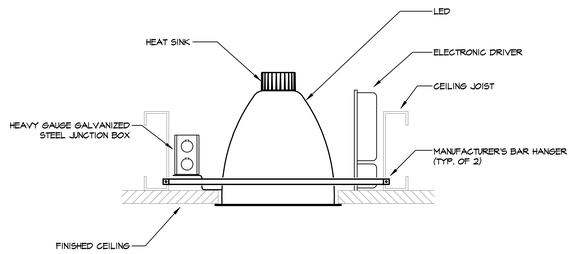
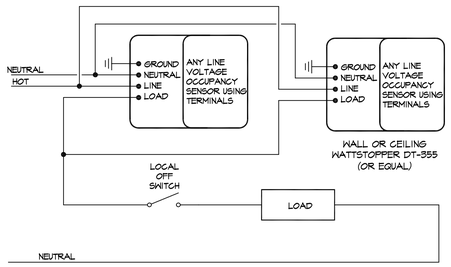
DRAWING SCHEDULE

SHEET	DESCRIPTION	IGOR CONSTRUCTION DOCUMENTS 09 APRIL 2018
E0.1	ELECTRICAL LEGEND, SHEET INDEX & DETAILS	●
E0.2	ELECTRICAL SPECIFICATIONS	●
E0.3	FIXTURE SCHEDULE & LIGHTING COMPLIANCE FORMS	●
E1.1	PARTIAL OVERALL FLOORPLAN	●
E2.1	ENLARGED PLANS - MENS	●
E3.1	ENLARGED PLANS - WOMENS	●
	TOTAL SHEETS IN ISSUE:	6



A / E0.1 DOWNLIGHT MOUNTING DETAIL

SCALE: NONE



3-WAY APPLICATION

B / E0.1 DUAL TECHNOLOGY LINE VOLTAGE MOTION SENSOR

SCALE: NONE

ELECTRICAL LEGEND

AUGUST 2011

- PANELBOARD: SURFACE MOUNTED
- PANELBOARD: FLUSH MOUNTED
- SWITCHBOARD OR DISTRIBUTION PANEL
- XF TRANSFORMER
- PULLBOX / VAULT
- MOTOR STARTER
- COMBINATION MOTOR STARTER
- COMBINATION MOTOR STARTER PROVIDED BY OTHERS
- F DISCONNECT SWITCH - FUSIBLE (FUSED PER EQUIP. NAMEPLATE)
- N DISCONNECT SWITCH - NON-FUSIBLE
- DISCONNECT SWITCH PROVIDED BY OTHERS
- VARIABLE FREQUENCY DRIVE
- VARIABLE FREQUENCY DRIVE PROVIDED BY OTHERS
- CB ENCLOSED CIRCUIT BREAKER
- GROUND ROD
- SHUNT TRIP STATION OR EMERGENCY PUSHBUTTON
- M REMOTE METER

- a b LIGHTING FIXTURE - LOWERCASE LETTER DENOTES SWITCHING (a = CENTER LAMP, b = OUTER LAMPS)
- WALL MOUNTED FIXTURE
- RECESSED DOWNLIGHT
- SURFACE LUMINAIRE
- POLE MOUNTED LIGHT (# OF HEADS INDICATED ON DRAWING)
- FLUORESCENT STRIP FIXTURE
- BOLLARD
- RECESSED DOWNLIGHT (WALL WASH)
- TRACK LIGHTING
- EMERGENCY LIGHTING UNIT
- EXIT SIGN FIXTURE - SHADED AREA DENOTES LIGHTED FACE - ARROWS DENOTE DIRECTION
- EMERGENCY FIXTURE

- SINGLE RECEPTACLE: 20A, 125V, NEMA 5-20, +18" AFF (UNO)
- DUPLEX RECEPTACLE: 20A, 125V, NEMA 5-20, +18" AFF (UNO)
- DUPLEX RECEPTACLE: HALF SWITCHED
- DUPLEX RECEPTACLE: FLOOR MOUNTED
- QUAD RECEPTACLE: 20A, 125V, NEMA 5-20, +18" AFF (UNO)
- QUAD RECEPTACLE: FLOOR MOUNTED
- ISOLATED GROUND TYPE RECEPTACLE (ORANGE TRIANGLE) - 20A, 125V, NEMA 5-2016, +18" AFF (UNO)
- DUPLEX RECEPTACLE GFI TYPE - 20A, 125V, NEMA 5-20 GFI +18" AFF (UNO)
- DUPLEX RECEPTACLE: ABOVE COUNTER (VERIFY HEIGHT)
- SPECIAL PURPOSE RECEPT.: SEE DWGS FOR NEMA CONFIG.
- DUPLEX RECEPTACLE: CEILING MOUNTED
- MULTI-OUTLET ASSEMBLY: SPACING PER DWGS

- DATA / VOICE OUTLET: 18" AFF (UNO) - 1 VOICE, 1 DATA JACK, 2 BLANKS
- DATA / VOICE OUTLET: FLOOR MOUNTED
- DATA / VOICE OUTLET: ABOVE COUNTER (VERIFY HEIGHT)
- MULTI-OUTLET ASSEMBLY: SPACING PER DWGS
- TELEPHONE OUTLET: 18" AFF (UNO)
- DATA OUTLET: 18" AFF (UNO)
- S SPEAKER
- TV TELEVISION OUTLET: 18" AFF (UNO)
- TELEPHONE TERMINAL BOARD (TTB)
- VC VOLUME CONTROL
- GROUNDING BAR

- S SINGLE POLE SWITCH 48" AFF (UNO)
- S_3 THREE WAY SWITCH 48" AFF (UNO)
- S_4 FOUR WAY SWITCH 48" AFF (UNO)
- S_K KEY OPERATED SWITCH 48" AFF (UNO)
- S_L SWITCH WITH LIGHTED HANDLE
- S_M MANUAL MOTOR STARTER
- S_P SWITCH WITH PILOT LIGHT 48" AFF (UNO)
- S_T TIME WALL SWITCH 48" AFF (UNO)
- D DIMMER OPERATED SWITCH 48" AFF (UNO)
- OCCUPANCY SENSOR - WALL MOUNTED 48" AFF (UNO)
- OS = 360°, OS = 180°, OS = 90° — OCCUPANCY SENSOR - CEILING MOUNTED. ARROWS INDICATE COVERAGE, DIRECTION & PATTERN. PROVIDE WITH POWER PACK PER MFG REQUIREMENTS.
- CONTROL STATION
- CONTACTOR OR RELAY
- PC PHOTOELECTRIC CELL (ON ROOF FACING NORTH UNO)
- TC TIMECLOCK

- GFI GROUND FAULT INTERRUPTER DEVICE
- M METERING DEVICE
- REMOTE METER
- ST SHUNT TRIP DEVICE
- TRANSFORMER
- CURRENT TRANSFORMER
- G GENERATOR
- # MOTOR - # INDICATES HP
- INTERRUPTER SWITCH
- GFI GROUND FAULT RELAY W/ CT OR SENSOR
- FUSE
- CIRCUIT BREAKER
- DRAWOUT CIRCUIT BREAKER
- A/S TRANSFER SWITCH (A=AUTOMATIC, M=MANUAL) # FOR POLES 2, 3 OR 4
- SPD SURGE PROTECTION DEVICE

- T THERMOSTAT (PROVIDED BY MECH. CONTRACTOR UNO)
- J JUNCTION BOX (SIZE AS REQUIRED UNO)
- S SHEET NOTE DESIGNATION
- F1 FIXTURE DESIGNATION. F1=TYPE (SEE FIXTURE SCH.)
- 5 REVISION DELTA: NUMBER REPRESENTS REVISION
- 1253 FEEDER DESIGNATION
- AHU 2 EQUIPMENT CONNECTION

- CONDUIT/RACEWAY IN WALL OR ABOVE CEILING
- CONDUIT/RACEWAY BELOW GRADE OR BELOW FLOOR
- CONDUIT/RACEWAY UP
- CONDUIT/RACEWAY DOWN
- BREAK OR RUN CONTINUES
- —OH— OVERHEAD SERVICE
- — P — PRIMARY
- — S — SECONDARY
- — C — COMMUNICATIONS OR SIGNAL
- — T — TELEPHONE
- —TV— TELEVISION
- — · — LOW VOLTAGE AND/OR CONTROL WIRING
- —✱—✱— EMERGENCY CIRCUIT
- CONDUIT/RACEWAY STUB OUT: MARK AND CAP (SITE)
- CONDUIT/RACEWAY SLEEVE

- TICS = NO. OF #12 WIRES (UNO) IF MORE THAN TWO WITHIN RACEWAY. GROUNDING CONDUCTOR (NOT SHOWN) ALWAYS REQUIRED.
  - ISOLATED GROUNDING CONDUCTOR
  - NEUTRAL CONDUCTOR
  - PHASE CONDUCTOR(S)
- BRANCH CIRCUIT (WHEN TIC MARKS ARE NOT SHOWN) = (1) PHASE, (1) NEUTRAL AND (1) GROUNDING CONDUCTOR
- HOMERUN TO PANELBOARD OR DEVICE
- HA-(1,3,5,3N)G HOMERUN CIRCUIT DESIGNATION
  - GROUNDING CONDUCTOR
  - NEUTRAL CONDUCTOR (N=1, 2N=2 NEUTRALS, 3N=3 NEUTRALS)
  - PHASE CONDUCTOR(S)
  - PANELBOARD DESIGNATION
- HA-(1,3,5)G HOMERUN CIRCUIT DESIGNATION (3 PHASE CIRCUIT SHOWN)
  - GROUNDING CONDUCTOR
  - PHASE CONDUCTOR(S)
  - PANELBOARD DESIGNATION

- NORMALLY OPEN (NO) CONTACT
- NORMALLY CLOSED (NC) CONTACT
- COIL - VOLTAGE PER CONTROL DIAGRAMS
- PILOT LIGHT (LED) PUSH-TO-TEST. LETTER INDICATES COLOR (R=RED, G=GREEN, A=AMBER, Y=YELLOW)
- PILOT LIGHT (LED) NON PUSH-TO-TEST
- THERMAL OVERLOAD
- MAGNETIC OVERLOAD
- PUSH BUTTON NORMALLY OPEN (NO)
- PUSH BUTTON NORMALLY CLOSED (NC)
- H O A HAND-OFF-AUTO (HOA) SELECTOR SWITCH
- LIMIT SWITCH NORMALLY OPEN (NO)
- LIMIT SWITCH NORMALLY CLOSED (NC)
- PUSH BUTTON ILLUMINATED (LED)

NOTE: THIS IS A MASTER SYMBOL LIST. IT MAY BE THAT NOT ALL SYMBOLS SHOWN ARE USED WITHIN THIS SET OF PLANS. HEIGHTS GIVEN ARE TO CENTER LINE OF DEVICE.

