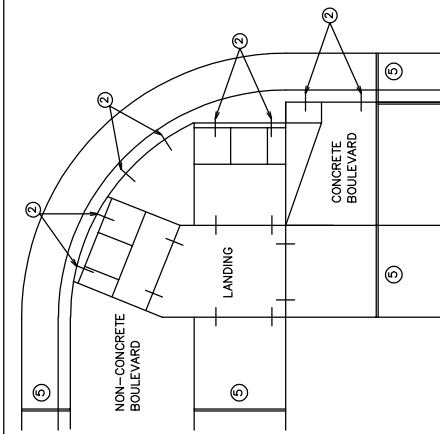
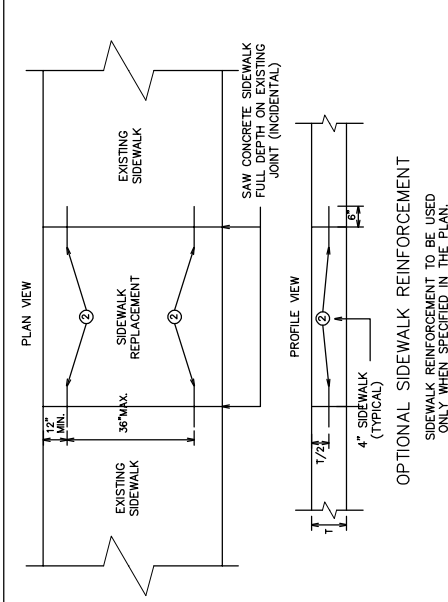


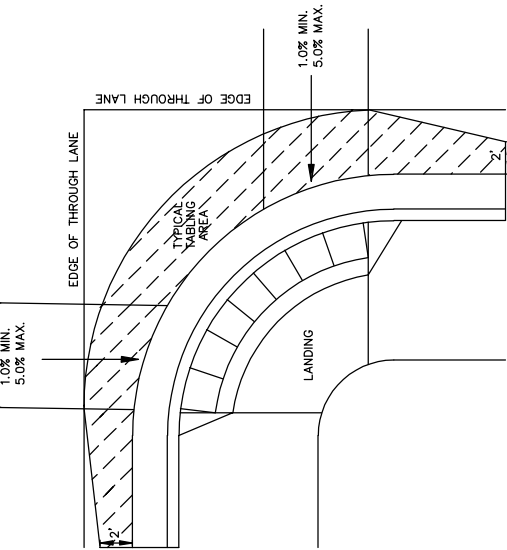
EXPANSION MATERIAL PLACEMENT FOR CONCRETE AND BITUMINOUS ROADWAYS



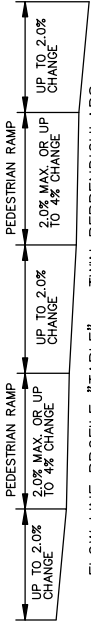
OPTIONAL CURB LINE REINFORCEMENT ④ PLACEMENT ON BITUMINOUS ROADWAYS



OPTIONAL SIDEWALK REINFORCEMENT SIDEWALK REINFORCEMENT TO BE USED ONLY WHEN SPECIFIED IN THE PLAN.



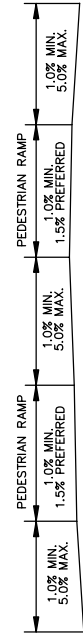
CURB LINE AND ROAD CROSSING ADJUSTMENTS



FLOW LINE PROFILE "TABLE" - TWIN PERPENDICULARS



FLOW LINE PROFILE "TABLE" - FAN



FLOW LINE PROFILE RAISE - TWIN PERPENDICULARS



FLOW LINE PROFILE RAISE - FAN

"TABLING" OF CROSSWALKS MEANS MAINTAINING LESS THAN 2% CROSS SLOPE WITHIN A CROSSWALK. IS REQUIRED WHEN A ROADWAY IS IN A STOP OR YIELD CONDITION AND THE PROJECT SCOPE ALLOWS. RECONSTRUCTION PROJECTS: ON FULL PAVEMENT REPLACEMENT PROJECTS

"TABLING" OF ENTIRE CROSSWALK SHALL OCCUR WHEN FEASIBLE.

