### TRACK GEOMETRY - HORIZONTAL GENERAL, CIVIL AND TRACK COMPOUND CURVATURE DIRECTION DISTRIBUTION AGGREGATE BASE AIR-BLOWN MORTAR INSUL INT INSULATION INTERIOR DIR DIST TICKET VENDING DEVICE POINT OF CHANGE FROM CIRCULAR CURVE TO SPIRAL AB ABM РŤМ PARKING TICKET MACHINE TYPICAL ABN ABANDON ABUTMENT DN DR DOWN INV INVERT PVC PVMT POLYVINYL CHLORIDE PAVEMENT INSIDE RADIUS ABUT DRIVE TANGENT DISTANCE OF SHIFTED PC REFERRED TO THE TS ASPHALTIC CONCRETE AC AD DRWY DRIVEWAY UB UD UG UON LITILITY ROX TANGENT DISTANCE OF SHIFTED PT REFERRED TO THE ST ARFA DRAIN DTR DFTOUR UNDERDRAIN UNDERGROUND UNLESS OTHERWISE NOTED JB JT (R) RELOCATED JUNCTION BOX AHD AHF AD R RC RCP RD RDWY RECT REF Lc TOTAL LENGTH OF CIRCULAR CURVE FROM PC TO PT ALIGN ALIGNMENT REINFORCED CONCRETE REINFORCED CONCRETE PIPE UP UTIL OR SC TO CS LENGTH OF COMPOUND SPIRAL FROM CS TO SC ALTERNATE UTILITY APPROXIMATE (E) **EXISTING** ROAD ROADWAY LENGTH OF SPIRAL FROM TS TO SC LENGTH OF SPIRAL FROM CS TO ST ARCHITECTURAL AGGREGATE SUBBASE ARCH LB LF POLINDS EA EB EBR ECR EE LINEAL FEET FACH Ls2 AS RECTANGULAR LONG ASPH **ASPHALT** LG LGT VAR VARIES REFERENCE AVF **AVENUE** END OF BRIDGE VERT REINFORCED ADD VALUE MACHINE END CURB RETURN LENGTH LEFT-HAND VISUAL MESSAGE BOARD VMR REL REQD OFFSET FROM INITIAL TANGENT TO PC OF THE SHIFTED RELOCATE р1 FACH END ΙH VMS VISUAL MESSAGE SIGN LH LN LOC LOL LP LPL LT LTG REQUIRED CIRCLE OF SPIRALIZED CURVE OFFSET FROM INITIAL TANGENT TO PT OF THE SHIFTED EACH FACE REV RH RO RP RR RT **REVISION** p2 LOCATION EMPLOYEE IN CHARGE RIGHT-HAND CIRCLE OF SPIRALIZED CURVE POINT OF CURVATURE/POINT OF CHANGE FROM TANGENT LAYOUT LINE EXPANSION JOINT PC ROUGH OPENING WEST LOW POINT LIGHT POLE ELECTRICAL BOARDING ASSISTANCE AREA REFERENCE POINT TO CIRCULAR CURVE POINT OF COMPOUND CURVE POINT OF INTERSECTION WITH WITHOUT EL ELEV EMB BBR BCR BEG **FI EVATION** BEGINNING OF BRIDGE RAILROAD PCC ELEVATOR LEFT LIGHTING W/O BEGIN CURB RETURN RIGHT PI POC **EMBANKMEN** BEGIN POINT ON CIRCUI AR CURVE EMER EMERGENCY WORK POINT POINT ON SPIRAL POINT ON TANGENT POINT OF TANGENCY/POINT OF CHANGE FROM CIRCULAR BK BKF BACK POS POT PRC RETAINING WALL WATERPROOF ENGINEERING EDGE OF PAVEMENT EQUATION ENGR EP BACKFILL RIGHT-OF-WAY WRT WITH RESPECT TO WEIGHT EQ EQUIP RALLAST WELDED WIRE FABRIC WWF FOUIPMENT ES ESMT WELDED WIRE MESH EDGE OF SHOULDER MAXIMIIM WWM RENCHMARK CURVE TO TANGENT MECHANICAL FASEMENT BOC BOTTOM OF CURB EDGE OF TRAVELED WAY MED MEM MEDIAN BOTTOM MEMBRANE FW BOTTOM OF WALL STAND ALONE VALIDATOR SOUTH BOUND BOW SAV SB SCHD SDMH SECT SERV SF SG SHLDR SHT SIM ĒΧC ME T EXCAVATION BR BS XING CROSSING MANHOL F BOTTOM OF SLOPE **EXPANSION** CROSSOVER XO, X/O SCHEDULE STORM DRAIN POINT OF CHANGE FROM SPIRAL TO CIRCULAR CURVE POINT OF CHANGE FROM ONE SPIRAL SC SS ST SPO MIC MICROPHONE EXTERIOR MINIMUM STORM DRAIN MANHOLE ΥD YARDS OF CHANGE FROM SPIRAL TO TANGENT MISCELLANEOUS SECTION POINT ON ORIGIN OF COMPOUND SPIRAL MOD MODIFIED MON MONUMENT SQUARE FEET MAINTENANCE OF WAY MILEPOST MOW CAP CCBM CCFGIP CCLKRP CORRUGATED ALUMINUM PIPE SUBGRADE TANGENT DISTANCE FROM TS TO PI TANGENT DISTANCE FROM ST TO PI Ts1 Ts2 TS CAPACITY SHOULDER FUTURE MPH MSL MILES PER HOUR CATCH BASIN FC FDN FF FG FH FIN SHEET FACE OF CONCRETE MEAN SEA LEVEL POINT OF CHANGE FROM TANGENT TO SPIRAL CEMENT CUBIC FEET SIMIL AR SLOPE FOUNDATION FILTER FABRIC MATERIAL SL SLPA CENTER OF GRAVITY SIGNAGE/LIGHTING/ FINISHED GRADE FIRE HYDRANT CAST IN PLACE SPEC SQ SS SST ST STA STD STIFF STIL STRUCT SW PUBLIC ADDRESS TANGENT OFFSET AT THE SC TANGENT OFFSET AT THE CS Xs1 Xs2 CONSTRUCTION JOINT FINISH CENTER LINE SOLIARE FLOW LINE FL FLR FOC NEW NORTH (NI) SANITARY SEWER CHAIN LINK STAINLESS STEEL STREET CLEAR FIBER OPTIC CABLE N/A NB NEG NOT APPLICABLE NORTHBOUND TANGENT DISTANCE AT THE SC CORRUGATED METAL PIPE FR FT TANGENT DISTANCE AT THE CS Ys2 CMU CONCRETE MASONRY UNIT STATION, ALIGNMENT FFFT NEGATIVE CONDUIT STANDARD NEUT NIC NO NOM NFUTRAL COUNTER STIFFENER FWY FREEWAY NOT IN CONTRACT TOTAL CENTRAL ANGLE OF THE SPIRALIZED CURVE CENTRAL ANGLE OF CIRCULAR CURVE (Lc) FROM SC TO CS CENTRAL ANGLE OF FIRST CIRCULAR CURVE OF STEEL STRUCTURAL COC CLE ANOUT CENTER ON CENTER NUMBER △ △ c c1 NOMINAL STRUCTURE SWITCH NOTE: COLLIMN NOT TO SCALE SWL SWL COMMUNICATIONS NTS COMPOUND CURVATURE CENTRAL ANGLE OF SECOND CIRCULAR CURVE OF COMPOUND CURVATURE CONC CONCRETE CONNECTION SOUNDWALL GALIGE SEE SCRRA ES2201 AND ES2202-01 GALV GCL GM GND GP GR GSP SIDEWALK GALVANIZED FOR ADDITIONAL HORIZONTAL AND CONST CONT CONSTRUCTION SY SYMM SQUARE YARDS GRADING CONTROL LINE VERTICAL ALIGNMENT ABBREVIATIONS. CONTINUOUS GUIDE MARKER OA OC OD OVERALL SYMMETRICAL COORDINATE ON CENTER GROUND GRADING PLANE θ<sub>s1</sub> CENTRAL ANGLE OF SPIRAL LENGTH LS1 OR SPIRAL ANGLE OF FIRST SPIRAL IN SPIRALIZED CURVE CENTRAL ANGLE OF SPIRAL LENGTH LS2 OR SPIRAL ANGLE OF SECOND SPIRAL IN SPIRALIZED CURVE CENTRAL ANGLE OF COMPOUND SPIRAL OR COMPOUND SPIRAL ANGLE FROM CS TO SC CONTROL POINT OUTSIDE DIAMETER CRV CSP CT CTR CULV CURVE OHD OP GUARDRAIL OVERHEAD CORRUGATED STEEL PIPE θ<sub>s2</sub> OVERPASS GALVANIZED STEEL PIPE COURT OPNG OPENING CENTER OPP OPPOSITE CUI VERT T&B TAN TOP AND BOTTOM CVR CWR TANGENT HOSE BIBB CONTINUOUS WELDED RAIL TAN TBD TC TD TDS TEL TF TO, T/O TOC TOC HC HD HANDICAP TO BE DETERMINED TRACK GEOMETRY - VERTICAL PULL BOX PEDESTRIAN HEAVY DUTY TOP OF CONCRETE HDPE HEX HIGH DENSITY POLY ETHYLENE PERM PERF PERMEARI E HEXAGONAL TRAIN DESTINATION SIGN BEGIN VERTICAL CURVE PERFORATED HANDHOLE TELEPHONE PĞ PGL TRACK FEET TURNOUT PROFILE GRADE LINE HOT MIX ASPHALT CONCRETE SUPERELEVATION IN INCHES POTHOLE TOP OF CURB HOR HORIZONTAL END VERTICAL CURVE HIGH POINT PLATE DELINEATORS HR HS HT HW HANDRAII TOL TOP TOLERANCE DEPTH DETAIL TOP OF PAVEMENT TOP OF RAIL TOP OF SLOPE TOP OF TIE TOP OF WALL TRANSITION PASSENGER NEEDING ASSISTANCE HIGH STRENGTH PNA POINT OF COMPOUND VERTICAL CURVE POINT OF INTERSECTION OF TWO PROFILE TANGENTS POINT ON VERTICAL CURVE PNL TOR, TOS TOT HEIGHT FIXATION POWER POLE PREFORMED PERMEABLE LINE DENSE GRADED ASPHALT HEADWALL DGAC POVC HWY CONCRETE DRAINAGE INLET PERFORATED PLASTIC PIPE TOW TRANS DI PR TRANSITION DIAMETER POUNDS PER SQUARE INCH TS TTB DIAG DIAGONAL PARK BY SPACE MACHINE TELEPHONE TERMINAL BOARD INSIDE DIAMETER UNBALANCED SUPERELEVATION IN INCHES DIMENSION INVERT ELEVATION INCHES VERTICAL CURVE 06/08/07 SCRRA ENGINEERING STANDARDS ARE INTENDED FOR SCRRA APPROVED USES ONL SLRKA ENUMERINO STANDANDS ARE INTENDED FOR SLRKA APPROVED USES ONLY FOR NON-SCRRA APPROVED USES. 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ASSISTANT DIRECTOR, DESIGN

