

HVAC LAYOUT

MECHANICAL NOTES:

- Each contractor shall be responsible for the securing of all necessary permits and for the payment of all fees.
- 2.) Any equipment or material deviations from that specified or detailed on this drawing shall be subject to the approval of the issuing authority. All proposed equipment deviations submitted shall be similar both in quality and copacity to that equipment specified.
- 3.) All work done shall be in accordance with all National, State and Local codes and ordinances.
- 4.) The HVAC controctor shall be responsible for all electrical conduit, wire and necessary connections relating to mechanical equipment controls as well as wiring associated with starter hading coloi unless indicated otherwise on the drawings. The mechanical controctor and account recurred information reference in the mechanical controctor and account to the electronic relation of shall coordinate uil work relative to the wiring of the mechanical system.
- 5.) Turning vanes shall be installed in all elbows.
- 6.) Ducts shall be 1" fleerglass duct board or 24 ga, steel, and installed in conditioned space. Supply duct 10"-0" from furnace shall be lined. Ducts installed in unconditioned attic space shall be insulated with nonobsorbort insulation having a minimum it value of 6 and the insulation shall be protected by an approved vapor barrier.
- 7.) Provide duct dampers at all supply branches near trunk duct as shown.
- Provide outside air direct to return air duct for furnaces as noted and regulate with a motorized damper connected to a 7-day programable control.
- Set furnace fans to run continuously when building is accupied.
 Control furnace, air conditioning and continuous fan operation with a 7-day programable control.
- Provide furnace with outside combustion air as specified by the manufacturer or code.
- Balance HVAC air system utilizing a balometer (Air Hood) to set duct damper for each supply branch.
- Provide an approved smake detector in the return air duct of each air distribution system ahead of the filters and fresh air supply which upon activation will shut down the air distribution system.
- 13.) Design and installation of in floor radiant heating to be provided by subcontractor.
- 14.) HVAC plans for rental spaces are to be submitted when spaces are leased.

MECHANICAL EQUIPMENT SCHEDULE

FURNACE MFG: MODEL: TYPE:

F-1 PAYNE 036080 UPFLOW INPUT OUTPUT CAPACITY:

80,000 BTUH 74,400 BTUH

AFU%: FUEL: BLOWER:

90.5% NATURAL GAS 1/3 HP, 1190 CFM CONDENSING UNIT:

AC-1 PAYNE 710 AO 36 TOTAL 33,600 SENSIBLE 24,800 LATENT 8,800 MODEL: CAPACITY # 95

SEER: ELECTRICAL DATA: 230V, 10, MCA=19.9A, MAX CKT BKR=25A

EVAPORATOR COIL: PAYNE CC5AA036 MFG: MODEL:

BOILER: BURNHAM 207A MFG: MODEL:

198,000 BTUH 141,700 BTUH INPUT CAPACITY:

80.4% NATURAL GAS AFU%:

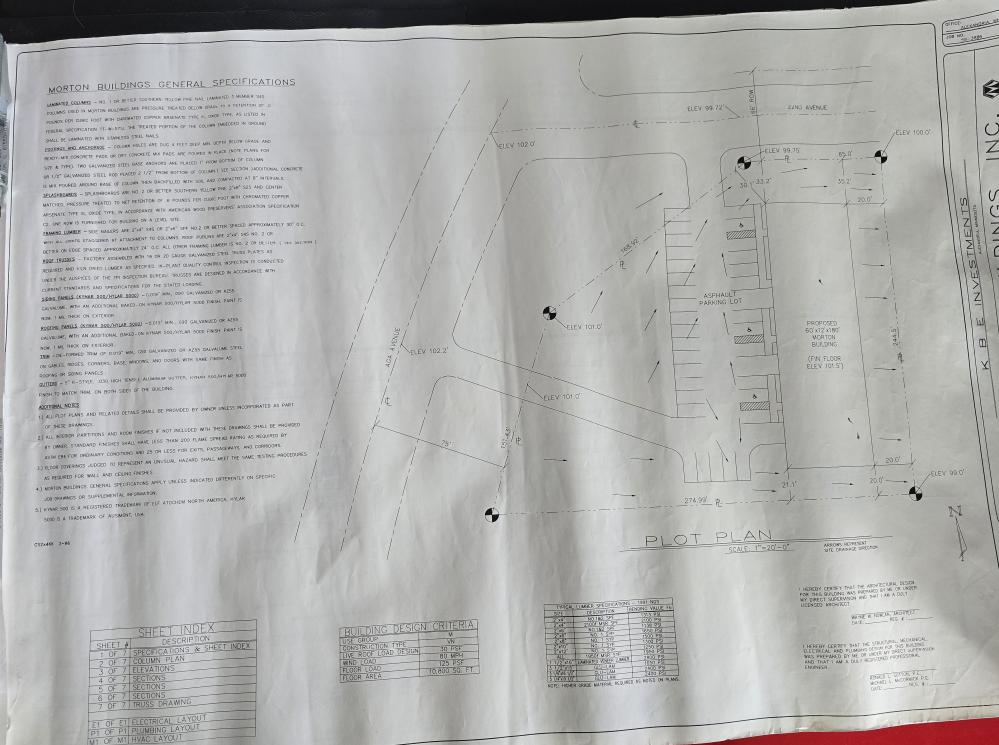
SUPPLY DIFFUSERS and RETURN GRILLES

STMENTS STANDA MINNESOTA

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DIFFUSER, GRILLE SYMBOL AIRFLOW IN CFM

DESCRIPTION TAG CEILING DIFFUSER RETURN AIR GRILLE FRESH AIR GRILLE FLOOR DIFFUSER DUCT DAMPER



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DRAWN BY: JASON

REVISED DATE: REVISED DATE:

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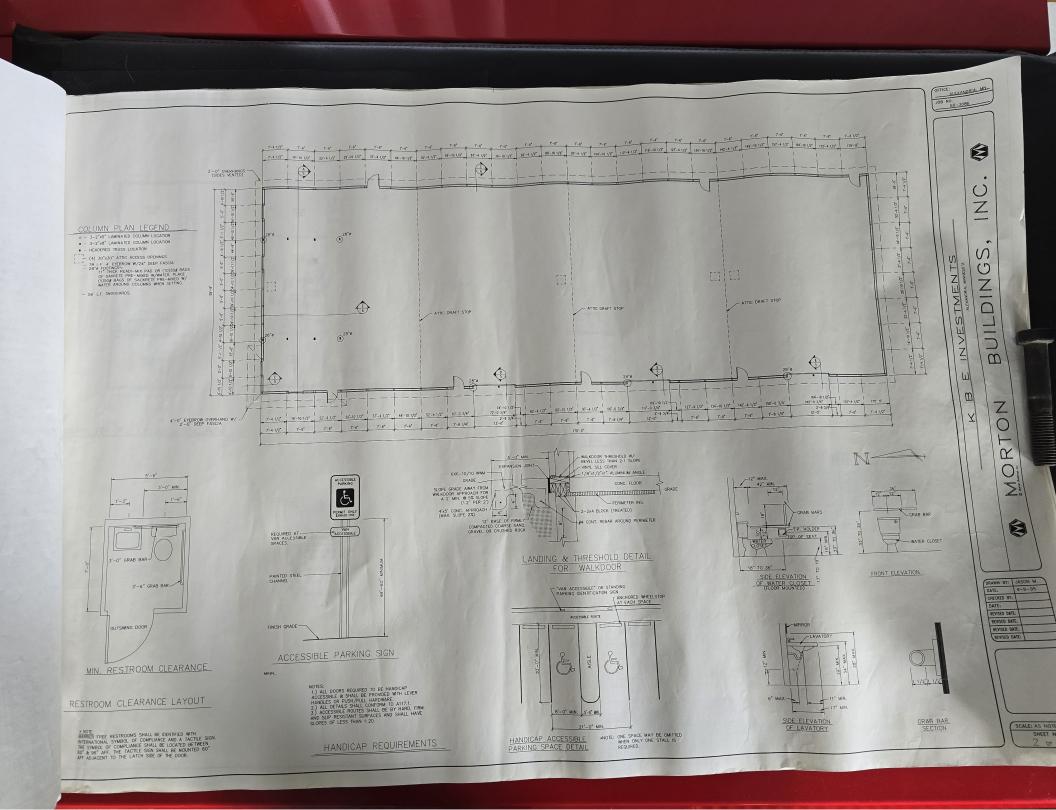
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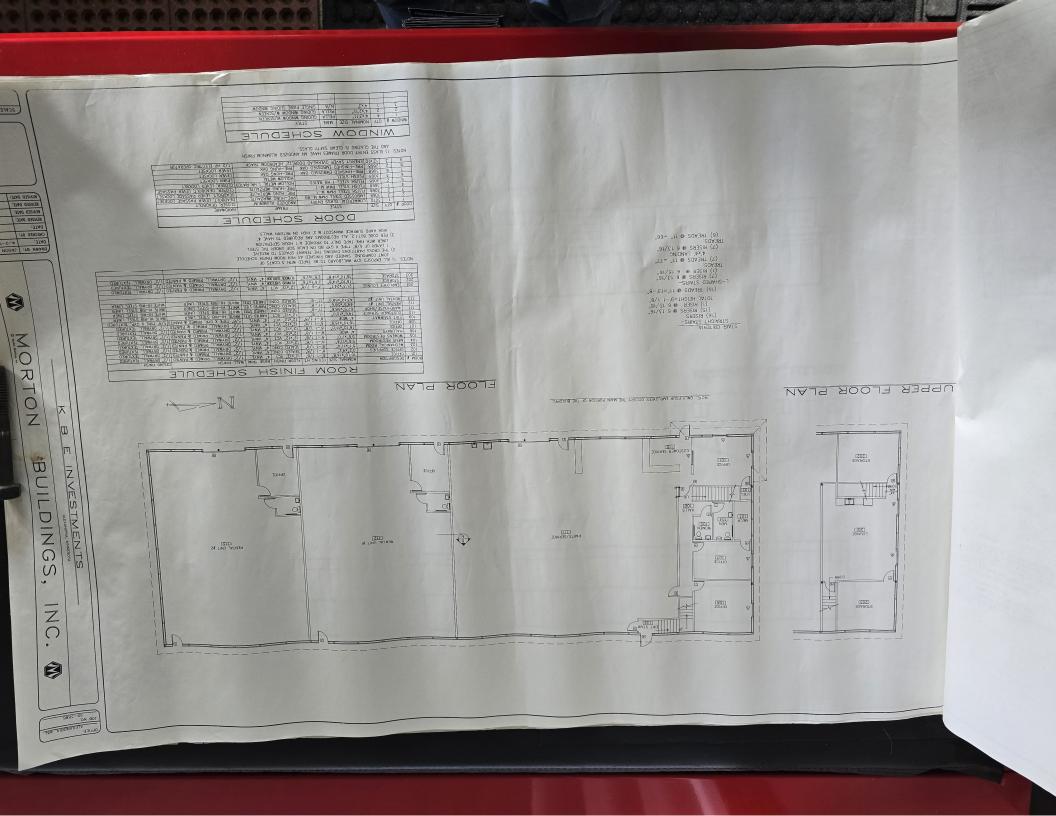
