

NOTES:

- 1. See Standard Drawing E 610-DRIV-13 for General Notes and additional
- (2) See Standard Drawings E 604-SDWK-01 or E 604-SDWK-02 for sidewalk elevation transition details.
- 3. See Standard Drawings E 610-DRIV-03 for concrete curb and gutter connection detail.
- 4. See Standard Drawings E 610-DRIV-07 for PCCP joint placement detail.
- 5. Pavement shall be PCCP for Approaches, 6 in., on subgrade treatment
- (6) See Standard Drawing E 610-DRIV-08 for sections A-A and B-B.
- 7. See Standard Drawing E 503-CCPJ-02 for longitudinal joint details.

LEGEND

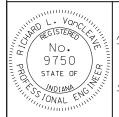
- W = Width of sidewalk
- X = Distance between back face of curb to sidewalk.
- |Y| = Distance from front face of curb to |P| or R/W.
- = Sidewalk elevation transition.

INDIANA DEPARTMENT OF TRANSPORTATION

CLASS I DRIVE

SEPTEMBER 2012

STANDARD DRAWING NO. E 610-DRIV-01



/s/ Richard L. VanCleave

SUPERVISOR, ROADWAY STANDARDS

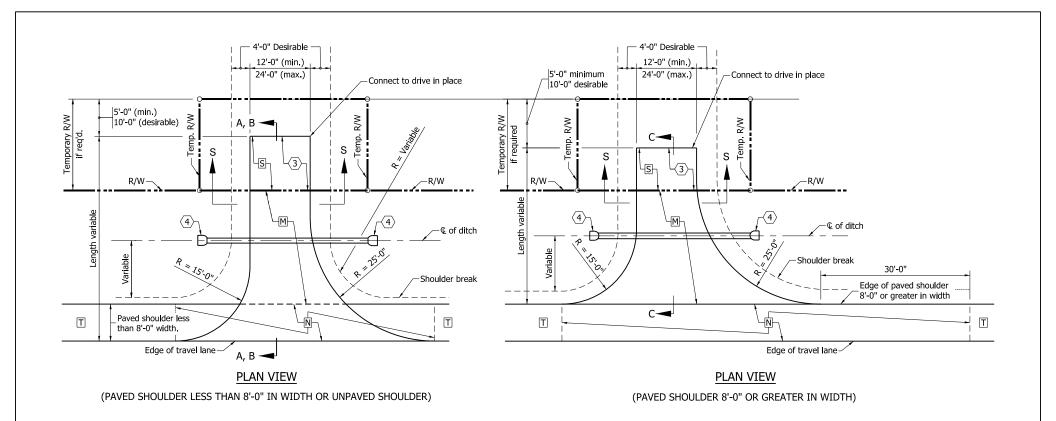
/s/ Mark A. Miller

CHIEF ENGINEER DATE

09/04/12

DATE

09/04/12



NOTES:

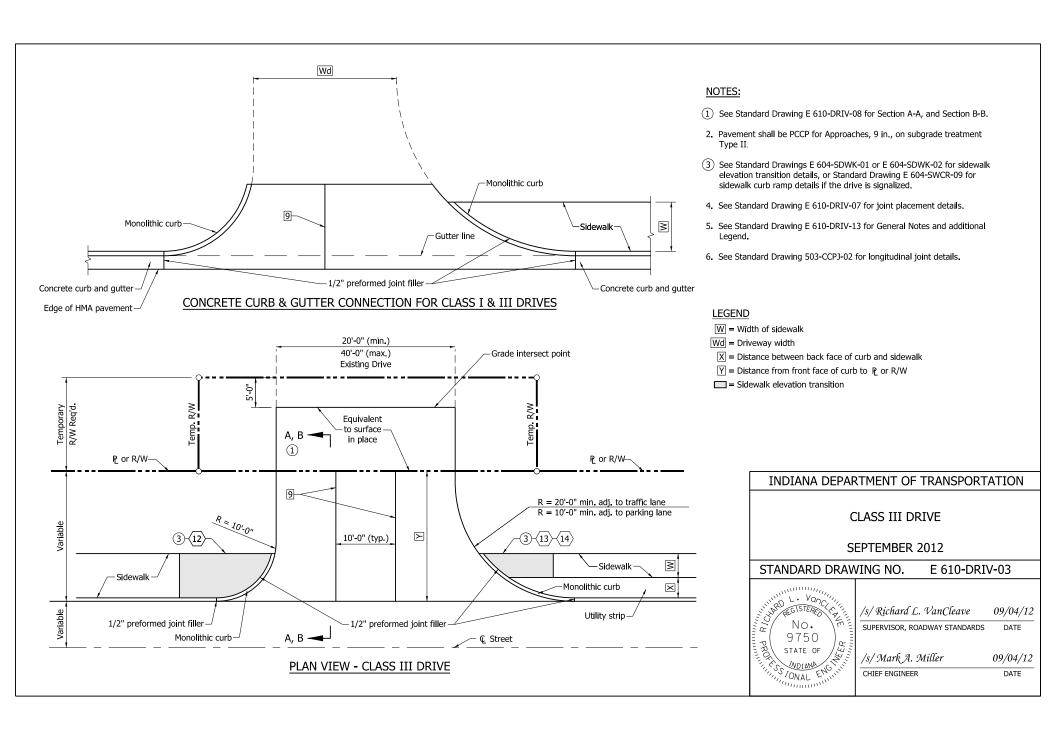
- See Standard Drawing E 610-DRIV-13 for General Notes and additional Legend.
- 2. See Standard Drawings E 610-DRIV-10 for Sections A-A, B-B and C-C.
- 3. See Standard Drawings E 610-DRIV-10 for approach grades.
- 4. See Standard Drawings E 610-DRIV-09 for Section S-S.

