Date

Project Administrator
Florida Department of Transportation

City, Florida

Subject: **QUALITY CONTROL PLAN**
Financial Project ID:
FAP Numbers:
Contract Number:
County:

Dear Mr.

The following information is being submitted in accordance with the plans and specifications to comply with an acceptable Quality Control Program. This Quality Control Plan incorporates the plans and specifications.

Sincerely,

Revised as of July 1, 2008

General Information

QCP-5.2 Personnel

QCP-5.2.1 Quality Control Manager - The primary contact for the department on this project is _____. In the event of illness or vacation on the part of the primary QC Manager the alternate QC Manager will be _____and all necessary contact information is provided. Contact information for the QC Manager is as follows:

Name	Name
TIN:	TIN:
Office:	
Cell:	
Home:	
Nextel:	
Email:	

QCP-5.2.2 Responsibilities - The QC Manager has full control of all matters relating to quality control issues and he reports to _____, an officer of _____(Contractor's Name)_____. This person shall supervise the QC staff on the project. The QC Manager has full authority to act as _(Contractor's name)_____ agent to institute all actions necessary for the successful implementation of the QC Plan. This person shall ensure that all QC staff has a copy of the approved project QC Plan. The QC Manager shall use Department Standard forms to summarize the daily QC program activities including testing and material sampling activities. The QC Manager will ascertain that all forms are prepared using blue ink and that there will be no erasures. Only cross outs with initials will be acceptable. The QC Manager will make available to the Department's representative copies of all completed forms for review. The QC Manager will also ensure that all QC tests are entered into the Department's database on a daily basis and all QC forms delivered to the Project Administrator within 24 hours after completion of the work. The QC Manager will ensure that all certifications required by the contract documents will be provided to the Department's Project Administrator prior to installation of the material for which the certification is required.

QCP-5.2.3 Monthly Certifications

The persons authorized to sign the Certification of Materials Acceptance and Testing, Form 700-020-02 is *(Prime Contractor person's name*). In the event that he is not available, then (*Provide an alternate name if needed*). Each month, he/she will provide a notarized certification of compliance on the Department's Form 700-020-02 and will note all exceptions. The form will be filled out in accordance with the instructions for the form.

PRECAST CONCRETE DRAINAGE PRODUCTS

PCP-5.2.2 Level of Responsibility: The Quality Control Manager as stated in section QCP 5.2.1 is the primary point of contact for quality control issues on the project.

PCP-5.3 Raw materials:

PCP – 5.3.1 Sources:

Precast Structures
Plant #
Plant Manager:
(Plant Address)

Concrete Pipe
Plant #
Plant Mgr:
(Plant Address)

PCP-5.3.2 Certifications: The QC Manager or (*name of designee*) will verify the raw materials supplier is an approved source to supply drainage products and will obtain a copy of all delivery tickets for the project from producers. Copies of tickets will be supplied with the Signed Monthly Certification.

PCP-5.3.3 Disposition of Failing Materials: See Producer's QC Plan

PCP – 5.4 Storage Facilities for Raw Materials: See Producers QC Plan.

PCP – 5.5 Production Equipment: See Producers QC Plan.

PCP – 5.6 Plant Requirements

PCP – 5.6.1 Plant Identification: See Producers QC Plan.
PCP – 5.6.2 Process Control System: See Producers QC Plan
PCP – 5.6.3 Loading and Shipping Control: See Producers QC Plan
PCP – 5.6.4 Types of Products Generated: See Producers QC Plan.

PCP – 5.7 Other Requirements

PCP – 5.7.1 Copy of Certification: N/A
PCP – 5.7.2 Statement of Compliance: The material and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.
PCP – 5.7.3 Information on Producer's with Accepted Quality Control Programs: See section PCP-5.3.1

PCP – 5.8 Final Manufactured Product – Plant Operations: See Producers QC Plan.

PCP – 5.8.1 Storage - See Producer's QC Plan

PCP – 5.8.2 Disposition of Failing Materials – See Producer's QC Plan

PCP – 5.9 Final Manufactured Product – Field Operations:

PCP – 5.9.1 Transportation: The applicable supplier will deliver product to the job site. Once product is placed in storage area as addressed in section PCP-5.9.2, a front-end loader with or without forklift attachment will be used to relocate product within job limits. A chain or other support straps will be used to hold product secure during transporting to ensure that product is not damaged.

PCP-5.9.2 Storage: The applicable suppliers will deliver product to the jobsite storage area. Upon arrival at the job site, product will be placed within an approved designated storage area and all precautions will be taken to ensure products are not damaged during off loading or storage. Should damage occur during storage and not repairable the item will be rejected for use on this project. The length of storage will be minimized to preclude deterioration to the product

PCP-5.9.3 Placement: Final placement of drainage products will be accomplished by accepted construction practices and in accordance with all contract requirements.

PCP-5.9.4 Disposition of Failing Materials: Upon arrival at the project final manufactured products materials will be inspected. Any drainage products found not to meet FDOT Specification will be identified, marked and removed from project.

