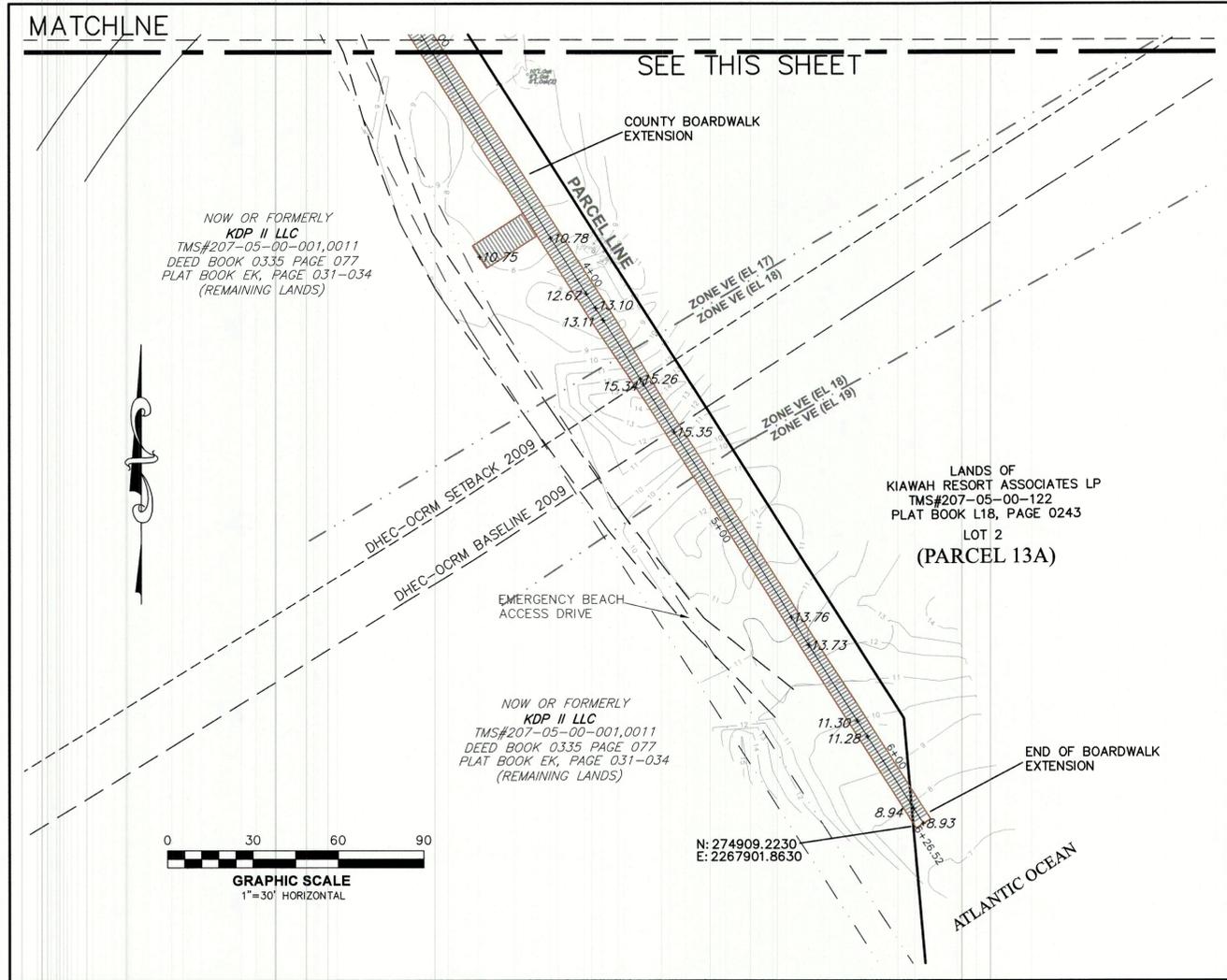
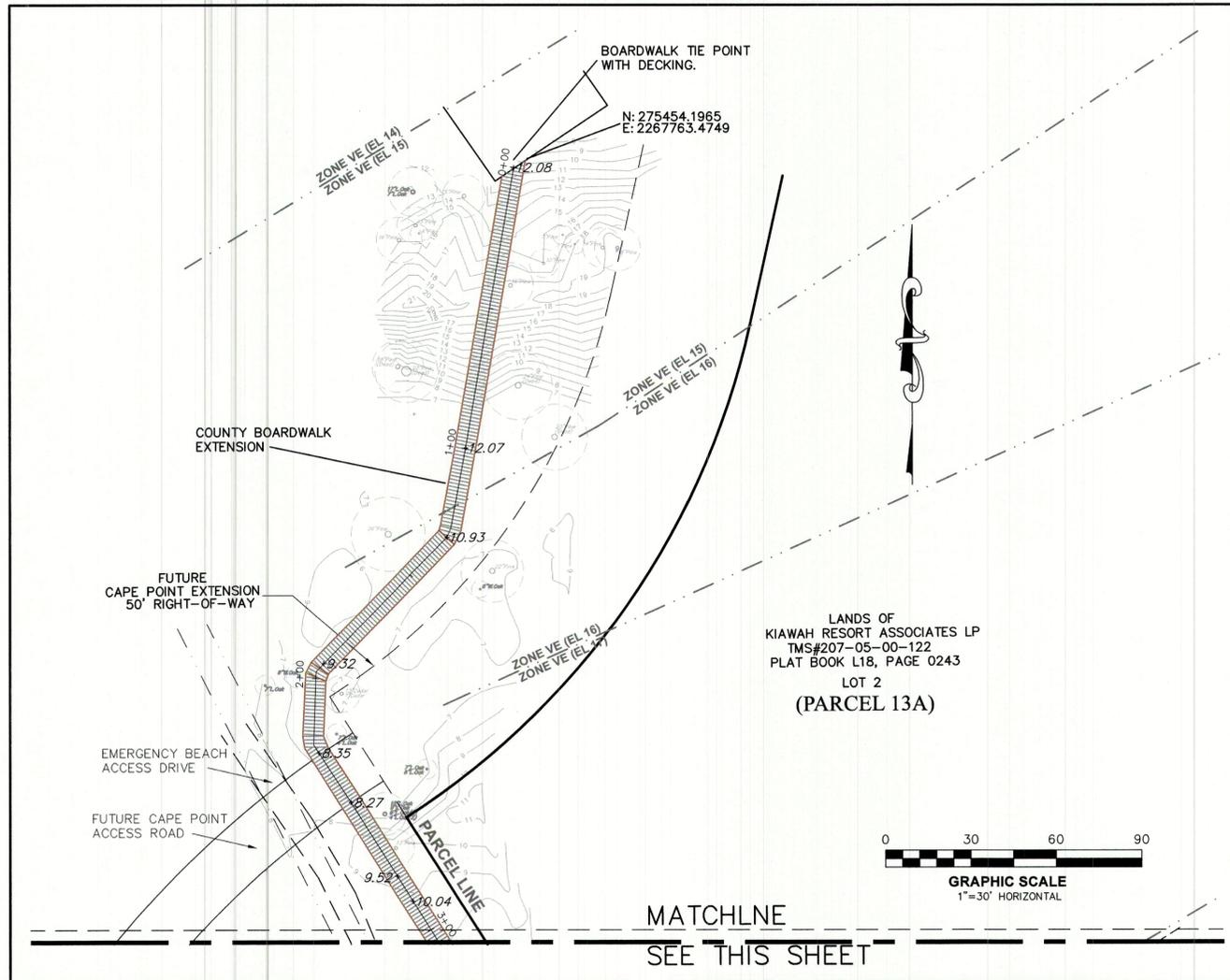




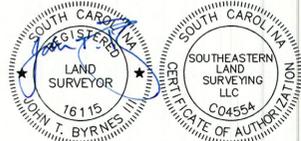
VICINITY MAP
(NOT TO SCALE)

- NOTE:
1. ANYTHING SHOWN OUTSIDE THE DEFINED BOUNDARY OF THIS PLAT IS FOR DESCRIPTIVE PURPOSES ONLY.
 2. AREA DETERMINED BY COORDINATE (OMD) METHOD.
 3. THE PUBLIC RECORDS REFERENCED ON THE PLAT ARE ONLY THOSE USED AND NECESSARY FOR THE ESTABLISHMENT OF THE BOUNDARY OF THIS PROPERTY. THEY ARE NOT AND DO NOT CONSTITUTE A TITLE SEARCH.
 4. BEARINGS ARE BASED ON SOUTH CAROLINA STATE PLANE NAD 1983
 5. ELEVATIONS ARE BASED ON NGVD 29
 6. THIS PROPERTY MAY BE SUBJECT TO VARIOUS UTILITY EASEMENTS THAT WERE NOT NOTED IN THE REFERENCED PLATS. THE UTILITIES SHOWN HEREON ARE BASED ON FIELD SURFACE LOCATIONS, AND WERE NOT VERIFIED AS TO DEPTH, SIZE, OR MATERIAL. THIS SURVEY DOES NOT SHOW SUBTERRANEAN CONDITIONS.
 7. PROPERTY IS LOCATED IN FLOOD ZONE AE (EL 13) AND VE (EL 14-19) AS SCALED FROM F.I.R.M. PANEL NO. 45019C 0785 J. REVISED. BEFORE ANY DESIGN OR CONSTRUCTION AN APPROPRIATE OFFICIAL SHOULD BE CONTACTED TO VERIFY FLOOD ZONES. A PORTION OF LOT NO.2 IS WITHIN A CBRA AREA. THE LINES DEPICTED ON THIS PLAT ARE FOR VISUAL PURPOSES ONLY.
 8. ANY FRESHWATER WETLAND BOUNDARIES OR DHEC-OCRM CRITICAL LINE SHOWN ON THIS SURVEY SHOULD NOT BE CONSIDERED AS A FINAL DEFINED LINE UNLESS THE APPROPRIATE AUTHORITY HAS CERTIFIED THEM ON THIS PLAT.



LEGEND

	EXISTING PROPERTY LINE
	FUTURE RIGHT-OF-WAY LINE
	FUTURE EDGE OF CAPE POINT ROAD PAVE
	EMERGENCY BEACH ACCESS DRIVE EASEMENT
	EMERGENCY BEACH ACCESS DRIVE
	FLOOD LINES DIGITIZED FOR VISUAL PURPOSES
	DHEC/OCRM SETBACK LINE 2009
	DHEC/OCRM BASELINE LINE 2009
	EXISTING CONTOURS FROM PREVIOUS TOPO
	ASBUILT BOARDWALK EXTENSION
	ASBUILT SPOT ELEVATIONS



NO.	DATE	DESCRIPTION	BY
R2	6-11-20	COMMENTS PER ENGINEER	KLK
R1	5-15-20	REV. WALK PER CONTRACTOR	KLK

SOUTHEASTERN LAND SURVEYING LLC
10335-B JENKINS ROAD
CHARLESTON SC 29407
(843)795-9330

AN ASBUILT SURVEY FOR BEACHWALKER COUNTY PARK BOARDWALK EXTENSION
LOCATED IN THE TOWN OF KIAWAH ISLAND
CHARLESTON COUNTY, SOUTH CAROLINA

DATE: APRIL 28, 2020
DRAWN: K.KUZIO
CHECK: JB
CC: SEAN B.
JOB: 19238
DWG: 19238-ASB
SHEET: 1 OF 2

BEACHWALKER COUNTY PARK BOARDWALK EXTENSION

KIAWAH, SC

GENERAL NOTES

- BROKEN LINES INDICATE ADJOINER PROPERTY LINES AND ARE NOT PART OF THIS SURVEY.
- THE OFF-SITE RIGHT-OF-WAY/PROPERTY LINE SHOWN HEREON IS FOR ILLUSTRATIVE PURPOSES ONLY. THE UNDERSIGNED CERTIFIES ONLY TO THE RIGHT-OF-WAY/PROPERTY LINES SURVEYED, AND DOES NOT CERTIFY TO THE RIGHT-OF-WAY WIDTH/PROPERTY LINE OF ANY ADJACENT PROPERTIES.
- THE SUBJECT PROPERTY IS NOT LOCATED WITHIN 2000' OF A HORIZONTAL NGS MONUMENT.
- PROPERTY MAY BE SUBJECT TO UNRECORDED RIGHT-OF-WAYS OR EASEMENTS NOT OBSERVED.

CONSTRUCTION NOTES

- CONTOURS AND SPOT GRADES ARE CONTROLS ONLY. ALL GRADING SHALL BE SMOOTH AND CONTINUOUS. TOPS AND BOTTOMS OF ALL SLOPES SHALL BE ROUNDED.
- PROPOSED WALKS SHALL NOT IMPEDE THE NATURAL FLOW OF WATER ACROSS THE WALK. WALK SHALL BE INSTALLED WITH A MAXIMUM TWO PERCENT (2%) CROSS SLOPE. UNDER NO CIRCUMSTANCES SHALL THE PROPOSED WALK CREATE A LOW SPOT OR POND WATER. GRADING FOR WALK SHALL ONLY DISTURB WHAT IS NECESSARY TO CONSTRUCT WALK AND MAINTAIN DRAINAGE FLOW.
- CONSTRUCT BOARDWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00%. FOR ROADWAY PROFILES THAT EXCEED 5.00%, CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.
- CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKEOUT FOR ALL NECESSARY LINES, GRADES AND ELEVATIONS OF THE PROPOSED FACILITIES.

