

**ABBREVIATIONS AND ACRONYMS**

A/C -AIR CONDITIONER.  
 AMP -AMPERE.  
 AC -ALTERNATING CURRENT, OR ACCESS CHAMBER.  
 AEC -ASSOCIATION OF ETONY ILLUMINATING COMPANIES.  
 AFD -ADJUSTABLE FREQUENCY DRIVE.  
 AFS -ABOVE FINISHED FLOOR.  
 AFG -ABOVE FINISHED GRADE.  
 ANI -AIR HANDLING UNIT.  
 A.L.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.  
 AR -ARCH WELD.  
 ARCH -ARCHITECTURE.  
 ASD -ADJUSTABLE SPEED DRIVE.  
 ASTM -ASTM STANDARD.  
 ATM -ATMOSPHERE.  
 ATS -AUTOMATIC TRANSFER SWITCH.  
 AUTO -AUTOMATIC.  
 AWG -AMERICAN WIRE GAGE.  
 AX -AXILIARY RELAY.  
 B -BAND.  
 BAG -BARE ARMORED GROUND, U.L. LABELED.  
 BAP -BATTERY.  
 BC -BRAC COPPER.  
 BD -BROG DUCT.  
 BHP -BRIAR HORSPOWDER.  
 BLDG -BUILDING.  
 BNC -BUSHING OF CONDUIT.  
 BOP -BUSHING OF PIPE.  
 BTE -BEAM TUBE ENCLOSURE.  
 BTU -BRITISH THERMAL UNIT.  
 C -CONDUIT, PER SPECIFICATION, U.L. LABELED.  
 C -CENTER LINE.  
 CAME -CABLE MOUNTED PLATE.  
 CAD -COMPUTER AIDED DESIGN.  
 CAD/CAM -COMPUTER AIDED DESIGN AND DRAFTING.  
 CAFP -CABLE FACTORY.  
 CB -CIRCUIT BREAKER.  
 CCBT -CROSS-CORROSION PROTECTION.  
 CCE -CONTRACTOR FURNISHED EQUIPMENT.  
 CFE -CIRCUIT FEEDER.  
 CTR -CONTROLLER.  
 CU -CUMULATIVE.  
 COAX -COAXIAL CABLE.  
 COL -COLUMN.  
 CONG -CONCRETE.  
 CONT -CONTINUED.  
 COM -COMMUNICATIONS FULL BOX.  
 CPU -CENTRAL PROCESSING UNIT.  
 CR -CONTROL RELAY.  
 CT -CURRENT TRANSFORMER.  
 CU -COPPER.  
 CB -CIRCUIT BREAKER.  
 DC -DIRECT CURRENT.  
 DET -DETAIL.  
 DIA -DIAGRAM.  
 DISC -DISCONNECT.  
 DN -DOWN.  
 DND -DOES NOT APPLY.  
 DSD -DOUBLE POLE DOUBLE THROW.  
 DSDT -DOUBLE POLE SINGLE THROW.  
 DT -DUCTWORK, U.L. LABELED.  
 DWG -DRAWING.  
 °C -DEGREES CELSIUS (CENTIGRADE).  
 °F -DEGREES FAHRENHEIT.  
 E -EMERGENCY.  
 EA -ELEVATION.  
 ELEC -ELECTRIC.  
 ELU -EMERGENCY LIGHTING UNIT.  
 EMP -EMPOWING.  
 ENG -ENGINEERING.  
 EP -EXPLOSION PROOF, U.L. LABELED.  
 EPR -ELECTRICAL PULL BOX.  
 EPR -ETHYLENE PROPYLENE RUBBER SYNTHETIC POLYMER.  
 I -INSULATED, U.L. LABELED TO 35 KV, CERTIFIED TO AEC SPECIFICATION, ABOVE 35 KV DO NOT IDENTIFY AS EP.  
 EPC -EQUIPMENT.  
 ET -ELEVATION.  
 EMC -ELECTRIC WATER COOLER.  
 EXIST -EXISTING.  
 FA -FIRE ALARM.  
 FACP -FIRE ALARM CONTROL PANEL.  
 FC -FLEXIBLE.  
 FDR -FEEDER.  
 FIB -FIBER.  
 FIX -FIXTURE.  
 FLS -FLEX LOAD AMPERES.  
 FLEX -FLEXIBLE CONDUIT, U.L. LABELED.  
 FLOR -FLOURESCENT.  
 FM -FACTORY MUTUAL RESEARCH CORPORATION APPROVED AND LABELED.  
 FM -FACTORY MUTUAL SYSTEM APPROVED, FM APPROVED, OR FM.  
 FREQ -FREQUENCY.  
 FT -FOOT.  
 FUT -FUTURE.  
 FV -FULL VOLTAGE NON-REVERSING.  
 FVR -FULL VOLTAGE REVERSING.  
 GA -GAGE (NOT GAUGE).  
 GALV -GALVANIZED.  
 GEN -GENERATOR.  
 GFE -GOVERNMENT FURNISHED EQUIPMENT.

