

RETAIL DESIGN & DELIVERY SUBMITTAL & TRANSMITTAL FORM									
MALL / PROPERTY NAME:		AL KOUTH MALL		BRAND NAME:		CLARK'S		UNIT NUMBER:	
SUBMITTAL / TRANSMITTAL NO.:		SUBMITTAL NO.:		BRAND NAME:		CLARK'S		UNIT NUMBER:	
INVESTOR and/or AUTHORIZED REPRESENTATIVE		NAME of Investor / Authorized Representative		CONTACT No. of Investor / Authorized		SUBMITTAL DATE:		24-Sep-17	
CONTRACTOR'S AUTHORIZED REPRESENTATIVE		JASHANMAL		90022060		E-mail Address of Investor / Authorized Representative		rafat@jashanmal.net	
COMPANY NAME		JASHANMAL		NAME of Contractor's Project Manager		CONTACT No.		E-mail Address	
Lanouvville Interiors		JASHANMAL		Eng.Dory Hanna		99825584		dory@lanouvvilleint.com	
ONE (1) SUBMITTAL / TRANSMITTAL for each SUBMITTAL TYPE									
ITEM NO.	DRAWING TITLE / DESCRIPTION	SUBMITTAL TYPE	DRAWING NO.	REVISION NO.	NO. OF COPIES	CODE			COMMENTS / REMARKS
						A	B	C	
1	COMPOSIT LAYOUT	ARCHITECTURAL & MEP DETAILED DESIGN; SIGNAGE; HOARDING; KFD/FIRE ALARM, FIRE FIGHTING, EMERGENCY & EXIT; AS BUILT; MATERIAL SAMPLE; SPECIFICATIONS; SURVEYS; INSURANCE, ETC.	CO-01	1	1				
2	FIRE FIGHTING LAYOUT		FF-01	1	1				
3	LIGHTING LAYOUT		LI-01	1	1				
4	HVAC LAYOUT		AC-01	1	1				
5	POWER LAYOUT		PW-01	1	1				
6	SMOKE DETECTOR LAYOUT		SM-01	1	1				
7	EM-&EX-LAYOUT		EMX-01	1	1				
8	SPEAKER LAYOUT		SP-01	1	1				
9	DB SCHEDULE management			1	1				
9	HEAT LOAD			1	1				
	24 SEP 2017								
RD&D ACTION									
<input checked="" type="checkbox"/> NEW SUBMITTAL <input type="checkbox"/> RE-SUBMITTAL <input type="checkbox"/> OTHERS									
Investor / Contractor									
Name: THOMAS JOY Tel. No.: 90020031 Date: 24-Sep-17 Authorized Signature / Date:									
RD&D Coordinator / Sr. MEP / MEP Engineer									
Name / Signature / Date:									
Sr. Manager and/or General Manager									
Name / Signature / Date:									

Clarks - AL Kout Mall

DB - 10 ways -- Isolator 100 A TPN on load type, 40A 4P COELCB 300mA with contactor for Lighting , 40A 4P COELCB 30mA for Power

