

ABBREVIATIONS AND ACRONYMS

A/C =AIR CONDITIONER.
A =AMPERE.
AC =ALTERNATING CURRENT, OR ACCESS CHAMBER.
AEC =ASSOCIATION OF EDISON ILLUMINATING COMPANIES.
AFD =ADJUSTABLE FREQUENCY DRIVE.
AF =ABOVE FINISHED FLOOR.
AFG =ABOVE FINISHED GRADE.
AHU =AIR HANDLING UNIT.
A.I.C. =AMPERE INTERRUPTING CAPACITY.
AL =ALUMINUM.
ANN =ANNUNCIATOR.
ANSI =AMERICAN NATIONAL STANDARDS INSTITUTE.
ANT =ANTENNA.
APPROX =APPROXIMATE.
ASME =AMERICAN SOCIETY OF MECHANICAL ENGINEERS.
ASTM =AMERICAN SOCIETY OF TESTING AND MATERIALS
AR =AS REQUIRED.
ARC =ARC WELD.
ARCH =ARCHITECTURE.
ASD =ADJUSTABLE SPEED DRIVE.
ASTM =ASYMMETRICAL.
ATM =ATMOSPHERE.
ATS =AUTOMATIC TRANSFER SWITCH.
AUTO =AUTOMATIC.
AWG =AMERICAN WIRE GAGE.
AX =AUXILIARY RELAY.
=AND.
BAG =BARE ARMORED GROUND, UL LABELED.
BAT =BATTERY.
BC =BARE COPPER.
BD =BUS DUCT.
BHP =BRAKE HORSEPOWER.
BKR =BREAKER.
BLDG =BUILDING.
BOC =BOTTOM OF CONDUIT.
BOP =BOTTOM OF PIPE.
BTE =BEAM TUBE ENCLOSURE.
BTU =BRITISH THERMAL UNIT.
C =CONDUIT, PER SPECIFICATION, UL LABELED.
=CENTER LINE.
CAPL =CALCIUM PLATED.
CAD =COMPUTER AIDED DESIGN.
CADD =COMPUTER AIDED DESIGN AND DRAFTING.
CAP =CAPACITOR.
CB =CIRCUIT BREAKER.
CCIV =CLOSED CIRCUIT TELEVISION.
CFE =CONTRACTOR FURNISHED EQUIPMENT.
CKT =CIRCUIT.
CNTRL =CONTROLLER.
CO =CONDUIT ONLY.
COAX =COAXIAL CABLE.
COL =COLUMN.
CONC =CONCRETE.
CONN =CONNECTION.
CONT =CONTINUED.
CPB =COMMUNICATIONS PULL BOX.
CPU =CENTRAL PROCESSING UNIT.
CR =CONTROL RELAY.
CT =CURRENT TRANSFORMER.
CU =COPPER.
DB =DIRECT BURIED.
DC =DIRECT CURRENT.
DET =DETAIL.
DIA =DIAMETER.
DIAG =DIAGRAM.
DISC =DISCONNECT.
DN =DOWN.
DNA =DOES NOT APPLY.
DPDT =DOUBLE POLE DOUBLE THROW.
DPST =DOUBLE POLE SINGLE THROW.
DT =DUSTTIGHT, UL LABELED.
DWG =DRAWING.
=DEGREES CELSIUS (CENTIGRADE).
=DEGREES FAHRENHEIT.
E =EMERGENCY.
EA =EACH.
EL =ELEVATION.
ELC =ELECTRIC.
ELU =EMERGENCY LIGHTING UNIT.
EMT =ELECTRICAL METALLIC TUBING, UL LABELED.
ENG =ENGINE.
EP =EXPOSURE PROOF, UL LABELED.
EPB =ELECTRICAL PULL BOX.
EPR =ETHYLENE PROPYLENE RUBBER (SYNTHETIC POLYMER) INSULATED, UL LABELED TO 35 KV, CERTIFIED TO AECI SPECIFICATION, ABOVE 35 KV DO NOT IDENTIFY AS EP.
EQPT =EQUIPMENT.
ETC =ET CETERA.
EWC =ELECTRIC WATER COOLER.
EXIST =EXISTING.
FA =FIRE ALARM.
FACP =FIRE ALARM CONTROL PANEL.
FC =FOOTCANDLE.
FDR =FEEDER.
FIG =FIGURE.
FIN GR =FINISH GRADE.
FIT =FITURE.
FLA =FULL LOAD AMPERES.
FLD =FLOOD.
FLEX =FLEXIBLE CONDUIT, UL LABELED.
FLUOR =FLUORESCENT.
FM =FACTORY MUTUAL RESEARCH CORPORATION APPROVED AND LABELED/FACTORY MUTUAL SYSTEM APPROVED, FM APPROVED, OR FM.
FMCS =FIRE MANAGEMENT CONTROL SYS.
FREQ =FREQUENCY.
FT =FOOT.
FUT =FUTURE.
FVNR =FULL VOLTAGE NON-REVERSING.
FVR =FULL VOLTAGE REVERSING.
GA =GAGE (NOT GAUGE).
GALV =GALVANIZED.
GEN =GENERATOR.
GFE =GOVERNMENT FURNISHED EQUIPMENT.
GFCI =GROUND FAULT INTERRUPTER.
GFS =GROUND FAULT SENSOR.
GND =GROUND.
G.R. =GROUND RELAY.
GRN =GREEN INSULATED, UL LABELED TYPE TY CONDUCTOR WHEN WITH GND.
GRS =GALVANIZED RIGID STEEL CONDUIT, UL LABELED.

