

Division Managers

Barstow

J.E. COBEAN	Terminal Manager	8-255-7607
T.P. DUNCAN	Terminal Manager	8-255-7603
M.S. HILL	Terminal Manager	8-255-7602
M.J. KIRSCHINGER	Terminal Superintendent	8-255-7601
L.A. LAWRENCE	Trainmaster	8-255-7583
C.L. LITTLEFIELD	Asst. Terminal Superintendent ...	8-255-7605
J.A. MARTINEZ	Road Foreman	8-255-7804
D.A. NEAL	Trainmaster	8-255-7585
K.P. NOE	Roadmaster	8-255-7654
R.R. RUSSELL	Terminal Manager	8-255-7604
S. SPEISSER	Trainmaster	8-255-5912
R.N. WADE	Trainmaster	8-255-7595
D.J. WALKER	Trainmaster	8-255-5056

La Mirada

S.D. JOHNSON	Trainmaster	8-267-5665
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Los Angeles

C.J. COLD	Road Foreman	8-869-3071
R. CRAFT	Trainmaster	8-267-4016
J.A. DePAEMELAERE ...	Road Foreman	8-267-4139
T.D. FRANKLIN	Terminal Manager	8-267-4232
J.G. HYNES	Terminal Superintendent	8-267-4006
W.E. JOHNSON	Terminal Manager	8-267-4014
J.T. McCABE	Trainmaster	8-267-4232
C.E. McCOY	Roadmaster	8-267-4009
J.C. MENDEZ	Trainmaster	8-267-4232
R.X. MENDOZA	Trainmaster	8-267-4232
J.A. NEWBERN	Trainmaster	8-267-4232
J. SANCHEZ	Supt. Field Operations	8-869-3000
B.D. SHOEMAKE	Terminal Manager	8-267-4323
V.L. STEWART	Terminal Manager	8-267-4011

Needles

G. BOUNOUS	Roadmaster	8-326-5414
B.N. EDWARDS	Mechanical Foreman	8-326-5427
D.K. YOUNG	Trainmaster	8-326-5462

San Bernardino

G.L. BOOP	Mgr. Safety/Rules	8-386-4002
M.E. CROY	Terminal Manager	8-386-4387
R.P. DENNISON	Road Foreman	8-386-4345
D. DILL	Division Engineer	8-386-4504
J.R. FRAZIER	Trainmaster	8-386-4342
T.R. GIBSON	Superintendent Operations	8-386-4304
D. GONZALES	Roadmaster	8-386-4061
O.G. KIRKLEY	General Supervisor Signals	8-386-4050
J.R. McHOOD	Superintendent Operations	8-386-4380
K.C. McREYNOLDS	General Road Foreman	8-386-4017
R.C. MITCHELL	Trainmaster	8-386-4342
A.T. MORALES	Roadmaster	8-386-4060
D.L. NELSON	Road Foreman	8-386-4354
C.D. PENROD	Director Administration	8-386-4012
D.L. SEATON	Trainmaster	8-386-4342
M.S. THERET	Asst. Division Engineer	8-386-4509

San Diego

W.B. ADAMS	Trainmaster	8-386-4800
D.C. WESSEL	Trainmaster	8-386-4801

Watson

C.L. ADAMS	Trainmaster	8-267-4096
D.E. LEATHERS	Superintendent Operations	8-267-4086
L.J. THOMPSON	Trainmaster	8-267-4096
W.H. WYSONG	Trainmaster	8-267-4096

BNSF



Southern California Division

Timetable No. 5

IN EFFECT AT 0001

Pacific Continental Time

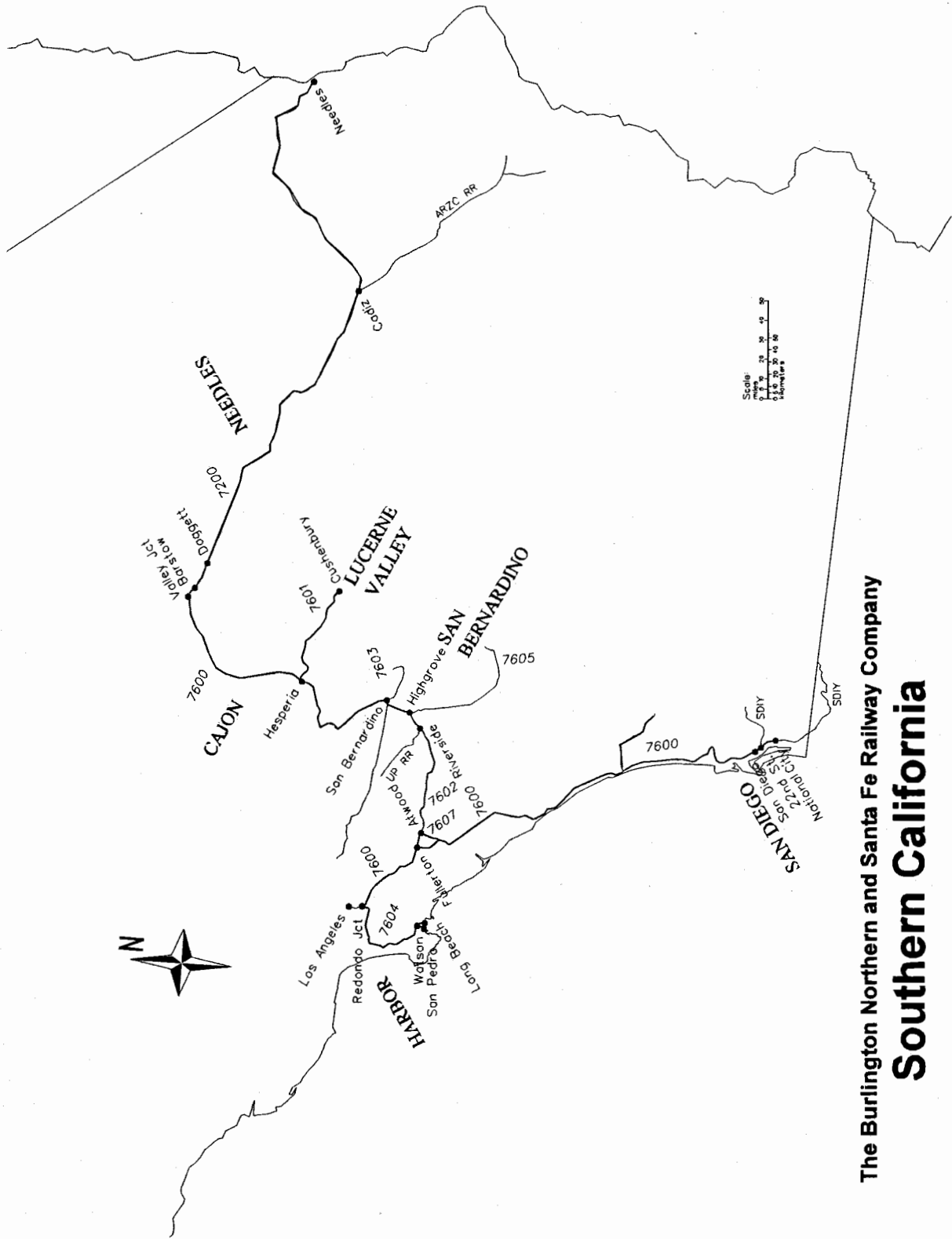
Sunday, December 12, 1999

Division Superintendent

D.L. Meyers

San Bernardino, California

(909) 386-4001



The Burlington Northern and Santa Fe Railway Company
Southern California

Length of Siding (Feet)	Station Nos.	Mile Post	Cajon Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.
	19000	0.0	BARSTOW	XBCPT			7600	0.9
		0.9	EAST D YARD	X(2)		4MT CTC		2.2
		2.7	WEST D YARD	X(2)				0.9
		3.4	VALLEY JCT.	J				0.9
		4.3	WEST R YARD					2.4
	19015	6.7	LENWOOD	X				6.9
		13.6	HODGE	X				15.8
		29.4	EAST ORO GRANDE	X				2.1
	19035	31.5	ORO GRANDE					3.1
		34.6	EAST VICTORVILLE	X				2.1
	19045	36.7	VICTORVILLE	BP		2MT CTC		1.3
		38.0	FROST	X				7.1
	19055	45.1	HESPERIA					5.0
		50.1	LUGO	X				5.8
	19065	55.9	SUMMIT	X				NO 8.9 SO 6.9
		56.6	CP 566	J				6.2
	19075	62.8	CAJON	X				6.6
	19080	69.4	KEENBROOK	X				4.5
		73.9	VERDEMONT	X				6.0
		79.9	BASELINE	X				0.7
		80.8	SEVENTH STREET	X				0.8
	19100	81.4	SAN BERNARDINO	X(2) JBCPT		3MT CTC		90.2

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
Barstow to Lenwood	32	1	3	4	5&7	9
Lenwood to Lugo	72	2	3	4	5&7	9
Lugo to San Bernardino	72	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

Barstow to San Bernardino	Passenger	Freight
	79 MPH.	55 MPH.*#

The exceptions to System Special Instructions Item 1(B), Speed—Main Tracks, do not apply on the Cajon Subdivision.

- Eastward freight trains on descending grades, with dynamic brakes not in use, must not exceed: MP 54.4 to MP 38.0 30 MPH.
- Redlands Industrial Spur, MP 0.0 to MP 0.7 5 MPH.
- Redlands Industrial Spur, MP 0.7 to MP 11.4 10 MPH.

Light engines operating between MP 55.9 and MP 80.6: observe passenger speed.

* System Special Instructions Item 1(B) applies between Barstow and Summit.

See System Special Instructions Item 1(C).

1(B). Speed—Permanent Restrictions

Westward:

MP 0.6 to MP 0.8	50 MPH.	50 MPH.
MP 0.8 to MP 2.7 (Nos. 1, 2, and 4 Main)	30 MPH.	30 MPH.
MP 0.8 to MP 2.7 (No. 3 Main)	50 MPH.	50 MPH.
MP 2.7 to MP 4.6	65 MPH.	60 MPH.
MP 31.9 to MP 33.8, curve	60 MPH.	55 MPH.
MP 33.8 to MP 34.4, curve		
Protected by Inert ATS Inductors	40 MPH.	35 MPH.
MP 34.4 to MP 36.2, curve (Main 1)	65 MPH.	45 MPH.
MP 34.4 to MP 36.2, curve (Main 2)	60 MPH.	45 MPH.
MP 36.2 to MP 37.2, curve	50 MPH.	45 MPH.

MP 37.2 to MP 37.4, curve	35 MPH.	35 MPH.
MP 37.4 to MP 39.1, curve (Main 1)	50 MPH.	45 MPH.
MP 39.1 to MP 42.0, curve (Main 2)	50 MPH.	45 MPH.
MP 37.4 to MP 39.1, curve (Main 2)	45 MPH.	40 MPH.
MP 39.1 to MP 42.0, curve (Main 1)	50 MPH.	45 MPH.
MP 42.0 to MP 43.7, curve	55 MPH.	50 MPH.
MP 47.2 to MP 48.1, curve	75 MPH.	65 MPH.
MP 48.1 to MP 48.8, curve	55 MPH.	55 MPH.
MP 48.8 to MP 50.4, curve	55 MPH.	50 MPH.
MP 50.4 to MP 52.2, curve	50 MPH.	50 MPH.
MP 52.2 to MP 56.1, curve	55 MPH.	50 MPH.
MP 56.1 to MP 56.6, grade (Main 2)	40 MPH.	40 MPH.
MP 56.1 to MP 56.6, grade (Main 1)	45 MPH.	45 MPH.
MP 56.6 to MP 61.5, grade (Main 2)		
Protected by Inert ATS Inductors	30 MPH.	20 MPH.
MP 56.6 to MP 64.2X, grade (Main 1)		
Protected by Inert ATS Inductors	30 MPH.	30 MPH.
MP 56.6, CP 566, Main 1 to UPRR	30 MPH.	30 MPH.
MP 61.5 to MP 62.2, grade (Main 2)	30 MPH.	30 MPH.
MP 62.2 to MP 64.2, grade	40 MPH.	35 MPH.
MP 64.2 to MP 66.5, grade	35 MPH.	35 MPH.
MP 66.5 to MP 72.6, grade	40 MPH.	35 MPH.
MP 72.6 to MP 80.7, grade	50 MPH.	35 MPH.
MP 80.7 to MP 81.5, curve		
Protected by Inert ATS Inductors	30 MPH.	30 MPH.

