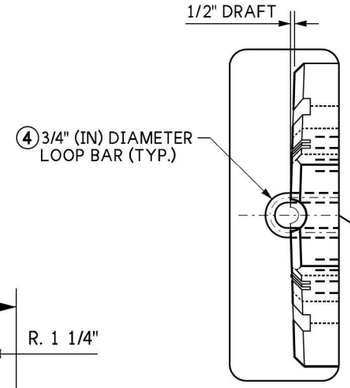
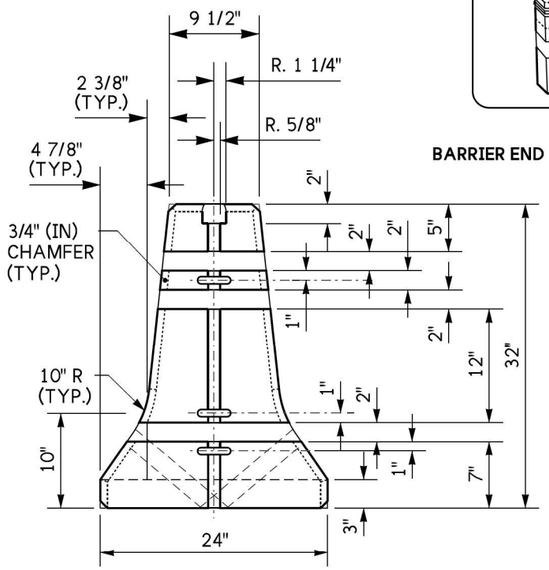
NOTES:

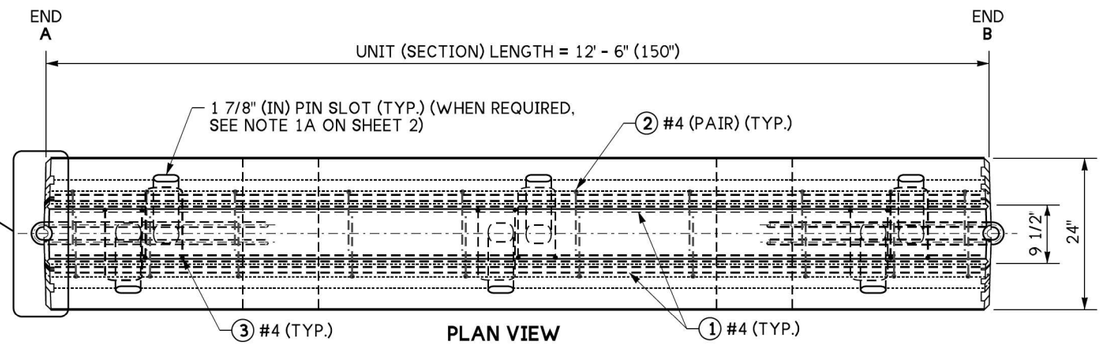
1. Concrete for Barrier Type F (Precast) shall be Class 5000.
2. The reinforcing steel details for the NARROW BASE barrier are the same as those shown for the 24" (in) wide barrier except for the stirrup bars (see Stirrup Bar Narrow Base Detail), Bar - 6 runs along the vertical face of the narrow base barrier with a 1 1/2" (in) clearance.
3. Type F barrier can be placed on horizontal curves with a radius of 150 feet or greater.



