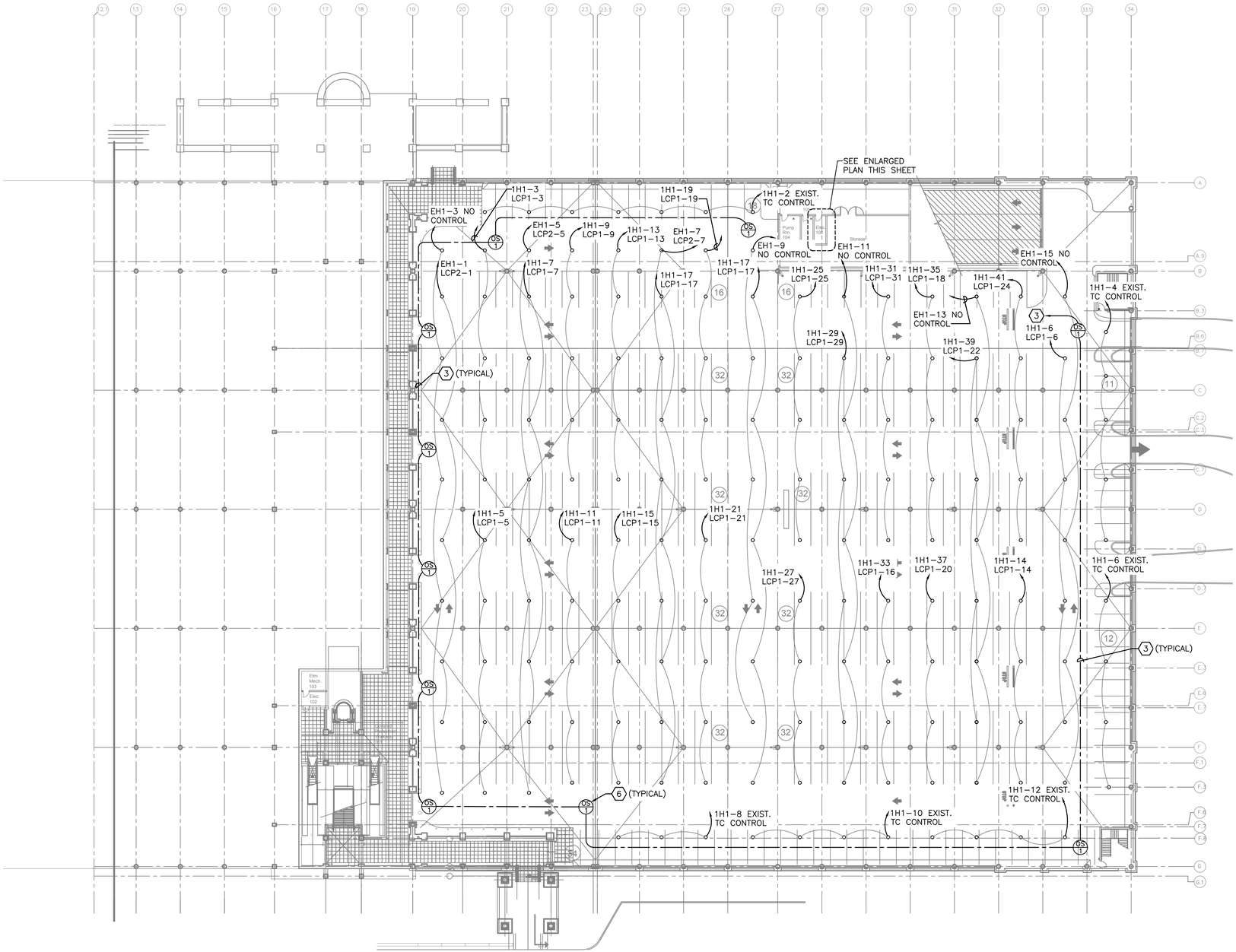



## ELECTRICAL LIGHTING CONTROL PLAN - GARAGE FIRST FLOOR

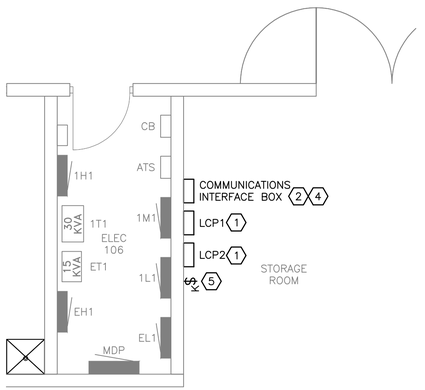
NORTH 0 15' 30' 60' 90' SCALE: 1" = 30'-0"

