

**Structural FAC  
Structural Details Meeting  
St. Paul, MN  
4-5 March 2002**

**1. Participants:** The following members met at the St. Paul District Office on 4-5 March regarding the Structural Detail Library Additions project, funded by the CADD/GIS Technology Center.

Lori Taylor (MVP)  
Cyndi Riley (SWL)  
Jim Bruszewski (LRB)  
Marybeth Walker (NAB)

**2. Purpose:** The purpose of the meeting was to sort through approximately 400 structural details which were submitted to the STFAC by various districts for inclusion in the CADD/GIS Technology Center's Detail Library. Details were then evaluated to eliminate duplication, and determine what work was required and by whom.

**Project Team Assignments:** The following project assignments were made:

Jim Bruszewski - Review structural notes to insure codes referenced are up-to-date.  
Review final details for blatant errors.  
John Connor - Review final details for blatant errors.  
Cyndi Riley - Clean up MicroStation details for AEIM, concrete footings, walls and floors, ladder w/safety rail (approx. 100 details)  
Marybeth Walker - Clean up Autocad details for roofs, and misc. from NAB (approx. 125 details)  
Clare VanDyke - Clean up misc. Autocad building details from SWK (approx. 100 details)  
Lori Taylor - Clean up MicroStation details for flood control structures, fuel storage tanks, misc. utilities, joints, ladders (approx 125 details)

**3. Additional Drafting Requirements:** In addition to the drafting requirements outlined in the CADD Center's scope of work, the following requirements will be adhered to:

- Multi-line text should be used for callouts and notes.
- The callouts should be placed using the *Place Note* MicroStation command or AutoCAD equivalent so that the callout lines and arrows are one entity and easier to manipulate if changes are required.
- Automatic dimensioning should be used so that dimensions are a single attribute.
- When ever possible, use shapes in lieu of individual lines. Individual lines are harder to edit.
- For consistency, use all capital letters for callouts and notes.
- For consistency, use straight lines with a leader for callout (don't use curved lines).
- Callouts should be lined up whenever possible.
- Place dimensions to the left of the detail and callouts to the right whenever possible.
- Use filled arrowheads. In order to match arrows available in AutoCAD, set the terminator geometry to a width of 1.5, a height of 0.5, and the min. leader to 2.5 in MicroStation.
- Do not use italics unless referring to flow or river/stream names.
- Spell out the word "PLATE" (symbols don't convert well)
- Use "DIA." in lieu of the diameter symbol (symbols don't convert well).
- Use the abbreviation "EL." for elevation and "CLR" for clear cover. **NOTE: Although this was not discussed in the meeting, use the list of standard abbreviations in the CADD Details Library, Report 5 at [http://tsc.wes.army.mil/products/cadd\\_details/reports/struct.pdf](http://tsc.wes.army.mil/products/cadd_details/reports/struct.pdf).**

**4. Coordination with SWD:** SWD is in the process of updating their AEIM details. These details are currently out for comment. Ray Veselka (214-767-2357) was contacted to insure there was no duplication of efforts. Ray planned on only issuing PDF versions of the details with the revised AEIM. Cyndi will be coordinating with Ray to insure we provide the most up-to-date details and provide him with a copy of the final AEIM details with which to create the PDF files.

**5. Border for Manual:** It was felt that it would be beneficial to have a PDF version of all structural details so that users can print the out if desired. Cyndi and Marybeth will try to come up with a standard border we can use.

**6. Categories:** The structural details will be broken out by the following categories. Breaking these fields down further, by material type was also discussed. The category breakout will be revised as needed.

- ▶ Airfields
- ▶ Bridges
- ▶ Building Substructure
  - ▶ Foundation
  - ▶ Slab on Grade
- ▶ Building Superstructure
  - ▶ Roofs
  - ▶ Walls
  - ▶ Columns
  - ▶ Floors
- ▶ Corrosion Protection
- ▶ Flood Control Structures
  - ▶ Walls
  - ▶ Channels
  - ▶ Gatewells
  - ▶ Closures
  - ▶ Inlets and Outlets
  - ▶ Pump Stations
- ▶ Gates
- ▶ Miscellaneous
  - ▶ General Notes and Tables
  - ▶ Ladders
  - ▶ Handrail
  - ▶ Utility
  - ▶ Grating
- ▶ Navigation Structures
- ▶ Open Frame Construction
- ▶ Piling

**7. File Storage:** For review purposes, files will be stored on St. Paul District's FTP site at [ftp://ftp.mvp.usace.army.mil/stfac/Details/Completed Details/](ftp://ftp.mvp.usace.army.mil/stfac/Details/Completed%20Details/). Details will be stored on individual district servers as updated.

**5. Schedule:** The following schedule is contingent on when funds are received.

Begin detail clean-up	11 Mar 2002
Draft details to Jim and John for review	15 Apr 2002
Complete draft review	29 Apr 2002
Complete final details	13 May 2002
Complete final review	10 Jun 2002
Final details to CADD Center for review	14 Jun 2002