

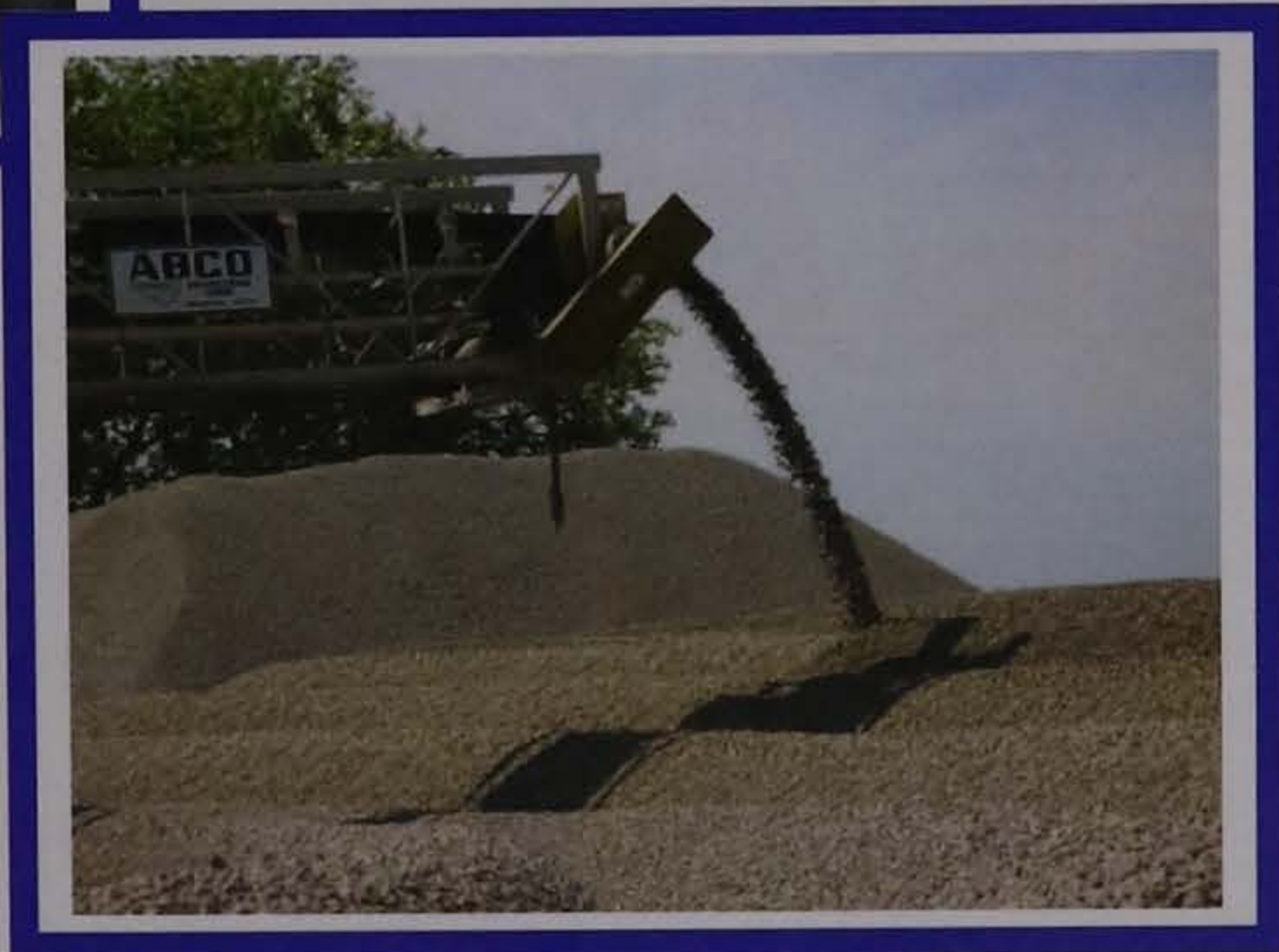
TE
203
.T43
2008

2008 – 2009


TECHNICAL TRAINING & CERTIFICATION PROGRAM

INFORMATION AND REGISTRATION BOOKLET

FOR HIGHWAY MATERIALS & CONSTRUCTION



DMACC
DES MOINES AREA
COMMUNITY COLLEGE

 Iowa Department
of Transportation

PROGRAM UPDATE AND CHANGES

Table of Contents

	Page
Program Update and Changes.....	1
Course Summary.....	7
Applications.....	11
Schedule of Classes.....	17
Iowa DOT and Organizations.....	35
District Materials Locations.....	37
Training and Motel Facilities.....	38
District Office Map.....	39
Program Requirements.....	45
Course Catalog.....	51
Math Problems.....	57
Materials IM 213.....	63

PROGRAM UPDATE AND CHANGES

Ames Central Complex Security

A new security system was established last winter. If you are attending a TTCP class in the East Materials Conference Room you will need to check-in at the Material's Main Entrance to obtain a Security pass. Non-DOT individuals will need to be escorted if they plan to go anywhere within the DOT except the class area. DOT individuals attending will be issued a DOT pass that allows them access to other parts of the DOT. If someone arrives late for a class and no one is available at the Material's Entrance to check them in, then they must go to the DOT Main Entrance to obtain a pass and someone will be called to escort them to class.

Smoking

Smoking is no longer allowed on any DOT or DMACC grounds. This includes field offices, as well as, the Main DOT Complex.

DMACC Policy - "use of tobacco products will not be allowed on any college property or in any college facility; this includes all buildings, grounds, sidewalks, parking lots, vehicles, and streets within the campus proper"

DOT Policy - *Smoking* – Inhaling, exhaling, burning or carrying any lighted cigar, cigarette, pipe, or other tobacco product in any manner or in any form. Smoking is prohibited in indoor areas owned, leased or occupied by or under the control of the Department. Smoking is prohibited anywhere on the grounds of any building owned, leased or occupied by or under the control of the Department. Grounds includes but is not limited to driveways, parking areas both paved and unpaved, sidewalks, sitting and standing areas, patios and courtyards.

Construction Industry Training Funds

These funds are offered to contractors, producers, and suppliers that provide materials or construction services on Iowa DOT projects. **Funding is limited this year, so enroll early for the best opportunity that CIT funds will be available.**

If you wish to use Construction Industry Training funds to pay for course registration fees, contact your employer for approval, then fill out the application appropriately. **Cancellation of any class must be done at least five working days prior to the class or the applicant will be billed the entire cost of the class.**

CIT funds **may not** be used if an individual must take a class for certification due to failure of a class previously attended. This would normally occur if an individual failed a recertification exam and then would be required to take the full class. The full class would not be covered by CIT funds.

Please call the Office of Contracts at 515-239-1422 if you have questions regarding the use of Construction Industry Training Funds. For questions about the Technical Training and Certification Program (TTCP), please call your District Material's Office or the Material's Training office at 515-239-1819.

Electronic Applications

There are electronic applications available at the Technical Training and Certification Program (TTCP) website: <http://www.iowa.gov/dot/materials/training.htm>. Applications can only be submitted electronically if fees or other documents don't need to be included with the registration. DOT employees need to remember to obtain supervisor approval, when required, before registering electronically. The application needs to be attached to an email to submit. Instructions for this procedure are covered on the website.

Web-based Training

The TTCP is starting to develop web-based training that can be used by both industry and agency. There are courses completed covering a number of subjects. A new Iowa DOT Training webpage is currently being constructed and the page will contain links to the new web based training. This page will be available through the Iowa DOT website and will hopefully be completed by fall 2008.

PCC and HMA Updates via Webconferencing

Both the PCC II and HMA I Updates will be available through webconferencing this season. The pilots held last season were successful so there will be web based updates listed in the class dates this year. These can either be taken on an individual's computer or as a group with a single computer hook-up and the attendees participating via computer projector. If there will be a group from your organization participating, the individual in charge should sign-up for the class and list the others that will be participating. We will be limited on computer connections, so please, if you only plan on having a single connection follow the instructions above.

Recertifications

Be prepared!! The recertification sessions will include an update and short review. Since the technician is certified, they are expected to have knowledge in the subject area in which they are re-testing. It is suggested that if the technician has not been active in the area in which they are recertifying, they review materials prior to the recertification class. Manuals in electronic format are available at the above website and are normally updated approximately one month prior to the class. The District Materials Offices should have hard copies of the manuals available for pick-up prior to the course, but always check on availability first.

HMA Sampler

The first portion of the HMA Sampler class will be lecture followed by an exam. All agency personnel will be required to attend additional instruction and hands-on training after the exam. This training will include instruction on performing core densities. **Only** agency personnel will be required to attend the portion after the exam. **Agency personnel should be prepared to stay an entire day for the class.**

Training Locations

Check on the confirmation notice for class location and directions. Classes in central Iowa could be held at DMAACC in Boone, the East Materials Conference Room at the Ames Complex, or the Ames Maintenance Training Room. Addresses and directions are also located in the District Locations portion of this booklet. **DMAACC classes are located at the Boone Campus. Information and a map for this facility are located in the District Locations section.**

Distribution of Information and Registration Booklets

The Technical Training and Certification Program will no longer mail the Information and Registration Booklet to contractors, consultants, producers, etc. This information is included at the TTCP website at <http://www.iowa.gov/dot/materials/training.htm>. The registration form should be printed off and mailed with course payment to the appropriate District Materials office. The book will be available at the District Materials offices for anyone that wishes to obtain a hard copy.

Know Your Math

We have included math problems in this publication. Please check to see if you have the math skills for the level of certification you are planning to attend. You will need to be able to operate the calculator you plan to use before attending class.

Remember we have free math classes for anyone that needs to brush up on math skills before attending certification classes. Math instruction is also available as a web-based course.

No Cell Phones, Please

Please be sure cell phones are shut off or put in the vibratory mode when entering the classroom. All cell phones will be shut off completely during examinations.

COURSE SUMMARY

All classes will start at 9 A.M. the first day unless stated otherwise on the confirmation notice, but could vary for the rest of the course. If the starting time for the rest of the course will be different, the instructor will notify the class the first day. Below is a list of supplies that are necessary for the certification courses:

- Pencils and paper
- Calculator - No computers or programmable calculators are allowed.
- Steel-toe shoes are recommended for the Level I HMA and the Level II HMA classes.
- Below is a list of supplies needed for the Basic 25-foot Profilometer course:

Blanking band	Engineer Tenths Scale
Bump Template	Red Medium Point Ball Point Pen
Calculator	

No supplies are required for the PCC and HMA update classes.

Cell Phones are to be shut off or put on vibratory mode when entering the classroom. All cell phones will be shut off completely during examinations.

COURSE SUMMARY

Certification Courses

Courses, Fees, and Pre-Requisites

Course Title	Description	Fee-New		Fee-Recert.		Pre-requisite
		*	**	*	**	
Level I Aggregate	Certified Sampling Tech.	50	75	25	50	None
Level II Aggregate	Certified Aggregate Tech.	350	425	75	100	Level I Aggregate
Level I HMA	Certified HMA Technician	500	650	75	100	Level II Aggregate
Level II HMA	Gyratory Mix Designer	500	625	75	100	Level I HMA
HMA Sampler	Certified HMA Sampling Technician	50	75	25	50	None
HMA-Update	Update for Level I HMA	‡	‡	N/A	N/A	None
Level I PCC	Certified Concrete Tester	300	375	75	100	None
Level I PCC	IF ACI CERTIFIED	100	150	75	100	None
Level II PCC	Certified PCC Technician	400	525	75	100	Level I PCC & AGG II
Level III PCC	PCC Mix Designer	400	500	75	100	Level II PCC
PCC-Update	Update for Level II PCC	‡	‡	N/A	N/A	None
Profilograph	Profilograph Technician	200	250	75	100	None
Prestress	Prestress Technician	300	375	75	100	◆PCC I or ACI Level I
Soils	Soils Technician	200	250	75	100	None
Nuclear Gauge	Nuclear Gauge Operator (DOT ONLY)	N/A	N/A	N/A	N/A	None

*These fees are for Government Agency employees.

**These fees are for Non-Government Agency employees.

‡Cost of the Update Sessions is included in the original cost of the course.

◆If the Certified Prestress Technician will be running gradations, they will need to be Aggregate Level II certified.

