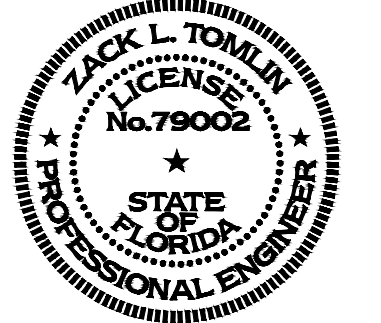


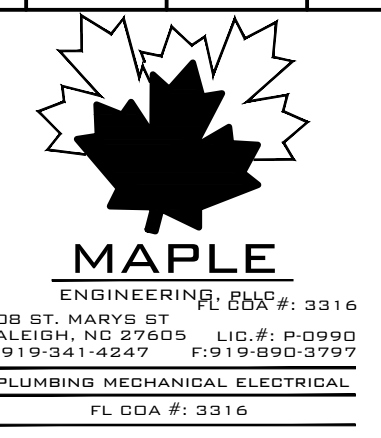
Planworx
ARCHITECTURE, P.A.
5711 Six Forks Road, Suite 100
Raleigh, NC 27609

office (919) 846-8100
website www.planworx.com

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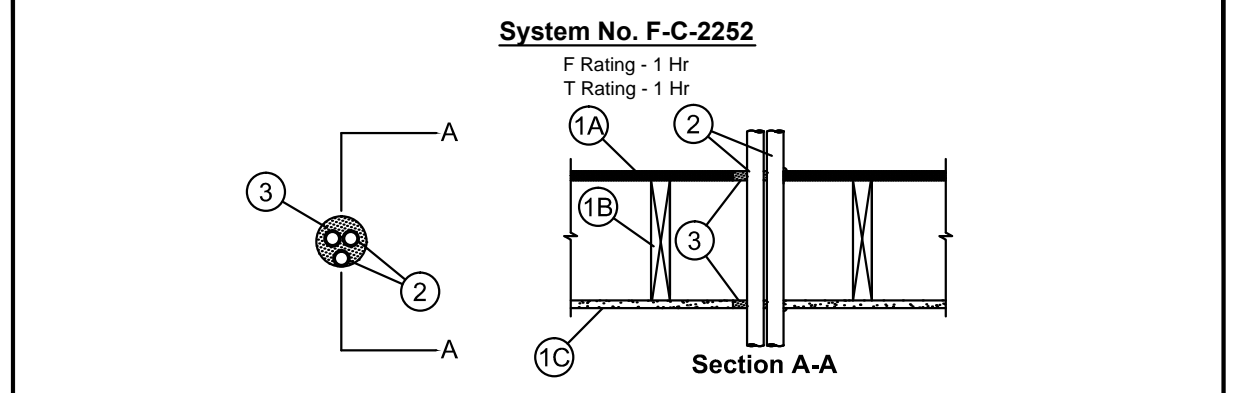
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PROJECT NO: **PLX-1906**

DRAWN BY: JLL
CHECKED BY: ZLT

SHEET TITLE: **PLUMBING DETAILS**

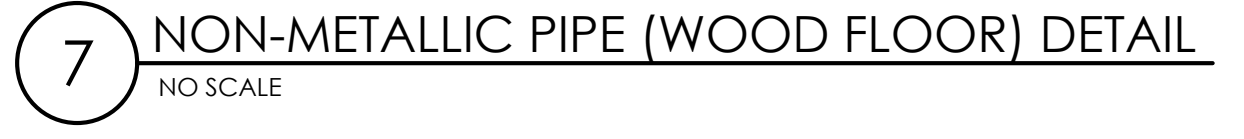
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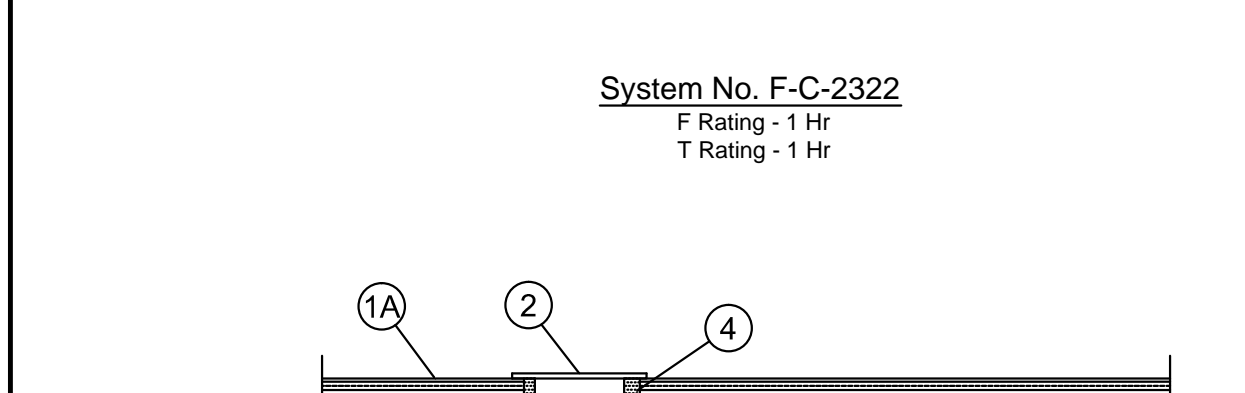
- Floor-Ceiling Assembly** - The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:
 - Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 3 in.
 - Wood Joists** - Nom 10 in. deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Gypsum Board*** - Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design. Max diam of opening is 3 in.
- Chase Wall** - (Optional, Not Shown) - The through penetrant (item 2) may be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in., greater than diameter of opening cut in side and top plates to accommodate the through penetrant (item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** - Nom 2 by 4 in., 2 by 6 in. or double nom 2 by 4 in. lumber studs.
 - Soile Plate** - Nom 2 by 4 in., 2 by 6 in., or parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 3 in.
 - Top Plate** - The double top plate shall consist of two nom 2 by 4 in., two nom 2 by 6 in., or two sets of parallel 2 by 4 in. lumber plates, tightly butted. Max diam of opening is 3 in.
 - Gypsum Board*** - Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.
- Through Penetrants** - One or more nonmetallic pipes, conduits or tubing to be installed either concentrically or eccentrically within the opening. Min space between pipes, conduits or tubes to be 0 in. Annular space between the pipes, conduits or tubing and the periphery of the opening shall be min 0 in. (point contact) to max 1 in. Penetrants to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes, conduits or tubing may be used:
 - Polyvinyl Chloride (PVC) Pipe** - Nom 1 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) piping systems.
 - Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 1 in. diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems.
 - Rigid Nonmetallic Conduit (RNC)*** - Nom 1 in. diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70).
 - Cross Linked Polyethylene (PEX) Tubing** - Nom 1 in. diam (or smaller) SDR9 PEX tubing for use in closed (process or supply) piping systems.
 - Electrical Nonmetallic Tubing (ENT)*** - Nom 1 in. diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA 70).
- Fill, Void or Cavity Material*** - Sealant - Min 3/4 in. thickness of fill material applied within the annulus, flush with the top surface of the floor or chase wall sole plate. Min 5/8 in. thickness of fill material applied within the annulus, flush with bottom surface of gypsum board ceiling or chase wall top plate. Min 1/4 in. diam bead of fill material applied at point contact location on the top surface of floor or sole plate and at the penetrant/ceiling or penetrant/chase wall top plate interface.

Specified Technologies Inc. - SpecSeal LCI Sealant
*Bearing the UL Classification Marking

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- Floor-Ceiling Assembly** - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:
 - Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Max diam of opening is 5 in. (127 mm).
 - Wood Joists** - Nom 2 by 10 in. (51 by 254 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped. As an alternate to lumber joists, nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists trusses or **Structural Wood Members*** with bridging as required with ends firestopped.
 - Furring Channels** - (Not Shown) - Resilient galv steel furring installed perpendicular to wood joists (item 1B) between gypsum board (item 1D) and wood joists as required in the individual Floor-Ceiling Design.
 - Gypsum Board*** - Nom 4 ft (122 mm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists as specified in the individual Floor-Ceiling Design.
- Closet Flange** - Polyvinyl chloride (PVC) or acrylonitrile butadiene styrene (ABS) closet flange installed in hole-sawed opening in flooring system with flange secured to top of flooring with steel screws. Diam of circular opening through flooring (item 1A) to be max 1/2 in. (13 mm) larger than outside diam of closet flange.
- Drain Piping** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVC or ABS drain piping and fittings. Short length of pipe with 90 degree elbow fitting cemented into bottom socket of closet flange. Drain piping to seal stack cemented into elbow.
- Fill, Void or Cavity Material*** - Sealant - Fill material forced into annulus between closet stub and periphery opening in flooring to max extent possible, flush with bottom surface of floor. Additional fill material to be installed such that a min 3/8 in. (10 mm) crown is formed around the closet stub on bottom surface of floor.

SPECIFIED TECHNOLOGIES INC. - Type WF300 Caulk
*Bearing the UL Classification Mark
- Water Closet** - (Not Shown) - Floor mounted vitreous china water closet.

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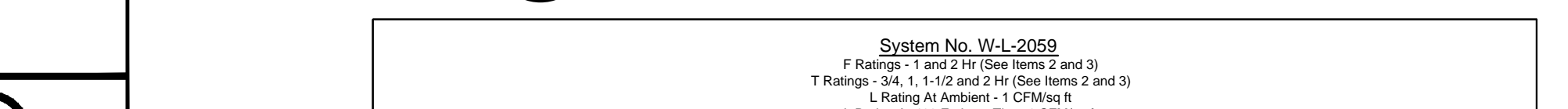


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- SEE STRUCTURAL PLANS FOR ACTUAL DEPTH OF FOOTING, 'C'.
 - SEE STRUCTURAL PLANS FOR ACTUAL WIDTH OF FOOTING, TO CALCULATE 'D'.
 - MAXIMUM DEPTH OF INVERT EQUAL TO 1/2 x (CORRIDOR WIDTH - 2D') + C" - PIPE Ø"
 - MAXIMUM DEPTH OF INVERT MEASURED TO TOP OF PIPE
- NOTE: DO NOT LOCATE PIPE BELOW BEARING PLANE.**
NOTE: FOOTING DETAILS ARE GENERIC IN NATURE, ANY UPDATES TO STRUCTURAL ELEMENTS WILL IMPACT PIPING INVERTS.

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- Wall Assembly** - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 and V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
 - Gypsum Board*** - 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 in. (127 mm).
- Through-Penetrants** - One nonmetallic pipe or conduit to be centered within the freestop system. The annular space shall be max 1/4 in. (6 mm). Pipe or conduit to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
 - Polyvinyl Chloride (PVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 80 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. When Schedule 80 PVC pipe is used, the F and T Ratings are 1 hr. When Schedule 40 PVC pipe is used in closed (process or supply) piping systems, the F and T Ratings are equal to the assembly rating of the wall in which it is installed.
 - Rigid Nonmetallic Conduits*** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 80 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70). When Schedule 80 PVC conduit is used, the F and T Ratings are 1 hr.
 - Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
 - Acrylonitrile Butadiene Styrene (ABS) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or foamed core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - Fire Resistant Polypropylene (FRPP) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - Polyvinylidene Fluoride (PVDF) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVDF pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - Fiberglass Reinforced Pipe (FRP) Pipe** - Nom 4 in. (102 mm) diam (or smaller) glass fiber reinforced thermosetting resin pipe for use in closed (process or control) or vented (drain, waste or vent) piping systems. When FRP pipe is used, T Rating is 3/4 hr.
 - High Density Polyethylene (HDPE) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 HDPE pipe for use in closed (process or supply) piping systems.
- Freestop System** - The freestop system shall consist of the following:
 - Fill, Void or Cavity Material*** - Sealant - Fill material forced into annular space to max extent possible. Caulk shall be installed flush with both surfaces of wall assembly. **SPECIFIED TECHNOLOGIES INC.** - SpecSeal 100, 101, 102, 109, 120 or 129 Sealant, SpecSeal LCI Sealant, SpecSeal Series SIL300 Sealant
 - Fill, Void or Cavity Material*** - Wrap Strip - Nom 1/8 in 3/16 in. (3.2 or 4.8 mm) thick incombustible material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick incombustible material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. The layers of wrap strips are industrially wrapped around the through-penetrant with ends butted and held in place with masking tape. Butted ends in successive layers shall be aligned.

Fire Rating of Wall (hr)	Max. Diam of Through Penetrant (in.)	No. of Wrap Strip Layers	F Rating Hr	T Rating Hr
1	1-1/2 (38)	1	1	1
2	1-1/2 (38)	1	2	1-1/2
1	2 (51)	1	1	1
2	2 (51)	1	2	1-1/2
1	3 (76)	2	1	1
2	3 (76)	2	2	2
1	4 (102)	3	1	1
2	4 (102)	3	2	2

- Except as noted in Item 2, the F and T Rating of the freestop system is dependent upon the fire rating of wall, diam of through penetrant and the number of wrap strips as tabulated below:
- Specified Technologies Inc.** - SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip or SpecSeal RED Wrap Strip
 - Steel Collar** - Collar fabricated from coils of precast 0.016 in. (0.4 mm) thick (30 MSG) galv steel sheet available from wrap strip manufacturer. Collar shall be min 1-1/2 in. (38 mm) deep with 1 in. (25 mm) wide by 2 in. (51 mm) long anchor tabs for securement to the concrete floor or wall. Reinforce tabs, 3/4 in. (19 mm) wide tapering down to 1/4 in. (6 mm) wide and located opposite the anchor tabs, are folded 90 degree toward pipe surface to maintain the annular space around the pipe and to retain the wrap strips. Steel collar wrapped around wrap strips and pipe with a 1 in. (25 mm) wide overlap material faced on both sides with a plastic film, supplied in 1-1/2 in. (38 mm) wide strips. The layers of wrap strips are industrially wrapped around the through-penetrant with ends butted and held in place with masking tape. Butted ends in successive layers shall be aligned.

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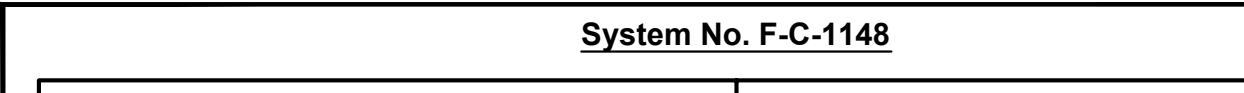


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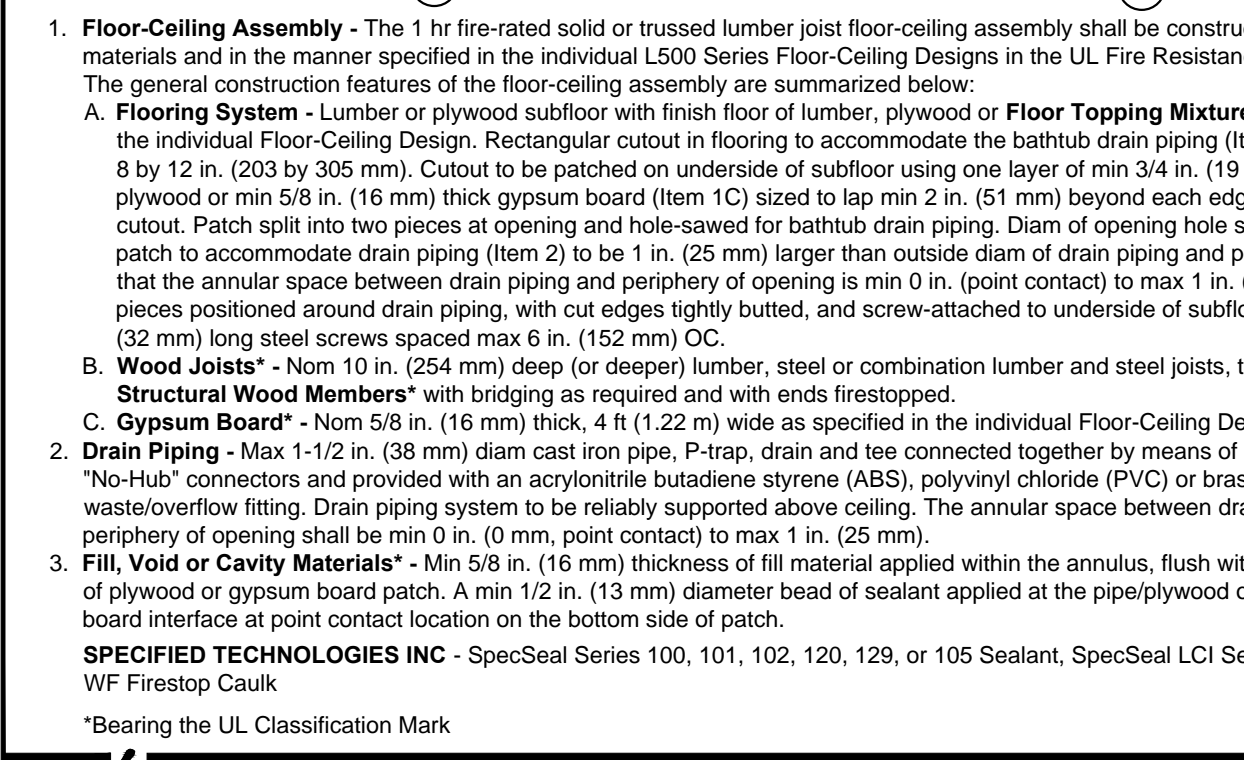
- INSTALL WATER HEATER PER MANUFACTURER REQUIREMENTS
- PROVIDE HEAT TRAP ON CW AND HW LINES PER ENERGY CODE
- ELEVATE DRAIN PAN AS NECESSARY TO ALLOW PROPER FLOW TO EXTERIOR

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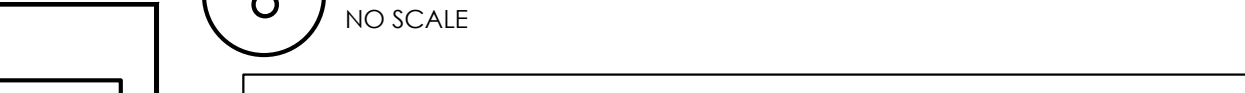


- | ANSI/UL1479 (ASTM E814) | CAN/ULC S115 |
|---|---|
| F Rating - 1 Hr | F Rating - 1 Hr |
| T Rating - 0 Hr | FT Rating - 0 Hr |
| L Rating At Ambient - Less Than 1 CFM/sq ft | FH Rating - 1 Hr |
| L Rating At 400 F - Less Than 1 CFM/sq ft | FTH Rating - 0 Hr |
| | L Rating At Ambient - Less Than 1 CFM/sq ft |
| | L Rating At 400 F - Less Than 1 CFM/sq ft |
- Floor-Ceiling Assembly** - The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction features of the floor-ceiling assembly are summarized below:
 - Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Rectangular cutout in flooring to accommodate the bathtub drain piping (item 2) to be max 8 by 12 in. (203 by 305 mm). Cutout to be patched on underside of subfloor using one layer of min 3/4 in. (19 mm) thick plywood or min 5/8 in. (16 mm) thick gypsum board (item 1C) sized to lap min 2 in. (51 mm) beyond each edge of rectangular cutout. Patch split into two pieces at opening and hole-sawed for bathtub drain piping. Diam of opening hole sawed through patch to accommodate drain piping (item 2) to be 1 in. (25 mm) larger than outside diam of drain piping and positioned such that the annular space between drain piping and periphery of opening is min 0 in. (point contact) to max 1 in. (25 mm). Two pieces positioned around drain piping, with cut edges tightly butted, and screw-attached to underside of subfloor with 1-1/4 in. (32 mm) long steel screws spaced max 6 in. (152 mm) OC.
 - Wood Joists*** - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - Gypsum Board*** - Nom 5/8 in. (16 mm) thick, 4 ft (122 mm) wide as specified in the individual Floor-Ceiling Design.
 - Drain Piping** - Max 1-1/2 in. (38 mm) diam cast iron pipe, P-trap, drain and tee connected together by means of stainless steel "No-Hub" connectors and provided with an acrylonitrile butadiene styrene (ABS), polyvinyl chloride (PVC) or brass bathtub waste/overflow fitting. Drain piping system to be reliably supported above ceiling. The annular space between drain piping and periphery of opening shall be min 0 in. (point contact) to max 1 in. (25 mm).
 - Fill, Void or Cavity Materials*** - Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of plywood or gypsum board patch. A min 1/2 in. (13 mm) diameter bead of sealant applied at the pipe/plywood or pipe/gypsum board interface at point contact location on the bottom side of patch.

SPECIFIED TECHNOLOGIES INC. - SpecSeal Series 100, 101, 102, 120, 129, or 105 Sealant, SpecSeal LCI Sealant, or Type WF Firestop Caulk
*Bearing the UL Classification Mark

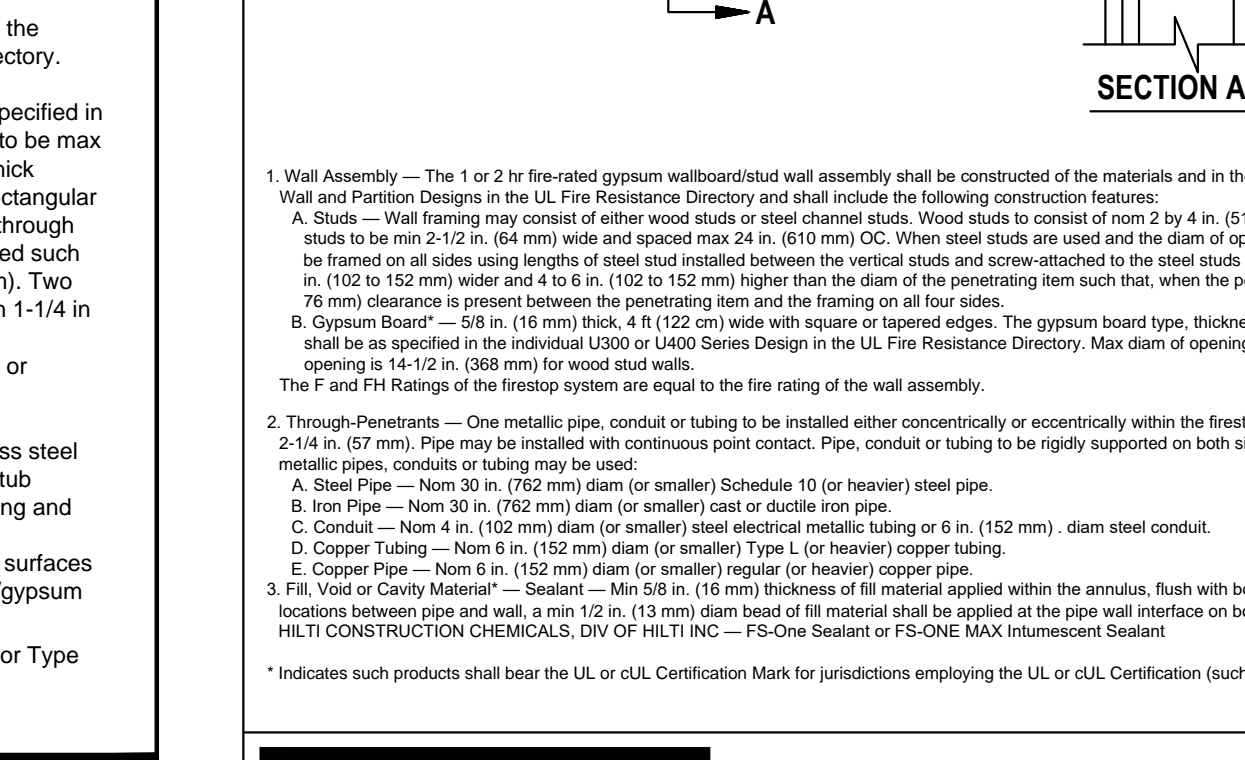


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- Wall Assembly** - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw-attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) taller than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the framing on all four sides.
 - Gypsum Board*** - 5/8 in. (16 mm) thick, 4 ft (122 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 in. (127 mm).
- Through-Penetrants** - One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the freestop system. The annular space shall be min 0 in. to max 2-1/4 in. (57 mm). Pipe may be installed with continuous point contact. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - Steel Pipe** - Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
 - Iron Pipe** - Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.
 - Conduit** - Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing or 6 in. (152 mm) diam steel conduit.
 - Copper Tubing** - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe** - Nom 6 in. (152 mm) diam (or smaller) regular (or heavier) copper pipe.
- Fill, Void or Cavity Material*** - Sealant - Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or construction cutout locations between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe/wall interface on both surfaces of wall.

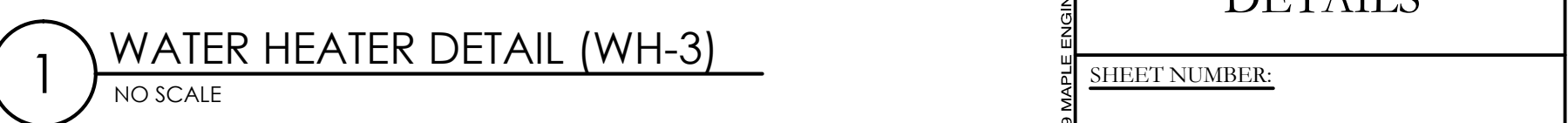
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC. - FS-OneSealant or FS-OneSeal MAX Intumescent Sealant
*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



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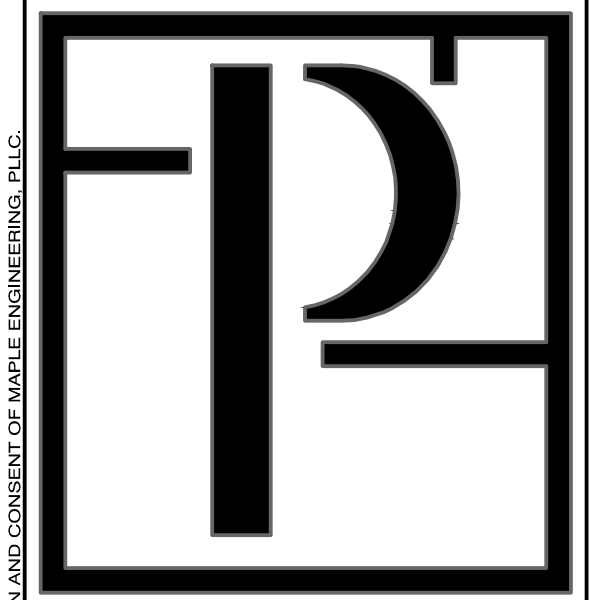
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FIRE RATING LEGEND	
	1-HR WALL
	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	



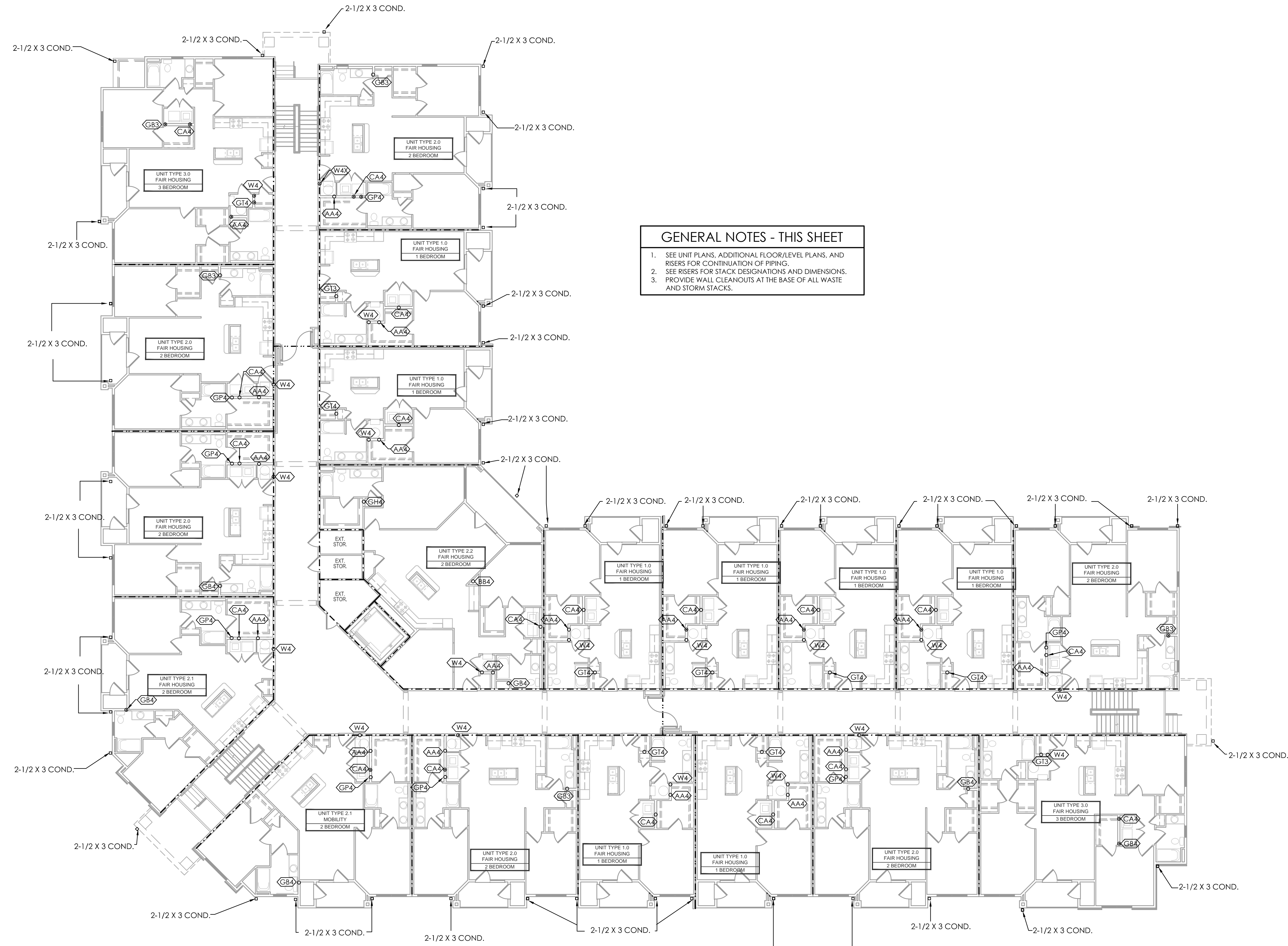
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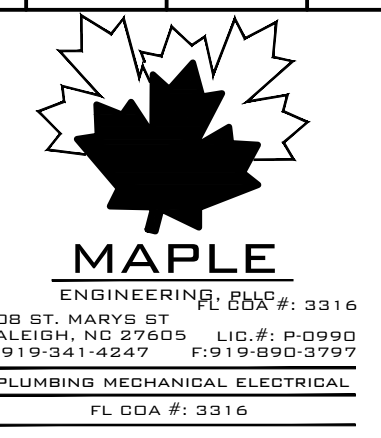
GENERAL NOTES - THIS SHEET

- SEE UNIT PLANS, ADDITIONAL FLOOR/LEVEL PLANS, AND RISERS FOR CONTINUATION OF PIPING.
- SEE RISERS FOR STACK DESIGNATIONS AND DIMENSIONS.
- PROVIDE WALL CLEANOUTS AT THE BASE OF ALL WASTE AND STORM STACKS.



1 PLUMBING SECOND FLOOR PLAN
SCALE: 3/32" = 1'-0"

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Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



ISSUE DATE:	07.19.19	DESCRIPTION
REVISIONS	NUMBER	DATE
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PROJECT NO: **PLX-1906**
DRAWN BY: JLL
CHECKED BY: ZLT
SHEET TITLE: **PLUMBING SECOND FLOOR PLAN**
SHEET NUMBER:

P1.11

7/18/2019 5:12 PM
PLX-1906-P1.11.DWG

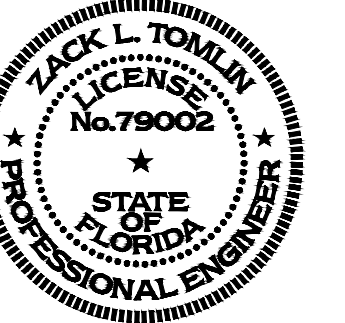
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FIRE RATING LEGEND	
	1-HR WALL
	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	



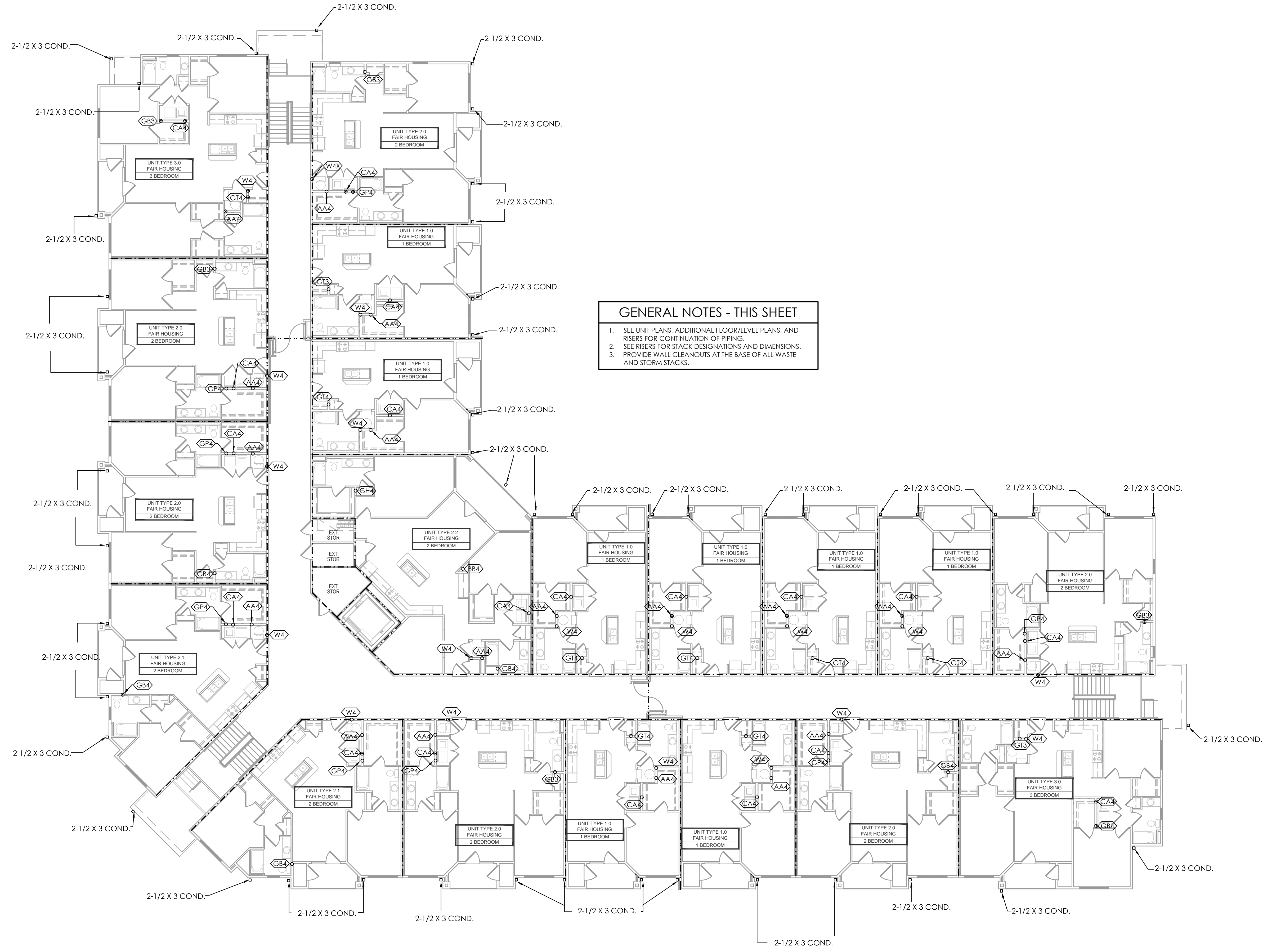
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GENERAL NOTES - THIS SHEET

- SEE UNIT PLANS, ADDITIONAL FLOOR/LEVEL PLANS, AND RISERS FOR CONTINUATION OF PIPING.
- SEE RISERS FOR STACK DESIGNATIONS AND DIMENSIONS.
- PROVIDE WALL CLEANOUTS AT THE BASE OF ALL WASTE AND STORM STACKS.



1 PLUMBING FOURTH FLOOR PLAN
SCALE: 3/32" = 1'-0"

SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



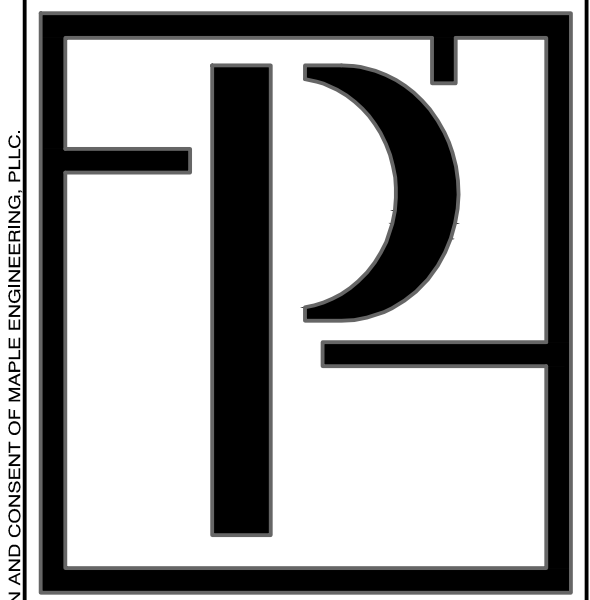
ENGINEERING: MAPLE	NO. 3316
708 W. HAYES ST.	RALEIGH, NC 27605
PLUMBING MECHANICAL ELECTRICAL	FL CDA # 3316

PROJECT NO:	PLX-1906
DRAWN BY:	JJL
CHECKED BY:	ZLT
SHEET TITLE:	PLUMBING FOURTH FLOOR PLAN
SHEET NUMBER:	

P1.13

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PLX-1906-F113.DWG

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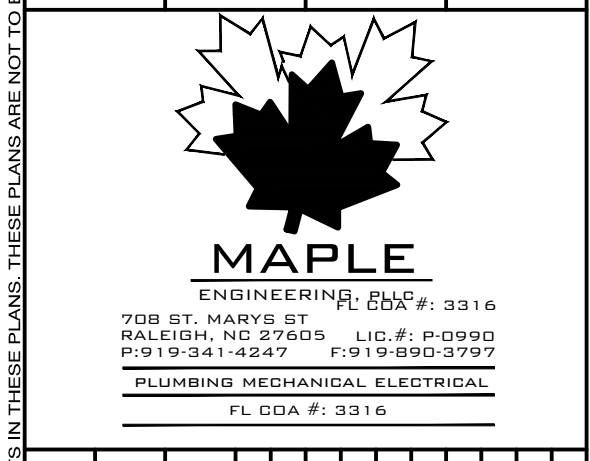
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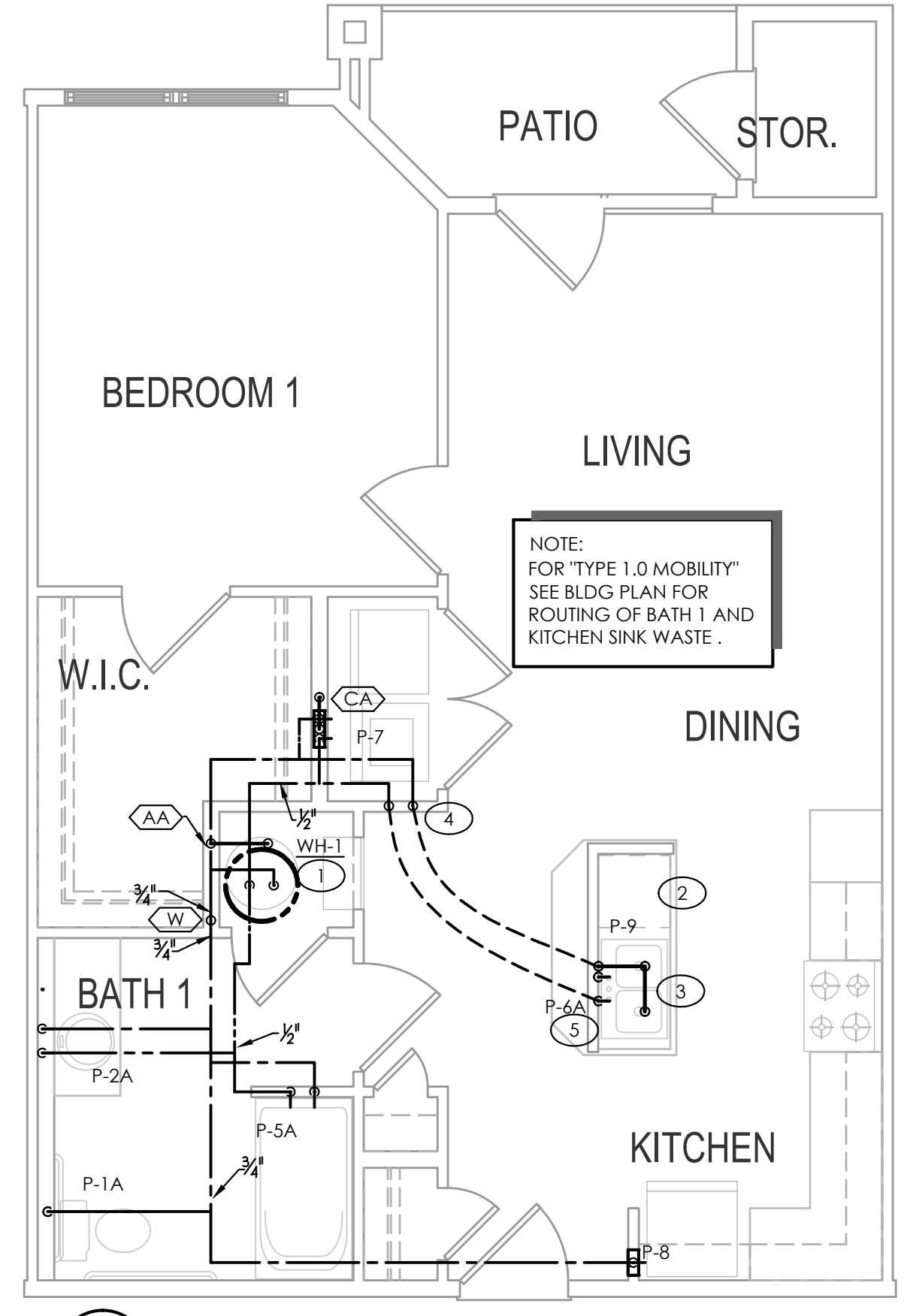
SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



ISSUE DATE:	REVISIONS	DATE	INITIALS	DESCRIPTION
07.19.19				

PROJECT NO: **PLX-1906**
DRAWN BY: JLL
CHECKED BY: ZLT
SHEET TITLE: **PLUMBING UNIT PLANS**
SHEET NUMBER:

P1.30



4 PLUMBING UNIT PLAN - TYPE 1.0 MOBILITY
SCALE: 1/4" = 1'-0"

TAGGED NOTES - THIS SHEET

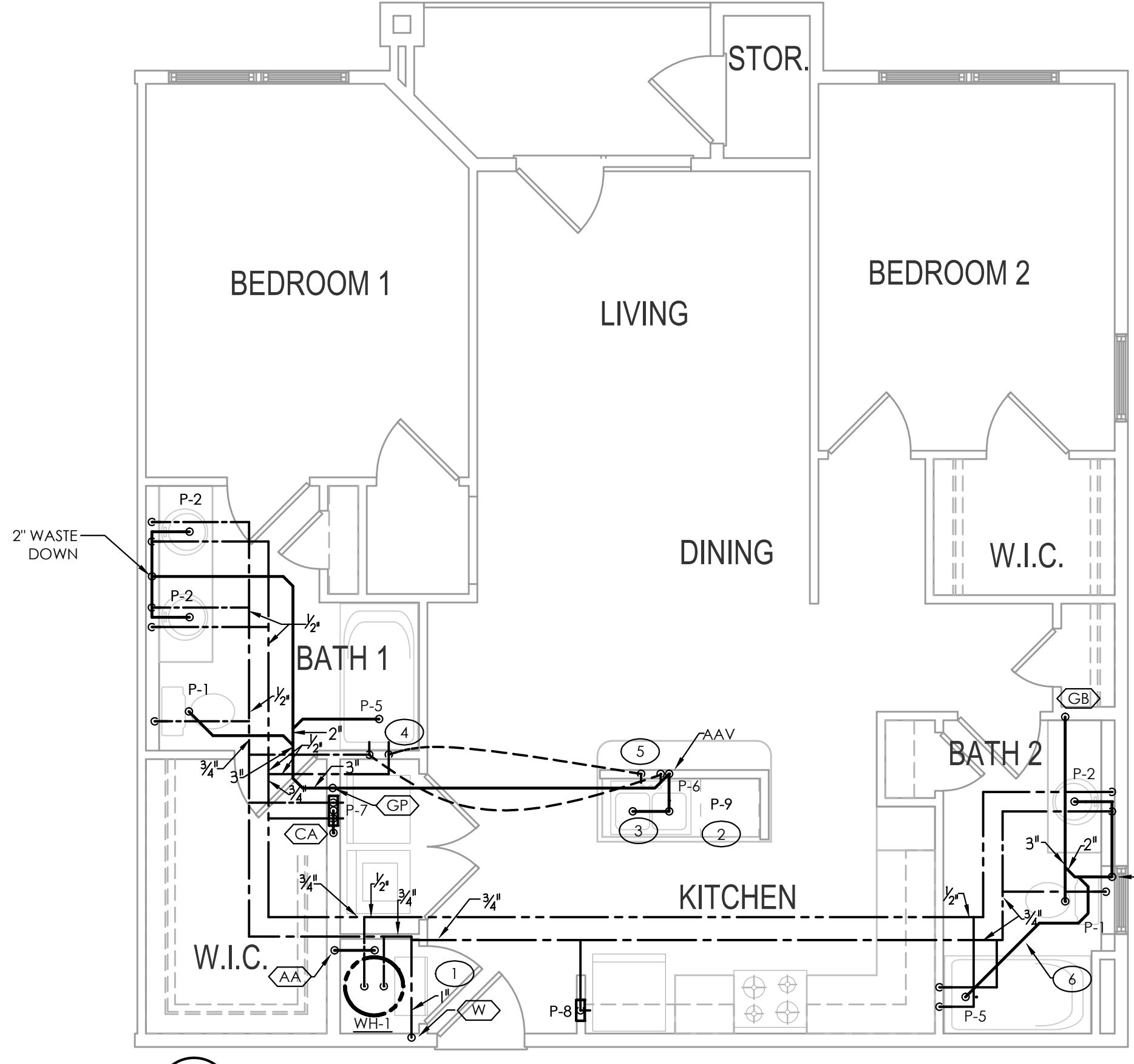
- 1 WATER HEATER BELOW HVAC UNIT IN CLOSET. DRAIN TO AREA HUB DRAIN. SEE DETAIL. COORDINATE EXACT LOCATION WITH M.C. AND AREA MECHANICAL EQUIPMENT. COORDINATE EXACT HUB DRAIN LOCATION WITH WATER HEATER DRAIN PAN; MUST BE VISIBLE AND ACCESSIBLE.
- 2 PROVIDE DISHWASHER CONNECTIONS.
- 3 PROVIDE GARBAGE DISPOSAL CONNECTION. ENSURE KNEE CLEARANCES ARE MAINTAINED IN ADA UNITS.
- 4 HW/CW DOWN IN WALL TO BELOW FLOOR.
- 5 HW/CW UP FROM BELOW FLOOR TO KITCHEN SINK.
- 6 P.C. TO ENSURE THAT DISTANCE FROM TRAP TO VENT DOES NOT EXCEED 8FT.
- 7 NOT USED.

GENERAL NOTES - THIS SHEET

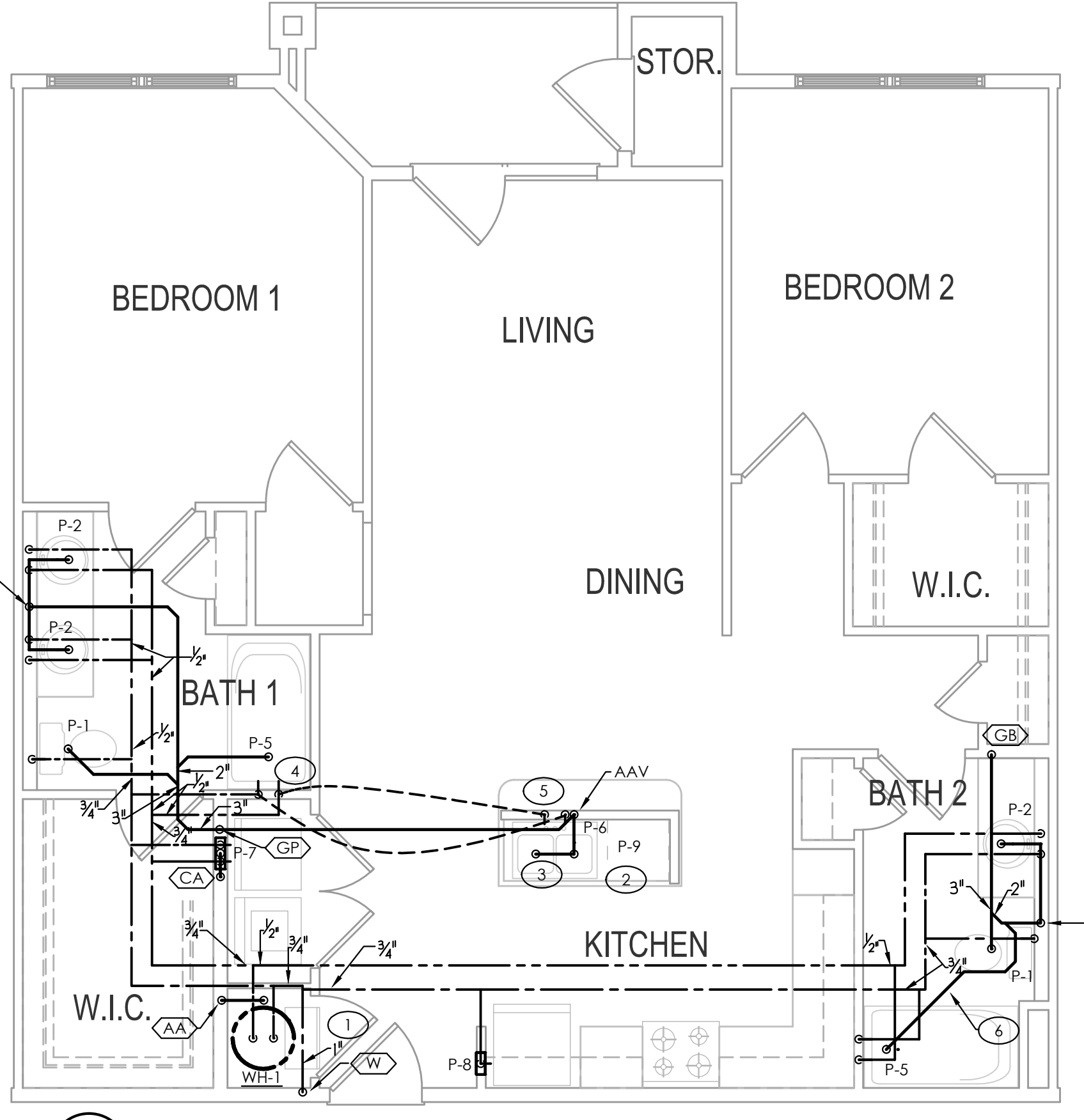
1. SEE OVERALL BUILDING PLANS FOR ROUTING OF MAIN WATER AND SEWER PIPING.
2. SEE BUILDING PLANS AND RISER SHEETS FOR CONTINUATIONS OF RISER TAGS AND ADDITIONAL INFORMATION.
3. SEE RISERS FOR STACK DESIGNATIONS AND DIMENSIONS.
4. WATER PIPING IS NOT TO BE SHARED BETWEEN UNITS.
5. SEE BUILDING PLANS FOR RATED WALL AND FLOOR INFORMATION.
6. P.C. TO ENSURE SHUT-OFF VALVES IN MECHANICAL CLOSETS WILL BE ACCESSIBLE ONCE AIR HANDLER IS INSTALLED.
7. P.C. TO ENSURE WASTE/VENT/WATER STACK LOCATIONS DO NOT INTERFERE WITH MECHANICAL DUCTWORK.
8. MECHANICAL CLOSET HUB DRAIN TO RUN TO STORM SEWER NO P-TRAP REQUIRED.

NOTE:
WATER HEATER IS TO BE NO MORE THAN 32" TALL IN UNITS WITH STACKED WATER HEATERS AND AIR HANDLERS IN THE SAME MECHANICAL CLOSET.

