

MSU PROJ. NO.	21712.00
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ELEC.	HALSEY
CIVIL	
L.A.	
INT. DES.	
CONST. REP.	
APPR.	
DATE	4/3/2024
SCALE	AS SHOWN
ISSUED FOR BIDS	

**ELECTRICAL GENERAL NOTES:**

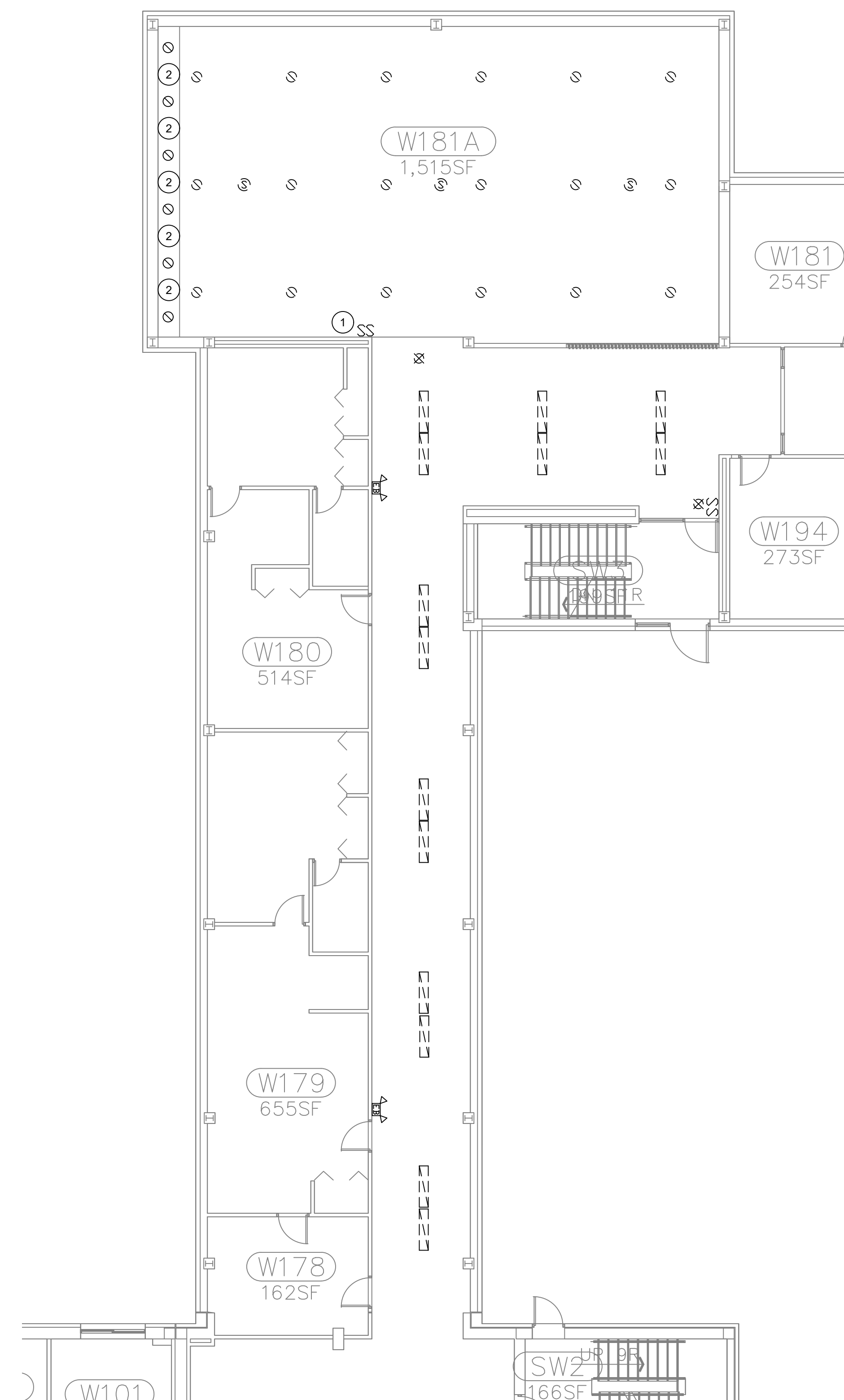
- ELECTRICIAN IS RESPONSIBLE FOR COMPLIANCE WITH MSU TECHNICAL STANDARDS AND ALL OTHER APPLICABLE CODES.
- DISCONNECT AND REMOVE ALL EMERGENCY LIGHTING UNITS SHOWN ON THE PLAN. REMOVE CONDUIT AND WIRE BACK TO SOURCE.
- DISCONNECT AND REMOVE LIGHT SWITCHES ASSOCIATED WITH FIXTURES BEING REMOVED. REMOVE WIRING TO SOURCE. LEAVE BOX AND CONDUIT IN PLACE. PROVIDE BLANK COVER PLATE. SWITCHES ASSOCIATED WITH FIXTURES THAT ARE NOT BEING REMOVED SHOULD STAY IN PLACE. FIELD VERIFY. UNLESS NOTED OTHERWISE.
- REMOVE LIGHT FIXTURES SHOWN ON THE PLAN. LEAVE CIRCUIT AND JUNCTION BOX IN PLACE FOR CONNECTION TO NEW LIGHT FIXTURES. SOME OF THE FIXTURES BEING REMOVED ARE CONNECTED TO THE "X-PANEL". REMOVE ALL CONDUIT, BOXES AND WIRING ASSOCIATED WITH THESE FIXTURES. UNLESS NOTED OTHERWISE.
- DISCONNECT AND REMOVE ALL EMERGENCY LIGHTING UNITS SHOWN ON THE PLAN. REMOVE CONDUIT AND WIRE BACK TO SOURCE.
- ONCE THE CEILING IS REMOVED, INSPECT FOR UNUSED CONDUIT AND WIRE AND REMOVE. ALSO INSPECT FOR IMPROPERLY SUPPORTED CONDUIT AND LOW VOLTAGE WIRE. RE-SUPPORT PER CODE.
- DISCONNECT AND REMOVE SPEAKERS LOCATED IN ROOM W181A. REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE.

