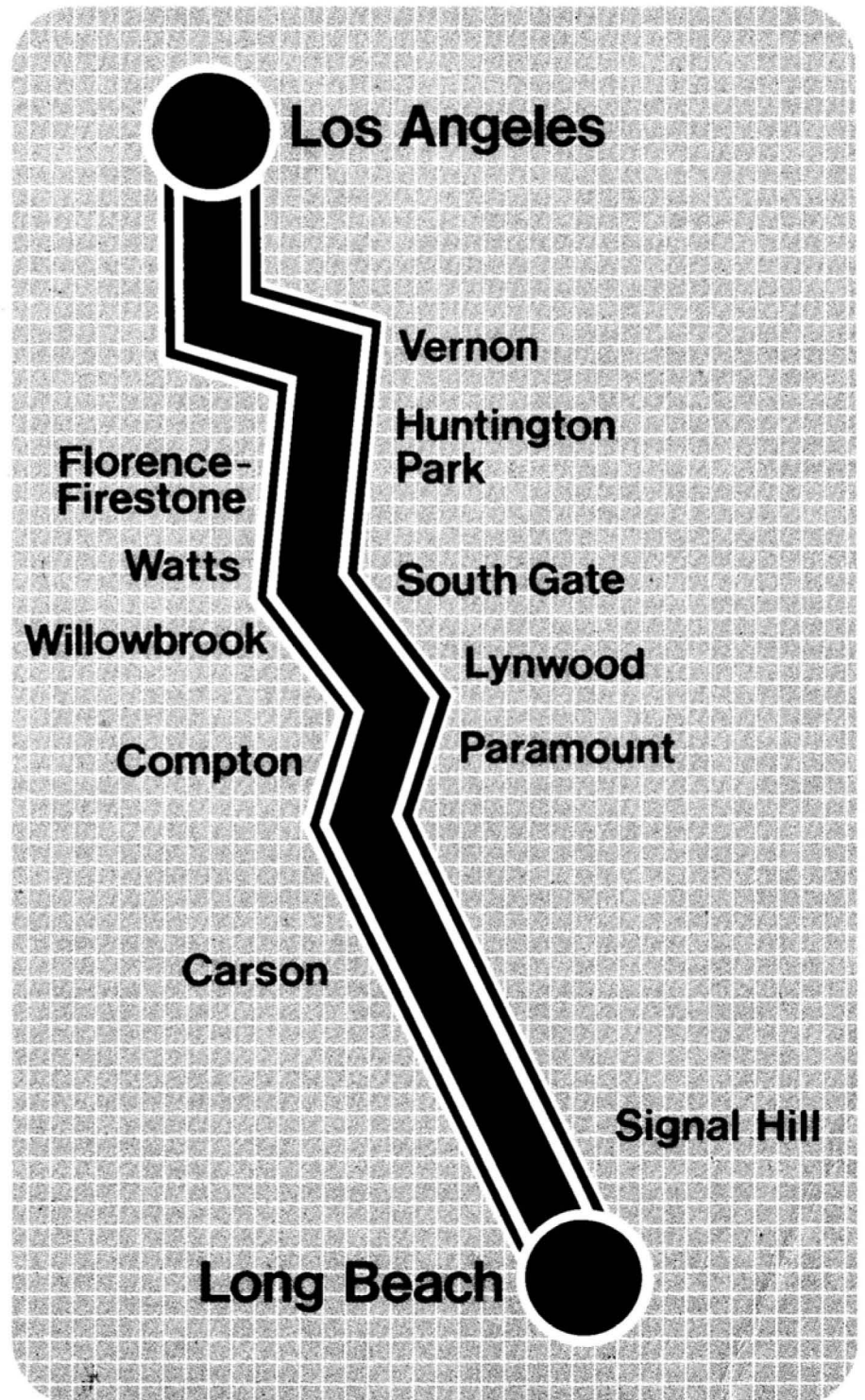


The Long Beach - Los Angeles Rail Transit Project

May 1984



Los Angeles County
Transportation
Commission
354 South Spring Street
Suite 500
Los Angeles
California 90013
(213) 626-0370

Draft Environmental Impact Report

(SCH No. 83091415)

Design Appendix S.C.R.T.D. LIBRARY

The Long Beach-Los Angeles Rail Transit Project

May 1984

Parsons Brinckerhoff / Kaiser Engineers in Association With:

- MYRA L. FRANK & ASSOCIATES
- J. WARREN & ASSOCIATES
- KENNARD DESIGN GROUP
- PACIFIC INTERNATIONAL ENGINEERS
- SEDWAY COOKE ASSOCIATES
- WILLIAMS-KUEBELBECK and ASSOCIATES
- BOLT BERANEK AND NEWMAN, INC.

PARTICIPATING GOVERNMENT AGENCIES

COUNTY OF LOS ANGELES

- Department of Regional Planning
- Road Department
- Engineer - Facilities
- Community Development Commission
- Flood Control District

CITY OF LOS ANGELES

- Department of Transportation
- Planning Department
- Department of Public Works
- Community Redevelopment Agency

CITY OF COMPTON

- Planning Department
- Department of Public Works
- Community Redevelopment Agency

CITY OF LONG BEACH

- Department of Public Works
- Department of Planning and Building
- Department of Community Development
- Long Beach Transit

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT

CITY OF CARSON - City Engineer

CALIFORNIA PUBLIC UTILITIES COMMISSION

CALIFORNIA DEPARTMENT OF TRANSPORTATION

IN COOPERATION WITH

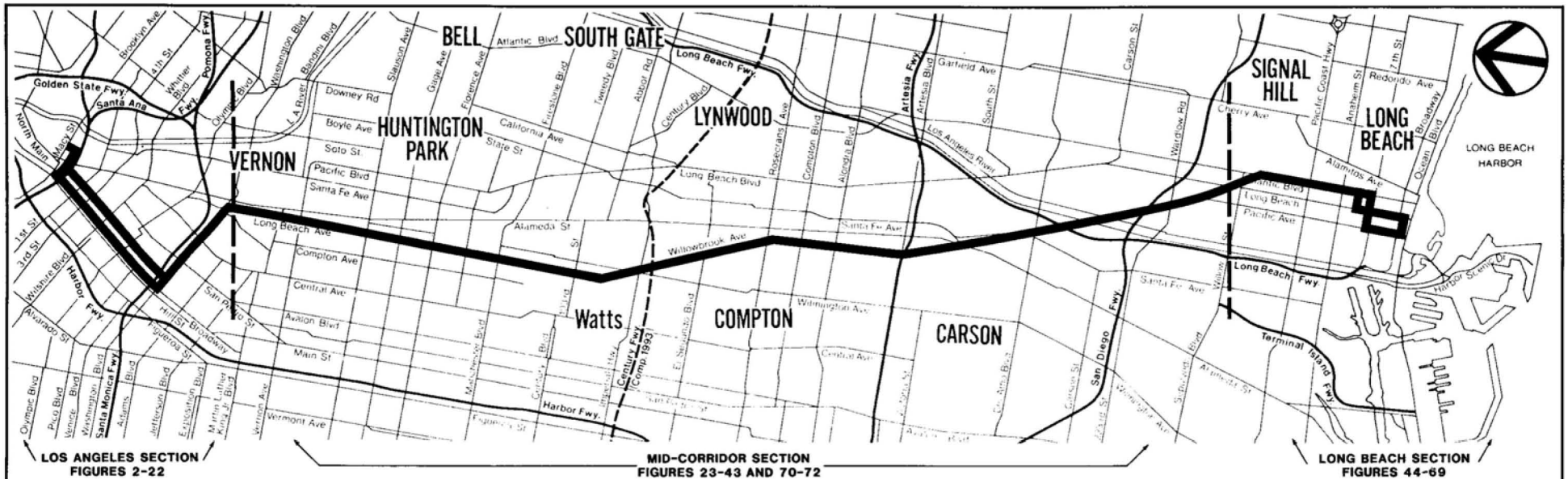
SOUTHERN PACIFIC TRANSPORTATION COMPANY
SOUTHERN CALIFORNIA EDISON COMPANY
LOS ANGELES DEPARTMENT OF WATER AND POWER
UNION PACIFIC RAILROAD
ATCHISON, TOPEKA AND SANTA FE RAILWAY



LOS ANGELES COUNTY TRANSPORTATION COMMISSION

This volume is the Design Appendix to the Draft Environmental Impact Report for the Long Beach-Los Angeles Rail Transit Project.

- o Volume I: Summary
- o Volume II: DEIR
- o Volume III: Design Appendix



INDEX MAP

INDEX OF DRAWINGS

PLANS AND PROFILES		STATIONS AND STOPS	
FIGURES	DESCRIPTION	ALTERNATIVES	FIGURE LOCATION
1	INDEX MAP		
2-4	LOS ANGELES AT GRADE	LA-1	<u>Los Angeles</u>
7-12	LOS ANGELES SUBWAY	LA-2	2 BROADWAY BETWEEN FIRST STREET AND SECOND STREET
13-17	LOS ANGELES AERIAL	LA-3	2 BROADWAY/FOURTH STREET
18-22	LOS ANGELES SECTIONS		3 BROADWAY/SEVENTH STREET
23-36	MID-CORRIDOR	ALL	4 BROADWAY/OLYMPIC STREET
37-39	MID-CORRIDOR COMPTON GRADE SEPARATION	MC-2	5 SPRING/FOURTH STREET
40-43	MID-CORRIDOR SECTIONS		6 OLIVE/NINTH STREET
44-46	DELETED		7 FLOWER/SEVENTH STREET
47-49	LONG BEACH ATLANTIC TO FIRST STREET	LB-1	8 FIGUEROA/SEVENTH STREET
50-52	LONG BEACH ATLANTIC/LONG BEACH COUPLER	LB-2	9 WASHINGTON BOULEVARD/SAN PEDRO STREET
53-58	LONG BEACH RIVER ROUTE	LB-3	
59-60	LONG BEACH ATLANTIC WITH LONG BEACH/PACIFIC LOOP	LB-4	<u>Mid Corridor</u>
61-69	LONG BEACH SECTIONS		10 SPTC R.O.W./SLAUSON AVENUE
70-82	SPTC RELOCATION		11 SPTC R.O.W./FIRESTONE BOULEVARD
<u>YARDS AND SHOPS</u>			12 SPTC R.O.W./103RD STREET MC 1 AND MC 2
1	SITE A SATELLITE YARD		13 SPTC R.O.W./103RD STREET MC 3
2	SITE G MAIN YARD		14 SPTC R.O.W./IMPERIAL HIGHWAY
3	MAINTENANCE AND ADMINISTRATION BUILDING		15 SPTC R.O.W./COMPTON BOULEVARD (AT-GRADE)
			16 SPTC R.O.W./COMPTON BOULEVARD, (GRADE SEPARATED)
			17 SPTC R.O.W./ARTESIA BOULEVARD
			18 SPTC R.O.S./DEL AMO BOULEVARD
			<u>Long Beach</u>
			19 LONG BEACH BOULEVARD/SIXTH STREET
			20 ATLANTIC AVENUE/PACIFIC COAST HIGHWAY
			21 ATLANTIC AVENUE/6TH STREET

NOTES

1. BASE LINE SYSTEM CONSISTS OF ALTERNATE LA-1 IN LOS ANGELES, MC-1 IN THE MID-CORRIDOR AND LB-4 IN LONG BEACH.
2. MID-CORRIDOR ALTERNATIVE MC-3 IS SIMILAR TO MC-1, EXCEPT THAT THE SOUTHERN PACIFIC (SPTC) TRACK IS RELOCATED TO ANOTHER ALIGNMENT. PLANS FOR THE SPTC RELOCATION ARE SHOWN ON FIGURES 70-82.
3. LONG BEACH ALTERNATIVE LB-4 INCLUDES LB-1 FIGURES 47, 48, 59 AND 60.
4. THERE ARE THREE VARIATIONS OF STREET/TRACK CONFIGURATIONS ON ATLANTIC AVENUE IN LONG BEACH.

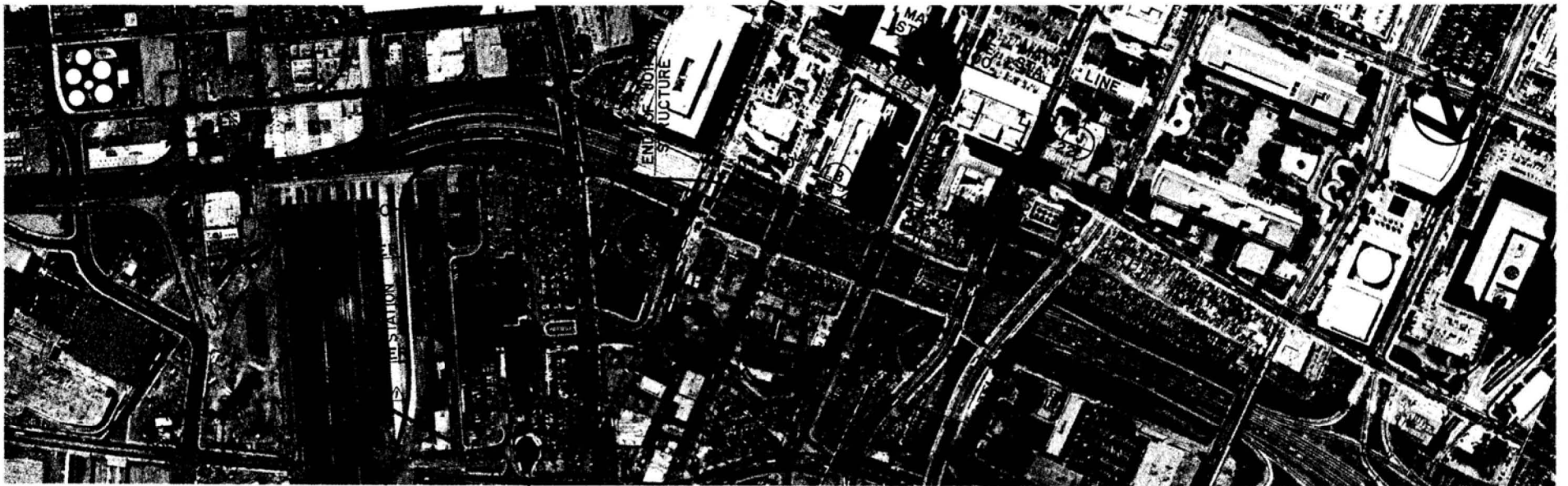
LIST OF ABBREVIATIONS

ALT	- Alternate	NTS	- Not to Scale
CC	- Centerline to Centerline	R	- Radius
C	- Center Line	R/W	- Right of Way
CLR	- Clear Distance	SB	- South Bound
CWR	- Continuous Welded Rail	SPTC	- Southern Pacific Transportation Co.
FWY	- Freeway	T.O.	- Turnout
LET	- Light Rail Transit	T/R	- Top of Rail
LRV	- Light Rail Vehicle	Typ	- Typical
MC	- Mid-Corridor	UPRR	- Union Pacific Railroad
MIN	- Minimum	V.C.	- Vertical Curve
NB	- North Bound	X-OVER	- Rail Cross Over

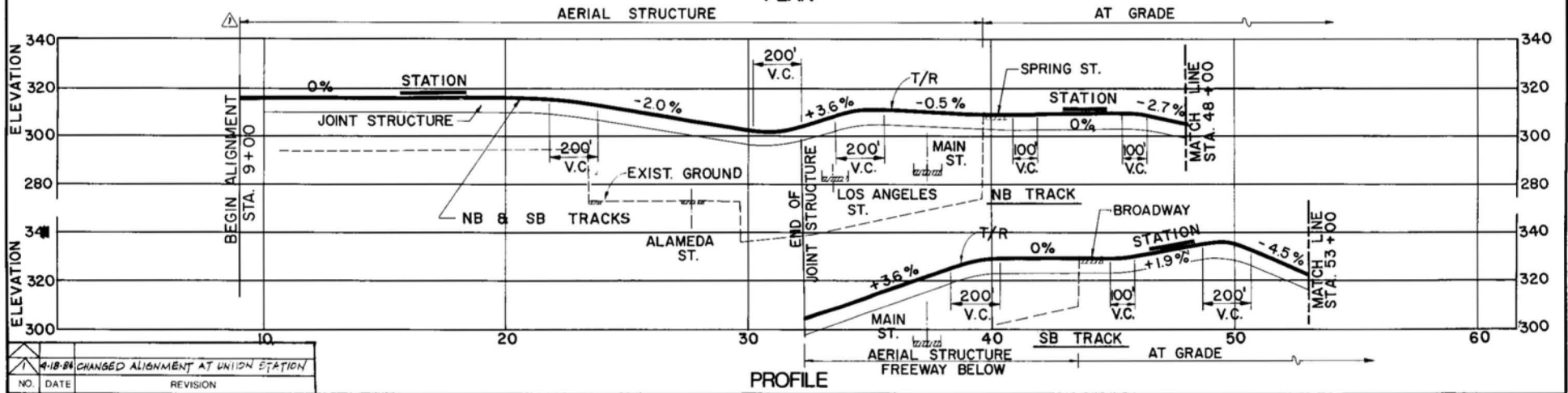
Long Beach - Los Angeles RAIL TRANSIT PROJECT

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Figure 1

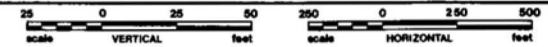


PLAN



PROFILE

NO.	DATE	REVISION
1	4-18-84	CHANGED ALIGNMENT AT UNION STATION

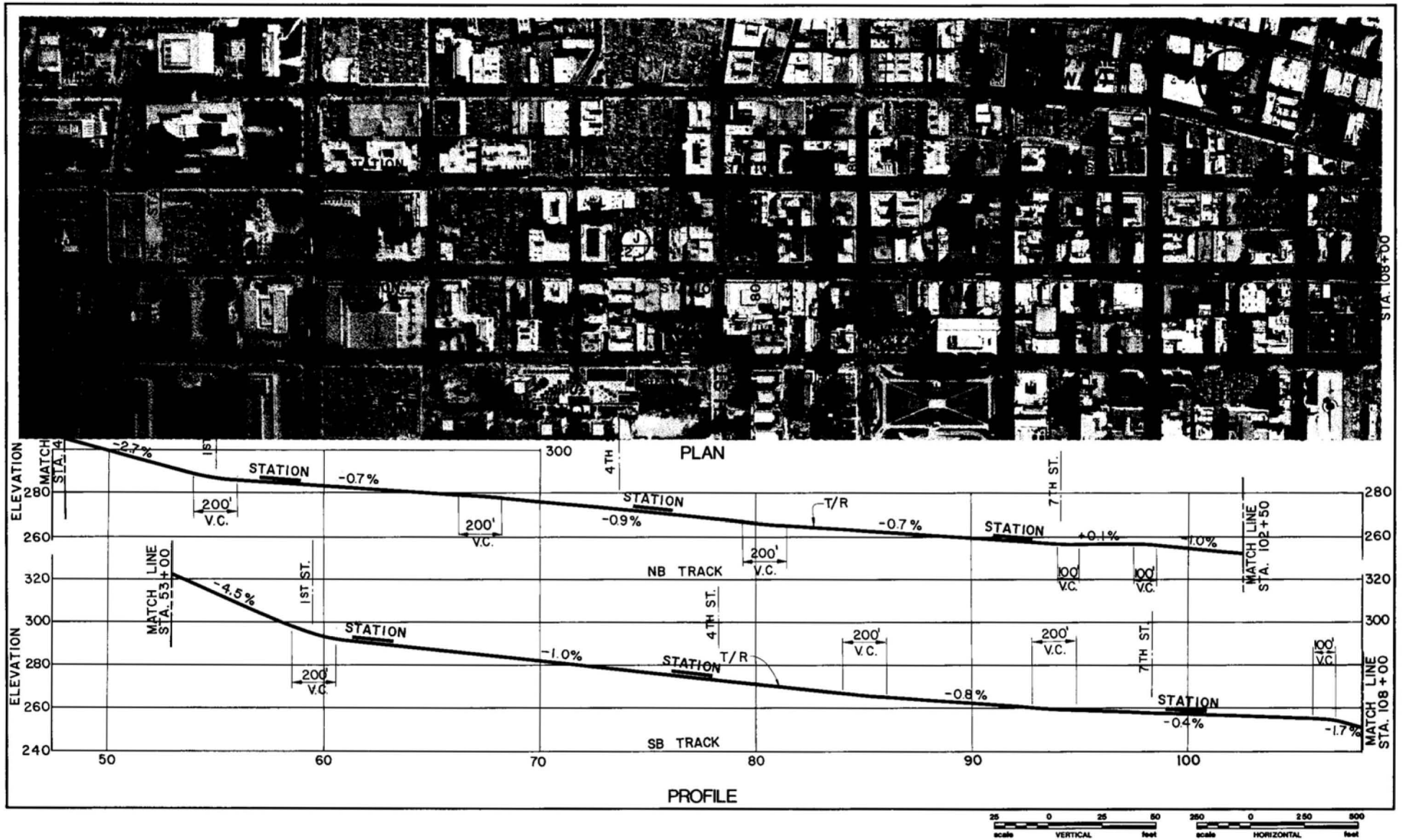


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Los Angeles (LA-1)
 BROADWAY/SPRING COUPLER

Figure 2

PARSONS BRINCKERHOFF/KAISER ENGINEERS

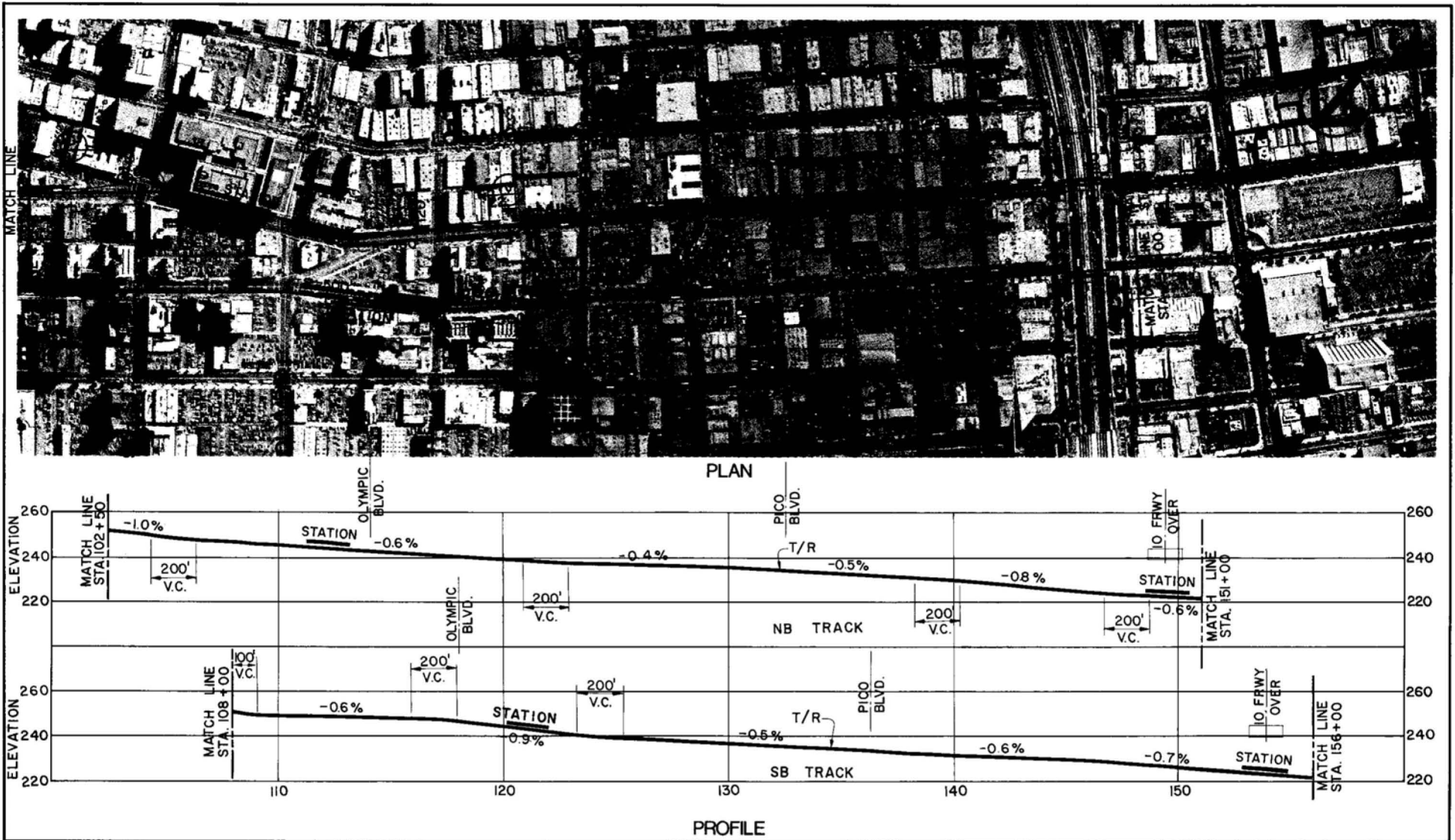


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Los Angeles (LA-1)
 BROADWAY/SPRING COUPLET

Figure 3

PARSONS BRINCKERHOFF/KAISER ENGINEERS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

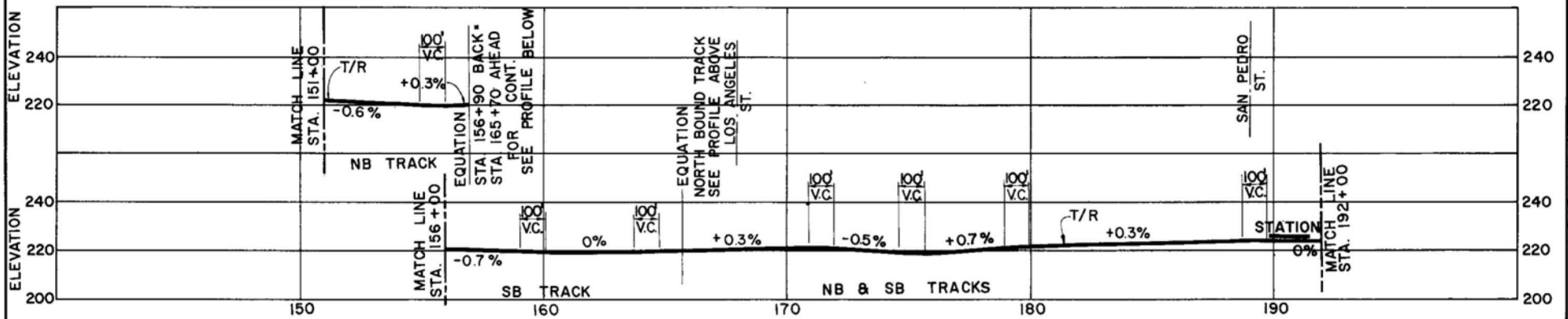
Plan and Profile
Los Angeles (LA-1)
 BROADWAY/SPRING COUPLER

Figure 4

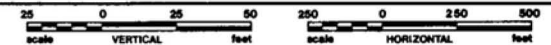
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

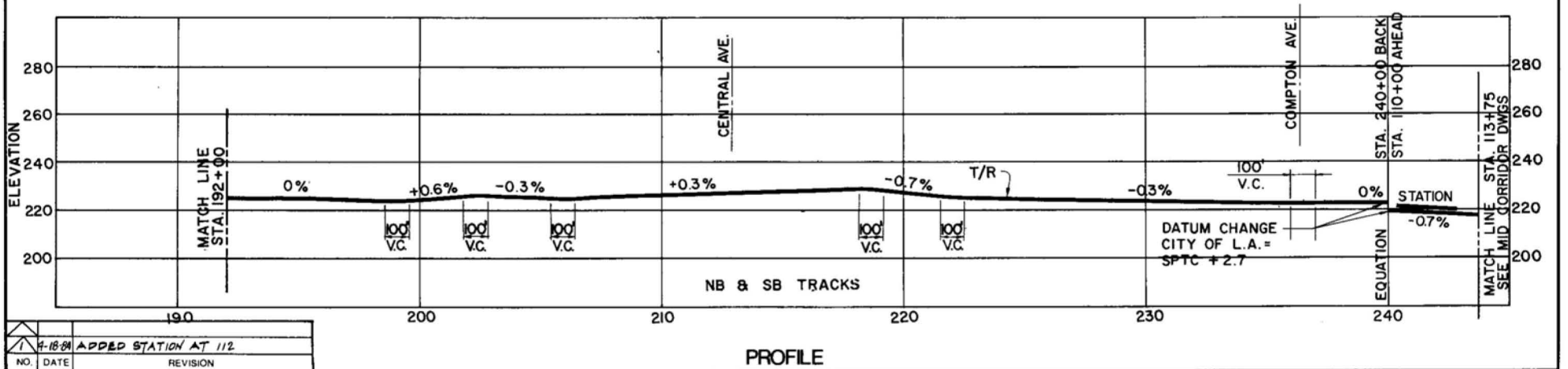
Plan and Profile
Los Angeles (LA-1)
 BROADWAY/SRING COUPLET

Figure 5

PARSONS BRINCKERHOFF/KAISER ENGINEERS

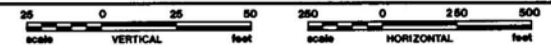


PLAN

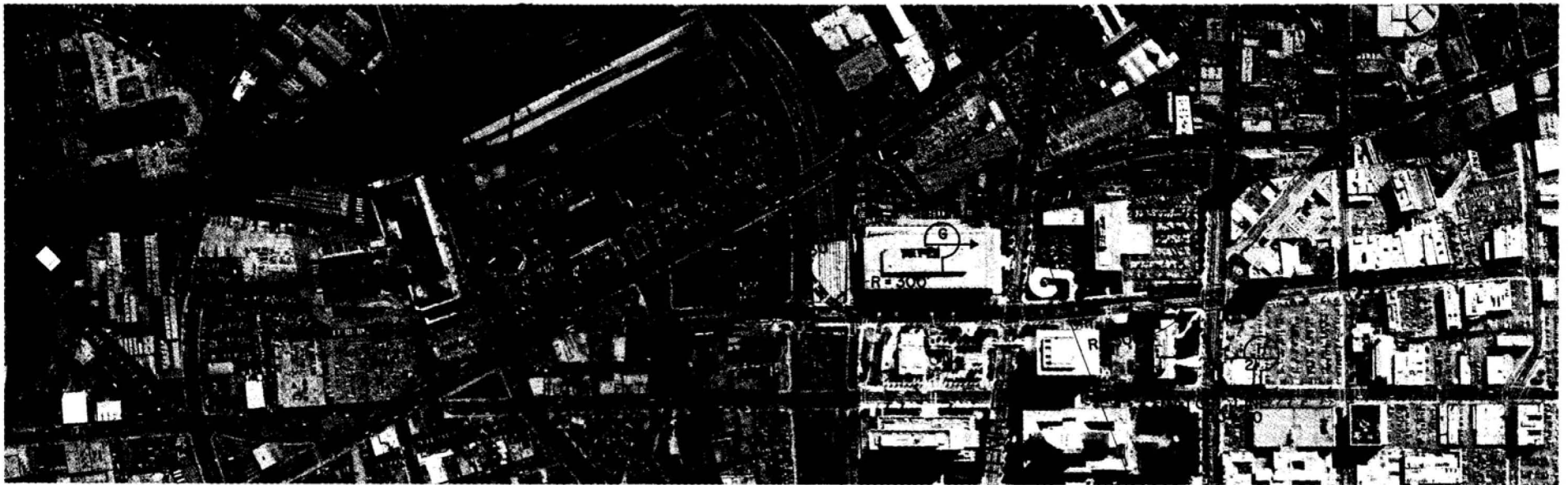


PROFILE

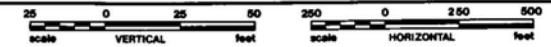
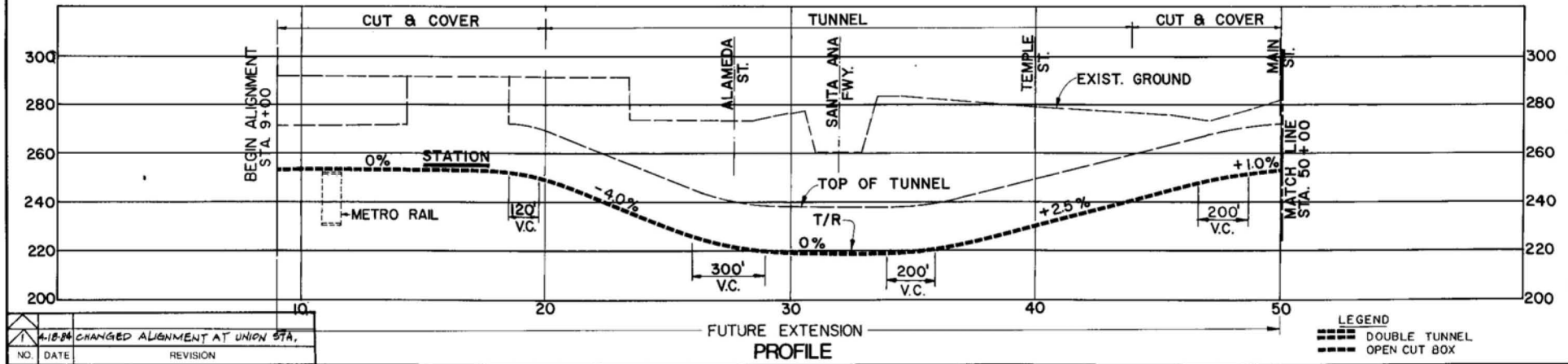
NO.	DATE	REVISION
1-18-84		ADDED STATION AT 112



<p>Long Beach - Los Angeles RAIL TRANSIT PROJECT LOS ANGELES COUNTY TRANSPORTATION COMMISSION</p>	<p>Plan and Profile Los Angeles (LA-1) BROADWAY/SPRING COUPLET</p>	<p>Figure 6 PARSONS BRINCKERHOFF/KAISER ENGINEERS</p>
---	--	--



PLAN



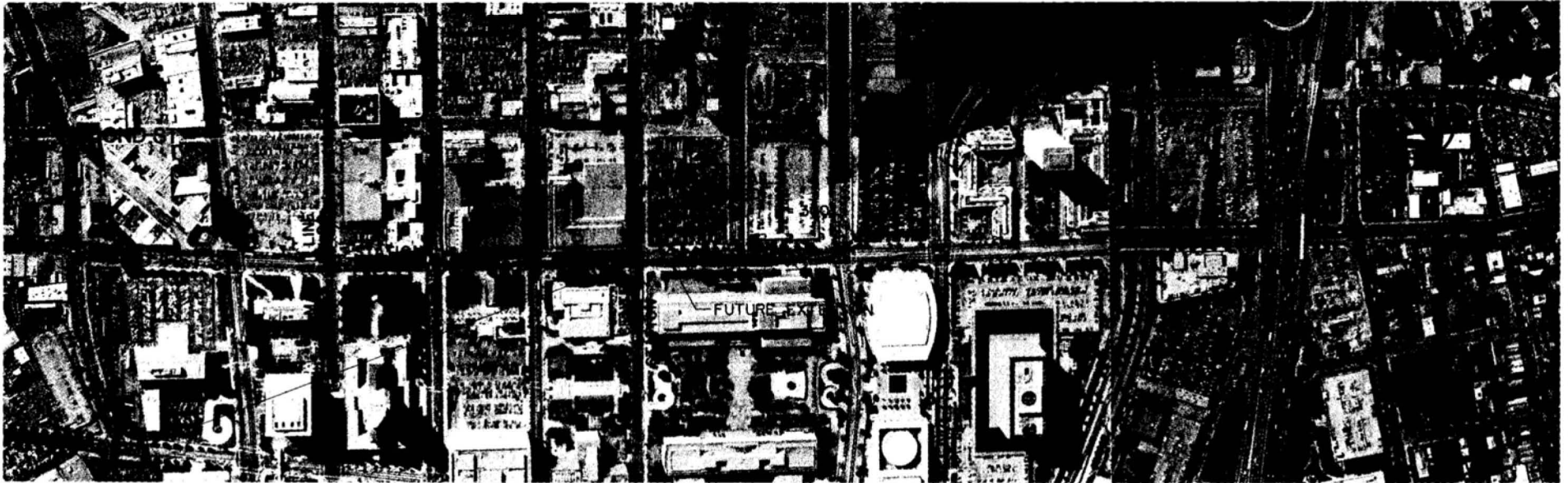
NO.	DATE	REVISION
1		CHANGED ALIGNMENT AT UNION STA.

Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

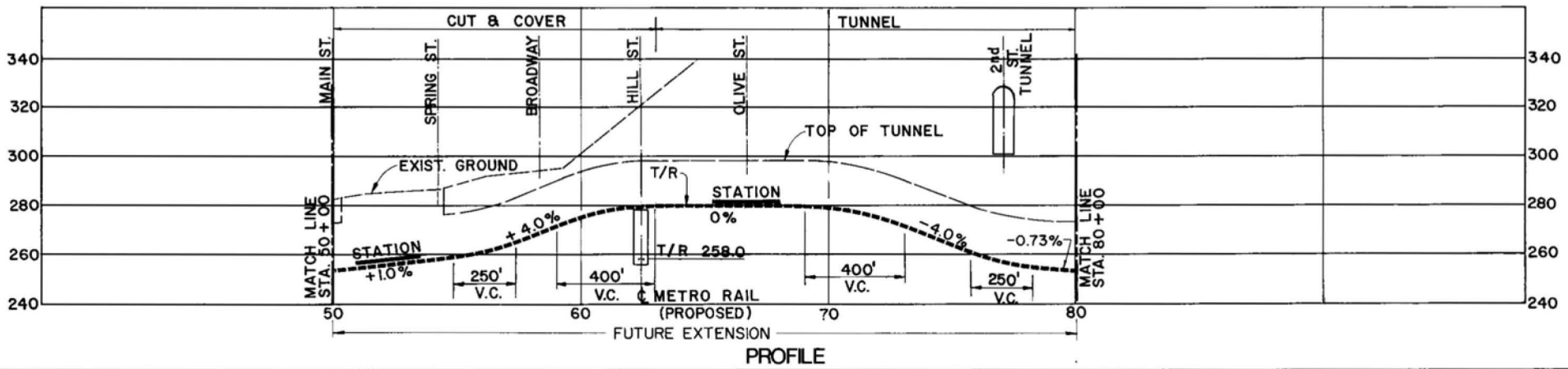
Plan and Profile
 Los Angeles (L A -2)
 SUBWAY

Figure 7

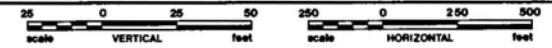
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

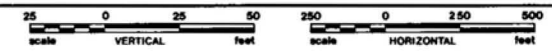
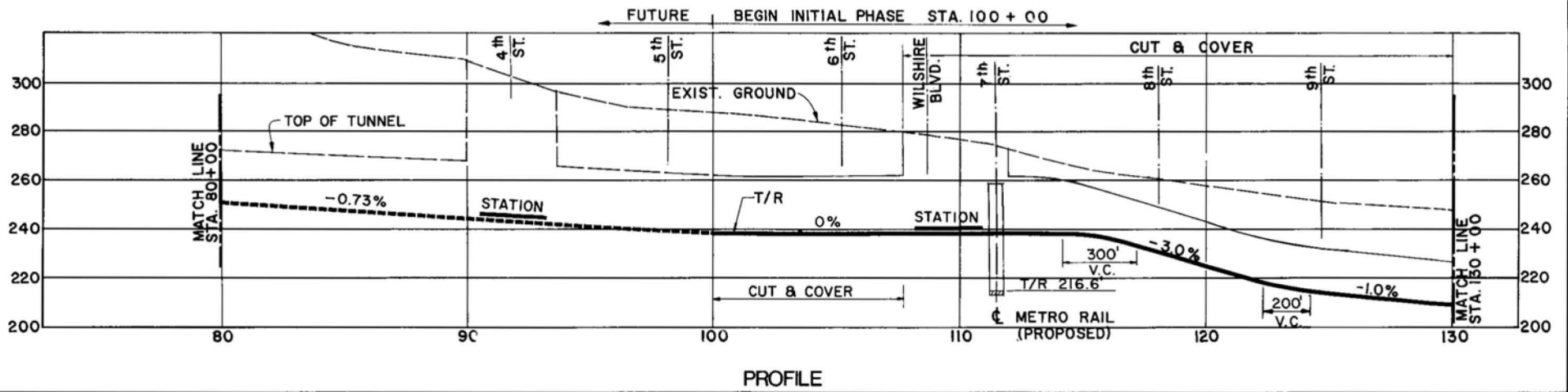
Plan and Profile
Los Angeles (L A - 2)
 SUBWAY

Figure 8

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

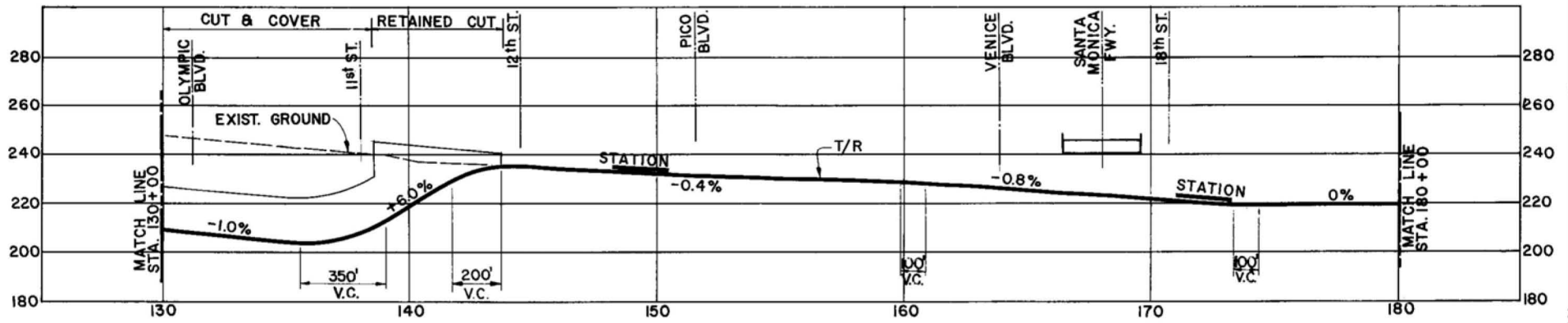
Plan and Profile
Los Angeles (LA-2)
 SUBWAY

Figure 9

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

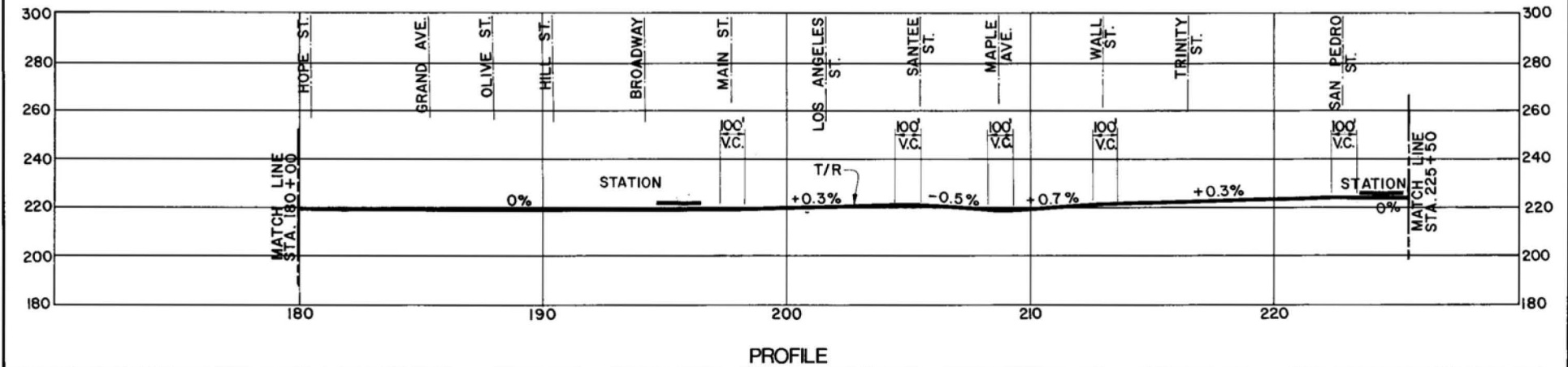
Plan and Profile
 Los Angeles (L A-2)
 SUBWAY

Figure 10

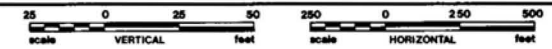
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



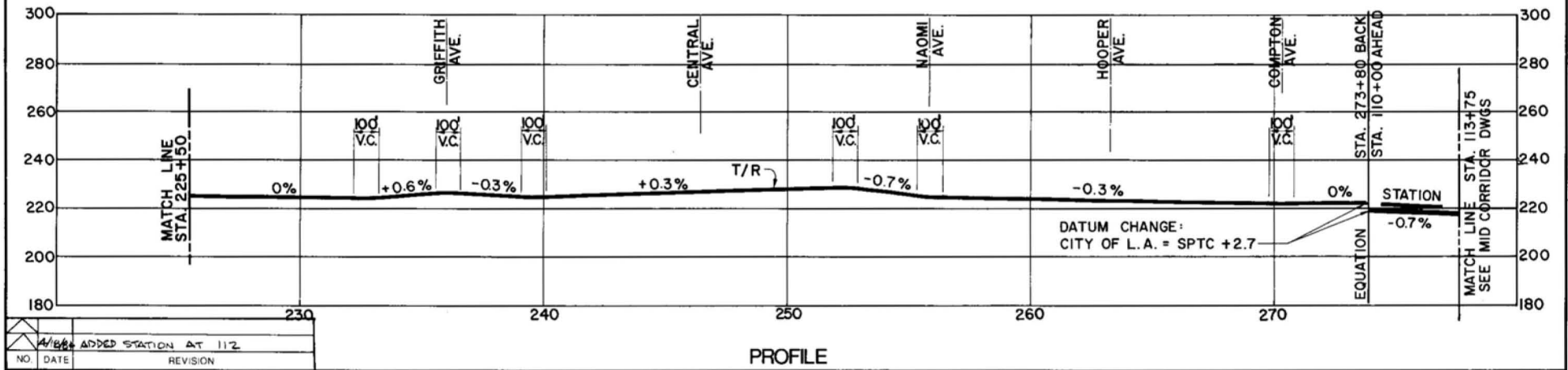
PROFILE



<p>Long Beach - Los Angeles RAIL TRANSIT PROJECT LOS ANGELES COUNTY TRANSPORTATION COMMISSION</p>	<p>Plan and Profile Los Angeles (L A -2) SUBWAY</p>	<p>Figure 11 PARSONS BRINCKERHOFF/KAISER ENGINEERS</p>
---	---	---

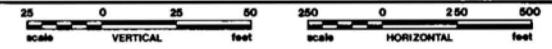


PLAN

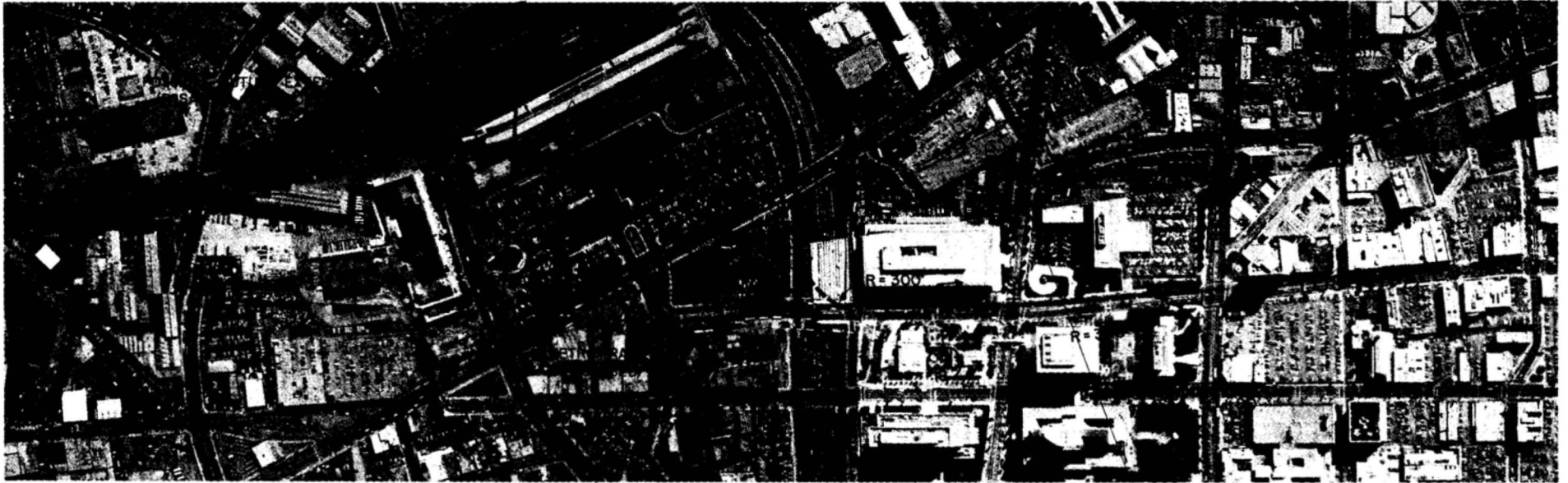


PROFILE

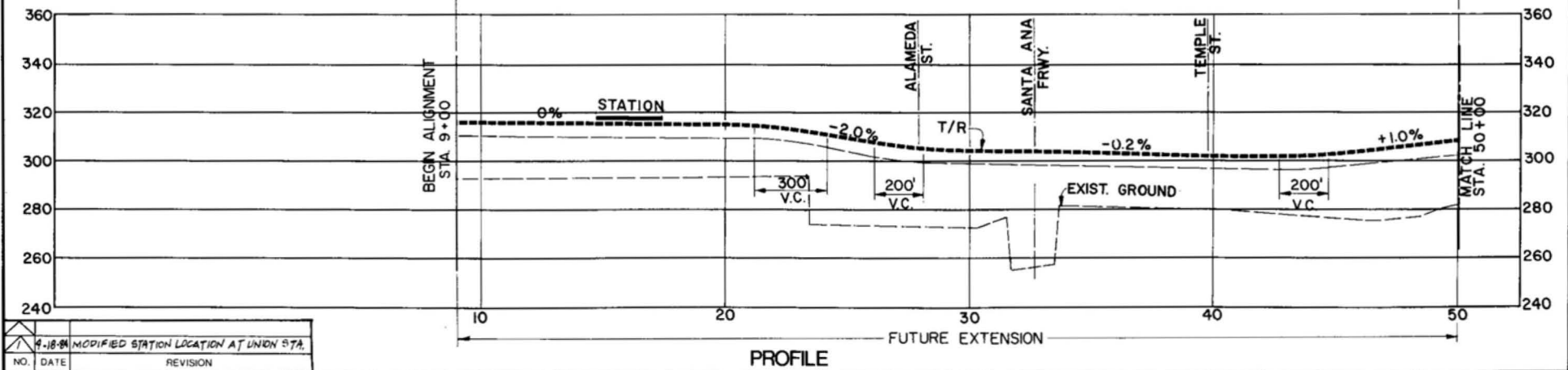
NO.	DATE	REVISION
1	4/88	ADDED STATION AT 112



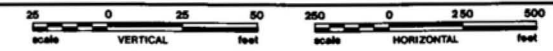
<h1 style="margin: 0;">Long Beach - Los Angeles</h1> <h2 style="margin: 0;">RAIL TRANSIT PROJECT</h2> <p style="margin: 0;">LOS ANGELES COUNTY TRANSPORTATION COMMISSION</p>	<h3 style="margin: 0;">Plan and Profile</h3> <h3 style="margin: 0;">Los Angeles (L A - 2)</h3>	<p style="margin: 0;">Figure 12</p> <p style="margin: 0; font-size: small;">PARSONS BRINCKERHOFF/KAISER ENGINEERS</p>
--	--	---



PLAN AERIAL



NO.	DATE	REVISION
1	9-18-84	MODIFIED STATION LOCATION AT UNION STA.

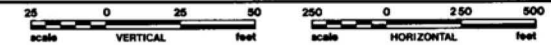
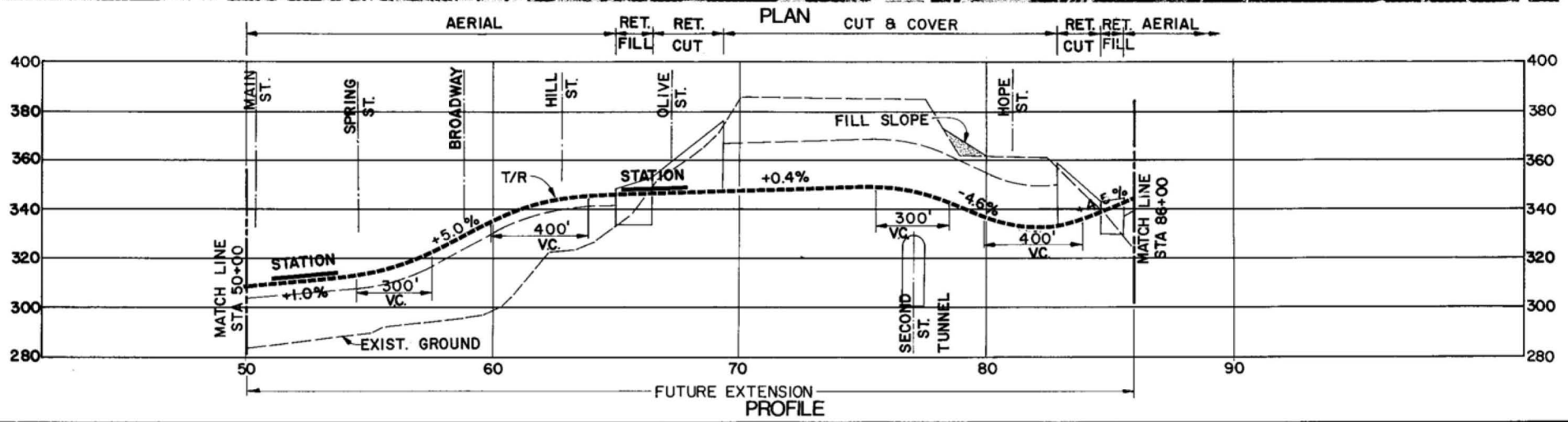
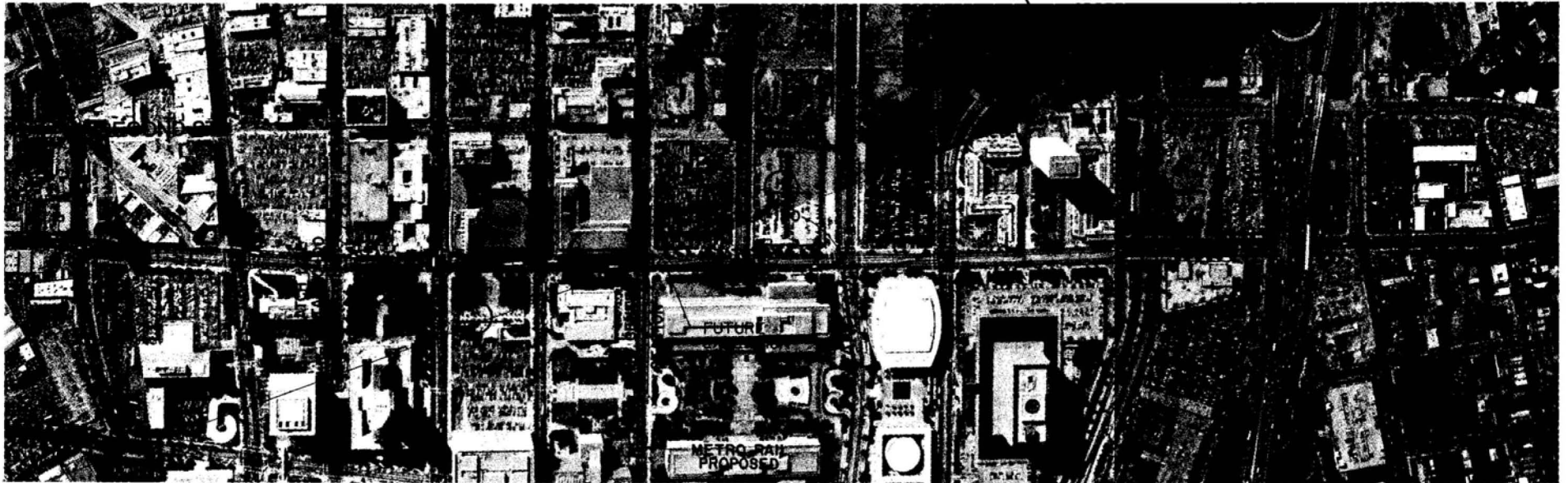


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
Los Angeles (L A - 3)
 AERIAL

Figure 13

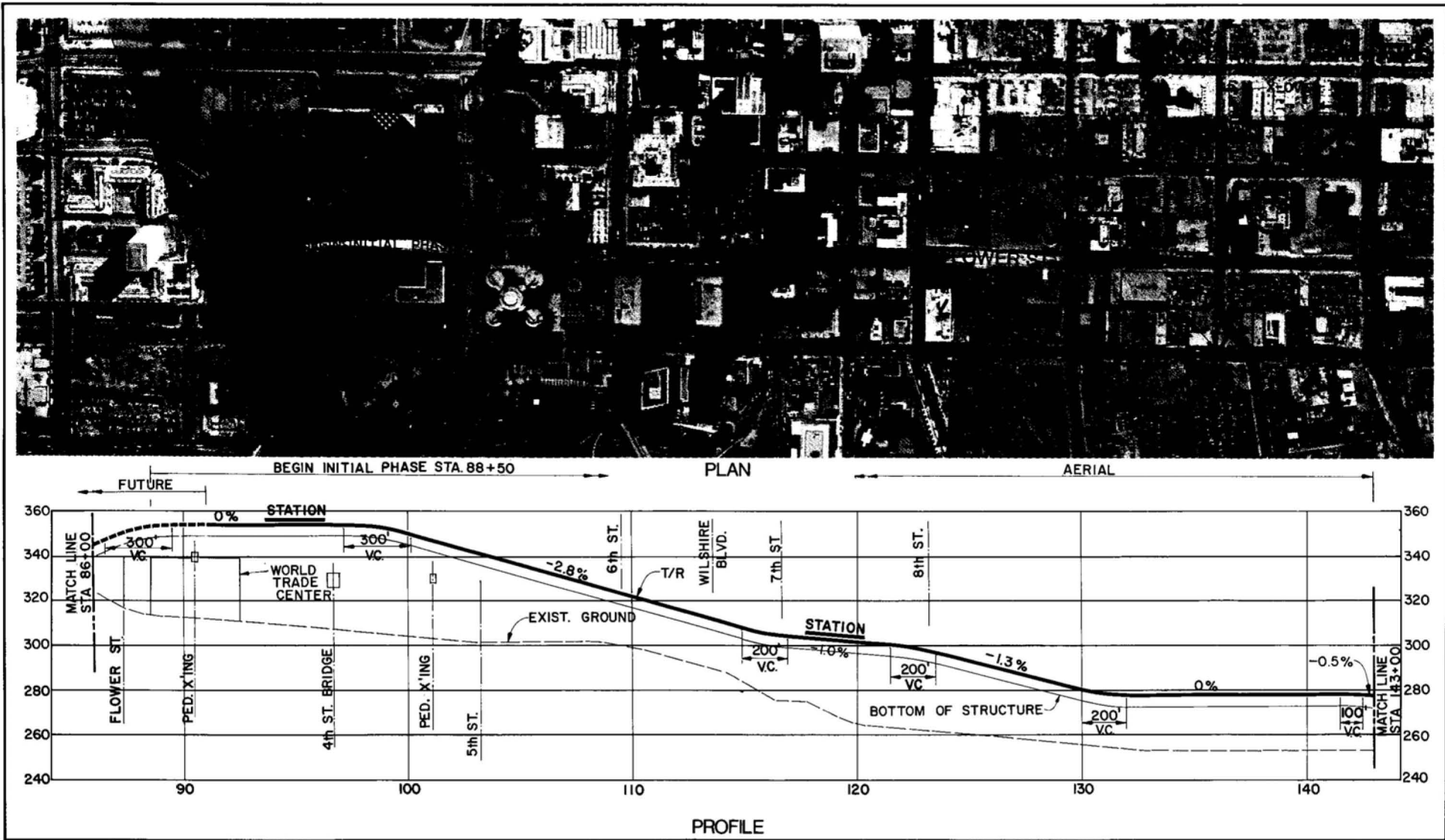
PARSONS BRINCKERHOFF/KAISER ENGINEERS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
Los Angeles (LA - 3)
 AERIAL

Figure 14



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

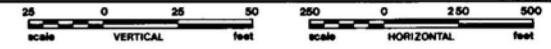
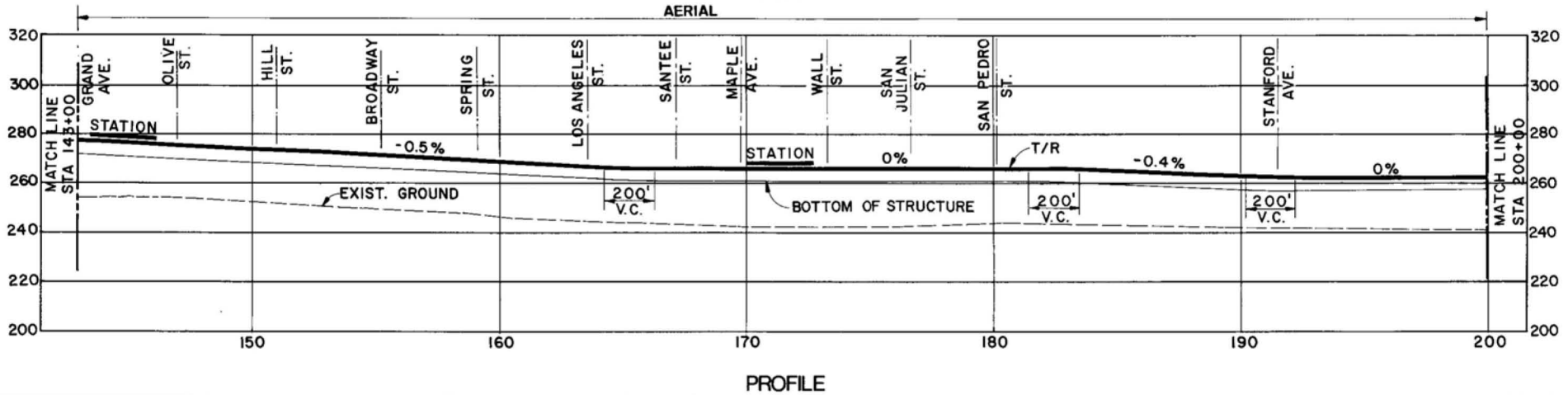
Plan and Profile
Los Angeles (L A - 3)
 AERIAL

Figure 15

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN

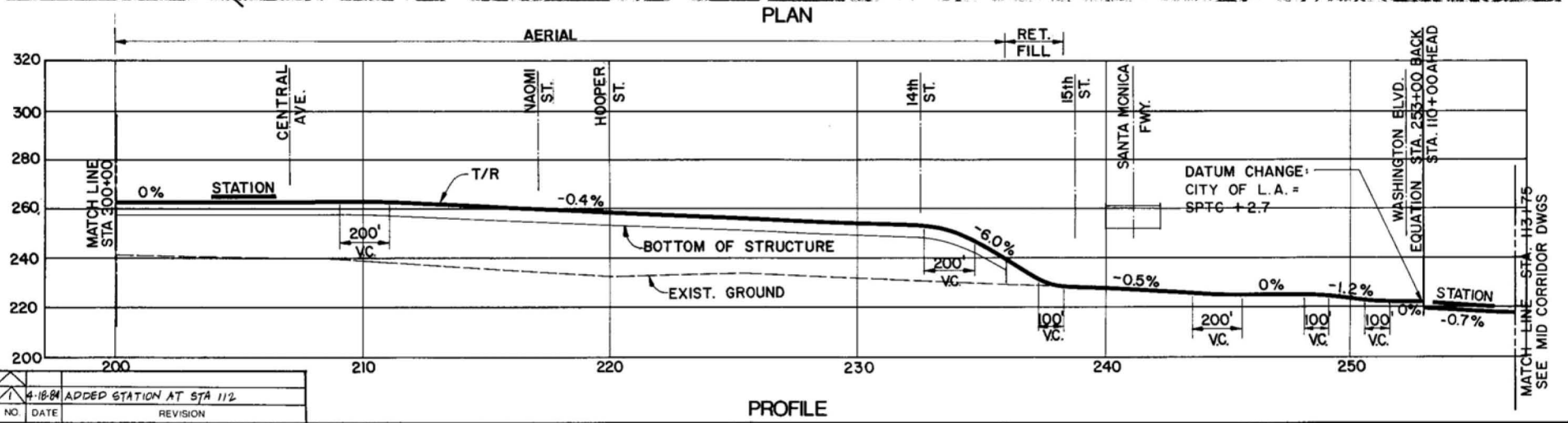


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Los Angeles (LA - 3)
 AERIAL

Figure 16

PARSONS BRINCKERHOFF/KAISER ENGINEERS

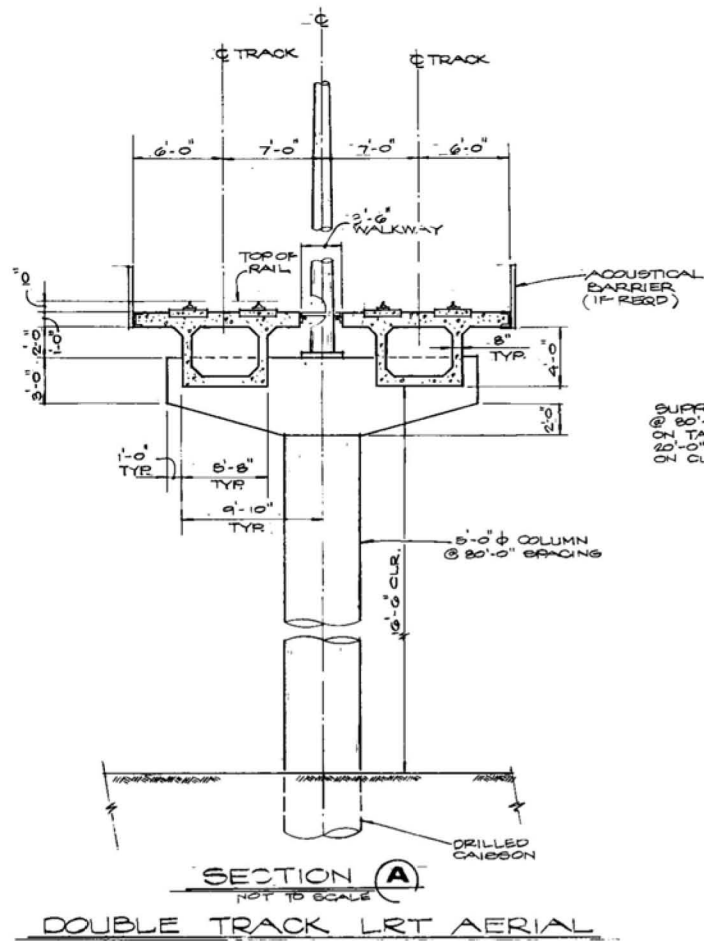


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

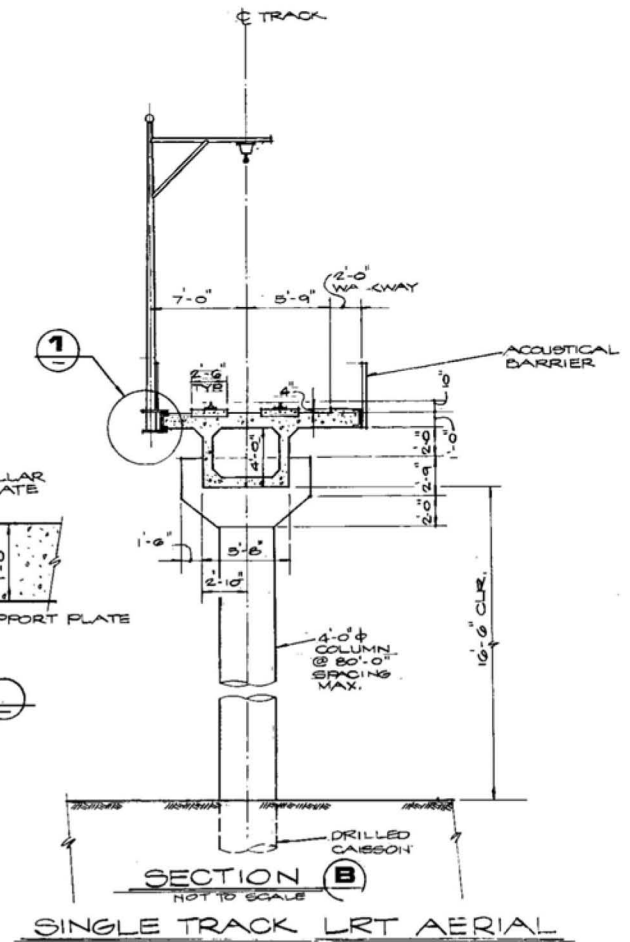
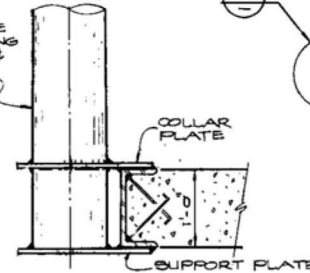
Plan and Profile
 Los Angeles (LA - 3)

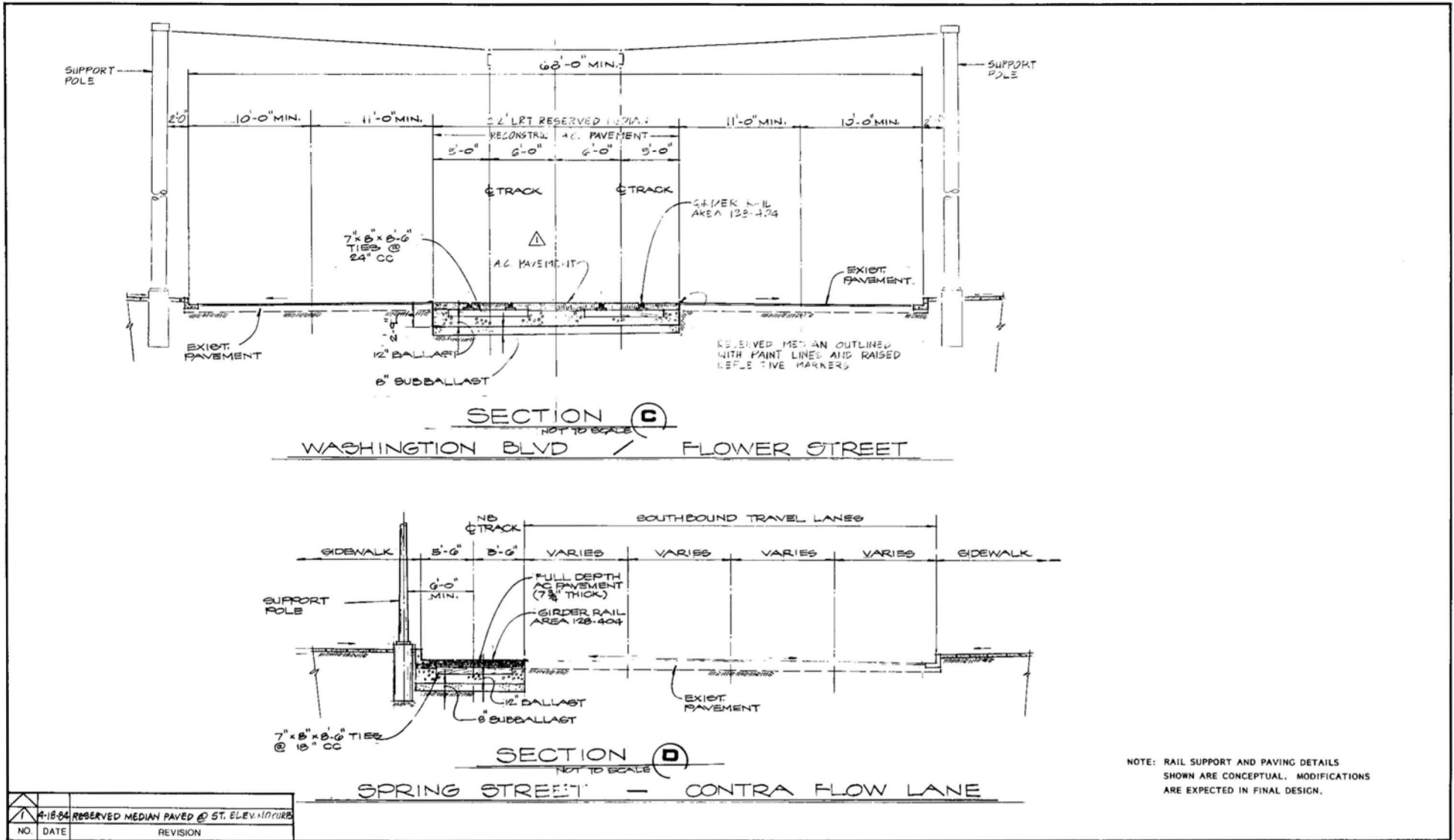
Figure 17

PARSONS BRINCKERHOFF/KAISER ENGINEERS



SUPPORT ROLE
@ 20'-0" SPACING
ON TANGENTS &
20'-0" SPACING
ON CURVES.



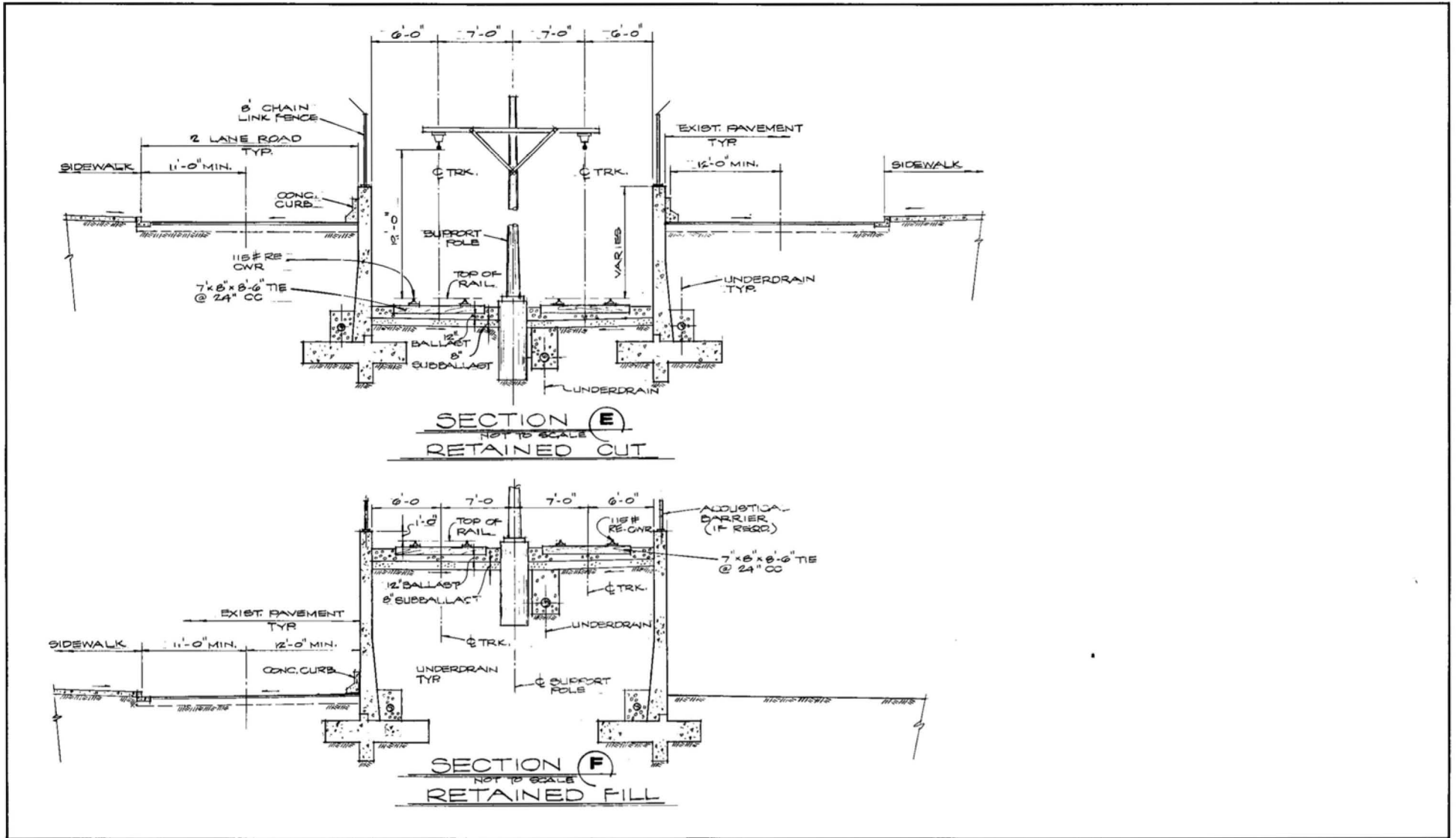


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections
LA - CBD

Figure 19

PARSONS BRINCKERHOFF/KAISER ENGINEERS

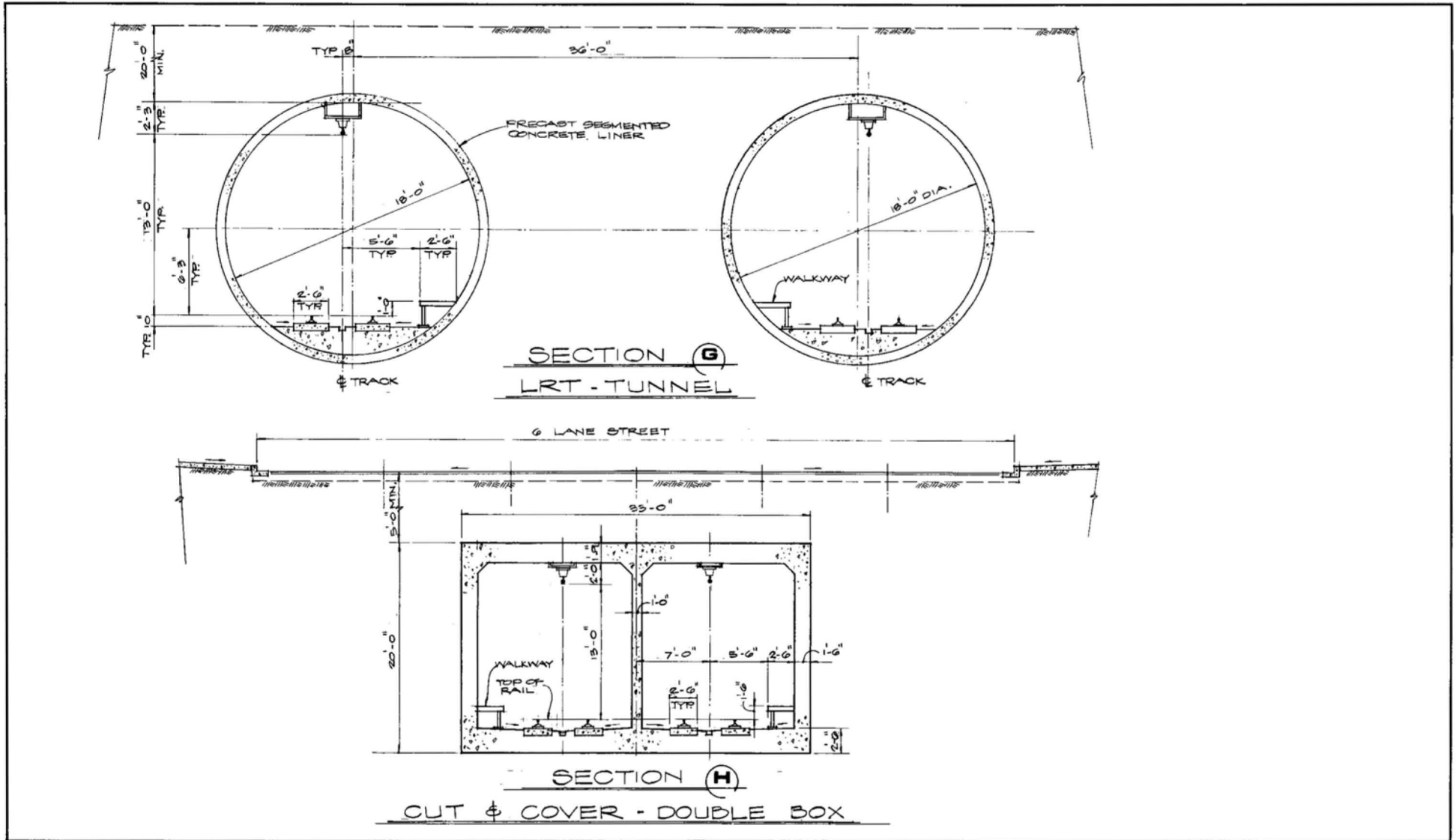


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections
 LA - CBD

Figure 20

PARSONS BRINCKERHOFF/KAISER ENGINEERS

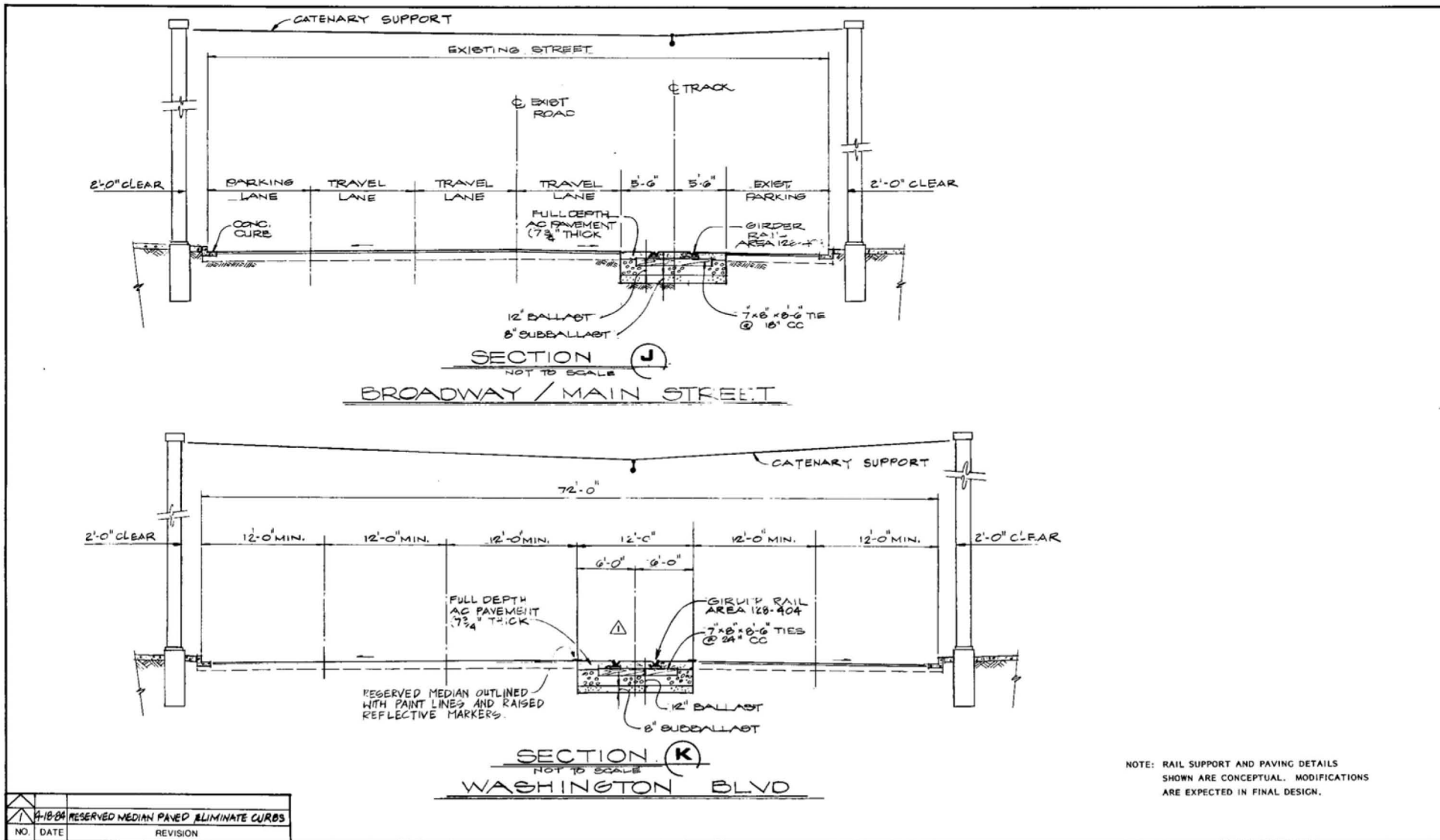


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections
 LA - CBD

Figure 21

PARSONS BRINCKERHOFF/KAISER ENGINEERS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

