

# ODOT Inspection Certification Program

## Overview

The Inspection Certification Program is one component of ODOT's Inspection Quality Assurance (QA) Program. The Inspection Certification Program provides training and resources for Construction inspectors, and ensures consistent administration of highway construction contracts. Inspection/monitoring of construction activities by certified inspectors promotes industry best practices and helps ensure quality materials and workmanship on ODOT construction projects.

The Inspection Certification Program:

- Improves contractor compliance with approved plans and specifications
- Improves the level of knowledge among construction inspectors
- Provides clear and consistent expectations of inspectors
- Improves the consistency of construction inspection practices
- Reduces the potential for construction claims and other contract disagreements
- Improves construction quality in the State of Oregon
- Complies with federal requirements prescribed in Title 23 of the Code of Federal Regulations (23 CFR 637.207)

## Inspection Certification Program

The Inspection Certification Program requires all inspectors on ODOT construction projects to be certified by ODOT. It is required that all inspectors be certified in General Construction Inspection. Additional discipline-specific certifications are required when performing inspection duties in specific disciplines.

If an inspector is working on a paving project, he/she is required to possess Asphalt Concrete Pavement Inspector (ACP) certification, but is not required to obtain the Certified Bridge Construction Inspector (CBCI) certification until such time that he/she is inspecting Bridge work.

The Project Manager is responsible for all inspection activities on a construction project and, at times, may need to supplement the inspection workforce with non-certified inspectors during periods of heavy construction activity. The program makes allowances for the use of non-certified inspectors.

### ***Certified vs. Non-Certified Inspectors***

Activities that are performed by certified inspectors include the following:

- Inspect the work to ensure it conforms with the plans, specifications and approved changes
- Help ensure quality control testing is being performed as required
- Inform quality assurance personnel of problems or potential problems with field-tested materials
- Record progress and/or delays with the work
- Ensure source documents allow proper payment to the contractor
- Work with the Project Manager, contractor and others to troubleshoot problems with construction
- Provide clear direction and guidance to non-certified inspectors who are assisting with inspection

The Project Manager may assign specific tasks to a non-certified inspector. The Project Manager must ensure that non-certified inspectors have a thorough understanding of their assigned duties. Non-certified inspectors should review the applicable training and/or reference material before performing inspection activities.

Some example duties that could be performed by non-certified inspectors include the following:

- Collect weigh memos and record material receipts
- Work with a certified inspector to monitor specific aspects of a construction activity or process.

In addition, a non-certified inspector on a paving project could be assigned to monitor one or more of the following:

- ACP temperature
- Surface preparation
- Tack coat application
- Rolling patterns
- ACP contamination (e.g., diesel, debris)
- Clumps or crusted mix in the mat or on grade ahead of paver

The certified inspector would be on-site performing other various inspection duties and would be receiving regular project updates from the non-certified inspector.

## **ODOT Inspector Certifications**

The Certified General Inspector Certification is recommended as a pre-requisite, or foundation for all inspection staff.

**Certified General Construction Inspector (CGCI):** Focuses on Standard Specifications, Special Provisions, Contract Plans, Contract Administration, Roles and Responsibilities, QPL, NTMAG, documentation requirements and resources needed for effective inspection.

The following inspector certifications are discipline-specific certifications which expand on concepts learned during the General Inspector training.

**Certified ADA Curb Ramp Inspector:** The class covers the use of the ADA Ramp Inspection forms, the use of tools and measurement guidance, when to submit the forms and where to send them. Participants will be assessing and inspecting various ramps and using the ADA Curb Ramp Inspection forms.

**Certified Asphalt Concrete Pavement Inspector (ACP):** Provides each participant with information and tools to be an effective ACP inspector. Attention is focused on inspection critical to ACP performance and contract documentation requirements.

**Certified Bridge Construction Inspector (CBCI):** Informs inspectors of the various types and methods of bridge construction and proper inspection practice. Topics include bridge foundations, false work inspection, beam seat calculations, reinforcement inspection, post tensioning, deck pre-placement inspections, curing and finishing.

**Certified Drilled Shaft Inspector (CDSI):** Provides inspectors with the practical knowledge and standard industry practices for inspection of drilled shaft construction by providing an overview of the Standard Specification requirements. Submittal requirements, pre-placement inspection of rebar and integrity of the drilled shaft, concrete and slurry requirements, concrete volumes and inspectors check lists to ensure the drilled shaft conforms to contract documents. The drilled shaft inspector certification is not for signal nor sign support drilled shafts.

**Certified Environmental Construction Inspector (CECI):** Informs inspectors of general environmental contract requirement, NPDES permit requirements and Best Management Practices for Erosion and Sediment Control.

