

JOINT
PUBLIC NOTICE

CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A Hagood Avenue
Charleston, SC 29403-5107
and
THE S.C. DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Office of Ocean and Coastal Resource Management
1362 McMillan Avenue, Suite 400
North Charleston, South Carolina 29405

REGULATORY DIVISION
Refer to: SAC-2021-00965

March 10, 2023

Pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403), Sections 401 and 404 of the Clean Water Act (33 U.S.C. 1344), and the South Carolina Coastal Zone Management Act (48-39-10 et.seq.), an application has been submitted to the Department of the Army and the S.C. Department of Health and Environmental Control by

Mr. Tim Calohan
National Oceanic & Atmospheric Administration
Office of the Chief Administrative Officer
7600 Sandpoint Way, N.E.
Seattle, Washington 98115-6349

for a permit to perform improvements to NOAA's Office of Marine and Aviation Operations (OMAO) facility in the

Cooper River

located at 2234 South Hobson Avenue, North Charleston, Charleston County, South Carolina (Latitude: 32.8509 °, Longitude: -79.9416 °), Quad Sheet- Charleston.

In order to give all interested parties an opportunity to express their views

NOTICE

is hereby given that written statements regarding the proposed work will be received by the **Corps** until

15 Days from the Date of this Notice,

and **SCDHEC** will receive written statements regarding the proposed work until

30 Days from the Date of this Notice

from those interested in the activity and whose interests may be affected by the proposed work.

NOTE: This public notice and associated plans are available on the Corps' website at: <http://www.sac.usace.army.mil/Missions/Regulatory/PublicNotices> .

Applicant's Stated Purpose

According to the applicant, the purpose of the proposed project is to re-establish homeport operations and maintenance functions for NOAA vessels by rehabilitating Pier Romeo to a fully viable berthing facility enabling the agency to support sustainable, safe navigation at all tidal cycles.

Project Description

The proposed work consists of rehabilitating Pier Romeo to replace an existing dock and dredge the area for vessel access. In detail, the applicant proposes to demolish the existing pier Romeo, and constructing a new 62' x 360' floating pier with an 80' x 30' trestle, as well as a 20' x 60' small vessel pier. Further, the applicant proposes to dredge 154,607 cubic yards of material from an area of 8.6 acres around the pier to a depth of -27' MLLW (25' dredge depth plus -2' allowable over-dredge). The dredge area is proposed to be maintained for a 10-year period by dredging on an approximately 2-year schedule with an estimated quantity of dredge spoil anticipated to be in the range of 50% to 100% of the original dredge amount for each cycle. Additionally, along a 620' long seawall located above the Critical Area Line, shoreline revetment improvements and construction of an optional living shoreline.

Avoidance and Minimization

The applicant has stated that the proposed project will avoid and/or minimize impacts to the aquatic environment by:
Area of proposed dredging, which is minimum needed to allow for safe operations at the facility, have been reduced from a width of 200' on either side of the pier to the currently proposed 150' to either side of the pier. Dredging will also adhere to any environmental windows that may be required as permit conditions. Additionally, the replacement pier is proposed to be approximately 90' shorter than the exiting pier. The main pier structure will be a floating concrete pier to allow for greater adaptations to sea level rise. The proposed seawall will be located landward of any wetlands and of the State's Critical Area Line

Proposed Compensatory Mitigation

The applicant has proposed to mitigate for impacts to wetlands and/or waters of the United States by: no mitigation is being proposed.

South Carolina Department of Health and Environmental Control

The District Engineer has concluded that the discharges associated with this project, both direct and indirect, should be reviewed by the South Carolina Department of Health and Environmental Control in accordance with provisions of Section 401 of the Clean Water Act. As such, this notice constitutes a request, on behalf of the applicant, for certification that this project will comply with applicable effluent limitations and water quality standards. The work shown on this application must also be certified as consistent with applicable provisions of the Coastal Zone Management Program (15 CFR 930). This activity may also require evaluation for compliance with the S. C. Construction in Navigable Waters Permit Program. State review, permitting and certification is conducted by the S. C. Department of Health and Environmental Control. The District Engineer will not process this application to a conclusion until such certifications are received. The applicant is hereby advised that supplemental information may be required by the State to facilitate the review. This Public Notice will serve as the notification to the Administrator of the Environmental Protection Agency (EPA) pursuant to section 401(a)(2) of the Clean Water Act.

Essential Fish Habitat

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. Implementation of the proposed project would impact **8.6** acres of estuarine substrates and emergent wetlands utilized by various life stages of species comprising the shrimp, and snapper-grouper management complexes. The District Engineer's initial determination is that the proposed action would not have a substantial individual or cumulative adverse impact on EFH or fisheries managed by the South Atlantic Fishery Management Council and the National Marine Fisheries Service (NMFS). The District Engineer's final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the NMFS.

Endangered Species

Pursuant to the Section 7 of the Endangered Species Act of 1973 (as amended), the Corps has reviewed the project and based on the location of the project and available information, the following species may be present in the County(s) where the work will occur: Frosted flatwoods salamander (*Ambystoma cingulatum*)

American wood stork (*Mycteria americana*)

Eastern black rail (*Laterallus jamaicensis jamaicensis*)

Piping plover (*Charadrius melodus*)

Red-cockaded woodpecker (*Picoides borealis*)

Rufa red knot (*Calidris canutus rufa*)

Atlantic sturgeon (*Acipenser oxyrinchus*)

Shortnose sturgeon (*Acipenser brevirostrum*)

Finback whale (*Balaenoptera physalus*)
Humpback whale (*Megaptera novaeangliae*)
Northern long-eared bat (*Myotis septentrionalis*)
Right whale (*Eubalaena glacialis*)
Sei whale (*Balaenoptera borealis*)
Sperm whale (*Physeter macrocephalus*)
West Indian manatee (*Trichechus manatus*)
American chaffseed (*Schwalbea americana*)
Canby's dropwort (*Oxypolis canbyi*)
Pondberry (*Lindera melissifolia*)
Seabeach amaranth (*Amaranthus pumilus*)
Green sea turtle (*Chelonia mydas*)
Kemp's Ridley sea turtle (*Lepidochelys kempii*)
Leatherback sea turtle (*Dermochelys coriacea*)
Loggerhead sea turtle (*Caretta caretta*)

Based on all information provided by the applicant and the most recently available information, the District Engineer has determined the following:

The project will have no effect on Frosted flatwoods salamander (*Ambystoma cingulatum*), American wood stork (*Mycteria americana*), Eastern black rail (*Laterallus jamaicensis jamaicensis*), Piping plover (*Charadrius melodus*), Red-cockaded woodpecker (*Picoides borealis*), Rufa red knot (*Calidris canutus rufa*), Finback whale (*Balaenoptera physalus*), Humpback whale (*Megaptera novaeangliae*), Northern long-eared bat (*Myotis septentrionalis*), Right whale (*Eubalaena glacialis*), Sei whale (*Balaenoptera borealis*), Sperm whale (*Physeter macrocephalus*), American chaffseed (*Schwalbea americana*), Canby's dropwort (*Oxypolis canbyi*), Pondberry (*Lindera melissifolia*), Seabeach amaranth (*Amaranthus pumilus*), Green sea turtle (*Chelonia mydas*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), Leatherback sea turtle (*Dermochelys coriacea*), Loggerhead sea turtle (*Caretta caretta*) and will not result in the destruction or adverse modification of designated or proposed critical habitat.

The Applicant has coordinated with the USFWS and National Oceanic and Atmospheric Administration–National Marine Fisheries Service (NOAA-NMFS) regarding the demolition and construction elements of the proposed project and concluded that the proposal is not likely to adversely affect the Green sea turtle (*Chelonia mydas*), Kemp's Ridley sea turtle (*Lepidochelys kempii*), Loggerhead sea turtle (*Caretta caretta*), Atlantic sturgeon (*Acipenser oxyrinchus*) and its critical habitat, Shortnose sturgeon (*Acipenser brevirostrum*), and the West Indian manatee (*Trichechus manatus*). The pertinent agency has concurred with these determinations.