COURSE SUMMARY

Non-Certification Courses

Courses, Fees, and Pre-Requisites

Course Title	Description	Fee-New		Fee-Recert.		Pre-requisite
		*	**	*	**	
HMA Field Inspection	HMA Paving Inspection	--	--	--	--	None
Structures Field Insp.	Structural Inspection	--	--	--	--	None
Bridge Deck Grade	Bridge Deck Grades and Superstructures	--	--	--	--	DOT Employees Only
PCC Field Inspection	PCC Paving Inspection	--	--	--	--	None
Grade Technician	Grade Inspection	--	--	--	--	None
Contract Administration for Local System	Contract Administration on Local System projects	--	--	--	--	None
Monitor Administrator	Monitor Duties Instruction Includes Updates for HMA & PCC	--	--	--	--	HMA Level I and/or PCC Level II
Math	Math Instruction	--	--	--	--	None

**IOWA DEPARTMENT OF TRANSPORTATION
2008-2009 TTCP APPLICATION FOR CERTIFICATION**

IDOT CERT # _____

ACI Exp. Date _____

Name (first, middle initial, last)	Driver's License Number
Home Address	E-mail Address
City, State, Zip Code	Home or Cell Phone No.
Employer's Name	Employer's Phone No.
Employer's Address (Street, City, State, Zip Code)	

All courses are limited to a maximum class size shown on the class listing—class size will not be exceeded. The Program Director has the right to cancel any courses where the minimum class size has not been reached. **Send application including fees to the District Materials Office in which you reside** as soon as possible. The applicant must attach copies of out-of-state certifications, engineering degrees or diplomas, and ACI certifications as necessary. All District Materials addresses are listed in the TTCP booklet or at <http://www.iowa.gov/dot/materials/training.htm>. Checks or money orders are to be made payable to the IDOT & attached to the application (NO CASH PLEASE). An administration fee of \$25 will be charged for cancellation prior to 5 working days before course date. Entire fee will be forfeited if cancellation occurs within 5 working days of course date. Be sure to put a second choice for course dates. The applicant will be notified of acceptance into a course or courses. **For questions about the TTCP, please call your District Material's Office or the Material's Training office at 515-239-1819.** Please note on the application any special needs that would need to be addressed in order to attend classes through the Technical Training and Certification Program.

Construction Industry Training Funds may be used to pay for any of the courses below. Please note below the amount of CIT funds you will be using for registration. If only a portion of the registration fee is paid by CIT funds, payment needs to be submitted with the application for the remaining portion. If course cancellation is not made within five working days, the applicant will be billed the entire course fee. Any questions on the use of CIT funds need to be directed to the Office of Contracts at 515-239-1422.

CIT Funds Being Used: \$ _____
 Applicant's signature below certifies employer's permission to use CIT Funds.
 Applicant's Signature: _____

Be sure all pre-requisites are met when applying for courses. These are listed in the course catalog.

Course	1 st Choice		2 nd Choice		Course Fee		Test	
	Course Date	Location	Course Date	Location	**	***	Date	Score
Level I Agg	_____	_____	_____	_____	50	75	_____	_____
Level II Agg	_____	_____	_____	_____	350	425	_____	_____
HMA Sampler	_____	_____	_____	_____	50	75	_____	_____
Level I HMA	_____	_____	_____	_____	500	650	_____	_____
Level II HMA	_____	_____	_____	_____	500	625	_____	_____
Level I PCC	_____	_____	_____	_____	300*	375*	_____	_____
Level II PCC	_____	_____	_____	_____	400	525	_____	_____
Level III PCC	_____	_____	_____	_____	400	500	_____	_____
Nuclear Gauge	_____	_____	_____	_____	DOT only		_____	_____
Profilometer	_____	_____	_____	_____	200	250	_____	_____
Prestress	_____	_____	_____	_____	300	375	_____	_____
Soils	_____	_____	_____	_____	200	250	_____	_____

Level I Agg, recert	_____	_____	_____	_____	25	50	_____	_____
Level II Agg, recert	_____	_____	_____	_____	75	100	_____	_____
HMA Sampler recert	_____	_____	_____	_____	25	50	_____	_____
Level I HMA, recert	_____	_____	_____	_____	75	100	_____	_____
Level II HMA, recert	_____	_____	_____	_____	75	100	_____	_____
Level I PCC, recert	_____	_____	_____	_____	75	100	_____	_____
Level II PCC, recert	_____	_____	_____	_____	75	100	_____	_____
Level III PCC, recert	_____	_____	_____	_____	75	100	_____	_____
Nuclear Gauge, recert	_____	_____	_____	_____	DOT only		_____	_____
Profilometer, recert	_____	_____	_____	_____	75	100	_____	_____
Prestress, recert	_____	_____	_____	_____	75	100	_____	_____

* If ACI certified - \$100 for government employees, \$150 for non-government employees
 ** Government employees *** Non-government employees

Special Needs _____

**IOWA DEPARTMENT OF TRANSPORTATION
2008-2009 TTCP APPLICATION FOR CERTIFICATION**

SPECIAL CLASSES

All courses are limited to a maximum class size shown on the class listing—class size will not be exceeded. **If not submitting electronically, send application to the District Materials Office in which you reside** as soon as possible. Be sure to put a second choice for course dates. The Program Director has the right to cancel any courses where the minimum class size has not been reached. All District Materials addresses are listed in the TTCP booklet and at <http://www.iowa.gov/dot/materials/training.htm>. The applicant will be notified of acceptance into a course or courses. Please note on the application any special needs that would need to be addressed in order to attend classes through the Technical Training and Certification Program.

Name (first, middle initial, last)	Driver's License No.	IDOT CERT # _____
Home Address	E-mail Address	
City, State, Zip Code	Home or Cell Phone No.	
Employer's Name	Employer's Phone No.	
Employer's Address (Street, City, State, Zip Code)		

Applicant's Signature: _____

Course	1 st Choice		2 nd Choice		Course Fee	
	Course Date	Location	Course Date	Location	* **	
†HMA Update	_____	_____	_____	_____	-0-	-0-
†PCC Update	_____	_____	_____	_____	-0-	-0-
Monitor Adm.	_____	_____	_____	_____	-0-	-0-
Math	_____	_____	_____	_____	-0-	-0-
Grade Technician	_____	_____	_____	_____	-0-	-0-
PCC Paving Field Inspect.	_____	_____	_____	_____	-0-	-0-
Structures Field Inspection	_____	_____	_____	_____	-0-	-0-
HMA Paving Field Inspect.	_____	_____	_____	_____	-0-	-0-
Bridge Deck Grade	_____	_____	_____	_____	DOT ONLY	
The following is directed to local systems field inspectors						
Contract Administration	_____	_____	_____	_____	-0-	-0-

* Government employees

** Non-government employees

† **Please note for web based attendees.** The application should only be filled out by the individual that will have the computer hook-up. If your system is the primary system and others from your agency/company plan on attending, via computer projector, please list those who plan to attend. These can be listed in the Special Needs blank or attached on an additional page. The individual that is in charge of the computer hook-up will also be responsible for notifying the others from their agency/company of date, time, and location.

Special Needs _____

2008-2009 SCHEDULE OF CLASSES

All classes have a maximum enrollment. Once this maximum is reached, the class will be closed with no more applications accepted. It is important that you get your application in early in order to get into the class you request. You will receive a confirmation for the class you will be attending. The enrollment deadline is two weeks prior to the first day of the class, providing the class is not already closed. **Reminder: Level II Aggregate starts in the afternoon after the completion of the Level I Aggregate in the morning.**

Level I Aggregate – Agg. Sampling Technician

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I Aggregate	DMACC	12/16/08	½	16
Level I Aggregate	DMACC	01/06/09	½	16
Level I Aggregate	DMACC	02/17/09	½	16
Level I Aggregate	DMACC	04/07/09	½	16
Level I Aggregate	District 2 Materials Waterloo Lab	12/09/08	½	6
Level I Aggregate	District 2 Materials Waterloo Lab	02/10/09	½	6
Level I Aggregate	District 2 Materials	01/13/09	½	9
Level I Aggregate	District 3 Materials	01/05/09	½	10
Level I Aggregate	District 3 Materials	02/09/09	½	10
Level I Aggregate	District 4 Materials	01/13/09	½	12
Level I Aggregate	District 4 Materials	02/10/09	½	12
Level I Aggregate	Chariton Construction	12/09/08	½	10
Level I Aggregate	District 5 Materials	12/16/08	½	20
Level I Aggregate	District 5 Materials	01/13/09	½	20
Level I Aggregate	District 6 Materials	01/20/09	½	15
Level I Aggregate	District 6 Materials	02/10/09	½	15
Level I Aggregate	District 6 Materials	03/10/09	½	15

Level II Aggregate – Certified Aggregate Technician

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II Aggregate	DMACC	12/16/08	3½	16
Level II Aggregate	DMACC	01/06/09	3½	16
Level II Aggregate	DMACC	02/17/09	3½	16
Level II Aggregate	DMACC	04/07/09	3½	16
Level II Aggregate	District 2 Materials Waterloo Lab	12/09/08	3½	6
Level II Aggregate	District 2 Materials Waterloo Lab	02/10/09	3½	6
Level II Aggregate	District 2 Materials	01/13/09	3½	9
Level II Aggregate	District 3 Materials	01/05/09	3½	10
Level II Aggregate	District 3 Materials	02/09/09	3½	10
Level II Aggregate	District 4 Materials	01/13/09	3½	12
Level II Aggregate	District 4 Materials	02/10/09	3½	12
Level II Aggregate	Chariton Construction	12/09/08	3½	10
Level II Aggregate	District 5 Materials	12/16/08	3½	8
Level II Aggregate	District 5 Materials	01/13/09	3½	8
Level II Aggregate	District 6 Materials	01/20/09	3½	15
Level II Aggregate	District 6 Materials	02/10/09	3½	15
Level II Aggregate	District 6 Materials	03/10/09	3½	15

Level I Aggregate Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I Aggregate Re-Certification	DMACC	12/03/08	½	20
Level I Aggregate Re-Certification	DMACC	12/17/08	½	20
Level I Aggregate Re-Certification	DMACC	01/07/09	½	20

Level I Aggregate Re-Certification	District 2 Materials Waterloo Lab	12/08/08	½	25
Level I Aggregate Re-Certification	District 2 Materials Waterloo Lab	02/09/09	½	25
Level I Aggregate Re-Certification	District 2 Materials	01/12/09	½	25
Level I Aggregate Re-Certification	District 3 Materials	01/09/09	½	15
Level I Aggregate Re-Certification	District 3 Materials	01/16/09	½	15
Level I Aggregate Re-Certification	District 3 Materials	01/30/09	½	15
Level I Aggregate Re-Certification	District 3 Materials	02/03/09	½	15
Level I Aggregate Re-Certification	District 3 Materials	02/13/09	½	15
Level I Aggregate Re-Certification	District 4 Materials Dist. Conf. Rm.	01/29/09	½	25
Level I Aggregate Re-Certification	District 4 Materials Dist. Conf. Rm.	02/03/09	½	25
Level I Aggregate Re-Certification	District 5 Materials	01/08/09	½	25
Level I Aggregate Re-Certification	Chariton Construction	12/04/08	½	10
Level I Aggregate Re-Certification	Chariton Construction	01/06/09	½	10
Level I Aggregate Re-Certification	Cedar Rapids Const. Residency	01/06/09	½	25
Level I Aggregate Re-Certification	Cedar Rapids Const. Residency	02/19/09	½	25

Level II Aggregate-Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II Agg. Re-Certification	DMACC	12/03/08	½	20
Level II Agg. Re-Certification	DMACC	12/17/08	½	20
Level II Agg. Re-Certification	DMACC	01/07/09	½	20
Level II Agg. Re-Certification	District 2 Materials Waterloo Lab	12/08/08	½	25
Level II Agg. Re-Certification	District 2 Materials Waterloo Lab	02/09/09	½	25
Level II Agg. Re-Certification	District 2 Materials	01/12/09	½	25
Level II Agg. Re-Certification	District 3 Materials	01/09/09	½	15
Level II Agg. Re-Certification	District 3 Materials	01/16/09	½	15
Level II Agg. Re-Certification	District 3 Materials	01/30/09	½	15
Level II Agg. Re-Certification	District 3 Materials	02/03/09	½	15
Level II Agg. Re-Certification	District 3 Materials	02/13/09	½	15
Level II Agg. Re-Certification	District 4 Materials Dist. Conf. Rm.	01/29/09	½	25
Level II Agg. Re-Certification	District 4 Materials Dist. Conf. Rm.	02/03/09	½	25
Level II Agg. Re-Certification	District 5 Materials	01/08/09	½	25
Level II Agg. Re-Certification	Chariton Construction	12/04/08	½	10
Level II Agg. Re-Certification	Chariton Construction	01/06/09	½	10

Level II Agg. Re-Certification	Cedar Rapids Const. Residency	01/06/09	½	25
Level II Agg. Re-Certification	Cedar Rapids Const. Residency	02/19/09	½	25

HMA Sampler

Class	Training Location	Starting Date	Days	Maximum Enrollment
HMA Sampler	DMACC	03/09/09	½	15
HMA Sampler	District 2 Materials	01/07/09	½	12
HMA Sampler	District 2 Materials	02/11/09	½	12
HMA Sampler	District 3 Materials	04/09/09	½	15
HMA Sampler	District 4 Materials	03/19/09	½	12
HMA Sampler	District 5 Materials	03/05/09	½	12
HMA Sampler	Cedar Rapids Const. Residency	01/23/09	½	25
HMA Sampler	Cedar Rapids Const. Residency	02/24/09	½	25

