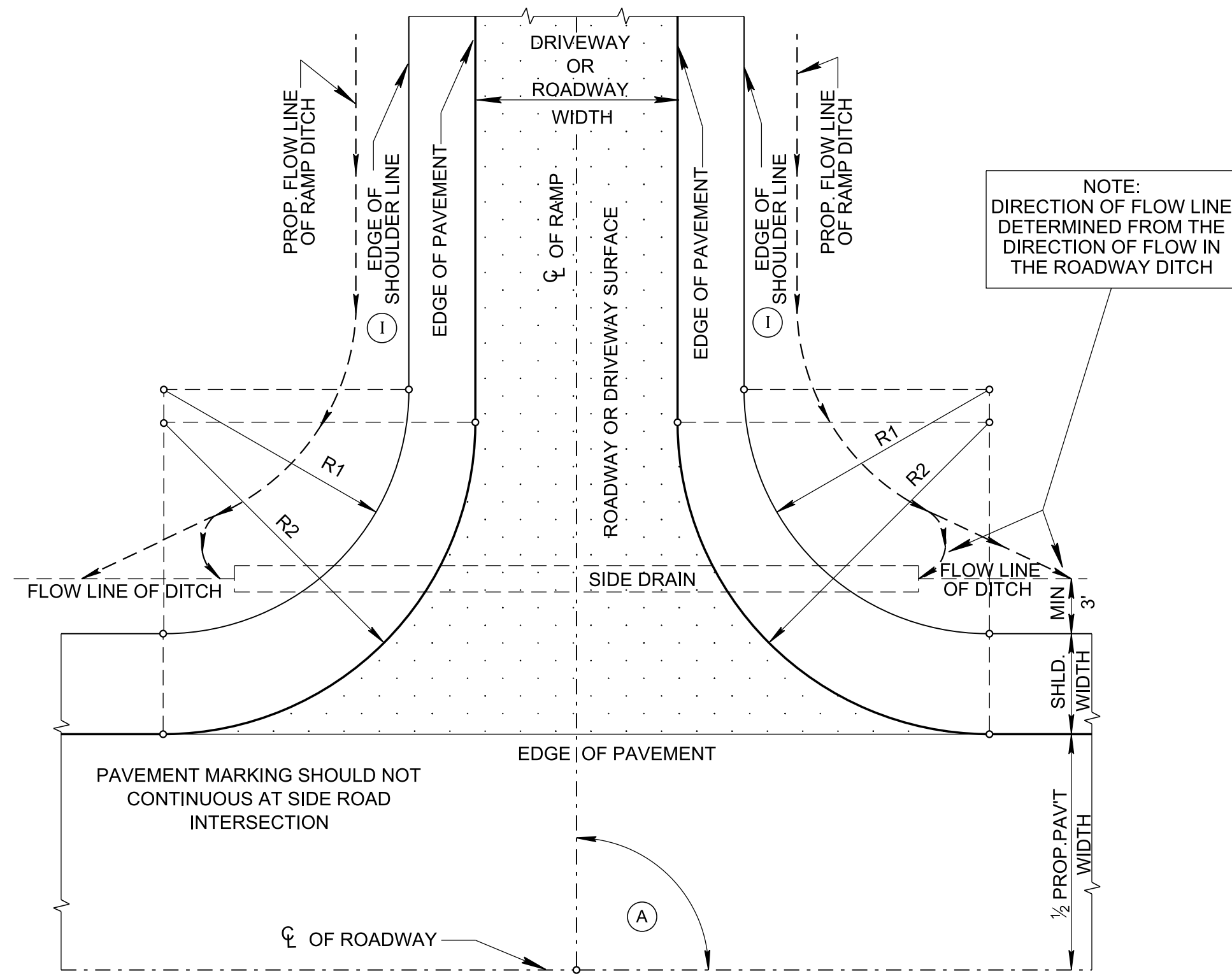