With regard to the Corps of Engineers determinations for the proposed dredging activities, the project is not likely to adversely affect Atlantic sturgeon (*Acipenser oxyrinchus*), Shortnose sturgeon (*Acipenser brevirostrum*), and the West Indian manatee (*Trichechus manatus*) or result in the destruction or adverse modification of designated or proposed critical habitat. This public notice serves as a request for written concurrence

from the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service on this determination.

This public notice serves as a request to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service for any additional information they may have on whether any listed or proposed endangered or threatened species or designated or proposed critical habitat may be present in the area which would be affected by the activity.

Cultural Resources

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), this public notice also constitutes a request to Indian Tribes to notify the District Engineer of any historic properties of religious and cultural significance to them that may be affected by the proposed undertaking.

In accordance with Section 106 of the NHPA, the District Engineer has consulted South Carolina ArchSite (GIS), for the presence or absence of historic properties (as defined in 36 C.F.R. 800.16)(1)(1)). Additionally, the Applicant has performed a cultural resources survey determining that 'no properties listed in or eligible for listing in the National Register of Historic Places will be affected' which was previously coordinated with the SHPO. Therefore, the Corps has initially determined that no historic properties are present and that there will be no effect on historic properties. To ensure that other historic properties that the District Engineer is not aware of are not overlooked, this public notice also serves as a request to the State Historic Preservation Office and any other interested parties to provide any information they may have with regard to historic properties. This public notice serves as a request for concurrence within 30 days from the SHPO (and/or Tribal Historic Preservation Officer).

The District Engineer's final eligibility and effect determination will be based upon coordination with the SHPO and/or THPO, as appropriate and required and with full consideration given to the proposed undertaking's potential direct and indirect effects on historic properties within the Corps-identified permit area.

Corps' Evaluation

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest and will include application of the guidelines promulgated by the Administrator, Environmental Protection Agency (EPA), under authority of Section 404(b) of the Clean Water Act and, as appropriate, the criteria established under authority of Section 102 of the Marine Protection, Research and Sanctuaries Act of 1972, as amended. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the project must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the project will be considered including the cumulative effects thereof; among those are

conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. A permit will be granted unless the District Engineer determines that it would be contrary to the public interest. In cases of conflicting property rights, the Corps cannot undertake to adjudicate rival claims.

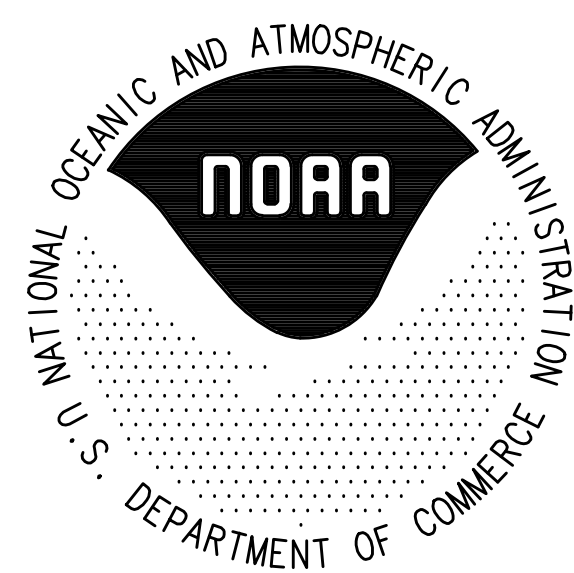
Solicitation of Public Comment

The Corps is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for this project. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity. Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for a public hearing shall state, with particularity, the reasons for holding a public hearing.

Please submit comments in writing, identifying the project of interest by public notice/file number (SAC-2021-00965), to shawn.a.boone@usace.army.mil or the following address:

**U.S. Army Corps of Engineers
ATTN: REGULATORY DIVISION
69A Hagood Avenue
Charleston, SC 29403-5107**

If there are any questions concerning this public notice, please contact Shawn Boone, Project Manager, at (843) 329-8158, toll free at 1-866-329-8187, or by email at shawn.a.boone@usace.army.mil.



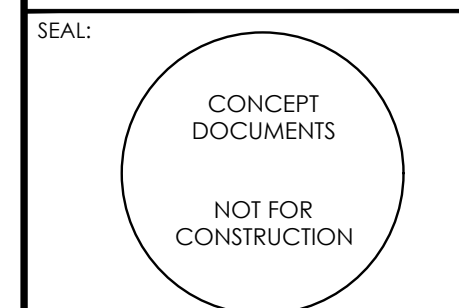
UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION (NOAA) OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO) SOUTHEAST MARINE OPERATIONS HUB PROJECT FINAL CONCEPT DRAWINGS



ASSOCIATED DESIGN GROUP, INC.
3909 West Congress Street, Suite 201
Lafayette, Louisiana 70506
Phone: (337) 234-5710
Email: adginc@adginc.org



ADD PROJECT NO: 21260-D



ENGINEER: _____
P.E. NO: _____
DATE: _____

Project No. 21260-D

MAY 6, 2022
CONTRACT NO: 1305M421DNAAJ0007
TASK ORDER NO: 1305M422FNAAJ0005

BUILDING INFORMATION

PROJECT ADDRESS

UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
OMAO SOUTHEAST MARINE OPERATIONS HUB PROJECT
2234 S. HOBSON AVE.
NORTH CHARLESTON, SC 29405