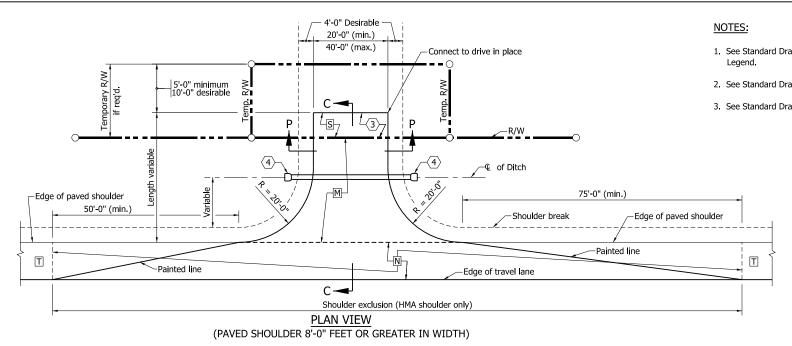
LEGEND

- M HMA for Approaches:

 165#/syd HMA Surface Type B on
 385#/syd HMA Intermediate Type B on
 subgrade treatment Type II
 or
 PCCP for Approaches, 6",
 subgrade treatment Type II
- $\overline{\mathbb{N}}$ The greater thickness of either the drive $\overline{\mathbb{M}}$ or the paved shoulder $\overline{\mathbb{T}}$ section.
- T Plan shoulder section.
- S For type and thickness equivalent to surface in place, see plans.

INDIANA DEPARTMENT OF TRANSPORTATION CLASS II DRIVE SEPTEMBER 2010 STANDARD DRAWING NO. E 610-DRIV-02 HAP REGISTERED TO /s/Richard L. VanCleave 09/01/10 No. DESIGN STANDARDS ENGINEER DATE 9750 STATE OF 09/01/10 /s/ Mark A. Miller AMAIDAN SONAL EN CHIEF HIGHWAY ENGINEER DATE DESIGN STANDARDS ENGINEER





Connect to drive in place

- 1. See Standard Drawing E 610-DRIV-13 for General Notes and additional
- 2. See Standard Drawings E 610-DRIV-10 for Sections A-A, B-B and C-C.
- 3. See Standard Drawings E 610-DRIV-09 for Section P-P.

LEGEND

- M HMA for Approaches: 165#/syd HMA Surface Type B on 275#/syd HMA Intermediate Type B on 880#/syd HMA base, Type B on subgrade treatment Type II PCCP for Approaches, 9", on subgrade treatment Type II
- N The greater thickness of either the drive M or the paved shoulder T section.
- T Plan shoulder section.
- S For type and thickness equivalent to surface in place, see plans.



CLASS IV DRIVE

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-04



/s/Richard L. VanCleave DESIGN STANDARDS ENGINEER

09/01/10 /s/ Mark A. Miller DATE

09/01/10

DATE

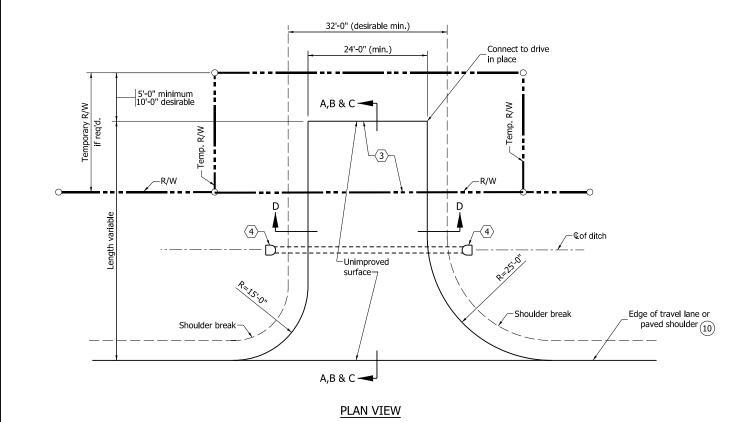
CHIEF HIGHWAY ENGINEER

DESIGN STANDARDS ENGINEER

minimum " desirable Temporary R/W mp R/W if req'd. 5'-0" n 10'-0" A, B 45 R/W ength variable $\langle 4 \rangle$ -€ of Ditch LM--Shoulder break Variable Paved T T A, B --Edge of travel lane PLAN VIEW

(PAVED SHOULDER LESS THAN 8'-0" IN WIDTH OR UNPAVED SHOULDER)

4'-0" Desirable 20'-0" (min.) 40'-0" (max.)