UTILITY NOTES

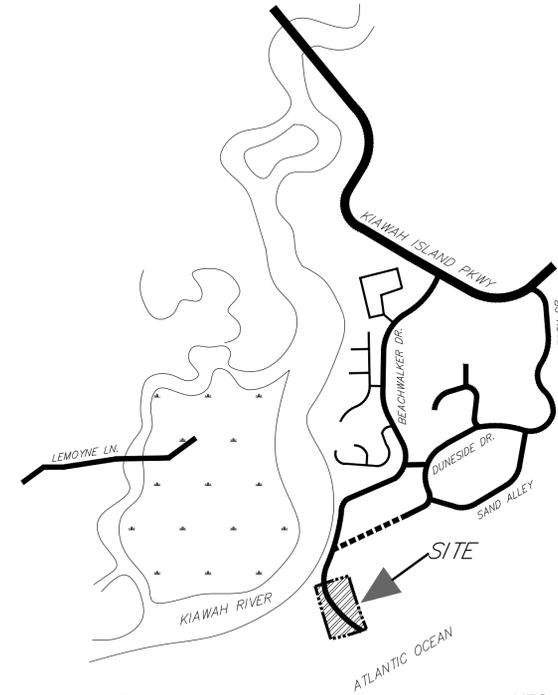
- THE CONTRACTOR, 3 DAYS PRIOR TO DIGGING AND NOT MORE THAN 10 DAYS, SHALL CONTACT THE "PALMETTO UTILITY PROTECTION SERVICE" AT 1-888-SC1-PUPS.
- CONFIRM EXISTING UTILITY LOCATIONS, DEPTHS AND INVERTS WITHIN THE WORK AREA PRIOR TO COMMENCING ANY WORK. COORDINATE ALL WORK AND DETAILS WITH THE ENGINEER AND/OR UTILITY COMPANY. NOTIFY OWNERS REPRESENTATIVE IF DISCREPANCIES EXISTS.
- CONTRACTOR SHALL REMOVE TREES, STUMPS, AND PRUNE ROOTS ALONG LINE OF EXCAVATION.
- CONTRACTOR SHALL NOT OPERATE ANY EXISTING WATER SYSTEM VALVES WITHOUT THE OWNER'S INSPECTOR OVERSEEING THE WORK.
- WATER LATERALS SHALL BE FILLED WITH WATER AND BROUGHT TO 150 PSI HYDROSTATIC TEST PRESSURE AT THE LOW POINT FOR 2 HOURS.
- THE CONTRACTOR SHALL CLEAR ALL UTILITIES BY A MINIMUM OF 1'-0" UNLESS OTHERWISE INDICATED. ALL UTILITY POLES SHALL BE CLEARED BY A MINIMUM OF 10'-0" AND SHALL BE SUPPORTED AS APPROVED BY THE UTILITY COMPANY.
- CONNECTIONS TO THE EXISTING WATER SYSTEM SHALL NOT BE MADE UNTIL PROPOSED WORK HAS BEEN COMPLETED, TESTED, DISINFECTED AND APPROVED BY OWNER'S REPRESENTATIVE.
- CONTRACTOR TO FIELD LOCATE THE EXISTING WATER LINE TAP.

LEGEND - EXISTING CONDITIONS

	BUILDING OUTLINE
	CONCRETE CURB & GUTTER
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING RW
	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	UNDERGROUND ELECTRICAL (LEVEL B)
	UNDERGROUND COMMUNICATIONS (LEVEL B)
	WATER LINE (LEVEL B)
	HIGH PRESSURE STEAM (LEVEL B)
	GAS LINE (LEVEL B)
	SANITARY LINE
	STORM DRAIN
	UNDERGROUND ELECTRICAL (LEVEL C)
	OVERHEAD ELECTRIC AND COMMUNICATION LINES
	UNDERGROUND COMMUNICATIONS (LEVEL C)
	WATER LINE (LEVEL C)
	HIGH PRESSURE STEAM (LEVEL C)
	GAS LINE (LEVEL C)
	TREE LINE
	COMMUNICATION MANHOLE
	DRAINAGE MANHOLE
	ELECTRIC TRANSFORMER/ JUNCTION BOX
	FIRE HYDRANT
	GAS VALVE
	GAS METER
	GAS VENT
	GUY WIRE
	LIGHT POLE
	POST INDICATOR VALVE
	POWER POLE
	SEWER CLEANOUT
	SEWER MANHOLE
	TELEPHONE PEDESTAL/JUNCTION BOX
	TELEVISION PEDESTAL/ JUNCTION BOX
	WELL
	WATER METER
	WATER VALVE
	CONCRETE MONUMENT
	EXISTING IRON PIN (EIP)
	PROPERTY LINE
	WETLAND DELINEATION LINE
	OCRM CRITICAL LINE
	ADJOINER PROPERTY LINE
	RIGHT-OF-WAY LINE
	WETLAND
	EXISTING PROTECTED AREAS

LEGEND - PROPOSED CONDITIONS

	LIMIT OF DISTURBANCE
	MAJOR CONTOUR
	MINOR CONTOUR
	UNDERGROUND ELECTRICAL
	SPLIT RAIL FENCE
	SCDOT RIGHT-OF-WAY
	GRAVEL PAVEMENT
	BOARDWALK
	BITUMINOUS PAVEMENT
	LANDSCAPE AREA



LOCATION MAP

NTS

INDEX OF SHEETS	
NO.	DESCRIPTION
C1.00	COVER SHEET
C2.00	EXISTING CONDITIONS & DEMOLITION PLAN
C3.00	SITE PLAN & SWPPP
C3.01	BOARDWALK PROFILE
S0.01	STRUCTURAL GENERAL NOTES
S1.01	STRUCTURAL PLANS
S5.01	BOARDWALK DETAILS
PG-001	PLUMBING SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES
PS-101	PLUMBING PARTIAL SITE PLAN AND DETAILS
E-101	SITE PLAN PARTIAL - ELECTRICAL

SITE DATA TABLE	
TMS #	2070500001
ADDRESS	0 BEACHWALKER RD.
ZONING	R3 / COMMERCIAL
PARCEL SIZE	UNKNOWN



3 DAYS BEFORE DIGGING IN

SOUTH CAROLINA

CALL 1-888-SC1-PUPS



SEAL:

PREPARED FOR:

KRA, LP
1 KIAWAH ISLAND PKWY
KIAWAH ISLAND, SC 29455
(843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:

BEACHWALKER COUNTY PARK
BOARDWALK
EXTENSION

PROJECT LOCATION:

8 BEACHWALKER DRIVE
KIAWAH ISLAND, SC 29455

PROJECT NUMBER:

19-00993-001

DATE:

8.13.19

SCALE:

AS NOTED

PLAN SET:

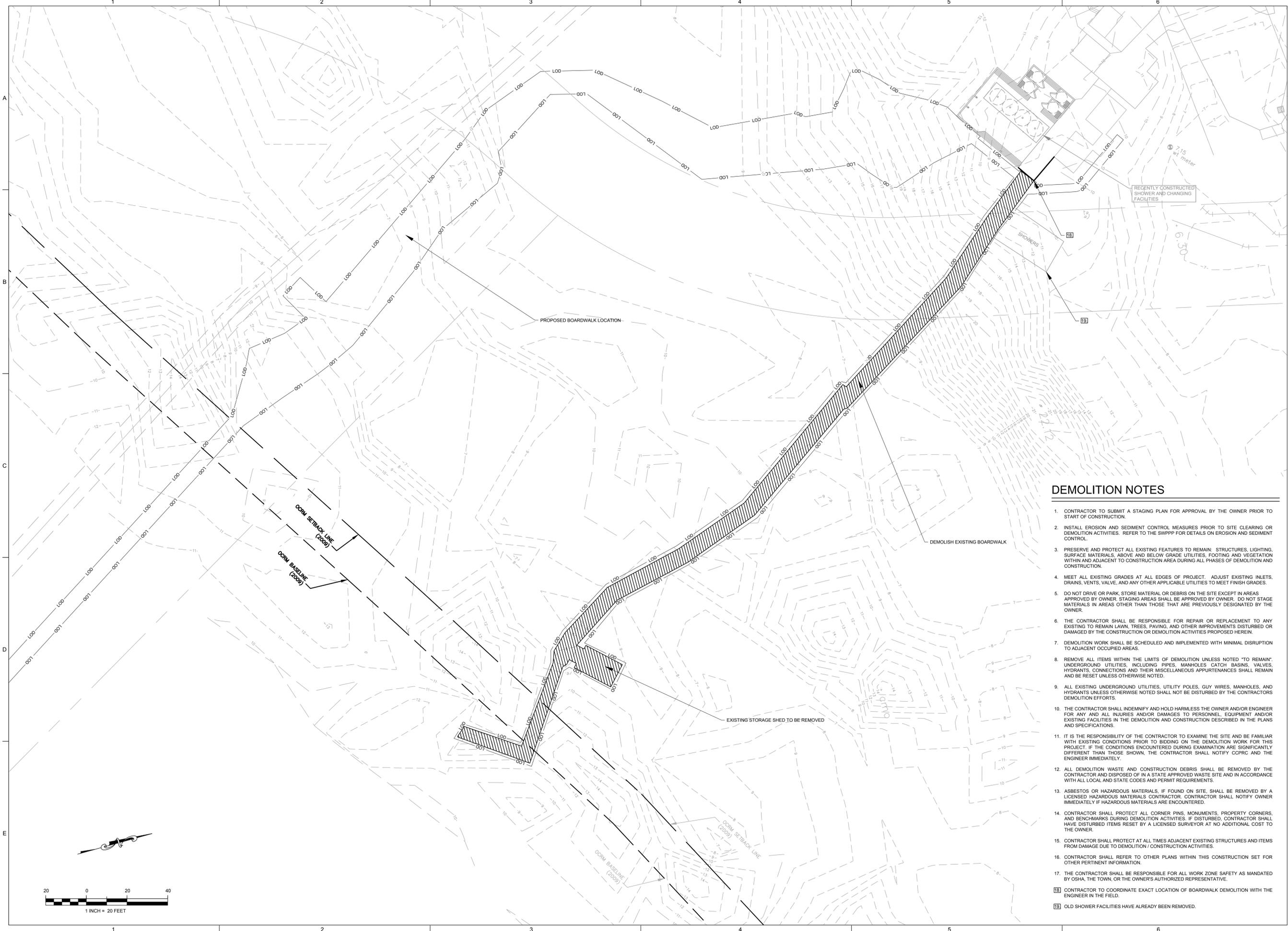
PRELIMINARY

DRAWING TITLE:

COVER SHEET AND
GENERAL NOTES

DRAWING NUMBER:

C1.00



DEMOLITION NOTES

- CONTRACTOR TO SUBMIT A STAGING PLAN FOR APPROVAL BY THE OWNER PRIOR TO START OF CONSTRUCTION.
 - INSTALL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE CLEARING OR DEMOLITION ACTIVITIES. REFER TO THE SWPPP FOR DETAILS ON EROSION AND SEDIMENT CONTROL.
 - PRESERVE AND PROTECT ALL EXISTING FEATURES TO REMAIN. STRUCTURES, LIGHTING, SURFACE MATERIALS, ABOVE AND BELOW GRADE UTILITIES, FOOTING AND VEGETATION WITHIN AND ADJACENT TO CONSTRUCTION AREA DURING ALL PHASES OF DEMOLITION AND CONSTRUCTION.
 - MEET ALL EXISTING GRADES AT ALL EDGES OF PROJECT. ADJUST EXISTING INLETS, DRAINS, VENTS, VALVE, AND ANY OTHER APPLICABLE UTILITIES TO MEET FINISH GRADES.
 - DO NOT DRIVE OR PARK, STORE MATERIAL OR DEBRIS ON THE SITE EXCEPT IN AREAS APPROVED BY OWNER. STAGING AREAS SHALL BE APPROVED BY OWNER. DO NOT STAGE MATERIALS IN AREAS OTHER THAN THOSE THAT ARE PREVIOUSLY DESIGNATED BY THE OWNER.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OR REPLACEMENT TO ANY EXISTING TO REMAIN LAWN, TREES, PAVING, AND OTHER IMPROVEMENTS DISTURBED OR DAMAGED BY THE CONSTRUCTION OR DEMOLITION ACTIVITIES PROPOSED HEREIN.
 - DEMOLITION WORK SHALL BE SCHEDULED AND IMPLEMENTED WITH MINIMAL DISRUPTION TO ADJACENT OCCUPIED AREAS.
 - REMOVE ALL ITEMS WITHIN THE LIMITS OF DEMOLITION UNLESS NOTED "TO REMAIN". UNDERGROUND UTILITIES, INCLUDING PIPES, MANHOLES, CATCH BASINS, VALVES, HYDRANTS, CONNECTIONS AND THEIR MISCELLANEOUS APPURTENANCES SHALL REMAIN AND BE RESET UNLESS OTHERWISE NOTED.
 - ALL EXISTING UNDERGROUND UTILITIES, UTILITY POLES, GUY WIRES, MANHOLES, AND HYDRANTS UNLESS OTHERWISE NOTED SHALL NOT BE DISTURBED BY THE CONTRACTORS DEMOLITION EFFORTS.
 - THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THE DEMOLITION WORK FOR THIS PROJECT. IF THE CONDITIONS ENCOUNTERED DURING EXAMINATION ARE SIGNIFICANTLY DIFFERENT THAN THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY CCPRC AND THE ENGINEER IMMEDIATELY.
 - ALL DEMOLITION WASTE AND CONSTRUCTION DEBRIS SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS.
 - ASBESTOS OR HAZARDOUS MATERIALS, IF FOUND ON SITE, SHALL BE REMOVED BY A LICENSED HAZARDOUS MATERIALS CONTRACTOR. CONTRACTOR SHALL NOTIFY OWNER IMMEDIATELY IF HAZARDOUS MATERIALS ARE ENCOUNTERED.
 - CONTRACTOR SHALL PROTECT ALL CORNER PINS, MONUMENTS, PROPERTY CORNERS, AND BENCHMARKS DURING DEMOLITION ACTIVITIES. IF DISTURBED, CONTRACTOR SHALL HAVE DISTURBED ITEMS RESET BY A LICENSED SURVEYOR AT NO ADDITIONAL COST TO THE OWNER.
 - CONTRACTOR SHALL PROTECT AT ALL TIMES ADJACENT EXISTING STRUCTURES AND ITEMS FROM DAMAGE DUE TO DEMOLITION / CONSTRUCTION ACTIVITIES.
 - CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE SAFETY AS MANDATED BY OSHA, THE TOWN, OR THE OWNER'S AUTHORIZED REPRESENTATIVE.
- (18) CONTRACTOR TO COORDINATE EXACT LOCATION OF BOARDWALK DEMOLITION WITH THE ENGINEER IN THE FIELD.
 (19) OLD SHOWER FACILITIES HAVE ALREADY BEEN REMOVED.