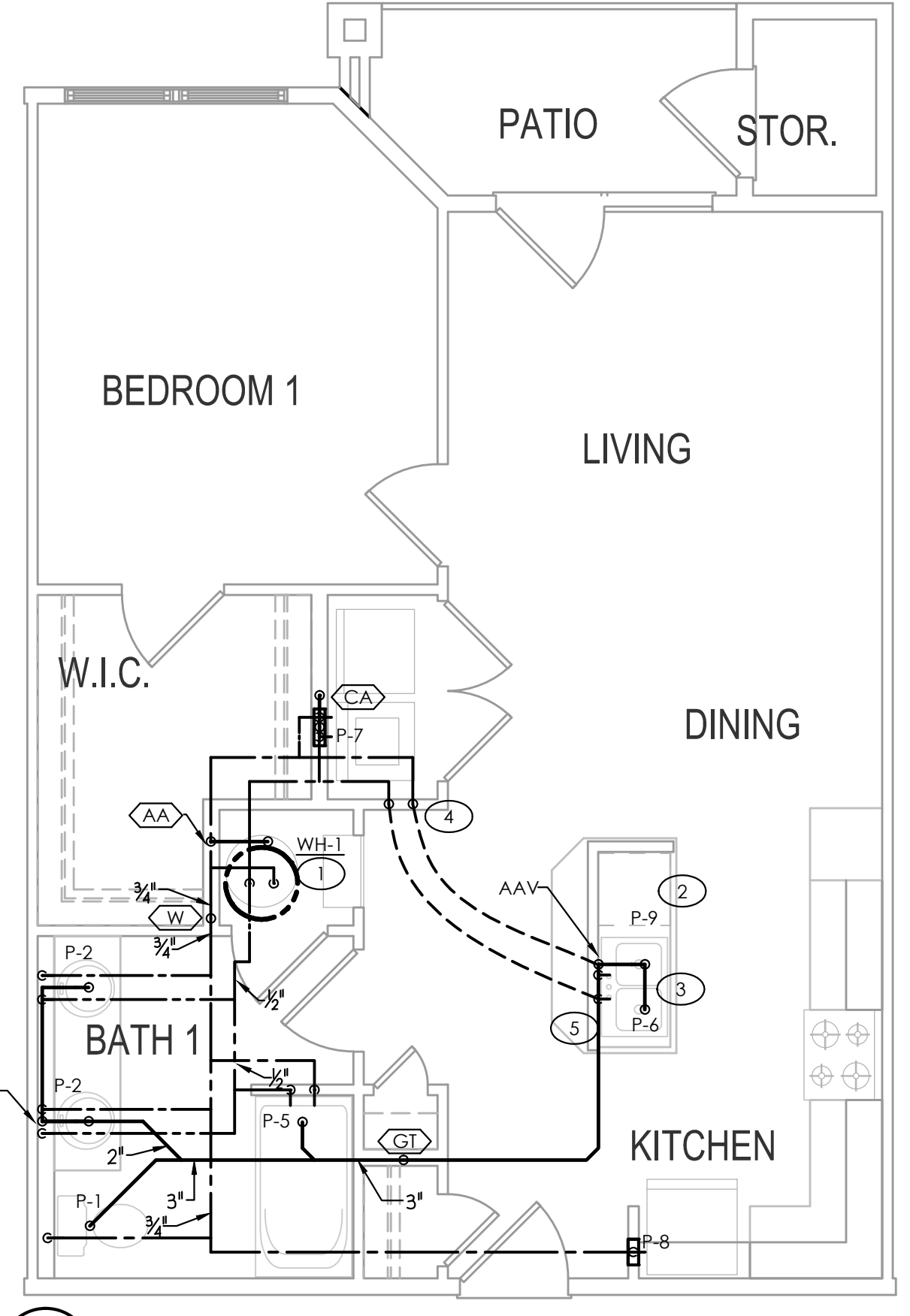
NOTE:
MECHANICAL CLOSET OF TYPE 2.0 & 2.1 UNITS IS A RETURN PLENUM. ALL MATERIALS MUST BE PLENUM RATED. WATER AND DRAIN PIPING TO BE COPPER OR PLENUM RATED CPVC. NO PVC. NO PEX. DRAIN PAN MUST BE METAL. NO PLASTIC. HUB DRAIN MUST BE METAL. NO PLASTIC.



3 PLUMBING UNIT PLAN - TYPE 2.0 FAIR HOUSING END UNIT
SCALE: 1/4" = 1'-0"



2 PLUMBING UNIT PLAN - TYPE 2.0 FAIR HOUSING INTERIOR
SCALE: 1/4" = 1'-0"



1 PLUMBING UNIT PLAN - TYPE 1.0 FAIR HOUSING
SCALE: 1/4" = 1'-0"

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GENERAL NOTES - THIS SHEET

1. WATER SERVICE AND BUILDING SEWER PIPING MUST BE SEPARATED PER 2017 FLPC 603.2.

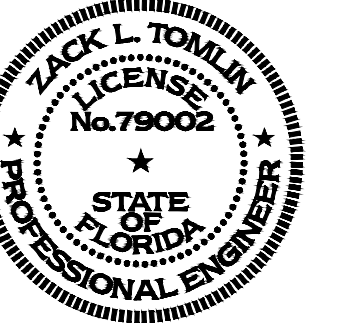
- TAGGED NOTES - THIS SHEET**
- 1 WATER HEATER, ABOVE IN ATTIC. DRAIN TO EXTERIOR AWAY FROM FOOT TRAFFIC. COORDINATE EXACT LOCATION WITH M.C. AND AREA MECHANICAL EQUIPMENT.
 - 2 CW DOWN IN WALL TO FREEZE-PROOF HOSE BIB. ENSURE PIPING IS ON WARM SIDE OF INSULATION. PROVIDE WITH BV-1 IN ACCESS PANEL. LOW ON WALL.
 - 3 1-1/4" CW LINE BELOW GRADE FROM METER AND SITE RPZ.
 - 4 CW UP TIGHT TO WALL TO ABOVE CEILING FROM BELOW SLAB. PROVIDE W/BV-1 LOW ON WALL.
 - 5 BACKFLOW PREVENTER, BFP-1, LOCATED ALONG WALL FOR POOL EQUIPMENT. DRAIN TO FLOOR DRAIN IN AREA. ENSURE REQ'D CLEARANCES CAN BE MAINTAINED.
 - 6 1" CW TO POOL EQUIPMENT. COORDINATE WITH POOL CONTRACTOR.
 - 7 SUMP PIT. COORDINATE EXACT LOCATION WITH POOL EQUIPMENT AND POOL CONTRACTOR.
 - 8 WASTE LINE FROM SUMP PIT IS LOWER THAN WASTE FROM FIXTURES. WASTE FROM FIXTURES TO DROP VERTICALLY IN AREA TO CONNECT TO WASTE LINE FROM SUMP PIT. SEE RISER.
 - 9 P.C. TO ENSURE SHOWER DRAIN IS LOCATED BELOW PERMANENT AWNING. COORDINATE WITH ARCHITECT.
 - 10 2" WASTE DOWN IN WALL.
 - 11 PORTION OF BRANCH LINE IS PART OF CIRCUIT VENT SYSTEM, MAXIMUM SLOPE 8%. TURN DOWN AS NECESSARY AFTER MOST DOWNSTREAM FIXTURE. IF SLOPE REQUIREMENTS CANNOT BE MAINTAINED, ADDITIONAL VENTS WILL BE REQUIRED.
 - 12 CW/HW DOWN IN WALL TO BELOW SLAB.
 - 13 CW/HW UP TO SINK FROM BELOW SLAB.
 - 14 CW DOWN IN WALL TO FREEZE-PROOF HOSE BIB. ENSURE PIPING IS ON WARM SIDE OF INSULATION.



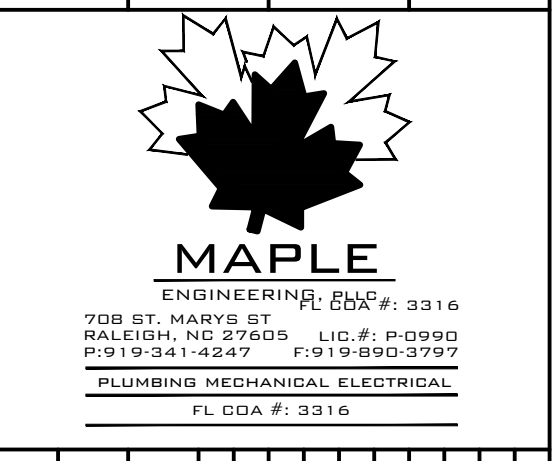
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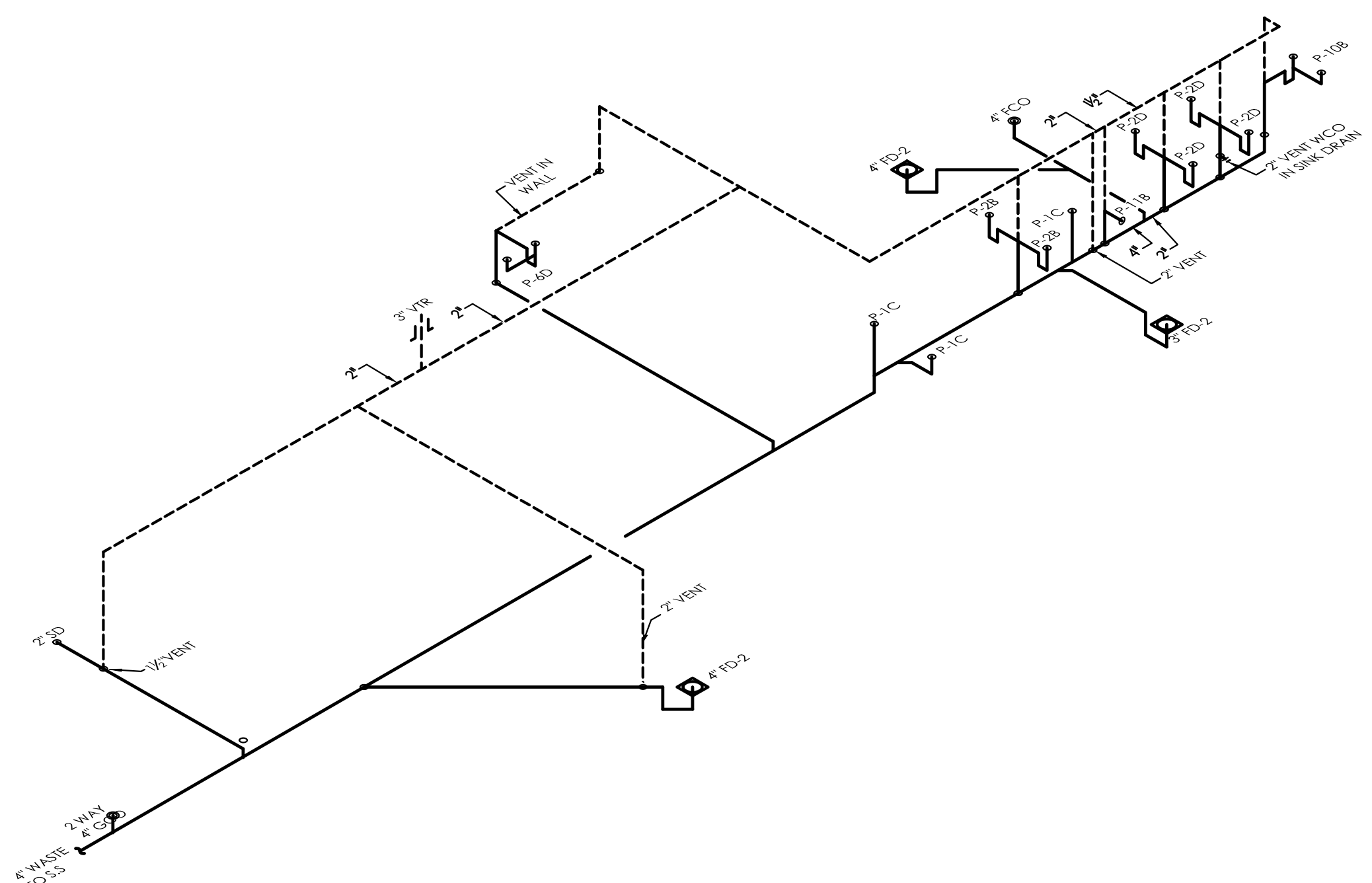
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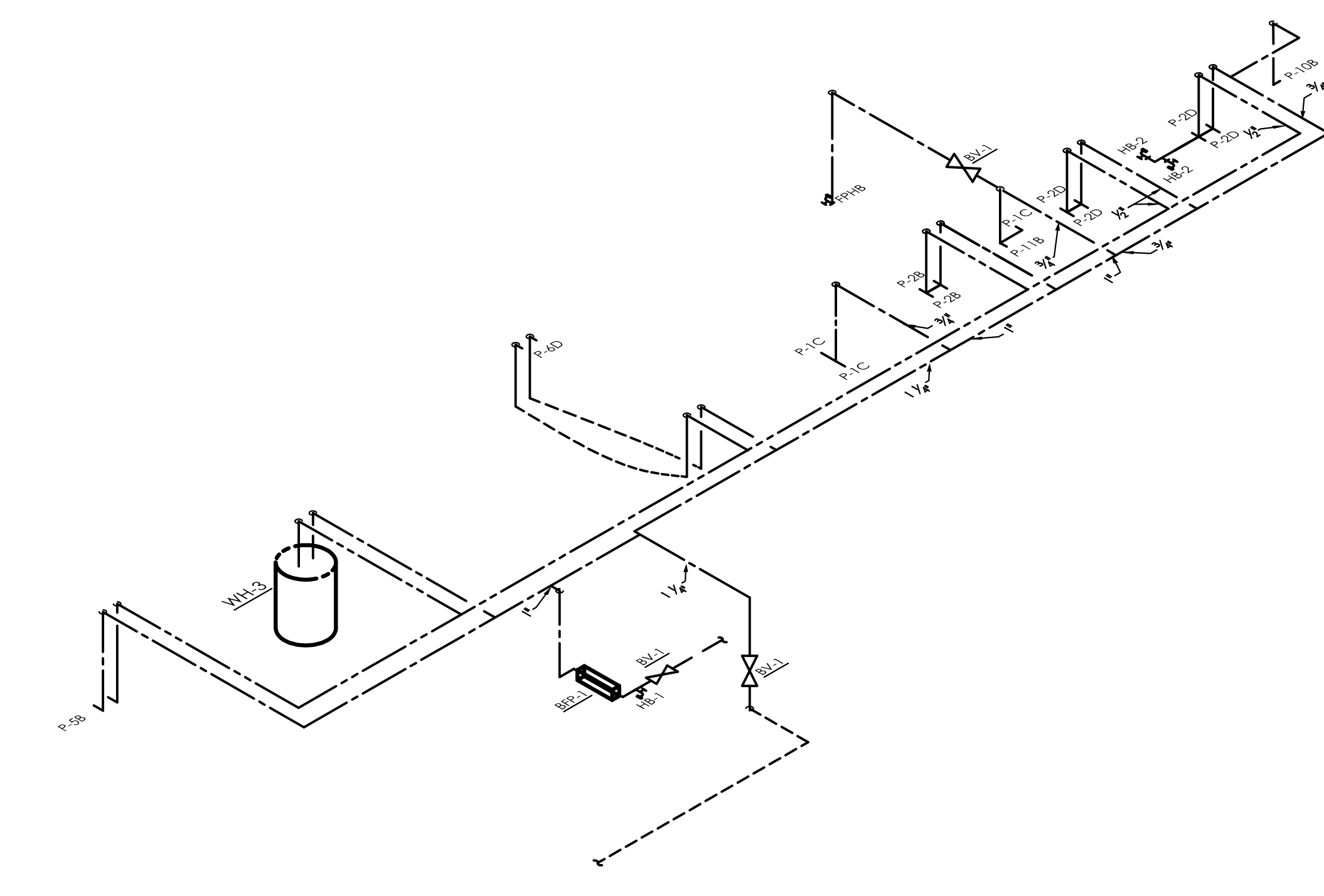
ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		
	NUMBER	INITIALS
	DATE	

PROJECT NO: **PLX-1906**
DRAWN BY: JLL
CHECKED BY: ZLT
SHEET TITLE:
PLUMBING POOLHOUSE PLANS

SHEET NUMBER:
P3.10



4 POOLHOUSE - WASTE RISER
NO SCALE

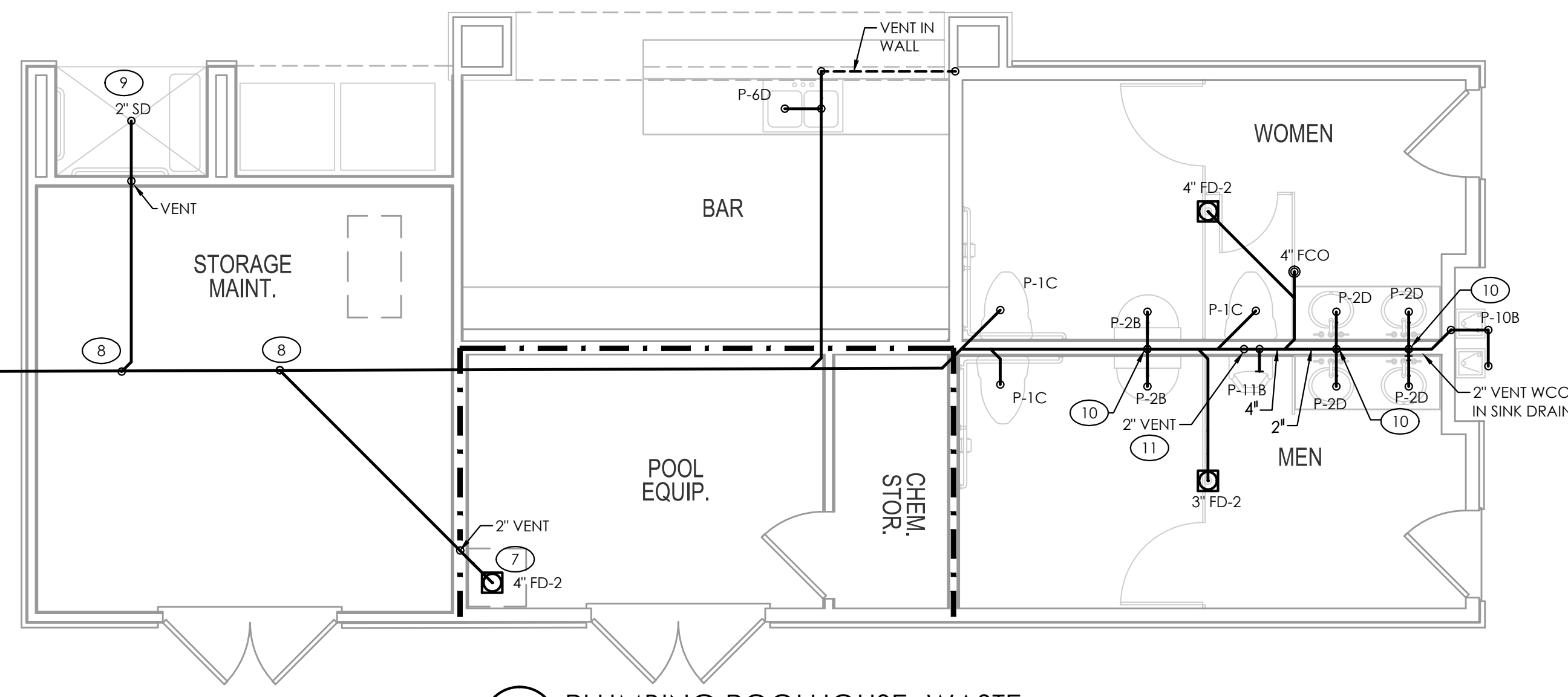


3 POOLHOUSE - WATER RISER
NO SCALE

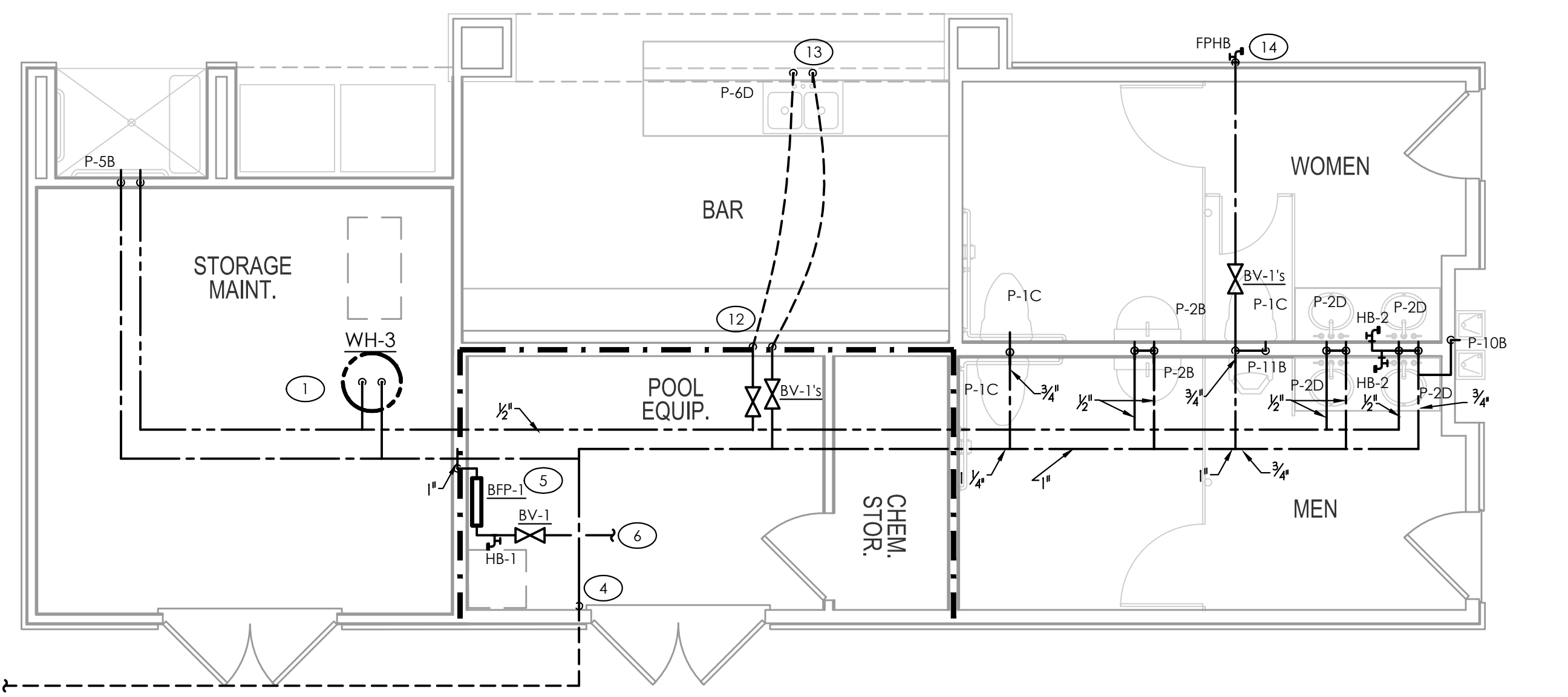
NOTE:
CONFIRM EXACT SIZE,
LOCATION, INVERT, AND
DIRECTION OF UTILITY
CONNECTIONS BEFORE
BEGINNING WORK.

NOTE:
PROVIDE MIN. 18 AWG YELLOW INSULATED
COPPER TRACER WIRE ALONG ALL UNDER-
GROUND NONMETALLIC PIPING. INSTALL
ON ALL WASTE PIPING UPSTREAM OF
CLEANOUT AT BUILDING DRAIN/BUILDING
SEWER CONNECTION. TERMINATE WIRE AT
2-WAY GRADE CLEANOUT. INSTALL PER
2017 FLFGC 404.17.3.

NOTE:
CONFIRM EXACT SIZE,
LOCATION, INVERT, AND
DIRECTION OF UTILITY
CONNECTIONS BEFORE
BEGINNING WORK.



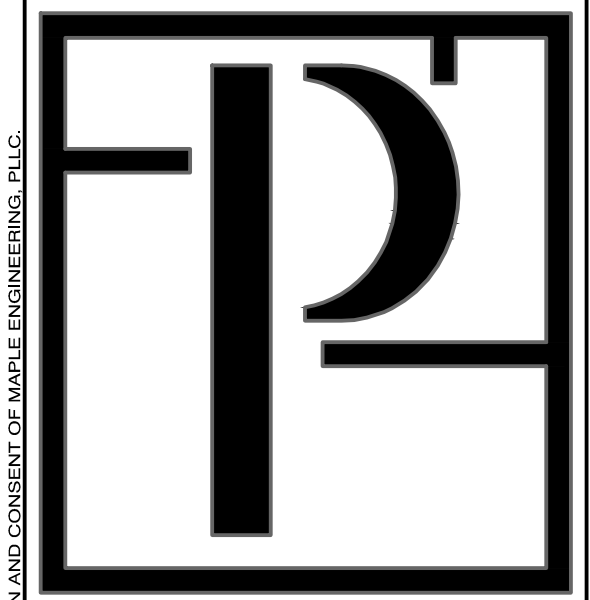
2 PLUMBING POOLHOUSE- WASTE
SCALE: 1/4" = 1'-0"



1 PLUMBING POOLHOUSE- WATER
SCALE: 1/4" = 1'-0"

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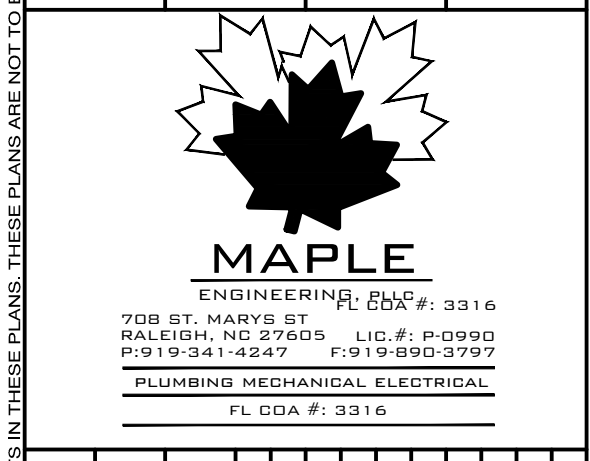
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CONTROL OPTIONS:
A. CONTROL W/ SWITCH
B. CONTROL W/ TIMER SWITCH (VENTILATION: 19 MINUTES/HR, DELAY 10 MINUTES, 35 AVG CFM/HR)
C. CONTROL W/ TIMER SWITCH (VENTILATION: 28 MINUTES/HR, DELAY 10 MINUTES, 51 AVG CFM/HR)
D. CONTROL W/ ROOM LIGHTS
E. CONTINUOUS OPERATION

SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



ISSUE DATE:	07.19.19	DESCRIPTION	
REVISIONS	NUMBER	DATE	INITIALS
	1		
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		

PROJECT NO: **PLX-1906**

DRAWN BY: RMH

CHECKED BY: ZLT

SHEET TITLE: **MECHANICAL SCHEDULES & NOTES**

SHEET NUMBER:

M0.01

UNIT NO.	SERVICE	AREA SERVED	CFM	S.P.	RPM	TYPE & ARRANGEMENT	MIN. MOTOR HP & VOLTAGE	MANUFACTURER & MODEL NO.	DRIVE	CONTROL SCHEME	NOTES
EF-1	EXHAUST	UNITS	110	0.35"	MFG	CEILING, CENTRIFUGAL	14.2 WATTS 120V/1Ø	BROAN XB110	DIRECT	A	1,2,3,4,6
EF-2	EXHAUST	MEN'S 112	150	0.30"	MFG	CEILING, CENTRIFUGAL	113 WATTS 120V/1Ø	GREENHECK SPA-190	DIRECT	D	1,2,3,4
EF-3	EXHAUST	WOMEN'S 113	150	0.30"	MFG	CEILING, CENTRIFUGAL	113 WATTS 120V/1Ø	GREENHECK SPA-190	DIRECT	D	1,2,3,4
EF-4	EXHAUST	PH WOMEN	225	0.35"	MFG	CEILING, CENTRIFUGAL	81 WATTS 120V/1Ø	GREENHECK SPA-290	DIRECT	D	1,2,3,4
EF-5	EXHAUST	PH MEN	225	0.35"	MFG	CEILING, CENTRIFUGAL	81 WATTS 120V/1Ø	GREENHECK SPA-290	DIRECT	D	1,2,3,4
EF-6	EXHAUST	POOL EQUIP.	200	0.35"	MFG	CEILING, CENTRIFUGAL	83 WATTS 120V/1Ø	GREENHECK SPA-250	DIRECT	E	1,3,4,6,7,8
EF-7	EXHAUST	CHEM. STORAGE	75	0.35"	MFG	CEILING, CENTRIFUGAL	49 WATTS 120V/1Ø	GREENHECK SPA-110	DIRECT	E	1,3,4,6,7,8
EF-8	EXHAUST	UNITS	110	0.35"	MFG	CEILING, CENTRIFUGAL	14.2 WATTS 120V/1Ø	BROAN XB110	DIRECT	B	1,2,3,4,5,6
EF-9	EXHAUST	UNITS	110	0.35"	MFG	CEILING, CENTRIFUGAL	14.2 WATTS 120V/1Ø	BROAN XB110	DIRECT	C	1,2,3,4,5,6

- NOTES:**
- SCREEN
 - BACKDRAFT DAMPER
 - COLOR BY ARCHITECT
 - INTEGRAL DISCONNECT SWITCH
 - EXHAUST FAN TO BE CONTROLLED W/ AIRCYCLER SE1 (OR EQUAL) TIMER SWITCH. SWITCH TO BE PROVIDED BY M.C. AND INSTALLED BY E.C.. SEE CONTROL OPTIONS FOR TIMER AND DELAY SETTINGS.
 - W/ RADIATION DAMPER
 - CORROSION RESISTANT
 - EXHAUST LOCATION CANNOT BE ON POOLSIDE OF ROOF

SYMBOL	CFM	NECK SIZE	MODULE SIZE	FRAME TYPE	PATTERN	DAMPER	MATERIAL	SERVICE	FINISH	MANUFACTURER & MODEL NO.	NOTES
(A)	AS NOTED	N/A	AS NOTED	SURFACE	2-WAY	YES	STEEL	SUPPLY	NOTE 2	HART & COOLEY 682	1,2,3
(B)	N/A	N/A	AS NOTED	SURFACE	LOUVERED	NO	STEEL	TRANSFER	NOTE 2	HART & COOLEY 672	1,2
(C)	AS NOTED	N/A	AS NOTED	SURFACE	DBL. DEFL.	YES	STEEL	SUPPLY	NOTE 2	TITUS 300RS	1,2,3
(D)	AS NOTED	N/A	AS NOTED	SURFACE	LOUVERED	NO	STEEL	RETURN	NOTE 2	TITUS 350RL	1,2,3

- NOTES:**
- GENERAL - MC RESPONSIBLE FOR VERIFYING QTY, COLOR & FRAME TYPE OF DIFFUSERS/GRILLES BEFORE ORDERING. PROVIDE SQR TO RND TRANSITIONS & PLENUMS AS NECESSARY.
- DIFFUSER DESIGNATIONS ON PLANS AS FOLLOWS:
DIFFUSER OR NECK SIZE: 8x4 0" (A)
AIR QUANTITY: 75
VERTICAL BLADE SPREAD (WHERE APPLICABLE)
DIFFUSER TYPE AS NOTED ABOVE
 - FINISH TO MATCH / BE ABLE MATCH CEILING OR WALL OR DOOR.
 - FACTORY INSULATION BACKING ON GRILLES EXPOSED TO NON-COOLITIONED AREAS. ALTERNATELY, FIELD SUPPLY AND INSTALL.

	RECTANGULAR DUCT
	ROUND METAL DUCT
	FLEX/RIGID ROUND DUCT
	ELBOW WITH TURNING VANES
	VOLUME DAMPER
	SUPPLY TAP WITH VOLUME DAMPER
	SUPPLY TAP
	SUPPLY DIFFUSER/GRILLE OR RISER
	RETURN REGISTER/GRILLE OR RISER
	SIDE-WALL DIFFUSER/GRILLE
	CEILING EXHAUST FAN
	T-STAT
	DUCT SMOKE DETECTOR
	AUDIO/VISUAL ALARM (W/ REMOTE TEST KEY SWITCH)
	1' DOOR UNDER CUT
	LOUVERED DOOR (SEE ARCHITECTURAL DRAWINGS)
	U.L. CEILING RADIATION DAMPER
	ATTIC ACCESS

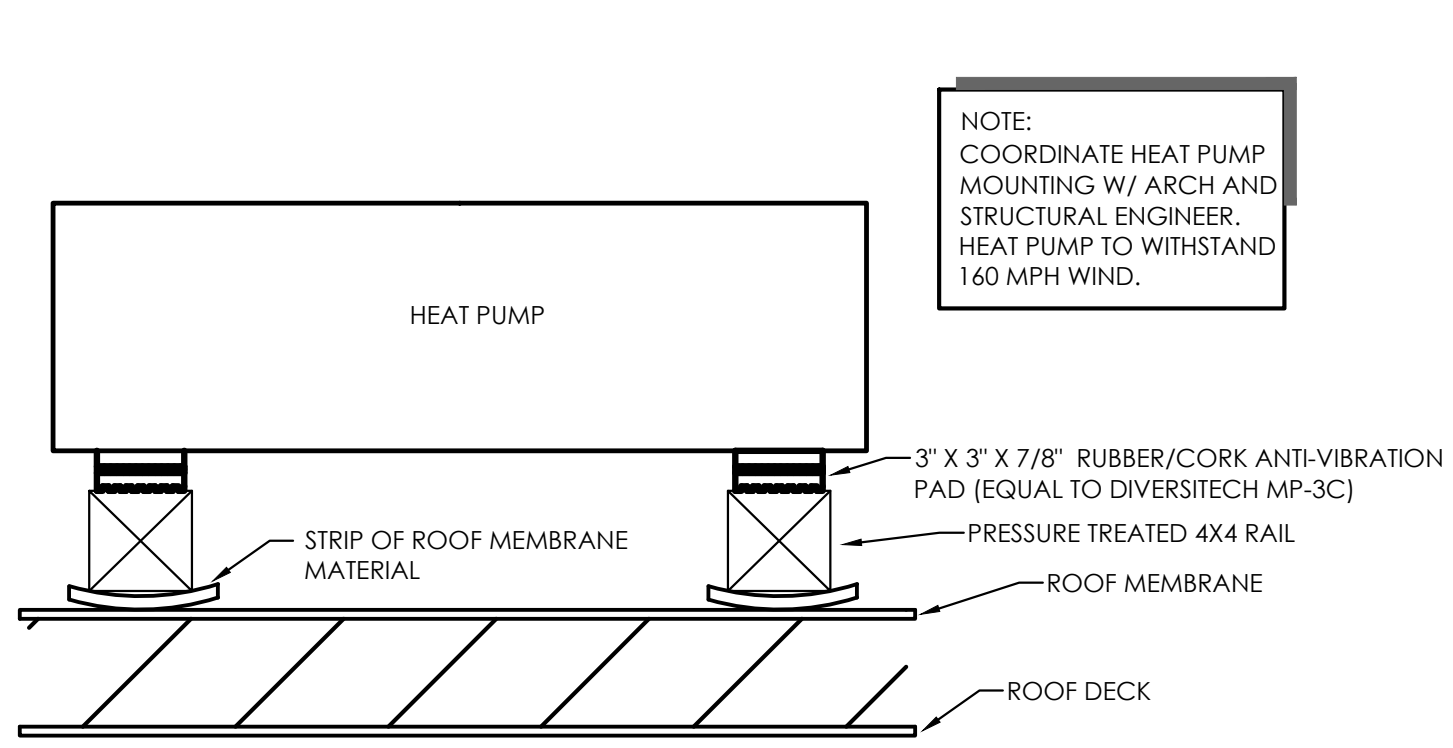
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ENERGY COST BUDGET	<input type="checkbox"/>	<input checked="" type="checkbox"/>
THERMAL ZONE		2A
EXTERIOR DESIGN CONDITIONS		
WINTER DRY BULB	34	34
SUMMER DRY BULB	94	94
INTERIOR DESIGN CONDITIONS		
WINTER DRY BULB	70	70
SUMMER DRY BULB	76	76
RELATIVE HUMIDITY	50%	50%
BUILDING HEATING LOAD (MBH)	621.8	60.2
BUILDING COOLING LOAD (MBH)	1290.2	137.6
MECHANICAL SPACING CONDITIONING SYSTEM		
UNITARY		
DESCRIPTION OF UNIT		SEE SCHEDULES
HEATING EFFICIENCY		SEE SCHEDULES
COOLING EFFICIENCY		SEE SCHEDULES
HEAT OUTPUT OF UNIT		SEE SCHEDULES
COOLING OUTPUT OF UNIT		SEE SCHEDULES
BOILER		
TOTAL BOILER OUTPUT		NA
CHILLER		
TOTAL CHILLER OUTPUT		NA
LIST EQUIPMENT EFFICIENCIES		SEE SCHEDULES
DESIGNER'S STATEMENT:		
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT REQUIREMENTS OF THE F.L.S. ENERGY CODE.		
SIGNED:		
NAME:	ZACK L. TOMLIN, PE	
TITLE:	MECHANICAL ENGINEER	

GENERAL HVAC NOTES

- GENERAL REQUIREMENTS:**
- MECHANICAL CONTRACTOR IS TO FURNISH AND PAY FOR ALL LABOR, MATERIAL, EQUIPMENT, PERMITS & FEES REQUIRED FOR THE COMPLETE INSTALLATION OF ALL SYSTEMS IN THIS SECTION OF WORK.
 - ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH FL MECHANICAL CODES AND ALL OTHER APPLICABLE CODES. MC IS TO COORDINATE W/ G.C. IN REGARDS TO PROJECT TIMELINE, WORK HOURS, AS WELL AS ANY BONDING OR INSURANCE REQUIREMENTS.
 - ALL MECHANICAL EQUIPMENT SHALL BE PROVIDED COMPLETE WITH ALL ACCESSORIES, HANGERS, SUPPORTS, CONTROLS, ETC FOR A FULLY FUNCTIONING SYSTEM REGARDLESS OF PRESENCE ON PLANS.
 - ALL EQUIPMENT, MATERIALS AND INSTALLATION SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE (1) YEAR AFTER FINAL ACCEPTANCE OF WORK OR IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD GUARANTEE. IF LONGER, ALL COMPRESSORS ARE TO INCLUDE FIVE (5) YEAR WARRANTY. EXISTING EQUIPMENT IS EXCLUDED FROM WARRANTY REQUIREMENT.
 - THESE DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL LOCATION AND ARRANGEMENT OF ALL MATERIALS AND EQUIPMENT. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS BUILDING CONSTRUCTION AND ALL OTHER WORK WILL PERMIT.
 - DO NOT SCALE DRAWINGS FOR MEASUREMENT.
 - ALL DUCT DIMENSIONS SHOWN ARE INTERIOR DUCT DIMENSIONS.
 - INFORMATION GIVEN IN SCHEDULES INCLUDES BOTH DESCRIPTION OF PRODUCT AND MANUFACTURER'S MODEL #. IF CONFLICT IS PRESENT BETWEEN DESCRIPTION AND MODEL #, EQUIPMENT DESCRIPTION SHALL TAKE PRECEDENT. IN CASE OF CONFLICT BETWEEN THE PLANS AND NOTES/SPECIFICATIONS OR CONFLICT BETWEEN INFORMATION PRESENTED ON THE PLANS OR IN THE NOTES/SPECIFICATIONS, THEN THE MOST RESTRICTIVE SHALL TAKE PRECEDENT.
 - BEFORE BID MC IS RESPONSIBLE FOR CLARIFYING W/ G.C. ANY CONFUSION IN REGARDS TO RESPONSIBILITY OF WORK TO BE PERFORMED OR MATERIALS TO BE PROVIDED. THE SUBMITTAL OF THE BID BY THE CONTRACTOR WILL BE HELD AS PROOF THAT THE CONTRACTOR UNDERSTANDS THOROUGHLY AND COMPLETELY THE SCOPE OF THE WORK INVOLVED, AND HAS INCLUDED ON THE BID ALL THE NECESSARY ITEMS TO CARRY OUT THIS SECTION OF WORK.
 - AS SOON AS POSSIBLE (AND NOT MORE THAN 30 DAYS) AFTER CONTRACT IS SIGNED, THE MC SHALL PROVIDE SUBMITTALS OF MECHANICAL EQUIPMENT HE/SHE INTENDS TO PURCHASE FOR REVIEW AND COMMENT BY THE ENGINEER. ENGINEER IS TO APPROVE SUBMITTALS BEFORE EQUIPMENT IS ORDERED.
 - ALL QUESTIONS MUST BE SUBMITTED IN RFI FORMAT TO THE ARCHITECT AND MUST BE ADDRESSED BY THE APPROPRIATE DESIGNER OF RECORD PRIOR TO BECOMING A PROPOSED CHANGE ORDER.
 - UPON COMPLETION OF WORK M.C. IS TO PROVIDE OWNER W/ COMPLETE BOUND SET OF ALL EQUIPMENT OPERATION & MAINTENANCE MANUALS, PACKAGE IS ALSO TO INCLUDE AND WARRANTY & GUARANTEE INFORMATION.
 - M.C. IS TO PROVIDE TRAINING TO OWNER OR OWNER'S REPRESENTATIVE IN REGARDS TO OPERATION, FUNCTION, AND MAINTENANCE OF ALL MECHANICAL EQUIPMENT, CONTROLS, ETC.
 - M.C. IS TO REVIEW COMPLETE DRAWING SET. M.C. IS RESPONSIBLE FOR WORK EXPLICITLY SHOWN AND WORK IMPLIED.
- DIVISION OF WORK:**
- ALL ROOF WORK INCLUDING PENETRATIONS, OPENINGS, FLASHING, CURB INSTALLS, ETC ARE TO BE PERFORMED BY ROOFING CONTRACTOR. M.C. RESPONSIBLE FOR PROVIDING ANY ROOF CURBS, EQUIPMENT RAILS, VENTS, ETC AND COMMUNICATING ALL REQ'S WITH G.C. & ROOFING CONTRACTOR.
 - ALL LOW VOLTAGE WIRING RELATED TO MECHANICAL EQUIPMENT AND SYSTEMS IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR (ANY LOW VOLTAGE FIRE ALARM WIRING TO BE BY E.C.). ALL HIGH VOLTAGE CONNECTIONS TO MECHANICAL EQUIPMENT, TO BE PROVIDED AND INSTALLED BY E.C. (SEE EQUIPMENT SCHEDULE FOR DISCONNECT RESPONSIBILITY).
 - G.C. TO BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ACCESS DOORS (WALL, FLOOR, CEILING) RELATED TO MECHANICAL SYSTEM. M.C. RESPONSIBLE FOR COMMUNICATING TO G.C. SIZE AND LOCATION OF REQ'D ACCESS DOOR(S).
 - MECHANICAL CONTRACTOR IS TO EMPLOY THE SERVICES OF THE G.C. FOR CUTTING AND PATCHING OF WALLS, FLOORS & CEILINGS RELATED TO THE INSTALLATION OF MECHANICAL EQUIPMENT & SYSTEMS.
 - G.C. RESPONSIBLE FOR PAINTING OF ANY EXPOSED DUCT, PIPING, GRILLES, ETC. M.C. RESPONSIBLE FOR CLEANING AND PREPARING ITEMS FOR PAINT. COORDINATE W/ G.C.
 - G.C. TO BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ACCESS PLATFORMS, GUARD RAILS, LADDERS, CONCRETE PADS. M.C. TO COMMUNICATE REQ'S TO G.C.
 - G.C. TO BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY WALL LOUVERS BRICK VENTS OR SIMILAR. M.C. TO PROVIDE AND INSTALL ANY WALL CAPS.
- COORDINATION:**
- THE MECHANICAL CONTRACTOR SHALL COORDINATE CLOSELY WITH ALL OTHER TRADES TO AVOID CONFLICT AND ENSURE OTHER TRADES PROVIDE MEASURES TO ACCOMMODATE MECHANICAL WORK (I.E. ACCESS DOORS, SLAB/WALL/ROOF OPENINGS, ELECTRICAL CONNECTIONS, ETC).
 - MECHANICAL CONTRACTOR SHALL VERIFY LOCATION OF ALL PENETRATIONS FOR RELIEF HOODS, OUTSIDE AIR HOODS, LOUVERS, AND WALL CAPS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION.
 - M.C. TO COORDINATE LOCATION OF ALL ROOF PENETRATIONS W/ ROOFING CONTRACTOR. P.C. & M.C. TO COORDINATE TO ENSURE NO PLUMBING VENTS OR ANY OTHER SOURCES OF BUILDING EXHAUST ARE LOCATED WITHIN 10' OF ANY OUTSIDE AIR INTAKES.
- MATERIALS:**
- ALL MATERIALS SHALL BE NEW UNLESS OTHERWISE SHOWN OR SPECIFIED.
 - ALL MATERIALS INSTALLED IN RETURN PLENUM ARE TO BE PLENUM RATED.
 - PROVIDE HANGERS & SUPPORTS APPROVED FOR USE BY 2017 FL MECHANICAL CODE.
 - ALL MAIN DUCTWORK (SUPPLY, RETURN, EXHAUST, OUTSIDE AIR) SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH SMACNA STANDARDS.
 - RUNOUTS FROM MAIN BRANCH DUCTS MAY BE FLEXIBLE DUCT CONFORMING TO THE REQUIREMENTS OF UL 181 FOR CLASS 1.
 - FLEXIBLE AIR DUCTS SHALL NOT BE LIMITED IN LENGTH.
 - FLEXIBLE AIR CONNECTORS SHALL BE LIMITED TO 14' IN LENGTH. FLEXIBLE AIR CONNECTORS SHALL NOT PASS THROUGH ANY WALL, FLOOR OR CEILING.
 - ALL SUPPLY AND RETURN DUCTWORK AND PLENUMS SHALL BE INSULATED. INSULATION OF DUCTWORK IN UNCONDITIONED SPACE SHALL BE MINIMUM R-6 PER 2017 FLECC. INSULATION OF DUCTWORK OUTSIDE BUILDING THERMAL ENVELOPE (I.E. ROOF, ATTIC, CRAWLSPACE) SPACE SHALL BE MINIMUM R-9 PER FLECC.
 - CONCEALED SHEET METAL SUPPLY & RETURN DUCT MAY BE EXTERNALLY INSULATED WITH MINERAL FIBER BOARD OR BLANKET OR MAY BE INTERNALLY INSULATED WITH ACOUSTICAL DUCT LINER.
 - OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 1" FIBERGLASS DUCT WRAP WITH VAPOR BARRIER.
 - ALL MAIN DUCTWORK (INCLUDING EXHAUST) TO BE SEALED ACCORDING TO FLECC AND AT A MINIMUM INCLUDE SEALING OF ALL DUCT SEAMS W/ NON-HARDENING MASTIC. SEALING BY TAPE ALONE NOT ALLOWED.
 - DUCTWORK ELBOWS SHALL BE FULL RADIUS OR MITERED WITH TURNING VANES.
 - CONDENSATE DRAIN PIPING AND FITTINGS NOT IN A RETURN PLENUM SHALL BE SCHEDULE 40 PVC. DRAINS FROM AIR HANDLING UNITS SHALL BE TRAPPED (2" MINIMUM), TRAPS ON INTERIOR OF BUILDINGS TO BE INSULATED. PIPING IN RETURN PLENUM TO BE COPPER OR PLENUM RATED CPVC.
 - ALL DAMPERS TO INCLUDE SET SCREW OR SIMILAR FEATURE FOR LOCKING IN POSITION.
 - ALL REFRIGERANT LINE MATERIAL AS PER MFG'S REQUIREMENTS. SIZE PER MFG INSTRUCTIONS. SUCTION LINE INSULATION TO BE MINIMUM 1-1/2" THICK W/ THERMAL CONDUCTIVITY (K) LESS THAN OR EQUAL TO 0.27 PER FLECC. COMMERCIAL PROVISIONS. SUCTION LINE INSULATION TO BE HAVE MINIMUM R-VALUE OF 3.0 W/ NO LIMITATION ON THICKNESS OR CONDUCTIVITY PER FLECC. RESIDENTIAL PROVISIONS. INSULATION SHALL HAVE TAPED OR SEALED SEAMS.
 - ALL FIRE, SMOKE AND RADIATION DAMPERS TO BE U.L. LISTED AND APPROVED FOR CORRECT PRESSURE CLASS, APPLICATION (STATIC, DYNAMIC), ORIENTATION (HORIZONTAL/VERTICAL), AND INSTALLATION (WALL, FLOOR, CEILING U.L. ASSEMBLY). TO INCLUDE 1/6" FUSIBLE LINK UNLESS OTHERWISE NOTED.
 - ALL FIRE SEALANTS TO BE U.L. LISTED AND APPROVED FOR USE W/ APPROPRIATE U.L. PENETRATION DETAIL.
 - ALL PROGRAMMABLE THERMOSTATS TO INCLUDE BATTERY BACK-UP AND HAVE CAPABILITY TO SETBACK TO 55°F (HEATING) & 85°F (COOLING). AUTO-CHANGEOVER THERMOSTATS TO HAVE A MIN. 5°F DEADBAND.
 - WITH THE EXCEPTION OF THE DRYER FLEX CONNECTION ALL DRYER EXHAUST DUCT SHALL BE 4Ø RIGID SHEET METAL, 26 GAUGE OR THICKER. JOIN DUCTS WITH HIGH TEMP & WATER RESISTANCE UL-181 APPROVED FOIL TAPE OR BLIND POP-REVETS.
- EXECUTION:**
- M.C. TO FOLLOW MANUFACTURER'S INSTRUCTIONS WHEN INSTALLING MECHANICAL EQUIPMENT. ENSURE REQUIRED MAINTENANCE ACCESS AND CLEARANCES ARE MAINTAINED. IF CONFLICT EXISTS BETWEEN THESE PLANS AND MFG INSTRUCTIONS CONTACT ENGINEER.
 - ALL PENETRATIONS THROUGH EXTERIOR WALLS & ROOF SHALL BE FLASHED & COUNTER-FLASHED IN A WATERPROOF MANNER.
 - SEAL ALL PENETRATIONS OF RATED WALLS, CEILING, FLOORS IN ACCORDANCE W/ APPROPRIATE U.L. PENETRATION DETAIL.
 - INSTALL ALL CONTROL DEVICES, INCLUDING THERMOSTATS AND SWITCHES, 4'-0" ABOVE FINISHED FLOOR.
 - ALL REFRIGERANT PIPING SHALL BE INSTALLED PER MFG'S INSTRUCTIONS IN REGARDS TO SUPPORTS, BENDS, FITTINGS, OIL TRAPS, ETC. NAIL (SHIELDING) PLATES ARE TO BE PROVIDED AT ANY POINT REFRIGERANT PIPING PASSES THROUGH WALL, FLOOR OR ATTIC/ROOF FRAMING.
 - PENETRATIONS OF NON-RATED WALLS, PARTITIONS AND FLOOR OF COMBUSTIBLE CONSTRUCTION SHALL BE FIRESTOPPED WITH MATERIALS EQUIVALENT TO TWO INCHES OF WOOD. FIRESTOPPING SHALL COMPLY WITH ASTM E-814.
 - ANY NOTCHING, DRILLING, BORING OR OTHER ALTERATION TO BUILDING STRUCTURE SHALL BE PERFORMED IN A CODE APPROVED METHOD AND NOT THREATEN THE INTEGRITY OF THE BUILDING STRUCTURE.
 - SUPPORT ALL DUCTWORK AND PIPING IN ACCORDANCE W/ 2017 FL MECHANICAL CODE. ANY SUSPENDED MATERIALS SHALL BE DIRECTLY SUPPORTED BY THE BUILDING STRUCTURE. DO NOT ATTACH ANYTHING TO THE ROOF DECK.
 - PENETRATIONS OF ALL EXTERIOR WALLS, FLOORS AND CEILINGS SHALL BE SEALED IN AN AIR TIGHT MANNER AND IN ACCORDANCE W/ 2017 FLECC. ALL PENETRATIONS OF WALLS, FLOORS & CEILINGS IN RETURN OR EXHAUST PLENUMS SHALL BE SEALED IN AN AIR TIGHT MANNER.
 - DUCT ACCESS DOORS TO BE PROVIDED AT ALL FIRE, RADIATION & SMOKE DAMPERS, SMOKE DETECTORS, CLEANOUTS AND ANY OTHER CODE REQUIRED LOCATIONS.
 - THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL MECHANICAL EQUIPMENT FROM FOREIGN MATERIAL DURING CONSTRUCTION (PAINT, SPACKLE, ETC.). UPON COMPLETION OF WORK THE MECHANICAL CONTRACTOR SHALL CLEAN, WASH, ETC. ALL ITEMS AND EQUIPMENT WITHIN HIS SCOPE OF WORK AND LEAVE ALL ITEMS BRIGHT AND CLEAN.
 - M.C. IS TO ENSURE THAT THEIR INSTALLATION OF NEW CONDUITS, PIPES, DUCTWORK, AND SIMILAR DOES NOT BLOCK ACCESS TO NEW OR EXISTING AREA EQUIPMENT AND THAT THE FORE MENTIONED DOES NOT INTERFERE WITH THE REQUIRED SERVICE CLEARANCE OF NEW OR EXISTING EQUIPMENT. COORDINATE WITH OTHER TRADE CONTRACTORS AND CONTACT ENGINEER IF UNCERTAINTY EXISTS REGARDING EQUIPMENT SERVICE CLEARANCE REQUIREMENTS.
 - MALE END OF ALL OVERLAPPING DRYER DUCT JOINTS ARE TO BE DIRECTED AWAY FROM DRYER. HORIZONTAL DUCT SECTIONS ARE TO HAVE THE LONGITUDINAL (LONG WAYS) SEAM FACING UP. IF POP-REVETS ARE USED DUCT JOINTS ARE TO BE SEALED WITH NON-HARDENING MASTIC OR SIMILAR.
 - ALL EXTERIOR EQUIPMENT, DEVICES AND MATERIALS SHALL BE INSTALLED, BRACED TO WITHSTAND A 160 MPH WIND.

TAG	LOCATION	TYPE	INPUT (BTUH)	OUTPUT (BTUH)	ELECTRICAL DATA				MANUFACTURER & MODEL NO.	NOTES
					W	V	PH	HZ		
UH-3	STOR./MAINT.	ELEC.	N/A	N/A	1,500	120	1Ø	60	MARKEL E3323TD-RP	1,2,3,4,5

- NOTES:**
- INTERNAL THERMOSTAT. SET TO 60° F.
 - SURFACE MOUNT.
 - MOUNT HEATER @ 12" A.F.F.
 - UNIT DISCONNECT.
 - U.L. LISTED.

