

**MIAMI DADE AVIATION DEPARTMENT
PROJECT PROCEDURES
CONSTRUCTION INSPECTION SERVICES**

**TITLE: CONSTRUCTION INSPECTION
REPORTING AND DOCUMENTATION**

**NO. CIS-18
REV. 1
DATE: 8/02**

1.0 PURPOSE

To identify and define the purpose and distribution of the various standard forms to be utilized to report observations pertinent to the work and create a permanent record thereof.

2.0 SCOPE

As the CISC provides quality assurance construction inspection services to ensure substantial conformance between the Contractor's work and the Contract Documents, the CISC shall prepare, disseminate to the project participants, and maintain for the record reports and records as defined in this Manual, the Contract Documents, and as may otherwise be required by the Owner.

3.0 INSTRUCTIONS

3.1 The following forms shall be utilized for recording, reporting and documenting observations pertinent to the work and performance; that is, compliance with the physical requirements and characteristics of the project, with the Contract Documents, and conformance to the approved Overall Project Schedule.

- Daily Construction Report
- Witness Report of Test.
- Notice of Nonconforming Work.
- Pile Record.
- Notice of Operation Requiring Inspection and Testing Services.
- Pre-Concrete Placement Verification Report
- Concrete Cylinder Mold Report.
- Concrete Placement Data Log

The specific purpose, format and general requirements for each recording and reporting form are described below.

3.2 Daily Construction Report

3.2.1 This report is used to document the day-to-day operations of the Contractor and provide a permanent record of observations with respect to the progress of the work and the fulfillment of obligations in the Contract. The Daily Construction Report shall address:

- Contractor's effectiveness to man and equip the job commensurate with work activity requirements and manpower and equipment commitments per the project schedule.
- The progress of all critical path work.
- The work in progress compared with the requirements of the Contract Documents. Anomalies or deviations are observed and precisely recorded with resolution or final status reported in the subsequent daily reports to provide continuity and a conclusion to any particular concern.

3.2.2 This daily report shall be prepared on Facilities Division Form FD5-165, Daily Construction Report.

3.2.3 Each report shall be numbered in consecutive order, be dated, and shall indicate the Contract day number.

3.2.4 A copy of the Daily Construction Report shall be transmitted to the A/E and the PM daily. The CISC shall retain the original for the project file.

3.3 Witness Report of a Test

See Procedure No. CIS-15.

3.4 Notice of Nonconforming Work

3.4.1 This provides formal written notice to the Contractor that its work or portions thereof are deemed defective, nonconforming or otherwise not in accordance with the Contract Documents and the extent thereof. The Notice of Nonconforming Work shall:

- describe the issue,

- direct the Contractor to provide a corrective action proposal including a time frame to complete the correction, and
- advise the Contractor that monies will be withheld from the next pay request until the nonconforming work is acceptable to the Owner.

3.4.2 The Notice of Nonconforming Work shall be issued to the Contractor immediately upon discovery of the nonconforming work. The CISC shall use Facilities Division Form FD5-157 and supplemental sheets as necessary. A copy of the Notice shall be transmitted to the Contractor, A/E and PM via fax, mail or hand delivery. The CISC shall retain the original for the project file.

3.4.3 Establish a discrete file for each Notice of Nonconforming Work and place documents in this file as conditions and events warrant until the nonconforming work is acceptable.

3.4.4 The section titled “For CISC’s Use Only” in the Notice of Nonconforming Work is provided to address the status of the work in question. The state of affairs or actions taken at key intervals relevant to corrective work performance is recorded in this section on a copy of the Notice by the CISC. The final disposition is written, initialed and dated in this section of the original notice when the corrective work is presumptively complete per notice from the Contractor and provides a permanent record of the status or other actions to be taken.

3.4.5 Prompt commencement of the implementation by the Contractor includes the submittal of a corrective action proposal. At the time of issuance of the Notice of Nonconforming Work the CISC shall advise the Contractor that such proposal shall show the integration of the corrective work into the approved schedule, shall address the particular way of accomplishing the corrective work, and shall provide work durations and completion dates. The CISC shall review the Contractor’s corrective action proposal to assure that these criteria have been adequately addressed.

3.5 Notice of Operation Requiring Inspection and Testing Services

3.5.1 At the pre-construction meeting the CISC shall provide the Contractor a copy of Facilities Division Form FD5-140, Notice of Operation Requiring Inspection and Testing Services, to use to provide such notice. The notice allows the CISC the opportunity to review the work as it progresses and to schedule others to witness and observe as required including the A/E, PM, and the Owner’s independent testing lab.

3.5.2 The CISC shall advise the Contractor at the pre-construction meeting that this Notice is required for all operations requiring inspections and testing services whether or not the Owner's testing lab will be involved. The CISC shall cross check these Notices with the Overall Project Schedule, the Contractor's quality control program, and the stipulated tests in the Contract Documents.

3.6 Pile Record

3.6.1 The CISC shall provide the designated Owner's independent testing lab with a copy of one of the pile recording documents appropriate to the piles being used in this project (see Associated Forms below for list of available documents). While testing labs have their own reporting format, the CISC shall direct the Owner's independent testing lab to report its finding using the appropriate form in lieu of or as a supplement to its own format. All the information required by the Owner's form shall be completed.