**# ELECTRICAL DEMOLITION PLAN NOTES:**

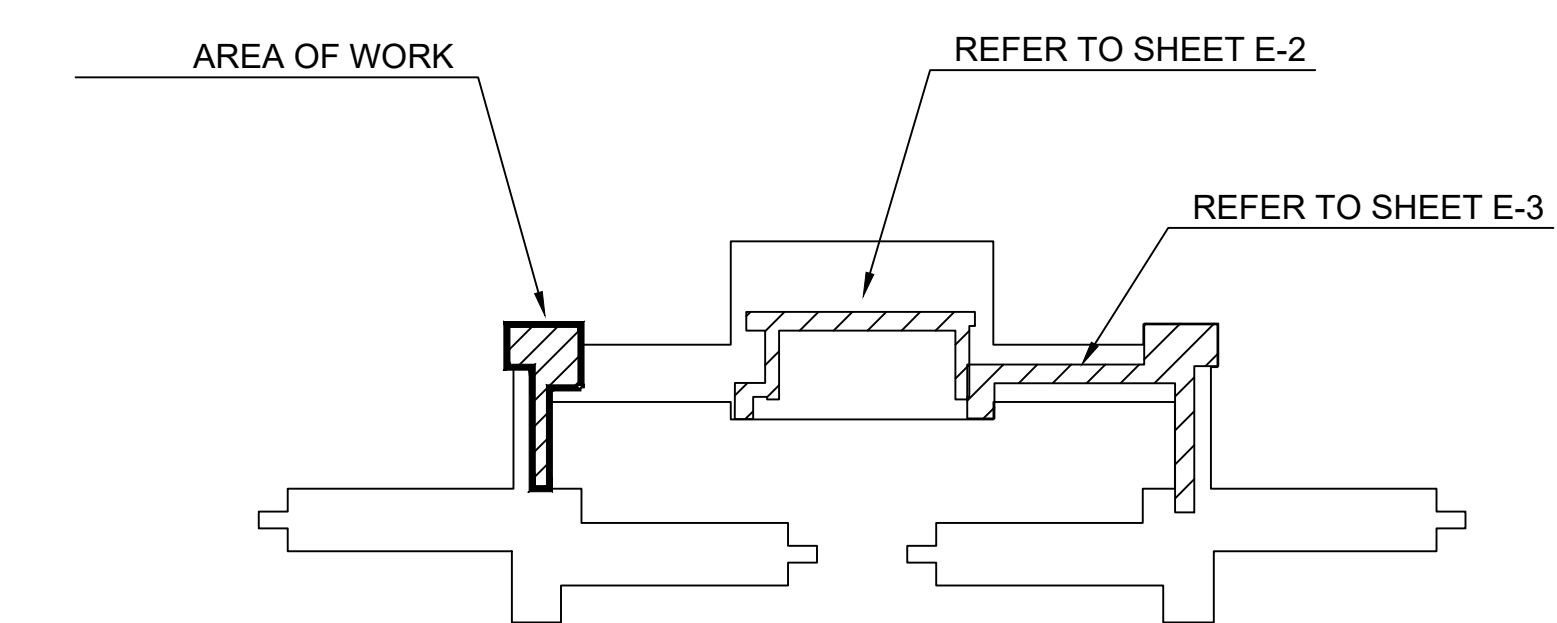
- LEAVE SWITCH ASSOCIATED WITH DOWN LIGHTS IN SOFFIT IN PLACE.
- LIGHTS LOCATED IN SOFFIT SHALL REMAIN.

**ELECTRICAL SYMBOLS**

FIXTURE TAG	CONTROL ZONE
TYPICAL LIGHT FIXTURE	EMERGENCY FIXTURE
	1' X 4' LIGHT FIXTURE
	2' X 4' NORMAL LIGHT FIXTURE
	2' X 4' EMERGENCY LIGHT FIXTURE
	2' X 2' NORMAL LIGHT FIXTURE
	2' X 2' EMERGENCY LIGHT FIXTURE
	DOWNLIGHT
	EXIT SIGN
	EMERGENCY LIGHTING UNIT
	LIGHT SWITCH
	CAMERA
	SPEAKER
	SMOKE DETECTOR
	EXISTING
	DEVICES SHOWN WITH DASHED LINES ARE INTENDED TO BE DEMOLISHED/REMOVED (TYPICAL FOR ALL DEVICES)