HMA Sampler Re-certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
HMA Sampler	DMACC	02/09/09	½	15
HMA Sampler	District 4 Materials	04/01/09	½	25

Level I HMA – HMA Technician

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I HMA	DMACC	01/26/09	5	20
Level I HMA	DMACC	02/23/09	5	20
Level I HMA	DMACC	03/23/09	5	20
Level I HMA	DMACC	04/20/09	5	20

Level I HMA– Update

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I HMA Update	Online	02/10/09 10:30 A.M.	½	N/A
Level I HMA Update	Online	03/05/09 10:30 A.M.	½	N/A
Level I HMA Update	Ames Maint. Garage Training Room	01/20/09 9:00 A.M.	½	25
Level I HMA Update	District 2 Materials	01/06/09 9:00 A.M.	½	25
Level I HMA Update	District 2 Materials	02/10/09 9:00 A.M.	½	25
Level I HMA Update	District 3 Materials	02/27/09 9:00 A.M.	½	15
Level I HMA Update	District 3 Materials	03/11/09 9:00 A.M.	½	15
Level I HMA Update	District 4 Materials District Conf. Rm	04/02/09 1:00 P.M.	½	25
Level I HMA Update	District 5 Materials	02/10/09 1:00 P.M.	½	25
Level I HMA Update	District 5 Materials	02/19/09 1:00 P.M.	½	25
Level I HMA Update	Cedar Rapids Const. Residency	01/22/09 9:00 A.M.	½	30

Level I HMA-Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I HMA Re-Cert	DMACC	01/13/09	1	20
Level I HMA Re-Cert	District 2 Materials	01/06/09	1	25
Level I HMA Re-Cert	District 2 Materials	02/10/09	1	25
Level I HMA Re-Cert	District 3 Materials	01/29/09	1	15
Level I HMA Re-Cert	District 4 Materials District Conf. Rm.	03/04/09	1	25
Level I HMA Re-Cert	District 5 Materials	01/15/09	1	25
Level I HMA Re-Cert	Cedar Rapids Const. Residency	01/22/09	1	30

Level II HMA - Gyratory Mix Design

Class	Training Location	Starting Date	Days	Maximum Enrollment
HMA Mix Design	DMACC	03/16/09	5	20

Level II HMA Re-Certification-Mix Design

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II HMA Re-Cert	East Matls. Conf. Rm Ames	02/05/09	1	25

Level I PCC – PCC Concrete Testing

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I PCC	DMACC	12/11/08	2	15
Level I PCC	DMACC	01/22/09	2	15
Level I PCC	DMACC	02/12/09	2	15
Level I PCC	DMACC	03/02/09	2	15
Level I PCC	DMACC	04/16/09	2	15
Level I PCC	District 2 Materials	01/28/09	2	8
Level I PCC	District 2 Materials	02/25/09	2	8
Level I PCC	District 3 Materials	01/27/09	2	10
Level I PCC	District 3 Materials	02/24/09	2	10
Level I PCC	District 4 Materials	01/27/09	2	12
Level I PCC	District 4 Materials	03/24/09	2	12
Level I PCC	District 5 Materials	12/09/08	2	8
Level I PCC	District 5 Materials	01/20/09	2	8
Level I PCC	District 6 Materials	12/16/08	2	12
Level I PCC	District 6 Materials	01/14/09	2	12
Level I PCC	District 6 Materials	02/17/09	2	12
Level I PCC	District 6 Materials	03/17/09	2	12

Level I PCC-Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level I PCC Re-Cert	DMACC	12/15/08	1	20
Level I PCC Re-Cert	DMACC	01/12/09	1	20
Level I PCC Re-Cert	DMACC	02/09/09	1	20
Level I PCC Re-Cert	District 2 Materials	01/21/09	1	25
Level I PCC Re-Cert	District 2 Materials	02/18/09	1	25
Level I PCC Re-Cert	District 3 Materials	01/21/09	1	15

Level I PCC Re-Cert	District 3 Materials	02/18/09	1	15
Level I PCC Re-Cert	District 3 Materials	02/26/09	1	15
Level I PCC Re-Cert	District 3 Materials	03/10/09	1	15
Level I PCC Re-Cert	District 4 Materials District Conf. Rm.	01/07/09	1	25
Level I PCC Re-Cert	District 4 Materials District Conf. Rm.	03/10/09	1	25
Level I PCC Re-Cert	District 5 Materials	12/16/08	1	20
Level I PCC Re-Cert	District 5 Materials	01/06/09	1	20
Level I PCC Re-Cert	Cedar Rapids Const. Residency	01/08/09	1	30

Level II PCC – PCC Plant Inspector

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II PCC	DMACC	01/13/09	4	20
Level II PCC	DMACC	02/02/09	4	20
Level II PCC	DMACC	02/17/09	4	20
Level II PCC	DMACC	03/17/09	4	20
Level II PCC	DMACC	04/21/09	4	20
Level II PCC	DMACC	05/05/09	4	20

Level II PCC – Plant Inspection Update

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II PCC Update	Online	02/10/09 9:00 A.M.	½	N/A
Level II PCC Update	Online	03/05/09 9:00 A.M.	½	N/A
Level II PCC Update	Ames Maint. Garage Training Room	01/20/09 10:30 A.M.	½	25
Level II PCC Update	District 2 Materials	01/22/09 9:00 A.M.	½	25
Level II PCC Update	District 2 Materials	02/19/09 9:00 A.M.	½	25
Level II PCC Update	District 3 Materials	02/27/09 1:00 P.M.	½	15
Level II PCC Update	District 3 Materials	03/11/09 1:00 P.M.	½	15
Level II PCC Update	District 4 Materials District Conf. Rm.	04/02/09 9:00 A.M.	½	25
Level II PCC Update	District 5 Materials	02/10/09 9:00 A.M.	½	25
Level II PCC Update	District 5 Materials	02/19/09 9:00 A.M.	½	25
Level II PCC Update	Cedar Rapids Const. Residency	01/16/09 9:00 A.M.	½	30

Level II PCC Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level II PCC Re-Cert	DMACC	01/26/09	1	20
Level II PCC Re-Cert	District 2 Materials	01/22/09	1	25
Level II PCC Re-Cert	District 2 Materials	02/19/09	1	25
Level II PCC Re-Cert	District 3 Materials	01/22/09	1	15
Level II PCC Re-Cert	District 3 Materials	02/19/09	1	15

Level II PCC Re-Cert	District 4 Materials District Conf. Rm.	01/08/09	1	25
Level II PCC Re-Cert	District 4 Materials District Conf. Rm.	03/11/09	1	25
Level II PCC Re-Cert	District 5 Materials	01/07/09	1	20
Level II PCC Re-Cert	Cedar Rapids Const. Residency	01/16/09	1	30

Level III PCC Mix Design

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level III PCC Mix Design	DMACC	03/03/09	4	20

Level III PCC Mix Design – Re-Certification

Class	Training Location	Starting Date	Days	Maximum Enrollment
Level III PCC Mix Design Re- Cert.	DMACC	02/12/09	1	25

Profilometer Operator

Profilometer- new	East Matls. Conf. Rm Ames	03/24/09	2	25
Profilometer- new	East Matls. Conf. Rm Ames	04/08/09	2	25

Profilometer-Re-Certification

Profilometer- Re-Cert	East Matls. Conf. Rm Ames	01/27/09	1	25
Profilometer- Re-Cert	East Matls. Conf. Rm Ames	02/17/09	1	25

Prestress Technician

Class	Training Location	Starting Date	Days	Maximum Enrollment
Prestress Technician	DMACC	03/31/09	3	20

Prestress – Re-Certification

Prestress Technician Re-Cert.	East Matls. Conf. Rm Ames	03/03/09	1	25
-------------------------------	------------------------------	----------	---	----

Soils Technician

Class	Training Location	Starting Date	Days	Maximum Enrollment
Soils Technician	DMACC	12/09/08	2	15
Soils Technician	DMACC	01/20/09	2	15
Soils Technician	DMACC	02/10/09	2	15
Soils Technician	DMACC	03/04/09	2	15

Monitor Administration – Monitors Only

Monitor Administration	East Matls. Conf. Rm Ames	02/11/09	1	25
Monitor Administration	East Matls. Conf. Rm Ames	03/11/09	1	25

Math

Math	East Matls. Conf. Rm Ames	12/04/08	1	25
Math	East Matls. Conf. Rm Ames	01/06/09	1	25

Grade Technician Training

Grade Technician DOT ONLY	Ames Maint. Garage Training Room	01/27/09	2	25
Grade Technician County, City, Consultant ONLY	Ames Maint. Garage Training Room	2/03/09	1	25

PCC Paving Field Inspection

PCC Paving Field Inspection	Ames Maint. Garage Training Room	02/10/09	2	25
PCC Paving Field Inspection	Ames Maint. Garage Training Room	3/04/09	2	25

Structural Field Inspection

Structural Inspection	Ames Maint. Garage Training Room	02/04/09	2	25
Structural Inspection	Ames Maint. Garage Training Room	03/05/09	2	25

HMA Paving Field Inspection

HMA Paving Field Inspection	Ames Maint. Garage Training Room	03/11/09	2	25
--------------------------------	-------------------------------------	----------	---	----

THE FOLLOWING CLASSES ARE FOR IOWA DOT EMPLOYEES ONLY.

Nuclear Gauge Operator

Nuclear Gauge- New	East Matls. Conf. Rm Ames	03/04/09	2	25
Nuclear Gauge- Recert.	East Matls. Conf. Rm Ames	01/22/09	1	25
Nuclear Gauge- Recert.	District 2 Materials Conf. Rm.	01/20/09	1	25
Nuclear Gauge- Recert.	District 3 Materials Conf. Rm.	02/10/09	1	20
Nuclear Gauge- Recert.	District 4 Materials District Conf. Rm.	01/27/09	1	25
Nuclear Gauge- Recert.	District 5 Materials	01/29/09	1	25
Nuclear Gauge- Recert.	Cedar Rapids Const. Residency	02/04/09	1	25

Bridge Deck Grade Training

Bridge Deck Grade Training	Ames Maint. Garage Training Room	02/12/09	1	25
Bridge Deck Grade Training	Ames Maint. Garage Training Room	03/10/09	1	25

THE FOLLOWING CLASSES ARE FOR LOCAL SYSTEM INSPECTORS

Contract Administration for Local Systems

Contract Admin. For Local Systems	East Matls. Conf. Rm Ames	01/20/09	2	25
Contract Admin. For Local Systems	District 2 Materials	03/17/09	2	25
Contract Admin. For Local Systems	District 3 Materials	03/03/09	2	25
Contract Admin. For Local Systems	District 4 Materials	02/17/09	2	25
Contract Admin. For Local Systems	District 5 Materials	02/03/09	2	25
Contract Admin. For Local Systems	Cedar Rapids Const. Residency	03/31/09	2	25

OTHER TRAINING SESSIONS AND SEMINARS AVAILABLE

APAI Workshop- Update Course for Level I HMA

Information and registration are available through the APAI.

March 5-6, 2009

ICPA Workshop- Update Course for Level II PCC

Information and registration are available through the ICPA.

February 4-6, 2009

IRMCA Workshop- Update Course for Level II PCC

Information and registration are available through the IRMCA.

March 1-3, 2009

Work Zone Safety Workshops

This course introduces the principles and conveys the importance of using proper methods for safe and efficient traffic control at work sites. It examines some specific applications relevant to situations normally encountered by city, county, utility, contractor, and Iowa DOT crews. This course is for all workers whose duties place them within or near the traveled portion of the roadway, and their supervisors. Each day-long workshop is divided into a general session for all participants and breakout sessions according to specific types of work zone activity: city, county, utility, Iowa DOT construction, and Iowa DOT maintenance. For information on this workshop DOT employees should contact Susan Fultz at 515-239-1076 and non-DOT employees should contact Tom McDonald at 515-294-6384.

Civil Engineering Technology

Des Moines Area Community College, Boone Campus, is now offering a Civil Engineering Technology Program. This program prepares the student for a career as a technician in the areas of design, construction, and inspection. Upon completion of the program, graduates will have a working knowledge of surveying equipment, industry-based computer software, and laboratory testing instruments. When an individual completes this program and passes the certification tests administered by the Iowa DOT Technical Training and Certification Program, they will be certified in Level I and Level II Aggregate; Level I and Level II PCC; and Level I HMA. Contact Renee White at DMACC, Boone at 515-433-5056 for more information on the program.