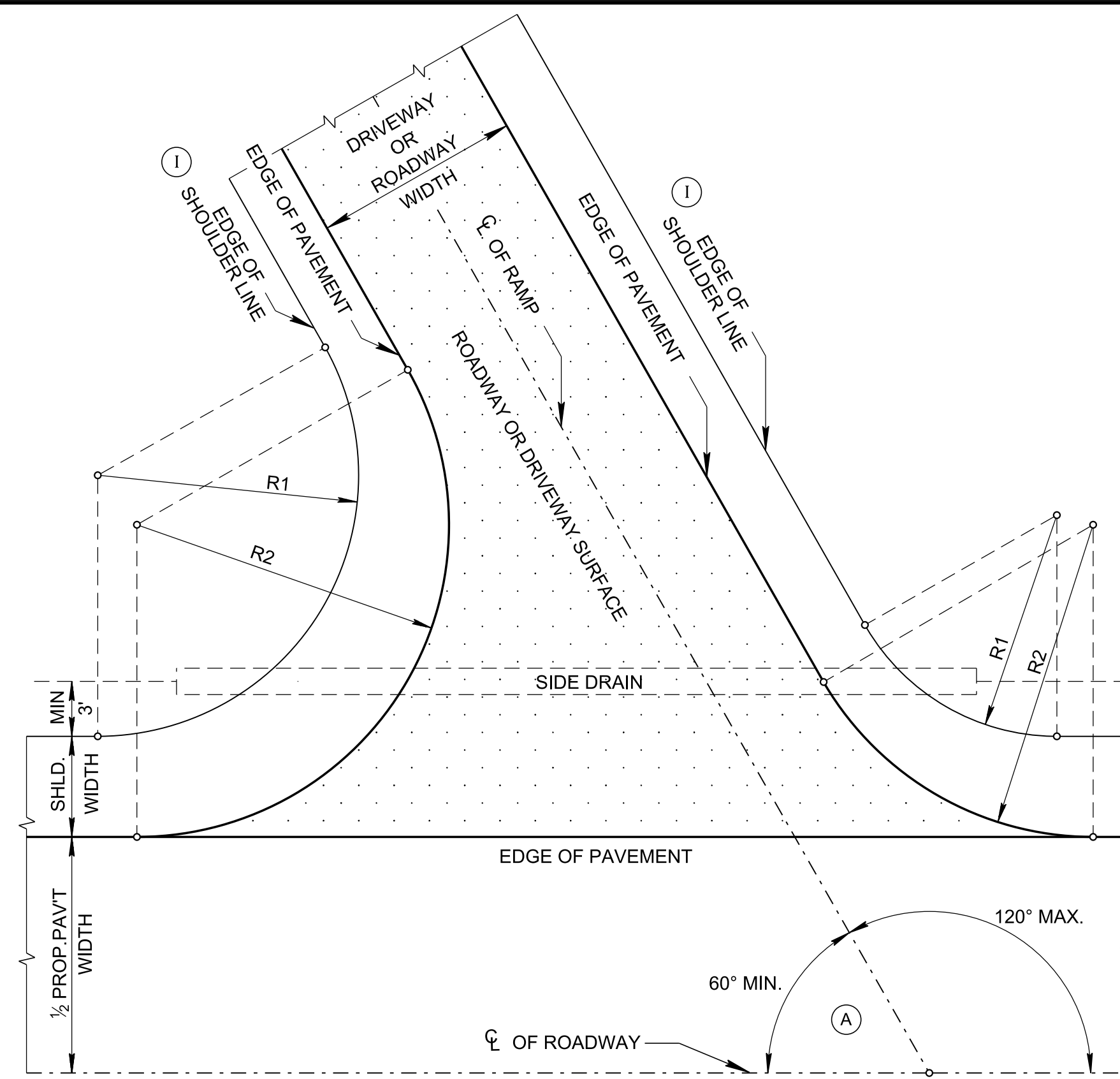


