GENERAL

(PROJECT MAY NOT USE ALL SYMBOLS / ABBREVIATIONS)

CONSTRUCTION NOTE IDENTIFICATION

ROOM NUMBER IDENTIFICATION ACCESS DOOR

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

EXISTING

EXISTING TO REMAIN

GAUGE GALVANIZED

MISCELLANEOUS

NOT IN CONTRACT

RUN THRU JOISTS

UNLESS OTHERWISE NOTED

_____ D ____ CONDENSATE DRAIN LINE

GENERAL NOTES AND LEGENDS

- 1. ALL MECHANICAL EQUIPMENT AND INSTALLATIONS SHALL YIELD COMPLETE OPERATIONAL SYSTEMS THAT CONFORM TO THE REQUIREMENTS OF THE APPLICABLE LOCAL ORDINANCES AND CODES INCLUDING BUT NOT LIMITED TO THE 2018 NORTH CAROLINA BUILDING CODE, THE 2018 NORTH CAROLINA MECHANICAL CODE, AND UNDERWRITERS LABORATORIES (OR ETL).
- 2. THE CONTRACT DOCUMENTS ARE BASED ON EQUIPMENT OF SPECIFIC MANUFACTURERS. IF THE CONTRACTOR SUBMITS OR PROPOSES TO USE EQUIPMENT OTHER THAN THAT USED ON THE CONTRACT DOCUMENTS THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DESIGN AND INSTALLATION REVISIONS AT NO ADDITIONAL COST TO THE PROJECT. REVISIONS INCLUDE BUT ARE NOT LIMITED TO, CHANGES IN EQUIPMENT DIMENSIONS OR WEIGHT, ACCESS REQUIREMENTS, ORIENTATION AND CONNECTIONS, AND ELECTRICAL REQUIREMENTS.
- 3. DO NOT SCALE DRAWINGS. DRAWINGS ARE DIAGRAMMATIC.
- ARCHITECT BEFORE ANY MECHANICAL EQUIPMENT IS ORDERED, PURCHASED, RELEASED, OR FABRICATED. SHOP DRAWINGS AND SUBMITTALS SHALL INCLUDE PRODUCT INFORMATION FOR ALL EQUIPMENT SPECIFIED OR SCHEDULED ON THE DRAWINGS.

4. SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE

- 5. ALL MECHANICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED ACCORDING TO MANUFACTURERS' RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS USING MANUFACTURER RECOMMENDED ACCESSORIES AND ASSOCIATED MATERIALS.
- 6. ALL EQUIPMENT AND MATERIALS INSTALLED IN AIR PLENUMS SHALL BE COMPLIANT WITH THE REQUIREMENTS FOR PLENUM INSTALLATIONS.
- 7. ALL MECHANICAL EQUIPMENT AND SYSTEMS SHALL BE GUARANTEED FOR A PERIOD OF TWELVE MONTHS AFTER ACCEPTANCE BY OWNER.
- 8. AT SUBSTANTIAL COMPLETION ALL FILTERS IN ALL MECHANICAL EQUIPMENT SHALL BE NEW AND CLEAN AND AN EXTRA NEW SET SHALL BE PROVIDED TO THE OWNER.
- 9. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL MECHANICAL EQUIPMENT, ETC. TO FIT WITHIN THE SPACE ALLOWED BY THE ARCHITECTURAL AND STRUCTURAL CONDITIONS. CUTTING OR OTHERWISE ALTERING ANY STRUCTURAL MEMBERS SHALL NOT BE

PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ARCHITECT.

- 10. LOCATE ALL EQUIPMENT TO PRODUCE UNOBSTRUCTED ACCESS TO EQUIPMENT ACCESS PANELS, CONTROLS.
- 11. PRIOR TO INSTALLATION, THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL TRADES THE LOCATIONS OF AIR CONDITIONING
- 12. AIR CONDITIONING EQUIPMENT INSTALLED OUTDOORS AT GRADE SHALL BE INSTALLED LEVEL ON 4-INCHES TALL 4-INCH THICK REINFORCED CONCRETE PADS THAT EXTEND 6-INCHES BEYOND THE PERIMETER OF THE EQUIPMENT.

ELECTRICAL COORDINATION

EQUIPMENT INSTALLED OUTDOORS.