32'-0" (desirable min.)

24'-0" min.

Slope 6:1 -2% Slope 6:1 Slope 6:1 Slope 6:1

SECTION D-D

Notes:

- 1. See Standard Drawing E 610-DRIV-13 for General Notes.
- 2. See Standard Drawing E 610-DRIV-10 for Section A-A, B-B and C-C.
- (10) Where the shoulder is earth or aggregate or the paved width is less than 8'-0", the drive radii shall be tangent to the edge of the travel lane. Where the paved shoulder width is 8'-0" or more, the drive radii shall be tangent to the edge of the paved shoulder.

CLASS V DRIVE FIELD ENTRANCE

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-05



/s/ Richard L. VanClaeve DESIGN STANDARDS ENGINEER

09/01/10 /s/ Mark A. Miller

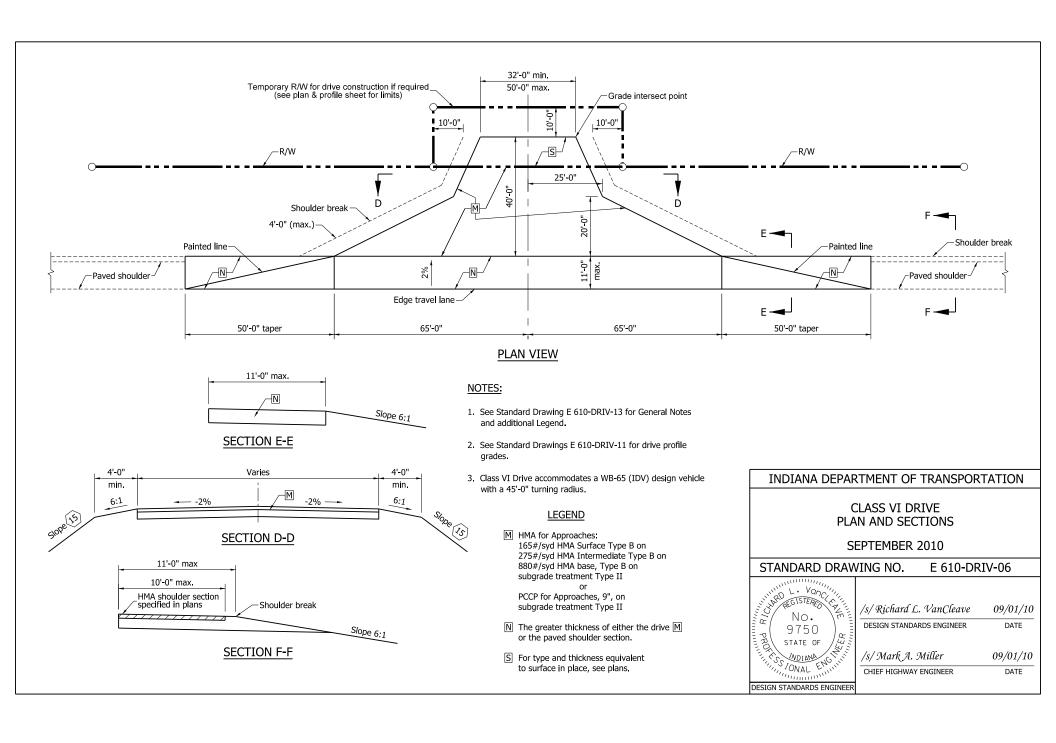
09/01/10

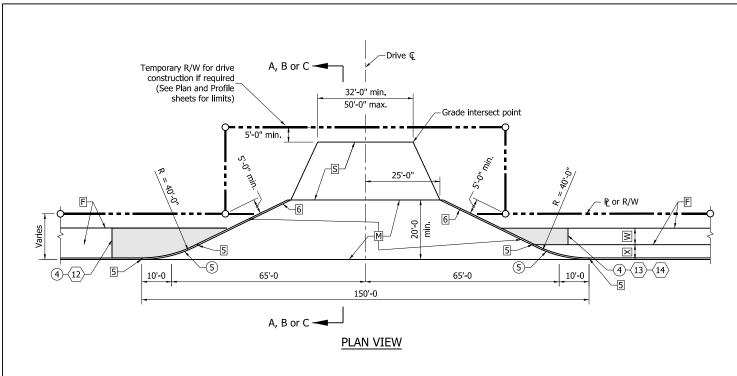
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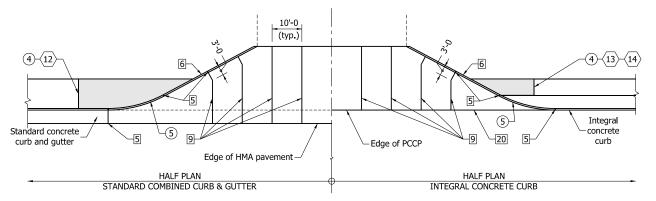
CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER

INDIANA DEPARTMENT OF TRANSPORTATION







JOINT PLACEMENT DETAIL FOR PCCP DRIVES

NOTES:

- See Standard Drawings E 610-DRIV-13 for General Notes and additional Legend.
- 2. See Standard Drawing E 610-DRIV-12 for sections A-A, B-B and C-C
- 3. Joint Placement Detail should be used with Class I, III and VII drives.
- (4) See Standard Drawing E 604-SDWK-01 or E 604-SDWK-02 for sidewalk elevation transition details.
- (5) See Standard Drawing E 610-DRIV-16 for details and corners.
- 6. See Standard Drawing 503-CCPJ-02 for longitudinal joint details.

LEGEND

- M HMA for Approaches:

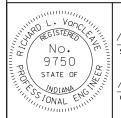
 165#/syd HMA Surface Type B on
 275#/syd HMA Intermediate Type B on
 880#/syd HMA base, Type B on
 subgrade treatment Type II
 or
 PCCP for Approaches, 9 in., on
 subgrade treatment Type II
- ☐ Sidewalk elevation transition
- For type and thickness equivalent to surface in place, see plans.

INDIANA DEPARTMENT OF TRANSPORTATION

CLASS VII DRIVE AND JOINT PLACEMENT DETAIL

SEPTEMBER 2012

STANDARD DRAWING NO. E 610-DRIV-07



/s/ Richard L. VanCleave

SUPERVISOR, ROADWAY STANDARDS DATE

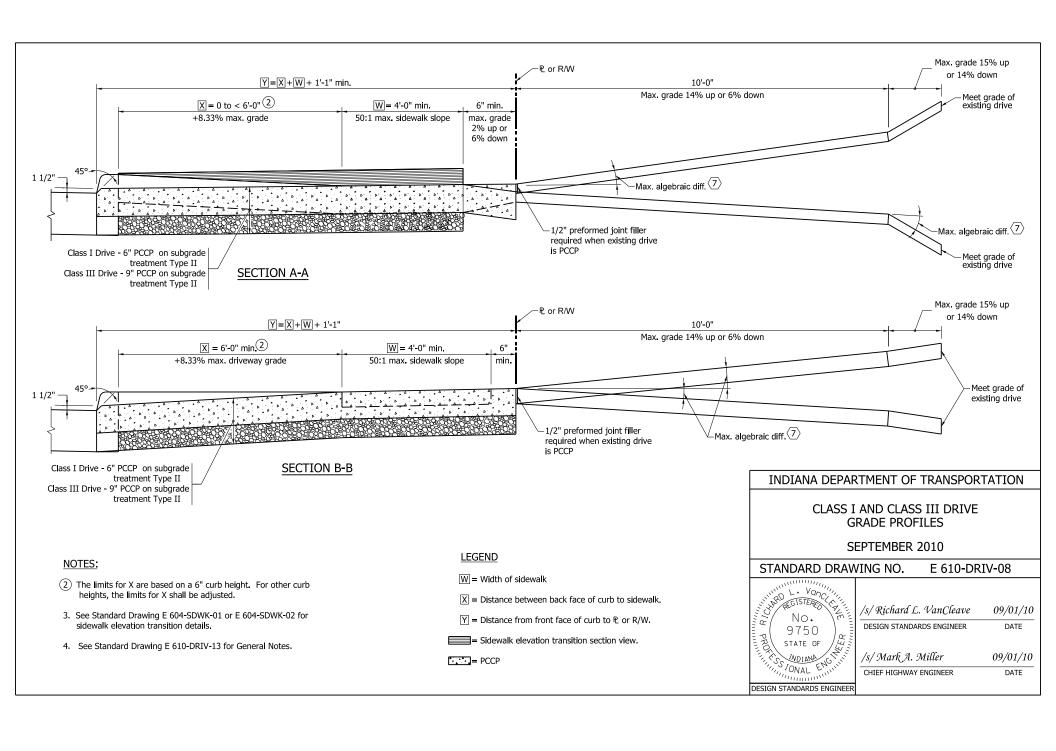
/s/ Mark A. Miller

09/04/12

09/04/12

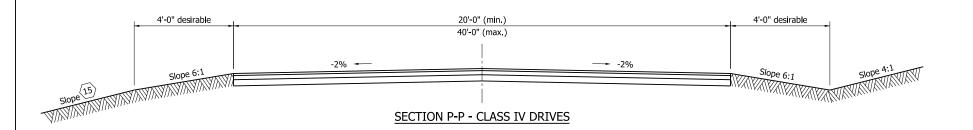
CHIEF ENGINEER

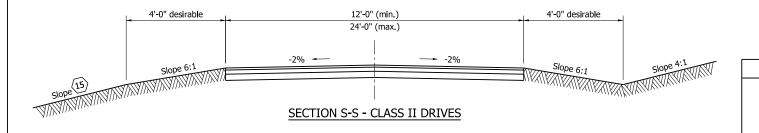
DATE



Notes:

- 1. See Standard Drawing E 610-DRIV-02 for Class II Drive details.
- 2. See Standard Drawing E 610-DRIV-04 for Class IV Drive details.
- 3. See Standard Drawing E 610-DRIV-13 for General Notes.



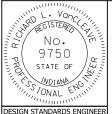


INDIANA DEPARTMENT OF TRANSPORTATION

CLASS II AND CLASS IV SECTIONS

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-09



/s/ Richard L. VanCleave

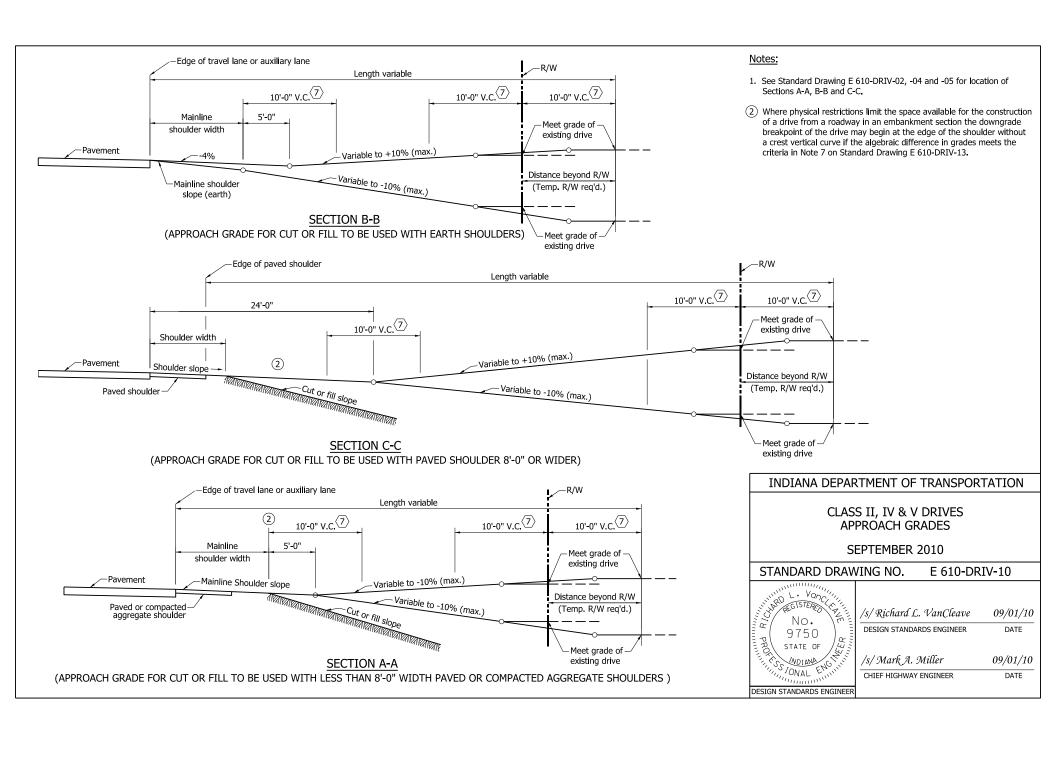
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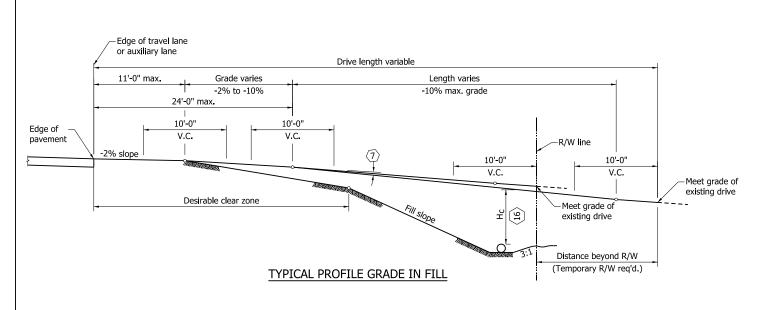
/s/ Mark A. Miller 09/01/10

