CABLE WHIPS OUT OF POWER POLE SHALL BE INSTALLED IN A NEAT AND WORKMAN-LIKE MANNER. ROUTE CABLE WHIPS

TO TERMINATIONS ALONG UNISTRUT OR STRUCTURE AND

SUPPORT EVERY 12" TO 24". EXCESS CABLE SHALL BE

TIGHTLY COILED AND ATTACHED TO UNISTRUT OR JOIST.

NO CONNECTION OF ANY KIND SHALL BE MADE

TO JOIST WEB MEMBERS, JOIST BRIDGING, OR ROOF DECK. MAINTAIN MINIMUM 6" CLEARANCE

FROM TOP OF POWER POLE TO ROOF DECK.

REF MANUFACTURER'S "GENERAL

EXTEND POWER POLE 3"

MIN ABOVE CL OF UNISTRUT

-INSTALL CEILING FLANGE

PROVIDE 1-1/4"

FENDER WASHER, LOCK

WASHER AND NUT. TYP-

PROVIDED WITH POLE FOR

STORES WITH LAY-IN CEILING

-CONTRACTOR SHALL ATTACH POWER

POLE TO CHECKOUT STAND PER

MANUFACTURER RECOMMENDATIONS

-PROVIDE UNISTRUT PER

\ OF BAR JOIST.

INSET: MOUNT UNISTRUT ABOVE BOTTOM CHORD OF BAR

JOISTS USING 1/4" BOLTS, WITH FENDER WASHERS AND

LOCK WASHERS BETWEEN BOLT HEAD AND JOIST FLANGE

SPECIFICATIONS. LENGTH AS

REQUIRED TO SPAN JOISTS.

-PROVIDE 1/4" BOLT

AND 1-1/4" FENDER

-PROVIDE UNISTRUT

FITTING OR EQUAL

P1026 ANGLE

WASHER TYP

—воттом

CHORD OF

SECURE TO BOTTOM CHORD

FITTINGS SPECIFICATIONS" FOR

DESIGN BOLT TORQUE.

12" PVC SLEEVE-

op power pole

2-1/2" UNISTRUT

INSET: CLAMP A 12" LENGTH

OF PVC CONDUIT AND RUN THE

POWER POLE THROUGH ITS CENTER

TO CONDUIT —

STRAP FIRMLY CLAMPED

:	ENCLOSURE	COIL	CONTACTS	NOTES
ERVED	]	VOLTS		
MART SIGNAGE	NEMA-1	120V	600V,	MECHANICALLY
			20A-2P	HELD
O SHEET EM1 FOR	EMS CONTROL INFORMATION	ON.		l
$\wedge$ $\wedge$ $\wedge$	^ ^ ^ .	$\wedge$ $\wedge$ $\wedge$	$\wedge$ $\wedge$ $\wedge$	
				$\circ \circ \circ$

STUB 1/2" CONDUIT 12" ABOVE LAY-IN CEILING AND TERMINATE WITH BUSHING	CONDUIT TO ABOVE CEILING TYP
VOICE/DATA JUNCTION BOX  "8-12	DUPLEX RECEPTACLE  RACK POST TYP SHELF TYP
	RACK POWER BRX12R

SAFETY SWITCH SCHEDULE LOAD SERVED PHASE AMPS FUSES NEMA REMARKS WIRES NO. ENCL HEAVY DUTY COMPACTOR-EXTERIOR 3PH 30 NONE WITH GROUND KIT INSTALLED

A. EQUIPMENT SHALL BE MANUFACTURED BY CUTLER-HAMMER, SIEMENS,

LIMITING FUSES, .... AMPS".

