



Iowa Department of Transportation

SPECIAL PROVISIONS FOR ON-CALL CONTRACTING FOR HIGH TENSION CABLE GUARDRAIL REPAIR

Statewide
IMN-000-S(574)0--0E-00

Effective Date
November 19, 2013

THE STANDARD SPECIFICATIONS, SERIES 2012, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

In addition to the requirements of Section 2505 of the Standard Specifications, the following shall apply.

120087.01 DESCRIPTION.

A. General.

1. This specification covers repair of high tension cable guardrail installations.
2. Definitions:
 - Installation: a continuous length of cables located between two end anchors.
 - End anchor: a post, bracket, or combination thereof that attaches one or more cables to a foundation at ground level.
 - Line post: a post that holds one or more cables at an elevation above the ground.
3. The contract documents will list county, route, begin and end milepost, direction of travel, manufacturer, and system type of each installation for work covered by this contract.
4. The Engineer reserves the right to make repairs with Iowa DOT forces. However, repairs that have been submitted to the Contractor will not be made by DOT forces, unless such repairs are not completed within 28 calendar days following notification by the Engineer.

B. Requests for Repair.

1. The Engineer will furnish the Contractor a list of individuals approved to initiate repairs. Requests for repairs will be initiated by either a fax or e-mail to the Contractor. Requests for repair will include the following: route number, milepost location, direction of travel, and an

estimate of the number of posts to be replaced for each repair. Provide the Engineer with an e-mail address and fax number which will be used to initiate requests for repairs.

2. For repairs not completed within 14 calendar days following notification by the Engineer, the Contractor will be charged \$500 per day as liquidated damages. Damages will begin to accrue on day 15.

120087.02 MATERIALS.

- A. Apply Article 2505.02 of the Standard Specifications.
- B. Replace damaged materials with new materials of the same type and manufacturer as existing.

120087.03 CONSTRUCTION.

A. General.

1. Schedule repairs upon notification by the Engineer. Provide Engineer at least 24 hours' notice of when proposed work will begin.
2. Routine repairs within a particular installation include:
 - End anchor repairs,
 - Removal and replacement of damaged line posts,
 - Removal and replacement of damaged line post hardware, and
 - Attaching or reattaching cable(s) to line posts.
3. Notify Engineer if non-routine repairs are needed. Non-routine repairs shall have Engineer's approval before repair work may begin.
4. Tension checks are required at locations where 10 or more line posts are replaced. Upon completion of repairs at such locations, check the tension of every cable within the affected installation according to manufacturer's recommendations. If tension of cable falls outside manufacturer's tolerance, re-tension cable to within recommended limits.
5. Remove and dispose of damaged materials. Leave work site in a safe and orderly condition at completion of work.
6. Maintain a log of repairs. Provide Engineer a copy of log at the end of the contract period, and at any time upon request. Log shall include:
 - Date and time of notification by Engineer to perform repairs,
 - Department personnel requesting repair,
 - Route number,
 - Milepost location of requested repair,
 - Direction of travel,
 - Date and time repairs were completed,
 - Number of line posts which required only cables to be reattached,
 - Number of line posts replaced,
 - Number of end anchors repaired,
 - Cable tension measurements taken after each repair,
 - Cable tension measurements taken as part of annual tension check, and
 - Cable tension measurements taken after each re-tensioning, as applicable.
7. Repairs may be performed either without a lane closure; or with a lane closure except for periods listed in the contract documents. Remove lane closures following completion of work.

Traffic control for lane closures and shoulder closures shall be according to the Standard Road Plans included in the contract documents.

B. Annual Checking of Cable Tension.

Check tension of all cables within each installation once during the contract period between April 1 and May 31. Check tension according to manufacturer's recommendations. Re-tension any cable whose tension falls outside manufacturer's tolerance.

120087.04 METHOD OF MEASUREMENT.

A. Line Post, Repair.

By count. Count will be the number of line posts replaced plus half the number of line posts where one or more cables are reattached to the post.

B. Mobilization, On-Call.

By count.

C. End Anchor, Repair.

By count. For purposes of this specification, all three Cable Release Posts within a Trinity CASS Cable Terminal are considered a single end anchor.

120087.05 BASIS OF PAYMENT.

Article 1109.16, C, 4, b, of the Standard Specifications will not apply to items on this contract.

A. Line Post, Repair.

Per line post. Payment is full compensation for removing and replacing damaged line post, removing and replacing line post hardware, attaching or reattaching cable(s) to line post, and checking tension of cables. Disposal of damaged materials, vegetation removal, snow removal, traffic control, and site cleanup are incidental to item.

B. Mobilization, On-Call.

Each. One payment of \$3000 per notification regardless of number of repair locations included. Re-tensioning of cable will be incidental to mobilization. One mobilization payment per contract will be made for annual checking of cable tension, including re-tensioning as necessary.

C. End Anchor, Repair.

Each. Pre-determined price of \$5000 for each End Anchor, Repair is full compensation for repairing the end anchor. Repair may include replacing cable end fittings and hardware, reattaching cable(s) to the end anchor, and removing the damaged anchor and installing a new anchor.

D. Non-routine repairs will be paid for according to Article 1109.03, B of the Standard Specifications. Non-routine repairs may include, but not limited to the following: replacing line post foundations, replacing turnbuckles, and repairing cable.