CONSTRUCTION NOTES

GENERAL:
These structures are designed for Cooper E80 live load with
speed, and cover as shown in Table 1.

Table 1 indicates the minimum required thickness for structural
stability based on the assumptions listed below. The required
gage thickness for structural steel plate pipe includes an
allowance for corrosion.

DESIGN ASSUMPTIONS:
Backfill Unit Weight: 120 psf.
Factors of Safety: buckling = 3, Net Area = 2, Buckling = 2
Minimum Plate Steel: Schedule 80.
Modulus of Elasticity: Steel = 29,000 ksi.
Minimum tensile strength: Steel = 45 ksi.

INSTALLATION:
1. Installation of SPP shall conform to the current AREMA
Manual for Railway Engineering, Chapter 1, Part 4. Culvert
sections shall be divided into standard 28-foot lengths. Each
length is to be based on standard mainline roadbed sections.

2. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

3. Culverts resting on rock foundation need not be cambered.

4. Culverts resting on rock foundation must be placed with
the inside circumferential laps pointing downstream.

5. Culverts placed in soil with a pH of 5-9 and resistivity of
2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

6. Wire or timber strutting used during installation must be
removed immediately after installation and backfill is complete.

7. Culverts for Cooper E80 Live Load without a cover as shown in Table 1.

8. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

9. Culverts resting on rock foundation need not be cambered.

10. These standard are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

11. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

12. Culverts resting on rock foundation need not be cambered.

13. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

14. Culverts resting on rock foundation need not be cambered.

15. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

16. Wire or timber strutting used during installation must be
removed immediately after installation and backfill is complete.

17. Culverts for Cooper E80 Live Load without a cover as shown in Table 1.

18. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

19. Culverts resting on rock foundation need not be cambered.

20. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

21. Culverts resting on rock foundation need not be cambered.

22. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

23. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

24. Culverts resting on rock foundation need not be cambered.

25. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

26. Wire or timber strutting used during installation must be
removed immediately after installation and backfill is complete.

27. Culverts for Cooper E80 Live Load without a cover as shown in Table 1.

28. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

29. Culverts resting on rock foundation need not be cambered.

30. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
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specified by the engineer.

31. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

32. Culverts resting on rock foundation need not be cambered.

33. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

34. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

35. Culverts resting on rock foundation need not be cambered.

36. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

37. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

38. Culverts resting on rock foundation need not be cambered.

39. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

40. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

41. Culverts resting on rock foundation need not be cambered.

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and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

43. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

44. Culverts resting on rock foundation need not be cambered.

45. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

46. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

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48. These standards are for installation in soil with a pH of 5-9
and resistivity of 2,500 megohms. Pipes located in soils outside
this range shall have additional corrosion protection as
specified by the engineer.

49. Structural plate pipe culverts must be placed with
the inside circumferential laps pointing downstream.

50. Culverts resting on rock foundation need not be cambered.