

1. GENERAL

1.1 RELATED WORK

- .1 Section 31 24 13 – Roadway Excavation, Embankment and Compaction.
- .2 Section 32 91 00 – Topsoil, Seeding and Sodding.

1.2 MEASUREMENT AND PAYMENT

- .1 The supply and installation of wire fence will be measured in lineal metres of wire fence installed, for each fence category, as specified within the Bid Forms. The unit price shall include the materials, equipment, tools, labour and supervision required to excavate (where required), dispose of all waste/excess material, prepare the foundation, driving the posts as well as the supply and installation of all corner, line and brace posts, wire, staples, corner and in-line brace assemblies, hardware, and all other tasks deemed incidental to the erecting of the wire fence.
- .2 The supply and installation of access gates will be measured in units installed for each type and size of access gate, as specified within the Bid Forms. The unit price shall include the materials, equipment, tools, labour and supervision require to excavate (where required), dispose of all waste/excess material, prepare the foundation, driving the posts as well as the supply and installation of all brace posts, framing materials, wire, staples, brace assemblies, hardware and all other tasks deemed incidental to the erecting of chain link gates.

2. PRODUCTS

2.1 MATERIALS

- .1 Posts and Brace Posts
 - .1 All corner, line and brace posts shall be pressure treated wood in accordance with CSA Standard 080.5 using a wood preservative non-toxic to surrounding plant material. All posts must be No. 1 grade pressure treated fir, pine, or cedar and to the applicable minimum dimensions as indicated below.
 - .2 All line posts shall be a minimum of 2.13m in length and 100mm in diameter.
 - .3 Anchor, gate, and corner posts shall be a minimum of 2.44m in length and minimum 125-150mm in diameter.
 - .4 Bracing poles shall be 125-150mm in diameter.
 - .5 All corner and line posts shall be machine pointed to permit driving of the posts.
- .2 Barbed and Barbless Wire
 - .1 Barbed wire shall meet the following specifications:
 - .1 Number of Strands – 2 (twisted double strand)
 - .2 Minimum wire gauge – 12.5 A.W.G.
 - .3 Maximum spacing between barbs – 125mm
 - .4 Number of points per barb – 4
 - .5 Galvanized – CSA G164
 - .6 Minimum Breaking Strength – 900lbs.

- .7 Canada Standard or Class 1 or 3
- .2 Straining wire shall meet the following specifications:
 - .1 Number of strands – 2 (twisted double strand)
 - .2 Minimum wire gauge – 97.5 A.W.G.
 - .3 Galvanized – CSA G164
- .3 Barbless wire shall meet the following specifications:
 - .1 Number of Strands – 2 (twisted double strand)
 - .2 Minimum wire gauge – 12.5 A.W.G.
 - .3 Galvanized – CSA G164
 - .4 Canada Standard or Class 1 or 3
- .4 Staples shall meet the following specifications:
 - .1 Minimum wire gauge – 9.0 A.W.G.
 - .2 Minimum length – 50mm
 - .3 Galvanized – CSA G164

3. EXECUTION

- 3.1 Barbed and barbless wire fencing shall be constructed consistent with the following requirements:
- .1 Fence lines shall be constructed in a straight line between braces. A straight line can be achieved by driving line posts along a pre-tensioned line. Posts must be set perpendicular to ground (right angles to the fence wires).
 - .2 All line posts shall be evenly spaced at 3.7m apart, set plumb, and shall be firmly anchored in the soil to a depth of not less than 0.75m. Tops must not be cut off of fence posts unless specifically allowed in writing by the Engineer. Cut tops must be treated with a copper sulfate mix.
 - .3 Anchor, gate, corner panels and brace assemblies are to be installed where required, set plumb, and shall be firmly anchored in the soil to a depth of not less than 1.1m. Brace assemblies shall be installed where there is a change in direction of the fence. In-line brace assemblies shall be installed a maximum of every 200m.
 - .4 The tops of all posts shall be at a consistent height above ground elevation.
 - .5 Barbed and barbless wire spacing (starting from the ground): four (4) wires each spaced at 0.3m apart (top wire at 1.2m above the ground level). Barbless wire spacing (starting from the ground): three (3) wires each spaced at 0.35m apart (top wire at 1.2m above the ground level).
 - .6 All barbed and none barbed wire is to be pre-tensioned to 600lbs. and then released and stapled at 250-300lbs. per strand. All of the stretch must be taken out of the wire to prevent future loosening and sag.
 - .7 Barbed or barbless wire shall be stretched tightly by a mechanical stretcher or device designed for such use prior to stapling to the posts.

- .8 Staples shall be driven diagonally to the grain of the wood and shall minimally be driven three-fourths of their length into the wood leaving enough room for the wire to move.
- .9 Whenever it is necessary to splice the wire, such splice shall be neat and tightly coiled a minimum of four (4) times on each side of a splice.
- .10 Entry gates, as required, shall be 5.0m in width. Barbed wire spacing for the gate (starting from the ground) shall be four (4) wires each spaced at 0.3m apart. Each gate shall include two (2) wood droppers equally spaced within the length of the gate.

3.2 SITE CLEANUP

- .1 Clean and trim any areas disturbed by operations. Dispose of surplus material.

END OF SECTION