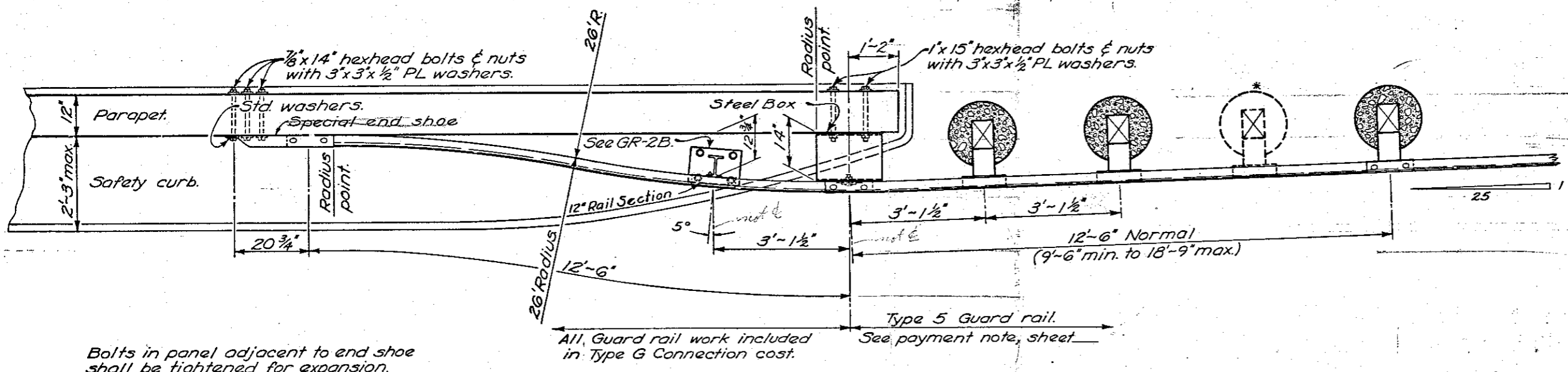


FHWA REGION	STATE	PROJECT	
5	OHIO		

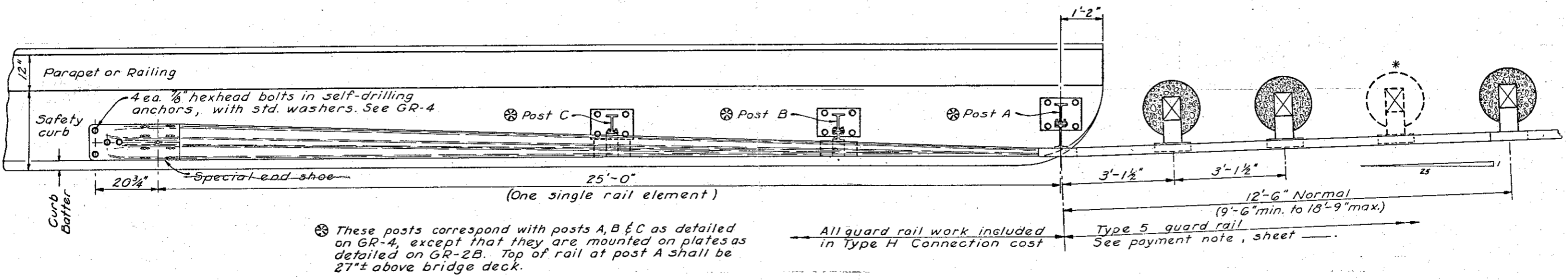
Blockout can be bigger if needed to put posts beyond wide approach slab.



Bolts in panel adjacent to end shoe shall be tightened for expansion, as per section 606.05.

TYPE G CONNECTION
(2-Way Cross Road)

See sheet _____ for pertinent notes including *POSTS note.

