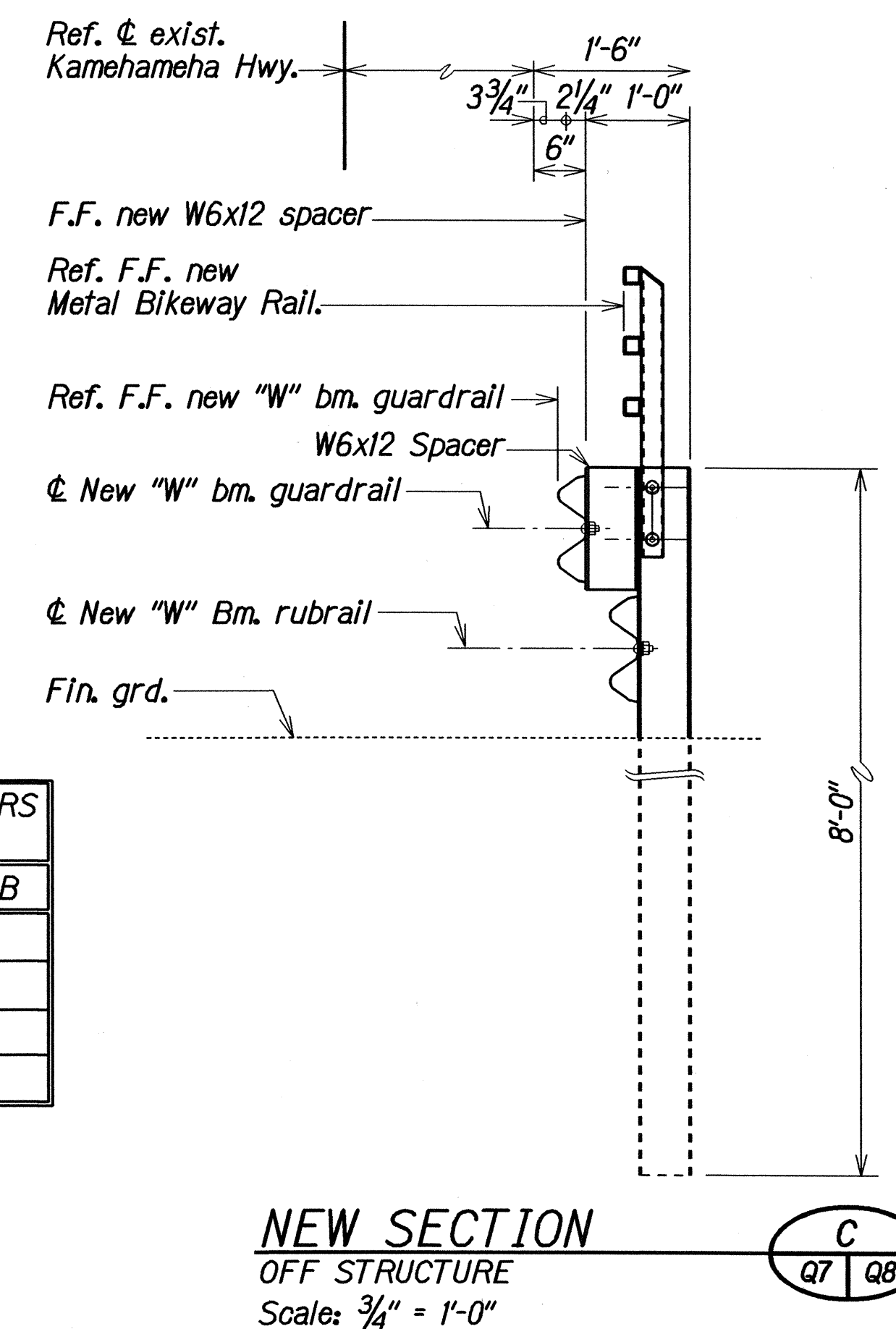
