File
SPS-2
LA

Brent Rauhut Engineering Inc.

July 9, 1993

Mr. Steve Cumbaa
Special Studies Research Engineer
Louisiana Transportation Research Center
4101 Gourrier Avenue
Baton Rouge, Louisiana 70808

Subject: Louisiana SPS-2 (220200) Revised Materials Sampling and Testing Plan.

Dear Steve,

Enclosed is a revised plan for field sampling and materials testing activities for the Louisiana SPS-2 project, located on US-171 in Desoto Parish, Louisiana. This plan details the field testing, materials sampling and laboratory materials testing to occur as part of the SPS-2 project construction. Please review this document thoroughly to ensure that it meets with the requirements of the planned construction, and is acceptable to the Louisiana Department of Transportation and Development.

If you have any questions or comments regarding the information provided in the materials sampling and testing plan, do not hesitate to call me. This revised plan has been approved by the FHWA/LTPP, for use on this project.

Sincerely,

Mark P. Gardner, P.E.
Project Engineer, SRCO

MPG:dmj

Enclosure: As stated.

cc.w/Enc: Monte Symons, FHWA/LTPP-DC
Homer Wheeler, RE-SRCO
Shiraz Tayabji, PCS/Law

8240 Mopac, Suite 220 • Austin, Texas 78759 • (512) 346-0870 • FAX (512) 346-8750

MATERIALS SAMPLING
AND
FIELD TESTING PLAN

LOUISIANA SPS-2 PROJECT 220200
US-171 NBL, DESOTO PARISH, LOUISIANA

PREPARED BY:

BRENT RAUHUT ENGINEERING INC.
SHRP SOUTHERN REGION COORDINATION OFFICE
8240 MOPAC, SUITE 220
AUSTIN, TEXAS 78759

REVISED
JULY 1993

LOUISIANA SPS-2 PROJECT 220200

REVISED MATERIALS SAMPLING AND FIELD TESTING PLAN

TABLE OF CONTENTS

Page

Introduction 1

Test Section Layout 3

Materials Sampling Requirements 8

Field and Laboratory Materials Testing Plan 9

Materials Sampling for the Materials Reference Library 13

Test Section/Sampling Area Layout 14

Sampling and Testing Locations for Subgrade 15

Sampling and Testing Locations for DGAB 16

Sampling and Testing Locations for PCC Surface 17

Sampling and Testing Plan By Test Section 18

Subgrade Materials Field Sampling/Testing 30

DGAB Materials Field Sampling/Testing 33

PATB Materials Field Sampling/Testing 35

PCC Surface Materials Field Sampling/Testing 36

MATERIALS SAMPLING AND TESTING PLAN
LOUISIANA SPS-2, US-171 NBL
DESOTO PARISH, LOUISIANA

INTRODUCTION

As part of their participation in the SHRP/FHWA long term pavement performance studies, the State of Louisiana has elected to construct an SPS-2 project to study the structural factors for rigid pavements. This project will consist of multiple test sections with similar details and materials along the stretch of U.S. Highway 171, in the northbound lane, in Desoto Parish, Louisiana. It is the intent of this document to provide a plan for the materials sampling and field testing, and a listing of the laboratory materials testing that will occur as a part of this project.

This document has been prepared in accordance with the guidelines provided by the Strategic Highway Research Program in operational memorandum #SHRP-LTPP-OM-022, entitled "Specific Pavement Studies Materials Sampling and Testing Requirements for Experiment SPS-2, Strategic Study of Structural Factors for Rigid Pavements, April 1991". Recognizing the apparent variability in the construction of roadway projects, the goal of this effort is to develop a sampling and testing plan for the project materials that will be consistent with other projects in this experiment, and therefore make the information obtained suitable for analysis.

The objective of the SPS-2 study is to more precisely determine the relative influence of strategic factors on the performance of rigid pavements. The factors addressed in this study include drainage, lane width, base type and thickness, and portland cement concrete (PCC) surface thickness. Louisiana's involvement in the study will provide critical information in the wet, no freeze environmental zone, on a fine-grained subgrade soil. The data produced by this experiment will be used to evaluate existing design methods and performance equations. The interaction of the factors previously discussed will be determined in combination with the effect of environmental region and soil type. The effects of these factors will be studied under realistic performance conditions with significant materials and construction control. Herein lies the need for a sampling testing plan, provided in the following pages.

This sampling and testing plan has been developed by Brent Rauhut Engineering, Inc. the Southern Region Coordination Office under contract to the Federal Highway Administration. If, during the construction activities, any questions arise regarding the sampling and/or testing to be conducted, one should first coordinate these questions with the Louisiana Department of Transportation and Development, who may refer them to the Southern Region Coordination Office.

This document contains numerous tables and figures which summarize the sampling and testing activities to occur at the Louisiana SPS-2 project. In general, the tests and test locations are identified by test section number, beginning with 220213, and ending with 220224. The numbers are not in consecutive order along the roadway. Figure 1 shows a typical test section layout. As may be seen, while the actual monitoring length of the test

section is 500′, the length of uniform construction should actually exceed 600′, to allow for sampling areas 50′ in length both before and after the test section. Transition areas of varying length are then necessary to make any necessary changes in construction to accommodate the experiment criteria for the next test section. Figure 2 and Tables 1 and 2 pertain to the layout of the test sections.

Tables 3 and 4 outline the scope of field testing and laboratory materials testing activities. Figures 3-18 are provided to establish the sampling locations for each test section.

Tables 6, 7, 8, and 9 itemize the field sampling and testing activities to occur on the subgrade, dense graded aggregate base (DGAB), permeable asphalt treated base (PATB), and PCC surface materials, respectively.

FIGURE 1. TYPICAL SECTION LAYOUT

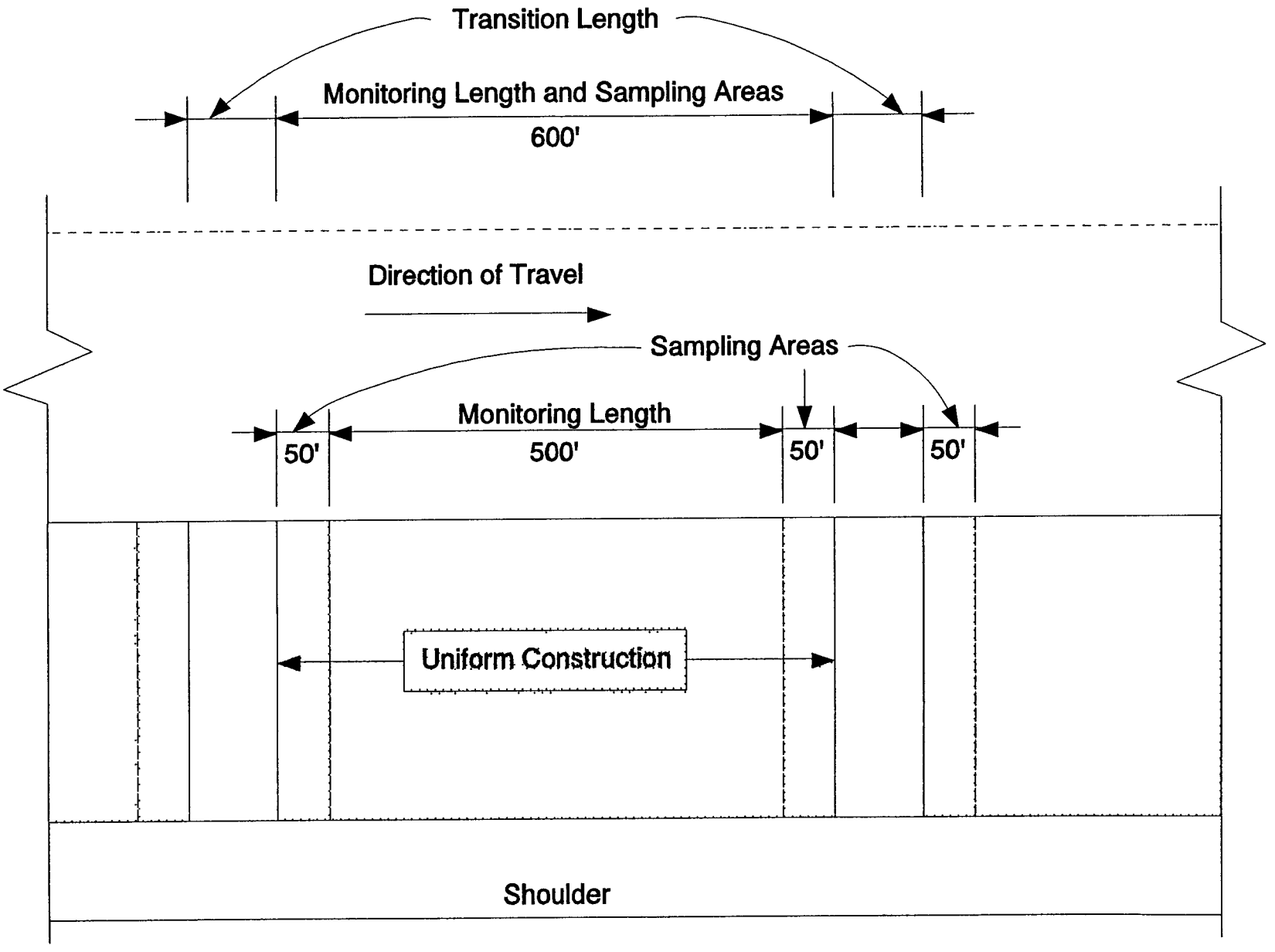


TABLE 1. PROPOSED TEST SECTION LAYOUT
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

Section (Cell ID)	Cross Section	Lane Width	Begin Station	End Station
220217 (O17)	8″ PCC (550 psi)	14′	177 + 95	183 + 95
	6″ LCB			
220213 (O13)	8″ PCC (550 psi)	14′	185 + 75	191 + 75
	6″ DGAB			
220221 (O21)	8″ PCC (550 psi)	14′	194 + 25	200 + 25
	4″ PATB			
	4″ DGAB			
220222 (O22)	8″ PCC (900 psi)	12′	205 + 25	211 + 25
	4″ ATB			
	4″ DGAB			
220214 (O14)	8″ PCC (900 psi)	12′	221 + 73	227 + 73
	6″ DGAB			
220218 (O18)	8″ PCC (900 psi)	12′	230 + 23	236 + 23
	6″ LCB			
220219 (O19)	11″ PCC (550 psi)	12′	242 + 45	248 + 45
	6″ LCB			
220215 (O15)	11″ PCC (550 psi)	12′	251 + 70	257 + 70
	6″ DGAB			

TABLE 1. PROPOSED TEST SECTION LAYOUT
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

Section (Cell ID)	Cross Section	Lane Width	Begin Station	End Station
220223 (O23)	11″ PCC (550 psi)	12′	260 + 95	266 + 95
	4″ PATB			
	4″ DGAB			
220224 (O24)	11″ PCC (900 psi)	14′	268 + 95	274 + 95
	4″ PATB			
	4″ DGAB			
220216 (O16)	11″ PCC (900 psi)	14′	282 + 63	288 + 63
	6″ DGAB			
220220 (O20)	11″ PCC (900 psi)	14′	297 + 00	303 + 00
	6″ LCB			

TABLE 2. ORDERING OF SECTIONS ALONG CENTER LINE STATIONING LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

Begin Sta.	End Sta.	Section ID	Lane Width (Ft.)	Thickness (In.)			
				PCC Surface	LCB	PATB	DGAB
177+95	183+95	220217	14	8 (550 psi)	6	0	0
183+95	185+75	Transition	14	8 (550 psi)	6-0	0	0-6
185+75	191+75	220213	14	8 (550 psi)	0	0	6
191+75	194+25	Transition	14	8 (550 psi)	0	0-4	6-4
194+25	200+25	220221	14	8 (550 psi)	0	4	4
200+25	205+25	Transition	14-12	8 (550-900 psi)	0	4	4
205+25	211+25	220222	12	8 (900 psi)	0	4	4
211+25	221+73	Transition	12	8 (900 psi)	0	4-0	4-6
221+73	227+73	220214	12	8 (900 psi)	0	0	6
227+73	230+23	Transition	12	8 (900 psi)	0-6	0	6-0
230+23	236+23	220218	12	8 (900 psi)	6	0	0
236+23	242+45	Transition	12	8-11(900-550 psi)	6	0	0
242+45	248+45	220219	12	11 (550 psi)	6	0	0
248+45	251+70	Transition	12	11 (550 psi)	6-0	0	0-6
251+70	257+70	220215	12	11 (550 psi)	0	0	6
257+70	260+95	Transition	12	11 (550 psi)	0	0-4	6-4
260+95	266+95	220223	12	11 (550 psi)	0	4	4
266+95	268+95	Transition	12-14	11 (550-900 psi)	0	4	4
268+95	274+95	220224	14	11 (900 psi)	0	4	4
274+95	282+63	Transition	14	11 (900 psi)	0	4-0	4-6
282+63	288+63	220216	14	11 (900 psi)	0	0	6
288+63	297+00	Transition	14	11 (900 psi)	0-6	0	6-0
297+00	303+00	220220	14	11 (900 psi)	6	0	0