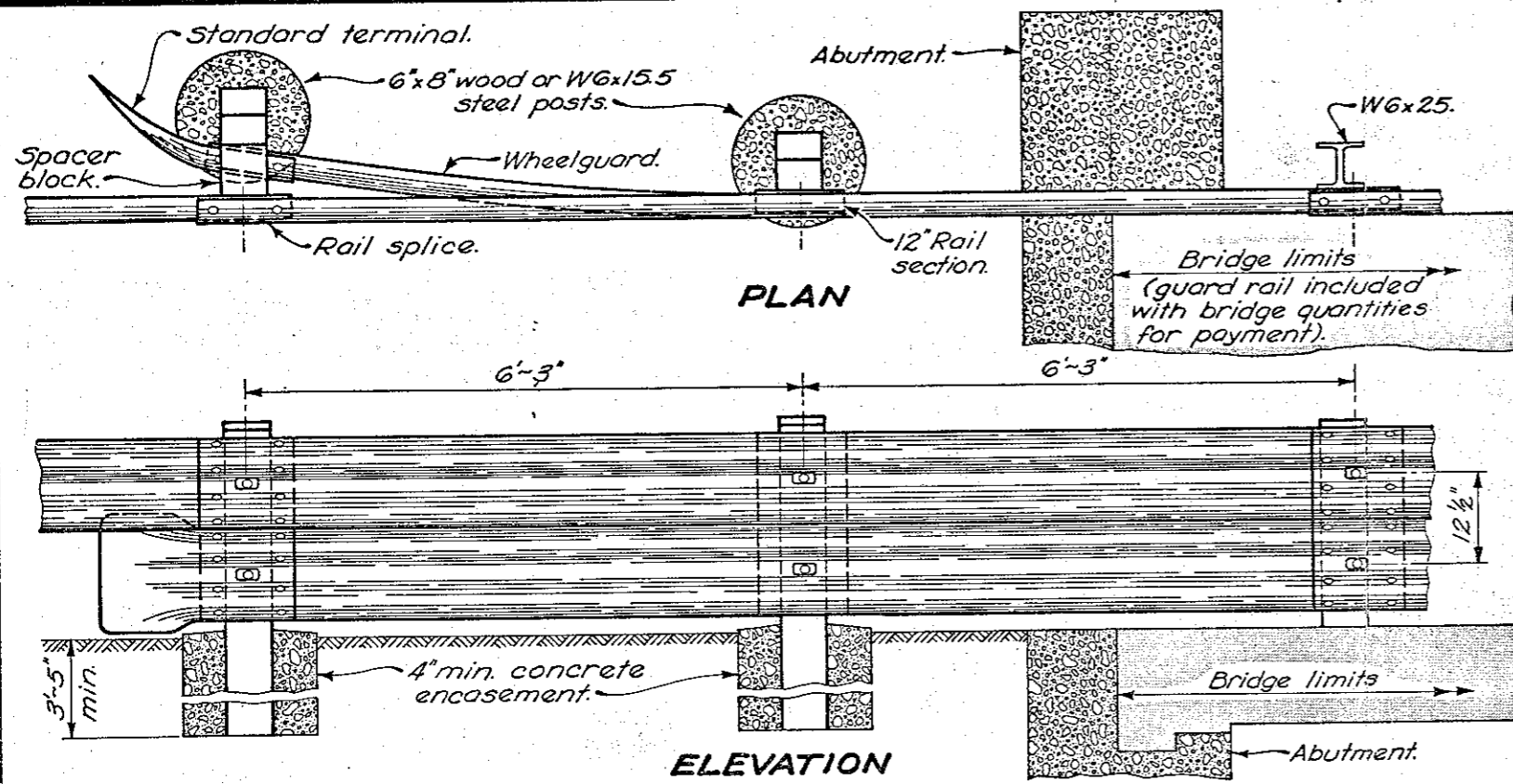


⊗ These posts correspond with posts A, B & C as detailed on GR-4, except that they are mounted on plates as detailed on GR-2B. Top of rail at post A shall be 27"± above bridge deck.

