GENERAL NOTES:

U.S. COAST GUARD NOTIFICATION: Notify the local office of the U.S. Coast Guard at least 30 days prior to beginning of construction of the Fender System.

14" SQUARE PRESTRESSED CONCRETE PILES: Provide 14" Square Prestressed Concrete Piles of sufficient length to achieve a minimum embedment of 20' into soil having a blow count greater than or equal to 6 (N = 6). Pile splices and build-ups are not permitted. Use only 14" Square Prestressed Concrete Piles with 8 - ½" diameter Low Relaxation Strands fabricated in accordance with Index No. 20614.

PLASTIC LUMBER AND STRUCTURAL COMPOSITE LUMBER WALES: Provide only Plastic Lumber and Structural Composite Lumber Wailes in accordance with Specification Section 913. Wailes shall be continuous and spliced only at locations shown on the plans.

PLASTIC LUMBER DECKING FOR CATWALKS: Provide Plastic Lumber decking for catwalks when called for in the Plans in accordance with Specification Section 913.

FIBERGLASS OPEN GRATING FOR CATWALKS: Provide Fiberglass Open Grating for catwalks when called for in the Plans. Fiberglass Open Grating shall be a heavy duty design suitable for exterior installations. Maximum gap opening on the walkway surface shall be 1½". Design live loads and deflections shall be a 50 psf uniformly distributed load with a maximum deflection of 1½ or 1/120 at the center of a simple span and a concentrated load of 250 pounds with a maximum deflection of ½ at the center of a simple span. Color of Fiberglass Open Grating shall be gray or black.

Install Fiberglass Open Grating according to manufacturer's recommendations using stainless steel #10 x 3" (minimum) deck screws.

FENCE SYSTEM ENERGY CAPACITY: Energy Capacity = 38 ft-k
**10" x 10" Wales Mark A**
- Composite Lumber
- 14" Sq. Prestressed

**Concrete Piles**
- Prestressed
- 14" Sq.

**Spacer Block Mark B (Typ.)**
- Plastic Lumber 8" x 8" (Typ.)

**1'-9" (Typ.)**
- Detail "A"
  - See Detail "A"

**Mark H1**
- Plastic Lumber 4" x 4" (Typ.)
- Orientation line for Navigation Light

**Mark G2**
- Plastic Lumber 6" x 6" (Typ.)

**Mark C**
- Plastic Lumber 2" x 6" (Typ.)

**Mark E**
- Plastic Lumber 2" x 12" Decking (Typ.)

**Mark F**
- Plastic Lumber 6" x 10" (Typ.)

**Deck Support Mark F**
- Plastic Lumber 6" x 10" (Typ.)

**Hand Rail Mark C**
- Plastic Lumber 2" x 6" (Typ.)

**Splice Plate Mark B**
- Plastic Lumber 8" x 8" (Typ.)

**Section E-E**
- Typical Flared Section
- (8° Turn Shown, 4° Turn Similar)

**View F-F**
- Typical Straight Section

**Partial View F-F**
- (Showing Fender End: Decking and Handrail Not Shown for Clarity)

**Cross References:**
- For Navigation Lights and SCH 80 PVC Electrical Conduit Details see Design Standard Index 21720.
- For View G-G and Clearance Gauge Details see Sheet 4.
- For Detail "A" and location of Section E-E see Sheet 2.
- For location of View F-F see Sheet 1.