BUILDING CODES

INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

2018 SOUTH CAROLINA ICC CODES
(INCLUDING BUT NOT LIMITED TO: INTERNATIONAL BUILDING CODE, MECHANICAL CODE, FIRE CODE.)

2018 NFPA 10
2016 NFPA 13
2017 NFPA 70: NATIONAL ELECTRICAL CODE
2016 ASHRAE 90.1
2016 ASHRAE 62.1

GENERAL NOTES

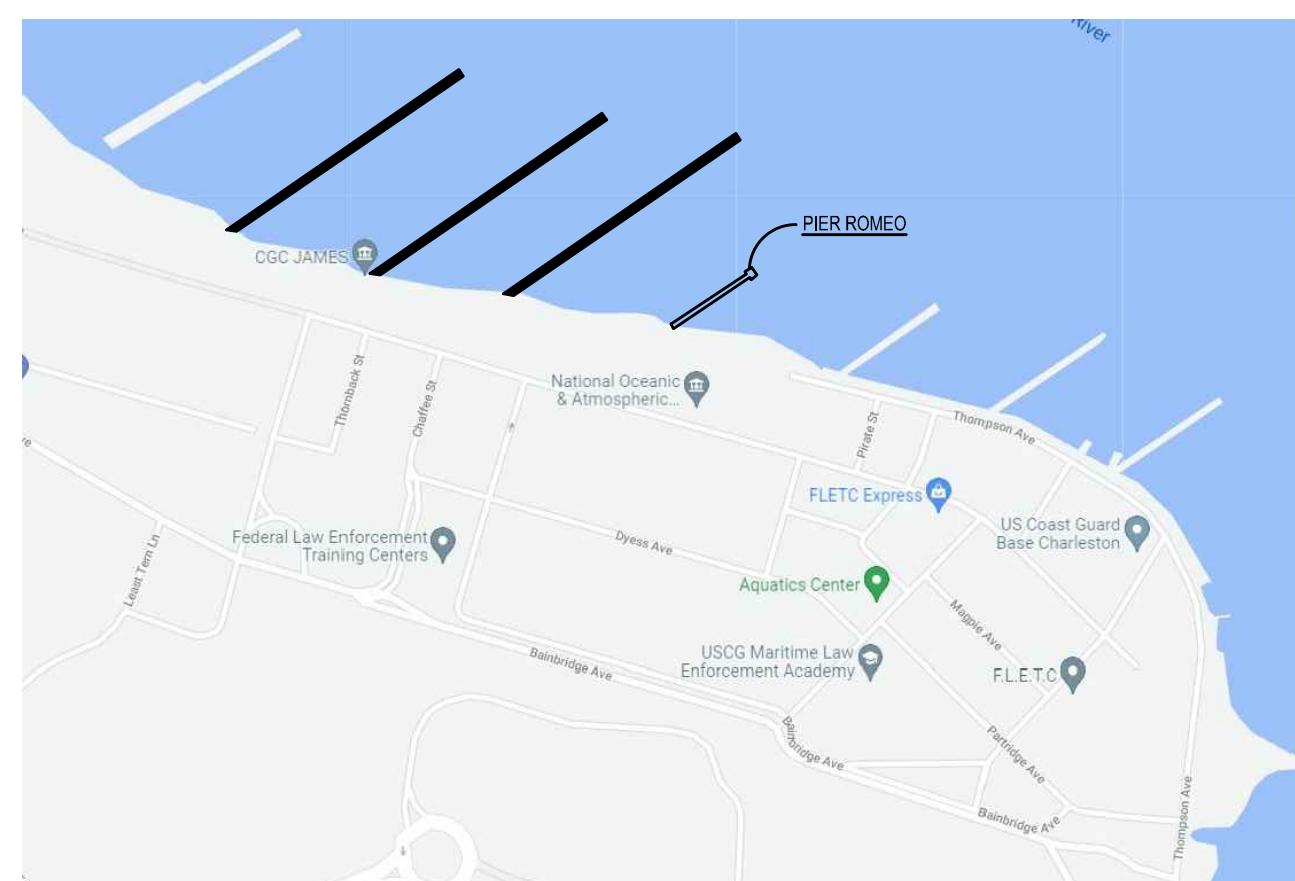
1. THE DRAWINGS AND DOCUMENTS INCLUDED ARE CONCEPT DOCUMENTS FOR USE BY NOAA. THESE DOCUMENTS ARE NOT TO BE USED FOR CONSTRUCTION, RECORDATION, CONVEYANCE, SALES OR A BASIS OF BUILDING PERMITS.
2. ALL WORK PERFORMED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES FROM LOCAL, STATE & FEDERAL AUTHORITIES. ALL WORK INCLUDES FURNISHING LABOR, MATERIALS, EQUIPMENT, TOOLS, SUPERVISION, START-UP SERVICES, & APPLICABLE PERMITS FOR THE PROJECT.
3. INSTALL MANUFACTURED ITEMS, MATERIALS, AND EQUIPMENT IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED SPECIFICATIONS, EXCEPT THE SPECIFICATIONS HEREIN, WHERE MORE STRINGENT, SHALL BE COMPLIED WITH.
4. CONTRACTOR IS RESPONSIBLE FOR CHECKING ALL CONCEPT DOCUMENTS, FIELD CONDITIONS, DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER ITEMS, THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE GOVERNMENT PM/COR BEFORE PROCEEDING WITH THE WORK IN QUESTION OR RELATED WORK.
5. THE PRIME PROFESSIONAL SHALL BE THE PRIMARY SOURCE FOR INFORMATION REGARDING THAT DISCIPLINE (CIVIL, MECH, ELEC, ETC.), HOWEVER IT WILL NOT BE THE ONLY SOURCE FOR COORDINATION OF DIMENSIONS, FIRE RESISTANCE, DESIGN, DETAILING AND FINISH APPEARANCE, COLOR OR TRIM FEATURES. THE CONTRACTOR IS RESPONSIBLE FOR REVIEW OF RELATED DESIGN DISCIPLINES AS THEY AFFECT COORDINATION. THE CONTRACTOR SHALL EXAMINE DRAWINGS AND SPECIFICATIONS OF ALL TRADES. NOTIFY DISCREPANCIES TO GOVERNMENT PM/COR.
6. DO NOT SCALE DRAWINGS, USE FIGURED DIMENSIONS ONLY, GOVT PM/COR WITH ANY CONFLICTS FOR RESOLUTION.
7. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH GOVERNING APPLICABLE LOCAL, STATE & FEDERAL CODES.
8. THE CONTRACTOR WILL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, REFLECTORS, LIGHTS, ETC DURING CONSTRUCTION. PROPERLY IDENTIFY AREAS CLOSED TO THE PUBLIC. VERIFY AND COORDINATE WITH GOVERNMENT PM/COR.
9. THE CONTRACTOR SHALL KEEP THE PREMISES FREE OF RUBISH AND CLEAN DAILY. DISPOSAL OF CONSTRUCTION DEBRIS/RUBISH SHALL MEET APPLICABLE GOVERNING CODES/REGULATIONS.
10. THE CONTRACTOR SHALL LOCATE ALL EXISTING SERVICES & UTILITIES WITHIN AND ADJACENT TO THE CONSTRUCTION AREA (WHERE AFFECTED) PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES.
11. ALL CONDITIONS AND DIMENSIONS SHOWN ARE FOR REFERENCE ONLY AND MUST BE VERIFIED AT THE SITE. EXISTING BUILDINGS, PIERS, ROADWAYS, ARE BASED ON EXISTING DRAWINGS. UPON COMPLETION OF DEMOLITION, ALL CONDITIONS AND DIMENSIONS ARE TO BE CHECKED FOR VARIANCES. ANY UNNOTED EXISTING CONDITIONS WHICH MAY CONFLICT WITH THE PROPOSED NEW WORK AND MAY REQUIRE MODIFICATION, RELOCATION AND/OR REMOVAL, SHALL BE IDENTIFIED AND REPORTED TO THE GOVERNMENT (C.O./C.O.R.), IN WRITING, AT ONCE.
12. THE USE OF MANUFACTURER NAMES OR PROPRIETARY PRODUCT NAMES SHALL NOT BE CONSTRUED TO IMPLY THAT ONLY THE NAMED PRODUCT MAY BE USED TO THE EXCLUSION OF EQUIVALENT PRODUCTS BY OTHER MANUFACTURERS. EQUIVALENT PRODUCTS SHALL BE DEFINED AS PRODUCTS THAT HAVE BEEN APPROVED BY THE GOVERNMENT THROUGH THE SUBMITTAL PROCESS AND HAVE BEEN DETERMINED TO HAVE THE QUALITIES (TYPE, FUNCTION, DIMENSION, APPEARANCE, IN-SERVICE PERFORMANCE) AND PHYSICAL PROPERTIES THAT ARE EQUAL TO OR EXCEED THOSE OF THE SPECIFIED PRODUCT.

TYPICAL ABBREVIATIONS

AFF ABOVE FINISHED FLOOR
CFCI CONTRACTOR FURNISHED/CONTRACTOR INSTALLED
EL ELEVATION
FE FIRE EXTINGUISHER
NIC NOT IN CONTRACT
VOJ VERIFY ON JOB
CB CATCH BASIN
SQF SQUARE FEET