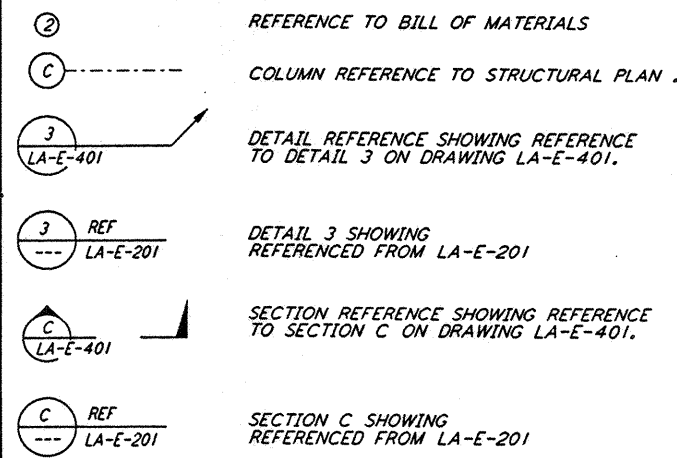
ABBREVIATIONS AND ACRONYMS

HD =HEAD.
HH =HANDHOLE.
HID =HIGH INTENSITY DISCHARGE.
HP =HORSEPOWER.
HPS =HIGH PRESSURE SODIUM.
HT =HEIGHT.
HTR =HEATER.
HV =HIGH VOLTAGE.
HVAC =HEATING, VENTILATION, AND AIR CONDITIONING.
HZ =HERTZ.
ICEA =INSULATED CABLE ENGINEERS ASSOCIATION.
IEC =INTERNATIONAL ELECTROTECHNICAL COMMISSION.
IEEE =INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS.
IG =INERT GAS.
IGW =INERT GAS WELD.
IMC =INTERMEDIATE GRADE CONDUIT, UL LABELED.
IN =INCH.
INC =INCORPORATED.
INST =INSTANTANEOUS.
INSTR =INSTRUMENT.
INTERCOM =INTERCOMMUNICATION.
IR =INVERT ELEVATION.
IR =INTERPOSING RELAY.
JB =JUNCTION BOX.
KA =KILOAMPERE.
KCMIL =THOUSAND CIRCULAR MILS
K =1,000.
KV =KILOVOLT.
KVA =KILOVOLT AMPERES.
KVAR =KILOVOLT AMPERES REACTIVE.
KW =KILOWATT.
KWH =KILOWATT HOURS.
=ROUND.
LG =LONG.
LPS =LOW PRESSURE SODIUM.
LO =LIQUID TIGHT FLEXIBLE CONDUIT, UL LABELED.
LTD =LIGHTING.
LV =LOW VOLTAGE.
LVEA =LASER VACUUM EQUIPMENT AREA
=MAXIMUM.
MAINT =MAINTENANCE.
MC =METAL CLAD CABLE, UL LABELED.
MCC =MOTOR CONTROL CENTER, UL LABELED.
MCP =MOTOR CIRCUIT PROTECTOR, UL LABELED.
MCS =MOLDED CASE SWITCH, UL LABELED.
MDF =MAIN DISTRIBUTION FRAME
MECH =MECHANICAL.
MEG =1,000,000.
MFG =MANUFACTURER.
MICRO =0.000001.
MILL =0.001.
MIL =MILILAR INSULATED COPPER SHEATHED CABLE, UL LABELED.
MIN =MINIMUM.
MISC =MISCELLANEOUS.
MNTG =MOUNTING.
MH =MOUNTING HEIGHT.
MTW =MACHINE TOOL WIRE, UL LABELED.
MSHA =MINE SAFETY AND HEALTH ADMINISTRATION.
