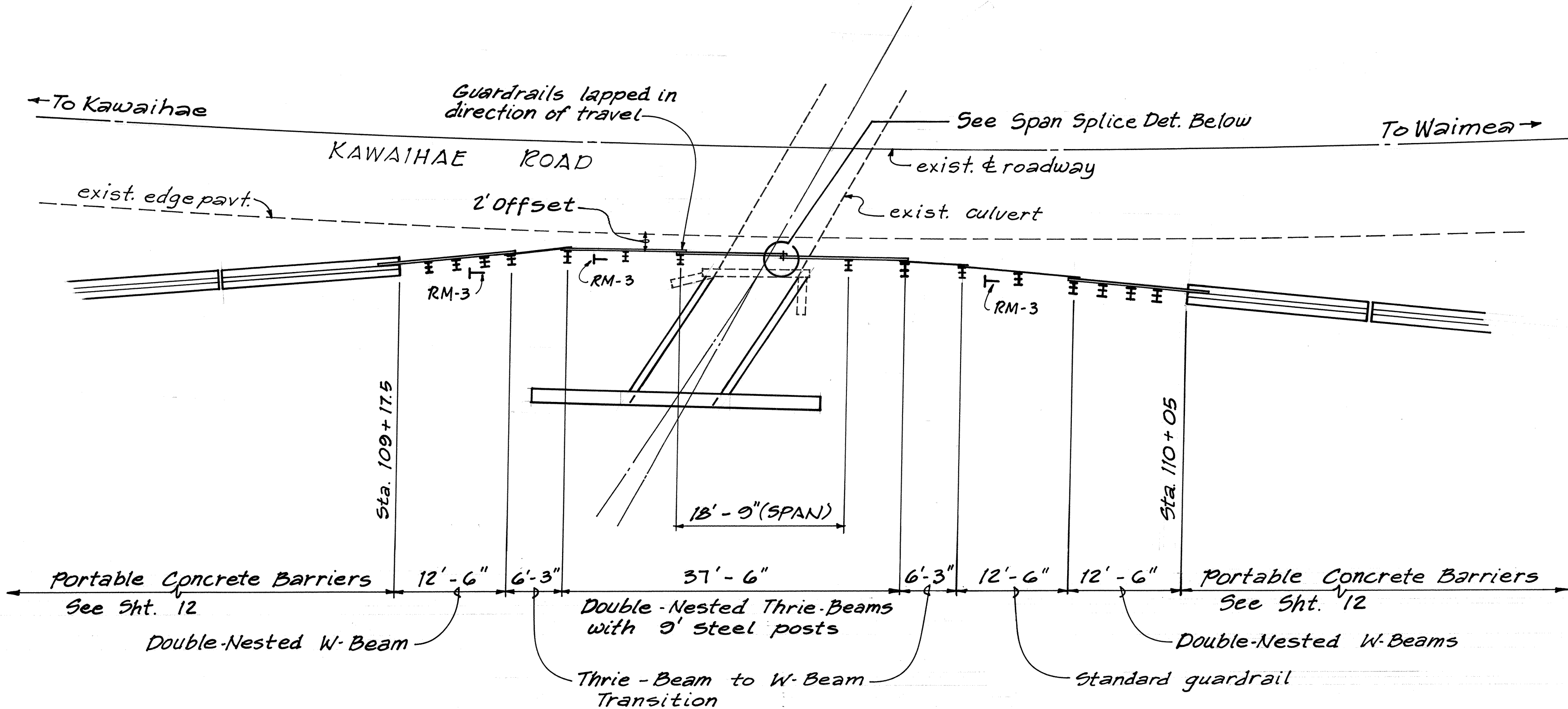


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	19D-01-92M	1992	13	18

PHASE-I CONSTRUCTION AND NOTES:

