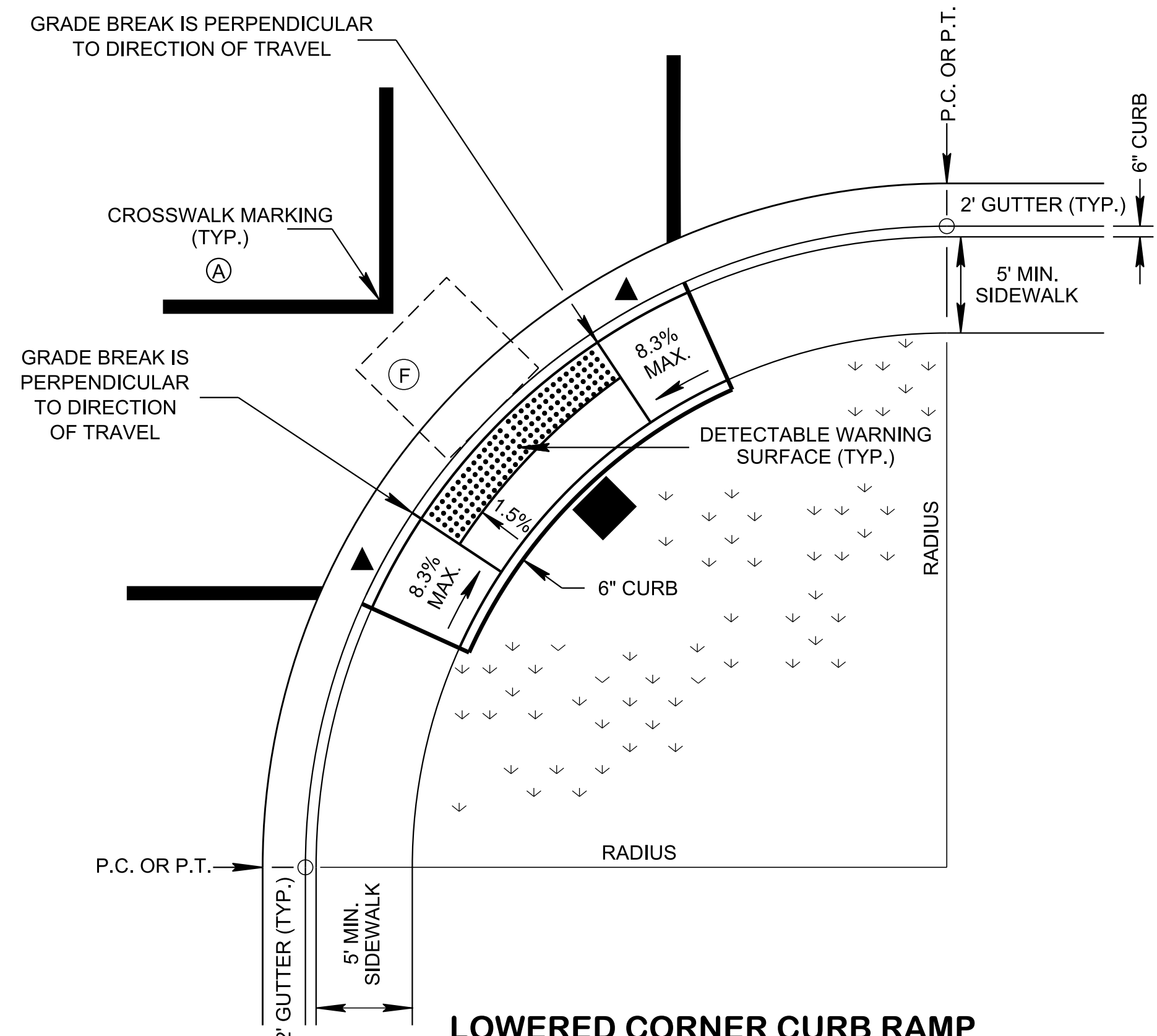


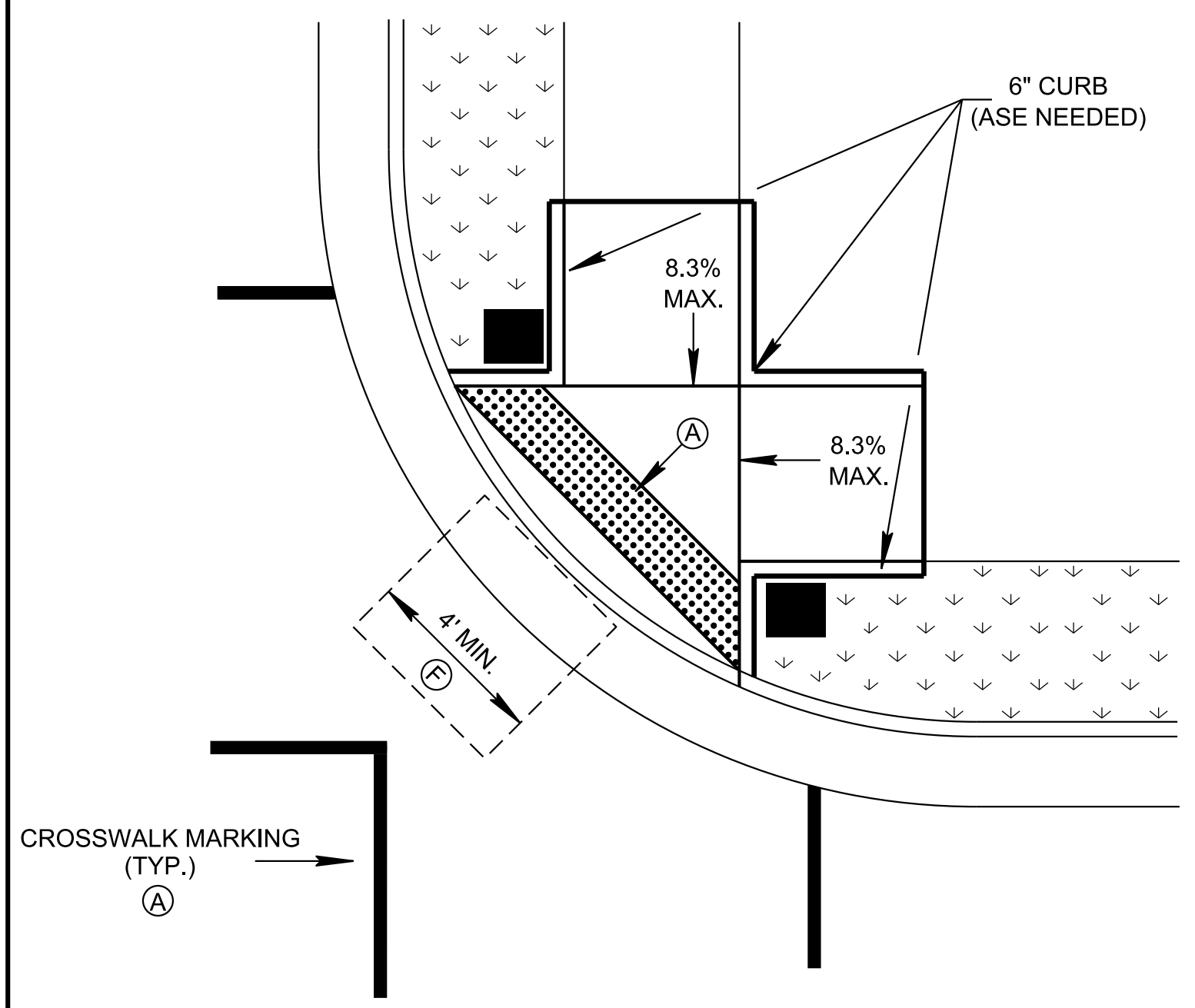
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 \\AG03SDC\FW00008.net.ads.state.tn.us\13SHARED\StandDraw\DESIGN STANDARDS\Instructional Bulletins\2018\Draft\B 18-12 - Curb Ramps & Driveways std.dwg RP-Hs & RP-Ds\DGNS and PDFs\RP-H9-201807



