

June 27, 2011

ADDENDUM #3

Mr. Lonnie Greim
Project Manager
Department of Facilities Management
University of Colorado at Boulder

RE: **CP121908 – LASP/Tenant Finish**
BURKETTDESIGN Project Number: 10042.000

Dear Lonnie:

The following is in response to the consolidated comments received from David Lindblad on or before June 24, 2011.

Response by:	Comment/Response
01	Question: A3.01 - The ceiling tiles in room W114A needs to be removed and the light may be required to be changed, comment on June 1, 2011.
Burkett	Response: Room No. W114A is outside of the Architectural scope of work. ITS will need to coordinate additional scope of work with Department of Facilities Management. The successful General Contractor will be responsible to coordinate access to the IDF Rooms outside of the scope of work.
02	Question: A5.01 - The walls for the IT rooms need to have plywood as listed on the T prints per the UCB specifications and painted white, comment on June 1, 2011.
Burkett	Response: Sheet A5.01, Keyed Note #4 only occurs on Sheet A5.02, Room #N254 / IDF Closet. Plywood installed on walls must comply with UCB standards and painted white.
03	Question: A5.02 - The walls for the IT rooms need to have plywood as listed on the T prints per the UCB specifications and painted white, comment on June 1, 2011.
Burkett	Response: Sheet A5.02, Room #N254 & W200 / IDF Closets. Plywood installed on walls must comply with UCB standards and painted white.
04	Question: M1.2 - The refrigeration piping shall not route through or within the IT room N254, comment on June 1, 2011.
ME Engineers	Response: Sheet M1.2, Keyed Note #12. Additional notation. New refrigerant piping shall not be routed through or within Room #N254 / IDF Closet. Refer to SKM-01 dated 06.27.11
05	Question: T2.01 - The contractors need to remove the ceiling tiles from the MDF room so if Lonnie hasn't committed to get this completed have the IT contractor remove the tiles.

1. I haven't heard if this cable was mounted per this design? Please confirm. Comment on June 1, 2011.

- Burkett**
Rimrock
- Response:** **Rooms identified on Sheet T2.01 are outside of the Architectural scope of work. ITS will need to coordinate additional scope of work with Department of Facilities Management. The successful General Contractor will be responsible to coordinate access to the IDF Rooms outside of the scope of work.**
- 06 **Question:** T2.01 - Polycomm needs to be hired for the wireless so as past projects you should add holding jacks on the prints however hopefully this review is complete and nailed down for the CD phase.
1. This hasn't been confirmed and I don't see any WAP holding outlets. Comment on June 1, 2011.
- Rimrock**
- Response:** **This survey has not been completed by Accuvant. We will provide a narrative for Addendum #3 for bidding purposes.**
- 07 **Question:** T2.01 - Comment on June 1, 2011, All floor boxes need a CAD number if jacks terminate in them but if no jack terminates in the floor box but cable is pulled through it show the box as a square because it is a pull box not an outlet box.
- Rimrock**
ME
Engineers
- Response:** **The floor boxes (FB) have CAD numbers assigned. The furniture feeds (F) do not. I believe this is corrected.**
- 08 **Question:** T2.02 - The contractors need to remove the ceiling tiles from the IDF room N254 so if Lonnie hasn't committed to get this completed have the IT contractor remove the tiles.
1. Not addressed on sheet A 3.01, comment on June 1, 2011.
- Burkett**
- Response:** **Refer to Sheet A3.02, Room #254 does not have a suspended ceiling grid or tile shown. Notation is 'OTS' = Open To Structure.**
- Rimrock**
- Response:** **This is not typically performed by the low-voltage contractor.**
- 09 **Question:** T2.02 - Polycomm needs to be hired for the wireless so as past projects you should add holding jacks on the prints however hopefully this review is complete and nailed down for the CD phase.
1. This hasn't been confirmed and I don't see any WAP holding outlets. Comment on June 1, 2011.
- Rimrock**
- Response:** **This survey has not been completed by Accuvant. We will provide a narrative for Addendum #3 for bidding purposes.**
- 10 **Question:** T3.01 - For the MDF Room Plan, show the route of the station wire from the conduits to the fourth relay rack.
1. I don't see that this has been addressed. Comment on June 1, 2011.
- Rimrock**
- Response:** **This will be covered in a future Addendum. This should not impact cost.**
- 11 **Question:** T3.01 -For the MDF Wall Elevations, we need a 100 pair tie cable to the right of the building protection to get circuits from the protector to the racks. The tie cable on the wall shall be on 66 blocks stacked 6 blocks high per our standard with a maximum of 6 foot 3 inches

with cable punched down on the left side only of the first four blocks. The cable should route in the corner with the OSP cable across the bottom and up the 66 blocks. We will also need ½ d-rings across the top from the protector to the right side of the 66 blocks for cross connect wire. These blocks shall be labeled per UCB ITS standards.