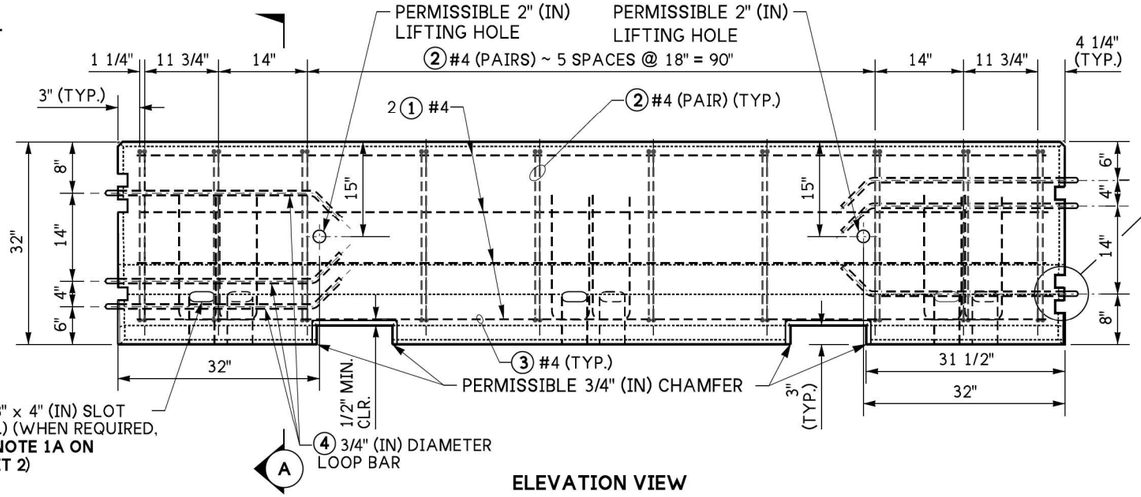
BARRIER END DETAIL



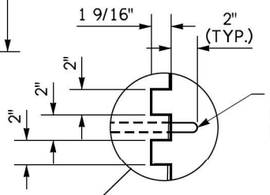
END A



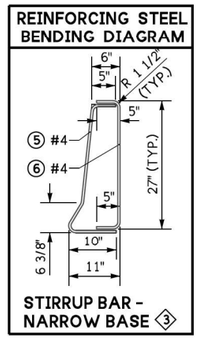
PLAN VIEW



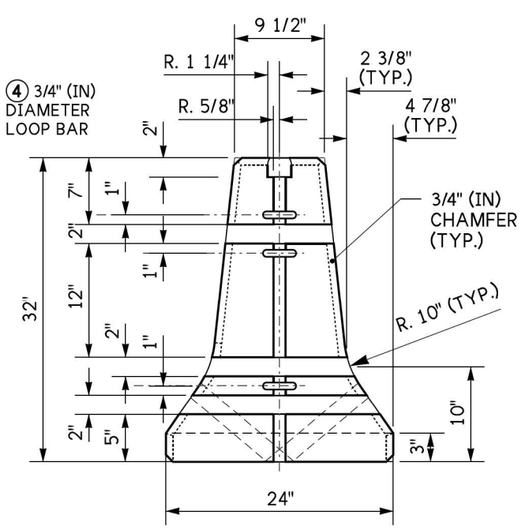
ELEVATION VIEW



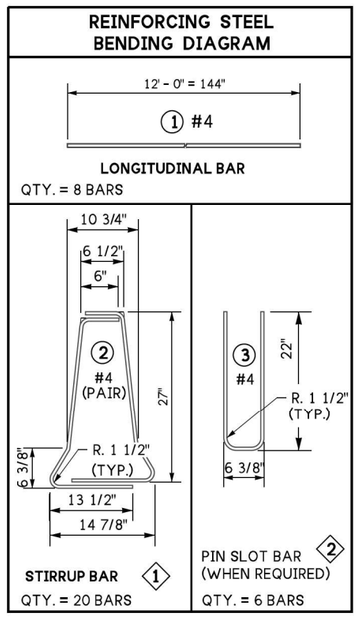
TYPICAL BARRIER PIN LOOP DETAIL

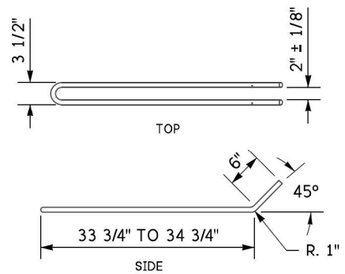


STIRRUP BAR - NARROW BASE 3



END B





LOOP BAR DETAIL

4 3/4" (IN) DIAM. LOOP BAR PER **ASTM A36 HOT ROLL** HOT DIP GALVANIZE AFTER FABRICATION PER **AASHTO M111**.

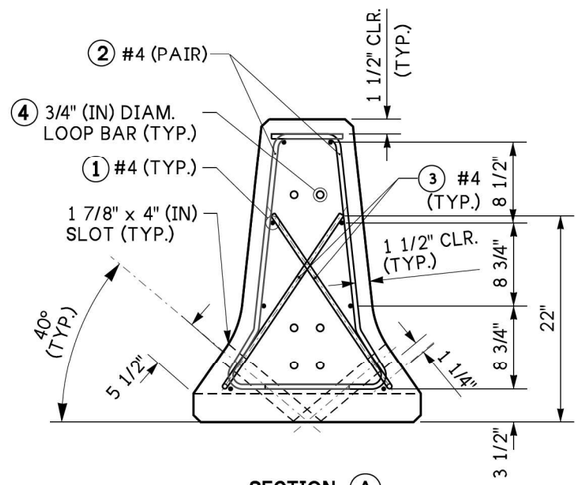
KEY NOTES:

STEEL WELDED WIRE REINFORCEMENT DEFORMED FOR CONCRETE MAY BE SUBSTITUTED FOR REINFORCING STEEL IN ACCORDANCE WITH **STANDARD SPECIFICATION SECTION 6-10.3**

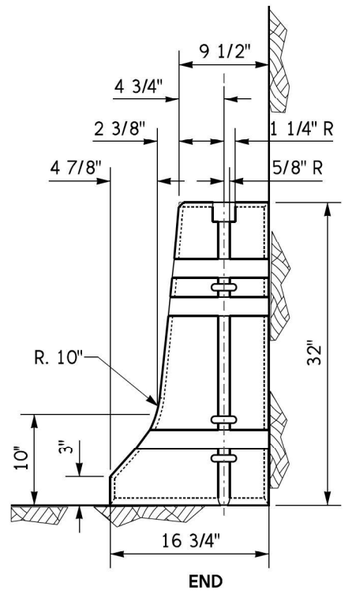
1 2 STIRRUP BAR MAY BE FABRICATED AS A SINGLE PIECE

2 3 HOT DIP GALVANIZE AFTER FABRICATION PER ASTM A767

3 STIRRUP BAR - NARROW BASE MAY BE FABRICATED AS A SINGLE PIECE



SECTION A



END

NARROW BASE (NO PIN SLOTS REQUIRED)

TIMOTHY J MOECKEL
STATE OF WASHINGTON
56294
REGISTERED PROFESSIONAL ENGINEER

Sep 3, 2026

CONCRETE BARRIER TYPE F (PRECAST)

STANDARD PLAN C-60.10-05

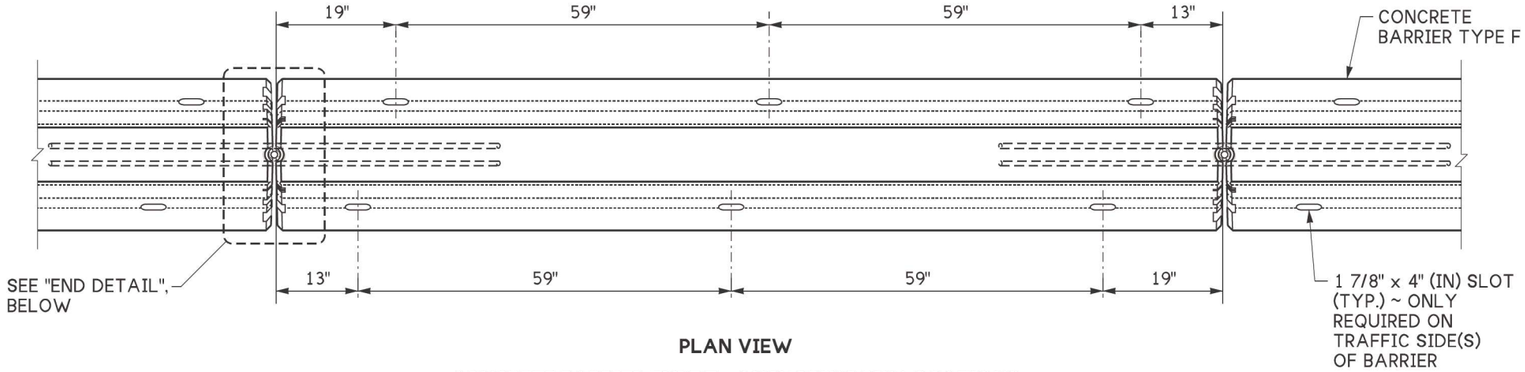
SHEET 1 OF 2 SHEETS

APPROVED FOR PUBLICATION

Mark A Baines Sep 3, 2026

STATE DESIGN ENGINEER

Washington State Department of Transportation



PLAN VIEW

CONCRETE BARRIER TYPE F - ANCHORING PIN LOCATIONS

NOTES: (Anchoring and Joining Barrier)

