

SCRRRA ENGINEERING STANDARDS INDEX SUMMARY		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>1000</b>	<b>GENERAL</b>	
	1000	Drawing Index
	1100	Abbreviations
	1200	Symbols
<b>2000</b>	<b>TRACK</b>	
	2000	Roadbed Sections
	2100	Clearances
	2200	Track Geometry
	2300	Rail Sections
	2350	Rail Fasteners
	2400	Ties
	2450	Tie Plates
	2500	Joint Bars and Bolts
	2600	Derails
	2700	Switch Stands, Rollers and Rods
2800	Turnouts	
<b>3000</b>	<b>STATIONS</b>	
3000	Station Configuration	
3100	Mini High Platforms	
3300	Station Signage	
3400	Station Communication Equipment	
3500	Customer Information System (CIS)	
3600	Video Surveillance System (VSS)	
<b>4000</b>	<b>GRADE CROSSINGS</b>	
	4000	Pedestrian Facilities
	4200	Precast Concrete Panels
	4300	Temporary Traffic Control
<b>5000</b>	<b>RIGHT-OF-WAY</b>	
	5000	Pipeline Standards
	5100	Fence Standards
	5200	Construction Project Signs
	5200	Wayside Signs

SCRRRA ENGINEERING STANDARDS INDEX SUMMARY		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>6000</b>	<b>STRUCTURES</b>	
	6000	Bridges
	6100	Signs for Structures
	6300	Culverts
<b>7000</b>	<b>MAINTENANCE AND LAYOVER FACILITIES</b>	
	7000	Walkway Clearances
	7100	Facilities
	7200	Compressed Air Facility
	7300	Power System
<b>8000</b>	<b>SIGNAL</b>	
	8000	Highway-Rail Grade Crossings
	8100	General
	8300	Crossings
	8400	Gate Arms
	8500	Signal Apparatus
	8600	Switch Apparatus
	8700	Detectors
	8800	Signal Facility Retaining Wall
<b>9000</b>	<b>COMMUNICATIONS</b>	
	9000	General
	9100	Data Radio System
	9200	Voice Radio System
	9300	Base Stations
	9400	Communications Shelter
	9500	Fiber Optic - Inside Plant
	9600	Fiber Optic - Outside Plant
	9700	Microwave Radio
	9800	Leased Telephone Circuits
	9900	Products

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>GENERAL</b>		
<b>1000</b>	<b>1000 ABBREVIATIONS</b>	
	1101 General Abbreviations Civil and Track	
	1102 Signal, Communications and Station Communications	A
	1103 General Abbreviations Architectural and Engineering	A
	1200 <b>SYMBOLS</b>	
	1201-01 Standard Abbreviations	
	1201-02 Standard Abbreviations	
	1201-03 Standard Symbols and Patterns	
	1201-04 Standard Linestyles	A
	1211 Standard Title Blocks	A
	1212 Lettering For Signs	
<b>TRACK</b>		
<b>2000</b>	<b>2000 ROADBED SECTIONS</b>	
	2001 Roadbed Sections for Track Construction using Wood Ties	
	2002 Roadbed Sections for Track Construction using Concrete Ties	
	2003 Roadbed Sections for Exposure to Ocean Surf	
	2004 HMA Underlayment for Select Critical Locations	A
	2005 Turnout Construction Pads	
	2007-01 Grain Size Distribution for Subgrad Soils	
	2007-02 Ballast & Subballast Gradation Table	
	2100 <b>CLEARANCES</b>	
	2101 Standard Clearance of Structures	
	2102 Minimum Clearance of Structures	
	2103 Car (Equipment) Clearance Envelope	
	2104 Minimum Vertical Clearances for Wires	
	2105 Turnout Walkways and HMA Underlayment	A
	2106 Track Clearance Points at Grade Crossings	
	2107 Track No Ride Zone at Turnouts	
	2108 Switch Stand Placement	
	2109 CPUC Minimum Walkway Standards	
	2200 <b>TRACK GEOMETRY DATA TABLE</b>	
	2201 Vertical Curves Geometry	
	2202-01 Horizontal Curve Geometry	
	2202-02 Track Geometry Data Table	A
	2203 Curve Speed, Superelevation and Spiral Length Notes	
	2204-01 Table P3.5 - 3.5 Inch Superelevation Underbalance Standard Spiral Length Table for Passenger Operations	
	2204-02 Table F2.0 - 2.0 Inch Superelevation Underbalance Standard Spiral Length Table for Freight Operations	
	2204-03 Table P3.5M - 3.5 Inch Superelevation Underbalance Minimum Spiral Length Table for Passenger Operations	
	2204-04 Table F2.0M - 2.0 Inch Superelevation Underbalance Minimum Spiral Length Table for Freight Operations	
	2204-05 Table PML - 4.0 Inch Superelevation Underbalance Maintenance Limit for Passenger Operations	
	2204-06 Table FML - 3.0 Inch Superelevation Underbalance Maintenance Limit for Freight Operations	
	2206 Superelevation Tags	
	2207 Track Center Spacing	
	2208 Speed Through Turnouts	
	2209 Facing Point Turnout Arrangement and Spacing	
	2300 <b>RAIL SECTIONS</b>	
	2301 Data for Standard Rail Sections	
	2302 Inside Guard Rail for Concrete Ties Details	
	2304 Inside Guard Rail for Wood Ties Details	
	2350 <b>RAIL FASTENERS</b>	
	2351-01 Rail Anchor Applications to Jointed Rail	A
	2351-02 Rail Anchor Applications for Continuous Welded Rail With Wood Crossties	
	2351-03 Rail Anchor Applications for Continuous Welded Rail-Transition from Wood to Concrete Cross Ties	
	2351-04 Rail Anchor Patterns for CWR on Bridges	
	2352 Track Bolts, Nuts and Washer	
	2353 Switch Rod Clips and Bolts	A
	2354 Switch Point Clamp	
	2355 6" Track Spikes, 15/16" Screw Fastener, Tie Plugs and Tight Spike Filler	
	2356 PIM 532 Screw, Insert and Helical Washer for Concrete Ties	
