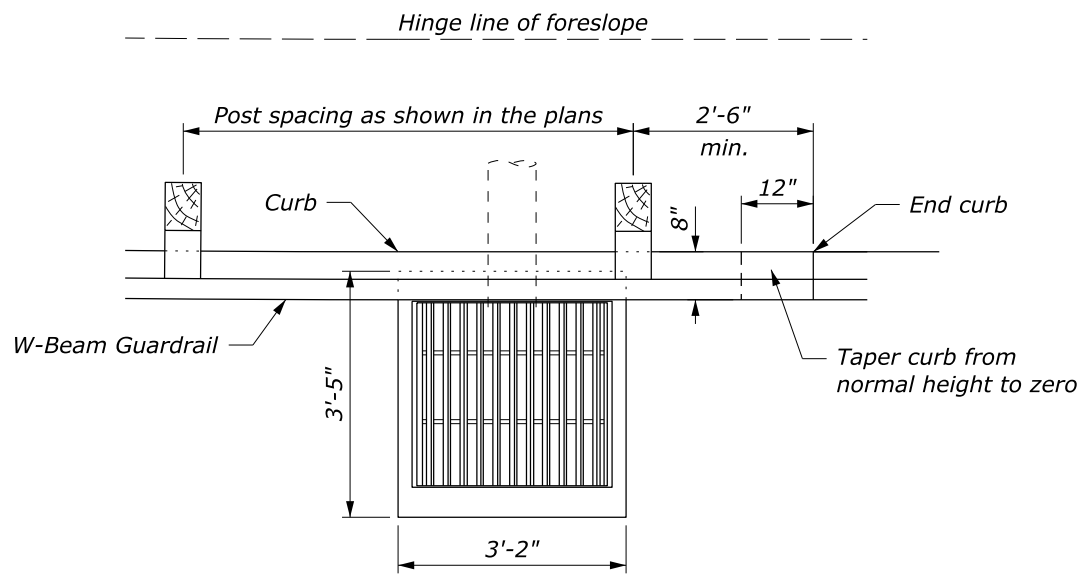


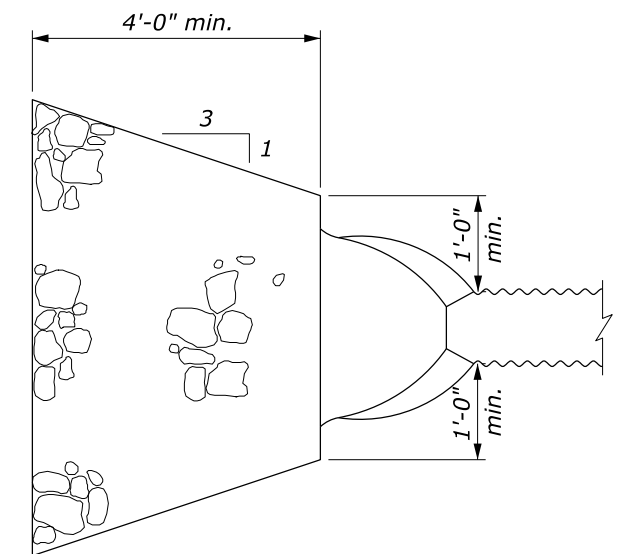
CATCH BASIN LAYOUT AT BRIDGE ENDS

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

PLAN

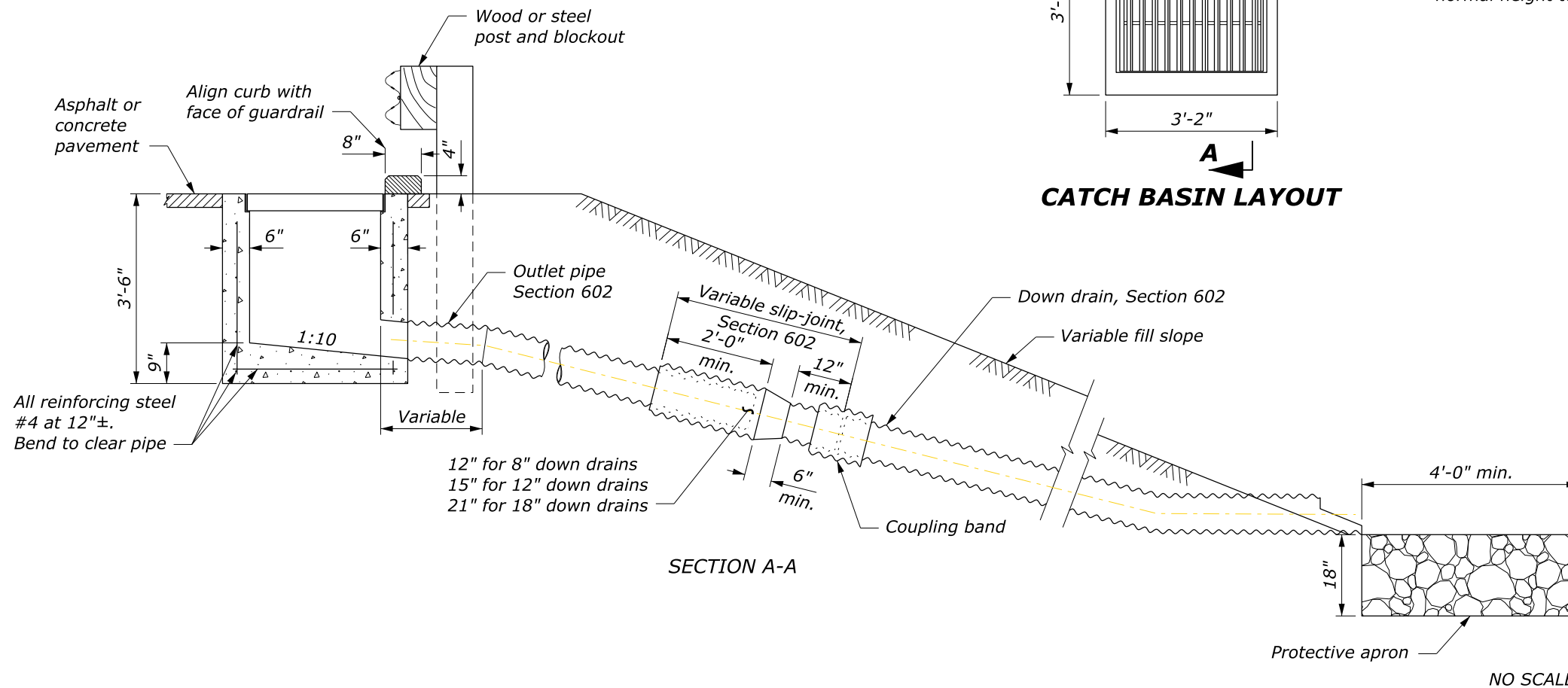


CATCH BASIN LAYOUT



PLAN

PROTECTIVE APRON



SECTION A-A

NO SCALE

NOTE:

1. Chamfer all exposed edges $\frac{3}{4}$ inch and finish all exposed surfaces with a Class 1 ordinary finish.
2. The minimum concrete cover to the face of any bar is $1\frac{1}{2}$ inches 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 $\frac{3}{16}$ -inch 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. Place Class 2 riprap according to Section 251 for protective apron.