13. CONTRACTOR SHALL COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL MECHANICAL EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR BEFORE ANY PRODUCT INFORMATION OR SHOP DRAWINGS ARE SUBMITTED AND BEFORE ANY EQUIPMENT IS ORDERED. THE ELECTRICAL CHARACTERISTICS (VOLTAGE, PHASE, OVERLOAD PROTECTION, ETC.) OF THE EQUIPMENT FURNISHED SHALL BE COMPATIBLE WITH THE ELECTRICAL CHARACTERISTICS SHOWN ON THE DRAWINGS. ON SHOP DRAWING SUBMITTALS THE MECHANICAL CONTRACTOR SHALL STATE THAT THE ELECTRICAL CHARACTERISITICS OF ALL EQUIPMENT HAS BEEN COORDINATED WITH THE ELECTRICAL CONTRACT DOCUMENTS AND THE ELECTRICAL CONTRACTOR.

- 14. ALL MECHANICAL EQUIPMENT REQUIRING ELECTRICAL POWER SHALL BE INSTALLED WITH DISCONNECT SWITCHES AND STARTERS WHETHER THEY ARE AN INTEGRAL COMPONENT OF THE MANUFACTURER'S EQUIPMENT OR NOT. COORDINATE SWITCH TYPE (FUSED OR NON-FUSED) WITH EQUIPMENT CHARACTERISTICS, MANUFACTURER'S RECOMMENDATIONS,
- ELECTRICAL DRAWINGS, AND ELECTRICAL CONTRACTOR. 15. ALL REQUIRED CONTROL WIRING FOR HVAC AND PLUMBING (INCLUDING POWER WIRING REQUIRED FOR CONTROL PANELS, ACTUATORS, DEVICES, ETC.) NOT SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE INCLUDED AS PART OF THE MECHANICAL WORK. WIRING, INCLUDING THAT IN HVAC PLENUM SPACES, SHALL BE INSTALLED ACCORDING TO CODE
- 16. UNLESS NOTED OTHERWISE, STARTERS, TRANSFORMERS, CONTROLS, AND CONTROL WIRING REQUIRED FOR ALL MECHANICAL SYSTEMS SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR. SEE ELECTRICAL SPECIFICATIONS FOR WIRING REQUIREMENTS.
- 17. ALL PIPE PENETRATIONS OF FIRE-, SMOKE-, OR FIRE- AND SMOKE-RATED ASSEMBLIES SHALL BE FIRE-STOPPED AS REQUIRED TO PRODUCE A RATED ASSEMBLY. FIRE BARRIER PRODUCTS SHALL BE AS MANUFACTURED BY 3M CO., HILTI INC., OR OTHER APPROVED MANUFACTURER. ACCEPTABLE PRODUCTS ARE HILTI FS-ONE, CP 606, CP648 WRAP STRIP, OR CP680 CAST-IN DEVICE SYSTEMS, OR AS RECOMMENDED BY THE MANUFACTURER FOR A PARTICULAR APPLICATION OR AN EQUIVALENT SYSTEM AS APPROVED BY LOCAL CODE OFFICIALS.
- 18. PIPING SHALL NOT BE SUPPORTED FROM ANY FIRE RATED WALL.

COOLING COIL CONDENSATE

REQUIREMENTS.

- 19. CONDENSATE FROM ALL AIR CONDITIONING EQUIPMENT SHALL BE TRAPPED AND ROUTED TO THE NEAREST FLOOR DRAIN. WHERE INDICATED TO BE PUMPED CONDENSATE MAY BE PUMPED WITH CONTROLS INCLUDED AS REQUIRED BY CODE. DRAIN LINES SHALL BE ROUTED TO AVOID INTERFERENCE WITH PASSAGEWAYS AND MAINTENANCE AND TO AVOID CREATING TRIPPING HAZARDS.
- 20. THE MINIMUM PIPE SIZE FOR CONDENSATE DRAIN LINES SHALL BE 3/4-INCHES.
- 21. THE CONDENSATE COIL DRAIN LINES SHALL BE MADE OF COOPER WITH 1/2 INCH THICK FLEXIBLE ELASTOMERIC WITH 30 MIL WHITE PVC JACKET OVER INSULATION.