	2357 Square Head Frog Bolts, Square and Hex Nuts and Hardened Flat Washers	
	2358 Tapered Frog Bolt Assembly	
	2359 Spherical (Self Centering) Washer Set	
	2360-01 "Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	A
	2360-02 "Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	A
	2360-03 "Pandrol Fastclip" Concrete Tie Assemblies for Various Rail Combinations	A
	2361 "Pandrol" Joint E-Clip Type E2063	
	2362 "Pandrol" Brand Rail Clip "e" Clip	
	2364 "Pandrol" Concrete Tie Pads for use with 5 1/2" & 6" Base Rail	A

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>TRACK</b>		
<b>2000</b>	<b>2350 RAIL FASTENERS</b>	
	2365-01 "Pandrol Fastclip" Type Side Post Insulators	
	2365-02 Insulator Side Post for FC1600 Series "Pandrol Fastclip"	
	2366 "Pandrol" Type Fastclip 136LB FC1601 and 115LB - 119LB FC1603	
	2367 "Pandrol" Type Toe Insulator to Suit Fastclip 1600 Series Rail Clips	
	2368 "Pandrol" Type Toe Insulator to Suit "Pandrol" Fastclip 1600 Series Rail Clips For Standard Rail & Joint Applications	
	2369 Weld-On Shoulder for "Pandrol" E-Clips	
	2370 Poly-Insulated Joint 141-136-132 RE Rail	
	2371 Inside Guard Rail Plates for Concrete Ties	
	2372 Forged Transition Rails for New 141/136 LB to 115 LB New and 1/4" Head Loss Rail	
	2373 Transition Rails (Planed) for New 141 LB and 136 LB to 132 LB 1/4" Head Loss	
	2375 Evergrip Double Head Spike	
	2380 Typical Track Panels 115 LB and 136 LB Timber Ties	
	2400 <b>TIES</b>	
	2402 Concrete Tie and Fastclip Fastening Standard	
	2403 8'-3" Bottom Pad Tie Fastclip for Use on Bridge Decks	
	2406 Concrete Tie - Guard Rail	
	2407 Concrete Tie - Guard Rail With Neoprene Pad	
	2450 <b>TIE PLATES</b>	
	2451 Standard 13" Tie Plate for 5 1/2" Base Rail	
	2452 14" Tie Plate for 6" Base Rail	
	2453 Rolled Steel Tie Plate to Suit 5 1/2" Base AREMA Rail and Pandrol Rail Clips E2055	
	2454 Rolled Steel Tie Plate to Suit 132 LB RE - 141 LB RE Rail and Pandrol Rail Clips E2055	
	2455 Cast Shoulder to Suit Series FC1600 Fastclip	
	2460-01 Tie Plate Spiking Patterns	A
	2460-02 Tie Plate Spiking Patterns For "SP" Plates	A
	2463 Double Shoulder Tie Plates 5 1/2" and 6" Base Rail	
	2500 <b>JOINT BARS AND BOLTS</b>	
	2501-01 Rail and Joint Assembly for 115 LB. "RE" Rail	
	2501-02 Rail and Joint Assembly for 115 LB. "RE" Rail for Maint. Use W/ Former SP Punch 2 1/2" x 6 1/2" x 6 1/2"	
	2502 Rail and Joint Assembly 136 LB. "RE" Rail	
	2503 Compromise Joints for Various Weights of Rail	
	2504 Prefabricated Bonded Insulated Joint	A
	2600 <b>DERAILS</b>	
	2601 Derail Use Requirements	
	2602 Connecting Rod Details for Derails	
	2604-01 16'-6" Double Point Derail (LH Shown)	
	2604-02 16'-6" Double Point Derail Bill of Material LH and RH	
	2610 Derailing Switch Target	A
	2611 Type "B" Derail Sign	A
	2612 Derail Switch Notice	A
	2613 Bi-Directional Derail With Crowder	
	2614 Bi-Directional Derail With Crowder with 36E Switch Stand	
	2615 Rail Lubricator	
	2616 Steel Bumping Post Details	
	2700 <b>SWITCH STANDS, ROLLERS AND RODS</b>	
	2701 High Star Switch Stand Double Crank - Double Headblock	A
	2702 Insulated Joint Placement and Derail Location	
	2703-01 Color Indicators of Targets on Switch Stands	
	2703-02 Color Indicators of Targets on Switch Stands	
	2704 Low Star Switch Stand Double Crank - Double Headblock	A
	2706 Insulated Gauge Rod	
	2707 22E Switch Stand	
	2708-01 36E & 36EH Switch Stands	
	2708-02 36E & 36EH Switch Stands	
	2709 112E High Switch Stand	
	2710 Switch Stands Hand Throw Adjustments and Installation Instructions	
	2712 Connecting Rod Assembly	
	2715 Identification Tags for Track Components	
	2800 <b>TURNOUTS</b>	
	2801 No. 8, RBM Frog, Tangential (Wood Tie)	
	2802 No. 10, RBM Frog, Tangential (Wood Tie)	
	2803 No. 10, WSM Frog, Schwihag Rollers, Pseudo Tangential (Wood Tie)	
	2805 No. 14, WSM Frog, Schwihag Rollers, Pseudo Tangential (Wood Tie)	
	2806 No. 20, WSM Frog, Schwihag Rollers, Pseudo Tangential (Wood Tie)	
	2807 No. 24, WSM Frog, Schwihag Rollers, Pseudo Tangential (Wood Tie)	
	2808 No. 10 Crossover (Tie Pattern & Panel Between Frogs) Wood Tie	
	2809 No. 14 Crossover (Tie Pattern & Panel Between Frogs) Wood Tie	
	2810 No. 20 Crossover (Tie Pattern & Panel Between Frogs) Wood Tie	
	2811 No. 24 Crossover (Tie Pattern & Panel Between Frogs) Wood Tie	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>2000</b>	<b>TRACK</b>	
2800	<b>TURNOUTS (NEW CONSTRUCTION)</b>	
2817	No. 10 Crossover (Tie Pattern & Panel Between Frogs) (Concrete Tie)	
2818	No. 14 Crossover (Tie Pattern & Panel Between Frogs) (Concrete Tie)	
2819	No. 20 Crossover (Tie Pattern & Panel Between Frogs) (Concrete Tie)	
2820	No. 24 Crossover (Tie Pattern & Panel Between Frogs) (Concrete Tie)	
2840	No. 8 Double Slip Switch Turnout (Wood Ties)	
2841	No. 10 Double Slip Switch Turnout (Wood Ties)	
	<b>TURNOUTS (MAINTENANCE)</b>	
