

2018 APPENDIX B  
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS  
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)

Name of Project: UPFIT PLAN FOR LIBERTY PLAY TOWN  
 Address: 3211-3213 RAY ROAD, SPRING LAKE, NC Zip Code 28390  
 Proposed Use: ASSEMBLY SPACE FOR INDOOR PLAY  
 Owner or Authorized Agent: JASON WELLS Phone (910) 436-3131 E-Mail Jason@hswellsonrealty.com  
 Owned By:  City/County  Private  State  County HARNETT  State NORTH CAROLINA  
 Code Enforcement Jurisdiction:  City  County HARNETT  State NORTH CAROLINA

CONTACT: GEORGE M. ROSE, P.E.

DESIGNER FIRM NAME LICENSE # TELEPHONE #  
 Architectural N/A N/A N/A N/A  
 Civil COASTAL PLANS ENGINEERING CHRISTOPHER S. LOCKLEAR 20193 910-521-1213 coastalplanseng@gmail.com  
 Electrical N/A N/A N/A N/A  
 Fire Alarm N/A N/A N/A N/A  
 Plumbing N/A N/A N/A N/A  
 Mechanical COASTAL PLANS ENGINEERING CHRISTOPHER S. LOCKLEAR 20193 910-521-1213 coastalplanseng@gmail.com  
 Sprinkler-Standpipe N/A N/A N/A N/A  
 Structural: N/A N/A N/A N/A  
 Precast: N/A N/A N/A N/A  
 Retaining Walls >5' N/A N/A N/A N/A  
 Building GEORGE M. ROSE, P.E. GEORGE M. ROSE 11816 910-471-5622 george@gmrpe.com

2018 NC CODE FOR:  New Construction  1st Time Interior Completion  Shell/Core  Phased Construction - Shell/Core  Renovation

2018 NC EXISTING BUILDING CODE:  Prescriptive  Repair  Chapter 14  
 Alteration:  Level I  Level II  Level III  Change of Use  Historic Property

CONSTRUCTED: 1986 ORIGINAL OCCUPANCY(S) (Ch. 3): BUSINESS  
 RENOVATED: N/A CURRENT OCCUPANCY(S) (Ch. 3): VACANT  
 RISK CATEGORY (Table 1604.5) Current:  I  II  III  IV Proposed:  I  II  III  IV

BASIC BUILDING DATA  
 Construction Type:  I-A  I-B  II-A  II-B  III-A  III-B  IV  V-A  V-B  
 (check all that apply)  
 Sprinklers:  No  Partial  Yes  NFPA 13  NFPA 13R  NFPA 13D  
 Standpipes:  Yes  No  Class:  I  II  III  Wet  Dry  
 Fire District:  No  Yes (Primary) Flood Hazard Area:  No  Yes  
 Special Inspections Required:  No  Yes

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	RENOVATED (SQ FT)	SUB-TOTAL
3th Floor				
2th Floor				
1th Floor				
3rd Floor				
2nd Floor				
Mezzanine				
1st Floor	4,288		2,854	2,854
Basement				
TOTAL	4,288 (ENTIRE BUILDING 3207-3213 RAY ROAD)		2,854	2,854

Primary Occupancy Classification: SELECT ONE

ALLOWABLE AREA

Assembley  A-1  A-2  A-3  A-4  A-5  
 Business  ASSEMBLY LESS THAN 50 PERSONS  
 Educational   
 Factory  F-1 Moderate  F-2 Low  
 Hazardous  H-1 Detonate  H-2 Deflagrate  H-3 Combust  H-4 Health  H-5 HPM  
 Institutional  I-1 CONDITION  I-2  I-3 CONDITION  I-4  I-5  
 Mercantile   
 Residential  R-1  R-2  R-3  R-4  
 Storage  S-1 Moderate  S-2 Low  High-piled  
 Parking Garage  Open  Enclosed  Repair Garage  
 Utility and Miscellaneous

Accessory Occupancy Classification(s): \_\_\_\_\_  
 Incidental Uses (Table 509): \_\_\_\_\_  
 Special Uses (Chapter 4 - List Code Sections): \_\_\_\_\_  
 Special Provisions (Chapter 5 - List Code Sections): \_\_\_\_\_  
 Mixed Occupancy:  No  Yes Separation: 0 Hr. Exception: \_\_\_\_\_  
 Non-Separated Use (508.3)  
 The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.  
 Separated Use (508.4)  
 See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.  

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2.4 AREA	(C) AREA FOR FRONTAGE INCREASE <sup>1,3</sup>	(D) ALLOWABLE AREA PER STORY OR UNLIMITED <sup>2,3</sup>
1	ASSEMBLY A-3	2,854	6,000		

1 Frontage area increases from Section 506.3 are computed thus:  
 a. Perimeter which fronts a public way or open space having 20 feet minimum width = \_\_\_\_\_ (F)  
 b. Total Building Perimeter = \_\_\_\_\_ (P)  
 c. Ratio (F/P) = \_\_\_\_\_ (F/P)  
 d. W = Minimum width of public way = \_\_\_\_\_ (W)  
 e. Percent of frontage increase  $I_f = 100 [(F/P) - 0.25] \times W/30 =$  \_\_\_\_\_ (%)  
 2 Unlimited area applicable under conditions of Section 507.  
 3 Maximum Building Area = total number of stories in the building x D (minimum 3 stories) (506.2).  
 4 The maximum area of open parking garages must comply with Table 406.5.4.  
 5 Frontage increase is based on the un sprinklered area value in Table 506.2.