TYPE H CONNECTION

DATE
7-24-72

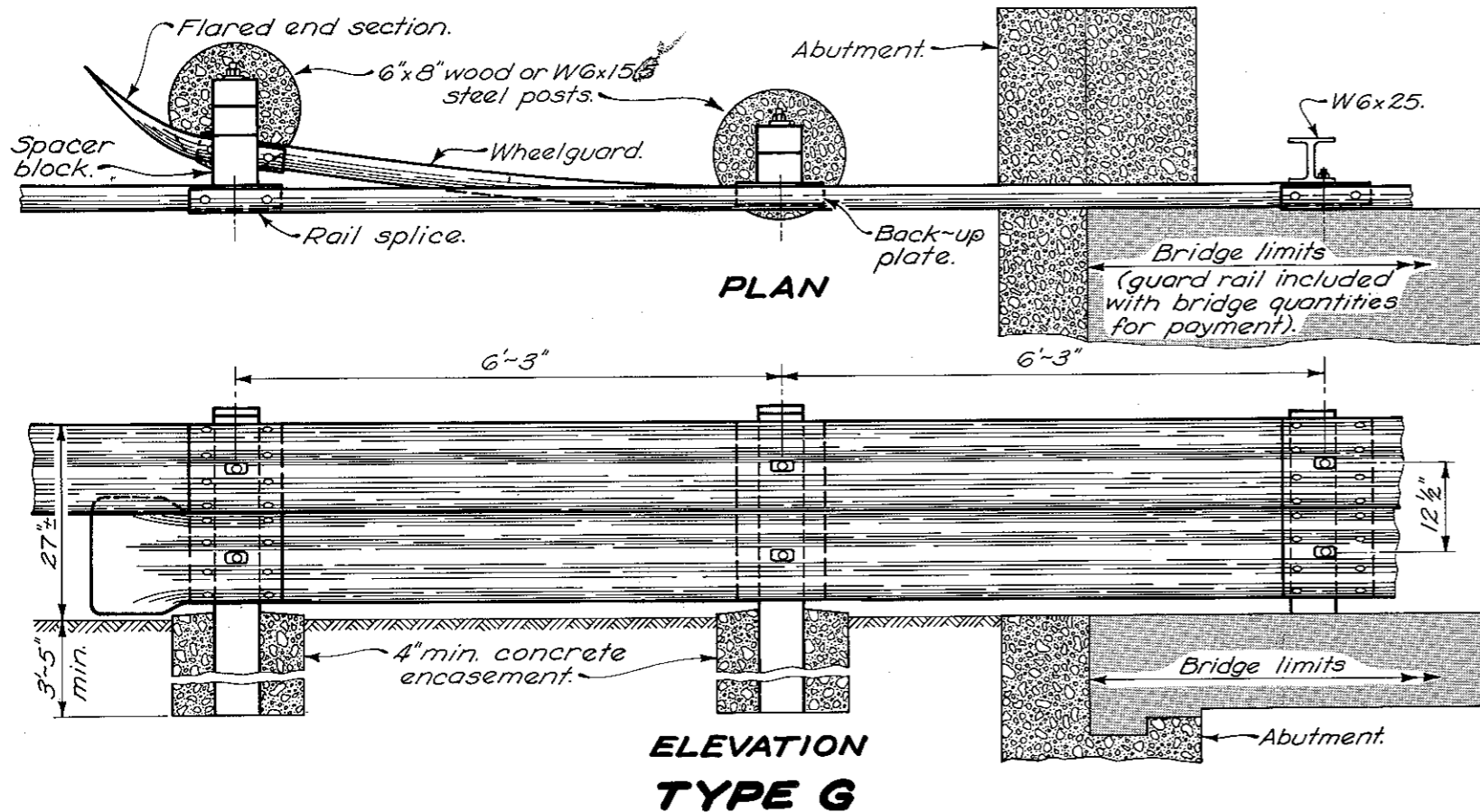
GR-3B



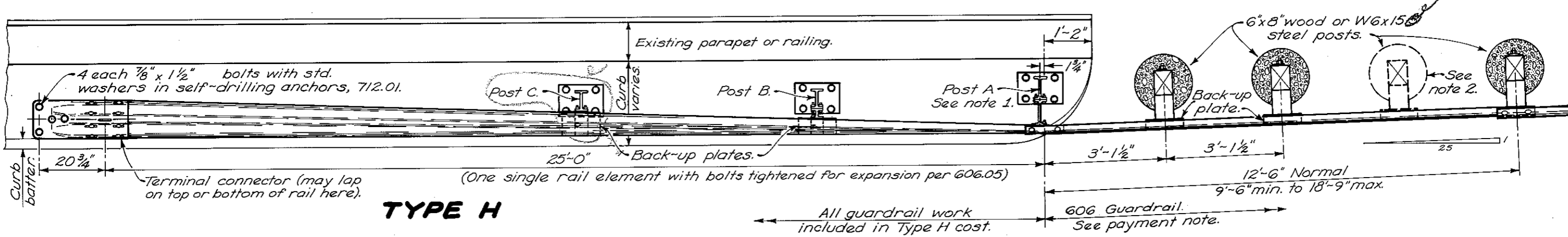
BRIDGE RAIL CONNECTION - TYPE BB

BRIDGE GUARD RAIL ASSEMBLY		DATE
STANDARD CONSTRUCTION DRAWING		GR-3A
APPROVED _____		Preliminary 6-28-74

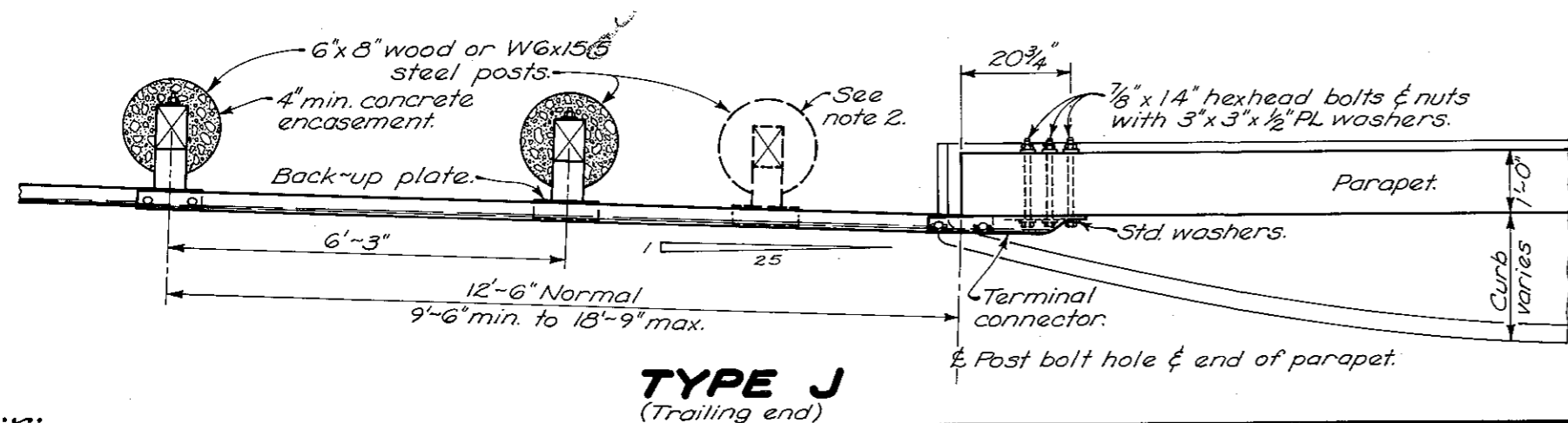
GR-3B



**ELEVATION
TYPE G**



TYPE H



**TYPE J
(Trailing end)**

NOTES

PAYMENT for item 606, each, Bridge terminal assembly, Type—, shall include the additional cost in excess of normal guard-rail cost, such as: additional or heavier posts, concrete encasement, wheelguard beyond bridge limits, extra rail, terminal connector, anchors and other hardware, etc.

SPACER BLOCK size may be increased if necessary to locate posts beyond wide approach slab.

POSTS shall be 6"x8" wood or W6x15 steel (except posts A, B & C of Type H) of the same material type as used on approach guardrail, with 4" minimum concrete encasement.

FOR DETAILS not shown, see GR-1, GR-4 and other Standard Construction Drawings pertaining to design of specific guardrail Type.

NOTE 1: These posts correspond with posts A, B & C as detailed on GR-4, except that they are mounted on plates as detailed on GR-1. Top of rail at post A shall be 27" above bridge deck.