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20	SINGLE POLE CIRCUIT BREAKER
20/2	TWO POLE CIRCUIT BREAKER
20/3	THREE POLE CIRCUIT BREAKER
20A	ARC FAULT CIRCUIT BREAKER
20C	CONTROLLABLE CIRCUIT BREAKER
20G	GFI CIRCUIT BREAKER

L = LIGHTING
R = RECEPTACLES
E = EQUIPMENT
M = MOTOR
MI = LARGEST MOTOR
K = KITCHEN EQUIP
H = ELECTRIC HEAT

A	AMPS
ADA	AMERICANS WITH DISABILITIES ACT
AFC	ABOVE FINISHED CEILING
AFCI	ARC-FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AIC	AMP INTERRUPTING CAPACITY
AL	ALUMINUM
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BC	BARE COPPER
BKR	BREAKER
C	CONDUIT/RACEWAY
CEC	CALIFORNIA ENERGY COMMISSION
CKT	CIRCUIT
CLG	CEILING
CO	CONDUIT/RACEWAY ONLY
CT	CURRENT TRANSFORMER
CU	COPPER
DB	DISTRIBUTION BOARD
DDC	DIRECT DIGITAL CONTROLLER
DPDT	DOUBLE-POLE, DOUBLE-THROW
DPST	DOUBLE-POLE, SINGLE-THROW
DWG	DRAWING
(E)	EXISTING TO REMAIN
ELEC	ELECTRICAL
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
(F)	FUTURE
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METAL CONDUIT (STEEL)
FPEN	FUSE PER EQUIP. NAMEPLATE
GFI	GROUND FAULT INTERRUPT
GFR	GROUND FAULT RELAY
GND	GROUND
HID	HIGH INTENSITY DISCHARGE
HOA	HAND-OFF-AUTO SWITCH
HP	HORSEPOWER
HSKP	HOUSEKEEPING
IMC	INTERMEDIATE METAL CONDUIT
J-BOX	JUNCTION BOX
K	kcmil (300K = 300 kcmil)
KVA	KILOVOLT AMPS
KW	KILOWATT
LTG	LIGHTING
IG	ISOLATED GROUND
MCB	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MILS
MFG	MANUFACTURER
MLO	MAIN LUGS ONLY
MS	MOTOR STARTER
MSB	MAIN SWITCHBOARD
MTS	MANUAL TRANSFER SWITCH
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
NIC	NOT IN CONTRACT
NL	NIGHTLIGHT
NO	NORMALLY OPEN
NTS	NOT TO SCALE
NVE	NV ENERGY
P	POLE
PH/Ø	PHASE
PV	PHOTOVOLTAIC
PNL	PANEL
PTC	PV USA TEST CONDITIONS
PWR	POWER
(R)	RELOCATED
RAC	RIGID ALUMINUM CONDUIT
RFC	RIGID FIBERGLASS CONDUIT
RSC	RIGID STEEL CONDUIT
SE	SERVICE ENTRANCE
SPD	SURGE PROTECTION DEVICE
SPDT	SINGLE-POLE, DOUBLE-THROW
SPST	SINGLE-POLE, SINGLE-THROW
STC	STANDARD TEST CONDITIONS
SW	SWITCH
TEL	TELECOM
TTB	TELEPHONE TERMINATION BOARD
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
UNSW	UNSWITCHED
UPS	UNINTERRUPTED POWER SUPPLY
V	VOLTS
VA	VOLT AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
WP	WEATHER PROOF
(X)	EXISTING TO BE REMOVED
XFMR OR XF	TRANSFORMER

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RSCC RESTROOM REMODELS

PWP: WA-2018-167

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SHEET DESCRIPTION
ELECTRICAL LEGEND, SHEET INDEX & DETAILS

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KEY PLAN

DRAWING SCALE:

WGA PROJECT NUMBER: 18-201

PROGRESS DATE: 09 APRIL 2018

SHEET NUMBER: E0.1

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PRINT DATE:

SECTION 260000 ELECTRICAL SPECIFICATIONS

ITEM | DESCRIPTION

PART 1 - GENERAL

1.1 SUMMARY
- THE WORK UNDER THIS DIVISION SHALL CONSIST OF ALL LABOR, MATERIALS, EQUIPMENT, SERVICES AND RELATED ACCESSORIES, ETC. NECESSARY AND REQUIRED TO COMPLETE ALL WORK AS SHOWN OR INFERRED ON THE DRAWINGS AND IN THE SPECIFICATIONS (CONTRACT DOCUMENTS).
- PROVIDE FIXED ELECTRICAL EQUIPMENT, EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE.
- PROVIDE EQUIPMENT AND/OR WIRING NORMALLY FURNISHED OR REQUIRED FOR COMPLETE ELECTRICAL SYSTEMS BUT NOT SPECIFICALLY SPECIFIED ON THE DRAWINGS AND/OR IN SPECIFICATIONS, AS THOUGH SPECIFIED BY BOTH.
- ALL EQUIPMENT AND WIRING SHALL BE NEW, EXCEPT WHERE SPECIFICALLY SHOWN OR SPECIFIED OTHERWISE.

1.2 RELATED WORK SPECIFIED ELSEWHERE
COORDINATION: THE CIVIL, ARCHITECTURAL, MECHANICAL, KITCHEN AND INTERIOR DRAWINGS CONTAIN DETAIL DESCRIPTIONS, CIRCUITING AND CONNECTION REQUIREMENTS WHICH ARE PART OF DIVISION 16 RESPONSIBILITIES. ELECTRICAL CONTRACTOR SHOULD NOT SUBMIT BIDS ON THIS PROJECT BEFORE REVIEWING ALL PROJECT DRAWINGS, SPECIFICATIONS AND ADDENDA.

1.3 ADOPTED CODES
- 2012 INTERNATIONAL BUILDING CODE (IBC) PUBLISHED BY THE INTERNATIONAL CODE COUNCIL (ICC).
- 2011 NATIONAL ELECTRICAL CODE (NEC) PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA).
- 2012 INTERNATIONAL FIRE CODE (IFC) PUBLISHED BY THE INTERNATIONAL CODE COUNCIL.
- 2012 NATIONAL FIRE CODES (NFPA STANDARDS) PUBLISHED BY THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) AS REFERENCED IN THE 2006 INTERNATIONAL FIRE CODE.
- 2012 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) PUBLISHED BY THE INTERNATIONAL CODE COUNCIL. ASHRAE / IESNA STANDARD 90.1-2004 IS INCORPORATED BY REFERENCE.
- ALL APPLICABLE PROVISIONS OF THE NEVADA REVISED STATUTES (NRS) AND THE NEVADA ADMINISTRATIVE CODE (NAC), INCLUDING THOSE LISTED BELOW.
- THE MOST CURRENT REGULATIONS OF THE STATE FIRE MARSHAL, NEVADA DEPARTMENT OF PUBLIC SAFETY, CARSON CITY, NEVADA (NAC CHAPTER 477, STATE FIRE MARSHAL).
- THE MOST CURRENT EDITION OF THE AMERICANS WITH DISABILITIES ACT (ADA) PUBLISHED BY THE UNITED STATES DEPARTMENT OF JUSTICE INCLUDING THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)

1.4 DEFINITIONS

PROVIDE	FURNISH, INSTALL, CONNECT AND TEST UNTIL COMPLETE
WIRE	FURNISH ALL NECESSARY WIRING, CONNECT AND TEST UNTIL COMPLETE
INSTALL	FURNISH, SET IN PLACE, WIRE AND TEST UNTIL COMPLETE
WORK	MATERIALS COMPLETELY INSTALLED, CONNECTED, AND TESTED UNTIL COMPLETE
EQUAL	ACCEPTABLE EQUAL AS DETERMINED BY THE ENGINEER

1.5 REQUIREMENTS OF REGULATORY AGENCIES
- OBTAIN AND PAY FOR ALL PERMITS AND INSPECTIONS REQUIRED FOR THE WORK. COMPLY WITH ALL ORDINANCES PERTAINING TO WORK DESCRIBED HEREIN. PAY ALL EXPENSES ARISING FROM THE PROCUREMENT OF THESE CERTIFICATES AND INCLUDE IN THE BASE CONTRACT PRICE.
- INSTALL WORK UNDER THIS DIVISION PER DRAWINGS, SPECIFICATIONS, LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, (NFPA-70) INCLUDING LOCAL AMENDMENTS AND INTERPRETATIONS, LOCAL ADOPTED BUILDING CODES, AND ANY SPECIAL CODES HAVING JURISDICTION OVER SPECIFIC PORTIONS OF WORK WITHIN COMPLETE INSTALLATION. IN EVENT OF CONFLICT, INSTALL WORK PER MOST STRINGENT CODE REQUIREMENTS DETERMINED BY ENGINEER. THIS DOES NOT RELIEVE THE CONTRACTOR FROM FURNISHING AND INSTALLING WORK SHOWN OR SPECIFIED WHICH MAY EXCEED THE REQUIREMENTS OF SUCH ORDINANCES, LAWS, REGULATIONS AND CODES.
- ALL MATERIALS, PRODUCTS, DEVICES, FIXTURES, FORMS OR TYPES OF CONSTRUCTION INCLUDED IN THIS PROJECT SHALL MEET OR EXCEED THE PUBLISHED REQUIREMENTS OF NATIONAL ELECTRICAL CODE (NEC), AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI), INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) AND NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATIONS (NEMA). ALL EQUIPMENT SHALL BEAR THE UNDERWRITER'S LABORATORIES (UL) LABEL OR EQUIVALENT FROM APPROVED INDEPENDENT TESTING LABORATORY.
- ARRANGE, PAY FEES FOR AND COMPLETE WORK TO PASS REQUIRED TESTS BY AGENCIES HAVING AUTHORITY OVER WORK. DELIVER TO ENGINEER COPIES OF THE CERTIFICATES OF INSPECTION AND APPROVAL ISSUED BY AUTHORITIES AND PROVIDE ORIGINAL COPY OF EACH CERTIFICATE TO OWNER.
- WHEN REQUIRED BY LAW OR REGULATIONS, THE GOVERNMENTAL AGENCY HAVING JURISDICTION FOR INSPECTIONS SHALL BE GIVEN REASONABLE NOTICE AND OPPORTUNITY TO INSPECT THE WORK. ANY WORK THAT IS ENCLOSED OR COVERED UP BEFORE SUCH INSPECTION AND TEST SHALL BE UNCOVERED AT THE CONTRACTOR'S EXPENSE; AFTER IT HAS BEEN INSPECTED, THE CONTRACTOR SHALL RESTORE THE WORK TO ITS ORIGINAL CONDITION AT HIS OWN EXPENSE.