**IOWA DOT & ORGANIZATIONS
DISTRICT LOCATIONS**

<u>ADDRESS</u>	<u>PHONE NUMBER</u>	<u>FAX NUMBER</u>	<u>MATERIALS ENGINEER/ CONTACT PERSON</u>
District 1 Materials 1020 S Fourth Ames, Iowa 50010	515-239-1844	515-239-1472	John Heggen/Debi Crook debi.crook@dot.iowa.gov
District 2 Materials 672 6 th St. SE Mason City, Iowa 50401	641-423-7676	641-424-2203	Keith Norris/Mark Picht/ Eileen West eileen.west@dot.iowa.gov
District 3 Materials PO Box 80128 Sioux City, Iowa 51108-0128	712-239-4713	712-239-4970	Bill Dotzler/Tony Yanak/ Marian Gisel james.yanak@dot.iowa.gov
District 4 Materials 2210 E. Seventh St. Atlantic, Iowa 50022	712-243-7649	712-243-5302	Dan Redmond/Richard Meyer richard.meyer@dot.iowa.gov
District 5 Materials PO Box 843 Fairfield, Iowa 52556-0587	641-472-3103	641-469-3427	James Webb/Ellen Davidson ellen.davidson@dot.iowa.gov
District 6 Materials P.O. Box 3150 Cedar Rapids, Iowa 52406-3150	319-366-0446	319-730-1565	Roger Boulet/ John Couser Lynn Gemmer john.couser@dot.iowa.gov

Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

		<u>Phone Number</u>	<u>Fax Number</u>
Jim Berger	Materials Engineer	515-239-1843	515-239-1092
John Smythe	Construction Engineer	515-239-1503	515-239-1845
Tom Jacobson	Asst. Construction Engineer	515-239-1453	515-239-1845
Todd Hanson	PC Concrete Engineer	515-239-1226	515-239-1092
Kevin Merryman	PC Concrete Field Engineer	515-239-1848	515-239-1845
Sam Moussalli	Structural Materials Engineer	515-239-1547	515-239-1092
Wayne Sunday	Structures Field Engineer	515-239-1185	515-239-1845
Vacant	Bituminous Engineer	515-239-1003	515-239-1092
Jeffrey Schmitt	Bituminous Field Engineer	515-239-1013	515-239-1845
Brian Gossman	Chief Geologist	515-239-1204	515-239-1092
Vacant	Grading Field Engineer	515-239-1280	515-239-1845
Chris Anderson	Technical Training Coordinator	515-239-1819	515-239-1092
Christie.Anderson@dot.iowa.gov			
Brian Squier	Training Specialist	515-233-7915	515-239-1092
Brian.Squier@dot.iowa.gov			

ORGANIZATIONS

Asphalt Paving Association of Iowa
116 Clark Avenue, Suite C
Ames, IA 50010
Mike Kvach 515-233-0015

Iowa Limestone Producers Association
5911 Meredith Dr., Suite A
Des Moines, Iowa 50322
Richard White 515-262-866

Iowa Concrete Paving Association
360 SE Delaware Ave.
Ankeny, Iowa 50021
Gordon Smith 515-963-0606

Iowa Ready Mix Concrete Association
380 S.E. Delaware Ave.
Ankeny, Iowa 50021
Jerry Woods 515-965-4575

Iowa Prestress Association
601 SW 9th
Des Moines, IA 50309
Ordean Johnson 515-243-5118

Des Moines Area Community College (DMACC)
Boone Campus
1125 Hancock Drive
Boone, Iowa 50036

Kelli Bennett
Phone number: 515-433-5232
E-mail: kabennett@dmacc.edu
Fax 515-433-5231

or

Renee White
Phone number: 515-433-5056
E-mail: crwhite@dmacc.edu

DISTRICT MATERIALS LOCATIONS

CENTRAL MATERIALS COMPLEX

800 Lincoln Way – Ames
Hwy. US 30 to Duff Exit
North to 3rd St. then West
3rd St. turns into 4th St.
DOT is on North side of 4th St.
Enter south gate – Materials Bldg. is
1st building on East side
parking is West or South of Materials Bldg.
Enter at main Materials entrance on east side of building.

DISTRICT 2 MATERIALS

672 6th St. SE – Mason City
Hwy. 122 to Virginia Avenue (east side of Mason City)
South on Virginia Avenue to 6th St. SE
West to District 2 Office on North side of the St.
Parking on north side of bldg.

DISTRICT 3 MATERIALS

4621 Hwy. US 75 N – Sioux City
Hwy. US 75 to 46th St. exit (North side of Sioux City)
Through underpass to Cleveland St.
Uphill on Cleveland then turn right
Parking on North side of the bldg.

DISTRICT 4 MATERIALS

Hwy. US 71 & 6 – Atlantic
Hwy. 71 & 6 on East side of Atlantic
On North side of Hwy. across from cemetery
Conference Room in Brick Bldg. Lab in Tan Metal Bldg.
Park on South side of the Lab

DISTRICT 5 MATERIALS

301 W Briggs – Fairfield
Hwy. US 34 to 4th St.
North on 4th St. to W Briggs
East on W Briggs
Building on North side of Street
Parking on the Street

DISTRICT 6 MATERIALS

CEDAR RAPIDS CONSTRUCTION RESIDENCY
5455 Kirkwood Blvd. SW – Cedar Rapids
Hwy. US 30 to Kirkwood Blvd.
South on Kirkwood
DOT on East side of St.
Conf. Room in South Bldg
Lab in North Bldg.
Parking is South of the South Bldg.

DISTRICT 1 MATERIALS

1020 S. 4th Street - Ames
Same directions as Central Materials
except District 1 is located on the
South side of 4th street. The District 1
lab is located directly across from the
Central Complex East gate on 4th St.

WATERLOO MATERIALS LAB

1875 W. Ridgeway Ave.- Waterloo
Hwy. 20 to Hwy. 63 (Southside of Waterloo)
North on Hwy. 63 1 mile then turn east on
Ridgeway Ave. Go ¼ mile and the lab
Located on the Southside of the DOT
Maintenance Complex. It is the center
walk-in door on the east side of the
building.

CHARITON CONST. RESIDENCY

21922 480th Street - Chariton
Hwy. 34 at the West Business
Junction. Turn North off Hwy. 34
at Business Jct. (480th Street)
On South side of 480th Street

OTHER LOCATIONS

DMACC MATERIALS LAB – BOONE

1125 Hancock Drive

The DMACC campus is accessible by turning north off Hwy 30 on Story St. to Park Avenue (a block past DMACC sign) Park Avenue takes you straight to DMACC parking lot. Or turn north off Hwy. 30 on South Linn and go North on South Linn to DMACC. Parking and the entrance are located on the north side of the building.

MAINTENANCE TRAINING ROOM – AMES

57073 E. Hwy. 30

East of I-35 on Highway 30. There is a frontage road to the North of Hwy. 30 and the DOT Maintenance Bldg. is off the frontage road. The Training Room is upstairs.

MOTELS

AMES

Country Inn & Suites – 515-233-3935
Heartland Inn – 800-334-3277
Super 8 Motel – 800-800-8000

SIOUX CITY

Holiday Inn Express – 712-274-1400
Holiday Inn Downtown – 712-277-9400
Comfort Inn – 712-274-1300
Days Inn – 712-258-8000
Best Western City Centre – 712-277-1550

CEDAR RAPIDS

Excel Inn – 800-356-8013
Heartland Inn – 800-334-3277
Super 8 Motel – 800-800-8000
Red Roof Inn – 800-843-7663

MASON CITY

Comfort Inn – 641-423-4444/800-424-6423
Days Inn – 641-424-0210/800-325-2525
Hanford Inn – 641-424-9494/800-424-9491
Holiday Inn – 641-423-1640/800-424-3685
Country Inn - 641-423-1770
Super 8 Motel - 641-423-8855/800-800-8000

ATLANTIC

Super 8 Motel – 800-800-8000
Hawkeye Motel – 712-243-1603
A/Ford/O Motel – 712-243-1412

FAIRFIELD

Super 8 Motel – 800-800-8000
Best Western – 515-472-2200

BOONE

American – 515-432-4322
Baymont – 515-432-8168
Super 8 Motel – 800-800-8000

STORM LAKE

Super 8 Motel – 800-800-8000
Amerihost Inn – 712-732-1000

Some motels give individuals DOT rates when they are attending DOT training courses. The student may want to check on this when making reservations

MINNESOTA COUNTIES

ILLINOIS COUNTIES

SOUTH DAKOTA COUNTIES

Rock Nobles Jackson Martin Fairbault Freeborn Mower Fillmore Houston

Minnehaha

Lincoln

Union

LYON OSCEOLA DICKINSON EMMET WINNEBAGO WORTH MITCHELL HOWARD WINNESHEIK ALLAMAKEE

Vernon

SIoux O'BRIEN CLAY PALO ALTO KOSSUTH HANCOCK CERRO GORDO FLOYD CHICKASAW

Crawford

DISTRICT 2 - Mason City

FAYETTE CLAYTON

Grant

PLYMOUTH CHEROKEE BUENA VISTA POCAHONTAS HUMBOLDT WRIGHT FRANKLIN BUTLER BREMER

DISTRICT 3 - Sioux City

BLACK HAWK BUCHANAN DELAWARE DUBUQUE

Jodavies

Neb. Co.

Dakota

Thurston

Burt

WOODBURY IDA SAC CALHOUN WEBSTER HAMILTON HARDIN GRUNDY

Carroll

MONONA CRAWFORD CARROLL GREENE BOONE STORY MARSHALL TAMA BENTON LINN JONES JACKSON

Whiteside

DISTRICT 1 - Ames

DISTRICT 6 - Cedar Rapids

CLINTON

Washington

HARRISON SHELBY AUDUBON GUTHRIE DALLAS Des Moines JASPER IOWA JOHNSON

Henry

Rock Island

Douglas

POTTAWATTAMIE CASS ADAIR MADISON WARREN MARION MAHASKA KEOKUK WASHINGTON MUSCATINE

Mercer

Sarpy

DISTRICT 4 - Atlantic

DISTRICT 5 - Fairfield

LOUISA

Cass

MILLS MONTGOMERY ADAMS UNION CLARKE LUCAS MONROE WAPELLO JEFFERSON HENRY DES MOINES

Henderson

Otoe

FREMONT PAGE TAYLOR RINGGOLD DECATUR WAYNE APPANOOSE DAVIS VAN BUREN LEE

Hancock

NEBRASKA COUNTIES

Atchison Nodaway Worth Harrison Mercer Putnam Schuyler Scotland

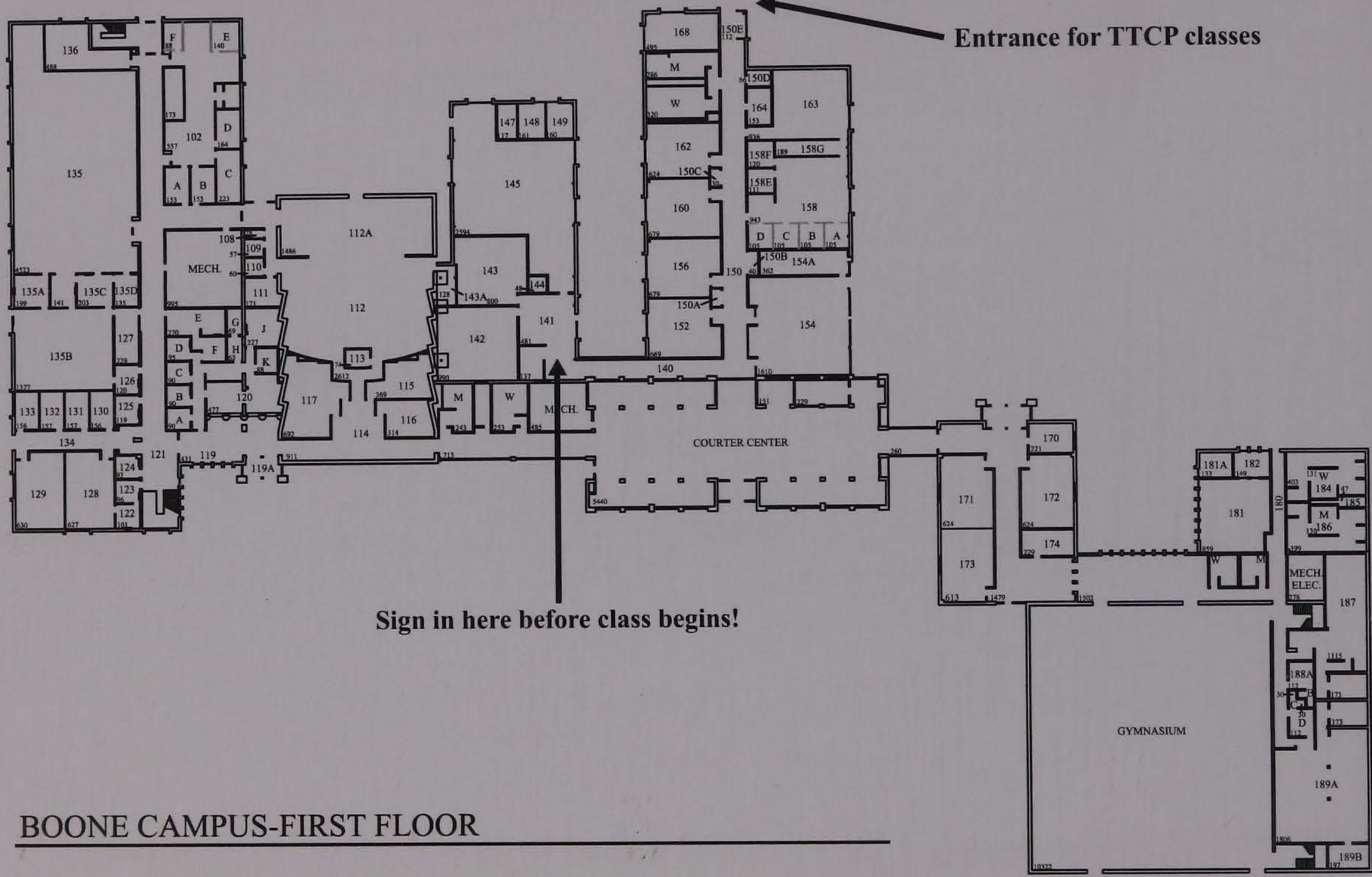
Clark

MISSOURI COUNTIES

PARKING AREA
NORTH SIDE



Entrance for TTCP classes



Sign in here before class begins!