Figure 2. LAYOUT OF TEST SECTIONS
LOUISIANA SPS-2, US-171 NBL
Desoto Parish, Louisiana

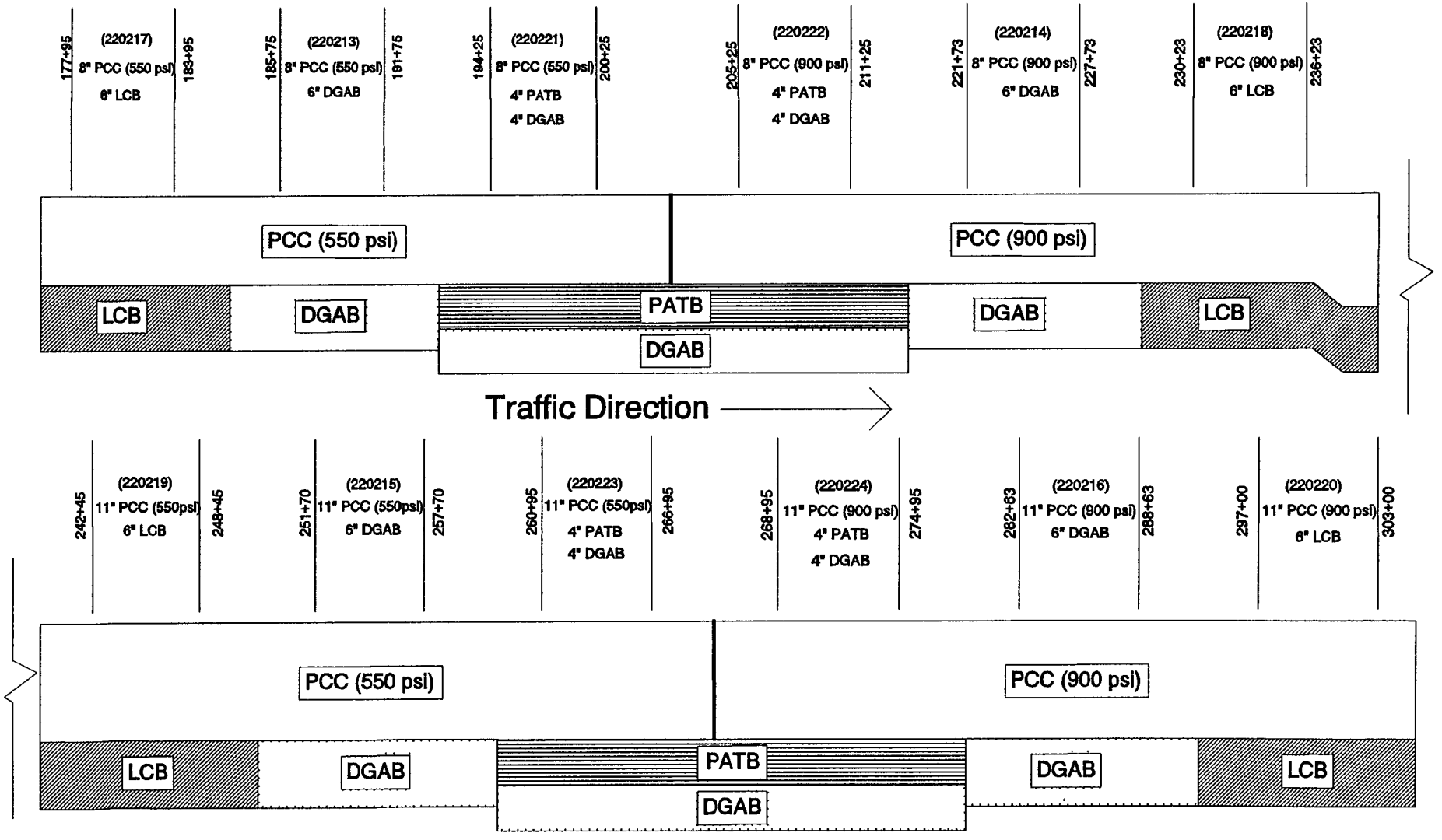


TABLE 3. MATERIALS SAMPLING REQUIREMENTS LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

Material And Sample Description	Number Of Samples	Sample Location
Portland Cement Concrete		
Coring - 4″ Diam. Cores	98	C1-C98
Bulk Sampling (Molded Into Test Specimens)	6	FC1-FC6 - From Site
Unbound Base/Subbase Layers (Per Layer)		
Bulk Sampling	3	B7-B9
Moisture Content Samples	3	B7-B9
Lean Concrete Base		
Coring - 4″ Diam. Cores	18	C1-C6,C42-C44, C50-C55,C91-C93
Bulk Sampling (Molded Into Test Specimens)	6	BP-01, BP-02 - From Site
Permeable Asphalt Treated Base		
Bulk Sampling (100 Lbs. Per Sample, Uncompacted)	3	BT-01, BT-02, BT-03 - From Plant
Subgrade		
Thin-Walled Tube Sampling	36	A1-A18
Splitspoon Sampling (To Replace Any Thin-Walled Tube Samples That Cannot Be Obtained)		A1-A18
Bulk Sampling (400 Lbs. Each Sample)	6	B1-B6
Moisture Content Samples	6	B1-B6
Shoulder Auger Probes (Depth To Rigid Layer)	3	S1-S3

TABLE 4. FIELD AND LABORATORY MATERIALS TESTING PLAN
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

Material And Test Description	SHRP Des.	SHRP Protocol	Nº. Of Tests	Sample Location
Subgrade				
Sieve Analysis	SS01	P51	6	B1-B6
Hydrometer to 0.01mm	SS02	P42	6	B1-B6
Atterberg Limits	SS03	P43	6	B1-B6
Classification and Type of Subgrade	SS04	P52	24	A1-A18, B1-B6 --- Note 1
Moisture-Density Relations	SS05	P55	6	B1-B6
* Resilient Modulus	SS07	P46	6	A2, A5, A8, A11, A14, A17
* Unit Weight	SS08	P56	18	A1-A18
Natural Moisture Content	SS09	P49	6	B1-B6
* Unconfined Comp. Strength	SS10	P54	6	A1, A4, A7, A10, A13, A16
* Permeability	SS11	P57	3	B1, B4, B6
In-Place Density		SHRP-LTPP Method	42	B1-B6, T1-T36
Depth to Rigid Layer		SHRP-LTPP Method	3	S1-S3
Plate Bearing Test	SS06	P58	2	T8P, T29P
Unbound Granular Base				
Particle Size Analysis	UG01	P41	3	B7, B8, B9
Sieve Analysis (Washed)	UG02	P41	3	B7, B8, B9
Atterberg Limits	UG04	P43	3	B7, B8, B9
Moisture-Density Relations	UG05	P44	3	B7, B8, B9
Resilient Modulus	UG07	P46	3	B7, B8, B9
Classification	UG08	P47	3	B7, B8, B9
Permeability	UG09	P48	3	B7, B8, B9
Natural Moisture Content	UG10	P49	3	B7, B8, B9
In-Place Density		SHRP-LTPP Method	24	T37-T60
Plate Bearing Test	SS06	P58	4	T41, T44, T53, T56

* NOTE: If thin-walled tube sampling cannot be performed, then Unit Weight and Unconfined Compression Strength tests are not required. Permeability and Resilient Modulus testing should be performed on recompacted specimens from bulk samples.

TABLE 4. FIELD AND LABORATORY MATERIALS TESTING PLAN
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

Material And Test Description	SHRP Des.	SHRP Protocol	Nº. Of Tests	Sample Location
Permeable Asphalt Treated Base				
Asphalt Content (Extraction)	AC04	P04	3	BT01, BT02, BT03
Extracted Aggregate				
Gradation of Aggregate	AG04	P14	3	BT01, BT02, BT03
Lean Concrete Base - As Delivered				
Compressive Strength	PC01	P61		
7-day			6	BP1, BP2 --- Note 2
28-day			6	BP1, BP2 --- Note 2
1-year			6	BP1, BP2 --- Note 2
Air Content	ASTM	SHRP-LTPP Method	6	BP1, BP2
Slump	ASTM	SHRP-LTPP Method	6	BP1, BP2
Temperature	ASTM	SHRP-LTPP Method	6	BP1, BP2

TABLE 4. FIELD AND LABORATORY MATERIALS TESTING PLAN
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

Material And Test Description	SHRP Des.	SHRP Protocol	Nº. Of Tests	Sample Location	
Portland Cement Concrete - As Delivered				550 psi Flexural Strength Concrete	900 psi Flexural Strength Concrete
Compressive Strength	PC01	P61			
14-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
28-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
1-year			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Splitting Tensile Strength	PC02	P62			
14-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
28-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
1-year			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Flexural Strength	PC09	P69			
14-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
28-day			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
1-year			6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Air Content	ASTM	SHRP-LTPP Method	6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Slump	ASTM	SHRP-LTPP Method	6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Temperature	ASTM	SHRP-LTPP Method	6	FC1 FC2 FC3	FC4 FC5 FC6--Note 3
Lean Concrete Base - As Placed					
Compressive Strength	PC01	P61			
14-day			6	C1, C4, C42, C50, C53, C91	
28-day			6	C2, C5, C43, C51, C54, C92	
1-year			6	C3, C6, C44, C52, C55, C93	

TABLE 4. FIELD AND LABORATORY MATERIALS TESTING PLAN
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

Material And Test Description	SHRP Des.	SHRP Protocol	Nº. Of Tests	Sample Location
Portland Cement Concrete - As Placed				
Compressive Strength	PC01	P61		
14-day			12	C1,C10,C18,C26,C34,C42,C51,C59,C67,C75,C83,C91
28-day			12	C2,C11,C19,C27,C35,C43,C52,C60,C68,C76,C84,C92
1-year			12	C4,C13,C20,C28,C36,C44,C53,C61,C69,C77,C85,C93
Splitting Tensile Strength	PC02	P62		
14-day			12	C5,C14,C21,C29,C37,C46,C54,C62,C70,C78,C86,C94
28-day			12	C6,C15,C22,C30,C38,C47,C55,C63,C71,C79,C87,C95
1-year			12	C8,C16,C24,C32,C40,C49,C57,C65,C73,C81,C89,C97
PCC Unit Weight	PC05	P65	36	Cores for Compressive Strength Testing
Static Modulus of Elasticity	PC04	P64		
28-day			12	C3,C7,C12,C23,C31,C45,C48,C56,C64,C72,C80,C88
1-year			12	C9,C17,C25,C33,C41,C50,C58,C66,C74,C82,C90,C98
Air Content	PC08	P68		
28-day			2	C10, C88
PCC Coefficient of Thermal Expansion	PC03	P63	2	C39, C96

NOTE 1 - Visual-manual classification ONLY.
NOTE 2 - The six specimens consist of three specimens molded from each of the two fresh concrete samples (BP1, BP2).
NOTE 3 - The six specimens consist of one specimen molded from each of the six fresh concrete samples (FC1-FC6).

TABLE 5. MATERIALS SAMPLING FOR THE MATERIALS REFERENCE LIBRARY LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

Material And Sample Description	Number Of Samples	Sample Location
Portland Cement - (5-Gallon Container Each Type Used - Sealed In Heavy Plastic Bag In Can)	1	Plant
Fly Ash (If Used) - (5-Gallon Container - Sealed In Heavy Plastic Bag in Can)	1	Plant
Additives - (1-Quart Jar Each Type Used)	1	Plant
Fine Aggregate - (5-Gallon Containers)	4	Plant
Coarse Aggregate - (5-Gallon Containers)	4	Plant

NOTE: If different materials are used for different mixes, then provide the designated amount for each mix. Materials should be obtained for the 550 psi and 900 psi mixes and LCB.