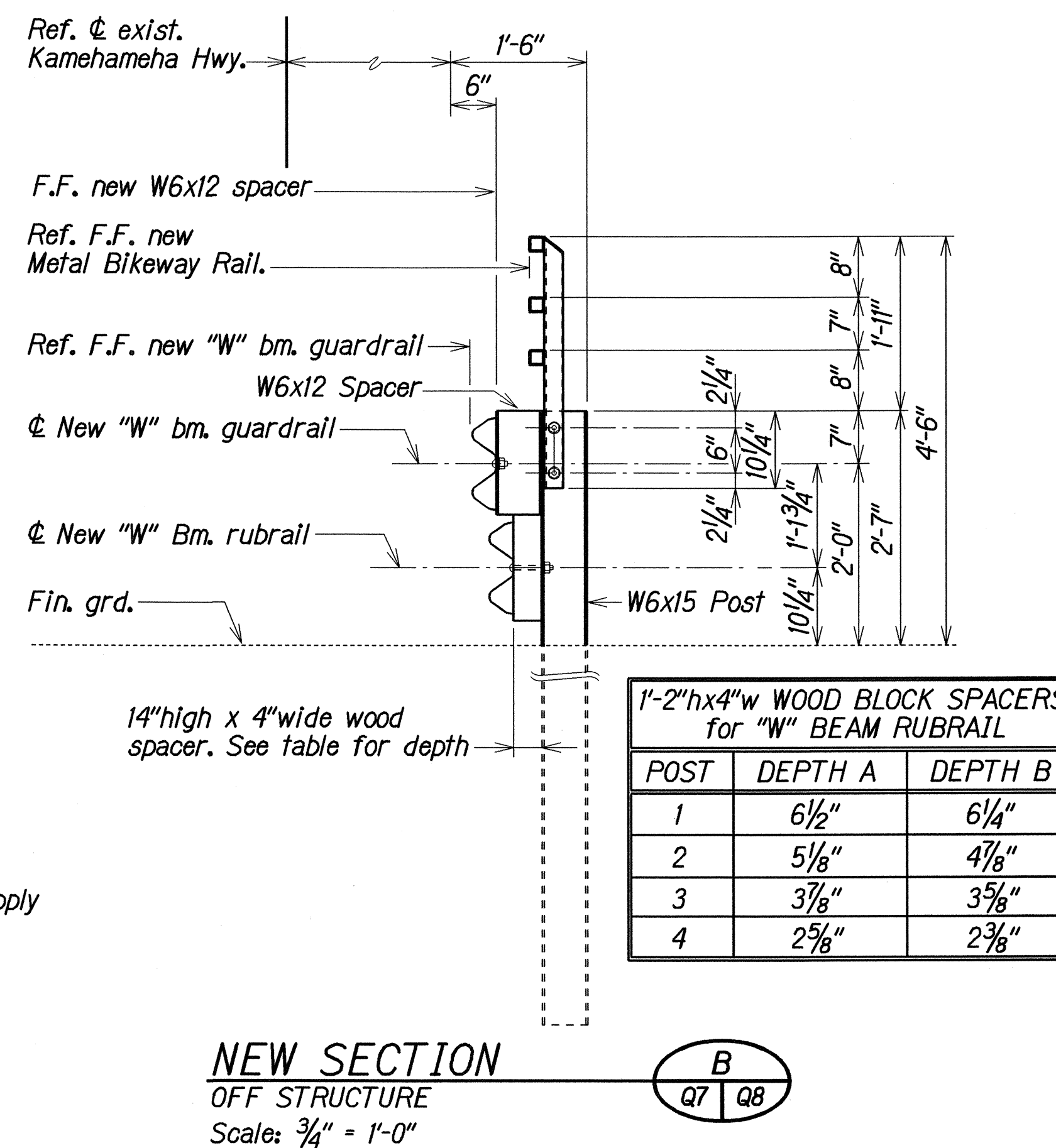
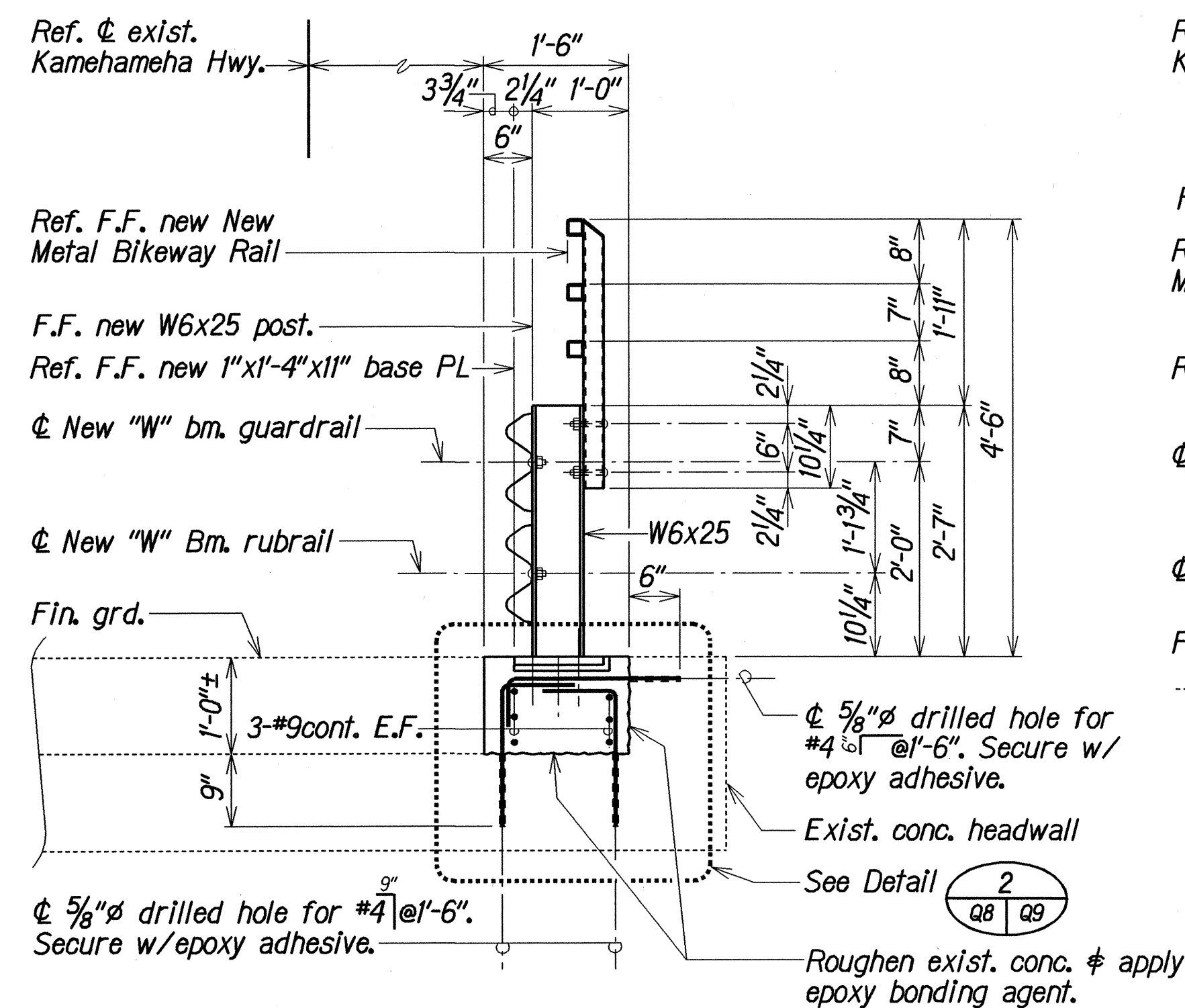
