

CADD Production Criteria Handbook (CPCH)

Record of Changes

FDOT2010 MR4 Update

NOTE: Updated all Chapter headers to reflect current update information.

Chapter	Description
Chapter 1	Introduction
1.1	<u>Purpose</u>
	In the last sentence, changed "...outlines the minimum standards necessary to ensure a usable and predicabile..." to read "outlines minimum standards necessary to ensure a usable, consistent and predicabile"
1.2	<u>Scope</u>
	Replaced the verbiage "guidelines" to read "requirements"
1.3	<u>General</u>
	Replaced the verbiage "Engineering / CADD Systems" to read "Engineering / CADD Systems Office (ECSO)"
1.4	<u>Distribution</u>
	Updated links.
1.5	<u>Procedure for Revisions and Updates</u>
	Removed discontinued On-line Support Survey Monkey link.
1.6	Added new section: <u>Glossary of Terms</u> moved from Chapter 24 Appendix
	Added new entries for clarification of Classical Electronic Delivery and Digital Delivery: Certified Authority, Classical Electronic Delivery, Digital Certificate, Digital Delivery, Digital Signature, Document Image File, Electronic Delivery Indexer (EDI), Electronic Journal, Electronic Signature, Engineering Data, File Checker, Graphics Design File, PDF Portfolio, Project Component, Project Component Directory, Project Directory, Project Index File, Root Certificate, Sheet Index, Supporting CADD Files
1.7	Added new section: <u>Abbreviations</u> moved from Chapter 24 Appendix
	No modifications.
1.8	Added new section: <u>Referenced Documents</u> moved from Chapter 24 Appendix
	Updated links.
Chapter 2	FDOT CADD Software
2.1	<u>General</u>
	Added verbiage to update current software release procedures and to include FDOT's acceptance of AutoCAD Civil 3D platform.
2.2	<u>Distribution</u>
	Added verbiage to update current distribution procedures and responsible parties.
2.3	<u>Support</u>
	Replaced the verbiage "...FDOT developed software" to read..." ...FDOT developed software modules..."
2.4	<u>Supported Products</u>
	No modifications.
2.5	<u>Minimum System Requirements</u>
	Updated software versioning.
2.6	<u>Translation of Files</u>
	Added verbiage to include FDOT's AutoCAD Civil 3D required information.
Chapter 3	Resource & Support Files
3.1	<u>General</u>
	Removed "The FDOT Menu (running inside of MicroStation) is a doorway into this customization."
3.2	<u>Database</u>
	Updated software versioning and added verbiage to include FDOT's AutoCAD Civil 3D required information.
3.3	<u>Control Files</u>
	No modifications.
3.4	Added new section: <u>AutoCAD Civil 3D Standards</u> to include FDOT's AutoCAD Civil 3D required information.
3.4 3.5	Renumbered section: <u>MicroStation Seed Files</u>
	Added verbiage to include FDOT's AutoCAD Civil 3D required information.
3.5 3.6	Renumbered section: <u>Levels and Symbology</u>
	Added last paragraph to include FDOT's AutoCAD Civil 3D required information.
3.5.1 3.6.1	Renumbered section and changed title from: <u>Levels</u> to read <u>Levels and Layers</u>
	Added verbiage to include FDOT's AutoCAD Civil 3D required information.
3.5.2 3.6.2	Renumbered section and changed title from: <u>Color Tables</u> to read <u>Color</u>

Chapter	Description
	Added verbiage to include FDOT's AutoCAD Civil 3D required information.
3.5.3 3.6.3	Renumbered section: <u>Line Weight</u>
	Added verbiage to include FDOT's AutoCAD Civil 3D required information.
	Replaced the verbiage "plot" to read "print"
3.5.4 3.6.4	Renumbered section: <u>Line Styles</u>
	Added verbiage and table to include FDOT's AutoCAD Civil 3D required information.
3.5.4.1 3.6.4.1	Renumbered section: <u>Standard English Line Style Measurements for Printing</u>
	Updated Line Style table
3.5.4.2 3.6.4.2	Renumbered section: <u>FDOT Custom Line Style Resource Files</u>
	Added verbiage to clarify FDOT Line Style resouce files.
3.5.4.3 3.6.4.3	Renumbered section: <u>Custom Line Style Graphic</u>
	No modifications.
3.6 3.7	<u>Renumbered section: Printer Driver Configuration Files</u>
	Second paragraph, removed last verbiage " to print to scale "
3.7 3.8	Changed title from: <u>Cell Libraries</u> to read <u>Cell / Block Libraries</u> to include FDOT's AutoCAD Civil 3D required information.
	Added verbiage and column in table to include FDOT's AutoCAD Civil 3D required information.
	Removed <u>3D.cel</u> cell library and added <u>Seals.cel</u> Professional Seals for Digital Signatories
3.8 3.9	<u>Renumbered section: Text</u>
3.8.1	Fonts Removed section title and included verbiage under 3.9 <u>Text</u>
	Added verbiage regarding the inclusion of additional engineering symbols.
3.8.1.1 3.9.1	Renumbered section: <u>FDOT True Type Fonts (TTF)</u>
	Added "FDOT Heavy", "FDOT Mono Heavy", "FDOT Vert Heavy", and "FDOT Vert MonoHeavy" font options to table.
3.8.1.2 3.9.2	Renumbered section and changed tite from: <u>MicroStation Fonts</u> to read: <u>Legacy MicroStation Fonts</u>
3.9.3	Added back section: <u>Size and Spacing</u>
Chapter 4	CADD Standard Rules
4.1	<u>Standard Rules</u>
	Updated verbiage to clarify language for the inclusion of dual software platforms. Corrected rule names (msarsp and spst10) to match current spelling.
4.2	<u>Standard Rule Tables</u>
	Added verbiage to identify the use of the MasterStandards.xlsx file and clarification of input information to denote Critical vs Non-critical Levels and new settings for Quality Control checking.
4.2.1	<u>ALGNRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.2	<u>AUTOSP</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.3	<u>CLIPRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.4	<u>DRDTRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.5	<u>DREXRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Removed Level: EndTreat_ep
	Removed Level/Feature: DrainMisc_ep/BAS
	Added New Levels: Basin_ep, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp

Chapter	Description
4.2.6	<u>DRMPRD</u>
	Renamed Rule from 'Drainage Mapping' to 'Drainage Map'
	Removed Level: ArtificialCovering
	Level Description update on: DrainAlert_px, EaseLicLine, PointLocator_ep
	Changed Critical Level settings on: SedimentBarrier
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.7	<u>DRPRRD</u>
	Level Description update on: DrainAlert_px, EaseLicLine, PointLocator_ep
	Changed Critical Level settings on: EasePerpLine, EaseTempLine, SedimentBarrier
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.8	<u>DRXSRD</u>
	Level Description update on: DrainAlert_px, EaseLicLine, EasePerpLine_px, EaseTempLine_px, PointLocator ep
	Changed Critical Level settings on: EasePerpLine_px, EaseTempLine_px
	Added New Levels: GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport, Wetland_ex, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06 dp. Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp
4.2.9	<u>DSGNLD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Changed symbology on: SlopeArea, StakingArea, TreeMaintArea
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.10	<u>DSGNLT</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06 dp. Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp
4.2.11	<u>DSGNRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep, EaseTempLine_ep, TurbidityBarrier2_ep, TurbidityBarrier1 ep
	Changed Critical settings on: Driveway, EasePerpLine, EaseTempLine, EaseTempLine_ep, SedimentBarrier
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.12	<u>DSGNSG</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Changed symbology on: JunctBox_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06 dp. Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp
4.2.13	<u>DSGNSP</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Changed symbology on: NorthArw_dp, RPM_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06 dp. Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp
4.2.14	<u>DTMRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09 dp. Xreference10 dp
4.2.15	<u>GEOTECH</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: GeotechFillPatt8, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07 dp.Xreference08 dp. Xreference09 dp. Xreference10 dp
4.2.16	<u>GSWKSP</u>