09/01/10

DATE

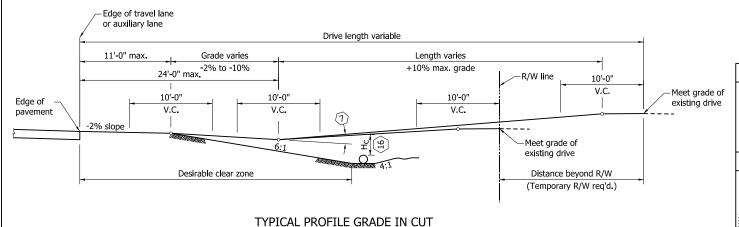
CHIEF HIGHWAY ENGINEER DATE





NOTES

- See Standard Drawing E 610-DRIV-06 for plan and sections of Class VI Drive.
- 2. See Standard Drawings E 610-DRIV-13 for General Notes.

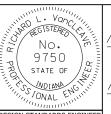


INDIANA DEPARTMENT OF TRANSPORTATION

CLASS VI DRIVE TYPICAL PROFILE GRADES

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-11



/s/ Richard L. VanCleave

DESIGN STANDARDS ENGINEER

lark A. Miller 09/01/10

09/01/10

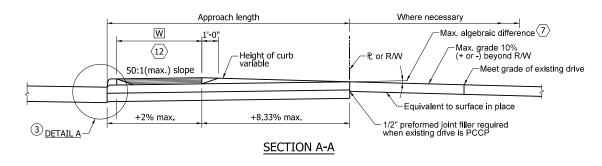
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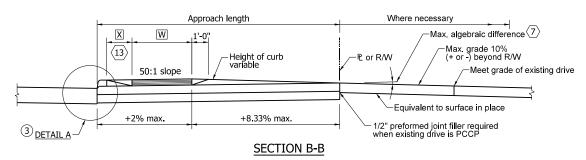
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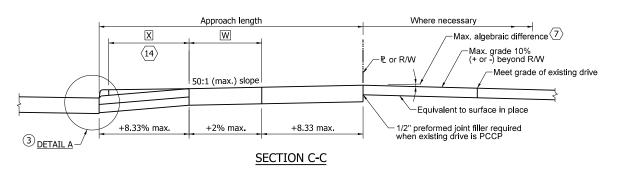
/s/ Mark A. Miller (
CHIEF HIGHWAY ENGINEER

THE THOMAS ENGINEER

DESIGN STANDARDS ENGINEER







NOTES

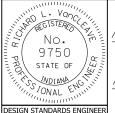
- 1. See Standard Drawing E 610-DRIV-07 for plan of Class VII Drive.
- 2. See Standard Drawings E 610-DRIV-13 for General Notes.
- ③ See Standard Drawing E 610-DRIV-16 for keyway joint shown in Detail A and for joint placement and corner reinforcement.

INDIANA DEPARTMENT OF TRANSPORTATION

CLASS VII DRIVE PROFILE GRADE

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-12



/s/ Richard L. VanCleave

/s/ Mark A. Miller 09/01/10

09/01/10

DATE

CHIEF HIGHWAY ENGINEER DATE

GENERAL NOTES

- 1. These notes apply to Standard Drawings E 610-DRIV-01 through 12.
- (2) If a PCCP approach is Class III or Class IV, the radii shall be constructed using ear construction Type C as detailed on Standard Drawing E 605-ERCN-02.
- \bigcirc When the maximum approach grade of $\pm 10\%$ does not meet the grade of the existing drive before the R/W line, the approach grade of $\pm 10\%$ shall extend beyond the R/W to the point of intersection with the existing driveway grade. Construction beyond the R/W line shall be done in temporary R/W.
- 4 The appropriate pipe end treatment should be provided for pipes located either inside the clear zone or outside the clear zone.
- The maximum algebraic difference in grades shall not exceed 8% for crested grade nor 12% for sagged grades for Types I and III drives, nor 11% for crested grade and 14% for sagged grades for Types II, IV, and V drives.
- (8) The minimum driveway pavement sections for Class III, IV, VI and VII Drives have been designed for 400 trucks per day. If the truck traffic count is greater than 400 per day, the required pavement section shall be as shown elsewhere on the plans.
- 11. See Standard Drawing E 610-DRIV-14 for shoulder treatment at driveways.
- (12) Curb Ramp Type H, as shown on Standard Drawing E 604-SWCR-09, when the approach is signalized, or a sidewalk elevation transition as shown on Standard Drawing E 604-SDWK-02 shall be used when sidewalk is adjacent to curb.
- (13) When X is equal to or greater than 2 ft but less than 6 ft, either a Curb Ramp Type G as shown on Standard Drawing E 604-SWCR-09, when the approach is signalized, or a sidewalk elevation transition as shown on Standard Drawing E 604-SDWK-01 shall be used.
- (14) When X is equal to or greater than 6 ft, no curb ramp or sidewalk elevation transition is required unless the curb height is in excess of 6 inches.
- (15) Embankment slopes within the mainline clear zone for new construction/reconstruction projects or within the obstruction-free zone for 3R projects should be as shown in the table on Standard Drawing E 610-PRAP-04. Outside the clear zone or the obstruction-free zone, the embankment slopes should desirably be 4:1 but not steeper than 3:1.
- (16) H_C earth cover over culvert shall be 1 foot or greater.

