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SECTION 400.00 – PROJECT MATERIALS CERTIFICATION

ITD has implemented procedures in accordance with State and Federal regulations for ensuring the materials incorporated into highway projects meet the required contract specifications.

401.00 Materials Certification Submittal Requirements by Project Type. The following documents are used for project materials certification to demonstrate that the materials incorporated into the project meet the required contract specifications:

- Materials Certification Letter (See Section 470.00)
- Materials Summary Report (See Section 420.00)
- ITD-852 Materials Certification Checklist (See Section 450.00)
- ITD-854 Resident Engineer’s Letter of Inspection (See Section 430.00)
- ITD-860 Independent Assurance Test Log (See Section 440.00)

Instructions for the above documents are detailed in the indicated Sections.

Table 400.1 lists the documents that are required for project materials certification based on funding and project type. As shown on the table, the District Engineer’s Final Letter of Acceptance is used to document project materials certification for projects not requiring a Materials Summary Report and Materials Certification Letter.

For all projects, adequate records to document proper testing and inspection are required and must be maintained in the project files.

Table 400.1. Project Materials Certification Requirements for Projects Awarded through Roadway Design Using ITD Specifications

Type of Project	Are there materials incorporated in the project?	SUBMITTAL TO HQ MATERIALS		District Engineer Final Letter of Acceptance
		Materials Certification Checklist (ITD-852)	Materials Certification Letter and Materials Summary Report (including IA Log & RE Letter)	
Federal-Aid On State Highway System	Yes	Yes	Yes	Yes
	No	Yes	No	Yes
Federal-Local On-System No State Funds	Yes	Yes	Yes	Yes
	No	Yes	No	Yes
Federal-Local Off-System No State Funds Federal-Aid Limit \$500k or more	Yes	Yes	Yes	Yes
	No	Yes	No	Yes
Federal-Local Off-System No State Funds Federal-Aid Limit less than \$500k	Yes	Yes	No	Yes
	No	Yes	No	Yes
State-funded on NHS	Yes	Yes	Yes	Yes
	No	Yes	No	Yes
State-funded off NHS	Yes	Yes	Yes	Yes
	No	Yes	No	Yes
Supply Services Contract	N/A	No	No	No

SECTION 410.00 – REPORTS AND DOCUMENTATION All field test reports, laboratory test reports, certifications, and other miscellaneous reports involving inspection, testing, and acceptance of materials are a part of the documentation of project records. These reports are considered a permanent record and are to be preserved with other permanent records such as survey notes, quantity measurements, etc. These records form the basis for certifying compliance with specification requirements of the contract to State auditors and the Federal Highway Administration for the materials used in construction.

The project files must sufficiently document that the acceptance of material was performed in accordance with the minimum testing requirements and the contract specifications. Specific instructions for each test report form are to be followed with the understanding that complete documentation is required for each contract. Any reports or records that apply from another contract should be either duplicated or must be completely referenced. There must be no doubt of the validity of the record applying to the pertinent project.

410.01 Materials Acceptance Plan (MAP) or ITD-862 Sampling Schedule. Project personnel must plan ahead using the minimum testing requirements (MTRs) and the contract specifications to determine the requirements for acceptance of all bid items and change orders. Each district is encouraged to develop a project Materials Acceptance Plan (MAP) or ITD-862 Sampling Schedule for reference by the project personnel during construction.

The development of the MAP or Sampling Schedule should be a joint effort by District Materials and project personnel. The final MAP should summarize the acceptance requirements for all items including any small quantities (see Section 270.04), items using nonstandard acceptance (see Section 270.05) or special provision items (see Section 270.06). The final MAP should be reviewed and signed by the Resident Engineer and the District Materials Engineer. When requested by the District, HQ Design/Materials/Construction will review and provide comment on the MAP for non-standard special provision items.

410.02 Checking Test Reports and Documents.

Laboratory tests, field tests, and certification reports are forwarded to the Resident Engineer whose staff regularly checks the reports so that deviations from specifications and poor documentation are mitigated. It is required that the person checking test reports have ITD STQP qualification or an Idaho PE license (see Section 210.01). Any discrepancies, lack of information, or incompleteness of the reports must be corrected without delay. After the checks are made, the reports are recorded for the Materials Summary Report (see Section 425.00 for directions) and placed in the project files.

Any items receiving less than the minimum requirements of sampling and testing and/or varying from specifications must have the corrective action or remedy efforts explained by the /Resident Engineer. The explanation must include the justification for acceptance, rejection, or price adjustment of noncompliant material. The explanation is recorded and noted for the Materials Summary Report.