DRAWING NOMENCLATURE LEGEND

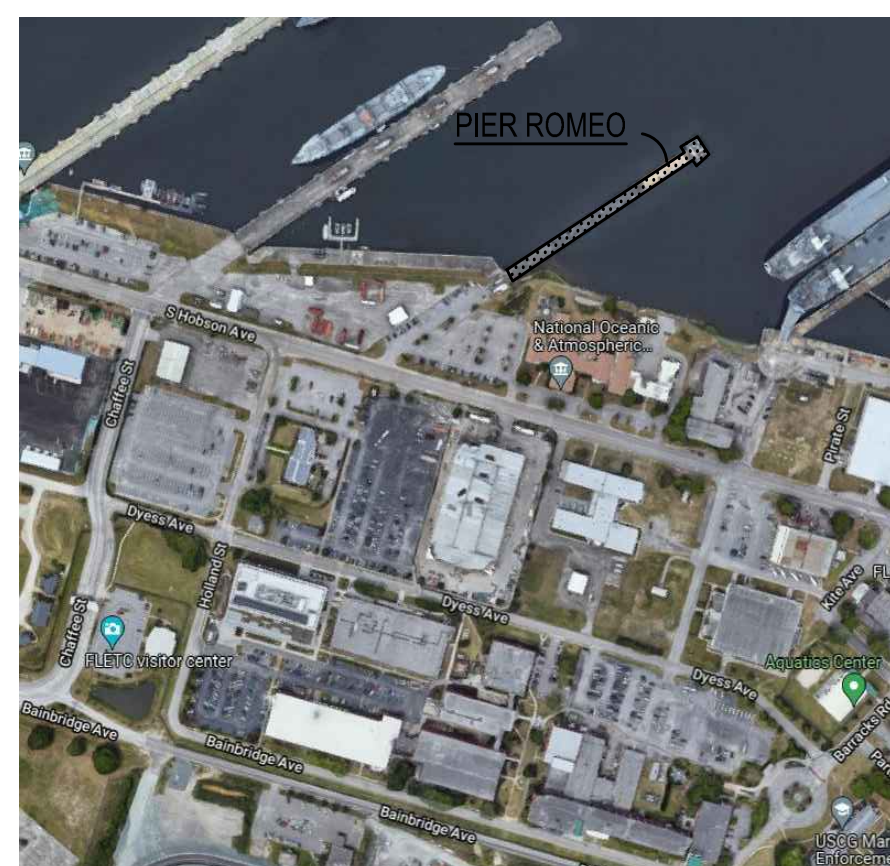
A - ###
DISCIPLINE DESIGNATOR
G - GENERAL
C - CIVIL
A - ARCHITECTURAL



(IMAGES COURTESY OF GOOGLE MAPS)

VICINITY MAP

NO SCALE



(IMAGES COURTESY OF GOOGLE MAPS)

PROJECT LOCATION MAP

NO SCALE



INDEX TO DRAWINGS	
SHT NO.	DESCRIPTION
G-001	COVER SHEET & INDEX TO DRAWINGS
C-100	EXISTING CONDITIONS PLAN
C-101	EXISTING UTILITY STRUCTURE DATA
C-102	DEMOLITION PLAN
C-110	OVERALL SITE PLAN
C-111	PARKING AREA PAVING & STRIPING CONCEPT PLAN
C-112	SITE UTILITIES PLAN
C-113	PIER AND SEAWALL LAYOUT
C-114	PIER ELEVATIONS
C-115	REVTMENT CROSS SECTIONS
A-100	WAREHOUSE BUILDING - FLOOR PLANS
A-101	WAREHOUSE BUILDING - ELEVATIONS



UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
SOUTHEAST MARINE OPERATIONS HUB PROJECT
FINAL CONCEPT DRAWINGS

2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022

DRAWN BY: SPC

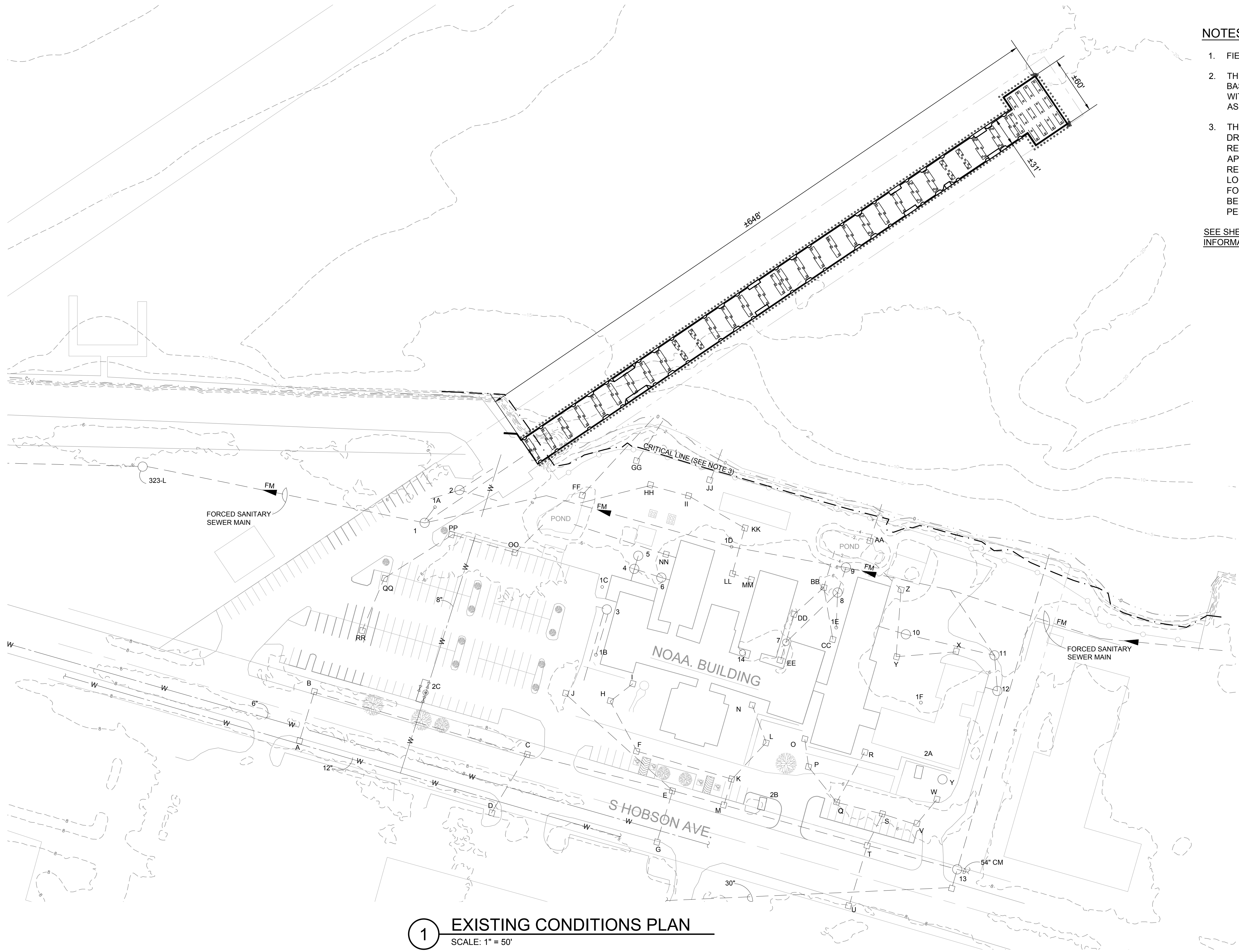
CHECKED BY: LWB/LM

FILE NAME: 21260-D_G-001_Cover.dwg

DRAWING TITLE:

COVER SHEET & INDEX TO DRAWINGS

REV NO. X SHEET NO. G-001



1 EXISTING CONDITIONS PLAN
SCALE: 1" = 50'

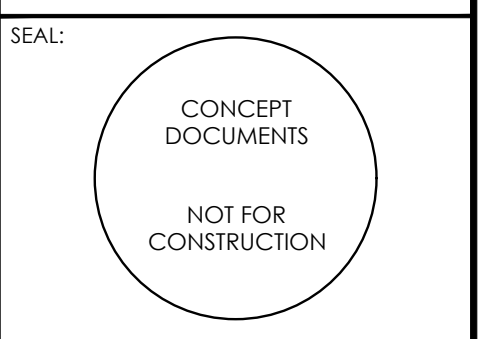
NOTES:

1. FIELD VERIFY DIMENSIONS.
2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
3. THE CRITICAL LINE LOCATION SHOWN ON DRAWING HAS PROVIDED BY OTHERS TO REPRESENT THE CRITICAL LINE APPROXIMATE LOCATION. THE GRAPHICAL REPRESENTATION OF CRITICAL LINE LOCATION ON DRAWINGS IS PROVIDED FOR REFERENCE ONLY AND SHOULD NOT BE RELIED ON FOR ANY FUTURE DESIGN, PERMITTING, OR CONSTRUCTION.