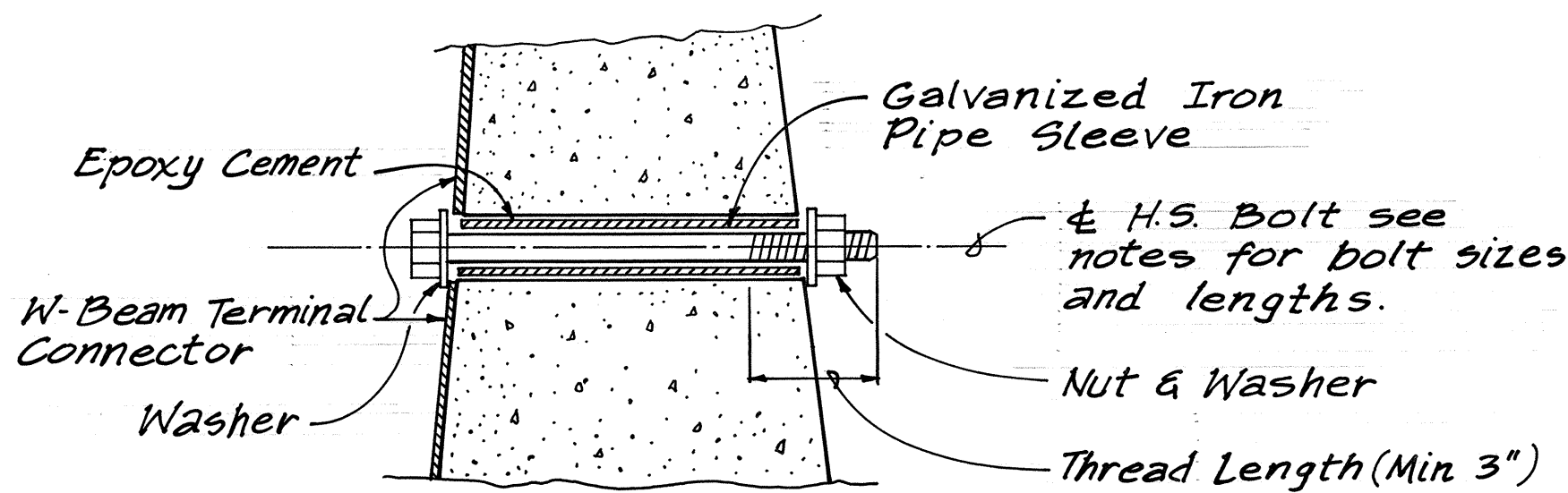
- Contractor shall widen shoulder as needed to install temporary guardrails and portable concrete barriers.
- Double-nested Thrie-beam Guardrails shall be installed with 9 feet length posts.
- Contractor shall be responsible for ordering and installing the proper bolt lengths for double-nested W-beams and double-nested Thrie-beams.
- Traffic remains in normal lanes while the Contractor completes culvert outlet extension work.
- Contractor shall install paved shoulders on makai (right) side from Station 106+00 to Station 113+00, remove temporary guardrails and install portable concrete barriers.
- Removed temporary guardrails and posts shall remain the property of the State. The Contractor shall deliver the guardrail and posts in good condition to the location designated by the Engineer. This work shall be considered incidental to contract items and no separate payment shall be provided.
- Temporary guardrails installation shall be paid for on a lump sum basis under Item 606.9000 Temporary Guardrails.