OR SQUARE D. B. IN ALL FUSIBLE SWITCHES, FURNISH REJECTION TYPE FUSE HOLDERS AND LABEL INDICATED SWITCHES "USE ONLY .... (BRAND) TYPE .... CURRENT

GENERAL NOTES

0.28.16

. FURNISH AND INSTALL ALL MATERIALS, EQUIPMENT, AND LABOR, FOR A COMPLETE INSTALLATION IN ALL RESPECTS, READY FOR INTENDED USE AND IN STRICT ACCORDANCE WITH NEC. NESC. STATE. AND LOCAL CODES. AND MANUFACTURER' RECOMMENDATIONS. PAY ALL NECESSARY FEES AND PERMITS A. NO CIRCUITRY SHALL BE ALLOWED TO BE ROUTED ACROSS

THE ROOF OR THE EXTERIOR SIDE OF THE EXTERIOR

B. ALL EQUIPMENT SHALL BE UL LISTED WHERE APPLICABLE. ARRANGE ALL WORK TO MINIMIZE DISRUPTIONS TO STORE

CYNTERGY ENGINEERING PLI

810 S CINCINNATI

SECOND FLOOR

www.cyntergy.com

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WORT

ISSUE BLOCK

| 02/12/18 | PERMIT/ E

 $\binom{7}{2}$  03/02/18 ADD #1

30 X 42 SHEET

DOCUMENT DATE: 02/12/1

SIGNATURE AND REQUIRED

SEAL OF AOR/EOR ARE

NOT FOR CONSTRUCTION

DOCUMENTS WITHOUT

CHECKED BY:

DRAWN BY:

PROTO CYCLE:

WORTH, TX CONTEMPORANEOUSLY WIT ITS ISSUE DATE ON 02/12/18, AND

TULSA, OK 74119

- OPERATIONS. COORDINATE ALL DISRUPTIONS WITH WALMART CONSTRUCTION MANAGER AND STORE MANAGER. D. CONTRACTOR SHALL VERIFY ALL WALL FINISH THICKNESSES BEFORE INSTALLING BOXES. FURNISH AND INSTALL
- EXTENDED BOXES OR BOX EXTENDERS WHERE REQUIRED. E. CONTRACTOR SHALL VERIFY THAT ALL AFFECTED PANELBOARDS HAVE CIRCUIT BREAKER KNOCKOUTS PROPERLY COVERED AND THAT ALL TRIM IS IN GOOD
- CONDITION, ALLOWING NO ACCESS TO LIVE PARTS. PROVIDE SEALS AT RACEWAY PENETRATIONS AS FOLLOWS: A. FIRE RATED WALLS: SEAL PER SPECIFICATIONS FOR FIRE
- STOPPING. B. NEUTRALIZATION AREA: SEAL PER MECHANICAL DETAIL.
- C. FREEZER/COOLER BOXES: SEAL WITH EXPANDING FOAM SEALANT. D. EXTERIOR: REFER TO ARCHITECTURAL DOCUMENTS FOR SEALING REQUIREMENTS AT ALL EXTERIOR MOUNTED

