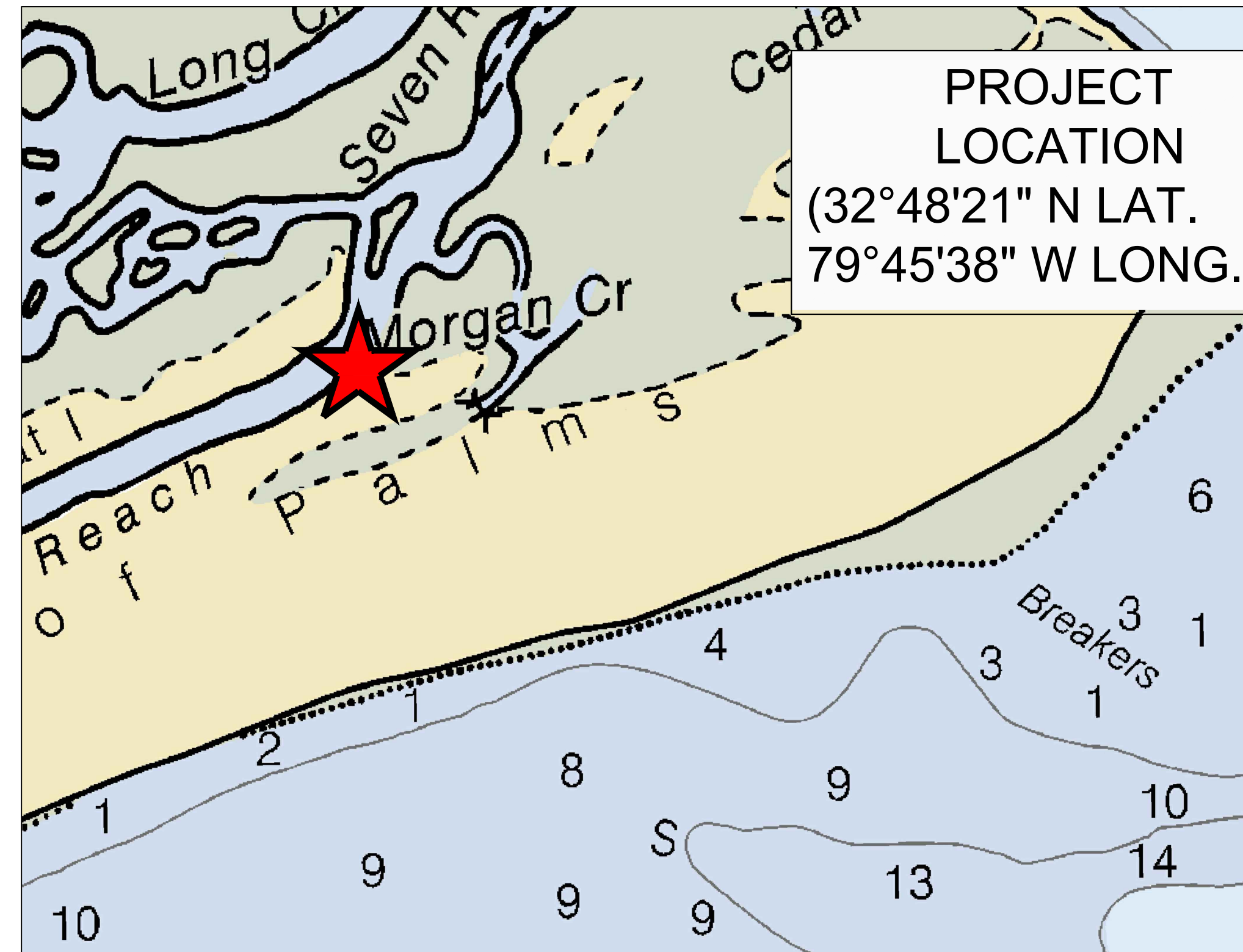
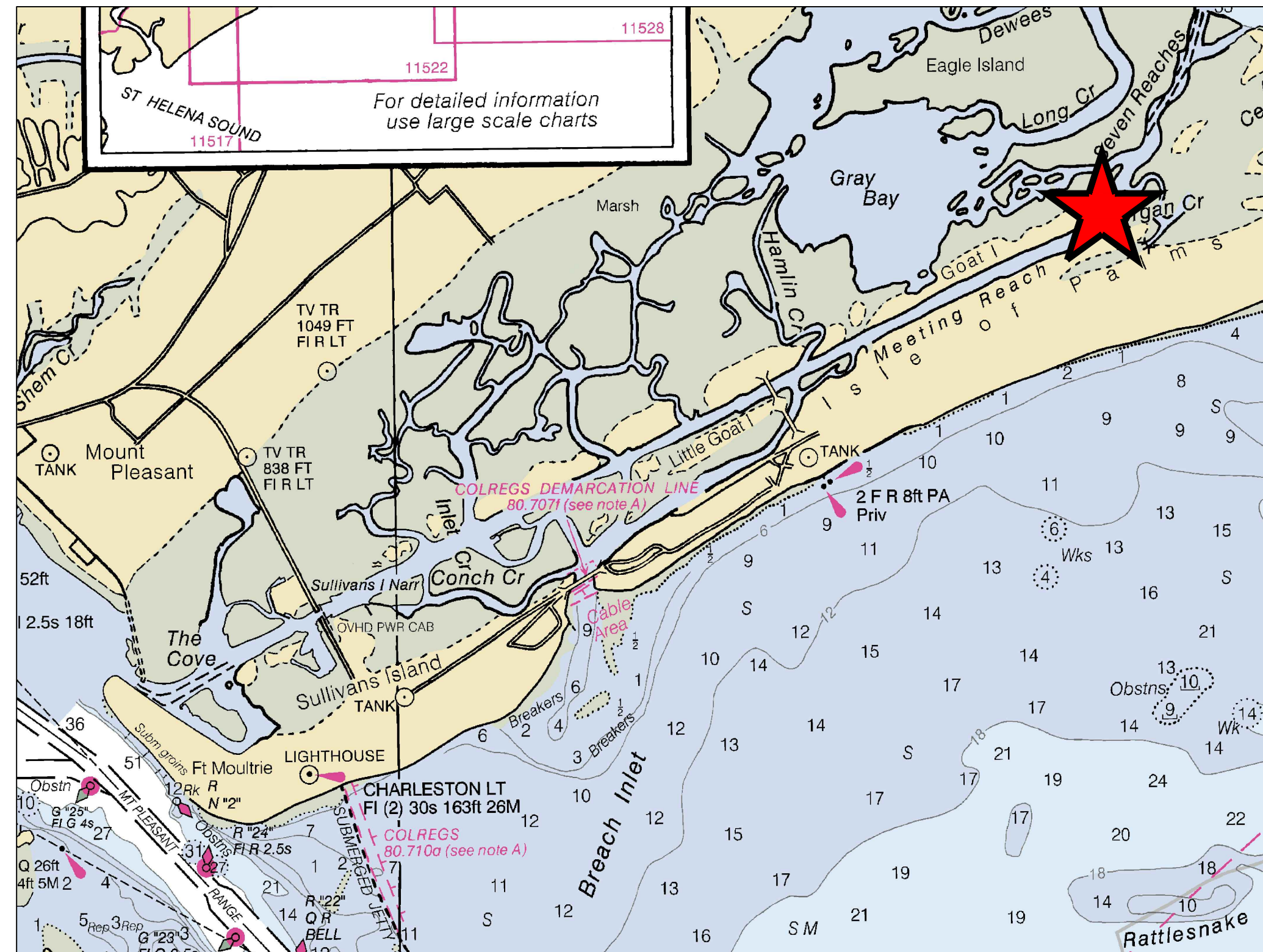


FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

# BID DRAWINGS FOR ISLE OF PALMS MARINA PUBLIC DOCK & INTRACOASTAL DOCK IMPROVEMENTS

OCTOBER 19, 2023



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P1	NOTES, LEGEND
P2	PLUMBING PLAN
P3	DETAILS



PREPARED FOR:

CITY OF ISLE OF PALMS  
1207 PALM BOULEVARD  
ISLE OF PALMS, SC 29451

PROJECT LOCATION:

50 41ST AVENUE  
ISLE OF PALMS, SC 29451

PREPARED BY:



A Geosyntec Company

APPLIED TECHNOLOGY & MANAGEMENT  
941 Houston Northcutt Blvd., SUITE 201  
Mt. Pleasant, SC. 29464  
(843) 414-1040



**FOR BIDDING PURPOSES ONLY  
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ATLANTIC INTRACOASTAL WATERWAY

FEDERAL NAVIGATION CHANNEL

USACE CONSTRUCTION  
SETBACK LINE

PARCEL BOUNDARY  
EXTENSION  
EDGE OF MARSH  
OCRM CRITICAL LINE

**PUBLIC DOCK**

EXISTING  
FLOATING DOCK

**INTRACOASTAL DOCK**

EXISTING  
FLOATING DOCKS

**RESTAURANT DOCK**

**FACE DOCK**

EXISTING  
FIXED PIER

MARSH AREA

RESTAURANT

EXISTING BULKHEAD

ISLE OF PALMS MARINA

APPROXIMATE CONTRACTOR  
LAYDOWN/STAGING AREA -  
CONFIRM WITH CITY

EXISTING BOAT RAMP

MARINA STORE

**CHARTER DOCK**

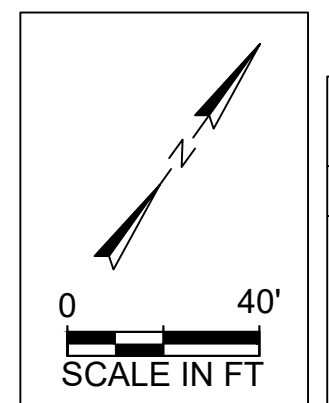
EXISTING FLOATING DOCKS

UPLAND FUEL

FUEL DOCK & FUEL  
HUT

MORGAN CREEK

- GENERAL NOTES:**
- BATHYMETRIC SURVEY PERFORMED BY MCKIM & CREED IN NOVEMBER 2022.
  - HORIZONTAL DATUM IS IN REFERENCE TO NAD83 SOUTH CAROLINA STATE PLANE, INTERNATIONAL FT.
  - VERTICAL DATUM IS IN REFERENCE TO MEAN LOW WATER (MLW), FEET.



NOAA STATION 8665387, HAMLIN CREEK, ISLE OF PALMS, SC		
DATUM	ABBREVIATION	ELEV. (FT. MLW)
MEAN HIGHER-HIGH WATER	MHHW	5.4
MEAN HIGHER WATER	MHW	5.0
NORTH AMERICAN VERTICAL DATUM OF 1988	NAVD88	2.9
MEAN LOW WATER	MLW	0
MEAN LOWER-LOW WATER	MLLW	-0.2

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	BY	REMARKS
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3					
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DESIGNED: \_\_\_\_\_  
DRAWN: \_\_\_\_\_  
CHECKED: \_\_\_\_\_  
DATE: 10/19/2023  
JOB NO. 18-3287  
SCALE: 1"=40'

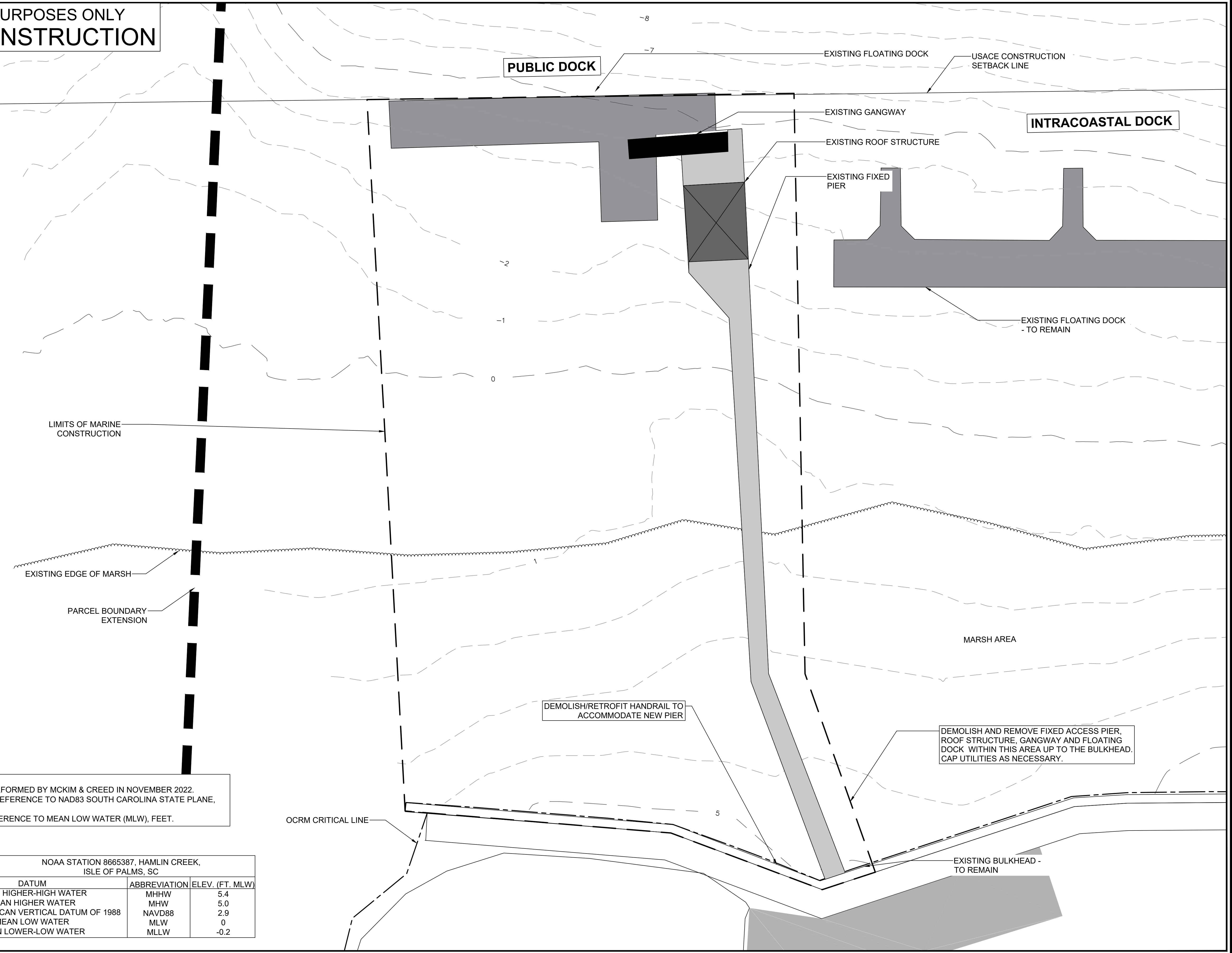
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**EXISTING CONDITIONS**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
ATM  
A Geosynetic Company  
941 Houston Northwest Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040

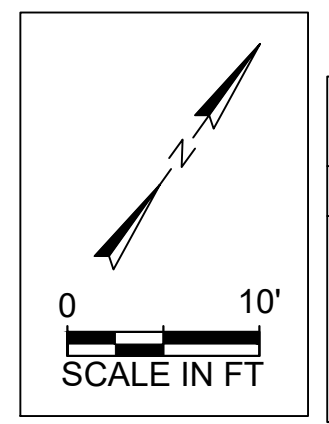
DRAWING NUMBER  
**G2**



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NOT FOR CONSTRUCTION**



- GENERAL NOTES:**
- BATHYMETRIC SURVEY PERFORMED BY MCKIM & CREED IN NOVEMBER 2022.
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NOAA STATION 8665387, HAMLIN CREEK, ISLE OF PALMS, SC			
DATUM	ABBREVIATION	ELEV. (FT. MLW)	
MEAN HIGHER-HIGH WATER	MHHW	5.4	
MEAN HIGHER WATER	MHW	5.0	
NORTH AMERICAN VERTICAL DATUM OF 1988	NAVD88	2.9	
MEAN LOW WATER	MLW	0	
MEAN LOWER-LOW WATER	MLLW	-0.2	

Signature \_\_\_\_\_  
Date \_\_\_\_\_

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DESIGNED: \_\_\_\_\_  
DATE: 10/19/2023  
JOB NO. 18-3287  
SCALE: 1"=10'

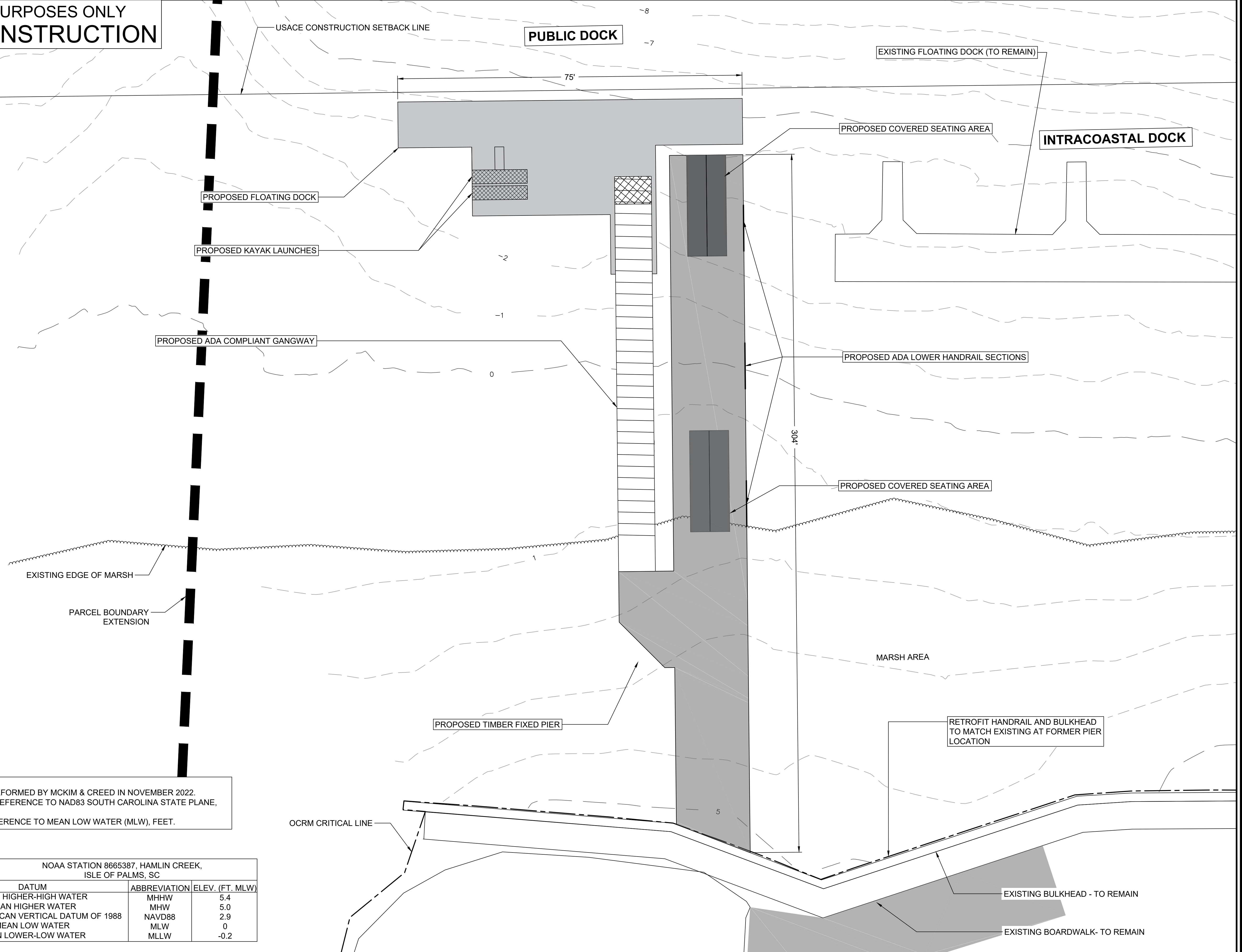
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**DEMOLITION PLAN**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
ATM  
A Geosyntec Company  
941 Houston Northcut Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040

DRAWING NUMBER  
**G3**

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USACE CONSTRUCTION SETBACK LINE

**PUBLIC DOCK**

EXISTING FLOATING DOCK (TO REMAIN)

**INTRACOASTAL DOCK**

PROPOSED FLOATING DOCK

PROPOSED KAYAK LAUNCHES

PROPOSED ADA COMPLIANT GANGWAY

PROPOSED COVERED SEATING AREA

PROPOSED ADA LOWER HANDRAIL SECTIONS

PROPOSED COVERED SEATING AREA

EXISTING EDGE OF MARSH

PARCEL BOUNDARY EXTENSION

MARSH AREA

PROPOSED TIMBER FIXED PIER

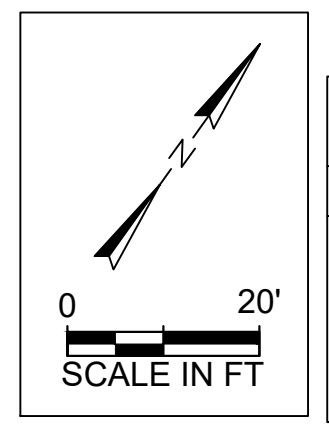
RETROFIT HANDRAIL AND BULKHEAD TO MATCH EXISTING AT FORMER PIER LOCATION

OCRM CRITICAL LINE

EXISTING BULKHEAD - TO REMAIN

EXISTING BOARDWALK - TO REMAIN

- GENERAL NOTES:**
- BATHYMETRIC SURVEY PERFORMED BY MCKIM & CREED IN NOVEMBER 2022.
  - HORIZONTAL DATUM IS IN REFERENCE TO NAD83 SOUTH CAROLINA STATE PLANE, INTERNATIONAL FT.
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NOAA STATION 8665387, HAMLIN CREEK, ISLE OF PALMS, SC			
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NORTH AMERICAN VERTICAL DATUM OF 1988	NAVD88	2.9	
MEAN LOW WATER	MLW	0	
MEAN LOWER-LOW WATER	MLLW	-0.2	

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	BY	REMARKS
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3					
2					
1					

DESIGNED: JD  
DATE: 10/19/2023  
JOB NO.: 18-3287  
SCALE: 1"=40'

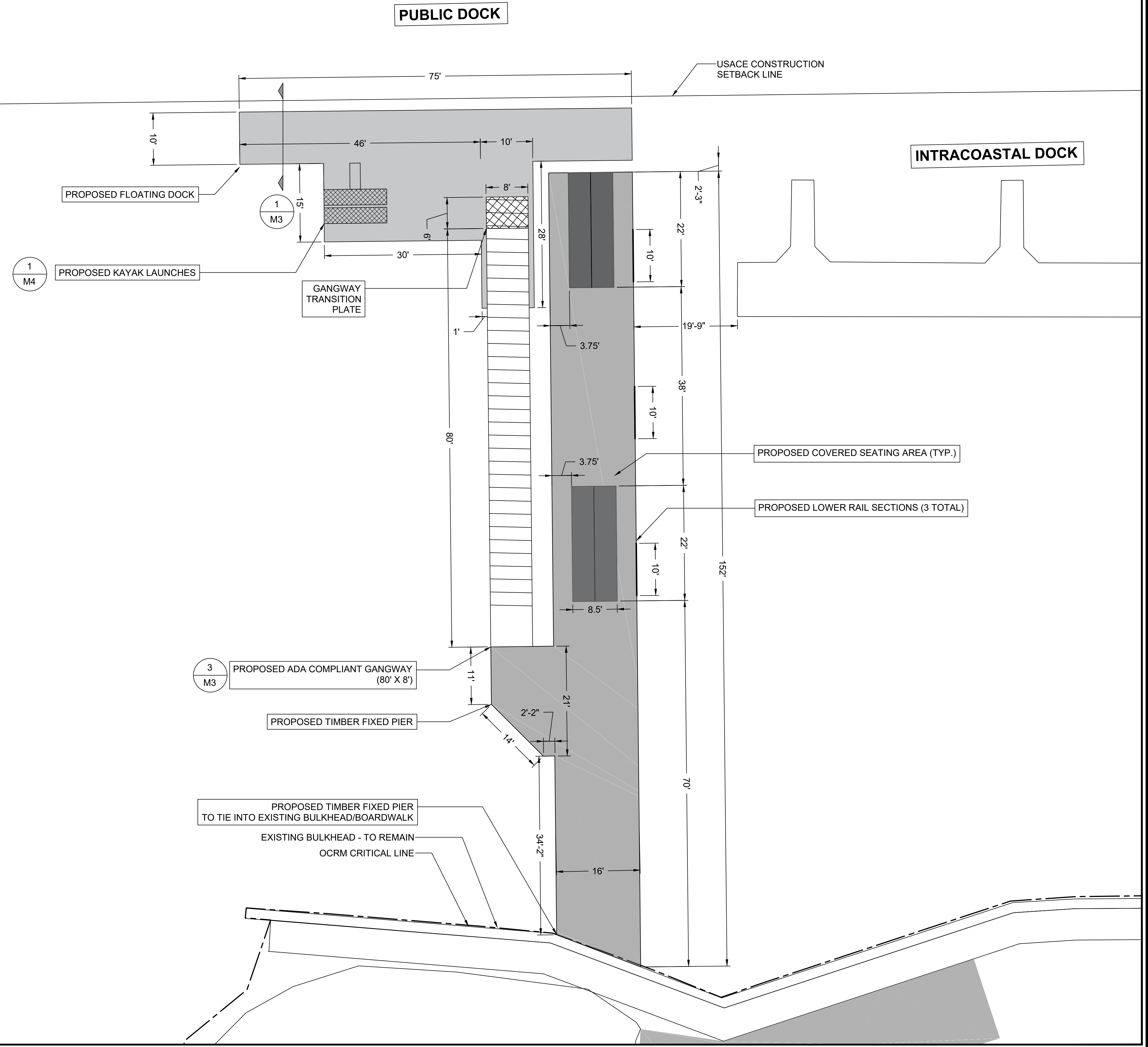
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**OVERALL PROPOSED SITE PLAN**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
ATM  
A Geosynetic Company  
941 Houston Northcut Blvd.  
Suite 201  
Myrtle Beach, SC 29577  
(843) 414-1040

DRAWING NUMBER  
**M1**



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NOT FOR CONSTRUCTION



Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN BY	CHECKED BY	REMARKS
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DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	18-3287	1"=10'