FIGURE 3. SITE LAYOUT WITH SAMPLING AREAS
LOUISIANA SPS-2, US-171 NBL
DESOTO PARISH, LOUISIANA

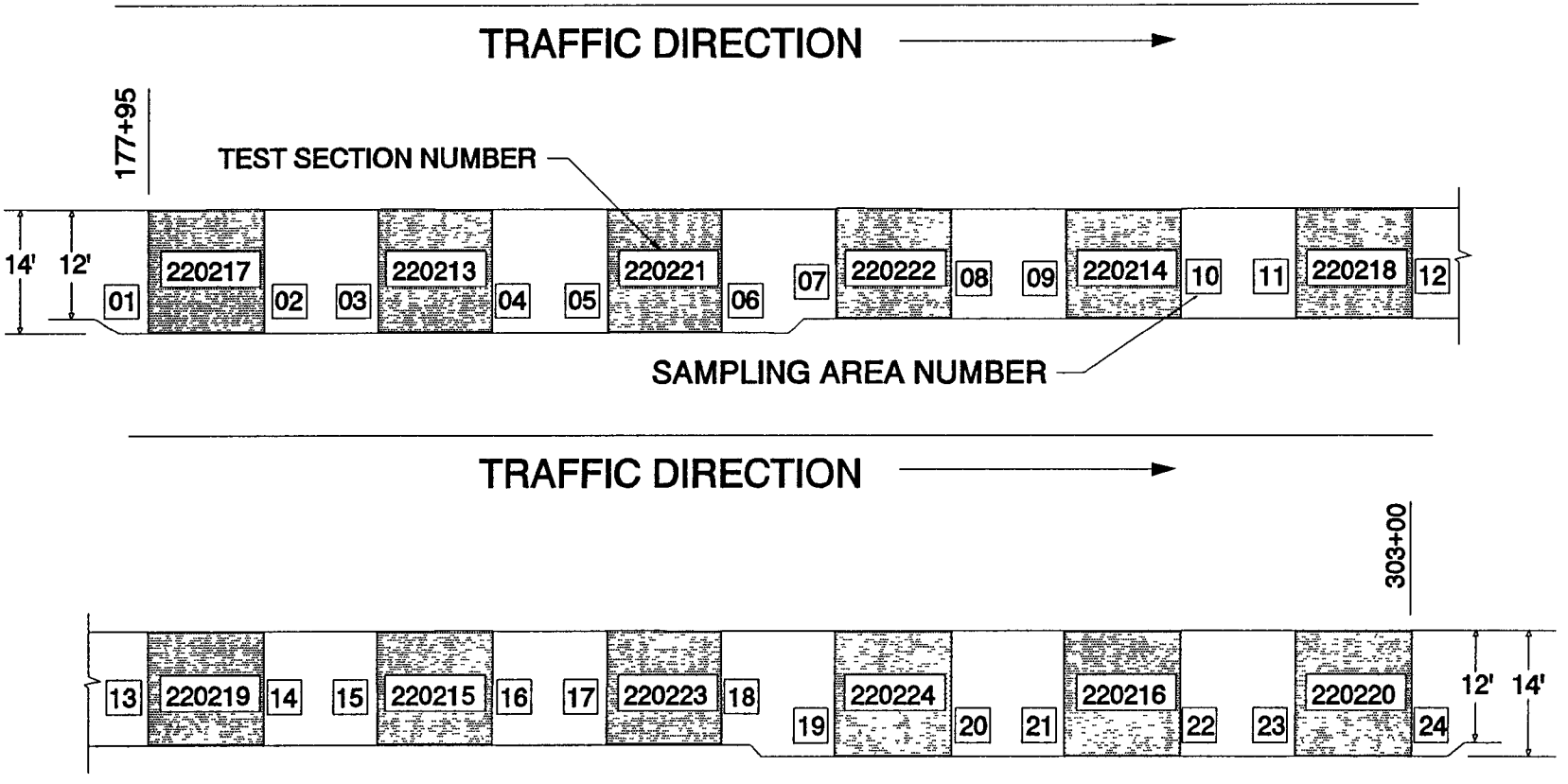
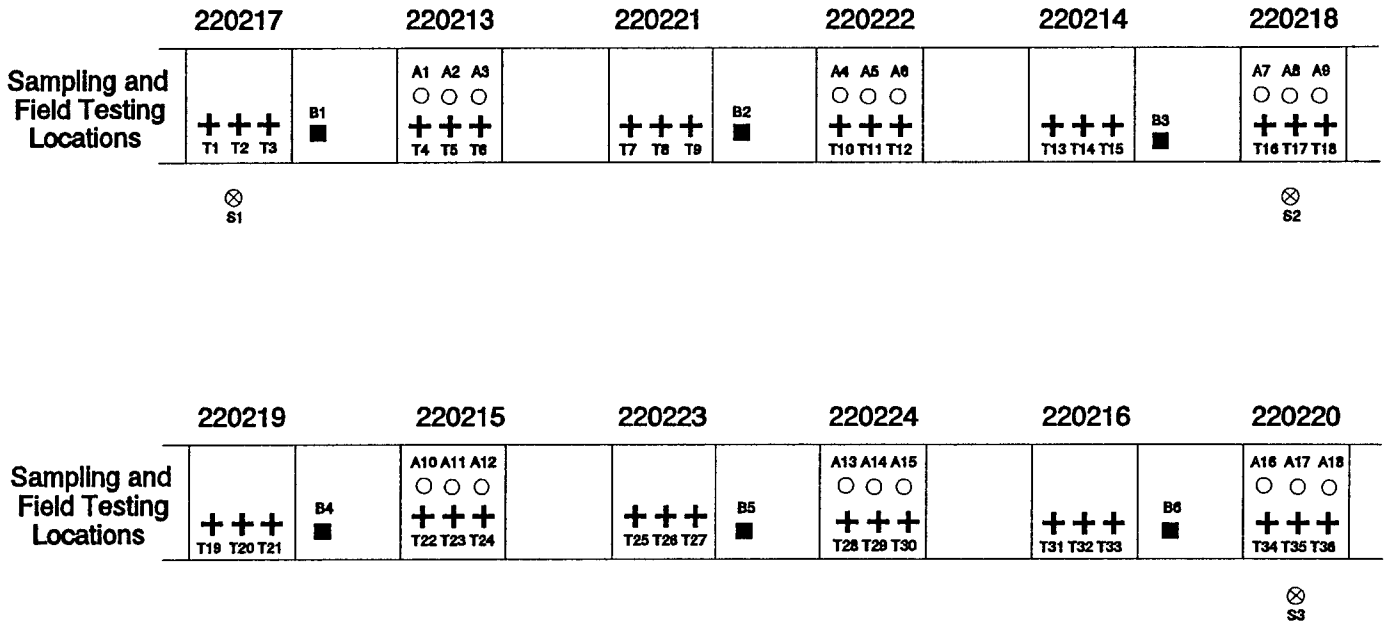


FIGURE 4. SAMPLING AND TESTING LOCATIONS FOR SUBGRADE
LOUISIANA SPS-2, US-171 NBL
DESOTO PARISH, LOUISIANA



LEGEND

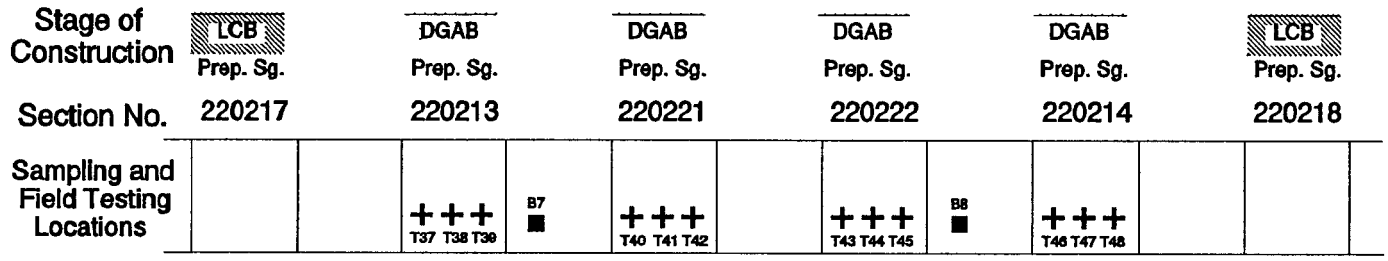
■ 2 X 2 bulk sampling location (B1 - B6) to 12" below top of subgrade.

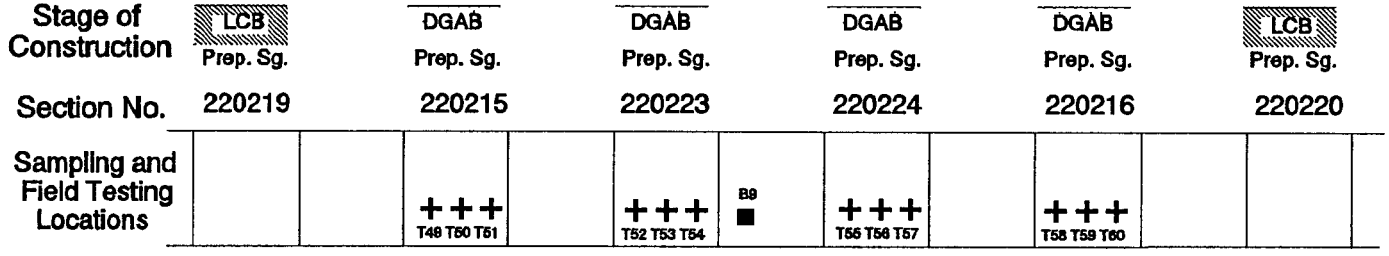
○ Shelby tube/splitspoon sampling to 4' below top of subgrade (A1 - A18).

⊗ Shoulder probe (S1 - S3)

\+ Location of in situ density testing (T1 - T36)

FIGURE 5. SAMPLING AND TESTING LOCATIONS FOR DGAB
LOUISIANA SPS-2, US-171 NBL
DESOTO PARISH, LOUISIANA





LEGEND

+ Location of in situ density testing (T37 - T60)

■ Location of bulk sampling of DGAB (B7 - B9)

Prep. Sg. - Prepared Subgrade

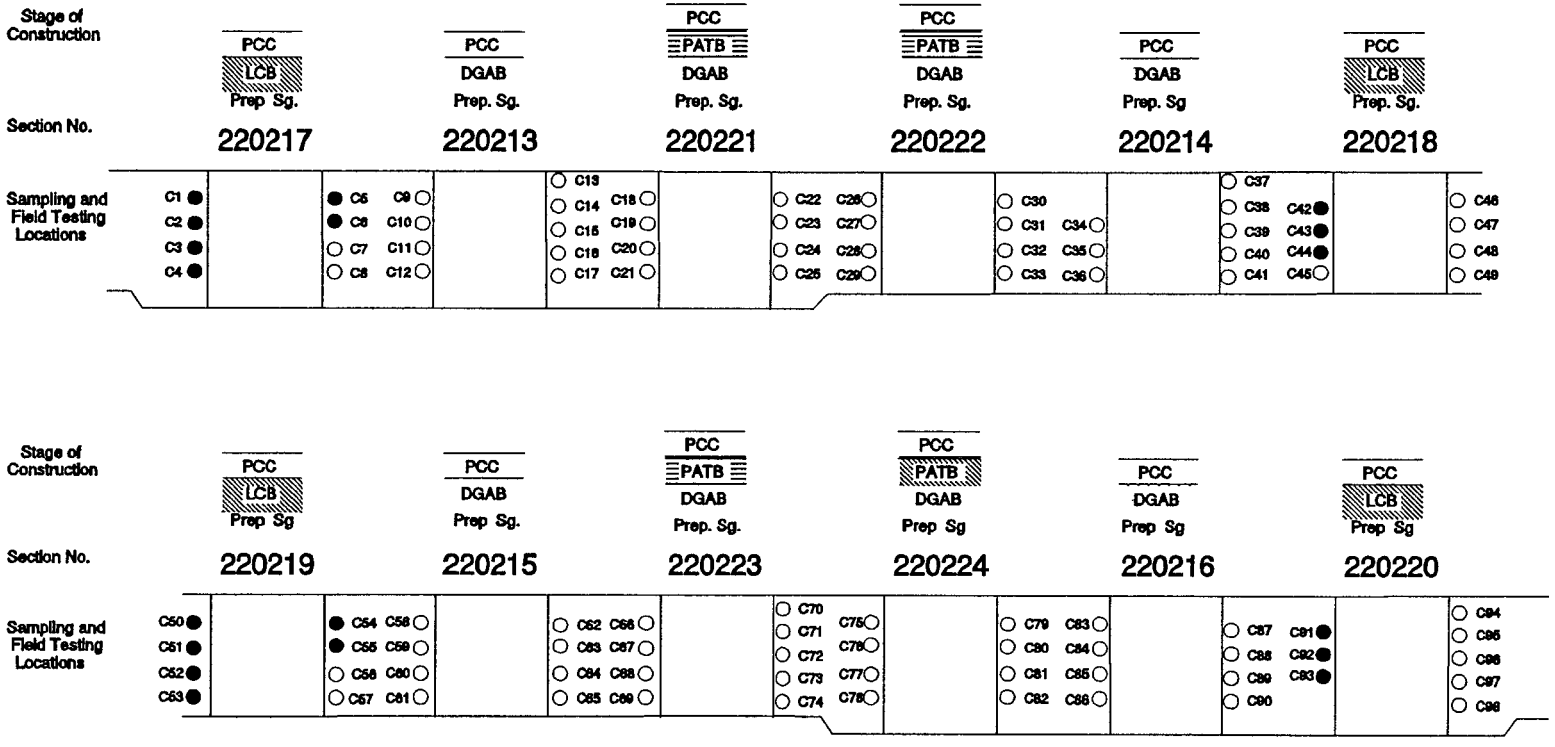
LCB - Lean Concrete Base

DGAB - Dense Graded Aggregate Base

FIGURE 6. SAMPLING AND TESTING LOCATIONS FOR PCC SURFACE

LOUISIANA SPS-2 , US-171 NBL

DESOTO PARISH, LOUISIANA



LEGEND

○ 4" OD Core of Finished PCC Surface Only (C7-C41, C45-C49, C56-C90, C94-C98)

