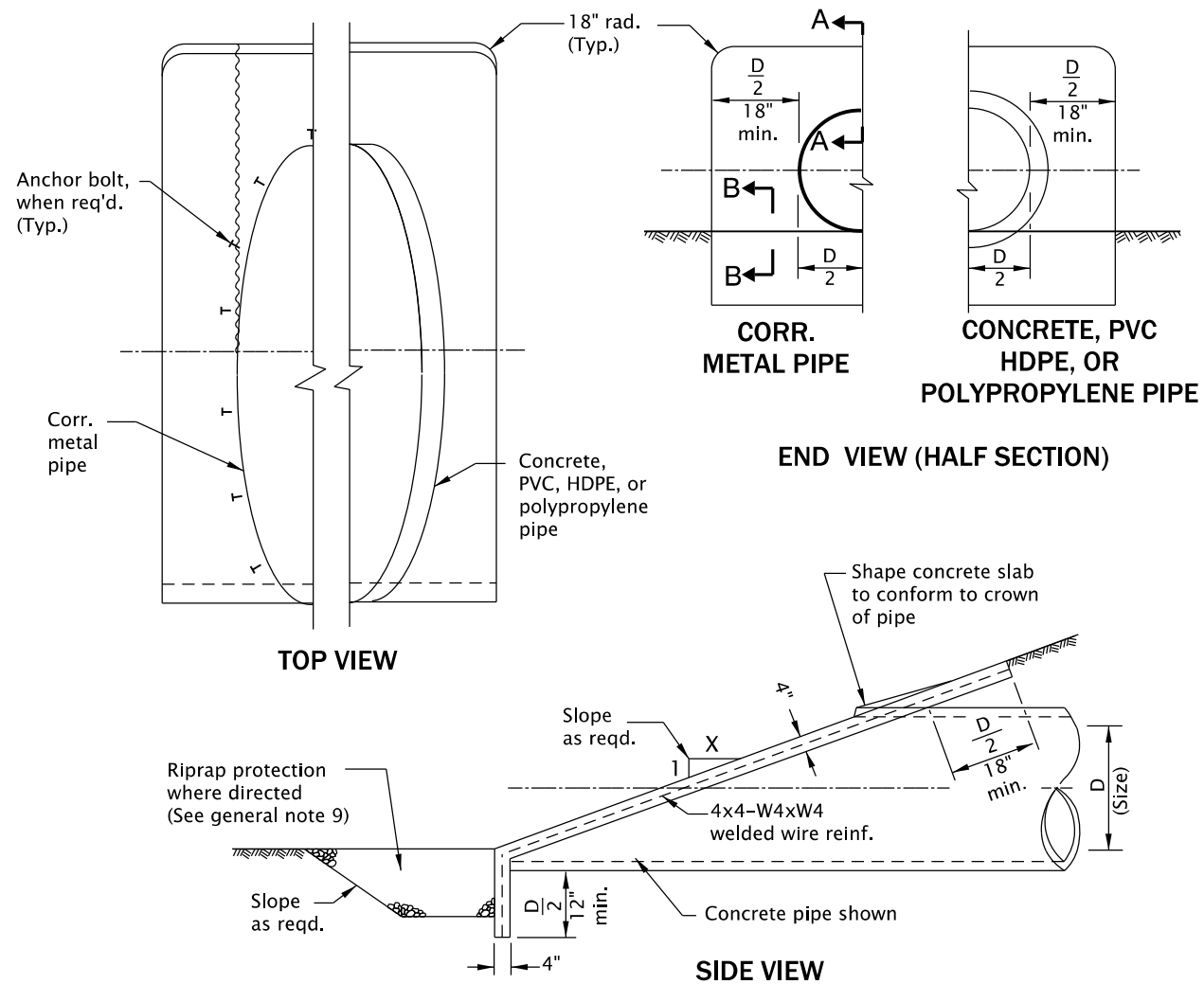
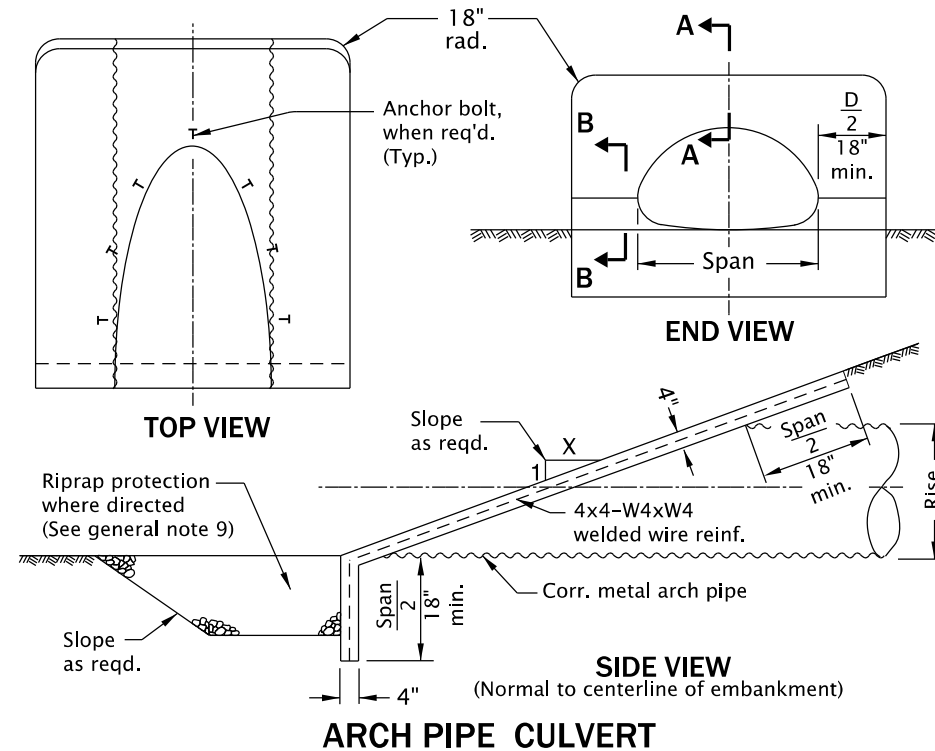
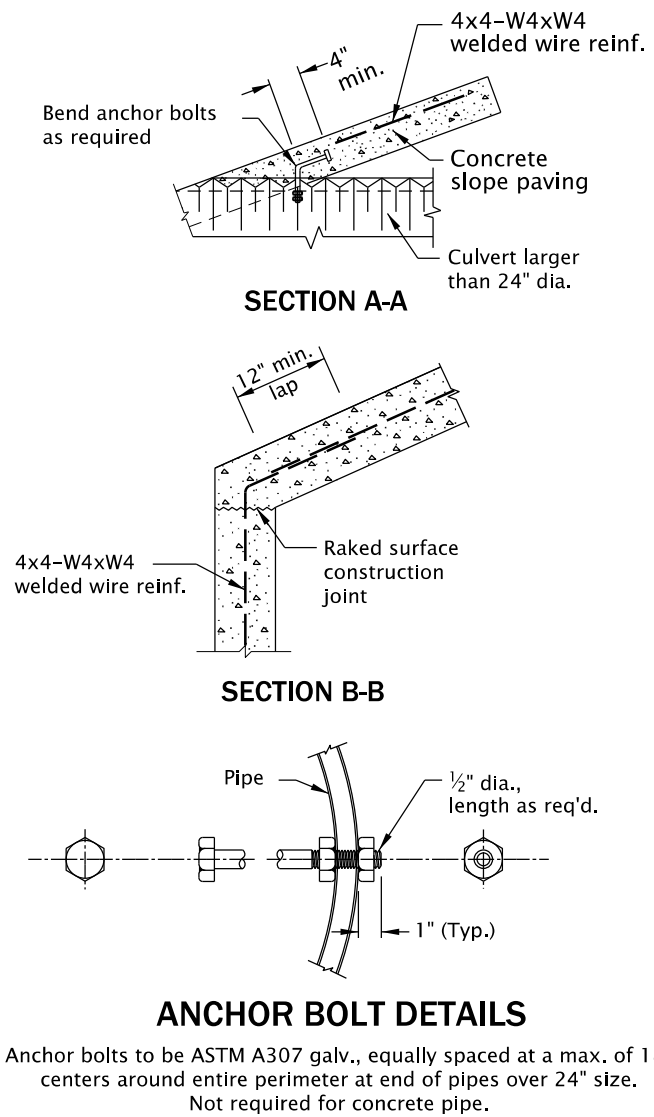




