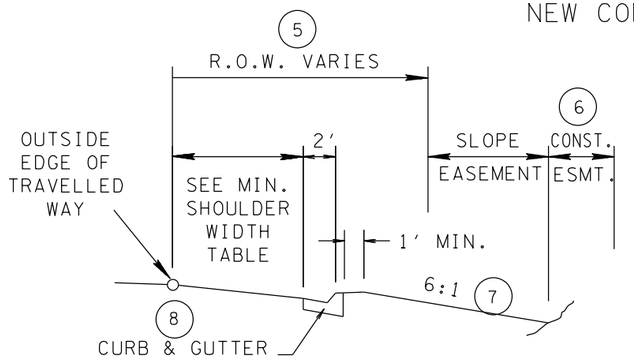
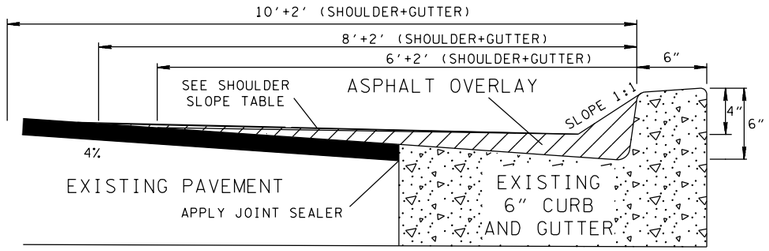
NEW CONSTRUCTION



SHOULDER AND CURB CONFIGURATION
FOR 45-55 MPH DESIGN SPEED
(SEE NOTE ③)

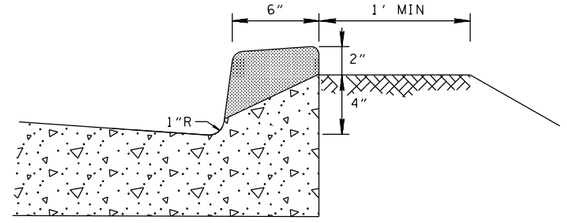
MINIMUM SHOULDER WIDTH TABLE			
ROAD CLASSIFICATION	STANDARD DRAWING	ADT	SHOULDER WIDTH
COLLECTION ROADS STREET	RD01-TS-2	< 2000	6′
		> 2000	8′
4-6 LANE COLLECTOR HWY	RD01-TS-2B	ANY	10′
2 LANE ARTERAL HWY	RD01-TS-3	< 2000	8′
		> 2000	10′
4-6 LANE ARTERAL HWY	RD01-TS-3C	ANY	10′

RECONSTRUCTION DETAILS



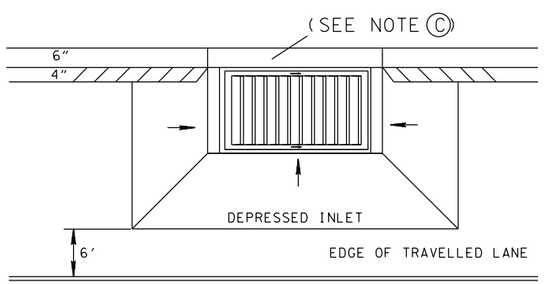
OPTION 2

THIS DETAIL IS INTENDED TO BE USED DURING RESURFACING PROJECTS WHEN MODIFICATION OF EXISTING CURB HEIGHT IS REQUIRED.
(SEE NOTE Ⓓ)



OPTION 3

SAW CUT LOCATION TO MODIFY EXISTING
6″ CURB TO 4″ CURB
(SEE NOTE Ⓓ)



DETAIL FOR OPTION 2
DEPRESSED GRATE INLET
MODIFICATION FOR ASPHALT OVERLAY
(SEE NOTE Ⓕ)

SHOULDER SLOPE TABLE	
EXISTING SHOULDER WIDTH (FT)	ADJUSTED SHOULDER SLOPE (%)
10	2.4
8	2
6	1.6

DESIGN NOTES

PURPOSE

① THIS STANDARD DRAWING IS INTENDED TO BE USED IN TRANSITIONAL ZONES (SUBURBAN) BETWEEN RURAL AND FULLY DEVELOPED URBAN AREAS WHERE CURB AND GUTTER IS NEEDED FOR DRAINAGE OR TO LIMIT RIGHT OF WAY, BUT A POSTED SPEED OF 45 MPH OR GREATER IS DESIRED. THIS STANDARD SHALL BE USED IN CONJUNCTION WITH THE TYPICAL SECTION REQUIRED FOR THE ROAD CLASSIFICATION.

DESIGN SPEED

② THIS APPLICATION IS FOR DESIGN SPEEDS OF 45-55 MILES PER HOUR. FOR DESIGN SPEEDS LESS THAN 45 MPH SEE RD01-TS-6.