SEAL:

PREPARED FOR:
KRA, LP
 1 KIAWAH ISLAND PKWY
 KIAWAH ISLAND, SC 29455
 (843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:
BEACHWALKER COUNTY PARK BOARDWALK EXTENSION

PROJECT LOCATION:
 8 BEACHWALKER DRIVE
 KIAWAH ISLAND, SC 29455

PROJECT NUMBER:
 19-00993-001

DATE:
 8.13.19

SCALE:
 AS NOTED

PLAN SET:
 PRELIMINARY

DRAWING TITLE:
EXISTING CONDITIONS & DEMOLITION PLAN

DRAWING NUMBER:
C2.00

BOARDWALK CONSTRUCTION NOTES

1. PROPOSED BOARDWALK SHALL BE BUILT A MINIMUM OF 2.0' ABOVE GRADE. IN THE CRITICAL AREA, AT ALL POINTS EXCEPT WHERE THE BOARDWALK WILL TIE INTO EXISTING GRADE.
2. PROPOSED BOARDWALK LONGITUDINAL SLOPE SHALL NOT EXCEED 5.0% AND THE CROSS SLOPE SHALL NOT EXCEED 2.0%.



SEAL:

PREPARED FOR:

KRA, LP
 1 KIAWAH ISLAND PKWY
 KIAWAH ISLAND, SC 29455
 (843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:

BEACHWALKER COUNTY PARK BOARDWALK EXTENSION

PROJECT LOCATION:

8 BEACHWALKER DRIVE
 KIAWAH ISLAND, SC 29455

PROJECT NUMBER:

19-00993-001

DATE:

8.13.19

SCALE:

1" = 20'

PLAN SET:

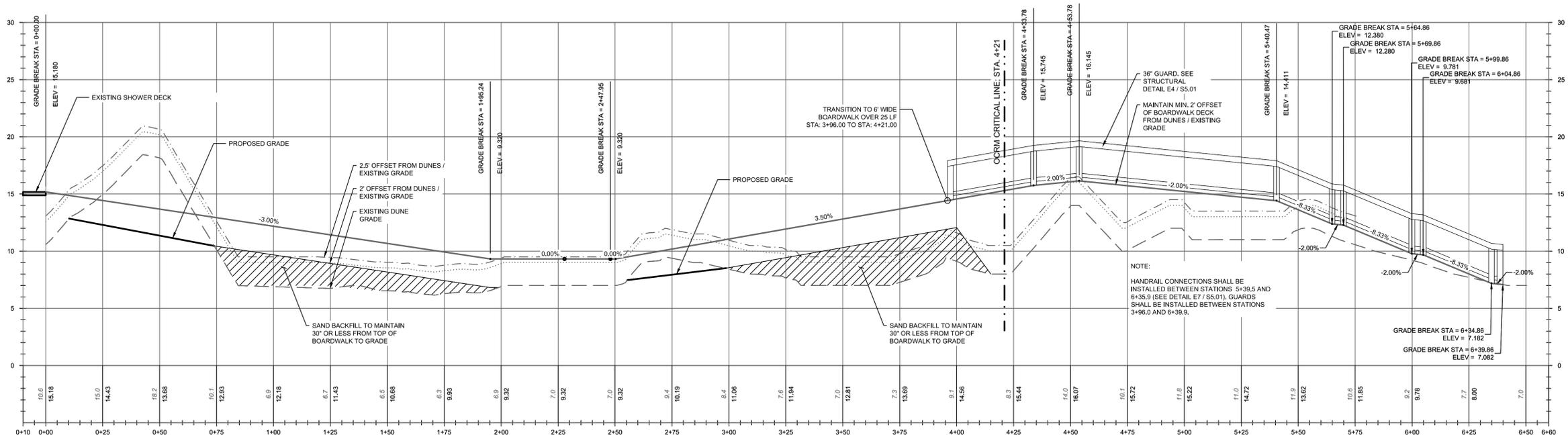
PRELIMINARY PLANS

DRAWING TITLE:

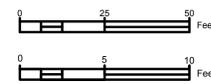
BOARDWALK PROFILE

DRAWING NUMBER:

C3.01



HORIZONTAL SCALE: 1" = 25'
VERTICAL SCALE: 1" = 5'



q:\2019\1900993_001_beachwalker_county_plans\CADD\construction_plans\Civil\Site Plans.dwg 9/18/2019

GENERAL NOTES

- CONTRACTOR TO VERIFY ALL DIMENSIONS AND SITE CONDITIONS PRIOR TO STARTING WORK. IF ANY DISCREPANCIES ARE NOTED, CONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER IMMEDIATELY.
- DO NOT SCALE DRAWINGS. CONSULT ENGINEER FOR DIMENSIONS.
- CONTRACTOR SHALL FULLY COORDINATE ALL MECHANICAL, ELECTRICAL, PLUMBING AND STRUCTURAL DRAWINGS AND SHALL FULLY RESOLVE ANY CONFLICTS PRIOR TO COMMENCING WORK. MISCELLANEOUS STRUCTURAL ITEMS, CONDITIONS OR PIECES OF STEEL MAY BE SHOWN ON ARCHITECTURAL DRAWINGS.
- CONTRACTOR MUST SUBMIT SHOP DRAWINGS TO ENGINEER FOR APPROVAL. CONTRACTOR SHALL REVIEW SHOP DRAWINGS BEFORE SUBMITTING THEM TO ENGINEER NOTING ANY DISCREPANCIES FOUND. FAILURE TO SUBMIT THE SHOP DRAWINGS TO THE ENGINEER IS AT THE CONTRACTOR'S OWN RISK.
- STRUCTURAL DRAWINGS ARE TO BE USED IN CONJUNCTION WITH MANUFACTURERS AND/OR ANY OTHER TRADE RELATED DRAWINGS. THE ENGINEER SHOULD BE NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES IN ORDER TO COMPLY WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS.
- THE STRUCTURE SHOWN ON THESE DRAWINGS IS STRUCTURALLY SOUND IN ITS COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING THE DESIGN, ADEQUACY AND SAFETY OF TEMPORARY ERECTION BRACING AND SHORING.
- THE ENGINEER HAS NO EXPERTISE IN, AND TAKES NO RESPONSIBILITY FOR, CONSTRUCTION MEANS AND METHODS OR JOB SITE SAFETY DURING CONSTRUCTION. IT IS SOLELY THE RESPONSIBILITY OF EACH CONTRACTOR TO FOLLOW ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION.
- NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
- THE CONTRACTOR SHALL MAKE NO DEVIATION FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN APPROVAL FROM THE OWNER.

DESIGN NOTES

DESIGN BASIS:

- IBC 2015 INTERNATIONAL BUILDING CODE
- ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES
- ACI 318-14 MANUAL FOR CONCRETE CONSTRUCTION
- NDS 2012 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION

DESIGN LOADS: DEAD: 1ST FLOOR: 15 PSF

LIVE: 60 PSF

WIND: SPEED: 3 SEC. 131 MPH
~110 MPH SUSTAINED

IMPORTANCE FACTOR: 1.0
BUILDING CATEGORY: I
ENCLOSURE CLASSIFICATION: OPEN
INTERNAL PRESSURE COEFFICIENT: ± 0.18

SEISMIC: SEISMIC IMPORTANCE FACTOR: I
SITE CLASS: D
SEISMIC RESISTING SYSTEM: INVERTED PENDULUM
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
S_{DS}: 0.808
S_{0.1}: 0.414

FLOOD: BASE FLOOD ELEVATION: 15

DEMOLITION NOTES

- THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BE PREPARED TO ADEQUATELY CARE FOR AND SAFEGUARD HIMSELF AND THE OWNER FROM DAMAGE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE STARTING WORK. NOTIFY THE OWNER IN WRITING OF ANY DISCREPANCIES. THE CONTRACTOR SHALL NOT BEGIN CONSTRUCTION IN ANY SUCH AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED BY THE OWNER.
- ALL FEDERAL, STATE, AND LOCAL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF CONSTRUCTION AND INSTALLATION OF MATERIALS IS THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL EXERCISE CAUTION DURING CONSTRUCTION OPERATIONS TO PREVENT ANY DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, AND STRUCTURAL MEMBERS, STRUCTURES, AND STRUCTURAL COMPONENTS NOT WITHIN THE SCOPE OF THIS PROJECT THAT ARE DAMAGED DURING THE REPAIR OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
- ALL UTILITIES SHALL BE TEMPORARILY SUPPORTED OR REMOVED AND REATTACHED COMPARABLE TO EXISTING CONDITIONS TO THE SATISFACTION OF THE OWNER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE SPECIFIED REPAIR WORK. ANY UTILITIES DAMAGED IN THE PROCESS OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AT THE EXPENSE OF THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.
- ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH "THE SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION" (OSHA 29 CFR 1926), THE STATE OF SOUTH CAROLINA, AND ALL OTHER APPLICABLE CODES AND REGULATIONS OF AGENCIES HAVING JURISDICTION.
- FOR ALL REPAIR ITEMS REQUIRING THE REMOVAL OF EXISTING STRUCTURAL MATERIALS, MARINE GROWTH AND OTHER DELETERIOUS SUBSTANCES, THE CONTRACTOR SHALL CAPTURE ALL MATERIALS AND SUBSTANCES REMOVED AND NOT ALLOW THEIR DISCHARGE INTO THE SURROUNDING LAND, WATER, OR AIR.
- ALL DEBRIS CREATED DURING THE EXECUTION OF THE SPECIFIED WORK SHALL BE REMOVED FROM THE PROJECT SITE. NO OIL OR OTHER HAZARDOUS SUBSTANCES SHALL BE DISCHARGED INTO THE WATER AROUND THE PROJECT SITE. ALL PRODUCTS OF REMOVAL OPERATIONS, DEBRIS, AND HAZARDOUS SUBSTANCES SHALL BE PROPERLY DISPOSED OF ACCORDING TO THE CONTRACT DOCUMENTS AND REGULATIONS OF ALL GOVERNING AGENCIES, AND SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- PLAN DIMENSIONS AND DETAILS SHOWN ON THESE CONTRACT DOCUMENTS ARE BASED PRIMARILY ON FIELD MEASUREMENTS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS.
- THE LOCATIONS OF UNDERGROUND AND OVERHEAD LINES AND STRUCTURES THAT MAY BE SHOWN ON THE PLANS ARE FOR REFERENCE ONLY AND THE ACCURACY AND LOCATIONS ARE NOT GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND LOCATING ALL ABOVEGROUND AND UNDERGROUND UTILITY LINES AND STRUCTURES BEFORE DIGGING. OTHER UTILITIES OR STRUCTURES MAY BE IN PLACE AND THE CONTRACTOR SHALL ACCEPT RISK OF OTHER UNDERGROUND UTILITIES.
- THE CONTRACTOR SHALL MAKE EVERY EFFORT TO LOCATE OTHER POSSIBLE UNKNOWN UTILITY LINES BY USE OF AN ELECTRONIC PIPE FINDER, OR OTHER MEANS HE MAY PREFER, AND SHALL EXCAVATE AND EXPOSE ALL EXISTING UNDERGROUND LINES IN ADVANCE OF ANY TRENCHING OR DIGGING OPERATIONS.
- THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE WORKMANLIKE REPAIR OF ANY DAMAGE DONE TO ANY UTILITIES DURING WORK UNDER THIS CONTRACT.