	CKT	PHASE	MCB Rating	WIRE SIZE	Controlled by	DESCRIPTION	Watts per point	LOAD (W)			
								R	Y	B	
LIGHTING	1	R	16	2.5	CONTROLLED BY CONTACTOR 40A	L1 (P0532 + P4401 + womens pendant)	6x25 + 1x15 + 1x50	215			
		Y	16	2.5		L2 (P0532 + P4401 + P4402)	5x25 + 3x15 + 2x20		210		
		B	16	2.5		L3 (P0532 + P4401)	6x25 + 2x15			180	
	2	R	16	2.5		Entrance (P4402 + D4477)	4x20 + 2x20	120			
		Y	16	2.5		L4 (P0532 + P4401)	5x25 + 1x15		140		
		B	16	2.5		Display (S4307JA)	2x75			150	
	3	R	16	2.5		Chandelier	5x50	250			
		Y	16	2.5		Furniture Display D -1	3x100		300		
		B	16	2.5		Furniture Display D -2	3x100			300	
	4	R	16	2.5		Furniture Display D -3	3x100	300			
		Y	16	2.5		Furniture Display D -4	3x100		300		
		B	16	2.5		Furniture Display D -5	3x100			300	
	5	R	16	2.5		Furniture Display D -6	3x100	300			
		Y	16	2.5		Signage	1x300		300		
		B	16	2.5		EX & EM	8X10 + 3X10			110	
6	R	16	2.5	L - Store		6X50	300				
	Y	16		Spare							
	B	16		Spare							
POWER	7	R	20	4	SW. Socket	Cashier - 1	2x200	400			
		Y	20	4	SW. Socket	Cashier - 2	2x200		400		
		B	20	4	SW. Socket	Store	2x200			400	
	8	R	20	4	SW. Socket	Utility - 1	2x200	400			
		Y	20	4	SW. Socket	Utility - 2	2x200		400		
		B	20	4	SW. Socket	Utility Store	3x200			600	
	9	R	20	4	SW. Socket	P - IT	2x200	400			
		Y	20	4	SW. Socket	AC	550		550		
		B	20	4	SW. Socket	P - CCTV	2x200			400	
	10	R	20			Spare					
		Y	20			Spare					
		B	20			Spare				70	
						7795	TOTAL LOAD = 7.795 KW				

24 SEP 2017

Time:

Management
GLA Property Management Co. (W)


 24 SEP 2017
 Time:
RECEIVED
 Retail Design & Delivery Dept.

G-01 RETAIL

1. General Details:

Floor Area

572.6

ft²

Avg. Ceiling Height

13.1

ft

Building Weight

70.0

lb/ft²

1.1. OA Ventilation Requirements:

Space Usage

RETAIL: Sales

OA Requirement 1

8.1

CFM/person

OA Requirement 2

0.12

CFM/ft²

Space Usage Defaults

ASHRAE Std 62.1-2007

2. Internals:

2.1. Overhead Lighting:

Fixture Type

Recessed (Unvented)

Wattage

1.86

W/ft²

Ballast Multiplier

1.08

Schedule

LIGHTING

2.2. Task Lighting:

Wattage

0.00

W/ft²

Schedule

None

2.3. Electrical Equipment:

Wattage

800.0

Watts

Schedule

ELECTRICAL

3. Walls, Windows, Doors:

Exp.	Wall Gross Area (ft²)	Window 1 Qty.	Window 2 Qty.	Door 1 Qty.
NNW	327.2	0	0	0

3.1. Construction Types for Exposure NNW

Wall Type

Wall

4. Roofs, Skylights:

(No Roof or Skylight data).

5. Infiltration:

Design Cooling

0.00

CFM

Design Heating

0.00

CFM

Energy Analysis

0.00

CFM

Infiltration occurs only when the fan is off.

6. Floors:

Type

Floor Above Conditioned Space

(No additional input required for this floor type).

7. Partitions:

(No partition data).

2.4. People:

Occupancy

4.0

People

Activity Level

User defined

Sensible

230.0

BTU/hr/person

Latent

104.1

BTU/hr/person

Schedule

PEOPLE

2.5. Miscellaneous Loads:

Sensible

0

BTU/hr

Schedule

None

Latent

0

BTU/hr

Schedule

None



G-02 RETAIL

1. General Details:

Floor Area 922.5 ft²
 Avg. Ceiling Height 13.1 ft
 Building Weight 70.0 lb/ft²

1.1. OA Ventilation Requirements:

Space Usage RETAIL: Sales
 OA Requirement 1 8.1 CFM/person
 OA Requirement 2 0.12 CFM/ft²
 Space Usage Defaults ASHRAE Std 62.1-2007

2. Internals:

2.1. Overhead Lighting:

Fixture Type Recessed (Unvented)
 Wattage 1.86 W/ft²
 Ballast Multiplier 1.08
 Schedule LIGHTING

2.2. Task Lighting:

Wattage 0.00 W/ft²
 Schedule None

2.3. Electrical Equipment:

Wattage 3500.0 Watts
 Schedule ELECRICAL

3. Walls, Windows, Doors:

(No Wall, Window, Door data).

4. Roofs, Skylights:

(No Roof or Skylight data).

5. Infiltration:

Design Cooling 0.00 CFM
 Design Heating 0.00 CFM
 Energy Analysis 0.00 CFM
 Infiltration occurs only when the fan is off.

6. Floors:

Type Floor Above Conditioned Space
 (No additional input required for this floor type).

7. Partitions:

(No partition data).

2.4. People:

Occupancy 12.0 People
 Activity Level User defined
 Sensible 220.0 BTU/hr/person
 Latent 104.1 BTU/hr/person
 Schedule PEOPLE

2.5. Miscellaneous Loads:

Sensible 0 BTU/hr
 Schedule None
 Latent 0 BTU/hr
 Schedule None



Air System Sizing Summary for FCU-11 CLARKS

Project Name: Clarks
Prepared by: Lenovelle

07/25/2017
08:15AM

Air System Information

Air System Name **FCU-11 CLARKS**
Equipment Class **CW AHU**
Air System Type **SZCAV**

Number of zones **1**
Floor Area **1495.1** ft²
Location **Kuwait City, Kuwait**

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM **Peak zone sensible load**
Space CFM **Coincident space loads**

Calculation Months **Jan to Dec**
Sizing Data **User-Modified**

Central Cooling Coil Sizing Data

Total coil load **3.5** Tons
Total coil load **42.4** MBH
Sensible coil load **34.2** MBH
Coil CFM at Jul 1900 **1700** CFM
Max block CFM **1700** CFM
Sum of peak zone CFM **1700** CFM
Sensible heat ratio **0.806**
ft²/Ton **422.7**
BTU/(hr-ft²) **28.4**
Water flow @ 10.0 °F rise **8.49** gpm

Load occurs at **Jul 1900**
OA DB / WB **112.8 / 79.7** °F
Entering DB / WB **75.2 / 65.1** °F
Leaving DB / WB **57.9 / 56.8** °F
Coil ADP **55.8** °F
Bypass Factor **0.100**
Resulting RH **52** %
Design supply temp. **59.9** °F
Zone T-stat Check **0 of 1** OK
Max zone temperature deviation **0.0** °F

Central Heating Coil Sizing Data

Max coil load **8.6** MBH
Coil CFM at Des Htg **1700** CFM
Max coil CFM **1700** CFM
Water flow @ 20.0 °F drop **0.86** gpm

Load occurs at **Des Htg**
BTU/(hr-ft²) **5.7**
Ent. DB / Lvg DB **66.2 / 70.9** °F

Precool Coil Sizing Data

Total coil load **1.1** Tons
Total coil load **13.6** MBH
Sensible coil load **13.6** MBH
Coil CFM at Jul 1500 **300** CFM
Max coil CFM **300** CFM
Sensible heat ratio **1.000**
Water flow @ 10.0 °F rise **2.72** gpm

Load occurs at **Jul 1500**
OA DB / WB **117.3 / 80.8** °F
Entering DB / WB **117.3 / 80.8** °F
Leaving DB / WB **75.0 / 69.6** °F
Bypass Factor **0.100**

Supply Fan Sizing Data

Actual max CFM **1700** CFM
Standard CFM **1689** CFM
Actual max CFM/ft² **1.14** CFM/ft²

Fan motor BHP **1.26** BHP
Fan motor kW **1.00** kW

Outdoor Ventilation Air Data

Design airflow CFM **300** CFM
CFM/ft² **0.20** CFM/ft²

CFM/person **18.75** CFM/person



Zone Sizing Summary for FCU-11 CLARKS

Project Name: Clarks
Prepared by: Lenovelle

07/25/2017
08:15AM

Air System Information

Air System Name FCU-11 CLARKS
Equipment Class CW AHU
Air System Type SZCAV

Number of zones 1
Floor Area 1495.1 ft²
Location Kuwait City, Kuwait

Sizing Calculation Information

Zone and Space Sizing Method:

Zone CFM Peak zone sensible load
Space CFM Coincident space loads

Calculation Months Jan to Dec
Sizing Data User-Modified

Zone Sizing Data

Zone Name	Maximum Cooling Sensible (MBH)	Design Air Flow (CFM)	Minimum Air Flow (CFM)	Time of Peak Load	Maximum Heating Load (MBH)	Zone Floor Area (ft ²)	Zone CFM/ft ²
FCU-11 CLARKS	28.0	1700	1700	Jul 1900	1.0	1495.1	1.14

Zone Terminal Sizing Data

No Zone Terminal Sizing Data required for this system.

Space Loads and Airflows

Zone Name / Space Name	Mult.	Cooling Sensible (MBH)	Time of Load	Air Flow (CFM)	Heating Load (MBH)	Floor Area (ft ²)	Space CFM/ft ²
FCU-11 CLARKS							
G-01 RETAIL	1	8.4	Jul 1900	507	1.0	572.6	0.89
G-02 RETAIL	1	19.7	Jul 1900	1193	0.0	922.5	1.29



Air System Design Load Summary for FCU-11 CLARKS

Project Name: Clarks
Prepared by: Lenovelle

07/25/2017
08:15AM

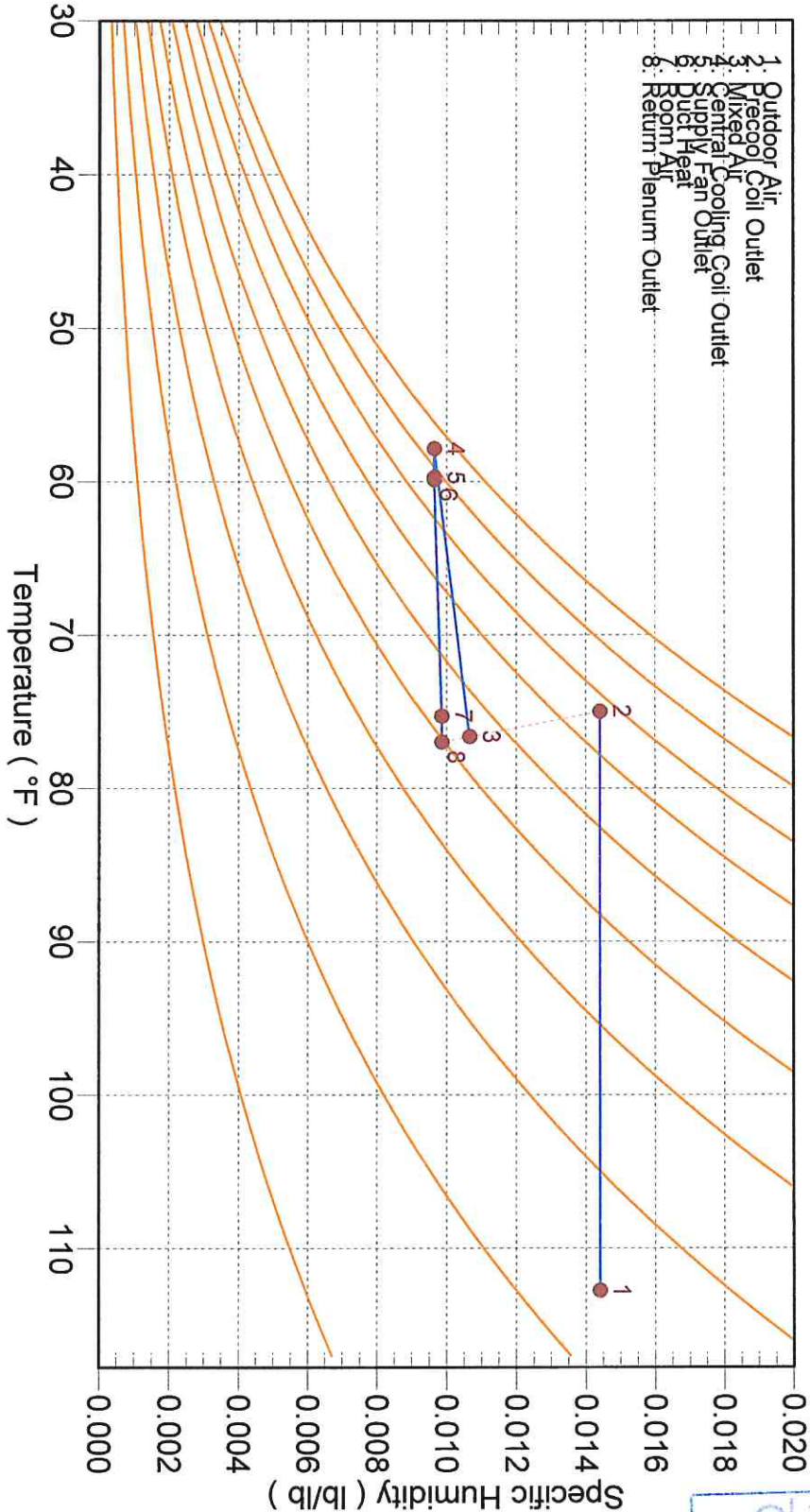
	DESIGN COOLING			DESIGN HEATING		
	COOLING DATA AT Jul 1900			HEATING DATA AT DES HTG		
	COOLING OA DB / WB 112.8 °F / 79.7 °F			HEATING OA DB / WB 40.1 °F / 36.6 °F		
ZONE LOADS	Details	Sensible (BTU/hr)	Latent (BTU/hr)	Details	Sensible (BTU/hr)	Latent (BTU/hr)
Window & Skylight Solar Loads	0 ft²	0	-	0 ft²	-	-
Wall Transmission	327 ft²	1626	-	327 ft²	1023	-