1.6 DRAWINGS AND SPECIFICATIONS
- DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY. WORK CALLED FOR BY ONE IS BINDING AS IF CALLED FOR BY BOTH. ANY DISCREPANCIES BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION DURING THE BIDDING PERIOD. NO ALLOWANCE SHALL SUBSEQUENTLY BE MADE TO THE CONTRACTOR BY REASON OF HIS FAILURE TO HAVE BROUGHT SAID DISCREPANCIES TO THE ATTENTION OF THE CONSULTANT DURING THE BIDDING PERIOD OR BY REASON OF ANY ERROR ON THE CONTRACTOR'S PART.
- DRAWINGS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE. DRAWINGS SHOW GENERAL RUN OF CIRCUITS AND APPROXIMATE LOCATION OF EQUIPMENT. THE CONTRACTOR SHALL REVIEW DRAWINGS OF ALL TRADES TO ASSURE COORDINATION PRIOR TO PLACEMENT OF WORK. RIGHT IS RESERVED TO CHANGE LOCATION OF EQUIPMENT AND DEVICES, AND ROUTING OF CONDUITS WITHIN 10 FEET, WITHOUT EXTRA COST TO OWNER (PRIOR TO ROUGH-IN).
- USE DIMENSIONS IN FIGURES, SHOP DRAWINGS, ETC. AND ACTUAL SITE MEASUREMENTS IN PREFERENCE TO SCALED DIMENSIONS. DO NOT SCALE DRAWINGS FOR EXACT SIZES OR LOCATIONS - USE DIMENSIONED DETAILS OR ACTUAL FIELD CONDITIONS. VERIFY ITEM MOUNTING HEIGHTS AS REQUIRED BY PROJECT CONDITIONS PRIOR TO ROUGH-IN.
- THE ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER ALL OTHER DRAWINGS IN MATTERS OF DIMENSIONS. DISCREPANCIES BETWEEN DIFFERENT DRAWINGS OR BETWEEN DRAWINGS AND SPECIFICATIONS, OR REGULATIONS AND CODES GOVERNING THE INSTALLATION SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING FOR DETERMINATION.
- LAYOUT EQUIPMENT AS SHOWN ON DRAWINGS AS CLOSE AS POSSIBLE. VERIFY ACCESS REQUIREMENTS FOR EQUIPMENT ACTUALLY FURNISHED,AND ADJUST LAYOUT TO COMPLY WITH NEC 110. RIGHT IS RESERVED TO CHANGE LAYOUT WITHIN 10 FEET WITHOUT ADDITIONAL COST (PRIOR TO ROUGH-IN).
- ALL DEVICES, LIGHT FIXTURES, ETC. LOCATED IN CEILING TILES SHALL BE LOCATED IN THE CENTER OF THE CEILING TILE UNLESS SPECIFICALLY NOTED OR APPROVED TO DO OTHERWISE.
- THE CONTRACTOR IS RESPONSIBLE TO FIELD MEASURE AND CONFIRM THE MOUNTING HEIGHTS AND LOCATION OF ELECTRICAL EQUIPMENT WITH RESPECT TO COUNTERS, DOORWAYS, AND OTHER ARCHITECTURAL, MECHANICAL OR STRUCTURAL WORK. DO NOT SCALE DISTANCES OFF THE ELECTRICAL DRAWINGS. USE ACTUAL BUILDING DIMENSIONS.
- EXECUTION OF CONTRACT IS EVIDENCE THAT CONTRACTOR HAS EXAMINED ALL EXISTING CONDITIONS, DRAWINGS AND SPECIFICATIONS RELATED TO WORK, AND IS INFORMED AS TO EXTENT AND CHARACTER OF WORK. LATER CLAIMS FOR LABOR AND MATERIALS REQUIRED DUE TO DIFFICULTIES ENCOUNTERED, WHICH COULD HAVE BEEN FORESEEN HAD EXAMINATION BEEN MADE, WILL NOT BE RECOGNIZED.
- ALL WORK CALLED FOR IN THIS SECTION OF THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED UNDER THIS SECTION, REGARDLESS OF WHETHER SUCH WORK MAY ALSO HAVE BEEN CALLED FOR IN OTHER SECTION(S). DISCREPANCIES IN OR CONFLICTS AMONG THE VARIOUS PARTS OF THE CONTRACT DRAWINGS SHALL NOT RELIEVE CONTRACTOR OF HIS OBLIGATION TO PERFORM.
- NO ATTEMPT HAS BEEN MADE TO ESTABLISH THE REQUIRED SECTIONS OR SPLITS OF EQUIPMENT RELATIVE TO THE SIZE OF ACCESS INTO THE SPACE, BUILDING, ETC. CONTRACTOR SHALL ESTABLISH ALL SAID SPLITS, SECTIONS, ETC. NECESSARY TO INSTALL EQUIPMENT COMPLETE WITHOUT UNDUE DISASSEMBLY OF EQUIPMENT OR DEMOLITION OF BUILDING PARTS AT SITE OF WORK.
- CHARGES FOR EXTRA WORK ARE NOT ALLOWED UNLESS WORK IS AUTHORIZED BY WRITTEN ORDER FROM THE OWNER'S REPRESENTATIVE APPROVING CHARGES FOR WORK.
- CHECK ALL DOOR SWINGS SO LIGHTING CONTROL DEVICES ARE NOT LOCATED BEHIND DOORS. RELOCATE DEVICES AS REQUIRED WITH THE CONSULTANT'S REVIEW.

1.7 COPYRIGHT
THESE PLANS, SPECIFICATIONS, AND ALL RELATED ADDENDA AND DOCUMENTS CONSTITUTE COPYRIGHT MATERIALS OF PK ELECTRICAL. ALL RIGHTS CONFERRED BY THE COPYRIGHT AND SIMILAR LAWS ARE RESERVED TO PK ELECTRICAL. THESE MATERIALS SHALL REMAIN THE SOLE PROPERTY OF PK ELECTRICAL AND MAY NOT BE REPRODUCED, DISTRIBUTED TO OTHERS OR USED FOR ANY PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF PK ELECTRICAL.

1.8 SUBMITTALS
BEFORE ORDERING ANY EQUIPMENT, CONTRACTOR SHALL SUBMIT SIX COPIES OF FACTORY SHOP DRAWINGS FOR ALL LIGHTING FIXTURES, LIGHTING CONTROLS, SWITCHGEAR, PANELS, CIRCUIT BREAKERS, MOTOR CONTROLLERS, DISCONNECTS WIRING DEVICES, PLATES, RACEWAYS AND FITTINGS, ETC. PROPOSED FOR THIS PROJECT.

1.9 SUBSTITUTIONS
PROPOSED SUBSTITUTIONS SHALL BE EQUAL OR SUPERIOR TO SPECIFIED ITEMS IN ALL RESPECTS. DETERMINATION OF EQUALITY RESTS SOLELY WITH ENGINEER. SUBSTITUTIONS MUST BE SUBMITTED A MINIMUM OF 10 WORKING DAYS PRIOR TO BID FOR CONSIDERATION. PROPOSED SUBSTITUTIONS PROVIDED LATER WILL NOT BE REVIEWED OR ALLOWED. BID SUBSTITUTED MATERIAL WILL ONLY BE ALLOWED IF ACCEPTED IN WRITING BY ENGINEER.

1.10 EXAMINATION OF SITE AND EXISTING CONDITIONS
BEFORE SUBMITTING A PROPOSAL, CONTRACTOR SHALL EXAMINE THE SITE AND FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND LIMITATIONS. NO EXTRAS WILL BE ALLOWED BECAUSE OF THE CONTRACTOR'S MISUNDERSTANDING OF THE AMOUNT OF WORK INVOLVED OR HIS LACK OF KNOWLEDGE OF ANY SITE CONDITIONS WHICH MAY AFFECT HIS WORK. ANY APPARENT VARIANCE OF THE DRAWINGS OR SPECIFICATIONS FROM THE EXISTING CONDITIONS AT THE SITE SHALL BE CALLED TO ATTENTION OF THE ENGINEER BEFORE SUBMITTING A PROPOSAL.

1.11 EXISTING OUTLETS
EXISTING OUTLETS AND CIRCUITING NOT IN CONFLICT WITH NEW CONDITIONS SHALL REMAIN. EXTEND OUTLETS TO NEW SURFACES, CAULK AND PROVIDE JUMBO PLATES AS REQUIRED TO PRESENT A SERVICEABLE AND FINISHED APPEARANCE.

1.12 EXISTING SWITCHGEAR
REUSE EXISTING SWITCHGEAR AND PANELS IN PLACE WHERE SO INDICATED. MODIFY AS REQUIRED TO ACCOMMODATE NEW WORK. PROVIDE NEW CIRCUIT BREAKERS AND/OR FUSES AS REQUIRED. MATCH AIC RATINGS. REARRANGE EXISTING CIRCUITS WITHIN PANELS TO AGREE WITH NEW PANEL SCHEDULES. TRACE AND IDENTIFY ALL EXISTING CIRCUITS ON NEW RECORD PANEL SCHEDULES.

1.13 EXISTING PANELBOARDS
- RING OUT CIRCUITS IN EXISTING PANELS. WHERE ADDITIONAL CIRCUITS ARE NEEDED REUSE CIRCUITS AVAILABLE FOR REUSE. INSTALL NEW BREAKERS AS INDICATED ON DRAWINGS. MATCH AIC RATINGS.
- TAG UNUSED CIRCUITS AS SPARE.
- WHERE EXISTING CIRCUITS ARE INDICATED TO BE REUSED, USE SENSING MEASURING DEVICES TO VERIFY THAT CIRCUITS FEEDING PROJECT AREA ARE NOT IN USE OR OVERLOADED.
- REMOVE EXISTING WIRE NO LONGER IN USE FROM PANEL TO EQUIPMENT.
- PROVIDE NEW UPDATED TYPED DIRECTORIES.

PART 2 - PRODUCTS

2.1 MATERIALS
- ALL MATERIAL SHALL BE NEW, AND HAVE A UL LABEL WHERE AVAILABLE. IF UL LABEL IS NOT AVAILABLE, MATERIAL SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE NEMA, IEEE AND FEDERAL STANDARDS. USE UL LABELED COMPONENTS IN ASSEMBLIES THAT DO NOT HAVE OVERALL UL LABEL. ALL EQUIPMENT SHALL COMPLY WITH THE TERMS "LISTED AND LABELED" AS DEFINED IN THE NEC 70, ARTICLE 100. SUBMIT LETTER STATING COMPLIANCE WITH THESE REQUIREMENTS.
- UTILIZE ONE OF THE MANUFACTURERS LISTED TO FURNISH ALL OF THE MAJOR EQUIPMENT (I.E. PANELS, TRANSFORMERS, BUS DUCT, SWITCHGEAR, CIRCUIT BREAKERS, ETC.) REQUIRED FOR THIS PROJECT.
- ALL MATERIAL AND EQUIPMENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). SERVICE EQUIPMENT SHALL BE FACTORY-ASSEMBLED COMMERCIAL-GRADE, CONFIGURED PER SERVING UTILITY STANDARDS. WIRING DEVICES SHALL BE SPECIFICATION GRADE WITH NYLON PLATES, WHITE UNLESS OTHERWISE NOTED, RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREAS.
- ALL EQUIPMENT AND CIRCUITING ACCESSIBLE BY THE PUBLIC SHALL BE TAMPER-PROOF AND VANDAL RESISTANT. OPENABLE DEVICES AND EQUIPMENT SHALL BE PADLOCKABLE.

2.2 CIRCUITING
ALL WIRING SHALL BE IN CONDUIT, CONCEALED EXCEPT WHERE NOTED. EMT WITH STEEL SET SCREW INSULATED-THROAT FITTINGS SHALL BE USED IN DRY, PROTECTED INTERIOR LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM-24". WRAPPED RIGID ELBOWS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE AND CONCRETE SLAB TRANSITIONS AND STUB-UPS. RGS OR IMC CONDUIT WITH THREADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE ELEMENTS OR SUBJECT TO PHYSICAL DAMAGE. FMC MAY BE USED FOR FINAL CONNECTION TO LIGHTING FIXTURE FROM J-BOX. FIXTURE WHIPS MAY NOT EXCEED 6' IN LENGTH. TYPE MC CABLE WILL NOT BE ACCEPTED FOR USE. ENT IS NOT ALLOWED. CONNECT RECESSED AND SUSPENDED LIGHTING FIXTURES, MOTORIZED AND VIBRATING EQUIPMENT WITH STEEL FLEX. ALL CONDUIT SHALL HAVE PULL CORD IF OTHERWISE EMPTY.

2.3 PANELBOARDS
PROVIDE ONE TYPED AND ONE SPARE UPDATED PANEL SCHEDULE FOR OWNER'S USE. SCHEUDLES SHALL BE TWO COLUMN TYPE WITH ODD CIRCUIT NUMBERS ON THE LEFT AND EVEN NUMBERS ON THE RIGHT.