MILL & OVERLAY PROJECTS: "TABLING" OF FLOW LINES, IN FRONT OF THE PEDESTRIAN RAMP, IS REQUIRED WHEN THE EXISTING FLOW LINE IS GREATER THAN 2% WARPING OF THE BITUMINOUS PAVEMENT. WHEN THE EXISTING FLOW LINE IS GREATER THAN 2% WARPING OF THE BITUMINOUS PAVEMENT, AS MUCH AS POSSIBLE WHILE ADHERING TO THE FOLLOWING CRITERIA:

- 1.0% MIN. CROSS-SLOPE OF THE ROAD
- 5.0% MAX. CROSS-SLOPE OF THE ROAD
- UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE IN FRONT OF PEDESTRIAN RAMP
- UP TO 2% CHANGE IN FLOW LINE FROM EXISTING SLOPE BEYOND THE PEDESTRIAN RAMP

STAND-ALONE ADA RETROFITS: FOLLOW MILL & OVERLAY CRITERIA ABOVE HOWEVER ALL PAVEMENT REPLACEMENT ON CONCRETE ROADWAYS.

RAISING OF CURB LINES SHOULD OCCUR IN VERTICALLY CONSTRAINED AREAS. RAISE THE CURB LINES ENOUGH TO MAINTAIN THE EXISTING FLOW LINE. WHEN RAISING THE CURB LINES, THE FOLLOWING CRITERIA, SHALL BE ADHERED TO:

- 1.0% MIN. AND 5.0% MAXIMUM CROSS-SLOPE OF THE ROAD
- 1.0% MIN. FLOW LINE (ON EITHER SIDE OF PEDESTRIAN RAMP) TO MAINTAIN POSITIVE DRAINAGE
- 5.0% RECOMMENDED MAX. FLOW LINE
- LONGITUDINAL THROUGH LANE ROADWAY TAPERS SHOULD BE 1" VERTICAL PER 15' HORIZONTAL

NOTES:

- ① TO ENSURE RAMPS AND LANDINGS ARE PROPERLY CONSTRUCTED, ALL INITIAL LANDINGS AT A TOP OF A RAMPED SURFACE (RUNNING SLOPE GREATER THAN 2%) SHALL BE FORMED AND PLACED SEPARATELY IN AN INDEPENDENT CONCRETE POUR. FOLLOW SIDEWALK REINFORCEMENT DETAILS ON THIS SHEET FOR ALL SEPARATELY POURED INITIAL LANDINGS.
- ② DRILL AND GROUT NO. 4 12" LONG REINFORCEMENT BARS AT 36" MAXIMUM CENTER TO CENTER (EPOXY COATED). BARS TO BE ADJUSTED TO MATCH RAMP GRADE.
- ③ DRILL AND GROUT 2 - NO. 4 X 12" LONG REINFORCEMENT BARS (EPOXY COATED). REINFORCEMENT REQUIRED FOR ALL CONSTRUCTION JOINTS WITHIN RADIUS.
- ④ THIS OPTIONAL CURB LINE REINFORCEMENT DETAIL SHOULD ONLY BE USED ON BITUMINOUS ROADWAYS WHEN SPECIFIED IN THE PLAN.
- ⑤ 1/2 IN. PREFORMED JOINT FILLER MATERIAL PER MNDOT SPEC. 3702.

REVISED:

APPROVED: 1-23-2017 STANDARD PLAN 5-297.250 6 OF 6

PEDESTRIAN CURB RAMP DETAILS

REVISION:

CITY PL. NO. STR-1-00  
REVISED 1-18  
APPROVED: JANUARY 23, 2017  
OPERATIONS ENGINEER