DEVICES, FIXTURES, ENCLOSURES, AND RACEWAY

- PENETRATIONS. 5. PROVIDE A SEPARATE EQUIPMENT GROUNDING CONDUCTOR (SIZE PER NEC) IN PVC TYPE CONDUIT, POWER CIRCUITS, ISOLATED GROUND CIRCUITS. OR AS SHOWN ON PLANS. CONDUIT SHALL BE SIZED PER NEC BASED ON THWN 600
- VOLT COPPER SINGLE CONDUCTORS, PLUS THE EQUIPMENT GROUNDING CONDUCTOR. -. WIRING DEVICES: DEVICE MOUNTING HEIGHTS ARE FROM
- FINISHED FLOOR TO CENTER OF OUTLET BOX UNLESS NOTED OTHERWISE ON PLANS. COORDINATE THE STANDARD MOUNTING HEIGHTS WITH MASONRY:
- A. SWITCHES +44" B. RECEPTACLES +20" C. VOICE/DATA +20"
- 5. WIRING SHALL INCLUDE FINAL CONNECTION TO ALL EQUIPMENT IN CONFORMANCE WITH EQUIPMENT SUPPLIER WIRING
- 6. CONTRACTOR IS RESPONSIBLE FOR PROVIDING COMPLETE PANELBOARD IDENTIFICATION SCHEDULES FOR PANELBOARDS AFFECTED BY REMODEL.
- '. NEW OVERCURRENT PROTECTIVE DEVICES INSTALLED IN EXISTING PANELBOARDS OR DISTRIBUTION BOARDS SHALL MATCH THE TYPE AND AIC RATING OF EXISTING OVERCURRENT PROTECTIVE DEVICES.
- B. BRANCH CIRCUIT CONDUCTORS SHALL BE MINIMUM #12 AWG UNLESS NOTED OTHERWISE IN SCHEDULES. WHERE 20A BRANCH CIRCUITS HAVE #8 AND LARGER WIRE SPECIFIED, #10 AWG WIRE SHALL BE USED FOR THE FINAL CONNECTION (15-FT MAXIMUM).
- 9. WHERE BRANCH CIRCUITS ARE GROUPED, SIZE CONDUIT AND DERATE CURRENT CARRYING CONDUCTORS PER NEC.
- D. PROVIDE UL LISTED HANDLE TIES ON ALL MULTIWIRE BRANCH CIRCUITS PER NEC REQUIREMENTS. 11. SUPPORTS FROM STRUCTURE: NO ATTACHMENT OF ANY TYPE
- SHALL BE MADE TO BRIDGING OR JOIST WEB MEMBERS. UTILIZE ONLY THE TOP AND BOTTOM CHORDS FOR SUPPORTING THE ELECTRICAL SYSTEM INSTALLATIONS.
- 2. DEVICES SHOWN ON COOLER/FREEZER PANELS SHALL BE SURFACE MOUNTED UNLESS NOTED OTHERWISE. REFER TO ARCHITECTURAL DOCUMENTS FOR CONDUIT INSTALLATION AND SEALING REQUIREMENTS.
- 3. ONLY FEEDER CIRCUITS NOTED ON THE ONE LINE DIAGRAM AND BRANCH CIRCUITS NOTED BY LEGEND SHALL BE INSTALLED UNDER SLAB. ALL OTHER FEEDER AND BRANCH CIRCUITS SHALL BE INSTALLED OVERHEAD. PROVIDE EXTERIOR COATED GRC BENDS ON ALL CONDUIT RUNS THAT HAVE 45 DEGREE BENDS OR GREATER. REF SPECIFICATIONS.
- 4. SEISMIC ZONE REQUIREMENTS: PROVIDE EXPANSION COUPLINGS AND BRACING FOR ELECTRICAL EQUIPMENT AS REQUIRED BY LOCAL CODES.
- 5. EXISTING ELECTRICAL AND ALARM:
- A. WHERE DEMOLITION OR NEW CONSTRUCTION INTERRUPTS EXISTING ELECTRICAL CIRCUITS FEEDING EXISTING EQUIPMENT, DEVICES, OR LIGHTING TO REMAIN, BUT NOT SHOWN ON DRAWINGS, PROVIDE LABOR AND MATERIALS TO REWORK CIRCUITRY, AS REQUIRED, TO MAINTAIN EXISTING OPERATION.
- B. IF DEMOLITION OR NEW CONSTRUCTION WILL DISRUPT EXISTING UNDERGROUND SERVICES (ELECTRICAL, TELEPHONE, PARKING LOT LIGHTING CIRCUITRY, ETC.) PROVIDE ALL MATERIALS AND LABOR AS REQUIRED TO
- REROUTE, SLEEVE, OR OTHERWISE REWORK THESE SERVICES TO MAINTAIN THEIR EXISTING OPERATION. C. EXERCISE CAUTION AROUND ALARM AND SECURITY CABLES DURING DEMOLITION AND CONSTRUCTION. PROTECT ALARM AND SECURITY CABLES FROM ACCIDENTAL DAMAGE SO
- THAT SYSTEMS REMAIN OPERATIONAL AT ALL TIMES. D. DISPOSE OF ALL REMOVED MATERIALS, UNLESS OTHERWISE
- EXISTING ELECTRICAL DEMOLITION:

BREAKER IN THE "OFF" POSITION.

