

SECTION 02831 - FENCING

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Fencing, fittings, accessories.

1.02 RELATED DOCUMENTS/SECTIONS

- A. Contract documents and drawings, construction details as shown on the plans, geotechnical engineering report. Refer to appropriate related sections as applicable.

1.03 FENCING

- A. All materials and construction shall conform to the Chain Link Fencing Manufacturers Institute (CLFMI) standards and specifications and the local authority having jurisdiction, and the plans and specifications. Provide all materials and accessories from a single source.
- B. TEMPORARY CONSTRUCTION FENCING: Provide temporary fencing as required for safety of all person(s) onsite for all phases of construction.

TEMPORARY CONSTRUCTION FENCING LOCATIONS:

Temporary construction fencing locations including but not limited to: around all construction work areas, storage areas, and construction staging/parking areas. At additions or renovations to existing buildings, all area(s) necessary to provide all person(s) safe access to all areas in use or required by Owner. Coordinate with Owner all required access and use areas prior to construction.

Temporary fence characteristics: Minimum 6 feet overall exposed height, minimum 12-1/2 gauge hog wire (no barbed wire) with drive-in metal posts securely anchored. Contractor to increase minimum fence criteria to suit his other needs for security and safety.

Gates: As necessary, with padlocks.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All materials and construction shall conform to the Chain Link Fencing Manufacturers Institute (CLFMI) standards and specifications. Provide all

materials and accessories from a single source. All fencing material shall be vinyl coated unless noted otherwise. Verify color with Architect/Owner prior to construction.

- B. Fabric: 2-inch diamond mesh. Minimum 9 gauge galvanized steel wire. Knuckle selvage top and bottom.
- C. Terminal and Gate Posts: 3-inch o.d., hot-dipped galvanized, schedule 40 steel pipe. Lengths = Exposure + 36" for embedment.
- D. Line Posts: 2-inch o.d., hot-dipped galvanized, schedule 40 steel pipe. Lengths = Exposure + 30" for embedment.
- E. Post Caps: Required for all posts. Size to suit posts, integral eye for passage of top rail or tension wire.
- F. Top Rails: 1-5/8 inch o.d., hot-dipped galvanized, schedule 40 steel pipe. Fabricate for swedge-type joints.
- G. Braces: Material same as rails.
- H. Fabric Tension Bars: 3/16" x 3/4" hot-dipped galvanized, single piece full height of fabric. Bands shall be 11 gauge x 7/8" wide.
- I. Tension Wire: 7 gauge coated steel coil spring wire. Required at bottom of all fencing.
- J. Fabric Ties: 11 gauge aluminum alloy.
- K. Gates:
 - Framework and diagonal bracing: Same as top rail pipe, shop fabricated welded construction, all welds ground smooth, hot-dipped galvanized.
 - Hinges: Offset non-liftoff type to achieve 180-degree opening, minimum 1 for each 24" of gate height or fraction thereof.
 - Latch: Fork type or plunger bar type with integral padlock eye to permit operation and unlocking from either side of gate.
 - Keeper: 1 for each leaf, automatically engages gate leaf and holds leaf open until manually released.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Layout fencing per Contract drawings and/or actual site conditions. Temporary construction fencing shall be provided as required to protect all persons from work/construction areas, provide for the safety of the public, and provide safe access for Owner as necessary for normal operation.
- B. Set all posts plumb. All permanent fencing posts shall be set in center of 3000 psi concrete footings in firm solid earth. Terminal and gate posts set in 12" diameter x 42" depth footings, line posts set in 10" diameter x 36" depth footings. Post lengths to achieve minimum 6" concrete coverage under post bottom and sides, posts shall not contact earth. Top of concrete finished smooth, set to finished grade, and sloped away from post to shed water. Exposed post height to achieve fabric height plus 2 inches of fabric clearance above finished grade.
- C. Locate terminal posts at all corners and changes of direction. Install braces at each terminal post with pressed steel connectors.
- D. Locate gate posts at both gate jambs of each gate. Install braces at each gate post with pressed steel connectors. Line posts evenly spaced at maximum 10.0 feet on center.
- E. Tie fabric to posts at 15" o.c. maximum, tie fabric to top rails at 24" o.c. maximum.
- F. Top rails shall be installed parallel to finish grade.
- G. Adjust gates and gate hardware for smooth operation without binding or scraping.
- H. Remove temporary construction fencing at completion of project.

3.02 PROTECTION

- A. Protect finished Work from damage during construction. Damaged work shall be replaced at the expense of the contractor.

END OF SECTION 02831