

- EXISTING IT/COMMUNICATIONS LINE
- PROPOSED IT/COMMUNICATIONS LINE
- REMOVED IT/COMMUNICATIONS LINE



Utilities – IT/Communications Distribution Plan

Exhibit E-07

Summary		Assumed Normal	Assumed Emergency
		Demand (kVA)	Demand (kVA)
	Mult. Disciplinary Classroom Facility	435	121
	Child Development Center	213	39
	College Center for the Arts	488	99
	Science & Tech Classroom & Labs Phase II	500	146
	Student Couns., Fin. Aid, and Admissions	582	100
	Classroom & Lecture Hall	310	66
	Maintenance & Operations Center	162	21
	Central Administrative Services	110	19
	Cumulative Demand:	2801	611

Programs:		NORMAL	% EMG	EMERGENCY
		VA/sqft		VA/sqft
	Laboratories - Wet	29	35	10.2
	Laboratories - Dry	29	35	10.2
	Offices	7	15	1.1
	Library/Study/Class Rms	6	15	0.9
	Seminar/Conference	6	15	0.9
	Special Use	10	15	1.5
	Auditoriums	6	20	1.2
	Common Space	6	15	0.9

Qualifications:

- 1) Calculated values for information purposes only. Not to be quoted or used for any other reason.
- 2) Input demand loads (VA/sqft) used in these calculations are broad estimates based on engineering judgement only.

Mult. Disciplinary Classroom Facility

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		28,425				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	25%	7,106	29	206	10.2	72
Offices	25%	7,106	7	50	1.1	7
Library/Study/Class Rms	25%	7,106	6	43	0.9	6
Seminar/Conference	10%	2,843	6	17	0.9	3
Special Use	0%	0	10	0	1.5	0
Auditoriums	0%	0	6	0	1.2	0
Common Space	15%	4,264	6	26	0.9	4
Pumps & Fans		-	-	40		10
Plumbing		-	-	2		1
Elevators		-	-	10		5
Fire Pump		-	-	2		2
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		110
				Allow 10% Margin		11
				Total Demand		121
			VA/ftsq	15.29		4.25

Child Development Center

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		24,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	0%	0	29	0	10.2	0
Offices	25%	6,000	7	42	1.1	6
Library/Study/Class Rms	60%	14,400	6	86	0.9	13
Seminar/Conference	0%	0	6	0	0.9	0
Special Use	0%	0	10	0	1.5	0
Auditoriums	0%	0	6	0	1.2	0
Common Space	15%	3,600	6	22	0.9	3
Pumps & Fans		-	-	40		10
Plumbing		-	-	2		1
Elevators		-	-	0		0
Fire Pump		-	-	2		2
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		35
				Allow 10% Margin		4
				Total Demand		39
			VA/ftsq	8.89		1.60

College Center for the Arts

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		58,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	0%	0	29	0	10.2	0
Offices	15%	8,700	7	61	1.1	9
Library/Study/Class Rms	15%	8,700	6	52	0.9	8
Seminar/Conference	0%	0	6	0	0.9	0
Special Use	0%	0	10	0	1.5	0
Auditoriums	55%	31,900	6	191	1.2	38
Common Space	15%	8,700	6	52	0.9	8
Pumps & Fans		-	-	70		18
Plumbing		-	-	3		1
Elevators		-	-	10		5
Fire Pump		-	-	4		4
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		90
				Allow 10% Margin		9
				Total Demand		99
			VA/ftsq	8.42		1.71

Science & Tech Classroom & Labs Phase II

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		25,575				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	35%	8,951	29	260	10.2	91
Offices	25%	6,394	7	45	1.1	7
Library/Study/Class Rms	25%	6,394	6	38	0.9	6
Seminar/Conference	0%	0	6	0	0.9	0
Special Use	0%	0	10	0	1.5	0
Auditoriums	0%	0	6	0	1.2	0
Common Space	15%	3,836	6	23	0.9	3
Pumps & Fans		-	-	75		19
Plumbing		-	-	2		1
Elevators		-	-	10		5
Fire Pump		-	-	2		2
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		133
				Allow 10% Margin		13
				Total Demand		146
			VA/ftsq	19.56		5.72