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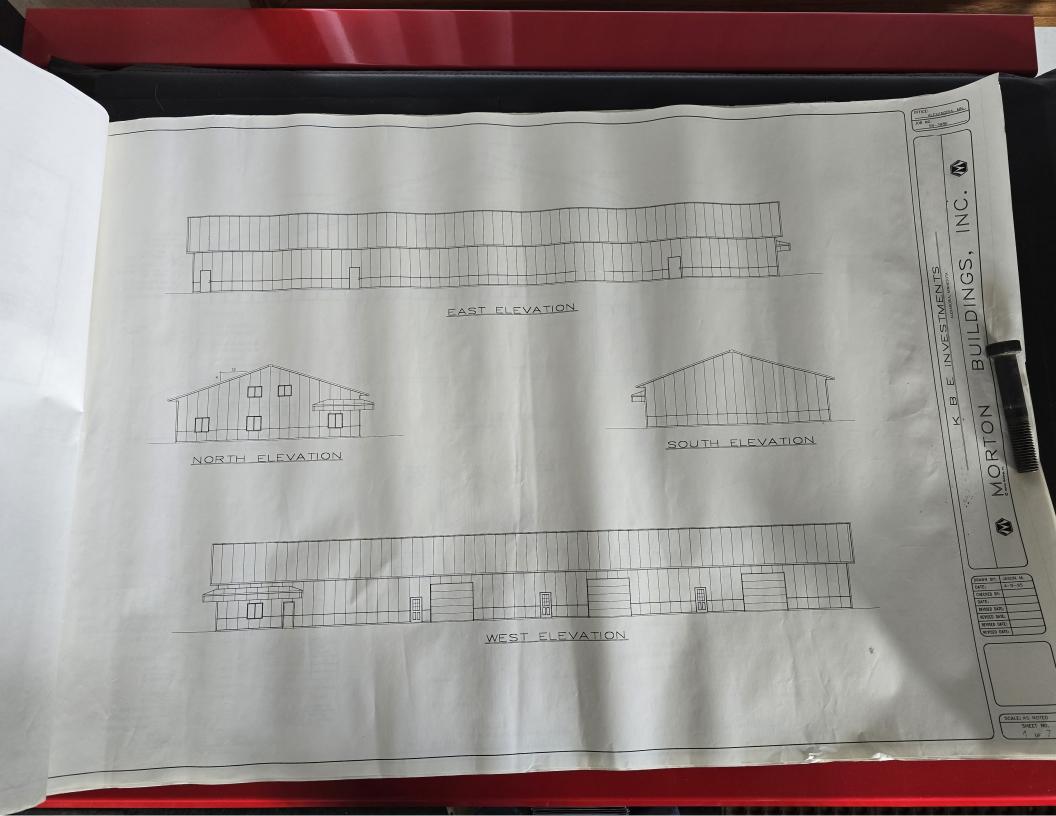
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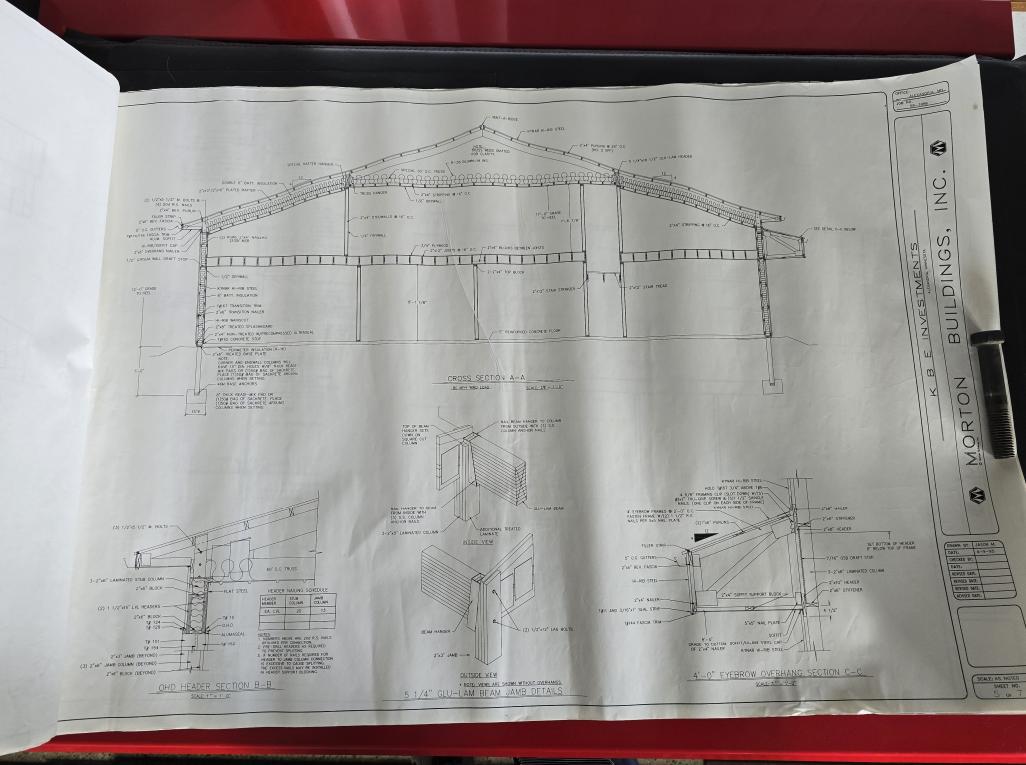
