November 11, 2004

MasterFormat™ - 2004

Kevin Miller
Handout includes:

- List of 2004 Divisions
- URL to the new MasterFormat
- URL to this presentation
- URL to handout on Converting Timberline DB
- URL to discussion group on the 2004 MasterFormat
- Sample comparison between 95 and 2004 version
- Sample of the 95 vs 2004 cost codes
What is MasterFormat™?

Master list of titles & numbers used to organize information by “work results”

**Primary Uses:** Organizing project manual, reference keynotes on drawings, & detailed costing

MasterFormat has often been referred to as the “CSI codes” or 16 Divisions
MasterFormat™ History

- CSI created in early 60s
  - 1961: Draft 1
  - 1962: Draft 2 (22 divisions)
  - 1963: CSI Format for Building Specifications

- 1964: “The CSI Format for Construction Specifications” (16 divisions) 28 total pages

1995 MasterFormat™ - 317 pages
Horse vs Car

Was the change from a horse to a car good for the construction industry?
- Required complete retooling in the field
- New cost account codes had to be created
- New process of fueling and waste disposal were required

Remember the Y2K bug was the end of the world

Ben Davis
Why Change MasterFormat?

- New materials and processes in construction.
- Include all types of construction:
  - Transportation and heavy civil engineering.
  - Complex mechanical and electrical projects.
  - Industrial and process engineering.
- May be easier to analyze scopes of work.
- Address project life-cycle issues.
- Provide expansion room for new materials and processes.

Ben Davis
MasterFormat™ Work Plan

Apr 01   Task Team Kickoff
Feb 02   Draft 1 published for public comment
Oct 02   Draft 2 published for public comment
Feb 03   Draft 3 published for public comment
May 03   Outline Draft 4 published for public comment
Aug 03   Draft 4 (final) published for public comment
Jun 04   Available to download
Jan 05   Some firms start to use MasterFormat™ 04

Ben Davis
Divisions – Overview of Changes

- Increase from **16 to 50** divisions.
  - (Really only 23 for buildings)
- Numbers reserved for future expansion.
- For continuity, Divisions 03 to 14 remain basically the same.

*Kristen Wynn*
Groupings

- 00 PROCUREMENT AND CONTRACTING REQUIREMENTS GROUP
- 01 SPECIFICATIONS GROUP GENERAL REQUIREMENTS SUBGROUP
- 02 – 14 FACILITY CONSTRUCTION SUBGROUP
- 20 FACILITY SERVICES SUBGROUP
- 30 SITE AND INFRASTRUCTURE SUBGROUP
- 40 PROCESS EQUIPMENT SUBGROUP

Kristen Wynn
MasterFormat™ Organization

MF 95

1 General Requirements

2 Site Construction

3 Concrete

4 Masonry

5 Metals

6 Wood and Plastics

MF 04

General Requirements

01 General Requirements

Facility Construction

02 Existing Conditions

03 Concrete

04 Masonry

05 Metals

06 Wood, Plastics & Composites

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MasterFormat™ Organization

MF 95

7 Thermal & Moisture Protection
8 Doors and Windows
9 Finishes
10 Specialties
11 Equipment
12 Furnishings
13 Special Construction
14 Conveying Systems

Kristen Wynn

MF 04

07 Thermal & Moisture Protection
08 Openings
09 Finishes
10 Specialties
11 Equipment
12 Furnishings
13 Special Construction
14 Conveying Equipment
15-19 Reserved
MasterFormat™ Organization

MF 95

13 – Special Construction
15 - Mechanical

16 - Electrical

Kristen Wynn

MF 04

Facility Services

21 - Fire Suppression
22 - Plumbing
23 - Heating, Ventilating, and Air Conditioning
25 - Integrated Automation
26 - Electrical
27 - Communications
28 - Electronic Safety and Security
MasterFormat™ Organization

**MF 95**

2 – Site Construction

**Kristen Wynn**

**MF 04**

Site and Infrastructure

31 - Earthwork

32 - Exterior Improvements

33 - Utilities

34 - Transportation

35 - Waterway & Marine
Numbering

**MF 95**

- Level 1
- Level 2
- Level 3
- Level 4

At Level 3: Max. 81 sections

*Dave Andrus*

**MF 04**

- Level 1
- Level 2
- Level 3
- Level 4

At Level 3: Max. 9801 Sections
Numbering

MF 95

03300 Cast-in-Place Concrete
07920 Joint Sealants
09910 Paints

MF 04

03 30 00 Cast-in-Place Concrete
07 92 00 Joint Sealants
09 91 00 Painting

Dave Andrus
Products vs. Work Results

MF 95
- Carpet
- Tile
- Paint
- Grouts
- Metal Deck
- Interior Luminaires
- Floor Treatment
- Decorative Finishes

