CITY OF URBANA, ILLINOIS DEPARTMENT OF PUBLIC WORKS



MEMORANDUM

TO:	Mayor Prussing and Members of the Urbana City Council	
FROM:	William R. Gray, Public Works Director	
	John Collins, Operations Manager	
DATE:	May 23, 2013	
RE:	Central Business District Street Name Sign Replacement	

Background:

The current Central Business District (CBD) Street Name Signs were installed in 2004. The CBD district is bound by Race Street, Illinois Street, Vine Street and University Avenue. This also includes the intersections of Cedar Street at Springfield Avenue and Cedar Street at Elm Street. (See attached CBD district map.) However, the street name signs along University Avenue at Race Street, Broadway Avenue and Vine Street are installed and maintained by the IDOT. These CBD street name signs are the arched top in shape with a black background and white legend. These signs also have "City of Urbana" in the arch of the sign. (See attached.)

Discussion:

The current CBD street name signs are in need of replacement due to their diminishing reflectivity and legibility. The current shape, text (size and font) and color of the current signs no longer meet specifications prescribed within the Manual on Uniform Traffic Control Devices (MUTCD). In the attached circular letter 2012-09 from IDOT, Acting Engineer of Local Roads and Streets, Darrel W. Lewis provides a summary of the new prescribed specifications. These new specifications do include the governing agency's ability to use an engineering study or judgment in regards to text height and sign size. See attached engineering study from Joseph Smith, P.E., Senior Civil Engineer, City of Urbana.

Options:

1. Replace the CBD street name signs complying with all MUTCD regulations and engineering judgment utilizing a 4" upper and 3" lower case text with a green background and white legend. (See attached layout of a street name sign for Main Street.) All overhead mounted signs will utilize 12" upper and 9" lower case text.

2. Replace the CBD street name signs complying with all MUTCD regulations and engineering judgment utilizing a 6" upper and 4.5" lower case text, with a green background and a white legend. All overhead mounted signs will utilize 12" upper and 9" lower case text.

3. Replace the CBD street name signs complying with all MUTCD regulations and engineering judgment utilizing a 6" upper and 4.5" lower case text, with a white back ground and black legend. (See attached layout of a street name sign for Main Street.) All overhead mounted signs will utilize 12" upper and 9" lower case text.

Fiscal Impact:

To replace all of the CBD street names signs utilizing option #3 will cost approximately \$4,000, including installation hardware.

Recommendations:

City staff recommends option #3. This option would provide a distinct brand for the Central Business District. The 6' text and larger sign size would provide better visibility for the motorist.

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CITY OF URBANA, ILLINOIS DEPARTMENT OF PUBLIC WORKS

ENGINEERING

MEMORANDUM

TO: William R. Gray, Public Works Director John Collins, Operations Manager

FROM: Joseph L. Smith, P.E. Senior Civil Engineer 3.4.

DATE: January 28, 2013

SUBJECT: MUTCD requirement for Street Name Sign Letter Height

The 2009 MUTCD has made several changes to the requirements concerning Street Name signs. In the attached circular letter 2012-09 from the Acting Engineer of Local Roads and Streets, Darrel W. Lewis, provides a summary of those changes. More specifically, the purpose of this memo is to provide my opinion and judgement regarding the recommended letter heights. The fourth bullet in his memo reads as follows:

Letter Height - MUTCD Table 2D-2 provides for the recommended minimum letter height based on type of mounting, type of street or highway, and speed limit. The MUTCD recommends a 6" letter height for roads with speed limits of 40 mph or less with an option of a 4" letter height for streets with speed limits of 25 mph or less. Agencies should decide immediately whether to use the recommended letter height or to use engineering study or judgment to decide that a smaller letter height is acceptable. The MUTCD also recommends for multilane roads greater than 40 mph that 8" letter heights be used for post mounted street name signs and 12" letter heights be used for overhead Street Name signs. Agencies need to evaluate and decide by December 2018 whether to use these recommended letter heights or to use engineering study or judgment to decide that a smaller letter height is acceptable.

As he points out, agencies should decide immediately whether to use the recommended letter height or to use an engineering study or judgment to decide that a smaller letter height is acceptable. Our current signs for local streets use a 4" high letter and all in capital letters. It is my opinion that they have been more than adequate in providing information to the driver in a timely manner. To my knowledge we have never received complaints about them being too small to read. I also believe that applying new retro-reflectivity standards and using the 3" high lower case letters with the first letter in 4" high upper case will greatly improve the decision time and readability of the signs. In addition most of our local streets have average speeds around 25-28 MPH and don't need the larger letters. For these reasons it is my judgment that we use the 4 inch upper case letters and 3 inch lower case letters when replacing our street name signs. Appropriate sign blank dimensions should be used per the discretion of the Operations Manager.