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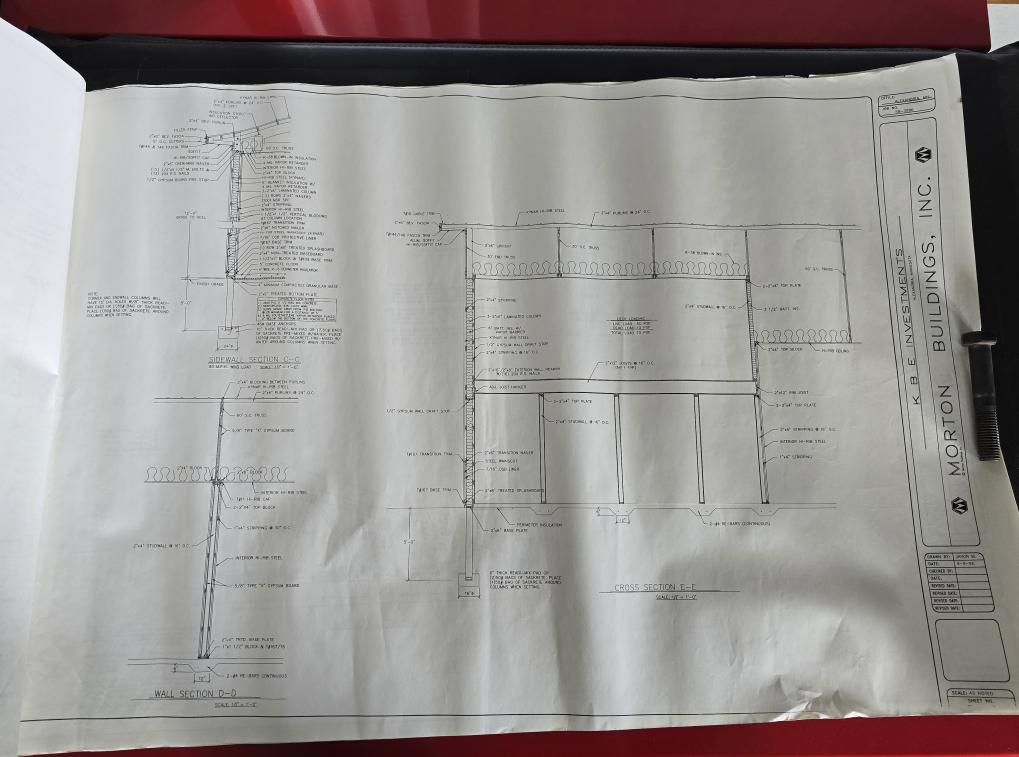
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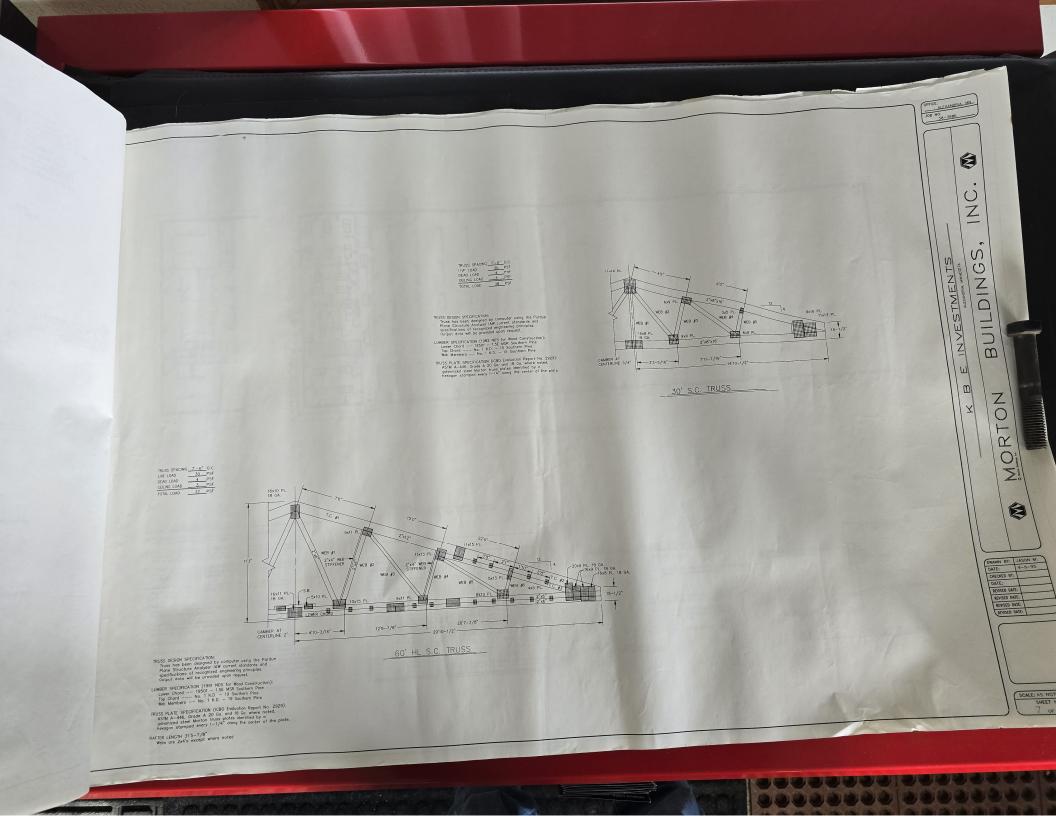


