City of Aurora
Building Codes Division
15151 E Alameda Pkwy
Aurora, CO 80012
(303) 739-7420

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Date 11/27/07

2865

PLAN REVIEW REVISION SUBMITTAL

This form should be completed and submitted with all building plan revisions. All changes from the previously approved drawings must be clearly shown by clouding, circling, etc.

Project address 1501 S Potomac St | Unit # _____

Project name Medical Center of Aurora | Valuation $ 150,000 00

Contractor JE Dunn | Contractor License 20061048690CI

Contact Name Paul Zubeck | Phone # 303-873-4694

Fax 303-873-4838 | Email paul.zubeck@jedunn.co

Owner HCA / Health One - DBA Med Center of Aurora | Phone # 303-695-2600

Address 1501 S Potomac St | Fax 303-337-9773

Have there been any permits issued for this job? Yes X No _____

If yes, what is the permit number? 2007-172604-000-00CM

What type of work is being proposed in the attached plans being submitted?

Revisions to PR6-Tap box location & quantity (1200 AMP Tap Boxes) near central plant

THIS SPACE FOR OFFICE USE ONLY

REVIEWS	Review Time (Hrs)
__Mechanical	
__Plumbing	
✓Electrical	2 hrs. JE
__Structural	
__Life Safety	

APPROVED DEC 05 2007

Plan Review Fee $ 94.00

Plan Location CAB 115
Parent RSN 251428
Permit Number 2007-172604
Permit Type Limited (LT)
Sub Type Plan Revisions
Intake by KT (P.E.)

RSN 283068

BOARD OF APPEALS

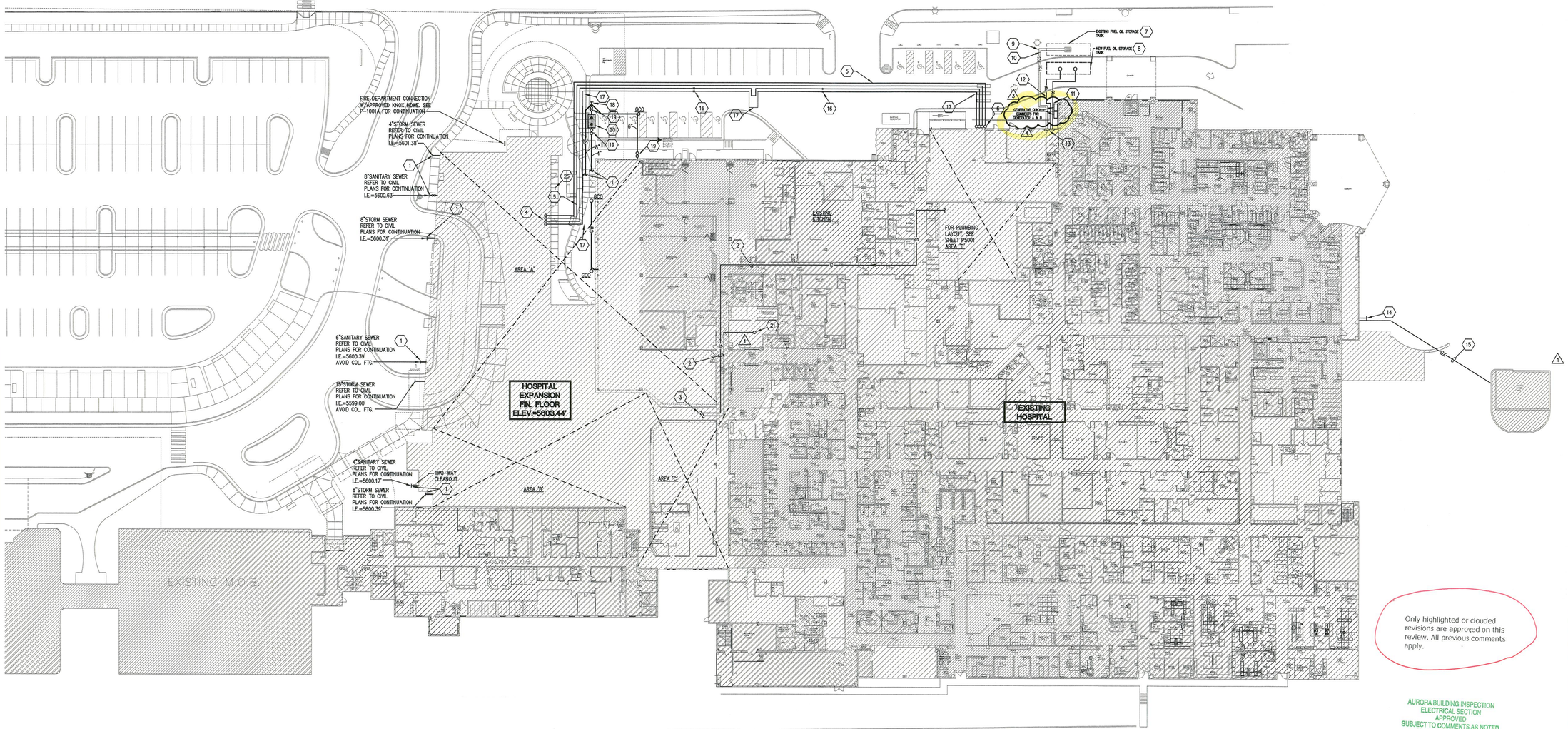
The City of Aurora has created a Building Code and Contractor's Appeals and Standards Board. Applicants have the right to have the board hear appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of the building code.

