

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.  
AFF =ABOVE FINISHED FLOOR.  
AFS =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.  
AS =AS REQUIRED.  
ARC =ARC WELD.  
ARCH =ARCHITECTURE.  
ASD =ADJUSTABLE SPEED DRIVE.  
ASYM =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.  
BLDG =BUILDING.  
BOC =BOTTOM OF CONDUIT.  
BOP =BOTTOM OF PIPE.  
BTE =BEAM TUBE ENCLOSURE.  
BTU =BRITISH THERMAL UNIT.  
C =CONDUIT, PER SPECIFICATION, UL LABELED.  
CL =CENTER LINE.  
CAPL =CADMIUM PLATED.  
CAD =COMPUTER AIDED DESIGN.  
CADD =COMPUTER AIDED DESIGN AND DRAFTING.  
CAP =CAPACITOR.  
CB =CIRCUIT BREAKER.  
CCTV =CLOSED CIRCUIT TELEVISION.  
CFE =CONTRACTOR FURNISHED EQUIPMENT.  
CKT =CIRCUIT.  
CNTRLR =CONTROLLER.  
CO =CONDUIT ONLY.  
COAX =COAXIAL CABLE.  
COL =COLUMN.  
CONC =CONCRETE.  
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.  
DWA =DOES NOT APPLY.  
DPST =DOUBLE POLE SINGLE THROW.  
DT =DUSTTIGHT, UL LABELED.  
DWG =DRAWING.  
°C =DEGREES CELSIUS (CENTIGRADE).  
°F =DEGREES FAHRENHEIT.  
E =EMERGENCY.  
EA =EACH.  
EL =ELEVATION.  
ELEC =ELECTRIC.  
ELU =EMERGENCY LIGHTING UNIT.  
EMT =ELECTRICAL METALLIC TUBING, UL LABELED.  
ENG =ENGINE.  
EP =EXPLOSION PROOF, UL LABELED.  
EPB =ELECTRICAL PULL BOX.  
EPR =ETHYLENE PROPYLENE RUBBER (SYNTHETIC POLYMER) INSULATED, UL LABELED TO 35 KV, CERTIFIED TO AEC 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.  
FIT =FITTING.  
FLA =FULL LOAD AMPERES.  
FLEX =FLEXIBLE CONDUIT, UL LABELED.  
FLUOR =FLUORESCENT.  
FM =FACTORY MUTUAL RESEARCH CORPORATION APPROVED AND LABELED; FACTORY MUTUAL SYSTEM APPROVED, FM APPROVED, OR FM.  
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.

