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Responsible Office: Division of
Construction Management
Standard Procedure: 510-002(SP)

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CONSTRUCTION AND MATERIALS SPECIFICATION DEVELOPMENT

STANDARD PROCEDURES

PURPOSE

These standard procedures are for the development and implementation of new or modified Specification and related pay items. They include handling, processing, reviewing, obtaining FHWA approval, distribution and implementation.

DEFINITIONS AND ABBREVIATIONS

Specifications: Contract documents used to issue instructions to contractors. For the purposes of this procedure, Specifications will include: the C&MS, Supplemental Specifications, Supplements, Special Provision Specifications, Proposal Notes, and Plan Notes.

Specification Committees: Specification committees are working committees, formed around specific materials or construction tasks, and composed of ODOT district and central office staff, representatives from the Federal Highway Administration and industry trade groups

Construction and Material Specifications Book (C&MS): The C&MS contains detailed provisions, which, together with the Plans and the Proposal, constitute the Contract for the performance of required work. It is the official legal and technical document by which the Department bids and constructs highway projects.

Supplemental Specifications: Individual numbered documents prepared in loose-leaf form describing the construction and material specifications for new items.

Special Provision Specifications: Individual numbered specifications prepared in loose-leaf form describing the construction and material specifications for items whose requirements are not covered in the C&MS or in Supplemental Specifications.

Supplements: Supplements provide necessary information such as laboratory methods of test, and certification or pre-qualification procedures for materials.

Proposal Notes: Proposal notes contain a wide variety of legal and technical requirements necessary for the proper bidding and sale of an individual project. Those notes override all other requirements in the Plan, C&MS, Supplemental Specifications, and Standard Construction Drawings.

Plan Notes: A plan note describing a non-standard pay item that deviates from the C&MS, supplemental specification or Standard Construction Drawing.

New Products: Materials, equipment and processes, unspecified and previously unused by the Department, which are being proposed for use in the construction, maintenance, or operation of transportation facilities. Also referred to as experimental materials, or new materials.

PROCEDURE STATEMENT

I. Specification Committees

- A. Pavement Material and Construction Committee
- B. Structures Committee
- C. Earthwork and Hydraulics Committee
- D. Contract Administration Committee
- E. Traffic and Miscellaneous Items Committee

II. Specification Committee Chairperson - The Deputy Director of the Division of Construction Management shall assign a chairperson to each Specification committee. The chairperson shall:

- A. Act as the liaison between the department and the industry;
- B. Determine the merit of all initial Specification submittals;
- C. Initiate committee meetings;
- D. Distribute meeting notices and agendas to committee members to allow sufficient time for review prior to meetings;
- E. Review final Specification draft for approval by the executive committee.

III. Initiation

- A. **General:** All initial Specification submissions must be submitted in writing to the appropriate Specification committee chairperson. Contractors, producers, suppliers and consultants must submit their requests through their association. FHWA may submit their request directly to the appropriate committee chairperson. Department staff must submit their request through their administrator.

- B. C&MS and Supplemental Specifications: All initial submissions for proposed C&MS and Supplemental Specifications must cover or reference the following topics:
1. Description
 2. Materials
 3. Construction requirements
 4. Method of measurements
 5. Basis of payment
 6. Designer note to address conditions under which the Specification will be used on construction projects

IV. Specification Committees' tasks

A. General:

1. Review and update existing Specifications as needed;
2. Review proposed Specifications;
3. Write all proposed Specifications in the active voice, imperative mood style with a designer note;
4. Circulate proposed draft Specifications for review by additional department and industry members as needed;
5. Keep detailed minutes of committee meetings;
6. Provide all documentation needed for the distribution of new and revised Specifications;
7. Review new products.

- B. C&MS: Ensure that Specifications are not placed in the C&MS until construction and material requirements have been proven to work and accepted as an industry practice.