PCP-6 Testing Laboratories: See Producer's QCP.

TIMBER PRODUCTS

TP-5.2.2 Level of Responsibility: The Quality Control Manager as stated in section QCP 5.2.1 is the primary point of contact for quality control issues on the project.

TP-5.3 Raw materials:

TP – 5.3.1 Sources: Mailbox timber post, fence posts and guardrail blocks.
(Supplier)
Telephone #
Contact:
(Plant Address)
Plant #

TP-5.3.2 Certifications: The QC Manager or (*name of designee*) will verify the raw materials supplier is an approved source to supply timber and will obtain a copy of all delivery tickets for the project from producers. Copies of tickets will be supplied with the Signed Monthly Certification.

TP-5.3.3 Disposition of Failing Materials: See Producer's QC Plan

TP – 5.4 Storage facilities for Raw Materials: See Producers QC Plan.

TP – 5.5 Production Equipment: See Producers QC Plan.

TP – 5.6 Plant Requirements
TP – 5.6.1 Plant Identification: See Producers QC Plan.
TP – 5.6.2 Process Control System: See Producers QC Plan
TP – 5.6.3 Loading and shipping Control: See Producers QC Plan
TP – 5.6.4 Types of Products Generated: See Producers QC Plan.

TP – 5.7 Other Requirements
TP – 5.7.1 Copy of Certification: N/A

TP – 5.7.2 Statement of Compliance: The material and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

TP – 5.7.3 Information on Producer's with Accepted Quality Control Programs: See section TP-5.3.1.

TP – 5.8 Final Manufactured Product – Plant Operations: See Producers QC Plan.
TP – 5.8.1 Storage - See Producer's QC Plan

TP – 5.8.2 Disposition of Failing Materials – See Producer's QC Plan

TP – 5.9 Final Manufactured Product – Field Operations:

TP – 5.9.1 Transportation: Materials will be brought to jobsite daily in back of pickup truck or flat bed truck and installed.

TP-5.9.2 Storage: Timber products will be delivered to project daily, therefore storage will not be needed.

TP-5.9.3 Placement: Final placement of timber products will be accomplished by accepted construction practices and in accordance with all contract requirements.

TP-5.9.4 Disposition of Failing Materials: Any Timber products with damage that structurally impairs the product will be rejected and removed from the project. The Project Engineer will be notified of rejected materials.

TP-6 Testing Laboratories: See Producer's QCP.

METAL PIPE

MP-5.2.2 Level of Responsibility: The Quality Control Manager as stated in section QCP 5.2.1 is the primary point of contact for quality control issues on the project.

MP-5.3 Raw materials:

MP – 5.3.1 Sources:

(Name of Supplier)
Telephone No.
Plant Mgr:
(Plant Address)
Plant #

MP-5.3.2 Certifications: The QC Manager or (*name of designee)* will verify the raw materials supplier is an approved source to supply metal pipe and will obtain a copy of all delivery tickets for the project from producers. Copies of tickets will be supplied with the Signed Monthly Certification.

MP-5.3.3 Disposition of Failing Materials: See Producer's QC Plan

MP – 5.4 Storage facilities for Raw Materials: See Producers QC Plan.

MP – 5.5 Production Equipment: See Producers QC Plan.

MP – 5.6 Plant Requirements

MP – 5.6.1 Plant Identification: See Producers QC Plan.
MP – 5.6.2 Process Control System: See Producers QC Plan
MP – 5.6.3 Loading and shipping Control: See Producers QC Plan
MP – 5.6.4 Types of Products Generated: See Producers QC Plan.

MP – 5.7 Other Requirements

MP – 5.7.1 Copy of Certification: N/A

MP – 5.7.2 Statement of Compliance: The material and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

MP – 5.7.3 Information on Producer's with Quality Control Programs - See section MP-5.3.1

MP – 5.8 Final Manufactured Product – Plant Operations: See Producers QC Plan.

MP – 5.8.1 Storage - See Producer's QC Plan

MP – 5.8.2 Disposition of Failing Materials – See Producer's QC Plan

MP – 5.9 Final Manufactured Product – Field Operations:

MP – 5.9.1 Transportation: The applicable supplier will deliver product to the job site. Once product is placed in storage area as addressed in section MP-5.9.2, a front-end loader with or without forklift attachment will be used to relocate product within job limits. A chain or other support straps will be used to hold product secure during transporting to ensure that product is not damaged.

MP-5.9.2 Storage: The applicable suppliers will deliver product to the jobsite storage area. Upon arrival at the job site, product will be placed within an approved designated storage area and all precautions will be taken to ensure products are not damaged during off loading or storage. Should damage occur during storage and not repairable the item will be rejected for use on this project.

MP-5.9.3 Placement: Final placement of metal pipe products will be accomplished by accepted construction practices and in accordance with all contract requirements. The metal pipe that is partly or entirely covered with concrete will be coated with a bituminous material approved by the engineer as required by specification 430 and the Design Standards. The material used to coat the pipe will be a cut-back asphalt applied with a continuous coating of .004" minimum thickness.