BOONE CAMPUS-FIRST FLOOR

PROGRAM REQUIREMENTS

ADMINISTRATION

The District Materials Office will handle all certification numbers and keep an updated computer listing of the certified technicians residing in their Districts. The Materials Office in Ames will continue to issue the certification certificates and cards.

Any correspondence about certification and applications should be directed to the District Materials Office in which the applicant or certified technician resides. Information on where the District Materials Offices are located is available in this book. Also, in this book is a map to assist in determining in which District the applicant resides.

APPLICATIONS AND CLASS SCHEDULING

Applications are included in this booklet or may be obtained at any District Materials Office. Applications must be mailed to the District Materials Office where the applicant resides. Payment needs to be sent with the application. **THE APPLICANT WILL NOT BE ENROLLED UNTIL PAYMENT IS RECEIVED.** Applications available at the website may be submitted electronically if the applicant does not have to submit fees or other documents at the time of registration. Phone applications are not acceptable. If more applications are needed, the ones in the book may be photocopied or extras are available at any District Materials Office or the Ames Complex. Information about the TTCP and applications can also be found on the Iowa DOT web site at www.iowadot.gov/materials/training_index.html. All classes will be limited to size. Under no circumstances will the class size be exceeded. Be sure to put a second choice date on the application. Once all classes are filled, a waiting list will be established. If enough people are on the waiting list to justify another class, then another class will be offered. If there are not enough people to have a minimum size class, then any applicants on the waiting list will have to reapply for the next training season to attend the course. All applications must be in no later than two weeks prior to the start of the class. Each applicant will be notified of acceptance into a course or courses.

FEES

Fees are included later with the course listings. There are two sets of fees: one rate for all employees of **government agencies** and another for all private contractors and producers. The fees are payable by check or money order with the applications. We can not accept credit cards. **NO CASH PLEASE.**

Construction Industry Training Funds may be used for all or a portion of class fees. If the applicant is using the CIT funds, they will need the employer's approval. **CIT funds may not be used if an individual must take a class for certification due to failure of a class previously attended.** This would normally occur if an individual failed a recertification exam and then would be required to take the full class. The full class would not be covered by CIT funds. **It is up to the applicant and their employer to ensure there are enough funds available in the employer's account to cover the amount on the application.** If the employer is uncertain, they should contact the Office of Contracts. **Any applicant using CIT funds must give cancellation notice within five working days of the class or they will be billed the full cost of the class.**

For anyone not using CIT funds an administration fee of \$25 will be charged for cancellation up to the week prior to the course. If an applicant has not canceled at least five working days before the course is to be held, the entire fee will be charged.

SPECIAL NEEDS AND REQUESTS

Applicants with special needs should notify the Technical Training and Certification Program office prior to the class to make sure the training location is prepared to accommodate their needs.

COURSE PRE-REQUISITES

Courses must be attended in sequence, with all pre-requisites fulfilled, before the applicant may attend the next course for certification desired. The listing of courses, and the pre-requisites for each course, appears in the Course Summary section.

EXPERIENCE

The certified technician must take the responsibility to obtain the experience necessary to perform their job duties properly before performing certified work. There is a 40-hour working day requirement for Prestress Certification.

REGISTERED PROFESSIONAL ENGINEERS AND ENGINEERING GRADUATES

Registered Professional Engineers and Engineering Graduates from accredited institutions will be exempt from the training requirement. In order to obtain certification for any level, these individuals must pass all applicable Iowa DOT Certification examinations for the level of certification they wish to obtain. To apply for any certifications, the applicant should complete an application attaching a copy of their Engineering Certificate or diploma. Complete a new application to attend the entire

course or the re-certification section if they want to test only. All certificates issued in accordance with these requirements will be subject to the same regulations concerning expiration, etc. as applies to certificates obtained via training and examinations.

CERTIFICATION AND RE-CERTIFICATION

An individual must attend the training and pass the examination in each level for which they are requesting certification. If an individual fails an examination following training, they will be given one opportunity to re-take the exam within 6 months of the original exam. If they fail the re-take of the exam, they will be required to repeat the training course. This is for new certifications only. If an individual fails a recertification exam, they are not given a chance to re-take the test but must retake the course and pass the exam in the level of certification they failed. A certification will be valid for five years. A certification shall be valid through December 31st of the fifth year. At the end of the five-year period, everyone must take the test for the certification they wish to obtain. Each certification will expire five years from the year of issuance. For example, an individual may be certified in Level I and II aggregate and those certifications may expire 12/31/07. The technician receives certification in PCC the following year, so that certification expires on 12/31/08. If an individual allows a certification to expire, they will also lose any levels of certification that the certification they allowed to expire was a prerequisite to. For example, an individual is certified as a Level II aggregate technician and a Level II PCC technician. They allow their Level II aggregate certification to expire. They are now no longer certified as a Level II PCC technician until such time as they regain their aggregate certification. The certificate holder shall be responsible for applying for certification renewal and for maintaining a current address on file with the appropriate District Materials Office. If the individual has not renewed their certification within the 90-day grace period they are automatically decertified. The individual may obtain certification by taking the examination of the level of certification they are requesting. If the individual does not take the examination and pass within one year from the date of expiration, i.e. 12/31/expiration year, they must retake all applicable schools and pass the examinations.

The Level I HMA and Level II PCC Technicians will be required to take two update courses in the five-year period between certification and each re-certification. By attending the update courses, an applicant may re-certify by taking and passing the particular certification exam. If the Certified Technician does not pass one or more of the re-certification exams, they must attend the training course for the level(s) of certification(s) they failed and pass the exam. If the Certified Technician does not take the update courses, they will be required to take the full school before re-certification will be issued. The Certified Technician will not receive credit for:

1. More than one update per training season in each level of certification
2. An update that was taken the same training season the individual re-certified

OUT-OF-STATE APPLICANTS

Out-of-state applicants will be able to obtain certification in Iowa if all the criteria in IM 213 is met. Any individual from out-of-state that will be attending any of the full certification courses or recertifying will need to apply using the applications for new certifications or recertifications. The applicant needs to attach copies of their certifications from the state in which they are certified. The applications and copies of their certifications need to be sent to the District Materials Office closest to the home location of the applicant. To decide which District to use refer to the map in this book. There is material available for out-of-state applicants to study once an application is received.

TESTING PROTOCOL

The TTCP has a testing protocol that must be followed. The protocol includes testing environment, time limits, proctoring exams, etc. The entire protocol will be covered with attendees prior to testing.

DES MOINES AREA COMMUNITY COLLEGE (DMACC), MATERIALS LAB

DMACC is now instructing all the certification classes statewide. The dates for all TTCP classes held by DMACC are listed in the Schedule of Classes. **To attend any of the classes held at DMACC, send an application (provided in this booklet) and the fees to the District Materials Office where you reside.**

COURSE CATALOG

RE-CERTIFICATION

There will be re-certifications available in all levels of certification. If a technician has any certification expiring 12/31/08, they will need to re-certify in each level expiring. **In Level I HMA and Level II PCC, the technician must have attended two updates prior to re-certification or the technician will have to go through the training course and pass the exam to re-certify.** All re-certifications will be one-day in length. It is the technician's responsibility to prepare for the re-certification exam. The instructor updates the class and conducts a brief review before testing. Manuals are available on the TTCP website prior to the class in case the technician needs these materials for review.

LEVEL I AGGREGATE

This level of aggregate certification is for an aggregate sampling technician. This course requires attending the first half-day of the Level II Aggregate Technician Course. A written exam will be given. This level of certification in aggregate will be required to secure and reduce aggregate samples. For more information on the Certified Aggregate Technician Program see IM 213.

LEVEL II AGGREGATE

This level of aggregate certification is for a certified aggregate technician. The prerequisite for this course is the Level I Aggregate Certification. This is a 3½-day course including a lecture and hands-on training on running gradations. To obtain this certification, the applicant must pass written and practical examinations. For more information on the Certified Aggregate Technician Program, see IM 213.

HMA SAMPLER

This level of hot mix asphalt certification is for a hot mix asphalt sampling technician. This class is not necessary for individuals that are HMA I certified. There is no prerequisite for this course. This is a half-day course consisting of lecture and hands-on training. An afternoon session is mandatory for DOT, county, or consultants that will performing inspection for a government agency. To obtain this certification, the applicant is required to pass a written exam. For more information on the HMA Certification Program, see IM 213.

LEVEL I HMA

This level of hot mix asphalt certification is for a HMA Technician. The pre-requisite for this course is Level I and II Aggregate. This is a five-day course consisting of lecture and hands-on training. To obtain this certification, the applicant is required to pass written and practical examinations. For more information on the HMA Certification Program, see IM 213.

LEVEL I HMA UPDATE SESSION

This course is for Level I HMA Technicians. All Level I HMA Technicians must take two update courses in their five-year certification period. It is their choice what years they take these courses and they will be made available annually. The technician will not receive credit for this update if the technician attends the update during the same training season they certify or re-certify. Credit will be given for only **one** update each training season per certification. This course will be made available at the APAI Workshop and you can register for the workshop with the APAI. The Iowa DOT will be presenting the update in the District Offices and via webcast. The cost of the updates is included in the certification fees. An individual can attend as many updates as they wish for the original fee, but must attend a minimum of two in the five-year certification period.

LEVEL II HMA MIX DESIGN

This course must be completed to design an asphalt mix. The pre-requisite for this course is Level I HMA. This is a five-day course consisting of lecture and lab. Level II HMA Mix Designers will not be required to attend this course if they have already attended a Gyratory Mix Design course instructed by NCAT, NATC, or a Superpave Center. For more information on the HMA Certification Program, see IM 213.

LEVEL I PCC CONCRETE TESTING

This level of PCC Certification is for a concrete testing technician. There is no pre-requisite for this course. This is a two-day course consisting of some lecture, but mainly hands-on experience in the testing of concrete. To obtain this certification, the applicant must pass a written exam and a demonstration of all concrete testing must be completed. For more information on the PCC Certification Program, see IM 213. If the applicant is American Concrete Institute (ACI) certified, they must attend a portion of the schooling that includes maturity, flowable mortar and beam breaks, and pass a written exam.

LEVEL II PCC

This level of PCC Certification is for a PCC technician. The pre-requisites for this course are the Level I PCC and Level I and II Aggregate Certifications. This is a four-day course consisting of mainly lecture. To obtain this certification, the applicant must pass a written exam. For more information on the PCC Certification Program, see IM 213.

LEVEL II PCC – UPDATE SESSION

This course is for Level II PCC Technicians. All Level II PCC Technicians must take two update courses in their five-year certification period. It is their choice what years they take these courses and they will be made available annually. The technician will not receive credit for this update if the technician attends the update during the same training season they certify or re-certify. Credit will be given for only **one** update each training season per certification. This course will be made available at the ICPA and IRMCA Workshops and registration can be made through these organizations. The Iowa DOT will be presenting the update in the District Offices and via webcast. The cost of the updates is included in the certification fees. An individual can attend as many updates as they wish for the original fee, but must attend a minimum of two in the five-year certification period.

LEVEL III PCC MIX DESIGN

This course must be completed to design a PCC mix. The pre-requisite for this course is Level II PCC. This is a four-day course consisting of mainly lecture. To obtain this certification, the applicant must pass a written examination. To obtain more information on the PCC Certification Program, see IM 213.

PRESTRESS TECHNICIAN

This certification is for a certified prestress technician. The pre-requisite for this course is ACI or Level I PCC Certification. This is a three-day course of mainly lecture. To obtain certification, the applicant must pass a written exam and obtain 40 hours of work experience. **Note:** *If the QC/QA person will be performing gradations, they will need to be Aggregate Level I and II certified.*

25-FOOT PROFILOMETER

This certification is for a certified 25-Foot Profilometer Operator. This is a two-day course consisting of mainly lecture. To pass this course, the applicant must take a written exam. For more information, see IMs 213 and 341.