Eastward:

MP 81.5 to MP 80.7, curve	30 MPH.	30 MPH.
MP 79.5 to MP 79.2, curve	60 MPH.	
MP 79.2 to MP 78.3, curve	70 MPH.	
MP 72.6 to MP 72.0, curve	50 MPH.	45 MPH.
MP 72.0 to MP 71.5, curve	45 MPH.	45 MPH.
MP 71.5 to MP 70.8, curve	45 MPH.	40 MPH.
MP 70.8 to MP 66.5, curve	50 MPH.	45 MPH.
MP 66.5 to MP 64.2, curve	40 MPH.	35 MPH.
MP 64.2 to MP 62.2, curve	50 MPH.	45 MPH.
MP 62.2 to MP 58.8, curve (Main 2)	35 MPH.	30 MPH.
MP 58.8 to MP 57.2, curve (Main 2)	30 MPH.	30 MPH.
MP 57.2 to MP 56.5, curve (Main 2)	40 MPH.	30 MPH.
MP 56.5 to MP 56.1, curve (Main 2)	50 MPH.	40 MPH.
MP 64.3X to MP 63.7X, curve (Main 1)	40 MPH.	35 MPH.
MP 63.7X to MP 63.1X, curve (Main 1)	35 MPH.	35 MPH.
MP 63.1X to MP 61.7X, curve (Main 1)	40 MPH.	35 MPH.
MP 61.7X to MP 57.4X, curve (Main 1)	30 MPH.	30 MPH.
MP 57.4X to MP 56.8X, curve (Main 1)	45 MPH.	40 MPH.
MP 56.8X to MP 56.1, curve (Main 2)	45 MPH.	45 MPH.
MP 56.1 to MP 52.1, curve	55 MPH.	50 MPH.
MP 52.1 to MP 50.4, curve	50 MPH.	50 MPH.
MP 50.4 to MP 48.8, curve	55 MPH.	50 MPH.
MP 48.8 to MP 48.1, curve	55 MPH.	55 MPH.
MP 48.1 to MP 47.2, curve	75 MPH.	65 MPH.
MP 43.7 to MP 42.0, curve		
Protected by Inert ATS Inductors	55 MPH.	50 MPH.
MP 42.0 to MP 39.1, curve (Main 2)	50 MPH.	45 MPH.
MP 42.0 to MP 37.4, curve (Main 1)	50 MPH.	45 MPH.
MP 39.1 to MP 37.4, curve (Main 2)	45 MPH.	40 MPH.
MP 37.4 to MP 37.2, curve	35 MPH.	35 MPH.
MP 37.2 to MP 36.2, curve	50 MPH.	45 MPH.
MP 36.2 to MP 34.4, curve (Main 1)	65 MPH.	45 MPH.
MP 36.2 to MP 34.4, curve (Main 2)	60 MPH.	45 MPH.
MP 34.4 to MP 33.9, curve	40 MPH.	35 MPH.
MP 33.9 to MP 31.8, curve	60 MPH.	55 MPH.
MP 4.6 to MP 2.7, curve	65 MPH.	60 MPH.
MP 2.7 to MP 0.8, (No. 3 Main)	50 MPH.	50 MPH.
MP 2.7 to MP 0.8, (Nos. 1, 2 and 4 Main)	30 MPH.	30 MPH.
MP 0.8 to MP 0.4, curve	50 MPH.	50 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

Barstow, EE passenger siding	20 MPH.	20 MPH.
Barstow, crossover	50 MPH.	50 MPH.
Barstow, yard entry	50 MPH.	50 MPH.
Barstow Yard, EE and WE inspection yard tracks 1101, 1102, 1103,	50 MPH.	50 MPH.
Barstow Yard, Jct., high and low leads on Needles Subdiv., yard entry track	25 MPH.	25 MPH.

Barstow Yard, crossovers between Cajon and Mojave Subdivs., yard entry tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE and WE all receiving yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1201 through 1205, power switches	25 MPH.	25 MPH.
Barstow Yard, WE all departure yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between north departure lead and south departure lead WE departure yard, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between WE inspection yard track 1103 and WE departure yard track 1201, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1206 through 1210, power switches	15 MPH.	15 MPH.
MP 0.02 Barstow, EE passenger siding	20 MPH.	
MP 0.0 Barstow, 2 crossovers	50 MPH.	
MP 0.01 Barstow, yard entry	50 MPH.	
MP 0.6 East D Yard, WE passenger siding	20 MPH.	
MP 0.7 East D Yard, crossover	50 MPH.	
MP 0.7 East D Yard, departure yard lead	50 MPH.	
MP 0.8 East D Yard, turnout to No. 1 Main	50 MPH.	
MP 0.9 East D Yard, turnout to No. 2 Main	50 MPH.	
MP 0.9 East D Yard, inspection yard lead	50 MPH.	
MP 2.6 West D Yard, turnout to No. 1 Main	50 MPH.	
MP 2.7 West D Yard, turnout to No. 2 Main	50 MPH.	
MP 2.7 West D Yard, inspection yard lead	50 MPH.	
MP 2.7 West D Yard, north departure yard lead	50 MPH.	
MP 2.8 West D Yard, south departure yard lead	50 MPH.	
MP 2.8 to MP 2.9, 3 crossovers	50 MPH.	
MP 3.4 Valley Jct., Mojave Subdiv. Jct.	50 MPH.	
MP 4.3 West R Yard, receiving yard lead	25 MPH.	
MP 6.8 Lenwood, 2 crossovers	50 MPH.	
MP 13.6 Hodge, 2 crossovers	50 MPH.	
MP 29.4 East Oro Grande, 2 crossovers	50 MPH.	
MP 34.5 East Victorville, crossover	50 MPH.	
MP 34.7 East Victorville, turnout, Leon Lead to Main 2	10 MPH.	
MP 38.0 Frost, 2 crossovers	50 MPH.	
MP 50.1 Lugo, 2 crossovers	50 MPH.	
MP 55.9 Summit, 2 crossovers	50 MPH.	
MP 65.3 Cajon, 2 crossovers	50 MPH.	
MP 69.4 Keenbrook, 2 crossovers	50 MPH.	
MP 69.6 turnout to UPRR	20 MPH.	
MP 73.4 Verdumont, 2 crossovers	50 MPH.	
MP 79.6 Baseline, turnout to Main 3	50 MPH.	
MP 79.8 Baseline, 2 crossovers	50 MPH.	
MP 80.5 Seventh Street, turnout, Main 1 and yard lead	10 MPH.	
MP 80.6 Seventh Street, crossover Main 2 to Main 1	40 MPH.	
MP 0.0 San Bernardino, turnout, Main 3 to Main 4	15 MPH.	

1(D). Speed—Other

MP 0.1 Needles Subdivision yard entry Between First St. Bridge and Junction High and low leads	25 MPH.	25 MPH.
Low lead	15 MPH.	15 MPH.
Balloon track	10 MPH.	10 MPH.

Speed restrictions, dynamic brake requirements, and special instructions governing the use of retainers for westbound freight trains operating between MP 56.6 and MP 78.0.

- Locomotive weight will not be included in train tonnage except for those units on which dynamic brake is inoperative.
- Speed Restrictions Westbound Freight Trains
Main 2 between MP 56.6 and MP 61.5:
 - 20 MPH if train does not exceed 4,500 tons or 95 TOB.
 - 15 MPH if train exceeds 4,500 tons or 95 TOB.
 - Cannot proceed if train exceeds 14,000 tons or 135 TOB.

Main 2 with helpers/distributed power between MP 56.6 and MP 61.5:

- 20 MPH if train does not exceed 4,500 tons or 95 TOB.
- 15 MPH if train exceeds 4,500 tons or 95 TOB.
- Cannot proceed if train exceeds 14,000 tons or 135 TOB.

Main 1 between MP 56.6 and MP 64.2X and on both tracks between MP 61.5 and MP 78.0:

- 30 MPH if train does not exceed 6,500 tons or 95 TOB.
- 20 MPH if train exceeds 6,500 tons or 95 TOB.
- Cannot proceed if train exceeds 16,000 tons or 135 TOB.
- 35 MPH for light engine consists.

Main 1 with helpers/distributed power between MP 56.6 and MP 61.5 and on both tracks between MP 61.5 and MP 78.0:

- 30 MPH if train does not exceed 6,500 tons or 135 TOB.
- 25 MPH if train is between 6,500 tons and 12,000 tons and does not exceed 135 TOB.
- 20 MPH if train exceeds 12,000 tons and does not exceed 135 TOB.
- Cannot proceed if train exceeds 16,000 tons or 135 TOB.

Exception: Westbound freight trains exceeding 16,000 tons or 135 TOB may operate through turnout to UPRR at CP 566 (MP 56.6). Train cannot proceed on this route if exceeding 17,000 tons or 143 TOB. Westbound freight trains departing Barstow in excess of 16,000 tons or 135 TOB must notify train dispatcher before passing Lenwood (MP 6.7).

Note: Westbound freight trains operating between MP 56.6 and MP 78.0 must have a properly functioning speed indicator on the controlling locomotive of the head-end consist.

- Dynamic Brake Requirements for Westbound Freight Trains: Train crews departing Barstow on westbound BNSF trains, via the Cajon Subdivision, must have in their possession a document from Barstow Diesel Service confirming that all dynamic brakes in their consist are known to be operative.
- Before leaving Summit, it must be known that the lead locomotive in the consist has an operative extended range dynamic brake and that the locomotive consist has the minimum number of operative axles of dynamic brake. If the train does not meet the minimum requirement, **the train must not proceed**. A helper consist may be added to meet this requirement. This requirement must be met using the axle count of locomotives having operative extended range type dynamic braking only.

After leaving Summit, if the dynamic brake on the lead locomotive in the consist becomes inoperative, or if one trailing locomotive's dynamic brake becomes inoperative, and the loss of the dynamic brake causes the train to have less than the minimum required amount of dynamic brake axles, and the engineer has the train under control, the train may proceed without stopping.

When operating with basic dynamic brakes (other than extended range), retarding force decreases as train speed reduces below 18 MPH. Additional brake pipe reduction and/or increased dynamic braking effort may be necessary to control train speed.

WESTWARD	Length of Siding (Feet)	Station Nos.	Mile Post	Cajon Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD
		19000	0.0	BARSTOW	XBCPT			7600	0.9	
			0.9	EAST D YARD	X(2)		4MT CTC		2.2	
			2.7	WEST D YARD	X(2)				0.9	
			3.4	VALLEY JCT.	J				0.9	
			4.3	WEST R YARD					2.4	
		19015	6.7	LENWOOD	X				6.9	
			13.6	HODGE	X		2MT CTC	15.8		
			29.4	EAST ORO GRANDE	X			2.1		
		19035	31.5	ORO GRANDE				3.1		
			34.6	EAST VICTORVILLE	X			2.1		
		19045	36.7	VICTORVILLE	BP		2MT CTC	1.3		
			38.0	FROST	X			7.1		
		19055	45.1	HESPERIA				5.0		
			50.1	LUGO	X		7603	5.8		
		19065	55.9	SUMMIT	X			NO 8.9 SO 6.9	6.2	
			56.6	CP 566	J			6.6		
		19075	62.8	CAJON	X			4.5		
		19080	69.4	KEENBROOK	X			6.0		
			73.9	VERDEMONT	X			0.7		
			79.9	BASELINE	X		3MT CTC	0.8		
			80.6	SEVENTH STREET	X			0.8		
		19100	81.4	SAN BERNARDINO	X(2) JBCPT			90.2		

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
Barstow to Lenwood	32	1	3	4	5&7	9
Lenwood to Lugo	72	2	3	4	5&7	9
Lugo to San Bernardino	72	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
Barstow to San Bernardino	79 MPH	55 MPH.*#

The exceptions to System Special Instructions Item 1(B), Speed—Main Tracks, do not apply on the Cajon Subdivision.

- Eastward freight trains on descending grades, with dynamic brakes not in use, must not exceed: MP 54.4 to MP 38.0 30 MPH.
- Redlands Industrial Spur, MP 0.0 to MP 0.7 5 MPH.
- Redlands Industrial Spur, MP 0.7 to MP 11.4 10 MPH.

Light engines operating between MP 55.9 and MP 80.6: observe passenger speed.