REFRIGERANT PIPING

- 22. WHEN THE ACCUMULATED EQUIVALENT LENGTH OF REFRIGERANT LINES BETWEEN PIECES OF EQUIPMENT EXCEEDS THE MANUFACTURER'S RECOMMENDED LENGTHS FOR STANDARD DIAMETER SIZED LINES THEN FURNISH AND INSTALL A MANUFACTURER'S APPROVED REFRIGERANT PIPING DIAGRAM FOR TYPICAL SYSTEMS SHOWING RECOMMENDED PIPE SIZES AND COMPONENTS SUCH AS SUCTION LINE ACCUMULATORS WHEN REQUIRED AND INSTALL REFRIGERANT PIPING AS RECOMMENDED BY THE MANUFACTURER.
- 23. ALL PIPING ABOVE GRADE SHALL BE SUPPORTED BY THE BUILDING STRUCTURE AND SHALL NOT REST ON CEILING TILES OR THE CEILING SUPPORT STRUCTURE. PIPING HUNG FROM JOISTS SHALL BE HUNG FROM THE TOP CHORDS OF THE JOISTS.

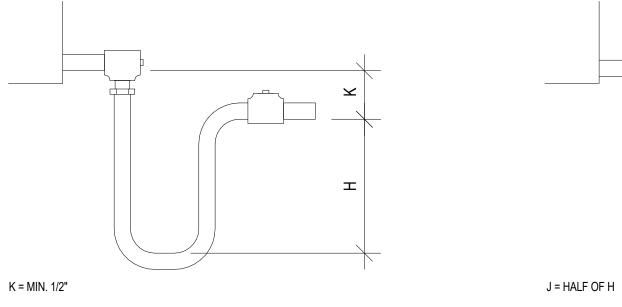
	SPLIT SYSTEM SCHEDULE																
INDOOR UNIT DATA OUTDOOR UNIT DATA																	
		NOM.	EAT	COOLING	HEATING @ 47	HEATING @ 17	BASIS OF	DESIGN		COOLING	COOLING	HEATING @ 47	HEATING @ 17		BASIS OF	DESIGN	REMARKS
MARK	SERVES	CFM	DB/WB	BTU/HR	BTU/HR	BTU/HR	MANUF	MODEL	MARK	BTU/HR	SEER	BTU/HR	BTU/HR	REFRIGERANT	MANUF	MODEL	
AC-1	REFER DRAWINGS	335	80/67	12,000	-	-	MITSUBISHI	PKA-A12HA6	CU-1	12,000	15.2	-	-	R410A	MITSUBISHI	PUY-A12NHA6-BS	1,2,3,4,5,6,7,8
AC-2	REFER DRAWINGS	385	80/67	18,000	-	-	MITSUBISHI	PKA-A18NHA4	CU-2	18,000	15.3	-	-	R410A	MITSUBISHI	PUY-A18NHA4-BS	1,2,3,4,5,6,7,8
ACHP-1	REFER DRAWINGS	705	80/67	12,000	14,000	9,200	MITSUBISHI	PKA-A12HA7	HP-1	12,000	20.8	14,000	9,200	R410A	MITSUBISHI	PUZ-A12NKA7-BS	1,2,3,4,5,6,7,8
			•														

1. DISCONNECT SWITCH FOR INDOOR UNIT AND DISCONNECT SWITCH FOR OUTDOOR UNIT. 4. LOW AMBIENT OPERATION KIT FOR OPERATION TO RUN TO 0 °F 7. INSULATED REFRIGERANT LINE PROVIDED BY MANUFACTURER. 2. CONDENSATE PUMP. 3. WALL MOUNTED T-STAT

5. INDOOR AIR HANDLER POWERED BY OUTDOOR CONDENSING UNIT 8. SEA COAST MODEL FOR OUTDOOR UNIT. 6. SYSTEM CONTROL BY FACTORY PROVIDED CONTROLS

9. PROVIDE MANUFACTURER WALL BRACKET.

ELECTRIC UNIT HEATER SCHEDULE AIRFLOW CAPACITY LOCATION (CFM) MANUFACTURER | MODEL NO REFER TO DWG. **UNIT HEATER** F2F5105N 5.0 400 MARKEL DISCONNECT SWITCH 2. INTEGRAL TAMPER RESISTANT THERMOSTAT