● 4" OD Core of Finished PCC and Bound Layers(C1-C6, C42-C44, C50-C55, C91-C93)

Prep. Sg. - Prepared Subgrade

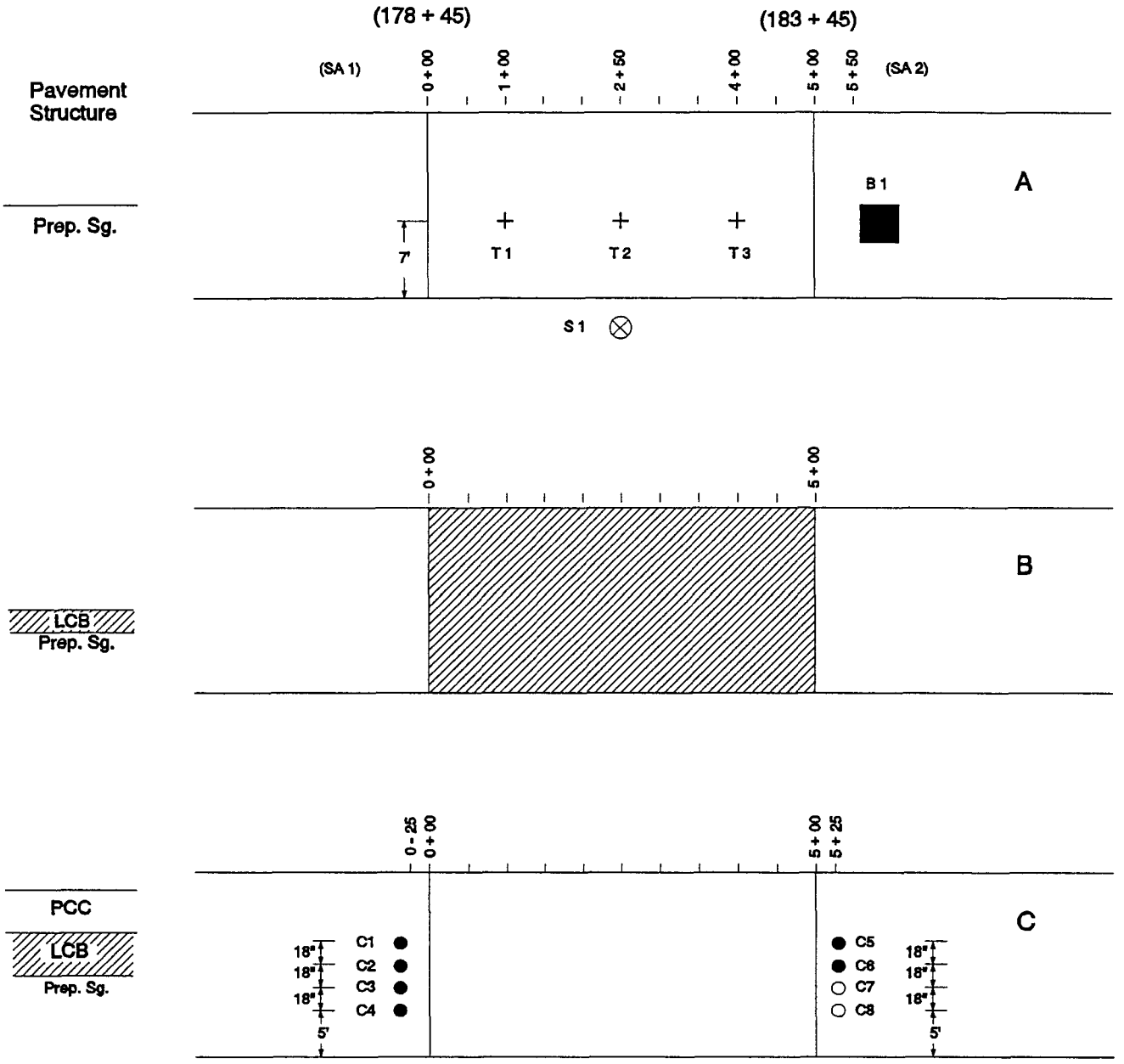
PATB - Permeable Asphalt Treated Base

DGAB - Dense Graded Aggregate Base

LCB - Lean Concrete Base

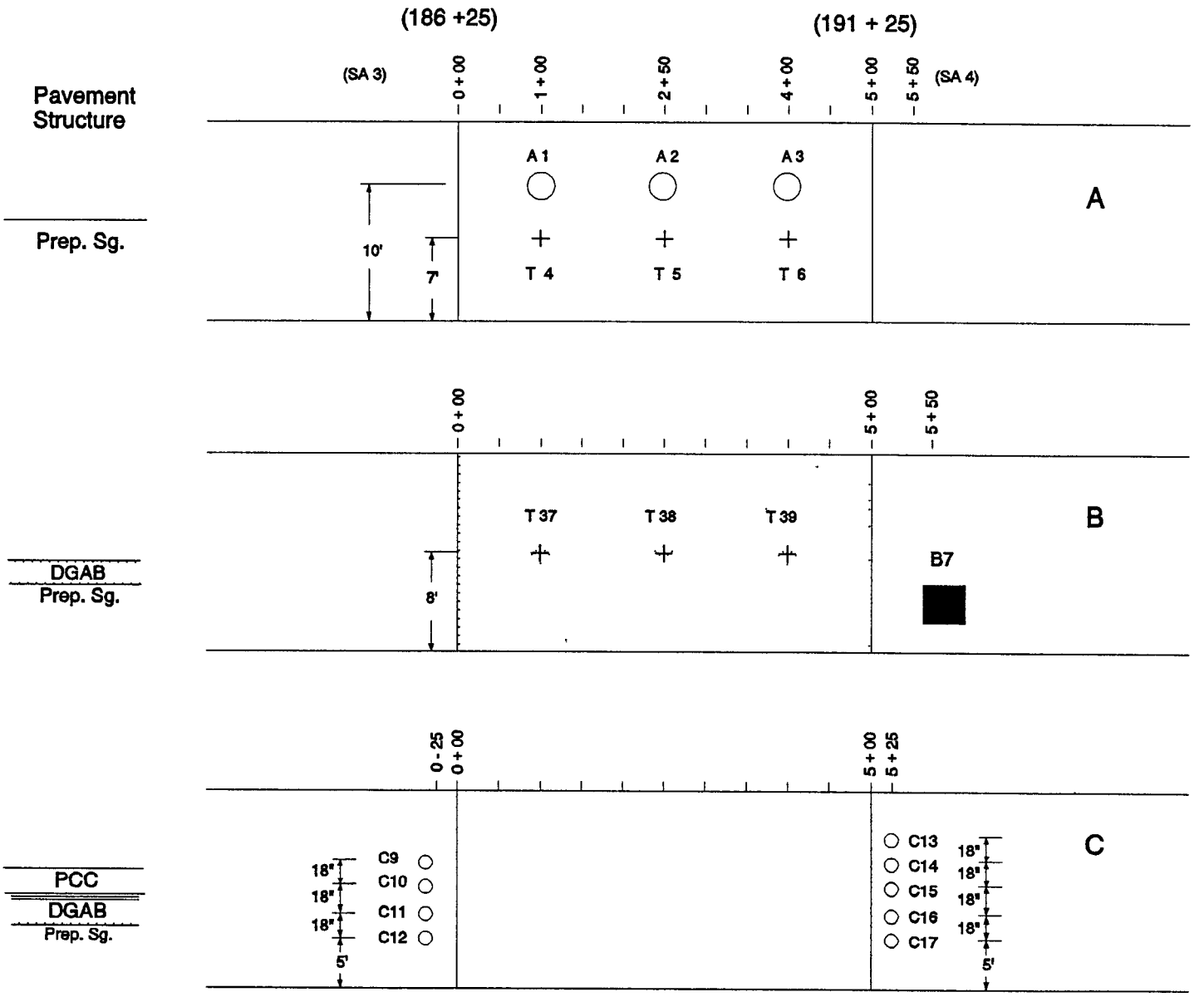
PCC - Portland Cement Concrete Surface

FIGURE 7. SAMPLING AND TESTING PLAN FOR TEST SECTION 220217



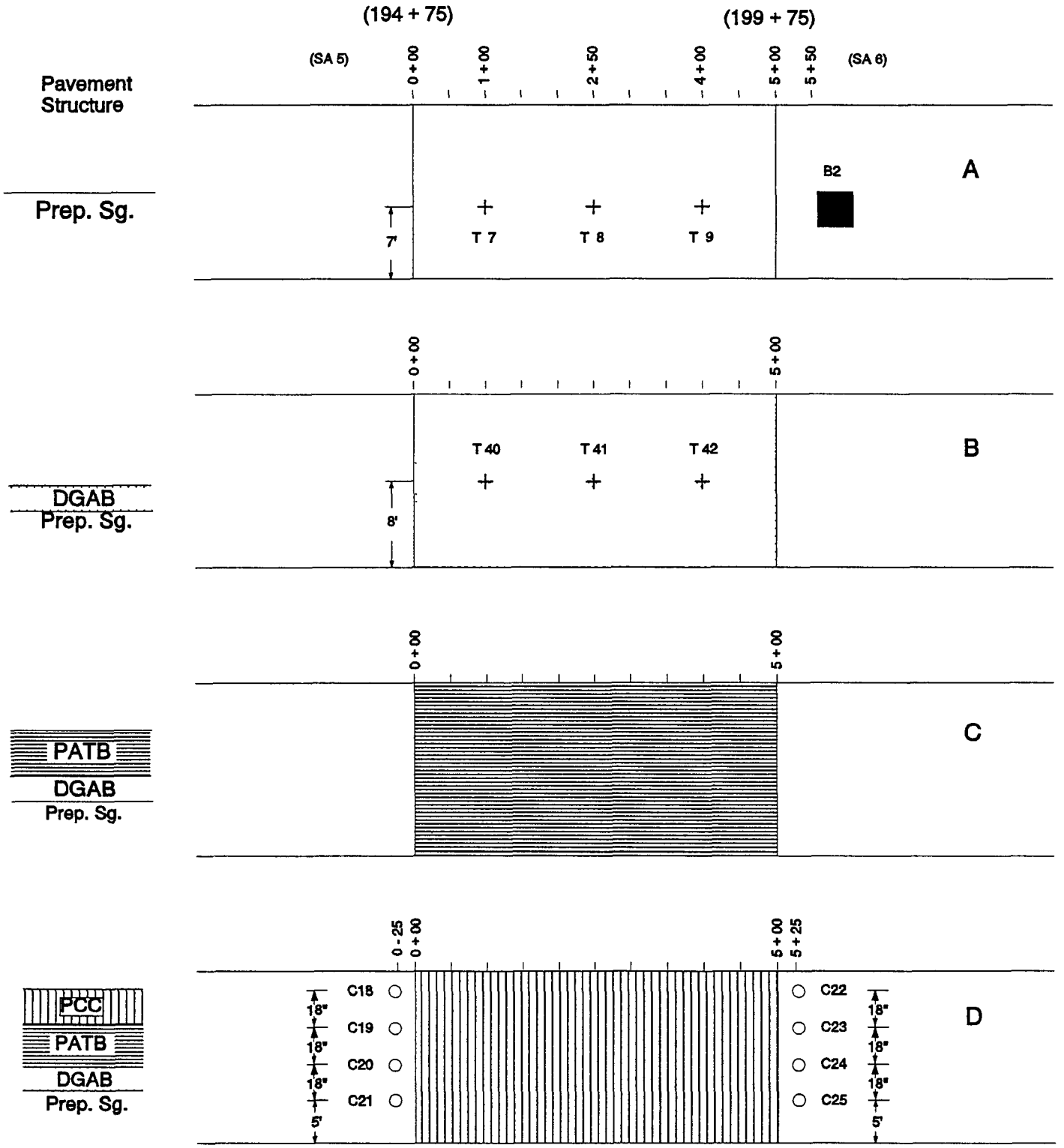
A Testing on prepared Subgrade (T1 - T3, B1, S1)
B No Testing on LCB
C Coring of finished PCC Surface (C7-C8)
Coring of Finished PCC Surface and bound layers (C1 - C6)

FIGURE 8. SAMPLING AND TESTING PLAN FOR TEST SECTION 220213



A Testing on prepared Subgrade (T4 - T6, A1 - A3)
B Testing on compacted DGAB (T37 - T39,B7)
C Coring of finished PCC Surface (C9-C17)

FIGURE 9. SAMPLING AND TESTING PLAN FOR TEST SECTION 220221



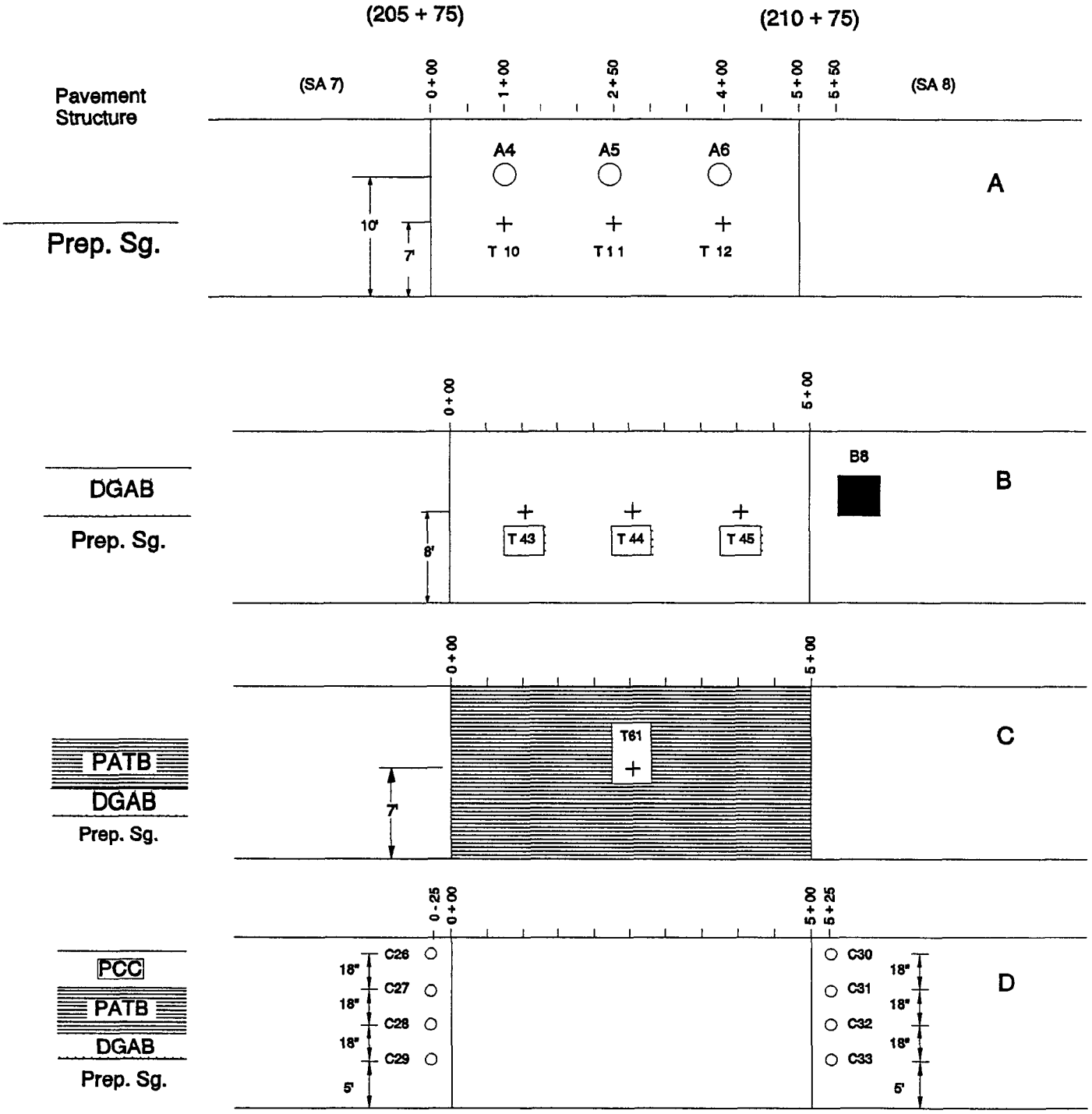
A Testing on prepared Subgrade (T7 - T9, B2)
Plate Bearing Test at T8 Location (T8P)

B Testing on compacted DGAB (T40 - T42)

C No testing on compacted PATB

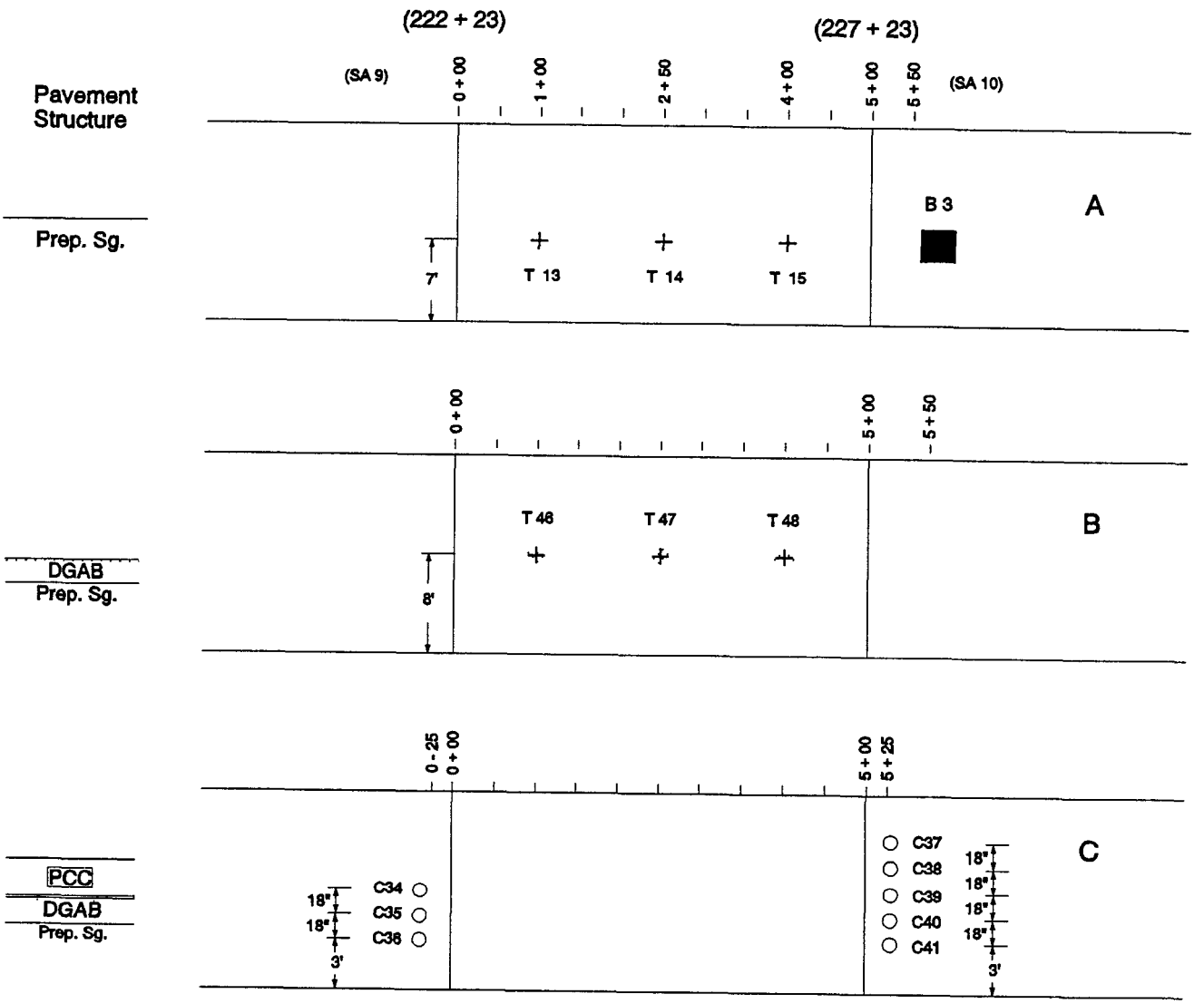
D Coring on finished PCC Surface (C18-C25)

FIGURE 10. SAMPLING AND TESTING PLAN FOR TEST SECTION 220222



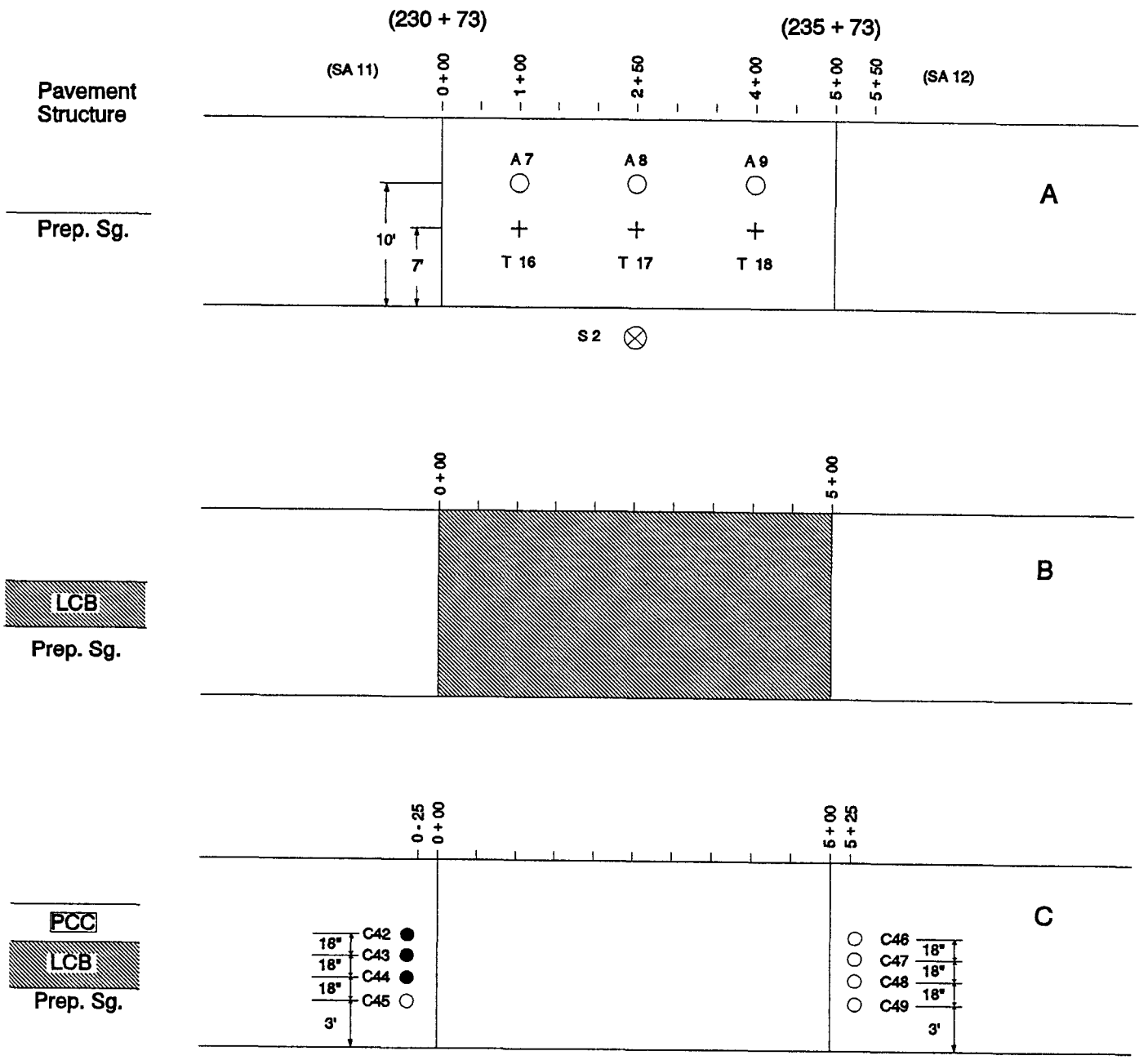
A Testing on prepared Subgrade (T10 - T12, A4 - A6)
B Testing on compacted DGAB (T43 - T45, B8)
C Testing on compacted PATB (T61)
D Coring on finished PCC Surface (C26 - C33)

FIGURE 11. SAMPLING AND TESTING PLAN FOR TEST SECTION 220214



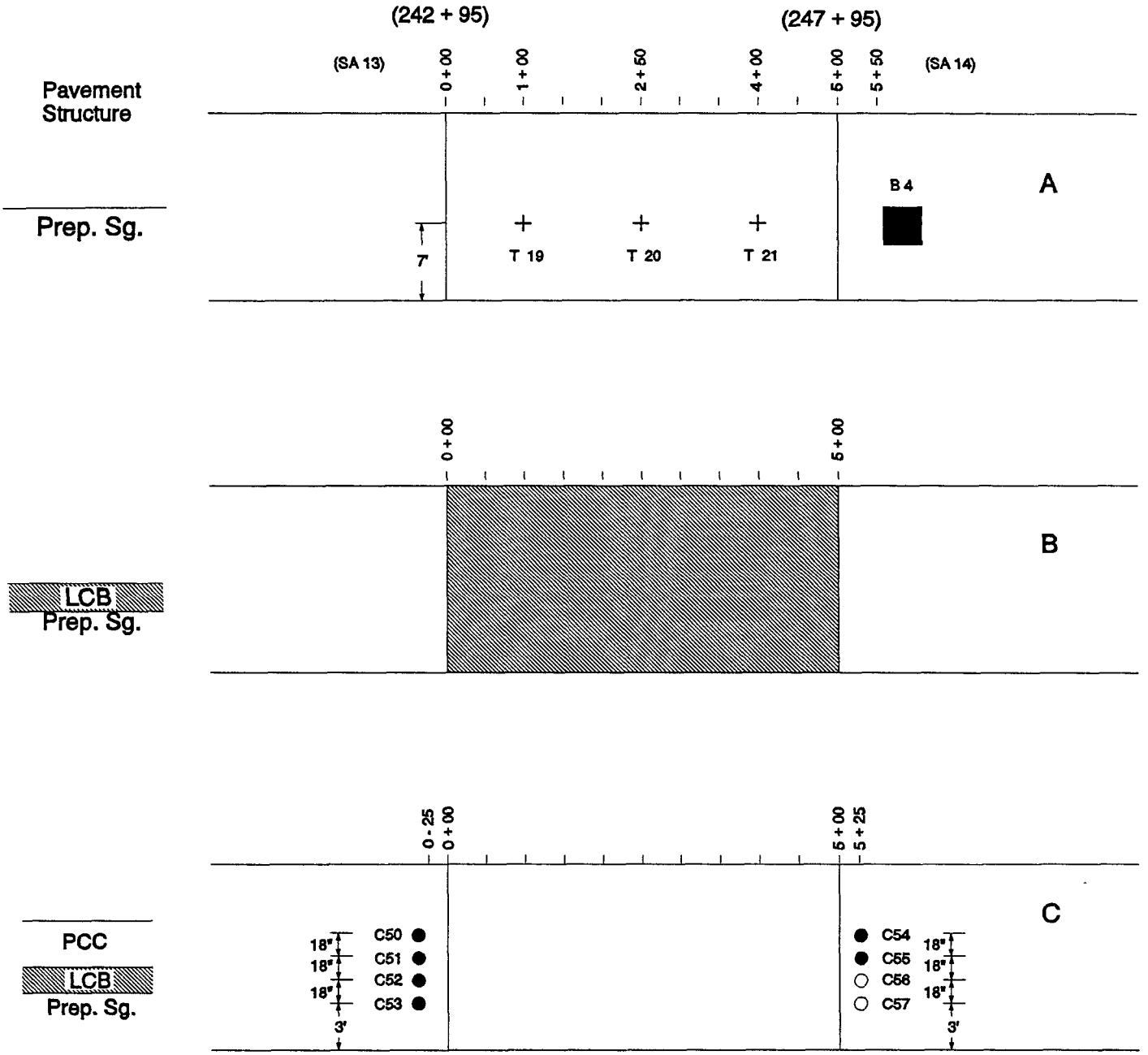
A Testing on prepared Subgrade (T13 - T15, B3)
B Testing on compacted DGAB (T46 - T48)
C Coring on finished PCC Surface (C34 - C41)

FIGURE 12. SAMPLING AND TESTING PLAN FOR TEST SECTION 220218



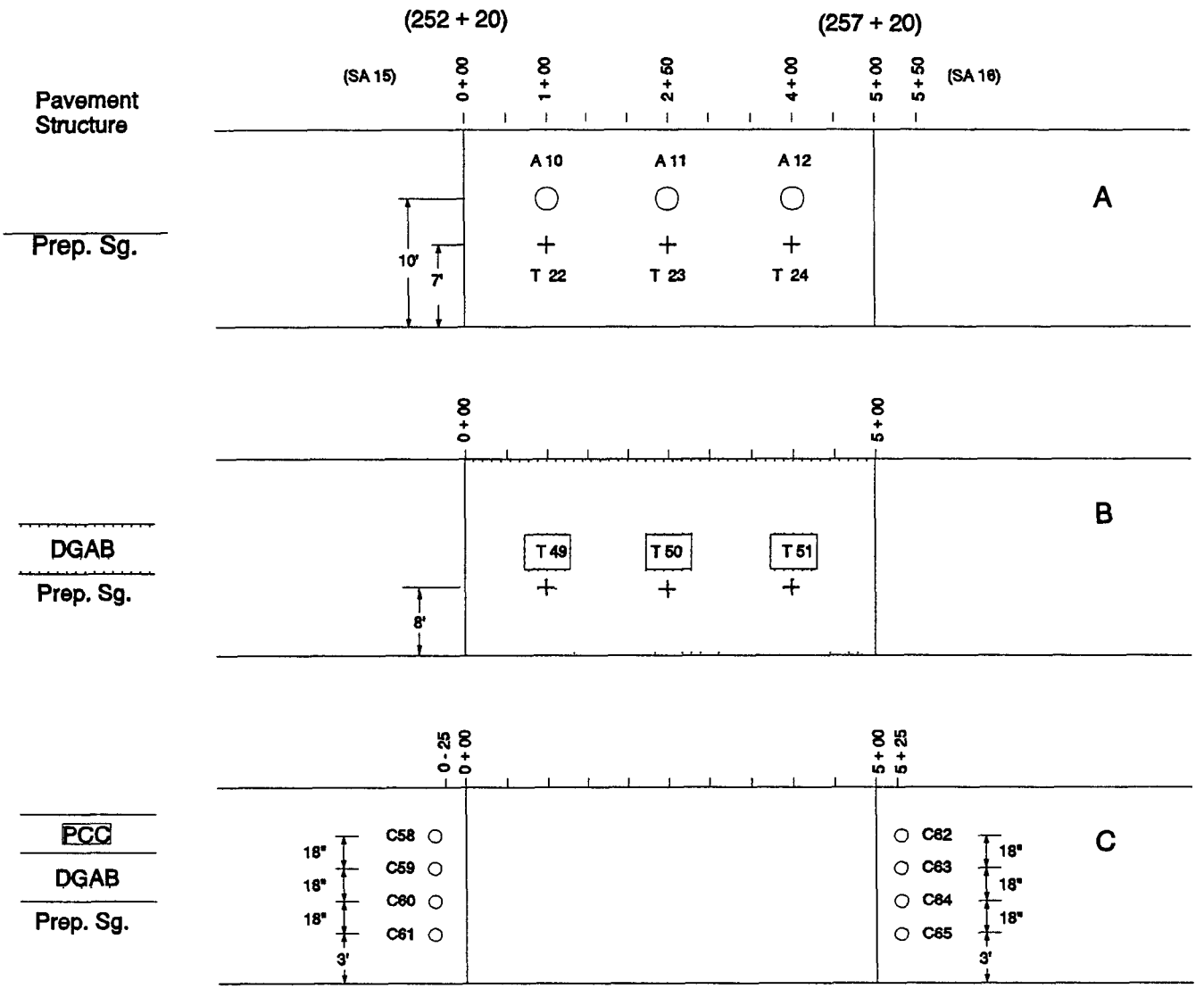
A Testing on prepared Subgrade (T16 - T18, A7 - A9, S2)
B No Testing on LCB
C Coring on finished PCC Surface (C45 - C49)
Coring PCC Surface and bound layers (C42 - C44)

FIGURE 13. SAMPLING AND TESTING PLAN FOR TEST SECTION 220219



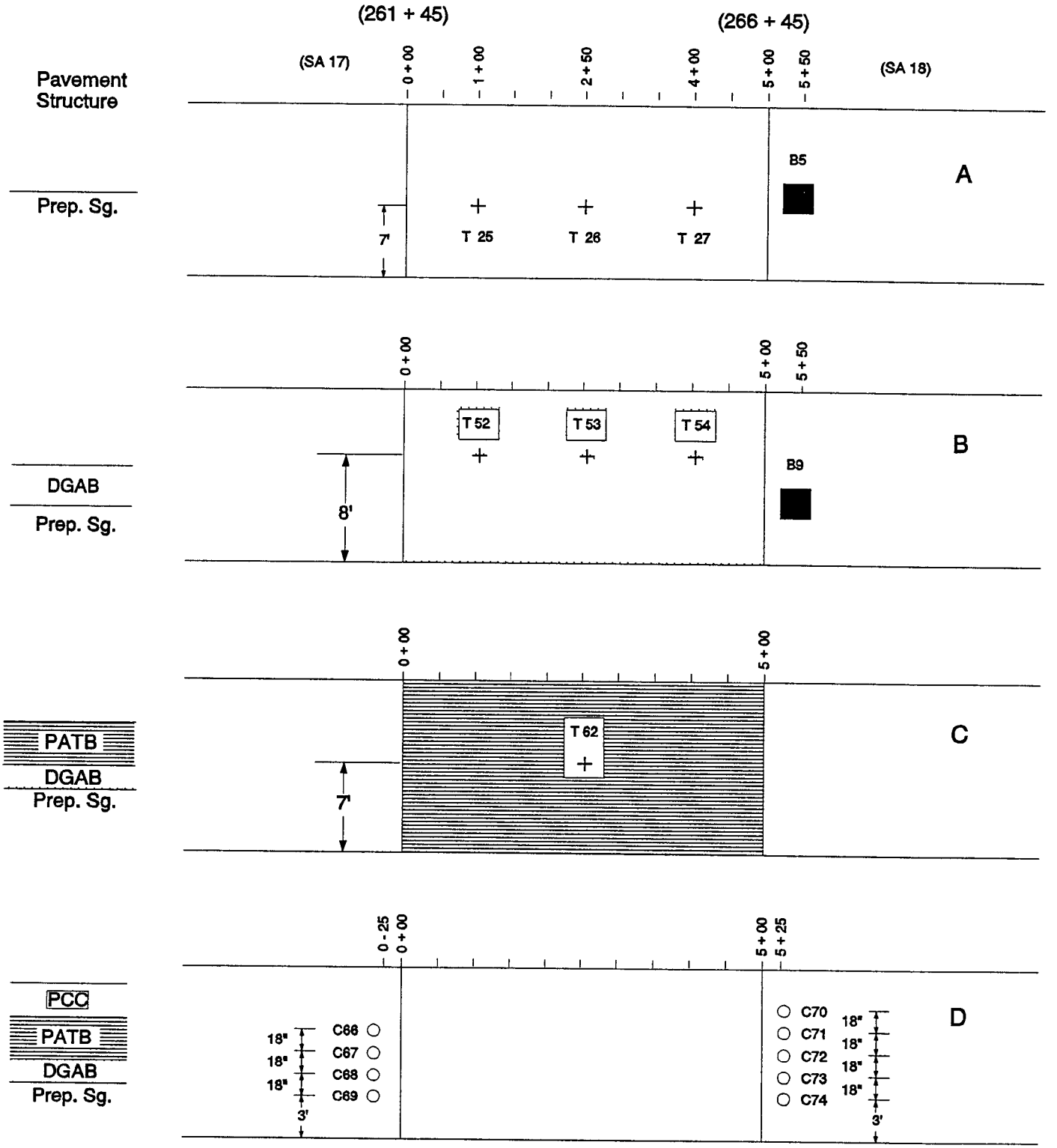
A Testing on prepared Subgrade (T19 - T21, B4)
B No testing on LCB
C Coring on finished PCC Surface (C56 - C57)
Coring PCC Surface and bound layers (C50 - C55)

