

Melinda L. McGrath
Interim Executive Director/
Chief Engineer

Jackie Duckworth
Deputy Executive Director/
Administration



Charles R. Carr
Director
Office of Intermodal Planning

Willie Huff
Director
Office of Enforcement

P. O. Box 1850 / Jackson, Mississippi 39215-1850 / Telephone (601) 359-7001 / FAX (601) 359-7110 / www.GoMDOT.com

Inter-Office Memorandum

Date: December 2, 2011

To: Design Team Leaders
Design Section Engineers
RWD Quality Control Engineer, Russell Sutterfield
RWD Hydraulics Engineer, Cathy Holmes
Active Consultants

From: Roadway Design Division Engineer
John M. Reese 

Subject: Revised Urban Street Typical Section
Figures 14-2H and 14-2F in 2001 Roadway Design Manual

Attached is a revised version of Figure 14-2H (Typical Section Nomenclature for Urban Streets with Curbs) from the 2001 Roadway Design Manual. The primary purpose of this drawing is to describe the nomenclature used in urban street design. It is not intended to illustrate every aspect of the desirable typical section. Every project is unique and may include additional features not depicted in the drawing, such as bicycle lanes, shared-use paths, on-street parking, etc.

Below is a summary of changes to this figure, which will be incorporated into the next edition of the Roadway Design Manual. Designers are to follow these guidelines for all urban curbed roadway designs.

1. The 2% slope across the sidewalk is reduced to 1.5% desirable, with 2% being the maximum allowable slope. A 1.5% cross slope will adequately drain the surface and provide some construction tolerance.
2. The fill section on the right side of the current figure shows a 2% slope across the sidewalk sloping towards the roadway. The revised figure shows the sidewalk sloping in the opposite direction, away from the roadway. The purpose of this is to reduce the amount of drainage entering into the stormdrain system. A fill ditch is also shown to carry side drainage to the next cross-drain.



3. The cut section shown on the right side of the current figure also shows the area behind the curb sloping towards the roadway. While this method is acceptable, it is more desirable to have this area sloping away from the roadway also, which would require that a ditch be incorporated behind the curb & gutter and sidewalk as shown in the revised figure. However, this may not always be practical in urban sections due to Right-of-Way constraints, and should be evaluated on a case-by-case basis. See Detail A in the revised figure.
4. In cases where it is not practical to design according to item number three above, and where alternating fill and cut sections would result in alternating directions of the slope of the area behind the curb, it is acceptable to slope this area towards the roadway as shown in Detail A of the revised figure, even in the fill sections. However, the stormdrain system for the roadway shall be designed so that this additional drainage can be accommodated (additional inlets, larger stormdrain pipes, etc).
5. The fill section on the left side of the current figure is shown correctly. However, without the sidewalk the slope should be 4%. Once again, an attempt should be made to slope the area behind the curb away from the roadway in both cut and fill sections, and incorporate a ditch behind the curb & gutter as described in item number three above, and as shown in the revised figure.
6. The ditches shown in the revised figure are minimum, and shall be adjusted as necessary to provide adequate drainage.
7. The left side of the current figure shows a desirable width of five (5) feet for the area behind the curb. A three (3)-foot width is acceptable here.
8. The right side of the current figure shows a three (3)-foot desirable buffer width between back of curb and sidewalk. The desirable buffer width should equal the driveway radii. It should be noted the Design Manual states that the minimum turning radius is three (3) feet for residential driveways, and five (5) feet for commercial/industrial driveways, measured from the back of the curb. Preferably, these minimum radii should be increased to five (5) feet and ten (10) feet respectively,
9. These guidelines apply to New Construction projects as well as 3R projects.