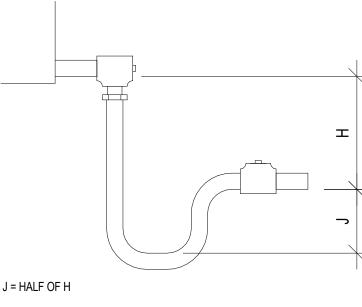


H = 1/2" PLUS MAX. TOTAL STATIC PRESSURE

POSITIVE PRESSURE TRAP

CONDENSATE DRAIN DETAIL

NEGATIVE PRESSURE TRAP



H = 1" PLUS MAX. NEG. STATIC PRESSURE

1. ALLOW SUFFICIENT SPACE BELOW DRAIN PAN FOR TRAP. COORDINATE

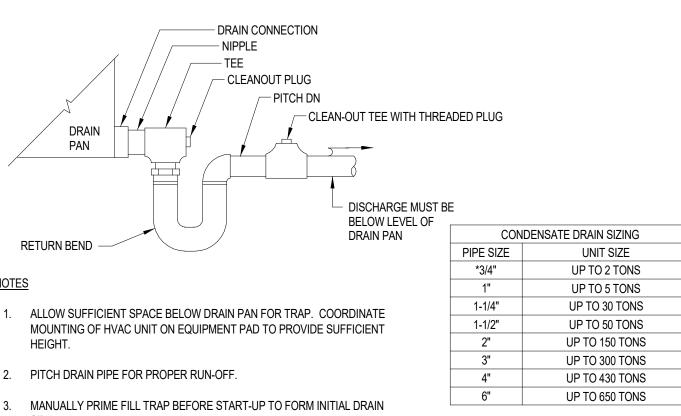
2. PITCH DRAIN PIPE FOR PROPER RUN-OFF.

<u>NOTES</u>

4. SUPPORT DRAIN LINES TO PREVENT SAG AND CONDENSATE OVERFLOW.

5. INSTALL A CLEANOUT TEE AT EACH CHANGE OF DIRECTION GREATER THAN

6. MAXIMUM DISTANCE BETWEEN CLEANOUTS TO BE 50 LINEAR FEET



*MINIMUM CONDENSATE DRAIN PIPE SIZE

M-001

DESIGN: JRS DRAWN: JRS

CN 8112

REVIEW: JNW

AND SCHEDULE

GENERAL NOTES, LEGEND,

UNIVERSITY of NORTH CAROLINA WILMINGTON

PARKING DECK II AND SURFACE

SCO ID NUMBER: 18-19226-01A

CLARKNEXSEN

CLARK NEXSEN LICENSE NUMBER: C-1028

1523 ELIZABETH AVENUE, SUITE 300

13860 Ballantyne Corporate Place

CHARLOTTE, NORTH CAROLINA 28204

PARKING (DESIGN-BUILD)

