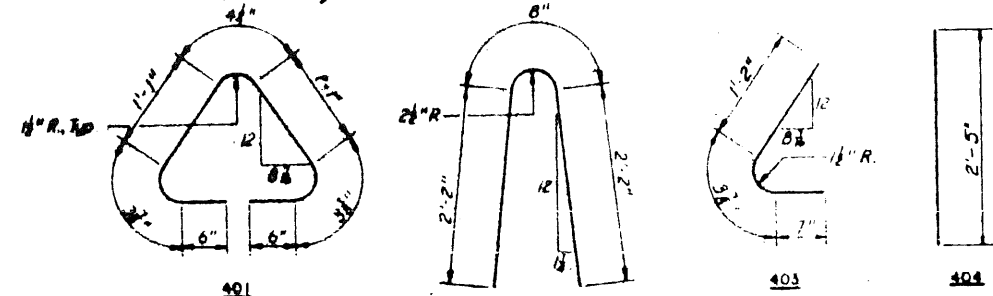
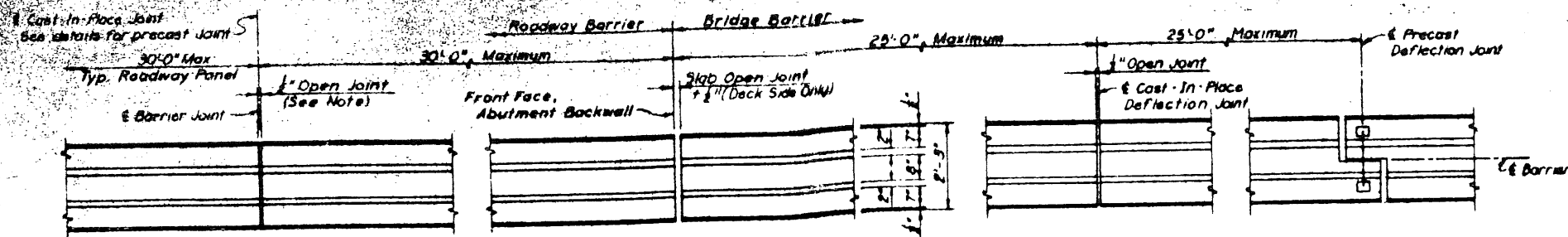


REINFORCING STEEL NOTES:

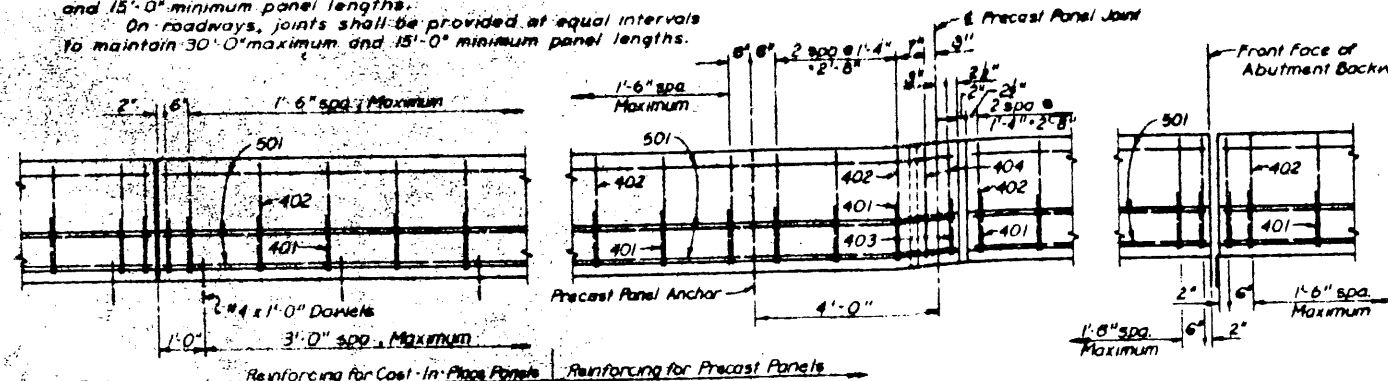
Bar dimension are given out-to-out of bar. Radii are given to inside of bar. Reinforcing bar callouts consist of the bar size followed by an individual two digit number.



