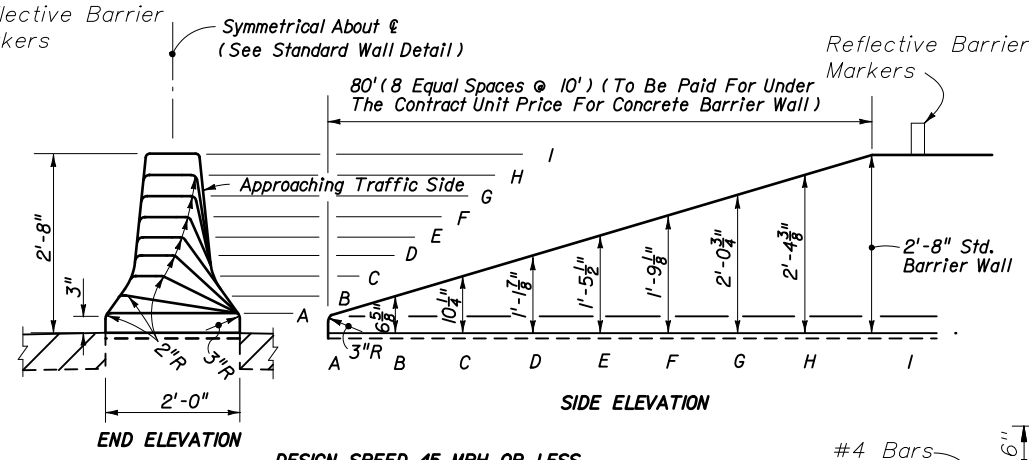


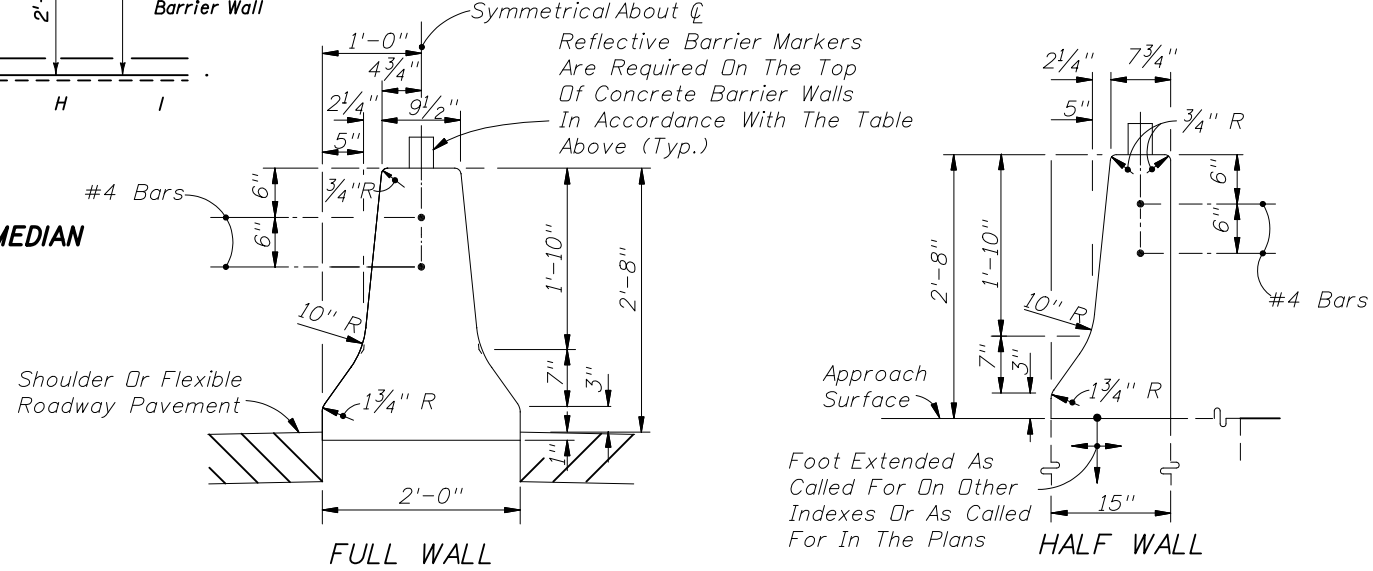
TO BE USED ONLY WHERE TERMINAL LOCATED CLEAR ZONE WIDTH FROM EDGE OF THE NEAR APPROACH TRAFFIC LANE.