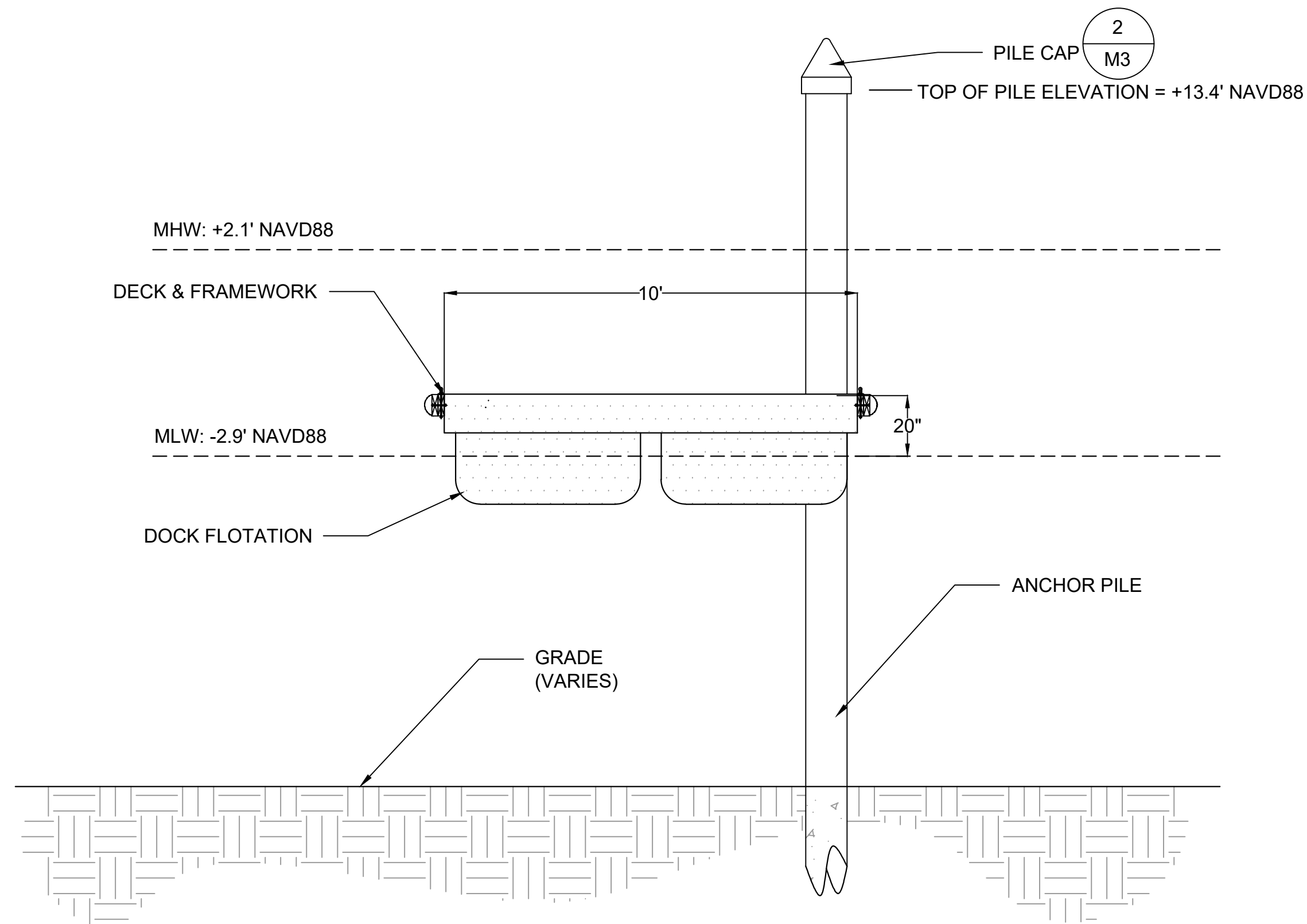
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**DIMENSIONAL LAYOUT**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
ATM  
A Geosynetic Company  
941 Houston Northcut Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040

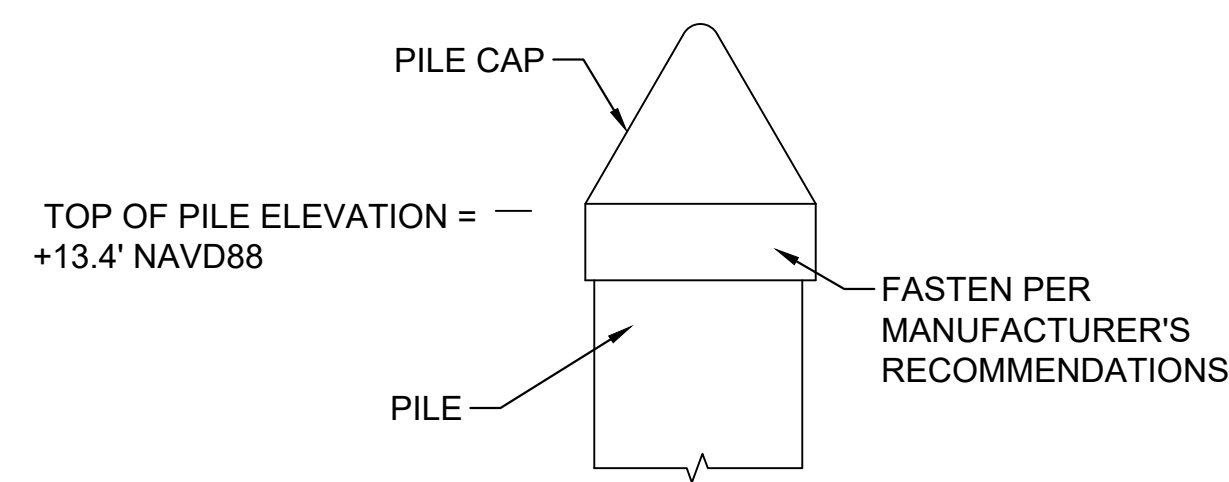
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NOT FOR CONSTRUCTION



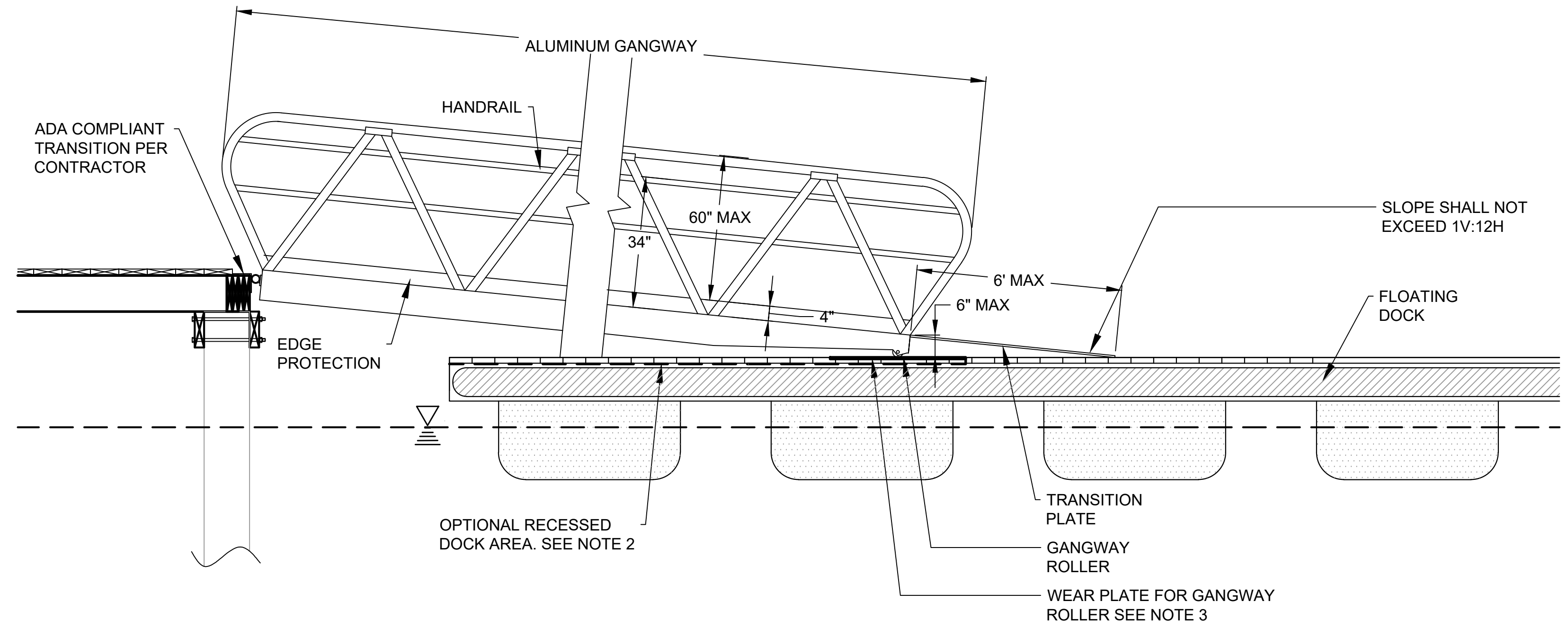
1 TYPICAL FLOATING DOCK SECTION  
N.T.S.



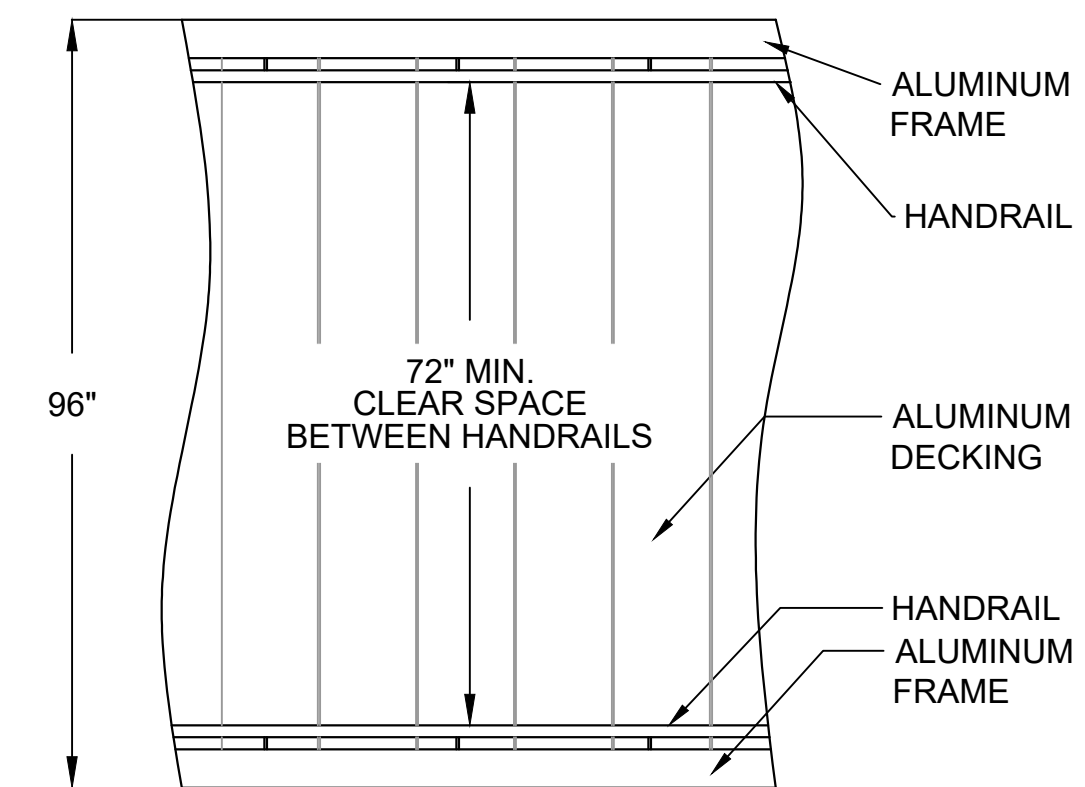
2 TYPICAL PILE CAP  
N.T.S.

**PILE CAP DETAIL NOTES**

1. AFTER PILES HAVE BEEN DRIVEN TO THE PROPER ELEVATION, THEY SHALL BE CAPPED WITH BLACK POLYETHYLENE PILE CAPS WITH A WALL THICKNESS OF NO LESS THAN 1/8". CONTRACTOR TO SUBMIT MANUFACTURER'S CUT SHEET FOR APPROVAL.
2. PILE CAP SAMPLE SHALL BE SUBMITTED TO OWNER FOR APPROVAL PRIOR TO INSTALLATION.
3. PILE CAP SHALL BE FASTENED PER MANUFACTURER'S RECOMMENDATIONS.
4. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION
5. MATCH EXISTING AT MORGAN CREEK SIDE OF MARINA TO THE EXTENT POSSIBLE.



3 GANGWAY PROFILE DETAIL  
N.T.S.



4 TYPICAL GANGWAY PLAN VIEW  
N.T.S.

**ADA GANGWAY DETAIL NOTES:**

THE CONTRACTOR IS TO DEVELOP GANGWAY DESIGN TO MEET THE FOLLOWING CRITERIA:

1. MAX. LENGTH OF TRANSITION PLATE SHALL BE 6 FT.
2. TRANSITION PLATE/GANGWAY HINGE SHALL HAVE A MAX. HEIGHT ABOVE FLOATING DOCK DECK SURFACE OF 6 INCHES. FLOATING DOCK DECK SECTION MAY BE MODIFIED (RECESSED) IN THIS AREA TO ACCOMMODATE MAXIMUM TRANSITION PLATE HEIGHT.
3. WEAR PLATE ON DOCK TO EXTEND MIN 2'-0" EACH SIDE WHEN ROLLERS CONTACT AT MID TIDE.
4. ALUMINUM HANDRAIL TO COMPLY WITH ADAAG SPECIFICATIONS. TOP OF GRIPPING SURFACE HANDRAIL SHALL BE 34" ABOVE WALKING SURFACE AND SHALL BE NON-SKID. DIAMETER/WIDTH SHALL BE 1 1/4" - 1 1/2". HANDRAIL MUST WITHSTAND 250 POUND LOAD.
5. INCLUDE ALUMINUM EDGE PROTECTION, MIN. 4" HIGH AND SHALL BE WELDED TO GANGWAY.
6. GANGWAY SHALL BE FULLY ADA COMPLIANT, INCLUDING TRANSITIONS.
7. CONSIDER HORIZONTAL MOVEMENT OF DOCK SYSTEMS IN GANGWAY DESIGN AND GANGWAY ATTACHMENT DESIGN.
8. TOP CHORD/STRUCTURAL ELEMENT OF GANGWAY SHALL NOT EXCEED 60" FROM WALKING SURFACE.

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	BY	REMARKS
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DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	JD	KM	10/19/2023	18-3287	VARIES

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**FLOATING DOCK TYPICAL DETAILS**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
941 Houston Northcut Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040  
ATM  
A Geosyntec Company

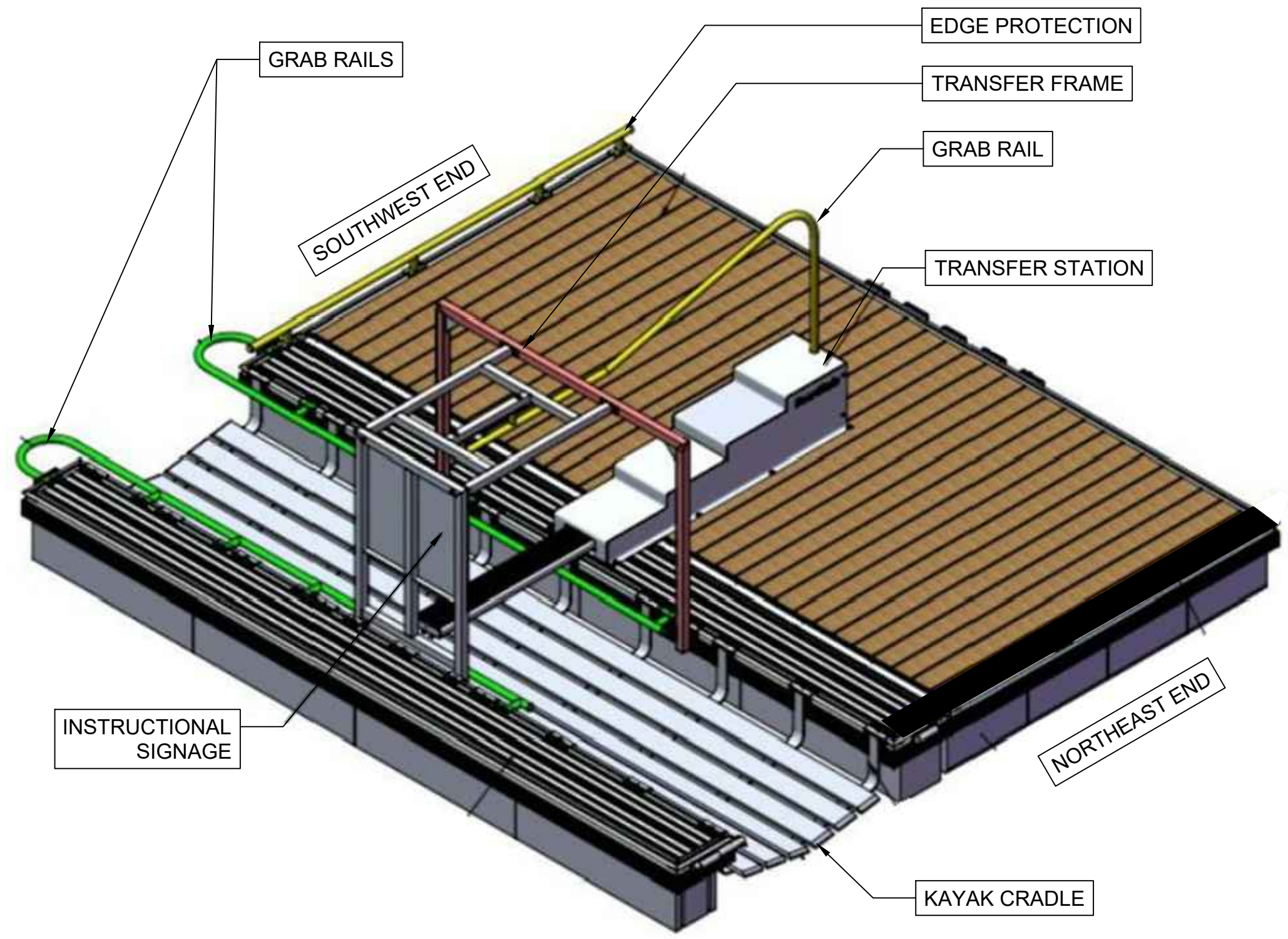
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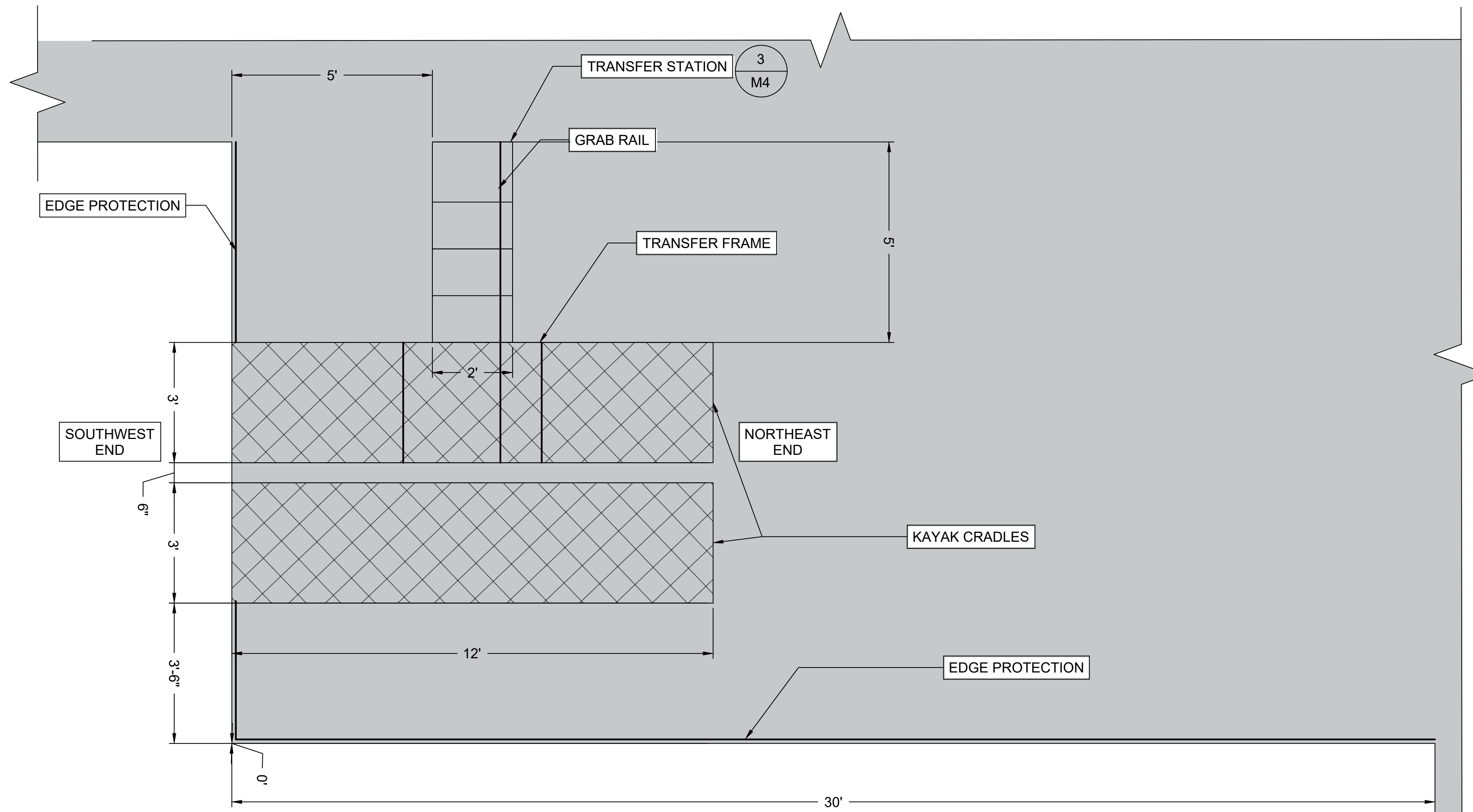
**FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION**

**KAYAK LAUNCH NOTES:**  
THE CONTRACTOR IS TO DEVELOP KAYAK LAUNCH DESIGN TO MEET THE FOLLOWING CRITERIA:

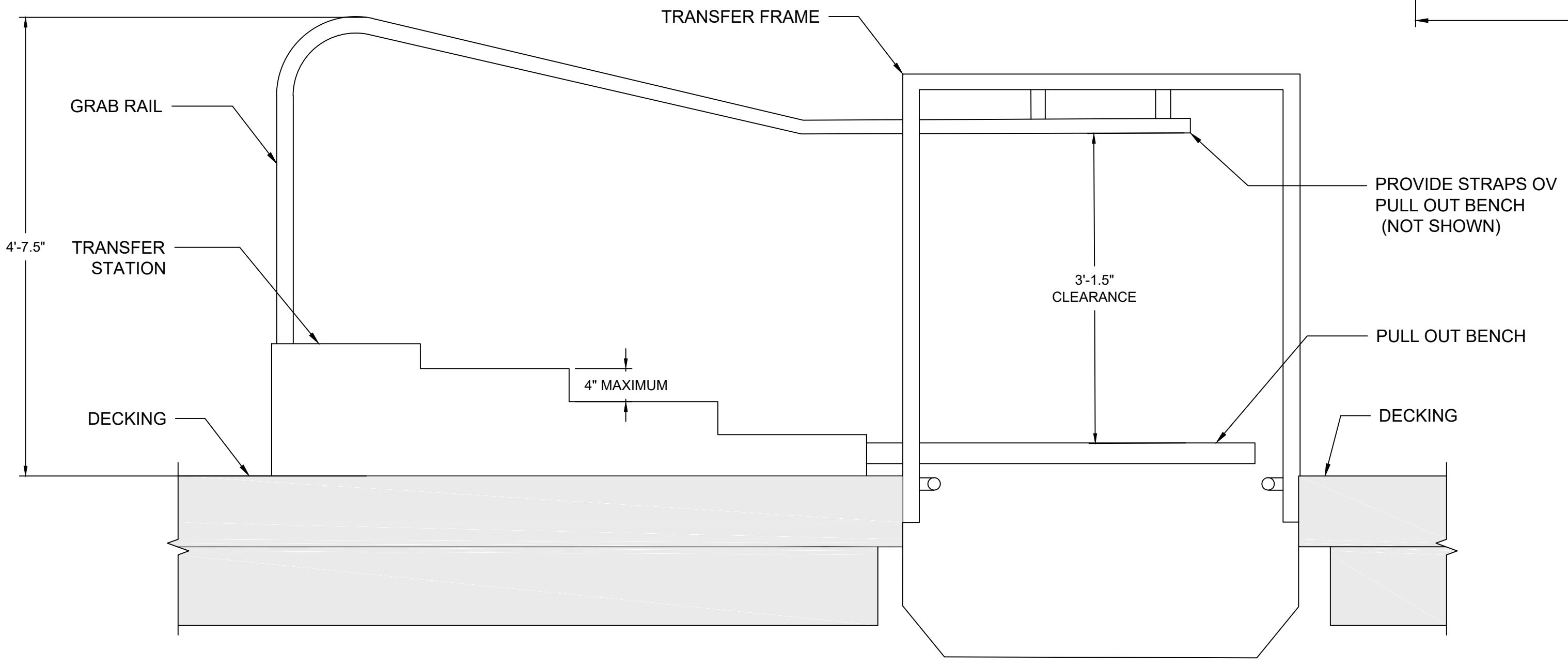
1. INCLUDE ALUMINUM GRABRAILS TO COMPLY WITH ADAAG SPECIFICATIONS. HANDRAIL MUST WITHSTAND 250 POUND LOAD.
2. INCLUDE TOE KICK EDGE PROTECTION, MIN. 5" HIGH AROUND KAYAK LAUNCH PLATFORM AS INDICATED BELOW.
3. CONTRACTOR TO PROVIDE SCHEMATIC DESIGN OF PROPOSED KAYAK LAUNCH SYSTEM WITH BID THAT MEETS OR EXCEEDS THE INDICATIVE DETAILS PROVIDED HEREIN.



**1 ADA ACCESSIBLE KAYAK LAUNCH TRANSFER STATION AND FRAME INDICATIVE SCHEMATIC DRAWING**  
N.T.S.



**2 KAYAK LAUNCH PLAN DETAIL**  
N.T.S.



**3 INDICATIVE TRANSFER STATION SECTION**  
N.T.S.

Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	BY	REMARKS
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DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	19-3287	VARIABLE

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**KAYAK LAUNCH DETAILS**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
941 Houston Northwest Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040  
**ATM**  
A Geosynetic Company

DRAWING NUMBER  
**M4**

C:\proj\18-3287\104-M4 Marina Permittals & Design\DWG\Public\Drawings\104-M4\_101923.dwg  
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FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION

PUBLIC DOCK

INTRACOASTAL DOCK

USACE CONSTRUCTION SETBACK LINE. NO DOCKS, PILES, OR OTHER STRUCTURES MAY EXTEND BEYOND THIS LINE.

N: 356156.57  
E: 2380535.52

N: 356186.27  
E: 2380604.39

N: 356171.85  
E: 2380601.90

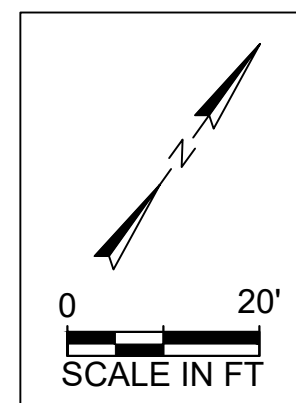
N: 356175.02  
E: 2380609.24

N: 356080.83  
E: 2380619.38

N: 356035.18  
E: 2380660.85

GENERAL NOTES:

1. HORIZONTAL DATUM IS IN REFERENCE TO NAD83 SOUTH CAROLINA STATE PLANE, INTERNATIONAL FT.
2. CONTRACTOR SHALL ENSURE THAT NO ENCROACHMENT INTO USACE CONSTRUCTION SETBACK OCCURS.
3. CONTRACTOR SHALL CONFIRM LOCATION OF ALL ADJACENT UTILITIES AND ENSURE NO CONFLICTS EXISTING, INCLUDING UNDERGROUND AND UNDERWATER LINES.



Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	REMARKS
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2				
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DESIGNED	DRAWN	CHECKED	DATE	SCALE
JD	HA	KM	10/19/2023	1"=50'
			JOB NO. 18-3287	

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**SETTING OUT PLAN**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
ATM  
A Geosyntec Company  
941 Houston Northcut Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040

DRAWING NUMBER  
**M5**

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# FOR BIDDING PURPOSES ONLY NOT FOR CONSTRUCTION

## APPLICABLE CODES

THE STRUCTURES INCLUDED HEREIN HAVE BEEN DESIGNED TO MEET THE GENERAL INTENT OF THE FOLLOWING DESIGN CODES AND GUIDELINES:

- INTERNATIONAL BUILDING CODE (IBC, 2018)
- PLANNING AND DESIGN GUIDELINES FOR SMALL CRAFT HARBORS (ASCE-50)
- MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE-7-16)
- UNITED FACILITIES CRITERIA (UFC) DESIGN: PIERS AND WHARVES (UFC 4-152-01)
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS-2018)

## DESIGN CRITERIA AND ASSUMPTIONS

- DESIGN CRITERIA UTILIZED IN THE STRUCTURAL DESIGN ARE SUMMARIZED IN THE TABLE ON THIS SHEET.
- THE PIER STRUCTURE INCLUDED HEREIN HAS BEEN DESIGNED TO THE SPECIFIED CRITERIA AND WITH CONSIDERATION GIVEN TO PRACTICAL DESIGN LIMITS AND RISK MANAGEMENT FOR TIMBER STRUCTURES IN A DYNAMIC MARINE ENVIRONMENT. CERTAIN LOADS, INCLUDING WAVE SLAM AND UPLIFT FORCES, MAY EXCEED ANY PRACTICAL DESIGN LIMIT FOR A TIMBER STRUCTURE OF THIS TYPE AND SOME LEVEL OF DAMAGE MAY BE EXPECTED UNDER EXTREME CONDITIONS.
- THE PIER STRUCTURE INCLUDED HEREIN HAS BEEN DESIGNED TO MINIMIZE LOADS IMPOSED ON THE EXISTING BULKHEAD AND/OR BOARDWALK FOR LATERAL OR VERTICAL STABILITY. ATM HAS NOT EVALUATED THE EXISTING STRUCTURES REGARDING THEIR CONDITION, STRUCTURAL CAPACITY, OR LONGEVITY AND ACCEPTS NO LIABILITY RELATED TO THE SHORT OF LONG TERM PERFORMANCE OF THE EXISTING STRUCTURES.

## GENERAL CONSTRUCTION AND BIDDING REQUIREMENTS

- CONTRACTOR'S WORK SHALL CONSIST OF PROVIDING ALL DEMOLITION, CONSTRUCTION, LABOR, SUPERVISION, TESTING, INSPECTIONS, LOCAL PERMIT(S), SURVEYING, EQUIPMENT, AND MATERIAL IN CONNECTION WITH THE WORK INDICATED HEREIN.
- THE CONTRACTOR IS RESPONSIBLE FOR PERFORMING HIS WORK IN A SAFE AND SATISFACTORY MANNER.
- ALL DETAILS, SECTIONS, AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT. UNLESS OTHERWISE INDICATED, PROVIDE EQUAL SPACING OF STRUCTURAL COMPONENTS BETWEEN OVERALL DIMENSIONS.
- PROPOSED SUBSTITUTIONS AND MODIFICATIONS TO IMPROVE THE CONSTRUCTABILITY, DURABILITY, PERFORMANCE, OR AESTHETICS OF THE PIER STRUCTURE ARE ENCOURAGED. HOWEVER, REVISIONS ARE NOT PERMISSIBLE WITHOUT PRIOR APPROVAL BY ATM. THE BIDDER/CONTRACTOR SHALL NOT ASSUME SUBSTITUTIONS OR MODIFICATIONS ARE ACCEPTABLE WITHOUT PRIOR WRITTEN APPROVAL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL PROFESSIONAL DESIGN SERVICES AND PERMITS REQUIRED DUE TO SUBSTITUTIONS AND MODIFICATIONS TO THE REQUIREMENTS DESCRIBED HEREIN.
- THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACING, SHORING, GUYING OR OTHER MEANS TO SUPPORT THE STRUCTURAL ELEMENTS, INCLUDING THE EXISTING BULKHEAD ALONG THE SHORELINE, AS/IF REQUIRED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND INSTALLATION OF ANY TEMPORARY SUPPORTS, WORK PLATFORMS, ETC. ASSOCIATED WITH THE CONSTRUCTION OF THE FIXED PIER.
- DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE FOR DESIGN REFERENCE ONLY. FIELD MEASUREMENTS AND SURVEY OF EXISTING CONDITIONS SHOULD BE USED TO DETERMINE THE EXACT DIMENSIONS FOR MATERIAL PURCHASE, FABRICATION, AND INSTALLATION.
- ALL PERMANENT CONSTRUCTION MATERIALS ASSOCIATED WITH THE FIXED PIER SHALL BE NEW. USED OR RECONDITIONED MATERIALS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY ATM.
- NO CUTS, HOLES, OR COPES REQUIRED FOR OTHER TRADES IN STRUCTURAL WOOD FRAMING SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY ATM.
- SWINGS AND BENCHES ARE SHOWN HEREIN AS GENERAL FORMS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL DESIGN OF THE PROPOSED BENCHES AND SWINGS AND ASSOCIATED CONNECTIONS TO THE ROOF STRUCTURE. SEE

NOTES UNDER "SWINGS AND BENCHES", SHEET S8.

- BIDDER IS REQUIRED TO PROVIDE PRICING FOR THE FOLLOWING BID ALTERNATES AND AS DELINEATED IN THE BID FORM.
  - UTILIZE TANZITE™ DECKING IN LIEU OF IPE HARDWOOD ON THE FIXED PIER
    - THIS BID ALTERNATE DOES NOT APPLY TO THE FLOATING DOCKS, KAYAK LAUNCHES, OR OTHER PROJECT COMPONENTS.
    - TANZITE™ DECKING SHALL BE "STONDECK - APPALACHIAN COLLECTION" IN THE COLOR "AGED TEAK".
    - TANZITE™ DECKING SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS.
  - UTILIZE HOT DIP GALVANIZED (HDG) HARDWARE IN LIEU OF GRADE 316 STAINLESS STEEL
    - THIS BID ALTERNATE DOES NOT APPLY TO SIMPSON™ BRACKETS/CONNECTORS AND ASSOCIATED NAILS/SCREWS, DECK SCREWS, OR OTHER SPECIALIZED PRODUCTS.
    - GALVANIZED HARDWARE SHALL MEET THE REQUIREMENTS OF ASTM A653, CLASS G185
- PROVIDE PILE WRAPPING ON ALL TIMBER PILES
  - PILE WRAP MATERIAL SHALL BLACK, UV RESISTANT HIGH DENSITY POLYETHYLENE WITH A MINIMUM THICKNESS OF 30 MILS.
  - WRAPPING SHALL BE INSTALLED FROM 1 FT. BELOW THE MUDLINE TO 1 FT. ABOVE THE MEAN HIGH WATER (MHW) LINE.
  - WRAPPING SHALL BE INSTALLED USING TYPE 316 STAINLESS STEEL FASTENERS WITH A 6 IN. MINIMUM CONTINUOUS OVERLAP AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

## SHOP DRAWINGS & SUBMITTALS

- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND OTHER SUBMITTALS FOR ALL STRUCTURAL COMPONENTS AND RELATED ACTIVITIES FOR REVIEW BY ATM. SUBMITTALS SHALL INCLUDE, BUT NOT NECESSARILY LIMITED TO:
  - CONSTRUCTION SCHEDULE WITH DEFINED SEQUENCES, TASKS, AND DURATION
  - CONSTRUCTION PLAN WITH PROPOSED DEMOLITION AND CONSTRUCTION METHODS, TECHNIQUES, AND EQUIPMENT
  - WOOD MATERIAL CERTIFICATIONS INCLUDING PRESERVATIVE TREATMENT
  - MATERIAL CERTIFICATIONS AND PRODUCT DATA FOR METAL FASTENERS, BOLTS, CONNECTORS, PLATES, AND OTHER RELATED HARDWARE COMPONENTS
  - QUALITY CONTROL PLAN FOR STRUCTURAL ELEMENTS INCLUDING MATERIAL TESTING, INSPECTIONS, MONITORING, ETC., AS APPLICABLE
  - PILE DRIVING LOGS (SEE "PIER FOUNDATION PILINGS" NOTES, THIS SHEET)
  - FINAL SWING AND BENCH DESIGN, CONNECTION DETAILS, AND SHOP DRAWINGS; DESIGN DOCUMENTS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
- CONTRACTOR'S SUBMITTALS SHALL PROVIDE COMPLETE INFORMATION FOR THE PRODUCTS OR COMPONENTS TO BE SUPPLIED. SUBMITTAL INFORMATION SHALL INCLUDE, BUT NOT BE LIMITED TO: MEMBER SIZES AND DIMENSIONS; GRADES OF MATERIAL FURNISHED; MATERIAL PREPARATION REQUIRED; MATERIAL FINISH AND MATERIAL COATINGS TO BE FURNISHED; INFORMATION REGARDING CUTS, COPES, AND HOLES REQUIRED FOR OTHER TRADES; END CONNECTIONS; CAMBER AND OTHER DEVIATION FROM LINE; SPECIAL ERECTION AND/OR INSTALLATION PROCEDURES, INCLUDING REQUIREMENTS FOR TEMPORARY STABILIZATION.
- ALL SHOP DRAWING RESUBMITTALS AND RECORD COPY SUBMITTALS SHALL HAVE ALL REVISIONS SUBSEQUENT TO THE PREVIOUS SUBMISSION CLOUDED OR OTHERWISE IDENTIFIED ON THE RESUBMITTED DOCUMENTS. RESUBMITTALS AND RECORD COPY SUBMITTALS WITHOUT IDENTIFICATION OF REVISIONS WILL BE REJECTED WITHOUT REVIEW.
- THE REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS FOR THIS PROJECT IS TO ASSESS GENERAL CONFORMANCE WITH THE DESIGN AND INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. COMMENTS REGARDING THESE SUBMITTALS DO NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE CONTRACT DOCUMENTS.

## PIER FOUNDATION PILINGS

- TIMBER PILES SHALL BE SOUTHERN YELLOW PINE IN ACCORDANCE WITH ASTM D25 AND 2.5 CCA PRESSURE PRESERVATIVE TREATED OR BETTER.
- TIMBER PILES SHALL BE VISUALLY STRAIGHT WITHOUT SPLITS OR VOIDS. PILES SHALL HAVE A CONSISTENT TAPER NOT EXCEEDING 0.1 INCH PER FOOT WITH MINIMUM BUTT AND TIP

CIRCUMFERENCES PER ASTM D25.

- IF IMPACT HAMMERS ARE TO BE USED DURING PILE INSTALLATION, CONTRACTOR SHALL CONDUCT A WAVE EQUATION ANALYSIS OF THE PILES (WEAP), COMPLETED BY A LICENSED GEOTECHNICAL ENGINEER, OF THE HAMMER-PILE-SOIL SYSTEM BASED ON THE PROVIDED GEOTECHNICAL REPORT TO DEFINE PILE DRIVING CRITERIA AND ENSURE THAT ALLOWABLE STRESSES IN PILES ARE NOT EXCEEDED DURING DRIVING ACTIVITIES. ANY PILE(S) DAMAGED DURING INSTALLATION, WHETHER VIA IMPACT HAMMER OR OTHER MEANS, SHALL BE REMOVED AND REPLACED NEW PILE(S) AT THE CONTRACTOR'S EXPENSE.
- PILE FOUNDATIONS SHALL BE HANDLED, INSTALLED, AND MONITORED IN ACCORDANCE WITH APPLICABLE SFPA GUIDELINES, REGULATORY PERMITS, AND GEOTECHNICAL REPORTS.
- EXTREME CARE IS REQUIRED TO ACCURATELY INSTALL ALL PILES AT THE REQUIRED SPACING, LOCATION, ORIENTATION, AND VERTICAL ALIGNMENT INDICATED HEREIN. CONTRACTOR IS RESPONSIBLE FOR UTILIZING PROPER METHODOLOGY AND EQUIPMENT TO ENSURE PILE INSTALLATION IN THE CORRECT POSITIONS AND SHALL IDENTIFY OPTIONS AND TECHNIQUES TO CORRECT ANY DEFICIENCIES WHICH MAY OCCUR.
- JETTING, INCLUDING PARTIAL OR LIMITED JETTING, IS PROHIBITED.
- PILES SHALL BE DRIVEN TO A MINIMUM ELEVATION OF -58" FT. NAV88. WOODEN PILE SPLICES SHALL NOT BE PERMITTED. IF PRACTICAL REFUSAL OR PILE DAMAGE IS ENCOUNTERED PRIOR TO REACHING MINIMUM PENETRATION, PILE DRIVING SHALL BE IMMEDIATELY STOPPED AND ATM SHALL BE NOTIFIED.
- CONTRACTOR SHALL RE-DRIVE ANY HEAVED PILES TO THE REQUIRED ELEVATION. PILES THAT ARE DAMAGED, LOCATED INCORRECTLY, OR OUT OF ALIGNMENT SHALL BE REPLACED OR ADDITIONAL PILES SHALL BE INSTALLED AS DIRECTED BY ATM AT THE CONTRACTOR'S EXPENSE.
- ALL PILES SHALL BE MARKED AT 1 FOOT INTERVALS WITH A NON-PERMANENT MARKING PRIOR TO DRIVING. MARKS SHALL CONSIST OF STRAIGHT LINES PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE PILE WITH ARABIC NUMBERS ASCENDING FROM THE PILE TIP.
- CONTRACTOR SHALL MAINTAIN AN ACCURATE RECORD OF PILE CONSTRUCTION AND INSTALLATION PROCEDURES AND OBSERVATIONS INCLUDING, BUT NOT LIMITED TO: LOCATIONS, DEVIATIONS FROM DESIGN LOCATIONS, CROSS SECTION SHAPE, ORIGINAL LENGTHS, GROUND OR MUDLINE ELEVATION, TIP ELEVATION, CUTOFF ELEVATION, TIME OF DRIVING OPERATION, TYPE AND SIZE OF HAMMER, RATE OF OPERATION, TYPE OF DRIVING HELMET, AND TYPE OF HAMMER CUSHION.
- PILE INSTALLATION LOGS AND INSPECTION REPORTS SHALL BE KEPT ON SITE. ELECTRONIC COPIES OF THE PILE INSTALLATION LOGS AND INSPECTION REPORTS SHALL BE MAINTAINED DAILY, IMMEDIATELY AVAILABLE UPON REQUEST, AND OTHERWISE SUBMITTED WEEKLY TO ATM.
- CONTRACTOR SHALL APPLY CLEAR WATER-BASED WAX EMULSION END GRAIN SEALER TO TOP OF TIMBER PILES IMMEDIATELY AFTER TRIMMING AND CUTTING, WHERE APPLICABLE. CONTRACTOR TO SUBMIT PROPOSED SEALANT PRODUCT SPECIFICATIONS TO ATM FOR APPROVAL PRIOR TO INSTALLATION. SEALANT SHALL BE APPLIED PER THE MANUFACTURER'S RECOMMENDATIONS.

## STRUCTURAL LUMBER

- ALL STRUCTURAL LUMBER SHALL BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS - LATEST EDITION) PUBLISHED BY THE AMERICAN WOOD COUNCIL AND SHALL MEET GRADING AND TREATMENT REQUIREMENTS OF PS 20 AMERICAN SOFTWOOD LUMBER STANDARD WITH THE APPLICABLE RULE OF INSPECTION AGENCIES CERTIFIED BY THE AMERICAN LUMBER STANDARD COMMITTEE (ALSC). FACTORY MARK EACH PIECE OF LUMBER WITH GRADE STAMP OF INSPECTION AGENCY EVIDENCING COMPLIANCE WITH GRADING RULE REQUIREMENTS.
- ALL LUMBER SHALL BE PRESSURE PRESERVATIVE TREATED WITH 2.5 PCF CCA TO AWPA STANDARDS FOR USE CATEGORY UC5B, UNLESS OTHERWISE INDICATED.
- ALL STRUCTURAL LUMBER SHALL BE S4S - SURFACED FOUR SIDES.
- STRUCTURAL LUMBER GRADES:
  - PIER SUPERSTRUCTURE LUMBER SHALL BE "NO. 2" SOUTHERN YELLOW PINE (SYP) OR BETTER.
  - HANDRAILS, ROOF COLUMNS, AND ROOF FRAMING SHALL BE "NO. 1" SYP OR BETTER.
  - CROSS BRACING SHALL BE "MARINE GRADE" OR BETTER.
- PRESERVATIVE TREATED LUMBER SHALL NOT BE IN DIRECT CONTACT WITH ALUMINUM.

- LUMBER SHALL BE UNLOADED IN A DRY PLACE AND PLACED ON DUNNAGE OR OTHER MEANS TO PREVENT CONTACT WITH THE GROUND. LUMBER STORED IN OPEN AREA(S) SHALL BE COVERED WITH A MATERIAL THAT WILL GIVE PROTECTION FROM THE ELEMENTS WHILE ALLOWING MOISTURE TO ESCAPE.
- WHERE BEAMS OR OTHER STRUCTURAL COMPONENTS ARE TO BE ATTACHED TO NOTCHED PILES, THESE COMPONENTS SHALL BE INSTALLED SUCH THAT THEY ARE IN BEARING WITH THE NOTCHED SURFACE OF THE PILE. PILE NOTCHES SHALL MATCH THE NOMINAL DIMENSIONS OF THE STRUCTURAL COMPONENT AND SHALL NOT EXCEED 50% OF THE TOTAL CROSS-SECTIONAL DIAMETER OF THE PILE.
- TRIM, CHAMFER, COPE, OR PROVIDE WOOD SHIMS AND BLOCKING AS REQUIRED TO FACILITATE MEMBER CONNECTIONS AND TRANSITIONS. MAINTAIN ALIGNMENT AND AESTHETIC APPEARANCE OF FIXED PIER FRAMING AND DECKING AT CHANGES IN GEOMETRY, DIRECTION, AND ELEVATION.
- ALL TREATED WOOD PRODUCTS SHALL BE HANDLED AND FIELD FABRICATED IN ACCORDANCE WITH AWPA STANDARDS FOR THE CARE OF PRESERVATIVE TREATED WOOD PRODUCTS. SEAL OR FIELD TREAT ALL CUT ENDS, NOTCHES, AND BOLTS HOLES OF PRESERVATIVE TREATED LUMBER PER AWPA M4.

## DECKING

- DECKING SHALL CONSIST OF 1X6 IPE HARDWOOD LUMBER (BASE BID). CONTRACTOR SHALL PROVIDE PRODUCT SPECIFICATIONS, HARVEST CERTIFICATION, AND MATERIAL PROPERTIES TO ATM FOR APPROVAL PRIOR TO PROCUREMENT.
  - CONTRACTOR SHALL PROVIDE PRICING FOR TANZITE STONDECK™ "APPALACHIAN COLLECTION" DECKING IN LIEU OF IPE AS A SOLICITED BID ALTERNATE FOR THE FIXED PIER, ONLY. SEE ALSO "GENERAL CONSTRUCTION AND BIDDING" NOTES, THIS SHEET.
- ALL DECKING SHALL BE INSTALLED IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT DESIGN REQUIREMENTS. GAPS BETWEEN DECK BOARDS SHALL BE 1/4 INCH (TYP) AND NO LESS THAN 3/16" AT THE TIME OF INSTALLATION. IN NO INSTANCE SHALL THERE BE ANY GAP IN THE WALKING SURFACE THAT EXCEEDS 1/2 INCH.
- DECK BOARDS SHALL BE ATTACHED TO EACH STRINGER WITH (2) #10 X 3" COUNTERSUNK TYPE 316 STAINLESS STEEL DECK SCREWS. DECK SCREWS SHALL BE ALIGNED, UNIFORMLY SPACED, AND SET FLUSH TO ALLOW FOR A SMOOTH SURFACE.
- DECKING OVERHANG ON PIER EDGES SHALL BE UNIFORM AND NOT EXCEED 3 INCHES PAST THE OUTER STRINGER OR OTHER SUPPORTING MEMBER.
- NOTCH AND TRIM DECKING AS REQUIRED AT HANDRAIL POSTS, ROOF COLUMNS AND ANY OTHER CONFLICTS.
  - FIELD CUTS SHALL BE OFFSET 0.5" TYP (1" MAX) FROM THE CONFLICTING MEMBER AND SHALL BE MADE PERPENDICULAR TO THE GRAIN. ADJACENT CUTS SHALL BE AT 90 DEG. TO EACH OTHER WHERE APPLICABLE.
  - VISIBLE CUTS ON THE SURFACE DUE TO SAW OVERRUN OR OTHER MARRING OF DECK ARE SUBJECT TO REJECTION AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

## HANDRAILS

- HANDRAIL DETAILS PROVIDED HEREIN ARE SCHEMATIC. HANDRAILS SHALL MATCH THE EXISTING HANDRAILS ALONG THE MORGAN CREEK PORTION OF THE COMMERCIAL MARINA. CONTRACTOR IS RESPONSIBLE FOR VERIFYING SIZES AND MATERIALS TO MATCH THE EXISTING RAILS PRIOR TO SUBMITTING THEIR BID.
- HANDRAIL TIMBER COMPONENTS SHALL BE PAINTED TO MATCH THE EXISTING HANDRAILS ALONG THE MORGAN CREEK PORTION OF THE COMMERCIAL MARINA.

Water Levels	Level (ft)	Reference Datum	Description	Source
Water Level	7.5'	NAVD 88	Deck Elevation	N/A
Winds	Speed (mph)	Type	Return Period	Source
Windspeed	135	3-sec gust	Risk Category I	ASCE 7-16
Wind-Waves	H <sub>s</sub> (ft)	T <sub>p</sub> (sec)	Return Period	Source
Wind-Waves	2.9	2.5	50-yr	Coastal Conditions Assessment (ATM)
Current	Speed (knots)	Speed (mph)		Source
Design Current Speed	1.7	1.96	-	Coastal Conditions Assessment (ATM)
Vertical Loads	Uniform (psf)	Point (lb)	Description	Source
Uniform Live Load	100	650	Unrestricted (golf carts)	ASCE-50; IBC 2021
Uniform Dead Load (pier superstructure)	25	-	-	Common practice for timber superstructure
Uniform Dead Load (roof)	35	-	-	Allows for metal roofing
Gangway	-	12,500	8' X 80" Aluminum	Assumed based on typical weights for this size gangway
Wave Uplift	-	-	-	Neglected - assumed decking to breakeaway
Wave Slam	-	-	-	Neglected - assumed decking to breakeaway
	Linear (plf)		Description	Source
Utilities	25	-	-	Per electrical designer

## FASTENERS AND CONNECTORS

- ALL HURRICANE TIES AND OTHER SPECIALIZED BRACKETS SHALL BE MANUFACTURED BY THE SIMPSON STRONG-TIE COMPANY OR PRE-APPROVED EQUAL AND SHALL BE TYPE 316 STAINLESS STEEL. CONTRACTOR SHALL NOTIFY ATM IF ANY DESIGNATED BRACKET IS NOT AVAILABLE IN 316 STAINLESS STEEL PRIOR TO PROCUREMENT OR INSTALLATION.
- ALL BOLTS, SCREWS, THREADED RODS, NAILS, WASHERS, HEX NUTS, CONNECTORS, AND OTHER HARDWARE SHALL BE TYPE 316 STAINLESS STEEL (BASE BID).
  - BIDDERS SHALL PROVIDE A BID ALTERNATE FOR THE USE OF HOT DIP GALVANIZED (HDG) COMPONENTS MEETING THE REQUIREMENTS OF ASTM A653, CLASS G185. SEE ALSO NOTES UNDER "GENERAL CONSTRUCTION AND BIDDING REQUIREMENTS", THIS SHEET.
- BOLTED CONNECTIONS SHALL CONSIST OF A HEX NUT (OR BOLT HEAD) AND WASHERS AT EACH END AS INDICATED IN THE DRAWINGS. Ogee WASHERS SHALL BE USED ON ALL BOLTS LOCATED ON THE OUTBOARD SIDES OF THE HANDRAIL POST THRU-RODS.
- AFTER INSTALLATION, BOLTED CONNECTIONS SHALL BE CHECKED FOR TIGHTNESS AND PROTRUDING BOLT ENDS SHALL BE CUT OFF ONE (1) INCH BEYOND THE NUT.
- BLOCKING BOARDS BETWEEN STRUCTURAL MEMBERS MAY BE AFFIXED VIA NAILS AND DO NOT REQUIRE SIMPSON TIES.

