1. Use the current edition of AASHTO A Policy on Geometric Design of Highways and Streets for design of roadway elements not shown on this STD DWG.

2. Use the current edition of AASHTO Roadway Design Guide and STD DWG DD 18 for clear zone requirements. Clear Zone may extend into cut or fill slopes.

3. Standards shown are minimum values. Exceed standards if conditions permit.

4. Maintain a constant slope from the edge of the pavement to the outer edge of the clear zone. In fill conditions, maintain a constant slope from the edge of the pavement to the bottom of the granular borrow layer. Use other measures to drain all pavement thickness layers in cut conditions. Provide other measures to drain the granular borrow layer to the bottom of the cut ditch. There may be cut foreslopes and backslopes in the clear zone.

5. Transition from flat to steeper cut and fill slopes in sufficient distance to provide a natural pleasing appearance.

6. Pavement thickness consists of hard surfacing, utc, and granular borrow (if used).

7. Install surface ditch (optional) when needed for drainage. Drain surface ditch to natural drainage, or roadside ditch. Provide other measures to prevent erosion cut slopes if surface ditch is omitted. See STD DWG DD 2 for details.

8. See STD DWG DD 2 for typical ditch flaring detail and bench slope detail.

9. Design speed changes throughout length of ramp. Use applicable clear zone. See STD DWG DD 17 for additional information.

10. Use a 12 ft min outside shoulder when heavy truck traffic exceeds 250 DDHV.

11. Range of super-elevation is the paved width.

12. Use 2 percent cross slopes except in areas of tangent runout or super-elevation runoff.

13. Provide maintenance access of 15 ft min width on a 10:1 or flatter slope from toe of slope to fence line where possible.

14. Use 2 percent cross slopes except in areas of tangent runout or super-elevation runout.

15. Place adverse slope breaks at shoulder or lane lines.

16. Use 4 percent maximum algebraic differential for slope breaks between shoulder and lane lines.

17. Use 4 percent maximum algebraic differential for slope breaks between lane lines.

18. Positive separation is required for median widths less than 50 ft. Use any acceptable positive separation.

19. Positive separation may be used for median width greater than 50 ft.