

## Chapter 7 Records and Reports

### 7-1. Daily Reports

Daily reports or logs are prepared by inspection personnel covering their assigned areas of work. The reports are prepared on ENG Forms 2538-1-R (MILITARY) and 2538-2-R (CIVIL), "Daily Log of Construction" (Figures 7-1, 7-2, 7-3, 7-4). Similar locally prepared forms or books may also be used. The importance of daily reports should be stressed at all levels of the Resident Engineer's force, since daily reports form a part of official Government records and may be used as evidence in court or in other legal action. The reports are also valuable in determining possible causes of distress, unusual seepage, or other potentially critical conditions during and after construction is completed. Inspectors' reports are not personal records and should be carefully controlled and accounted for as official records. The daily reports must be thorough, accurate, neat, and legible. Detailed information on the following items should be included as outlined in ER 1180-1-6:

- a. Contract number and contractor's name.
- b. Description and location of the work.
- c. Date.
- d. Weather.
- e. Items of equipment and procedures used.
- f. Type and amount of work performed.
- g. Type and number of field control tests performed by the contractor and by Government forces, and brief comments on results obtained.
- h. Progress of work, delays, causes of delays, and extent of delays.
- i. Instructions given to contractor, including name of contractor representative talked to, and resulting actions taken by contractor.
- j. Details of any controversial matters.
- k. Visitors to the inspector's area of responsibility.
- l. Safety infractions/violations observed and corrective actions taken.

Daily reports are often included in a weekly progress report to the District Construction Division. The weekly report also contains information on overall progress on unusual conditions, and on instructions and directions given to the contractor by the Resident Engineer to attain desired results in accordance with plans and specifications.

### 7-2. Compaction Control Reports

Records of compaction control are required to document the procedure used and the adequacy of results obtained. The records also provide information for evaluation of compaction control and for use in determining causes of distress or unusual conditions that may develop during or after construction. Forms for use in tabulating daily field control data are contained in Appendix C, together with instructions for their preparation and additional information required when submitting the forms to higher echelons. These forms can also be used in submitting monthly reports of data, as required by ER 1110-2-1925. Evaluation of compaction control is necessary to ensure that the method and procedures are producing the quality of in-place fill required by the specifications. Summaries of compaction control data described in Appendix D provide a convenient means of evaluating the adequacy of compaction. These summaries are required to be submitted by the district office for review by higher echelons (ER 1110-2-1925).

### 7-3. Instrumentation Observations

a. Records of instrumentation observations are important in determining changes in pore water pressure, deformations, and settlements. The data, when summarized and evaluated, are useful in substantiating design assumptions and thus in verifying stability during construction, designing modifications, and additions to structures, or determining causes of operating difficulties. Standard forms and instructions for recording the following types of instrumentation readings are contained in Appendix E.

- (1) Closed-system piezometer data.
- (2) Open-system piezometer data.
- (3) Subsurface settlement plate data.
- (4) Surface reference point data.

b. For guidance on recording of data not covered by Appendix E, frequency of observations, and evaluating instrumentation data, see EM 1110-2-1908. Instructions for submission of data to a higher echelon are contained in ER 1110-2-1925.

<b>QUALITY ASSURANCE REPORT (QAR) DAILY LOG OF CONSTRUCTION - MILITARY</b> <i>(ER 1180-1-6)</i>		THE OCR WILL BE ATTACHED TO OR FILED WITH THE QAR.	
		REPORT NUMBER	
PROJECT		DATE	
CONTRACTOR <i>(Or hired labor)</i>		CONTRACT NUMBER	
		WEATHER	
CQC Control phases attended and instruction given:			
Results of QA activities and tests, deficiencies observed, actions taken and corrective action of contractor. Include comment pertaining to contractor's CQC activities.			
VERBAL INSTRUCTION GIVEN TO CONTRACTOR: <i>(include names, reactions and remarks)</i>			
HAS ANYTHING DEVELOPED ON THE WORK WHICH MIGHT LEAD TO A CHANGE ORDER OR FINDING OF FACT?			
		<input type="checkbox"/> NO	<input type="checkbox"/> YES
ENG Form 2538-1-R, May 94		(MILITARY)	EDITION OF AUG 89 MAY BE USED UNTIL EXHAUSTED
		<i>(Prepared: CEMP-CE)</i>	

