

DIVISION 100

CONTRACT ADMINISTRATION & INSPECTION PROCEDURES

101.00 -- CONSTRUCTION ORGANIZATION

101.01 PURPOSE OF MANUAL

- Establish uniform policies and procedures for contract administration and inspection of construction projects, and provide interpretation and clarification of specifications.
- Serve as a collecting point for new instructions and guidelines relating to administration and inspection of construction projects.
- Describe the role of District Engineers, District Construction Engineers, Project Managers, Construction Technicians, and others assigned to supervise and inspect construction projects.

101.02 ENGINEER'S DUTIES AND AUTHORITY

I. Authority of the Director

- A. General - The specifications are the Engineer's authority to decide questions as to quality or acceptability of material furnished, work performed, manner of performance, rate of progress of the work, and interpretations of the plans and specifications.

The authority exercised by the Engineer as provided in *SSHC Subsection 104.02 and Subsection 105.01* includes the following:

1. Authority to enforce specific requirements and provisions of the plans and specifications.
2. Authority to interpret the requirements and provisions of the plans and specifications in cases of questionable or doubtful application.
3. Authority to authorize (approve) revisions or modifications in the plans or specification requirements and/or to authorize or establish new or additional plans or specification requirements.
4. Authority to suspend the work under certain conditions.

B. Delegation of Authority

General - The Director, exercising the responsibilities given him/her by the statutes regarding the control, management, supervision, administration, and direction of the Department of Roads, assigns and designates to various engineering, management, and technical

personnel the responsibility for the performance of certain functions of the highway construction operations.

The assignment and designation of responsibility for the performance, supervision, or completion of any task by this Construction Manual also includes the authority necessary to complete that task.

101.03 CONSTRUCTION DIVISION

The Construction Division is the eventual authority for all your unresolved contract and construction related questions. It provides:

- Direction and consultation to District Engineers, Construction Engineers, Project Managers, Construction Technicians, and other central offices relating to specifications, methods, techniques, and policies on highway construction, inspection, and contract award and administration.
- Final decision capability for all disputes or questions regarding contract administration.

The Construction Engineer is directly accountable to the Deputy Director for Engineering. The organizational chart for the Construction Division is shown in Figure 101.1.

Responsibility for administering construction contracts on the roads, highways, and interstate systems rests with the Construction Engineer. Responsibility for actual construction work is delegated to the District Engineer and ultimately rests with the Project Manager.