FOUNDATION EXCAVATION & FILL NOTES

- THE FOUNDATION DESIGN WAS PREPARED IN THE ABSENCE OF A SOILS REPORT. THE DESIGN ASSUMES A SOIL BEARING PRESSURE OF 2000 PSF AND THAT PILES PENETRATING 7'-6" AT THE BOARDWALK WILL DEVELOP 5 TON BEARING CAPACITY. IT IS THE REASONABLENESS OF THIS ASSUMPTION SHOULD BE VERIFIED BY THE CONTRACTOR WITH A GEOTECHNICAL ENGINEER KNOWLEDGEABLE OF LOCAL SOIL CONDITIONS.
- ALL EXCAVATIONS FOR FOOTINGS SHALL BE MADE TO THE GRADES SHOWN FOR CONTINUOUS AND SPREAD FOOTINGS. CONTRACTOR SHALL TAKE MEASURES TO PREVENT CAVING IN OF THE FOOTING EXCAVATION. THESE MEASURES MAY INCLUDE CUTTING BACK THE SIDE SLOPES AND/OR THE USE OF SIDE FORMS.
- COMPACTED FILL MATERIAL SHALL BE FREE OF ORGANICS, STONES, ROCKS, BROKEN BRICKS, WOOD FRAGMENTS, OR OTHER DELETERIOUS MATERIAL THAT AFFECTS THE COMPACTIBILITY OF THE MATERIAL.
- THE MATERIAL SHALL CONSIST OF A MAXIMUM OF 20% FINES (MATERIAL PASSING A #200 SIEVE) AND HAVE A MAXIMUM DRY DENSITY (MODIFIED PROCTOR ASTM D-1557) OF AT LEAST 100 PCF.
- THE MATERIAL'S LIQUID LIMIT SHALL NOT EXCEED 30 AND THE PLASTICITY INDEX SHALL NOT BE GREATER THAN 15.
- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 10" AND COMPACTED TO AT LEAST 95% OF THE MODIFIED PROCTOR MAXIMUM DRY DENSITY.
- ANY SOFT AREAS OR AREAS SUSPECTED OF POOR MATERIAL SHALL BE REMOVED TO A DEPTH OF NOT LESS THAN 24" BELOW THE UNSUITABLE MATERIAL AND REPLACED WITH A SUITABLE FILL MATERIAL AS DESCRIBED ABOVE.
- PRIOR TO PLACEMENT OF ANY CONCRETE, THE THIN LAYER OF DISTURBED SOIL IN THE FOOTING SUB-GRADE SHALL BE COMPACTED WITH HAND-OPERATED, GAS POWERED TAMPERS.
- PROVIDE SHORING, BRACING, AND SHEETING IN ACCORDANCE WITH COE EM 385-1-1.
- MAINTAIN POSITIVE SURFACE DRAINAGE TO PREVENT ACCUMULATION OF WATER IN EXCAVATED AREAS.
- EXCAVATIONS FOR STRUCTURES LOCATED BELOW OR WITHIN THREE FEET OF THE GROUNDWATER LEVEL SHALL BE DE-WATERED. GROUNDWATER SHALL BE LOWERED AND CONTINUOUSLY MAINTAINED AT LEAST THREE FEET BELOW THE PROPOSED BEARING ELEVATION.
- DO NOT DISCONTINUE DE-WATERING BACKFILL OR FILL AGAINST THE STRUCTURE UNTIL THE CONCRETE HAS CURED TO THE 28 DAY STRENGTH.

WOOD FRAMING NOTES

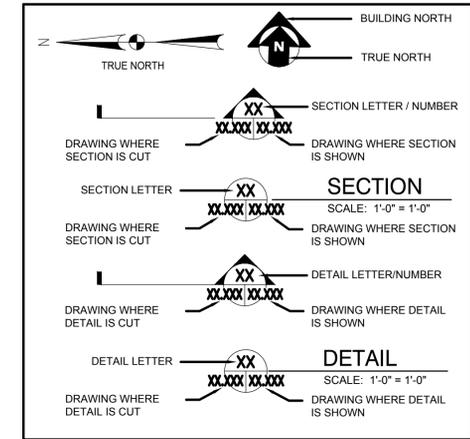
- ALL WOOD FRAMING MATERIALS FOR THE 2X6 DECKING SHALL BE COX DURAPINE CLASSIC DECKING OR APPROVED EQUAL. ALL OTHER WOOD FRAMING MATERIALS SHALL BE SOUTHERN YELLOW PINE #1 KILN DRIED OR EQUAL, UNLESS NOTED OTHERWISE.
- ALL LUMBER SHALL BE CONTINUOUS WITHOUT SPLICES EXCEPT AS NOTED ON THE DRAWINGS.
- ALL WOOD MEMBERS IN CONTACT WITH CONCRETE, MASONRY OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED.
- SOLID WOOD BLOCKING SHALL BE THE FULL DEPTH OF THE FLOOR JOIST MEMBERS AND BE LOCATED AT THIRD POINTS OF THE SPAN.
- ALL TIMBER FASTENERS SHALL BE SS316 UNLESS OTHERWISE NOTED. ALL CLIPS AND HANGERS SHALL BE GALVANIZED UNLESS OTHERWISE NOTED.

PRESERVATIVE TREATMENT NOTES

- TREATMENT SHALL MEET THE FOLLOWING REQUIREMENTS:
- PILING:** TREAT PILES BY THE FULL CELL PRESSURE PROCESS IN ACCORDANCE WITH AWWA UC5B FOR MARINE PILING. WATERBORNE PRESERVATIVE FOR MARINE PILING (ACA, ACZA, CCA). MINIMUM RETENTION RATE 2.5 LBS/CFT.
 - LUMBER:** TREAT TIMBER IN ACCORDANCE WITH AWWA UC5B. MINIMUM RETENTION RATE 0.60 LBS/CFT. FOR LUMBER USED ABOVE MSL. MINIMUM RETENTION RATE FOR LUMBER USED BELOW MSL 2.5 LBS/CFT.
 - DECKING:** TREAT TIMBERS IN ACCORDANCE WITH AWWA UC3B. MINIMUM RETENTION RATE 0.40 LBS/CFT. FOR LUMBER USED ABOVE MSL. LUMBER BELOW MSL SHALL HAVE 2.5 LBS/CFT.
 - ALL:** COAT CUT ENDS OF PILES AND TIMBERS, AND SWAB ALL DRILLED HOLES, WITH COPPER NAPHTHENATE OR EQUAL MEETING AWWA STANDARD P-8.

TIMBER PILING NOTES

- ALL TREATED TIMBER PILES AND PILE INSTALLATION SHALL CONFORM TO:
 - ASTM D25 (ROUND TIMBER PILES)
 - ASTM D1143 (PILES UNDER STATIC AXIAL COMPRESSIVE LOAD)
 - ASTM D1760 (PRESSURE TREATMENT OF TIMBER PRODUCTS)
 - AWPA C3 (PILES - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES)
 - AWPA M4 (CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS)
 - FS RR-S-331 (SHOES FOR WOOD PILES)
- ALL TIMBER PILE SHALL BE ONE PIECE TIMBER TREATED IN ACCORDANCE WITH AWWA3. PILE SHALL HAVE A BUTT DIAMETER OF 8 INCHES (8") WHEN MEASURED 3 FEET FROM THE BUTT END OF THE PILE. PILE SHALL BE CAPABLE OF BEING DRIVEN TO A RESISTANCE TO DEVELOP A LOAD CARRYING CAPACITY OF 5 TONS.
- PERMANENT PILES SHALL BE DRIVEN IN ONE CONTINUOUS PIECE, WITHOUT INTERRUPTION, TO THE "CALCULATED" TIP ELEVATION TO REACH THE REQUIRED RESISTANCE TO DEVELOP A 5 TON LOAD BEARING CAPACITY.
- PILE SHOES WILL BE USED WHERE NECESSARY.
- ALL PILE SHALL BE DRIVEN WITH A VARIATION OF NOT MORE THAN 0.25 INCHES PER FOOT OF PILE LENGTH FROM THE VERTICAL. FOR PLUMB PILE, BUTTS SHALL BE WITHIN 4 INCHES OF THE LOCATION INDICATED. MANIPULATION OF PILES TO FORCE THEM INTO POSITION WILL NOT BE PERMITTED.
- ALL PILE SHALL BE CHECKED BY THE CONTRATOR FOR HEAVE. PILE FOUND TO HAVE HEAVED SHALL BE RE-DRIVEN TO THE REQUIRED TIP ELEVATION.
- PILE DAMAGED, MIS-LOCATED, OR DRIVEN OUT OF ALIGNMENT SHALL BE REPLACED OR ADDITIONAL PILE DRIVEN AS DIRECTED.
- PILE SHALL BE INSPECTED BEFORE INSTALLATION AND WHERE WOOD TREATMENT HAS BEEN DAMAGED BETWEEN THE CUTOFF AND A POINT WHICH WILL BE NOT LESS THAN 10 FEET BELOW THE GROUND. THE PILE SHALL BE REPAIRED AND A POINT WHICH WILL BE NOT LESS THAN 10 FEET BELOW THE GROUND; THE PILE SHALL IN ACCORDANCE WITH AWWA M4.
- PILES TO HAVE A MINIMUM EMBEDMENT OF 7'-6" AT BOARDWALK LOCATIONS.



ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ASCE	AMERICAN SOCIETY OF CIVIL ENGINEERS
ASTM	AMERICAN SOCIETY OF TESTING AND MATERIALS
BG	BELOW GRADE
C	CENTER LINE
COL	COLUMN
CJ	CONTROL JOINT
CONC.	CONCRETE
CONT.	CONTINUOUS
DWG	DRAWING
Ø	DIAMETER
EA	EACH WAY
EJ	EXPANSION JOINT
EW	EACH WAY
HDG	HOT DIP GALVANIZED
KD	KILN DRIED
PSF	POUNDS PER SQUARE FOOT
PT	PRESSURE TREATED
SYP	SOUTHERN YELLOW PINE
TBW	TOP OF BOARDWALK
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WWM	WELDED WIRE MESH



SEAL:

PREPARED FOR:

KRA, LP
1 KIAWAH ISLAND PKWY
KIAWAH ISLAND, SC 29455
(843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:

BEACHWALKER COUNTY PARK BOARDWALK EXTENSION

PROJECT LOCATION:

**8 BEACHWALKER DRIVE
KIAWAH ISLAND, SC 29455**

PROJECT NUMBER:

19-00993-001

DATE:	SCALE:
8.13.19	AS NOTED

PLAN SET:

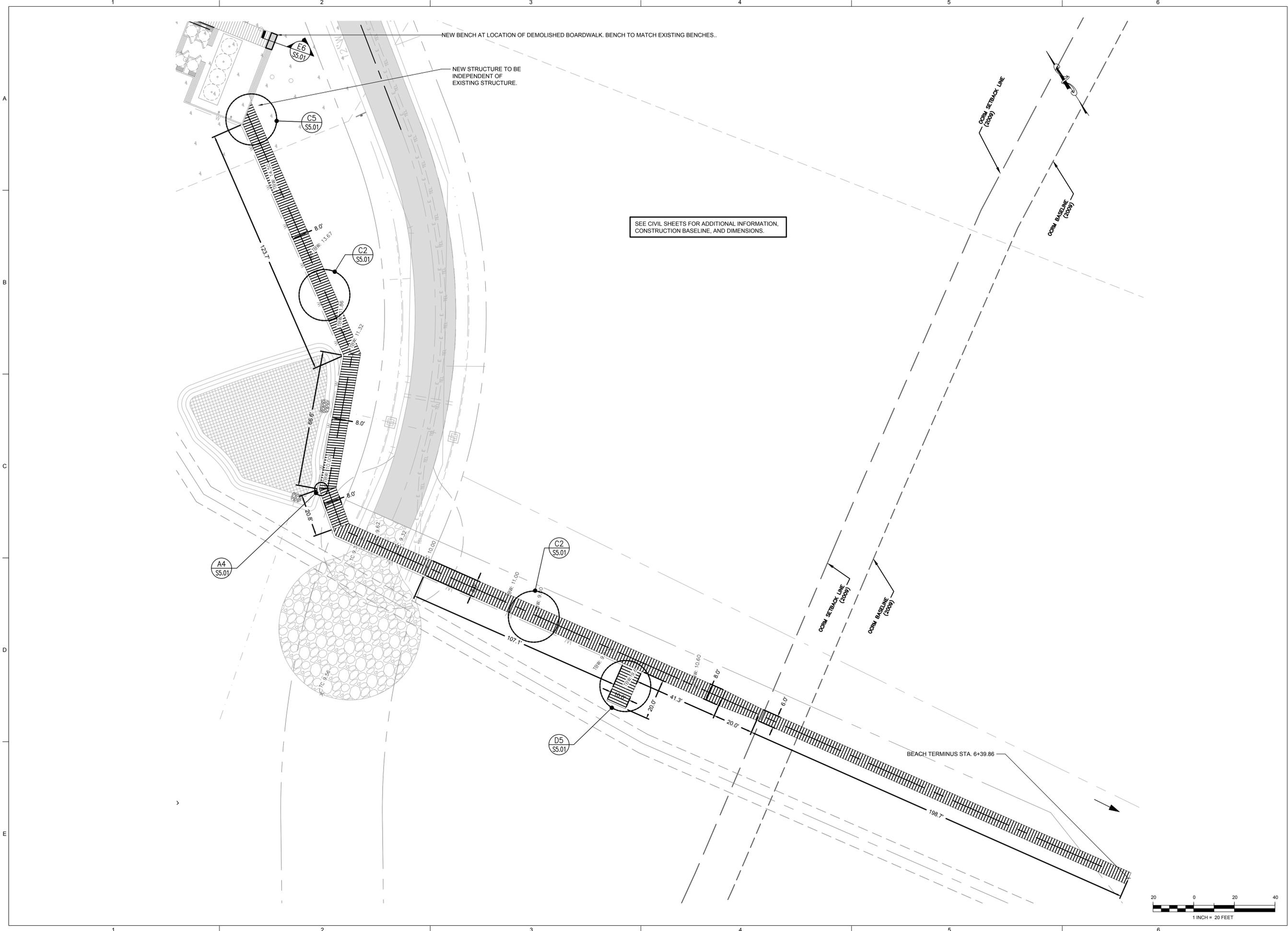
DRAFT

DRAWING TITLE:

STRUCTURAL GENERAL NOTES

DRAWING NUMBER:

S0.01



SEAL:

PREPARED FOR:
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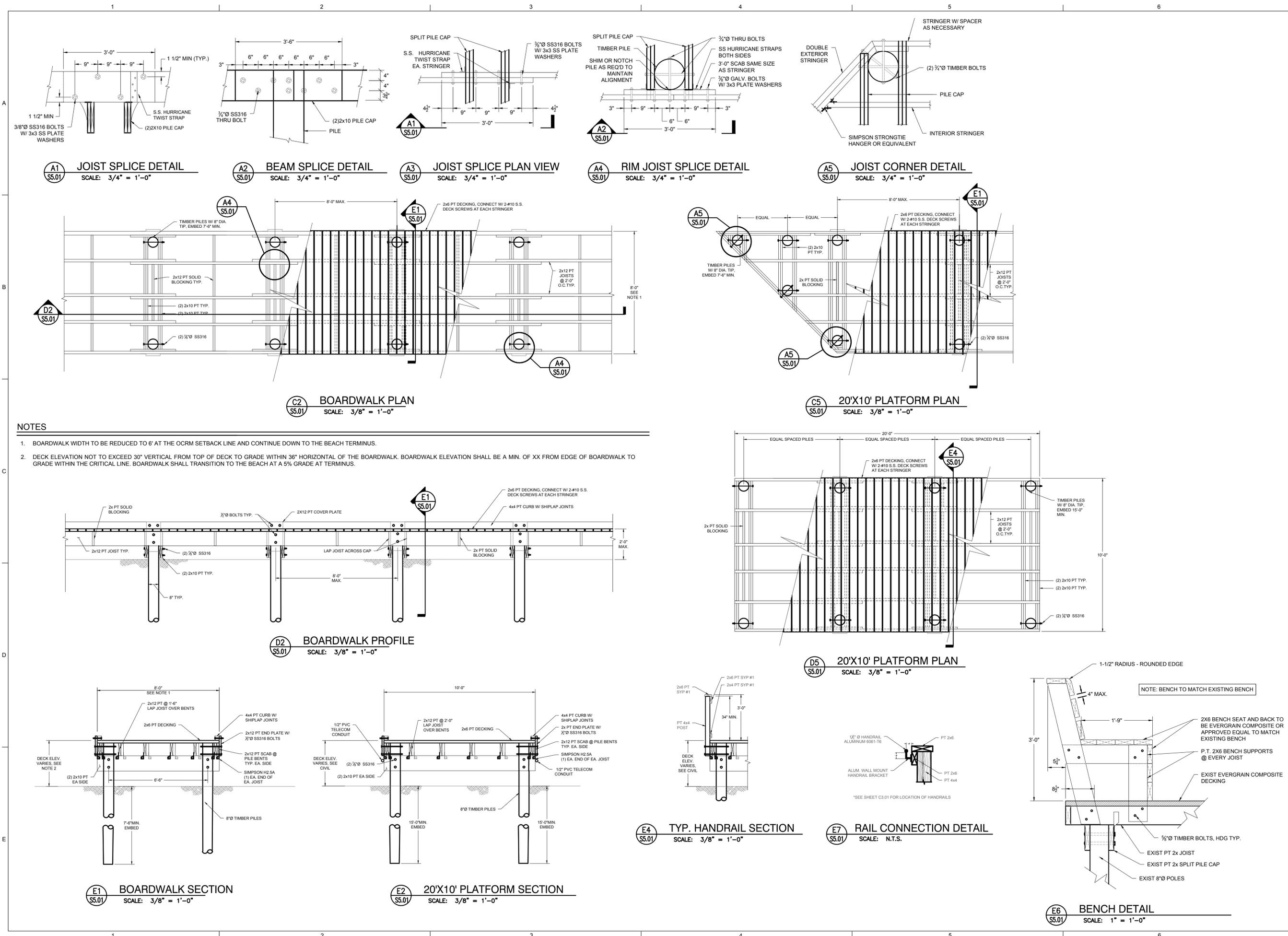
PROJECT NUMBER:
 19-00993-001

DATE: 8.13.19 SCALE: 1" = 20'

PLAN SET:
 PRELIMINARY PLANS

DRAWING TITLE:
STRUCTURAL PLAN

DRAWING NUMBER:
S1.01



- NOTES**
- BOARDWALK WIDTH TO BE REDUCED TO 6' AT THE OCRM SETBACK LINE AND CONTINUE DOWN TO THE BEACH TERMINUS.
 - DECK ELEVATION NOT TO EXCEED 30" VERTICAL FROM TOP OF DECK TO GRADE WITHIN 36" HORIZONTAL OF THE BOARDWALK. BOARDWALK ELEVATION SHALL BE A MIN. OF XX FROM EDGE OF BOARDWALK TO GRADE WITHIN THE CRITICAL LINE. BOARDWALK SHALL TRANSITION TO THE BEACH AT A 5% GRADE AT TERMINUS.



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PROJECT NUMBER:
19-00993-001

DATE: 8.13.19

SCALE: AS NOTED

PLAN SET:
DRAFT

DRAWING TITLE:
BOARDWALK DETAILS

DRAWING NUMBER:
S5.01

ABBREVIATIONS

@	AT	INV	INVERT
AAV	AUTOMATIC AIR VENT	ISOL	ISOLATION
ABV	ABOVE	IW	INDUSTRIAL WASTE
ACV	AUTOMATIC CONTROL VALVE	KW	KILOWATTS
AD	ACCESS DOOR	L	LONG LENGTH
ADR	AREA DRAIN	LAT	LEAVING AIR TEMPERATURE
AFF	ABOVE FINISHED FLOOR	LBS	POUNDS
AHU	AIR HANDLING UNIT	LBSHR	POUNDS PER HOUR
ALUM	ALUMINUM	LDB	LEAVING DRY BULB
AMD	AIR MONITORING DEVICE	LF	LINEAR FEET
APD	AIR PRESSURE DROP	LPC	LOW PRESSURE CONDENSATE PIPE
APPROX	APPROXIMATELY	LPS	LOW PRESSURE STEAM PIPE
AR	ACID RESISTANT	LRA	LOCKED ROTOR AMPERES
ATC	AUTOMATIC TEMPERATURE CONTROL	LSD	LINEAR SLOT DIFFUSER
ATTN	ATTENUATOR	LWB	LEAVING WET BULB
AWT	AVERAGE WATER TEMPERATURE	LWT	LEAVING WATER TEMPERATURE
BDD	BACKDRAFT DAMPER	MA	MIXED AIR
BFP	BACKFLOW PREVENTOR	MAV	MANUAL AIR VENT
BHP	BRAKE HORSEPOWER	MAX	MAXIMUM
BLDG	BUILDING	MBH	THOUSAND BRITISH THERMAL UNITS PER HOUR
BLW	BELOW	MECH	MECHANICAL
BP	BYPASS	MFD	MOTORIZED FIRE DAMPER
BTM	BOTTOM	MFR	MANUFACTURER
BTUHR	BRITISH THERMAL UNITS PER HOUR	MIN	MINIMUM
BV	BALANCING VALVE	MOD	MOTOR OPERATED DAMPER
BWV	BACKWATER VALVE	MTD	MOUNTED
		MVD	MANUAL VOLUME DAMPER
C	COMMON	NC	NOISE CRITERIA OR NORMALLY CLOSED
°C	DEGREES CELSIUS	NIC	NOT IN CONTRACT
CA	COMPRESSED AIR	NOM	NOMINAL
CC	COOLING COIL	No	NORMALLY OPEN
CCP	COOLING COIL PUMP	No	NUMBER
CD	CONDENSATE DRAIN	NPW	NON-POTABLE WATER
CDR	CONDENSER WATER RETURN PIPE	OA	OUTDOOR AIR
CDS	CONDENSER WATER SUPPLY PIPE	OAI	OUTDOOR AIR INTAKE
CFM	CUBIC FEET PER MINUTE	OAT	OUTDOOR AIR TEMPERATURE
CHR	CHILLED WATER RETURN PIPE	OC	ON CENTER
CHS	CHILLED WATER SUPPLY PIPE	OED	OPEN END DUCT WITH 1/2" FRAMED WIRE MESH SCREEN
CI	CAST IRON	OFD	OVERFLOW DRAIN
CLG	CEILING	OI	OIL INTERCEPTOR
CO	CLEANOUT	OS&Y	OUTSIDE STEM & YOKE VALVE
CONC	CONCRETE	%	PERCENT
CONN	CONNECT, CONNECTION	PC	PUMPED CONDENSATE PIPE
CONTN	CONTINUATION	PD	PRESSURE DROP OR PUMP DISCHARGE
CV	CHECK VALVE	PH	PHASE
CW	DOMESTIC COLD WATER	POD	POINT OF DISCONNECTION
CX	CONNECT TO EXISTING	PR	PRESSURE RELIEF
		PRG	PRESSURE RELIEF GRILLE
D	SUPPLY AIR DIFFUSER OR DEEP DEPTH	PRS	PRESSURE REDUCING VALVE
DAM	DUCT AIR MONITOR	PS	PRESSURE SENSOR
DB	DECIBEL OR DRY BULB	PSI	POUNDS PER SQUARE INCH POUNDS
DDC	DIRECT DIGITAL CONTROL	PSIG	PER SQUARE INCH GAUGE
DESG	DESIGNATION	PUH	PROPELLER UNIT HEATER
DF	DRINKING FOUNTAIN	R	RETURN/EXHAUST/SUPPLY AIR REGISTER
DHC	DUCT HEATING COIL	RA	RETURN AIR
DIA, Ø	DIAMETER	RDR	REQUIRED
DIFF	DIFFERENTIAL	RECD	REQUIRED
DL	DOOR LOUVER	RF	RETURN FAN
DN	DOWN	RH	RELATIVE HUMIDITY
DPR	DAMPER	RL	REFRIGERANT LIQUID
DPS	DIFFERENTIAL PRESSURE SENSOR	RLA	RUNNING LOAD AMPERES
DR	MISCELLANEOUS DRAINAGE	RM	ROOM
DTR	DUAL TEMPERATURE RETURN	RPM	REVOLUTIONS PER MINUTE
DTS	DUAL TEMPERATURE SUPPLY	RS	REFRIGERANT SUCTION
DWG	DRAWING	RV	RELIEF VENT
		RX	REMOVE EXISTING
EA	EXHAUST AIR	S	SPRINKLER SUPPLY PIPE
EAT	ENTERING AIR TEMPERATURE	SA	SUPPLY AIR
EDB	ENTERING DRY BULB	SAN	SANITARY, SOIL, WASTE
EFF	EFFICIENCY	SAT	SATURATED
EF	EXHAUST FAN	SD	SMOKE DAMPER
EJ	EXPANSION JOINT	SENS	SENSIBLE
ELEC	ELECTRIC	SEP	SEPARATOR
ELEV	ELEVATION OR ELEVATOR	SF	SUPPLY FAN OR SQUARE FEET
ESP	EXTERNAL STATIC PRESSURE	SL	SOUND LINING, SOUND LINED
EWB	ENTERING WET BULB	SM	SHEET METAL
EWT	ENTERING WATER TEMPERATURE	SP	STATIC PRESSURE
EX	EXISTING	SPD	STATIC PRESSURE DROP
EXH	EXHAUST	SPEC	SPECIFICATION
EXP	EXPANSION	SQ	SQUARE
		SQ FT	DROP SQUARE FOOT
F	FILTER	SPR	SPRINKLER LINE
°F	DEGREES FAHRENHEIT	SS	START/STOP
F&T	FLOAT & THERMOSTATIC	SIS	STAINLESS STEEL
FC	FILEBLE CONNECTION	STL	STEEL
FD	FIRE DAMPER OR FOUNDATION DRAINAGE	SV	SOLENOID VALVE
FDC	FIRE DEPARTMENT CONNECTION	SW	STORM WATER
FDR	FLOOR DRAIN	ΔT	TEMPERATURE DROP
FDV	FIRE DEPARTMENT VALVE	TDTR	TRENCH DRAIN
FHC	FIRE HOSE CABINET	TEMP, T	TEMPERATURE
FL	FLOOR	TG	TRANSFER GRILLE
FLA	FULL LOAD AMPERES	TPV	TRAP PRIMER VALVE
FOB	FLAT ON BOTTOM	TS	TAMPER SWITCH
FOT	FLAT ON TOP	TSP	TOTAL STATIC PRESSURE
FPM	FEET PER MINUTE	TYP	TYPICAL
FP	FIRE PIPING	TW	DOMESTIC TEMPERED WATER PIPE
FPS	FEET PER SECOND	UC	UNDERCUT DOOR
FSP	FIRE STANDPIPE	UH	UNIT HEATER
FT, '	FOOT, FEET OR FLASH TANK	UON	UNLESS OTHERWISE NOTED
FT HD	FEET OF HEAD	V	VOLTS, VACUUM PIPE
FZ	FREEZE STAT	VP	VITRIFIED CLAY PIPE
FU	FIXTURE UNITS	VCPIX	VITRIFIED CLAY PIPE-EXTRA STRENGTH
		VD	VOLUME DAMPER
G	NATURAL GAS PIPE OR RETURN/EXHAUST GRILLE	VEL	VELOCITY
GAL	GALLON, GALLONS	VENT	VENTILATION
GALV	GALVANIZED	VFT	VENTILATION FAN
GD	GARBAGE DISPOSAL	VFD	VARIABLE FREQUENCY DRIVE
GDS	GAS DETECTION SYSTEM	VIB	VIBRATION
GEN	GENERATOR	ISOL VLV	ISOLATION VALVE
GI	GREASE INTERCEPTOR	VP	SANITARY VENT PIPE
GPM	GALLONS PER MINUTE	VTR	VENT THROUGH ROOF
		W	WIDTH
H	HIGH HEIGHT	W	WITH
H2O	WATER	WB	WET BULB
HB	HOSE BIBB	WC	WATER COLUMN
HED	HOSE END DRAIN VALVE	WH	WALL HYDRANT
HP	HORSEPOWER	ZN	ZONE
HPC	HIGH PRESSURE CONDENSATE PIPE		
HPS	HIGH PRESSURE STEAM PIPE		
HW	DOMESTIC HOT WATER (140°F)		
HW	DOMESTIC HOT WATER CIRCULATING		
HPP	HIGH PRESSURE PIPING - NON-POTABLE HOT WATER		
HZ	HERTZ		
IGV	INLET GUIDE VANE		
IN, "	INCH, INCHES		

SECTION 221119 - DOMESTIC WATER PIPING SPECIALTIES

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS
- A. DRAWINGS AND GENERAL PROVISIONS OF THE CONTRACT, INCLUDING GENERAL AND SUPPLEMENTARY CONDITIONS AND DIVISION 01 SPECIFICATION SECTIONS, APPLY TO THIS SECTION.

