| POWER SYMBOL LEGEND | | |
|---|---|---|
| SYMBOLS SHOWN IN LEGEND MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE DIAGRAMMATIC IN NATURE AND MAY NOT BE TO SCALE. | | |
| SYMBOL | DESCRIPTION | MTG HT, UON |
| (J)⊢(J) | JUNCTION BOX | -- |
| (E)⊢(E) | HARDWIRED EQUIPMENT CONNECTION | -- |
| ▭ | 480Y/277V PANELBOARD, MCB | 72" AFF |
| ▬ | 208Y/120V PANELBOARD, MCB | 72" AFF |
| ——— | CIRCUIT HOMERUN TO PANELBOARD<br>WHERE MULTIPLE CIRCUITS SHARE SAME HOMERUN, LIMIT TO MAX THREE SINGLE POLE CIRCUITS TO A SINGLE HOMERUN | |
| X/X/X | MULTI-POLE DEVICE CIRCUIT NUMBERS. REFER TO PANEL SCHEDULES FOR ADDITIONAL INFORMATION. | |
| —UG— | CONDUIT INSTALLED UNDERGROUND, IN SLAB, OR IN UTILITY TRENCH | |
| — — — | CONDUIT INSTALLED SURFACE MOUNTED | |
| ⊖⊢ | DUPLEX RECEPTACLE | 18" AFF |
| ⊖⊢ | DUPLEX RECEPTACLE, GFCI | 18" AFF |

| LIGHTING SYMBOL LEGEND | | |
|---|---|---|
| SYMBOLS SHOWN IN LEGEND MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE DIAGRAMMATIC IN NATURE AND MAY NOT BE TO SCALE. | | |
| SYMBOL | DESCRIPTION | MTG HT, UON |
| ▭ | WALL LINEAR | SEE NOTE 2 |
| ○ | RECESSED DOWNLIGHT | SEE NOTE 2 |
| Z#_# | LCP RELAY/ZONE DESIGNATOR. INDICATES Z(LEVEL #)_(ZONE #) | |
| ◎⊸ | LIGHT POLE | |

LIGHTING NOTES:
1. REFER TO LUMINAIRE SCHEDULE FOR SPECIFIC FIXTURE INFORMATION.
2. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILING HEIGHTS. IT IS THE INTENT, UNLESS NOTED OTHERWISE, THAT SURFACE AND RECESSED FIXTURES WILL BE MOUNTED AT ARCHITECT'S CEILING PLANE.

| TELECOM SYMBOL LEGEND | | |
|---|---|---|
| SYMBOLS SHOWN IN LEGEND MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE DIAGRAMMATIC IN NATURE AND MAY NOT BE TO SCALE. | | |
| SYMBOL | DESCRIPTION | MTG HT, UON |
| ◁# | SURFACE MOUNTED TELECOM OUTLET, SUBSCRIPT "#" DENOTES NUMBER OF CONNECTORS, WET LOCATION RATED | |

| FIRE ALARM SYMBOL LEGEND | | |
|---|---|---|
| SYMBOLS SHOWN IN LEGEND MAY NOT APPEAR IN ALL DRAWINGS. SYMBOLS ARE DIAGRAMMATIC IN NATURE AND MAY NOT BE TO SCALE. | | |
| SYMBOL | DESCRIPTION | MTG HT, UON |
| ◉ | HEAT DETECTOR, WET LOCATION RATED | |
| ▯ | FIRE ALARM MULTI-HAZARD CONTROL PANEL | 72" AFF TO TOP |
| ◈ | COMBINATION AUDIBLE (SPEAKER)/VISUAL NOTIFICATION DEVICE WALL MOUNTED, WET LOCATION RATED | 96" AFF |
| ▽F | COMBINATION AUDIBLE (SPEAKER)/VISUAL NOTIFICATION DEVICE CEILING MOUNTED, WET LOCATION RATED | |
| TS | TAMPER SWITCH | |
| FS | FLOW SWITCH | |
| SV | SOLENOID VALVE | |
| AIM | ADDRESSABLE INPUT MODULE | |
| AOM | ADDRESSABLE OUTPUT MODULE | |

| GENERAL NOTATIONS AND MOUNTING HEIGHTS |
|---|
| NOTE 1: MOUNTING HEIGHTS REFER TO CENTERLINE OF DEVICE, UNLESS OTHERWISE INDICATED.<br>A) 48" AFF INDICATES TO TOP OF DEVICE;<br>B) 15" AFF INDICATES TO BOTTOM OF DEVICE;<br>C) 80" AFF INDICATES TO BOTTOM OF DEVICE;<br>D) 72" AFF INDICATES TO TOP OF ENCLOSURE;<br>E) 90" AFF INDICATES TO TOP OF ENCLOSURE, EXCEPT SHALL BE ADJUSTED LOWER AS NEEDED SO THAT FOR ALL OCPD, CENTER OF GRIP IN HIGHEST POSITION DOES NOT EXCEED 6'-7".<br><br>NOTE 2: CONFIRM BACKBOX SIZE WITH VENDOR SHOP DRAWINGS PRIOR TO ELECTRICAL ROUGH-IN. |
| ⬡1 — SHEET NOTE: DENOTES "SEE LEGEND NOTE NO. 1". |
| 1/E501 — EXAMPLE DENOTES REFERENCE TO DETAIL 1 ON DRAWING (SHEET) E501. |
| 2/E401 — EXAMPLE DENOTES REFERENCE TO ENLARGED PLAN 2 ON DRAWING (SHEET) E401. |
| A/1 — EQUIPMENT CALLOUT: REFERS TO A-1 ON EQUIPMENT SCHEDULE. SEE EQUIPMENT SCHEDULE SHEETS FOR ADDITIONAL DETAILS. |
| A1 — LIGHT FIXTURE TYPE CALLOUT: REFERS TO LUMINAIRE TAG A1 ON LIGHT FIXTURE SCHEDULE. SEE LIGHTING SCHEDULE SHEETS FOR ADDITIONAL DETAILS. |
| △1 — REVISION DELTA |
| a — DUCT SECTION MARKER. SEE CORRESPONDING DUCT SECTION DETAIL WITH SAME LETTER DESIGNATION. |
| 1/E301 — SECTION MARKER. EXAMPLE DENOTES REFERENCE TO DETAIL 1 ON SHEET E301. |

# ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL
A. REFER TO COMPLETE CONTRACT DOCUMENTS FOR OTHER DETAILS AND REQUIREMENTS.
B. CONFORM TO THE BUILDING, FIRE, AND ELECTRICAL CODES OF THE CITY AND COUNTY OF HONOLULU, LAWS AND REGULATIONS OF THE CITY AND COUNTY OF HONOLULU AND STATE OF HAWAII.
C. OBTAIN AND PAY FOR REQUIRED PERMITS, LICENSES, FEES, AND OTHER CHARGES. DELIVER CERTIFICATES OF COMPLETION AND INSPECTION TO THE OWNER. SUBCONTRACTORS SHALL BE LICENSED FOR THE WORK THEY PERFORM.
D. PROVIDE 4 COPIES OF DATA ON LUMINAIRES, ELECTRICAL EQUIPMENT, AND WIRING DEVICES THAT HAVE BEEN CHECKED BY THE CONTRACTOR FOR ARCHITECT'S REVIEW AND APPROVAL. ALLOW TEN WORKING DAYS FOR REVIEW PROCESS. (IF SUBSTITUTE PRODUCTS ARE PROPOSED FOR USE, THE BIDDER SHALL, PRIOR TO BID OPENING, SUBMIT 4 COPIES OF SHOP DRAWINGS OR CATALOG CUTS FOR APPROVAL. SUBSTITUTIONS AFTER RECEIPT OF APPROVED SUBMITTALS SHALL NOT BE PERMITTED UNLESS APPROVED IN WRITING BY THE ARCHITECT.)
E. FIRE ALARM AND TELECOMMUNICATIONS SHOP DRAWINGS (OBTAIN DRAWINGS FROM OWNER CONTRACTED VENDORS) ARE A PART OF THE CONTRACT DOCUMENTS AND SUPERSEDE OTHER DRAWINGS AND REQUIREMENTS.
F. MAINTAIN A SET OF CONTRACT DRAWINGS AT THE JOB SITE MARKING THEM TO SHOW VARIATIONS BETWEEN CONSTRUCTION ACTUALLY PROVIDED AND THAT INDICATED ON CONTRACT DOCUMENTS. PRIOR TO FINAL INSPECTION, TRANSFER THESE DATA AND SUBMIT 1 SET OF CLEAN RECORD DRAWINGS TO THE ARCHITECT.
G. EXISTING CONDITIONS ARE SHOWN IN AN APPROXIMATE WAY AND HAVE NOT BEEN VERIFIED BY THE OWNER OR HIS REPRESENTATIVE. CONTRACTOR SHALL DETERMINE THE EXACT CONDITION OF EXISTING WIRING BEFORE COMMENCING WORK, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY THE CONTRACTOR'S FAILURE TO LOCATE AND PRESERVE CONDITIONS.
H. THE ELECTRICAL INSTALLATION SHALL BE GUARANTEED FOR ONE YEAR AFTER ACCEPTANCE BY THE OWNER. WHEN NOTIFIED BY THE OWNER OF FAILURE OF ANY PART OF THE INSTALLATION DURING THE GUARANTEE PERIOD, THE CONTRACTOR SHALL REPAIR OR REPLACE THE DEFECTIVE PART AT HIS OWN EXPENSE TO THE SATISFACTION OF THE OWNER. FAILURES DUE TO DEFECTIVE PARTS SHALL BE COVERED BY THE MANUFACTURERS' WARRANTIES.
I. PROVIDE ALL COMPONENTS REQUIRED FOR A COMPLETE AND OPERABLE INSTALLATION.
J. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON THE JOBSITE.

| PANELBOARD NAMING KEY |
|---|
| #A# |
| VOLTAGE AND TYPE<br>2 = 208Y/120V PANELBOARD<br>4 = 480Y/277V PANELBOARD |
| SEQUENCE/COUNT<br>A# = 1ST PANEL OF TYPE LOCATED ON LEVEL # _<br>B# = 2ND PANEL OF TYPE LOCATED ON LEVEL # _ |
| *EXCEPTIONS: N/A |
| EXAMPLE: PANEL '2B2' IS THE SECOND 208Y/120V PANEL LOCATED ON LEVEL 2 |