WILMINGTON, NORTH CAROLINA 28403

SOUTH CAMPUS - 4965 RIEGEL ROAD

601 S COLLEGE ROAD

CODE: 441828

ITEM: 301

CONTRACTOR

DESIGNER

704-377-8800

Suite 140

Charlotte, NC 28277

www.walkerconsultants.com

243 NORTH FRONT STREET

WILMINGTON, NORTH CAROLINA

NC CORPORATE ENGINEERING LICENSE #C-1028

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CIVIL ENGINEER

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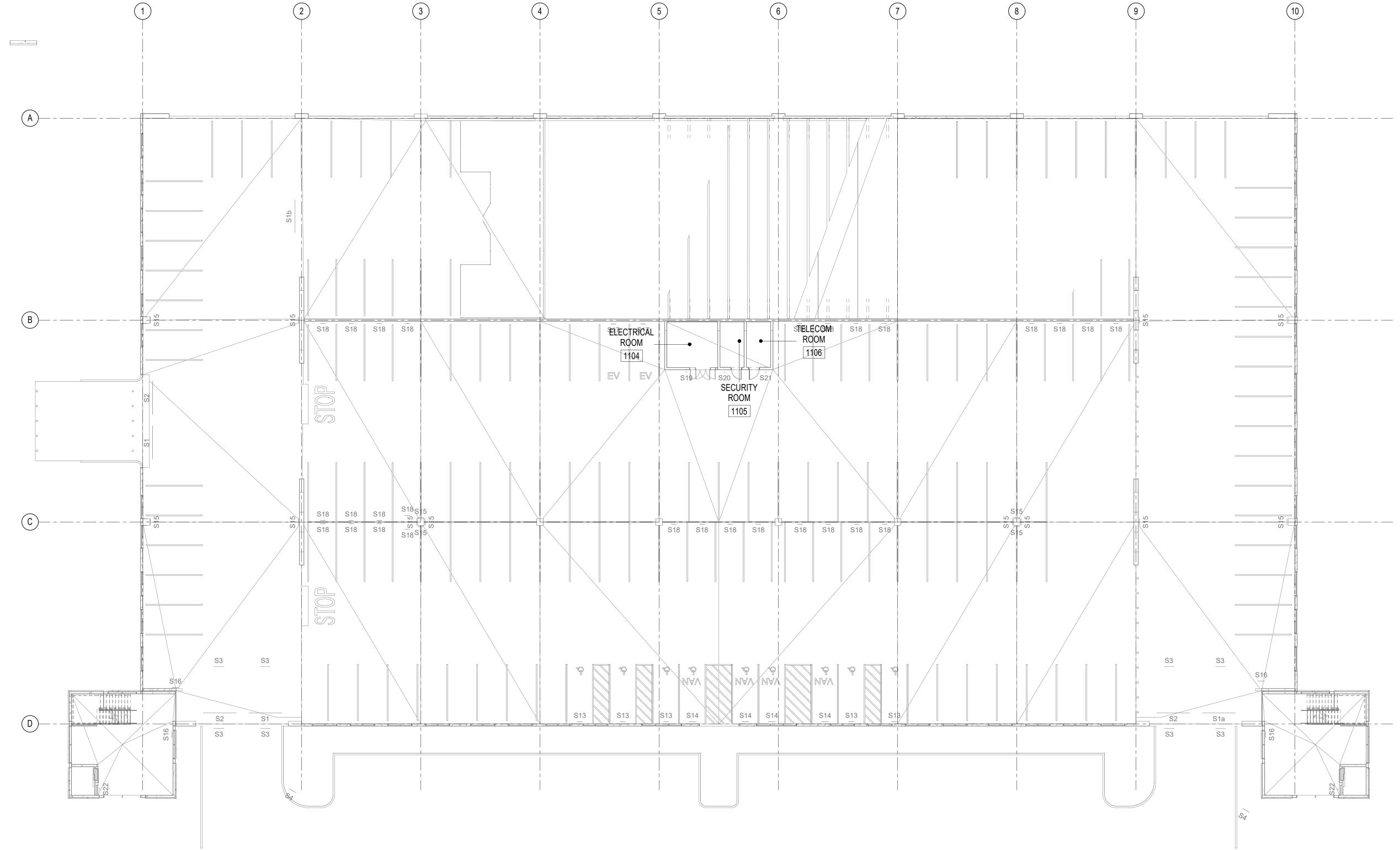
SUBMITTAL

03/29/2019

REVISIONS

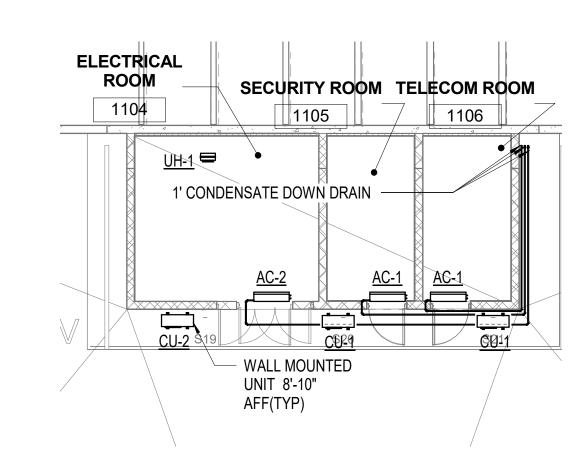
KEY PLAN

DOCUMENTS



FIRST LEVEL PLAN

1/16" = 1'-0"



COOLING SET POINT TO BE NO COOLER THAN 80 F. SUPPLY AIR FROM INDOOR
UNIT TO BE DIRECTED AWAY FROM EQUIPMENT AND ALL HARD SURFACES.

