

January 22, 2009

OFFICIAL PUBLIC NOTICE

Attention: Contractors, Architects and Engineers

Subject: Reorganization and Changes to City of Manhattan Design and Construction Standard Specifications and Policies ~ Amendment No. 10

TO: WHOM IT MAY IT MAY CONCERN:

The following changes in policies, design criteria and construction standard specifications shall take place starting **March 1, 2009** for all projects not currently under design or under construction within the City limits of Manhattan Kansas.

Item No. 10.1: Reorganization of Standard Specifications Chapters.

- **Actions:** The following Chapters are hereby reorganized into the following Divisions and Sections:

OLD Chapter Name	New Division, New Section, New Name
General Information	Division I; Section 1100 ~ General Conditions
Earthwork & Trenching	Division II; Section 2100 ~ Grading & Site Prep
Sanitary Sewer	Division II; Section 2200 ~ Sanitary Sewers
Water	Division II; Section 2300 ~ Waterlines
Storm Drainage Structures	Division II; Section 2400 ~ Storm Sewers
New Chapter did not exist prior to this re-organization.	Division II; Section 2500 ~ Structures
Street & Parking Lots	Division II; Section 2600 ~ Paving
Sidewalks and Driveways	Division II; Section 2700 ~ Construction in Public Rights-of-Way
Seeding and Sodding	Division II; Section 2800 ~ Seeding & Sodding
New Chapter did not exist prior to this re-organization. This new section is the existing Resolution No. 030403-A	Division II; Section 2900 ~ Street Lights

which was approved by City Commission in 2003	
Measurement and Payment	Division IV; Section 4100 ~ Measurement and Payment
New Chapter did not exist prior to this re-organization.	Division V; Section 5100 ~ Street Signs & Traffic Control
New Chapter did not exist prior to this re-organization. KDHE has approved this document for use in the City of Manhattan.	Division V; Section 5200 ~ Sanitary Sewer & Appurtenances
New Chapter did not exist prior to this re-organization. This new section is currently under consideration and not a public document in affect at this time.	Division V; Section 5300 ~ Waterlines Design
New Chapter did not exist prior to this re-organization. This new section is currently under consideration and not a public document in affect at this time. Engineers should continue to follow Stormwater Management Master Plan document for design considerations.	Division V; Section 5600 ~ Storm Drainage Systems & Facilities
New Chapter did not exist prior to this re-organization. This new section is currently under consideration and not a public document in affect at this time.	Division V; Section 5600 ~ Street Design
New Chapter did not exist prior to this reorganization. This section is essential all the Standard Drawing Sheets.	Division VI; Section 6100 ~ Manhattan Standard Drawings

Item No. 10.2: General Conditions; Pages 7 through 31 of the current specifications.

- **Actions:** Remove all pages that are currently in the standard specifications and replace the entire section with new Division I, Section 1100 which are new general conditions distributed last year.

Item No. 10.3: Sanitary Sewer Chapter of the current specifications.

- **Actions:** Remove all pages that are currently in the standard specifications and replace the entire section with two new divisions 2200 and 5200. Division 5200 is the design criteria that should be used by engineers for design of sanitary sewer improvements. Division 2200 is the construction standards to which the improvements shall be constructed, tested and evaluated.

Item No. 10.4: Sanitary Sewer Pipe Material Change.

- **Actions:** The City of Manhattan is transitioning away from Composite Sewer Pipe ~ “TRUSS” Pipe made from CONTECH and begin using a single wall PVC product such as SDR -26 or A-2000 from CONTECH for all sanitary sewers sizes from 8 inch to 15 inch.

Item No. 10.5: Water Line Minimum Size Diameter Change.

- **Actions:** The City of Manhattan is now requiring that all water lines be a minimum of 8 inch in diameter for new projects as per recommendations on page 2-11 in the *2003 Water Distribution System and Sanitary Sewer Collection System Master Plan Update Report*. The price to install an 8 inch water line will be the new baseline value for calculating city-at-large percentages for over sizing with benefit petition districts. If the master plan or City Engineer directs that a larger line be installed to service future areas through a subdivision/development the matching City portion will only include lines larger than 8 inch.

Item No. 10.6: Use of AVK fire hydrants and valves memorandum is revoked.

- **Actions:** The City of Manhattan is hereby repealing Amendment No 6 dated January 15, 2005. The only permitted products for fire hydrants and valves in the City of Manhattan shall be products from Mueller Co.

Item No. 10.7: Stormwater Detention Requirements Changes.

- **Actions:** The stormwater detention requirement has changed for the post development condition on new subdivisions and infill projects that are 0.5 acres or larger. Previously the Stormwater Management Master Plan (SWMMP) established maximum allowable release rates on page 19 for the 2 year, 10 year and 100 year storm events on a per acreage basis. The new criteria for both new subdivisions and infill developments shall provide stormwater detention on site and the post development condition shall have stormwater release rates equal to or less than the predeveloped condition. Developers should continue to have licensed professional engineers prepare drainage studies on all new developments and infill projects to determine the impact and mitigating methods to keep post developed conditions for the 2 year, 10 year, and 100 year storm equal to or less than the pre-developed condition.

