CURB RETURN FILLET REQUIRED
FOR NEW CURB & GUTTER
INSTALLATIONS (TYPICAL)

NOTE: INCLUDE COST OF CONCRETE FILLET IN VALLEY GUTTER.

VARIABLE RADIUS

BACK OF CURB

CONCRETE CURB RETURN FILLET

REINFORCE WITH 5 – #4 x 36" (13 x 900) EPOXY COATED
DEFORMED REBARS EVENLY SPACED ON 8" [150] CENTERS
WITH 3 1/2" [90] COVER

CONTRACTION JOINTS ARE REQUIRED APPROX. EVERY 10 FEET (3000)

FRONT OF GUTTER

CURB TO CURB WIDTH VARIES

EXISTING CURB & GUTTER INSTALLATION WITHOUT CURB RETURN FILLET

VARIABLE RADIUS

BACK OF CURB

6" [150]

REINFORCE WITH 5 – #4 x 36"
(13 x 900) EPOXY COATED
DEFORMED REBARS EVENLY SPACED ON 8" [150] CENTERS WITH 3 1/2"
[90] COVER

PLAN

STREET SURFACE

FINISHED STREET SURFACE IS 1/8" (3) TO 1/4" (6) ABOVE EDGES OF DOUBLE GUTTER

NOTES:

1. INDIVIDUAL LOCATIONS MAY REQUIRE MORE DETAILS FOR ELEVATIONS AND DIMENSIONS.

2. INSTALL REINFORCEMENT AT ALL CONSTRUCTION JOINTS.

3. CONTRACTION JOINTS ARE 1/8" [3 mm] MIN. AND 3/8" [10 mm] MAX. IN WIDTH. FORM JOINTS BY SAWING OR SCORING TO A MINIMUM DEPTH OF 1" [25 mm]. FORM SCORED JOINTS BY A TOOL WHICH WILL LEAVE ROUNDED CORNERS AND DESTROY AGGREGATE INTERLOCK TO A MINIMUM DEPTH OF 1" [25 mm].

4. TO BE USED ON PLANT MIX SURFACING PROJECTS ONLY. PROVIDE PROJECT SPECIFIC DETAILS FOR PCCP PROJECTS.

SECTION A-A

UNITED STATES DEPARTMENT OF TRANSPORTATION

DETAILED DRAWING

REFERENCE

STANDARD SPEC.

Dwg. No.

Section

609-00

CONCRETE VALLEY GUTTER

MONTANA DEPARTMENT OF TRANSPORTATION
CONCRETE CURBS

**2% SLOPE**

6' [183] OR AS REQUIRED

CONCRETE ADA LAYDOWN CURBS

USE WHEN LANDING IS PLACED INTEGRAL WITH CURB & GUTTER

SEE DETL. DWG. NO. 608-35

CONCRETE CURBS

1 CUBIC FOOT (0.305 cu m) OF CONCRETE WILL MAKE ABOUT 8 LINEAR FEET (2.44 in m) OF CURB.

CURB SECTION

1 CUBIC FOOT (0.305 cu m) OF CONCRETE WILL MAKE ABOUT 5 LINEAR FEET (1.52 in m) OF CURB.

CURB SECTION

NOTES:

1. WHEN CURB IS USED IN CONJUNCTION WITH GUARDRAIL, USE THE 4' [102] HIGH TYPE. OTHERWISE, THE CONTRACTOR MAY USE EITHER SECTION.
2. CONFORM ALL MATERIALS AND CONSTRUCTION PER SECTION 609.
3. PROVIDE CONTRACTION JOINTS IN CONCRETE CURBS AS DESCRIBED IN NOTE (B) ABOVE.

EXPANSION JOINT FILLER MATERIAL

USE PREFORMED EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF SECTION 707.

BOND BREAKER MATERIAL

USE A 15 OR 20 POUND (6.8 OR 13.6 KILOGRAM) ROOFING FELT MATERIAL, OR OTHER PRODUCT AS APPROVED BY THE PROJECT MANAGER. DO NOT USE EXPANSION JOINT MATERIAL.

RADIUS:

MINIMUM CURB RETURN RADIUS = 10' [3.05 m], 15' [4.57 m] RADIUS ARE DESIRABLE FOR STREETS.

CONCRETE:

UNLESS OTHERWISE SPECIFIED, CONSTRUCT CONCRETE CURBS AND CONCRETE INTEGRAL CURB AND GUTTER WITH CLASS GENERAL CONCRETE OR APPROVED EQUAL.

UNITS SHOWN IN BRACKETS ({ }) ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

REFERENCE

DWG. NO. 609-05

STANDARD SPEC.