Signature \_\_\_\_\_  
Date \_\_\_\_\_

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3					
2					
1					

DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	18-3287	N/A

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC

## STRUCTURAL NOTES

CITY OF ISLE OF PALMS

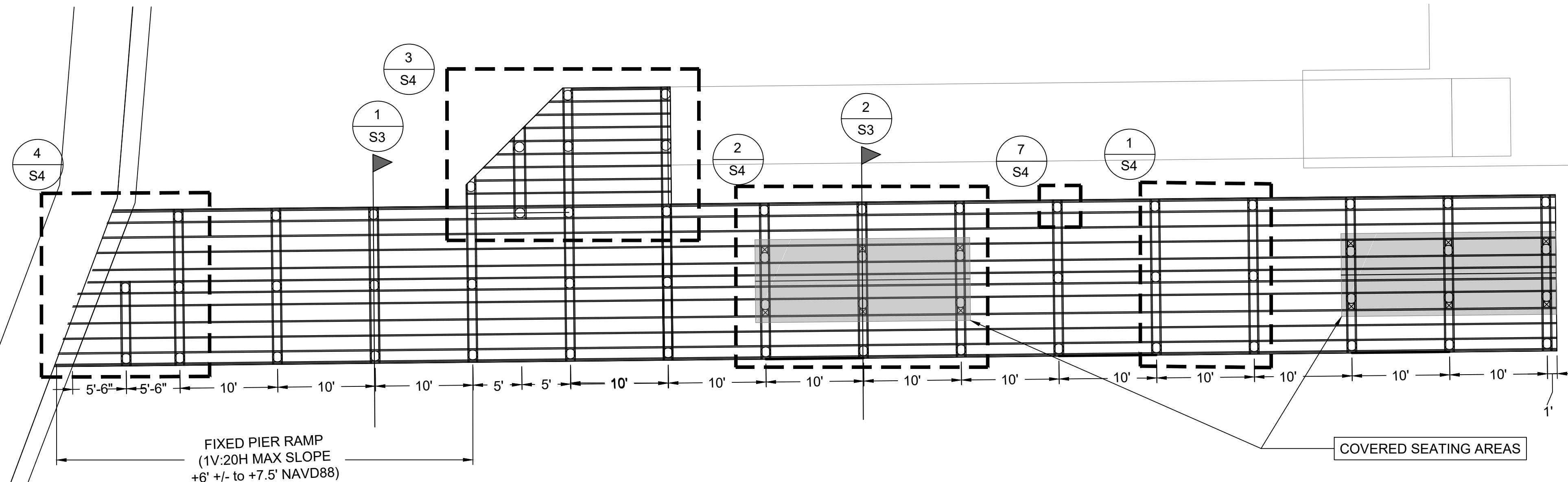
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ATM  
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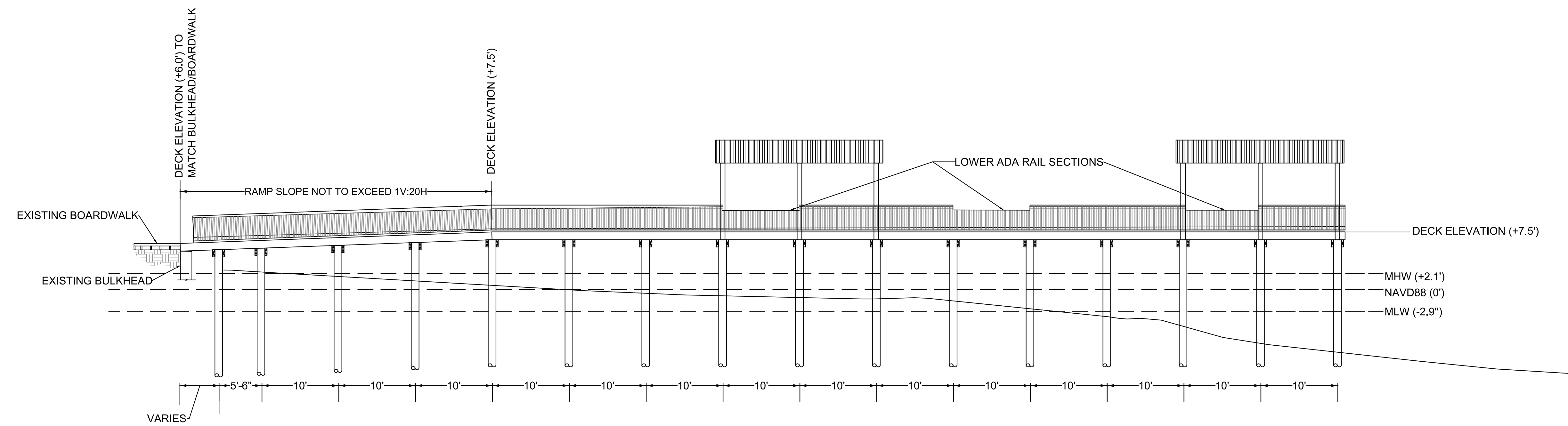
DRAWING NUMBER  
**S1**



FOR BIDDING PURPOSES ONLY  
NOT FOR CONSTRUCTION



1 FIXED PIER FRAMING PLAN OVERVIEW  
1/8" = 1'-0"



2 FIXED PIER PROFILE  
1/8" = 1'-0"

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

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DESIGNED	DRAWN	CHECKED	DATE	SCALE
JD	HA	KM	10/19/2023	1/8"=1'
			JOB NO. 18-3287	

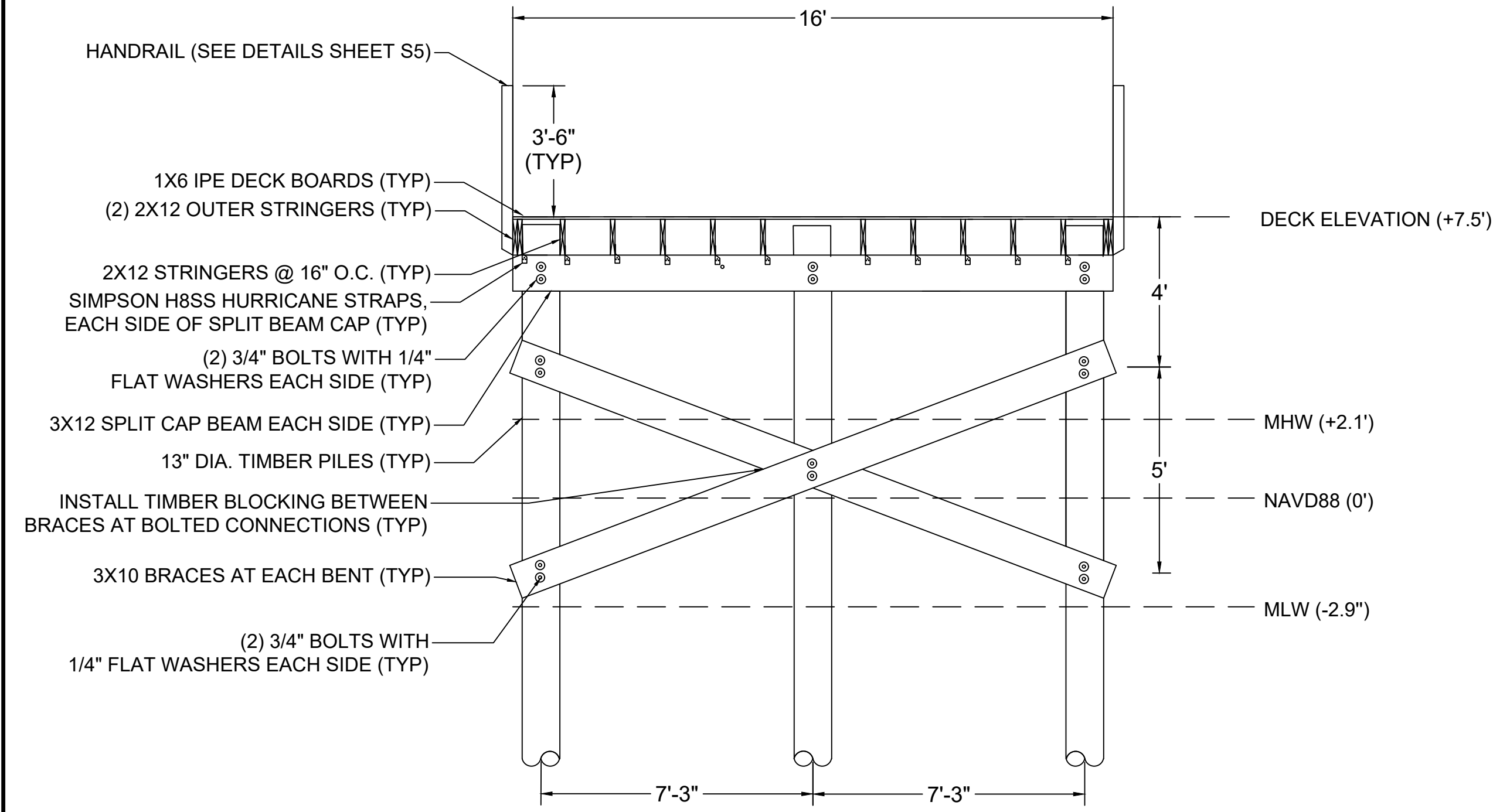
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**STRUCTURAL PLAN OVERVIEW**  
CITY OF ISLE OF PALMS

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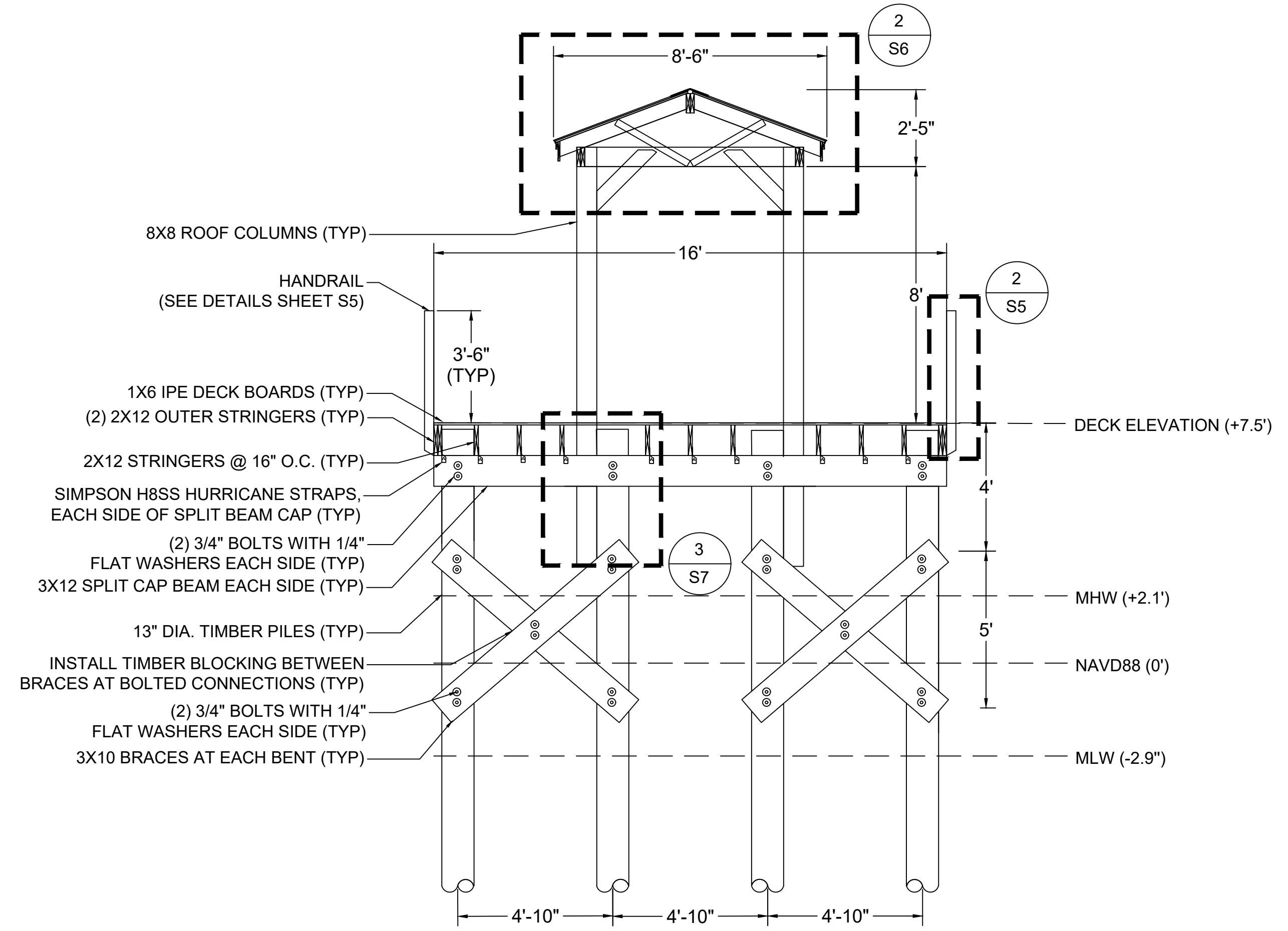
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**S2**



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1 TYPICAL FIXED PIER SECTION  
1" = 3'-0"



2 TYPICAL FIXED PIER SECTION AT ROOF STRUCTURE  
1" = 3'-0"

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN BY	CHECKED BY	REMARKS
4				
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DESIGNED: J.D.  
DRAWN: J.D.  
CHECKED: H.A.  
DATE: 10/19/2023  
JOB NO.: 18-3287  
SCALE: 1"=3'-0"

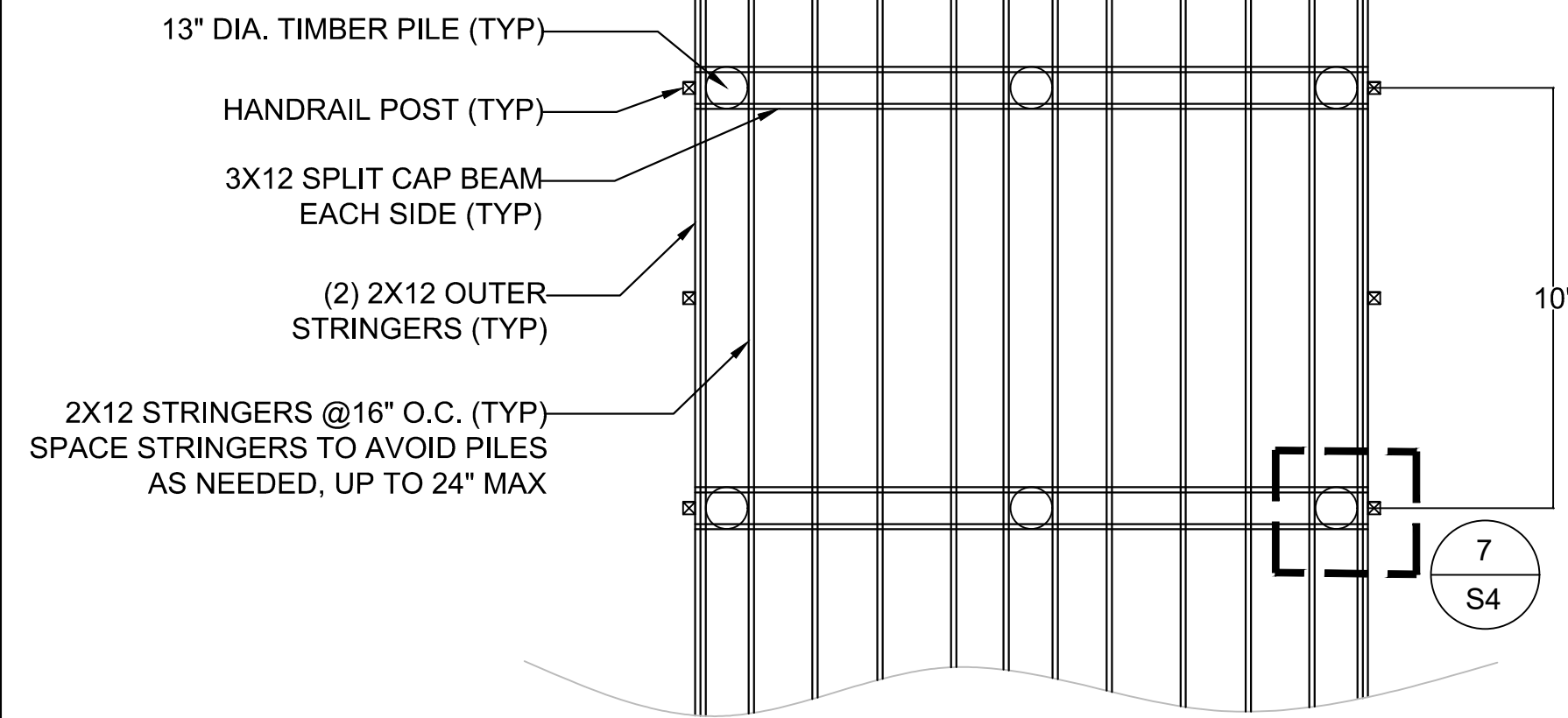
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**TYPICAL FIXED PIER SECTIONS**  
CITY OF ISLE OF PALMS

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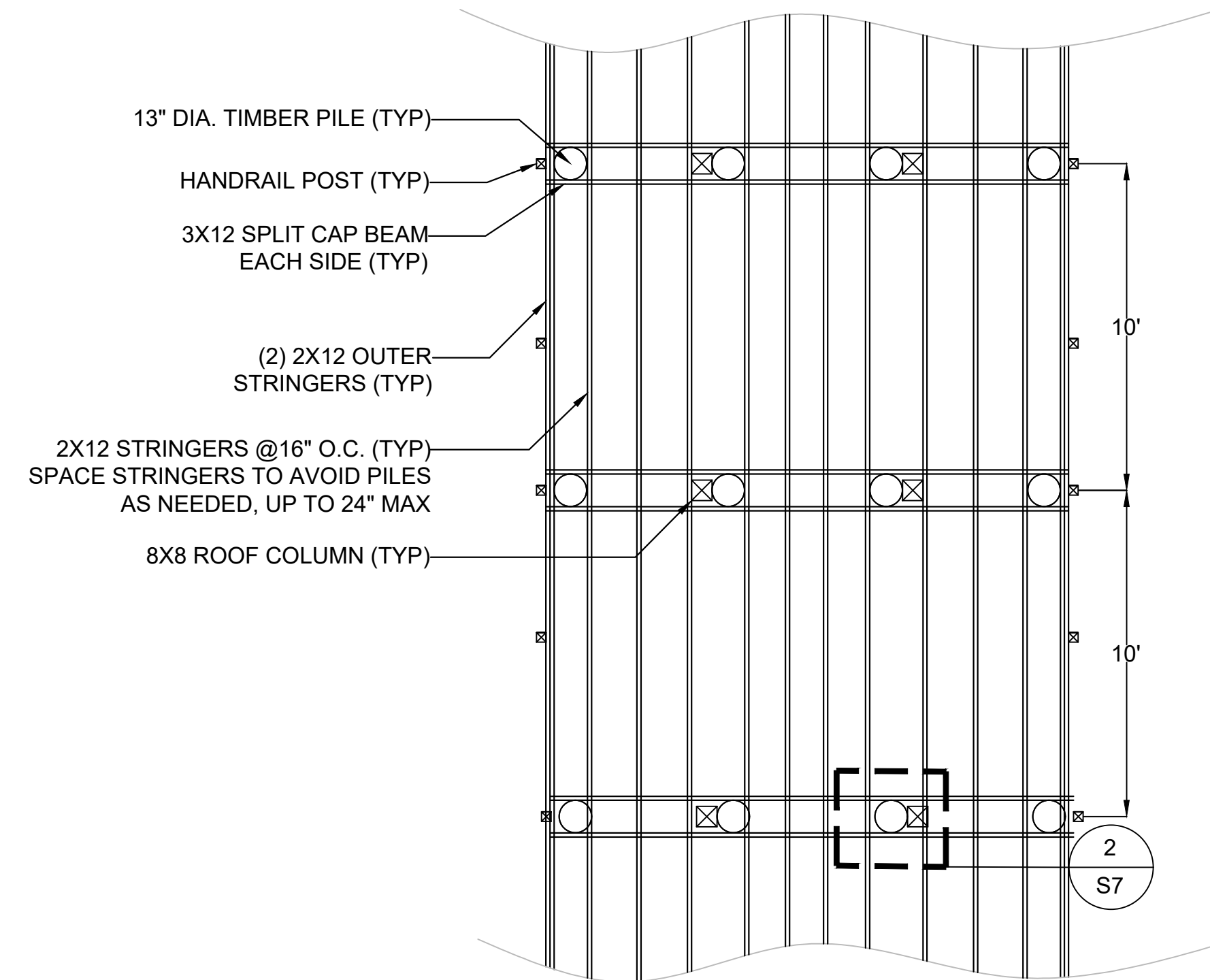
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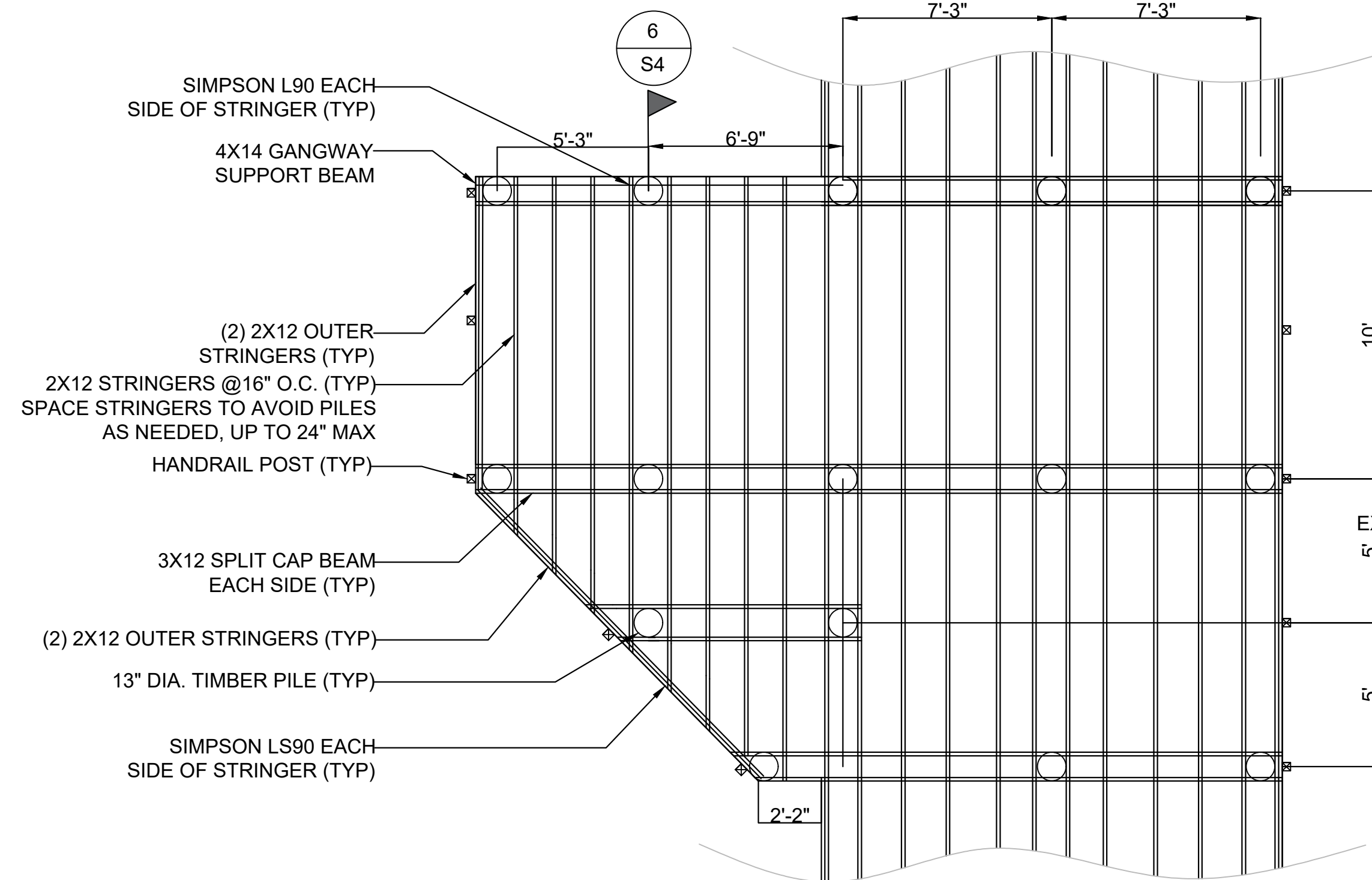
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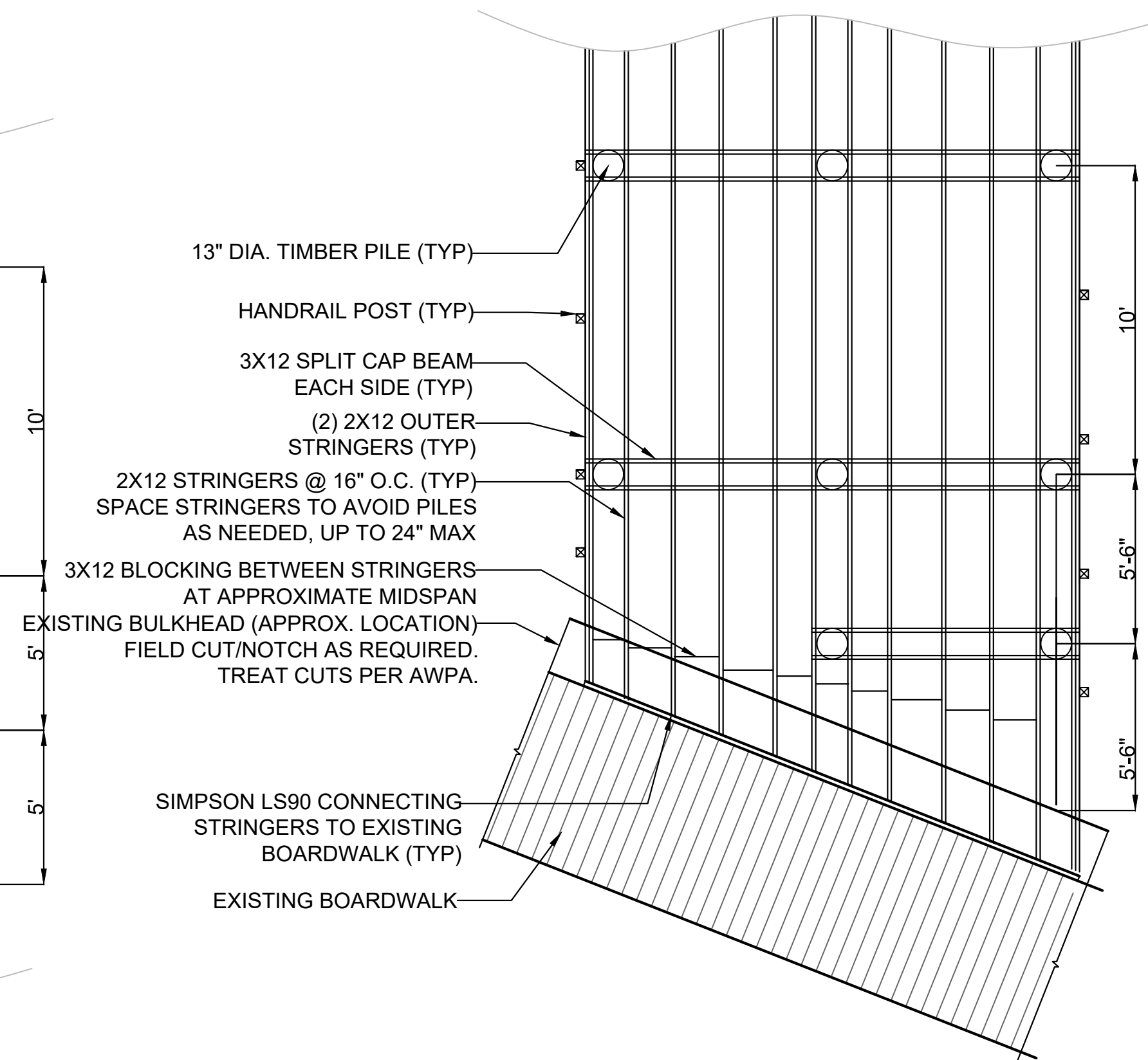
**1 TYPICAL FIXED PIER FRAMING DETAIL**  
1" = 4'-0"