2901 (1-14)	No. 8, 136 LB. Double Slip Crossing with Solid Manganese Frog	
2902 (1-20)	No. 10, 136 LB. Double Slip Crossing with Moveable Point Frog	
2911 (1-15)	No. 8, 136 LB. R.H. RBM Frog Turnout and Crossover	
2921 (1-16)	No. 10, 136 LB. R.H. RBM Frog Turnout and Crossover	
2922 (1-15)	No. 10, 136 LB. R.H. SR Frog Turnout and Crossover	
2931 (1-16)	No. 14, 136 LB. R.H. RBM Frog Turnout and Crossover	
2941 (1-15)	No. 20, 136 LB. R.H. RBM Frog Turnout and Crossover	
2951 (1-16)	No. 24, 136 LB. R.H. RBM Frog Turnout and Crossover	
<b>3000</b>	<b>STATION</b>	
3000	<b>STATION CONFIGURATION</b>	
3001	Abbreviations, Legend and General Notes	<b>B</b>
3002	Side Platforms	<b>B</b>
3003	Center Platforms	<b>B</b>
3004	Locomotive and Car Elevations	<b>A</b>
3100	<b>MINI HIGH PLATFORMS</b>	
3101-01	Mini-High Platform Details	<b>C</b>
3101-02	Mini-High Platform Details	<b>A</b>
3101-03	PreCast Mini High Platform	<b>C</b>
3101-04	PreCast Mini High Platform Details	<b>C</b>
3201	Side Platforms Typical Sections	<b>A</b>
3202	Center Platforms Typical Sections	<b>B</b>
3203-01	Detectable Warning Tile and Marking Details	<b>C</b>
3203-02	Detectable Warning Tile and Marking Details	<b>A</b>
3300	<b>STATION SIGNAGE</b>	
3301-01	Sheet Index and General Notes	
3301-02	Graphic Standards	<b>A</b>
3302-01	Station Sign Menu	
3302-02	Station Sign Menu	
3303-01	Station Site Typical Sign Location Plan	
3303-02	Side Platform Typical Sign Location Plan	
3303-03	Side Platform Typical Sign Location Plan	
3305	Primary Identification Monument Sign - Sign Type 1	<b>A</b>
3306	Vehicular Directional Freestanding Sign - Sign type 2	
3307-01	Information / Restrictive Sign Copy Layouts - Sign Type 3	
3307-02	Information / Restrictive Sign Details - Sign Type 3	
3307-03	Information / Restrictive Sign Attachment Details - Sign Type 3	
3307-04	Information / Restrictive Sign Exit Sign Installation Details - Sign Type 3	
3308	Trailblazer Directional Sign - Sign Type 4	
3309	Parking Restrictive Sign Pole Mounted - Sign Type 5	
3310	Accessible Parking Identification Sign - Sign Type 6	
3311	Accessible Parking Information Sign - Sign Type 7	
3314	Track Directional Sign - Sign Type 11	
3315	Elevator Directional Sign - Sign Type 12	
3316	Elevator Identification Flag Mounted - Sign Type 13	
3317	Pedestrian Warning Signs at Station Platforms - (Sign Type 14)	<b>B</b>
3318	Pedestrian Directional Sign Gate Mounted - Sign Type 15	
3319	Pedestrian Directional Look Sign Post Mounted - Sign Type 16	<b>A</b>
3320	Station Identification Sign (Small) - Sign Type 20	
3321	Station Identification Sign (Large) - Sign Type 21	
3322	CPUC Railroad Crossing Sign Post Mounted - Sign Type 22	<b>A</b>
3323	Accessibility Sign - Sign Type 23	
3324	Pedestrian Restrictive / Information Sign - Sign Type 24	
3325	ADA Station Identification Sign (Braille) - Sign Type 25	
3326	Map / Info Kiosk Freestanding - Sign Type 26	
3327	ADA Station Identification at Track - Sign Type 27	
3328-01	Display Case Wall or Post Mounted - Sign Type 28	
3328-02	Display Case Post Mounted Single Sided - Sign Type 28	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>3000</b>	<b>STATION</b>	
3300	<b>STATION SIGNAGE</b>	
3330-01	Train Position Marker - Sign Type 30	<b>A</b>
3330-02	New Train Position Marker - Sign Type 30	
3330-03	Side Platform Typical Sign Location Plan	<b>A</b>
3330-04	Side Platforms Locomotive Position Marker Plan	<b>A</b>
3330-05	Side Platforms Locomotive Position Marker Plan	<b>A</b>
3330-06	Center Platform Locomotive Position Marker Plan	<b>A</b>
3332	Passenger Information Telephone - Sign Type 41	
3400	<b>STATION COMMUNICATION EQUIPMENT</b>	
3401-01	Metrolink Station Conduit Layout - Side Platform	<b>B</b>
3401-02	Metrolink Station Conduit Layout - Center Platform	<b>B</b>
3402-01	Metrolink Station Conduit Layout Details - Side Platform	<b>B</b>
3402-02	Metrolink Station Conduit Layout Details - Center Platform	<b>B</b>
3403	Single Tennant Communications Equipment Room Conduit Layout	<b>A</b>
3404	Shared Tennant Communications Equipment Room Conduit Layout	<b>A</b>
3405-01	Metrolink Station TVM Pad (COMPLETE CONFIGURATION)	<b>B</b>
3405-02	Metrolink Station TVM Pad (COMPLETE CONFIGURATION)	<b>B</b>
3501-01	Customer Information System (CIS) For Existing Stations	
3501-02	Customer Information System (CIS) For Existing Stations Speaker Diagram	
3501-03	Customer Information System (CIS) For Existing Stations LED Message Sign Diagram	
3501-04	Customer Information System (CIS) For Existing Stations LED Video Monitor Diagram	
3502-01	Customer Information System (CIS) For New Stations	
3502-02	Customer Information System (CIS) For New Stations Speaker Diagram	
3502-03	Customer Information System (CIS) For New Stations LED Message Sign Diagram	