MP-5.9.4 Disposition of Failing Materials: Upon arrival at the project, final manufactured product materials will be inspected. Any pipe products found not to meet FDOT Specification will be identified, marked and removed from project.

MP-6 Testing Laboratories: See Producer's QCP.

PRESTRESSED CONCRETE PRODUCTS

PSCP-5.2.2 Level of Responsibility: The Quality Control Manager as stated in section QCP 5.2.1 is the primary point of contact for quality control issues on the project.

PSCP-5.3 Raw materials:

PSCP – 5.3.1 Sources:

Prestressed Beams and Piles
Plant #
Plant Manager:
(Plant Address)

PSCP-5.3.2 Certifications: The QC Manager or (*name of designee)* will verify the raw materials supplier is an approved source to supply drainage products and will obtain a copy of all delivery tickets for the project from producers. Copies of tickets will be supplied with the Signed Monthly Certification.

PSCP-5.3.3 Disposition of Failing Materials: See Producer's QC Plan

PSCP – 5.4 Storage facilities for Raw Materials: See Producers QC Plan.

PSCP – 5.5 Production Equipment: See Producers QC Plan.

PSCP – 5.6 Plant Requirements

PSCP – 5.6.1 Plant Identification: See Producers QC Plan.
PSCP – 5.6.2 Process Control System: See Producers QC Plan
PSCP – 5.6.3 Loading and shipping Control: See Producers QC Plan
PSCP – 5.6.4 Types of Products Generated: See Producers QC Plan.

PSCP – 5.7 Other Requirements

PSCP – 5.7.1 Copy of Certification: N/A
PSCP – 5.7.2 Statement of Compliance: The material and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.
PSCP – 5.7.3 Information on Producer's with Quality Control Programs: See Section PSCP-5.3.1

PSCP – 5.8 Final Manufactured Product – Plant Operations: See Producers QC Plan.

PSCP – 5.8.1 Storage - See Producer's QC Plan
PSCP – 5.8.2 Disposition of Failing Materials – See Producer's QC Plan

PSCP – 5.9 Final Manufactured Product – Field Operations:

PSCP – 5.9.1 Transportation: The applicable supplier will deliver product to the job site. Once product is placed in storage area as addressed in section PSCP-5.9.2, a piece of construction capable of lifting the piece of prestressed finished product will be used to place it on a vehicle capable of carrying it to the area it will be used. *(Or the prestressed products will be stored on the trailers on which they are delivered and then the trailers will be moved to the area where the prestressed product is to be used.)*

PSCP-5.9.2 Storage: The applicable suppliers will deliver product to the jobsite storage area. Upon arrival at the job site, the Prestressted products will be inspected for defects and all defects will be reported to the Project Engineer/Administrator immediately and the product will be placed within an approved designated storage area and all precautions will be taken to ensure products are not damaged during off loading or storage. Should damage occur during storage and not repairable the item will be rejected for use on this project. The length of storage will be minimized to preclude deterioration to the product

PSCP-5.9.3 Placement: Final placement of prestressed products will be accomplished by accepted construction practices and in accordance with all contract documents.

PSCP-5.9.4 Disposition of Failing Materials: Upon arrival at the project final manufactured products materials will be inspected. Any prestressed products found not to meet FDOT Specification will be identified, marked and removed from project.

PSCP-6 Testing Laboratories: See Producer's QCP

(If your project contains steel bridge components, movable bridge components, overhead cantilevered sign supports, mast arms for signals, pedestrian poles, ladders and platforms, bearings, end wall grates, roadway gratings, metal drainage components, steel expansion joint and components, shear connectors, pipe handrails, galvanized steel woven wire farm fence, and guardrail, then this section is required in the QC Plan. Everything in italics below has to be filled in by the contractor in their own words. If the area is not applicable, then place a N/A next to that section to indicate that the area was not overlooked)

GALVANIZED STEEL, STRUCTURAL STEEL AND/OR MISCELLANEOUS METALS

SSMM-5.2.2 Level of Responsibility: The Quality Control Manager as stated in section QCP 5.2.1 is the primary point of contact for quality control issues on the project.

SSMM-5.3 Raw materials: *(List types of materials that are used in the project and the source for each material.)*

SSMM – 5.3.1 Sources:

A. Guardrail
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

B. Fencing
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

C. Mast Arms/Pedestrian poles
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

D. Drainage gratings
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

E. Sign Structures
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

F. Handrail
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

G. (Any other metal material required by Specification 105-3.1)
Fabricator Name:
Address:
Location:
Plant/Facility #:
Plant Manager:

SSMM-5.3.2 Certifications: The QC Manager or (*name of designee)* will verify the fabricator is an approved source to supply structural steel and miscellaneous metals and will obtain a copy of all delivery tickets for the project from the fabricator. Copies of tickets will be supplied to the Department with the Signed Monthly Certification.

SSMM-5.3.3 Disposition of Failing Materials: See Producer's QC Plan

SSMM – 5.4 Storage facilities for Raw Materials: See Producers QC Plan.