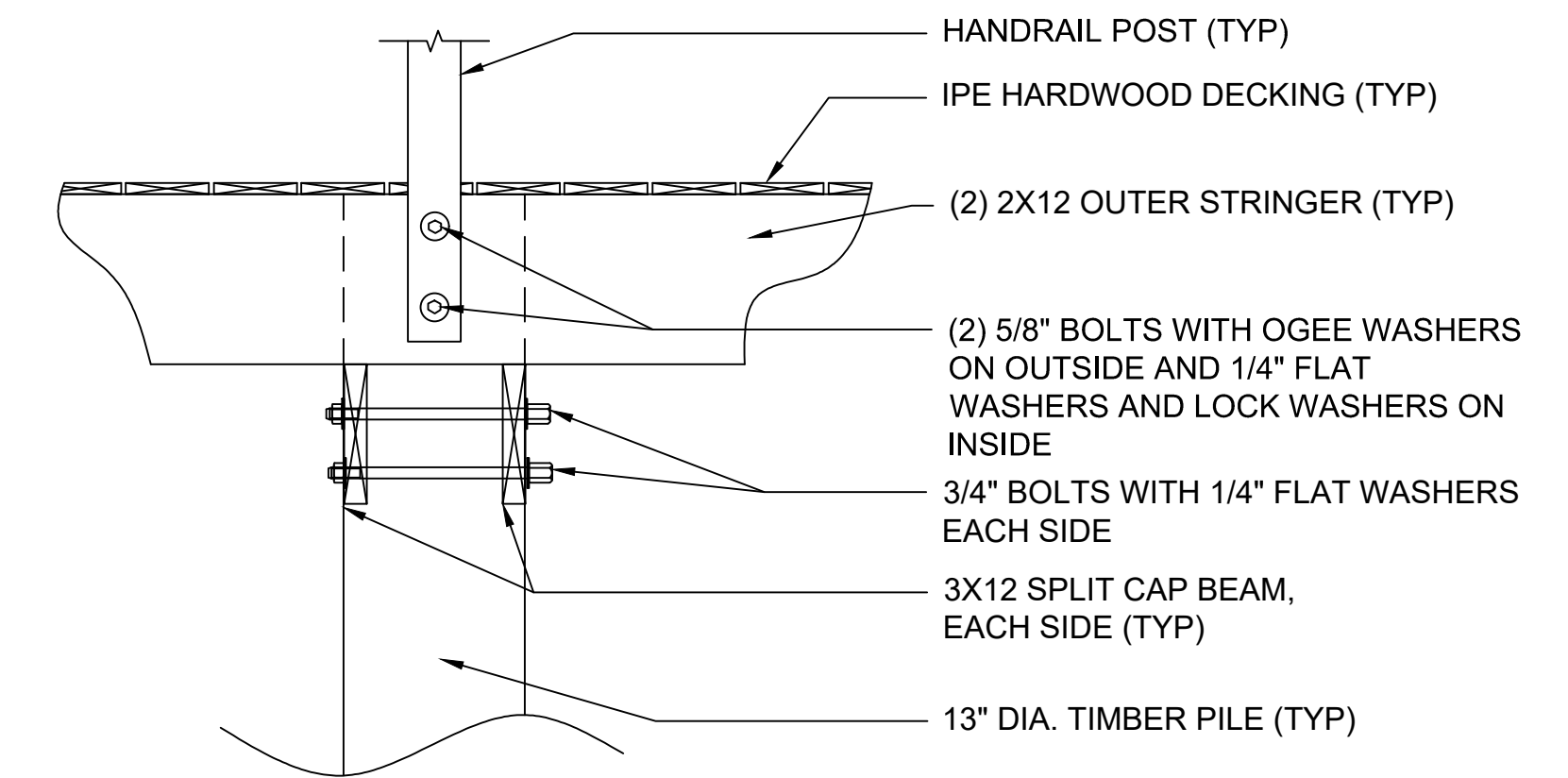
**2 TYPICAL FIXED PIER FRAMING DETAIL AT ROOF STRUCTURE**  
1" = 4'-0"



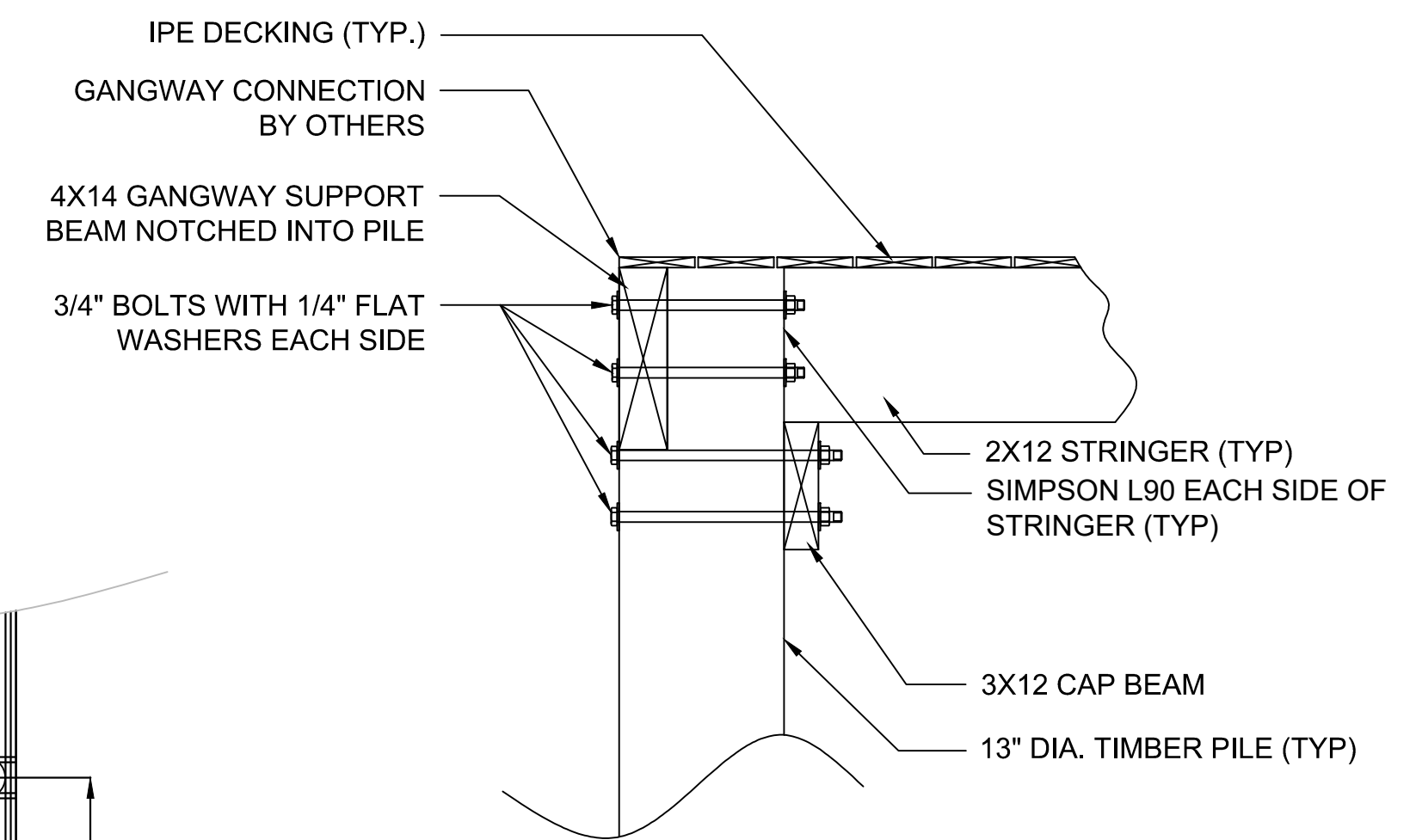
**3 FRAMING AT GANGWAY PLATFORM**  
1" = 4'-0"



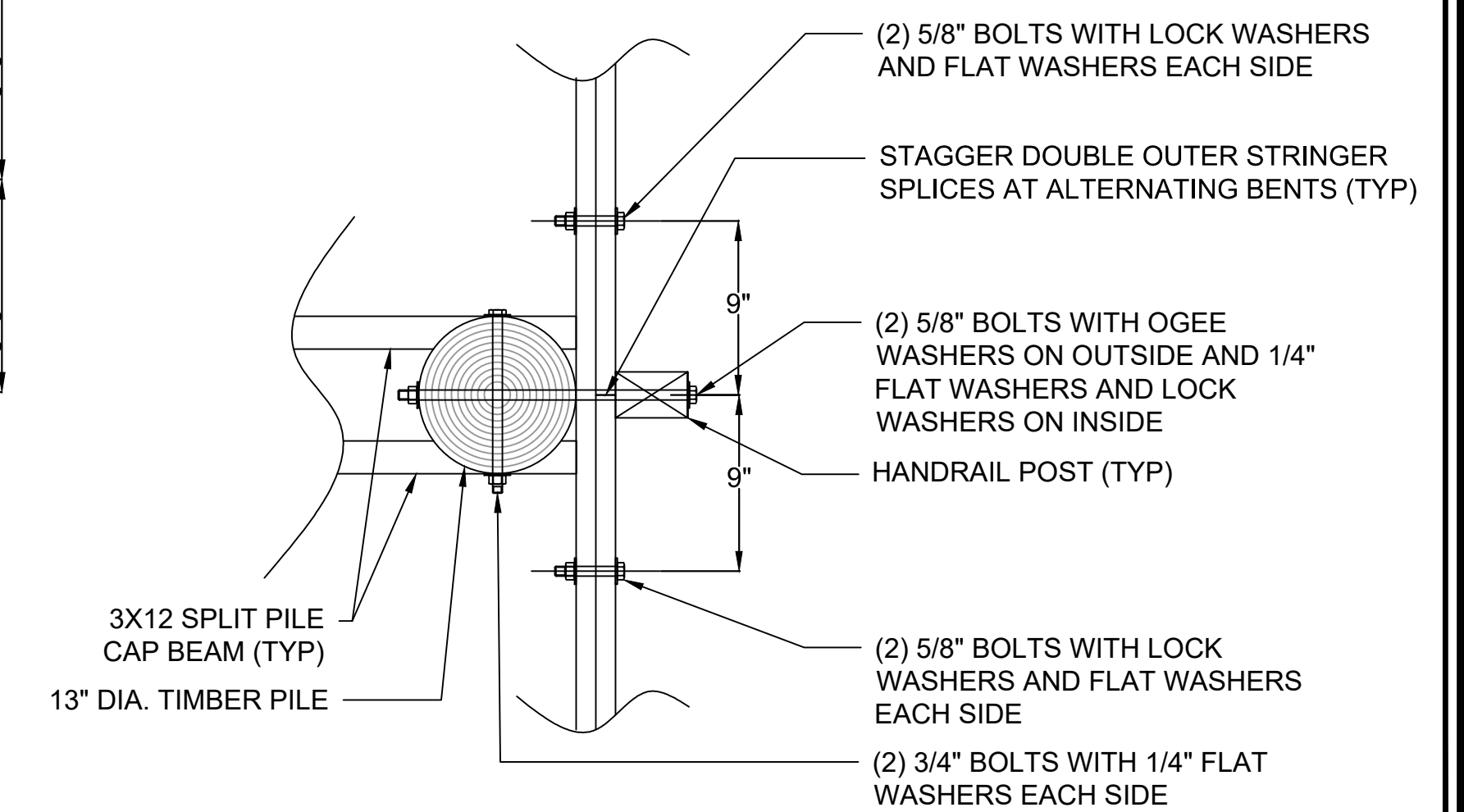
**4 FRAMING DETAIL AT BULKHEAD**  
1" = 4'-0"



**5 TYPICAL PILE BENT PROFILE**  
1" = 1'-0"



**6 GANGWAY SUPPORT BEAM SECTION**  
1" = 1'-0"



**7 TYPICAL OUTER STRINGER DETAIL**  
1" = 1'-0"

Signature \_\_\_\_\_  
Date \_\_\_\_\_

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JD	HA	KM	10/19/2023	18-3287	VARIABLE

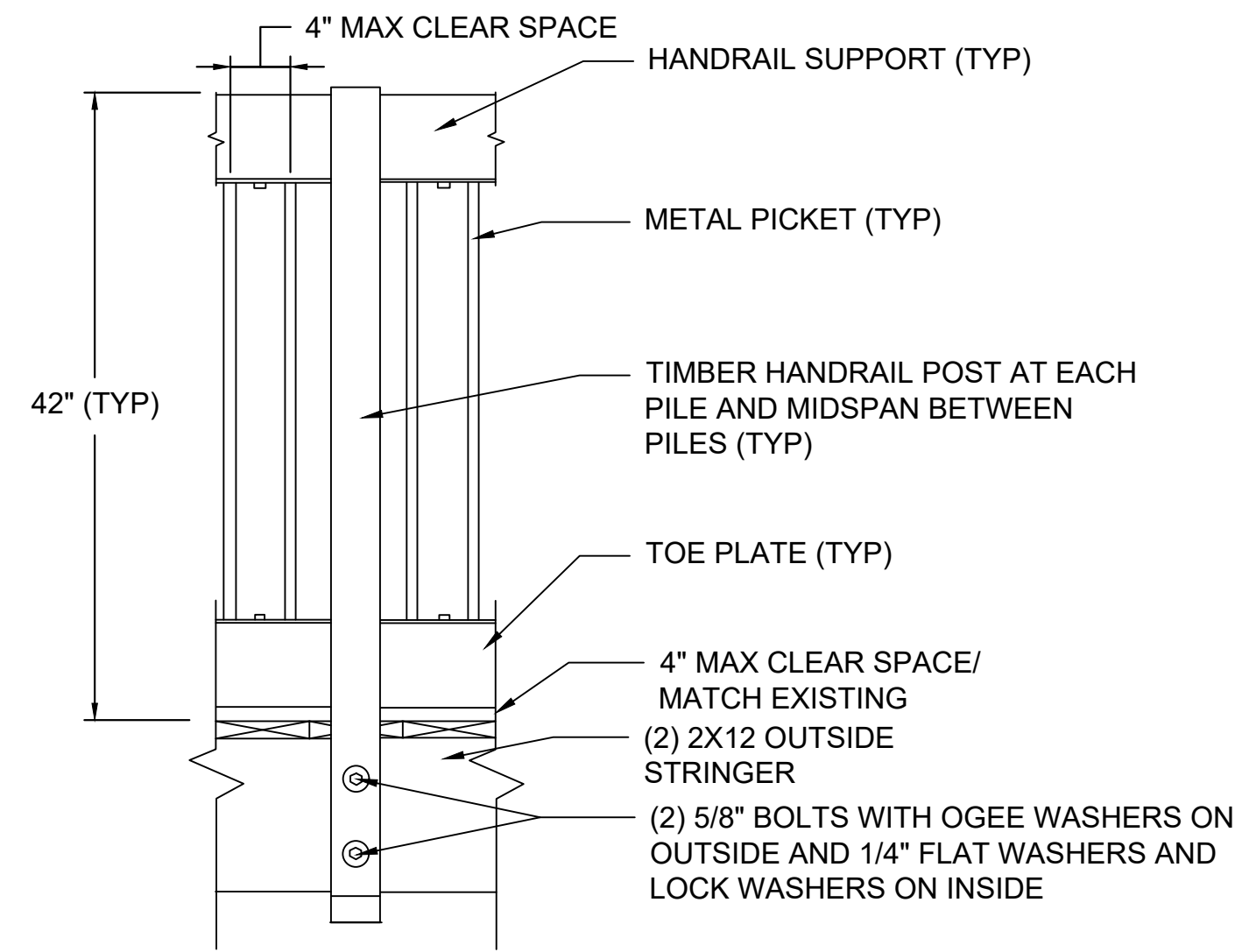
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ISLE OF PALMS, SC  
**STRUCTURAL DETAILS**  
CITY OF ISLE OF PALMS

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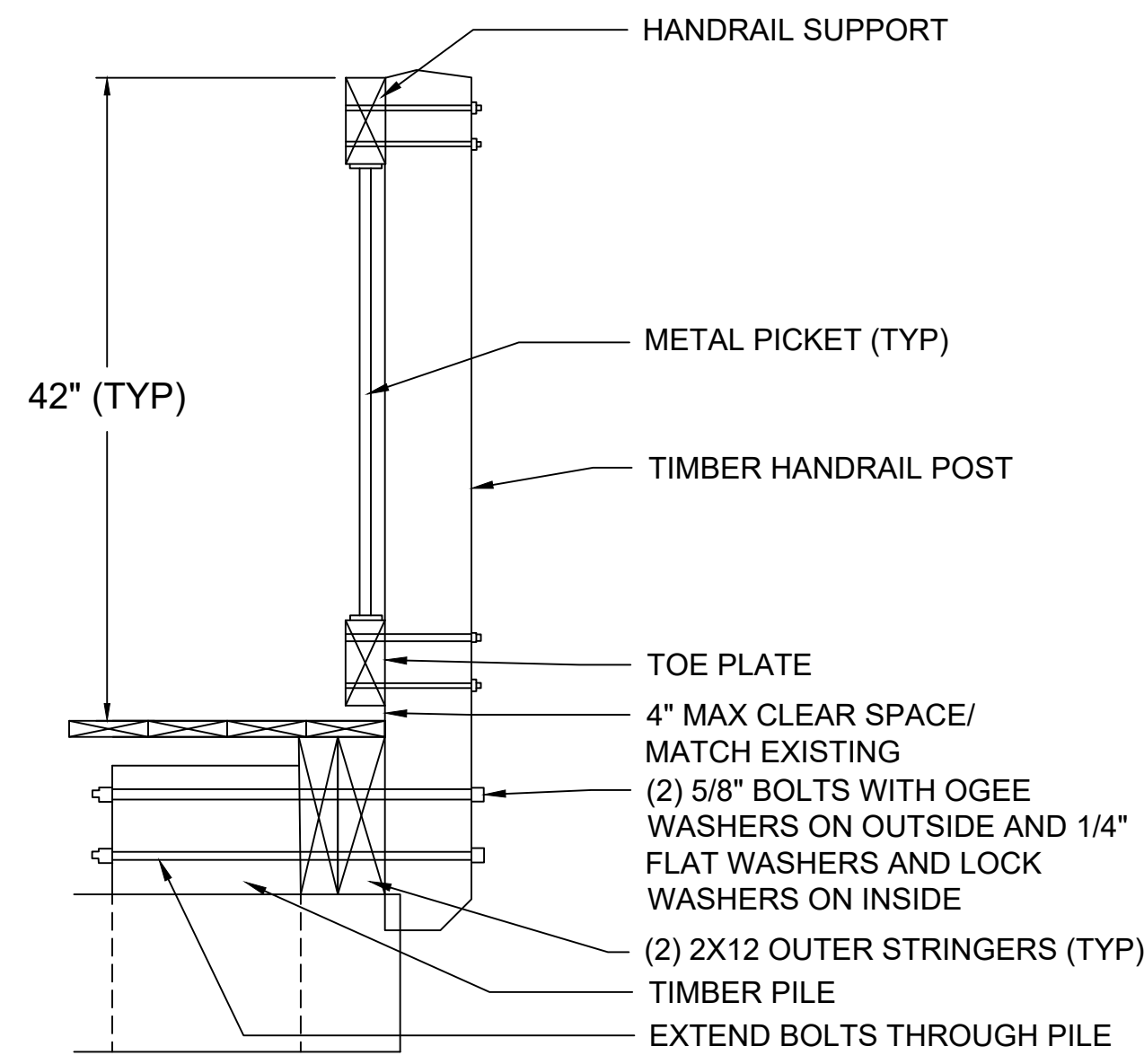
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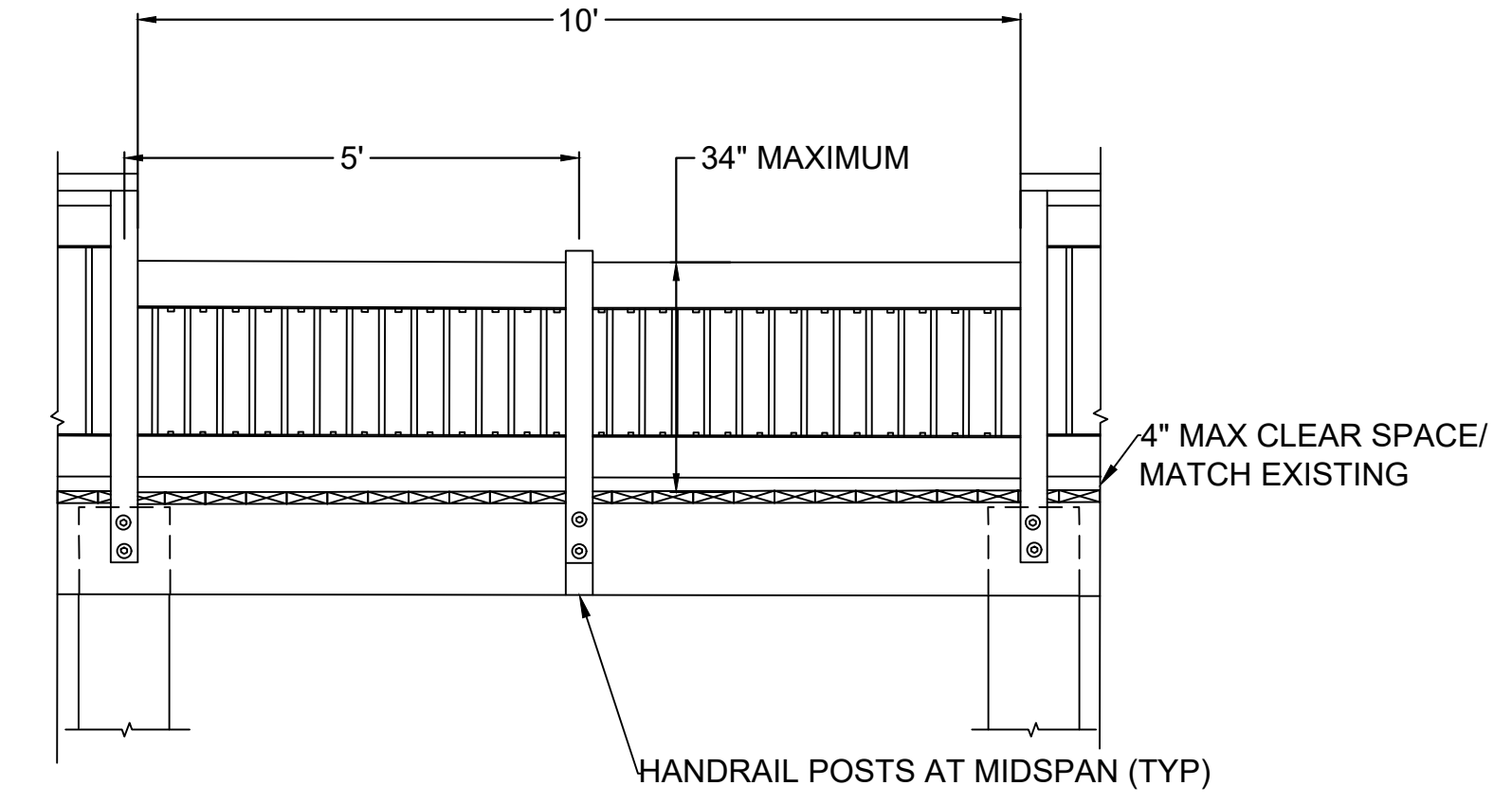
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**1 FIXED PIER TYPICAL HANDRAIL PROFILE**  
1" = 1'-0"

