



UNIVERSITY OF SOUTH CAROLINA AIKEN

471 UNIVERSITY PKWY. AIKEN, SC 29801

PACER DOWNS HVAC REPLACEMENT PHASE I

MARCH 11, 2019

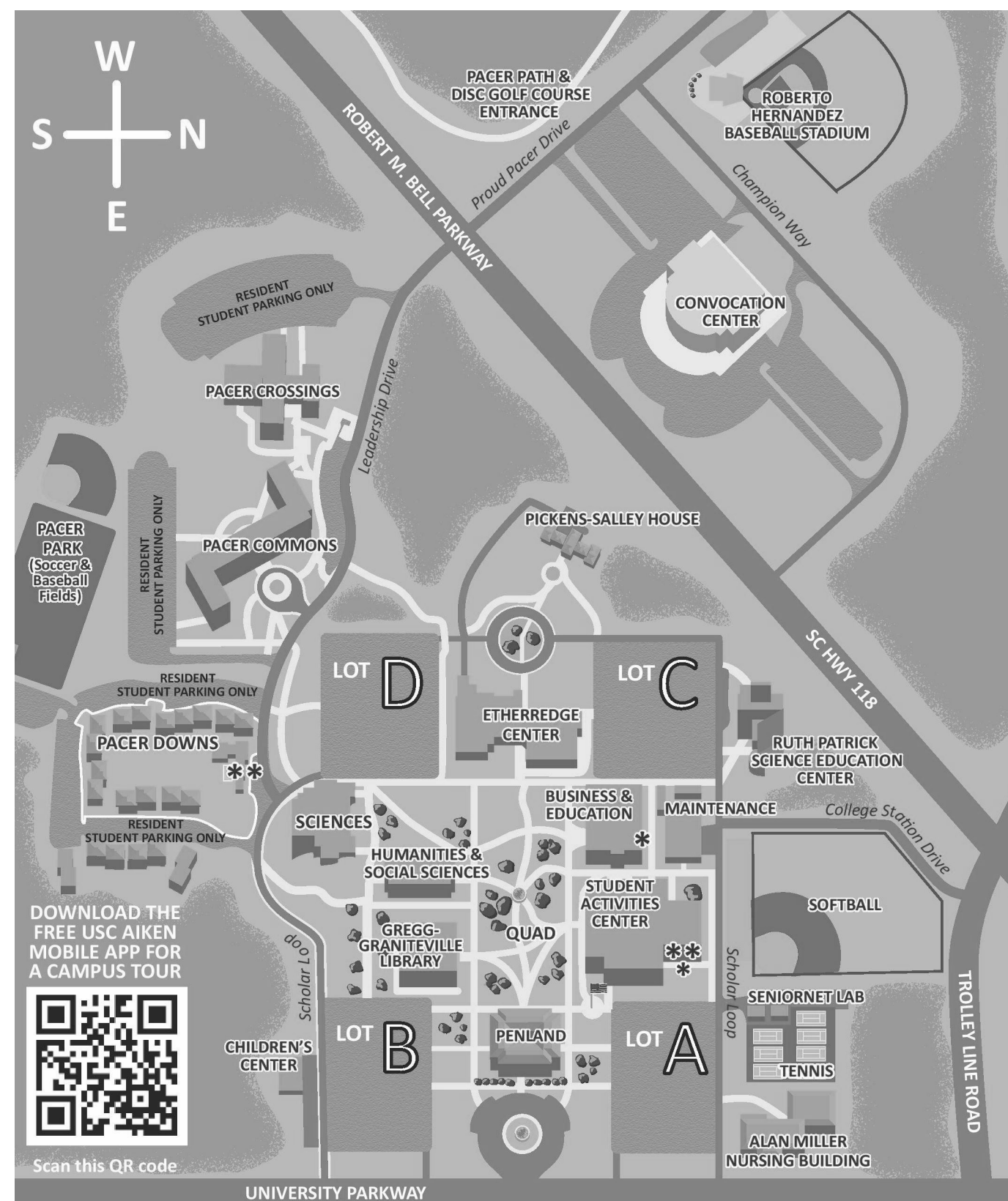
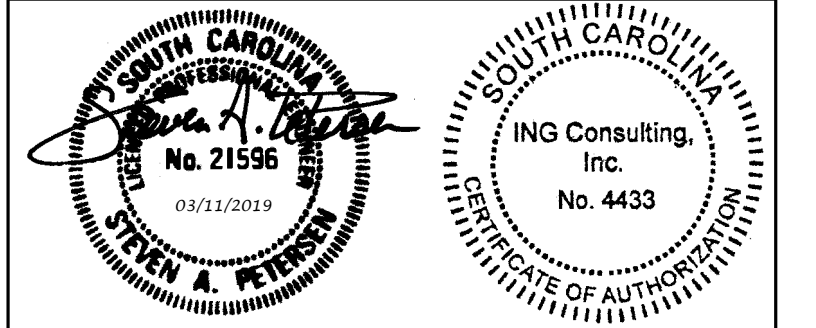