* System Special Instructions Item 1(B) applies between Barstow and Summit.

See System Special Instructions Item 1(C).

1(B). Speed—Permanent Restrictions

Westward:

- MP 0.6 to MP 0.8 50 MPH 50 MPH.
- MP 0.8 to MP 2.7 (Nos. 1, 2, and 4 Main) 30 MPH 30 MPH.
- MP 0.8 to MP 2.7 (No. 3 Main) 50 MPH 50 MPH.
- MP 2.7 to MP 4.6 65 MPH 60 MPH.
- MP 31.9 to MP 33.8, curve 60 MPH 55 MPH.
- MP 33.8 to MP 34.4, curve 40 MPH 35 MPH.
- Protected by Inert ATS Inductors 40 MPH 35 MPH.
- MP 34.4 to MP 36.2, curve (Main 1) 65 MPH 45 MPH.
- MP 34.4 to MP 36.2, curve (Main 2) 60 MPH 45 MPH.
- MP 36.2 to MP 37.2, curve 50 MPH 45 MPH.

- MP 37.2 to MP 37.4, curve 35 MPH 35 MPH.
- MP 37.4 to MP 39.1, curve (Main 1) 50 MPH 45 MPH.
- MP 39.1 to MP 42.0, curve (Main 2) 50 MPH 45 MPH.
- MP 37.4 to MP 39.1, curve (Main 2) 45 MPH 40 MPH.
- MP 39.1 to MP 42.0, curve (Main 1) 50 MPH 45 MPH.
- MP 42.0 to MP 43.7, curve 55 MPH 50 MPH.
- MP 47.2 to MP 48.1, curve 75 MPH 65 MPH.
- MP 48.1 to MP 48.8, curve 55 MPH 55 MPH.
- MP 48.8 to MP 50.4, curve 55 MPH 50 MPH.
- MP 50.4 to MP 52.2, curve 50 MPH 50 MPH.
- MP 52.2 to MP 56.1, curve 55 MPH 50 MPH.
- MP 56.1 to MP 56.6, grade (Main 2) 40 MPH 40 MPH.
- MP 56.1 to MP 56.6, grade (Main 1) 45 MPH 45 MPH.
- MP 56.6 to MP 61.5, grade (Main 2) 30 MPH 20 MPH.
- Protected by Inert ATS Inductors 30 MPH 30 MPH.
- MP 56.6 to MP 64.2X, grade (Main 1) 30 MPH 30 MPH.
- Protected by Inert ATS Inductors 30 MPH 30 MPH.
- MP 56.6, CP 566, Main 1 to UPRR 30 MPH 30 MPH.
- MP 61.5 to MP 62.2, grade (Main 2) 30 MPH 30 MPH.
- MP 62.2 to MP 64.2, grade 40 MPH 35 MPH.
- MP 64.2 to MP 66.5, grade 35 MPH 35 MPH.
- MP 66.5 to MP 72.6, grade 40 MPH 35 MPH.
- MP 72.6 to MP 80.7, grade 50 MPH 35 MPH.
- MP 80.7 to MP 81.5, curve 30 MPH 30 MPH.
- Protected by Inert ATS Inductors 30 MPH 30 MPH.

Eastward:

- MP 81.5 to MP 80.7, curve 30 MPH 30 MPH.
- MP 79.5 to MP 79.2, curve 60 MPH.
- MP 79.2 to MP 78.3, curve 70 MPH.
- MP 72.6 to MP 72.0, curve 50 MPH 45 MPH.
- MP 72.0 to MP 71.5, curve 45 MPH 45 MPH.
- MP 71.5 to MP 70.8, curve 45 MPH 40 MPH.
- MP 70.8 to MP 66.5, curve 50 MPH 45 MPH.
- MP 66.5 to MP 64.2, curve 40 MPH 35 MPH.
- MP 64.2 to MP 62.2, curve 50 MPH 45 MPH.
- MP 62.2 to MP 58.8, curve (Main 2) 35 MPH 30 MPH.
- MP 58.8 to MP 57.2, curve (Main 2) 30 MPH 30 MPH.
- MP 57.2 to MP 56.5, curve (Main 2) 40 MPH 30 MPH.
- MP 56.5 to MP 56.1, curve (Main 2) 50 MPH 40 MPH.
- MP 64.3X to MP 63.7X, curve (Main 1) 40 MPH 35 MPH.
- MP 63.7X to MP 63.1X, curve (Main 1) 35 MPH 35 MPH.
- MP 63.1X to MP 61.7X, curve (Main 1) 40 MPH 35 MPH.
- MP 61.7X to MP 57.4X, curve (Main 1) 30 MPH 30 MPH.
- MP 57.4X to MP 56.8X, curve (Main 1) 45 MPH 40 MPH.
- MP 56.8X to MP 56.1, curve (Main 1) 45 MPH 45 MPH.
- MP 56.1 to MP 52.1, curve 55 MPH 50 MPH.
- MP 52.1 to MP 50.4, curve 50 MPH 50 MPH.
- MP 50.4 to MP 48.8, curve 55 MPH 50 MPH.
- MP 48.8 to MP 48.1, curve 55 MPH 55 MPH.
- MP 48.1 to MP 47.2, curve 75 MPH 65 MPH.
- MP 43.7 to MP 42.0, curve 55 MPH 50 MPH.
- Protected by Inert ATS Inductors 55 MPH 50 MPH.
- MP 42.0 to MP 39.1, curve (Main 2) 50 MPH 45 MPH.
- MP 42.0 to MP 37.4, curve (Main 1) 50 MPH 45 MPH.
- MP 39.1 to MP 37.4, curve (Main 2) 45 MPH 40 MPH.
- MP 37.4 to MP 37.2, curve 35 MPH 35 MPH.
- MP 37.2 to MP 36.2, curve 50 MPH 45 MPH.
- MP 36.2 to MP 34.4, curve (Main 1) 65 MPH 45 MPH.
- MP 36.2 to MP 34.4, curve (Main 2) 60 MPH 45 MPH.
- MP 34.4 to MP 33.9, curve 40 MPH 35 MPH.
- MP 33.9 to MP 31.8, curve 60 MPH 55 MPH.
- MP 4.6 to MP 2.7, curve 65 MPH 60 MPH.
- MP 2.7 to MP 0.8, (No. 3 Main) 50 MPH 50 MPH.
- MP 2.7 to MP 0.8, (Nos. 1, 2 and 4 Main) 30 MPH 30 MPH.
- MP 0.8 to MP 0.4, curve 50 MPH 50 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

- Barstow, EE passenger siding 20 MPH 20 MPH.
- Barstow, crossover 50 MPH 50 MPH.
- Barstow, yard entry 50 MPH 50 MPH.
- Barstow Yard, EE and WE inspection yard tracks 1101, 1102, 1103, 50 MPH 50 MPH.
- Barstow Yard, Jct., high and low leads on Needles Subdiv., yard entry track 25 MPH 25 MPH.

Barstow Yard, crossovers between Cajon and Mojave Subdivs., yard entry tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE and WE all receiving yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1201 through 1205, power switches	25 MPH.	25 MPH.
Barstow Yard, WE all departure yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between north departure lead and south departure lead WE departure yard, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between WE inspection yard track 1103 and WE departure yard track 1201, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1206 through 1210, power switches	15 MPH.	15 MPH.
MP 0.02 Barstow, EE passenger siding	20 MPH.	
MP 0.0 Barstow, 2 crossovers	50 MPH.	
MP 0.01 Barstow, yard entry	50 MPH.	
MP 0.6 East D Yard, WE passenger siding	20 MPH.	
MP 0.7 East D Yard, crossover	50 MPH.	
MP 0.7 East D Yard, departure yard lead	50 MPH.	
MP 0.8 East D Yard, turnout to No. 1 Main	50 MPH.	
MP 0.9 East D Yard, turnout to No. 2 Main	50 MPH.	
MP 0.9 East D Yard, inspection yard lead	50 MPH.	
MP 2.6 West D Yard, turnout to No. 1 Main	50 MPH.	
MP 2.7 West D Yard, turnout to No. 2 Main	50 MPH.	
MP 2.7 West D Yard, inspection yard lead	50 MPH.	
MP 2.7 West D Yard, north departure yard lead	50 MPH.	
MP 2.8 West D Yard, south departure yard lead	50 MPH.	
MP 2.8 to MP 2.9, 3 crossovers	50 MPH.	
MP 3.4 Valley Jct., Mojave Subdiv. Jct.	50 MPH.	
MP 4.3 West R Yard, receiving yard lead	25 MPH.	
MP 6.8 Lenwood, 2 crossovers	50 MPH.	
MP 13.6 Hodge, 2 crossovers	50 MPH.	
MP 29.4 East Oro Grande, 2 crossovers	50 MPH.	
MP 34.5 East Victorville, crossover	50 MPH.	
MP 34.7 East Victorville, turnout, Leon Lead to Main 2	10 MPH.	
MP 38.0 Frost, 2 crossovers	50 MPH.	
MP 50.1 Lugo, 2 crossovers	50 MPH.	
MP 55.9 Summit, 2 crossovers	50 MPH.	
MP 65.3 Cajon, 2 crossovers	50 MPH.	
MP 69.4 Keenbrook, 2 crossovers	50 MPH.	
MP 69.6 turnout to UPRR	20 MPH.	
MP 73.4 Verdumont, 2 crossovers	50 MPH.	
MP 79.6 Baseline, turnout to Main 3	50 MPH.	
MP 79.8 Baseline, 2 crossovers	50 MPH.	
MP 80.5 Seventh Street, turnout, Main 1 and yard lead	10 MPH.	
MP 80.6 Seventh Street, crossover Main 2 to Main 1	40 MPH.	
MP 0.0 San Bernardino, turnout, Main 3 to Main 4	15 MPH.	

1(D). Speed—Other

MP 0.1 Needles Subdivision yard entry Between First St. Bridge and Junction High and low leads	25 MPH.	25 MPH.
Low lead	15 MPH.	15 MPH.
Balloon track	10 MPH.	10 MPH.

Speed restrictions, dynamic brake requirements, and special instructions governing the use of retainers for westbound freight trains operating between MP 56.6 and MP 78.0.

1. Locomotive weight will not be included in train tonnage except for those units on which dynamic brake is inoperative.
2. Speed Restrictions Westbound Freight Trains
Main 2 between MP 56.6 and MP 61.5:
 - A. 20 MPH if train does not exceed 4,500 tons or 95 TOB.
 - B. 15 MPH if train exceeds 4,500 tons or 95 TOB.
 - C. Cannot proceed if train exceeds 14,000 tons or 135 TOB.

Main 2 with helpers/distributed power between MP 56.6 and MP 61.5:

- A. 20 MPH if train does not exceed 4,500 tons or 95 TOB.
- B. 15 MPH if train exceeds 4,500 tons or 95 TOB.
- C. Cannot proceed if train exceeds 14,000 tons or 135 TOB.

Main 1 between MP 56.6 and MP 64.2X and on both tracks between MP 61.5 and MP 78.0:

- A. 30 MPH if train does not exceed 6,500 tons or 95 TOB.
- B. 20 MPH if train exceeds 6,500 tons or 95 TOB.
- C. Cannot proceed if train exceeds 16,000 tons or 135 TOB.
- D. 35 MPH for light engine consists.

Main 1 with helpers/distributed power between MP 56.6 and MP 61.5 and on both tracks between MP 61.5 and MP 78.0:

- A. 30 MPH if train does not exceed 6,500 tons or 135 TOB.
- B. 25 MPH if train is between 6,500 tons and 12,000 tons and does not exceed 135 TOB.
- C. 20 MPH if train exceeds 12,000 tons and does not exceed 135 TOB.
- D. Cannot proceed if train exceeds 16,000 tons or 135 TOB.

Exception: Westbound freight trains exceeding 16,000 tons or 135 TOB may operate through turnout to UPRR at CP 566 (MP 56.6). Train cannot proceed on this route if exceeding 17,000 tons or 143 TOB. Westbound freight trains departing Barstow in excess of 16,000 tons or 135 TOB must notify train dispatcher before passing Lenwood (MP 6.7).

Note: Westbound freight trains operating between MP 56.6 and MP 78.0 must have a properly functioning speed indicator on the controlling locomotive of the head-end consist.