PART 2 - PRODUCTS
A. NO PRODUCTS CONTAINING ASBESTOS SHALL BE USED ON THIS PROJECT.
B. MATERIALS AND EQUIPMENT SHALL MEET THE REQUIREMENTS OF UNDERWRITER'S LABORATORIES, INC. (UL) WHERE UL STANDARDS HAVE BEEN ESTABLISHED FOR THOSE ITEMS. ALL ITEMS SHALL BE NEW UNLESS INDICATED OTHERWISE.
1. CONDUCTORS: MINIMUM SIZE NO. 12 AWG, COPPER, 600 VOLTS, TYPE THWN OR XHHW. PROVIDE TYPE RHW FOR CONDUCTORS TO BE INSTALLED UNDERGROUND. CONDUCTORS NO. 8 AND LARGER SHALL BE STRANDED. CONDUCTORS NO. 10 AND SMALLER SHALL BE SOLID, EXCEPT THAT CONDUCTORS FOR REMOTE-CONTROL AND SIGNAL CIRCUITS, CLASSES 1, 2, AND 3, MAY BE STRANDED. COLOR CODE OF UNGROUNDED CONDUCTORS:
   a. 208/120 VOLT, 3-PHASE: PHASE A - BLACK, PHASE B - RED, PHASE C - BLUE.
2. RACEWAYS: ELECTRICAL METAL TUBING (EMT), 3/4" INCH MINIMUM UNLESS OTHERWISE NOTED, AND GALVANIZED RIGID CONDUIT, 3/4" INCH MINIMUM UNLESS OTHERWISE NOTED. LIQUID TIGHT FLEX FOR CONNECTION TO TRANSFORMERS AND MOTORS.
3. PROVIDE PVC CONDUITS FOR UNDERGROUND INSTALLATIONS. PROVIDE GALVANIZED RIGID CONDUITS FOR EXPOSED SURFACE MOUNT RACEWAY INSTALLATIONS: PAINTED TO MATCH ADJACENT SURFACES.
4. DEVICE PLATES: SMOOTH ONE PIECE TO SUIT DEVICES INSTALLED, UREA OR PHENOLIC, WHITE. GROUPED DEVICES SHALL BE GANGED UNDER A SINGLE PLATE.
5. WIRING DEVICES:
   A. RECEPTACLES: SPECIFICATION GRADE, NEMA 5-20R, DUPLEX, WHITE.
6. LUMINAIRES: PER FIXTURE SCHEDULE ON PLANS. INCLUDE ALL HANGERS, SUPPORTS, BALLASTS AND LAMPS AS REQUIRED.
7. PANEL:
   a. MODIFY EXISTING PANELS AS INDICATED, COMPLEMENTS TO BE COMPATIBLE WITH EXISTING PANEL.
   b. BOLT-ON BREAKERS, TYPE AND RATING AS INDICATED.
   c. UPDATE AND TYPE DIRECTORY TO INDICATE LOAD SERVED BY EACH CIRCUIT.
8. FIRE ALARM AND DETECTION DEVICES: NEW EQUIPMENT SHALL BE COMPATIBLE WITH AND SHALL OPERATE ACCURATELY AND RELIABLY WITH THE EXISTING VENDOR SYSTEM AND SHALL NOT IMPAIR RELIABILITY OR OPERATIONAL FUNCTIONS OF EXISTING SYSTEM.
9. NAMEPLATES: LAMINATED MELAMINE PLASTIC, 1/8"-THICK, WHITE WITH BLACK CENTER CORE. SURFACE SHALL BE MATTE FINISH. ENGRAVE 1/4"-HIGH NORMAL BLOCK STYLE LETTERING INTO CORE. MINIMUM SIZE OF NAMEPLATE SHALL BE 1" X 2-1/2".
10. SUBMIT DRAWINGS OR CATALOG CUTS FOR THE FOLLOWING EQUIPMENT AND RESUBMIT UNTIL APPROVAL IS RECEIVED. EACH SUBMITTAL SHALL BE CLEARLY MARKED AS TO ITS INTENDED USE AND LOCATION.
   a. LUMINAIRES
   b. TIME SWITCH