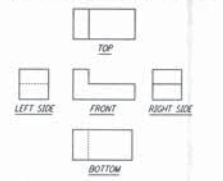
**ABBREVIATIONS AND ACRONYMS**

GFI -GROUND FAULT INTERRUPTER.  
 GFS -GROUND FAULT SENSOR.  
 GND -GROUND.  
 G.R. -GROUND RELAY.  
 GRN -GREEN INSULATED, U.L. LABELED TYPE TW CONDUCTOR WHEN WITH GND.  
 GRS -GRAIN REINFORCED STEEL CONDUIT, U.L. LABELED.  
 HW -HANDHOLE.  
 HSD -HIGH INTENSITY DISCHARGE.  
 HSD -HORSPOWDER.  
 HPS -HIGH PRESSURE SODIUM.  
 HT -HOT.  
 HTR -HEATER.  
 HV -HIGH VOLTAGE.  
 HVAC -HEATING, VENTILATION, AND AIR CONDITIONING.  
 HERTZ -HERTZ.  
 ICEA -INSULATED CABLE ENGINEERS ASSOCIATION.  
 IE -INERT ELEVATION.  
 IEE -INERT GAS.  
 IEE -INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS.  
 IS -INERT GAS WELD.  
 ISW -INTERMEDIATE GRADE CONDUIT, U.L. LABELED.  
 IN -INCH.  
 INC -INCORPORATES.  
 INST -INSTANTANEOUS.  
 INSTR -INSTRUMENT.  
 INSTR -INSTRUMENTATION.  
 INTERCOM -INTERCOMMUNICATION.  
 INV -INVERT ELEVATION.  
 IR -INTERFERRING RELAY.  
 JB -JUNCTION BOX.  
 KA -KILOVOLTS.  
 KCMIL -KILOCAND CIRCULAR MILS.  
 KIL -KILO.  
 KWH -KILOWATT HOURS.  
 KW -KILOWATT.  
 KWHR -KILOWATT HOURS.  
 LB -POUND.  
 LPS -LOW PRESSURE SODIUM.  
 LSP -LOW SLOPE FLEXIBLE CONDUIT, U.L. LABELED.  
 LTO -LIGHTING.  
 LV -LOW VOLTAGE.  
 LVEA -LASER VACUUM EQUIPMENT AREA.  
 MAX -MAXIMUM.  
 MAINT -MAINTENANCE.  
 MC -METAL CLAD CABLE, U.L. LABELED.  
 MCC -MOTOR CONTROL CENTER, U.L. LABELED.  
 MCP -MOTOR CONTROL PROTECTOR, U.L. LABELED.  
 MCS -MAGNETIC CASE SWITCH, U.L. LABELED.  
 MDP -MAIN DISTRIBUTION FRAME.  
 MECH -MECHANICAL.  
 MEGA -1,000,000.  
 MFR -MANUFACTURER.  
 MICRO -10,000,000.  
 MLLI -METAL INSULATED COPPER SHEATHED CABLE, U.L. LABELED.  
 MON -MONITORING.  
 MISC -MISCELLANEOUS.  
 MTS -MOVING.  
 MH -MOVING HEAD.  