3. Dynamic Brake Requirements for Westbound Freight Trains: Train crews departing Barstow on westbound BNSF trains, via the Cajon Subdivision, must have in their possession a document from Barstow Diesel Service confirming that all dynamic brakes in their consist are known to be operative.
4. Before leaving Summit, it must be known that the lead locomotive in the consist has an operative extended range dynamic brake and that the locomotive consist has the minimum number of operative axles of dynamic brake. If the train does not meet the minimum requirement, **the train must not proceed.** A helper consist may be added to meet this requirement. This requirement must be met using the axle count of locomotives having operative extended range type dynamic braking only.

After leaving Summit, if the dynamic brake on the lead locomotive in the consist becomes inoperative, or if one trailing locomotive's dynamic brake becomes inoperative, and the loss of the dynamic brake causes the train to have less than the minimum required amount of dynamic brake axles, and the engineer has the train under control, the train may proceed without stopping.

When operating with basic dynamic brakes (other than extended range), retarding force decreases as train speed reduces below 18 MPH. Additional brake pipe reduction and/or increased dynamic braking effort may be necessary to control train speed.

Minimum required operative axles of dynamic brake for Main 2 between MP 56.6 and MP 61.5:

Tons Per Operative Brake (TOB)

Total Trailing Train Tonnage	TOB 75 or less	TOB 76 to 85	TOB 86 to 95	TOB 96 to 105	TOB 106 to 115	TOB 116 to 125	TOB 126 to 135
4,000 or less	10	12	14	16	18	18	20
4,001 to 5,000	12	14	18	20	20	22	24
5,001 to 6,000	14	18	20	22	24	26	28
6,001 to 7,000	16	20	22	24	28	30	32
7,001 to 8,000	16	22	24	28	32	34	36
8,001 to 9,000	18	24	28	32	36	38	40
9,001 to 10,000	20	26	32	36	38	42	44
10,001 to 12,000	24	32	38	42	46	50	52
12,001 to 14,000	28	36	42	48	54	58	60

The total minimum operative axles of dynamic brake for trains (including helpers) are in the body of the table. When using this table to determine TOB, round the figures up to the next whole number. For example, 105.1 TOB becomes 106 TOB.

Note: The maximum number of axles of dynamic brake that may be cut in on the lead consist of freight trains is 28 axles; except that solid double-stack trains and bulk commodity "unit" trains (i.e. coal, grain, potash, etc.) may operate with 32 axles of dynamic brake cut in on the lead consist.

Minimum required operative axles of dynamic brake for Main 1 between MP 56.6 and MP 64.2X and on both tracks between MP 61.5 and 78.0:

Tons Per Operative Brake (TOB)

Total Trailing Train Tonnage	TOB 85 or less	TOB 86 to 95	TOB 96 to 105	TOB 106 to 115	TOB 116 to 125	TOB 126 to 135
4,000 or less	8	8	8	8	10	10
4,001 to 5,000	8	8	10	10	12	12
5,001 to 6,000	12	12	12	12	14	14
6,001 to 7,000	12	12	12	14	16	16
7,001 to 8,000	12	12	12	14	16	16
8,001 to 9,000	12	12	14	16	18	20
9,001 to 10,000	12	12	14	18	20	22
10,001 to 12,000	12	12	16	20	24	26
12,001 to 14,000	12	12	18	24	28	30
14,001 to 16,000	12	14	20	26	30	34

Total minimum operative axles of dynamic brake for trains (including helpers) is in the body of the table. When using this table to determine TOB, round the figures up to the next whole number. For example 105.1 TOB becomes 106 TOB.

Note: Maximum number of axles of dynamic brake which may be cut in on the lead consist of freight trains is 28 axles, except that solid double-stack trains may operate with 32 axles of dynamic brake on lead consist.

- West of MP 56.6, under certain conditions such as undesired emergency, break-in-two, emergency stop, etc., where it is necessary to hold the train while the brake system is being recharged, starting behind the lead

locomotives, apply a sufficient number of hand brakes to hold the train.

The brake system must be fully charged, after which a brake pipe reduction must be made that is sufficient enough to hold the train while the hand brakes are being released. Before proceeding, all hand brakes must be released.

- If the total brake pipe reduction exceeds 18 psi to control speed, the train must be stopped immediately.

To control train speed, a sufficient number of retainers (not less than 20), starting behind the lead locomotives, must be set in high-pressure position before releasing the train brakes.

Before proceeding, the brake system must be fully recharged. Excessive use of the engine brake is prohibited. If retainers are positioned before reaching Cajon, a 10-minute cooling stop must be made at Verdmont.

Trains operating with retainers must stop east of the controlled signal at Baseline and place the retainers in direct exhaust position before proceeding.

- The speed of trains must be controlled, at least in part with automatic air brake, when train tonnage exceeds: 2,500 tons on Main 2, between MP 56.6 and MP 62.5; 3,500 tons on Main 1, between MP 56.6 and MP 64.2X; and 4,500 tons on both tracks, between MP 62.5 and MP 78.0.
- Between MP 56.6 and MP 78.0, westbound freight trains containing more than one-half double-stack equipment are required to have RCE or helper locomotives at or near the rear of the train if the train exceeds an average of 100 TOB and exceeds 250 tons per operative axle of dynamic brake.

Other Speed Restrictions

Oro Grande, East Victorville, Victorville, Thorn, Keenbrook, Devore and Ono—The speed limit is 5 MPH on other than main tracks for locomotives in excess of four axles. (Except at Oro Grande, locomotives with more than four axles are prohibited from operating on Clic 8246 and Clic 8247 at Riverside Cement.)

Temperature 100 degrees or above

When the air temperature meets the "threshold temperature," all trains must reduce speed to 40 MPH on main tracks through these limits unless a more restrictive speed is in effect.

If in doubt as to the temperature, contact the train dispatcher. Notify the train dispatcher when your train is restricted to 40 MPH.

Limits	Threshold Temperature	Speed
MP 38.2 to MP 54.5	100 degrees F	40 MPH.
MP 62.2 to MP 80.8	100 degrees F	40 MPH.

Redlands Industrial Spur—From 1100 to 1900 hours, when the temperature is over 100 degrees F, the track is out of service until it is inspected.

See Item 1 of the System Special instructions for additional speed restrictions.

- Bridge and Equipment Weight Restrictions**
Maximum Gross Weight of Car
Barstow to San Bernardino 143 tons, Restriction B
- Type of Operation**
CTC—in effect on Main Track:
Barstow to San Bernardino MP 0.0 to MP 81.4
Rule 6.26—Multiple Main Tracks:
Barstow to San Bernardino MP 0.0 to MP 81.4

Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH, immediately reduce to that speed.
Rule 9.53 Flashing Yellow Over Lunar	Approach-- Thirty	Proceed; approach next signal not exceeding 30 MPH prepared to enter diverging route at prescribed speed, if exceeding 40 MPH, immediately reduce to that speed.

4. General Code of Operating Rules Items

Rule 1.14—Union Pacific freight trains may use joint track between Barstow and San Bernardino.

Rule 6.26—Main tracks cross at grade separation, MP 39.1, and are designated as prescribed by Rule 6.26 above either side of crossing.

Redlands Industrial Spur—Trackage between San Bernardino, MP 0.0, and End of Track, MP 11.4, identified as Redlands Industrial Spur: Rule 6.28 is in effect. All switches must be left lined and locked for movement on Redlands Industrial Spur track.

Rule 104.3.1—If the train is stopped at Summit for any reason, an automatic brake application of not less than 10 psi must be made and not released until ready to proceed.

Rule 101.13—At Summit, westbound passenger trains must make a running air brake test between MP 55 and MP 56. Westbound freight trains operating between Summit and Cajon must make a running air brake test between Lenwood and Lugo, and in doing so must determine the following:

- A. Retarding force of air brake system.
- B. If equipped with a functioning ETD, that normal brake pipe pressure changes occur at the rear of the train.

5. Trackside Warning Detectors (TWD)

- A. Protecting bridges, tunnels or other structures: None
- B. Other TWD locations
 - MP 8.5—Recall Code 8
 - MP 28.5—Recall Code 8
 - MP 32.7 (DED only)
 - MP 37.9 (DED only)
 - MP 42.9 (DED only)
 - MP 48.5—Recall Code 8
 - MP 52.8 (DED only)
 - MP 58.2X—Main 1 (DED only)
 - MP 58.6—Main 2 (DED only)
 - MP 64.7—Recall Code 8

6. FRA Exempted Track

Redlands Industrial Spur—MP 0.0 to MP 11.4, all tracks.

7. Special Conditions

1. In the application of ABTH Rule 101.29.2—Testing Emergency Function—Item 3:
It must be known that it is possible to effect an emergency application of the air brakes from the rear of the train using the two-way ETD equipment, manned helper locomotive, caboose valve, remote-controlled locomotive or passenger equipment. This emergency air brake application must be made after all other air brake tests have been completed and MUST be propagated through the entire train.

Before departing Amtrak Station, Barstow Lenwood Road Crossing or Yermo, freight trains must obtain a signed ETD Certification Form, documenting that the two-way ETD is armed and that the battery is fully charged. This form must be kept on the controlling locomotive of the train with the daily inspection report.

Westbound freight trains operating between Summit and Baseline that are experiencing air brake problems MUST STOP immediately using an emergency air brake application, if necessary, and must secure the train. The train must not proceed until the air brake system is repaired.

At Summit, freight trains required to stop before descending the grade must recharge the train brake system before proceeding.

Freight trains that exceed the maximum authorized speed by 5 MPH must stop by using an emergency application of the air brakes.

All trains operating between Needles and Bakersfield will be required to have in their possession a two-way ETD Certification Form stating that the two-way emergency air test has been performed either at Belen or Bakersfield. This will relieve crews from complying with a two-way test at Barstow. This does not apply to trains originating at Barstow.

2. **Automatic Brake Valve Cutout Valve Position**
When operating westward freight trains on the Cajon Subdivision, place the automatic brake valve cutout valve in FRT position. In the event of equalizing reservoir leakage while operating between Summit and Baseline, the train MUST BE STOPPED. After stopping, the train must be properly secured and the automatic brake valve cutout valve placed in PASS position. The train brake system must be fully charged before proceeding.

A radio report must be made promptly to the Mechanical Desk, Fort Worth, and Form 1226-B Std. "Locomotive Inspection Form" must be completed and turned in at conclusion of the trip.
3. Westbound freight trains departing Barstow must notify the Cajon Subdivision dispatcher of the following information:
 1. Work to be performed on the Cajon Subdivision and at San Bernardino.
 2. If the train qualifies for Main 2.
4. Close clearance overhead and side obstructions that impair clearance:
Victorville
Southwestern Portland Cement Co. "A" track (CLIC 8274), "B" track (CLIC 8275)
Hesperia
Don Oakes Lumber Company (CLIC 8323)

Long Mile Post Condition

Between MP 0.0 to MP 3.0, each mile is 6495 feet.
Between MP 3.0 to MP 4.0, each mile is 5821 feet.

8. Line Segments

Yard Line Segments

Line Segment	Limits
7253	Barstow Yard
7650	San Bernardino Yard

Road Line Segments

Line Segment	Limits
7600	Barstow to National City
7601	Hesperia to Cushenbury
7603	San Bernardino to MP 11.4

9. Locations Not Shown as Stations

Name		Mile Post Location	Capacity Feet	Switch Opens
Helendale	(Main 1)	21.1	640	Both
	(Main 2)	21.1	937	
Oro Grande	(Main 1)	31.5	2,591	Both
	(Main 2)	31.5	2,145	
Victorville	(Main 1)	36.7	4,750	Both
	(Main 2)	36.7	4,700	
Thorn	(Main 1)	41.1	3,635	Both
Hesperia	(Main 2)	45.1	6,760	Both
Martinez Spur	(Main 1)	54.2	3,270	East
Summit	(Main 1)	55.7	220	Both
	(Main 2)	55.7	220	
Alray	(Main 1)	59.7X	820	East
Cajon	(Main 1)	64.3X	1,025	Both
Old Keenbrook	(Main 1)	67.3	100	West
Devore	(Main 2)	71.0	1,200	Both
Cargill	(Main 1)	72.5	3,301	Both
Ono	(Main 1)	75.0	1,960	East
Redlands Industrial Spur		0.0	11.4 miles	West

Length of Siding (Feet)	Station Nos.	Mile Post	Harbor Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.
	23550	0.0	REDONDO JCT.	JCMPTR		7604	1.5	
		1.5	MALABAR	R			1.0	
	21830	2.5	UP RRX NADEAU	A			0.3	
		2.8	UP RRX	A			0.7	
	21650	3.5	WINGFOOT	R			2.5	
	21660	6.0	WILDASIN	R			1.3	
	21670	7.3	VAN NESS	R			0.7	
	21680	8.0	HYDE PARK	R			0.24	
		8.2	ORTIZ				1.66	
	21690	9.9	INGLEWOOD		TWC		2.1	
		12.0	WILLIAMS				1.6	
4,962	21710	13.6	LAIRPORT	R			1.0	
		14.6	UP RRX	R			0.2	
	21720	14.8	EL SEGUNDO	TR			1.8	
	21770	16.6	LAWNDALE	R			3.5	
	21780	20.1	ALCOA	R			1.6	
	21830	21.7	TORRANCE	R			1.6	
	21820	23.3	IRONSIDES	R			3.3	
	22100	26.6X	WATSON	JBCPTR			1.4	
	22240	28.0	WILMINGTON	R			2.0	
	21840		PIER A YARD	TR		1.1		
	22475	27.6	WEST THENARD UP RRX	JRA		0.6		
		28.3	LONG BEACH JCT.	JR		1.9		
	22500		LONG BEACH	R	PHL	33.6		

See Item 1 of the System Special Instructions for additional speed restrictions.

