

ARCHITECTURAL ABBREVIATIONS

NOTE: WHEN PLURAL OF A TERM IS INTENDED, THE SUFFIX "S" WILL BE ADDED TO ITS ABBREVIATION.

& L @ x c c R	AND ANGLE AT BY CENTER LINE NONE REQUIRED PLATE	FLDR FRTW FSS FT FTG	FOLDING DOOR FIRE RETARDANT TREATED WOOD FOLDING SHOWER SEAT FEET FOOTING	PTD PTDWR  PWD  QT	PAPER TOWEL DISPENSER PAPER TOWEL DISPENSER/WASTE RECEPTACLE PLYWOOD  QUARRY TILE
A/C AB AC P AC T AC W ADJ AFF ALM ALT APPROX	AIR CONDITION (-ER) (-ING) ANCHOR BOLT ACOUSTICAL PANEL CEILING ACOUSTICAL TILE ACOUSTICAL WALL SYSTEM ADJUSTABLE ABOVE FINISHED FLOOR ALUMINUM ALTERNATE APPROXIMATELY	GA GALV GB GC GCT GL GT GWC GYP BD GYPLS H HC HD HDW HM HB HORIZ HR	GAUGE GALVANIZED GRAB BAR GENERAL CONTRACTOR GLAZED CERAMIC MOSAIC GLASS, GLAZING GLAZED WALL TILE GLAZED WALL COATING GYPSUM BOARD GYPSUM PLASTER HEIGHT, HIGH HOLLOW CORE HAND DRYER HARDWARE HOLLOW METAL HOSE BIBB HORIZONTALLY HOUR	R R/W RCP RD REBAR RECT REINF RECO RES F REV RFG RH RM RP RT RT	RADIUS RIGHT-OF-WAY REINFORCED CONCRETE PIPE ROOF DRAIN REINFORCING BAR RECTANGULAR REINFORCEMENT REQUIRED RESINOUS FLOORING REVERSE REFRIGERATOR ROBE HOOK ROOM RAISED PROFILE RUBBER TILE RUBBER TILE
BLDG BLKG BM BRK BUR	BUILDING BLOCKING BEAM BRICK BUILT-UP ROOFING	LA LAM LAV LLH LMC LW	LANGUAGE ARTS LAMINATED LAVATORY LONG LEG HORIZONTAL LINEAR METAL CEILING LIGHTWEIGHT	SH SC SCI SCR SD SFT GL SH SHO SHO C SHO H SIM SND SNV SNV/D SP C SPEC SQ SS STC STD STL STOR STR SUPPL SUS SW	SEALER/HARDENER SOLID CORE SCIENCE SHOWER CURTAIN/ROD SOAP DISPENSER SAFETY GLASS SOAP HOLDER SHOWER SHOWER CONTROLS SHOWER HEAD SIMILAR SANITARY NAPKIN DISPOSAL SANITARY NAPKIN VENDOR SANITARY NAPKIN VENDOR/DISPOSAL SPECIAL COATING SPECIFICATIONS SQUARE STAINLESS STEEL SOUND TRANSMISSION CLASS (RATING) STANDARD STEEL STORAGE STRUCTURAL SUPPLEMENTARY SUSPENDED SWITCH
CB CEM PLS CHKBD CLG CLO CMU COL CONC CONF CONST CONT CORR CPT CR CT CTRJT CUS	CATCH BASIN CEMENT PLASTER (PORTLAND) CHALKBOARD CEILING CLOSET CONCRETE MASONRY UNIT COLUMN CONCRETE CONFERENCE CONSTRUCTION CONTINUOUS CORRIDOR CARPET CLASSROOM CERAMIC MOSAIC TILE CONTROL JOINT CUSTODIAN'S UTILITY SHELF	JAN JT  LA LAM LAV LLH LMC LW  M M/S MAINT MATL MAX MECH MFR MH MIN MN MO MPU MRKBD MTD MTL	JANITOR JOINT  LANGUAGE ARTS LAMINATED LAVATORY LONG LEG HORIZONTAL LINEAR METAL CEILING LIGHTWEIGHT  MIRROR MIRROR/SHELF MAINTENANCE MATERIAL MAXIMUM MECHANICAL MANUFACTURER MANHOLE MINIMUM MINUTE MASONRY OPENING MULTI-PURPOSE UNIT MARKERBOARD MOUNTED METAL	T T&G TB THR T&BD TMP TPO TTD TYP  U UON  V VCT VERT VEST VSF	TOILET TONGUE AND GROOVE TOWEL BAR THRESHOLD TACKBOARD TEMPERED TEACHER PLANNING OFFICE TOILET TISSUE DISPENSER TYPICAL, (UNLESS OTHERWISE NOTED)  URINAL UNLESS OTHERWISE NOTED  VINYL VINYL COMPOSITION TILE VERTICAL VESTIBULE VINYL SHEET FLOORING
D DBL DF DIA, Ø DIM DN DNSP DP DR DTL DWG	DEEP, DEPTH DOUBLE DRINKING FOUNTAIN DIAMETER DIMENSION DOWN DOWNSPOUT DAMP-PROOFING DOOR DETAIL DRAWING	NIC NO, # NOM NTS  OC OH OD OPNG OPP  PARTN PF RF PLBG PLS PNT PROJ PT	NOT IN CONTRACT NUMBER NOMINAL NOT TO SCALE  ON CENTER OPPOSITE HAND OUTSIDE DIAMETER OPENING OPPOSITE  PARTITION PREFORMED ROOFING PLUMBING PLASTER PAINT (PAINTED FINISH) PROJECT PRESSURE TREATED	W/ WC WD WR WWF	WITH WALL COVERING WOOD WASTE RECEPTACLE WELDED WIRE FABRIC
EA ELEC EL ELEV ENCL EQ EQUIP ETC EWC EXIST EXP JT EXT	EACH ELECTRICAL ELEVATION ELEVATOR ENCLOSURE EQUIP EQUIPMENT ET CETERA ELECTRICAL WATER COOLER EXISTING EXPANSION JOINT EXTERIOR	OPNG OPP  PARTN PF RF PLBG PLS PNT PROJ PT	OPENING OPPOSITE  PARTITION PREFORMED ROOFING PLUMBING PLASTER PAINT (PAINTED FINISH) PROJECT PRESSURE TREATED		
FD FE FEC FH FHC FIN FL	FLOOR DRAIN FIRE EXTINGUISHER FIRE EXTINGUISHER CABINET FIRE HYDRANT FIRE HOSE CABINET FINISH FLOOR				

DRAWING SYMBOL AND IDENTIFICATION LEGEND

	NORTH ARROW		DOOR / INTERIOR OPENING ("B" INDICATES WINDOW BLIND LOCATION)
	VERTICAL ELEVATION MARK		SPECIFIC NOTE INDICATION NOTE NUMBER
	COLUMN LINE SYMBOL CENTERLINE OF REFERENCE GRID		ROOM NUMBER IDENTIFICATION
	MATCHLINE		WINDOW TYPE / STOREFRONT TYPE / LOUVER TYPE ("B" INDICATES WINDOW BLIND LOCATION)
	DETAIL SYMBOL DETAIL NUMBER DRAWING NUMBER		SHELVING TYPE
	EXTERIOR ELEVATION SYMBOL INDICATES ELEVATION TO BE VIEWED DETAIL NUMBER DRAWING NUMBER		INSTRUCTIONAL AIDS TYPE
	SECTION SYMBOL DETAIL NUMBER DRAWING NUMBER SECTION "CUT LINE"		WALL TYPE
	INTERIOR ELEVATION SYMBOL INDICATES ELEVATION TO BE VIEWED DETAIL NUMBER DRAWING NUMBER		SIGNAGE TYPE SPECIFICATION SECTION 10425
	DETAIL INDICATION DETAIL NUMBER DRAWING NUMBER		TOILET ACCESSORY TYPE
	DETAIL AREA		GLAZING TYPE
			KITCHEN EQUIPMENT TYPE
			EQUIPMENT NUMBER
			LIFE SAFETY OCCUPANT CAPACITY
			SPOT ELEVATION

INDEX OF DRAWINGS

GENERAL A0.0	COVER SHEET, INDEX, SYMBOLS AND LOCATION MAP
ARCHITECTURAL A1.0 A2.1 A3.1 A4.1 A5.1	SITE PLAN LIFE SAFETY PLAN ROOF PLAN DEMOLITION PLAN FLOOR PLAN
STRUCTURAL S1.0	STRUCTURAL PLANS AND NOTES
PLUMBING P0.1 P0.2 P1.1	PLUMBING GENERAL NOTES, SCHEDULES AND LEGEND PLUMBING SPECIFICATIONS PLUMBING FLOOR PLANS AND DETAILS
MECHANICAL M0.1 M0.2 M1.1	HVAC GENERAL NOTES AND LEGEND HVAC SPECIFICATIONS HVAC FLOOR PLANS, DETAILS AND SCHEDULES
ELECTRICAL E0.1 E0.2 E1.1 E2.1 E3.0 E4.0	ELECTRICAL LEGEND AND NOTES LUMINAIRE SCHEDULE AND CUT SHEETS LIGHTING PLAN ELECTRICAL RENOVATION PLAN ELECTRICAL RISER DIAGRAM ELECTRICAL DETAILS

# TAMPA SPORTS AUTHORITY BABE ZAHARIAS GRILL RENOVATION

PRICING  
03/19/2019

ARCHITECT

**HEPNER ARCHITECTS, INC.**

601 SOUTH BOULEVARD, SUITE 101  
TAMPA, FLORIDA 33606  
813-229-0614

STRUCTURAL ENGINEER

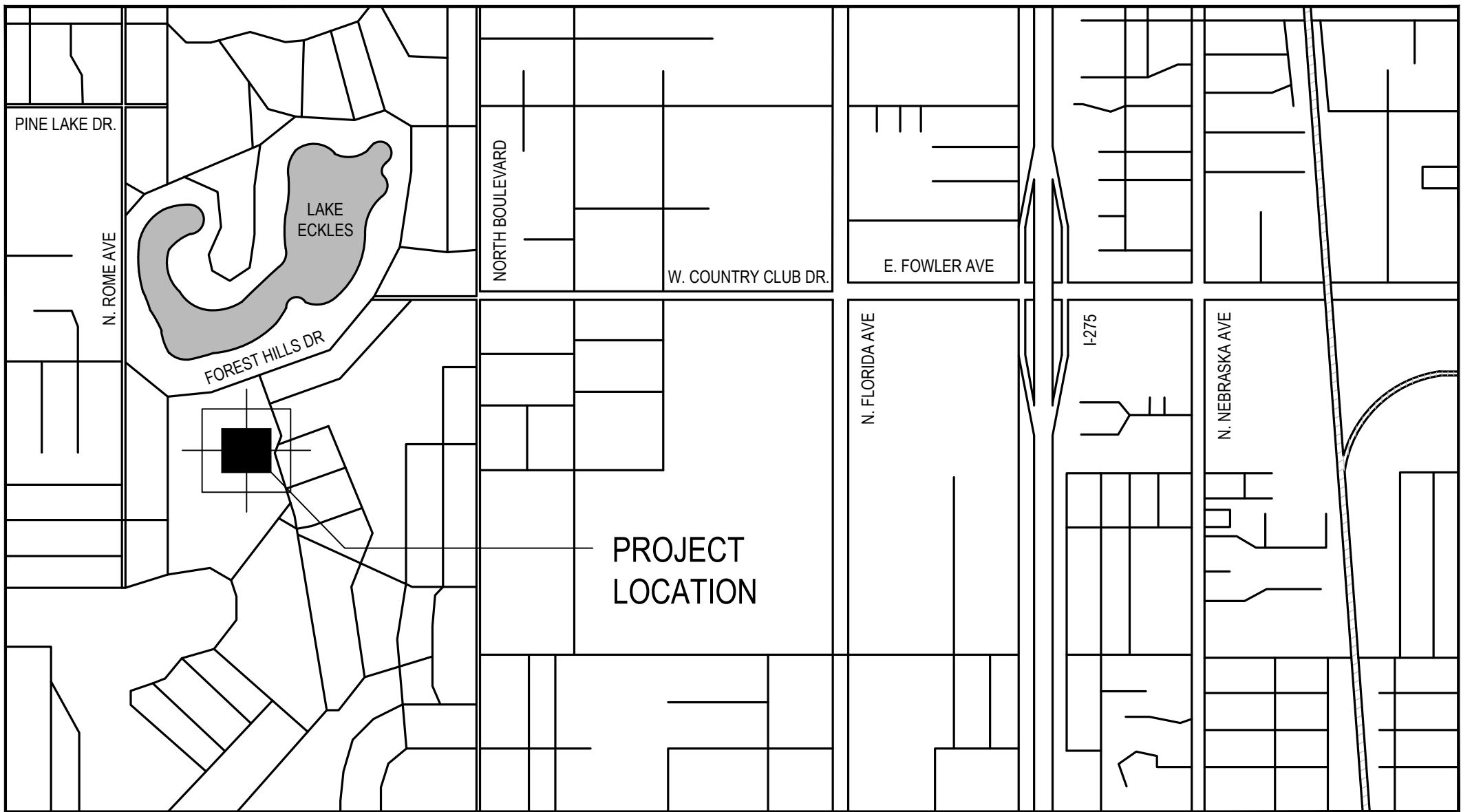
**DECAROWILLSON STRUCTURAL ENGINEERS**

1725 E. 5TH AVENUE  
TAMPA, FLORIDA 33605  
813-248-8080

MEP ENGINEER & FIRE PROTECTION

**ANSTON-GREENLEES, INC.**

1315 WEST FLETCHER AVENUE  
TAMPA, FLORIDA 33612  
813-963-1919



**HEPNERARCHITECTS**

HEPNER ARCHITECTS, INCORPORATED  
601 SOUTH BOULEVARD, SUITE 101  
TAMPA, FLORIDA 33606  
813-229-0614  
AA 0002617

STRUCTURAL ENGINEER  
DECAROWILLSON STRUCTURAL ENGINEERS  
1725 E. 5TH AVENUE  
TAMPA, FLORIDA 33605  
813-248-8080  
CERT AUTH NO. 25896

MECHANICAL/ELECTRICAL/PLUMBING ENGINEER  
ANSTON-GREENLEES, INC.  
1315 WEST FLETCHER AVENUE  
TAMPA, FLORIDA 33612  
813-963-1919  
CERT AUTH NO. 6093

JOHN S KIDWELL, AIA  
0016305

**TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.**

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

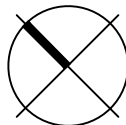
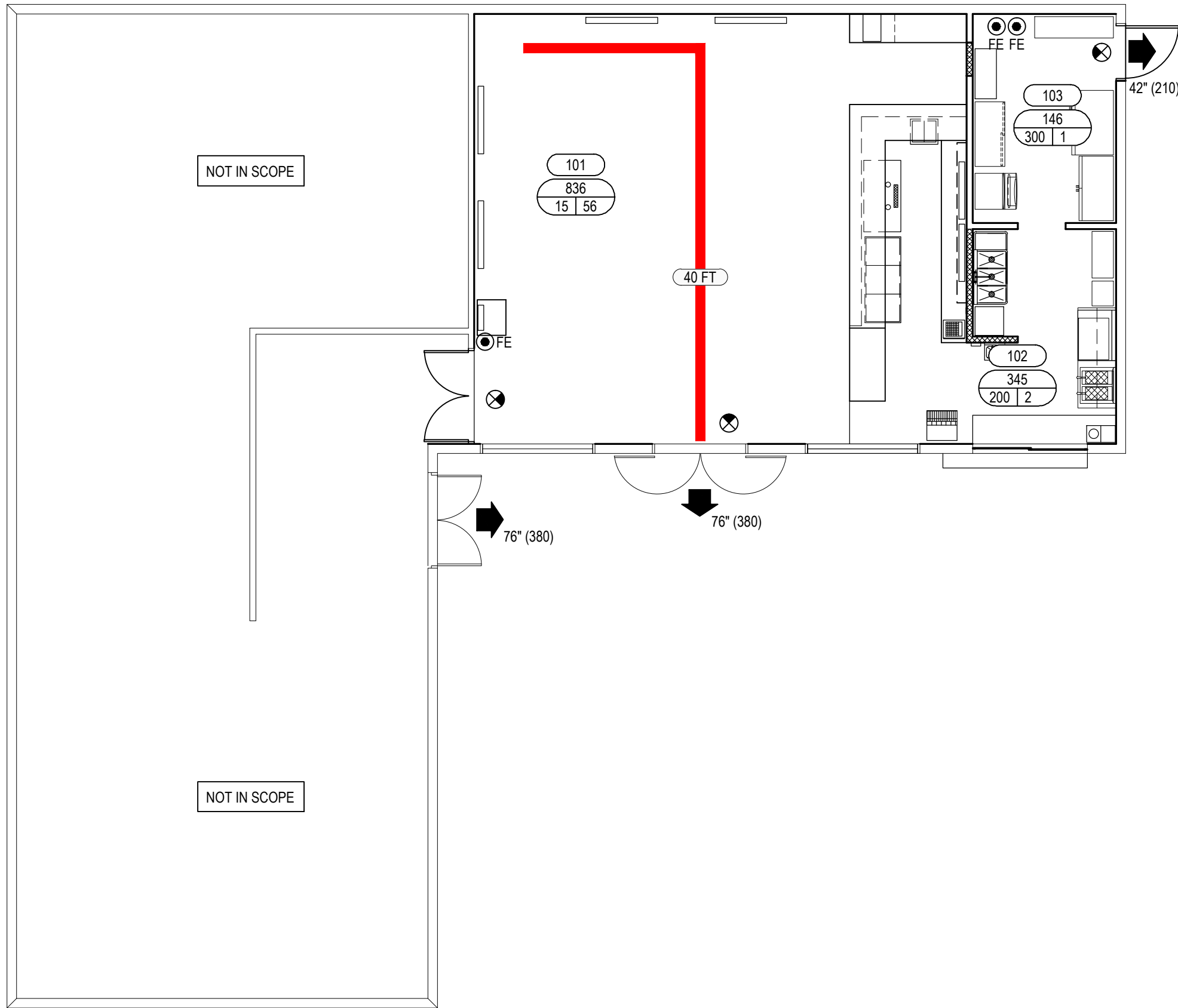
PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

COVER SHEET,  
INDEX, SYMBOLS,  
LOCATION MAP

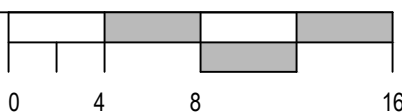
**A0.0**

LIFE SAFETY LEGEND

- (E) DENOTES EXISTING COMPONENT
- PRIMARY EGRESS  
EXIT WIDTH IN INCHES (MAXIMUM OCCUPANT LOAD FOR EXIT WIDTH)
  - 20M  
RATED OPENING, IN MINUTES (M) OR HOURS (HR)
  - FE  
FIRE EXTINGUISHER
  - EXIT LIGHT
  - SMOKE DETECTOR
  - ROOM AREA  
OCCUPANT CAPACITY
  - AREA PER OCCUPANT
  - TRAVEL DISTANCE TO EXIT
  - NOT IN SCOPE



1  
A2.1  
LIFE SAFETY PLAN  
SCALE: 1/8" = 1'-0"



JOHN S KIDWELL, AIA  
0016305

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

LIFE SAFETY PLAN



ROOM LEGEND

SPACE	SPACE NAME
100	LOBBY
101	DINING AREA
102	KITCHEN
103	STORAGE
104	BAR

DEMOLITION LEGEND

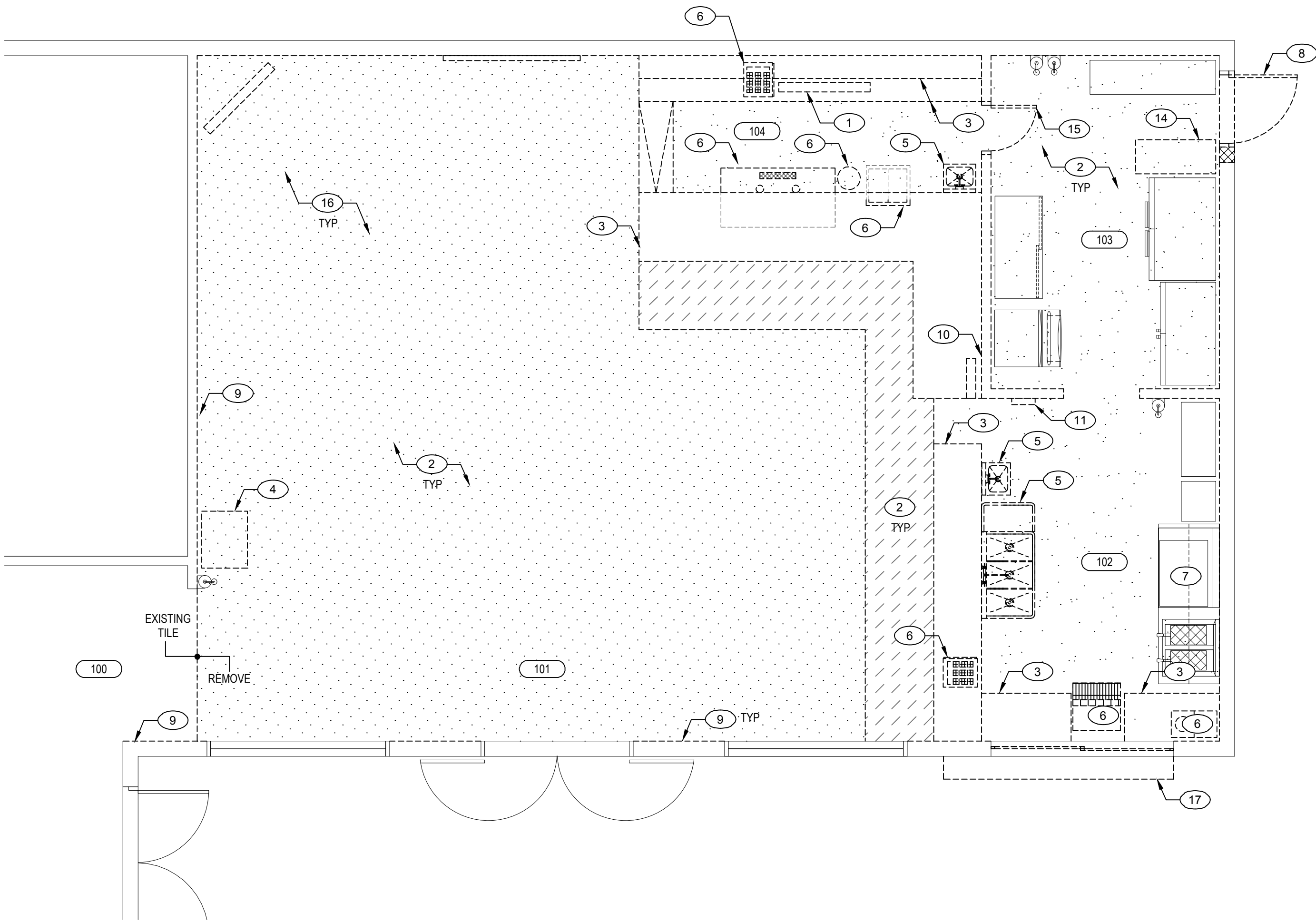
	EXISTING WALL TO REMAIN
	REMOVE EXISTING WALL
	REMOVE EXISTING GYPSUM WALL BOARD AND WOOD WAINSCOT AS REQUIRED, WALL STUDS TO REMAIN
	REMOVE EXISTING DOOR AND FRAME
	REMOVE EXISTING WINDOW AND FRAME
	REMOVE EXISTING CARPET AND ADHESIVES
	REMOVE EXISTING CERAMIC TILE AND ADHESIVES
	REMOVE EXISTING COATING
	REMOVE EXISTING AIR DEVICE
	REMOVE EXISTING LIGHT
	REMOVE EXISTING GYPSUM WALLBOARD CEILING

DEMOLITION GENERAL NOTES

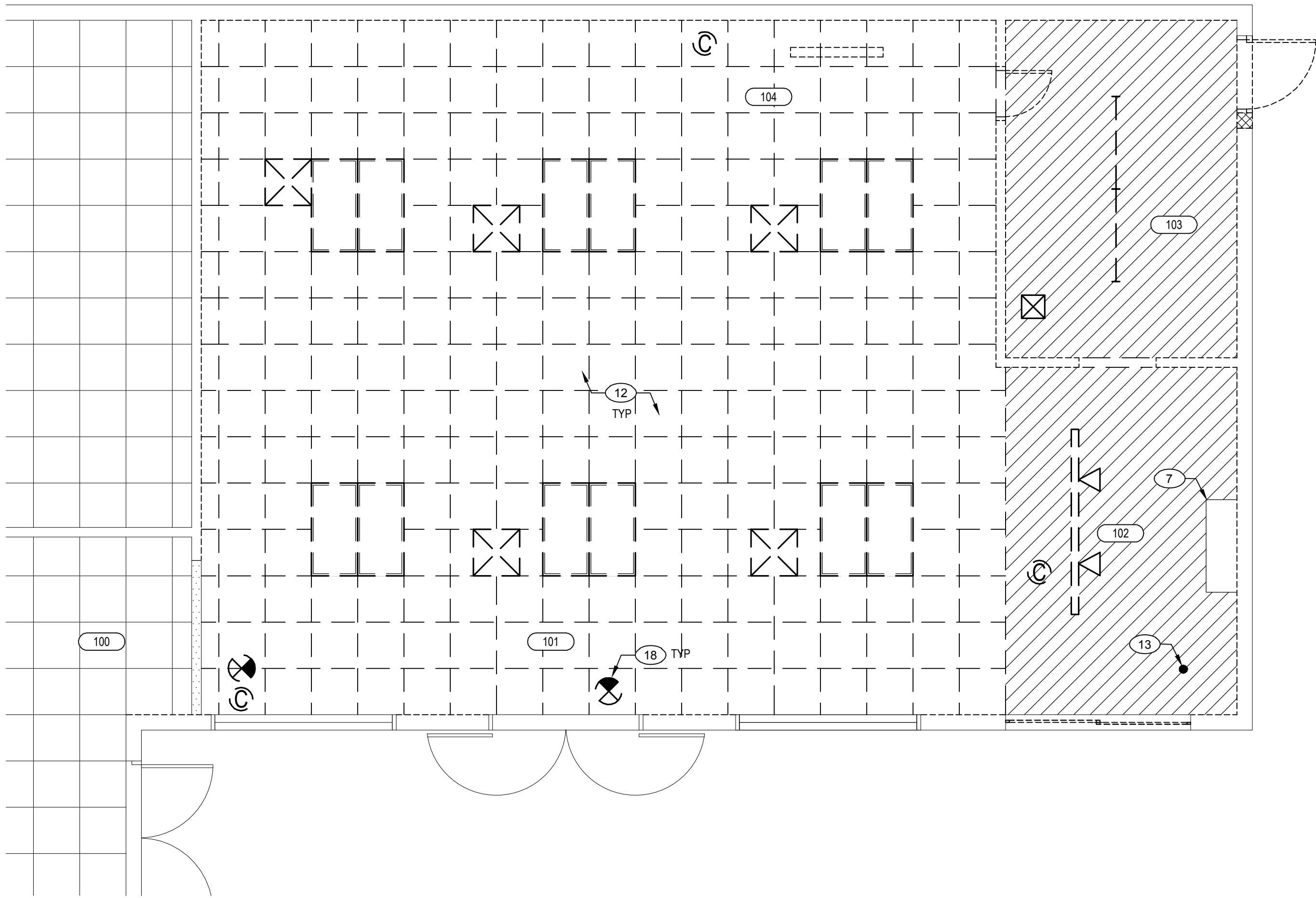
- GENERAL CONTRACTOR TO COORDINATE ALL DEMOLITION WITH CONTRACT DOCUMENTS FOR NEW CONSTRUCTION
- REMOVE AND TERMINATE ALL ELECTRICAL DEVICES, CONDUIT, FIXTURES, FINISHES, WINDOW TREATMENT, CASEWORK, EQUIPMENT, PLUMBING, HVAC EQUIPMENT, DUCTWORK, ETC. AS NECESSARY FOR COMPLETION OF NEW WORK. REMOVE ALL ABANDONED UTILITIES COMPLETELY.
- CUT AND PATCH EXISTING CONSTRUCTION AS REQUIRED TO INSTALL NEW WORK. USE CLEANED, STORED MATERIAL AS NECESSARY.
- OTHER DEMOLITION MAY BE REQUIRED FOR INSTALLATION OF NEW WORK AS SHOWN IN THE DOCUMENTS AND SHALL BE INCLUDED EVEN THOUGH NOT SHOWN.
- DISPOSE OF ALL DEMOLISHED MATERIAL OFF SITE, EXCEPT FOR MATERIAL THE OWNER WISHES TO REMAIN. PROVIDE THE OWNER WITH THE OPPORTUNITY TO TAG EXISTING ITEMS THEY WISH TO SAVE.
- REFER TO STRUCTURAL, PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION
- ALL SPEAKERS, SECURITY, INTERCOM, TV, FIRE ALARM, AND OTHER SUCH DEVICES SHALL BE REINSTALLED.

DEMOLITION PLAN SPECIFIC NOTES

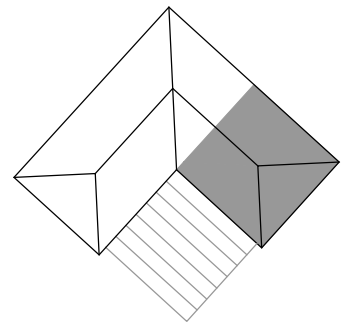
- REMOVE, SAVE AND PROTECT EXISTING TV AND SUPPORT ASSEMBLY, REINSTALL AS INDICATED ON FLOOR PLAN
- REMOVE EXISTING FLOORING AND ADHESIVES
- REMOVE EXISTING CASEWORK
- RELOCATE EXISTING MOVABLE CASEWORK, COORDINATE NEW LOCATION WITH OWNER
- REMOVE, SAVE AND PROTECT EXISTING SINK ASSEMBLY, RELOCATE EXISTING PLUMBING LINES AS REQUIRED TO ACCOMMODATE NEW FIXTURE LOCATIONS, REFER TO PLUMBING
- REMOVE, SAVE AND PROTECT EXISTING EQUIPMENT, CLEAN PRIOR TO INSTALLATION
- EXISTING KITCHEN HOOD AND GRILL ASSEMBLY TO REMAIN, PROTECT DURING CONSTRUCTION
- REMOVE EXISTING DOOR, FRAME AND PORTION OF EXTERIOR WALL AS NECESSARY FOR INSTALLATION OF NEW DOOR, REFER TO STRUCTURAL AND ELECTRICAL
- REMOVE EXISTING GYPSUM WALL BOARD, WOOD BASE AND WOOD PANELING, WALL FRAMING TO REMAIN
- REMOVE, SAVE AND PROTECT ELECTRONIC AD SCREEN, REFER TO FLOOR PLAN FOR NEW LOCATION
- REMOVE, SAVE AND PROTECT EXISTING PHONE, CLEAN PRIOR TO REINSTALLATION
- REMOVE EXISTING LAY-IN CEILING, LIGHTS, AIR DEVICES, SPEAKERS AND OTHER DEVICES. SAVE DEVICES FOR REUSE AS REQUIRED, REFER TO ELECTRICAL
- TERMINATE AND CAP PIPE STUB-OUT TO ABOVE CEILING
- RELOCATE WIRE SHELVING TO LOCATION INDICATED ON FLOOR PLAN
- REMOVE EXISTING DOOR AND FRAME ASSEMBLY
- REMOVE EXISTING WALL MOUNTED ITEMS, COORDINATE WITH OWNER
- REMOVE EXISTING WINDOW ASSEMBLY AND ASSOCIATED LAMINATE COUNTERTOP
- REMOVE, SAVE AND PROTECT EXISTING EGRESS SIGN FOR REINSTALLATION, REFER TO ELECTRICAL
- REMOVE, SAVE AND PROTECT EXISTING EGRESS SIGN FOR REINSTALLATION, REFER TO ELECTRICAL



1 DEMOLITION PLAN  
A4.1 SCALE: 1/4" = 1'-0"



2 DEMOLITION REFLECTED CEILING PLAN  
A4.1 SCALE: 1/4" = 1'-0"



KEY PLAN

JOHN S KIDWELL, AIA  
0016305

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

DEMOLITION  
PLAN

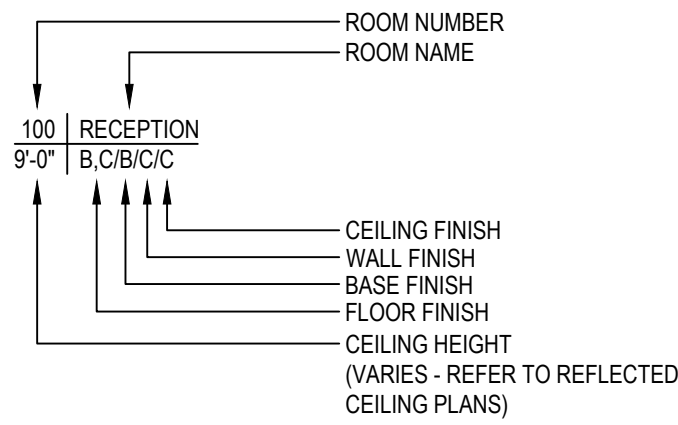
FLOOR PLAN GENERAL NOTES

1. FIELD VERIFY ALL DIMENSIONS ASSOCIATED WITH EXISTING CONSTRUCTION.
2. CONTRACTOR SHALL CHECK EXISTING FLOOR SLABS FOR LEVEL AFTER COMPLETION OF DEMOLITION WORK AND NOTIFY THE ARCHITECT OF ANY DEVIATION FROM SPECIFIED TOLERANCES. CORRECTIVE WORK SHALL BE ACCOMPLISHED PRIOR TO INSTANTING NEW CONSTRUCTION.
3. AT ALL WALL MOUNTED EQUIPMENT, PROVIDE WOOD BLOCKING IN ACCORDANCE WITH DETAIL 3/A11.1.