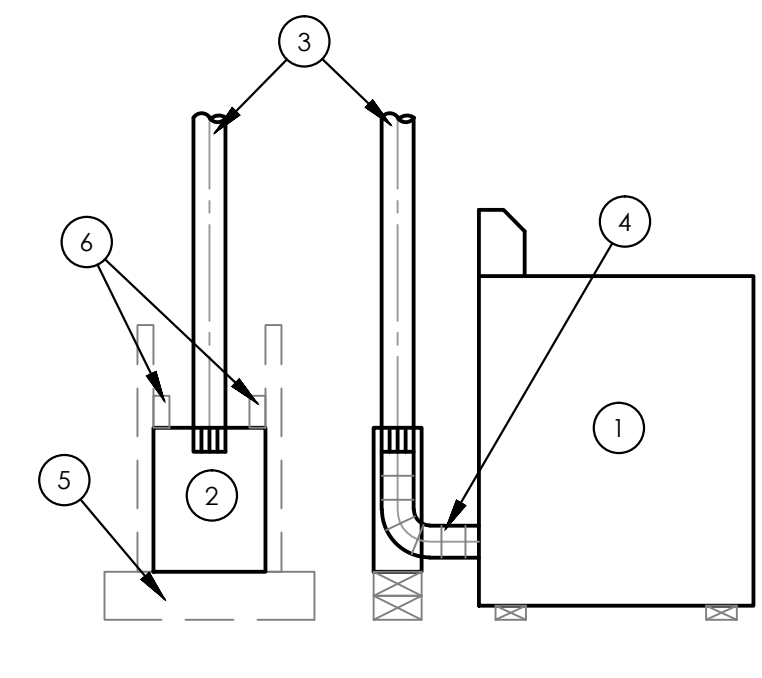


NOTE:
COORDINATE HEAT PUMP MOUNTING W/ ARCH AND STRUCTURAL ENGINEER. HEAT PUMP TO WITHSTAND 160 MPH WIND.

- HEAT PUMP
- STRIP OF ROOF MEMBRANE MATERIAL
- 3" X 3" X 7/8" RUBBER/CORK ANTI-VIBRATION PAD (EQUAL TO DIVERSITECH MP-3C)
- PRESSURE TREATED 4X4 RAIL
- ROOF MEMBRANE
- ROOF DECK

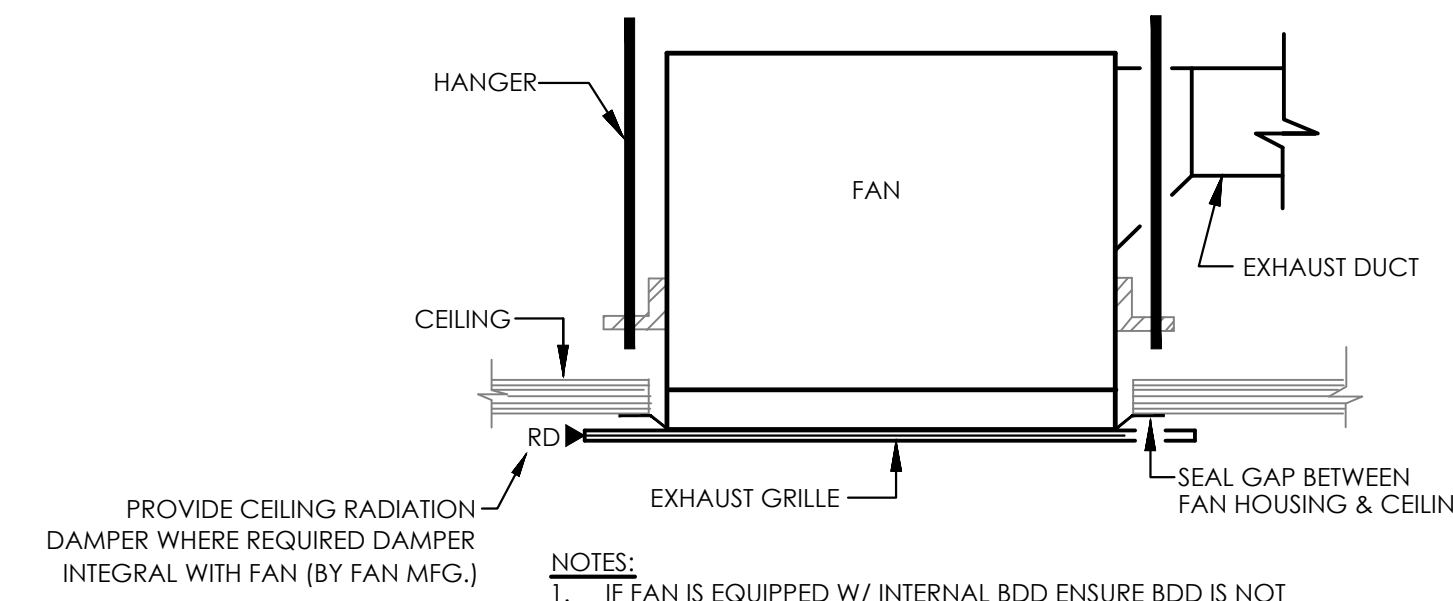
NOTES:
1. ANTI-VIBRATION PAD TO BE INSTALLED AT ALL (4) CORNERS OF UNIT.

10 ROOF HEAT PUMP DETAIL
NO SCALE



- 1. RESIDENTIAL DRYER
- 2. RECESSED METAL BOX (18"x14"x5-1/2")
- 3. 4" DRYER VENT
- 4. DRYER FLEX HOSE
- 5. ONE 2x6 BLOCK ON BOTTOM PLATE
- 6. 2x4 BLOCKING

9 RECESSED METAL BOX FOR DRYER EXHAUST
NO SCALE

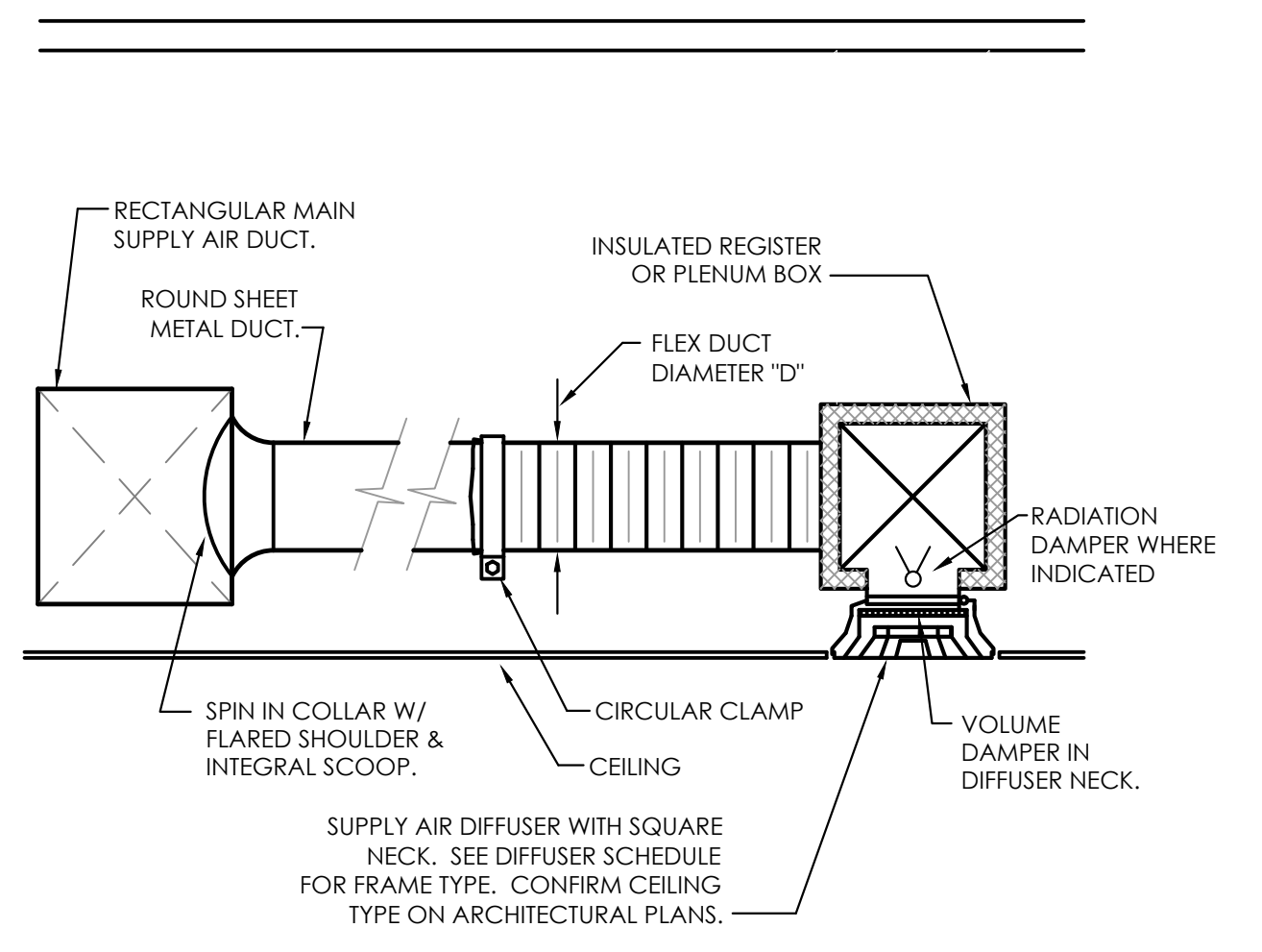


- HANGER
- CEILING
- EXHAUST DUCT
- EXHAUST GRILLE
- SEAL GAP BETWEEN FAN HOUSING & CEILING

PROVIDE CEILING RADIATION DAMPER WHERE REQUIRED DAMPER INTEGRAL WITH FAN (BY FAN MFG.)

NOTES:
1. IF FAN IS EQUIPPED W/ INTERNAL BDD ENSURE BDD IS NOT TAPED SHUT.
2. ENSURE NO PORTION OF TAPE, SEALING, ETC EXTENDS PAST EDGE OF EXHAUST GRILLE.
3. INSTALLATION IN HARD-CEILING SIMILAR. FAN TO BE FASTENED TO RAFTER/JOIST. SEE MFG INSTRUCTIONS.

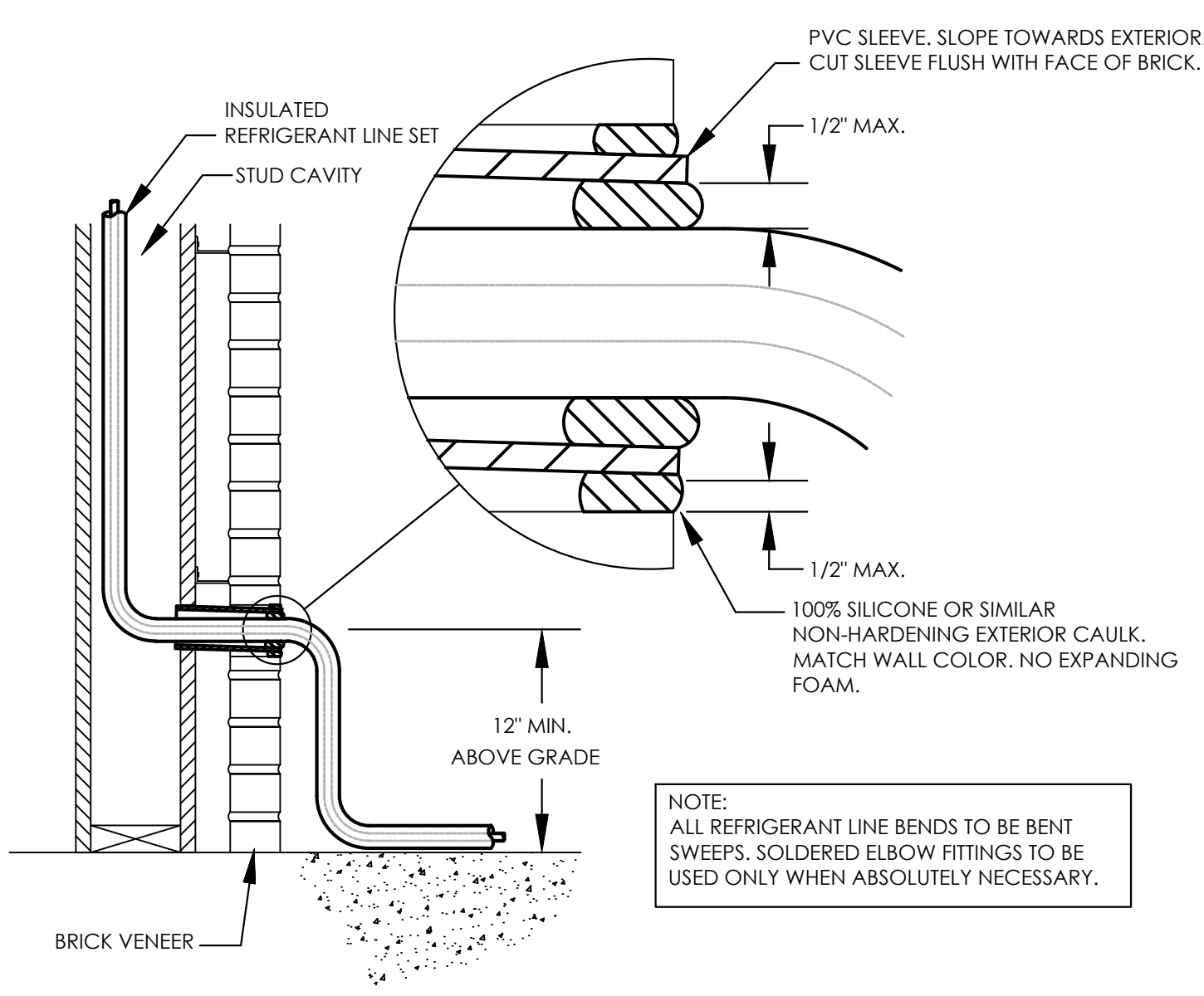
8 EXHAUST FAN (CEILING) DETAIL
NO SCALE



- RECTANGULAR MAIN SUPPLY AIR DUCT
- ROUND SHEET METAL DUCT
- INSULATED REGISTER OR PLENUM BOX
- FLEX DUCT DIAMETER "D"
- RADIATION DAMPER WHERE INDICATED
- VOLUME DAMPER IN DIFFUSER NECK
- CIRCULAR CLAMP
- CEILING
- SPIN IN COLLAR W/ FLARED SHOULDER & INTEGRAL SCOOP
- SUPPLY AIR DIFFUSER WITH SQUARE NECK. SEE DIFFUSER SCHEDULE FOR FRAME TYPE. CONFIRM CEILING TYPE ON ARCHITECTURAL PLANS.

NOTE:
1. SEE HVAC GENERAL NOTES FOR DUCT INSULATION REQUIREMENTS.

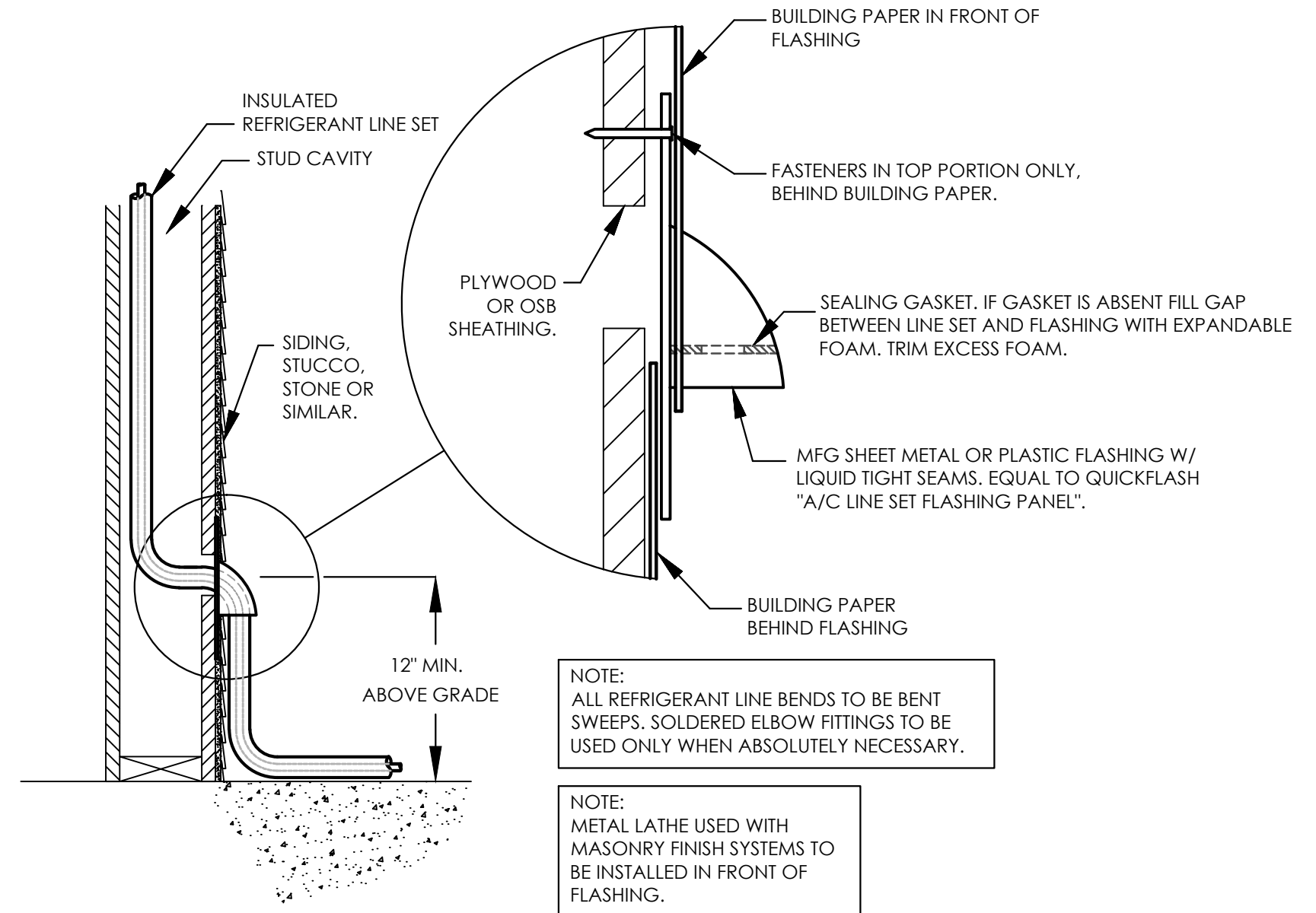
7 SUPPLY AIR DIFFUSER DETAIL (APARTMENT UNITS)
NO SCALE



- PVC SLEEVE. SLOPE TOWARDS EXTERIOR. CUT SLEEVE FLUSH WITH FACE OF BRICK.
- 1/2" MAX.
- INSULATED REFRIGERANT LINE SET
- STUD CAVITY
- 100% SILICONE OR SIMILAR NON-HARDENING EXTERIOR CAULK. MATCH WALL COLOR. NO EXPANDING FOAM.
- 12" MIN. ABOVE GRADE
- BRICK VENEER

NOTE:
ALL REFRIGERANT LINE BENDS TO BE BENT SWEEPS. SOLDERED ELBOW FITTINGS TO BE USED ONLY WHEN ABSOLUTELY NECESSARY.

6 HVAC LINE SET PENETRATION DETAIL (MASONRY)
NO SCALE

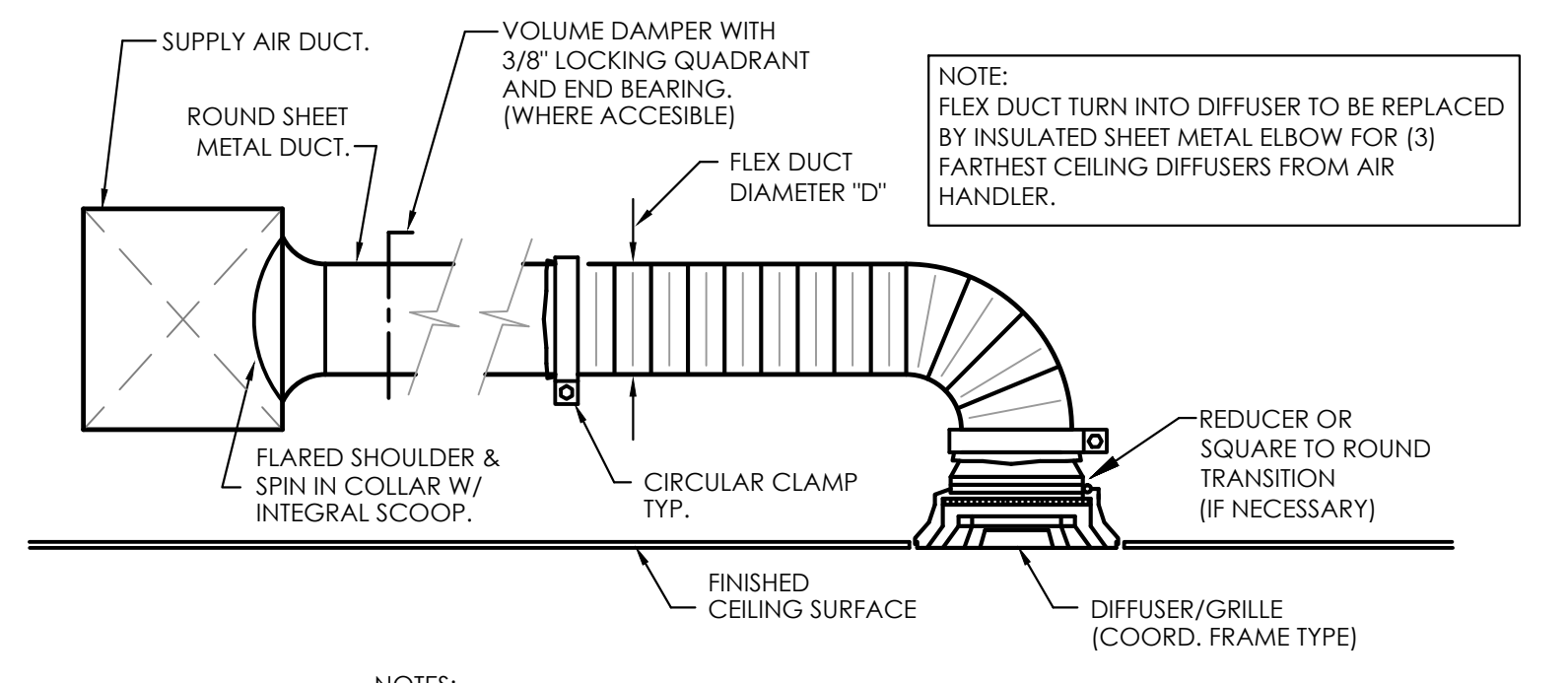


- INSULATED REFRIGERANT LINE SET
- STUD CAVITY
- PLYWOOD OR OSB SHEATHING.
- SIDING, STUCCO, STONE OR SIMILAR.
- 12" MIN. ABOVE GRADE
- BUILDING PAPER IN FRONT OF FLASHING
- FASTENERS IN TOP PORTION ONLY, BEHIND BUILDING PAPER.
- SEALING GASKET, IF GASKET IS ABSENT FILL GAP BETWEEN LINE SET AND FLASHING WITH EXPANDABLE FOAM. TRIM EXCESS FOAM.
- MFG SHEET METAL OR PLASTIC FLASHING W/ LIQUID TIGHT SEAMS. EQUAL TO QUICKFLASH "A/C" LINE SET FLASHING PANEL.
- BUILDING PAPER BEHIND FLASHING

NOTE:
ALL REFRIGERANT LINE BENDS TO BE BENT SWEEPS. SOLDERED ELBOW FITTINGS TO BE USED ONLY WHEN ABSOLUTELY NECESSARY.

NOTE:
METAL LATHE USED WITH MASONRY FINISH SYSTEMS TO BE INSTALLED IN FRONT OF FLASHING.

5 HVAC LINE SET PENETRATION DETAIL (NON-MASONRY)
NO SCALE

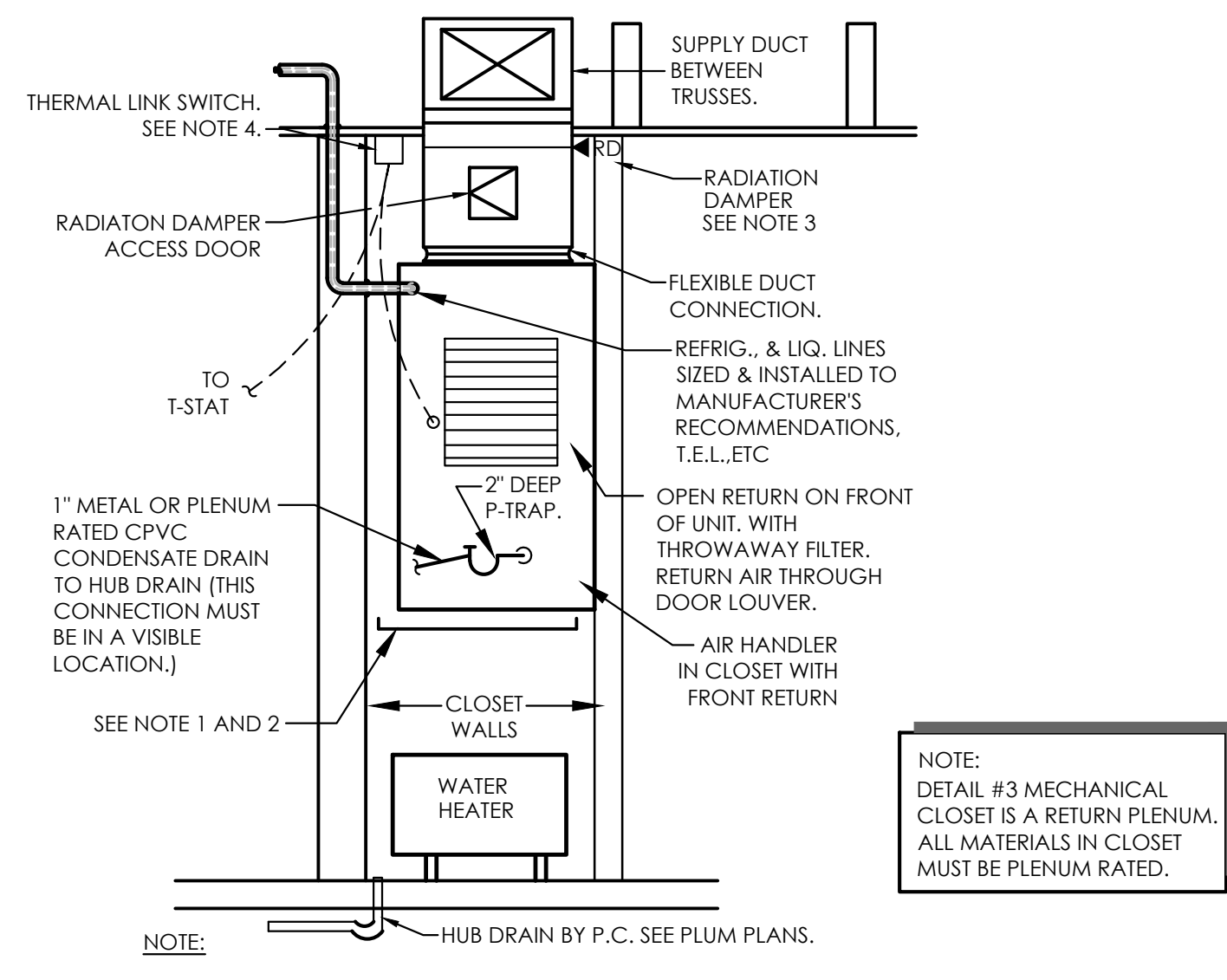


- SUPPLY AIR DUCT
- ROUND SHEET METAL DUCT
- VOLUME DAMPER WITH 3/8" LOCKING QUADRANT AND END BEARING. (WHERE ACCESSIBLE)
- FLEX DUCT DIAMETER "D"
- REDUCER OR SQUARE TO ROUND TRANSITION (IF NECESSARY)
- FINISHED CEILING SURFACE
- DIFFUSER/GRILLE (COORD. FRAME TYPE)
- FLARED SHOULDER & SPIN IN COLLAR W/ INTEGRAL SCOOP
- CIRCULAR CLAMP TYP.

NOTE:
FLEX DUCT TURN INTO DIFFUSER TO BE REPLACED BY INSULATED SHEET METAL ELBOW FOR (3) FARTHEST CEILING DIFFUSERS FROM AIR HANDLER.

NOTES:
1. PROVIDE INSULATED REGISTER BOOT/PLENUM BOX IF NECESSARY.
2. RETURN APPLICATION IS SIMILAR. ALL ELBOWS IN RETURN APPLICATION TO BE INSULATED SHEET METAL (NO FLEX ELBOWS).

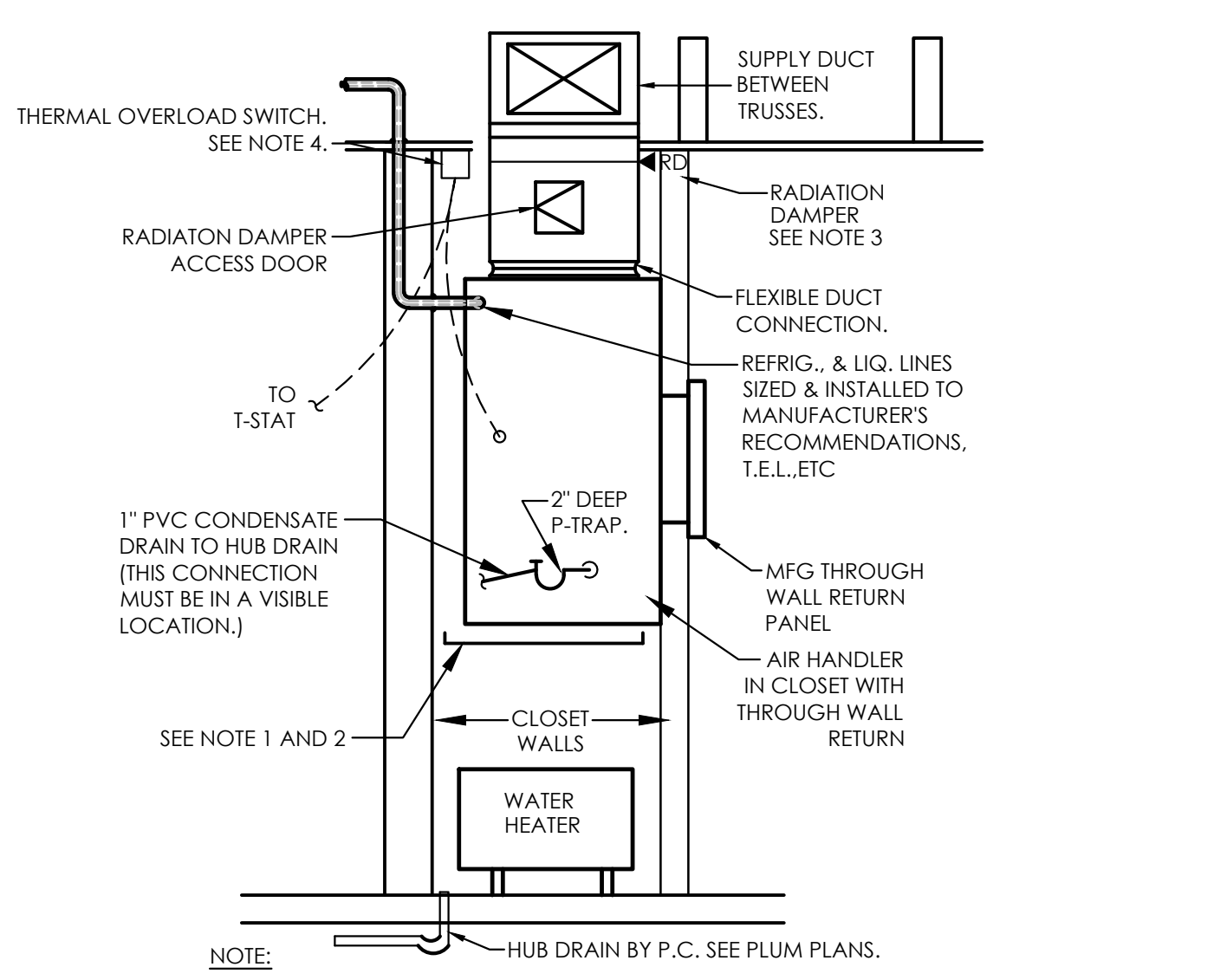
4 DIFFUSER DETAIL (CLUBHOUSE)
NO SCALE



- THERMAL LINK SWITCH. SEE NOTE 4.
- RADIATION DAMPER ACCESS DOOR
- TO T-STAT
- 1" METAL OR PLENUM RATED CPVC CONDENSATE DRAIN TO HUB DRAIN (THIS CONNECTION MUST BE IN A VISIBLE LOCATION.)
- SEE NOTE 1 AND 2
- CLOSET WALLS
- WATER HEATER
- HUB DRAIN BY P.C. SEE PLUM PLANS.
- RADIATION DAMPER SEE NOTE 3
- FLEXIBLE DUCT CONNECTION.
- REFRIG. & LIQ. LINES SIZED & INSTALLED TO MANUFACTURER'S RECOMMENDATIONS, T.E.L., ETC
- 2" DEEP P-TRAP.
- OPEN RETURN ON FRONT OF UNIT, WITH THROWAWAY FILTER. RETURN AIR THROUGH DOOR LOUVER.
- AIR HANDLER IN CLOSET WITH FRONT RETURN

NOTE:
DETAIL #3 MECHANICAL CLOSET IS A RETURN PLENUM. ALL MATERIALS IN CLOSET MUST BE PLENUM RATED.

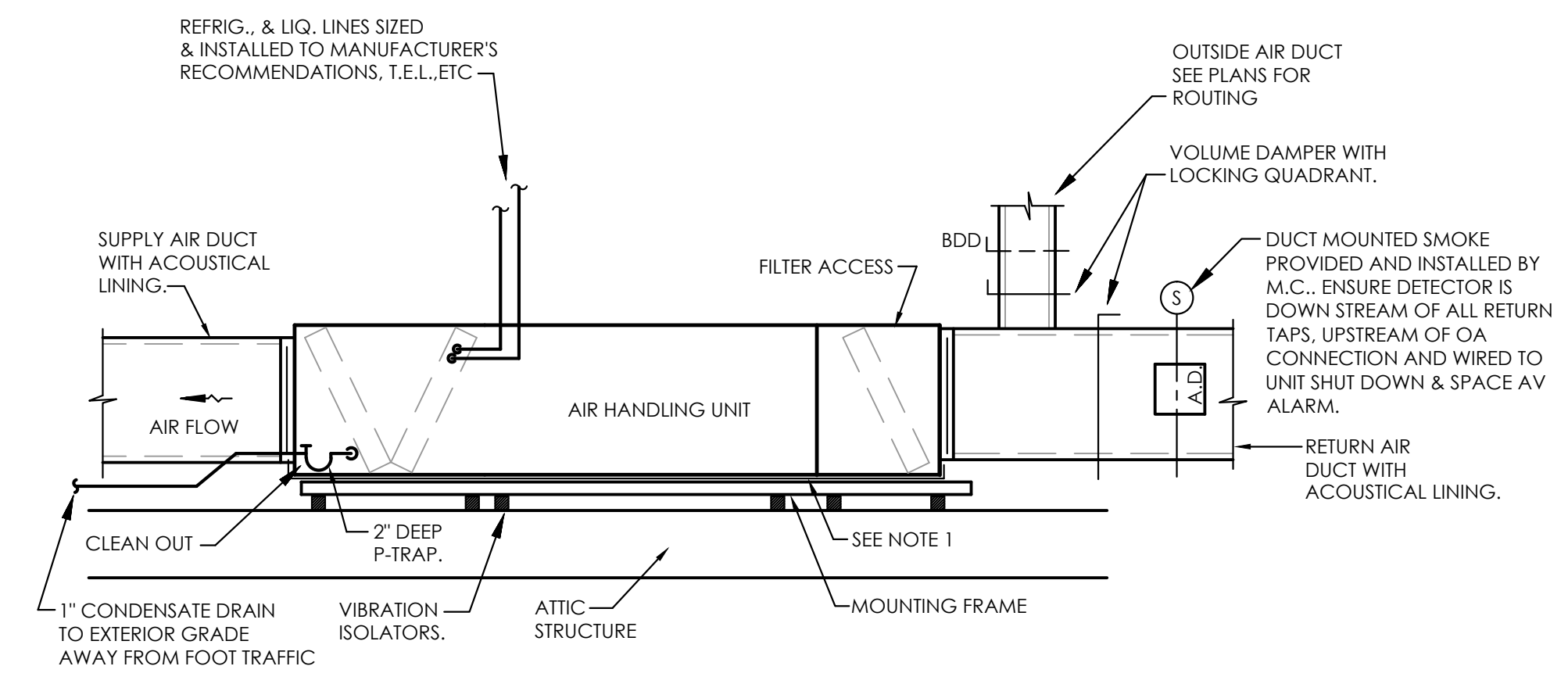
3 WALL HUNG AIR HANDLER DETAIL (AH-2)
NO SCALE



- THERMAL OVERLOAD SWITCH. SEE NOTE 4.
- RADIATION DAMPER ACCESS DOOR
- TO T-STAT
- 1" PVC CONDENSATE DRAIN TO HUB DRAIN (THIS CONNECTION MUST BE IN A VISIBLE LOCATION.)
- SEE NOTE 1 AND 2
- CLOSET WALLS
- WATER HEATER
- HUB DRAIN BY P.C. SEE PLUM PLANS.
- RADIATION DAMPER SEE NOTE 3
- FLEXIBLE DUCT CONNECTION.
- REFRIG. & LIQ. LINES SIZED & INSTALLED TO MANUFACTURER'S RECOMMENDATIONS, T.E.L., ETC
- 2" DEEP P-TRAP.
- MFG THROUGH WALL RETURN PANEL
- AIR HANDLER IN CLOSET WITH THROUGH WALL RETURN

NOTES:
1. AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH, INTERLOCK FLOAT SWITCH WITH AIR HANDLER. MAY BE INTEGRAL TO AIR HANDLER.
2. COORDINATE INSTALLATION WITH P.C. AND WATER HEATER BELOW AH.
3. RADIATION DAMPER TO BE CURTAIN STYLE. METAL-FAB MCCD CURTAIN STYLE. INSTALL IN VERTICAL SECTION OF SUPPLY DUCT PRIOR TO 90° ELBOW. THERMAL LINK TO BE SET TO 165°F. M.C. TO PROVIDE OVERLOAD SWITCH AT CEILING EQUAL TO GLOVE TECHNOLOGIES 3271.55. SET TO 155°F. WIRE AH CONTROLS VIA SWITCH. AH TO SHUT DOWN UPON SWITCH OPENING.
4. AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH, INTERLOCK FLOAT SWITCH WITH AIR HANDLER. MAY BE INTEGRAL TO AIR HANDLER. COORDINATE INSTALLATION WITH P.C.

2 WALL HUNG AIR HANDLER DETAIL (AH-1 & AH-3)
NO SCALE



- REFRIG. & LIQ. LINES SIZED & INSTALLED TO MANUFACTURER'S RECOMMENDATIONS, T.E.L., ETC
- SUPPLY AIR DUCT WITH ACOUSTICAL LINING
- AIR FLOW
- CLEAN OUT
- 1" CONDENSATE DRAIN TO EXTERIOR GRADE AWAY FROM FOOT TRAFFIC
- VIBRATION ISOLATORS.
- ATTIC STRUCTURE
- MOUNTING FRAME
- SEE NOTE 1
- 2" DEEP P-TRAP.
- OUTSIDE AIR DUCT SEE PLANS FOR ROUTING
- VOLUME DAMPER WITH LOCKING QUADRANT.
- DUCT MOUNTED SMOKE PROVIDED AND INSTALLED BY M.C. ENSURE DETECTOR IS DOWN STREAM OF ALL RETURN TAPS. UPSTREAM OF OA CONNECTION AND WIRED TO UNIT SHUT DOWN & SPACE AV ALARM.
- RETURN AIR DUCT WITH ACOUSTICAL LINING.

NOTES:
1. 1-1/2" DEEP AUXILIARY DRAIN PAN WITH MICROFLOAT SWITCH, INTERLOCK FLOAT SWITCH WITH AIR HANDLER. INSTALL FLOAT SWITCH IN ONE CORNER OF PAN AND TILT PAN TO THAT CORNER.

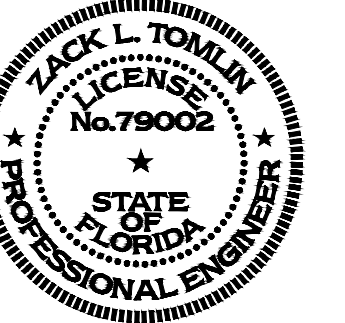
1 AIR HANDLING UNIT DETAIL (AH-5, AH-6, AH-7, AH-8, AH-9)
NO SCALE



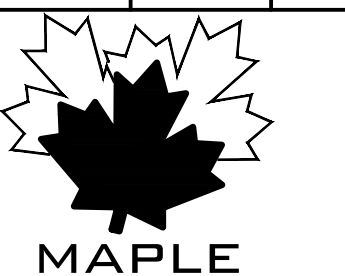
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SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



ENGINEERING: EDP # 3316
708 ST. MARKS ST.
RALEIGH, NC 27605 LIC. # P-0990
P.L. # 241-4547 F.B. # 9800-3797
PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

ISSUE DATE:	REVISIONS	DATE	INITIALS	DESCRIPTION
07.19.19				

PROJECT NO: PLX-1906

DRAWN BY: RMH

CHECKED BY: ZLT

SHEET TITLE: MECHANICAL DETAILS

SHEET NUMBER: M0.03

System No. F-C-8036
F Rating - 1 Hr
T Rating - 1 Hr

1. Floor-Ceiling Assembly - The 1 hr fire rated wood joist, wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory and shall include the following construction features:

- Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture** as specified in the individual Floor-Ceiling Design. Diam of floor opening to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of floor opening is 3 in. (76 mm).
- Joists** - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, wood trusses or **Structural Wood Members** with bridging as required and with ends firestopped.
- Furring Channels** - (Not Shown) - Resilient galv steel furring channels installed perpendicular to wood joists (Item 1B) as required in the individual Floor-Ceiling Design.
- Gypsum Board** - Nom 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Diam of opening in ceiling to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of ceiling opening is 3 in. (76 mm).

2. Chase Wall - (Optional) - The through penetrant (Item 3) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum board chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- Studs** - Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
- Sole Plate** - Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening in sole plate to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of opening is 3 in. (76 mm).
- Top Plate** - The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening in top plate to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of opening is 3 in. (76 mm).
- Gypsum Board** - Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.

3. Through Penetrants - Pipes, conduits, tubing and cables to be bundled and centered in the opening. The space between penetrants and edge of opening shall be min 1/4 in. (6 mm) to max 3/4 in. (19 mm). Penetrants to be rigidly supported on both sides of the floor-ceiling assembly:

- Metallic Pipes** - A max of two metallic pipes, conduits or tubing, (one 3/4 in. or 19 mm diam and one 1/2 in. or 13 mm diam) to be installed within the firestop system. The following types and sizes of metallic pipes, conduits or tubing may be used:

- Steel Pipe** - Nom 3/4 in. (19 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
- Conduit** - Nom 3/4 in. (19 mm) diam (or smaller) steel electrical metallic tubing or steel conduit.
- Copper Tubing** - Nom 3/4 in. (19 mm) diam (or smaller) Type L (or heavier) copper tubing.
- Copper Pipe** - Nom 3/4 in. (19 mm) diam (or smaller) Regular (or heavier) copper pipe.

- Nonmetallic Pipes** - A max of one nonmetallic pipe to be installed within the firestop system. The following types and sizes of nonmetallic pipes may be used:

- Polyvinyl Chloride (PVC) Pipe** - Nom 1/2 in. (13 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- Chlorinated Polyvinyl Chloride (PVC) Pipe** - Nom 1/2 in. (13 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- Cables** - A max of two 4/C No. 18 AWG (or smaller) thermostat cables with PVC insulation and PVC/nylon jacketing material.
- Tube Insulation - Plastic** - Nom 1/2 in. (13 mm) thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. Tube insulation to be installed on a max of one metallic pipe or tubing.

See **Plastics** (QMFZ2) category in the Plastics Recognized Components Directory for names of manufacturers. Any recognized component tube insulation meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

4. Fill, Void or Cavity Material - **Caulk** - Min 3/4 in. (19 mm) thickness of fill material applied within annulus on top surface of floor. Min 5/8 in. (16 mm) thickness of fill material applied within annulus on lower top plate of chase wall assembly or gypsum board ceiling. Fill material forced into grouped penetrant interstices to max extent possible.

SPECIFIED TECHNOLOGIES INC - Type WF300 Caulk
+Bearing the UL Recognized Component Mark
*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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3 AC LINE SET (WOOD FLOOR/CEILING) UL DETAIL
NO SCALE

NOTE:
NUMBER OF REF. LINE OPENINGS TO BE DETERMINED AND CUT AND ON JOB

5 REFRIGERANT BOX DETAIL (ROOF)
NO SCALE

System No. W-L-2059
F Ratings - 1 and 2 Hr (See Items 2 and 3)
T Ratings - 3/4, 1, 1-1/2 and 2 Hr (See Items 2 and 3)
L Rating At Ambient - 1 CFM/sq ft
L Rating At Ambient - Less Than 1 CFM/sq ft

1. Wall Assembly - The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 and V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

- Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC.
- Gypsum Board** - 5/8 in. (16 mm) thick, 4 ft (1219 mm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 5 in. (127 mm).

2. Through-Penetrants - One nonmetallic pipe or conduit to be centered within the firestop system. The annular space shall be max 1/4 in. (6 mm). Pipe or conduit to be rigidly supported on both sides of the wall assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

- Polyvinyl Chloride (PVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 60 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems. When Schedule 80 PVC pipe is used, the F and T Ratings are 1 hr. When Schedule 80 PVC pipe is used in closed (process or supply) piping systems, the F and T Ratings are equal to the assembly rating of the wall in which it is installed.
- Rigid Nonmetallic Conduits** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 or 60 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70). When Schedule 80 PVC conduit is used, the F and T Ratings are 1 hr.
- Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 4 in. (102 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
- Acrylonitrile Butadiene Styrene (ABS) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid or formed core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- Fire Retardant Polypropylene (FRPP) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 FRPP pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- Polyvinylidene Fluoride (PVDF) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 PVDF pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- Fiberglass Reinforced Pipe (FRP) Pipe** - Nom 4 in. (102 mm) diam (or smaller) glass fiber reinforced thermosetting resin pipe for use in closed (process or control) or vented (drain, waste or vent) piping systems. When FRP pipe is used, T Rating is 3/4 hr.
- High Density Polyethylene (HDPE) Pipe** - Nom 4 in. (102 mm) diam (or smaller) Schedule 40 HDPE pipe for use in closed (process or supply) piping systems.

3. Firestop System - The firestop system shall consist of the following:

- Fill, Void or Cavity Material - Sealant - Fill material forced into annular space to max extent possible. Caulk shall be installed flush with both surfaces of wall assembly.

SPECIFIED TECHNOLOGIES INC - SpecSeal 100, 101, 102, 105, 120 or 129 Sealant, SpecSeal LCI Sealant, Penel 300 Sealant or SpecSeal Series SLS300 Sealant

B. Fill, Void or Cavity Material - Wrap Strip - Nom 1/8 in. (3.2 or 4.8 mm) thick incompressible material faced on both sides with a plastic film, applied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick incompressible material faced on both sides with a plastic film, applied in 1-1/2 in. (38 mm) wide strips. The layers of wrap strips are individually wrapped around the through-penetrant with ends butted and held in place with masking tape. Butted ends in successive layers shall be aligned.

C. Firestop Device - (Optional, Not Shown) - As an alternate to Item 3B and 3C, galv steel collar lined with an incompressible material sized to fit the specific diam of the through-penetrant. Device shall be installed around through-penetrant in accordance with accompanying installation instructions. Device incorporates anchor tabs for securement to each surface of wall assembly by means of 1/8 in. (3 mm) diam by 1-3/4 in. (45 mm) long steel molly bolts in conjunction with 1/4 in. (6 mm) diam steel thread washers.

SPECIFIED TECHNOLOGIES INC - SpecSeal Firestop Collar, SpecSeal LCC Collar or SpecSeal SSC Collar
*Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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System No. W-L-2059
F Ratings - 1 and 2 Hr (See Items 2 and 3)
T Ratings - 3/4, 1, 1-1/2 and 2 Hr (See Items 2 and 3)
L Rating At Ambient - 1 CFM/sq ft
L Rating At Ambient - Less Than 1 CFM/sq ft

2 NON-METALLIC PIPE (GYPSUM WALL) DETAIL
NO SCALE

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. O.C. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) O.C.
- Gypsum Board** - 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/2 in.

2. Through Penetrant - A max of two pipes or tubing to be installed within the opening. Of the two pipes, or tubing, only one of the pipes or tubing shall have a nom diam greater than 1/2 in. The annular space between pipes or tubing and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- Steel Pipe** - Nom 1 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- Iron Pipe** - Nom 1 in. diam (or smaller) cast or ductile iron pipe.
- Copper Tubing** - Nom 1 in. diam (or smaller) Type L (or heavier) copper tubing.
- Copper Pipe** - Nom 1 in. diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation - Plastics - A max of nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on a max of one pipe or tubing. The annular space between penetrating item and periphery of opening shall be min 1/2 in. to max 3/4 in. The space between pipes or tubing shall be 0 in. (point contact)

See Plastics (QMFZ2) category in the Recognized Component Directory for names for manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

4. Cables - One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced a min 0 in. (point contact) to max 1/2 in. from the other penetrants. The space between the cable and the periphery of the opening shall be a min 0 in. (point contact) to max 1/2 in. Cable to be rigidly supported on both sides of wall assembly.

5. Fill, Void or Cavity Material - **Sealant** - Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be forced into interstices within groups of penetrating items to max extent possible and installed such that a min 1/4 in. thick crown is formed around the penetrating items and lapping 1/4 in. beyond the periphery of the opening.

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant
+Bearing the UL Recognized Component Mark
*Bearing the UL Certification Mark

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2 NON-METALLIC PIPE (GYPSUM WALL) DETAIL
NO SCALE

System No. F-C-7060

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating - 1 Hr	F Rating - 1 Hr
T Ratings - 1 Hr	FT Ratings - 1 Hr
L Rating At Ambient - Less Than 1 CFM/sq ft	FH Rating - 1 Hr
	FTH Ratings - 1 Hr
	L Rating At Ambient - Less Than 1 CFM/sq ft

4 DRYER DUCT PENETRATION (WOOD FLOOR/CEILING) DETAIL
NO SCALE

System No. W-L-8011
F Ratings - 1 & 2 Hr. (See Item 1B)
T Rating - 1/2 Hr.

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. O.C. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. O.C.
- Gypsum Board** - 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/2 in.

2. Through Penetrant - A max of two pipes or tubing to be installed within the opening. Of the two pipes, or tubing, only one of the pipes or tubing shall have a nom diam greater than 1/2 in. The annular space between penetrating item and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- Steel Pipe** - Nom 1 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- Iron Pipe** - Nom 1 in. diam (or smaller) cast or ductile iron pipe.
- Copper Tubing** - Nom 1 in. diam (or smaller) Type L (or heavier) copper tubing.
- Copper Pipe** - Nom 1 in. diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation - Plastics - A max of nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on a max of one pipe or tubing. The annular space between penetrating item and periphery of opening shall be min 1/2 in. to max 3/4 in. The space between pipes or tubing shall be 0 in. (point contact)

See Plastics (QMFZ2) category in the Recognized Component Directory for names for manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

4. Cables - One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced a min 0 in. (point contact) to max 1/2 in. from the other penetrants. The space between the cable and the periphery of the opening shall be a min 0 in. (point contact) to max 1/2 in. Cable to be rigidly supported on both sides of wall assembly.

5. Fill, Void or Cavity Material - **Sealant** - Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be forced into interstices within groups of penetrating items to max extent possible and installed such that a min 1/4 in. thick crown is formed around the penetrating items and lapping 1/4 in. beyond the periphery of the opening.

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant
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System No. W-L-8011
F Ratings - 1 & 2 Hr. (See Item 1B)
T Rating - 1/2 Hr.

1. Wall Assembly - The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

- Studs** - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. O.C. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. O.C.
- Gypsum Board** - 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 3-1/2 in.

2. Through Penetrant - A max of two pipes or tubing to be installed within the opening. Of the two pipes, or tubing, only one of the pipes or tubing shall have a nom diam greater than 1/2 in. The annular space between penetrating item and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. Pipes or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:

- Steel Pipe** - Nom 1 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
- Iron Pipe** - Nom 1 in. diam (or smaller) cast or ductile iron pipe.
- Copper Tubing** - Nom 1 in. diam (or smaller) Type L (or heavier) copper tubing.
- Copper Pipe** - Nom 1 in. diam (or smaller) Regular (or heavier) copper pipe.

3. Tube Insulation - Plastics - A max of nom 3/4 in. thick acrylonitrile butadiene/polyvinyl chloride (AB/PVC) flexible foam furnished in the form of tubing. The tube insulation may be installed on a max of one pipe or tubing. The annular space between penetrating item and periphery of opening shall be min 1/2 in. to max 3/4 in. The space between pipes or tubing shall be 0 in. (point contact)

See Plastics (QMFZ2) category in the Recognized Component Directory for names for manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL94 Flammability Classification of 94-5VA may be used.

4. Cables - One 4 pair No. 18 AWG (or smaller) thermostat cable with polyvinyl chloride (PVC) insulation and jacket materials. Cable to be spaced a min 0 in. (point contact) to max 1/2 in. from the other penetrants. The space between the cable and the periphery of the opening shall be a min 0 in. (point contact) to max 1/2 in. Cable to be rigidly supported on both sides of wall assembly.

5. Fill, Void or Cavity Material - **Sealant** - Min 5/8 in. thickness of fill material applied within annulus, flush with both surfaces of wall. Additional fill material to be forced into interstices within groups of penetrating items to max extent possible and installed such that a min 1/4 in. thick crown is formed around the penetrating items and lapping 1/4 in. beyond the periphery of the opening.