**ELECTRICAL DEMOLITION PLAN**  
SCALE: 1/8" = 1'-0"



**BUILDING KEY PLAN**  
FOR REFERENCE ONLY

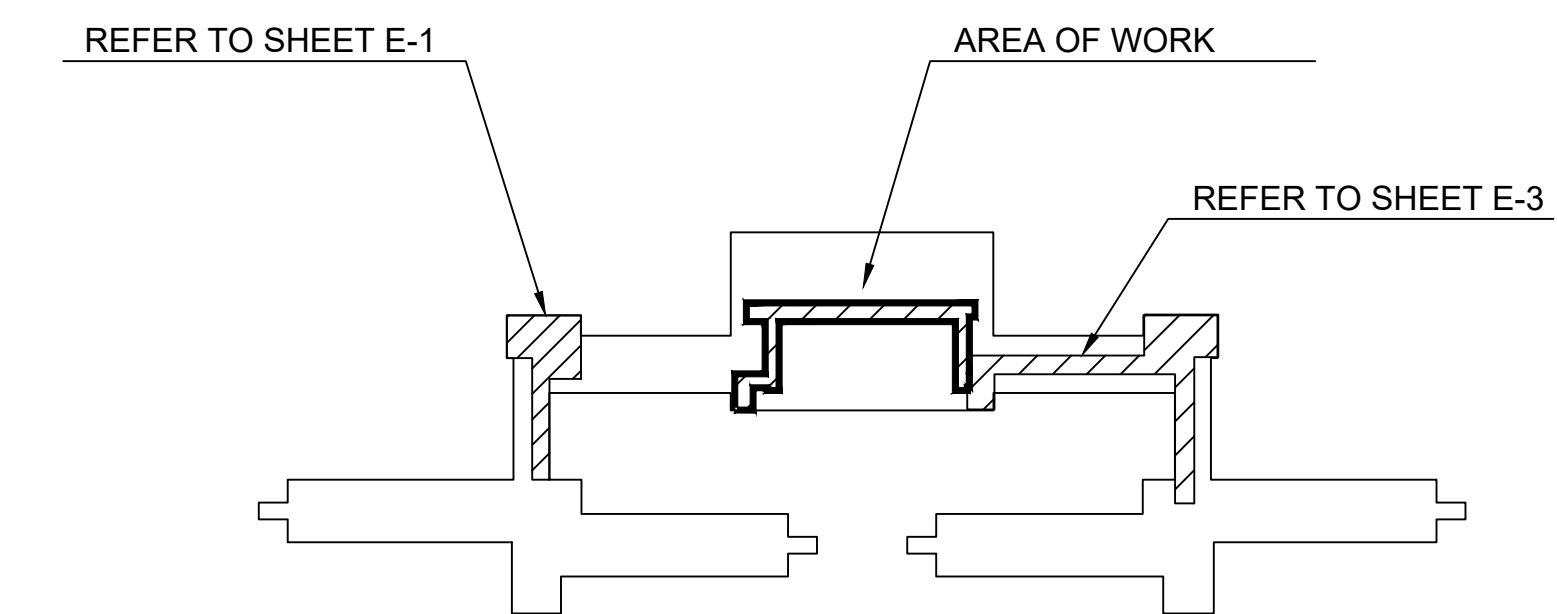
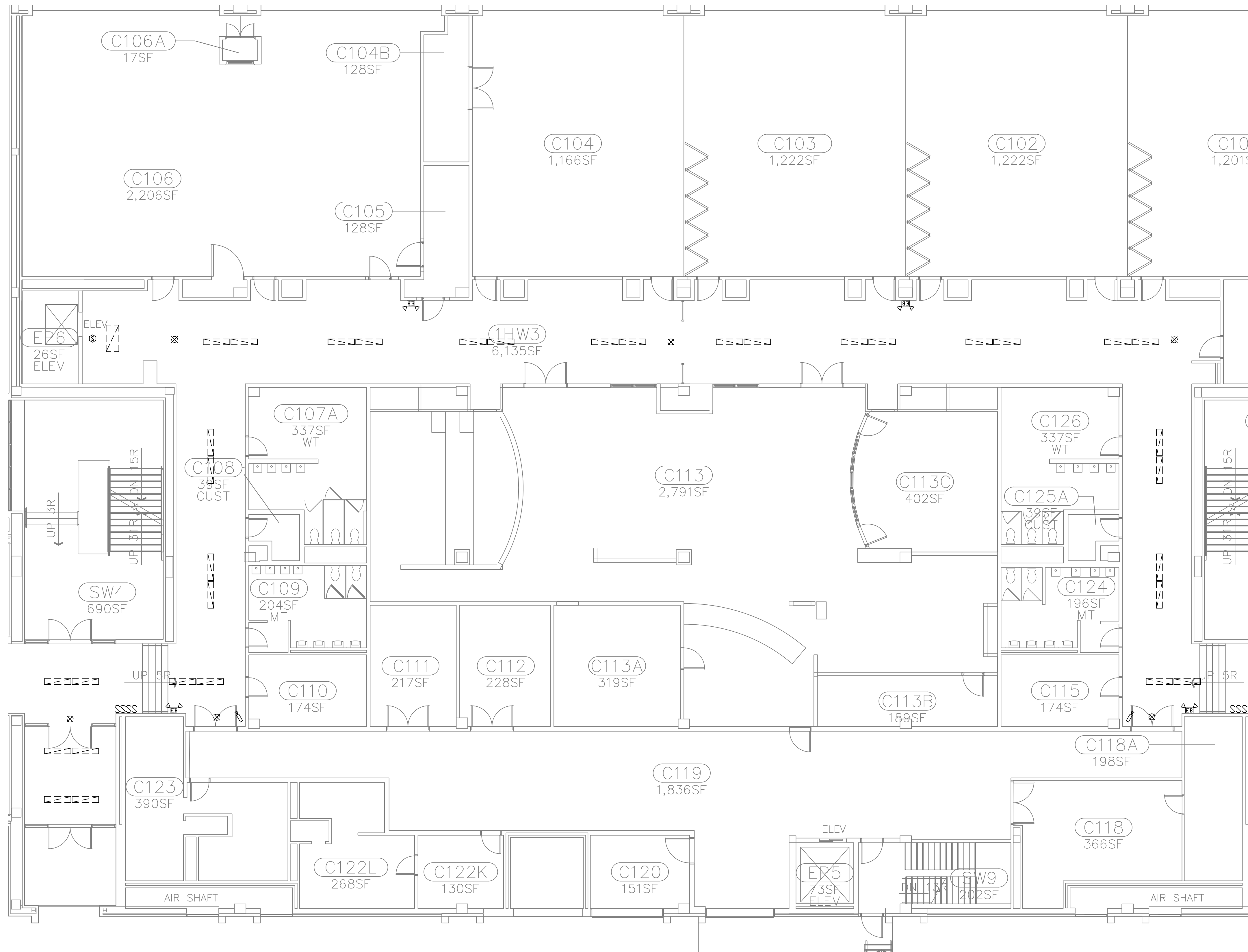