LEGEND

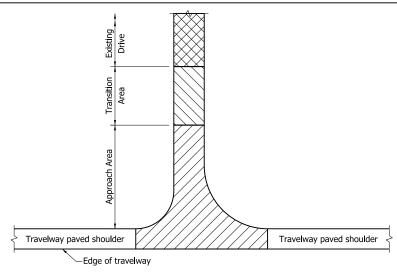
- 5 1/2 in. preformed joint filler
- Monolithic curb for PCCP Approaches or conrete curb and gutter for HMA for Approaches.
- 9 Longitudinal joint
- F Concrete sidewalk
- S For type and thickness equivalent to surface in place, see plans.
- 20 Keyway construction joint

- |X| = Distance between back face of curb and sidewalk.
- W = Width of sidewalk

PCCP

Curb ramp, if signalized, or typically, sidewalk elevation transition.

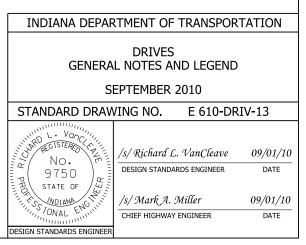
Curb ramp or sidewalk elevation transition section view.

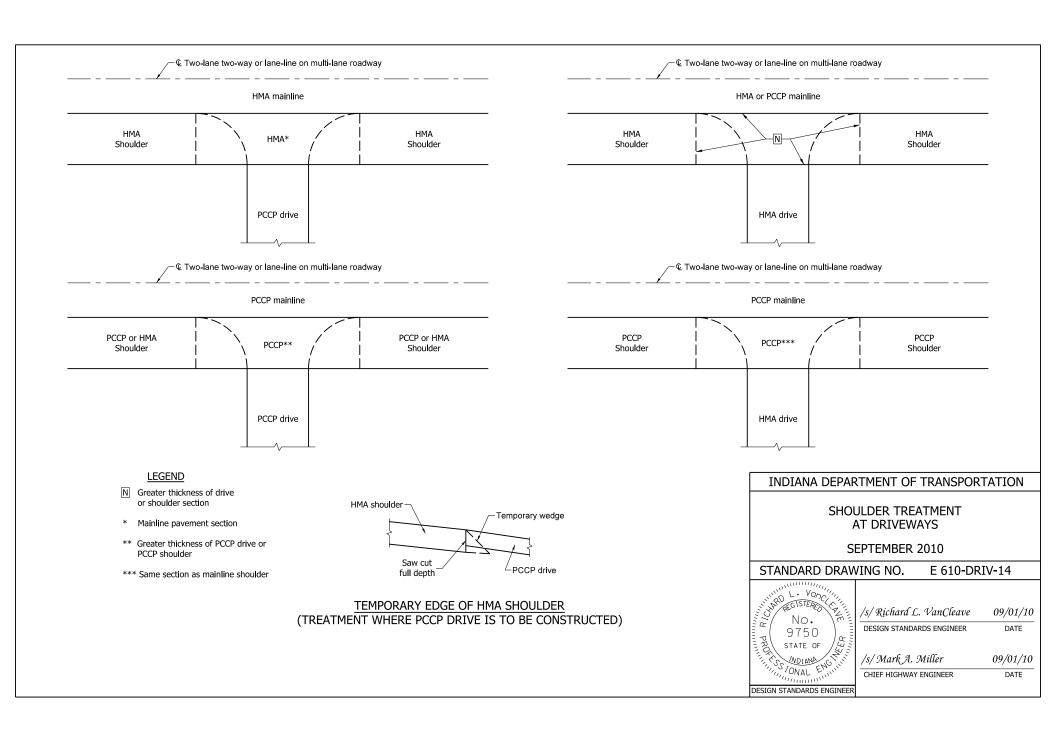


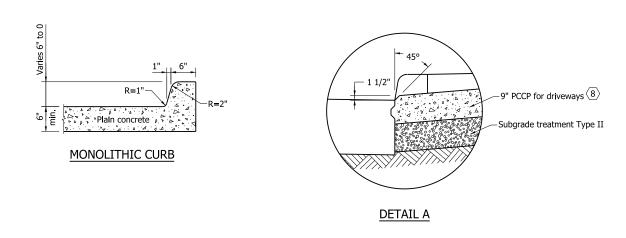
TYPE I, II, III, IV, VI AND VII DRIVES

NOTES

- 1. The pay limits shown hereon generally apply to Type I, II, III, IV, VI and VII Drives as shown on Standard Drawings E 610-DRIV-01, -02, -03, 04, -06 and -07 respectively.
- 2. Approach Area HMA for Approaches or PCCP for Approaches. This area typically extends from the edge of an 8 foot or wider paved travelway shoulder to the right of way or property line or within a few feet of the right of way or property line where the new drive meets the grade of the existing drive, depending on the site-specific conditions. Where the travelway paved shoulder width is less than 8 feet, this area will be measured from the edge of travelway.
- 3. Transition Area an equivalent pavement section to the existing drive. This area typically extends from the right of way or property line to a point on the property owner's drive where the new drive grade can match the existing drive grade.

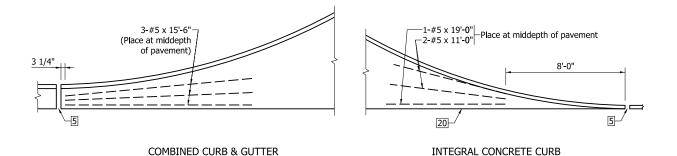






NOTES

- 1. See Standard Drawing E 610-DRIV-07 for plan and Standard Drawing E 610-DRIV-12 for profile of Class VII drive.