SPECIFIED TECHNOLOGIES INC - SpecSeal Series SSS Sealant or SpecSeal LCI Sealant
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1 HVAC LINE SET (GYPSUM WALL) DETAIL
NO SCALE

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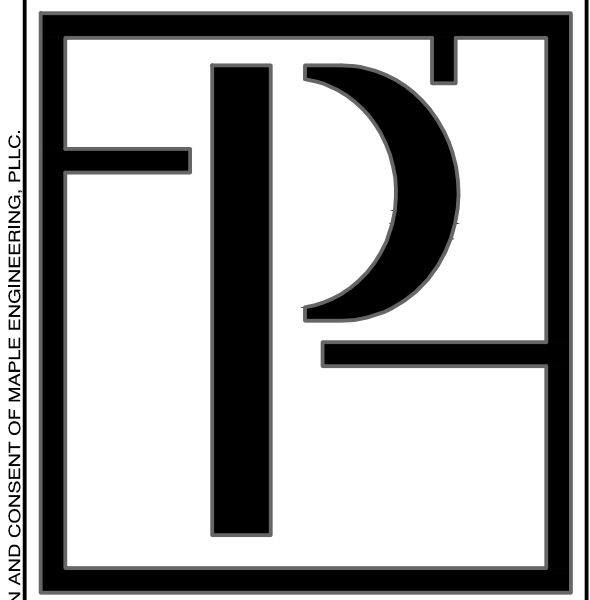
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PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

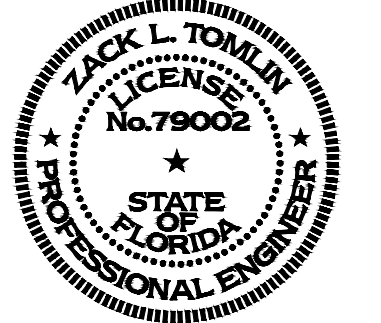
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MECHANICAL VENTILATION CALCULATIONS						
ROOM	LIVING AREA (SQFT)	AVG. CEILING HEIGHT (FT)	LIVING AREA VOLUME (CU. FT)	# OF BEDROOMS	# OF OCCUPANTS	REQUIRED OUTSIDE AIR (CFM)
TYPE 3.0 FAIR HOUSING	1192	9	10728	3	4	63

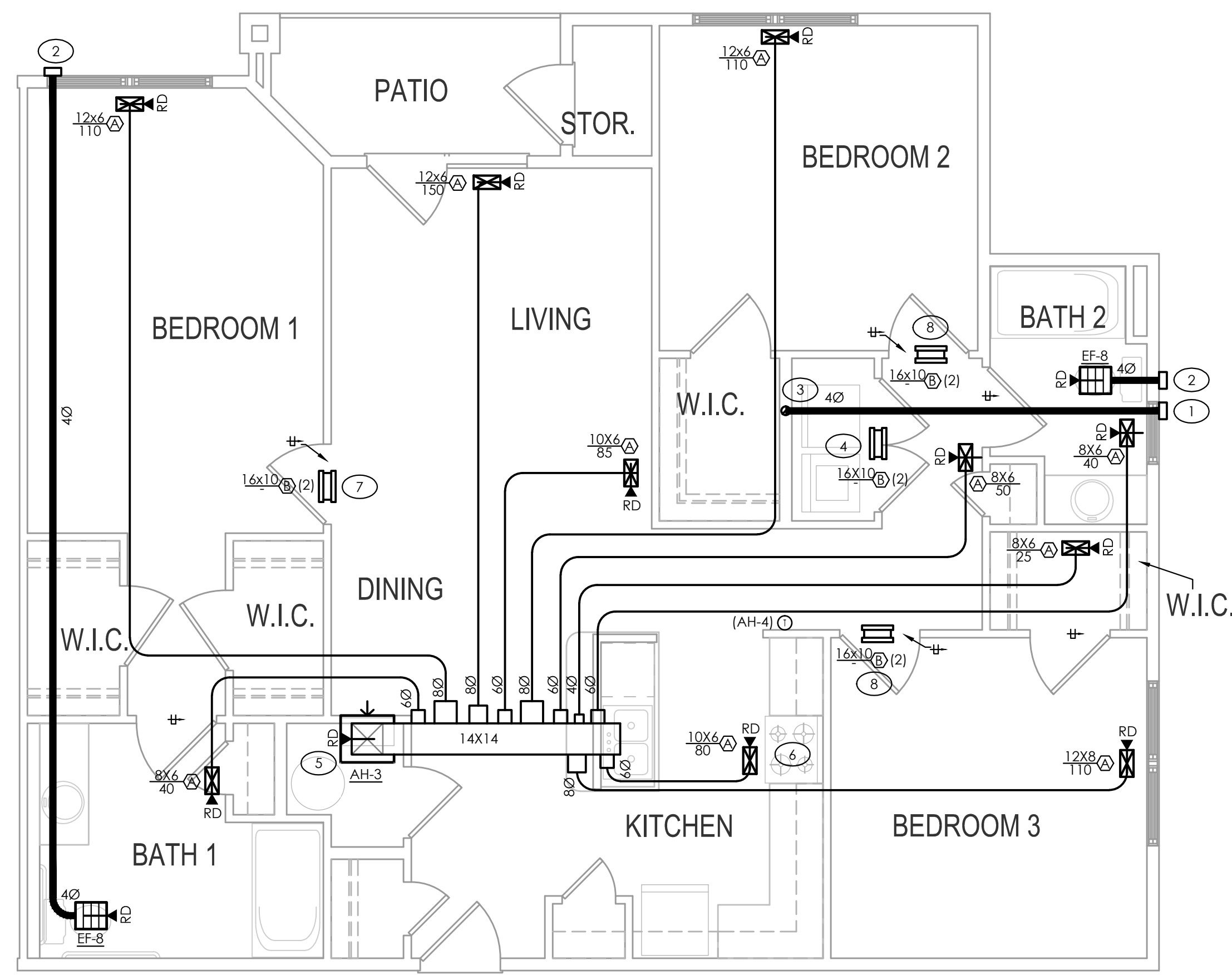
MECHANICAL VENTILATION CALCULATIONS (CONT.)				
APARTMENT UNIT	EXHAUST FAN	EXHAUST FAN CFM	AUTOMATIC OPERATION TIME PER HOUR (MINUTES)	PROVIDED VENTILATION (CFM)
TYPE 3.0 FAIR HOUSING	EF-8	110	19	35
TYPE 3.0 FAIR HOUSING	EF-8	110	19	35
TOTAL OUTSIDE AIR				70

DRYER VENT LENGTH
2017 FLMC SEC. 504.8
"UNIT TYPE 3.0 LAUNDRY":
(1) 90° BEND = 5' + 9' (V) + 14' (H) = 28' < 35'

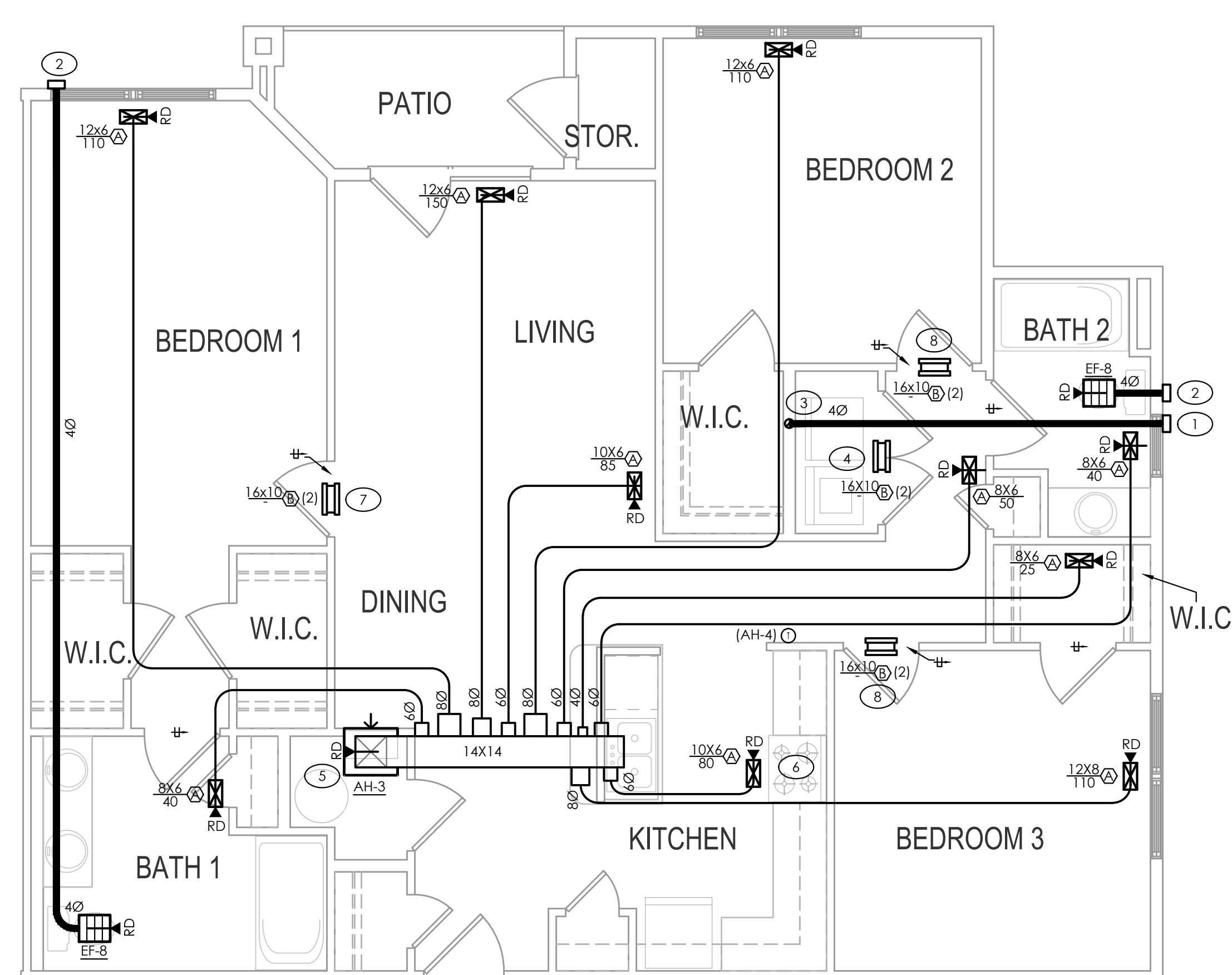
- INSTALLED DRYER MUST BE RATED BY MFG FOR VENT LENGTH OF 28' OR GREATER WHEN INSTALLED W/ (1) 40° 90° ELBOW(S).
- PROVIDE SHIELD PLATES ON THE FACE OF ALL FRAMING MEMBERS WHERE THERE IS LESS THAN 1-1/4" OF MATERIAL BETWEEN DRYER DUCT AND FACE OF FRAMING MEMBER. SHIELD PLATES ARE TO BE OF STEEL AND HAVE A MINIMUM THICKNESS OF 0.062 INCHES AND EXTEND A MINIMUM OF 2 INCHES ABOVE SOLE PLATES AND BELOW TOP PLATES. (2017 FLMC 504.7)

- TAGGED NOTES - THIS SHEET**
- DRYER VENT TO WALL CAP W/ BDD (NO SCREEN). CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
 - BATHROOM EXHAUST TO WALL CAP W/ BDD AND INSECT SCREEN. CAULK BEHIND AND AROUND CAP WITH 100% SILICONE. MAINTAIN 10' CLEARANCE FROM ALL BUILDING AIR INTAKES.
 - 40° DRYER VENT UP WALL. PROVIDE RECESSED DRYER BOX. SEE DETAIL REGARDING FIRE STOPPING OF DRYER VENT DUCTS.
 - PROVIDE TRANSFER GRILLE CENTERED OVER LAUNDRY CLOSET DOOR. GRILLE TO HAVE MINIMUM FREE AREA OF 100 SQIN. TURN BLADES TO FACE UP.
 - AIR HANDLER TO BE INSTALLED ON WALL IN CLOSET. SUPPLY TO DISCHARGE FROM TOP OF UNIT AND TO ABOVE CEILING. PROVIDE AIR HANDLER W/ MFG'S WALL PANEL FOR RETURN AIR AND AIR HANDLER ACCESS. SEE DETAIL.
 - U.L. LISTED RE-CIRCULATING EXHAUST HOOD BY G.C..
 - PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 135 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.
 - PROVIDE TRANSFER GRILLE CENTERED OVER BEDROOM DOOR. GRILLE TO HAVE MINIMUM GRILLE AREA OF 110 SQIN. TURN BLADES TO FACE UP. PROVIDE 1" DOOR UNDERCUT.

- GENERAL NOTES - THIS SHEET**
- DUCTWORK ROUTING TO BE COORDINATED WITH STRUCTURE AND TRUSS SPACING.
 - SEE BLDG PLAN FOR HEAT PUMP LOCATIONS.
 - NO FLEXIBLE DUCTWORK TO BE USED FOR EXHAUST APPLICATIONS. RIGID METAL DUCTWORK ONLY.
 - SEE BUILDING PLANS FOR UNIT DEMISING WALL AND FLOOR/CEILING RATINGS.
 - M.C. TO COORDINATE DUCT LOCATIONS WITH P.C. AND AREA PLUMBING STACKS AND OVERHEAD WASTE AND VENT PIPING.
 - M.C. TO COORDINATE WITH E.C. AND AREA PANEL FEEDER LOCATIONS.
 - M.C. TO COORDINATE WITH FIRE SPRINKLER CONTRACTOR AND AREA SPRINKLER PIPING.
 - SEE DETAILS REGARDING FIRE STOPPING OF DRYER EXHAUST DUCTS AND BATHROOM EXHAUST DUCTWORK.

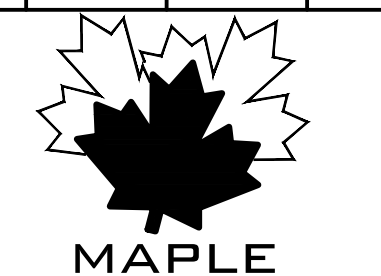


2 MECHANICAL UNIT PLAN - TYPE 3.0 MOBILITY
SCALE: 1/4" = 1'-0"



1 MECHANICAL UNIT PLAN - TYPE 3.0 FAIR HOUSING
SCALE: 1/4" = 1'-0"

SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



MAPLE
ENGINEERING
708 RT. 100, SUITE 100
RALEIGH, NC 27605
PLUMBING MECHANICAL ELECTRICAL

ISSUE DATE:	REVISIONS	DATE	INITIALS	DESCRIPTION
07.19.19				

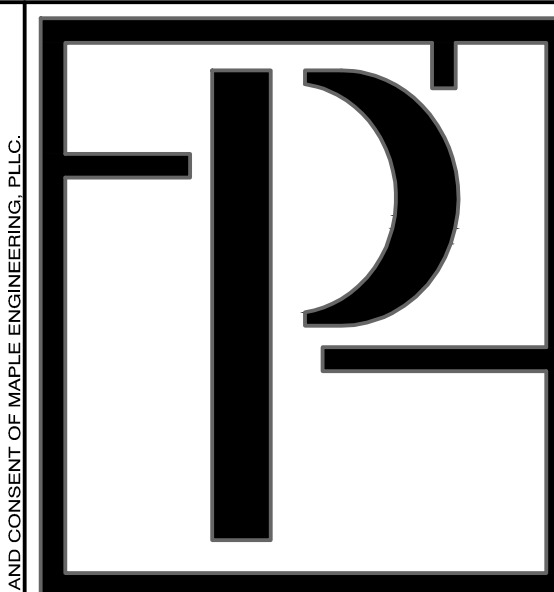
PROJECT NO: **PLX-1906**
DRAWN BY: RMH
CHECKED BY: ZLT

SHEET TITLE:
MECHANICAL UNIT PLANS

SHEET NUMBER:
M1.33

7/18/2019 5:11 PM
PLX-1906-M1.33.DWG

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5711 Six Forks Road, Suite 100

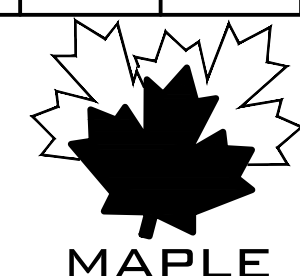
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office (919) 846-8100 website www.planworx.com

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Table with columns: ISSUE DATE, REVISIONS, DESCRIPTION, INTIALS. Includes a revision table with 11 rows.

PROJECT NO: PLX-1906

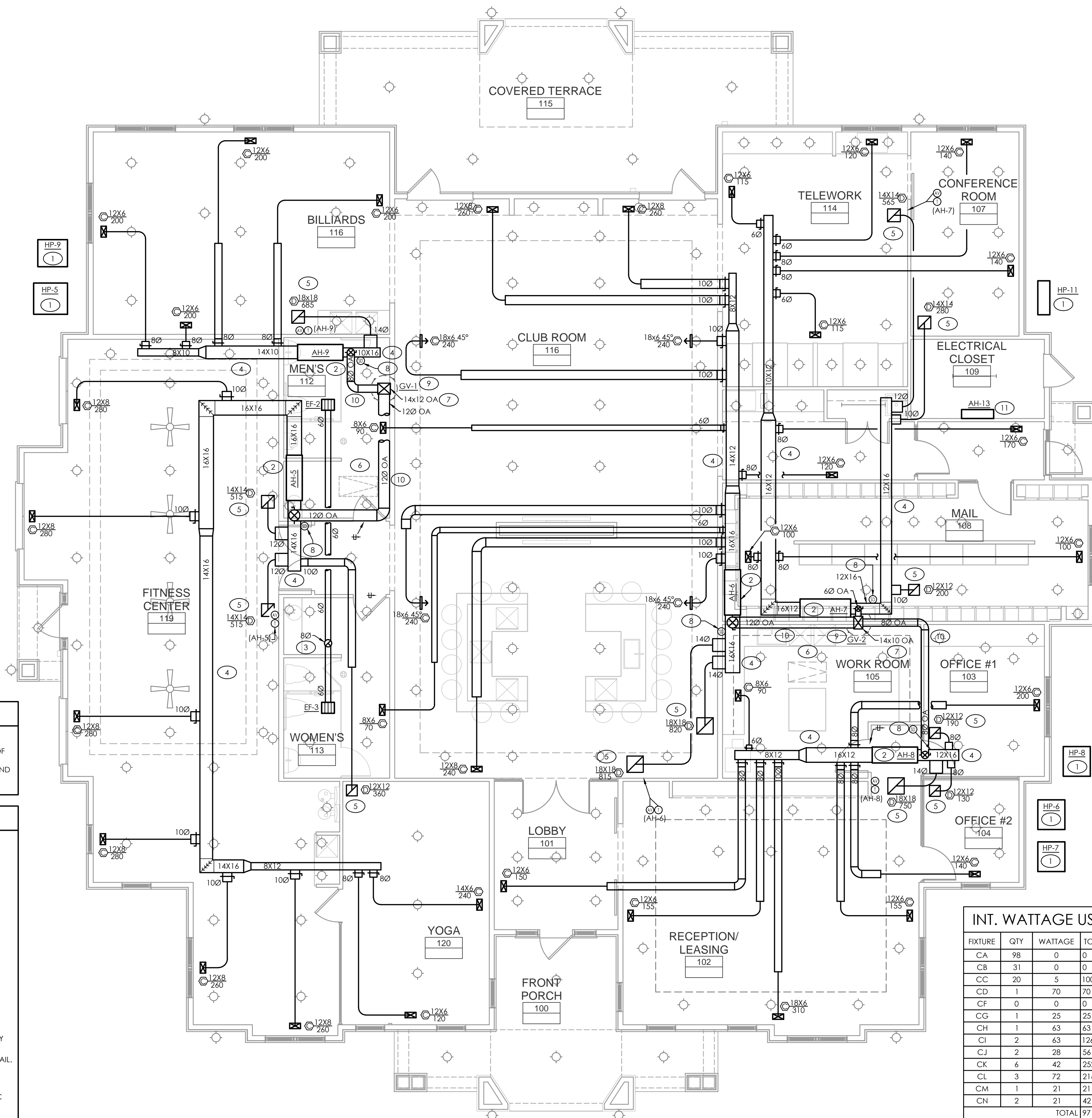
DRAWN BY: RMH

CHECKED BY: ZLT

SHEET TITLE: MECHANICAL CLUBHOUSE

SHEET NUMBER:

M2.10



GENERAL NOTES - THIS SHEET
1. ENSURE THAT ALL SOURCES OF BUILDING EXHAUST ARE A MINIMUM OF 10' HORIZONTALLY FROM OR A MINIMUM OF 3' ABOVE ANY AREA OUTSIDE AIR INTAKES.

TAGGED NOTES - THIS SHEET
1 HEAT PUMP TO BE INSTALLED ON EQUIPMENT PAD. COORDINATE EXACT LOCATION AND PAD W/ G.C. ENSURE ALL MFG REQUIRED CLEARANCES ARE MAINTAINED.

Table titled 'INT. WATTAGE USED' with columns: FIXTURE, QTY, WATTAGE, TOTAL. Lists fixtures like CA, CB, CC, CD, etc.

MECHANICAL PLAN - CLUBHOUSE SCALE: 3/16" = 1'-0"

7/18/2019 5:11 PM PLX-1906-M2.10.DWG

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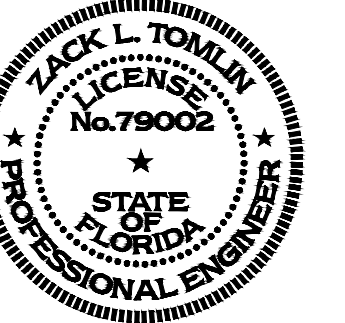
FIRE RATING LEGEND
 - - - 1-HR WALL
 * CEILING ABOVE POOL EQUIP. & CHEM. STOR. IS 1-HR RATED



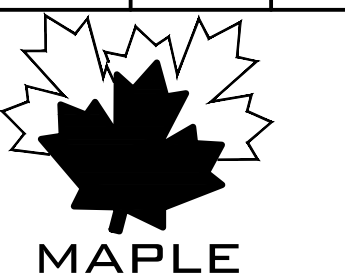
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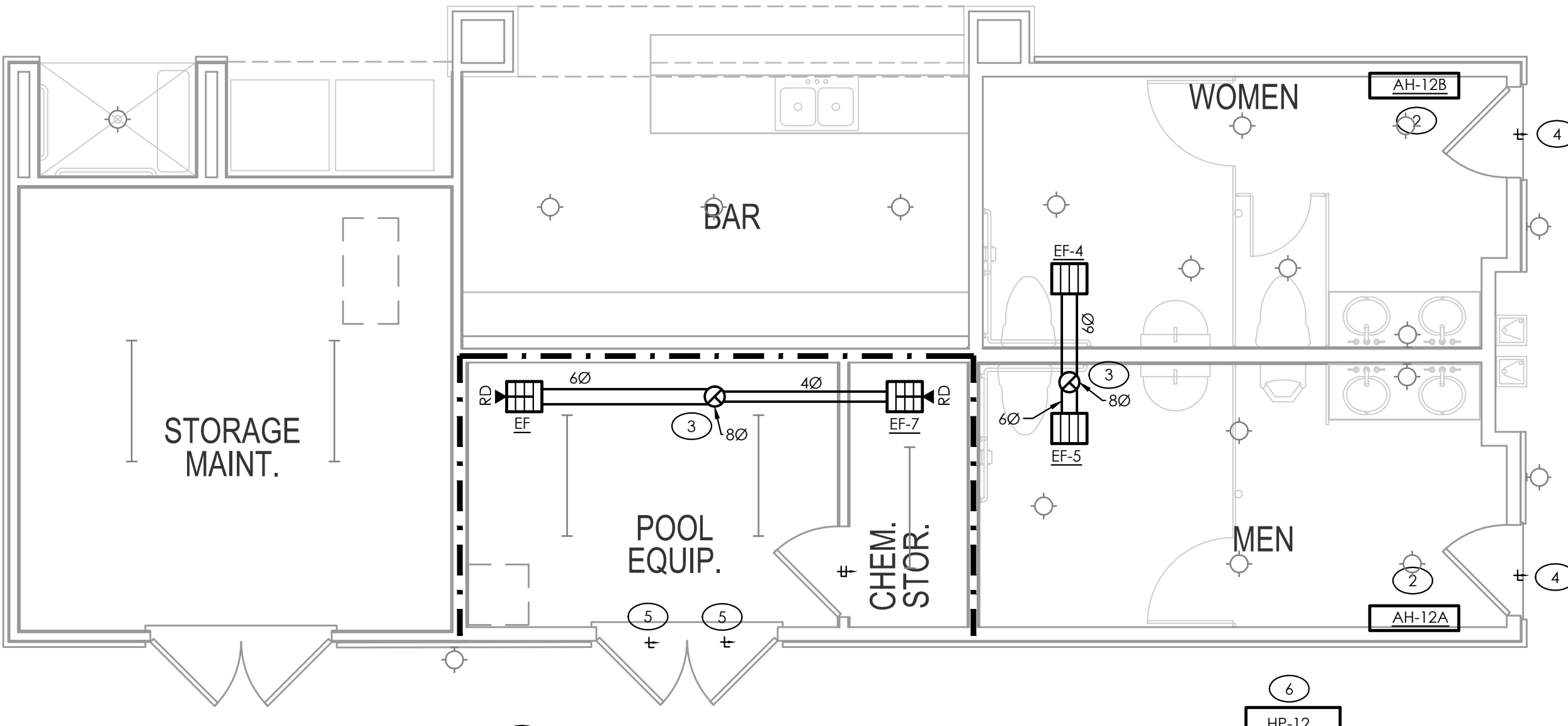
MAPLE
 ENGINEERING, INC.
 708 RT. 100, SUITE 101
 RALEIGH, NC 27605
 P.O. BOX 145847
 RALEIGH, NC 27614
 FL CDA # 3316

- TAGGED NOTES - THIS SHEET**
- 1 SURFACE MOUNTED UNIT HEATER. COORDINATE LOCATION W/ G.C. AND AREA EQUIPMENT.
 - 2 MINI-SPLIT AIR HANDLER TO BE INSTALLED HIGH ON WALL. COORDINATE EXACT INSTALLATION LOCATION W/ G.C. AND EQUIPMENT. CONDENSATE TO BE ROUTED TO GRADE/GRASSY AREA AWAY FROM FOOT TRAFFIC. COORDINATE CONDENSATE ROUTING W/ G.C..
 - 3 EXHAUST DUCT UP TO MFG ROOF CAP W/ INSECT SCREEN AND BDD. ENSURE 10' HORIZONTAL OR 3' VERTICAL CLEARANCE IS MAINTAINED FROM ALL SOURCES OF BUILDING AIR INTAKES. ENSURE EXHAUST CAP IS NOT ON POOL SIDE OF ROOF.
 - 4 DOOR WITH WEATHERPROOF LOUVER AND INSECT SCREEN BY G.C.. LOUVER TO HAVE MINIMUM FREE AREA OF 120 SQIN.
 - 5 DOOR WITH WEATHERPROOF LOUVER AND INSECT SCREEN BY G.C.. EACH LOUVER TO HAVE MINIMUM FREE AREA OF 72 SQIN.
 - 6 HEAT PUMP TO BE INSTALLED AT GRADE. COORDINATE MOUNTING PAD REQUIREMENTS W/ G.C.. ENSURE ALL MFG MAINTENANCE CLEARANCES ARE MAINTAINED.

VENTILATION CALC'S

CHEMICAL STORAGE:
 35 SQFT x 9' HIGH CEILING = 315 CU. FT @ 10 ACH = 53 CFM
 *75 CFM PROVIDED

PUMP ROOM:
 111 SQFT x 9' HIGH CEILING = 999 CU. FT @ 10 ACH = 167 CFM
 *200 CFM PROVIDED



1 MECHANICAL PLAN - POOLHOUSE
 SCALE: 1/4" = 1'-0"

ISSUE DATE:	REVISIONS NUMBER	DATE	INITIALS	DESCRIPTION
07.19.19				

PROJECT NO: **PLX-1906**
 DRAWN BY: RMH
 CHECKED BY: ZLT
 SHEET TITLE:
MECHANICAL POOLHOUSE PLANS

SHEET NUMBER:
M3.10

7/18/2019 5:11 PM
 PLX-1906-M3.10.DWG

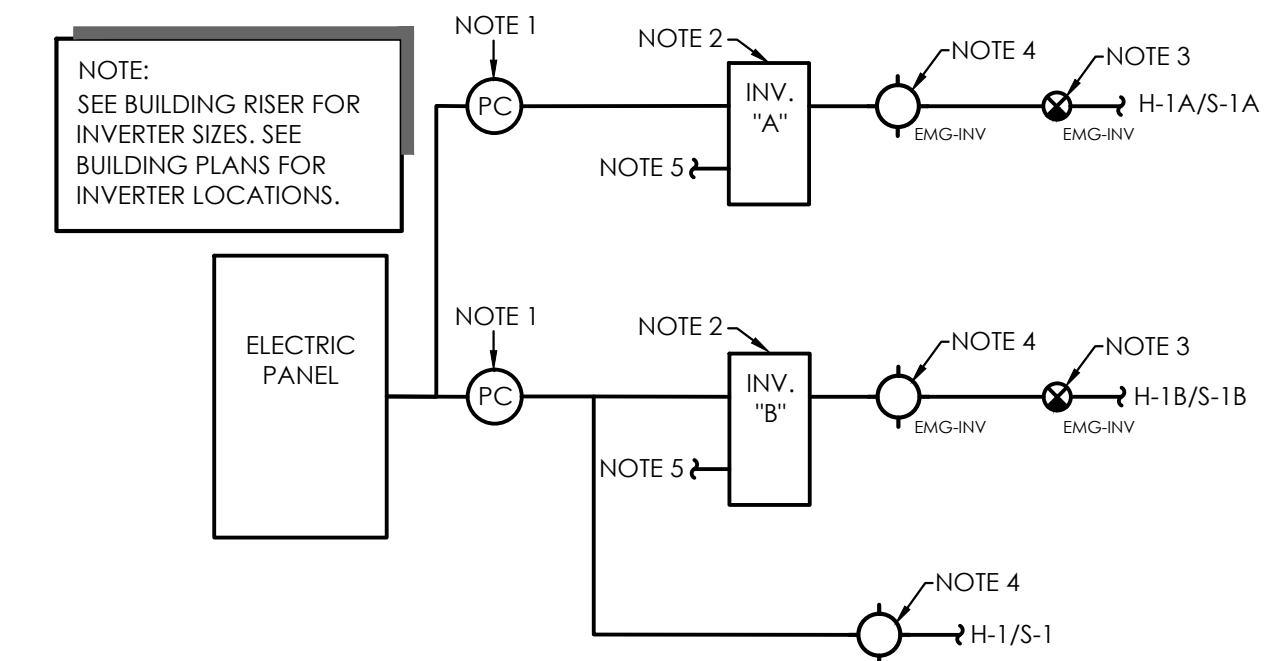
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MOTION SENSOR LEGEND	
	WALL SWITCH DUAL TECH. (INFRARED AND ULTRASONIC) OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WSX PDT. 120/277V. TIME DELAYS 15 MINUTES FOR ON/OFF. LINE VOLTAGE.
	CORNER MOUNTED DUAL TECH. (INFRARED AND ULTRASONIC) OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL WVR PDT 16. 120/277V. TIME DELAYS 20 MINUTES FOR ON/OFF. LINE VOLTAGE.
	CEILING MOUNTED DUAL TECH. (INFRARED AND ULTRASONIC) OCCUPANCY SENSOR EQUAL TO SENSOR SWITCH MODEL CMR PDT 10. 120/277V. TIME DELAYS 20 MINUTES FOR ON/OFF. LINE VOLTAGE.

NOTE:
THE CONTRACTOR IS TO PROVIDE AND INSTALL ALL RELAYS, CONTROLS, SWITCHES, ETC FOR A FULLY FUNCTIONING SYSTEM REGARDLESS OF PRESENCE OR ABSENCE ON PLANS.

LIGHTING FIXTURE SCHEDULE CONTINUED										
MARK	MANUF.	CATALOG NUMBER	LAMP DATA		VOLTS	BALLAST DATA		INPUT WATTS	MOUNTING	DESCRIPTION
			NO.	TYPE		NO.	TYPE			
ED	LITHONIA	WSQ-LED-P4-SR4-30K-MVOLT	1	LED	MVOLT	1	LED DRIVER	61	WALL 20' MOUNT HEIGHT	LED WALL PACK, WET LOC. & COLD TEMP RATED, 5,991 LUMENS, 3000K TEMP. SR4 DISTRIBUTION, FULL CUT-OFF
EE	LITHONIA	WSQ-LED-P3-SR4-30K-MVOLT	1	LED	MVOLT	1	LED DRIVER	40	WALL 8.5' MOUNT HEIGHT	LED WALL PACK, WET LOC. & COLD TEMP RATED, 4,486 LUMENS, 3000K TEMP. SR4 DISTRIBUTION, FULL CUT-OFF
	LITHONIA	LQM	1	LED	120, 277	-	-	1.2	CEILING	EXIT LIGHT, AC POWER ONLY, RED ILLUMINATED EXIT SIGN, HOUSING COLOR BY ARCH. DAMP LOCATION LISTED.
	LITHONIA	LHQM LED	2	1.5W	120, 277	-	-	3.0	WALL	LED EXIT-EMERGENCY LIGHT COMBO, (2) ADJ. HEADS, BATTERY BACK-UP, RED ILLUMINATED EXIT SIGN, HOUSING COLOR BY ARCH.
	LITHONIA	LHQM LED	2	1.5W	120, 277	-	-	3.0	CEILING	LED EXIT-EMERGENCY LIGHT COMBO, (2) ADJ. HEADS, BATTERY BACK-UP, RED ILLUMINATED EXIT SIGN, HOUSING COLOR BY ARCH.
	BARRON LIGHTING GROUP	TR-WB-BR-CL	2	6W XENON	120, 277	-	-	-	WALL	REMOTE EXTERIOR EMERGENCY LIGHT, PAINTABLE, BATTERY BACK-UP, W/ TEST SWITCH, WET LOC LISTED, NEC 700.16 COMPLIANT.
	LITHONIA	ELM2 LED	2	1.5 W	120, 277	-	-	1.4	SEE PLAN	GEN. PURPOSE EMERGENCY LED LIGHT, (2) ADJ. HEADS, BATTERY BACK-UP.
EMG-INV	-	-	-	-	120, 277	-	-	MFG	-	FIXTURE TO BE WIRED VIA EMERGENCY LIGHTING INVERTER WITH 90 MINUTE BATTERY BACK-UP. SEE RISER(S) AND DETAIL(S).

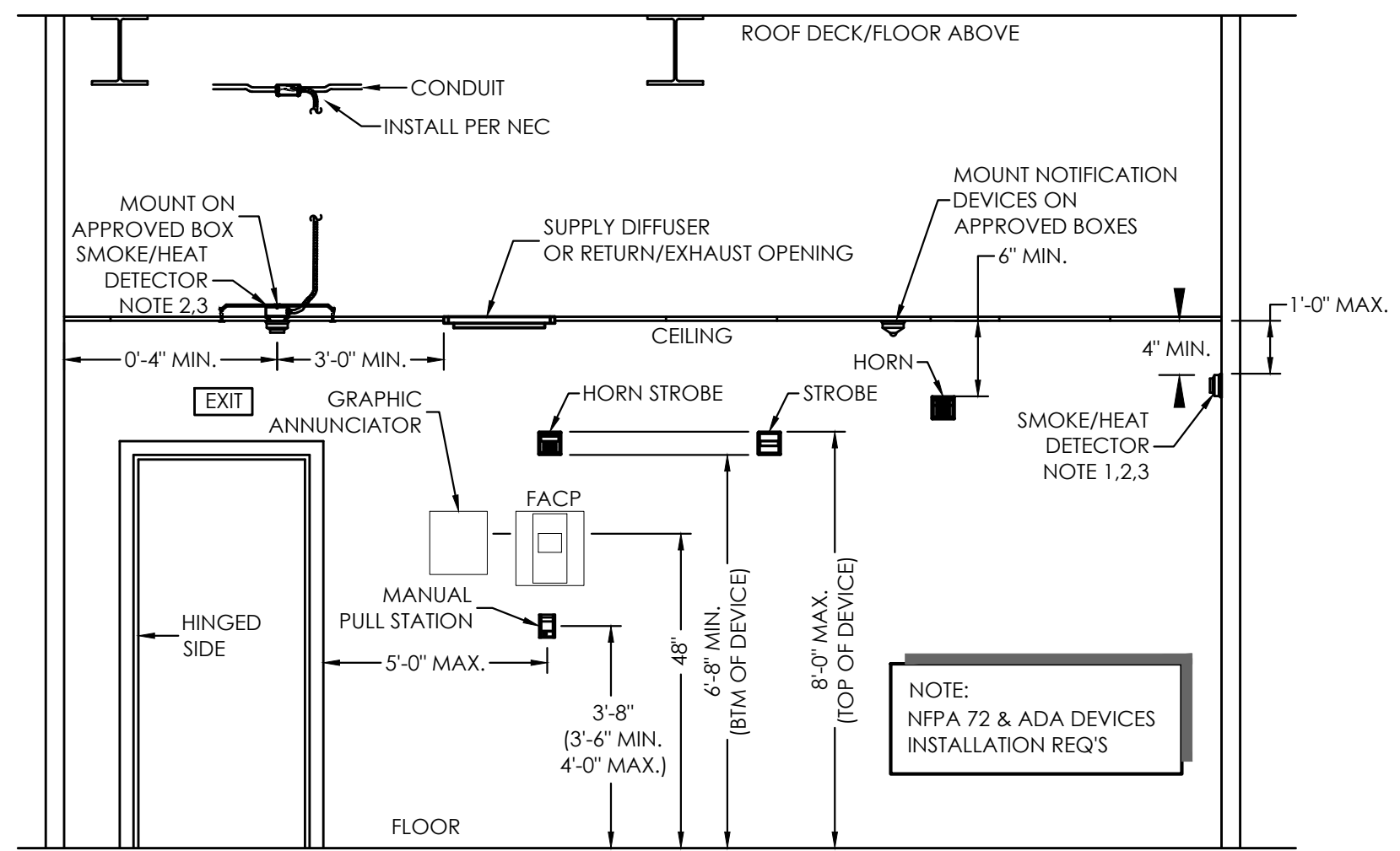
- NOTES:
- UNLESS OTHERWISE NOTED COLOR & FINISH OF FIXTURE HOUSING, BAFFLE, OR SIMILAR EXPOSED ELEMENTS TO BE BY ARCHITECT.
 - EXIT AND EMERGENCY LIGHTING FIXTURES SHALL BE CIRCUITED TO AN UNSWITCHED LEG OF A NORMALLY ON LOCAL LIGHTING CIRCUIT (UNLESS NOTED OTHERWISE), INCLUDE 90 MINUTE BATTERY BACK-UP & TESTING MEANS UNLESS OTHERWISE NOTED.
 - FIXTURES WIRED VIA EMERGENCY LIGHTING INVERTER WHERE "EMG-INV" IS SHOWN.
 - ALL LAMPS OF A SINGLE FIXTURE TYPE INSTALLED IN EACH AREA/ROOM/SPACE ARE TO BE OF SAME TEMPERATURE/COLOR.



- NOTE:
SEE BUILDING RISER FOR INVERTER SIZES. SEE BUILDING PLANS FOR INVERTER LOCATIONS.
- NOTE:
- BUILDING PHOTOCELL ON NORTH SIDE OF BUILDING. (2) EMERGENCY CIRCUITS MAY NOT SHARE SINGLE PHOTOCELL.
 - PORTION OF CIRCUIT TO BE WIRED VIA SWITCHED EMERGENCY LIGHTING INVERTER. SEE PLAN FOR SIZE AND LOCATION OF INVERTER. CIRCUIT DESIGNATION INDICATED ON BUILDING PLANS.
 - EXIT SIGNS.
 - LIGHT FIXTURES.
 - "H-1" OR "S-1" HOT LEG TO INVERTER FOR MONITORING.

9 EMERGENCY LIGHTING INVERTER

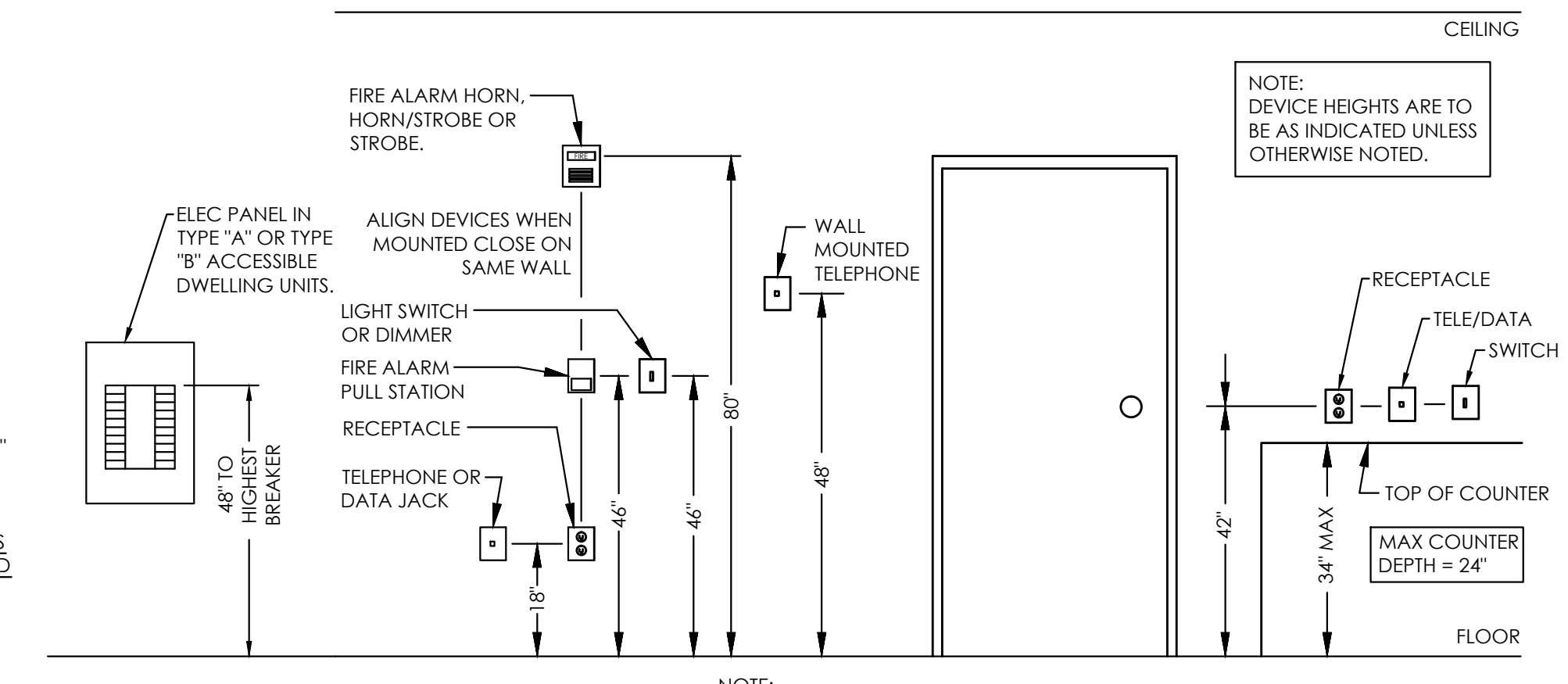
NO SCALE



- DEVICE DETAIL NOTES:
- PLACE SMOKE/HEAT DETECTOR AT HIGHEST POINT IN VAULTED CEILINGS.
 - PLACE SMOKE/HEAT DETECTOR NO LESS THAN 3FT FROM BATHROOM/SHOWER ROOM DOORS (2017 FLBC 907.2.11.4).
 - PLACE PHOTOELECTRIC SMOKE/HEAT ALARMS NO LESS THAN 6FT FROM PERMANENTLY INSTALLED COOKING APPLIANCES (2017 FLBC 907.2.11.3.3). PLACE IONIZATION SMOKE/HEAT DETECTORS WITH AN ALARM-SILENCING SWITCH NO LESS THAN 10FT FROM A PERMANENTLY INSTALLED COOKING APPLIANCE (2017 FLBC 907.2.11.3.2). PLACE IONIZATION SMOKE/HEAT DETECTORS WITHOUT AN ALARM-SILENCING SWITCH NO LESS THAN 20FT FROM A PERMANENTLY INSTALLED COOKING APPLIANCE (2017 FLBC 907.2.11.3.1).

4 FIRE ALARM AND SIMILAR DEVICE LOCATIONS

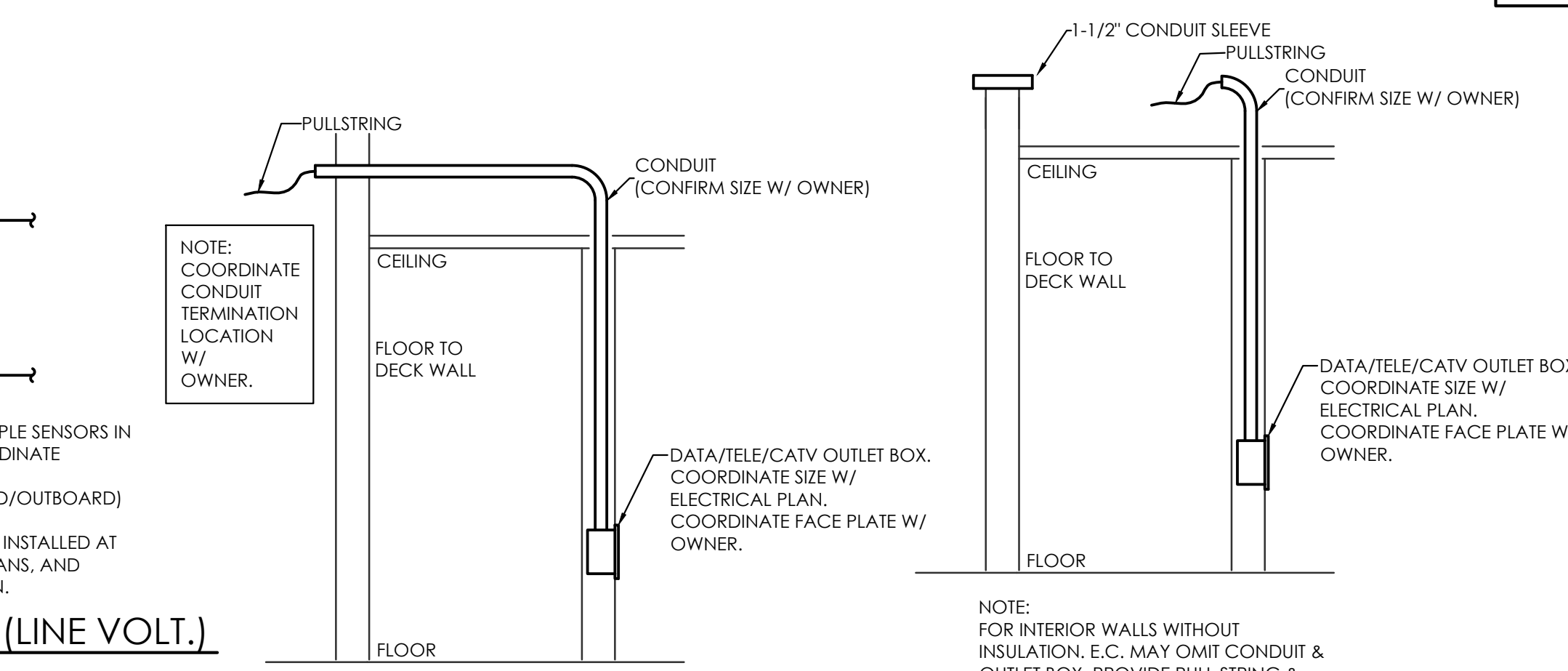
NO SCALE



- NOTE:
MOUNTING LOCATIONS OF RECEPTACLES, SWITCHES AND ALL OTHER CONTROL DEVICES SHALL BE IN ACCORDANCE WITH ANSI A117.1 AND ADA REQUIREMENTS (FHA REQ'S FOR MULTI-FAMILY AND RESIDENTIAL PROJECTS).

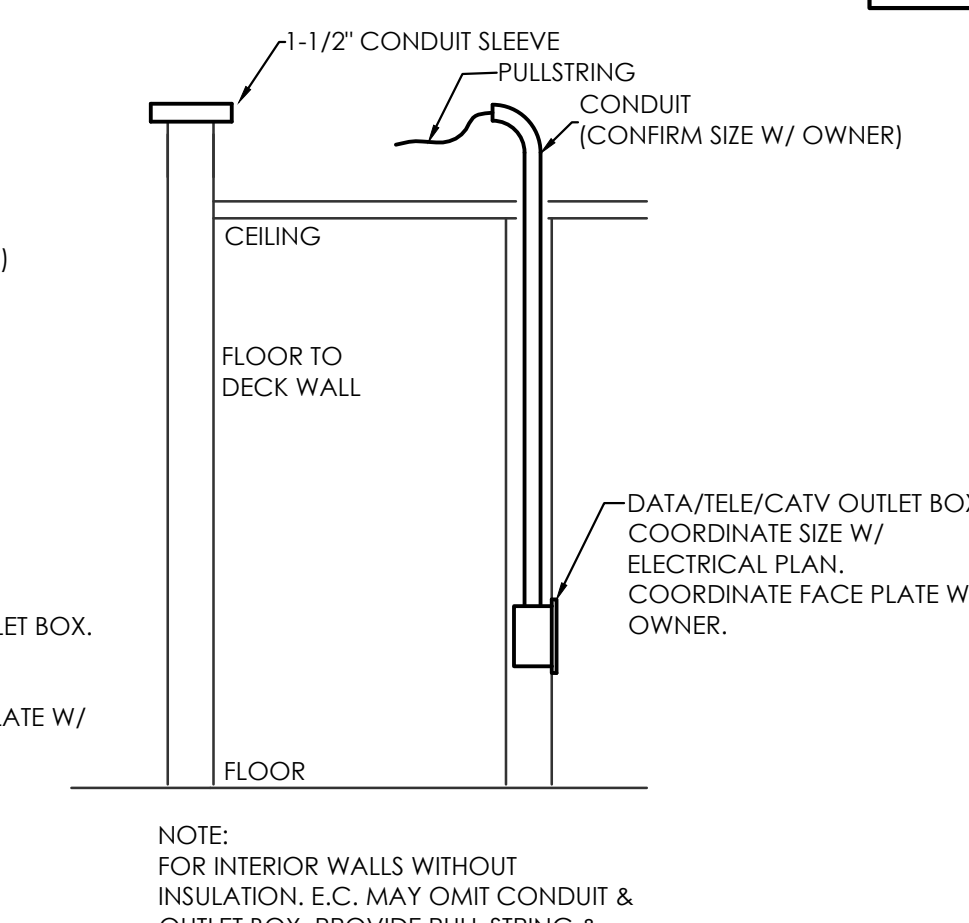
1 TYPICAL DEVICE MOUNTING HEIGHTS

NO SCALE



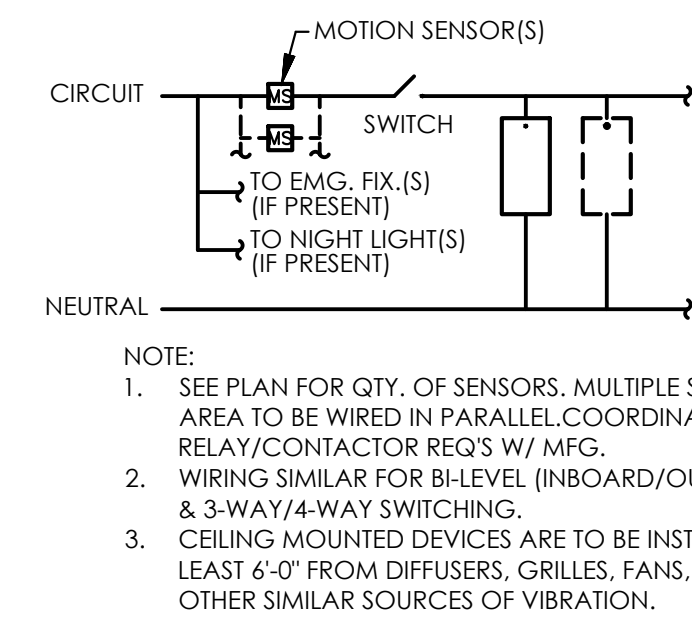
6 DATA/TELE/CATV OUTLET (HARD CEIL)

NO SCALE



5 DATA/TELE/CATV OUTLET (LAY-IN CEIL)

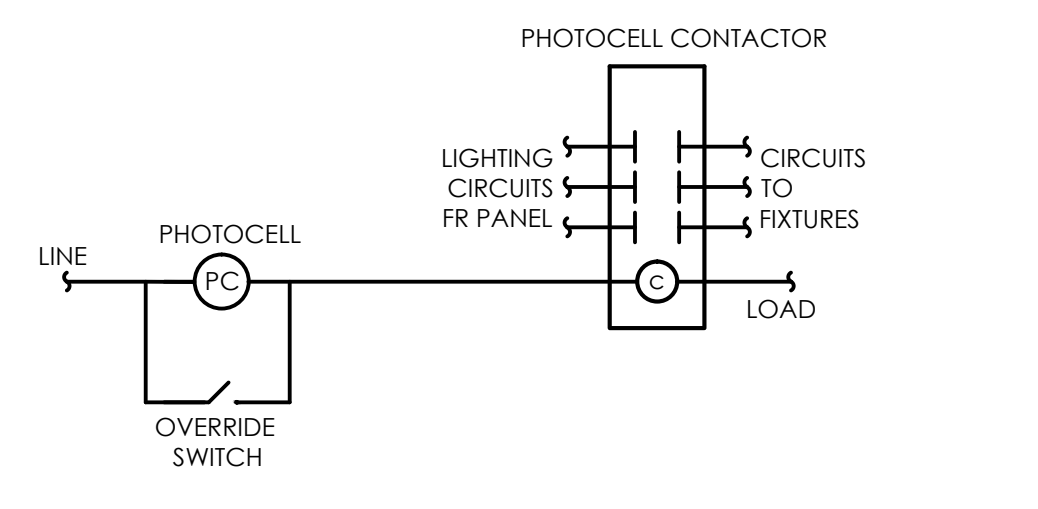
NO SCALE



7 MOTION SENSOR WIRING (LINE VOLT.)

NO SCALE

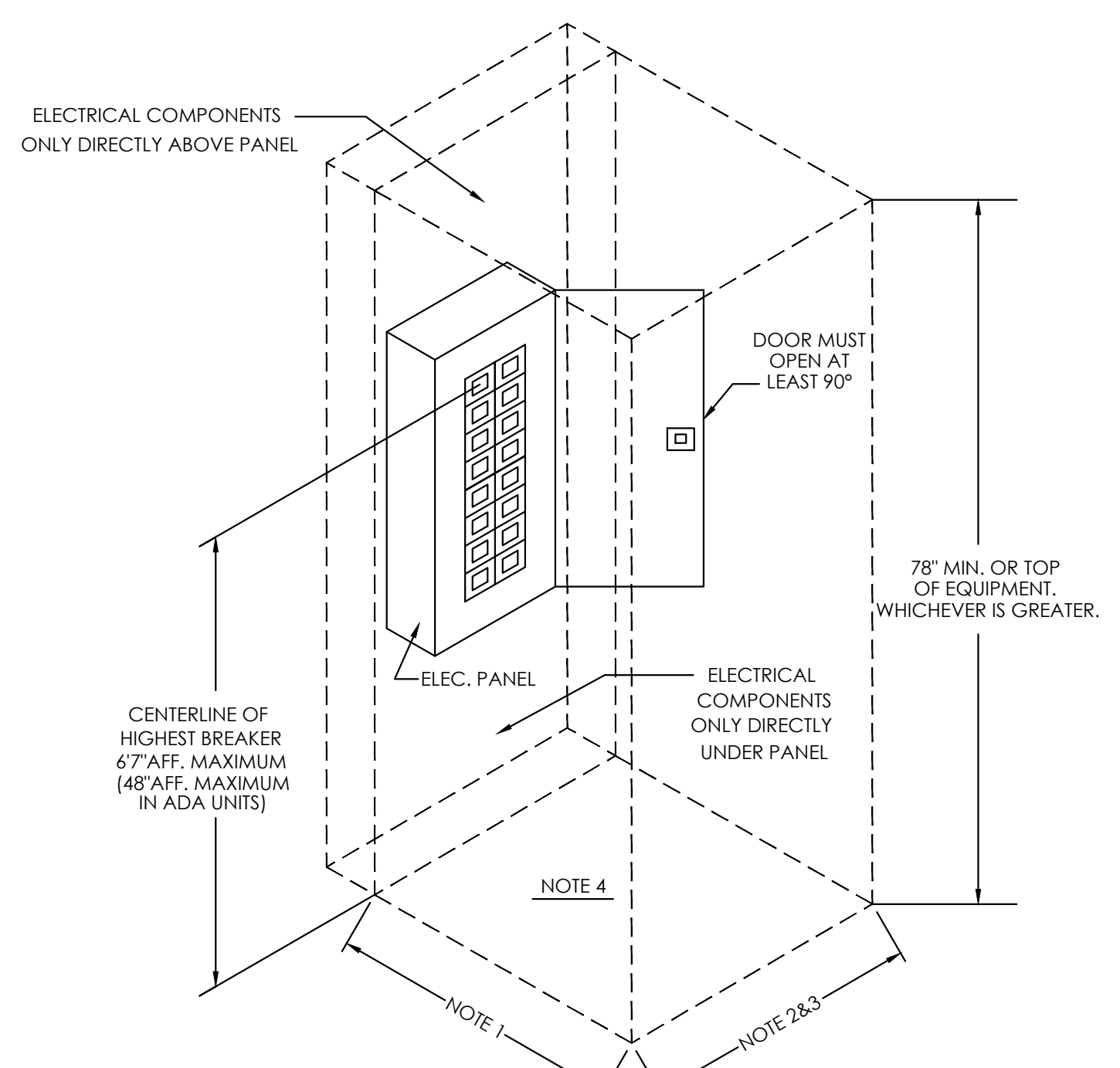
- NOTE:
- SEE PLAN FOR QTY. OF SENSORS. MULTIPLE SENSORS IN AREA TO BE WIRED IN PARALLEL. COORDINATE RELAY/CONTACTOR REQ'S W/ MFG.
 - WIRING SIMILAR FOR BI-LEVEL (INBOARD/OUTBOARD) & 3-WAY/4-WAY SWITCHING.
 - CEILING MOUNTED DEVICES ARE TO BE INSTALLED AT LEAST 6'-0" FROM DIFFUSERS, GRILLES, FANS, AND OTHER SIMILAR SOURCES OF VIBRATION.