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
Redondo Jct. to MP 8.23	36	1	3	4	5&7	9
MP 8.23 to West Thenard	72	1	3	4	5&7	9
Pacific Harbor Line	58	-	-	-	-	-

1. Speed Regulations

1(A). Speed—Maximum

	Freight
Harbor Subdivision	20 MPH.
Alcoa Spur	10 MPH.

1(B). Speed—Permanent Restrictions

MP 0.0 to MP 1.6	12 MPH.
MP 1.6 to MP 10.1	15 MPH.
MP 2.5, Nadeau	10 MPH.
MP 14.6 RRX (HE Only)	10 MPH.

1(C). Speed—Switches and Turnouts

Harbor Subdivision	10 MPH.
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1(D). Speed—Other

Loaded slab train	30 MPH.
Locomotive cranes/pile drivers, AT-199454 through AT-199468 and Jordan spreaders	20 MPH.

When ambient temperature reaches 100 degrees F after 1400 hours, train speed is restricted to 10 MPH with continuous patrols.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

Redondo Jct. to Long Beach 143 tons, Restriction A

3. Type of Operation

Restricted Limits—in effect:

Redondo Jct. to Ortiz MP 0.0 to MP 8.24
 Williams to Watson MP 12.0 to MP 26.6
 Watson to Long Beach MP 26.6 to UP
 Watson to Anaheim Street MP 26.6 to MP 28.0X

TWC—in effect:

MP 8.24 (Ortiz) to MP 12.0 (Williams)

Pacific Harbor Line—Employees operating on the PHL must have in their possession the current PHL Timetable and Special Instructions. Trains, engines and equipment must have permission from PHL control operator before passing West Thenard or Anaheim St.

4. General Code of Operating Rules Items

Rule 9.13—When crank type dual control switches controlled by Redondo Jct. are used in hand position, switches must not be returned to motor position until movement is clear of switches.

Light indicators are located between Malabar and Nadeau for westward movement at MP 1.7 with 1000-foot approach circuit, and for eastward movement at MP 2.3 with 1000-foot approach circuit. The indicators are lighted continuously, displaying a Red aspect; except when engines or cars foul the approach circuit, the indicator will display a Green aspect if limits are unoccupied. If the indicator does not change to a Green aspect when engines or cars foul the approach circuit, a stop must be made. After stopping, the train or engine may proceed. Within these limits, the Main Track must be continuously occupied, or the switch for track CLIC 2809 must be left open. Track CLIC 2809 must not be used by trains, engines or equipment to clear the Main Track.

5. Trackside Warning Detectors (TWD)—None

6. FRA Exempted Track—None

7. Special Conditions

In the application of ABTH Rule 101.29.2—Testing Emergency Function—Item 3:

It must be known that it is possible to effect an emergency application of the air brakes from the rear of the train using the two-way ETD equipment, manned helper locomotive, caboose valve, remote controlled locomotive or passenger equipment. This emergency air brake application must be made after all other air brake tests have been completed and MUST be propagated through the entire train.

Harbor Subdivision—All movements between West Thenard and Port of Long Beach, West Thenard and Port of Los Angeles, Watson Yard at Anaheim Street and Pasha Terminal Figueroa Street, must be cleared through the Pacific Harbor Line Railway assistant trainmaster at Badger Bridge on Channel 58 when operating in both directions. Do not pass the automatic interlocking at Thenard without clearance from Badger Bridge.

When operating between MP 502.1, Port of Long Beach, and Long Beach Yard Anaheim Street, permission must be granted from the Dolores yardmaster for movement in this territory.

Pacific Harbor Line—Pacific Harbor Line Timetable No. 1, in effect 0001 hours, February 15, 1998. When operating on this territory, employees must have a copy of this timetable and Pacific Harbor general orders in their possession.

8. Other Line Segments

Yard Line Segments

Line Segment Limits

7653 Wilmington Yard

Road Line Segments

Line Segment Limits

7604 Redondo Jct. to Long Beach Jct.

9. Locations Not Shown as Stations—None

WESTWARD	Length of Siding (Feet)	Station Nos.	Mile Post	Lucerne Valley Subdivision		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD
				BRANCH LINE STATIONS						
	2,900	19080	29.2	CUSHENBURY		R			3.1	
	700		28.1	SPUR 5		R		7601	28.1	
		19055	0.0	HESPERIA		R			29.2	

Tone Call-In						
RADIO COMMUNICATION	CH	DS	SC	MC	CSS	EMER
Cushenbury to Hesperia	72	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

Hesperia to MP 29.2 **Freight**
20 MPH.

1(B). Speed—Permanent Restrictions

MP 4.1 to MP 4.4 10 MPH.

1(C). Speed—Switches and Turnouts

Lucerne Valley Subdivision 10 MPH.

1(D). Speed—Other

Locomotive cranes/pile drivers, AT-199454 through AT-199468 and Jordan spreaders 10 MPH.

From 1100 to 1900, if ambient temperature is over 100 degrees F, track is out of service unless train is preceded by train inspector, then movement is restricted to 10 MPH.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car
Cushenbury to Hesperia 143 tons, Restriction D

3. Type of Operation

Restricted Limits—in effect:
Cushenbury to Hesperia MP 29.2 to MP 0.0

4. General Code of Operating Rules Items—None

5. Trackside Warning Detectors (TWD)—None

6. FRA Excepted Track—None

7. Special Conditions

Spur 4 Pluess-Staufner (CLIC 8417, CLIC 8422) has impaired clearance.

Cushenbury—Tracks 8446, 8447 and Scale Track have impaired clearance.

On tracks 8441 and 8442, employees are prohibited from switching cars other than gondola and hopper type, and from riding on top of cars. No employees shall position themselves higher than the brake platform in the operation of the hand brake.

8. Line Segments

Road Line Segments

Line Segment Limits
7601 Hesperia to Cushenbury

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Feet	Switch Opens
Bass	15.5	700	Both
Pleuss-Staufner, Inc.	23.5	884	West
Chas. Pfizer and Co., Inc.	26.2	1,300	East

WESTWARD ↓	Length of Siding (Feet)	Station Nos.	Mile Post	Needles Subdivision MAIN LINE STATIONS	Rule 4.3	Type of Oper.	Line Segment	EASTWARD ↑	
								Miles to Next Stn.	
		19800	578.0	NEEDLES	BCPT	2MT CTC		(1) 2.2	
			580.2	WEST NEEDLES				(2) 2.1	
		19795	585.6	JAVA				5.4	
		19790	592.3	IBIS				6.8	
		19785	597.0	BANNOCK	X			(1) 5.4	
								(2) 4.6	
(1) 6,718		19780	601.5	HOMER	X			4.6	
(1) 9,218 (2) 7,254		19775	609.1	GOFFS	X			7.5	
		19770	618.7	FENNER	X			9.7	
(2) 5,369		19765	626.2	ESSEX	X			7.5	
(2) 5,841		19760	634.7	DANBY	X			8.5	
(1) 9,328 (2) 9,292		19295	648.1	CADIZ	PTX	DT TWC ABS	7200	10.3	
(2) 2,590		19290	658.4	SALTUS	X			3.1	
(1) 5,298 (2) 5,406		19285	661.5	AMBOY	X			7.8	
(2) 5,022		19280	669.3	BAGDAD	X			7.4	
(1) 8,746		19275	678.6	SIBERIA	X			(1) 9.5	
(1) 9,000 (2) 7,113		19265	686.7	ASH HILL	TX			(2) 7.7	
		19260	693.4	LUDLOW	X			6.7	
		19250	706.6	PISGAH	X			13.2	
(1) 8,605 (2) 9,592		19245	712.8	HECTOR	X			6.2	
			724.3	CP 7245	X			11.5	
								1.3	
(1) 7,352 (2) 5,363		19240	725.6	NEWBERRY	X	2MT CTC		11.7	
			725.7	CP 7257	X			0.1	
			727.2	CP 7272	X			4.0	
			731.2	CP 7312	X			6.1	
		19215	737.3	DAGGETT	J			2.3	
			739.6	WEST DAGGETT				4.0	
			743.6	EAST BARSTOW	X			2.3	
		19000	745.9	BARSTOW Main 1 (168.7), Main 2 (166.0)	BCPTX			178.5	

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
Needles to East Barstow	55	1	3	4	5&7	9
East Barstow to Barstow	32	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
Main 1		
Needles to Goffs	79 MPH.	55 MPH.*%
Goffs to Bagdad	90 MPH.	55 MPH.*%
Bagdad to Pisgah	79 MPH.	55 MPH.*%
Pisgah to Daggett	90 MPH.	55 MPH.*%
Daggett to Barstow	79 MPH.	55 MPH.*%
Main 2		
Barstow to Daggett	79 MPH.	55 MPH.*%
Daggett to Pisgah	90 MPH.	55 MPH.*%
Pisgah to MP 685.8	79 MPH.	55 MPH.*%
MP 685.8 to MP 671.4	79 MPH.	45 MPH.
MP 671.4 to Bagdad	79 MPH.	55 MPH.*%
Bagdad to MP 646.1	90 MPH.	55 MPH.*%
MP 646.1 to Needles	79 MPH.	55 MPH.*%
Both Tracks		
Daggett to Ibis against the current of traffic	59 MPH.	49 MPH.*%

* See System Special Instructions Item 1(B).
% See System Special Instructions Item 1, Maximum Speeds Permitted.

Speed limit freight trains, with dynamic brakes not in use: 30 MPH on descending grades:

Westward	Eastward
MP 611.0 to MP 635.0	MP 700.0 to MP 694.0
MP 706.5 to MP 713.0	MP 686.5 to MP 669.5
	MP 607.4 to MP 578.0

Light engines without dynamic brakes in use: 24 MPH on descending grades:

Eastward
Ash Hill to Bagdad and Goffs to Needles

Note: Eastward freight trains must not exceed 60 MPH between Goffs and Needles, and are further restricted to 45 MPH if any of the following apply:

- Train averages more than 80 TOB.
- Train exceeds 5,500 tons.
- Tonnage (including locomotives without operative dynamic brake) exceeds 300 tons per axle of operative dynamic brake, using the table in System Special Instructions Item 2(C).