SSMM – 5.5 Production Equipment: See Producers QC Plan.

SSMM – 3.6 Plant Requirements

SSMM – 3.6.1 Plant Identification: See Producers QC Plan.
SSMM – 3.6.2 Process Control System: See Producers QC Plan
SSMM – 3.6.3 Loading and shipping Control: See Producers QC Plan
SSMM – 3.6.4 Types of Products Generated: See Producers QC Plan.

SSMM – 5.7 Other Requirements

SSMM – 5.7.1 Copy of Certification: N/A
SSMM – 5.7.2 Statement of Compliance: The material and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

SSMM – 5.7.3 Information on Producer's with Quality Control Programs: See Section SSMM-5.3.1.

SSMM – 5.8 Final Manufactured Product – Plant Operations: See Producers QC Plan.

SSMM – 5.8.1 Storage - See Producer's QC Plan

SSMM – 5.8.2 Disposition of Failing Materials – See Producer's QC Plan

SSMM – 5.9 Final Manufactured Product – Field Operations:

SSMM – 5.9.1 Transportation: The applicable fabricator will deliver steel products to the job site. Once product is placed in a storage area as addressed in section SSMM-5.9.2, a piece of construction equipment capable of lifting the piece of structural steel or miscellaneous metals will be used to place it on a vehicle capable of carrying it to the area it will be used.

SSMM- 5.9.2 Storage: The applicable fabricator will deliver the steel and miscellaneous metals to the jobsite storage area. Upon arrival at the job site, the structural steel and/or miscellaneous metals will be inspected for defects and all defects will be reported to the Project Administrator immediately and the product will be placed within an approved designated storage area on dunnage and all precautions will be taken to ensure products are not damaged during off loading or storage. Should damage occur during storage and not repairable the item will be rejected for use on this project. The length of storage will be minimized to preclude deterioration to the product

SSMM-5.9.3 Placement: Final placement of steel and miscellaneous metal products will be accomplished by accepted construction practices and in accordance with all contract documents.

SSMM-5.9.3.1a: Methods for ensuring satisfactory materials and workmanship:

All materials incorporated into the Project will be from an FDOT Approved source. Contractor's representative will inspect materials upon delivery to site. Damage or Non-Conforming materials will be segregated and rejected for use on this project. Qualified installers will inspect work as it progresses with emphasis on workmanship and conformance to specifications.

SSMM-5.9.3.1b: Responsibilities of QC Inspectors (QCI):

The Steel and Miscellaneous Metals installer will have a designated person responsible to insure that materials and installation meet all requirements in the contract documents. QCI will verify that metals are properly manufactured, galvanized and/or coated according to plans and specifications.

SSMM-5.9.3.1c: Inspection and Testing Equipment: N/A

SSMM-5.9.3.1d: Welding Procedures and Consumables: N/A

SSMM-5.9.3.1e: Nondestructive Examination: N/A

SSMM-5.9.3.1f: Nonconformance Control:
Upon arrival at the project, final manufactured product materials will be inspected. Any Steel or Miscellaneous Metal products found not to meet FDOT Specifications will be identified, marked, and removed from the project or repaired as approved by the Engineer. The cause of defective material will be determined and steps will be taken to prevent further occurrences. The Engineer will be provided a written proposal documenting the situation and suggesting corrective actions for repairs or replacement. Repairs will be performed in accordance with the contract documents and with procedures acceptable to the Engineer.

SSMM-5.9.3.1g: Erector Certification and Qualifications: N/A

SSMM-5.9.3.1h: Contractor Documentation:
All records regarding inspections, measurements, field testing, reportable non-conformances, and repairs of Structural Steel and/or Miscellaneous Metal products will be kept at the following location:

Name:
Address:

For items that require full or partial field assemblies, signed reports will be submitted to the Project Administrator indicating compliance or deviation to assemblies and pictures if available. All records will be made available to the Department upon request.

SSMM-5.9.4 Disposition of Failing Materials: Upon arrival at the project final manufactured products materials will be inspected. Any galvanized steel, structural steel or miscellaneous metals found not to meet FDOT Specification will be identified, marked and removed from project.

SSMM-6 Testing Laboratories: See Producer's QCP or Field testing laboratory if necessary.

Earthwork

EWK-5.2 Personnel

EWK-5.2.1 Personnel: The following is a list of personnel that may be on the project and their qualifications.

Name	Company	TIN	Earthwork CTQP Level of qual.

EWK-5.2.2 Level of Responsibility: The Quality Control Manager is the primary point of contact for quality control issues on the project. Approved qualified personnel are responsible for inspection of materials and construction activities. The alternate Quality Control Manager would serve as a temporary Quality Control Manager should illness or other unavoidable conflict occur with the Quality Control Manager.

Earthwork Level 2 Technician will be in responsible charge of assisting the contractor in achieving density in the most accurate and time saving method, by having full knowledge of density theory, Florida Specifications and Design Standards. Oversee and assist Level 1 Technician with preparation, completion and certification of density logbook.