FLOOR PLAN SPECIFIC NOTES

- 1 REPLACE WOOD BASE, TYPICAL ENTIRE BUILDING
- 2 EXISTING EQUIPMENT TO REMAIN. REMOVE, PROTECT, AND RE-INSTALL AS REQUIRED FOR INSTALLATION OF NEW QUARRY TILE
- 3 PATCH CEMENTIOUS SIDING AS REQUIRED FOR INSTALLATION OF NEW STAINLESS STEEL COUNTER

ROOM LEGEND



FINISH SCHEDULE

FLOOR	BASE	WALLS	CEILING
A PORCELAIN TILE	WOOD (MATCH EXISTING)	PAINTED GWB	ACOUSTICAL LAY-IN
B QUARRY TILE	QUARRY TILE	PAINTED WOOD PANELING	PAINTED GWB
C EXISTING	EXISTING	EXISTING	EXISTING

ALTERNATES

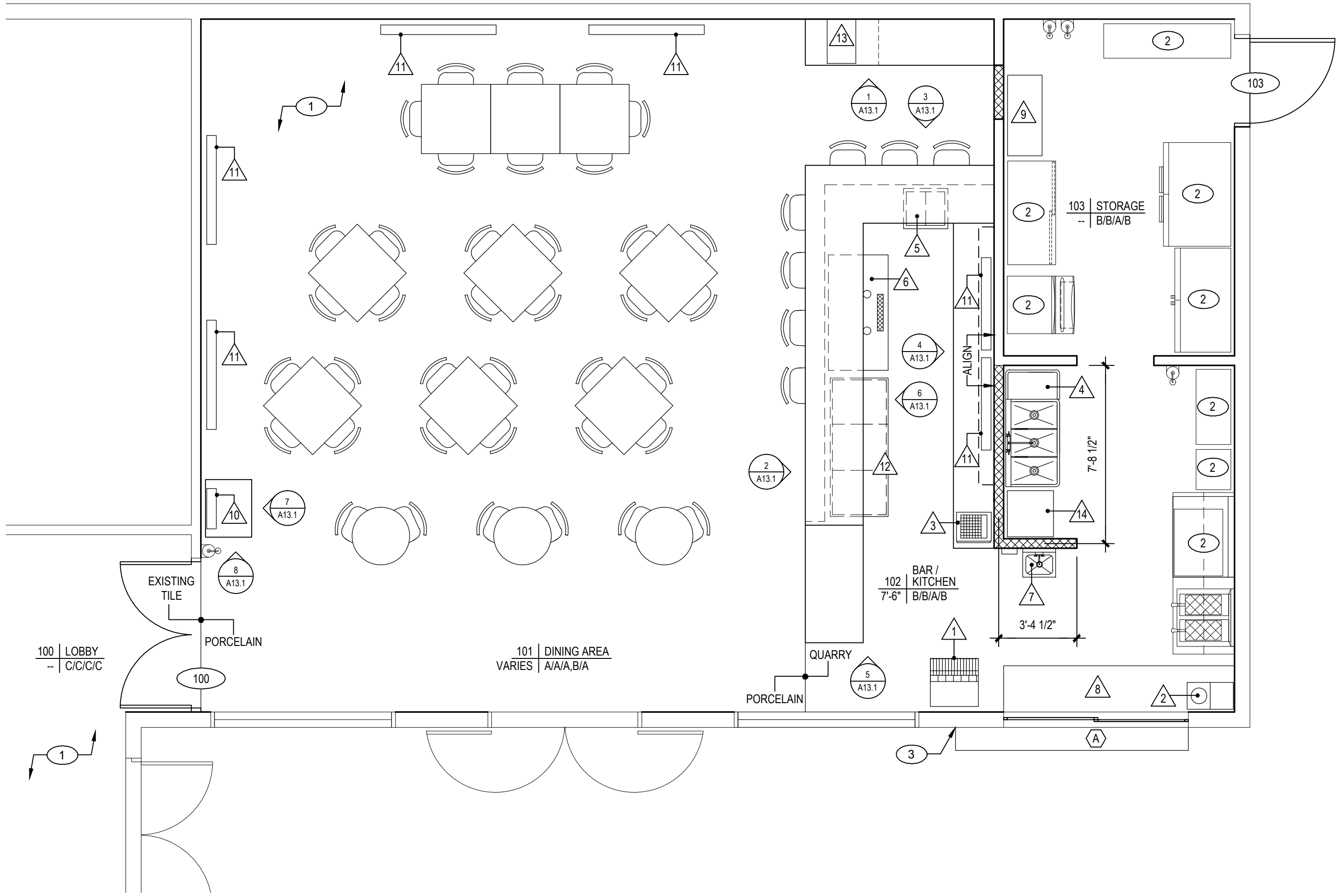
- ALTERNATE 1  
BASE BID: REPAIR AND PAINT DAMAGED WOOD SIDING AND WOOD BASE AT LOBBY, SPORTS STORE, AND AS REQUIRED THROUGHOUT BUILDING.  
ALTERNATE: PAINT INTERIOR WOOD SIDING, CEILINGS AND DOORS AT THE LOBBY AND SPORTS STORE.
- ALTERNATE 2  
BASE BID: REPAIR AND PAINT DAMAGED WOOD SIDING AND WOOD BASE AT LOBBY, SPORTS STORE, AND AS REQUIRED THROUGHOUT BUILDING.  
ALTERNATE: REMOVE EXISTING GYPSUM WALLBOARD, WOOD SIDING AND WOOD BASE. INSTALL NEW GYPSUM WALL BOARD
- ALTERNATE 3  
BASE BID: CARPET TO REMAIN AT LOBBY, CERAMIC TILE TO REMAIN AT SPORTS STORE. ALTERNATE: REMOVE EXISTING CARPETING AT SPORTS STORE AND EXISTING CERAMIC TILE AT LOBBY. REPLACE WITH PORCELAIN TILE AND WOOD BASE TO MATCH NEW FLOORING AT DINING.
- ALTERNATE 4  
BASE BID: PROVIDE QUARTZ COUNTERTOPS AT CASEWORK AS INDICATED ON DOCUMENTS ON SHEETS A13.1 AND A13.2  
ALTERNATE: DELETE THE REQUIREMENT FOR QUARTZ COUNTERTOPS AND IN LIEU THEREOF PROVIDE CORIAN SOLID SURFACE COUNTERTOPS.
- ALTERNATE 5  
BASE BID: PROVIDE QUARTZ COUNTERTOPS AT CASEWORK AS INDICATED ON DOCUMENTS ON SHEETS A13.1 AND A13.2  
ALTERNATE: DELETE THE REQUIREMENT FOR QUARTZ COUNTERTOPS AND IN LIEU THEREOF PROVIDE LAMINATE COUNTERTOPS.

WALL TYPE LEGEND

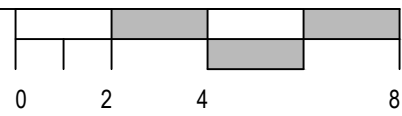
- NEW CMU WALL
- NEW METAL STUD PARTITION
- EXISTING WALL TO REMAIN
- AREA NOT IN SCOPE

EQUIPMENT SCHEDULE

STATUS: A = FURNISHED BY CONTRACTOR, INSTALLED BY CONTRACTOR B = FURNISHED BY OWNER, INSTALLED BY CONTRACTOR C = FURNISHED BY OWNER, INSTALLED BY OWNER D = EXISTING EQUIPMENT TO BE RELOCATED BY CONTRACTOR					
ITEM NO.	ITEM EQUIPMENT	STATUS	ITEM NO.	ITEM EQUIPMENT	STATUS
1	SODA FOUNTAIN	D	9	WIRE SHELVING	D
2	COFFEE MAKER	D	10	AD TV (RELOCATED)	B
3	POINT OF SALE	D	11	LCD TV	B
4	SCULLERY SINK	D	12	UNDER-COUNTER REFRIGERATOR, MODEL: TURBO AIR MUR-72 19 CU. FT.	B
5	UNDER-COUNTER ICE BIN	D	13	COUNTERTOP WATER DISPENSER, MODEL: DSBCE180K BLUBAR	B
6	KEG COOLER	D		COUNTERTOP AS MANUFACTURED BY ELKAY MANUFACTURING COMPANY	
7	HAND SINK	D	14	DISHWASHER, MODEL: KDT334GPS AS MANUFACTURED BY KITCHENAID	B
8	24" X 120" S.S. TABLE	B			



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



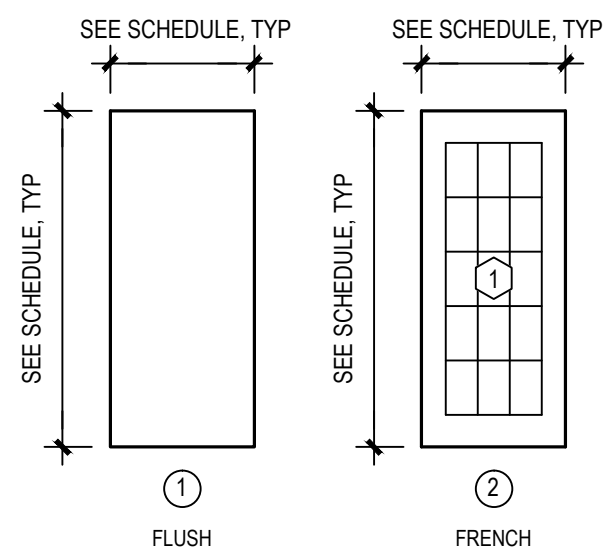
FLORIDA PRODUCT APPROVAL APPROVED PRODUCTS LIST

FLORIDA BUILDING CODE VERSION - 2017

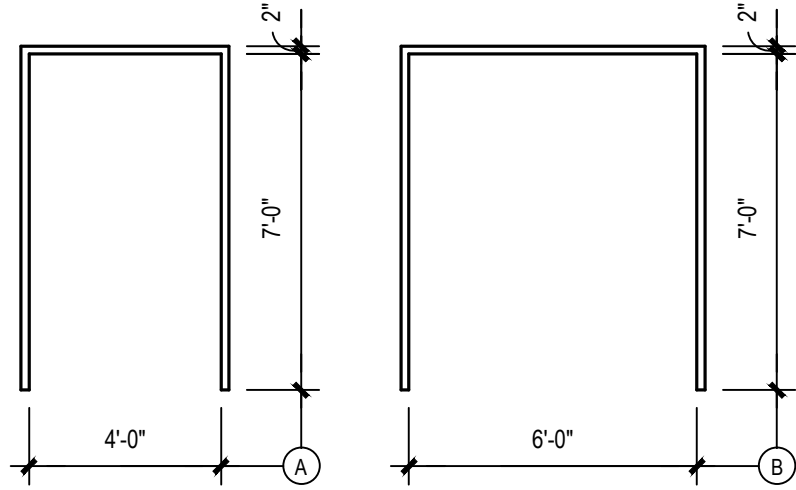
PRODUCT CATEGORY	SUB CATEGORY	MANUFACTURER	APPROVAL NUMBER	APPROVAL OR VALIDATION DATE
EXTERIOR DOORS	SWINGING EXTERIOR DOOR ASSEMBLIES	QUALITY ENGINEERED PRODUCTS	FL 3294.1	01/31/2018
WINDOW	HORIZONTAL SLIDER	KAWNEER COMPANY, INC	FL 16178-R2	10/03/2017

DOOR, FRAME AND HARDWARE SCHEDULE

OPENING NUMBER	LOCATION		TYPE	MATERIAL	FRAMES			TYPE	MATERIAL	DOOR OPENINGS		HDW SET	REMARKS
	FROM	TO			HEAD	SILL	JAMB			WIDTH	HEIGHT		
100	LOBBY TO DINING		B	HM	7/A11.1	-	7/A11.1 SIM	2	WOOD	3'-0" (PR)	7'-0"	01	--
103	EXTERIOR TO STORAGE		A	HM	6/A11.1	-	6/A11.1 SIM	1	HM	4'-0"	7'-0"	02	--



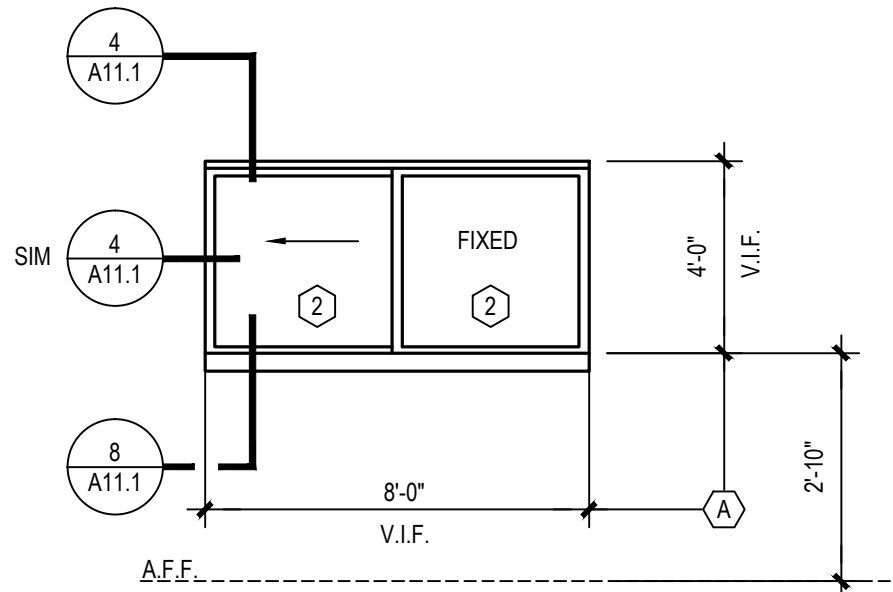
2 DOOR TYPES  
SCALE: 1/4" = 1'-0"



3 HOLLOW METAL FRAME TYPES  
SCALE: 1/4" = 1'-0"  
NOTE: ALL FRAME MEMBERS ARE 2" UNLESS OTHERWISE NOTED.

GLASS SCHEDULE

GLASS TYPE	DESCRIPTION
1	1/4" CLEAR TEMPERED
2	9/16" IMPACT RESISTANT GLASS



4 ALUMINUM WINDOW TYPES  
SCALE: 1/4" = 1'-0"

FINISH SCHEDULE (ALL INTERIOR FINISHES TO BE CLASS A, TYPICAL)

- T1: PORCELAIN TILE  
MFTR: LEGINI IDENTICA  
SIZE: 6X36 & 9X36  
COLOR: TO BE DETERMINED
- C1: COUNTERTOP  
MFTR: CORIAN QUARTZ  
COLOR: TO BE DETERMINED
- T2: QUARRY TILE  
MFTR: DAL TILE  
SIZE: 6X6  
COLOR: ASHEN GRAY
- C2: COUNTERTOP  
MFTR: CORIAN QUARTZ  
COLOR: TO BE DETERMINED

- PL1: PLASTIC LAMINATE  
MFTR: WILSONART HP LAMINATE  
COLOR: TO BE DETERMINED  
FINISH: PREMIUM AEON  
MATCHING 3MM PVC EDGE BANDING

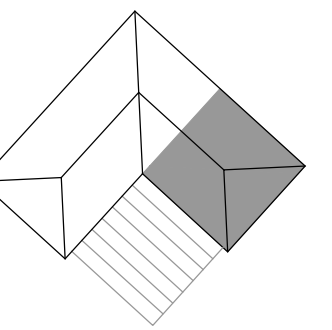
- PL2: PLASTIC LAMINATE  
MFTR: WILSONART HP LAMINATE  
COLOR: TO BE DETERMINED  
FINISH: PREMIUM AEON  
MATCHING 3MM PVC EDGE BANDING

CONFIRM ALL FINISHES WITH OWNER PRIOR TO ORDERING

HEPNER ARCHITECTS, INCORPORATED  
601 SOUTH BOULEVARD, SUITE 101  
TAMPA, FLORIDA 33606  
813-229-0614  
AA 0002617

STRUCTURAL ENGINEER  
DECAROWILLSON STRUCTURAL ENGINEERS  
1725 E. 5TH AVENUE  
TAMPA, FLORIDA 33605  
813-248-8080  
CERT AUTH NO. 25896

MECHANICAL/ELECTRICAL/PLUMBING ENGINEER  
ANSTON-GREENLEES, INC.  
1315 WEST FLETCHER AVENUE  
TAMPA, FLORIDA 33612  
813-863-1919  
CERT AUTH NO. 6093



KEY PLAN

JOHN S KIDWELL, AIA  
0016305

TAMPA SPORTS AUTHORITY - BABE ZAHARIAS GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE THE PLANS AND SPECIFICATIONS ARE COMPLETE AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

FLOOR PLAN



ROOM LEGEND

SPACE	SPACE NAME
100	DINING AREA
101	BAR
102	KITCHEN
103	STORAGE ROOM

REFLECTED CEILING PLAN GENERAL NOTES

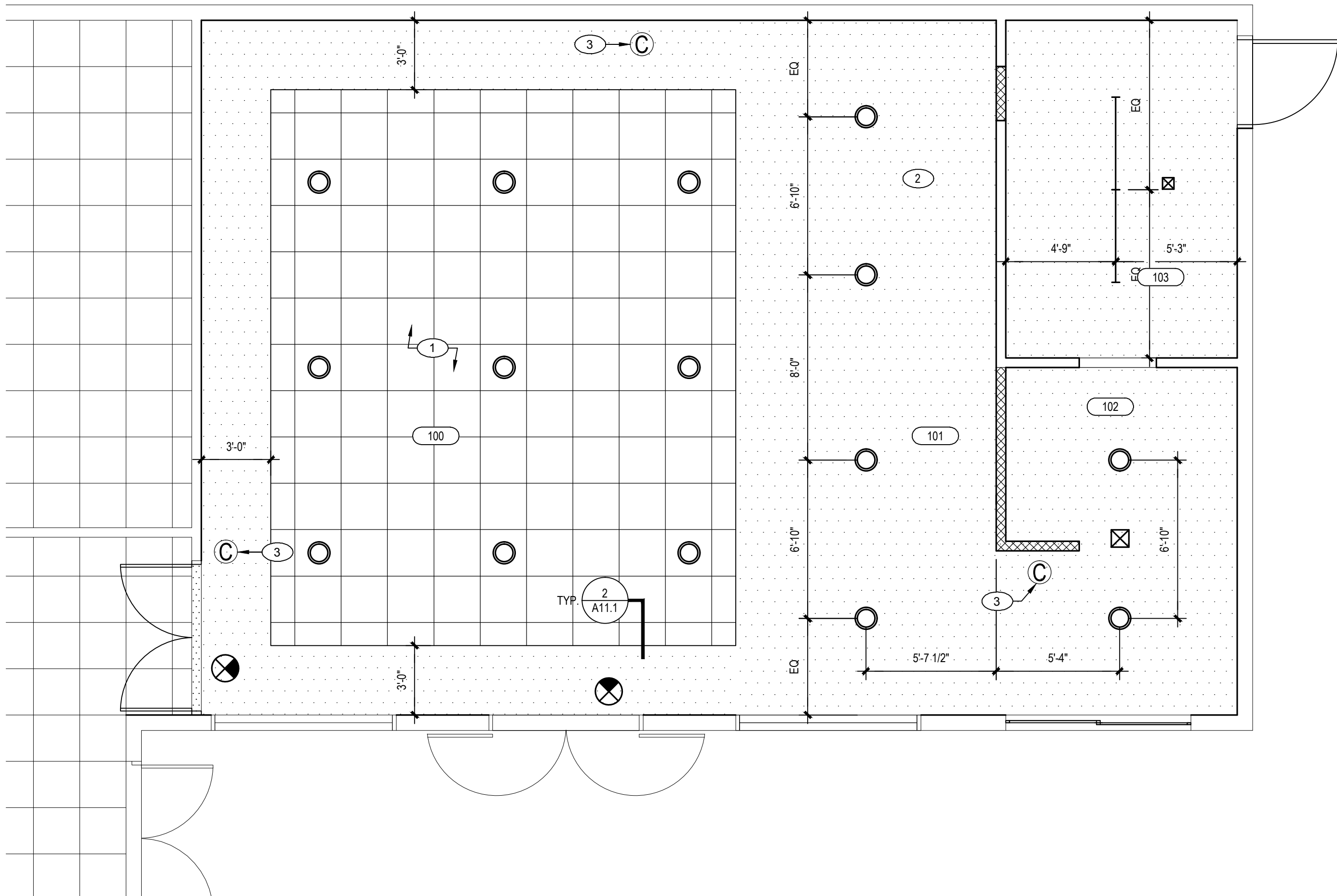
- ITEMS LOCATED IN ACOUSTICAL CEILINGS ARE CENTERED IN CEILING PANELS.
- ITEMS LOCATED IN HARD CEILINGS ARE CENTERED AS SHOWN, UNLESS OTHERWISE NOTED.
- PATCH AND REPAIR ALL EXTERIOR SOFFITS AND INTERIOR HARD CEILINGS AS REQUIRED.

REFLECTED CEILING PLAN SPECIFIC NOTES

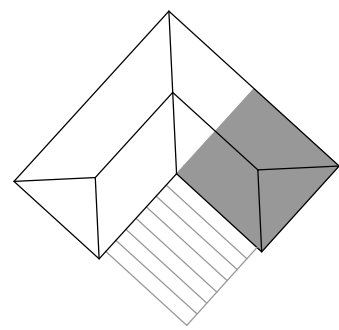
- NEW ACOUSTICAL CEILING SYSTEM AT 9'-0" AFF
- NEW GYPSUM WALL BOARD CEILING AT 8'-0" AFF OR AS TIGHT AS POSSIBLE TO UNDERSIDE OF STRUCTURE
- SECURITY CAMERA. COORDINATE LOCATION WITH OWNER

CEILING PLAN SYMBOL LEGEND

- |   |   |
|---|---|
| Ⓢ | SOUND SYSTEM SPEAKER  |
| Ⓟ | PAGING SPEAKER  |
| ⊠ | AIR INTAKE OR OUTLET  |
| ⬢ | LIGHT FIXTURE   |
| ⊙ | MOTION DETECTOR   |
| Ⓒ | CAMERA  |
| ⊠ | SMOKE OR HEAT DETECTOR  |
| ⬢ | EXIT LIGHT  |
| ⬢ | ACCESS PANEL  |
| ⬢ | SUSPENDED ACOUSTICAL CEILING  |
| ⬢ | GWB CEILING   |
| ⬢ | WALLS TO DECK OR STRUCTURE. PROVIDE BATT INSULATION AT ALL STUD WALLS TO DECK OR STRUCTURE. REFER TO LIFE SAFETY PLANS FOR RATED WALLS. |



REFLECTED CEILING PLAN  
SCALE: 1/4" = 1'-0"



KEY PLAN

JOHN S KIDWELL, AIA  
0016305

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

REFLECTED  
CEILING PLAN

A7.1

1

NOT USED

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

2

DETAIL - SOFFIT

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

ACOUSTICAL CEILING

GYPSUM WALLBOARD ON METAL FRAMING, SECURE TO STRUCTURE

CORNER BEAD

3

DETAIL - BLOCKING

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

GYPSUM WALL BOARD

PROVIDE MIN. 2X6 WOOD BLOCKING CONTINUOUS BETWEEN STUDS AT EACH POINT OF ATTACHMENT OF ALL WALL MOUNTED ITEMS

TYPICAL WALL MOUNTED ITEM  
TACKBOARD, MARKERBOARD,  
TOILET ROOM ACCESSORY,  
DOOR STOP, MOP RACK, FIRE  
EXTINGUISHER BRACKET, ETC.

4

DETAIL - HORIZONTAL SLIDING WINDOW HEAD

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

EXTERIOR

EXISTING EXTERIOR SIDING ON MOISTURE BARRIER ON FRAMING, PATCH AS REQUIRED FOR INSTALLATION OF NEW WINDOW

Z-FLASHING

ACCENT TRIM TO MATCH TYPE AND PROFILE AT EXISTING WINDOWS

PRE-FINISHED ALUMINUM HORIZONTAL SLIDING WINDOW

SEALANT, TYP

JAMB

INTERIOR

GYPSUM WALLBOARD ON EXISTING FRAMING

J-TRIM

EXISTING HEIGHT

5

NOT USED

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

6

DETAIL - EXTERIOR DOOR HEAD

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

EXTERIOR

EXISTING EXTERIOR SIDING ON MOISTURE BARRIER ON FRAMING, PATCH AS REQUIRED FOR INSTALLATION OF NEW DOOR

Z-FLASHING

ACCENT TRIM TO MATCH TYPE AND PROFILE AT EXISTING DOORS

PAINTED HOLLOW METAL DOOR MECHANICALLY FASTENED TO FRAMING

INTERIOR

GYPSUM WALLBOARD ON EXISTING FRAMING

J-TRIM

7

DETAIL - INTERIOR DOOR HEAD/JAMB

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

GYPSUM WALLBOARD ON EXISTING FRAMING

SEALANT

HOLLOW METAL FRAME

WOOD DOOR

8

DETAIL - HORIZONTAL SLIDING WINDOW SILL

A11.1

SCALE: 3" = 1'-0"

0

2'

4'

8'

EXTERIOR

PRE-FINISHED ALUMINUM HORIZONTAL SLIDING WINDOW

CONTINUOUS STAINLESS STEEL SERVING COUNTER

L3x4x3/16 FRAMING FOR COUNTER

EXTEND EXISTING MOISTURE / VAPOR BARRIER AS REQUIRED

1'-0"

EXTEND LEG OF STEEL ANGLE AS REQUIRED FOR SECURE CONNECTION TO EXISTING WALL

MATCH PROFILE OF EXTERIOR SIDING

EXISTING EXTERIOR SIDING ON MOISTURE / VAPOR BARRIER ON FRAMING, PATCH AS REQUIRED FOR INSTALLATION OF NEW WINDOW

INTERIOR

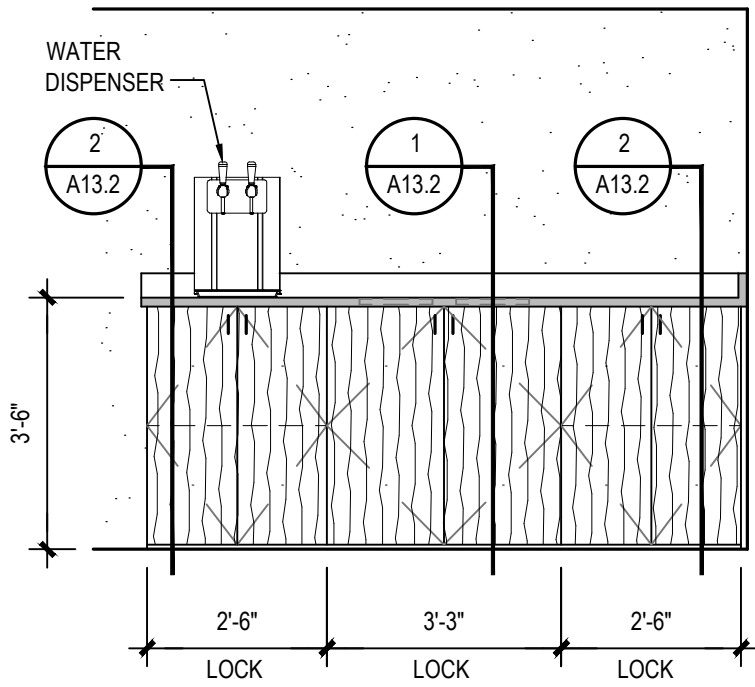
GYPSUM WALLBOARD ON EXISTING FRAMING

J-TRIM

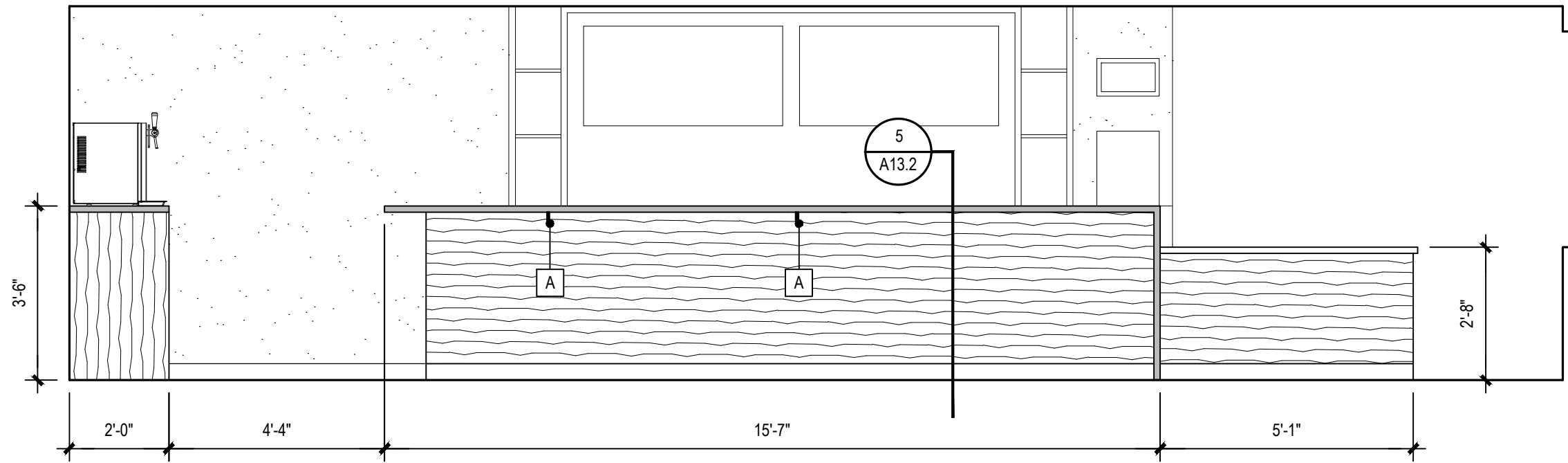
SEALANT

SEE SCHEDULE

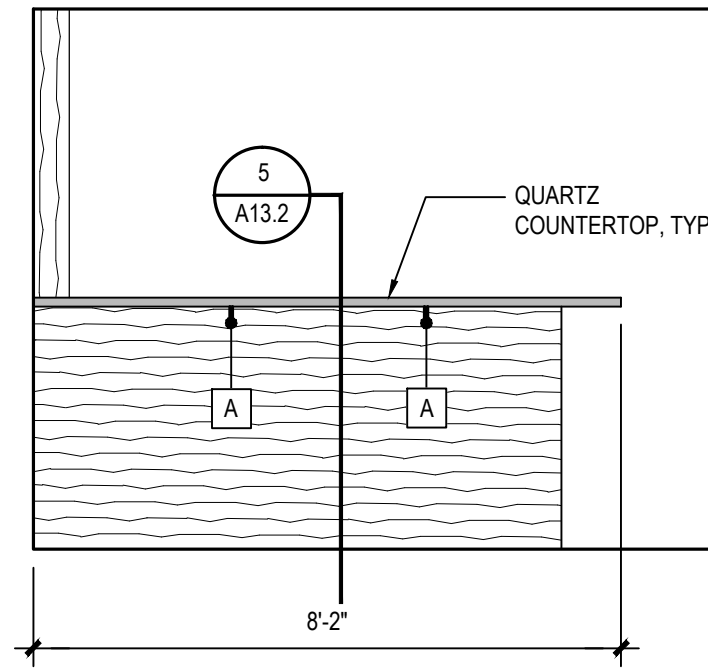




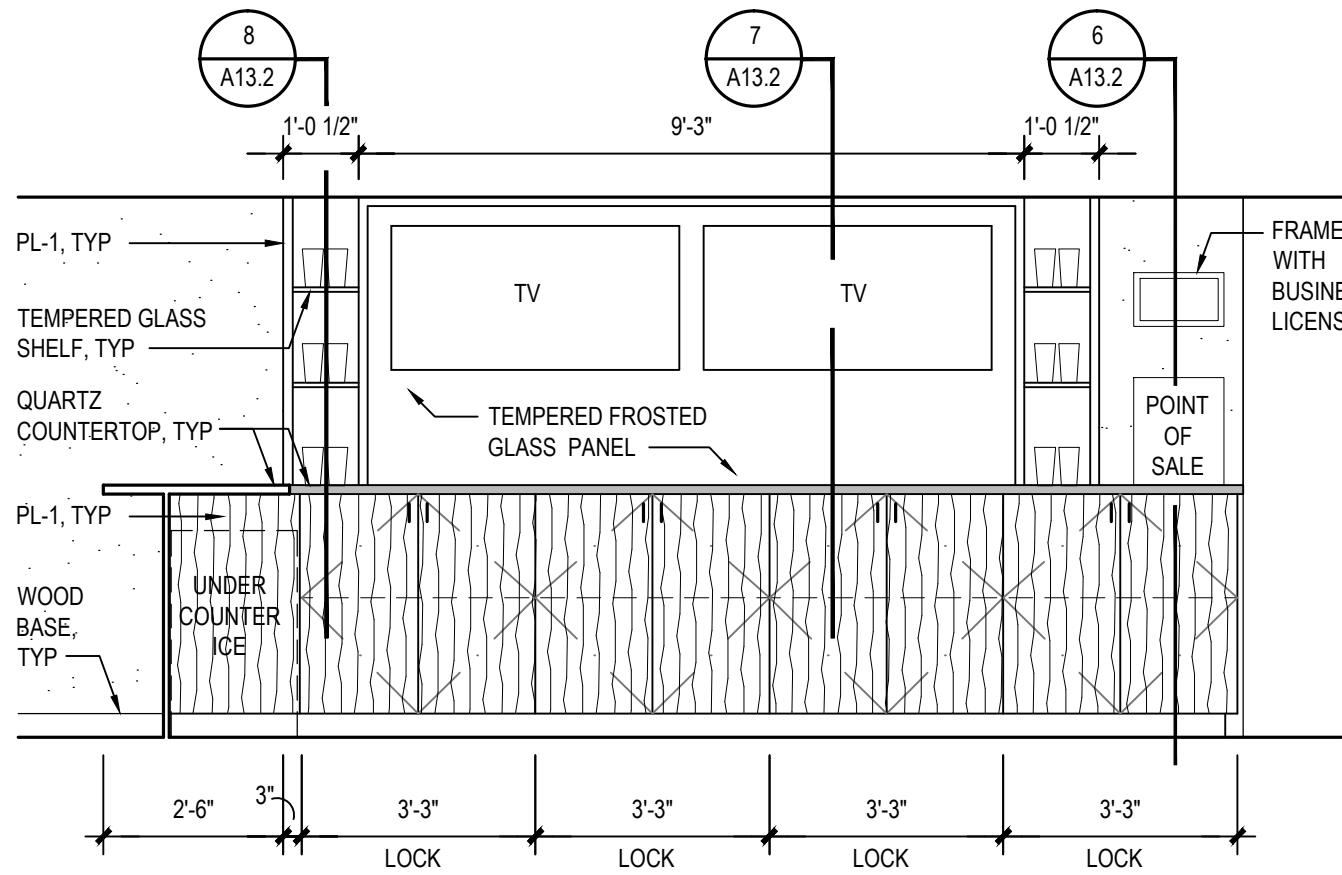
1 CONDIMENT COUNTER  
A13.1 SCALE: 3/8" = 1'-0"



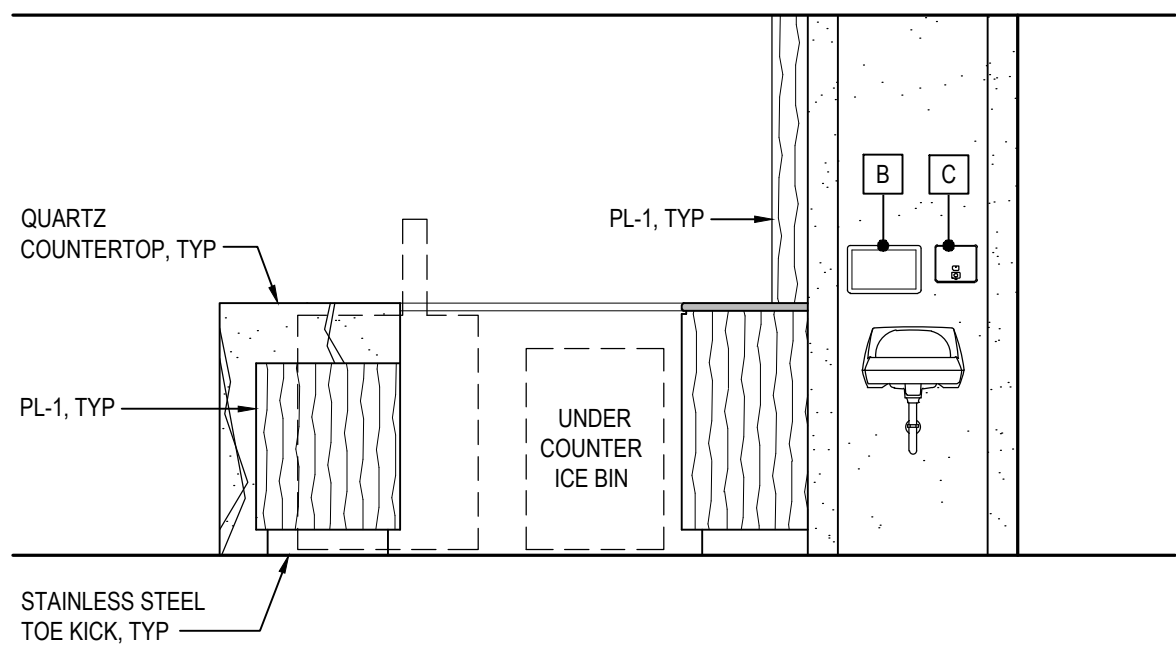
2 BAR AND CONDIMENT COUNTER  
A13.1 SCALE: 3/8" = 1'-0"



