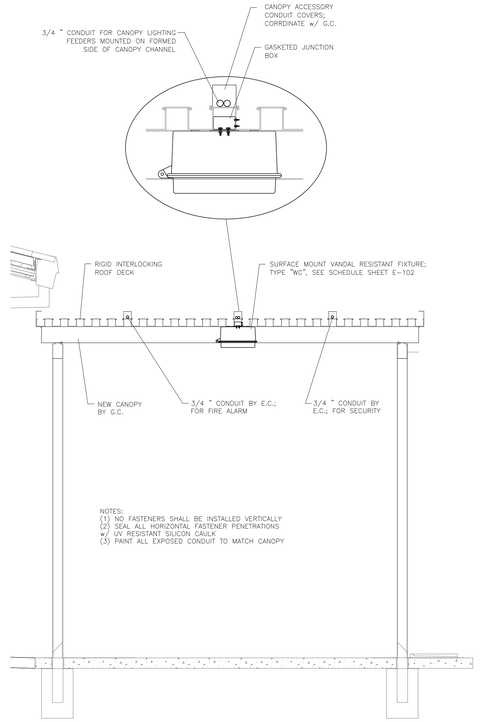
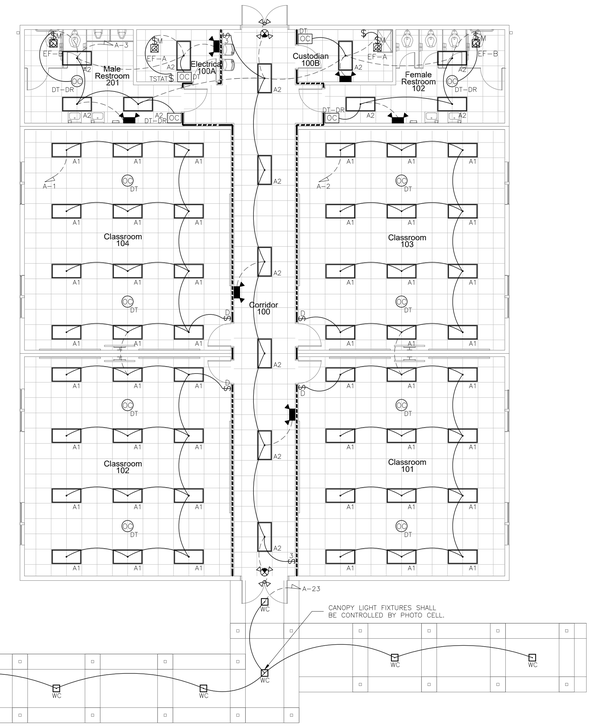
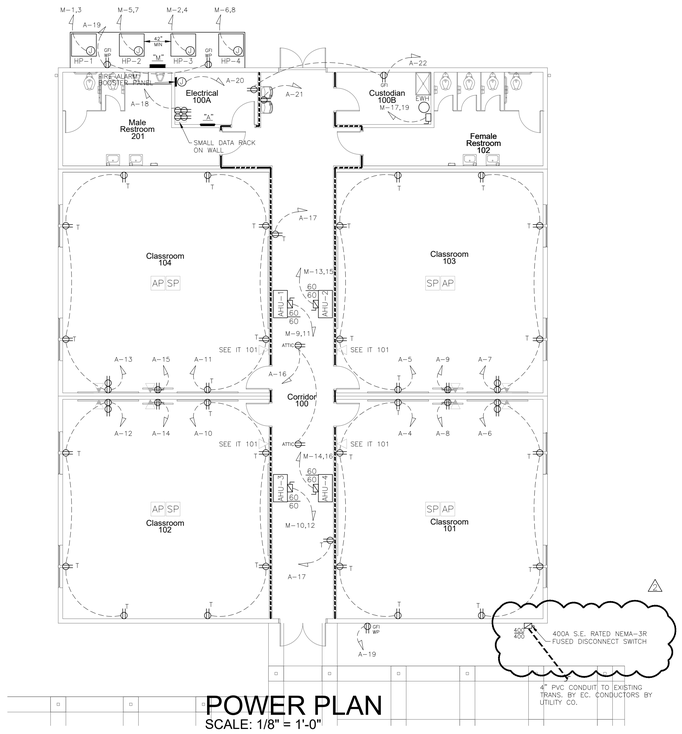
copyright 2023 Hite associates



101.1 CANOPY LIGHT INSTALLATION DETAIL
SCALE: N.T.S.



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



POWER PLAN
SCALE: 1/8" = 1'-0"