ALLOWABLE HEIGHT			
	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55'	20'	
Building Height in Stories (Table 504.4)	2	1	

Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.  
 1 The maximum height of air traffic control towers must comply with Table 412.3.1.  
 2 The maximum height of open parking garages must comply with Table 406.5.4.

PERCENTAGE OF WALL OPENINGS CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

FIRE PROTECTION REQUIREMENTS						
BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	REQ'D	RATING PROVIDED (w/ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses						
Bearing walls Exterior						
North						
East						
West						
South						
Interior						
Nonbearing walls and Partitions						
Exterior walls						
North						
East						
West						
South						
Interior walls and partitions						
Floor construction including supporting beams and joists						
Roof construction including supporting beams and joists						
Roof construction including supporting beams and joists						
Roof ceiling Assembly						
Column supporting roof						
Shafts Enclosures - Exit						
Shafts Enclosures - Other						
Corridor Separation						
Occupancy/Fire Barrier Separation	2		G1		U419	
Party/Fire Wall Separation	2		G1		U419	
Smoke Barrier Separation						
Tenant/Dwelling Unit/Sleeping Unit Sep						
Incidental Use Separation						

\* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENINGS CALCULATIONS			
FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)

LIFE SAFETY SYSTEM REQUIREMENTS

Life Safety Plan Sheet #: G1 (2/G1)

Fire and/or smoke rated wall locations (Chapter 7)  
 Assumed and real property line locations (if not on the site plan)  
 Exterior wall opening area with respect to distance to assumed property lines (705.8)  
 Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)  
 Occupant loads for each area  
 Exit access travel distance (1017)  
 Common path of travel distances (1006.2.1 & 2006.3.2(1))  
 Dead end lengths (1020.4)  
 Clear exit widths for each exit door  
 Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)  
 Actual occupant load for each exit door  
 A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation and supporting construction for a fire barrier/fire partition/smoke barrier.  
 Location of doors with panic hardware (1010.1.10)  
 Location of doors with electromagnetic egress locks (1010.1.9.9)  
 Location of emergency escape windows (1030)  
 The square footage of each fire area (202)  
 The square footage of each smoke compartment for Occupancy Classification 1-2 (407.5)  
 Note any code exceptions or table notes that may have been utilized regarding the items above

ENERGY SUMMARY

ENERGY REQUIREMENTS:  
 The following data shall be considered minimum and any special attribute required to meet the North Carolina Energy Conservation Code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy costs for the standard reference design vs. annual energy cost for the proposed design.  
 Existing building envelope complies with code:  No  Yes (the remainder of this section is not applicable)  
 Existing building:  No  Yes (Provide Code or Statute reference)  
 Existing building: No Yes (Provide Code or Statute reference)  
 Climate Zone:  3A  4A  5A  
 Method of Compliance: Energy Code  Performance  Prescriptive ASHRAE 90.1  Performance  Prescriptive (if "Other" specify source here) \_\_\_\_\_  
 THERMAL ENVELOPE (Prescriptive method only)  
 Roof/Ceiling Assembly (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Skylights in each assembly: \_\_\_\_\_  
 U-Value of skylight: \_\_\_\_\_  
 Total square footage of skylights in each assembly: \_\_\_\_\_  
 Exterior Walls (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Openings (windows or doors with glazing)  
 U-Value of assembly: \_\_\_\_\_  
 Solar heat gain coefficient: \_\_\_\_\_  
 U-Value of assembly: \_\_\_\_\_  
 Projection factor: \_\_\_\_\_  
 Door R-Values: \_\_\_\_\_  
 Walls below grade (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Floors over unconditioned space (each assembly)  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Floor slab on grade  
 Description of assembly: \_\_\_\_\_  
 U-Value of total assembly: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Horizontal/Vertical requirement: \_\_\_\_\_  
 R-Value of insulation: \_\_\_\_\_  
 Slab Heated: \_\_\_\_\_

ACCESSIBLE PARKING (SECTION 1106)					
LOT OR PARKING AREA	TOTAL PARKING SPACES		ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESSIBLE AISLE	
EXISTING AS REQ'D					
TOTAL					

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1)												
SPACE	EXISTING	WATER CLOSETS			URINALS			LAVATORIES		SHOWERS/TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX	MALE	FEMALE	UNISEX	REGULAR	ACCESSIBLE			
NEW		0	0	0	0	0	0	0	0	0	0	0
REQUIRED		1	2	0	0	1	1	0	0	0	0	0

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, SCO, DPI, DHHS, ICC, etc., describe below)