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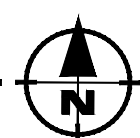
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2. DISCONNECT AND REMOVE ALL EMERGENCY LIGHTING UNITS SHOWN ON THE PLAN. REMOVE CONDUIT AND WIRE BACK TO SOURCE.
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**ELECTRICAL DEMOLITION PLAN**  
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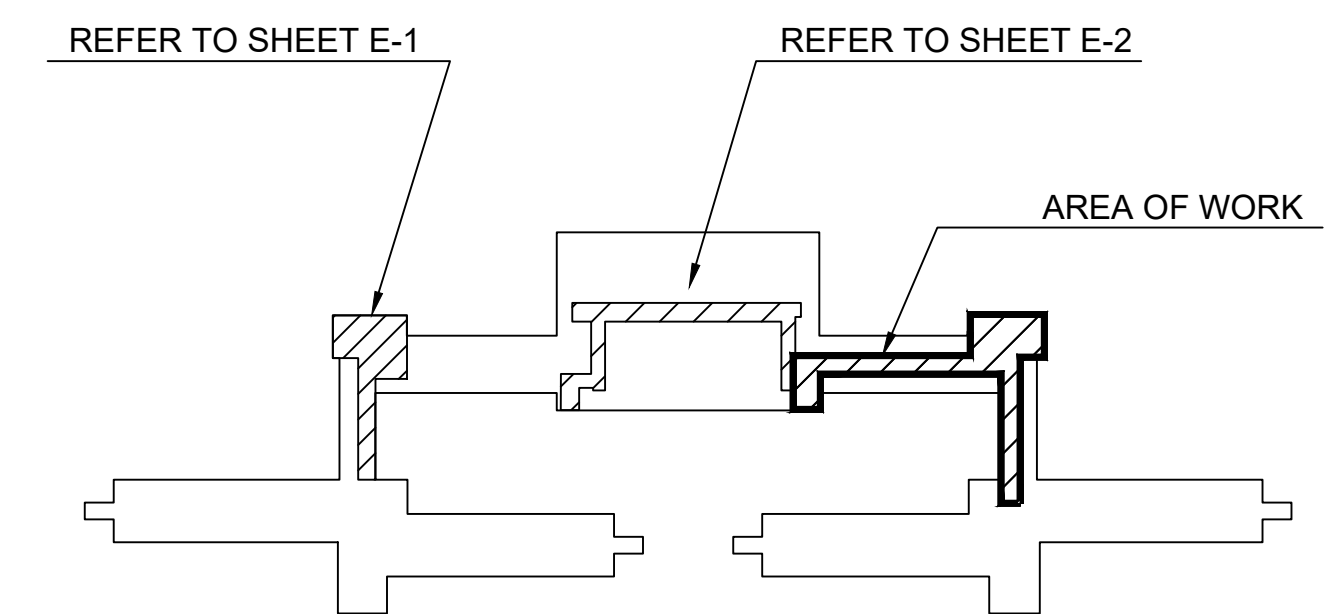
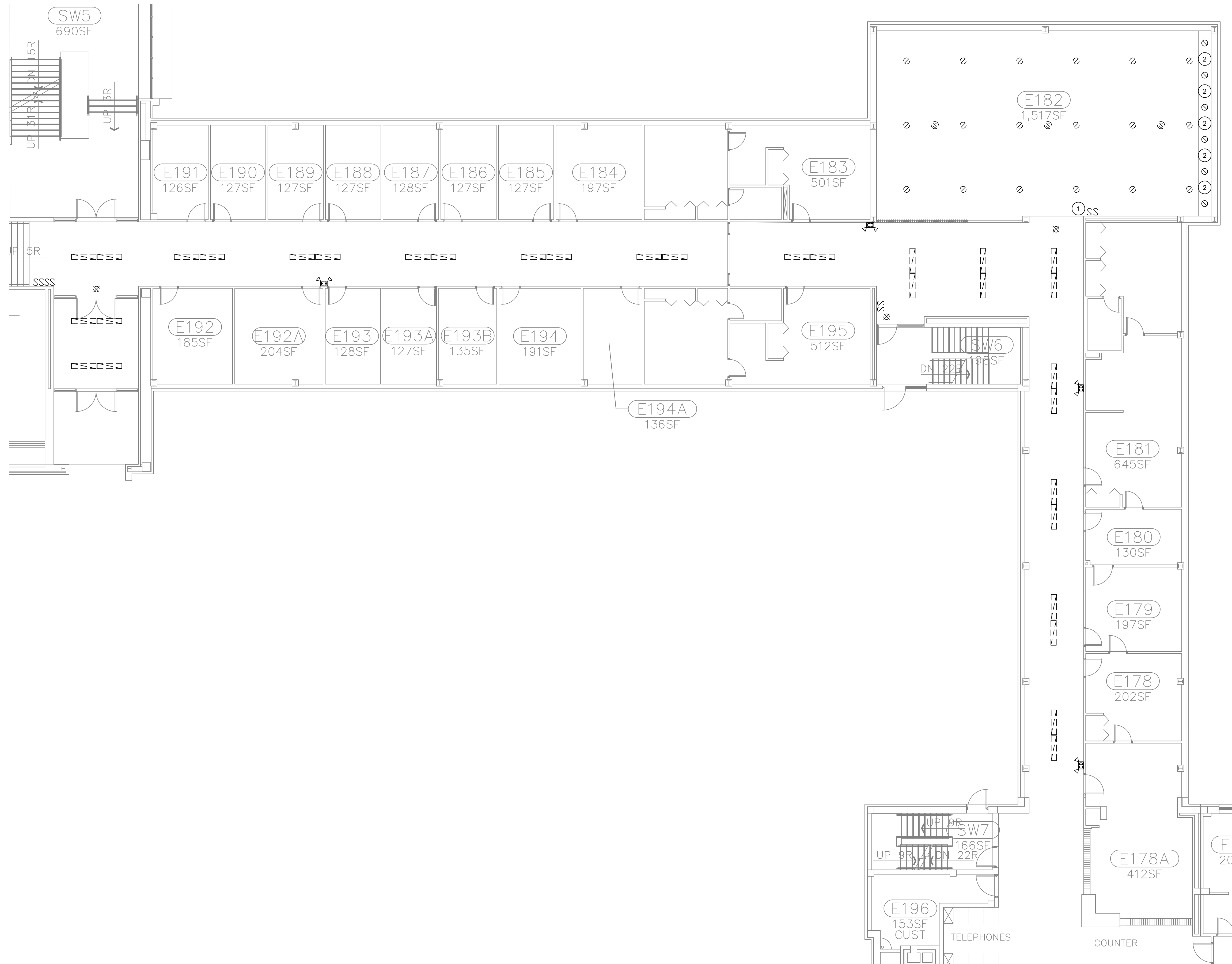
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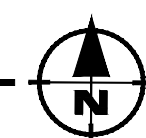
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7. DISCONNECT AND REMOVE SPEAKERS LOCATED IN ROOM E182. REMOVE ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE.