SOILS

This certification is for a certified soils technician. This is a two-day course consisting of lecture and hands-on instruction. To obtain this certification, the applicant must pass a written exam and a demonstration of soils testing must be completed.

MONITOR ADMINISTRATION

This course will include administrative duties of monitors as well as problem spotting and solving. It will also cover any new techniques or items that will be occurring in future construction seasons. This is a one-day course for both HMA and PCC monitors. The course is offered to monitors and prospective monitors. The HMA and a PCC Updates are included at the Monitor Administration class and anyone attending will receive credit for attending both updates.

MATH

This course is offered for individuals that need to brush up on their math skills before attending a TTCP course. This course will consist of math problems that the technician will encounter on a project. This course will include instruction on using calculators.

GRADE TECHNICIAN TRAINING

This lecture course is an introduction to pre-construction preparation for grading, soil types, plan reading of soils sheets, soil behavior, drainage, grading equipment, and compaction requirements. It provides basic information and understanding of embankment quality. Quick reference on DOT specifications will be covered. This course is open to Iowa DOT, counties, cities, and consultants.

HMA PAVING FIELD INSPECTION

This course is an introduction to field inspection of HMA resurfacing/paving. Content includes equipment, mix placement, problems, solutions, and roles of both the inspector and contractor. References for proper sources and documentation will be provided. This course is open to Iowa DOT, counties, cities, and consultants.

PCC PAVING FIELD INSPECTION

This course is an introduction to field inspection of PCC resurfacing/paving. Content includes equipment, mix placement, problems, solutions, and roles of both the inspector and contractor. References for proper sources and documentation will be provided. This course is open to Iowa DOT, counties, cities, and consultants.

STRUCTURE FIELD INSPECTION

This course is an introduction to field inspection of bridge and culvert construction. Course content will provide information on bridge and culvert components, their function, and design intent. Discussion will include a focus on bridge and culvert foundations, reinforcing steel installation, concrete placement, and important dimensional checks necessary to ensure quality of construction. The roles of inspector and contractor associated with the construction process and potential construction problem areas will also be discussed. This course is open to Iowa DOT, counties, cities, and consultants.

BRIDGE DECK GRADE TRAINING

This new course is an advanced training on bridge superstructures and development of bridge deck grades. Course content will provide a review of bridge types, superstructure elements, deck forming methods, and determination of bridge deck grades. Included in the discussion of bridge deck grade determination will be calculation and evaluation of deck grades, deck grade adjustments, and important considerations associated with establishment of final deck grades. This course is available to DOT only this year.

CONTRACT ADMINISTRATION FOR LOCAL SYSTEMS

This is a two-day course for beginning construction inspectors that will be performing inspection duties on local systems projects. The course covers the basic administration duties of the construction inspector. This course will not include information on field manager. This course is offered to county, city, or consultant personnel who perform field inspection on local system projects.

Sample Math Questions

The following are math problems associated with the different levels of training and certifications offered. You will need to know how to solve these types of problems to complete each level. It is suggested that you work the problems associated with the level of certification you are applying for. If after working these problems you feel your math skills are not sufficient to attend the course you are applying for, you may want to consider enrolling in one of the math courses offered. You will also need to be knowledgeable on the use of calculators.

1. $1500 \times 1.15 =$ _____

$$\frac{1500 \times 1.15}{1.15} = \frac{1725}{1.15}$$

$$\frac{1725}{1.15} = 1500$$

PCG Level Lead II

2. $1000 \times 1.25 =$ _____

3. $1000 \times 1.25 \times 100 =$ _____

4. $1000 \times 1.25 =$ _____

5. $1000 \times 1.25 \times 1.25 =$ _____

HMA Level I

6. $1000 \times 1.25 \times 1.25 \times 1.25 =$ _____

7. $1000 \times 1.25 \times 1.25 =$ _____

8. $1000 \times 1.25 \times 1.25 \times 1.25 =$ _____

$$\frac{1000 \times 1.25}{1.25} = \frac{1250}{1.25}$$

$$\frac{1250}{1.25} = 1000$$

Aggregate Level II

1. $102 + 64 + 181.5 + 154.6 = \underline{\hspace{2cm}}$
2. $11,539.20 \div 9,348.11 = \underline{\hspace{2cm}}$
3. $9,236.55 \div 8,760.49 \times 100 = \underline{\hspace{2cm}}$
4. $\frac{1,545.50 - 1,541.20}{1,540.50} \times 100 = \underline{\hspace{2cm}}$
5. $0.70 = \text{what \% of } 1?$
6. $8.6 \text{ grams rounded to the nearest gram} = \underline{\hspace{2cm}}$
7. $\frac{(3,916.5 - 3,907.0)(2.61)(100)}{(2.61 - 1)(2,000.0)} = \underline{\hspace{2cm}}$
8. $\frac{2,000}{2,625.0 + 2,000 - 3,875.0} = \underline{\hspace{2cm}}$

PCC Level I and II

9. $(94.3 - 20.6)/0.496 = \underline{\hspace{2cm}}$
10. $[(159.7 - 145.7)/159.7] \times 100 = \underline{\hspace{2cm}}$
11. $(37,900/138.1)/10 = \underline{\hspace{2cm}}$
12. $0.108 \times 3.14 \times 62.4 \times 27 = \underline{\hspace{2cm}}$

HMA Level I

13. $(2.314 - 2.310)^2 + (2.304 - 2.310)^2 + (2.312 - 2.310)^2 = \underline{\hspace{2cm}}$
14. $\frac{100(6.2) - (6.0)(6.35)}{100 - (6.0)(6.35 \div 100)} = \underline{\hspace{2cm}}$
15. $6.9 + [6.3(6.5)(0.01) - 6.9(6.3)(6.5)(0.0001)] = \underline{\hspace{2cm}}$
16. $\sqrt{\frac{(3.16 - 2.41)^2}{7-1}} = \underline{\hspace{2cm}}$
17. $\frac{100}{\frac{94.25}{2.646} + \frac{5.75(0.5)(0.003)(94.25)}{1.031}} = \underline{\hspace{2cm}}$



Answers

1. 502.1

TECHNICAL TRAINING & CERTIFICATION PROGRAM

2. 1.234

3. 105.43

4. 0.279

5. 70%

6. 9.0

7. 2.667

8. 2.446

9. 148.589

10. 8.766

11. 27.444

12. 571

13. 0.000056

14. 5.841

15. 7.281

16. 0.306

17. 2.747

The Technical Training & Certification Program is to ensure Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) receive proper training and education. Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) are responsible for ensuring proper implementation of quality assurance systems and procedures and for ensuring the quality and consistency of work performed by sub-contractors and other personnel.

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).

The Department of Transportation (DOT) requires the requirements in sections 1000.001 and 1000.002 to be met by all persons engaged in the State of Florida. The DOT also requires the requirements and the authority of persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs) to be met by all persons engaged in the position of Certified Quality Control Inspectors (QCIs) and Acceptance of Approvals (AAAs).



October 17, 2006

Supersedes October 18, 2005

TECHNICAL TRAINING & CERTIFICATION PROGRAM

GENERAL

The purpose of the Technical Training & Certification Program is to ensure Quality Control (QC)/Quality Assurance (QA) and Acceptance of Aggregates, Hot Mix Asphalt (HMA), Portland Cement Concrete (PCC), Grade Inspection, Precast and Prestressed Concrete, and Pavement Profiles and to ensure proper documentation of quality control/quality assurance and acceptance procedures and test results by industry and Contracting Authority personnel.

This Instructional Memorandum (IM) explains the requirements to become certified and to remain certified to perform inspection and testing in the State of Iowa. This IM also describes the duties, responsibilities and the authority of persons assigned the position of Certified Technician in any of the above areas for construction or maintenance projects. Appendix C of this IM lists what tests and procedures the technician is qualified to perform for each level of certification they obtain.

Through a cooperative program of training, study, and examination, personnel of the construction industry, State DOT, and other Contracting Authorities will be able to provide quality management and certified inspection. Quality control/quality assurance and acceptance sampling, testing and inspection will be performed by certified personnel and documented in accordance with the IMs.

A technician who is qualified and holds a valid certification(s) shall perform quality control/quality assurance and acceptance at a production site, proportioning plant, or project site. Responsibilities cannot be delegated to non-certified technicians. The duties of a Certified Technician may be assigned to one or more additional Certified Technicians.

The Technical Training & Certification Program will be carried out in accordance with general policy guidelines established or approved by the Highway Division Director. A Board of Certification composed of the following members will advise the Director:

- Director – Office of Materials
- Director – Office of Construction
- Representative of District Materials Engineers**
- Representative of District Construction Engineers**
- Representative of Associated General Contractors (AGC of Iowa)
- Representative of Iowa Concrete Paving Association (ICPA)
- Representative of Asphalt Paving Association of Iowa (APAI)
- Representative of Iowa Ready Mixed Concrete Association (IRMCA)
- Representative of Iowa Limestone Producers Association (ILPA)
- Representative of County Engineers
- Coordinator of Technical Training & Certification Program**

** Appointed by Program Director

The Director of the Office of Materials will be the Program Director. Coordinators will be appointed by the Program Director to assist in administration of the program and to handle such planning, administration, and coordinating functions as may be needed.

TRAINING

The Iowa DOT will provide the training necessary to become certified or an agency approved by the Program Director. Producers/Contractors are encouraged to conduct their own pretraining program. A complete listing of training opportunities is available in the Technical Training & Certification Program's Information and Registration Booklet or at the Technical Training & Certification Program website, www.iowa.gov/dot/materials/training.htm. This book is available at any of the Iowa DOT Materials Offices. They may also be obtained from the ICPA, IRMCA, ILPA, and APAI.

CERTIFICATION REQUIREMENTS

1. A candidate must attend instruction and pass the examination(s) for all levels of certification prepared and presented by the Program Director or someone designated by the Program Director. If the new candidate fails the examination, they will have one opportunity to retake the examination. The retake must be completed within six months of the original exam. If they fail the retake of the examination, they will need to attend the training again before taking the examination the third time. If an individual is recertifying they will have only one opportunity to take the examination. If they fail the examination they must take the applicable training before retaking the examination.
2. All prerequisites shall be met before the applicant may attend the next level of training for the certification desired. A listing of certification levels and prerequisites is located in Appendix A.
3. Once the candidate has met all the criteria and has received certification, it is recommended the Certified Technician work under the supervision of an experienced technician until they become efficient in the inspection and testing methods they will be performing.

An individual requesting to become certified as a Precast/Prestress Concrete Technician is required to obtain forty hours of experience assisting in quality control inspection at an approved plant before certification will be issued. The experience must be documented and shall be approved by the District Materials Engineer. This experience must be completed within two years from the date the individual attended the training.

4. Registered Professional Engineers, engineering graduates, and geology graduates from accredited institutions will be exempt from the training requirement in the areas they have had instruction. In order to obtain certification for any technical level, these persons must pass all applicable tests for the level of certification they wish to obtain. All certificates issued in accordance with these requirements will be subject to the same regulations concerning expiration, recertification, etc., as applies to certificates obtained via training and examinations.

Out-of-state technicians will be issued certifications when the following criteria are met:

1. The applicant must be certified in another state or shall have received equivalent training, if the state does not have a certification program, in each level of certification they are requesting.
2. The applicant must pass an examination for each level of certification desired, which will be administered by the Iowa Department of Transportation. Failure of the examination shall require the applicant to take the applicable schooling before they can retake the exam.
3. The applicant must follow the prerequisite requirements of the Technical Training & Certification Program.

Out-of-state applications should be submitted to the District Materials Office closest to the home location of the applicant. Copies of all the applicant's certifications must accompany the application.

CERTIFICATION

Upon successfully completing the requirements for certification, the Program Director will issue a certificate and a pocket certification card. This certification is not transferable. A certification shall be valid for five years.

CERTIFICATION IDENTIFICATION

The certificate will contain letters that identify the District of record, the certificate holder, certification number, the level of certification, and the expiration date of each level.

The assigned certification number may change if the certificate holder changes their residence.

RENEWAL OF CERTIFICATION

A certification shall be valid through December 31st of the fifth year. A 90-day grace period will be allowed. If the individual has not renewed their certification within the 90-day grace period, they are automatically decertified. The individual may obtain certification by taking the examination for the level of certification they are requesting. If the individual does not take the examination within one year after their certification(s) expire, i.e., 12/31/expiration year, they must retake all applicable schooling and pass the examinations. If an applicant becomes decertified in any level of certification and that certification is a prerequisite for other levels of certification the applicant will also be decertified in those related levels of certification.

All certified technicians will be required to pass an examination in each level of certification they hold before recertification will be issued. Failure of any level shall require the applicant to retake the applicable schooling and pass the test.

