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* Provided For Information Only

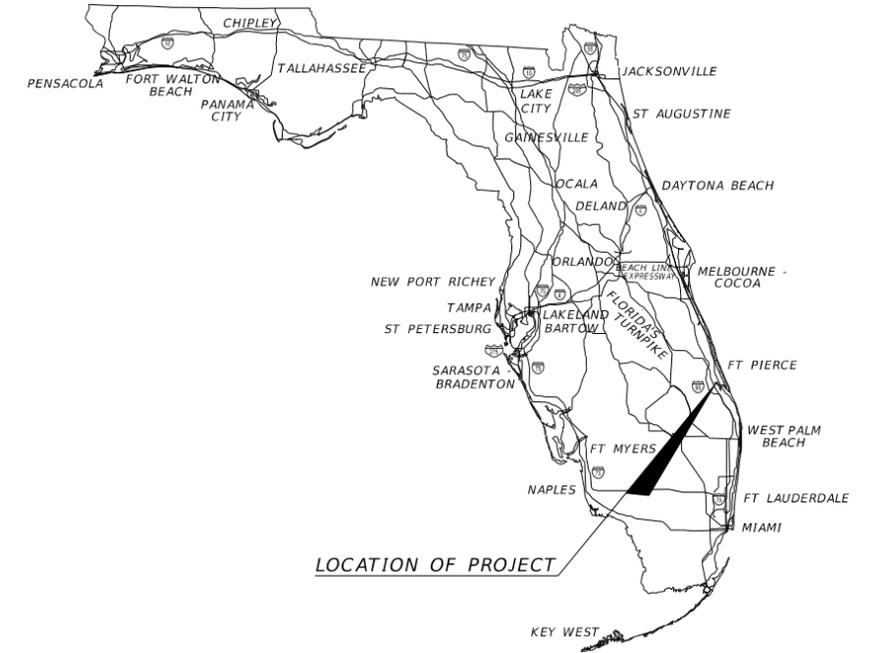
CITY OF PORT ST. LUCIE

CONTRACT PLANS

ST. LUCIE COUNTY

RIVERWALK AND WESTMORELAND PARK

STRUCTURE PLANS



STRUCTURE PLANS

ENGINEER OF RECORD:

RICHARD A. HUNTER, P.E.
P.E. NO. 50601
AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 CYPRESS RIDGE BLVD, SUITE 200
WESLEY CHAPEL, FLORIDA 33544
PHONE: (813) 435-2600
CONTRACT NO. C9P99
VENDOR NO. F043682340-001
CERTIFICATE OF AUTHORIZATION NO. 9302

SHEET NO.

S-1

NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C.

NOTES:

1. Specifications: Designed in accordance with:
 - AASHTO LRFD Bridge Design Specifications, 7th Edition
 - AASHTO LRFD Guide Specification for the Design of Pedestrian Bridges, 2nd Edition
2. Lumber sizes shown are nominal sizes. Lumber shall be furnished in sizes meeting the requirements of the American Softwood Lumber Standard, PS20-94. Lumber grade shall be No. 1, in accordance with Standard Specification 952. The decking and railing cap shall be Structural Plastic (SP). Structural Plastic shall be Fiberglass Fiber Reinforced Composite Lumber (FFRCL) in accordance with FDOT Standard Specification 973.
3. Design Loading:
 - Pedestrian LL: 90 psf
 - Rail and Post LL: 200 lb + 50 plf
 - Timber DL: 34.3 pcf
 - Structural Plastic DL: 65 pcf
 - Maximum Deck Weight: 8.13 psf
4. All lumber (Timber & Post) shall be treated in accordance with FDOT Standard Specification 955. All posts shall receive treatment as required for piling. All posts, except those for the boat dock, shall be treated with Chromated Copper Arsenate (CCA) in accordance with FDOT Standard Specification 955-2.1. All other timber, including boat dock posts, shall be treated in accordance with FDOT Standard Specification 955-2.2 for wood products of pedestrian bridges. All posts shall be wrapped with a high density polyethylene material that has a minimum thickness of 0.03". The seams of the wrap shall use a 6" minimum overlap with 1 1/4" stainless steel ring-shank roofing nails spaced every 2" along entire length of seam. The wrap shall extend from the mudline to the mean high water of approximately EL. 2.0.
5. Use bolts or screws, as shown, for assembly of the boardwalk. All bolt assemblies shall have washers under both the bolt head and nuts. Screws shall be countersunk and installed in holes drilled with a countersunk drill bit. Nails may only be used for pre-assembly as shown. All fasteners, including bolts, nuts, washers, screws, nails and plate washers, shall be ASTM F593C or F593D stainless steel.
6. Details for these standards are shown for straight sections only. Moderately curved (R > 1300') boardwalks shall use chorded sections and variable decking spacing. For smaller radius curves, (R > 350') wedge blocks at joist splices, mitered handrail splices and tapered decking at interior supports will be required for turns at interior bents.
7. The color of the Structural Plastic shall be Color No. 30227 in accordance with Federal Color Standard 595B.
8. Lengths of U-bolts are measured from the inner diameter to the end of bolt (End to end of bolt minus one bolt diameter). Lengths of all bolts given in this set of plans assume a maximum 8" post diameter and may not be sufficient for post diameters over 8". The contractor shall verify that the lengths of all bolts are sufficient prior to ordering bolts.

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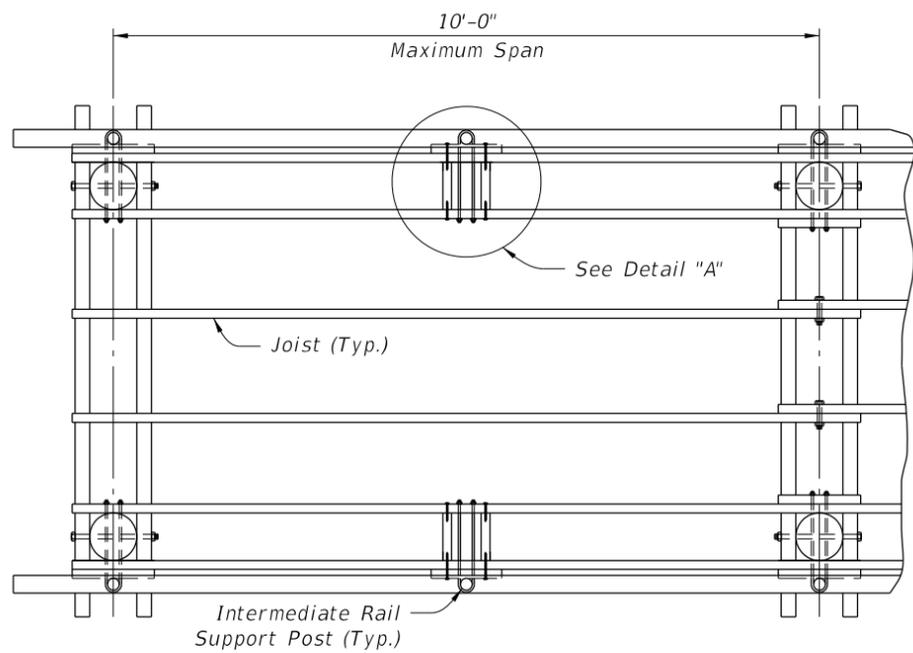
REVISIONS						AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE:	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		CHECKED BY: RH	ROAD NO.	COUNTY	ACE PROJECT NUMBER	GENERAL NOTES	
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK		
						CHECKED BY: LP					SHEET NO. S-2	

SUSERS

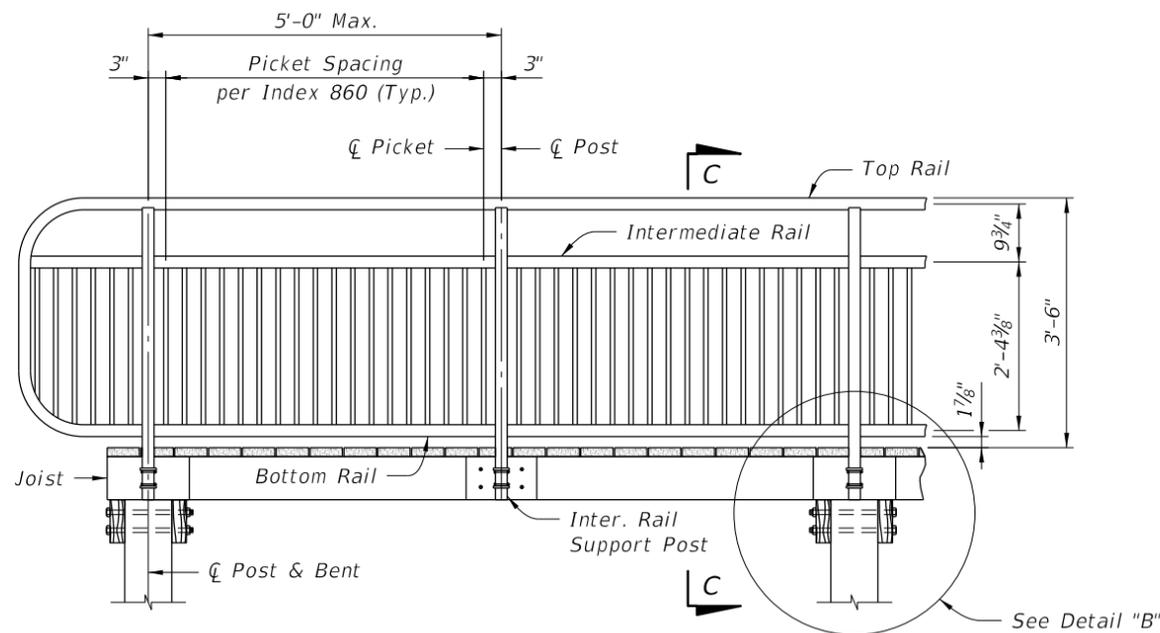
SDATES

STIMES

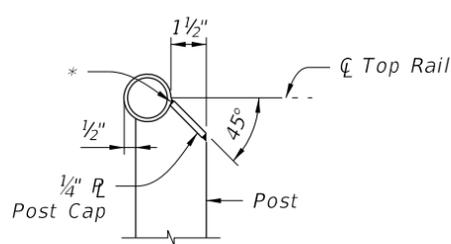
SFILES



PLAN

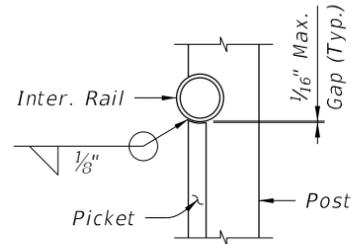


ELEVATION

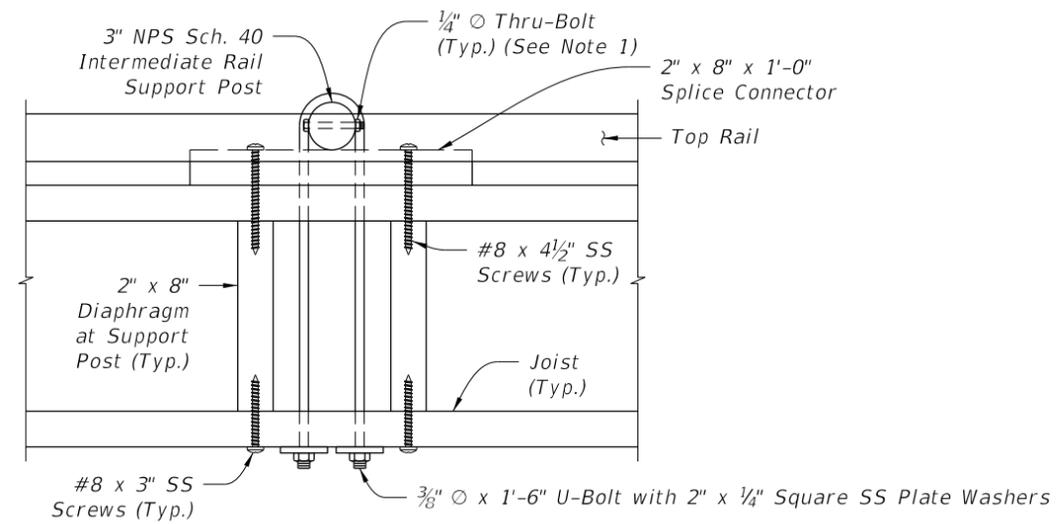


TOP RAIL & POST CONNECTION

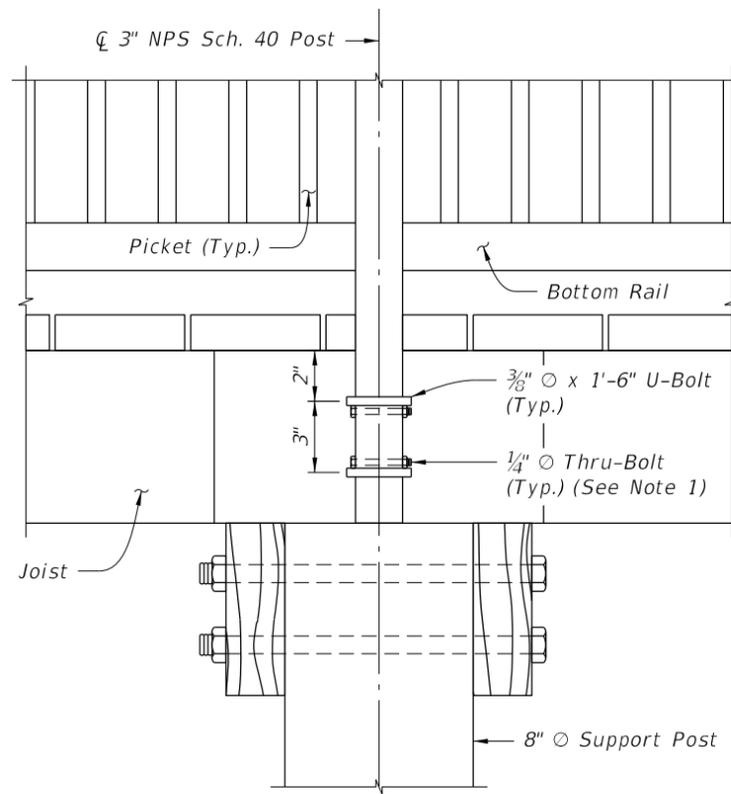
*1/4" Seal Weld Cap to top of post, all sides



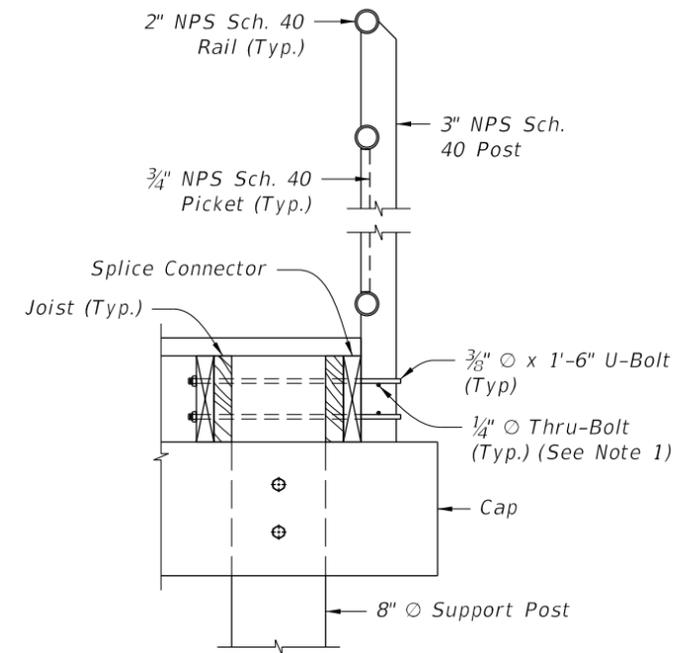
INTERMEDIATE RAIL & POST CONNECTION
(Intermediate Rail shown, Bottom Rail similar)



DETAIL "A"



DETAIL "B"



SECTION C-C

NOTE:

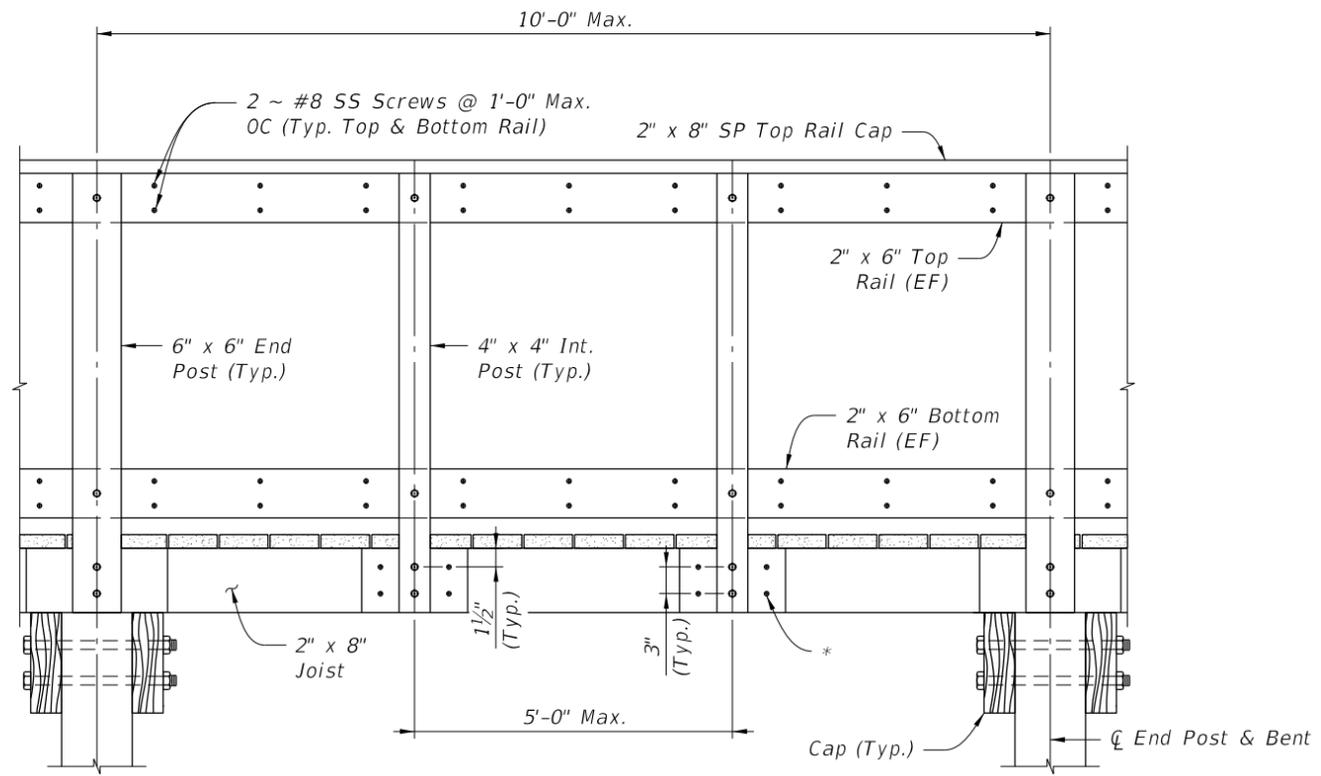
- Contractor shall install bolts such that either the 3/8" U-Bolt bears on the head and nut of the 1/4" Thru-Bolt or the 3/8" U-Bolt bears on the 1/4" Thru-Bolt itself. Contractor shall deform the threads at the end of the 1/4" Thru-Bolt after installation to prevent the nut from working free.
- For additional Aluminum Pedestrian/Bicycle Picket Railing details, see Index No. 860 (2010 FDOT Design Standards).
- Contractor shall submit shop drawings for the Aluminum Pedestrian/Bicycle Picket Railing.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

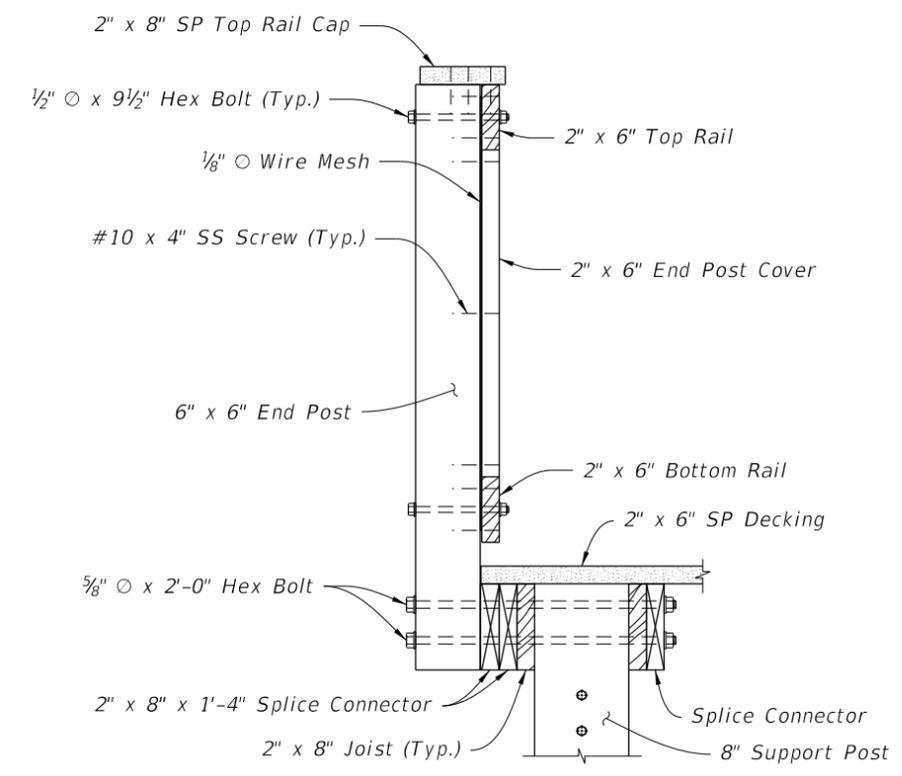
AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
Certificate of Authorization No. 9302
Richard A. Hunter, P.E. No. 50601

DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE		
CHECKED BY: RH	ROAD NO.	COUNTY	ACE PROJECT NUMBER
DESIGNED BY: AM	N/A	ST. LUCIE	516978-7
CHECKED BY: LP			

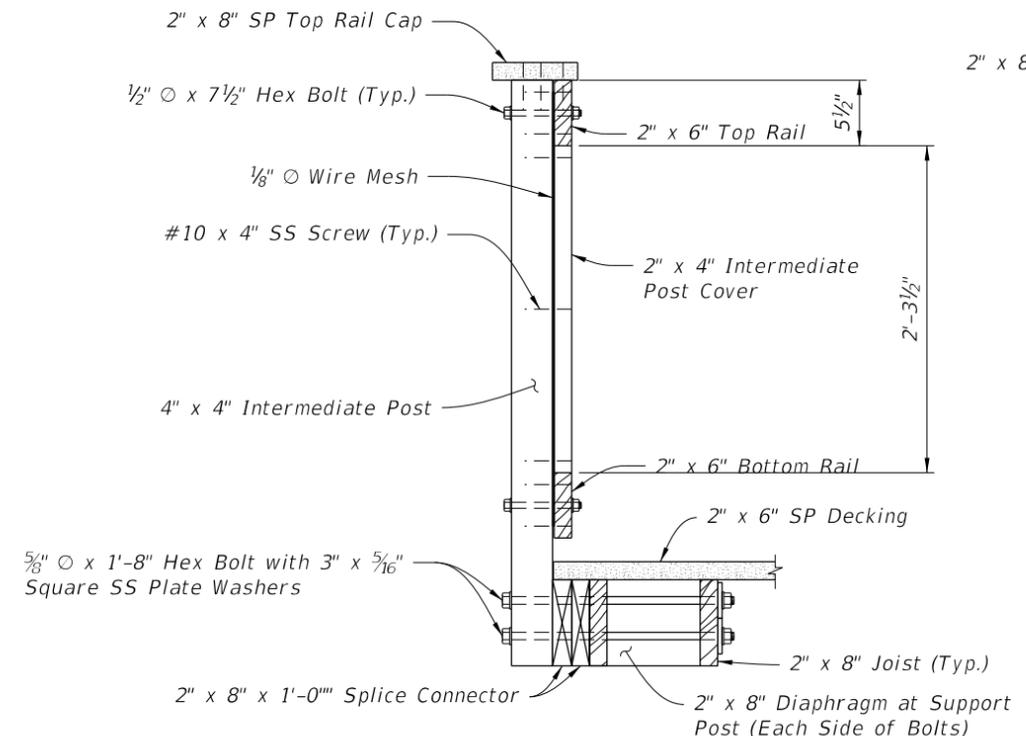
SHEET TITLE: ALUMINUM PEDESTRIAN/BICYCLE PICKET RAILING		REF. DWG. NO.
PROJECT NAME: RIVERWALK AND WESTMORELAND PARK		SHEET NO. S-3



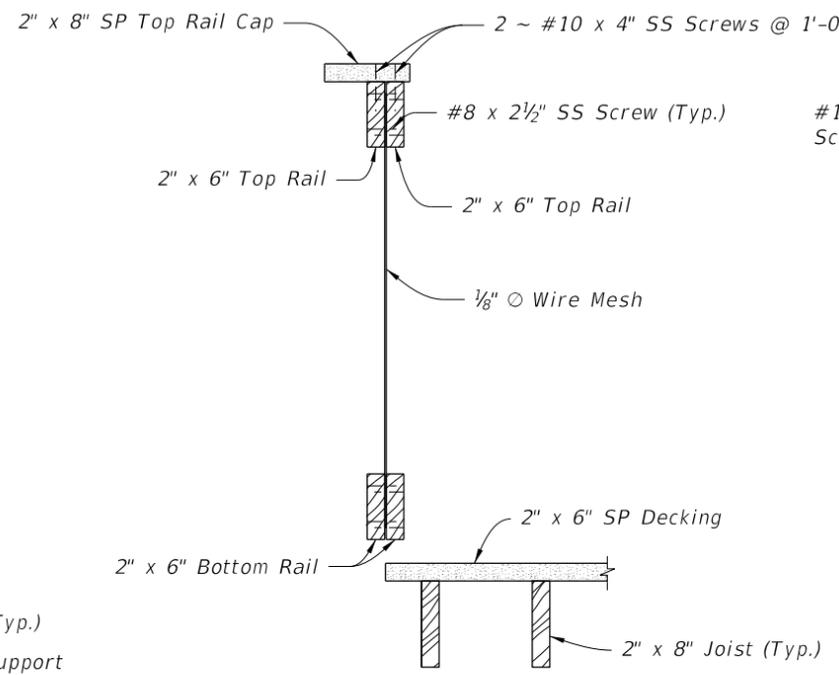
ELEVATION (WIRE MESH RAILING)



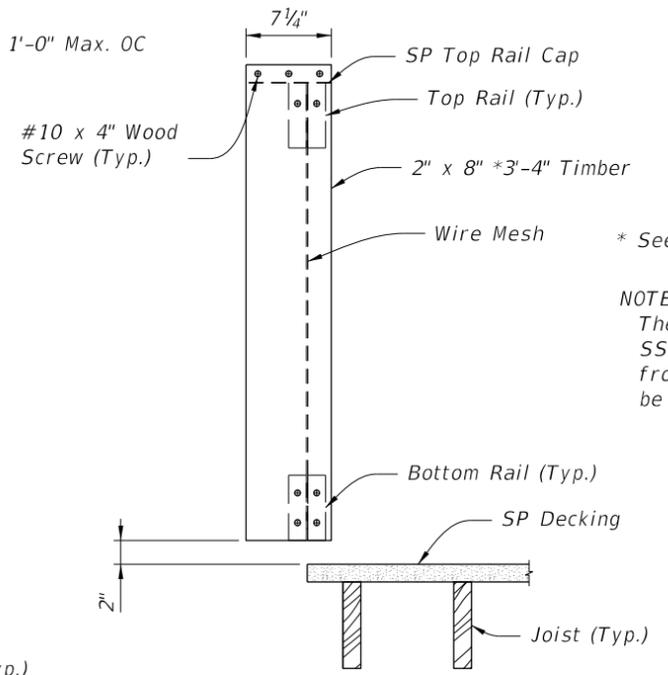
SECTION THROUGH WIRE MESH RAILING AT Q END POST & BENT
(Cap Not Shown for Clarity)



SECTION THROUGH WIRE MESH RAILING AT INTERMEDIATE POST



SECTION THROUGH WIRE MESH RAILING AT MIDSPAN OF RAILING



SECTION THROUGH HANDRAIL AT BEGIN/END BOARDWALK

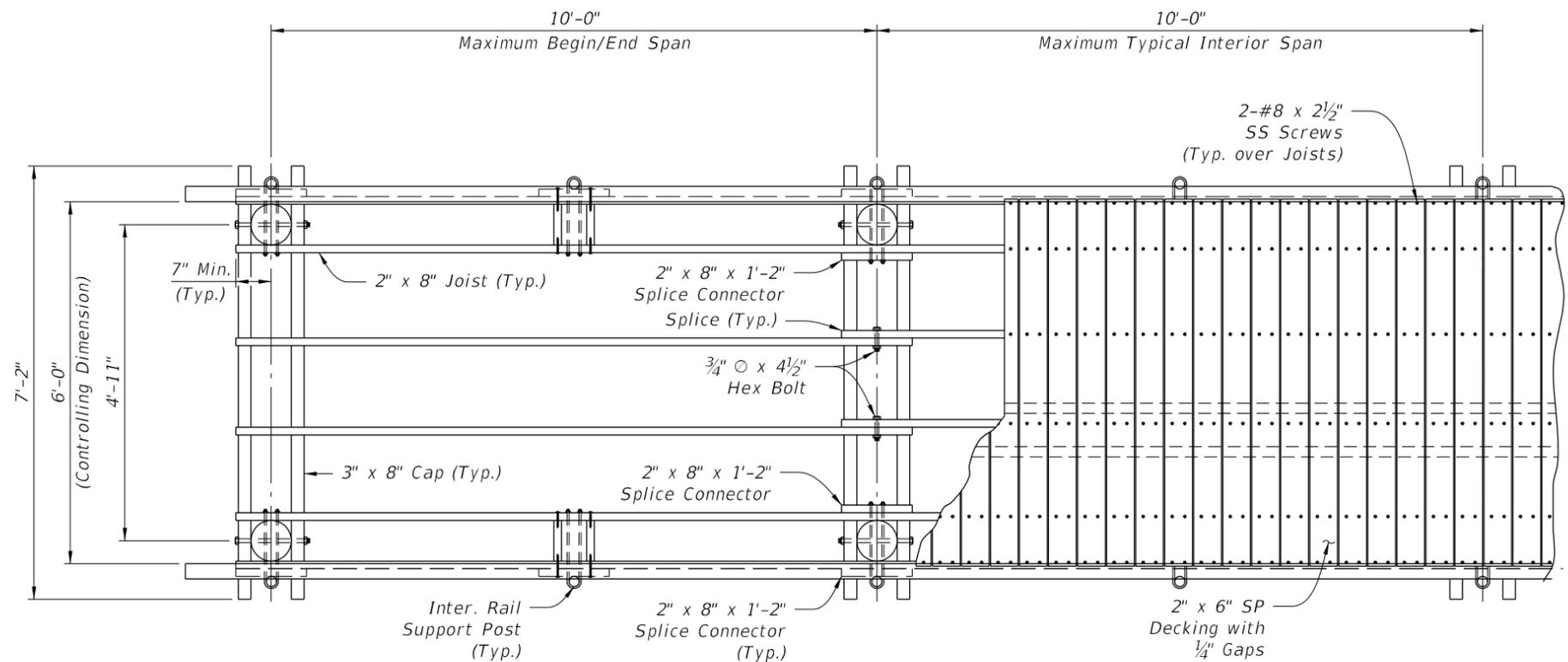
* See Detail "A" on Sheet S-3 for screw sizes.

NOTE:
The minimum center-to-center spacing between SS screws shall be 7/8". The minimum spacing from center of screw to edge of timber shall be 7/8".

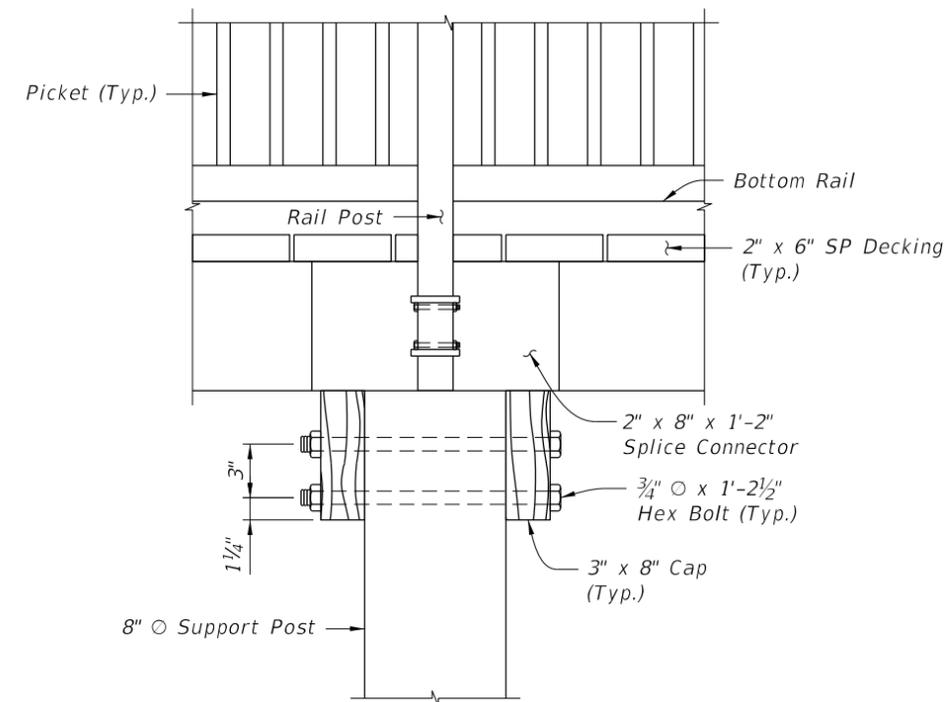
FOR INFORMATION ONLY

REVISIONS						AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	DRAWN BY: JV/RR/CB CHECKED BY: RH DESIGNED BY: AM CHECKED BY: LP			CITY OF PORT ST. LUCIE ROAD NO. COUNTY ACE PROJECT NUMBER N/A ST. LUCIE 516978-7			SHEET TITLE: WIRE MESH RAILING PROJECT NAME: RIVERWALK AND WESTMORELAND PARK		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION							SHEET NO.			
												S-4			

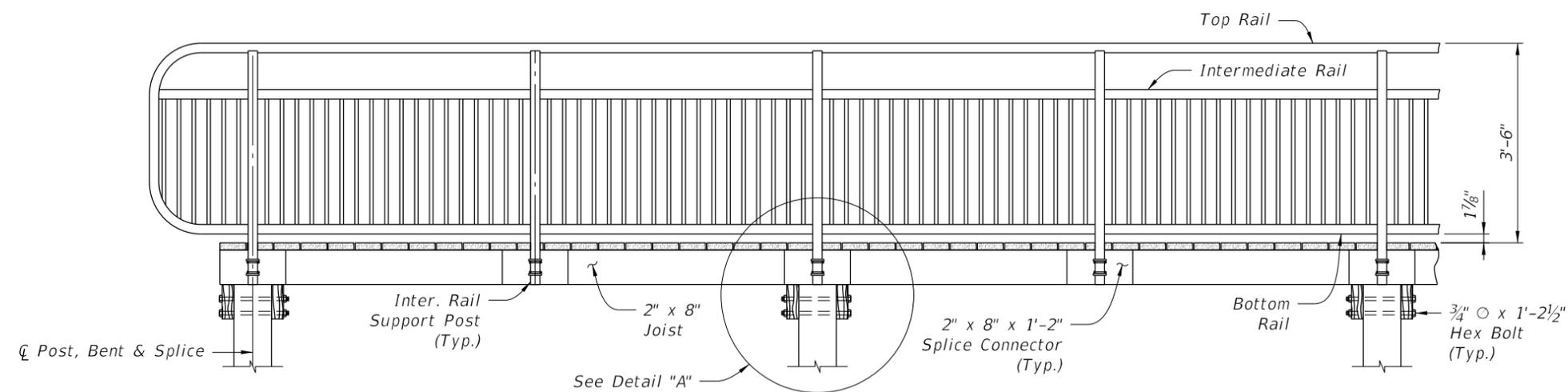
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PLAN



DETAIL "A"

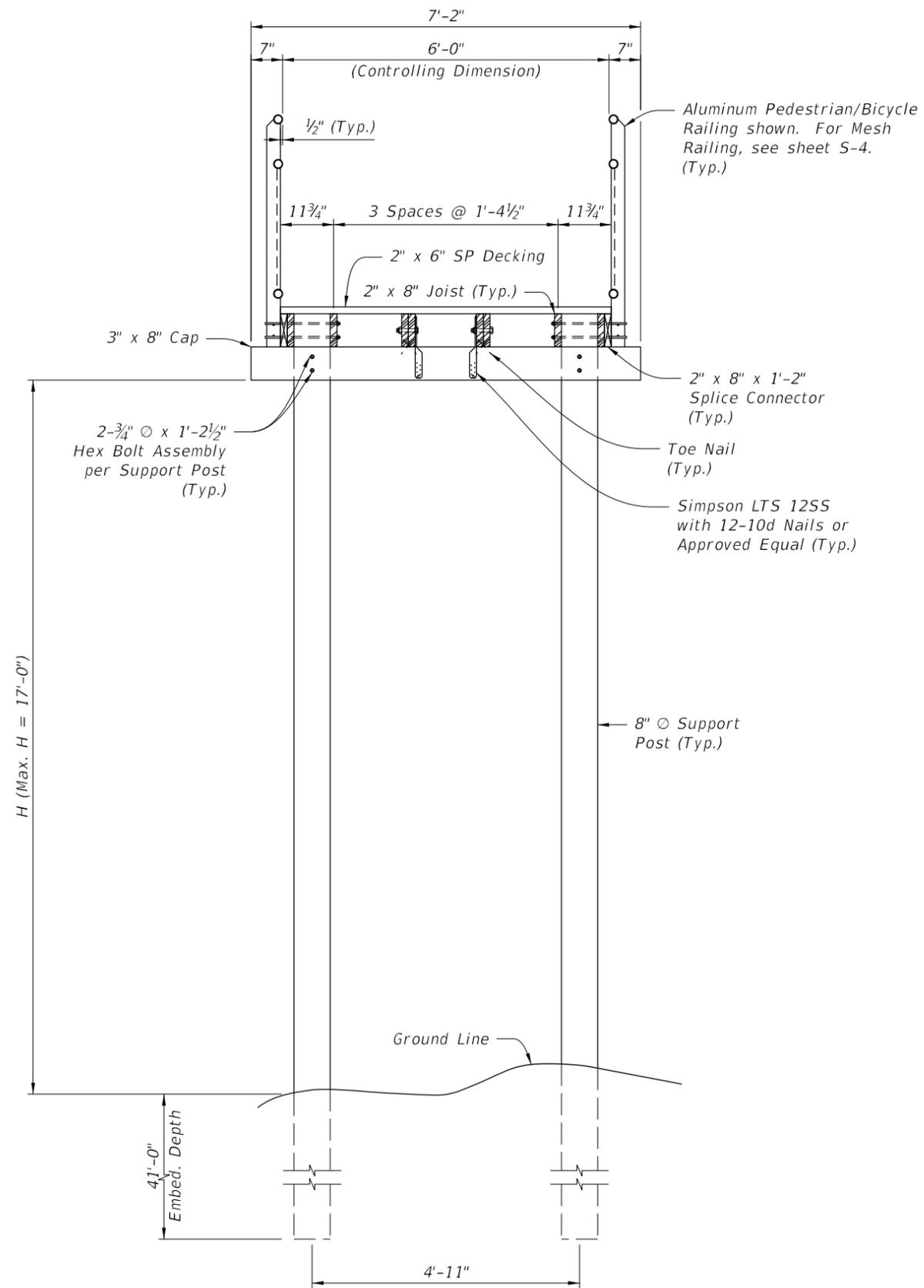


ELEVATION

- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Typical Section, see sheet S-6.
 4. For Boardwalk Lighting Details, see sheet S-18.

REVISIONS						AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	DRAWN BY: JV/RR/CB CHECKED BY: RH DESIGNED BY: AM CHECKED BY: LP			CITY OF PORT ST. LUCIE ROAD NO. COUNTY ACE PROJECT NUMBER N/A ST. LUCIE 516978-7			SHEET TITLE: 6'-0" BOARDWALK (1 OF 2)		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		PROJECT NAME: RIVERWALK AND WESTMORELAND PARK					SHEET NO. S-5			

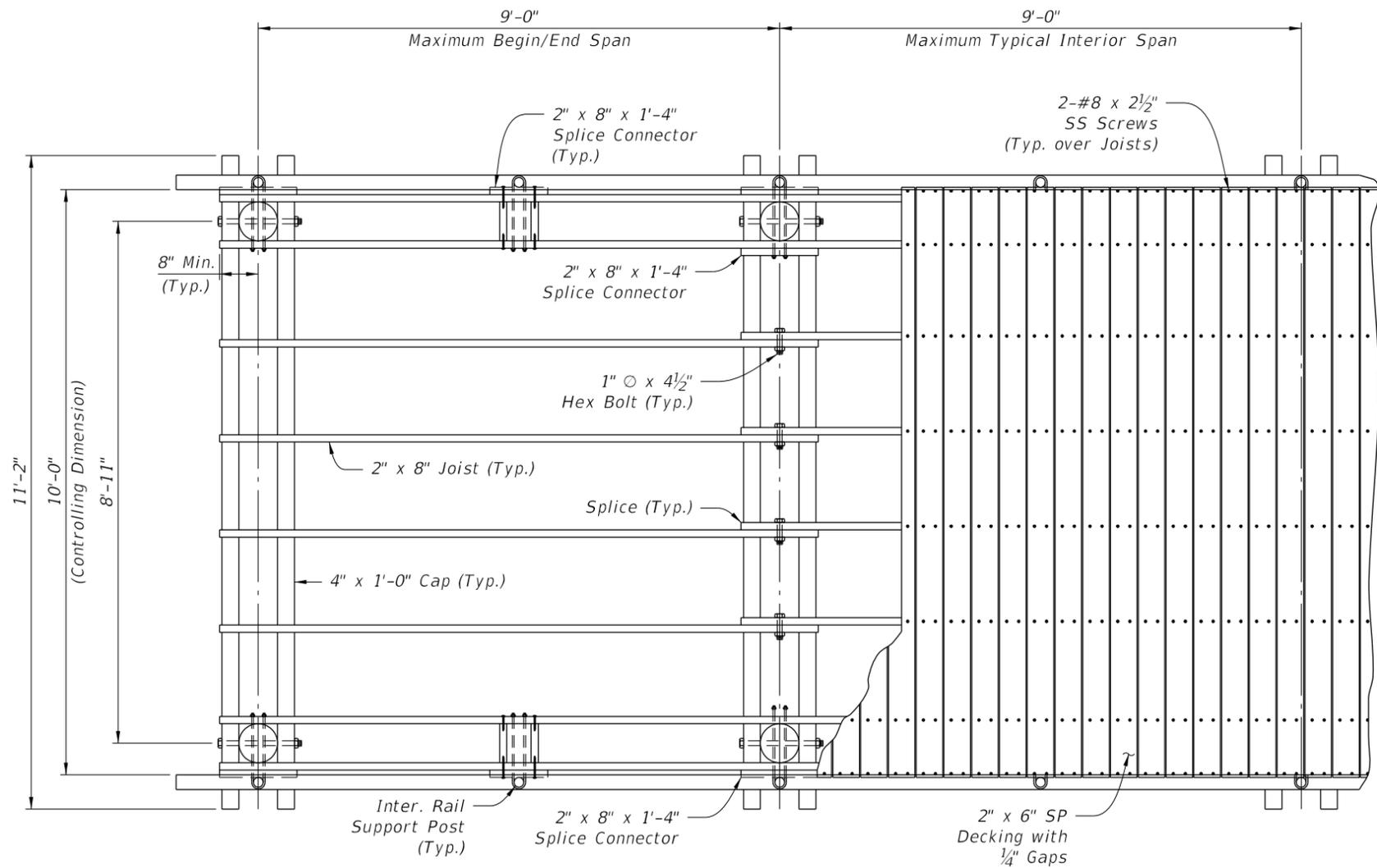
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



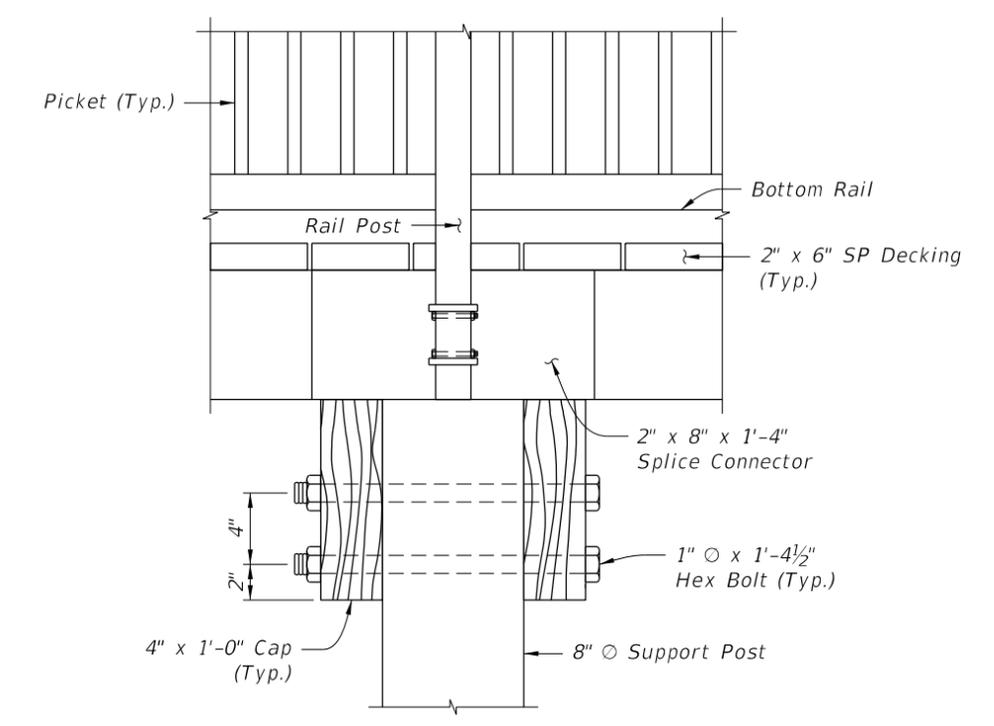
TYPICAL SECTION THROUGH BOARDWALK

- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Plan and Elevation, see sheet S-5.
 4. For Boardwalk Lighting Details, see sheet S-18.

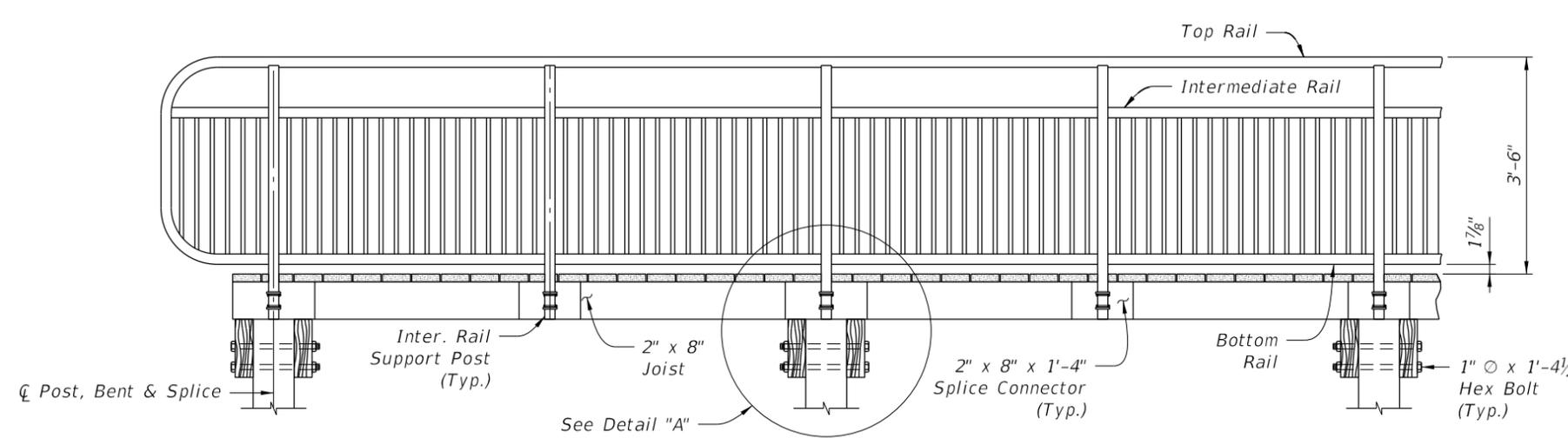
REVISIONS						AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	DRAWN BY: JV/RR/CB CHECKED BY: RH DESIGNED BY: AM CHECKED BY: LP	CITY OF PORT ST. LUCIE			SHEET TITLE: 6'-0" BOARDWALK (2 OF 2)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	ACE PROJECT NUMBER		
							N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-6	



PLAN



DETAIL "A"



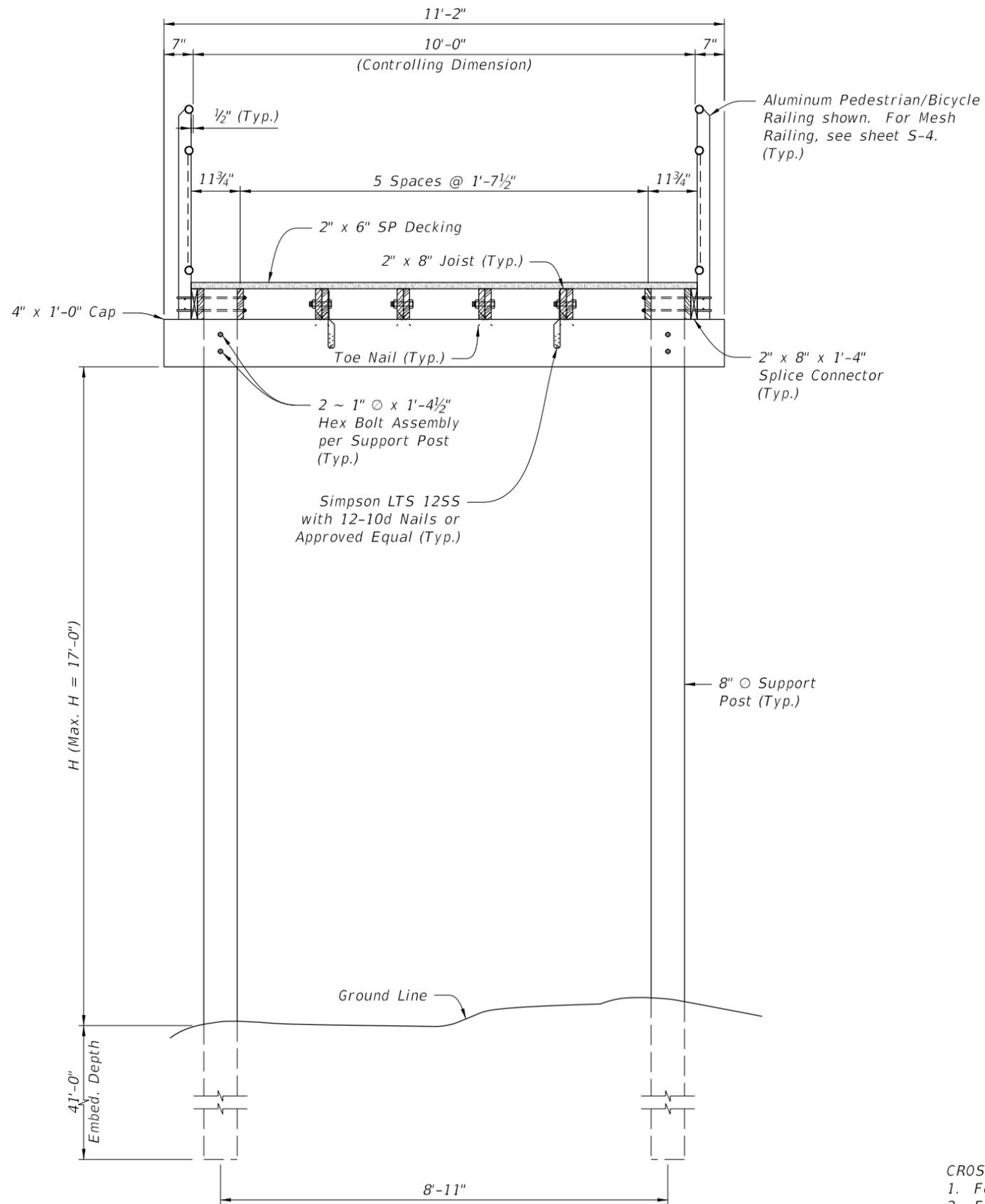
ELEVATION

- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Typical Section, see sheet S-8.

FOR INFORMATION ONLY

REVISIONS						DRAWN BY: JV/RR/CB CHECKED BY: RH DESIGNED BY: AM CHECKED BY: LP	CITY OF PORT ST. LUCIE			SHEET TITLE:		REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER	PROJECT NAME:		SHEET NO.
						N/A	ST. LUCIE	516978-7	10'-0" BOARDWALK (1 OF 2)			
						RIVERWALK AND WESTMORELAND PARK						S-7

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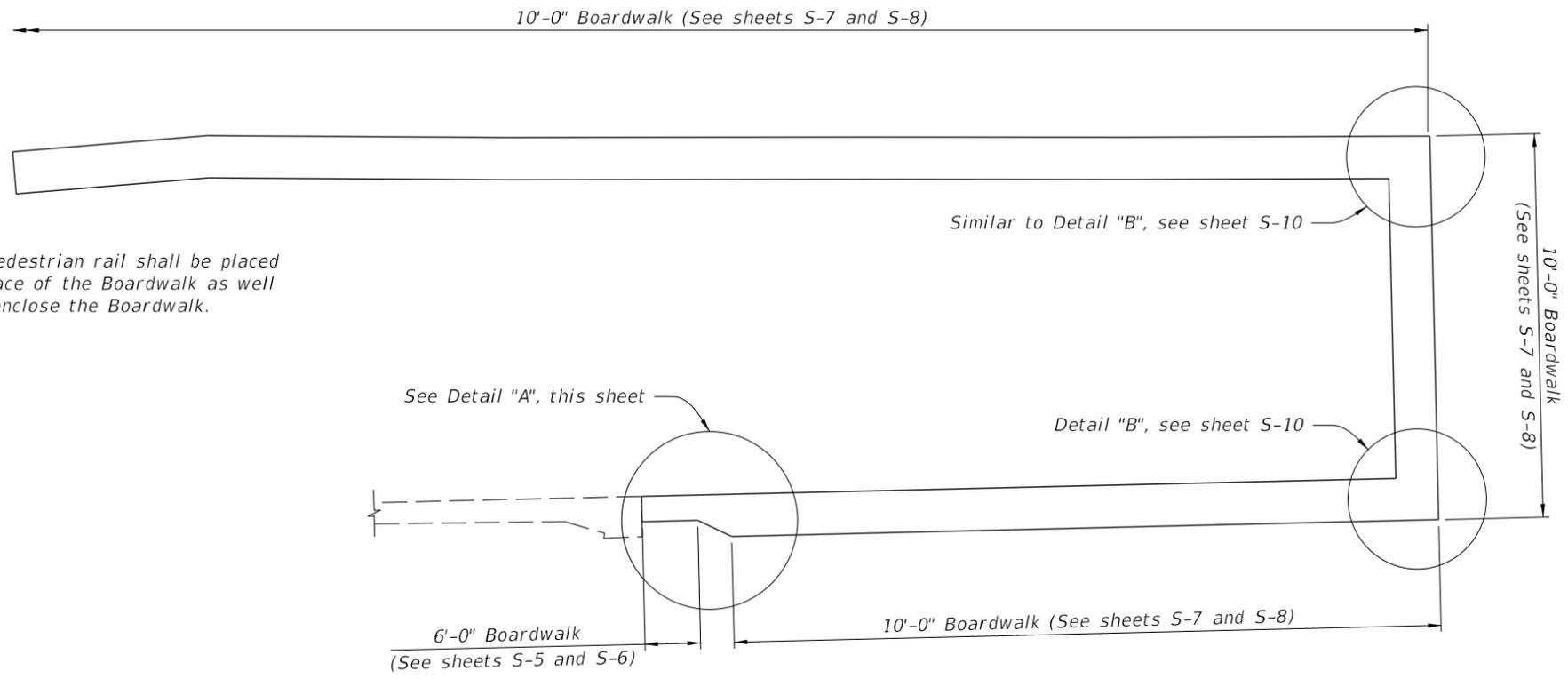
Aluminum Pedestrian/Bicycle Railing shown. For Mesh Railing, see sheet S-4. (Typ.)

- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Plan and Elevation, see sheet S-7.

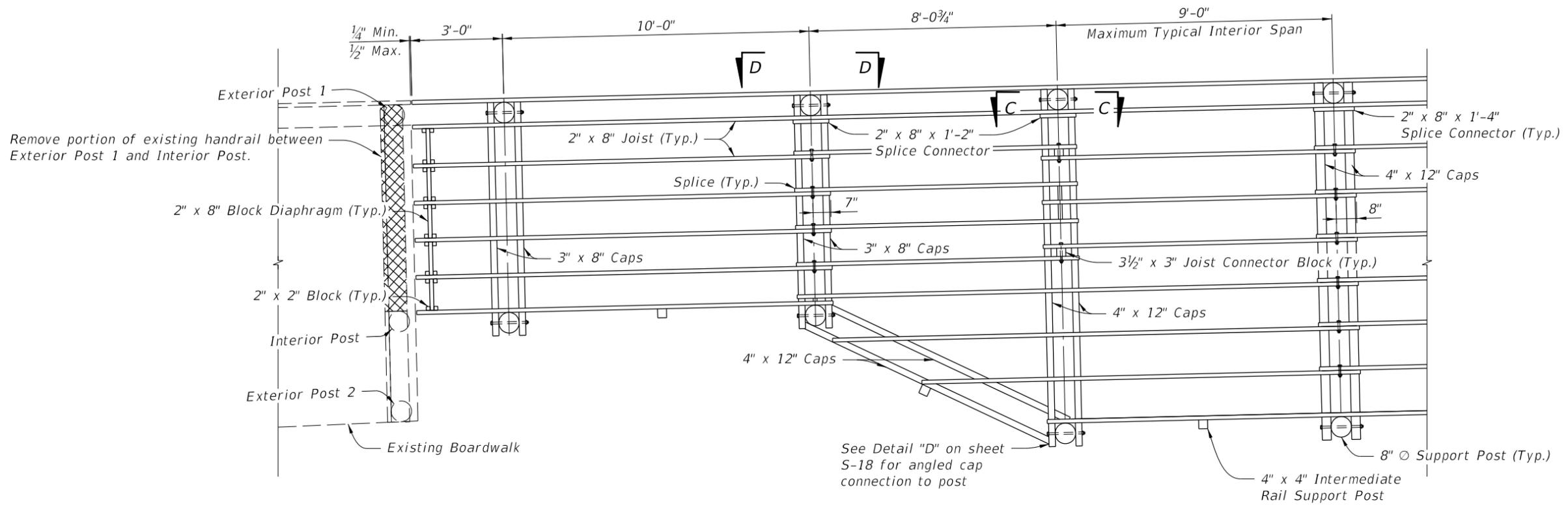
FOR INFORMATION ONLY

REVISIONS						DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE: 10'-0" BOARDWALK (2 OF 2)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH	N/A	ST. LUCIE	516978-7	PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-8
AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601						DESIGNED BY: AM					
						CHECKED BY: LP					

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OVERALL DOCK PLAN VIEW



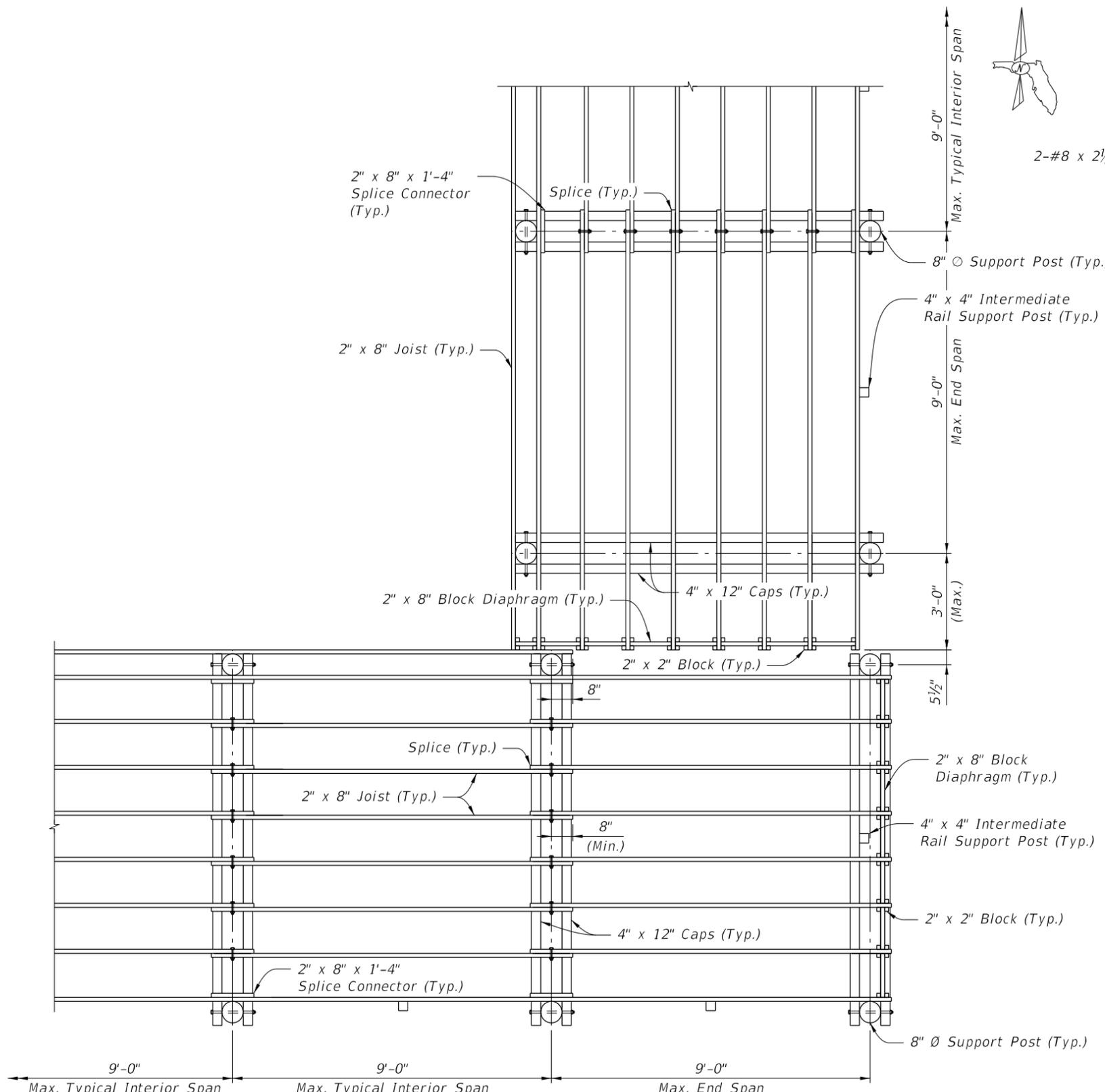
DETAIL "A"

FOR INFORMATION ONLY

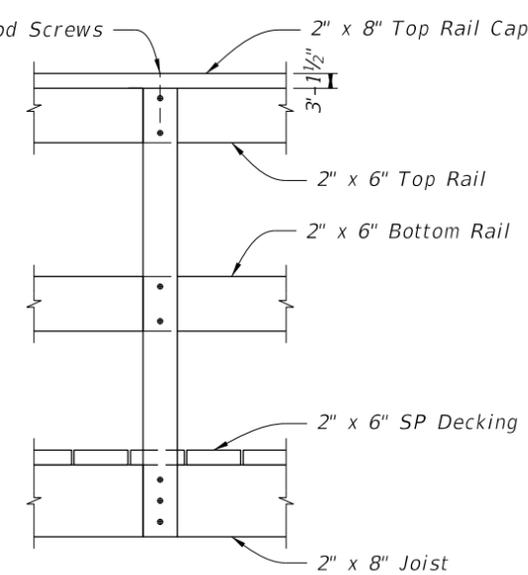
CROSS REFERENCE:
For additional details, see sheets S-10 and S-11.

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	ACE PROJECT NUMBER		
							N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK	S-9	

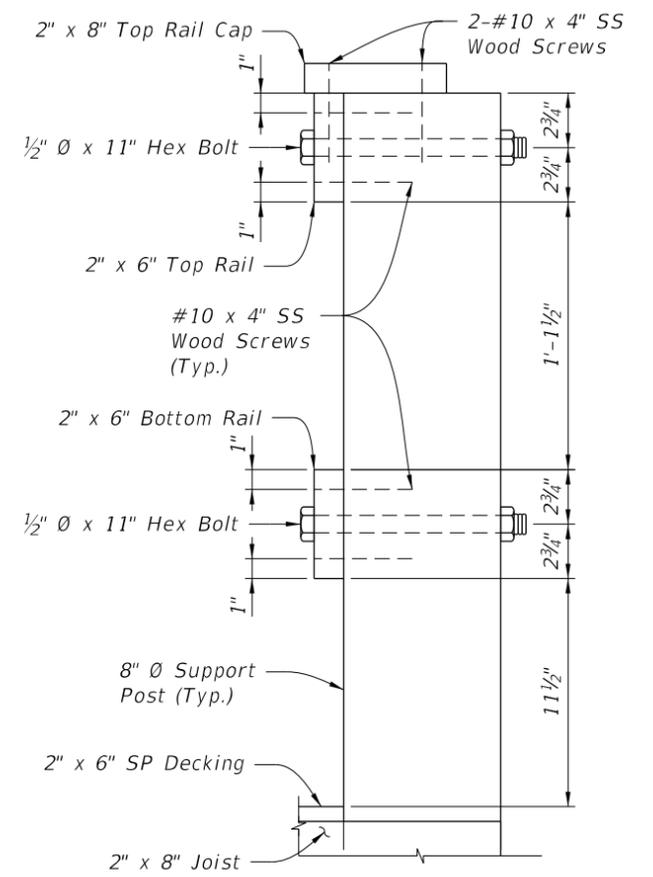
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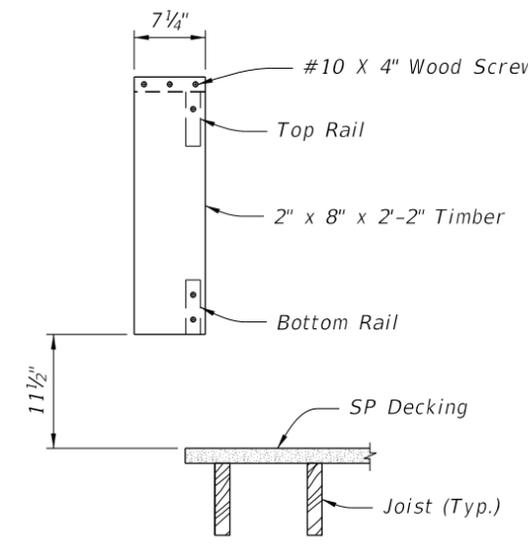
DETAIL "B"



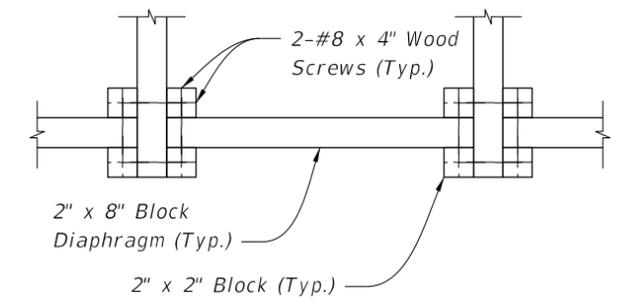
INTERMEDIATE RAIL POST CONNECTION



CONNECTION DETAILS



SECTION THROUGH HANDRAIL AT BEGIN/END BOARDWALK



DIAPHRAGM DETAIL (Typ. at End of Joists)

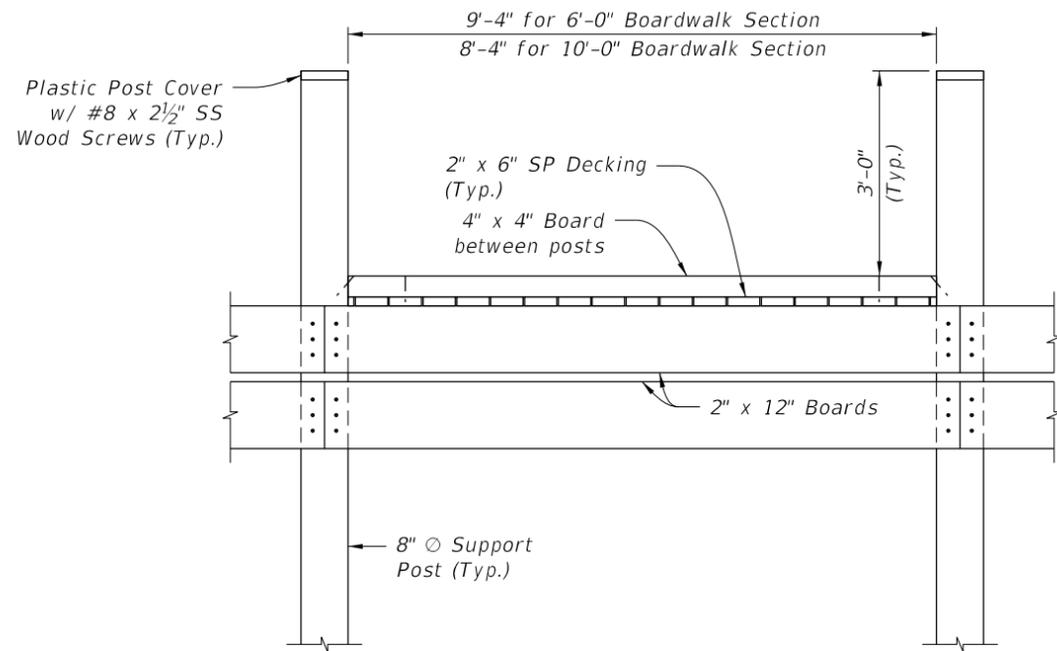
- CROSS REFERENCE:**
1. For location of Detail "B", see sheet S-9.
 2. For additional details, see sheet S-11.

FOR INFORMATION ONLY

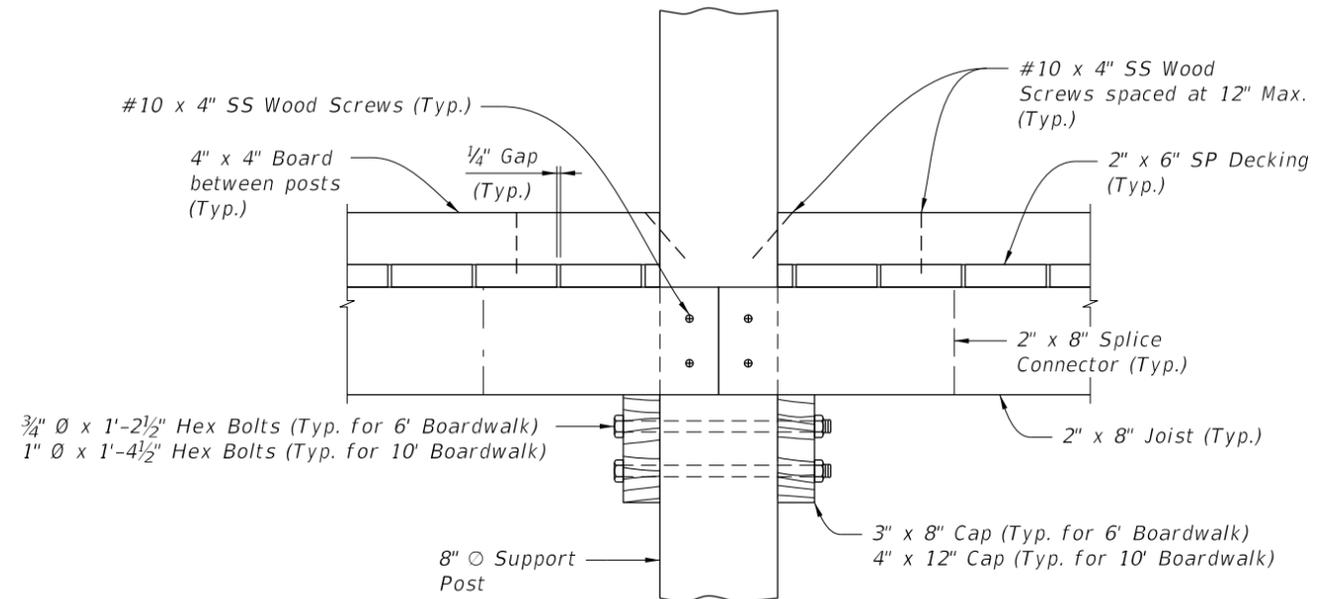
REVISIONS						DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE: BOAT DOCK (2 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7	PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-10
						CHECKED BY: LP					

AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC
2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
Certificate of Authorization No. 9302
Richard A. Hunter, P.E. No. 50601

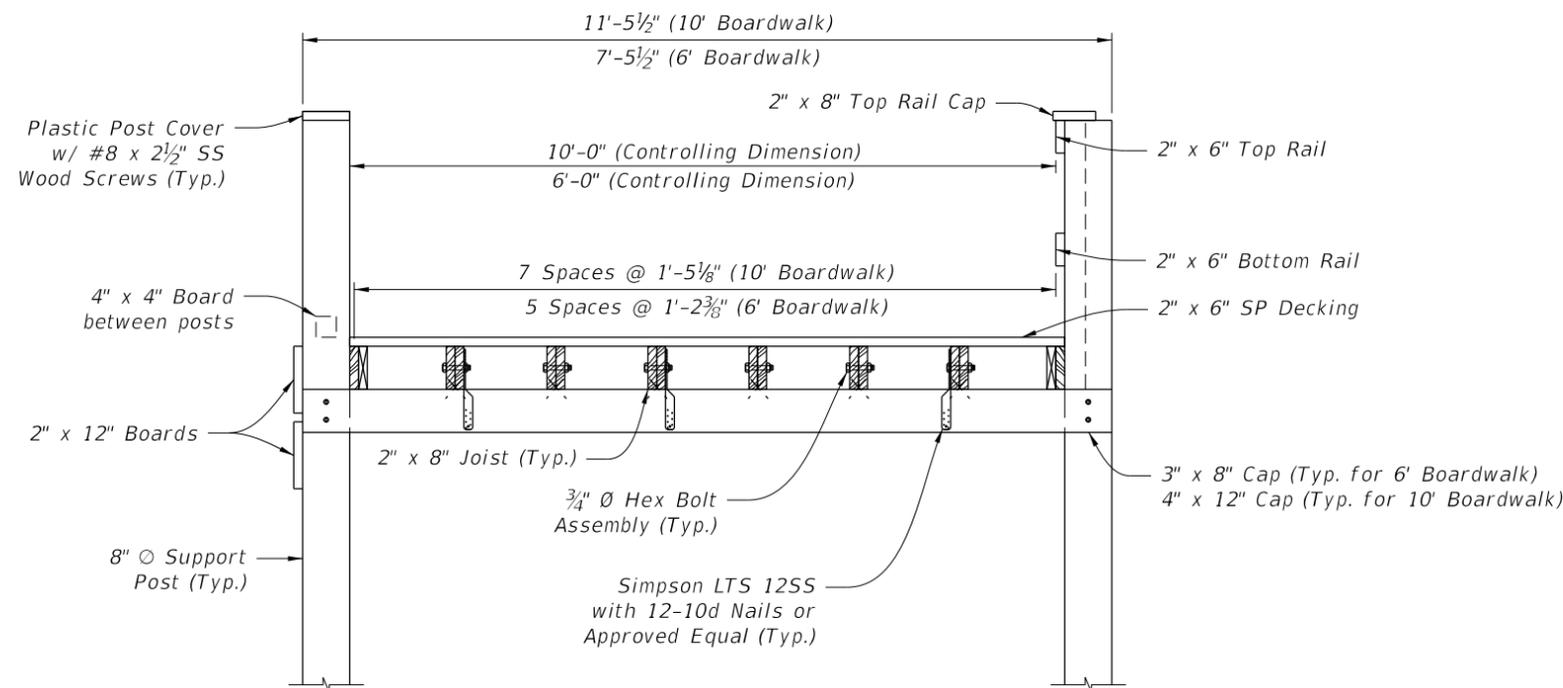
THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.



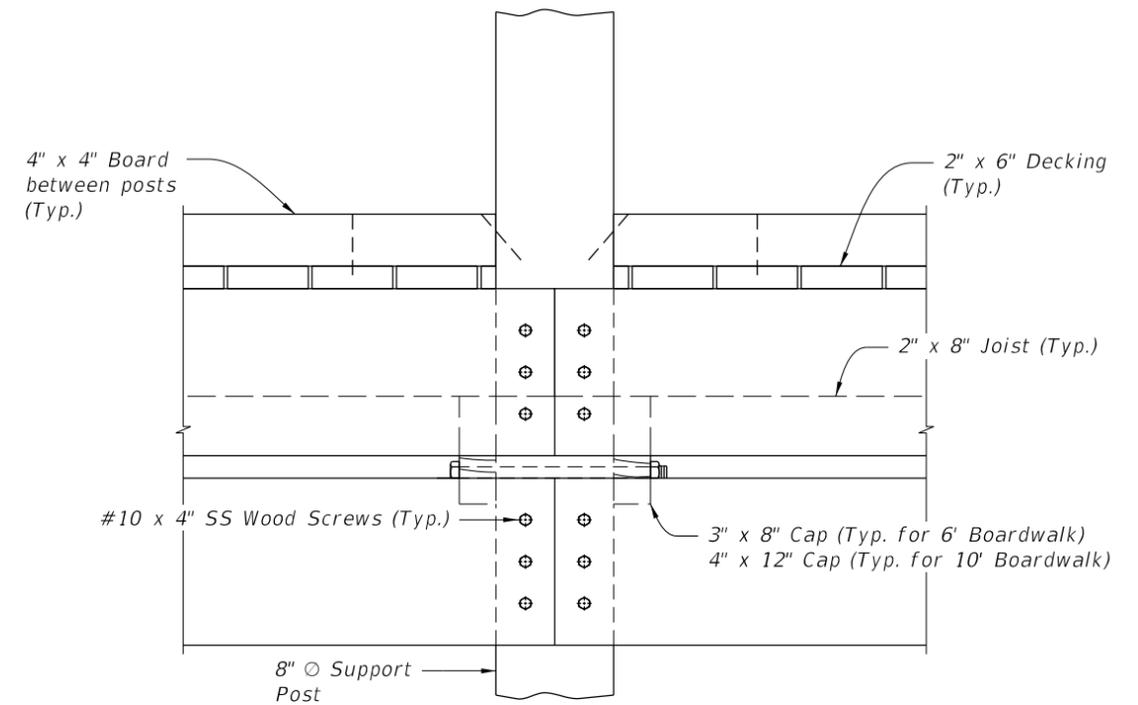
ELEVATION OF DOCK



SECTION C-C



TYPICAL SECTION THROUGH DOCK BOARDWALK
(See sheets S-5 thru S-8 for additional details)



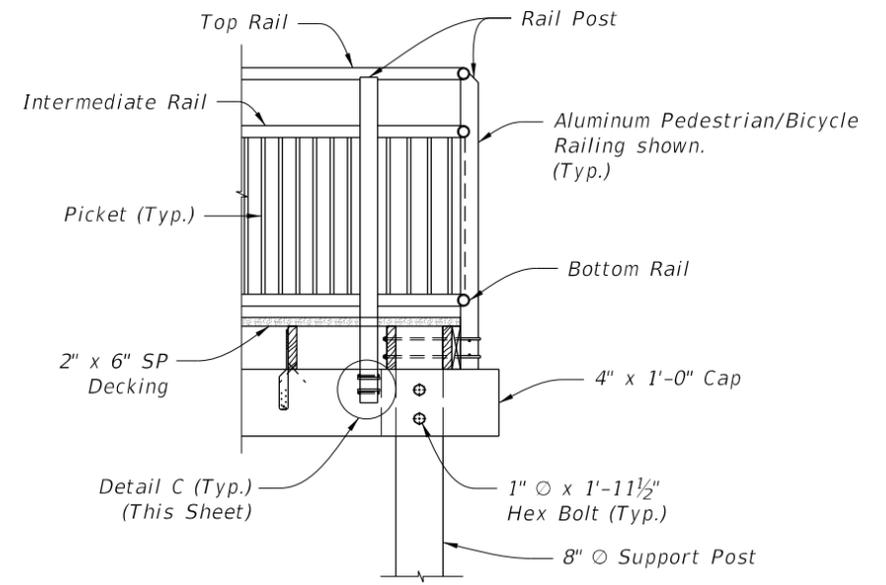
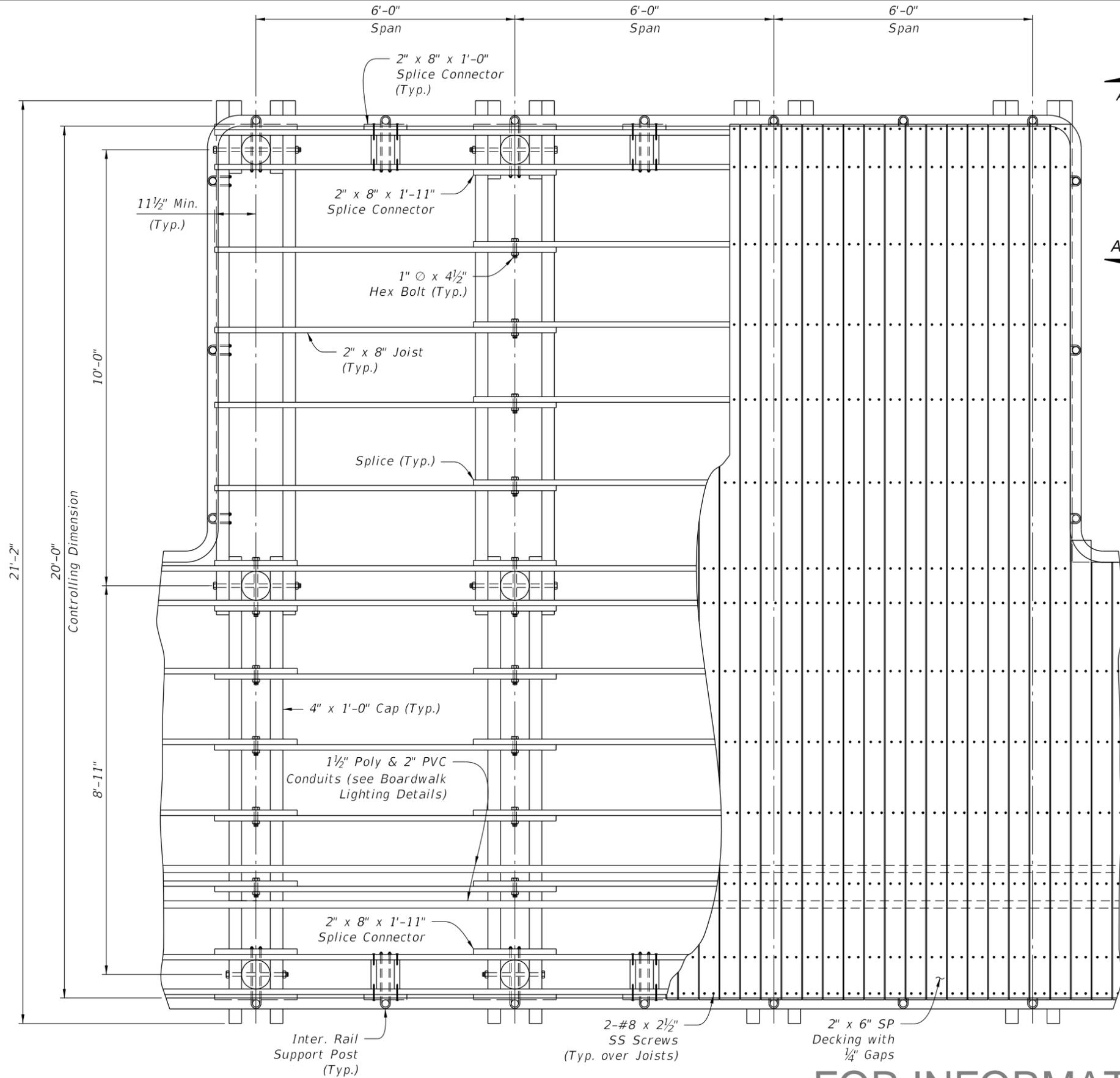
SECTION D-D

FOR INFORMATION ONLY

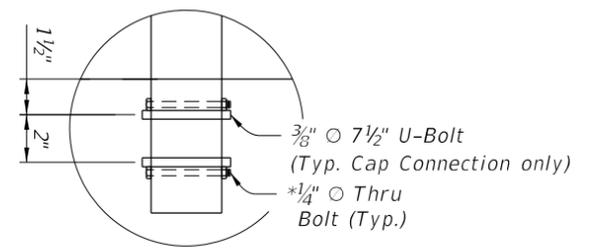
- CROSS REFERENCE:
1. For location of Sections C-C and D-D, see sheet S-9.
 2. For rail connections to post and additional details, see sheet S-10.

REVISIONS						DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE: BOAT DOCK (3 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH				PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-11
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7		
						CHECKED BY: LP					

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VIEW A-A



DETAIL C

* See Note 1 on sheet S-3.

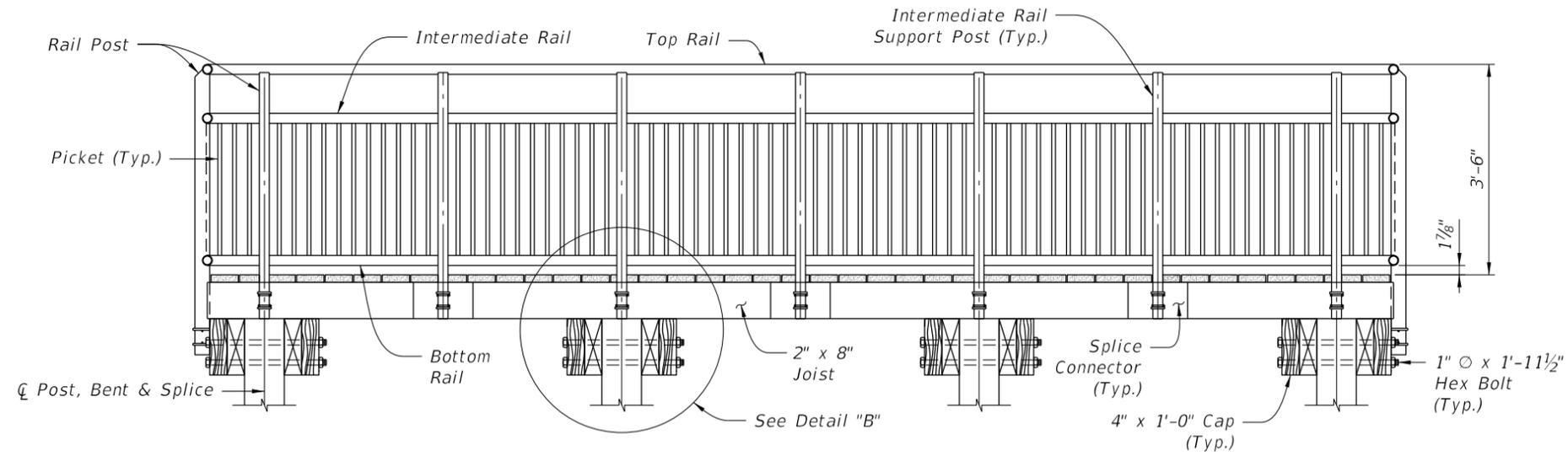
- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Elevation, see sheet S-13.
 4. For Typical Section, see sheet S-14.
 5. For Boardwalk Lighting Details, see sheet S-18.

FOR INFORMATION ONLY

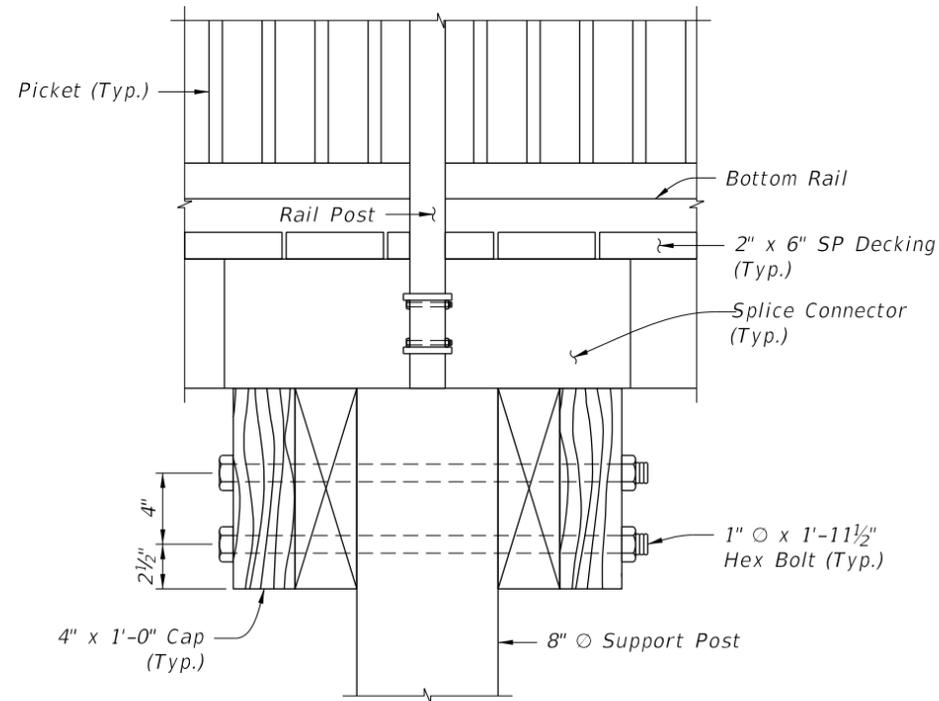
REVISIONS						DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE: 20'-0" OVERLOOK (1 OF 3)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH				PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-12
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7		
						CHECKED BY: LP					

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2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
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ELEVATION



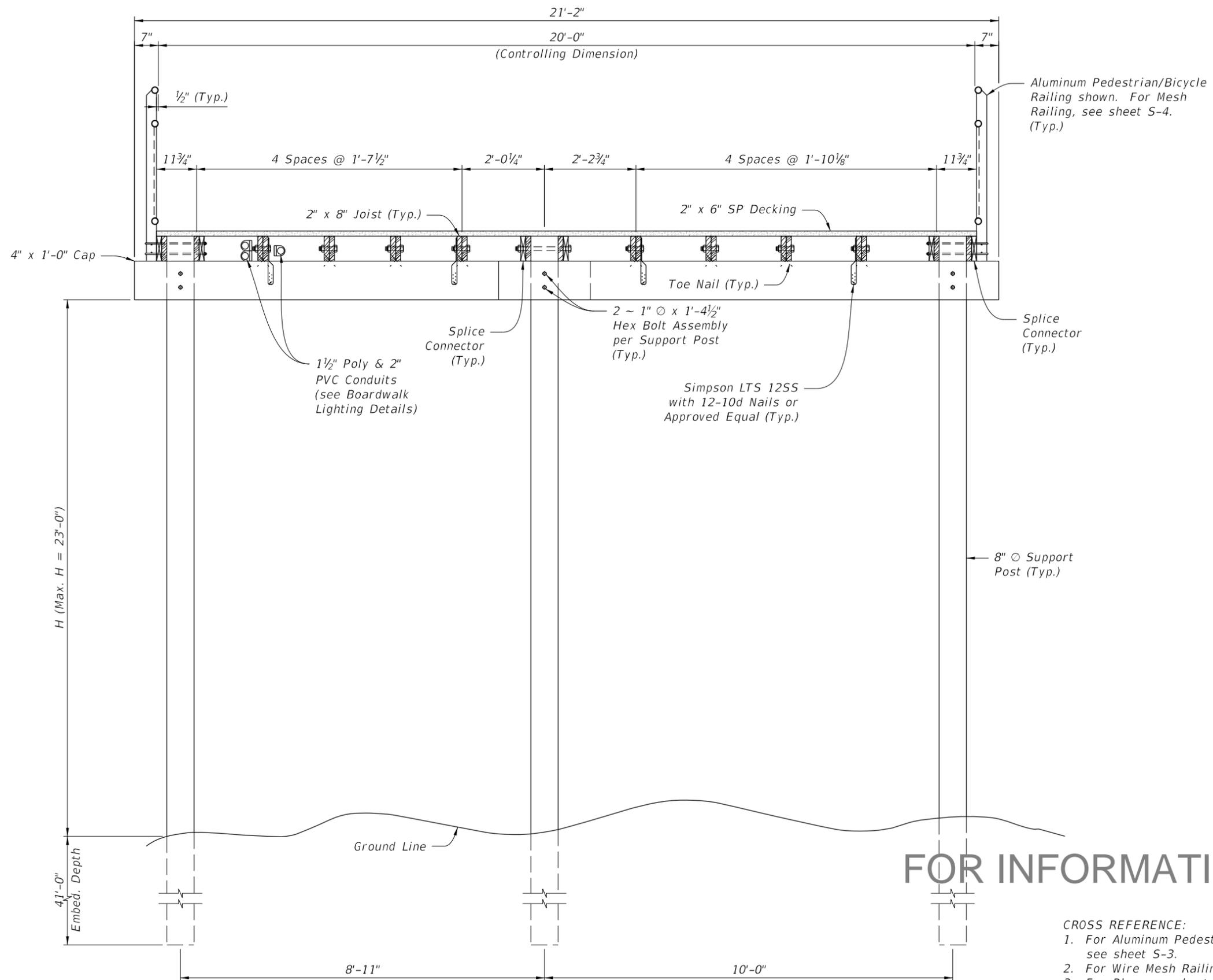
DETAIL "B"

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- CROSS REFERENCE:
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Plan, see sheet S-12.
 4. For Typical Section, see sheet S-14.

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	ACE PROJECT NUMBER		
							N/A	ST. LUCIE	516978-7	RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-13	

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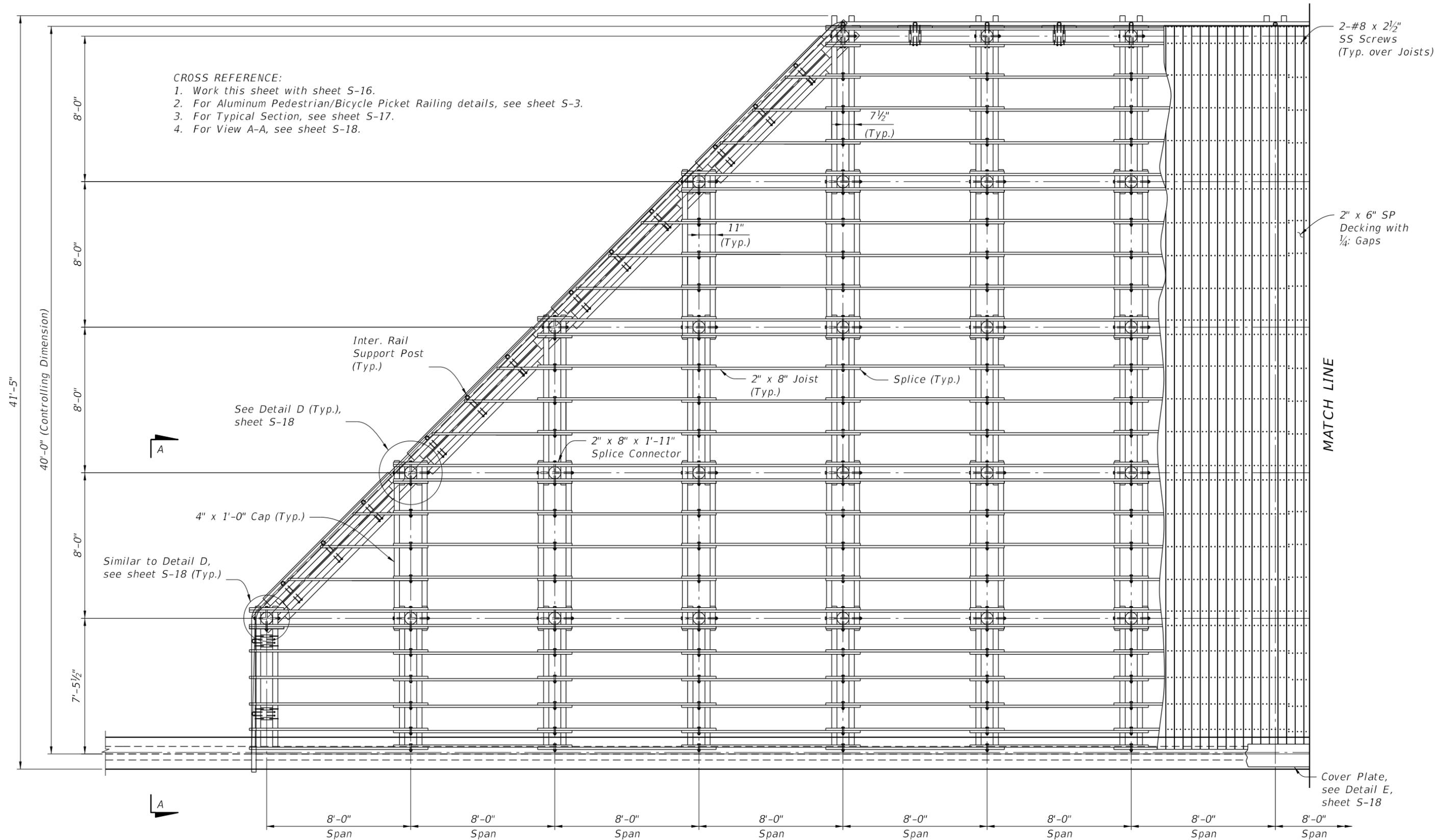
- CROSS REFERENCE:**
1. For Aluminum Pedestrian/Bicycle Picket Railing, see sheet S-3.
 2. For Wire Mesh Railing, see sheet S-4.
 3. For Plan, see sheet S-12.
 4. For Elevation, see sheet S-13.
 5. For Boardwalk Lighting Details, see sheet S-18.

TYPICAL SECTION THROUGH BOARDWALK

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH				PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-14
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7		
						CHECKED BY: LP					

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 Wesley Chapel, Florida 33544
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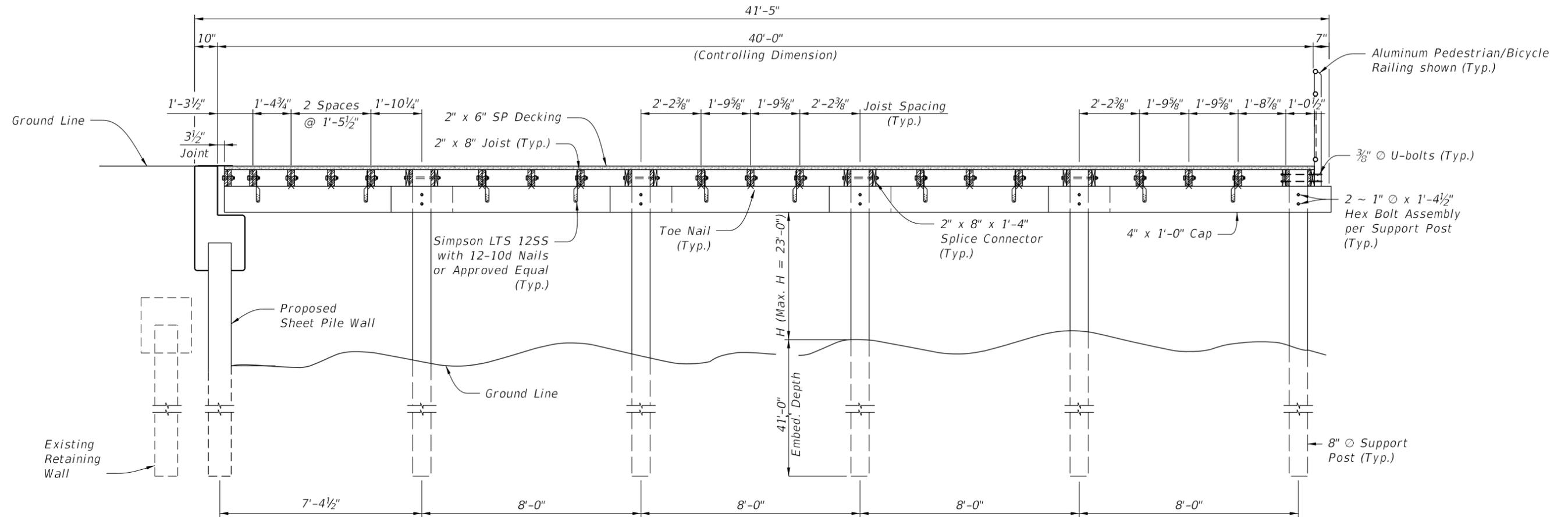
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PLAN

REVISIONS						AMERICAN CONSULTING ENGINEERS OF FLORIDA, LLC 2818 Cypress Ridge Blvd, Suite 200 Wesley Chapel, Florida 33544 Phone: (813) 435-2600 Fax: (813) 435-2601 Certificate of Authorization No. 9302 Richard A. Hunter, P.E. No. 50601	DRAWN BY: JV/RR/CB CHECKED BY: RH DESIGNED BY: AM CHECKED BY: LP	CITY OF PORT ST. LUCIE			SHEET TITLE: AQUATIC EDUCATION PLATFORM (1 OF 4) PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	ACE PROJECT NUMBER		SHEET NO.
						N/A	ST. LUCIE	516978-7	S-15			

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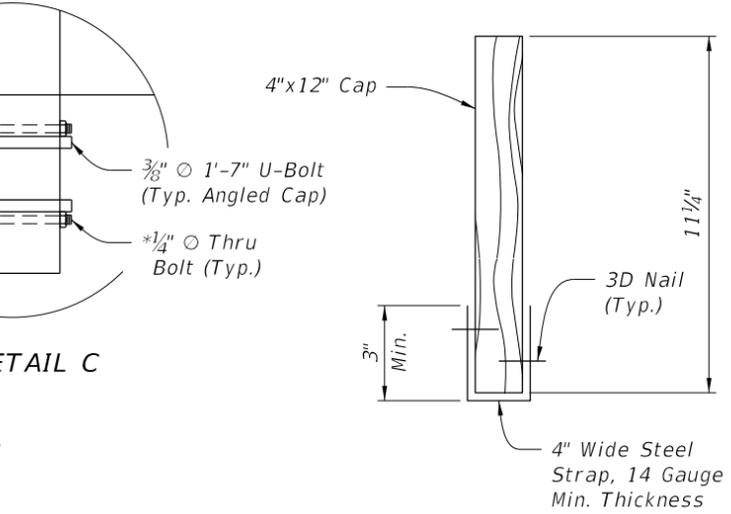
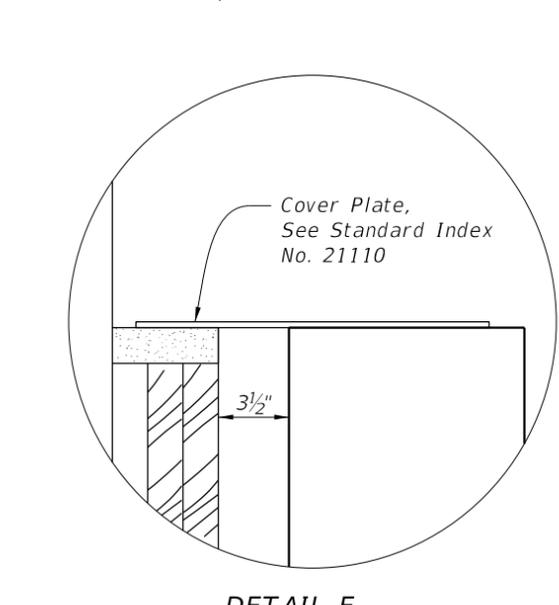
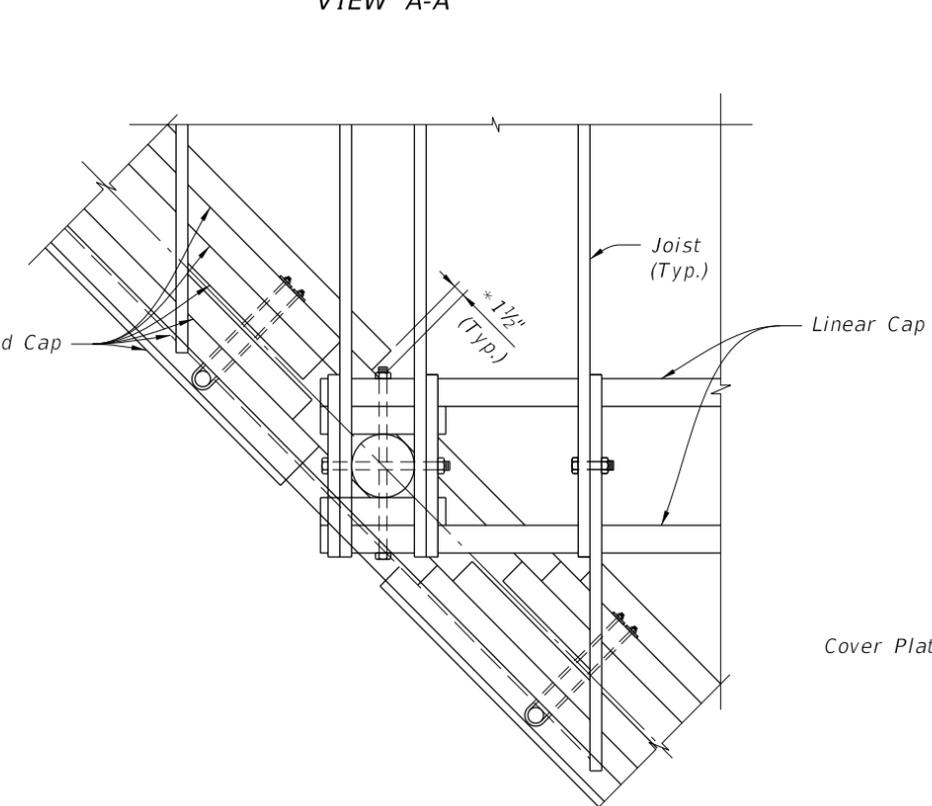
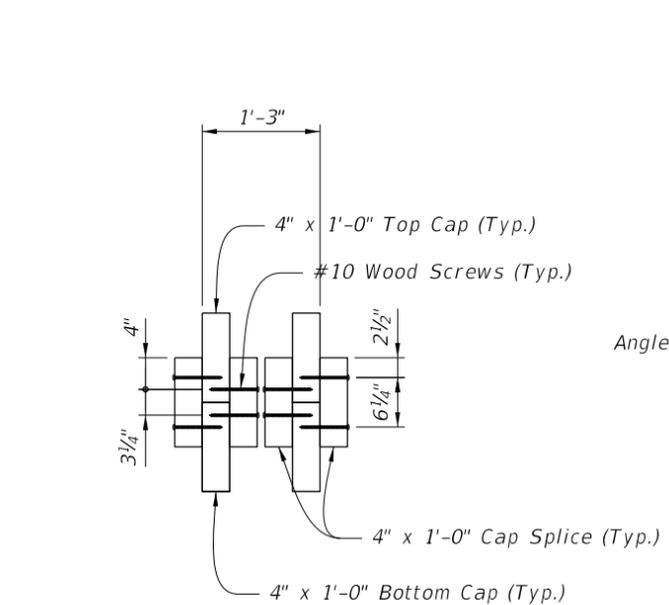
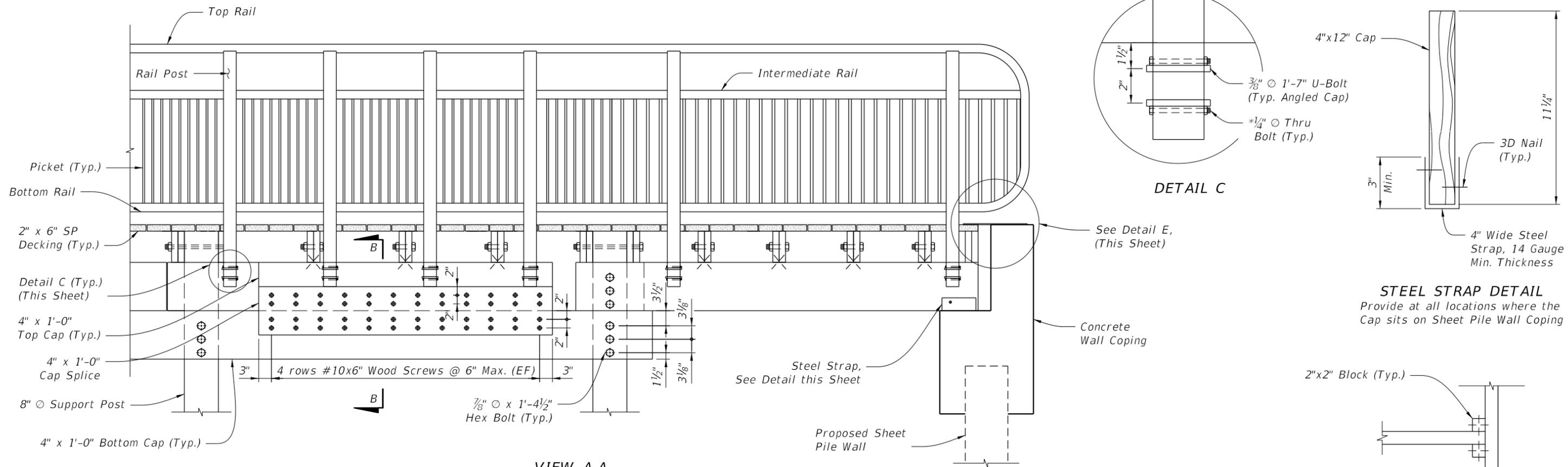


TYPICAL SECTION THROUGH BOARDWALK

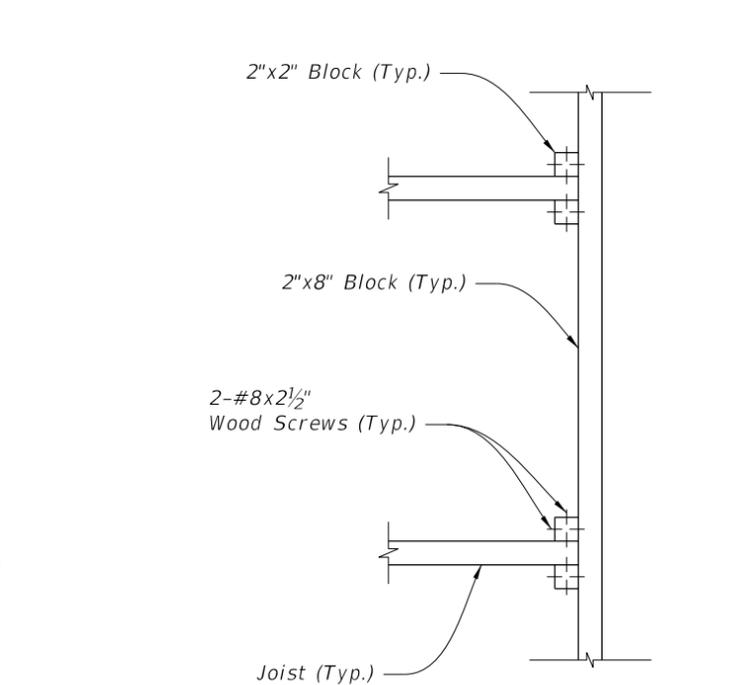
- CROSS REFERENCE:
 1. For Aluminum Pedestrian/Bicycle Picket Railing details, see sheet S-3.
 2. For Plan and Elevation, see sheet S-15 & S-16.

REVISIONS						DRAWN BY: JV/RR/CB	CITY OF PORT ST. LUCIE			SHEET TITLE: AQUATIC EDUCATION PLATFORM (3 OF 4)	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH				PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-17
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7		
						CHECKED BY: LP					

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STEEL STRAP DETAIL
Provide at all locations where the Cap sits on Sheet Pile Wall Coping



VIEW A-A

DETAIL D

DETAIL E

BLOCKING DETAIL

Cover Plate Can be Continuous or in segment lengths of no less than 10'-0".

CROSS REFERENCE:

1. For Aluminum Pedestrian/Bicycle Picket Railing details, see sheet S-3.
2. For location of View A-A, see sheet S-15.

NOTE:

1. Maximum Spacing for Pedestrian/Bicycle Railing shall be 5'-0".

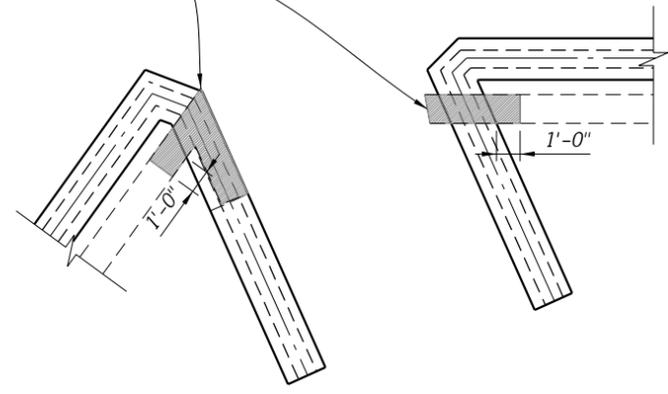
* Stop the angled top cap & middle cap splice boards with 1 1/2"± clearance between linear cap boards.

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER		
						CHECKED BY: RH				PROJECT NAME: RIVERWALK AND WESTMORELAND PARK	SHEET NO. S-18
						DESIGNED BY: AM	N/A	ST. LUCIE	516978-7		
						CHECKED BY: LP					

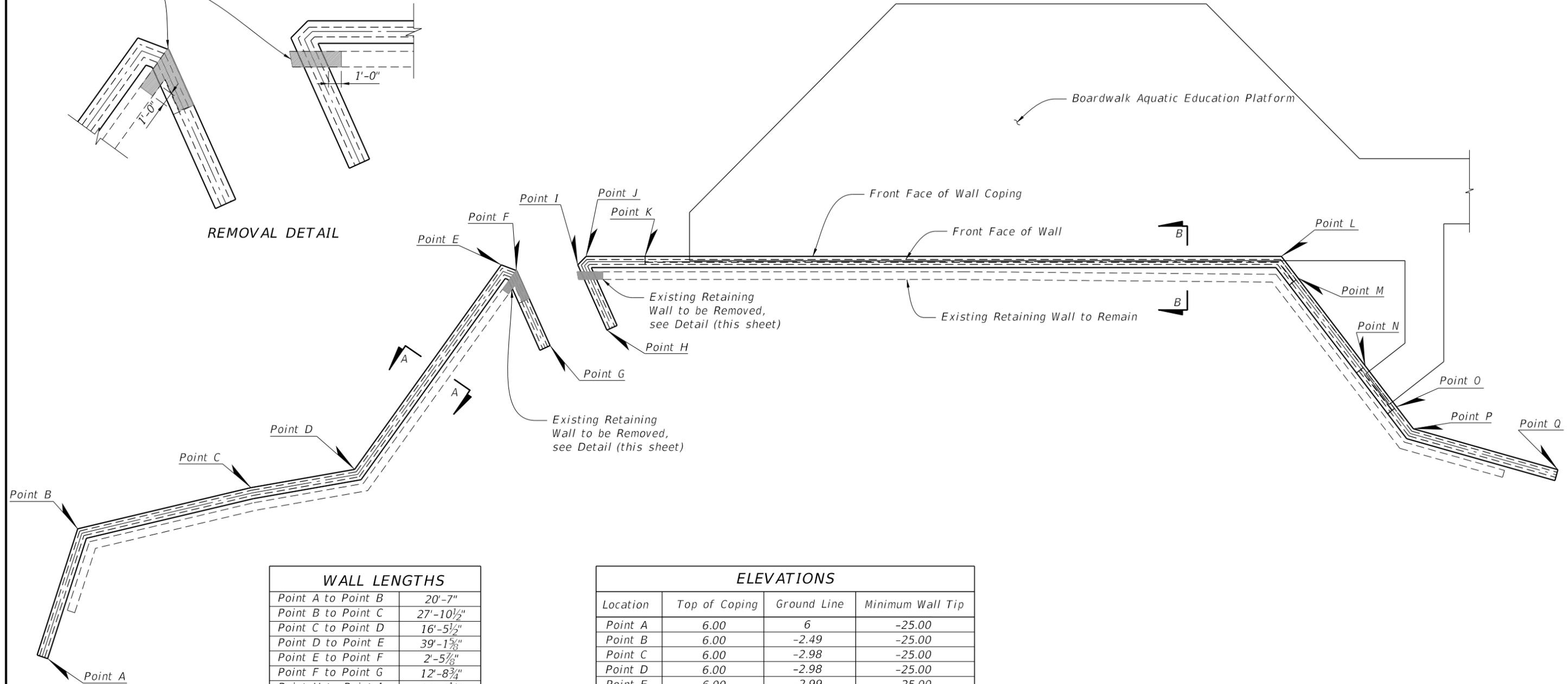
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2818 Cypress Ridge Blvd, Suite 200
Wesley Chapel, Florida 33544
Phone: (813) 435-2600 Fax: (813) 435-2601
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Existing Retaining Wall to be Removed



REMOVAL DETAIL



WALL LENGTHS	
Point A to Point B	20'-7"
Point B to Point C	27'-10 1/2"
Point C to Point D	16'-5 1/2"
Point D to Point E	39'-1 5/8"
Point E to Point F	2'-5 7/8"
Point F to Point G	12'-8 3/4"
Point H to Point I	11'-1 1/8"
Point I to Point J	1'-10 1/2"
Point J to Point K	9'-2 3/8"
Point K to Point L	99'-8"
Point L to Point M	4'-3 1/4"
Point M to Point N	17'-2 3/8"
Point N to Point O	8'-0"
Point O to Point P	4'-3 3/4"
Point P to Point Q	23'-6"

ELEVATIONS			
Location	Top of Coping	Ground Line	Minimum Wall Tip
Point A	6.00	6	-25.00
Point B	6.00	-2.49	-25.00
Point C	6.00	-2.98	-25.00
Point D	6.00	-2.98	-25.00
Point E	6.00	-2.99	-25.00
Point F	6.00	-2.99	-25.00
Point G	6.00	6	-25.00
Point H	6.00	6	-25.00
Point I	6.00	-3.23	-25.00
Point J	6.00	-3.23	-25.00
Point K	6.00	-4.50	-25.00
Point L	6.00	-4.01	-25.00
Point M	6.00	-4.01	-25.00
Point N	6.00	-4.01	-25.00
Point O	6.00	-2.32	-25.00
Point P	6.00	-2.32	-25.00
Point Q	6.00	6	-25.00

NOTES:
 1. All Dimensions are along Front Face of Coping.
 2. Points K, M, N and O are transition points between Elevations 6.00 and 4.33.

CROSS REFERENCE:
 1. Section A-A and Section B-B, see sheet S-20.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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 CHECKED BY: LP

CITY OF PORT ST. LUCIE

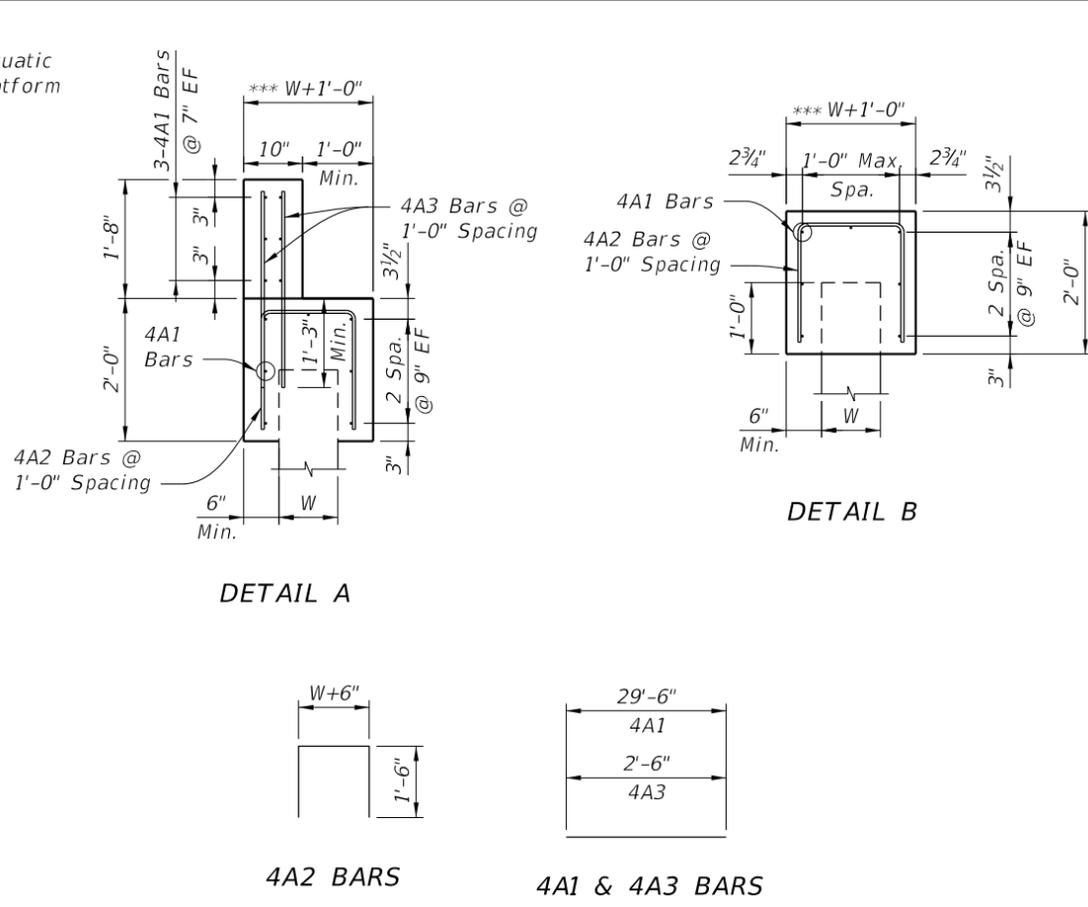
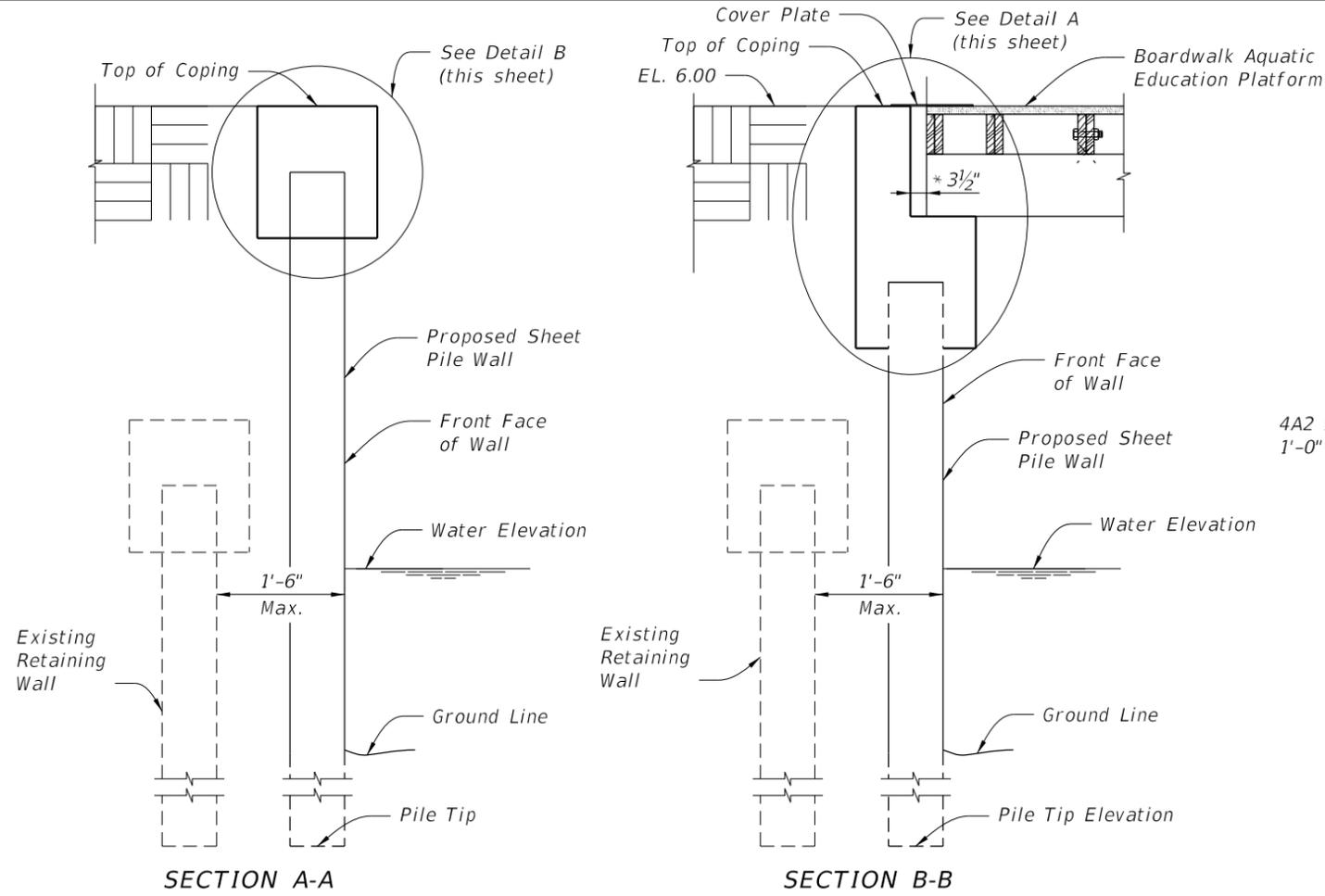
ROAD NO.	COUNTY	ACE PROJECT NUMBER
N/A	ST. LUCIE	516978-7

SHEET TITLE: RETAINING WALL DETAILS (1 OF 2)

PROJECT NAME: RIVERWALK AND WESTMORELAND PARK

REF. DWG. NO. SHEET NO. S-19

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CONSTRUCTION INFORMATION

DESIGN PARAMETERS

ALUMINUM SHEET PILE WALL, CANTILEVER DATA TABLE

WALL LOCATION	MINIMUM SECTION MODULUS (in ³ /ft) Alloy 6061-T6 fy=38 ksi	MINIMUM REQUIRED MOMENT OF INERTIA (in ⁴ /ft)	SOIL ELEVATION		WATER ELEVATION		DESIGN LIVE LOAD (psf)
			** FRONT OF WALL (ft)	BACK OF WALL (ft)	FRONT OF WALL (ft)	BACK OF WALL (ft)	
Point A to Point Q	12	85	-4.5	6	-1	-1	90

FRP COMPOSITE SHEET PILE WALL, CANTILEVER DATA TABLE

WALL LOCATION	MINIMUM SECTION MODULUS (in ³ /ft)	MINIMUM REQUIRED MOMENT OF INERTIA (in ⁴ /ft)	SOIL ELEVATION		WATER ELEVATION		DESIGN LIVE LOAD (psf)
			** FRONT OF WALL (ft)	BACK OF WALL (ft)	FRONT OF WALL (ft)	BACK OF WALL (ft)	
Point A to Point Q	38	266	-4.5	6	-1	-1	90

- * 3 1/2" Opening with no Live Load on backside of wall.
- ** Minimum of Design Ground Surface of Design Scour Depth.
- *** Width of Concrete Coping shall be equal to greater of the width of selected Sheet Pile Wall Section (W) plus 1'-0" or 1'-10".

NOTES:

1. The Design Parameters indicated in this table were used in the sheet pile wall analysis. If the Contractor plans operations, which exceed the design parameters shown above, the Contractor's Specialty Engineer will redesign the wall to resist construction loads at a maximum deflection of 3".
2. Environmental Classification is Extremely Aggressive.
3. Concrete for Cast-In-Place Retaining Wall Cap shall be Class IV (f'c = 5500 psi)
4. Coat exposed surface of steel sheet piles to 5 feet below the Front Of Wall Soil Elevation (**), with coal tar-epoxy in accordance with Specification Section 560. [Delete note for Temporary Walls]
5. Cut bars 4A1 as needed to maintain cover.
6. Shift bars 4A3 along length of wall to avoid conflict with Sheet pile Wall.

CROSS REFERENCE:

1. For location of Section A-A and Section B-B, see sheet S-19.

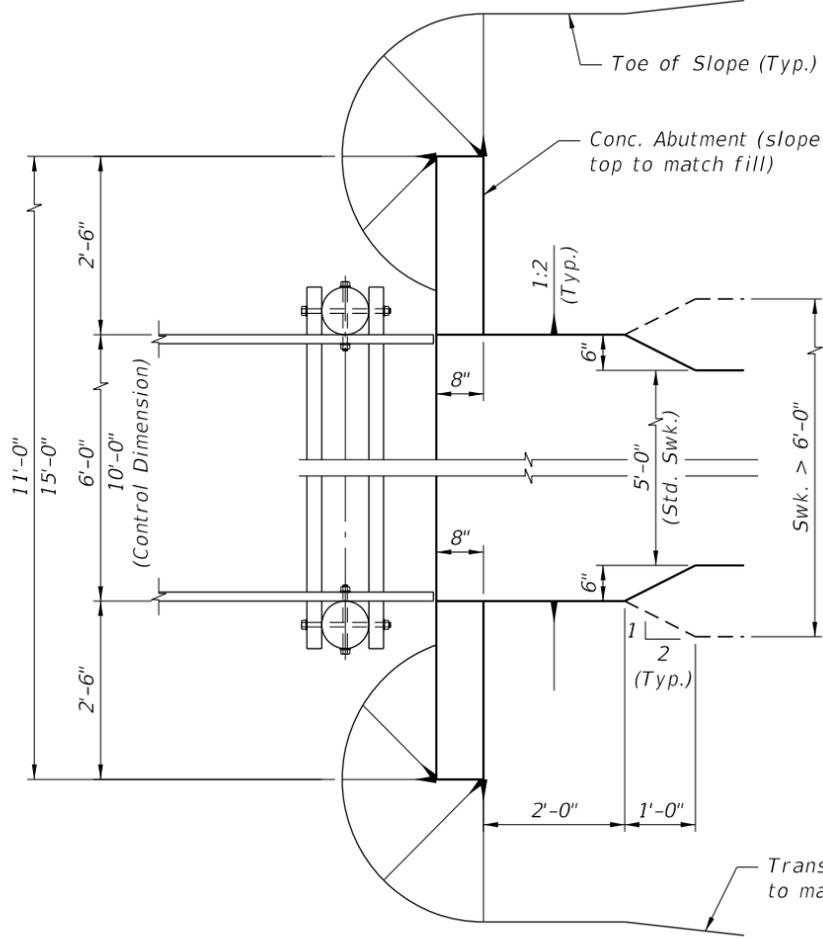
REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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 Phone: (813) 435-2600 Fax: (813) 435-2601
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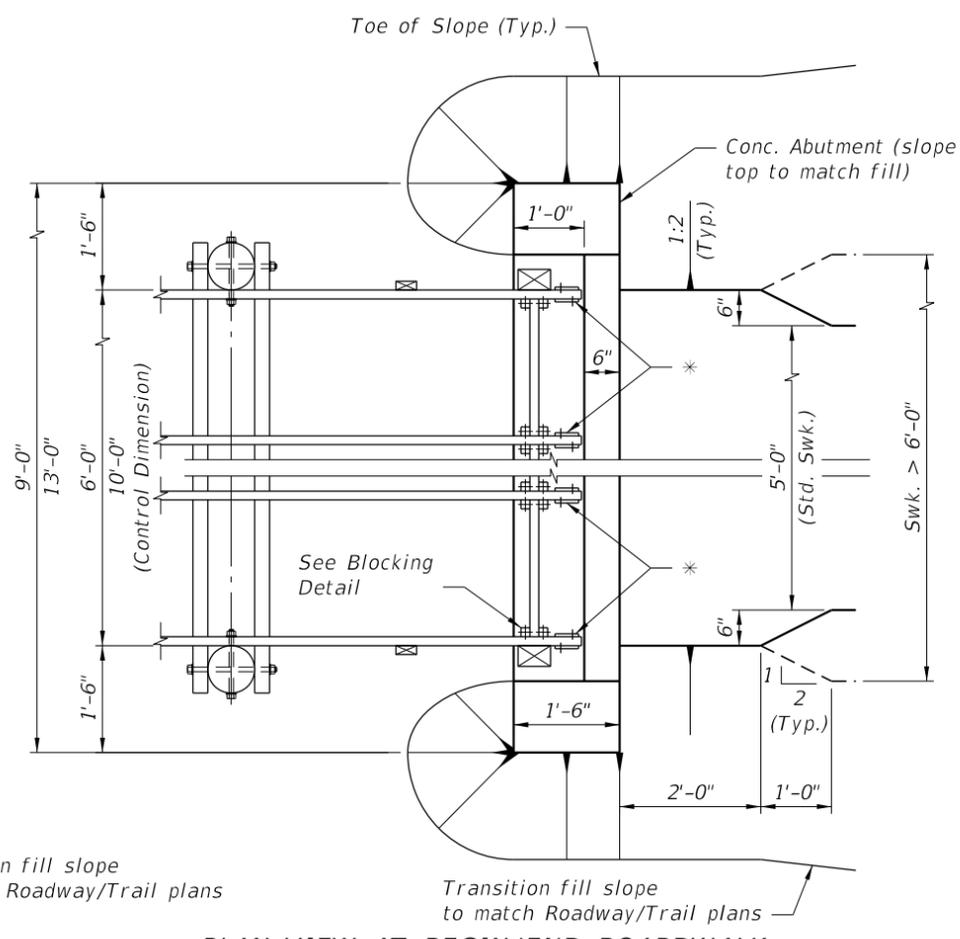
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CHECKED BY: RH	ROAD NO.	COUNTY	ACE PROJECT NUMBER
DESIGNED BY: AM	N/A	ST. LUCIE	516978-7
CHECKED BY: LP	PROJECT NAME: RIVERWALK AND WESTMORELAND PARK		

SHEET TITLE: RETAINING WALL DETAILS (2 OF 2)		REF. DWG. NO.
PROJECT NAME: RIVERWALK AND WESTMORELAND PARK		SHEET NO. S-20

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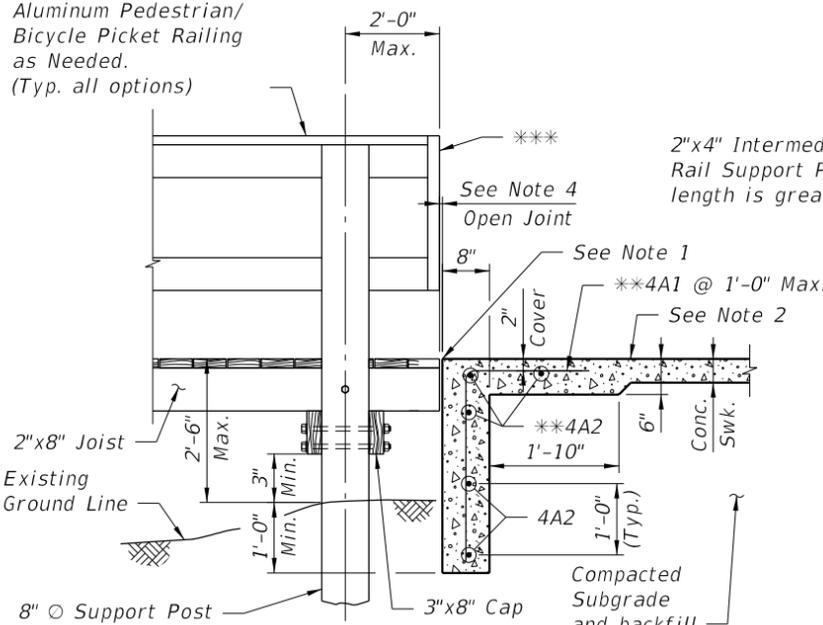


PLAN VIEW AT BEGIN/END BOARDWALK OPTION 1

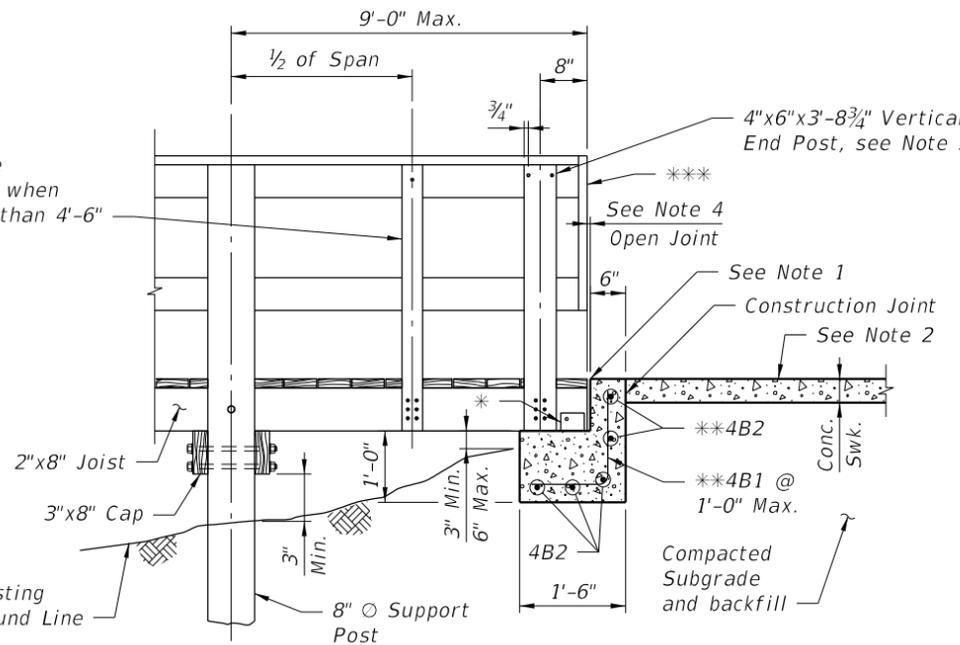


PLAN VIEW AT BEGIN/END BOARDWALK OPTION 2

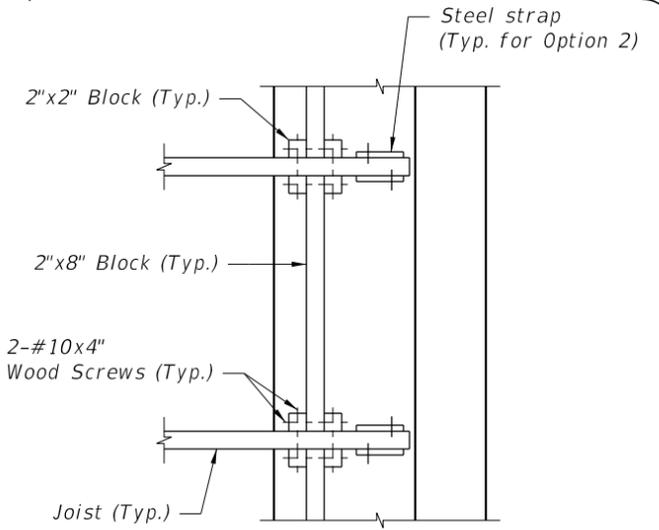
Railing at Boat Ramp Shown, Substitute Wire Mesh Railing or Aluminum Pedestrian/Bicycle Picket Railing as Needed. (Typ. all options)



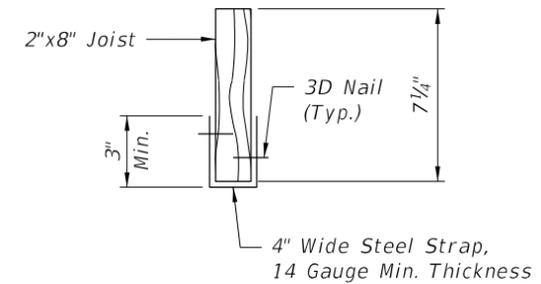
ELEVATION VIEW AT BEGIN/END BOARDWALK OPTION 1



ELEVATION VIEW AT BEGIN/END BOARDWALK OPTION 2



BLOCKING DETAIL (Begin/End Boardwalk Option 2)



STEEL STRAP DETAIL

- * Steel Strap, see Blocking Detail
- ** Field cut rebar as required to maintain 2"
- *** 2"x8"x2'-2" Timber, See Section Through Handrail at Begin/End Boardwalk on Sheet S-10 for Boardwalk Rail and S-4 for Wire Mesh Rail

NOTES:

1. Top of sidewalk to be flush with top of boardwalk (Tool edge to 1/2" radius).
2. Transition to standard sidewalk width of project.
3. Screws used on 4"x6"x3'-8 3/4" must be #8x4 1/2".
4. 1/4" Min./1/2" Max. Open Joint Typical.
5. Subgrade and backfill shall be clean sand and be compacted to 98% of the standard Proctor maximum density.
6. Concrete shall be Class IV with a minimum 28-day compressive strength, f'c, of 4.5 ksi.
7. Reinforcing steel shall be #4 bars and grade 60 ksi.

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	ACE PROJECT NUMBER	END BOARDWALK DETAILS		
10/10/19	RH	Removed Gravity Wall Option 3, added Blocking Detail, and expanded notes.					N/A	ST. LUCIE	FPID 516978-7	RIVERWALK AND WESTMORELAND PARK		
						DESIGNED BY: AM						SHEET NO.
						CHECKED BY: LP						5-21