1. I don't see the height of 6 foot 3 inches labeled, comment on June 1, 2011.

i. This was addressed however it looks like we haven't told the contractor to punch down the cable on the left side of the blocks from top to the bottom. June 24, 2011.

Rimrock **Response:** **This will be covered in a future Addendum. This should not impact cost.**
12 **Question:** T3.01 - For the MDF Wall Elevations, add Qwest cable from the datacenter to the west wall in the south corner in D-rings with the cabling in the south / west corner. The Qwest cable on the wall shall be on 66 blocks stacked 6 blocks high per our standard with a maximum of 6 foot 3 inches with cable punched down on the left side only of the first four blocks. These blocks shall be labeled per UCB ITS standards.

2. I don't see the height of 6 foot 3 inches labeled, comment on June 1, 2011.

This was addressed however it looks like we haven't told the contractor to punch down the cable on the left side of the blocks from top to the bottom. June 24, 2011.

Rimrock **Response:** **This will be covered in a future Addendum. This should not impact cost.**
13 **Question:** T3.01 - For the IDF W117 Room Plan, show the route of the station wire from the conduits to the second relay rack.

3. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock **Response:** **This will be coordinated in the field. There is not enough room for cable runway to surround the room and have (2) routes for cabling.**
14 **Question:** T3.01 - For the IDF W117 Room Plan, show the route of the station wire from the conduits to the second relay rack.

4. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock **Response:** **This will be coordinated in the field. There is not enough room for cable runway to surround the room and have (2) routes for cabling.**
15 **Question:** T3.01 - For the IDF W117 Room Plan, add a dedicated power outlet

per Jane Folger's direction.

5. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock Response: This has been coordinated will be on the electrical drawings.

**ME
Engineers
16**

Refer to SKE-02 & SKE-05 dated 06.27.11

Question: T3.01 - For the IDF W117 Wall Elevations, add Qwest cable from the datacenter to the north wall in the west corner in D-rings with the cabling in the north / west corner. The Qwest cable on the wall shall be on 66 blocks stacked 6 blocks high per our standard with a maximum of 6 foot 3 inches with cable punched down on the left side only of the first four blocks. These blocks shall be labeled per UCB ITS standards.

6. I don't see the height of 6 foot 3 inches labeled, comment on June 1, 2011.

Rimrock Response: This is shown on at 6'3" on sheet T3.01. The block punch downs will be covered in a future addendum. This should not impact cost.

17 Question: T3.04 - For the IDF W200 Room Plan, show the route of the station wire from the conduits to the second relay rack.

7. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock Response: This will be coordinated in the field. There is not enough room for cable runway to surround the room and have (2) routes for cabling.

18 Question: T3.04 - For the IDF W200 Room Plan, add a dedicated power outlet per Jane Folger's direction.

8. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock Response: This has been coordinated will be on the electrical drawings.

**ME
Engineers
19**

Refer to SKE-01 & SKE-04 dated 06.27.11

Question: T3.04 - For the IDF W200 Wall Elevations, add Qwest cable from the datacenter to the north wall in the west corner in D-rings with the cabling in the north / west corner. The Qwest cable on the wall shall be on 66 blocks stacked 6 blocks high per our standard with a maximum of 6 foot 3 inches with cable punched down on the left side only of the first four blocks. These blocks shall be labeled per UCB ITS standards.

9. I don't see the height of 6 foot 3 inches labeled, comment on June 1, 2011.

- i. This was addressed however we don't have a detail of the Qwest landing in the data center as of June 24, 2011.

Rimrock **Response:** **This will be coordinated in the field. The wall field is existing.**
20 **Question:** T3.03 - For the IDF N254 Room Plan, show the route of the station wire from the conduits to the second relay rack.

10. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock **Response:** **This will be coordinated in the field. There is not enough room for cable runway to surround the room and have (2) routes for cabling.**
21 **Question:** T3.03 - For the IDF N254 Room Plan, add a dedicated power outlet per Jane Folger's direction.