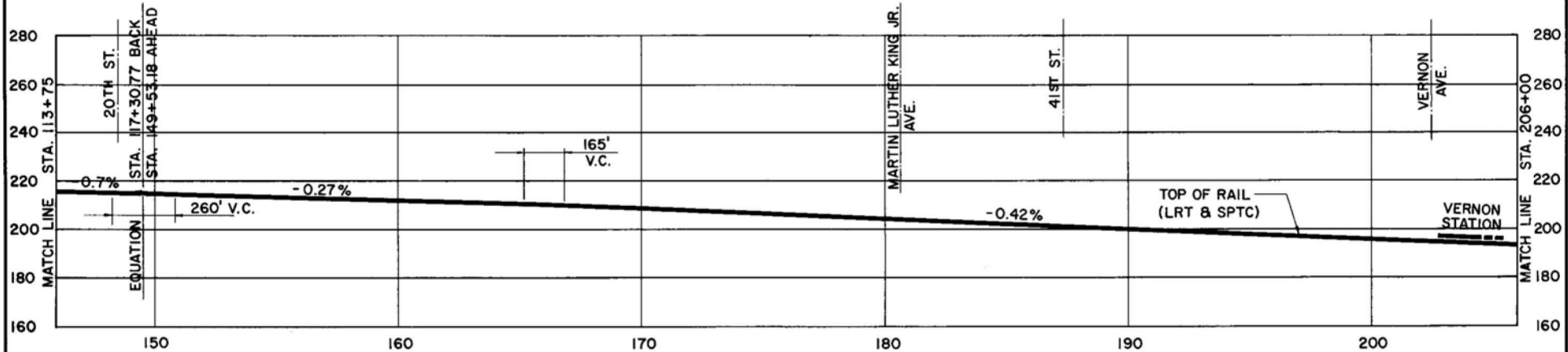
Typical Sections
 LA - CBD

Figure 22

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

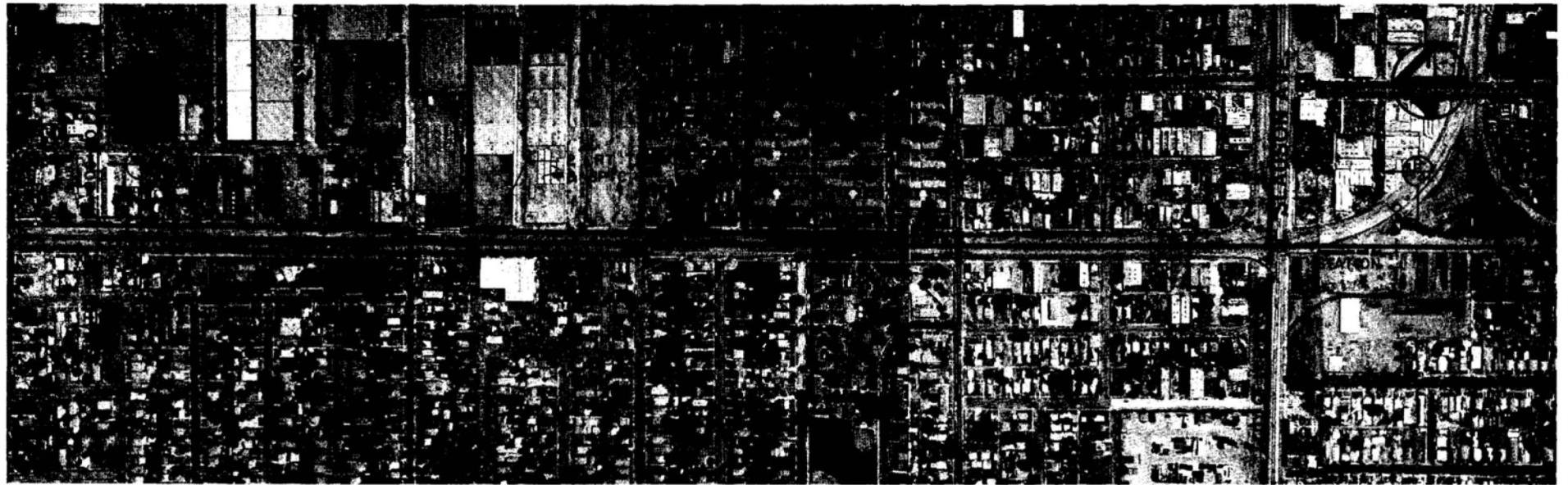


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

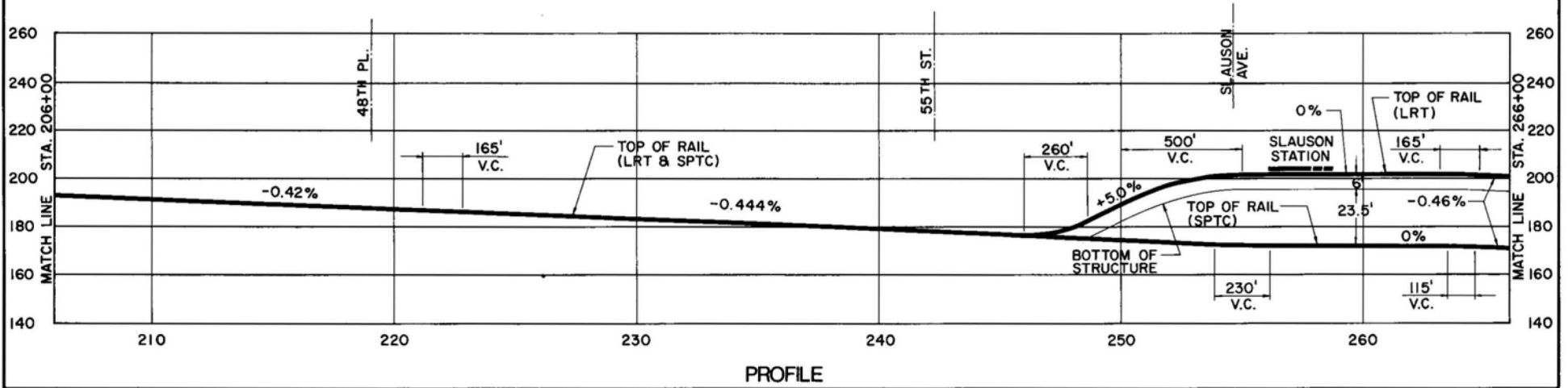
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 23

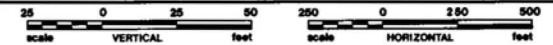
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

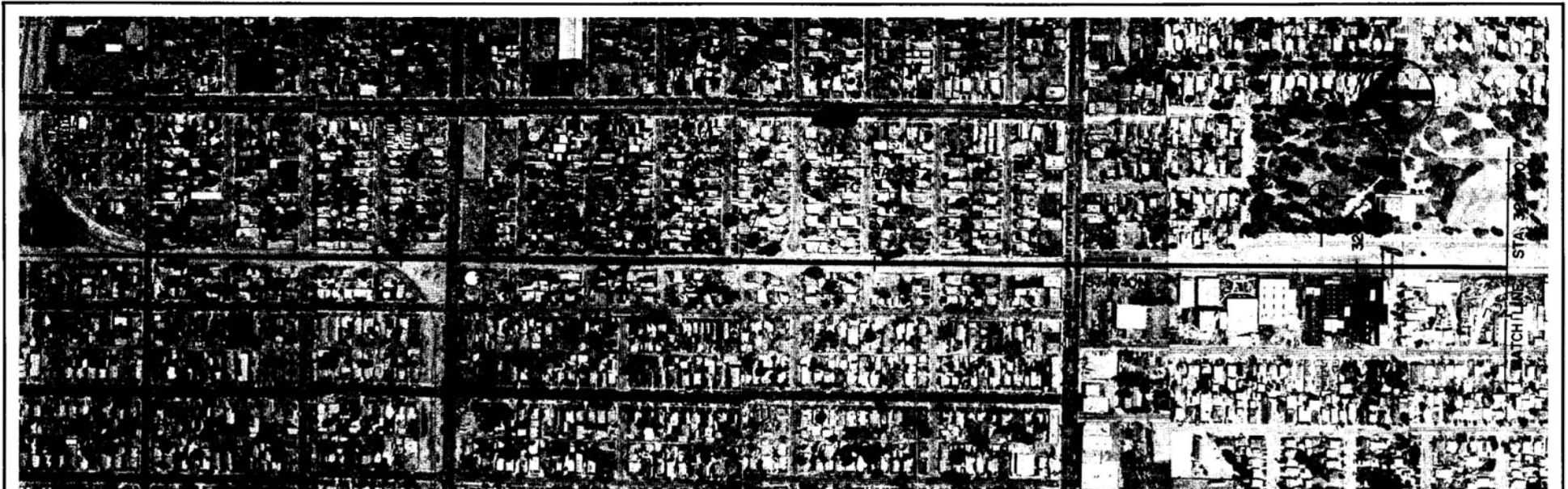


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

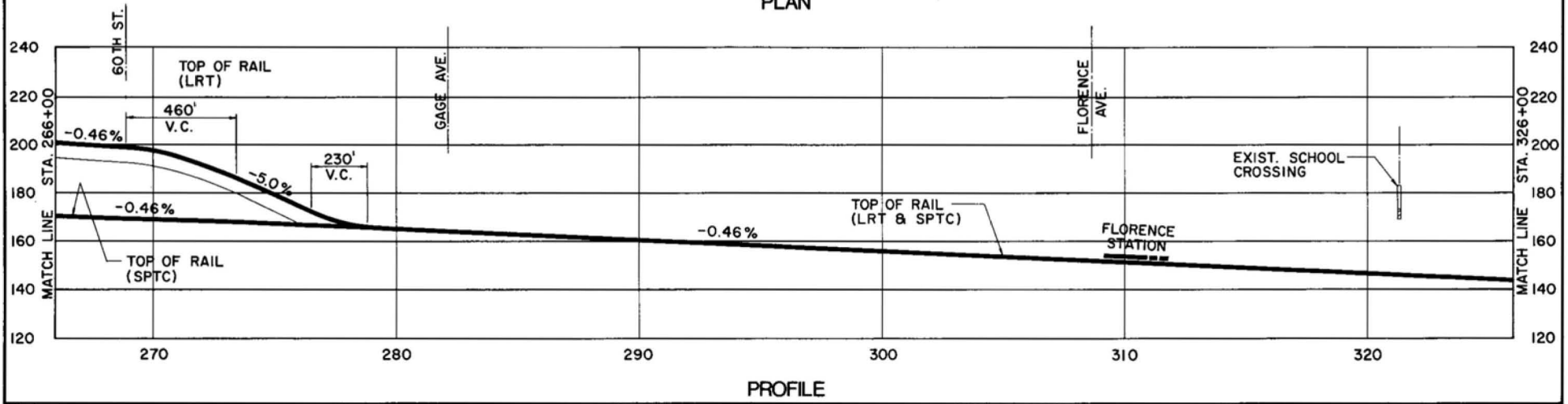
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 24

PARSONS BRINCKERHOFF / KAISER ENGINEERS



PLAN



PROFILE

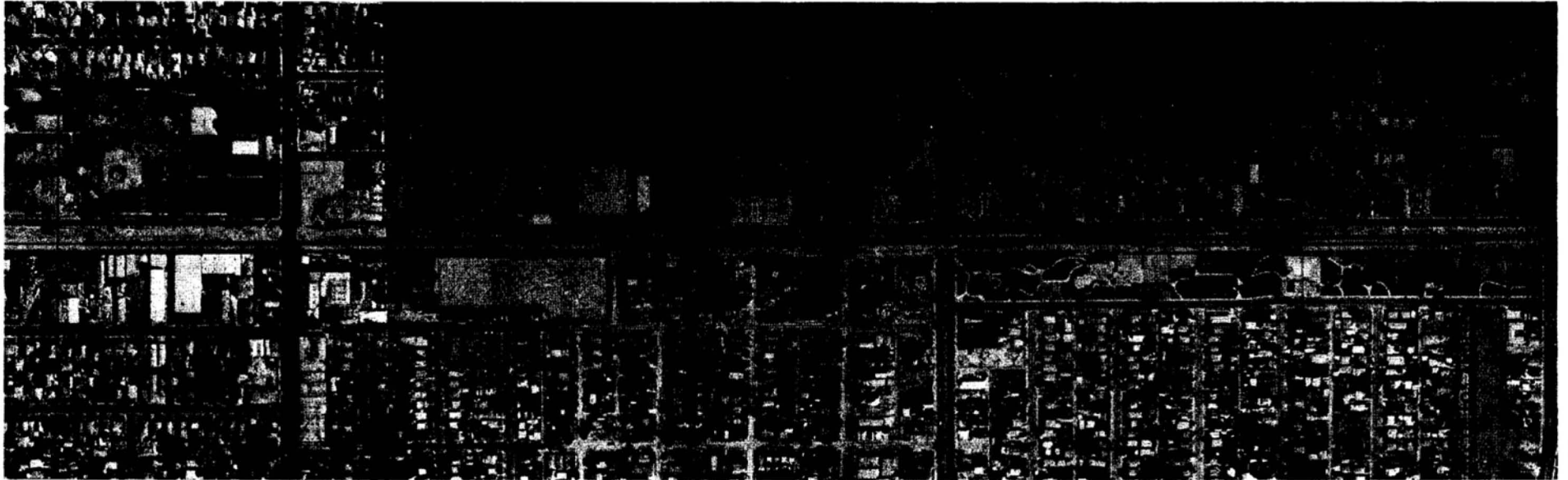


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

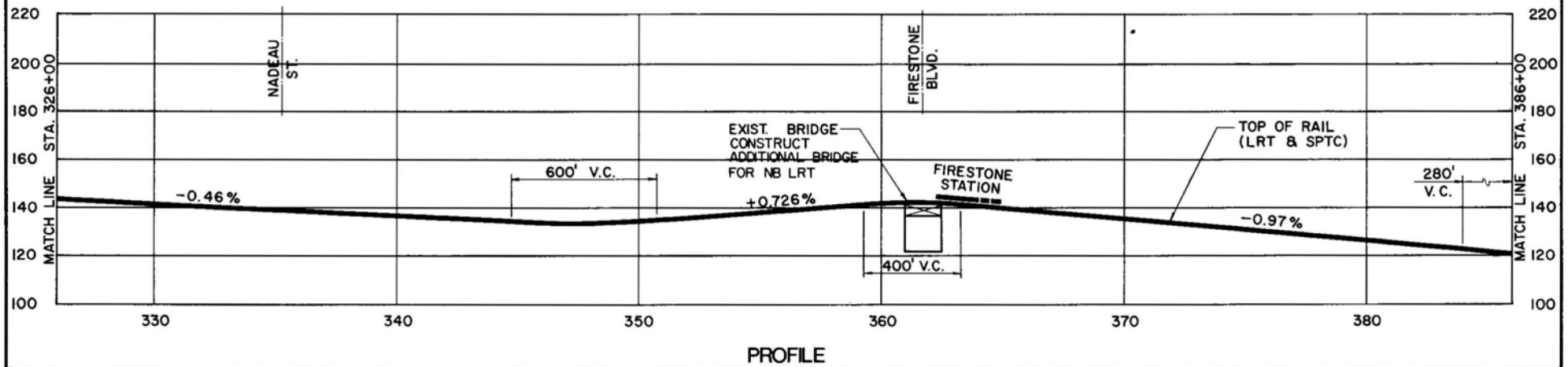
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 25

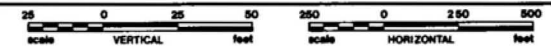
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

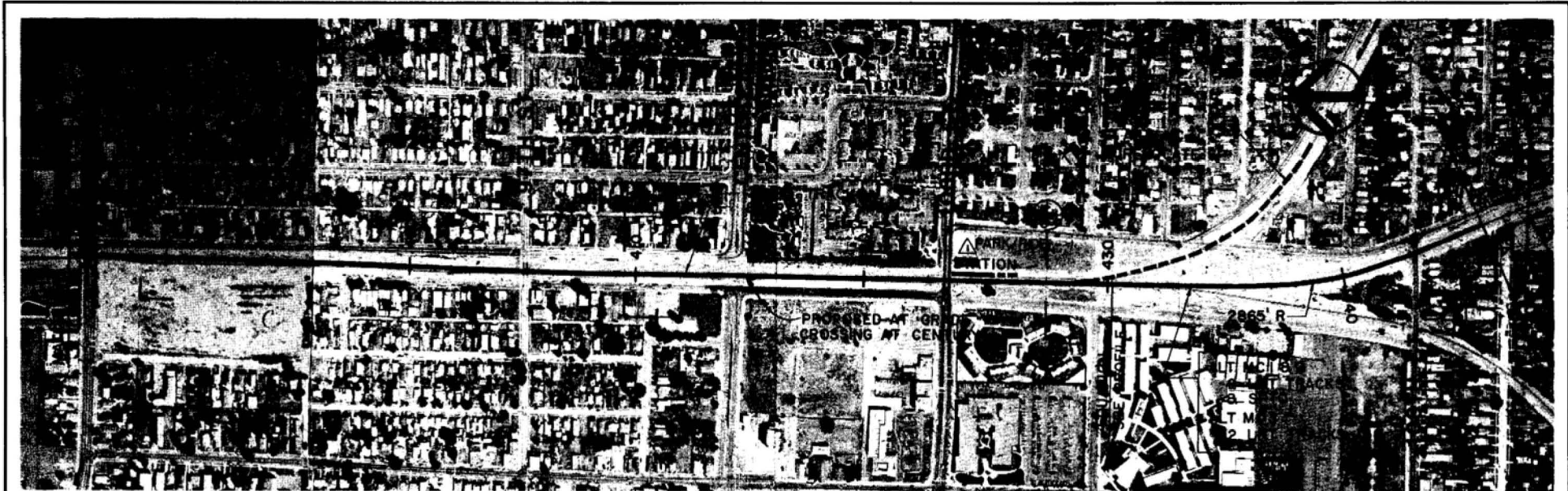


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

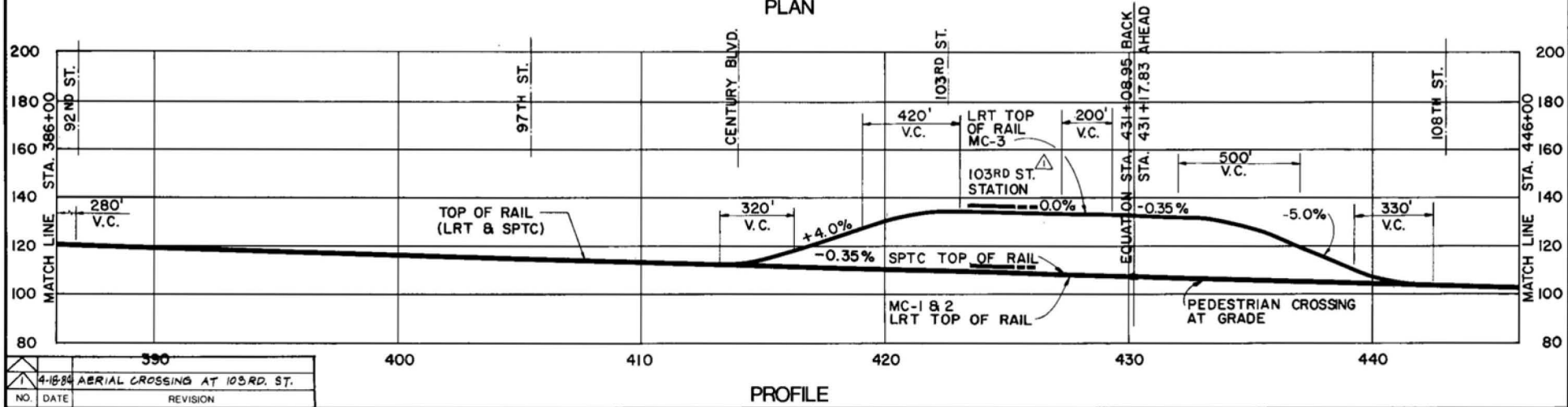
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 26

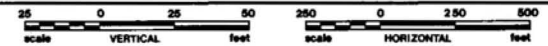
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

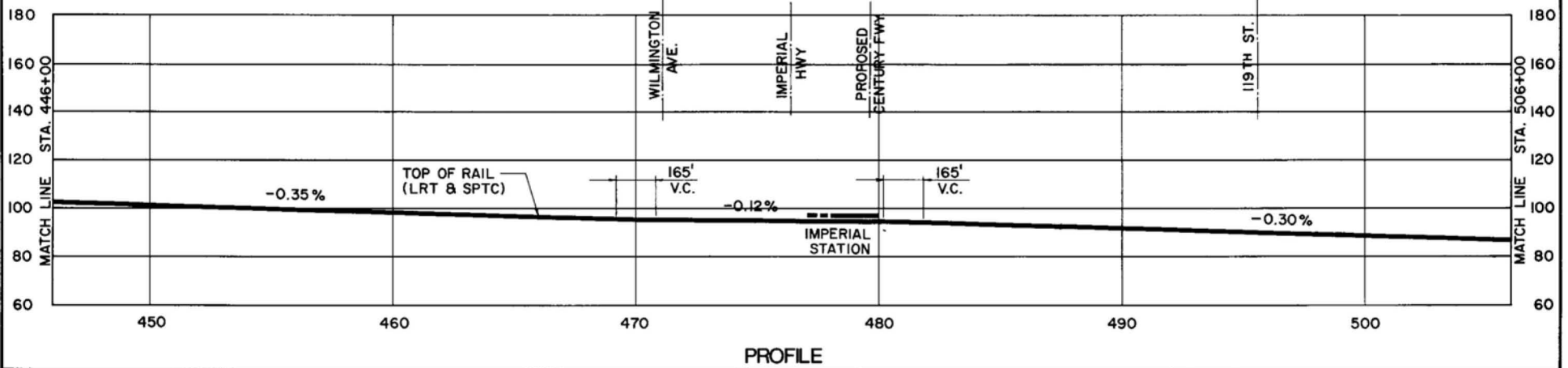
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 27

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

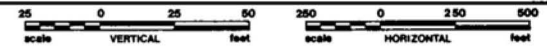
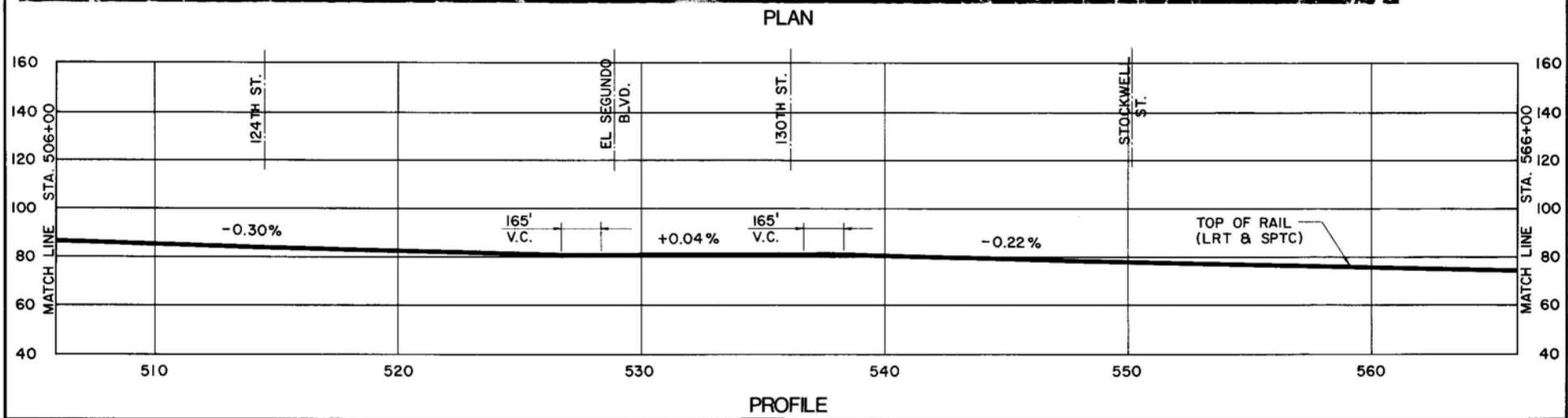


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 28

PARSONS BRINCKERHOFF/KAISER ENGINEERS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

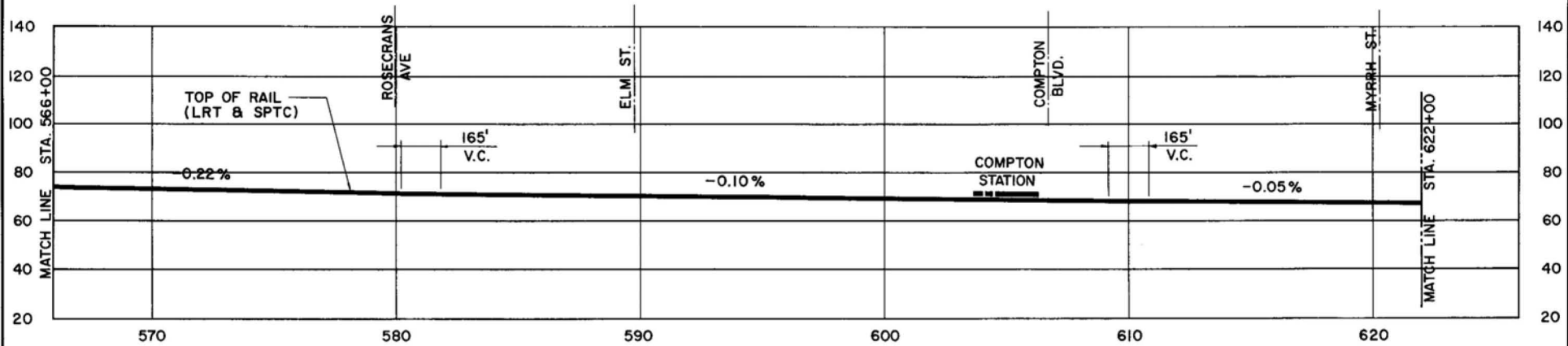
Plan and Profile
 Mid Corridor (MC 1 & 3)

Figure 29

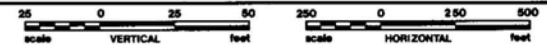
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

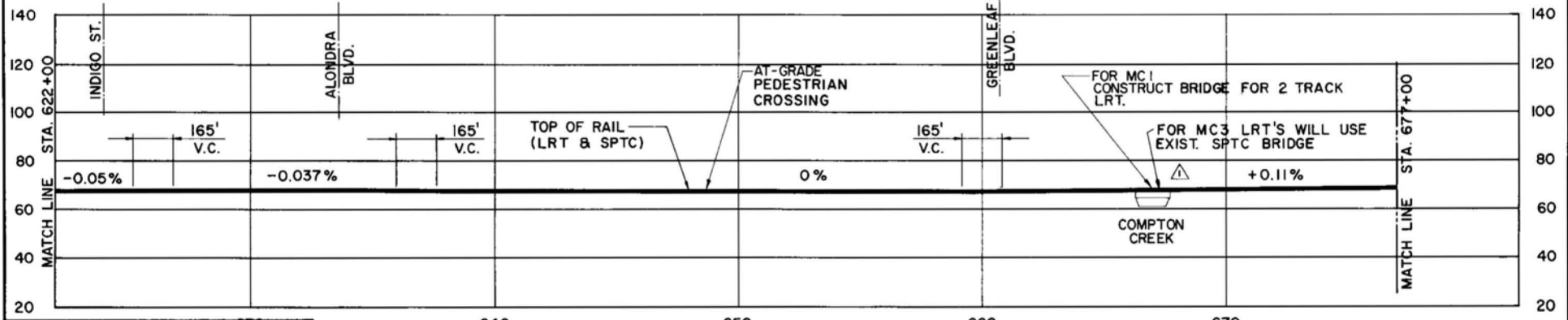
Plan and Profile
 Mid Corridor (MC 1 & 3)

Figure 30

PARSONS BRINCKERHOFF/KAISER ENGINEERS

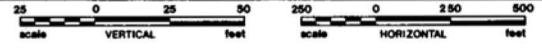


PLAN



PROFILE

630	
4-18-84	NEW BRIDGE FOR LRT'S AT COMPTON CR.
NO.	REVISION



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

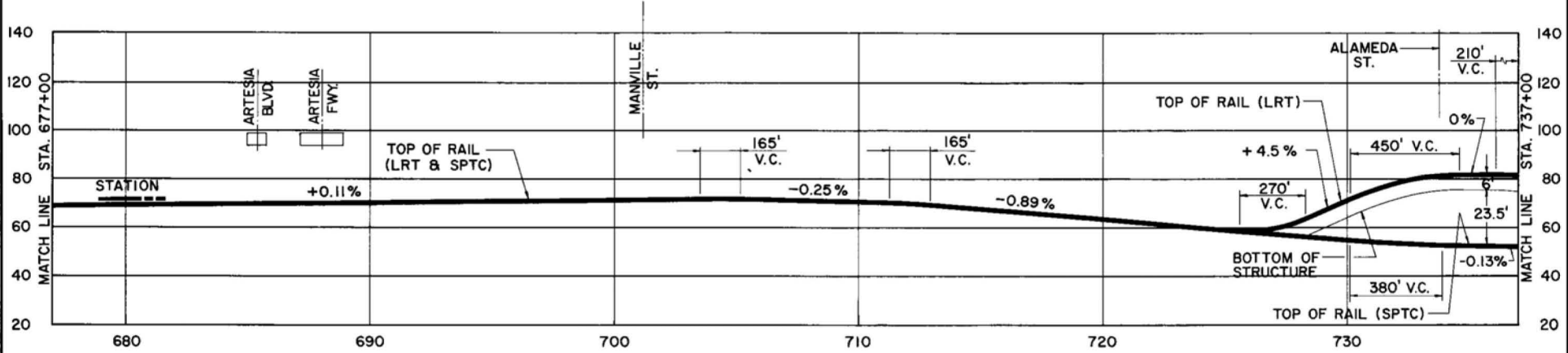
Plan and Profile
 Mid Corridor (MC 1 & 3)

Figure 31

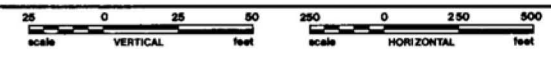
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

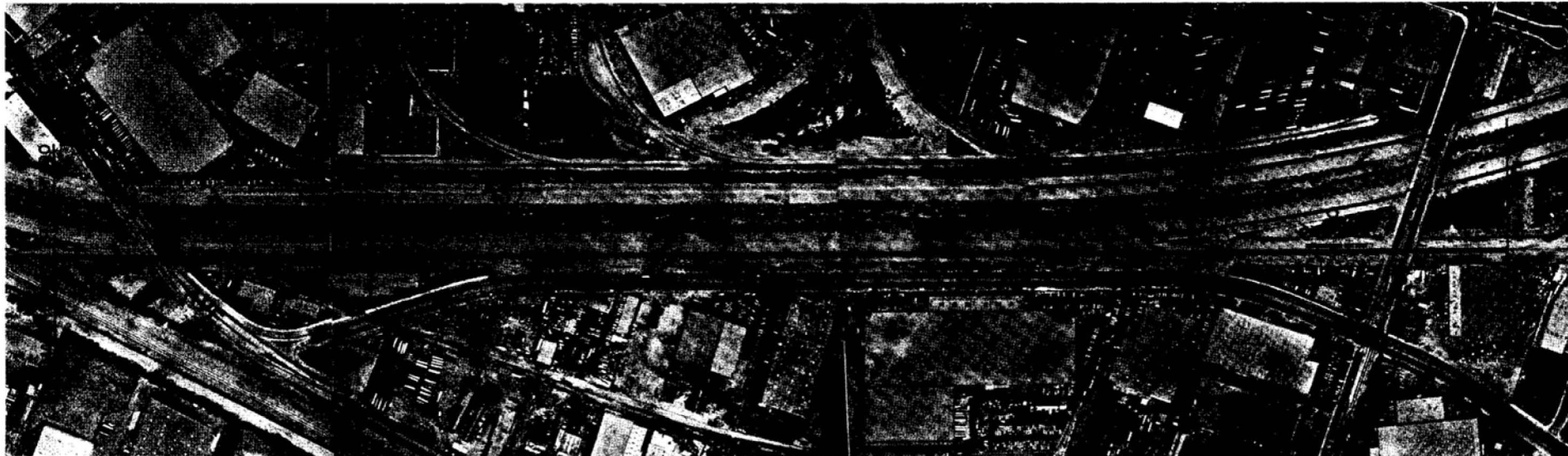


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

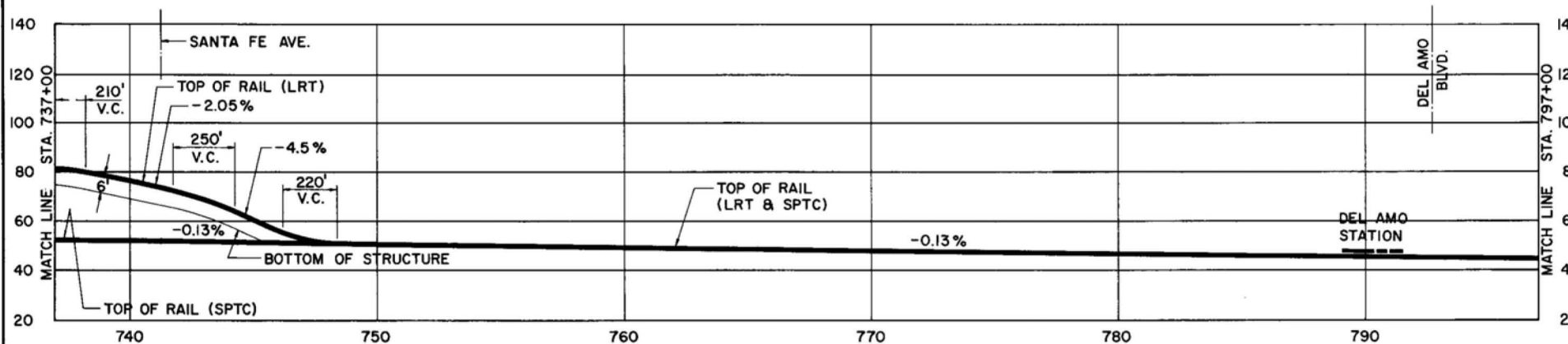
Plan and Profile
Mid Corridor (MC 1, 2 & 3)

Figure 32

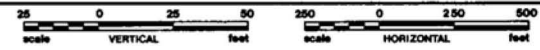
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



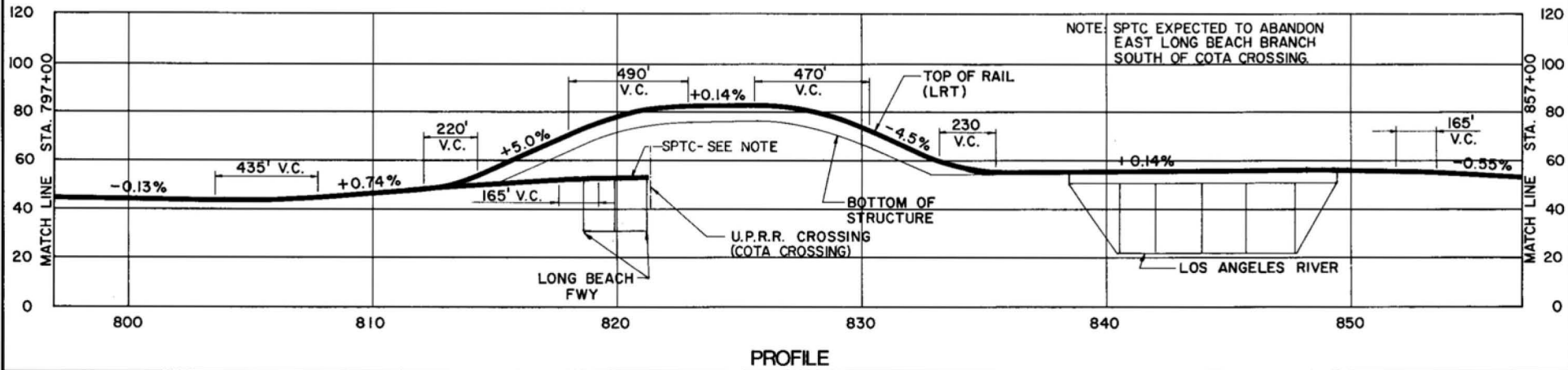
PROFILE



<p>Long Beach - Los Angeles RAIL TRANSIT PROJECT LOS ANGELES COUNTY TRANSPORTATION COMMISSION</p>	<p>Plan and Profile Mid Corridor (MC 1, 2 & 3)</p>	<p>Figure 33</p>
<p>PARSONS BRINCKERHOFF / KAISER ENGINEERS</p>		



PLAN



PROFILE

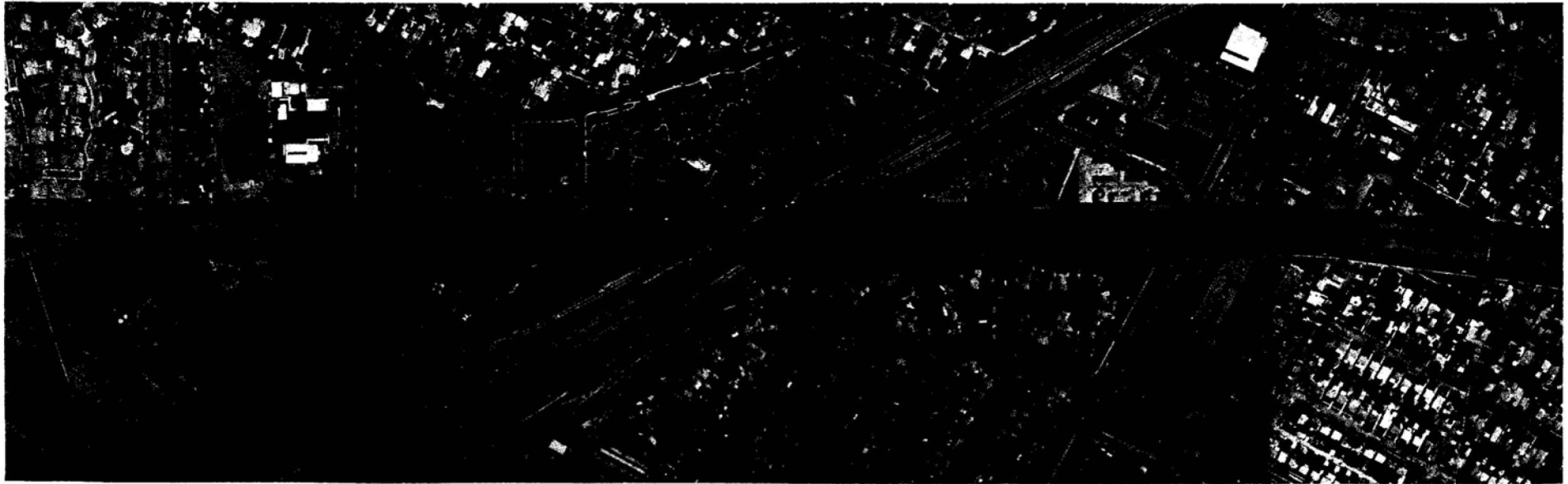


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

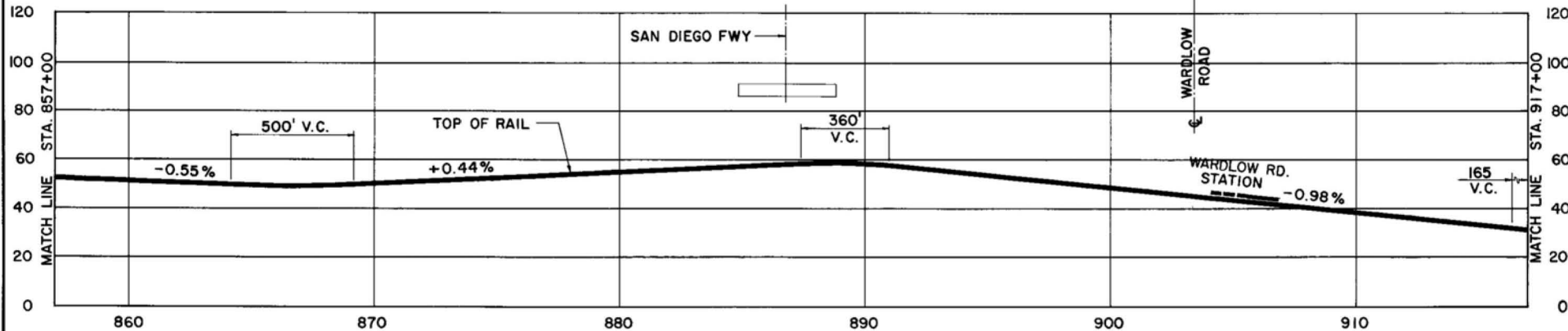
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 34

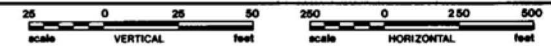
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

