INSTRUCTIONS

1. Determine Pavement Type:
   a. Rigid (Portland Cement Concrete) => Use Rigid Design Pagea
   b. Flexible (Asphalt Concrete) => Use Flexible Design Pages.

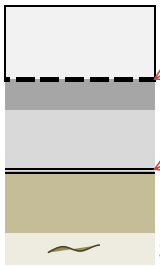
2. Input Required:
   a. Traffic Group: See Supplemental Information Page for additional information; to be assigned based on location
   b. Soil CBR: See Supplemental Information Page for additional information; to be assigned based on geotechnical study.

3. Determine required section:
   Using appropriate figures and input parameters, follow diagrams, left to right, for required pavement layer thicknesses.

SUPPLEMENTAL INFORMATION

TYPICAL SECTIONS

RIGID



P-501 Portland Cement Concrete, thickness as indicated, Rigid Design Charts

Sand Bond Breaker

P-304 Cement Treated Base Course, thickness as indicated, Rigid Design Charts

P-154 Aggregate Subbase course, thickness as indicated, Rigid Design Charts

OPTIONAL: Tensar 1200 BX Geogrid, if indicated, Rigid Design Charts

OPTIONAL: 18" Lime-Treated Subgrade, to strength indicated, Rigid Design Charts

Scarify Subgrade to provide required density at depth, FAA P-152

FLEXIBLE

P-401 Bituminous Surface Course, thickness as indicated, Flexible Design Charts

P-304 Cement Treated Base Course with microcracking compaction, thickness as indicated, Flexible Design Charts

P-154 Aggregate Subbase course, thickness as indicated, Flexible Design Charts

OPTIONAL: Tensar 1200 BX Geogrid, if indicated, Flexible Design Charts

OPTIONAL: 18" Lime-Treated Subgrade, to strength indicated, Rigid Design Charts

Scarify Subgrade to provide required density at depth, FAA P-152

TRAFFIC

Traffic to be used for design is based on location. See traffic map or select appropriate category:

Traffic Category naming convention:

a) "NS" => LAX: Northside of the Airport; "SS" => LAX: Southside of the Airport
"ONT" => Ontario Airport; "VNY" => Van Nuys Airport

b) "100" => Traffic similar to 100% of the runway traffic ; "50" => Traffic similar to 50% of runw
"50" => Traffic similar to 50% of runway traffic, etc.

See Table below for actual aircraft mix and forecast annual number of operations for each category

Abbreviations:	
S	Single
D	Dual
DT	Dual Tandem
DDT	Double Dual Tandem
TT	Triple Tandem
ST	Single Tandem
COM	Combination

SUPPLEMENTAL INFORMATION

LAX TRAFFIC

LAX - DETAILED TRAFFIC BREAKDOWN

Aircraft	Wt/Gear	Annual Operations - Southside				Annual Operations - Northside			
		SS 100	SS 50	SS 25	SS 10	NS 100	NS 50	NS 25	NS 10
B737	190D	14,796	7,398	3,699	1,480	76,665	38,333	19,166	7,667
A320	173D	12,470	6,235	3,117	1,247	29,762	14,881	7,441	2,976
A321	210D	1,219	609	305	122	3,027	1,514	757	303
MD-80	161D	4,654	2,327	1,164	465	6,629	3,315	1,657	663
B767	451DT	21,314	10,657	5,329	2,131	7,508	3,754	1,877	751
B757	271DT	23,735	11,867	5,934	2,373	6,947	3,473	1,737	695
A340	840COM	289	144	72	29	3,468	1,734	867	347
MD-11	633COM	5,595	2,797	1,399	559	532	266	133	53
B777	777TT	7,970	3,985	1,992	797	9,376	4,688	2,344	938
B747	978DDT	7,746	3,873	1,937	775	15,492	7,746	3,873	1,549
CRJ	81D	13,184	6,592	3,296	1,318	40,251	20,126	10,063	4,025
EMB-120	27D	7,096	3,548	1,774	710	7,096	3,548	1,774	710
A330	517DT	747	374	187	75	514	257	128	51
A380	1305A380	13	7	3	1	653	327	163	65
	TOTALS:	120,827	60,414	30,207	12,083	207,921	103,961	51,980	20,792