Chapter	Description
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.17	<u>IRRGLD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.18	<u>ITSSP</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, Fiber01Blue_ep, Fiber02Orange_ep, Fiber03Green_ep, Fiber04Brown_ep, Fiber05Slate_ep, Fiber06White_ep, Fiber07Red_ep, Fiber08Black_ep, Fiber09Yellow_ep, Fiber10PurpleV, Fiber11Rose_ep, Fiber12Aqua_ep, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.19	<u>KEYSHT</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.20	<u>MRARSP</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.21	<u>OPEN</u>
	No change
4.2.22	<u>PDXSRD</u>
	Level Description update on: DrainAlert_px, EaseLicLine, PointLocator_ep
	Change symbology on: Concrete_px,
	Change Critical settings on: EaseLine_ep, EasePerpLine_px, EaseTempLine_px
	Added New Levels: GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport, Wetland_ex, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.23	<u>PLANRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.24	<u>PLPRRD</u>
	Level Description update on: DrainAlert_px, EaseLicLine, PointLocator_ep, SignMulti_ep, TopoMisc_ep, WaterMisc_ep, Wells_ep
	Changed symbology on: FireHydrant_ep, FloodLight_ep, Gauges_ep, Luminaire_ep, PumpNonPet_ep, SpanWire_ep, Sprinkler_ep, TeleMisc_ep, Valve_ep, ValveCover_ep, ValveCvrEff_ep, ValveCvrGas_ep, ValveCvrSewer_ep, ValveCvrWater_ep, ValveCvrWaterNP_ep, ValveGas_ep, ValveSewer_ep, ValveWater_ep, ValveWaterNP_ep, WaterMisc_ep, Wells_ep
	Removed Level: DrainMisc_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.25	<u>QTDSRD</u>
	Added existing level EOP to Standard Rule: QTDSRD
	Level Description update on: EaseLicLine, PointLocator_ep
	Changed Critical settings on: Driveway, SedimentBarrier
	Added New Levels: EOP, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.26	<u>RDSXRD</u>

Chapter	Description
	Level Description update on: DrainAlert_px, EaseLicLine, EaseLine_ep, EasePerpLine_px, EaseTempLine_px, PointLocator_ep
	Changed Critical settings on: EaseLine_ep, EasePerpLine_px, EaseTempLine_px
	Changed symbology on: InletBottom_px, WetlandEdge_ep
	Added New Levels: GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport, Wetland_ex, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.27	<u>RDXSSP</u>
	Level Description update on: DrainAlert_px, EaseLicLine, EaseLine_ep, EasePerpLine_px, EaseTempLine_px, PointLocator_ep
	Changed Critical settings on: EaseLine_ep, EasePerpLine_px, EaseTempLine_px
	Changed symbology on: InletBottom_px, TeleBur_px
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport, Wetland_ep, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.28	<u>RWDTRD</u>
	Level Description update on: EaseLicLine, EaseLine_ep, EasePerpLine, EaseTempLine, EaseTempLine_ep, GovTwpRgeLine_ep, LARWLine, LARWLine_ep, PointLocator_ep, PropertyLine_ep, RWLine, RWLine_ep
	Change Critical settings on: EaseTempLine_ep
	Added New Levels: ScratchEle2_dp, Viewport, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.29	<u>RWENG10 (Moved from Chapter 9)</u>
	Updated Critical settings to specify checking criteria
	Corrected by-level weights
	Level Description update on: PointLocator_ep, SheetLinesSignature_dp, TopoMisc_ep
	Added New Levels: ScratchEle2_dp, Viewport, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.29 4.2.30	Renumbered section: <u>TCDSRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep
	Changed Critical settings on: EasePerpLine, EaseTempLine, SedimentBarrier
	Added New Levels: ScratchEle2_dp, Viewport, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.29 4.2.31	Renumbered section: <u>TOPORD</u>
	Level Description update on: BarrierWall_ep, Bridge_ep, Monument_ep, PointLocator_ep, SignalMisc_ep, Slopes_ep, TextSurveyLabel, TopoMisc_ep, Tree_ep, WetlandSym_ep
	Updated symbology: Beacons_ep, BLSurveySymbl_ep, CableBarrier_ep, FloodLight_ep, Hole_ep, Mailbox_ep, MiscEquip_ep, Signal_ep, SpanWire_ep, TankUG_ep, Wetland_ep, WetlandEdge_ep, WetlandSym_ep
	Removed Level: EnvImpact_ep
	Removed Levels/Feature: Gates_ep/CGD, Pump_ep/PMPIS, StreamMisc_ep/DF
	Added Levels/Feature: Bollard_ep/BOL, CattleGuard_ep/CGD, Dolphins_ep/DF, GroundShot_ep/GDN, Pumpisland_ep/PMPIS, SpanWire_ep/SSW
	Added New Levels: ScratchEle2_dp, Viewport, Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp, Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.29 4.2.32	Renumbered section: <u>TOPORW</u>
	Level Description update on: Bridge_ep, Gates_ep, MiscEquip_ep, PointLocator_ep, Power_ep, RailroadMisc_ep, SateDish_ep, SignSingle_ep, Silo_ep, TankStor_ep, TextSurveyLabel, TopoMisc_ep, Wells_ep, WetlandEdge_ep
	Changed symbology on: JunctBox_ep, Luminaire_ep
	Changed Critical settings on: RRTextWt0
	Added Levels/Feature: BarrierWall_ep/TMPW, Basin_ep/BAS, MiscEquip_ep/PKGM, PolePower_ep/PP, PolePower_ep/PPT, PolePower_ep/SHP, PolePower_ep/SHPT, PoleTel_ep/TELP, Power_ep/PWR, Pumpisland_ep/PMPIS, RailroadMisc_ep/RRS, RailroadMisc_ep/RRWS, RailroadMisc_ep/SWG, SignMulti_ep/SMS, Tower_ep/HML, Wetland_ep/DEP, WetlandEdge_ep/COE, WetlandEdge_ep/EM, WetlandEdge_ep/MAR
	Removed Levels/Feature: DrainMisc_ep/BAS, Pump_ep/PMPIS

