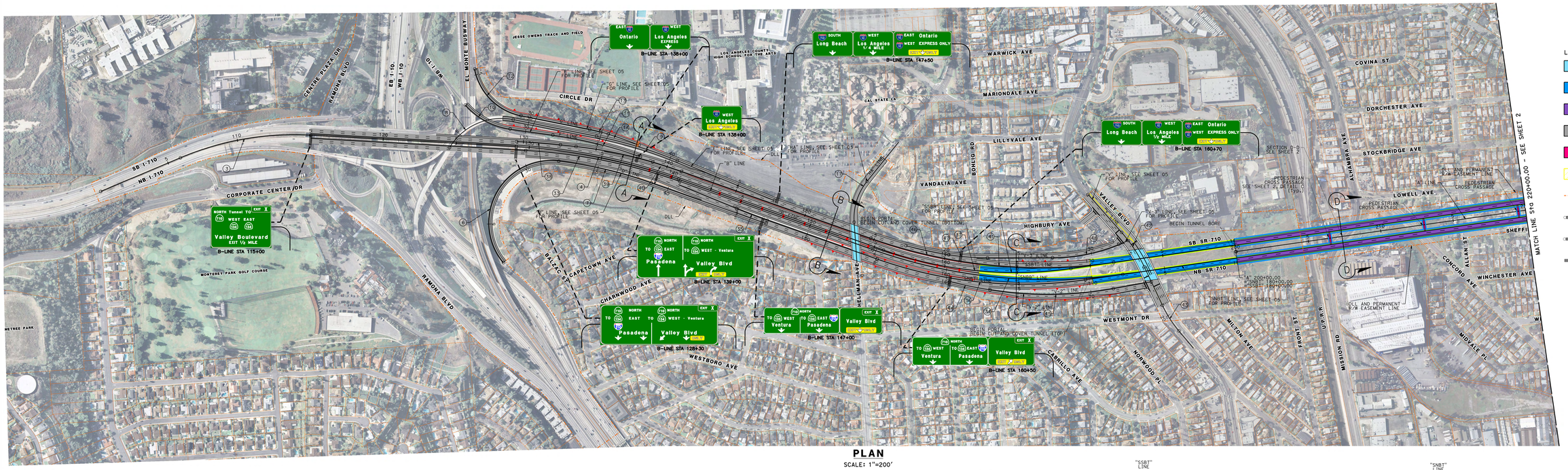
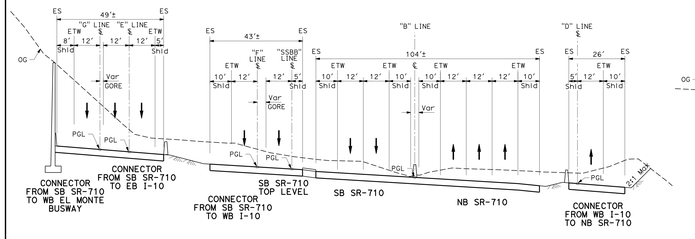
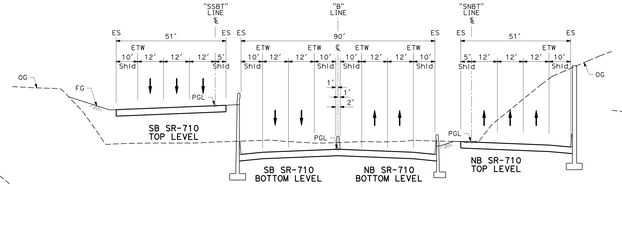


PLAN
SCALE: 1"=200'

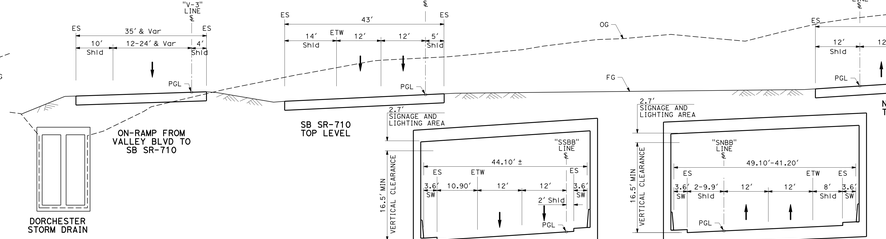
LEGEND:
- BRIDGE
- CUT & COVER TUNNEL
- TUNNEL BORING MACHINE (TBM)
- PAVEMENT
- TUNNEL CROSS PASSAGES
- HISTORIC PROPERTY
- DISTURBANCE LIMIT LINE (DLL)
- SIGN BRIDGE
- CANTILEVERED SIGN
- SIGN MOUNTED ON A BRIDGE