SECTION 420.00 – MATERIALS SUMMARY REPORT The Materials Summary Report (MSR) shows the basis for acceptance of all bid items and change orders of the contract as required by the minimum test requirements (MTRs) and contract specifications including:

- Acceptance test results.
- Manufacturer's certifications.
- Laboratory acceptance and verification test results.
- Notes to explain the resolution for any failing test results or lack of minimum testing.
- Notes to explain the basis for accepting any material not tested or not certified according to the minimum testing requirements or contract specifications.

The MSR is compiled for each construction contract as indicated in Table 400.1 by posting all of the field and laboratory test reports and manufacturer's certifications into the electronic Materials Summary Program. The data should be posted daily or at least weekly to ensure current reporting. All test reports should be posted as soon as possible after they are received and checked. It is a good practice to maintain the MSR so that it is contemporaneous with the most current pay estimate.

See [Section 425.00](#) for the required postings for the MSR.

The MSR should be printed after each pay estimate and kept in a binder or file folder for easy access.

Adequate documentation of failures and/or deviations from specification requirements must be included in the Materials Summary Report to justify acceptance, rejection, or price adjustment of contract items. [Section 215.00](#) contains details about documentation for non-compliant material.

SECTION 425.00 – COMPLETING THE MSR The following guidelines are provided for use in typical project situations to accurately complete a project Materials Summary Report (MSR).

The acceptance documents are posted in the MSR under the contract item where the material was paid. When material is incidental to a contract item the posting will be shown under the associated contract item.

- The posting must be done using the electronic Materials Acceptance Program.
- Every contract item, including change orders, where there was material used on the project must be included in the MSR.
- Some contract items will have multiple posting in the MSR because there is more than one acceptance requirement as shown in the MTR tables.
- The postings of test result data for items that require statistical analysis (QASP items) must each be checked for accuracy by someone other than the person who posted the data. The postings in the MSR portion of MAP must be at least randomly checked.

Use Table 425.1 to determine the minimum information required in the MSR. Find the contract bid item in the Section 270.00 MTR tables of the Quality Assurance Manual, and from the MTR tables identify the

type of acceptance requirements. Then, find the type of acceptance in the left column of the table below and provide the required information in the MSR as is described in the corresponding right hand column.

Table 425.1

Acceptance Type from MTR tables	Postings Required in the MSR
Statistical Analysis (QA Special Provisions)	Copy of Bonus Summary Report showing the pay factor for each lot
	Remarks explaining actions taken when any lot falls below .85 or below .75
	Copy of F&T report for each day of production testing
	Remarks to indicate evaluation procedures taken when there is a t test failure
Field Tests (other than statistical analysis) ¹	Date sampled
	Test number
	Indication of pass or fail test results
	A remark indicating the location of the in-place density test for pipe or structure backfill
	Remarks to indicate tests that are considered check tests for failing tests
	Remarks to indicate the corrective action taken for a failing test
Manufacturer's or Fabricator's Certification	Date certification statement signed
	Quantity of material certified
	Manufacturer or fabricator company signing certification
Laboratory Verification Tests	Date sampled
	Sample number
	Laboratory number
	Indication of pass or fail test results
	Remarks to indicate corrective action or price adjustment for a failing test
Laboratory Acceptance Tests	Date sampled
	Sample number
	Laboratory number
	Indication of pass or fail test results
	Remarks to indicate corrective action or price adjustment for a failing test
Pre-Tested or Pre-Approved Tests (Approved Lists)	Remarks to indicate the material/product used on the project is included on the approved list maintained by HQ Materials Section
Acceptance by Inspection	Item will be shown on the ITD-854 , Resident Engineer's Letter of Inspection
Small Quantity or Non-Standard Acceptance (see Section 270.04 & 270.05)	Remarks to summarize the basis of acceptance including the following where applicable: Remarks to indicate aggregates obtained from approved materials source Remarks to indicate mix design approval for plant mix or concrete Post core test results for plant mix paving on mainlines or intersections Remarks to indicate visual inspection during installation, placement or compaction
¹ (field tests are: in-place density, gradation, sand equivalent, fracture count, cleanness value, field saybolt viscosity, presence of anti-strip additive, asphalt content of plant mix, plant mix test strip, air/slump/temperature/unit weight of concrete)	

Acceptance Type from MTR tables	Postings Required in the MSR
Special Provisions (see Section 270.06)	Post acceptance information as indicated in the special provision OR as indicated below if not specified in the special provision.
	When material is included in MTR table and used in a standard application, find MTR acceptance type above and post the same information
	When special provision indicates the material must meet a given specification, such as AASHTO or ASTM: Post same information shown above for manufacturer's certification.
	When material is not included in MTR tables or not used in standard application: Remarks to summarize basis of acceptance as determined by the Engineer and District Materials Engineer.
Change Orders (see Section 270.07)	Post acceptance information as indicated in the change order OR as indicated below if not specified in the change order.
	For standard pay items or when material is included in MTR tables and used in a standard application, find MTR acceptance type above and post the same information
	When change order indicates the material must meet a given specification, such as AASHTO or ASTM: Post same information shown above for manufacturer certification.
	When material is not included in MTR tables or not used in standard application: Remarks to summarize basis of acceptance as determined by the Engineer and District Materials Engineer