SUPPLEMENTAL INFORMATION

ONT TRAFFIC

ONT - DETAILED TRAFFIC BREAKDOWN

Aircraft	Wt/Gear	Annual Operations - Ontario			
		ONT 100	ONT 50	ONT 25	ONT 10
A310	364D	42	21	10	4
A319	168D	3,585	1,793	896	359
A320	173D	6,092	3,046	1,523	609
A321	200	998	499	250	100
A330	380DT	1,266	633	317	127
A380	A380	74	37	18	7
B727	170D	42	21	11	4
B727-200	210D	98	49	25	10
B737-300	140D	4,876	2,438	1,219	488
737-700	155D	31,085	15,543	7,771	3,109
B737-800	175D	5,096	2,548	1,274	510
B737-900	188D	1,681	841	420	168
B747-200	836DDT	13	7	3	1
B747-400	913DDT	355	178	89	36
B747-8F	978DDT	414	207	104	41
B757-200	256DT	3,892	1,946	973	389
B757-800	271DT	11	6	3	1
B767-300	413DT	3,216	1,608	804	322
B777F	769TT	996	498	249	100
Globemaster 3	580COM	1	1	1	1
DC8	358DT	1	1	1	1
DC9	122D	2	1	1	1
DC10	443DT	396	198	99	40
MD11	633COM	2,432	1,216	608	243
MD80	161D	1,233	617	308	123
MD90	169D	1	1	1	1
P3C Orion	143D	58	29	15	6
B737-200	111D	4,157	2,079	1,039	416
BD700 Gl. Expr.	95D	581	291	145	58
CRJ-700	75D	3,893	1,947	973	389
F-15 Eagle	68S	11	6	3	1
ERJ-145	50D	443	222	111	44
Falcon 50	40D	667	334	167	67
BAe HS 125	30D	1,677	839	419	168
G150	26D	98	49	25	10
Learjet 40	20D	1,533	767	383	153
Super King	12.5S	3,137	1,569	784	314
Dornier Alpha Jet	7.5S	881	441	220	88
	TOTALS:	2,801	1,401	700	280

SUPPLEMENTAL INFORMATION

VNY TRAFFIC

VNY - DETAILED TRAFFIC BREAKDOWN

Aircraft	Wt/Gear	Annual Operations - Van Nuys			
		VNY 100	VNY 50	VNY 25	VNY 10
Boeing 727-200	210D	123	62	31	12
Boeing Business Jet (BBJ)	171D	748	374	187	75
Global Express (BD700)	95D	6,986	3,493	1,747	699
Gulfstream V	89D	11,096	5,548	2,774	1,110
Gulfstream IV	72D	14,383	7,192	3,596	1,438
Gulfstream GIII	69D	2,055	1,027	514	205
Gulfstream GII	65D	2,055	1,027	514	205
Dassault Falcon 900	46D	2,055	1,027	514	205
CL-600 Challenger	42D	4,931	2,466	1,233	493
Challenger 300 (BD100)	38D	3,082	1,541	771	308
Cessna Citation X (750)	36D	14,383	7,192	3,596	1,438
Cessna Soverign CE (680)	30D	2,466	1,233	616	247
HS125-800	25D	15,205	7,603	3,801	1,521
Cessna Citation 550	15D	20,547	10,274	5,137	2,055
Raytheon 390 (Premier)	12.5S	2,877	1,438	719	288
Gates Learjet 60	10D	20,547	10,274	5,137	2,055
Eclipse EA500	10D	2,466	1,233	616	247
C130	155TS	24	12	6	2
urbo Prop 30K	30A	6,321	3,160	1,580	632
Piston 35K	35S	3,160	1,580	790	316
Piston 7K	7S	30,024	15,012	7,506	3,002
Piston 5K	5S	124,836	62,418	31,209	12,484
Turbo Prop 12.5K	12.5S	25,283	12,642	6,321	2,528
McDonnell-Douglas EA-3B	82S	273	137	68	27
	TOTALS:	290,370	145,185	72,593	29,037

SOIL CBR

1) Undertake project-level geotechnical investigation to determine nature of subgrade soils.
2) Provide soil borings and subgrade CBR testing at frequency recommended by FAA Advisory
3) Design CBR = average minus one standard deviation - round down to nearest whole value.