VICINITY MAP  
NO SCALE

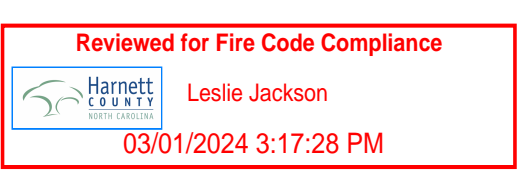
STRUCTURAL DESIGN (PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:  
 Importance Factors: Snow (I<sub>s</sub>) 1.0  
 Snow (I<sub>e</sub>) 1.0  
 Live Loads: Roof 20 psf  
 Mezzanine \_\_\_\_\_ psf  
 Floor 100 psf  
 Ground Snow Load: 10 psf  
 Wind Load: Ultimate Wind Speed 120 mph (ASCE-7)  
 Exposure Category \_\_\_\_\_  
 SEISMIC DESIGN CATEGORY:  A  B  C  D  
 Provide the following Seismic Design Parameters:  
 Risk Category (Table 1604.5)  I  II  III  IV  
 Spectral Response Acceleration  $S_s =$  \_\_\_\_\_ %g  $S_1 =$  \_\_\_\_\_ %g  
 Site Classification (ASCE 7)  A  B  C  D  
 Data Source:  Field Test  Presumptive  Historical Data  
 Basic structural system  Bearing Wall  Dual w/Special Moment Frame  
 Building Frame  Dual w/Intermediate R/C or Special Steel  
 Moment Frame  Inverted Pendulum  
 Simplified  Equivalent Lateral Force  Dynamic  
 Analysis Procedure:  Architectural, Mechanical, Components anchored?  Yes  No  
 LATERAL DESIGN CONTROL: Earthquake  Wind   
 SOIL BEARING CAPACITIES:  
 Field Test (provide copy of test report) \_\_\_\_\_ psf  
 Presumptive Bearing Capacity \_\_\_\_\_ psf  
 Pile size, type, and capacity \_\_\_\_\_ psf

SHELL VARIABLE FORM (for all spaces - see plan)  
 (THIS SECTION REQUIRED FOR ALL SHELL ALTERATIONS TO SHELL AND INTERIOR COMPLETION PROJECTS)  
 Check each applicable line to match scope of work. Edit as necessary to provide clear detail of installation.  
 Mechanical  
 No work  
 Equipment set with without power  
 Trunk line installed with without outlets  
 Gas Line  
 Install complete operational system  
 Other \_\_\_\_\_  
 Plumbing  
 No work  
 Install water service and sewer  
 Install building drain and or water distribution main with without branches  
 Install complete plumbing system  
 Other  ROUGH-INS ARE INCOMPLETE, ADD'L IN-SLAB WORK IS REQUIRED. WATER SERVICE IS EXISTING (PRESENTLY INSTALLED).  
 Sprinkler  
 Install complete sprinkler system  
 Building  
 Install slab  partial complete  
 Install demising walls  
 Install interior partition  partial complete  
 Install Ceilings  
 White box (additional interior completion permits are required for Certificate of Occupancy and power)  
 Other \_\_\_\_\_  
 Electrical  
 House panel  
 Service laterals to meter centers/panels located on buildings  
 Demise wall and ceilings only  
 Conduit, duct, raceway in slab  
 Power and lighting circuits to "J" Box  
 Install light fixtures  
 Install Heat/A/C Elevator Generator Parking lot lighting  
 Install complete system  
 Other  SUITE PANEL AND SERVICE ARE EXISTING (PRESENTLY INSTALLED).  
 Please provide full information on any alternate methods and means incorporated into the design of this project. Provide specific details and incorporate into plan submittal any supporting documents or agreement

SPECIAL INSTRUCTIONS (CHAPTER 17)  
 SPECIAL INSPECTIONS SHALL BE CONDUCTED ON ALL PROJECTS THAT FALL WITHIN BUILDING CATEGORIES AND/OR CONTAIN ELEMENTS SUBJECT TO SPECIAL INSPECTIONS AS PRESCRIBED BY REVISED SECTION 1704.  
 To schedule a required pre-construction meeting with the City of Fayetteville, please call Doug Maples at (910) 433-1703. The main line number for the Development Services Center is (910) 433-1701.  
 List whom will inspect the required special inspections:  
 Fabricator of load bearing components \_\_\_\_\_  
 Soil tests \_\_\_\_\_  
 Concrete, caissons, piles, piers, pre-cast \_\_\_\_\_  
 Post tension concrete \_\_\_\_\_  
 Modular construction \_\_\_\_\_  
 Steel and connections, welds, bolts, anchors \_\_\_\_\_  
 Fire spray tests \_\_\_\_\_  
 Smoke control \_\_\_\_\_  
 Seismic, wind designs, Quality Assurance \_\_\_\_\_  
 Retaining walls \_\_\_\_\_  
 Masonry \_\_\_\_\_  
 Wood \_\_\_\_\_  
 Alternate Methods \_\_\_\_\_  
 EIFS \_\_\_\_\_  
 Other (describe) \_\_\_\_\_  
 Other (describe) \_\_\_\_\_  
 Owner or agent \_\_\_\_\_

SPECIAL APPROVALS:  
 Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, ICC, etc., describe below)  
 NONE



HARNETT COUNTY  
 2018 APPENDIX B  
 BUILDING CODE SUMMARY  
 for:  
 INTERIOR RENOVATIONS PLAN  
**LIBERTY PLAY TOWN**  
 3211-3213 RAY ROAD  
 SPRING LAKE, NORTH CAROLINA  
 28390



BC





Coastal Plains Engineering, P.A.