MUX =MUX.
MV =MEDIUM VOLTAGE (EQUIPMENT), OR MEDIUM VOLTAGE CABLE, UL LABELED, 132% INSULATED TYPE MH-90 PER NEC.
N =NORTH.
NA =NON AUTOMATIC.
N.C. =NORMALLY CLOSED.
NEC =NATIONAL ELECTRICAL CODE.
NEMA =NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.
NESC =NATIONAL ELECTRICAL SAFETY CODE.
NEUT =NEUTRAL.
NFPA =NATIONAL FIRE PROTECTION ASSOCIATION.
NIC =NOT IN CONTRACT.
NL =NIGHT LIGHT.
N.O. =NORMALLY OPEN.
NPT =NATIONAL PIPE THREAD.
NTS =NOT TO SCALE.
=NUMBER.
OAS =OVERALL SHIELD.
OC =ON CENTER.
OCB =OIL CIRCUIT BREAKER.
OD =OUTSIDE DIAMETER.
OFE =OWNER FURNISHED EQUIPMENT.
OH =OVERHEAD.
O.L. =OVERLOAD RELAY CONTACTS.
OSB =OPERATIONS SUPPORT BUILDING.
OSHA =OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.
=PHASE.
PA =PUBLIC ADDRESS.
PABX =PRIVATE AUTOMATIC BRANCH EXCHANGE.
PB =PUSH BUTTON.
PF =POWER FACTOR.
PILC =PAPER INSULATED LEAD COVERED CABLE.
PLAT =PLATFORM.
PNL =PANEL.
PID =PIPING AND INSTRUMENTATION DIAGRAM.
PLTC =POWER LIMITED TRAY CABLE, UL LABELED.
PR =PAIR.
PS =PRESSURE SW.
PVC =POLYVINYL CHLORIDE CONDUIT
=RIGID ALUMINUM CONDUIT, UL LABELED.
REF =REFERENCE.
RCPT =RECEPTACLE.
REED =REED.
RHW =RUBBER INSULATED HEAT AND MOISTURE RESISTANT WIRE, UL LABELED.
RM =ROOM.
RMS =ROOT MEAN SQUARE.
RPVC =RIGID POLYVINYL CHLORIDE CONDUIT SCHEDULE 40, UL LABELED.
RPVC-80 =RIGID POLYVINYL CHLORIDE CONDUIT SCHEDULE 80, UL LABELED.
RSB =RAINWATER, UL LABELED.
RT =REDUCED VOLTAGE NON-REVERSING.
RVNR =REDUCED VOLTAGE NON-REVERSING.