SECTION 430.00 – RESIDENT ENGINEER’S LETTER OF INSPECTION (ITD-854) The purpose of the Resident Engineer's Letter of Inspection (ITD-854) is for the Resident Engineer to document the inspection of certain materials and to document the materials are acceptable according to the plans and specifications. The form should not be used as a catch-all for items usually accepted by sampling and testing, and inclusion on the form does not excuse the inspector from sampling and testing or obtaining manufacturer certifications, as required by the Minimum Testing Requirements. A copy of the completed RE Letter will be submitted with the MSR at the completion of the project. See Section 250.00 for complete information on the Resident Engineer’s Letter of Inspection.

SECTION 440.00 – INDEPENDENT ASSURANCE TEST LOG (ITD-860) Independent Assurance tests are not posted in the Materials Summary Report, but are recorded on the IA Test Log (form ITD-860) by the ITD project personnel. A copy of the complete IA test log must be submitted with the MSR at the completion of the project. See Section 370.00 for information on completion of the IA Test Log.

SECTION 450.00 – MATERIALS CERTIFICATION CHECKLIST (ITD-852) Resident Engineer’s office prepares the ITD-852 Materials Certification Checklist by completing each checkbox shown on the form. Explanations must be included in the “Remarks” field for any items checked “No”. Known exceptions to the materials acceptance requirements for the project will be identified on the form. Once complete the checklist is provided to the Resident Engineer and Engineering Manager for review and signature. For projects not requiring a Materials Summary Report per Table 400.1 check the

appropriate box to indicate no Materials Summary Report is required and complete the remainder of the form as applicable for the project.

SECTION 460.00 – DISTRICT AUDIT OF MATERIALS SUMMARY REPORT The District will perform an independent assurance audit of the Materials Summary Report (MSR) for all projects, Independent assurance audits shall be performed by individuals who are:

- 1) Currently qualified in all WAQTC modules along with the Concrete Laboratory Testing Technician (CLTT).
- 2) Independent of both the project and the residency
- 3) Deemed by the District Engineer as knowledgeable in the preparation and review of Materials Summary Reports.

The audit should be done periodically as the project progresses. The most current pay estimate should be used as a guide to determine that material paid for was accepted in accordance with the contract requirements. Any deviations or exceptions found during the audit must be resolved to the satisfaction of the District Materials Engineer before issuance of the Materials Certification Letter.

District audit of MSR report shall be completed using Form ITD-858. The District Materials Engineer will review this MSR audit, and make final resolution and document such by signature on form ITD-858. A close-out should be held with ITD project personnel to discuss any deviations found and to obtain a resolution statement. See Section 360.03 of this manual. A copy of the completed ITD-858 shall be included in the project files.

460.10 District Audit of GARVEE and Consultant CE&I projects. The GARVEE and Consultant CE&I projects have an assigned ITD Resident Engineer. The individual assigned to audit the records will contact the assigned Resident Engineer to make arrangements for the on-site review of the project materials records.

SECTION 470.00 – MATERIALS CERTIFICATION LETTER When the MSR and associated documentation is considered acceptable, the District will prepare the Materials Certification Letter using the inter-department memo (ITD-500) addressed to the Design/Materials/Construction Engineer (see Example 470.02 at the end of this section) for the District's Engineer signature. The Materials Certification Letter is prepared and submitted to the District Engineer along with a copy of ITD-860, IA Test Report Log; ITD-852, Materials Certification Checklist; the Materials Summary Report; and ITD-854, Resident Engineer's Letter of Inspection of Contract Items, for review, signature and distribution.

The Materials Certification Letter must contain the following statement (per 23 CFR 637):

This is to certify that:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. All independent assurance samples and tests are within tolerance limits of the samples and tests that are used in the acceptance program.

Explanations for exceptions to the plans and specifications are as follows:

The Materials Certification Letter will list, by contract item, any exceptions and how they were resolved, which includes an explanation for justification of acceptance of the contract item. See Example 470.02 at the end of this section.

For Federal-aid full oversight projects, the FHWA will review the below listed items in order to concur in the Materials Certification.