Chapter	Description
	Added New Levels: ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10_dp
4.2.29- 4.2.33	Renumbered section: <u>TYPDRD</u>
	Level Description update on: EaseLicLine, EasePerpLine_px, EaseTempLine_px, PointLocator_ep
	Changed Critical settings on: EasePerpLine, EasePerpLine_px, EaseTempLine, EaseTempLine_px
	Changed symbology on: InletBottom_px
	Added New Levels: GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07 dp,Xreference08 dp, Xreference09 dp, Xreference10 dp
4.2.29- 4.2.34	Renumbered section: <u>TYPSRD</u>
	Level Description update on: EaseLicLine, EasePerpLine_px, EaseTempLine_px, PointLocator_ep
	Change Critical settings on: EasePerpLine, EasePerpLine_px, EaseTempLine, EaseTempLine_px
	Change symbology on: InletBottom_px
	Added New Levels: GeotechFillPatt8, GeotechFillPatt8_px, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07 dp,Xreference08 dp, Xreference09 dp, Xreference10 dp
4.2.29- 4.2.35	Renumbered section: <u>UTADRD</u>
	Level Description update on: EaseLicLine, PointLocator_ep, SignMulti_ep, TopoMisc_ep, WaterMisc_ep, Wells ep
	Change symbology on: CATVMisc_ep, FireHydrant_ep, FloodLight_ep, Gauges_ep, Guys_ep, Luminaire_ep, ManholeCover_ep, ManholeCovUnk_ep, ManholeCovW_ep, ManholeElec_ep, ManholeGas, ManholeGas_ep, ManholeSS, ManholeSS_ep, ManholeSW, ManholeSW_ep, ManholeTel, ManholeTel_ep, MeterElec_ep, MeterGas_ep, MeterUnk_ep, MeterWater_ep, PolePower_ep, PoleTel_ep, PowerMisc_ep, PumpNonPet_ep, SanitaryMisc_ep, SateDish_ep, Signal_ep, SpanWire_ep, Sprinkler_ep, TeleMisc_ep, Valve_ep, ValveCover_ep, ValveCvrEff_ep, ValveCvrGas_ep, ValveCvrSewer_ep, ValveCvrWater_ep, ValveCvrWaterNP_ep, ValveGas_ep, ValveSewer_ep, ValveWater_ep, ValveWaterNP_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, Core_ep, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05 dp, Xreference06 dp, Xreference07 dp,Xreference08 dp, Xreference09 dp, Xreference10 dp
4.2.29- 4.2.36	Renumbered section: <u>UTEXRD</u>
	Level Description update on: Gas_ep, PointLocator_ep, Power_ep, PowerBur_ep, TeleBur_ep, TeleMisc_ep, Valve_ep, ValveCover_ep, ValveGas_ep, ValveSewer_ep, ValveWaterNP_ep, Vault_ep, WaterMisc_ep, Wells ep
	Updated by-level Style and Weight symbology on most of the levels
	Remove Levels: Core_ep,
	Remove Level/Features: FOBur_ep/FOP, FOBur_ep/FOPU, ValveCvrWater_ep/VCRW, WaterMisc ep/WELL
	Added new Level/Features: SanitaryMisc_ep/PMPST, ValveBFP_ep/VLVB, ValveCvrWaterNP_ep/VCRW
	Added New Levels: Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06_dp, Xreference07_dp,Xreference08_dp, Xreference09_dp, Xreference10 dp
4.2.29- 4.2.37	Renumbered section: <u>UTPRRD</u>
	Level Description update on: EaseLicLine, ManholeCvrUnk, PointLocator_ep, SignMulti_ep, TopoMisc_ep, WaterMisc ep, Wells ep
	Change LineStyle and/or Weight symbology on: Beacons_ep, CATVMisc_ep, FireHydrant_ep, FloodLight_ep, Gauges, Gauges_ep, Guys_ep, JunctBox_ep, Luminaire_ep, ManholeCover_ep, ManholeCovUnk_ep, ManholeCovW_ep, ManholeElec_ep, ManholeGas_ep, ManholeSS_ep, ManholeSW_ep, ManholeTel_ep, MeterElec_ep, MeterGas_ep, MeterUnk_ep, MeterWater_ep, PolePower_ep, PoleTel_ep, PowerMisc_ep, PumpNonPet_ep, SanitaryDumpSta_ep, SanitaryMisc_ep, SateDish_ep, Signal_ep, SpanWire_ep, Sprinkler, Sprinkler_ep, TeleBur_px, TeleMisc_ep, Tower, Tower_ep, UtilsProposed, Valve_ep, ValveCover, ValveCover_ep, ValveCvrEff, ValveCvrEff_ep, ValveCvrGas, ValveCvrGas_ep, ValveCvrSewer, ValveCvrSewer_ep, ValveCvrWater, ValveCvrWater_ep, ValveCvrWaterNP, ValveCvrWaterNP_ep, ValveGas, ValveGas_ep, ValveSewer, ValveSewer_ep, ValveWater, ValveWater_ep, ValveWaterNP_ep, Vault_ep, Vent_ep, VentGas_ep, VentSewer_ep, WaterMisc_ep, Wells_ep
	Added New Levels: ConduitAG, ConduitBM, ConduitDB, ConduitJB, ConduitOT, ScratchEle2_dp, Viewport ,Xreference_dp, Xreference01_dp, Xreference02_dp, Xreference03_dp, Xreference04_dp, Xreference05_dp, Xreference06 dp, Xreference07 dp,Xreference08 dp, Xreference09 dp, Xreference10 dp
Chapter 5	Production Procedures
5.1	Changed section title from <u>Exceptions</u> to read <u>Introduction</u>
	Added verbiage for clarification.
5.2	<u>Standard Project Directory</u>

Chapter	Description
	Added verbiage for clarification.
5.2.1	Added new section: <u>Classical Electronic Delivery –vs– Digital Delivery Projects</u> for inclusion of FDOT's acceptance of Digital Delivery process.
5.2.1 5.2.2	Renumbered section and changed title from: <u>Create Project Procedure</u> to read: <u>Create Project</u>
	Verbiage added for inclusion of FDOT's acceptance of the alternative Digital Delivery.
5.2.2 5.2.3	Renumbered section: <u>Discipline Sub-Directories</u>
	First paragraph, first sentence, removed last verbiage " <i>not necessarily the type of work</i> "
	Last paragraph, changed "(TIMS, ProjectWise, etc.)" to read "(for access control systems such as TIMS, ProjectWise, etc.)" and removed last verbiage ", which leads to questions such as: Does the 'roadway' designer have permission to write to the \Drainage sub-directory?"
5.2.2.1 5.2.3.1	Renumbered section: <u>Sub-Directories Under the Discipline Directories</u>
	First sentence, changed verbiage from "advantageous" to read "desirable"
	Second sentence, added verbiage ", or when subdivision of the files into additional folders just makes sense"
	Last sentence, changed verbiage from "sub-directories as defined in Section 5.1.3 of this handbook." to read "sub-directory names as defined in the following section of this handbook."
5.2.3 5.2.4	Renumbered section: <u>Custom Sub-Directories</u>
	Second paragraph, verbiage added/changed for clarification of FDOT custom sub-directories.
	Third paragraph, added verbiage to clarify path information.
5.2.4 5.2.5	Renumbered section and changed title from: <u>Engineering Data Directory</u> to read <u>Engineering Data Sub-directories</u>
	Added/changed verbiage to clarify Classical Delivery vs Digital Delivery process.
5.2.5 5.2.6	Renumbered section: <u>Standard Project Directory Format</u>
	Added/changed verbiage to clarify Classical Delivery vs Digital Delivery process.
5.3	<u>Standard File Names</u>
	Added/removed minor verbiage for clarification
5.3.1	<u>Standard Design File Naming Convention</u>
	Added/removed minor verbiage for clarification
5.3.2	Changed title from: <u>Print File Naming Convention</u> to read <u>Print Image File Naming Convention</u>
	First paragraph, added/changed verbiage to clarification in regards to Sheet Navigator.
	Added last four paragraphs for the inclusion of FDOT's acceptance of AutoCAD Civil 3D platform and Digital Delivery.
5.3.2.1	<u>Sheet Numbers</u>
	Added verbiage for clarification.
5.3.2.2	Changed title from: <u>Print File Naming Format</u> to read: <u>Print Image File Naming Format</u>
	Added last four paragraphs for the inclusion of FDOT's acceptance alternate option of Digital Delivery.
5.3.3	<u>Standard File Name Extensions</u>
	Minor verbiage changes for clarification.
5.3.4	<u>Duplicate Files</u>
	This section re-written to clarify current identification of duplicate files with the inclusion of AutoCAD Civil 3D platform requirement.
5.4	<u>Reference Files</u>
	First paragraph, minor verbiage changes for clarification.
	Removed second paragraph: " <i>In order to allow a project to be moved to a different drive without the loss of reference file attachments, specifically at the time of delivery to FDOT, the reference files must be attached such that MicroStation can resolve the reference file attachments regardless of the project directory location. Reference files shall be attached using the file name only, without the full path. Thus the option to "Save Full Path" when attaching reference files shall not be used. Always attach using relative path to the project root folder, allowing the project to be moved from drive to drive without losing the reference file attachments when accessed through the FDOT workspace. If one is certain of the uniqueness of reference file names, an attachment using no path should be used.</i> "
5.5	<u>File Sharing and Merging</u>
	Added verbiage for the inclusion of Classical Delivery vs Digital Delivery.
	Removed the last paragraph: " <i>Because Roadway files are referenced by other disciplines and the elements are possibly used in quantity calculations, it may be necessary to break these elements at key points to assist the other disciplines in using the information in a logical manner. This can be accomplished by re-drawing the element(s) with logical breaks so it is not one long unmanageable element. Place breaks to coincide with sheet clip borders, or place the breaks at angular breaks in the element. Clip masking may also be used.</i> "
5.6	<u>Project Indexing and Journaling</u>