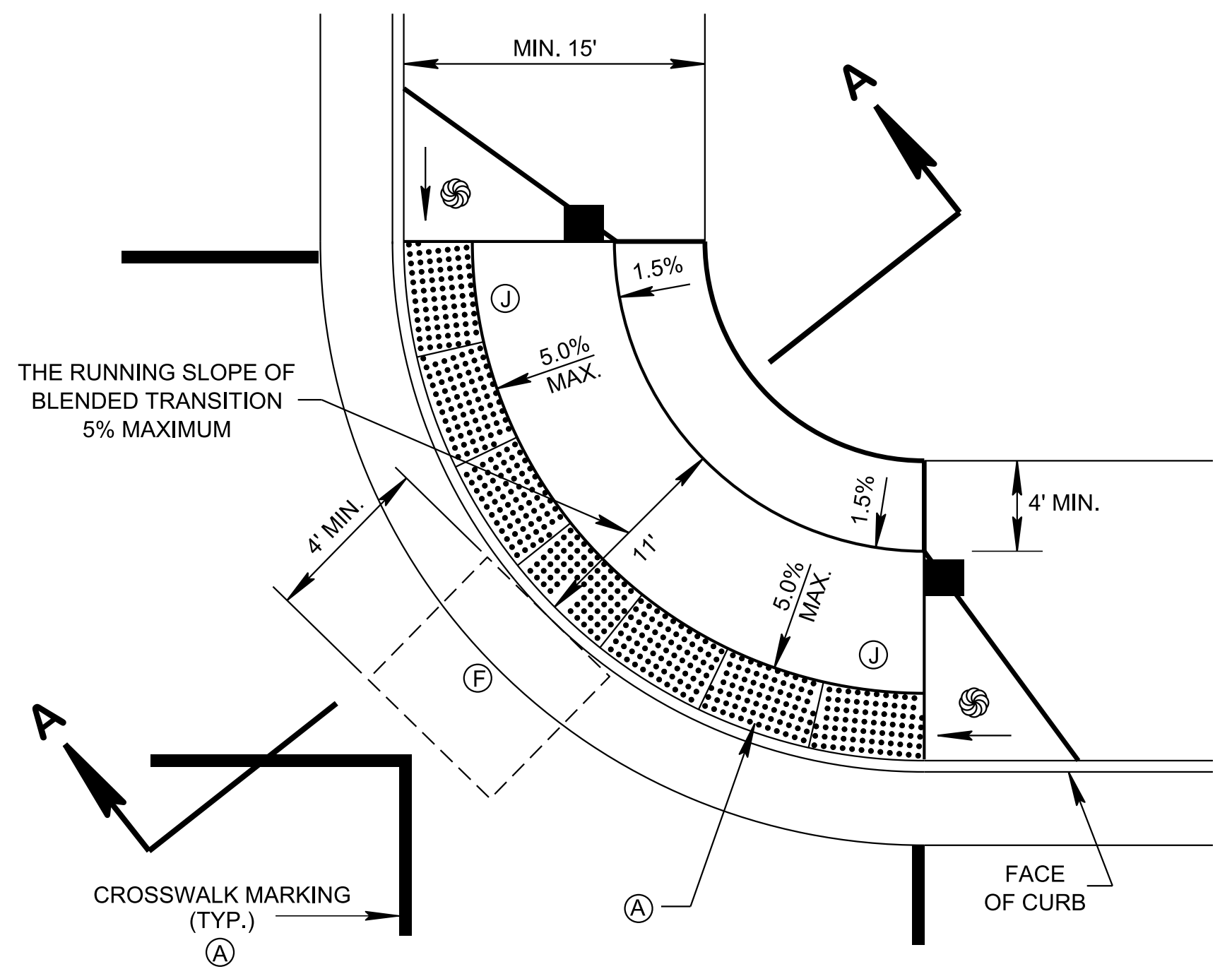
LOWERED CORNER CURB RAMP WITH BI-DIRECTIONAL SIDEWALK

LOWERED CORNER CURB RAMP TO BE USED AS AN ALTERNATE TO BLENDED TRANSITION WHEN REQUIRED DUE TO GEOMETRIC LIMITATIONS.