## GENERAL NOTES

1. EXISTING LIGHTING CIRCUITS ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY ALL LIGHTING CIRCUITS AND ASSOCIATE LIGHTING CIRCUIT NUMBER WHERE POSSIBLE WITH SAME CONTROL RELAY NUMBER TO BE ROUTED THROUGH CONTROL PANELS LCP1 AND LCP2. UNUSED CONTROL RELAYS SHALL BE LABELED AS SPARE FOR FUTURE USE.
2. PROVIDE A RELAY BASED LIGHTING CONTROL SYSTEM TO AUTOMATICALLY TURN LIGHTS OFF AND ON BASED ON GARAGE OCCUPANCY. THE SYSTEM SHALL INCLUDE RELAY PANEL(S) AND OCCUPANCY SENSORS. SEE SYSTEM CONTROL DIAGRAM ON E6.2 SYSTEM SHALL BE AS MANUFACTURED BY COOPER CONTROLS, GREENGATE CONTROLKEEPER OR APPROVED EQUAL.

## KEYED NOTES

1. PROVIDE DEDICATED 277 VOLT CIRCUITS FROM PANEL "1H1" TO FEED LIGHTING CONTROL PANEL "LCP1" AND FROM PANEL "EH1" TO FEED LIGHTING CONTROL PANEL "LCP2".
2. PROVIDE A MINIMUM 20"H x 16"W x 10"D NON-METALLIC, LOCKABLE, HINGED ENCLOSURE TO HOUSE A NEMA 5-20R QUAD OUTLET TO POWER GATEWAY AND ETHERNET INTERFACE MODULE. GATEWAY SHALL BE SIMILAR TO COOPER CONTROL, GREENGATE MODEL "GATEWAY" AND EITHERNET INTERFACE MODULE SHALL BE SIMILAR TO COOPER CONTROLS, GREENGATE MODEL "EIM". PROVIDE A 1 POLE, 20 AMP CIRCUIT FROM AVAILABLE SPACE IN PANEL "1L1" INSIDE ELEC ROOM 106. 120 VOLT POWER SHALL BE RUN IN CONDUIT INSIDE NON-METALLIC ENCLOSURE TO DEVICE OUTLET BOX.
3. PROVIDE A 1" CONDUIT FROM CONTROL PANEL LCP1 WITH A COMPOSIT CONTROL CABLE SIMILAR TO COOPER CONTROLS/GREENGATE CATALOG NUMBER "LCCNP" NON PLENUM RATED CABLE OR APPROVED EQUAL. CABLE CONSIST OF 2/C#18 FOR POWER, #22UTP FOR DATA, AND 1#24 GROUND.
4. PROVIDE A 1" CONDUIT WITH PULL WIRE TO NEAREST COMMUNICATION CLOSET FOR CONTROL PANEL INTERFACE.
5. PROVIDE A MASTER OVERRIDE SWITCH, SIMILAR TO GREENGATE KEYED SWITCH MODEL – "MAIN-KEY".
6. PROVIDE INFRARED TECHNOLOGY OCCUPANCY AS MANUFACTURED BY COOPER CONTROLS GREENGATE MODEL # OXC-P-2MH0-R.