License No. C-2009

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LIBERTY PLAY TOWN

3211-3213 RAY ROAD, SPRING LAKE, NC

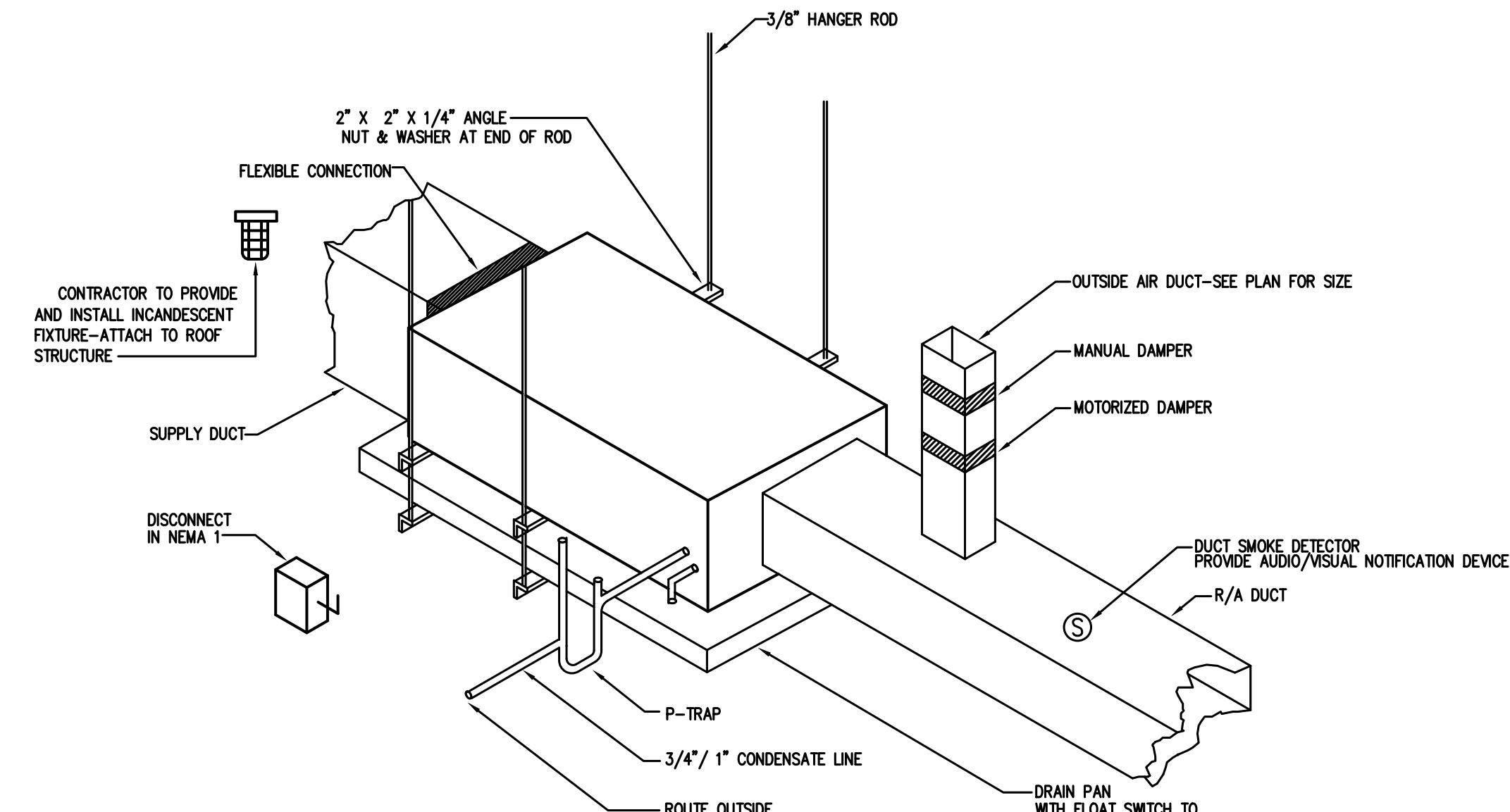
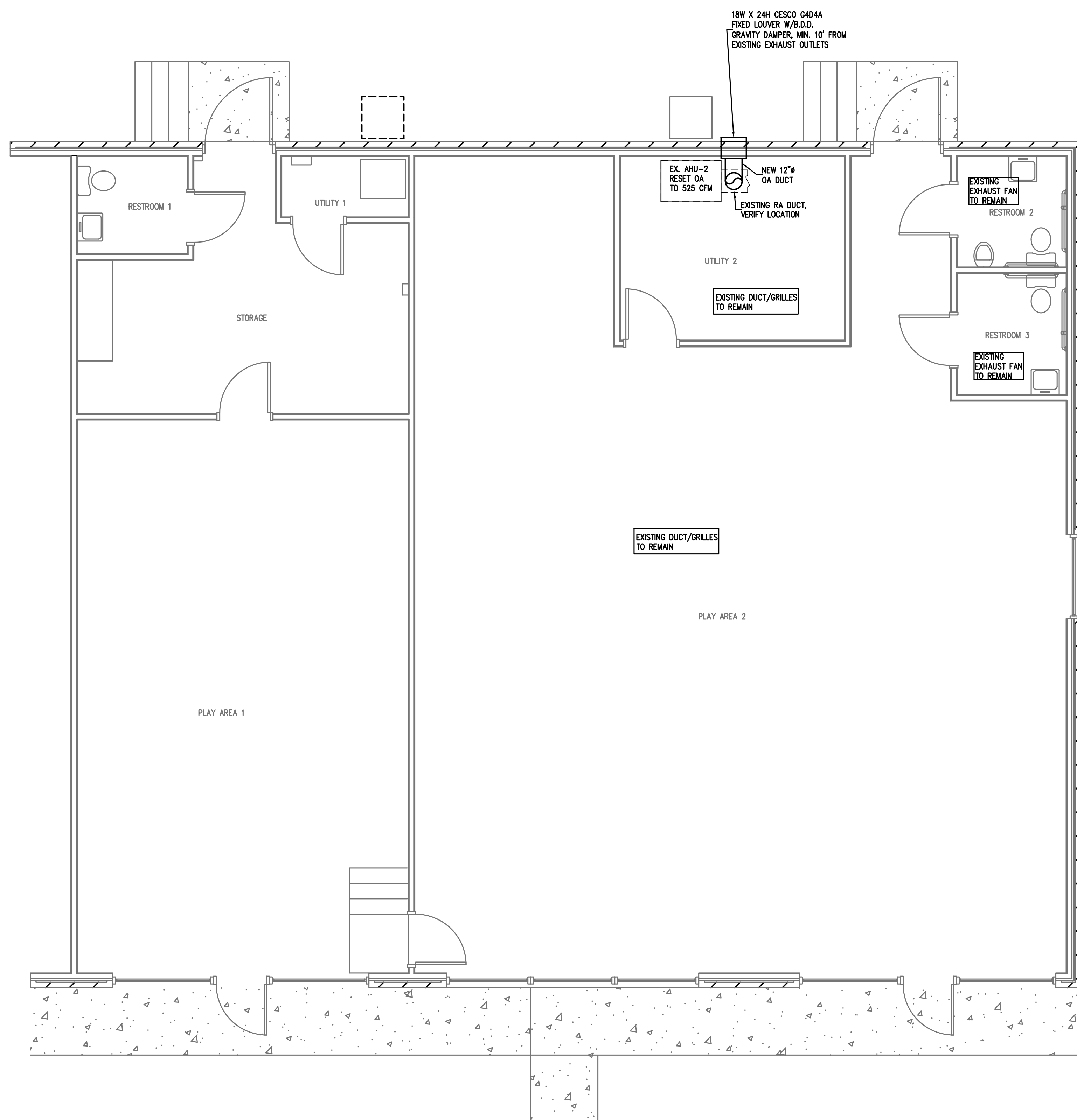
DRAWINGS AND THE DESIGN ARE THE PROPERTY OF THE ENGINEER. WHETHER THE PROJECT FOR WHICH THEY ARE PREPARED IS EXECUTED OR NOT, THE DRAWINGS SHALL NOT BE USED BY THE PROJECT OWNER OR ANYONE ELSE FOR ANY OTHER PROJECT.