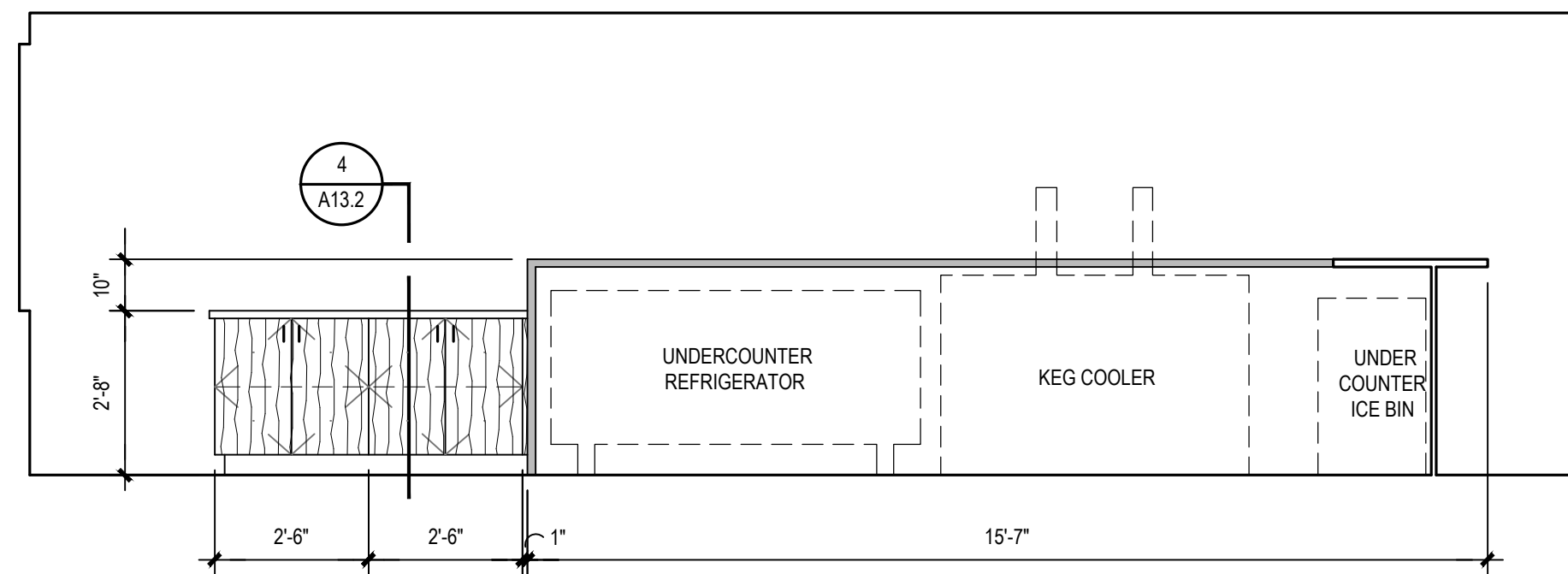
3 BAR  
A13.1 SCALE: 3/8" = 1'-0"



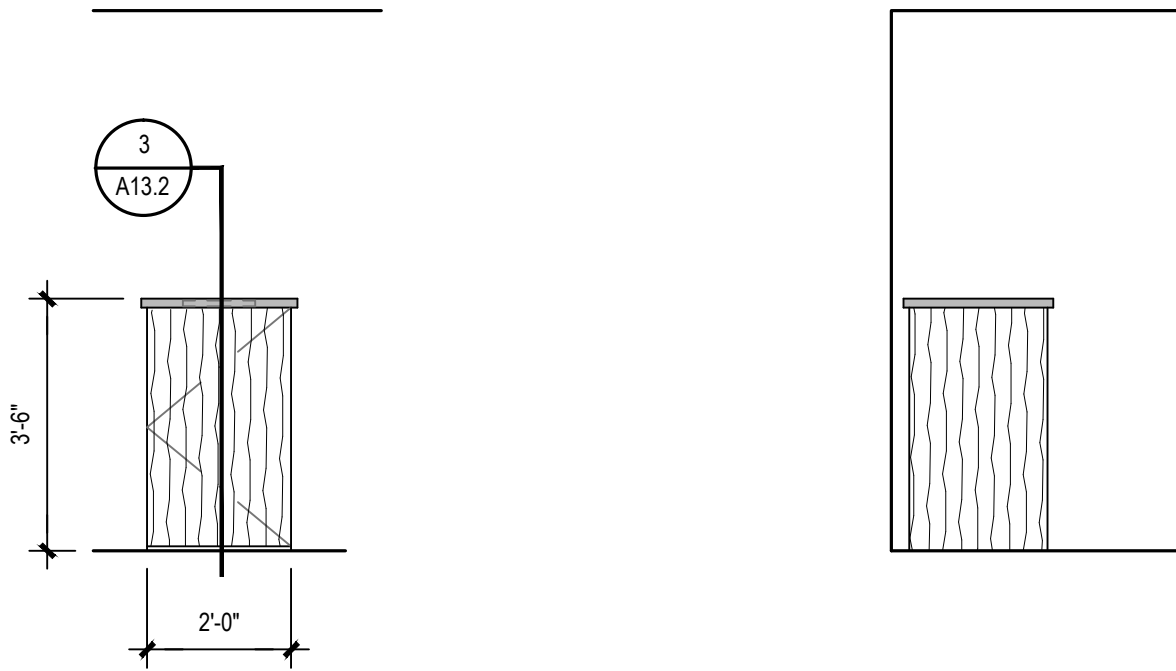
4 BAR  
A13.1 SCALE: 3/8" = 1'-0"



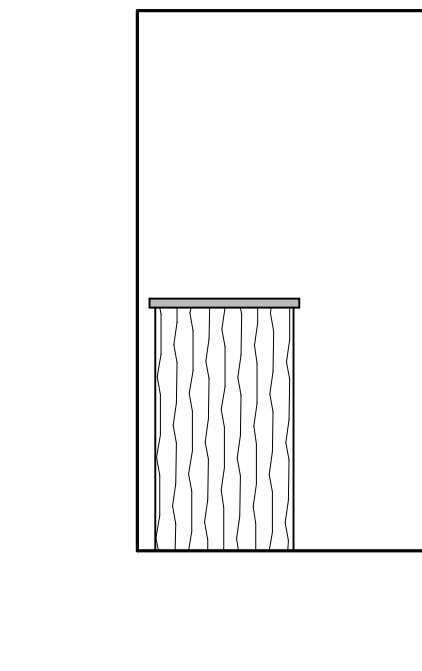
5 BAR  
A13.1 SCALE: 3/8" = 1'-0"



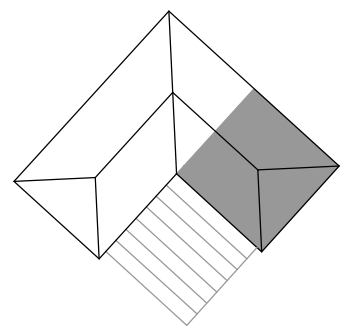
6 BAR  
A13.1 SCALE: 3/8" = 1'-0"



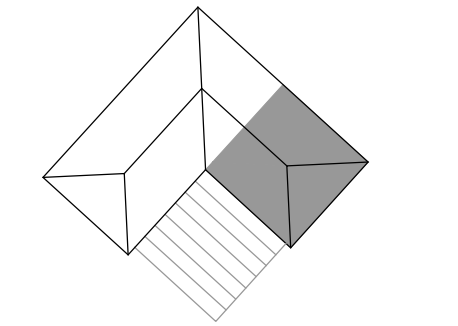
7 TRASH RECEPTACLE  
A13.1 SCALE: 3/8" = 1'-0"



8 TRASH RECEPTACLE  
A13.1 SCALE: 3/8" = 1'-0"



KEY PLAN



KEY PLAN

JOHN S KIDWELL, AIA  
0016305

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

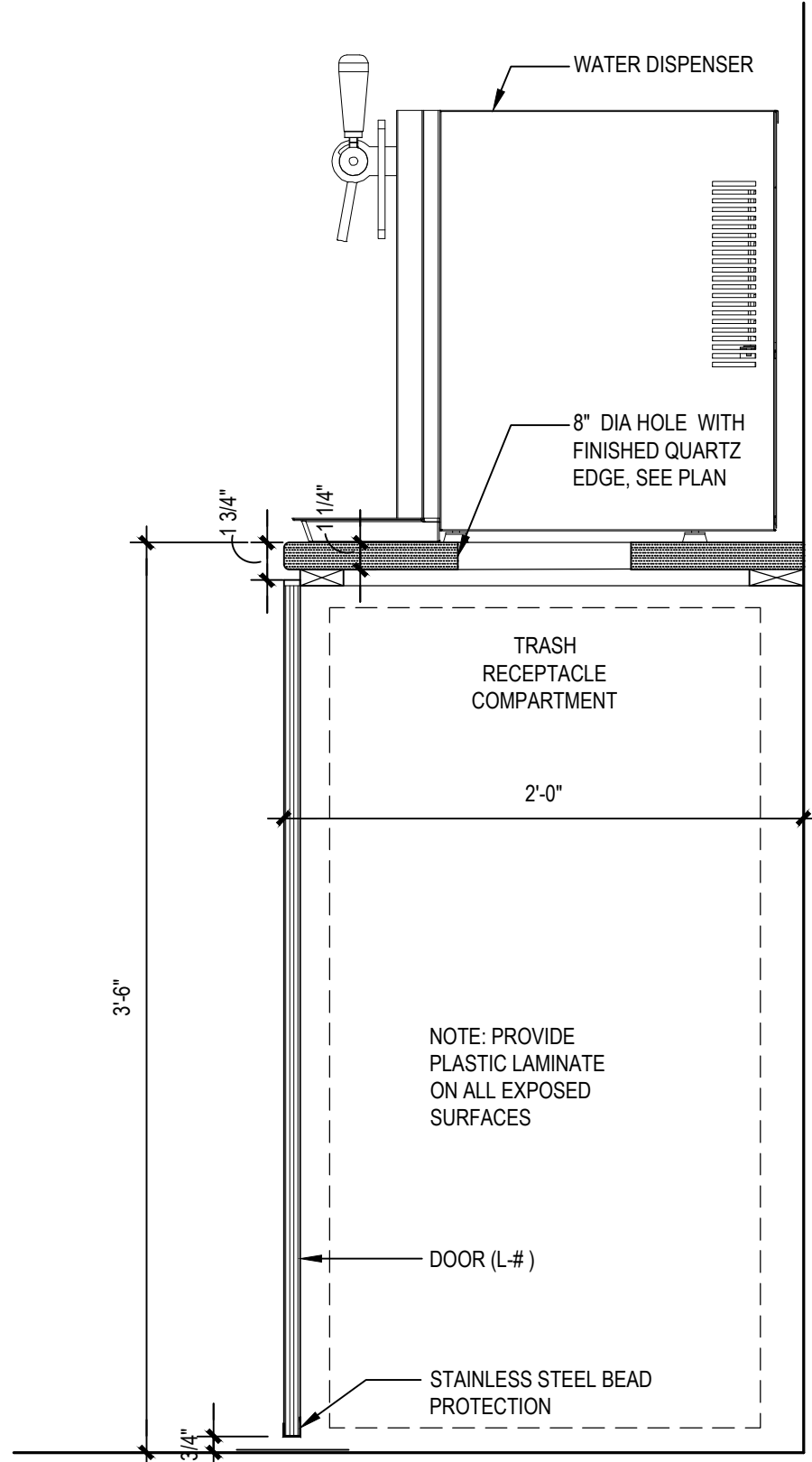
11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

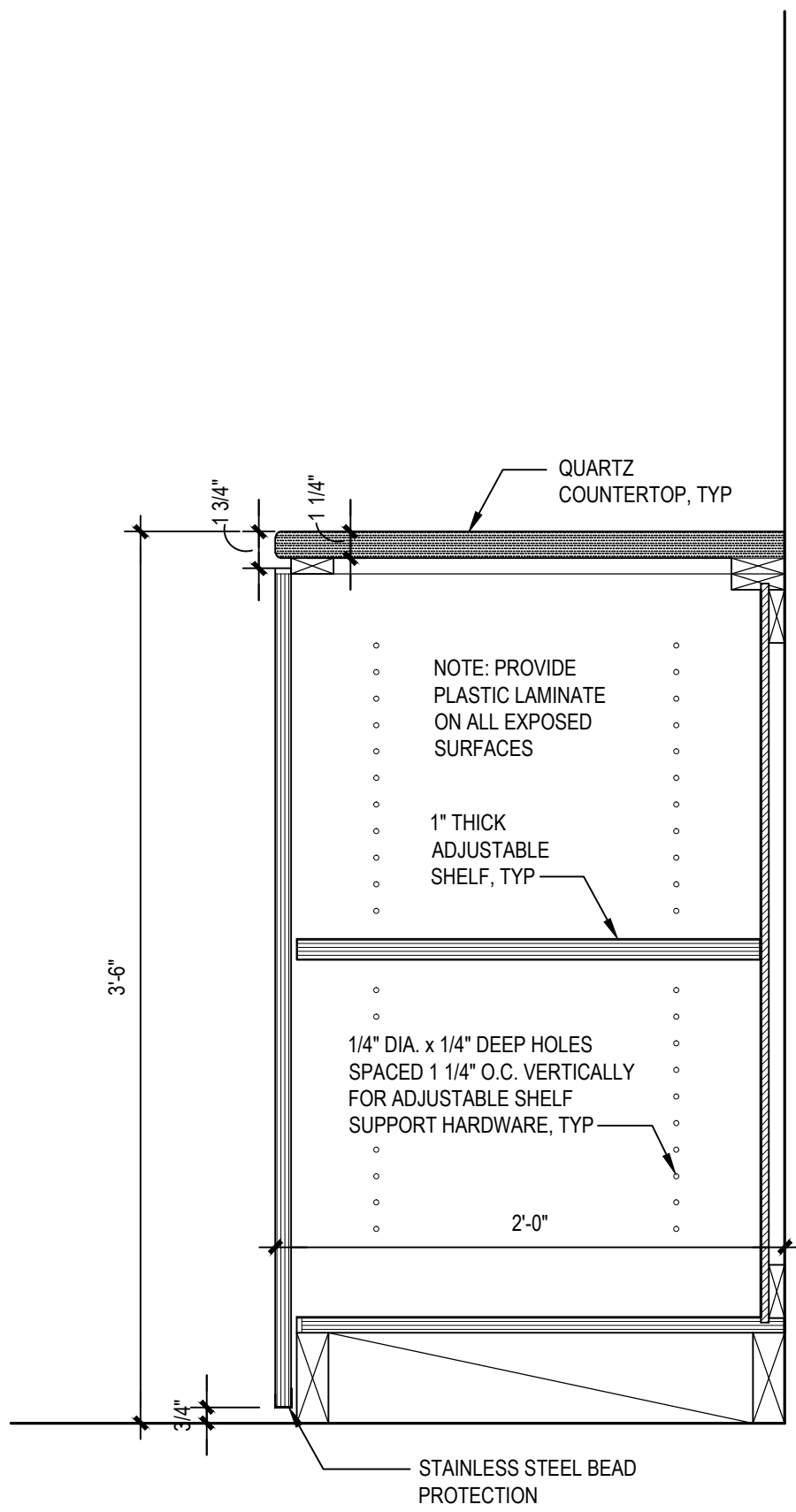
PROJECT NO.	3172
DISTRIBUTION	DATE
PRICING	03/19/2019

CASEWORK  
DETAILS

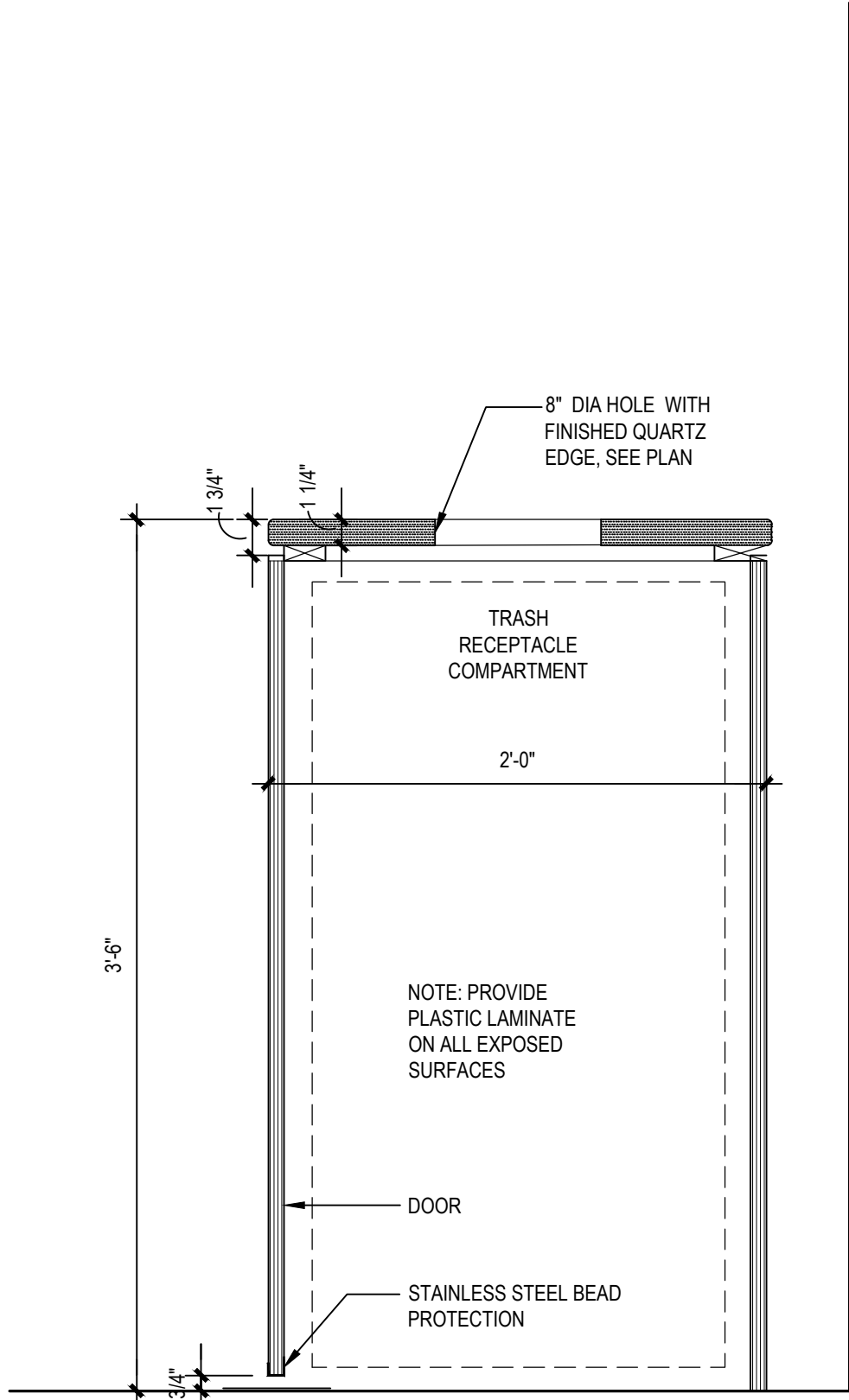
A13.2



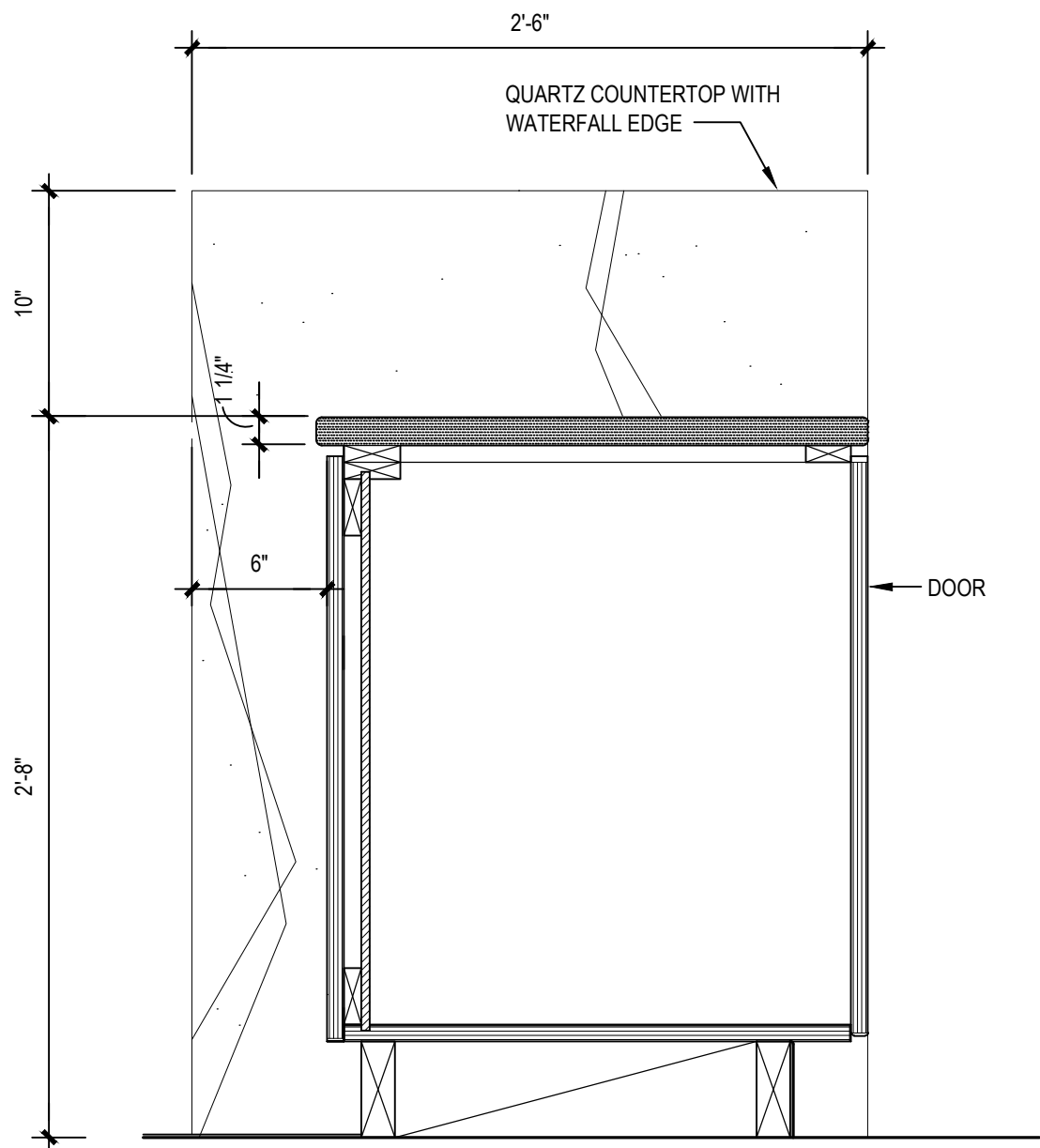
1 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



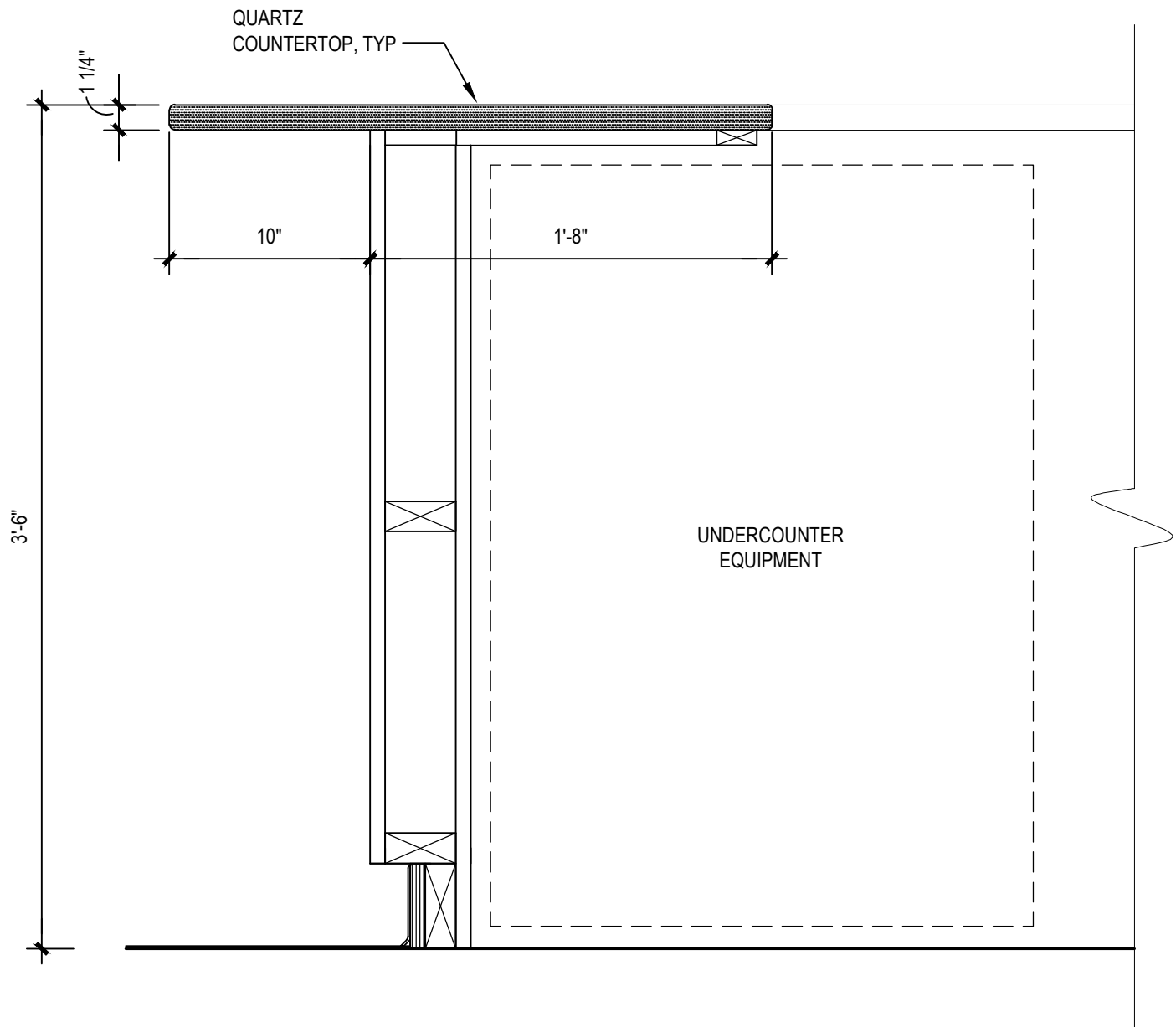
2 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



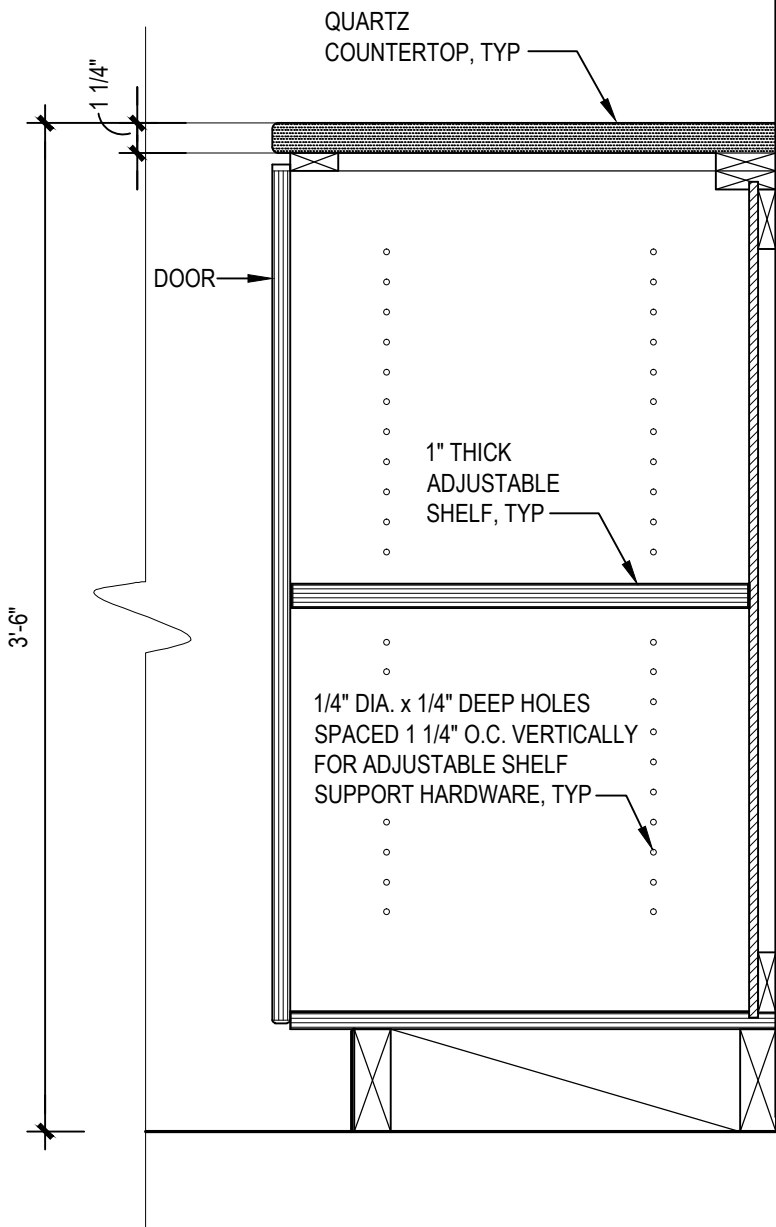
3 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



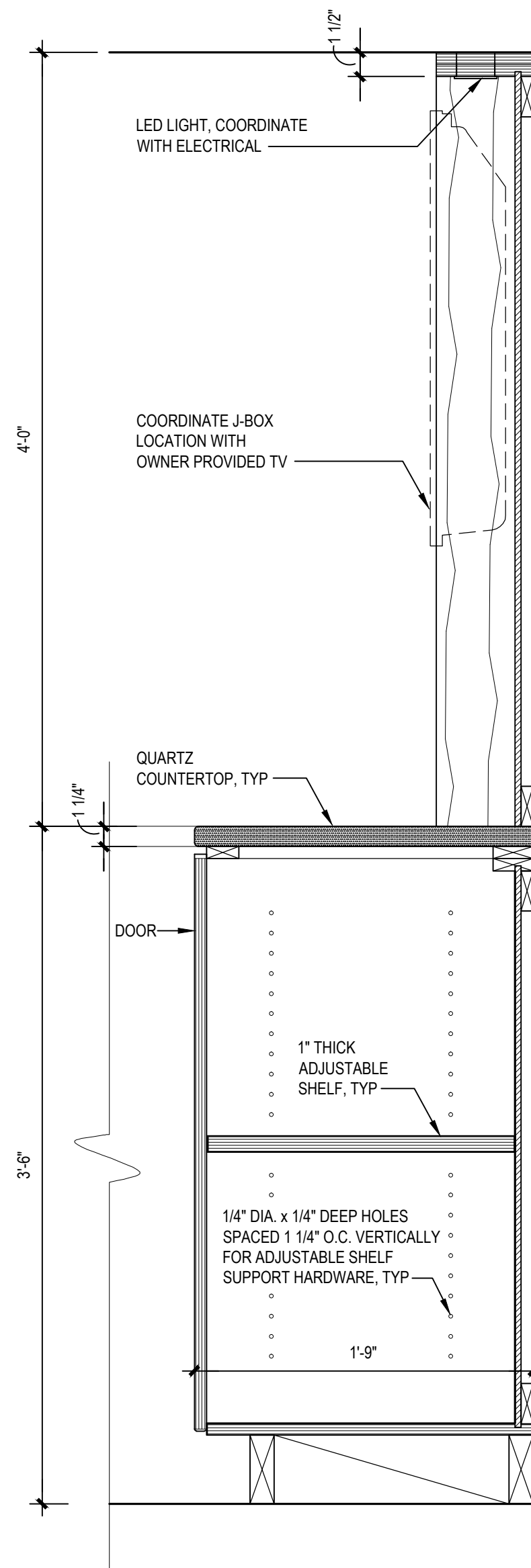
4 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



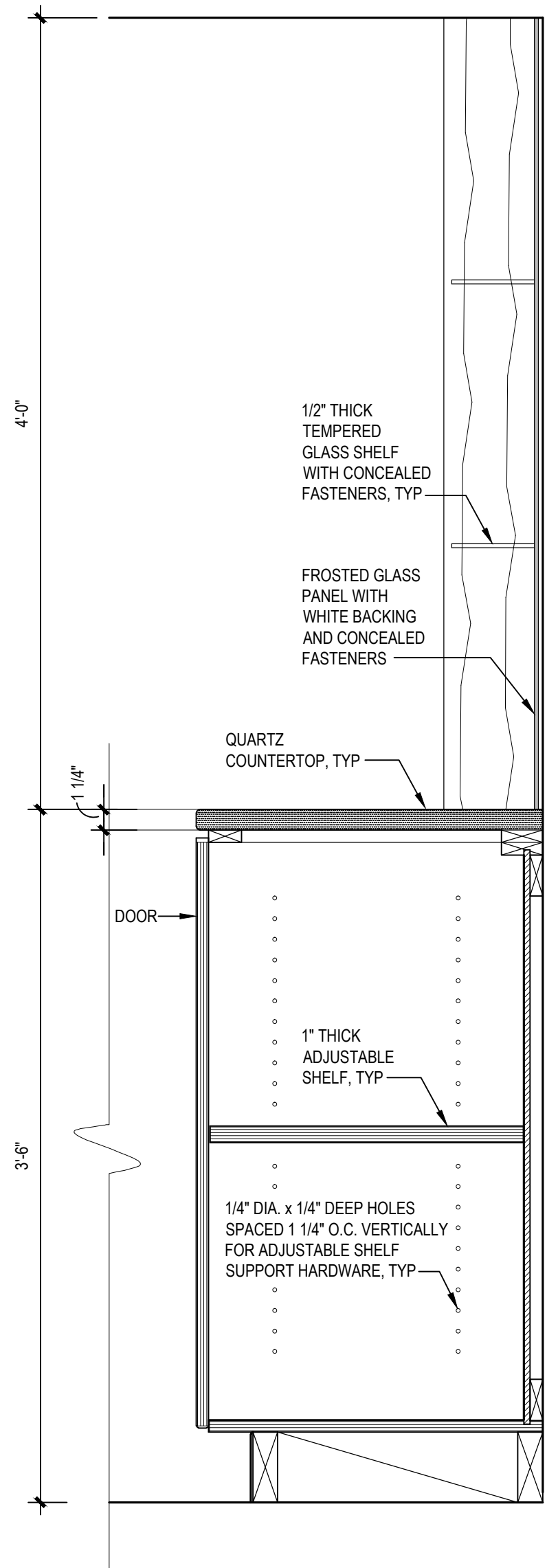
5 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



6 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



7 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



8 BASE CABINET  
A13.2 SCALE: 1-1/2"=1'-0"



CODES AND SPECIFICATIONS

A. The Florida Building Code 6<sup>th</sup> Edition, 2017.

DESIGN LOADS

- A. Wind Loads
- |                                    |                               |
|------------------------------------|-------------------------------|
| 1. Code                            | - FBC 6 <sup>th</sup> Edition |
| 2. Building Risk Category          | - II                          |
| 3. Wind Speed, Vult                | - 141 mph                     |
| 4. Wind Speed, Vasd                | - 109 mph                     |
| 5. Exposure Category               | - C                           |
| 6. Wind Directionality Factor (Kd) | - .85                         |
| 7. Topographic Factor (Kzt)        | - 1.0                         |
| 8. Internal Pressure Coef.         | - +/- .18                     |
| 9. Wind Born Debris Reg.           | - Yes                         |

WOOD FRAMING

- A. All wood framing shall be in compliance with the latest edition of the National Design Specifications for Wood Construction (NDS).
- B. All lumber shall be sound, seasoned, and free from warp.
- C. All framing lumber shall be Southern Yellow Pine (SYP) #2 or better.
- D. Install blocking in all wall studs over 8'-0" at mid-height, and sheathing joint.
- E. All lumber in contact with masonry or concrete shall be pressure treated.
- F. Sheathing shall be APA exterior grade rated with Ply-Clips at 24" o.c.. See nailing schedule for sheathing connection.
- G. All nails and fasteners exposed to the exterior or in contact with pressure treated wood shall be galvanized.
- H. All connection hardware shall be galvanized and supplied by Simpson Strong-Tie or approved equal.