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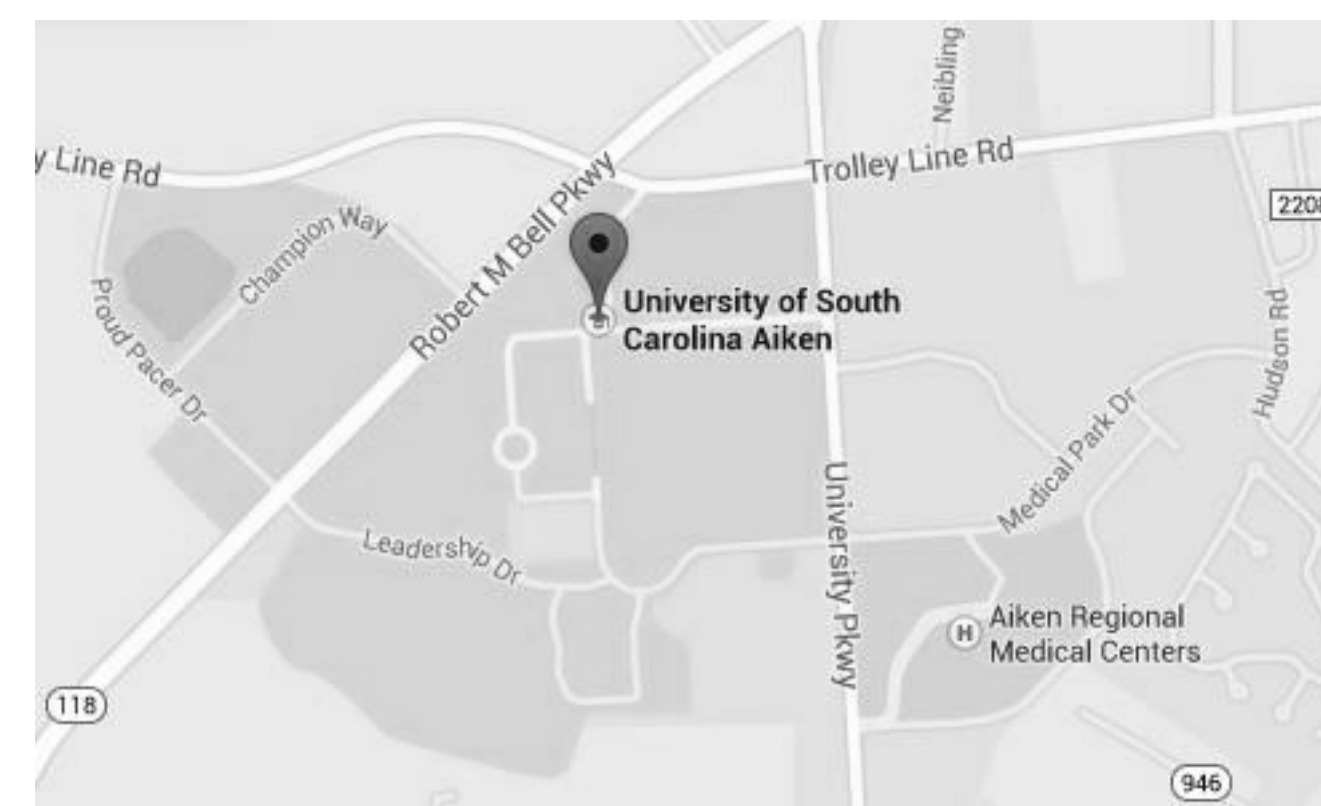
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USC AIKEN CAMPUS MAP
NOT TO SCALE



PROJECT LOCATION MAP
NOT TO SCALE

LEGEND
= PROJECT LOCATION

SCHEDULE OF DRAWINGS

SHEET: TITLE:

- CS001 COVER SHEET
- M001 MECHANICAL SCHEDULE AND DETAILS
- M101 MECHANICAL DEMOLITION PLANS
- M102 MECHANICAL DEMOLITION PLANS
- M201 MECHANICAL NEW WORK PLANS
- M202 MECHANICAL NEW WORK PLANS



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AIKEN, SC 29801

MARK	DATE	DESCRIPTION
0	3/11/19	ISSUED FOR BID
PROJECT NO:	FP00000216	
CAD DWG FILE:		
DRAWN BY:	JKF	
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SHEET TITLE
COVER SHEET