ADA AND LEGAL DISCLAIMER  
 THIS DOCUMENT IS INTENDED TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA). ARCHITECTS AND ENGINEERS ARE NOT LICENSED TO INTERPRET LAWS OR GIVE ADVICE CONCERNING LAWS OR LEGAL MATTERS. THE OWNER SHOULD HAVE THIS DOCUMENT REVIEWED BY HIS ATTORNEY TO DETERMINE IF IT COMPLES ADA AND OTHER LAWS.

PROJECT NO: 2023-178  
 DRAWN BY: SL  
 REVISIONS:

SHEET NO:

M1



ALL WORK SHALL BE IN ACCORDANCE WITH THE 2018 NC MECHANICAL CODE.

ALL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL IN ACCORDANCE WITH ASHRAE & SMACNA. DUCT SIZES SHOWN ARE NET FREE AREA REQUIRED. ALL SUPPLY AND RETURN DUCTS AND FLEX SHALL BE INSULATED WITH MIN. R-8.0 INSULATION UNLESS OTHERWISE NOTED IN THE DRAWING.

ALL DUCTS SHALL BE AIR TIGHT, RIGID AND FREE FROM VIBRATION AND NOISE. ALL LAP JOINTS SHALL BE IN THE DIRECTION OF FLOW. VOLUME OR SPLITTER DAMPERS SHALL BE INSTALLED WHERE NECESSARY TO GUIDE AND CONTROL THE AIR FLOW. PROVIDE SHEET METAL SLEEVES AND COLLARS WHERE DUCTS PASS THROUGH WALLS.

STRUCTURAL MEMBERS OF THE BUILDING SHALL NOT BE CUT IN ANY MANNER FOR THE INSTALLATION OF ANY EQUIPMENT UNLESS PRIOR APPROVAL IS OBTAINED FROM THE ARCHITECT.

MECHANICAL CONTRACTOR TO CONFIRM BREAKER/DISCONNECT SIZES OF HIS EQUIPMENT WITH THE ELECTRICAL CONTRACTOR.

FURNISH AND INSTALL A DUCT MOUNTED SMOKE DETECTOR IN THE RETURN DUCT OF THE A/C UNIT IN ACCORDANCE WITH 2018 NC MECHANICAL CODE. THE DETECTOR SHALL BE WIRED TO SHUT DOWN THE FAN IN THE EVENT THE DETECTOR IS ACTIVATED. THE MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL THE DUCT DETECTOR AND RUN THE NECESSARY CONTROL WIRING FROM THE DETECTOR TO HIS EQUIPMENT. SMOKE DETECTORS ARE ONLY REQUIRED FOR UNITS SUPPLYING 2000 CFM OR MORE.

MECHANICAL CONTRACTOR SHALL PROVIDE A TEST AND BALANCE REPORT. SYSTEM COMPLIANCE STATEMENT REQUIRES A WRITTEN T&B REPORT. FINAL PROJECT SIGNOFF WILL BE DENIED WITHOUT THIS REPORT.

MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATIONS AND ROUTING OF ALL DUCTWORK WITH OTHER TRADES TO AVOID CONFLICTS.