Earthwork Level 1 Technician will be in responsible charge of checking soil classification to ensure the soil utilized is the same soil proctors were acquired on. Take soil samples from pit and/or job-site to lab for sampling, performing nuclear density test, speedy moisture sampling soils test and reporting results in Density log book.

EWK-5.3 Raw Materials:

EWK-5.3.1 Sources:

Base Rock: Base rock will be delivered to site from FDOT Approved Limerock Pit Number_____.

Borrow Material: Borrow material will be obtained from _____. A separate letter requesting approval from the project administrator will be provided.

(*Borrow Material: Borrow pits are project specific. New borrow pits need proper approval. The borrow pits approved for previous projects can be utilize by transferring them to the current project provided the borrow material is available in those pits and the transfer is requested by the contractor. All borrow material for embankment and pipe backbill, no matter whether it is coming from on site or previously approved borrow pits or new borrow pits, shall be approved by the project administrator before it is being placed on the current project?)*

EWK-5.3.2 Certification: Subcontractor will visually verify that the material is suitable. Subcontractor will collect the delivery tickets and verify that the material arriving on the project is from the designated source. These tickets will be delivered to the Department representative attached to the Monthly Material Certification.

Delivery tickets will include pit number, DOT Code No., quantity shipped, and language stating “Certified for FDOT” or “Cert. for FDOT”.

EWK-5.3.3 Disposition of Failing Materials: See EWK-5.9.4

EWK-5.4 Storage Facilities for Raw Materials: Borrow and limerock material will be stockpiled within an approved designated storage area or placed directly into the open cut. To ensure these materials are not contaminated or mixed together while stockpiled silt fence and adequate area of separation between materials will be utilized. *(If there is no baserock material used on the project, delete the reference to limerock material from the above statement)*

EWK-5.5 Production Equipment: N/A

EWK-5.6: N/A

EWK-5.7 Other Requirements

EWK-5.7.1 Copy of Certifications: N/A

EWK-5.7.2 Statement of Compliance: N/A – Included in the general statement of compliance.

EWK-5.7.3 Information on Producer’s with Quality Control Programs: N/A

EWK-5.7.4 Describe Documentation Procedure

EWK-5.7.4.1 LIMS Data Entry: QC Manager or __(*Name of Designee*) __ will enter all pertinent information into the LIMS system within 24 hours of the test and as required by Specifications. Monthly sampling reports will be obtained to verify all samples and results are logged into the Departments LIMS system. All original records will be stored at____(*Name and address*)_____.

EWK-5.7.4.2 Quality Control Log Book: (*Name of person that will maintain the logbook)* will maintain the logbook and the QC Manager shall be the point of contact. In the event discrepancies are found during the District Density Engineer (DDE) review of the QC Log Book, discrepancies will be corrected immediately and available for recheck by the DDE. During work operations not requiring densities the logbook will be stored at _____(*Name and address*)_____.

EWK-5.8 Final Manufactured Product Plant Operations: N/A

EWK-5.9 Final Manufactured Product – Field Operations

EWK-5.9.1 Transportation: N/A

EWK-5.9.2 Storage: N/A

EWK-5.9.3 Placement: Calibration frequency for the Nuclear Gauge and Speedy will be maintained as per FDOT and Manufacturers requirements. The Department and all QC gauges will be compared at the start of earthwork operations to ensure compliance with specifications. If a substitution gauge is brought to the project, a gauge comparison will be immediately requested of the

Department. The QC Manager will notify the Project Administrator when new materials are encountered and/or additional sampling is required.

All material testing frequencies will be in accordance with the **Job Guide Schedule**. In the event of added work testing frequencies will be in accordance with the Departments sampling and testing guide.

EWK-5.9.4 Disposition of Failing Materials: The QC Manager or (*Name of designee*) will monitor test results for trends and take appropriate action to adjust processes to ensure conformance to specifications. When material does not conform to the specifications additional testing will be performed. The QC Manager will report findings to the Project Administrator, Contractor Project Manager, Superintendent and the appropriate subcontractor.

Depending on results of materials and upon approval of the Engineer, the Contractor may initiate and submit to the Project Administrator for approval an **Engineering Analysis Report (EAR)** along with a request for the material to be left in place. In the event that an EAR is needed for the project an independent lab will be selected and a revision to this QC Plan will be submitted naming the lab for approval seven (7) days prior to use. The lab selected will not be working on this project for the FDOT performing verification or working for _____(Contractor's Name) _____performing CQC testing. The lab will be accredited and approved to do the testing procedure required for the EAR.

If the material is found not to meet specification and the EAR is not approved, the material will be rejected for use. The limits of failing materials will be confirmed, failing material will be removed and replaced with material that meets specification.

EWK-6 Testing Laboratories: Laboratories that will perform all earthwork related Quality Control testing:

(Name, Lab Number, and address of Laboratory)

Asphalt

HMA-5.2 Personnel: The following is a list of personnel that may be on the project and their qualifications.