 MW -MACHINE TOOL WIRE, U.L. LABELED.  
 MSHA -MINE SAFETY AND HEALTH ADMINISTRATION.  
 MVA -MULTIPLEX.  
 MV -MEDIUM VOLTAGE (EQUIPMENT), OR MEDIUM VOLTAGE CABLE, U.L. LABELED. \*35 IN INSULATED TYPE W- TO PER NEC.  
 N -NORTH.  
 NA -NOW AUTOMATIC.  
 N.C. -NORMALLY CLOSED.  
 NEC -NATIONAL ELECTRICAL CODE.  
 NEMA -NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION.  
 NES -NATIONAL ELECTRICAL SAFETY CODE.  
 NETA -NATIONAL FIRE PROTECTION ASSOCIATION.  
 NFPA -NATIONAL FIRE PROTECTION ASSOCIATION.  
 NIC -NOT IN CONTRACT.  
 NL -NIGHT LIGHT.  
 NLO -NORMALLY OPEN.  
 NPT -NATIONAL PIPE THREAD.  
 NTS -NOT TO SCALE.  
 # -NUMBER.  
 OS -OVERALL SHEILD.  
 OC -ON CENTER.  
 OCB -OIL CIRCUIT BREAKER.  
 OD -OUTSIDE DIAMETER.  
 ORE -OWNER FURNISHED EQUIPMENT.  
 OH -OVERHEAD.  
 OLL -OVERLOAD RELAY CONTACTS.  
 OSR -OPERATIONS SUPPORT BUILDING.  
 OSHA -OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.  
 P -PHASE.  
 PA -PANEL ADDRESS.  
 PABX -PRIVATE AUTOMATIC BRANCH EXCHANGE.  
 PB -PUSH BUTTON.  
 PF -POWER FACTOR.  
 PIC -POWER INSULATED LEAD COVERED CABLE.  
 PNE -PANEL.  
 PLED -PUSHING AND INSTRUMENTATION DIAGRAM.  
 PLTC -POWER LIMITED TRAY CABLE, U.L. LABELED.  
 PI -PANEL.  
 PVC -POLYVINYL CHLORIDE CONDUIT.  
 RAC -RIGID ALUMINUM CONDUIT, U.L. LABELED.  
 RCPT -RECEPTACLE.  
 RECD -RECESSED.  
 RHW -RUBBER INSULATED HEAT AND MOISTURE RESISTANT WIRE, U.L. LABELED.  
 RW -ROOT MEAN SQUARE.  
 RMS -ROOT MEAN SQUARE.  
 RPH -RIGID POLYETHYLENE CHLORIDE CONDUIT SCHEDULE 40, U.L. LABELED.  
 RPH-80 -RIGID POLYETHYLENE CHLORIDE CONDUIT SCHEDULE 80, U.L. LABELED.  
 RSP -RIGID SILICON-BRONZE CONDUIT, U.L. LABELED.  
 RT -RAINTIGHT, U.L. LABELED.  
 RVR -REDUCED VOLTAGE NON-REVERSING.

**ABBREVIATIONS AND ACRONYMS**

IP -SINGLE POLE.  
 SC -SHORT CIRCUIT.  
 SCH -SCHEDULE.  
 SECT -SECTION.  
 SIS -SYNTHETIC INSULATED HEAT RESISTANT SWITCHBOARD WIRE, U.L. LABELED.  
 SH -SHIELD.  
 SMT -SHIELDED TWISTED PAIR.  
 SMT -SHIELDED TWISTED TRIADS.  
 SMT -SHIELDED TWISTED QUADS.  
 SOD -SOLIDLY OPERATED VALVE.  
 SPDT -SINGLE POLE DOUBLE THROW.  
 SPEC -SPECIFICATION.  
 SPT -SINGLE POLE SINGLE THROW.  
 SQ -SQUARE.  
 SST -STAINLESS STEEL, TYPE 316.  
 STD -STANDARD.  
 STR -STRUCTURAL.  
 SUBST -SUBSTATION.  
 SW -SWITCH.  
 SWBD -SWITCHBOARD.  
 SWEP -SWITCHGEAR.  
 SWNK -SWITCHBACK.  
 SW -SYMMETRICAL.  
 SW -SPLIT.  
 SW -THREE WIRE.  
 SW -STRAY CABLE.  
 TEL -TELEPHONE.  
 TERM -TERMINAL.  
 THWN -THERMOPLASTIC INSULATED HEAT RESISTANT NYLON JACKET WIRE, U.L. LABELED.  
 THWN -THERMOPLASTIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, U.L. LABELED.  
 THWN -THERMOPLASTIC INSULATED HEAT AND MOISTURE RESISTANT NYLON JACKET WIRE, U.L. LABELED.  
 TOP -TOP OF CONCRETE.  
 TOP -TOP OF DUCT.  
 TOP -TOP OF STEEL.  
 TP -TWISTED PAIR.  
 TP -THERMOPLASTIC INSULATED MOISTURE RESISTANT WIRE, U.L. LABELED.  
 TP -TYPICAL.  
 UBC -UNIFORM BUILDING CODE.  
 UMC -UNITED NATIONAL LABORATORIES, INC.  
 UNF -UNITED NATIONAL COARSE SCREW THREAD (SEE NOTE 10).  
 UNF -UNITED NATIONAL FINE SCREW THREAD.  
 UN-8 -UNITED NATIONAL 8 THREAD SERIES.  
 UN-12 -UNITED NATIONAL 12 THREAD SERIES.  
 UN-16 -UNITED NATIONAL 16 THREAD SERIES.  
 UNF -UNLESS OTHERWISE NOTED.  
 UPS -UNINTERRUPTIBLE POWER SUPPLY.  
 V -VOLT.  
 VAR -VARIABLE OR VOLT AMPERES REACTIVE.  
 VEA -VACUUM EQUIPMENT AREA.  
 VFD -VARIABLE FREQUENCY DRIVE.  
 VT -VAPORTIGHT, U.L. LABELED.  
 W -WATT OR WIRE.  
 WP -WEATHERPROOF.  
 W -WEIGHT.  
 XFRM -TRANSFORMER.  
 XFRM -SYNTHETIC INSULATED HEAT AND MOISTURE RESISTANT WIRE, U.L. LABELED.  
 ALPE -CROSSLINKED POLYETHYLENE INSULATED, U.L. LABELED TO 35 KV, CERTIFIED TO AEC SPECIFICATION ABOVE 35 KV, DO NOT IDENTIFY AS ALP, DO NOT USE ICEA.  
 Z -IMPEDANCE.

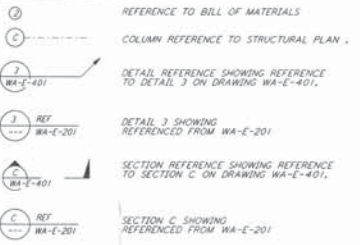
**TYPICAL DRAWING LAYOUT**



**AREA CLASSIFICATION SYMBOLS**

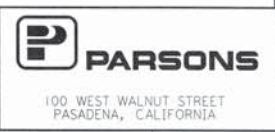


**TYPICAL SYMBOLS**



REVISION	NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION

26. ISSUED FOR CONSTRUCTION	DATE	6-29-96
DRAWN	M.M.	6-29-96
CHECKED	J.J.	7-1-96
ENGINEER	R.	7-8-96
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LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY SITE NO. 1 - HANFORD, WASHINGTON

TITLE	NONE	PROJECT NO.	PP150969	REVISED BY	RO94
<b>WA-E-001</b>					

ELECTRICAL STANDARD SYMBOLS, ABBREVIATIONS & ACRONYMS

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