- NOTE:
- E.C. TO COORDINATE # OF CIRCUITS CONTROLLED AND NATURE OF LOADS W/ CONTACTOR MFG.
 - VERRIDE SWITCH TO BE LOCATED AT LIGHTING CONTACTOR & CLEARLY LABELED.
 - LOCATE CONTACTOR AT PANEL SERVED, CLEARLY LABEL.
 - PHOTOCELL TO BE LOCATED ON NORTH SIDE OF BUILDING, LABEL CONTACTOR W/ PHOTOCELL LOCATION.

8 LIGHTING CONTACTOR PHOTOCELL

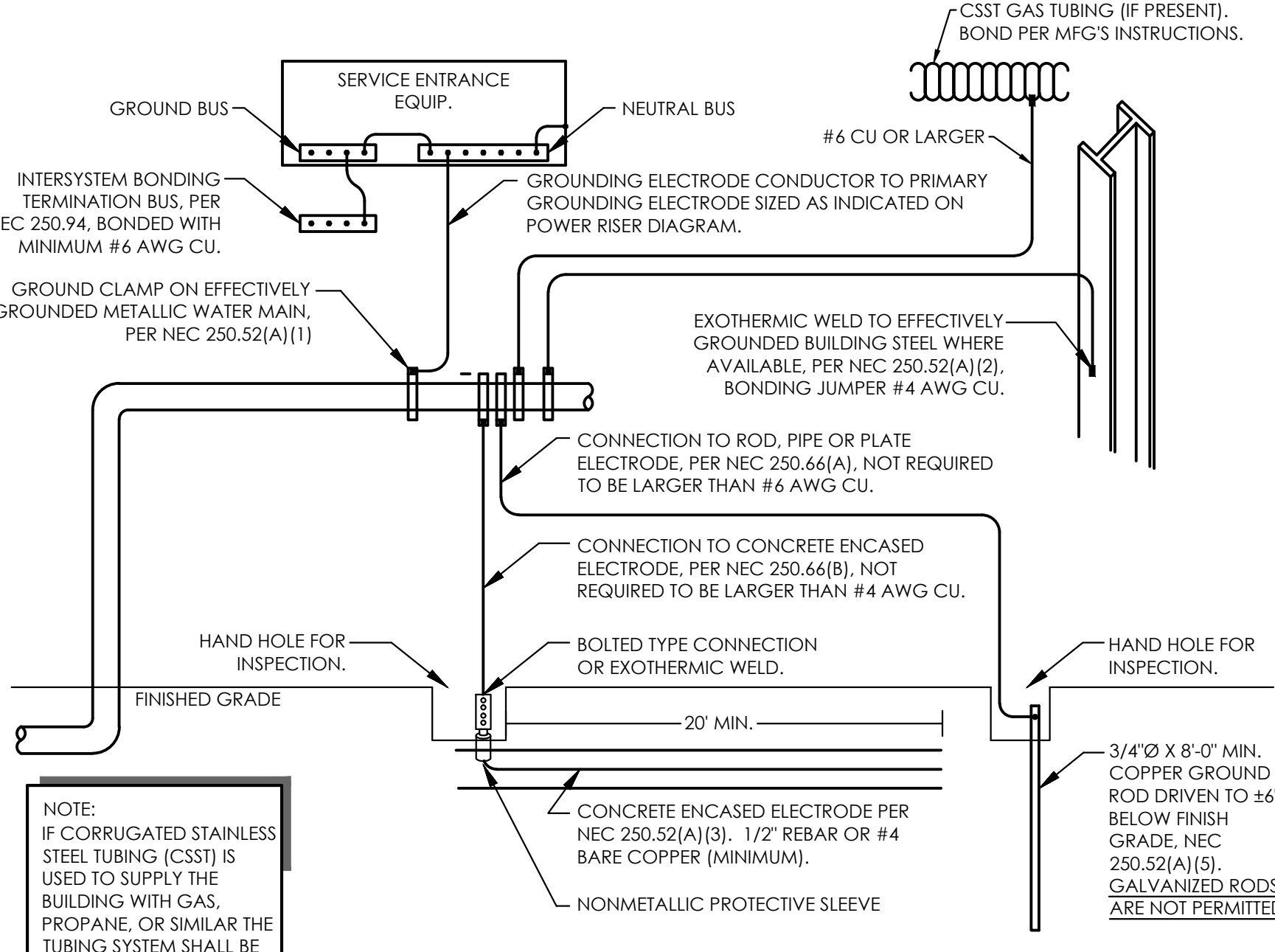
NO SCALE



3 ELECTRICAL PANEL MOUNTING DETAIL

NO SCALE

- NOTES:
- FROM FACE OF PANEL: 42" MIN FOR 480/277V AND 240/120V 3Ø HIGH LEG DELTA SYSTEMS, 36" MIN FOR 208/120V AND 240/120V SYSTEMS.
 - THE WIDTH OF THE WORKING SPACE IN FRONT OF THE ELECTRICAL EQUIPMENT SHALL BE THE WIDTH OF THE EQUIPMENT OR 30", WHICHEVER IS GREATER.
 - WORKING SPACE DOES NOT HAVE TO BE CENTERED ON PANEL BUT MUST EXTEND TO/PAST EACH EDGE OF PANEL.
 - OTHER AREA PANELS MAY SHARE CLEARANCE SPACE.



2 GROUNDING DETAIL

NO SCALE

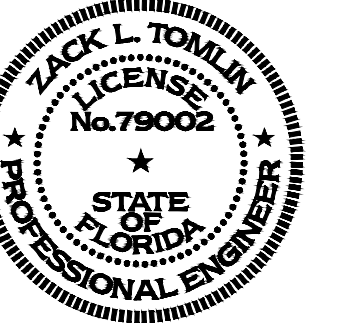
- NOTE:
IF CORRUGATED STAINLESS STEEL TUBING (CSST) IS USED TO SUPPLY THE BUILDING WITH GAS, PROPANE, OR SIMILAR THE TUBING SYSTEM SHALL BE BONDED TO THE BUILDING GROUNDING SYSTEM AT THE POINT WHICH THE PIPING ENTERS THE BUILDING. USE #6 COPPER OR LARGER.
- NOTE:
GROUNDING ELECTRODES SHALL BE PROVIDED IN ACCORDANCE WITH NEC SECTION 250. ALL GROUNDING ELECTRODE CONDUCTORS SIZED AS INDICATED ON POWER RISER DIAGRAM. ALL METHODS OF CREATING THE GROUNDING SYSTEM MAY NOT BE REQUIRED OR AVAILABLE.



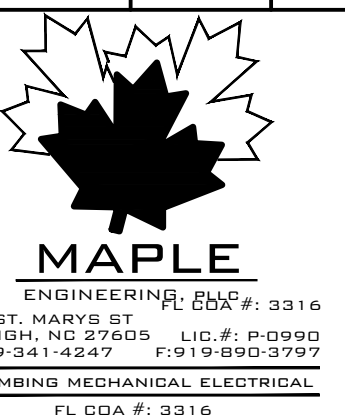
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708 W. HAVES ST.
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PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		

PROJECT NO: **PLX-1906**

DRAWN BY: JNS

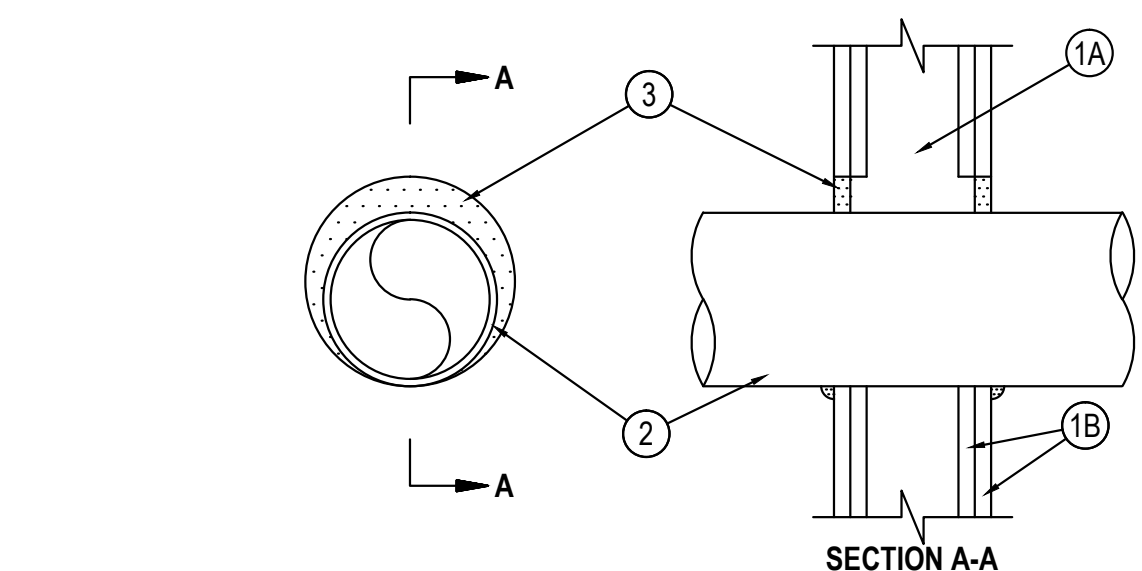
CHECKED BY: ZLT

SHEET TITLE: **ELECTRICAL DETAILS**

SHEET NUMBER:

E0.02

System No. W-L-1054	
ANSI/UL1479 (ASTM E814)	CANULC S115
F Ratings — 1 and 2 Hr (See Items 1 and 3)	F Ratings — 1 and 2 Hr (See Items 1 and 3)
T Rating — 0 Hr	FT Rating — 0 Hr
L Rating at Ambient — Less Than 1 CFM/sq ft	FH Ratings — 1 and 2 Hr (See Items 1 and 3)
L Rating at 400 F — Less Than 1 CFM/sq ft	FTH Rating — 0 Hr
	L Rating at Ambient — Less Than 1 CFM/sq ft
	L Rating at 400 F — Less Than 1 CFM/sq ft



- Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced max 24 in. (610 mm) OC. When steel studs are used and the diam of opening exceeds the width of stud cavity, the opening shall be framed on all sides using lengths of steel stud installed between the vertical studs and screw attached to the steel studs at each end. The framed opening in the wall shall be 4 to 6 in. (102 to 152 mm) wider and 4 to 6 in. (102 to 152 mm) higher than the diam of the penetrating item such that, when the penetrating item is installed in the opening, a 2 to 3 in. (51 to 76 mm) clearance is present between the penetrating item and the wall sides.
 - Gypsum Board — 5/8 in. (16 mm) thick, 4 ft (122 cm) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 32-1/4 in. (819 mm) for steel stud walls. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls.
- Through Penetrants — One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. The annular space shall be min 0 in. to max 3/16 in. (3 mm) gap. Pipe may be installed with continuous gaskets. Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
 - Steel Pipe — Nom 3/4 in. (19 mm) diam (or smaller) Schedule 40 (or heavier) steel pipe.
 - Iron Pipe — Nom 3/4 in. (19 mm) diam (or smaller) cast or ductile iron pipe.
 - Copper Tubing — Nom 1/2 in. (12 mm) diam (or smaller) Type L (or heavier) copper tubing.
 - Copper Pipe — Nom 1/2 in. (12 mm) diam (or smaller) regular (or heavier) copper pipe.
- Fill, Void or Cavity Material — Sealant — Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. At the point or continuous contact locations between pipe and wall, a min 1/2 in. (13 mm) diam bead of fill material shall be applied at the pipe wall interface on both surfaces of wall.

HILTI CONSTRUCTION CHEMICALS DIV. HILTI INC. — P-50 One-Sealant or P-50-ONE MAX Instantaneous Sealant



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October 14, 2015

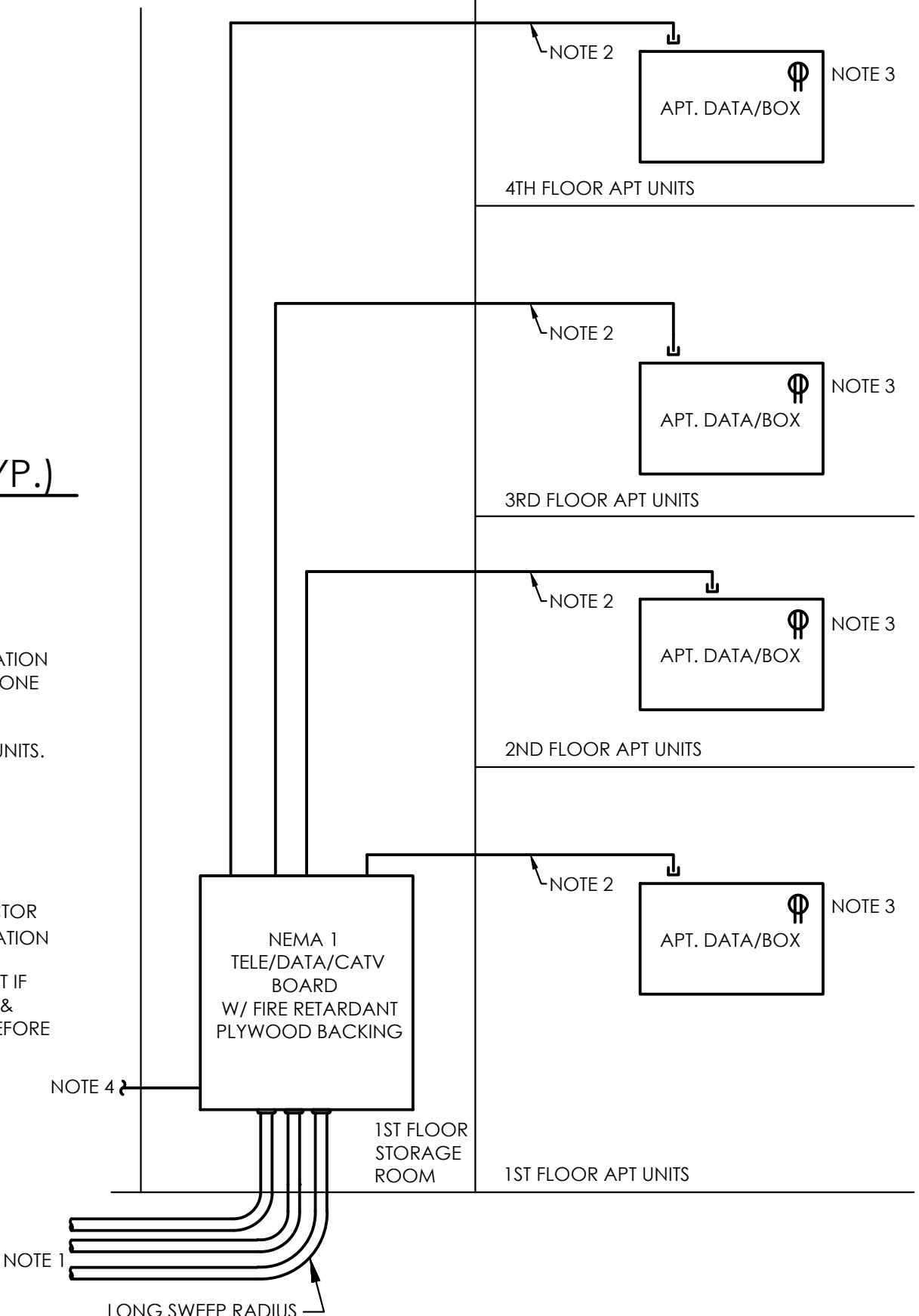
WL-1054

5 TELE/DATA/CATV RISER (TYP.)

NO SCALE

TELE/DATA/CATV RISER NOTES:

- PROVIDE THREE 4" CONDUITS PROVIDED UNDER SLAB/GROUND TO PROPERTY LINE W/ PULL STRING. CLEARLY LABEL AND COORDINATE EXACT TERMINATION LOCATION AND DETAILS WITH OWNER AND TELEPHONE UTILITY.
- PROVIDE 1" CONDUIT W/ PULL STRING TO ALL APT UNITS. CLEARLY LABEL. SEE PLANS FOR LOCATIONS.
- PROVIDE 120V RECEPTACLE FOR TELEPHONE AND OTHER COMMUNICATION EQUIPMENT (SEE POWER PLANS).
- PROVIDE #6 CU GROUNDING/BONDING CONDUCTOR IN 1/2" CONDUIT TO INTERSYSTEM BONDING TERMINATION (BT) AT BUILDING ELECTRICAL SERVICE, BOND CONDUIT/CONDUCTOR AT EACH END OF CONDUIT IF METAL RACEWAY IS USED. INSTALL PER NEC 250.94 & NEC 800.100. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.



LIGHTING SYSTEMS: CLUBHOUSE

FECC SECTION C405 & C406

LIGHTING POWER DENSITY CALCULATION COMPLIANCE		DESIGNER STATEMENT:	
INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.		TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE FLORIDA ENERGY CONSERVATION CODE, SECTION C405 & C406 AND ANY LOCAL AMENDMENTS THEREOF.	
INTERIOR WATTAGE SPECIFIED VS. ALLOWED	2266 VS. 5572	SIGNED:	<i>Zack L. Tomlin</i>
EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.5.1. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.		NAME:	ZACK L. TOMLIN, PE
TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	330 VS. 600	TITLE:	ELECTRICAL ENGINEER
NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	NA VS. NA		
ADDITIONAL PRESCRIPTIVE COMPLIANCE			
NOT APPLICABLE (RENOVATION PROJECT)		C406.5 ON-SITE RENEWABLE ENERGY	
C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT		C406.6 DEDICATED OUTDOOR AIR SYSTEM	
C406.3 REDUCED LIGHTING POWER DENSITY	X	C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING	
C406.4 ENHANCED DIGITAL LIGHTING CONTROLS			

LIGHTING SYSTEMS: APARTMENT BUILDINGS

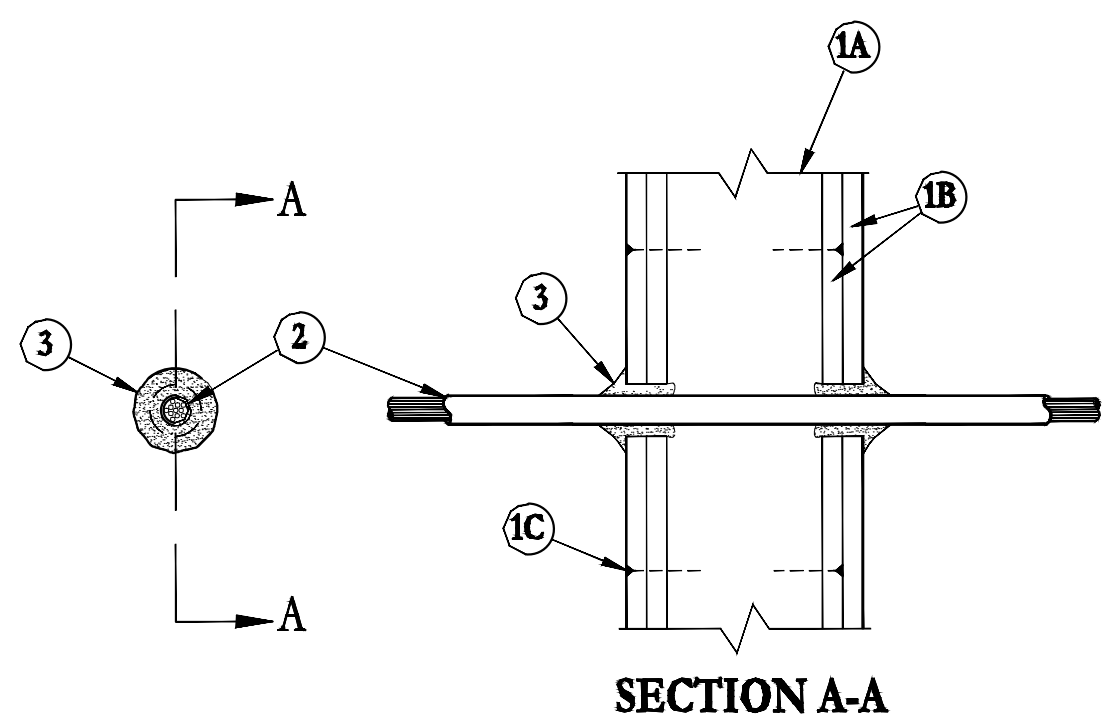
FECC SECTION C405 & C406

LIGHTING POWER DENSITY CALCULATION COMPLIANCE		DESIGNER STATEMENT:	
INTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.4.2. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.		TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE LIGHTING SYSTEMS REQUIREMENTS OF THE FLORIDA ENERGY CONSERVATION CODE, SECTION C405 & C406 AND ANY LOCAL AMENDMENTS THEREOF.	
INTERIOR WATTAGE SPECIFIED VS. ALLOWED	325 VS. 448	SIGNED:	<i>Zack L. Tomlin</i>
EXTERIOR LIGHTING POWER DENSITY CALCULATION PER TABLE C405.5.1. SEE LIGHTING FIXTURE SCHEDULE FOR FIXTURE INFORMATION.		NAME:	ZACK L. TOMLIN, PE
TRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	1128 VS. 3227	TITLE:	ELECTRICAL ENGINEER
NONTRADABLE EXTERIOR WATTAGE SPECIFIED VS. ALLOWED	NA VS. NA		
ADDITIONAL PRESCRIPTIVE COMPLIANCE			
NOT APPLICABLE (RENOVATION PROJECT)		C406.5 ON-SITE RENEWABLE ENERGY	
C406.2 MORE EFFICIENT MECHANICAL EQUIPMENT		C406.6 DEDICATED OUTDOOR AIR SYSTEM	
C406.3 REDUCED LIGHTING POWER DENSITY	X	C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING	
C406.4 ENHANCED DIGITAL LIGHTING CONTROLS			

4 METALLIC PIPE (GYPSUM WALL) DETAIL

NO SCALE

System No. W-L-3001	
September 07, 2004	
(Formerly System No. 149)	
F Ratings ? 1 and 2 Hr (See Item 1)	T Ratings ? 3/4, 1, 1-1/2 and 2 Hr (See Item 2)
L Rating at Ambient ? 15 CFM/sq ft (See Item 3)	L Rating at 400 F ? less than 1 CFM/sq ft (See Item 3)



- Wall Assembly — The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC with nom 2 by 4 in. lumber end plates and cross braces. Steel studs to be min 3-5/8 in. wide by 1-3/8 in. deep channels spaced max 24 in. OC.
 - Gypsum Board* — Nom 1/2 or 5/8 in. thick, 4 ft wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers and sheet orientation shall be as specified in the individual Wall or Partition Design. Diam of circular through opening to be 3/8 in. to 5/8 in. larger than outside diam of cable or cable bundle.
 - Fasteners — When wood stud framing is employed gypsum wallboard layers attached to studs with cement coated nails as specified in the individual Wall or Partition Design. When steel channel stud framing is employed, gypsum wallboard attached to studs with type S self-drilling, self-tapping bugle-head steel screws as specified in the individual Wall or Partition Design.
- The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
 - Cables — Individual cable or max 1 in. diam cable bundle installed in through opening with annular space of min 0 in. (point contact) to max 3/4 in. Cable to be rigidly supported on both sides of wall assembly. The following types and sizes of cables may be used:
 - Max 150 pair No. 24 AWG copper conductor telephone cable with polyvinyl chloride (PVC) insulation and jacket materials. When max 25 pair telephone cable is used, T Rating is 2 hr. When 50 to 150 pair telephone cable is used in 2 hr fire rated wall T Rating is 3/4 hr. When 50 to 150 pair telephone cable is used in 2 hr fire rated wall, T Rating is 1 hr.
 - Max 10 AWG multiple copper conductor Type NM (Romex) non metallic sheathed cable with PVC insulation and jacket materials. When Type NM cable is used, max T Rating is 1-1/2 hr.
 - Multiple fiber optical communication cable jacketed with PVC and having a max outside diam of 5/8 in. When fiber optic cable is used, max T Rating is 2 hr.
 - Max 12 AWG multi conductor (max seven conductors) power/control cable with cross-linked polyethylene (XLPE) insulation and XLPE or PVC jacket materials. When multi conductor power/control cable is used, max T Rating is 2 hr.
 - Fill, Void or Cavity Material* — Caulk, Sealant or Putty — Caulk or putty fill material installed to completely fill annular space between cable and gypsum wallboard on both sides of wall with a min 1/4 in. diam bead of caulk or putty applied to perimeter of cable(s) at its egress from each side of the wall.

3M COMPANY — MP+ Stix putty, CP 25WB+ caulk, FB-3000 WT sealant or Cable Wrap putty (Note: L Ratings apply only when CP-25WB+ caulk or FB-3000 WT is used.)

*Bearing the UL Classification Mark
- DAYLIGHT CONTROLS:
 - ALL CONTROL DEVICES (PHOTOCONTROLS) HAVE BEEN PROPERLY LOCATED, FIELD-CALIBRATED AND SET FOR APPROPRIATE SET POINTS AND THRESHOLD LIGHT LEVELS.
 - DAYLIGHT CONTROLLED LIGHTING LOADS ADJUST TO APPROPRIATE LIGHT LEVELS IN RESPONSE TO AVAILABLE DAYLIGHT, THE LOCATION WHERE CALIBRATION ADJUSTMENTS ARE MADE IS READILY ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL.

3M Fire Protection Products
www.3m.com/firestop

W-L-3001 | 1 of 1

Product Support 1-800-328-1687
Choose option for FAX ON DEMAND 379

Through Penetrations

Cables

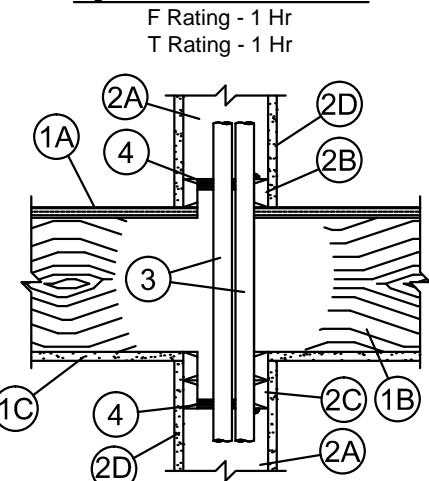
3000 Series

Gypsum

W-L

System No. F-C-2319

F Rating - 1 Hr
T Rating - 1 Hr



- Floor-Ceiling Assembly - The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:
 - Flooring System - Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Diam of floor opening to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of opening is 3 in. (76 mm).
 - Wood Joists - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped.
 - Gypsum Board* - Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design.
- Chase Wall - The through penetrant (Item 2) shall be routed through a 1 hr fire rated single, double or staggered wood stud/gypsum board chase wall. Depth of chase wall stud cavity to be min 1/2 in. (13 mm) greater than diameter of opening cut in sole and top plates to accommodate the through penetrant (Item 2). The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 - Studs - Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - Sole Plate - Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm) parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening in sole plate to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of opening is 3 in. (76 mm).
 - Top Plate - The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm), two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening in top plate to be min 1/2 in. (13 mm) to max 1 in. (25 mm) larger than outside diameter of individual or grouped penetrants. Max diam of opening is 3 in. (76 mm).
- Gypsum Board* - Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design.
 - Through Penetrants - One or more nonmetallic pipes, conduits or tubing to be installed either concentrically or eccentrically within the opening. Min space between pipes, conduits or tubes to be 0 in. Annular space between the pipes, conduits or tubing and the periphery of the opening shall be min 0 in. (0 mm, point contact) to max 1 in. (25 mm). Penetrants to be rigidly supported on both sides of wall-ceiling assembly. The following types and sizes of nonmetallic pipe, conduits or tubing may be used:
 - Cross Linked Polyethylene (PEX) Tubing - Nom 1 in. (25 mm) diam (or smaller) SDR9 PEX tubing for use in closed (process or supply) piping systems.
 - Electrical Nonmetallic Tubing (ENT) - Nom 2 in. (51 mm) diam (or smaller) PVC tubing installed in accordance with Article 331 of the National Electrical Code (NFPA 70).
 - Fill, Void or Cavity Material* - Sealant - Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with both top and bottom surfaces of chase wall top plate. Min 3/8 in. (10 mm) diam bead of fill material applied at point contact location on the top surface of floor or sole plate and at the penetrant/chase wall top plate interface.

SPECIFIED TECHNOLOGIES INC. - Type WF300 Caulk



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

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BUILDING SYSTEMS COMMISSIONING

I. GENERAL REQUIREMENTS:

- BUILDING SYSTEMS TO BE COMMISSIONED IN ACCORDANCE WITH 2017 FL ECC SECTION C408.
- DOCUMENTS CERTIFYING THAT THE INSTALLED LIGHTING CONTROLS MEET DOCUMENTED PERFORMANCE CRITERIA ARE TO BE PROVIDED TO THE BUILDING OWNER WITHIN 90 DAYS FROM THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

II. COMMISSIONING SCOPE:

- THE FOLLOWING MARKED SYSTEMS WILL BE COMMISSIONED IN THIS PROJECT:

SYSTEM	EQUIPMENT
ELECTRICAL	OCCUPANCY SENSOR CONTROLS
	TIME-SWITCH CONTROLS
	DAYLIGHT RESPONSIVE CONTROLS

III. COMMISSIONING PROCEDURE:

- OCCUPANCY SENSORS:
 - CERTIFY THAT THE SENSOR HAS BEEN LOCATED AND AIMED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 - FOR EACH SENSOR TO BE TESTED, VERIFY THE FOLLOWING:
 - STATUS INDICATOR (AS APPLICABLE) OPERATES CORRECTLY.
 - THE CONTROLLED LIGHTS TURN OFF OR DOWN TO THE PERMITTED LEVEL WITHIN THE REQUIRED TIME.
 - FOR AUTO-ON OCCUPANCY SENSORS, THE LIGHTS DO TURN ON TO THE PERMITTED LEVEL WHEN SOMEONE ENTERS THE SPACE.
- AUTOMATIC TIME SWITCHES:
 - CONFIRM THAT THE AUTOMATIC TIME SWITCH CONTROL IS PROGRAMMED WITH APPROPRIATE WEEKDAY, WEEKEND, AND HOLIDAY (AS APPLICABLE) SCHEDULES.
 - DOCUMENT FOR THE AGENCY AUTOMATIC TIME SWITCH PROGRAMMING INCLUDING WEEKDAY, WEEKEND, HOLIDAY SCHEDULES AS WELL AS ALL SET-UP AND PREFERENCE PROGRAM SETTINGS.
 - VERIFY THE CORRECT TIME AND DATE IS PROPERLY SET IN THE TIME SWITCH.
 - VERIFY THAT ANY BATTERY BACK-UP (AS APPLICABLE) IS INSTALLED AND ENERGIZED.
 - VERIFY THAT THE OVERRIDE TIME LIMIT IS SET TO NO MORE THAN 2 HOURS.
 - SIMULATE OCCUPIED CONDITION, VERIFY AND DOCUMENT THE FOLLOWING:
 - ALL LIGHTS CAN BE TURNED ON AND OFF BY THEIR RESPECTIVE AREA CONTROL SWITCH.
 - VERIFY THE SWITCH ONLY OPERATES LIGHTING IN THE ENCLOSED SPACE IN WHICH THE SWITCH IS LOCATED.
 - SIMULATE UNOCCUPIED CONDITION, VERIFY AND DOCUMENT THE FOLLOWING:
 - ALL NON-EXEMPT LIGHTING TURNS OFF.
 - MANUAL OVERRIDE SWITCH ALLOWS ONLY THE LIGHTS IN THE ENCLOSED SPACE WHERE THE OVERRIDE SWITCH IS LOCATED TO TURN ON OR REMAIN ON UNTIL THE NEXT SCHEDULED SWITCH OFF OCCURS.
 - DAYLIGHT CONTROLS:
 - ALL CONTROL DEVICES (PHOTOCONTROLS) HAVE BEEN PROPERLY LOCATED, FIELD-CALIBRATED AND SET FOR APPROPRIATE SET POINTS AND THRESHOLD LIGHT LEVELS.
 - DAYLIGHT CONTROLLED LIGHTING LOADS ADJUST TO APPROPRIATE LIGHT LEVELS IN RESPONSE TO AVAILABLE DAYLIGHT, THE LOCATION WHERE CALIBRATION ADJUSTMENTS ARE MADE IS READILY ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL.

3 NON METALLIC CABLE (GYPSUM WALL) DETAIL

NO SCALE

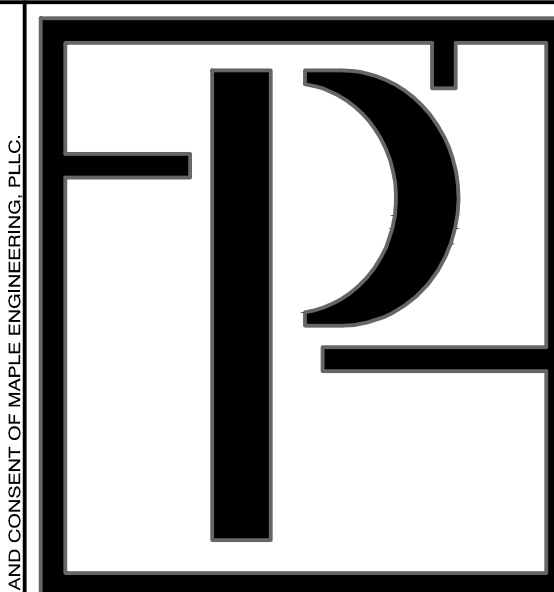
2 FLOOR/CEILING DETAIL

NO SCALE

1 NON-METALLIC PIPE (GYPSUM WALL) DETAIL

NO SCALE

1. All drawings are to be coordinated with all site information by owner and contractor, and applicable codes. 2. Contractor is to notify architect immediately of conditions or items varying from depicted information. 3. Planworx Architecture, P.A. is not responsible for constructed variations from the information depicted. 4. Planworx Architecture, P.A. will not assume any liability for expenses associated with errors and omissions on these drawings unless offset by verified construction savings as a result of planworx architecture, P.A. Design. 5. Planworx Architecture, P.A. retains ownership of all of designs depicted and implied herein. 6. Planworx Architecture, P.A. is not responsible for estimating, maintaining, or regulating construction costs associated with these plans. © Copyright 2019 - PLANWORX ARCHITECTURE, P.A. All rights reserved. Reproduction of this sheet, in whole or in part, is strictly prohibited. Plans may be used once only. Unauthorized use strictly prohibited. PLANS NOT VALID FOR CONSTRUCTION W/O APPROPRIATE PROFESSIONAL SEAL.

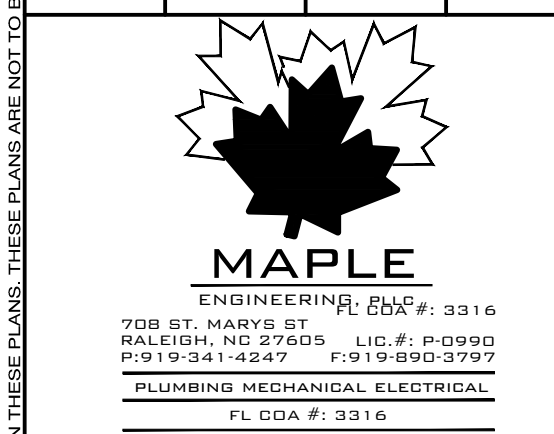


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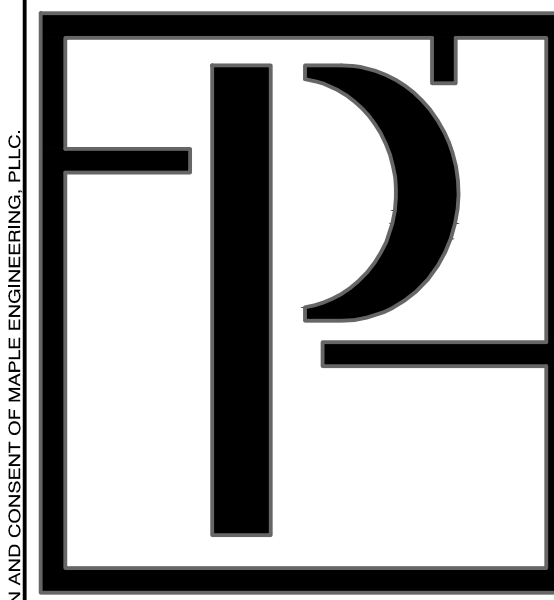
SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		
	NUMBER	DATE

PROJECT NO: PLX-1906
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE: ELECTRICAL DETAILS
SHEET NUMBER:

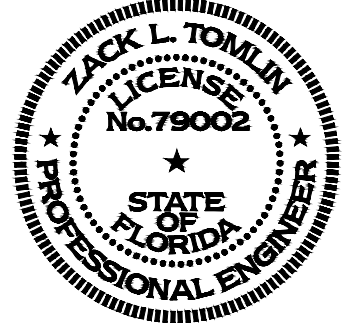
E0.03



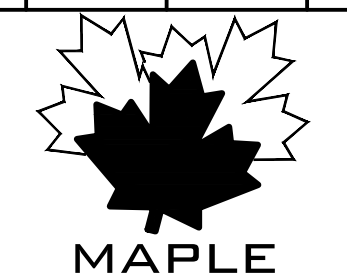
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SURFSIDE CORNER
Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET



MAPLE
ENGINEERING, P.A.
708 W. HAVES ST.
RALEIGH, NC 27605 LIC. # P-0990
P.L.# 19341-4547 P.L.# 19341-3797
PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

ISSUE DATE:	REVISION NUMBER	DATE	INITIALS	DESCRIPTION
07.19.19				

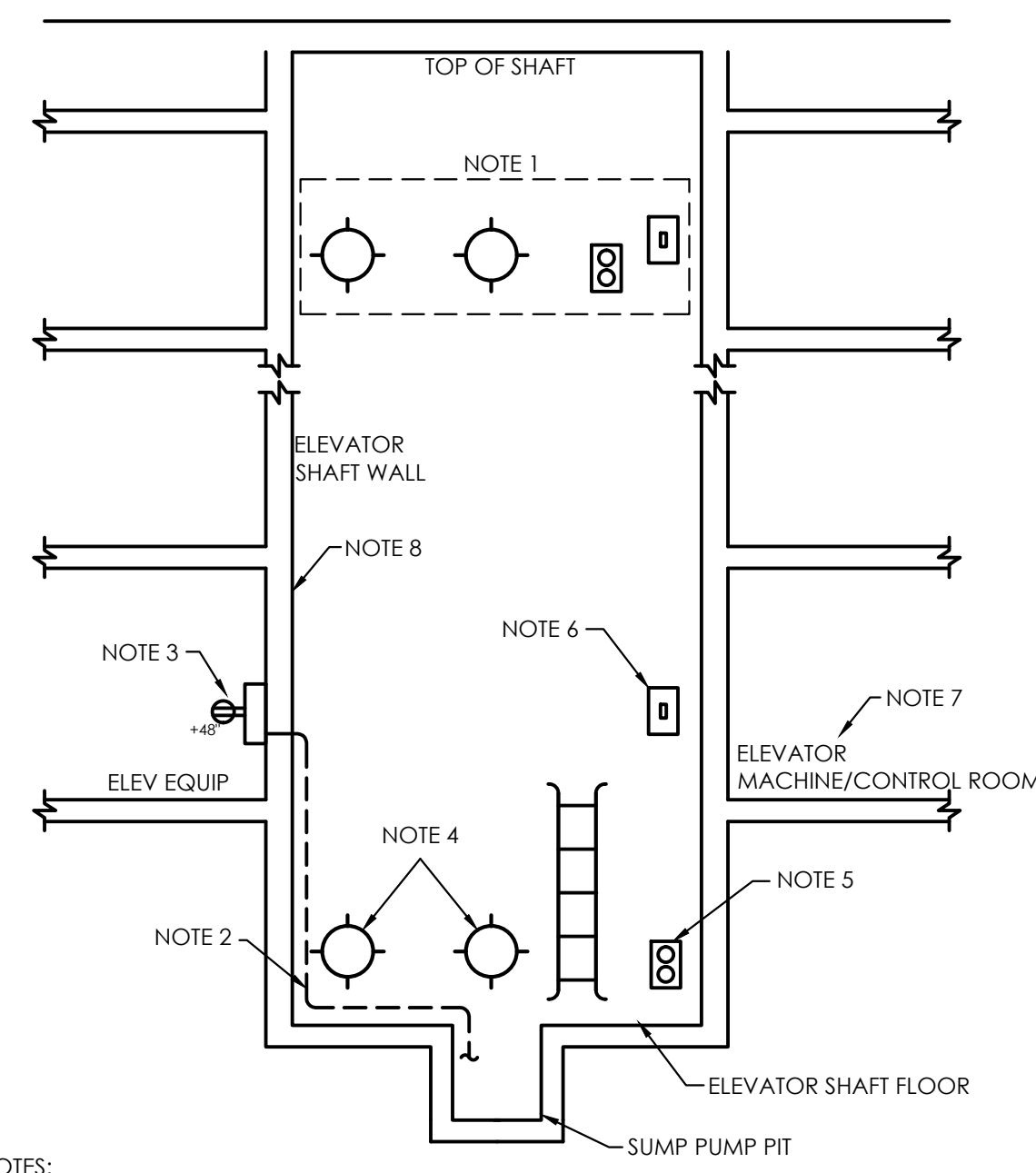
PROJECT NO: **PLX-1906**

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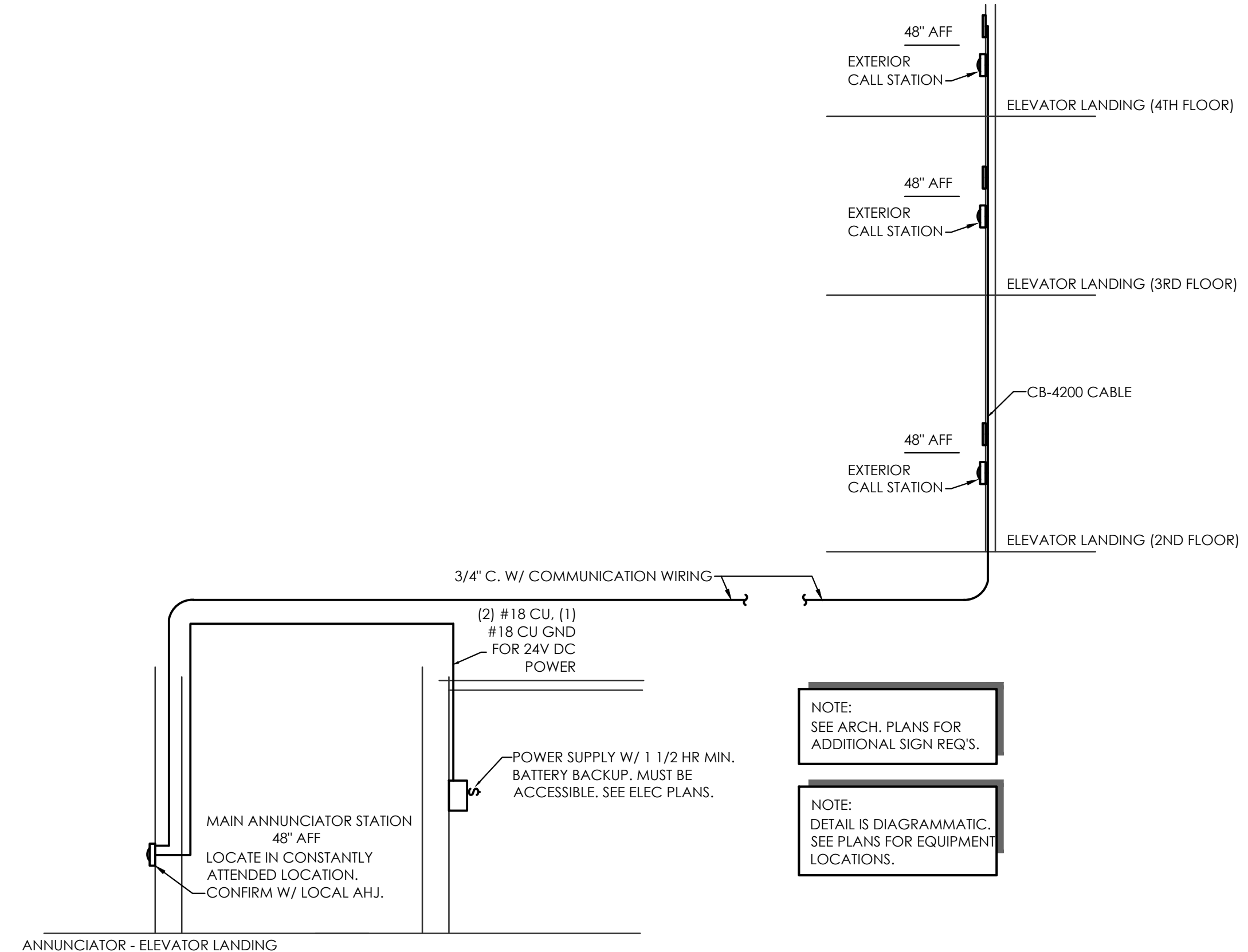
SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:
E0.04



- NOTES:
1. LIGHTS AND RECEPTACLE PER ELEVATOR MANUFACTURERS REQUIREMENTS.
 2. CONTROL AND POWER FROM SUMP PUMP TO CONTROL PANEL PROVIDED AND INSTALLED BY P.C.
 3. E.C. TO PROVIDE POWER FOR SUMP PUMP CONTROL PANEL (SEE PLANS). CONTROL PANEL FURNISHED BY P.C.. COORDINATE EXACT LOCATION WITH P.C..
 4. PROVIDE (2) LIGHTS 18" ABOVE PIT FLOOR/. SEE PLAN FOR LOCATION. PIT LIGHTS AND RECEPTACLE TO NOT SHARE THE SAME CIRCUIT.
 5. PROVIDE (1) GFCI WEATHER-PROOF RECEPTACLE 18" ABOVE PIT FLOOR. SEE PLAN FOR LOCATION. (NEC 620.24, NEC 620.85). PIT LIGHTS AND RECEPTACLE TO NOT SHARE THE SAME CIRCUIT.
 6. PROVIDE WEATHER-PROOF LIGHT SWITCH ADJACENT TO ELEVATOR PIT LADDER. COORDINATE LOCATION WITH ELEVATOR MANUFACTURER'S SUBMITTAL (NEC 620.24).
 7. BRANCH CIRCUITS, WIRING, AND DEVICES FOR MACHINE ROOMS OR CONTROL ROOMS TO FOLLOW NEC 620.23, NEC 620.37, AND NEC 620.85.
 8. RATED SHAFT WALLS. SEE ARCHITECT PLANS.

2 ELEVATOR SHAFT DETAIL
NO SCALE

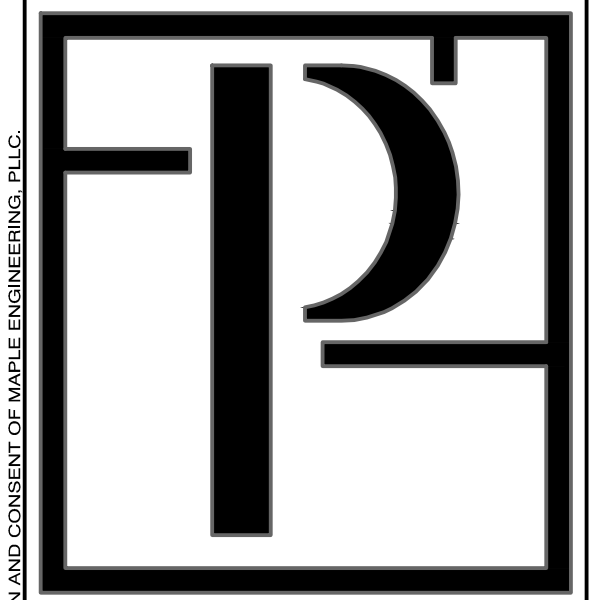


- NOTES:
1. EXTERIOR CALL STATION EQUAL TO ALPHA COMMUNICATIONS 4202 WEATHERPROOF MODEL.
 2. ANNUNCIATOR PANEL EQUAL TO ALPHA COMMUNICATIONS 4200 SERIES WEATHERPROOF MODEL.
 3. FURNISH W/ POWER SUPPLY, COMMUNICATION CABLES, REQUIRED SIGNAGE AND ALL OTHER COMPONENTS REQUIRED FOR A FULLY FUNCTIONING SYSTEM. COORDINATE PROGRAMMING WITH LOCAL AHJ AND OWNER.

1 TWO-WAY ELEVATOR COMMUNICATION
NO SCALE

7/18/2019 5:07 PM
PLX-1906-E004.DWG

FIRE RATING LEGEND	
	1-HR WALL
	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	

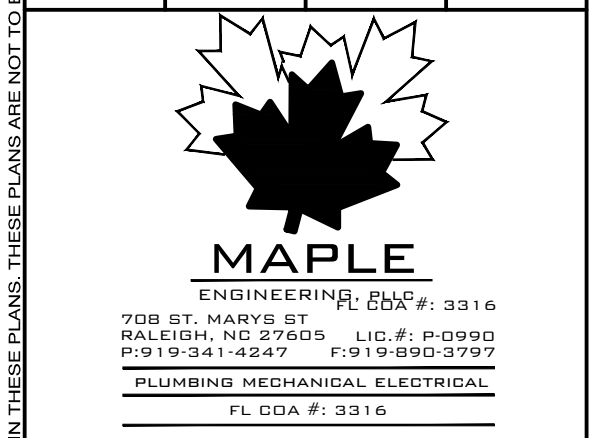


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ISSUE DATE:	07.19.19	DESCRIPTION:	
REVISIONS:		INITIALS:	
NUMBER:		DATE:	

PROJECT NO: **PLX-1906**
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE:
ELECTRICAL FIRST FLOOR PLAN
SHEET NUMBER:

E1.10

GENERAL NOTES - THIS SHEET

- ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.