PART 3 - EXECUTION
A. DRAWINGS ARE OF SMALL SCALE AND ARE SCHEMATIC. LOCATIONS OF EQUIPMENT AND SYSTEM ELEMENTS ARE APPROXIMATE. RELOCATE ANY DEVICE WITHIN 10 FEET PRIOR TO INSTALLATION, WITHOUT ADDITIONAL COST, AT THE DIRECTION OF THE OWNER.
B. CONSULT THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR DETAILS NOT SHOWN ON THE ELECTRICAL DRAWINGS. ANY CONFLICTS IN LOCATING EQUIPMENT SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR RESOLUTION. IF DIRECTED BY THE ARCHITECT, THE CONTRACTOR SHALL MAKE REASONABLE MODIFICATION TO THE LAYOUT OF EQUIPMENT TO PREVENT CONFLICT WITH OTHER TRADES OR FOR THE PROPER EXECUTION OF THE WORK AT NO EXTRA COST.
C. INSTALLATION AND WORKMANSHIP:
1. INSTALLATION SHALL CONFORM TO SEISMIC DESIGN REQUIREMENTS OF CHAPTER 16 OF THE 2018 INTERNATIONAL BUILDING CODE. PROVIDE SEISMIC BRACING FOR WALL MOUNTED ENCLOSURES, LUMINAIRES, AND OTHER ELECTRICAL EQUIPMENT.
2. WORK SHALL BE NEATLY EXECUTED, WORKMANLIKE IN APPEARANCE, SYMMETRICAL, PLUMB, UNIFORM, PROPERLY ALIGNED AND SECURED IN PLACE.
3. LAY OUT WORK IN ADVANCE. EXERCISE CARE WHERE CUTTING, CHANNELING, CHASING OR DRILLING FLOORS, WALLS, PARTITIONS, CEILINGS, OR OTHER SURFACES. FLOOR PENETRATIONS SHALL BE ACCOMPLISHED BY A LICENSED CORING CONTRACTOR. CONCRETE FLOOR SLABS SHALL BE X-RAYED BEFORE ANY CORING. REPAIR DAMAGE TO BUILDINGS, PIPING, AND EQUIPMENT USING SKILLED CRAFTSMEN OF TRADES INVOLVED. CUTTING, REPAIRS AND REFINISHING SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT.
4. FASTEN TO CONCRETE WITH EXPANSION BOLTS OR CONCRETE INSERTS; TO WOOD WITH WOOD SCREWS; AND TO LIGHT STEEL CONSTRUCTION WITH SHEET METAL SCREWS.
D. WIRING METHOD:
1. USE ELECTRICAL METALLIC TUBING IN CONCEALED LOCATIONS AND GALVANIZED RIGID CONDUITS IN EXPOSED LOCATIONS AS INSTRUCTED BY THE ARCHITECT. INSTALL RACEWAY PARALLEL WITH OR AT RIGHT ANGLES TO CEILINGS, WALLS, AND STRUCTURAL MEMBERS.
2. PROVIDE FLEXIBLE CONNECTION FOR EQUIPMENT SUBJECT TO VIBRATION AND LUMINAIRES MOUNTED ON ACCESSIBLE CEILING PANELS OR GRID.
3. FIRE ALARM WIRING WILL BE IN CONDUIT SYSTEM. JUNCTION BOXES SHALL BE SPRAYED RED AND LABELED "FIRE ALARM".
4. CONDUCTORS FOR 20 AMPERE BRANCH CIRCUITS OF 120 VOLTS MORE THAN 100 FEET LONG AND OF 277 VOLTS MORE THAN 230 FEET LONG FROM PANEL TO CENTER OF LOAD SHALL NOT BE SMALLER THAN NO. 10.
5. DATA RACEWAY INSTALLATION SHALL BE IN ACCORDANCE WITH EIA/TIA 569.
6. BONDING. ALL METAL COMPONENTS SHALL BE BONDED TO PROVIDE A CONTINUOUS CONDUCTING PATH BACK TO THE SERVICE GROUND OR DERIVED SYSTEM GROUND.
7. A GREEN EQUIPMENT GROUND CONDUCTOR, SIZED PER NEC TABLE 250-122, SHALL BE RUN WITH THE CONDUCTORS FOR EACH FEEDER AND BRANCH CIRCUIT. CONDUIT ALONE AS EQUIPMENT GROUND CONDUCTOR IS NOT ACCEPTABLE.
8. EQUIPMENT GROUND CONDUCTOR FOR ISOLATED GROUND CIRCUITS SHALL BE GREEN WITH A YELLOW STRIPE. EACH ISOLATED EQUIPMENT GROUND CONDUCTOR SHALL BE CONTINUOUS BACK TO THE SERVICE OR DERIVED SYSTEM GROUND POINT.
9. PROVIDE AND INSTALL ALL JUNCTION BOXES AND PULL BOXES REQUIRED FOR INSTALLATION OF ELECTRICAL DEVICES AND EQUIPMENT, WHETHER OR NOT SPECIFICALLY INDICATED ON THE PLANS. SIZING OF BOXES SHALL BE PER NEC.
10. LABEL ALL JUNCTION BOXES AND PULL BOXES INDICATION PANEL NAME AND CIRCUIT NUMBERS OF ALL BRANCH CIRCUIT CONDUCTORS CONTAINED WITHIN THE BOX.
E. INSTALL PULLSTRING (PLASTIC HAVING MINIMUM 200 POUND TENSILE STRENGTH) IN EMPTY CONDUITS IN WHICH WIRE IS TO BE INSTALLED BY OTHERS.
F. SEAL OPENINGS AROUND NEW ELECTRICAL PENETRATIONS THROUGH FIRE RESISTANCE-RATED WALLS, PARTITIONS, FLOORS, OR CEILINGS TO MAINTAIN FIRE RESISTIVE INTEGRITY. WHERE AN EXISTING PENETRATION IS USED, SEAL PENETRATION AFTER WORK IS COMPLETED.
G. COORDINATE ELECTRICAL WORK WITH OTHER TRADES AND WITH OWNER.
H. FASTEN NAMEPLATES TO THE DEVICE WITH A MINIMUM OF TWO SHEETMETAL SCREWS OR TWO RIVETS.
I. PERFORM AN OPERATIONAL TEST AFTER COMPLETING THE INSTALLATION TO ASSURE PROPER OPERATION OF ITEMS OF THE WORK.
J. CLEAN UP DEBRIS AT END OF EACH DAYS WORK. REMOVE MARKINGS FROM ELECTRICAL EQUIPMENT AND DEVICES.

# ABBREVIATIONS

| | |
|---|---|
| AC | ALTERNATING CURRENT |
| AWG | AMERICAN WIRE GAGE |
| EMT | ELECTRICAL METALLIC TUBING |
| EXST/E | EXISTING |
| G/GRD | GROUND |
| NEC | NATIONAL ELECTRICAL CODE |
| NEMA | NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION |
| NFPA | NATIONAL FIRE PROTECTION ASSOCIATION |
| PNL | PANEL |
| SS | STAINLESS STEEL |
| UL | UNDERWRITER'S LABORATORIES, INC. |

CITY AND COUNTY OF HONOLULU
REVISED ORDINANCE OF HONOLULU 2021
CHAPTER 16B

To the best of my knowledge, this project's design substantially conforms to the Building Energy Conservation Code for:

_____ Building Component Systems
__X__ Electrical Component Systems
_____ Mechanical Component Systems

DENNIS J. LI LICENSED PROFESSIONAL ENGINEER No. 14597-E HAWAII, U.S.A.

Signature: _____ Date: 10/12/26
Name: DENNIS LI
Title: ELECTRICAL ENGINEER
License No.: 14597-E

EXTERIOR LIGHTING POWER CALCULATION:
BASE ALLOWANCE = 500 W
0.6W/LF (WALKWAY < 10 FT WIDE) X 350 LF = 210 W
0.11W/LF (WALKWAY > 10 FT WIDE) X 129 LF = 14 W
TOTAL EXTERIOR LIGHTING ALLOWANCE = 685 W

INSTALLED LIGHTING POWER: 650 W

| REVISION | DATE: | DESCRIPTION | SHT. NO. | APPROVED |
|---|---|---|---|---|
| 1 | 10/1/26 | ADDENDUM #1 | of | |

DENNIS J. LI LICENSED PROFESSIONAL ENGINEER No. 14597-E HAWAII, U.S.A.
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.
DENNIS J. LI
LICENSE EXPIRES APRIL 30, 2026
CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AT JOB BEFORE PROCEEDING WITH WORK

DESIGNED BY: WW
CHECKED BY: GH
DRAWN BY: WW
DATE: 09/08/2026
ACCEPTED: [illegible]
Program Administrator, Mechanical/Electrical Division