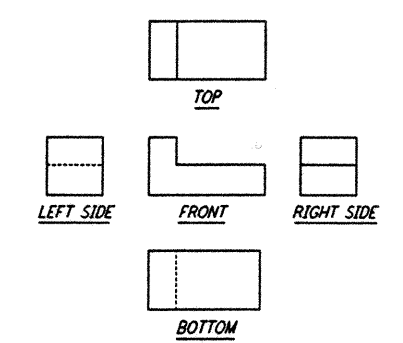
ABBREVIATIONS AND ACRONYMS

IP =SINGLE POLE.
SC =SHORT CIRCUIT.
SCH =SCHEDULE.
SECT =SECTION.
SIS =SYNTHETIC INSULATED HEAT RESISTANT SWITCHBOARD WIRE, UL LABELED.
SH =SHIELD.
SHT =SHIELDED.
SHTP =SHIELDED TWISTED PAIR.
SWTR =SHIELDED TWISTED TRIADS.
SSTO =SHIELDED TWISTED QUADS.
SOV =SOLENOID OPERATED VALVE.
SPDT =SINGLE POLE DOUBLE THROW.
SPEC =SPECIFICATION.
SPST =SINGLE POLE SINGLE THROW.
SQ =SQUARE.
SST =STAINLESS STEEL, TYPE 316.
STD =STANDARD.
STR =STRUCTURAL.
STRO =STRANDED.
SUBST =SUBSTATION.
SW =SWITCH.
SWBD =SWITCHBOARD.
SWGR =SWITCHGEAR.
SWRK =SWITCHRACK.
SYM =SYMMETRICAL.
=2 POLE.
=3 POLE.
=TYPED WIRE.
TBD =TO BE DETERMINED.
TC =TRAY CABLE.
TEL =TELEPHONE.
TERM =TERMINAL.
THHN =THERMOPLASTIC INSULATED HEAT RESISTANT NYLON JACKET WIRE, UL LABELED.
THW =THERMOPLASTIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, UL LABELED.
THWN =THERMOPLASTIC INSULATED HEAT AND MOISTURE RESISTANT NYLON JACKET WIRE, UL LABELED.
TOC =TOP OF CONCRETE.
TOD =TOP OF DUCT.
TOS =TOP OF STEEL.
TP =TWISTED PAIR.
TW =THERMOPLASTIC INSULATED MOISTURE RESISTANT WIRE, UL LABELED.
TYP =TYPICAL.
UBC =UNIFORM BUILDING CODE.
UG =UNDERGROUND.
UL =UNDERWRITERS LABORATORIES INC.
UNC =UNIFIED NATIONAL COARSE SCREW THREAD (SEE NOTE 10).
UNF =UNIFIED NATIONAL FINE SCREW THREAD.
UN-8 =UNIFIED NATIONAL 8 THREAD SERIES.
UN-12 =UNIFIED NATIONAL 12 THREAD SERIES.
UN-16 =UNIFIED NATIONAL 16 THREAD SERIES.
UNLESS OTHERWISE NOTED
UPS =UNINTERRUPTIBLE POWER SUPPLY.
V =VOLT.
VAR =VARIABLE OR VOLT AMPERES REACTIVE.
VEA =VACUUM EQUIPMENT AREA
VD =VOLTAGE DROP.
VT =VAPORTIGHT, UL LABELED.
W =WATT OR WIRE.
WP =WEATHERPROOF.
WT =WEIGHT.
XFMR =TRANSFORMER.
XHHW =SYNTHETIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, UL LABELED.
XLP =CROSSLINKED POLYETHYLENE INSULATED, UL LABELED TO 35 KV, CERTIFIED TO AECI SPECIFICATION ABOVE 35 KV. DO NOT IDENTIFY AS XLP. DO NOT USE ICEA.
Z =IMPEDANCE.

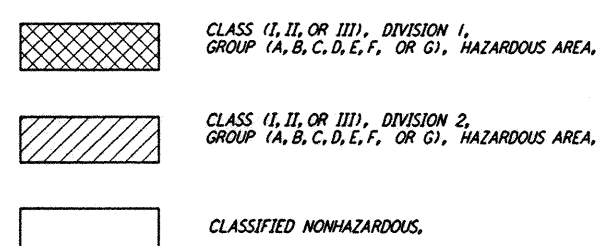
TYPICAL SYMBOLS



TYPICAL DRAWING LAYOUT



AREA CLASSIFICATION SYMBOLS



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