TEMPORARY GUARDRAIL PHASE I

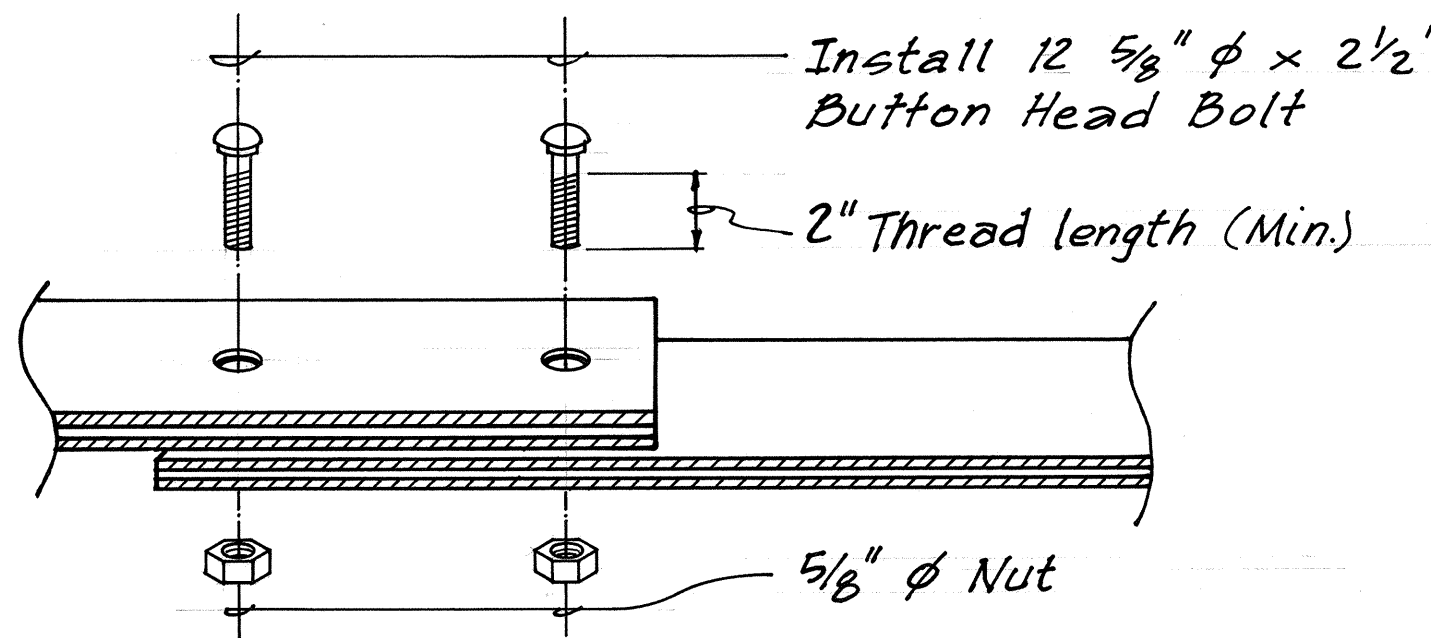
@ CULVERT STA. 109+65

NOT TO SCALE



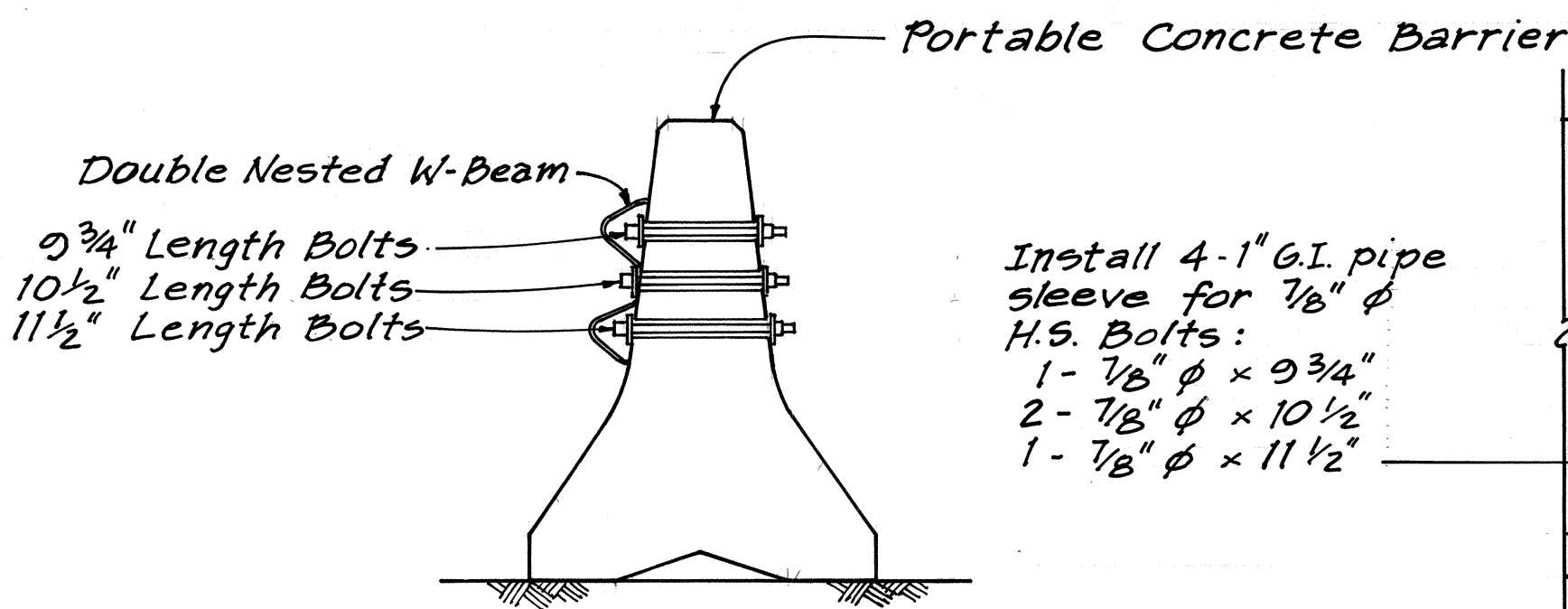
BOLT DETAIL

NOT TO SCALE



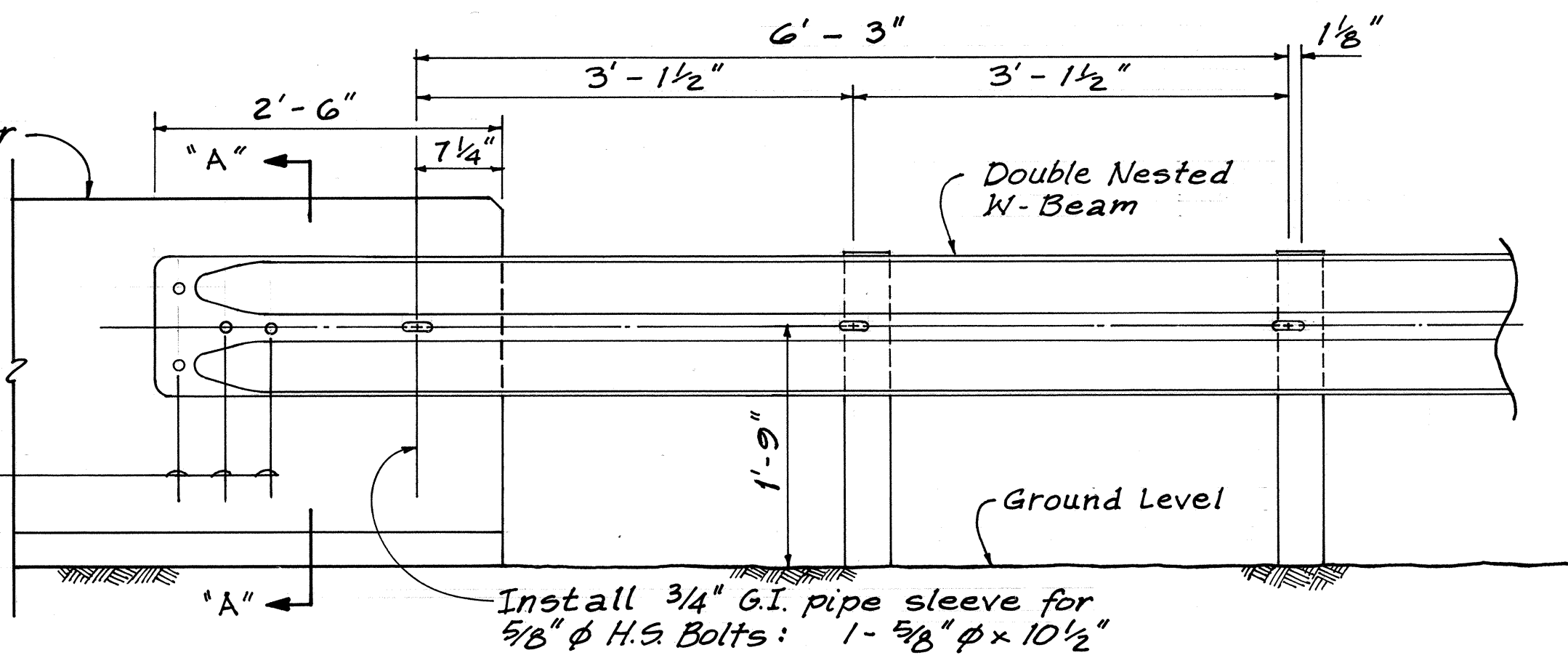
SPAN SPLICE DETAIL

NOT TO SCALE



SECTION "A-A"

Scale: 1" = 1'-0"



GUARDRAIL TO PORTABLE CONCRETE BARRIER TRANSITION DETAIL

Scale: 1" = 1'-0"

TEMPORARY GUARDRAIL ESTIMATED QUANTITIES

ITEM	UNIT	QUANTITY
Thrie-Beam, 12'-6" rail	Each	6
W-Beam, 12'-6" rail	Each	5
Thrie-Beam to W-Beam Transition	Each	2
W-Beam Terminal Connector	Each	2
Steel Posts, 9'	Each	5
Steel Posts, 6'	Each	10
G.I. Pipe Sleeves, Various Lengths	Each	10
RM-3 Reflector Marker w/Steel Post	Each	3 *

* RM-3 may be re-used for permanent installation called for elsewhere on plans.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TEMPORARY GUARDRAILS
PHASE-I CONSTRUCTION
CULVERT @ STA. 109+65

KAWAIIHAE ROAD

CULVERT EXTENSIONS

PROJECT NO. 19D-01-92M

Scale: As Noted Date: Apr. 1992

SHEET NO. 1 OF 1 SHEETS