## ENLARGED PARTIAL PLAN - GROUND FLOOR ROOM #106

NORTH 0 1' 2' 4' 8' SCALE: 1/4" = 1'-0"



SOUTH CAROLINA — THE OHMEGA GROUP LLC NO. 4769 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — 9/25/14 — No. 25642 — MARK A. MORLEY

COLUMBIA METROPOLITAN AIRPORT
Columbia, South Carolina

HOLT CONSULTING COMPANY, LLC.
Holt Consulting Company, LLC
1332 Main Street, Suite 55
Columbia, SC 29201
Ph: (803) 771-4658

Foth
Foth Infrastructure & Environmental, LLC
3501 Air Commerce Drive
Columbia, SC 29170
Ph: (803) 250-4846

THE OHMEGA GROUP CONSULTING ENGINEERS
1332 MAIN STREET #55
COLUMBIA, SOUTH CAROLINA 29201
T | 803.893.0463
WWW.OHMEGAGROUP.COM
SOUTH CAROLINA COA NO. 4769
ELECTRICAL ENGINEER
MARK A. MORLEY, PE
SC PE NO. 25642
ENGINEERING | TECHNOLOGY | ENERGY

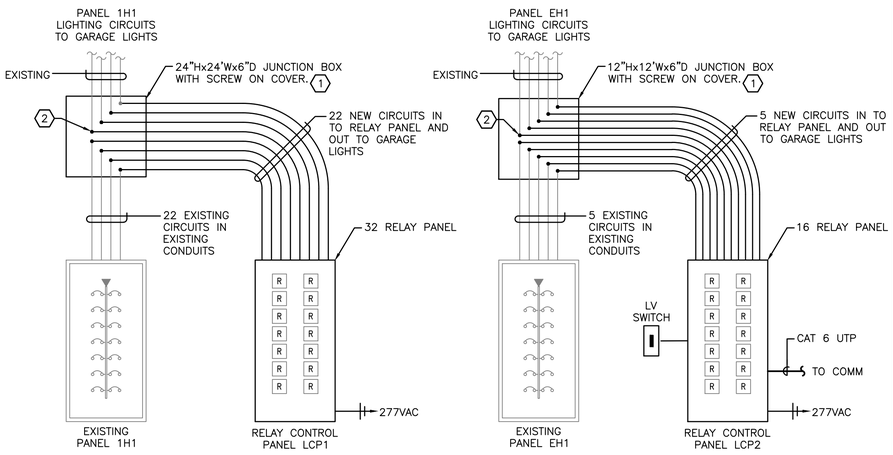
# COLUMBIA METROPOLITAN AIRPORT RENTAL CAR READY/RETURN RELOCATION

| REVISIONS | | |
|---|---|---|
| No. | Date | Description |
| | | |

JOB NUMBER 00393-0714
DESIGNED BY: R. DEYO
CHECKED BY: M. MORLEY
DRAWN BY: R. DEYO
CAD DATE: 09/25/2014

DRAWING NAME:
**ELECTRICAL LIGHTING CONTROLS PLAN - GARAGE 1ST FLOOR**

PROJECT NUMBER: 14C003.00
PROJECT DATE: 9/25/14
DRAWING NUMBER: **E2.0**




## 1 ELECTRICAL RISER DIAGRAM

SCALE: NONE

LIGHTING CONTROL PANEL LCP1

| RELAY # | POWER PANEL CKT # | AREA CONTROLLED | CONTROLLED BY | RELAY # | POWER PANEL CKT # | AREA CONTROLLED | CONTROLLED BY |
|---|---|---|---|---|---|---|---|
| 31 | 1H1–31 | PARKING GARAGEL GROUND LEVEL | OS | 32 | --- | SPARE | --- |
| 29 | 1H1–29 | PARKING GARAGEL GROUND LEVEL | OS | 30 | --- | SPARE | --- |
| 27 | 1H1–27 | PARKING GARAGEL GROUND LEVEL | OS | 28 | --- | SPARE | --- |
| 25 | 1H1–25 | PARKING GARAGEL GROUND LEVEL | OS | 26 | --- | SPARE | --- |
| 23 | 1H1–23 | PARKING GARAGEL GROUND LEVEL | OS | 24 | 1H1–41 | PARKING GARAGEL GROUND LEVEL | OS |
| 21 | 1H1–21 | PARKING GARAGEL GROUND LEVEL | OS | 22 | 1H1–39 | PARKING GARAGEL GROUND LEVEL | OS |
| 19 | 1H1–19 | PARKING GARAGEL GROUND LEVEL | OS | 20 | 1H1–37 | PARKING GARAGEL GROUND LEVEL | OS |
| 17 | 1H1–17 | PARKING GARAGEL GROUND LEVEL | OS | 18 | 1H1–35 | PARKING GARAGEL GROUND LEVEL | OS |
| 15 | 1H1–15 | PARKING GARAGEL GROUND LEVEL | OS | 16 | 1H1–33 | PARKING GARAGEL GROUND LEVEL | OS |
| 13 | 1H1–13 | PARKING GARAGEL GROUND LEVEL | OS | 14 | 1H1–14 | PARKING GARAGEL GROUND LEVEL | OS |
| 11 | 1H1–11 | PARKING GARAGEL GROUND LEVEL | OS | 12 | --- | SPARE | --- |
| 9 | 1H1–9 | PARKING GARAGEL GROUND LEVEL | OS | 10 | --- | SPARE | --- |
| 7 | 1H1–7 | PARKING GARAGEL GROUND LEVEL | OS | 8 | --- | SPARE | --- |
| 5 | 1H1–5 | PARKING GARAGEL GROUND LEVEL | OS | 6 | --- | SPARE | --- |
| 3 | 1H1–3 | PARKING GARAGEL GROUND LEVEL | OS | 4 | --- | SPARE | --- |
| 1 | 1H1–1 | PARKING GARAGEL GROUND LEVEL | OX | 2 | --- | SPARE | --- |