2.4 WIRING
- WIRE SHALL BE COPPER UNLESS OTHERWISE INDICATED. MINIMUM WIRE SIZE SHALL BE #12 AWG. WHERE ALUMINUM IS ALLOWED, WIRE SHALL BE TERMINATED IN AN INSULATED CU/AL RATED COMPRESSION TERMINAL FITTING (MAC-ADAPT OR EQUAL). INSULATION SHALL BE THW, THWN OR THHN.
- UNLESS OTHERWISE REQUIRED BY LOCAL ORDINANCES, GROUND WIRES SHALL BE GREEN, NEUTRAL WIRES SHALL BE WHITE (120V) OR GREY (277V) AND PHASE WIRES SHALL BE BLACK (PHASE A), RED (PHASE B), AND BLUE (PHASE C) FOR A 120/208 VOLT SYSTEM AND BROWN (PHASE A), ORANGE (PHASE B), AND YELLOW (PHASE C) FOR A 277/480 VOLT SYSTEM.

2.5 WIRING DEVICES
WIRING DEVICES SHALL BE AS FOLLOWS:
- SWITCHES - 120V/277V, 20A, WHITE, HEAVY DUTY, SILENT TYPE SPECIFICATIONS GRADE.
- DEVICE PLATE SHALL BE NYLON, COLOR AND SCREWS TO MATCH EXISTING (TYPICALLY IVORY).

2.6 OCCUPANCY SENSORS SHALL BE PLACED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS:
- INSTALL SENSORS ON VIBRATION-FREE, STABLE SURFACES.
- POSITION SENSORS ABOVE OR CLOSE TO THE ANTICIPATED MAIN AREAS OF OCCUPANT ACTIVITY IN A SPACE.
- INSTALL OCCUPANCY SENSORS SO THAT ANTICIPATED FURNITURE (I.E. BOOK CASES, FURNITURE PARTITIONS, FILE CABINETS, ETC.) DOES NOT OBSTRUCT THE SENSOR'S CLEAR LINE OF SIGHT OF THE AREA OF OCCUPANT ACTIVITY.
- INSTALL OCCUPANCY SENSORS SO THAT THE SENSOR'S LINE-OF-SIGHT DOES NOT PASS THROUGH ADJACENT WINDOWS OR DOORWAYS. POSITION THE SENSOR SO THAT FALSE-TRIPS DO NOT OCCUR.
- INSTALL SENSORS A MINIMUM OF SIX FEET FROM HVAC SUPPLY REGISTERS / GRILLES. SENSORS SHALL BE LOCATED SO THAT NO AIRFLOW FROM HVAC SYSTEMS WILL INTERFERE WITH SENSOR OPERATION.
- REFER TO INSTALLATION AND OPERATION MANUALS THAT ACCOMPANY SENSORS FOR PROPER WIRING OF THE SENSORS, REQUIRED SPACING BASED ON THE INDIVIDUAL SENSOR'S COVERAGE PATTERN (I.E. SENSOR PLACEMENT SHOULD ALLOW FOR 20% OVERLAP BETWEEN SENSOR COVERAGE PATTERNS), SENSOR COMMISSIONING TECHNIQUES, FIELD-ADJUSTABLE SETTINGS, ETC.
- SENSOR TIME-OUT SHALL BE SET TO MINIMUM ADJUSTMENT (GENERALLY 5 OR 15 MINUTES, DEPENDING ON SENSOR), UNLESS NOTED OTHERWISE.

OCCUPANCY SENSORS SHALL BE COMMISSIONED PRIOR TO BUILDING BEING OCCUPIED:
- SENSORS SHALL BE POSITIONED IN THE CORRECT ORIENTATION, FACING THE AREA OF THE ROOM WITH THE HIGHEST LEVEL OF OCCUPANT ACTIVITY AND BEST VIEW OF THE ENTIRE COVERAGE AREA.
- SENSOR SENSITIVITY, COVERAGE CUT-OFF, LINE-OF-SIGHT, ETC. SHALL BE ADJUSTED IN REFERENCE TO DESIRED SENSOR OPERATION.

SENSORS AHEAD OF TOGGLE SWITCHES SHALL BE WIRED TO OPERATE AS FOLLOWS:
- LIGHT FIXTURES SHALL ILLUMINATE UPON OCCUPANT ENTERING ROOM / OCCUPANCY SENSOR LINE-OF-SIGHT AND MANUALLY TURNING LIGHTS ON WITH TOGGLE SWITCHES.
- UPON OCCUPANT(S) LEAVING THE ROOM, THE OCCUPANCY SENSOR SHALL OVERRIDE MANUAL TOGGLE SWITCHES AND AUTOMATICALLY TURN LIGHTS OFF.
- TOGGLE SWITCHES IN THE 'ON' POSITION AND LIGHTING OVERRIDDEN OR TURNED OFF BY OCCUPANCY SENSOR: LIGHT FIXTURES SHALL ILLUMINATE AUTOMATICALLY UPON OCCUPANT WALKING INTO SENSOR LINE-OF-SIGHT.

2.7 INTERIOR LIGHTING
- LAMPS: LED, COLOR TEMPERATURE AS SPECIFIED.
- MINIMUM EFFICIENCY: 60 LUMENS / WATT OR GREATER. MINIMUM CRI >/= 80
- DRIVER: CLASS 1 ELECTRONIC, INTEGRAL CONTROLS AS INDICATED ON DRAWINGS, HIGH POWER FACTOR (>90%). SEE DRAWINGS FOR INPUT VOLTAGE.
- DLC QUALIFIED
- EXISTING WORK: DISCONNECT AND REMOVE INTERIOR LUMINARIES AS INDICATED ON DRAWINGS.
- RETROFIT: MODIFY EXISTING FIXTURE HOUSING PER RETROFIT KIT MANUFACTURER DIRECTIONS.
- THIRD PARTY BY IESNA LM-79 AND LM-80.
- LISTED AND LABELED IN ACCORDANCE WITH U.S. DEPT. OF ENERGY'S LIGHTING FACTS PROGRAM.
- SHALL PROVIDE INDEPENDENT TEST LAB IES PHOTOMETRIC FILES WHICH VERIFY LIGHT LEVELS.

PART 3 - EXECUTION

3.1 VISIT TO SITE
VISIT SITE, AND SURVEY EXISTING CONDITIONS AFFECTING WORK PRIOR TO BID. INCLUDE NECESSARY MATERIALS AND LABOR TO ACCOMPLISH THE ELECTRICAL WORK, INCLUDING RELOCATION OF EXISTING SERVICES AND UTILITIES ON BUILDING SITE IN BID. NO CONSIDERATION SHALL BE GIVEN TO FUTURE CLAIMS DUE TO EXISTING CONDITIONS. ANY DISCREPANCIES OR INTERFERENCES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.

3.2 WORKMANSHIP
- ALL WORK PERFORMED SHALL BE FIRST CLASS WORK IN EVERY ASPECT. THE WORK SHALL BE PERFORMED BY MECHANICS SKILLED IN THEIR RESPECTIVE TRADES, WHO SHALL AT ALL TIMES BE UNDER THE SUPERVISION OF COMPETENT PERSONS. ALL WORK SHALL BE INSTALLED TO COMPLY WITH NECA'S "STANDARD OF INSTALLATION."
- IN ADDITION TO THE MATERIALS SPECIFIED ELSEWHERE, FURNISH AND INSTALL ALL OTHER MISCELLANEOUS ITEMS NECESSARY FOR THE COMPLETION OF THE WORK TO THE EXTENT THAT ALL SYSTEMS ARE COMPLETE AND OPERATIVE.
- ALL WORK UNDER THIS SECTION SHALL BE PERFORMED IN COOPERATION WITH THE WORK PERFORMED UNDER ALL OTHER SECTIONS OF THE SPECIFICATIONS FOR THE PROJECT IN ORDER TO AVOID INTERFERENCE WITH OTHER WORK AND TO SECURE THE PROPER INSTALLATION OF ALL WORK. REFER THE DRAWINGS AND SPECIFICATIONS COVERING THE WORK TO BE PERFORMED UNDER ALL SECTIONS, SO THAT THE RELATION AND EXTENT OF THE WORK OF THIS SECTION WITH RESPECT TO THE WORK OF ALL OTHER SECTIONS IS UNDERSTOOD. GIVE RIGHT OF WAY TO RACEWAYS AND PIPING SYSTEMS INSTALLED AT A REQUIRED SLOPE.
- CONDUIT SYSTEMS MUST BE COMPLETE PRIOR TO INSTALLATION OF WIRING.

3.3 CHANGE ORDERS
- ADDITIONAL WORK MAY BE REQUIRED ON THE PROJECT WHICH IS OUTSIDE THE SCOPE OF THE CONTRACT. SUCH ADDITIONAL WORK WILL BE DESCRIBED IN SUPPLEMENTAL INSTRUCTIONS AND/OR CLARIFICATIONS, TO BE ESTIMATED AND PRICED BY THE CONTRACTOR, AND ACCEPTED BY THE OWNER, PRIOR TO COMMENCING WORK. PROPOSALS SHALL INCLUDE A LIST OF QUANTITIES OF ALL MATERIAL BEING USED WITH UNIT COSTS BROKEN DOWN INTO MATERIAL AND LABOR COSTS PER UNIT. CONTRACTOR SHALL PROVIDE ACTUAL EQUIPMENT QUOTES WHEN REQUESTED BY ENGINEER.
- MATERIAL COSTS AND LABOR UNITS SHALL NOT EXCEED THE LATEST EDITION OF RS MEANS ELECTRICAL COST DATA.

3.4 GUARANTEE
- FURNISH THE OWNER A WRITTEN GUARANTEE, STATING THAT IF THE WORKMANSHIP AND/OR MATERIAL EXECUTED UNDER THIS DIVISION IS PROVEN DEFECTIVE WITHIN (1) YEAR AFTER THE FINAL ACCEPTANCE BY THE OWNER, SUCH DEFECTS AND OTHER WORK DAMAGED WILL BE REPAIRED AND/OR REPLACED. SUBMIT WITH OPERATION AND MAINTENANCE MANUALS.
- OBTAIN FROM THE VARIOUS MANUFACTURERS OR VENDORS GUARANTEES OR WARRANTIES FOR THEIR PARTICULAR EQUIPMENT OR COMPONENTS, AND DELIVER THEM TO THE OWNER. ALL GUARANTEES AND WARRANTIES PROVIDED SHALL BE REFERENCED TO THIS PROJECT.
- IN EVENT THAT SYSTEMS ARE PLACED IN OPERATION IN SEVERAL PHASES AT THE OWNER'S REQUEST, GUARANTEE WILL BEGIN ON DATE EACH SYSTEM OR ITEM OF EQUIPMENT IS ACCEPTED FOR SERVICE BY THE OWNER. PROVIDE O&M MANUALS FOR ALL EQUIPMENT WHEN EQUIPMENT IS ACCEPTED FOR SERVICE BY THE OWNER.
- ALL GUARANTEES AND WARRANTIES SHALL INCLUDE LABOR AND MATERIAL AT THE SITE OF INSTALLATION FOR THE DURATION OF THE GUARANTEE PERIOD.

3.5 OBSERVATIONS OF WORK AND DEMONSTRATION OF OPERATION (ACCEPTANCE)
- AT ALL OBSERVATIONS OF WORK, OPEN PANEL COVERS, JUNCTION BOX COVERS, PULL BOX COVERS, DEVICE COVERS, AND OTHER EQUIPMENT WITH REMOVABLE PLATES FOR OBSERVATION AS REQUESTED BY AHJ OR ENGINEER. PROVIDE SUFFICIENT PERSONNEL TO EXPEDITE COVER REMOVAL AND REPLACEMENT.
- CONTRACTOR TO DEMONSTRATE OPERATION OF NEW EQUIPMENT AND/OR SYSTEMS TO SATISFACTION OF OWNER/ENGINEER. CONTRACTOR TO HAVE MANUFACTURER AVAILABLE FOR DEMONSTRATION OF EQUIPMENT AND/OR SYSTEMS WHERE REQUESTED BY OWNER/ENGINEER. FURNISH AFFIDAVIT SIGNED BY OWNER'S REPRESENTATIVE INDICATING THAT DEMONSTRATION OF OPERATION HAS BEEN PERFORMED.