CONTRACTOR RESPONSIBILITY

- A. The Contract Structural Drawings and Specifications represent the finished structure and, except where specifically shown, do not indicate the means or methods of construction. The Contractor shall supervise and direct the work and shall be solely responsible for all construction means, methods, procedures, techniques, and sequence. The Engineer shall not have control or charge of, and shall not be responsible for, construction means, methods, procedures, techniques, or sequence, for safety precautions and programs in connection with the work, for the acts or omissions of the contractor, subcontractor, or any other persons performing and of the work, or for the failure if and of them to carry out the work in accordance with the Contract Documents.
- B. It is the Contractor's responsibility to inform the Architect and Engineer of any conflicts that exist within the Structural drawings or conflict between the Architectural and Structural drawings in order to receive a clarification before proceeding with work.
- C. In locations where details or sections are not specifically noted, the construction shall be the same as similar conditions detailed and/or noted on the construction documents and specifications.
- D. It is the Contractor's responsibility to inform the Architect and Engineer of any unforeseen conditions, conflicts or discrepancies with the contract drawings and the existing conditions with regard to the demolition and remodeling of existing buildings.
- E. The General Contractor is responsible for all means and methods of demolition.
- F. The General Contractor is responsible for all temporary shoring required during demolition and construction.

JOHN L. DECARO, PE  
PE 56031

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

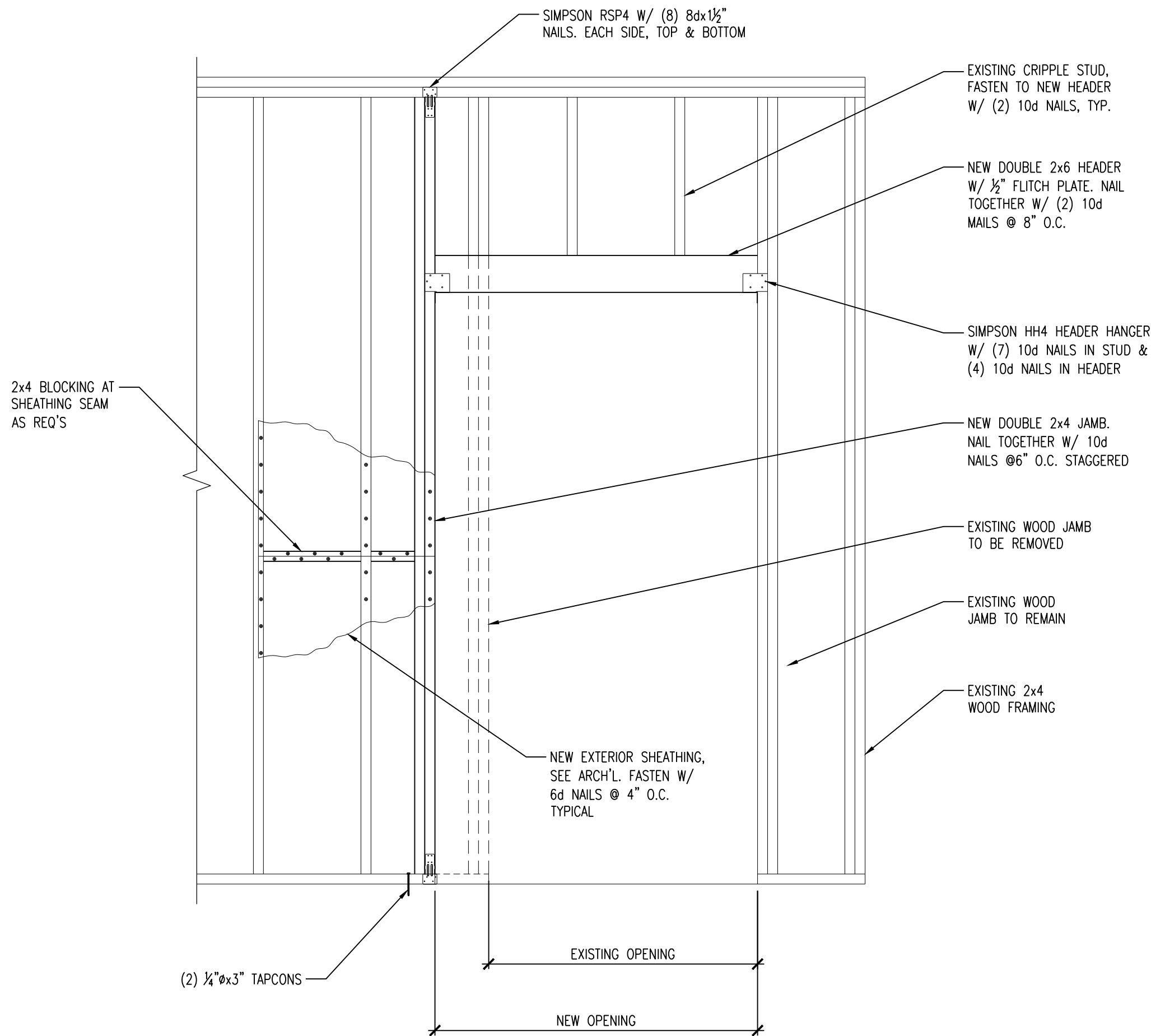
11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

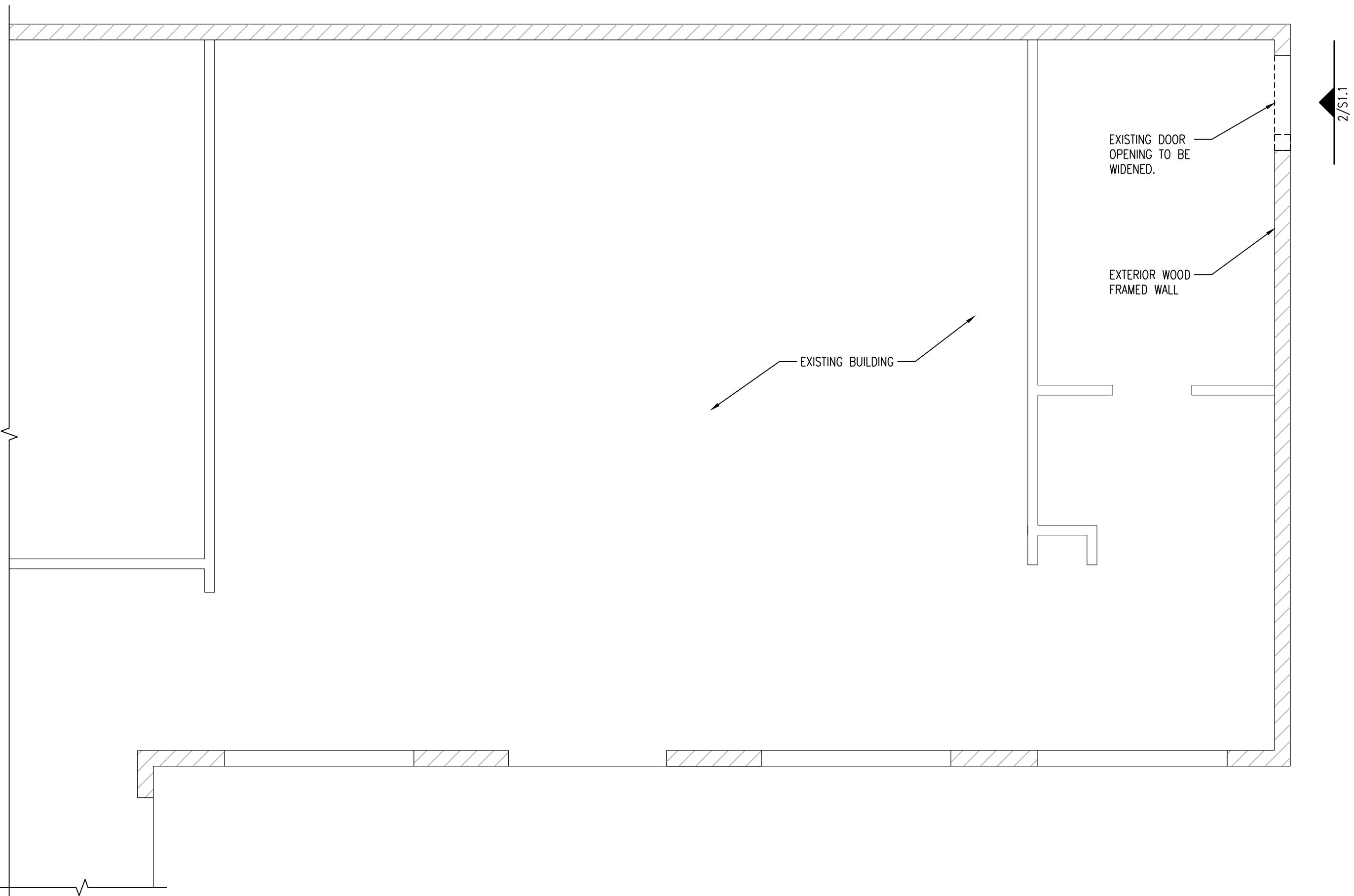
PROJECT NO.	3172
DISTRIBUTION	DATE
100% REVIEW	2/15/2019

STRUCTURAL PLANS  
AND NOTES

S1.1



2 EXISTING DOOR OPENING TO BE WIDENED  
S1.1 SCALE: N.T.S.



1 FLOOR PLAN  
S1.1 SCALE: 1/4" = 1'-0"



COORDINATE AND VERIFY EXACT LOCATIONS OF ALL PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS

REFER TO RISER ON DRAWING P401 FOR DOMESTIC WATER AND DRAWING P301 FOR WASTE AND VENT LINE SIZING

PLUMBING LEGEND

- ⤵ --- ⤵ VENT PIPING  
⤵ ---⤵ WASTE PIPING BELOW FLOOR OR GRADE (SAN)  
⤵ ·····⤵ COLD WATER PIPING (CW)  
⤵ ·····⤵ HOT WATER PIPING (HW)  
⤵ ···-T-···· TEMPERED WATER (110°F) (TW)  
⤵ ·····⤵ HOT WATER RETURN PIPING (HWR)  
⤵ 120° ⤵ HOT WATER (120°F)  
⤵ -RL- ⤵ RAIN LEADER LINE ⤵ -RL-⤵ BELOW FLOOR  
⤵ ---⤵ WASTE PIPING IN SLEEVE UNDER FOOTER  
○ PIPING UP  
○ PIPING DOWN  
⊗ HOT WATER BALANCING VALVE  
P# PLUMBING FIXTURE IDENTIFICATION. SEE PLUMBING FIXTURE SCHEDULE  
VTR VENT THROUGH ROOF  
⊕ ELEVATION  
🔍 CONNECT NEW TO EXISTING. FIELD VERIFY SIZE AND LOCATION PRIOR TO EXECUTING WORK  
(E) EXISTING — EXACT SIZE AND LOCATION TO BE FIELD VERIFIED.  
(D) EXISTING ITEM TO BE DEMOLISHED  
(RL) EXISTING ITEM TO BE RELOCATED  
(R) NEW LOCATION OF EXISTING ITEM  
AFF ABOVE FINISHED FLOOR  
BFF BELOW FINISHED FLOOR  
S SANITARY  
W WASTE  
V VENT

GENERAL PLUMBING NOTES

- ALL PLUMBING WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:
  - FLORIDA BUILDING CODE (FBC) 6TH EDITION (2017); THIS CODE INCLUDES THE 2017 FBC BUILDING, MECHANICAL, PLUMBING, ENERGY CONSERVATION, FUEL GAS, ACCESSIBILITY, AND TEST PROTOCOLS VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC BUILDING CHAPTER 35; FBC MECHANICAL CHAPTER 15; FBC PLUMBING CHAPTER 14; FBC ENERGY CONSERVATION CHAPTER 6; AND FBC FUEL GAS CHAPTER 8) (EFFECTIVE DECEMBER 31, 2017)
  - 6TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC); (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2017)
  - 2014 NATIONAL ELECTRIC CODE
- PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED. WORK CONSISTS OF FURNISHING ALL MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS.
- IN GENERAL, PLANS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- CONDITIONS SHOWN AS EXISTING ARE BASED ON AVAILABLE DATA AND SHOULD BE INTERPRETED TO BE APPROXIMATE. VERIFY EXISTING CONDITIONS IN THE FIELD.
- COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS.
- COORDINATE LOCATIONS OF FLOOR DRAINS, CLEAN OUTS AND FLOOR HYDRANTS WITH THE ARCHITECTURAL DRAWINGS.
- UNLESS OTHERWISE NOTED, ALL PIPING SHALL BE RUN IN CONCEALED SPACES..
- WATER PIPING SHALL BE HARD DRAWN COPPER TYPE L WITH WROUGHT COPPER FITTINGS AND 95-5 SOLDER.
- ALL SOIL, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 PVC DWV.
- VENT THROUGH ROOF TERMINALS SHALL BE LOCATED 10'-0" AWAY FROM ANY BUILDING INTAKE OPENINGS. COORDINATE WITH THE MECHANICAL CONTRACTOR.
- GATE VALVES SHALL BE #125 BRONZE WITH UNION BONNET.
- PROVIDE TRAP PRIMERS WHERE REQUIRED BY CODE.
- ALL FIRE STOPPING SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S U.L. DETAILS OF THE PRODUCTS USED SPECIFICALLY ON THIS PROJECT. APPLICABLE U.L. DETAILS SHALL BE SUBMITTED FOR THE ENGINEER'S REVIEW AND A COPY SHALL BE AVAILABLE ON SITE FOR USE BY THE AUTHORITY HAVING JURISDICTION.
- UNLESS NOTED OTHERWISE, ALL PLUMBING EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A ONE YEAR PERIOD FROM DATE OF ACCEPTANCE.
- PROVIDE ALL CUTTING REQUIRED FOR THE INSTALLATION OF PLUMBING WORK. FINISH PATCHING SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR.
- ALL SOIL AND WASTE PIPING 2-1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT. LARGER WASTE PIPING SHALL BE SLOPED AT 1/8" PER FOOT.
- ALL WATER PIPING SHALL BE SUPPORTED RIGIDLY AND IN LINE FROM THE BUILDING STRUCTURE. OFFSET PIPING TO AVOID STRUCTURAL MEMBERS, CANTS, FLASHING, MECHANICAL AND ELECTRICAL EQUIPMENT, ETC.
- PRIOR TO COMMENCING ANY PLUMBING ROUGH-IN, THE EXISTING SANITARY PIPING SHALL BE EXCAVATED. VERIFY THE EXACT SIZE, LOCATION, INVERT AND DIRECTION OF FLOW. NOTIFY THE ENGINEER IMMEDIATELY IF THE DRAIN IS SMALLER THAN INDICATED OR IF THE INVERT WILL NOT BE LOW ENOUGH FOR THE NEW PLUMBING ROUGH-IN. CONNECT NEW SANITARY LINES TO EXISTING SANITARY LINES AS INDICATED. PATCH THE FLOOR AS DIRECTED BY THE ARCHITECT.
- VERIFY ALL SITE RELATED SANITARY & WATER CONNECTIONS PRIOR TO STARTING WORK. SHOULD DEPTHS BE DIFFERENT THAN THAT SHOWN HEREIN ADVISE ENGINEER IMMEDIATELY.
- PRIOR TO SITE UTILITIES WORK, CALCULATE THE INVERTS FOR ALL SANITARY WASTE CONNECTIONS BASED ON ACTUAL CONDITIONS. COORDINATE SANITARY WASTE LOCATIONS AND INVERTS WITH SITE UTILITIES CONTRACTOR.
- WASTE LINES RECEIVING BELOW AMBIENT TEMPERATURE CONDENSATE SHALL BE INSULATED WITH 1/2" FLEXIBLE UNICELLULAR FOAM (ARMAFLEX OR EQUIVALENT) INSULATION TO GRADE.
- VALVES AND FITTINGS SHALL BE OF SAME SIZE OF LINE ON WHICH THEY ARE INDICATED.
- INSTALL WATER HAMMER SHOCK ARRESTORS AT EACH FIXTURE OR BATTERY OF FIXTURES WHERE REQUIRED. ARRESTORS SHALL BE FACTORY FABRICATED. INSTALL ARRESTORS AND SIZE PER PLUMBING AND DRAINAGE INSTITUTE STANDARD P.D.I. WH-201. AIR CHAMBERS SHALL NOT BE CONSIDERED EQUIVALENT TO WATER HAMMER SHOCK ARRESTORS.
- ALL FLOOR SINKS SHALL BE PROVIDED WITH TRAP PRIMER VALVE AND FITTINGS.
- ROUTE ALL PIPING CONCEALED ABOVE CEILINGS, WITHIN WALLS, OR IN CHASES EXCEPT WHERE SPECIFICALLY NOTED OR IN THE MECHANICAL ROOM. ANY PIPING EXPOSED TO VIEW SHALL BE RELOCATED AT NO ADDITIONAL COST TO THE OWNER IF DETERMINED BY THE OWNER TO BE OBJECTIONABLE.
- PROVIDE ACCESS PANELS TO ALL VALVES WITHIN CHASES OR ABOVE NON- ACCESSIBLE CEILINGS. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING TYPES.
- PROVIDE DIELECTRIC ISOLATION/SEPARATION (I.E. UNIONS) AT CONNECTIONS OF DISSIMILAR METALS.
- ROUGH-IN ALL WASTE AND SUPPLIES TO SPECIAL EQUIPMENT ACCORDING TO MANUFACTURE'S SHOP DRAWINGS AND MAKE FINAL CONNECTIONS TO RENDER EQUIPMENT FULLY OPERATIONAL. ALL SUPPLIES SHALL BE VALVED. PROVIDE VACUUM BREAKERS OR CHECK VALVES WHERE REQUIRED BY AUTHORITY HAVING JURISDICTION.
- PLUMBING CONTRACTOR SHALL TAG ALL VALVES WITH STAMPED BRASS TAGS. PROVIDE FIELD COORDINATED VALVE SCHEDULE MOUNTED IN 8-1/2"x11" PICTURE FRAME IN THE MECHANICAL ROOM.
- ALL EXPOSED PLUMBING PENETRATIONS SHALL HAVE ESCUTCHEON PLATES.
- AVOID RUNNING WATER PIPING HORIZONTALLY IN WALL. IF HORIZONTAL RUN IS NECESSARY, THE PIPING SHALL BE HELD CLOSE TO CEILING OR TO FLOOR. KEEP WALL SPACE AS CLEAR AS POSSIBLE FOR EQUIPMENT.
- ANY PLUMBING ITEMS EXPOSED TO VIEW SHALL BE PLACED PER THE ARCHITECTURAL DRAWINGS.
- PROVIDE A BLUE STICKER ON CEILING GRID TEE BELOW ANY WATER VALVE ABOVE CEILING FOR LOCATION FACILITATION.
- REFER TO ARCHITECTURAL DRAWINGS FOR AREAS TO RECEIVE NEW WALL COVERINGS OR FLOOR FINISHES. EXISTING PLUMBING FIXTURES SHALL BE REMOVED TO ALLOW WORK TO BE DONE IN THESE AREAS AND THEN REINSTALLED.
- DISCONNECT AND REMOVE DRAINS FROM ALL PLUMBING FIXTURES BEING REMOVED AND CAP BELOW FLOOR OR INSIDE OF WALL. DISCONNECT AND REMOVE ASSOCIATED VENT.
- REMOVE ALL UNUSED WASTE AND VENT PIPING.
- FOR EXISTING PLUMBING FIXTURES TO REMAIN OR BE RELOCATED, PERFORM THE FOLLOWING WORK:
  - REPLACE ALL MISSING COVERS FOR FLOOR CLEANOUTS AND INSTALL NEW GRATES ON FLOOR DRAINS WHERE BROKEN OR MISSING.
  - RE-HANG LOOSE FIXTURES.
  - REPAIR LEAKING WASTE PIPING.
  - SINKS AND LAVATORIES BEING REUSED — INSTALL NEW FAUCETS, TRAPS, STRAINERS, AND DRAIN ASSEMBLIES AS REQUIRED TO RENDER FIXTURE FULLY OPERATIONAL AND HAVE A LIKE NEW APPEARANCE.
  - INSTALL NEW FIXTURE STOPS AT ALL LAVATORIES AND SINKS.
- SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

PLUMBING FIXTURE SCHEDULE

MARK	DESCRIPTION	SELECTION	W OR S	TRAP	VENT	HW	CW
P1	RESIDENTIAL TYPE VALVE BOX FOR RESIDENTIAL REFRIGERATOR AND DISHWASHER. ROUGH-IN AND MAKE ALL CONNECTIONS. ONE 1/2" HOSE BIBB AND 7-1/2" X 9" X 3-1/2" BOX. NOTE: PROVIDE 4" BOX IN STUD WALLS.	WATER-TITE 9700	-	-	-	-	1/2"
P2 EXISTING RELOCATED LAVATORY	NON-HANDICAPPED HOT/COLD WATER: BOWL, PROVIDE FLOOR MOUNTED WALL CARRIER WITH CONCEALED CARRIER ARMS, MOUNT AT 32" TO RIM. FAUCET, EXISTING TO REMAIN. DRAIN: FLAT GRID, CHROME FINISH, 1-1/4" OUTLET WITH ADA COMPLIANT OFFSET TAILPIECE. 2-TRAP: CHROME FINISHED WITH TWO UNIONS, 1-1/4" INLET AND 1-1/2" OUTLET, WITHOUT CLEANOUT, WALL ESCUTCHEON. SUPPLY: TWO REQUIRED, CHROME PLATED, LOOSE KEY ANGLE VALVE, WALL ESCUTCHEON, FLEXIBLE TUBE RISER, 3/8" INLET AND OUTLET CONNECTIONS. MIXING VALVE, THERMOSTATICALLY CONTROLLED POINT OF USE MIXING VALVE. LEAD FREE. ASSE 1070 COMPLIANT. SET TEMPERATURE TO 105°F.	WATTS TCA-411  MCGUIRE 155WC  MCGUIRE 8902CNC  MCGUIRE 2165CCLK  SYMMONS 7-225-CK-MS	2"	1-1/4"	1-1/4"	1/2"	1/2"
P3 EXISTING RELOCATED TRIPLE COMPARTMENT SINK	FAUCET: CHROME-PLATED BRASS FAUCET, 8" CENTERSET WALL MOUNT FAUCET WITH 9-1/2" SPOUT AND 4" LEVER CHROME HANDLES. FLOW RATE ON 1.5 GPM WITH CERAMIC DISC. DRAIN: FLAT GRID, CHROME FINISH, 3-1/2" OUTLET, TYPICAL OF THREE. SUPPLY: TWO REQUIRED, CHROME PLATED, LOOSE KEY ANGLE VALVE, WALL ESCUTCHEON, FLEXIBLE TUBE RISER, 3/8" INLET AND OUTLET CONNECTIONS.	CHICAGO W8W-L9E35-317ABCP  ELKAY LK35, LK76  MCGUIRE 2165CCLK	2"	1-1/2"	1-1/2"	1/2"	1/2"

PLUMBING EQUIPMENT SCHEDULE

MARK	DESCRIPTION	SELECTION	W OR S	TRAP	VENT	HW	CW
FS1	FLOOR SINK 12-1/2" NICKEL BRONZE TOP, 4" DEEP, STAINLESS STEEL GRATE.	SMITH 3001NB	2"	2"	1-1/2"	-	-
FS2	FLOOR SINK 12-1/2" NICKEL BRONZE TOP, 10" DEEP, STAINLESS STEEL GRATE.	SMITH 3009NB	3"	3"	1-1/2"	-	-
WCO	CAST IRON TEE WALL CLEAN-OUT WITH BRONZE PLUG AND ROUND STAINLESS STEEL COVER PLATE. SIZE C.O. SAME AS LINE SIZE (2-1/2" MINIMUM). PROVIDE PVC TO NO-HUB ADAPTERS FOR PVC DWV APPLICATIONS.	SMITH 4351S-Y	2-1/2" MIN.	-	-	-	-
TP	TRAP PRIMER TAILPIECE, GRAVITY FED DEVICE WITH NO MECHANICAL PARTS. 1-1/4" TAILPIECE WITH 1/2" NOMINAL ARM FOR CONNECTION TO FLOOR DRAIN. USE TRAP PRIMER TAILPIECE IN-LIEU OF STANDARD LAVATORY TAILPIECE WHERE SPECIFIED. ASSE 1044.	SILOUX CHIEF 213-092	-	-	-	-	-

EXAMINATION OF EXISTING CONDITIONS

ALL BIDDERS ARE ENCOURAGED TO VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS PRIOR TO SUBMITTING THEIR BID. NO ALLOWANCES WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS, INCLUDING THE PRESENCE OF ASBESTOS. THE OWNER SHALL REMOVE FROM THE SITE ALL CURRENTLY KNOWN SOURCES OF ASBESTOS PRIOR TO COMMENCEMENT OF THE WORK TO BE PERFORMED BY THE CONTRACTOR. IF DURING THE COURSE OF CONSTRUCTION, THERE IS REASON TO SUSPECT THE PRESENCE OF ADDITIONAL ASBESTOS, IMMEDIATELY NOTIFY THE ARCHITECT. THE ARCHITECT SHALL NOTIFY THE OWNER WITH REASONABLE PROMPTNESS TO ALLOW THE OWNER, AT THE OWNER'S EXPENSE, TO HAVE THE MATERIAL TESTED USING RECOGNIZED TESTING METHODS COMMONLY APPROVED IN THE INDUSTRY. SHOULD THE MATERIAL TEST POSITIVE FOR ASBESTOS, THE OWNER SHALL ARRANGE FOR THE ABATEMENT AND DISPOSAL OF THE MATERIAL AT THE OWNER'S EXPENSE. CONSTRUCTION MAY BE SUSPENDED DURING THE PERIOD REQUIRED TO COMPLETE SUCH TESTING AND REMOVAL OF ASBESTOS. SHOULD THE OWNER FAIL, WITHIN A REASONABLE TIME, TO REMOVE ALL THE ASBESTOS FROM THE SITE OR FAIL TO VERIFY TO THE SATISFACTION OF THE ARCHITECT AND CONTRACTOR THAT NO ASBESTOS IS PRESENT, THEN THE CONTRACTOR SHALL BE RELIEVED OF ANY FURTHER OBLIGATION REGARDING CONSTRUCTION.

NOT FOR CONSTRUCTION

STEPHEN R. FORKNER, P.E. 80532  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
CONFORM WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019

PLUMBING DRAWING INDEX

- P0.1 PLUMBING GENERAL NOTES, SCHEDULES AND LEGEND  
P0.2 PLUMBING SPECIFICATIONS  
P1.1 PLUMBING FLOOR PLANS AND DETAILS

PLUMBING GENERAL  
NOTES, SCHEDULES  
AND LEGEND

P0.1



3.03 VALVES

- A. Install valves where required for proper operation of piping and equipment, including valves in branch lines where necessary to isolate sections of piping. Locate valves so as to be accessible and accessible to the piping.
- B. Install valves with stems pointed up, in vertical position where possible, but in no case with stems pointed downward from horizontal plane unless unavoidable. Install valve drains with hose-end adapter for each valve that must be installed with stem below horizontal plane.
- C. Place shut-off valve on each water main service. Place valve near the building where indicated on the drawings.

3.04 SUPPORTS AND ANCHORS

- A. Install hangers, supports, clamps and attachments to support piping properly from building structure; comply with MSS SP-69. Arrange for grouping of parallel runs of horizontal piping to be supported together on trapeze type hangers where possible. Install supports with maximum spacings complying with MSS SP-69. Where piping of various sizes is to be supported together by trapeze hangers, space hangers for smallest pipe size or install intermediate supports for smaller diameter pipe. Do not use wire or perforated metal to support piping, and do not support piping from other piping.
- B. Install hangers and supports complete with necessary inserts, bolts, rods, nuts, washers and other accessories. Except as otherwise indicated for exposed continuous pipe runs, install hangers and supports of same type and style as installed for adjacent similar piping.
- C. Prevent electrolysis in support of copper tubing by use of hangers and supports which are copper plated, or by other recognized industry methods.

1. Saddles: Where insulation without vapor barrier is indicated, install protection saddles.

3.05 INSULATION

- A. Piping Insulation:
1. Do not split insulation. Slide over the tubing before fabrication. Seal successive sections of insulation with factory approved and recommended mastics. Butt together and hold until mastic dries .60 seconds.
2. Split insulation is not acceptable and shall be removed and new insulation installed if it is observed on the job.
3. Size insulation for tubing. Do not oversize. Insulation shall be snug.

3.06 PLUMBING FIXTURES AND EQUIPMENT

- A. Plumbing Fixtures
1. Install plumbing fixtures and equipment as indicated on the drawings. Installation must be in accordance with applicable codes and manufacturer's recommendations. Coordinate to ensure that fixture carrier is of appropriate type and size to fit plumbing chase walls as required.
2. All wall hung fixtures, pipes, etc. shall be tightly secured to and anchored to walls. Provide additional stiffening members on stud walls as required.
3. Contractor shall refer to, and locate and install plumbing fixtures as shown on latest architectural drawings.
4. After plumbing fixtures are set, the crack between the fixture and the wall shall be caulked carefully with Tub-Tite as manufactured by American Fluorelate Company, or approved equal.
5. Fixtures shall be protected from damage during construction, and shall be thoroughly cleaned of all tape and adhesives prior to final acceptance.
6. All porcelain or vitreous china fixtures shall be clean, smooth and bright. All shall be warranted not to craze, discolor or scale.

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019

SECTION 15400 - PLUMBING EQUIPMENTS

PART 1.00 - GENERAL

1.01 RELATED DOCUMENTS

- A. Cooperate with all other trades and install work as fast as the progress of the job will permit.
- B. Use only mechanics skilled in the work they are to perform and have a competent representative on the job when any work is being done.
- C. No work shall be done unless the Superintendent of the Contractor is on the job site. Work shall be properly protected, all rubbish removed promptly, and exposed work shall be carefully cleaned prior to final acceptance.
- D. The term "provide" shall include labor, materials, and equipment necessary to furnish and install, complete and operable, the item or system indicated.
- E. In decisions arising from discrepancies, interpretation of Drawings and Specifications, substitutes, and other pertinent matters, the decision of the Owner's representative's approval shall be final.

1.02 SPECIFICATIONS AND DRAWINGS

- A. Plans show location of fixtures and equipment and are intended to depict the general intent of the work in scope, layout and quality of workmanship. They are not intended to show in minute detail every or all accessories intended for the purpose of executing the work, but it is understood that such details are a part of this work.
- B. Where Drawings and Specifications conflict, it shall be the responsibility of this Contractor to bring such conflict to the attention of the Architect/Engineer for clarification. In general, the more stringent interpretation shall take precedence and the Architect/Engineer shall take precedence over the Plumbing Drawings with reference to building construction. All changes from the Drawings necessary to make the work conform with the building as constructed and to fit the work of other trades or to conform to the rules of authorities having jurisdiction, shall be made by the Contractor at his own expense.
- C. Keep a record of the locations of concealed work and of any field changes in Contract Drawings and Specifications for each trade and, upon completion of the job, supply "As-Built" Drawings and Specifications showing in pencil on sepiá reproduces, any deviations from the original Drawings, indicating in the Specifications each manufacturer's name underlined or inserted whose product was used on the job. These Drawings shall indicate dimensions of buried utility lines from building walls. One set of sepiá reproduces of the original tracings will be furnished upon request for this purpose.
- D. Where equipment is used other than manufacturers specified, the Sub-Contractor shall request approval to substitute materials and/or products as indicated and defined herein. Provide four (4) copies of materials and equipment for approval, for items requiring submittals.

1.03 PERMITS, FEES AND INSPECTIONS

- A. The Contractor shall give all necessary notices, obtain all permits and pay all government fees, sales taxes and other costs, including utility connections or extensions, in connection with this work; file all permit applications required by all governmental departments having jurisdiction.
- B. Obtain all required certificates of inspection for work and deliver them to the Owner before requesting acceptance and final payment for the work.
- C. The Contractor shall include in the work, without extra cost to the Owner, any labor, materials, services, apparatus and drawings required to comply with all applicable laws, ordinances, rules and regulations.
- D. The Contractor shall inform the Owner of any work or materials which conflict with any of the applicable codes, standards, laws and regulations before submitting his bid.

1.04 GENERAL

- A. Materials or products specified herein and/or indicated on drawings by trade name, manufacturer's name and/or catalog number shall be provided as specified. Substitutions will not be permitted except as described herein and in the Supplementary and General Conditions.
- B. Since manufacturers reserve the right to change their products at any time, contractors shall verify all dimensions, performance data, etc. for each piece of equipment submitted to assure compliance with the intent of the drawings and specifications.
- C. All materials shall be new and of quality as specified, and when required, be clearly labeled and/or stamped as manufactured in the United States.
- D. For acceptance of products or manufacturers other than those specified, bidders shall submit to the Architect/Engineer a request in writing at least ten (10) days prior to bid date and hour. Requests received after this time will not be reviewed or considered regardless of cause. Requests shall clearly define and describe the product for which approval is requested. Requests shall be accompanied by manufacturer's literature, specifications, drawings, cuts, performance data list of references or other information necessary to completely describe the item. Approval will be in the form of an addendum to the specifications issued to all prospective prime contract bidders on record. The addendum will indicate the additional products which are approved for this project.
- E. A list of all materials and equipment which the Contractor proposes to furnish shall be submitted for approval within ten (10) days after the contract has been awarded. Data shall be complete in all respects.
- F. Where an accepted substitution or deviation requires different quantity or arrangement of foundations, supports, ductwork, piping, wiring, conduit, and any other equipment or accessories normal to this equipment, contractor shall furnish solid changes and additions and pay all costs for all changes and additions to his work and the work of others affected by this substitution or deviation.
- G. Deviations mean the use of any listed approved manufacturer other than those on which the drawings are based.