BAR BENDING DIAGRAMS

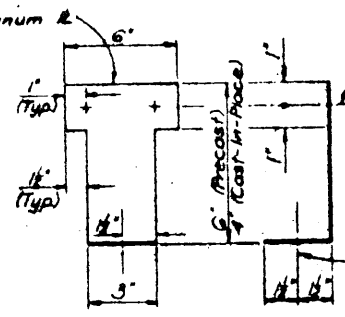


Note: On bridges, joints shall be provided at ends of spans, over interior supports of continuous units, and at equal intervals in between as required to maintain 25'-0" maximum and 15'-0" minimum panel lengths.
On roadways, joints shall be provided at equal intervals to maintain 30'-0" maximum and 15'-0" minimum panel lengths.



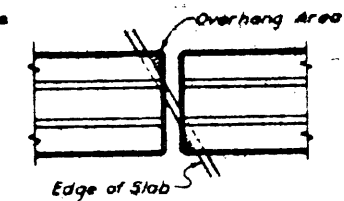
ELEVATION

ABUTMENT JOINT



STATION MARKER BRACKET

Note: Place bracket @ 500' centers. Fasten to barrier at anchorage locations (Precast Roadway Units) or special insert locations (Precast Bridge Units and Cast-In-Place Units).

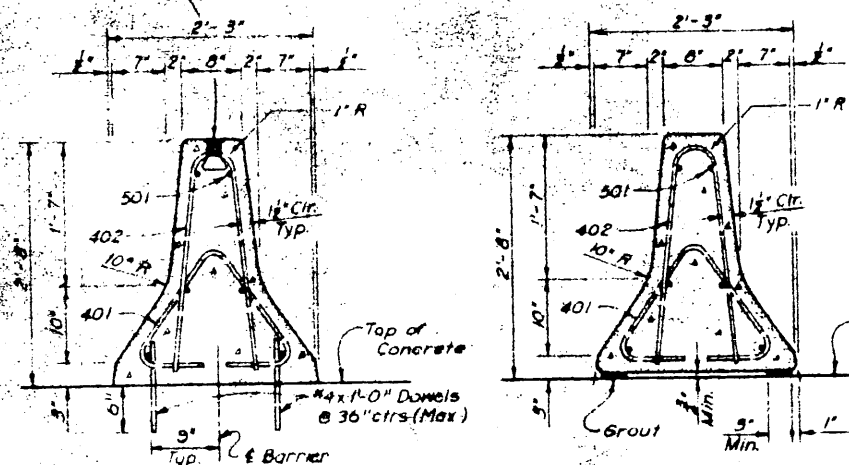


PLAN

ELEVATION

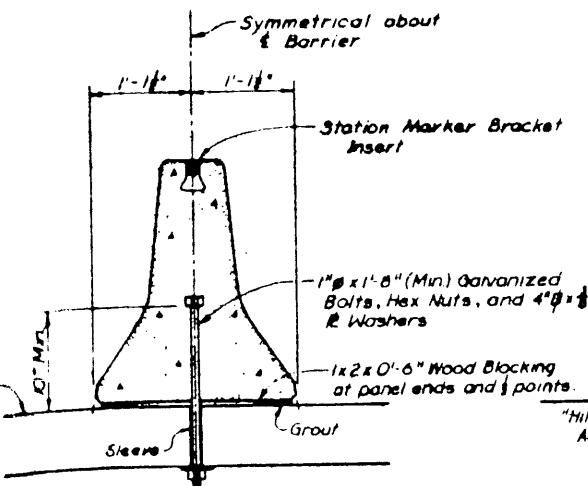
EXPANSION JOINT DETAILS

Richmond Type LF-W insert for Tollway station marker where required by the Engineer.

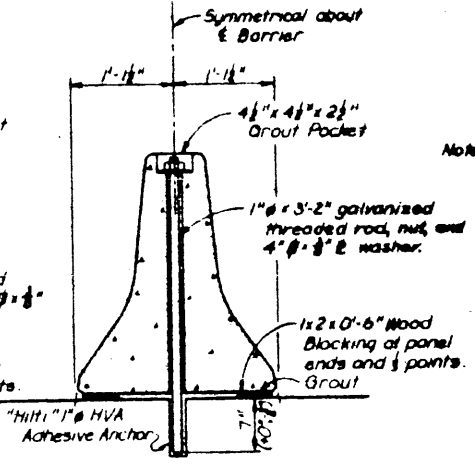


CAST-IN-PLACE SECTION

PRECAST SECTION

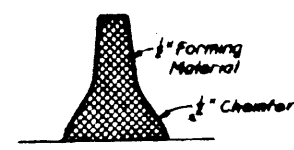


BRIDGE ANCHORAGE SECTION (PRECAST UNITS)

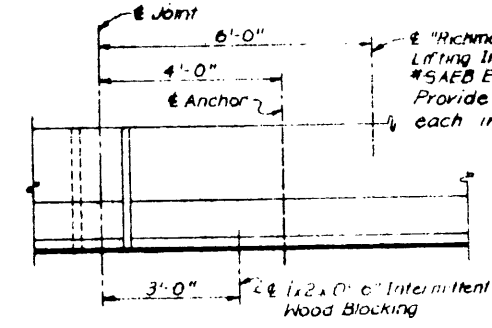


ROADWAY ANCHORAGE SECTION (PRECAST UNITS)

Note: Forming material such as sponge, molded cork granules, polystyrene, rubber sheet, etc., may be left in place if it is compressible and light in color.