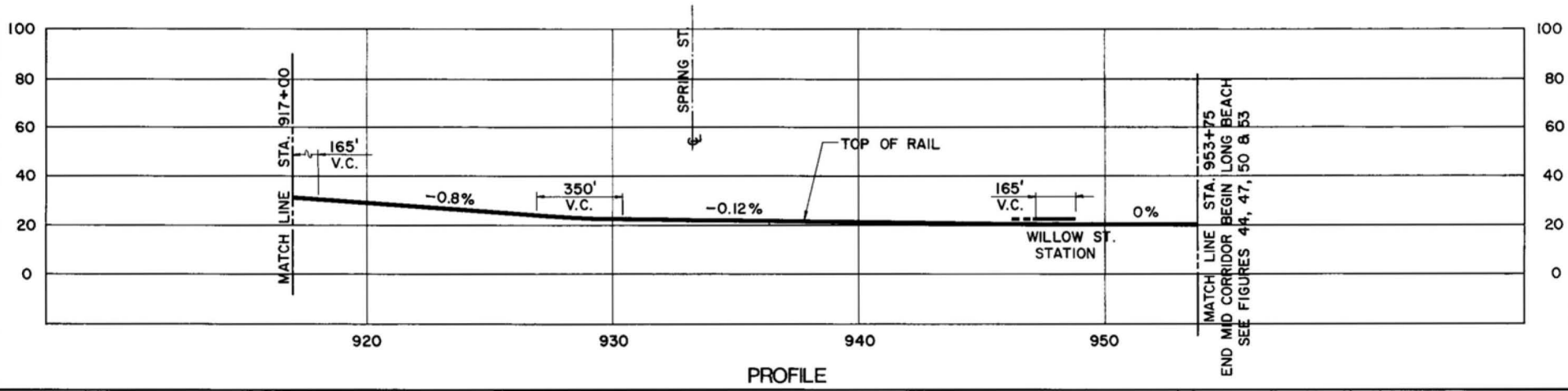
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 35

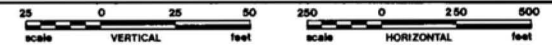
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

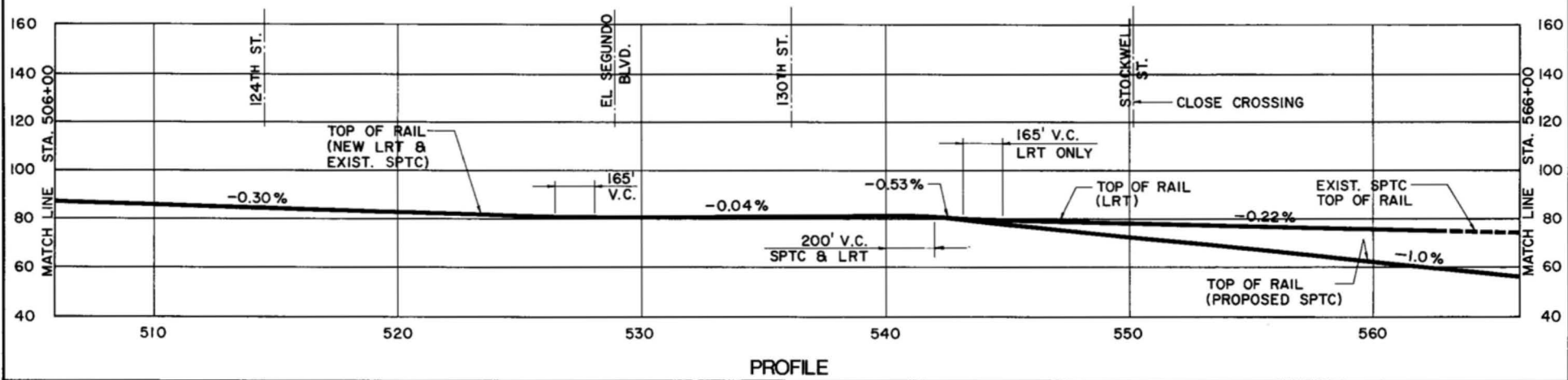
Plan and Profile
 Mid Corridor (MC 1, 2 & 3)

Figure 36

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

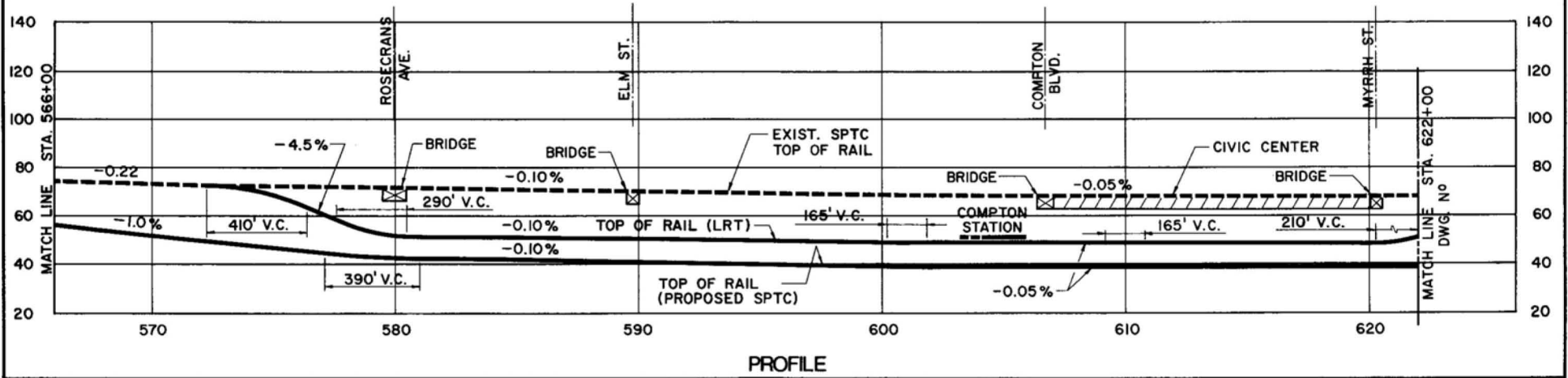
Plan and Profile
 Mid Corridor (MC 2)

Figure 37

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

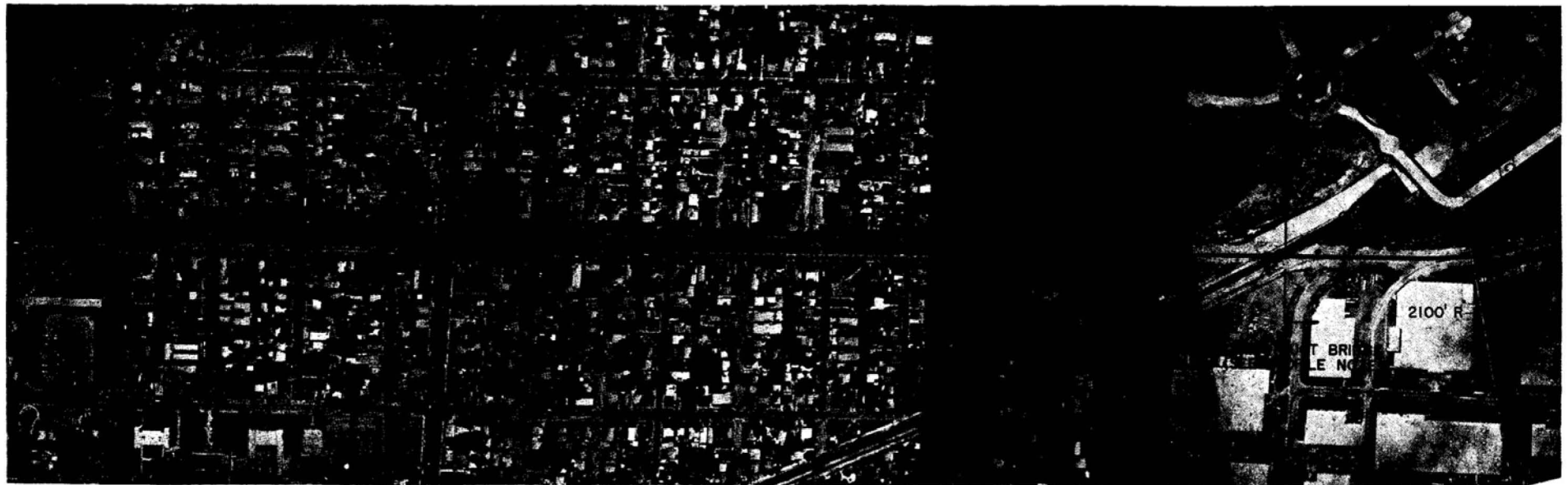


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

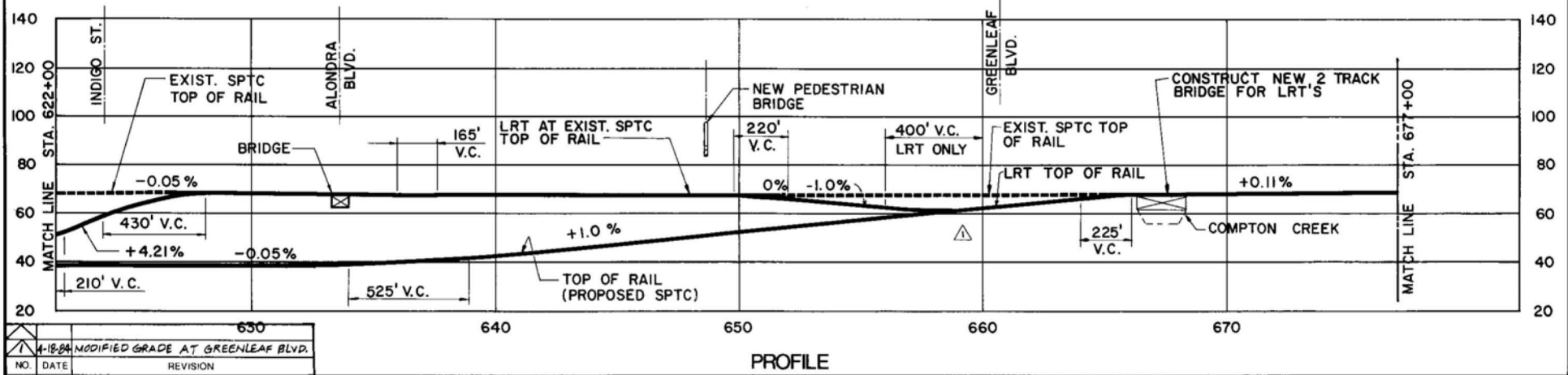
Plan and Profile
 Mid Corridor (MC 2)

Figure 38

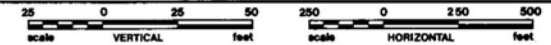
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

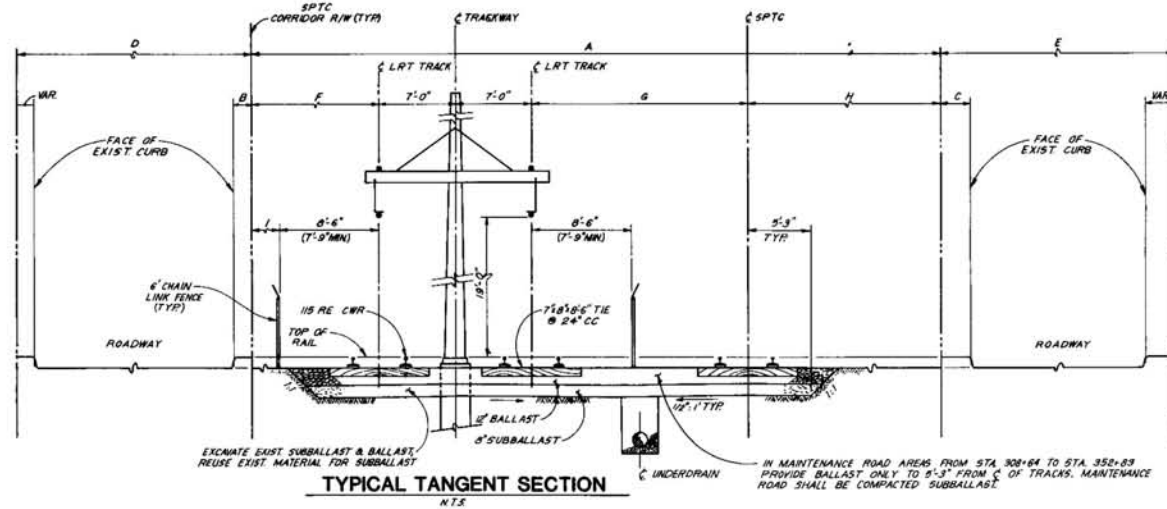


Long Beach - Los Angeles RAIL TRANSIT PROJECT

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile Mid Corridor (MC 2)

Figure 39



SECTION NO.	STA. TO STA.	A (R/W)	B (FACE OF CURB TO R/W)	C (FACE OF CURB TO R/W)	D (STREET R/W CURB TO CURB)	E (STREET R/W CURB TO CURB)	F (LRT TO R/W)	G (LRT & SPRR SEPARATION)	H (SPRR TO R/W)	I (FENCE TO R/W)	COMMENTS
A	109+77 TO 195+00	80'-0"	VAR 0' TO 3'	VAR 0' TO 5'	40'-0"/30'-0"	40'-0"/30'-0"	11'-0"	18'-6"	16'-6"	2'-6"	15' SIDE CLEARANCE FROM LRT C TO FACE OF CURB SHALL BE PROVIDED FOR RR GATES @ CROSS STREETS. SPTC SHALL USE EXIST SPTC TRACK @ SPURS SOUTH OF TWENTIETH, R/W WIDTHS TO 80' IN WASHINGTON STA. AREA, 24' BETWEEN LRT C @ STATIONS.
B	195+00 TO 214+00	VAR 60'-0" TO 100'-0"	N/A**	0'	40'-0"/30'-0"	VAR 30'-40"/20'-30'	13'-0"	18'-6"	MIN 12' EXCEPT 16'-6" @ ST. CROSS	VAR.	R/W IN QUESTION ON WEST SIDE OF CORRIDOR, LRT TRACKS @ VERNON STATION SHALL BE 24' CENTERS.
C	214+00 TO 219+04	80'-0"	0'	0'	40'-0"/30'-0"	40'-0"/30'-0"	13'-0"	18'-6"	34'-6"	4'-6"	
D	219+04 TO 245+94	80'-0"	5'	0'	40'-0"/30'-0"	40'-0"/30'-0"	11'-0"	18'-6"	16'-6"	2'-6"	
E	278+8103 TO 308+64	70'-0"					13'-0"	18'-6"	24'-6"	4'-6"	R/W REDUCES TO 60' SOUTH OF FLORENCE ON THE WEST SIDE, MAINTENANCE RD ON WEST SIDE OF SPTC TRACK.
F	308+64 TO 333+26	80'-0"	40' EXCEPT 3' FOR 800'		40'-0"/30'-0"		7'-9"	26'-6"	12'-0"	0'	FOR SECTIONS T & G, DO NOT CONTINUE BALLAST BETWEEN LRT & SPTC TRACKS. BALLAST SHOULD BE 3'-9" FROM C OF TRACKS ONLY, PROVIDE SUBBALLAST IN BETWEEN.
G	333+26 TO 341+71	60'-0"					7'-9"	26'-6"	12'-0"	0'	21.8' OF R/W WILL BE REQUIRED FOR SP DRILL TRACK, CLEARANCE BETWEEN DRILL TRACK & LRT SHALL BE 17', AND DRILL TRACK TO R/W SHALL BE 12'. ALSO SEE DETAIL.
H	383+38 TO 423+00	100'-0"	VAR. 3' TO 5'	0'	VAR 40'-30"/30'-40'	VAR 0'-40"/0'-30'	VAR 24'-9" TO 10'-9"	18'-6"	VAR 42'-9" TO 57'-3"	VAR 16'-9" TO 1'-9"	SPTC TO USE EXIST TRACK (STA 383+00 TO STA 431+00).
I	423+00 TO 456+00	VAR 100'-0" TO APPROX 280'					VAR 42'-9" TO 150'	18'-6"	VAR 24'-9" TO 150'	VAR.	NB LRT TRACK TO FOLLOW EXIST SPTC ALIGNMENT. LRT TRACKS @ 103RD ST. STATION SHALL BE @ 24' CENTERS.
J	456+00 TO 580+00 (TO 537+38 FOR COMPTON CR)	100'-0"	VAR 0' TO 10'	VAR 0' TO 10'	VAR 40'-30"/30'-0"	VAR 0'-50"/0'-40'	42'-9"	18'-6"	24'-9"	34'-3"	NB LRT TO FOLLOW EXIST SPTC ALIGNMENT EXCEPT @ IMPERIAL STA. FOR APPROX. 800'.
K	580+00 TO 660+72	64'-0"	5' TO 6'	0'	VAR 35'-40"/30'-35'	VAR 0'-35"/30'	11'-0"	18'-6"	16'-6"	2'-6"	15' SIDE CLEARANCE FROM LRT C TO FACE OF STREET CURB SHALL BE PROVIDED FOR RR GATES, ACQUIRE 8'-9" R/W @ COMPTON STATION.
L	660+82 TO 667+30 668+60 TO 672+00	VAR 64'-0" TO 100'-0"					VAR	VAR	VAR	VAR	TRANSITION LRT EAST OF EXIST. SPTC COMPTON CREEK BRIDGE.
M	709+00 TO 725+59 748+41 TO 812+71	120'-0"					20'-3"	18'-6"	87'-3"	11'-9"	SPTC TO USE EXIST TRACK FROM STA. 709+00 TO STA. 830+00, EXCAVATE FOR PLACEMENT OF LRT TRACKS ONLY WHERE SPTC USES EXIST TRACK (TYP).
N	837+48 TO 863+00	120'-0"					VAR	VAR	VAR	VAR	LRT & SPTC TO USE EXIST. L.A. RIVER SP BRIDGE, SPTC TO USE EXIST ALIGNMENT FROM STA. 837+00 TO 860+00.
O	863+00 TO 860+00	120'-0"					20'-3"	18'-6"	67'-3"	11'-9"	SPTC TO USE EXIST ALIGNMENT.

** N/A = NOT APPLICABLE

*** NO ROAD PARALLELS THE CORRIDOR, SPACE FOR MAINTENANCE ROAD WILL BE PROVIDED.

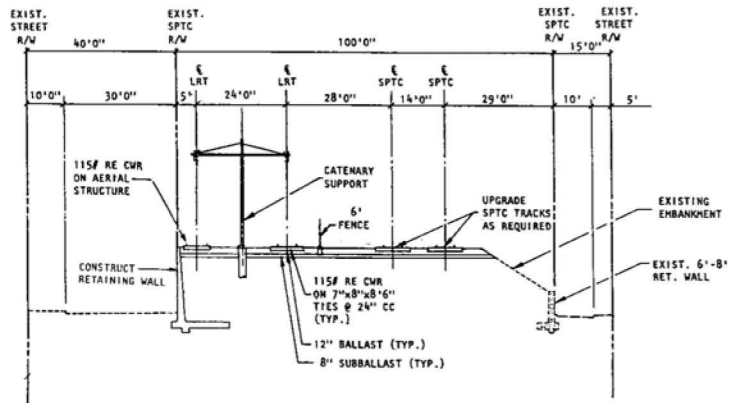
Long Beach - Los Angeles RAIL TRANSIT PROJECT

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

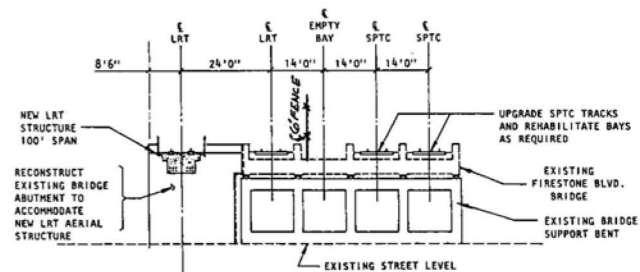
Sections Mid Corridor

Figure 40

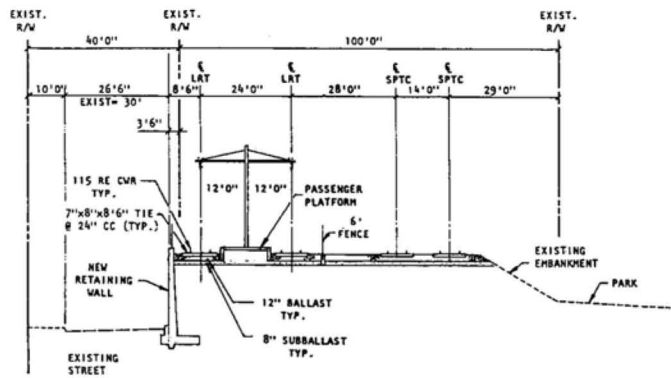
PARSONS BRINCKERHOFF/KAISER ENGINEERS



SECTION - BRIDGE VICINITY NORTH OF FIRESTONE BLVD. (T1)



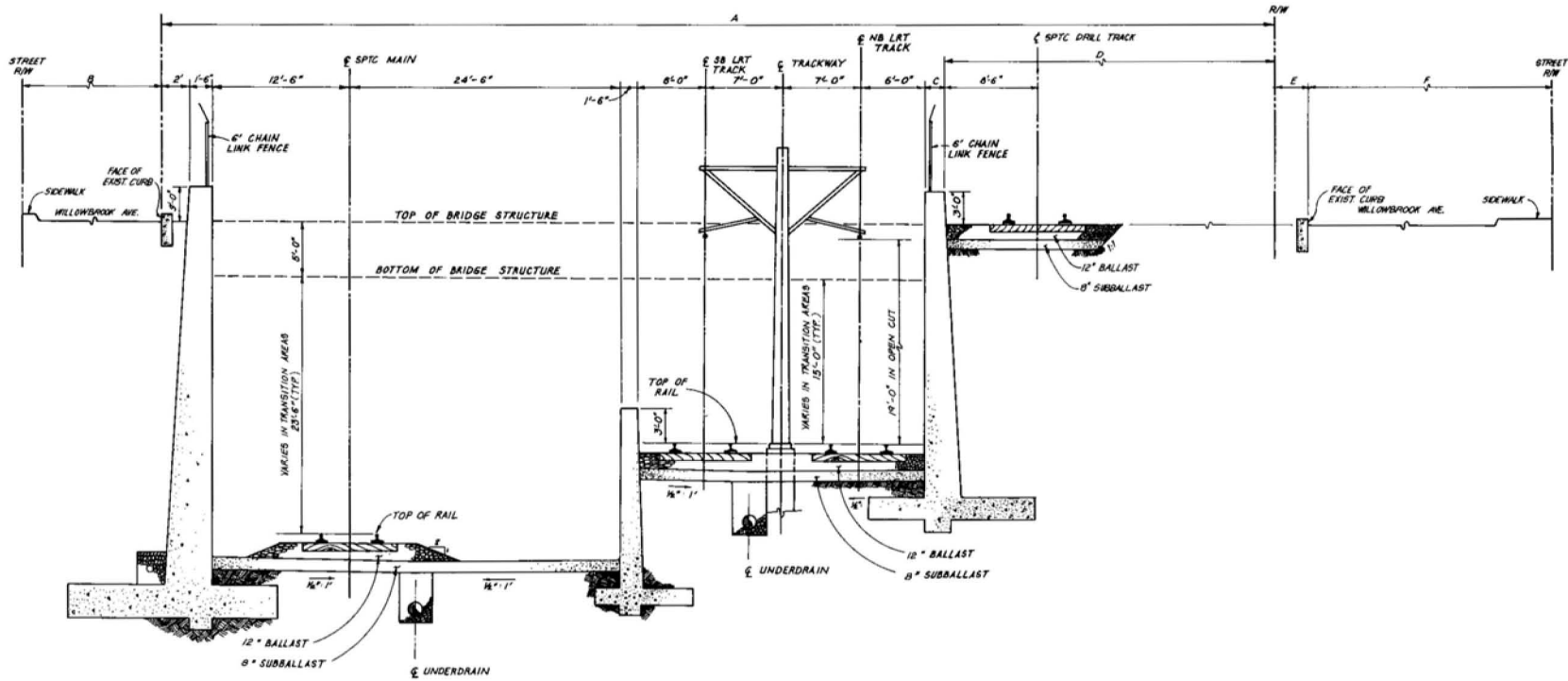
SECTION - AERIAL CROSSING AT FIRESTONE BLVD. (T2)



SECTION - FIRESTONE STATION SOUTH OF FIRESTONE BLVD. (T3)

SECTIONS AT FIRESTONE BLVD

4-18-04	MODIFIED STATION
NO.	DATE
	REVISION



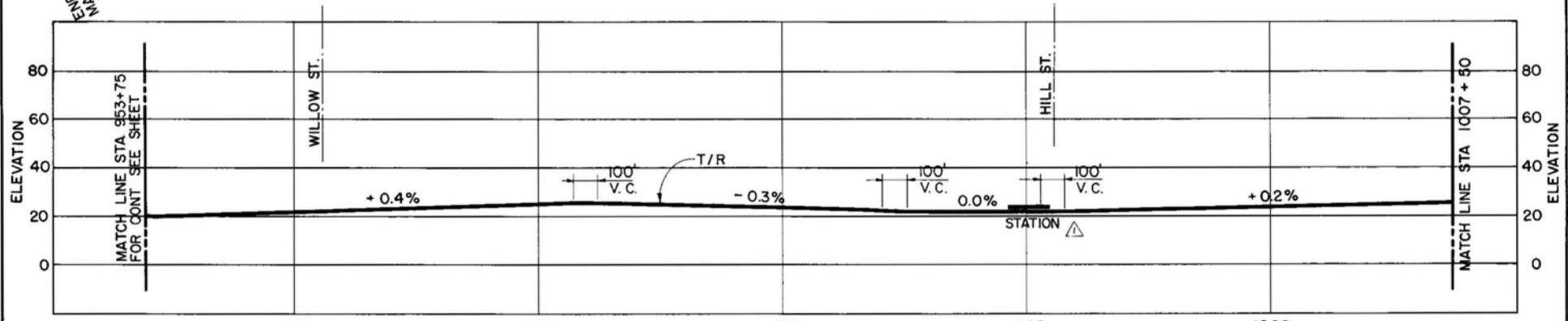
TYPICAL COMPTON CUT SECTION
N.T.S.

SECTION NO.	STA. TO STA.	A (R/W)	B (STREET R/W CURB TO CURB)	C (RETAINING WALL THICKNESS)	D (FACE OF RET. WALL TO R/W)	E (R/W TO FACE OF CURB)	F (STREET R/W CURB TO CURB)	COMMENTS
U	537+38 TO 617+00*	100'-0" (125'-30" OF MOB. LANE)	VAR. 40'-50"/20'-35'	1'-0"	30'-3" (59'-3")	---	VAR. 40'-50"/20'-35'	SEE PROFILE FOR LENGTH AND HEIGHT OF CUT SECTION. SPTC DRILL TRACK AT GRADE ON WEST SIDE WITH BRIDGE @ STA 571+50. DIM. 'E' REDUCES TO 1'-6" SOUTH OF SP BRIDGE.
V	607+00 TO 660+87*	64'-0"	35' / 30'	1'-3"	***	VAR. 0'-6"	4' / 30"	***ACQUIRE 5'-5" R/W, TOTAL R/W FOR CUT SECTION = 69'-5"

* INCLUDES TRANSITION AREAS
** SPTC MAIN TRACK TO R/W WILL BE 14'

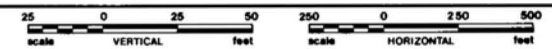


PLAN



PROFILE

NO.	DATE	REVISION
4-18-44		ADDED STATION AT HILL STREET



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

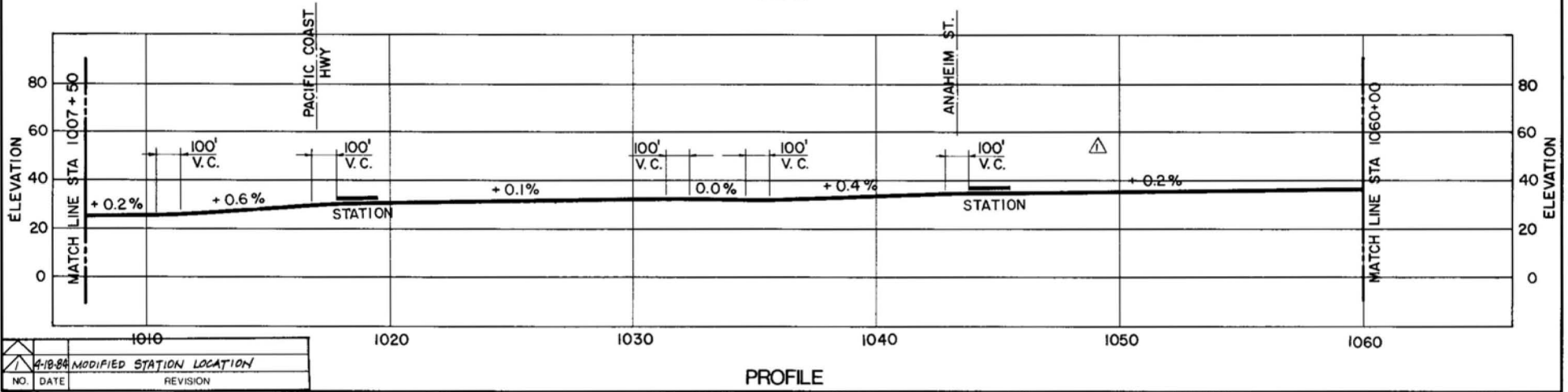
Plan and Profile
 Long Beach (LB 1 & 4)
 ATLANTIC AVENUE TWO WAY

Figure 47

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

NO.	DATE	REVISION
4-18-84		MODIFIED STATION LOCATION



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

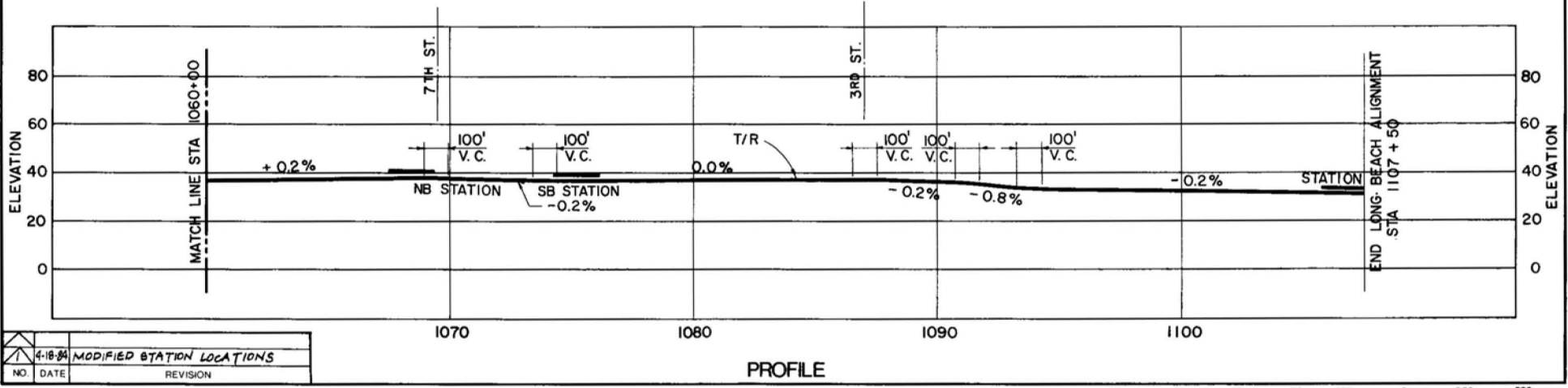
Plan and Profile
 Long Beach (LB 1 & 4)
 ATLANTIC AVENUE TWO WAY

Figure 48

PARSONS BRINCKERHOFF/KAISER ENGINEERS

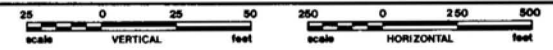


PLAN



PROFILE

NO.	DATE	REVISION
4-16-84		MODIFIED STATION LOCATIONS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Long Beach (LB I)
 ATLANTIC AVENUE TWO WAY

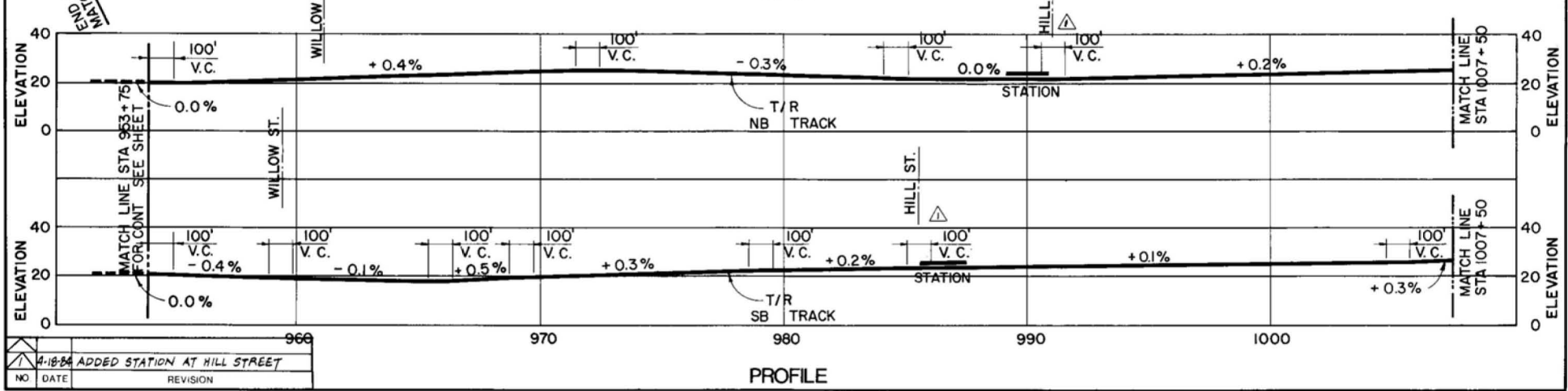
Figure 49

PARSONS BRINCKERHOFF/KAISER ENGINEERS

BEGIN LONG BEACH
SEE FIGURE 36

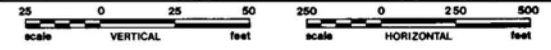


PLAN



PROFILE

NO.	DATE	REVISION
1	4-18-84	ADDED STATION AT HILL STREET



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

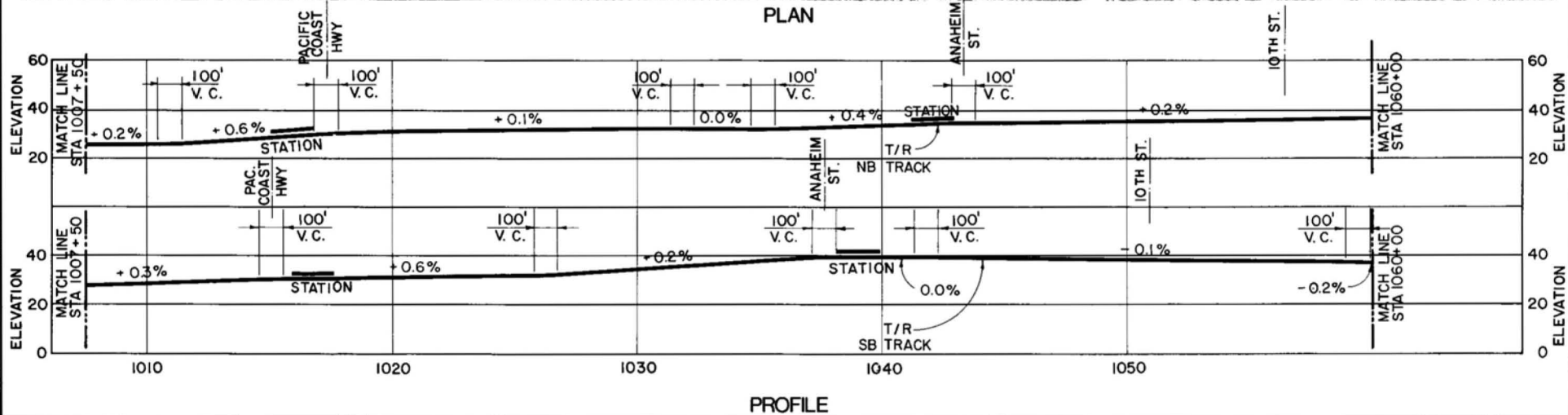
Plan and Profile
 Long Beach (LB 2)
 ATLANTIC/LONG BEACH COUPLET

Figure 50

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

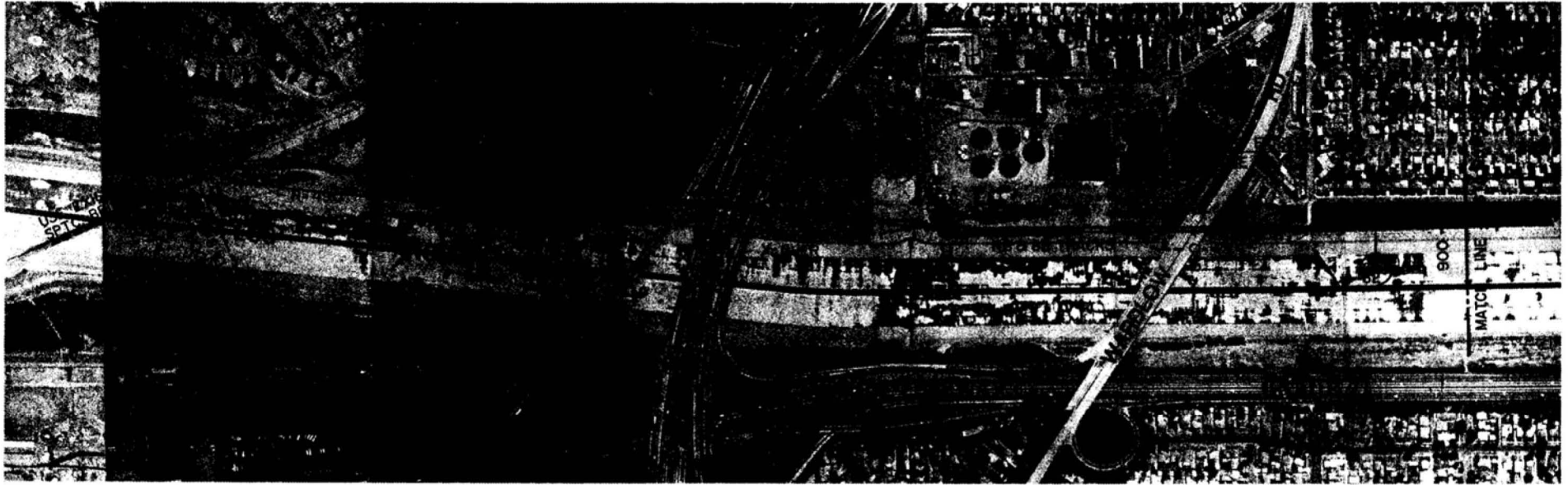


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

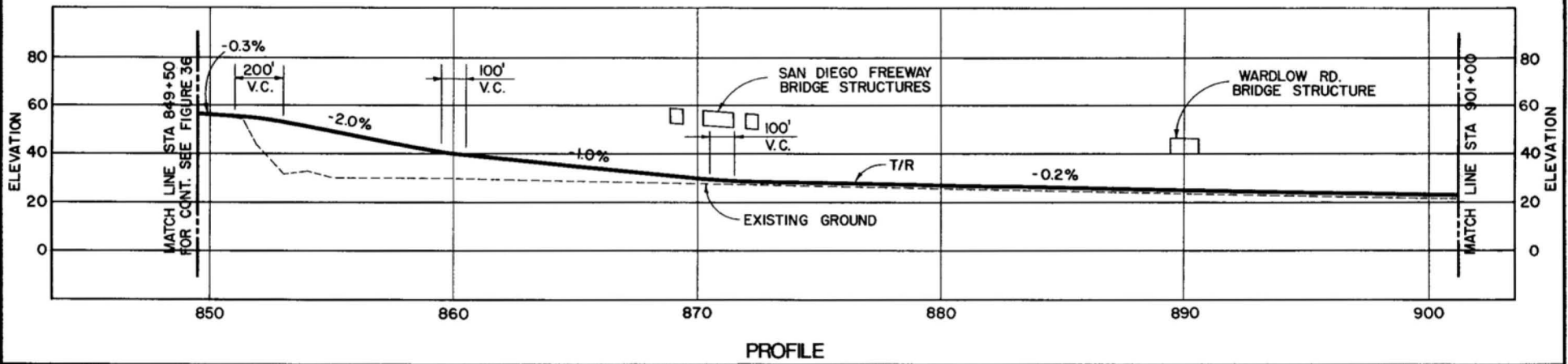
Plan and Profile
Long Beach (LB 2)
 ATLANTIC/LONG BEACH COUPLER