Construction Division

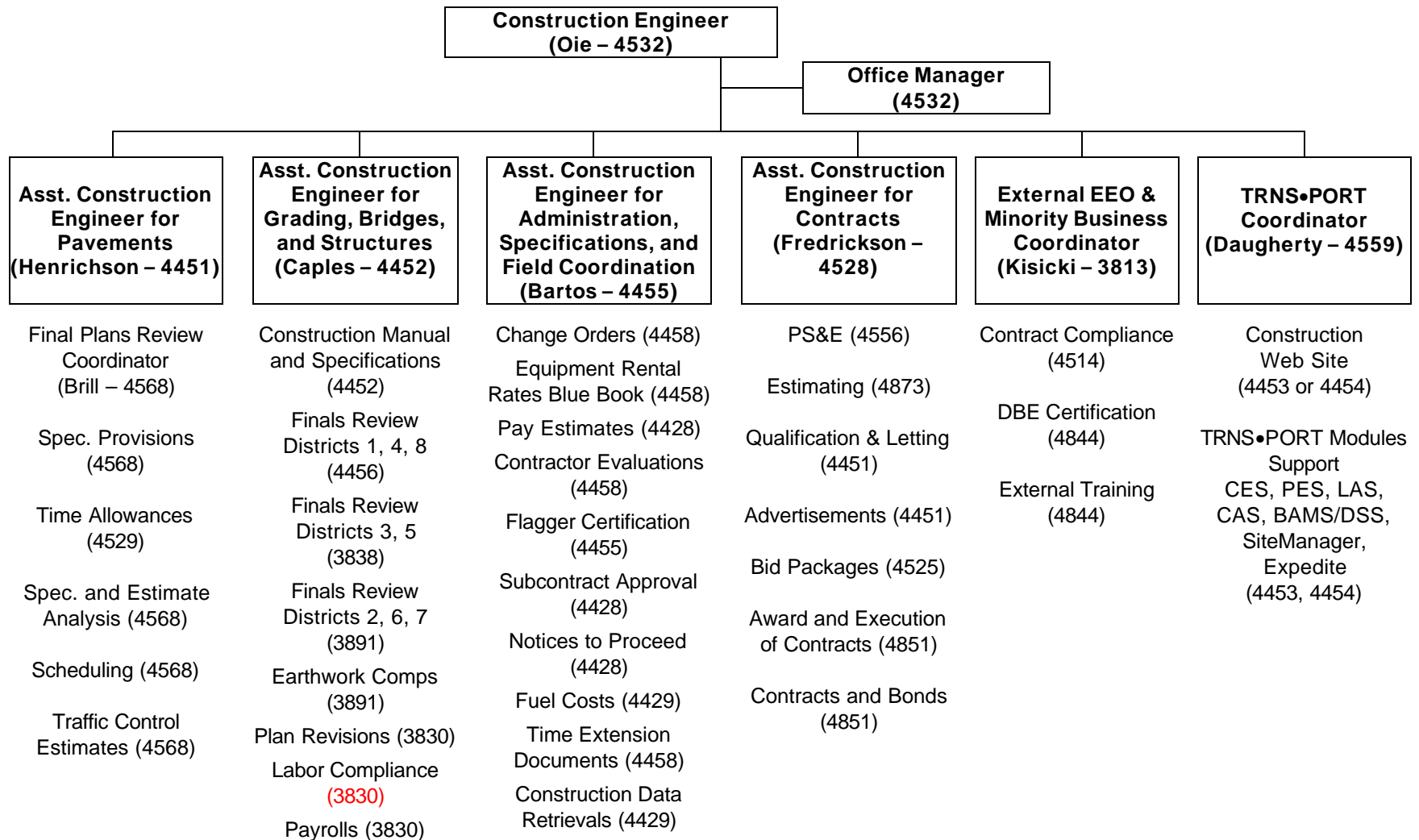
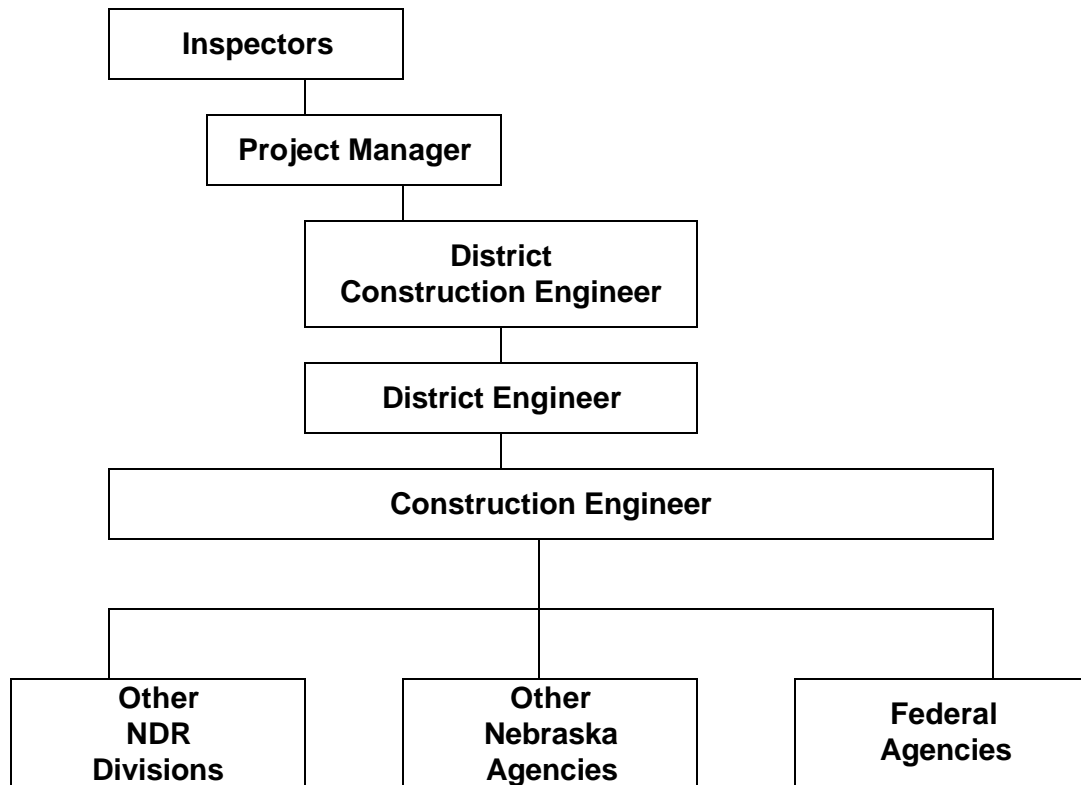