3502-04	Customer Information System (CIS) For New Stations LED Video Monitor Diagram	
3503	LED Message Sign Mounting Details	<b>A</b>
3504-01	LED Video Monitor Assembly Mounting Details	<b>D</b>
3504-02	LED Video Monitor Assembly Mounting Details	<b>D</b>
3505	CIS Materials List	<b>D</b>
3601	Video Surveillance System (VSS) Mounting & Spacing Details (Typical)	<b>A</b>
3602	Video Surveillance System (VSS) Typical Network Line Diagram	<b>A</b>
3603	Video Surveillance System (VSS) Camera Field of View Details	<b>A</b>
3604-01	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	
3604-02	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	
3604-03	Video Surveillance System (VSS) Equipment Mounting Configurations (Typical)	
<b>4000</b>	<b>GRADE CROSSINGS</b>	
4000	<b>PEDESTRIAN FACILITIES</b>	
4001	Highway Rail Grade Crossing - Typical Sections	
4002-01	Pedestrian Swing Gate Details	<b>C</b>
4002-02	Pedestrian Swing Gate Details	<b>A</b>
4003	Pedestrian Gate Layout, Signal Foundation and ADA Ramp Details	<b>NEW</b>
4004	Pedestrian Crossing Design Consideration Table	
4005	Pedestrian Barricade and Metal Hand Railing Details	<b>C</b>
4006-01	Grade Crossing Marking and Signage	<b>A</b>
4006-02	Grade Crossing Marking and Signage	<b>B</b>
4011	Pedestrian Facilities At Vehicle Crossing Entrance Gates Only	<b>B</b>
4012	Pedestrian Facilities At Vehicle Crossing Entrance / Exit Gates	<b>B</b>
4013	Pedestrian Facilities At Acute Angle Vehicle Crossing - Entrance Gates Only	<b>B</b>
4014	Pedestrian Facilities At Acute Angle Vehicle Crossing - Entrance / Exit Gates	<b>B</b>
4015	Pedestrian Facilities At Obtuse Angle Vehicle Crossing - Entrance / Exit Gates	<b>B</b>
4016	Pedestrian Facilities At Obtuse Angle Vehicle Crossing - Entrance Gates Only	<b>B</b>
4017	Typical Pedestrian Treatment Details	<b>B</b>
4018	Pedestrian Crossing Only	<b>C</b>
4020	Pedestrian / Vehicle Crossing Adjacent to Station	<b>B</b>
4021	Pedestrian Crossing Adjacent to Station	<b>C</b>
4200	<b>PRECAST CONCRETE PANELS</b>	
4201-01	Precast Concrete Panels for Highway - Rail Grade Crossing	<b>B</b>
4201-02	Precast Concrete Panels for Highway - Rail Grade Crossing	<b>B</b>
4201-03	Precast Concrete Panels for Highway - Rail Grade Crossing	<b>B</b>
4300	<b>TEMPORARY TRAFFIC CONTROLS</b>	
4301-01	Temporary Traffic Control At or Near Grade Crossings	
4301-02	Temporary Traffic Control At or Near Grade Crossings	<b>A</b>
4302	Temporary Construction Crossing	
4310	Highway - Railroad Crossing Crossbuck Sign	<b>B</b>
4311	Private, Pedestrian And Bicycle Railroad Grade Crossing Sign	<b>B</b>
4312	Private Crossing Closure Notification Sign	<b>B</b>

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>5000</b>	<b>RIGHT-OF-WAY</b>	
	<b>PIPELINE STANDARDS</b>	
5000	Pipelines for Non-Flammable Substances Across or Along R.O.W.	A
5002	Pipelines for Flammable and Hazardous Substances Across or Along R.O.W.	
	<b>FENCE STANDARDS</b>	
5102	Station Fencing Platform Edge Fence and Inter-track Fence	A
5103	R.O.W. Fencing High Security Ornamental Fencing	
5104	R.O.W. Fencing (Tube Steel)	B
5105	R.O.W. Fencing (Welded Wire Mesh)	A
5106	R.O.W. Fencing (Chain Link)	A
5107-01	Security Access Gate Details	B
5107-02	Security Access Gate Details	
5108-01	Automated Vehicular Driveway Gate Swing Gate Operator Typical Layout	
5108-02	Automated Vehicular Driveway Gate Swing Gate Details	
5109-01	Automated Vehicular Driveway Gate Slide Gate Operator Typical Layout	
5109-02	Automated Vehicular Driveway Gate Slide Gate Details	
	<b>CONSTRUCTION PROJECT SIGNS</b>	
5201	Construction Project Funding Identification Sign (Federal)	
	<b>WAYSIDE SIGNS</b>	
5210	Details for Installing Signs at Grade	
5211	Milepost	A
5212	Quarter Mile Increment Marker	A
5213	Permanent Speed Restriction Signs	B
5214	Warning Signs	C
5215	Stop, Slow and Resume Speed Flags and Signs	A
5216	Whistling Point / Quiet Zone Sign	A
5217	Yard Limit Sign for Terminal Tracks	A
5218-01	CP Limit Sign	B
5218-02	CP Limit Sign Rail Markings	
5219	Flag Stanchion	
5222	Station Signs for Other Than CTC Territory	A
5223	Mechanical Limit and No Ride Zone Signs	A
5225	Warning Paddle	A
5229	Underground Cable Sign	A
5230	Marking For Track Identification	A
<b>6000</b>	<b>STRUCTURES</b>	
	<b>BRIDGES</b>	
6001 1-26	Precast / Prestressed Concrete Double Box Beam Bridges	
6002 1-22	Precast / Prestressed Concrete Slab Beam Bridges	
6003 1-4	General Details Precast Concrete Culverts (Single and Double Box)	
	<b>SIGNS FOR STRUCTURES</b>	
6101	Bridge Trestle & Culvert Numbers	A
6102	Tunnel Numbers	A
6103	Radio Channel Sign	B
6104	Tunnel Exit Sign	A
	<b>CULVERTS</b>	
6301	End Treatments for Pipe Culverts General Notes	B
6302-01	General Arrangement for Type A Headwalls	A
6302-02	Culvert Pipe Lengths for Type A Headwalls	
6304-01	Type A-1 Headwall Framing Details	B