STANDARD PAVEMENT SECTIONS - LOS ANGELES WORLD AIRPORTS

LAX PAVEMENT REQUIREMENTS - RIGID

AREA	TRAFFIC	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS		SB/SG REQMTS	NOTES
LAX NORTHSIDE	NS 10	CBR ≤ 3	→	20'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→ 1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 4 - 6	→	20'' P-501	+	12'' P-304					
		CBR 7 - 9	→	19'' P-501	+	12'' P-304					
		CBR 10 - 13	→	18'' P-501	+	12'' P-304					
		CBR 14 - 18	→	17'' P-501	+	12'' P-304					
		CBR ≥ 19	→	16'' P-501	+	12'' P-304					
	NS 25	CBR ≤ 5	→	21'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→ 1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 6 - 8	→	20'' P-501	+	12'' P-304					
		CBR 9 - 12	→	19'' P-501	+	12'' P-304					
		CBR 13 - 16	→	18'' P-501	+	12'' P-304					
		CBR 17 - 24	→	17'' P-501	+	12'' P-304					
		CBR ≥ 25	→	16'' P-501	+	12'' P-304					
	NS 50	CBR ≤ 3	→	21'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→ 1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 4 - 7	→	21'' P-501	+	12'' P-304					
		CBR 8 - 10	→	20'' P-501	+	12'' P-304					
		CBR 11 - 14	→	19'' P-501	+	12'' P-304					
		CBR 15 - 20	→	18'' P-501	+	12'' P-304					
		CBR ≥ 21	→	17'' P-501	+	12'' P-304					
	NS 100	CBR ≤ 5	→	22'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→ 1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 6 - 9	→	21'' P-501	+	12'' P-304					
		CBR 10 - 12	→	20'' P-501	+	12'' P-304					
		CBR 13 - 17	→	19'' P-501	+	12'' P-304					
		CBR 18 - 24	→	18'' P-501	+	12'' P-304					
		CBR ≥ 25	→	17'' P-501	+	12'' P-304					

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS - LOS ANGELES WORLD AIRPORTS

LAX PAVEMENT REQUIREMENTS - RIGID

AREA	TRAFFIC	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS		SB/SG REQMTS		NOTES
LAX SOUTHSIDE	SS 10	CBR ≤ 5	→	20'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 6 - 8	→	19'' P-501	+	12'' P-304						
		CBR 9 - 12	→	18'' P-501	+	12'' P-304						
		CBR 13 - 15	→	17'' P-501	+	12'' P-304						
		CBR 16 - 21	→	16'' P-501	+	12'' P-304						
		CBR ≥ 22	→	15'' P-501	+	12'' P-304						
	SS 25	CBR ≤ 4	→	21'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 5 - 8	→	20'' P-501	+	12'' P-304						
		CBR 9 - 11	→	19'' P-501	+	12'' P-304						
		CBR 12 - 14	→	18'' P-501	+	12'' P-304						
		CBR 15 - 20	→	17'' P-501	+	12'' P-304						
		CBR ≥ 21	→	16'' P-501	+	12'' P-304						
	SS 50	CBR ≤ 3	→	22'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 4 - 6	→	21'' P-501	+	12'' P-304						
		CBR 7 - 9	→	20'' P-501	+	12'' P-304						
		CBR 10 - 15	→	19'' P-501	+	12'' P-304						
		CBR 16 - 17	→	18'' P-501	+	12'' P-304						
		CBR ≥ 18	→	17'' P-501	+	12'' P-304						
	SS 100	CBR ≤ 4	→	22'' P-501	+	12'' P-304	+	12" P-154 on Geogrid[1]	or	18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 5 - 9	→	21'' P-501	+	12'' P-304						
		CBR 10 - 11	→	20'' P-501	+	12'' P-304						
		CBR 12 - 15	→	19'' P-501	+	12'' P-304						
		CBR 16 - 21	→	18'' P-501	+	12'' P-304						
		CBR ≥ 22	→	17'' P-501	+	12'' P-304						

