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.
- POLYMERIC PILES Provide polymeric piles in accordance with Specification Section 471. Installation shall be in accordance with manufacturer's recommendations. All piles shall be plumb.
- PLASTIC LUMBER AND STRUCTURAL COMPOSITE LUMBER WALES: Provide only Plastic Lumber and Structural Composite Lumber Wales in accordance with Specification Section 973. Wales 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 973.

Install Plastic Lumber Decking according to manufacturer's recommendations using stainless steel #10 x 3" (minimum) deck screws.

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 $\frac{3}{8}$ " or L/120 at the center of a simple span and a concentrated load of 250 pounds with a maximum deflection of $\frac{1}{4}$ " 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 hardware, screws, bolts, nuts and washers. Attach Fiberglass Open Grating to Wales and Deck Supports at a 2'-O" maximum spacing so as to resist pedestrian live loads and uplift forces from wind, buoyancy and wave action.

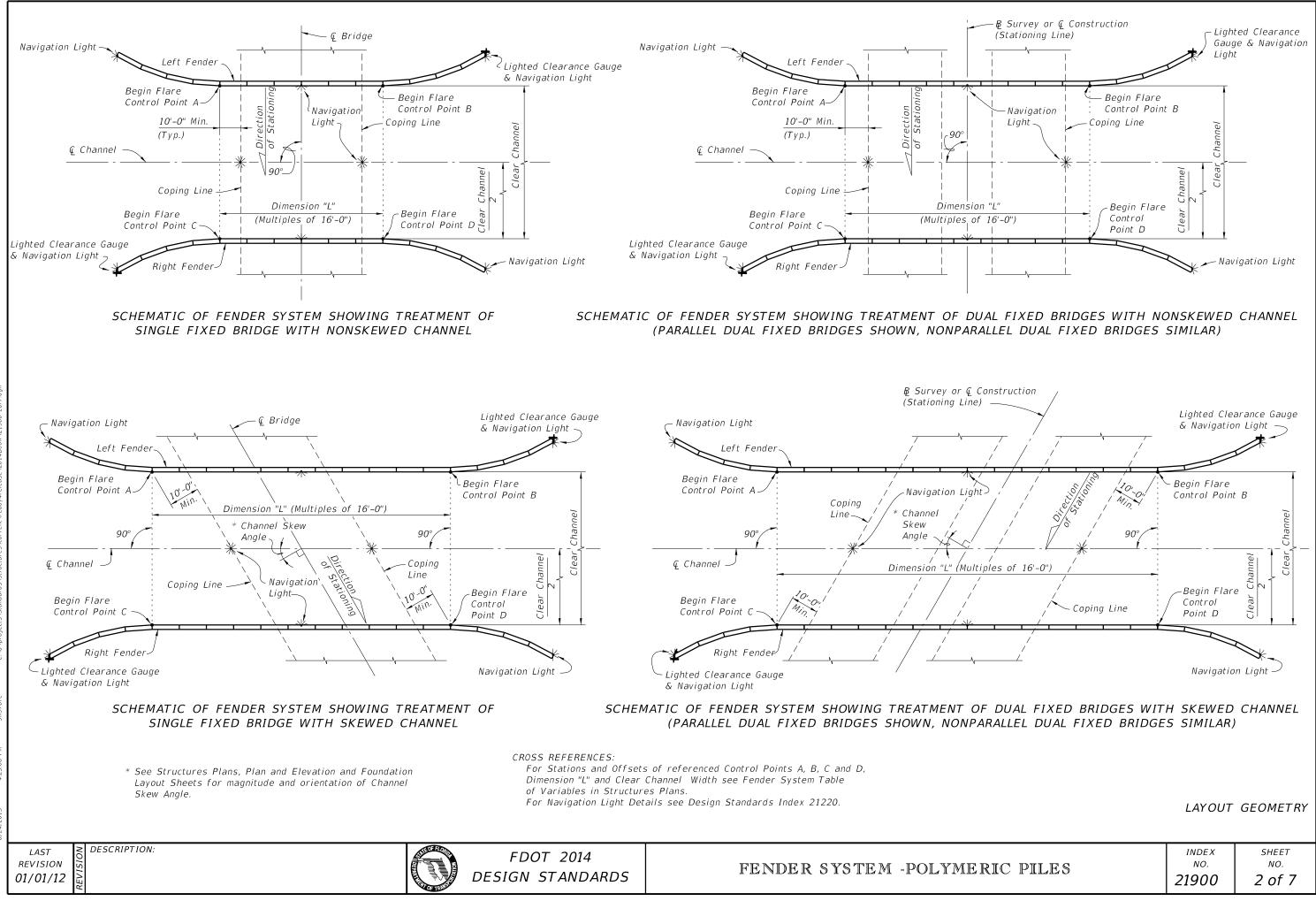
- CLEARANCE GAUGE AND LIGHT: Clearance Gauge to be furnished by the FDOT and erected by the Contractor. Clearance Gauge width and numeral height is dependant on visibility distance. The required visibility distance shall be determined by the United States Coast Guard District Commander. Provide and install Clearance Gauge Light in accordance with Specification Section 510 and Index No. 21220.
- NAVIGATION LIGHTS: Provide and install Navigation Lights in accordance with Specification Section 510, Index No. 21220 and/or project specific details. Provide and maintain Temporary Navigation Lights during construction until permanent Navigation Lights are operational.

BOLTS, THREADED BARS, NUTS, SCREWS AND WASHERS: Furnish stainless steel Bolts in accordance with ASTM F593 Type 316. Furnish stainless steel Threaded Bars in accordance with ASTM A193 Grade B8M. Furnish stainless steel Nuts in accordance with ASTM F594 Type 316. Furnish stainless steel Screws in accordance with ASTM F593 Type 305. Furnish stainless steel Washers compatible with Bolts, Threaded Rods and Nuts under heads and nuts. Torque Nuts on 1" diameter Bolts and Threaded Bars to 150 lb-ft. Keep threads on Bolts, Threaded Bars and Nuts free from dirt, coarse grime and sand to prevent galling and seizing during tightening.

SPLICE PLATES: Furnish Splice Plates in accordance with ASTM A240 Type 316.