1(B). Speed—Permanent Restrictions

Main 1

MP 578.1 (HE only)	30 MPH.	30 MPH.
MP 578.0 to MP 579.4	50 MPH.	40 MPH.
MP 579.4 to MP 582.7	45 MPH.	40 MPH.
MP 582.7 to MP 584.5	50 MPH.	50 MPH.
MP 584.5 to MP 587.0	55 MPH.	50 MPH.
MP 587.0 to MP 587.8	50 MPH.	45 MPH.
MP 587.8 to MP 589.3	50 MPH.	50 MPH.
MP 589.3 to MP 592.7	65 MPH.	55 MPH.
MP 592.7 to MP 593.3	60 MPH.	50 MPH.
MP 593.3 to MP 593.8		
Protected by Inert ATS Inductors	30 MPH.	30 MPH.
MP 593.8 to MP 597.8	65 MPH.	55 MPH.
MP 597.8 to MP 599.1	60 MPH.	55 MPH.
MP 599.1 to MP 601.5	70 MPH.	
MP 608.2 to MP 609.1	70 MPH.	
MP 609.1 to MP 609.7	80 MPH.	
MP 618.9 to MP 619.2	85 MPH.	
MP 638.8 to MP 639.2	85 MPH.	
MP 642.4 to MP 642.7	85 MPH.	
MP 644.8 to MP 646.2	75 MPH.	
MP 671.5 to MP 674.0	60 MPH.	50 MPH.
MP 674.0 to MP 678.1	55 MPH.	50 MPH.
MP 678.1 to MP 680.3	40 MPH.	35 MPH.
MP 680.3 to MP 682.7	55 MPH.	50 MPH.
MP 682.7 to MP 683.5	40 MPH.	40 MPH.
MP 683.5 to MP 686.2	55 MPH.	50 MPH.
MP 688.4 to MP 689.5	60 MPH.	55 MPH.
MP 692.9 to MP 693.7	70 MPH.	65 MPH.
MP 693.7 to MP 695.0		
Protected by Inert ATS Inductors	45 MPH.	45 MPH.
MP 695.0 to MP 696.1	60 MPH.	55 MPH.
MP 696.1 to MP 700.4	65 MPH.	55 MPH.
MP 700.4 to MP 702.0	55 MPH.	55 MPH.
MP 707.8 to MP 710.6	70 MPH.	65 MPH.
MP 710.6 to MP 711.6	80 MPH.	
MP 745.0 to MP 745.9	50 MPH.	50 MPH.

Main 2

MP 745.9 to MP 745.0	50 MPH.	50 MPH.
MP 711.6 to MP 710.6	80 MPH.	
MP 710.6 to MP 708.2	70 MPH.	65 MPH.
MP 708.2 to MP 707.8	65 MPH.	60 MPH.
MP 702.0 to MP 701.5	60 MPH.	55 MPH.
MP 701.5 to MP 700.4	70 MPH.	65 MPH.
MP 699.2 to MP 696.2	70 MPH.	
MP 696.2 to MP 694.9	60 MPH.	55 MPH.
MP 694.9 to MP 693.6		
Protected by Inert ATS Inductors	50 MPH.	45 MPH.
MP 693.6 to MP 692.8	70 MPH.	65 MPH.
MP 689.5 to MP 688.4	60 MPH.	55 MPH.
MP 688.4 to MP 685.8 curve, grade	70 MPH.	65 MPH.
MP 685.8 to MP 683.4 curve, grade	75 MPH.	
MP 683.4 to MP 680.7X curve, grade		
Protected by Inert ATS Inductors	50 MPH.	
MP 680.7X to MP 678.3X curve, grade	75 MPH.	
MP 678.3X to MP 677.8 curve, grade	65 MPH.	
MP 677.8 to MP 676.9 curve, grade	75 MPH.	
MP 676.9 to MP 671.4 curve, grade	70 MPH.	
MP 639.2 to MP 638.8	75 MPH.	
MP 625.5 to MP 625.3		65 MPH.

MP 624.6 to MP 618.9	75 MPH.	65 MPH.
MP 612.2 to MP 611.0	75 MPH.	65 MPH.
MP 611.0 to MP 609.2		65 MPH.
MP 609.2 to MP 608.3	70 MPH.	
MP 601.5 to MP 599.1	70 MPH.	
MP 599.1 to MP 597.7	65 MPH.	
MP 597.7 to MP 595.2	75 MPH.	
MP 591.4 to MP 589.3	70 MPH.	
MP 589.3 to MP 587.8	55 MPH.	50 MPH.
MP 587.8 to MP 587.0	45 MPH.	45 MPH.
MP 587.0 to MP 585.2	65 MPH.	50 MPH.
MP 585.2 to MP 583.2	50 MPH.	50 MPH.
MP 583.2 to MP 582.3	55 MPH.	50 MPH.
MP 582.3 to MP 578.0	60 MPH.	50 MPH.
MP 578.1 (HE only)	30 MPH.	30 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

MP 578.4 Needles, crossover, freight lead to Main 1	20 MPH.	20 MPH.
MP 578.4 Needles, crossover	30 MPH.	30 MPH.
West Needles, WE freight lead	20 MPH.	20 MPH.
West Needles, 2 crossovers	50 MPH.	50 MPH.
Ibis, 2 crossovers	50 MPH.	50 MPH.
CP 7245, 2 crossovers	50 MPH.	50 MPH.
CP 7257, 2 crossovers	50 MPH.	50 MPH.
CP 7272, 2 crossovers	50 MPH.	50 MPH.
CP 7312, 2 crossovers	50 MPH.	50 MPH.
Daggett, 2 crossovers	50 MPH.	50 MPH.
Daggett, turnout, Main 1 to UP No. 2 Track	40 MPH.	40 MPH.
Daggett, crossover, Main 1 to UP No. 1 Track	40 MPH.	40 MPH.
West Daggett, turnout, Main 1 to UP No. 1 Track	40 MPH.	40 MPH.
East Barstow, 2 crossovers	50 MPH.	50 MPH.
East Barstow, auxiliary yard entry	30 MPH.	30 MPH.
Barstow, EE passenger siding	20 MPH.	20 MPH.
Barstow, crossover	50 MPH.	50 MPH.
Barstow, yard entry	50 MPH.	50 MPH.
Barstow Yard, EE and WE inspection yard tracks 1101, 1102, 1103	50 MPH.	50 MPH.
Barstow Yard, Jct., high and low leads on Needles Subdiv., yard entry track	25 MPH.	25 MPH.
Barstow Yard, crossovers between Cajon and Mojave Subdiv., yard entry tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE and WE all receiving yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1201 through 1205, power switches	25 MPH.	25 MPH.
Barstow Yard, WE all departure yard tracks, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between North Departure Lead and South Departure Lead, WE departure yard, power switches	25 MPH.	25 MPH.
Barstow Yard, crossover between WE inspection yard track 1103 and WE departure yard track 1201, power switches	25 MPH.	25 MPH.
Barstow Yard, EE departure yard tracks 1206 through 1210, power switches	15 MPH.	15 MPH.

1(D). Speed—Other

Bridge 694.7, cars heavier than 143 tons	25 MPH.	25 MPH.
Barstow Yard: MP 0.1, passenger siding over switch No. 0142	15 MPH.	15 MPH.
MP 0.4 Needles Subdivision yard entry Between First St. Bridge and Junction		
High and low leads	25 MPH.	25 MPH.
Low lead	15 MPH.	15 MPH.
Balloon track	10 MPH.	10 MPH.

Temperature 100 degrees or above

When the air temperature meets the "threshold temperature," all trains must reduce speed to 40 MPH on main tracks through these limits unless a more restrictive speed is in effect.

If in doubt as to the temperature, contact the train dispatcher. Notify the train dispatcher when your train is restricted to 40 MPH.

<u>Limits</u>	<u>Threshold Temperature</u>	<u>Speed</u>
MP 578.4 to MP 650.5	110 degrees F	40 MPH.
MP 669.7 to MP 712.6	110 degrees F	40 MPH.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

Needles to Barstow 143 tons, Restriction A

3. Type of Operation

Crews operating between Ibis and CP 7245 are required to obtain a track warrant listing bulletins and a track warrant with authority before leaving the terminal, unless otherwise instructed by the train dispatcher.

Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH, immediately reduce to that speed.
Rule 9.53 Flashing Yellow Over Lunar	Approach—Thirty	Proceed; approach next signal not exceeding 30 MPH prepared to enter diverging route at prescribed speed, if exceeding 40 MPH, immediately reduce to that speed.

CTC—in effect on Main Track:

Needles to Ibis	MP 578.0 to MP 592.3
CP 7245 to Barstow	MP 724.3 to MP 745.9

CTC—in effect on Freight Lead:

East Needles to West Needles	MP 574.8 to MP 580.2
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TWC—in effect:

Ibis to CP 7245	MP 592.3 to MP 724.3
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ABS—in effect:

Ibis to CP 7245	MP 592.3 to MP 724.3
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Rule 6.26—Multiple Main Tracks

Needles to Ibis	MP 578.0 to MP 592.3
CP 7245 to Barstow	MP 724.3 to MP 745.9

Rule 6.24—Double Tracks—Crossovers

Ibis to CP 7245	MP 592.3 to MP 724.3
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Station	MP	Points	Turnout Speed
Bannock	597.0	Trailing	10
Homer	601.2	Trailing	10
Goffs	609.1	Trailing	10
Fenner	618.6	Trailing	10
Essex	626.2	Trailing	10
Danby	634.6	Trailing	10
Cadiz	646.7	Facing	10
Cadiz	648.6	Trailing	10
Saltus	658.5	Trailing	10
Amboy	662.2	Trailing	10
Bagdad	669.9	Trailing	10
Bagdad	669.9	Facing	10
Siberia	677.3	Facing	10
Siberia	677.4	Trailing	10
Ash Hill	686.4	Trailing	10
Ludlow	693.3	Trailing	10

Pisgah	707.8	Trailing	10
Hector	711.8	Facing	10
Hector	712.5	Trailing	10
Newberry	725.4	Trailing	10
.....	727.3	Trailing	10

4. General Code of Operating Rules Items

Rule 1.14—Union Pacific trains may use joint track between Daggett and Barstow. BNSF trains may use A&C RR main track between MP 189 and MP 190, under the provisions of Rule 6.13. A&C RR trains may use Main 2 siding and yard tracks 6476 and 6478 at Cadiz.

Rule 5.5—Permanent speed signs are not displayed for movements against the current of traffic.

Rule 6.19—Flag protection as prescribed in Rule 6.19 is authorized.

Rule 6.25—Movements against the current of traffic. Spring switches are located as follows:

Homer	WE Main 1 Siding
Goffs	WE Main 1 Siding & EE Main 2 Siding
Essex, Danby	EE Main 2 Siding
Cadiz	WE Main 1 Siding & EE Main 2 Siding
Bagdad	EE Main 2 Siding
Amboy	EE Main 2 Siding & WE Main 1 Siding
Siberia	WE Main 1 Siding
Ash Hill, Pisgah	WE Main 1 Siding & EE Main 2 Siding

Rule 12.1—ATS in effect on Main 1, Goffs to Bagdad and Pisgah to CP 7245, and CP 7245 to Daggett in westward direction only; and on Main 2, Daggett to CP 7245 in eastward direction only, CP 7245 to Pisgah, and Bagdad to MP 646.1.

5. Trackside Warning Detectors (TWD)

A. Protecting bridges, tunnels or other structures: None

B. Other TWD locations

- MP 584.6—Recall Code 8
- MP 600.7—Recall Code 0
- MP 614.9—Recall Code 0
- MP 628.1—Recall Code 8
- MP 644.5—Recall Code 0
- MP 651.0—Main 2—Recall Code 8
- MP 665.0—Recall Code 0
- MP 690.7—Recall Code 8
- MP 711.1—Recall Code 0
- MP 733.3—Recall Code 8

C. Other detectors

- MP 587.9—High Water
 - WWD signals 5861, 5863
 - EWD signals 5892, 5894
- MP 642.9—High Water
 - WWD signal 6421
 - EWD signal 6442

6. FRA Excepted Track—None

7. Special Conditions

East Needles—Ibis

Key controllers, entering double track against the current of traffic:

After obtaining track warrant authority to move against the current of traffic, the train dispatcher will issue permission and the key controller must be operated at the controlled signal governing movement against the current of traffic, to obtain the signal indication.

The key controller is located on the side of the instrument case. The key controller may be operated only after receiving permission from the train dispatcher.

Train VVCPHX: Do not exceed 20 MPH between MP 686.0 and MP 677.0.

Bridge 642.9

On the Needles Subdivision between Cadiz and Danby, trains operating against the current of traffic approaching Bridge 642.9 must stop and make a thorough examination to determine that the bridge has not been weakened by high water, unless block signals 6421 or 6442 on the adjacent track can be seen to display an aspect other than red. Block signals 6401, 6421, 6442 and 6462 are continuously lighted for this purpose.

Saltus

Six-axle locomotives must not operate on West Salt Spur, CLIC 6491.

All safety hub (flop-over) switches on the Needles Subdivision are considered "rigid" and must not be run through.

Do not leave cars, locomotives or any other equipment on CLIC tracks 7276 and 7277 at Newberry unless permission is obtained from the train dispatcher.