1. District Engineer Materials Certification Letter
2. ITD-0858 Materials Summary Report District IA Audit
3. Final Estimate
4. ITD-0852 Materials Certification Checklist
5. ITD- 0854 Resident Engineer's letter of Inspection of Contract Items
6. ITD-0860 Independent Assurance Log
7. Materials Acceptance Program (MAP) report for any contract pay items that has exceptions to the contract specifications or plans including the following notes:
 - a. Notes to explain the resolution for any failing test results or lack of minimum testing.
 - b. Notes to explain the basis for accepting any material not tested or not certified according to the minimum testing requirements or contract specifications.

Submit these documents (via cc) to the FHWA for review and approval. Upon review and approval; submit final non-participation determinations to the Department's Financial Services. See example 470.03 at the end of this section.

470.01 Exceptions. An exception is considered any instance where non-specification material is identified, the non-specification material is allowed to remain, and corrective action was required. A failing test with an immediate passing check test is not considered non-specification material. Corrective action is remedial methods, such as price adjustments or contractor repair work.

When there are indications of acceptance of non-specification material in the materials summary report, then the corrective action taken must be included in the summary remarks and in the certification letter. For QA Special Provision contract items, non-specification material is a lot where the pay factor for any quality characteristic is below 0.75 and the material was allowed to remain.

An exception is also when contract specifications and/or minimum testing requirements were not met. This may be lack of acceptance testing, lack of IA testing, or lack of manufacturer's certifications. It is usually not possible to remedy or justify these exceptions, especially if not discovered until the project is complete. A full explanation of the circumstances is necessary to ascertain the consequences of the deviation from the specifications, including the quantities accepted without the required testing or certifications. In some cases, material quantities may not be eligible for Federal-aid participation. The District will determine non-participation using the current memorandum of understanding between the Department and the Federal Highway Administration Idaho Division Office.

Exceptions should be listed by contract item number on the Materials Certification Letter as follows:

- Number of tests representing non-specification material out of the total number of tests performed with remarks for justification that allowed material to remain in place.
- Total number of tests performed and number of tests required by the minimum testing requirements when the number of tests performed is less than the required minimum, including lack of or failure to perform Independent Assurance testing.
- Lack of required manufacturer's certifications covering the quantity of material paid for.
- QA Special Provision item where the pay factor was less than 0.75 and a description of action taken.
- QA Special Provision item where t test failed and there is no indication an evaluation was made.
 - Price adjustment, if applied, or justification for acceptance or rejection of material with failing laboratory test.

The items ineligible for Federal-aid participation including the dollar amount must be shown on the Materials Certification Letter.

470.02 Materials Certification Letter Example (Non-Full Oversight Project Example)**IDAHO TRANSPORTATION DEPARTMENT****Department Memorandum****DATE: PROJECT NO.(S):****TO: NAME**

DESIGN/MATERIALS/CONSTRUCTION ENGINEER

FROM: NAME:

DISTRICT ____ ENGINEER

RE: MATERIALS CERTIFICATION LETTER (NON-FULL OVERSIGHT PROJECT)

This is to certify that:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. All independent assurance samples and tests are within tolerance limits of the samples and tests that are used in the acceptance program.

Explanations for exceptions to the plans and specifications are as follows:

303-005A 19mm Aggregate Base: Lot #3 had a pay factor of .74 and was removed and replaced by the contractor.

405-025A PL MX PAV CL I: Acceptance Test Strip #1 failed and was paid at 50%.

602-035A 450mm Pipe Culvert: There are no required manufacturer's certifications for 150 meters of pipe.

640 Subgrade Geotextile: No required laboratory verification tests were performed. The item was accepted by manufacturer's certification.

S501-010 MSE Retaining Wall: The ITD laboratory test was failing for cement and a price adjustment of 25% was applied.

The original of the Materials Summary Report, correspondence, manufacturer's certifications, and test reports are on file in the project records.

CC:

DE ____

District ____ Engineering Manager

DMTL w/attach

RE (original attach)

DRI (w/attach)

DMC Engineer (w/attach)

Financial Services

470.03 Materials Certification Letter Example (Full Oversight Project)**IDAHO TRANSPORTATION DEPARTMENT****Department Memorandum****DATE: PROJECT NO.(S):****TO: NAME**

DESIGN/MATERIALS/CONSTRUCTION ENGINEER

FROM: NAME:

DISTRICT ____ ENGINEER

RE: MATERIALS CERTIFICATION LETTER (FULL OVERSIGHT PROJECT)

This is to certify that:

The results of the tests used in the acceptance program indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the approved plans and specifications. All independent assurance samples and tests are within tolerance limits of the samples and tests that are used in the acceptance program.

Explanations for exceptions to the plans and specifications are as follows:

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The original of the Materials Summary Report, correspondence, manufacturer's certifications, and test reports are on file in the project records.

cc:

DE ____

District ____ Engineering Manager

DMTL w/attach

RE (original attach)

DRI (w/attach)

DMC Engineer (w/attach)

FHWA (w/ attachment)