	GENER.	AL NOTES
IC PILES	index no. 21900	^{SHEET} NO. 1 of 7



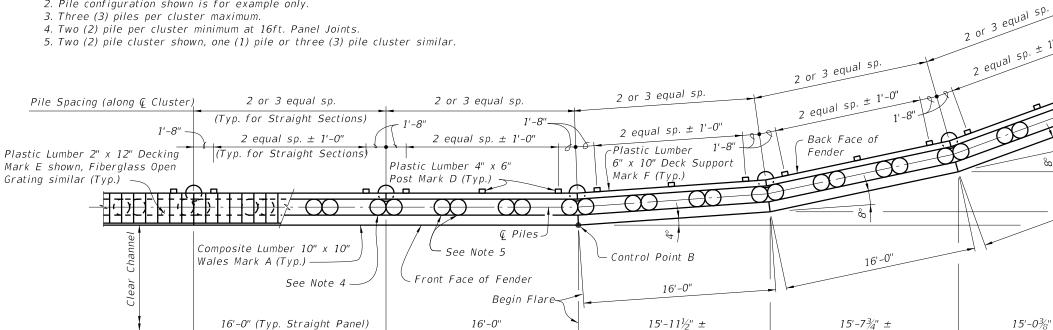
CROSS REFERENCES:

For Sections A-A and B-B see Sheet 4.

For View F-F see Sheet 5.

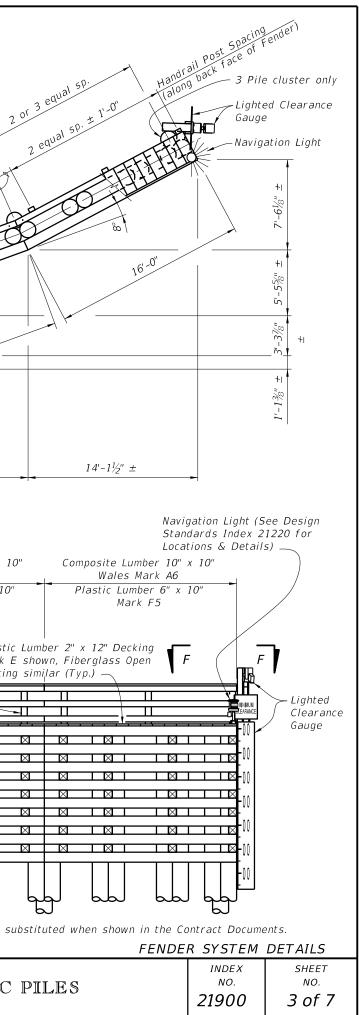
NOTES:

- 1. Plastic Lumber and Composite Lumber Dimensions shown are based on Nominal Lumber Dimensions and may vary depending on Actual Lumber Dimension. 2. Pile configuration shown is for example only.
- 3. Three (3) piles per cluster maximum.



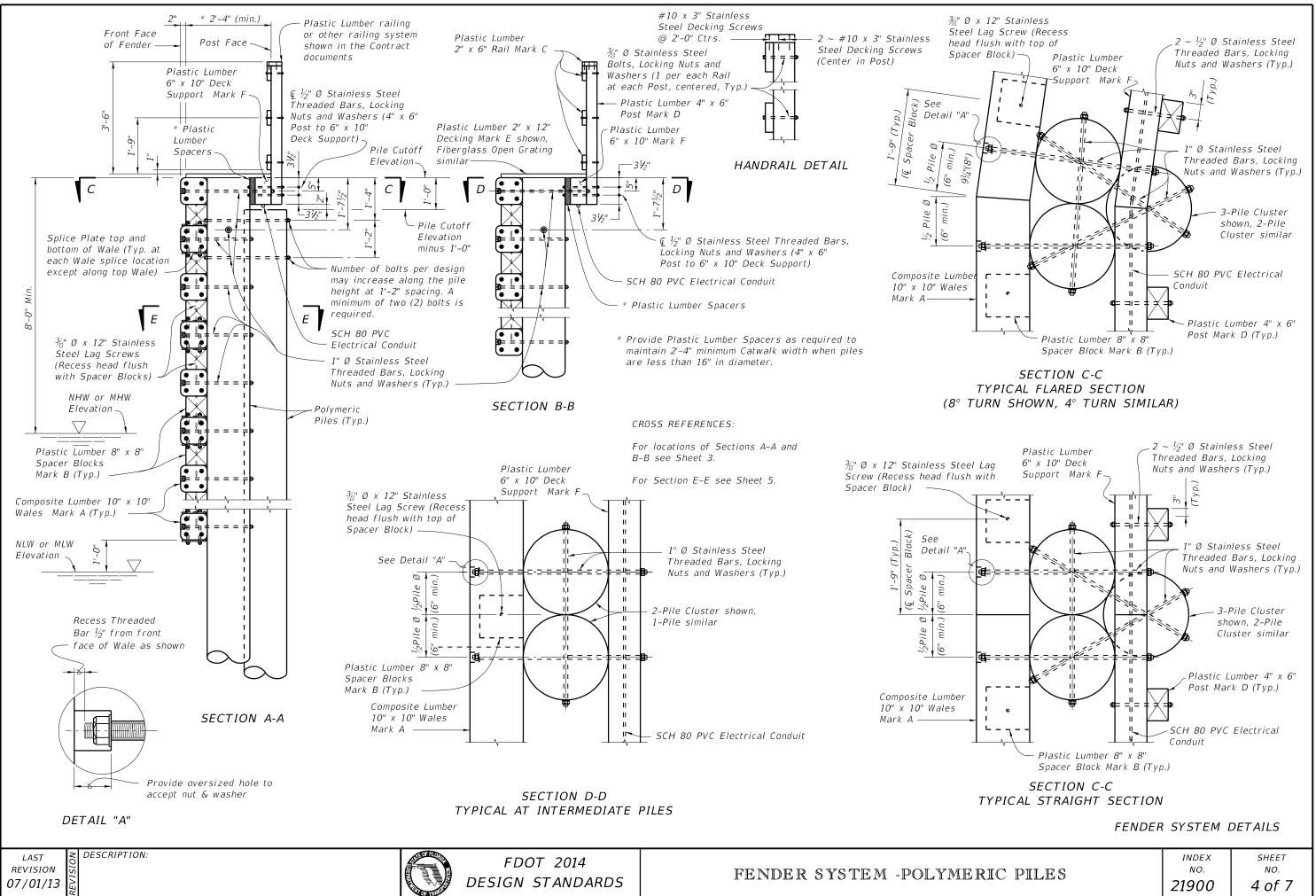
PARTIAL PLAN VIEW (TYPICAL FLARE) (FLARE AT CONTROL POINT B SHOWN, CONTROL POINTS A, C & D SIMILAR) (HANDRAIL NOT SHOWN FOR CLARITY)

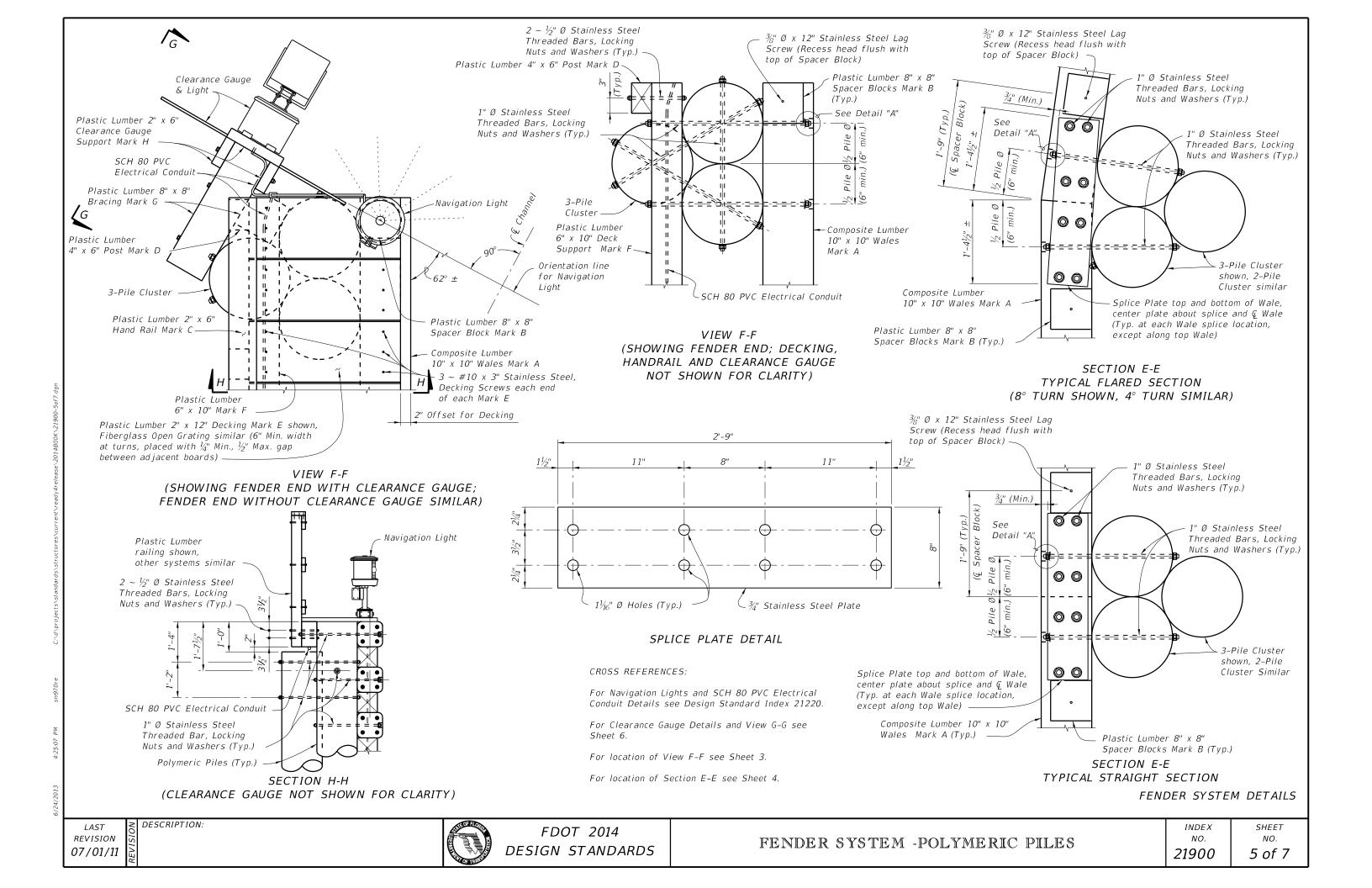
Composite Lumber 10" x 10" Wales Mark A1, A2 or A3	Composite Lumber 10" x 10	0" Wales Mark A2	Composite Lumber 10" x 10" Wales Mark A4	Composite Lumber 10" x 10" Wales Mark A5	Composite Lumber 10" x Wales Mark A5
Plastic Lumber 6" x 10" Mark F1	Plastic Lumber 6" x 10" Mark F1	Plastic Lumber 6" x 10" Mark F2	Plastic Lumber 6" x 10" Mark F3	Plastic Lumber 6" x 10" Mark F4	Plastic Lumber 6" x 1 Mark F4
	posite Lumber 10" x 10" Ales Mark A1, A2 or A3	mposite Lumber 10" x 10" Wales Mark A3	Plastic Lumber 8" x 8" Spacer Blocks Mark B (Typ.)	Plastic Lumber 2" x 6" Rail Mark C *	Plastic Lumber Plas 4" x 6" Post Mark Mark D (Typ.) * — Grat
Mark	A (along Front Face of er) (Typ.)	B b	Pile Clusters (Typ.)		J ther railing system may be
LAST REVISION 07/01/13			OT 2014 STANDARDS	FENDER SYSTI	EM -POLYMERI

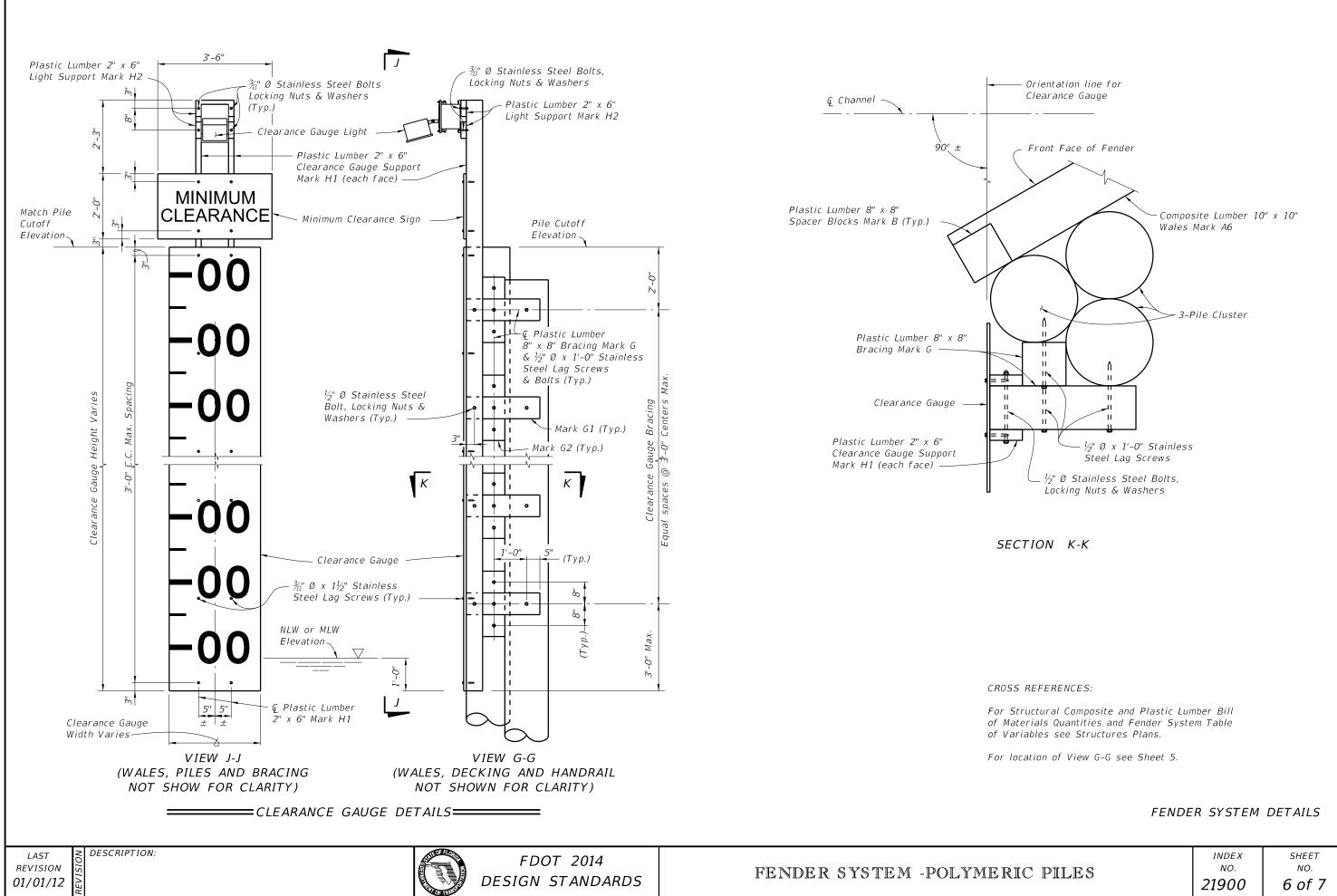


16'-0''

15'-0<u>%</u>" ±







	* STRUCTU	IRAL COMPOSITE LUMBER	BILL OF M	AIERIALS	>
MARK	SIZE (NOMINAL)	DIMENSIONS	BOARD FT. PER EACH	NO. REQD.	QUANTITY
A1	10" X 10" COMPOSITE LUMBER	32'-0" (STRAIGHT)	266.6	mber	
A2	10" X 10" COMPOSITE LUMBER		266.6	I Plastic Lur	Structures Plans
A3	10" X 10" COMPOSITE LUMBER		133.3	mposite ano	e in Structu
A4	10" X 10" COMPOSITE LUMBER		133.3	tructural Co	terials Table in
A5	10" X 10" COMPOSITE LUMBER		133.3	Estimated Structural Composite and Plastic Lumber	Bill of Materials
A6	10" X 10" COMPOSITE LUMBER		133.3	See	

- * 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.

	SIZE (NOMINAL)	DIMENSIONS	BOARD FT. PER EACH	NO. REQD.	QUANTITY		
В	8" X 8" PLASTIC LUMBER	8" (STRAIGHT)	3.6	I			
С	2" X 6" PLASTIC LUMBER	16'-0" (STRAIGHT) (Trim & Miter Ends as required)	16.0				
D	4" X 6" PLASTIC LUMBER	4'-4" (STRAIGHT)	8.7	mber			
** E	2" X 12" PLASTIC LUMBER	2'-6" (STRAIGHT) (Miter as required)	5.0				
F 1	6" X 10" PLASTIC LUMBER	16'-0" (STRAIGHT)	80.0	lastic Lun s Plans			
F2	6" X 10" PLASTIC LUMBER		79.6	Estimated Structural Composite and Plastic Lumber Bill of Materials Table in Structures Plans			
F3	6" X 10" PLASTIC LUMBER	15'-9 ¹ / ₄ "	78.8				
F4	6" X 10" PLASTIC LUMBER	³ / ₈ " ³ / ₈ " − − − − − − − − − − − − − − − − − − −	78.4	See Estimated Structu Bill of Material			
F5	6" X 10" PLASTIC LUMBER		79.2				
G 1	8" X 8" PLASTIC LUMBER	2'-3" (STRAIGHT)	12.0				
G2	8" X 8" PLASTIC LUMBER	2'-0" (STRAIGHT)	10.7				
H1	2" X 6" PLASTIC LUMBER	PILE CUTOFF ELEV. MINUS NLW OR MLW ELEV. PLUS 5'-6" (STRAIGHT)	1.0 PER LF EACH				
Н2	2" X 6" PLASTIC LUMBER	1'-0" (STRAIGHT)	1.0				



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 ($N \ge 6$). Pile splices and build-ups are not permitted. Use only 14" Square Prestressed Concrete Piles with 8 - 1/3" 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 Wales in accordance with Specification Section 973. Wales 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 973.
- Install Plastic Lumber Decking according to manufacturer's recommendations using stainless steel #10 x 3" (minimum) deck screws.
- 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 $1\frac{1}{2}$ ". Design live loads and deflections shall be a 50 psf uniformly distributed load with a maximum deflection of $\frac{3}{6}$ " or L/120 at the center of a simple span and a concentrated load of 250 pounds with a maximum deflection of $\frac{1}{2}$ 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 hardware, screws, bolts, nuts and washers. Attach Fiberglass Open Grating to Wales and Deck Supports at a 2'-0" maximum spacing so as to resist pedestrian live loads and uplift forces from wind, buoyancy and wave action.

- CLEARANCE GAUGE AND LIGHT: Clearance Gauge to be furnished by the FDOT and erected by the Contractor. Clearance Gauge width and numeral height is dependant on visibility distance. The required visibility distance shall be determined by the United States Coast Guard District Commander. Provide and install Clearance Gauge Light in accordance with Specification Section 510 and Index No. 21220.
- NAVIGATION LIGHTS: Provide and install Navigation Lights in accordance with Specification Section 510, Index No. 21220 and/or project specific details. Provide and maintain Temporary Navigation Lights during construction until permanent Navigation Lights are operational.

BOLTS, THREADED BARS, NUTS, SCREWS AND WASHERS: Furnish stainless steel Bolts in accordance with ASTM F593 Type 316. Furnish stainless steel Threaded Bars in accordance with ASTM A193 Grade B8M. Furnish stainless steel Nuts in accordance with ASTM F594 Type 316. Furnish stainless steel Screws in accordance with ASTM F593 Type 305. Furnish stainless steel Washers compatible with Bolts, Threaded Rods and Nuts under heads and nuts. Torque Nuts on 1" diameter Bolts and Threaded Bars to 150 lb-ft. Keep threads on Bolts, Threaded Bars and Nuts free from dirt, coarse grime and sand to prevent galling and seizing during tightening.

SPLICE PLATES: Furnish Splice Plates in accordance with ASTM A240 Type 316.

WIRE ROPE: Provide wire rope meeting one of the following requirements:

- 1. ½" diameter 6x19, 6x25 or 6x37 class IWRC Type 316 stainless steel wire rope with a minimum breaking strength of 18,000 lbs.
- 2. ½" diameter 6x19 galvanized wire rope with ultraviolet ray resistant polypropylene impregnation having an outside diameter of 5/8" with a minimum breaking strength of 22,000 lbs. Protect all ends with heat shrinkable end caps compatible with the rope's polypropylene that provide an effective water-tight seal.

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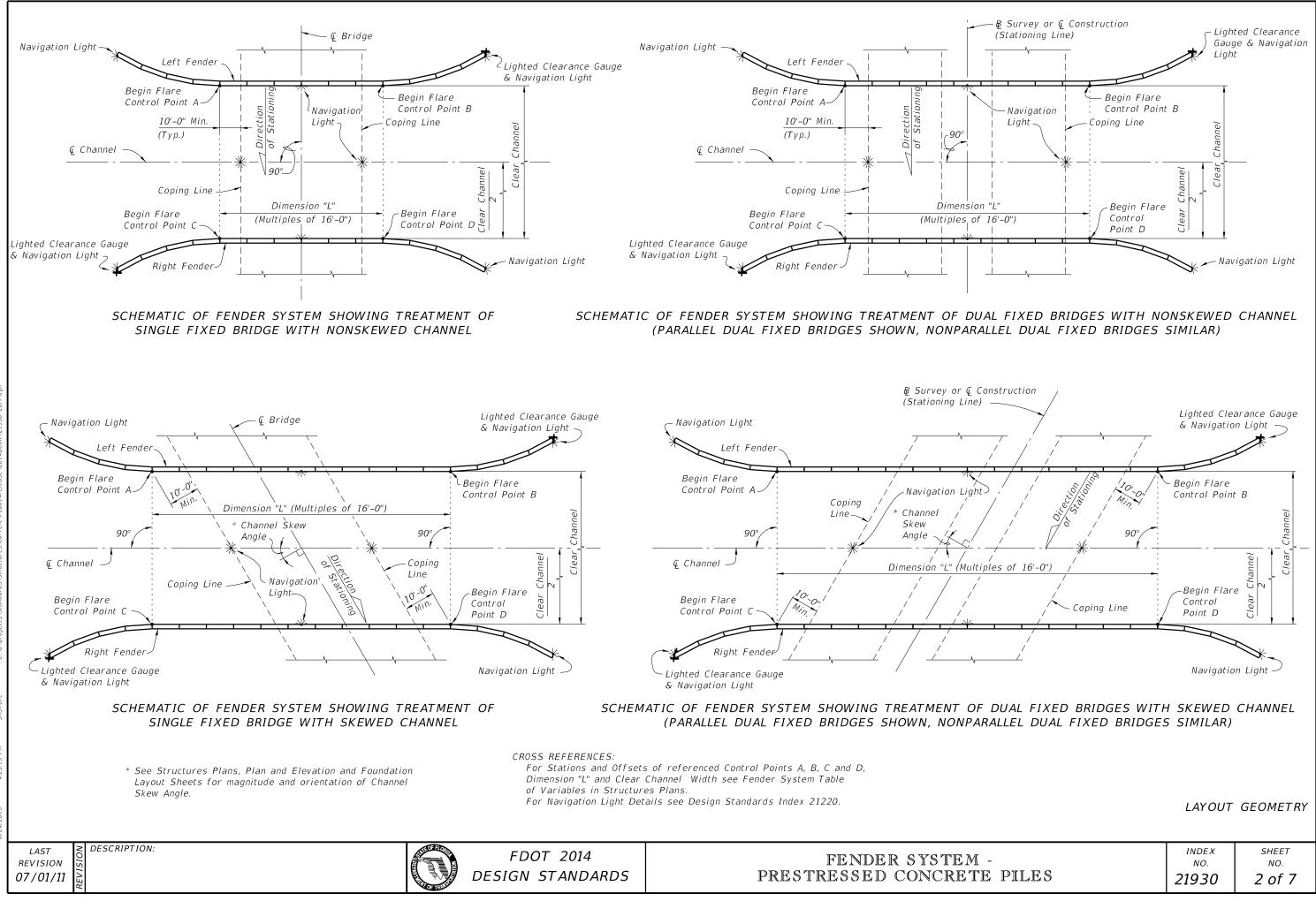
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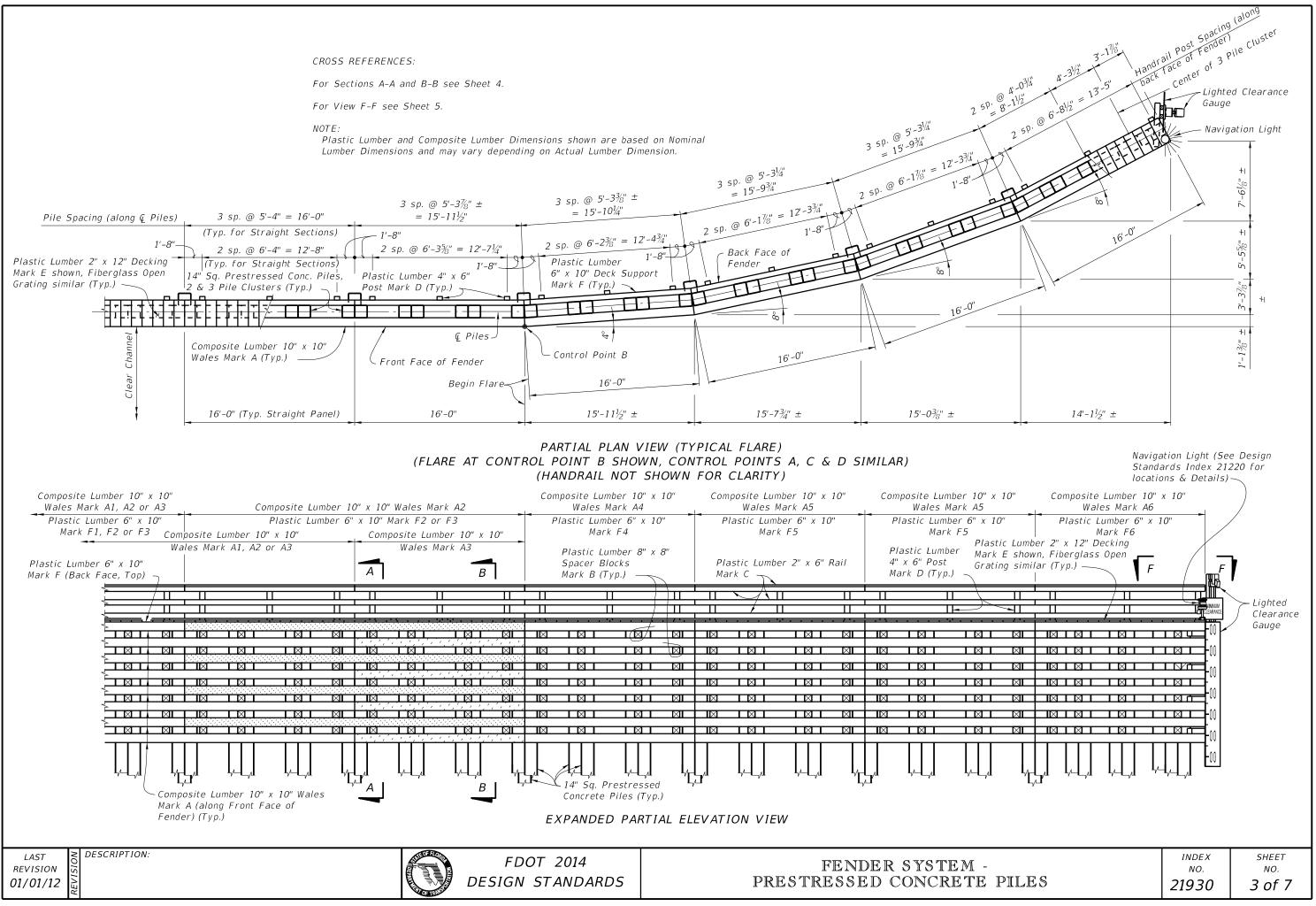


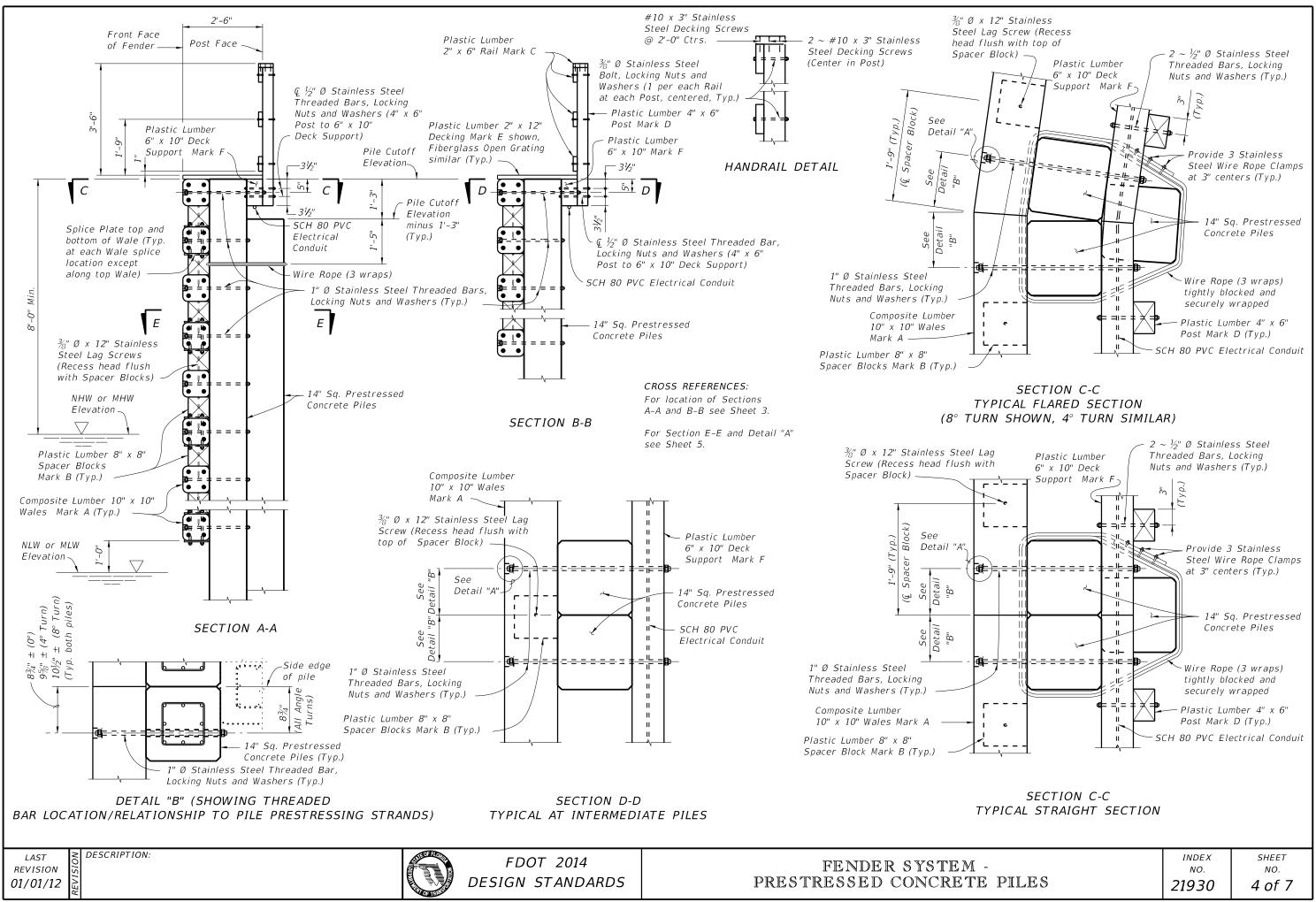
FENDER SYSTEM ENERGY CAPACITY: Energy Capacity = 38 ft-k

GENERAL NOTES

	INDEX	SHEET
	NO.	NO.
PILES	21930	1 of 7

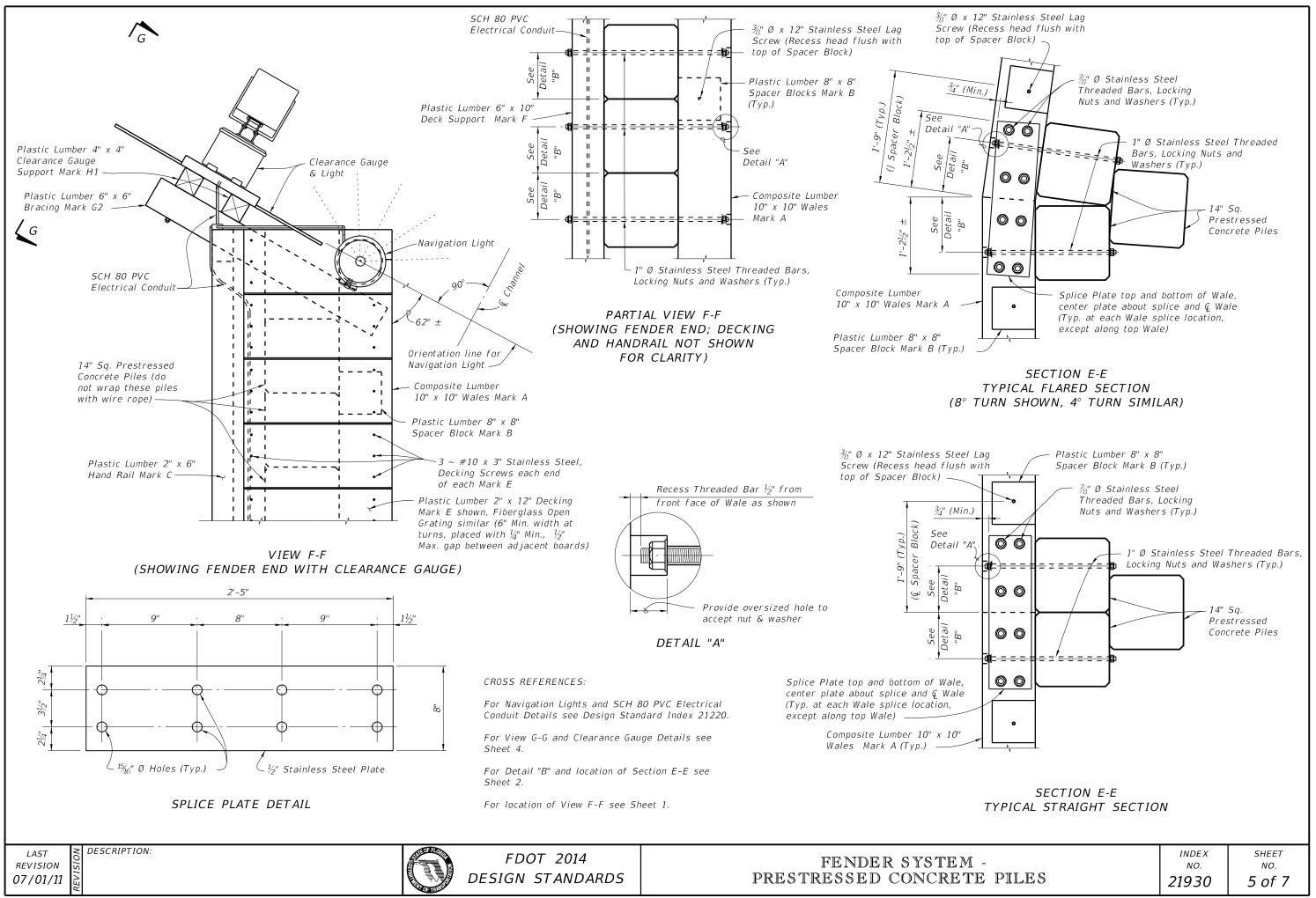


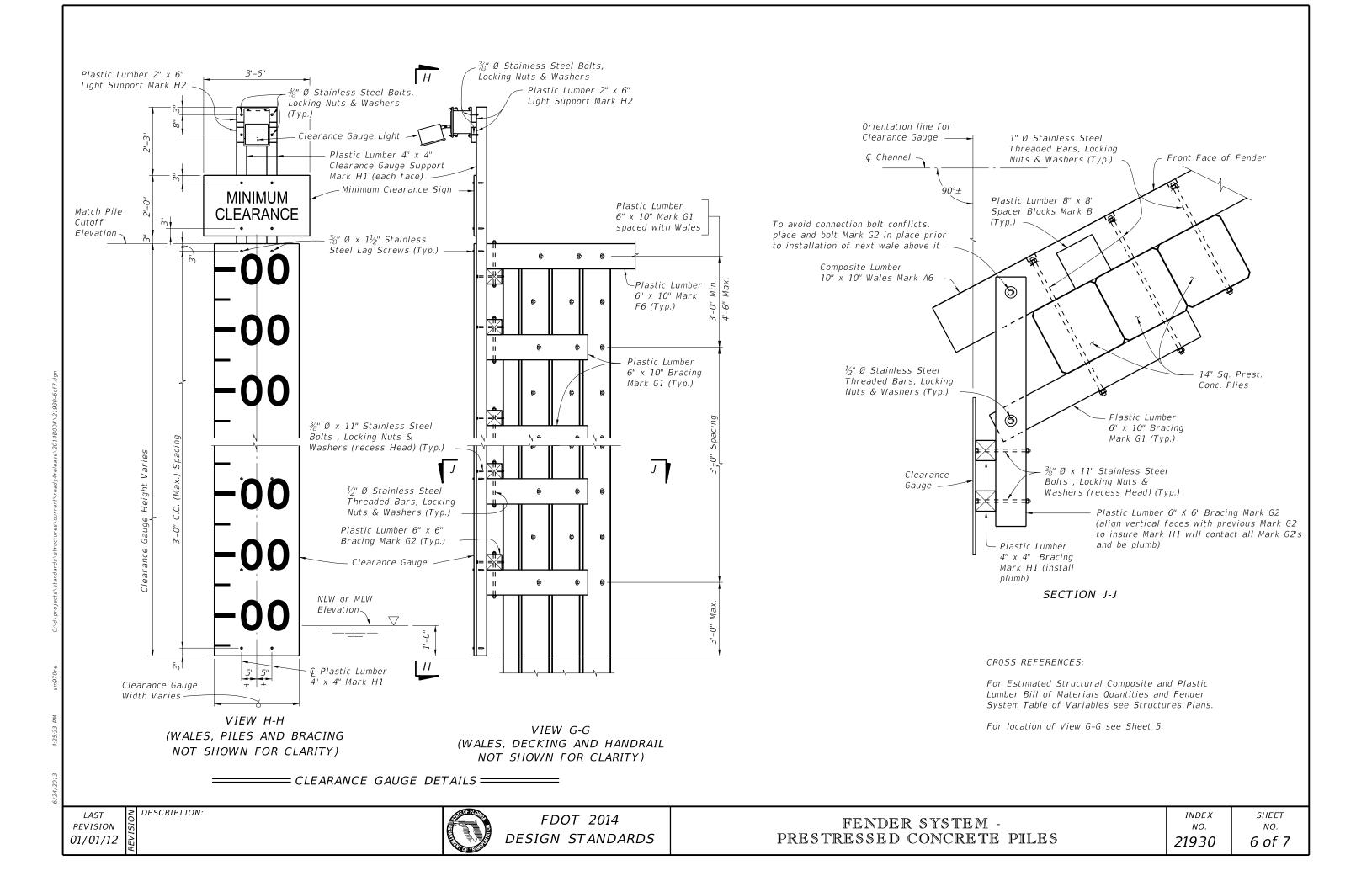




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	* STRUCTL	IRAL COMPOSITE LUMBER	BILL OF M	ATERIALS	5
MARK	SIZE (NOMINAL)	DIMENSIONS	BOARD FT. PER EACH	NO. REQD.	QUANTITY
A1	10" X 10" COMPOSITE LUMBER	32'-0" (STRAIGHT)	266.6	nber	
A2	10" X 10" COMPOSITE LUMBER	⁵ 0 3 ⁸ " - 1 - 32'-0"	266.6	Plastic Lur	res Plans
A3	10" X 10" COMPOSITE LUMBER	[∞] 01 16'-0"	133.3	mposite ano	e in Structu
A4	10" X 10" COMPOSITE LUMBER		133.3	tructural Co	terials Tablı
A5	10" X 10" COMPOSITE LUMBER	⁵ 01 → 5%" 5%" → 16'-0"	133.3	Estimated Structural Composite and Plastic Lumber	Bill of Ma
A6	10" X 10" COMPOSITE LUMBER		133.3	See I	

* 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.

MARK	SIZE (NOMINAL)	DIMENSIONS	BOARD FT. PER EACH	NO. REQD.	QUANTITY	
В	8" X 8" PLASTIC LUMBER	8" (STRAIGHT)	3.6			
С	2" X 6" PLASTIC LUMBER	16'-0" (STRAIGHT) (Trim & Miter Ends as required)	16.0			
D	4" X 6" PLASTIC LUMBER	4'-4" (STRAIGHT)	8.7			
** E	2" X 12" PLASTIC LUMBER	2'-6" (STRAIGHT) (Miter as required, 6" Min. width)	5.0			
F 1	6" X 10" PLASTIC LUMBER	32'-0" (STRAIGHT)	160.0	her		
F2	6" X 10" PLASTIC LUMBER		159.6	d Dlastic Lur	ires Plans	
F3	6" X 10" PLASTIC LUMBER		79.6	ine ette en	e in Structu	
F4	6" X 10" PLASTIC LUMBER	₹ <u>15'-9¼"</u>	78.8	tructural Co	Estimated Structural Composite and Plastic Lumber Bill of Materials Table in Structures Plans	
F5	6" X 10" PLASTIC LUMBER	³ / ₈ " ³ / ₈ " − − − − − − − − − − − − − − − − − − −	78.4	Estimated S	Bill of Ma	
F6	6" X 10" PLASTIC LUMBER		79.3	D D D D D D D)	
G 1	6" X 10" PLASTIC LUMBER	3'-8" (STRAIGHT)	18.3			
G2	6" X 6" PLASTIC LUMBER	4'-1" (STRAIGHT)	12.3			
H1	4" X 4" PLASTIC LUMBER	PILE CUTOFF ELEV. MINUS NLW OR MLW ELEV. PLUS 5'-6" (STRAIGHT)	1.3 PER LF EACH			
H2	2" X 6" PLASTIC LUMBER	1'-2" (STRAIGHT)	1.2			

LAST REVISION 07/01/11

