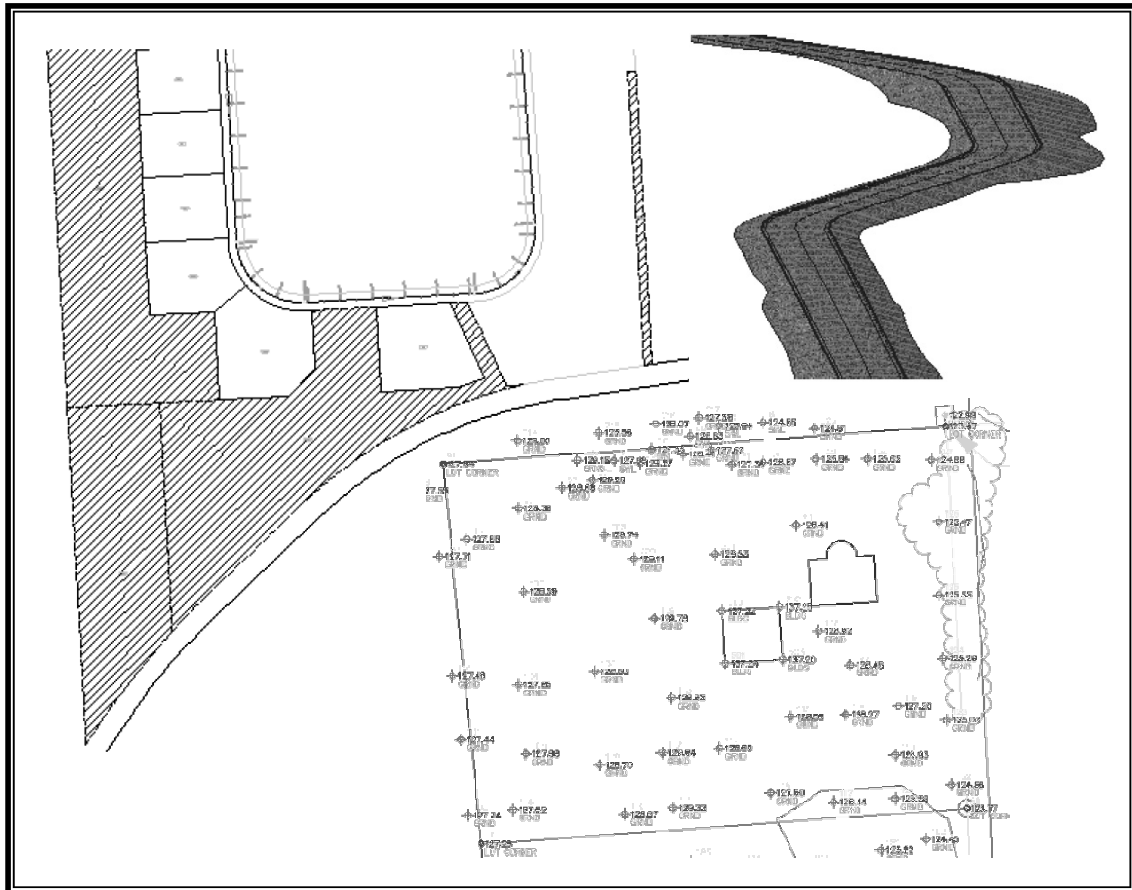


AutoCAD Civil 3D 2009 ESSENTIALS



SDC
PUBLICATIONS

Schroff Development Corporation
www.schroff.com

Better Textbooks. Lower Prices.

Contents

Preface.....	v
Introduction.....	vii
Module 1: The AutoCAD Civil 3D Interface, Project Structure, and Points.....	1-1
Section 1: The AutoCAD Civil 3D Interface.....	1-2
Product Overview.....	1-3
AutoCAD Civil 3D Workspaces.....	1-4
AutoCAD Civil 3D Menu Browser.....	1-5
AutoCAD Civil 3D Toolspace.....	1-6
AutoCAD Civil 3D Panorama.....	1-15
Self Check: The AutoCAD Civil 3D Interface.....	1-25
Section 2: Project Setup.....	1-26
Settings and Templates.....	1-27
Creating Project Drawings.....	1-28
AutoCAD Civil 3D Projects.....	1-30
Self Check: Project Setup.....	1-36
Section 3: Points and Point Groups.....	1-37
Points Overview.....	1-38
Importing and Exporting Points.....	1-40
Reviewing and Editing Points.....	1-42
Creating Points.....	1-51
Referencing Points.....	1-54
Point Groups.....	1-58
Description Key Sets Overview.....	1-60
Self Check: Points and Point Groups.....	1-63
Optional Practices.....	1-64
Module 2: Surfaces.....	2-1
Section 1: Surface Overview.....	2-2
Surface Process.....	2-3
Overview of Surface Styles.....	2-9
Surface Properties.....	2-10
Breaklines and Boundaries.....	2-18
Contour Data.....	2-24
Other Surface Data.....	2-28
Surface Analysis Tools.....	2-29
Self Check: Surface Overview.....	2-42
Section 2: Surface Editing.....	2-43
Surface Editing.....	2-44

