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CHAPTER 9

2

FINAL ESTIMATES

3

TRAINING AND QUALIFICATIONS PROGRAM

4

9.1 PURPOSE

5 The purpose of the ***Final Estimates (FE) Training and Qualification Program*** is to
6 establish a specific level of knowledge and administrative skills for the persons
7 responsible for measuring pay item quantities, completing FE forms and documents,
8 processing progress payments, and preparing a final estimate package for a
9 construction contract. This course provides appropriate methods for measurements
10 and documentation for Lump Sum, Design Build, Plan Quantity, and Final Measured
11 Concept Pay Items.

12

9.2 AUTHORITY

13 Sections ~~334.044~~ 20.23 (3) (a), 334.048 and 337.141, Florida Statutes (F.S.)
14 Rule 14-22, Florida Administrative Code.
15 The Florida Department of Transportation's Standard Specifications for Road and
16 Bridge Construction

17

9.3 BACKGROUND

18 Prior to 2003, the Department had two existing training courses with one certification.
19 The first course was called "***District Specific Training for Final Estimates***
20 ***Preparation***", ***TRESS No. BT-06-0037***. This course targeted all District and
21 Consultant Senior Inspectors, Inspectors, Inspector Aides, Contract Support
22 Specialist, Administrators, and Mapping Technicians. The second course was called
23 "***Statewide Seminar for Final Estimates***", ***TRESS No. BT-06-0042***. This course
24 targeted Consultant Engineers, Mapping Technicians, and DOT Project
25 Administrators. The Department provided a certification for Final Estimates Training
26 only for this second course. The State Construction Office (SCO) conducted training
27 and a certificate was provided to personnel of Consultant Engineering and Inspection
28 Firms upon completion of the course.

29

30 For over 20 years, the Department has maintained a ***Final Estimates Self Study***
31 ***(FESS) Manual*** and corresponding Examination. The FE Level I Training Course and
32 Examination replaces the FESS Course and Examination. The FE sSelf sStudy
course will no longer be available after the effective date of this procedure.

33

9.4 QUALIFICATIONS

34

There are two levels of Final Estimates Training Qualification: Level I, and Level II.
Final Estimates Training and Qualification Program

1 Level I targets all persons responsible for documenting quantities on the appropriate
2 site source records in accordance with the **Preparation and Documentation Manual**
3 **(P&DM), Topic No. 700-050-010.**

4 Level II targets all persons responsible for proper payment of items on a construction
5 contract and submittal of the required documentation for the FE package all in
6 accordance with the **P&DM** and the **Review and Administration Manual (R&AM),**
7 **Topic No. 700-050-005.** The dates for becoming **Construction Training and**
8 **Qualification Program (CTQP)** qualified are contained in **Attachment 9-3.**

9 **9.4.1 FE Level I Qualification Requirements**

10 A qualified FE Level I person will be able to perform the appropriate
11 measurements, and calculate and document quantities on the proper forms,
12 field books, and or other site source records.

13 All trainees seeking the FE Level I qualification must:

14
15 Pass the FE Level I written examination.

16 After obtaining this qualification requirement, the trainee's Department
17 qualification date will be added to the training database.

18 **9.4.1.1 FE Level I Training Course**

19 The Level I Training Course is approximately eight (8) hours long and is
20 computer based. Topics covered in this course are ~~included~~ listed in
21 **Attachment 9-1.**

22 Information about the course resides on the Construction Training and
23 Qualification Program (CTQP) website.

24 **9.4.1.1.1 FE Level I Course Prerequisites**

25 Trainees taking the FE Level I examination should be familiar
26 with the current specifications; the **Computation Methods for**
27 **Design, Construction and Final Estimates Handbook**
28 **(CMDCFE), Topic No. 700-050-001;** and the **P&DM.**

29 The prerequisites for the FE Level I course are:

30 (1) Pass the sSelf-study examination for **Construction Math,**
31 **TRESS No. BT-06-0007.**

- 1 (2) Pass the Self-study examination for **Contract Plans**
2 **Reading, TRESS No. BT-06-0008.**

3 **9.4.1.1.2 FE Level I Written Examination**

4 A written examination is administered by the CTQP for the FE
5 Level I qualification course. The passing score of this
6 examination is 70%.

7 A CTQP application must be completed and processed.

8 Trainees need to schedule the FE Level I examination on a
9 CTQP examination date/location. The written examinations are
10 electronically graded by the CTQP and posted in the **Training**
11 **Qualification Data Base System (TQDBS)**. Two weeks should
12 be allowed for grading and posting of the examination results.

13 **9.4.2 FE Level II Qualification Requirements**

14 A qualified FE Level II person will compile, verify, and process the necessary
15 documentation for proper payment of progress estimates during a construction
16 contract in accordance with the contract documents, **P&DM**, etc. In addition,
17 this person will be responsible for the submittal of the completed FE package
18 that includes all the necessary documentations and forms used to support the
19 final contract amount for the construction project.