SECTION A-A
NTS



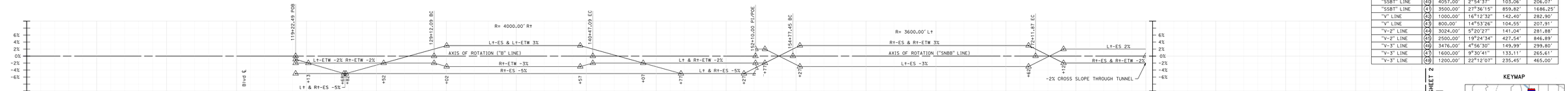
SECTION B-B
NTS



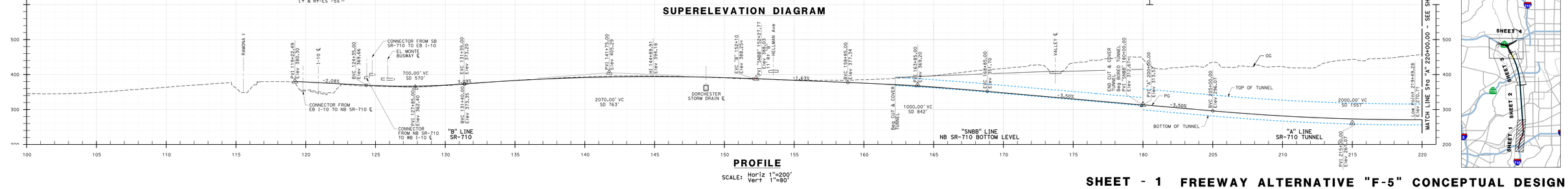
SECTION C-C
NTS

CURVE DATA TABLE

Alignment	No.	R	D	T	L
"B" LINE	(3)	2000.00'	26°07'21"	463.99'	911.85'
"B" LINE	(4)	4000.00'	16°15'28"	571.34'	1135.00'
"D" LINE	(6)	425.00'	136°51'34"	2075.05'	1015.17'
"D" LINE	(7)	3000.00'	12°25'42"	326.66'	650.75'
"E" LINE	(8)	415.00'	69°46'33"	289.38'	505.39'
"E" LINE	(9)	3000.00'	11°01'42"	289.61'	577.44'
"F" LINE	(10)	500.00'	40°33'10"	184.72'	353.89'
"F" LINE	(11)	3024.00'	11°42'54"	310.23'	618.30'
"G" LINE	(12)	401.86'	67°57'06"	270.81'	476.60'
"G" LINE	(13)	1200.00'	6°16'16"	65.74'	131.34'
"G" LINE	(14)	3012.00'	4°14'54"	111.72'	223.33'
"HA" line	(17)	400.00'	42°51'03"	156.96'	299.15'
"SNBB" LINE	(33)	3800.00'	16°15'28"	542.77'	1078.25'
"SNBB" LINE	(34)	3600.00'	27°36'15"	884.39'	1734.43'
"SNBT" LINE	(35)	4500.00'	2°51'45"	112.43'	224.81'
"SNBT" LINE	(36)	3000.00'	27°36'15"	736.99'	1445.36'
"SSBB" LINE	(37)	2700.00'	27°36'15"	663.29'	1300.82'
"SSBT" LINE	(38)	4035.00'	4°15'50"	150.21'	300.28'
"SSBT" LINE	(39)	3000.00'	10°13'48"	268.53'	535.64'
"SSBT" LINE	(40)	4057.00'	2°54'37"	103.06'	206.07'
"SSBT" LINE	(41)	3500.00'	27°36'15"	859.82'	1686.25'
"V" LINE	(42)	1000.00'	16°12'32"	142.40'	282.90'
"V" LINE	(43)	800.00'	14°53'26"	104.55'	207.91'
"V-2" LINE	(44)	3024.00'	5°20'20"	141.04'	281.88'
"V-2" LINE	(45)	2500.00'	19°24'34"	427.54'	846.89'
"V-3" LINE	(46)	3476.00'	4°56'30"	149.99'	299.80'
"V-3" LINE	(47)	1600.00'	9°30'41"	133.11'	265.61'
"V-3" LINE	(48)	1200.00'	22°12'07"	235.45'	465.00'

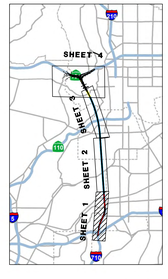


SUPERELEVATION DIAGRAM



PROFILE
SCALE: Horiz 1"=200'
Vert 1"=80'

KEYMAP



SHEET - 1 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

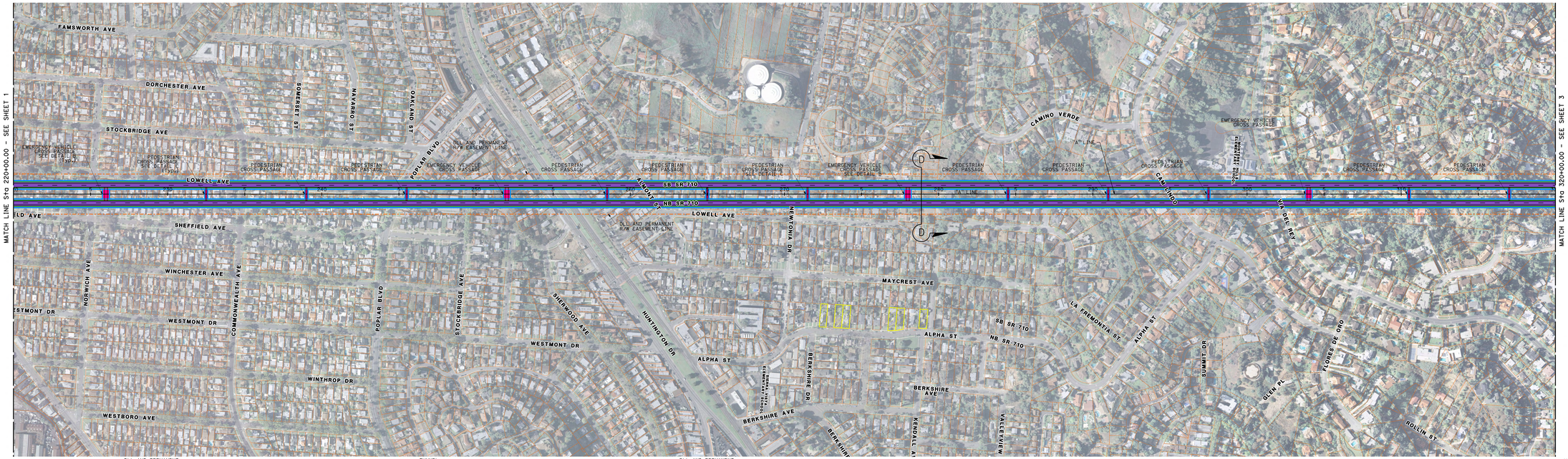
Gatsers
555 SOUTH MAIN STREET
PASADENA, CA 91101

CH2MHILL
1000 WILSHIRE BLVD #2100
LOS ANGELES, CA 90017

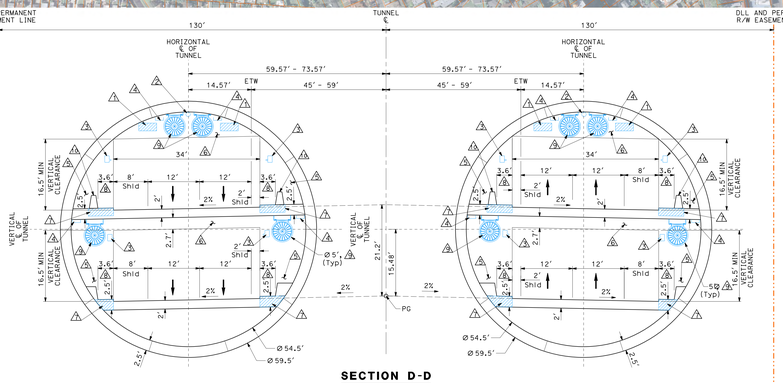
Metro
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012

710 STUDY
CONCEPTUAL DESIGN

SHEET NO. F-5
1 OF 8
DATE SHOWN
OCT. 2012



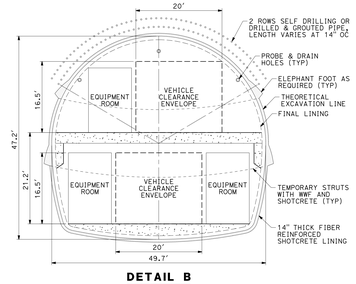
PLAN
SCALE: 1"=200'



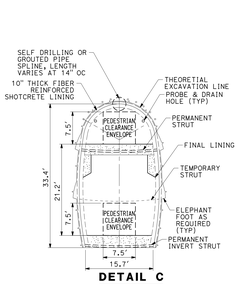
SECTION D-D
NTS

NOTES:

1. AREA FOR LIGHTING EQUIPMENT, APPROX. 2.0'X1.5'
2. AUTOMATIC FIRE DETECTION SYSTEM
3. CCTV/VIDEO DETECTION SYSTEM AREA FOR MEASUREMENT EQUIPMENT, APPROX. 0.8'X1.0'
4. CABLE TRAY
5. AREA FOR EMERGENCY CABINET, FIRE FIGHTING SYSTEM
6. TRAFFIC SIGNS (SIZE SHALL BE DETERMINED)
7. AREA FOR CABLES AND WATER SUPPLY AND FIRE FIGHTING SYSTEM, APPROX. 4.0'X2.0'
8. EMERGENCY WALKWAY
9. VENTILATION JET FAN
10. Conc BARRIER TYPE 60