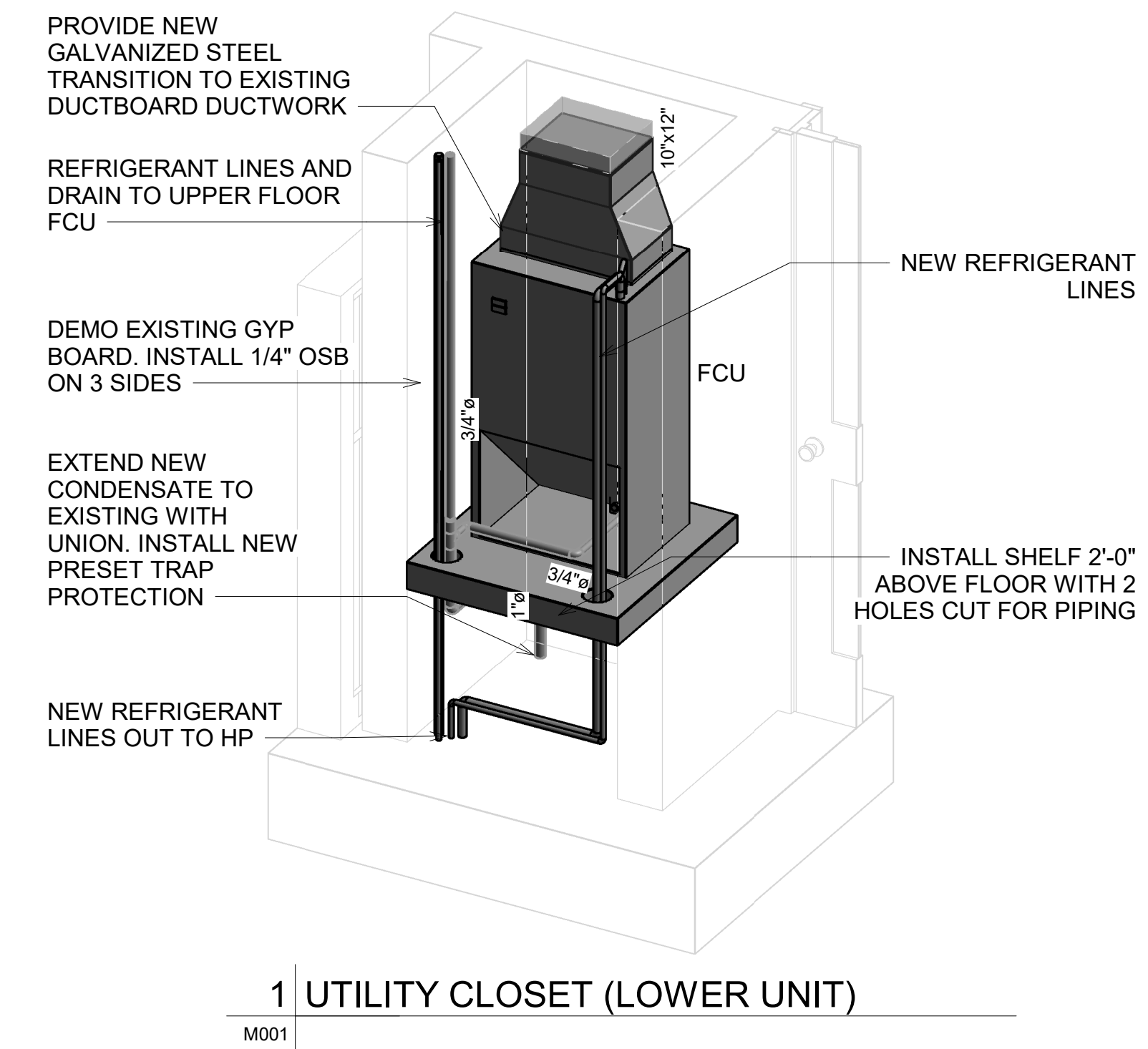
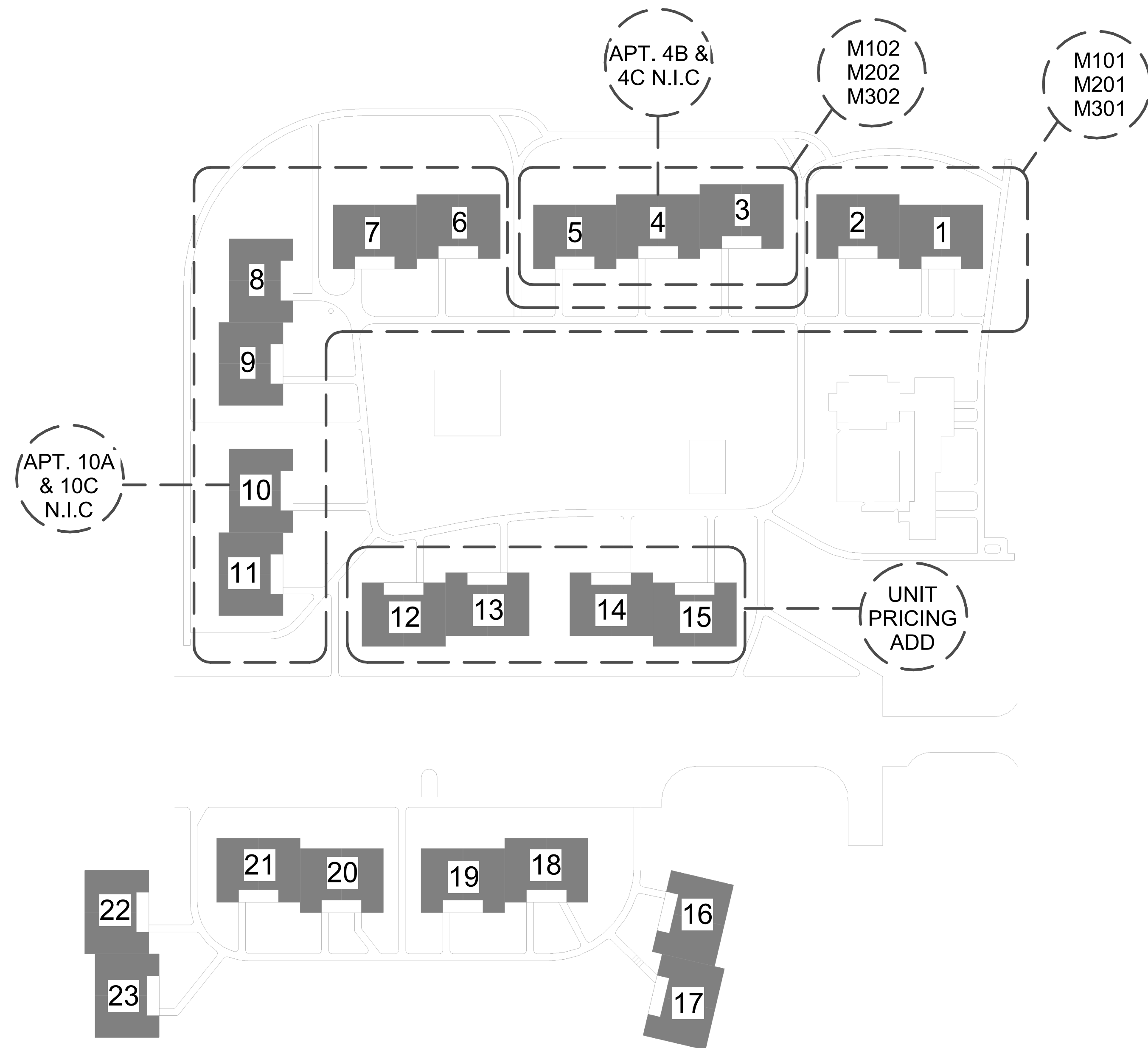
CS001

