

## APPENDIX B05

### PRECAST CONCRETE DRAINAGE STRUCTURES AND BOX CULVERTS PRODUCER QUALITY CONTROL PLAN CHECKLIST

Instructions:

1. This checklist will be used by the Department during the evaluation of Quality Control (QC) Plans submitted by Precast Concrete Drainage Structures and Box Culverts Producers. The checklist may also be used as a guideline for creating a QC Plan to be submitted to the Department.
2. Refer to FDOT Standard Specifications Section 105 for more information regarding the submission of a Producer QC Plan. Requirements in the QC Plan Item column of the checklist are from Section 105 unless otherwise stated. MM indicates FDOT Materials Manual, followed by the appropriate section number.
3. The information section above the checklist is designed to record general production facility information. Producers may use it as a template for identifying information on the cover page of the QC Plan.

Company: \_\_\_\_\_ Tax ID: \_\_\_\_\_  
 Physical Address: \_\_\_\_\_ FDOT ID: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ County: \_\_\_\_\_  
 Decimal Latitude / Longitude Coordinates: \_\_\_\_\_ / \_\_\_\_\_  
 Mailing Address (if different from above): \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ County: \_\_\_\_\_

Primary Contact: \_\_\_\_\_ Phone #: \_\_\_\_\_  
 Email Address: \_\_\_\_\_ Fax #: \_\_\_\_\_

QC Plan Date: \_\_\_\_\_

QC Plan Item	Y/N	Pg. #
<b>1. Personnel</b>		
<i>A. Key Personnel List</i>		
1) On-site production and general manager (or equivalents), including work experience identified? (MM 6.3)		
2) Quality Control (QC) manager, technicians performing sampling, testing and inspection for both field and laboratory, including Technician Identification Numbers (TINs), and work experience identified? (MM 6.3)		
<i>B. Qualifications</i>		
1) Copy of QC Manager Level II certification attached?		

QC Plan Item	Y/N	Pg. #
2) Copy of QC Inspector Level II certification(s) attached?		
3) Copy of QC Inspector Level I certification(s) attached?		
4) Copy of ACI Concrete Field Grade 1 certification(s) attached?		
5) Copy of ACI Concrete Strength Testing Technician certification(s)* attached?		
6) Copy of CTQP Concrete Field Technician Level 1 certification(s)* attached?		
7) Copy of Batch Plant Operator certification* attached?		
<b>C. Level of Responsibility</b>		
1) Primary contact for the Department identified?		
2) Roles and responsibilities of personnel involved in the quality control process identified?		
<b>2. Raw Materials</b>		
<b>A. Source</b>		
1) Department-approved structural concrete batch plant identified by the FDOT facility ID, when applicable? (MM 6.3)		
2) Mix design intended to be produced with the Concrete Mix Identification type per Table 6.3-1 attached? (MM 6.3)		
3) Manufacturer of reinforcing steel and welded-wire reinforcement identified? (MM 6.3)		
4) Methods for tracking the placement and monetary value for minimal quantities of non-domestic steel and iron described? (MM 6.3)		
5) Methods and locations for segregating non-domestic and domestic steel and iron stockpiles described? (MM 6.3)		

QC Plan Item	Y/N	Pg. #
6) Methods for identifying and cataloging finished products containing non-domestic steel and iron described? (MM 6.3)		
7) An example delivery ticket with Buy America compliance statement and dollar amount of non-domestic steel and iron used in the finished products for each delivery included? (MM 6.3)		
8) Supplier of coarse and fine aggregate identified, including location and mine numbers? (MM 6.3)		
9) Supplier of cement identified, including plant numbers? (MM 6.3)		
10) Supplier of pozzolans and slag identified*, including plant numbers? (MM 6.3)		
11) Source of water used for batching concrete, and methods and frequency of testing identified? (MM 6.3)		
12) Supplier of chemical admixtures identified? (MM 6.3)		
<b>B. Certification</b>		
1) Methods of verifying material certification compliance with the Specifications described?		
<b>C. Disposition of Failing Materials</b>		
1) System for controlling non-conforming materials, including procedures for identification, isolation, and disposition described?		
<b>D. Storage</b>		
1) Method for storing all raw materials described?		
<b>3. Plant and Production Requirements</b>		
<b>A. Production Equipment</b>		
1) Calibration and verification schedule for production, placement, and quality control testing equipment described? (MM 6.3)		
<b>B. Process Control System</b>		

QC Plan Item	Y/N	Pg. #
1) For aluminum forms*, information regarding the application of a protective barrier to minimize the natural reactivity between aluminum and fresh concrete included? (MM 6.3)		
2) Method and frequency for the inspection of reinforcement and accessories described? (MM 6.3)		
3) Concrete placement method described? (MM 6.3)		
4) Method of curing described? (MM 6.3)		
5) Method and frequency for inspection of forms described? (MM 6.3)		
6) Method and frequency for the inspection of finished products described? (MM 6.3)		
7) Repetitive non-conformance corrective action plan (if applicable) included? (MM 6.3)		
<b>C. Loading and Shipping Control</b>		
1) Description of method to prevent damage during handling, storing, and loading of finished products included? (MM 6.3)		
<b>D. Types of Products Generated</b>		
1) Type of products generated for the Department identified by the Standard Plan Index numbers?		
<b>4. Other Requirements</b>		
<b>A. Submittal of Certification</b>		
1) Copy of notarized Material Certification letter provided to the Engineer at the beginning of each project, certifying that the plant will manufacture the products in accordance with the requirements set forth in the Contract Documents and the Producer QC Plan attached? (MM 6.3)		
<b>B. Statement of Compliance</b>		
1) Statement of compliance with all quality requirements set forth by the Department in the Contract Documents and Department manuals included?		
<b>C. Statement of Quality</b>		

QC Plan Item	Y/N	Pg. #
1) Management statement of dedication to quality included? (MM 6.3)		
<b>D. Document Storage</b>		
1) Method of record keeping described, including material certifications, test reports, pre and post placement inspection reports, deficiencies found, and the location of document storage to enable Department review? (MM 6.3)		
<b>E. Producer Shop Drawings</b>		
1) For Structures that deviate from the Standard Plans, are approved Producer shop drawings present in the QC Plan, reflecting the most current version of the Standard Plans including Index number and Last Revision date, and have they been stamped by the State Drainage Office? (MM 6.3)		
<b>F. Addenda</b>		
1) Have previous addenda been incorporated into the QC Plan revision, when applicable? (MM 6.3)		
<b>5. Final Manufactured Product – Plant Operations</b>		
<b>A. Storage</b>		
1) Method of storage, including separation of rejected and acceptable structures included? (MM 6.3)		
2) Methods of handling to prevent damage included? (MM 6.3)		
<b>B. Disposition of Failing Materials</b>		
1) Methods and measures for identifying, controlling, preventing, and correcting non-complying products described?		
2) A copy of the plant's proposed repair methods for deficiencies included? (MM 6.3)		
<b>C. QC Stamp</b>		
1) Copy of QC stamp included? (MM 6.3)		
2) Procedure for applying QC stamp, including statement that the Department-issued plant number will only be applied to FDOT projects, and point in time when applied to product included?		
<b>6. Testing Laboratories</b>		

QC Plan Item	Y/N	Pg. #
A. Approved testing laboratories identified?		
<b>7. Department Inspection Access</b>		
A. Statement allowing Department access while Department representatives are at the production facility included?		

\*When applicable

Last Updated: December 10, 2021