3.6 COOPERATION
- CAREFULLY COORDINATE WORK WITH OTHER CONTRACTORS AND SUBCONTRACTORS. REFER CONFLICTS BETWEEN TRADES TO ENGINEER. PROVIDE NECESSARY INFORMATION TO OTHER TRADES FOR SUCH COORDINATION. SUCH INFORMATION SHALL INCLUDE SHOP DRAWINGS, PRODUCT DATA AND ALL OTHER REQUIRED DATA. PROVIDE A SYSTEM ERECTION/COORDINATION DRAWING SHOWING ELECTRICAL, HVAC, PLUMBING AND ARCHITECTURAL FOR INSTALLATION IN CONGESTED AREAS, WHEN REQUESTED.
- WHENEVER SUCH INFORMATION IS NOT PROVIDED IN A TIMELY MANNER OR WHENEVER SUCH INFORMATION IS INCORRECT, THIS CONTRACTOR SHALL BEAR ALL COSTS FOR PROVIDING OR CORRECTING AFFECTED WORK OF RELATED TRADES WITH NO CHANGE TO THE CONTRACT PRICE OR CONSTRUCTION SCHEDULE.
- WORK TO BE INSTALLED AS PROGRESS OF PROJECT WILL ALLOW. SCHEDULE OF WORK DETERMINED BY GENERAL CONTRACTOR, OWNER, AND/OR ARCHITECT/ENGINEER.

3.7 DELIVERY, STORAGE AND HANDLING
- DELIVER EQUIPMENT AND MATERIALS TO JOB SITE IN ORIGINAL, UNOPENED, LABELED CONTAINER. PRODUCTS SHALL BE PROPERLY IDENTIFIED WITH NAMES, MODEL NUMBERS, TYPES, GRADES, COMPLIANCE LABELS AND OTHER INFORMATION NEEDED FOR IDENTIFICATION. STORE TO PREVENT DAMAGE AND INJURY. STORE MATERIALS TO PREVENT CORRODING. STORE FINISHED MATERIALS AND EQUIPMENT TO PREVENT STAINING AND DISCOLORING. STORE MATERIALS AFFECTED BY CONDENSATION IN WARM DRY AREAS. PROVIDE HEATERS. CONTRACTOR SHALL VERIFY THE AVAILABILITY OF ON SITE STORAGE SPACE, IF NO ON SITE STORAGE SPACE IS AVAILABLE THEN THE CONTRACTOR SHALL COVER THE COST FOR OFF SITE STORAGE. MATERIALS STORED AT THE PROJECT SITE THAT BECOMES SOILED WITH CONSTRUCTION DIRT, CONCRETE, OR MOISTURE SHALL BE REMOVED FROM THE SITE AND REPLACED WITH NEW. DO NOT INSTALL SOILED MATERIAL.
- INSTALL EQUIPMENT PER MANUFACTURER'S RECOMMENDATIONS. CONFLICTS BETWEEN CONTRACT DOCUMENTS AND THESE RECOMMENDATIONS SHALL BE REFERRED TO ENGINEER FOR REMEDY.
- ELECTRICAL OR ELECTRONIC EQUIPMENT THAT HAS BEEN DAMAGED, EXPOSED TO WEATHER OR IS, IN THE OPINION OF THE ENGINEER OR ARCHITECT, OTHERWISE UNSUITABLE BECAUSE OF IMPROPER FABRICATION, STORAGE OR INSTALLATION SHALL BE REMOVED AND REPLACED BY THIS CONTRACTOR AT HIS EXPENSE.

3.8 ANCHORS
- PROVIDE ANCHORS FOR ALL EQUIPMENT, RACEWAYS, HANGERS, ETC. TO SAFELY SUPPORT WEIGHT OF ITEM INVOLVED PLUS 100% FOR DEAD LOADS. LIVE LOADS SHALL BE CONSIDERED IN ADDITION TO DEAD LOADS.
- ANCHORS TO CONSIST OF EXPANSION TYPE DEVICES SIMILAR TO "REDHEAD" OR LEAD EXPANSION ANCHORS. PLASTIC ANCHORS ARE NOT ACCEPTABLE.
- USE PRESET ANCHOR STEEL INSERTS IN CONCRETE SLABS. PROVIDE PRESET ANCHOR SIZE AND TYPE FOR ANTICIPATED OR SPECIFIED ROD/BOLT SIZE AND LIVE/DEAD LOAD.

3.9 CLEANING AND PAINTING
- CLEAN EQUIPMENT FURNISHED IN THIS DIVISION AFTER COMPLETION OF WORK. CLEAN WIPE THE INTERIOR OF ALL CONDUIT, PULLBOXES, JUNCTION BOXES, OUTLET BOXES, AND PANELBOARD BACKBOXES SOILED WITH DIRT AND DEBRIS PRIOR TO INSTALLATION OF WIRING.
- TOUCH-UP OR RE-PAINT DAMAGED PAINTED FINISHES AS DETERMINED BY THE ENGINEER.

3.10 RECORD DRAWINGS
- CONTRACTOR SHALL PROVIDE, PRIOR TO FINAL ACCEPTANCE AND OBSERVATION, ONE-SET OF REVISED RECORD ELECTRICAL CONSTRUCTION DOCUMENTS ON REPRODUCIBLE MEDIUM. ALSO INCLUDE THE FOLLOWING INFORMATION:
  EXACT ROUTING OF ALL CONDUITS LARGER THAN ONE INCH.
  EXACT LOCATION OF ALL SERVICE GROUNDING/ BONDING CONNECTIONS.
  CONTRACTORS NAME, ADDRESS, AND TELEPHONE NUMBER.
- RECORD NOTATIONS SHALL BE CLEARLY DRAWN AT A DRAFTING APPEARANCE EQUAL TO THE ORIGINAL DRAWINGS. CONTRACTOR SHALL ALSO PROVIDE ALL OPERATING AND MAINTENANCE MANUALS PRIOR TO FINAL PAYMENT.

3.11 TESTING
PRIOR TO PLACING IN SERVICES, ALL ELECTRICAL SYSTEMS SHALL BE TESTED FOR OPENS, GROUNDS, AND PHASE ROTATION. THE MAIN SERVICE GROUND AND ALL LOCAL TRANSFORMER MADE GROUNDS SHALL BE MEGGER-TESTED. PROVIDE GFI TESTING FOR SERVICE SWITCHBOARD.

3.12 IDENTIFICATION
- JUNCTION, PULL AND CONNECTION BOXES: IDENTIFICATION OF SYSTEMS AND CIRCUITS SHALL INDICATE SYSTEM VOLTAGE AND CONTAINED CIRCUITS ON OUTSIDE OF BOX COVER. USE SELF-ADHESIVE MARKING TAPE LABELS AT EXPOSED LOCATIONS AND INDELIBLE BLACK MARKER AT CONCEALED BOXES. ALL FIRE ALARM BOXES SHALL HAVE COVERS PAINTED RED. ALL TEMPERATURE CONTROL BOXES SHALL HAVE COVERS PAINTED BLUE.
- BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED IN EACH JUNCTION BOX AND PULL BOX WITH WIRE MARKERS AS MANUFACTURED BY T&B, PANDUIT, 3M, OR IDEAL TO INDICATE PANEL/CIRCUIT NUMBER.
- JUNCTION BOX COVERS IN BRANCH CIRCUIT WIRING SHALL BE LABELED WITH PANEL AND CIRCUIT NUMBERS. JUNCTION BOX COVERS FOR SPECIAL SYSTEMS SHALL BE LABELED WITH SYSTEM NAME AND OTHER IDENTIFICATION AS DIRECTED; FOR EXAMPLE, "FIRE ALARM-ZONE 1". WHERE BOXES ARE INSTALLED FLUSH MOUNTED IN FINISHED AREAS OR SURFACE MOUNTED IN UNFINISHED AREAS, LABELING SHALL BE WITH ENGRAVED PLASTIC NAMEPLATE AS SPECIFIED HEREIN. WHERE BOXES ARE INSTALLED ABOVE ACCESSIBLE CEILINGS, LABELING MAY BE NEAT HAND WRITTEN LETTERING WITH INDELIBLE MARKER.
- DEVICE PLATES - SWITCHES AND RECEPTACLES: IDENTIFY THE PANELBOARD AND BRANCH CIRCUIT NUMBER FROM WHICH SERVED ON THE FRONT OF THE DEVICE PLATE WITH PERMANENT POLYESTER TAPE. LOCATE ALL LABELS AT THE BOTTOM OF THE PLATE IN THE SAME LOCATION THROUGHOUT.

3.13 SUSPENDED CEILING SYSTEMS
ALL LAY-IN FIXTURES SHALL BE INDEPENDENTLY SUPPORTED BY TWO #12 SLACK WIRES ATTACHED TO TWO OPPOSITE CORNERS OF THE FIXTURE PER IBC & NEC REQUIREMENTS. THESE WIRES SHALL BE SECURED TO THE STRUCTURAL FRAMING SUCH THAT FAILURE OF THE SUSPENDED CEILING SHALL NOT ALLOW THE FIXTURE TO DROP.

3.14 ONGOING OPERATION
CONDUCT WORK TO MINIMIZE DISRUPTION OF OWNER'S ONGOING OPERATIONS. PROVIDE BARRICADES, NOISE ABATEMENT AND DUST CONTAINMENT MEASURES TO ENSURE THE SAFETY AND COMFORT OF PATRONS, STAFF, AND WORKERS. INTERRUPTIONS OF EXISTING POWER, COMMUNICATIONS OR FIRE ALARM SYSTEMS SHALL BE PERFORMED ONLY AT SUCH TIMES AS DIRECTED BY GENERAL CONTRACTOR / OWNER. OUTAGES SHALL BE MOMENTARY IN NATURE. EACH SUCH OUTAGE (OR OPERATION WHICH MAY POSE RISK OF AN ACCIDENTAL OUTAGE) SHALL BE SCHEDULED 48 HOURS IN ADVANCE.

3.15 FLEXIBLE CONNECTIONS
PROVIDE FLEXIBLE ELECTRICAL CONDUIT AND CONDUCTORS HAVING A SLACK, 90-DEGREE BEND OR LOOP IN ANY PLANE BETWEEN CONNECTIONS AT ALL VIBRATION ISOLATED EQUIPMENT AND THE FIRST ATTACHMENT TO BUILDING STRUCTURE OR CABINETS, PANELS OR BOXES MOUNTED THEREON.

3.16 DISPOSAL PROCEDURES (FLUORESCENT BULBS, BALLASTS, AND LIGHT FIXTURES)
- THESE MATERIALS DO NOT REQUIRE SPECIAL TRAINING TO REMOVE OR PACKAGE.
- THE CONTRACTOR SHALL CONTRACT WITH WASTE MANAGEMENT LAMPTRACKER OR SIMILAR RECYCLING COMPANY TO RECYCLE THE LAMPS (FLUORESCENT BULBS) AND BALLASTS REMOVED DURING THE PROJECT. THE COSTS TO RECYCLE THESE MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR. THE DISPOSAL AND COSTS OF NON-REGULATED MATERIALS (LIGHT FIXTURES) IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR IS REQUIRED TO RECYCLE AS MUCH MATERIAL AS POSSIBLE.