Figure 51

PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

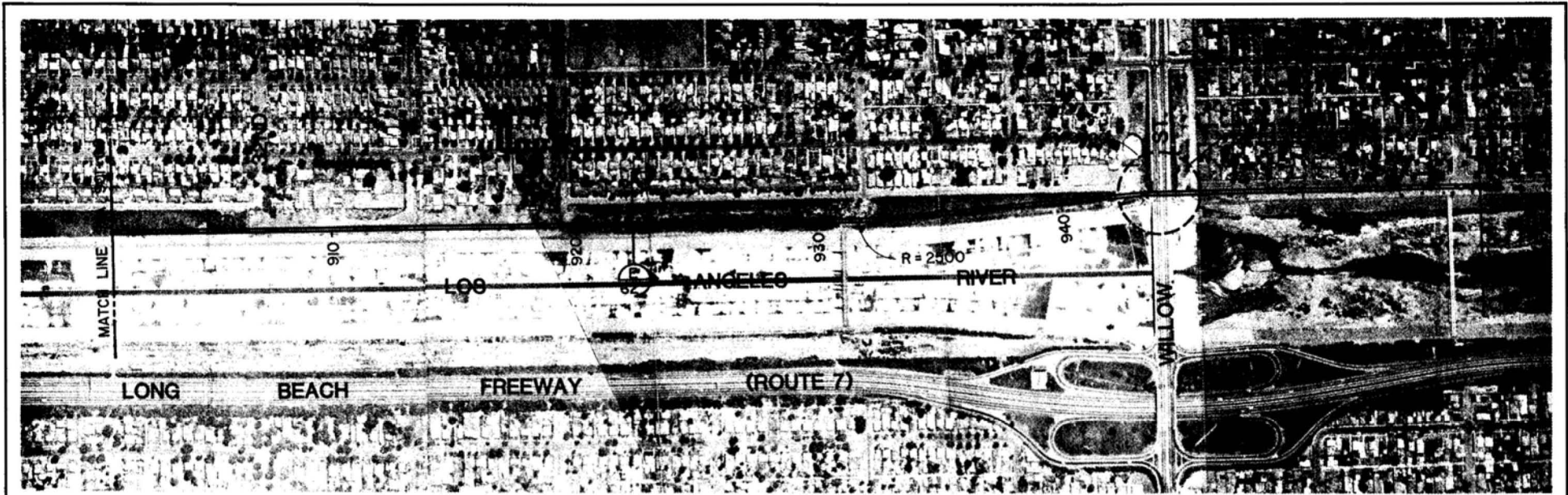


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

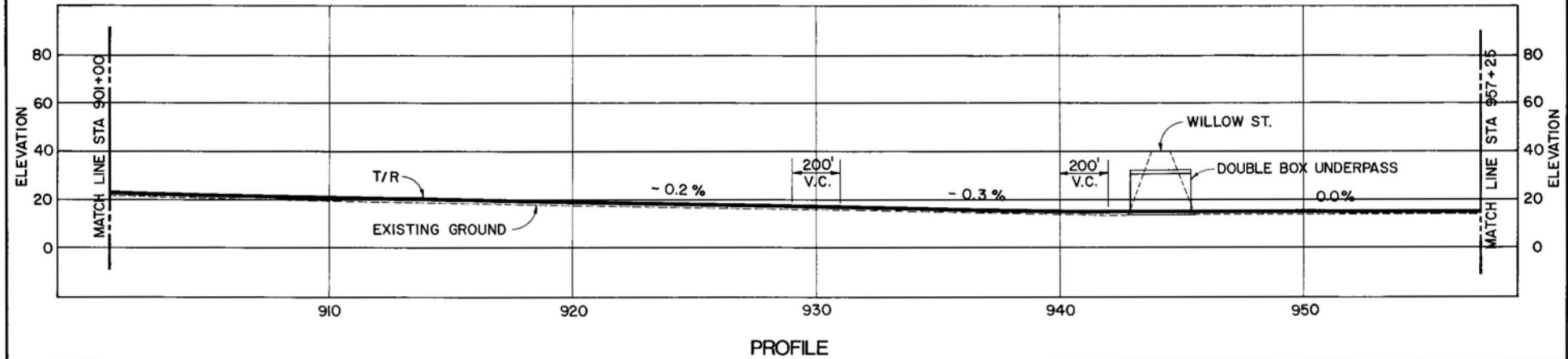
Plan and Profile
 Long Beach (LB 3)
 RIVER ROUTE

Figure 53

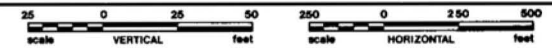
PARSONS BRINCKERHOFF/KAISER ENGINEERS



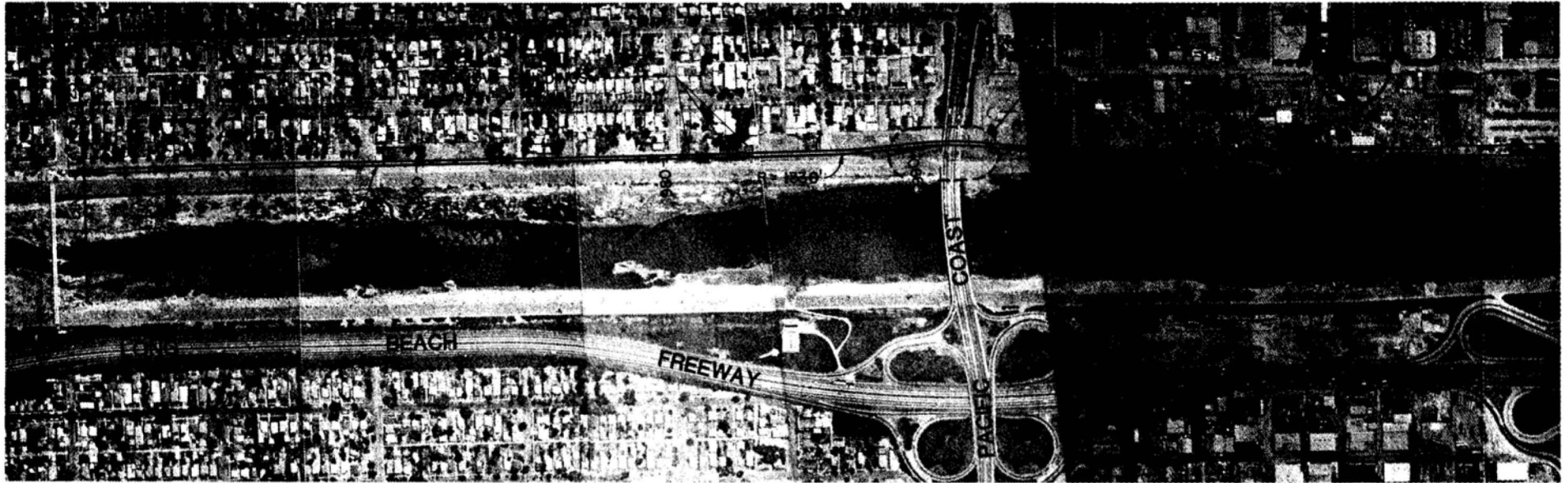
PLAN



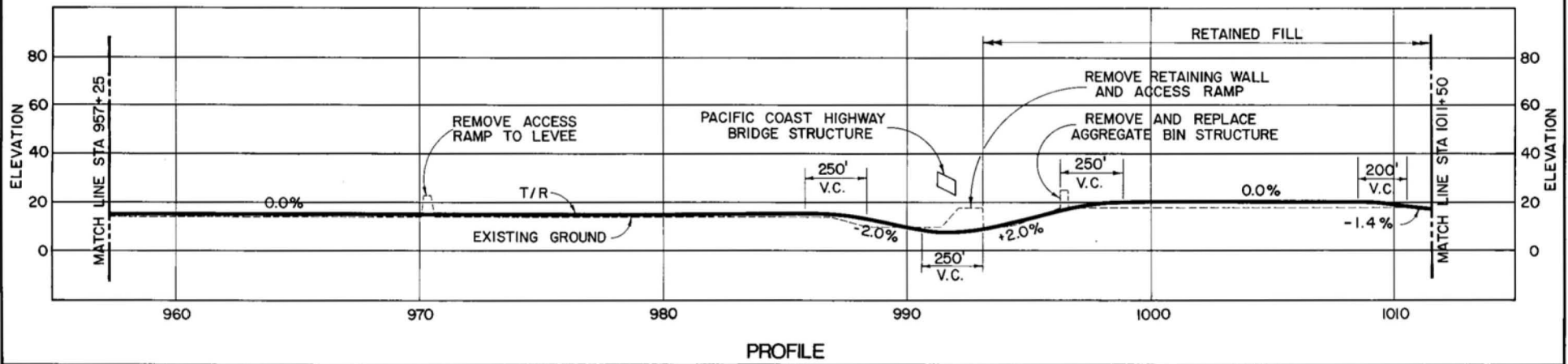
PROFILE



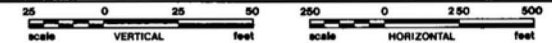
<p>Long Beach - Los Angeles RAIL TRANSIT PROJECT LOS ANGELES COUNTY TRANSPORTATION COMMISSION</p>	<p>Plan and Profile Long Beach (LB 3) RIVER ROUTE</p>	<p>Figure 54 PARSONS BRINCKERHOFF/KAISER ENGINEERS</p>
---	--	--



PLAN



PROFILE

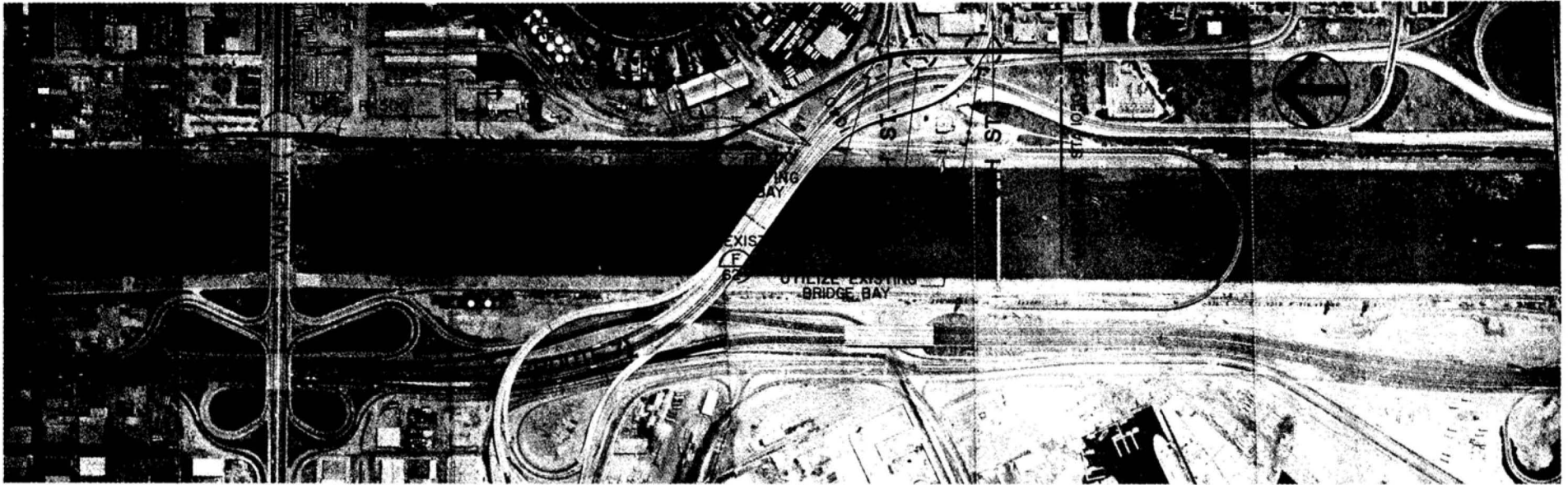


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

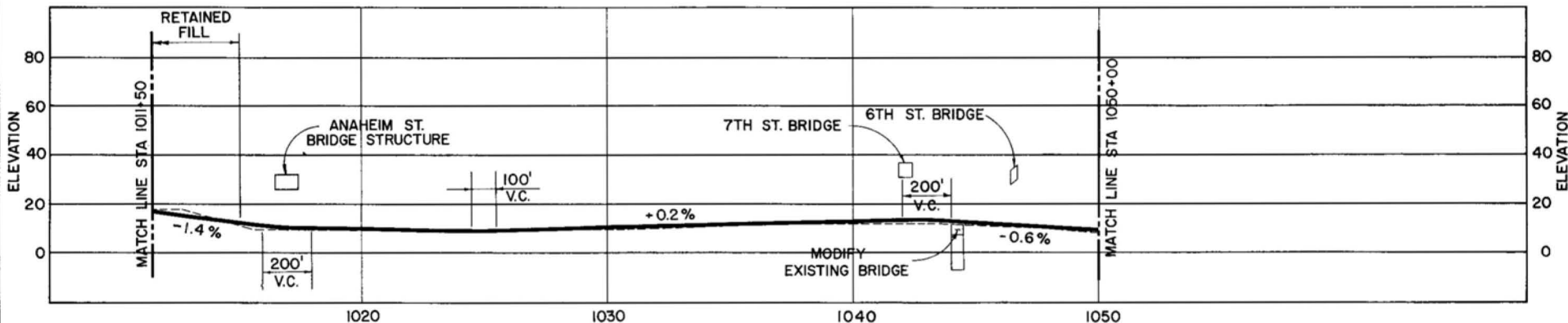
Plan and Profile
 Long Beach (LB 3)
 RIVER ROUTE

Figure 55

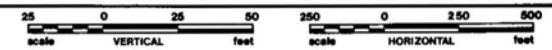
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

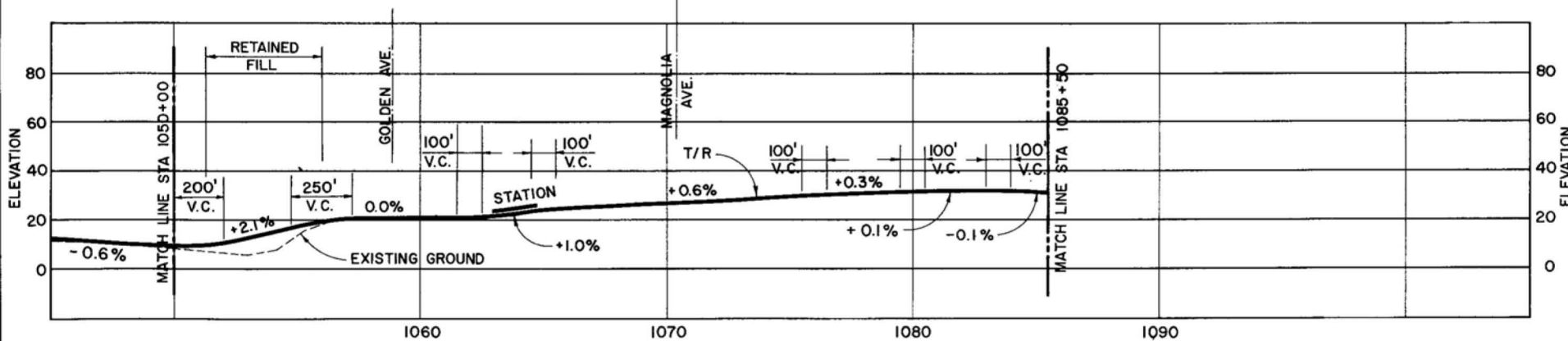
Plan and Profile
Long Beach (LB 3)
 RIVER ROUTE

Figure 56

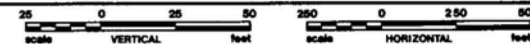
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

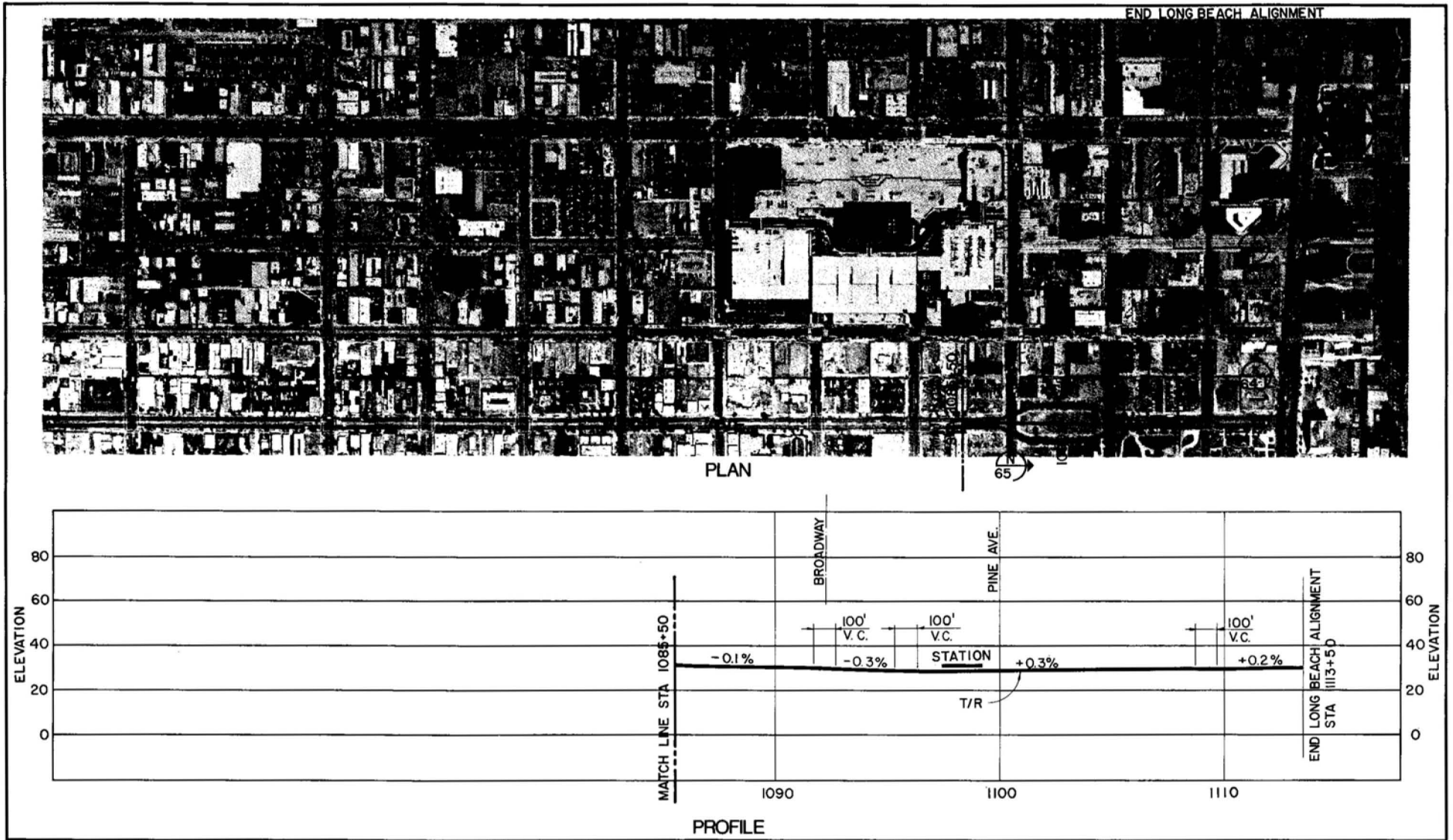


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
Long Beach (LB 3)
 RIVER ROUTE

Figure 57

PARSONS BRINCKERHOFF/KAISER ENGINEERS

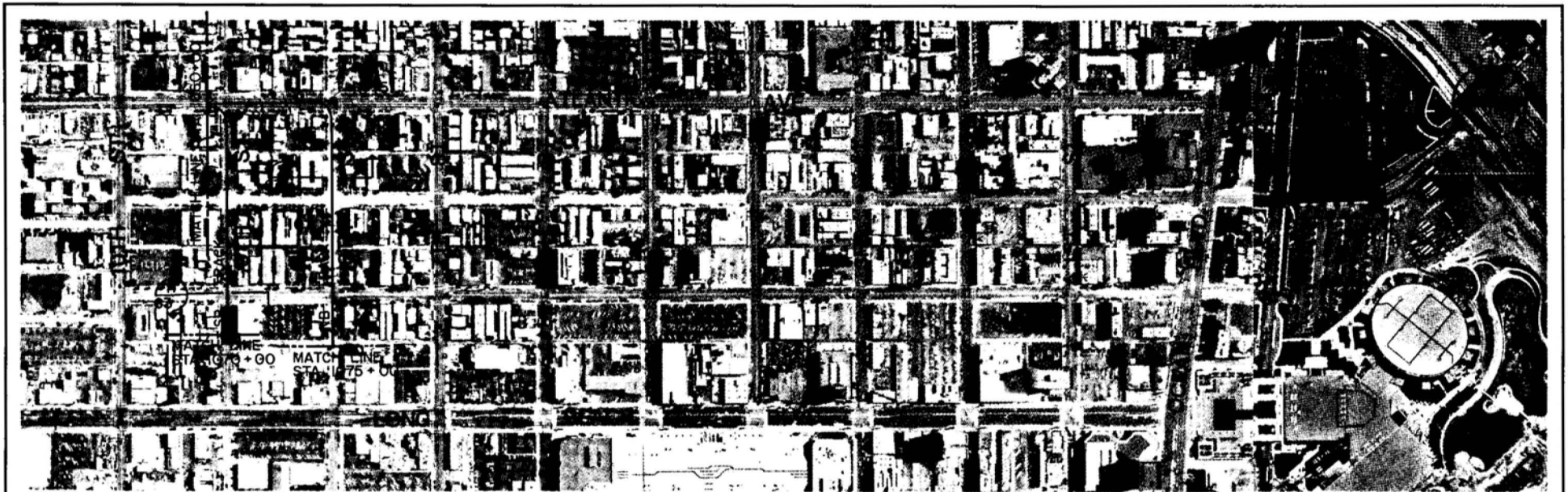


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

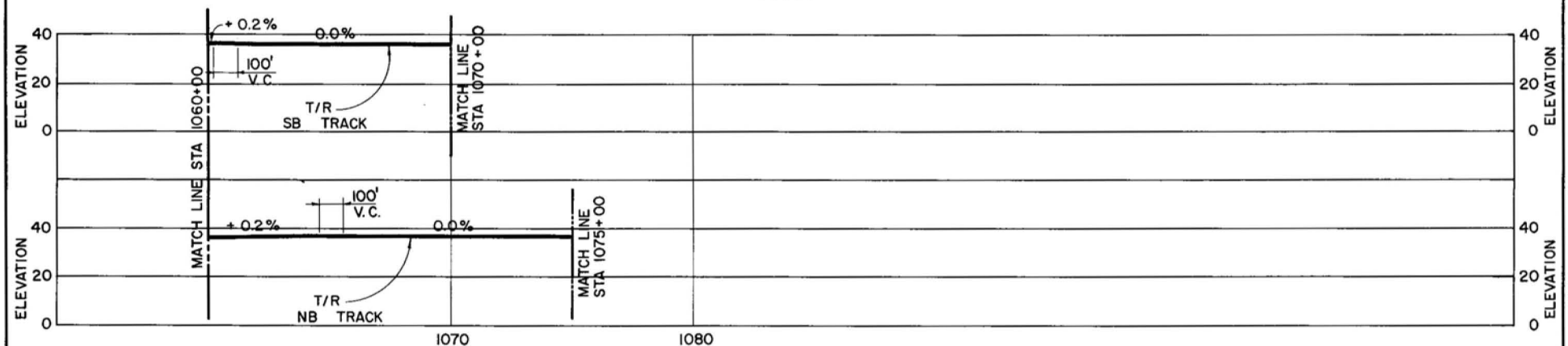
Plan and Profile
 Long Beach (LB 3)
 RIVER ROUTE

Figure 58

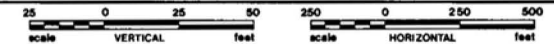
PARSONS BRINCKERHOFF/KAISER ENGINEERS



PLAN



PROFILE

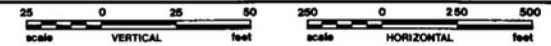
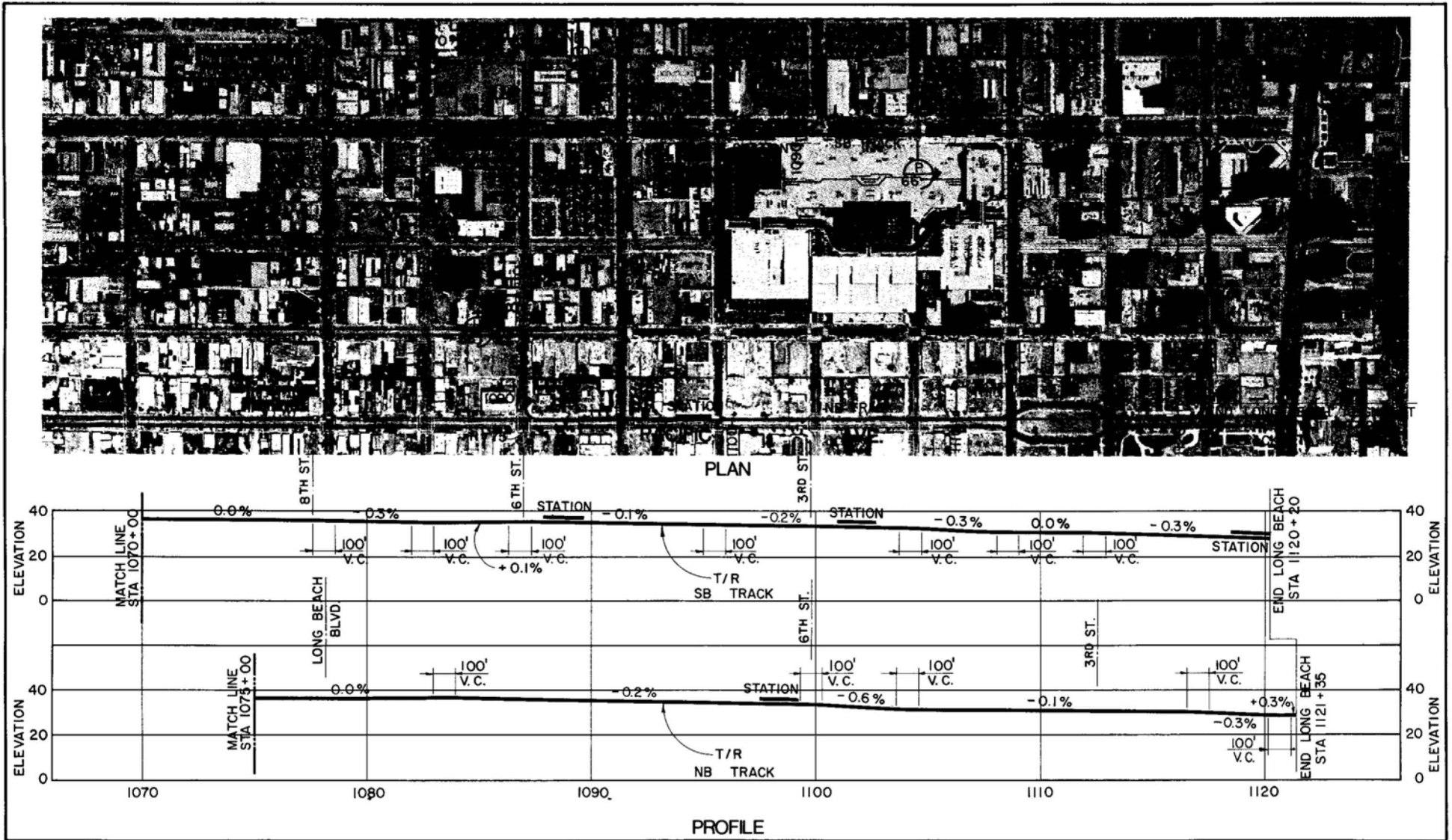


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Plan and Profile
 Long Beach (LB 4)
 PACIFIC AVENUE LOOP

Figure 59

PARSONS BRINCKERHOFF/KAISER ENGINEERS

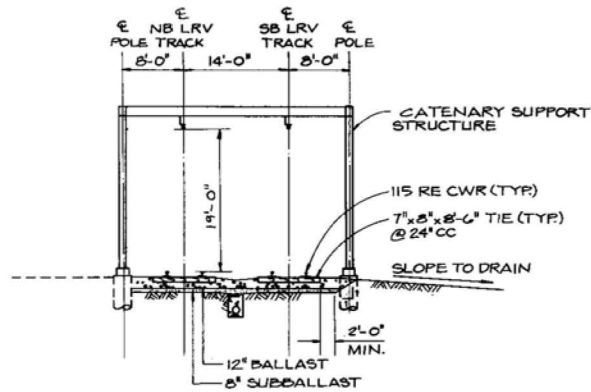


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

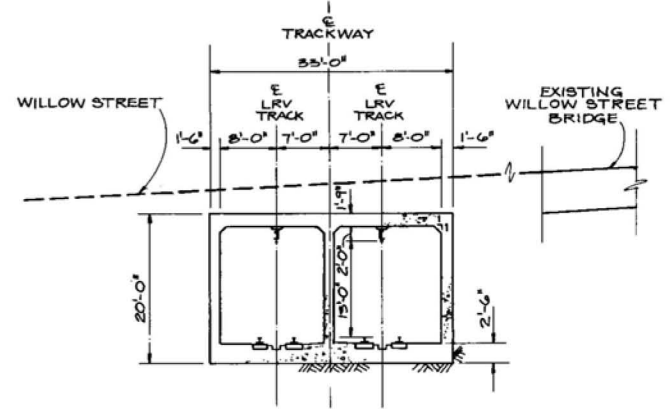
Plan and Profile
 Long Beach (LB 4)
 PACIFIC AVENUE LOOP

Figure 60

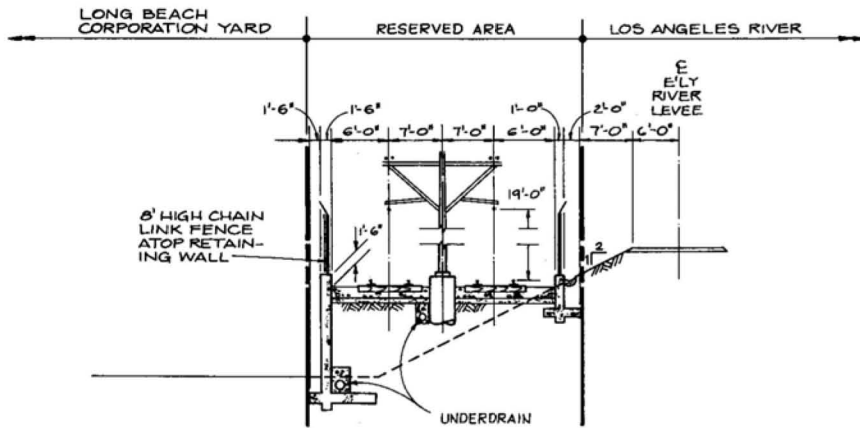
PARSONS BRINCKERHOFF/KAISER ENGINEERS



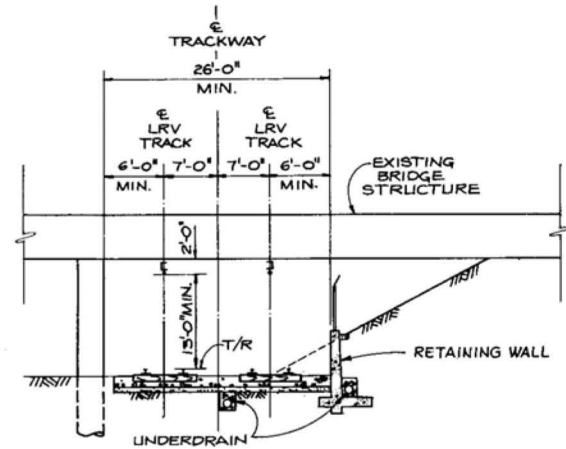
SECTION A
NOT TO SCALE



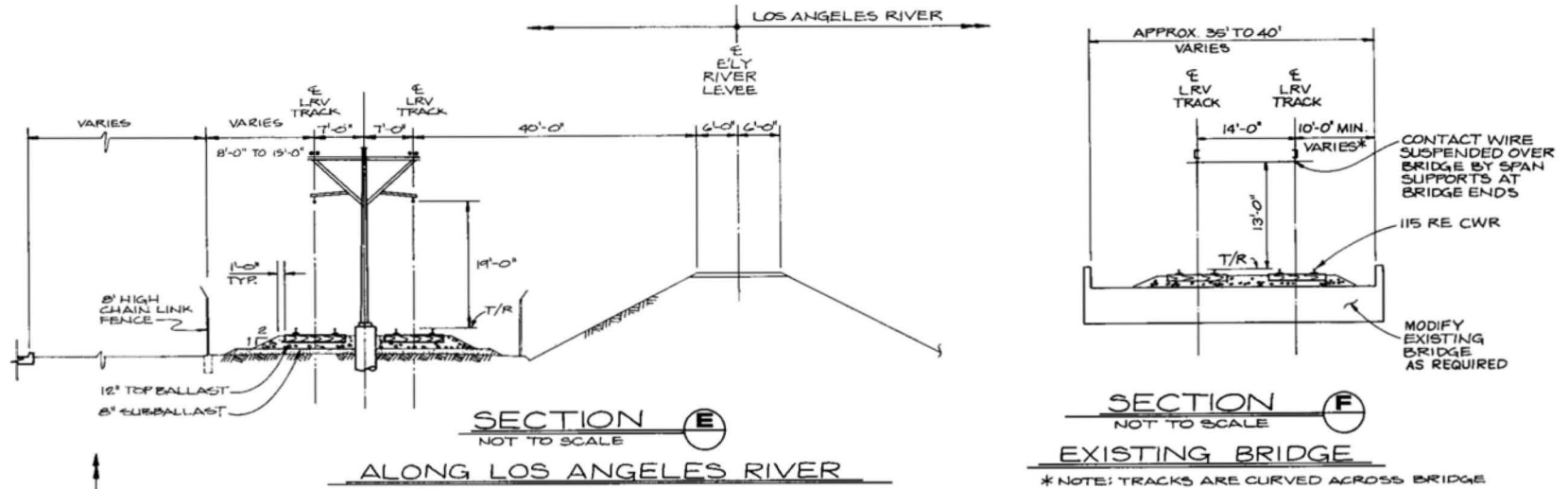
SECTION B
NOT TO SCALE
WILLOW ST. UNDERPASS



SECTION C
NOT TO SCALE
PARALLEL TO
CITY CORPORATION YARD



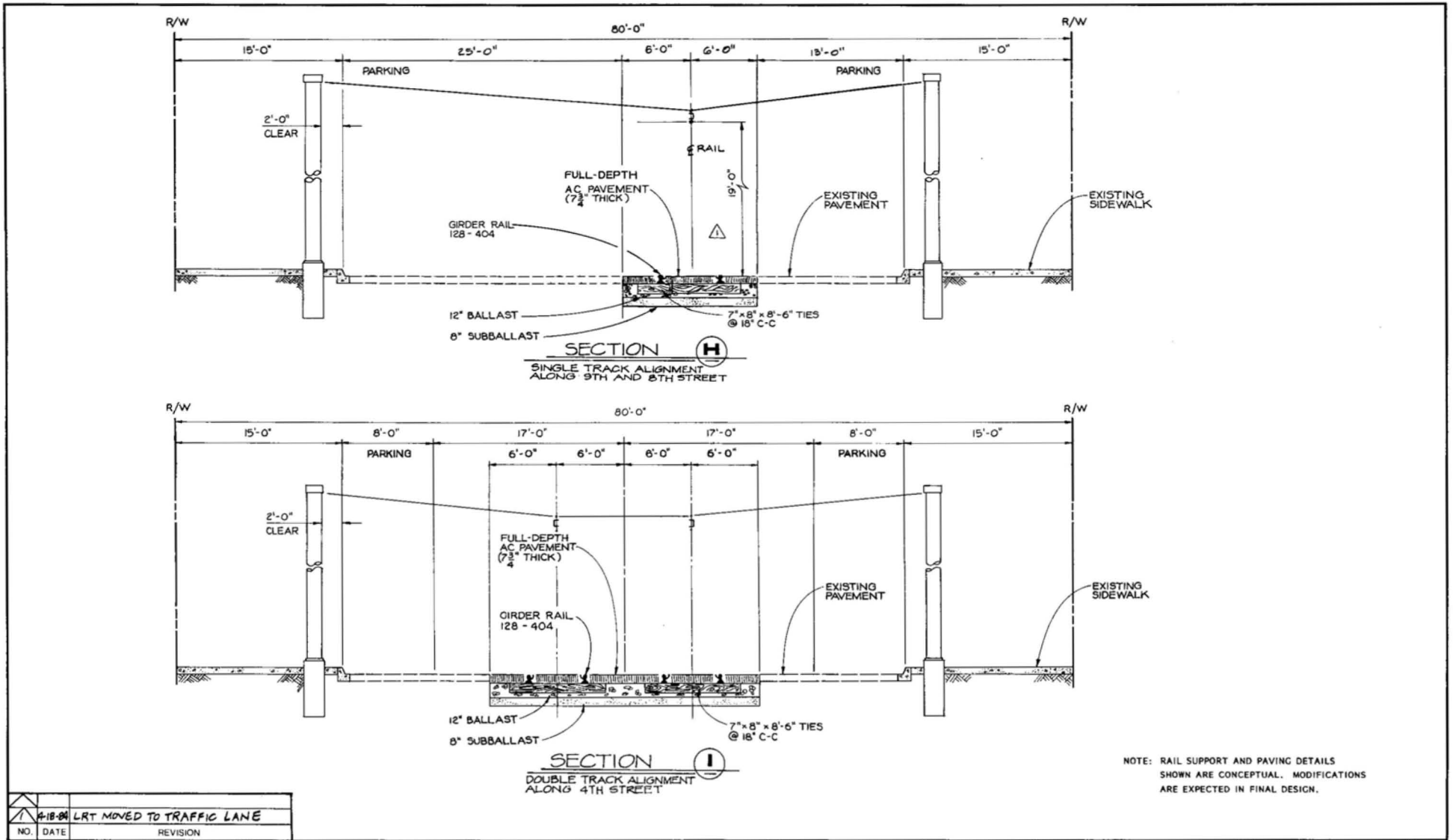
SECTION D
NOT TO SCALE
EXISTING BRIDGE UNDERPASS



**Long Beach - Los Angeles
RAIL TRANSIT PROJECT**
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

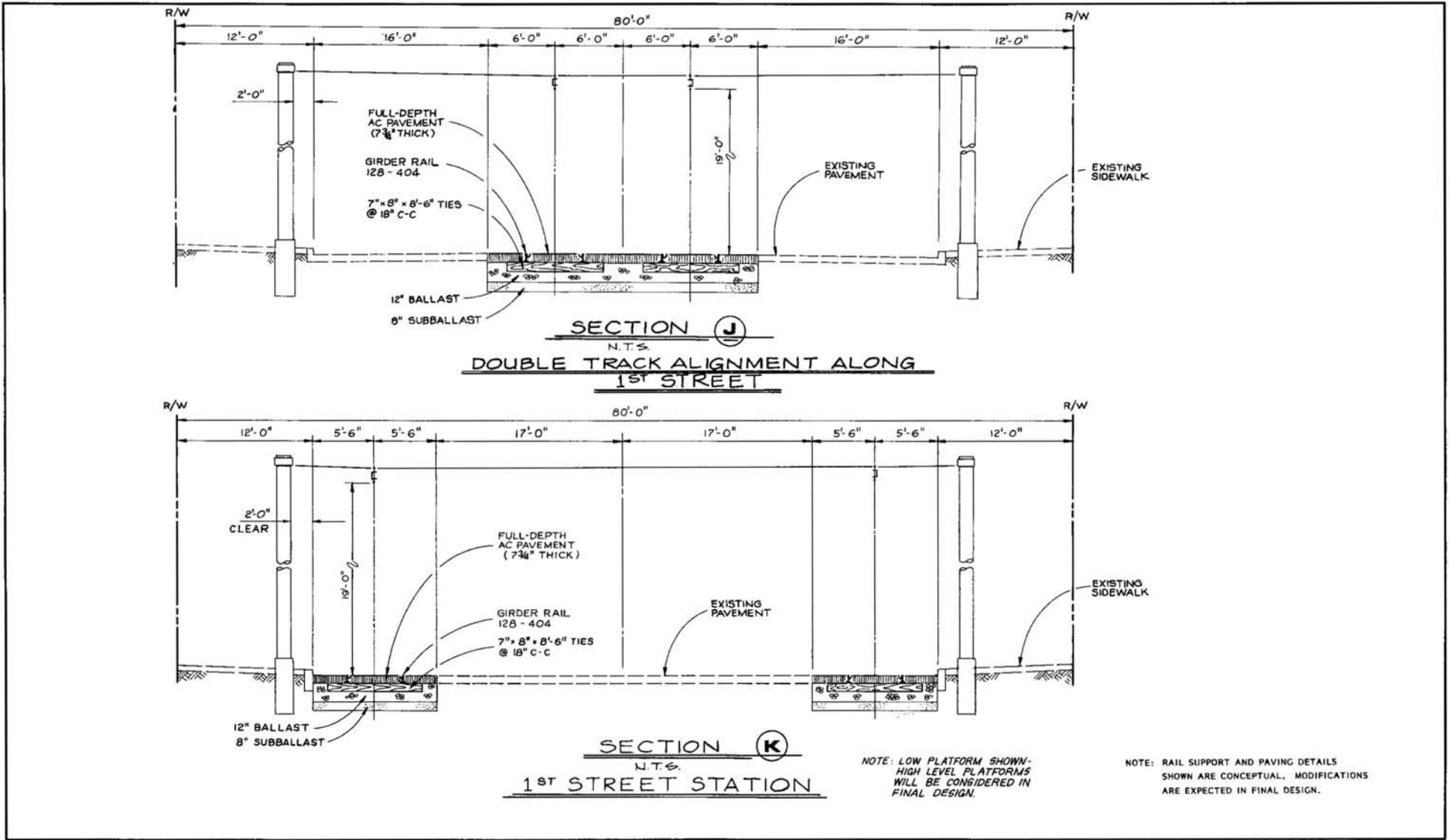
Figure 62



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

Figure 63

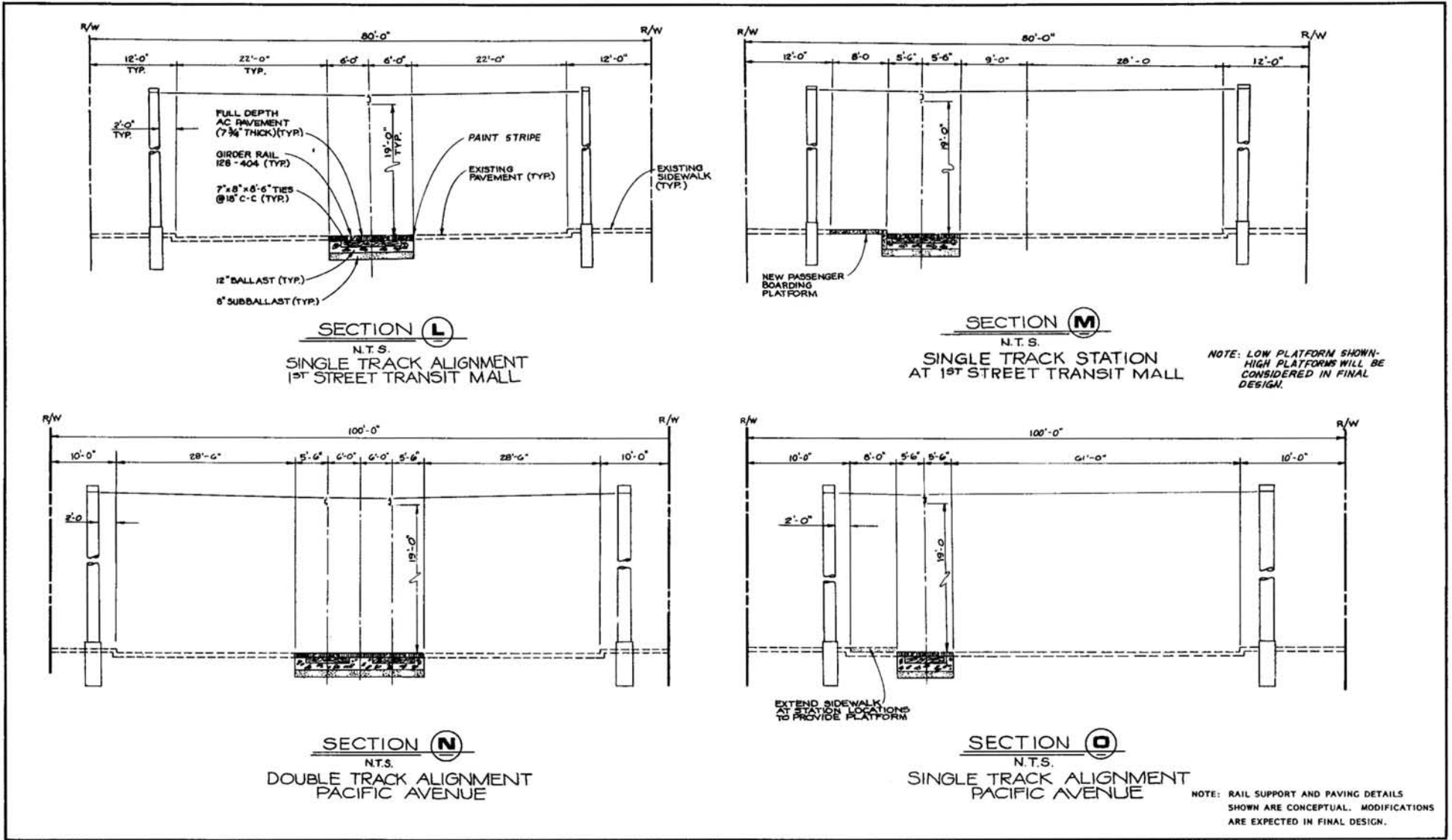


Long Beach - Los Angeles RAIL TRANSIT PROJECT
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

Figure 64

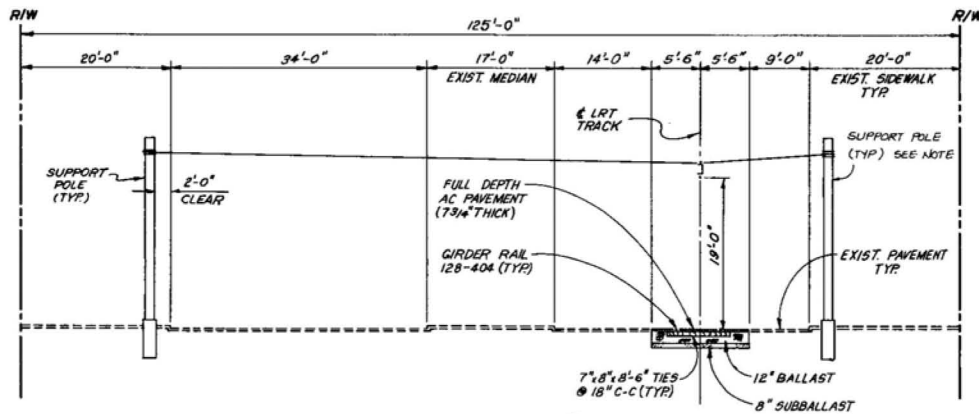
PARSONS BRINCKERHOFF/KAISER ENGINEERS



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

Figure 65

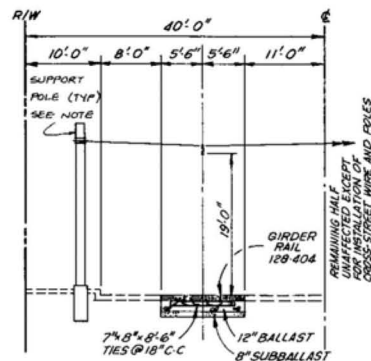


NOTE
 CANTILEVER SUPPORT POLE CAN BE
 CANTILEVER TYPE FOR TRACKS IN
 FIRST OR SECOND LANE FROM CURB.