A 04-13-20

REV. DATE

ADDED TS TO ABBREVIATIONS

DESCRIPTION

UserName >> scrrapw11ics01\$ Date Plotted: 3/27/2023 2:31:47 PM

DES. ENG.

900 WILSHIRE BLVD., SUITE 1500, L. A., CA, 90017

**CIVIL & TRACK** 

ES1101

### STATION COMMUNICATIONS **SIGNALS** AGENCIES, ORGANIZATIONS AND CODES TRAIN CONTROL COMMUNICATION PUBLIC ADDRESS PUBLIC ADDRESS SYSTEM PERSONAL DIGITAL ASSISTANT POWER DISTRIBUTION UNIT AMERICAN ASSOCIATION OF STATE HIGH-WAY AND TRANSPORTATION OFFICIALS ACS ADVANCED COMMUNICATION SYSTEM APPROACH TRACK INDICATION AASHTO PAS ADVANCE TRAIN CONTROL SYSTEM ASSOCIATION OF AMERICAN RAILRAODS AMERICAN CONCRETE INSTITUTE PDA PDU AAR ACI BER BIT-ERROR RATE DAX DOWNSTREAM ADJACENT CROSSING PROGRAMMABLE LOGIC CONTROLLER PUBLIC SWITCHING TELEPHONE AMERICANS WITH DISABILITIES ACT NATIONAL RAILROAD PASSENGER BIT ERROR RATE AMTRAK BAND PASS FILTER NETWORK PROTECTED TERMINAL BLOCKS CORPORATION C CC CCTV BS EMS EMERGENCY ALARM CONTROL BASE STATION ANSI AMERICAN NATIONAL STANDARDS COMMUNICATIONS CABINET CIRCUITS CLOSED CIRCUIT TELEVISION-VIDEO SECURITY AMERICAN PUBLIC WORKS ASSOCIATION AMERICAN RAILWAY ENGINEERING PRIVATE VIRTUAL CIRCUIT APWA CYCLIC REDUNDANCY CHECKS CHANNEL SERVICE UNIT CENTRALIZED TRAIN CONTROL CONTINUOS-TONE-CODED AREA COMMUNICATIONS EQUIPMENT ROOM CER CIC CSU ASSOCIATION COMMUNICATIONS INTERFACE FLASHER RELAY AREMA AMERICAN RAILWAY ENGINEERING AND CABINETS CTCSS MAINTENANCE OF WAY ASSOCIATION AMERICAN SOCIETY FOR TESTING AND CID CIR CIS CS CARD INTERFACE DEVICE CIRCUIT QUALITY OF SERVICE 005 ASTM CUSTOMER INFORMATION SYSTEM COMMUNICATION SHELTER GATE CONTROL RELAY ATT ATLANTIC TELEPHONE AND TELEGRAPH GD GE GPR GATE DOWN RESILIENT PACKET RING GREEN SIGNAL LAMP GATE REPEATER RELAY CSMH COMMUNICATIONS SYSTEM RTU REMOTE TERMINAL UNIT AMERICAN WIRE GAUGE AMERICAN WELDING SOCIETY AWG MANHOLE (COMMUNICATIONS) (GATE IN UP POSITION) AWS CST COMBINED SYSTEM TRUNK dBm DECIBEL REFERENCED TO A MILLIWATT DC DDS DSO DISTRIBUTION CABINET BNSF BURLINGTON NORTHERN SANTA FE DECIBEL REFERENCED TO A WATT DEDICATED DIGITAL SERVICE SINGLE DATA CHANNEL OF STATION COMMUNICATION CABINET LOS LOSS OF SHUNT DBU DED DIAL BACKUP CALIFORNIA ACCESS COMPLIANCE SOURCE CALCAS SMALL FORM (PLUGGABLE) CROSS-CONNECT DRAGGING EQUIPMENT DETECTOR 56-65 Kbps CALIFORNIA DISABLED ACCESSIBILITY CALDAG DATA SERVICE UNIT SERVICE LEVEL AGREEMENT SINGLE MODE SLA SM GUIDEROOK NORTHWARD SIGNAL REQUEST NORTHWARD SIGNAL CLEAR CALTRANS CALIFORNIA DEPARTMENT OF SINGLE MODE SINGLE-MODE FIBER OPTIC CABLE SIMPLE NETWORK MANAGEMENT TRANSPORTATION CALIFORNIA CODE OF REGULATIONS CALIFORNIA ELECTRICAL CODE CENTRAL MAINTENANCE FACILITY NGK INDICATION CCR CEC CMF EDC E&M SNMP ELECTRICAL DISTRIBUTION CENTER EAR AND MOUTH N.ISP DUAL SELECTOR LEVER ERP EFFECTIVE RADIATED POWER PROTOCOL NORMAL SWITCH INDICATION NORMAL SWITCH POINT POSITION NORMAL SWITCH CONTROL RELAY SYNCHRONOUS OPTICAL NETWORK SONET E-LAN EOS ETHERNET LAN ETHERNET OVER SONET SWITCHED POWER DISTRIBUTION UNIT NWP CPUC CALIFORNIA PUBLIC UTILITIES COMMISSION FACTORY ACCEPTANCE TEST ETHERNET VIRTUAL CIRCUIT ETHERNET VIRTUAL CIRCUIT ETHERNET VIRTUAL PRIVATE LINE ETHERNET VIRTUAL PRIVATE LAN EPL EVC NORMAL SWITCH REQUEST FDP FEC FIBER DISTRIBUTION PANEL FORWARD ERROR CONNECTION ΕIΑ ELECTRONICS INDUSTRIES ALLIANCE FREQUENCY MODULATION FIBER OPTIC FIBER OPTIC PATCH PANEL FRAME RELAY FМ FEDERAL AVIATION ADMINISTRATION SINGLE DATA CHANNEL OF 1.544 Mbps A MULTIPLEXING DEVICE BY WHICH A SINGLE T1 CHANNEL IS UTILIZED TO PROVIDE DSO CHANNELS EVPLAN FΟ FEDERAL COMMUNICATIONS COMMISSION FEDERAL RAILROAD ADMINISTRATION TIMUX FÖPP FR RED SIGNAL LAMP FIBER DISTRIBUTION