9/25/2024 10:13:43 AM P:\StandDraw\DESIGN STANDARDS Drawings Library\Standard Roadway Drawings - CURRENT\In Progress\10-105.00 Roadway, Pavement Appurtenances and Fence\105.02 Intersections\PIRPR-1A

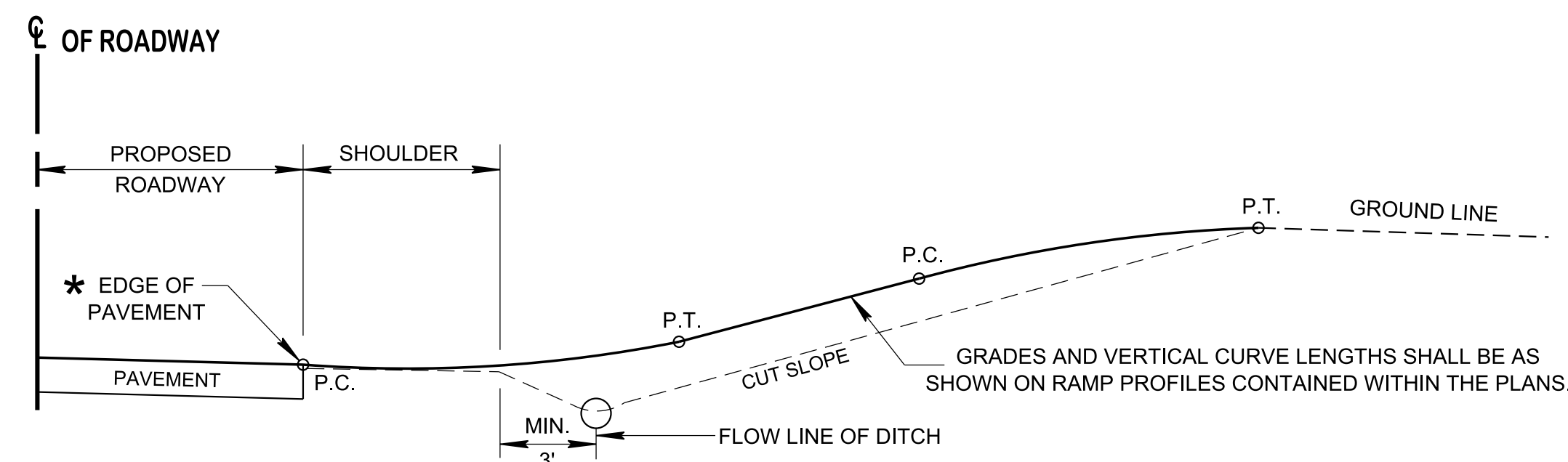


PLAN OF RAMP-90° WITH ℓ OF SURVEY

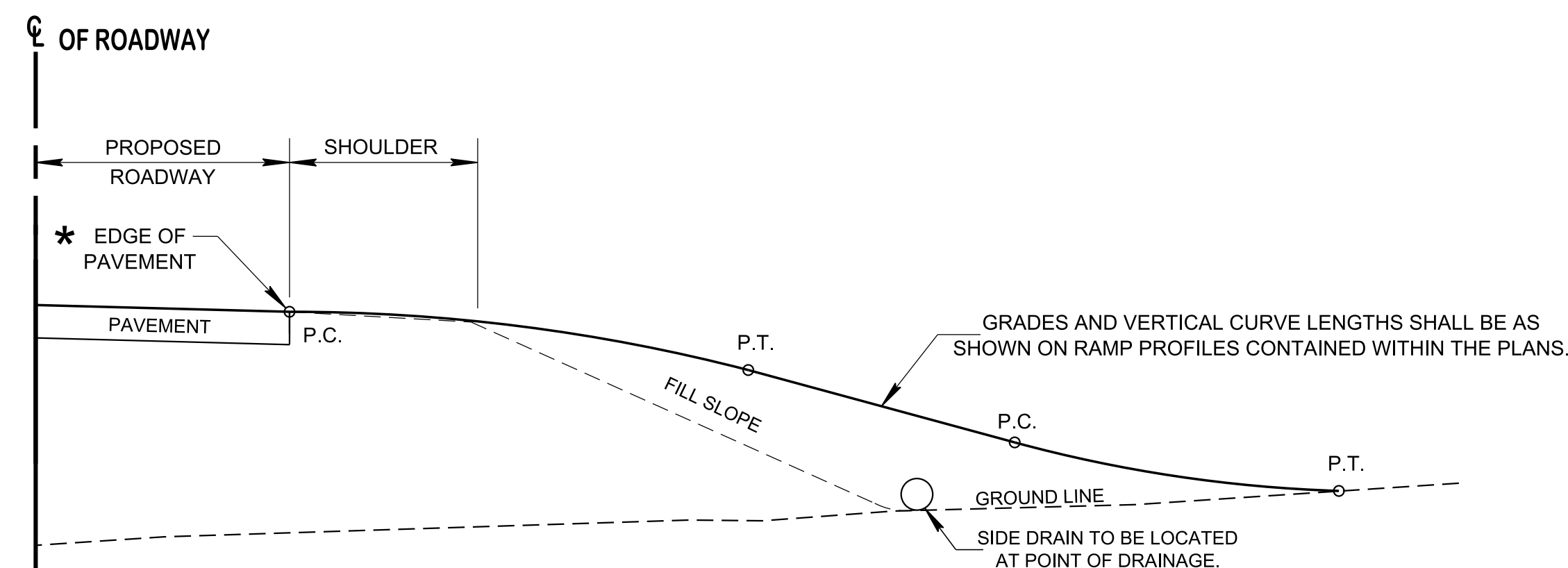


PLAN OF RAMP-SKEWED TO ℓ OF SURVEY
FLOW LINE ARE LEFT OUT FOR CLARITY

- LEGEND**
- R1 SHOULDER RADIUS
 - R2 PAVED SURFACE RADIUS (30' MIN. AT SIDE ROAD AND SEE NOTE (J) FOR DRIVEWAYS)



ℓ PROFILE OF RAMP IN CUT SECTION



ℓ PROFILE OF RAMP IN FILL SECTION

- GENERAL NOTES**
- (A) ALIGNMENT OF INTERSECTING ROADWAYS AND PRIVATE DRIVES (RAMPS) SHALL BE MODIFIED SO AS TO ATTAIN ADEQUATE SIGHT DISTANCES AND DESIRABLE GRADES. DESIRABLE SKEW IS 90° AND MINIMUM IS 60°.
 - (B) SEE AASHTO CURRENT PUBLICATION "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS" AND TDOT "ROADWAY DESIGN GUIDELINES" FOR INTERSECTION DESIGN REQUIREMENTS. (REFER TO STANDARD DRAWING RD11-SD SERIES FOR INTERSECTION SIGHT DISTANCE DESIGN.)
 - (C) WHERE EXISTING SHOULDER LINES AND EDGES OF EXISTING PAVEMENT ARE NOT THE SAME, PROPOSED SHOULDER LINES SHALL TIE INTO EXISTING SHOULDER LINES.
 - (D) PROFILE OF EMBANKMENT AND EXCAVATION RAMPS ARE THE SAME EXCEPT FOR LOCATION OF SIDE DRAIN AND DITCHES.