6304-02	Type A-1 Headwall Reinforcing Details	A
6304-03	Type A-1 Headwall Reinforcing Schedule	
6306-01	Type A-2 Headwall Framing Details	B
6306-02	Type A-2 Headwall Reinforcing Details	A
6306-03	Type A-2 Headwall Reinforcing Schedule	
6308-01	Type A-3 Headwall Framing Details	B
6308-02	Type A-3 Headwall Reinforcing Details	A
6308-03	Type A-3 Headwall Construction Sequence	A
6308-04	Type A-3 Headwall Reinforcing Schedule	
6310-01	Type A-M Headwall Framing Details	B
6310-02	Type A-M Headwall Reinforcing Details	A
6310-03	Type A-M Headwall Reinforcing Schedule	
6330	Handrail Layout and Details	
6340	Construction Notes & Table for Smooth & Corrugated Steel Pipe Culverts	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>7000</b>	<b>MAINTENANCE AND LAYOVER FACILITIES</b>	
	<b>WALKWAY CLEARANCES</b>	
7001-01	Walkway Clearance for Facilities With Under Track Pits	
7001-02	Walkway Clearance for Facilities WithOut Under Track Pits	
	<b>FACILITIES</b>	
7100	Dump Station Layout	
7101-01	Dump Station Vault Details	
7101-02	Dump Station Vault Aluminum Lid Details	
7101-03	Flushing Manhole Details	
7102	Potable Water Station	
7103	Typical Inspection Pit Plan	
7104-01	Inspection Pit Section and Details	
7104-02	Inspection Pit Partial Elevation	
7104-03	Inspection Pit Stair Plan and Section	
7104-04	Inspection Pit Stair Plan, Sections and Details	
7104-05	Jacking Pad Plan, Sections and Details	
7105	Oil Drip Collector Pans Plan, Elevation and Section	
7109	Track Spacing at Maintenance Facilities	
7110	Roadway Details at Maintenance Facilities	
7111	Lighting at Maintenance Facilities Foundation and Fixture	
7112		
	<b>COMPRESSED AIR FACILITY</b>	
7201-01	Compressed Air Plumbing Schedule & Details	
7201-02	Miscellaneous Equipment Foundations	
	<b>POWER SYSTEM</b>	
7300	Ground Power System - Typical 600A Panel Schematic	
7301-01	Ground Power System - Panel Layouts	
7301-02	480V Wayside Power - Cordset Details	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
8000		
	<b>SIGNAL</b>	
8000	<b>HIGHWAY-RAIL GRADE CROSSING</b>	
ES8000-01	Minimum Braking Distance Table for Freight Trains Ascending	
ES8000-02	Minimum Braking Distance Table for Freight Trains Descending	
ES8005-01	Freight Train Reducing Distances	
ES8005-02	Freight Train Reducing Distances	
ES8005-03	Freight Train Reducing Distances	
ES8005-04	Freight Train Reducing Distances	
ES8010	Passenger Train Braking and Reducing Distances	
ES8020-01	Speed - Time - Distance Chart	
ES8020-02	Speed - Time - Distance Chart	
ES8030	Standard Bit Assignment	
ES8100	<b>GENERAL SIGNAL</b>	
ES8100	Circuit Plan Symbols	
ES8105	Component Symbols	
ES8110	Shelf and Vital Relay Symbols	
ES8115	Relay Contact Symbols	
ES8120	Plug-In Relay Base Coil & Jumper Wiring with Contact Arrangement	
ES8125	Grade Crossing Symbols	
ES8130	Wayside Signal Symbols	
ES8135	Switch and Derail Symbols	
ES8140	Circuit Controller Contact Symbols	
ES8145	Ohms Law	
ES8150	Wago and Board Wiring Details	
ES8155	Cable Junction Case Wiring Details	
ES8205	Typical Signal Terminal Box	
ES8210-01	Cable Termination	
ES8210-02	Cable Termination	
ES8215-01	Placement of Instrument Enclosure	
ES8215-02	Placement of Signal Foundation	
ES8220	Placement of Insulated Joints	
ES8223	Conduit Installation	
ES8225-01	Placement of Pull Boxes and Conduit	
ES8225-02	Typical Conduit Layout for Pullbox	
ES8230	Track Wire Installation	
ES8235	Termination Shunt Installation	
ES8237	Tuned Joint Coupler and Wide Band Shunt Installation	
ES8240	Rail and Frog Bonding Details	
ES8245	Placement of Fouling Bridles	
ES8250	Foundation For Ped Gate with Stubmast	
ES8253	Foundation For Dwarf Gate with Stubmast	
ES8255	Foundation for ground signal, gate, & flasher mast	
ES8260	Automatic Train Stop Inductor Layout	
ES8270-01	Typical Legend for Highway-Rail Grade Crossing Instrument Enclosure	
ES8270-02	Typical Legend for Highway-Rail Grade Crossing Instrument Enclosure	
ES8270-03	Typical Legend for Highway-Rail Grade Crossing Instrument Enclosure	
ES8271	Typical Legend For Control Point Instrument Enclosure	
ES8275	Typical Power Off Indication Light	
ES8280	Grounding Details	
ES8290	Standard Signs Begin Circuit, End Circuit	
ES8291	Standard Signs Begin CTC, End CTC	
ES8292	Standard Wayside Stop Sign	
ES8300	<b>CROSSINGS</b>	
ES8300	Flashing Light Signals With or Without Gate	
ES8305	Flashing Light Signals Configurations	
ES8306	Flashing Light Signals with Gate Configurations	
ES8308	Pedestrian Gate Assembly With or Without Flashing Light	
ES8320-01	Single Mast Crossing Cantilever 10' Thru 30' Arm Length	
ES8320-02	Model W Walkout Cantilever Signal	
ES8325-01	Double Mast Crossing Cantilever 30' Thru 40' Arm Length	
ES8325-02	Model WNR Walkout Cantilever Signal	
ES8330	Foundation For Cantilever Assemblies	
ES8350-01	Location Plan Flashing Light Signals with Entrance Gates	
