

PIMA COUNTY REGIONAL FLOOD CONTROL DISTRICT DISTRICT STANDARD

STANDARD NO: District Standard DS-303

EFFECTIVE DATE: May 12, 2011

PROCEDURE NAME: Computer Aided Drafting and Design Standards

PURPOSE: The Regional Flood Control District frequently exchanges data with stakeholders, partners and the consulting/contractor community. To maximize the use of this data, the District needs consistency in the way data is prepared, presented and maintained.

The District must incorporate a CADD standard that is generic enough to operate under various CADD software packages, including Bentley's MicroStation and Autodesk's AutoCAD, and can incorporate existing industry standards to the extent possible.

Of course, this will be an ongoing process resulting in updates to these standards.

DESCRIPTION:

In 2004, the RFCD Director approved these same ACOE A/E/C CADD Standards for use by the District. This Administrative Procedure provides an update for both the Microstation and AutoCAD platforms.

These standards apply to drafting and design documents prepared by both RFCD design staff and external consultants/contractors, and to RFCD project managers who procure contract services.

The A/E/C CADD Standard has been developed and is maintained by the CAD/BIM Technology Center for Facilities, Infrastructure, and Environment (to eliminate redundant Computer-Aided Design standardization efforts). The CADD drafting standards addressed in the A/E/C CADD standard include presentation graphics, level/layer assignments, electronic file naming and standard symbology.

APPLICATION:

RFCD Division staff who either perform CADD design work, or procure external electronic design services, shall use these procedure to achieve consistency and accuracy over time, a stated goal of RFCD management.

RFCD Design Staff

- IMD staff will load a standard workspace on all computers running Microstation. Standard workspaces contain consistent levels, line weights, and line styles

necessary to share electronic files between parties. Workspace categories include plan, cross section, profile, structure, aerial and sheet files. AutoCAD users: use the standard AutoCAD drawing files located in the RFCD Level Libraries SUPPORTING DATA LINK below .

- A number of cell libraries have been compiled with continuing efforts to build new cell libraries. Cell libraries are used to represent standard details or repetitive drafting elements. To date, IMD staff has compiled flood control, transportation, wastewater, water, traffic, ACOE, and ADOT cell libraries.

RFCD Project Managers who Procure CADD Services

- RFCD Project Managers shall include specific language for CADD specifications and deliverables, per this Administrative Procedure, within all RFCD consulting or vendor contract documents. Updated specification language is provided for your use in the Supporting Data Links below.
- All Division Managers should review contract documents under preparation by their staff to ensure the consistent use of this procedural language for contracts utilizing CADD / Microstation applications.

SUPPORTING DATA LINKS

[A/E/C CADD Standard version 4.0](#)

[Supplemental Graphic Specifications – Pima Co RFCD](#)

[Standard Level Descriptions for RFCD Construction Drawings](#)

[RFCD Base Files](#)

[RFCD Level Libraries](#)

[USACE Permit and Mitigation Map and Drawing Standards \(9/15/2010\)](#)

APPROVED BY:

Suzanne Shields 8/15/2011
Suzanne Shields Date
Director

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Date(s) Revised: