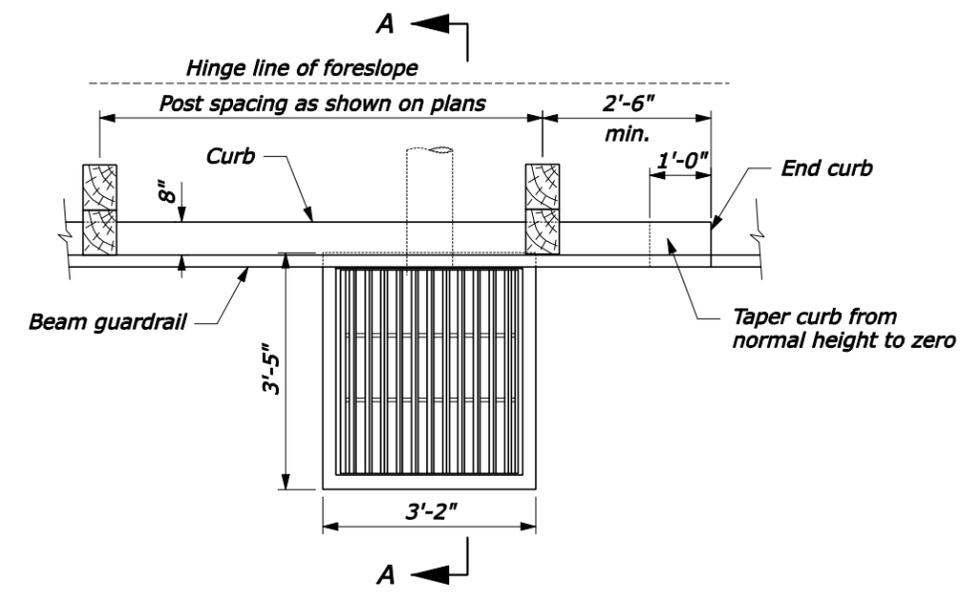


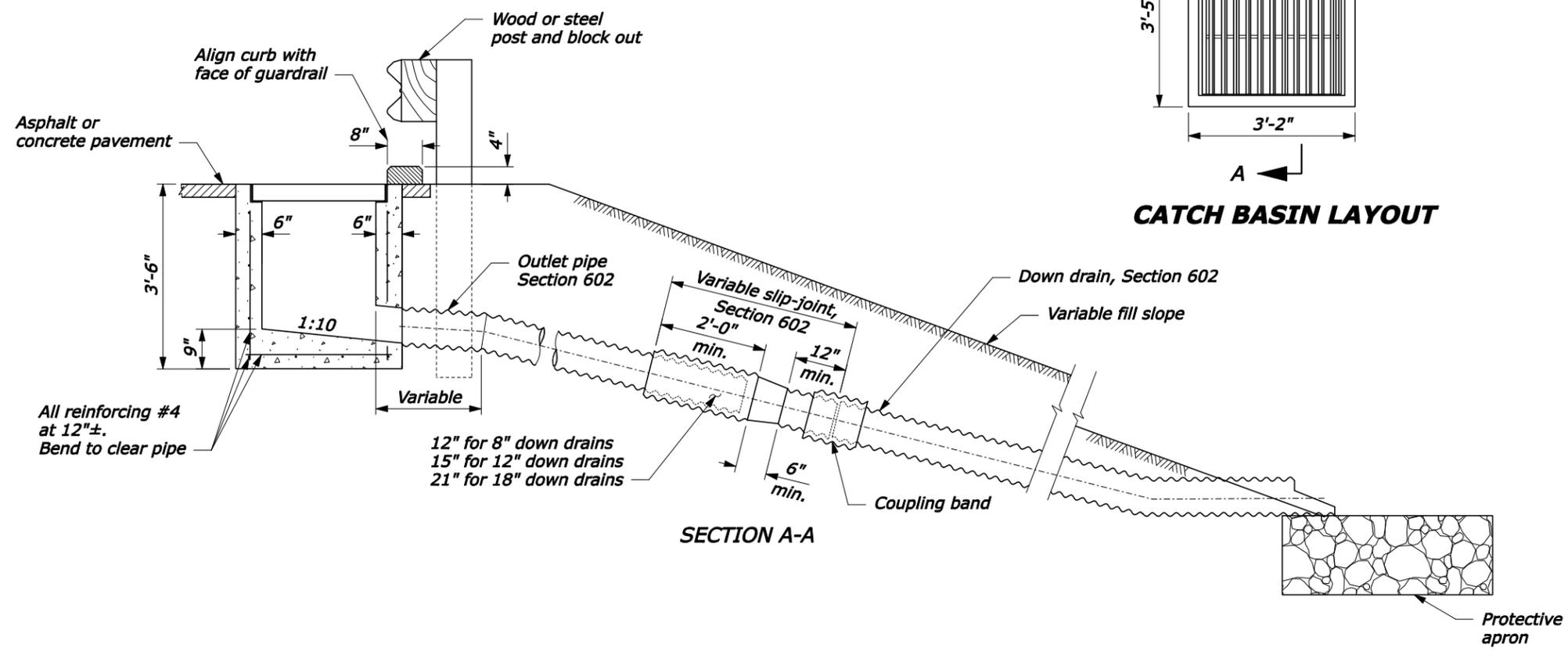
CATCH BASIN LAYOUT AT BRIDGE ENDS

- NOTE:**
1. **CONCRETE:** Chamfer exposed edges $\frac{3}{4}$ " unless otherwise shown. Give all concrete surfaces a Class 1 finish.
 2. The minimum concrete cover to the face of any bar is $1\frac{1}{2}$ " unless otherwise shown.
 3. See Standard 604-2 for Type A Frame and Grate and Standard 604-3 for Type B Frame and Grate.
 4. Make all coupling band connections watertight by placing $\frac{3}{16}$ " bead of approved caulking under each half of the bands before tightening.
 5. Fabricate tapered portion of slip-joint from either flat or corrugated sheets.
 6. See Detail C251-50 for protective apron details.

DESCRIPTION	FRAME AND GRATE	
	TYPE A	TYPE B
Reinforcing Steel	70 lb	70 lb
Structural Steel	215 lb	238 lb
Concrete	0.85 cuyd	0.85 cuyd



CATCH BASIN LAYOUT



SECTION A-A

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION CENTRAL FEDERAL LANDS HIGHWAY DIVISION	
U.S. CUSTOMARY DETAIL CATCH BASIN TYPE 2 WITH DOWN DRAIN	
DETAIL APPROVED FOR USE 03/2009	DETAIL C604-50

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NOTES TO THE DESIGNER

Last Updated: March 2009