- A. GENERAL: REMOVE OR RELOCATE EXISTING ELECTRICAL EQUIPMENT CONDUIT, AND CONDUCTORS AS INDICATED ON THE DRAWINGS, OR ONLY AS REQUIRED BY DEMOLITION. REMOVE ALL PANELBOARDS, DISCONNECT SWITCHES, BOXES, RELAYS, TIME SWITCHES, LIGHTS, DEVICES, ETC., WHICH
- WILL NOT BE REUSED. B. SALES FLOOR: REMOVE UNUSED POWER DROP CONDUIT, CONDUCTORS AND RELATED DEVICES SERVING SALES AREA GONDOLAS BEING RELOCATED OR REMOVED. EXISTING CONDUIT AND CONDUCTORS MAY BE REUSED FOR NEW POWER DROPS WHERE SIZE, RATING, AND CONDITION MEET REQUIREMENTS INDICATED ON PLANS AND ALL U.L. RATINGS. REMOVE ALL UNUSED CONDUIT AND CONDUCTORS BACK TO POINT OF ORIGIN WHENEVER FEASIBLE AND RELABEL DEMOLISHED CIRCUITS AS "SPARE". PROVIDE HANDLE DEVICE TO LOCK "SPARE" CIRCUIT
- C. CONDUIT AND WIRING TO BE ABANDONED IN CEILING SPACES AND OTHER NON-PUBLIC AREAS (I.E., THROUGH STOCKROOM AREA): CUT WIRING LOOSE AND REMOVE FROM RACEWAY(S), LEAVING RACEWAY(S) IN PLACE. CONDUIT TO BE ABANDONED IN WALLS OR FLOORS SHALL BE REMOVED BACK TO FINISHED SURFACE AND CAPPED INSIDE. REPAIR SURFACE(S) TO MATCH ADJACENT.
- D. ALL CIRCUIT BREAKERS SERVING BRANCH CIRCUITS TO BE ABANDONED OR REMOVED SHALL REMAIN IN RESPECTIVE PANELBOARD FOR FUTURE USE, UNLESS NOTED OTHERWISE ON DRAWINGS. PROVIDE HANDLE DEVICE TO LOCK "SPARE" CIRCUIT BREAKER IN THE "OFF" POSITION.
- E. DEMOLISHED FLUORESCENT LIGHT FIXTURES: REFER TO SELECTIVE SITE DEMOLITION SPECIFICATION FOR DISPOSAL OF LIGHT FIXTURE.
- F. BUILDING COMPONENTS ABANDONED BY THE SCOPE OF WORK SHALL BE SECURED TO PREVENT FALLING, LOOSENING, OR CREATING DAMAGE OF ANY KIND IN THE FUTURE.
- '. ETHERNET CABLE: A. FURNISH AND INSTALL JUNCTION BOXES AS SHOWN ON PLANS. PROVIDE CONDUIT AS REQUIRED BY LOCAL CODES AND/OR ORDINANCES.
  - B. ETHERNET CABLE IS FURNISHED BY OTHERS. C. ELECTRICAL CONTRACTOR SHALL INSTALL CABLE IN POWER
  - D. ELECTRICAL CONTRACTOR SHALL INSTALL OTHER CABLE AS DIRECTED BY WALMART CONSTRUCTION MANAGER.

EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND D SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILIT ADDITIONAL COMPENSATION SHALL BE ALLOWED

ERIC KESTERSON, P.E.

ENGINEER OF RECORD

CA # F-2220

**ELECTRICAL** 

**DETAILS** 

**SCHEDULES** 

ELECTRICAL SYMBOLS LEGEND

DESCRIPTION

(WALL MOUNTED/CEILING MOUNTED)

ENCLOSED COOLER/FREEZER LIGHT

(WALL MOUNTED/CEILING MOUNTED)

0.28.16 (SYMBOLS APPLY ONLY WHEN USED ON DRAWINGS)