Adjusting Surfaces through Surface Properties	2-51
Self Check: Surface Editing	2-58
Section 3: Surface Labels and Analysis	2-59
Surface Labels	2-60
Surface Volume Calculations	2-61
Surface Analysis Display	2-62
Viewing Surfaces in 3D	2-64
Self Check: Surface Labels and Analysis	2-74
Optional Practices	2-75
Module 3: Sharing Data Between Drawings.....	3-1
Section 1: Shortcuts	3-2
Sharing Data	3-3
Optional Practices	3-7
Section 2: Vault.....	3-18
Vault Overview	3-19
Using the Vault Client.....	3-22
Self Check: Shortcuts and Vault	3-37
Module 4: Alignments and Profiles	4-1
Section 1: Alignments.....	4-2
Roadway Design Overview.....	4-3
AutoCAD Civil 3D Sites.....	4-4
Alignments	4-5
Alignment Properties.....	4-18
Alignment Styles	4-20
Labels and Tables.....	4-21
Self Check: Shortcuts and Alignments.....	4-28
Section 2: Profiles	4-29
Profiles Overview.....	4-30
Create Profiles from Surface	4-32
Create Profile View Wizard	4-33
Finished Ground Profiles	4-44
Creating and Editing Profiles	4-45
Self Check: Profiles.....	4-58
Section 3: Productivity Tools.....	4-59
Plan Production Tools	4-60
Self Check: Productivity Tools	4-62
Optional Practices	4-63
Module 5: Assemblies, Corridors, and Sections	5-1
Section 1: Assemblies	5-2
Assembly Overview	5-3
Modifying Assemblies	5-6

Self Check: Assemblies.....	5-15
Section 2: Corridors	5-16
Creating a Corridor.....	5-17
Corridor Properties.....	5-19
Corridor Surfaces	5-29
Corridor Section Review and Edit	5-31
Self Check: Corridors.....	5-39
Section 3: Sections	5-40
Sample Line Groups.....	5-41
Section Views.....	5-47
Section Volume Calculations	5-56
Self Check: Sections.....	5-65
Optional Practices	5-66
Module 6: Parcels.....	6-1
Section 1: Parcels Overview	6-2
Introduction to Parcels	6-3
Parcel Styles and Settings	6-5
Create Parcels from Objects.....	6-10
Self Check: Parcels Overview.....	6-20
Section 2: Subdividing Parcels	6-21
Creating and Editing Parcels by Layout Overview	6-22
Creating and Editing Parcel Techniques	6-25
Self Check: Subdividing Parcels.....	6-41
Section 3: Parcel Reports, Annotation, and Tables.....	6-42
Parcel Reports	6-43
Parcel Labels	6-44
Renumbering Parcels.....	6-46
Parcel Tables	6-47
Self Check: Parcel Reports, Annotation, and Tables	6-55
Optional Practices	6-56
Module 7: Grading, Pipes, and Production Tools	7-1
Section 1: Grading	7-2
Grading Overview.....	7-3
Configuring AutoCAD Civil 3D Grading.....	7-7
Self Check: Grading.....	7-26
Section 2: Creating Pipe Networks	7-27
AutoCAD Civil 3D Pipes Overview	7-28
Pipes Configuration.....	7-30
The Network Layout Toolbar.....	7-38
Creating Networks from Objects.....	7-40
Self Check: Creating Pipe Networks.....	7-53
Section 3: Pipe Editing and Annotation	7-54
Network Editing	7-55

Annotating Pipe Networks	7-57
Self Check: Pipe Editing and Annotation	7-64
Section 4: Productivity Tools.....	7-65
Labeling Features	7-66
Inquiries and Reporting.....	7-68
Self Check: Productivity Tools	7-78
Optional Practices	7-79
Appendix.....	8-1
How to Learn More	8-2
AutoCAD Civil 3D Template Layers Summary	8-3
Survey Tab (AutoCAD Civil 3D Toolspace).....	8-5
Drawing Settings in Detail	8-7
Styles in Depth	8-11
Description Key Sets.....	8-23
Surface Styles.....	8-25
Grouping Methods for Surface Analysis.....	8-28
Creating a Custom AutoCAD Civil 3D Template	8-32
Index.....	9-1
Index.....	9-2