CIRCULAR PIPE CULVERT

PAVED END SLOPE AREA TABLE						
Nominal Pipe Diameter (Inches)	PAVED END SLOPE AREA SQUARE FEET					
	1:3 SLOPE		1:4 SLOPE		1:6 SLOPE	
	Circular Pipe	Arch Pipe	Circular Pipe	Arch Pipe	Circular Pipe	Arch Pipe
12	23	--	26	--	32	--
15	26	23	32	27	41	34
18	30	26	35	30	44	38
21	33	30	39	35	51	45
24	37	33	44	39	57	51
30	47	39	55	46	72	61
36	56	53	67	63	88	83
42	76	67	90	80	119	107
48	98	90	117	108	155	144
54	124	114	148	137	196	184
60	164	137	197	165	264	221

(1) Areas for multiple installations are as shown on the plans.



GENERAL NOTES FOR ALL DETAILS ON THIS SHEET:

- When rock is encountered, cut off wall depth $\frac{D}{2}$ or $\frac{\text{span}}{2}$ may be reduced to rock line but not less than 12".
- When using pervious bedding and backfill, it is desirable to prevent seepage and piping by placing impervious material at the inlet. Cutoff collars may be used in lieu of impervious material.
- For multiple pipe installations, see Std. Dwgs. RD300 & RD304.
- All exposed conc. edges shall be chamfered $\frac{3}{4}$ " unless noted otherwise. Slope paving surface variations shall not exceed $\frac{3}{8}$ " in 10'.
- All metal reinforcement shall be placed $1\frac{1}{2}$ " clear of nearest face of concrete unless shown or noted otherwise.
- All concrete shall be commercial grade concrete.
- Open ends of pipes normally require a site specific design, and may require special treatment (Slope ends, culvert embankment protection, paved end slopes, safety end sections, or other measures). See special details or Standard Drawings as called for on plans.
- See Std. Dwg. RD321 for removable safety bars (When req'd.).
- See Std. Dwg. RD317 for culvert embankment protection and riprap pads (When req'd.).

The selection and use of this Standard Drawing, while designed in accordance with generally accepted engineering principles and practices, is the sole responsibility of the user and should not be used without first consulting a Registered Professional Engineer.

All materials shall be in accordance with the current Oregon Standard Specifications.

OREGON STANDARD DRAWINGS PAVED END SLOPE FOR CULVERTS 60" MAXIMUM PIPE SIZE

2024

DATE	REVISION	DESCRIPTION
CALC. BOOK NO. RD07-02	SDR DATE 15-JAN-2016	RD320

Effective Date: June 1, 2026 – November 30, 2026