11. I don't see that this has been addressed. Comment on June 1, 2011.

Rimrock **Response:** **This has been coordinated will be on the electrical drawings.**

ME
Engineers
22

Refer to SKE-01 & SKE-03 dated 06.27.11

Question: T3.03 - For the IDF N254 Wall Elevations, add Qwest cable from the datacenter to the south wall in the east corner in D-rings with the cabling in the south / east corner. The Qwest cable on the wall shall be on 66 blocks stacked 6 blocks high per our standard with a maximum of 6 foot 3 inches with cable punched down on the left side only of the first four blocks. These blocks shall be labeled per UCB ITS standards.

12. I don't see the height of 6 foot 3 inches labeled, comment on June 1, 2011.

- ii. This was addressed however we don't have a detail of the Qwest landing in the data center as of June 24, 2011.

Rimrock **Response:** **This will be coordinated in the field. The wall field is existing.**
23 **Question:** T3.03 - Remove 1L 96 port voice panel (the 200 is covered in rack 2 and rack 3), comment on June 1, 2011.

13. This needs to be fixed. Remove 1L and put the 96 port panel back in rack 2 for shorter patching as 2L. Also fix the labeling of the 96 port panel in rack 3 to be 3L.

Rimrock **Response:** **This will be covered in a future addendum. This should not impact cost.**

END



PROJECT: University of Colorado at Boulder, LASP
CP-121908

DATE: June 27, 2011

Re: ADDENDUM #3

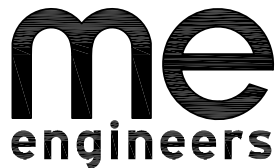
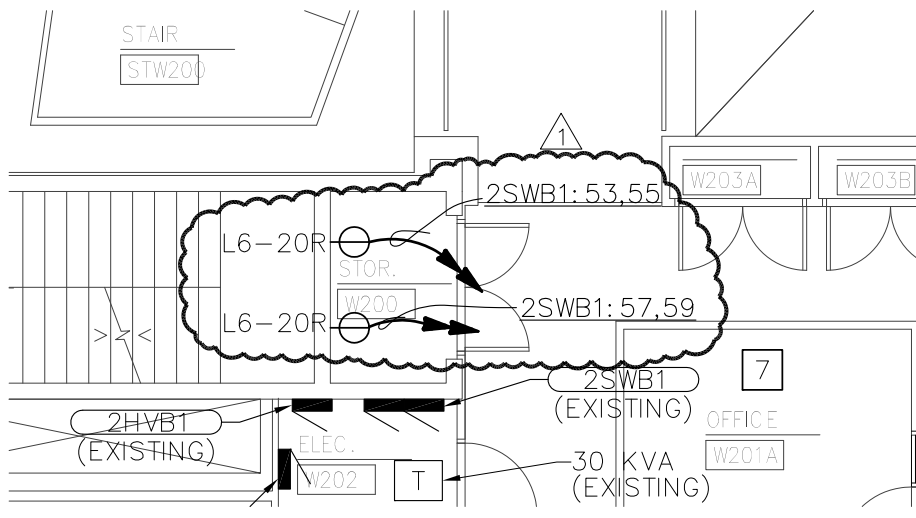
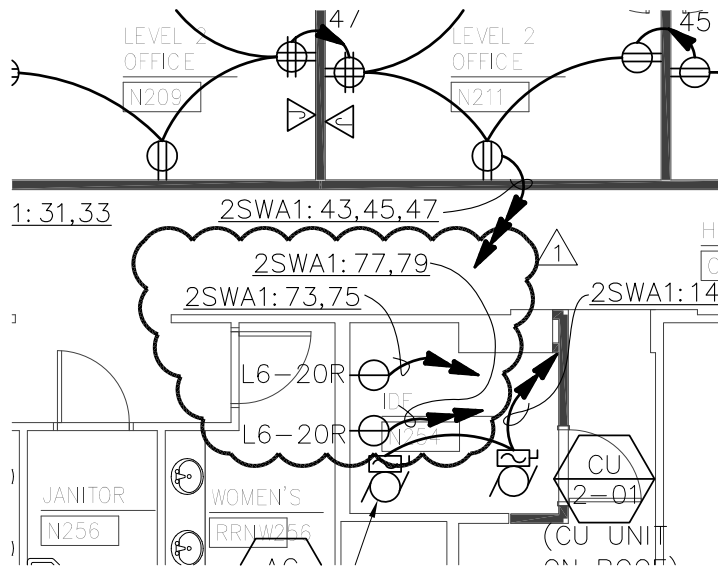
This Addendum becomes part of the Contract Documents and shall be acknowledged by each bidder on the proposal form. All parts of the original specifications and drawings shall remain in force except as noted below:

1. Provide eighty-eight (88) wireless access point package throughout the 1st and 2nd floors, each consisting of one Category 6 cable, one WAP enclosure, and one Wireless Access Unit, per Specifications, including all incidental materials, to provide a complete wireless access point ready for the Owner's use.

