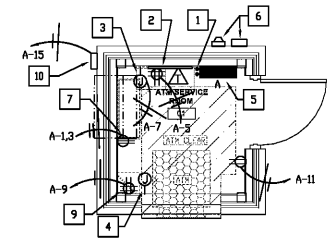


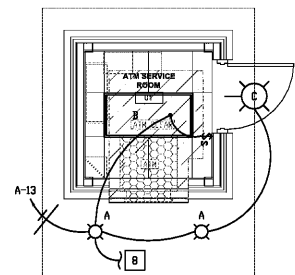
WALL TYPES AND RATINGS LEGEND

REFER TO ARCHITECTURAL SHEETS FOR MORE INFORMATION ON RATINGS AND ADDITIONAL RATED CONSTRUCTIONS INCLUDING COLUMNS WHERE APPLICABLE. PROTECT ALL RATED CONSTRUCTIONS AS REQUIRED.

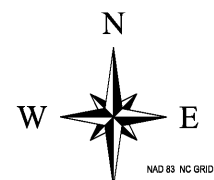
---	NEW WALL TO BE CONSTRUCTED
-----	----------------------------



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



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



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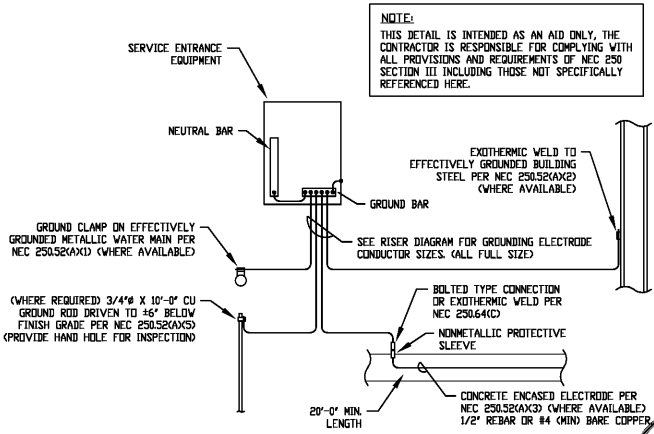
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PLAN SHOWN IS TYPICAL FOR TWO ATM KIOSKS ON THIS PROJECT SITE. SEE SITE PLANS FOR LOCATIONS AND ORIENTATIONS.



1 SERVICE GROUND DETAIL
SCALE: NONE

PANEL SCHEDULE NOTES (FOR ALL PANELS):

- VALUES FOR DEMAND LOADS INCLUDE ALL CODE FACTORS SUCH AS 125% FOR CONTINUOUS LOADS, 125% LARGEST MOTOR, ETC.
- BREAKER SIZES SHOWN FOR NEW EQUIPMENT IN PANEL SCHEDULES ARE FOR REFERENCE ONLY. SEE EQUIPMENT CONNECTION SCHEDULES FOR ADDITIONAL INFORMATION. WHERE BREAKER / FUSE SIZE BETWEEN SCHEDULES CONFLICT, THE EQUIPMENT CONNECTION SCHEDULE SHALL TAKE PRECEDENCE.
- CIRCUIT BREAKERS USED FOR HVAC EQUIPMENT SHALL BE "HACR" TYPE.
- ALL PANEL DIRECTORIES SHALL BE COMPLETED IN ACCORDANCE WITH NEC 408.4.
- CONTRACTOR SHALL PROVIDE MULTIPLE BREAKERS INSTEAD OF ALL SINGLE POLE BREAKERS SHOWN WHEN MULTIPLE BRANCH CIRCUITS ARE INSTALLED PER NEC 240.7.
- CONTRACTOR SHALL LABEL ALL BREAKERS FEEDING EMERGENCY AND LIGHTING CIRCUITS (78.10(A)).
- TRIP AND ARC FLASH HAZARD WARNING LABELS AS REQUIRED ON ALL PANELS DIRECTORIES BY THE WORK. COMPLY WITH NEC 110.16.
- CONTRACTOR SHALL PROVIDE IDENTIFICATION FOR NEW FEEDERS AND ANY NEW BRANCH CIRCUITS PER NEC 200.6, 210.5, AND 215.1E. BREAKERS INDICATED AS (L) SHALL HAVE A BREAKER LOCK PROVIDED, I.E. 20(A)(3) SHALL BE A 20 AMP SINGLE POLE BREAKER WITH LOCK. BREAKER LOCK SHALL BE ACCESSIBLE FROM OUTSIDE OF PANEL AND SHALL NOT REQUIRE THE REMOVAL OF PANEL COVER IN ORDER TO RESET THE BREAKER.
- WHERE CIRCUIT BREAKERS OR FUSES ARE NOTED TO BE SERIES RATED, THE EQUIPMENT SHALL BE MARKED PER NEC 110.22 AS APPLICABLE. FOR TESTED SERIES COMBINATION SYSTEMS, THE MARKING SHALL STATE THE FOLLOWING "CAUTION - SERIES COMBINATION SYSTEM RATED _____ AMPERES. IDENTIFIED REPLACEMENT COMPONENTS REQUIRED" FOR ENGINEERED SERIES COMBINATION SYSTEMS, SEE NEC 110.22(D) FOR MARKING LANGUAGE.