C. Supplemental Specifications:

1. Review existing Supplemental Specifications and recommend incorporating in C&MS or as Special Provision Specifications.
2. Implement new Specifications whose requirements may change from year to year and are still in the developmental or experimental stage as Supplemental Specifications.
3. Assign a limited lifetime to Supplemental Specifications, normally no more than four years.
4. Ensure that Supplemental Specifications will be incorporated in the C&MS, discontinued, or become a Special Provision Specification within four years.

D. Special Provision Specifications:

1. Review and update existing Special Provision Specifications as needed.

2. Ensure that Special Provision Specifications are applied on specific projects.
- E. Supplements: Review and update existing Supplements as needed.
- F. Proposal and Plan Notes:
1. Review and approve modifications to standard Proposal and Plan Notes
 2. Review and approve new Proposal and Plan Notes.
 3. Ensure that the main usage for Proposal and Plan Notes is to:
 - a. Correct errors or make minor changes to existing Specification items of plan drawings.
 - b. Add specific language directing the Contractor.
- G. All New Products will be coordinated and reviewed by the New Product Engineer (NPE) (see flow chart Attachment D):
1. Districts/Offices submit an application to the NPE noting the new product and potential benefits. If the District/Office is proposing a test installation, they should also submit a work plan.
 2. The NPE submits the following items to the Specification Committee chair:
 1. Determination if application is new to ODOT.
 2. Summary of other states evaluations.
 3. Recommendation as to whether evaluation should continue.
 3. The Specification Committee chair, with input from the committee, recommends any additional testing, field studies, etc and then forwards the decision and recommendations to the NPE.
 4. NPE reports committee determination to all Districts/Offices and statewide in a web-based format.
 5. If the evaluation is approved by the Specification Committee, the NPE assures that the District/Office tests incorporate committee recommendations.
 6. NPE tracks the new product evaluation and reports ongoing status to all Districts/Offices.
 7. District/Office submits a report to the NPE, which includes findings of the evaluation and recommendations as to whether it should not be approved, or be adopted through a specification or standard change.
 8. After the new product has been evaluated and recommended for use by the District/Office, the NPE works with the District/Office to produce a draft specification for the new product. The draft specification is to be submitted to the Specification Committee for review and approval. The NPE will also submit the District's/Office's complete report on the product and their recommendations to the Specification Committee.
 9. The Specification Committee reviews the draft specification, the District's/Office's complete report and their recommendations. The

Specification Committee then determines if the draft specification should be approved.

10. If the Specification Committee determines the product should be approved, they will make any necessary modifications to the draft specification and then submits the specification to the Executive Committee for final approval. If the Specifications Committee determines that the new product should not be approved, they will report their findings to the NPE who will post their findings to the web-based database.
11. If the specification is submitted to and approved by the Executive Committee, the NPE will report on the new product being used to all Districts/offices and to the web-based database.

V. Executive Committee

The executive committee is responsible for final approval of all Specification on behalf of the department. Members of the executive committees are:

- A. Assistant Director for Highway Management,
- B. Deputy Director Division of Construction Management,
- C. Deputy Director Division of Contract Administration,
- D. Deputy Director Division of Highway Operations and
- E. Deputy Director Division of Production.