3.17 SEISMIC PROTECTION
- THIS PROJECT IS SUBJECT TO THE SEISMIC BRACING REQUIREMENT OF THE INTERNATIONAL BUILDING CODE, 2012 EDITION. THE FOLLOWING CRITERIA ARE APPLICABLE TO THIS PROJECT:
  SEISMIC USE GROUP: II; SEISMIC CLASS CATEGORY: D; SEISMIC DESIGN CATEGORY: D.
- IT IS RECOMMENDED THAT THE CONTRACTOR ENLIST THE SERVICES OF A QUALIFIED SEISMIC BRACING VENDOR/ SUPPLIER. PROVIDE BRACING FOR IDENTIFIED EQUIPMENT AND SYSTEM.
- ELECTRICAL EQUIPMENT: ELECTRICAL EQUIPMENT SHALL INCLUDE THE FOLLOWING ITEMS TO THE EXTENT REQUIRED ON THE DRAWINGS OR IN OTHER SECTIONS OF THESE SPECIFICATIONS TO BE SEISMICALLY PROTECTED:
  LIGHT FIXTURES.
- ELECTRICAL SYSTEMS: THE FOLLOWING ELECTRICAL SYSTEMS SHALL BE SEISMICALLY PROTECTED IN ACCORDANCE WITH THIS SPECIFICATION:
  LIGHTING.
- CONDUITS REQUIRING NO SPECIAL SEISMIC RESTRAINTS: SEISMIC RESTRAINTS MAY BE OMITTED FROM ELECTRICAL CONDUIT LESS THAN 2-1/2 INCHES TRADE SIZE. ALL OTHER INTERIOR CONDUIT SHALL BE SEISMICALLY PROTECTED AS SPECIFIED.

END OF SECTION 260000

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SHEET DESCRIPTION
ELECTRICAL SPECIFICATIONS

All Drawings and Specifications for this Project are the sole property of the Architect. They shall be used only with respect to this Project. Any use or reproduction of this Drawing in whole or part by any means whatsoever is strictly prohibited, except with the specific written consent of WORTHGROUP ARCHITECTS. COPYRIGHT 2018

KEY PLAN

DRAWING SCALE:
WGA PROJECT NUMBER: 18-201
PROGRESS DATE: 09 APRIL 2018
SHEET NUMBER: E0.2

PRINT DATE :

COMcheck Software Version 4.0.8.1

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2012 IECC
Project Title: RSCVA Restroom Renovation
Project Type: Alteration

Construction Site:
4001 S. Virginia St.
Reno, NV 89202

Owner/Agent:
City of Reno
1 East First St.
Reno, NV 89505
775-334-4636

Designer/Contractor:
PK Electrical Inc.
681 Sierra Rose Dr.
Suite B
Reno, NV 89511
775-826-9010

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Women's Restroom (Common Space Types:Restroom)	661	1.00	661
2-Men's Restroom (Common Space Types:Restroom)	525	1.00	525
		Total Allowed Watts =	1186

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Women's Restroom (Common Space Types:Restroom 661 sq.ft.)				
LED 1: L1C: LED Perimeter Fixture: Other:	1	2	56	112
LED 2: L1D: LED Perimeter Fixture: Other:	1	2	61	122
LED 3: L2: LED Perimeter Fixture: Other:	1	2	39	78
LED 4: L3/L3X: Square Downlight: Other:	1	8	13	104
Men's Restroom (Common Space Types:Restroom 525 sq.ft.)				
LED 1: L1A/L1AX: LED Perimeter Fixture: Other:	1	2	43	86
LED 2: L1B: LED Perimeter Fixture: Other:	1	1	52	52
LED 2 copy 1: L1CX: LED Perimeter Fixture: Other:	1	1	56	56
LED 2 copy 2: L1E: LED Perimeter Fixture: Other:	1	2	63	126
LED 2 copy 3: L3/L3X: Square Downlight: Other:	1	3	13	39
			Total Proposed Watts =	775

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calcurations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2012 IECC requirements in COMcheck Version 4.0.8.1 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Karen D. Purcell, P.E. — Name - Title
Signature
4/9/18 — Date

LIGHTING FIXTURE SCHEDULE

PK ELECTRICAL, INC. @ 2007

LIGHTING FIXTURE CATALOG NUMBERS ARE SERIES TYPE ONLY. PROVIDE TRIMS, BALLASTS, MOUNTING EQUIPMENT, FITTINGS AND LAMPS AS REQUIRED BY THE SPECIFICATIONS AND PROJECT CONDITIONS FOR A COMPLETE INSTALLATION. THIS IS NOT A STANDALONE SCHEDULE AND FIXTURES MUST INCORPORATE ALL WORK INDICATED OR IMPLIED THROUGHOUT THE DRAWINGS AND SPECIFICATIONS.

SUBSTITUTION DEFINITIONS

- OR EQUAL = EQUAL OR SUPERIOR TO SPECIFIED IN ALL RESPECTS WILL BE ALLOWED. ENGINEER'S PRE-BID APPROVAL IS NOT REQUIRED. PROPOSED EQUAL FIXTURES ARE SUBJECT TO REVIEW DURING THE STANDARD SUBMITTAL PROCESS.
- NO EQUAL = PROVIDE SPECIFIED FIXTURE. SUBSTITUTIONS ARE NOT ALLOWED.
- SUBJECT TO REVIEW = EQUAL OR SUPERIOR TO SPECIFIED IN ALL RESPECTS MAY BE ALLOWED ONLY WITH ENGINEER'S APPROVAL. ALL SUBSTITUTIONS MUST BE SUBMITTED AS REQUIRED BY SPECIFICATIONS AND ACCOMPANIED WITH POINT BY POINT LIGHTING CALCULATIONS. DETERMINATION OF EQUAL IS ENGINEER'S SOLE DISCRETION.

TYPE	SYMBOL	DESCRIPTION AND MANUFACTURER
L1A 43		LED PERIMETER FIXTURE PRODUCING 3,624 LUMENS (382 LUMENS/FT), APPROXIMATELY 9'-6" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERIMETER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R9'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1AX 43		SAME AS L1A' EXCEPT PROVIDE 1,175 LUMEN EMERGENCY BATTERY PACK IN ADDITION TO LED DRIVER. LAMP: LED/3500K (1) VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R9'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND-EMH SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1B 52		LED PERIMETER FIXTURE PRODUCING 4,943 LUMENS (382 LUMENS/FT), APPROXIMATELY 11'-6" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERMITER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R11'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1C 56		LED PERIMETER FIXTURE PRODUCING 4,775 LUMENS (382 LUMENS/FT), APPROXIMATELY 12'-6" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERMITER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R12'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1CX 56		SAME AS L1C' EXCEPT PROVIDE 1,175 LUMEN EMERGENCY BATTERY PACK IN ADDITION TO LED DRIVER. LAMP: LED/3500K (1) VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R12'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND-EMH SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1D 61		LED PERIMETER FIXTURE PRODUCING 5,157 LUMENS (382 LUMENS/FT), APPROXIMATELY 13'-6" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERMITER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R13'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L1E 63		LED PERIMETER FIXTURE PRODUCING 5,348 LUMENS (382 LUMENS/FT), APPROXIMATELY 14'-0" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERMITER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-LO-R14'-0"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L2 59		LED PERIMETER FIXTURE PRODUCING 3,234 LUMENS (382 LUMENS/FT), APPROXIMATELY 5'-6" LENGTH (LENGTH TO BE VERIFIED IN FIELD) EXTRUDED ALUMINUM HOUSING, SATIN ACRYLIC LENS, ASYMMETRIC PERMITER DISTRIBUTION, HARD CEILING MOUNTING & LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: PRUDENTIAL BIO-PSTD-FLUSH-LED35-MO-R5'-6"-TMW-AWL-DIR-WTH-SC-UNV-X3-ND SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L3 13	□	6" SQUARE DOWNLIGHT, CLEAR SPECULAR REFLECTOR, 1,000 LUMENS, NORMAL DISTRIBUTION, RECESSED HOUSING AND LED DRIVER. LAMP: LED/3500K VOLTAGE: 120/277 MANUFACTURER: LITHONIA LDN4SQ-35/10-LS4-AR-LS-MVOLT-EZ10 SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL
L3X 13	■	SAME AS L4' EXCEPT PROVIDE 575 LUMEN EMERGENCY BATTERY PACK IN ADDITION TO LED DRIVER. LAMP: LED/3500K (1) VOLTAGE: 120/277 MANUFACTURER: LITHONIA LDN4SQ-35/10-LS4-AR-LS-MVOLT-EZ10-EL SUBSTITUTIONS: ◉ OR EQUAL ○ SUBJECT TO REVIEW ○ NO EQUAL

LIGHTING SYSTEM FOOTCANDLE LEVELS ARE BASED ON THE UTILIZATION OF STANDARD REFLECTANCES OF 80-50-20 (CEILING-WALL-FLOOR) PER I.E.S. (ILLUMINATED ENGINEERING SOCIETY). THE ROOM SURFACES ARE USED AS AN INTEGRAL COMPONENT OF THE LIGHTING SYSTEMS. THE REFLECTANCE OF THE SURFACE PAINT COLOR, MATERIAL, AND OTHER ROOM SURFACES, DIRECTLY AFFECTS THE DELIVERY OF LIGHT TO THE WORK PLANE. A SIGNIFICANT DROP IN OVERALL LIGHTING LEVELS WILL OCCUR IF REFLECTANCES ARE LOWERED. THE ARCHITECT/OWNER SHALL NOTIFY THE ENGINEER IMMEDIATELY IF FINISHES DO NOT FALL INLINE WITH THE REFLECTANCES MENTIONED ABOVE.

SHEET NOTES

(1) REMOTE TEST SWITCH/CHARGE LIGHT SHALL BE INTEGRAL TO FIXTURE AND BE ACCESSIBLE FROM TRIM SIDE OF FIXTURE.

