## 1.4 Submittals

Product data for the fence and gate components shall be provided for review.

1.5 Codes and Standards: Comply with applicable provisions of the following codes, specifications and standard, except where more stringent requirements are shown or

American Society for Testing and Materials Chain Link Fence Manufacturer's Institute.

### 2.0 Products

### 2.1 Manufacturer:

Fencing and accessories shall be as manufactured by American Steel and Wire Division of U. S. Steel Corporation Merchant Metals, Anchor Fence, Allied Pipe & Tube or equal. All material for the construction of the seven (7) foot safety fence and gates shall be galvanized finished as specified in this section.

#### End and Corner Post

End and corner post shall be hot-dip galvanized per ASTM A 120, basic open hearth copper-bearing Schedule 40 steel pipe three (3) inches O.D., weighing not less than 5.8 pounds per foot. Posts shall be set a full three (3) feet in concrete footings, crowned to shed water. Tops of posts shall be fitted with galvanized iron fittings designed to exclude water from the post interior.

## Swing Gate Post

Swing gate post shall be as specified for end posts except they shall be four (4) inches O.D. Schedule 40 steel pipe and weigh not less than nine (() lbs. per foot.

#### Line Post

Line post shall not be less than galvanized 2-1/2" O.D. Standard Schedule 40 steel pipe, basic open hearth copper bearing steel pipe. Posts shall be spaced not more than ten (10) feet apart and be set a full three (3) feet in bell shaped concrete footings, crowned at the top to shed water. Line post tops shall be heavy malleable iron, designed to fit over the post top and shall include provisions for accommodating a top rail.

### Top Rail

Fence top rail shall be 1-5/8" O.D. standard Schedule 40 steel pipe weighing not less than 2.3 lb/ft hot galvanized and shall be furnished in lengths not less than 18 feet, except where shorter lengths are necessary. Lengths of pipe shall be joined, using extra long, hot galvanized, pressed steel sleeves.

### Coil Tension Wire:

A number seven (7) gauge coiled spring tension wire having a zinc coating of 1.6 oz. of zinc per square foot of surface area shall be provided along bottom of fence. Fabric shall be fastened to tension wire at intervals of 2'-0" with pig rings.

## 2.2 Bracing and Tensioning

## Ban

Bands shall be unclimbable, beveled edge type, secured with 3/8 inch diameter square shouldered aluminum carriage bolts, non-removable from outside of fence enclosure.

# Bracing

All terminal posts shall be braced by means of 1-5/8 inch O.D. horizontal compressive member, securely attached to terminal and first line posts with malleable iron fittings and bevel edge bands, truss braced from first line post to bottom of terminal with 3/8" diameter rods and turnbuckle. Corner posts shall be braced in each direction.

# Tension Bars

Tension bars for attaching fence fabric to terminal posts shall be ¼ by ¾ inch, high carbon steel, and shall be attached to terminal posts by means of beveled edge bands.

# Barbed Wire Extension Arms

Intermediate and corner posts shall be equipped with extension arms for the support of barbed wire. The arm base shall be malleable iron and the extension shall be pressed steel, the complete units being hot galvanized after fabrication. Intermediate post arms shall have provision for accommodating the top rail and the corner post arms shall have a set screw. Arms shall slope to the outside at a 45° angle. The design length of the extension arms shall be sufficient to support three (3) strands of the barbed wire specified.

# 2.3 Fabric

# Fencing Fabric

Fencing fabric shall consist of individual wire pickets, helically wound, and interwoven from No. 9 W & M gauge copper bearing steel wire to form a continuous chain link fabric in tow (2) inch mesh. Top and bottom edge of fabric shall be knuckled and fabric shall be seven (7) feet in height between top and bottom edge for installation around the sewage pump station. Top and bottom edges of fabric shall have a twisted and barbed finish fabric shall comply with ASTM A392.

# Fini

Fabric shall be hot dip galvanized after weaving and the zinc coating shall not be less than Class 2, ASTM A392. The coating shall withstand six (6) one-minute dips by the Preece Test, ASTM A239.

# Tensile Strength

The wire in the completed fabric, after galvanizing, shall have a tensile strength of not less than 80,000 pounds per square inch.

# Fabric Ties:

Fabric shall be attached to line posts and top rail with aluminum strip or wire of an approved gauge and design, at intervals of not more than 14 inches on line posts and 24 inches on top rail.

# Barbed Wire

Chain link fence fabric shall be surmounted with three (3) stands of barbed wire (complying with ASTM A121), each strand consisting of two (2) No. 12 ½ WM gauge twisted copper bearing (0.20% copper) steel line wires, double galvanized (Class 2, ASTM A121), having 14 WM gauge 4 point barbs spaced four (4) inches apart.

### 2.4 Gates Frames and Hardware

## Swing Gate Frames

Swing Gate Frames shall be minimum two (2) inches, D.O. Standard weight steel pipe with interval bracing of 1 5/8 O.D. standard weight steel pipe. Frame members shall be welded at all joints to insure a watertight construction.

## Fabric For Gates

Fabric for gates shall be as specified for line fence.

### Hinges

Hinges shall be standard offset type which will allow gates to swing back parallel with line fence. Hinge material shall be malleable iron or steel forgings.

## Double Latches

Double latches shall be drop-bar type, securely bolted to gate frames and designed to engage heavy malleable iron gate stops anchored in concrete footings.

## Single Latches

Single latches for gate frames up to and including ten (10) feet wide, shall be malleable iron, gravity type, designed to automatically engage a pin welded to the gate frame and to be secured with an approved type padlock.