REMOVED PANEL SCHEDULE

M DEMAND CALCS

LIGHTING	3.74	KVA	X	125	%	=	**4.7 KVA**
RECEPTAC TOTAL	9.00	KVA					
1ST	10.00	KVA	X	100	%	=	**9.0 KVA**
REMAIN	0.00	KVA	X	50	%	=	**0.0 KVA**
MOTORS	28.32	KVA	X	100	%	=	**28.3 KVA**
LARGEST	5.28	KVA	X	125	%	=	**6.6 KVA**
A/C	0.00	KVA	X	100	%	=	**0.0 KVA**
WATER HEATING	4.50	KVA	X	125	%	=	**5.6 KVA**
FUTURE		KVA	X	100	%	=	**0.0 KVA**
KITCHEN	0.00	KVA	X	65	%	=	**0.0 KVA**
MISCELLANEOUS	32.80	KVA	X	100	%	=	**32.8 KVA**
TOTAL =	**362.6 amps**					=	**87.0 KVA**

PANELBOARD SCHEDULE - "PANEL M"

MAIN: 400 MLO | VOLTAGE 240/120 | PHASE: 1 | WIRE: 3 | MOUNTING: SURFACE | AIC: 22,000 | BUS BARS: COPPER

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	PHASE B	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	35	2	8	3/4"	HP-1			2.6									2.2					HP-3	3/4"	10	2	30	2
3								2.6									2.2										4
5	35	2	8	3/4"	HP-2			2.6									2.2					HP-4	3/4"	10	2	30	6
7								2.6									2.2										8
9	60	2	4	1 1/4"	AHU-1			1.8				3.6					1.8				3.6	AHU-3	1 1/4"	4	2	60	10
11								1.8				3.6					1.8				3.6						12
13	60	2	4	1 1/4"	AHU-2			1.8				3.6					1.8				3.6	AHU-4	1 1/4"	4	2	60	14
15								1.8				3.6					1.8				3.6						16
17	30	2	10	3/4"	EWH					2.3												SPARE			1	20	18
19										2.3												SPARE			1	20	20
21	20	1			SPARE																	SPARE			1	20	22
23	20	1			SPARE																	SPACE			1		24
25	20	1			SPARE																	SPACE			1		26
27	100	1	3	1 1/4"	PANEL "A"	3.0	4.4	0.0	0.0	0.0	0.0	2.6										SPACE			1		28
29						0.7	4.6	0.0	0.0	0.0	0.0	1.4										SPACE			1		30

LIGHTING (KVA):	3.7	3.7	9.0	17.8	0.0	4.5	0.0	18.4
RECEPTACLES (KVA):	9.0						
MOTORS (KVA):	33.6						
A/C (KVA):	0.0						
HEATING (KVA):	4.5						
KITCHEN (KVA):	0.0						
MISCELLANEOUS (KVA):	32.8						

		0.0	0.0	15.8	0.0	0.0	0.0	14.4
PHASE A	40.2	334.9					
PHASE B	43.5	362.1					
	KVA	AMPS					

CONNECTED LOAD (KVA):	83.6
DEMAND LOAD (KVA):	87.0
CONNECTED LOAD (AMPS):	348.5
DEMAND LOAD (AMPS):	362.6

NOTES:

A DEMAND CALCS

LIGHTING	3.74	KVA	X	125	%	=	**4.7 KVA**
RECEPTAC TOTAL	9.00	KVA					
1ST	10.00	KVA	X	100	%	=	**9.0 KVA**
REMAIN	0.00	KVA	X	50	%	=	**0.0 KVA**
MOTORS	0.00	KVA	X	100	%	=	**0.0 KVA**
LARGEST		KVA	X	125	%	=	**0.0 KVA**
A/C	0.00	KVA	X	100	%	=	**0.0 KVA**
WATER HEATING	0.00	KVA	X	125	%	=	**0.0 KVA**
FUTURE		KVA	X	100	%	=	**0.0 KVA**
KITCHEN	0.00	KVA	X	65	%	=	**0.0 KVA**
MISCELLANEOUS	4.00	KVA	X	100	%	=	**4.0 KVA**
TOTAL =	**73.6 amps**					=	**17.7 KVA**

PANELBOARD SCHEDULE - "PANEL A"

