



## CHAPTER 9

# RESPONSIBILITIES OF RESIDENT ENGINEER

### 9-1 General Responsibilities

As stated in Subsection 00150.01, the Resident Engineer (RE), acting for the Chief Engineer, is the Agency's authorized representative on each Project and has the responsibility and authority to properly administer the Project. The person the Agency names to fulfill the role of RE could be:

- A Consultant reporting to an ODOT RE.
- A Consultant reporting to an ODOT Transportation Project Manager (TPM).
- A Local Agency employee reporting to a TPM.

An Agency employee is typically one who holds the title of RE on their position description.

The RE is the Agency's designated representative for administering the Contract with the Construction Contractor, and for Project interactions with the public and others. The role of the RE may be assigned to an ODOT employee, a Local Agency employee, or a Consultant. The responsibilities of fulfilling the role of the RE will be the same; however, the delegated authorities will differ.

As discussed in Chapter 3 - Delegation of Authority, an Agency employee assigned as RE may be provided a letter of authority. Without such letter of authority the RE may only **recommend** approval of Change Orders and Contract Time adjustments.

The RE's duties regarding construction Contracts include:

- Develop and supervise an efficient and effective organization, including the RE's staff and other members of the Agency's Project team as needed, to help ensure that each Project is constructed in accordance with the Plans and Specifications.
- Assure that Contract administration is performed according to established ODOT policies and procedures, including those described in this manual.
- Assure that Work and Materials used on the Project, and Project documentation conform to Contract requirements and established ODOT policies and practices. The RE must obtain the approval of the Contract Administration Engineer (CAE) for price adjustments or for documentation that does not meet the Contract or accepted ODOT guidelines, including those described in this manual.
- For Projects assigned to the RE, assure that Contract requirements. are met

**NOTE:** For the RE's responsibilities on Design-Build Contracts, refer to Design-Build Contract documents and the Design-Build Contract Administration Manual. The Project-specific, Agency-accepted Quality Plan will define the processes and practices the Design-Builder must follow. The RE will monitor the Design-Builder's adherence to the processes outlined in the Quality Plan to ensure Contract compliance.

For the RE's responsibilities on Construction Manager / General Contractor (CM/GC) Contracts, refer to the CM/GC Contract documents and the CM/GC.

The RE has limited authority to change Contract Plans and Specifications. If changes are considered necessary, the RE may need to obtain approval, including involvement of the Construction Section, and the Professional of Record (POR) and/or designer.

The RE is responsible, among other things, to assure that the:

- Work is constructed in accordance with the Contract, Plans and Specifications.
- Contract is administered in a proper and fair manner.
- Contractor is paid for Contract items that are completed in accordance with the Contract.
- Work is inspected.
- Work is properly documented.

In administering the Contract or interpreting its terms and requirements, the RE must assure that actions comply with the practices described in this manual, and that the actions do not conflict with other accepted statewide practices.

The RE is responsible to ensure administration of the Contract and may delegate such authority they deem necessary for the performance of the Work. The Agency's representatives associated with the Project are responsible to work through the RE.

## 9-2 Working Relationship with the Contractor

The RE is the Agency's single point of contact with the Contractor in all aspects of administrating the Contract. The Contractor's Superintendent will be the single point of contact with the RE. [Refer to Chapter 10 - Superintendence by Contractor.]

For each construction Project, the RE and Contractor should develop a functional organization chart that defines the lines of communication between members of the organizations. This facilitates communication between the appropriate individuals on the Project.

It is imperative that the Contractor and RE maintain effective communications. Communication may be both written and verbal.

On critical Project issues, written communication occurs only between the RE and the Contractor's Superintendent. Such issues include:

- Change Orders
- Project schedule and needed updates
- Contract Time
- Disputed issues
- Significant issues involving workmanship or Work quality, Material quality, etc.
- Changes to Subcontractor's work
- Subcontractor performance

Verbal agreements or directions must be confirmed in writing and entered into the Project diary or General Daily Progress Report.

The RE and other Project personnel shall not direct the Contractor's operations except when directing Force Account Work. [Refer to Chapter 12-G - Extra Work Performed on Force Account Basis and Chapter 15 - Change Orders/Force Account/Work by Public Forces.] The RE is responsible for requiring the Contractor to correct methods that are unsafe or detrimental, or to correct Work that does not fulfill Contract requirements. If the RE or other Project personnel attempt to direct the Contractor's operations, then the Contractor may claim that the RE assumed risk and responsibility for the Work product.

## 9-3 Inspection

The RE may assign one (1) or more individuals to perform inspection or other Work on the Project. In addition, the RE may utilize other persons or units for inspection.

Although the duties and authorities of an Inspector are defined in 00150.02, the RE may assign other duties as well and delegate such authority as the RE sees fit.