FAN COIL UNIT SCHEDULE																								
TAG	MAUNFACTURER	MODEL	MOUNT	SUPPLY FAN				COOLING PERFORMANCE				HEATING PERFORMANCE				ELECTRICAL				WEIGHTED SOUND POWER LEVEL (dBA)	WEIGHT (LBS)	SEER	EER	OPTIONS
				CFM	HP	RPM	ESP (IN. W.C.)	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	CAPACITY (BTUh)	EAT DB (°F)	LAT DB (°F)	CAPACITY (BTUh)	VOLTAGE	PHASE	MCA	MOCF						
FCU-#A	CARRIER	FFMANP019	FRAME	600	0.3	1,050	0.5	80	67	54	18,000	65	93	18,000	208	1	2.4	15.0	55	90	16	11.6	ALL	
FCU-#B	CARRIER	FFMANP019	FRAME	600	0.3	1,050	0.5	80	67	54	18,000	65	93	18,000	208	1	2.4	15.0	55	90	16	11.6	ALL	
FCU-#C	CARRIER	FFMANP019	FRAME	600	0.3	1,050	0.5	80	67	54	18,000	65	93	18,000	208	1	2.4	15.0	55	90	16	11.6	ALL	
FCU-#D	CARRIER	FFMANP019	FRAME	600	0.3	1,050	0.5	80	67	54	18,000	65	93	18,000	208	1	2.4	15.0	55	90	16	11.6	ALL	
FCU-#D	CARRIER	FFMANP019	FRAME	600	0.3	1,050	0.5	80	67	54	18,000	65	93	18,000	208	1	2.4	15.0	55	90	16	11.6	ALL	

OPTIONS:
 1. FORMAT UNIT TAGS AS (BUILDING #)(UNIT LETTER). EXAMPLE: FAN COIL UNIT FOR BUILDING 16, UNIT C SHALL BE "FCU-16C". CONFIRM BUILDING AND UNIT NUMBERS WITH BUILDING MANAGER.
 2. ECM MOTOR
 3. 24V INTERFACE CARRIER MODEL KSAIC0201230
 4. MERV-8 PLEATED FILTER
 5. REMOVE TXV / PISTON
 6. INCLUDE CARRIER WIFI CORE THERMOSTAT

HEAT PUMP SCHEDULE														
TAG	MAUNFACTURER	MODEL	NOMINAL TONS	COOLING CAPACITY (BTUh)	HEATING CAPACITY (BTUh)	ELECTRICAL				WEIGHT (LBS)	ASSOCIATED INDOOR UNIT	SEER	EER	OPTIONS
						VOLTAGE	PHASE	MCA	MOCF					
HP-#A	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#A	16	11.6	ALL
HP-#A	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#A	16	11.6	ALL
HP-#B	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#B	16	11.6	ALL
HP-#B	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#B	16	11.6	ALL
HP-#C	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#C	16	11.6	ALL
HP-#C	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#C	16	11.6	ALL
HP-#D	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#D	16	11.6	ALL
HP-#D	CARRIER	38MAQB18	1.5	18,000	18,000	208	1	13	20	150	FCU-#D	16	11.6	ALL

OPTIONS:
 1. FORMAT UNIT TAGS AS (BUILDING #)(UNIT LETTER). EXAMPLE: HEAT PUMP FOR BUILDING 16, UNIT C SHALL BE "HP-16C". CONFIRM BUILDING AND UNIT NUMBERS WITH BUILDING MANAGER.
 2. PROVIDE NEW FUSED DISCONNECT
 3. HAIL GUARDS



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SHEET TITLE
MECHANICAL SCHEDULE AND DETAILS

M001

1

2

3

4

5

D

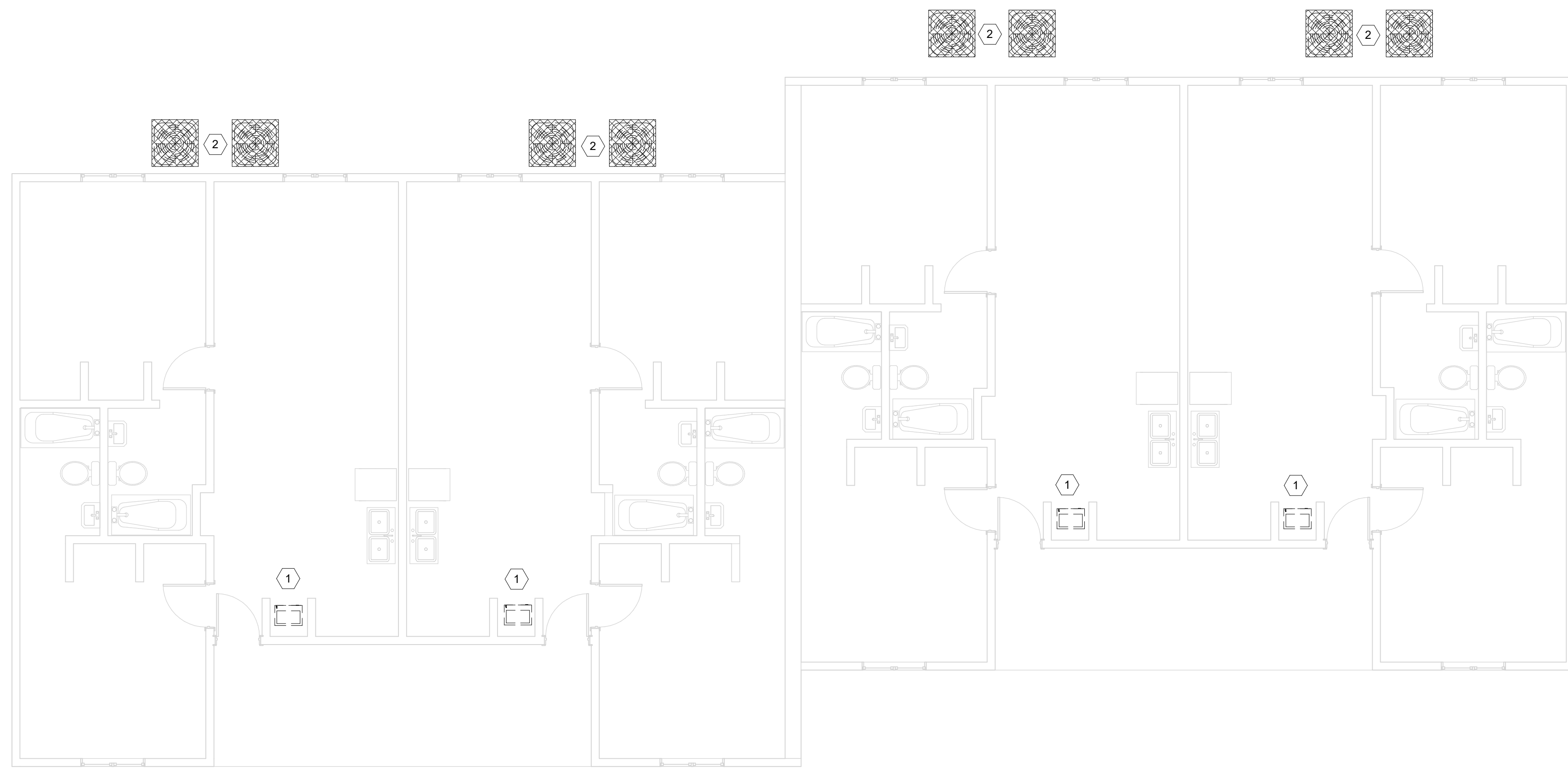
C

B

A

NEW WORK KEYNOTES: (THIS SHEET ONLY)

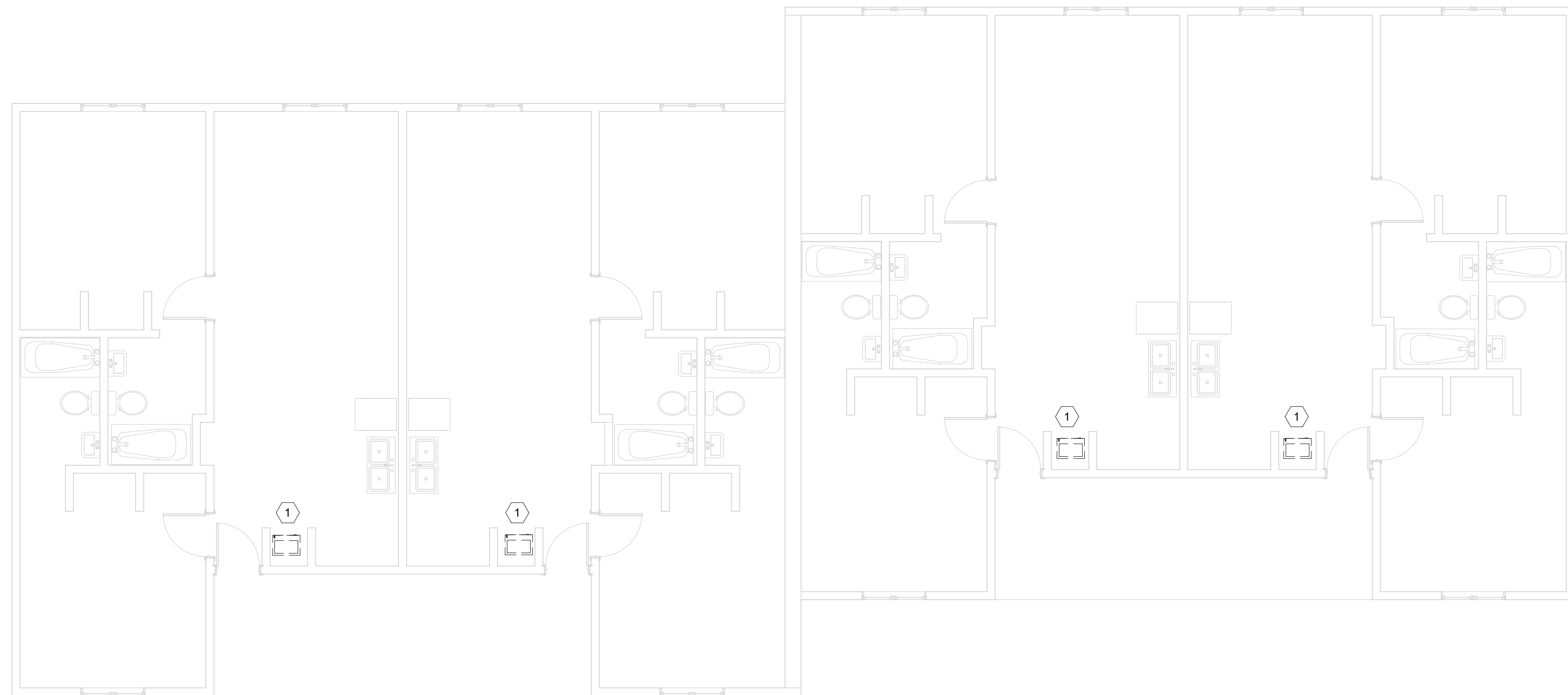
- ① DEMO AND REMOVE EXISTING FAN COIL UNIT. PREPARE EXISTING DUCT FOR NEW WORK. EXISTING LOUVERED DOOR TO REMAIN.
- ② DEMO AND REMOVE EXISTING CONDENSER UNIT AND REFRIGERANT PIPING. PREPARE AREA FOR NEW WORK. WHERE CONCRETE PAD IS DAMAGED OR OF IMPROPER SIZE, CONTRACTOR SHALL DEMO AND REMOVE.