**# ELECTRICAL DEMOLITION PLAN NOTES:**

1. LEAVE SWITCH ASSOCIATED WITH DOWN LIGHTS IN SOFFIT IN PLACE.
2. LIGHTS LOCATED IN SOFFIT SHALL REMAIN.



**ELECTRICAL DEMOLITION PLAN**  
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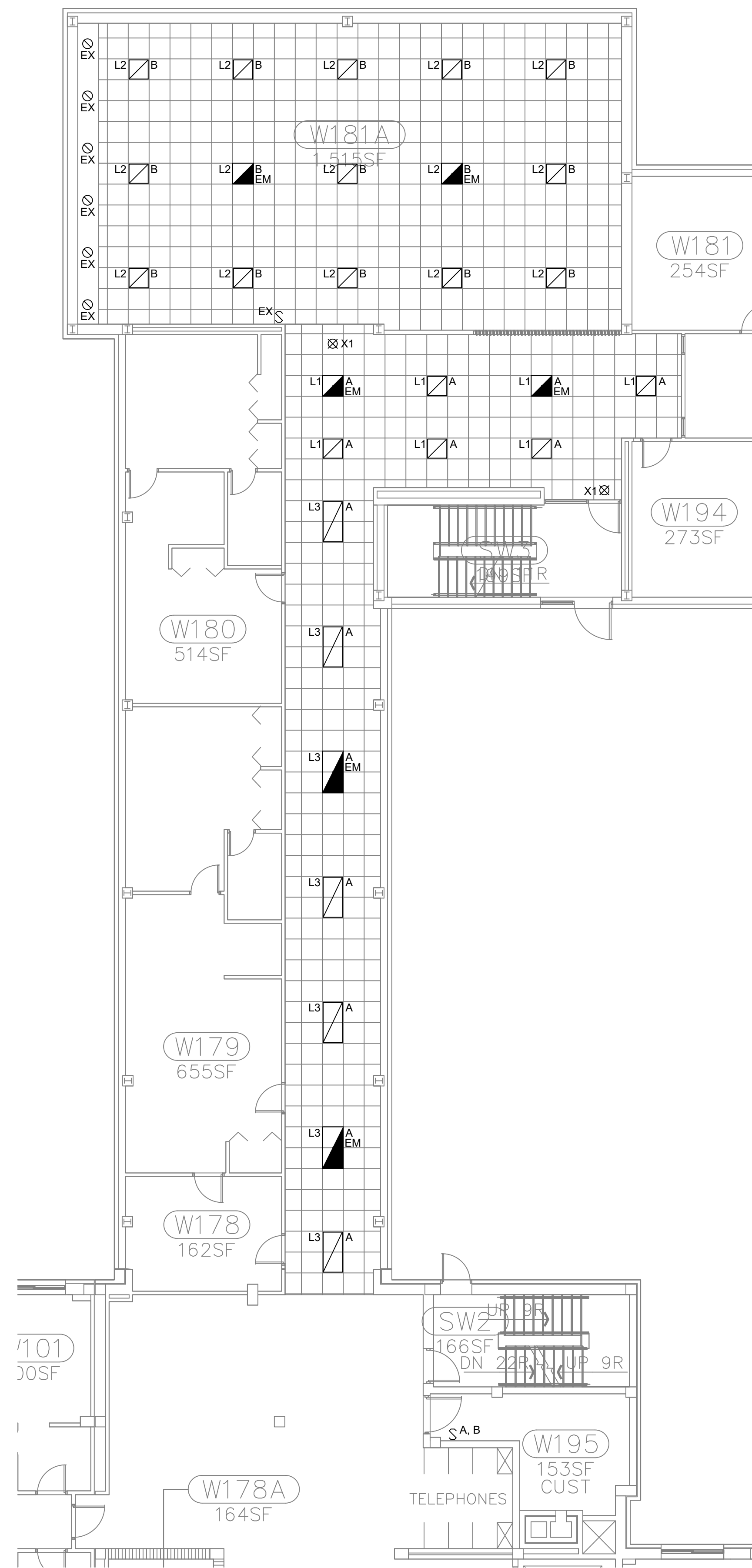


**BUILDING KEY PLAN**  
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**LIGHT FIXTURE SCHEDULE**

TAG	MANUFACTURER	PART NUMBER	DESCRIPTION
L1	LITHONIA	CPX 2X2 2000LM 80CRI 40K SWL MIN1 ZT MVOLT NLTAIR2 APDT	2 X 2 LED FLAT PANEL WITH ONBOARD WIRELESS CONTROLS
L1EM	LITHONIA	CPX 2X2 2000LM 80CRI 40K SWL MIN1 ZT MVOLT E10WLCPLNLTAIR2 APDT	SAME AS L1 EXCEPT WITH EMERGENCY DRIVER AND ONBOARD WIRELESS CONTROLS
L2	LITHONIA	CPX 2X2 3200LM 80CRI 40K SWL MIN1 ZT MVOLT NLTAIR2 APDT	2 X 2 LED FLAT PANEL WITH ONBOARD WIRELESS CONTROLS
L2EM	LITHONIA	CPX 2X2 3200LM 80CRI 40K SWL MIN1 ZT MVOLT E10WLCPLNLTAIR2 APDT	SAME AS L2 EXCEPT WITH EMERGENCY DRIVER AND ONBOARD WIRELESS CONTROLS
L3	LITHONIA	CPX 2X4 3000LM 80CRI 40K SWL MIN1 ZT MVOLT NLTAIR2 APDT	2 X 4 LED FLAT PANEL WITH ONBOARD WIRELESS CONTROLS
L3EM	LITHONIA	CPX 2X4 3000LM 80CRI 40K SWL MIN1 ZT MVOLT E10WLCPLNLTAIR2 APDT	SAME AS L3 EXCEPT WITH EMERGENCY DRIVER AND ONBOARD WIRELESS CONTROLS
X1	LITHONIA	LE S 1 G ELN SD	EXIT SIGN WITH SINGLE FACE, BLACK HOUSING, ALUMINUM FACE, GREEN LETTERS AND BATTERY BACK-UP



**ELECTRICAL LIGHTING PLAN**  
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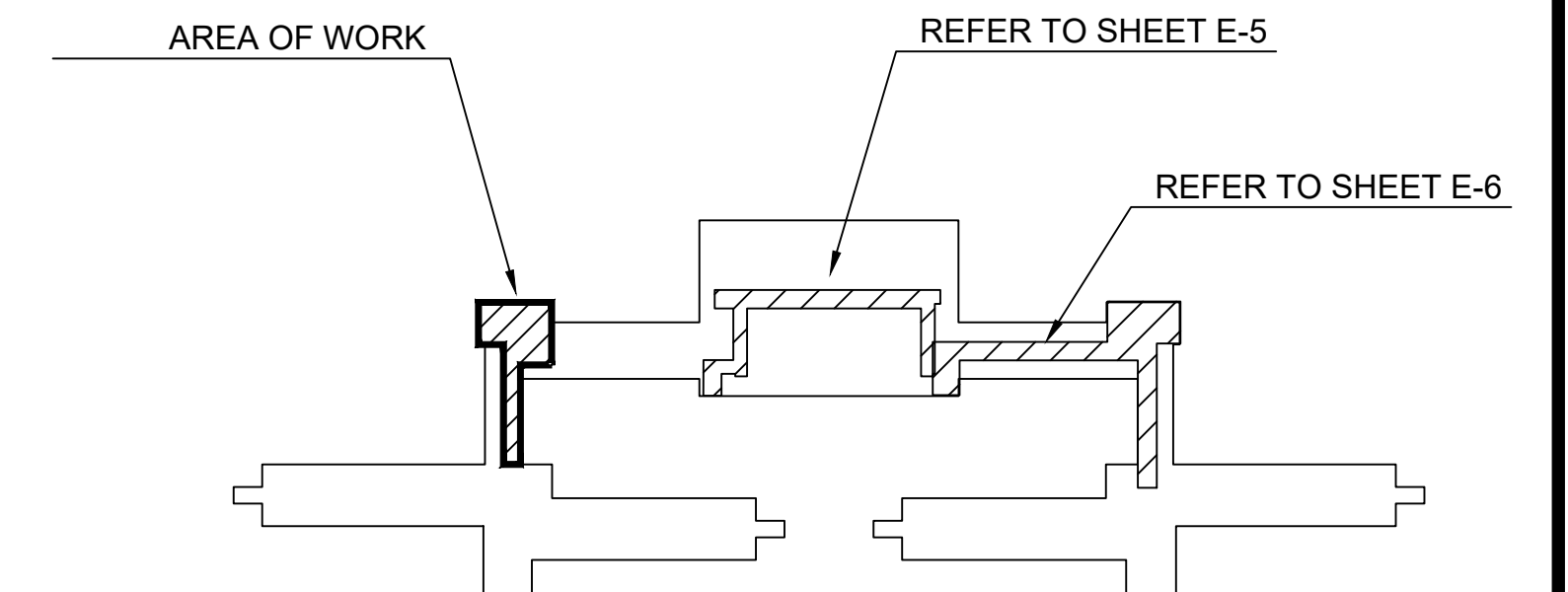


