End Measurement For Opaque 1/3" Open Joint Visual Barrier Payment, LF Above Barrier Wall Joints Or Adjoining 6' Transition Rigid Structures 2" Clear Cut & Field Bend Reinf. Steel 2" Clear 2" Clear Top Of Concrete Barrier Wall ELEVATION OF REINFORCEMENT AND DOWELING © of Barrier Wall & Visual Barrier Tooled Edge Tooled Edge 11/5" Cover Min. Visual Barrier #4 Vert. Bars 2'-0" Long (See Note 2) Spaced At 1'-6" Ctrs. (See General Note No. 4) Class II Concrete. See General Note No. 6 For 1½" Cover Min. Surface Finish And (See Note 2) Coating Requirements #4 Dowels 1'-8" Or 2'-2" #4 Horiz. Bars Long. Spaced At 3'-0" Ctrs. Spaced At 11" Ctrs. (See General Note No. 4) (See General Note No. 4) — Tooled Edge — ✓— Tooled Edge (See General Note No. 2)

ESTIMATED QUANTITIES, LF Concrete 0.042 CY 3.27 Lbs.* Reinforcing Steel

PICTORIAL

*3.38 Lbs. With 2'-2" Dowels

— Type F Safety Shape · Barrier Wall (Symmetrical Or Asymmetrical) New Jersey Safety Shape Roadway Surface

END VIEW

GENERAL NOTES

- 1. The opaque visual barrier is intended to function as a visual screen, and is not intended to resist vehicle impact loads nor to restrain, contain or restrict vehicles or cargo. The barrier is designed to withstand zone wind loading and strikes by light debris; and, designed to yield to exceptional strikes by vehicles or cargo, and to contain ruptured segments of the screen when yielding to such strikes.
- 2. When the opaque visual barrier is constructed on an existing barrier wall, dowels shall be 1'-8" in length, embedded 6" into the barrier wall and set with an approved non shrink grout. Embedment holes shall be 5#8" diameter, drilled to a depth 1#4" below the tip of the dowel unless greater depth is required to accept manufactured grout capsules.

When the opaque visual barrier is constructed in conjunction with project concrete barrier walls, dowels may be set as described above, in either the drilled or preformed holes; or, placed when the barrier wall is cast. For dowels that are placed when the wall is cast, the dowel shall be 2'-2" in length and embedded to a depth of 12".

When longitudinal reinforcing bars are encountered in the stem of existing barrier, shift the dowels to clear, maintaining the 11#2" Cover Minimum to the face of the Opaque Visual Barrier.

3. For both double and single faced concrete barrier walls the opaque visual barrier is to be located in the center of the top of the wall

For single faced barrier walls that are constructed around other vertical structures, the opaque visual barrier shall follow the alignments of only one of the walls and be centered atop that wall.

For dual median barrier walls that follow differential profiles, the opaque visual barrier shall be constructed atop the wall with the higher elevation, unless conditions dictate otherwise. Lateral transitions or end overlaps for opaque visual barriers that alternate between dual walls shall be detailed in the plans.

For median barrier walls that are divided when connecting to separated bridges, the opaque visual barrier shall be constructed atop the approach side barrier wall, unless differential profiles dictate locating the opaque visual barrier on the departure side barrier wall.

Opaque visual barriers to be located on capped fills between dual barrier walls shall be detailed in the plans.

- 4.In lieu of the reinforcement shown, the Contractor may substitute welded wire fabric equal to or better than that shown, when approved by the Engineer. Details shall be submitted with requests for substitution.
- 5. The Contractor may construct contiguous precast concrete panels in lieu of the cast-in-place opaque screen when approved by the Engineer. Panel design and method for anchorage to the barrier wall shall be detailed by shop drawings when requesting the Engineer's approval.

The Contractor may construct the opaque screen monolithically with the barrier wall; however, the screen design shall not be modified so as to cause the wall to be dynamically active from strikes on the screen; see design considerations in Note No. 1 above.

- 6. Exposed concrete surfaces shall have a Class 3 surface finish in accordance with Section 521 of the Standard Specification, unless another finish is called for in the plans.
- 7. Payment for opaque visual barrier shall be full compensation for concrete, reinforcement, dowels, casting, placement, drilling, grouting, tooling, finishing and work incidental thereto, and shall be paid for under the contract unit price for Opaque Visual Barrier (Concrete) (2'-3" Height), LF.

REVISION 07/01/15

DESCRIPTION:

FY 2017-18 DESIGN STANDARDS

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