1. Precast Concrete Barrier Type F can be installed in the following configurations:

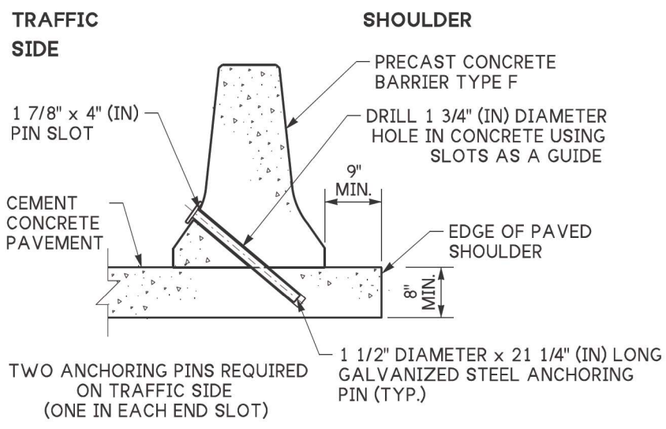
   A. Unanchored on hot mix asphalt (HMA), or cement concrete pavement in permanent or temporary installations, and on compacted soil in temporary installations. It is permissible to manufacture theType F barrier without pin slots and pin slot bars when barrier is not anchored.
   B. Anchored on hot mix asphalt (HMA) or cement concrete pavement in permanent or temporary installations as shown on this plan. See **Standard Plans K-80.35 and K-80.37** for anchoring Type F Narrow Base in temporary installations on cement concrete pavement or bridge decks.

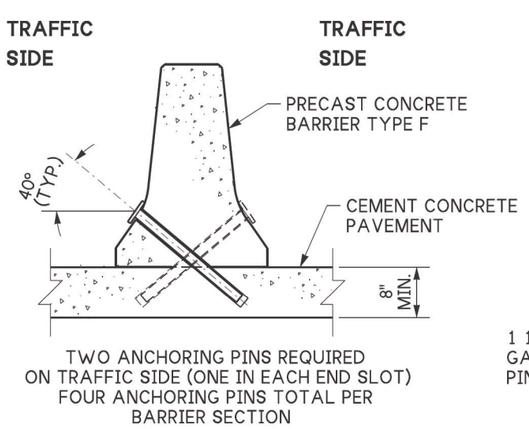
2. See **Standard Plan C-60.70** for anchoring patterns when transitioning from Type F anchored runs to another type of barrier run.

3. After removing the anchoring pins, clean the pin holes and fill them with sealant according to **Std. Specification Section 9-04.2**.

4. Remove slack between barrier segments after inserting the connecting pin.

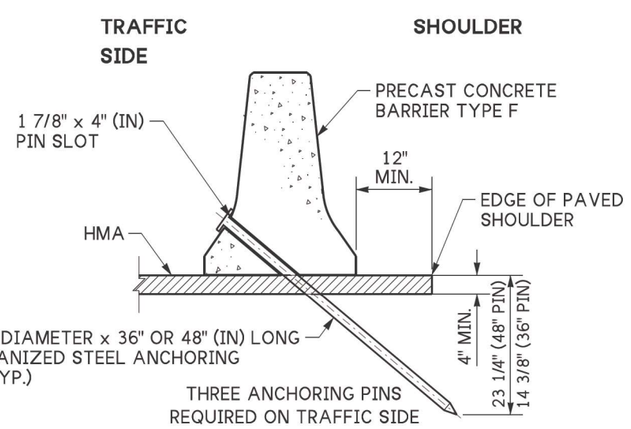
5. Connecting Pin head designs vary among different Mfrs. Pin designs that are shaped differently than those shown in the details are acceptable if the bearing surface is within the minimum and maximum widths specified.