1 1ST FLOOR MECHANICAL DEMOLITION

M101 3/16" = 1'-0"

NOTE: THIS FLOOR PLAN IS TYPICAL OF 6 AND APPLIES TO BUILDING NUMBERS 1/2, 6/7, 8/9, 10/11, 12/13, AND 14/15.



2 2ND FLOOR MECHANICAL DEMOLITION

M101 3/16" = 1'-0"

NOTE: THIS FLOOR PLAN IS TYPICAL OF 6 AND APPLIES TO BUILDING NUMBERS 1/2, 6/7, 8/9, 10/11, 12/13, AND 14/15.

1

2

3

4

5

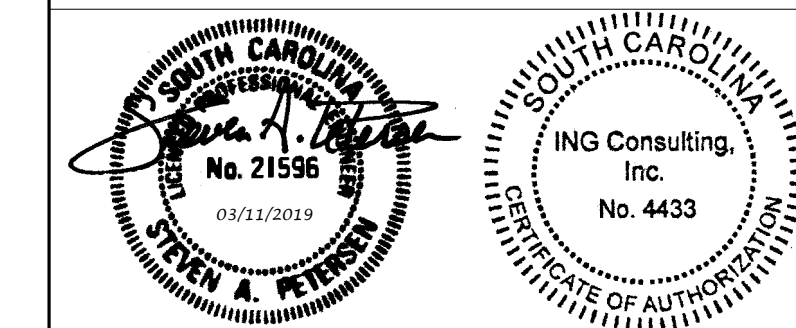


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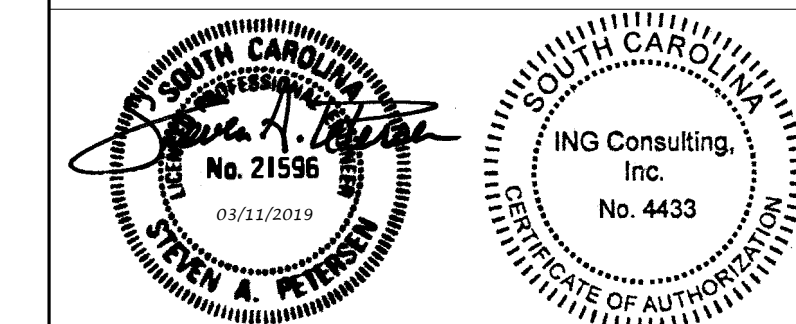
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SHEET TITLE
MECHANICAL DEMOLITION PLANS

M101

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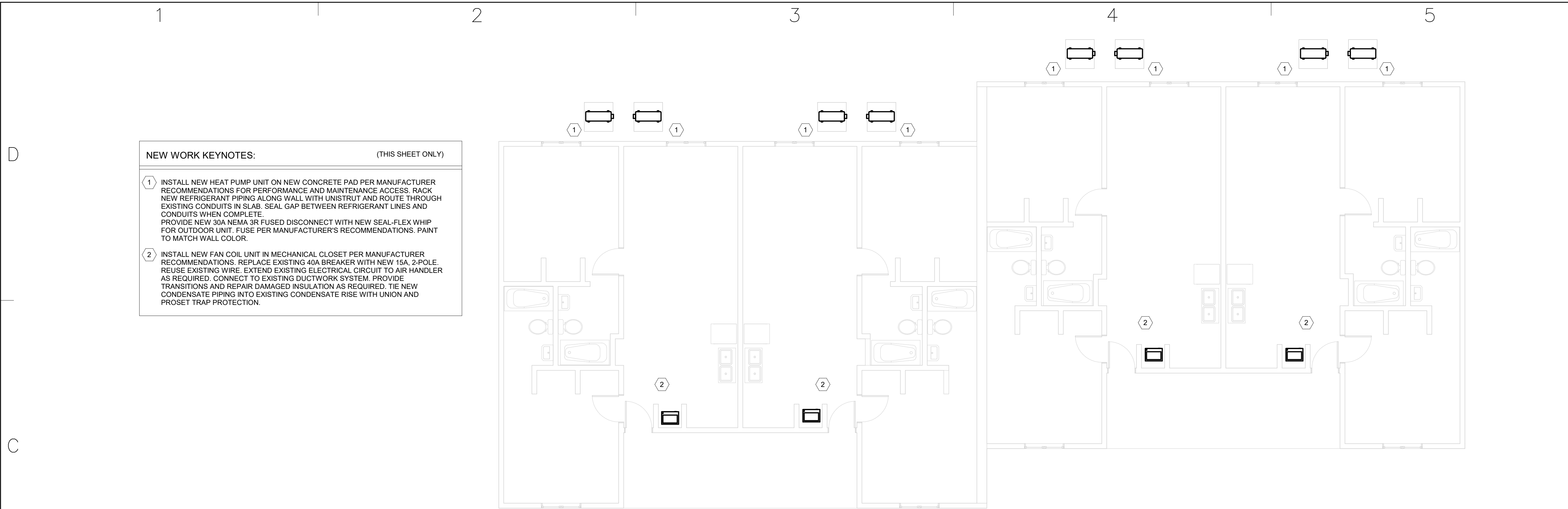