The certificate holder shall be responsible for applying for certification renewal and for maintaining a current address on file with the appropriate District Materials Office.

Technicians certified as Level I HMA and/or Level II PCC shall attend a minimum of two update classes each in the five-year period between certification and each recertification. The Iowa DOT or an agency or organization approved by the TTCP will hold these classes. These update classes will be listed in the Technical Training & Certification Program Booklet and on the program website, or the certified technician may contact the Iowa DOT for information. If an individual does not attend the two update classes required before their certification expires, they must take the entire schooling and pass the examination for the certification required.

The certified technician will not receive credit for the following:

1. More than one update per training season in each level of certification.
2. An update taken during the same training season in which the individual recertified.

UNSATISFACTORY PERFORMANCE NOTICE

A certified technician failing to perform the required specified duties or inadequately performing these duties, will receive an Unsatisfactory Notice (Office of Materials IM 213, Appendix B). The notice will be from the District Materials Engineer in the District where the failure occurred. This notice and all supporting documentation will be placed in the technician's permanent file with the District Materials Office in which the technician resides. The notice will also be placed on the statewide computer file.

SUSPENSION & DECERTIFICATION

A three-month suspension will be given upon receipt of two Unsatisfactory Performance Notices. Technicians that are suspended shall not perform any duties of the applicable certification, including any duties for which the affected certification is a prerequisite.

Technicians are eligible to be reinstated after the three-month suspension and successful completion of the applicable recertification test(s).

Technicians are subject to decertification when they receive a third Unsatisfactory Performance Notice.

Certified Technicians will be decertified for any of the following reasons:

The certificate will become invalid for the following reasons:

1. Failure of the certificate holder to renew the certificate prior to regular expiration as described above.
2. Use of false or fraudulent information to secure or renew the certificate.
3. Use of false or fraudulent actions or documentation by the certificate holder.
4. Not performing tests and technician duties properly and in accordance to specifications.

Action will be effective on the date the Program Director issues the suspension or decertification notice.

Technicians that are decertified shall not perform any duties requiring certification. Technicians may request reinstatement after one year.

Appeals and reinstatement requests shall be submitted in writing to the Program Director. Appeals and reinstatement requests will be considered by the Certification Board.

If reinstatement is authorized, the applicant must attend and successfully complete the applicable certification courses.

FUNCTIONS & RESPONSIBILITIES

A certificate holder at each production site, project site, proportioning plant, or laboratory will perform duties. The certified technician shall perform quality control testing in accordance with specified frequencies and submit designated reports and records.

The specification requirement for materials testing by a certified technician does not change the supplier's responsibilities to furnish materials compliant with the specification requirements.

The District Materials Engineer and/or Project Engineer will be responsible for monitoring the sampling, testing, production inspection activities and quality control performed by the contractor. A monitor shall have satisfactorily completed the training and be certified for the level of technician they are monitoring.

The District Materials Engineer and/or Project Engineer will have authority and responsibility to question and where necessary, require changes in operations and quality control to ensure specification requirements are met.

QUALITY CONTROL, TESTING, & DOCUMENTATION

The QC Technician shall be present whenever construction work related to production activity, such as stockpiling or other preparatory work, requires record development and/or documentation is in progress. The QC Technician's presence is normally required on a continuing basis beginning one or more days before plant operation begins and ending after plant shut down at the completion of the project. The work shall be performed in a timely manner and at the established frequencies.

The QC Technician's presence is not normally required during temporary plant shut downs caused by conditions, such as material shortages, equipment failures, or inclement weather.

All quality control activities and records shall be available and open for observation and review by representatives of the contracting authority.

Reports, records, and diaries developed during progress of construction activities will be filed as directed by the Contracting Authority and will become the property of the Contracting Authority.

Quality control activities, testing, and records will be monitored regularly by Contracting Authority representatives. The Project Engineer or District Materials Engineer will assign personnel for this function.

Monitor activities will be reported and filed at prescribed intervals with the Project Engineer, District Materials Engineer, producer, contractor, and the contractor's designated producer.

At no time will the monitor inspector issue directions to the contractor, or to the QC Technician. However, the monitor inspector will have the authority and responsibility to question, and where necessary, reject any operation or completed product, which is not in compliance with contract requirements.

ACCEPTANCE

Completed work will be accepted on the basis of specification compliance documented by acceptance test records, and monitor inspection records. Specification noncompliance will require corrective action by the producer, contractor, or by the contractor's designated producer, and review of events and results associated with noncompliance by the Project Engineer.

CERTIFICATION LEVELS

<u>CERTIFICATION LEVEL</u>	<u>TITLE</u>	<u>PRE-REQUISITES</u>
<u>AGGREGATE</u>		
Level I Aggregate	Certified Sampling Technician	None
Level II Aggregate	Certified Aggregate Technician	Level I Aggregate
<u>PORTLAND CEMENT CONCRETE</u>		
Level I PCC**	PCC Testing Technician	None
Level II PCC	PCC Plant Technician	Level II Aggregate & Level I PCC
Level III PCC	PCC Mix Design Technician	Level II PCC
**American Concrete Institute (ACI) Grade I certification will be acceptable as a portion of the Level I PCC training.		
<u>HOT MIX ASPHALT</u>		
HMA Sampler	HMA Sampler	None
Level I HMA	HMA Technician	Level II Aggregate
Level II HMA	HMA Mix Design Technician	Level I HMA
<u>PROFILOGRAPH</u>		
Profilograph	Profilograph Technician	None
<u>PRESTRESS</u>		
Prestress	Prestress Technician	Level I PCC or ACI Grade I <i>If the technician will be performing gradations, they will need to be Aggregate Level II- certified.</i>
<u>SOILS</u>		
Soils	Soils Technician	None

UNSATISFACTORY PERFORMANCE NOTICE

Issued To: _____

Date: _____

This notice is to inform you that your performance as a Certified Inspector/Technician was unsatisfactory for the reason(s) listed below.

This notice will be placed in your permanent file with the District Materials Office in which you reside. It will also be placed on the statewide computer file.

The goal of the Technical Training and Certification Program (TTCP) is to work with contractors, producers, cities, and counties to continually improve the quality of Iowa's construction projects. We hope you will work with us to achieve this goal.

Unsatisfactory Performance:

District Materials Engineer

cc: Program Director – Materials Engineer, Ames
TTCP Coordinator
Resident Construction Engineer

CERTIFIED TECHNICIANS QUALIFICATIONS

Tests and Procedures the Certified Technician is qualified to perform for each level of certification.

LEVEL I AGGREGATE

- IM 204 - Inspection of Construction Project Sampling & Testing (when material is incorporated)
- IM 209, App. C - Aggregate Specification Limits & Sampling & Testing Guide (when material is produced)
- IM 301 - Aggregate Sampling Methods

LEVEL II AGGREGATE

- IM 216 - Guidelines for Verifying Certified Testing Results
- IM 302 - Sieve Analysis of Aggregates
- IM 306 - Determining the Amount of Material Finer Than #200 (75 μ m) Sieve in Aggregate
- IM 307 - Determining Specific Gravity of Aggregate
- IM 308 - Determining Free Moisture & Absorption of Aggregate
- IM 336 - Methods of Reducing Aggregate Field Samples to Test Samples
- IM 344 - Determining the Amount of Shale in Fine Aggregate
- IM 345 - Determining the Amount of Shale in Coarse Aggregate

LEVEL I PCC

- IM 204 - Inspection of Construction Project Sampling & Testing
- IM 208 - Materials Laboratory Qualification Program
- IM 216 - Guidelines for Verifying Certified Testing Results
- IM 315 - Method of Protecting, Curing, Making & Testing Concrete Cylinders
- IM 316 - Flexural Strength of Concrete
- IM 317 - Slump of Hydraulic Cement Concrete
- IM 318 - Air Content of Freshly-Mixed Concrete by Pressure
- IM 327 - Sampling Freshly-Mixed Concrete
- IM 328 - Making, Protecting, and Curing Concrete Flexural Specimens
- IM 340 - Weight Per Cubic Foot, Yield, & Air Content (Gravimetric) of Concrete
- IM 383 - Testing the Strength of PCC Using the Maturity Method
- IM 385 - Temperature of Freshly-Mixed Concrete
- IM 525 - Designing Flowable Mortar
- Iowa 410-B - Method of Test for Flow of Grout Mixtures
- AASHTO T97 - Third Point Loading

LEVEL II PCC

- IM 527 - Paving Plant Inspection
- IM 528 - Structural Concrete Plant Inspection
- IM 529 - PC Concrete Proportions

LEVEL III PCC

- IM 530 - Quality Management & Acceptance of PC Concrete Pavement
- IM 531 - Test Method for Combining Aggregate Gradations
- IM 532 - Aggregate Proportioning Guide for Portland Cement Concrete Pavement

HMA SAMPLER

- IM 322 - Method of Sampling Uncompacted Hot Mix Asphalt
- IM 323 - Method of Sampling Asphaltic Materials

LEVEL I HMA

- IM 204 - Inspection of Construction Project Sampling & Testing
- IM 208 - Materials Laboratory Qualification Program
- IM 216 - Guidelines for Verifying Certified Testing Results
- IM 320 - Method of Sampling Compacted Asphalt Mixtures
- IM 321 - Method of Test for Compacted Density of Hot Mix Asphalt (HMA) (Displacement)
- IM 322 - Method of Sampling Uncompacted Hot Mix Asphalt
- IM 323 - Method of Sampling Asphaltic Materials
- IM 325G - Method of Test for Determining the Density of Hot Mix Asphalt (HMA) Using the Superpave Gyrotory Compactor (SGC)
- IM 337 - Determining Thickness of Completed Courses of Base, Subbase, & Hot Mix Asphalt
- IM 350 - Maximum Specific Gravity of Hot Mix Asphalt (HMA) Mixtures
- IM 357 - Preparation of Hot Mix Asphalt (HMA) Mix Samples for Test Specimens
- IM 501 - Asphaltic Terminology, Equations & Example Calculations
- IM 508 - Hot Mix Asphalt (HMA) Plant Inspection
- IM 509 - Tank Measurement & Asphalt Cement Content Determination
- IM 511 - Control of Hot Mix Asphalt (HMA) Mixtures

LEVEL II HMA

- IM 380 - Vacuum-Saturated Specific Gravity & Absorption of Combined or Individual Aggregate Sources
- IM 510 - Method of Design of Hot Mix Asphalt (HMA) Mixes
- AASHTO T176 - Plastic Fines in Graded Aggregate & Soils by use of Sand Equivalent Test
- AASHTO T304 - Uncompacted Void Content of Fine Aggregate
- ASTM D 4791 - Flat Particles, Elongated Particles, or Flat & Elongated Particles in Coarse Aggregate
- AASHTO T283 Resistance of Compacted Hot Mix Asphalt (HMA) to Moisture-Induced Damage

PROFILOGRAPH

- IM 341 - Determining Pavement & Bridge Ride Quality

PRESTRESS

- IM 570 - Precast & Prestressed Concrete Bridge Units

SOILS

- Test Method No. Iowa 103-D and AASHTO T-99 – Moisture-Density Relationship of Soils (Standard Proctor)
- ASTM D-2937 – Field density by drive-cylinder method
- ASTM D-4643 – Moisture content determination by microwave
- AASHTO T-265 – Moisture content determination by oven

AGGREGATE TECHNICIAN DUTIES

Duties of the Aggregate Technician are detailed in IM 209 and the IM 300 Series and consist of, but are not limited to the following:

A. Sampling

1. Obtain representative samples by approved method(s).
2. Sample at required frequencies.
3. Identify samples with pertinent information such as:
 - a. Type of material
 - b. Intended use
 - c. Production beds working depth
 - d. Sampling method

B. Gradation Testing

1. Follow appropriate gradation testing methods.
2. Maintain current applicable specifications.
3. Post test results within 24 hours of sampling.

C. Other Testing as Required (specific gravity, moisture, deleterious material, etc.)

1. Follow appropriate testing methods.
2. Maintain current applicable specifications.
3. Complete required reports.

D. Sampling & Testing Equipment

1. Clean and check testing sieves for defects.
2. Assure scale accuracy.
3. Maintain sampling and testing equipment.

E. Communication

1. Notify the District Materials office for production start-up or changes.
2. Relay test results to appropriate production or supervisory personnel.
3. Report failing test results immediately to appropriate personnel (including District Materials office) and assure remedial actions are taken.

F. General

1. Monitor stockpiling procedures to avoid contamination and excess segregation.
2. Assure proper identification of stockpiles.
3. Assure specification requirements for intended use are met before shipment.
4. Assure sampling locations are safe.
5. Assure proper bedding planes or production depths are maintained.

G. Documentation

1. Report all production test results of certified aggregates on Form #821278 and distribute as required.
2. Assure "plant production log" is maintained.

**PORTLAND CEMENT CONCRETE (PCC) TECHNICIAN DUTIES
PAVING & STRUCTURAL CONCRETE**

The Quality Control Technician shall have no other duties while performing certified inspection duties. The District Materials Engineer may approve all quality control activities be performed by a single certified technician for low production situations.