FIGURE 14. SAMPLING AND TESTING PLAN FOR TEST SECTION 220215



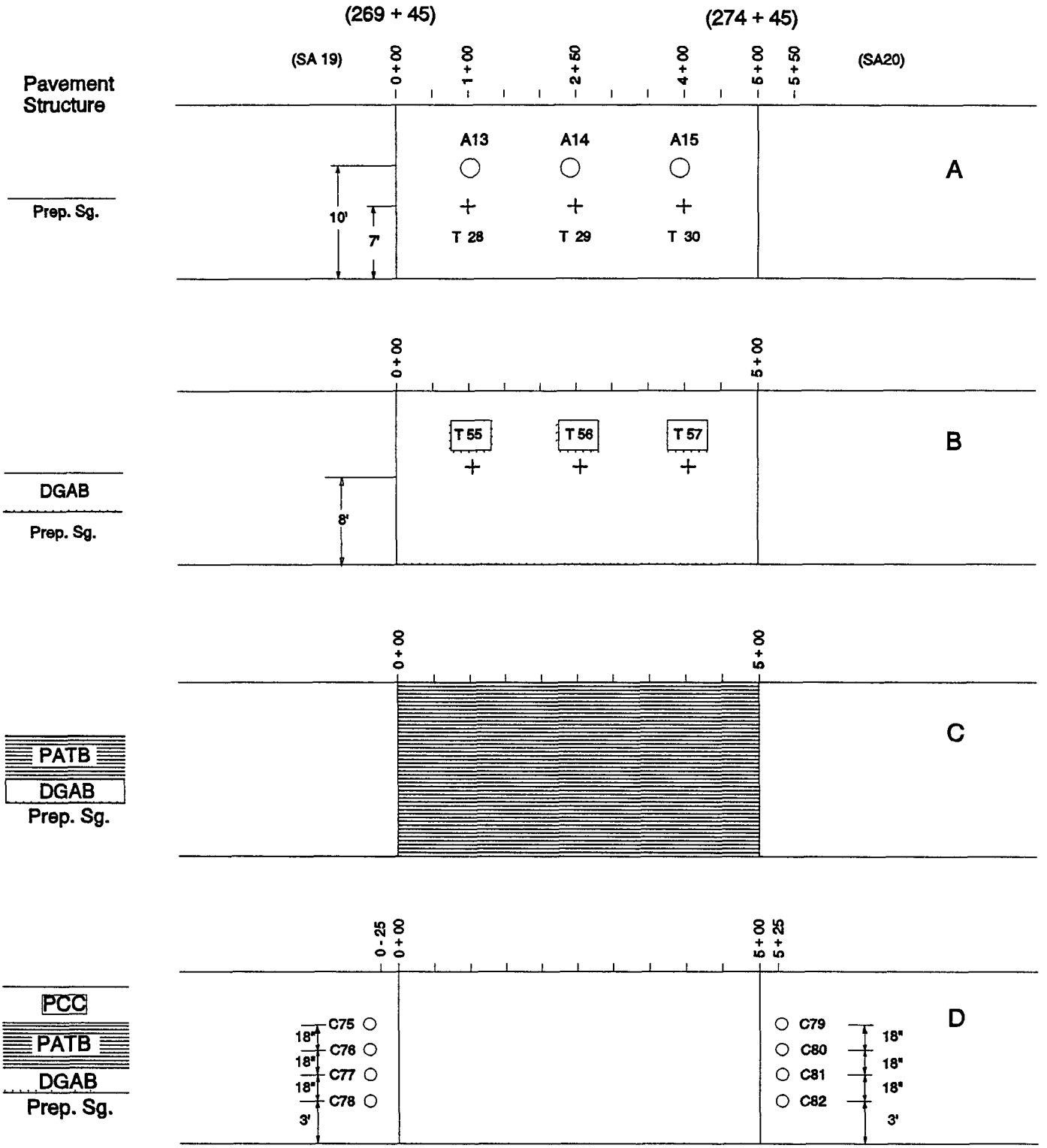
A Testing on prepared Subgrade (T22 - T24, A10 - A12)
B Testing on compacted DGAB (T49 - T51)
C Coring on finished PCC Surface (C58 - C65)

FIGURE 15. SAMPLING AND TESTING PLAN FOR TEST SECTION 220223



A Testing on prepared Subgrade (T25 - T27, B5)
B Testing on compacted DGAB (T52 - T54, B9)
C Testing on compacted PATB (T62)
D Coring of finished PCC Surface (C66 - C74)

FIGURE 16. SAMPLING AND TESTING PLAN FOR TEST SECTION 220224



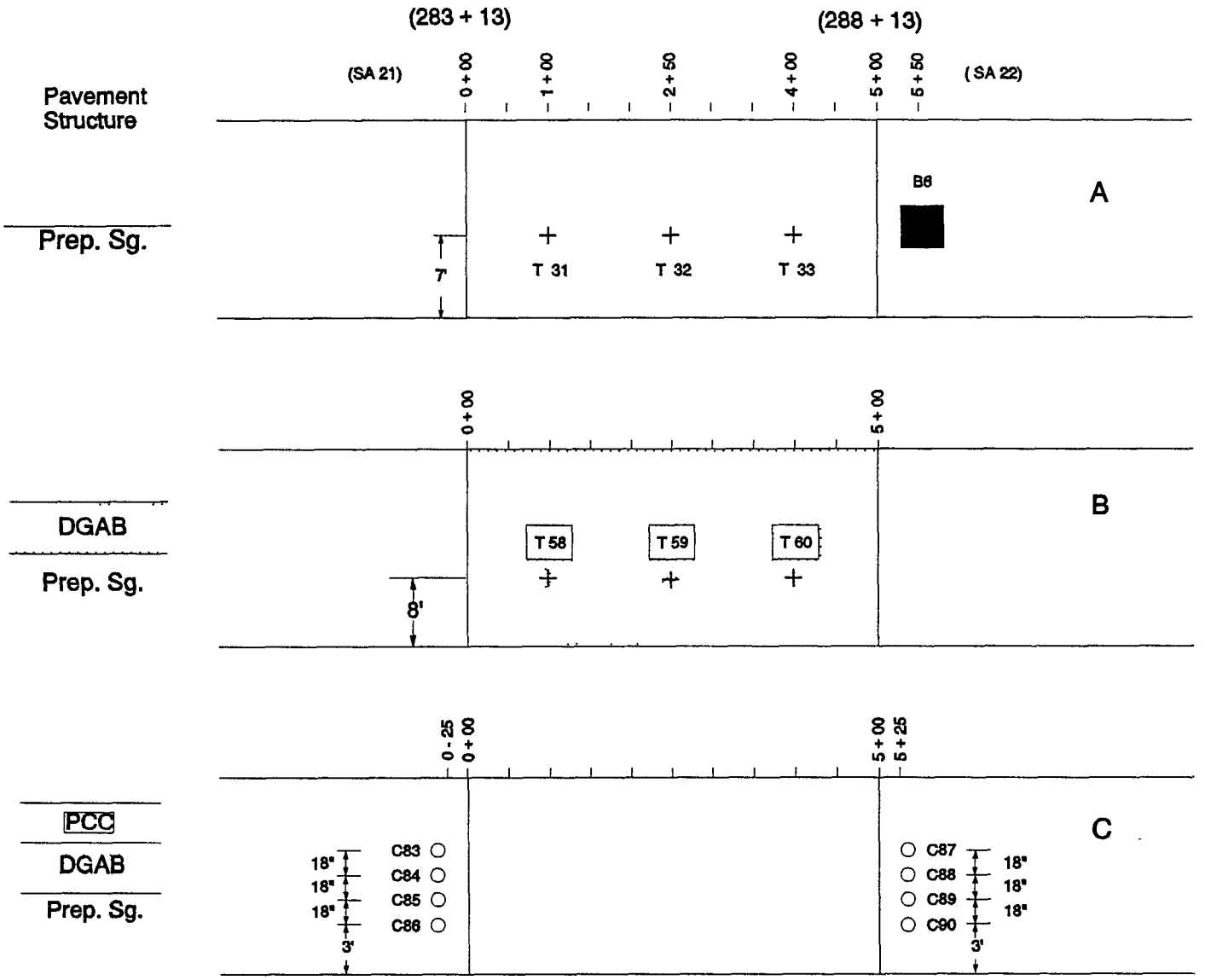
A Testing on prepared Subgrade (T28 - T30, A13 - A15)
Plate Bearing Test at T29 Location (T29P)

B Testing on compacted DGAB (T55 - T57)

C No testing on PATB

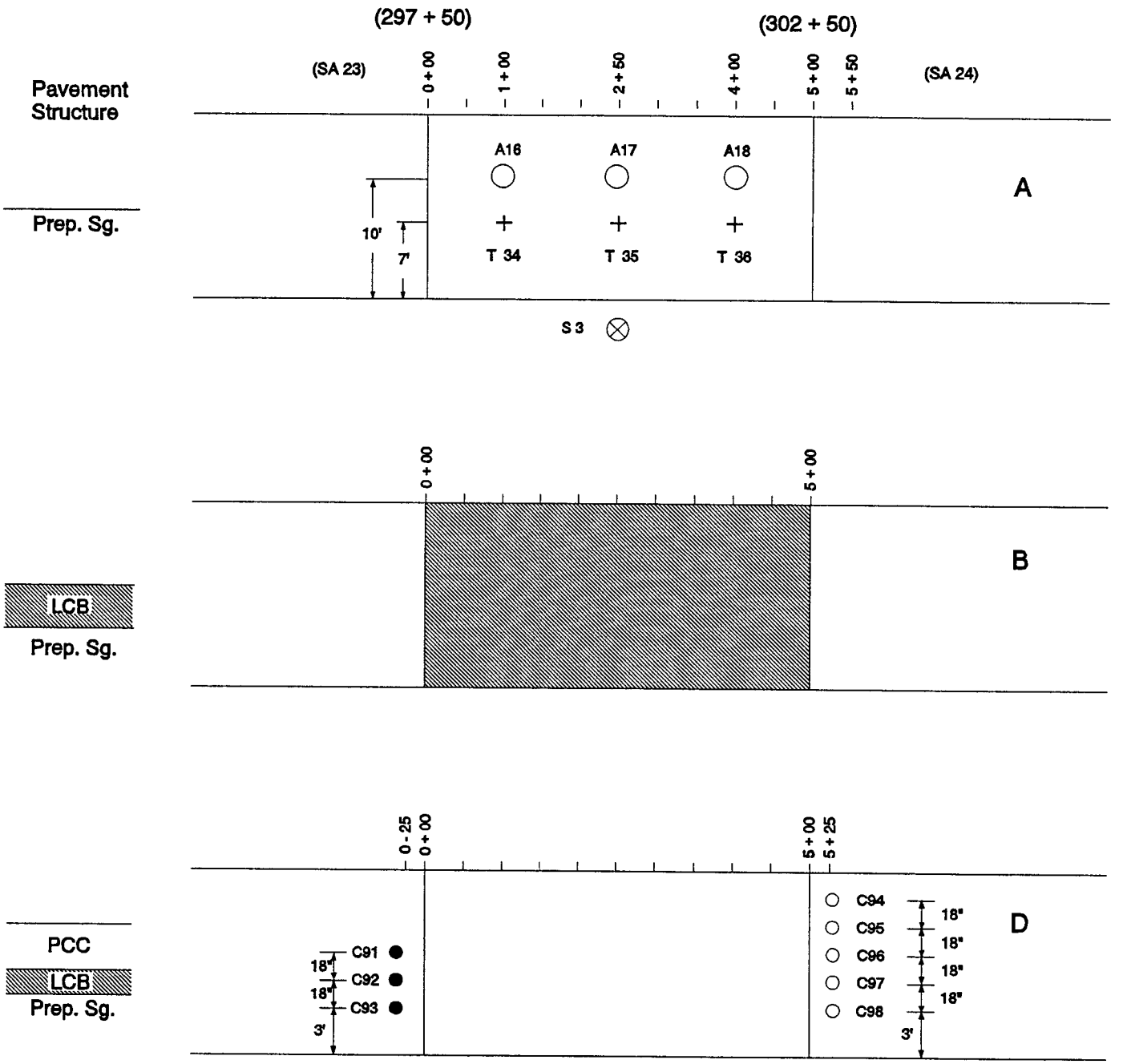
D Coring of finished PCC Surface (C75 - C82)