NOTE: RAIL SUPPORT AND PAVING DETAILS
 SHOWN ARE CONCEPTUAL. MODIFICATIONS
 ARE EXPECTED IN FINAL DESIGN.

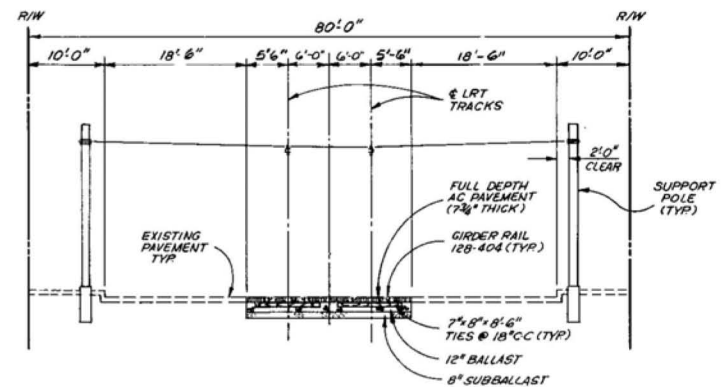
SECTION **(P)**
 N.T.S.

SINGLE TRACK - LONG BEACH BLVD.



HALF SECTION **(S)**
 N.T.S.

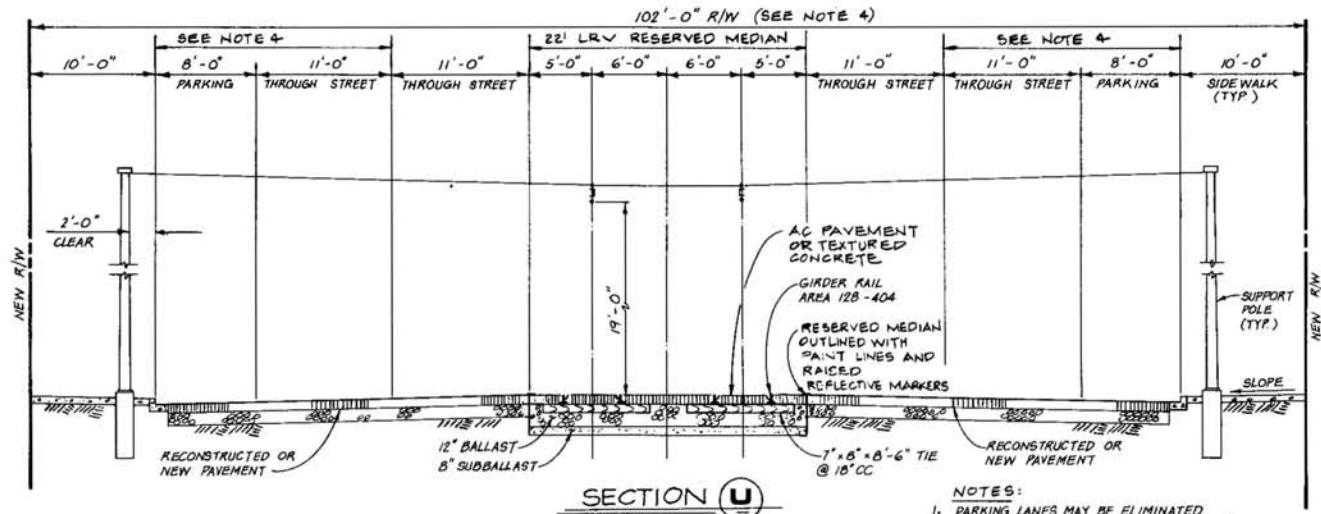
SINGLE TRACK
 ATLANTIC AVE.



SECTION **(T)**
 N.T.S.

DOUBLE TRACK - MIXED TRAFFIC
 ATLANTIC AVE.

NO.	DATE	REVISION
4-18-04		DELETED SECTION Q

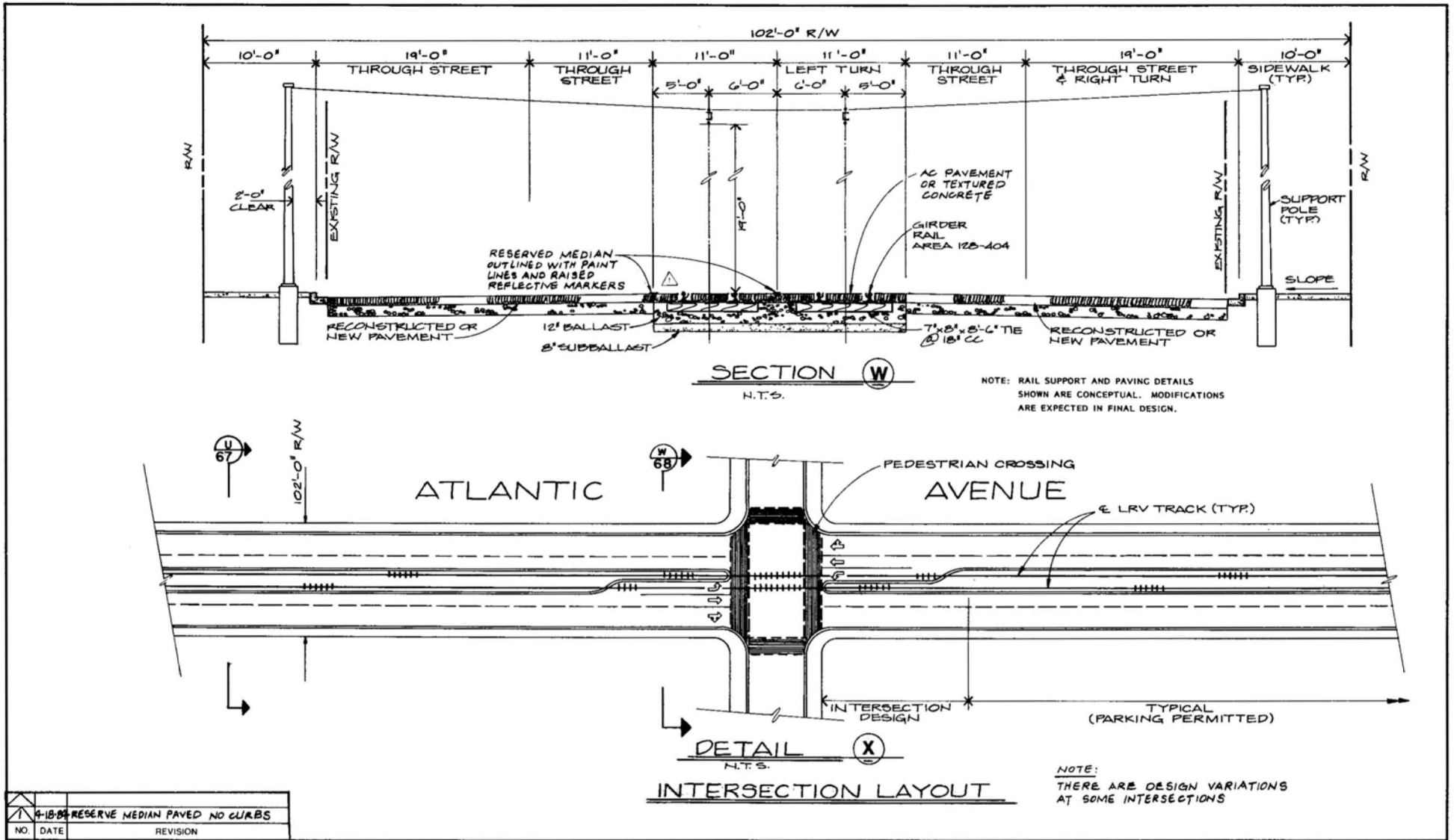


SECTION **U**
N.T.S.
ATLANTIC AVENUE

- NOTES:
1. PARKING LANES MAY BE ELIMINATED AND SIDEWALKS NARROWED IN VICINITY OF RESTRICTED RIGHT-OF-WAY CONDITIONS.
 2. EXISTING R/W ON ATLANTIC AVENUE IS 80' WIDE NORTH OF ANAHEIM BLVD.
 3. ADDITIONAL R/W WILL GENERALLY BE TAKEN ON ONE SIDE.
 4. WHERE PARKING IS ELIMINATED THE THROUGH LANE ADJACENT TO THE CURB IS 12' WIDE AND THE FULL R/W IS 88' WIDE.

NOTE: RAIL SUPPORT AND PAVING DETAILS SHOWN ARE CONCEPTUAL. MODIFICATIONS ARE EXPECTED IN FINAL DESIGN.

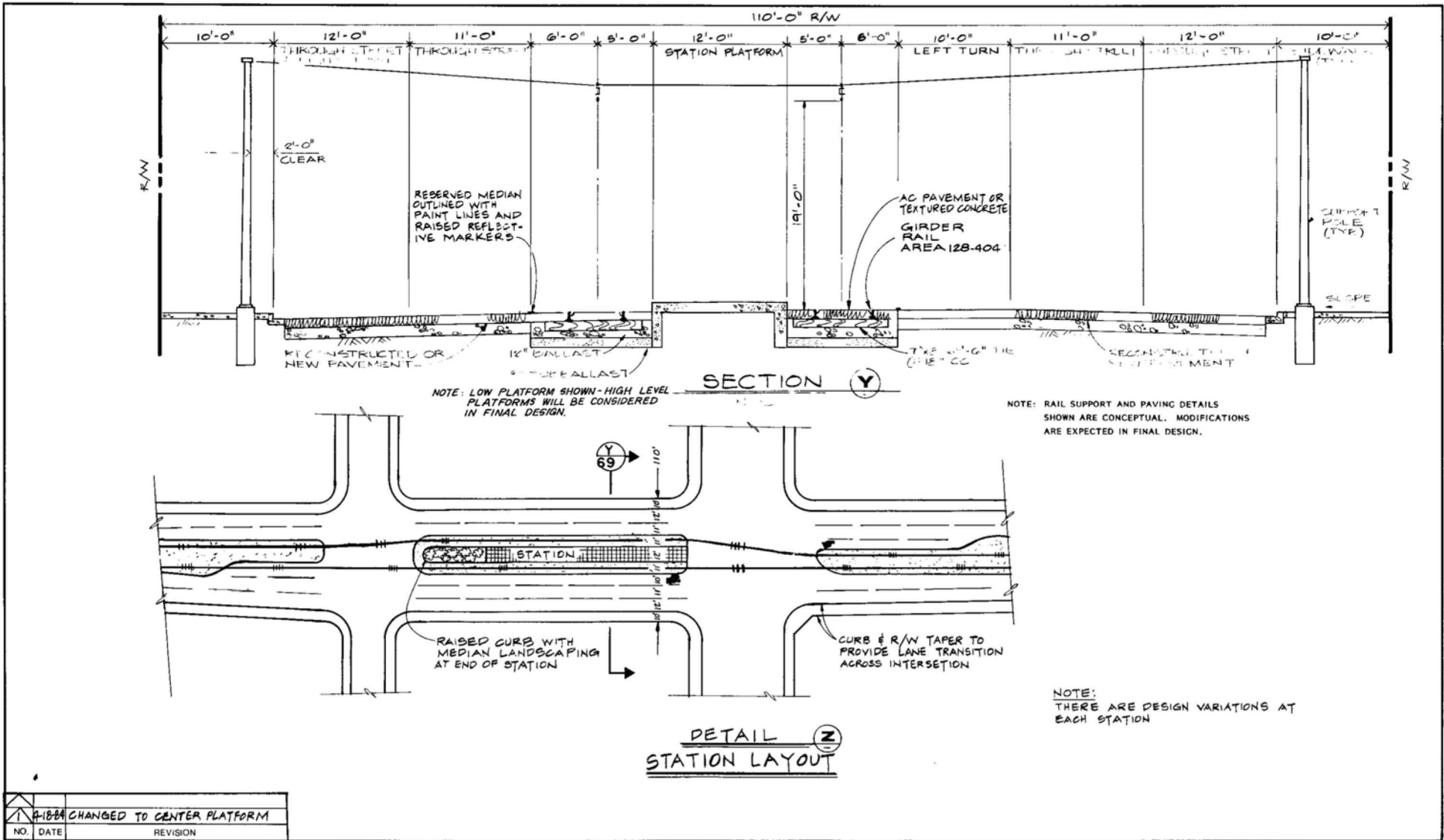
4-18-84	ADDED NOTES 2 THRU 4
NO.	REVISION



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

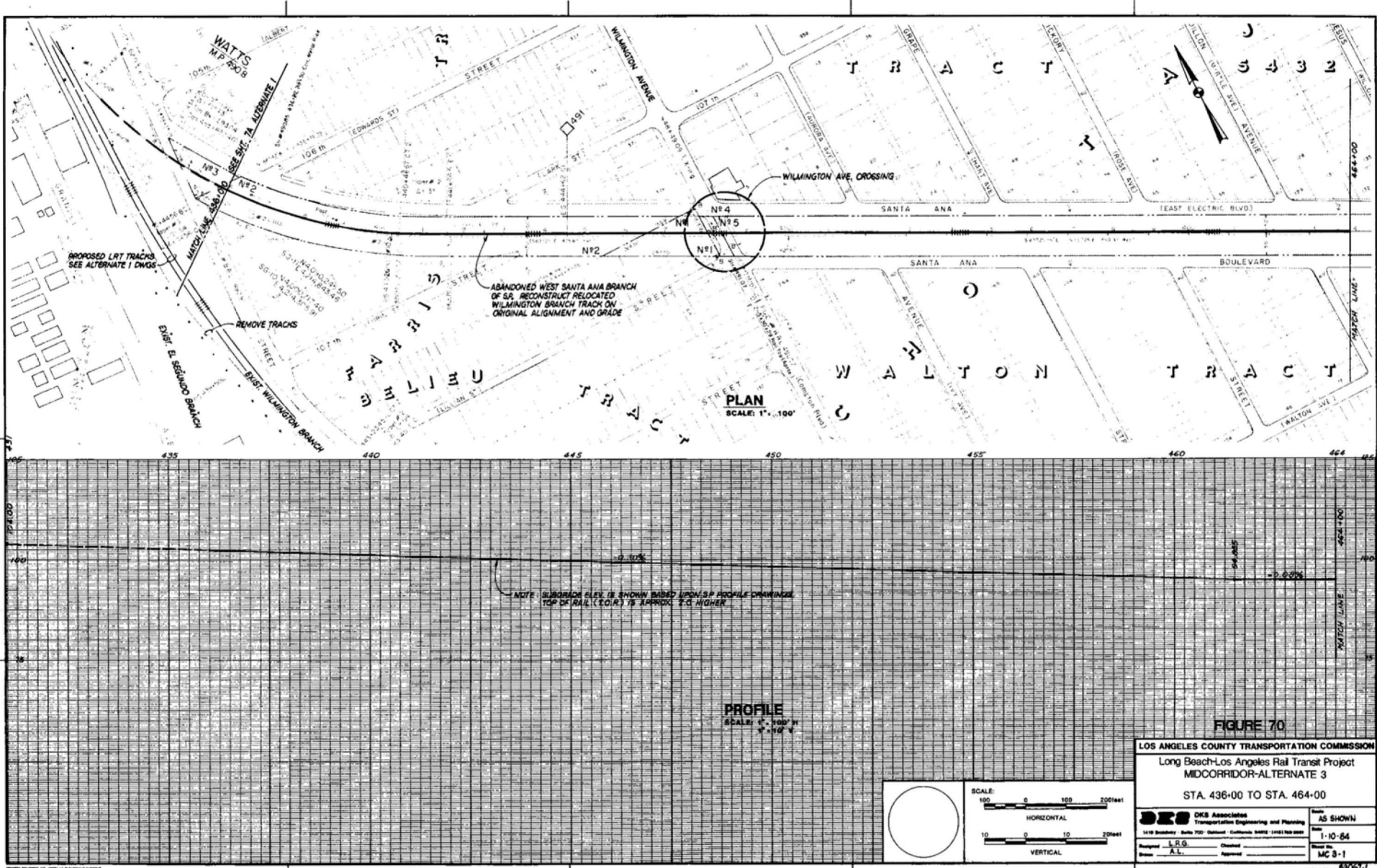
Figure 68



Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Typical Sections

Figure 69



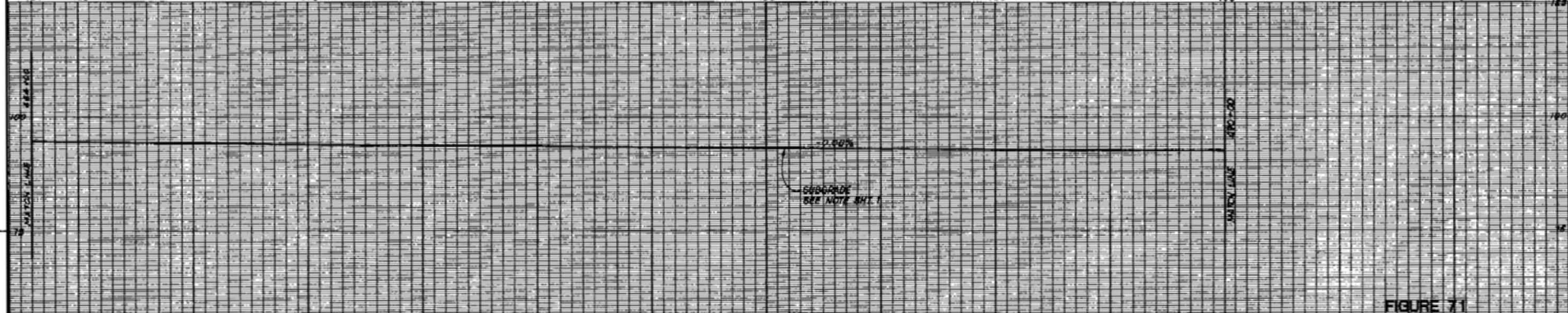
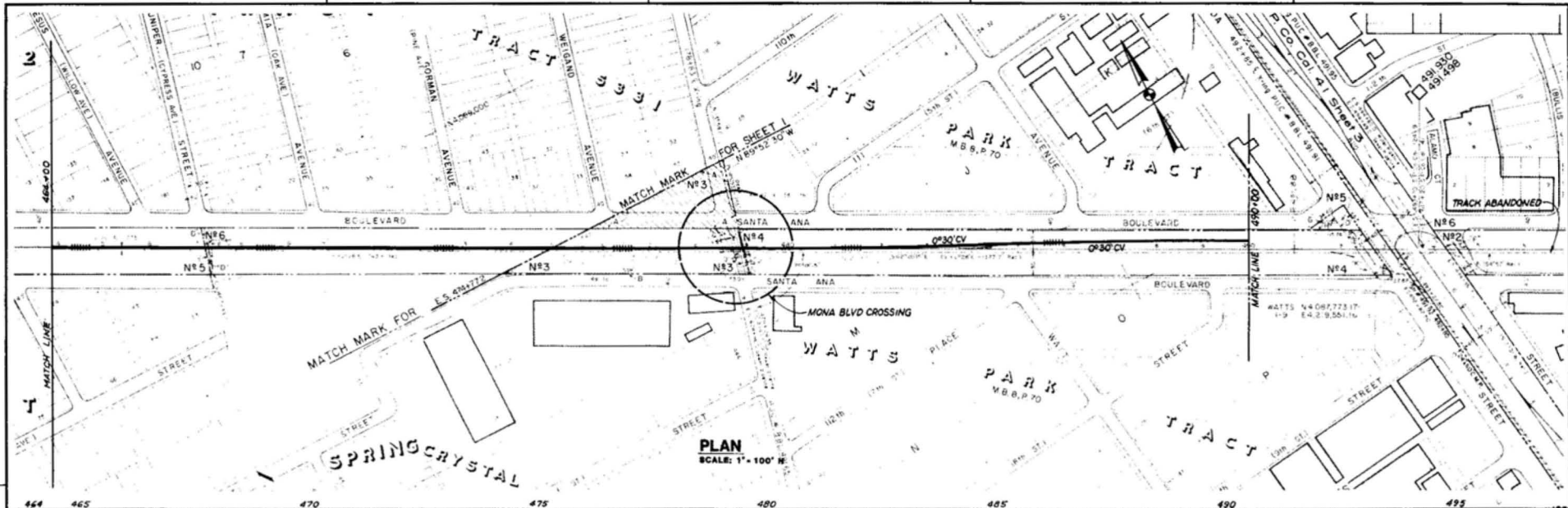
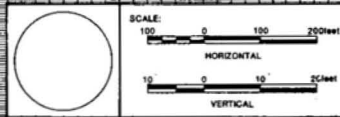


FIGURE 71

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Long Beach-Los Angeles Rail Transit Project
 MIDCORRIDOR-ALTERNATE 3
 STA. 464+00 TO STA. 490+00

 DKS Associates Transportation Engineering and Planning 1419 Broadway, Suite 710, Oakland, California 94612 (415) 762-2800	Date: AS SHOWN
	Drawn By: LRG
Checked By: AL	Date: 1-10-84
Approved By: AL	Sheet No.: MC3-2
Project No.: 83067-1	



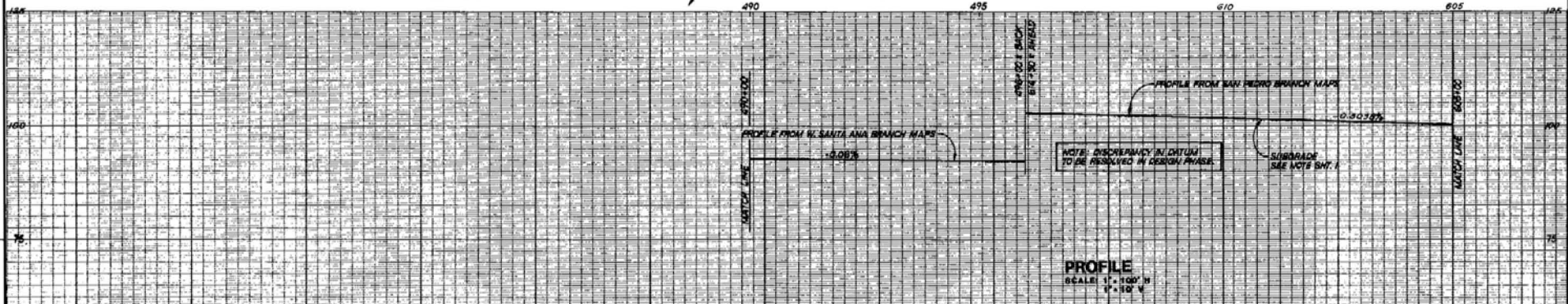
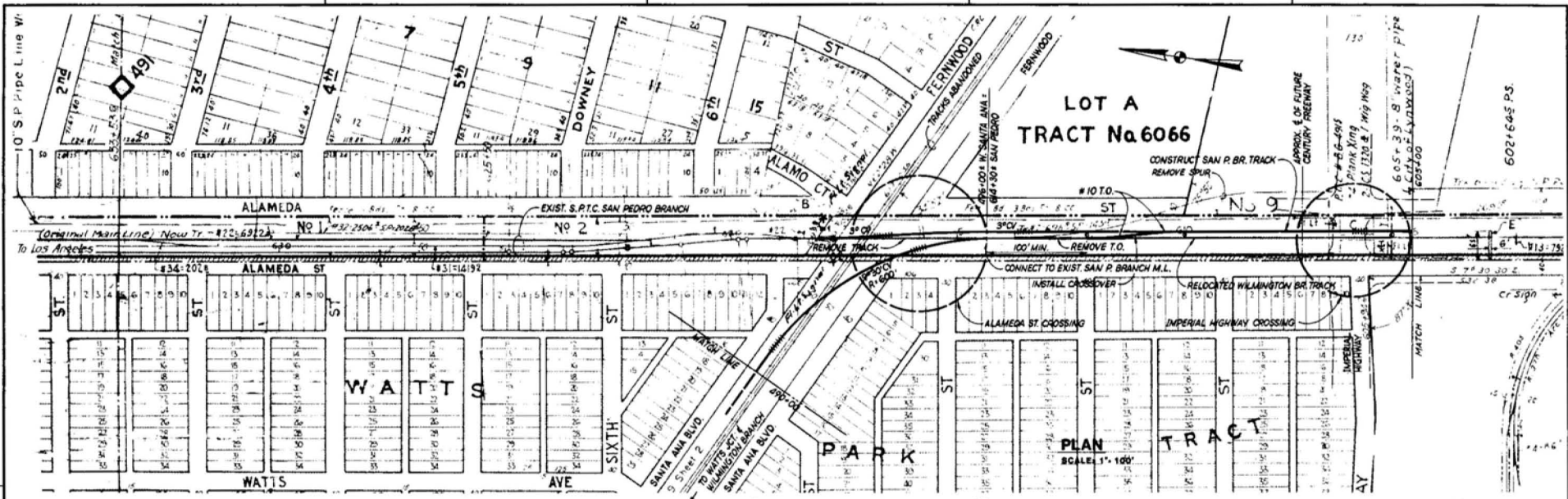


FIGURE 72

LOS ANGELES COUNTY TRANSPORTATION COMMISSION

Long Beach-Los Angeles Rail Transit Project
MIDCORRIDOR-ALTERNATE 3

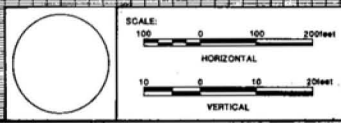
STA. 608+00 TO STA. 605+00

DESIGN ENGINEER: DKS Associates
TRANSPORTATION ENGINEERING AND PLANNING

DATE: 1-10-84

PROJECT: L.R.G.
SHEET: MC3-3

AS SHOWN



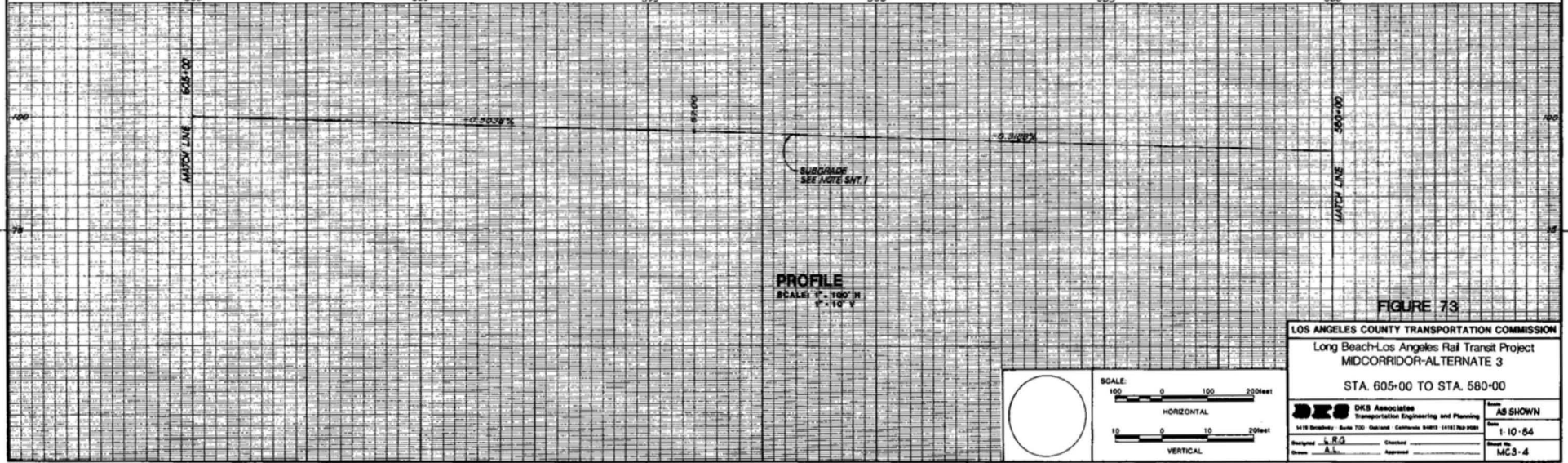
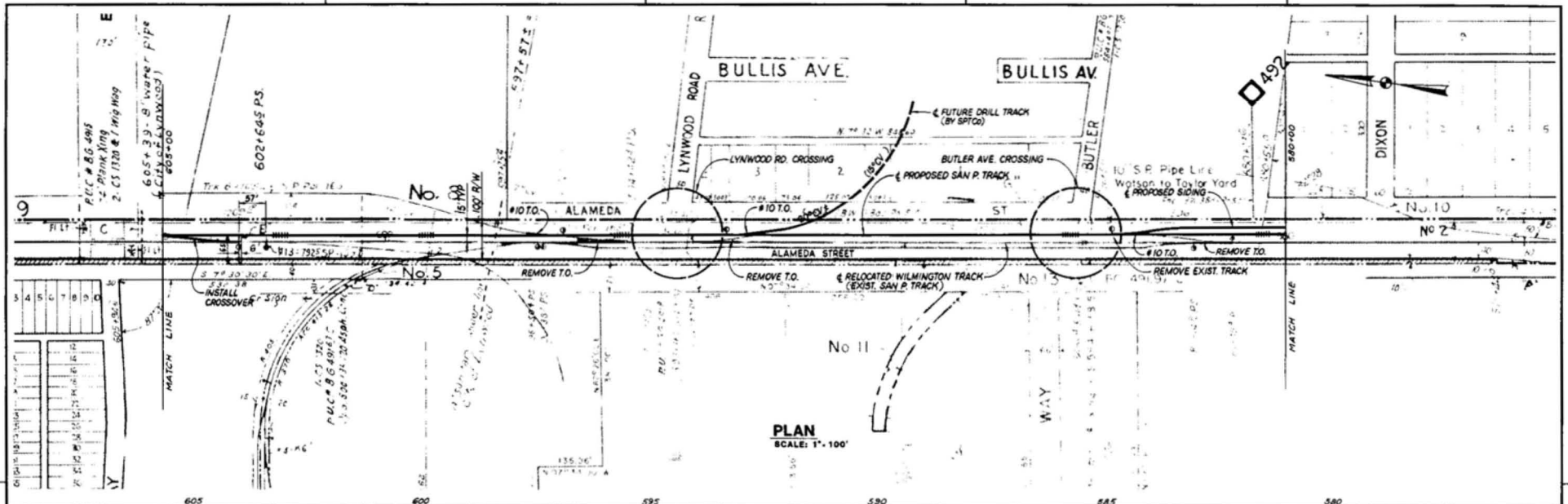
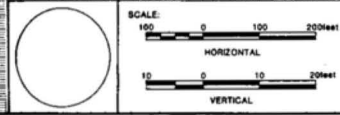


FIGURE 73

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Long Beach-Los Angeles Rail Transit Project
 MIDCORRIDOR-ALTERNATE 3
 STA. 605+00 TO STA. 580+00

D&S D&S Associates Transportation Engineering and Planning <small>1410 Smiley, Suite 700, Del Mar, California 92014 (619) 342-2000</small>	Date: AS SHOWN 1-10-54
	Designer: L.R.G. Checked: _____ Drawn: A.S. Approved: _____



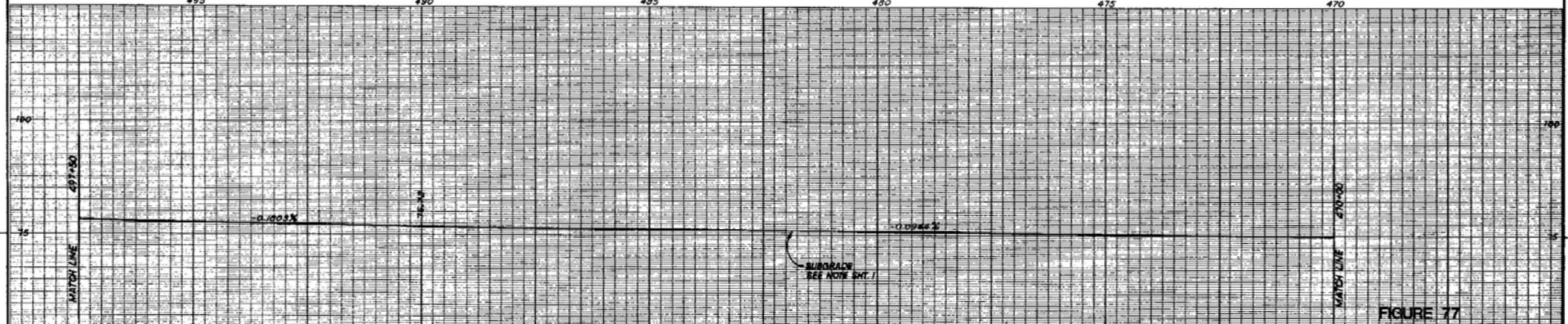
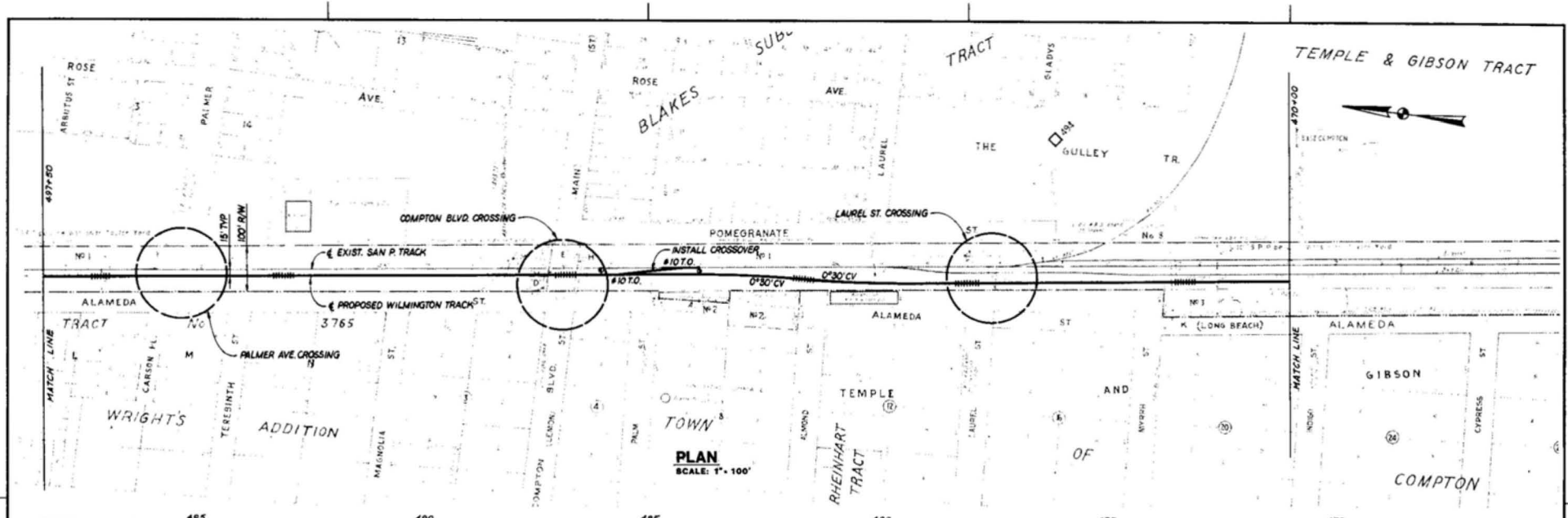


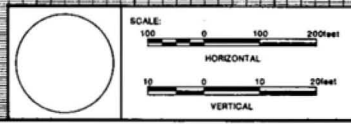
FIGURE 77

LOS ANGELES COUNTY TRANSPORTATION COMMISSION
 Long Beach-Los Angeles Rail Transit Project
 MIDCORRIDOR-ALTERNATE 3
 STA. 497+50 TO 470+00

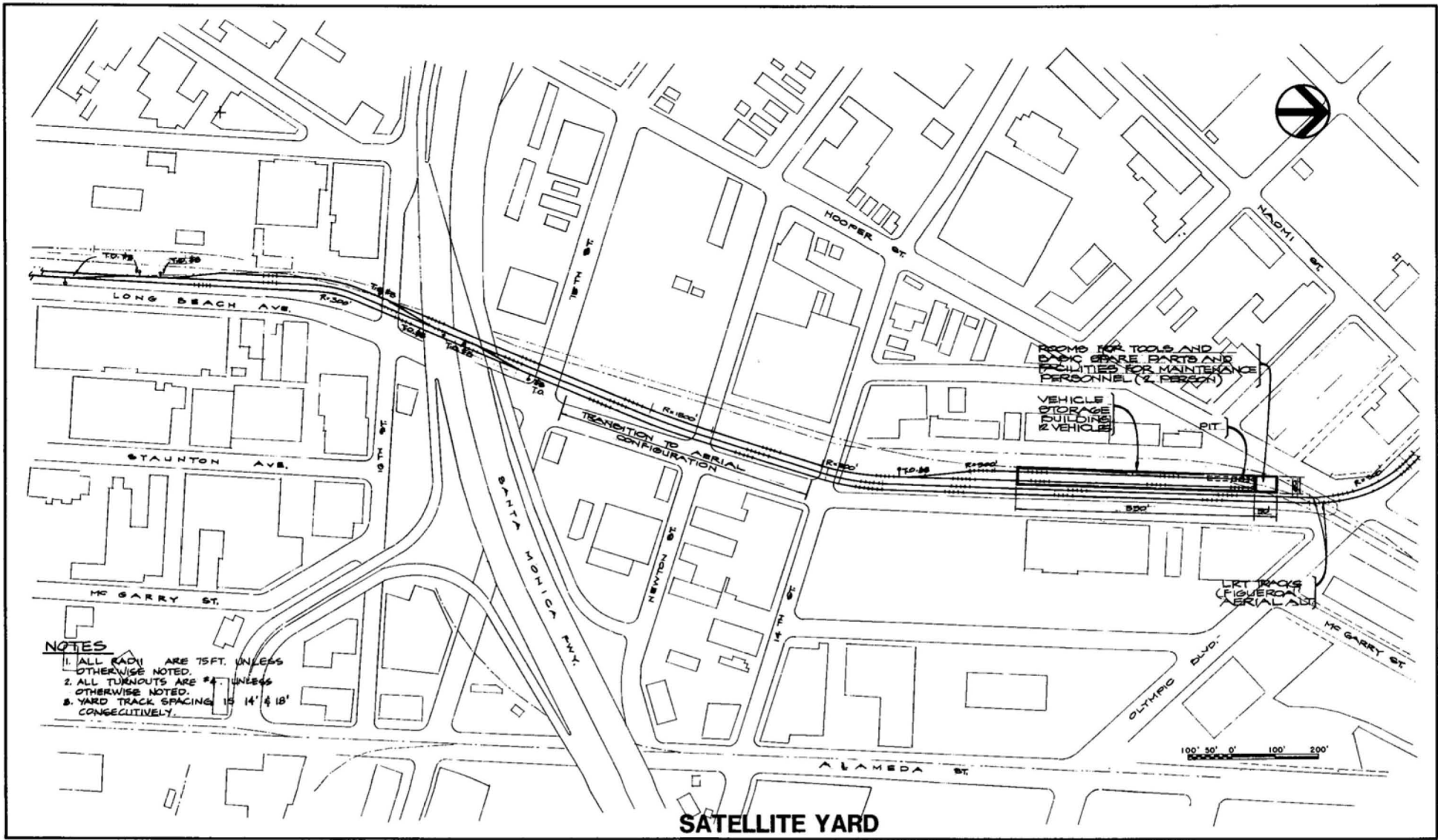
DKS DKS Associates
 Transportation Engineering and Planning
 1418 Broadway, Suite 700, Oakland, California 94612 (415) 764-9000