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KAREN D. PURCELL
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12/31/19
ELECTRICAL
04/09/2018

CONSULTANT:

CLIENT/PROJECT:

Reno Tahoe

RSCC RESTROOM REMODELS

PWP: WA-2018-167

RENO SPARKS CONVENTION CENTER

4590 S.VIRGINIA STREET, RENO, NV 89502

SHEET DESCRIPTION
FIXTURE SCHEDULE, LIGHTING COMPLIANCE FORMS

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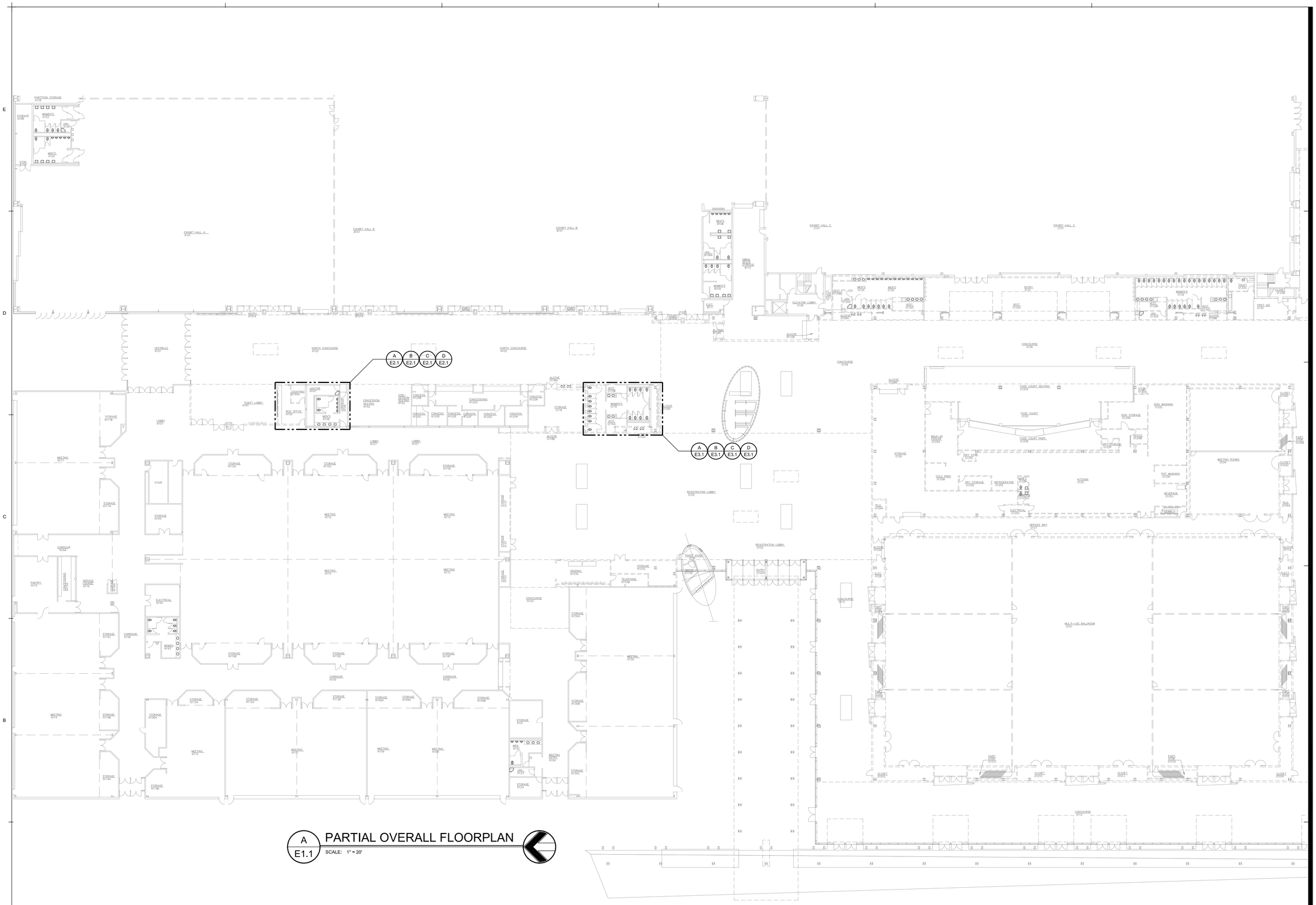
KEY PLAN

DRAWING SCALE:	WGA PROJECT NUMBER: 18-201
PROGRESS DATE: 09 APRIL 2018	
SHEET NUMBER: E0.3	

PRINT DATE :



A
E1.1

PARTIAL OVERALL FLOORPLAN

SCALE: 1" = 20'

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PWP: WA-2018-167

RENO SPARKS CONVENTION CENTER

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SHEET DESCRIPTION:
PARTIAL OVERALL FLOORPLAN

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KEY PLAN

DRAWING SCALE:	WGA PROJECT NUMBER:
	18-201

PROGRESS DATE:
09 APRIL 2018

SHEET NUMBER:
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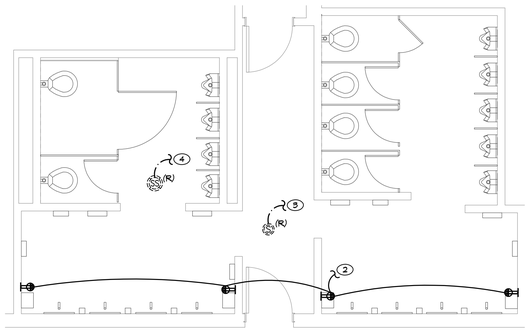
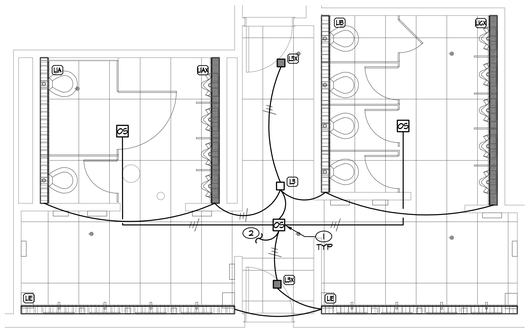
PRINT DATE:



D
E2.1

MENS RESTROOM POWER & SIGNAL NEW WORK PLAN - N148

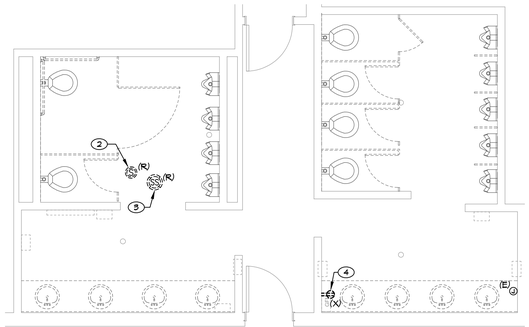
SCALE: 1/4" = 1'-0"



C
E2.1

MENS RESTROOM LIGHTING NEW WORK PLAN - N148

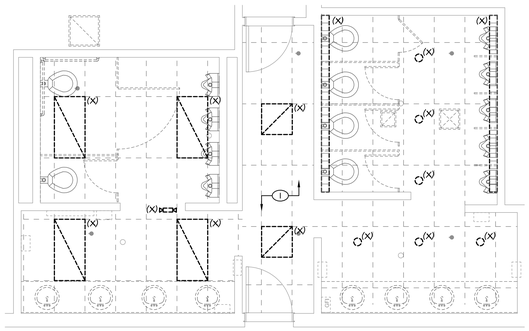
SCALE: 1/4" = 1'-0"



B
E2.1

MENS RESTROOM POWER & SIGNAL DEMOLITION PLAN - N148

SCALE: 1/4" = 1'-0"



A
E2.1

MENS RESTROOM LIGHTING DEMOLITION PLAN - N148

SCALE: 1/4" = 1'-0"

GENERAL NOTES - NEW WORK

1. (E) AND/OR DASHED LINES INDICATE EXISTING EQUIPMENT, (R) AND/OR DASHED LINES INDICATE RELOCATED EQUIPMENT, (N) AND/OR SOLID LINES INDICATE NEW EQUIPMENT UNLESS NOTED OTHERWISE.
2. LIGHT FIXTURES DESIGNATED AS "EMERGENCY" SHALL BE WIRED TO OPERATE WITH LOCAL SWITCHING UNDER NORMAL POWER CONDITIONS AND SHALL OPERATE VIA EMERGENCY BATTERY PACK (AND GENERATOR POWER) UPON LOSS OF BUILDING UTILITY POWER ONLY, UNLESS NOTED OTHERWISE.
3. PROVIDE MULTIPLE-GANG FACEPLATES AS NECESSARY WHERE TWO OR MORE LIGHT SWITCHES ARE INDICATED IN A COMMON LOCATION. SINGLE-GANG FACEPLATES FOR A GROUP OF LIGHT SWITCHES ARE NOT PERMITTED.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS, ELEVATIONS, ETC. FOR EXACT LOCATION OF LIGHT FIXTURES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FINAL FIXTURE LOCATIONS, ABOVE-CEILING HOUSING CLEARANCES, ETC. WITH MECHANICAL, PLUMBING, SPRINKLER CONTRACTOR, AND OTHER TRADES PRIOR TO ROUGH-IN.
6. RELOCATED AND EXISTING TO REMAIN LIGHT FIXTURES WITHIN AREA OF SCOPE. CONTRACTOR SHALL CLEAN FIXTURE LENSES AND INSIDE OF HOUSINGS. RE-LAMP FIXTURES TO MATCH EXISTING LAMP TYPES.
7. CONTRACTOR IS RESPONSIBLE FOR RECONNECTING EXISTING LIGHT FIXTURES DISCONNECTED DURING DEMOLITION PHASE. ALL EXISTING SYSTEMS SHALL BE IN WORKING CONDITION UPON COMPLETION OF CONSTRUCTION.
8. CONTRACTOR SHALL REPLACE BROKEN DEVICES, COVER PLATES, ETC. WHERE NECESSARY WITHIN AREA OF SCOPE.
9. REUSE EXISTING CONDUIT SYSTEMS FOR NEW WORK TO EXTENT POSSIBLE WHERE EXISTING LIGHT FIXTURES, DEVICES, ETC. ARE REMOVED DURING DEMOLITION PHASE.
10. CONTRACTOR SHALL ARRANGE FOR WALL OPENINGS LEFT OVER FROM DEMOLITION OF DEVICES TO BE PATCHED. BLANK COVER PLATES ARE NOT PERMITTED.
11. WALL MOUNTED DEVICES SHALL BE GREY FINISH OR MATCH EXISTING.

SHEET NOTES - NEW WORK

1. CEILING-MOUNTED LINE VOLTAGE OCCUPANCY SENSOR WATT STOPPER #DW-100 OR EQUAL UPON ENGINEER'S APPROVAL. REFER TO DETAIL B/E0.1
2. CONNECT TO EXISTING BRANCH CIRCUIT MADE AVAILABLE DURING DEMOLITION.
3. CONNECT TO EXISTING SPEAKER SYSTEM CIRCUIT MADE AVAILABLE DURING DEMOLITION.
4. CONNECT TO EXISTING FIRE ALARM CIRCUIT MADE AVAILABLE DURING DEMOLITION.

GENERAL NOTES - DEMOLITION

1. THIS DRAWING REPRESENTS THE EXISTING LIGHTING, POWER AND COMMUNICATIONS SYSTEMS WITHIN THE EXISTING BUILDING AREA TO BE REMODELED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, RELOCATING AND REWIRING ALL EQUIPMENT AS INDICATED ON THE DRAWINGS, INCLUDING EQUIPMENT THAT LIES WITHIN WALLS AND CEILINGS TO BE DEMOLISHED OR REMODELED.
2. (X) AND/OR DASHED LINES INDICATE EXISTING EQUIPMENT TO BE REMOVED, (R) AND/OR DASHED LINES INDICATE EXISTING EQUIPMENT TO BE RELOCATED, (E) AND/OR SOLID LINES INDICATE EXISTING EQUIPMENT TO REMAIN UNLESS NOTED OTHERWISE.
3. SALVAGEABLE ITEMS REMOVED DURING DEMOLITION SHALL BE OFFERED TO OWNER PRIOR TO DISPOSAL OR REMOVAL FROM SITE.
4. EXISTING CIRCUITS AS INDICATED ARE BASED ON CASUAL FIELD OBSERVATION AND INFORMATION PER RECORD DRAWINGS AND SHALL BE FIELD VERIFIED BY ELECTRICAL CONTRACTOR PRIOR TO START OF DEMOLITION WORK.
5. THE CONTRACTOR SHALL SALVAGE AND REUSE EXISTING BOXES AND CONDUIT WHERE POSSIBLE. DAMAGED CONDUIT, FITTINGS BOXES, ETC. MAY NOT BE REUSED. NEW CIRCUITING AS INDICATED ON THE DRAWINGS IS SHOWN FOR INTENT ONLY AND MAY VARY BASED ON ACTUAL FIELD CONDITIONS (NEW CIRCUITING SHALL MATCH EXISTING WHERE POSSIBLE TO UTILIZE EXISTING HOME-RUN CONDUITS, ETC.). KEEP AS-BUILT DRAWINGS CURRENT WITH ANY DEVIATION IN CIRCUITING FROM WHAT IS INDICATED WITHIN THESE PLANS.
6. THE CONTRACTOR SHALL REMOVE FROM THE JOB SITE ALL DISCARDED AND ABANDONED MATERIALS LEFT OVER FROM DEMOLITION AND INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, CONDUIT, FASTENERS AND BOXES. MATERIALS EMBEDDED IN GRADE AND / OR CONCRETE MAY BE ABANDONED IN PLACE. ALL ABANDONED CONDUIT SHALL BE CAPPED.
7. EXISTING FIRE ALARM SYSTEM SHALL BE PROTECTED IN ITS ENTIRETY.