BARRIER JOINT AND DEFLECTION JOINT FORMING



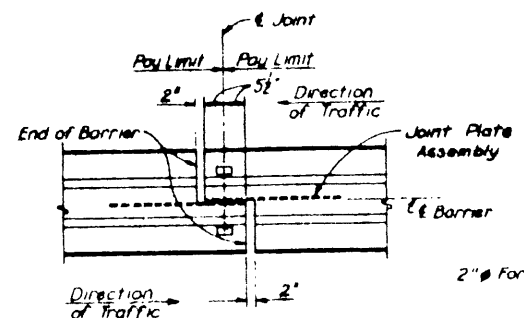
PRECAST PANEL LIFTING DETAIL

GENERAL NOTES:

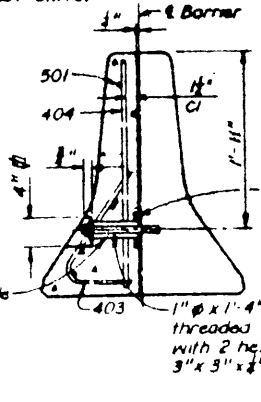
Designed according to AASHTO M77 Standard Specifications and Interim Specifications thru 1982.
All concrete, reinforcement, anchor bolts, blocking, inserts, grout, etc., as shown, are considered a part of the barrier for payment.
The centerline axis of the barrier shall be vertical unless otherwise shown on the plans or directed by the Engineer.
Unless otherwise shown on the plans, the Contractor may furnish either a precast or a cast-in-place traffic barrier.
The maximum offset from the center of the barrier to the true circular centerline shall be one inch for precast segments installed on horizontal curves. If this would require segment lengths of less than 15 feet, then the barrier shall be cast in place to the correct radius.
Shop drawings are not required for this barrier.
All steel fittings for barrier joints shall be galvanized after fabrication.
For modifications to the standard barrier cross section of median drainage inlets, see Standard Drawing No. 2.

MATERIAL NOTES:

All concrete shall be Class C.
Barrier forms shall be constructed of steel.
Grout for precast barriers shall consist of two parts sand and one part cement. Latex adhesive may be added to the grout if directed by the Engineer. Wood, or other material approved by the Engineer, shall be used for blocking. At other locations, any suitable material may be used to retain the grout.
Anchor bolts, threaded rods, and associated nuts, washers, and plates for the precast panel to slab and panel to panel attachment shall be galvanized.
Bolts shall conform to ASTM A-307 (or A-36 threaded rod with lock washer nut).
Threaded rods may be A-307 with minimum diameter with rolled threads. Nuts shall conform to A-307 requirements and shall be tapped or chased after galvanizing.
Bolts and nuts shall have Class 2A and 2B fit tolerances.
All precast panel joint plates and plate washers shall conform to the requirements of ASTM A-36.

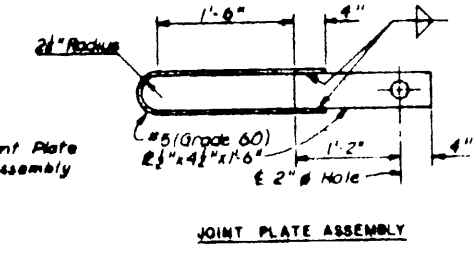


PLAN



TYPICAL SECTION

PRECAST PANEL JOINT DETAILS



JOINT PLATE ASSEMBLY

NO.	REVISION	BY	DATE
TEXAS TURNPIKE AUTHORITY DALLAS NORTH TOLLWAY			
CONCRETE TRAFFIC BARRIER CAST-IN-PLACE AND PRECAST TYPE I PANEL DETAILS			
HNTB HERRING HARRIS TRAYLOR & ASSOCIATES			SECTION VI
DESIGNED BY	DATE	DESIGNED BY	DATE
CHECKED BY	DATE	CHECKED BY	DATE
STANDARD DRAWING NO 31			