SECTION 609.707

MISCELLANEOUS CURBS

MDT* MONTANA DEPARTMENT OF TRANSPORTATION
CONSTRUCTION:

1. CURBS MAY BE CONSTRUCTED USING ANY OF THE FOLLOWING THREE METHODS:
   (1) PRECAST
   (2) CAST IN PLACE
   (3) CONSTRUCTED BY THE USE OF AN APPROVED CURB FORMING OR SLIP FORM MACHINE.

2. WHEN USING EITHER METHOD (2) OR (3), REINFORCING STEEL IS NOT REQUIRED, WITH
   THE EXCEPTION OF THE PINS, SCREWS OR SAW CUT CURBS TO A DEPTH OF 1" [25] TO FORM
   CONTRACTION JOINTS AT INTERVALS OF 10 FT. [3000] OR LESS. EXTEND 1/2" [13] MIN. WIDTH
   EXPANSION JOINTS COMPLETELY THROUGH CURB EVERY 100 FT. [+ 30 FT ] [30 m (+ 10 m)], AT
   INTERVALS EQUAL TO THE NEAREST MULTIPLE OF THE CONTRACTION JOINT INTERVAL AND
   FILL WITH PREFORMED EXPANSION JOINT FILLER MEETING SECTION 707.

3. FORM PRECAST CURBS IN THEIR INVERTED POSITION, IN LENGTHS NOT LESS THAN
   4 FT. [1220], OR MORE THAN 10 FT. [3050].

MATERIAL:

1. CONSTRUCT CURBS WITH CLASS GENERAL CONCRETE OR AN APPROVED EQUIVALENT MIX.

2. EPOXY Binder FOR Grouting MUST MEET THE REQUIREMENTS OF
   (AASHTO M 235 [235 M]) (ASTM C 881 [881 M]).
NOTES:
1/2" (13) EXPANSION JOINTS ARE SHOWN AS DARK SOLID LINES FOR VISUAL PURPOSES.
BOND BREAKER IS SHOWN AS DARK DASHED LINE FOR VISUAL PURPOSES.

SECTION A-A

NOTES:
1. INSTALL PREFORMED EXPANSION JOINT FILLER, PER SECTION 707, AT ALL EXPANSION JOINTS, FOR THE FULL THICKNESS OF THE CONCRETE MEDIAN CAP.
3. ALL JOINTS MUST BE STRAIGHT AND PERPENDICULAR TO THE CENTERLINE AND THE SURFACE OF THE MEDIAN CAP. WHERE PRACTICAL ALIGN ALL JOINTS WITH LIKE JOINTS IN ADJOINING WORK. USE JOINTS TO OUTLINE ALL PANELS IN THE MEDIAN CAP. USE SQUARE PANELS WHEN PRACTICAL. ON NARROW MEDIAN CAPS, RECTANGULAR SHAPED PANELS ARE ACCEPTABLE.
4. PROVIDE CONTRACTION JOINTS NO LESS THAN 1/8" (.3) WIDE AND NO MORE THAN 1/4" (.6) WIDE, BY USING CONCRETE JOINT TILES, MATERIALS, OR SPACING, AS REQUIRED. CONTRACTION JOINTS MAY BE CUT BY A GROOVE FORMING TOOL.
5. LOCATE EXPANSION JOINTS AT ALL JOINTS BETWEEN THE MEDIAN CAP AND STRUCTURES IN PLACE AND EVERY 100 FT (30.5 m) AT INTERVALS EQUAL TO THE NEAREST MULTIPLE OF THE CONTRACTION JOINT INTERVAL. USE A LONGITUDINAL EXPANSION JOINT IN THE CENTERLINE OF ALL MEDIAN CAPS WIDER THAN 12 FT. (3600).
6. USE LONGITUDINAL CONTRACTION JOINTS IN MEDIAN CAPS WIDER THAN 6 FT. (1830), WITH SPACING TO EXCEED 6 FT. (1830). SPACE TRANSVERSE CONTRACTION JOINTS EQUAL TO THE LONGITUDINAL SPACING ON MEDIAN CAPS WIDER THAN 6 FT. (1830). FOR MEDIAN CAPS NARROWER THAN 6 FT. (1830), SPACE TRANSVERSE CONTRACTION JOINTS 10 FT. (3000) OR LESS.
7. CONSTRUCT CONCRETE MEDIAN CURB AND CAP WITH CLASS GENERAL CONCRETE OR APPROVED EQUIVALENT.

UNITS SHOWN IN BRACKETS [ ] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 609-12
SECTION 609, 707

CONCRETE MEDIAN CAPS