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY & COUNTY OF HONOLULU

WAIKIKI SURF RACKS
2395 KALAKAUA AVE, HONOLULU, HI 96815
TAX KEY: 2-6-001: 008, 015, 018, 019

ELECTRICAL LEGEND

PROJECT NO. 26-P-07
DRAWING NO.: E001
SHEET NO. 29 OF 43
FILE NO. 61/51

Plot Date: 10/12/2026 9:41:17 AM
1

## Branch Panel: C1

**Location:** (E) ELECTRICAL C104
**Supply From:** METER MAIN (3P175A)
**Mounting:** Surface
**Enclosure:** Type 1

**Volts:** 208Y/120V
**Phases:** 3
**Wires:** 4

**A.I.C. Rating:** 10 KAIC
**Mains Type:** MLO
**Mains Rating:** 225 A

**Notes:**

| CKT | Circuit Description | Trip | Poles | A | B | C | Poles | Trip | Circuit Description | CKT |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | (E) R - STOR, TOILET CH | 20 A | 1 | 500 VA | 1200 VA | | 1 | 20 A | (E) L - STOR, ELEC, TOILET CH | 2 |
| 3 | (E) R - ELE RM, STOR | 20 A | 1 | | 500 VA | 1200 VA | 1 | 20 A | (E) L - MENS / WOMENS TOILET (TIME... | 4 |
| 5 | (E) R - IR SINK WOMEN / MEN / EXT | 20 A | 1 | | | 200 VA | 1 | 20 A | (E) L - EXTERIOR | 6 |
| 7 | (E) R - FESTIVE LIGHT | 20 A | 1 | 1500 VA | 1200 VA | | 1 | 20 A | (E) L - EXTERIOR | 8 |
| 9 | (E) R - FESTIVE LIGHT | 20 A | 1 | | 1000 VA | 1200 VA | 1 | 20 A | (E) L - BLDG ROOF TRELLIS | 10 |
| 11 | (E) L - FLOOD (ON ST LT POLE) | 20 A | 1 | | | 1200 VA | 1 | 20 A | (E) L - EXTERIOR ROOF | 12 |
| 13 | (E) R - KIOSK | 20 A | 1 | 1000 VA | 1000 VA | | 1 | 20 A | (E) R - ON TRELLIS | 14 |
| 15 | (E) R - LANDSCAPE | 20 A | 1 | | 1500 VA | 1000 VA | 1 | 20 A | (E) R - BEACHBOY #2 & #3 | 16 |
| 17 | (E) L - SURF RACK AREA | 20 A | 1 | | | 1000 VA | 1100 VA | 1 | 20 A | (E) L - MF #1 WATER FEAT | 18 |
| 19 | | | | 1300 VA | 1000 VA | | | 1 | 20 A | (E) L - MF #1 LANDSCAPE | 20 |
| 21 | (E) MINI FOUNTAIN #6 | 40 A | 3 | | 1300 VA | 1000 VA | | 1 | 20 A | (E) L - MF #6 WATER FEAT | 22 |
| 23 | | | | | | 1300 VA | 1000 VA | 1 | 20 A | (E) L - MF #6 LANDSCAPE | 24 |
| 25 | | | | 6000 VA | 500 VA | | | | | | 26 |
| 27 | (E) STAGE POWER #1 | 50 A | 3 | | 6000 VA | 500 VA | 3 | 15 A | (E) LOAD | 28 |
| 29 | | | | | | 6000 VA | 500 VA | | | | 30 |
| 31 | (E) MINI FOUNTAIN #1 | 20 A | 2 | 500 VA | 1000 VA | | 1 | 20 A | (E) TIME CLOCK | 32 |
| 33 | | | | | 500 VA | 1000 VA | 1 | 20 A | (E) EXHAUST FAN / TOILET | 34 |
| 35 | (E) TEL BOOTH POWER | 20 A | 1 | | | 1000 VA | 1000 VA | 1 | 20 A | (E) CLOCK | 36 |
| 37 | L - SURFBOARD RACK | 20 A | 1 | 1498 VA | 1000 VA | | 1 | 20 A | (E) OTWC WI-FI | 38 |
| 39 | (N) FIRE ALARM MULTI-HAZARD PANEL | 20 A | 1 | | 180 VA | 500 VA | 1 | 20 A | (E) SPARE | 40 |
| 41 | (N) TELECOM SWITCH | 20 A | 1 | | | 180 VA | 0 VA | 1 | 20 A | (E) SPARE | 42 |
| | | | | **Total Load:** 19198 VA | | 17380 VA | 16880 VA | | | | |
| | | | | **Total Amps:** 161 A | | 145 A | 141 A | | | | |

| Load Classification | Connected Load | Demand Factor | Estimated Demand | Panel Totals | |
|---|---|---|---|---|---|
| Lighting | 138 VA | 100.00% | 138 VA | | |
| Other | 1360 VA | 100.00% | 1360 VA | **Total Conn. Load:** | 53458 VA |
| Power | 180 VA | 100.00% | 180 VA | **Total Est. Demand:** | 53458 VA |
| Receptacle | 180 VA | 100.00% | 180 VA | **Total Conn. Current:** | 148 A |
| | | | | **Total Est. Demand Current:** | 148 A |