Roof Transmission	0 ft²	0	-	0 ft²	0	-
Window Transmission	0 ft²	0	-	0 ft²	0	-
Skylight Transmission	0 ft²	0	-	0 ft²	0	-
Door Loads	0 ft²	0	-	0 ft²	0	-
Floor Transmission	0 ft²	0	-	0 ft²	0	-
Partitions	0 ft²	0	-	0 ft²	0	-
Ceiling	0 ft²	0	-	0 ft²	0	-
Overhead Lighting	3000 W	6385	-	0	0	-
Task Lighting	0 W	0	-	0	0	-
Electric Equipment	4300 W	13932	-	0	0	-
People	16	3065	1665	0	0	0
Infiltration	-	0	0	-	0	0
Miscellaneous	-	0	0	-	0	0
Safety Factor	12% / 7%	3001	117	0%	0	0
>> Total Zone Loads	-	28008	1782	-	1023	0
Zone Conditioning	-	28103	1782	-	1771	0
Plenum Wall Load	0%	0	-	0	0	-
Plenum Roof Load	70%	0	-	0	0	-
Plenum Lighting Load	30%	3071	-	0	0	-
Return Fan Load	1700 CFM	0	-	1700 CFM	0	-
Ventilation Load	300 CFM	11520	6434	300 CFM	10188	0
Supply Fan Load	1700 CFM	3412	-	1700 CFM	-3412	-
Space Fan Coil Fans	-	0	-	-	0	-
Duct Heat Gain / Loss	1%	280	-	1%	10	-
>> Total System Loads	-	46386	8215	-	8558	0
Central Cooling Coil	-	34226	8217	-	0	0
Central Heating Coil	-	0	-	-	8558	-
Precool Coil	-	12161	0	-	0	0
>> Total Conditioning	-	46386	8217	-	8558	0
Key:	Positive values are clg loads Negative values are htg loads			Positive values are htg loads Negative values are clg loads		



