Any application for appeal to the board shall be based on a claim that the true intent of the code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of the building code do not fully apply or an equally good or better form of construction is proposed.

NATURAL GAS SCHEDULE

LOCATION	DESCRIPTION – FUNCTION	BTUH	REQUIRED PRESSURE (@ EQUIPMENT)
CENTRAL PLANT	CBLE 06-1 BOILER (HOSPITAL)	14,650,000	1.59 LBS.
	CBLE 06-2 BOILER STAND-BY (HOSPITAL)	14,650,000	1.59 LBS.
	EXISTING BRYAN BOILER (HOSPITAL)	8,000,000	1.59 LBS.
	EXISTING CLEAVER BROOKS CB200-150 BOILER (HOSPITAL)	6,280,000	1.59 LBS.
KITCHEN	EXISTING KITCHEN LOAD (ESTIMATED)	1,000,000	.5 LB.
WAITING ROOMS	FIREPLACE	300,000	.5 LB.
TOTAL DEMAND LOAD		44,880,000	

CONTACT
XCEL ENERGY
MR. KEN NUMOTO
303-671-39-22



LEGEND NOTES

1. FOR STORM AND SANITARY LINES CONT. INTO BLDG., SEE SHEET P1001A.
2. NEW 2"GAS (UNDER 1 PSI) ABOVE CEILING. IT SHALL BE SLEEVED. ALSO A NEW 4"CW, 3"HW & 1½"HWR. 1
3. FOR CONTINUATION, SEE SHEET P2001C.
4. 8"CHS/R, 6"STM & 2"PCR BELOW GRADE AND INTO BED TOWER MECHANICAL ROOM. REF:M-5001 FOR CONTINUATION. REF: 07/M7004 FOR HPS DRIP LEG DETAIL.
5. 8"CHS/R, 6"STM & 2"PCR DIRECT BURIED. THESE BURIED SERVICES SHALL BE ENGINEERED SYSTEMS, DESIGNED AND INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. PRE-INSULATED PIPING SYSTEMS PER DIVISION 23 "HYDRONIC PIPING" AND "STEAM AND CONDENSATE PIPING".
6. 8"CHS/R, 6"STM & 2"PCR FROM BELOW GRADE UP AND INTO CENTRAL PLANT. REF: M-5001 FOR CONTINUATION. REF: 07/M7004 FOR HPS DRIP LEG DETAIL.
7. EXISTING 10,000 GALLON FUEL OIL STORAGE TANK BELOW GRADE. FIELD VERIFY EXACT LOCATION. REFER TO FUEL OIL SYSTEM PIPING DIAGRAM ON SHEET 01/P-7005 FOR MODIFICATIONS TO THE EXISTING PIPING SYSTEM.
8. NEW 10,000 GALLON FUEL OIL STORAGE TANK BELOW GRADE. REFER TO FUEL OIL SYSTEM PIPING DIAGRAM ON SHEET 01/P-7005 FOR PIPE CONNECTIONS TO EXISTING SYSTEM.
9. EXISTING 2" F.O.S. PIPING.
10. EXISTING 2" F.O.R. PIPING.
11. NEW 2" F.O.S. PIPING.
12. NEW 2" F.O.R. PIPING.
13. FOR CONTINUATION OF FUEL OIL PIPING INTO BUILDING REFER TO SHEET P-2001C.
14. 6" DOMESTIC WATER LINE (NON-POTABLE).
15. 4" OXYGEN LINE SLEEVED AND SCHEDULE 40 PVC FROM OXYGEN YARD TO BUILDING.
16. ANCHOR STEAM AND PCR PIPE WITH RIGID CONNECTION THIS LOCATION.
17. ENGINEERED EXPANSION JOINT. DESIGN BY PRE-INSULATED PIPING SYSTEMS MANUFACTURER PER DIVISION 23 "HYDRONIC PIPING" AND "STEAM AND CONDENSATE PIPING".
18. 8" SANITARY SEWER. REFER TO CIVIL PLANS FOR CONTINUATION. I.E. 5593.53'
19. TWO-WAY CLEANOUT
20. GREASE TRAP INTERCEPTOR
21. 4" CW, 2½" HW, 1½" HWR UP THRU FIRST FLOOR ROOF FOR CONTINUATION SEE SHT. MEP-2001. 1
22. 8" FIRE LINE. REFER TO CIVIL PLANS FOR CONTINATION.