Figure 7-1. Front of ENG FORM 2538-1

<p>Information on progress of work, causes for delays and extent of delays, weather, plant, material, etc.</p>			
<p>Information, instructions or actions taken not covered on QCR report or disagreements:</p>			
<p><b>SAFETY:</b> <i>Include any infractions of approved safety plan, safety manual or instructions from Government personnel. Specify corrective action taken.</i></p>			
<p><b>REMARKS:</b> <i>(include visitors to project and miscellaneous remarks pertinent to work.)</i></p>			
QA REPRESENTATIVES SIGNATURE	DATE	SUPERVISOR'S INITIALS	DATE
<p>(REVERSE OF ENG FORM 2538-1-R)</p>		<p>Page 2 of 2 Pages</p>	<p>★ U.S.G.P.O.: 1990-718-543/10302</p>

Figure 7-2. Back of ENG FORM 2538-1



CQC CONTROL PHASES ATTENDED AND INSTRUCTIONS GIVEN:			
RESULTS OF QA INSPECTIONS AND TESTS, DEFICIENCIES OBSERVED, ACTIONS TAKEN AND CORRECTIVE ACTION OF CONTRACTOR. INCLUDE COMMENT PERTAINING TO CONTRACTORS CQC ACTIVITIES			
VERBAL INSTRUCTIONS GIVEN TO CONTRACTOR: <i>(include names, reactions and remarks)</i>			
CONTROVERSIAL MATTERS IN DETAIL:			
INFORMATION, INSTRUCTIONS OR ACTIONS TAKEN NOT COVERED IN QCR REPORT OR DISAGREEMENTS:			
REMARKS: <i>(include visitors to project and miscellaneous remarks pertinent to work)</i>			
SAFETY: <i>(include any infractions of approved safety plan, safety manual or instructions from Government personnel. Specify corrective action taken.)</i>			
QA REPRESENTATIVES SIGNATURE	DATE	SUPERVISOR'S INITIALS	DATE

(Reverse of ENG Form 2538-2-R) Page 2 of 2 pages.

Figure 7-4. Back of ENG FORM 2538-2

*c.* Observations of seepage quantities from relief wells, toe drains, seepage galleries, and other seepage control installations should be recorded on appropriate locally developed forms for evaluation at the project and district levels. Unusual seepage conditions should be reported immediately to the district office along with available observational data for evaluation of the effect of existing conditions on the safety of the dam.

#### **7-4. Construction Foundation Report**

*a.* Construction foundation reports are to be prepared for major projects as required in ER 1110-1-1801. Voluminous records are maintained during construction and are often filed on completion of the project without regard for possible future usefulness. Such information is readily available if it is assembled in a concise foundation report. Because of the complexity of this report, responsibility for its preparation should be assigned at a very early stage of construction so that its preparation can progress as the work progresses.

*b.* Instructions for preparation of the foundation report, including a suggested outline, are contained in ER 1110-1-1801. Drawings in the reports should accurately pinpoint major features and not simply be rough sketches. Photographs are especially useful if foundation problems arise in the future. Therefore, good photographs of major features, labeled accurately as to location, should be used liberally throughout the report.

#### **7-5. Final Construction Report**

A final construction report should include the foundation report outlined in ER 1110-1-1801 and the following:

*a.* A narrative history of the project, including schedules of starting and completing various phases, treatment of unusual conditions, construction methods and equipment used, quantities of materials involved, and other pertinent information.

*b.* As-built drawings.

*c.* Construction photographs.

*d.* Summary of field compaction control data and laboratory test results.

*e.* Summary of other tests for acceptance control.

*f.* Test results on record samples.

*g.* Results of stability and other analyses during construction.

*h.* Summary of instrumentation data.

*i.* Summaries or references to conferences and inspection visits and resulting actions implemented.