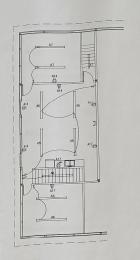


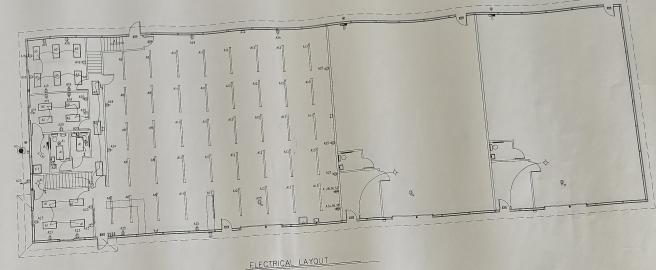












ELECTRICAL NOTES:

- The Electrical Contractor shall be responsible for the securing of all necessary permits and for the payment of all fees.
- Any material deviations from that specified or detailed shall be subject to approad. All proposed equipment devolution submitted shall be similar both in quality and in capacity to that equipment specified.
- All work done shall be in accordance with all National, State and Local code and administer, and the performed in accordance with the latest edition of the National Electric Code.
- Were shall be cooper, 600 volt insulation, thus, then, shall or thin, we brought 40 shall be solid: #8 and larger stranded. Minimum wire size #12.
- Well switches shall be 120/277 volt, quiet, slow make, slow break design, toggle handle totally enclosed case, rated 20 omps, specification grade coordinate leafor with architect.
- Receptades shall be standard dupler. Full gauge size, polarized, parallel blook, till grant processes of the standard standard galot, specification grade rated 20 emps, 125 volts, NEMA line 5, blook, till grant for split feed service.
- 7.) Outlet/Switch covers shall be nylon, smooth, high obuse color to motch device.
- 7. Outet/Switch covers shall be nylon, smooth, high clouse color to motch device.

 8. Exit signs shall be illuminated at all times when the building is occupied. The branch scout feeding the unit equipment for emergency means of eyess. The branch should be common as they seem to emerge the common should be connected about of the same branch as they seem switches to so source control of the same should be connected about of them one hour in cose of primary control to so. The same should be connected to me about the same seems of the same should be complete with section 270.0. Exit signs and emergency lighting shall be battery back-up, section 704–12(1) N.E.C. 1993.
- All wiring shall be in conduit. Wiring in shop and other nonconceded areas shall be in EMT conduit.
- 10.) All equipment shall be properly grounded.
- 11.) Provide seperate disconnect on outside of building for A/C units.
- 200A. 120/240V. 36 delta service is to be provided to rental spaces. Electrical design is to be submitted when spaces are leased.

NOTES:

1) ELECTRIC SERVICE IS 120/240V, 30 DELTA.

2) PHASE B SHALL HAVE THE HIGHER VOLTAGE.

PA	NEL A	SCH			
BUS: 200_AMPERE,		TAGE: -	,	PHA	SE:_3_, WRE:4
BUS: 200 AMPERE,	MAIN: 200_, VO	THOU.	SS MER	w T	DESCRIPTION
	S SENSE S	1 8	ANY.	WRE	LIGHTS
DESCRIPTION			20	12	OPEN
LIGHTS	12 20 1	4	-	-	LIGHTS
OPEN	12 20 5	6		12	LIGHTS
LIGHTS	12 20 7	8		12	OPEN
LIGHTS	9	10	20	12	LIGHTS
OPEN	12 20 1	12		12	CUTLETS
LIGHTS	12 20 1.		20	-	OPEN
LIGHTS	- 1	10	20	12	OUTLETS
OPEN OUTLETS	12 20 1		20	12	OUTLETS
OUTLETS	12 20 1		-	E	OPEN
OPEN	2		20	12	OUTLETS
OUTLETS	12 20 2	100	20	12	B-1
OUTLETS	12 20 2		100		OUTLET
OPEN			20	12	
F-1	12 20 2		100	1000	
	10 25	3 34	1000		OUTLET
AC-1		5 36	120	12	
		7 38	1		
		9 40	20	12	
	12 20		20	12	

ELECTRICAL SYMBOL SCHEDULE:

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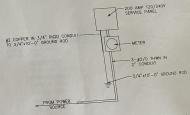
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ELECTRICAL SCHEMATIC DIAGRAM

OFFICE:
ALEXANDRIA, MN.
JOB NO.
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DRAWN BY: JASON M.

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