ES8350-02	Location Plan Flashing Light Signals with Entrance Gates	
ES8355	Location Plan Flashing Light Signals with Entrance Gates and Exit Gates	
ES8360	Typical Location Plan Cantilever Flashers Entrance With Gates	
ES8365	Typical Location Plan Cantilever Flashers Entrance With Gates and Exit Gates	
ES8370	Typical Location Plan Flashing Light Signals With Gates and Median	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
8000		
	<b>SIGNAL</b>	
ES8300	<b>CROSSINGS</b>	
ES8375	Typical Location Plan Flashing Light Signals With Entrance and Exit Gates And Median	
ES8380	Typical Location Plan Cantilever Flashers with Entrance Gates and Median	
ES8385	Typical Location Plan Cantilever Flashers with Entrance and Exit Gates and Median	
ES8390	Location Plan Pedestrian Flashing Light Signals With Gates Crossing Configuration	
ES8395	Location Plan - Pedestrian with Gate	
ES8400	<b>GATE ARMS</b>	
ES8400	Typical Light Unit Alignment For Flashing Lights Signals	
ES8405	Vital Placement for Inductive Loops Used With Exit Gates	
ES8450-01	Typical LED Gate Arm Lamp Complete With Hardware	
ES8450-02	Typical LED Gate Arm Lamp Specifications	
ES8450-03	Typical 4" Gate Arm Lamp Complete With Hardware	
ES8460-01	Typical Fiber Reinforced Polyglass Gate Arm Tip Section with Diagonal Striping	
ES8460-02	Typical Fiber Reinforced Polyglass Gate Arm Tip Section with Diagonal Striping	
ES8461-01	Typical Fiber Reinforced Polyglass Gate Arm Mid Section with Vertical Striping	
ES8461-02	Typical Fiber Reinforced Polyglass Gate Arm Mid Section with Diagonal Striping	
ES8462-01	Typical Gate Arm Aluminum Base Section with Vertical Striping	
ES8462-02	Typical Gate Arm Aluminum Base Section with Diagonal Striping	
ES8465-01	Typical 26' High Wind Gate Arm Kit with Vertical Striping	
ES8465-02	Typical 26' High Wind Gate Arm Kit with Diagonal Striping	
ES8466-01	Typical 32' High Wind Gate Arm Kit with Vertical Striping	
ES8466-02	Typical 32' High Wind Gate Arm Kit with Diagonal Striping	
ES8470-01	Typical Wind Support	
ES8470-02	Typical Wind Support	
ES8500-01	Typical Ground Signals with One Platform Ladder Assembly	
ES8500-02	Typical Ground Signals with One Platform Ladder Assembly (17'-0" Mast; Single Unit ColorLight)	
ES8500-03	Typical Ground Signals with One Platform Ladder Assembly (22'-6" Mast; Single Unit ColorLight)	
ES8500-04	Typical Ground Signals with One Platform Ladder Assembly (17'-0" Mast; Bi-directional ColorLight)	
ES8500-05	Typical Ground Signals with One Platform Ladder Assembly (22'-6" Mast; Bi-Directional ColorLight)	
ES8505-01	Typical Ground Signals with Two Platform Ladder Assembly	
ES8505-02	Typical Ground Signals with Two Platform Ladder Assembly (22'-6" Mast; Double Unit ColorLight)	
ES8505-03	Typical Ground Signals with Two Platform Ladder Assembly (22'-6" Mast; Bi-Directional ColorLight With Second Unit)	
8500	<b>SIGNAL APPARATUS</b>	
ES8510	Wayside Signal Cantilever Structure	
ES8515	Wayside Signal Bridge Structure	
ES8520	Typical Dwarf Signal Assembly	
ES8525-01	Typical LED Color Light Signal Unit	
ES8525-02	Incandescent Colorlight With Second Unit	
ES8530	Typical Ground Signal Junction Box	
ES8540	Typical Signal Number Plate For Use At Intermediate	
ES8545	Typical "P" Sign for Use At Protective Signal Locations	
ES8570	Typical Galvanized Signal Ladder	
	Standard Signs Begin Circuit, End Circuit	
	Standards Signs Begin CTC, End CTC	
	Standard Wayside Stop Signal	
8600	<b>SWITCH APPARATUS</b>	
ES8600	M23A-E Power Switch Machine	
ES8605-01	M23A-E Dual Control Switch Layout for No. 8, No. 10, & No. 14 Right Hand Turnouts	
ES8605-02	M23A Dual Control Switch Layout for No. 8, No. 10, & No. 14 Right Hand Turnouts	
ES8610-01	M23A-E Dual Control Switch Layout for No. 8, No. 10, & No. 14 Left Hand Turnouts	
ES8610-02	M23A-A Dual Control Switch Layout for No. 8, No. 10, & No. 14 Left Hand Turnouts	
ES8615-01	M23A-E Dual Control Switch Layout for No. 20 & No. 24 Right Hand Turnouts	
ES8615-02	M23A-A Dual Control Switch Layout for No. 20 & No. 24 Right Hand Turnouts	
ES8620-01	M23A-E Dual Control Switch Layout for No. 20 & No. 24 Left Hand Turnouts	
ES8620-02	M23A-A Dual Control Switch Layout for No. 20 & No. 24 Left Hand Turnouts	
ES8625	Helper Rod Assembly for No. 20 Right and Left Hand Turnouts	
ES8630	Helper Rod Assembly for No. 24 Right and Left Hand Turnouts	
ES8635-01	Push-Pull Helper Rod Assembly Details "T" Crank & Pipe Guide Aux Connection	
ES8635-02	Push-Pull Helper Rod Assembly Details Screw Jaw, Solid Jaw, & Adjustable Link	
ES8650	Typical Left or Right Hand Racor Type "MF" Insulated "Front" Rod for Use on No. 8, No. 10, & No. 14 Turnouts	
ES8655	Typical Left or Right Hand Racor Type "MF" Insulated "Front" Rod for Use on No.20 & no. 24 Turnouts	