Drawn: AS SHOWN
 Date: 1-10-84
 Checked: _____
 Design: LRG
 Stationed: _____
 Approved: _____

Sheet No. MCS-8
 Project No. 830667-1



YARDS AND SHOPS

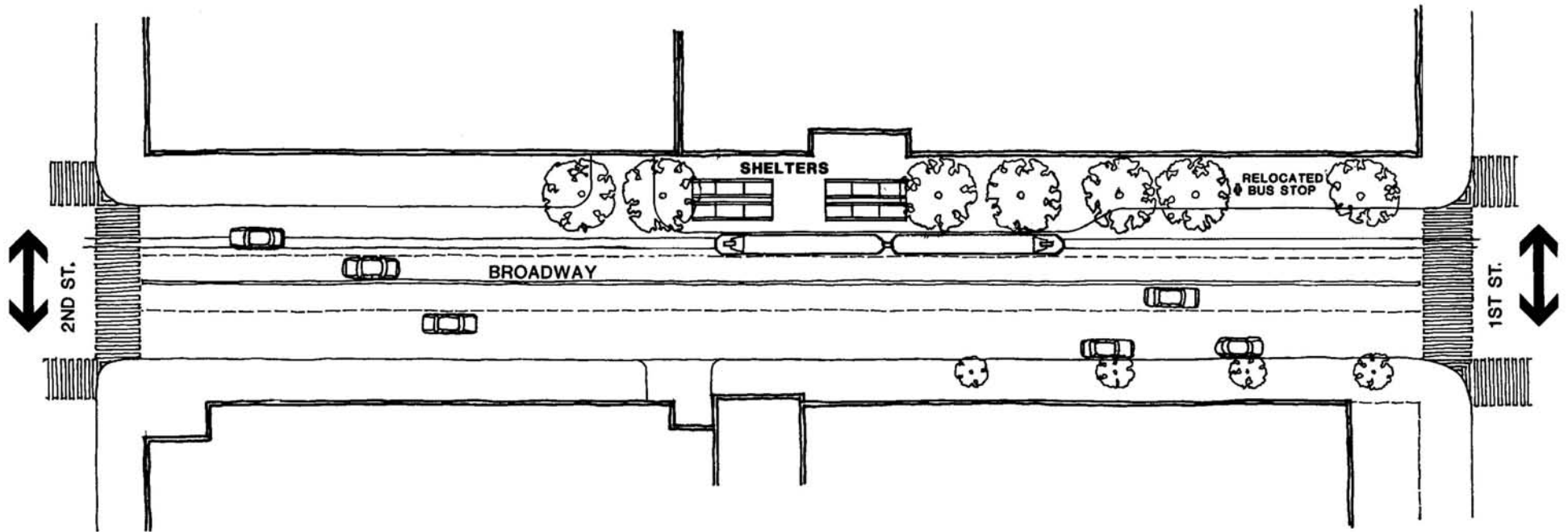


Long Beach - Los Angeles
RAIL TRANSIT PROJECT
 LOS ANGELES COUNTY TRANSPORTATION COMMISSION

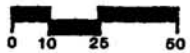
Plan
 Yard and Shops

Figure 1

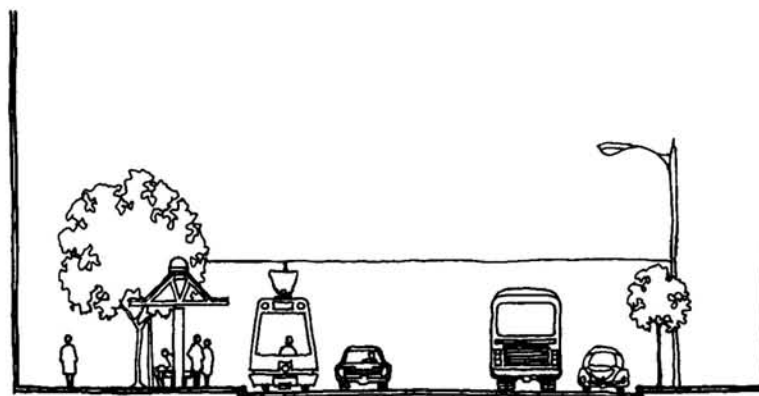
STATIONS



PLAN



Broadway at 1st St STATION CONCEPT
At Grade In Downtown Los Angeles MC-1

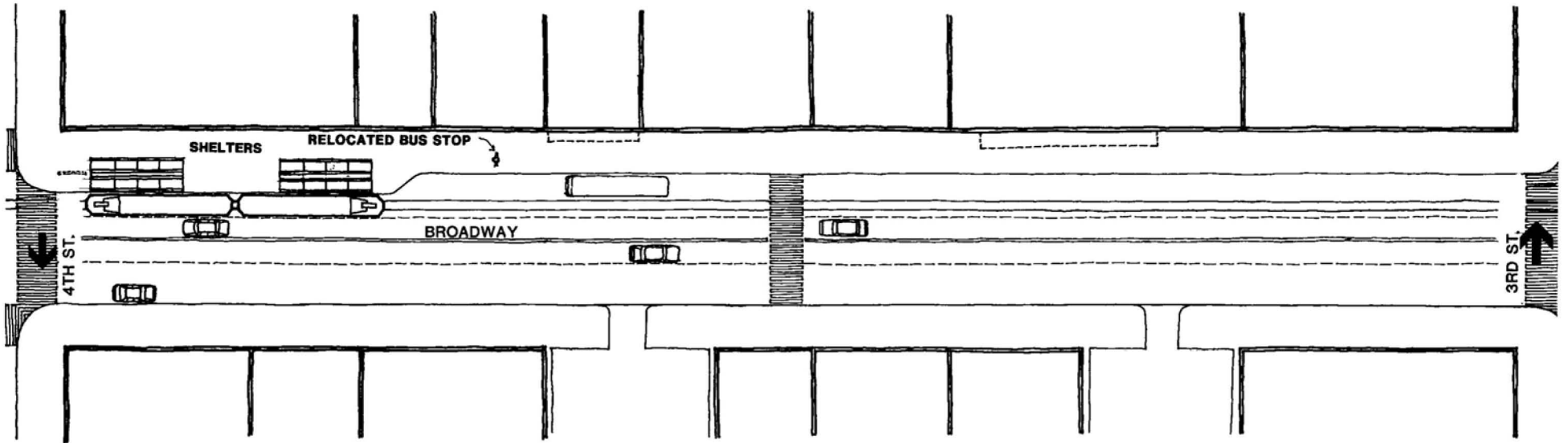


SECTION



STATION CONCEPT
Figure No. 1

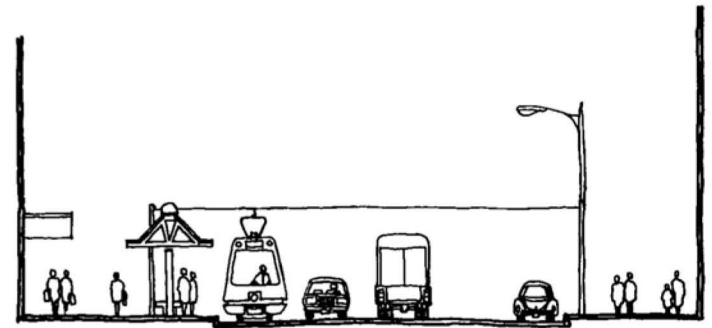
Station Concept Subject To Change In Final Design



PLAN



Broadway at 4th St
At Grade In Downtown Los Angeles MC-1



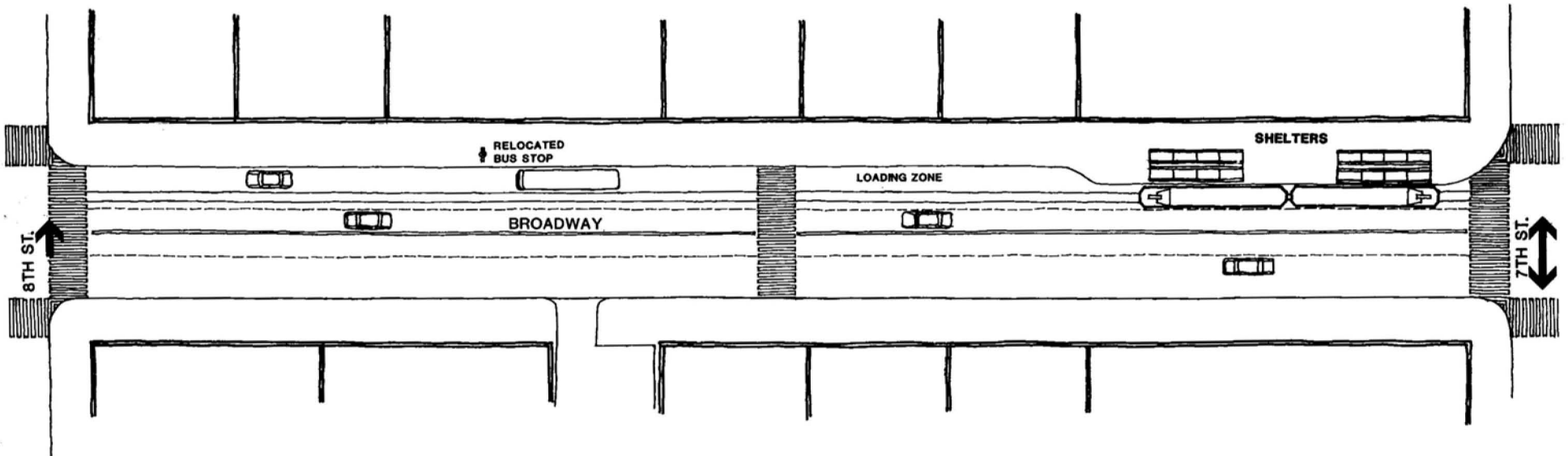
SECTION



STATION CONCEPT

Figure No.2

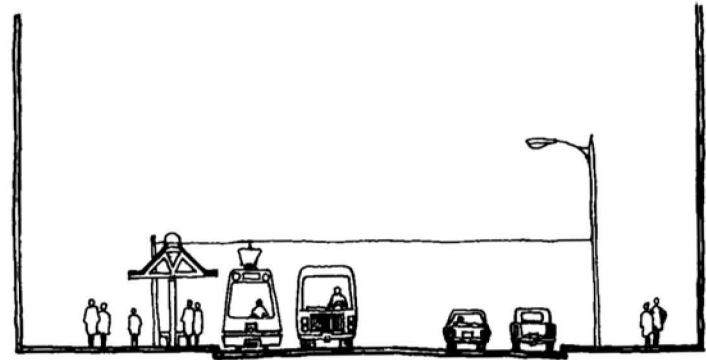
Station Concept Subject To Change In Final Design



PLAN



**Broadway at 7th St
At-Grade In Downtown Los Angeles MC -1**

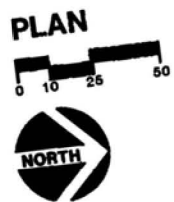
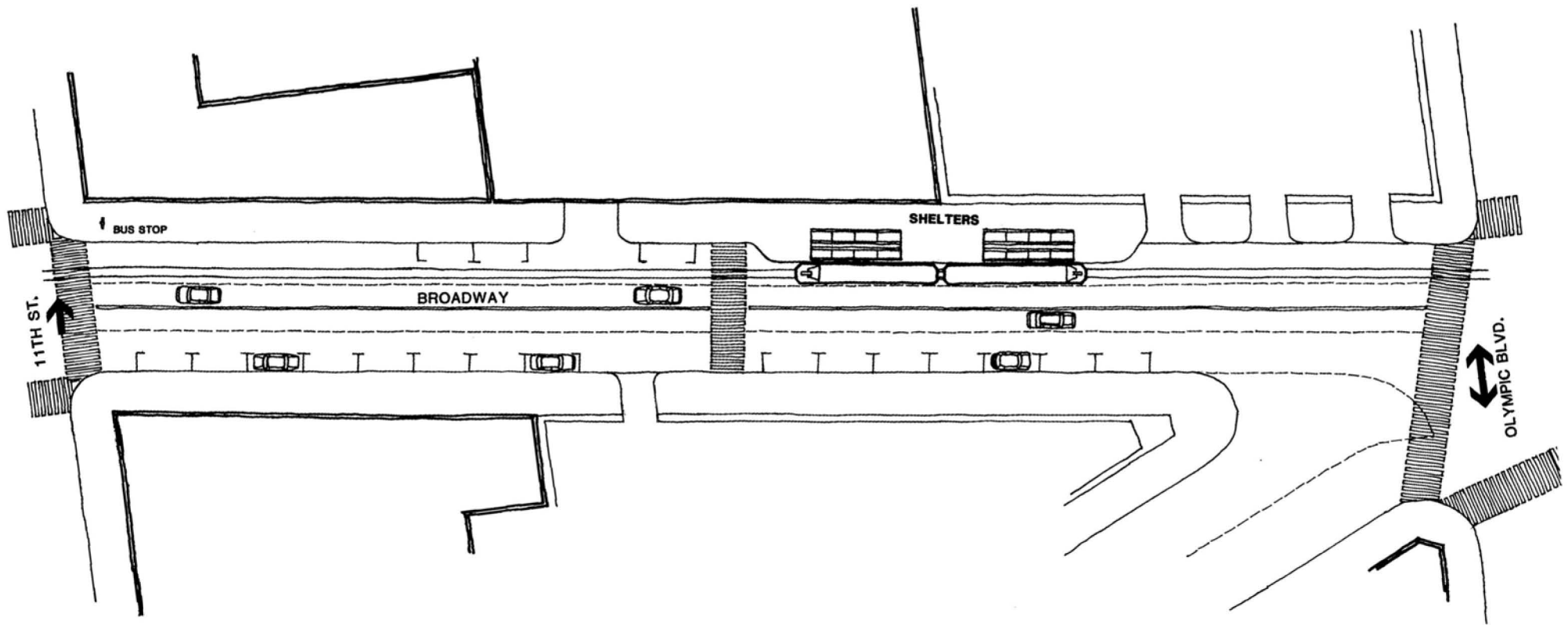


SECTION



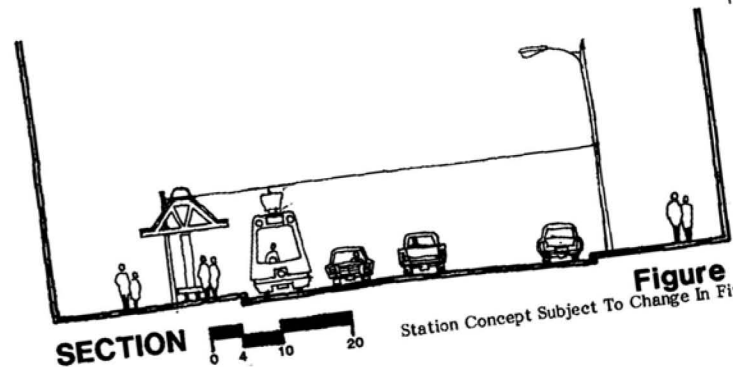
**STATION CONCEPT
Figure No. 3**

Station Concept Subject To Change In Final Design



Broadway at Olympic Blvd
 At - Grade In Downtown Los Angeles

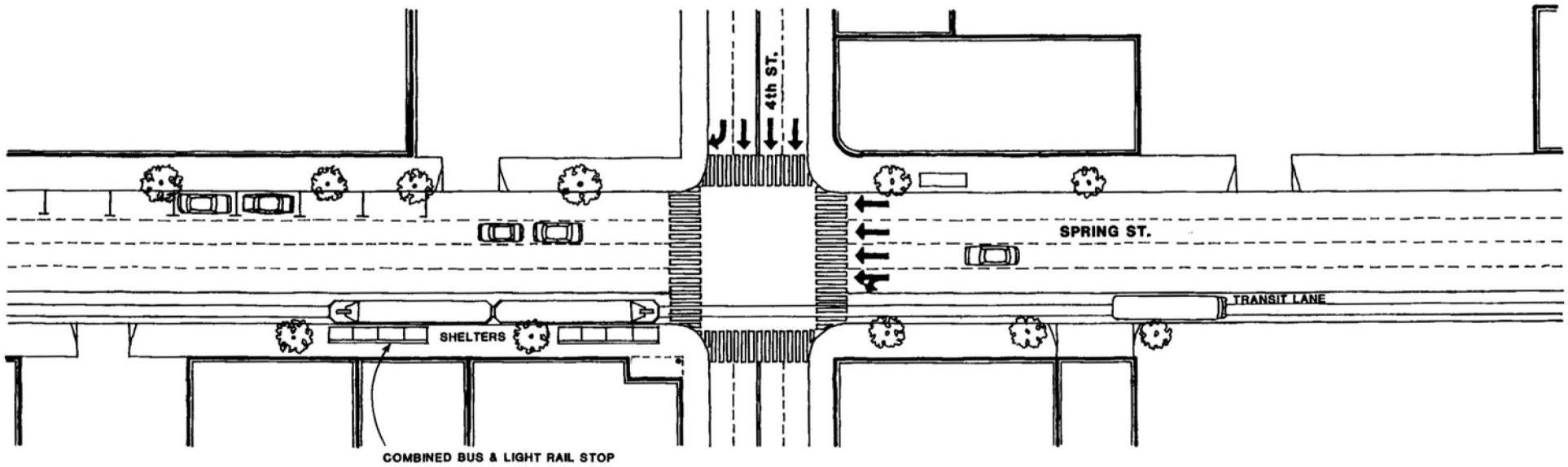
STATION CONCEPT



SECTION 0 4 10 20

Station Concept Subject To Change In Final Design

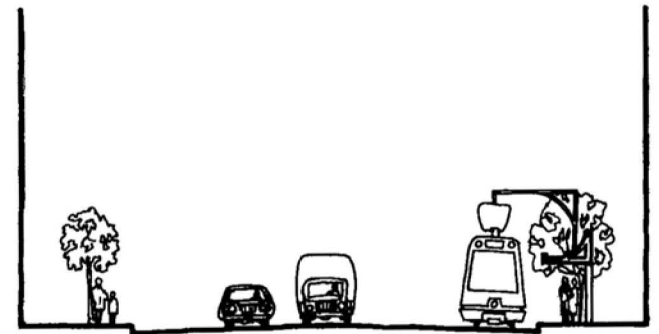
Figure No. 4



PLAN



**Spring Street at 4th Street
At Grade In Downtown Los Angeles**



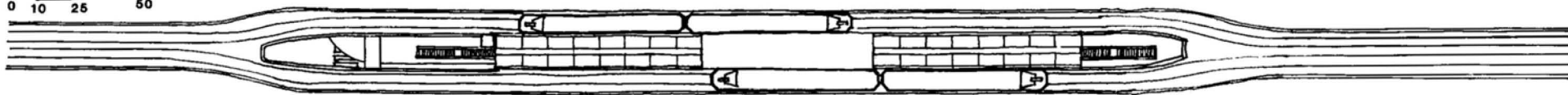
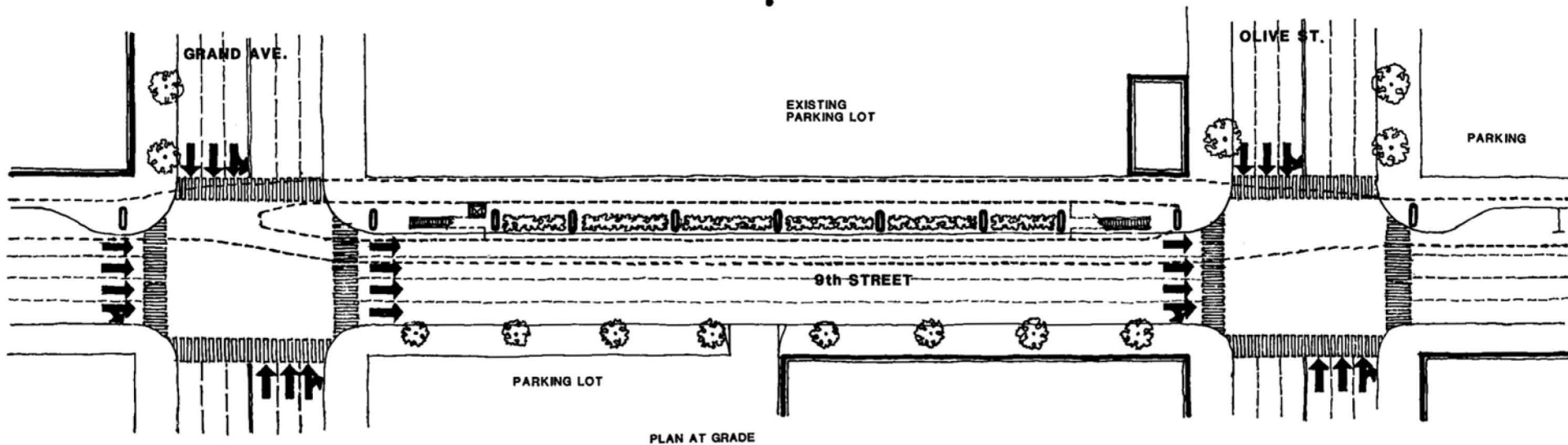
SECTION



STATION CONCEPT

Figure No. 5

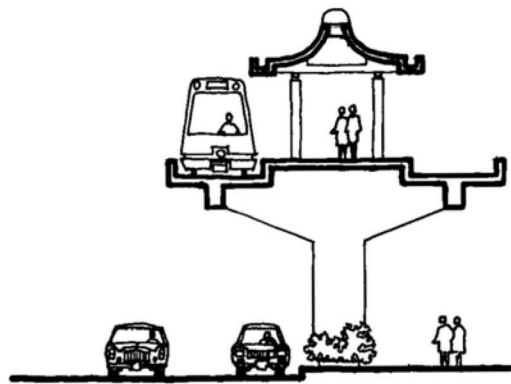
Station Concept Subject To Change In Final Design



PLAN OF PLATFORM



**9th Street at Olive Street
Aerial At Sidewalk In Downtown Los Angeles**



NOTE:
THE PLATFORM SHOWN IS LOW LEVEL. FOR SOME SYSTEM ALTERNATIVES, THE PLATFORM FOR THIS STATION IS HIGH LEVEL.

STATION CONCEPT

Figure No. 6

Station Concept Subject To Change In Final Design

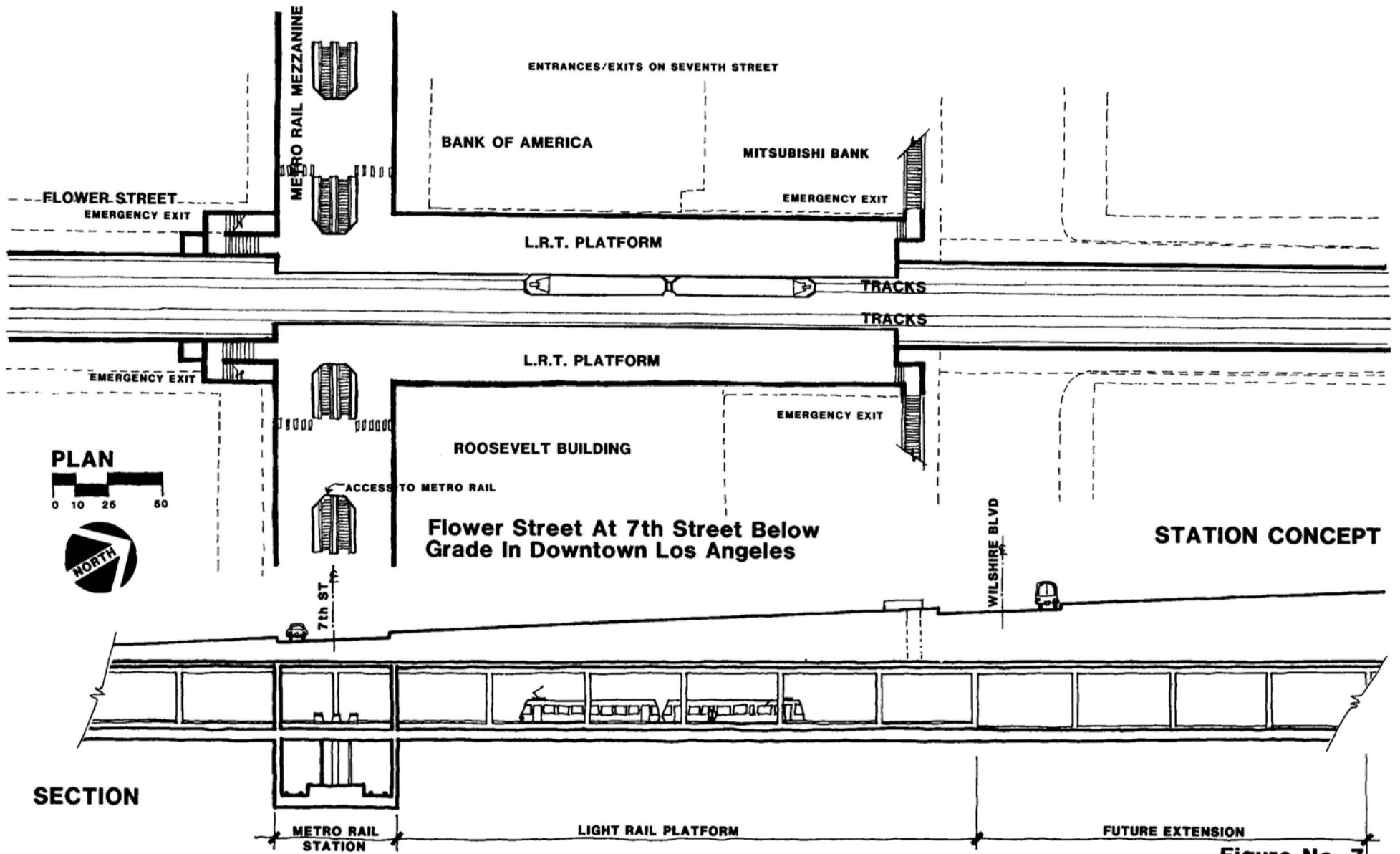
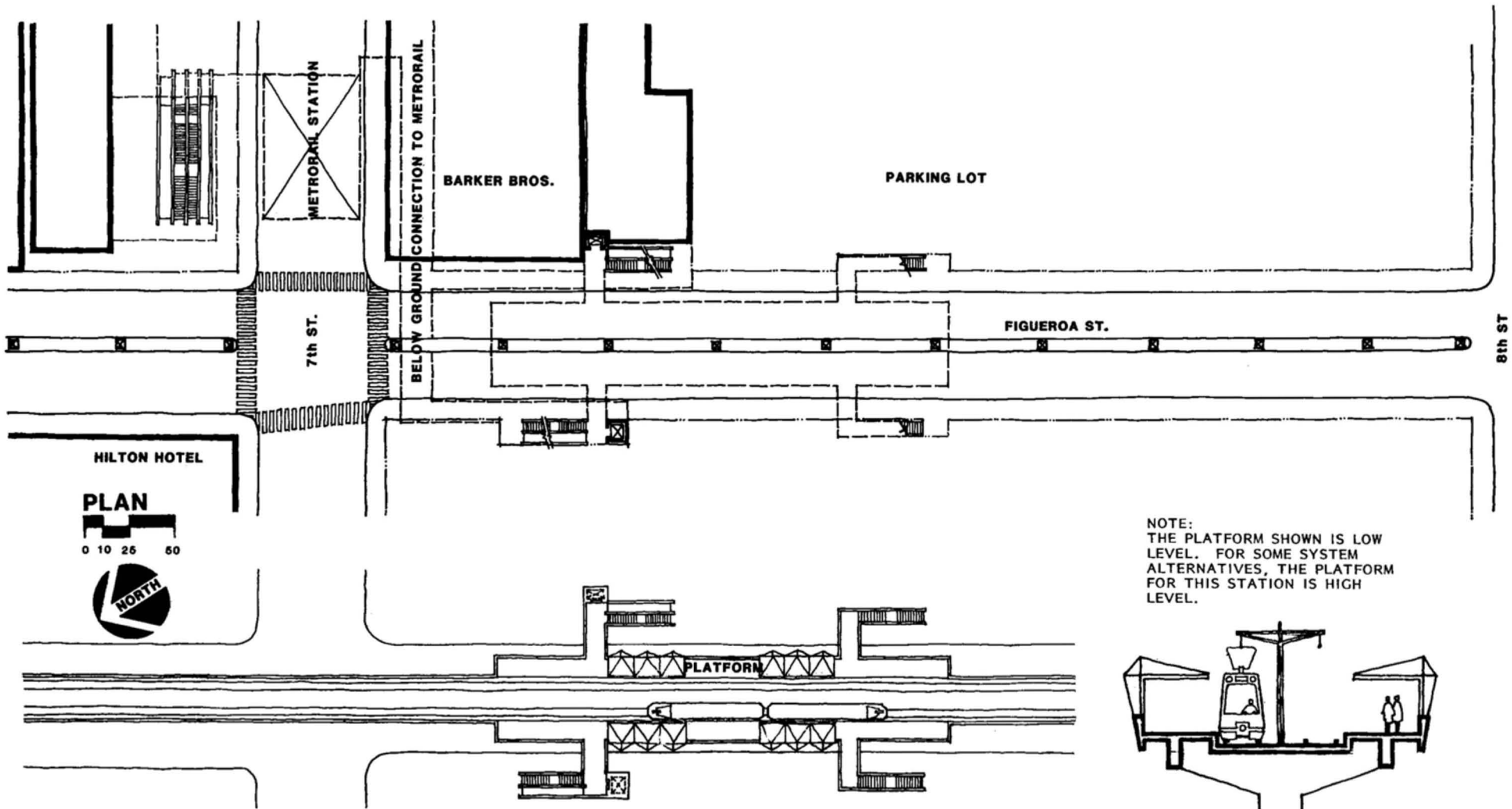


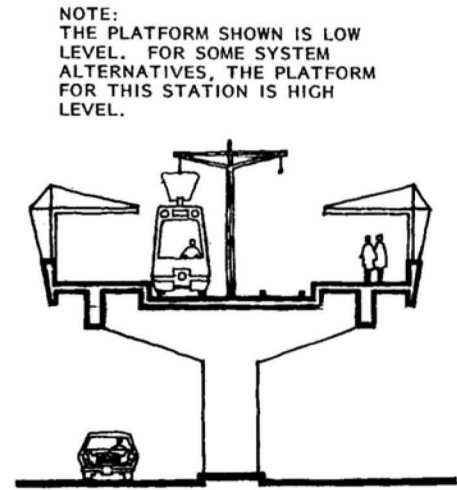
Figure No. 7

Station Concept Subject To Change In Final Design



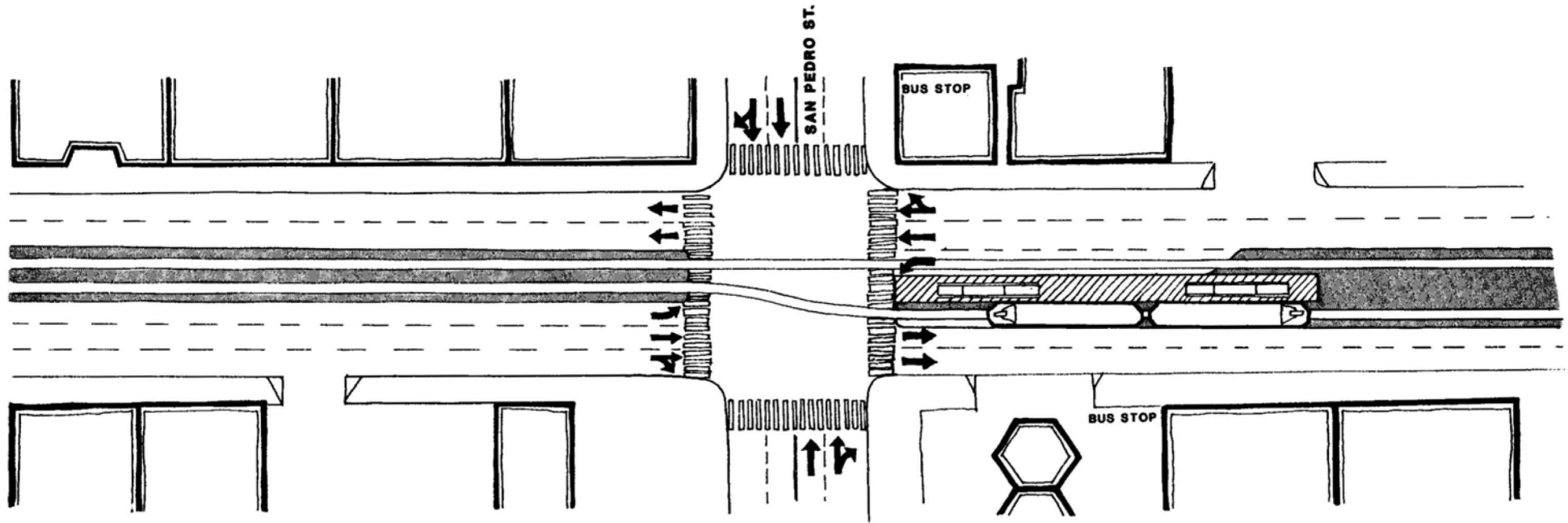
**Figuroa Street At 7th Street
Aerial Station In Street Center In Downtown Los Angeles**

SECTION
0 5 10 20



**STATION CONCEPT
Figure No. 8**

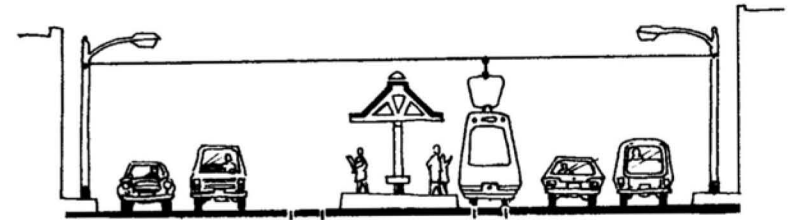
Station Concept Subject To Change In Final Design



PLAN



NOTE:
 THE PLATFORM SHOWN IS LOW
 LEVEL. FOR SOME SYSTEM
 ALTERNATIVES, THE PLATFORM
 FOR THIS STATION IS HIGH
 LEVEL AND LONG ENOUGH FOR
 3 VEHICLES.



**Washington Blvd. at San Pedro St
 At Grade In Downtown Los Angeles**

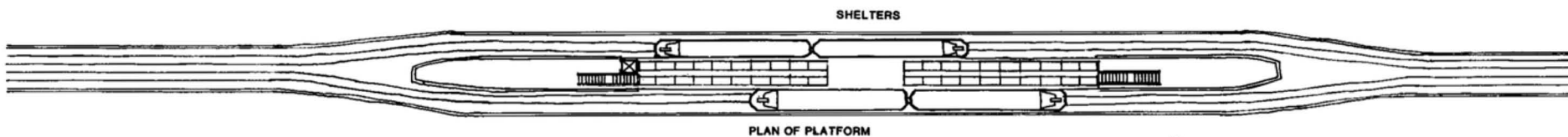
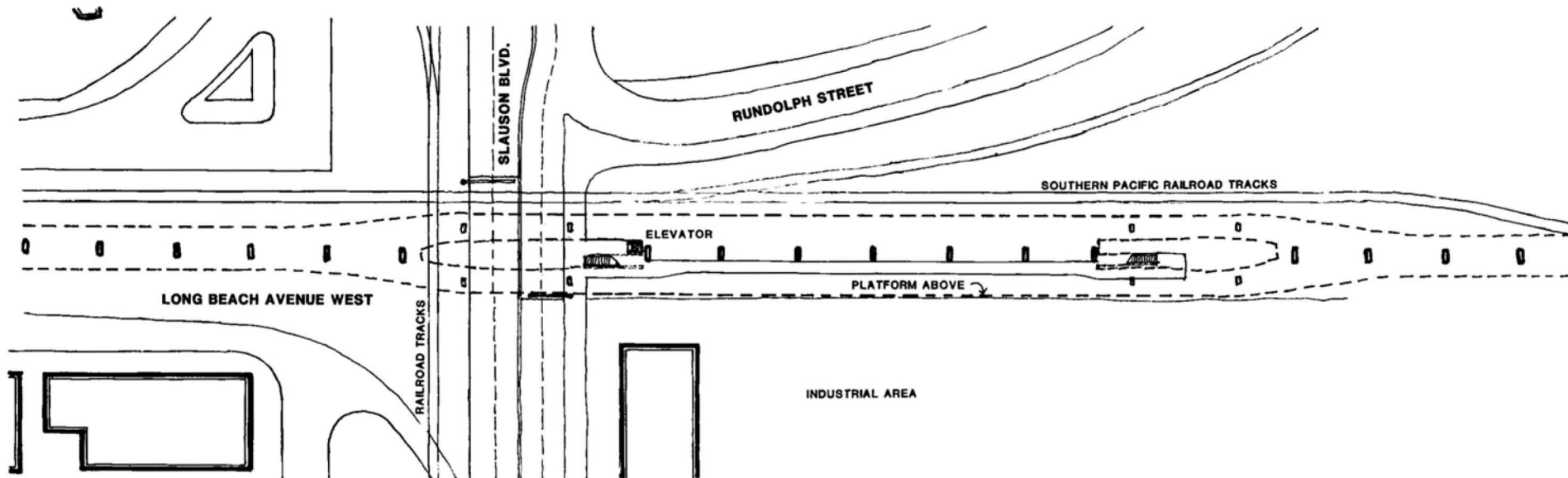
SECTION



STATION CONCEPT

Figure No. 9

Station Concept Subject To Change In Final Design

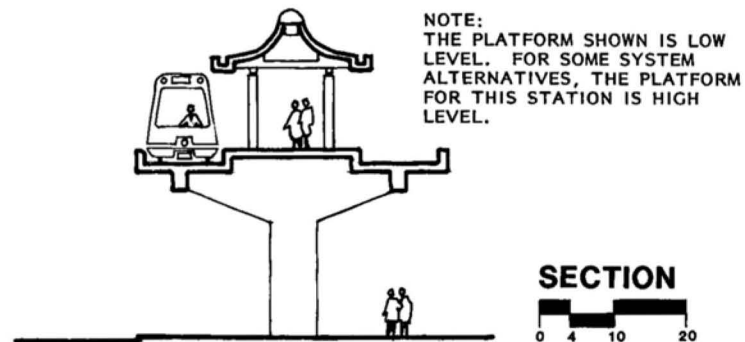


PLAN

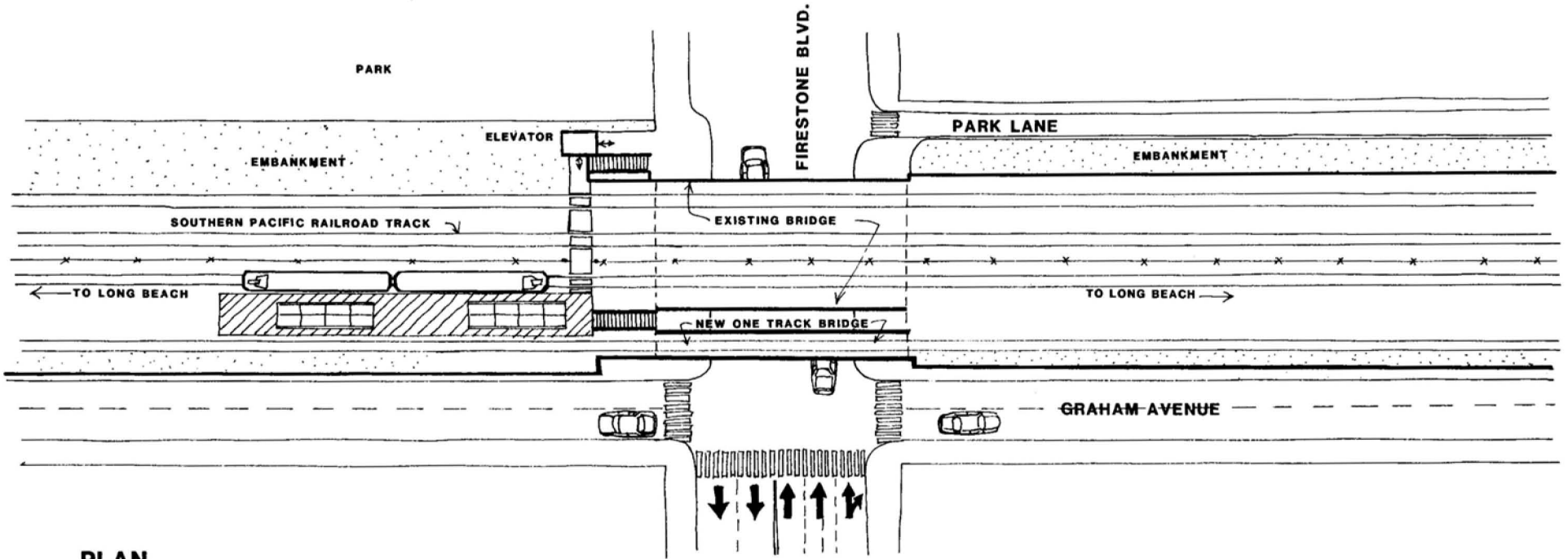


**Slauson Blvd. at S.P.T.C. R.O.W.
Aerial IN Mid-Corridor**

STATION CONCEPT



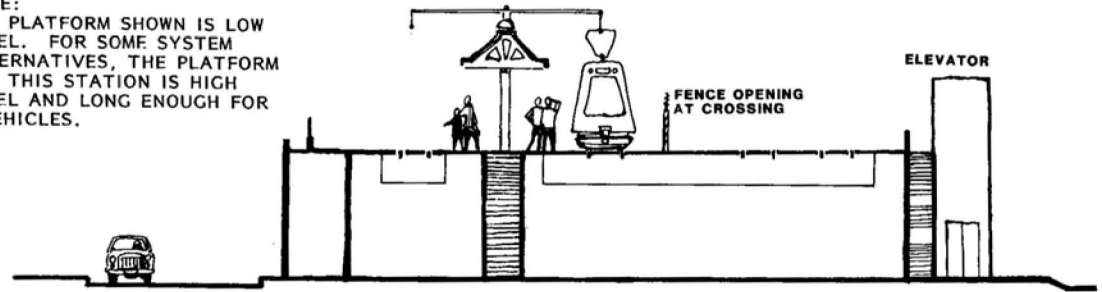
Station Concept Subject To Change In Final Design **Figure No.10**



PLAN



NOTE:
THE PLATFORM SHOWN IS LOW LEVEL. FOR SOME SYSTEM ALTERNATIVES, THE PLATFORM FOR THIS STATION IS HIGH LEVEL AND LONG ENOUGH FOR 3 VEHICLES.