**Notes:**

## Branch Panel: P

**Location:** STATION AREA H103
**Supply From:** METER MAIN (3P100A)
**Mounting:** Surface
**Enclosure:** Type 1

**Volts:** 208Y/120V
**Phases:** 3
**Wires:** 4

**A.I.C. Rating:** 10 KAIC
**Mains Type:** MLO
**Mains Rating:** 100 A

**Notes:**

| CKT | Circuit Description | Trip | Poles | A | B | C | Poles | Trip | Circuit Description | CKT |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | (E) R - ENTRY | 20 A | 1 | 180 VA | 1200 VA | | 1 | 20 A | (E) L - INTERIOR | 2 |
| 3 | (E) R - MONITOR RM | 20 A | 1 | | 360 VA | 200 VA | 1 | 20 A | (E) L - TOILET / EXHAUST FAN | 4 |
| 5 | (E) R - MONITOR RM | 20 A | 1 | | | 360 VA | 1200 VA | 1 | 20 A | (E) L - INTERIOR | 6 |
| 7 | (E) R - MONITOR RM | 20 A | 1 | 180 VA | 1200 VA | | 1 | 20 A | (E) L - EXTERIOR | 8 |
| 9 | (E) R - TOILET / HALL | 20 A | 1 | | 1200 VA | 1200 VA | 1 | 20 A | (E) R - OFFICE #3 | 10 |
| 11 | (E) R - MECH RM | 20 A | 1 | | | 500 VA | 1200 VA | 1 | 20 A | (E) R - OFFICE #2 | 12 |
| 13 | (E) R - FRONT DESK | 20 A | 1 | 1200 VA | 1200 VA | | | 1 | 20 A | (E) R - OFFICE #1 | 14 |
| 15 | (E) L - ROOF TRELLIS | 20 A | 1 | | 100 VA | 1200 VA | | 1 | 20 A | (E) R - SOUND SYSTEM | 16 |
| 17 | (E) SPARE | 20 A | 1 | | | 1000 VA | 500 VA | 1 | 20 A | (E) FIRE ALARM | 18 |
| 19 | | | | 4800 VA | 600 VA | | | | | | 20 |
| 21 | (E) ACCU-1 | 60 A | 3 | | 4800 VA | 600 VA | 2 | 20 A | (E) FCU-1 | 22 |
| 23 | | | | | | 4800 VA | 600 VA | 1 | 20 A | (E) SPARE | 24 |
| 25 | PFB | -- | 1 | -- | 0 VA | | | 1 | 20 A | (E) SPARE | 26 |
| 27 | PFB | -- | 1 | | -- | 0 VA | | 1 | 20 A | (E) SPARE | 28 |
| 29 | PFB | -- | 1 | | | -- | | | | | 30 |
| | | | | **Total Load:** 10560 VA | | 9660 VA | 10160 VA | | | | |
| | | | | **Total Amps:** 89 A | | 81 A | 85 A | | | | |

| Load Classification | Connected Load | Demand Factor | Estimated Demand | Panel Totals | |
|---|---|---|---|---|---|
| | | | | **Total Conn. Load:** | 30380 VA |
| | | | | **Total Est. Demand:** | 30380 VA |
| | | | | **Total Conn. Current:** | 84 A |
| | | | | **Total Est. Demand Current:** | 84 A |

**Notes:**

## LUMINAIRE SCHEDULE

| TYPE | LOCATION | DESCRIPTION | LIGHT SOURCE | VOLTAGE | WATTAGE | LUMENS | COLOR TEMP | MOUNTING | MANUFACTURER | CATALOG # (OR APPROVED SUBSTITUTE) |
|---|---|---|---|---|---|---|---|---|---|---|
| L1 | SURFBOARD RACKS INTERIOR | LED LINEAR MOUNT<br>UL1598 WET LOCATION RATED | LED | 110V-277V UNIVERSAL VOLTAGE | 60 W | 4500 | 3000K | SURFACE MOUNT, ADJUSTABLE ARM | KIM LIGHTING | RN-D-3-15-3K8-AS-CL-UNV-DBT-W-NXWS16F-EM<br>FINISHING COLOR: RAL-7022 |
| L1A | SURFBOARD RACKS EXTERIOR | LED LINEAR MOUNT<br>UL1598 WET LOCATION RATED | LED | 110V-277V UNIVERSAL VOLTAGE | 20 W | 5707 | 3000K | WALL MOUNT | KIM LIGHTING | RN-D-4-10-3K8-SM-CL-UNV-DBT-W<br>FINISHING COLOR: RAL-7022 |
| D1 | CONCESSION STAND BUILDING EXTERIOR UNDERHANG | LOW-PROFILE RECESSED 5" DOWNLIGHT<br>UL1598 WET LOCATION RATED | LED | 110V-277V UNIVERSAL VOLTAGE | 28 W | 3000 | 3000K | CEILING RECESSED | KIRLIN | LRC-05SDN-3000L-FLR-WFL<br>FINISHING COLOR: RAL-7022 |
| P1 | SURFBOARD RACKS INTERIOR | SOLAR POWER<br>LED<br>POLE MOUNT<br>WET LOCATION RATED | LED | NO INPUT VOLTAGE * | 60 W | 5800 ** | 3000K | POLE MOUNT | HYBRILUX | SL10H-060<br>SPIGOT SUPPORT: MT-SL10-01A [1] |
| EXIT | SURFBOARD RACKS INTERIOR | EXIT SIGN<br>LED<br>WALL MOUNT<br>WET LOCATION RATED | LED | 110V-277V UNIVERSAL VOLTAGE | 2.7 W | 50 | 3000K | WALL MOUNT | LITHONIA | WLTE-W-1-G-EL-TP |

NOTE:
* LIGHT FIXTURE IS SOLAR-POWERED WITH SELF-CONTAINED BATTERY.

** LIGHT FIXTURE LUMENS OUTPUT IS PROGRAMMABLE. RECOMMEND TO ADJUST LUMENS OUTPUT TO APPROXIMATELY 5800 LUMENS.

| APPROVED | SHT. NO. | DESCRIPTION | DATE: | REVISION |
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| | 0F | ADDENDUM #1 | 10/1/26 | 1 |

DENNIS J. LI
LICENSED PROFESSIONAL ENGINEER
No. 14597-E
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

DENNIS J. LI
LICENSE EXPIRES APRIL 30, 2028
CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AT JOB BEFORE PROCEEDING WITH WORK.