Chapter	Description
	No modifications
5.6.1	<u><i>Index Guidelines and Format</i></u>
	Added verbiage for the inclusion of Classical Delivery vs Digital Delivery and AutoCAD Civil 3D.
5.6.2	<u><i>Journal Guidelines and Format</i></u>
	Added/changed verbiage for clarification.
Chapter 6	<i>Printing Image Files</i>
6.1	<u><i>Prints</i></u>
	Added/removed verbiage for the inclusion of Classical Delivery vs Digital Delivery and AutoCAD Civil 3D and to clarify current printing requirements.
6.2	<u><i>Print Borders</i></u>
	Created Note at the end of section.
6.3	<u><i>Image Files</i></u>
	Removed first two paragraphs: <i>"FDOT policy states that all construction plans prepared by and for FDOT, either by in-house staff or by consultants, shall be totally prepared using CADD. This involves the delivery of an "image" of the plan sheets in electronic format.</i> <i>PostScript was originally selected as the format for the electronic version of the plan sheet image. Postscript is the most widely used, open standard in the publishing and reprographics industry. In addition, MicroStation, at no additional cost, does an excellent job of producing a PostScript file to scale, with grayscales, halftones and color. The PostScript plan sheet images can be printed at any scale while maintaining adequate resolution.</i>
	Removed third paragraph: <i>There are "freeware" PostScript file viewers available. GSView, a free post script viewer, is available for download from Engineering CADD Systems Office (ECSO) website. The PostScript image files for the plan sheets are produced the same way a paper print is generated, except a MicroStation PostScript print driver is used. See also section 6.4 below. If the Engineer of Record signs and seals these files with the Professional's Electronic Data Delivery System (PEDDS), then those files will be the official record document and any paper prints (if desired) will be considered only copies of the official legal record."</i>
	Fifth paragraph becomes the first. Added verbiage to clarify current PDF requirements and removed <i>"FDOT is adapting printing to this format as well. However, FDOT has experienced issues with PDF file fidelity in the vector graphics contained in PDF files. These were very rare and it is believed those issues are resolved in the contemporary print drivers supplied by vendors."</i>
	Updated specific discipline Rule Numbers.
6.4	Changed title from: <u><i>Inclusion of Electronic Plan Sheets</i></u> to read <u><i>Foreign Plan Sheets</i></u>
	First paragraph, added verbiage for clarification and added last sentence.
	Second paragraph, added minor verbiage for clarification and removed last sentence: <i>"Each sheet should be scanned to its own single file that is one sheet per file, however some Districts prefer scanned documents included as a multi-page PDF or Postscript (multiple sheets per scanned file), so check with your Project Manager."</i>
	Third paragraph, changed <i>"...are also alphanumeric, and..."</i> to read <i>"...should closely follow the conventions described in Chapter 5 of this Handbook, and names..."</i> .
	Fourth paragraph, changed <i>"...signed and sealed electronically. However they may be signed-only (not sealed) electronically by a responsible party to take accountability for their inclusion in the electronic plans set."</i> to read <i>"signed and sealed electronically - with either PEDDS or Digital Signature, however they may be signed-only (not sealed) by a responsible party to take accountability only for their inclusion within a contemporary electronic plans set (using the appropriate qualifiers or exculpatory language)"</i>
6.5	<u><i>FDOT Print Drivers</i></u>
	Added <i>"...from printer model to printer model. It is the sole responsibility of the person performing the prints to ensure hardcopy printing is operating acceptably for their hardware."</i> to the last sentence.
6.5.1	<u><i>MicroStation Half-Toning</i></u>
	Added minor verbiage for clarification.
6.5.2	<u><i>Quality and Reproduction</i></u>
	Added minor verbiage for clarification.
Chapter 7	<i>CADD Quality Assurance / Quality Control</i>
7.1	<u><i>General</i></u>
	Added minor verbiage for clarification.
7.2	Changed title from: <u><i>Preservation of the Professional of Record</i></u> to read: <u><i>The Professional of Record</i></u>
	Added verbiage for the inclusion of Digital Signing and Sealing.
7.3	<u><i>Electronic Delivery Process Management</i></u>