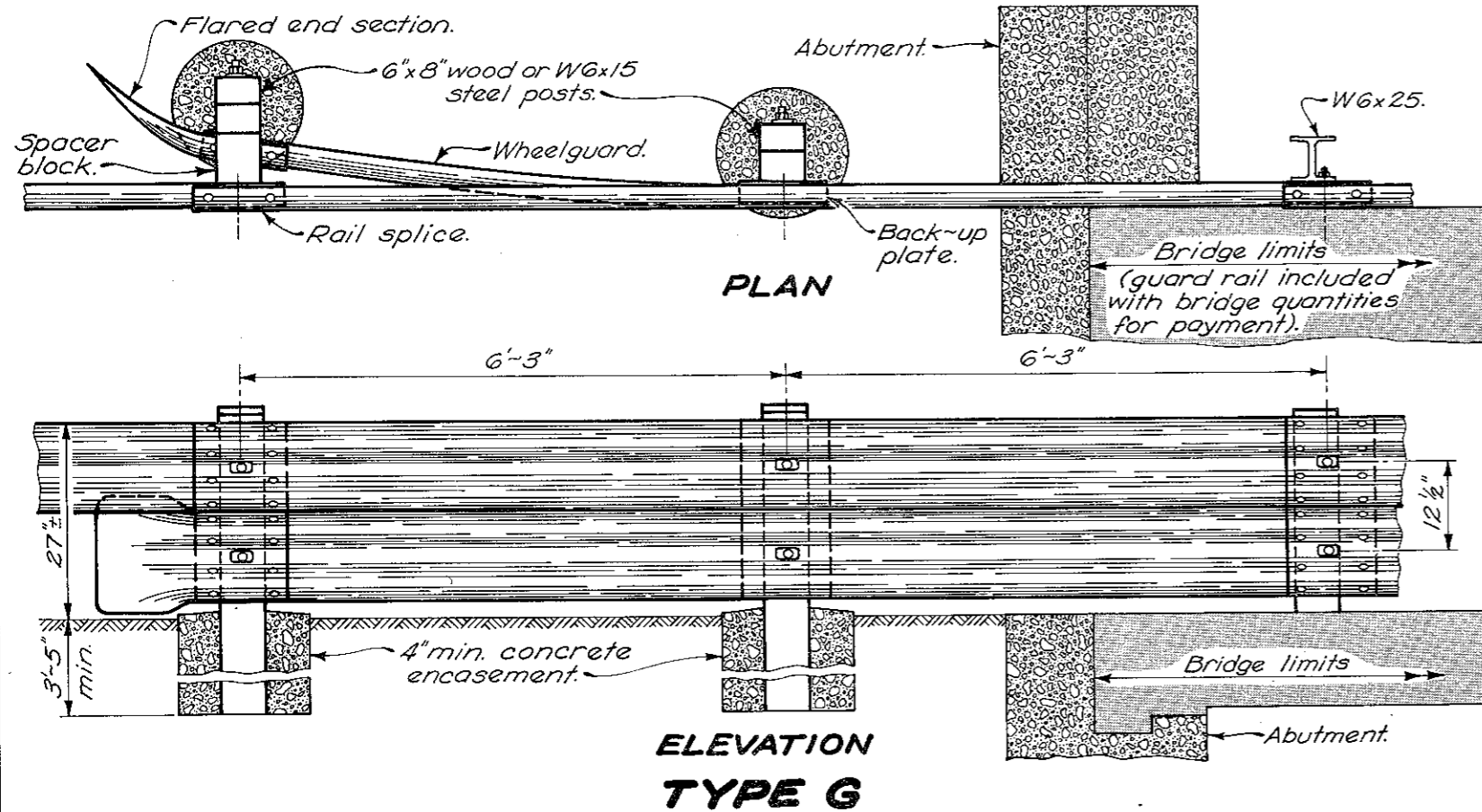
TYPE G: Where guardrail is used as bridge railing the approach length on directional roadways and at both ends on undivided highways shall be not less than 125 feet plus the anchor assembly. The trailing length on directional roadways shall be not less than 25 feet plus the anchor assembly. 12'-6"

NOTE 2: Place one additional encased post halfway between 2nd & 3rd posts (Type H) or 1st post and bridge parapet (Type J) when panel length exceeds 12'-6".

GUARDRAIL TERMINATION as directed by the Engineer. The 12'-6" normal rail section may vary as shown to facilitate connection or reconstruction of existing approach guardrail. The 20 3/4" terminal connector or 1'-2" Post A location dimensions may be increased to avoid existing parapet steel.

SELF-DRILLING ANCHORS meeting requirements of 712.01 with 7/8" x 1 1/2" bolts with washers may be substituted for the 1/8" bolts shown in the parapet on Type J.

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
DATE 12-6-76	
BRIDGE TERMINAL ASSEMBLIES	
STANDARD CONSTRUCTION DRAWING	GR-3B
APPROVED <i>M. J. Cunningham</i> ENGR., L. & D.	



**ELEVATION
TYPE G**

PAYMENT for item 606, each, Bridge terminal assembly, Type __, shall include the additional cost in excess of normal guard-rail cost, such as: additional or heavier posts, concrete encasement, wheelguard beyond bridge limits, extra rail, terminal connector, anchors and other hardware, etc.

FOR DETAILS not shown, see GR-1, GR-4 and other Standard Construction Drawings pertaining to design of specific guardrail Type.