1.05 SHOP AND ERECTION DRAWINGS AND SAMPLES

- A. The Architect/Engineer's approval shall be obtained for all equipment and material before delivery to the job site. Delivery, storage or installation of equipment or material which has not had prior approval will not be permitted at the job site. Submittals shall be made for all equipment and systems as indicated in the respective specification section.
- B. All submittals shall include adequate descriptive literature, catalog cuts, shop drawings and other data necessary for the Architect/Engineer to ascertain that the proposed equipment and materials comply with specification and drawing requirements. Catalog cuts submitted for approval shall be legible and clearly identify equipment being submitted.
- C. Shop and erection drawing submittals shall conform to the requirements of the General Conditions and Division-1 specifications except as modified herein.
- D. Submit required and/or requested shop and erection drawings, for review by Architect/Engineer before ordering or installing any equipment or material. Equipment or material ordered or installed before Architect/Engineer review may not be accepted and may have to be removed from the project if deemed unacceptable.
- E. Shop drawings shall consist of manufacturer's size drawings, cuts or catalogs, including descriptive literature which shall clearly indicate the construction, material, physical dimensions, wiring diagrams and complete operating data clearly marked for each item. Data of general nature will not be accepted.
- F. Shop drawings on paper larger than 11"x17" shall be submitted in the form of one set of reproducible (vellum) and one set of blueprints. The blueprints will be retained by the engineer and the reproducible will be returned to the contractor. All drawings are to be submitted no later than 60 days after the contract has been awarded.

1. Coordination drawings shall show major elements, components, and systems of plumbing equipment and materials in relationship with other building components. Prepare drawings to accurate scale of 1/4"=1'-0" or larger. Indicate the location of all equipment and materials, including clearances for installing, servicing and maintaining equipment, valve stem movement, and similar requirements. Indicate movement and positioning of large equipment into the building during construction.
- C. Submittals for individual systems and equipment assemblies which consist of more than one item or component shall be made for the system or assembly as a whole. Partial submittals will not be considered for approval. Submittals shall be submitted for all applicable products and materials specified in each individual section of these specifications.
- H. Make submittals for the equipment and materials in accordance with the following:

1. Mark the submittals, "SUBMITTED UNDER SECTION\_\_\_\_\_".
2. Submittals shall be marked to show specification reference including the section and paragraph numbers.
3. The submittals shall include the following:
- a. Information that confirms compliance with contract requirements. Include the manufacturer's name, model or catalog numbers, catalog information, technical data sheets, shop drawings, pictures, nameplate data and test reports as required. Provide any additional information specifically requested in the individual specification section or on the drawings.
- b. Parts list which shall include those replacement parts recommended by the equipment manufacturer, quantity of parts, current price and availability of each part.
- L. Shop drawings on paper 11"x17" or smaller in size shall be submitted in tabbed and indexed three ring binder. The binder shall not exceed 11-5/8" height. Partial submittals are unacceptable. The index shall indicate the related specification section number.
- J. A fee will be charged for Engineering review of drawings received after the time allotted as described in "F" above or for plans that have been rejected two or more times due to non-compliance or incompleteness. The fee will be determined by the Architect/Engineer and will accompany the re-submission in the form of a cashiers check or money order made payable to the Engineer.
- K. The General Contractor will certify that all shop drawings are in conformance with the plans and specifications. Deviations from the plans and specifications shall be noted, and the specific area of the deviation clouded and in contrasting color (green) with a complete explanation for the reasons for the deviation. Any redesign of the system shall be Certified by a Professional Engineer currently registered in the State of Florida, and will be accompanied by the fees as described in "J" above.

L. Carefully examine all shop drawings and mark-up as necessary before submitting to the Architect/Engineer for review. The consultant will only consider shop drawings bearing the contractor's stamp of approval.

M. The engineer's review shall not relieve the contractor from the responsibility for deviations from drawings and specifications. The engineer's review shall be confined to apply only to general arrangement and shall not relieve the contractor from the responsibility for the correctness of details and dimensions and provision of the correct equipment.

N. The contractor shall retain copies of all reviewed shop drawings on the job site for reference.

O. In addition to the requirement of SUBMITTALS, the Owner reserves the right to request the manufacturer to arrange for the Owner's representative(s) to see typical active systems in operation, when there has been no prior experience with the manufacturer or the type of equipment being submitted.

1.06 COORDINATION WITH OTHER TRADES

- A. Contractor shall coordinate his work with other trades to avoid interferences and delays. He shall assist in working out space requirements to make a satisfactory installation.
- B. If the Contractor installs his work before coordinating with other trades, or so as to cause any interference with the work of other trades, he shall make the necessary changes in his work to correct the condition without extra charge.
- C. The Contractor shall furnish to other trades, as required, all necessary templates, patterns, setting plans, and shop details for the proper installation of work and for the purpose of coordinating adjacent work.

1.07 EQUIPMENT IDENTIFICATION

A. Each unit shall be identified by its system number and other appropriate designation by stenciling in letters of approved size and wording. Equipment requiring identification shall include: supply and exhaust fans, air conditioning and heating machinery and apparatus, control cabinets, and other equipment units as may be directed by the owner.

1.08 CUTTING, PATCHING, EXCAVATION, BACKFILL, AND LAYOUT

- A. Provide openings and excavation required for the installation of the work. Patch work and backfill as required. Finished work shall match the existing adjoining work.
- B. Verify all conditions affecting the work to be performed under this contract.
- C. Carefully verify measurements at the site, determine the exact location of chases and openings required. Provide sleeves, inserts, and hangers as required. No columns, beams, joists, building foundations, nor any other structural building component shall be cut, drilled or disturbed in any way. Conflicts shall immediately be brought to the attention of the Architect/Engineer.
- D. All excavation on sites containing existing buildings and existing services, shall be done with hand shovel to avoid damage to existing services. Any damage incurred by the Contractor shall be repaired by the Contractor in a manner approved by the Architect/Engineer at no cost to the Owner and with no extension of time limitation.

1.09 EXPERIENCE

- A. The Contractor performing this work shall be a licensed, reputable firm, regularly performing the type of work incorporated in this

project and who also maintains, as part of the firm, a service department with qualified personnel who regularly perform this type of work. The Contractor shall, upon request, show evidence of at least two jobs of similar character and size installed within the preceding two years.

1.10 ELECTRICAL WORK FOR PLUMBING SYSTEMS

- A. Controllers, and control equipment necessary for plumbing equipment operation shall be provided under Division 15 Mechanical. Starters not integral with plumbing equipment and starters mounted in motor control centers shall be provided under Division 16 Electrical.
- B. Power wiring for motors and installation of starters shall be provided under Division 16 Electrical.
- C. Temperature, humidity, pressure and similar controls essential to the operation of plumbing systems, and wiring and conduit thereof, including interlock wiring, shall be provided under Division 15 of Specifications, installed in accordance with requirements of Division 16.
- D. Motors shall be provided under Division 15 Mechanical of capacity required to operate equipment specified, but shall not be less than that specified.
- E. All low voltage (120v and under) temperature control wiring for equipment shall be provided under this division.
- F. Conduit when required for control wiring shall be provided under this division.

1.11 REMOVAL OF RUBBISH

A. Contractor shall keep premises free from accumulations of waste material or rubbish caused by his employees or work. At completion of work, he shall remove all his tools, scaffolding, surplus materials, and rubbish from building and site. He shall leave premises and his work in a clean orderly condition acceptable to the Architect/Engineer.

1.12 QUIET OPERATION AND VIBRATION

- A. All equipment provided under this section shall operate under all conditions of load free of objectionable sound and vibration. Sound and vibration conditions considered objectionable shall be corrected in an approved manner.
- B. Vibration and sound control shall be by means of approved vibration eliminators or sound attenuators in a manner as specified and as recommended by the manufacturer.

1.13 EXAMINATION OF EXISTING CONDITIONS

- A. Visit and carefully examine those portions of the site and/or present buildings affected by this work so as to become familiar with existing conditions and difficult that will affect the execution of the work before submitting proposals.
- B. Submission 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, which could have been foreseen had such examination been made, will not be recognized.

1.14 CLEANING AND ADJUSTMENTS

- A. Upon completion of work, Contractor shall clean and lubricate fans, motors, and other running equipment and apparatus which he has installed and make certain such apparatus and mechanisms are in proper working order and ready to test.
- B. Scratched or damaged painting shall be touched up as necessary to return the painting to "new" condition and appearance.
- C. All piping and equipment shall be thoroughly blown out under pressure and cleared of all foreign matter, or run water through temporary connections as long as necessary to thoroughly clean system before system is placed in operation. Use every precaution to prevent pipe compound, scale, dirt, welding and other objectionable matter from getting into the piping system and equipment.
- D. During blow out period, baskets from strainers shall be removed, traps and control valves, etc., shall be by-passed.
- E. All cleaning shall be done prior to any sterilization, pressure testing, flow balancing or equipment adjustment procedures.

1.15 DEMOLITION

A. No columns, beams, joists, building foundations nor any other structural building component shall be cut, drilled or disturbed in any way. Conflicts shall immediately be brought to the attention of the Architect/Engineer. Contractor shall not proceed until instructed in writing by the Architect/Engineer if conflicts between plumbing work and structural elements occur.

1.16 CLEANING AND PROTECTING

- A. During construction protect all piping and equipment from damage and dirt. Cap the open ends of all piping and equipment.
- B. After completion of project clean the exterior surface of equipment included in this section, remove all concrete residues and as directed touch up paint or completely repaint all damaged surfaces.

1.17 STORAGE OF MATERIALS

- A. All materials stored on site shall be properly protected from injury or deterioration. Materials shall not be stored in contact with ground or floor.
- B. Do not remove manufacturer's packing materials until ready to install. Materials showing signs of corrosion, improper handling or storage shall be replaced at no cost to the Owner.
- C. Provide continuous protection for all equipment already installed.

1.18 WATERPROOFING

- A. Where any work pieces waterproofing including waterproof concrete, the method of installation shall be as approved by the Owner before the work is done.
- B. Provide all necessary seales, caulking and flashing required to make openings absolutely watertight. Waterproof flashing materials shall be compatible with base materials.

1.19 TESTS

A. Contractor shall make all tests required to establish the adequacy, quality, safety, completed status and satisfactory operation of all systems to the satisfaction of the Architect/Engineer. Provide all instruments, labor and services necessary to conduct tests.

1.20 INSTRUCTIONS

A. Fully instruct Owner's personnel in the care and operation of plumbing systems and furnish a letter to the Architect/Engineer advising the particular person who has received such instruction.

1.21 WARRANTY

- A. Furnish a letter addressed to the Architect/Engineer advising that the completed systems have been installed in accordance with the Plans and Specifications and that they are in proper operating condition. The Owner shall receive a written guarantee covering all defects in workmanship and material for a period of one year from date of final acceptance. Any defects appearing within this year period shall be repaired without additional cost to the Owner. Provide a five year manufacturer's warranty covering repair and replacement for all equipment and fixtures furnished for this project due to failure of the product.

1.23 ACCEPTANCE

- A. Before requesting final inspection:
1. Complete all work required. If any items are held in abeyance as incomplete for final inspection, list such items together with explanation for delay.
2. Submit statement that equipment is properly installed, adjusted, fully lubricated and operation is satisfactory.
3. Certify in writing to the Architect/Engineer that the Owner's representative has been instructed as to the care and operation of the system and that catalog service and maintenance information has been turned over to the Architect/Engineer.
4. Submit copy of written guarantee.
5. Submit copy of other data as may be outlined in these specifications.
- B. Copies of the above data shall be submitted to the Architect/Engineer prior to requesting final inspection.

1.24 BROCHURE

- A. At the completion of work, submit a bound brochure containing the following:
1. Shop Drawings
2. Maintenance Manuals
3. Control Wiring and Piping Diagrams
4. Operating Instructions
5. Copy of Guarantee
6. As-Built Drawings
- B. Where projects are of sufficient size to make a single brochure impractical, several brochures shall be prepared by trade and As-Built Drawings may be submitted as a separate item.
- C. Brochure shall be indexed and divided for reasonable clarity.
- D. Brochure shall be turned over to the Architect/Engineer for review and approval. The contractor shall make modifications to the brochure as deemed necessary for compliance and clarity, by the Architect/Engineer, and re-submit the final brochure to the Architect/Engineer to be forwarded to the Owner.

END OF SECTION 15400

SECTION 15450 - PLUMBING MATERIALS & METHODS

PART 1.00 - GENERAL

1.01 RELATED DOCUMENTS

- A. The general conditions and all requirements of the contract documents shall apply to all work of this Division.

1.02 WORK INCLUDED

- A. Scheduling: Schedule work with Owner so as to avoid disruption of normal activities.
- B. Pipes and Pipe Fittings
- C. Piping Specialties
- D. Valves
- E. Hangers and Supports
- F. Insulation
- G. Plumbing Fixtures
- H. Plumbing Equipment

1.03 REFERENCE STANDARDS

- A. Standard Building Codes
1. 2017 Florida Building Code, Sixth Addition - Building
2. 2017 Florida Building Code, Sixth Addition - Plumbing
- B. National Fire Protection Association (NFPA) Codes.
- C. American Society for Testing and Materials (ASTM).

1. ASTM C177-76: Steady-State Thermal Transmission Properties by means of the Guarded Hot Plate: Thermal Conductivity.
2. ASTM C335-79: Steady-State Heat Transfer Properties of Horizontal Pipe Insulations: Thermal Conductivity.
- D. National Electrical Manufacturers Association (NEMA).

1. NEMA Standard MS -125.336.

E.Manufacturer's Standardization Society of the Valve and Fittings Industry, Inc.

1. MSS SP-58 - Pipe Hangers and Supports - Materials Design and Manufacture, 1988.
2. MSS SP-69 - Pipe Hangers and Supports - Selection and Application, 1991.

1.04 SUBMITTALS

- A. Submit the following detailed manufacturer's product data and shop drawings for each item as follows:

1. Pipes and Pipe Fittings
2. Piping Specialties and Valves
3. Valves
4. Hangers and Supports
5. Insulation
6. Plumbing Fixtures
7. Plumbing Equipment

1.05 MECHANICAL SYSTEMS DEMONSTRATION

- A. Prior to inspection, demonstrate the proper operations of each system to the Owner's representative.
- B. Instruct Owner's maintenance personnel in operation, adjustment, maintenance of equipment and system using the operation and maintenance data as the basis of instruction.

1.06 WARRANTIES AND BONDS

- A. Prior to final payment, compile manufacturer's written warranties for each major piece of equipment. In addition, warranty all apparatus furnished to remain in serviceable and operational condition for a period of at least one year from the date of substantial completion and acceptance of the work. This written warranty shall provide that any imperfections in material or function, as a whole or in part, by reason of defective workmanship, defective materials damaged as result of these defects or their repair, shall be made good to the satisfaction of the Owner's representative at the contractor's expense.

PART 2.00 - PRODUCTS

2.01 PIPES AND PIPE FITTINGS

- A. Domestic Water Piping:
1. Interior above ground shall type copper tube, ASTM B88, Type L. Fittings shall meet ANSI B 16.18.
- B. Sanitary Water and Vent Piping:
1. Above Slab & Exterior: Polyvinyl chloride DWV Schedule 40 pipe (PVC); standard weight; PVC DWV Schedule 40 pipe fittings, solvent cement joints.
2. Below Slab: Polyvinyl chloride DWV Schedule 40 pipe (PVC); standard weight; PVC DWV Schedule 40 pipe fittings, solvent cement joints.

2.02 PIPING SPECIALTIES

- A. Pipe Escutcheons: Provide pipe escutcheons with inside diameter closely fitting pipe outside diameter, or outside of pipe insulation where pipe is insulated. Select outside diameter of escutcheon to completely cover pipe penetration hole in floors, walls, or ceilings; and pipe sleeve extension, if any. Furnish pipe escutcheons with nickel or chrome finish for occupied areas, prime paint finish for unoccupied areas.
1. Pipe Escutcheons for Moist Areas: For waterproof floors, and areas where water and condensation can be expected to accumulate, provide cast brass or sheet brass escutcheons, solid or split hinged.
2. Pipe Escutcheons for Dry Areas: Provide sheet steel escutcheons, solid or split hinged.
3. Manufacturer: Chicago Specialty Products Specialty or Sanitary-Dash.
- B. Dielectric Unions: Provide standard products recommended by manufacturer for use in service indicated, which effectively isolate ferrous from non-ferrous piping (electrical conductance), prevent galvanic action, and stop corrosion.

1. Manufacturer: B&K Industries; Capital Mfg.; Eclipse; Epco; Perfection; or Rockford-Eclipse.
- C. Mechanical Sleeve Seals: Modular mechanical type, consisting of interlocking synthetic rubber links shaped to continuously fill annular space between pipe and sleeve, connected with bolts and pressure plates which cause rubber sealing elements to expand when tightened, providing watertight seal and electrical insulation.

1. Manufacturer: Thunderfire.
- D. Fire Barrier Penetration Seals: Provide seals for any opening through fire-rated walls, floors, or ceilings used as passage for mechanical components such as piping or ductwork as shown in the details.

- E. Water Hammer Arresters: Provide bellows type water hammer arresters, stainless steel casing and bellows, pressure rated for 250 psi, tested and certified in accordance with FDI Standard WH-201.

1. Manufacturer: Amtrol; Smith; Tyler; or Zurn.
- F. Pipe Sleeves: Provide pipe sleeves of one of the following:
1. Sheet-metal: Fabricate from galvanized sheet metal; round tube closed with snaplock joint, welded spiral seams, or welded longitudinal joint. Fabricate from the following gages: 3" and smaller, 20 ga; 4" to 6", 16 ga; over 6", 14 ga.
2. Steel-Pipe: Fabricate from Schedule 40 galvanized steel pipe; remove burrs.
3. Iron-Pipe: Fabricate from cast-iron or ductile-iron pipe; remove burrs.
4. Plastic-Pipe: Fabricate from Schedule 80 PVC plastic pipe; remove burrs.
- G. Sleeve Seals: Provide sleeve seals for sleeves located in foundation walls below grade, or in exterior walls, of one of the following:

1. Mechanical Sleeve Seals: Installed between sleeve and pipe.

2.03 VALVES

- A. General: Provide factory-fabricated valves recommended by manufacturer for use in service indicated. Provide valves of types and pressure ratings indicated. Where not indicated, provide proper selection as determined by installer to comply with installation requirements. Provide end connections which properly mate with pipe, tube, and equipment connections. Where more than one type is indicated, selection is installer's option.

- B. Sizes: Unless otherwise indicated, provide valves of same size as upstream pipe size.
- C. Gate Valves: Lead free. Comply with the following standards:
1. Bronze Valves: MSS SP-80, BSF 61.
2. Manufacturer: Crane; Fairbanks; Hammond; Grinnell; Jenkins; Lutenheimer; Milwaukee; Nisco; Powell; Stockham; or Walworth.
- D. Ball Valves: Lead free Comply with the following standards:
1. Brass Valves: MSS SP-110, NSF 61.
2. Manufacturer: Conbraco; Crane; Fairbanks; Hammond; Grinnell; Jamesbury; Jenkins; Metraflex; Milwaukee; Nisco; Powell; Stockham; Walworth; or Watts.

2.04 HANGERS AND SUPPORTS

- A. Piping:
1. Hangers and supports shall comply with the requirements of MSS SP-58.
2. For support of copper tubing, use a split ring hanger with provision for vertical adjustment of cast brass, copper plated malleable iron.

2.05 INSULATION

- A. Domestic Hot and Cold Water Piping: Insulate all domestic hot and cold water piping except exposed fixture connections with 1/2" Armaflex or approved equal.

2.06 PLUMBING FIXTURES

- A. Plumbing fixtures shall be of the size, type, manufacturer, and capacity with all trim as listed on the fixture schedule on the drawings. Provide carrier where indicated.
- B. Submit shop drawings for approval of all plumbing fixtures furnished.

2.07 PLUMBING EQUIPMENT

- A. Plumbing equipment shall be of the size, type, manufacturer, and capacity as listed in the equipment schedules on the drawings.
- B. Submit shop drawings for approval of all plumbing equipment furnished.

PART 3.00 - EXECUTION

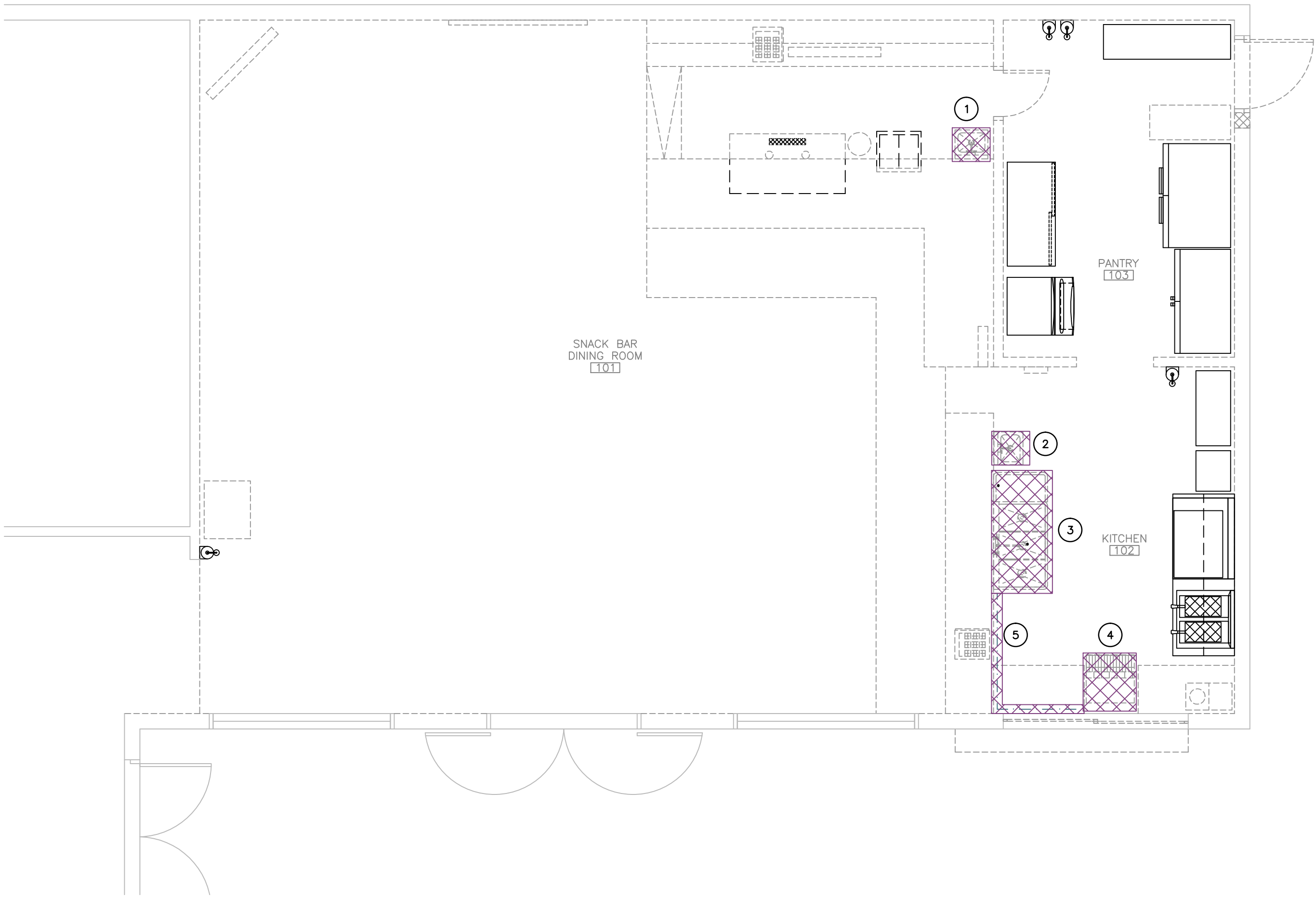
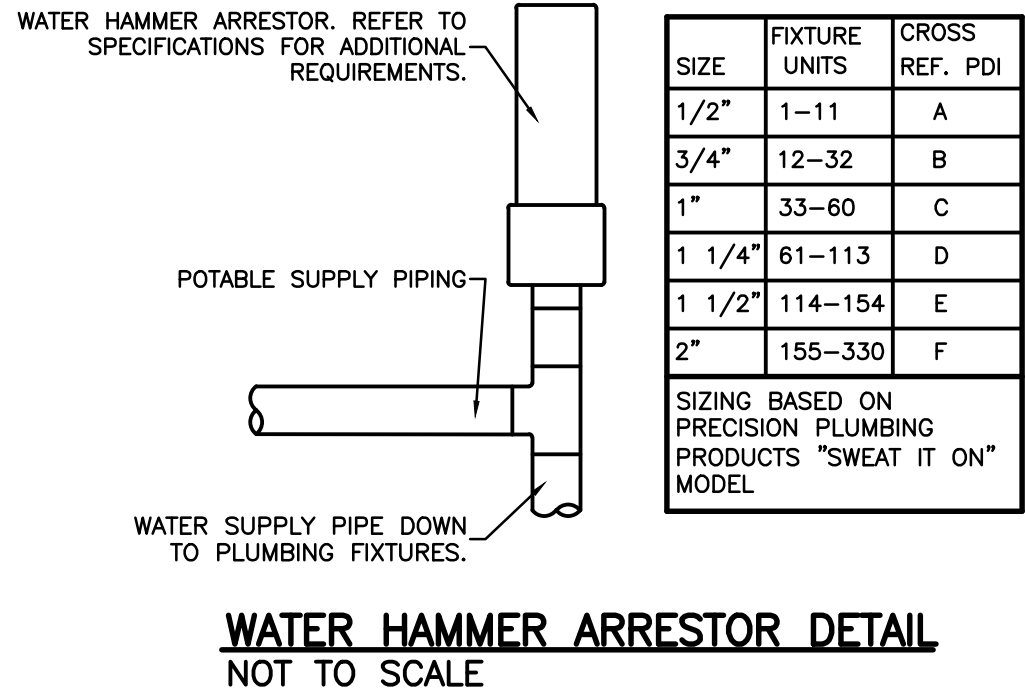
3.01 PIPES AND PIPE FITTINGS

- A. General: Install pipes and pipe fittings in accordance with recognized industry practices which will achieve permanently-leakproof piping system, capable of performing each indicated service without piping failure. Install each run with minimum joints and coupling, but with adequate and accessible unions for disassembly and maintenance/replacement of valves and equipment. Reduce sizes (where indicated) by use of reducing fittings. Align piping accurately at connections, within 1/16" misalignment tolerance. Comply with ASME B31 Code for Pressure Piping.
- B. Locate piping runs, except as otherwise indicated, vertically and horizontally (pitched to drain) and avoid diagonal runs whenever possible. Orient horizontal runs parallel with walls and column lines. Locate runs as shown or described by diagrams, details and notations or, if not otherwise indicated, run piping in shortest route which does not obstruct usable space or block access for servicing building and its equipment. Hold piping close to walls, overhead construction, columns and other structural and permanent-enclosure elements of building; limit clearance to 1/2" where tubing is shown for enclosure or concealment of piping, but allow for insulation thickness, if any. Where possible, locate insulated piping far 1" clearance outside insulation. Wherever possible in finished and occupied spaces, conceal piping from view, by locating in column enclosures, in hollow wall construction or above suspended ceilings; do not encase horizontal runs in solid partitions, except as indicated.
- C. Electrical Equipment Spaces: Do not run piping through transformer vaults and other electrical or electronic equipment spaces and enclosures.
- D. Solder copper tube-and-fitting joints in accordance with applicable provisions of CDA "Copper Tube Handbook".

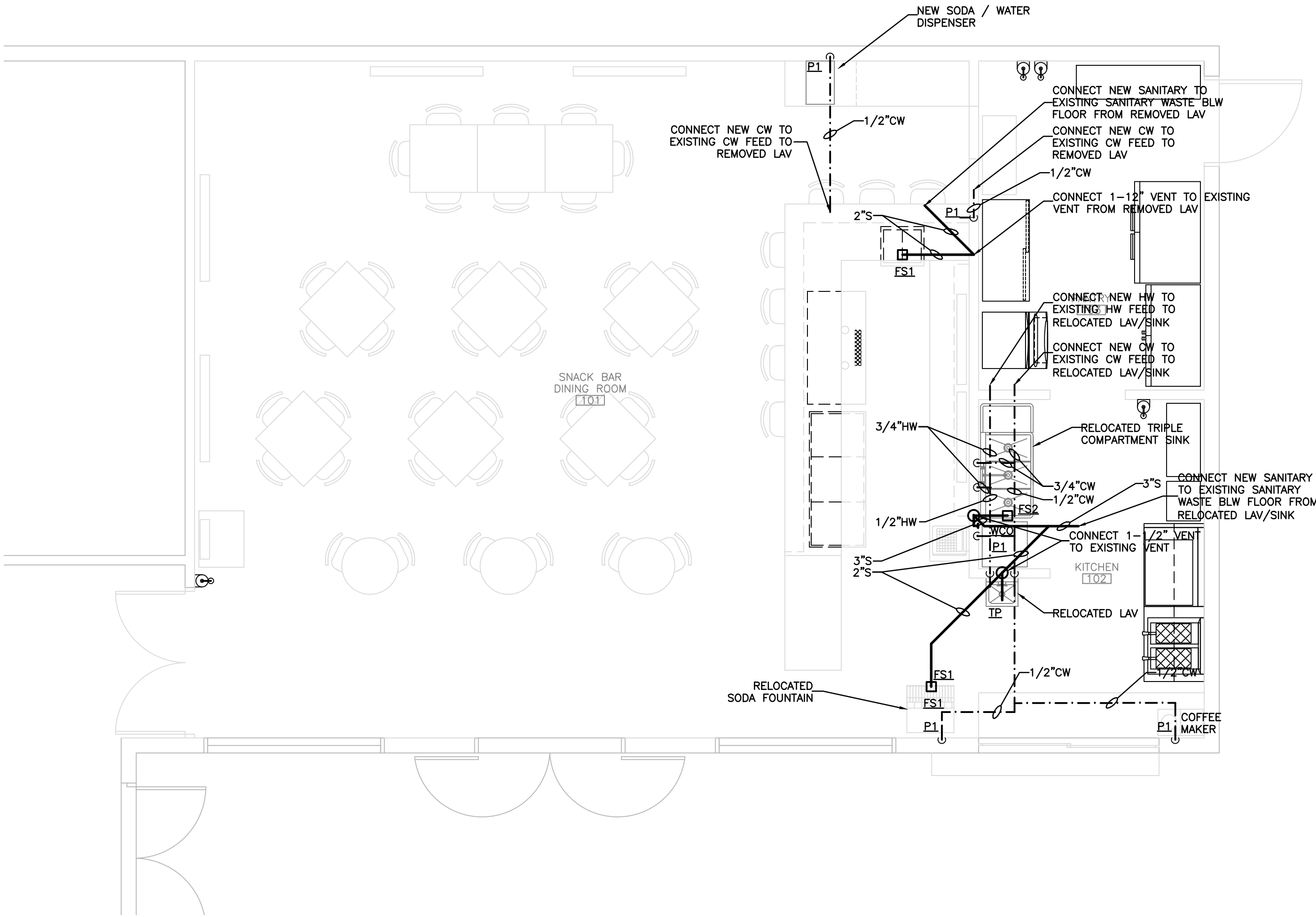
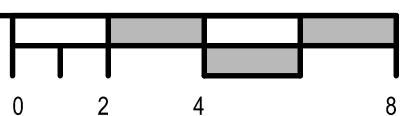


DEMOLITION NOTES:

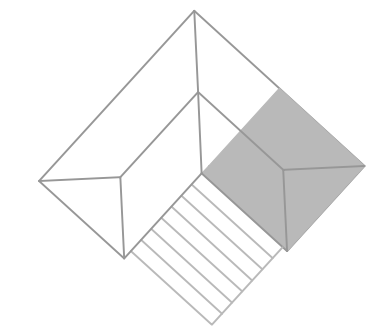
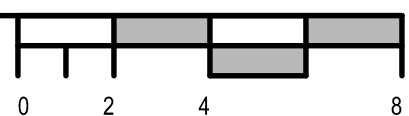
- 1 RELOCATE EXISTING LAVATORY AND FAUCET. REMOVE EXISTING COLD WATER AND HOT WATER PIPE TO BEHIND WALL AND CAP. REMOVE EXISTING WASTE PIPING TO BEHIND ADJACENT WALL AND CAP. PATCH OPENINGS TO MATCH ADJACENT SURFACE. PROVIDE NEW TAILPIECE, P-TRAP, SUPPLY STOPS, SUPPLY PIPES, ETC.
- 2 REMOVE EXISTING LAVATORY. REMOVE EXISTING COLD WATER AND HOT WATER PIPE TO BEHIND WALL AND CAP. REMOVE EXISTING WASTE PIPING TO BEHIND ADJACENT WALL AND CAP. PATCH OPENINGS TO MATCH ADJACENT SURFACE.
- 3 RELOCATE EXISTING TRIPLE COMPARTMENT SINK. REMOVE EXISTING COLD WATER AND HOT WATER PIPE TO BEHIND WALL AND CAP. REMOVE EXISTING WASTE PIPING TO BEHIND ADJACENT WALL AND CAP. PATCH OPENINGS TO MATCH ADJACENT SURFACE. PROVIDE NEW FAUCET, TAILPIECE, P-TRAP, SUPPLY STOPS, SUPPLY PIPES, ETC.
- 4 EXISTING SODA FOUNTAIN TO BE RELOCATED. REMOVE EXISTING COLD WATER PIPE TO BEHIND WALL AND CAP. PATCH OPENINGS TO MATCH ADJACENT SURFACE.
- 4 REMOVE DOMESTIC HOT WATER AND HOT WATER. CAP PIPE.