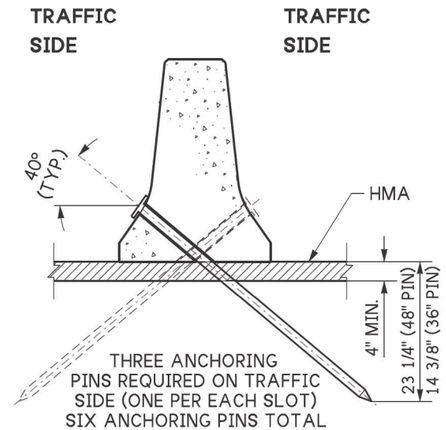




SECTION VIEWS

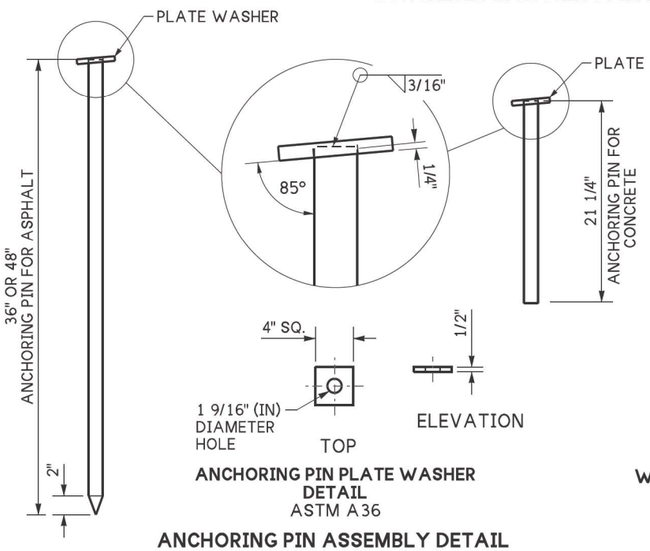
CONCRETE ANCHORING PIN LOCATIONS





SECTION VIEWS

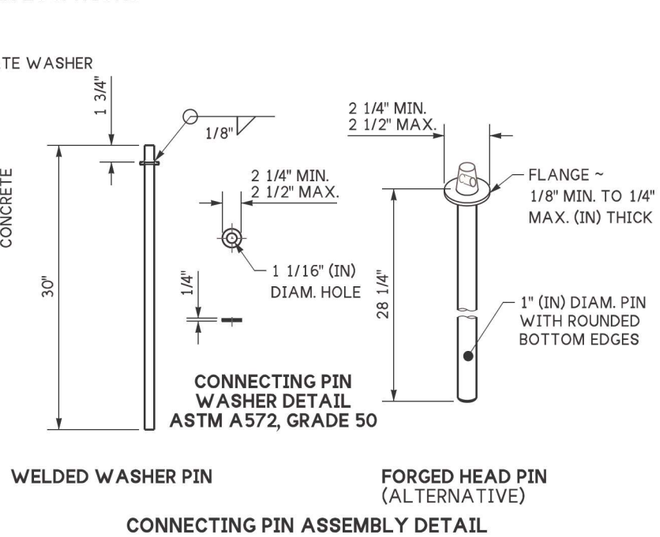
HMA ANCHORING PIN LOCATIONS



ANCHORING PIN PLATE WASHER DETAIL
ASTM A36

ANCHORING PIN ASSEMBLY DETAIL

1 1/2" (IN) DIAMETER PER **ASTM A36**, HOT ROLL. HOT DIP GALVANIZE AFTER FABRICATION PER **ASTM A123** OR **AASHTO M111**

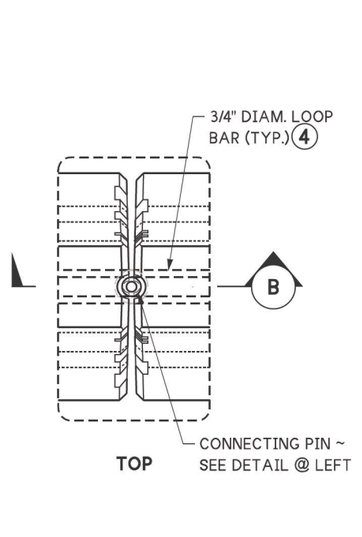


CONNECTING PIN WASHER DETAIL
ASTM A572, GRADE 50

WELDED WASHER PIN — **FORGED HEAD PIN** (ALTERNATIVE)

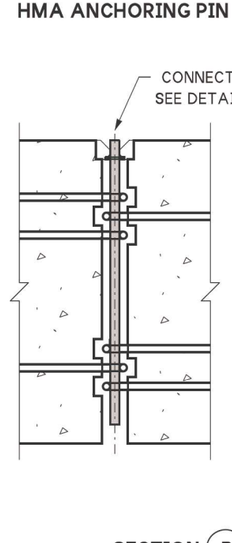
CONNECTING PIN ASSEMBLY DETAIL

(SEE NOTE 5)
1" (IN) DIAMETER PER **ASTM A449**
HOT DIP GALVANIZE AFTER FABRICATION
PER **ASTM A123** OR **AASHTO M111**



END DETAIL

JOINING TWO BARRIER SEGMENTS



SECTION (B)

(SEE NOTE 4)

Sep 3, 2026

CONCRETE BARRIER TYPE F (PRECAST)

STANDARD PLAN C-60.10-05

SHEET 2 OF 2 SHEETS

APPROVED FOR PUBLICATION

Mark A Deines — Sep 3, 2026

STATE DESIGN ENGINEER

Washington State Department of Transportation