Chapter	Description
	Changed verbiage "Realizing that each district has a slightly different workflow, it is expected that district management plans comply with the CADD Manual." to read: "It is expected that quality control plans comply with the CADD Manual and this Handbook."
7.4	<u>Quality Assurance (QA) - Central Office Role</u>
	Added minor verbiage for clarification.
7.4.1	<u>QA Reports</u>
	Added minor verbiage for clarification.
7.5	<u>Quality Control (QC) – Data Producers' Role</u>
	Added/removed verbiage for clarification
	Important: <note> - Removed last sentence: "The only access to the old GDM QC Software will be under the FDOT menu option: Actions > Cleanup and QC Utilities > GDM QC Software."
7.5.1	<u>FDOT FileChecker</u> - REMOVED included in training/help documents.
7.5.1.1	<u>FileCheckers Interface</u> - REMOVED included in training/help documents.
7.5.1.2	<u>FileCheckers Reports</u> - REMOVED included in training/help documents.
7.5.2	<u>Quality Control (QC) Software</u> - REMOVED included in training/help documents.
7.5.2.1	<u>QC Quick</u> - REMOVED included in training/help documents.
7.5.2.2	<u>QC Batch Report</u> - REMOVED included in training/help documents.
Chapter 8	Electronic Delivery Procedure
8.1	<u>General</u>
	Leaving the first sentence, removed all verbiage following: "The first stage of electronic delivery is by far the shortest and only performed once. All tasks performed during this stage center around preparing the folders and files needed for electronic delivery. The FDOT electronic delivery software suite contains tools needed to create a seed project which will provide the files necessary to begin production work. The second stage of the electronic delivery process centers on the tasks involved in producing the delivery and a secure file set to the FDOT. This stage not only includes the production of design work for the project, but a number of tasks that assist in electronic delivery, such as preparing a project journal, indexing sheets, preparing reports, signing and sealing sheets, and other non-design related activities. Once the design of a project has been completed, packaged, or secured and delivered to the Department, certain activities will be done by the Department to authenticate the data, preserve, and advance the project to letting."
	Added Note regarding Glossary of Terms found in Chapter 1.6.
8.2	<u>Glossary</u> Moved to Chapter 1.6
8.3 8.2	Renumbered section: <u>Project Data Set Contrasted to the Bid Set</u>
	Added verbiage and table to clarify inclusion of Classical Electronic Delivery and Digital Delivery.
8.3	Added new section: <u>Project Directory / Bid Set Examples</u> to clarify the samples for Classical Electronic Delivery.
8.4	Changed title from: <u>Revision File Name Conventions for Electronic Delivery</u> to read: <u>File Name Conventions for Electronic Delivery</u>
8.4.1	Added new section: <u>Classical Electronic Delivery Projects</u> to clarify current electronic delivery requirements.
	Added Specification file names line items to the table.
	Added "Note: Multiple TSP files may exist in the delivery."
8.4.2	Added new section: <u>Digital Delivery Projects</u> to clarify the file naming requirements of Digital Delivery.
8.5	<u>Pre-Production</u>
	First paragraph, changed verbiage from "Activities include the specification ..." to read "Activities include the creation..."
	Second paragraph, removed the last half: "... should be made available to the prime consultant, or the prime consultant could create his own "seed project" with the appropriate information and tools provided. If the prime consultant subcontracts parts of the project, it is the prime's responsibility to provide to his subcontractors the seed project with the appropriate electronic files. The Electronic Delivery software provides tools to help perform these tasks."
8.6	<u>Production</u>
	Added verbiage and incorporated applicable summary listings to clarify general FDOT Electronic Delivery task requirements.
8.6.1	Added new section: <u>Classical Electronic Delivery Projects</u> to clarify current electronic delivery task requirements.

Chapter	Description
	Removed first paragraph: <i>"The "Production Phase" incorporates several functions to be accomplished, including the creation of files to FDOT standards, the documentation of those files, and the electronic securing and packaging of them. There are also output specifications called for in the CADD Manual and documented in this Chapter. FDOT provides the necessary tools in the Electronic Delivery Software to perform many of these tasks "</i>
	Added verbiage and incorporate applicable summary listings to clarify the current Classical Electronic Delivery.
8.6.2	Added new section: <u><i>Digital Delivery Projects</i></u> to clarify the alternate digital delivery task requirements.
8.6.1 8.6.3	Renumbered section: <u><i>Engineering Data</i></u>
	First paragraph, removed last verbiage from first sentence: <i>"of the transportation facility"</i> and remove last sentence: <i>"The engineering data files delivered with the project will comply with the standards defined herein. This is applicable for all CADD projects produced by and for the Department, regardless of the software packages used to develop the project."</i>
	Renamed first bullet from: <i>"Syntax Standard Electronic Engineering Data "</i> to read <i>"Delivery Standards for Engineering Data "</i> and made minor verbiage changes for clarification.
	Second bullet (Cross Sections), removed first verbiage of second sentence: <i>"For the users of software that support the Multi-Line General File format (like GEOPAK, CAICE, etc.)..."</i> and made minor verbiage changes for clarification.
	Third bullet (Quantity Files), changed verbiage from: <i>"Engineering data supporting quantity calculations will be retained..."</i> to read: <i>"Engineering data supporting quantity calculations will be delivered..."</i>
8.6.2 8.6.4	Renumbered section: <u><i>Data for Machine Control in Construction</i></u>
	Added verbiage to clarify FDOT's position on 3D design and modeling and the use of Automated Machine Guidance (AMG).
	Added first bullet: • <u><i>Control</i></u> to clarify field monument survey control.
	Second bullet (Alignments/PGLs), removed last sentence: <i>"It is highly desirable the data to be as non-proprietary as possible, hence LandXML."</i> and made minor verbiage changes for clarification.
	Third bullet (Surfaces), removed beginning of third sentence: <i>"The surface data must be formatted to be consumed into the contractor's systems, and it is highly desirable to be as non-proprietary as possible:"</i>
	Fourth bullet (Breaklines), made minor verbiage changes for clarification.
8.6.3 8.6.5	Renumbered section and changed title from: <u><i>Maximum Corridor Frequency Spacing</i></u> to read: <u><i>Maximum Corridor Frequency Interval Spacing</i></u>
	Made verbiage changes for 'Interval' clarification.
8.6.4 8.6.6	Renumbered section: <u><i>Merging External Project Files</i></u>
	First bullet (CADD System Dependency Files), changed verbiage <i>"It is highly recommended that these files be included early on in the project, and verified that referencing systems function properly with the files located in the required delivery locations. Reference files must also be located without the "save full path" option..."</i> to read <i>"It is highly recommended that these files be included in the project directory structure early on in the project development, and verified that referencing functions work properly. Reference files must also be attached without the "save full path" option..."</i> <i>"This will allow future customers of the data to be able to view, or recreate plots matching those that were part of the original delivery."</i> to read <i>"This allows future customers of the data the ability to view or recreate prints matching the original delivery."</i> Added Note to clarify the software versioning requirement.
	Secon bullet (Files from Outside Sources), removed last two sentences: <i>"The sub-consultant shall return to the prime only those files for which he is responsible. These files must be merged into appropriate discipline directories prior to delivery to FDOT."</i>
8.6.5 8.6.7	Renumbered section: <u><i>Reviewing the Project</i></u>
	The verbiage in this section has been re-written to clarify the inclusion of Digital Deliveries vs Classical Electronic Deliveries with Note added to notify users to contact District Project Managers for any additional District specific delivery requirements.
8.6.6 8.6.8	Renumbered section: <u><i>Sign and Seal Project Files</i></u>
	Section split into two sections to clarify the inclusion of the alternate Digital Delivery vs Classical Electronic Delivery requirements.
8.6.8.1	Added new section: <u><i>Classical Electronic Delivery with PEDDS</i></u>
8.6.8.2	Added new section: <u><i>Digital Delivery with Digital Signature</i></u>
8.6.9	Added new section: <u><i>Securing the Project for Delivery</i></u>
	To clarify the securing of Project Deliveries.