TYPICAL CROSS-SECTION DETAILS

③ THIS STANDARD ADDRESSES THE USE OF CURBS ON HIGHER DESIGN SPEEDS AND SHOWS HOW TO MODIFY EXISTING STANDARD TYPICAL SECTIONS BEYOND THE OUTSIDE EDGE OF TRAVELLED WAY ONLY. FOR ALL OTHER INFORMATION NOT SHOWN SEE APPLICABLE TYPICAL CROSS-SECTION STANDARD DRAWING RD01-TS-2, RD01-TS-2B, RD01-TS-3, OR RD01-TS-3C.

SHOULDER

④ SHOULDER WIDTH VERIES FOR DIFFERENT ROAD CLASSIFICATIONS AND ADT (SEE TABLE).

RIGHT OF WAY

⑤ IF GUARDRAIL IS NOT PROPOSED, THE REQUIRED RIGHT-OF-WAY SHALL BE ACQUIRED TO MEET CLEAR ZONE REQUIREMENTS AS SHOWN ON S-CZ-1 FOR THE DESIGN SPEED (45-55 MPH). FOR 55 MPH DESIGN SPEED THE REQUIRED ROW WIDTH FROM THE OUTSIDE OF TRAVELLED WAY IS 22′ (6:1 SLOPES) OR 26′ (4:1 SLOPES)

CONSTRUCTION EASEMENT

⑥ IF REQUIRED, 10 FEET MINIMUM DESIRABLE.

SLOPES

⑦ 6:1 SLOPES OR FLATTER ARE DESIRABLE AND 4:1 IS THE MAXIMUM. SLOPES STEEPER REQUIRE GUARDRAIL SEE NOTE ⑨.

CURBS

⑧ ONLY 4″ SLOPING CURB (RP-MC-1) TYPE 4-30, 4-36 OR 4-42 MAY BE USED.

GUARDRAIL

⑨ 31″ GUARDRAIL ONLY MAY BE USED SEE S-GR-31-1 FOR GUARDRAIL LOCATION REACTIVE TO CURB SEE S-PL-6.

SIDEWALKS

⑩ SIDEWALKS ADJACENT TO CURB SHOULD NOT BE CONSIDERED FOR HIGH SPEED FACILITIES. HOWEVER IF UNAVOIDABLE SIDEWALK SHOULD BE PLACED AS FAR AS FROM THE ROADWAY.

PARKING

⑪ PARKING NOT PERMITTED ON HIGH SPEED URBAN ROADWAYS.

RECONSTRUCTION NOTES

Ⓐ EXISTING SECTION OF CURBED ROADWAY MAY BE RETROFITTED TO THIS STANDARD TO ALLOW HIGHER SPEED LIMITS IF A TRAFFIC ENGINEERING STUDY SHOWS THAT THE ROADWAY MEETS THE HIGHER SPEED DESIGN CRITERIA (GEOMETRIC DESIGN, SIGHT DISTANCE, ETC) SEE NOTE Ⓑ AND Ⓒ.

Ⓑ EXISTING 6″ VERTICAL CURB SHALL BE REPLACED BY 4″ SLOPING CURB AT THE TIME OF RESURFACING OR OTHER LARGE SCOPE PROJECT.

Ⓒ EXISTING 6″ VERTICAL CURB IRONS SHALL BE REPLACED BY 4″ SLOPING CURB IRONS WHEN THE CURB IS RETROFITTED.

Ⓓ MODIFICATIONS TO EXISTING 6″ VERTICAL CURBS MAY BE ACCOMPLISHED BY OR A COMBINATION OF FOLLOWING OPTIONS:

1) REMOVING EXISTING 6″ CURB AND REPLACING WITH 4″ CURB.

2) PAVING OVER THE GUTTER WITH ASPHALT WITH MODIFIED SHOULDER SLOPE. (SEE OPTION 2).

3) CUTTING THE EXISTING 6″ VERTICAL CURB FACE (SEE OPTION 3).

Ⓔ PROPER CLEAR ZONE OR GUARDRAIL MUST BE PROVIDED. SEE DESIGN NOTES ⑤ AND ⑨.

Ⓕ IF ASPHALT OVERLAY OPTION IS USED, THE PAVEMENT AT EXISTING GRATE INLETS SHALL BE MODIFIED TO CREATE A DEPRESSED INLET. THE FLARES SHALL BE 1% STEEPER THAN THE RUNNING GRADE OR CROSS SLOPE RESPECTIVELY SEE DETAIL 3.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

TYPICAL CURB AND GUTTER FOR HIGH SPEED SUBURBAN ROADWAYS

4-17-14 | RD01-TS-6B