2: Provide add/delete unit cost for one (1) wireless access point package, each consisting of one Category 6 cable, one WAP enclosure, and one Wireless Access Unit, per Specifications, including all incidental materials, to provide a complete wireless access point ready for the Owner's use.

END OF ADDENDUM

1 6. LOW VOLTAGE ROUGH-IN AND CONDUIT SHOWN FOR REFERENCE ONLY. REFER TO TECHNOLOGY DRAWINGS AND SPECIFICATIONS FOR EXACT QUANTITIES AND LOCATIONS.



M-E Engineers, Inc.
 10055 west 43rd avenue
 wheat ridge, co 80033
 t. 303.421.6655 / f. 303.421.0331
 www.me-engineers.com

PROJECT: CU LASP

DATE: 06/27/11

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

CHECKED BY: JY

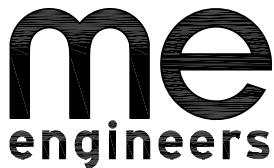
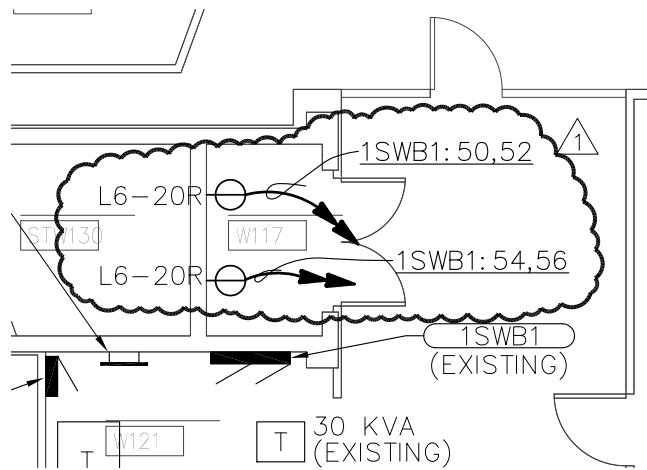
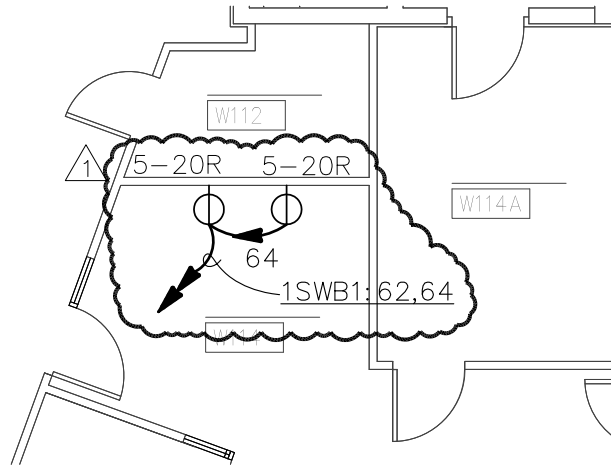
DRAWN BY: JY

REF. SHT: E1.2

REV: UBC COMMENTS

SKETCH NO.: **SKE-01**

6. LOW VOLTAGE ROUGH-IN AND CONDUIT SHOWN FOR REFERENCE ONLY. REFER TO TECHNOLOGY DRAWINGS AND SPECIFICATIONS FOR EXACT QUANTITIES AND LOCATIONS.



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

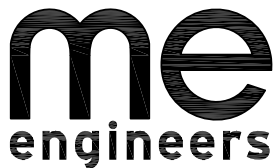
CHECKED BY: JY

DRAWN BY: JY

REF. SHT: E1.1

REV: UBC COMMENTS

SKETCH NO.: **SKE-02**



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PROJECT: CU LASP

DATE: 06/27/11

SCALE: N.T.S.