**CONCRETE BARRIER WALL TERMINAL
DETAIL II**

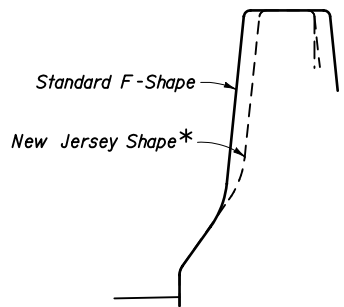


**CONCRETE BARRIER WALL TERMINAL FOR NARROW MEDIAN
DETAIL III**

| REFLECTIVE BARRIER MARKER SPACING ON WALL | | REMARKS |
|---|---------------|--|
| Distance - Edge of Travel Lane to Barrier Wall. (Ft.) | Spacing (Ft.) | |
| < 4' | 40' | 1. Reflectors shall conform to Section 993 of the Standard Specifications. 2. Reflector color (white or yellow) shall conform to the color of the near edgeline. 3. The cost for reflectors shall be included in the contract unit price for barrier wall. |
| 4' to 8' | 80' | |
| > than 8' | none required | |



For concrete barrier wall details at piers, highway lighting and guardrail connections, see other sheets of this Index.
Standard barrier to be paid for under the contract unit price for Median Concrete Barrier Wall, LF.



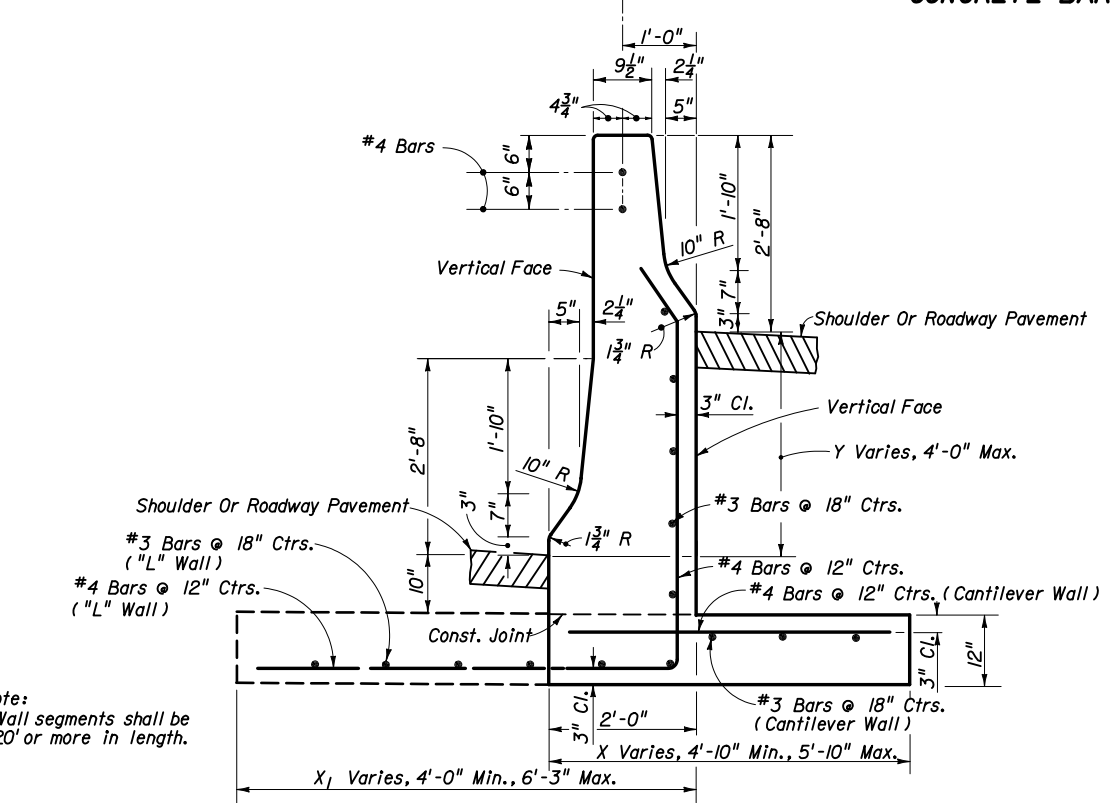
WALL FACE SAFETY SHAPES

* Where standard F-Shape walls abut existing NJ Shape walls, face transitions of not less than 5' in length shall be constructed at the adjoining end of the F-Shape wall.

