TO:

SUPERSEDED BY EB 98-014 EFFECTIVE 4/24/98

ENGINEERING INSTRUCTION

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

SUBJECT: HAUNCH DETAILS FOR STEEL STRINGERS

Subject Code: 7.35-5

Distribution: 30 Main Office 32 Regions 34 Special

APPROVED: 6/27/90

Arun M. Shirole, Deputy Chief Engineer, (Structures)

Code: E.I. 90-24

Date: 6/29/90

Supersedes:

The concrete bridge deck haunch detail for steel stringers shown on page 2 is subject to cracking. In some cases this cracked concrete has fallen from the structure.

This detail was commonly employed when removable wooden forms were used for a concrete deck, since it enabled pre-cut material to be used in the forming operation. The cause of cracking and eventual loosening of portions of this unreinforced concrete has been attributed to forces generated by corrosion on the vertical edges of the flanges. Cracking occurs at the top corner of a stringer flange and progresses upward and outward through the concrete to the vertical haunch face. This loosened concrete is then prone to separate and fall from the structure.

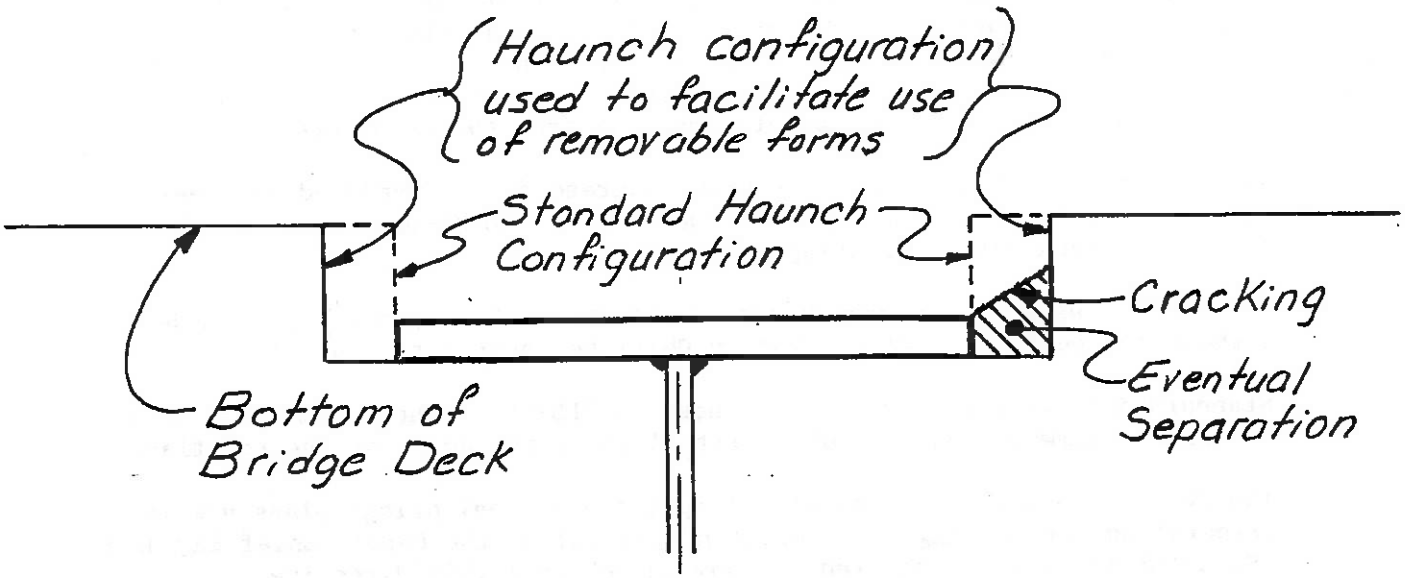
All structural plans for bridges with concrete decks supported on steel stringers or floorsystems shall include a note, in association with the standard haunch detail, stating:

"No deviations from the haunch details shown on these plans may be made without the permission of the Deputy Chief Engineer (Structures)".

Standard details for haunches are shown on GLD-MC1. Where removable forms are used, formwork must be cut to fit flush to the edges of the top flange.

The above note will be added to all applicable steel bridge plans now in preparation for letting. The written approval of the Deputy Chief Engineer (Structures) will be required for any waiver from this directive.

JMOC:EJ
4


Haunch configuration used to facilitate use of removable forms
Standard Haunch Configuration
Cracking
Eventual Separation
Bottom of Bridge Deck