8. Line Segments

Yard Line Segments

Line Segment Limits

7253 Barstow Yard

Road Line Segments

Line Segment Limits

7200 Needles to Barstow MP 578.0 to MP 745.9

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Feet	Switch Opens
Klondike (Main 1)	MP 682.0	345	West
Lavic (Main 2)	MP 702.7	235	East
Cool Water (Main 1)	MP 735.9	300	West
Nebo (Main 2)	MP 741.6	5,488	Both

WEST WARD ↓	Length of Siding (Feet)	Station Nos.	Mile Post	San Bernardino Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EAST WARD ↑
				SAN BERNARDINO						
		19100	0.0	SAN BERNARDINO		JBCMPT- X(2)	4MT CTC	7602	2.8	
		19140	2.2	RANA		X(2)	3MT CTC		0.7	
			2.9	CP 29		JX	3MT CTC		0.3	
		25045	3.2	COLTON (UP RRX)		M	2MT CTC		1.0	
4,490			4.2	WEST COLTON		JX			1.9	
			6.1	CP 61		X	3MT CTC		0.6	
		25085	6.7	HIGHGROVE					3.1	
		25200	9.8	RIVERSIDE			3MT CTC	0.1		
			9.9	TENTH STREET				0.7		
			10.6	WEST RIVERSIDE		X	2MT CTC	3.4		
		25210	14.0	CASA BLANCA				1.1		
			15.1	CP 151		X	2MT CTC	3.4		
			18.5	LA SIERRA				2.9		
		25250	21.4	MAY		X	2MT CTC	1.4		
8,059		25255	22.8	PORPHYRY				1.3		
		25260	24.1	CORONA			3MT CTC	3.1		
			27.2	WEST CORONA				2.2		
		25265	29.4	PRADO DAM		X	3MT CTC	6.4		
		25270	35.8	ESPERANZA		X		4.8		
		25274	40.6	ATWOOD		JX	2MT CTC	4.9		
		23200	45.5 165.5	FULLERTON JCT.		JBCPX		3MT CTC	2.5	
		23160	163.0	BASTA		X	3MT CTC	2.7		
		23148	160.3	BUENA PARK		X		2.6		
		21340	157.7	LA MIRADA		TX	2MT CTC	1.6		
(1)4,150 (2)3,432			156.1	NORWALK				1.1		
			155.0	SANTA FE SPRINGS		X	2MT CTC	2.0		
		23120	153.0	LOS NIETOS (UP RRX)		M		0.9		
		23110	152.1	DT JCT. (UP RRX)		MX	3MT CTC	1.2		
		23100	150.9	PICO RIVERA		BCPT		1.1		
		23039	149.8	BANDINI		X	3MT CTC	1.3		
			148.5	COMMERCE		X		1.2		
			147.3	EASTERN AVE.		X(2)	2MT CTC	1.3		
		23000	146.0	HOBART		BCPX(2)		1.5		
			144.5	HOBART TWR. (UP RRX)		JCMX	2MT CTC	1.3		
		23550	143.2	REDONDO JCT. (UP RRX)		JCMPT		68.4		

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
San Bernardino to MP 10.6	72	1	3	4	5&7	9
MP 10.6 to Redondo Jct.	36	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
San Bernardino to Fullerton Jct.	60 MPH.	50 MPH.#
Fullerton Jct. to MP 144.5	79 MPH.	50 MPH.#
MP 144.5 to Redondo Jct.	65 MPH.	50 MPH.#
San Jacinto Industrial Spur, MP 0.0 to MP 3.6		20 MPH.
MP 3.6 to MP 7.0		15 MPH.
MP 7.0 to MP 14.2		20 MPH.
MP 14.2 to MP 38.3		10 MPH.
3M Spur		10 MPH.

See System Special Instructions Item 1(C).

System Special Instructions Item 1(C) is in effect between CP Rancho and Arcadia on Metrolink tracks.

1(B). Speed—Permanent Restrictions

MP 0.0 to MP 0.9, Main 4	15 MPH.	15 MPH.
MP 0.9 to MP 2.2, Main 4	20 MPH.	20 MPH.
MP 0.0X to MP 2.9, Main 1, 2 and 3	30 MPH.	30 MPH.
MP 2.2 to MP 3.2, Main 1 and 2	30 MPH.	30 MPH.
MP 3.2 to MP 4.0	40 MPH.	40 MPH.
MP 6.6 to MP 6.8	50 MPH.	40 MPH.
MP 8.3 to MP 8.5	60 MPH.	50 MPH.
MP 9.3 to MP 9.6	55 MPH.	50 MPH.
MP 11.8 to MP 12.5	45 MPH.	40 MPH.
MP 15.4 to MP 15.9	55 MPH.	50 MPH.
MP 15.9 to MP 16.7	55 MPH.	50 MPH.
MP 16.7 to MP 17.1	60 MPH.	50 MPH.
MP 31.4 to MP 31.6	55 MPH.	50 MPH.
MP 31.6 to MP 32.8	60 MPH.	50 MPH.
MP 32.8 to MP 34.4	50 MPH.	50 MPH.
MP 34.4 to MP 35.1	50 MPH.	45 MPH.
MP 35.9, Main 2 (switch)	50 MPH.	50 MPH.
MP 42.7 to MP 43.6 (HER)	50 MPH.	50 MPH.
MP 45.2 to MP 45.7	50 MPH.	50 MPH.
MP 165.2 to MP 164.7 (HER)	50 MPH.	50 MPH.
MP 165.0 to MP 164.4	40 MPH.	40 MPH.
MP 163.8 to MP 163.5	75 MPH.	
MP 161.1 to MP 160.8	70 MPH.	
MP 156.6 to MP 155.9	75 MPH.	
MP 154.2 to MP 153.8	70 MPH.	
MP 153.0 RRX	50 MPH.	30 MPH.
MP 152.9 to MP 152.5	70 MPH.	
MP 152.1 RRX	30 MPH.	30 MPH.
MP 151.7 to MP 151.4	65 MPH.	
MP 148.5, Main 2 (switch)	40 MPH.	40 MPH.
MP 144.5 to MP 144.9, Main 2 and 3	40 MPH.	40 MPH.
MP 144.5 to MP 143.4	30 MPH.	30 MPH.
MP 143.4 to MP 142.9		
Protected by Inert ATS Inductors	15 MPH.	15 MPH.

1(C). Speed—Switches and Turnouts

Trains and engines using auxiliary tracks must not exceed turnout speed for that track unless otherwise indicated.

MP 0.0 San Bernardino, turnout, Main 3 and 4	15 MPH.
MP 0.1 San Bernardino, passenger movements and all freight movements, Main 4, double slip switch	15 MPH.
MP 0.1 San Bernardino, freight movements routed to or from passenger yard or flyover, double slip switch	10 MPH.
MP 0.3X, 4 crossovers	30 MPH.
MP 0.3X, turnout to A Yard Lead	10 MPH.
MP 0.3X, turnout to Auto Facility Lead	10 MPH.
MP 2.2 Rana, turnout to B Yard Lead	10 MPH.
MP 2.2 Rana, 4 crossovers	30 MPH.
MP 2.2 Rana, turnout to Main 4	30 MPH.
MP 2.2 Rana, turnout from Main 3 to Auto Facility Lead	10 MPH.
MP 2.9 CP 29, turnouts Main 1 to Main 1 to UP Connection Track	40 MPH.
MP 2.9 CP 29, turnouts Main 1 to UP Connection Track	10 MPH.
MP 4.2 West Colton, WE Main 2 siding, UP Connecting Track	25 MPH.
MP 4.3 West Colton, 2 crossovers	50 MPH.
MP 6.1 CP 61, crossover and turnout to Main 1	50 MPH.
MP 6.4, turnout Main 2 to San Jacinto Ind. Spur	20 MPH.
MP 9.9 Tenth Street, turnout Main 1 to Metrolink Station	40 MPH.
MP 9.9, Main 3 to Metrolink Station	30 MPH.
MP 10.3, Main 3 to Metrolink Station	30 MPH.
MP 10.4, West Riverside, 2 crossovers and turnout Main 1 to UPRR and turnout to Main 2	40 MPH.
MP 10.4 West Riverside, crossover to Metrolink lead	30 MPH.
MP 15.1 CP 151, 2 crossovers	50 MPH.
MP 21.4 May, 2 crossovers	50 MPH.
MP 22.4/MP 24.0 Porphyry, EE and WE siding	15 MPH.
MP 29.5 Prado Dam, 2 crossovers and turnout to Main 1	50 MPH.
MP 35.9 Esperanza, 2 crossovers and turnout to Main 1	50 MPH.
MP 40.6 Atwood, switch to Metrolink	25 MPH.

MP 40.5 Atwood, 2 crossovers	50 MPH.
MP 45.5/MP 165.5 Fullerton Jct., switch to Metrolink	40 MPH.
MP 45.5/MP 165.5 Fullerton Jct., 2 crossovers	50 MPH.
MP 165.2 Fullerton Jct., crossover Main 2 to Main 3	40 MPH.
MP 163.2 Basta, 2 crossovers, and turnout to Main 3	50 MPH.
MP 160.1 Buena Park, 2 crossovers	50 MPH.
MP 157.7 La Mirada, 2 crossovers	50 MPH.
MP 156.8/MP 155.8 Norwalk, EE and WE Main 1 siding	40 MPH.
MP 156.8/MP 155.8 Norwalk, EE and WE Main 2 siding	40 MPH.
MP 155.0 Santa Fe Springs, 2 crossovers	50 MPH.
MP 152.1 D.T. Jct., 2 crossovers	50 MPH.
MP 149.9 Bandini, 2 crossovers	50 MPH.
MP 148.4 Commerce, end of 3 tracks switch to Main 3	40 MPH.
MP 147.3 Eastern Ave., 2 crossovers	40 MPH.
MP 147.3 Eastern Ave., crossover between Main 1 and outbound lead and Main 1 to setout track	10 MPH.
MP 146.1 Hobart, Main Track crossovers	30 MPH.
MP 146.1 Hobart, crossover Main 1 to setout track	30 MPH.
MP 144.7 Hobart Tower, crossover Main 1 to Main 2	40 MPH.
MP 144.7 Hobart Tower, east crossover	30 MPH.
MP 144.7 Hobart Tower, middle crossover	15 MPH.
MP 144.7 Hobart Tower, west crossover	30 MPH.
MP 143.2 Redondo Jct., crossovers and turnouts	15 MPH.
MP 144.7 Hobart Tower, all other crossovers and turnouts	15 MPH.

1(D). Speed—Other

Temperature 100 degrees or above

When the air temperature meets the "threshold temperature," all trains must reduce speed to 40 MPH on main tracks through these limits unless a more restrictive speed is in effect.

If in doubt as to the temperature, contact the train dispatcher. Notify the train dispatcher when your train is restricted to 40 MPH.

<u>Limits</u>	<u>Threshold Temperature</u>	<u>Speed</u>
MP 10.7 to MP 18.0	100 degrees F	40 MPH.
MP 26.7 to MP 38.5	100 degrees F	40 MPH.

San Jacinto Industrial Spur—From 1100 to 1900 hours, if the air temperature is over 100 degrees F, the track is out of service unless movement is preceded by the track supervisor; then the train can proceed at 10 MPH.

At Redondo Jct., the speed limit is 5 MPH over Santa Fe Blvd. on the Butte Street lead to the Washington auto dock.

Hobart Tower

The speed limit is 5 MPH on Junction Wye. Loaded slab trains are restricted to 30 MPH.

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

Barstow to San Bernardino	143 tons, Restriction B
Highgrove to San Jacinto	143 tons, Restriction D

3. Type of Operation

CTC—in effect on Main Track:

San Bernardino to Redondo Jct.	MP 0.0 to MP 143.2
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CTC—in effect on siding:

Norwalk (Main 1 and Main 2)	MP 156.1
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Multiple Main Tracks

San Bernardino to Redondo Jct.	MP 0.0 to MP 143.2
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Controlled Sidings

West Colton
Porphyry

Manual Interlockings Not Controlled by BNSF

<u>Location</u>	<u>Controlling Railroad</u>
Hobart Tower (UP RRX), MP 144.5	UP

Signals Not Conforming to Aspects and Indications Shown in the System Special Instructions

Aspect	Name	Indication
Red Over Flashing Yellow	Diverging Approach (Rule 9.1.11 does not apply.)	Proceed through diverging route; prescribed speed through turnout; approach next signal preparing to stop, if exceeding 40 MPH immediately reduce to that speed.