CHECKED BY: JY

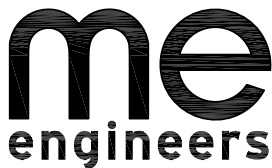
DRAWN BY: JY

REF. SHT: E0.2

REV: UBC COMMENTS

SKETCH NO.: **SKE-04**

CU LASP Sybase Space Study 208Y/120 3Phase, 4Wire + Gnd		M-E Engineers Inc. BUS: 250 Amps MAINS: M.L.O.		Copper		2SWB1 2 OF 2								
NOTES: A. EXISTING BREAKER AND EXISTING LOAD B. EXISTING BREAKER AND NEW LOAD 1. ALTERNATE #2 2. ALTERNATE #3		OPTIONS:		DATE: 2SWB1_1		FED. FROM : MOUNTING : ISSUE:								
N	ID	DESCRIPTION	V-A	P	BKR	PH	CKT	BKR	CKT	P	V-A	DESCRIPTION	ID	N
A	R	EXISTING LOAD	1200	1	20	A	43	20	44	1	1200	EXISTING LOAD	R	A
A	R	EXISTING LOAD	1200	1	20	B	45	20	46	1	1200	EXISTING LOAD	R	A
A	R	EXISTING LOAD	1200	1	20	A	47	20	48	1	1200	EXISTING LOAD	R	A
B,1	M	BREAK W214 EWH-2	1500	2	20	A	49	20	50	1	1200	EXISTING LOAD	R	A
B,1	M	1500	1500	>	20	B	51	20	52	1	1200	EXISTING LOAD	R	A
B,2	R	IDF ROOM W200 L6-20R	500	2	20	C	53	20	54	1	1200	EXISTING LOAD	R	A
B,2	R	-----	500	<	20	A	55	20	56	1	1200	EXISTING LOAD	R	A
B,2	R	IDF ROOM W200 L6-20R	500	2	20	B	57	20	58	1	1200	EXISTING LOAD	R	A
B,2	R	-----	500	<	20	C	59	20	60	1	1200	EXISTING LOAD	R	A
A	P	--SPARE--	500	1	20	A	61	20	62	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	B	63	20	64	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	C	65	20	66	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	A	67	20	68	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	B	69	20	70	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	C	71	20	72	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	A	73	20	74	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	B	75	20	76	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	C	77	20	78	1	1200	--SPARE--	P	A
A	P	--SPARE--	500	1	20	A	79	30	80	3	1200	EXISTING TVSS	R	A
A	P	--SPARE--	500	1	20	B	81	30	82	>	1200	-----	R	A
A	P	--SPARE--	500	1	20	C	83	30	84	>	1200	-----	R	A
LOAD SUMMARY WITH DOWNSTREAM LOADS INCLUDED CATEGORY CONNECTED FACTOR CALC'D V-A AMPS @ 208Y/120 Volts LIGHTING 14,000 125% 10,000 28 RECEPT 3,000 50% 2,000 6 MOTOR 3,000 100% 3,000 8 LRGST MTR 3,000 25% 750 2 MISC 100% KITCHEN 100% ELEC HEAT 100%														
TOTAL											17,000	15,750	44	



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CU LASP Sybase Space Study
 208Y/120
 3Phase, 4Wire + Gnd

M-E Engineers Inc.
 BUS: 250 Amps
 MAINS: M.L.O.

Copper

PANEL: 1SWB1
 SECTION: 2 OF 2
 LOCATION:

DATE: 06/27/11
 FED FROM: 1SWB1_1
 MOUNTING:
 ISSUE:

NOTES: A. EXISTING BREAKER AND EXISTING LOAD
 B. EXISTING-BREAKER AND NEW LOAD
 1. ADDENDUM #3

OPTIONS:

N	ID	DESCRIPTION	V-A	P	BKR	CKT	PH	CKT	BKR	CKT	PH	CKT	BKR	P	V-A	DESCRIPTION	V-A	P	BKR	CKT	PH	CKT	BKR	ID	N
A	R	EXISTING LOAD	1200	1	20	43	A	44	20	1	1200	44	20	1	1200	EXISTING LOAD	1200	1	20	44	A	44	20	R	A
A	R	EXISTING LOAD	1200	1	20	45	B	46	20	1	1200	46	20	1	1200	EXISTING LOAD	1200	1	20	46	B	46	20	R	A
A	R	EXISTING LOAD	1200	1	20	47	C	48	20	1	1200	48	20	1	1200	EXISTING LOAD	1200	1	20	48	C	48	20	R	A
A	R	EXISTING LOAD	1200	1	20	49	A	50	20	2	500	50	20	2	500	IDF ROOM W117 L6-20R	500	2	20	50	A	50	20	R	B.1
A	R	EXISTING LOAD	1200	1	20	51	B	52	20	2	500	52	20	2	500	---	500	2	20	52	B	52	20	R	B.1
A	R	EXISTING LOAD	1200	1	20	53	C	54	20	2	500	54	20	2	500	IDF ROOM W117 L6-20R	500	2	20	54	C	54	20	R	B.1
A	R	EXISTING LOAD	600	1	20	55	A	56	20	2	500	56	20	2	500	---	500	2	20	56	A	56	20	R	B.1
A	R	EXISTING LOAD	600	1	20	57	B	58	20	2	500	58	20	2	500	---	500	2	20	58	B	58	20	R	B.1
A	R	EXISTING LOAD	600	1	20	59	C	60	20	1	1200	60	20	1	1200	EXISTING LOAD	1200	1	20	60	C	60	20	R	A
A	P	---	600	1	20	61	A	62	20	1	500	62	20	1	500	MDF ROOM W114 5-20R	500	1	20	62	A	62	20	R	B.1
A	R	EXISTING LOAD	600	1	20	63	B	64	20	1	500	64	20	1	500	MDF ROOM W114 5-20R	500	1	20	64	B	64	20	R	B.1
A	R	EXISTING LOAD	600	1	20	65	C	66	20	1	500	66	20	1	500	---	500	1	20	66	C	66	20	R	B.1
A	P	---	600	1	20	67	A	68	20	1	500	68	20	1	500	---	500	1	20	68	A	68	20	P	A
A	P	---	600	1	20	69	B	70	20	1	500	70	20	1	500	---	500	1	20	70	B	70	20	P	A
A	P	---	600	1	20	71	C	72	20	1	500	72	20	1	500	---	500	1	20	72	C	72	20	P	A
A	P	---	600	1	20	73	A	74	20	1	500	74	20	1	500	---	500	1	20	74	A	74	20	P	A
A	P	---	600	1	20	75	B	76	20	1	500	76	20	1	500	---	500	1	20	76	B	76	20	P	A
A	P	---	600	1	20	77	C	78	20	1	500	78	20	1	500	---	500	1	20	78	C	78	20	P	A
A	P	---	600	1	20	79	A	80	30	3	1500	80	30	3	1500	EXISTING TVSS	1500	3	30	80	A	80	30	R	A
A	P	---	600	1	20	81	B	82	30	3	1500	82	30	3	1500	---	1500	3	30	82	B	82	30	R	A
A	P	---	600	1	20	83	C	84	30	3	1500	84	30	3	1500	---	1500	3	30	84	C	84	30	R	A

LOAD SUMMARY WITH DOWNSTREAM LOADS INCLUDED	CONNECTED	FACTOR	CALC'D V-A	AMPS @ 208Y/120 Volts
TOTALS	18,000	125%	10,000	28
LIGHTING	18,000	100%	10,000	28
RECEPT		50%	4,000	11
MOTOR		100%		
LRGST MTR		25%		
MISC		100%		
KITCHEN		100%		
ELEC HEAT		100%		
TOTAL	18,000		14,000	39

PROJECT: CU LASP

DATE: 06/27/11 SCALE: N.T.S.

CHECKED BY: JY DRAWN BY: JY

REF. SHT: E0.2 REV: UBC COMMENTS

SKETCH NO.: **SKE-05**

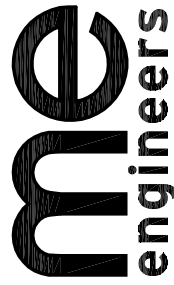
KEY NOTES:

(SOME KEY NOTES MAY NOT APPLY TO THIS SHEET)

12 ROUTE REFRIGERANT PIPING UP TO ROOF VIA (E) MECHANICAL CHASE. FIELD LOCATE CONDENSING UNIT (CU 1-01) ON ROOF. INSTALL PER MANUFACTURER'S

LITERATURE. NEW REFRIGERANT PIPING SHALL NOT BE ROUTED THROUGH OR WITHIN ROOM N254/IDF CLOSET.

13 REPLACE DAMAGED SLOT DIFFUSER.



M-E Engineers, Inc.
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www.me-engineers.com

PROJECT: CU LASP

DATE: 06/27/11

SCALE: NO SCALE

CHECKED BY: BK

DRAWN BY: ISR

REF. SHT: M1.2

REV: UBC Comments

SKETCH NO.: **SKM-01**