Regional Engineers

 Jack A. Elston, P.E.

 Special Provision for Steel Cost Adjustment

 October 1, 2021

This special provision was developed by the Bureau of Design and Environment to account for the industry wide escalation in the cost of steel. It has been revised to change the term “mesh reinforcement” to “welded reinforcement” (i.e. welded wire or bar mat).

It should be included in all projects involving steel metal piling (excluding temporary sheet piling), structural steel, and reinforcing steel. It should also be included for other materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates that may be subject to a steel cost adjustment when the pay item they are used in has a contract value of $10,000 or greater.

The districts should include the BDE Check Sheet marked with the applicable special provisions for the January 21, 2022 and subsequent lettings. The Project Coordination and Implementation Section will include a copy in the contract.

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# steel cost adjustment (bde)

Effective: April 2, 2004

Revised: January 1, 2022

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate with their bid whether or not this special provision will be part of the contract. Failure to indicate “Yes” for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling)

Structural Steel

Reinforcing Steel

Other steel materials such as dowel bars, tie bars, welded reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of $10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

(a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.

(b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

 Q = quantity of steel incorporated into the work, in lb (kg)

 D = price factor, in dollars per lb (kg)

D = MPIM – MPIL

Where: MPIM = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

 MPIL = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPIM will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPIL and MPIM in excess of five percent, as calculated by:

Percent Difference = {(MPIL – MPIM) ÷ MPIL} × 100

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

**Attachment**

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| --- | --- |
| Item | Unit Mass (Weight) |
| Metal Piling (excluding temporary sheet piling)Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)Other piling | 23 lb/ft (34 kg/m)32 lb/ft (48 kg/m)37 lb/ft (55 kg/m)See plans |
| Structural Steel | See plans for weights (masses) |
| Reinforcing Steel | See plans for weights (masses) |
| Dowel Bars and Tie Bars | 6 lb (3 kg) each |
| Welded Reinforcement | 63 lb/100 sq ft (310 kg/sq m) |
| GuardrailSteel Plate Beam Guardrail, Type A w/steel postsSteel Plate Beam Guardrail, Type B w/steel postsSteel Plate Beam Guardrail, Types A and B w/wood postsSteel Plate Beam Guardrail, Type 2Steel Plate Beam Guardrail, Type 6Traffic Barrier Terminal, Type 1 Special (Tangent)Traffic Barrier Terminal, Type 1 Special (Flared) | 20 lb/ft (30 kg/m)30 lb/ft (45 kg/m)8 lb/ft (12 kg/m)305 lb (140 kg) each1260 lb (570 kg) each730 lb (330 kg) each410 lb (185 kg) each |
| Steel Traffic Signal and Light Poles, Towers and Mast ArmsTraffic Signal PostLight Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m )Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m) | 11 lb/ft (16 kg/m)14 lb/ft (21 kg/m)21 lb/ft (31 kg/m)13 lb/ft (19 kg/m)19 lb/ft (28 kg/m)31 lb/ft (46 kg/m)65 lb/ft (97 kg/m)80 lb/ft (119 kg/m) |
| Metal Railings (excluding wire fence)Steel Railing, Type SMSteel Railing, Type S-1Steel Railing, Type T-1Steel Bridge Rail | 64 lb/ft (95 kg/m)39 lb/ft (58 kg/m)53 lb/ft (79 kg/m)52 lb/ft (77 kg/m) |
| Frames and GratesFrameLids and Grates | 250 lb (115 kg)150 lb (70 kg) |

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