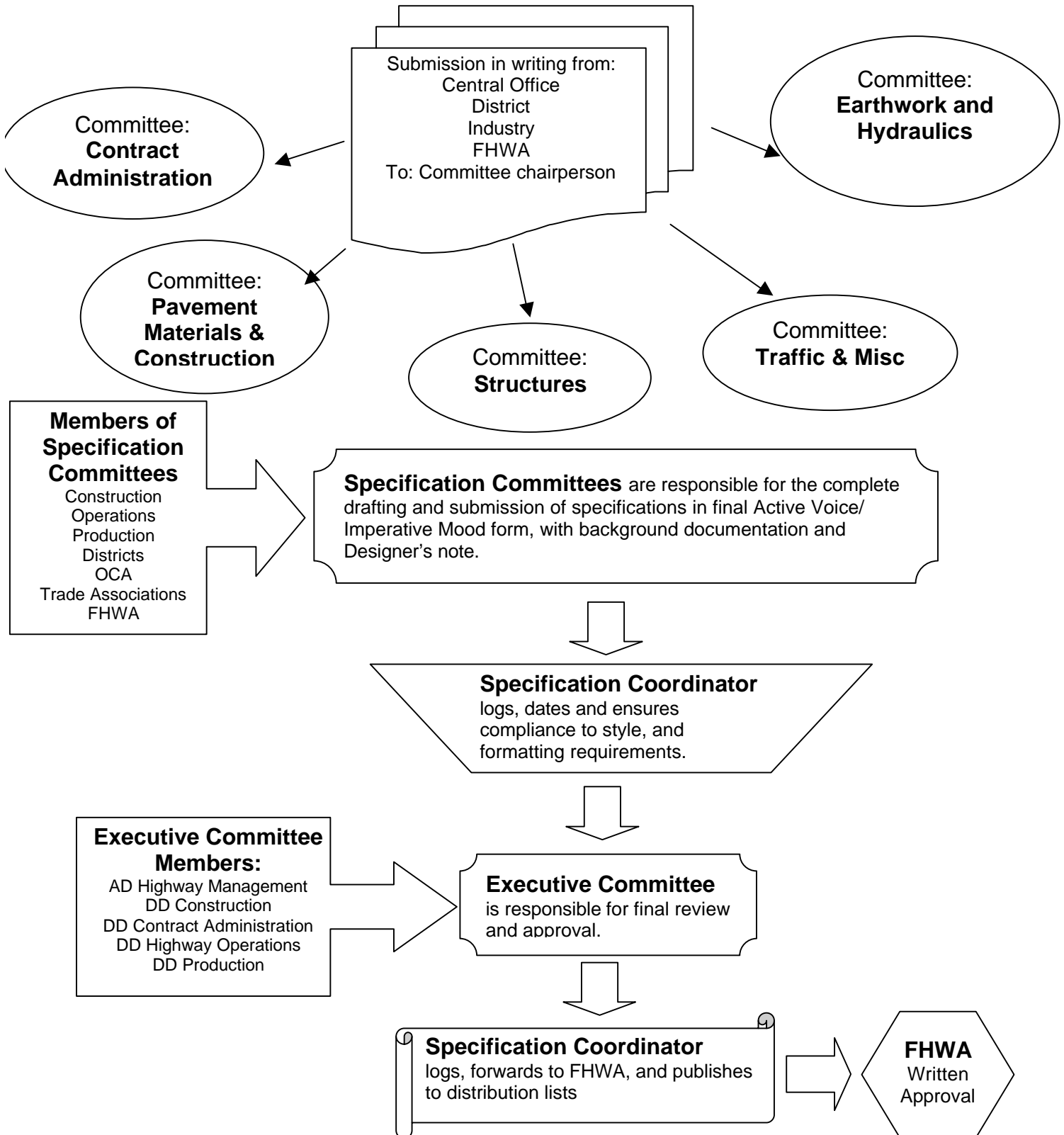
VI. Specification Coordinator duties

- A. Logging and dating final draft Specifications submitted by the Specification committees;
- B. Ensuring Specification writing style consistency;
- C. Maintaining a computer record of all Specifications status;
- D. Forwarding the final draft Specification from the committees to the Executive Committee within 5 working days;
- E. Logging, dating and forwarding all approved Specifications from the executive committee to FHWA within 5 working days;
- F. Returning non-approved Specifications to the originating Specification Committee with comments.
- G. Publication of the Specification, its designer note and other written guidance, after FHWA approval;
- H. Distribution of paper copies to the ODOT list;
- I. Publication of Specification, its designer note and other written guidance, on the Internet under the appropriate Specification section;
- J. Sending notification to all Specification users along with the designer notes, and other written guidance.

VII. Training

Specification Committee chairs must complete a course on writing Specifications in the Active Voice/Imperative Mood style.