SEE SHEET C-101 FOR UTILITY STRUCTURE INFORMATION



ADG PROJECT NO: 21260-D



ENGINEER: _____
P.E. NO: _____
DATE: _____



UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
SOUTHEAST MARINE OPERATIONS HUB PROJECT
FINAL CONCEPT DRAWINGS
2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
DRAWN BY: SPC
CHECKED BY: LWB/LM
FILE NAME: 21260-D_C-100-Ex conditions.dwg

DRAWING TITLE: EXISTING CONDITIONS PLAN

REV NO: X SHEET NO: C-100

SANITARY SEWER STRUCTURE DATA

ID	Utility	Structure				Pipe			Notes
		Dia (in)	Material	Depth (ft)	Depth to Standing Water (ft)	Dia (in)	Invert (ft. Below Rim)	Material	
1	Sanitary	48	Conc	4.56	4.03	4	2.10 E	PVC	
						8	4.5 N	DI	
						12	4.83 SW	Clay	
						12	4.92 N	Clay	
1A	Valve Box	6		1.72					Depth of structure is to Top of Nut
1B	Valve Box	6		0.6					Depth of structure is to Top of Nut
1C	Valve Box	6		0.28					Depth of structure is to Top of Nut
1D	Valve Box	6		N/A					Top of nut above grade
3	Sanitary	48	Conc	4.37		8	4.43 N	Clay	
						4	3.41 S	DI	
						8	4.29 S	Clay	
4	Sanitary	48	Conc	4.40		8	4.16 N	Clay	
						8	4.40 E	Clay	
						8	4.16 S	Clay	
5	Sanitary	48	Conc	4.57	4.17				Structure appears to be abandoned
6	San LS	48	Conc	9.97	8.03				No pipes Visible
7	Sanitary	48	Conc & Brick	4.44					All pipes are capped
8	Sanitary	48	Conc	4.75	3.72	8	4.65 NE		
						8	4.55 SW		
9	Sanitary	48	Conc	3.82	2.92	8	3.82 SW		
10	Sanitary	48	Conc	3.72	2.04	8	3.72 E		
						8	3.72 W		
11	Sanitary	48	Conc	4.32	2.12	8	4.32 NW		
						8	4.32 SE		
12	Sanitary	48	Conc	6.54	4.54	8	5.02 W		
13	Sanitary	48	Conc	7.30	4.94				No pipes visible

WATER UTILITY STRUCTURE DATA

ID	Utility	Structure			Pipe			Notes
		Dimensions	Material	Depth (ft)	Dia (in)	Depth to top of Pipe (ft.)	Material	
2A	Water Vault	3' x 3'	Conc	4.45	4	4	DI	Depth is to top of existing 4" pipe
2B	Water Vault	4' x 4'	Conc					Cover bolted shut. No Access
2C	Water Vault	5' x 10'	Conc	5.84		3.33		Depth is to top of valve nut. Pipe not visible
						3.33		Depth is to top of valve nut. Pipe not visible

MISC./ UNKNOWN UTILITY STRUCTURE DATA

ID	Utility	Structure			Pipe			Notes
		Dia (in)	Material	Depth (ft)	Depth to Standing Water (ft)	Dia (in)	Invert (ft. Below Rim)	
2	Telephone	6' x 8'	Conc	7.42	4.93		N	Unable to measure to Pipe Invert
							E	Unable to measure to Pipe Invert
							SW	Unable to measure to Pipe Invert
14	Unknown	48	Conc	4.70		4	2.41 S	DI
						4	4.45 SE	Clay
						8	4.70 E	Clay

STORM SEWER STRUCTURE DATA

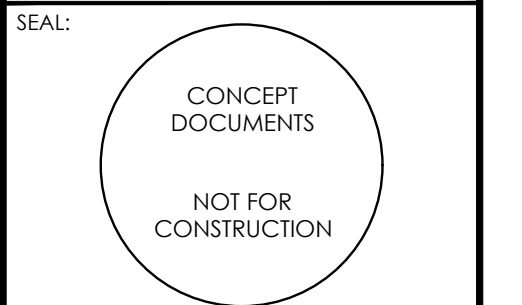
ID	Utility	Structure			Pipe			Notes
		Dimensions	Material	Depth (ft)	Dia (in)	Invert (ft. Below Rim)	Material	
A	Storm	3' x 4'	Conc & Brick	2.31	10	2.31 N	CMP	
B	Storm	3' x 4'	Conc & Brick	2.99	10	2.35 S	CMP	
					12	2.99 E	CMP	
C	Storm	3' x 4'	Conc & Brick	3.70	12	3.45 W	CMP	
					12	3.70 E	CMP	
					12	2.70 S	CMP	
D	Storm	3' x 4'	Conc & Brick	2.5	12	2.70 N	CMP	
E	Storm	3' x 4'	Conc & brick	4.91	12	4.11 W	CMP	
					15	4.41 NW	RCP	
					8	4.89 NE	Clay	
					15	4.91 E	RCP	
					12	3.06 S	CMP	
F	Storm	2' x 3'	Conc	3.89	12	2.53 NW	RCP	
					12	2.72 E	RCP	
G	Storm	3' x 4'	Conc & Brick	2.74	12	2.74 N	CMP	
H	Storm	2' x 3'	Conc	2.17	12	2.17 SE	RCP	
					12	2.02 NE	RCP	
I	Storm	3' x 3'	Conc	2.16	12	2.16 SW	RCP	
J	Storm	2' x 2'	Conc	2.28	15	2.28 SE	RCP	

STORM SEWER STRUCTURE DATA

K	Storm	2' x 3'	Conc	3.52	12	3.46 W	RCP	
					15	3.52 S	RCP	
					12	3.39 NE	RCP	
L	Storm	2' x 3'	Conc	3.55	12	2.93 SW	RCP	
					10	3.37 SE	PVC	
					15	5.09 W	RCP	
M	Storm	3' x 3'	Conc	5.11	15	4.95 N	RCP	
					15	5.11 E	CMP	
					10	2.90 SE	PVC	
O	Storm	2.5' x 2.5'	Conc	2.13	12	2.13 SE	RCP	
P	Storm	3.5' x 3.5'	Conc	2.60	12	2.50 NW	RCP	
					12	2.60 SE	RCP	
Q	Storm	3.5' x 3.5'	Conc	2.48	12	2.43 NW	RCP	
					12	2.38 NE	RCP	
					12	2.45 E	RCP	
R	Storm	3.5' x 3.5'	Conc	2.47	12	2.47 SW	RCP	
S	Storm	3.5' x 3.5'	Conc	2.91	12	2.73 W	RCP	
					18	2.90 S	RCP	
					10	2.90 E	PVC	
T	Storm	4' x 4'	Conc	5.60	18	5.21 N	RCP	
					15	5.60 E	CMP	
					12	2.58 S	CMP	
					15	5.46 W	CMP	
U	Storm	3' x 4'	Conc	2.35	12	2.35 N	CMP	
V	Storm	3' x 3'	Conc	2.22	10	2.22 W	PVC	
					10	2.02 NE	PVC	
					10	1.51 SW	PVC	
W	Storm	3' Dia	Conc	1.51	10	1.51 SW	PVC	
X	Storm	2' x 2'	Conc	1.90	12	1.90 W	RCP	
Y	Storm	3' x 3'	Conc	2.4	12	2.40 E	RCP	
					15	2.05 NW	RCP	
					15	3.85 SE	RCP	
Z	Storm	3.5' x 3.5'	Conc	3.85	15	3.95 NW	RCP	
					15	1.88 N	RCP	
AA	Storm	3.5' x 3.5'	Conc	1.91	12	1.88 N	RCP	
BB	Storm	2' x 2'	Conc	2.32	12	2.32 NE	RCP	
					10	2.26 SW	RCP	
					12	2.12 SE	RCP	
CC	Storm	3' x 3'	Conc	2.73	12	2.73 NW	RCP	
DD	Storm	2' x 2'	Conc	1.85	10	1.85 NE	RCP	
					10	1.70 S	RCP	
					10	1.45 NE	RCP	
EE	Storm	2' x 2'	Conc	1.45	10	1.45 NE	RCP	
FF	Storm	3.5' x 3.5'	Conc	2.28	6	2.19 W	RCP	
					12	2.28 NE	RCP	
GG	Storm	2.5' x 2'	Conc	1.9	10	1.90 NW	DI	
HH	Storm	4' x 4'	Conc	2.55	15	2.55 NW	RCP	
					15	2.45 E	RCP	
					15	1.95 W	RCP	
II	Storm	3' x 3'	Conc	1.95	15	1.70 E	RCP	
					15	4.29 N	RCP	
JJ	Storm	3' x 3'	Conc	4.29	12	4.29 N	RCP	
KK	Storm	5' x 5'	Conc	2.19	15	2.19 W	RCP	
					15	1.98 S	RCP	
					15	2.35 N	RCP	
LL	Storm	3.5' x 3.5'	Conc	2.35	15	2.33 E	RCP	
					15	2.54 W	RCP	
MM	Storm	3.5' x 2.5'	Conc	2.54	15	2.54 W	RCP	
NN	Storm	3' x 3'	Conc	2.49	18	2.49 NW	RCP	
					15	2.47 SE	RCP	
OO	Storm	3' x 4'	Conc	2.87	18	2.87 N	RCP	
					15	2.79 E	RCP	
					15	2.57 E	RCP	
PP	Storm	3' x 3.5'	Conc	3.00	15	2.68 S	RCP	
					15	2.74 N	RCP	
QQ	Storm	3' x 3.5'	Conc	2.91	15	2.75 SW	RCP	
					15	2.96 NE	RCP	
RR	Storm	3' x 3'	Conc	3.07	15	2.96 NE	RCP	