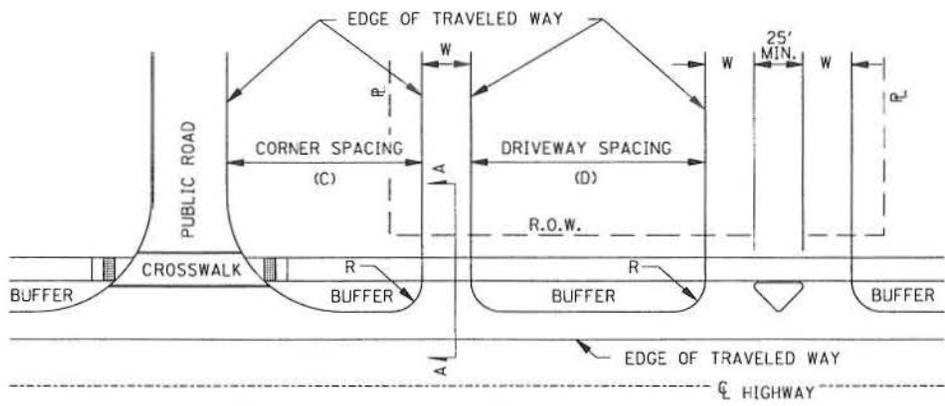
A revised Figure 14-2F is also attached. This revision incorporates the changes described above to the profile sections, and also revised plan views for different sidewalk configurations.

If there are any questions, please advise.

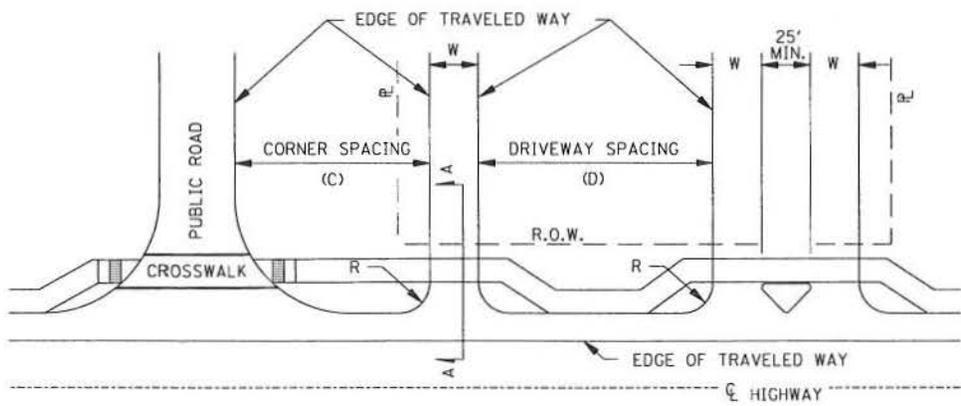
JMR:JRP:jrp

pc: Melinda L. McGrath, Interim Executive Director/Chief Engineer
Amy Mood, Assistant Chief Engineer – Pre-Construction
Construction Division
LPA Division
District Engineers