DESIGNED BY: WW
CHECKED BY: GH
DRAWN BY: WW
DATE: 09/09/2026
ACCEPTED:
Program Administrator, Mechanical/Electrical Division

**DEPARTMENT OF DESIGN AND CONSTRUCTION**
CITY & COUNTY OF HONOLULU

WAIKIKI SURF RACKS

2395 KALAKAUA AVE, HONOLULU, HI 96815

TAX KEY: 2-6-001: 008, 015, 018, 019

ELECTRICAL SCHEDULES

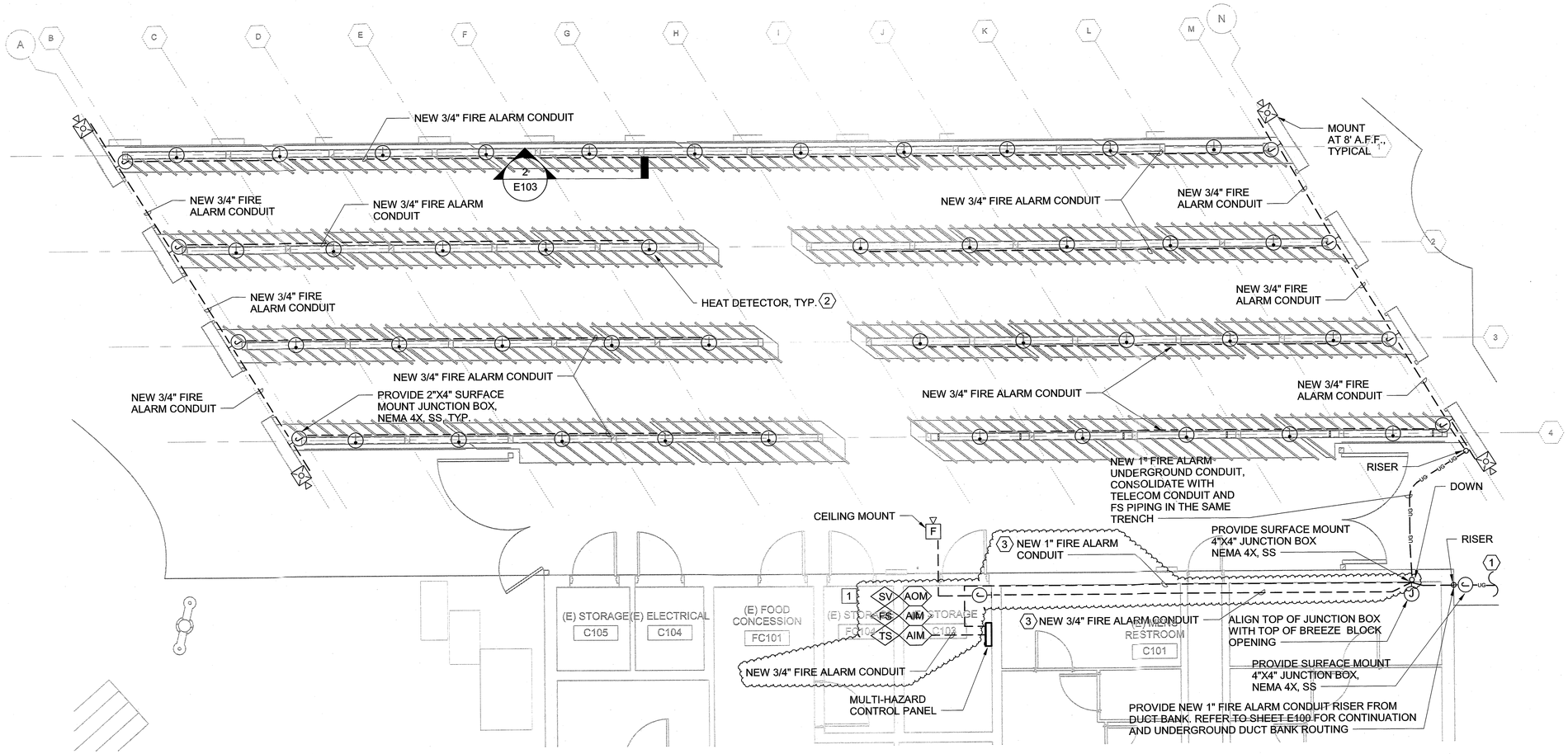
PROJECT NO. 26-P-07

DRAWING NO.:

E010

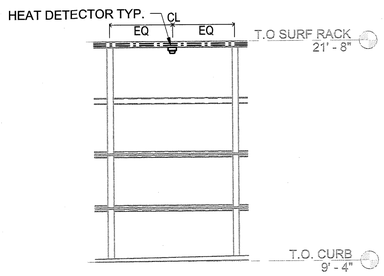
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| 31 OF 43 | 61/51 |

Plot Date: 10/12/2026 9:41:17 AM




## 1 FIRE ALARM PLAN

1/4" = 1'-0"




## 2 TYPICAL HEAT DETECTOR ELEVATION DETAIL

1/4" = 1'-0"

GENERAL NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND NOTIFY WSP OF ANY DISCREPANCIES PRIOR TO COMMENCING WORK. ANY DISCREPANCIES FOUND ON SITE SHALL BE TAKEN CARE OF IN ACCORDANCE WITH NFPA STANDARDS.
2. PAINT CONDUIT TO MATCH ADJACENT SURFACE. SEE ARCHITECTURE DRAWINGS FOR CONDUIT MOUNTING DETAIL.

FIRE ALARM KEYNOTES

1. PROVIDE NEW 1" CONDUIT FROM NEW MULTI-HAZARD RELEASE CONTROL PANEL TO EXISTING FIRE ALARM CONTROL PANEL AT HONOLULU POLICE DEPARTMENT BUILDING. SEE SHEET E100 FOR CONTINUATION.
2. RATED FOR WET LOCATION. MOUNT HEAT DETECTORS TO THE UNDERSIDE OF RACK. REFER TO SECTION VIEW E103/2.
3. WITHIN BACK OF HOUSE SPACES, SURFACE MOUNT ALL CONDUITS ABOVE EXISTING BREEZE BLOCK OPENINGS. ENSURE ALL PARALLEL CONDUITS ARE CONSOLIDATED WHERE POSSIBLE.