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

LAX PAVEMENT REQUIREMENTS - FLEXIBLE

AREA	TRAFFIC	SUBGRADE CBR	SURFACE REQMTS	BASE REQMTS	BASE/SB REQMTS		SB/SG REQMTS	NOTES
LAX NORTHSIDE	NS 10	CBR ≤ 4	5" P-401	12" P-304	54" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 6 (E=9,000 psi)
		CBR 5 - 7	5" P-401	12" P-304	48" P-154	or	36" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 6 (E=9,000 psi)
		CBR 8 - 10	5" P-401	12" P-304	24" P-154			
		CBR 11 - 15	5" P-401	6" P-304	24" P-154			
		CBR ≥ 16	5" P-401	6" P-304	12" P-154			
	NS 25	CBR ≤ 4	5" P-401	12" P-304	60" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 5 - 7	5" P-401	12" P-304	48" P-154	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 8 - 11	5" P-401	12" P-304	24" P-154			
		CBR 12 -16	5" P-401	6" P-304	24" P-154			
		CBR ≥ 17	5" P-401	6" P-304	12" P-154			
	NS 50	CBR ≤ 5	5" P-401	12" P-304	66" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 6 - 9	5" P-401	12" P-304	48" P-154	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 10 - 12	5" P-401	12" P-304	18" P-154			
		CBR 13 - 18	5" P-401	6" P-304	24" P-154			
		CBR ≥ 19	5" P-401	6" P-304	12" P-154			
	NS 100	CBR ≤ 5	5" P-401	12" P-304	66" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[4] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 4) Lime: % as needed to reach CBR 8 (E=12,000 psi)
		CBR 6 - 9	5" P-401	12" P-304	48" P-154	or	36" P-154 on 18" P-153 Lime Stab[4] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 4) Lime: % as needed to reach CBR 8 (E=12,000 psi)
		CBR 10 - 13	5" P-401	12" P-304	18" P-154			
		CBR 14 - 19	5" P-401	6" P-304	18" P-154			
		CBR ≥ 20	5" P-401	6" P-304	12" P-154			

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

LAX PAVEMENT REQUIREMENTS - FLEXIBLE

AREA	TRAFFIC	SUBGRADE CBR	SURFACE REQMTS	BASE REQMTS	BASE/SB REQMTS		SB/SG REQMTS	NOTES
LAX SOUTHSIDE	SS 10	CBR ≤ 5	5" P-401	12" P-304	54" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 6 (E=9,000 psi)
		CBR 6 - 7	5" P-401	12" P-304	36" P-154			
		CBR 8 - 10	5" P-401	12" P-304	18" P-154			
		CBR 11 - 14	5" P-401	6" P-304	24" P-154			
		CBR ≥ 15	5" P-401	6" P-304	12" P-154			
	SS 25	CBR ≤ 5	5" P-401	12" P-304	60" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 6 - 8	5" P-401	12" P-304	42" P-154	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 9 - 11	5" P-401	12" P-304	18" P-154			
		CBR 12 - 15	5" P-401	6" P-304	24" P-154			
		CBR > 16	5" P-401	6" P-304	12" P-154			
	SS 50	CBR ≤ 5	5" P-401	12" P-304	60" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 6 - 8	5" P-401	12" P-304	48" P-154	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 7 (E=10,500 psi)
		CBR 9 - 12	5" P-401	12" P-304	24" P-154			
		CBR 13 - 16	5" P-401	6" P-304	18" P-154			
		CBR > 17	5" P-401	6" P-304	12" P-154			
	SS 100	CBR ≤ 5	5" P-401	12" P-304	66" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[4] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 4) Lime: % as needed to reach CBR 8 (E=12,000 psi)
		CBR 6 - 8	5" P-401	12" P-304	48" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[4] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 4) Lime: % as needed to reach CBR 8 (E=12,000 psi)
		CBR 9 - 13	5" P-401	12" P-304	24" P-154			
		CBR 14 - 18	5" P-401	6" P-304	18" P-154			
		CBR > 19	5" P-401	6" P-304	12" P-154			

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

LAX PAVEMENT REQUIREMENTS - SHOULDER

AREA	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS		SB/SG REQMTS		NOTES
LAX SHOULDER	CBR ≤ 5	→	3'' P-401	+	6'' P-209	+	24" P-154 on Geogrid[1]	or	14" P-154 on 18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 6 (E=9,000 psi)
	CBR 6 - 7	→	3'' P-401	+	6'' P-209	+	16'' P-154				
	CBR 8 - 9	→	3'' P-401	+	6'' P-209	+	12'' P-154				
	CBR 10 - 11	→	3'' P-401	+	6'' P-209	+	10'' P-154				
	CBR 12 - 14	→	3'' P-401	+	6'' P-209	+	8'' P-154				
	CBR 15 -18	→	3'' P-401	+	6'' P-209	+	6'' P-154				
	CBR ≥ 19	→	3'' P-401	+	6'' P-209	+	4'' P-154				