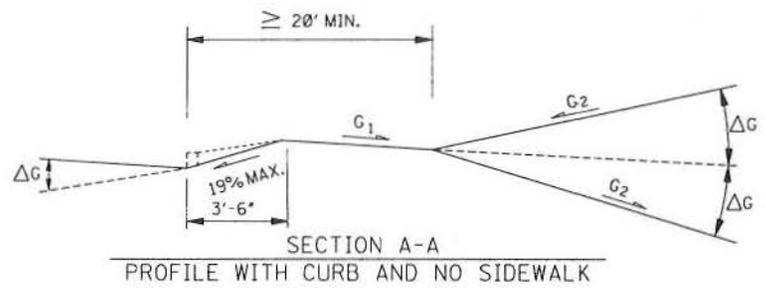
Attachments



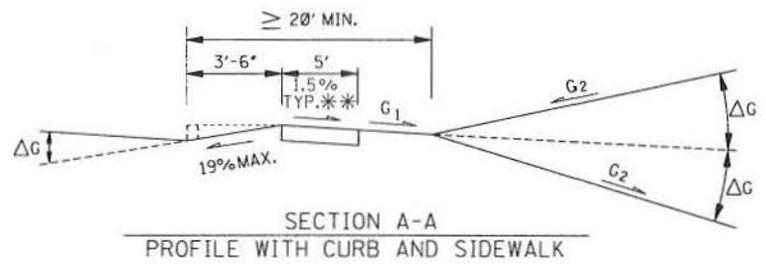
PLAN VIEW WITH CONSTANT BUFFER



PLAN VIEW WITHOUT BUFFER OR WITH VARIABLE BUFFER



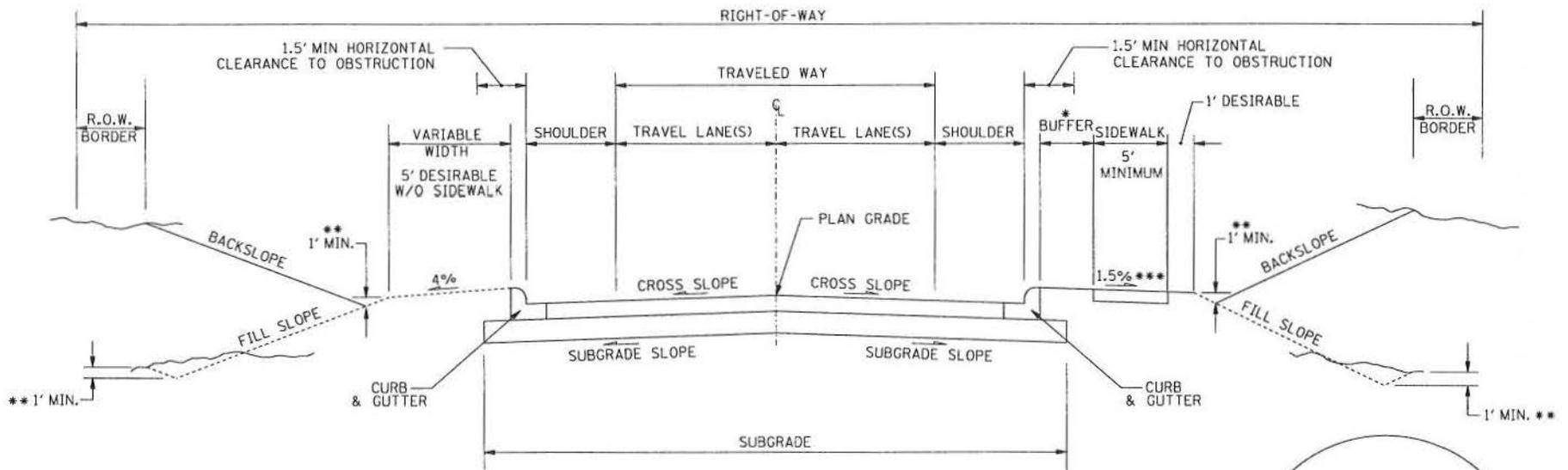
SECTION A-A
PROFILE WITH CURB AND NO SIDEWALK



SECTION A-A
PROFILE WITH CURB AND SIDEWALK

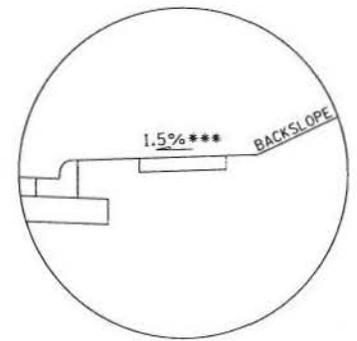
** 1.5% DESIRABLE (2% MAX)

TYPICAL URBAN DRIVEWAYS
FIGURE 14-2F
(REVISED)



- *5' BUFFER TYPICAL
MUST PROVIDE ADEQUATE
ROOM FOR CURB-CUT
- **DEPTH TO BE DETERMINED IN
DRAINAGE DESIGN (1' MIN)
- ***1.5% DESIRABLE (2% MAX)

TYPICAL SECTION NOMENCLATURE
(URBAN STREETS WITH CURBS)
FIGURE 14-2H
(REVISED)



DETAIL *A*
SLOPE TOWARDS ROAD IN
AREAS WITH LIMITED ROW