**ELECTRICAL GENERAL NOTES:**

- ELECTRICIAN IS RESPONSIBLE FOR COMPLIANCE WITH MSU TECHNICAL STANDARDS AND ALL APPLICABLE CODES.
- UPDATE PANELBOARD CIRCUIT DIRECTORIES TO REFLECT ANY CHANGES MADE.
- ALL NEW COVER PLATES TO BE STAINLESS STEEL.
- EMERGENCY LIGHT FIXTURES ARE NOT NIGHT LIGHTS. THEY ARE INTENDED TO BE CONTROLLED IN THE SAME FASHION AS THE SURROUNDING FIXTURES.
- PROVIDE AN UNSWITCHED HOT WIRE TO ALL EMERGENCY LIGHT FIXTURES AND EXIT SIGNS.
- ROUTE MC CABLE FROM THE ORIGINAL FIXTURE JUNCTION BOXES TO THE NEW FIXTURES IMMEDIATELY BELOW. PROVIDE EXTENSION RINGS AND NEW COVER PLATES AS REQUIRED FOR EXISTING JUNCTION BOXES. LONGER LENGTHS OF MC CABLE WILL BE PERMITTED TO ROUTE MC CABLE TO EXIT SIGNS AND OTHER FIXTURES WHERE "X-PANEL" J-BOXES AND CIRCUITS WERE REMOVED. KEEP MC CABLE LENGTHS TO A MINIMUM. PROVIDE CODE REQUIRED SUPPORT FOR MC CABLE.

**LIGHTING CONTROLS SEQUENCE OF OPERATIONS:**

- ALL NEW FIXTURES ARE PROVIDED WITH ONBOARD OCCUPANCY SENSORS AND PHOTOCELLS.
- ZONES ARE INDICATED BY AN UPPERCASE LETTER (A, B, C, D, ETC.) PLACED NEXT TO THE FIXTURE ON THE PLAN. ALL FIXTURES WITHIN A ZONE SHALL BE CONTROLLED TOGETHER.
- PROGRAM FIXTURES TO OPERATE AT 95% WHEN OCCUPANCY IS DETECTED.
- AFTER A PERIOD OF 20 MINUTES WITH NO OCCUPANCY DETECTION IN ZONE A, LIGHTS SHOULD DIM TO 20%.
- AFTER A PERIOD OF 20 MINUTES WITH NO OCCUPANCY DETECTION IN ZONE B, LIGHTS SHOULD DIM TO 10%.
- VESTIBULE FIXTURE SHOULD DIM DURING DAYLIGHT HOURS AND OPERATE AT 95% AT NIGHT.
- PROGRAM FIXTURES TO AUTOMATICALLY DIM WITHIN DAYLIGHT ZONES PER CODE.
- OVERRIDE SWITCHES ARE LOCATED IN CUSTODIAL CLOSET W195.
- VERIFY UPPER AND LOWER LIGHT LEVELS WITH MSU SLE PROJECT MANAGER.



