECTOR(S) IN THE MACHINE ROOM OR ELEVATOR LOBBY OR THE ELEVATOR HOISTWAY SHALL CAUSE A SUITABLE WARNING LIGHT TO FLASH. THE LIGHT IS TO BE LOCATED AS REQUIRED BY ANSI A17.1 (LATEST ADOPTED EDITION).

SHEET NAME	SCALE
SYMBOL LEGEND AND SHEET INDEX - SYSTEMS	NTS
SECOND FLOOR DEMO PLAN - SYSTEMS	1/8"=1'
FIRST FLOOR - SYSTEMS	1/8"=1'
SECOND FLOOR RENO PLAN - SYSTEMS	1/8"=1'
ENLARGED PLAN - SYSTEMS	1/4"=1'
RISER DIAGRAM - FIRE ALARM	1/8"=1'
DETAILS	NTS
DETAILS	NTS
	SYMBOL LEGEND AND SHEET INDEX - SYSTEMS SECOND FLOOR DEMO PLAN - SYSTEMS FIRST FLOOR - SYSTEMS SECOND FLOOR RENO PLAN - SYSTEMS ENLARGED PLAN - SYSTEMS RISER DIAGRAM - FIRE ALARM DETAILS DETAILS

ABBREVIATIONS

AFF = ABOVE FINISHED FLOOR AFG = ABOVE FINISHED GRADE

AHJ = AUTHORITY HAVING JURISDICTION

BO = BOTTOM OF CD = CANDELA

DEMO = DEMOLITION ER = EXISTING TO REMAIN

IDF = INTERMEDIATE DISTRIBUTION FRAME MDF = MAIN DISTRIBUTION FRAME

MM = MULTIMODE NTS = NOT TO SCALE

OFCI = OWNER FURNISHED, CONTRACTOR INSTALLED. OFOI - OWNER FURNISHED, OWNER INSTALLED

PP = PATCH PANEL RENO = RENOVATION

RM = ROOM

SM = SINGLEMODE TV = TELEVISION

WP = WEATHERPROOF

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NOTES				
<u>GEN</u>	IERAL NOTES			
1. <u>HEX</u>	REFER TO TELECOMMUNICATIONS GENERAL NOTES ON SHEET T001. NOTES			
1	EXISTING OUTLET BOX PROVIDE AND INSTALL NEW BLANK PLATE FOR DEMOLISHED DEVICE. REFER TO DEMOLITION PLANS.			
2	PROVIDE 1-1/4" CONDUIT TO FEED OUTLET BOX FOR ROUTING OF SYSTEMS CATEGORY 6 CABLES TO NEW DATA OUTLET LOCATIONS IN SYSTEMS FURNITURE.			
3	OUTLET BOX WITH TWO (2) 1-1/4" CONDUIT EXTENDED INTO CEILING FOR VIDEO CONNECTION TO WALL MOUNTED VIDEO MONITOR. MONITOR AND MONITOR WALL BRACKET OFOI EQUIPMENT.			
4	PROVIDE TWO 1-1/4" CONDUITS TO FEED OUTLET BOXES FOR AUDIO/VIDEO CIRCUITS AT THIS LOCATION.			
5	EXISTING ACCESS CONTROL PANEL RELOCATED TO ABOVE ACCESSIBLE CEILING AREA. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AS NECESSARY TO MAINTAIN EXISTING CONNECTIONS TO SYSTEM DEVICES.			
6	FIELD VERIFY LOCATION AND ROUGH-IN WITH OWNER AND ARCHITECT PRIOR TO ROUGH-IN.			
\overline{O}	HOMERUN TO VOICE/DATA TERMINATION AREA IN IDF (254).			
8	HOMERUN TO VOICE/DATA TERMINATION AREA IN IDF (241).			

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9 HEAT DETECTOR FOR ELEVATOR RECALL RECONNECT TO EXISTING CIRCUIT.

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SCALE: 1/8" = 1'-0"

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GENERAL NOTES

1. REFER TO TELECOMMUNICATIONS GENERAL NOTES ON SHEET T001.

HEX NOTES

EXISTING FIRE ALARM CONDUIT WITH NEW CABLE.

- 2 SLC LOOP CIRCUIT.
- 3 NAC CIRCUIT.

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	IERAL
STATE TERMINATED	
RITTEN LABELS SHALL	
YPICAL LABL RS. INSERT UNDER LENS TOP AND BOTTOM LET AS SHOWN. Image: Carte Cable. MDF/IDF-XXX EACH OUTLET SHALL HAVE (1) 1" MINIMUM CONDUIT STUBBED UP ABOVE FINISHED CEILING. Image: Carte Cable. 27 26 26 VOICE DATA OUTLET DETAIL SCALE: 3/32" = 1'-0" Scale: 3/32" = 1'-0" Image: Carte Cable.	
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GENERAL NOTES 1. REFER TO TELECOMMUNICATIONS GENERAL

NOTES ON SHEET T001.

DSE	CABLE DESCRIPTION
	TWO (2) CONDUCTOR, JACKETED, 14 AWG, FPL RATED
CUIT (NAC)	TWO (2) CONDUCTOR, JACKETED, 12 AWG, FPL RATED
RCUIT (NAC)	TWO (2) CONDUCTOR, JACKETED, 16 AWG, FPL RATED
IT (SLC)	TWO (2) CONDUCTOR, JACKETED, 18 AWG, FPL RATED
	TWO (2) CONDUCTOR, JACKETED, 14 AWG, FPL RATED
	TWO (2) CONDUCTOR, JACKETED, 18 AWG, FPL RATED
	FOUR (4) CONDUCTOR, JACKETED, 14 AWG, FPL RATED
R PANEL	TWO (2) CONDUCTOR, JACKETED, 14 AWG, FPL RATED
IE CIRCUIT	TWO (2) CONDUCTOR, JACKETED, 14 AWG, FPL RATED
ICE CIRCUIT (IDC)	TWO (2) CONDUCTOR, 14 AWG, THWN RATED
E CIRCUIT (SLC)	TWO (2) CONDUCTOR, 14 AWG, THWN RATED
APPLIANCE CIRCUIT (NAC)	TWO (2) CONDUCTOR, 14 AWG, THWN RATED
CIRCUIT	TWO (2) CONDUCTOR, 14 AWG, THWN RATED

FIRE ALARM SYSTEM CABLING SHALL BE AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER
 CONDUCTOR SIZES SHOWN ARE MINIMUM. CONTRACTOR SHALL INCREASE SIZE AS NECESSARY FOR

MAINTAIN SEPARATION OF CIRCUITS AS REQUIRED BY MANUFACTURER OR CODE.

SCALE: 3/32" = 1'-0"

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