STANDARD BARRIER WALL SECTIONS

GENERAL NOTES

- Class II concrete shall be used for all reinforced and plain (nonreinforced) concrete barrier walls; except, in moderately and extremely aggressive environments, Class IV concrete shall be used. All reinforcing steel with undesignated size shall be #4 bars. Exposed concrete surfaces shall have a Class 3 surface finish in accordance with Section 521 of the Standard Specifications, unless other finish called for in plans. The surfaces shall have a Class 5 Applied Finished Coating in accordance with Section 400 only when called for in the plans.
- Concrete barrier wall terminal notes for design speeds ≥ 50 mph.
 - Terminated outside clear zone of the approach traffic with 'Detail II' end treatment.
 - Terminated within a shielded location.
 - Terminal protection by the use of a crash cushion system.
 - Terminated in conjunction with a suitably designed transition to another barrier.
- Expansion joints in wall required only at bridge ends and/or at locations where wall is an integral part of existing or proposed concrete slab; wall joints are to match an existing or proposed expansion joint.
- When the barrier is installed adjacent to the pavement the top 12" of the subgrade shall be compacted to at least 100% of the density as defined in the AASHTO T-99 specifications.
- Cast-in place barrier wall normally will be a continuous pour without transverse contraction joints. Cast-in-place segments with a length < 40' shall be joined to adjacent sections by doweling. See Detail B.
- Precast construction is allowed as an alternate to cast-in-place construction.
 - Wall segments < 40' in length shall be joined by a transverse joint in accordance with Details C & D. The minimum segment length is 20'.
 - Bedding of the precast sections shall be facilitated by the use of sand-cement grout or equal method to assure uniform bearing.
 - Reinforcement may be required for handling stresses.
- On roadways designated for reverse laning all downstream, ends that are not shielded or outside the clear zone shall be marked by Type 3 Object Markers.
- Cost of reinforcing steel and reflective barrier markers shall be included in the contract unit price for concrete barrier wall. See individual details for pay item information.
- For barrier wall inlet details see Indexes Nos. 217, 218 and 219.
- Concrete barrier wall with New Jersey Safety Shape may not be substituted for the Standard F Shape Barrier.



Note: Wall segments shall be 20' or more in length.

Design Criteria:

Vehicle: 4000 lbs., 60 mph, 25°, Avg. Lat. Impact Deceleration Force- 76's (28 kips)
Vehicle Force Applications: 1000 lbs. Vert. At Top of Toe; 28 kips Horiz. At 5 1/2" Above Pavt.

Unless the plans stipulate a specific wall type, either the cantilever wall or the "L" wall may be constructed at the Contractor's option.

Steel not required in walls of heights Y=0' To 0'-6" when footing and stem cast as one unit. When footing and stem cast separately by construction joint, the footing joint surface shall be roughened and #4 dowels 24" long installed at the centerline of the stem on 24" centers with 9" embedment in the footing.

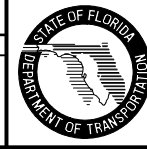
Cost of the steel and concrete footing to be included in the contract unit price for Median Concrete Barrier Wall, LF.

| | Height Y | 0'-0" | 0'-6" | 1'-0" | 1'-6" | 2'-0" | 2'-6" | 3'-0" | 3'-6" | 4'-0" |
|-----------------|----------------------|--------|-------|-------|-------|-------|-------|-------|-------|--------|
| Cantilever Wall | Width X | 4'-10" | 5'-0" | 5'-2" | 5'-3" | 5'-5" | 5'-6" | 5'-7" | 5'-9" | 5'-10" |
| "L" Wall | Width X ₁ | 4'-0" | 4'-4" | 4'-8" | 5'-0" | 5'-3" | 5'-6" | 5'-9" | 6'-0" | 6'-3" |

**MEDIAN BARRIER WALL FOR SUPERELEVATED SECTIONS
OR FOR VARIABLE ROADWAY PROFILE GRADES**

REVISIONS

| DATE | BY | DESCRIPTION | DATE | BY | DESCRIPTION |
|----------|-----|--|------|----|-------------|
| 12/11/07 | CAH | Modified the reflector location on the barrier wall. | | | |



2008 Interim Design Standard

CONCRETE BARRIER WALL

| | |
|--------------|-----------|
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| Index No. | |
| 410 | |