Student Couns., Fin. Aid, and Admissions

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		65,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	0%	0	29	0	10.2	0
Offices	60%	39,000	7	273	1.1	41
Library/Study/Class Rms	0%	0	6	0	0.9	0
Seminar/Conference	10%	6,500	6	39	0.9	6
Special Use	10%	6,500	10	65	1.5	10
Auditoriums	0%	0	6	0	1.2	0
Common Space	20%	13,000	6	78	0.9	12
Pumps & Fans		-	-	60		15
Plumbing		-	-	2		1
Elevators		-	-	10		5
Fire Pump		-	-	2		2
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		91
				Allow 10% Margin		9
				Total Demand		100
			VA/ftsq	8.95		1.54

Classroom & Lecture Hall

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		30,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	5%	1,500	29	44	10.2	15
Offices	25%	7,500	7	53	1.1	8
Library/Study/Class Rms	50%	15,000	6	90	0.9	14
Seminar/Conference	0%	0	6	0	0.9	0
Special Use	5%	1,500	10	15	1.5	2
Auditoriums	0%	0	6	0	1.2	0
Common Space	15%	4,500	6	27	0.9	4
Pumps & Fans		-	-	40		10
Plumbing		-	-	2		1
Elevators		-	-	10		5
Fire Pump		-	-	2		2
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		60
				Allow 10% Margin		6
				Total Demand		66
			VA/ftsq	10.34		2.21

Maintenance & Operations Center

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		10,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	0%	0	29	0	10.2	0
Offices	25%	2,500	7	18	1.1	3
Library/Study/Class Rms	0%	0	6	0	0.9	0
Seminar/Conference	0%	0	6	0	0.9	0
Special Use	75%	7,500	15	113	1.5	11
Auditoriums	0%	0	6	0	1.2	0
Common Space	0%	0	6	0	0.9	0
Pumps & Fans		-	-	15		4
Plumbing		-	-	1		0
Elevators		-	-	0		0
Fire Pump		-	-	1		1
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		19
				Allow 10% Margin		2
				Total Demand		21
			VA/ftsq	16.17		2.08

Central Administrative Services

Programs	Assumed % of Total Area	Area (sqft)	Overall VA/sqft	Normal (kVA)	Emergency VA/Sqft	Emergency (kVA)
Assignable Sq. Ft.		12,000				
Laboratories - Wet	0%	0	29	0	10.2	0
Laboratories - Dry	0%	0	29	0	10.2	0
Offices	75%	9,000	7	63	1.1	9
Library/Study/Class Rms	0%	0	6	0	0.9	0
Seminar/Conference	5%	600	6	4	0.9	1
Special Use	5%	600	10	6	1.5	1
Auditoriums	0%	0	6	0	1.2	0
Common Space	15%	1,800	6	11	0.9	2
Pumps & Fans		-	-	15		4
Plumbing		-	-	1		0
Elevators		-	-	0		0
Fire Pump		-	-	1		1
Smoke Exhaust		-	-	0		0
				Normal (kVA)		Emergency (kVA)
				Sub Total		18
				Allow 10% Margin		2
				Total Demand		19
			VA/ftsq	9.20		1.61

		Assumed Demand (MBTUH)
Summary	Mult. Disciplinary Classroom Facility	1021
	0	715
	College Center for the Arts	1705
	0	993
	Student Couns., Fin. Aid, and Admissions	1854
	0	921
Maintenance & Operations Center	495	
0	385	
Cumulative Demand:		8089

Programs:		Heating	Equipment & Fixture	Building
		BTUH/gsf	BTUH	GSF
	Laboratories - Wet	50	Refer to Individual Building	253,000
	Laboratories - Dry	50		
	Offices	25		
	Library/Study/Class Rms	25		
	Seminar/Conference	25		
	Special Use	25		
	Auditoriums	25		
	Common Space	25		

Qualifications:

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- 2) Input demand loads (BTUH/sqft) used in these calculations are broad estimates based on engineering judgement only.