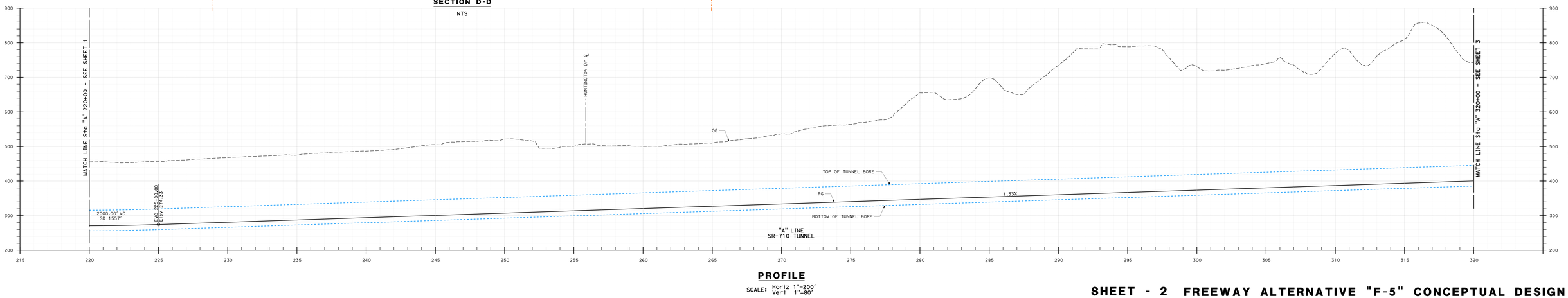


DETAIL B
(EMERGENCY VEHICLE CROSS PASSAGE)
NTS



DETAIL C
(PEDESTRIAN CROSS PASSAGE)
NTS

KEYMAP



PROFILE
SCALE: Horiz 1"=200'
Vert 1"=80'

LEGEND:

- BRIDGE
- CUT & COVER TUNNEL
- TUNNEL BORING MACHINE (TBM)
- PAVEMENT
- TUNNEL CROSS PASSAGES
- HISTORIC PROPERTY
- DISTURBANCE LIMIT LINE (DLL)

SHEET - 2 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

Gatrans
555 SOUTH MAIN STREET
LOS ANGELES, CA 90013
CYCLEWHILL
1000 WILSHIRE BLVD #2100
LOS ANGELES, CA 90017
Metro
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012

710 STUDY
CONCEPTUAL DESIGN

SHEET NO.	F-5
2 OF 8	
DATE SHOWN	
OCT. 2012	

LEGEND:

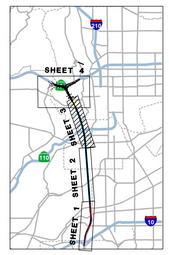
- BRIDGE
- CUT & COVER TUNNEL
- TUNNEL BORING MACHINE (TBM)
- PAVEMENT
- TUNNEL CROSS PASSAGES
- HISTORIC PROPERTY
- DISTURBANCE LIMIT LINE (DLL)
- APPROXIMATE RAYMOND FAULT ZONE

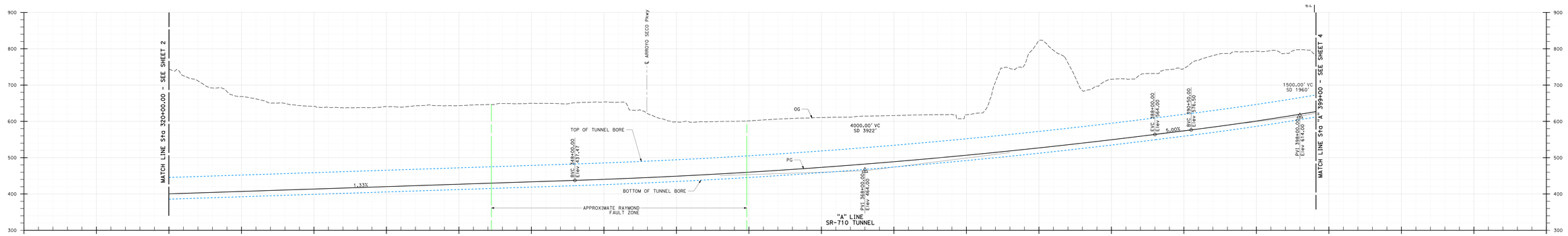
PLAN
SCALE: 1"=200'

CURVE DATA TABLE

No.	R	D	T	L
(6)	20100.00'	24°16'42"	4323.44'	8517.15'

KEYMAP





PROFILE
SCALE: Horiz 1"=200'
Vert 1"=80'