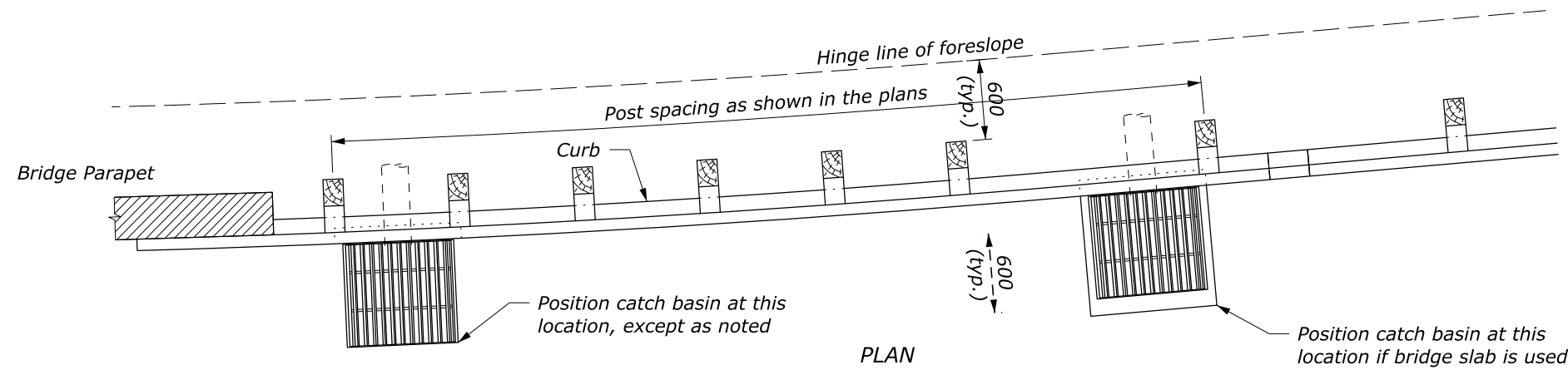
U.S. DEPARTMENT OF TRANSPORTATION, FHWA
OFFICE OF FEDERAL LANDS HIGHWAY

**CATCH BASIN
TYPE 2
WITH DOWN DRAIN**

FLH STANDARD
604-4

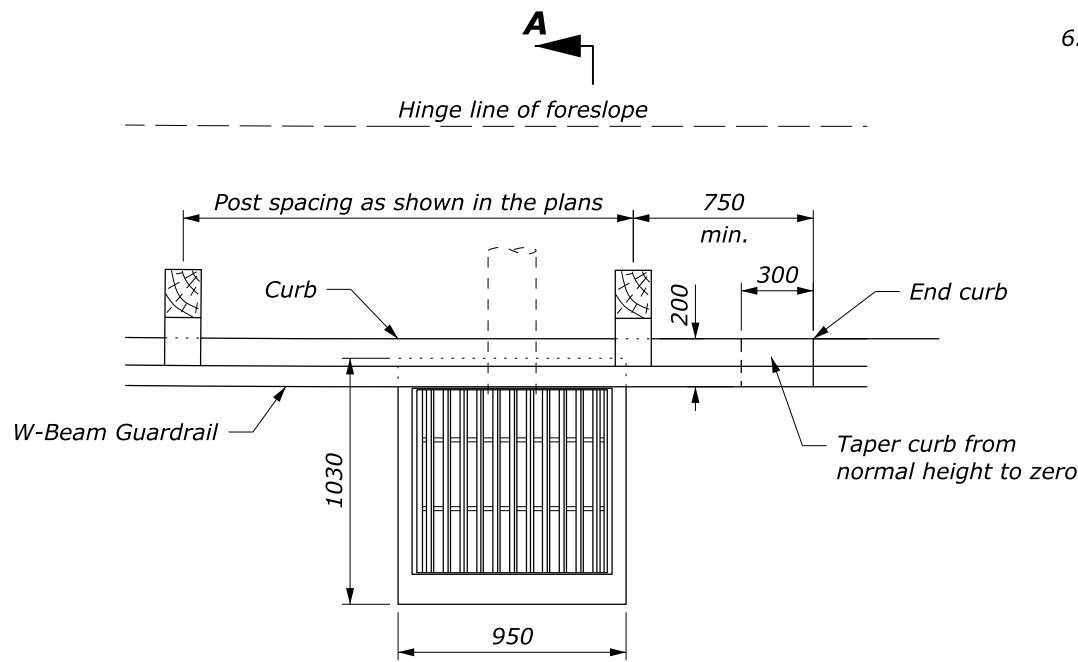
SPECIFICATION
FP-14, FP-24

APPROVED FOR USE
1/2024

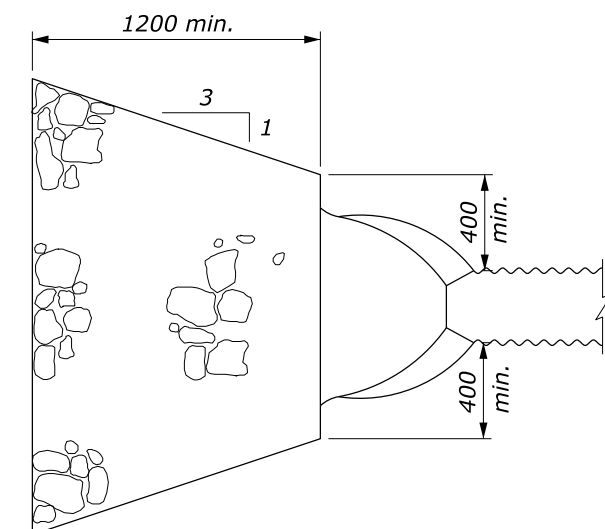


CATCH BASIN LAYOUT AT BRIDGE ENDS

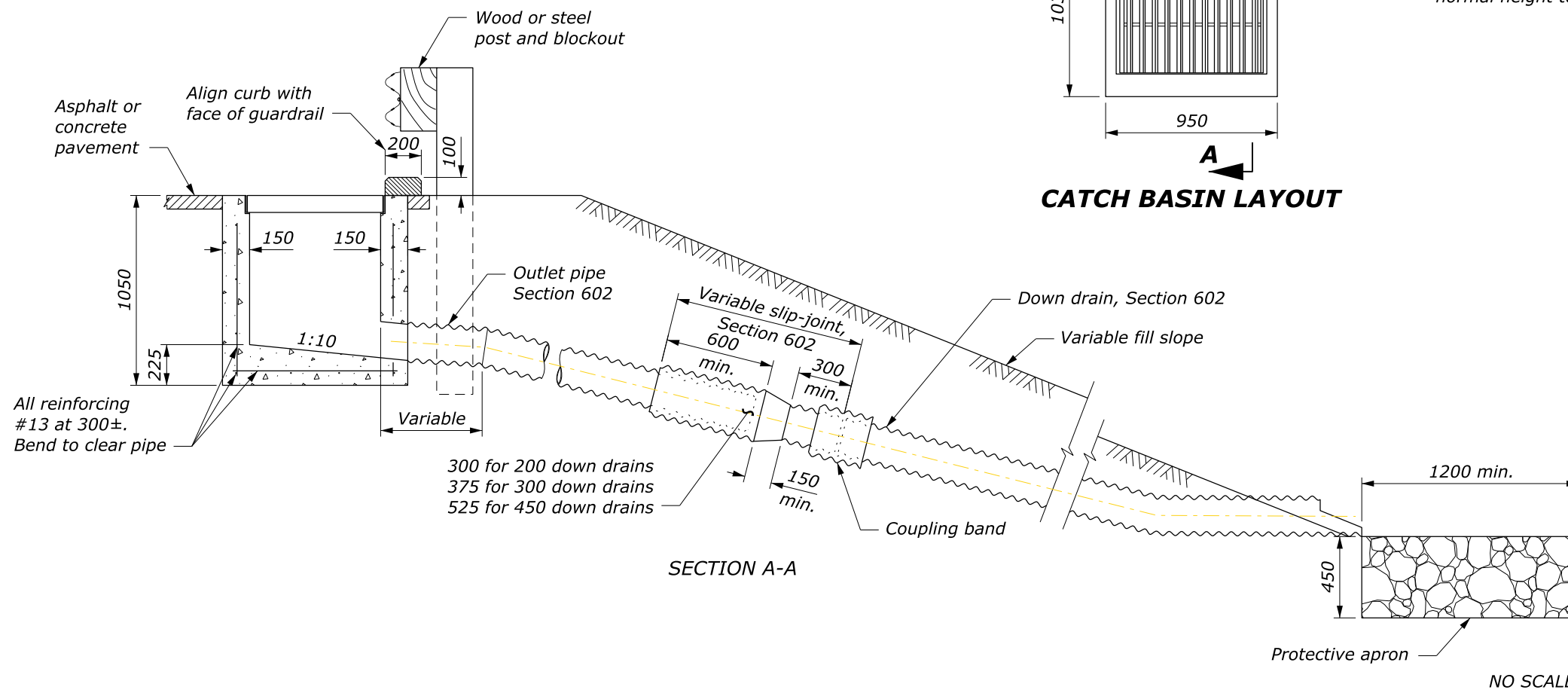
DESCRIPTION	FRAME AND GRATE	
	TYPE A	TYPE B
Reinforcing Steel	32 kg	32 kg
Structural Steel	98 kg	108 kg
Concrete	0.6 m ³	0.6 m ³



CATCH BASIN LAYOUT



PROTECTIVE APRON



SECTION A-A

- NOTE:**
1. Chamfer all exposed edges 20 mm and finish all exposed surfaces with a Class 1 ordinary finish.
 2. The minimum concrete cover to the face of any bar is 50 mm unless otherwise shown.
 3. See Standard M604-2 for Type A Frame and Grate and Standard M604-3 for Type B Frame and Grate.
 4. Make all coupling band connections watertight by placing 5 mm 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. Place Class 2 riprap according to Section 251 for protective apron.

This drawing contains **Metric** units of measure. Dimensions without units are millimeters.

U.S. DEPARTMENT OF TRANSPORTATION, FHWA OFFICE OF FEDERAL LANDS HIGHWAY	FLH STANDARD M604-4
CATCH BASIN TYPE 2 WITH DOWN DRAIN	SPECIFICATION FP-24, FP-14
	APPROVED FOR USE 1/2024