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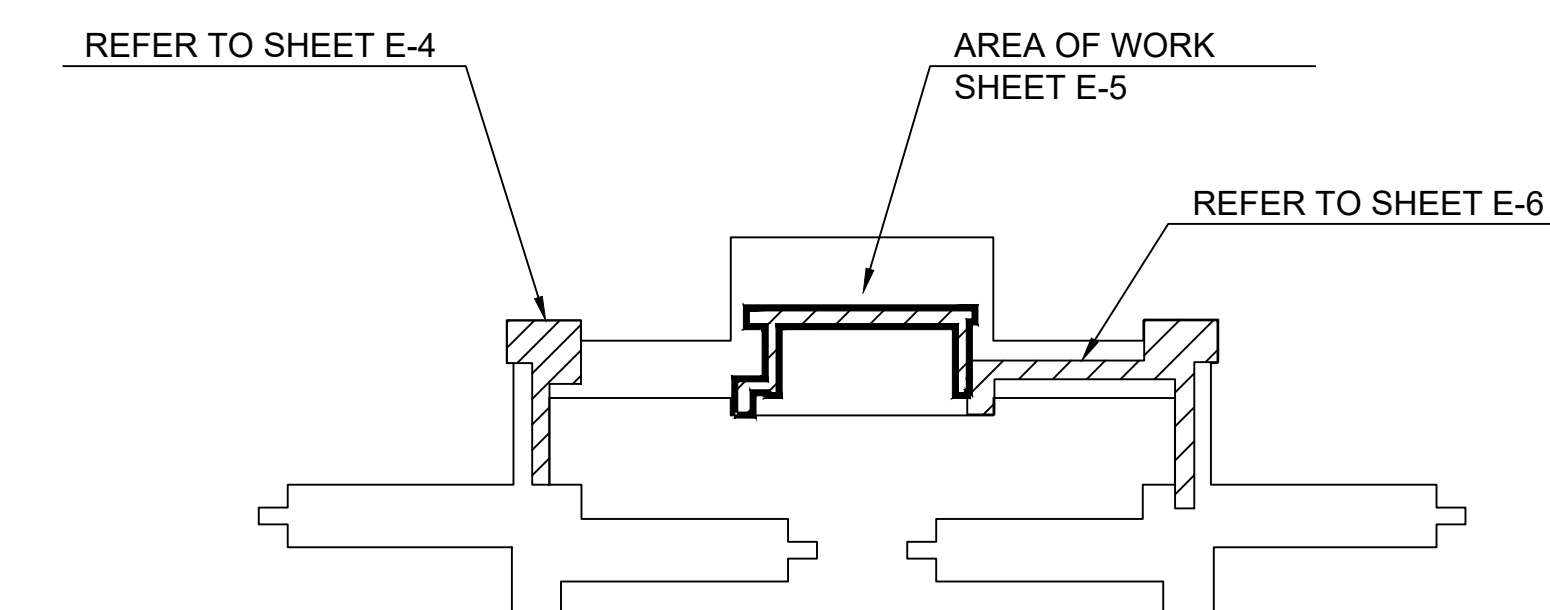
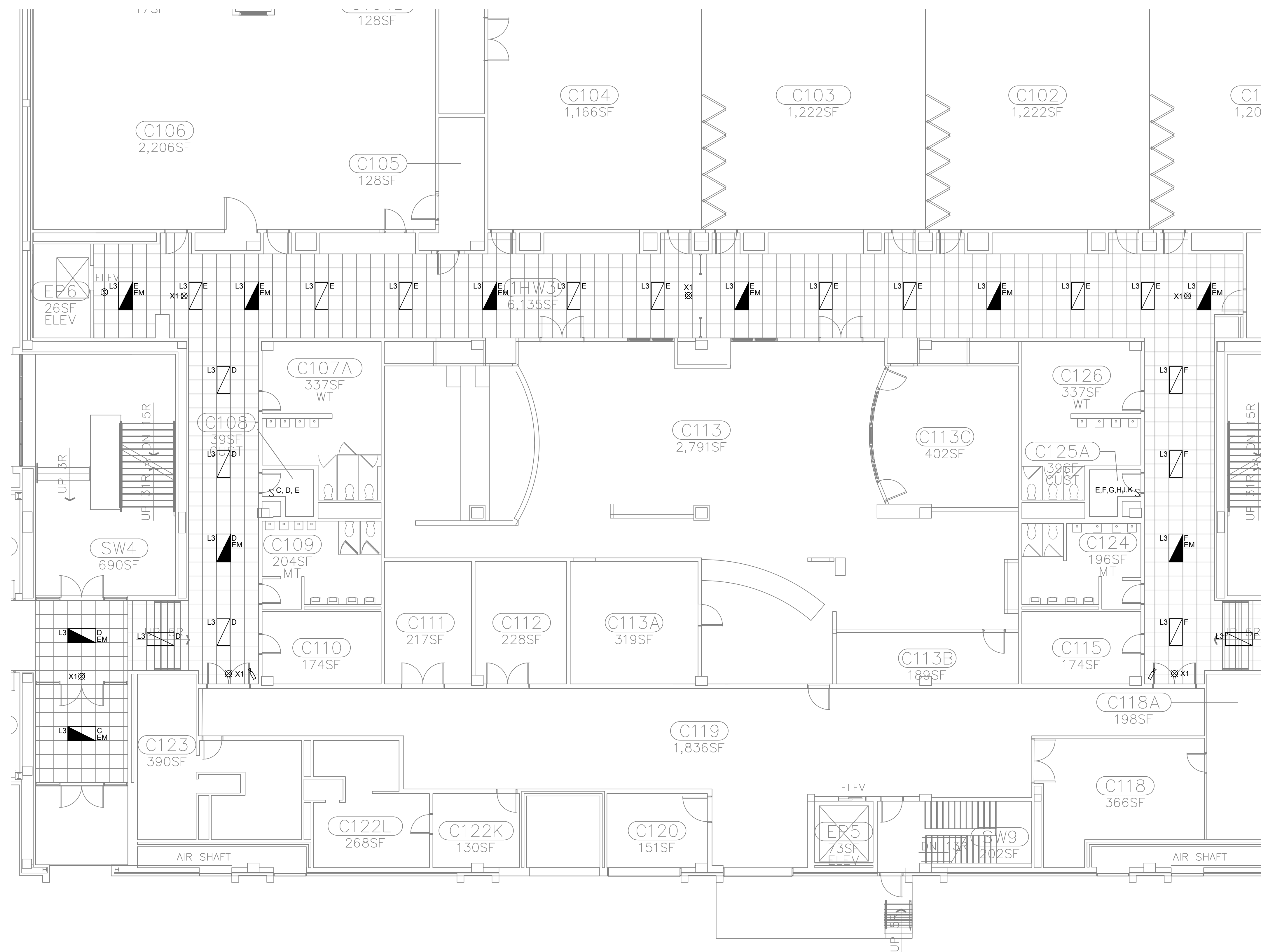
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3. ALL NEW COVER PLATES TO BE STAINLESS STEEL.
4. EMERGENCY LIGHT FIXTURES ARE NOT NIGHT LIGHTS. THEY ARE INTENDED TO BE CONTROLLED IN THE SAME FASHION AS THE SURROUNDING FIXTURES.
5. PROVIDE AN UNSWITCHED HOT WIRE TO ALL EMERGENCY LIGHT FIXTURES AND EXIT SIGNS.
6. ROUTE MC CABLE FROM THE ORIGINAL FIXTURE JUNCTION BOXES TO THE NEW FIXTURES IMMEDIATELY BELOW. PROVIDE EXTENSION RINGS AND NEW COVER PLATES AS REQUIRED FOR EXISTING JUNCTION BOXES. LONGER LENGTHS OF MC CABLE WILL BE PERMITTED TO ROUTE MC CABLE TO EXIT SIGNS AND OTHER FIXTURES WHERE "X-PANEL" J-BOXES AND CIRCUITS WERE REMOVED. KEEP MC CABLE LENGTHS TO A MINIMUM. PROVIDE CODE REQUIRED SUPPORT FOR MC CABLE.
7. RE-INSTALL SECURITY CAMERAS IN SAME LOCATION. COORDINATE WITH MSU SECURITY SERVICES.
8. RE-INSTALL SMOKE DETECTOR IN SAME LOCATION.

**LIGHTING CONTROLS SEQUENCE OF OPERATIONS:**

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6. PROGRAM FIXTURES TO AUTOMATICALLY DIM WITHIN DAYLIGHT ZONES PER CODE.
7. OVERRIDE SWITCHES ARE LOCATED IN CUSTODIAL CLOSETS E196 AND C125A.
8. VERIFY UPPER AND LOWER LIGHT LEVELS WITH MSU SLE PROJECT MANAGER.