TAGGED NOTES - THIS SHEET

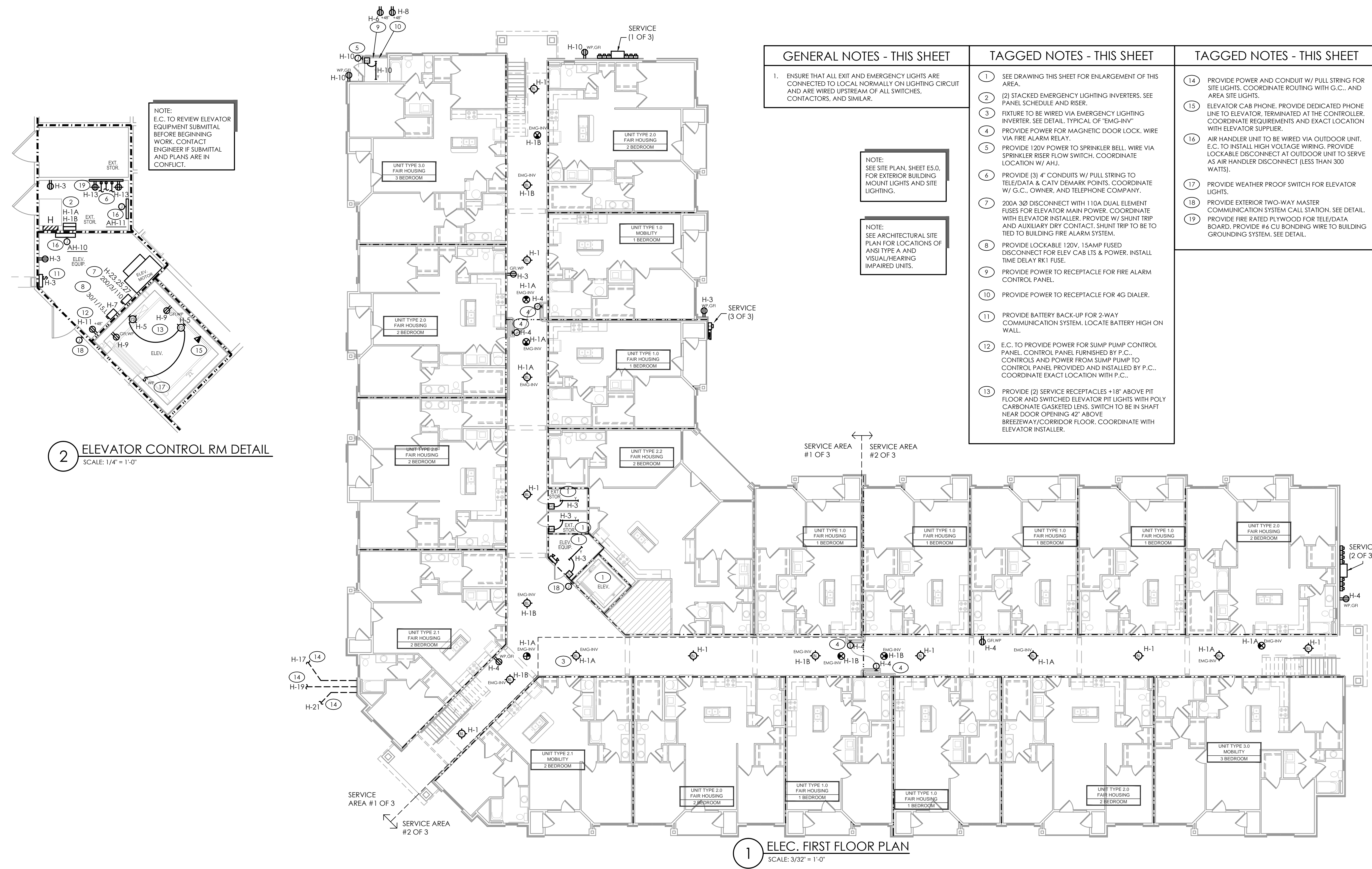
- SEE DRAWING THIS SHEET FOR ENLARGEMENT OF THIS AREA.
- (2) STACKED EMERGENCY LIGHTING INVERTERS. SEE PANEL SCHEDULE AND RISER.
- FIXTURE TO BE WIRED VIA EMERGENCY LIGHTING INVERTER. SEE DETAIL. TYPICAL OF "EMG-INV"
- PROVIDE POWER FOR MAGNETIC DOOR LOCK. WIRE VIA FIRE ALARM RELAY.
- PROVIDE 120V POWER TO SPRINKLER BELL. WIRE VIA SPRINKLER RISER FLOW SWITCH. COORDINATE LOCATION W/ AHJ.
- PROVIDE (3) 4" CONDUITS W/ PULL STRING TO TELE/DATA & CATV DEMARK POINTS. COORDINATE W/ G.C., OWNER, AND TELEPHONE COMPANY.
- 200A 3Ø DISCONNECT WITH 110A DUAL ELEMENT FUSES FOR ELEVATOR MAIN POWER. COORDINATE WITH ELEVATOR INSTALLER. PROVIDE W/ SHUNT TRIP AND AUXILIARY DRY CONTACT. SHUNT TRIP TO BE TIED TO BUILDING FIRE ALARM SYSTEM.
- PROVIDE LOCKABLE 120V, 15AMP FUSED DISCONNECT FOR ELEV CAB LITS & POWER. INSTALL TIME DELAY RK1 FUSE.
- PROVIDE POWER TO RECEPTACLE FOR FIRE ALARM CONTROL PANEL.
- PROVIDE POWER TO RECEPTACLE FOR 4G DIALER.
- PROVIDE BATTERY BACK-UP FOR 2-WAY COMMUNICATION SYSTEM. LOCATE BATTERY HIGH ON WALL.
- E.C. TO PROVIDE POWER FOR SUMP PUMP CONTROL PANEL. CONTROL PANEL FURNISHED BY P.C.. CONTROLS AND POWER FROM SUMP PUMP TO CONTROL PANEL PROVIDED AND INSTALLED BY P.C.. COORDINATE EXACT LOCATION WITH P.C..
- PROVIDE (2) SERVICE RECEPTACLES +18" ABOVE PIT FLOOR AND SWITCHED ELEVATOR PIT LIGHTS WITH POLY CARBONATE GASKETED LENS. SWITCH TO BE IN SHAFT NEAR DOOR OPENING 42" ABOVE BREEZEWAY/CORRIDOR FLOOR. COORDINATE WITH ELEVATOR INSTALLER.

TAGGED NOTES - THIS SHEET

- PROVIDE POWER AND CONDUIT W/ PULL STRING FOR SITE LIGHTS. COORDINATE ROUTING WITH G.C. AND AREA SITE LIGHTS.
- ELEVATOR CAB PHONE. PROVIDE DEDICATED PHONE LINE TO ELEVATOR. TERMINATED AT THE CONTROLLER. COORDINATE REQUIREMENTS AND EXACT LOCATION WITH ELEVATOR SUPPLIER.
- AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT. E.C. TO INSTALL HIGH VOLTAGE WIRING. PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
- PROVIDE WEATHER PROOF SWITCH FOR ELEVATOR LIGHTS.
- PROVIDE EXTERIOR TWO-WAY MASTER COMMUNICATION SYSTEM CALL STATION. SEE DETAIL.
- PROVIDE FIRE RATED PLYWOOD FOR TELE/DATA BOARD. PROVIDE #6 CU BONDING WIRE TO BUILDING GROUNDING SYSTEM. SEE DETAIL.

NOTE:
SEE SITE PLAN, SHEET E5.0,
FOR EXTERIOR BUILDING
MOUNT LIGHTS AND SITE
LIGHTING.

NOTE:
SEE ARCHITECTURAL SITE
PLAN FOR LOCATIONS OF
ANSI TYPE A AND
VISUAL/HEARING
IMPAIRED UNITS.



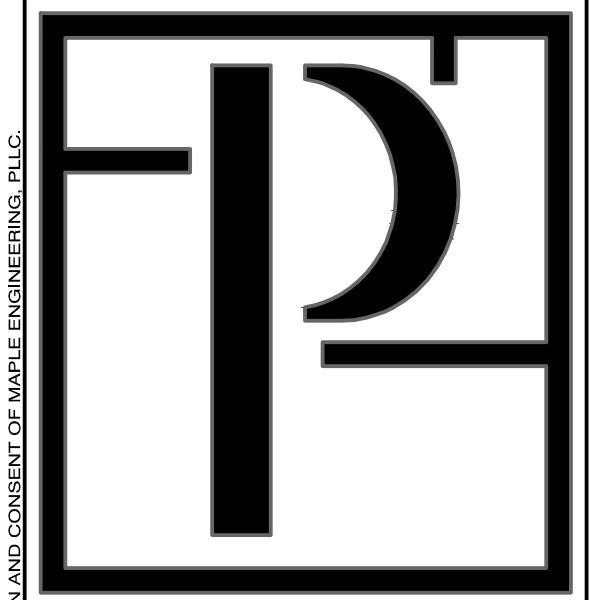
2 ELEVATOR CONTROL RM DETAIL
SCALE: 1/4" = 1'-0"

1 ELEC. FIRST FLOOR PLAN
SCALE: 3/32" = 1'-0"

NOTE:
E.C. TO REVIEW ELEVATOR
EQUIPMENT SUBMITTAL
BEFORE BEGINNING
WORK. CONTACT
ENGINEER IF SUBMITTAL
AND PLANS ARE IN
CONFLICT.

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FIRE RATING LEGEND	
	1-HR WALL
	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	



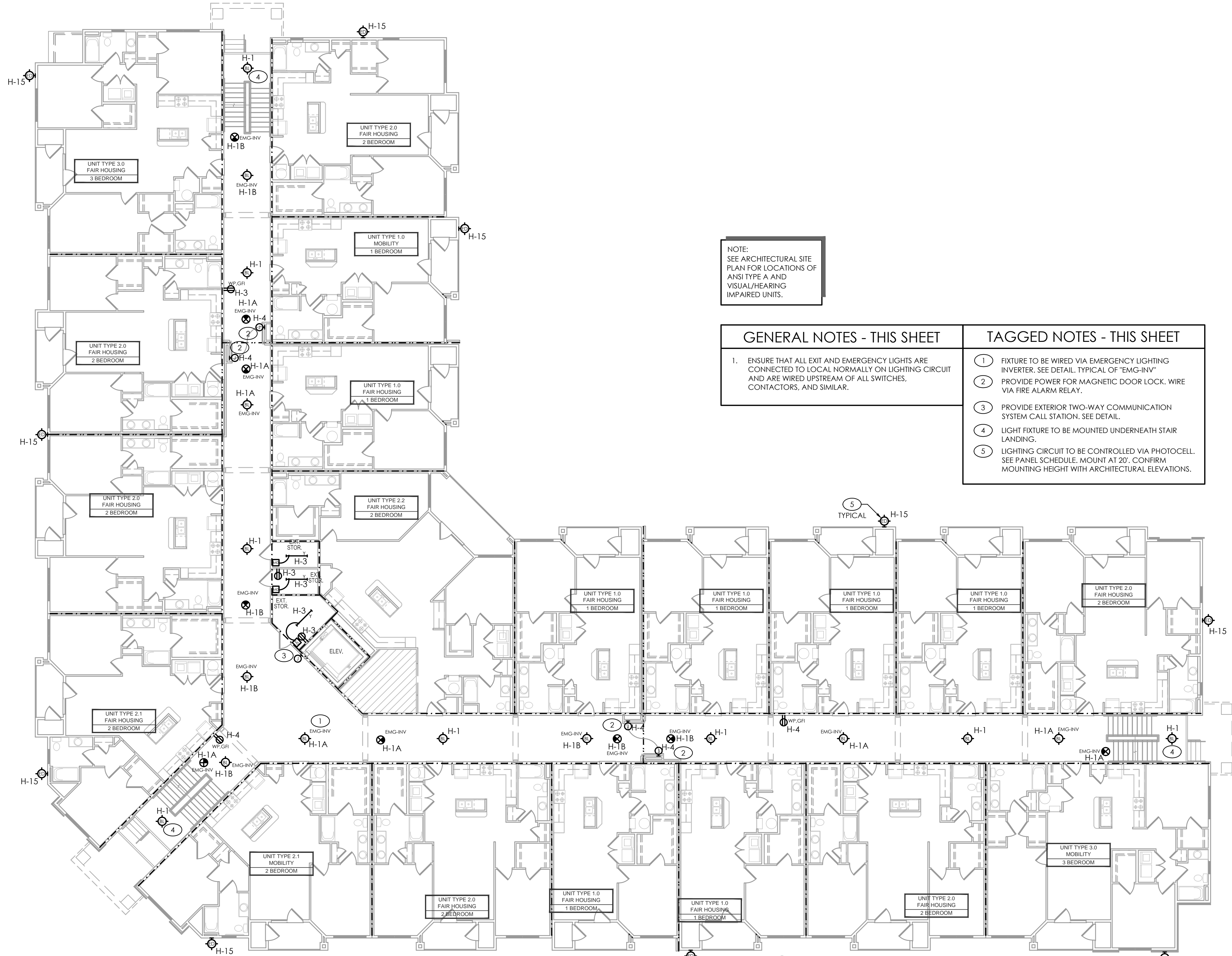
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office (919) 846-8100
website www.planworx.com

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LICENSED PROFESSIONAL ENGINEER
No. 79002
STATE OF FLORIDA

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Zimmer Development Company
CAPE CORAL, FLORIDA
PERMIT SET

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708 W. MAIN ST. RALEIGH, NC 27605 LIC. # P-0990
P.O. BOX 24145 RALEIGH, NC 27602-0414
PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316



NOTE:
SEE ARCHITECTURAL SITE PLAN FOR LOCATIONS OF ANSI TYPE A AND VISUAL/HEARING IMPAIRED UNITS.

GENERAL NOTES - THIS SHEET

- ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.

TAGGED NOTES - THIS SHEET

- FIXTURE TO BE WIRED VIA EMERGENCY LIGHTING INVERTER. SEE DETAIL TYPICAL OF "EMG-INV"
- PROVIDE POWER FOR MAGNETIC DOOR LOCK. WIRE VIA FIRE ALARM RELAY.
- PROVIDE EXTERIOR TWO-WAY COMMUNICATION SYSTEM CALL STATION. SEE DETAIL.
- LIGHT FIXTURE TO BE MOUNTED UNDERNEATH STAIR LANDING.
- LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. SEE PANEL SCHEDULE. MOUNT AT 20'. CONFIRM MOUNTING HEIGHT WITH ARCHITECTURAL ELEVATIONS.

1 ELEC. SECOND FLOOR PLAN
SCALE: 3/32" = 1'-0"

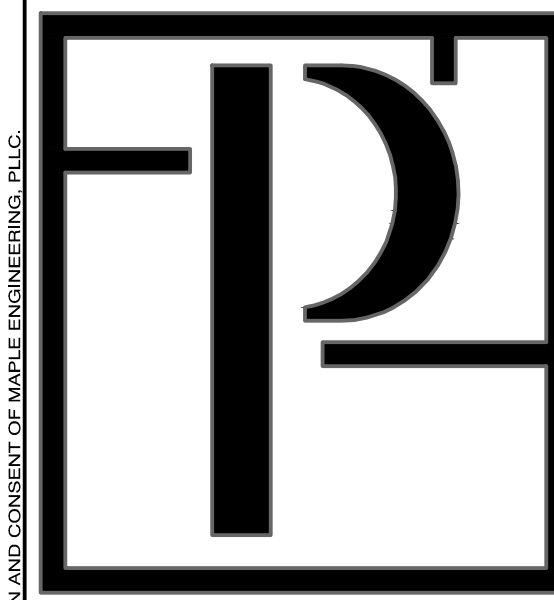
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PROJECT NO: **PLX-1906**
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE:
ELECTRICAL SECOND FLOOR PLAN
SHEET NUMBER:
E1.11

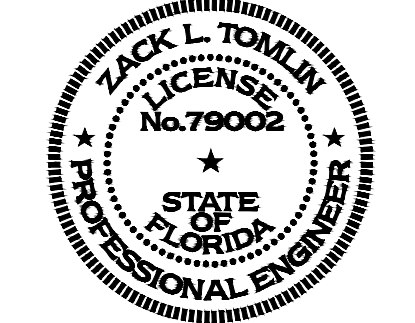
FIRE RATING LEGEND	
---	1-HR WALL
----	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	



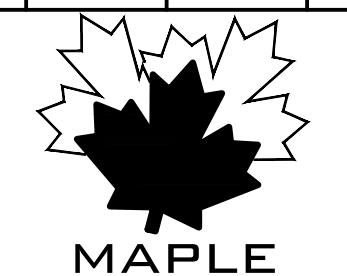
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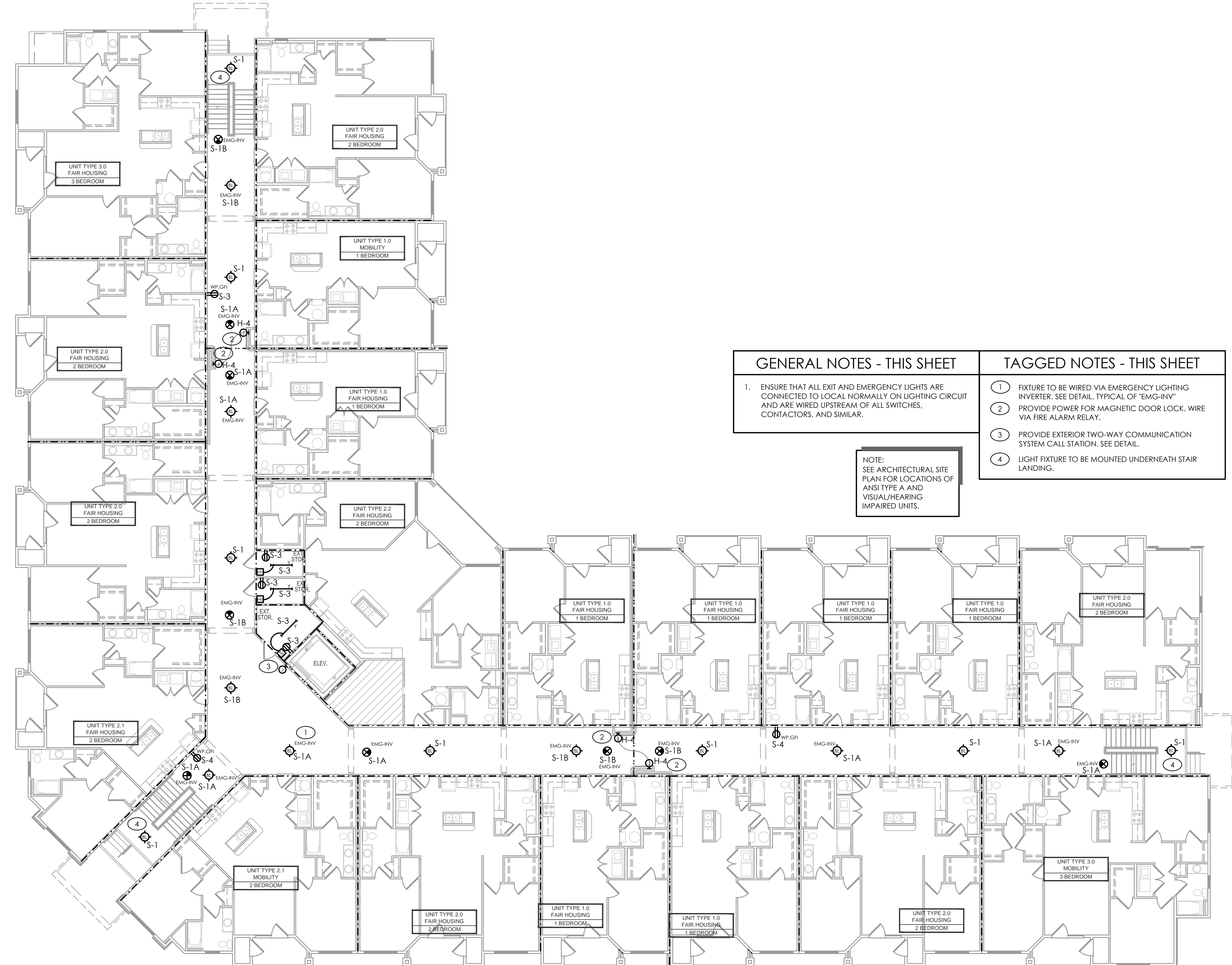
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RALEIGH, NC 27605 LIC. # P-0990
P.L. # 15414-4547 P.L. # 1900 3797
PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

ISSUE DATE:	REVISIONS NUMBER	DATE	INITIALS
07.19.19			

PROJECT NO: **PLX-1906**
DRAWN BY: JNS
CHECKED BY: ZLT

SHEET TITLE:
ELECTRICAL THIRD FLOOR PLAN

SHEET NUMBER:
E1.12



GENERAL NOTES - THIS SHEET

1. ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES, CONTACTORS, AND SIMILAR.

TAGGED NOTES - THIS SHEET

1. FIXTURE TO BE WIRED VIA EMERGENCY LIGHTING INVERTER. SEE DETAIL TYPICAL OF 'EMG-LV'.

2. PROVIDE POWER FOR MAGNETIC DOOR LOCK. WIRE VIA FIRE ALARM RELAY.

3. PROVIDE EXTERIOR TWO-WAY COMMUNICATION SYSTEM CALL STATION. SEE DETAIL.

4. LIGHT FIXTURE TO BE MOUNTED UNDERNEATH STAIR LANDING.

NOTE:
SEE ARCHITECTURAL SITE PLAN FOR LOCATIONS OF ANSI TYPE A AND VISUAL/HEARING IMPAIRED UNITS.

1 ELEC. THIRD FLOOR PLAN
SCALE: 3/32" = 1'-0"

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PLX-1906-E1.12.DWG

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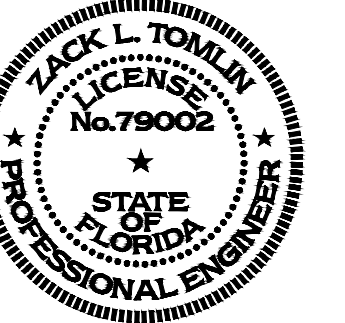
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FIRE RATING LEGEND	
(Symbol)	1-HR WALL
(Symbol)	2-HR WALL
* FLOOR/CEILING ASSEMBLY IS 1-HR RATED.	

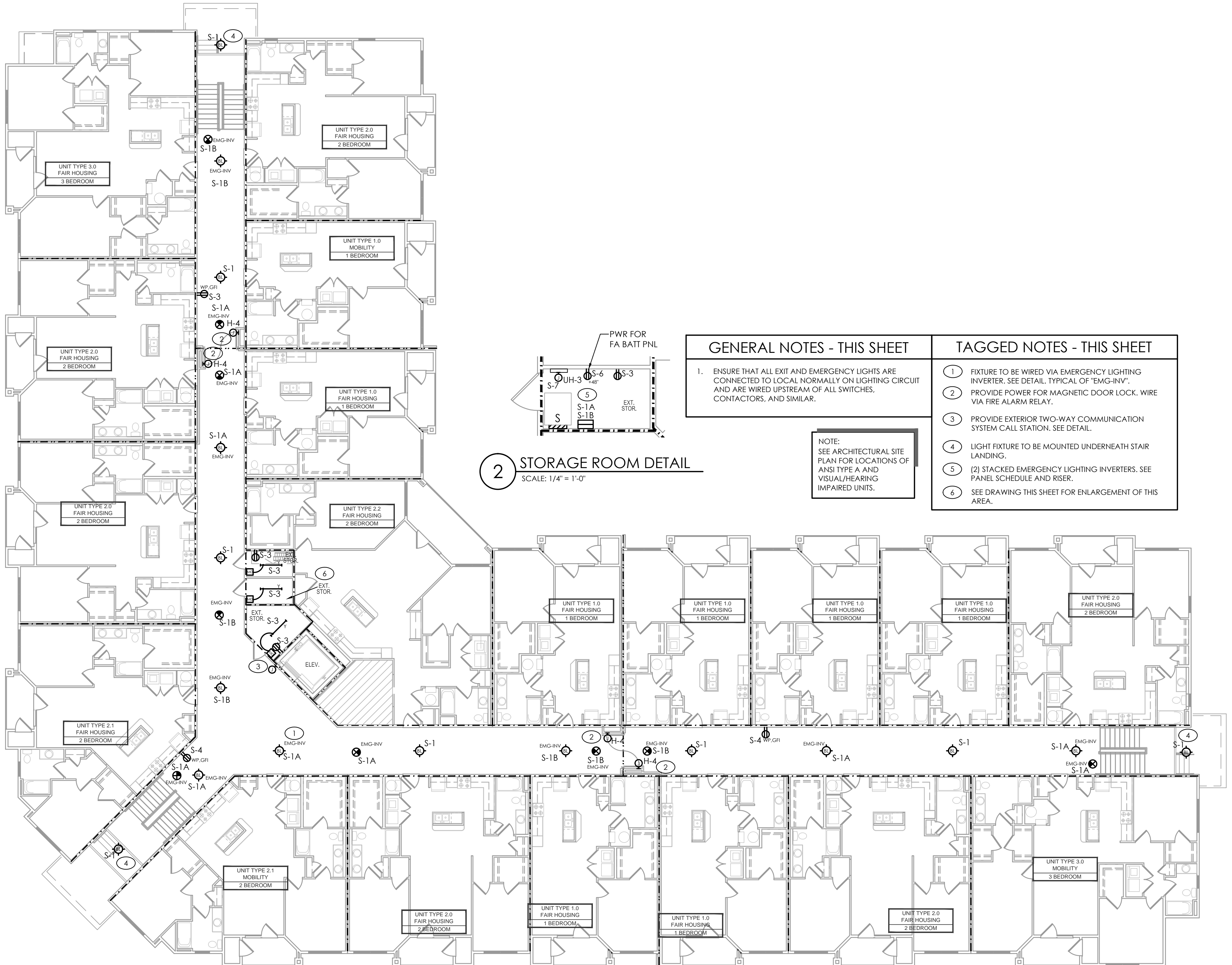
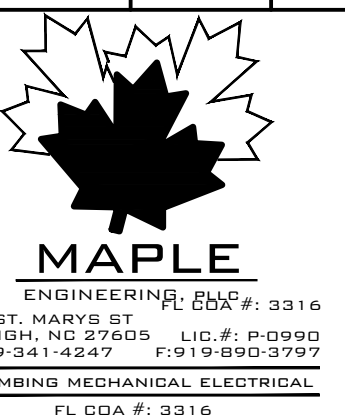


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TAGGED NOTES - THIS SHEET

- FIXTURE TO BE WIRED VIA EMERGENCY LIGHTING INVERTER. SEE DETAIL TYPICAL OF "EMG-INV".
- PROVIDE POWER FOR MAGNETIC DOOR LOCK. WIRE VIA FIRE ALARM RELAY.
- PROVIDE EXTERIOR TWO-WAY COMMUNICATION SYSTEM CALL STATION. SEE DETAIL.
- LIGHT FIXTURE TO BE MOUNTED UNDERNEATH STAIR LANDING.
- (2) STACKED EMERGENCY LIGHTING INVERTERS. SEE PANEL SCHEDULE AND RISER.
- SEE DRAWING THIS SHEET FOR ENLARGEMENT OF THIS AREA.

NOTE:
SEE ARCHITECTURAL SITE PLAN FOR LOCATIONS OF ANSI TYPE A AND VISUAL/HEARING IMPAIRED UNITS.

2 STORAGE ROOM DETAIL
SCALE: 1/4" = 1'-0"

1 ELEC. FOURTH FLOOR PLAN
SCALE: 3/32" = 1'-0"

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PLX-1906-E113.DWG

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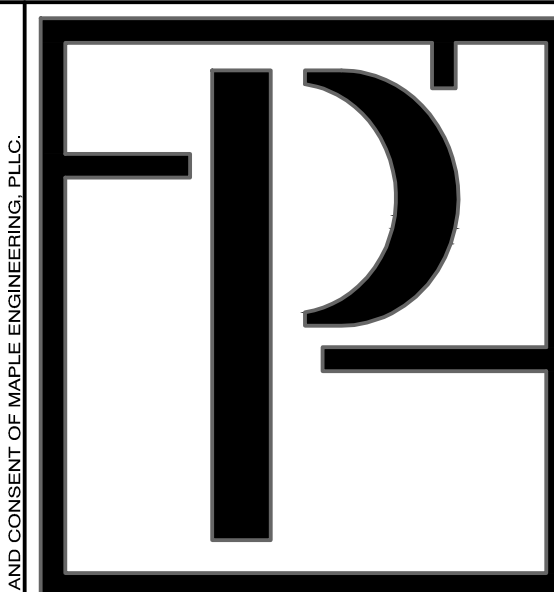
PROJECT NO: **PLX-1906**

DRAWN BY: JNS

CHECKED BY: ZLT

SHEET TITLE: **ELECTRICAL FOURTH FLOOR PLAN**

SHEET NUMBER: **E1.13**



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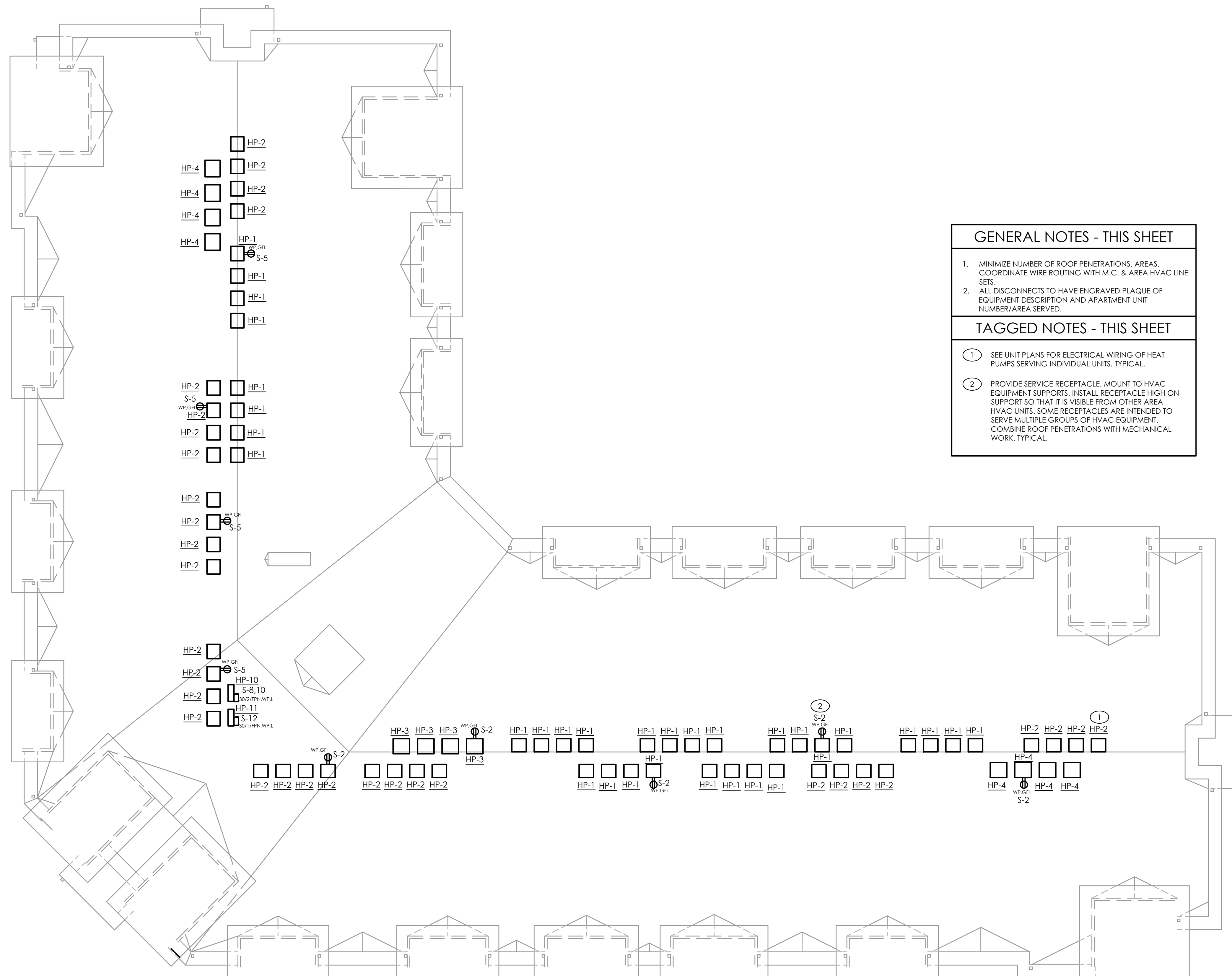


GENERAL NOTES - THIS SHEET

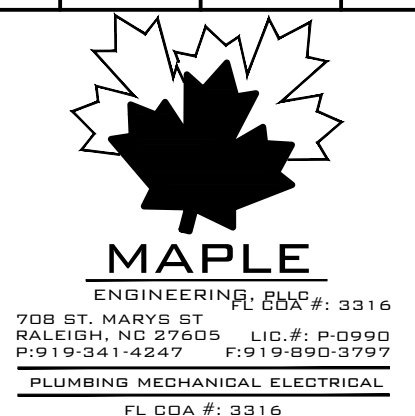
- MINIMIZE NUMBER OF ROOF PENETRATIONS. AREAS, COORDINATE WIRE ROUTING WITH M.C. & AREA HVAC LINE SETS.
- ALL DISCONNECTS TO HAVE ENGRAVED PLAQUE OF EQUIPMENT DESCRIPTION AND APARTMENT UNIT NUMBER/AREA SERVED.

TAGGED NOTES - THIS SHEET

- SEE UNIT PLANS FOR ELECTRICAL WIRING OF HEAT PUMPS SERVING INDIVIDUAL UNITS. TYPICAL.
- PROVIDE SERVICE RECEPTACLE, MOUNT TO HVAC EQUIPMENT SUPPORTS. INSTALL RECEPTACLE HIGH ON SUPPORT SO THAT IT IS VISIBLE FROM OTHER AREA HVAC UNITS. SOME RECEPTACLES ARE INTENDED TO SERVE MULTIPLE GROUPS OF HVAC EQUIPMENT. COMBINE ROOF PENETRATIONS WITH MECHANICAL WORK. TYPICAL.



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	NUMBER	DATE
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	DATE	
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PROJECT NO: **PLX-1906**
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SHEET TITLE:
ELECTRICAL ROOF PLAN
SHEET NUMBER:
E1.20

1 ELECTRICAL ROOF PLAN
SCALE: 3/32" = 1'-0"

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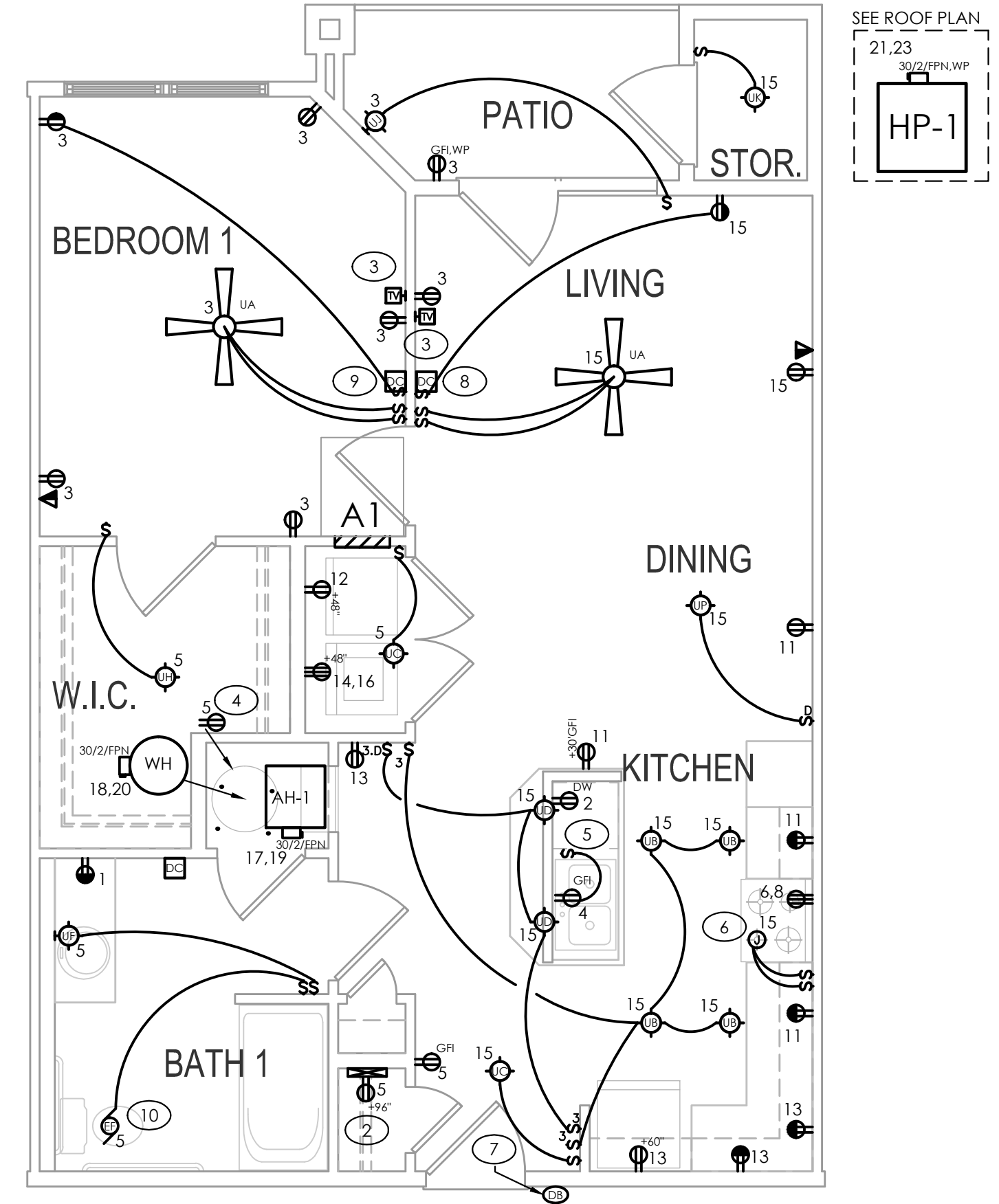
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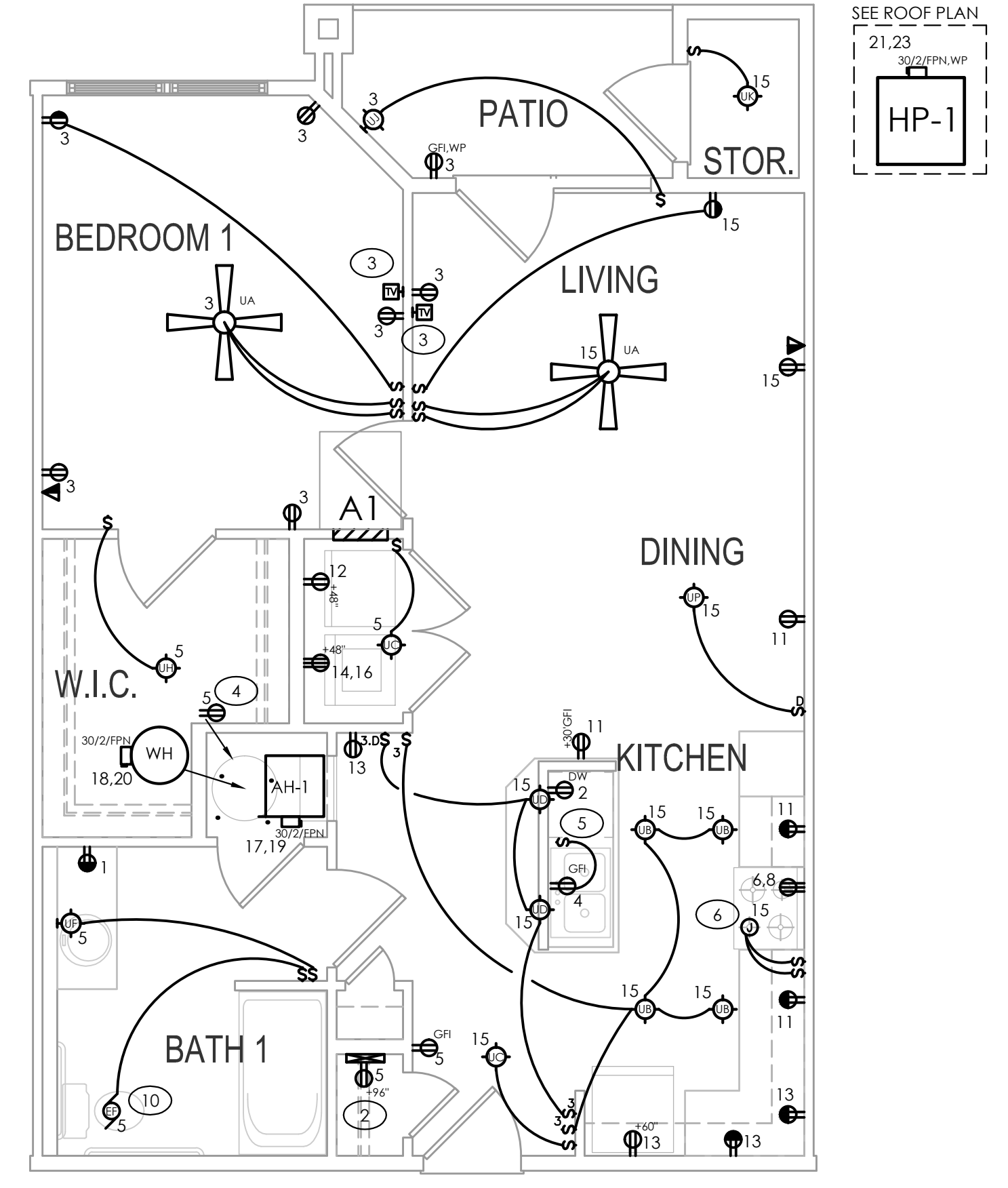
- GENERAL NOTES - THIS SHEET**
- ALL 120V RECEPTACLES ARE TO BE TAMPER RESISTANT.
 - ALL RECEPTACLES ON 20 AMP CIRCUIT TO BE 20 AMP RECEPTACLES.
 - COORDINATE EXACT LOCATION OF WH, AH, & HP W/ P.C. & M.C. BEFORE BEGINNING WORK.
 - E.C. TO CONFIRM ALL APPLIANCE LOCATIONS W/ ARCH PLANS PRIOR TO BEGINNING WORK.
 - PROVIDE EXTRA BRACING FOR ANY CEILING FAN.
 - CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL OUTLETS BEFORE STARTING "ROUGH-IN" WORK. CONTRACTOR SHALL NOT "ROUGH-IN" ANY OUTLET, FIXTURE OR DEVICE OF ANY KIND WITHOUT FIRST ATTENDING A WALK THROUGH OF EACH APARTMENT UNIT WITH THE OWNER AND GENERAL CONTRACTOR FOR COORDINATION OF FINAL LOCATIONS.
 - UNIT PANELS ARE TO BE INSTALLED SO THAT NO TRIM LATCH ON BREAKER IS GREATER THAN 48" AFF.
 - SEE BUILDING PLANS FOR RATING OF UNIT DEMISING WALLS & FLOOR/CEILING ASSEMBLIES.
 - COORDINATE VISUAL/HEARING IMPAIRED UNIT DESIGNATIONS WITH G.C. AND ARCH PRIOR TO BID.
 - NOTIFICATION DEVICES SHALL COMPLY WITH 2017 FLORIDA ACCESSIBILITY CODE 809.5.5.

NOTE:
SEE FA PLANS FOR SMOKE DETECTORS IN ADA UNITS.

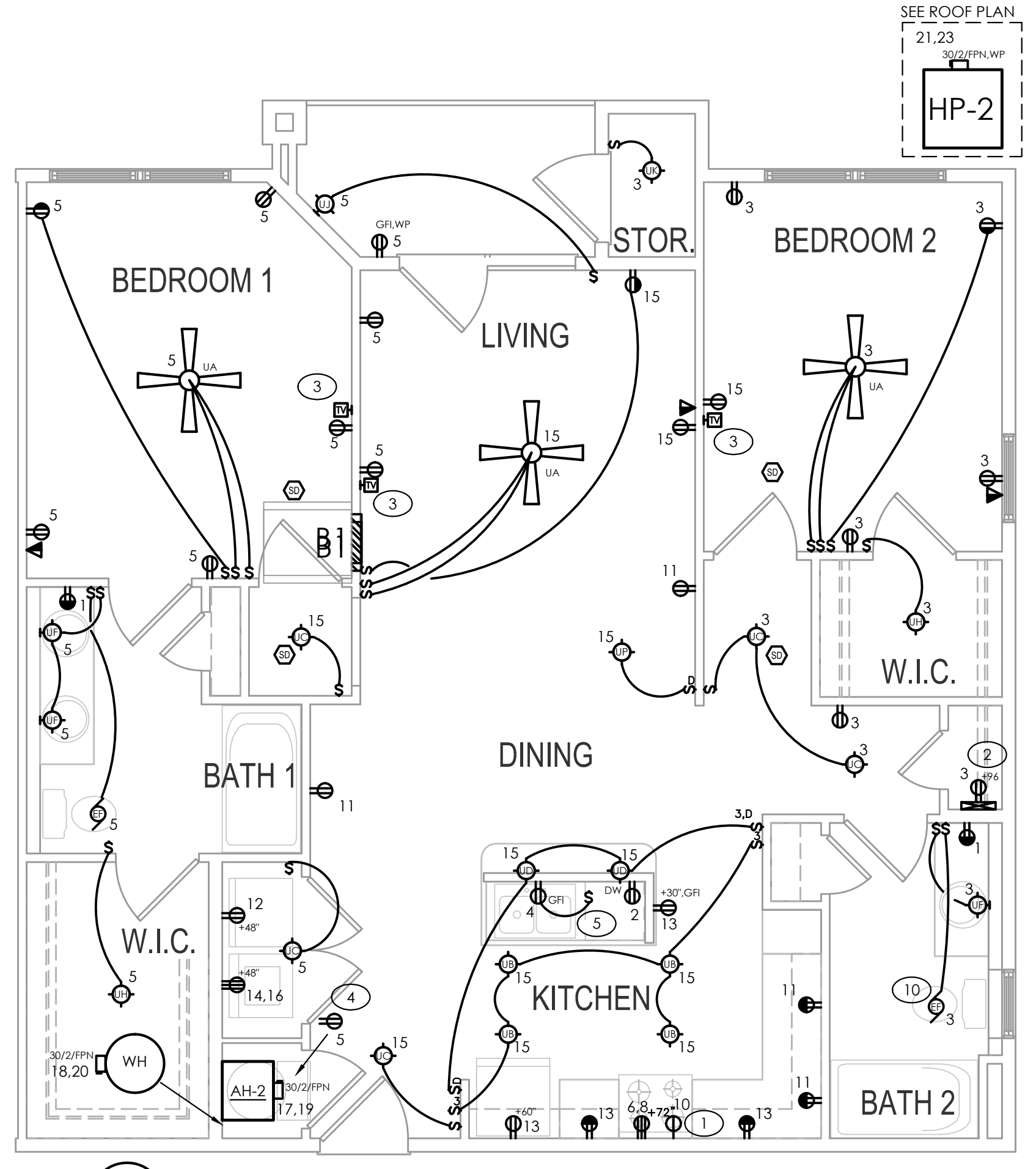
- TAGGED NOTES - THIS SHEET**
- PROVIDE A SIMPLEX RECEPTACLE FOR MICROWAVE UNIT. MOUNT RECEPTACLE AT BACK OF UPPER CABINET; MICROWAVE UNIT IS MOUNTED OVER RANGE. COORDINATE EXACT LOCATION W/ G.C.
 - PROVIDE CHANNEL VISION BRAND STRUCTURED WIRING ENCLOSURE FOR NETWORKING PURPOSES WITHIN APARTMENT FOR MODULAR PUSH AND LOCK TELEPHONE, VIDEO, DATA, AND POWER MODULES. THE CABLE TV COAX AND TELEPHONE/DATA CAT 5 FEED FROM THE LOWER LEVEL DATA ROOM(S) SHALL TERMINATE AT THIS BOX IN EACH APARTMENT. THEN FROM THIS BOX SPLIT OFF TO FEED EACH DATA/TELEPHONE/CABLE TV OUTLET WITHIN EACH APARTMENT. USE 19" MODEL C-0119E IN THE 4BR AND 3BR UNITS AND USE 12" MODEL C-0112WE IN THE 2BR AND 1BR UNITS. INSIDE THE SINGLE GANG KNOCKOUT PROVIDED IN EACH STRUCTURED WIRING ENCLOSURE PROVIDE A DUPLEX ELECTRICAL POWER RECEPTACLE ON CIRCUIT NOTED.
 - CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
 - PROVIDE POWER FOR WATER METER COORD. LOCATION W/ P.C.
 - PROVIDE COUNTER TOP AIR SWITCH NEXT TO SINK FOR GARBAGE DISPOSAL. CONFIRM EXACT LOCATION W/ OWNER.
 - HOOD LIGHTS AND CONTROLS TO BE SWITCHED SEPARATELY. SWITCHES TO BE LOCATED IN AN ADA COMPLIANT LOCATION. COORDINATE WITH G.C.
 - HARD-WIRED DOORBELL BUTTON/SWITCH. PROVIDE A LIGHTED OR CONTRASTING COLOR DOORBELL BUTTON/SWITCH CONNECTED TO THE AUDIBLE AND STROBE ALARMS.
 - AUDIO/VISUAL DOORBELL NOTIFICATION DEVICE. AUDIBLE AND STROBE ALARM TO BE INSTALLED IN EACH BATHROOM, BEDROOM, AND COMMON AREA TYPICAL.
 - NOTIFICATION DEVICES IN SLEEPING AREAS SHALL HAVE CONTROLS TO DEACTIVATE THE DOORBELL SIGNAL.
 - PROGRAMMABLE EXHAUST FAN SWITCH PROVIDED BY M.C. INSTALLED BY AND PROGRAMMED(DIALS SET) BY E.C. - SEE MECH PLAN.