GUARDRAIL TERMINATION as directed by the Engineer. The 12'-6" normal rail section may vary as shown to facilitate connection or reconstruction of existing approach guardrail. The 20 3/4" terminal connector or 1'-2" Post A location dimensions may be increased to avoid existing parapet steel.

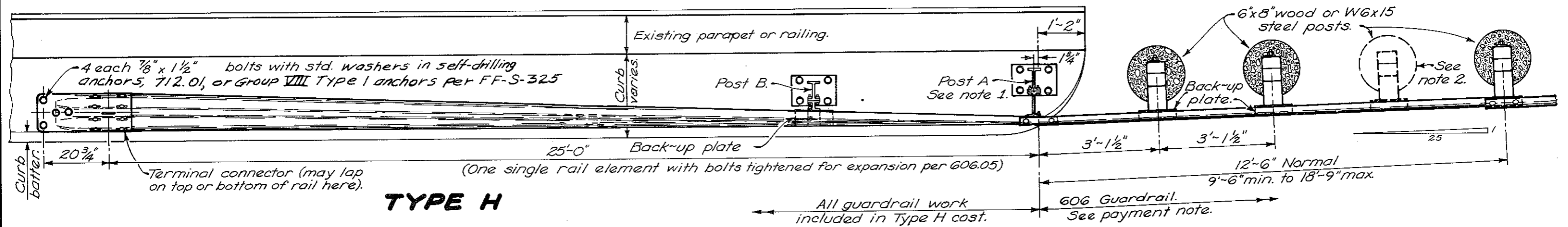
NOTES

SPACER BLOCK size may be increased if necessary to locate posts beyond wide approach slab.

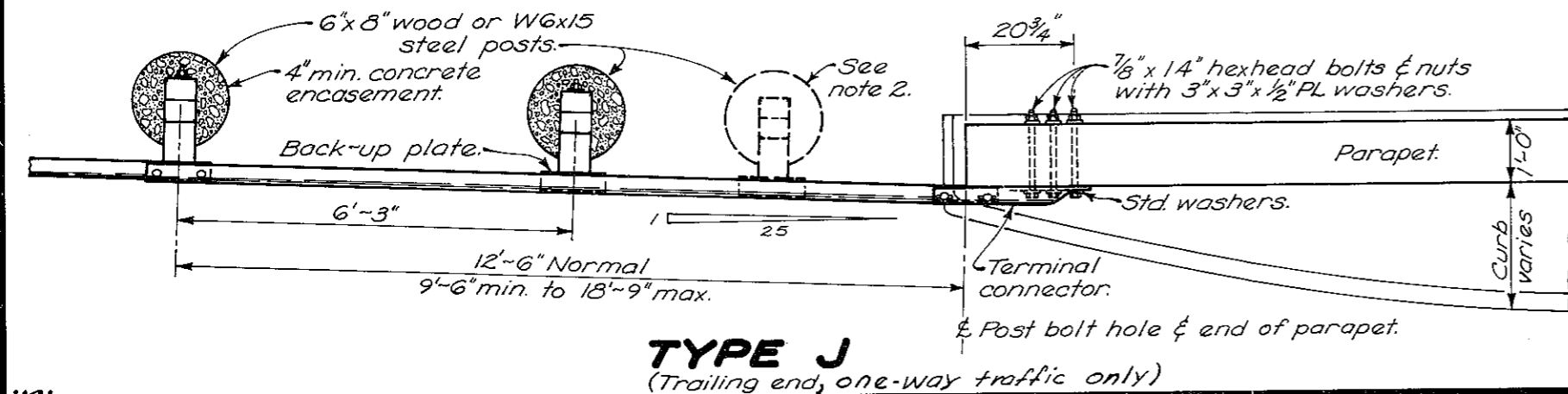
POSTS shall be 6"x8" wood or W6x15 steel (except posts A and B of Type H) of the same material type as used on approach guardrail, with 4" minimum concrete encasement.

NOTE 1: These posts correspond with posts A and B as detailed on GR-4, except that they are mounted on plates as detailed on GR-1. Top of rail at post A shall be 27" above bridge deck.

NOTE 2: Place one additional encased post halfway between 2nd & 3rd posts (Type H) or 1st post and bridge parapet (Type J) when panel length exceeds 12'-6".