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

AURORA BUILDING INSPECTION
ELECTRICAL SECTION
APPROVED
SUBJECT TO COMMENTS AS NOTED
AND FIELD INSPECTIONS

RSN 283068
07 206860

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE: APPROVED DEC 05 2007
2005 NEC

01 SITE PLAN - MEP
SCALE: 1" = 30'-0"

F:\2005 Projects\25555 Medical Center of Aurora Expansion\Drawings\Construction Documents\555MEP-1001(HPE).dwg
06/14/2007 - 10:10AM
Don Seeley, CCRD Partners

PERKINS & WILL
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Medical Center of Aurora

South Campus
Private Room Expansion
Aurora, Colorado

HCA

Project # 306660001

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KEY PLAN

NORTH

COLORADO LICENSED
JAMES A. SEELEY
31031
PROFESSIONAL ENGINEER
10/22/07

Revisions		
1	ADDENDUM #3	09/13/06
2	ADDENDUM #2	10/31/06
3	PR #1	04/27/07
4	PR #GR	10/22/07
NO.	ISSUE	DATE

Sheet Information	
Date	04-27-2007
Job Number	142228.000
Drawn	YC
Checked	JS
Approved	AG

Title

SITE PLAN
MEP

Sheet

MEP-1001

Issued for Permit & Construction

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GENERAL NOTES:

A. FEEDER SIZES ARE DETERMINED BY THE FEEDER SCHEDULE ON SHEET E-6000 AND ARE DESIGNATED BY A RECTANGULAR TAG ([***]) ON EACH FEEDER UNLESS NOTED OTHERWISE.

B. REFER TO E-6000 FOR ONE-LINE DIAGRAM SYMBOLS AND SCHEDULES.

LEGEND NOTES:

1. EXISTING DISTRIBUTION PANEL TO BE DEMOLISHED AND REPLACED WITH NEW DISTRIBUTION PANEL IN SAME LOCATION AS INDICATED. IF EXISTING DISTRIBUTION PANEL CAN BE MODIFIED TO ACCOMODATE NEW LOADS, EXISTING DISTRIBUTION PANEL MAY BE RE-USED.
2. 1200A TEMPORARY GENERATOR CONNECTION CABINET EQUAL TO CUTLER-HAMMER LOW VOLTAGE "GENERATOR QUICK CONNECT SWITCHBOARD", NEMA 3R CONSTRUCTION, WITH EXTRA TALL DOOR TO ACCOMMODATE (8) PARALLELED SETS OF CABLE FROM TEMPORARY GENERATOR. REFER TO E-1001B FOR EXACT LOCATION.
3. PROVIDE MECHANICAL AND ELECTRONIC LOCK OUT TO ALLOW ONLY ONE CIRCUIT BREAKER TO BE IN THE CLOSED POSTION AT ANY TIME.
4. EXISTING FEEDERS TO BE REMOVED AND RE-PULLED TO ACCOMODATE NEW GARAGE DOOR IN CENTRAL PLANT. REFER TO ENLARGED CENTRAL PLANT PLAN, 02/E-5001 FOR ADDITIONAL INFORMATION.