STANDARD PAVEMENT SECTIONS - LOS ANGELES WORLD AIRPORTS

ONT PAVEMENT REQUIREMENTS - RIGID

AREA	TRAFFIC	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS	SB/SG REQMTS	NOTES
ONTARIO RIGID	ONT 10	CBR ≤ 5	→	17'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 8	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 9 - 13	→	15'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 14 - 20	→	14'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 21	→	13'' P-501	+	12'' P-304	+	12'' P-154		
	ONT 25	CBR ≤ 5	→	18'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 8	→	17'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 9 - 11	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 12 - 18	→	15'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 19	→	14'' P-501	+	12'' P-304	+	12'' P-154		
	ONT 50	CBR ≤ 3	→	19'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 4 - 6	→	18'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 7 - 9	→	17'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 10 - 14	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 15	→	15'' P-501	+	12'' P-304	+	12'' P-154		
	ONT 100	CBR ≤ 5	→	19'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 8	→	18'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 9 - 12	→	17'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 13 - 18	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 19	→	15'' P-501	+	12'' P-304	+	12'' P-154		

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

ONT PAVEMENT REQUIREMENTS - FLEXIBLE

AREA	TRAFFIC	SUBGRADE CBR	SURFACE REQMTS	BASE REQMTS	BASE/SB REQMTS		SB/SG REQMTS	NOTES
ONTARIO FLEXIBLE	ONT 10	CBR ≤ 5	5" P-401	12" P-304	36" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 5 (E=7,500 psi)
		CBR 6 - 8	5" P-401	12" P-304	24" P-154			
		CBR 9 - 11	5" P-401	6" P-304	24" P-154			
		CBR 12 -21	5" P-401	6" P-304	12" P-154			
		CBR ≥ 22	5" P-401	4" P-304	12" P-154			
	ONT 25	CBR ≤ 5	5" P-401	12" P-304	42" P-154 on Geogrid[1]	or	42" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 5 (E=7,500 psi)
		CBR 6 - 9	5" P-401	12" P-304	30" P-154			
		CBR 10 - 12	5" P-401	6" P-304	18" P-154			
		CBR 13 -25	5" P-401	6" P-304	12" P-154			
		CBR ≥ 26	5" P-401	4" P-304	12" P-154			
	ONT 50	CBR ≤ 5	5" P-401	12" P-304	42" P-154 on Geogrid[1]	or	42" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 5 (E=7,500 psi)
		CBR 6 - 9	5" P-401	12" P-304	36" P-154			
		CBR 10 - 14	5" P-401	6" P-304	24" P-154			
		CBR 15 - 20	5" P-401	6" P-304	12" P-154			
		CBR ≥ 21	5" P-401	4" P-304	12" P-154			
	ONT 100	CBR ≤ 6	5" P-401	12" P-304	36" P-154 on Geogrid[1]	or	36" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 6 (E=9,000 psi)
		CBR 7 - 10	5" P-401	12" P-304	30" P-154			
		CBR 11 - 14	5" P-401	6" P-304	24" P-154			
		CBR 15 - 25	5" P-401	6" P-304	12" P-154			
		CBR ≥ 26	5" P-401	4" P-304	12" P-154			

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

ONT PAVEMENT REQUIREMENTS - SHOULDER

AREA	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS		SB/SG REQMTS		NOTES
ONT SHOULDER	CBR ≤ 5	→	3'' P-401	+	6'' P-209	+	20" P-154 on Geogrid[1]	or	15" P-154 on 18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 5 (E=7,500 psi)
	CBR 6 - 7	→	3'' P-401	+	6'' P-209	+	15'' P-154				
	CBR 8 - 9	→	3'' P-401	+	6'' P-209	+	11'' P-154				
	CBR 10 - 11	→	3'' P-401	+	6'' P-209	+	9'' P-154				
	CBR 12 - 14	→	3'' P-401	+	6'' P-209	+	7'' P-154				
	CBR 15 -16	→	3'' P-401	+	6'' P-209	+	5'' P-154				
	CBR ≥ 17	→	3'' P-401	+	6'' P-209	+	4'' P-154				