Figure 101.

101.04 CHAIN OF COMMAND

The normal chain of command for questions and business operations is as follows:



101.05 CONSTRUCTION ENGINEER

The Construction Engineer provides guidance to District Construction Offices to insure compliance with Specifications and established policies and procedures in the timely completion of NDR projects. The District Engineer, through the Project Manager, has direct responsibility for construction projects. The Construction Engineer is the next level of authority on approval of substantial change orders and the resolution of contract disputes when District Engineer decisions are appealed.

Interpretation of Specifications

The Construction Division provides consultation and advice on construction problems concerning the application and interpretation of Specifications and other contract requirements. Providing this guidance on a statewide basis is intended to insure uniform and fair contract administration.

101.06 DISTRICT ENGINEER (DE)

101.07 DISTRICT CONSTRUCTION ENGINEER - The District Engineer is responsible to the Director for the proper administration and completion of each contract for highway construction in his/her District.

The District Engineer has the responsibility and the authority to:

- a. Manage the field staff that provides construction and materials inspection on highway projects within each NDR District. This responsibility includes oversight on contract administration issues, compliance of materials, quality of work performed, and approval of most change orders.
- b. Enforce specific requirements of the plans and specifications in the completion of contracts for highway work. (Generally, he/she will actually delegate this responsibility and authority to the Project Manager.)
- c. Interpret or rule on disputes over requirements of the plans and specifications and decide questions which may arise in all cases when such interpretations and decisions will result in completion of the work in accordance with the intent of the plans and specifications.
- d. Prepare and recommend revisions and modifications in the requirements or provisions in the plans or specifications, or prepare and recommend additional requirements in cases where construction conditions appear to warrant revisions or additional requirements. See *SSHC Subsection 104.02* for alterations which can be approved by the District Engineer.
- e. Delegate the direct responsibility for the engineering supervision and inspection at the project level, generally through the District Construction Engineer to Project Managers in the field.

DEs also provide field input into construction related problems for process improvements. It is imperative that DEs maintain a close working relationship with all central offices.

101.07 DISTRICT CONSTRUCTION ENGINEER (DCE)

The DCE is responsible for management of the field staff that provides construction and materials inspection on highway projects within each NDR District. This responsibility includes oversight on contract administration issues, compliance of materials, quality of work performed, and approval of most change orders. DCEs also provide field input into construction related problems for process improvements. It is imperative that DCEs maintain a close working relationship with all central offices. The DCEs report to the DE.

The District Construction Engineer is responsible directly to the District Engineer for the direct and close supervision of the construction work and the supervision of Project Managers at the project level, as assigned to him/her by the District Engineer.

The District Construction Engineer has the same authority as listed for the District Engineer when carrying out and discharging the responsibilities assigned to him/her by the District Engineer.