SHEET - 3 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

Caltrans
100 SOUTH MAIN STREET
LOS ANGELES, CA 90012

CH2MHILL
1000 WILSHIRE BLVD, #1700
LOS ANGELES, CA 90017

Metro
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012-2952

710 STUDY
CONCEPTUAL DESIGN

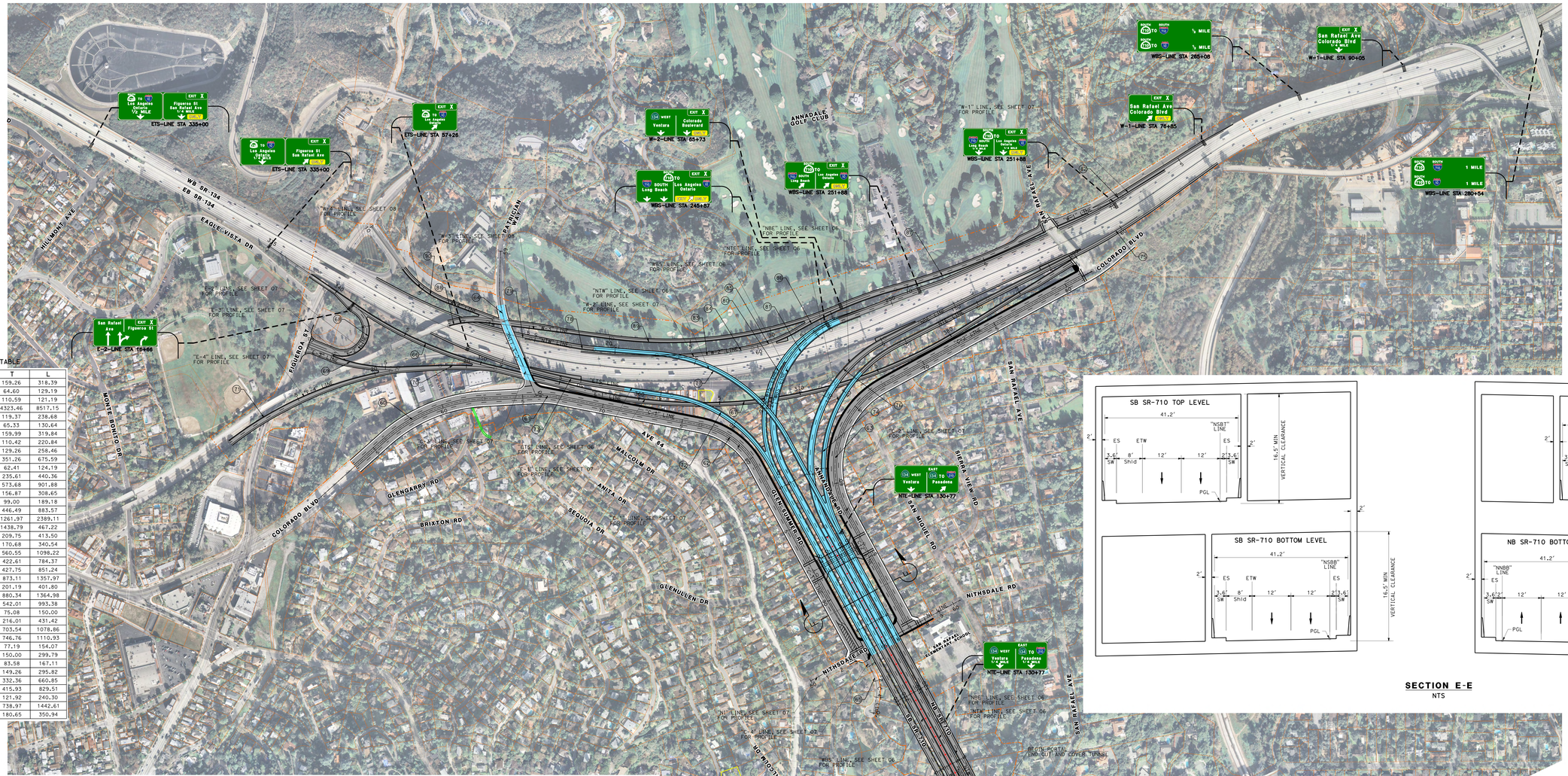
F-5

SHEET 3 OF 8

DATE SHOWN
OCT. 2012

CURVE DATA TABLE

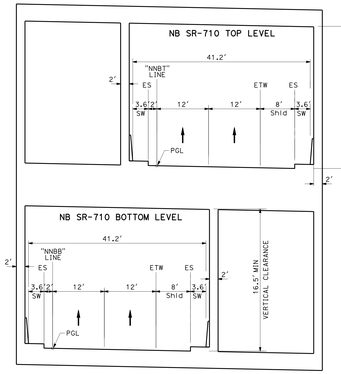
No.	R	D	T	L
C1	4500.00	4°03'14"	159.26	318.39
C2	4500.00	1°38'42"	64.60	129.19
C3	20116.00	0°37'48"	110.59	121.19
C4	20100.00	24°16'42"	4323.46	8517.15
C5	4500.00	3°02'20"	119.37	238.68
C6	4500.00	1°39'48"	65.33	130.64
C7	4500.00	4°04'21"	159.99	319.84
C8	20084.00	0°37'48"	110.42	220.84
C9	4500.00	3°17'23"	129.26	258.46
C10	1000.00	38°42'30"	351.26	675.59
C11	500.00	14°13'51"	62.41	124.19
C12	500.00	50°27'40"	235.61	440.36
C13	575.00	89°52'05"	573.68	901.88
C14	700.00	25°15'47"	156.87	308.65
C15	260.00	41°41'19"	99.00	189.18
C16	2488.00	20°20'51"	446.49	883.57
C17	3000.00	45°37'43"	1261.97	2389.11
C18	160.00	167°18'33"	1438.79	467.22
C19	1000.00	23°41'31"	209.75	413.50
C20	2000.00	9°45'20"	170.68	340.54
C21	2224.00	28°17'35"	560.55	1098.22
C22	850.00	52°52'19"	422.61	784.37
C23	3482.31	14°00'21"	427.75	851.24
C24	850.00	91°32'12"	873.11	1357.97
C25	3081.81	7°28'12"	201.19	401.80
C26	850.00	92°00'33"	880.34	1364.98
C27	1000.00	56°54'59"	542.01	993.38
C28	1350.00	6°21'58"	75.08	150.00
C29	3326.16	7°25'54"	216.01	431.42
C30	660.00	93°39'27"	703.54	1078.86
C31	650.00	97°55'32"	746.76	1110.93
C32	1000.00	8°49'40"	77.19	154.07
C33	3329.67	5°09'31"	150.00	299.79
C34	3000.00	3°11'30"	83.58	167.11
C35	900.00	18°49'51"	149.26	295.82
C36	2500.00	15°08'44"	332.36	660.85
C37	4500.00	10°33'42"	415.93	829.51
C38	576.19	23°53'42"	121.92	240.30
C39	2700.00	30°36'48"	738.97	1442.61
C40	600.00	33°30'44"	180.65	350.94

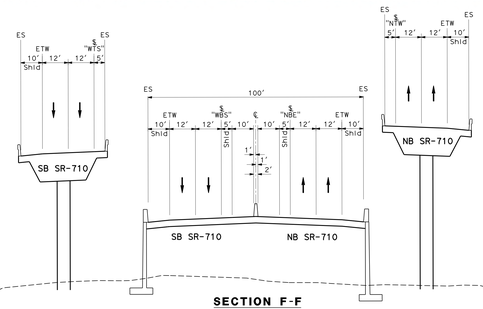


LEGEND:

- BRIDGE
- CUT & COVER TUNNEL
- TUNNEL BORING MACHINE (TBM)
- PAVEMENT
- TUNNEL CROSS PASSAGES
- HISTORIC PROPERTY
- DISTURBANCE LIMIT LINE (DLL)
- SIGN BRIDGE
- CANTILEVERED SIGN
- SIGN MOUNTED ON A BRIDGE