**Splice Plate Detail**
- 1/2" Stainless Steel Plate
- 1/2" Ø Holes (Typ.)

**Navigation Light**
- Orientation line for Navigation Light

**Grating similar (6" Min. width at turns, placed with 3/16" Min., 3/16" Max. gap between adjacent boards)**

**Max. gap between adjacent boards**
- 3 - #10 x 3" Stainless Steel, Doweling Screws each end of each Mark E

**Recess Threaded Bar**
- 1/2" from front face of Wale as shown

**Provide oversized hole to accept nut & washer**

**For View G-G and Clearance Gauge Details see Sheet 4.**

**For Detail "A" and location of Section E-E see Sheet 2.**

**For location of View F-F see Sheet 1.**

**FOR CLARITY**
- AND HANDRAIL NOT SHOWN (SHOWING FENDER END; DECKING PARTIAL VIEW F-F)

**DETAIL "A"**
- 1/2" Ø Stainless Steel Lag Screw (Recess head flush with top of Spacer Block)

**Composite Lumber 10" x 10" Wales Mark A**

**Plastic Lumber 8" x 8" Spacer Block Mark B (Typ.)**

**1" Ø Stainless Steel Threaded Bars, Locking Nuts and Washers (Typ.)**

**1/2" Ø Stainless Steel Threaded Bars, Locking Nuts and Washers (Typ.)**

**SCH 80 PVC Electrical Conduit**
- 1'-9" (Typ.)

**Electrical Conduit**
- SCH 80 PVC

**Navigation Light & Light**
- Orientation line for Navigation Light

**Support Mark H1**
- Plastic Lumber 4" x 4" (Typ.)

**SPLICE PLATE DETAIL**

**Electrical Conduit**
- SCH 80 PVC

**Support Mark H1**
- Plastic Lumber 4" x 4" (Typ.)

**14" Sq. Prestressed Concrete Piles**
- Prestressed
- 14" Sq.

**Concrete Piles**
- Prestressed
- 14" Sq.

**Detail "A"**
- See Detail "A"

**For navigation Lights and SCH 80 PVC Electrical Conduit Details see Design Standard Index 21720.**

**For View G-G and Clearance Gauge Details see Sheet 4.**

**For Detail "A" and location of Section E-E see Sheet 2.**

**For location of View F-F see Sheet 1.**
### STRUCTURAL COMPOSITE LUMBER BILL OF MATERIALS

<table>
<thead>
<tr>
<th>MARK</th>
<th>SIZE (NOMINAL)</th>
<th>DIMENSIONS</th>
<th>BOARD FT PER EACH</th>
<th>NO. REQD</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>32'-0&quot; (STRAIGHT)</td>
<td>266.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>16'-0&quot;</td>
<td>266.6</td>
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<tr>
<td>A3</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>16'-0&quot;</td>
<td>133.3</td>
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<tr>
<td>A4</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>16'-0&quot;</td>
<td>133.3</td>
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<tr>
<td>A5</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>16'-0&quot;</td>
<td>133.3</td>
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<tr>
<td>A6</td>
<td>10&quot; X 10&quot; COMPOSITE LUMBER</td>
<td>16'-0&quot;</td>
<td>133.3</td>
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</tbody>
</table>

* All Plastic Lumber and Composite Lumber Dimensions and Quantities shown are based on Nominal Lumber Dimensions and may vary depending on Actual Lumber Dimension.

** Provide Fiberglass Open Grating in lieu of 2" X 12" Plastic Lumber when called for in the Plans. Mounting hardware shall be Stainless Steel, install per Manufacturer's recommendations. See Structures Plans for Notes and Details.

### PLASTIC LUMBER BILL OF MATERIALS

<table>
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<tr>
<th>MARK</th>
<th>SIZE (NOMINAL)</th>
<th>DIMENSIONS</th>
<th>BOARD FT PER EACH</th>
<th>NO. REQD</th>
<th>QUANTITY</th>
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<tr>
<td>B</td>
<td>8&quot; X 8&quot; PLASTIC LUMBER</td>
<td>8&quot; (STRAIGHT)</td>
<td>3.6</td>
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<tr>
<td>C</td>
<td>2&quot; X 6&quot; PLASTIC LUMBER</td>
<td>16'-0&quot; (STRAIGHT) (Trim &amp; Miter Ends as required)</td>
<td>16.0</td>
<td></td>
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<tr>
<td>D</td>
<td>2&quot; X 6&quot; PLASTIC LUMBER</td>
<td>4'-4&quot; (STRAIGHT)</td>
<td>8.7</td>
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<tr>
<td>E</td>
<td>2&quot; X 12&quot; PLASTIC LUMBER</td>
<td>2'-6&quot; (STRAIGHT) (Miter as required, 6&quot; min. width)</td>
<td>5.0</td>
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<tr>
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<td>160.0</td>
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<td>F2</td>
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<td>159.6</td>
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<td>F3</td>
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<tr>
<td>H1</td>
<td>4&quot; X 4&quot; PLASTIC LUMBER</td>
<td>PILE CUTOFF ELEV. MINUS NLW OR MLR ELEV. PLUS 5'-0&quot; (STRAIGHT)</td>
<td>1.3 PER LF</td>
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<td></td>
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<tr>
<td>H2</td>
<td>2&quot; X 6&quot; PLASTIC LUMBER</td>
<td>1'-2&quot; (STRAIGHT)</td>
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**REVISIONS**

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**2010 Interim Design Standard**

PRESTRESSED CONCRETE PILES