101.08 PROJECT MANAGER (PM)

The Project Manager, working directly under the supervision of the District Construction Engineer (DCE), is responsible through the DCE to the District Engineer for the construction of the project in accordance with the requirements of the plans and specifications. The Project Manager is responsible for and has the authority to assign or delegate the supervision, staking, or inspection of construction work phases or operations to engineers or construction technicians working under his/her direction.

The Project Manager is the key person in the field organization. The Project Manager's diligence, knowledge, and integrity are important in carrying out the work of planners and designers. The assignment demands judgment, courage, ingenuity, foresight, and tact. Its reward includes priceless experience in the arts of supervision, organization, engineering, and public relations. It also furnishes pride and satisfaction in a job well done.

In assuming the responsibility for proper fulfillment of assigned construction work, the Project Manager is also accountable for:

- Maintaining good relations with contractors, affected property owners, and the general public.
- Assigning personnel to inspection and survey operations on the project, along with providing the supervision and instructions necessary to assure proper performance of assigned duties.
- Keeping the District and Headquarters Office informed as to construction progress, status, etc.
- Maintaining a complete record and proper documentation of all quantities and transactions relative to the project.
- Assuring proper use of equipment and materials used in the performance of assigned duties.

While Project Managers have responsibility for general supervision of the work, their main concerns are compliance with specifications and project completion. It is not their responsibility to direct the everyday activities of the contractor, **and they should not do so.**

The Project Manager is authorized to assign or delegate the inspection and record keeping required for the project. The Project Manager must monitor the delegated tasks to insure they are being properly performed.

In cases of questionable application of plan or specification requirements, the Project Manager may decide such questions or make interpretation of specification requirements if the decision or interpretation will clearly result in the completion of the work in accordance with the intent of the plans and specifications.

If the intent of the plans or specifications is not clear or a dispute over interpretation of plan or specification requirements develops, or if the provisions are clearly unworkable or impractical, the Project Manager shall submit the question or problem to the District Construction Engineer or District Engineer for determination.

If an immediate decision must be made, or question resolved, and the District Engineer or the District Construction Engineer is not available, the Project Manager is authorized to contact and consult the Construction Engineer or the appropriate Assistant Construction Engineer who will, if required, contact the appropriate division engineer concerned (Design, Bridge, Materials and Research, or Right of Way) for a determination. Exceptions to the foregoing are questions considered routine in nature concerning materials, in which case the Materials and Research Division may be contacted directly.

Delegation of Responsibility

The Project Manager cannot and should not expect to retain all the duties and responsibilities assigned. In an efficient organization, each employee should be delegated authority in line with their responsibilities and duties. The Project Manager must check to see that duties delegated to the Construction Technicians are properly performed.

Responsibility for inspection and surveying on a project should be delegated to one or more experienced employees. This includes the responsibility for documentation of quantities and administrative work necessary for preparation of the final estimate. Inspectors must have authority to direct and coordinate activities of inspection or survey personnel assigned to them.

All employees should be encouraged to accept delegated responsibility and to make decisions within the authority delegated to them.

101.09 CONSTRUCTION TECHNICIAN (CT)

Construction Technician must review and understand the Plans, Special Provisions, Specifications, utility agreements, railroad agreements, and municipal/county agreements. A CT will be assigned to monitor or inspect specific construction operations by the Project Manager. The CT will be responsible for and directly accountable to the Project Manager for the proper performance of the task assigned.

The CT has the authority to inspect all work performed and materials furnished and to enforce all specific requirements of the plans and specifications involved in the operations to which he/she is assigned.

In cases of questionable application of plan or specification requirements to the work in progress, and if an immediate decision is needed, the CT should, if the CT judges the intent of the requirement to clearly warrant a reasonable interpretation, make such an

interpretation. The CT should, when time permits, initially take such matters to the Project Manager for interpretation. If an immediate decision is necessary and is made by the inspector, the CT should have the Project Manager review and confirm the decision or interpretation at the earliest opportunity.

If the intent of the plans or specifications is not clear, or if the provisions are unworkable, the CT shall consult the Project Manager.