20 All trainees seeking FE Level II qualification must:

21 Pass the FE Level II written examination

22 After obtaining this qualification requirement, the trainee's ~~FDOT~~ [Department](#)
23 qualification date will be added to the training database. Qualification shall be
24 for five (5) years (60 months).
25

26 **9.4.2.1 FE Level II Training Course**

27 This is a two- ~~(2)~~ day course and includes a written examination at the
28 end of the second day (usually multiple choice)

29 Topics covered in this course are included in **Attachment 9-2**.

Information about course schedules and costs can be obtained by
accessing the CTQP web site. Persons not having access to the CTQP
web site may access course schedules by contacting the CTQP, the
DCTA, or the State Construction Training Administrator (SCTA).

1 **9.4.2.1.1 FE Level II Course Prerequisites**

2 The prerequisites for the FE Level II courses ~~are~~ is to: (must have
3 ~~one~~):

4
5 Hold a FE Level I qualification.

6 **9.4.2.1.2 FE Level II Written Examination**

7 A closed book, written examination is administered on the last
8 day of the FE Level II qualification course (usually multiple-
9 choice). The passing score for this examination is 70%.

10 Training course attendance is encouraged, but is not required for
11 qualification. All examinations are electronically graded by the
12 CTQP and the results posted in the TQDBS. Two weeks should
13 be allowed for grading and posting the examination results.

14
15 **~~9.4.3 FE Level II Training Course Refresher~~**

16 ~~Refresher courses are offered for FE Level II qualification only. Refresher~~
17 ~~courses will begin to be offered in January 2006. This will be a one-day course.~~
18 ~~Topics covered in this course may include any of the topics listed in~~
19 ~~**Attachment 9-2.** At the end of the refresher training presentation, a written~~
20 ~~examination will be administered (usually multiple choice).~~

21
22 ~~Due to frequent changes in specifications, methods of documentation, and~~
23 ~~other processes, the information needed to properly complete an estimate for~~
24 ~~pay is dynamic. While the CTQP FE Level II qualification is good for 5 years,~~
25 ~~the knowledge necessary to properly complete a final/monthly estimate will~~
26 ~~need to be refreshed. While refresher training is **not required**, it is highly~~
27 ~~recommended every 24 months. Trainees who take and pass a CTQP FE~~
28 ~~Level II refresher examination will have their CTQP FE Level II qualification~~
29 ~~extended for five (5) years from the date they successfully completed the~~
30 ~~examination.~~

31 ~~Information about course schedules and costs may be obtained by accessing~~
32 ~~the CTQP web site. Persons not having access to the CTQP web site may~~
33 ~~obtain course schedules by contacting the CTQP, the DCTA, or the SCTA.~~

34 **~~9.4.3.1 Level II Refresher Training Course~~**
35 **~~Examination~~**

~~1 An examination is administered at the end of the FE Level II Refresher
2 qualification course (usually multiple choice). The passing score for this
3 examination is 70%.~~

~~4 All examinations are electronically graded by the CTQP and the results
5 posted in the TQDBS. Two weeks should be allowed for grading and
6 posting the examination results.~~

7 **9.5 QUALIFICATION REQUIREMENTS BY JOB FUNCTION AND** 8 **IMPLEMENTATION SCHEDULE**

9 Job functions related to the Final Estimates qualifications with the scheduled
10 implementation date are contained in **Attachment 9-3**.

11 **9.6 REQUALIFICATION**

12 Due to frequent changes in specifications, methods of documentation, and other
13 processes, requalification requirements are issued as follows:

14 **9.6.1 FE Level I Requalification**

The requirements for a FE Level I requalification is to:

Pass the written examination for the FE Level I Training Course.

After a trainee has successfully met the qualification requirement, the qualification date will be added to the training database. Qualification shall be for five (5) years (60 months).

Any trainee who fails to become requalified by the 60th month shall become disqualified on the last day of the 60th month. A previously qualified Level I person who lets their qualification expire must reapply for qualification.

15 **9.6.2 FE Level II Requalification**

16 The requirement for the FE Level II requalification is to:

17 ~~(1) Pass the written FE Level II Refresher examination.~~

18

19

~~-OR-~~

20

21

~~(2) Pass the written FE Level II examination.~~

22 **NOTE:** CTQP FE Level II qualified trainees who let their FE Level II qualification
23 expire will be required to pass the FE Level I and Level II examinations. Therefore,

1 as long as Level II Qualification/Requalification is kept current, Level I
2 Qualification/Requalification will stay current.

3 Any trainee who fails to become requalified by the 60th month shall become
4 disqualified on the last day of the 60th month. A previously qualified person who lets
5 their qualification expire must reapply for qualification for both, Level I and Level II.

6 **9.7 FE QUALIFICATION SUSPENSIONS**

7 CTQP FE Level II qualified personnel will be subject to evaluations and must achieve
8 acceptable results in order to maintain qualified status. This will be based on a review
9 of all active qualifications. See **Chapter 15** of the **Review and Administration**
10 **Manual (R&AM), Topic No. 700-050-005.**

11
12 Suspensions may be appealed to the State Construction Engineer (SCE) within 30
13 days of the notice of suspension. The SCE's decision concerning suspension is final.