Chapter	Description
8.6.10	Added new section: <u>Authentication of a Delivery</u> To clarify the Authentication of Project Deliveries.
8.6.7 8.6.11	Renumbered section: <u>Media Requirements for Delivery</u> Verbiage changes made for clarification of current media requirements.
8.6.8 8.6.12	Renumbered section: <u>Compliance Certification</u> Added last sentence to Note . Changed verbiage from "The Compliance Certification contains a checklist of items that should be checked before a final submittal." to read: "The Compliance Certification Checklist Report shown on the following page contains a baseline checklist of items that should be checked before a final submittal."
	Removed remaining verbiage: "The Electronic Delivery suite also includes an application called FileChecker, which is used to review adherence to certain FDOT standards and business rules for the Electronic Delivery. It produces an HTML formatted report of the results which may be required by the Districts. (See Chapter 7 for more information). FileChecker is only a tool, not a substitute for a comprehensive check by the data producer and the persons responsible for receiving and accepting an electronic delivery. Every report created by FileChecker bears the following admonition at the top of the report: This report flags suspected inconsistencies in an Electronic Delivery project, but does not replace a thorough technical review by a qualified professional or eliminate the responsibility of the user. A report with few or no status errors is a good sign, but does not guarantee an error free project. Likewise a report with many status warning or errors cannot be assumed to indicate an invalid project. The user or reviewer of this report must carefully consider the standards applicable to the project at the time of development."
8.7	<u>Post-Production</u> Third paragraph, removed first sentence: "The CADD Manual defers to this handbook on technical issues regarding the content and formatting of the electronic delivery." and last portion of last sentence: "...it only attempts to address presentation in electronic form."
8.8	<u>Revisions</u> Split section into two to clarify the inclusion of the alternate Digital Delivery vs Classical Electronic Delivery.
8.8.1	Added new section: <u>Classical Electronic Delivery</u>
8.8.2	Added new section: <u>Digital Delivery</u>
8.9	<u>Strung Projects</u> Section was re-written to clarify the inclusion of the alternate Digital Delivery vs Classical Electronic Delivery.
8.10	<u>Re-let Projects and Roll Back Revisions</u> Minor grammatical corrections.
8.11	Added new section: <u>Design Build Projects</u> To clarify Design Build deliverables.
Chapter 9	<u>Right of Way Mapping Standards</u>
9.1	Added new section: <u>General</u> to clarify purpose of chapter.
9.1 9.2	Renumbered section: <u>Standard File Names</u> Added verbiage, formatting and example to clarify Right of Way naming convention. Expanded Standard File Name table to match the MasterStandards file and include columns to indicate: Model, Standard Rule, MicroStation Seed File, and Civil 3D Template File to match formatting with the discipline chapters. Added new standard file name: SIGNRW - Digital Signatures (Multi)
9.2- 9.3	Renumbered section: <u>Seed File Settings</u> First bullet, renamed from "English Seed File Settings (Non-Survey Inch)" to read: "English Seed File Settings" with minor changes for clarification. Second bullet (Advanced Working Unit Settings), changed verbiage from "These settings define two items. The first establishes the size of a grid (similar to the design plane in MicroStation/J) that overlays the drawing area. This grid is used for backward compatibility with older versions of MicroStation." to read: "This setting defines the units of resolution per master unit (US Survey Foot) which subsequently calculates the dimensions of the design plane."
9.3 9.4	Renumbered section: <u>Text</u>
9.3.1- 9.4.1	Renumbered section: <u>True Type Font</u> Verbiage changes made to clarify current FDOT true type font files.
9.3.2 9.4.2	Renumbered section: <u>Text Size</u> Minor verbiage change.
9.4 9.5	Renumbered section: <u>MicroStation Line Styles</u> Minor verbiage changes for clarification.
9.5 9.6	Renumbered section: <u>Cell Library</u>

Chapter	Description
	Minor verbiage changes for Right of Way Cell Library clarification.
9.6 9.7	Renumbered section: <u>Standard Level and Symbology Table</u>
	Moved Standard Level table to Chapter 4.2.29
	Updated verbiage to reference Standard Rule table in Chapter 4 and changes to clarify Right of Way Level and Symbology Standards.
9.7 9.8	Renumbered section and renamed title from: <u>FDOT CADD Software</u> to read: " <u>R/W CADD Workspace</u> "
	Minor verbiage changes to clarify the FDOT Right of Way MicroStation workspace.
9.8 9.9	Renumbered section: <u>GEOPAK Feature Preference</u>
	First paragraph re-written to clarify current FDOT GEOPAK Feature Preferences.
	Removed bullets: <i>"The Feature Preference dialog contains the following items:</i> <ul style="list-style-type: none"> • SMD File <i>This field displays the current working database. A different working database can be located and attached by the Select... button.</i> • Edit SMD <i>This button will bring up the Survey Preference dialog for editing the database much in the same method as the Design and Computation Manager.</i> • Apply Best Match Feature <i>When this toggle is active, the best match feature from the feature survey preference database is utilized. In the fdote_10rw.smd database the Default Feature category will be used if the active feature does not match a feature item in the current database category."</i> • Plot Scale" to read: <i>"The Feature Preference dialog shows the attached .smd file. A different working database can be located and attached if desired. Plot Scale defines the scale...."</i>
Chapter 10	<u>Environmental Management Standards</u>
10.1	<u>General</u>
	Minor verbiage changes for clarification.
10.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: " <i>MicroStation Seed File</i> " and displayed only the seed file name.
	Added " <i>Civil 3D Template File</i> " column to the Standard File Name table.
	Added new standard file name: SIGNEM - Digital Signatures (Multi)
Chapter 11	<u>Survey Standards</u>
11.1	<u>General</u>
	No modifications
11.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: " <i>MicroStation Seed File</i> " and displayed only the seed file name.
	Added " <i>Civil 3D Template File</i> " column to the Standard File Name table.
11.3	Added new section: <u>Data Files Created By Survey</u> , splitting information from 11.2 to clarify current data files.
11.3 11.4	Renumbered section: <u>Resource Files</u>
11.3.1 11.4.1	Renumbered section: <u>CAiCE Feature Table</u>
	Minor verbiage changes for clarification of CAiCE feature table.
	Removed: " <i>Note Earlier year's standards may also be installed.</i> "
11.4.1.1	Changed section Heading numbering to • Bullet format and renamed from " <u>List Files</u> " to read: " <u>Feature List Files</u> " and updated versioning.
	Added Note regarding Theme Viewer application.
11.3.2 11.4.2	Renumbered section: <u>CAiCE Cell Library</u>
	First paragraph: removed reference to V7 cell Library and updated versioning.
	Removed last paragraph: " <i>When creating a CTLSRD.dgn file, three MicroStation cells, CTLDAT, CTLDETL, and CTLTAB, have been provided to aid in the insertion of project control data if needed. All three cells can be found in the Right of Way cell library (row.cel).</i> "