 - (E) ALL ROADWAYS AND PRIVATE DRIVES (RAMPS) THAT REQUIRE SIDE DRAINS SHALL USE STANDARD DRAWING NO. D-SEW-1A, UNLESS THE ENDWALL IS PROTECTED BY GUARDRAIL.
 - (F) WHEN POSSIBLE MINIMUM 10' LOW GRADE AREA IS RECOMMENDED FOR VEHICLES TO STOP BEFORE ENTERING ROADWAY.
 - (G) ANY NECESSARY EXCAVATION FOR INSTALLING RAMPS OR ROADWAYS SHALL BE PAID FOR UNDER ITEM 203-01, ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED), C.Y.
 - (H) DRIVEWAY VERTICAL CURVE LENGTHS SHALL BE BASED ON K VALUES OF: CREST, K = 1 AND SAG, K = 2.

$$K = \frac{L \text{ (LENGTH OF VERTICAL CURVE)}}{A \text{ (ALGEBRAIC DIFFERENCE OF GRADE)}} \quad \text{OR} \quad K \times a = L \text{ (VERTICAL CURVE LENGTH)}$$
 - (I) SHOULDERS NOT REQUIRED FOR DRIVEWAYS.
 - (J) DRIVEWAY RADIUS OF CURVATURE (R) WILL VARY, DEPENDING ON THE TYPE OF ESTABLISHMENT AND THE TYPE OF VEHICLE USING THE ENTRANCE. PARTICULAR SITE CHARACTERISTICS, SUCH US THE SPEED OF THE ADJACENT ROADWAY, SHOULD ALSO BE CONSIDERED IN DETERMINING THE RADII. REFER TO SECTION 5 (ACCESS DESIGN) IN THE MANUAL OF CONSTRUCTING DRIVEWAY ENTRANCE ON STATE HIGHWAY CURRENT EDITION.

STATE OF TENNESSEE
STANDARD DRAWING
DEPARTMENT OF TRANSPORTATION

STANDARD RAMP DETAILS FOR LOW VOLUME RURAL ROADWAYS