FIGURE 17. SAMPLING AND TESTING PLAN FOR TEST SECTION 220216



A Testing on prepared Subgrade (T31 - T33, B6)
B Testing on compacted DGAB (T58 - T60)
C Coring of finished PCC Surface (C83 - C90)

FIGURE 18. SAMPLING AND TESTING PLAN FOR TEST SECTION 220220



A Testing on prepared Subgrade (T34 - T36, A16- A18, S3)
B No testing on LCB
C Coring of finished PCC Surface (C94 - C98)
Coring PCC Surface and bound layers (C91 - C93)

TABLE 6. SUBGRADE MATERIALS FIELD SAMPLING/TESTING LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

SUBGRADE SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
183+95	220217	5+50	7′ Lt	B1	Bulk
200+25	220221	5+50	7′ Lt	B2	Bulk
227+73	220214	5+50	7′ Lt	B3	Bulk
248+45	220219	5+50	7′ Lt	B4	Bulk
266+95	220223	5+50	7′ Lt	B5	Bulk
288+63	220216	5+50	7′ Lt	B6	Bulk
187+25	220213	1+00	10′ Lt	A1	Shelby Tube
188+75	220213	2+50	10′ Lt	A2	Shelby Tube
190+25	220213	4+00	10′ Lt	A3	Shelby Tube
206+75	220222	1+00	10′ Lt	A4	Shelby Tube
208+25	220222	2+50	10′ Lt	A5	Shelby Tube
209+75	220222	4+00	10′ Lt	A6	Shelby Tube
231+73	220218	1+00	10′ Lt	A7	Shelby Tube
233+23	220218	2+50	10′ Lt	A8	Shelby Tube
234+73	220218	4+00	10′ Lt	A9	Shelby Tube
253+20	220215	1+00	10′ Lt	A10	Shelby Tube
254+70	220215	2+50	10′ Lt	A11	Shelby Tube
256+20	220215	4+00	10′ Lt	A12	Shelby Tube
270+45	220224	1+00	10′ Lt	A13	Shelby Tube
271+95	220224	2+50	10′ Lt	A14	Shelby Tube
273+45	220224	4+00	10′ Lt	A15	Shelby Tube
298+50	220220	1+00	10′ Lt	A16	Shelby Tube
300+00	220220	2+50	10′ Lt	A17	Shelby Tube
301+50	220220	4+00	10′ Lt	A18	Shelby Tube

TABLE 6. SUBGRADE MATERIALS FIELD SAMPLING/TESTING
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

SUBGRADE SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
180+95	220217	2+50	9′ Rt	S1	Shoulder Probe
233+23	220218	2+50	9′ Rt	S2	Shoulder Probe
300+00	220220	2+50	9′ Rt	S3	Shoulder Probe
179+45	220217	1+00	7′ Lt	T1	Moisture/Density
180+95	220217	2+50	7′ Lt	T2	Moisture/Density
182+45	220217	4+00	7′ Lt	T3	Moisture/Density
187+25	220213	1+00	7′ Lt	T4	Moisture/Density
188+75	220213	2+50	7′ Lt	T5	Moisture/Density
190+25	220213	4+00	7′ Lt	T6	Moisture/Density
195+75	220221	1+00	7′ Lt	T7	Moisture/Density
197+25	220221	2+50	7′ Lt	T8	Moisture/Density
198+75	220221	4+00	7′ Lt	T9	Moisture/Density
206+75	220222	1+00	7′ Lt	T10	Moisture/Density
208+25	220222	2+50	7′ Lt	T11	Moisture/Density
209+75	220222	4+00	7′ Lt	T12	Moisture/Density
223+23	220214	1+00	7′ Lt	T13	Moisture/Density
224+73	220214	2+50	7′ Lt	T14	Moisture/Density
226+23	220214	4+00	7′ Lt	T15	Moisture/Density
231+73	220218	1+00	7′ Lt	T16	Moisture/Density
233+23	220218	2+50	7′ Lt	T17	Moisture/Density
234+73	220218	4+00	7′ Lt	T18	Moisture/Density
243+95	220219	1+00	7′ Lt	T19	Moisture/Density
245+45	220219	2+50	7′ Lt	T20	Moisture/Density
246+95	220219	4+00	7′ Lt	T21	Moisture/Density

TABLE 6. SUBGRADE MATERIALS FIELD SAMPLING/TESTING
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

SUBGRADE SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
253+20	220215	1+00	7′ Lt	T22	Moisture/Density
254+70	220215	2+50	7′ Lt	T23	Moisture/Density
256+20	220215	4+00	7′ Lt	T24	Moisture/Density
262+45	220223	1+00	7′ Lt	T25	Moisture/Density
263+95	220223	2+50	7′ Lt	T26	Moisture/Density
265+45	220223	4+00	7′ Lt	T27	Moisture/Density
270+45	220224	1+00	7′ Lt	T28	Moisture/Density
271+95	220224	2+50	7′ Lt	T29	Moisture/Density
273+45	220224	4+00	7′ Lt	T30	Moisture/Density
284+13	220216	1+00	7′ Lt	T31	Moisture/Density
285+63	220216	2+50	7′ Lt	T32	Moisture/Density
287+13	220216	4+00	7′ Lt	T33	Moisture/Density
298+50	220220	1+00	7′ Lt	T34	Moisture/Density
300+00	220220	2+50	7′ Lt	T35	Moisture/Density
301+50	220220	4+00	7′ Lt	T36	Moisture/Density
197+25	220221	2+50	7′ Lt	T8P	Plate Bearing
271+95	220224	2+50	7′ Lt	T29P	Plate Bearing

TABLE 7. DGAB FIELD MATERIALS SAMPLING/TESTING LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

DGAB SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
191+75	220213	5+50	8′ Lt	B7	Bulk
211+25	220222	5+50	8′ Lt	B8	Bulk
266+95	220223	5+50	8′ Lt	B9	Bulk
187+25	220213	1+00	8′ Lt	T37	Moisture/Density
188+75	220213	2+50	8′ Lt	T38	Moisture/Density
190+25	220213	4+00	8′ Lt	T39	Moisture/Density
195+75	220221	1+00	8′ Lt	T40	Moisture/Density
197+25	220221	2+50	8′ Lt	T41	Moisture/Density
198+75	220221	4+00	8′ Lt	T42	Moisture/Density
206+75	220222	1+00	8′ Lt	T43	Moisture/Density
208+25	220222	2+50	8′ Lt	T44	Moisture/Density
209+75	220222	4+00	8′ Lt	T45	Moisture/Density
223+23	220214	1+00	8′ Lt	T46	Moisture/Density
224+73	220214	2+50	8′ Lt	T47	Moisture/Density
226+23	220214	4+00	8′ Lt	T48	Moisture/Density
253+20	220215	1+00	8′ Lt	T49	Moisture/Density
254+70	220215	2+50	8′ Lt	T50	Moisture/Density
256+20	220215	4+00	8′ Lt	T51	Moisture/Density
262+45	220223	1+00	8′ Lt	T52	Moisture/Density
263+95	220223	2+50	8′ Lt	T53	Moisture/Density
265+45	220223	4+00	8′ Lt	T54	Moisture/Density
270+45	220224	1+00	8′ Lt	T55	Moisture/Density
271+95	220224	2+50	8′ Lt	T56	Moisture/Density
273+45	220224	4+00	8′ Lt	T57	Moisture/Density

TABLE 7. DGAB FIELD MATERIALS SAMPLING/TESTING
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA
(Continued)

DGAB SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
284+13	220216	1+00	8′ Lt	T58	Moisture/Density
285+63	220216	2+50	8′ Lt	T59	Moisture/Density
287+13	220216	4+00	8′ Lt	T60	Moisture/Density
197+25	220221	2+50	8′ Lt	T41	Plate Bearing
208+25	220222	2+50	8′ Lt	T44	Plate Bearing
263+95	220223	2+50	8′ Lt	T53	Plate Bearing
271+95	220224	2+50	8′ Lt	T56	Plate Bearing

TABLE 8. PATB FIELD MATERIALS SAMPLING/TESTING LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

PATB SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
Plant	-----	-----	-----	BT-01	Bulk
Plant	-----	-----	-----	BT-02	Bulk
Plant	-----	-----	-----	BT-03	Bulk

TABLE 9. PCC SURFACE FIELD MATERIALS SAMPLING/TESTING LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

PCC SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
178+20	220217	0-25	5′,6.5′,8′,9.5′	C1,C2,C3,C4	4″ Cores
183+70	220217	5+25	5′,6.5′,8′,9.5′	C5,C6,C7,C8	4″ Cores
186+00	220213	0-25	5′,6.5′,8′,9.5′	C9,C10,C11,C12	4″ Cores
191+50	220213	5+25	5′,6.5′,8′,9.5′	C13,C14,C15,C16,C17	4″ Cores
194+50	220221	0-25	5′,6.5′,8′,9.5′	C18,C19,C20,C21	4″ Cores
200+00	220221	5+25	5′,6.5′,8′,9.5′	C22,C23,C24,C25	4″ Cores
205+50	220222	0-25	5′,6.5′,8′,9.5′	C26,C27,C28,C29	4″ Cores
211+00	220222	5+25	5′,6.5′,8′,9.5′	C30,C31,C32,C33	4″ Cores
221+98	220214	0-25	3′,4.5′,6′	C34,C35,C36	4″ Cores
227+48	220214	5+25	3′,4.5′,6′,7.5′,9′	C37,C38,C39,C40,C41	4″ Cores
230+48	220218	0-25	3′,4.5′,6′,7.5′	C42,C43,C44,C45	4″ Cores
235+98	220218	5+25	3′,4.5′,6′,7.5′	C46,C47,C48,C49	4″ Cores
242+70	220219	0-25	3′,4.5′,6′,7.5′	C50,C51,C52,C53	4″ Cores
248+20	220219	5+25	3′,4.5′,6′,7.5′	C54,C55,C56,C57	4″ Cores
251+95	220215	0-25	3′,4.5′,6′,7.5′	C58,C59,C60,C61	4″ Cores
257+45	220215	5+25	3′,4.5′,6′,7.5′	C62,C63,C64,C65	4″ Cores
261+20	220223	0-25	3′,4.5′,6′,7.5′	C66,C67,C68,C69	4″ Cores
266+70	220223	5+25	3′,4.5′,6′,7.5′,9′	C70,C71,C72,C73,C74	4″ Cores
269+20	220224	0-25	3′,4.5′,6′,7.5′	C75,C76,C77,C78	4″ Cores
274+70	220224	5+25	3′,4.5′,6′,7.5′	C79,C80,C81,C82	4″ Cores
282+88	220216	0-25	3′,4.5′,6′,7.5′	C83,C84,C85,C86	4″ Cores
288+38	220216	5+25	3′,4.5′,6′,7.5′	C87,C88,C89,C90	4″ Cores
297+25	220220	0-25	3′,4.5′,6′	C91,C92,C93	4″ Cores
302+75	220220	5+25	3′,4.5′,6′,7.5′,9′	C94,C95,C96,C97,C98	4″ Cores

TABLE 9. PCC SURFACE FIELD MATERIALS SAMPLING/TESTING
LOUISIANA SPS-2, US-171 NBL, DESOTO PARISH, LOUISIANA

(Continued)

PCC SAMPLES					
Approx ℄ Station	Section ID	Section Station	O/S From Lane Edge	Sample ID	Sample Type
- -	220217	- -	- -	FC1	Molded Cylinders
- -	220221	- -	- -	FC2	Molded Cylinders
- -	220214	- -	- -	FC3	Molded Cylinders
- -	220219	- -	- -	FC4	Molded Cylinders
- -	220223	- -	- -	FC5	Molded Cylinders
- -	220216	- -	- -	FC6	Molded Cylinders