Chapter	Description
11.3.3 11.4.3	Renumbered section and renamed title from: " <u>Translation Table</u> " to read: " <u>CAiCE Translation Table</u> " Changed verbiage in last sentence from: "This table is loaded automatically by the FDOT2010 Software Install routine into the x:\CAiCE\DGN\ subdirectory and is automatically called by CAiCE when screen graphics are saved to MicroStation graphics." to read: "This table is in the FDOT2010 Software Install at the x:\FDOT2010\CAiCE\DGN\ subdirectory."
11.3.4 11.4.4	Renumbered section: <u>Additional CAiCE Tables and Cell Libraries</u>
11.3.5 11.4.5	Renumbered section: <u>CAiCE Special Characters</u> Updated Note in regards to CAiCE and True Type Fonts. First bullet, renamed from: " <u>FDOT's font library 48 in MicroStation (roadway font)</u> " to read: " <u>CAiCE font 48 and translating to MicroStation</u> "
11.4 11.5	Renumbered section and renamed title from: " <u>GEOPAK Survey</u> " to read: " <u>GEOPAK Survey & Data Acquisition</u> " Updated versioning with cell library file names and removed last sentence of first paragraph: "Note that older versions of this feature table may also be installed for legacy project compatibility (i.e. FDOT2004.smd)."
11.5 11.6	Renumbered section: <u>Survey Data</u> Changed verbiage from: "... for survey procedure and data deliverables to the Department." to read: "... for survey procedure and data deliverables for the FDOT projects." Added Note regarding Civil 3D surveying deliverables.
11.6 11.7	Renumbered section: <u>Level and Symbology Standards</u> Removed Standard Level tables for DREXRD, DTMRD, TPORD, TOPORW and UTEXRD. These tables are found in Chapter 4.2. Updated Note to current reference for CADD Standard Rules.
11.7 11.8	Renumbered section: <u>County Mapping</u>
Chapter 12	<u>Drainage Standards</u>
12.1	<u>General</u> Verbiage changes for clarification of the current purpose of this chapter. Removed last sentence: "The intent is to provide electronic files that are shareable in a format that the Roadway and Drainage disciplines can use productively."
12.2	<u>Standard File Names</u> Added a Note to reference the Standard Rules in Chapter 4. Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name. Added "Civil 3D Template File" column to the Standard File Name table.
12.2.1	<u>File Sharing and Merging</u> Removed table and last sentence: "File sharing among the Roadway and Drainage groups shall be as noted in the table below."
12.3	<u>Resource Files</u> Verbiage re-written to clarify current requirements for delivery of Drainage databases.
12.4	<u>Engineering Data</u> Minor verbiage changes for clarification and removed fifth bullet: "• All computer input and output files used in the structural design of culvert structures"
12.5	<u>Packaging</u> Fourth bullet re-written to current requirements from: "• Drainage Map (DRMPRD00.DGN) - (This is not usually in a plan set, but kept on the server. The Drainage Map may be considered as optional to be included in the Final Plans submittal at the discretion of the individual Districts.)" to read: "• Drainage Map (DRMPRD00.DGN - The Drainage Map, if required in the Plans Preparation Manual (PPM), shall be included in the final submittal – this is no longer at the discretion of the individual District.)"
12.6	Removed section: <u>Engineer of Record (E.O.R.)</u> addressed in the Plans Preparation Manual.
12.6.1	Removed section: <u>Roadway Engineer of Record (E.O.R.)</u> addressed in the Plans Preparation Manual.
12.6.2	Removed section: <u>Drainage Engineer of Record (E.O.R.)</u> addressed in the Plans Preparation Manual.
12.7	Removed section: <u>Drainage Structures & Box Culverts</u> addressed in the Plans Preparation Manual.
12.7.1	Removed section: <u>Plan View</u> addressed in the Plans Preparation Manual.
12.7.2	Removed section: <u>Profile View</u> addressed in the Plans Preparation Manual.
12.7.3	Removed section: <u>Drainage Structure Cross Section</u> addressed in the Plans Preparation Manual.
Chapter 13	<u>Roadway Standards</u>

Chapter	Description
13.1	<u>General</u>
	Verbiage re-written to clarify current purpose of this chapter. Included reference to Plans Preparation Manual (PPM) that covers much of the existing verbiage.
	<p><i>Removed verbiage covered by the PPM reference: "The "Contract Plans" depicts in detail the required construction work. This set consists of Roadway Plans (all sheets pertaining to roadway design) and component plans. The component plans are:</i></p> <ol style="list-style-type: none"> <i>1. Signing and Pavement Marking</i> <i>2. Signalization</i> <i>3. Intelligent Transportation Systems (ITS)</i> <i>4. Lighting</i> <i>5. Landscape</i> <i>6. Architectural</i> <i>7. Structures"</i> <p><i>Though many component plans use Roadway element symbology, the primary Roadway Symbology Standards shall not be modified for other discipline's use; except when specifically stated in that discipline's chapter.</i></p>
	<p><i>Removed verbiage covered by the PPM reference: "For Example: Signal plans also show the proposed edge of pavement. The proposed edge of pavement symbology in the plan view shall be the same for all disciplines, except Right of Way. If other disciplines need to emphasize or de-emphasize specific elements, this can be accomplished using plot drivers with adjusted level symbology or pen tables.</i></p> <p><i>In addition, the roadway plans may contain sheets which were prepared separately (perhaps by a sub-consultant) and incorporated into the roadway plans early in the design process (prior to the establishment of sheet numbering). As an option, these may be identified with the following prefixes and placed at the end of the numbered sequence of the roadway plans:</i></p> <p><i>GR- # Soil Survey and Report of Core Borings normally associated with the roadway plans set (including miscellaneous structures but excluding bridges and walls)</i></p> <p><i>CTL- # Project Survey Control Sheets</i></p> <p><i>TR- # Tree Survey Sheets</i></p> <p><i>UTV- # Verified Utility Locate Sheets</i></p> <p><i>Refer to the Plans Preparation Manual (PPM), Volume II Chapter 3.6 at:</i> http://www.dot.state.fl.us/rddesign/PPMManual/PPM.shtm</p>
13.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: CORRRD - Corridor Design Model
	Added new standard file name: SIGNRD - Digital Signatures (Multi)
13.3	Removed section: <u>Support Roadway Excel Files</u>
Chapter 14	<u>Signing & Pavement Marking Standards</u>
14.1	<u>General</u>
	Minor verbiage changes for clarification.
14.2	<u>Standard File Names</u>
	<p>Second paragraph changed last sentence from: <i>"If the need arises to create a file type defined by another discipline, use the first 4 characters of the standard file name and append the signing and pavement marking filename designation (SP) as the fifth and sixth characters, followed by the file sequence numbers. An example is toposp01.dgn."</i></p> <p>to read: <i>"Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."</i></p>
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNSP - Digital Signatures (Multi)
14.3	<u>Sign Design</u>
	No modifications
14.4	<u>GuidSIGN</u>
	No modifications
14.5	<u>AutoTURN</u>

Chapter	Description
	No modifications
Chapter 15	Signals Standards
15.1	<u>General</u>
	Minor verbiage changes for clarification.
15.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Second paragraph changed last sentence from: <i>"If the need arises to create a file type defined by another discipline, use the first 4 characters of the standard file name and append the Signals filename designation (SG) as the fifth and sixth characters, followed by the file sequence numbers. An example is toposg01.dgn."</i> to read: <i>"Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."</i>
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: <i>"MicroStation Seed File"</i> and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNSG - Digital Signatures (Multi)
Chapter 16	Highway Lighting Standards
16.1	<u>General</u>
	Minor verbiage changes for clarification.
16.2	<u>Standard File Names</u>
	First paragraph, minor verbiage changes for clarification.
	Second paragraph, added last sentence: <i>"Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."</i>
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: <i>"MicroStation Seed File"</i> and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNLT - Digital Signatures (Multi)
16.3	<u>AGI32 Lighting Software</u>
	Minor verbiage changes for clarification.
Chapter 17	Landscape Standards
17.1	<u>General</u>
	Minor verbiage changes for clarification.
17.2	<u>Standard File Names</u>
	First paragraph, minor verbiage changes for clarification.
	Second paragraph, added last sentence: <i>"Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."</i>
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: <i>"MicroStation Seed File"</i> and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNLD - Digital Signatures (Multi)
Chapter 18	Structures Standards
18.1	<u>General</u>
	Minor verbiage changes for clarification and added Template Files to table for the inclusion of Civil 3D platform.
18.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Updated Note to reflect current reference for Structures Detailing Manual.
	Added new standard file names for Non-bridge related projects: WallControl.dgn, Bulkhead.dgn, BulkheadDet.dgn, CrashWall.dgn, SheetPileWallAnch.dgn, SheetPileWallCant.dgn, MSEwall.dgn, RetainingWall.dgn, SheetPileWall.dgn, SheetPileWallST.dgn, SheetPileWallConc.dgn, SoundBarrier.dgn
	Added new standard file name: SIGNST - Digital Signatures (Multi)
18.3	<u>Resource Files</u>
	No modifications
18.4	<u>Engineering Data</u>
	No modifications

Chapter	Description
18.5	<u>Level and Symbology Standards</u>
	No modifications
18.5.1	<u>Borders and Scales</u>
	No modifications
18.5.1.1	<u>Borders</u>
	No modifications
18.5.1.2	<u>Scales</u>
	No modifications
18.5.2	<u>Text Sizes and Weights</u>
	No modifications
18.5.3	<u>Colors</u>
	No modifications
18.5.4	<u>Special Symbols</u>
	No modifications
18.5.5	<u>Dimension Settings</u>
	No modifications
18.6	<u>Reference Files</u>
	No modifications
Chapter 19	Utilities Standards
19.1	<u>Introduction of Utility Coordination of CADD Files</u>
	Minor verbiage changes for clarification.
19.2	<u>Utility File Coordination Options</u>
	No modifications
19.2.1	<u>Sharing of Graphic Files</u>
	Minor verbiage changes for clarification.
19.2.2	<u>ASCII Input File</u>
	No modifications
19.2.3	<u>Geographic Information System (GIS) File</u>
	No modifications
19.3	<u>Utility Coordination Workflow</u>
	No modifications
19.3.1	<u>Phase I Utility Coordination Workflow</u>
	No modifications
19.3.2	<u>Phase II Utility Coordination Workflow</u>
	No modifications
19.3.3	<u>Phase III Utility Coordination Workflow</u>
	No modifications
19.3.4	<u>Phase IV Utility Coordination Workflow</u>
	No modifications
19.4	<u>Exchange of Graphic Files</u>
	No modifications
19.4.1	<u>Standard File Names</u>
	Fourth paragraph, added last sentence: <i>"Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."</i>
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: <i>"MicroStation Seed File"</i> and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
19.5	<u>Utility Plans</u>
	Minor verbiage changes for clarification.
19.6	Renamed title from: <u>"ASCII File Name Convention"</u> to read: <u>"Filename Conventions"</u>
	Changed symbols " * " to reflect numeric input: " ## "
	Second paragraph, removed verbiage: <i>"This media will bear a label with the name of every input file, the utility owner's name, date, state project number and contact person's name and telephone number. "</i>
19.6.1	<u>ASCII Header Convention</u>
	Minor grammatical changes for clarification.
19.6.2	<u>Format of Station and Offset ASCII File</u>

Chapter	Description
	Minor grammatical changes for clarification.
19.6.3	<u>Format of Northing and Easting ASCII File</u>
	No modifications
19.6.4	<u>ASCII Input File Examples</u>
	No modifications
19.7	<u>Utility Scanned Images</u>
	No modifications
Chapter 20	Geotechnical Standards
20.1	<u>General</u>
	No modifications
20.2	<u>Standard File Names</u>
	Third paragraph, added last sentence: "Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
20.3	<u>Engineering Data</u>
	No modifications
20.4	<u>Soil Survey</u>
	No modifications
20.5	<u>Soil Boring Data</u>
	No modifications
Chapter 21	Construction Standards
21.1	<u>General</u>
	No modifications
21.2	<u>Standard File Names</u>
	Third paragraph, added last sentence: "Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNCN - Digital Signatures (Multi)
Chapter 22	Intelligent Transportations Systems (ITS) Standards
22.1	<u>General</u>
	Minor verbiage changes for clarification.
22.2	<u>Standard File Names</u>
	Minor verbiage changes for clarification.
	Second paragraph, added last sentence: "Standard Model names are also provided, however, it is not mandatory to use more than the default model, with the exception of those listed in this table."
	Added a Note to reference the Standard Rules in Chapter 4.
	Renamed "Seed File" column on the Standard File Name table to read: "MicroStation Seed File" and displayed only the seed file name.
	Added "Civil 3D Template File" column to the Standard File Name table.
	Added new standard file name: SIGNIT - Digital Signatures (Multi)
Chapter 23	Architectural Standards
23.1	<u>General</u>
	Minor verbiage changes for clarification.
23.2	Renamed title from: " <u>Adopted CADD File Format</u> " to read: " <u>Adopt CADD File Format</u> "
	Minor verbiage changes for clarification.
23.3	<u>Adopted CADD Standards</u>
	Minor verbiage changes for clarification and updated links.
23.4	<u>Architectural Projects</u>
	No modifications
23.5	<u>Delineation Between Architectural & Engineering Plans</u>

Chapter	Description
	No modifications
23.6	<u>Standard File Names</u>
	No modifications
23.6.1	<u>Standard Model File Names</u>
	No modifications
23.6.2	<u>Standard Sheet File Names</u>
	Removed Section 23.6 reference.
23.6.3	<u>Standard Detail File Name Format</u>
	No modifications
23.6.4	<u>Standard Schedule File Name Format</u>
	No modifications
23.7	<u>Engineering Data</u>
	No modifications
23.8	<u>Level and Symbology Standards</u>
	No modifications
23.8.1	<u>Architectural Scale Chart</u>
	No modifications
23.8.2	<u>Text Type, Size and Line Weight</u>
	No modifications
23.9	<u>Layering Standards</u>
	No modifications
23.10	<u>File Structure</u>
	No modifications
23.11	<u>Electronic Signing and Sealing</u>
	Minor verbiage changes for clarification and updated links.
23.12	<u>Electronic Submittal</u>
	Change verbiage from: "...should be submitted on CD." to read: "...should be submitted on CD-ROM media."
Chapter 24	Specification Standards
24.1	<u>General</u>
	Minor verbiage changes for clarification.
24.2	Renamed title from: " <u>Standard File Names</u> " to read: " <u>Standard File Naming Convention</u> "
24.2.1	Added new section: <u>Classical Electronic Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.2.2	Added new section: <u>Digital Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.3	<u>Resource Files</u>
	No modifications
24.4	<u>Technical Special Provisions-Signing and Sealing</u>
	Verbiage changes to clarify the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.5	<u>Electronic File Structure</u>
	Verbiage changes to clarify the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.5.1	Added new section: <u>Classical Electronic Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.5.2	Added new section: <u>Digital Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.6	Renamed title from: " <u>Format Procedure for Spec-Package Submittal on CD</u> " to read: " <u>Additional Instructions for Spec-Package Submittal</u> "
	Verbiage changes to clarify the inclusion of Digital Delivery vs Classical Electronic Delivery
24.6.1	Added new section: <u>Classical Electronic Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
24.6.2	Added new section: <u>Digital Delivery</u> for clarification of the inclusion of Digital Delivery vs Classical Electronic Delivery.
Chapter 25	Appendix - Moved to Chapter 1
24.1	<u>Glossary of Terms</u> - Moved to Chapter 1.6
24.2	<u>Abbreviations</u> - Moved to Chapter 1.7
24.3	<u>Reverenced Documents</u> - Moved to Chapter 1.8