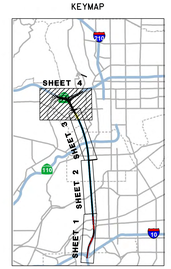
SECTION E-E
NTS





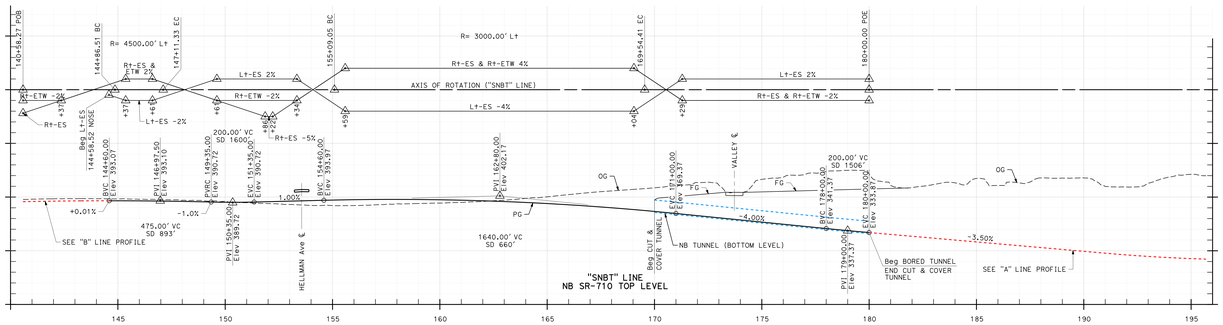
SECTION F-F
NTS

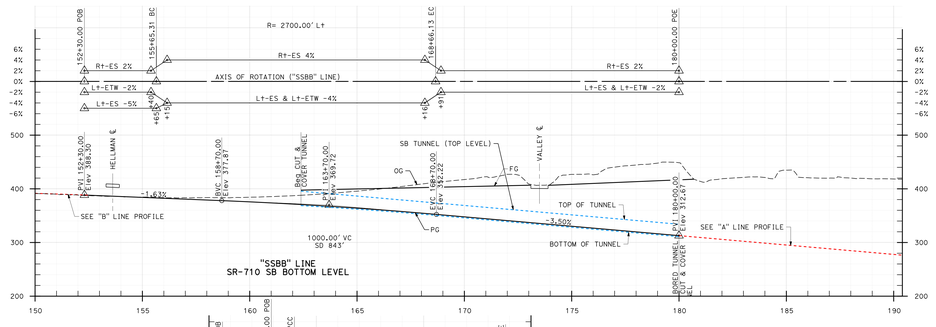
KEYMAP

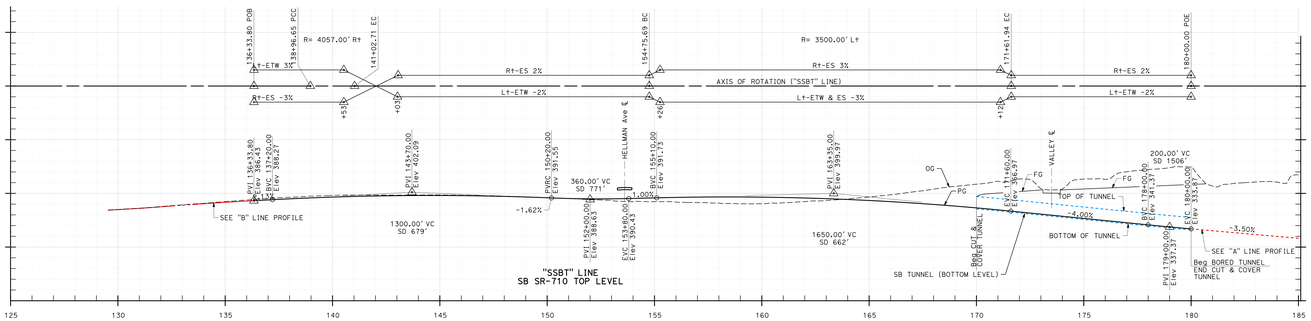


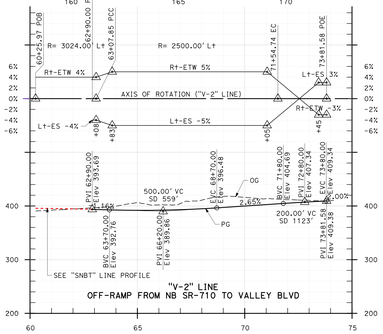
SHEET - 4 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

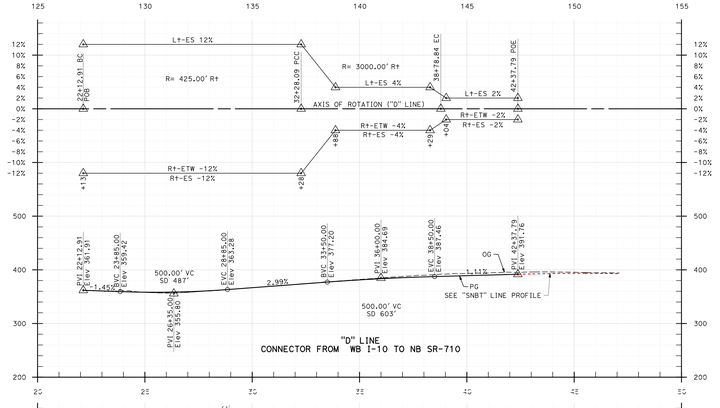
Caltrans
CH2MHILL
Metro
710 STUDY
CONCEPTUAL DESIGN
F-5
4 OF 8