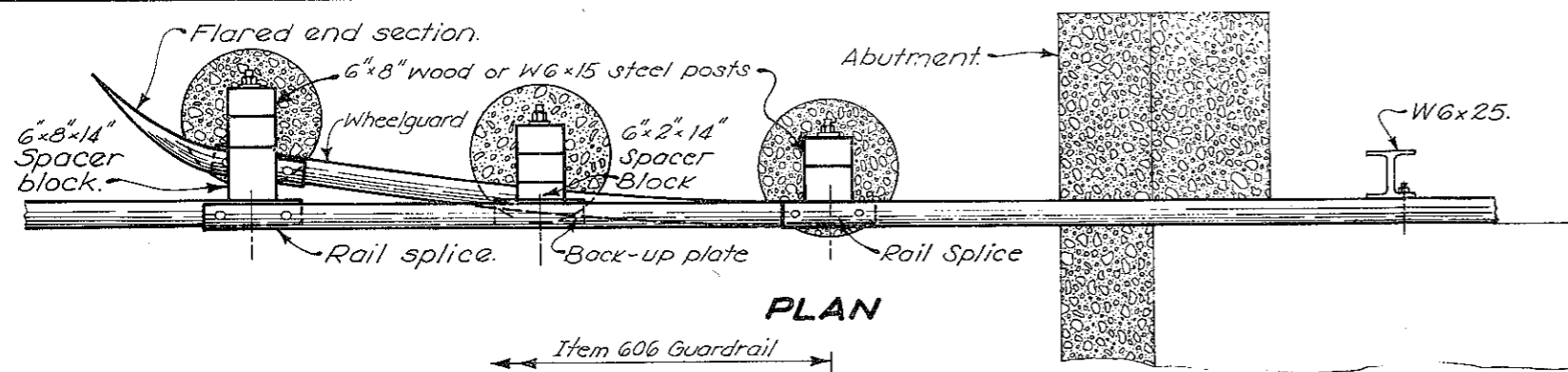
TYPE H



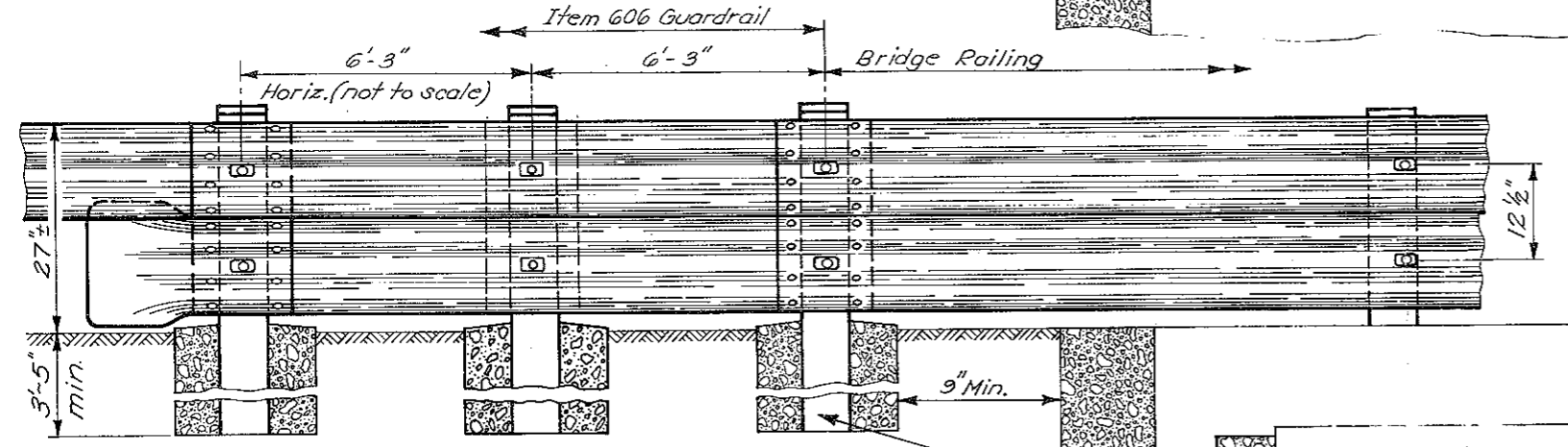
TYPE J
(Trailing end, one-way traffic only)

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
BRIDGE TERMINAL ASSEMBLIES	
STANDARD CONSTRUCTION DRAWING	GR-3B
APPROVED ENGR., L. & D.	

DATE
12-6-76
2-5-82



PLAN



ELEVATION TYPE G

Post and mounting hardware included with Item 606.