The CISC shall likewise request the Contractor's testing lab to use these forms in lieu of or as a supplement to its own format.

3.6.2 The CISC shall direct the Owner's independent testing lab to provide supplemental drawings and/or data sheets of the report when actual pile location deviates from the Contract drawings, pile is abandoned, additional piles installed to correct load bearing deficiencies, pile pattern changes, other anomalies, as-built condition(s), etc.

3.6.3 The CISC shall maintain a record drawing of the pile layout plan that reflects as-built conditions, additions, changes, obstructions, geotechnical anomalies, etc. Each pile, pile pattern or grouping shall be cross-referenced to the pile records by assigning each pile a discrete number in consecutive order.

3.6.5 The CISC shall transmit a copy of each pile record to the A/E and the PM immediately upon receipt from the Owner's testing lab.

3.6.6 The CISC shall set-up and maintain a discrete file for each pile pattern or pile cluster as shown on the Contract drawing(s). This file shall record and substantiate the as-built conditions for each pattern or cluster.

3.7 Pre-Concrete Placement Verification Report

3.7.1 All concrete placements require inspection and testing services. The Contractor shall use Facilities Division Form FD5-140 to provide the advanced written notice required by the Contract Documents. In addition, the Contractor shall complete Facilities Division Form FD5-141, Pre-Concrete Placement Verification Report and submit it with Form FD5-140

in fulfillment of its notification obligations for concrete placements. The CISC shall advise the Contractor of this requirement at the pre-construction meeting and shall provide the Contractor with a copy of this form at that time.

3.8 Concrete Cylinder Mold Report

3.8.1 The Concrete Cylinder Mold Report is to record the observed conditions and certain physical characteristics of the delivered concrete essential to producing quality molds with known physical properties that will yield reliable results for comparison with the standard when subjected to physical tests. This report will establish discrete cylinder mold numbers and the necessary information to relate these discrete molds to a specific project, concrete placement location, time, concrete supplier, truck number, design mix, Contractor, A/E and testing lab/technician.

3.8.2 Testing labs provide these reports. The CISC shall provide the Owner's independent testing lab a copy of Facilities Division Form FD5-142 for its use in submitting its report. The CISC shall direct the independent testing lab to use this form either in lieu of or as a supplement to its own format. All the information required by the Owner's form shall be completed. The CISC shall transmit a copy of the Concrete Cylinder Mold Report to the PM and the Contractor via fax or hand delivery. The original shall be retained by the CISC for the project file.

The CISC shall likewise request the Contractor's testing lab to use the same format either in lieu of or as a supplement to its reporting format.

3.9 Concrete Placement Data Log

3.9.1 This log provides a summary record report of

- the observed factors and conditions affecting the quality of any delivered load of concrete for a specific concrete placement;
- key physical characteristics of the concrete slurry and quantity of the load;
- on-site additives to a plant batched load;
- the concrete cylinder mold applicable to a specific batched load and the placement thereof.

3.9.2 The Concrete Placement Data Log shall be prepared on Facilities

Division Form FD5-143. The CISC shall transmit a copy of each concrete placement data log via fax or hand delivery to the Contractor and the A/E. The original shall be retained by the CISC for the project file.

3.9.3 The data log shall be cross referenced to the specific concrete placement.

3.9.4 The CISC shall maintain drawings of the foundations, foundation walls, floor slabs, pavement, etc., that clearly indicate each concrete placement, the extent thereof and all pertinent data by cross referencing the concrete structure or components shown on these plan drawings to the concrete placement number and the data log. Extent may be shown by color coding, shading, etc.

These drawings supplement the written description of the concrete placements shown on the respective data logs by providing geographical orientation.

3.9.5 The CISC shall set-up and maintain a discrete file for each concrete placement on the project. Each file shall be titled "Concrete Placement No. 1, No. 2, No. 3," etc. and contain the following information and data as a minimum:

- Concrete placement data log per the foregoing paragraphs.
- Concrete cylinder mold report.
- Contractor's Notice of Operation Requiring Inspecting and Testing Services (for concrete placement).
- A concrete delivery ticket for each truckload per the requirements of the Technical Specifications. Copies shall be hand delivered to the CISC and the testing lab on arrival of the concrete delivery truck immediately following the slump tests.
- Seven (7) day and twenty-eight (28) day compression test reports utilizing the discretely numbered cylinder molds applicable to the specific concrete placement. The independent testing lab shall transmit copies of these tests to the CISC.

4.0 REFERENCES

Miami-Dade Aviation Department - Construction Inspection Services Project Procedure Manual, Procedure No. CIS-15.

Miami-Dade Aviation Department - Construction Contracts General and Legal Provisions and Division 1 for Facilities Projects

5.0 ASSOCIATED FORMS

Facilities Division Form FD5-138 Augercast/Caisson Pumping Record

Facilities Division Form FD5-139, Pile Driving Record.

Facilities Division Form FD5-140, Notice of Operation Requiring Inspection and Testing Services

Facilities Division Form FD5-141, Pre-Concrete Placement Verification Report

Facilities Division Form FD5-142, Concrete Cylinder Mold Report

Facilities Division Form FD5-143, Concrete Placement Data Log.

Facilities Division Form FD5-157, Notice of Nonconforming Work

Facilities Division Form FD5-165, Daily Construction Report