Psychrometric Analysis for FCU-11 CLARKS

07/25/2017
08:15AM

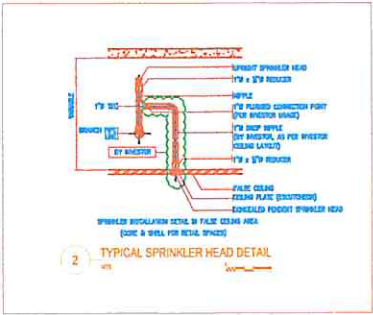
Location: Kuwait City, Kuwait
Altitude: 180.0 ft.
Data for: July DESIGN COOLING DAY, 1900



[illegible]

HVAC LEGEND:-	
	DUCTED FAN COIL UNIT
	AIR HANDLING UNIT/FRESH AIR HANDLING UNIT
	ECOLOGY UNIT
	CHILLED WATER SUPPLY PIPE
	CHILLED WATER RETURN PIPE
	GATE VALVE
	PIPE CAP OR FLANGED END
	SUPPLY AIR DUCT
	RETURN/EXHAUST/SMOKE EXHAUST AIR DUCT
	FRESH AIR/SMOKE FRESH AIR DUCT
	DUCT WORK ACOUSTIC LINING
	FIRE DAMPER
	VOLUME DAMPER
	MOTORIZED DAMPER
	FIRE RATED BULLHEAD ENCLOSURE BY OWNER
	ATC SLAB WITH GYPSUM BOARD ENCLOSURE BY OWNER (PAINT BY INVESTOR)
NOTE: SHOFFRONT DESIGN IS BY INVESTOR AS/INVESTOR MAIN	

[illegible]



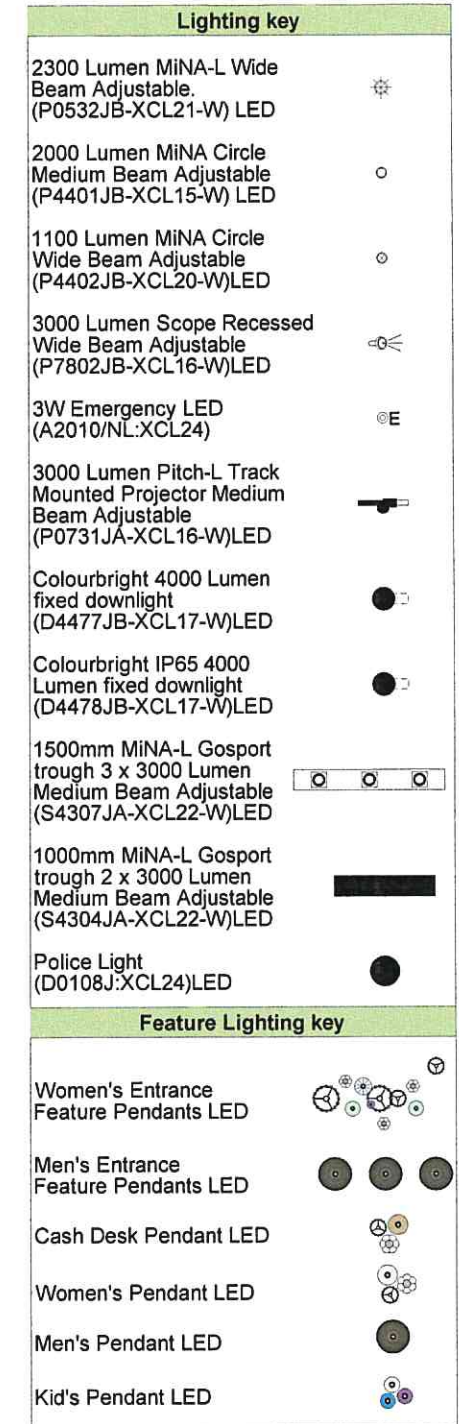
gla
management
GLA Property Management Co. (WLL)

24 SEP 2017

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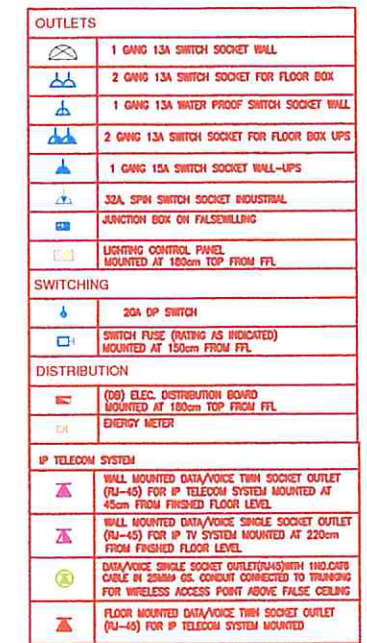
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management
GLA Property Management Co. (M.L.L.)