General Information

1. **Converted from an FLH Standard.** This drawing was originally an FLH Standard drawing that was modified to accommodate the new riprap SCR.
2. **Riprap classes.** Use this drawing only with NCHRP classifications (See the Section 251 SCRs on the LOS). Use [FLH Standard drawing 604-4](#) with FP-03 classifications.

Applicable SCRs

1. Section 251:
http://www.cflhd.gov/design/ documents/construction/scr_03/S251-03E.doc
2. Section 705:
http://www.cflhd.gov/design/ documents/construction/scr_03/S705-03E.doc

Typical Pay Items Used

- 25101-2000 Placed riprap, class 2 and/or
- 25101-3000 Placed riprap, class 3 and/or
- 25101-4000 Placed riprap, class 4

- 60201-0300 8-inch pipe culvert or
- 60204-0400 12-inch pipe culvert or
- 60201-0600 18-inch pipe culvert

- 60404-2000 Catch basin, type 2

- 60409-0100 Metal frame and grate type A or
- 60409-0200 Metal frame and grate type B

- Other project-specific items, including curb, guardrail, and pavement surfacing
- Geotextile quantity is shown for information only

Updates

March 2009

- Converted from an FLH Standard
- Deleted protective apron detail – refers to CFL Detail 251-50 for riprap apron details.