ALL EQUIPMENT MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED TO BE FREE OF DEFECTS FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF THE WORK OR IN ACCORDANCE WITH THE PARTICULAR MANUFACTURER'S STANDARD GUARANTEE, IF LONGER. ANY FAULTY MATERIAL OR WORKMANSHIP OR FAILURE OF ANY PART OF THE SYSTEM DURING NORMAL OPERATIONS UNDER THIS GUARANTEE SHALL BE CORRECTED WITHOUT COST TO THE OWNER.

ALL THERMOSTATS SHALL BE OF A PROGRAMMABLE TYPE.

BUILDING CONTRACTOR SHALL PROVIDE PERMANENT ACCESS TO ROOF STRUCTURE FOR ACCESS TO MECHANICAL EQUIPMENT WHEN ROOF STRUCTURE IS GREATER THAN 16'-0" HIGH.

**2 HVAC NOTES**  
 M1 N.T.S.

**1 MECHANICAL PLAN**  
 M1 1/4"=1'

OUTSIDE AIR CALCULATION -NC 2018 MECHANICAL CODE (TABLE 403.3.1.1)  $V_{bz} = R_p P_z + R_a A_z$

OCCUPANCY TYPE:	SF (Az)	# OF OCCUPANTS PER 1000 SF	# OF OCCUPANTS (Pz)	O.A. CFM PER PERSON (Rp)	O.A. CFM PER SqFt (Ra)	O.A. CFM REQUIRED (Vbz)	EXHAUST CFM REQUIRED
PLAY AREA 2	1624	0	0.0	0	0.3	487	
UTILITY 2	146	0	0.0	0	0.12	18	
EX. AHU-2 RESTROOM 2	43	0	0.0	0	0	0	140
RESTROOM 3	47	0	0.0	0	0	0	70
<b>TOTAL CFM REQUIRED</b>						<b>505</b>	<b>210</b>
<b>TOTAL CFM FURNISHED</b>						<b>525</b>	<b>210</b>



CONTRACTOR SHALL COORDINATE WITH LOCAL UTILITY FOR SERVICE. A COMPLETE AND WORKING SYSTEM IS REQUIRED FOR COMPLIANCE WITH THESE DOCUMENTS. DETERMINE THE POINT OF CONNECTION TO THE UTILITY WITH THE UTILITY REPRESENTATIVE AND PROVIDE ACCORDINGLY FOR A COMPLETE WORKING SYSTEM.

WIRE AND CABLE SHALL BE INSULATED, TYPE THHN OR THHN, 600 VOLTS, WITH COPPER CONDUCTORS. CONDUCTOR SIZES NO. 8 AWG AND LARGER MAY BE STRANDED. CONDUCTORS SIZES NO. 10 AWG AND SMALLER MAY BE SOLID OR STRANDED. NO ROMEX PERMITTED.

EMT SHALL BE GALVANIZED STEEL TUBING, 1/2-INCH MINIMUM SIZE, EQUAL TO ELECTRUNITE BRAND OR APPROVED AND USED ONLY WITH HEXAGONAL ALL STEEL COMPRESSION FITTINGS.

PLASTIC CONDUIT SHALL BE RIGID, 3/4-INCH MINIMUM NON-METALLIC, HEAVY DUTY, HIGH IMPACT, POLYVINYLCHLORIDE (PVC), TYPE I WILL BE USED FOR CONCRETE ENCASEMENT. FITTINGS SHALL BE THE SAME MATERIALS AND MANUFACTURER AS THE PLASTIC CONDUIT.

FLEXIBLE METAL CONDUIT SHALL BE 1/2-INCH MINIMUM SINGLE STRIP, STEEL, HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, MAXIMUM LENGTH 72 INCHES FOR LIGHTING AND 36" FOR MOTORS. FLEXIBLE METAL CONDUIT SHALL BE LIQUDTIGHT OR WATERTIGHT WITH PVC JACKET WHERE USED IN DAMP, WET OR OUTSIDE AREAS, AND LIQUDTIGHT OR WATERTIGHT CONNECTORS SHALL BE USED.

NO RECEPTACLES OR TEL. OUTLETS TO BE MOUNTED BACK TO BACK, KEEP AT LEAST 2 INCHES BETWEEN RECEPTACLES AND TEL. OUTLETS.

ALL CONDUCTOR SHALL BE COPPER WITH A MINIMUM SIZE OF #12 AWG EXCEPT FOR FIRE ALARM. THESE CONDUCTORS SHOULD COMPLY WITH NFPA.

CONTRACTOR SHALL ALIGN FIXTURES, SMOKE DETECTORS, CEILING DIFFUSERS ETC. AS REQUIRED TO PROVIDE A UNIFORM PRESENTATION. AT NO TIME WILL AN IONIZATION DETECTOR BE LOCATED WITHIN 3'-0" OF A SUPPLY OR RETURN AIR GRILLE.

CIRCUIT BREAKERS AND WIRE ARE SIZED FOR SPECIFIC EQUIPMENT. BEFORE ORDERING WIRE, BREAKERS AND CONDUIT FOR THIS PROJECT THE CONTRACTOR SHALL COORDINATE WITH THE OTHER CONTRACTORS ON THE JOB AND VERIFY THE ELECTRICAL DATA FOR THE EQUIPMENT WHICH WILL ACTUALLY BE INSTALLED, RECOMPUTING WIRE AND BREAKER SIZES IF REQUIRED BY THE NEC.

ALL CONDUIT TERMINATING IN THE CEILING CAVITIES IS TO BE LABELED.