THIS DETAIL MAY BE USED WHERE SIDEWALK WIDTHS ARE LESS THAN 10' WIDE AND CURB RAMP IS LOCATED ANYWHERE WITHIN A CURVED SECTION OF SIDEWALK.



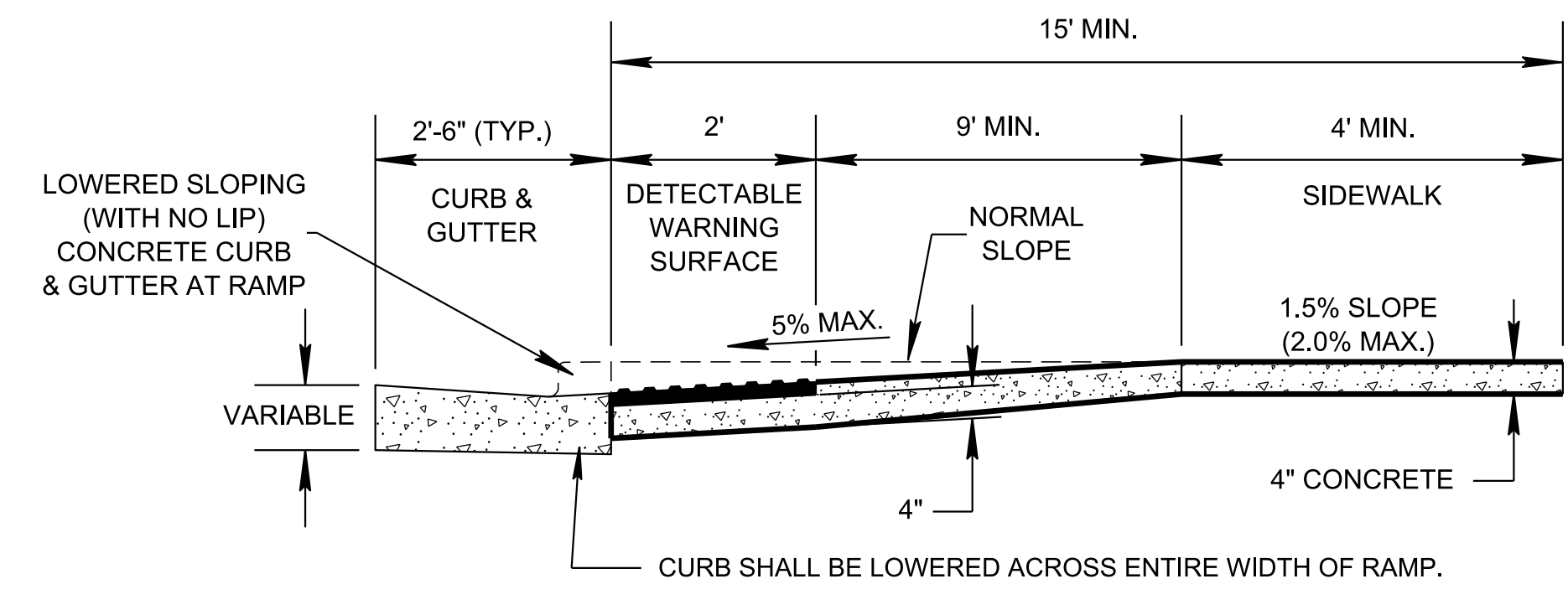
PARALLEL CURB RAMP



BLENDED TRANSITION

BLENDED TRANSITIONS ARE ALTERNATIVE ONLY WHEN PARALLEL, PERPENDICULAR AND COMBINATION CURB RAMP WILL NOT WORK DUE TO GEOMETRIC CONSTRAINTS.