Panel A*

DESCRIPTION	AMPS	BREAKER	IN	OUT	SPACE	LOAD SERVED
EMERGENCY	10.7	20V	1	2	SPACE	SPACE
TELECOM	0.27	3	6	4	SPACE	SPACE
PROTECTIVE	0.28	100V	1	0	SPACE	SPACE
CHANGING	0.4	20V	7	6	SPACE	SPACE
PROTECTIVE	0.2	20V	9	2	SPACE	SPACE
TELECOM	0.27	20V	11	8	SPACE	SPACE
TELECOM	0.2	20V	13	14	SPACE	SPACE
TELECOM	0.2	20V	15	16	SPACE	SPACE
SPACE	SPACE	SPACE	17	18	SPACE	SPACE
SPACE	SPACE	SPACE	19	20	SPACE	SPACE
SPACE	SPACE	SPACE	21	22	SPACE	SPACE
SPACE	SPACE	SPACE	23	24	SPACE	SPACE
SPACE	SPACE	SPACE	25	26	SPACE	SPACE
SPACE	SPACE	SPACE	27	28	SPACE	SPACE
SPACE	SPACE	SPACE	29	30	SPACE	SPACE

Estimated Load Summary:
 Voltage: 120V
 Line-to-Line: 208V
 Line-to-Neutral: 120V
 Total Panel Load: 4.5 kVA
 21.8 Amps