PANEL FIBER OPTIC FIBER OPTIC CABLE FRAME PER SECOND FDP REVERSE SWITCH INDICATION REVERSE SWITCH POINT POSTION RWK FO FOC FPS LAUS LOS ANGELES UNION STATION RWP TDM TIME DIVISION MULTIPLEXING SWITCH CONTROL RELAY REVERSE SWITCH REQUEST MOC METROLINK OPERATIONS CENTER RWS FSE FIBER SLACK ENCLOSURE GMSK GPS GAUSSIAN MINIMUM SHIFT KEYING MUTCD MANUAL ON UNIFORM TRAFFIC CONTROL GLOBAL POSITIONING SYSTEM 1000 MBPS SWITCH EXPANSION PORTS DEVICES **UP-LINK** DEVICES NATIONAL ELECTRICAL CODE NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION NATIONAL FIRE PROTECTION ASSOCIATION NOT IN CONTRACT GBIC GBPS GIGE GND GRP GIGABIT INTERFACE CONVERTER UPS UPSR UNINTERRUPTIBLE POWER SUPPLY UNIDIRECTIONAL PATH SWITCH RING SIGNAL EQUIPMENT HOUSE NEMA GIGABITS PER SECOND GIGABIT ETHERNET SOUTHWARD SIGNAL REQUEST SOUTHWARD SIGNAL CLEAR UNSHIELDED TWISTED PAIR ISDN INTERGRATED SERVICES DIGITAL NETWORK GROUND GROUND GLASS REINFORCED PLASTIC ROD GALVANIZED RIGID STEEL GRAPHICAL USER INTERFACE NFPA NIC GRS KEYBOARD OPERATOR VIRTUAL CONCATENATION PCMCIA PERSONAL COMPUTER MEMORY CARD TEK SIGNAL IN TIME INDICATION KEYBOARD VIDEO MOUSE GU VIRTUAL LOCAL AREA NETWORK VIRTUAL PRIVATE NETWORK KVM VLAN INTERNATIONAL ASSOCIATION OS TRACK INDICATION TON PER OPERATIVE BRAKE TK TOB SOUTHERN CALIFORNIA EDISON SOUTHERN CALIFORNIA REGIONAL RAIL INTERFACE CONVERTER INTERNET PROTOCOL MULTIPLE ADDRESSING SCHEME MAS AUTHORITY (METROLINK) MEDIA CONVERTER SPR SPTC SPRINT NEXTEL UAX UPSTREAM ADJACENT CROSSING MDF MAIN DISTRIBUTION FRAME SOUTHERN PACIFIC TRANSPORTATION KILO BITS PER SECOND WIDE AREA NETWORK WIRELESS APPLICATION PROTOCOL Kbps WAN COMPANY WAYSIDE COMMUNICATIONS TELECOMMUNICATIONS INDUSTRY ASSOC SWITCH CONTROL RELAY BACK TIA NETWORK INTERFACE CARD LOCAL AREA NETWORK LAN LCD LDF LID MANAGER CHECK NMS NETWORK MANAGEMENT SYSTEM LIQUID CRYSTAL DISPLAY UNIFORM BUILDING CODE URC LOCAL DISTRIBUTION FRAME UNDERWRITERS LABORATORIES UL UPC LOCAL INJECTION AND DETECTION UNIFORM PLUMBING CODE CROSSING CONTROL RELAY RADIO FREQUENCY UNION PACIFIC RAILROAD LPM LOCAL PAGING MICROPHONE RX RECEIVE ΥE YELLOW SIGNAL LAMP SPKR SINAD MEGA BITS PER SECOND Mbps SIGNAL TO NOISE AND DISTORTION MDF MAIN DISTRIBUTION FRAME MEDIUM DENSITY POLYETHYLENE SERVER MDPE (CABLE SHEATH) METRO ETHERNET FORUM MEF TC/C TCT TRAIN CONTROLS AND COMMUNICATION TRAIN CONTROL TRENCH MULTI-MODE FIBER OPTIC CABLE MMFOC MAIN POINT OF ENTERY TX MILLISECOND MSPP MULTI-SERVICE PROVISIONING PLATFORM UHF ULTRA HIGH FREQUENCY VERY HIGH FREQUENCY NETWORK INTERFACE DEVICE NETWORK MEDIA PLAYER VITAL HARMON LOGIC CONTROLLER VHLC NETWORK MANAGEMENT SYSTEM NMS NTP NETWORK TIME PROTOCOL NVR NETWORK VIDEO RECORDER

					DRAWN BY: A. CARLOS DATE: 06/08/07	
					4	FOR NON-SCRRA APPROVED USES:  SCRRA SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF THE DATA OR INFORMATION CONTAINED HERFIN. THE SELECTION AND USE OF TH
					ND Juic	STANDARDS IS THE SOLE RESPONSIBILITY OF THE USER AND SHOULD NOT BE U
					PRINCIPAL ENGINEER, DESIGN & STANDARDS	WITHOUT CONSULTING A REGISTERED PROFESSIONAL ENGINEER. ALL WARRANTIES
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Α	11-01-13	REVISED GENERAL ABBREVIATIONS	AC	NDP	_ Clarate Ch	USE. NO PART OF THESE STANDARDS SHOULD BE REPRODUCED OR DISTRIBUTED ANY FORM OR BY ANY MEANS WITHOUT THE PRIOR WRITTEN PERMISSION OF SC
REV.	DATE	DESCRIPTION	DES.	ENG.	ASSISTANT DIRECTOR, DESIGN	ALL RIGHTS RESERVED.

## METROLINK

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY 900 WILSHIRE BLVD., SUITE 1500, L. A., CA. 90017

ENGINEERING	STANDARDS
GENERAL ABB	REVIATIONS

SIGNAL, COMMUNICATIONS AND

STATION COMMUNICATIONS

SCALE:

NTS

REVISION SHEET

A 1 OF 1

CADD FILE:
ES1102

OPERATION CONTROL CENTER

OUTSIDE PLANT

OCC OSP

### **ARCHITECTURAL ELECTRICAL MECHANICAL** PRECAST CONCRETE ALTERNATING CURRENT NORMALLY CLOSED ACOUS ACOUSTICAL LED LIGHT EMITTING DIODE ASA ACOUSTICAL SOUND ALUMINUM' PCC PLAM PORTLAND CEMENT CONCRETE PLASTIC LAMINATE AF AFR AMPERE FUSE AMPERE FRAME ATTENUATOR AIR COMPRESSOR LV NORMALLY OPEN ABOVE FINISHED FLOOR AGC AMP AUTOMATIC GAIN CONTROL PLYWD PTD AIR CONDITIONING UNIT PLYWOOD AMPERE MAGNETIC OUTSIDE AIR PAPER TOWEL DISPENSER ANNUCIATOR AIR FILTER/AIR FOIL MC CONTACTOR COIL METALLIC CONDUIT OAD OUTSIDE AIR DAMPER BOARD BD AMPERE SENSOR AMPERE SWITCH AIR HANDLING UNIT ACCESS PANEL AS ASW BITUM BITUMINOUS BLOCKING MAIN DISTRIBUTION PANEL BLKG AIR PRESSURE DROP AUTOMATIC SPRINKLER RISER AUX ASSY AUXII IARY APD ASR MAIN GROUNDING BUSS-BAR MOTOR STARTER MGR RB RD RESIL RM RESILIENT BASE ROOF DRAIN PD PUMP DISCHARGE ASSEMBLY PDN PLANTER DRAIN AT ATS AMPERE TRIP EMPTY CONDUIT МТ PH PHASE RESILIENT AUTOMATIC TRANSFER POST INDICATOR VALVE ROOM SWITCH AUTOMATIC VEHICLE CAB CER CABINET PRESSURE REDUCING VALVE PRV RWL RAIN WATER LEADER AVI CERAMIC BD BDD BFP BFV BALANCING DAMPER BACK DRAFT DAMPER PS POSITION SWITCH IDENTIFICATION CAST IRON NON FUSED CAST IRON PIPE NONMETALLIC CONDUIT NMC BACKFLOW PREVENTER BUTTERFLY VALVE CLG CEILING NEMPLATE SC SCD SDT SND SNR SPKR SSK STOR SOLID CORE SEAT COVER DISPENSER CLKG CORR CT CAULKING RETURN AIR RETURN AIR DAMPER CORRIDOR SMOKE DETECTOR STATIC DISSIPATE TILE FLOOR RAD CERAMIC TILE CA CC CEG CG COND ČŤSK COMPRESSED AIR COUNTERSUNK BARE COPPER WIRE RADIANT HEATER RH RL RS RV SANITARY NAPKIN DISPENSER POWER CABLE COOLING COIL REFRIGERANT LIQUID REFRIGERANT SUCTION ROOF VENTILATOR SANITARY NAPKIN RECEPTACLE CEILING EXHAUST GRILLE CEILING GRILLE PCU PE PEC POWER CONDITIONING UNIT SPEAKER PHOTOEL ECTRIC SERVICE SINK STORAGE PHOTOELECTRIC CELL CONDENSATE DRINKING FOUNTAIN DF PH POS PT PHASE POSITIVE CONDENSING UNIT DISPENSER CU SUSPENDED ČV CW DO DR DOOR OPENING DOOR CHARGE COUPLED DEVICE CHASSIS GROUNDING BUS-BAR POTENTIAL TRANSFORMER CCD CGB COLD WATER SA SANT SUPPLY AIR SANITARY CHILLED WATER RETURN CHILLED WATER SUPPLY DOWNSPOUT DS DSP CWS DRY STANDPIPE SOUND ATTENUATOR SELF CONTAINED AIR SAR SCAC CURRENT LIMITING FUSE RES RESISTOR TOILET PAPER DISPENSER CLF TPD RIGID GALVANIZED STEEL REMOTE POWER CENTER RIGID STEEL CONDUIT C/O COMM CONDUIT ONLY COMMUNICATIONS CONDITIONER SCHP SDP SF SELF CONTAINED HEAT PUMP CONDUCTOR RSC **ENCLOSURE** UNFINISHED DRY BULB DUCT EXHAUST GRILLE DIRECT EXPANSION **ENCL** UNF UR DB DEG SPLITTER DAMPER CNTL CP CPT CONTROL ESCL EXPD ESCALATOR URINAL SUPPLY FAN STATIC PRESSURE WATER CONTROL PANEL **EXPOSED** DX CONTROL POWER TRANSFER EMERGENCY SHOWER/ STC SUPERVISORY TERMINATION GAUGE SUMP PUMP CONTACT RAIL EYE WASH VINYL COMPOSITION TILE SP CR CRI CONTROL RELAY SV SOLENOID VALVE COLOR RENDENING INDEX EA EAD EAT EF EFF ESP EXHAUST AIR EXHAUST AIR DAMPER SWBD PVC COATED RIGID STEEL CONDUIT **SWGR** SWITCHGEAR ENTERING AIR TEMPERATURE CS CT CTB WATER CLOSET FIRE ALARM CONTROL PANEL FLOOR CLEAN OUT WC TEMPERATURE AND PRESSURE RELIEF VALVE TEMPERATURE FACP EXHAUST FAN T&P CURRENT TRANSFORMER FCO COMPUTER TERMINAL BOARD EXTERNAL STATIC PRESSURE ELECTRIC UNIT HEATER WET STAND PIPE TEMP TG THR TSP TV TIME CLOCK TIME DELAY RELAY TELECOMMUNICATIONS FD FDC FLOOR DRAIN FIRE DEPARTMENT ĒŪH TRANSFER GRILLE TOTAL HEAT REJECTION TOTAL STATIC PRESSURE TDR TGB EXTR EXTRACTER FIRE EXTINGUISHER GROUNDING BUSS-BAR THERMOSTAT TURNING VANE FIRE HOSE CABINET TLK TMGB FC FCD FLA FLEX FMN TELCOMMUNICATIONS MAIN FORWARD CURVE FLUORESCENT FACE OF FINISH FACE OF STUDS FIREPROOF DIMMER DIRECT CURRENT **FLUOR** GROUNDING BUSS-BAR FLOW CONTROL DEVICE FOF FOS FPRF TMS THERMAL FIT MARKER SYSTEM FULL LOAD AMPERES FLEXIBLE UNDER CUT UC UH UNIT HEATER DISTRIBUTION PANEL FORCE MAIN DIGITAL SIGNAL PROCESSING FLOOR SINK **FURRING**

		EMI EMT	ELECTROMAGNETIC INTERFACE ELECTRICAL METALLIC	UH	UNIT HEATER	GPM GR	GALLONS PER MINUTE GRILLE	VEL VEL VB	VACUUM BREAKER VOLUME DAMPER VELOCITY VENT THROUGH ROOF
			TUBING	V	VOLT	GV	GATE VALVE	VIR	VENT THROUGH ROUP
GL GYF GYF		EPF ETM	EXPLOSION PROOF ELAPSED TIME METER	VM VPF VS	VOLT METER VAPOR PROOF VOLTIMETER SWITCH	HC HD	HEATING COIL HEAD HOPPER DRAIN	WST WB WCO	WASTE WET BULB WALL CLEAN OUT
HDV HM	VE HARDWARE HOLLOW METAL	FC FDR FS FVNR	FRAMMING CHANNEL FEEDER FLOW SWITCH FULL VOLTAGE	W WHD	WATT WATT-HOUR DEMAND METER	HDN HP HSC HVA	HOPPER DRAIN HORSEPOWER/HEAT PUMP HOSE STORAGE CABINET HOSE VALVE, ANGLE GLOBE TYPE	WEG WG WH WHA	WALL EXHAUST GRILLE WATER GAUGE WATER HEATER WATER HAMMER ARRESTOR
INC	AND INCANDESCENT		NON-REVERSING	XFMR	TRANSFORMER	HVS HWR	HOSE VALVE, STRAIGHTWAY GATE TYPE HOT WATER RETURN	WL WSP	WALL LOUVER WET STANDPIPE
JAN	JANITOR	GFI GRS GTS	GROUND FAULT INTERRUPTER GALVANIZED RIGID STEEL GROUND TEXT STATION			HWS	HOT WATER SUPPLY		

LOCKER	HOA HAND-OFF-AUTO SWITCH HPS HIGH PRESSURE SODIUM HV HIGH VOLTAGE	LAT LCP	LEAVING AIR TEMPERATURE LOCAL CONTROL PANEL
MASONRY OPENING MOP SINK		LR	LONG RADIUS
MOUNTED	IC INTERRUPTING CAPACITY		
MULLION		14.417	MANULAL AID VENIT

HIGH INTENSITY DISCHARGE

OVERFLOW DRAIN	KVA KW	KILOVAR KILOWATT		MAV MCC MCP MD	MANUAL AIR VENI MOTOR CONTROL CENTER MOTOR CONTROL PANEL MOTOR OPERATED DAMPER
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В	04-13-20	REMOVED TS DEFINITION	AC	JMM
Α	11-01-13	REVISED GENERAL ABBREVIATIONS	AC	NDP
REV.	DATE	DESCRIPTION	DES.	ENG.