MF 04
- Carpeting
- Tiling
- Painting
- Grouting
- Metal Decking
- Interior Lighting
- Flooring Treatment
- Decorative Finishing

Dave Andrus
New Section Titles

Expand Architectural Subjects
• Listed in MF 95 w/ no numbers
• Not listed in MF 95

New Titles Include:
Construction Waste Recycling
Cold Formed Steel Trusses
Insulated Concrete Forms
Integrated Door and Hardware Assemblies
Code-Required Special Inspections

Dave Andrus
Section Numbers Standardized

**Standardized** Number Pairs:

01  - Operation and Maintenance
05  - Common Work Results
06  - Schedules
07  - Insulation
08  - Commissioning
09  - Instrumentation and Controls

**Examples:**

22 07 00 - Plumbing Insulation
23 07 00 – HVAC Insulation

Dave Andrus
MF 04 Exam

MF 95: Section 02310 - Grading
MF 04: Section ?

Joseph Kearl
MF 04 Exam

Site and Infrastructure Subgroup
30 Series

MF 04:
Section 31 00 00 – Earthwork
Section 31 22 00 – Grading
Section 31 22 13 – Rough Grading

Joseph Kearl
MF 04 Exam

MF 95: Section 15140 – Domestic Water Piping
MF 04: Section ?

Joseph Kearl
MF 04 Exam

Facility Services
Subgroup
20 Series

MF 04:
Section 22 00 00 – Plumbing
Section 22 11 00 – Facility Water Distribution
Section 22 11 16 – Domestic Water Piping

Joseph Kearl
MF 04 Exam

MF 95: Section 03300 – Cast-in-Place- Concrete
MF 04: Section ?

Joseph Kearl
MF 04 Exam

Facility Construction Subgroup

MF 95: Section 03300

MF 04:
Section 03 00 00 – Concrete
Section 03 30 00 – Cast-in-Place Concrete

Joseph Kearl
MF 04 Exam

MF 95: Section 07840 - Firestopping

MF 04: Section ?

Joseph Kearl
MF 04 Exam

Facility Construction Subgroup

MF 95: Section 07840

MF 04:
Section 07 00 00 – Thermal and Moisture Protection
Section 07 84 00 – Firestopping
Section 07 84 13 – Annular Space Protection

Joseph Kearl
MF 04 Exam

MF 95: Section 02700 – Pavement Specialties
MF 04: Section ?

Joseph Kearl
MF 04 Exam

Site and Infrastructure Subgroup
30 Series

MF 04:
Section 32 00 00 – Exterior Improvements
Section 32 17 00 – Paving Specialties
Section 32 17 23 – Pavement Markings

Joseph Kearl
MF 04 Exam

MF 95: Section 02890 – Traffic Signs and Signals
MF 04: Section ?

Joseph Kearl
MF 04 Exam

Facility Construction Subgroup

MF 95: Section 02890

MF 04:
Section 10 00 00 – Specialties
Section 10 14 00 – Identification Specialties
Section 10 14 23 – Panel Signage
Section 10 14 23.23 – Post and Panel Signage

Joseph Kearl
Transitioning

- Estimating Databases
- Cost Histories
- Accounting Codes

Typically a 1 to 1 code conversion.
  - It's not splitting or joining phases between the two formats.

Conrad Johnson
Who’s Adopting
Owners / Publishers

- Army Corps of Engineers Late 2005
- Sweets 2006 Edition
- Reeds Construction Data (Means) 2006 Ed.
- LDS Church Jan 2005
- BYU 2005
Who’s Adopting
Architects

As Master Spec makes it available during the second Quarter 2005
- MHTN
- FFKR
- GSBS
- Architectural Nexus

Wait & See or no plans either way
- DFCM
- VCBO
- Naylor Wentworth

Conrad Johnson
Dilemma

- Some designers adopt early and others wait a year or two.
- This will prolong using a dual format.
- Possibly the construction trade organizations in the state (ie. AGC, ABC, AIA, etc) set a general Utah time table to statewide start new projects using the 04 MasterFormat.
Estimating

- Estimating Software may allow for both MasterFormat structures
  - If not, consider using 2 database
- Talk to your software vendors about tools that may assist in the renumbering task.
- Once you start an estimate, don’t change the format
- On Bid Day your spreadsheet will look different but the same information will be there.
- Spend a few more minutes on the first few bids to become comfortable with the new look.

Jared Bingham
Cost Histories

- Check to see if cost histories can have an additional field for sorting
- Consider this an opportunity to standardize and cleanup your historical data
Accounting

- Finish current projects in 95 MasterFormat
- Start new projects in the 04 format

Jared Bingham
Thank You & Questions

MasterFormat™ Information -
- MasterFormat™ Update Page:
  http://www.CSINet.org/masterformat
- AECDaily.COM

Converting Timberline Estimating Database
http://www.et.byu.edu/~kmiller/mf04/dbconv.html