1 DEMOLITION PLAN  
M1.1 SCALE: 1/4" = 1'-0"



2 RENOVATION PLAN  
M1.1 SCALE: 1/4" = 1'-0"



KEY PLAN

**AGI**  
Anston-Greenlees, Inc.  
Mechanical & Electrical Consulting Engineers  
1315 West Fletcher Avenue, Tampa, FL 33612 Tel(813)963-1919  
Email: AGI@ag-engineers.com HTTP://www.ag-engineers.com  
Florida Engineering Business Number 6093

NOT FOR CONSTRUCTION

**STEPHEN B. AGOSTINI, P.E. 408582**  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

**TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.**

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019

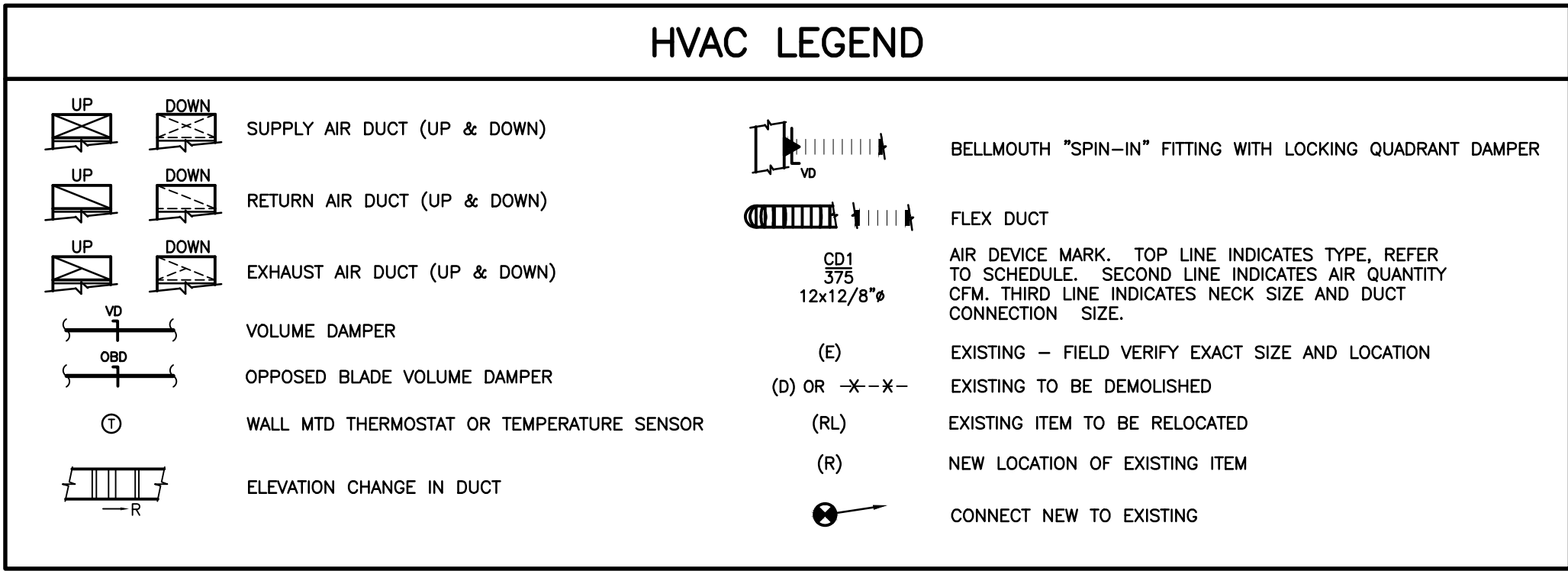
PLUMBING FLOOR  
PLANS AND DETAILS

P1.1



GENERAL MECHANICAL NOTES

- ALL MECHANICAL WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:
  - FLORIDA BUILDING CODE (FBC) 6TH EDITION (2017). THIS CODE INCLUDES THE 2017 FBC BUILDING, MECHANICAL, PLUMBING, ENERGY CONSERVATION, FUEL GAS, ACCESSIBILITY, AND TEST PROTOCOLS VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC BUILDING CHAPTER 35; FBC MECHANICAL CHAPTER 15; FBC PLUMBING CHAPTER 14; FBC ENERGY CONSERVATION CHAPTER 6; AND FBC FUEL GAS CHAPTER 8) (EFFECTIVE DECEMBER 31, 2017).
  - 6TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2017).
  - 2014 NATIONAL ELECTRIC CODE.
- VERIFY, BY VISITING THE SITE, THE LOCATION OF UTILITIES IN ALL AREAS BEFORE COMMENCING WORK.
- COVER ALL ELECTRICAL AND MECHANICAL EQUIPMENT TO PROTECT THEM FROM DUST AND DAMAGE DURING CONSTRUCTION. RESTORE ALL FACTORY PAINTED SURFACES TO NEW CONDITION, REPAIR ALL SCRATCHES, DENTS AND ABRASIONS. THOROUGHLY CLEAN ALL SURFACES OF DUST DEBRIS, AND FOREIGN MATTER. THE EQUIPMENT, WHEN TURNED OVER TO THE OWNER, SHALL BE CLEAN AND FREE OF DEFECTS.
- IN GENERAL, PLANS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- ALL DUCTWORK SHALL MEET THE STANDARDS SET FORTH BY THE LATEST EDITION OF SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE FABRICATED FROM SHEET METAL. ALL ROUND DUCT SHALL BE SHEET METAL UNLESS OTHERWISE NOTED. PROVIDE TURNING VANES IN ALL 90° DUCT ELBOWS.
- PROVIDE INSULATION FOR NEW DUCTWORK TO AND FROM THE UNIT WITH GLASS FIBER DUCT WRAP INSULATION. FACTORY APPLIED FOIL FACED VAPOR BARRIER, ASTM 518 AND ASTM E84 CERTIFIED TESTING PROCEDURES. JOINT TAPE SHALL BE MINIMUM 3" WIDE FOIL REINFORCED KRAFT TYPE. INSULATION THICKNESS SHALL BE A MINIMUM 2" THICK.
- ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS (FREE AREA).
- VERIFY ALL CLEARANCES AND DIMENSIONS BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSETS TO MEET FIELD CONDITIONS. ADJUST LOCATIONS OF ALL EQUIPMENT AND DUCTWORK, AS NECESSARY TO AVOID INTERFERENCES WITH STRUCTURAL AND OTHER BUILDING COMPONENTS.
- DUCTWORK, DIFFUSERS, REGISTERS, GRILLES, AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- ALL SUPPLY DUCTWORK SHALL BE 2" W.G. ALL SHEET METAL DUCTWORK SHALL HAVE A CLASS C SEAL.
- PROVIDE SUPPLEMENTARY STEEL AS REQUIRED TO INSTALL MECHANICAL EQUIPMENT AND MATERIALS.
- REPLACE ANY CEILING TILES OR GRID, DAMAGED DURING CONSTRUCTION IN ANY AREAS WHERE THE CEILING IS REMOVED TO EXECUTE WORK. REPLACEMENT TILES AND TEES SHALL MATCH EXISTING.
- PROVIDE ADDITIONAL VOLUME DAMPERS AS REQUIRED BY THE TEST AND BALANCE CONTRACTOR TO ACHIEVE AIRFLOWS INDICATED ON THE DRAWINGS.
- MAINTAIN NEGATIVE PRESSURE IN ALL DESIGNATED CONSTRUCTION AREAS.
- THE OWNER SHALL BE GIVEN ONE WEEK PRIOR NOTICE FOR ALL PERIODS OF HVAC SYSTEMS DOWNTIME.
- EXISTING THERMOSTATS AND SENSORS SHALL BE REUSED. THOSE BEING DISPLACED BY RENOVATION WORK SHALL BE RELOCATED AS DIRECTED BY THE OWNERS REPRESENTATIVE IN THE FIELD.
- ALL DUCT MOUNTED MANUAL BALANCING DAMPERS SHALL HAVE A TWO FOOT LONG, YELLOW STRIP OF MATERIAL ATTACHED TO THE DAMPER HANDLE FOR EASY VISUAL IDENTIFICATION.
- ROUND FLEX DUCT SHALL BE A MAXIMUM LENGTH OF 6 FEET. ALL RUNS OF FLEX DUCT ARE TO BE SUPPORTED WITH THE APPROPRIATE HANGERS. FLEX DUCT SHALL NOT SAG OR BE CRIMPED.
- LOCATE ALL AIR DISTRIBUTION DEVICES AND CEILING MOUNTED EQUIPMENT IN CONFORMANCE WITH THE REFLECTED CEILING PLANS INCLUDED IN THE ARCHITECTURAL DRAWINGS FOR THIS PROJECT. COORDINATE DUCTWORK TO ALLOW FOR LOCATIONS OF THESE ITEMS. PROVIDE REVISED DUCTWORK LAYOUT WHERE REQUIRED. ANY MECHANICAL ITEMS EXPOSED TO VIEW SHALL BE PLACED PER THE ARCHITECTURAL DRAWINGS.
- ALL EXTERIOR FASTENERS, ANCHORS, SUPPORTS, AND MOUNTING HARDWARE SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL.
- PRIOR TO SUBSTANTIAL COMPLETION, A COMPLETE CERTIFIED TEST AND BALANCE REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS.
- AT THE COMPLETION OF THE INSTALLATION, SUBMIT A COMPLETE CERTIFIED TEST AND BALANCE REPORT FROM AN AGENCY HAVING A MINIMUM OF FIVE YEARS EXPERIENCE AND IS A CURRENT MEMBER OF NEBB OR AABC. REPORT SHALL ITEMIZE THE PERFORMANCE OF EACH AIR DEVICE AND UNIT WITH REGARD TO CFM, STATIC PRESSURE, AND TEMPERATURE.
- SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.



DUCTWORK MATERIALS

- FLEX DUCT SHALL BE EQUIVALENT TO FLEXMASTER 1M WITH A POLYETHYLENE FABRIC (PE) CORE AND SHALL HAVE PRESSURE RATINGS OF 10" W.G. POSITIVE, 5" W.G. NEGATIVE THROUGH 16" DIA., AND 1" W.G. NEGATIVE FOR 18" AND 20" DUCTS.
- ALL TRANSFER DUCT SHALL BE UNINSULATED LONGITUDINAL SEAM SHEET METAL DUCTWORK. INSULATE DUCT IF OUTSIDE OF THERMAL ENVELOPE.
- FLEXIBLE DUCT RUNOUTS SHALL NOT EXCEED 6 FEET.
- THE USE OF SNAP LOCK DUCT IS NOT PERMITTED.

DESIGN CRITERIA

Location:	TAMPA
Latitude:	28.0°
Longitude:	82.0°
Elevation:	19 ft.
Barometric Pressure:	29.9 in. Hg

DESIGN TEMPERATURES:	
Ambient Summer Design Dry Bulb:	91°F
Ambient Summer Design Wet Bulb:	80°F
Ambient Winter Design Dry Bulb:	39°F
Space Setpoint - cooling	78°F
Space Setpoint - heating	70°F
Space Setpoint - humidity	50% RH

HVAC DRAWING INDEX

M0.1	HVAC GENERAL NOTES, AND LEGEND
M0.2	HVAC SPECIFICATIONS
M1.1	HVAC FLOOR PLANS, DETAILS, AND SCHEDULES

NOT FOR CONSTRUCTION

STEPHEN R. FORKNER, P.E. 90532  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019

HVAC GENERAL  
NOTES AND  
LEGEND

M0.1



SECTION 15010 – MECHANICAL REQUIREMENTS

PART 1.00 – GENERAL

1.01 RELATED DOCUMENTS

- A. Cooperate with all other trades and install work as fast as the progress of the job will permit.
- B. Use only mechanics skilled in the work they are to perform and have a competent representative on the job when any work is being done.
- C. No work shall be done unless the Superintendent of the Contractor is on the job site. Work shall be properly protected, all rubbish removed promptly, and exposed work shall be carefully cleaned prior to final acceptance.
- D. The term "provide" shall include labor, materials, and equipment necessary to furnish and install, complete and operable, the item or system indicated.
- E. In decisions arising from discrepancies, interpretation of Drawings and Specifications, substitutes, and other pertinent matters, the decision of the Owner's representative's approval shall be final.

1.02 SPECIFICATIONS AND DRAWINGS

- A. Plans show location of fixtures and equipment and are intended to depict the general intent of the work in scope, layout and quality of workmanship. They are not intended to show in minute detail every or all accessories intended for the purpose of executing the work, but it is understood that such details are a part of this work.
- B. Where Drawings and Specifications conflict, it shall be the responsibility of the Mechanical Contractor to bring such conflict to the attention of the Architect/Engineer for clarification. In general, the more stringent interpretation shall take precedence and the Architectural Drawings shall take precedence over the Mechanical Drawings with reference to building construction. All changes from the Drawings necessary to make the work conform with the building as constructed and to fit the work of other trades or to conform to the rules of authorities having jurisdiction, shall be made by the Contractor at his own expense.
- C. Keep a record of the locations of concealed work and of any field changes in Contract Drawings and Specifications for each trade and, upon completion of the job, supply "As-Built" Drawings and Specifications showing in pencil on sepio reproduces, any deviations from the original Drawings, indicating in the Specifications each manufacturer's name underlined or inserted whose product was used on the job. These Drawings shall indicate dimensions of buried utility lines from building walls. One set of sepio reproduces of the original tracings will be furnished upon request for this purpose.
- D. Where equipment is used other than manufacturers specified, request approval to substitute materials and/or products as indicated and defined herein. Provide four (4) copies of materials and equipment for approval, for items requiring submittals.

1.03 PERMITS, FEES AND INSPECTIONS:

- A. Give all necessary notices, obtain all permits and pay all government fees, sales taxes and other costs, including utility connections or extensions, in connection with this work; file all permit applications required by all governmental departments having jurisdiction.
- B. Obtain all required certificates of inspection for work and deliver them to the Owner before requesting acceptance and final payment for the work.
- C. Include in the work, without extra cost to the Owner, any labor, materials, services, apparatus and drawings required to comply with all applicable laws, ordinances, rules and regulations.
- D. Inform the Owner of any work or materials which conflict with any of the applicable codes, standards, laws and regulations before submitting his bid.

1.04 GENERAL

- A. Materials or products specified herein and/or indicated on drawings by trade name, manufacturer's name and/or catalog number shall be provided as specified. Substitutions will not be permitted except as described herein and in the Supplementary and General Conditions.
- B. Since manufacturers reserve the right to change their products at any time, contractors shall verify all dimensions, performance data, etc. for each piece of equipment submitted to assure compliance with the intent of the drawings and specifications.
- C. All materials shall be new and of quality as specified, and when required, be clearly labeled and/or stamped as manufactured in the United States.
- D. For acceptance of products or manufacturers other than those specified, bidders shall submit to the Architect/Engineer a request in writing at least ten (10) days prior to bid date and hour. Requests received after this time will not be reviewed or considered regardless of cause. Requests shall clearly define and describe the product for which approval is requested. Requests shall be accompanied by manufacturer's literature, specifications, drawings, cuts, performance data list of references or other information necessary to completely describe the item. Approval will be in the form of an addendum to the specifications issued to all prospective prime contract bidders on record. The addendum will indicate the additional products which are approved for this project.
- E. A list of all materials and equipment which the Mechanical Contractor proposes to furnish shall be submitted for approval within ten (10) days after the contract has been awarded. Data shall be complete in all respects.
- F. Where an accepted substitution or deviation requires different quantity or arrangement of foundations, supports, ductwork, piping, wiring, conduit, and any other equipment or accessories normal to this equipment, contractor shall furnish said changes and additions and pay all costs for all changes and additions to his work and the work of others affected by this substitution or deviation.
- G. Deviations mean the use of any listed approved manufacturer other than those on which the drawings are based.

1.05 SHOP AND ERECTION DRAWINGS AND SAMPLES

- A. The Architect/Engineer's approval shall be obtained for all equipment and material before delivery to the job site. Delivery, storage or installation of equipment or material which has not had prior approval will not be permitted at the job site. Submittals shall be made for all equipment and systems as indicated in the respective specification section.
- B. All submittals shall include adequate descriptive literature, catalog cuts, shop drawings and other data necessary for the Architect/Engineer to ascertain that the proposed equipment and materials comply with specification and drawing requirements. Catalog cuts submitted for approval shall be legible and clearly identify equipment being submitted.
- C. Shop and erection drawing submittals shall conform to the requirements of the General Conditions and Division-1 specifications except as modified herein.
- D. Submit required and/or requested shop and erection drawings, for review by Architect/Engineer before ordering or installing any equipment or material. Equipment or material ordered or installed before Architect/Engineer review may not be accepted and may have to be removed from the project if deemed unacceptable.
- E. Shop drawings shall consist of manufacturer's scale drawings, cuts or catalogs, including descriptive literature which shall clearly indicate the construction, material, physical dimensions, wiring diagrams and complete operating data clearly marked for each item. Data of general nature will not be accepted.
- F. Shop drawings on paper larger than 11"x17" shall be submitted in the form of one set of reproduces (vellum) and one set of blueprints. The blueprints will be retained by the engineer and the reproduces will be returned to the contractor. All drawings are to be submitted no later than 60 days after the contract has been awarded.
1. Coordination drawings shall show major elements, components, and systems of mechanical equipment and materials in relationship with other building components. Prepare drawings to an accurate scale of 1/4"=1'-0" or larger. Indicate the locations of all equipment and materials, including clearances for installing, servicing and maintaining equipment, valve stem movement, and similar requirements. Indicate movement and positioning of large equipment into the building during construction.
- G. Submittals for individual systems and equipment assemblies which consist of more than one item or component shall be made for the system or assembly as a whole. Partial submittals will not be considered for approval. Submittals shall be submitted for all applicable products and materials specified in each individual section of these specifications.
- H. Make submittals for the equipment and materials in accordance with the following:

1. Mark the submittals, "SUBMITTED UNDER SECTION\_\_\_\_\_".
2. Submittals shall be marked to show specification reference including the section and paragraph numbers.
3. The submittals shall include the following:
- a. Information that confirms compliance with contract requirements. Include the manufacturer's name, model or catalog numbers, catalog information, technical data sheets, shop drawings, pictures, nomenclature data and test reports as required. Provide any additional information specifically requested in the individual specification section or on the drawings.
- b. Parts list which shall include those replacement parts recommended by the equipment manufacturer, quantity of parts, current price and availability of each part.

1. Shop drawings on paper 11"x17" or smaller in size shall be submitted in tabbed and indexed three ring binder. The binder shall not exceed 11-5/8" height. Partial submittals are unacceptable. The index shall indicate the related specification section number.

J. A Fee will be charged for Engineering review of drawings received after the time allotted as described in "F" above or for plans that have been rejected two or more times due to non-compliance or incompleteness. The fee will be determined by the Architect/Engineer and will accompany the re-submittal in the form of a cashiers check or money order made payable to the Engineer.

K. Certify that all shop drawings are in conformance with the plans and specifications. Deviations from the plans and specifications shall be noted, and the specific area of the deviation clouded and in contrasting color (green) with a complete explanation for the reasons for the deviation. Any redesign of the system shall be Certified by a Professional Engineer currently registered in the State of Florida, and will be accompanied by the fees as described in "J" above.

L. Carefully examine all shop drawings and mark-up as necessary before submitting to the Architect/Engineer for review. The consultant will only consider shop drawings bearing the contractor's stamp of approval.

M. The engineer's review shall not relieve the contractor from the responsibility for deviations from drawings and specifications. The engineer's review shall be construed to apply only to general arrangement and shall not relieve the contractor from the responsibility for the correctness of details and dimensions and provision of the correct equipment.

N. Retain copies of all reviewed shop drawings on the job site for reference.

O. In addition to the requirement of SUBMITTALS, the Owner reserves the right to request the manufacturer to arrange for the Owner's representative(s) to see typical active systems in operation, when there has been no prior experience with the manufacturer or the type of equipment being submitted.

1.06 COORDINATION WITH OTHER TRADES

- A. Coordinate work with other trades to avoid interferences and delays. Assist in working out space requirements to make a satisfactory installation.
- B. If installation occurs prior to coordinating with other trades, or so as to cause any interference with the work of other trades, necessary changes to correct the condition shall be without extra charge.
- C. Furnish to other trades, as required, all necessary templates, patterns, setting plans, and shop details for the proper installation of work and for the purpose of coordinating adjacent work.

1.07 EQUIPMENT IDENTIFICATION

A. Each unit shall be identified by its system number and other appropriate designation by stenciling in letters of approved size and wording. Equipment requiring identification shall include: supply and exhaust fans, air conditioning and heating machinery and apparatus, control cabinets, and other equipment units as may be directed by the owner.

1.08 CUTTING, PATCHING, EXCAVATION, BACKFILL, AND LAYOUT

- A. Provide openings and excavation required for the installation of the work. Patch work and backfill as required. Finished work shall match the existing adjoining work.
- B. Verify all conditions affecting the work to be performed under this contract.
- C. Carefully verify measurements at the site, determine the exact location of chases and openings required. Provide sleeves, inserts, and hangers as required. No columns, beams, joists, building foundations nor any other structural building component shall be cut, drilled or disturbed in any way. Conflicts shall immediately be brought to the attention of the Architect/Engineer.
- D. All excavation on sites containing existing buildings and existing services, shall be done with hand shovel to avoid damage to existing services. Any damage incurred shall be repaired in a manner approved by the Architect/Engineer at no cost to the Owner and with no extension of time limitation.

1.09 EXPERIENCE

A. The Mechanical Contractor shall be a licensed, reputable firm, regularly performing the type of work incorporated in this project and who also maintains, as part of the firm, a service department with qualified personnel who regularly perform this type of work. Upon request, show evidence of at least two jobs of similar character and size installed within the preceding two years.

1.10 ELECTRICAL WORK FOR MECHANICAL SYSTEMS

- A. Controllers, and control equipment necessary for mechanical equipment operation shall be provided under Division 15 Mechanical. Starters not integral with mechanical equipment and starters mounted in motor control centers shall be provided under Division 16 Electrical.
- B. Power wiring for motors and installation of starters shall be provided under Division 16 Electrical.
- C. Temperature, humidity, pressure and similar controls essential to the operation of mechanical systems, and wiring and conduit thereof, including interlock wiring, shall be provided under Division 15 of Specifications, installed in accordance with requirements of Division 16.
- D. Motors shall be provided under Division 15 Mechanical of capacity required to operate equipment specified, but shall not be less than that specified.
- E. All low voltage (120V and under) temperature control wiring for equipment shall be provided under this division.
- F. Conduit when required for control wiring shall be provided under this division.

1.11 MOTORS

- A. All motors shall be furnished and installed under Division 15 Mechanical and shall be wired under Division 16 Electrical.
- B. All motors shall be built in accordance with the current applicable IEEE, ASA, and NEMA standards. All general purpose motors shall be open drip-proof machines for installation indoors and/or in protected locations. Totally enclosed (TEFC) motors shall be used in all areas of exposure to weather or other environmental contamination. Motors shall be rated explosion proof when located in hazardous atmospheres. Type II weather protected motors may be used in lieu of TEFC motors on roof mounted fan units and similar equipment.
- C. Unless indicated otherwise, motors shall be NEMA Design B with a service factor of 1.15 with total temperature rise of 90 degrees C. (resistance measured) in 40 degrees C. ambient when powered from the system voltage feeding the motor. TEFC motors shall have a service factor of 1.00 with total temperature rise of 80 degrees C. in the above conditions. Motors located in areas exceeding 40 degrees C. ambient shall be factory rated for the ambient temperature of the motor environment. Single phase motors shall generally be NEMA Design N split phase induction motors with built-in thermal protectors. Single phase motors connected on loads requiring high starting torque shall be capacitor-start induction motors. Single phase motors of 1/10 HP or less may be shodded pole induction motors. Refer to Div. 16 drawings for three phase motor starters.
- D. If variations are proposed in motor horsepower and/or characteristics from those specified, inform the Architect/Engineer of the change and shall then coordinate the change and shall pay all additional charges in connection with the change.
- E. All motors supplied on this project one (1) HP and larger shall have a power factor not less than 85 percent under rated load conditions. Power factor of less than 85 percent shall be corrected to at least 90 percent under rated load conditions. Power factor corrective devices, installed to comply with this data, shall be switched with the utilization equipment.

1.12 REMOVAL OF RUBBISH

A. Keep premises free from accumulations of waste material or rubbish caused by his employees or work. At completion of work, remove all tools, scaffolding surplus materials, and rubbish from building and site. Leave premises and work in a clean orderly condition acceptable to the Architect/Engineer.

1.13 QUIET OPERATION AND VIBRATION

- A. All equipment provided under this section shall operate under all conditions of load free of objectionable sound and vibration. Sound and vibration conditions considered objectionable shall be corrected in an approved manner.
- B. Vibration and sound control shall be by means of approved vibration eliminators or sound attenuators in a manner as specified and as recommended by the manufacturer.

1.14 EXAMINATION OF EXISTING CONDITIONS

- A. Visit and carefully examine those portions of the site and/or present buildings affected by this work so as to become familiar with existing conditions and difficulties that will affect the execution of the work before submitting proposals.
- B. Submission 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, which could have been foreseen had such examination been made, will not be recognized.

1.15 CLEANING AND ADJUSTMENTS

- A. Upon completion of work, clean and lubricate fans, motors, and other running equipment and apparatus which he has installed and make certain such apparatus and mechanisms are in proper working order and ready to test.
- B. Scratched or damaged painting shall be touched up as necessary to return the painting to "new" condition and appearance.
- C. All piping and equipment shall be thoroughly blown out under pressure and cleared of all foreign matter, wasting air, gas or water through temporary connections as long as necessary to thoroughly clean system before system is placed in operation. Use every precaution to prevent pipe compound, scale, dirt, welding and other objectionable matter from getting into the piping system and equipment.
- D. All cleaning shall be done prior to any sterilization, pressure testing, flow balancing or equipment adjustment procedures.

1.16 DEMOLITION

A. No columns, beams, joists, building foundations nor any other structural building component shall be cut, drilled or disturbed in any way. Conflicts shall immediately be brought to the attention of the Architect/Engineer. Do not proceed until instructed in writing by the Architect/Engineer if conflicts between mechanical work and structural elements occur.

1.18 CLEANING AND PROTECTING

- A. During construction protect all piping and equipment from damage and dirt. Cap the open ends of all piping and equipment.
- B. After completion of project clean the exterior surface of equipment included in this section, remove all concrete residues and as directed touch up paint or completely repaint all damaged surfaces.

1.19 STORAGE OF MATERIALS

- A. All materials stored on site shall be properly protected from injury or deterioration. Materials shall not be stored in contact with ground or floor.
- B. Do not remove manufacturer's packing materials until ready to install. Materials showing signs of corrosion, improper handling or storage shall be replaced at no cost to the Owner.
- C. Provide continuous protection for all equipment already installed.

1.20 WATERPROOFING

A. Where any work pierces waterproofing including waterproof concrete, the method of installation shall be as approved by the Owner before the work is done.

B. Provide all necessary sleeves, caulking and flashing required to make openings absolutely watertight. Waterproof flashing materials shall be compatible with base materials.

1.21 TESTS

A. All tests required to establish the adequacy, quality, safety, completed status and satisfactory operation of all systems to the satisfaction of the Architect/Engineer. Provide all instruments, labor and services necessary to conduct tests.

1.22 INSTRUCTIONS

A. Fully instruct Owner's personnel in the care and operation of mechanical systems and furnish a letter to the Architect/Engineer advising the particular person who has received such instruction.

1.23 Warranty

A. Furnish a letter addressed to the Architect/Engineer advising that the completed systems have been installed in accordance with the Plans and Specifications and that they are in proper operating condition. The Owner shall receive a written guarantee covering all defects in workmanship and material for a period of one year from date of final acceptance. Any defects appearing within this year period shall be repaired without additional cost to the Owner. Provide a five year manufacturer's warranty covering repair and replacement for all equipment and fixtures furnished for this project due to failure of the product.

1.24 ACCEPTANCE

- A. Before requesting final inspection:
1. Complete all work required. If any items are held in abeyance as incomplete for final inspection, list such items together with explanation for delay.
2. Submit statement that equipment is properly installed, adjusted, fully lubricated and operation is satisfactory.
3. Certify in writing to the Architect/Engineer that the Owner's representative has been instructed as to the care and operation of the system and that catalog service and maintenance information has been turned over to the Architect/Engineer.
4. Submit copy of written guarantee.
5. Submit copy of other data as may be outlined in these specifications.
- B. Copies of the above data shall be submitted to the Architect/Engineer prior to requesting final inspection.

1.25 BROCHURE

- A. At the completion of work, submit a bound brochure containing the following:
1. Shop Drawings
2. Maintenance Manuals
3. Control Wiring and Piping Diagrams
4. Operating Instructions
5. Copy of Guarantee
6. As-Built Drawings
- B. Where projects are of sufficient size to make a single brochure impractical, several brochures shall be prepared by trade and As-Built Drawings may be submitted as a separate item.
- C. Brochure shall be indexed and divided for reasonable clarity.
- D. Brochure shall be turned over to the Architect/Engineer for review and approval. The contractor shall make modifications to the brochure as deemed necessary for compliance and clarity, by the Architect/Engineer, and re-submit the final brochure to the Architect/Engineer to be forwarded to the Owner.

END OF SECTION 15010

SECTION 15050 – MECHANICAL MATERIALS AND METHODS

1. PART ONE – GENERAL

1.01 RELATED DOCUMENTS

A. The general conditions and all requirements of the contract documents shall apply to all work of this Division.

1.2 WORK INCLUDED

- A. Scheduling: Schedule work with Owner so as to avoid disruption of normal activities.
- B. Sheet Metal Duct Work
- C. Ductwork Accessories
- D. Diffusers
- E. Hangers and Supports
- F. Insulation
- G. Test and Balance

1.3 REFERENCE STANDARDS

- A. American Society for Testing and Materials (ASTM).
1. ASTM C177-76: Steady-State Thermal Transmission Properties by means of the Guarded Hot Plate: Thermal Conductivity.
2. ASTM C335-79: Steady-State Heat Transfer Properties of Horizontal Pipe Insulations: Thermal Conductivity.

B. National Electrical Manufacturers Association (NEMA).

1. NEMA Standard MG1 -12.536.

1.4 SUBMITTALS

A. Submit the following detailed manufacturer's product data and shop drawings for each item as follows:

1. Metal Duct Work
2. Duct Work Accessories
3. Diffusers
4. Hangers and Supports
5. Insulation
6. Mechanical Equipment

1.5 MECHANICAL SYSTEMS DEMONSTRATION

- A. Prior to inspection, demonstrate the proper operations of each system to the Owner's representative.
- B. Instruct Owner's maintenance personnel in operation, adjustment, maintenance of equipment and system using the operation and maintenance data as the basis of instruction.

1.6 WARRANTIES AND BONDS

- A. HVAC system to be warranted for one year from date of occupancy with five year minimum manufacturer warranty on equipment.
- B. Prior to final payment, compile manufacturer's written warranties for each major piece of equipment. In addition, warranty all apparatus furnished to remain in serviceable and operational condition for a period of at least one year from the date of substantial completion and acceptance of the work. This written warranty shall provide that any imperfections in material or function, as a whole or in part, by reason of defective workmanship, defective materials damaged as result of these defects or their repair, shall be made good to the satisfaction of the Owner's representative at the contractor's expense.

2. PART TWO – PRODUCTS

2.1 METAL DUCT WORK

A. Low Pressure Duct Work shall be constructed in accordance to SMACNA for stotic pressure 2 inches wg and less.

2.2 DUCTWORK ACCESSORIES

- A. Balancing Dampers: For small outside air intake and branch duct taps provide single blade, locking quadrant dampers with shaft extension and mounting flange for insulated ducts, shaft bushings, blade stops, and quadrant handle.
- B. Turning Vanes: Provide turning vanes constructed of 1-1/2" wide curved blades set at 3/4" o.c., supported with bars perpendicular to blades set at 2" o.c., and set into side strips suitable for mounting in ductwork. Barber-Colman Co. or approved equal.

2.4 GRILLES, REGISTERS, AND DIFFUSERS

A. Furnish and install grilles, registers, and diffusers as indicated on the drawings and as described herein.

B. Diffusers: Square ceiling mounted aluminum diffusers with frame assembly to match ceiling face. Provide vane face, integral adjustable opposed blade damper, factory applied foil faced neck connection where required, and ADC certified performance. Finish off-white enamel. Manufacturers shall be Titus, Metairie, Krueger, or approved equal.

2.5 HANGERS AND SUPPORTS

A. Duct Work: Except as otherwise indicated provide hot-dipped galvanized steel fasteners, anchors, rods, straps, trim and angles for support of duct work.

2.6 INSULATION

A. Diffusers, grilles, and sheet metal supply & return ductwork below ambient space temperature: Diffusers and grilles shall be insulated with glass fiber duct wrap insulation, factory applied foil faced vapor barrier, ASTM C518 and ASTM E84 certified testing procedures. Seal the insulation to the diffuser and connecting duct, and at all edges. Joint tape shall be 3-inch wide minimum foil-reinforced kraft type. Insulation thickness shall be 1-1/2 inches thick except in attic spaces and above ceiling insulation where it shall be a minimum of 2 inches thick.

PART THREE – EXECUTION

3.1 DUCT WORK

- A. Install in accordance with approved shop drawings and manufacturer's written instructions.
- B. Coordinate with architectural ceiling heights and lighting trades. Reflected ceiling plans shall be adhered to unless otherwise noted.
- C. Install work in accordance with construction schedules.
- D. Test duct work for leakage prior to concealing and prior to final testing. Submit these tests for approvals.

3.2 INSULATION

- A. Duct Insulation – Glass Fiber Duct Wrap Insulation, ASTM C 1136, Type II: Provide insulation of the following thicknesses:
1. Supply Duct: 2" thickness.

3.3 TEST AND BALANCE

- A. Tester's Qualifications: Firm certified by Associated Air Balance Council (AABC) in those testing and balancing disciplines similar to those required for this project.
- B. AABC Compliance: Comply with AABC's Manual MN-1 "AABC National Standards", as applicable to mechanical air and hydronic distribution systems, and associated equipment and apparatus.
- C. Job Conditions: Do not proceed with testing, adjusting, and balancing work until work has been completed and is operable. Ensure that there is no latent residual work still to be completed.
- D. Examine installed work and conditions under which testing is to be done to ensure that work has been completed, cleaned, and is operable. Do not proceed with TAB work until satisfactory conditions have been corrected in manner acceptable to Tester.
- E. Test, adjust and balance environmental systems and components, as indicated, in accordance with procedures outlined in applicable standards.
- F. Prepare report of test results, including instrumentation calibration reports, in format recommended by applicable standards.
- G. Patch holes in insulation, ductwork, and housings, which have been cut or drilled for test purposes, in manner recommended by original installer.
- H. Mark equipment settings, including damper control positions, valve indicators, fan speed control levers, and similar controls and devices, to show final settings at completion of TAB work. Provide markings with point or other suitable permanent identification materials.
- I. Prepare report of recommendations for correcting unsatisfactory mechanical performances when system cannot be successfully balanced, including, where necessary, modifications which exceed requirements of contract documents for mechanical work.
- J. Retest, adjust, and balance systems subsequent to significant system modifications, and resubmit test results.

END OF SECTION

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019



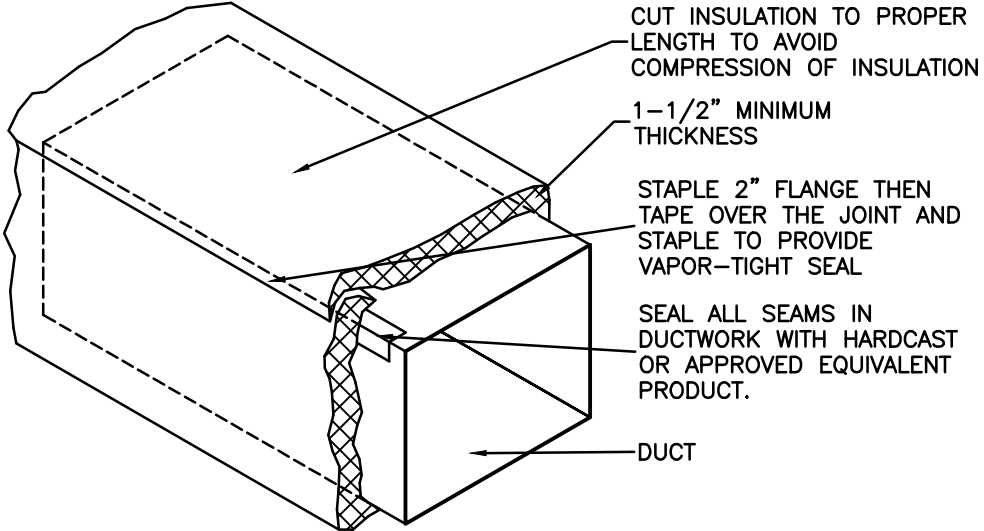
## AIR DISTRIBUTION DEVICE SCHEDULE

MARK		CD1	XG1
NECK SIZE		—	22x22
MODULE/FACE SIZE	INCH	24x24/24x24	24x24/23x23
MANUFACTURER	—	METALAIR	TITUS
MODEL NUMBER	—	5700A	PAR-AA
CONSTRUCTION	—	ALUMINUM	ALUMINUM
NOTES	—	1, 2, 3	1, 3, 4

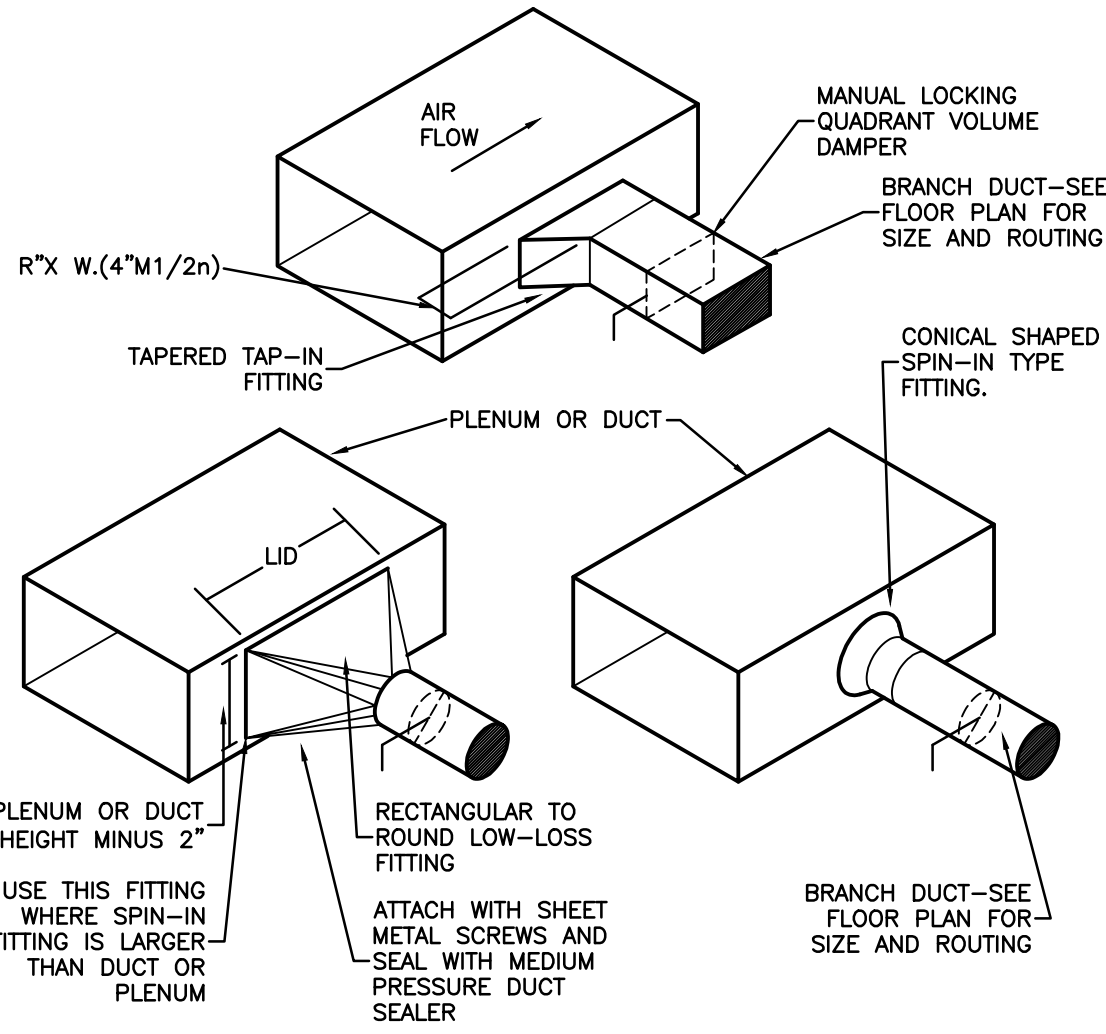
- NOTES:
- NECK SIZE OF DEVICE IS EQUAL TO THE DUCT SIZE INDICATED ON THE DRAWING.
  - PROVIDE WITH SQUARE TO ROUND ADAPTER. REFER TO PLANS FOR SIZE.
  - SEE PLANS FOR SIZE.
  - WHERE GRILLE IS INDICATED TO BE LOCATED IN LAY-IN CEILINGS, PROVIDE 24X24 LAY-IN PANEL BORDER, WHITE IN COLOR.

- REMARKS:
- REFER TO PLANS FOR EXACT LOCATIONS OF ALL DIFFUSERS, GRILLES AND REGISTERS.
  - COORDINATE FRAME STYLES WITH CEILING SYSTEM ACTUALLY FURNISHED.
  - NC VALUES FOR DIFFUSERS, GRILLES AND REGISTERS SHALL NOT EXCEED 35 WITH A ROOM ABSORPTION RATE OF 10db ie., 10-12 WATTS.
  - REFER TO THE MECHANICAL LEGEND FOR A DESCRIPTION OF THE AIR DEVICE MARK.
  - WHERE THE CONNECTING DUCT OR PLENUM CAN BE OBSERVED THROUGH THE FACE OF THE GRILLE, THE VISIBLE DUCTWORK SHALL BE PAINTED FLAT BLACK.

NOTE: SECURE INSULATION WITH WELDED STICK PINS ON DUCTWORK 24" AND LARGER. ALL JOINTS SHALL BE FABRIC TAPED AND MASTIC COATED WITH #8 MASTIC BY RCD CORPORATION.

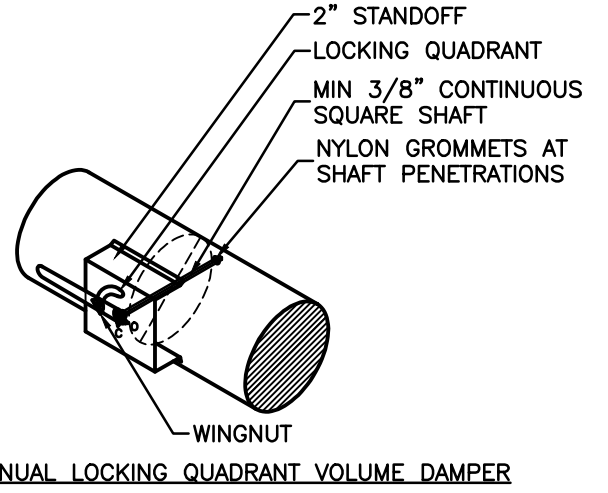


**TYPICAL DUCT WRAPPING DETAIL**  
NOT TO SCALE



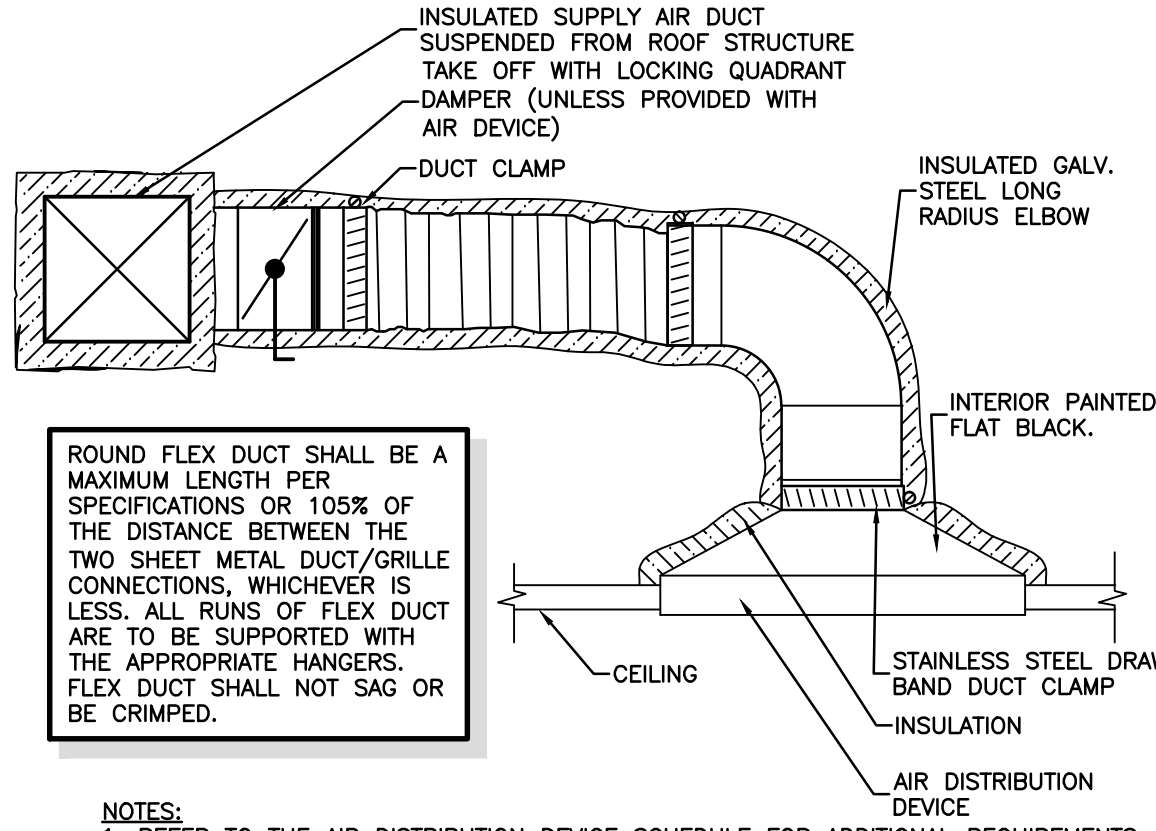
**BRANCH DUCT TAKE-OFF DETAIL**  
NOT TO SCALE

- NOTES:
- PROVIDE FITTING WITH 1" WIDE FLANGE WITH GASKET.
  - MUST MEET SMACNA GUAGE STANDARDS AND 2"W.G. STATIC PRESSURE.
  - CONTINUOUS WELD LONGITUDINAL SEAM FOR NO LEAKAGE AT 2" W.G. STATIC PRESSURE.



**MANUAL LOCKING QUADRANT VOLUME DAMPER**

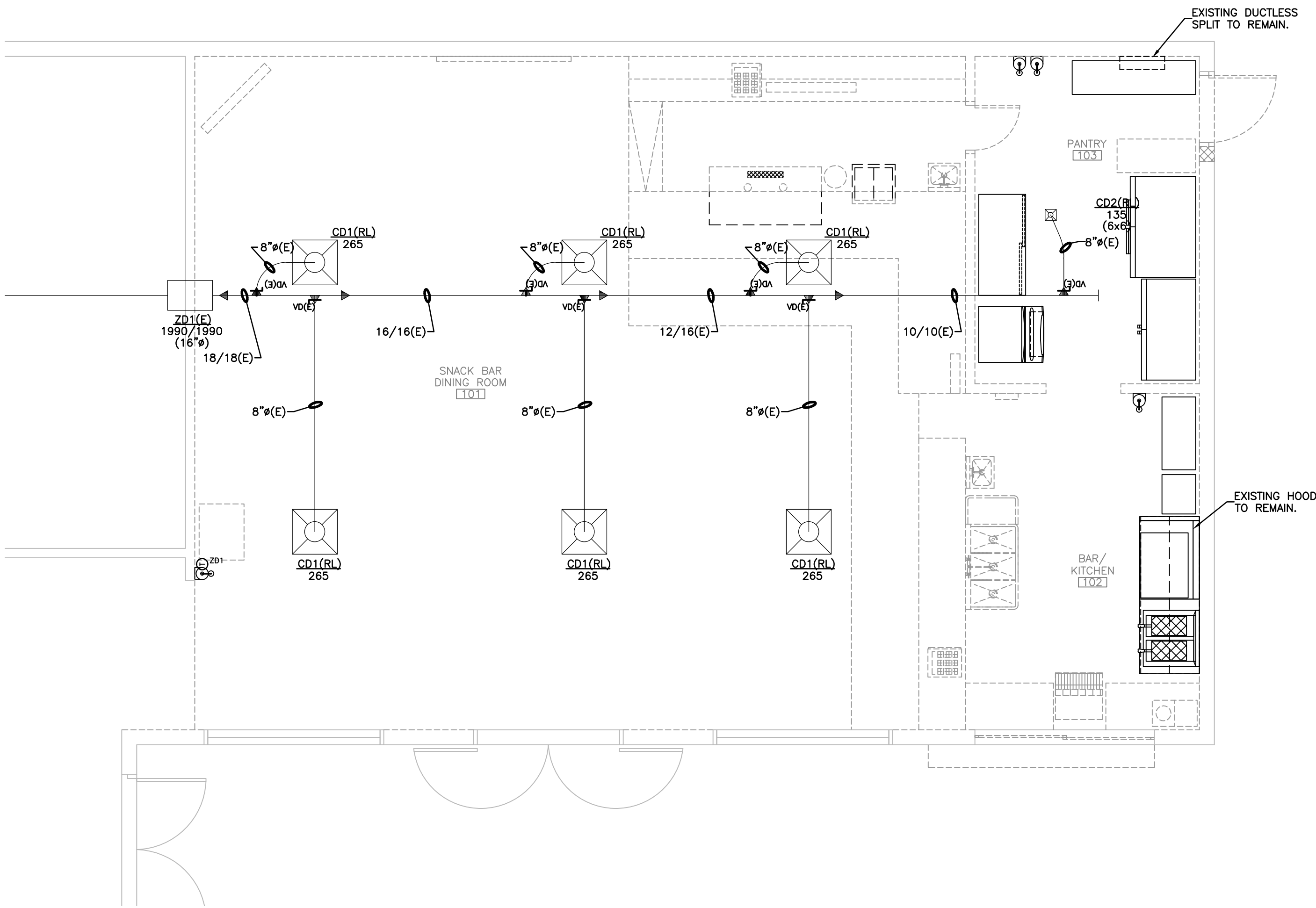
- NOTES:
- WINGNUT ON SHAFT IS UNACCEPTABLE. WINGNUT MUST RIDE IN LOCKING QUADRANT.



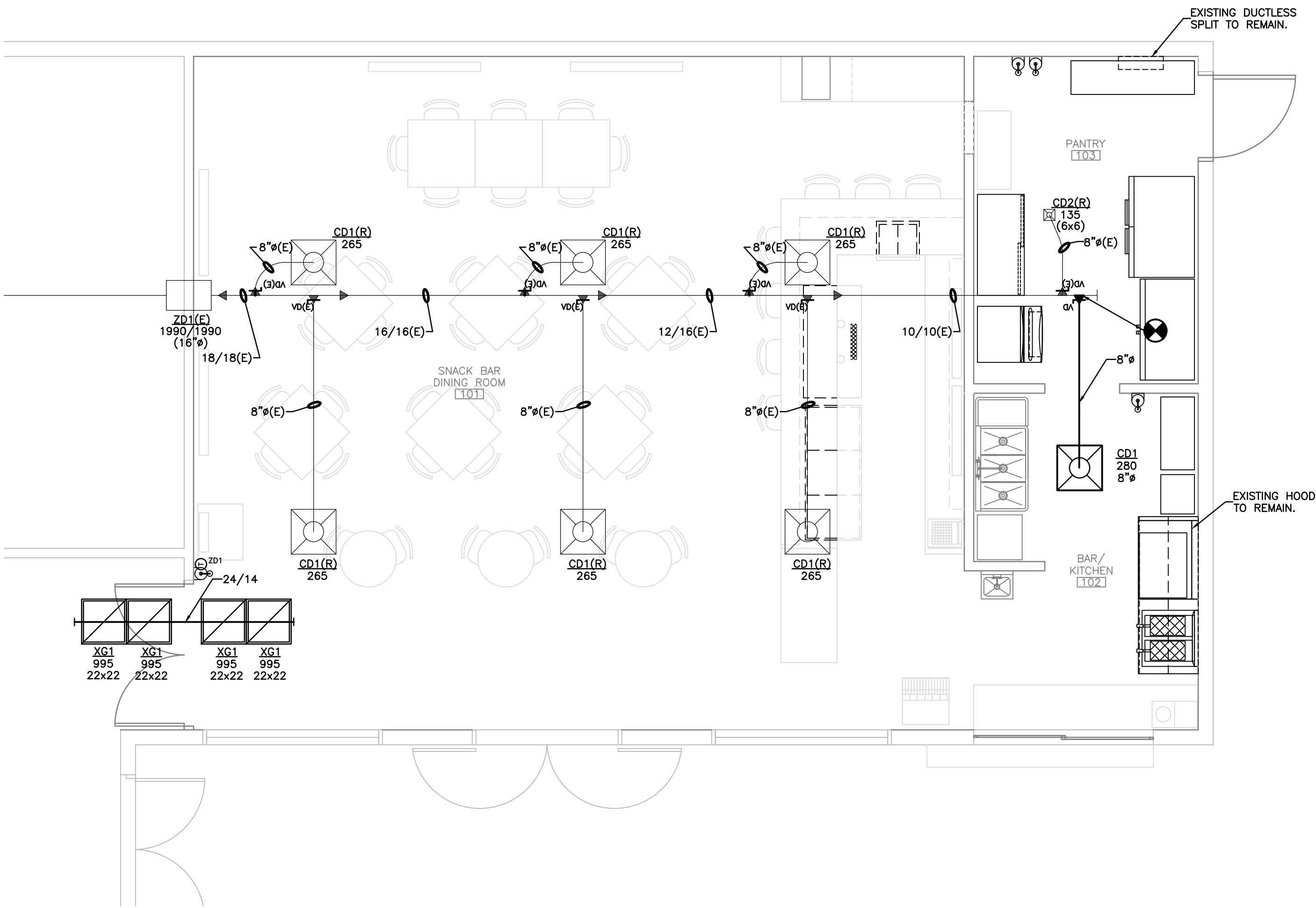
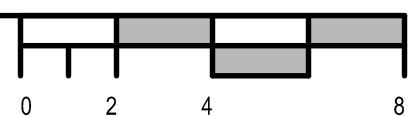
ROUND FLEX DUCT SHALL BE A MAXIMUM LENGTH PER SPECIFICATIONS OR 105% OF THE DISTANCE BETWEEN THE TWO SHEET METAL DUCT/GRILLE CONNECTIONS, WHICHEVER IS LESS. ALL RUNS OF FLEX DUCT ARE TO BE SUPPORTED WITH THE APPROPRIATE HANGERS. FLEX DUCT SHALL NOT SAG OR BE CRIMPED.

- NOTES:
- REFER TO THE AIR DISTRIBUTION DEVICE SCHEDULE FOR ADDITIONAL REQUIREMENTS.
  - REFER TO SPECIFICATIONS FOR MAXIMUM FLEXIBLE DUCT LENGTH.
  - SUSPEND AIR DEVICE FROM ABOVE, DO NOT SUPPORT FROM CEILING.
  - INTERIOR OF DEVICE TO BE PAINTED FLAT BLACK.

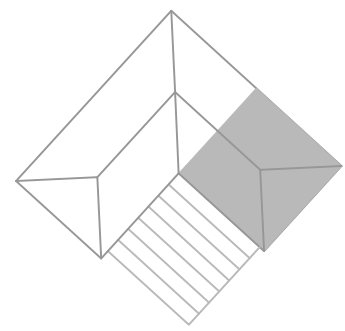
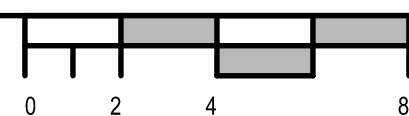
**FLEXIBLE DUCT RUN-OUTS TO AIR DEVICE**  
NOT TO SCALE



**1 DEMOLITION PLAN**  
M1.1 SCALE: 1/4" = 1'-0"



**2 RENOVATION PLAN**  
M1.1 SCALE: 1/4" = 1'-0"



**KEY PLAN**

**AGI**  
Anston-Greenlees, Inc.  
Mechanical & Electrical Consulting Engineers  
1315 West Fletcher Avenue, Tampa, FL 33612 Tel(813)963-1919  
Email: AGI@ag-engineers.com HTTP://www.ag-engineers.com  
Florida Engineering Business Number 6093

**NOT FOR CONSTRUCTION**  
STEPHEN R. FORKNER, P.E. 90532  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

**TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.**

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019

**HVAC FLOOR PLANS,  
DETAILS, AND  
SCHEDULES**

**M1.1**



ELECTRICAL LEGEND		
SYMBOL	DESCRIPTION	MOUNTING
	LED LUMINAIRE, LETTER INDICATES TYPE. 1 = GKT. NO. , a = SWITCH DESIGNATION	CEILING – SEE FIXTURE SCHEDULE
	LED LUMINAIRE WITH EMERGENCY BATTERY BACK-UP, CIRCUIT, LETTER INDICATES TYPE.	CEILING – SEE FIXTURE SCHEDULE
	LED LUMINAIRE, LETTER INDICATES TYPE	CEILING – SEE FIXTURE SCHEDULE
	LED LUMINAIRE WITH EMERGENCY BATTERY BACK-UP, CIRCUIT, LETTER INDICATES TYPE.	CEILING – SEE FIXTURE SCHEDULE
	LED STRIP LIGHT, LETTER INDICATES TYPE.	CEILING – SEE FIXTURE SCHEDULE
	LED LUMINAIRE, LETTER INDICATES TYPE	CEILING – SEE FIXTURE SCHEDULE
	LED LUMINAIRE, LETTER INDICATES TYPE	WALL – SEE FIXTURE SCHEDULE
	EXIT LIGHT, LETTER INDICATES TYPE SINGLE OR DUAL FACED AS INDICATED ON DRAWINGS	SEE FIXTURE SCHEDULE
	LOW VOLTAGE OCCUPANCY SENSOR, VACANCY TYPE (MANUAL ON/AUTO OFF) SENSORSWITCH OR APPROVED EQUIVALENT. PROVIDE WIDER RANGE DEVICES WHEN NECESSARY.	CEILING MOUNTED OR WALL MOUNT AT 9'-0" AFF
	LOW VOLTAGE (0-10V) OCCUPANCY SENSOR, PASSIVE INFRA-RED (ON/AUTO OFF) SENSORSWITCH OR APPROVED EQUIVALENT.	CEILING MOUNTED OR WALL MOUNT AT 9'-0" AFF
	LIGHTING CONTROL WALL SWITCH. PUSH BUTTON ON/OFF. LOW VOLTAGE (0-10V) LIGHTING CONTROL WALL SWITCH WITH STAINLESS STEEL COVERPLATE. SENSOR SWITCH sPDM-SA OR APPROVED EQUIVALENT. COORDINATE WITH THE OCCUPANCY SENSOR. LETTER INDICATES FIXTURE GROUPING BY SWITCH	M.H. 48" AFF TO TOP
	MULTI-WAY LIGHTING CONTROL WALL SWITCH (e.g. 3-WAY). PUSH BUTTON ON/OFF. LOW VOLTAGE (0-10V) LIGHTING CONTROL WALL SWITCH WITH STAINLESS STEEL COVERPLATE. SENSOR SWITCH sPDM-SA-3X OR APPROVED EQUIVALENT. COORDINATE WITH THE OCCUPANCY SENSOR. LETTER INDICATES FIXTURE GROUPING BY SWITCH	M.H. 48" AFF TO TOP
	PUSH-BUTTON DIMMER SWITCH, ON/OFF/DIMMING – 0-10V LED DIMMER SHALL BE COMPATIBLE WITH LED DRIVER AND OCCUPANCY SENSOR. SENSOR SWITCH sPDM-SA-D OR APPROVED EQUIVALENT.	M.H. 48" AFF TO TOP
	LINE VOLTAGE SINGLE POLE SWITCH (120/277V), LETTER INDICATES FIXTURE GROUPING BY SWITCH	M.H. 48" AFF TO TOP
	MOTOR/HP RATED TOGGLE SWITCH SIZED PER MOTOR MANUFACTURER'S RECOMMENDATION, MINIMUM 20 AMP.	SURFACE, ADJACENT TO OR ON MOTOR
	LINE VOLTAGE SINGLE POLE SWITCH (120/277V), KEY OPERATED	M.H. 48" AFF TO TOP
	SINGLE RECEPTACLE – 120VAC	M.H. 16" AFF TO BOTTOM
	DUPLEX RECEPTACLE – 120VAC	M.H. 16" AFF TO BOTTOM
	DUPLEX RECEPTACLE – 120VAC	MOUNTED 42" AFF TO BOTTOM OR AS NOTED
	DOUBLE DUPLEX RECEPTACLE – 120VAC	M.H. 16" AFF TO BOTTOM
	DOUBLE DUPLEX RECEPTACLE – 120VAC	MOUNTED 42" AFF TO BOTTOM OR AS NOTED
	DUPLEX RECEPTACLE – 120VAC, WP DENOTES WEATHERPROOF, GFI DENOTES GROUND FAULT PROTECTION.	M.H. 16" AFF TO BOTTOM
	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	AS NOTED
	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	WALL MOUNTED
	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX, FOR HAND DRYER ELECTRICAL CONNECTION.	M.H. 44" AFF TO CENTER
	MOTOR CONNECTION	AS NOTED

THIS IS A STANDARD LEGEND. NOT ALL DEVICES SHOWN ARE USED IN THESE DOCUMENTS.

ELECTRICAL LEGEND		
SYMBOL	DESCRIPTION	MOUNTING
	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED ABOVE CEILING OR BEHIND FINISHED WALL.	N/A
	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED BELOW FINISHED FLOOR OR UNDERGROUND	N/A
	RACEWAY EXPOSED ON WALL OR CEILING	N/A
	HOMERUN TO PANELBOARD – LETTER INDICATES PANEL, NUMBER INDICATES CIRCUIT, MINIMUM 3/4" CONDUIT. NOTE: ANY HOMERUN WITHOUT FURTHER DESIGNATION INDICATES TWO #12 AWG AND #12 AWG EQUIPMENT GROUND. PC OUTLET REQUIRES SEPARATE NEUTRAL, MIN. #10 AWG. DEDICATED CIRCUIT REQUIRES SEPARATE NEUTRAL	N/A
	RACEWAY RISER, UP OR DOWN AS NOTED	N/A
	CONDUIT CAPPED	N/A
	4"x4"x2-1/8" DEEP OUTLET BOX FOR COMMUNICATIONS WITH 1 " CONDUIT TO ACCESSIBLE CEILING SPACE. CABLING AND DATA JACK BY OWNER.	M.H. 16" AFF TO BOTTOM OR AS NOTED
	4"x4"x2-1/8" DEEP TV OUTLET BOX WITH 3/4" CONDUIT W/BUSHING STUBBED INTO ACCESSIBLE CEILING SPACE. CABLING AND JACK BY OWNER.	M.H. 16" AFF TO BOTTOM OR AS NOTED
	120/240 VOLT POWER PANELBOARD	M.H. 6'-0" TO TOP OR AS NOTED
	NON-FUSIBLE SWITCH	M.H. 6'-0" TO TOP OR AS NOTED
	FUSIBLE SAFETY SWITCH	M.H. 6'-0" TO TOP OR AS NOTED
	COMBINATION MOTOR STARTER	AS NOTED
	RECESSED ENCLOSED 50 AMP, 2-POLE, 208 VOLT, SINGLE PHASE CIRCUIT BREAKER FOR RANGE. MOUNT ABOVE COUNTER CENTERED BETWEEN COUNTER TOP AND OVERHEAD CABINETS. CIRCUIT BREAKER: SQUARE "D" #Q0250 FLUSH ENCLOSURE: SQUARE "D" #Q02100BNF GROUND BAR KIT: SQUARE "D" #PK0GT2 3/4"C.; 3 #8, 1 #10 GND.	FLUSH MOUNTED
	FIRE ALARM STROBE XX = CANDELA RATING, MINIMUM 75 CANDELA U.O.N.	TOP 6" BELOW CEILING OR 80" TO BOTTOM OF LENS A.F.F. WHICHEVER IS LOWER
	FIRE ALARM COMBINATION HORN/STROBE, LETTER IN CIRCLE INDICATES TYPE: C=CHIME, B=BELL, H=HORN, S=SPEAKER XX = CANDELA RATING, MINIMUM 75 CANDELA U.O.N.	TOP 6" BELOW CEILING OR 80" TO BOTTOM OF LENS A.F.F. WHICHEVER IS LOWER
	FIRE ALARM HORN/SPEAKER, LETTER IN CIRCLE INDICATES TYPE: B=BELL, C=CHIME, H=HORN, S=SPEAKER WP=WEATHERPROOF TYPE	TOP 6" BELOW CEILING OR 80" TO CTR. A.F.F. WHICHEVER IS LOWER EXTERIOR HORNS MOUNTED AT 96" AFF
	FIRE ALARM SPEAKER. RECESSED IN THE CEILING OR SURFACE MOUNTED WHEN INDICATED WITH (SUR)	CEILING MOUNTED U.O.N. WITH (SUR)
	FIRE ALARM TROUBLE BELL (SEE F.A. ONE LINE DIAGRAM)	AS NOTED
	FIRE ALARM MANUAL PULL STATION	M.H. 48" AFF TO TOP
	FIRE ALARM REMOTE INDICATOR	M.H. 48" AFF TO TOP
	FIRE ALARM FLOW SWITCH	AS NOTED
	FIRE ALARM TAMPER SWITCH	AS NOTED
	FIRE ALARM MAGNETIC DOOR HOLDER COORDINATE MOUNTING HEIGHT WITH DOOR SUPPLIER	WALL MOUNTED
	FIRE ALARM SMOKE DETECTOR	CEILING MOUNTED
	FIRE ALARM DUCT MOUNTED SMOKE DETECTOR	DUCT MOUNTED (SEE MECHANICAL DWGS.)
	FIRE ALARM HEAT DETECTOR	CEILING MOUNTED
	HIGH TEMP. FIRE ALARM HEAT DETECTOR 190°F FIXED TEMP. RATING	CEILING MOUNTED
	FIRE ALARM CONTROL RELAY (AIR HANDLER SHUTDOWN SOLENOID VALVE, ETC.)	M.H. 60" A.F.F. TO BOTTOM OR AS NOTED
	FIRE RATED SMOKE DAMPER WITH MOTOR ACTUATOR PROVIDE RELAY AND CONTROL CIRCUIT TO CONTROL 120V SMOKE DAMPER POWER	AS NOTED

THIS IS A STANDARD LEGEND. NOT ALL DEVICES SHOWN ARE USED IN THESE DOCUMENTS.

ELECTRICAL GENERAL NOTES:  
(THESE NOTES APPLY TO ALL SHEETS)

- ALL ELECTRICAL WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:  
A. FLORIDA BUILDING CODE (FBC) 6TH EDITION (2017): THIS CODE INCLUDES THE 2017 FBC BUILDING, MECHANICAL, PLUMBING, ENERGY CONSERVATION, FUEL GAS, ACCESSIBILITY, AND TEST PROTOCOLS VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC BUILDING CHAPTER 35; FBC MECHANICAL CHAPTER 15; FBC PLUMBING CHAPTER 14; FBC ENERGY CONSERVATION CHAPTER 6; AND FBC FUEL GAS CHAPTER 8) (EFFECTIVE DECEMBER 31, 2017)  
B. 6TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2017)  
C. 2014 NATIONAL ELECTRIC CODE
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY THE EXISTING CONDITIONS TO GAIN KNOWLEDGE OF THE SCOPE OF WORK INVOLVED.
- "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- IN GENERAL, THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHOULD NOT BE SCALED. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. PROVIDE ALL ITEMS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
- ELECTRICAL INSTALLATION SHALL BE CLOSELY COORDINATED WITH ALL OTHER TRADES. REVIEW THE ENTIRE SET OF DOCUMENTS FOR COORDINATION. NO COST SHALL BE ASSOCIATED WITH ILL-TIMED INSTALLATION INCLUDING ANY REPAIRS OR REPLACEMENTS.
- ALL CONDUITS AND BOXES SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL CONDUIT RUNS ARE SCHEMATIC IN NATURE. EXACT ROUTING TO BE DETERMINED IN THE FIELD UNLESS OTHERWISE NOTED.
- APPLY A BITUMASTIC COATING FOR ALL EXPOSED METALLIC CONDUITS PENETRATING FLOOR SLABS FROM BELOW GRADE.
- PROVIDE ALL REQUIRED PULL BOXES, JUNCTION BOXES, ETC. FOR A COMPLETE INSTALLATION.
- PATCH, REPAIR AND REPAINT ALL WALLS THAT HAVE BEEN DAMAGED DUE TO ELECTRICAL ROUGH-IN. REMOVE ANY UNUSED CONDUIT AND WIRE.
- PROVIDE FIRE-STOPPING AT ALL FIRE WALL PENETRATIONS. USE A U.L. APPROVED SYSTEM LISTED FOR THE ASSOCIATED INSTALLATION.
- ALL CONDUCTORS SHALL BE STRANDED COPPER, THHN/THWN, MINIMUM #12 AWG. ALL CONDUCTORS SHALL BE IN CONDUIT. FLEXIBLE CONDUIT SHALL BE LIMITED TO A MAXIMUM OF 6'-0" IN LENGTH.
- MC CABLE OR OTHER PREMANUFACTURED CABLING SHALL NOT BE USED.
- ALL CIRCUITS SHALL CONTAIN A SEPARATE, GREEN, COPPER GROUNDING CONDUCTOR.
- ALL RECEPTACLES SHALL HAVE A GROUND TERMINAL.
- RECESSED LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE AT (4) POINTS. DO NOT SUPPORT FIXTURES FROM THE CEILING GRID, MECHANICAL PIPING, DUCTWORK, CONDUIT OR OTHER NON-STRUCTURAL BUILDING MEMBERS. PROVIDE SUPPLEMENTAL STEEL AS REQUIRED FOR INSTALLATION.
- THE COLOR OF ALL RECEPTACLES, TOGGLE SWITCHES AND COVERPLATES SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO ORDERING.
- PANELBOARDS SHALL BE ACCURATELY LABELED TO IDENTIFY FINAL CIRCUIT NUMBERS UTILIZED, THEIR LOAD AND LOCATION.
- SYSTEMS (FIRE ALARM, INTERCOM, TV, VOICE/DATA, SECURITY) WIRING SHALL NOT BE RUN UNDERGROUND. CABLING/SERVICES FROM ONE BUILDING TO ANOTHER MAY RUN UNDERGROUND. WIRING SHALL BE BATED SUCH USE.
- PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL PENETRATIONS OF FIRE RATED PARTITIONS, WALLS AND STRUCTURAL SLABS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, PRIOR TO SUBMITTING BID, LOCATIONS OF ALL SUCH FIRE RATED PARTITIONS, WALL AND STRUCTURAL SLABS.
- SEE SPECIFICATION FOR MORE REQUIREMENTS

ELECTRICAL DRAWING INDEX

- |      |                                   |
|------|-----------------------------------|
| E0.1 | ELECTRICAL LEGEND AND NOTES       |
| E0.2 | LUMINAIRE SCHEDULE AND CUT SHEETS |
| E1.1 | LIGHTING PLAN                     |
| E2.1 | POWER AND SYSTEMS PLAN            |
| E3.0 | ELECTRICAL RISER DIAGRAM          |
| E4.0 | ELECTRICAL DETAILS                |

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR	GWB	GYPSON WALL BOARD
AFG	ABOVE FINISHED GRADE	H.D.	HAND DRYER
E	EXISTING	INT	INTERCOM/PAGING CABINET
ETR	EXISTING TO REMAIN	MTG	MOUNTING
EWG	ELECTRIC WATER COOLER	MTD	MOUNTED
EWB	ELECTRIC WATER HEATER	M.H.	MOUNTING HEIGHT
EG	EQUIPMENT GROUND	N/A	NOT APPLICABLE
ESB	ENERGY SAVING BALLAST	PROJ	PROJECTOR LOCATION
EXP	EXPLOSION PROOF	U.O.N.	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	R	REMOVE
FATC	FIRE ALARM TERMINAL CABINET	RL	RELOCATED
GFI	GROUND FAULT PROTECTION	WP	WEATHER PROOF
G, GND	GROUND		

NOT FOR CONSTRUCTION  
ROBERT C. ANSTON, P.E. 40858  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS AND THE PROJECT MANUAL ARE COMPLETE AND COMPLY WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019



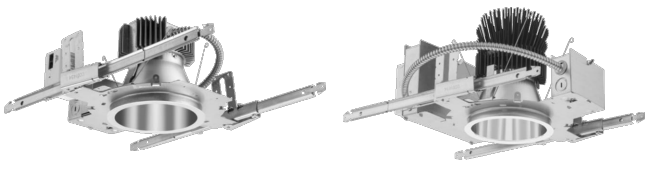

ELECTRICAL  
LEGEND AND  
NOTES

E0.1



LUMINAIRE SCHEDULE						
TYPE	DESCRIPTION	VOLTS	WATTS	BALLAST (IF APPLICABLE)	LAMPS	MOUNTING
A	6" OPEN REFLECTOR, LED DOWNLIGHT WITH WHITE TRIM. DUAL VOLTAGE. GOTHAM #EVO-40/15-6AR-WD-LSS-MVOLT-GZ10, OR APPROVED EQUIVALENT	120	19	LED DRIVER 0-10 VOLT DIMMING	LED 1,500 LUMENS, 4000K	RECESSED FLANGE
A1	SAME AS TYPE 'A' EXCEPT EQUIPPED WITH EMERGENCY BATTERY BACKUP. GOTHAM #EVO-40/15-6AR-WD-LSS-MVOLT-GZ10-EL, OR APPROVED EQUIVALENT	120	19	LED DRIVER 0-10 VOLT DIMMING, EMERGENCY BATTERY BACKUP	LED 1,500 LUMENS, 4000K	RECESSED FLANGE
C	4' LENGTH, NARROW HOUSING LED LUMINAIRE, ACRYLIC LENS, DIE-FORMED METAL HOUSING. LITHONIA #LBL4-3000LM-80CRI-40K-NODIM-GTL-MVOLT OR APPROVED EQUIVALENT	120	32	LED DRIVER	LED 3000 LUMENS, 4000K	SURFACE

FIXTURE 'A' AND 'A1'



Luminaire Type:  
Catalog Number:

Gotham Architectural Downlighting  
LED Downlights

**6" Evo®  
Downlight**

Solid-State Lighting

PS  
DESIGNGROUP

CSA  
CERTIFIED

ENERGY STAR

SHOWN: 4500LM (LEFT), 17,500LM (RIGHT)

### FEATURES

#### OPTICAL SYSTEM

- Patented Bounding Ray™ optical design (U.S. Patent No. 5,800,050)
- 45° cutoff to source and source image
- Top-down flash characteristic
- Polycarbonate lens integral to light engine

#### MECHANICAL SYSTEM

- 16-gauge galvanized steel construction; maximum 1-1/2" ceiling thickness
- Telescopic mounting bars maximum of 32", preinstalled, 4" vertical adjustment
- Toolless adjustments post installation
- Junction box capacity: 8 (4 in, 4 out ) 12AWG rated for 90°C
- Light engine and driver accessible through aperture

#### ELECTRICAL SYSTEM

- Fully serviceable and upgradeable lensed LED light engine
- 70% lumen maintenance at 60,000 hours
- Tested according to LM-79 and LM-80 standards
- Overload and short circuit protected
- 2.5 SDCM, 85 CRI typical, 90+ CRI optional

#### LISTINGS

- Fixtures are CSA certified to meet US and Canadian standards; wet location, covered ceiling. ENERGY STAR® certified product.


