

Part 100 Introduction

Section 101 Foreword

The Traffic –Roadway Section presents the Roadway CAD Manual (RCM), which includes the instructions, procedures, methods, and standards for developing and preparing final Oregon Department of Transportation (ODOT) plans for the roadway portion of the plans. This manual is a supplement to the [ODOT CAD Manual](#) (OCM). It provides the standards used in the preparation of roadway plans using Computer Aided Drafting (CAD) in MicroStation CONNECT format. ODOT staff, consultants, and outside agency personnel are to use the OCM and the RCM to prepare ODOT plans.

ODOT staff and consulting engineer staff working on ODOT projects will perform design services and contract plan production using Bentley MicroStation CONNECT and OpenRoads Designer. All deliverables must be in ODOT's current version of Bentley MicroStation.

Updates to this manual are an ongoing process and revisions are issued as required.

Section 102 Overview

ODOT and its consultants rely on CAD systems to produce contract plans. The CAD system is an integral part of the process as projects progress from project development to final contract plans to construction. CAD files are often shared between internal and external design and construction staff. Consistency and uniformity of CAD files, contract plans, and other products greatly enhances productivity and quality. This is achieved through standardization of the process and products.

Contract plans, specifications, and estimates (PS&E) are the final documents required for the advertisement of a project. The PS&E package is submitted to the ODOT Project Control Office (PCO) for review prior to bid advertisement and award of the construction contract. The plans and special provisions must set forth the work in a clear and concise manner to avoid misinterpretation. It is important to follow both, the instructions in this manual, and the instructions in the OCM.

Drafting and workflow varies between CAD Technicians. This means that plans from different CAD Technicians will have subtle differences. All plans are reviewed for legibility and adherence to the standards found in this manual and the OCM. Plans that are clean, easy to read, and follow ODOT CAD standards will generate fewer mark-ups and the review turnaround time will be much faster.

It is the user's responsibility to ensure that they are using the latest version of this document. Always check [the RCM website](#) for the latest information and updates.

The Parts of this document are named for general topics pertaining to the Roadway portion of contract plans.

Consultants and outside agency personnel working on plan sheets may need to download the ODOT_CONNECT Custom Configuration for MicroStation CONNECT and OpenRoads Designer. The files needed can be found on the [ODOT EAST](#) website.