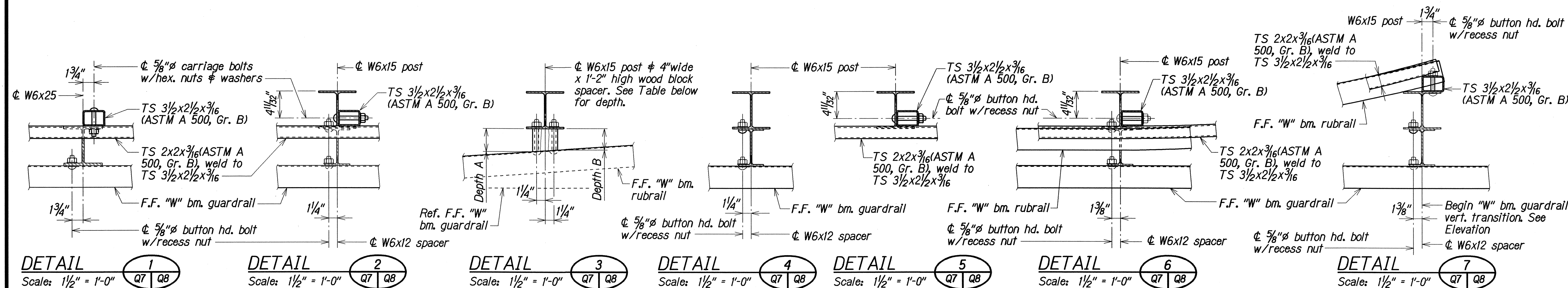