NOTES

- CONNECT WALLPACKS OR OTHER NORMALLY OFF EMERGENCY LIGHTS, EXIT LIGHTS AND NIGHT LIGHTS AHEAD OF LOCAL SWITCHES, RELAYS, AND MOTION SENSOR POWER PACKS (TOTAL FIXTURE UNSWITCHED). WHERE NOT INDICATED AS A NIGHT LIGHT, FIXTURES WITH EMERGENCY BATTERIES SHALL BE CONNECTED WITH THE BATTERY AHEAD OF SWITCH SO THAT EMERGENCY BALLAST COILS ON ONLY IN THE EVENT OF POWER LOSS. FIXTURE IS SWITCHED WITH OTHER LIGHTS UNDER NORMAL CONDITIONS.
- INDIVIDUAL BRANCH CIRCUITS ARE SHOWN WITH A DEDICATED NEUTRAL UNLESS INDICATED OTHERWISE. WHEN MULTIVIRE BRANCH CIRCUITS ARE TO BE INSTALLED, PROVIDE MULTIPOLAR CIRCUIT BREAKERS AS REQUIRED BY NEC 210.7.
- ALL ELECTRICAL BOXES MOUNTED IN RATED WALLS SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2018 NCSBC SECTION 714.3.2. ALL ELECTRICAL BOXES MOUNTED IN RATED CEILING/HORIZONTAL ASSEMBLIES SHALL COMPLY WITH ALL REQUIREMENTS OF THE 2018 NCSBC SECTION 714.2. UNLESS OTHERWISE NOTED, DEVICES SHOWN IN RATED ASSEMBLIES SHALL BE FLUSH WITH CONDUIT CONCEALED. PROVIDE HORIZONTAL SEPARATION, PUTTY PADS, RATED BOXES ETC. AS REQUIRED FOR REQUIRED INSTALLATION. ALL LOW VOLTAGE ELECTRICAL DEVICES MOUNTED IN RATED ASSEMBLIES SHALL BE PROTECTED IN ACCORDANCE WITH THE SECTIONS LISTED ABOVE.
- SEE VOLTAGE DROP SCHEDULE ON DETAILS SHEET FOR WIRE SIZING INFORMATION FOR ALL BRANCH CIRCUITS OVER 65' IN LENGTH.
- FOR LIGHTING CONTROLS WHICH INCLUDE DAYLIGHT OR OCCUPANCY SENSORS, AUTOMATIC CONTROLS, AUTOMATIC SHUT-OFF CONTROLS, OCCUPANCY SENSORS, OR AUTOMATIC TIME SWITCHES, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE LIGHTING CONTROLS PER SECTION 408.9 OF THE 2018 NC ENERGY CONSERVATION CODE TO ENSURE THAT CONTROL DEVICES, COMPONENTS, EQUIPMENT, AND SYSTEMS ARE CALIBRATED, ADJUSTED AND OPERATE IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS. SENSORS OF OPERATION SHALL BE FUNCTIONALLY TESTED TO ENSURE THEY OPERATE IN ACCORDANCE WITH APPROVED PLANS AND SPECIFICATIONS.
- REFER TO ATM INSTALLATION GUIDELINES FOR ADDITIONAL REQUIREMENTS.
- THE AREA PHOTOMETRIC PLAN IS SHOWN TO DEMONSTRATE THE EXPECTED FOOT-CANDLE READINGS AT THE NOTED LOCATIONS INCLUDING ONLY CONTRIBUTIONS FROM THE FIXTURES SHOWN ON THESE PLANS AND NOT INTENDED TO CONVEY COMPLIANCE WITH ANY MUNICIPAL LIGHTING REQUIREMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN WHAT LIGHTING (IF ANY) WILL ALSO CONTRIBUTE TO THE LIGHT LEVELS IN THIS AREA AND PROVIDE A COMPREHENSIVE LIGHTING STUDY IF NECESSARY TO DEMONSTRATE COMPLIANCE WITH ANY MUNICIPAL LIGHTING REQUIREMENTS WHICH MAY APPLY TO THIS PROJECT.

LIGHT FIXTURE SCHEDULE

DESIGNATION	MANUFACTURER	DESCRIPTION	VOLTAGE	BALLAST TYPE/ QUANTITY	NUMBER/TYPE LAMPS	TOTAL WATTS
A	LITHONIA LDN6-40/10-L06AR-LSS-MVOLT	RECESSED CANOPY DOWNLIGHT	120/1	1-LED DRIVER	1-LED MODULE	23
B	LITHONIA #2GTL-4-30L-MVOLT-LP840-VL-EL14L	2X4 LAY-IN TROFFER W/ EMERGENCY BATTERY	120/1	1-LED DRIVER	1-LED MODULE	24
C	LITHONIA #V50-LED-PI-40K-SR4-MVOLT-E20VC	EXTERIOR WALLPACK W/ EMERGENCY BATTERY	120/1	1-LED DRIVER	1-LED MODULE	20
D	LITHONIA #CSX2 LED-120C-1000-40K-TSM-MVOLT	EXTERIOR POLE LIGHT WITH SQUARE STEEL POLE AND CONCRETE BASE AS NECESSARY FOR 25' MOUNTING HEIGHT	120/1	1-LED DRIVER	1-LED MODULE	416