ALL CONDUIT SHALL BE COLOR CODED WITH 1/2" WIDE TAPE, 10'-0" ON CENTER IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE.

THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT AND OWNER, PRIOR TO INSTALLATION, FOR USE WITH ACTUAL EQUIPMENT.

EACH CONTRACTOR WILL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER/ARCHITECT. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER/ARCHITECT AT THE CONTRACTORS EXPENSE.

THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS.

THE CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THIS PROJECT PRIOR TO THE INSTALLATION OF HIS EQUIPMENT, SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND ALLOW FOR OPTIMUM WORKING SPACE AND MAINTENANCE.

ALL FUSES DISCONNECT SWITCHES AND BREAKER SIZES SHOWN FOR MECHANICAL EQUIPMENT SHALL BE VERIFIED BEFORE PURCHASE AND INSTALLATION OF SAID EQUIPMENT WITH THE EQUIPMENT SUPPLIER AND MECHANICAL CONTRACTOR.

WHERE EQUIPMENT PENETRATES EXTERIOR WALL OR ROOF THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ARCHITECT/ENGINEER.

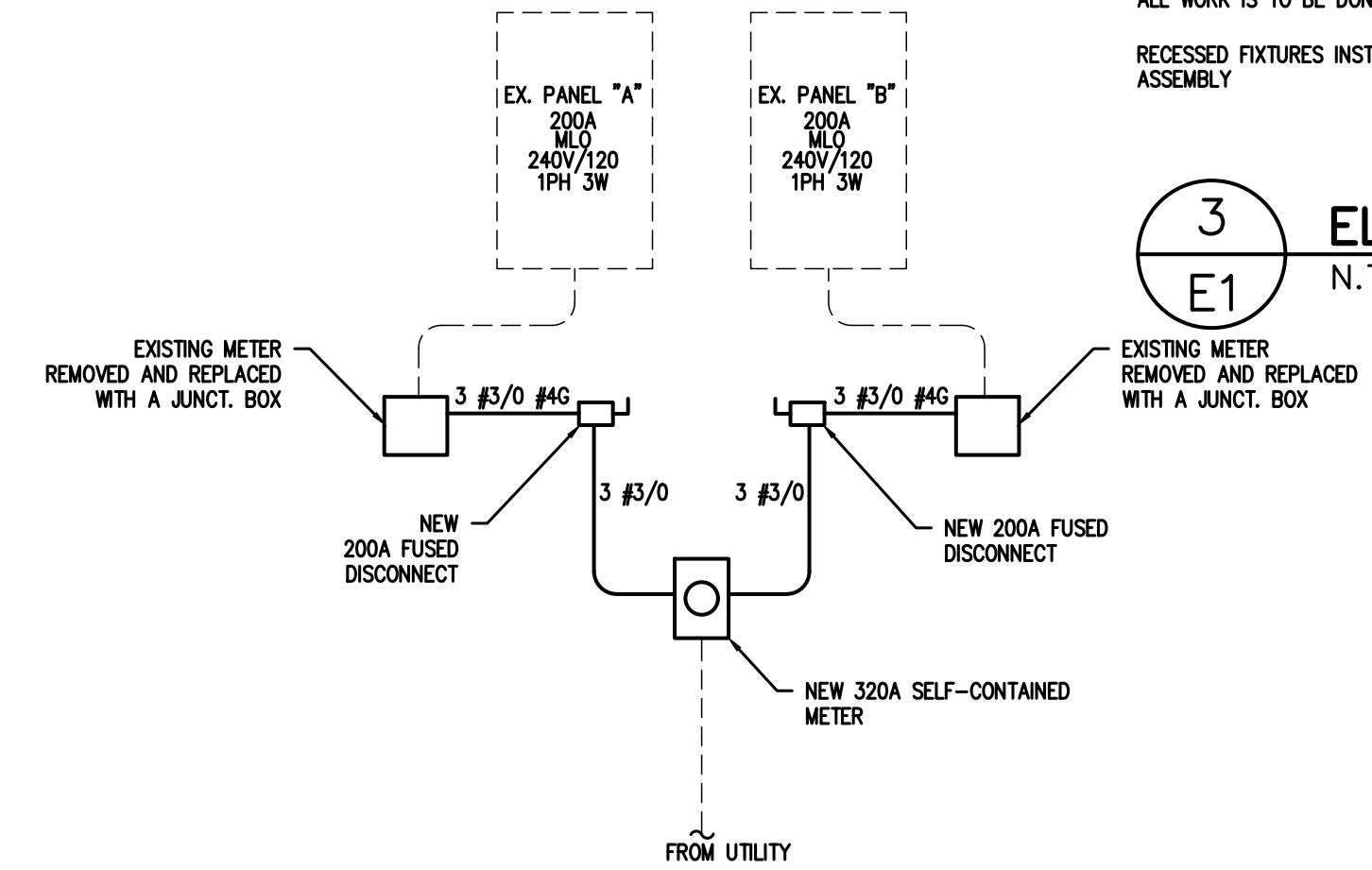
ALL WORK IS TO BE DONE IN STRICT COMPLIANCE WITH THE LATEST VERSION OF THE NEC AND APPLICABLE STATE CODES

RECESSED FIXTURES INSTALLED IN RATED ASSEMBLIES SHALL BE INSTALLED WITH AN ENCLOSURE SO AS TO MAINTAIN THE RATING OF ASSEMBLY

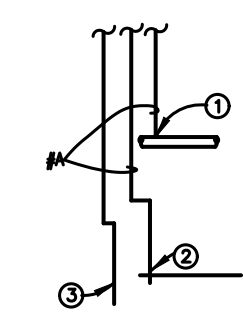
**3 ELECTRICAL NOTES**  
N.T.S.

