



CQC, 10th Anniversary

2012 FDOT/FTBA Construction Conference

CQC – Source

- ▶ Code of Federal Regulations
 - ▶ 23 CFR 637 B
 - ▶ *FHWA policy on the use of contractor's quality control test results for acceptance.*
 - ▶ *Requires validation of all data not generated by the State Transportation Department.*



CQC = Contractor + Validation

- ▶ **Contractor**
 - ▶ Quality Control **QC**
- ▶ **FDOT**
 - ▶ Validation
 - ▶ Verification **V**
 - ▶ Independent Verification **IV**
 - ▶ Dispute Resolution **R**



CQC- General Concept

Testing Level	Who does it?	Typical Volume	Remarks
Quality Control (QC)	Contractor	100%	Processes carried out by the contractor to document that materials used meet contract specifications
Verification (V)	CEI	25 %	At project site
	Materials	25 %	Off-site: producers (Asphalt Plants) and laboratory
Independent Verification (IV)	CEI or Materials	10%	Typically asphalt (per specification)
Resolution (R)	Materials	< 5 %	Infrequent - to resolve disputes



CQC – Included Items

▶ *Materials*

- ▶ **Concrete**
- ▶ **Earthwork**
- ▶ **Asphalt**
- ▶ **Cementitious**
- ▶ **Timber**
- ▶ **Steel**
- ▶ **Galvanized**
- ▶ **Prestressed**
- ▶ **Precast**
- ▶ **Drainage**

▶ *Other*

- ▶ **Laboratories**
- ▶ **Personnel**



CQC – Practical Vision

▶ Contractor

- ▶ QC Plan
 - ▶ *On site*
 - ▶ *Suppliers*
- ▶ QC Manager
- ▶ Test Materials
- ▶ Inspect Workmanship
- ▶ Correct Where Needed
- ▶ Report

▶ Control Quality

▶ FDOT

- ▶ Approve QC Plan
 - ▶ Contractors
 - ▶ Suppliers
- ▶ Verify
- ▶ Resolve Disputes
- ▶ Report

▶ Verify Quality

CQC – Vital Components



Quality

Communication

Trust



CQC – What's Next?

- ▶ Statistical Comparisons
- ▶ Specification Revisions
- ▶ QC Manager Training
- ▶ Simplification



CQC – 2012 Panel

- ▶ Jonathon Addison – Moderator
- ▶ Kevin Price – DAB – Asphalt Paving Contractor
- ▶ Bill Reed – Skanska – DRB
- ▶ Gayle Grady – PCL – General Contractor
- ▶ Jim Phillips – E.C. Driver – EOR
- ▶ Doug Geiger – RS&H – CEI
- ▶ Brian Mckishnie – FDOT Construction
- ▶ Ken Morgan – FDOT Materials