GRAPHIC SCALE
0 2' 4' 8'
1/4" = 1'-0"

| REVISION | DATE | DESCRIPTION | SHT. NO. | APPROVED |
|---|---|---|---|---|
| 1 | 10/1/26 | ADDENDUM #1 | 0F | |

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ACCEPTED:
Program Administrator/ Mechanical/Electrical Division

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FIRE ALARM PLAN

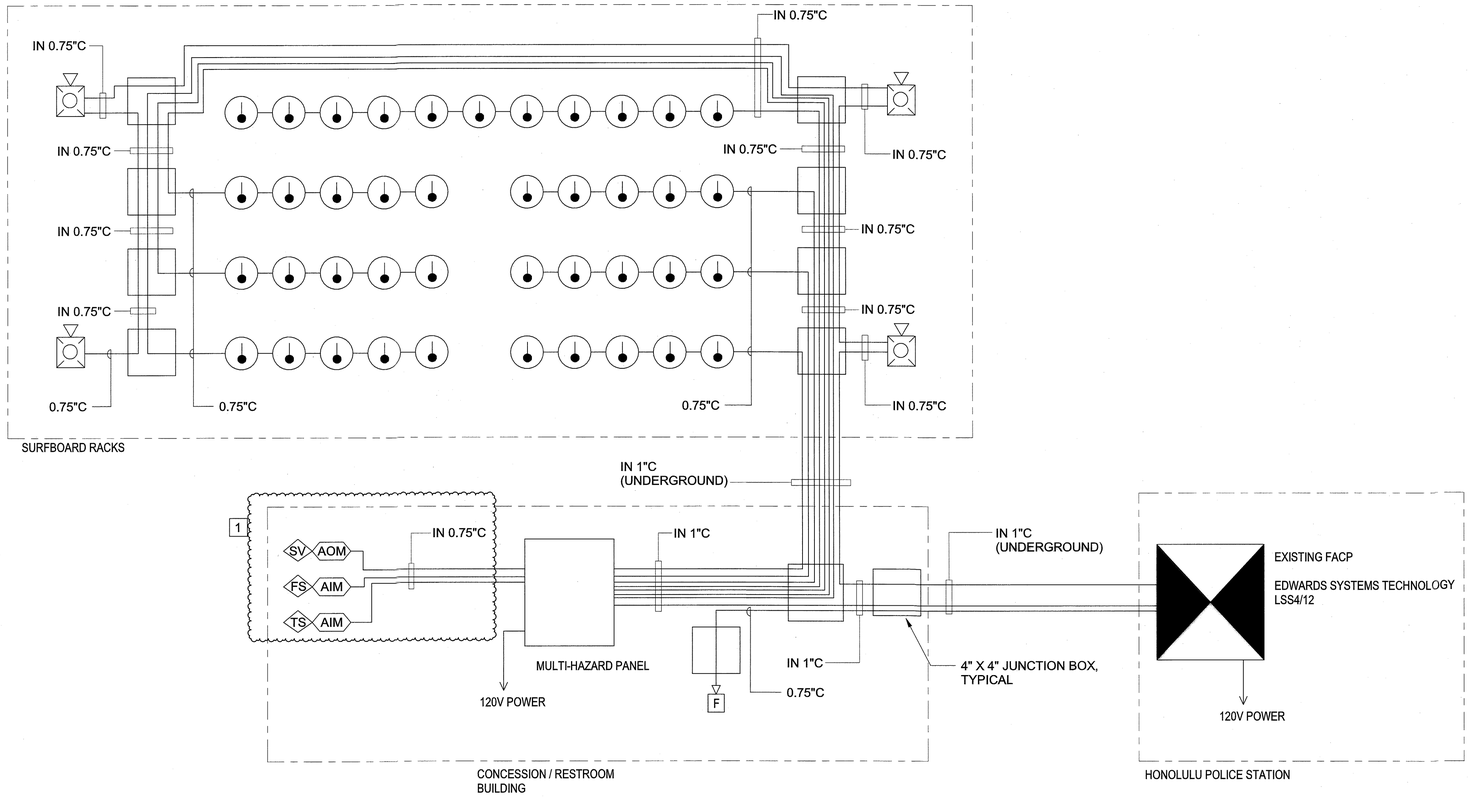
PROJECT NO. 26-P-07

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E103

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| 36 OF 43 | 61/51 |

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## 1 PARTIAL FIRE ALARM RISER

NOT TO SCALE

GENERAL NOTES:

1. RISER DIAGRAM IS REPRESENTATIVE ONLY. SEE DRAWINGS FOR LOCATIONS OF DEVICES.
2. CONTRACTOR AND FIRE ALARM VENDOR SHALL ADJUST AND ADD DEVICES AS REQUIRED TO OBTAIN APPROVAL BY FIRE DEPARTMENT.
3. COORDINATE CABLING REQUIREMENTS WITH FIRE ALARM SYSTEM VENDOR.

| REVISION | DATE: | DESCRIPTION | SHT. NO. | APPROVED |
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| 1 | 10/1/26 | ADDENDUM #1 | OF | |

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Program Administrator/Mechanical/Electrical Division

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2395 KALAKAUA AVE, HONOLULU, HI 96815 TAX KEY: 2-6-001: 008, 015, 016, 019

ELECTRICAL DIAGRAMS

PROJECT NO. 26-P-07

DRAWING NO.:

E602

| SHEET NO. | FILE NO. |
|---|---|
| 39 OF 43 | 61/51 |

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