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24 SEP 2017

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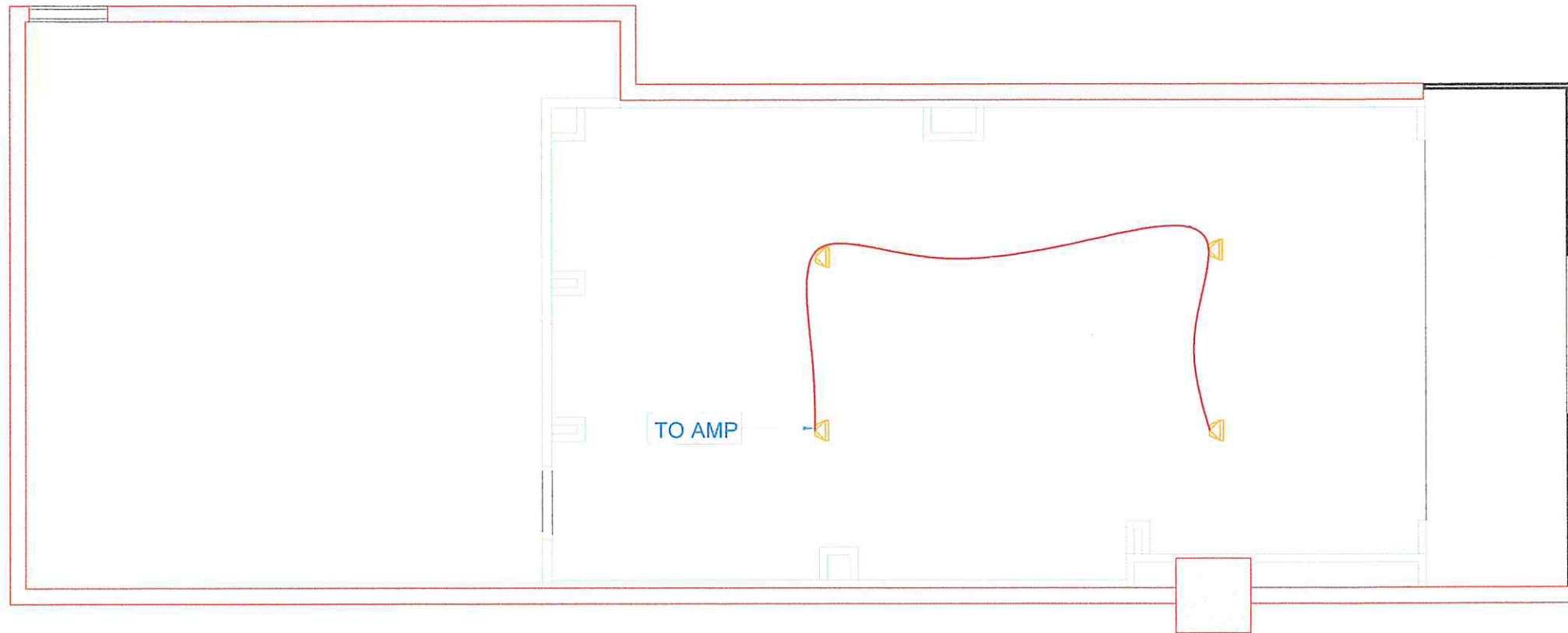


DATE	DATE	DATE
10/20/13	10/20/13	10/20/13

QCT PD No.	REV. NO.
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SM-01	PG
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EM & EX LAYOUT:

301 REF NO.	REV. NO.
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FACTORY NO.	REV NO.
EMX-01	02