14 The State Final Estimates Manager (SFEM) will notify by letter, the District Final
15 Estimates Manager (DFEM) and the District Construction Engineer (DCE) regarding
16 the suspension. This information will also be copied into the CTQP for updating of the
17 CTQP database.

18 Prior to having the qualification reinstated, the trainee must attend and complete any
19 applicable Qualification course(s), and obtain a passing score on any applicable
20 written examination(s). This includes meeting all initial, conditional requirements.

21 **9.8 FE DISQUALIFICATION**

22 Active, qualified personnel must conform to the Department's practices with regard to
23 Quality Control operations. Should any qualified person falsify Department records,
24 his/her qualification will be subject to possible revocation by the SFEM or the DCE,
25 jointly. Falsification of project related documentation may be subject to further
26 investigation and penalty under State Statutes and Federal Law.

27 The SFEM and the DCE (jointly) shall be the authority which revokes qualification.
28 Both the SFEM and the DCE must sign the letter of revocation. Notification that a
29 qualification has been revoked shall be by "return receipt requested" mail. A copy of
30 the notification shall be sent to the employee's supervisor/manager (in-house or
31 consultant), State Construction Training Manager (SCTM), and the CTQP for
32 database update. This decision may be appealed to the SCE. The Trainee has 90
33 days from receipt of notice to appeal this decision. The SCE's decision regarding
34 revocation is final. Anyone having their qualification revoked shall be eligible to apply
35 for new qualification after a period of two years.

36 The following responsibilities are unique to the FE Qualification Program and are in
37 addition to those listed in the end of **Chapter 1** of this manual.

1 **9.9 DEPARTMENT RESPONSIBILITIES**

2 **9.9.1 State FE Office (SFEO)**

3
4 (1) Maintain the list of all—~~“DOT”~~ Department (in-house and
5 consultant) active qualified FE Level I and Level II personnel for
6 at least five years. The database should be accessible to all
7 District Construction Engineers (DCE), the District Final
8 Estimates Managers (DFEM), the State Final Estimates Manager
9 (SFEM), the State Construction Engineer (SCE), and the District
10 Construction Training Manager (DCTM).

11 (2) Conduct Process Reviews (PR) on Certified Final Estimate
12 Projects at the District Final Estimates Offices (DFEO).

13 **9.9.2 District Construction Engineer (DCE) or Designee**

14 Conduct IA Reviews on selected CTQP qualified FE Level II personnel.
15 Conduct Post Audit Reviews (PAR) on Certified Final Estimate Projects. See
16 **Chapter 4** of the ~~R & AM~~ R&AM.
17

18 **9.9.3 Final Estimates Technical Review Team (FETRT)**

19 Review and recommend revisions to the manuals, training aids, examinations,
20 and qualification procedure.

1

Attachment 9-1

2

FE LEVEL I TRAINING COURSE

3 Topics covered in this course are:

4 (1) Contract Documents:

5

6 Review of Supplemental Agreements, Plans, Order of Precedence for
7 documents, etc.

8 (2) Methods of Measurements:

9 Definitions of Lump Sum, Plan Quantity & Final Measure Pay Item
10 Concepts.

11 (3) Final Measurements:

12 a) Methods of calculating areas

13 b) Methods of calculating volume

14 c) Methods of calculating Linear measurements, weights, etc.

15 (4) Types of documentation:

16 Field books, site source records for asphalt, concrete, piling, etc., final
17 "As-Built" plans.

18 (5) Introduction of electronic documentation.

1

2

Attachment 9-2

3

FE LEVEL II TRAINING COURSE

4 Topics covered in this course are:

5 (1) Refreshers (Procedures, Contract Administration, and Specification
6 Changes)

7 (2) Specific Final Estimates Contract Language: Retainage, Liquidated
8 Damages, Contract Documents, etc.

9 (3) Unpaid Bills

10 (4) Contract Time

11 (5) Fuel and Bituminous Adjustments

12 (6) Computation Book (Quantities, Referencing, and Backup Documentation)

13 (a) Asphalt Records (Penalties and Bonuses)

14 (b) Earthwork (Regular Excavation, Embankment, Subsoil, Channel
15 Excavation, and Lateral Ditch Excavation)

16 (c) Structures (Bridge, Pile Driving, and Drilled Shafts), (Penalties and
17 Shaft Reduction)

18 (7) Final Plans

19 (8) Certification of Materials (NFTR)

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Attachment 9-3

3
4

CTQP Qualification by Job Function

5

Final Estimates Level I:

6 This is the individual responsible for taking and documenting final measurements
7 used in the documentation of pay quantities on progress and final estimates.
8 Department employees targeted for this qualification are Inspectors and Lead
9 Inspectors.

10 All persons who are responsible for taking and documenting final measurements
11 must be CTQP qualified prior to July 2005.

12

13

Final Estimates Level II:

14 All persons responsible for producing monthly, progress, and final payments and/or
15 compiling final estimates packages must be CTQP FE Level II qualified prior to July
16 2004.