1.2 ACTION SUBMITTALS

- A. PRODUCT DATA: FOR EACH TYPE OF PRODUCT.
- B. SHOP DRAWINGS: FOR DOMESTIC WATER PIPING SPECIALTIES.

PART 2 - PRODUCTS

- 2.1 YARD (POST) HYDRANTS
- A. NON-FREEZE, DRAINING-TYPE YARD (POST) HYDRANTS: SEE DETAIL.
- WOODFORD MANUFACTURING COMPANY MODEL Y1 OR APPROVED EQUAL.
 - STANDARD: ASME A112.21.3M.
 - TYPE: NON-FREEZE, EXPOSED-OUTLET POST HYDRANT.
 - OPERATION: LEVER HANDLE AND PLUNGER.
 - INLET: FEMALE 1" NPT
 - CASING: STAINLESS STEEL.
 - OPERATING ROD: 3/8" GALVANIZED STEEL PIPE.
 - NOZZLE: 3/4" BRASS MALE HOSE NOZZLE.
 - DRAIN: TAPPED 1/8" NPT.
 - VACUUM BREAKER:
 - NON-REMOVABLE, DRAINABLE, HOSE-CONNECTION VACUUM BREAKER COMPLYING WITH ASSE 1011 OR BACKFLOW PREVENTER COMPLYING WITH ASSE 1052.
 - GARDEN-HOSE THREAD COMPLYING WITH ASME B1.20.7 ON OUTLET.
- B. ANCHOR:
- GIBSON STAINLESS AND SPECIALTY, INC. STAINLESS SPLIT RING CLAMP OR APPROVED EQUAL.
 - 3/16 SS CLAMP, NEOPRENE WASHER, 3/16 SS SCREWS
 - 3/16 SS EXTENSION ROD

PART 3 - EXECUTION

- 3.1 INSTALLATION
- A. NON-FREEZE, DRAINING-TYPE POST HYDRANTS: INSTALL WITH 1 CU. YD. OF CRUSHED GRAVEL AROUND DRAIN HOLE. SET POST HYDRANTS IN CONCRETE PAVING OR IN 1 CU. FT. OF CONCRETE BLOCK AT GRADE.
- 3.2 CONNECTIONS
- B. DRAWINGS INDICATE GENERAL ARRANGEMENT OF PIPING, FITTINGS, AND SPECIALTIES.
- C. WHEN INSTALLING PIPING SPECIALTIES ADJACENT TO EQUIPMENT AND MACHINES, ALLOW SPACE FOR SERVICE AND MAINTENANCE.
- 3.3 FIELD QUALITY CONTROL
- D. PERFORM THE FOLLOWING TESTS AND INSPECTIONS:
- TEST YARD (POST) HYDRANT ACCORDING TO AUTHORITIES HAVING JURISDICTION AND THE DEVICE'S REFERENCE STANDARD.
- E. DOMESTIC WATER PIPING SPECIALTIES WILL BE CONSIDERED DEFECTIVE IF THEY DO NOT PASS TESTS AND INSPECTIONS.
- F. PREPARE TEST AND INSPECTION REPORTS.

SECTION 221116 DOMESTIC WATER PIPING

PART 1 GENERAL

- 1.1 SECTION INCLUDES
- A. PEX-A PIPE AND FITTINGS FOR DOMESTIC WATER PIPING.
- B. AMERICAN WATER WORKS ASSOCIATION:
- AWWA C904 STANDARD FOR CROSSLINKED POLYETHYLENE (PEX) PRESSURE PIPE, 1/2 IN. THROUGH 3 IN., FOR WATER SERVICE.
- C. CODES
- INTERNATIONAL PLUMBING CODE (IPC)
 - SOUTH CAROLINA PLUMBING CODE
- D. PLASTICS PIPE INSTITUTE (PPI)
- PPI TECHNICAL REPORT TR-406
- E. UPONOR, INC.
- UPONOR PLUMBING DESIGN ASSISTANCE MANUAL (PDAM), 2017.
 - UPONOR PIPING POCKET GUIDE, 2017.
- 1.2 SUBMITTALS
- A. PRODUCT DATA: PROVIDE MANUFACTURER'S PRODUCT SUBMITTAL DATA.
- 1.3 QUALITY ASSURANCE
- A. INSTALLER QUALIFICATIONS: INSTALLER SHALL HAVE SUCCESSFULLY COMPLETED THE UPONOR COMMERCIAL PIPING SYSTEMS TRAINING COURSE (FORMERLY UPONOR AQUAPEX CERTIFICATION) AND IS ABLE TO PROVIDE PROOF/VERIFICATION. COURSE SHALL BE CONDUCTED BY THE MANUFACTURER OR A MANUFACTURER'S REPRESENTATIVE.
- 1.4 DELIVERY, STORAGE, AND HANDLING
- A. ORDERING: COMPLY WITH MANUFACTURER'S ORDERING INSTRUCTIONS AND LEAD-TIME REQUIREMENTS TO AVOID CONSTRUCTION DELAYS.
- B. DELIVERY: DELIVER MATERIALS IN MANUFACTURER'S ORIGINAL, UNOPENED, UNDAMAGED CONTAINERS WITH IDENTIFICATION LABELS INTACT.
- C. STORAGE AND PROTECTION: STORE MATERIALS PROTECTED FROM EXPOSURE TO HARMFUL ENVIRONMENTAL CONDITIONS AND AT TEMPERATURE AND HUMIDITY CONDITIONS RECOMMENDED BY THE MANUFACTURER.
- STORE PEX TUBING IN CARTONS OR UNDER COVER TO AVOID DIRT OR FOREIGN MATERIAL FROM ENTERING THE TUBING.
 - DO NOT EXPOSE PEX TUBING TO DIRECT SUNLIGHT FOR MORE THAN 30 DAYS. IF CONSTRUCTION DELAYS ARE ENCOUNTERED, COVER THE TUBING TO PREVENT EXPOSURE TO DIRECT SUNLIGHT
- 1.5 WARRANTY
- A. PROJECT WARRANTY: REFER TO CONDITIONS OF THE CONTRACT FOR PROJECT WARRANTY PROVISIONS.
- B. MANUFACTURER'S WARRANTY: PEX-A MANUFACTURER SYSTEM WARRANTY SHALL COVER PIPING AND FITTINGS FOR A DURATION OF 25 YEARS FROM THE DATE OF INSTALLATION. PIPING SYSTEM WARRANTY SHALL APPLY TO POTABLE WATER DISTRIBUTION AND WATER SERVICE SYSTEMS CONSTRUCTED OF PIPE AND FITTING PRODUCTS SOURCED FROM THE SAME MANUFACTURER.

PART 2 PRODUCTS

- 2.1 PEX PIPE AND FITTINGS
- A. PEX-A (ENGEL METHOD CROSSLINKED POLYETHYLENE) PIPING: ASTM F 876 AND F877 (CAN/CSA-B137.5) BY UPONOR.
- B. PEX-A FITTINGS: ELBOWS, ADAPTERS, COUPLINGS, PLUGS, TEES AND MULTI-PORT TEES 1/2 INCH THROUGH 3-INCH NOMINAL PIPE SIZE: ASTM F1960 COLD-EXPANSION FITTING MANUFACTURED FROM THE FOLLOWING MATERIAL TYPES:
- UNS NO. C69300 LEAD-FREE (LF) BRASS.
 - UNS NO. C27453 LEAD-FREE (LF) BRASS.
 - 20% GLASS-FILLED POLYSULFONE AS SPECIFIED IN ASTM D 6394.
 - UNREINFORCED POLYSULFONE (GROUP 01, CLASS 1, GRADE 2) AS SPECIFIED IN ASTM D 6394.
 - POLYPHENYLSULFONE (GROUP 03, CLASS 1, GRADE 2) AS SPECIFIED IN ASTM D 6394.
 - BLENDED POLYPHENYLSULFONE (55-80%) AND UNREINFORCED POLYSULFONE (REM) AS SPECIFIED IN ASTM D 6394.
 - REINFORCING COLD-EXPANSION RINGS SHALL BE MANUFACTURED FROM THE SAME SOURCE AS PEX-A PIPING MANUFACTURER AND MARKED "F1960".
- C. PRE-INSULATED PIPING (1/2 INCH THROUGH 2-INCH NOMINAL PIPE SIZE): PEX-A PIPING, WITH A CLOSED-CELL POLYETHYLENE FOAM INSULATION.
- 2.2 TRANSITION FITTINGS
- A. PEX-TO-METAL TRANSITION FITTINGS:
- MANUFACTURERS: PROVIDE FITTINGS FROM THE SAME MANUFACTURER OF THE PIPING.
 - PEX-A TO THREAD TRANSITION: ONE-PIECE BRASS FITTING WITH MALE OR FEMALE THREADED ADAPTER AND ASTM F 1960 COLD-EXPANSION END, WITH PEX-A REINFORCING COLD-EXPANSION RING.
 - PEX-A TO COPPER SWEAT TRANSITION: ONE-PIECE BRASS FITTING WITH SWEAT ADAPTER AND ASTM F 1960 COLD-EXPANSION END, WITH PEX-A REINFORCING COLD-EXPANSION RING.
- 2.3 VALVES
- A. PEX-TO-PEX, LEAD FREE (LF) BRASS BALL VALVES 1/2 INCH THROUGH 2-INCH NOMINAL PIPE SIZE)
- MANUFACTURERS: PROVIDE BALL VALVE(S) FROM THE SAME MANUFACTURER AS THE PIPING SYSTEM.
 - FULL PORT BALL VALVE: TWO-PIECE, ASTM F1960 COLD-EXPANSION ENDS, WITH PEX-A REINFORCING COLD-EXPANSION RING.
 - LF BRASS VALVE WITH A POSITIVE STOP SHOULDER MANUFACTURED FROM C69300 BRASS.
 - IN COMPLIANCE WITH: 250 CWP, ANSISNF 359, ANSISNF 1461, CNSF-US-PV, G LEAD FREE 0.25% LEAD MAX, ASTM F1960, ASTM F 877 (CAN/CSA B137.5).

PART 3 EXECUTION

- 3.1 EXAMINATION
- A. SITE VERIFICATION OF CONDITIONS: VERIFY THAT SITE CONDITIONS ARE ACCEPTABLE FOR INSTALLATION OF THE DOMESTIC WATER PIPING. DO NOT PROCEED WITH INSTALLATION UNTIL UNACCEPTABLE CONDITIONS ARE CORRECTED.
- B. INSTALLATION TO BE COORDINATED WITH CONSTRUCTION OF DECK SUPPORT STRUCTURE.
- 3.2 INSTALLATION
- A. INSTALL PLUMBING SYSTEM ACCORDING TO APPROVED SHOP DRAWINGS AND COORDINATION DRAWINGS.
- B. COMPLY WITH MANUFACTURER'S PRODUCT DATA, INCLUDING PRODUCT TECHNICAL BULLETINS, INSTALLATION INSTRUCTIONS AND DESIGN DRAWINGS, INCLUDING THE FOLLOWING.
- C. PIPING INSTALLATION:
- INSTALL PIPING SYSTEM IN COMPLIANCE WITH THE UPONOR PIPING POCKET GUIDE (2017).
 - PEX SHALL NOT BE INSTALLED IN AREAS WITHIN FIVE FEET OF UV LIGHT.
- D. HANGERS AND SUPPORTS:
- HORIZONTAL PEX-A PIPING HANGERS: INSTALL CTS HANGERS SUITABLE FOR PEX-A PIPING IN COMPLIANCE WITH THE UPONOR PIPING POCKET GUIDE (2017) AND LOCAL CODES, WITH THE FOLLOWING MAXIMUM SPACING:
 - NATIONAL PLUMBING CODE OF CANADA (NPPC): 3 INCH AND SMALLER: MAXIMUM SPAN, 32 INCHES (0.81 M).
 - INTERNATIONAL PLUMBING CODE (IPC) & UNIFORM PLUMBING CODE (UPC): 1 INCH (25 MM) AND BELOW: MAXIMUM SPAN, 32 INCHES (0.81 M).
 - IPC & UPC: 1-1/4 INCH AND SMALLER: MAXIMUM SPAN, 48 INCHES (1.2 M).
 - NOTE: THE ABOVE MAXIMUM HANGER SPACING REQUIREMENTS MAY BE EXTENDED WITH THE USE OF A CONTINUOUS SUPPORT CHANNEL SUCH AS UPONOR PEX-A PIPE SUPPORT.
 - HORIZONTAL PEX-A PIPING WITH PEX-A PIPE CHANNEL: INSTALL HANGERS FOR PEX-A PIPING WITH HORIZONTAL SUPPORT CHANNEL IN ACCORDANCE WITH LOCAL JURISDICTION AND MANUFACTURER'S RECOMMENDATIONS, WITH THE FOLLOWING MAXIMUM SPACING:
 - 3/4 INCH AND SMALLER: MAXIMUM SPAN, 6 FEET (1.8 M).
 - 1 INCH AND LARGER: MAXIMUM SPAN, 8 FEET (2.4 M).
 - VERTICAL PEX-A PIPING: SUPPORT PEX-A PIPING WITH MAXIMUM SPACING OF 5 FEET.
 - PEX-A RISER SUPPORTS: INSTALL CTS RISER CLAMPS AT THE BASE OF EACH FIXTURE.
- E. PIPING SCHEDULE:
- ABOVEGROUND DOMESTIC WATER PIPING 3 INCH AND SMALLER SHALL BE THE FOLLOWING: PEX-A PIPING, WITH ENGINEERED POLYMER (EP) OR LEAD-FREE BRASS F1960 COLD-EXPANSION FITTINGS.
- F. PIPE JOINT CONSTRUCTION: PEX-A CONNECTIONS: INSTALL PER MANUFACTURER'S RECOMMENDATIONS. USE MANUFACTURER-RECOMMENDED COLD-EXPANSION TOOL FOR ASTM F 1960 CONNECTIONS.
- G. FIELD QUALITY CONTROL: DO NOT EXPOSE PEX PIPING TO DIRECT SUNLIGHT FOR MORE THAN 30 DAYS. IF CONSTRUCTION DELAYS ARE ENCOUNTERED, PROVIDE COVER TO PORTIONS OF PIPING EXPOSED TO DIRECT SUNLIGHT.

