Urban Drainage and Flood Control District

SPECIFICATIONS FOR ELECTRONIC SUBMITTAL OF
FHAD AND MASTER PLAN DOCUMENTS IN PDF FORMAT

By

CH2MHILL

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SPECIFICATIONS FOR ELECTRONIC SUBMITTAL OF

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(August 2006)

1. GENERAL REQUIREMENTS

    1.1. PDF CONTENTS. The electronic PDF shall contain the same information as the hard copy document (text, plans, profiles, etc.), in the same order as the hard copy.

    1.2. LINE SYMBOLOGY AND COLOR

        1.2.1. LINE SYMBOLOGY. Priority should be given to producing a readable hard copy product in grayscale. Appropriate line symbology and line weights should be used.

        1.2.2. BASEMAPPING AND TOPOGRAPHY. The base mapping and topography shall be screened (light gray linework). This applies to both hard copy and PDF documents.

        1.2.3. COLOR

            1.2.3.1. 100-YEAR FLOOD INFORMATION.

                1.2.3.1.1. For documents with "detailed" 100-year flood information, the 100-year flood outline (flood limits shown in plan view) and the 100-year water surface (shown in profile) linework shall be shown in the PDF as a navy blue colored line. The hard copy may be printed in grayscale.

                1.2.3.1.2. For documents with "approximate" 100-year flood information, no color is required on the plan or profile drawings in the PDF.

            1.2.3.2. PHOTOGRAPHS. Photographs in the PDF shall be in color. The hard copy may be printed in grayscale.

            1.2.3.3. HARD COPY COVER. The hard copy cover may be color if desired.

            1.2.3.4. OPTIONAL COLOR. The use of color other than as required above is optional. The entire hard copy document will be reproduced for UDFCD in grayscale.

        1.2.4. GRAPHS AND PLOTS. Graphs and plots with multiple data sets shall use line symbology (dashes, dash-dot, etc.) such that each data set can be clearly identified if printed in grayscale. This applies to both hard copy and PDF documents.

    1.3. PAGE SIZES. Each document shall contain only one size of paper (8.5″ x 11″ or 11″ x 17″). For example, in an 11″ x 17″ document, the cover letter and all other pages shall be on 11″ x 17″ paper. Page sizes within the PDF shall be the same as the hard copy.

    1.4. PAGE ORIENTATION. Page orientation shall be adjusted so that the pages read correctly when projected on-screen.

    1.5. DOUBLE-SIDE PRINTING AND START OF CHAPTER LOCATION. If the hard copy documents will be printed double-sided, insert extra pages labeled "This page intentionally left blank." as-needed so that when the PDF is printed double-sided, each

new chapter starts on the front side of a page (right hand side of the open document). The printed PDF shall match the hard copy.

    1.6. PRINTING SCALE. All pages should print at a scale of 100% of normal size.

2. BOOKMARKING

    2.1. BOOKMARK DEFINITION: A bookmark shall be as defined in Acrobat. A bookmark allows you to "jump" to a point in a PDF document by clicking on the bookmark in the Bookmarks Tab of the Navigation Pane. When a bookmark is clicked, it should take the user to that section or heading.

    2.2. BOOKMARK CREATION. The bookmark name shall be identical to the section heading. Using Acrobat's Select Text\Create Bookmark function ensures consistency. If a consistent heading style is used in Microsoft Word, Acrobat can automatically create bookmarks and a bookmarking "structure" for each heading and sub-heading.

    2.3. REQUIRED BOOKMARKS. FHAD and Master Plan documents are required to include the items listed in UDFCD's corresponding Checklists. At a minimum, all bold items listed in the Report Section column of the Checklist shall be bookmarked in the PDF file. Each plan and/or profile sheet shall also be bookmarked.

    2.4. ADDITIONAL BOOKMARKS. Additional bookmarks can be inserted as needed. A bookmarking "structure" that allows sub-bookmarks to be hidden under major heading bookmarks shall be used to organize bookmarks in the Navigation Pane.

3. LINKS

    3.1. LINKS DEFINITION: Links are navigation devices similar to bookmarks that are located within the PDF document.

    3.2. REQUIRED LINKS. Each row of the Table of Contents, List of Tables, List of Figures, and the Index Sheet shall be linked to the corresponding location in the PDF.

    3.3. OPTIONAL LINKS. Links within the document text are optional. If links are used, they shall be a different color as compared to the surrounding text so that they can be easily identified in the PDF. The color used for links should appear similar to black text in the hard copy document.

    3.4. AUTOMATED LINKS. If a consistent heading style is used in Microsoft Word, automated links for the Table of Contents and other tables can be created by Acrobat.

4. PDF CREATION

    4.1. PDF documents must be created from within the software programs in which they were created (Microsoft Word, AutoCAD, etc.).

    4.2. CONSOLIDATION. A single PDF file shall be created that consolidates all text, plans, profiles, appendices, and other information. Additional bookmarking and linking should then be added as needed for consistency throughout the PDF document.