LIGHTING CONTROL PANEL LCP2

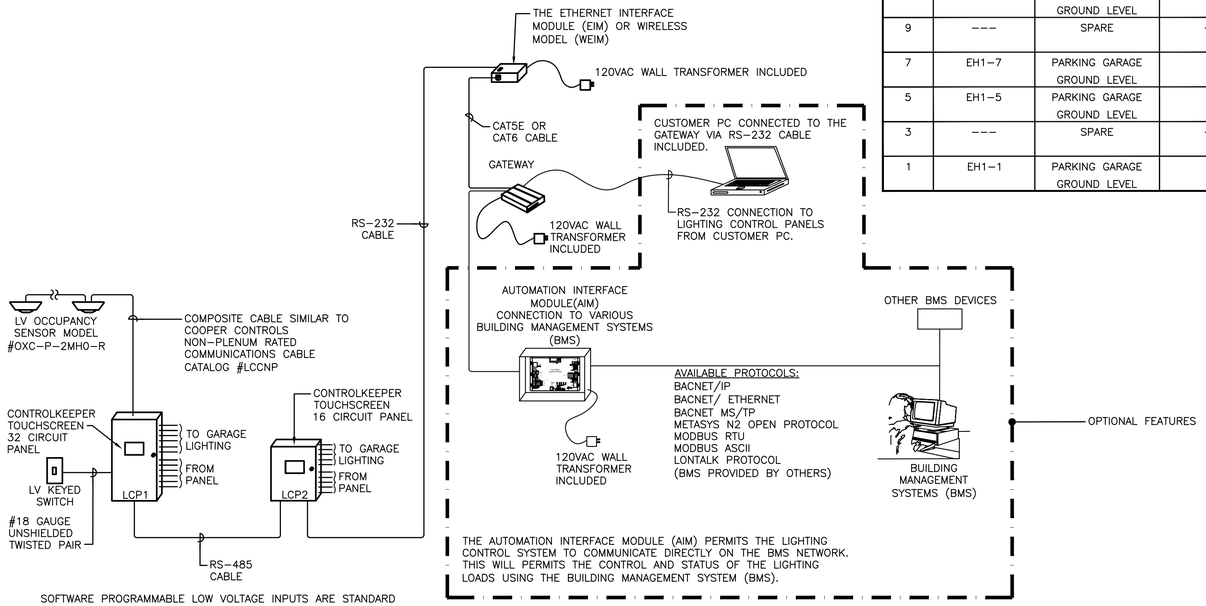
| RELAY # | POWER PANEL CIRCUIT NO. | AREA CONTROLLED | CONTROLLED BY | RELAY # | POWER PANEL CIRCUIT NO. | AREA CONTROLLED | CONTROLLED BY |
|---|---|---|---|---|---|---|---|
| 15 | --- | SPARE | --- | 16 | --- | SPARE | --- |
| 13 | EH1–13 | PARKING GARAGE GROUND LEVEL | OS | 14 | --- | SPARE | --- |
| 11 | EH1–11 | PARKING GARAGE GROUND LEVEL | OS | 12 | --- | SPARE | --- |
| 9 | --- | SPARE | --- | 10 | --- | SPARE | --- |
| 7 | EH1–7 | PARKING GARAGE GROUND LEVEL | OS | 8 | --- | SPARE | --- |
| 5 | EH1–5 | PARKING GARAGE GROUND LEVEL | OS | 6 | --- | SPARE | --- |
| 3 | --- | SPARE | --- | 4 | --- | SPARE | --- |
| 1 | EH1–1 | PARKING GARAGE GROUND LEVEL | OS | 2 | --- | SPARE | --- |

## KEYED NOTES

1. BOXES HAVE BEEN SIZED BASE ON 1" HOMERUN CONDUITS. CONTRACTOR SHALL FIELD VERIFY ACTUAL SIZES OF LIGHTING CIRCUITS CONDUITS AND SIZE BOX PER NEC. ART. 314.28.
2. TYPICAL SPLICING CONNECTION OF EXISTING LIGHTING CIRCUIT GOING IN TO AND OUT OF RELAY CONTROL PANEL.

## LIGHTING CONTROL GENERAL NOTES

1. BASIS OF DESIGN FOR THE LIGHTING CONTROL RELAY PANEL IS COOPER CONTROLS, GREENGATE CONTROLKEEPER TOUCHSCREEN SYSTEM, OR EQUAL SYSTEMS SHALL MEET OR EXCEED THE FOLLOWING REQUIREMENTS,
   - A. UL LISTED – 916 STANDARD.
   - B. 32 LOW VOLTAGE INPUT CONNECTIONS.
   - C. DIGITAL SWITCH INTERFACE.
   - D. TIME SCHEDULED WITH ASTRONOMIC CLOCK.
   - E. PRIORITIZATION AND MASKING OF SWITCH INPUTS, TIME SCHEDULES AND REMOTES.
   - F. TIMED INPUTS.
   - G. OCCUPANT WARN–OFF AND OVERRIDES
   - H. TOUCHSCREEN.
   - J. RS–232 PORT STANDARD.
   - K. RS–485 NETWORK STANDING
   - L. 4 ANALOG INPUTS.
   - M. UL LISTED – UL 924 WITH RIM




NOTE:
SHADED PORTIONS OF THIS RISER INDICATE AVAILABLE OPTIONS WHICH CAN BE IMPLEMENTED WITH THE ADDITION OF VARIOUS GREENGATE ACCESSORIES AND OR OWNER PROVIDED EQUIPMENT.

SOFTWARE PROGRAMMABLE LOW VOLTAGE INPUTS ARE STANDARD ON THE CONTROLKEEPER LIGHTING CONTROL PANELS. EACH INPUT CAN BE PROGRAMMED TO CONTROL ANY RELAY OR GROUP OF RELAYS IN THE SYSTEM.

BASIS OF DESIGN IS THE COOPER CONTROLS / GREENGATE CONTROLKEEPER LIGHTING CONTROL SYSTEM AND ACCESSORIES.

## 2 LIGHTING CONTROL SYSTEM DIAGRAM

SCALE: NONE



SOUTH CAROLINA — THE OHMEGA GROUP LLC NO. 4769 — CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA — LICENSED PROFESSIONAL ENGINEER — 9/25/14 — No. 25642 — MARK A. MORLEY

COLUMBIA METROPOLITAN AIRPORT
Columbia, South Carolina

HOLT CONSULTING COMPANY, LLC.
Holt Consulting Company, LLC
1332 Main Street, Suite 55
Columbia, SC 29201
Ph: (803) 771-4658

Foth
Foth Infrastructure & Environmental, LLC
3501 Air Commerce Drive
Columbia, SC 29170
Ph: (803) 250-4846

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COLUMBIA, SOUTH CAROLINA 29201
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WWW.OHMEGAGROUP.COM
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PROJECT NUMBER: 14C003.00
PROJECT DATE: 9/25/14
DRAWING NUMBER: **E6.2**