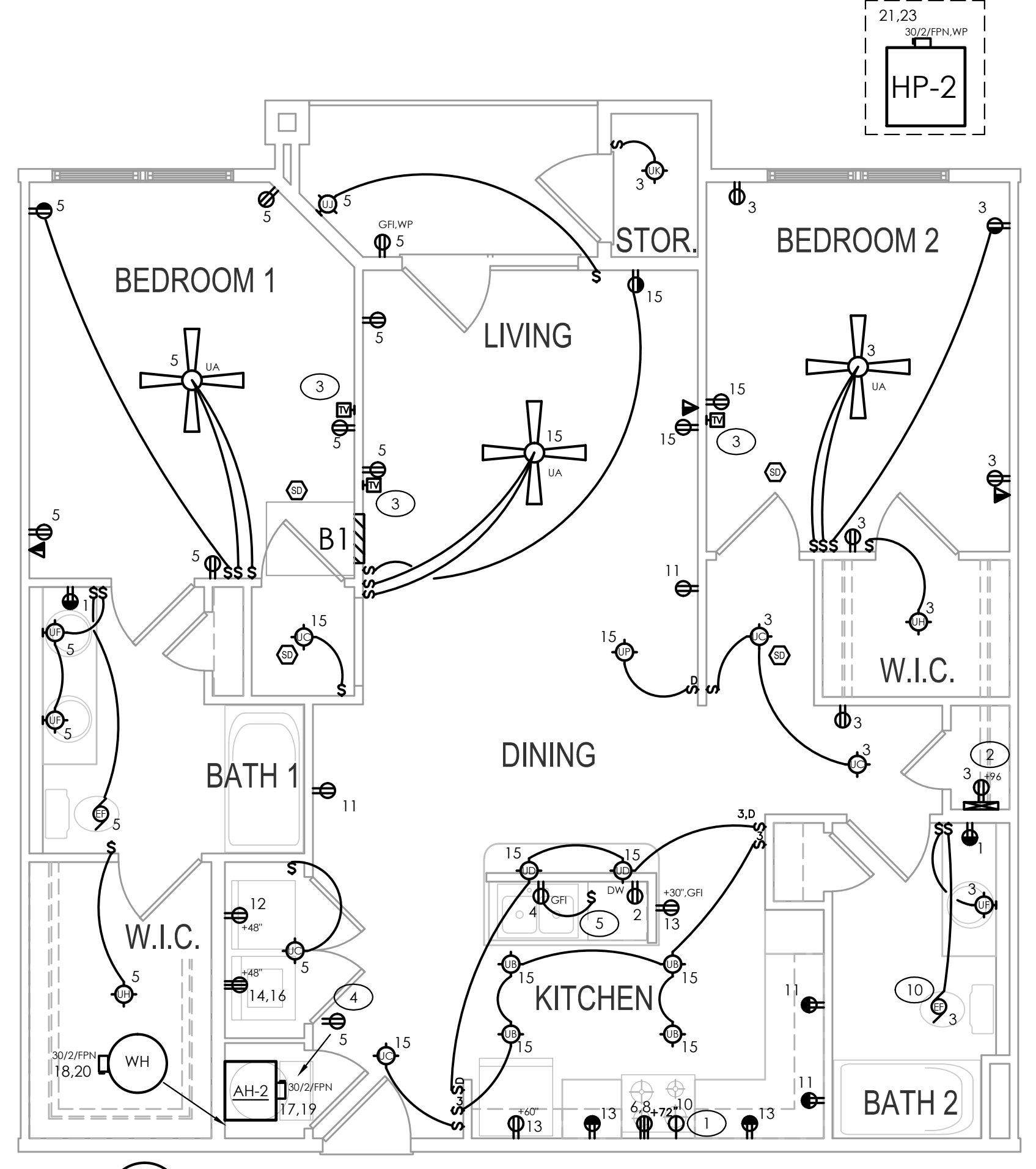
5 ELEC. UNIT PLAN - TYPE 1.0 MOBILITY (HEARING/VISUAL IMPAIRED)
SCALE: 1/4" = 1'-0"



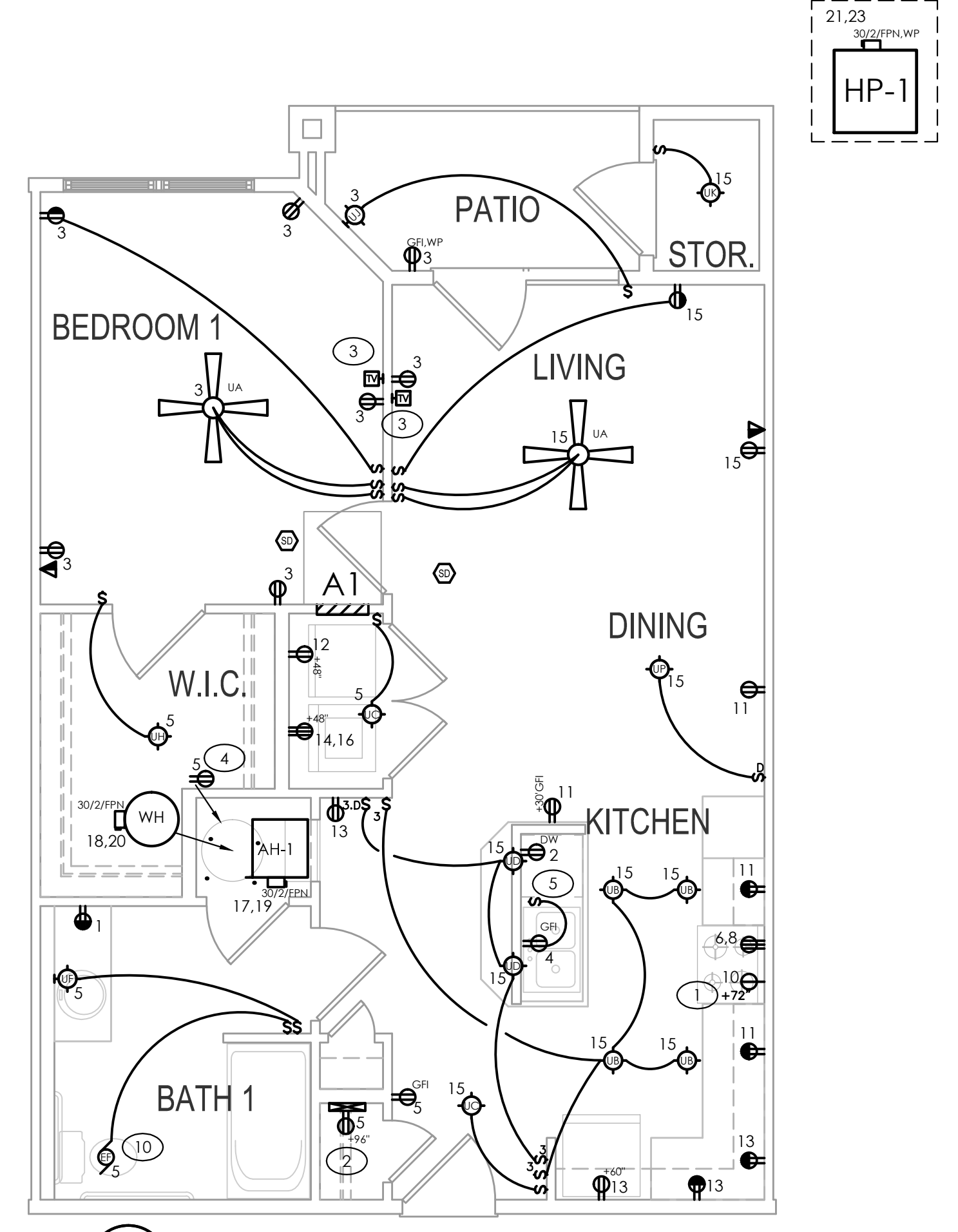
4 ELEC. UNIT PLAN - TYPE 1.0 MOBILITY
SCALE: 1/4" = 1'-0"



3 ELEC. UNIT PLAN - TYPE 2.0 FAIR HOUSING END UNIT
SCALE: 1/4" = 1'-0"



2 ELEC. UNIT PLAN - TYPE 2.0 FAIR HOUSING INTERIOR
SCALE: 1/4" = 1'-0"



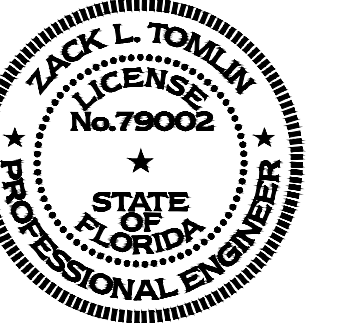
1 ELEC. UNIT PLAN - TYPE 1.0 FAIR HOUSING
SCALE: 1/4" = 1'-0"



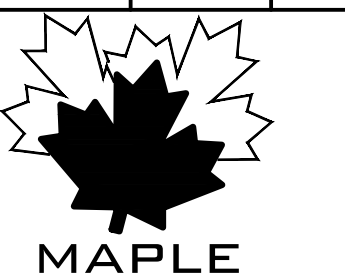
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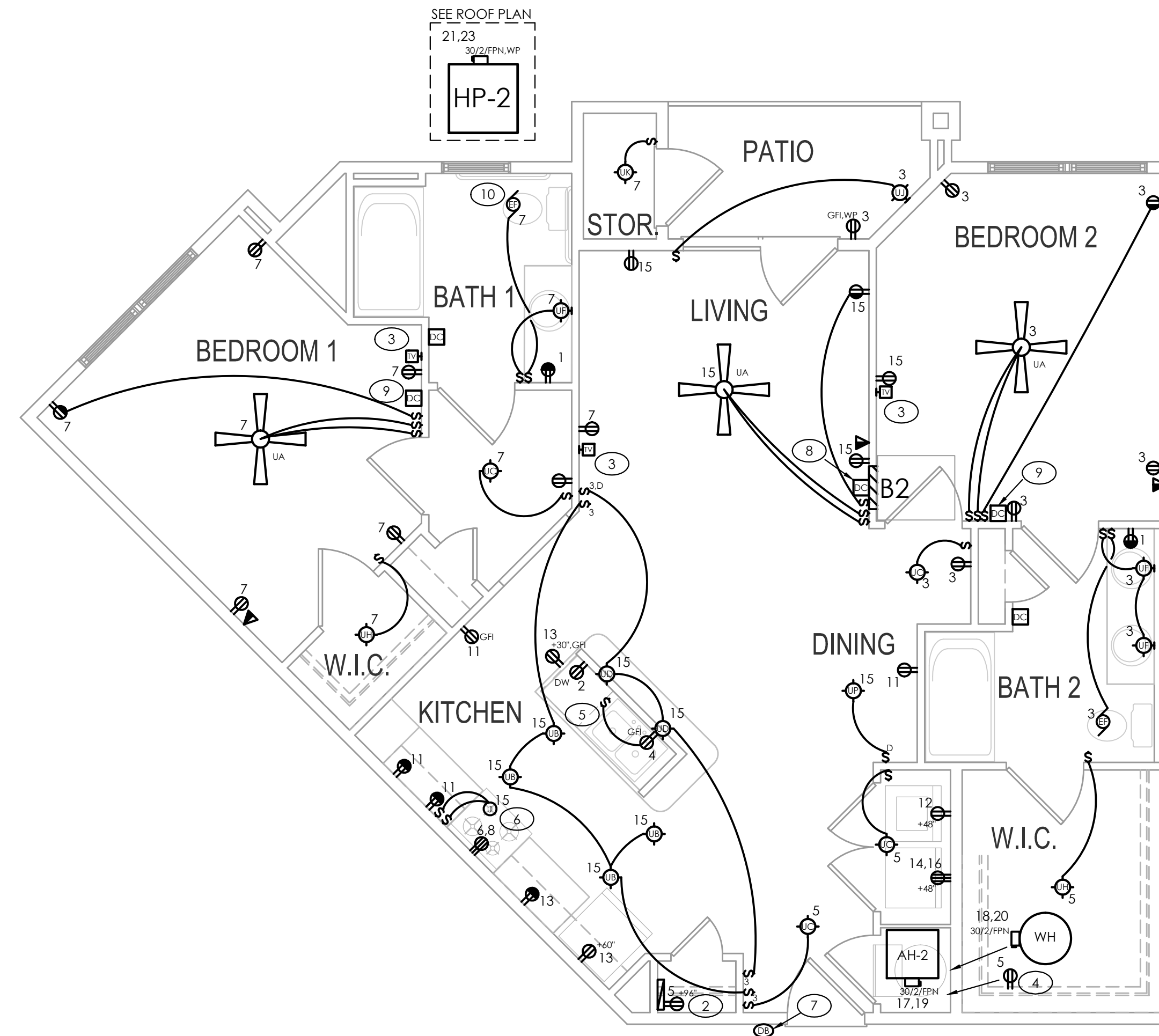
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SHEET TITLE: **ELECTRICAL UNIT PLANS**

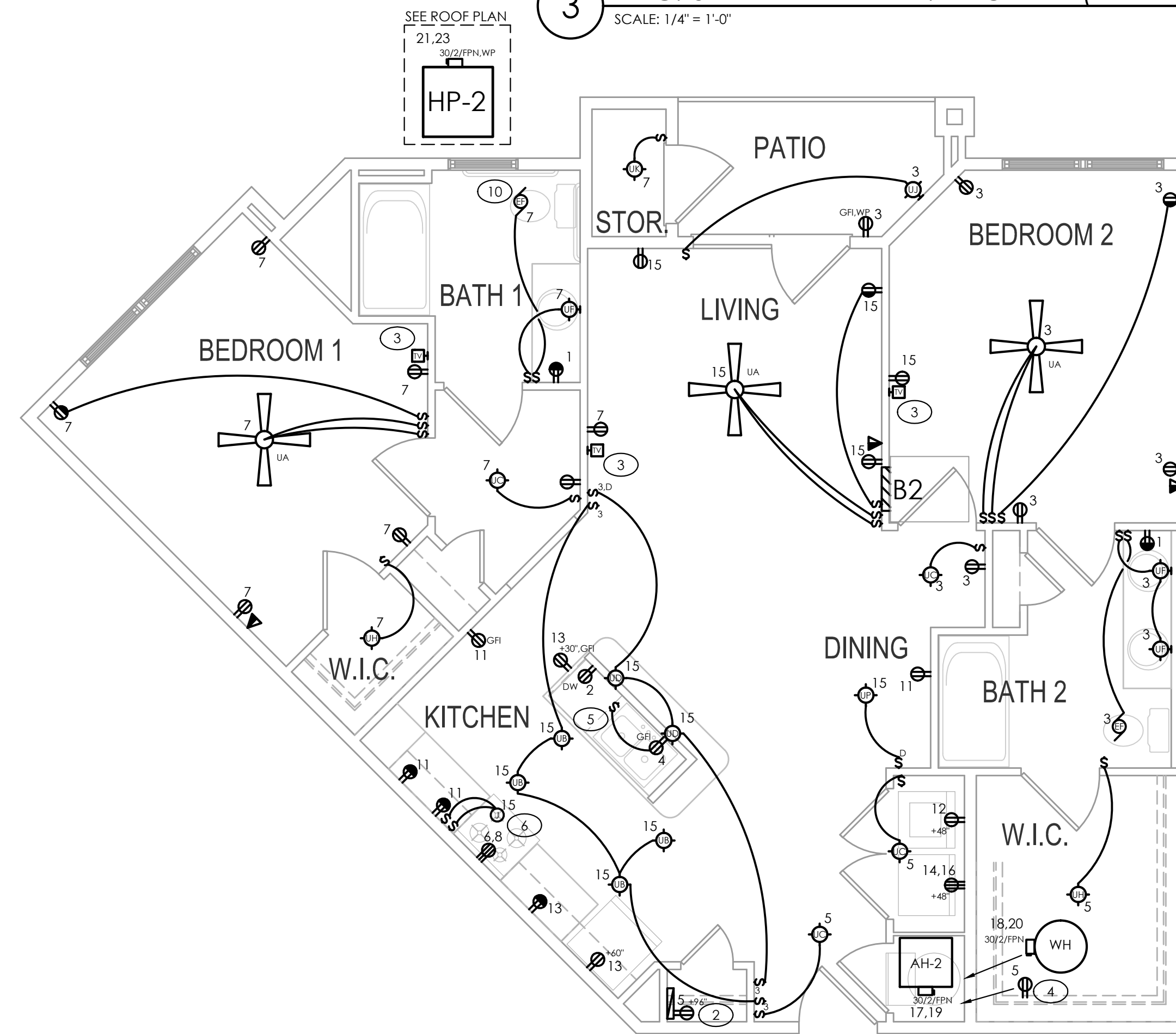
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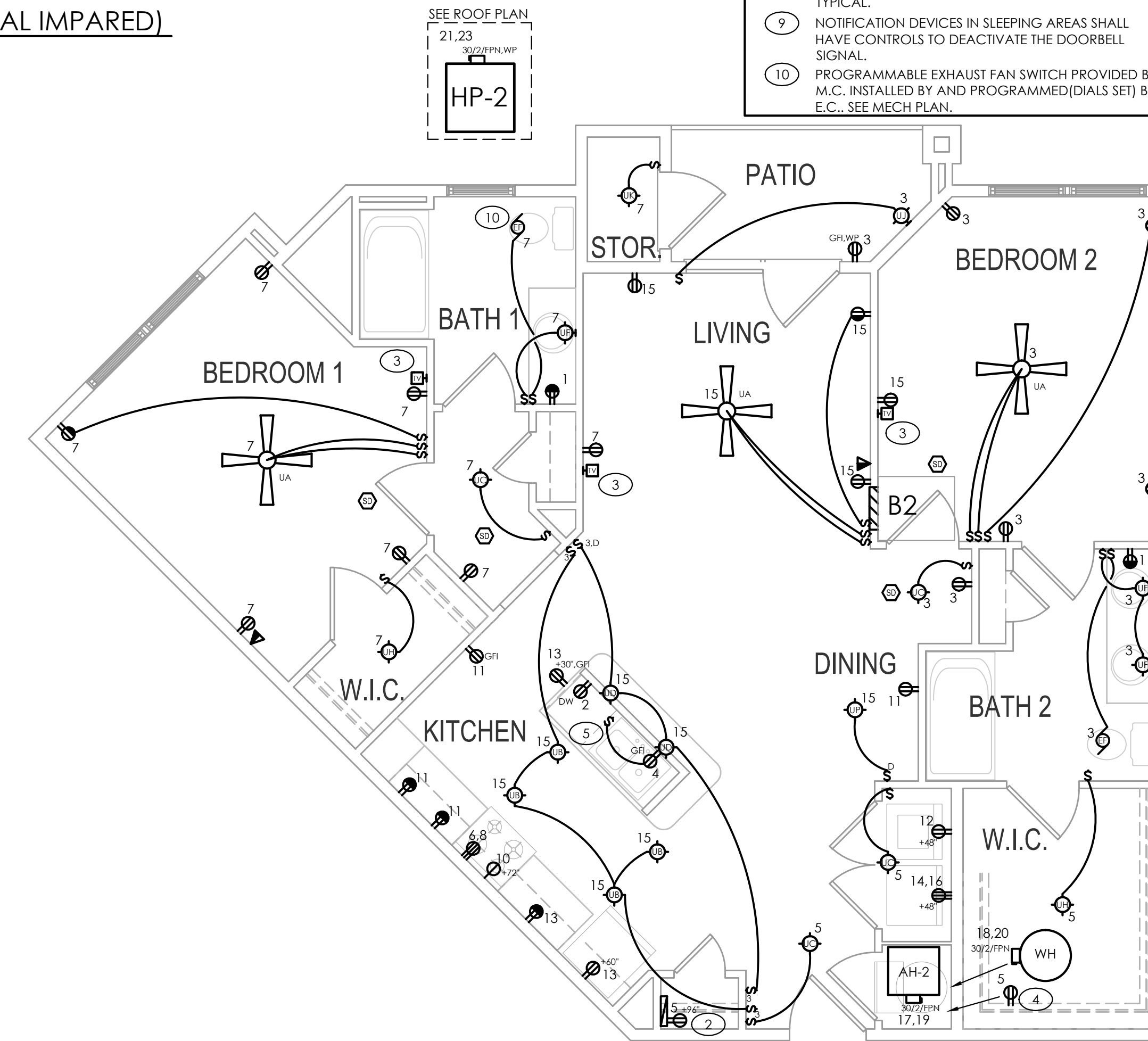
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3 ELEC. UNIT PLAN - TYPE 2.1 MOBILITY (HEARING/VISUAL IMPAIRED)
SCALE: 1/4" = 1'-0"



2 ELEC. UNIT PLAN - TYPE 2.1 MOBILITY
SCALE: 1/4" = 1'-0"



1 ELEC. UNIT PLAN - TYPE 2.1 FAIR HOUSING
SCALE: 1/4" = 1'-0"

- GENERAL NOTES - THIS SHEET**
1. ALL 120V RECEPTACLES ARE TO BE TAMPER RESISTANT.
 2. ALL RECEPTACLES ON 20 AMP CIRCUIT TO BE 20 AMP RECEPTACLES.
 3. COORDINATE EXACT LOCATION OF WH, AH, & HP W/ P.C. & M.C. BEFORE BEGINNING WORK.
 4. E.C. TO CONFIRM ALL APPLIANCE LOCATIONS W/ ARCH PLANS PRIOR TO BEGINNING WORK.
 5. PROVIDE EXTRA BRACING FOR ANY CEILING FAN.
 6. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL OUTLETS BEFORE STARTING "ROUGH-IN" WORK. CONTRACTOR SHALL NOT "ROUGH-IN" ANY OUTLET, FIXTURE OR DEVICE OF ANY KIND WITHOUT FIRST ATTENDING A WALK THROUGH OF EACH APARTMENT UNIT WITH THE OWNER AND GENERAL CONTRACTOR FOR COORDINATION OF FINAL LOCATIONS.
 7. UNIT PANELS ARE TO BE INSTALLED SO THAT NO TRIM LATCH ON BREAKER IS GREATER THAN 48" AFF.
 8. SEE BUILDING PLANS FOR RATING OF UNIT DEMISING WALLS & FLOOR CEILING ASSEMBLIES.
 9. COORDINATE VISUAL/HEARING IMPAIRED UNIT DESIGNATIONS WITH G.C. AND ARCH PRIOR TO BID. NOTIFICATION DEVICES SHALL COMPLY WITH 2017 FLORIDA ACCESSIBILITY CODE 809.5.5.
 10. NOTIFICATION DEVICES SHALL COMPLY WITH 2017 FLORIDA ACCESSIBILITY CODE 809.5.5.

- TAGGED NOTES - THIS SHEET**
- 1 PROVIDE A SIMPLEX RECEPTACLE FOR MICROWAVE UNIT. MOUNT RECEPTACLE AT BACK OF UPPER CABINET. MICROWAVE UNIT IS MOUNTED OVER RANGE. COORDINATE EXACT LOCATION W/ G.C..
 - 2 PROVIDE CHANNEL VISION BRAND STRUCTURED WIRING ENCLOSURE FOR NETWORKING PURPOSES WITHIN APARTMENT FOR MODULAR PUSH AND LOCK TELEPHONE, VIDEO, DATA, AND POWER MODULES. THE CABLE TV COAX AND TELEPHONE/DATA CAT 5 FEED FROM THE LOWER LEVEL DATA ROOM(S) SHALL TERMINATE AT THIS BOX IN EACH APARTMENT. THEN FROM THIS BOX SPLIT OFF TO FEED EACH DATA/TELEPHONE/CABLE TV OUTLET WITHIN EACH APARTMENT. USE 19" MODEL C-0119E IN THE 4BR AND 3BR UNITS AND USE 12" MODEL C-0112WE IN THE 2BR AND 1BR UNITS. INSIDE THE SINGLE GANG KNOCKOUT PROVIDED IN EACH STRUCTURED WIRING ENCLOSURE. PROVIDE A DUPLEX ELECTRICAL POWER RECEPTACLE ON CIRCUIT NOTED.
 - 3 CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
 - 4 PROVIDE POWER FOR WATER METER COORD. LOCATION W/ P.C..
 - 5 PROVIDE COUNTER TOP AIR SWITCH NEXT TO SINK FOR GARBAGE DISPOSAL. CONFIRM EXACT LOCATION W/ OWNER.
 - 6 HOOD LIGHTS AND CONTROLS TO BE SWITCHED SEPARATELY. SWITCHES TO BE LOCATED IN AN ADA COMPLIANT LOCATION. COORDINATE WITH G.C..
 - 7 HARD-WIRED DOORBELL BUTTON/SWITCH. PROVIDE A LIGHTED OR CONTRASTING COLOR DOORBELL BUTTON/SWITCH CONNECTED TO THE AUDIBLE AND STROBE ALARMS.
 - 8 AUDIO/VISUAL DOORBELL NOTIFICATION DEVICE. AUDIBLE AND STROBE ALARM TO BE INSTALLED IN EACH BATHROOM, BEDROOM, AND COMMON AREA TYPICAL.
 - 9 NOTIFICATION DEVICES IN SLEEPING AREAS SHALL HAVE CONTROLS TO DEACTIVATE THE DOORBELL SIGNAL.
 - 10 PROGRAMMABLE EXHAUST FAN SWITCH PROVIDED BY M.C. INSTALLED BY AND PROGRAMMED(DIALS SET) BY E.C. SEE MECH PLAN.

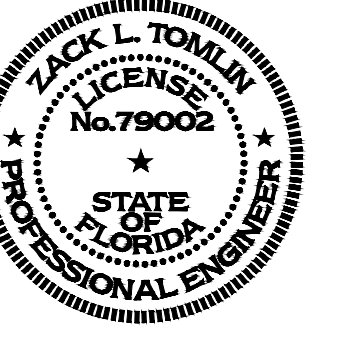
NOTE:
SEE FA PLANS FOR SMOKE DETECTORS IN ADA UNITS.



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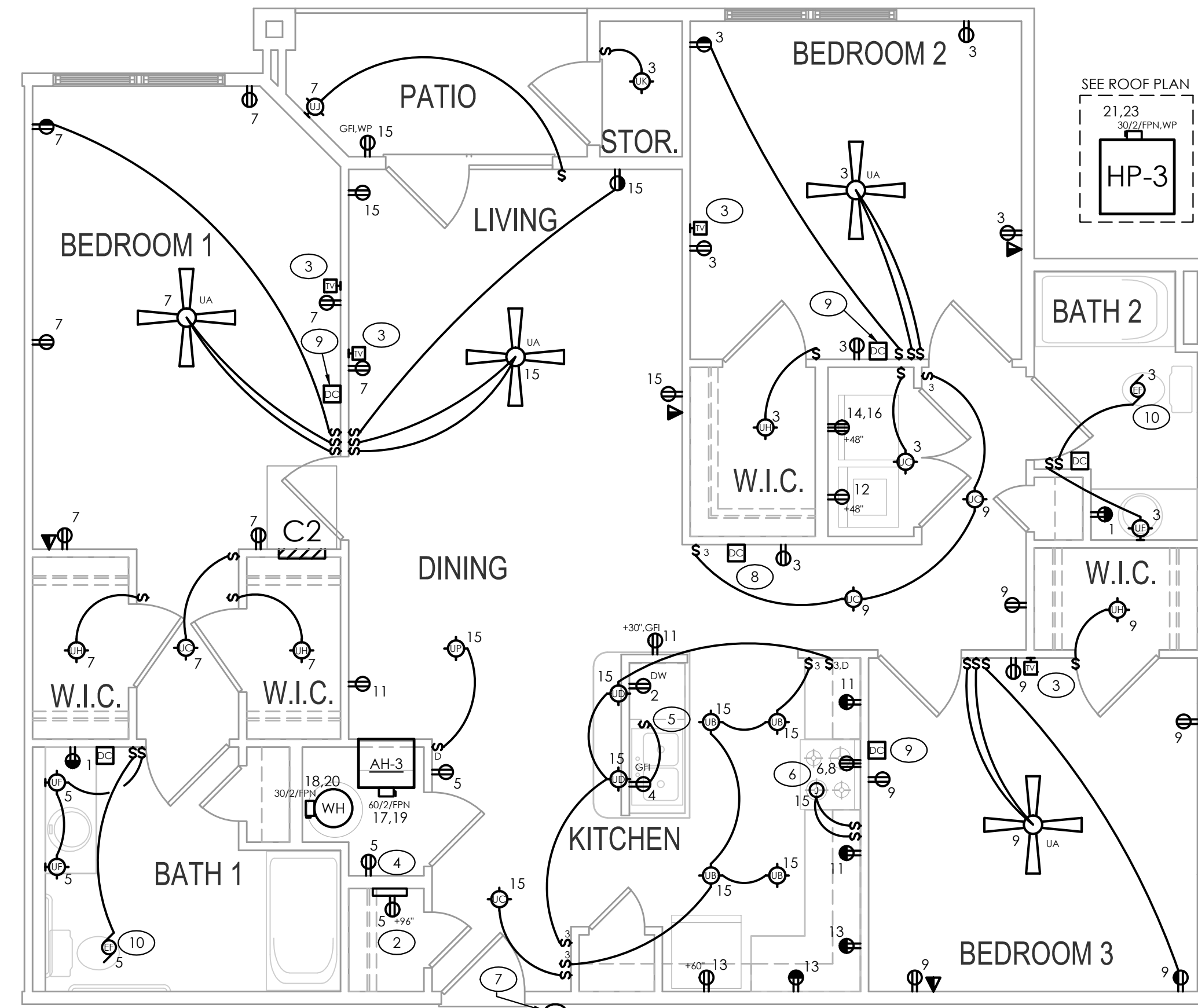
ENGINEER: ZLT
708 W. HAYES ST.
RALEIGH, NC 27605 LIC. #: P-0990
P-13341-4547 F-11900-3797
PLUMBING MECHANICAL ELECTRICAL
FL CDA #: 3316

ISSUE DATE:	REVISIONS	DESCRIPTION
NUMBER	DATE	INITIALS
07.19.19		

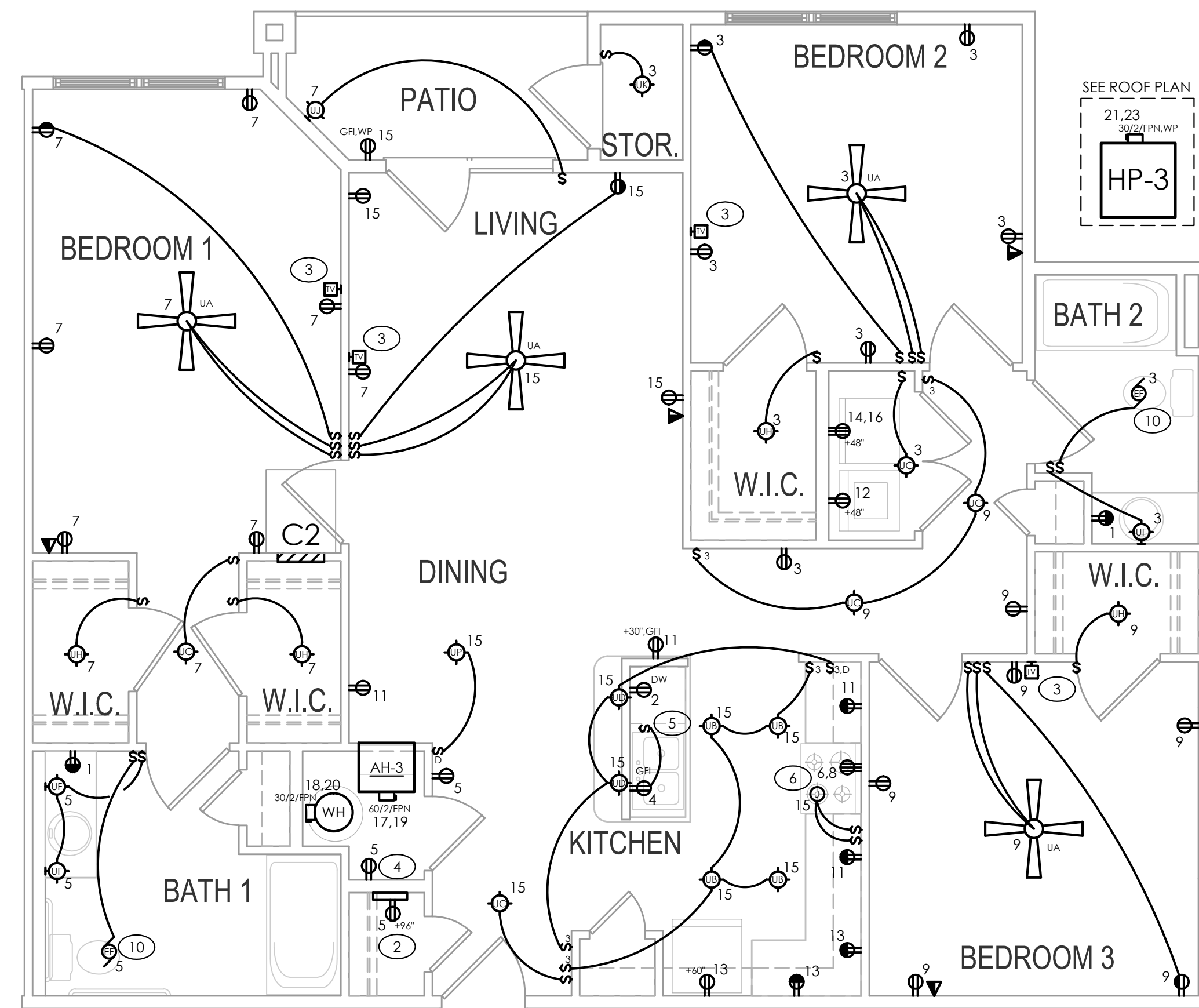
PROJECT NO: **PLX-1906**
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE:
ELECTRICAL UNIT PLANS

SHEET NUMBER:
E1.31

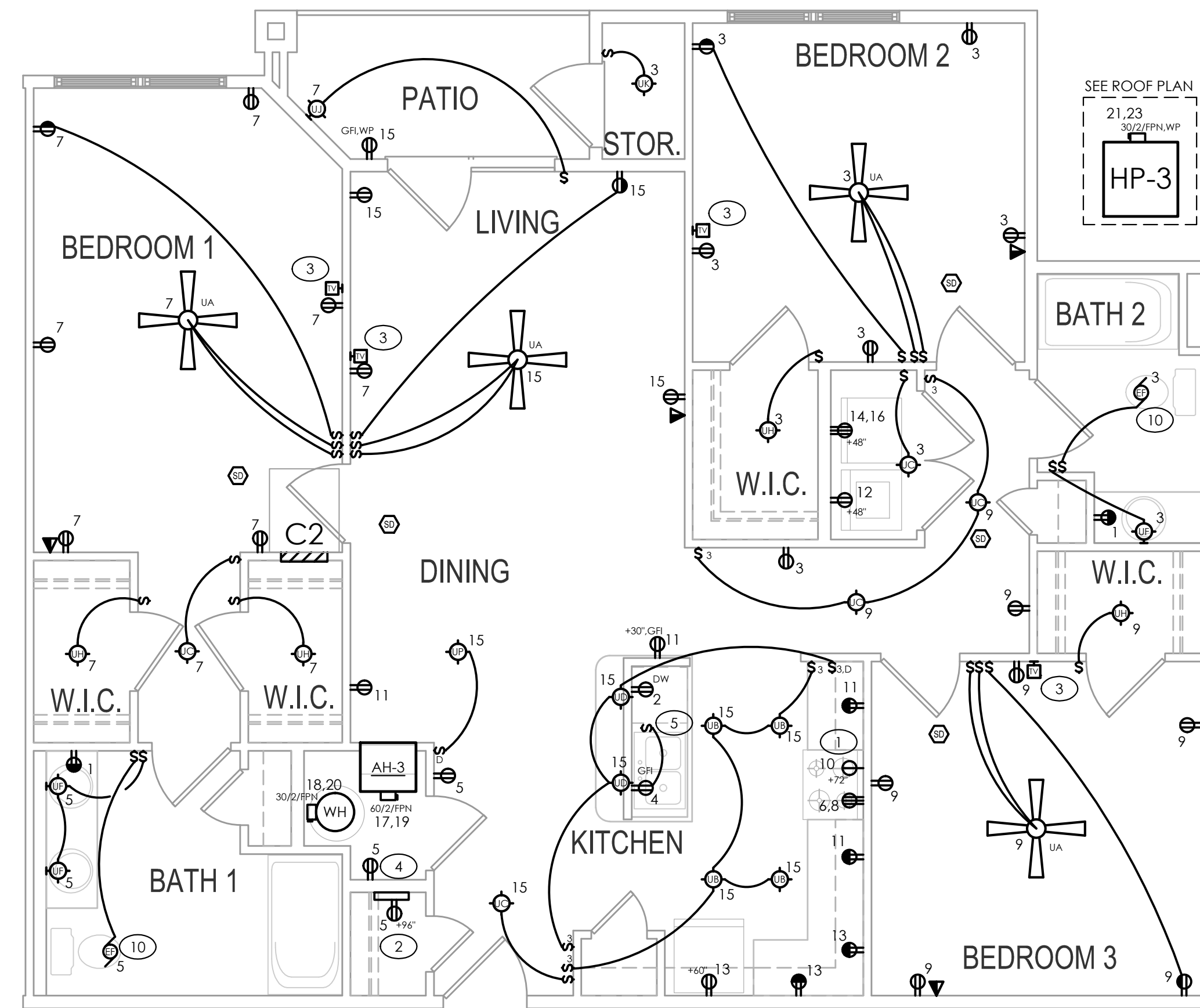
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3 ELEC. UNIT PLAN - TYPE 3.0 MOBILITY (HEARING/VISUAL IMPAIRED)
SCALE: 1/4" = 1'-0"



2 ELEC. UNIT PLAN - TYPE 3.0 MOBILITY
SCALE: 1/4" = 1'-0"



1 ELEC. UNIT PLAN - TYPE 3.0 FAIR HOUSING
SCALE: 1/4" = 1'-0"

- GENERAL NOTES - THIS SHEET**
1. ALL 120V RECEPTACLES ARE TO BE TAMPER RESISTANT.
 2. ALL RECEPTACLES ON 20 AMP CIRCUIT TO BE 20 AMP RECEPTACLES.
 3. COORDINATE EXACT LOCATION OF WH, AH, & HP W/ P.C. & M.C. BEFORE BEGINNING WORK.
 4. E.C. TO CONFIRM ALL APPLIANCE LOCATIONS W/ARCH PLANS PRIOR TO BEGINNING WORK.
 5. PROVIDE EXTRA BRACING FOR ANY CEILING FAN.
 6. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND MOUNTING HEIGHTS FOR ALL OUTLETS BEFORE STARTING "ROUGH-IN" WORK. CONTRACTOR SHALL NOT "ROUGH-IN" ANY OUTLET, FIXTURE OR DEVICE OF ANY KIND WITHOUT FIRST ATTENDING A WALK THROUGH OF EACH APARTMENT UNIT WITH THE OWNER AND GENERAL CONTRACTOR FOR COORDINATION OF FINAL LOCATIONS.
 7. UNIT PANELS ARE TO BE INSTALLED SO THAT NO TRIM LATCH ON BREAKER IS GREATER THAN 48" AFF.
 8. SEE BUILDING PLANS FOR RATING OF UNIT DEMISING WALLS & FLOOR CEILING ASSEMBLIES.
 9. COORDINATE VISUAL/HEARING IMPAIRED UNIT DESIGNATIONS WITH G.C. AND ARCH PRIOR TO BID.
 10. NOTIFICATION DEVICES SHALL COMPLY WITH 2017 FLORIDA ACCESSIBILITY CODE 809.5.5.

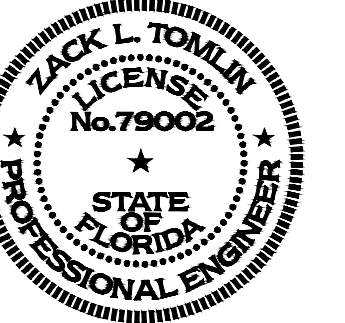
NOTE:
SEE FFA PLANS FOR SMOKE DETECTORS IN ADA UNITS.

- TAGGED NOTES - THIS SHEET**
1. PROVIDE A SIMPLEX RECEPTACLE FOR MICROWAVE UNIT. MOUNT RECEPTACLE AT BACK OF UPPER CABINET; MICROWAVE UNIT IS MOUNTED OVER RANGE. COORDINATE EXACT LOCATION W/ G.C..
 2. PROVIDE CHANNEL VISION BRAND STRUCTURED WIRING ENCLOSURE FOR NETWORKING PURPOSES WITHIN APARTMENT FOR MODULAR PUSH AND LOCK TELEPHONE, VIDEO, DATA, AND POWER MODULES. THE CABLE TV COAX AND TELEPHONE/DATA CAT 5 FEED FROM THE LOWER LEVEL DATA ROOM(S) SHALL TERMINATE AT THIS BOX IN EACH APARTMENT, THEN FROM THIS BOX SPLIT OFF TO FEED EACH DATA/TELEPHONE/CABLE TV OUTLET WITHIN EACH APARTMENT. USE 1/2" MODEL C-0119E IN THE 4BR AND 3BR UNITS AND USE 1/2" MODEL C-0112WE IN THE 2BR AND 1BR UNITS. INSIDE THE SINGLE GANG KNOCKOUT PROVIDED IN EACH STRUCTURED WIRING ENCLOSURE, PROVIDE A DUPLEX ELECTRICAL POWER RECEPTACLE ON CIRCUIT NOTED.
 3. CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
 4. PROVIDE POWER FOR WATER METER COORD. LOCATION W/ P.C..
 5. PROVIDE COUNTER TOP AIR SWITCH NEXT TO SINK FOR GARBAGE DISPOSAL. CONFIRM EXACT LOCATION W/ OWNER.
 6. HOOD LIGHTS AND CONTROLS TO BE SWITCHED SEPARATELY. SWITCHES TO BE LOCATED IN AN ADA COMPLIANT LOCATION. COORDINATE WITH G.C..
 7. HARD-WIRED DOORBELL BUTTON/SWITCH. PROVIDE A LIGHTED OR CONTRASTING COLOR DOORBELL BUTTON/SWITCH CONNECTED TO THE AUDIBLE AND STROBE ALARMS.
 8. AUDIO/VISUAL DOORBELL NOTIFICATION DEVICE. AUDIBLE AND STROBE ALARM TO BE INSTALLED IN EACH BATHROOM, BEDROOM, AND COMMON AREA TYPICAL.
 9. NOTIFICATION DEVICES IN SLEEPING AREAS SHALL HAVE CONTROLS TO DEACTIVATE THE DOORBELL SIGNAL.
 10. PROGRAMMABLE EXHAUST FAN SWITCH PROVIDED BY M.C. INSTALLED BY AND PROGRAMMED(DIALS SET) BY E.C.. SEE MECH PLAN.



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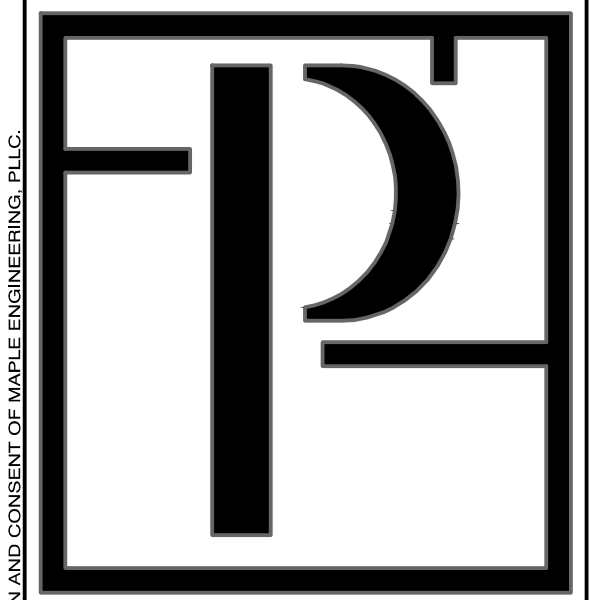


ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		

PROJECT NO: **PLX-1906**
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE:
ELECTRICAL UNIT PLANS

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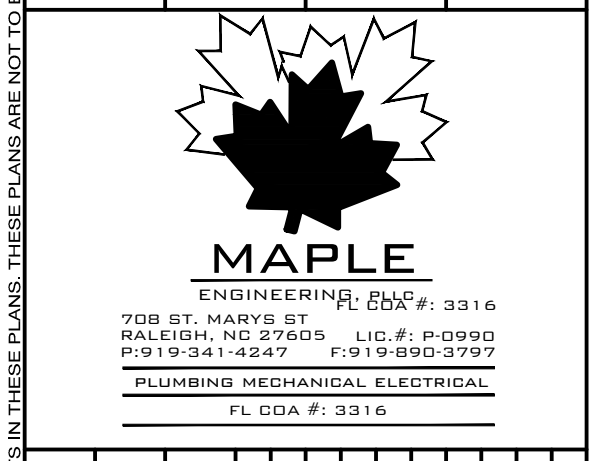
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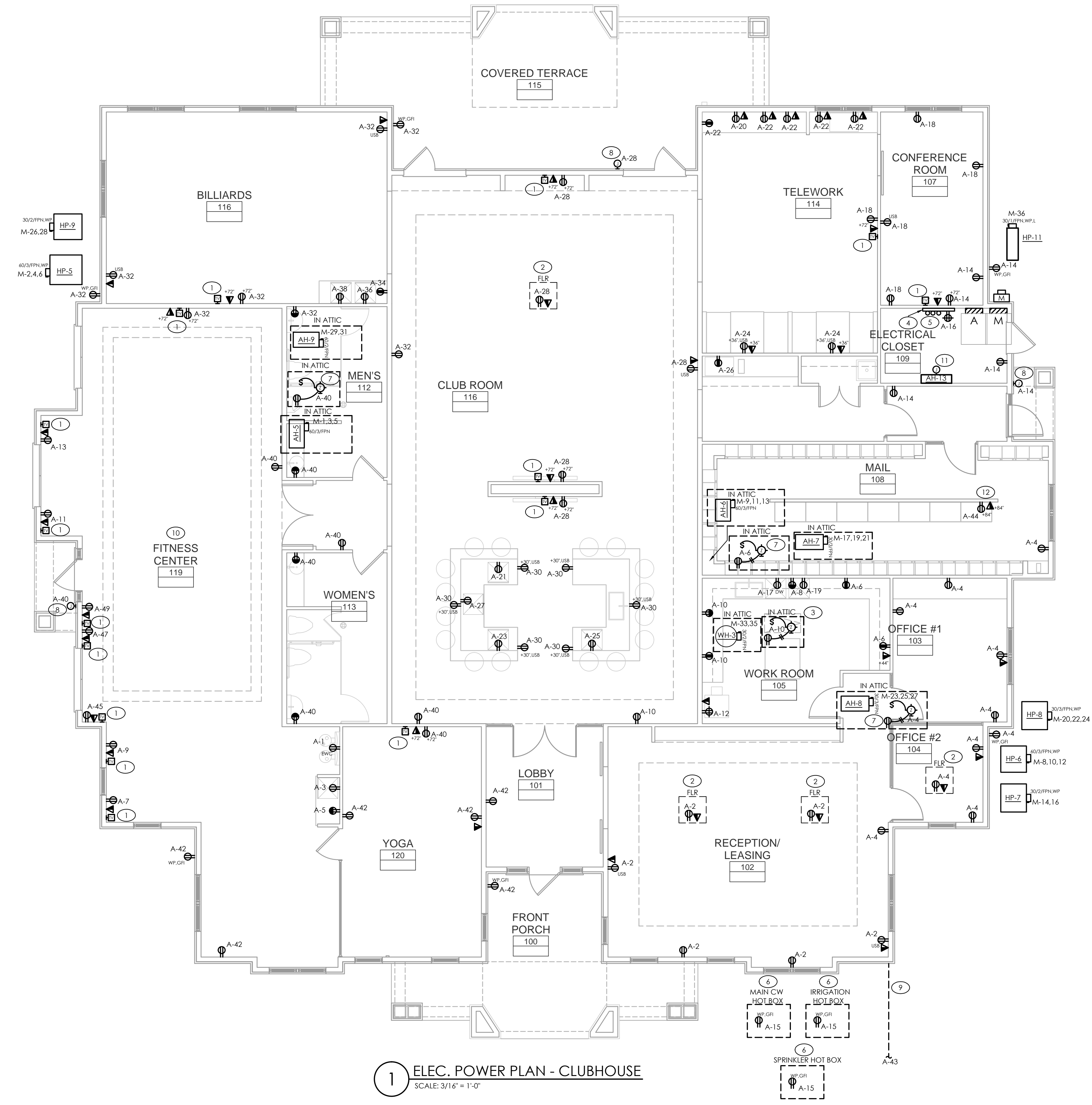
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	DATE	

PROJECT NO: **PLX-1906**
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SHEET TITLE:
ELECTRICAL CLUBHOUSE

SHEET NUMBER:
E2.11



GENERAL NOTES - THIS SHEET

- SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
- E.C. TO COORDINATE EXACT LOCATION AND INSTALLATION OF ALL EQUIPMENT W/ OWNER. FINAL CONNECTION BY E.C..
- PROVIDE USB COMBINATION DUPLEX RECEPTACLES FOR THOSE SHOWN AS "USB"

TAGGED NOTES - THIS SHEET

- CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
- COORDINATE FLOOR BOX TYPE & EXACT LOCATION W/ OWNER. COORDINATE CONDUIT ROUTING WITH G.C..
- PROVIDE POWER FOR SWITCH AND LIGHT AT ATTIC ENTRANCE FOR AREA EQUIPMENT. PROVIDE POWER TO SERVICE RECEPTACLE FOR AREA EQUIPMENT. COORDINATE LOCATION OF LIGHT WITH P.C. AND G.C..
- PROVIDE FIRE RATED PLYWOOD FOR TELE/DATA BOARD. PROVIDE #6 CU BONDING WIRE TO BUILDING GROUNDING SYSTEM.
- PROVIDE (3) 4" CONDUITS TO TELE/DATA DEMARC POINTS. COORDINATE W/ G.C. AND UTILITY.
- PROVIDE POWER TO WEATHER PROOF GFI RECEPTACLE AT HOT BOX FOR HEAT TAPE. COORDINATE EXACT LOCATION W/ P.C AND CIVIL PLANS. TYPICAL OF ALL.
- PROVIDE POWER FOR SWITCH AND LIGHT IN ATTIC FOR AREA EQUIPMENT. PROVIDE POWER TO SERVICE RECEPTACLE FOR AREA EQUIPMENT. COORDINATE LOCATION OF LIGHT WITH M.C. AND G.C..
- PROVIDE CONDUIT AND POWER FOR CARD READER AND/OR DOOR LOCK. COORDINATE EXACT LOCATIONS AND DETAILS WITH G.C.. DOOR TO OPEN FREELY IN DIRECTION OF EGRESS.
- PROVIDE POWER AND CONDUIT FOR MONUMENT SIGN. CIRCUIT CONTROLLED VIA PHOTOCELL. COORDINATE ROUTING WITH G.C..
- E.C. TO CONFIRM LOCATIONS OF ALL FITNESS CENTER RECEPTACLES WITH OWNER.
- AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT. E.C. TO INSTALL HIGH VOLTAGE WIRING. PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
- PROVIDE POWER AND DATA FOR AMAZON PACKAGE LOCKER. CONFIRM EXACT LOCATION WITH EQUIPMENT SUPPLIER.

NOTE:
IN ASSEMBLY OCCUPANCIES OF OVER 100 PEOPLE WIRING MATERIALS AND METHODS SHALL COMPLY WITH NEC SEC. 318 AND THE WIRING METHOD/MATERIAL ITSELF SHALL QUALIFY AS AN EQUIPMENT GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC 250.118 OR SHALL CONTAIN AN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH NEC TABLE 250.122. NO NM CABLE ALLOWED.
CLUBHOUSE IS ASSEMBLY OCCUPANCY OVER 100 PEOPLE.

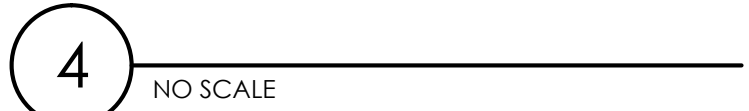
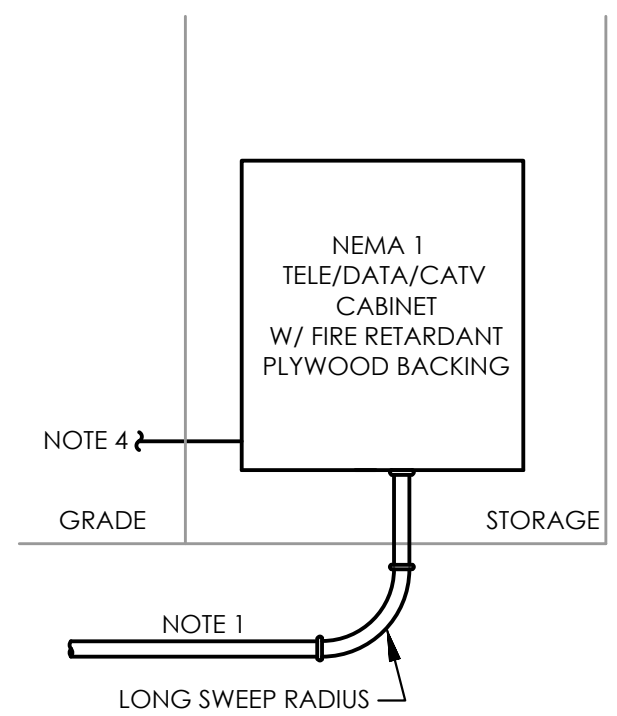
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DESCRIPTION	POLE	WIRE SIZE	CCT #	LOAD PER PHASE			CCT #	BRK SIZE	WIRE SIZE	POLE	DESCRIPTION				
				A	B	C									
REC: DEDICATED BAR	1	12	20	1	0.4	2.0					POOL EQUIP RM PUMP #7				
REC: DEDICATED BAR	1	12	20	3				30	10	3	SHUNT TRIP #4				
REC: TELE/DATA BOARD	1	12	20	5							POOL EQUIP RM PUMP #7				
SPACE	1	-	-	7	0	0					SHUNT TRIP #4				
WH-3	2	10	30	9							POOL EQUIP RM PUMP #7				
LTS: POOL	1	12	20	13	0.5	2.0			30	10	3	SHUNT TRIP #4			
LTS: POOL	1	12	20	15							POOL EQUIP RM PUMP #7				
REC: ATTIC/EXTERIOR	1	12	20	17							SHUNT TRIP #4				
REC: POOL EQUIP	1	12	20	19	0.7	2.0					POOL EQUIP RM PUMP #7				
REC: HEAT TAPE/POOL PHON	1	12	20	21					30	10	3	SHUNT TRIP #4			
REC: BAR EQUIPMENT	1	12	20	23							REC: TVS/COUNTER				
REC: VENDING MACHINE	1	12	20	25	0.5	1.0			26	20	1	SPARE			
REC: VENDING MACHINE	1	12	20	27					28	20	-	SPARE			
LO LTS: INTERIOR/EFS	1	12	20	29					0.3	0	30	20	-	1	SPARE
LTS: EXTERIOR	1	12	20	31	0.2	0							-	1	SPARE
AH-12A/B & HP-12	2	10	25	33			1.8	0			34	20	-	1	SPARE
SPACE	1	-	-	37	0	0					38	-	-	1	SPACE
SPACE	1	-	-	39							40	-	-	1	SPACE
SPACE	1	-	-	41							42	-	-	1	SPACE
TOTAL CONNECTED KVA:				9.3	11.8	11.7	DEMAND KVA:				39.7				
PANEL RMS SYM. AMPS:				SEE RISER			DEMAND AMPS:				110.2				

- PANEL SHALL BE SERVICE ENTRANCE RATED EQUAL TO SQUARE D NG.
- L - INDICATES LOCK-OFF ATTACHMENT REQUIRED (ATTACHMENT TO MEET NEC REQ'S FOR APPLIANCE DISCONNECT)
- LO - INDICATES LOCK-ON ATTACHMENT REQUIRED
- POOL PUMP SHUNT TRIP TO BE WIRED TO EMERGENCY STOP SWITCH. SEE PLAN FOR LOCATION. POWER SHUNT TRIP VIA CIRCUIT P-29.
- GFI - PROVIDE GFCI BREAKER FOR CIRCUIT. GFCI RECEPTACLES MAY BE USED IN LIEU OF GFCI BREAKERS SO LONG AS THE DEVICE(S) CONFORM TO NEC CODE REQUIREMENTS FOR GFCI PROTECTION & ACCESSIBILITY.
- PC - CIRCUIT THROUGH PHOTOCELL LOCATED ON NORTH FACE OF BUILDING.
- VERIFY BREAKER AND WIRE SIZE REQUIREMENTS WITH EQUIPMENT NAMEPLATE BEFORE BEGINNING WORK.
- TC - CIRCUIT THROUGH 7-DAY PROGRAMMABLE ASTRONOMICAL TIME SWITCH WITH AUTO-DUSK. AUTO-DAWN FEATURE EQUAL TO LEVITON VPT24-1P2. SWITCH TO INCLUDE MANUAL OVERRIDE AND BATTERY BACK-UP. LOCATE AT PANEL.