LAV LKR

MSK MTD MUL

OFD

LAMINATE

LAVATORY

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# **METROLINK**

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ENGINEERING STANDARDS	STANDARD
	SCALE:
GENERAL ABBREVIATIONS  ARCHTECTURAL & ENGINEERING	REVISION B

IRON PIPE SIZE

INDUSTRIAL WASTE

1103

10-

### **ABBREVIATIONS**

OLNENAL							
&	AND	COMM	COMMUNICATIONS	FG	FINISHED GRADE	MAINT	MAINTENANCE
<u>@</u>	AT	COMM R/W	COMMISSION RIGHT OF WAY	FΗ	FIRE HYDRANT	MANG	MANGANESE
ĀB	AGGREGATE BASE	CONC	CONCRETE	FIN	FINISH, FINISHED	MAX	MAXIMUM
ABM	AIR-BLOWN MORTAR	CONN	CONCRETE CONNECTION	FL	FLOW LINE	M/C	MILL CUT
ABN	ABANDON	CONST	CONSTRUCTION	FLR	FLOOR	MECH	MECHANICAL
ABUT	ABUTMENT	CONT	CONTINUOUS	FOC	FIBER OPTIC CABLE	MED	MEDIAN, MEDIUM
		CONT	CONTINUOUS CONTRACTOR	r O C		MED	MEDIAN, MEDIUM
AC	ASPHALTIC CONCRETE	CONTR	CONTRACTOR	FR	FRAME	MEM	MEMBRANE
AD .	AREA DRAIN	COORD	COORDINATE	FT	FOOT, FEET	MET	METAL
ADJ	ADJUSTABLE	COS	COSINE	FTG	FOOTING	MFG	MANUFACTURER
AHD	AHE AD	CP	CONTROL POINT, CLEARANCE POINT	FW	FIELD WELD	MH	MANHOLE
ALIGN	ALIGNMENT	CPUC	CALIFORNIA PUBLIC UTILITIES COMMISSION	FWY	FREEWAY	MIC	MICROPHONE
AL T	ALTERNATE	CRV	CURVE			MIN	MINIMUM
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	CSP	CORRUGATED STEEL PIPE	G A	GAUGE	MISC	MISCELLANEOUS
AOBE	AS ORDERED BY ENGINEER	ĊŤ	COURT	GALV	GALVANIZED	ML	MAINLINE
APPROX	APPROXIMATE, APPROXIMATELY	CTC	CENTER TO CENTER, CENTRALIZED	GCL	GRADING CONTROL LINE	MOD	MODIFIED
ARCH	ARCHITECTURAL	0.0	TRAFFIC CONTROL	GM	GUIDE MARKER	MON	MONUMENT
AREA	AMERICAN RAILWAY ENGINEERING ASSOCIATION	CTR	CENTER	GND	GROUND	MOW	MAINTENANCE OF WAY
AREMA	AMERICAN RAILWAY ENGINEERING &	CULV	CULVERT	GP	GRADING PLANE	MP	MILE POST
ANLWA	MAINTENANCE OF WAY ASSOCIATION	CVD	CURVED	GR	GUARDRAIL/GRADE	MPH	MILES PER HOUR
	MAINTENANCE OF WAT ASSOCIATION	CVR	COVER	GSP	GALVANIZED STEEL PIPE	MSL	MEAN SEA LEVEL
A / D	AC DECILIDED		CONTINUOUSLY WELDED DAIL	634	GALVANIZED STEEL PIPE	MISL	MATERIAL
A/R	AS REQUIRED	CWR	CONTINUOUSLY WELDED RAIL	LLD	HOCE DIDD	MTL	MATERIAL
AS	AGGREGATE SUBBASE	CY	CUBIC YARD	HB	HOSE BIBB	4113	N.5.11
ASPH	ASPHALT, ASPHALT CONCRETE PAVING	_		HC	HANDICAP, HANDICAPPED	(N)	NE W_
ASSY	ASSEMBLY	Dс	DEGREE OF CURVE	HD	HEAVY DUTY	N	NORTH
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	DEL	DELINEATORS	HDPE	HIGH DENSITY POLY ETHYLENE	N/A	NOT APPLICABLE
ATR	ABOVE TOP OF RAIL	DEP	DEPTH	HEX	HEXAGONAL	NB	NORTHBOUND
AVE	AVENUE	DET	DETAIL	HF	HEEL OF FROG, HEAD FREE RAIL	NEG	NEGATIVE
AVM	ADD VALUE MACHINE	DFX	DIRECT FIXATION	HH	HANDHOLE	NEUT	NEUTRAL
AWWA	AMERICAN WATER WORKS ASSOCIATION	DGAC	DENSE GRADED ASPHALT CONCRETE	HI	HIGH	NIC	NOT IN CONTRACT
		DI	DROP INLET, DRAINAGE INLET	HL	HEEL LENGTH	NO, #	NUMBER
BAA	BOARDING ASSISTANCE AREA	DIA, Ø	DIAMETER	HMAC	HOT MIX ASPHALT CONCRETE	NOM	NOMINAL
BB	BATTERY BOX	DIAG	DIAGONAL	HORIZ	HORIZONTAL	NTS	NOT TO SCALE
BBR	BEGINNING OF BRIDGE	DIM	DIMENSION	HP	HEEL PLATE, HIGH POINT	1113	NOT TO SOME
BCR	BEGIN CURB RETURN	DIR	DIRECTION	HR	HANDRAIL	OA	OVERALL
BEG	DECIM COND KLIOKN	DIST	DISTRIBUTION	HS	HANDINAIL	0 C	ON CENTER
	BEGIN, BEGINNING			ПЭ	HEEL OF FROG, HIGH STRENGTH	00	ODANCE COUNTY TRANSPORTATION AUTHORITY
BK	BACK	DN	DOWN	HST	HOLLOW STEEL TIE	OCTA	ORANGE COUNTY TRANSPORTATION AUTHORITY
BKF	BACKFILL	DR	DRIVE	HT	HEIGHT, HIGH TENSILE, HAND THROW	OD	OUTSIDE DIAMETER
BL	BASELINE	DRWY	DRIVEWAY	HW	HEADWALL	OHD	OVERHEAD
BLDG	BUILDING	DTR	DETOUR	HWY	HIGHWAY	0P	OVERPASS
BLLBRD	BILLBOARD	DWG	DRAWING	ΗZ	HERTZ	OPNG	OPENING
BLST	BALLAST					OPP	OPPOSITE
BLVD	BOULEVARD	(E)	EXISTING	ID	INSIDE DIAMETER	OTM	OTHER TRACK MATERIAL
BM	BENCHMARK	E	EAST	I.D.	IDENTIFICATION	ΟZ	OUNCE
BNSF	BURLINGTON NORTHERN SANTA FE RAILWAY	EΑ	EACH	ΙE	INVERT ELEVATION		
BOC	BOTTOM OF CURB	ĒВ	EASTBOUND	ĪĴ	INSULATED JOINT	PB	PULL BOX
BOS	BOTTOM OF SLOPE	EBR	END OF BRIDGE	ÍŇ	INCH(ES)	PED	PEDESTRIAN
BOT	BOTTOM	ECR	END CURB RETURN	INSUL	INSULATION	PERF	PERFORATED
BOW	BOTTOM OF WALL	EE	FACH END	INT	INTERIOR	PERM	PERMEABLE, PERMANENT
BR BR	BRIDGE, BLUE ROD	ĒĒ	EACH END EACH FACE	INV	INVERT	PF	POINT OF FROG
DIX	DRIDGE, DECE ROD	EJ	EXPANSION JOINT	IR	INSIDE RADIUS	PG	PAGE
C/W	COMES WITH	ELEC	ELECTRICAL	111	INSIDE NADIOS	PGL	PROFILE GRADE LINE
CAB	CABINET		ELEVATION	JB	JUNCTION BOX	PH	POTHOLE
		EL					POINT OF INTERCECTION OF THRNOHT
CALP	CORRUGATED ALUMINUM PIPE	ELEV	ELEVATOR	JJ JT	JOINTED RAIL	PITO	POINT OF INTERSECTION OF TURNOUT
CAP	CAPACITY	EMB	EMBANKMENT	JI	JOINT	PL	PLATE
CB	CATCH BASIN	EMER	EMERGENCY	1 40500	LOC ANOTICE COUNTY FLOOR	P/L	PROPERTY LINE