BLENDED TRANSITIONS ARE RAISED PEDESTRIAN STREET CROSSINGS, DEPRESSED CORNERS, OR SIMILAR CONNECTIONS BETWEEN PEDESTRIAN ACCESS ROUTES AT THE LEVEL OF THE SIDEWALK AND THE LEVEL OF THE PEDESTRIAN STREET CROSSING THAT HAVE A GRADE OF 5% OR LESS. BLENDED TRANSITIONS ARE SUITABLE FOR A RANGE OF SIDEWALK CONDITIONS.



SECTION A-A

LEGEND

- DIMENSION VARIES RELATIVE TO LONGITUDINAL ROADWAY GRADE, 8.3% DESIRABLE (10.0% MAX.)
- DENOTES: APPROXIMATE PEDESTRIAN POLE/PUSHBUTTON LOCATION FOR SIGNALIZED INTERSECTIONS
- CLEARLY MAINTAIN THE DEFINED PERIMETER OF THE RAMP AT LOCATIONS WHERE THE GRADE OF THE ROADWAY MAY MATCH THE SLOPE OF THE RAMP.

GENERAL NOTES

(A) FOR DETECTABLE WARNING SURFACE DETAILS SEE STD. DWG. RP-H-3. FOR ADDITIONAL DETAILS AND OTHER INFORMATION FOR PERPENDICULAR CURB RAMP NOT SHOWN ON THIS DRAWING SEE STD. DWG. RP-H-4 AND FOR PARALLEL CURB RAMP SEE STD. DWG. RP-H-5. FOR CROSSWALK MARKING DETAILS SEE STD. DWG. T-M-4.

(B) IF PERPENDICULAR CURB RAMP AND TURNING SPACE CANNOT BE CONSTRUCTED DUE TO LIMITED RIGHT-OF-WAY, USE PARALLEL CURB RAMP INSTEAD.

(C) CARE SHALL BE TAKEN ON ALL ROADWAY CURB RAMP AT INTERSECTIONS WITH SIDEWALK AND CURB RAMP TO ENSURE A UNIFORM GRADE AROUND THEM. THE ROADWAY CURB RAMP GRADE SHALL BE FREE OF SAGS AND SHORT GRADE CHANGES.

(D) SIDEWALK WIDTH SHALL NOT INCLUDE 6" CONCRETE CURB. THE DESIRABLE SIDEWALK CROSS SLOPE IS 1.5%, ABSOLUTE MAXIMUM IS 2.0%.

(E) DRAINAGE STRUCTURES SHALL NOT BE PLACED IN THE CROSSWALK OR IN FRONT OF THE CURB RAMP.

(F) TURNING SPACE \ CLEAR SPACE:
 CLEAR SPACE BEYOND THE BOTTOM GRADE BREAK, A CLEAR SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE.
 TURNING SPACE MUST BE PROVIDED AT THE TOP OF PERPENDICULAR CURB RAMP. THE TURNING SPACE MUST BE 4' (MIN.) BY 4' (MIN.), AND IS PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. WHERE THE TURNING SPACE IS CONSTRAINED AT THE BACK OF THE SIDEWALK, THE TURNING SPACE MUST BE 4' (MIN.) BY 5' (MIN.), WITH THE 5' DIMENSION PROVIDED IN THE DIRECTION OF THE RAMP RUN.
 FOR PARALLEL CURB RAMP, A TURNING SPACE 4' (MIN.) BY 4' (MIN.) SHALL BE PROVIDED AT THE BOTTOM OF THE CURB RAMP AND SHALL BE PERMITTED TO OVERLAP OTHER TURNING SPACES AND CLEAR SPACES. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, THE TURNING SPACE SHALL 4' (MIN.) BY 5' (MIN.). THE 5' DIMENSION SHALL BE PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.

(G) GRADE BREAKS:
 GRADE BREAKS AT THE TOP AND BOTTOM OF CURB RAMP RUNS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE CURB RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF CURB RAMP RUNS AND TURNING SPACES. SURFACE SLOPES THAT MEET AT GRADE BREAKS SHALL BE FLUSH.
 WHERE THE END OF BOTTOM GRADE BREAK ARE BEHIND THE BACK OF CURB AND THE DISTANCE FROM EITHER END OF THE BOTTOM GRADE BREAK TO THE BACK OF CURB IS 5' OR LESS, DETECTABLE WARNING SURFACES SHALL BE PLACED ON THE CURB RAMP RUN WITHIN ONE DOME SPACING OF THE BOTTOM GRADE BREAK.