LIGHT FIXTURE

JIGHT FIXTURE

IGHT FIXTURE

LIGHT FIXTURE

NIGHT LIGHT

EMERGENCY LIGHT

TRACK LIGHTING

EMERGENCY FIXTURE

SWITCH, SINGLE POLE

SWITCH, 3-WAY

SWITCH, 4-WAY

SWITCH, KEYED

SWITCH, DIMMER

SWITCH, VARIBLE SPEED

SWITCH, MANUAL MOTOR

RECEPTACLE, DUPLEX

RECEPTACLE, DUPLEX,

ISOLATED GROUND

L5-15R, UNO

L5-15R, UNO

JUNCTION BOX

RECEPTACLE, SPECIAL

RECEPTACLE, SIMPLEX

ALARM JUNCTION BOX,

FOR REMOTE TEST/RESET

NON-FUSED DISCONNECT

FUSED DISCONNECT

IRCUIT, EXPOSED,

SWITCHED/TRAVELERS NEUTRAL

RECEPTACLE, PLUG-MOLD

MOUNTED HORIZONTALLY

RECEPTACLE, DOUBLE DUPLEX

RECEPTACLE, DOUBLE DUPLEX,

RECEPTACLE, SIMPLEX TWIST LOCK,

RECEPTACLE, SIMPLEX TWIST LOCK, ISOLATED GROUND, L5-15R, UNO

RECEPTACLE, DUPLEX TWIST LOCK,

RECEPTACLE, DUPLEX TWIST LOCK,

ISOLATED GROUND, L5-15R, UNO

(WALL MOUNTED/CEILING MOUNTED)

(WALL MOUNTED/CEILING MOUNTED)

(WALL MOUNTED/CEILING MOUNTED)

CIRCUIT, CONCEALED IN WALLS OR

CIRCUIT, CONCEALED IN FLOOR SLAB,

CEILING, E INDICATES EXISTING

E INDICATES EXISTING WIRING

INDICATES EXISTING WIRING

FLUSH MOUNTED PANELBOARD

VOICE/DATA, FLUSH FLOOR

TELEPOWER POLE

SMOKE DETECTOR

**THERMOSTAT** 

TIME CLOCK

SWITCHING CONFIGURATION

CEILING/CIRCULATION FAN

ELECTRIC WATER COOLER

GROUND FAULT EQUIPMENT

GROUND FAULT CIRCUIT

ABOVE FINISH COUNTER

ABOVE FINISH FLOOR

ABOVE FINISH GRADE

CONDUIT

EXHAUST FAN

EXPLOSION PROOF

EXISTING TO REMAIN

CIRCUIT

GROUND

INTERRUPTER

GABLE FAN

ENERGY MANAGEMENT

TEMPERATURE SENSOR

<u>ABBREVIATIONS</u>

ISOLATED GROUND

INTER-REGISTER

COMMUNICATION ISP IN-STORE PROCESSOR

LCU LIGHTING CONTROL UNIT

K KEY OPERATED

NEUTRAL

NTS NOT TO SCALE

P WITH PILOT LIGHT

RH RADIANT HEATER

CONTRACTOR

SUPPLY FAN

TR TAMPER RESISTANT

SECURITY CAMERA

RC REFRIGERATION

WH WATER HEATER

WP WEATHERPROOF WR WEATHER RESISTANT

UH UNIT HEATER

UNO UNLESS NOTED

OTHERWISE

TYP TYPICAL

a, b, c LOWER CASE LETTERS INDICATE HD HAND DRYER

PUSH BUTTON

BUZZER

SURFACE MOUNTED PANELBOARD

= DATA ONLY, v = VOICE ONLY

LOW VOLTAGE CABLE BOX FOR OTHER

EQUIPMENT CONNECTION POINT

PROVIDED WITH EQUIPMENT)

JUNCTION BOX, ALARM SYSTEM

SWITCH, OCCUPANCY SENSOR

SWITCH, BI-LEVEL OCCUPANCY SENSOR

RECEPTACLE, DUPLEX ISOLATED GROUND

CEILING OCCUPANCY SENSOR AND ASSOCIATED RELAY

EXIT FIXTURE

SYMBOL

0.0

DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION OF PERFORMING THE WORK PROPERLY. NO WITH ALL OTHER DISCIPLINES AND EXISTING

BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.