As typically delegated by the RE, the Inspector is responsible for the following:

- Inspect the Work performed and Materials furnished to assure compliance with the requirements of the Contract.

**NOTE:** For Design-Build Projects, it is the responsibility of the Design-Builder to develop the Project-specific organization chart which will define the lines of communication as part of the overall Quality Plan.

**NOTE:** *The Agency's inspection responsibilities on Design-Build Projects are significantly different. Refer to the Design-Build Contract to determine the Agency's inspection responsibilities.*

- Orally reject defective Materials and confirm such rejection in writing.
- Orally suspend the Work (temporarily) for improper prosecution, pending the Engineer's decision.
- Verify the Contractor does not violate the restrictions of the Contract.
- Measure the completed Work (to assure proper payment).
- Document Project activities (labor, Equipment, weather, significant events, etc.).
- Communicate (represent the RE in communications with the Contractor and others).

The Inspector achieves this by:

- Observing the Work, including Materials and processes, as appropriate.
- Performing or reviewing testing and reviewing test results.
- Assuring that Material quality is acceptable and documented.
- Rejecting defective Material as needed under the Quality Assurance Program and the Contract requirements.
- Documenting quantities of Work performed to allow payment to be made.
- Reporting to the RE on progress of the Work as compared to the Contractor's Project schedule.
- Recording information daily to document Project progress, events on the Project, and conversations with the Contractor or other individuals about the Project.
- Addressing and attempting to resolve issues and disagreements, or escalating those to a higher level for resolution.

[Refer to Chapter 12 - Project Records for additional information.]

The Inspector is not authorized to:

- Accept Work or Materials.
- Alter or waive provisions of the Contract.
- Give instructions or advice inconsistent with the Contract documents.

It is imperative that the Inspector maintains effective communication with the Contractor's Superintendent. The Inspector is expected to act proactively and assure that the Contractor's Superintendent is familiar with the Contract requirements before the affected Work is started.

The Inspector may become aware of issues involving traffic, property owners, local governments, or Utilities that affect or are affected by the Contractor's Work. The Inspector is responsible to keep the RE informed of both the progress of the Work and any known or anticipated problems.

If the Inspector is unable to resolve issues with the Contractor, or if changes are required, the Inspector must obtain prior approval from the RE for any changes to the Work. In addition, the RE may need to obtain proper approval for such changes from the Region/BDU or the Construction Section. All changes to the Contract must be made in writing.

If another agency, Utility, or other organization will assume ownership of Work being constructed under the Contract, or if Contract Work is being done in close proximity to facilities owned by third parties, representatives of those organizations may inspect the Work affecting their interest or property. [See 00150.20(d).] Representatives of those organizations should convey instructions or concerns only through the RE or the designated representative from the Project staff (usually the Inspector).

### **A. Inspection Quality Assurance Program**

The purpose of the Agency's Inspection Quality Assurance Program is to provide training and resources for Construction Inspectors and to ensure consistent administration of Highway construction Contracts.

**All** Inspectors working on ODOT construction Projects are required to pass an examination in order to obtain Inspector Certification(s). There are multiple Inspector Certifications available, including:

- Certified Bridge Construction Inspector (CBCI)
- Certified Environmental/Erosion Control Inspector (CECI)
- Certified Drilled Shaft Inspector (CDSI)
- Certified General Inspector (CGI)
- Certified Hot Mixed Asphalt Concrete Inspector (HMAC)
- Certified Traffic Signal Inspector (CTSI)

The intent of the program is that **all** Inspectors working on ODOT construction Projects will possess the General Inspector certification (CGI).

More information on the Agency's Inspection Quality Assurance Program is available online at: <http://www.oregon.gov/ODOT/Construction/Pages/Inspector-Certification-Program.aspx>

## 9-4 Ensuring Contractor Compliance

If the Contractor fails to perform its work according to the terms of the Contract, the RE may take actions as appropriate, such as:

- Suspension of Work
- Withholding payment
- Removal of Contractor personnel (Standard Specification 00180.30)
- Correction of deficiencies at Contractors expense
- Initiation of termination (Standard Specification 00180.10 or 00180.15)

Each of these actions will require the RE to include Notice to the Contractor's Surety.

Because the Contractor is also responsible for **all** actions or inactions of its Subcontractors, the RE will take action against the Contractor if a Subcontractor failed to perform according to the terms of the Contract.

The RE should be proactive to identify and resolve problems before they occur. Some actions might include:

- Assure that the Contractor's Project schedule realistically depicts the Work and has not overlooked Work restrictions or seasonal community events.
- Discuss upcoming Work and significant community events with the Contractor to assure that the Contractor understands its responsibilities and resource needs.
- Discuss contractual requirements with the Contractor, including quality, coordination, sequence of Work, environmental and permit conditions or requirements, submittal procedures, and review processes, etc.