## Gate Keepers

Gate shall be equipped with a gate keeper designed to engage with the gates when opened wide to secure them in this position.

## Locks

Owner shall provide chain and locks for gate security.

#### Miscellaneous Fittings

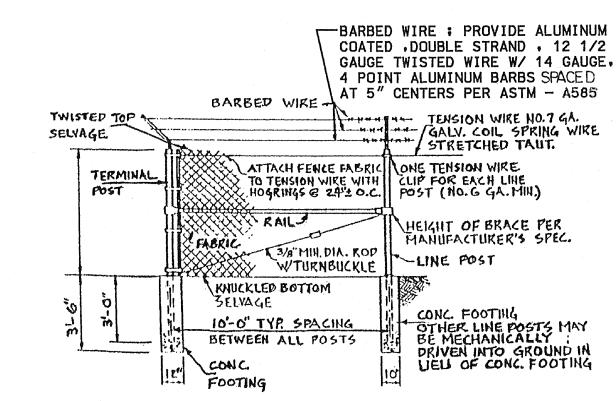
Al fence fittings as above or otherwise necessary for a complete installation shall be malleable iron, pressed steel, aluminum or forgings. All miscellaneous ferrous metals used in the work shall be hot dip galvanized or galvanized with polyvinyl chloride (PVC) to match adjacent materials. All materials to match adjacent fence finish.

### Concrete

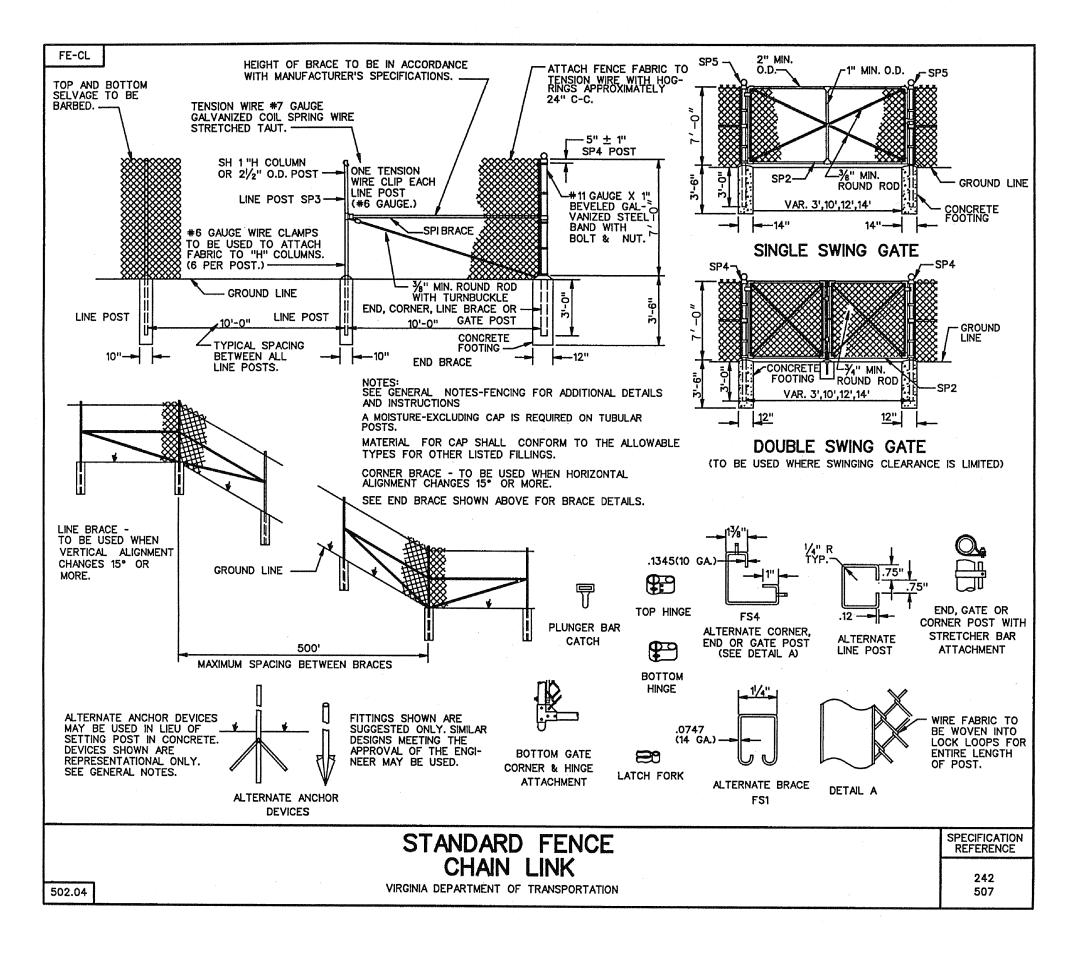
Concrete for footings shall be as specified hereunder.

### 3.0 - Execution

3.1 The fence, gates and post shall be installed as specified herein and shown in the details on the plans.



CHAIN LINK FENCE WITH BARBED WIRE



BERKLEY HOWELL & ASSOC.

ENGINEERS • SURVEYORS • PLAN
306 ENTERPRISE DRIVE, SUITE

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O.W. O.BERKLEY, JR. F. Lic. No. 10759

WESTLAKE VILLAGI BUSINESS PARK SOL SEWERAGE FACILITI

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GENERAL SPECIFICATION

DATE: 01-10-08

DRAWN:

CHECKED:

REVISIONS

NO. DATE

1 03-04-08
2 03-31-08
3 04-14-08
4 04-25-08

SCALES

HORIZ: AS SHOWN
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