CEM	CEMENT	ENGR	ENGINEER, ENGINEERING	LACFCD	LOS ANGELES COUNTY FLOOD	PNA	PASSENGER NEEDING ASSISTANCE
CF	CUBIC FEET	EP	EDGE OF PAVEMENT		CONTROL DISTRICT	PNL	PANEL
ÇG	CENTER OF GRAVITY	EQ	EQUAL, EQUATION	LACMTA	LOS ANGELES COUNTY METROPOLITAN	PP	POWER POLE
CI	CAST IRON	EQUIP	EQUIPMENT		TRANSPORTATION AUTHORITY	PPL	PREFORMED PERMEABLE LINE
CIP	CAST IN PLACE	ES	EDGE OF SHOULDER, ENGINEERING STANDARD	LAUS	LOS ANGELES UNION STATION	PPP	PERFORATED PLASTIC PIPE
CJ	CONSTRUCTION JOINT	ESMT	EASEMENT	LB, LBS	POUND, POUNDS	PR	PAIR
				LF	LINEAL FEET	PROP	PROPOSED
CL,Y	CENTERLINE	ET	END OF TRACK	LI			
CL,¥ CLK	CENTERLINE CHAIN LINK		END OF TRACK EDGE OF TRAVELED WAY	LG	LONG	PS	POINT OF SWITCH
CLK	CENTERLINE CHAIN LINK	ΕT	EDGE OF TRAVELED WAY	ĹĠ	LONG		POINT OF SWITCH
	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE	E T E T W	EDGE OF TRAVELED WAY END WALL EXISTING			PS	
CLK CLR CMP	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE	E T E T W E W E X	EDGE OF TRAVELED WAY END WALL EXISTING	LG LGT LGTH	LONG LIGHT LENGTH	PS PSI PSM	POINT OF SWITCH POUNDS PER SQUARE INCH
CLK CLR CMP CMPA	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH	ET ETW EW EX EXC	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION	LG LGT LGTH LH	LONG LIGHT LENGTH LEFT HAND	PS PSI PSM PT	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT
CLK CLR CMP CMPA CMU	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE CONCRETE MASONRY UNIT	E T E T W E W E X E X C E X P	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION	LG LGT LGTH LH LN	LONG LIGHT LENGTH LEFT HAND LANE	PS PSI PSM PT PTM	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE
CLK CLR CMP CMPA CMU COMPJT	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT	ET ETW EW EX EXC	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION	LG LGT LGTH LH LN LOC	LONG LIGHT LENGTH LEFT HAND LANE LOCATION	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE
CLK CLR CMP CMPA CMU COMPJT CND	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT CONDUIT	ET ETW EW EX EXC EXP EXT	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR	LG LGT LGTH LH LN LOC LOC	LONG LIGHT LENGTH LEFT HAND LANE LOCATION LAYOUT LINE	PS PSI PSM PT PTM	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE
CLK CLR CMP CMPA CMU COMPJT CND CNTR	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT CONDUIT COUNTER	ET ETW EW EX EXC EXP EXT	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR  FUTURE	LG LGT LGTH LH LN LOC LOC LOL	LONG LIGHT LENGTH LEFT HAND LANE LOCATION LAYOUT LINE LOW POINT	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE
CLK CLR CMP CMPA CMU COMPJT CND CNTR CNTRLR	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT COUNTER CONTROLLER	ET ETW EW EX EXC EXP EXT (F) FC	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR  FUTURE FACE OF CONCRETE	LG LGT LGTH LH LN LOC LOC LOL LP LPL	LONG LIGHT LENGTH LEFT HAND LANE LOCATION LAYOUT LINE LOW POINT LIGHT POLE	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE
CLK CLR CMP CMPA CMU COMPJT CND CNTR CNTR CNTRLR CO	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT CONDUIT COUNTER CONTROLLER CLEANOUT	ET ETW EW EX EXC EXP EXT (F) FC FDN	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR  FUTURE FACE OF CONCRETE FOUNDATION	LG LGT LGTH LH LN LOC LOC LP LP LPL	LONG LIGHT LENGTH LEFT HAND LANE LOCATION LAYOUT LINE LOW POINT LIGHT POLE LEFT	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE
CLK CLR CMP CMPA CMU COMPJT CND CNTR CNTRLR CO COC	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT CONDUIT COUNTER CONTROLLER CLEANOUT CENTER ON CENTER	ET ETW EW EX EXC EXP EXT (F) FC	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR  FUTURE FACE OF CONCRETE	LG LGT LGTH LH LN LOC LOL LP LP LPL LT	LONG LIGHT LENGTH LENGTH LEFT HAND LANE LOCATION LAYOUT LINE LOW POINT LIGHT POLE LEFT LIGHTING	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE
CLK CLR CMP CMPA CMU COMPJT CND CNTR CNTR CNTRLR CO	CENTERLINE CHAIN LINK CLEAR, CLEARANCE CORRUGATED METAL PIPE CORRUGATED METAL PIPE ARCH CONCRETE MASONRY UNIT COMPROMISE JOINT CONDUIT COUNTER CONTROLLER CLEANOUT	ET ETW EW EX EXC EXP EXT (F) FC FDN	EDGE OF TRAVELED WAY END WALL EXISTING EXCAVATION EXPANSION EXTERIOR  FUTURE FACE OF CONCRETE FOUNDATION	LG LGT LGTH LH LN LOC LOC LP LP LPL	LONG LIGHT LENGTH LEFT HAND LANE LOCATION LAYOUT LINE LOW POINT LIGHT POLE LEFT	PS PSI PSM PT PTM PVC	POINT OF SWITCH POUNDS PER SQUARE INCH PARK BY SPACE MACHINE POINT PARKING TICKET MACHINE POLYVINYL CHLORIDE