ES8660	Typical Racor Type "SMJ" No. Insulated "Basket" Rod for Use on No. 8, No. 10, & No. 14 Turnouts	
ES8665	Typical Racor Type "SMJ" No. Insulated "Basket" Rod for Use on No.20 & no. 24 Turnouts	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>8000</b>		
	<b>SIGNAL</b>	
	<b>8700 DETECTORS</b>	
ES8700	Internal Point Detector Bar For M23-A Power Switch Machine	
ES8705	Point Detector Connecting Rod for Dual Control Switch Applications	
ES8710	Internal Lock Rod Assembly	
ES8715	Lock Rod Drop Lug	
ES8720	Lock Rod Connecting Rod	
ES8725	Switch Operating Lug (Bear Claw)	
ES8730	Switch Operating Rod for Dual Control Switch Applications	
ES8735	Universal Extension Plate for 14'-0" Dapped Headblock tie	
ES8740	14'-0" or 16'-0" Dapped Headblock Tie	
ES8750	Various Tie Straps For Dual Control Switch Layout Applications	
ES8755	Typical Pedestal Junction Box	
ES8760	Circuit Controller Placement At Hand Throw Switches	
ES8765	Electric Switch Lock Model 10A	
ES8800	<b>SIGNAL FACILITY RETAINING WALL</b>	
ES8801	Typical Embankment or Signal Facility with Instrument Enclosure	
ES8800	Hot Bearing Detector Layout	
ES8802	Typical Embankment or Signal Facility Signal Foundation Only	
ES8803	Typical Retaining Wall for Signal Facility Instrument Enclosure with Post and Cable Fall Protection	
ES8804	Typical Retaining Wall for Signal Facility Instrument Enclosure with Chain Link Fence Fall Protection	
ES8805	Retaining Wall Block Details	
ES8810	Dragging Equipment Detector Layout	
ES8820	High Water Detector Layout Line Connection	
ES8830	High -Wide Load Detector Layout Valley Subdivision	
ES8831	High -Wide Load Detector Layout Ventura Subdivision	
<b>9000</b>		
	<b>COMMUNICATIONS</b>	
	<b>9000 GENERAL</b>	
ES9000	List of Acronyms	
ES9001	Index of Symbols	
ES9002-01	Notes and Symbols	
ES9002-02	Notes and Symbols	
ES9005	Metrolink Subdivisions	
ES9010-01	Valley Subdivision	
ES9010-02	Valley Subdivision	
ES9015-01	Ventura Subdivision	
ES9015-02	Ventura Subdivision	
ES9020-01	River Subdivision	
ES9020-02	River Subdivision	
ES9025-01	San Gabriel Subdivision	
ES9025-02	San Gabriel Subdivision	
ES9030-01	Orange Subdivision	
ES9030-02	Orange Subdivision	
ES9040-01	Olive Subdivision	
ES9040-02	Olive Subdivision	
ES9045	Pasadena Subdivision	
ES9080-01	Voice and ATCS Radio Interface at MOC	
ES9080-02	Voice and ATCS Radio Interface at MOC	
ES9100	<b>DATA RADIO SYSTEM</b>	
ES9100	Metrolink ATCS Data Radio Network Block Diagram	
ES9102	ATCS Base Station Block Diagram	
ES9105	ATCS Data Radio Base Station Directional Antenna	
ES9110	ATCS Data Radio Base Station Directional Antenna Array	
ES9115	Control Points ATCS Data Radio Block Diagram	
ES9120-01	Control Points ATCS 40 Foot Radio Tower & Foundation Plan	
ES9120-02	Control Points ATCS 40 Foot Radio Tower & Foundation Plan	
ES9122-01	Control Points ATCS 60 Foot Radio Tower & Foundation Plan	
ES9122-02	Control Points ATCS 60 Foot Radio Tower & Foundation Plan	
ES9125	Control Points ATCS Radio Antenna & Tower	
ES9130	Voice Radio Base Station Omni Directional Antenna	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
<b>9000</b>		
	<b>COMMUN</b>	
ES9100	<b>DATA RADIO SYSTEM</b>	
ES9140-01	Control Points ATCS Data Radio Wiring Details	
ES9140-02	Control Points ATCS Data Radio Wiring Details	
ES9140-03	Control Points ATCS Data Radio Wiring Details	
ES9140-04	Control Points ATCS Data Radio Wiring Details	
ES9150	Metrolink Map of Subdivisions CP and ATCS Base Stations	
ES9155	Metrolink Map of Subdivisions Orange Subdivision	
ES9160	Metrolink Map of Subdivisions River Subdivision	
ES9165	Metrolink Map of Subdivisions San Gabriel Subdivision	
ES9170	Metrolink Map of Subdivisions Valley Subdivision	
ES9175	Metrolink Map of Subdivisions Ventura Subdivision	
9200	<b>VOICE RADIO SYSTEM</b>	
ES9200	Block Diagram Metrolink Voice Radio System	
ES9210	Metrolink VHF Voice Radio Subscriber System Overview	
ES9215	Voice Radio Base Station Block Diagram	
ES9230	VHF Radio For Dragging Equipment Detector Interface	
ES9250	Metrolink Map of Subdivisions All Major Base Radio Stations	
ES9255	Metrolink VHF Voice Radio Coverage to Trains	
ES9260	Metrolink VHF Voice Radio Coverage to Portables	
9300	<b>BASE STATIONS</b>	
ES9300	Base Station Sites Mountain - Top Site Details	
ES9310	Base Station Sites ROW Site Details (1 of 2)	
ES9315	Base Station Sites ROW Site Details (2 of 2)	
ES9320	Base Station Sites Grounding Plan	
ES9325	Grounding Configuration CP Antenna Towers	
ES9330	Grounding Configuration ROW Base Station Sites	
ES9335	Equipment Housing / Racks For Base Station And Microwave Radio Sites	
9400	<b>COMMUNICATIONS SHELTER</b>	
ES9400	Shelter Floor and Roof Plan	
ES9405	Shelter Ceiling Plan And Panel Connections	
ES9410	Shelter Panel Connection Locations	
ES9415	Type 1A Shelter Exterior Elevation Views	
ES9420	Shelter Foundation And Entrance Conduit Details	