- 2. See Standard Drawings E 610-DRIV-13 for General Notes and additional Legend.
- 3. See Standard Drawing E 610-DRIV-07 for keyway joint shown in Detail A and for joint placement and corner reinforcement.
- 4. See Standard Drawing E 605-ERCN-01 for ear construction Type A. See Standard Drawing E 605-ERCN-02 for ear construction Type B.



TYPICAL CORNER REINFORCING

INDIANA DEPARTMENT OF TRANSPORTATION

CLASS VII DRIVE JOINT PLACEMENT AND CORNERS

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-16



/s/ Richard L. VanCleave DESIGN STANDARDS ENGINEER

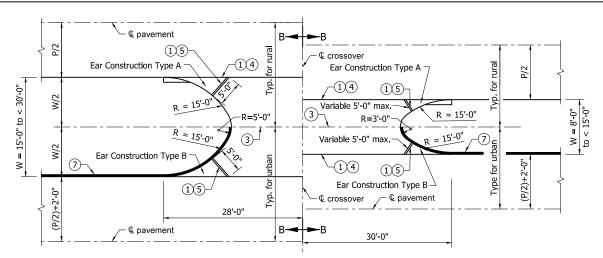
/s/ Mark A. Miller 09/01/10

09/01/10

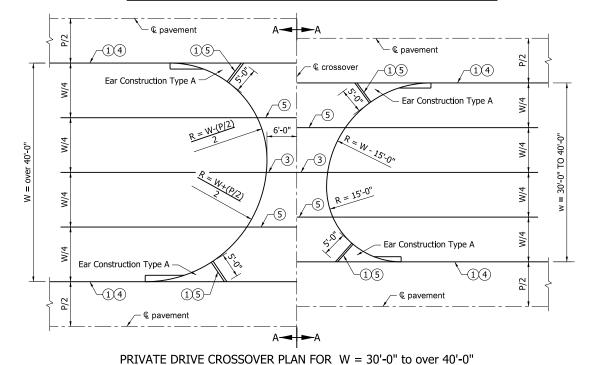
DATE

CHIEF HIGHWAY ENGINEER DATE

DESIGN STANDARDS ENGINEER



PRIVATE DRIVE CROSSOVER PLAN FOR W = 8'-0" to less than 30'-0"



Notes:

- 1 Thickened edge
- 2. See Standard Drawings: E 605-ERCN-01 for TYPE "A" Ear Construction E 605-ERCN-02 for TYPE "B" Ear Construction E 610-DRIV-18 for sections A-A and B-B
- (3) Contraction Joint Type D-1, see Standard Drawing E 503-CCPJ-01
- (4) Keyway Construction Joint, see Standard Drawing E 610-DRIV-16 for details.
- (5) 1" Preformed Joint Filler.
- 6. Private drive crossovers shall be constructed of HMA or PCCP as shown on the plans section unless otherwise directed.
- (7) Integral Concrete Curb, see Standard Drawing E 605-CCIN-01 for details.

INDIANA DEPARTMENT OF TRANSPORTATION

PRIVATE DRIVE CROSSOVER **PLANS**

SEPTEMBER 2010

STANDARD DRAWING NO. E 610-DRIV-17



/s/ Richard L. VanCleave DESIGN STANDARDS ENGINEER

09/01/10 /s/ Mark A. Miller

09/01/10

DATE

DATE

CHIEF HIGHWAY ENGINEER

DESIGN STANDARDS ENGINEER