COMMUNICATION AND ELECTRICAL ENLARGED PLANS

1/8" = 1'-0"



PARKING DECK II - SOUTH CAMPUS RIEGEL ROAD

SCO ID NUMBER: 19226 CODE: 441828 ITEM: 301

CONTRACTOR **Balfour Beatty**

Construction

DESIGNER

CLARKNEXSEN 1523 ELIZABETH AVENUE, SUITE 300 CHARLOTTE, NORTH CAROLINA 28204 704.377.8800

CLARK NEXSEN LICENSE NUMBER: C-1028



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SUBMITTAL 03/29/2019

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KEY PLAN

FIRST LEVEL PLAN

MH101

DESIGN: JRS DRAWN: JRS REVIEW: JNW

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S18 S18 S18 S18 | S18 | S18 | S18 | S18 | S18 | | S18 S 5_{S18} S18 S18 S18 S18 | S18 S16

SECOND LEVEL PLAN

1/16" = 1'-0"



PARKING DECK II - SOUTH CAMPUS

SCO ID NUMBER: 19226 CODE: 441828 ITEM: 301

RIEGEL ROAD

ITEM: 301

CONTRACTOR

Balfour BeattyConstruction

DESIGNER

CLARKNEXSEN

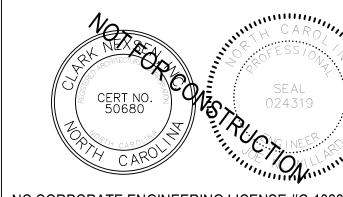
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CHARLOTTE, NORTH CAROLINA 28204
704:377:8800

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KEY PLAN

SECOND LEVEL PLAN

MH102

DESIGN: JRS DRAWN: JRS REVIEW: JNW

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S18 S18 S18 S18 S18 | S18 | S18 | S18 | S18 | S18 | | S18 S18 S18 S18 S 5 5 8 S 18 S 18 S 18 S18 S18 S18

THIRD LEVEL PLAN
NO SCALE

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601 SOUTH COLLEGE ROAD
WILMINGTON, NORTH CAROLINA 28403

PARKING DECK II - SOUTH CAMPUS

SCO ID NUMBER: 19226 CODE: 441828 ITEM: 301

RIEGEL ROAD

ITEM: 301

CONTRACTOR

Balfour Beatty
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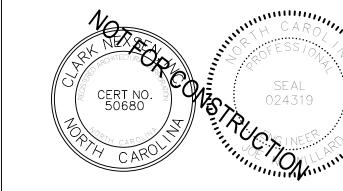
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KEY PLAN

THIRD LEVEL PLAN

MH103

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S18 S18 S18 S18 | S18 | S18 | S18 | S18 S18 S18 S18 S18 S18 S18 S18 S 5_{S18} S18

FOURTH LEVEL PLAN

1/16" = 1'-0"



PARKING DECK II - SOUTH CAMPUS

SCO ID NUMBER: 19226 CODE: 441828 ITEM: 301

RIEGEL ROAD

CONTRACTOR

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Construction

DESIGNER

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KEY PLAN

FOURTH LEVEL PLAN

MH104

DESIGN: JRS
DRAWN: JRS
REVIEW: JNW

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10 ______ `-----' `-----' FIFTH LEVEL PLAN

1/16" = 1'-0" S16 COOLING SET POINT TO BE NO COOLER THAN 80 F. SUPPLY AIR FROM INDOOR UNIT TO BE DIRECTED AWAY FROM ROUTE 1 INCH ROUTE 1 INCH CONDENSATE DOWN EQUIPMENT AND ALL HARD SURFACES. CONDENSATE DOWN TO TO DRAIN. REFER TO DRAIN. REFER TO PLUMBING PLUMBING. WALL MOUNTED ______UNIT 8'-10" AFF ____ WALL MOUNTED UNIT 8'-10" AFF.

3 EAST STAIR TOWER 102

UNIVERSITY of NORTH CAROLINA WILMINGTON 601 SOUTH COLLEGE ROAD WILMINGTON, NORTH CAROLINA 28403

PARKING DECK II - SOUTH CAMPUS

SCO ID NUMBER: 19226 CODE: 441828 ITEM: 301

Construction

RIEGEL ROAD

CONTRACTOR **Balfour Beatty**

DESIGNER

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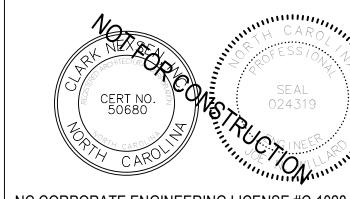
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KEY PLAN

FIFTH LEVEL PLAN

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2 WEST STAIR TOWER 103