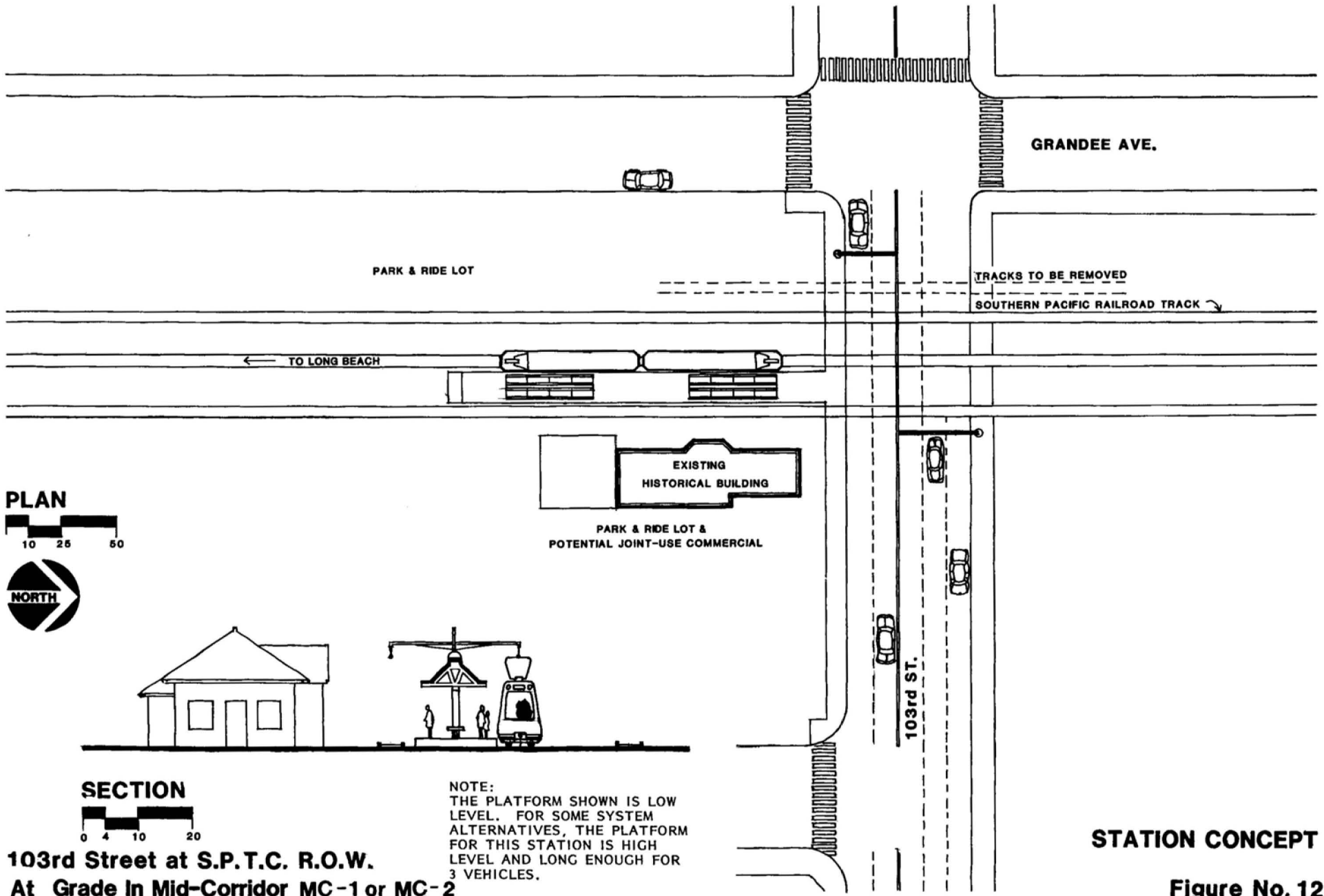
SECTION

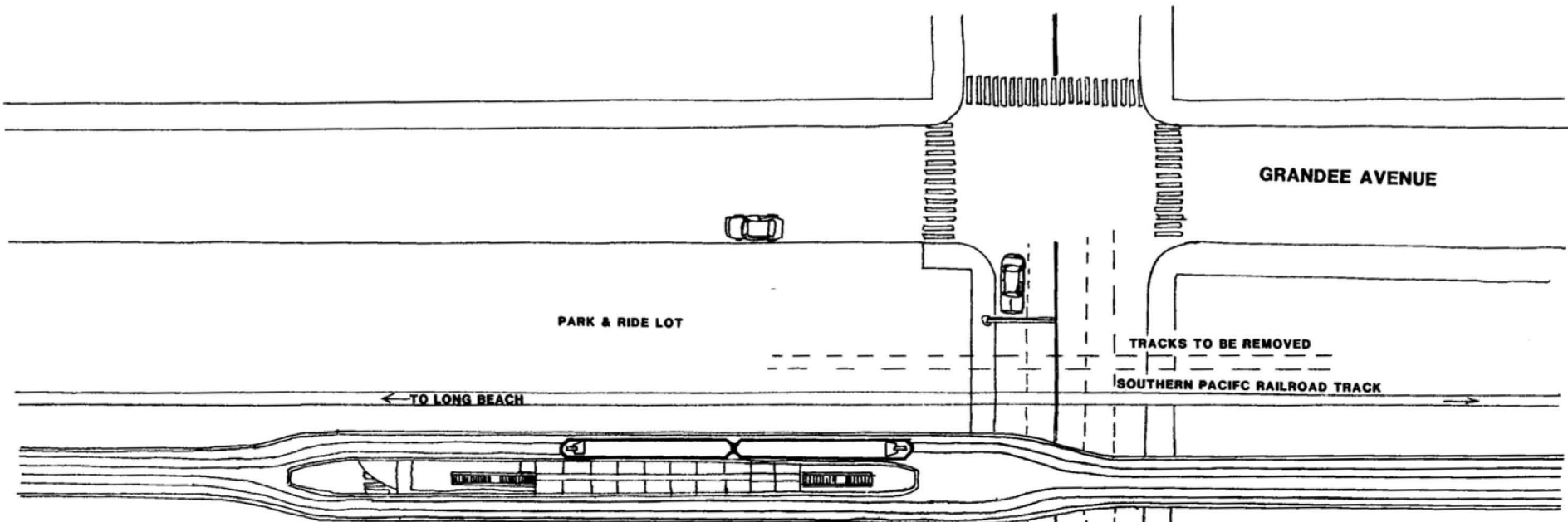


STATION CONCEPT

Firestone Blvd. in S.P.T.C. R.O.W. on Embankment in Mid-Corridor

Figure No. 11



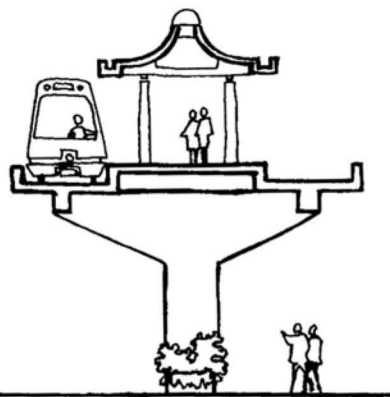
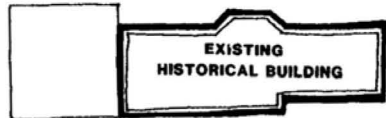


NOTE:
 THE PLATFORM SHOWN IS LOW
 LEVEL. FOR SOME SYSTEM
 ALTERNATIVES, THE PLATFORM
 FOR THIS STATION IS HIGH
 LEVEL.

PLAN



PARK & RIDE LOT & POTENTIAL JOINT-USE COMMERCIAL



STATION CONCEPT

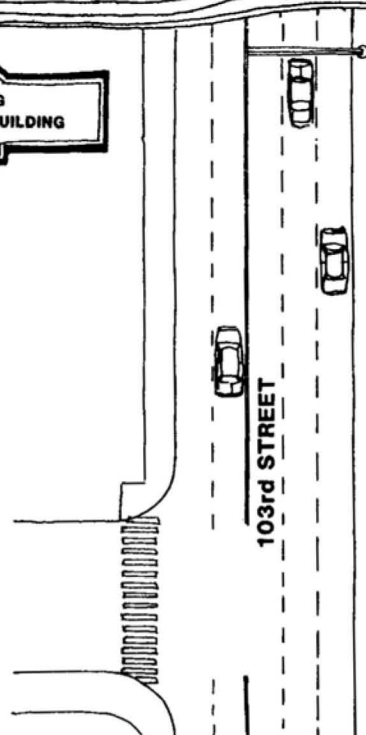
**103rd Street at S.P.T.C. R.O.W.
 (MC-3)**

SECTION



Station Concept Subject To Change In Final Design

Figure No. 13



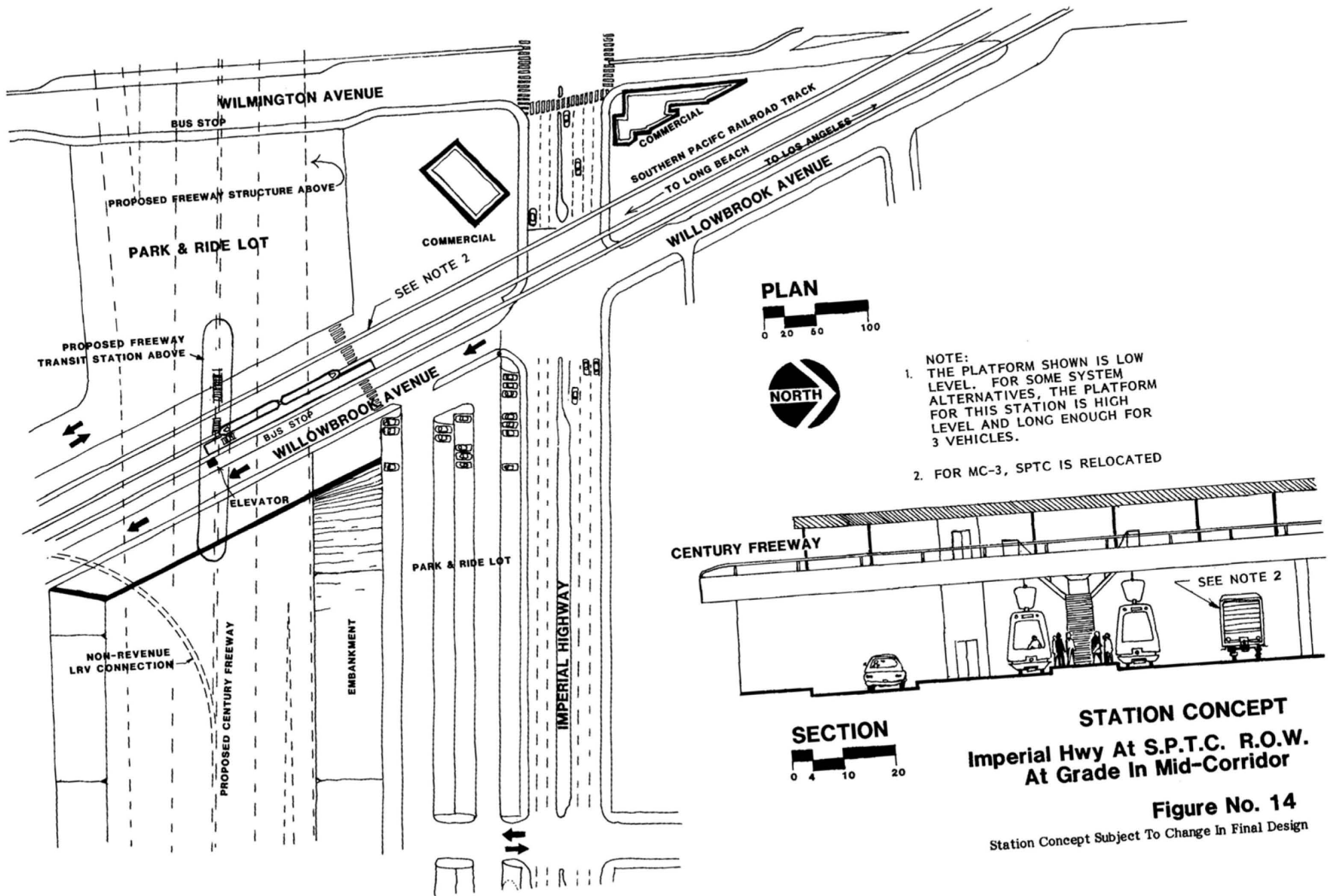
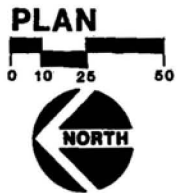
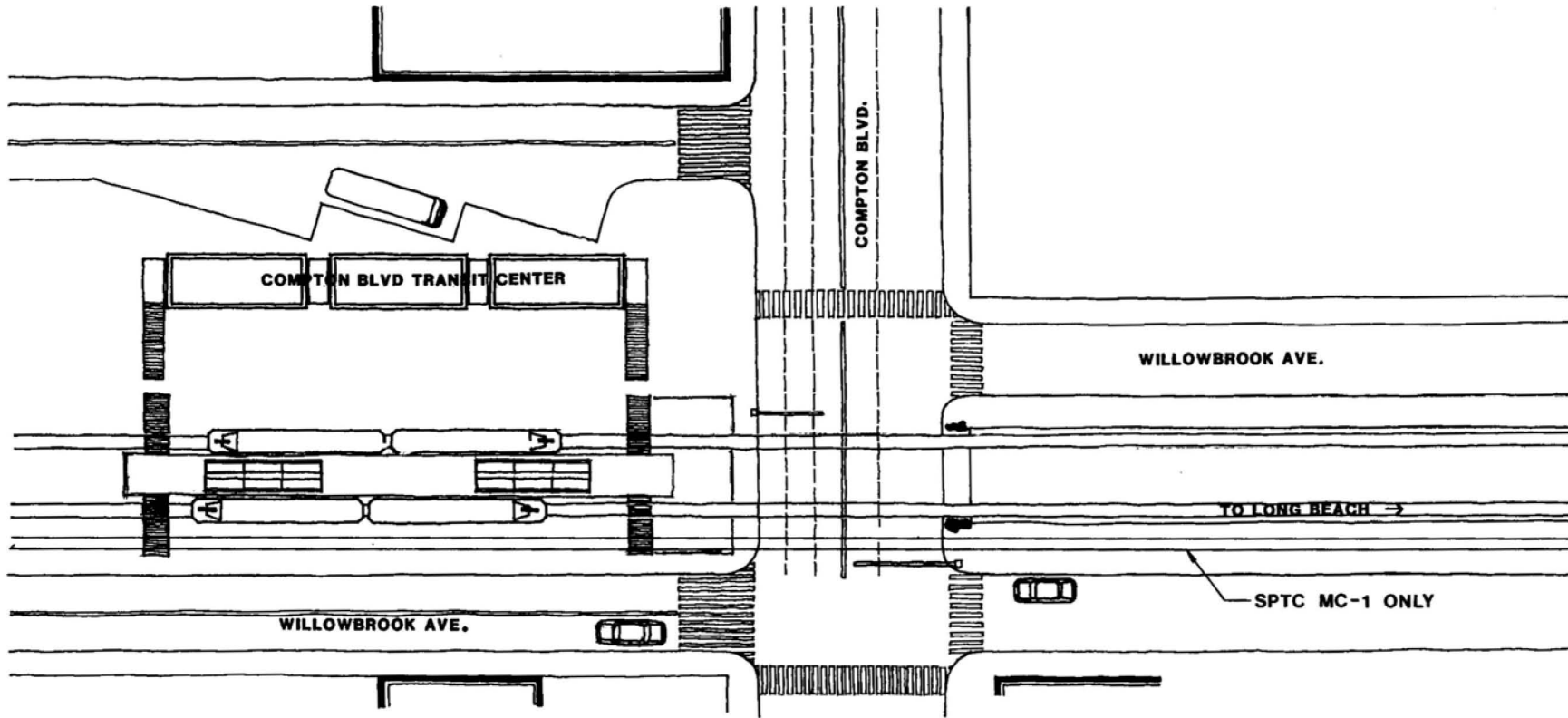


Figure No. 14
 Station Concept Subject To Change In Final Design



**Compton Blvd. At S.P. T.C. R.O.W.
At Grade In Mid-Corridor MC-1 & MC-3**

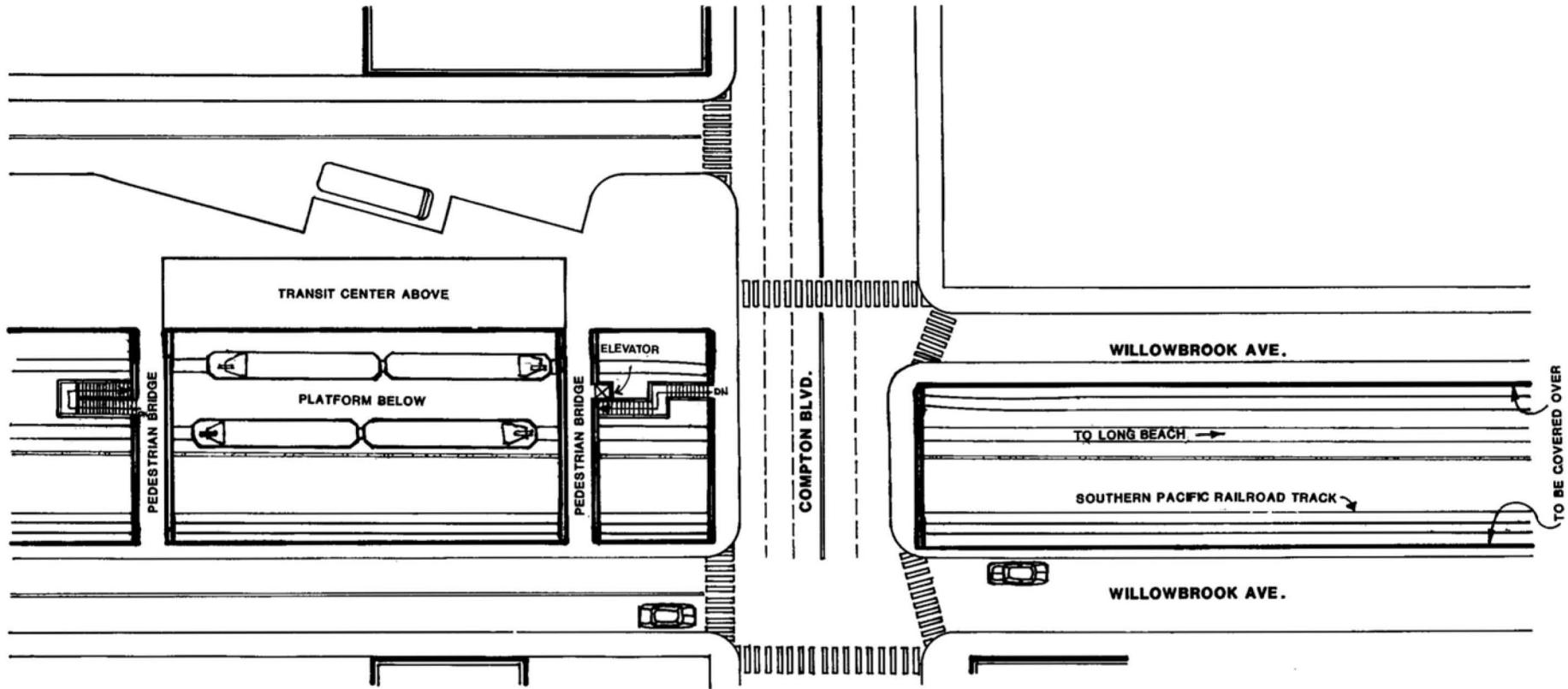


NOTE:
THE PLATFORM SHOWN IS LOW LEVEL. FOR SOME SYSTEM ALTERNATIVES, THE PLATFORM FOR THIS STATION IS HIGH LEVEL AND LONG ENOUGH FOR 3 VEHICLES.

STATION CONCEPT

Figure No.15

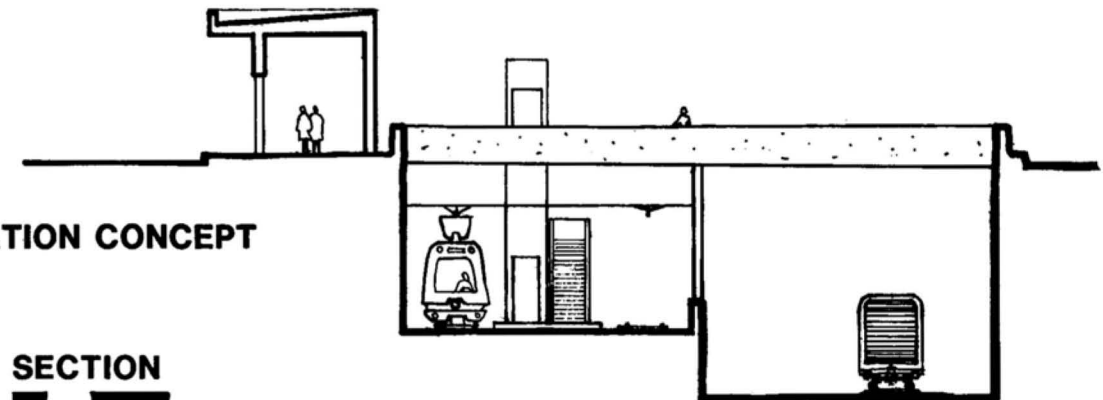
Station Concept Subject To Change In Final Design



NOTE:
 THE PLATFORM SHOWN IS LOW
 LEVEL. FOR SOME SYSTEM
 ALTERNATIVES, THE PLATFORM
 FOR THIS STATION IS HIGH
 LEVEL AND LONG ENOUGH FOR
 3 VEHICLES.

**Compton Blvd. At S.P.T.C.R.O.W.
 Below Grade In Mid-Corridor MC-2**

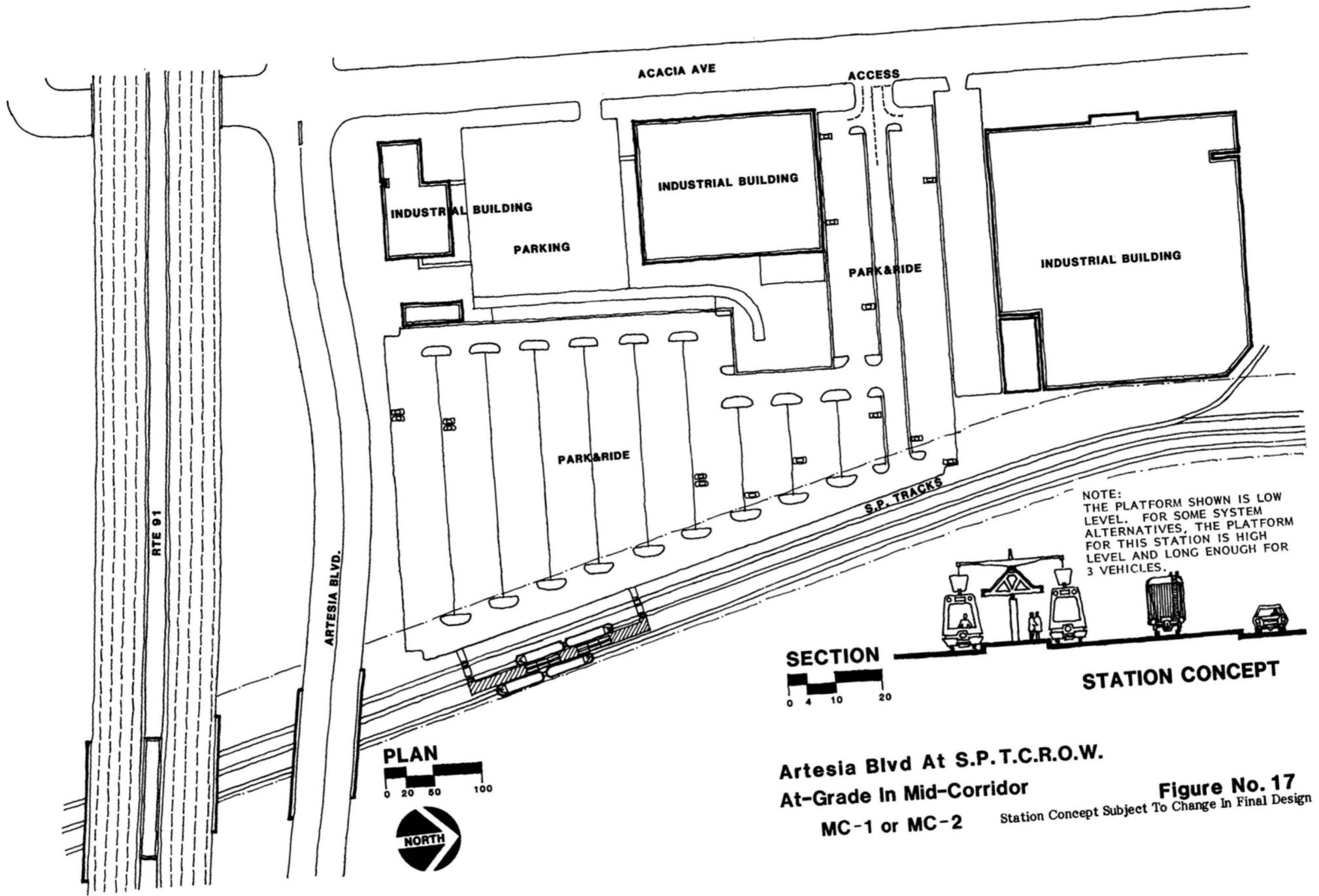
STATION CONCEPT



SECTION



Station Concept Subject To Change In Final Design **Figure No. 16**



Artesia Blvd At S.P.T.C.R.O.W.
At-Grade In Mid-Corridor
 MC-1 or MC-2

Figure No. 17
 Station Concept Subject To Change In Final Design

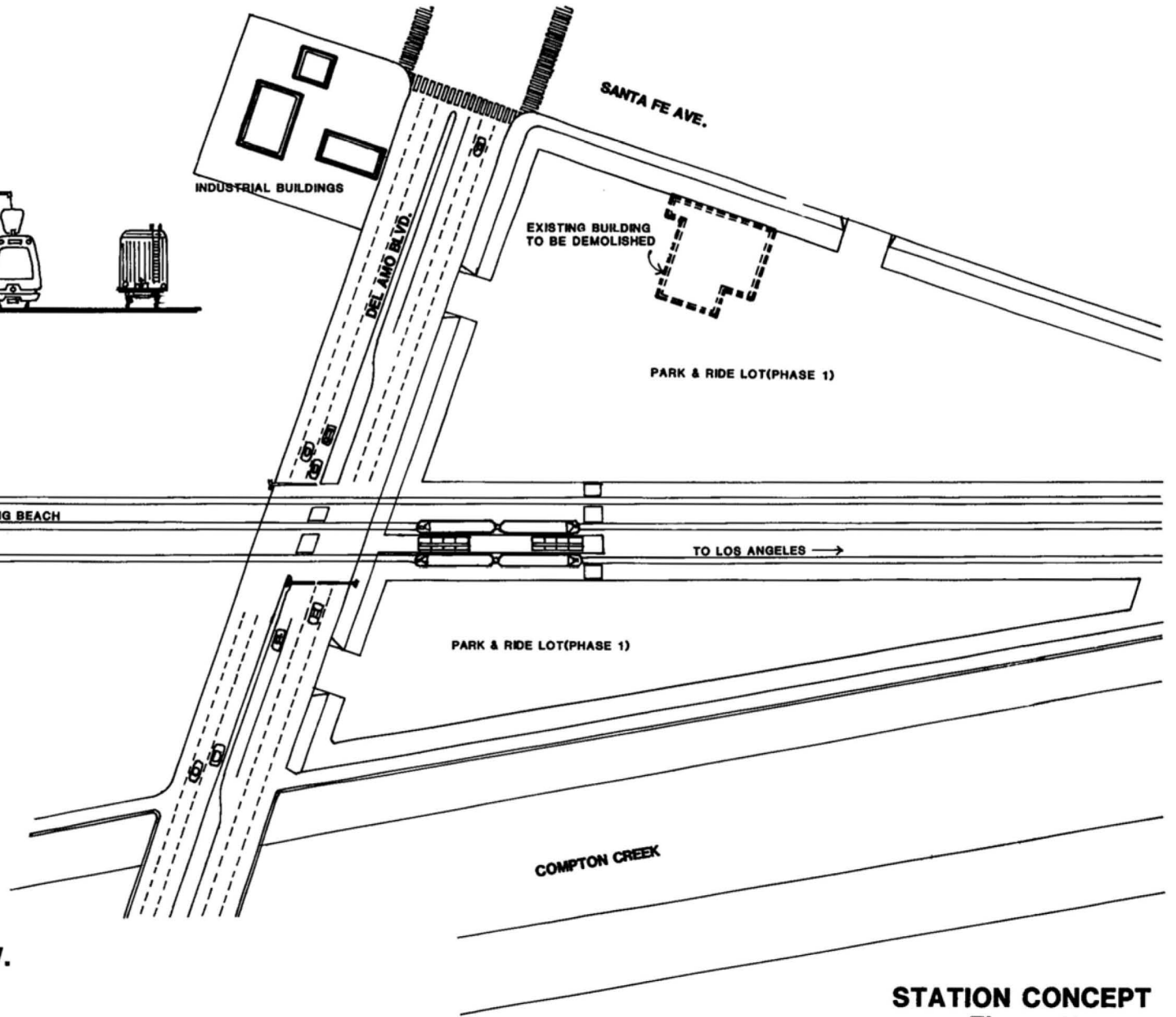
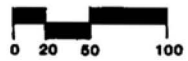
NOTE:
 THE PLATFORM SHOWN IS LOW
 LEVEL. FOR SOME SYSTEM
 ALTERNATIVES, THE PLATFORM
 FOR THIS STATION IS HIGH
 LEVEL AND LONG ENOUGH FOR
 3 VEHICLES.



SECTION

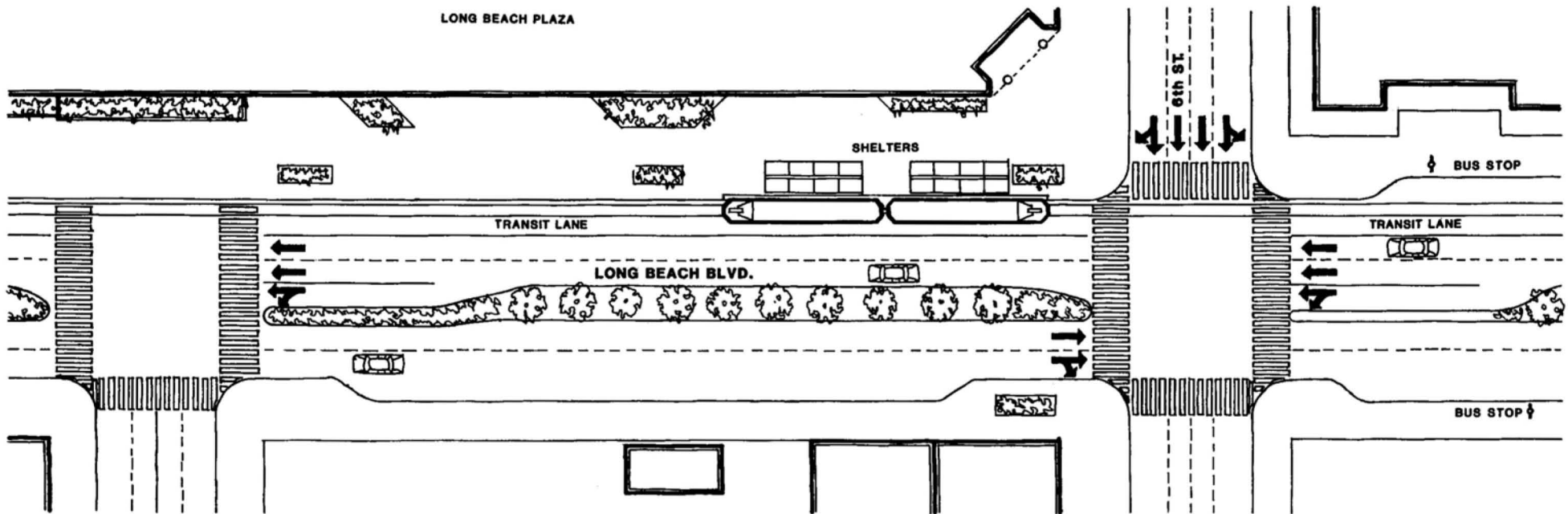


PLAN

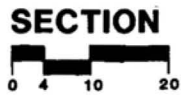
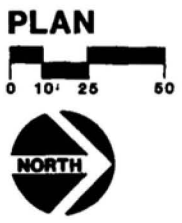


**Del Amo Blvd. At S.P.T.C. R.O.W.
 At-Grade In Mid-Corridor**

STATION CONCEPT
Figure No. 18
 Station Concept Subject To Change In Final Design

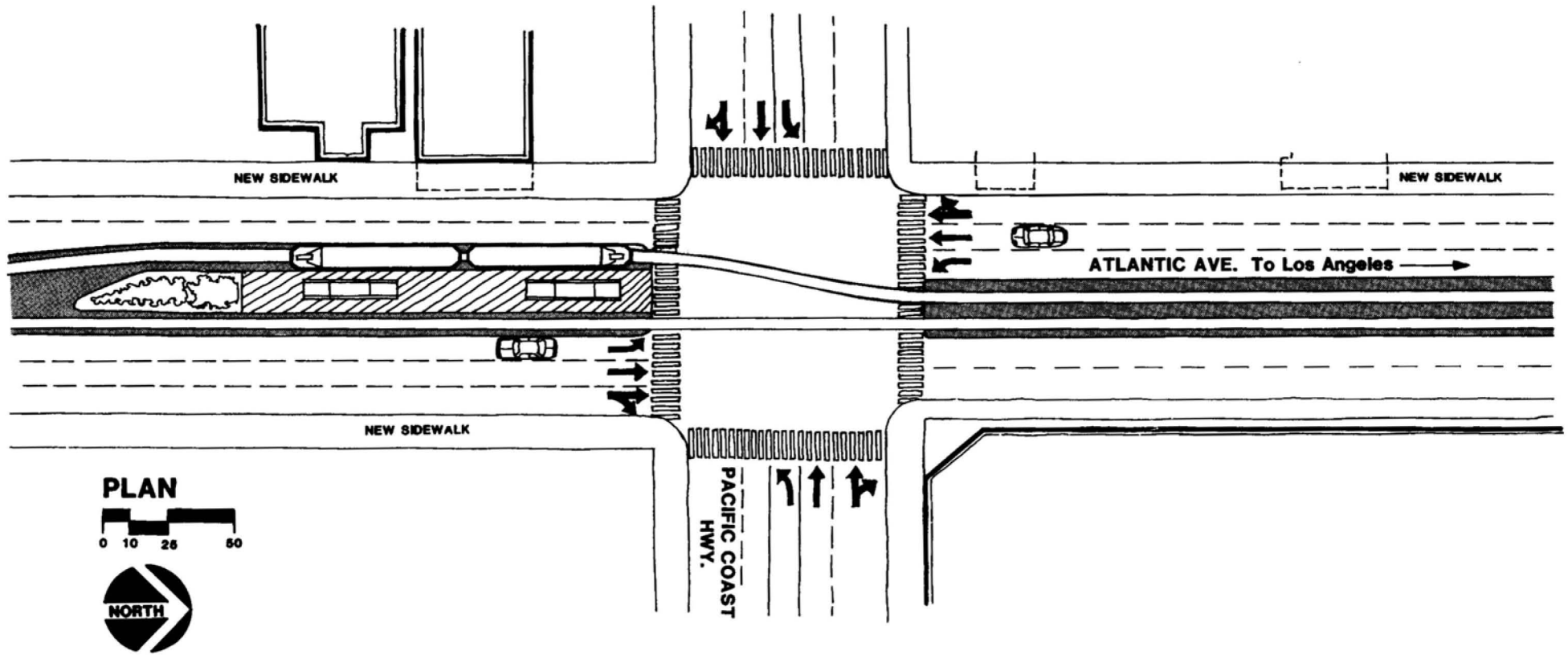


NOTE:
 THE PLATFORM SHOWN IS LOW
 LEVEL. FOR SOME SYSTEM
 ALTERNATIVES, THE PLATFORM
 FOR THIS STATION IS HIGH
 LEVEL.

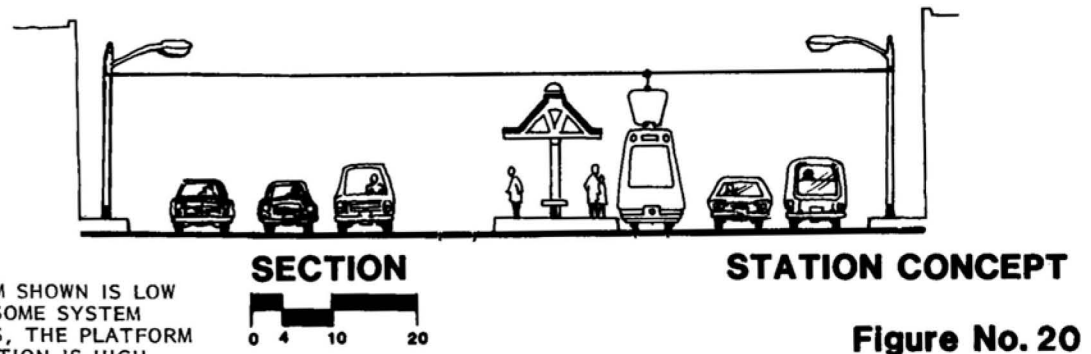


STATION CONCEPT

**Long Beach Blvd. at 6th Street
 At Grade In Downtown Long Beach
 LB-2 or LB-4**

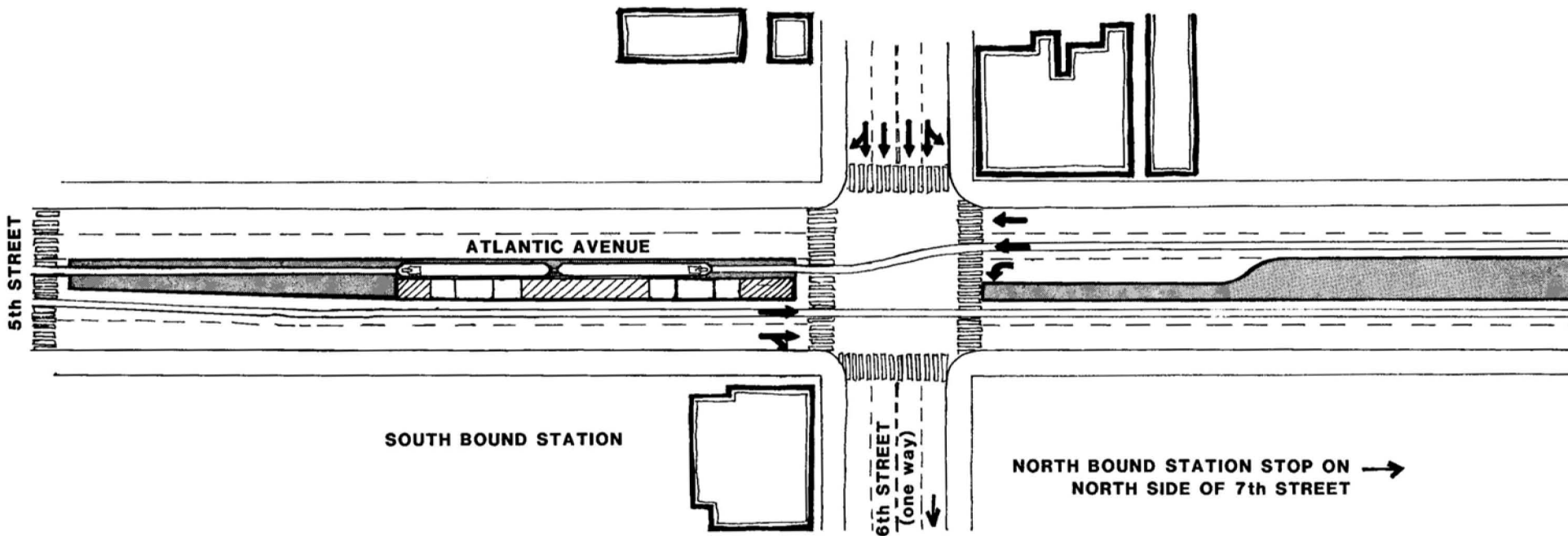


**Atlantic Avenue at Pacific Coast Hwy
at-Grade In Downtown Long Beach
(B-1 and 4)**



NOTE:
THE PLATFORM SHOWN IS LOW
LEVEL. FOR SOME SYSTEM
ALTERNATIVES, THE PLATFORM
FOR THIS STATION IS HIGH
LEVEL.

Figure No. 20
Station Concept Subject To Change In Final Design



STATION CONCEPT

**Atlantic Avenue at 6th Street
Street Level in Long Beach (LB-1)**

NOTE:
THE PLATFORM SHOWN IS LOW
LEVEL. FOR SOME SYSTEM
ALTERNATIVES, THE PLATFORM
FOR THIS STATION IS HIGH
LEVEL.

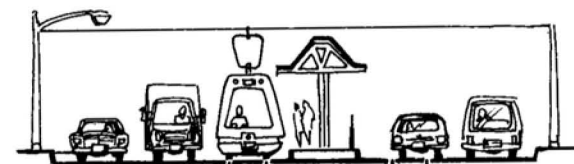


Figure No. 21

Station Concept Subject To Change In Final Design