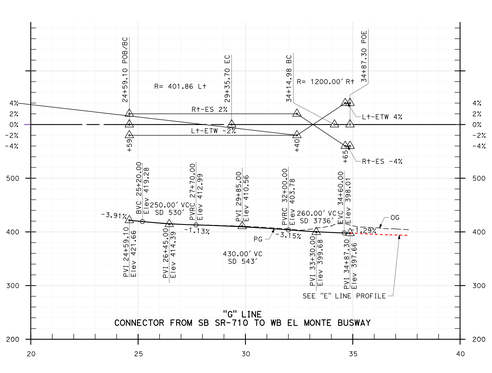


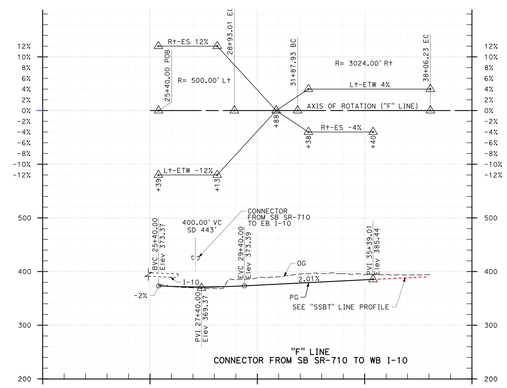


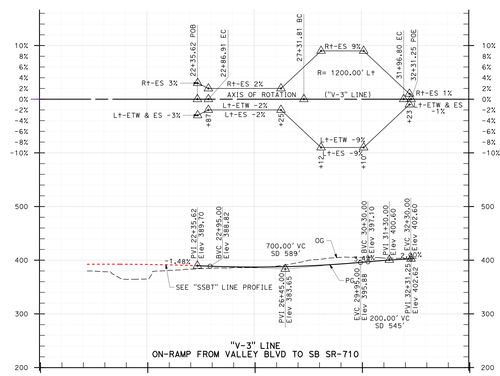


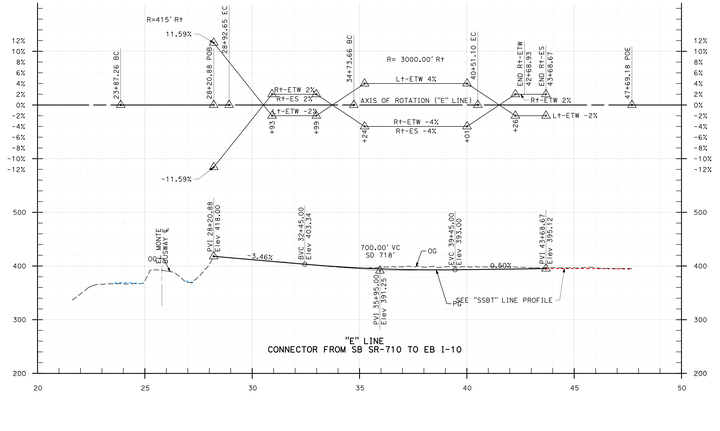


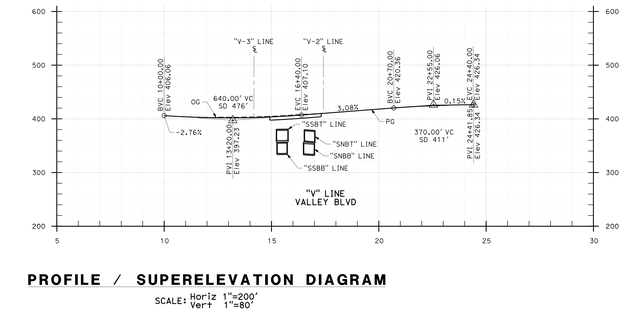


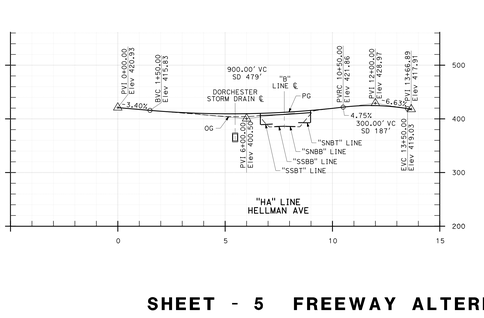










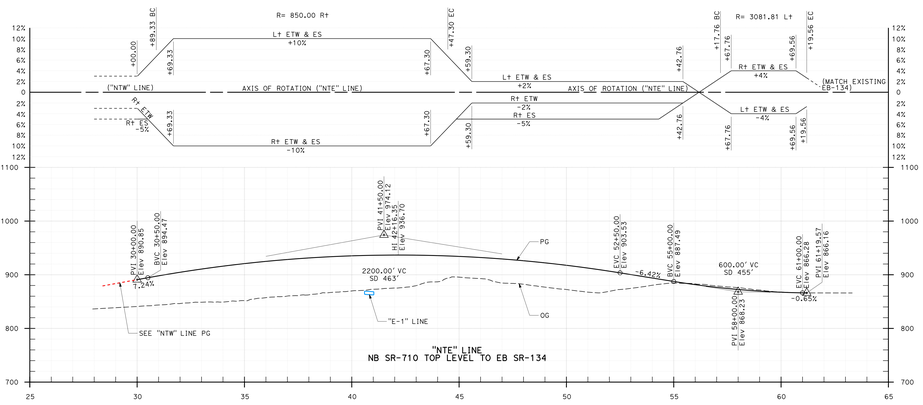


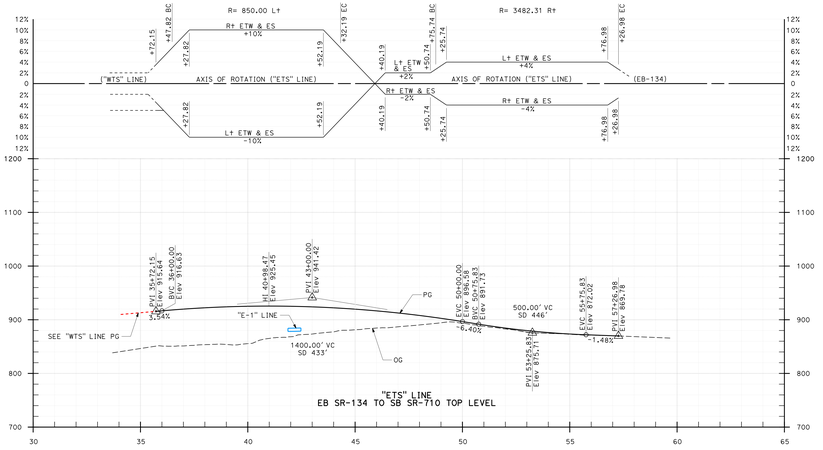
PROFILE / SUPERELEVATION DIAGRAM

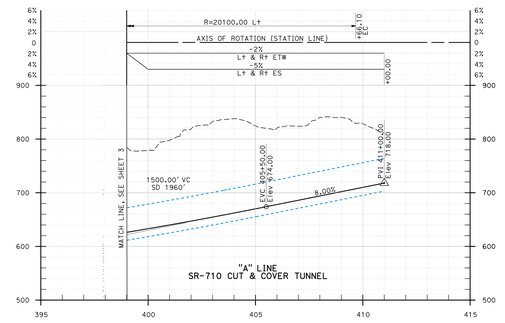
SCALE: Horiz 1"=200'
Vert 1"=80'

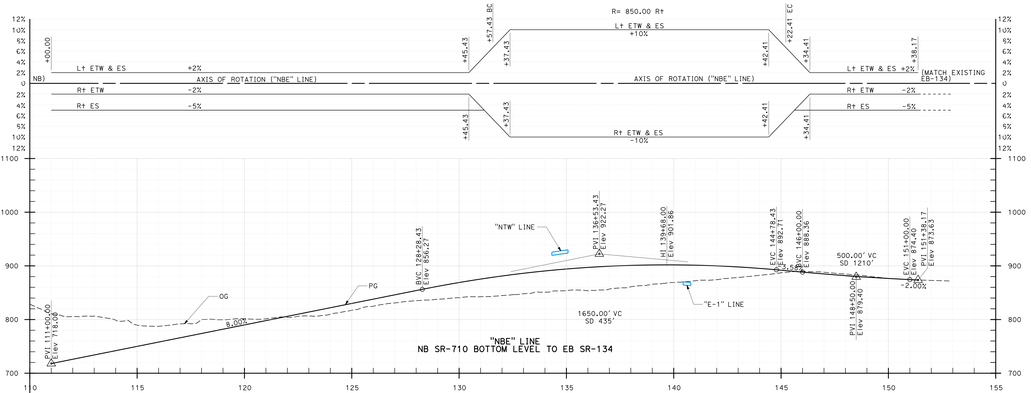
SHEET - 5 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

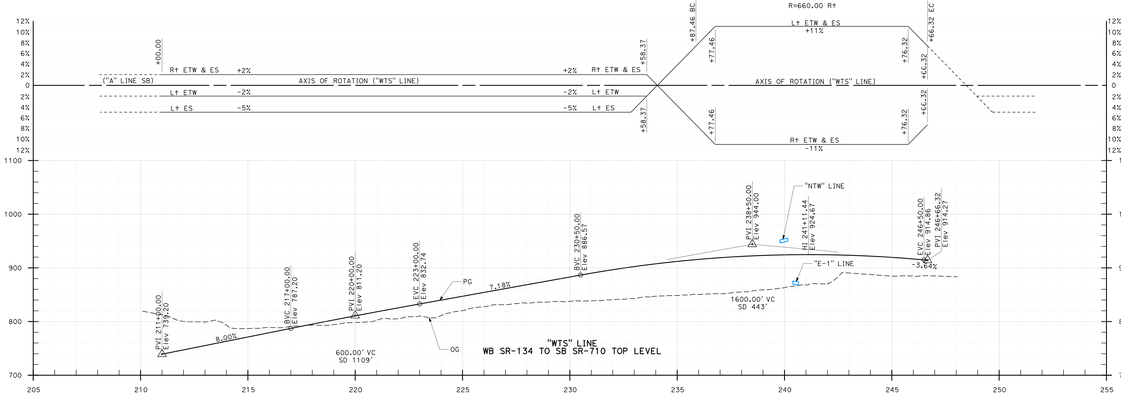
Caltrans
CH2MHILL
Metro
710 STUDY
CONCEPTUAL DESIGN
F-5
5 OF 8
DATE SHOWN
MAY 2012