PANEL P LOAD SUMMARY			
LOAD TYPE	KVA	DEMAND FACT.	KVA DEM.
LOADS ON A 200A MCB			
LIGHTS (704 SQFT @ 2 W/SQFT > CONN. LOAD)	1.4	1.25	1.8
RECEPTACLES			
1st 10 kVA	5.2	1.0	5.2
REMAINDER	0.0	0.5	0.0
HVAC & R			
ELEC HEAT	0.0	1.0	0.0
LARGEST MOTOR	3.6	1.25	4.5
REMAINDER	0.0	1.0	0.0
WATER HEATER (ELECTRIC)	4.5	1.00	4.5
POOL LTS	1.0	1.25	1.3
POOL RM PUMPS	18.0	1.25	22.5
TOTALS	33.7		39.7
TOTAL AMPS @ 208V 3 PHASE	110.2		



NOTES:

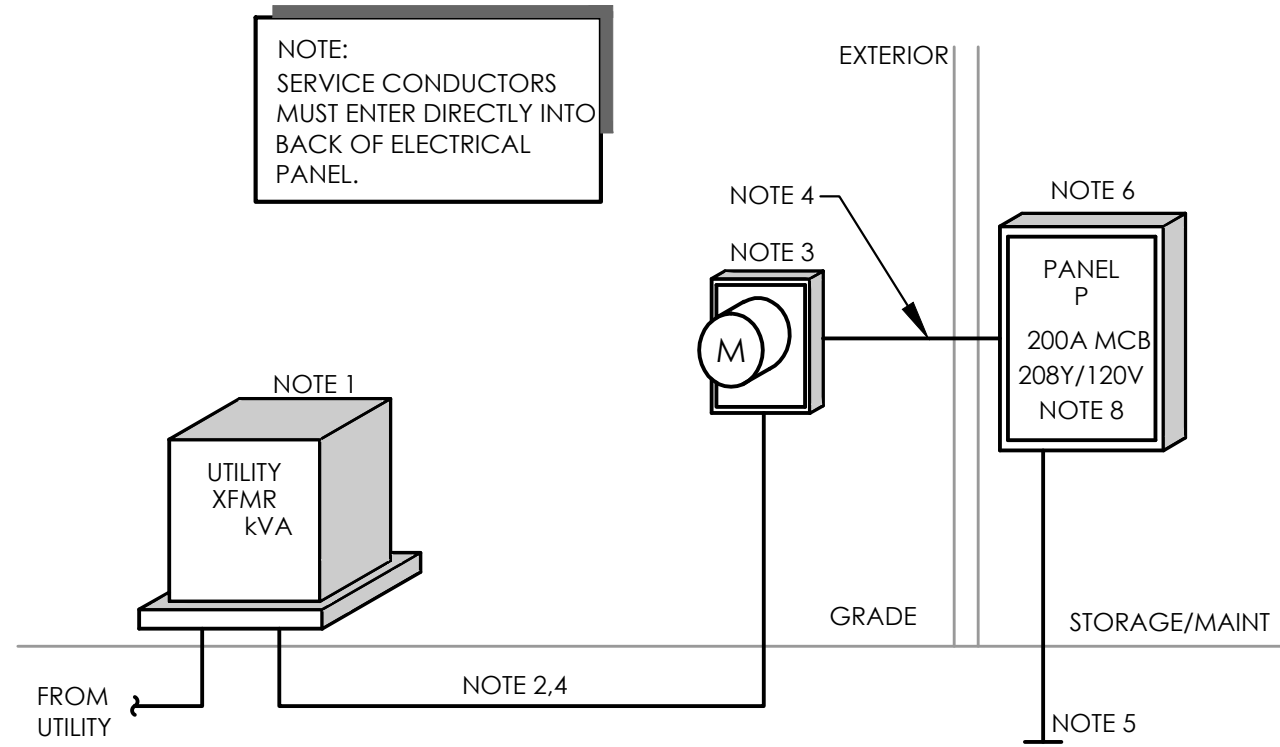
- PROVIDE (1) 3" CONDUIT PROVIDED UNDER SLAB/GROUND TO PROPERTY LINE W/ PULL STRING. CLEARLY LABEL AND COORDINATE EXACT TERMINATION LOCATION AND DETAILS WITH OWNER AND TELEPHONE UTILITY.
- 3/4" FINISH GRADE PLYWOOD BACKBOARD PAINTED WITH FLAME RETARDANT PAINT. COORDINATE SIZE & EXACT LOCATION W/ OWNER.
- PROVIDE 120V QUAD RECEPTACLE ON A DEDICATED CIRCUIT FOR TELEPHONE AND OTHER COMMUNICATION EQUIPMENT (SEE POWER PLANS).
- PROVIDE #6 CU GROUNDING/BONDING CONDUCTOR IN 3/2" CONDUIT TO INTERSYSTEM BONDING TERMINATION (BT) AT BUILDING ELECTRICAL SERVICE. BOND CONDUIT/CONDUCTOR AT EACH END OF CONDUIT IF METAL RACEWAY IS USED. INSTALL PER NEC 250.94 & NEC 800.100. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.

GENERAL NOTES - THIS SHEET

- ENSURE THAT ALL EXIT AND EMERGENCY LIGHTS ARE CONNECTED TO LOCAL NORMALLY ON LIGHTING CIRCUIT AND ARE WIRED UPSTREAM OF ALL SWITCHES.
- SEE PANEL SCHEDULES FOR GFI PROTECTION OF SOME OUTLETS.
- FINAL CONNECTION TO ALL EQUIPMENT BY E.C..
- RECEPTACLES INDICATED "TR" ARE TO BE TAMPER RESISTANT.

TAGGED NOTES - THIS SHEET

- PROVIDE POWER & GFCI PROTECTION FOR POOL PUMPS. COORDINATE EXACT LOCATION & SPEC W/ G.C. & POOL CONTRACTOR BEFORE BEGINNING WORK. FINAL CONNECTION BY E.C..
- PROVIDE EMERGENCY "PUSH IN" POWER OFF SWITCH FOR POOL PUMPS. VERIFY LOCATION W/ LOCAL AHJ. WIRE TO SHUNT TRIP BREAKERS IN PANEL. SEE PANEL SCHEDULE.
- PROVIDE EMERGENCY PHONE RECEPTACLE. FIELD VERIFY LOCATION W/ LOCAL AHJ.
- PROVIDE 3" EMPTY CONDUIT W/ PULL STRING TO PROPERTY LINE FOR TELEPHONE. COORDINATE W/ G.C..
- PROVIDE (2) 1" CONDUITS W/ CIRCUITS AS SHOWN TO POOL FOR POOL LIGHTS AND OTHER POOLSIDE EQUIPMENT. COORDINATE EXACT SIZE & LOCATIONS W/ G.C. & POOL CONTRACTOR. CIRCUIT TO BE CONTROLLED VIA TIME CLOCK.
- EXHAUST FAN TO BE WIRED FOR CONTINUOUS OPERATION. COORDINATE W/ M.C..
- LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. SEE PANEL SCHEDULE.
- PROVIDE SWITCH AT ATTIC ENTRANCE FOR ATTIC LIGHT. PROVIDE SERVICE RECEPTACLE AT AREA EQUIPMENT COORD. LOCATION W/ P.C. AND G.C..
- CONFIRM EXACT LOCATION OF TV OUTLET W/ OWNER.
- CORROSIVE ENVIRONMENT (NEC 680.14). SEE GENERAL NOTES SHEET E0.01.
- MOTION SENSOR TO BE ON 20 MINUTE TIMER.
- POWER CIRCUIT FOR AREA LIGHT FIXTURE TO BE WIRED VIA AREA MOTION SENSOR. MOTION SENSOR TO BE UPSTREAM OF AREA SWITCHES. SEE DETAIL.
- AIR HANDLER UNIT TO BE WIRED VIA OUTDOOR UNIT. E.C. TO INSTALL HIGH VOLTAGE WIRING. PROVIDE LOCKABLE DISCONNECT AT OUTDOOR UNIT TO SERVE AS AIR HANDLER DISCONNECT (LESS THAN 300 WATTS).
- PROVIDE FIRE RATED PLYWOOD FOR TELE/DATA BOARD. PROVIDE #6 CU BONDING WIRE TO BUILDING GROUNDING SYSTEM.
- PROVIDE (1) 3" CONDUITS W/ PULL STRING TO TELE/DATA & CATV DEMARK POINTS. COORDINATE W/ G.C. AND OWNER.

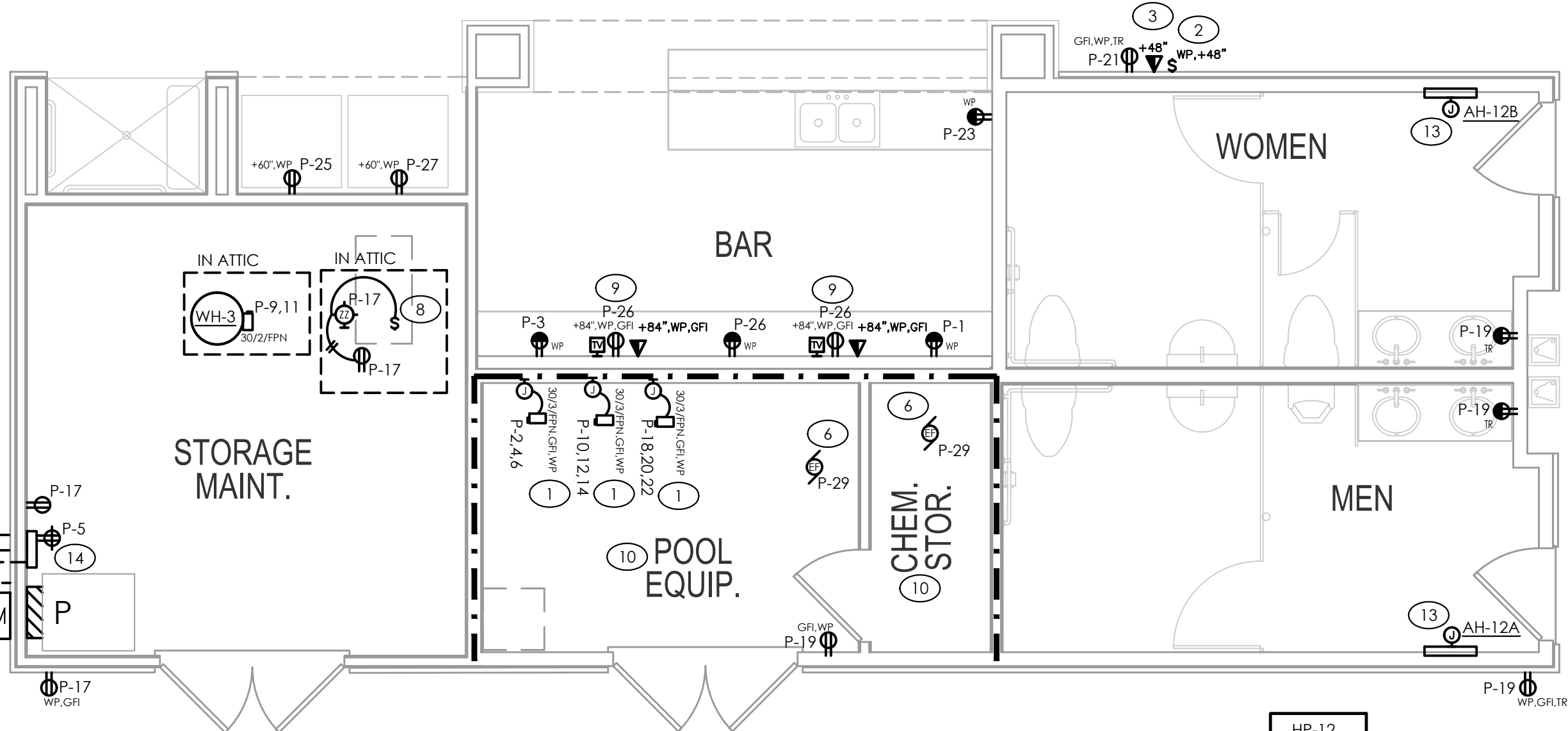


3 ELECTRICAL POWER RISER

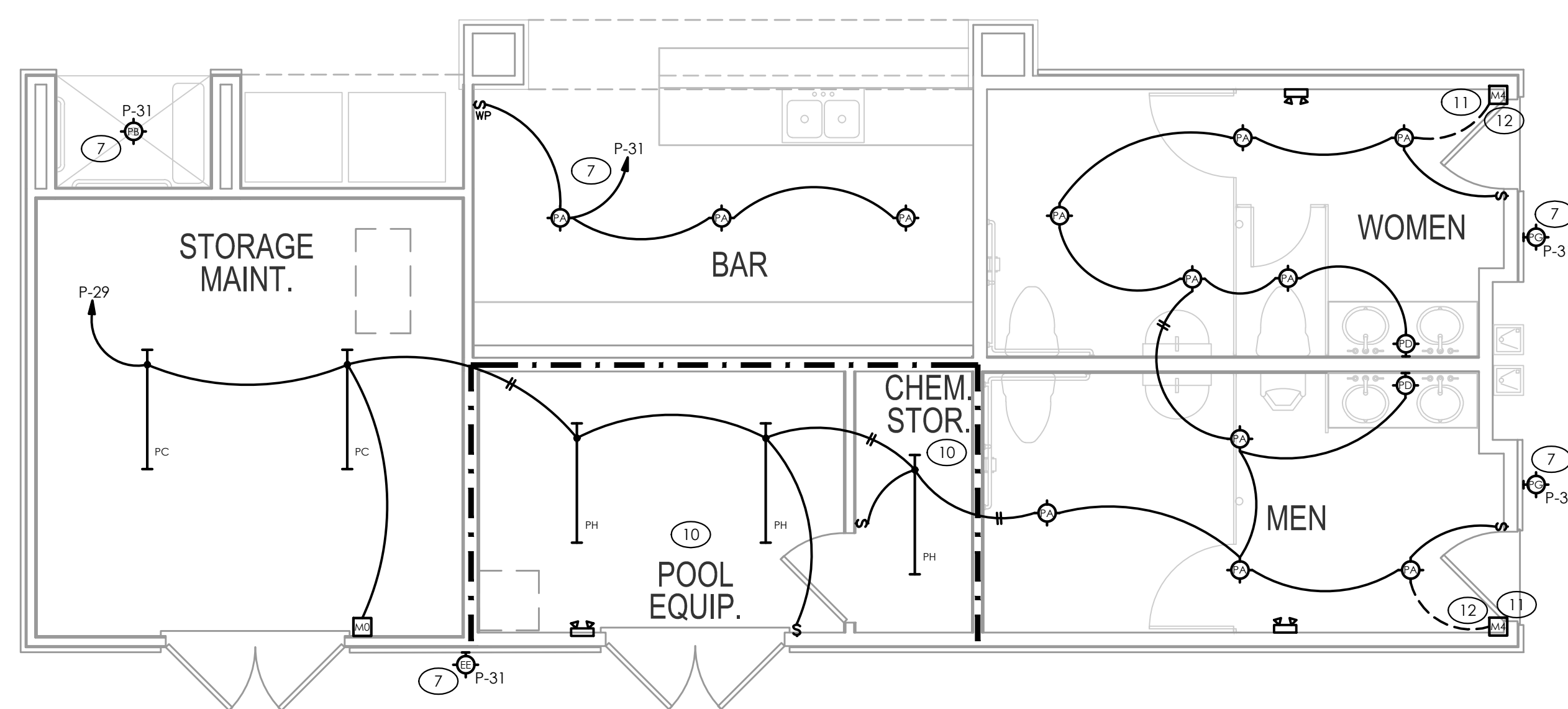
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RISER DIAGRAM NOTES:

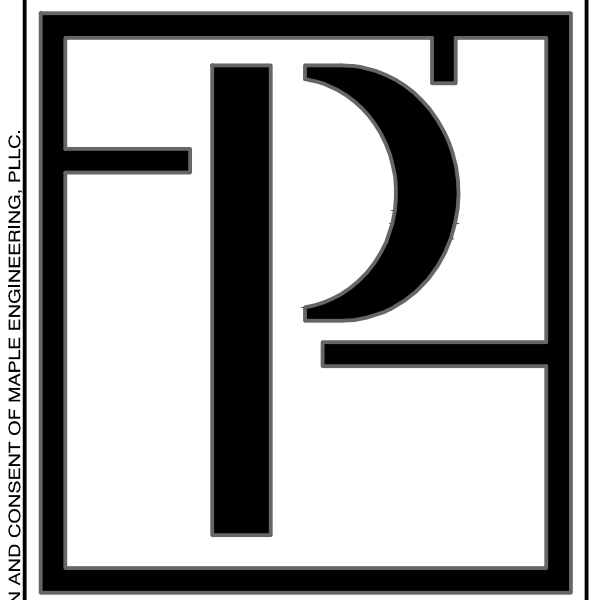
- PAD MOUNTED TRANSFORMER BY UTILITY.
- SECONDARY CONDUCTORS SIZED, PROVIDED & INSTALLED BY E.C.. CONFIRM INSTALLATION W/ UTILITY BEFORE BEGINNING WORK.
- 200A METER BASE PER UTILITY REQUIREMENTS. METER BY UTILITY.
- (4) #3/0 CU, 2" CONDUIT.
- #4 CU MAIN GROUNDING ELECTRODE CONDUCTOR TO GROUNDING SYSTEM (SEE DETAIL). BUILDING SHALL HAVE ONE GROUNDING ELECTRODE SYSTEM.
- PROVIDE PLACARD INDICATING AVAILABLE AIC FAULT CURRENT (NEC 110.24).
- PROVIDE PLACARD INDICATING ARC-FLASH HAZARD AT PANEL(S)/DISCONNECT(S). (NEC 110.16)
- UTILITY TRANSFORMER SPECS UNKNOWN AT TIME OF DESIGN COMPLETION. DESIGN IS BASED ON 42,000AIC. E.C. TO VERIFY TRANSFORMER PROPERTIES WITH UTILITY PRIOR TO PURCHASING EQUIPMENT. IF TRANSFORMER AIC IS LESS LOWER RATED EQUIPMENT MAY BE USED. IF HIGHER CONTACT ENGINEER. CIRCUIT BREAKERS WITH A LESSER LABELED AIC RATING MAY BE USED IF THOSE BREAKERS ARE PAIRED WITH AN UPSTREAM BREAKER OR FUSE AS PART OF A UL SERIES RATED COMBINATION. PAIRED DEVICES MUST BE IN ACCORDANCE WITH NEC 240.86. LABEL PER NEC 110.22(C). CONFIRM W/ EQUIPMENT MFG BEFORE PURCHASE. E.C. TO PROVIDE FIELD INSPECTOR WITH MFG'S DOCUMENTATION REGARDING UL SERIES RATING OF PAIRED BREAKERS/FUSES.



2 ELEC. POWER PLAN - POOLHOUSE
SCALE: 1/4" = 1'-0"



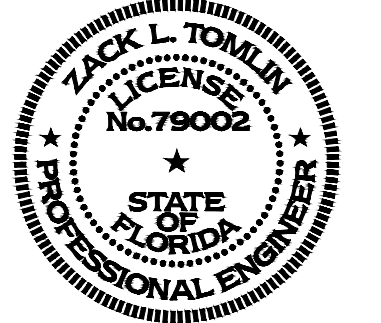
1 ELEC. LIGHTING PLAN - POOLHOUSE
SCALE: 1/4" = 1'-0"



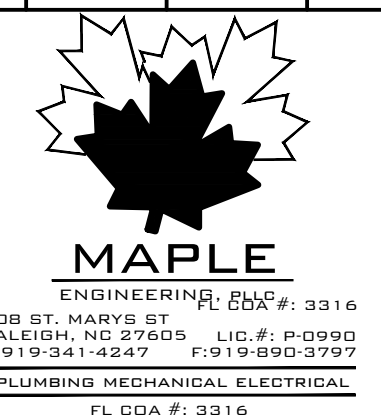
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Zimmer Development Company
CAPE CORAL, FLORIDA
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ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		

PROJECT NO: PLX-1906
DRAWN BY: JNS
CHECKED BY: ZLT
SHEET TITLE:
ELECTRICAL
POOLHOUSE PLANS
SHEET NUMBER:

E3.10

7/18/2019 5:08 PM PLX-1906-E3.10.DWG
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PANEL H LOAD SUMMARY				
LOAD TYPE	KVA CONN.	DEM. FACT.	KVA DEM.	
LOADS ON 300 AMP FUSED DISC. @ METER				
LIGHTS (CONN. LOAD)	5.3	1.25	6.6	
RECEPTACLES	1st 10 KVA	9.4	1.0	9.4
	REMAINDER	0.0	0.5	0.0
HVAC & R	ELEC HEAT	0.0	1.0	0.0
	LARGEST MOTOR	3.0	1.25	3.8
	REMAINDER	2.0	1.0	2.0
ELEVATOR	# OF ELEVATORS: 1	45.7	1.0	45.7
UNIT HEATERS		1.5	1.25	1.9
TOTALS				
TOTAL AMPS @ 208 V 3 PHASE	66.9			69.4
TOTALS				
TOTAL AMPS @ 208 V 3 PHASE	66.9			192.5

NOTE:
E.C. TO REVIEW ELEVATOR SUBMITTAL BEFORE BEGINNING WORK.

EXT. STORAGE 1ST FLOOR										3 PHASE, 4 WIRE										
PANEL: H					SURFACE MOUNTED					PANEL: S					SURFACE MOUNTED					
LOAD PER PHASE					LOAD PER PHASE					LOAD PER PHASE					LOAD PER PHASE					
VOLTAGE: 208Y/120V																				
AMPS: 400-MLO																				
-DESCRIPTION-																				
LTS: CORRIDOR/EMG	1	12	20	1	1.5	0														
LTS: ELEV/EXT STORAGE	1	12	20	3			1.4	1.2			4	20	12	1						
LTS: ELEVATOR SHAFT	1	12	20	5					0.2	0.2	6	20	12	1						
LTS: ELEVATOR CAB	1	12	20	7	0.4	0.2					8	20	12	1						
REC: ELEVATOR SHAFT	1	12	20	9			0.4	0.5			10	20	12	1						
SUMP PUMP PANEL	1	12	20	11					0.2	0.0	12	-	-	-						
REC: TELE/DATA BOARD	1	12	20	13	0.8	0					14	-	-	-						
LTS: BUILDING	1	12	20	15			0.8	0			16	-	-	-						
LTS: SITE/POLE PARKING	1	12	20	17					0.5	0	18	20	-	-						
LTS: SITE/POLE PARKING	1	12	20	19	0.5	0					20	20	-	-						
LTS: SITE/POLE PARKING	1	12	20	21			0.5	0			22	20	-	-						
ELEVATOR	3	1	300	25	15.2	5.7					26	-	-	-						
SPACE	1	-	-	27			15.2	3.0			28	-	-	-						
				23							29	-	-	-						
				24			15.3	0			30	-	-	-						
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				109							11									

EXTERIOR LIGHTING DESIGN CRITERIA		CITY OF CAPE CORAL, FLORIDA LAND DEVELOPMENT CODE ARTICLE 5			
AREA DESCRIPTION		MAXIMUM INITIAL FOOT-CANDLES	MINIMUM INITIAL FOOT-CANDLES	UNIFORMITY RATIO MAX/MIN	UNIFORMITY RATIO AVG/MIN
PARKING LOT		3.0 FC	0.5 FC	12.0 / 1	4.0 / 1
STATISTICAL CALCULATION AREA ILLUMINANCE					
AREA DESCRIPTION	SYMBOL	AVERAGE INITIAL FOOT-CANDLES	MAXIMUM INITIAL FOOT-CANDLES	MINIMUM INITIAL FOOT-CANDLES	UNIFORMITY RATIO MAX/MIN
GENERAL PARKING	+	1.5 FC	2.9 FC	0.5 FC	7.3 / 1

GENERAL NOTES - THIS SHEET	TAGGED NOTES - THIS SHEET
<ol style="list-style-type: none"> COORDINATE FINAL LIGHT POLE LOCATIONS W/ LANDSCAPE ARCHITECT AND LANDSCAPE PLAN. ALL UNDERGROUND CONDUITS SHALL BE LOCATED AS NECESSARY TO NOT INTERFERE WITH SITE UTILITY (STORM, WATER, SANITARY, ETC.) WORK. COORDINATE WITH SITE UTILITY CONTRACTOR(S). REFER TO VOLTAGE DROP SCHEDULE FOR UPSIZED WIRES BASED ON LOAD AND LENGTH OF RUN. LIGHT POLE BASE TO WITHSTAND WINDS OF 160+ MPH. COORDINATE WITH STRUCTURAL ENGINEER. 	<ol style="list-style-type: none"> 120V/1Ø 20 AMP LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. WIRE TO AREA BUILDING HOUSE PANEL. SEE PANEL SCHEDULE. 120V/1Ø 20 AMP LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. WIRE TO POOL HOUSE PANEL CIRCUIT INDICATED. SEE PANEL SCHEDULE. 120V/1Ø 20 AMP LIGHTING CIRCUIT TO BE CONTROLLED VIA PHOTOCELL. WIRE TO AREA BUILDING HOUSE PANEL. SEE PANEL SCHEDULE.

NOTE:
E.C. TO CONFIRM ALL FIXTURE FINISHES AND COLOR TEMPERATURES WITH ARCHITECT BEFORE PURCHASE.

E.C. TO COORDINATE EXACT PLACEMENT OF ALL BLDG MOUNTED LIGHTS WITH ARCHITECTS AND ELEVATIONS BEFORE BEGINNING WORK.

PARKING LIGHTING FIXTURE SCHEDULE												
MARK	MANUF.	CATALOG NUMBER	LAMP DATA		VOLTS	BALLAST DATA		INPUT WATTS	INITIAL LUMENS	IES DISTRIBUTION	MOUNTING	DESCRIPTION
			NO.	TYPE		NO.	TYPE					
EA	LITHONIA	DSX1-LED-40C-530-30K-14M-MVOLT-HS	1	LED	MVOLT	1	LED DRIVER	68	8,090	TYPE 14M	20' POLE	SQUARE AREA LIGHT FIXTURE W/ FULL CUT-OFF AND HOUSE-SIDE SHIELD. MOUNTED ON 20' TAPERED SQUARE STEEL POLE. 3000K COLOR TEMP.
EB	LITHONIA	DSX1-LED-40C-530-30K-14M-MVOLT	1	LED	MVOLT	1	LED DRIVER	68	8,090	TYPE 14M	20' POLE	SQUARE AREA LIGHT FIXTURE W/ FULL CUT-OFF MOUNTED ON 20' TAPERED SQUARE STEEL POLE. 3000K COLOR TEMP.
EC	LITHONIA	DSX1-LED-40C-700-30K-15M-MVOLT	1	LED	MVOLT	1	LED DRIVER	89	10,790	TYPE 15M	20' POLE	SQUARE AREA LIGHT FIXTURE W/ FULL CUT-OFF MOUNTED ON 20' TAPERED SQUARE STEEL POLE. 3000K COLOR TEMP.

NOTES:
1. W/ PHILIPS GARDCO MODEL #: GTS-20-II-D1-BLP POLE (160+ MPH WIND RATED). POLE COLOR TO BE BLACK.
2. MOUNTING HEIGHT = 20'
3. COLOR TO BE BLACK. POLE AND FIXTURE COLOR TO MATCH.

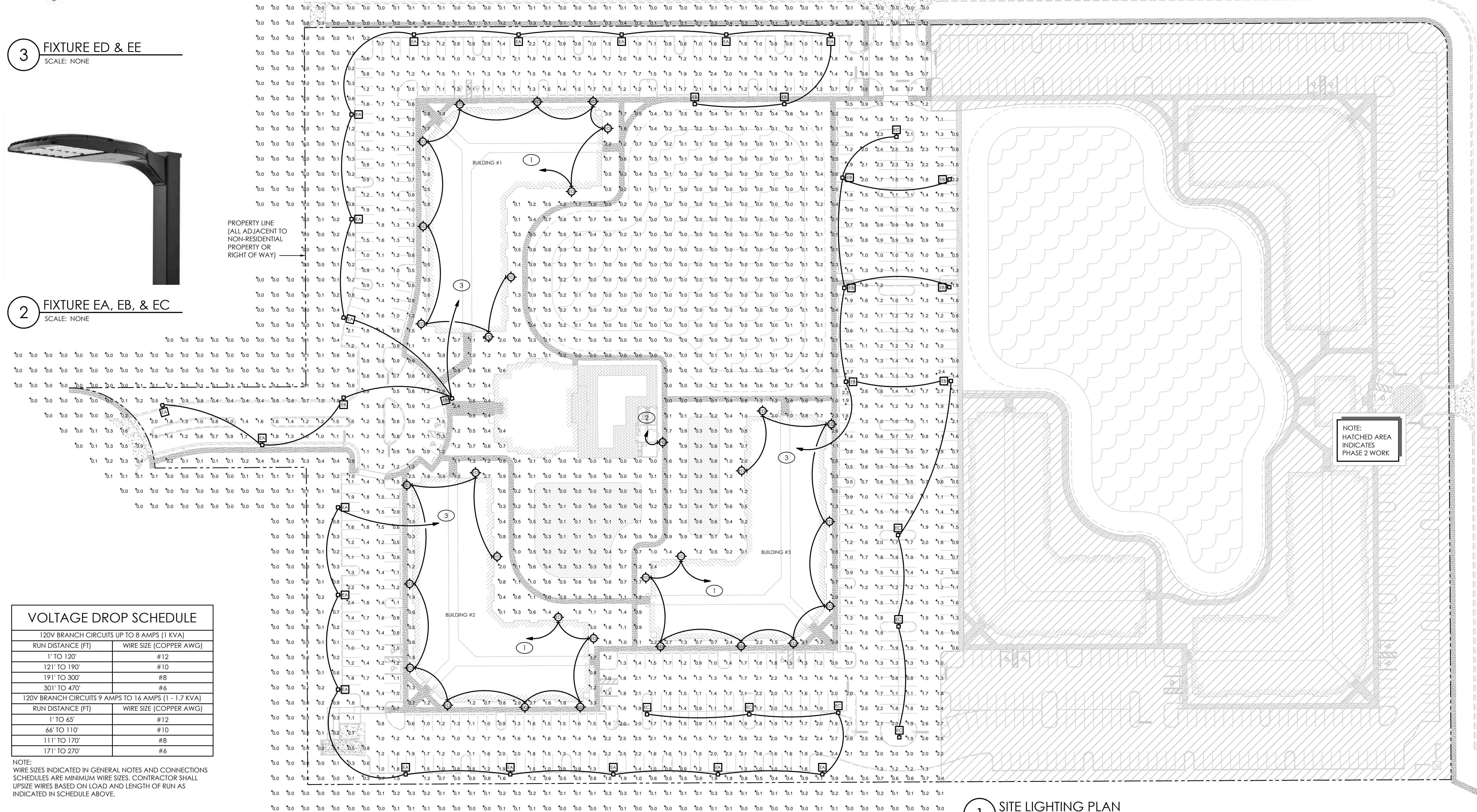
BUILDING LIGHTING FIXTURE SCHEDULE											
MARK	MANUF.	CATALOG NUMBER	LAMP DATA		VOLTS	BALLAST DATA		INPUT WATTS	MOUNTING	DESCRIPTION	
			NO.	TYPE		NO.	TYPE				
ED	LITHONIA	WSQ-LED-P4-SR4-30K-MVOLT	1	LED	MVOLT	1	LED DRIVER	61	WALL 20' MOUNT HEIGHT	LED WALL PACK. WET LOC. & COLD TEMP RATED. 5,991 LUMENS. 3000K TEMP. SR4 DISTRIBUTION. FULL CUT-OFF.	
PG	LITHONIA	WSQ-LED-P3-SR4-30K-MVOLT	1	LED	MVOLT	1	LED DRIVER	40	WALL 8.5' MOUNT HEIGHT	LED WALL PACK. WET LOC. & COLD TEMP RATED. 4,456 LUMENS. 3000K TEMP. SR4 DISTRIBUTION. FULL CUT-OFF.	



3 FIXTURE ED & EE
SCALE: NONE



2 FIXTURE EA, EB, & EC
SCALE: NONE



NOTE: HATCHED AREA INDICATES PHASE 2 WORK

VOLTAGE DROP SCHEDULE	
120V BRANCH CIRCUITS UP TO 8 AMPS (1 KVA)	
RUN DISTANCE (FT)	WIRE SIZE (COPPER AWG)
1' TO 120'	#12
121' TO 190'	#10
191' TO 300'	#8
301' TO 470'	#6
120V BRANCH CIRCUITS 9 AMPS TO 16 AMPS (1 - 1.7 KVA)	
RUN DISTANCE (FT)	WIRE SIZE (COPPER AWG)
1' TO 65'	#12
66' TO 110'	#10
111' TO 170'	#8
171' TO 270'	#6

NOTE:
WIRE SIZES INDICATED IN GENERAL NOTES AND CONNECTIONS SCHEDULES ARE MINIMUM WIRE SIZES. CONTRACTOR SHALL UPSIZE WIRES BASED ON LOAD AND LENGTH OF RUN AS INDICATED IN SCHEDULE ABOVE.

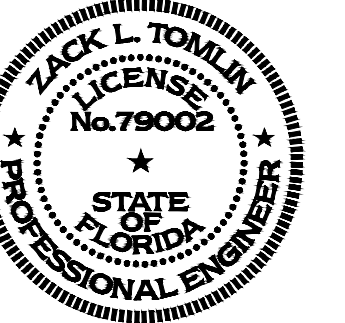
1 SITE LIGHTING PLAN
SCALE: 1" = 50'-0"



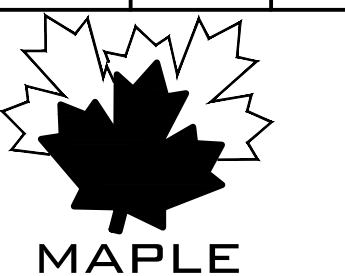
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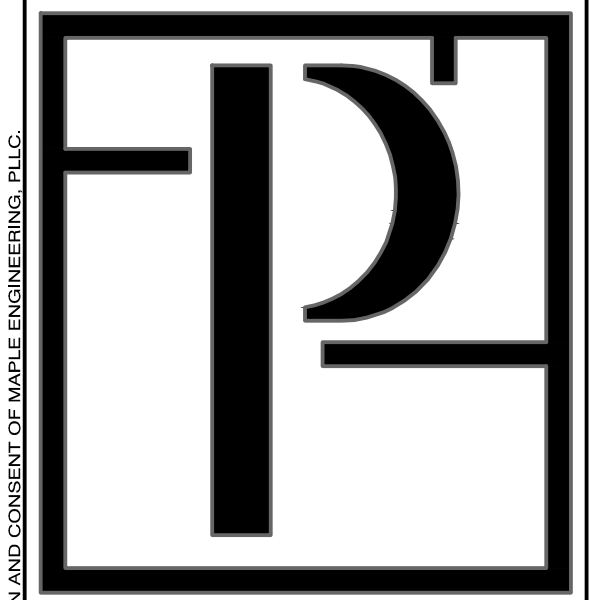


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PLUMBING MECHANICAL ELECTRICAL
FL CDA # 3316

ISSUE DATE:	REVISIONS	DESCRIPTION
07.19.19		

PROJECT NO: PLX-1906
DRAWN BY: DWB
CHECKED BY: ZLT
SHEET TITLE: SITE LIGHTING PLAN
SHEET NUMBER:

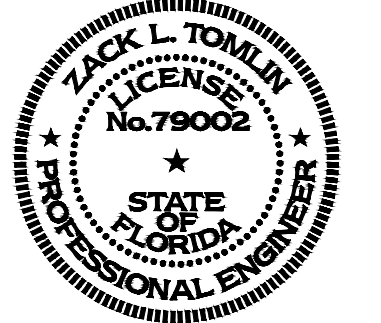
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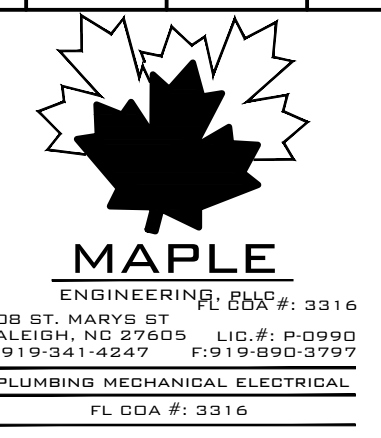
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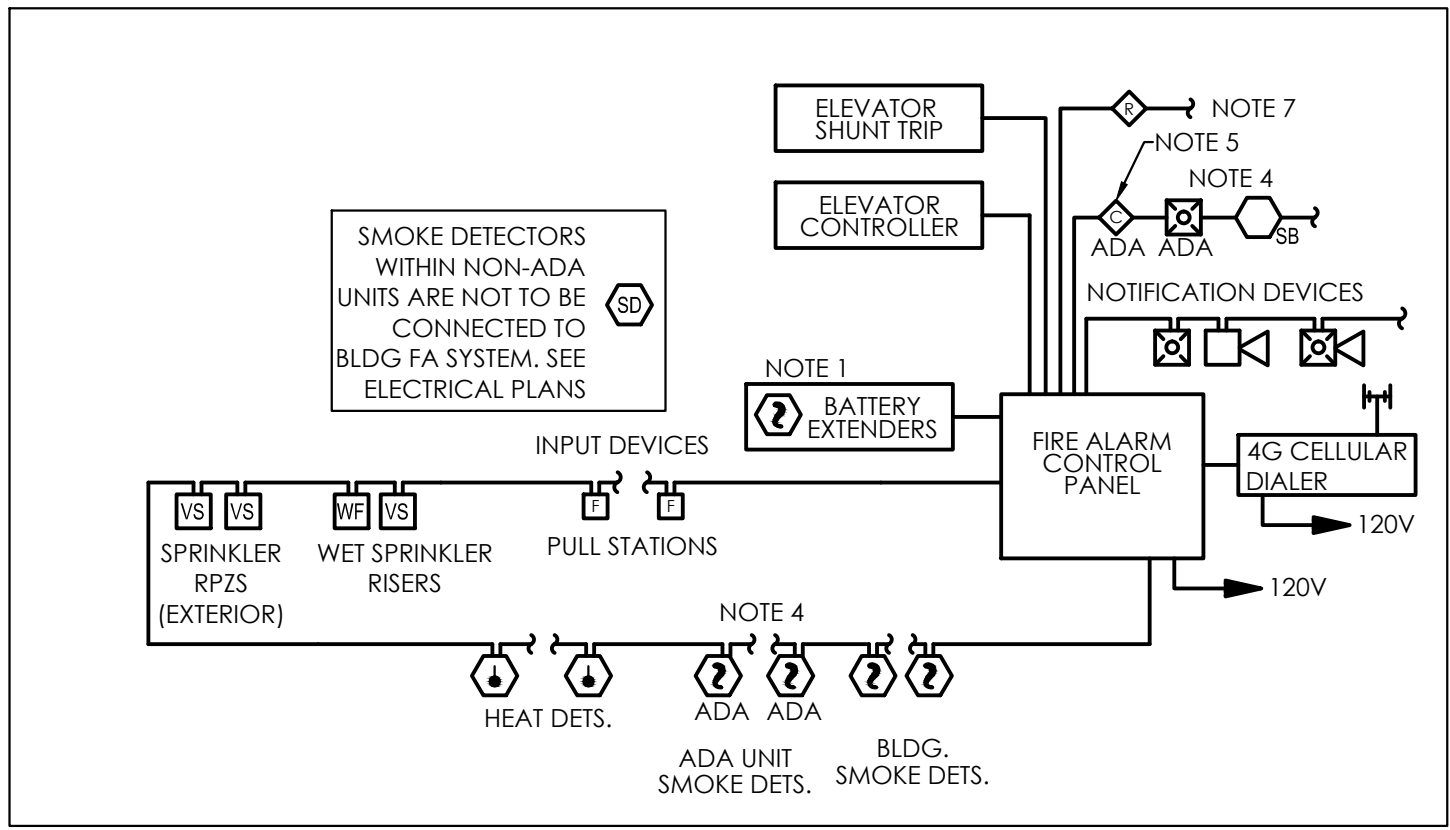
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07.19.19		
	INITIALS	
	DATE	

PROJECT NO: **PLX-1906**
DRAWN BY: NPB
CHECKED BY: ZLT
SHEET TITLE:
FIRE ALARM SCHEDULES & NOTES
SHEET NUMBER:

FA0.01

FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX	SYSTEM OUTPUTS																								
	FACP ANNUNCIATION												NOTIFICATION						REQUIRED FIRE SAFETY CONTROL						
SYSTEM INPUTS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
1 FIRE ALARM SYSTEM AC POWER FAILURE																									
2 FIRE ALARM SYSTEM LOW BATTERY																									
3 OPEN CIRCUIT																									
4 GROUND FAULT																									
5 NOTIFICATION APPLIANCE CIRCUIT SHORT																									
6 BUILDING MANUAL PULL STATIONS																									
7 AREA SMOKE DETECTORS																									
8																									
9																									
10																									
11																									
12 SPRINKLER TAMPER SWITCH																									
13 SPRINKLER WATER FLOW IN BUILDING																									
14 SPRINKLER WATER FLOW IN ELEV EQUIP RM OR SHAFT																									
15 ELEV EQUIP RM AREA HEAT/SMOKE DETECTOR																									
16 ELEV SHAFT AND ELEV EQUIP RM HEAT/SMOKE DETECTORS																									
17 ELEV LOBBY SMOKE/HEAT DETECTORS - UPPER FLOORS																									
18 ELEV LOBBY SMOKE/HEAT DETECTOR - RECALL FLOOR																									
19 ELEV CONTROLLER POWER SHUNT TRIP STATUS																									
20																									
21																									
22																									
23																									
24																									
25																									
26 ADA APARTMENT SMOKE DETECTORS																									
27																									

3 FIRE ALARM DEVICE MATRIX
NO SCALE

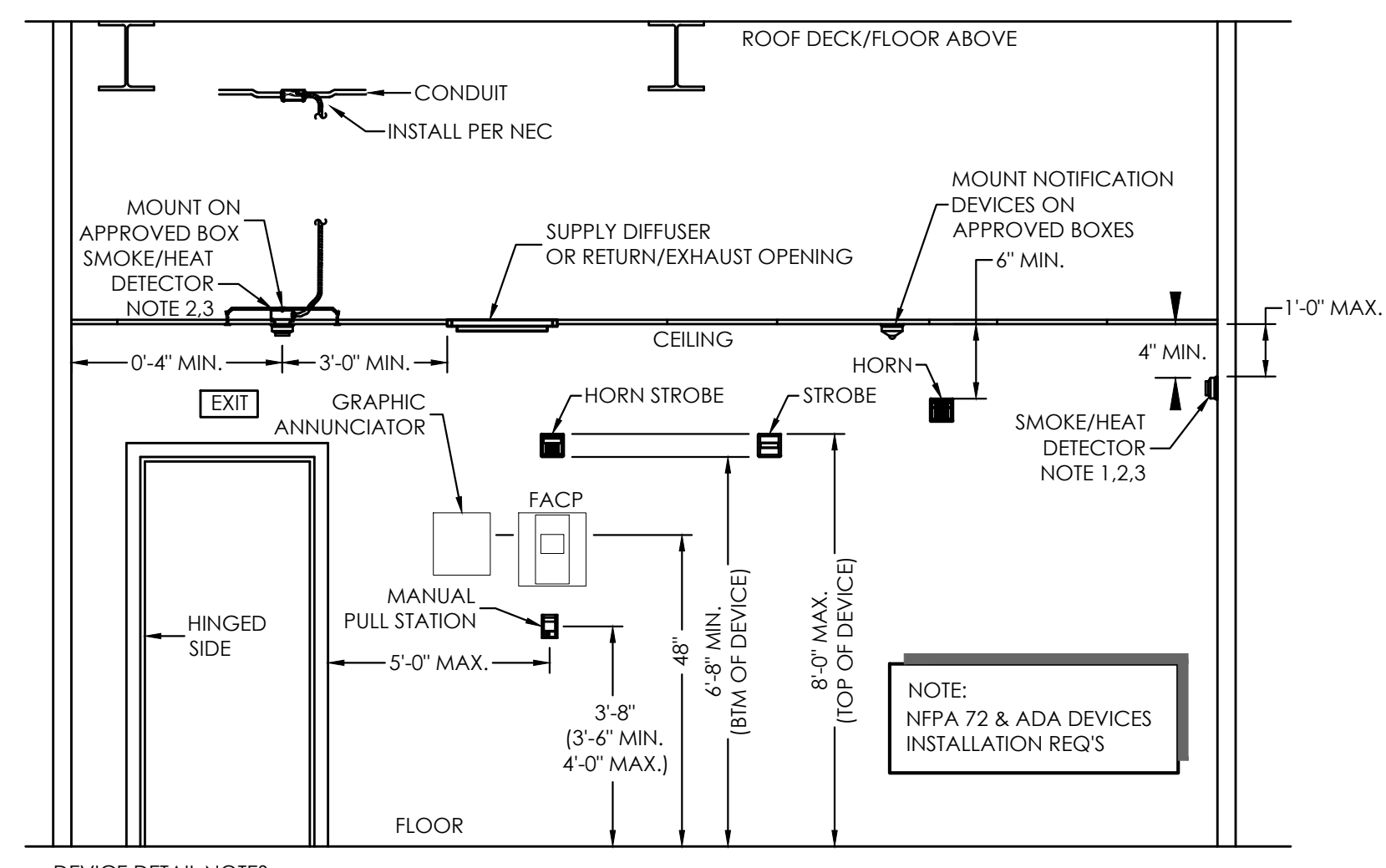


RISER NOTES:

- FIRE ALARM CONTROL PANEL TO BE EQUAL TO FIRE-LITE MSP200UDLS W/ FIRE-LITE IPGSM-4G DIGITAL CELLULAR FIRE COMMUNICATOR W/ BATTERY BACK-UP (POWER AND TELECOM LINES FOR DEVICE MUST BE IN CONDUIT. SEE MANUFACTURER'S INSTRUCTIONS). PROVIDE FCPS24-F58 POWER SUPPLIES AS REQUIRED. ENSURE SMOKE DETECTOR IS PROVIDED AT ALL BATTERY EXTENDER PANELS.
- ENSURE ALL DEVICES/APPLIANCES USED ARE COMPATIBLE WITH FACP. PROVIDE ALL PROGRAMMING AND FINAL CONNECTION BY A FACTORY TRAINED TECHNICIAN.
- RISER IS GENERIC IN NATURE SEE PLAN FOR EXACT DEVICE LAYOUT AND QUANTITY.
- MAP ADA UNIT SMOKE DETECTORS TO CORRESPONDING UNIT CONTROL MODULE. WHEN SMOKE IS DETECTED IN AN ADA UNIT ONLY NOTIFICATION DEVICES IN THAT SPECIFIC UNIT ARE TO ACTIVATE.
- CONTROL MODULE TO ACTIVATE ADA UNIT NOTIFICATION APPLIANCES UPON GENERAL BUILDING ALARM AND DETECTION OF SMOKE WITHIN INDIVIDUAL UNIT.
- ALL DEVICES IN SLEEPING AREAS AND APARTMENT UNITS, INCLUDING LIVING ROOMS, TO BE LOW FREQUENCY TYPE.
- RELAY(S) FOR DOOR HOLDERS. SEE PLANS.

2 FIRE ALARM RISER DIAGRAM (TYPICAL OF MULTIPLE BUILDINGS)
NO SCALE

- GENERAL FIRE ALARM NOTES**
- THE FIRE ALARM CONTRACTOR IS TO BE HELD TO THE SAME REQUIREMENTS AS THE ELECTRICAL CONTRACTOR. FIRE ALARM CONTRACTOR SHALL REVIEW ELECTRICAL PLANS AND ELECTRICAL "GENERAL NOTES" BEFORE COMPLETING BID.
 - FIRE ALARM CONTRACTOR IS TO VERIFY PROPOSED SYSTEM HAS BATTERY AND VOLTAGE CAPACITY TO HANDLE ALL DEVICES PLUS REQUIRED CAPACITY FOR POTENTIAL FUTURE DEVICES. PROVIDE FIRE ALARM SHOP DRAWINGS TO LOCAL AHJ.
 - AUDIBLE FIRE ALARM NOTIFICATION APPLIANCES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 dBA ABOVE THE AVERAGE AMBIENT SOUND PRESSURE LEVEL OR 5 dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, AT ALL LOCATIONS WITHIN THE OCCUPIABLE SPACE (TYPICAL AVERAGE AMBIENT SOUND PRESSURE LEVELS ARE GIVEN IN NFPA 72 TABLE A.18.4.3). THE MINIMUM SOUND PRESSURE LEVEL SHALL BE 75 dBA IN OCCUPANCY GROUPS R AND I-1, 90 dBA IN MECHANICAL EQUIPMENT ROOMS, AND 60 dBA IN ALL OTHER OCCUPANCIES. THE MAXIMUM SOUND PRESSURE LEVEL SHALL BE 110 dBA AT THE MINIMUM HEARING DISTANCE FROM ANY AUDIBLE APPLIANCE.
 - IF THREE OR MORE FIRE ALARM SYSTEM VISUAL NOTIFICATION APPLIANCES ARE LOCATED WITHIN AN OBSERVER'S FIELD OF VIEW (135°) AND WITHIN 55'-0" OF THE OBSERVER, THEN THE DEVICES SHALL BE SYNCHRONIZED.
 - LOW FREQUENCY DEVICES TO BE INSTALLED IN SLEEPING AREAS, APARTMENT UNITS (INCLUDING LIVING ROOMS).
 - FIRE ALARM DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND 'ADA'.
 - ADA SMOKE DETECTORS TO INCLUDE LOW FREQUENCY SOUNDER BASE. TEMPORAL 3 TONE PATTERN FOR FIRE ALARM.
 - ALL FIRE ALARM WIRING SHALL BE IN CONDUIT OR AS ALLOWED BY NEC OR LOCAL AHJ.
 - ELECTRICAL CONTRACTOR SHALL PROVIDE AN UPDATED FIRE ALARM LAYOUT PLAN AT THE FACP.
 - TESTING OF THE FIRE ALARM SYSTEM SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
 - FIRE ALARM DEVICES COLOR TO BE SELECTED BY ARCHITECT.



- DEVICE DETAIL NOTES:**
- PLACE SMOKE/HEAT DETECTOR AT HIGHEST POINT IN VAULTED CEILINGS.
 - PLACE SMOKE/HEAT DETECTOR NO LESS THAN 3FT FROM BATHROOM/SHOWER ROOM DOORS.
 - PLACE PHOTOELECTRIC SMOKE/HEAT ALARMS NO LESS THAN 6FT FROM PERMANENTLY INSTALLED COOKING APPLIANCES. PLACE IONIZATION SMOKE/HEAT DETECTORS WITH AN ALARM-SILENCING SWITCH NO LESS THAN 10FT FROM A PERMANENTLY INSTALLED COOKING APPLIANCE. PLACE IONIZATION SMOKE/HEAT DETECTORS WITHOUT AN ALARM-SILENCING SWITCH NO LESS THAN 20FT FROM A PERMANENTLY INSTALLED COOKING APPLIANCE.

1 FIRE ALARM AND SIMILAR DEVICE LOCATIONS
NO SCALE

FIRE ALARM SYMBOL LEGEND

	FIRE ALARM CONTROL UNIT
	FIRE ALARM TERMINAL CABINET (N = TRANSPONDER NUMBER)
	FIRE SUPPRESSION CONTROL PANEL (N DENOTES SUPPRESSION TYPE)
	GRAPHIC ANNUNCIATOR PANEL
	DIGITAL ALARM COMMUNICATOR TRANSMITTER
	FIRE ALARM ANNUNCIATOR
	REMOTE VOICE EVACUATION VOICE (EVACUATION MICROPHONE)
	WATER FLOW SWITCH
	LOW TEMPERATURE SWITCH
	HIGH PRESSURE SWITCH
	PRESSURE DETECTOR/SWITCH
	VALVE SUPERVISORY SWITCH
	GAS DETECTOR (X = GAS TYPE EX. CARBON MONOXIDE)
	HEAT DETECTOR/SENSOR (X= TYPE)
	PROVIDE BOX, AS SHOWN, TO DENOTE COMBINATION DETECTORS
	PULL STATION/FIRE ALARM
	SMOKE DETECTOR/SENSOR (DEFAULT PHOTOELECTRIC TYPE)
	SMOKE DETECTOR - IONIZATION TYPE (ION)
	SMOKE DETECTOR IN ADA UNIT. PROVIDE INTELLIGENT LOW FREQUENCY SOUNDER BASE WITH TEMPORAL 3 TONE EQUAL TO SYSTEM SENSOR B2005-LF. PROVIDE COMPATIBLE PHOTOELECTRIC SMOKE DETECTOR/SENSOR.
	SMOKE ALARM (SINGLE STATION)
	SMOKE ALARM (MULTI STATION)
	DETECTOR WITH SOUNDER BASE (SB)
	DETECTOR - MULTI CRITERIA TYPE (MC)
	DUCT SMOKE DETECTOR (NFPA 72, SECTION 17.7.5.5)
	AUDIBLE ONLY APPLIANCE (WALL MOUNTED)
	VISUAL ONLY APPLIANCE (WALL MOUNTED)
	AUDIBLE/VISUAL APPLIANCE (WALL MOUNTED)
	VISUAL ONLY APPLIANCE (CEILING MOUNTED)
	AUDIBLE ONLY APPLIANCE (CEILING MOUNTED)
	AUDIBLE/VISUAL APPLIANCE (CEILING MOUNTED)
	AUDIBLE ONLY APPLIANCE, SPEAKER (WALL MOUNTED)
	AUDIBLE/VISUAL APPLIANCE, SPEAKER (WALL MOUNTED)
	AUDIBLE ONLY APPLIANCE, SPEAKER (CEILING MOUNTED)
	AUDIBLE/VISUAL APPLIANCE, SPEAKER (CEILING MOUNTED)
	MAGNETIC DOOR HOLDER (SUPPLIED WITH DOOR HARDWARE), CONNECT TO LOCAL SMOKE DETECTOR.
	120V SPRINKLER BELL (WALL MOUNTED)
	CONTROL MODULE EQUAL TO FIRE-LITE CMF-300.
	RELAY MODULE EQUAL TO FIRE-LITE CRF-300.

