

## CONCRETE QUALITY CONTROL PLAN

### INSTRUCTIONS

1. Please indicate the project number and Airport as indicated.
2. Text shown in bold is to be replaced and the appropriate information as indicated should be inserted by the contractor.
3. Those areas showing the following text: (**Note: Refer to Concrete Quality Control Responsibilities**) in bold type shall have the appropriate information inserted by the contractor. A list of Material Quality Control Responsibilities for Aeronautics concrete projects may also be found on the IDOT web-site.
4. Upon completion of the Concrete Quality Control Plan, the contractor shall submit copies to the Division of Aeronautics and Project Resident Engineer for approval.
5. This plan is required to be submitted for all concrete paving projects, and be signed by the Contractor, the Consultant, and the Division of Aeronautics before any paving can begin.

## CONCRETE QUALITY CONTROL PLAN

Airport:  
Ill. Proj.:  
AIP Proj.:

Contractor: **(Name)**  
**(Address)**

Personnel: QC Officer: **(Name & Company)**  
Technicians:  
Plant: **(Number and duties)**  
Paver: **(Number and duties)**  
**(Note: Provide resume of QC Officer and technicians)**

The mix for the subject project will be manufactured by **(producer name)** in their **(plant manufacture, model and capacity)**. **(Name of QC Officer)** will have overall responsibility and authority for Quality Control at both the plant and at the paver and will make needed adjustments in the mix production, sampling, and testing to assure that the mix is manufactured and sampled in conformance with the Standard Specifications and the Special Provisions. In the event of **(QC Officer's name)** absence, **(name of backup QC Officer)** will be in charge of Overall Quality Control, provided he/she has the necessary qualifications and has been approved by the Engineer.

A. LABORATORY  
**(Give description of the laboratory floor size and the equipment therein).**

The Engineer will be notified prior to the preparation of the Test Batch that the lab is ready for inspection. At the time of preparing of the Test Batch the lab, sampling, and curing facilities, will be installed and approved. In the event of laboratory equipment breakdown, the equipment will be repaired or replaced immediately or the mix production will be shut down until the equipment is in working order.

B. Materials and Inspection

The materials used in the manufacture of the concrete for the project shall be from approved sources. Certification will be obtained from each vendor and furnished to the Engineer to cover the quantity and quality of all materials used. Listed below are the sources of each material proposed for use in the mix:

**(List the source of all materials to be used in the manufacture of the concrete).**

All aggregates at the concrete plant will be stockpiled by the "single layer/pushed" or "multi-layered truck" method. The maximum layer thickness will be as specified in the Standard Specifications for Construction of Airports.

C. Mix Designs

All concrete mix designs, as prepared by the Division of Aeronautics, will be reviewed by our office for final concurrence and acceptance.

D. Concrete Plant

The Plant is a **(manufacture and model)** producing a **(size of batch)** batch per drum, and has been calibrated by **(agency)** and approved by **(agency)**. The weigh scales were checked by **(company)** on **(date)**. We anticipate producing for **(hours)** per day from **(time)** to **(time)**, producing and placing approximately **(cubic yards)** per day.

E. Material Sampling Frequency and Testing

**(Note: Refer to Concrete Quality Control Responsibilities)**

F. Testing

We have contracted **(Testing Co.)** to supervise and perform the Quality Control Program. All Testing equipment will be supplied by **(company)** and the laboratory will be provided by **(company)**.

All tests will be performed in accordance with the following ASTM specifications:

ASTM (number)	(Description)
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There will be a current copy of all applicable ASTM tests available at the field lab at the field laboratory.

G. Mix Production

At the start of mix production or when adjustments are made to the mix, the QC Officer will give the proportions to the plant operator and periodically throughout the day, checks will be made of the actual proportions and water/cement ratio used. The results shall be recorded on the appropriate IDOA forms.

H. Laydown

The mix will be laid on the prepared base in accordance with the specifications using the following equipment:

**(Equipment made and model)**

Should any adverse mix characteristics be observed, the laydown superintendent will notify the QC Officer to review the manufacture of the mix and make adjustments if necessary to correct the situation.

I. Utilization of Personnel

Listed below are the duties to be performed by the various technical personnel assigned to the project.

QC Officer- Overall supervision of the QC/QA Program

**(Note: Refer to Concrete Quality Control Responsibilities)**

Quality Control Technician (Plant)

**(Note: Refer to Concrete Quality Control Responsibilities)**

Quality Control Technician (Paver)

**(Note: Refer to Concrete Quality Control Responsibilities)**

J. Reporting of Test Results

All test data be reported on the following forms:

**(Form and Description)**

**(Note: Refer to Concrete Quality Control Responsibilities)**

K. Control Charts

In addition, control charts will be posted at the laboratory and kept updated for the following test parameters:

1. Coarse Aggregate Gradation
  - (a) Percent Passing ½ " Sieve
  - (b) Percent Passing #200 Sieve
2. Aggregate Moisture Content
  - (a) Coarse Aggregate
  - (b) Fine Aggregate (If not using a moisture probe)
3. Water/Cement Ratio
  - (a) Actual Calculated

## SIGNATURE PAGE

As attested below, this plan will be adhered to during concrete production:

Prime Contractor Signature: \_\_\_\_\_ Date: \_\_\_\_\_

PCC Producer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Resident Engineer Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Approved by:**

Engineer of Const. & Materials: \_\_\_\_\_ Date: \_\_\_\_\_  
IDOT, Division of Aeronautics