#### WARRANTY

5-year limited warranty. Complete warranty terms located at:  
[www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:**  
Actual performance may differ as a result of end user environment and application.  
All values are design or typical values, measured under laboratory conditions at 25 °C.

WATTAGE CONSUMPTION MATRIX			
NOMINAL LUMENS	DELIVERED LUMENS*	WATTAGE	LUMENS per WATT
1000	1074	11.8	91.4
1500	1595	18.5	86.2
2000	2064	23.2	89.2
2500	2660	29.5	90.2
3000	3077	36.6	84.1
3500	3665	42.1	87.1
4000	4050	48.1	84.2
4500	4623	46.9	98.6
5000	5256.3	48.66	108.0
6000	6371.4	57.61	110.6
8000	8246.7	74.89	110.1
10000	10636.5	97.13	109.5
12000	12332	115.0	107.2
15000	15776	150.9	104.5
17500	17801	175.3	101.5

\*Lumen Output for C880 - 3500K - M80 - Clear LS Reflector



This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.


- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a **shaded background**\*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a **shaded background**\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).


\*See ordering tree for details

GOTHAM ARCHITECTURAL DOWNLIGHTING | 1400 Lester Road Croyers GA 30012 | P 800.315.4982 | [gothamlighting.com](http://gothamlighting.com)

© 2014-2019 Acuity Brands Lighting, Inc. All Rights Reserved. Rev. 01/21/19. Specifications subject to change without notice.



FIXTURE 'B'



### FEATURES & SPECIFICATIONS

**INTENDED USE** — LBL LED wraparound provides a digital lighting platform to deliver general ambient lighting for surface-mount applications. The LED system delivers long life and excellent color to ensure a quality, low-maintenance lighting installation. Ideal for closets, storage rooms, hallways, stairwells and offices.

**CONSTRUCTION** — Metal parts are die formed from cold-gauge steel. Prismatic diffuser is 100% acrylic with sonically welded luminous ends. Continuous side flanges on fixture body provide light trap and continuous diffuser support to prevent accidental opening and simplify maintenance.

Finish: Five-stage iron phosphate pretreatment assures superior paint adhesion and rust resistance. Painted parts finished with high-gloss, high-reflectivity baked white polyester enamel (low VOC).

**OPTICS** — Curved prismatic diffuser with linear slopecrims and highly transmissive overlay minimizes lamp image and provides high-angle brightness control. Luminous end plates soften appearance for improved aesthetics.

**ELECTRICAL** — Long-life LEDs, coupled with high-efficiency drivers, provide superior quantity and quality of illumination for extended service life: 90% LED lumen maintenance at 50,000 hours (L90/50,000). The LEDs have a CRI of 82.

elidoLED driver options deliver choice of dimming range and choices for control, while assuring flicker-free, low-current inrush, 89% efficiency and low EMI.

Step-level dimming option allows system to be switched to 50% power for compliance with common energy codes while maintaining fixture appearance.

**CONTROLS** — Pair the LBL with the fixture mount Sensor Switch LSXR sensor for additional energy savings when the space is unoccupied. The LSXRBL sensor dims the fixture down to a low-level setting when there is no occupancy. This option is ideal for stairwells, back rooms, and closets due to the low occupancy level in those spaces.

Optional nLight® embedded controls continuously monitor system performance, allow for constant lumen management / compensation function, facilitate simple "plug-and-play" network and controls upgrading via Cat-5 cable. Ballast disconnect provided where required to comply with US and Canadian codes.

**LISTINGS** — CSA certified to meet US and Canadian standards. Damp listed.

DesignLights Consortium® (DLC) Premium qualified product. Not all versions of this product may be DLC Premium qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

**WARRANTY** — 5-year limited warranty. Complete warranty terms located at [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

Catalog Number






Notes


Type

**Low-Profile Curved-Basket LED Wraparound**

**LBL4**

4" LENGTH, NARROW HOUSING LED





This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and out-of-the-box control compatibility with simple commissioning.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is part of an A+ Certified solution for nLight® control networks when ordered with drivers marked by a **shaded background**\*
- This luminaire is part of an A+ Certified solution for nLight® control networks, providing advanced control functionality at the luminaire level, when selection includes driver and control options marked by a **shaded background**\*

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

\*See ordering tree for details

LED

LBL4

AGI  
Anston-Greenlees, Inc.  
Mechanical & Electrical Consulting Engineers  
1315 West Fletcher Avenue, Tampa, FL 33612 Tel: (813) 963-1919  
Email: [AGI@anston-greenlees.com](mailto:AGI@anston-greenlees.com) [HTTP://www.agi-engineers.com](http://www.agi-engineers.com)  
Florida Engineering Business Number 6093

NOT FOR CONSTRUCTION  
ROBERT C. ANSTON, P.E. 40858  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019

LUMINAIRE  
SCHEDULE AND  
CUT SHEETS

E0.2

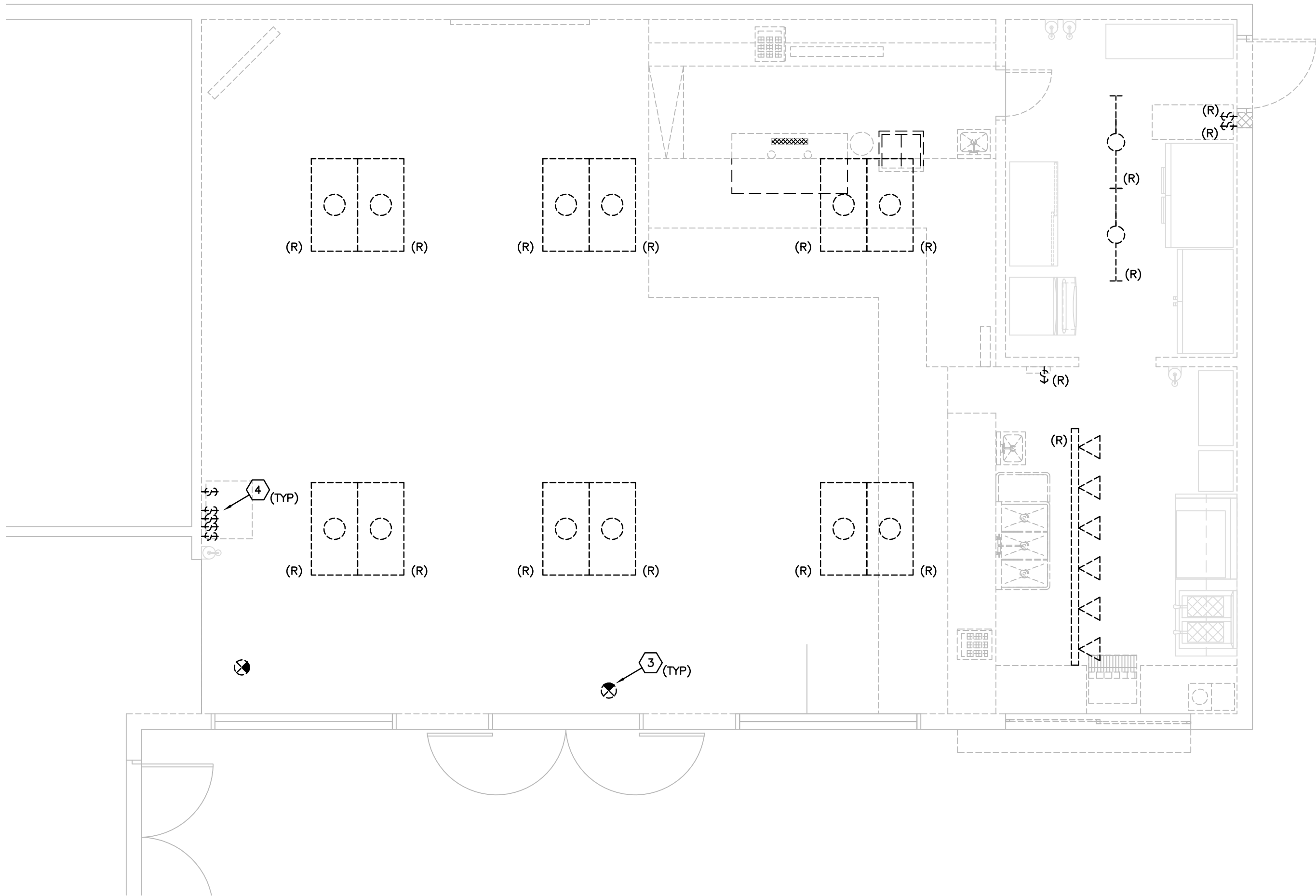
COPYRIGHT 2019, HEPNER ARCHITECTS, INCORPORATED. ALL RIGHTS RESERVED

LIGHTING DEMOLITION NOTES:

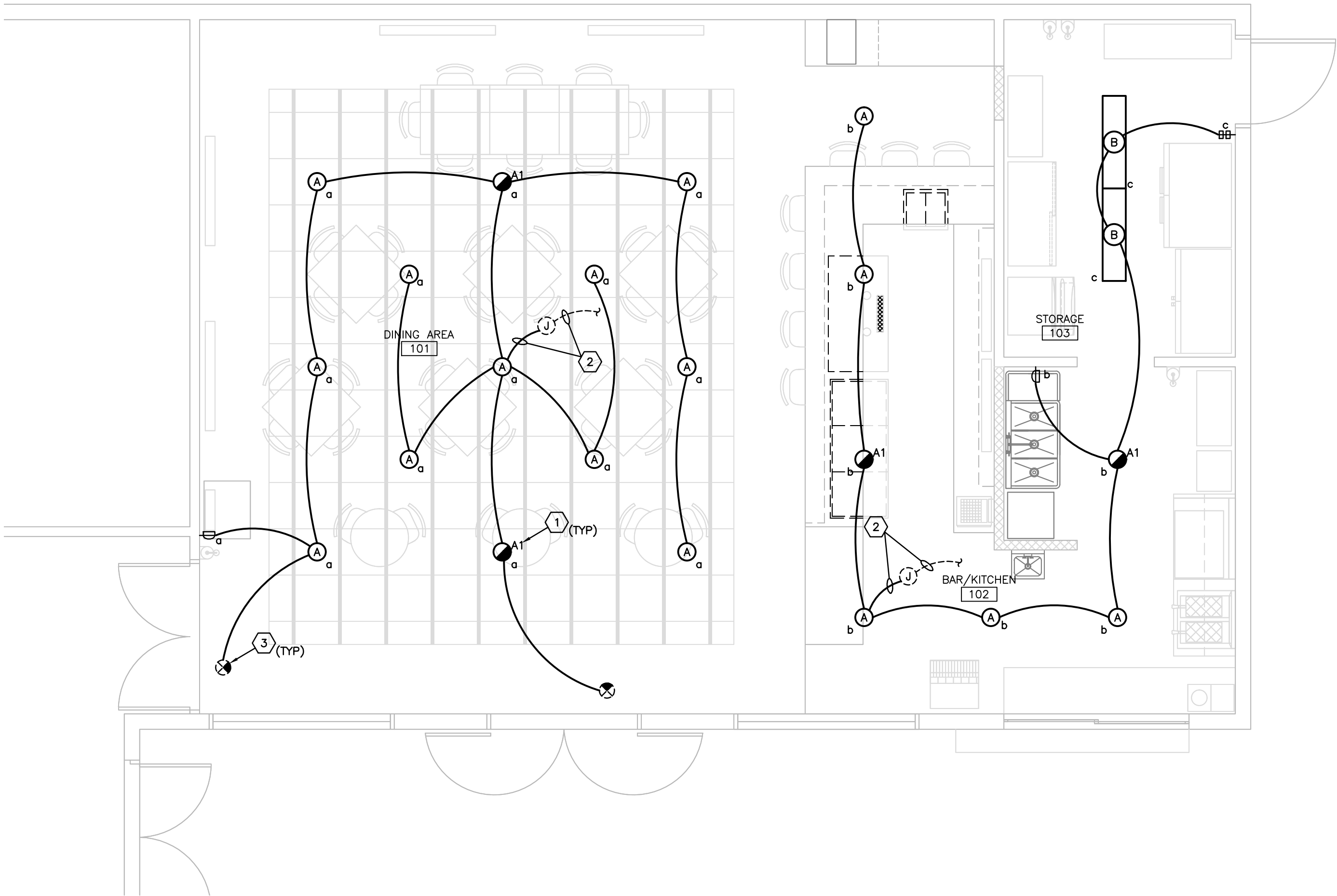
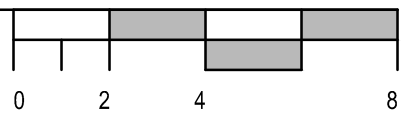
1. SPLICE AND EXTEND CIRCUITS AS NECESSARY TO MAINTAIN CIRCUIT CONTINUITY TO EXISTING LUMINAIRES AND OTHER DEVICES WHICH ARE TO REMAIN.
2. DASHED LUMINAIRES/DEVICES INDICATES EXISTING.
3. LUMINAIRES/DEVICES INDICATED WITH (R) ARE TO BE REMOVED.
4. EXISTING LIGHTING JUNCTION BOXES WHICH ARE NOT BEING REUSED SHALL BE REMOVED AND THE WALLS OR CEILINGS SHALL BE PATCHED AND PAINTED TO MATCH THE SURROUNDING AREA.
5. ALL DEVICES ON DASHED WALLS SHALL BE REMOVED. EXTEND CIRCUITS AS NECESSARY TO DEVICES WHICH ARE TO REMAIN TO MAINTAIN CIRCUIT CONTINUITY.

DRAWING NOTES:

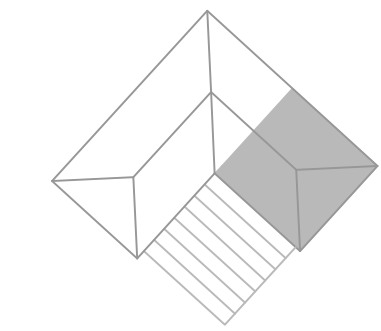
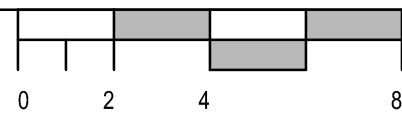
1. FIXTURES WITH EMERGENCY BATTERY PACKS SHALL BE SWITCHED AFTER THE EMERGENCY PACK SUCH THAT THE BATTERY PACK CONTINUOUSLY SEES NORMAL POWER. THE EMERGENCY BATTERY BACK-UP SHALL BE UNSWITCHED AND SHALL AUTOMATICALLY ILLUMINATE THE FIXTURE TO FULL BRIGHTNESS IN THE EVENT OF LOSS OF NORMAL POWER. TYPICAL FOR ALL HALF-SHADED FIXTURES.
2. EXTEND AND MODIFY EXISTING LIGHTING BRANCH CIRCUITS FOR THE NEW LUMINAIRE LAYOUT. PROVIDE ALL REQUIRED MODIFICATIONS AND EXTENSIONS TO THE EXISTING LIGHTING CIRCUITS TO CONNECT THE NEW LUMINAIRES. CONNECT THE EXISTING SWITCHES AND CONNECT THE NEW OCCUPANCY SENSORS. EXISTING LIGHTING CIRCUIT HOMERUNS CAN BE REUSED.
3. REMOVE, CLEAN AND REINSTALL EXISTING EXIT LIGHTS. EXIT LIGHTS SHALL BE CONNECTED TO LOCAL NORMAL POWER LIGHTING CIRCUIT BUT SHALL NOT BE SWITCHED.
4. REMOVE EXISTING SWITCHES THAT CONTROL DINING ROOM LIGHTING.



1 LIGHTING DEMOLITION PLAN  
E1.1 SCALE: 1/4" = 1'-0"



2 LIGHTING RENOVATION PLAN  
E1.1 SCALE: 1/4" = 1'-0"



KEY PLAN

AGI  
Anston-Greenlees, Inc.  
Mechanical & Electrical Consulting Engineers  
1315 West Fletcher Avenue, Tampa, FL 33612 Tel(813)963-1919  
Email: [AGI@anston-greenlees.com](mailto:AGI@anston-greenlees.com) [HTTP://www.agi-engineers.com](http://www.agi-engineers.com)  
Florida Engineering Business Number 6093

NOT FOR CONSTRUCTION  
ROBERT C. ANSTON, P.E. 40858  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019

LIGHTING  
PLAN

E1.1

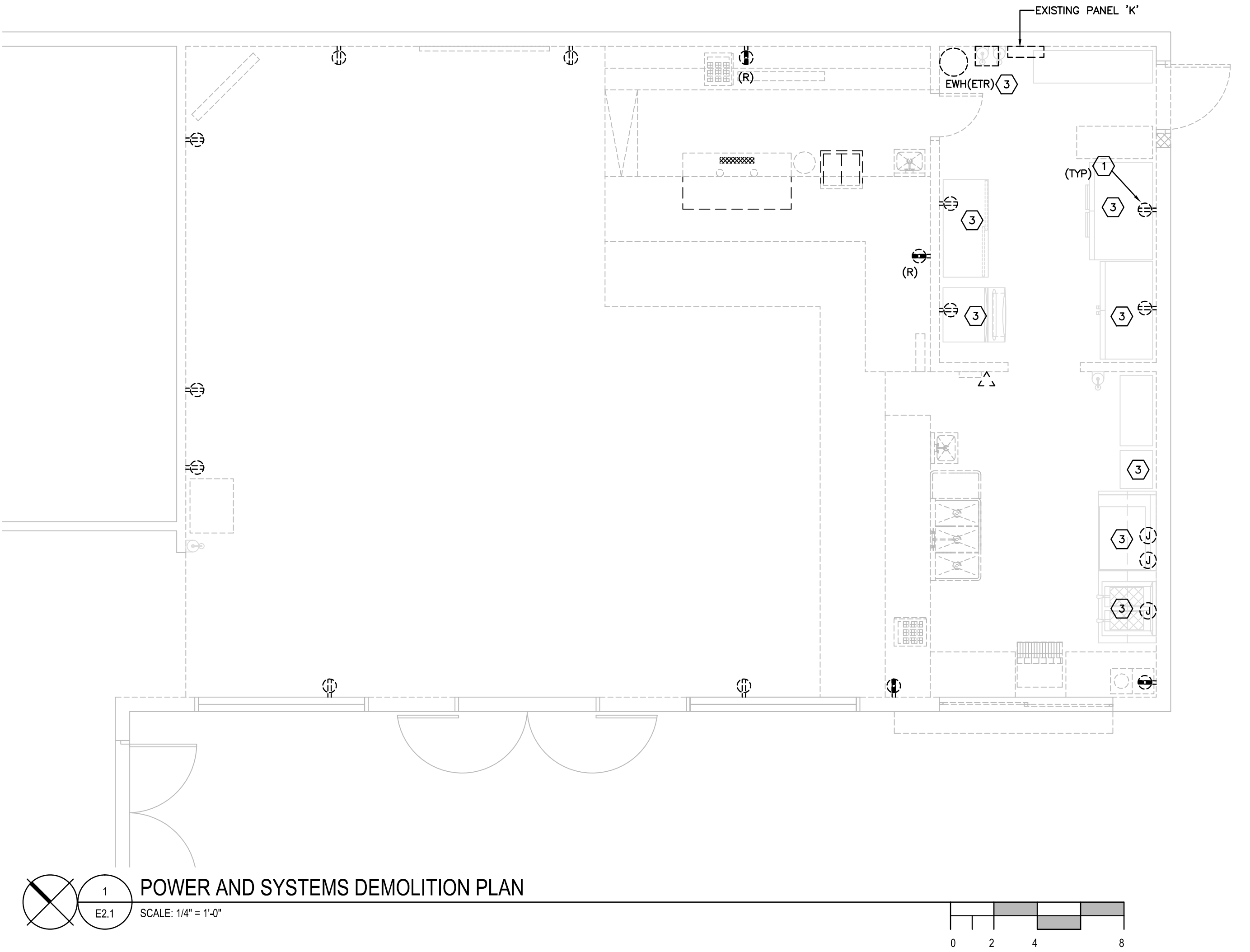


DEMOLITION NOTES:

1. SPLICE AND EXTEND CIRCUITS AS NECESSARY TO MAINTAIN CIRCUIT CONTINUITY TO EXISTING LUMINAIRES AND OTHER DEVICES WHICH ARE TO REMAIN.
2. DASHED DEVICES INDICATES EXISTING.
3. DEVICES INDICATED WITH (R) ARE TO BE REMOVED.
4. EXISTING JUNCTION BOXES WHICH ARE NOT BEING REUSED SHALL BE REMOVED AND THE WALLS OR CEILINGS SHALL BE PATCHED AND PAINTED TO MATCH THE SURROUNDING AREA.
5. REFER TO ARCHITECTURAL DRAWINGS FOR THE AREAS AND EXTENT OF THE REQUIRED DEMOLITION.

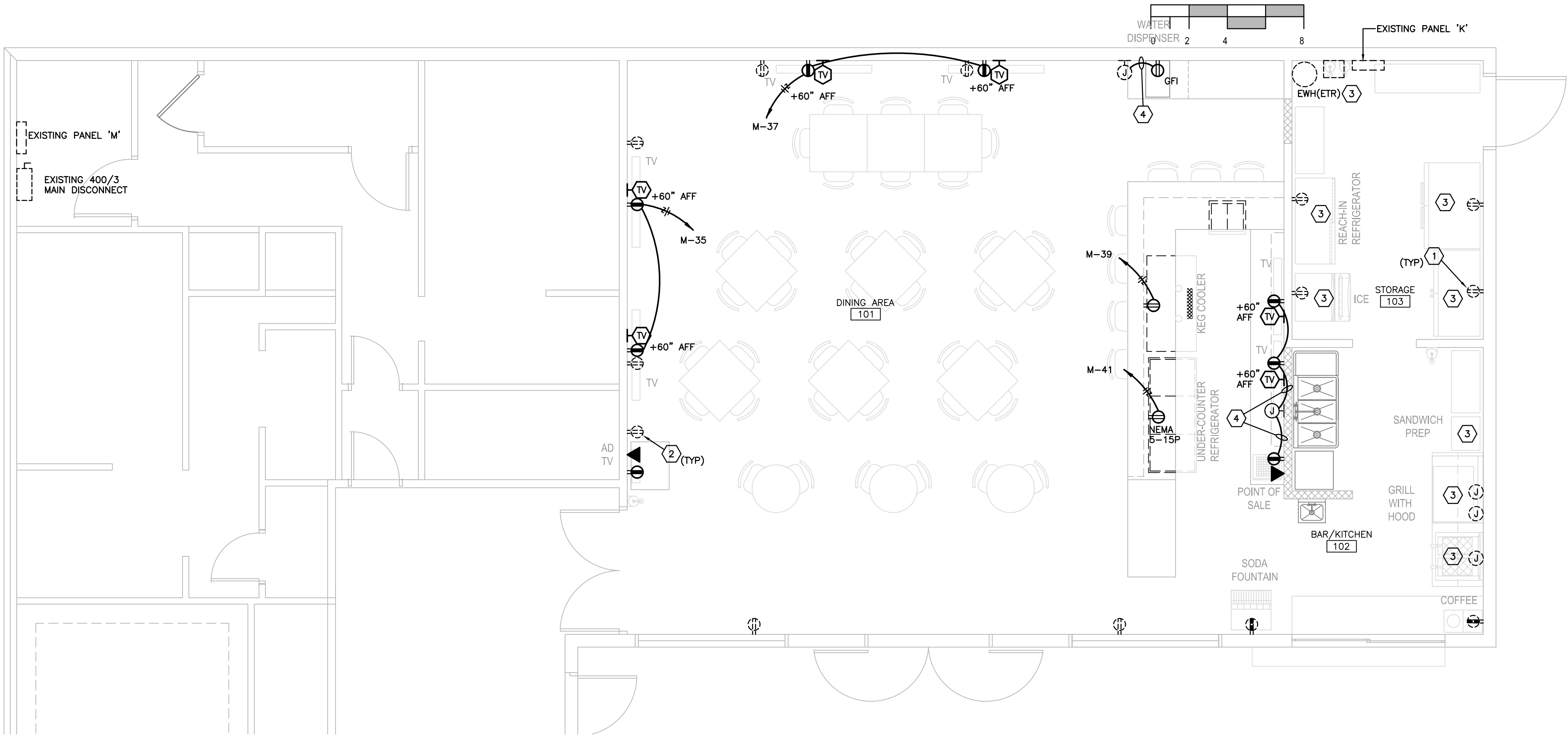
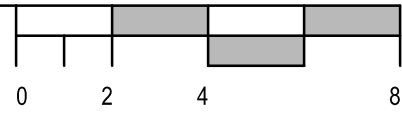
DRAWING NOTES:

1. REMOVE AND PROTECT EXISTING ELECTRICAL DEVICES ON WALL WHERE EXISTING GYPSUM WALL BOARD AND WOOD WAINSCOT IS BEING REMOVED. REFER TO ARCHITECTURAL DRAWINGS FOR AREAS AND EXTENT OF DEMOLITION. REINSTALL DEVICES INTO NEW WALL. PROVIDE ALL NEW COVERPLATES. VERIFY EXACT COLOR WITH ARCHITECT.
2. PROVIDE ALL NEW COVERPLATES ON ALL RECEPTACLES/DEVICES WHICH ARE TO REMAIN. VERIFY EXACT COLOR WITH ARCHITECT.
3. EXISTING EQUIPMENT TO REMAIN. REMOVE, PROTECT AND REINSTALL AS REQUIRED.
4. EXTEND AND MODIFY EXISTING RECEPTACLE BRANCH CIRCUITS TO NEW RECEPTACLE. PROVIDE ALL REQUIRED MODIFICATIONS AND EXTENSIONS TO THE EXISTING CIRCUITS



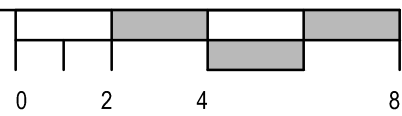
POWER AND SYSTEMS DEMOLITION PLAN

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



POWER AND SYSTEMS RENOVATION PLAN

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



KEY PLAN

AGI  
Anston-Greenlees, Inc.  
Mechanical & Electrical Consulting Engineers  
1315 West Fletcher Avenue, Tampa, FL 33612 Tel(813)963-1919  
Email: [info@ag-engineers.com](mailto:info@ag-engineers.com) [HTTP://www.ag-engineers.com](http://www.ag-engineers.com)  
Florida Engineering Business Number 6093

NOT FOR CONSTRUCTION

ROBERT C. ANSTON, P.E. 40858  
TO THE BEST OF MY KNOWLEDGE, THESE DRAWINGS  
AND THE PROJECT MANUAL ARE COMPLETE AND  
COMPLY WITH THE 2017 FLORIDA BUILDING CODE

TAMPA SPORTS  
AUTHORITY -  
BABE ZAHARIAS  
GRILL RENOV.

11412 N. FOREST HILLS DR  
TAMPA, FLORIDA 33612

TO THE BEST OF THE ARCHITECT'S KNOWLEDGE  
THE PLANS AND SPECIFICATIONS ARE COMPLETE  
AND COMPLY WITH THE FLORIDA BUILDING CODE

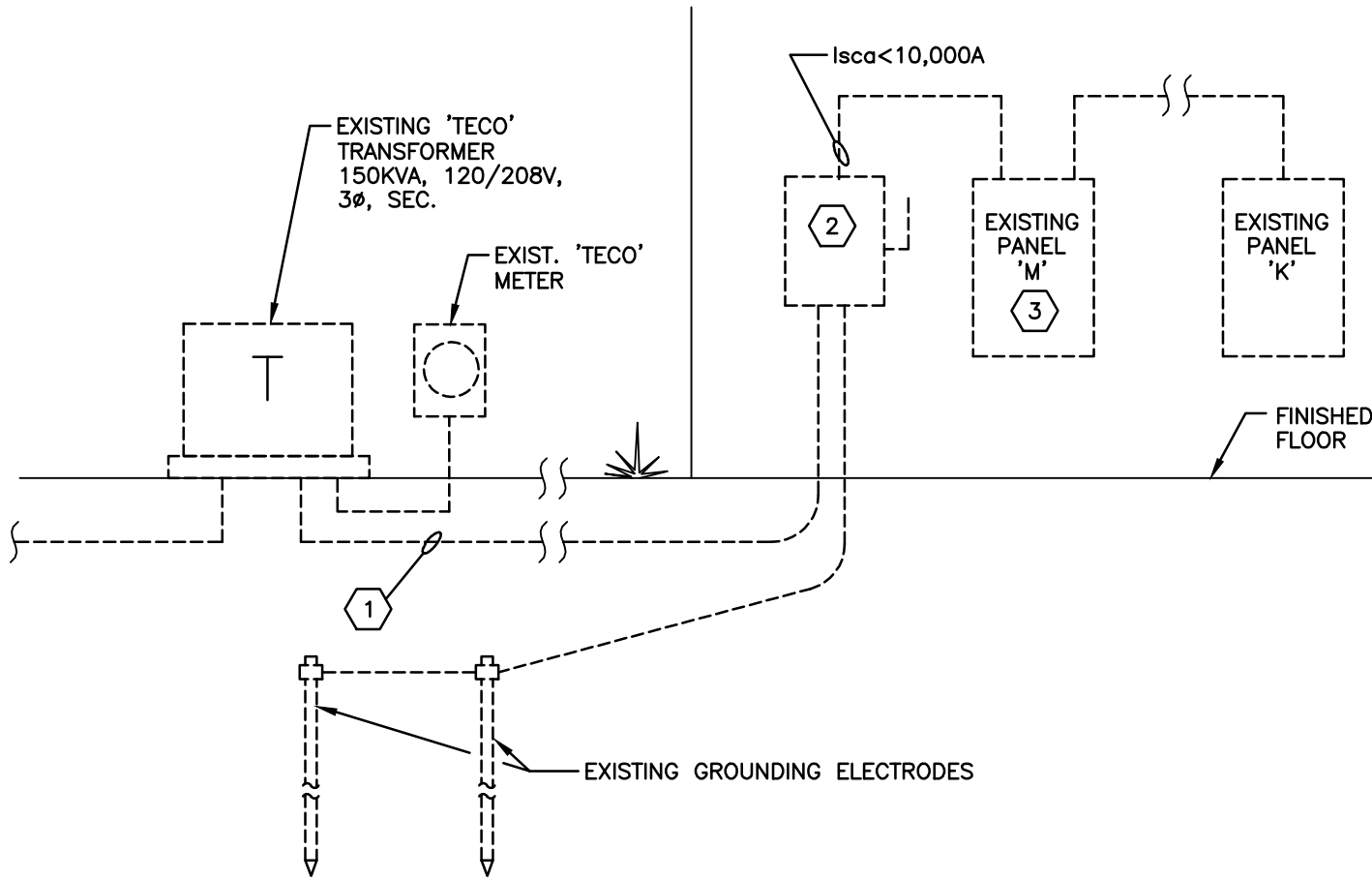
PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019

ELECTRICAL  
RENOVATION  
PLAN

E2.1

RISER DIAGRAM NOTES:

- 1
- EXISTING 120/208V, 400A, 3Ø SERVICE FROM TAMPA ELECTRIC COMPANY.
- 2
- EXISTING 208V, 3-POLE, MAIN DISCONNECT FUSED AT 400 AMPS.
- 3
- EXISTING 400A PANEL 'M', 120/208V, 3Ø, 4W, 44-CIRCUIT PANELBOARD.
- 4
- EXISTING PANEL 'K' 120/208V, 200A, 3Ø, 4W, 44-CIRCUIT PANELBOARD.



EXISTING ELECTRICAL RISER DIAGRAM  
SCALE: NONE

PROJECT NO.	3172
DISTRIBUTION	DATE
90% REVIEW SET	2/15/2019
100% REVIEW SET	2/22/2019