Many of the duties of the PCC Level II Technician are detailed in IM 527 (Paving) and IM 528 (Structural) and consist of, but are not limited to the following:

A. Stockpiles

1. Assure proper stockpiling procedures.
2. Prevent intermingling of aggregates.
3. Prevent contamination.
4. Prevent segregation.

B. Plant Facilities

1. Assure safe sampling locations.
2. Check for equipment compliance.
3. Assure proper laboratory location and facilities.

C. Calibration

1. Be present during calibration (paving).
2. Check plant calibration (structural).
3. Assure proper batch weights.

D. Cement (Fly Ash) & Aggregate Delivery

1. Check for proper sources and certification.
2. Document quantities delivered.
3. Monitor condition of shipments.

E. Plant Sampling

1. Check aggregate gradations by obtaining, splitting, and testing samples.
2. Check aggregate moistures and specific gravity.

F. Proportion Control

1. Check scale weights and operation.
2. Check admixture dispensers.
3. Check mixing time and revolutions.
4. Check cement yield. (Paving plant only, unless over 10,000 cu. yds.)

G. Concrete Tests

1. Cure flexural test specimens.
2. Test flexural specimens (Contract agency will perform test in structural plant).
3. Conduct maturity testing.

H. Test Equipment

1. Clean and maintain scales, screens, pycnometers and beam molds, and laboratory facility.

I. Documentation

1. Prepare daily plant reports (paving), weekly plant reports (structures).
2. Document all checks and test results in the field book.
3. Maintain daily diary of work activity.

HOT MIX ASPHALT (HMA) TECHNICIAN INSPECTION DUTIES

The following is a list of the duties that must be performed by the Certified Level I HMA Technicians doing quality control work for the Contractor on all projects where the Quality Management-Asphalt (QM-A) specification applies. The Quality Control Technician shall have no other duties while performing certified inspection duties.

These duties consist of, but are not limited to, the following:

A. Aggregate Stockpiles.

1. Assure proper stockpiling of aggregate deliveries. (stockpile build & additions)
(daily check list, IM 508)
 - a. Prevent intermingling of aggregates.
 - b. Check for and prevent contamination.
- c. Prevent segregation.
 - d. Check for oversize material.
2. Document certified aggregate deliveries. (each delivery) (plant book, IM 508)
 - a. Obtain truck tickets.
 - b. Check for proper certification.
 - c. Check for proper approved source.
- d. Enter deliveries in Plant Book Program, Aggregate Certification page.
3. Observe loader operation. (daily) (daily check list, IM 508)
 - a. Check for proper stockpile to bin match-up.
 - b. Check that loader does not get stockpile base material in load.
 - c. Check that loader does not intermingle aggr. by overloading bins.

B. Asphalt Binder Delivery. (each delivery) (plant report & plant book, IM 508 & 509)

1. Check that material is pumped into correct tank.
 2. Document Deliveries.
 - a. Obtain truck tickets.
 - b. Check for proper approved source.
 - c. Check for proper certification.
 - d. Check for proper grade.
 - e. Check for addition of liquid anti-strip if required.
 - f. Check if weight per gallon or specific gravity has changed.
 - g. Enter deliveries into Plant Book Program, Asphalt Binder Shipment Log page.
-

C. Plant Operations. (daily)

1. Prepare Plant Report Program for daily entries. (plant report, IM 511)
 - a. Enter Date.
 - b. Enter Report Number.
 - c. Enter expected tonnage for the day.
 - d. Enter any proportion or target changes that apply.
2. Aggregate Delivery System. (daily check list, IM 508)
 - a. Check for proper cold feed gate settings.
 - b. Check for proper cold feed belt speed settings.
 - c. Check for proper moisture setting (drum plants).
 - d. Monitor RAP proportions
3. Mixing System. (daily check list, spec 2303.03, IM 508)
 - a. Check for proper asphalt binder delivery setting.
 - b. Check for proper interlock operation.
 - c. Monitor coating of aggregates.
 - d. Monitor mixing time (batch plants).
4. Loading System. (daily check list, spec 2303.03 & 2001.01, IM 508)
 - a. Check hopper/silo gates for proper open/close
 - b. Check trucks for proper loading and possible segregation.
 - c. Check trucks for diesel fuel contamination in box and remove contaminated trucks from service (5 hrs with box raised).
5. Asphalt Binder Quantity Determination. (plant report, IM 508 & 509)
 - a. Perform start-up tank stick measurement before mix production begins (if applicable).
 - b. Perform final tank stick measurement after mix production is done (if applicable).
 - c. Perform intermediate tank stick measurements as needed.
 - d. If using meter for quantity, obtain totalizer printout readings and periodically check against tank stick readings.
 - e. If using batch count for quantity, obtain printouts of each batch and add up the asphalt binder used for total quantity.

D. Plant Operations. (2 hour intervals) (plant report, IM 508)

1. Temperatures.

- a. Monitor and record mix temperature at discharge into truck box.
-

- b. Monitor and record asphalt binder temperature.
 - c. Monitor and record air temperature.
2. Observe plant operation for any irregularities.

E. Weighing Equipment.

1. Proportioning scales (batch plants). (min. 1/day) (spec 2001.07 & .20)
(daily check list, IM 508)
 - a. Perform sensitivity checks of scales.
 - b. Check for interference at scale pivot points.
2. Pay Quantity Scales. (min. 1/day) (spec 2001.07 & .20, IM 508)
(daily check list, plant book)
 - a. Regularly perform check weighing comparisons with a certified scale as necessary. (min. 1st day and one additional if >5000 tons, and as directed by Engineer)
 - b. Perform sensitivity checks of scales.
 - c. Check for interference at scale pivot points.
 - d. Perform verification weighing (truck platform scales).
3. Weigh Belts. (daily) (daily check list)
 - a. Check weigh belt for excess clinging fines that effects speed reading.
 - b. Check weigh belt for interference at bridge pivot points.
 - c. Check for proper span setting.
4. Enter scale checks in Plant Book Program, Daily Check List or Plant Scale Checks page. (daily) (plant book)

F. Plant Sampling. (daily) (spec 2303.04, IM 204 & 511)

1. Obtain cold-feed gradation samples as directed by Contracting Authority personnel per IM 301 and IM 204.
2. Obtain asphalt binder samples as directed by Contracting Authority personnel per IM 323 and IM 204.
3. Enter sample data into Plant Book Program, Sample Log page.
4. Obtain cold-feed moisture samples at a minimum of every ½ day (drum mix plants).

G. Field Sampling (if not performed by others). (daily) (spec 2303.04, IM 204 & 511)

1. Obtain uncompacted mix random samples as directed by Contracting Authority personnel, and identify time, station, lift and side.
-

3. Obtain compacted mix core random samples as directed by Contracting Authority personnel.

H. Testing. (daily) (spec 2303.04, IM 204 & 511)

1. Field cores.

- a. Provide properly calibrated equipment for Contracting Authority technician's use.
- b. Obtain and record core location station and offset information.
- c. Obtain copy of core thickness measurements from Contracting Authority Technician.
- d. Obtain copy of core weights from Contracting Authority technician.
- e. Record weights and thickness in Plant Report Program.
- f. Enter sample data into Plant Book Program Sample Log page.

2. Uncompacted mix.

- a. Properly store Contracting Authority secured portion of paired sample.
- b. Split Contractor half of paired sample into test portions as per IM 357.
- c. Perform gyratory compaction as per IM 325G.
- d. Perform bulk specific gravity test of laboratory-compacted specimen as per IM 321.
- e. Perform maximum specific gravity test as per IM 350.
- f. Enter test data into Plant Report Program.
- g. Submit secured samples to DOT District Lab.
- h. Enter sample data into Plant Book Program, Sample Log page.

3. Aggregate.

- a. Split one sample each day as directed by Contracting Authority personnel and provide half for testing by Contracting Authority.
- b. Perform gradation analysis as per IM 302 and enter weights into Plant Report Program.
- c. Perform moisture tests and enter weights into Plant Book Program, Plant Moistures page (drum mix plants).

4. Testing Lab Qualification. (as needed) (IM 208 & 511)

- a. Record all HMA sample validations with DOT on form 235.
- b. Document corrective actions taken when not correlating.
- c. Document all test equipment calibrations.
- d. Update IM's, test procedures and specs as required.

I. Documentation. (daily) (spec 2303.04, plant report, plant book, IM 204, 511 & 508)

1. Prepare computerized Daily Plant Report (form 241).

- a. Check that all data is correct.
- b. Check that all data is complete.
- c. Compute moving averages for gradation and lab voids.
- d. Compute tons of mix used to date.
- e. Enter mix adjustment data on report.
- f. Check for spec compliance.
- g. Immediately report non-complying results.
- h. Obtain and record mat temperatures and stationing.
- i. Provide daily Plant Report printout to DME.

2. Maintain a daily diary of work activity in Plant Report Program.

- a. Record weather conditions.
- b. Record daily high and low temperatures.
- c. Record sunrise and sunset times.
- d. Record any interruptions to plant production.
- e. Record any other significant events.

3. Copy and export daily data and paste into control charts program.

4. Enter all asphalt binder or aggregate proportion changes in Plant Book Program, Mix Adjustments page.

5. Enter tack shipment quantities in Plant Book Program, Tack Shipment Log page.

6. Total all truck tickets delivered to project and deduct any waste to determine HMA pay quantity.

J. Miscellaneous. (daily) (daily check list, IM 208 & 511)

1. Fill out Plant Book Program, Daily Check List page.

2. Clean lab.

3. Back-up computer files.

4. Dispose of samples as directed by District Lab.

5. Clean and maintain lab equipment.

K. Independent Assurance Duties. (Every 3 months) (IM 205 & 216)

1. Pick up HMA and aggregate proficiency sample from District Lab.
2. Test aggregate proficiency sample for gradation per IM 302.
3. Test HMA proficiency sample per IM 357, 325G, 321 & 350.
4. Report test results on proficiency samples to Central Materials Office per IM 205.

L. Project Duties. (1/project) (IM 508 & 511)

1. Be in possession of appropriate mix design.
2. Be present during plant calibration.
3. Observe scale calibrations.
4. Perform plant site and set-up inspection and fill out Plant Site Inspection List.
5. Set up Plant Report and Plant Book Programs and enter all project information to create Project Master files at beginning of project.
6. Check that release agents used in truck boxes are on the approved list in IM 491.15
7. Copy all computer files and provide to the Contracting Authority at completion of project.
8. Copy all paperwork and control charts and provide to the Contracting Authority at completion of project.

PRESTRESS TECHNICIAN DUTIES

Duties of the Prestress Technician are detailed in IM 570 and consist of, but are not limited to the following:

A. Pre-pour

1. Identify and document materials requiring outside fabrication inspection.
 2. Identify potential fabrication or production problems and notify Iowa DOT inspectors.
 3. Verify that all materials incorporated meet the requirements of the contract documents.
 4. Review concrete placement documents for strand locations.
 5. Check tension calculations.
 6. Measure elongation and gauge pressure during tensioning.
 7. Check hold down and insert locations.
 8. Check stress distributions.
 9. Check steel reinforcement and placement.
 10. Check strand position.
 11. Check condition of pallet.
 - a. Level
 - b. Holes
 - c. Gaps
 - d. Other deformities
 12. Determine moisture of aggregates.
 13. Check form condition and placement.
 - a. Oil
 - b. Line alignment level
 - c. Tightness
-

B. Concrete Placement

1. Check on use of an approved mix design and batching operations (sequence).
2. Assure appropriate placement and proper vibration techniques.
3. Measure and record concrete temperature.
4. Assure test cylinders are properly made.
5. Assure appropriate finish.
6. Assure appropriate curing operations.

C. Post-pour

1. Check temperature and record during curing process.
2. Assure concrete strength has been met prior to releasing the line.
3. Assure proper detensioning procedure.
4. Check unit for defects and obtain approval for repairs.
5. Identify and store cylinders with the respective units.
6. Check beam ends for fabrication in accordance with the plans.
7. Assure exterior sides of fascia beams are grouted.
8. Inspect after patching and desired surfacing.
9. Measure and record overall dimensions of beam.
10. Measure and record camber at release and compare to design camber.
11. Check and/or measure and record lateral sweep before shipping.
12. Assure proper cylinder cure.

PROFILOGRAPH TECHNICIAN DUTIES

Duties of the Profilograph Technician are detailed in IM 341 and consist of, but are not limited to the following:

A. Test pavement for smoothness criteria.

B. Evaluate and certify test results.

1. Certified person that reduces trace must sign certified test report.

2. Profilograms become part of permanent project record.

C. Documentation

1. Certified Profilograph Test report must include following statement:

This is to certify that all testing and trace reduction herein described has been performed according to applicable contract specifications and requirements.

STATE LIBRARY OF IOWA



3 1723 02092 1490