ADG PROJECT NO: 21260-D



ENGINEER: _____
P.E. NO: _____
DATE: _____



UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
SOUTHEAST MARINE OPERATIONS HUB PROJECT
FINAL CONCEPT DRAWINGS
2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022

DRAWN BY: SPC

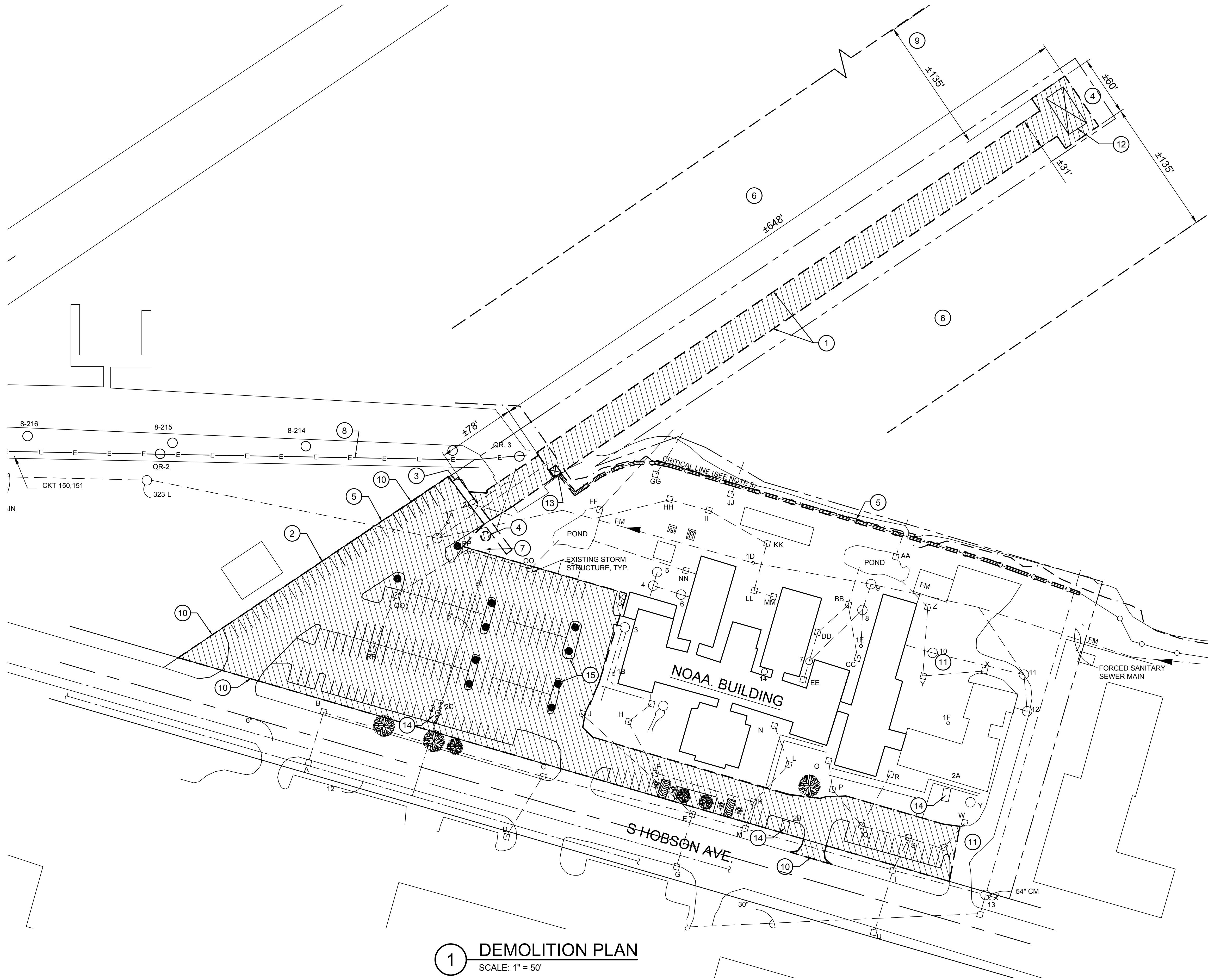
CHECKED BY: LWB/LM

FILE NAME: 21260-D_C-101 Ex Utility Data.dwg

DRAWING TITLE:

EXISTING UTILITY STRUCTURE DATA

REV NO. **X** SHEET NO. **C-101**



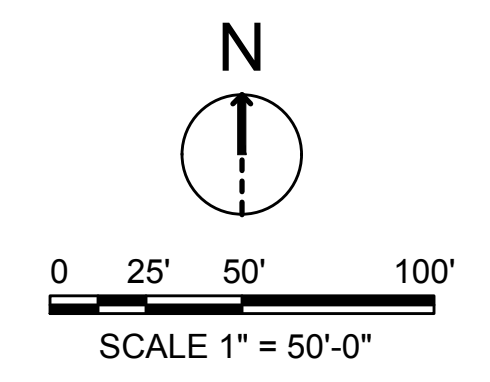
1 DEMOLITION PLAN
SCALE: 1" = 50'

NOTES:

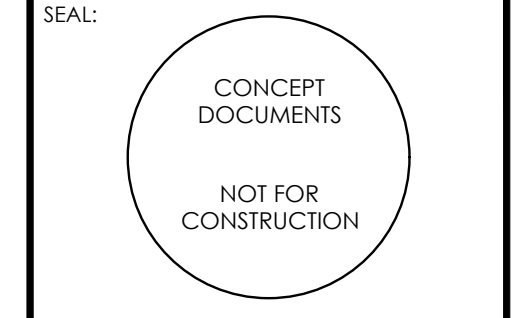
1. FIELD VERIFY DIMENSIONS.
2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
3. THE CRITICAL LINE LOCATION SHOWN ON DRAWING HAS PROVIDED BY OTHERS TO REPRESENT THE CRITICAL LINE APPROXIMATE LOCATION. THE GRAPHICAL REPRESENTATION OF CRITICAL LINE LOCATION ON DRAWINGS IS PROVIDED FOR REFERENCE ONLY AND SHOULD NOT BE RELIED ON FOR ANY FUTURE DESIGN, PERMITTING, OR CONSTRUCTION.

