LCCC – ALBANY COUNTY CAMPUS
EMERGENCY GENERATOR ADDITION
LARAMIE, WYOMING

LARAMIE COUNTY COMMUNITY COLLEGE (LCCC)
1400 EAST COLLEGE DRIVE
CHEYENNE, WY 82007

FACILITIES MAINTENANCE DIRECTOR: 307-778-1121

CATOR, RUMA & ASSOCIATES
420 WEST LINCOLNWAY
CHEYENNE, WYOMING 82001

CONSULTING ENGINEER: 307-274-3832

DRAWING LIST

PROJECT LOCATION
LCC LC117269 10000 6th ST W LARAMIE
CITY OF LARAMIE

AUTHORITIES HAVING JURISDICTION
BUILDING DEPARTMENT
Phone: (307) 742-9400
Website: www.ci.laramie.wy.us

DESIGN TEAM

PROJECT INFORMATION

APPLICABLE CODES
INTERNATIONAL BUILDING CODE (IBC) 2018
INTERNATIONAL ELECTRICAL CODE (NEC) 2017
ASFP BUILDING CODE (ASFP BC) 2017
AMERICAN NATIONAL STANDARD FOR EMERGENCY POWER SYSTEM (NFPA 110) 2014
ACCESSIBLE AND SUSTAINABLE BUILDING CODE (ASBC) 2017
NATIONAL ELECTRICAL CODE (NFPA 70) 2017

BUILDING INFORMATION

TOTAL FLOOR AREA (SQA)
10,000 SQ FT

SQUARE FEET PER FLOOR (SQA)
10,000 SQ FT
NEW PANEL "EMW"

Panel Notes:
1. PROVIDE 30mA GROUND FAULT CIRCUIT BREAKER.
2. BREAKER AND WIRING SIZED BY DEVICE SUPPLIER.

WIRE 4 W MFR: GE AMPERE SHORT CIRCUIT RATING (FULLY RATED) 42,000 MTG.: SURFACE BREAKER NOTES:

<table>
<thead>
<tr>
<th>NOTE</th>
<th>DESCRIPTION</th>
<th>LTG</th>
<th>RECEPT</th>
<th>MOTORS</th>
<th>OTHER</th>
<th>GENERAL</th>
<th>TOTAL AMP</th>
<th>P CCT</th>
<th>PH CCT</th>
<th>AMP</th>
<th>P TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 A</td>
<td>20/1</td>
<td>705</td>
<td>705</td>
<td></td>
<td></td>
<td>L-NIGHT LIGHTS</td>
<td>0 SPARE</td>
<td>640</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2 A</td>
<td>20/1</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td></td>
<td>EQ-MAU-1</td>
<td>0 SPARE</td>
<td>498</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>2 B</td>
<td>20/2</td>
<td>1,000</td>
<td>1,000</td>
<td></td>
<td></td>
<td>EQ-EF-2</td>
<td>0 SPARE</td>
<td>498</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 A</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>BATTERY CHARGER</td>
<td>0 SPARE</td>
<td>498</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 B</td>
<td>20/3</td>
<td>150</td>
<td>150</td>
<td></td>
<td></td>
<td>MOTOR LOUVER</td>
<td>0 SPARE</td>
<td>150</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 C</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>SPARE</td>
<td>0 SPARE</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 D</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>SPARE</td>
<td>0 SPARE</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 E</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>SPARE</td>
<td>0 SPARE</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 F</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>SPARE</td>
<td>0 SPARE</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>3 G</td>
<td>20/1</td>
<td>0</td>
<td>0</td>
<td>SPARE</td>
<td></td>
<td>SPARE</td>
<td>0 SPARE</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
</tbody>
</table>

LOAD TYPE (VA) PH A PH B PH C LOAD TYPE CONNECTED NEC CALCULATED POWER DEMAND
LIGHTING 640.0 0.0 0.0 LOAD KVA DEMAND LOAD FACTOR LOAD KW PANEL
RECEPTACLES 0.0 0.0 0.0 CONNECTED PF=
MOTORS 1,819.0 1,819.0 1,819.0 LIGHTING 0.6 KVA x 125% = 0.8 KVA x 95% = 0.8 KW 96%
OTHER 0.0 0.0 0.0 RECEPTACLES
GENERAL 3,882.0 3,882.0 3,882.0 FIRST 10 KVA 0.0 KVA x 100% = 0.0 KVA x 100% = 0.0 KW CONNECTED
TOTAL (VA) 6,341.0 5,701.0 5,701.0 REMAINDER 0.0 KVA x 50% = 0.0 KVA x 100% = 0.0 KW AMPACITY=
MOTORS 49.2 NEC CALCULATED LARGEST 4.0 KVA x 125% = 5.0 KVA x 90% = 4.5 KW
PHASE AMPACITY 56.8 50.2 50.2 REMAINDER 1.5 KVA x 100% = 1.5 KVA x 90% = 1.3 KW NEC DEMAND
GENERAL 100.0 11.6 KVA x 100% = 11.6 KVA x 100% = 11.6 KW 52.4
PHASE BALANCE A-B B-C C-A 11% 0% 11% TOTAL 17.7 KVA 18.9 KVA 18.2 KW
GENERAL NOTES:
1. EVERY CIRCUIT SHALL BE UNIQUELY IDENTIFIED WITH ITS SPECIFIC PURPOSE AND/OR EQUIPMENT AS NECESSARY TO DISTINGUISH FROM ALL OTHER LOADS. IDENTIFICATION SHALL INCLUDE A DEGREE OF DETAIL AS APPROVED BY THE AHJ.
2. PROVIDE TYPED DESCRIPTIONS FOR NEW CIRCUITS BEING INSTALLED. INDICATE THE SPARES IN PENCIL.
MINIMUM COVER REQUIREMENTS

LOCATION NONMETALLIC RACEWAYS W/O CONCRETE LOW VOLTAGE

INSTALLED UNDER TWO INCHES OF CONCRETE 18 IN 6 IN
ALL OTHER LOCATIONS (NOT UNDER STREETS & ROADWAYS) 24 IN 6 IN

REFER TO NEC TABLE 300.5 FOR COMPLETE REQUIREMENTS