APPENDIX A-10
REQUIREMENTS FOR TECHNICIAN CERTIFICATION

I Hot Mix Asphalt (HMA) Laboratory Technician

The "Certified Asphalt Technician" is the generic title given to the asphalt technician that includes a basic knowledge and hands-on experience in hot mix asphalt laboratory testing methods.

a) Qualification

The minimum academic/experience qualifications are based on the criteria listed in Table 1.

Table 1: Technician Academic/Experience Criteria

Category	Academic Qualifications	Experience, Years *
I	High School Diploma**	3
II	College/University, non-technical Diploma	2
III	College/University Technology Diploma	1

* Number of construction seasons with a minimum of 6 months continuous hands on asphalt lab testing related experience

** Previous work experience will be considered for applicants who do not possess a High School Diploma

Asphalt technicians applying for certification must have documented hands-on experience in various hot mix asphalt laboratory testing methods while meeting minimum qualifications listed in Table 1;

Furthermore the Certified Asphalt Technician must regularly participate in the required inter-laboratory proficiency testing program as well as the required testing during the laboratory inspections

b) CCIL Certified HMA Laboratory Technician Types

CCIL offers two types of certified HMA technician, depending on laboratory of employment certification.

Type 1. HMA Certified Marshall and Superpave Laboratory Technician
Type 2. HMA Certified Marshall Only Laboratory Technician

New Technicians employed by CCIL certified Marshall and Superpave laboratories must apply for Type 1.

New Technicians employed by CCIL certified Marshall ONLY laboratories can apply for Type 1 or Type 2.

New Type 1 technicians seeking certification must attend the CCIL HMA Technician Certification Program in its entirety and pass all components of the examinations.

New Type 2 technicians seeking certification for Marshall only must also attend the certification program in its entirety. However, participation in the practical and written examinations will be focused only on Marshall related topics.

Note: The CCIL HMA technician certification program should be expected to include comprehensive examinations both practical and written in all related Marshall and Superpave test procedures. The written component should also be expected to include in part calculations pertaining to the various test methods. As this is not an asphalt training course, CCIL does not supply reference notes, books, test standards or any other related printing materials. Technicians participating in the CCIL HMA certification program are encouraged to take Marshall and/or Superpave training course(s), if needed, for skill enhancement prior to participation in the CCIL HMA certification program.

A technician employed at a CCIL certified asphalt laboratory and currently holding a valid Marshall or a valid Marshall and Superpave card may renew the card as usual through successful participation in the written examination overseen by CCIL personnel every 5 years.

c) Certification Requirements

1) The Type1 Asphalt Technician must complete certification examinations and obtain passing grades on procedures listed in CCIL LC101, Appendices A-2 through A-5 as well as demonstrating proficiency in the following test procedures**.**

Table 2. PRACTICAL EXAMINATION REQUIREMENTS

General Asphalt Testing	
1	Sample Preparation - Splitting or Quartering of Bulk Sample and Oven Drying
2	Rotarex, Extraction and Fines Correction
3	A) Compaction and Thickness of Cores Including Trimming B) Maximum Relative Density of Loose Asphalt Mix
4	Grain Size Analysis and Wash Pass 75 µm
Marshall Testing	
5	Preparation of Specimens
	Determination of Stability and Flow
	BRD of Compacted Specimens
Superpave Testing	
6	Preparation of Specimens
	Gmb of Compacted Specimens

2) The Type2 Asphalt Technician must complete certification examinations and obtain passing grades on procedures listed in CCIL LC101 Appendices A-2 and A-4. This type technician must also demonstrate proficiency in the test procedures from 1 through 5 in Table 2.

II Aggregate Laboratory Technician

a) Qualification

Certification as an aggregate laboratory technician is available to any person who has been trained in the test and carries out aggregate laboratory testing on a regular basis.

b) Certification Requirements

The technician must demonstrate proficiency in the following test procedures in the presence of a CCIL inspector:

LS-600/C702	Dry Preparation of Aggregates for Determination of Physical Constants
LS-601/C117	Material Finer than 75 um Sieve in Mineral Aggregates by Washing, Method of Test for
LS-602/C13	Sieve Analysis of Aggregates, Method of Test for
LS-607/D5821	Determination of Percent Crushed Particles in Processed Coarse Aggregate, Method of Test for
LS-608/D4791	Determination of Flat and Elongated Particles in Coarse Aggregate, Method of Test for
LS-621	Determination of the Amount of Asphalt Coated Particles in Coarse Aggregate, Method of Test for

III Petrographic Analyst Technician

a) Qualifications

Certification as a Petrographic Analyst Technician is available to any person who has been trained by an expert in this field and carries out LS609 “Procedure for Petrographic Analysis of Coarse Aggregates” on a regular basis. The candidate’s qualifications will be assessed on the basis of the requirements listed below.

b) Certification Requirements

CCIL Certification of a Petrographic Analyst requires:

1) Declaration of education supported by copies of University/College diplomas OR transcripts
2) Resume of employment training and practical experience
3) On-going participation in the annual MTO Aggregate and Soil Proficiency Sample Testing Program for LS209 “Procedure for Petrographic Analysis of Coarse Aggregates
4) Submission of completed CCIL “Petrographic Analyst Qualification Criteria” form
5) Satisfactory analysis of reference samples to be supplied by CCIL