DEMOLITION KEY NOTES

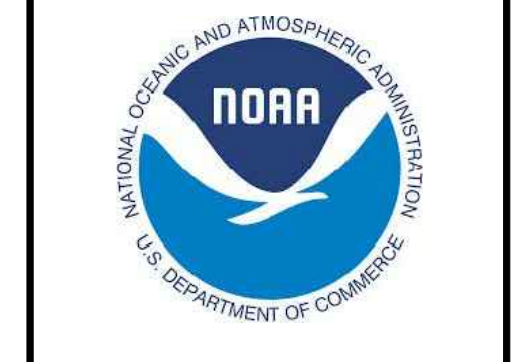
- 1 EXISTING PIER STRUCTURE TO BE DEMOLISHED, REMOVED AND DISPOSED. ALL PILES, INCLUDING FENDER PILES SHALL BE REMOVED TO 3 FEET BELOW FINISHED DREDGE DEPTH BASED ON THE DREDGING REPORT. REMOVE ALL PIER UTILITIES AND APPURTENANCES TO SERVICE POINTS OR CONNECTIONS LOCATED ONSHORE.
- 2 DEMOLISH, REMOVE AND DISPOSE OF EXISTING CONCRETE CURB, ASPHALT PAVEMENT, LANDSCAPING, PLANTER AREAS AND IRRIGATION SYSTEM WITHIN THE PARKING LOT TO ACCOMMODATE NEW PARKING SPACES AND THE PROPOSED WAREHOUSE BUILDING.
- 3 EXISTING SIGN TO REMAIN. REFURBISH SIGN.
- 4 REMOVE HIGH MAST LIGHTING FIXTURE.
- 5 DEMOLISH EXISTING FENCE.
- 6 TENTATIVE DREDGE ZONE DOWN -25 MEAN LOW WATER. REFER TO DREDGING REPORT.
- 7 EXISTING ELECTRICAL BREAKERS HOUSED IN CONCRETE STRUCTURE. VERIFY IF ELECTRICAL IS ACTIVE AND CURRENTLY SUPPLYING EQUIPMENT ON SITE. REMOVE IF NO LONGER REQUIRED FOR SITE. REPLACE AND RE-FEED EQUIPMENT IF REQUIRED FOLLOWING FIELD DETERMINATION OF ELECTRICAL CONNECTIONS.
- 8 REMOVE EXISTING ELECTRICAL FEEDER TO SOURCE
- 9 DREDGE LIMITS TO EXTENT TO THE EXISTING CHANNEL.
- 10 CONTRACTOR SHALL PROVIDE FOR THE PROJECT SITE SECURITY AT ALL TIMES TO INCLUDE TEMPORARY PERIMETER SECURITY FENCING. CONTRACTOR SHALL COORDINATE WITH NOAA/FLETC TO ENSURE SITE SECURITY FOR DURATION OF CONSTRUCTION AND UNTIL INSTALLATION OF PERMANENT FENCING HAS BEEN COMPLETED.
- 11 NOAA REQUIRES CONTINUOUS ACCESS TO AND FROM SHIPPING AND RECEIVING AREAS.
- 12 REMOVE AND DISPOSED OF IN ITS ENTIRETY, EXISTING ELECTRICAL BUILDING, INCLUDING EQUIPMENT AND ASSOCIATED FEEDER CONDUIT TO TO SOURCE.
- 13 REMOVE AND DISPOSED OF IN ITS ENTIRETY EXISTING PIER GUARD SHACK AND ASSOCIATED ELECTRICAL CONDUITS TO SOURCE.
- 14 EXISTING WATER METER/ VALVE VAULT. CONTRACTOR TO PROTECT THE EXISTING VAULTS DURING DEMOLITION AND MAINTAIN ACCESS AT ALL TIMES.
- 15 PROTECT IN PLACE EXISTING ISLAND CONCRETE CONCRETE CURB. REMOVE AND DISPOSE OF EXISTING LANDSCAPING AND IRRIGATION SYSTEM.



ADD PROJECT NO: 21260-D



ENGINEER: _____
P.E. NO: _____
DATE: _____

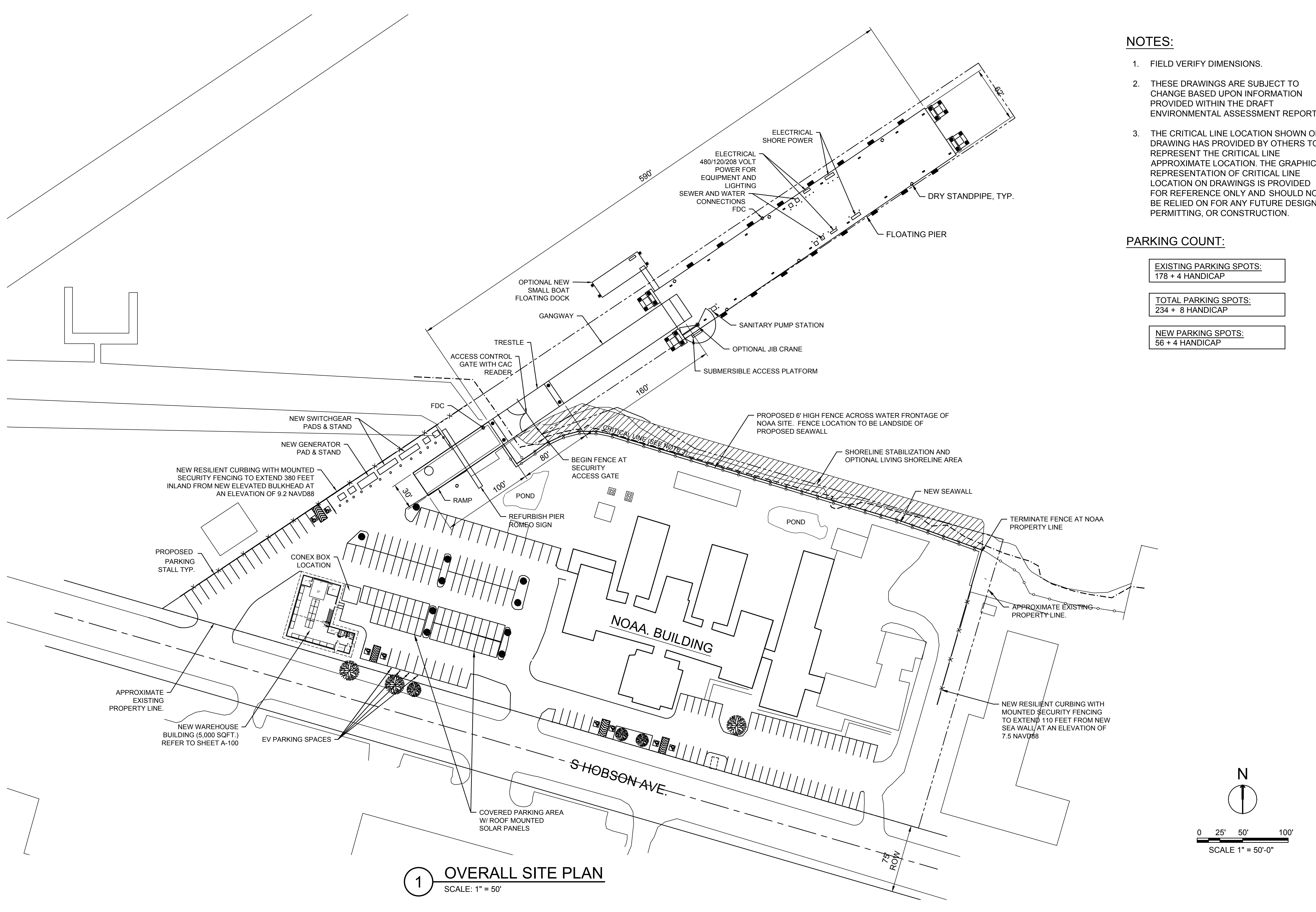


UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
 OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
 SOUTHEAST MARINE OPERATIONS HUB PROJECT
 FINAL CONCEPT DRAWINGS
 2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
 DRAWN BY: SPC
 CHECKED BY: LWB/LM
 FILE NAME: 21260-D_C-102 Demolition.dwg
 DRAWING TITLE: DEMOLITION PLAN