SHEET NOTES - DEMOLITION

1. EXISTING LIGHT FIXTURES AND SWITCHES IN THIS AREA SHALL BE DISCONNECTED AND REMOVED UNLESS NOTED OTHERWISE. REMOVE ALL CONDUIT AND WIRE BACK TO TERMINATION POINT. MAINTAIN CIRCUIT AND SWITCHING INTEGRITY FOR ANY LIGHT FIXTURES THAT SHARE THE SAME CIRCUIT AND ARE EXISTING TO REMAIN. REMOVE ALL ABANDONED, EXPOSED CONDUIT.
2. EXISTING SPEAKER SYSTEM SHALL BE DISCONNECTED AND PROTECTED FOR REUSE. PROTECT EXISTING HOMERUN CIRCUITING FOR REUSE.
3. EXISTING FIRE ALARM SPEAKER STROBE DEVICES SHALL BE DISCONNECTED AND PROTECTED FOR REUSE.
4. EXISTING DEVICE SHALL BE DICONNECTED AND REMOVED. PROVIDE NEW DEVICE PER DIVISION 16 SPECIFICATIONS.

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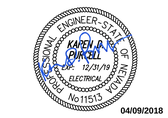

04/09/2018

CONSULTANT:

CLIENT/PROJECT:

Reno Tahoe

RSCC RESTROOM REMODELS

PWP: WA-2018-167

RENO SPARKS CONVENTION CENTER

4590 S.VIRGINIA STREET, RENO, NV 89502

SHEET DESCRIPTION
ENLARGED PLANS - MENS

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KEY PLAN

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PROGRESS DATE:
09 APRIL 2018

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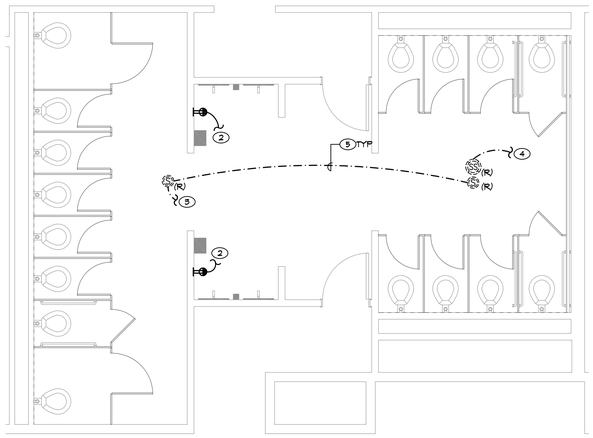
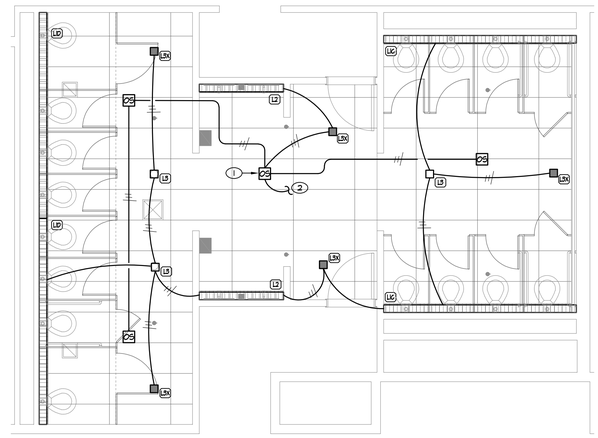


D
E3.1

WOMENS RESTROOM POWER & SIGNAL NEW WORK PLAN - G119

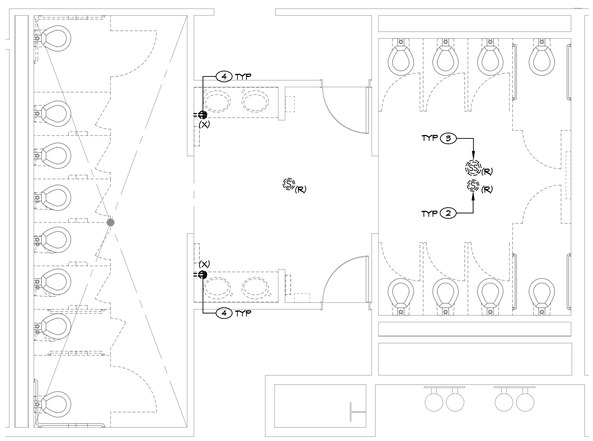
SCALE: 1/4" = 1'-0"



C
E3.1

WOMENS RESTROOM LIGHTING NEW WORK PLAN - G119

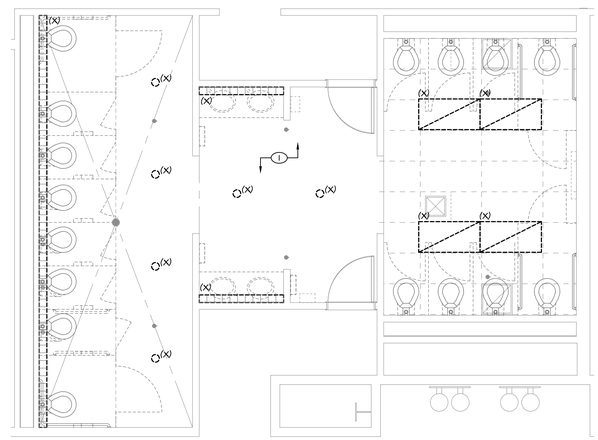
SCALE: 1/4" = 1'-0"



B
E3.1

WOMENS RESTROOM POWER & SIGNAL DEMOLITION PLAN - G119

SCALE: 1/4" = 1'-0"



A
E3.1

WOMENS RESTROOM LIGHTING DEMOLITION PLAN - G119

SCALE: 1/4" = 1'-0"

GENERAL NOTES - NEW WORK

1. (E) AND/OR DASHED LINES INDICATE EXISTING EQUIPMENT, (R) AND/OR DASHED LINES INDICATE RELOCATED EQUIPMENT, (N) AND/OR SOLID LINES INDICATE NEW EQUIPMENT UNLESS NOTED OTHERWISE.
2. LIGHT FIXTURES DESIGNATED AS 'EMERGENCY' SHALL BE WIRED TO OPERATE WITH LOCAL SWITCHING UNDER NORMAL POWER CONDITIONS AND SHALL OPERATE VIA EMERGENCY BATTERY PACK (AND GENERATOR POWER) UPON LOSS OF BUILDING UTILITY POWER ONLY, UNLESS NOTED OTHERWISE.
3. PROVIDE MULTIPLE-GANG FACEPLATES AS NECESSARY WHERE TWO OR MORE LIGHT SWITCHES ARE INDICATED IN A COMMON LOCATION. SINGLE-GANG FACEPLATES FOR A GROUP OF LIGHT SWITCHES ARE NOT PERMITTED.
4. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS, SECTIONS, ELEVATIONS, ETC. FOR EXACT LOCATION OF LIGHT FIXTURES.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING FINAL FIXTURE LOCATIONS, ABOVE-CEILING HOUSING CLEARANCES, ETC. WITH MECHANICAL, PLUMBING, SPRINKLER CONTRACTOR AND OTHER TRADES PRIOR TO ROUGH-IN.
6. CONTRACTOR IS RESPONSIBLE FOR RECONNECTING EXISTING LIGHT FIXTURES DISCONNECTED DURING DEMOLITION PHASE. ALL EXISTING SYSTEMS SHALL BE IN WORKING CONDITION UPON COMPLETION OF CONSTRUCTION.
7. CONTRACTOR SHALL REPLACE BROKEN DEVICES, COVER PLATES, ETC. WHERE NECESSARY WITHIN AREA OF SCOPE.
8. REUSE EXISTING CONDUIT SYSTEMS FOR NEW WORK TO EXTENT POSSIBLE WHERE EXISTING LIGHT FIXTURES, DEVICES, ETC. ARE REMOVED DURING DEMOLITION PHASE.
9. CONTRACTOR SHALL ARRANGE FOR WALL OPENINGS LEFT OVER FROM DEMOLITION OF DEVICES TO BE PATCHED. BLANK COVER PLATES ARE NOT PERMITTED.
10. WALL MOUNTED DEVICES SHALL BE GREY FINISH OR MATCH EXISTING.

SHEET NOTES - NEW WORK

1. CEILING-MOUNTED LINE VOLTAGE OCCUPANCY SENSOR WATT STOPPER #DW-100 OR EQUAL UPON ENGINEER'S APPROVAL. REFER TO DETAIL B/E0.1
2. CONNECT TO EXISTING BRANCH CIRCUIT MADE AVAILABLE DURING DEMOLITION.
3. CONNECT TO EXISTING SPEAKER SYSTEM CIRCUIT MADE AVAILABLE DURING DEMOLITION.
4. CONNECT TO EXISTING FIRE ALARM CIRCUIT MADE AVAILABLE DURING DEMOLITION.
5. FURNISH 1B/2, CL2, PLENUM RATED SPEAKER CABLE.

GENERAL NOTES - DEMOLITION

1. THIS DRAWING REPRESENTS THE EXISTING LIGHTING, POWER AND COMMUNICATIONS SYSTEMS WITHIN THE EXISTING BUILDING AREA TO BE REMODELED. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING, RELOCATING AND REWIRING ALL EQUIPMENT AS INDICATED ON THE DRAWINGS, INCLUDING EQUIPMENT THAT LIES WITHIN WALLS AND CEILINGS TO BE DEMOLISHED OR REMODELED.
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7. EXISTING FIRE ALARM SYSTEM SHALL BE PROTECTED IN ITS ENTIRETY.

SHEET NOTES - DEMOLITION

1. EXISTING LIGHT FIXTURES AND SWITCHES IN THIS AREA SHALL BE DISCONNECTED AND REMOVED UNLESS NOTED OTHERWISE. REMOVE ALL CONDUIT AND WIRE BACK TO TERMINATION POINT. MAINTAIN CIRCUIT AND SWITCHING INTEGRITY FOR ANY LIGHT FIXTURES THAT SHARE THE SAME CIRCUIT AND ARE EXISTING TO REMAIN. REMOVE ALL ABANDONED, EXPOSED CONDUIT.
2. EXISTING SPEAKER SYSTEM SHALL BE DISCONNECTED AND PROTECTED FOR REUSE. PROTECT EXISTING HOMERUN CIRCUITING FOR REUSE.
3. EXISTING FIRE ALARM SPEAKER STROBE DEVICES SHALL BE DISCONNECTED AND PROTECTED FOR REUSE.
4. EXISTING DEVICE SHALL BE DICONNECTED AND REMOVED. PROVIDE NEW DEVICE PER DIVISION 16 SPECIFICATIONS.

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SHEET DESCRIPTION
ENLARGED PLANS - WOMENS

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KEY PLAN

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