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MECHANICAL NEW WORK PLANS

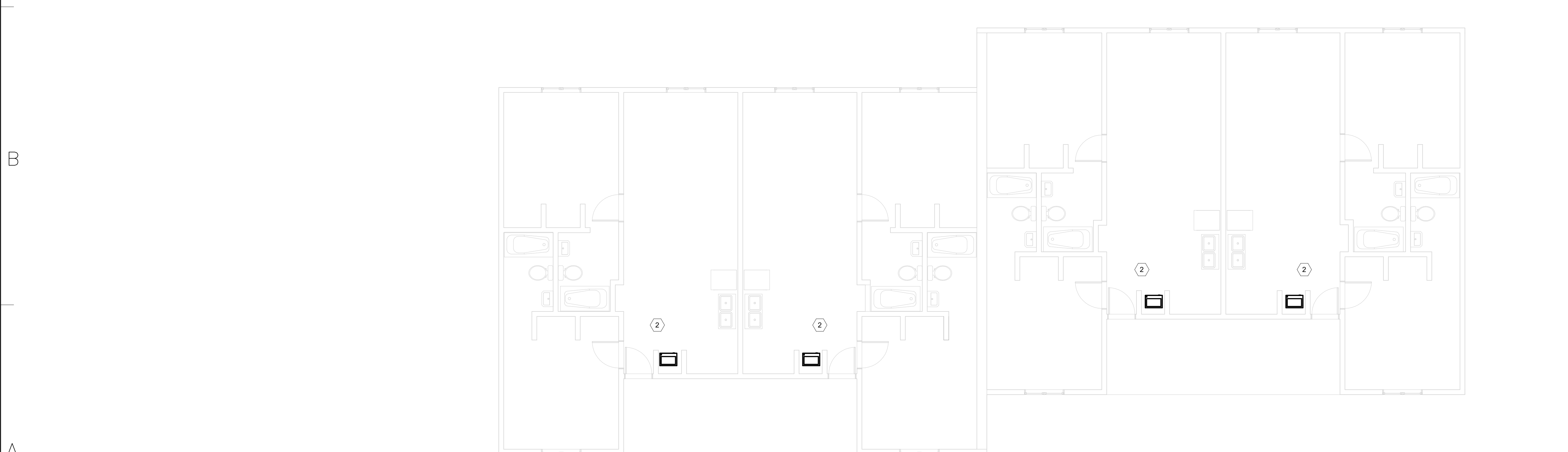
M201



1 1ST FLOOR MECHANICAL NEW WORK

M201 3/16" = 1'-0"

NOTE: THIS FLOOR PLAN IS TYPICAL OF 6 AND APPLIES TO BUILDING NUMBERS 1/2, 6/7, 8/9, 10/11, 12/13, AND 14/15.



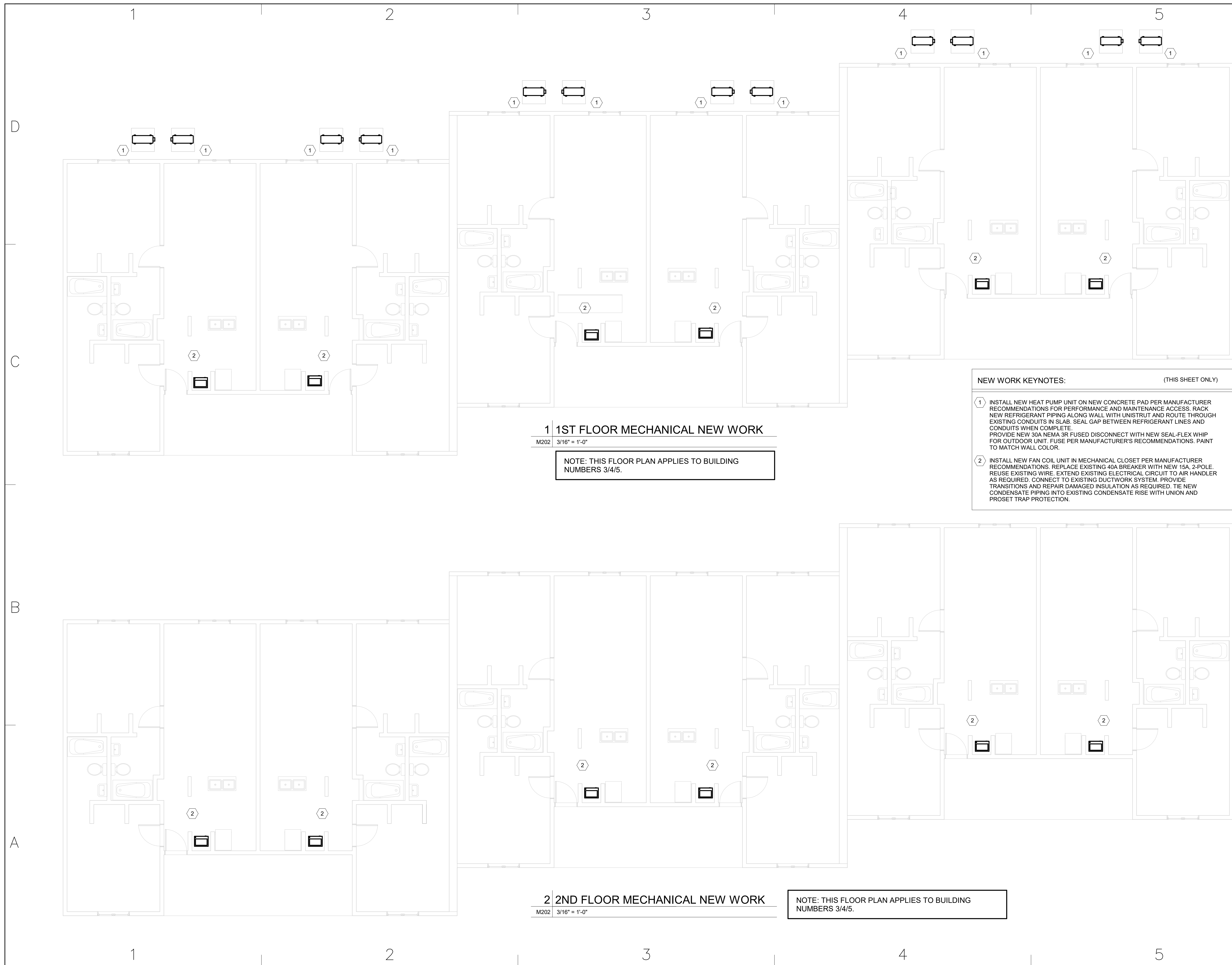
2 2ND FLOOR MECHANICAL NEW WORK

M201 3/16" = 1'-0"