It is my opinion that these 4 inch/3 inch letters should only be used on any single lane roads with posted speed limits of 35 MPH or lower. For posted speeds of 40 MPH on single or multi-lane roads I would recommend we use the 6 inch and 4.5 inch letter combination. On any multi-lane roads greater than 40 MPH we should follow the MUTCD and use 8 inch and 6 inch combination and 12 inch and 9 inch combination on overhead signs. To further clarify my suggestions, a summary of various speed limits and street widths follows and modifies the MUTCD Table 2D-2:

Street Speed Limit=	25 MPH	30 MPH	35 MPH	40 MPH	45+ MPH
Two Travel Lanes	4/3 U/L	4/3 U/L	4/3 U/L	6/4.5 U/L	6/4.5 U/L
Four Travel Lanes	4/3 U/L	4/3 U/L	6/4.5 U/L	6/4.5 U/L	8/6 U/L

All Overhead Signs 12/9 U/L for any speed limit

If you need further clarification or have questions, please let me know.



April 16, 2012

CIRCULAR LETTER 2012-09

STREET NAME SIGNS

COUNTY ENGINEERS/SUPERINTENDENTS OF HIGHWAYS MUNICIPAL ENGINEERS/DIRECTORS OF PUBLIC WORKS/MAYORS CONSULTING ENGINEERS

Due to changes in the 2009 <u>Manual on Uniform Traffic Control Devices</u> (MUTCD) to the requirements for Street Name (D3-1) signs, the central Bureau of Local Roads and Streets has received numerous questions. Following is a summary:

- Installation MUTCD Section 2D.43 paragraph 01 recommends that "Street Name (D3-1 or D3-1a) signs should be installed in urban areas at all intersections...and should be installed in rural areas to identify important roads that are not otherwise signed." The department requires rural reference signs to follow the Street Name (D3-1) sign requirements if installed.
- Size of Sign MUTCD Section 2D.04 paragraph 01 requires that "the sizes of conventional road guide signs that have standardized designs shall be as shown in Table 2D-1." For 1 line street name signs, the height required is 12" for conventional roads with a minimum height of 8" allowed based on engineering judgment. The length varies based on the name of the street. This requirement applies immediately to any new Street Name signs. However, there is no deadline for existing Street Name signs to meet this requirement.
- Mixed Case Lettering MUTCD Section 2D.43 paragraph 03 requires that street name signs "shall be composed of a combination of lower-case letters with initial upper-case letters." This requirement applies immediately to any new Street Name signs. However, there is no deadline for existing Street Name signs to meet this requirement.
- Letter Height MUTCD Table 2D-2 provides for the recommended minimum letter height based on type of mounting, type of street or highway, and speed limit. The MUTCD recommends a 6" letter height for roads with speed limits of 40 mph or less with an option of a 4" letter height for streets with speed limits of 25 mph or less. Agencies should decide immediately whether to use the recommended letter height or to use engineering study or judgment to decide that a smaller letter height is acceptable. The MUTCD also recommends for multilane roads greater than 40 mph that 8" letter heights be used for post mounted street name signs and 12" letter heights be used for overhead Street Name signs. Agencies need to evaluate and decide by December 2018 whether to use these recommended letter heights or to use engineering study or judgment to decide that a smaller letter height is acceptable.

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- Background Color MUTCD Section 2D.43 paragraph 18 requires that besides green "the only acceptable alternative background colors for Street Name (D3-1 or D3-1a) signs shall be blue, brown, or white." The lettering for green, blue, or brown signs shall be white and the lettering for white signs shall be black. This requirement applies immediately to any new Street Name signs. However, there is no deadline for existing Street Name signs to meet this requirement.
- Visibility MUTCD Section 2D.43 paragraph 21 allows that "Street Name signs may also be placed above regulatory STOP or YIELD sign with no required vertical separation."
- Letter Font The Standard Highway Sign manual recommends D Series font. B and C Series font may be used in cases where lateral space constraints require a limited length of sign.

Please contact the Local Policy and Technology Unit at <u>dot.localpolicy@illinois.gov</u> with any questions.