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Α	10-02-20	REVISED ABBREVIATIONS	AC	JMM	l
REV.	DATE	DESCRIPTION	DES.	ENG.	

**GENERAL** 

HDR DATE: 03/31/2011

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# METROLINK

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY 900 WILSHIRE BLVD., SUITE 1500, L. A., CA. 90017

ENGINEERING STANDARDS

STANDARD STANDARD

SCALE:

NONE

STANDARD ABBREVIATIONS

STANDARD ABBREVIATIONS

STANDARD ABBREVIATIONS

ES1201-01

### **GENERAL**

### **ABBRE VIATIONS**

QTY	QUANTITY	Ţ&B	TOP AND BOTTOM
(R) R BM RRCCCT YT RDCCT YT RDCCT YT RRELLQV RRELLQV RRELLQV RRELLQV RRCRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRRR	RELOCATED RADIUS RAIL BOUND MANGANESE REINFORCED CONCRETE REINFORCED CONCRETE PIPE RIVERSIDE COUNTY TRANSPORTATION COMMISSION ROAD ROADWAY RECTANGULAR REFERENCE REINFORCED RELOCATE(D) REQUIRED REVISION, REVISED RIGHT HAND ROUGH OPENING REFERENCE POINT RAILROAD RIGHT ROUTE ROADWAY WORKER-IN-CHARGE RIGHT OF WAY	TAN TBD TBR TC TD TDS TEL TF THDS THK TK TC TOC TOC TOC TOC TOC TOC TOC TOC TOC	TANGENT TO BE DETERMINED TO BE REMOVED TRACK CENTER TRENCH DRAIN TRAIN DESTINATION SIGN TELEPHONE TRACK FEET THREADS THICKNESS TRACK TOE LENGTH TURNOUT TOP OF CURB TOP OF GRATE TOLERANCE TOP OF PAVEMENT TOP OF SLOPE TOP OF TIE TOP OF WALL TOP OF RAIL TRANSITION TELEPHONE TERMINAL BOARD TICKET VENDING DEVICE
S AE T A SBB HD A SCCRR SD MNG SDDMG SDERV SERV SF SHT SIM SIN SL	SOUTH SOCIETY OF AUTOMOBILE ENGINEER SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY SOUTHBOUND SCHEDULE SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY STORM DRAIN STORM DRAIN STORM DRAIN MANHOLE SIDING SECTION SERVICE SQUARE FEET SUBGRADE SHOULDER SHEET SIMILAR SINE SLOPE	UB UD UG UON UP UPRR UR UTIL VAR VCTC VERT VMB VMS	TYPICAL  UTILITY BOX UNDERDRAIN UNDERGROUND UNLESS OTHERWISE NOTED UNDERPASS UNION PACIFIC RAILROAD UNIFORM RISER UTILITY  VARIES VENTURA COUNTY TRANSPORTATION COMMISSION VERTICAL VISUAL MESSAGE BOARD VISUAL MESSAGE SIGN
SLPA SMCN SPQ SSST STTA STTIFF STTRLU STTRLU STTRLU SWK SWY SYMM	SIGNAGE/LIGHTING/PUBLIC ADDRESS SWIVEL MOVEABLE JOINT SERIAL NUMBER SPECIFICATION SQUARE SANITARY SEWER STAINLESS STEEL STREET STATION STANDARD STIFFENER STEEL STRAIGHT STRUCTURAL STRUCTURE SWITCH SIDEWALK SQUARE YARD(S) SYMMETRICAL	W W/O WB WI WPF WPF WRT WSM WT WWF WWM XING XOVER, X/O YD •20POTO RH •10HOTO LH •/-, ±	WEST WITH WITH WITHOUT WESTBOUND WROUGHT IRON WORK POINT WATERPROOF WITH RESPECT TO WELDED SPRING MANGANESE WEIGHT WELDED WIRE FABRIC WELDED WIRE MESH CROSSING CROSSOVER YARD(S) NUMBER 20 POWER OPERATED TURNOUT - RIGHT HAND NUMBER 10 HAND OPERATED TURNOUT - LEFT HAND PLUS OR MINUS, APPROXIMATELY

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Α	10-02-20	REVISED ABBREVIATIONS	AC	JMM	ı
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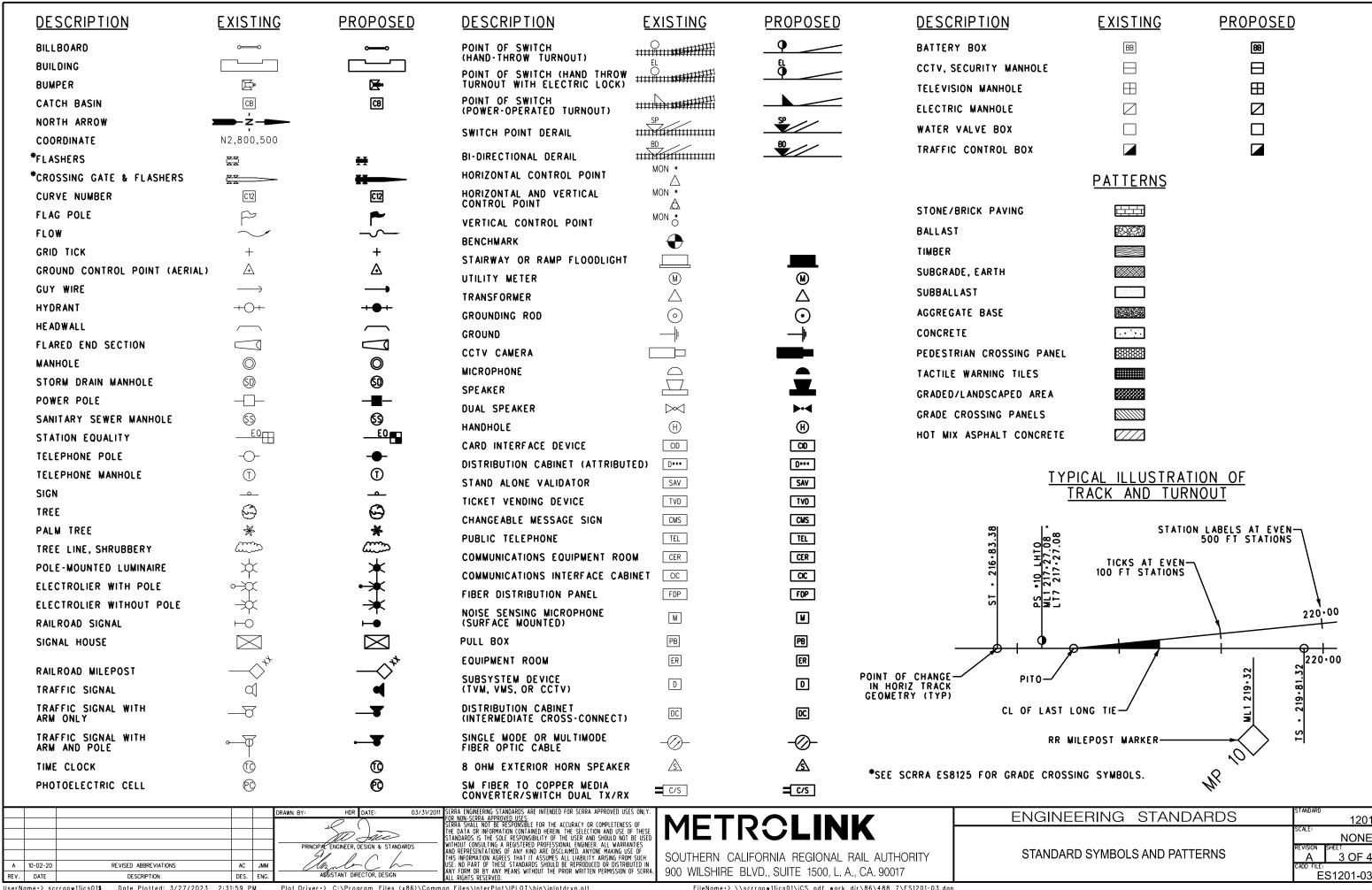
# **METROLINK**

SOUTHERN CALIFORNIA REGIONAL RAIL AUTHORITY 900 WILSHIRE BLVD., SUITE 1500, L. A., CA. 90017

ENGINEERING ST	TANDARDS
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STANDARD ABBREVIATIONS

STAN		1201
SCAL		NONE
REVIS	4	SHEET 2 OF 4
CADD	FILE:	S1201-02



	UTILITY	EXISTING OVERHEAD	OVERHEAD TO BE REMOVED	PROPOSED OVERHEAD	EXISTING UNDERGROUND	UNDERGROUND TO BE REMOVED	PROPOSED UNDERGROUND	
	ELECTRIC POWER	— — POE— — P	— <del>×</del> ¹0E <del>×</del> — ¹	——ое——	— — · E — — ·	— × ' E -×— '	—— Е ——	
	NATURAL GAS				— — · · G — — ·	— ★ ' G → — '	G	
	OIL				——· 0 — — ·	— <del>×</del> <sup>1</sup> 0 −× <sup>1</sup>	o	
S	SANITARY SEWER				— — · ss — — ·	— <del>×</del> + ss —×— +	ss	
	STORM DRAIN				— — · SD — — ·	— <del>×</del> 'SD −× '	so	
STY	SIGNAL				— — · SIG — — ·	— <del>×</del> 'SIG −× '	SIG	
INE I	TELEPHONE	— — · O T — — ·	— <del>×</del> ¹01 <del>×</del> − ¹	—— от ——	— — · T — — ·	— <del>×</del> ₁ 1 — <del>×</del> 1	— т —	
	CABLE TV	— — · o t v — — ·	$- \times \text{OTV} \times - \text{OTV}$	—— от v ——	— — · T v — — ·	— <del>×</del> ¹ ⊺ ∨ — <del>×</del> − ¹	— ти —	
<u> </u>	COMMUNICATIONS	— - · o c — - ·	— <del>×</del> ¹0 C <del>×</del> − ¹	— ос —	— — · · C — — ·	— — — c — — —	—— c ——	
UTIL	FIBER OPTIC CABLE	— — ¹OFO— — ¹	— —× 0F0 <del>×</del> − °	——OF O——	— — FO — —	— <del>×</del> + FO — <del>×</del> +	—— FO ——	
	WATER				— — w — — ·	— → w — →	w	
	TRENCH DRAIN				— — · TD — — ·	— <del>×</del> ⁴ TD — <del>×</del> − ⁴	——то——	
	UNDER DRAIN				— — · UD — — ·	— <del>×</del> ¹ UD —×— ¹	——	
	COMPRESSED AIR				— — · AIR — — ·	— <del>×</del> ¹ AIR — <del>×</del> − ¹	AIR	

