PART 1 GENERAL

1.1 SECTION INCLUDES

.1 Fence frame work, fabric, and accessories.

.2 Excavation for post bases; concrete foundation for posts.

.3 Electrically operated sliding gates, related hardware and equipment.

1.2 RELATED SECTIONS

.1 Section 03300-Cast-in-Place: Concrete anchorage for posts.

1.3 REFERENCES

.1 ASTM A123 - Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.

.2 ASTM C94 - Ready-mixed Concrete.

.3 ASTM F567 - Installation of Chain-Link Fence.

.4 ASTM F573 - Residential Zinc-Coated Steel Chain Link Fence Fabric.

.5 ASTM F668 - Poly (Vinyl Chloride) (PVC) Coated Steel Chain Link Fence Fabric.

.6 ASTM F1083 - Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.

.7 ASTM F1234 - Protective Coatings on Steel FrameWork for Fences.

.8 Chain Link Fence Manufacturers Institute (CLFMI) - Product Manual.

1.4 SYSTEM DESCRIPTION

.1 Fence Height: 1800 mm nominal as indicated on Drawings.

.2 Line Post Spacing: At intervals not exceeding 3000 mm.

.3 Fence Post and Rail Strength: Conform to ASTM F669 Light Industrial Fence quality.

.4 Automatic sliding gate operators and man door controlled by card readers.

1.5 SUBMITTALS FOR REVIEW

.1 Product Data: Provide data on fabric, posts, accessories, fittings and hardware.

.2 Shop Drawings: Indicate plan layout, spacing of components, post foundation dimensions, hardware anchorage, and schedule of components.

1.6 SUBMITTALS AT PROJECT CLOSEOUT

.1 Operation Data: Include electrical control adjustments.

.2 Maintenance Data: Include data for motor and transmission, gearing, lubrication frequency, spare part sources.

1.7 QUALITY ASSURANCE

.1 Perform Work in accordance with ASTM F567.

1.8 QUALIFICATIONS

.1 Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years documented experience.

.2 Installer: Company specializing in performing the Work of this section with minimum three years documented experience.

1.9 SEPARATE PRICES

.1 Refer to Bidding Procedures article B9.

.2 Provide a Separate Price No. 4 for the supply and installation of the Chain link fencing and automatic gates as specified in this Section.

.3 Indicate Separate Price amount on Form B: Prices.

PART 2 PRODUCTS

2.1 MATERIALS

.1 Framing (Steel): ASTM F1083 Schedule 40 galvanized steel pipe, welded construction, minimum yield strength of 172 Mpa; coating conforming to ASTM F1234 Type A on pipe exterior and interior.

.2 Fabric Wire (Steel): ASTM F668 PVC coated.

.3 Concrete: Type specified in Section 03300.

2.2 COMPONENTS

.1 Line Posts: 60 mm diameter.

.2 Corner and Terminal Posts: 89 mm.

.3 Gate Posts: 112 mm diameter.

.4 Top and Brace Rail: 42 mm diameter, plain end, sleeve coupled.

.5 Gate Frame: 42 mm diameter for welded fittings and truss rod fabrication.

.6 Fabric: 51 mm diamond mesh interwoven wire, 4 mm thick, top salvage knuckle end closed, twisted tight, bottom selvage twisted tight.

.7 Tension Wire: 5 mm thick steel, single strand.

.8 Tension Band: 5 mm thick steel.

.9 Tension Strap: 5 mm thick steel.

.10 Tie Wire: Aluminum alloy steel wire.

2.3 ACCESSORIES

.1 Caps: Cast steel galvanized; sized to post diameter, set screw retainer.

.2 Fittings: Sleeves, bands, clips, rail ends, tension bars, fasteners and fittings; steel.

2.4 FINISHES

.1 Framing Components: Galvanized to ASTM A123; 550 g/sq m coating; with powder coated paint finish, colour to be black.

.2 Fabric: Vinyl over coating of 550 g/sq m galvanizing; coating colour to be black.

.3 Vinyl Components: colour to be black.

.4 Hardware: Galvanized to ASTM A153, 550 g/sq m coating.

.5 Accessories: Same finish as framing.

2.5 SLIDING GATE

.1 Double gate: cantilevered gates 2400 high x length to suit opening; 6061/6063 grade aluminum. Gate frame to be 60 mm diameter. Wire fabric infill on 9 mm rods; colour to match fence fabric.

.2 Provide stop column at centre of gate opening to receive both gates.

.3 Guides: structural portals with cantilever gate rollers LDI rollers by Advanced designs; cast nylon compoSite Comboliun 396.

2.6 SLIDING GATE OPERATOR

.1 Gate operator: CSA Approved; continuous duty motor with thermal overload protection; #40 nickel-plated chain; Chamberlain Lift Master Model SL 930.

.2 Control unit: Provide gate control by access control centre card reader.

.3 Limit switches; magnetic proximity switch fro detect end positions of gate.

.4 Safety devices: through beam photo cell.

PART 3 EXECUTION

3.1 INSTALLATION

.1 Install frameWork, fabric, accessories and gates in accordance with ASTM F567 and manufacturer's instructions.

.2 Coordinate construction of man gate to accommodate electric lock.

.3 Place fabric on outside of posts and rails.

.4 Set intermediate, terminal, gate, posts plumb, in concrete footings with top of footing 150 mm below finish grade. Slope top of concrete for water runoff.

.5 Brace each gate and corner post to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail one bay from end and gate posts.

.6 Provide top rail through line post tops and splice with 150 mm long rail sleeves.

.7 Do not stretch fabric until concrete foundation has cured 28 days.

.8 Stretch fabric between terminal posts or at intervals of 30 m maximum, whichever is less.

.9 Position bottom of fabric 50 mm above finished grade.

.10 Fasten fabric to top rail, line posts, braces, and bottom tension wire with tie wire at maximum 380 mm on centers.

.11 Attach fabric to end, corner, and gate posts with tension bars and tension bar clips.

.12 Install bottom tension wire stretched taut between terminal posts.

.13 Install gate with fabric to match fence.

3.2 ERECTION TOLERANCES

.1 Maximum Variation From Plumb: 6 mm.

.2 Maximum Offset From True Position: 25 mm.

.3 Components shall not infringe adjacent property lines.

END OF SECTION