EXISTING 600KW/750KVA, 480V, .8PF, 902A, W/GROUND FAULT INDICATION EMERGENCY DIESEL ENGINE GENERATOR B (CUMMINS)

EXISTING 1250KW/1600KVA, 480V, .8PF W/GROUND FAULT INDICATION EMERGENCY DIESEL ENGINE GENERATOR C (CUMMINS)

EXISTING 600KW/750KVA, 480V, .8PF, 902A W/GROUND FAULT INDICATION EMERGENCY DIESEL ENGINE GENERATOR A (CUMMINS)

GEN B — 1200/3

GEN C — 1200/3, 800/3

GEN A — 1200/3

(4 SETS) 3#350KCM, 1#350KCM N, 1#3/0 G, 3"C

600KW TEMP GEN SET AT .8PF

1200 AMP NEMA 3R TAP CAN WITH FULLY RATED BUSBARS FOR TEMPORARY GENERATOR CONNECTION.

EXISTING DISTRIBUTION PANEL "DPGC"
1200A MLO, 480Y/277V, 3P, 4W+G
1200/3 (K) | 1200/3 (K) | 1200/3 (K)

NEW MAIN DISTRIBUTION PANEL "DPGC".
1200A MLO, 480Y/277V, 3P, 4W+G,
42,000 MIN A.I.C.
16,514 AVAILABLE A.I.C.

1	2	3	4	5	6	7–10
600/3 LSI	800/3 LSI	600/3 LSI	150/3 LSI	225/3 LSI	S.O.	1200/3

PROVIDE:
1 S.O. @ 600A/3P
2 S.O. @ 600A/3P
1 S.O. @ 400A/3P

FEEDERS ROUTED FROM EXISTING CENTRAL PLANT TO NEW MAIN EMERGENCY ELECTRICAL ROOM IN CONCRETE ENCASED DUCTBANK ARRANGEMENT

TO ATS-1DPEQH REFER TO SHEET E-6005

TO ATS-1DPLSH REFER TO SHEET E-6002

TO ATS-1DPCRH REFER TO SHEET E-6002

TO FIRE PUMP TRANSFER SWITCH REFER TO SHEET E-6002

Removed Temporary Generator.

TO MSBA-6 REFER TO E-6001

EQUIPMENT BRANCH OPEN TRANSITION 4-POLE 1200A (CUMMINS) ATS DPEQC

EXISTING DISTRIBUTION PANEL "MTSB"
1200A MLO, 480Y/277V, 3P, 4W+G
10,000 MIN A.I.C.
5,302 AVAILABLE A.I.C.

(4 SETS) 3#350KCM, 1#350KCM N, 1#3/0 G, 3"C

"DPGC" LOAD SUMMARY

	LTS	RCPTS	WTRS	HSPTL	X-RAY	ELEV	KTCH	HEAT	MISC	TOTAL (KVA)	TOTAL (AMPS)
TOTAL CONNECTED LOAD	23.3	44.7	569.0	513.4	0.0	143.0	0.0	0.0	50.0	1343.4	1615.9
DEMAND FACTOR	SEE DEMAND FACTOR TABLE										
TOTAL DEMAND LOAD	23.0	27.5	593.8	112.6	0.0	121.6	0.0	0.0	50.0	928.4	1116.7
CONTINUOUS (DESIGN) FACTOR	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
TOTAL DESIGN LOAD	28.8	27.5	593.8	112.6	0.0	121.6	0.0	0.0	50.0	934.2	1123.6

EXISTING EMERGENCY DISTRIBUTION PANEL "DPEQC"
1200A MLO, 480Y/277V, 3PH, 4W + G
1 | 2 | 3 | 4 | 5
XXX/3 SPARE | 60/3 | 175/3 | 20/3 | 20/3

EXISTING DISTRIBUTION PANEL DPEQC
A.I.C. RATING: 100,000 A
48,671 AVAILABLE A.I.C.

EXISTING LOAD	97.8 KVA	117.7 A

EXISTING DISTRIBUTION PANEL "MTSA"
1200A MLO, 480Y/277V, 3P, 4W+G
6,984 AVAILABLE A.I.C.