**ELECTRICAL LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"



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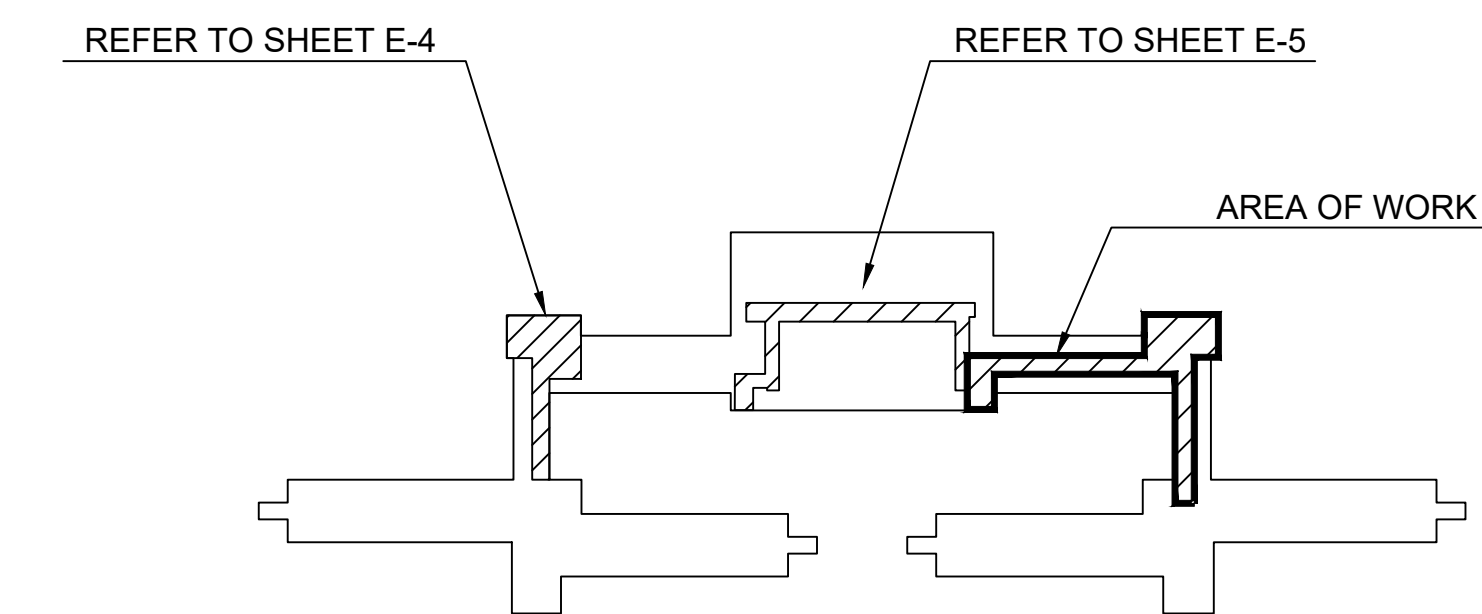
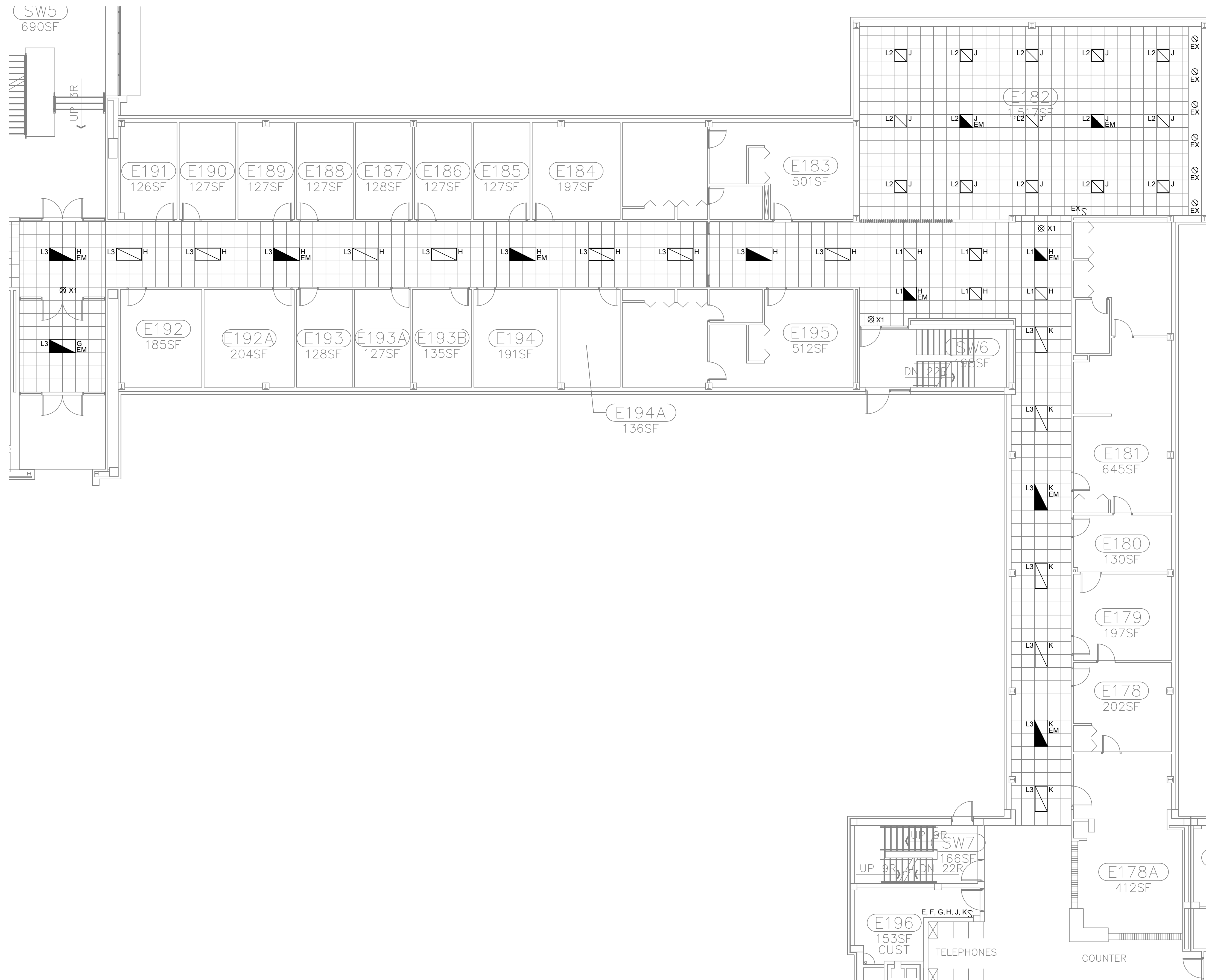
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3. ALL NEW COVERPLATES TO BE STAINLESS STEEL.
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7. OVERRIDE SWITCHES ARE LOCATED IN CUSTODIAL CLOSET W195.
8. VERIFY UPPER AND LOWER LIGHT LEVELS WITH MSU SLE PROJECT MANAGER.



**ELECTRICAL LIGHTING PLAN**  
SCALE: 1/8" = 1'-0"



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