### NOTE:

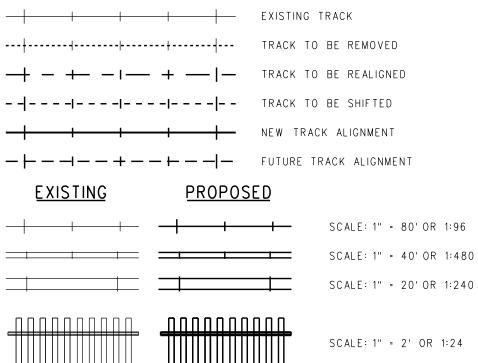
UTILITY MAPS SHALL BE PLOTTED IN COLOR FOR VERIFICATION, REVIEW AND APPROVAL BY SCRRA AND UTILITY COMPANIES. THE COLORS USED SHALL BE AS PER CALTRANS AND SHALL BE:

- ELECTRICAL GREEN - NATURAL GAS BROWN - FUEL

ORANGE - SEWER PURPLE - TELEPHONE/CABLE/COMMUNICATIONS/FIBER OPTIC

- WATER BLUE

## TRACK



### RAIL ONLY TIMBER TIES ONLY CONCRETE TIES ONLY +−RECON-ST-+ SPOT TIE ONLY FASTENERS ONLY —RECON-F —+ RAIL AND PLATES BALLAST ONLY +RECON-R/TT/B+RAIL/TIMBER TIE/ BALLAST $-\!\!\!+$ RECON-R/TC/B $+\!\!\!-$ RAIL/CONCRETE TIE/BALLAST RAIL/CONCRETE TIE/BALLAST/HMAC RECON-R/TC/B/HMAC ----

EXISTING TRACK RECONSTRUCTION

OTHER COMMON LINESTYLES						
			EXISTING FENCE			
			PROPOSED FENCE			
———			EXISTING SCRRA INTERTRACK FENCE/WWM			
<b>—</b>		—∎–	PROPOSED SCRRA INTERTRACK FENCE/WWM			
			CENTERLINE			
			RIGHT OF WAY, EASEMENT, PROPERTY LINE			
			MATCH LINE			
	0	0_	EXISTING GUARDRAIL			
	•	•	PROPOSED GUARDRAIL			
			EXISTING RETAINING WALL			
			PROPOSED RETAINING WALL			

					DRAWN BY: HDR DATE: 03/
					NT -ais
					PRINCIPAL ENGINEER, DESIGN & STANDARDS
					9111
A	02-26-16	REVISED LINE STYLES	AC	NDP	_ Manle Ch
REV.	DATE	DESCRIPTION	DES.	FNG.	ASSISTANT DIRECTOR, DESIGN

O3/31/2011 SCRRA ENGINEERING STANDARDS ARE INTENDED FOR SCRRA APPROVED USES

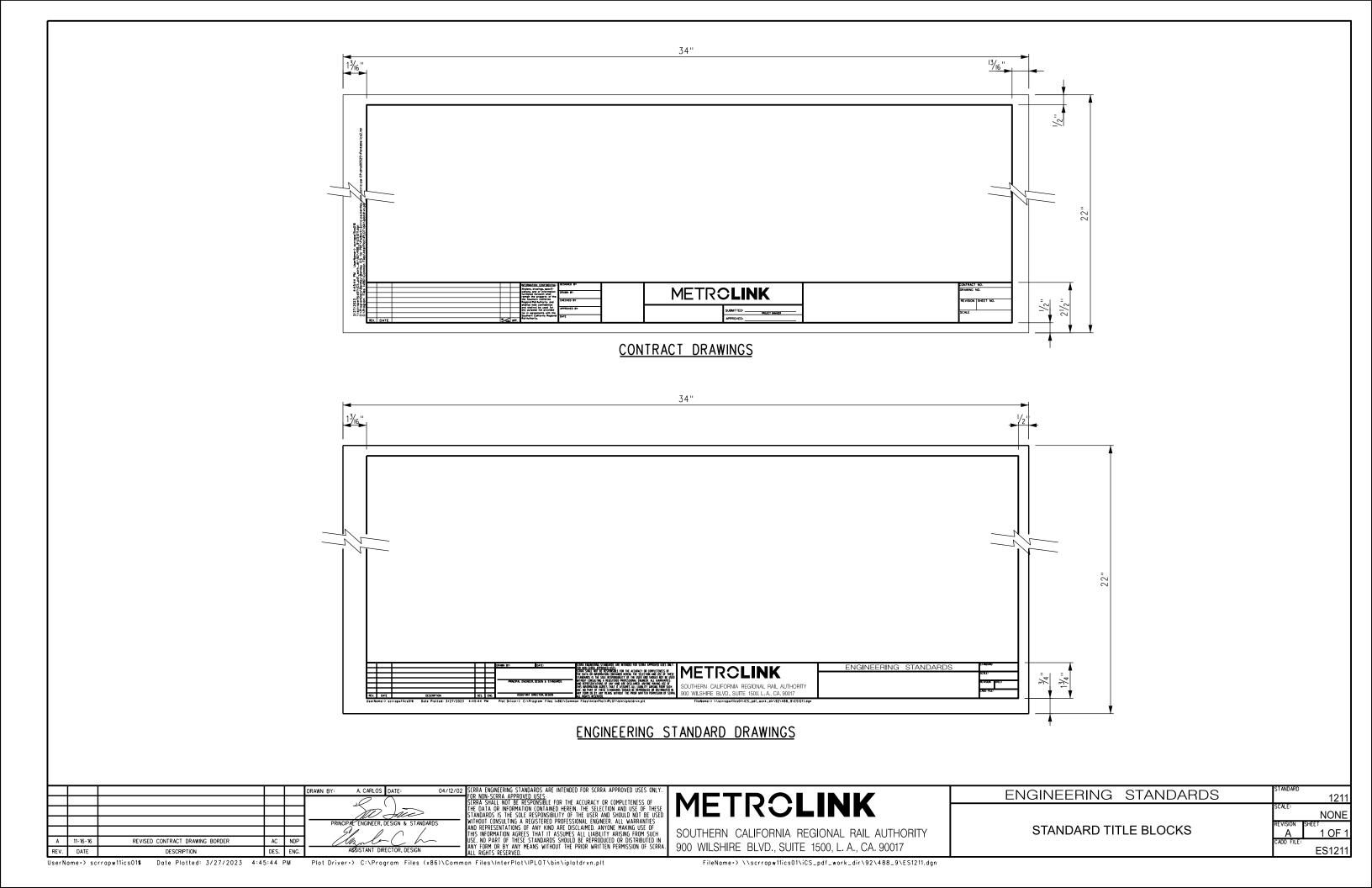
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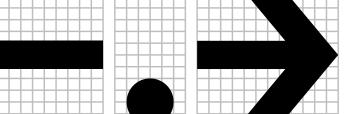
STANDARD LINESTYLES

**ENGINEERING STANDARDS** 

NONE 4 OF 4 ES1201-04







**SPACING** TEXT HEIGHT X 1.5

## **UNRELATED LINE**

В	09-25-20	REVISED NOTES, NUMBER 1 & ADDED LETTER "I"	AC	JMM
Α	03-22-13	REVISED NOTE 3	AC	NDP
REV.	DATE	DESCRIPTION	DES.	ENG.

O4/12/02

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## **METROLINK**

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ENGINEERING	STANDARDS

4. USE TEXT SPACING PATTERN ON THIS SHEET UNLESS OTHERWISE SPECIFIED ON SIGN STANDARD.

LETTERING FOR SIGNS

1212 NONE 1 OF 1 ES1212