NOTE: THIS FLOOR PLAN IS TYPICAL OF 6 AND APPLIES TO BUILDING NUMBERS 1/2, 6/7, 8/9, 10/11, 12/13, AND 14/15.

NEW WORK KEYNOTES: (THIS SHEET ONLY)

- 1 INSTALL NEW HEAT PUMP UNIT ON NEW CONCRETE PAD PER MANUFACTURER RECOMMENDATIONS FOR PERFORMANCE AND MAINTENANCE ACCESS. RACK NEW REFRIGERANT PIPING ALONG WALL WITH UNISTRUT AND ROUTE THROUGH EXISTING CONDUITS IN SLAB. SEAL GAP BETWEEN REFRIGERANT LINES AND CONDUITS WHEN COMPLETE. PROVIDE NEW 30A NEMA 3R FUSED DISCONNECT WITH NEW SEAL-FLEX WHIP FOR OUTDOOR UNIT. FUSE PER MANUFACTURER'S RECOMMENDATIONS. PAINT TO MATCH WALL COLOR.
- 2 INSTALL NEW FAN COIL UNIT IN MECHANICAL CLOSET PER MANUFACTURER RECOMMENDATIONS. REPLACE EXISTING 40A BREAKER WITH NEW 15A, 2-POLE. REUSE EXISTING WIRE. EXTEND EXISTING ELECTRICAL CIRCUIT TO AIR HANDLER AS REQUIRED. CONNECT TO EXISTING DUCTWORK SYSTEM. PROVIDE TRANSITIONS AND REPAIR DAMAGED INSULATION AS REQUIRED. TIE NEW CONDENSATE PIPING INTO EXISTING CONDENSATE RISE WITH UNION AND PROSET TRAP PROTECTION.



1 1ST FLOOR MECHANICAL NEW WORK

M202 3/16" = 1'-0"

NOTE: THIS FLOOR PLAN APPLIES TO BUILDING NUMBERS 3/4/5.

NEW WORK KEYNOTES: (THIS SHEET ONLY)

- ① INSTALL NEW HEAT PUMP UNIT ON NEW CONCRETE PAD PER MANUFACTURER RECOMMENDATIONS FOR PERFORMANCE AND MAINTENANCE ACCESS. RACK NEW REFRIGERANT PIPING ALONG WALL WITH UNISTRUT AND ROUTE THROUGH EXISTING CONDUITS IN SLAB. SEAL GAP BETWEEN REFRIGERANT LINES AND CONDUITS WHEN COMPLETE. PROVIDE NEW 30A NEMA 3R FUSED DISCONNECT WITH NEW SEAL-FLEX WHIP FOR OUTDOOR UNIT. FUSE PER MANUFACTURER'S RECOMMENDATIONS. PAINT TO MATCH WALL COLOR.
- ② INSTALL NEW FAN COIL UNIT IN MECHANICAL CLOSET PER MANUFACTURER RECOMMENDATIONS. REPLACE EXISTING 40A BREAKER WITH NEW 15A, 2-POLE. REUSE EXISTING WIRE. EXTEND EXISTING ELECTRICAL CIRCUIT TO AIR HANDLER AS REQUIRED. CONNECT TO EXISTING DUCTWORK SYSTEM. PROVIDE TRANSITIONS AND REPAIR DAMAGED INSULATION AS REQUIRED. TIE NEW CONDENSATE PIPING INTO EXISTING CONDENSATE RISE WITH UNION AND PROSET TRAP PROTECTION.

2 2ND FLOOR MECHANICAL NEW WORK

M202 3/16" = 1'-0"

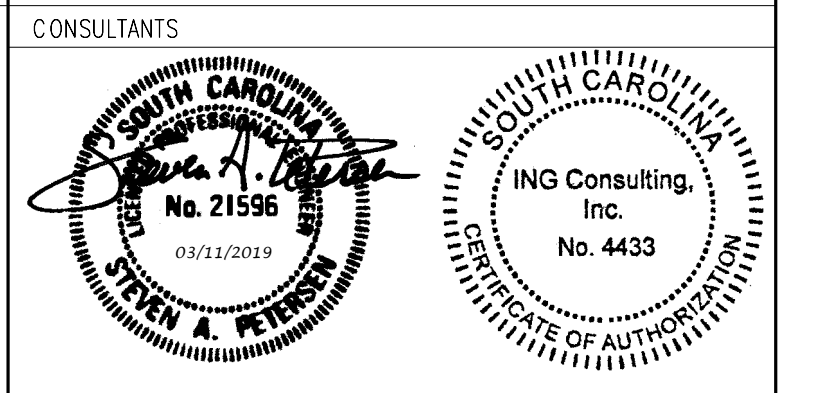
NOTE: THIS FLOOR PLAN APPLIES TO BUILDING NUMBERS 3/4/5.



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MECHANICAL NEW WORK PLANS

M202