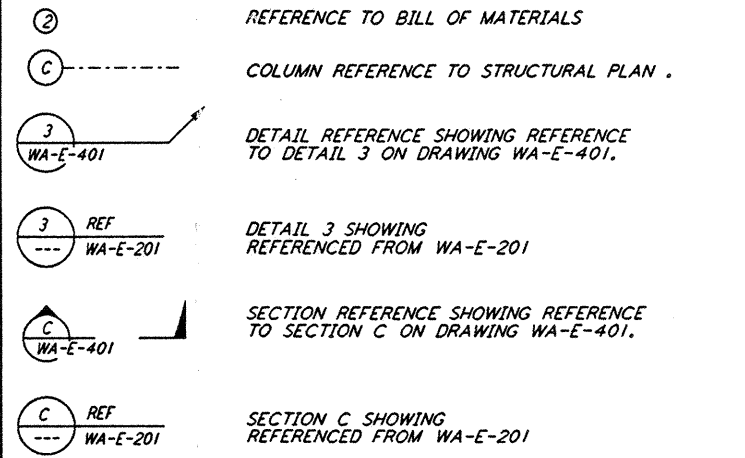
ABBREVIATIONS AND ACRONYMS

GFI =GROUND FAULT INTERRUPTER.  
GFS =GROUND FAULT SENSOR.  
GND =GROUND.  
G.R. =GROUND RELAY.  
GRN =GREEN INSULATED, UL LABELED TYPE TW CONDUCTOR WHEN WITH GND.  
GRS =GALVANIZED RIGID STEEL CONDUIT, UL LABELED.  
HH =HANDHOLE.  
HP =HIGH INTENSITY DISCHARGE.  
HPS =HIGH PRESSURE SODIUM.  
HT =HEIGHT.  
HTR =HEATER.  
HV =HIGH VOLTAGE.  
HVAC =HEATING, VENTILATION, AND AIR CONDITIONING.  
HZ =HERTZ.  
ICEA =INSULATED CABLE ENGINEERS ASSOCIATION.  
IE =INVERT ELEVATION.  
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.  
INV =INVERT ELEVATION.  
IR =INTERPOSING RELAY.  
JB =JUNCTION BOX.  
KA =KILOAMPERE.  
KCMIL =THOUSAND CIRCULAR MILS.  
KLO =1,000.  
KV =KILOVOLT.  
KVA =KILOWATT AMPERES.  
KVAR =KILOWATT AMPERES REACTIVE.  
KW =KILOWATT.  
KWH =KILOWATT HOURS.  
LB =POUND.  
LPS =LOW PRESSURE SODIUM.  
LTO =LIQUID TIGHT FLEXIBLE CONDUIT, UL LABELED.  
LTG =LIGHTING.  
LV =LOW VOLTAGE.  
LVEA =LASER VACUUM EQUIPMENT AREA.  
MAX =MAXIMUM.  
MAINT =MAINTENANCE.  
MC =METAL CLAD CABLE.  
ML =MIL.  
MCC =MOTOR CONTROL CENTER, UL LABELED.  
MCP =MOTOR CIRCUIT PROTECTOR, UL LABELED.  
MCS =MOLDED CASE SWITCH, UL LABELED.  
MDF =MAIN DISTRIBUTION FRAME.  
MECH =MECHANICAL.  
MEGA =1,000,000.  
MFR =MANUFACTURER.  
MICRO =0.0001.  
MILLI =0.001.  
MI =MINERAL INSULATED COPPER SHEATHED CABLE, UL LABELED.  
MIN =MINIMUM.  
MISC =MISCELLANEOUS.  
MTG =MOUNTING.  
MH =MOUNTING HEIGHT.  
MTW =MACHINE TOOL WIRE, UL LABELED.  
NSHA =MINE SAFETY AND HEALTH ADMINISTRATION.  
MUX =MUX TIPLINE.  
MV =MEDIUM VOLTAGE (EQUIPMENT), OR MEDIUM VOLTAGE CABLE, UL LABELED, 133% INSULATED TYPE MV-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.  
NF =NON FUSED.  
NFFPA =NATIONAL FIRE PROTECTION ASSOCIATION.  
NIC =NOT IN CONTRACT.  
NL =NIGHT LIGHT.  
N.O. =NORMALLY OPEN.  
NPT =NATIONAL PIPE THREAD.  
NTS =NOT TO SCALE.  
#, NO. =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.  
P =PHASE.  
PA =PUBLIC ADDRESS.  
PABX =PRIVATE AUTOMATIC BRANCH EXCHANGE.  
PB =PUSH BUTTON.  
PF =POWER FACTOR.  
PILC =PAPER INSULATED LEAD COVERED CABLE.  
PIL =PANEL.  
PID =PIPING AND INSTRUMENTATION DIAGRAM.  
PLTC =POWER LIMITED TRAY CABLE, UL LABELED.  
PR =PAIR.  
PVC =POLYVINYL CHLORIDE CONDUIT.  
RAC =RIGID ALUMINUM CONDUIT, UL LABELED.  
RCPT =RECEPTACLE.  
REQD =REQUIRED.  
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 =RIGID SILICON-BRONZE CONDUIT, UL LABELED.  
RT =RAINTIGHT, UL LABELED.  
RVNR =REDUCED VOLTAGE NON-REVERSING.

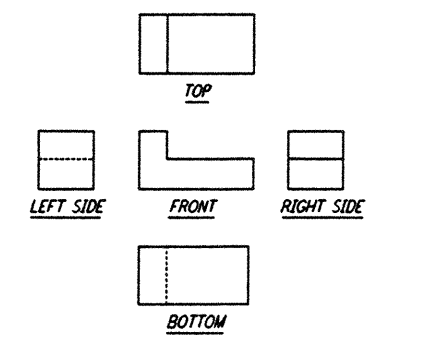
ABBREVIATIONS AND ACRONYMS

IP =SINGLE POLE.  
SC =SHORT CIRCUIT.  
SCH =SCHEDULE.  
SECT =SECTION.  
SIS =SYNTHETIC INSULATED HEAT RESISTANT SWITCHBOARD WIRE, UL LABELED.  
SH =SHIELDED.  
SHT =SHIELDED TWISTED PAIR.  
SHTD =SHIELDED TWISTED TRIADS.  
SHTO =SHIELDED TWISTED QUADS.  
SOV =SOLENOID OPERATED VALVE.  
SPOT =SINGLE POLE DOUBLE THROW.  
TOS =TOP OF STEEL.  
SPST =SINGLE POLE SINGLE THROW.  
SO =SOLEARE.  
SST =STAINLESS STEEL, TYPE 316.  
STD =STANDARD.  
STR =STRUCTURAL.  
SUBST =SUBSTATION.  
SW =SWITCH.  
SWBD =SWITCHBOARD.  
SWGR =SWITCHGEAR.  
SYM =SYMMETRICAL.  
2P =2 POLE.  
3P =3 POLE.  
JW =JUNCTION WIRE.  
TC =TRAY CABLE.  
TEL =TELEPHONE.  
TERM =TERMINAL.  
THERM =THERMOPLASTIC INSULATED HEAT RESISTANT NYLON JACKET WIRE, UL LABELED.  
TIN =THERMOPLASTIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, UL LABELED.  
TINW =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.  
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.  
UN =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 WIFE.  
WP =WEATHERPROOF.  
WT =WEIGHT.  
XFMR =TRANSFORMER.  
XHPW =SYNTHETIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, UL LABELED.  
XLP =CROSSLINKED POLYETHYLENE INSULATED, UL LABELED TO 35 KV, CERTIFIED TO AEC SPECIFICATION ABOVE 35 KV, DO NOT IDENTIFY AS XLP. DO NOT USE ICEA.  
Z =IMPEDANCE.

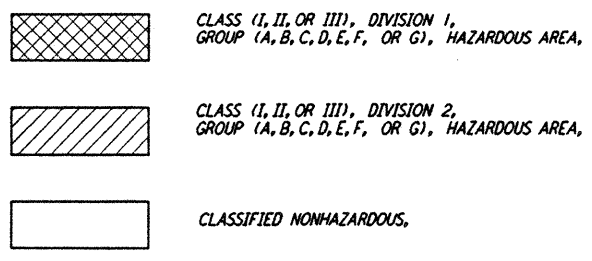
TYPICAL SYMBOLS



TYPICAL DRAWING LAYOUT



AREA CLASSIFICATION SYMBOLS

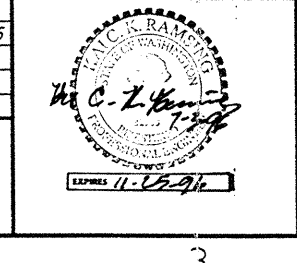


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