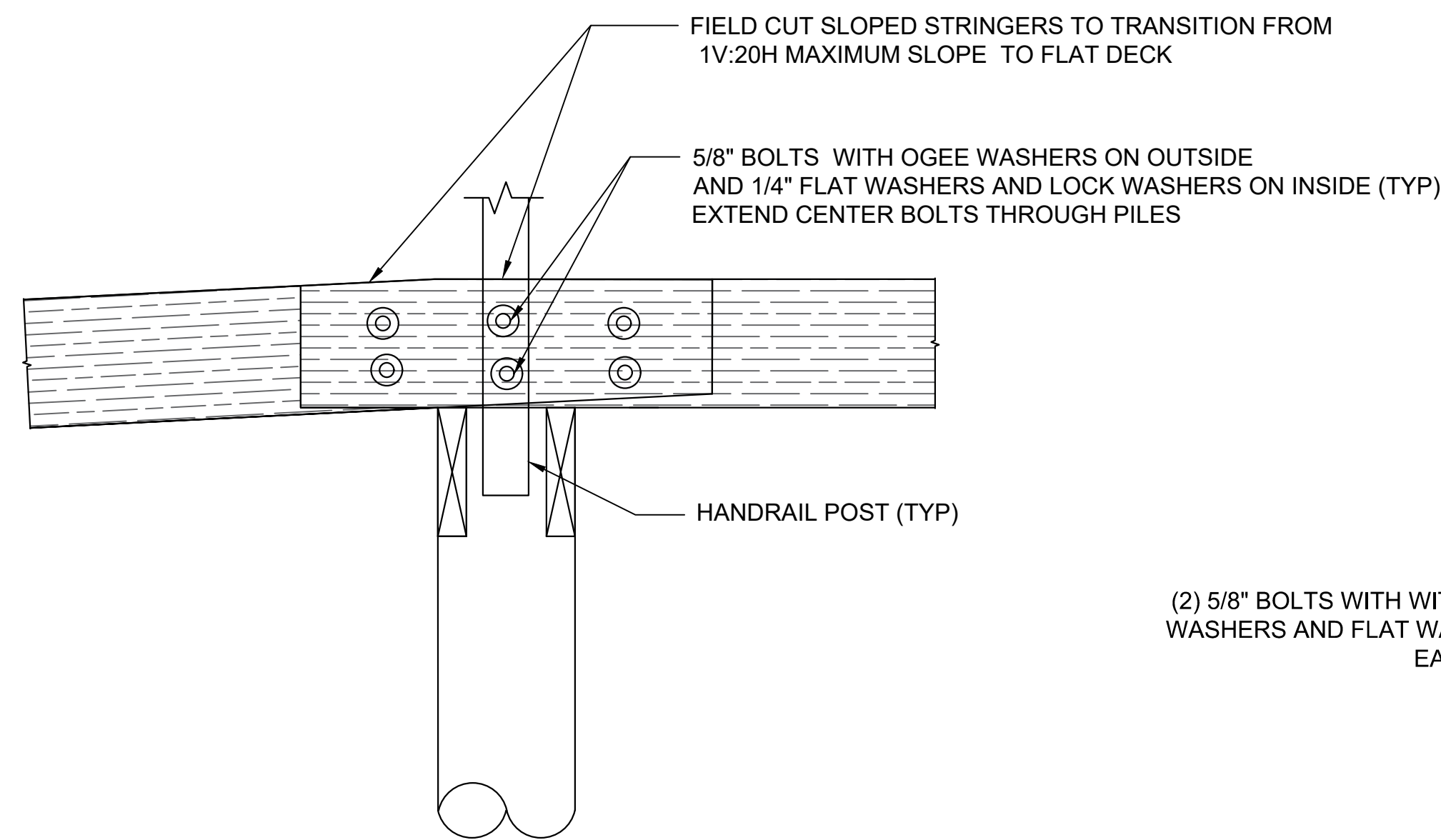


**2 FIXED PIER TYPICAL HANDRAIL SECTION**  
1" = 1'-0"

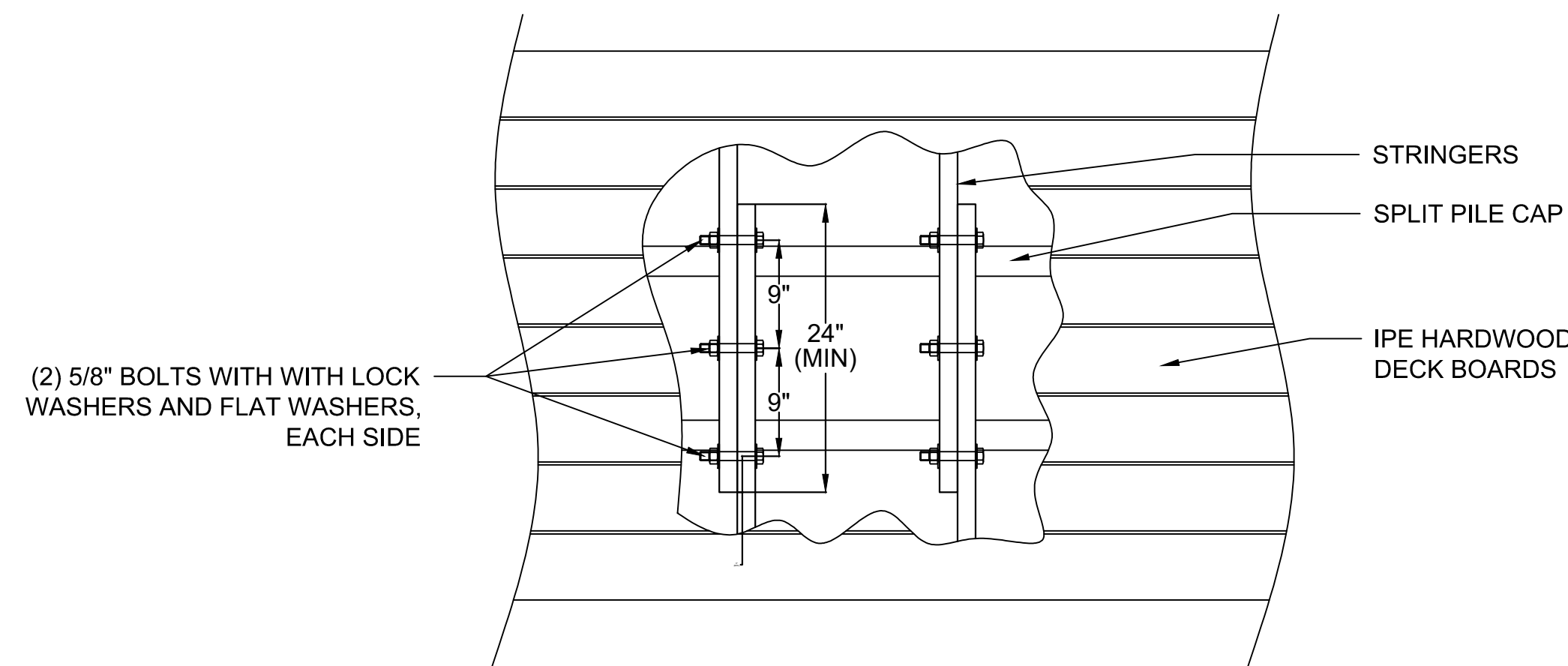


**3 FIXED PIER LOWER RAILING PROFILE (ADA)**  
1" = 2'-0"

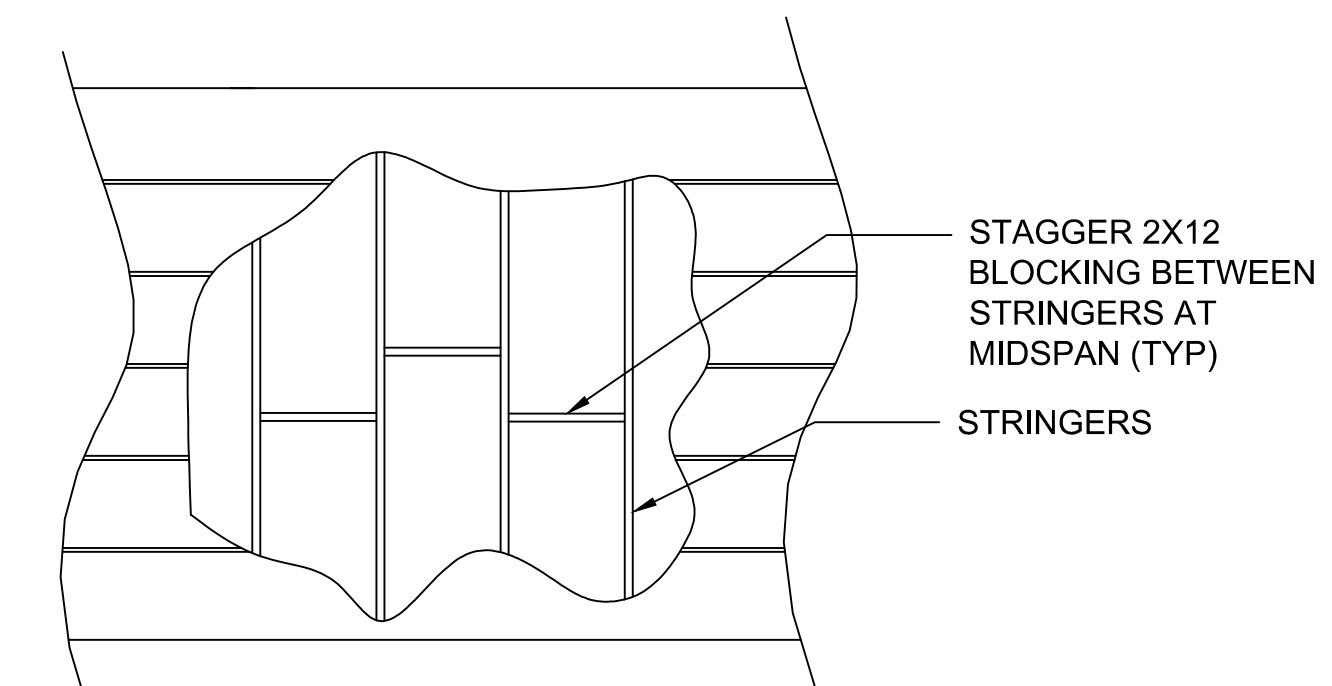
**HANDRAIL NOTES:**  
1. CONTRACTOR SHALL DESIGN HANDRAILS TO MATCH THE EXISTING HANDRAILS IN THE MORGAN CREEK PORTION OF THE MARINA.  
2. HANDRAIL TIMBER TO BE NO. 1 TREATED SYP OR BETTER. SEE NOTES SHEET S1.



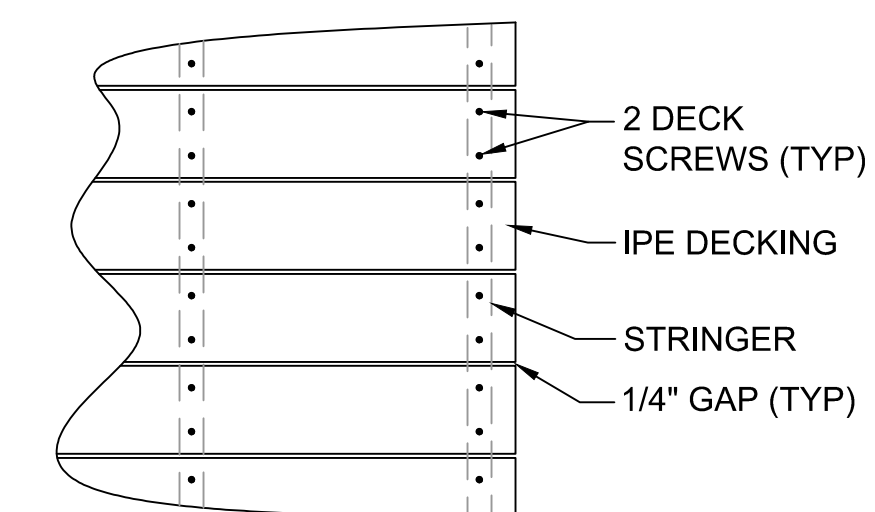
**4 STRINGER SPLICE AT RAMP TRANSITION**  
1" = 1'-0"



**5 TYPICAL LAP SPLICE DETAIL**  
NOT TO SCALE



**6 TYPICAL BLOCKING DETAIL**  
NOT TO SCALE



**7 TYPICAL DECK BOARD ATTACHMENT SCHEDULE**  
NOT TO SCALE

Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV	DATE	DRAWN	CHECKED	BY	REMARKS
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DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	18-3287	VARIES

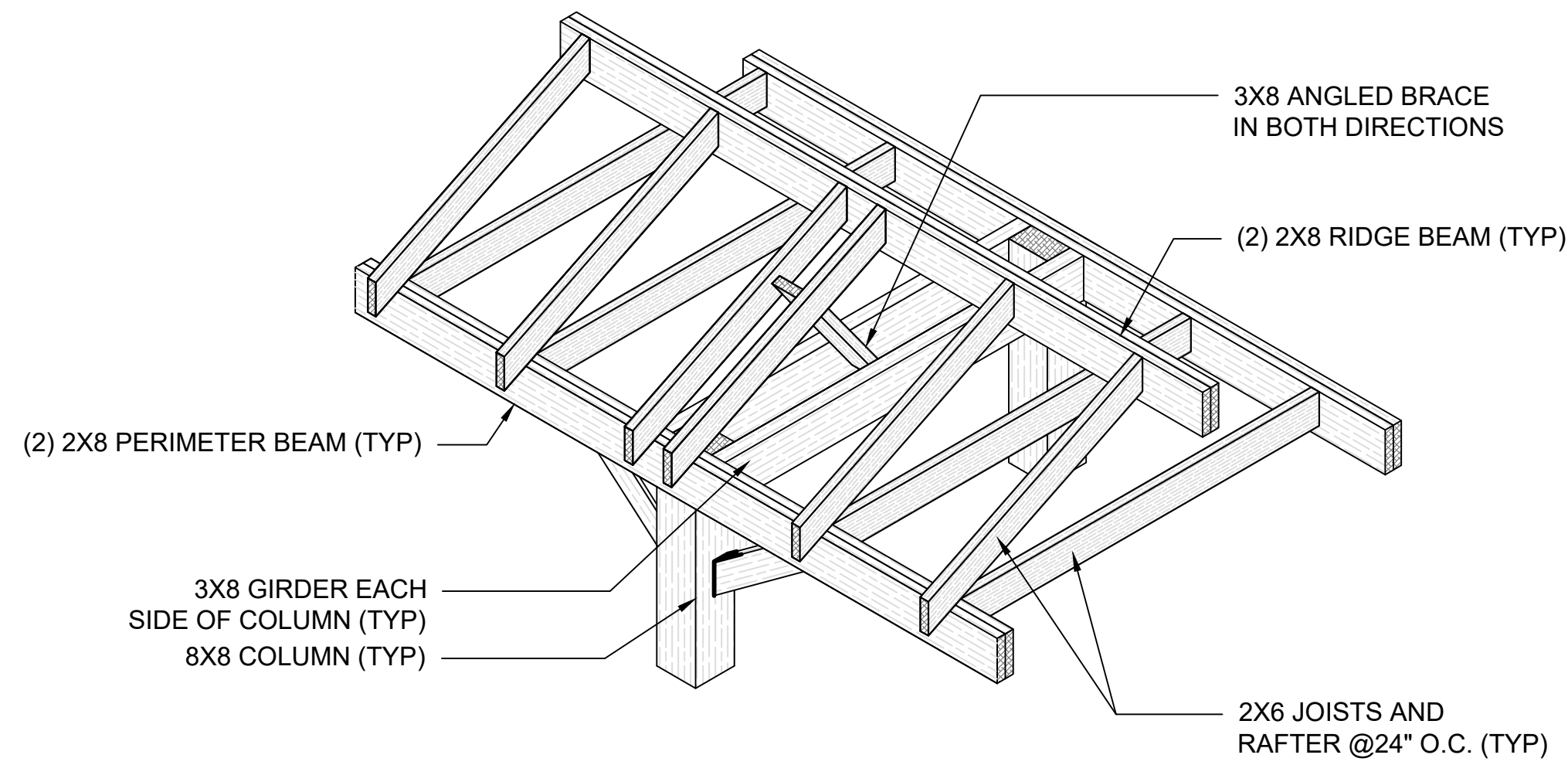
ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**STRUCTURAL DETAILS**  
CITY OF ISLE OF PALMS

Applied Technology & Management  
941 Houston Northcut Blvd.  
Suite 201  
Myrtle Beach, SC 29577  
ATM  
A Geosynetic Company

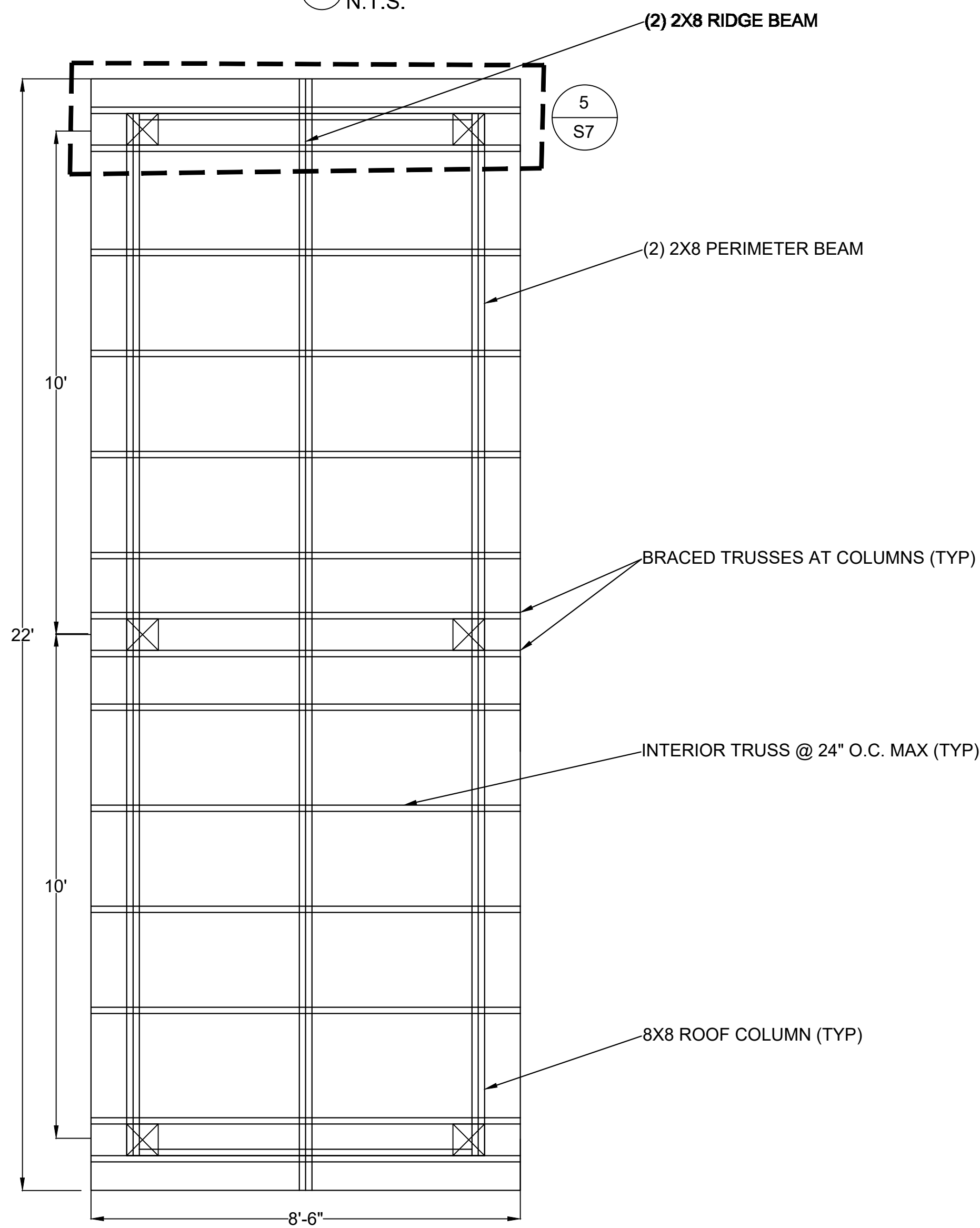
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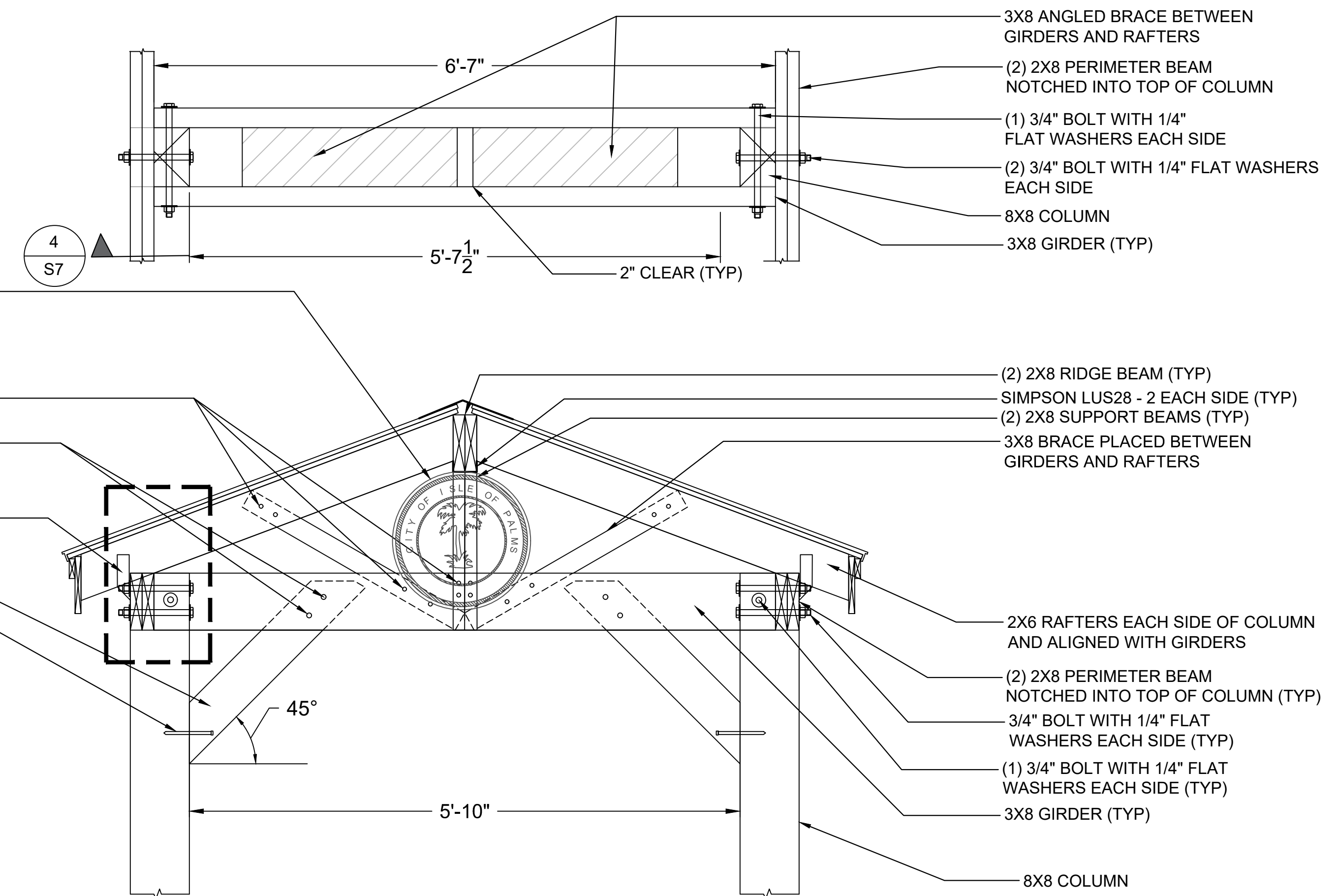
1 ISOMETRIC ROOFING DETAIL  
N.T.S.



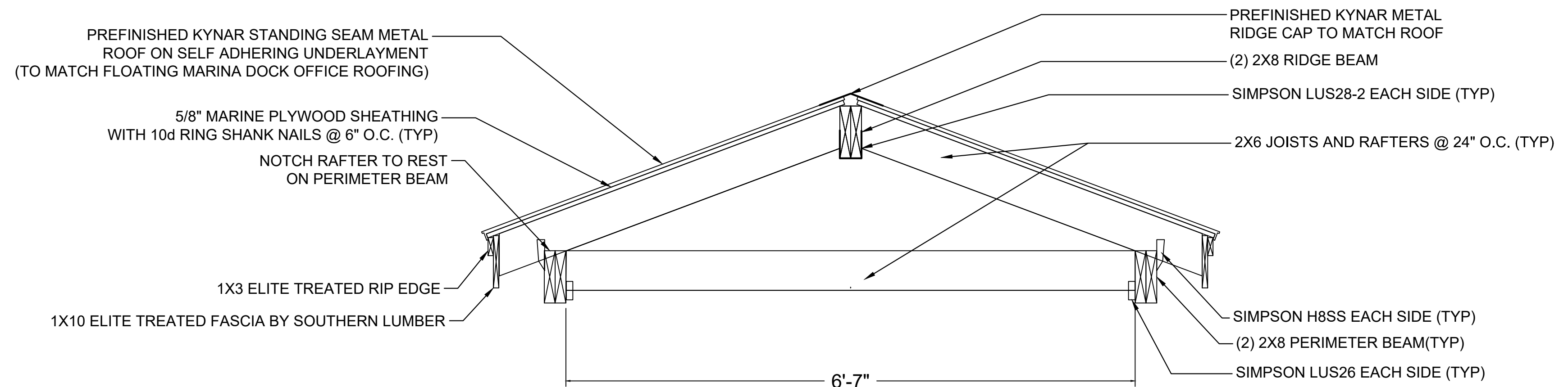
NOTE:  
STAGGER 2X4 BLOCKING BETWEEN RAFTERS AT MID-PITCH

3 ROOF FRAMING PLAN  
1" = 2'-0"

LASER CUT METAL POWDER COATED CITY SEAL (APPROX 18" DIA.) CONTRACTOR TO PROVIDE SHOP DRAWINGS AND VANDAL RESISTANT CONNECTION DETAILS  
(2) 1/2" DIA. 6" SS LAG BOLTS (TYP)  
5/8" BOLTS WITH 1/4" FLAT WASHERS EACH SIDE (TYP)  
SIMPSON H8SS EACH SIDE (TYP)  
2X6 BRACE (TYP)  
1/2" DIA. 6" SS LAG BOLT RECESSED INTO BRACE (TYP)



2 TYPICAL BRACED TRUSS SECTION AT COLUMNS  
1" = 1'-0"



4 TYPICAL INTERIOR TRUSS SECTION  
1" = 1'-0"

Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV	DATE	DRAWN	CHECKED	BY	REMARKS
4					
3					
2					
1					

DESIGNED: JD  
DATE: 10/19/2023  
JOB NO: 18-3287  
SCALE: VARIES

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**ROOFING DETAILS**  
CITY OF ISLE OF PALMS

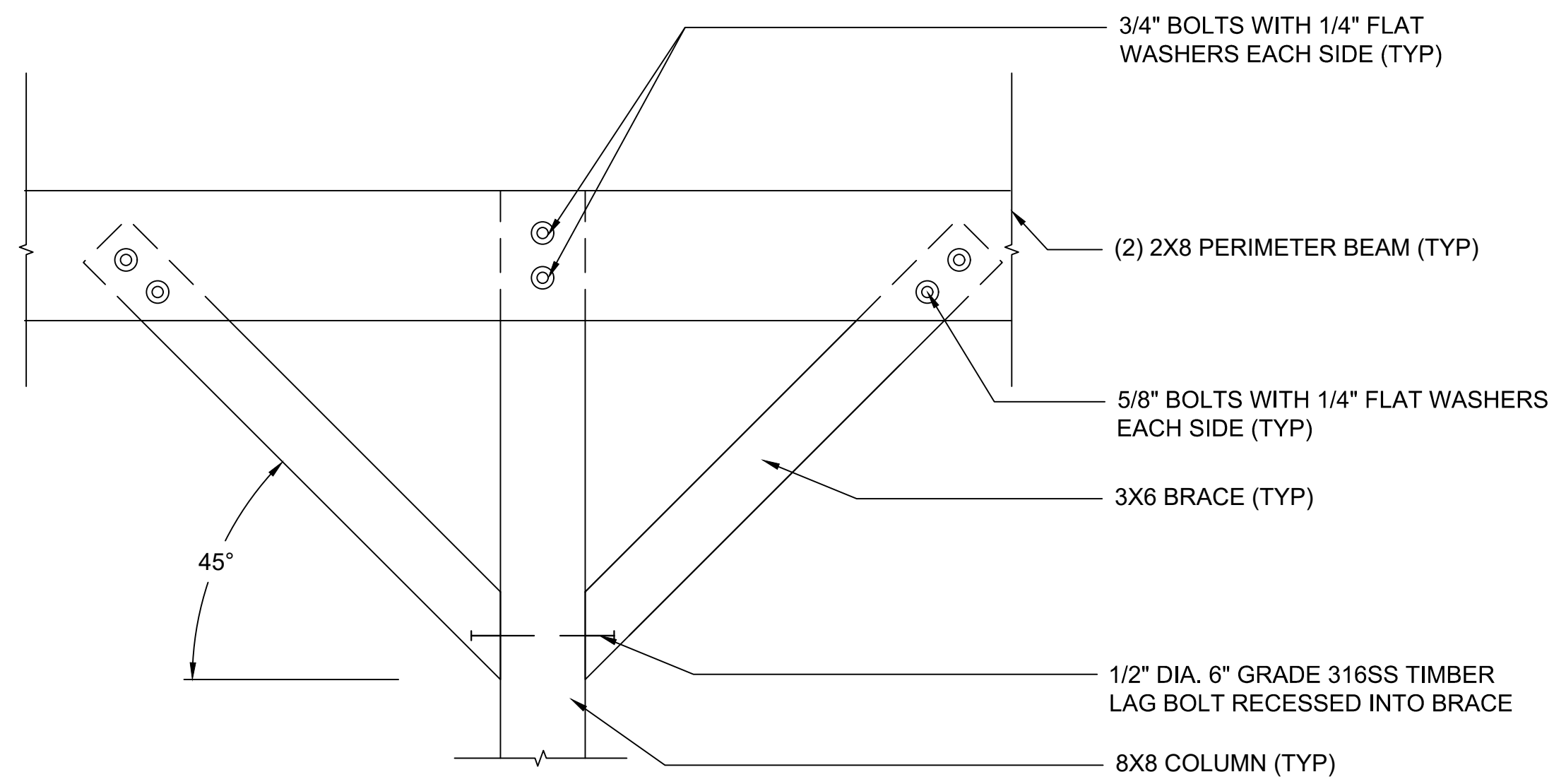
Applied Technology & Management  
941 Houston Northwest Blvd.  
Suite 201  
Mt Pleasant SC, SC 29464  
(843) 414-1040  
**ATM**  
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DRAWING NUMBER  
**S6**

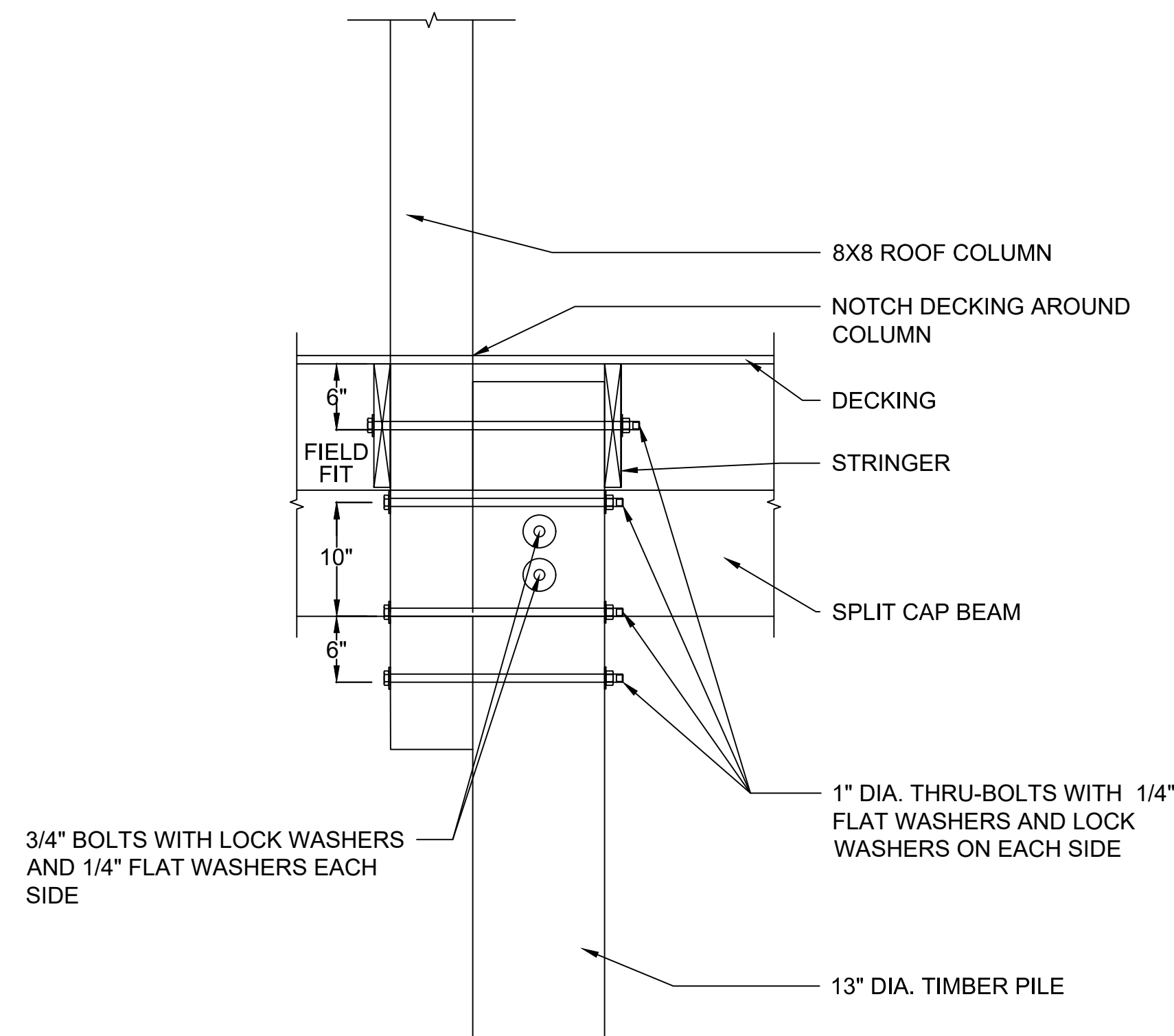
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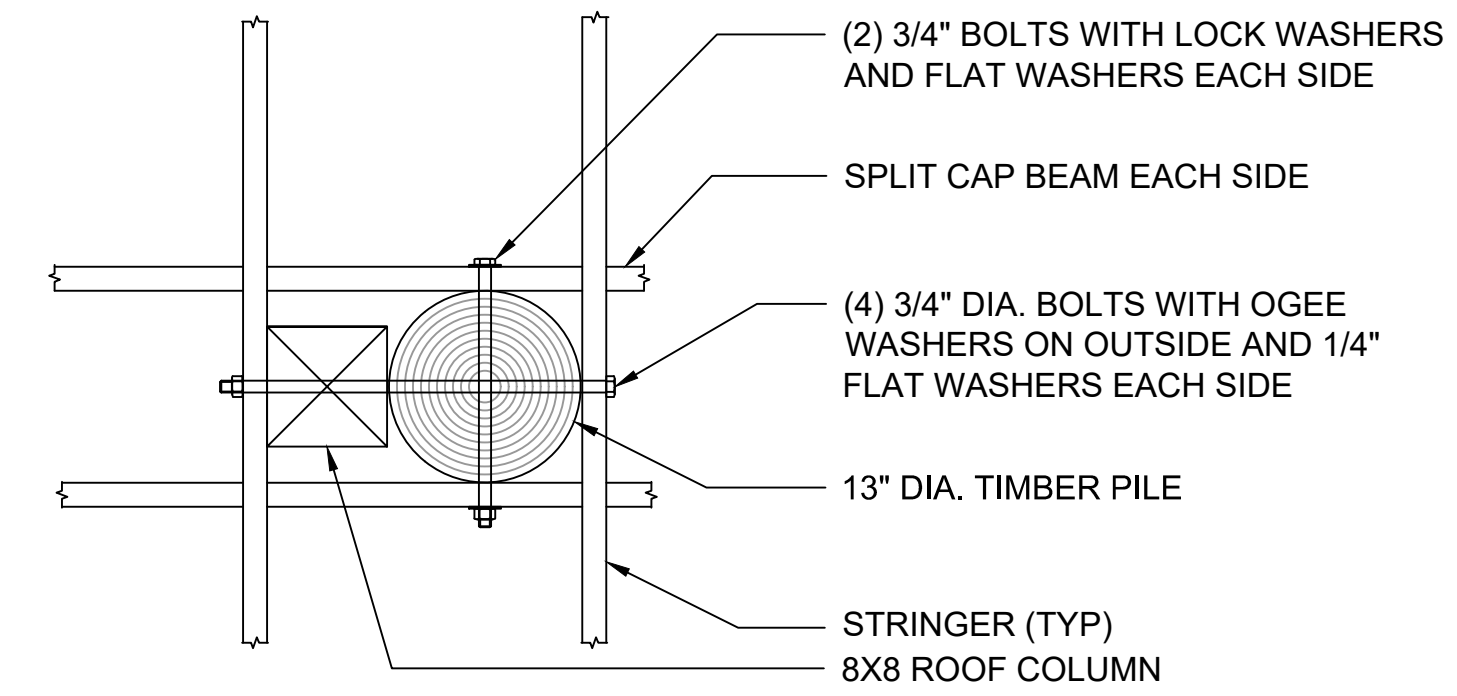
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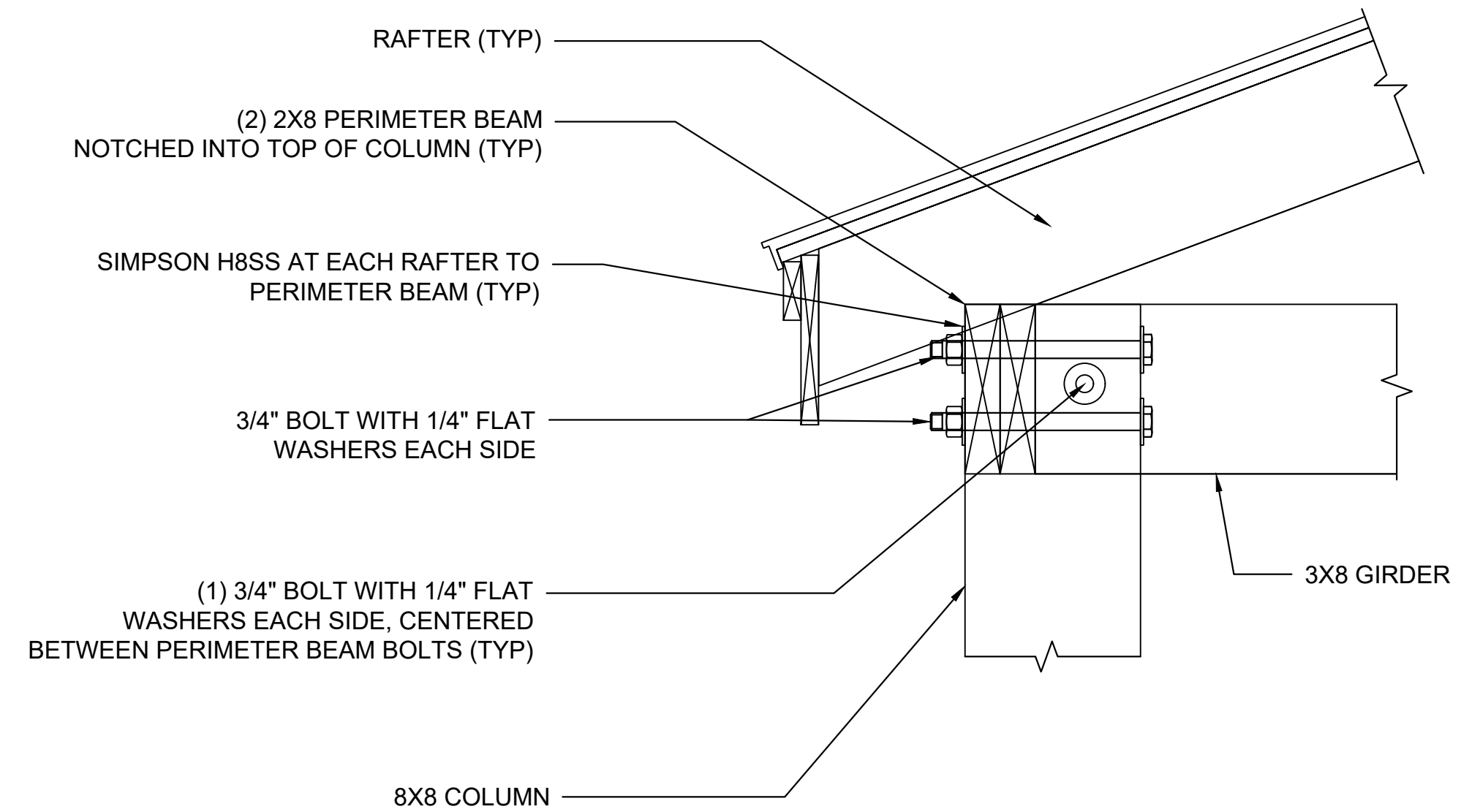
**1 TYPICAL COLUMN PERIMETER SIDE BEAM BRACING PROFILE DETAIL**  
1" = 1'-0"



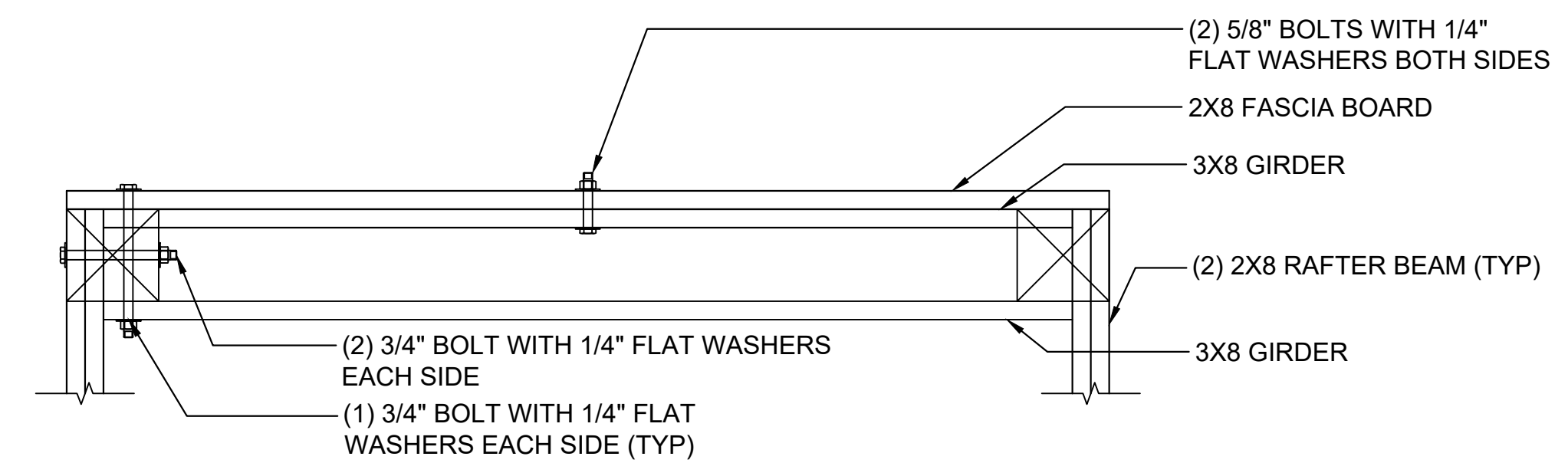
**3 TYPICAL COLUMN TO PILE CONNECTION DETAIL - PROFILE**  
1" = 1'-0"



**2 TYPICAL COLUMN TO PILE CONNECTION - PLAN**  
1" = 1'-0"



**4 TYPICAL BRACED ROOF SECTION AT COLUMNS**  
1" = 6"



**5 END FASCIA BOARD DETAIL**  
1" = 1'-0"

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Signature \_\_\_\_\_  
Date \_\_\_\_\_

REV. No.	DATE	DRAWN	CHECKED	REMARKS
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DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	18-3287	VARIABLES

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**ROOFING DETAILS**  
CITY OF ISLE OF PALMS

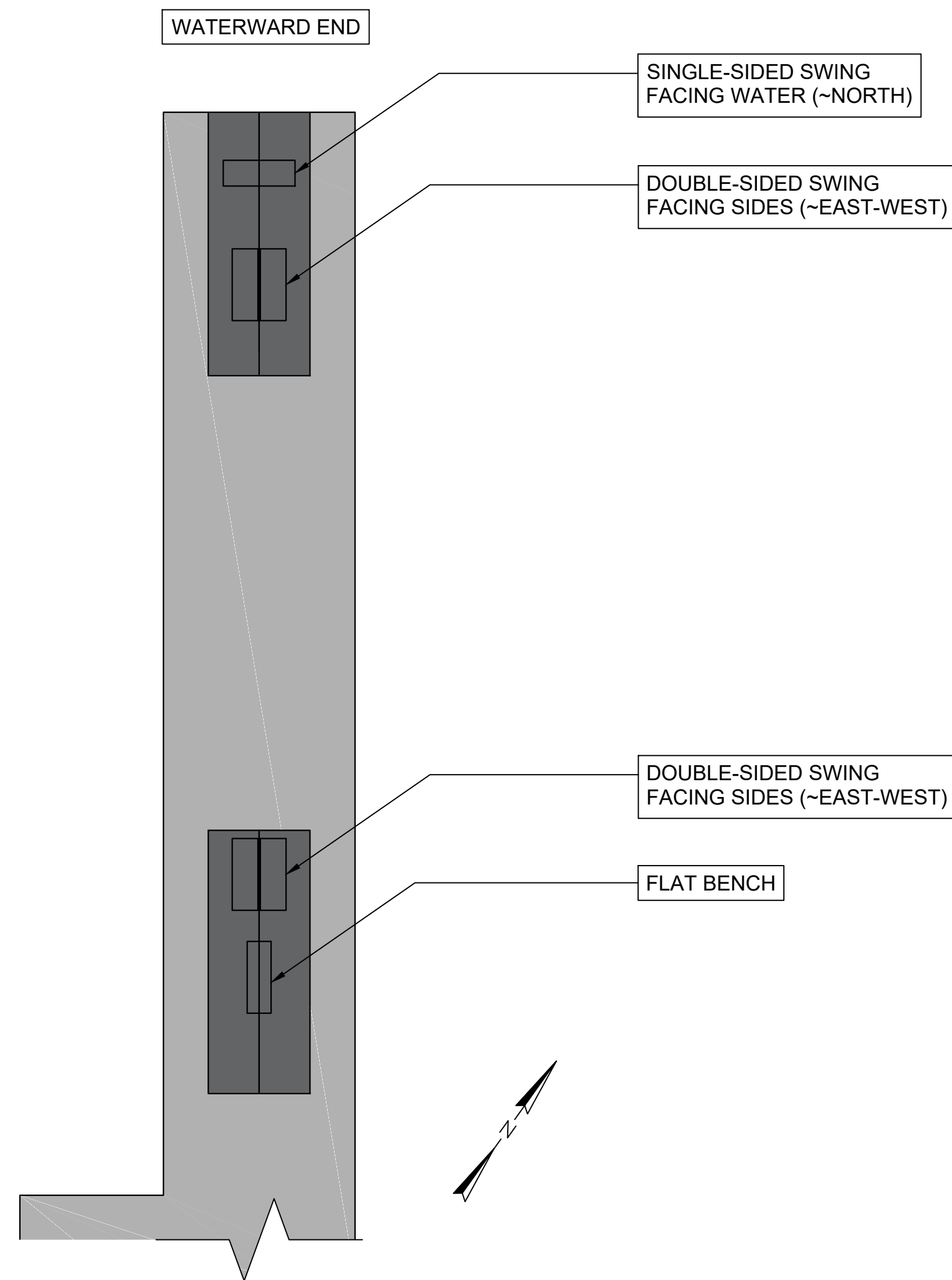
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**SWINGS AND BENCHES NOTES:**

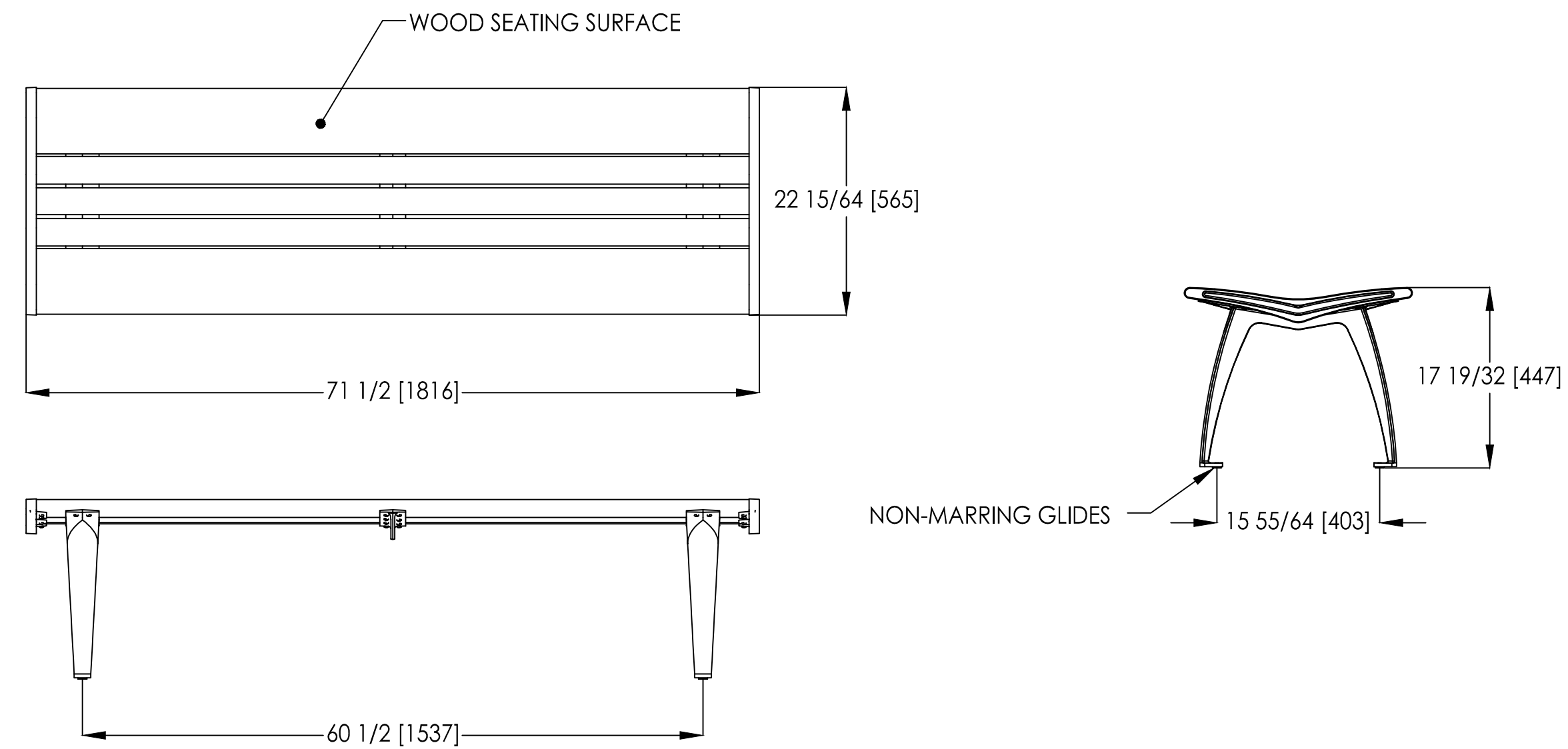
- SWINGS AND BENCHES SHALL BE MANUFACTURED BY LANDSCAPE FORMS, INC. (CONTACT INFORMATION PROVIDED BELOW) OR AN ALTERNATE PRE-APPROVED MANUFACTURER. CONTACT INFORMATION FOR LANDSCAPE FORMS, INC. IS AS FOLLOWS:  
LORI BROWN, SENIOR BUSINESS DEVELOPMENT LEAD - CAROLINAS  
EMAIL: LORIB@LANDSCAPEFORMS.COM  
PHONE: 704-560-0589
- SWINGS AND BENCHES DEPICTED HEREIN ARE GENERAL IN NATURE AND INTENDED TO DEMONSTRATE GENERAL LOCATION AND DIMENSIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE FINAL DESIGN OF THE SWINGS, BENCHES AND ASSOCIATED CONNECTIONS TO THE ROOF AND PIER STRUCTURES. CONTRACTOR SHALL PROVIDE SIGNED AND SEALED FINAL DESIGN PACKAGE AND SHOP DRAWINGS TO ATM FOR REVIEW PRIOR TO FABRICATION AND INSTALLATION.
- SWINGS AND BENCHES SHALL BE LANDSCAPE FORMS' AUSTIN™ STYLE WITH POWDER-COATED FINISH IN THE COLOR "MERCURY METALLIC" WITH IPE HARDWOOD SEATS AND BACKS.
- SWINGS SHALL BE CUSTOMIZED WITH THE CITY OF ISLE OF PALMS LOGO AS GENERALLY DEPICTED HEREIN.
- SWINGS SHALL INCLUDE A MEANS TO ANCHOR THEM TO THE DECK AND RESTRAIN MOVEMENT DURING STORM EVENTS. ANCHORS SHALL BE ABLE TO BE REMOVED OR UNLATCHED DURING NORMAL USE.
- CONTRACTOR SHALL PROVIDE A SPECIFIED TRAVEL DISTANCE FOR THE SWINGS.
- BENCHES SHALL BE A SURFACE MOUNT BACKLESS BENCH WITH NO ARMS AND ANCHORED TO THE DECK PER MANUFACTURER'S RECOMMENDATIONS.



**1 BENCH & SWING PLAN VIEW**  
N.T.S

**Austin™** Backless Bench, Freestanding / Surface Mount, Wood, No Arms  
Product Drawing

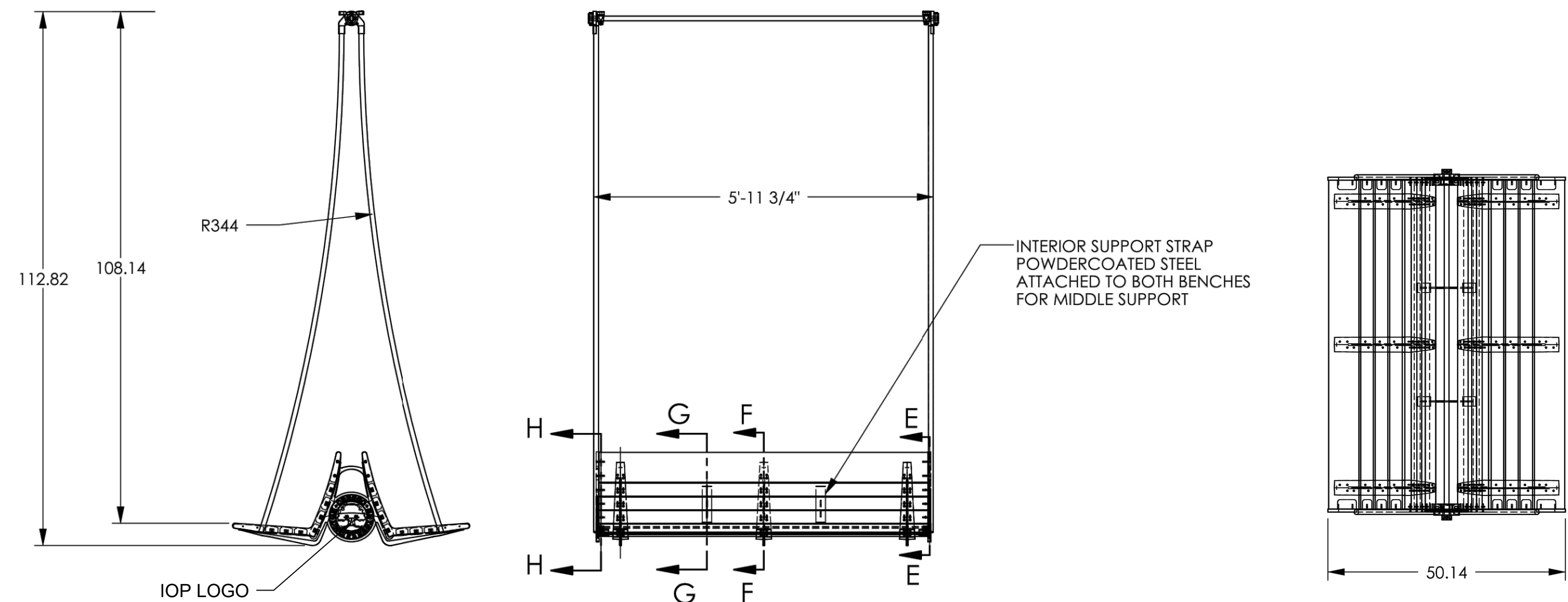
Date: 12/18/2019  
www.landscapeforms.com Ph: 800.521.2546



landscapeforms Drawing: AU451-04  
Dimensions are in inches [mm]

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**2 SCHEMATIC BENCH DETAILS**  
N.T.S



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TITLE: AU BACK TO BACK SWING	SCALE: 1:28
FILE NAME: CUS_SF0240-001-A	AUTHOR: RGS
PROJECT: MOUNT PLEASANT WATERFRONT PARK	PROJECT#: SF0240
ALL DIMENSIONS IN INCHES[mm]	DATE: 7/16/2008
	B-SIZE SHEET REVISED:

**3 SCHEMATIC SWING DETAILS**  
N.T.S

Signature	Date
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REV	DATE	BY	CHKD	REMARKS
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3				
2				
1				

DESIGNED	DRAWN	CHECKED	DATE	JOB NO.	SCALE
JD	HA	KM	10/19/2023	18-3287	VARIES

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
ISLE OF PALMS, SC  
**BENCH & SWING DETAILS**  
CITY OF ISLE OF PALMS

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REPAIR WORK DESCRIPTION & INSTRUCTIONS TO BIDDERS

THE CITY OF ISLE OF PALMS (OWNER) IS SOLICITING BIDS FROM QUALIFIED CONTRACTORS TO CONDUCT REPAIRS TO THE FIXED ACCESS PIER & FLOATING DOCK SYSTEM FOR THE INTRACOASTAL DOCK AT THE ISLE OF PALMS MARINA LOCATED ON THE ATLANTIC INTRACOASTAL WATERWAY (AIWW) AT 50 41ST AVENUE, ISLE OF PALMS, SC 29451. THE REPAIRS ARE BEING UNDERTAKEN TO MAKE GENERAL MAINTENANCE TO THE FIXED ACCESS PIER AND FLOATING DOCK SYSTEM TO EXTEND THEIR USEFUL LIFE.