ES9425	Shelter Inside Elevation Views With Conduits	
ES9430	Type 1A Shelter AC Panel And Device Details	
ES9435	Type 1B Shelter AC Panel And Device Details	
ES9440	Shelter Grounding Scheme	
9500	<b>FIBER OPTIC - INSIDE PLANT</b>	
ES9500	Ethernet Cabling Standards	
ES9505	Typical Node Floor Plan	
ES9510-01	Typical Main Distribution Frame	
ES9510-02	Typical Node AC Power Riser	
ES9515-01	Typical Cable Ladder Attachments	
ES9515-02	Cable Label Scheme	
ES9520-01	Typical Node Rack Space Planning	
ES9520-02	Typical Node Main Equipment Rack	
ES9520-03	Typical Node DC Power Rack	
ES9525-01	Fiber Distribution Panel Details	
ES9525-02	Node Connectivity Details	
ES9530-01	Connector Wiring Details	
ES9530-02	Node DC Power Riser	
ES9535	T1 Distribution Wiring for Fujitsu 4100	
ES9540-01	TM100 T1 Multiplexer	
ES9540-02	Master Clock Connectivity	
ES9540-03	Node Fiber Multiplexer Details	
ES9540-04	CP Fiber Multiplexer Details	
ES9550-01	Cable Run List	
ES9550-02	Node CCTV Connectivity	
ES9550-03	Node CCTV Network Equipment	
ES9550-04	CCTV Fiber Optic Multiplex Equipment	
ES9550-05	Video/Audio Data Encoder	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
9000		
	<b>COMMUNICATIONS</b>	
9500	<b>FIBER OPTIC - INSIDE PLANT</b>	
ES9560-01	Equipment Rack Details	
ES9560-02	Fiber Distribution Panel, 72 Port	
ES9560-03	Fiber Distribution Panel, 24 Port	
ES9560-04	SC Fiber Panel Details	
ES9560-05	Fiber Splice Enclosure Details	
ES9565-01	100 Base T Patch Panel Details	
ES9565-02	Category 6 Patch Panel Details	
ES9570-01	SC to SC Fiber Patch Cord Details	
ES9570-02	SC to ST Fiber Patch Cord Details	
ES9570-03	SC to LC Fiber Patch Cord Details	
ES9570-04	RJ45 to RJ45 Data Patch Cord Details	
ES9570-05	RJ45 Data Connector Details	
ES9570-06	Single Mode Fiber Pigtail Details	
ES9570-07	Vertical AC Power Strip Details	
ES9570-08	Patch Panel Cable Manager	
ES9575-01	Horizontal Cable Manager Details	
ES9575-02	ADC Fiber Duct Details	
ES9575-03	Cable Ladder Build Details	
ES9575-04	Grounding Details	
ES9575-05	Ladde Rack Panning	
ES9580	Equipment Alignment and Floor Planning	
ES9585	Fujitsu 4100 Shelf Details	
ES9590	Fujitsu 4100 Cable Assemblies	
ES9595	External (Housekeeping) Alarms	
9600	<b>FIBER OPTIC - OUTSIDE PLANT</b>	
ES9600	Typical OSP Route Diagram	
ES9605	OSP Cable Assignments	
ES9610	OSP Cable Labeling	
ES9615-01	Hand-Hole Butterfly Diagrams	
ES9615-02	Hand-Hole Layouts	
ES9615-03	Hand-Hole Placement and Service Loop	
ES9620-01	Fiber Splice Enclosure Placement Details	
ES9620-02	Rack Mount Fiber Splicing Details	
ES9625-01	Fiber Termination Details	
ES9625-02	Fiber Termination Details	
ES9630-01	B/B FOC Splice and Termination - Single FDP	
ES9630-02	B/B FOC Splice and Termination - Dual FDP	
ES9635-01	72-Strand Fiber Optic Splice and Termination	
ES9635-02	Backbone-to-Lateral Fiber Splicing	
ES9635-03	Backbone-to-Lateral Fiber Splicing 72-Strand	
ES9635-04	FOC Splicing, 96-, 72-, 24- Strand	
ES9635-05	Multiple Lateral FOC Splicing	
ES9640	Fiber Optic Cable (FOC) System Schematic	
ES9645	Communications Shelter Placement	
ES9650-01	Cable Depths Around Culverts and Ditches	
ES9650-02	Cable Excavation Locations Near Rails	
ES9655	COTT Mark Installation	
ES9660-01	Hand-Hole and Conduit Planning	
ES9660-02	Conduit Depth and Construction Details	
ES9660-03	Typical Hand-Hole Duct System	
ES9665	Trace Wire Details	
ES9670-01	Quazite Hand-Hole Specifications	
ES9670-02	Fiber Splice Enclosure Details	

SCRR ENGINEERING STANDARDS INDEX		
ENGINEERING STANDARD NO.	DESCRIPTION	CURRENT REVISION
9000		
	<b>COMMUN</b>	
9700	<b>MICROWAVE RADIO</b>	
ES9700	Required Microwave Network Architecture Simplest 2-Site loop Architecture	
ES9710	Required Microwave Network Architecture Complex 2-Site loop Architecture	
ES9720	Microwave Radio Site Design	
ES9750	Simple Line-Of-Site Microwave Radio Link	
9800	<b>LEASED TELEPHONE CIRCUITS</b>	
ES9800	leased Telephone Circuits Required For Voice And Data Radio Support	
9900	<b>PRODUCTS</b>	
ES9900	Voice Radio Base Station/Repeater VHF Quantar	
ES9905	VHF Base Station Omni Directional Antenna	
ES9910	VHF Base Station Directional Antenna	
ES9915	Radio Coaxial Transmission Line FOAM Dielectric	
ES9920	Harris 5200 Microwave Radio	
ES9925	Signal Processing Unit	
ES9930	Controller Board (CPU)	
ES9935-01	Truepoint 5200 Radio Specifications (1 of 2)	
ES9935-02	Truepoint 5200 Radio Specifications (2 of 2)	
ES9940	Lightning Arrestor For ATCS Data Radio Antenna Sites 890 to 970 MHZ	
ES9945	Lightning Arrestor For VHF Voice Radio Antenna Sites	
ES9950	Tilt Down Tower	
ES9960-01	ATCS Data Radio Base Station Radio Equipment	
ES9960-02	ATCS Data Radio Base Station Radio Equipment	
ES9970-01	ATCS Data Radio Base Station Radio Equipment	
ES9970-02	ATCS Data Radio Base Station Radio Equipment	