PAYMENT for item 606, each, Bridge terminal assembly, Type —, shall include the additional cost in excess of normal guard-rail cost, such as: additional or heavier posts, concrete encasement, wheelguard, extra rail, terminal connector, anchor bolts and other hardware.

FOR DETAILS not shown, see GR-1, GR-4 and other Standard Construction Drawings pertaining to design of specific guardrail Type.

GUARDRAIL TERMINATION as directed by the Engineer. The 12'-6" normal rail section may vary as shown to facilitate connection or reconstruction of existing approach guardrail. The 20 3/4" terminal connector or 1'-2" Post A location dimensions may be increased to avoid existing parapet steel.

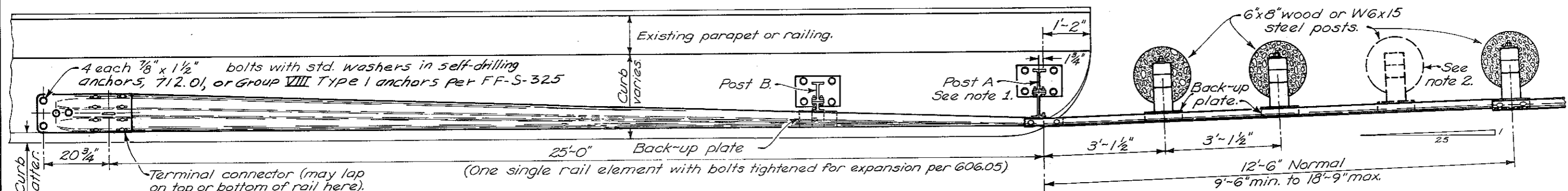
NOTES

SPACER BLOCK size may be increased if necessary to locate posts beyond wide approach slab.

POSTS shall be 6"x8" wood or W6x15 steel (except posts A and B of Type H) of the same material type as used on approach guardrail, with 4" minimum concrete encasement.

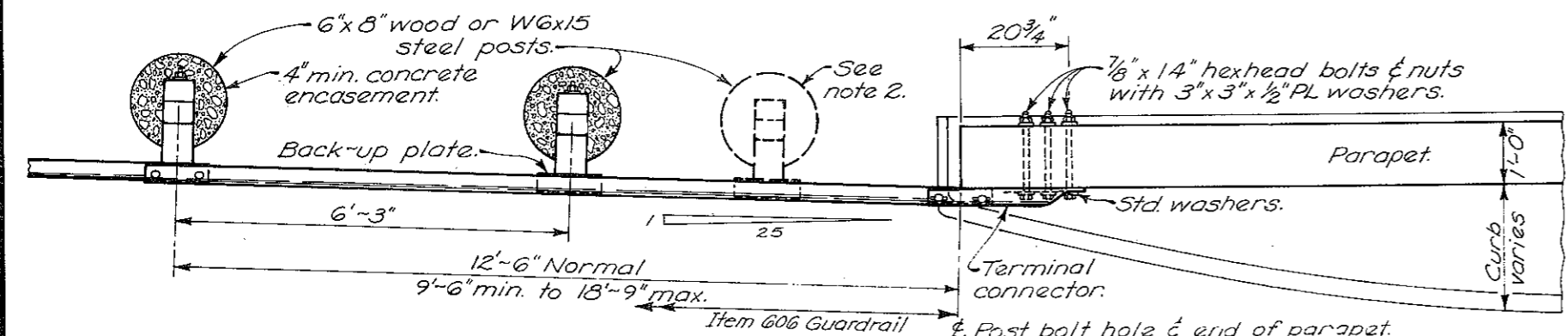
NOTE 1: These posts correspond with posts A and B as detailed on GR-4, except that they are mounted on plates as detailed on GR-1. Top of rail at post A shall be 27" above bridge deck.

NOTE 2: Place one additional encased post halfway between 2nd & 3rd posts (Type H) or 1st post and bridge parapet (Type J) when panel length exceeds 12'-6".



TYPE H

All guardrail work included in Type H cost.



TYPE J

(Trailing end, one-way traffic only)

BUREAU OF LOCATION AND DESIGN OHIO DEPARTMENT OF TRANSPORTATION	
BRIDGE TERMINAL ASSEMBLIES	
STANDARD CONSTRUCTION DRAWING	GR-3B
APPROVED <i>E. L. Vaughn</i>	ENGR., L. & D.
DATE 12-6-76 2-5-82 1-21-85	