STANDARD PAVEMENT SECTIONS - LOS ANGELES WORLD AIRPORTS

VNY PAVEMENT REQUIREMENTS - RIGID

AREA	TRAFFIC	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS	SB/SG REQMTS	NOTES
VAN NUYS RIGID	VNY 10	CBR ≤ 5	→	14'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 9	→	13'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 10 - 13	→	12'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 14 - 20	→	11'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 21	→	10'' P-501	+	12'' P-304	+	12'' P-154		
	VNY 25	CBR ≤ 5	→	15'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 9	→	14'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 10 - 13	→	13'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 14 - 21	→	12'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 22	→	11'' P-501	+	12'' P-304	+	12'' P-154		
	VNY 50	CBR ≤ 3	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 4 - 7	→	15'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 8 - 12	→	14'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 13 - 18	→	13'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 19	→	12'' P-501	+	12'' P-304	+	12'' P-154		
	VNY 100	CBR ≤ 5	→	16'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 6 - 10	→	15'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 11 - 15	→	14'' P-501	+	12'' P-304	+	12'' P-154		
		CBR 16 - 26	→	13'' P-501	+	12'' P-304	+	12'' P-154		
		CBR ≥ 27	→	12'' P-501	+	12'' P-304	+	12'' P-154		

NOTE: See Supplemental Information Page

STANDARD PAVEMENT SECTIONS LOS ANGELES WORLD AIRPORTS

VNY PAVEMENT REQUIREMENTS - FLEXIBLE

AREA	TRAFFIC	SUBGRADE CBR	SURFACE REQMTS	BASE REQMTS	BASE/SB REQMTS		SB/SG REQMTS	NOTES
VAN NUYS FLEXIBLE	VNY 10	CBR ≤ 4	5" P-401	6" P-304	24" P-154 on Geogrid[1]	or	24" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 5 - 8	5" P-401	6" P-304	18" P-154			
		CBR 9 - 12	5" P-401	4" P-304	12" P-154			
		CBR ≥ 13	5" P-401	4" P-304	6" P-154			
	VNY 25	CBR ≤ 4	5" P-401	6" P-304	30" P-154 on Geogrid[1]	or	30" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 5 - 7	5" P-401	6" P-304	24" P-154			
		CBR 8 - 10	5" P-401	6" P-304	12" P-154			
		CBR 11 -14	5" P-401	4" P-304	12" P-154			
		CBR ≥ 15	5" P-401	4" P-304	6" P-154			
	VNY 50	CBR ≤ 4	5" P-401	6" P-304	30" P-154 on Geogrid[1]	or	30" P-154 on 18" P-153 Lime Stab[2] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 4 (E=6,000 psi)
		CBR 5 - 8	5" P-401	6" P-304	24" P-154			
		CBR 9 - 12	5" P-401	6" P-304	12" P-154			
		CBR 13 - 15	5" P-401	4" P-304	12" P-154			
		CBR ≥ 16	5" P-401	4" P-304	6" P-154			
	VNY 100	CBR ≤ 5	5" P-401	6" P-304	30" P-154 on Geogrid[1]	or	30" P-154 on 18" P-153 Lime Stab[3] SG	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 3) Lime: % as needed to reach CBR 5 (E=7,500 psi)
		CBR 6 - 8	5" P-401	6" P-304	24" P-154			
		CBR 9 - 13	5" P-401	6" P-304	12" P-154			
		CBR 14 - 18	5" P-401	4" P-304	12" P-154			
		CBR ≥ 19	5" P-401	4" P-304	6" P-154			

VNY PAVEMENT REQUIREMENTS - SHOULDER

AREA	SUBGRADE CBR		SURFACE REQMTS		BASE REQMTS		BASE/SB REQMTS		SB/SG REQMTS		NOTES
VNY SHOULDER	CBR ≤ 5	→	3'' P-401	+	8'' P-209	+	14" P-154 on Geogrid[1]	or	14" P-154 on 18" P-153 Lime Stab[2] SG	→	1) Geogrid: Tensar BX 1200 Geogrid or equivalent 2) Lime: % as needed to reach CBR 5 (E=7,500 psi)
	CBR 6	→	3'' P-401	+	8'' P-209	+	12'' P-154				
	CBR 7	→	3'' P-401	+	8'' P-209	+	10'' P-154				
	CBR 8	→	3'' P-401	+	8'' P-209	+	8'' P-154				
	CBR ≥ 9	→	3'' P-401	+	8'' P-209	+	6'' P-154				