EXISTING METER REMOVED AND REPLACED WITH A JUNCT. BOX

EXISTING METER REMOVED AND REPLACED WITH A JUNCT. BOX



**2 ELECTRICAL RISER**  
N.T.S.



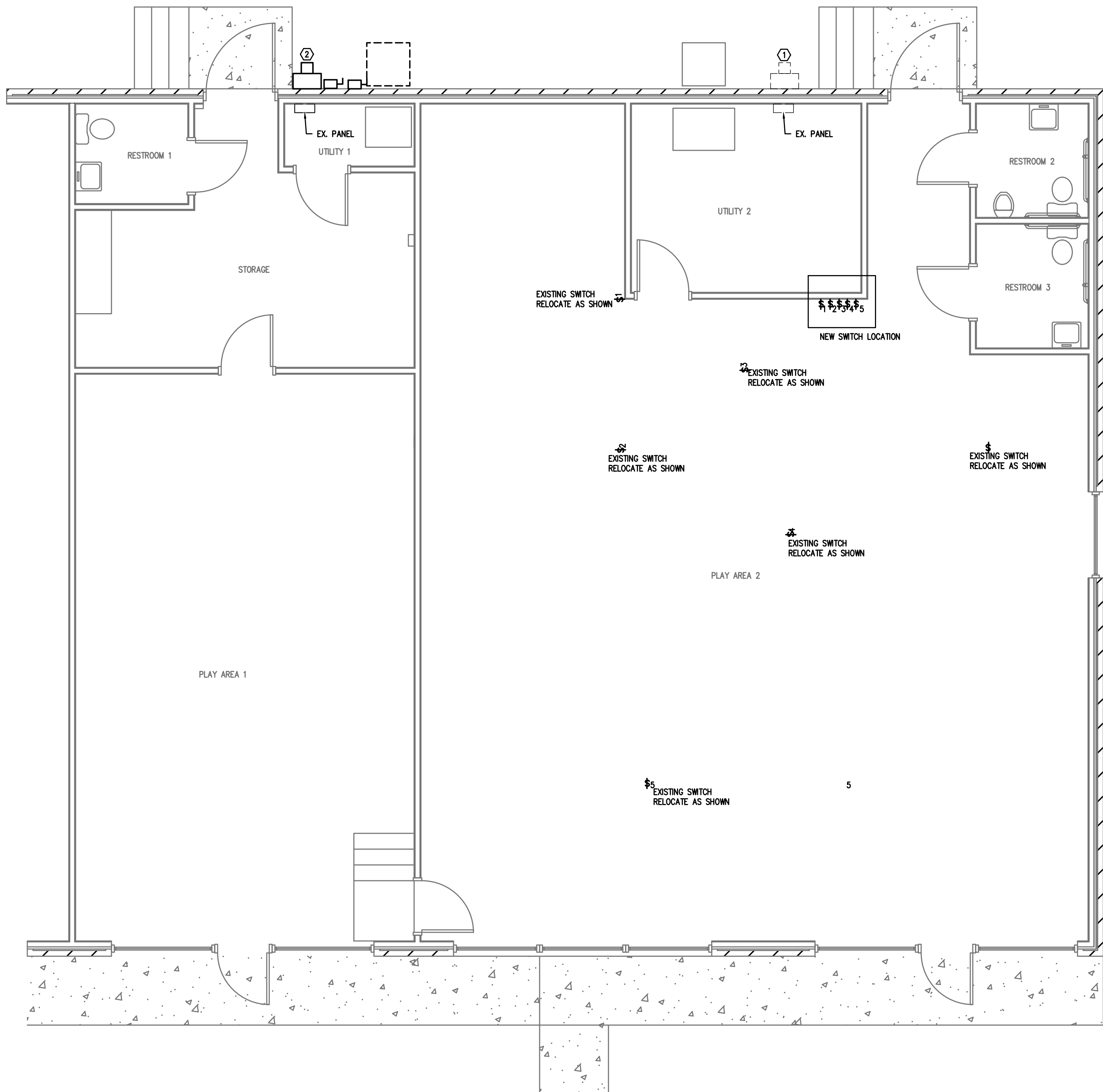
TYPICAL GROUNDING

**GROUNDING ELECTRODE DETAILS**

GROUNDING ELECTRODE CONDUCTORS SHALL BE #4 BARE COPPER. OTHER MATERIAL AND INSTALLATION PER NEC

- ① CONNECT TO METALIC WATER PIPE AS REQ'D.
- ② #4 COPPER GROUND PLACED TO BLDG STEEL
- ③ 3/4"x10' LONG COPPER CLAD GROUNDING ROD W/ #6 COPPER GROUND.

A=#4 CU Abb



**1 POWER PLAN**  
1/4"-1'

- ① EXISTING METER TO BE REMOVED
- ② NEW 320 AMP SELF-CONTAINED METER AND NEW DISCONNECTS

**Coastal Plains Engineering, P.A.**  
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**LIBERTY PLAY TOWN**  
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PROJECT NO: 2023-179  
 DRAWN BY: SLL  
 REVISIONS:

SHEET NO:  
**E1**