- NOTES:**
- ALL FIXTURES, BALLASTS, AND DRIVERS SHALL COMPLY WITH N.C. BUILDING CODE, 2018 NORTH CAROLINA ENERGY CONSERVATION CODE AND SHALL BE UL LISTED. ALL TB BALLASTS SHALL BE INSTANT START, HIGH-PERFORMANCE ELECTRONIC WITH NORMAL BALLAST FACTOR (0.88) UNLESS OTHERWISE NOTED. ALL LED DRIVERS SHALL COMPLY WITH NEMA 410.
 - ALL FIXTURES NOTED AS EMERGENCY SHALL HAVE EMERGENCY ILLUMINATION FUNCTIONALITY AS DESCRIBED BELOW. IN ALL CASES, BATTERIES MUST BE RATED FOR THE ENVIRONMENT IN WHICH THEY ARE INSTALLED.
 - INTERIOR LINEAR FLUORESCENT & LED FIXTURES SHALL HAVE 1100 LUMEN (MINIMUM) OUTPUT, 90 MINUTE BATTERY PACK. FLUORESCENT & LED DOWNLIGHTS SHALL HAVE A 500 LUMEN (MINIMUM) OUTPUT, 90 MINUTE BATTERY PACK OR SHALL BE PROVIDED WITH A FULL OUTPUT INVERTER.
 - EXTERIOR EMERGENCY LIGHTS SHALL HAVE AN INTEGRAL EXTERIOR RATED (0° F) OR REMOTE MOUNTED 1100 LUMEN OUTPUT 90 MINUTE BATTERY.
 - TEST SWITCHES FOR EMERGENCY BATTERIES SHALL BE INTEGRAL TO THE FIXTURE SERVED BY THE BATTERY.
 - EMERGENCY FIXTURES SHALL OPERATE ONE LAMP WHERE MULTIPLE EMERGENCY FIXTURES ARE TO BE INSTALLED IN AN AREA, AND SHALL OPERATE TWO LAMPS WHERE THE LOSS OF A SINGLE LAMP WOULD RENDER THE SPACE IN TOTAL DARKNESS DURING EMERGENCY OPERATION.
 - WHERE EMERGENCY LIGHTS PROVIDE EMERGENCY ILLUMINATION IN AREAS NORMALLY LIT BY METAL HALIDE FIXTURES (OR SIMILAR SOURCES) WITH RESTRIKE DELAY, THE EMERGENCY BATTERY SHALL BE PROVIDED WITH A TIME DELAY TO MAINTAIN BATTERY ILLUMINATION FOR 15 MINUTES AFTER THE RESTORATION OF NORMAL POWER.
 - EMERGENCY LIGHTING DESIGN IS BASED ON EXISTING FIXTURES LUMEN OUTPUTS AS DESCRIBED ABOVE. CONTRACTOR SHALL VERIFY ANY EXISTING EMERGENCY FIXTURE BATTERIES HAVE LUMEN OUTPUTS AS INDICATED AND SHALL REPLACE ANY BATTERIES RATED LESS.
 - EMERGENCY LIGHTING UNITS WITH DEDICATED EMERGENCY HEADS SHALL PROVIDE 1 F.C. FOR AT LEAST 25' FOR A MINIMUM OF 90 MINUTES.
 - ALL NEW, RELOCATED, OR RESWITCHED FIXTURES THAT UTILIZE BALLASTS SHALL BE PROVIDED WITH A LUMINAIRE DISCONNECT WHERE REQUIRED PER NEC SECTION 410.130(D). USE IDEAL POWERPLUG OR EQUAL INTERNAL TO FIXTURE.
 - LAMP COLOR TEMPERATURE FOR NEW EXTERIOR FIXTURES ARE SHOWN AS 4000K BUT SHALL BE ADJUSTED TO MATCH OTHER PROPOSED NEW OR EXISTING LAMPS IN EXISTING SITE FIXTURES TO REMAIN, AND ALL LAMP COLORS FOR DIFFERENT FIXTURE TYPES AND SOURCES SHALL BE CONSISTENT THROUGHOUT THE SITE UNLESS SPECIFICALLY NOTED OTHERWISE. NEW LAMPS WITH NO EXISTING LAMPS TO MATCH SHALL BE 4000K UNLESS OTHERWISE NOTED. CONTRACTOR SHALL ENSURE THAT ALL INTERIOR AND EXTERIOR LAMPS ARE THE SAME COLOR TEMPERATURE.
 - EQUALS MUST BE APPROVED BY ENGINEER PRIOR TO ORDER. VENDORS, CONTRACTORS OR MANUFACTURERS OF SUBMITTED ALTERNATE FIXTURES SHALL BE PREPARED TO PROVIDE BOTH IES FILES OF THE PROPOSED FIXTURES AS WELL AS COMPLETE PHOTOMETRIC ANALYSIS OF THE ILLUMINATED AREA/SPACE TO DEMONSTRATE THE ALTERNATE FIXTURES ARE PHOTOMETRICALLY EQUAL TO SPECIFIED FIXTURES.

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ELECTRICAL DETAILS AND PLANS

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DRAWN BY:	JOB #: SE19.070
SHEET	
E-21	