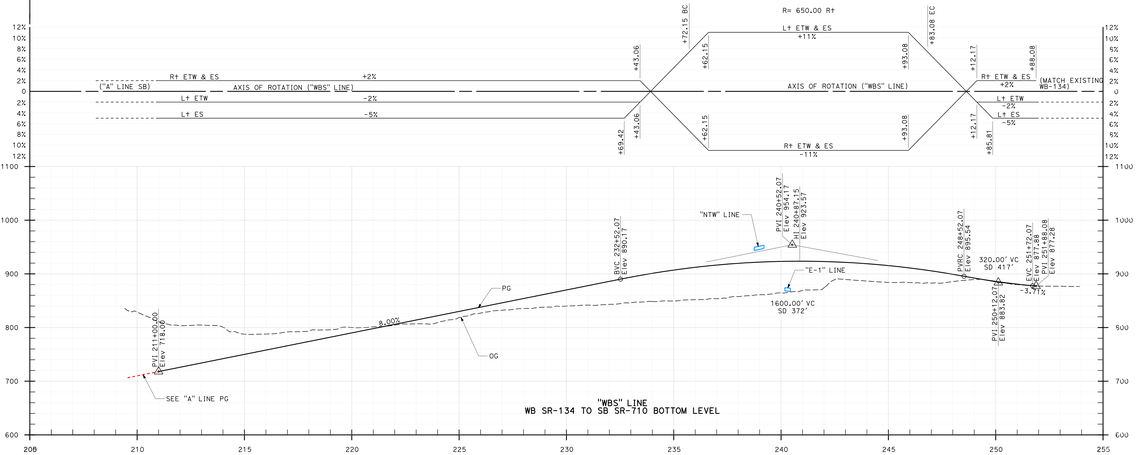


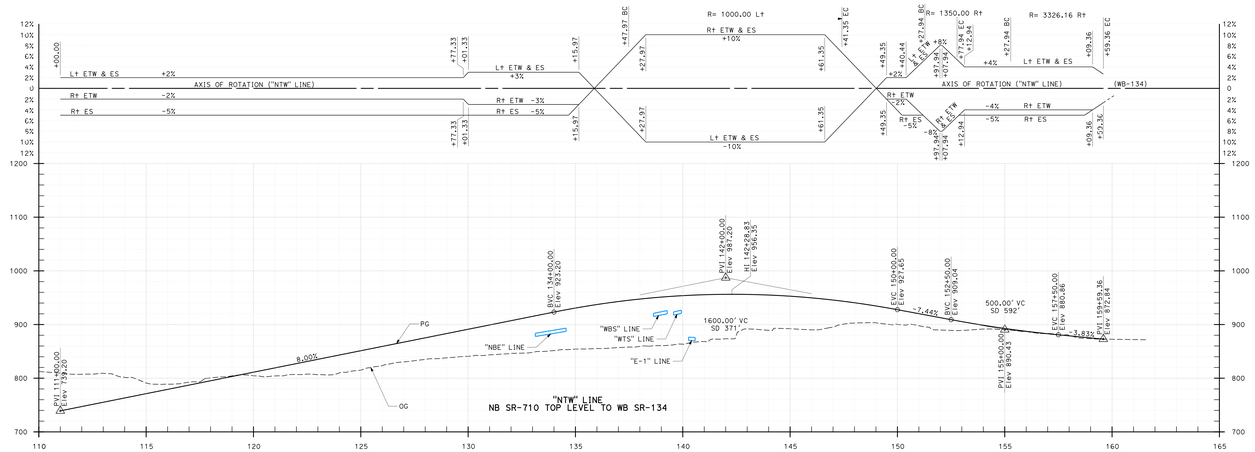












PROFILE / SUPERELEVATION DIAGRAM

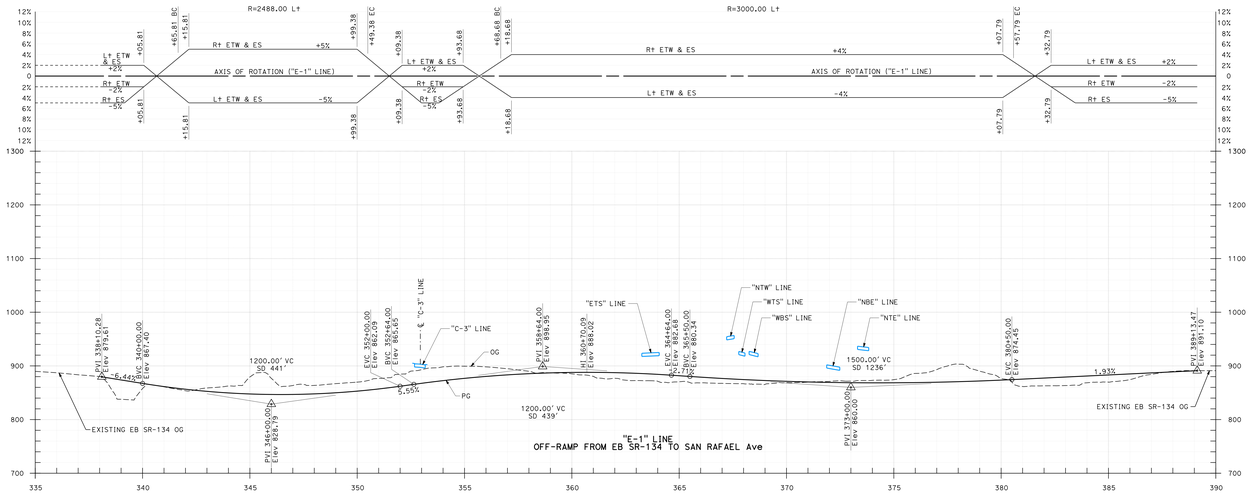
SCALE: Horiz 1"=200'
Vert 1"=80'

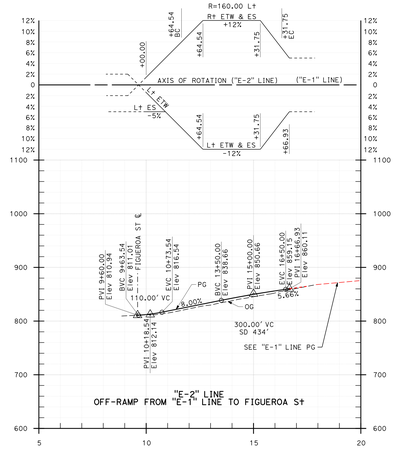
SHEET - 6 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

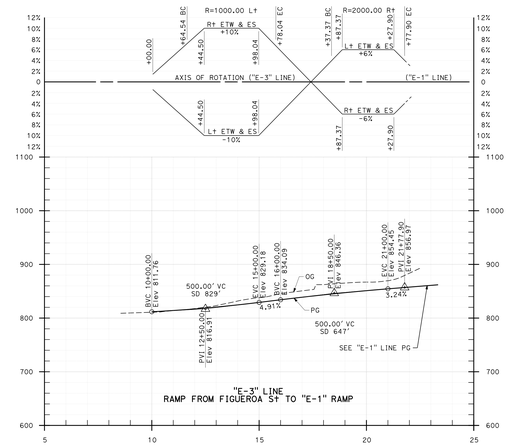
Caltrans
CH2MHILL
1100 WILSHIRE BLVD. #2500
LOS ANGELES, CA 90017
Metro
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012-2952

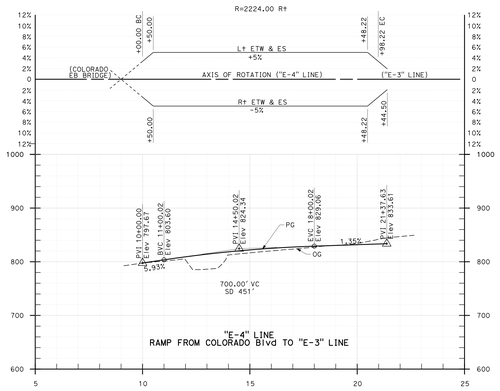
710 STUDY
CONCEPTUAL DESIGN

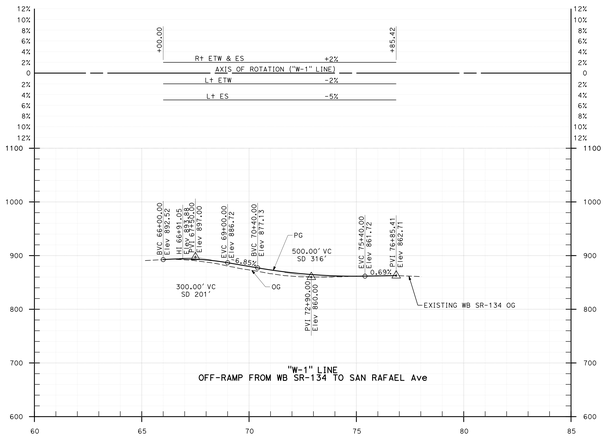
Revisions	F-5
SHEET 6 OF 8	
DATE SIGNED	SEPT 2012