4. General Code of Operating Rules Items

Rule 1.14—Union Pacific trains may use joint track between San Bernardino and West Riverside. BNSF trains and engines may use Metrolink tracks between CP Rancho and Arcadia. The speed limit on all auxiliary tracks is not specifically governed by the Metrolink Timetable and other instructions; it is 10 MPH, unless further restricted. The special instructions for ALL SUBDIVISIONS and all general orders and superintendent notices remain in effect unless specific instructions to the contrary are issued by Metrolink.

Rule 5.8.2—Between MP 39.0 and MP 44.0, the engine whistle will not be used in advance of street crossings protected by automatic crossing gates. Exception: The engine whistle shall be used at the discretion of the engineer to avoid injury to persons, damage to property or when approaching roadway workers on or near the track.

Rule 5.16—Passenger Trains—Observe and Call Signals: When a signal requires the train to stop at or pass the next signal at restricted speed, the engineer must communicate that fact to a designated member of the crew, including the track designation if on multiple tracks, and get an acknowledgment. If no acknowledgment is received, the engineer must ascertain at the next scheduled stop why the message is not being confirmed. If the engineer fails to control the train movement in accordance with either a wayside signal or other restrictions imposed upon the train, the designated crew member shall at once communicate with and caution the engineer regarding the restriction, and if necessary, take appropriate action to ensure the safety of the train, including stopping all movement if appropriate.

Rule 9.9—All Trains—Train Delayed Within a Block: In CTC, when any train stops or its speed is reduced below 10 MPH, the train must proceed at a speed not exceeding 40 MPH, prepared to stop at the next signal until the next signal is visible and the signal displays a proceed indication.

Rule 9.12.1—Permission must be secured from the BNSF train dispatcher to pass controlled signals indicating Stop at Fullerton Jct. and Atwood.

Before operating beyond controlled signals indicating Stop onto the Metrolink San Gabriel, Olive and Orange subdivisions, permission must be obtained from the BNSF train dispatcher to pass the Stop signal and from the Metrolink train dispatcher to occupy the Main Track beyond the control point.

Rule 9.13—When crank-type dual control switches controlled by Redondo Jct. or Hobart Tower are used in hand position, the switches must not be returned to motor position until movement is clear of switches.

Rule 10.3—When Track and Time is granted to trains or engines on the Metrolink San Gabriel, Olive and Orange subdivisions between the BNSF-controlled signal and points beyond on the Metrolink Subdivision, permission must be obtained from the BNSF train dispatcher to pass the controlled signal.

San Jacinto Industrial Spur—Trackage between Highgrove, MP 0.0, and San Jacinto, MP 38.3, is identified as San Jacinto Industrial Spur; Rule 6.28 is in effect. Rule 9.12.3, Automatic Interlocking, is in effect at UP RRX, MP 1.5. Turning facility is located at Val Verde, MP 13.5. All switches must be left lined and locked for movement on the San Jacinto Industrial Spur track.

5. Trackside Warning Detectors (TWD)

- A. Protecting bridges, tunnels or other structures: None
- B. Other TWD locations
 - MP 6.0—Recall Code 8
 - MP 32—Recall Code 8
 - MP 154.7—Recall Code 8
- C. Other detectors
 - MP 4.6—High Water
 - EWD controlled signals CP 61
 - WWD controlled signals W. Colton

6. FRA Excepted Track

San Jacinto Industrial Spur, all tracks MP 18.8 to MP 38.3.

7. Special Conditions

1. In the application of ABTH Rule 101.29.2—Testing Emergency Function—Item 3:
It must be known that it is possible to effect an emergency application of the air brakes from the rear of the train using the two-way ETD equipment, manned helper locomotive, caboose valve, remote-controlled locomotive or passenger equipment. This emergency air brake application must be made after all other air brake tests have been completed and **MUST** be propagated throughout the entire train.

In the application of Air Brake and Train Handling Rule 102.12.2, first bullet reading, "Distance to be traveled exceeds 2 miles": At Hobart Yard only, movements on other than Main Track may be made from other than the cab nearest the direction traveled when the "Distance to be traveled does not exceed 5 miles."

2. Trains departing CP Kaiser to San Bernardino B Yard must contact the assistant trainmaster (909-386-4384) for permission to enter the B Yard.
3. Close Clearance
 - Close clearance on the south track, south side, between East and West Norwalk.
 - Close clearance at Kimberly-Clark, CLIC 6321.

BNSF System Special Instructions Amendment—Item 9 Amtrak Instructions, under the heading "Equipment," the line reading, "Movement with locomotive between cars is prohibited" does not apply on the Southern California Division. Be governed by the following instructions:

- Movement with locomotives between cars is prohibited unless:
- A. Locomotive is being used in "push-pull service."
 - B. "MU" cables are connected through the entire train.
 - C. Locomotive between cars is not isolated or dead-in-tow.

8. Line Segments

Yard Line Segments

Line Segment Limits

- 7650 San Bernardino Yard
- 7652 Hobart Yard
- 7651 First Street Yard (LA)

Road Line Segments

Line Segment Limits

- 7600 Barstow to National City
- 7602 San Bernardino to Fullerton Jct.
- 7605 Highgrove to San Jacinto

9. Locations Not Shown as Stations

Name	Mile Post Location	Capacity Feet	Switch Opens
San Bernardino Subdivision			
Colton Cement Spur	3.5	1,882	East
San Jacinto Industrial Spur	6.7	38.3 miles	East
Prenda Spur (Prenda)	14.3	300	Both
Arlington	15.9	2,000	Both
Porphyry (3M Spur)	22.7	18,480	West
West Corona	26.8	5,812	Both
Fullerton	164.7 MT 1	7,995	Both
Fullerton	164.7 MT 2	4,350	Both
San Jacinto Industrial Spur			
Highgrove	0.0	1,018	Both
Lily Cup	0.6	545	Both
Box Springs	7.2	1,555	Both
Alessandro	10.6	2,046	Both
Val Verde	13.5	1,105	Both
Granite Spur	14.5	4,752	Both
Mayer Farms	15.9	920	Both
Ellis	19.9	800	East

WESTWARD ↓	Length of Siding (Feet)	Station Nos.	Mile Post	San Diego Subdivision MAIN LINE STATIONS		Rule 4.3	Type of Oper.	Line Segment	Miles to Next Stn.	EASTWARD ↑
		25710	273.1	NATIONAL CITY	R				3.8	
			269.3	22ND STREET	BCPXR			7600	1.8	
		25700	267.5	SAN DIEGO	TXR				103.3	
		23200	165.0	FULLERTON JCT.	JBCPX				108.9	

RADIO COMMUNICATION	Tone Call-In					
	CH	DS	SC	MC	CSS	EMER
National City to MP 267.7	32	1	3	4	5&7	9
MP 267.7 to Fullerton Jct./Atwood	30	1	3	4	5&7	9

1. Speed Regulations

1(A). Speed—Maximum

	Passenger	Freight
National City to MP 268.5 (5th Ave.)	10 MPH.	10 MPH.
MP 268.5 (5th Ave.) to San Diego	20 MPH.	10 MPH.

System Special Instructions Item 1(C) is in effect between Fullerton Jct. and Atwood and San Diego.

1(B). Speed—Permanent Restrictions—None

1(C). Speed—Switches and Turnouts

San Diego Subdivision 10 MPH.

1(D). Speed—Other—None

See Item 1 of the System Special Instructions for additional speed restrictions.

2. Bridge and Equipment Weight Restrictions

Maximum Gross Weight of Car

National City to San Diego 143 tons, Restriction C

3. Type of Operation

Restricted Limits—in effect:

National City to San Diego—MP 273.1 to MP 267.7

4. General Code of Operating Rules Items

Rule 1.14—BNSF trains and engines may use Metrolink tracks between Fullerton Jct. or Atwood and County Line, and may use San Diego Northern Railway tracks between County Line and San Diego, MP 267.7. San Diego Northern Railway trains and engines may use Main Track between MP 267.6 and MP 268.8. The speed limit on all auxiliary tracks is not specifically governed by the Metrolink and San Diego Northern Railway timetables and other instructions; it is 10 MPH, unless further restricted. The special instructions for ALL SUBDIVISIONS and all general orders and superintendent notices remain in effect unless specific instructions to the contrary are issued by Metrolink or San Diego Northern Railway.

5. Trackside Warning Detectors (TWD)—None

6. FRA Exempted Track—None

7. Special Conditions

In the application of ABTH Rule 103.10.2—Testing Emergency Function—Item 3:

It must be known that it is possible to effect an emergency application of the air brakes from the rear of the train using the two-way ETD equipment, manned helper locomotive, caboose valve, remote-controlled locomotive or passenger equipment. This emergency air brake application must be made after all other air brake tests have been completed and MUST be propagated throughout the entire train.

8. Line Segments

Yard Line Segments

Line Segment Limits

7654 Bay Yard

Road Line Segments

Line Segment Limits

7600 Fullerton Jct. to National City

9. Locations Not Shown as Stations—None

GCOR and MWOR Rule 15.2A—Verbal Permission:

When granting verbal permission, use the following words:

"Foreman (name) (of Gang No.) using track bulletin no. ___ line no. ___ between MP ___ and MP ___ on ___ Subdivision."

1. To permit a train to pass a red flag (or light) without stopping, add the following:
 "Unless otherwise restricted, (train) may pass red flag or light located at MP ___ without stopping." (Specify track if necessary.) Unless otherwise restricted, the train may pass the red flag or light at restricted speed without stopping.
2. To permit a train to proceed at other than restricted speed, add the following:
 "Unless otherwise restricted, (train) may proceed through the limits at ___ MPH (or at maximum authorized speed)." (Specify track if necessary.) The train may move through the limits at the speed specified, unless otherwise restricted.
3. To require a train to move at restricted speed, but less than 20 MPH, add the following:
 "Unless otherwise restricted, (train) must proceed at restricted speed but not exceeding ___ MPH." (Specify distance and track if necessary.) Unless otherwise restricted, the train must proceed at restricted speed and not exceed the speed specified.
4. To permit a train to move at a higher speed after receiving permission to pass a red flag or light at specific speed for a specific distance, add the following:
 "Unless otherwise restricted, (train) may pass red flag (or light) located at MP ___ (without stopping) at ___ MPH until the entire train has passed MP ___. You may then proceed at (higher speed) MPH (or at maximum authorized speed)." (Specify track if necessary.) Only one additional speed can be given. It must be higher than the speed permitted by the red flag or light, and the speed will extend to the end of the Form B limits, unless otherwise restricted.

Speed Tables

SPEED TABLE								
Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour	Time Per Mile		Miles Per Hour
Min.	Sec.		Min.	Sec.		Min.	Sec.	
-	36	100	-	58	62.1	1	40	36.0
-	37	97.3	-	59	61.0	1	42	35.3
-	38	94.7	1	-	60.0	1	44	34.6
-	39	92.3	1	02	58.0	1	46	34.0
-	40	90.0	1	04	56.2	1	48	33.3
-	41	87.8	1	06	54.5	1	50	32.7
-	42	85.7	1	08	52.9	1	52	32.1
-	43	83.7	1	10	51.4	1	54	31.6
-	44	81.8	1	12	50.0	1	56	31.0
-	45	80.0	1	14	48.6	1	58	30.5
-	46	78.3	1	16	47.4	2	-	30.0
-	47	76.6	1	18	46.1	2	05	28.8
-	48	75.0	1	20	45.0	2	10	27.7
-	49	73.5	1	22	43.9	2	15	26.7
-	50	72.0	1	24	42.9	2	30	24.0
-	51	70.6	1	26	41.9	2	45	21.8
-	52	69.2	1	28	40.9	3	-	20.0
-	53	67.9	1	30	40.0	3	30	17.1
-	54	66.6	1	32	39.1	4	-	15.0
-	55	65.5	1	34	38.3	5	-	12.0
-	56	64.2	1	36	37.5	6	-	10.0
-	57	63.2	1	38	36.8	12	-	5.0

FEET	TENTHS OF A MILE
528	0.1
1,056	0.2
1,584	0.3
2,112	0.4
2,640	0.5
3,168	0.6
3,696	0.7
4,224	0.8
4,752	0.9