MAIN: 100 MLO | VOLTAGE 240/120 | PHASE: 1 | WIRE: 3 | MOUNTING: RECESSED | AIC: 22,000 | BUS BARS: COPPER

CKT #	BKR TRIP	POLE	WIRE SIZE	COND SIZE	DESCRIPTION	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	PHASE A	PHASE B	LOAD (KVA) LTG	REC	MTR	A/C	HTG	KIT	MISC	DESCRIPTION	COND SIZE	WIRE SIZE	POLE	BKR TRIP	CKT #
1	20	1	12	3/4"	LIGHTING - CLASS 102 104	1.5									1.5							LIGHTING - CLASS 103 101	3/4"	12	1	20	2
3	20	1	12	3/4"	LIGHTING - CORRIDOR/RR	0.4						0.2				0.8						RECEPT - CLASS 101	3/4"	12	1	20	4
5	20	1	12	3/4"	RECEPT - CLASS 103		0.8									1.0						RECEPT - CLASS 101 TS	3/4"	12	1	20	6
7	20	1	12	3/4"	RECEPT - CLASS 103 TS		1.0														0.5	MONITOR CLASS 101	3/4"	12	1	20	8
9	20	1	12	3/4"	MONITOR CLASS 103							0.5				0.8						RECEPT - CLASS 102	3/4"	12	1	20	10
11	20	1	12	3/4"	RECEPT - CLASS 104		0.8									1.0						RECEPT - CLASS 102 TS	3/4"	12	1	20	12
13	20	1	12	3/4"	RECEPT - CLASS 104 TS		1.0														0.5	MONITOR CLASS 102	3/4"	12	1	20	14
15	20	1	12	3/4"	MONITOR CLASS 104							0.5				0.4						RECEPT - HVAC ATTIC	3/4"	12	1	20	16
17	20	1	12	3/4"	RECEPT - CORRIDOR		0.4														0.8	DATA RACK	3/4"	12	1	20	18
19	20	1	12	3/4"	RECEPT - EXTERIOR		0.6														0.2	FA BOOSTER	3/4"	12	1	20	20
21	20	1	12	3/4"	EWC (GFI BREAKER)							0.8				0.4						RECEPT - ELEC 100A 100B	3/4"	12	1	20	22
23	20	1	12	3/4"	LIGHTING - CANOPY	0.4																SPARE	3/4"	12	1	20	24
25	20	1	12	3/4"	SPARE																	SPARE	3/4"	12	1	20	26
27	20	1	12	3/4"	SPARE																	SPARE	3/4"	12	1	20	28
29		1			SPACE																	SPACE			1		30
31		1			SPACE																	SPACE			1		32

LIGHTING (KVA):	3.7	2.2	4.6	0.0	0.0	0.0	0.0	2.0
RECEPTACLES (KVA):	9.0						
MOTORS (KVA):	0.0						
A/C (KVA):	0.0						
HEATING (KVA):	0.0						
KITCHEN (KVA):	0.0						
MISCELLANEOUS (KVA):	4.0						

		1.5	4.4	0.0	0.0	0.0	0.0	2.0
PHASE A	10.0	83.3					
PHASE B	6.7	56.2					
	KVA	AMPS					

CONNECTED LOAD (KVA):	16.7
DEMAND LOAD (KVA):	17.7
CONNECTED LOAD (AMPS):	69.7
DEMAND LOAD (AMPS):	73.6

NOTES:

No.	Date	Revision
2	10/12/23	ADDENDUM # 2
1	10/04/23	ADDENDUM # 1

THIS DRAWING IS THE PROPERTY OF ENGINEERING SOURCE of NC, P.A. THIS DRAWING IS NOT TO BE COPIED IN WHOLE OR IN PART. THIS DRAWING OR THE INFORMATION HEREUPON IS NOT TO BE USED ON ANY OTHER PROJECT AND MUST BE RETURNED TO ENGINEERING SOURCE of NC, P.A. UPON REQUEST. DO NOT SCALE THESE DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS.

Hite associates
ARCHITECTURE / PLANNING / TECHNOLOGY
2600 Meridian Drive / Greenville, NC 27834 / tel (252) 757-0333

HITE ASSOCIATES, P.C. CORPORATION LICENSE A-18 GREENVILLE, NC

New Classroom Addition for
North Duplin Jr.-Sr. High School
1388 NC-403, Mt Olive, NC 28365
Duplin County / North Carolina

ES Project No. ES23022
ENGINEERING SOURCE of NC, P.A.
102-A2 Regency Blvd. Greenville, NC 27834
E-Mail Address: generalmail@engrsource.com
Voice (252) 439-0338 • Fax (252) 439-0462 • Fax #2-1813

10/12/23

Project No.	22253
Date:	6 March 2023
Drawing no.	E 101