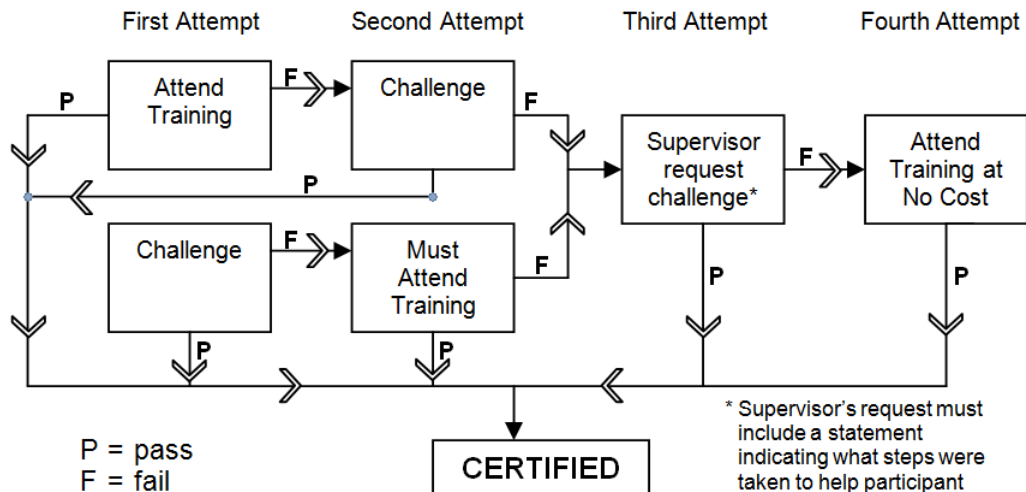
**Certified Traffic Control Technician / Supervisor:** This program trains participants on the fundamental principles of setting up and taking down work zone traffic control. Participants will also learn to read and understand construction Traffic Control Plans.

**Certified Traffic Signal Inspector (CTSI):** Provides the training and resources necessary to properly inspect traffic signals and associated electrical components.

## Certification Process

*Training may be delivered in-person, self-guided or virtually.*

To become certified, inspectors are required to demonstrate minimum competency of inspection processes by passing an examination. In-class training is available, but not required, for each of the inspector certifications. Experienced inspectors may choose to challenge the certification examination without attending in-class training. The following chart shows the certification process for all inspector exams:



The exam for the Certified General Inspector course has two sections; one section focuses on contract plans/special provisions and one section on inspector resources. A passing score must be achieved on both sections to receive the certification. If only one section is passed, the section that was not passed may be taken individually without retaking the entire exam. The inspector will have 180 days after the initial, single section, failed exam date to successfully pass the other section to become certified. If the inspector does not meet this requirement, he/she will be required to retake both sections of the exam.

Training course materials are available for download or purchase<sup>1</sup> through the ODOT Construction Section internet site to allow inspectors who intend to challenge the exam an opportunity for self-study<sup>2</sup>.

The schedule for training courses is set every fall for classes during November through June, although challenge exams can be scheduled year round. The schedule and registration

<sup>1</sup> <https://www.oregon.gov/ODOT/Forms/20DOT/7345110.pdf>

<sup>2</sup> The requirements for each class are outlined at: <https://www.oregon.gov/ODOT/Construction/Pages/Inspector-Certification-Program.aspx>

requirements are available on ODOT's Inspection Certification Program website<sup>3</sup>. Training course participants will receive course materials the first day of training as part of the registration.

Training and certification are strongly recommended at the earliest opportunity for new inspectors and other non-certified individuals. Certification exams are readily available for non-certified individuals to challenge. Non-certified individuals who have demonstrated competence on the job are encouraged to challenge the applicable certification exam(s) and obtain proper certification.

Inspector certifications are valid for a 2, 3 or 5<sup>4</sup> year period depending on the type of certification. An inspector must complete an examination to retain his/her certification for an additional 3 to 5 years. The examination may be done through the challenge process or as part of a certification/re-certification class. If a certified inspector receives a failing score on any certification exam, his/her certification will be suspended until a passing score is achieved.

The Quality Assurance Unit will work with all of the training providers to ensure a consistent certification/re-certification process that will measure an inspector's skills and competency.

### ***Certification Examinations***

To apply for a certification, the applicant may either register for one of the approved training classes, where the exam will be administered as part of the class, or submit an application to challenge the exam<sup>5</sup>. Challenge exams will be scheduled at a time that is convenient for ODOT and the applicant.

Exams are:

- a. Open book
- b. Multiple choice and true/false questions about inspection procedures, specifications, plans, and other resource documents
- c. Written exams with times vary from 2-4 hours depending on the certification
- d. Required to have a passing score of 80% for all certifications

### **Documentation of Certification**

<sup>3</sup> <https://www.oregon.gov/ODOT/Construction/Pages/Inspector-Certification-Program.aspx>

\*Supervisor's request must include a statement indicating what steps were taken to help the participant (i.e., Allow time for study and/or coaching by experienced staff and an exam review. The participant can coordinate an exam review through the following email address: [ODOTConstructionTraining@odot.state.or.us](mailto:ODOTConstructionTraining@odot.state.or.us).)

<sup>4</sup> Certified ADA Curb Ramp Inspector Certification is valid for 2 years and Certified Traffic Signal Inspector Certification is valid for 3 years from the date of issue. The remaining certifications are valid for 5 years.

<sup>5</sup> <https://www.oregon.gov/odot/Construction/Pages/Forms.aspx>

Upon the successful completion of the current examination(s), the participant's results will be entered into the official certification registry database. The registry is maintained by the ODOT Construction Section and can be accessed on the internet at the following: <https://highway.odot.state.or.us/cf/techcertdynamic/>. This webpage is considered the participant's official record of ODOT construction certifications.

Results will be emailed to the participant within two weeks of the exam date.