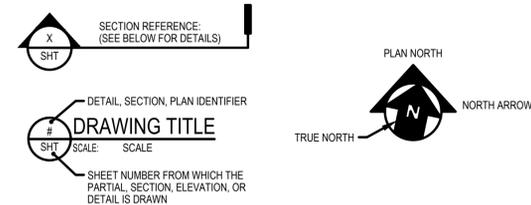
LEGEND

SYMBOL	DESCRIPTION
---	SOIL, WASTE, OR SANITARY PIPE
----	VENT PIPE
-----	STORM WATER PIPE
-----	DOMESTIC COLD WATER PIPE
-----	DOMESTIC HOT WATER PIPE
-----	DOMESTIC HOT WATER CIRCULATING PIPE
CO --- CO	CLEANOUT (WALL/FLOOR)
⊥	PIPE CAP
└	BRANCH TAKE OFF
┘	PIPE DROP END
├	PIPE DROP TEE
┤	PIPE RISE TEE
├──┤	PIPE GUIDE
├──┤	BACKWATER VALVE
⊙	FLOOR DRAIN
⊙	ROOF DRAIN
HOSE #	HOSE BIBB
→	FLOW DIRECTION ARROW
●	POINT OF CONNECTION, NEW TO EXISTING
○	POINT OF DISCONNECTION FROM EXISTING
○	SYMBOL FOR SPECIFIC NOTE: NOTE APPLIES TO DRAWING ON WHICH IT OCCURS
⊞	FLEXIBLE CONNECTION (PIPING)
⊞	EXPANSION JOINT
⊞	PIPE (SOLID) OVER PIPE (BROKEN)
AD	ACCESS DOOR

GENERAL NOTES

- WORK SHALL CONFORM TO THE CONTRACT DRAWINGS, SPECIFICATIONS AND THE LATEST APPLICABLE INTERNATIONAL MECHANICAL AND PLUMBING CODE AND ALL APPLICABLE SOUTH CAROLINA CODES.
- THE SCOPE OF WORK INDICATED IN THESE DOCUMENTS SHALL INCLUDE ALL PLUMBING SYSTEMS, FULLY ADJUSTED, TESTED AND READY TO USE. PROVIDE ITEMS NECESSARY TO COMPLETE THE SYSTEMS. EXAMINE WORK INDICATED FOR TRADES IN ORDER TO DETERMINE THE EXTENT OF THE WORK REQUIRED TO BE COMPLETED.
- IT IS THE INTENTION OF THESE DRAWINGS TO CALL FOR FINISHED WORK, TESTED AND READY FOR OPERATION. WHEREVER THE WORD "PROVIDE" IS USED, IT SHALL MEAN "FURNISH AND INSTALL COMPLETE, TESTED AND READY FOR USE."
- THE DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW EVERY COMPONENT AND/OR ACCESSORY REQUIRED FOR A COMPLETE INSTALLATION. THE CONTRACTOR SHALL PROVIDE ITEMS NECESSARY FOR A PROPERLY WORKING SYSTEM IN COMPLIANCE WITH ACCEPTED INDUSTRY STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
- PRIOR TO THE INSTALLATION, FABRICATION, REMOVAL, OR RELOCATION OF ANY WORK, THE CONTRACTORS SHALL REVIEW THE ACTUAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED AND SHALL COORDINATE WORK WITH THE PLANS, EQUIPMENT, SYSTEMS, BUILDING STRUCTURE, AND WORK OF OTHER TRADES. WHERE CONFLICTS OCCUR, OR IF CONNECTIONS THERETO CAN NOT BE MADE, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONSTRUCTION MANAGER PRIOR TO MATERIAL FABRICATION OR INSTALLATION.
- WHERE THE WORK OF VARIOUS TRADES WILL BE INSTALLED IN CLOSE PROXIMITY TO ONE ANOTHER OR WHERE THERE IS EVIDENCE THAT THE WORK OF ONE TRADE WILL INTERFERE WITH WORK OF ANOTHER, THE CONTRACTOR SHALL WORK OUT SPACE CONDITIONS TO MAKE A SATISFACTORY ADJUSTMENT. IF THE CONTRACTOR ALLOWS ONE TRADE TO INSTALL HIS WORK BEFORE COORDINATING WITH WORK OF OTHER TRADES THE CONTRACTOR SHALL MAKE NECESSARY CHANGES TO CORRECT THE CONDITIONS IN A MANNER ACCEPTABLE TO THE OWNER AND THE CONTRACTOR SHALL BEAR THE COST OF SUCH CORRECTIONS.
- THE CONTRACTOR SHALL LOCATE EQUIPMENT WHICH MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITION. EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, FIXTURES, VALVES, PIPING, AND DRAINS, ETC. IF REQUIRED FOR ACCESSIBILITY, FURNISH ACCESS DOORS FOR THE PURPOSE. MINOR DEVIATIONS FROM DRAWINGS MAY BE MADE TO ALLOW FOR BETTER ACCESSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR, AND SHALL INCUR FINANCIAL RESPONSIBILITIES FOR, ANY DAMAGES CAUSED BY OR RESULTING FROM DEFECTS IN HIS WORK.
- FINISHES DAMAGED DURING THE PROJECT SHALL BE REPAIRED TO MATCH EXISTING.

SHEET DESIGNATIONS



SEAL:

PREPARED FOR:

KRA, LP
 1 KIAWAH ISLAND PKWY,
 KIAWAH ISLAND, SC 29455
 (843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:

**BEACHWALKER
 COUNTY PARK
 IMPROVEMENTS**

PROJECT LOCATION:

8 BEACHWALKER DRIVE
 KIAWAH ISLAND, SC 29455

PROJECT NUMBER:

18-00957-001

DATE:

8.13.19

SCALE:

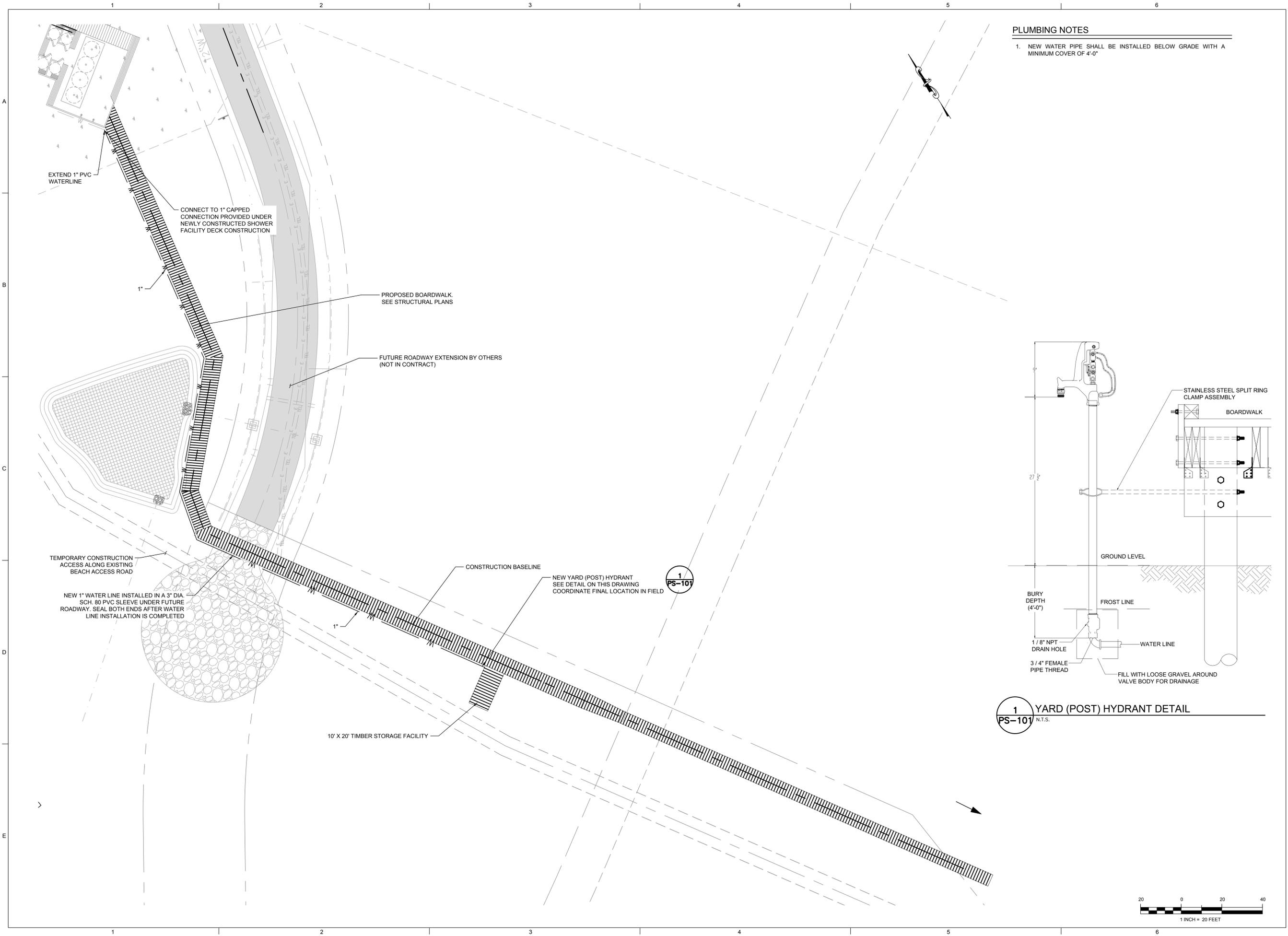
AS NOTED

PLAN SET:

PRELIMINARY PLANS

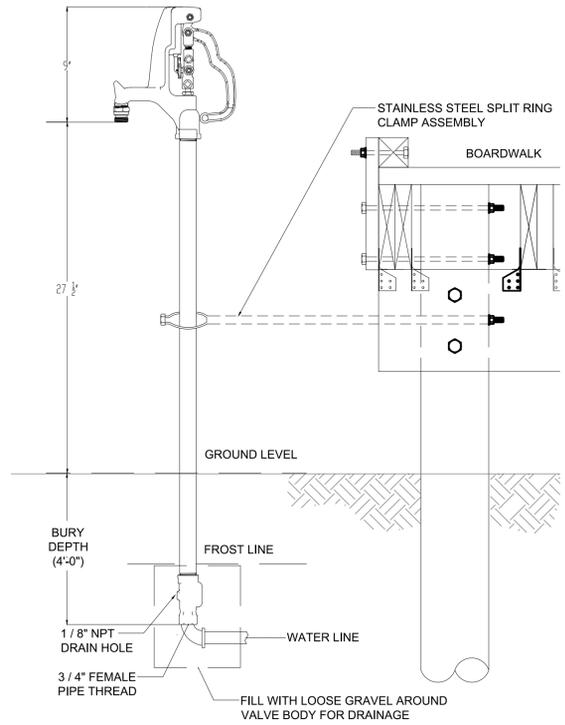
DRAWING TITLE:

**PLUMBING SYMBOLS,
 ABBREVIATIONS, AND
 GENERAL NOTES**

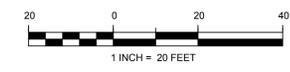


PLUMBING NOTES

1. NEW WATER PIPE SHALL BE INSTALLED BELOW GRADE WITH A MINIMUM COVER OF 4'-0"



1
PS-101 YARD (POST) HYDRANT DETAIL
N.T.S.



SEAL:

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KIAWAH ISLAND, SC 29455
(843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:

**BEACHWALKER
COUNTY PARK
BOARDWALK
EXTENSION**

PROJECT LOCATION:

8 BEACHWALKER DRIVE
KIAWAH ISLAND, SC 29455

PROJECT NUMBER:

19-00993-001

DATE:

8.13.19

SCALE:

1" = 20'

PLAN SET:

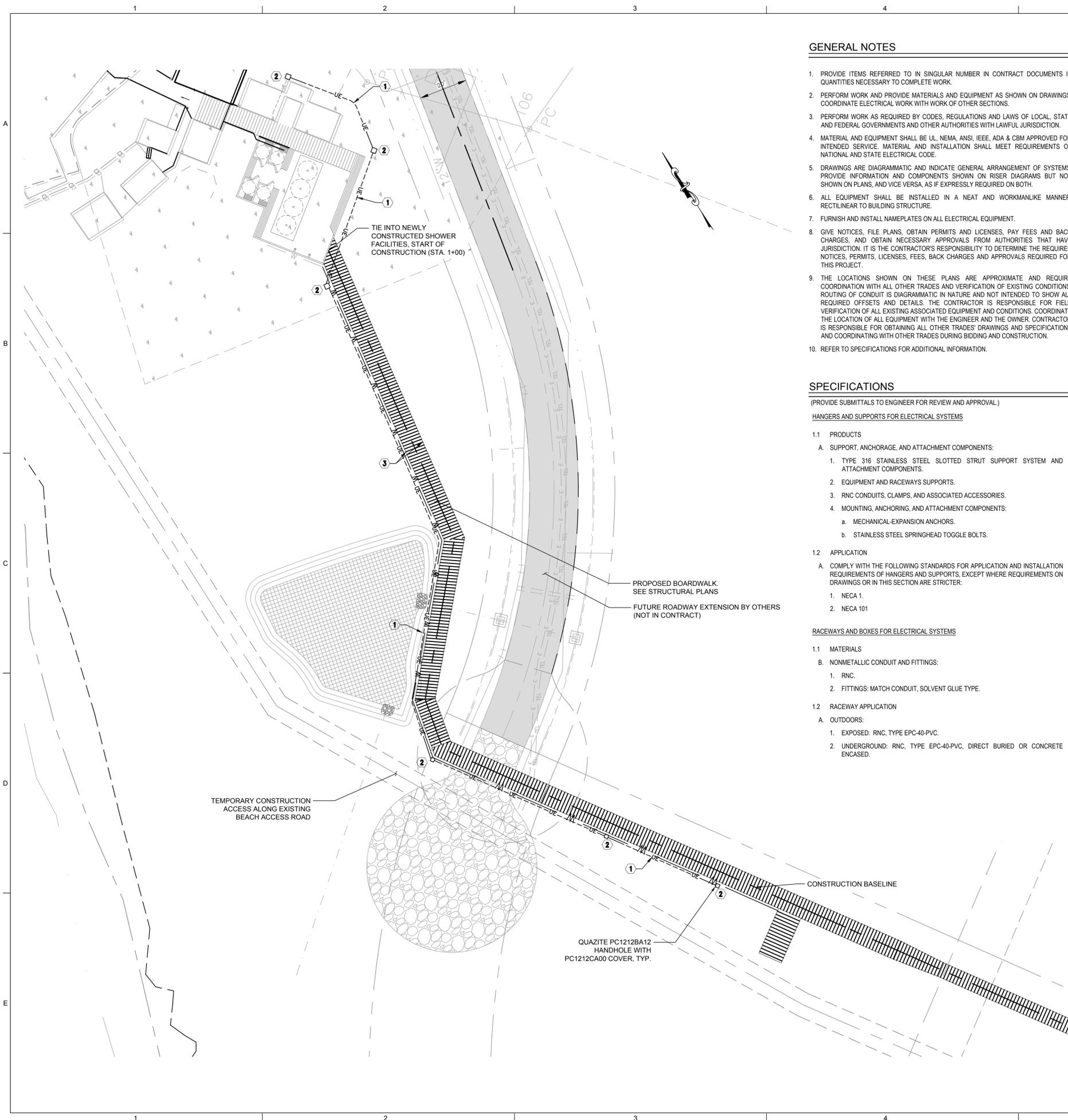
PRELIMINARY PLANS

DRAWING TITLE:

**PLUMBING PARTIAL
SITE PLAN AND
DETAILS**

DRAWING NUMBER:

PS-101



GENERAL NOTES

1. PROVIDE ITEMS REFERRED TO IN SINGULAR NUMBER IN CONTRACT DOCUMENTS IN QUANTITIES NECESSARY TO COMPLETE WORK.
2. PERFORM WORK AND PROVIDE MATERIALS AND EQUIPMENT AS SHOWN ON DRAWINGS. COORDINATE ELECTRICAL WORK WITH WORK OF OTHER SECTIONS.
3. PERFORM WORK AS REQUIRED BY CODES, REGULATIONS AND LAWS OF LOCAL, STATE AND FEDERAL GOVERNMENTS AND OTHER AUTHORITIES WITH LAWFUL JURISDICTION.
4. MATERIAL AND EQUIPMENT SHALL BE UL, NEMA, ANSI, IEEE, ADA & CBM APPROVED FOR INTENDED SERVICE. MATERIAL AND INSTALLATION SHALL MEET REQUIREMENTS OF NATIONAL AND STATE ELECTRICAL CODE.
5. DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT OF SYSTEMS. PROVIDE INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS BUT NOT SHOWN ON PLANS, AND VICE VERSA, AS IF EXPRESSLY REQUIRED ON BOTH.
6. ALL EQUIPMENT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER, RECTILINEAR TO BUILDING STRUCTURE.
7. FURNISH AND INSTALL NAMEPLATES ON ALL ELECTRICAL EQUIPMENT.
8. GIVE NOTICES, FILE PLANS, OBTAIN PERMITS AND LICENSES, PAY FEES AND BACK CHARGES, AND OBTAIN NECESSARY APPROVALS FROM AUTHORITIES THAT HAVE JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE REQUIRED NOTICES, PERMITS, LICENSES, FEES, BACK CHARGES AND APPROVALS REQUIRED FOR THIS PROJECT.
9. THE LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND REQUIRE COORDINATION WITH ALL OTHER TRADES AND VERIFICATION OF EXISTING CONDITIONS. ROUTING OF CONDUIT IS DIAGRAMMATIC IN NATURE AND NOT INTENDED TO SHOW ALL REQUIRED OFFSETS AND DETAILS. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL EXISTING ASSOCIATED EQUIPMENT AND CONDITIONS. COORDINATE THE LOCATION OF ALL EQUIPMENT WITH THE ENGINEER AND THE OWNER. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER TRADES' DRAWINGS AND SPECIFICATIONS AND COORDINATING WITH OTHER TRADES DURING BIDDING AND CONSTRUCTION.
10. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.

SPECIFICATIONS

(PROVIDE SUBMITTALS TO ENGINEER FOR REVIEW AND APPROVAL.)
HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

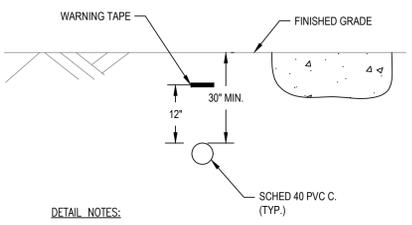
- 1.1 PRODUCTS**
- A. SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS:**
1. TYPE 316 STAINLESS STEEL SLOTTED STRUT SUPPORT SYSTEM AND ATTACHMENT COMPONENTS.
 2. EQUIPMENT AND RACEWAYS SUPPORTS.
 3. RNC CONDUITS, CLAMPS, AND ASSOCIATED ACCESSORIES.
 4. MOUNTING, ANCHORING, AND ATTACHMENT COMPONENTS:
 - a. MECHANICAL-EXPANSION ANCHORS.
 - b. STAINLESS STEEL SPRINGHEAD TOGGLE BOLTS.
- 1.2 APPLICATION**
- A. COMPLY WITH THE FOLLOWING STANDARDS FOR APPLICATION AND INSTALLATION REQUIREMENTS OF HANGERS AND SUPPORTS, EXCEPT WHERE REQUIREMENTS ON DRAWINGS OR IN THIS SECTION ARE STRICTER:**
1. NECA 1.
 2. NECA 101

RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

- 1.1 MATERIALS**
- B. NONMETALLIC CONDUIT AND FITTINGS:**
1. RNC.
 2. FITTINGS: MATCH CONDUIT, SOLVENT GLUE TYPE.
- 1.2 RACEWAY APPLICATION**
- A. OUTDOORS:**
1. EXPOSED: RNC, TYPE EPC-40-PVC.
 2. UNDERGROUND: RNC, TYPE EPC-40-PVC, DIRECT BURIED OR CONCRETE ENCASED.

ELECTRICAL NOTES

- 1 PROVIDE (1) 2" SCHED 40 PVC CONDUIT. PROVIDE AND INSTALL PULL CORD IN CONDUIT. REFER TO TYPICAL DIRECT BURIED RACEWAY DETAIL FOR ADDITIONAL INFORMATION.
- 2 STUB-UP CONDUIT WITHIN HANDHOLE AND CAP FOR FUTURE USE.
- 3 PROVIDE 2 TELECOM WIRES IN 2" PVC CONDUIT (ONE ON EACH SIDE OF BOARDWALK). SEE TYPICAL BOARDWALK SECTION ON STRUCTURAL PLANS.



- DETAIL NOTES:**
1. RACEWAY FOR POWER.
 2. TRENCHING, BACKFILLING, RESTORE FINISHED GRADE, AND PROVIDE NEW FINISHED GRADE PER CIVIL DRAWINGS.

1
E-001 N.T.S.
TYPICAL DIRET BURIED RACEWAY

GENERAL ABBREVIATIONS

A	AMPERES	KW	KILOWATTS
A/C	ALTERNATING CURRENT, ABOVE COUNTER	LTG	LIGHTING
ADA	AMERICANS WITH DISABILITIES ACT	LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
AFF	ABOVE FINISH FLOOR	MAU	MAKE-UP AIR UNIT
AFG	ABOVE FINISH GRADE	MC	METAL CLAD CABLE
AHJ	AUTHORITY HAVING JURISDICTION	MCB	MAIN CIRCUIT BREAKER
AHU	AIR HANDLING UNIT	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MCP	MOTOR CIRCUIT PROTECTOR
AL	ALUMINUM	MISC	MISCELLANEOUS
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	MLO	MAIN LUGS ONLY
ARCH	ARCHITECT	NC	NORMALLY CLOSED
ATS	AUTOMATIC TRANSFER SWITCH	NEC	NATIONAL ELECTRIC CODE
ATC	AUTOMATIC TEMPERATURE CONTROL	NEMA	NATIONAL ELECTRICAL MANUFACTURES ASSOCIATION
AWG	AMERICAN WIRE GAUGE	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
BFG	BELOW FINISH GRADE	NO	NORMALLY OPEN OR NUMBER
BLDG	BUILDING	NTS	NOT TO SCALE
C	CONDUIT	P	POLE
CAT	CATALOG	PB	PUSHBUTTON
CB	CIRCUIT BREAKER	PNL	PANEL
CBM	CERTIFIED BALLAST MANUFACTURERS	POS	PROVIDED UNDER OTHER SECTIONS
CKT	CIRCUIT	PVC	POLYVINYL CHLORIDE
CL	CENTERLINE	PWR	POWER
CLF	CURRENT LIMITING FUSE	QTY	QUANTITY
COL	COLUMN	REL	RELOCATE
CPT	CONTROL POWER TRANSFORMER	REQ'D	REQUIRED
CT	CURRENT TRANSFORMER	REX	REPLACE EXISTING
CU	COPPER	RMC	RIGID METAL CONDUIT
DWG	DRAWING	RMS	ROOT MEAN SQUARE
EC	ELECTRICAL CONTRACTOR	RNC	RIGID NON-METALLIC CONDUIT
ECB	ENCLOSED CIRCUIT BREAKER	RTU	ROOF TOP UNIT
EF	EXHAUST FAN	RX	REMOVE EXISTING
EM	EMERGENCY	SP	SPARE
EMT	ELECTRICAL METALLIC TUBING	SPD	SURGE PROTECTIVE DEVICE
EPO	EMERGENCY POWER OFF	SW	SWITCH
ETR	EXISTING TO REMAIN	SYM	SYMMETRICAL
EWC	ELECTRIC WATER COOLER	TEL	TELEPHONE
EX	EXISTING	TMCB	THERMAL MAGNETIC CIRCUIT BREAKER
F	FUSE	UG	UNDERGROUND OR UNDERGRADE
FA	FIRE ALARM	UL	UNDERWRITERS LABORATORIES
FLA	FULL LOAD AMPERES	V	VOLT
FMC	FLEXIBLE METAL CONDUIT	VT	VOLTAGE TRANSFORMER
FT	FEET	W	WIRE, WATT
GND,G	GROUND OR GROUNDING	WH	WATER HEATER
GRC	GALVANIZED RIGID CONDUIT	WP	WEATHER PROOF
HOA	HAND, OFF, AUTOMATIC SWITCH	WR	WEATHER RESISTANT
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS	XFMR	TRANSFORMER
IMC	INTERMEDIATE METAL CONDUIT	△	DELTA
INT	INTERLOCK	∇	WYE
KCMIL	THOUSAND CIRCULAR MILS	∅,PH	PHASE
KVA	KILOVOLT AMPERES		



SEAL:

PREPARED FOR:
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 KIAWAH ISLAND, SC 29455
 (843) 768-3418

REVISIONS

NO.	DATE	DESCRIPTION

PROJECT:
BEACHWALKER COUNTY PARK BOARDWALK EXTENSION

PROJECT LOCATION:
 8 BEACHWALKER DRIVE
 KIAWAH ISLAND, SC 29455

PROJECT NUMBER:
 19-00993-001

DATE: 8.13.19 SCALE: 1" = 20'

PLAN SET:
PRELIMINARY PLANS

DRAWING TITLE:
SITE PLAN PARTIAL - ELECTRICAL

DRAWING NUMBER:
E-101