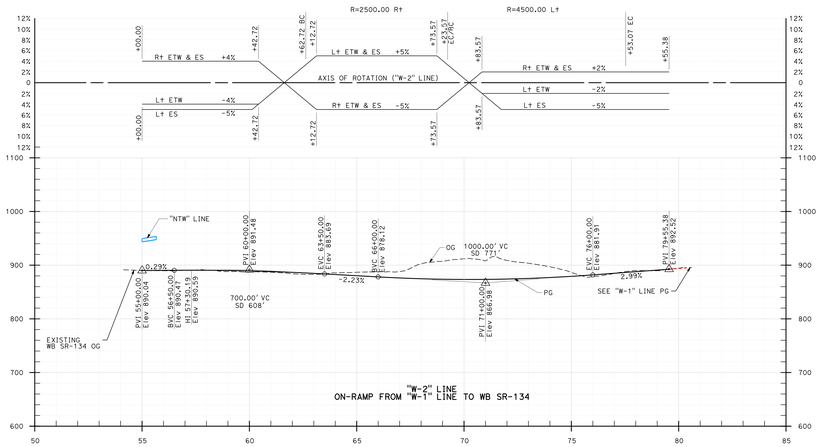












PROFILE / SUPERELEVATION DIAGRAM

SCALE: Horiz 1"=200'
Vert 1"=80'

SHEET - 7 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

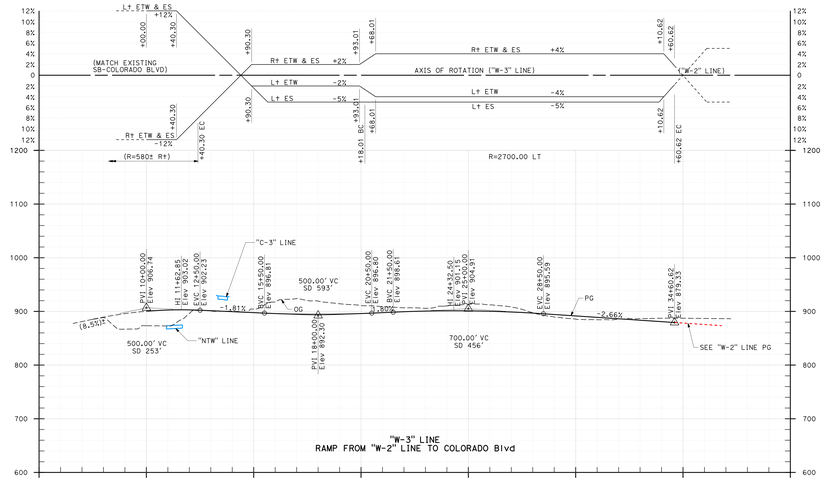
Caltrans
DISTRICT 4
111 GRAND AVE.
OAKLAND, CA 94612

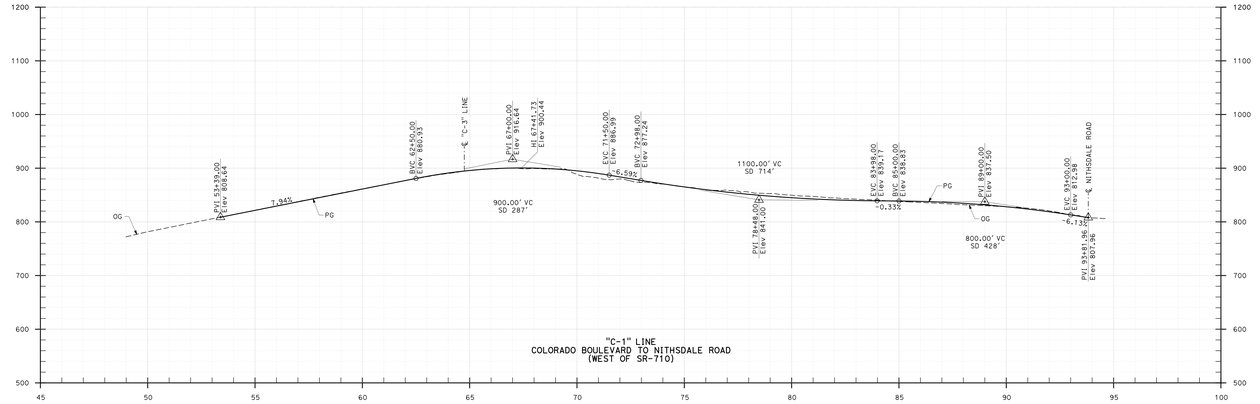
CH2MHILL
1999 HARRISON ST. SUITE 2000
OAKLAND, CA 94612

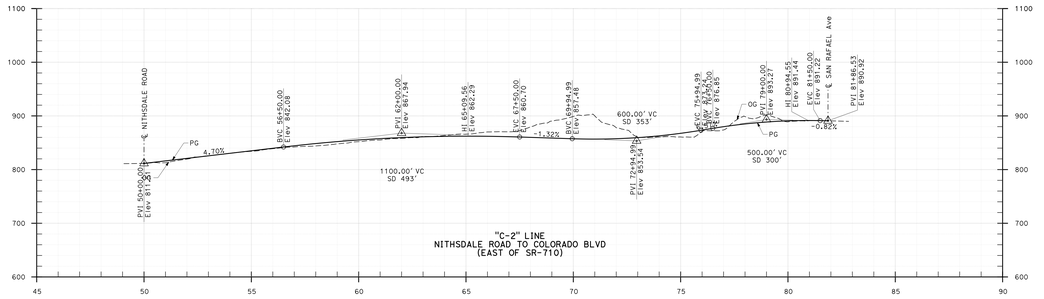
Metro
ONE GATEWAY PLAZA
LOS ANGELES, CA 90012-2952

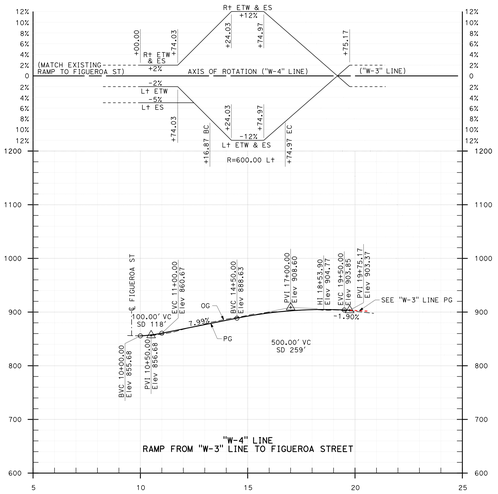
710 STUDY
CONCEPTUAL DESIGN

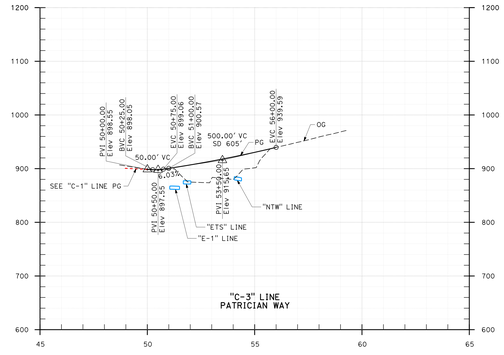
Sheet No.: 7 OF 8
Alternative: F-5
DATE: JANUARY 2013

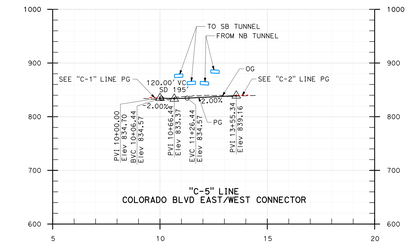












PROFILE / SUPERELEVATION DIAGRAM

SCALE: Horiz 1"=200'
Vert 1"=80'

SHEET - 8 FREEWAY ALTERNATIVE "F-5" CONCEPTUAL DESIGN

Caltrans
CH2MHILL
Metro
710 STUDY
CONCEPTUAL DESIGN
F-8
8 OF 8
MAY 2012