    4.3. SCANNING. Scanning of documents is only allowed for documents that are only available in hard copy format. If scalable drawings or figures are scanned and included in the PDF, the following shall be included in the lower right-hand corner of each scanned page using large font: "SCANNED DOCUMENT – MAY NOT BE TO SCALE".

    4.4. FILE SIZE.

4.4.1. PDF CONVERSION. The "Standard" conversion setting should be selected when creating PDFs. For Acrobat Version 6.0, this setting is found at Adobe PDF \ Change Conversion Settings \ Settings (tab) \ PDF Maker Settings \ Conversion Settings (drop down box): Standard.

4.4.2. FILE COMPRESSION. Compression of most PDF sheets is not required. However, it has been found that drawing index sheets and other information-intensive sheets can be very slow to load in Acrobat. Sheets that are slow to load in Acrobat should be compressed. One method is to use Acrobat's PDF Optimizer and select the check box for Enable Adaptive Compression. For Acrobat Version 6.0, this setting is found at Advanced \ PDF Optimizer \ Images (tab) \ Adaptive Compression Options \ Enable Adaptive Compression (checkbox). The compression shall not be so much that there is a loss of sheet quality when printed at 100% of normal size.

4.4.3. See Helpful Hints at the end of this document. These helpful hints are not requirements for the delivery of the PDF files.

4.5. INITIAL VIEW. The Initial View setting in Acrobat should be set to "Bookmarks Panel and Page." For Acrobat Version 6.0, this option is found at File \ Document Properties \ Initial View \ Document Options \ Show (drop down box): Bookmarks Panel and Page.

5. CD

5.1. CD TYPE. Standard 120mm size CDs shall be used.

5.2. CD FINALIZATION. The CD should be finalized, closed, etc. to prevent additional information from being added to the CD and to make the CD compatible with most computers.

6. CD LABEL

6.1. LABEL TYPE. The CD label shall consist of a round sticker made specifically for CD labeling, or the label can be printed directly on the CD using CDs specifically made for label printing.

6.2. LABEL CONTENTS. The CD label shall at a minimum include the following typed or computer generated (not hand written) information (see attached samples):

6.2.1. Project Title.

6.2.2. Date (e.g., March 2006)

6.2.3. UDFCD Agreement Number.

6.2.4. Project Sponsors (UDFCD, local City/County, etc.). Sponsor logos are not required. List sponsors after "Prepared For:".

6.2.5. Company name.

6.2.6. SAMPLE LABELS. Sample CD Labels are included at the end of these specifications.

6.3. OPTIONAL ITEMS. The CD label can be colored and contain images (photos, etc.) to match the cover of the FHAD or Master Plan.

6.4. TEXT SIZE. The text for the project title shall be Aerial and a minimum of 10 point font. Other text on the label may use other fonts and text sizes, as long as the information is legible.

7. CD CASE

    7.1. CASE TYPE. The CD case shall be a standard square, plastic, hinged CD case with the standard thin thickness of 0.2 inches. The case shall have a clear cover that allows the CD Label to be easily read.

    7.2. OPTIONAL CASE INSERT. A case with a clear cover is required; an insert is not required. If a case insert is used, it shall match the format of the hard copy document's cover and shall at a minimum contain the same information as listed for the CD Label.

8. DISCLAIMERS. Disclaimers should not be included on the CD. The electronic PDF file and CDs will become the property of UDFCD and may be copied, distributed, made available for download, etc. as deemed appropriate by UDFCD.

9. COPIES. The number of CD copies as specified in the FHAD or Master Plan Agreement shall be delivered to UDFCD with delivery of the hard copy documents.

HELPFUL HINTS

The following helpful hints are provided so that lessons learned over time can be distributed to those creating documents using these specifications. Many of the hints relate to how to reduce file sizes and PDF load time. These helpful hints are not requirements for the delivery of the PDF files..

1. Converting photographs from JPEG format to TIFF format before converting the document to PDF format may reduce file size and loading time of pages and images.

2. Lowering the print resolution to 300 dpi (dots per inch) may be used to reduce file size while maintaining adequate quality.

3. Changing background images to grayscale may reduce file size and load time.

4. Compressing or resizing photos and images prior to inserting them into Word or CAD may reduce file size and load time.

5. Be aware that text boxes in CAD may result in black boxes in the PDF.

6. Please proof each page of your PDF document to ensure it matches the hard copy. Converting documents to PDF can sometimes produce unexpected results.

7. If you have comments on the PDF process or have additional helpful hints, please notify the District's Project Manager for your project.

SAMPLE CD LABELS

Upper Goldsmith Gulch Outfall Systems Planning Conceptual Design Report

November 2005

MOSER
& associates
ENGINEERING

720 S. Colorado Blvd.
Suite 410 S
Denver, CO 80246
Phone: (303) 757-3655
Fax: (303) 300-1635

Urban Drainage and Flood Control District

Arapahoe County

City of Greenwood Village

OLSSON ASSOCIATES
ENGINEERS • PLANNERS • SCIENTISTS • SURVEYORS

Flood Hazard Area Delineation

Massey Draw and SJCD (South)

prepared for

Urban Drainage and Flood Control District
Jefferson County
City of Littleton

December 2005

City of Littleton