(4 SETS) 3#350KCM, 1#350KCM N, 1#3/0 G, 3"C

TO MSBA-5 REFER TO E-6001

EQUIPMENT BRANCH OPEN TRANSITION 4-POLE 800A (CUMMINS) ATS-800A

TO "QH1F"

EXISTING DISTRIBUTION PANEL "SGDP"
A.I.C. RATING: 25,000 A
5,289 AVAILABLE A.I.C.

EXISTING LOAD	250 KVA	300.7 A
NEW LOAD	4.0 KVA	4.8 A
TOTAL LOAD	254 KVA	305.5 A

EXISTING EMERGENCY DISTRIBUTION PANEL "SGDP"
1200A MLO, 480Y/277V, 3PH, 4W + G
1 | 2 | 3 | 4 | 5
800/3 | 600/3 | 225/3 | 225/3 | SPACE

(2 SETS) 3#350KCM, 1#350KCM N, 1#1 G, 2–1/2" C

TO SSB-2 REFER TO E-6001

CRITICAL BRANCH OPEN TRANSITION 4-POLE 600A (ZENITH) ATS-CR

EXISTING DISTRIBUTION PANEL "GPDP"
A.I.C. RATING: 10,000 A
6,757 AVAILABLE A.I.C.

EXISTING LOAD	360 KVA	433 A
NEW LOAD	241.3 KVA	290.2 A
REMOVED LOAD	–89.8 KVA	–108 A
TOTAL LOAD	511.5 KVA	615.2 A

EXISTING DISTRIBUTION PANEL "GPDP"
1200A MLO, 480Y/277V, 3P, 4W+G
1 | 2 | 3 | 4
600/3 | 400/3 | 200/3 | SPACE

(2 SETS) 3#350KCM, 1#350KCM N, 1#1 G, 2–1/2" C

TO EQUIPMENT ATS #1 ("EDP") REFER TO E-6004

EXISTING DISTRIBUTINO PANEL "GPDPA"
A.I.C. RATING: 42,000 A
6,964 AVAILABLE A.I.C.

EXISTING LOAD	420.7 KVA	506 A
NEW LOAD	242.3 KVA	291.4 A
REMOVED LOAD	–89.8 KVA	–108 A
TOTAL LOAD	573.1 KVA	689.4 A

EXISTING EMERGENCY DISTRIBUTION PANEL "GPDPA"
1200A MLO, 480Y/277V, 3PH, 4W + G
1 | 2 | 3 | 4 | 5
SPACE | 800/3 ~~600/3~~ | 225/3 | 225/3 | SPACE

3#4/0, 1#4/0 N, 1#4 G, 2–1/2" C

TO MDP2-4 REFER TO E-6001

CRITICAL BRANCH OPEN TRANSITION 4-POLE 225A (KOHLER) ATS #2 (1A)

EXISTING DISTRIBUTION PANEL "CBDPA"
A.I.C. RATING: 25,000 A
12,553 AVAILABLE A.I.C.

EXISTING LOAD	60.7 KVA	73 A
NEW LOAD	1.0 KVA	1.2 A
TOTAL LOAD	61.7 KVA	74.2 A

EXISTING DISTRIBUTION PANEL "CBDPA"
250A, 480Y/277V, 3P, 4W+G
1 | 2 | 3 | 4 | 5
150/3 | 150/3 | 100/3 | 100/3 | SPACE

3#4/0, 1#4 G, 2" C

EXISTING T-LCBDPA 112.5 KVA XFMR 480–208/120V 4.5%Z IMPEDENCE

EXISTING DISTRIBUTION PANEL "LCBDPA"
A.I.C. RATING: 10,000 A
5,540 AVAILABLE A.I.C.

EXISTING LOAD	26.3 KVA	73 A
NEW LOAD	1.0 KVA	2.8 A
TOTAL LOAD	27.3 KVA	75.8 A

EXISTING DISTRIBUTION PANEL "LCBDPA"
400A MCB, 208/120V, 3P, 4W+G,
400/3
100/3 | 100/3 | 100/3 | 100/3 | SPACE

3#1, 1#1 N, 1#6 G, 1–1/2" C

LCB3A

EXISTING PANEL "LCB3A"
A.I.C. RATING: 10,000 A
2,629 AVAILABLE A.I.C.

EXISTING LOAD	7 KVA	19.4 A
NEW LOAD	1.0 KVA	2.8 A
TOTAL LOAD	8 KVA	22.2 A

EXISTING DISTRIBUTION PANEL "CR"
A.I.C. RATING: 50,000 A
44,117 AVAILABLE A.I.C.

EXISTING LOAD	117.8 KVA	141.7 A
NEW LOAD	4.0 KVA	4.8 A
TOTAL LOAD	121.8 KVA	146.5 A

EXISTING DISTRIBUTION PANEL "CR"
800A MLO, 480Y/277V, 3P, 4W+G,
125/3 | SPACE | 150/3 | SPACE | 225/3 SPARE | 400/3

(2 SETS) 3#3/0, 1#3/0 N, 1#3 G, 2–1/2" C

EXISTING PANEL CH1B
A.I.C. RATING: 42,000 A
6,155 AVAILABLE A.I.C.

EXISTING LOAD	48 KVA	57.7 A
NEW LOAD	3.2 KVA	3.8 A
TOTAL LOAD	51.2 KVA	61.5 A

3#1/0, 1#6 G, 2" C

CH1B

EXISTING T-CL1B 75 KVA XFMR 480–208Y/120V 3.2%Z IMPEDENCE

3#250KCM, 1#4 G, 2–1/2" C

EXISTING PANEL CL1B
A.I.C. RATING: 10,000 A
2,912 AVAILABLE A.I.C.

EXISTING LOAD	22 KVA	61.1 A
NEW LOAD	2.8 KVA	7.8 A
TOTAL LOAD	24.8 KVA	68.9 A

CL1B

EXISTING DISTRIBUTION PANEL "CHDP"
400A MLO, 480Y/277V, 3P, 4W+G,
XXX/3 SPARE | XXX/3 SPARE | XXX/3 SPARE | XXX/3 SPARE | 100/3 | 100/3 | 175/3 | 175/3

EXISTING DISTRIBUTION PANEL "CHDP"
A.I.C. RATING: 42,000 A
17,157 AVAILABLE A.I.C.

EXISTING LOAD	65.4 KVA	78.7 A
NEW LOAD	0.8 KVA	0.96 A
TOTAL LOAD	66.2 KVA	79.66 A

3#4/0, 1#4 G, 2" C

EXISTING T-CL1G 112.5 KVA XFMR 480–208/120V 4.5%Z IMPEDENCE

(2 SETS) 3#3/0, 1#3 G, 2" C

CL1G

EXISTING PANEL CL1G
A.I.C. RATING: 10,000 A
5,729 AVAILABLE A.I.C.

EXISTING LOAD	31 KVA	86 A
NEW LOAD	0.8 KVA	2.2 A
TOTAL LOAD	31.8 KVA	88.2 A

Only highlighted or clouded revisions are approved on this review. All previous comments apply.

01 EXISTING EMERGENCY POWER ONE-LINE DIAGRAM
NO SCALE

RSN 283068
07 206860

CITY OF AURORA
BUILDING DIVISION
APPROVED AS NOTED
DATE APPROVED DEC 05 2007
2005 NEC

AURORA BUILDING INSPECTION
ELECTRICAL SECTION
APPROVED
SUBJECT TO COMMENTS AS NOTED
AND FIELD INSPECTIONS

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Project # 306660001

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AUGUST 24, 2006 - 100% CD'S ISSUED FOR PERMIT & CONSTRUCTION

COLORADO, LICENSED, JOHN E. GRAHAM, 31031, PROFESSIONAL ENGINEER
10/22/07

Revisions

NO.	ISSUE	DATE
1	ADDENDUM #2	10/31/06
2	ASI #2	01/18/07
3	ASI #3	03/12/07
4	PR #6	07/24/07
5	PR #13	10/12/07
6	PR #6r	10/22/07

Sheet Information

Date	08-24-2006
Job Number	142228.000
Drawn	SG
Checked	SG
Approved	SG

Title

EXISTING EMERGENCY POWER ONE-LINE DIAGRAM

Sheet

E-6003

Issued for Permit & Construction

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10/22/2007 - 12:48PM
Don Seely, CCRD Partners