(H) PEDESTRIAN SIGNAL PUSHBUTTON:
 WHERE PEDESTRIAN SIGNALS ARE PROVIDED AT PEDESTRIAN STREET CROSSINGS, THEY SHALL INCLUDE ACCESSIBLE PEDESTRIAN SIGNALS AND POLE/PEDESTRIAN PUSHBUTTONS COMPLYING WITH SECTIONS 4E.08 THROUGH 4E.13 OF THE MUTCD. FOR DETAILS OF THE PLACING OF PEDESTRIAN SIGNAL PUSHBUTTONS SEE TDOT TRAFFIC DESIGN MANUAL.
 WHEN TWO PEDESTRIAN PUSHBUTTONS ARE ON ONE CORNER THEY WILL BE SEPARATED BY 10 FEET.

(I) PAYMENT:
 COST OF CURB AND GUTTER TO BE INCLUDED IN THE PRICE OF ITEM NO. 702-01, CONCRETE CURB, PER C. Y. OR ITEM NO. 702-03, CONCRETE COMBINED CURB & GUTTER, PER C. Y.
 NEW CURB RAMP:
 ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN NEWLY CONSTRUCTED SIDEWALK AREAS, SHALL BE PAID BY ITEM NO. 701-02.03, CONCRETE CURB RAMP, PER SQUARE FOOT.
 PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY FOR CONSTRUCTION OF THE CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).
 CURB RAMP(S) (RETROFIT):
 ALL COSTS OF INSTALLING CURB RAMP(S), INCLUDING DETECTABLE WARNING SURFACE(S) IN EXISTING SIDEWALK AREAS, REMOVAL OF THE EXISTING SIDEWALK, AND ADJUSTMENT OF GUTTER PAN SLOPE, SHALL BE PAID BY ITEM NO. 701-02.01, CONCRETE CURB RAMP (RETROFIT), PER SQUARE FOOT.
 PAYMENT SHALL INCLUDE ALL MATERIALS, EQUIPMENT, AND LABOR INSTALLATION OF CURB RAMP(S), INCLUDING INSTALLATION OF DETECTABLE WARNING SURFACE(S).

(J) DETECTABLE WARNING SURFACE(S) SHALL COVER ENTIRE RADIUS WITHIN RAMP AND SHALL EXTEND TO THE CROSSWALK PAVEMENT MARKINGS ON EITHER SIDE.

REV. 4-13-11: ADJUSTED CROSSWALK MARKINGS, ADDED NOTE (I), REVISED TABLE DIMENSIONS, ADDED GUTTER TO CROSSWALK INTERSECT DIMENSION, OTHER MISC. EDITS TO DRAWINGS.

REV. 5-8-13: REVISED TITLE FOR TERMINOLOGY.

REV. 6-4-13: ADDED NOTE (G), MODIFIED NOTE (C), CHANGED SHEET NAME.

REV. 1-30-15: REMOVED TYPE 4, REVISED NOTE (B), ADDED NOTES (H), (I) AND (J), ADDED NEW DETAILS, REMOVED TABLE A.

REV. 10-10-16: ADDED GENERAL NOTES, MISC. REVISIONS TO DRAWINGS.

REV. 07-16-18: ADJUSTED LIMITS OF TRUNCATED DOME SURFACE IN THE LOWERED CORNER RAMP DETAIL. MOVED THE PARALLEL CURB RAMP DETAIL TO STD. DWG RP-H-8. REVISED GENERAL NOTES. RENAMED AND REDREW SHEET.

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED

**STATE OF TENNESSEE
DEPARTMENT OF
TRANSPORTATION**

**CURB RAMP
IN CURVE
BI-DIRECTIONAL
DUAL CROSSING**

01-15-07 RP-H-9