Mult. Disciplinary Classroom Facility

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		28,425		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	25%	7,106	50	355
Offices	25%	7,106	25	178
Library/Study/Class Rms	25%	7,106	25	178
Seminar/Conference	10%	2,843	25	71
Special Use	0%	0	25	0
Auditoriums	0%	0	25	0
Common Space	15%	4,264	25	107
Showers & Sinks		-	-	40
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 928
				Allow 10% Margin 93
				Total Demand 1,021
				BTUH/gsf 35.92

Child Development Center

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		24,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	0%	0	50	0
Offices	25%	6,000	25	150
Library/Study/Class Rms	60%	14,400	25	360
Seminar/Conference	0%	0	25	0
Special Use	0%	0	25	0
Auditoriums	0%	0	25	0
Common Space	15%	3,600	25	90
Showers & Sinks		-	-	50
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 650
				Allow 10% Margin 65
				Total Demand 715
				BTUH/gsf 29.79

Student Couns., Fin. Aid, and Admissions

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		65,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	0%	0	50	0
Offices	60%	39,000	25	975
Library/Study/Class Rms	0%	0	25	0
Seminar/Conference	10%	6,500	25	163
Special Use	10%	6,500	25	163
Auditoriums	0%	0	25	0
Common Space	20%	13,000	25	325
Showers & Sinks		-	-	60
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 1,685
				Allow 10% Margin 169
				Total Demand 1,854
				BTUH/gsf 28.52

Classroom & Lecture Hall

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		30,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	5%	1,500	50	75
Offices	25%	7,500	25	188
Library/Study/Class Rms	50%	15,000	25	375
Seminar/Conference	0%	0	25	0
Special Use	5%	1,500	25	38
Auditoriums	0%	0	25	0
Common Space	15%	4,500	25	113
Showers & Sinks		-	-	50
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 838
				Allow 10% Margin 84
				Total Demand 921
				BTUH/gsf 30.71

College Center for the Arts

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		58,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	0%	0	50	0
Offices	15%	8,700	25	218
Library/Study/Class Rms	15%	8,700	25	218
Seminar/Conference	0%	0	25	0
Special Use	0%	0	25	0
Auditoriums	55%	31,900	25	798
Common Space	15%	8,700	25	218
Showers & Sinks		-	-	100
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 1,550
				Allow 10% Margin 155
				Total Demand 1,705
				BTUH/gsf 29.40

Science & Tech Classroom & Labs

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		25,575		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	35%	8,951	50	448
Offices	25%	6,394	25	160
Library/Study/Class Rms	25%	6,394	25	160
Seminar/Conference	0%	0	25	0
Special Use	0%	0	25	0
Auditoriums	0%	0	25	0
Common Space	15%	3,836	25	96
Showers & Sinks		-	-	40
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 903
				Allow 10% Margin 90
				Total Demand 993
				BTUH/gsf 38.85

Maintenance & Operations Center

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		10,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	0%	0	50	0
Offices	25%	2,500	25	63
Library/Study/Class Rms	0%	0	25	0
Seminar/Conference	0%	0	25	0
Special Use	50%	5,000	25	125
Auditoriums	0%	0	25	0
Common Space	25%	2,500	25	63
Showers & Sinks		-	-	100
Kitchens		-	-	0
Process		-	-	100
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 450
				Allow 10% Margin 45
				Total Demand 495
				BTUH/gsf 49.50

Central Administrative Services

Programs	Assumed % of Total Area	Area (sqft)	Overall BTUH/sqft	Nat Gas (MBTUH)
Assignable Sq. Ft.		12,000		
Laboratories - Wet	0%	0	50	0
Laboratories - Dry	0%	0	50	0
Offices	75%	9,000	25	225
Library/Study/Class Rms	0%	0	25	0
Seminar/Conference	5%	600	25	15
Special Use	5%	600	25	15
Auditoriums	0%	0	25	0
Common Space	15%	1,800	25	45
Showers & Sinks		-	-	50
Kitchens		-	-	0
-		-	-	-
-		-	-	-
-		-	-	-
				Nat Gas (MBTUH)
				Sub Total 350
				Allow 10% Margin 35
				Total Demand 385
				BTUH/gsf 32.08