HMA-5.2.1 Qualifications:

Paving Level 1 Personnel:
(Names)
TIN:

Paving Level 2 Personnel:
(Names)
TIN:

Mix Designer:
(Name)
TIN:

In the event the above listed personnel are not available, CTQP qualified personnel will be utilized and the Engineer will be notified within 24 hours with the name and TIN.

HMA-5.2.2 Level of Responsibility: The primary contact for Asphalt Paving and Production will be the Quality Control Manager as listed in section QCP-5.2.1. Approved qualified personnel are responsible for inspection of materials and construction activities.

Paving Level 2 Technician will be in responsible charge of the paving operations. This individual will also be responsible for monitoring the mix spread rate, monitoring the pavement cross slope, all required reports and documentation, cutting of cores, transporting cores to asphalt lab, and mix temperature of the first five loads and every fifth load thereafter.

Paving Level 1 Technician will be responsible for the pavement infrared temperature, verifying density with a density measuring device, and monitoring the pavement smoothness with a 15 foot rolling straightedge.

HMA-5.3 Raw Materials:

HMA-5.3.1 Source: The following primary plant will be used to provide Hot Mix Asphalt for the project:
Plant #

Secondary location :
Plant #

Asphalt mix design:

Superpave Mix Design #

Sources of other products will be from the Qualified Products List, or a certification from the manufacturer will be provided.

HMA-5.3.2 Certification: Mixtures and products incorporated into the project will be in conformance to specifications. Load tickets will bear approved mix design number and/or producer certification. The design mixes for this project have been submitted to the State Materials Office for approval. Copies of the approved design mixes will be submitted under a revision to this plan prior to the Prepaving Conference. All subsequent changes to the mix design will result in a change to the QC Plan and must be submitted to the Engineer prior to paving operations in the field.

HMA-5.3.3 Disposition of Failing Materials: see producer's QC Plan and HMA-5.9.4

HMA-5.4 Storage Facilities for Raw Materials: Hot Mix Storage addressed in Producer's Quality Control Plan and 330-6.4 and other materials such as ARMI cover stone will be stockpiled and loaded to prevent segregation and contamination. Asphalt Rubber Binder will be per 336-5. Prime and tack per section 300.

HMA-5.5 Production Equipment: Refer to Producer's QC Plan.

HMA-5.6 Plant Requirements

HMA-5.6.1 Plant Identification: Refer to Producer's QC Plan.
HMA-5.6.2 Process Control System: Refer to Producer's QC Plan.
HMA-5.6.3 Loading and Shipping Control: Refer to Producer's QC Plan
HMA-5.6.4 Types of Products Generated: Refer to Producer's QC Plan.

HMA-5.7 Other Requirements

HMA-5.7.1 Copy of Certification: Certifications and delivery tickets for items such as Tack; Prime; Asphalt mix delivery tickets will be in the required FDOT format and will meet FDOT Specification per item. These tickets will be delivered to the Department representative attached to the Monthly Material Certification.

HMA-5.7.2 Statement of Compliance: The materials and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

HMA-5.7.3 Information on Producer's with Quality Control Programs: See section HMA-5.3.1 for list of approved producers.

HMA-5.7.4 Documentation Procedure: All testing reports, cross-slope measurement forms, etc. will be stored at the production facility, and will be

made available to Department personnel for review, upon request. Copies of daily reports will be submitted to the Engineer on a daily basis. Quality Control information will be entered into the LIMS System at ____(*Name and address*)_____within 24 hours of the testing being completed.

HMA-5.8 Final Manufactured Product – Plant Operations

HMA-5.8.1 Storage: Not Applicable. See Producer's QC Plan.

HMA-5.8.2 Disposition of Failing Materials: See Producer's QC Plan.

HMA-5.9 Final Manufactured Product – Field Operations

HMA-5.9.1 Transportation: Trucks hauling Hot Mix will be of tight construction which prevents the loss of material, and will be equipped with a tarpaulin or waterproof cover mounted in such a manner it can cover the entire load. The trucks will be cleaned of all foreign material, and coated with a soapy solution or release agent. The bed of the truck will be equipped with a hole for measuring the temperature of the mix.

HMA-5.9.2 Storage: N/A

HMA-5.9.3 Placement: See HMA – 5.9.3.5

HMA-5.9.3.1 Milling: Milling will be accomplished with equipment according to specification 327-2 and will conform to the requirements of specification 327-3 and 327-4. The milled cross slope will be verified at a frequency of at least every 250 feet unless modified in writing by the Department. Emphasis will be made for proper texture and ride wherever necessary.

HMA-5.9.3.2 ARMI: Monitor per 341-4, 5 and 6 and adjust as necessary to maintain application rates

HMA-5.9.3.3 Preparation: Prior to application of tack material, the existing surface will be cleaned of all foreign material, which might prevent proper bond over the full width of the application. Attempts will be made to minimize tack drop-off coming from truck tires, or mix droppings on the pavement surface prior to paving.

HMA-5.9.3.4 Prime and Tack: Tack material will be verified by verifying the spread rate for each application. Adjustments to the application will be made to maintain the spread rate within the specified range. Monitor per Specification 300-8.