Specification Development and Review Process



**MEMBERSHIP OF
SPECIFICATION COMMITTEES**

PAVEMENT MATERIALS & CONSTRUCTION COMMITTEE	
Chairperson: Administrator, Office of Materials Management	
Concrete sub-committee: Specification Sections: 255, 256, 305, 450, 608, 609, 611, 612, 622 and pertinent 700 sections	Asphalt sub-committee: Specification Sections: 251, 252, 253, 254, 301, 302, 307, 400, 615, 618, and pertinent 700 sections
Construction Office	Construction Office
Materials Management Office	Materials Management Office
Pavement Office	Pavement Office
Division of Production	Division of Production
Estimating Office	Estimating Office
Geotechnical Engineering Office	Geotechnical Engineering Office
District Office Representative	District Office Representative
Federal Highway Administration	Federal Highway Administration
Ohio Contractors Association	Ohio Contractors Association
Contractor (chosen by Ohio Contractors Association)	Contractor (chosen by Ohio Contractors Association)
Consulting Engineers Council of Ohio	Consulting Engineers Council of Ohio
American Concrete Pavement Association	Flexible Pavements of Ohio
Ohio Aggregates & Industrial Minerals Association	Ohio Aggregates & Industrial Minerals Association
Ohio Ready Mix Concrete Association	

STRUCTURES COMMITTEE	
Specification Sections: 500, 610, and pertinent 700 sections	
Construction Office, Chairperson	
Materials Management Office	
Structures Office	
Division of Production	
Estimating Office	
Geotechnical Engineering Office	
District Office Representative	
Federal Highway Administration	
Ohio Contractors Association	
Contractor (chosen by Ohio Contractors Association)	
Ohio Ready Mix Concrete Association	
Consulting Engineers Council of Ohio	

Attachment B - continued

EARTHWORK AND HYDRAULICS COMMITTEE	
Specification Sections: 200, 304, 410, 411, 601, 602, 603, 604, 605, 613, 616, 638, and pertinent 700 sections.	
Geotechnical Engineering Office, Chairperson	
Materials Management Office	
Structures Office	
Construction Office	
Pavement Office	
Division of Production	
Estimating Office	
Office of Environmental Services	
District Office Representative	
Federal Highway Administration	
Ohio Contractors Association	
Contractor (chosen by Ohio Contractors Association)	
Consulting Engineers Council of Ohio	
Ohio Aggregates & Industrial Minerals Association	

CONTRACT ADMINISTRATION COMMITTEE	
Specification Sections: 100	
Construction Office, Chairperson	
Division of Contract Administration	
Materials Management Office	
Division of Highway Operation	
Division of Production	
District Office Representative	
Federal Highway Administration	
Ohio Contractors Association	
Contractor (chosen by Ohio Contractors Association)	
Consulting Engineers Council of Ohio	

TRAFFIC AND MISCELLANEOUS ITEMS	
Specification Sections: 606, 607, 614, 617, 619 – 633, 640, 651 to 673, and pertinent 700 sections.	
Traffic Office, Chairperson	
Materials Management Office	
Construction Office	
Pavement Office	
Division of Production	
Estimating Office	
District Office Representative	
Federal Highway Administration	
Ohio Contractors Association	
Contractor (chosen by Ohio Contractors Association)	
ITE (Institute of Traffic Engineers)	
Consulting Engineers Council of Ohio	

OHIO DEPARTMENT OF TRANSPORTATION
EXPERIMENTAL PRODUCT / TECHNIQUE EVALUATION
WORK PLAN

Experimental feature to be evaluated: _____
Manufacturer: _____
Proposed location: _____ PID or Project No: _____
Anticipated installation date: _____ Estimated Feature Cost: _____
Person responsible for evaluating the experimental feature and preparing the required reports: _____
Is federal oversight required? _____

To what extent has this feature been used in Ohio? Elsewhere?

What potential benefits can be derived from the installation of this experimental feature?

How will the experimental feature be installed?

How will performance be evaluated? Will there be a standard or control against which performance can be judged?

Prepared by: _____
Office or District: _____
Date: _____

Approved/Date: _____

(Specification Committee Chairperson)

New Product Review Process