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83G-01-03M	2005	32	47



NOTE:

- All work on this sheet shall be paid for under Item No. 507.7600. See Special Provisions, Section 507--Railings for Details.
- For further guardrail details (W-beam, rubrail, bolts, etc.), see Standard Plan B-4.

ORIGINAL PLAN	DATE	BY
NOTED	FEB 2005	KSG
DESIGNED	FEB 2005	JFL/KAM
CHECKED	FEB 2005	JFL/KAM
APPROVED	FEB 2005	PTS

04/inst/2/ksg/tu/kahiko2/pall/dkml/

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DOUBLE BOX CULVERT CROSSING
DETAILS and SECTIONS
KAMEHAMEHA HIGHWAY RESURFACING
Kahiko Street to Pali Highway
Project No. 83G-01-03M

Scale: As Noted Date: Feb. 2005

Technical drawing of a bridge deck cross-section showing the connection between an existing concrete headwall and a new 27'-0" long x 1'-0" high x 1'-6" wide concrete build-up.

Existing Structure:

- concr. headwall
- 1'-0"± Exist.

New Structure:

- New 27'-0" long x 1'-0" high x 1'-6" wide conc. build-up. Top of build-up to match exist. conc. headwall

Reinforcement and Fasteners:

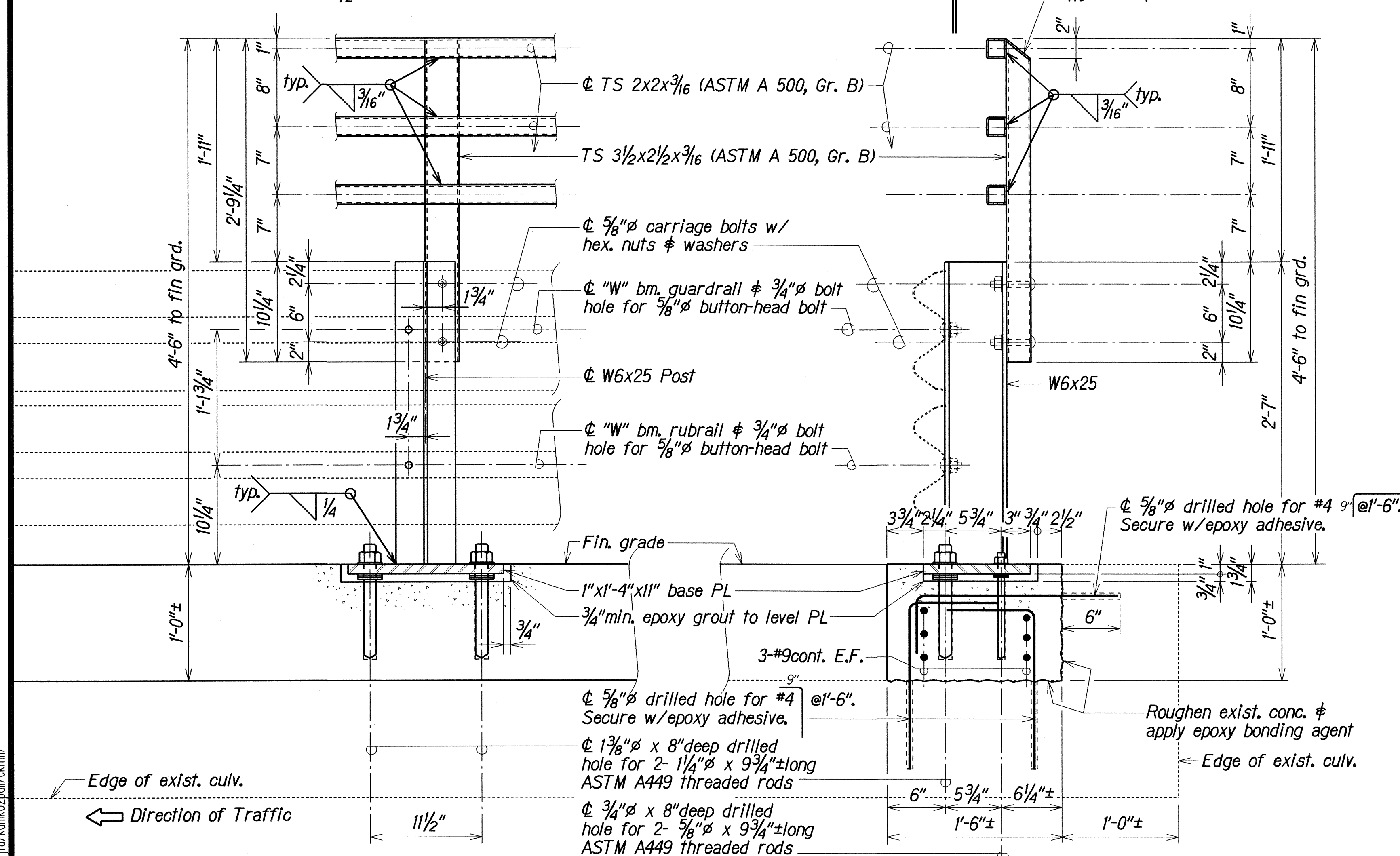
- W6x25 Post
- 1 3/4" spacing
- 1 3/8" ø x 8" min. deep drilled hole for 2- 1 1/4" ø x 1'-6" long ASTM A449 threaded rods
- 1 3/4" ø carriage bolts w/ hex. nuts & washers
- TS 3 1/2 x 2 1/2 x 3/16 (ASTM A 500, Gr. B)
- TS 2 x 2 x 3/16 (ASTM A 500, Gr. B)
- 1 3/8" ø x 8" min. deep drilled hole for 2- 1 1/4" ø x 1'-6" long ASTM A449 threaded rods
- 1 3/4" ø bolt hole for 5/8" ø button-head bolt
- 1/4" typ.

Dimensions:

- 1'-6"±
- 8 3/4"
- 2 1/4"
- 3 3/4"
- 2 1/4"
- 5 3/4"
- 3"
- 1'-4"
- 8"
- 1 3/4"
- 2 1/4"
- 5 3/4"

Other Labels:

- F.F. "W" bm. rubrail



2
QB | Q9

SHEET No. 09 OF 10 SHEETS