HMA-5.9.3.5 Paving: Paving will be accomplished using properly maintained equipment meeting specification 320-5 and monitor paving operations per Specification 330-2.2 (temperature, slope, mix spread rate), and placement requirements per Specification 330-3, 9,11,12 and 13 with emphasis on uniformity and smoothness. Reasonable attempts will be made to make smooth

transitions at bridge approaches, manholes, and joints. Immediately cease transportation of asphalt mixtures from the plant when rain begins at the roadway. Do not place asphalt mixtures while the rain is falling, or when there is water on the surface to be covered. Once the rain has stopped and water has been removed from the tack surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 330-9.1.2, the Contractor may then place the mixture caught in transit.

HMA-5.9.3.6 Compaction: Compaction will be achieved using an adequate number of properly maintained rollers meeting applicable sections of 320-5.3. The compactive effort will be adjusted to control and achieve density as referenced in 330-10. Specification 330-10.1.2 is not applicable in SuperPave asphalt paving. Care will be taken not to over compact the pavement layer or use no more force than necessary to achieve density.
In areas where density testing is not required, the following rolling pattern is proposed to be done using the following equipment and coverages:
Roller 1: (*type and weight*) Coverages:
Roller 2: (*type and weight*) Coverages:
This proposed rolling pattern will then be documented immediately after completion and reviewed with the Engineer for approval. Informational cores will be taken at 3 cores per day or as directed by the Engineer to determine the initial optimal density in these areas. The average of these three cores will become the target density for those areas where an approved rolling pattern is used in lieu of density testing.
In areas where density is required and where a rolling pattern is used in lieu of density testing, the following will be done:
DENSITY:
The pavement density will be monitored at a minimum frequency of one nuclear density test per 1500 feet of pavement or a day's production, whichever is less as outlined in item 1 of the roadway section of Specification 330-2.2. The density test results will be documented in the remarks section of the "Roadway Daily Report of Quality Control".

In areas where density is not required and an approved rolling pattern is used, if the daily average density varies by more than 0.080 Gmb (5 lbs / cu. ft.) from the rolling pattern target density the rolling procedure will be reviewed and a new, engineer approved pattern will be developed if necessary.

Changes in rolling procedure shall require modifications to the QCP as approved by the Engineer. In the event that the rolling procedure deviates from the approved procedure, placement of the mix shall be stopped.

HMA-5.9.3.7 Friction Courses: Meet requirements for various Friction Courses listed in 337, including process control per 337-5 and roadway acceptance per 337-7, with emphasis on uniformity, smoothness, and density as required. Care

to be taken not to overcompact mixes and crush aggregate particles in final surface.

HMA-5.9.4 Disposition of Failing Materials: Failing materials will be handled per 334-5 Low Pay Factor Material, 330-6.3 Mix Temperature, 330-6.5 Contractors responsibility of Mixture Requirements, and 330-12 Surface Requirements.
If mix, as determined by the Paving Level 2 Technician, appears to be out of specification, the following steps will be taken:

HMA-5.9.4.1: Rechecking and/or retesting sample to validate test result and/or calculations. (As deemed necessary, an additional sample may be taken and tested to compare results.) *(Provide information in this area on how the contractor will address Process Control failures. Suggestion: At the roadway, should nuclear density tests indicate we are not getting optimum density, we will stop paving operations and determine what the problem may be. We will then change the rolling pattern to achieve the required optimum density. The Project Administrator will be notified so that he can document the change in the rolling pattern.)*

HMA-5.9.4.2: If the Composite Pay Factor is between 0.75 and 0.80 and upon approval of the Engineer, the material will be addressed in accordance with the Specifications. This evaluation will be in accordance with 334-5.1.9.5. The lab selected to perform the EAR will not be working on this project for the FDOT performing verification or working for *(Contractor's Name*) performing CQC testing. The name of the lab chosen to perform the analysis will be submitted to the Engineer for approval prior to engaging their services. The lab will be accredited and approved to do the testing procedure required for the EAR.

HMA-5.9.4.3: Implementing remedial action (if necessary) to correct the problem. Will include notations on daily reports of any changes in process.

HMA-5.9.4.4: Notification of the QC Manager if necessary.

HMA-5.9.4.5: Notification of the Engineer if the results exceed limits described in Section 334-5.

HMA-6 Testing Laboratories: The laboratory providing testing for this project is:

Prime lab:

Secondary lab:

(Provide the Name, Lab Number, telephone number and address of all labs)

Concrete

CNC-5.2 Personnel

CNC-5.2.1 Qualifications: The following is a list of personnel that may be on the project and their qualifications.