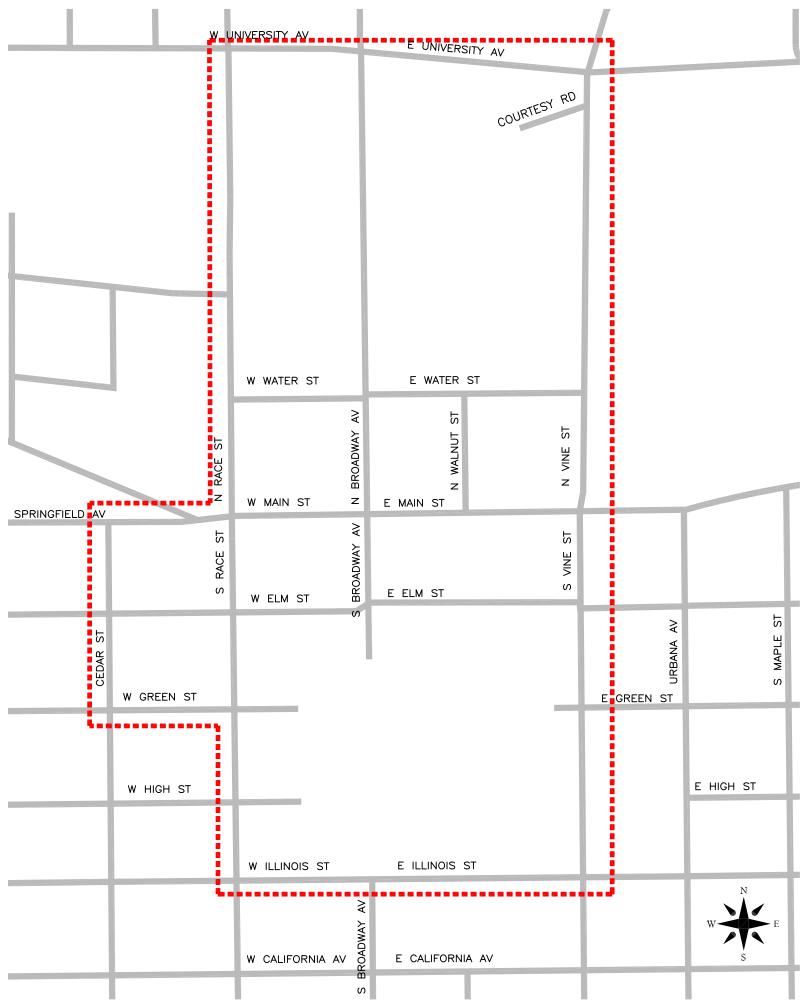
Sincerely,

Varrell Zeurs

Darrell W. Lewis, P. E. Acting Engineer of Local Roads and Streets

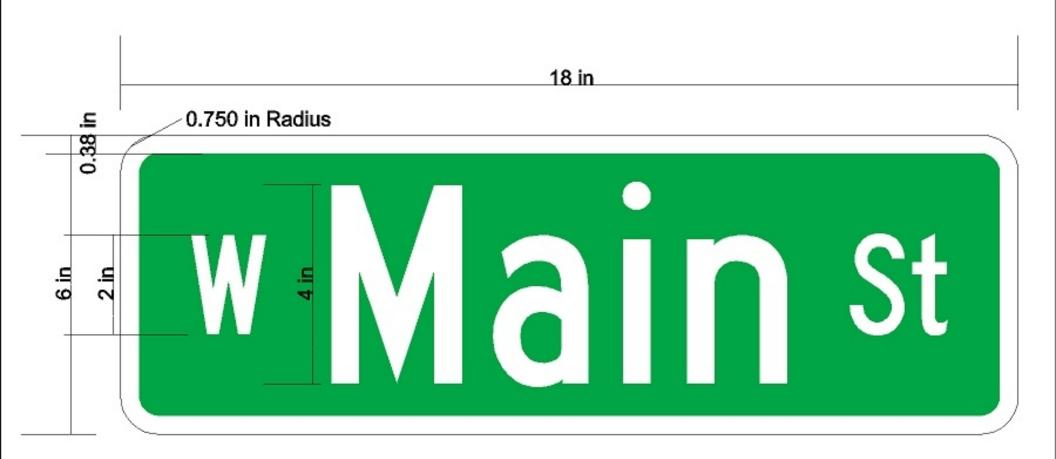
Attachments

DOWNTOWN STREET NAME SIGN REPLACEMENT









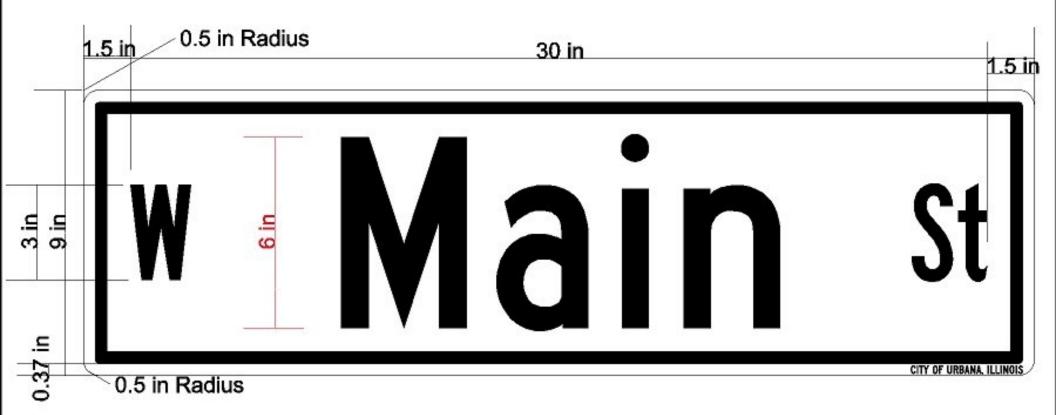
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