Item No. 10.8: Roadway Base Material Change.

- **Actions:** The City of Manhattan will require that a four-inch base material of 1-1/4 inch “Road Rock be the minimum thickness placed under all roadways that are constructed of either asphalt or concrete. Optimum compaction of the native soil or contractor furnished fill to 95% density using modified proctorof

6 inches below the base material is required as well. Hence a 4 inch base material is required with an additional 6 inches of compaction to 95% density is required as a minimum under all roadways.

Item No. 10.9: Streets Name Signs and Traffic Control Signs.

- **Actions:** For new subdivisions, engineers should include in the petition amount the cost to install all street name signs at every intersection plus any necessary traffic control signs as warranted and in compliance with the MUTCD (Manual of Uniform Traffic Control Devices). The cost of these street name signs and traffic control signs will be 100% benefit district. Attached are three standard cad drawings (MSD5310, MSD5320, MSD 5330) that will be used when designing those improvements for new subdivisions.

Item No. 10.10: ADA Truncated Detectable Domes at Sidewalk Ramps.

- **Actions:** The method by which the domes are created by casting concrete in place and stamping them during construction will no longer be permitted on public sidewalk ramps. The performance of domes created by this method have short service and often have to be replaced in two to three years because the domes no longer meet the height, shape and size requirements. Contractors shall use manufactured products in new sidewalk ramps that have been created under condition, such as bricks, pre-cast concrete, stainless steel, cast aluminum or polycarbonate. The following products are examples of materials that could be used: “RampDome Systems”, “Armor-Tile”, “Armorcast”, “Vanguard ADA Systems”.

Item No. 10.11: Modifications to Amendment No. 3 ~ Tracer Wire.

- **Actions:** The wire installed to trace water mains shall be reduced from currently required 12 gauge copper single strand insulated wire to **14 gauge copper single strand insulated wire**. In addition to this change the Public Works department now requires for Cathodic Test Stations to be placed behind all new Fire Hydrants. These test stations shall be Model T2IS2B from Handly Industries, Inc. of Jackson, Michigan or approved equivalent. The test station should be a 15 inch ABS plastic cylinder with a 2 3/8 inch I.D and a flat top for flush installment at the final grade elevation. There shall be two terminal blocks of solid brass. The lids shall be a blue color with a solid iron top. The standard CAD detail sheet has been modified to show the location of these test stations.

Item No. 10.12: Modifications to all the Standard CAD Detail Sheets.

Actions: Remove the previous CAD Detail sheets and replace the set with the following sheets. Manhattan Standard Drawings (MSD) are now Division VI, Section 6100:

Manhattan Standard Detail Sheet No.	Description of the Sheet	Quick Summary of Changes Made to the Standard Sheet
MSD 1110	Title Page	Conventional Signs and Symbols Added, Title Block Area
MSD 1120	General Notes	Dig Safe Information, Summary of Bid Items, Designer and Owner Information
MSD 2210	Sanitary Sewer	Eccentric cones, Centered Manhole Lid & Ring on Shallow Manhole, Adjustment Rings Max and Min, standard Ring and Cover
MSD 2220	Sanitary Sewer Lift Station	Reorganized Detail, Minor text and Note Changes.
MSD 2230	Aerial Sanitary Sewer Pipe Crossing & Quantity Summary Tables	New Sheet
MSD 2310	Water Lines	Added Model T2IS2B Cathode Test Station, tracing wire detail
MSD 2410	Storm Sewer	No Changes
MSD 2510	Headwall Details	New Sheet
MSD 2610	Concrete Street	Panel Widths, 4 inch of base material under all roadways, Added Thickened Edge Expansion Joint Detail, Added Type III and Type IV Valley Gutters, Removed Backer Rod, Removed Keyways
MSD 2620	Asphalt Pavement & Patching	Added Type III and Type IV Valley Gutters, Added a Notes on Stormwater Runoff Considerations Between Major and Minor Streets
MSD 2710	Sidewalk	Minimum Width is 5 feet, Manufactured Detectable Domes at ADA Ramps Only
MSD 2720	Driveways	Radius at Arterial Streets, Max Recommend Slope for a Driveway, Distance of Driveways from Intersections
MSD 2810	General Notes for Erosion Control	New Sheet
MSD 2820	Silt Fence	New Sheet
MSD 2830	Erosion Control Methods for Curb Inlets	New Sheet
MSD 2840	Detention Ponds &	New Sheet

	Erosion Control Blanks	
MSD 5110	Street Name Signs	New Sheet
MSD 5120	Permanent Traffic Control Signs	New Sheet
MSD 5130	Sign Quantity Details	New Sheet

Item No. 10.13: Modifications to Mueller Fire Hydrant Pumper Nozzle Connection.

Actions: Pumper nozzle shall be 5 inch female “Harrington” “STORZ” connection, Part No. HPHA50-45H/CAP. See MSD 2310 sheet for further details to the changes of the fire hydrants assembly.

Sincerely,



Robert K. Ott, PE.,
City Engineer

rko/08092

cc: Dale Houdeshell, P.E., Director of Public Works