Name	Company	TIN	Conc. CTQP Level of qual

(Include drilled shaft personnel if drilled shafts involved in project)

CNC-5.2.2 Level of Responsibility: The primary contact for the department on this project is the Quality Control Manager. Approved qualified personnel are responsible for inspection of materials and construction activities. The following personnel are authorized to accept or reject the concrete being placed on the referenced project:

(List CTQP qualified personnel here)

Level 1 – This level will check the plastic properties of the concrete which will include, but not be limited to, slump, temperature, air content, water-to-cementitious materials ratio calculation, and making and curing concrete cylinders. Duties will include initial sampling and testing to confirm specifications compliance prior to beginning concrete placements, ensuring timely placement of initial cure and providing for the transport of compressive strength samples to the designated laboratories. This level will also be responsible for all reports and documentation.

Level 2 – On major bridge projects, this level will be present on the jobsite during all concrete placements. Prior to the placement of concrete, the technician will inspect the element to be cast to ensure compliance with Contract Documents. The duties may include ensuring that concrete testing, inspection, and curing in the field is performed in accordance with applicable Contract Documents.

CNC-5.3 – Raw Materials

CNC-5.3.1 Source

Primary Plant:

Secondary Plant:

Concrete Location	Class/PSI	Environment	Mix Design#

CNC-5.3.2 Certification: The Quality Control Manager or (*name of designee)* will verify that the concrete plant is an approved source to supply and produce concrete. The Quality Control manager will obtain a copy of all approved mix designs from the producer.

CNC-5.3.3 Disposition of Failing Materials: See Producer's QCP

CNC-5.4 Storage Facilities of Raw Materials – See Producer's QCP.

CNC-5.5 Production Equipment: Refer to the Producer's QC Plan.

CNC-5.6 Plant Requirements

CNC-5.6.1 Plant Identification: Refer to Producer's QC Plan.
CNC-5.6.2 Process Control System: Refer to Producer's QC Plan.
CNC-5.6.3 Loading and Shipping Control: Refer to Producer's QC Plan.
CNC-5.6.4 Types of Products Generated: Refer to Producer's QC Plan.

CNC–5.7 Other Requirements

CNC-5.7.1 Copy of Certification: N/A
CNC-5.7.2 Statement of Compliance: N/A
CNC-5.7.3 Information on Producer's with Quality Control Program: See section CNC-5.3.1

CNC-5.7.4 Describing Documentation Procedure:
The Quality Control Managers or (*name of designee*) will be responsible maintaining paperwork documentation. All documentation for concrete shall be kept at_____(*Name and address*)__ _____ Quality Control information will be entered into the LIMS System at____(*Name and address*)__ _____ within 24 hours of the testing being completed.

CNC-5.8 – Final Manufactured Product – Plant Operations :

CNC-5.8.1 Storage - See Producer's QCP

CNC-5.8.2 Disposition of Failing Materials - See Producer's QCP

CNC-5.9 Final Manufactured Product – Field Operations

CNC-5.9.1 Transportation: See Producer's Plan. All material will be delivered to project by an approved method.

CNC-5.9.2 Storage: No Storage of concrete will take place on this project.

CNC-5.9.3 Placement: The following methods may be used for placement of concrete. All personnel listed in section CNC-5.2.1 are authorized to test concrete and/or make any necessary adjustments to concrete. All approved adjustment will be within FDOT Specifications.

Concrete Location Method of Placement

The following checked item will be taken into consideration and utilized and needed on the project.

__(Mass pour information if required name your specialty engineer if applicable. Note this may be submitted as an addendum)__

__(Cold weather concrete information if required)____

__(Weather Protection for Concrete Pours with method of protection__

__(Other information that may be specific to the project)____

CNC-5.9.3.1 Screeding of concrete: N/A

CNC-5.9.4 Disposition of Failing Materials: For all failing materials, the following process will be followed:

CNC-5.9.4.1 Notification: The Project Administrator will be notified.

CNC-5.9.4.2 Investigation/Analysis: Request of verification test results will be obtained. Communication with the producer and field personnel will occur to determine what caused the failure to occur, and what will be done different in the future to insure this will not happen again. Depending on results of materials the Contractor may initiate, with the approval of the Engineer, an **Engineering Analysis Report (EAR)** along with a request for the material to be left in place. In the event that an EAR is needed for the project an independent lab will be selected and a revision to this QC Plan will be submitted naming the lab for approval seven (7) days prior to use. The lab selected will not be working on this project for the FDOT performing verification or working for _____(Contractor's Name) _____performing CQC testing. The lab will be accredited and approved to do the testing procedure required for the EAR.

CNC-5.9.4.3 Disposition: Information will be provided to the Project Administrator advising of the current state of the material such as compressive strength test results.

CNC-5.9.4.4 Corrective/Preventive Action: A report will be supplied to the Project Administrator advising of the proposed corrective measures. In the event that required corrected actions or pay reductions are mandated by the specification they will be implemented. Communication with the producer and field personnel will occur to determine what caused the failure to occur, and what will be done different in the future to insure this will not happen again.

CNC-5.9.4.5 Severe and/or repeated failures: Severe or repeated failures will require the above process to be in writing.

CNC-6 Testing Laboratories: Laboratories that will perform all concrete related Quality Control testing:

Primary Laboratory:
Lab #

Secondary Laboratory:
Lab #

(Provide the Name, Lab Number and address of the lab)

Attachments