THE PROPOSED PROJECT INCLUDES GENERAL REPAIRS AS PART OF THE BASE BID, WITH ADDITIONAL REPAIRS THAT SHALL BE CONSIDERED TO BE ALTERNATE BID ITEMS.

THE BASE BID COMPONENTS OF THE REPAIR WORK INCLUDE:

1. ACCESS PIER - REPLACE STRUCTURAL HARDWARE
2. ACCESS PIER - REPLACE TIMBER HANDRAIL POSTS (SELECT LOCATIONS)
3. ACCESS PIER - REPLACE TIMBER ANGLED CAP (SELECT LOCATIONS)
4. ACCESS PIER - REPLACE SECURITY GATE
5. ACCESS PIER - RE-ATTACH TIMBER BENCH
6. FLOATING DOCK - REPLACE TIMBER FENDER BOARD (SELECT LOCATIONS)
7. FLOATING DOCK - REPLACE VINYL BUMPER STRIP SIDE A ONLY
8. FLOATING DOCK - REPLACE CORNER PLATE (SELECT LOCATIONS)
9. FLOATING DOCK - NEW PILE GUIDE
10. FLOATING DOCK - REPLACE ELECTRICAL & POTABLE WATER SYSTEMS
11. FLOATING DOCK - REPLACE FIRE PEDESTALS

THE ALTERNATE REPAIR COMPONENTS INCLUDE:

1. ACCESS PIER - SAND AND RE-PAINT HANDRAIL
2. ACCESS PIER - REPLACE DECKING (SYP)
3. FLOATING DOCK A - REPLACE DECKING (SYP)
4. FLOATING DOCK B - REPLACE DECKING (SYP)
5. FLOATING DOCK - REPLACE PILE GUIDE ROLLERS & SCRAPE PILES

CONTRACTOR SHALL CONSIDER THE FOLLOWING IN PREPARATION OF THEIR BID:

1. CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL STRUCTURAL HARDWARE ON THE FIXED ACCESS PIER. STRUCTURAL HARDWARE INCLUDES BOLTS CONNECTING TIMBER PILES TO TIMBER SPLIT CAP MEMBERS, BOLTS CONNECTING HAND RAIL POSTS TO EXTERIOR TIMBER STRINGERS, BOLTS ON OUT TIMBER FASCIA BOARD AND SST H2.5 HURRICANE STRAPS ON EACH STRINGER. HARDWARE SHALL BE GALVANIZED STEEL, SEE DETAIL SHEET R-3 FOR FURTHER CLARIFICATION. REPLACEMENT BOLTS SHALL BE GALVENIZED THROUGH-BOLTS.
2. REPLACEMENT OF TIMBER HANDRAIL POSTS SHALL BE DONE CAREFULLY TO AVOID DAMAGE TO OTHER COMPONENTS OF THE HAND RAILING. TOP END SHALL BE MITERED TO MATCH ANGLE OF EXISTING ANGLED CAP. BOTTOM SHALL BE MITERED TO MATCH EXISTING AND INSTALLED VIA GALVANIZED STEEL THROUGH BOLTS. MEMBER SCHEDULED FOR REPLACEMENT SHALL BE PAINTED TO MATCH EXISTING.
3. REPLACEMENT OF TIMBER ANGLED CAP SHALL BE DONE CAREFULLY TO AVOID DAMAGE TO OTHER COMPONENTS OF THE HAND RAILING. BUTT JOINTS SHALL BE MITERED TO MATCH EXISTING. MEMBERS SCHEDULED FOR REPLACEMENT SHALL BE PAINTED TO MATCH EXISTING.
4. CONTRACTOR SHALL FURNISH AND INSTALL A NEW SECURITY GATE TO MATCH EXISTING AS SHOWN IN SITE PHOTOS ON SHEET R3. THE NEW SECURITY GATE SHALL INCLUDE ALL HARDWARE AND SECURITY ACCESS LOCKING MECHANISMS. IF ADJACENT STRUCTURAL TIMBER IS COMPROMISED DURING REPLACEMENT, THE CONTRACTOR SHALL REPLACE WITH NEW PRESSURE TREATED TIMBER. SEE TIMBER AND HARDWARE NOTES FOR FURTHER SPECIFICATION.
5. FOR RE-ATTACHING THE (2) TIMBER BENCHES ON THE ACCESS PIER, CONTRACTOR SHOULD USE 3" GALVANIZED STEEL CORNER BRACES FASTENED WITH STAINLESS STEEL SCREWS.
6. MEASUREMENTS FOR FLOATING DOCK TIMBER FENDER BOARDS TO BE REPLACED ARE APPROXIMATE. DAMAGED TIMBERS SHALL BE REPLACED IN WHOLE PIECES TO GENERALLY MATCH THE DIMENSIONS OF EXISTING TIMBERS. CONTRACTOR TO VERIFY REQUIRED TIMBER QUANTITIES PRIOR TO SUBMITTING THEIR BID.
7. VINYL BUMPER STRIPS ARE TO BE REPLACED ALONG THE "SIDE A" PERIMETER OF THE FLOATING DOCK INCLUDING "SIDE A" FINGER DOCKS, PILE GUIDES, AND MAIN PIER.
8. WHERE STEEL CORNER PLATES ARE SCHEDULED FOR REPLACEMENT, THE CONTRACTOR SHALL MATCH THE EXISTING CORNER PLATES AND REPLACE ALL HARDWARE. NEW CORNER PLATES AND HARDWARE SHALL BE GALVANIZED STEEL. IF INTERNAL TIMBER MEMBERS ARE ROTTEN OR OTHERWISE COMPROMISED, THE CONTRACTOR SHALL REPLACE TIMBER MEMBERS TO ANCHOR NEW CORNER PLATES.
9. THE NEW PILE GUIDE SHALL MATCH THE EXISTING PILE GUIDES IN MATERIAL TYPE AND DIMENSIONS. CONTRACTOR RESPONSIBLE FOR PROVIDING ADEQUATE TIMBER FRAMING AND GALVANIZED STEEL THROUGH BOLTS TO ANCHOR THE NEW PILE GUIDE TO THE EXISTING FLOATING DOCK. SHOP DRAWING SUBMITTAL AND DESIGN CRITERIA PROFESSIONAL APPROVAL IS REQUIRED PRIOR TO PURCHASING.
10. FOR FLOATING DOCK ELECTRICAL, POTABLE WATER AND FIRE SYSTEMS REPLACEMENT, REFER TO "E-SERIES", "FP-SERIES" AND "P-SERIES" SHEETS IN THIS DRAWING SET.
11. FOR ALTERNATE BID ITEM 1, CONTRACTOR RESPONSIBLE FOR ADEQUATELY SANDING THE EXISTING PAINT FINISH FROM ALL TIMBER ACCESS PIER HAND RAILING COMPONENTS INCLUDING THE GUARD RAIL, VERTICAL POSTS, SPINDLES, AND KICK BOARDS ON ALL SIDES. ALL PAINT CHIPS AND DUST AS A RESULT FROM SANDING SHALL BE CONTAINED FROM THE MARSH/WATERBODY AND APPROPRIATELY DISPOSED OF FROM THE PROJECT SITE. CONTRACTOR SHALL PRIME AND RE-PAINT ALL COMPONENTS WITH EXTERIOR WEATHER RESISTANT PAINT TO MATCH EXISTING COLOR. A MINIMUM OF 2 COATS SHALL BE APPLIED PER MANUFACTURER RECOMMENDATIONS.
12. FOR ALTERNATE BID ITEM 2, 3 & 4, DECKING SHALL BE REPLACED IN-KIND WITH SOUTHERN YELLOW PINE DECKING (SYP) AND STAINLESS STEEL SCREWS. CONTRACTOR SHALL PROVIDE PRODUCT SPECIFICATIONS AND MATERIAL PROPERTIES TO DESIGN CRITERIA PROFESSIONAL FOR APPROVAL PRIOR TO PURCHASING. CONTRACTOR RESPONSIBLE FOR VERIFYING THAT EXISTING FRAMING MEMBERS ON THE FIXED ACCESS PIER AND THE FLOATING DOCK ARE NOT DAMAGED

AND CAN BE RE-USED TO ANCHOR NEW DECKING.

13. FOR ALTERNATE BID ITEMS 2, 3 & 4, ALL DECKING SHALL BE INSTALLED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT DESIGN REQUIREMENTS.
14. FOR ALTERNATE BID ITEM 5, CONTRACTOR SHALL REPLACE ROLLER GUIDES WITH ULTRA HIGH MOLECULAR WEIGHT PLASTIC. CONCRETE ANCHOR PILES SHOULD BE SCRAPED FREE OF BARNACLES ON AN ELEVATION SLIGHTLY BELOW THE NORMAL LOW TIDE LEVEL. CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL HARDWARE THAT MAY BE NECESSARY FOR PLASTIC ROLLER REPLACEMENT.
15. CONTRACTOR'S BID PRICING FOR REPLACEMENT OF ALL DOCK COMPONENTS SHALL BE UNDERSTOOD TO INCLUDE ALL NECESSARY TIMBER ELEMENTS AND FASTENING HARDWARE (BOLTS, WASHERS, NUTS, ETC.) AND ASSOCIATED LABOR & EQUIPMENT.
16. PRIOR TO SUBMITTING A BID, THE CONTRACTOR SHALL COMPARE THE DRAWINGS AGAINST FIELD CONDITIONS AND NOTIFY THE OWNER AND DESIGN CRITERIA PROFESSIONAL IN WRITING OF ANY APPARENT DISCREPANCIES BETWEEN THE DRAWINGS AND SITE CONDITIONS.
17. THE CONTRACTOR'S BID SHALL UTILIZE THE SCHEDULE OF VALUES PROVIDED IN THE REQUEST FOR BID (RFB) DOCUMENTS. COSTS SHALL CLEARLY DIFFERENTIATE BETWEEN "BASE BID" REPAIRS AND "ALTERNATE" REPAIRS AS INDICATED IN THE SCHEDULE OF VALUES.
18. CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE OWNER'S ON-SITE MARINA STAFF TO MINIMIZE IMPACTS TO EXISTING OPERATIONS TO THE EXTENT PRACTICABLE. IF VESSELS ARE REQUIRED TO BE RELOCATED TO FACILITATE THE CONTRACTOR'S WORK, CONTRACTOR SHALL NOTIFY MARINA STAFF A MINIMUM OF 48 HOURS IN ADVANCE.

GENERAL CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THESE DRAWINGS AND ASSOCIATED NOTES/SPECIFICATIONS.
2. WORKING HOURS SHALL BE COORDINATED WITH THE OWNER PRIOR TO CONSTRUCTION.
3. ALL APPROPRIATE SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED.
4. ANY DAMAGE TO STATE, COUNTY, OR LOCAL ROADS, OR OTHER ONSITE INFRASTRUCTURE CAUSED BY THE CONSTRUCTION ACTIVITIES RELATED TO THIS PART OF THE PROJECT SHALL BE REPAIRED BY THE CONTRACTOR TO THE SATISFACTION OF OWNER AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. THE CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID AND FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS. IF CONTRACTOR DISCOVERS FIELD CONDITIONS DIFFERENT THAN SHOWN IN THE PLANS AND SPECIFICATIONS THEY SHALL IMMEDIATELY NOTIFY OWNER AND DESIGN CRITERIA PROFESSIONAL.
6. CONTRACTOR SHALL STRICTLY COMPLY WITH ALL APPLICABLE SAFETY REGULATIONS.
7. MEANS, METHODS, AND TECHNIQUES OF CONSTRUCTION ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. CONTRACTOR SHALL ABIDE BY ALL APPLICABLE ENVIRONMENTAL PROTECTION LAWS, STANDARDS, AND REGULATIONS. THIS INCLUDES ADHERING TO ALL PERMIT CONDITIONS AND REPORTING REQUIREMENTS. THE OWNER IS PURSUING REGULATORY AUTHORIZATION FROM SC-DHEC OCRM FOR THE REPAIRS PORTION OF THIS PROJECT. CONTRACTOR SHALL ASSUME THAT THE OWNER WILL PROVIDE A COPY OF THE REGULATORY AUTHORIZATION PRIOR TO INITIATION OF THE WORK. NO SPECIAL CONDITIONS ARE EXPECTED. CONTRACTOR IS RESPONSIBLE FOR ANY LOCAL BUILDING PERMIT(S) OR OTHER AUTHORIZATIONS THAT MAY BE REQUIRED.
9. ADDITIONAL WORK PERFORMED BY OTHER CONTRACTORS MAY BE OCCURRING AT THE PROJECT SITE AT THE SAME TIME AS THE WORK DEFINED IN THESE DOCUMENTS. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH THESE OTHER PROJECT CONTRACTORS AS IT RELATES TO THEIR WORK.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SITE LAY DOWN, PARKING, AND STORAGE AREAS WITH THE OWNER PRIOR TO CONSTRUCTION. NO STORAGE OF CONSTRUCTION EQUIPMENT OR DEBRIS SHALL OCCUR IN ANY LOCATION ON SITE OR ON THE DOCKS OTHER THAN IN AREA(S) APPROVED BY THE OWNER AND DESIGN CRITERIA PROFESSIONAL.
11. THE CONTRACTOR SHALL INCORPORATE BEST MANAGEMENT PRACTICES TO PREVENT CONSTRUCTION DEBRIS, DUST, AND OTHER MATERIALS FROM LEAVING THE IMMEDIATE WORK AREA AND ENTERING LOCAL WATERS. THE CONTRACTOR SHALL REMOVE CONSTRUCTION DEBRIS FROM THE SITE ON A DAILY BASIS. DISPOSAL OF THE MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL REMOVE ALL SURPLUS MATERIAL, SUPPLIES, AND DEBRIS AT THE COMPLETION OF THE PROJECT AND PRIOR TO SUBMITTING THE FINAL APPLICATION FOR PAYMENT.
12. SHOULD THE CONTRACTOR, DURING THE PROGRESS OF THE WORK, LOSE, DUMP, THROW OVERBOARD, SINK, OR MISPLACE ANY MATERIAL, PLANT MACHINERY, OR APPLIANCE WHICH IN THE OPINION OF THE OWNER MAY BE DANGEROUS TO OR OBSTRUCT NAVIGATION, THE CONTRACTOR SHALL RECOVER AND REMOVE THE SAME WITH THE UTMOST DISPATCH. THE CONTRACTOR SHALL GIVE IMMEDIATE NOTICE, WITH DESCRIPTION AND LOCATION OF SUCH OBSTRUCTIONS TO THE OWNER, AND WHEN REQUIRED SHALL MARK OR BUOY SUCH OBSTRUCTIONS UNTIL THEY ARE REMOVED. SHOULD THE CONTRACTOR REFUSE, NEGLECT, OR DELAY COMPLIANCE WITH THE ABOVE REQUIREMENTS, SUCH OBSTRUCTIONS MAY BE REMOVED BY THE OWNER, AND THE COST OF SUCH REMOVAL MAY BE DEDUCTED FROM ANY MONEY DUE OR TO BECOME DUE TO THE CONTRACTOR.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ALL ELEMENTS OF THE PROJECT IN GENERAL CONFORMANCE WITH THESE PLANS AND ASSOCIATED NOTES/SPECIFICATIONS. IF ANY MODIFICATIONS ARE REQUIRED IN ANY ELEMENT, THE CONTRACTOR SHALL SUBMIT PROPOSED CHANGES TO THE OWNER FOR APPROVAL PRIOR TO EXECUTING THAT PORTION OF THE WORK.
14. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EXISTING UPLAND UTILITIES. CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY UTILITY DAMAGES THAT OCCUR.
15. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A GENERAL INVENTORY OF WORK COMPLETED WHICH IS TO BE SUBMITTED TO THE OWNER ON A WEEKLY BASIS. THIS INVENTORY SHALL CLEARLY DESCRIBE THE NUMBER OF EACH COMPONENT THAT HAS BEEN REPAIRED/REPLACED AT THE TIME OF THE WEEKLY REPORT.
16. UPON PROJECT COMPLETION, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS WHICH CLEARLY DELINEATE THE VARIOUS COMPONENTS THAT WERE REPLACED. THESE MAY INCLUDE RED-LINED BID PLANS.

PILES & PILE GUIDES

1. NEW PILE GUIDE SHALL MATCH EXISTING EXTERNAL PILE GUIDES MADE OF GALVANIZED STEEL WITH PLASTIC ROLLER GUIDES. CONTRACTOR SHALL PROVIDE ADEQUATE TIMBER FRAMING AND GALVANIZED THROUGH BOLTS FOR ANCHORING THE NEW PILE GUIDE TO THE EXISTING FLOATING DOCK SYSTEM.
2. FLOATING DOCK ANCHOR PILES ARE SQUARE CONCRETE PILES. FOR ALTERNATE BID ITEM, CONTRACTOR SHALL SCRAPE ALL PILES TO REMOVE BARNACLE GROWTH TO AN ELEVATION SLIGHTLY BELOW THE NORMAL LOW TIDE LEVEL.
3. FOR ALTERNATE BID ITEM, ALL PILE GUIDES SHALL HAVE PLASTIC ROLLERS REPLACED. PLASTIC ROLLERS SHALL BE MADE OF ULTRA HIGH MOLECULAR WEIGHT PLASTIC MOUNTED TO A STAINLESS STEEL AXLE. CONTRACTOR TO SUBMIT PRODUCT DATA TO DESIGN CRITERIA PROFESSIONAL FOR REVIEW PRIOR TO PURCHASING.

CORNER PLATES

1. CORNER PLATES SHALL BE MADE OF GALVANIZED STEEL MATERIAL OF EQUAL OR GREATER THICKNESS THAN EXISTING MEMBERS. WHERE CORNER PLATES ARE SCHEDULED FOR REPLACEMENT, CONTRACTOR SHALL PROVIDE NEW GALVANIZED STEEL THROUGH BOLTS FOR ANCHORING THE NEW PLATES.
2. CONTRACTOR SHALL SUBMIT SPECIFICATIONS AND SHOP DRAWINGS OF THE CORNER PLATES TO THE OWNER AND DESIGN CRITERIA PROFESSIONAL FOR REVIEW/APPROVAL PRIOR TO PURCHASING.
3. CONTRACTOR IS RESPONSIBLE FOR REPLACING MISSING OR ROTTEN TIMBER COMPONENTS WITHIN THE FLOATING SYSTEM THAT ARE USED TO ANCHOR GUSSET BRACKETS.

TIMBER MEMBERS & BUMPER STRIPS

1. TIMBER MEMBERS (FENDER BOARDS, HAND RAIL POSTS, INCIDENTAL FRAMING) SHALL BE REPLACED IN KIND TO MATCH EXISTING TIMBER NOMINAL DIMENSIONS.
2. ALL FENDER BOARDS SHALL BE FLUSH WITH THE WALKING SURFACE OF THE DECKING SO AS NOT TO CREATE A TRIPPING HAZARD.
3. ALL TIMBER SHALL BE SOUTHERN YELLOW PINE "NO. 1" (OR APPROVED EQUAL) IN ACCORDANCE WITH EITHER THE SOUTHERN PINE INSPECTION BUREAU OR THE TIMBER PRODUCTS INSPECTION BUREAU GRADING RULES.
4. ALL (NON-DECKING) TIMBER SHALL BE PRESSURE PRESERVATIVE TREATED WITH A MINIMUM CHROMATED COPPER ARSENATE (CCA) CONTENT EQUAL TO 0.6 POUNDS PER CUBIC FOOT (PCF). MOISTURE CONTENT NOT TO EXCEED 19% AFTER TREATMENT , KDAT OR S-DRY.
5. ALL SOUTHERN YELLOW PINE DECKING SHALL BE PRESSURE PRESERVATIVE TREATED WITH COPPER QUAT (AQC) CONTENT EQUAL TO 0.6 POUNDS PER CUBIC FOOT (PCF). MOISTURE CONTENT NOT TO EXCEED 19% AFTER TREATMENT KDAT OR S-DRY.
6. ALL TIMBER SHALL COMPLY WITH AMERICAN SOFTWOOD LUMBER STANDARDS COMMITTEE, PS-20 WASHINGTON, DC, TO GRADE THE SPECIES. ALL LUMBER SPECIFIED FOR TREATMENTS SHALL BE TREATED TO THE REQUIREMENTS OF THE AMERICAN WOOD PROTECTION ASSOCIATION (AWPA) U1-15 AND T1-15. ALL FIELD CUTS AND HOLES SHALL BE TREATED IN ACCORDANCE WITH AWPA M4-15.
7. CONTRACTOR SHALL PROVIDE TIMBER SPECIFICATIONS/TREATMENT CERTIFICATES TO THE DESIGN CRITERIA PROFESSIONAL FOR REVIEW/APPROVAL PRIOR TO PROCUREMENT.
8. TIMBER SHOULD BE CUT TO LENGTH AND ALL HOLES DRILLED PRIOR TO PRESSURE TREATMENT TO THE EXTENT PRACTICABLE. ANY FIELD-CUTS OR HOLES DRILLED IN THE FIELD SHALL BE TREATED WITH COPPER-GREEN WOOD PRESERVATIVE TREATMENT OR APPROVED EQUAL.
9. TIE BANDS USED TO SECURE TIMBER DURING DELIVERY SHALL HAVE NON-MARRING BETWEEN THE BANDS AND THE WOOD TO PREVENT CRUSHING. BUNDLE IDENTIFICATION NOT PERMANENTLY STAIN LUMBER SURFACE.
10. BUMPER STRIPS SHALL BE EXTRUDED, NON-MARRING, MARINE GRADE VINYL, WHITE IN COLOR. EACH STRIP SHALL HAVE A MINIMUM HEIGHT OF FOUR INCHES, MINIMUM THICKNESS OF 1/8 INCH, AND A MINIMUM WEIGHT OF 1.6 POUNDS PER LINEAR FOOT. THE BUMPER STRIP SHALL BE INSTALLED WITH STAINLESS STEEL SCREWS OR ALUMINUM RING SHANK NAILS WITH WASHERS ON 4-INCH CENTERS ALONG BOTH FLANGES AND SHALL CLOSELY MATCH EXISTING TO THE EXTENT POSSIBLE. CONTRACTOR'S SELECTED BUMPER STRIP PRODUCT SPECIFICATIONS SHALL BE SUBMITTED TO THE OWNER AND DESIGN CRITERIA PROFESSIONAL FOR REVIEW/APPROVAL PRIOR TO PROCUREMENT.

HARDWARE

1. ALL BOLTS, NUTS, & WASHERS (HARDWARE) SHALL BE STEEL, IN ACCORDANCE WITH ASTM A-307.
2. ALL HARDWARE SHALL BE HOT DIPPED GALVANIZED (UNLESS NOTED OTHERWISE) IN ACCORDANCE WITH ASTM A-123.
3. WASHERS SHALL BE USED WITH ALL NUTS AND BOLTS WHICH BEAR ON WOOD OR STEEL. CUT WASHERS SHALL BE USED ON ALL SURFACES BEARING ON STEEL SURFACES.
4. WHERE STAINLESS STEEL COMPONENTS ARE SPECIFIED, MATERIAL SHALL BE TYPE 316 SS.
5. ANY INSTALLATION OF DISSIMILAR METALS SHALL BE PROPERLY INSULATED TO MINIMIZE OR ELIMINATE POTENTIAL GALVANIZE CORROSION THE MARINE ENVIRONMENT. APPROPRIATE DIELECTRIC MATERIALS (NON-CONDUCTING INSULATORS, BUSHINGS, OR BITUMINOUS PAINT) SHALL BE USED TO SEPARATE DISSIMILAR METALS OR WHERE METAL COMES IN CONTACT WITH CONCRETE OR TREATED TIMBER.
6. HARDWARE FOR REPLACEMENT OF THE SECURITY ACCESS GATE SHALL BE GALVANIZED STEEL. THE SECURE ACCESS KEYPAD SHALL MATCH EXISTING AS PICTURED ON SHEET R3, AND PROGRAMMED FOR A ENTRY CODE OF THE OWNER'S CHOICE. CONTRACTOR SHALL PROVIDE A PRODUCT SUBMITTAL FOR THE SECURE ACCESS KEYPAD FOR REVIEW AND APPROVAL BY THE DESIGN CRITERIA PROFESSIONAL PRIOR TO PURCHASING.

GALVANIZED COATING

1. A HOT DIPPED GALVANIZED COATING SHALL BE REQUIRED ON ALL BOLTS, WASHERS, AND MISCELLANEOUS HARDWARE, IN ACCORDANCE WITH EITHER ASTM A-123 OR ASTM A-153 AS APPLICABLE TO THE SPECIFIC MATERIAL.

2. ZINC COATING SHALL BE 3 MILS THICK, AT A MINIMUM.
3. GALVANIZING SHALL BE APPLIED AFTER FABRICATION.

SUBMITTALS & SHOP DRAWINGS

1. CONTRACTOR SHALL PROVIDE THE FOLLOWING AS PART OF BID SUBMITTAL:
  - A PRELIMINARY WORK PLAN TO INCLUDE GENERAL METHODOLOGIES PROPOSED TO ACHIEVE THE WORK DEPICTED IN THESE DRAWINGS AND IN CONFORMANCE WITH THE TECHNICAL SPECIFICATIONS AND ALL PERMIT REQUIREMENTS. THIS PRELIMINARY WORK PLAN SHALL INCLUDE:
    - A GENERAL CONSTRUCTION SCHEDULE
    - DISPOSITION OF MATERIAL
    - CLEAN UP PLAN
    - EQUIPMENT INVENTORY
    - MEANS AND METHODS OF SANDING AND PAINTING FIXED ACCESS PIER

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE TECHNICAL INFORMATION ON ALL MATERIALS TO THE DESIGN CRITERIA PROFESSIONAL BEFORE PURCHASING.
3. A DETAILED SCHEDULE OF CONSTRUCTION OPERATIONS SHALL BE SUBMITTED TO THE DESIGN CRITERIA PROFESSIONAL IMMEDIATELY UPON RECEIVING THE NOTICE TO PROCEED.

WARRANTY

1. CONTRACTOR SHALL PROVIDE MEANINGFUL ONE YEAR WARRANTY ON ALL MATERIALS AND WORKMANSHIP.


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Signature \_\_\_\_\_  
Date \_\_\_\_\_

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DESIGNED: \_\_\_\_\_  
 DRAWN: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: 10/19/2023  
 JOB NO. 18-3287  
 SCALE: 1"=40'

ISLE OF PALMS MARINA PUBLIC & INTRACOASTAL DOCK  
 ISLE OF PALMS, SC  
**INTRACOASTAL DOCK REPAIR GENERAL NOTES**  
 CITY OF ISLE OF PALMS

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