REV NO.	SHEET NO.
X	C-102

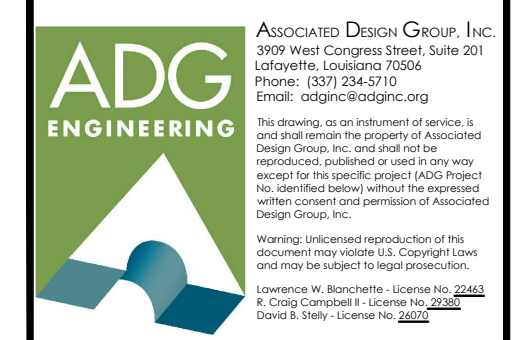
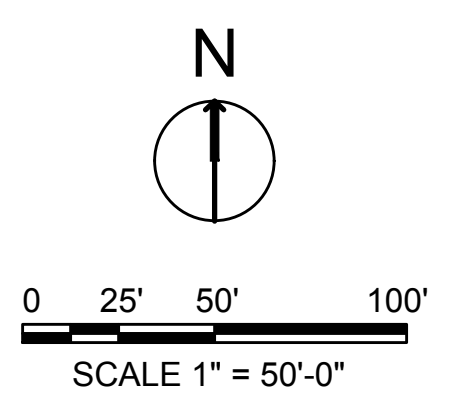


1 OVERALL SITE PLAN
SCALE: 1" = 50'

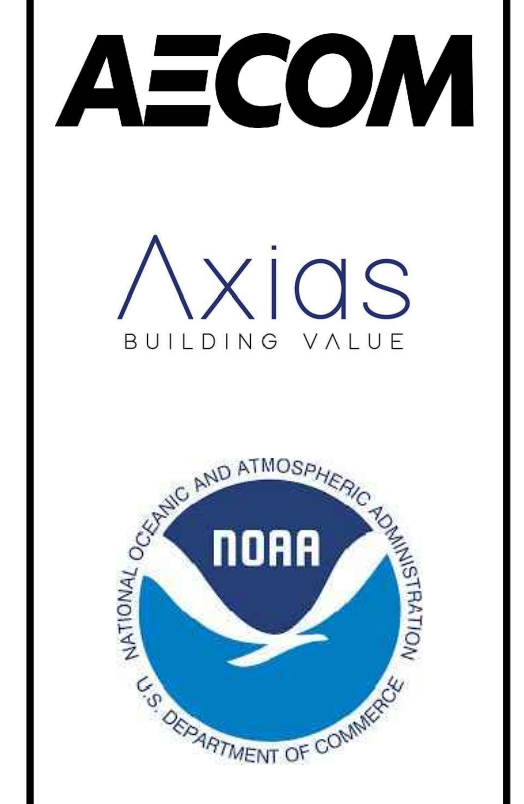
- NOTES:**
1. FIELD VERIFY DIMENSIONS.
 2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
 3. THE CRITICAL LINE LOCATION SHOWN ON DRAWING HAS PROVIDED BY OTHERS TO REPRESENT THE CRITICAL LINE APPROXIMATE LOCATION. THE GRAPHICAL REPRESENTATION OF CRITICAL LINE LOCATION ON DRAWINGS IS PROVIDED FOR REFERENCE ONLY AND SHOULD NOT BE RELIED ON FOR ANY FUTURE DESIGN, PERMITTING, OR CONSTRUCTION.

PARKING COUNT:

EXISTING PARKING SPOTS:	178 + 4 HANDICAP
TOTAL PARKING SPOTS:	234 + 8 HANDICAP
NEW PARKING SPOTS:	56 + 4 HANDICAP



ADD PROJECT NO: 21260-D
SEAL:
CONCEPT DOCUMENTS
NOT FOR CONSTRUCTION
ENGINEER:
P.E. NO:
DATE:

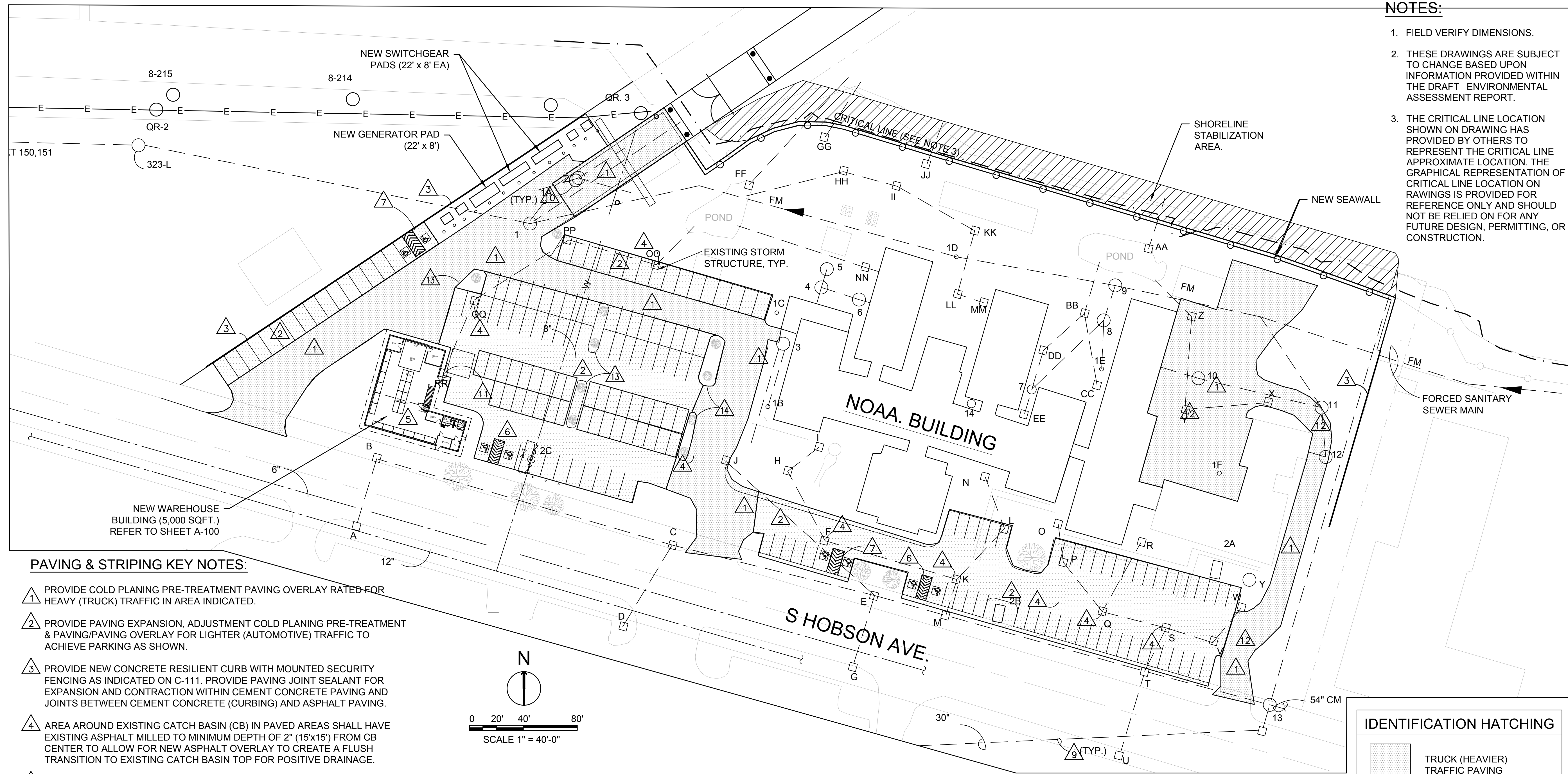


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FINAL CONCEPT DRAWINGS
2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
DRAWN BY: SPC
CHECKED BY: LWB/LM
FILE NAME: 1260-D_C-110_Overall Site.dwg
DRAWING TITLE: OVERALL SITE PLAN

REV NO.	SHEET NO.
X	C-110



NOTES:

1. FIELD VERIFY DIMENSIONS.
2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
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PAVING & STRIPING KEY NOTES:

- 1 PROVIDE COLD PLANING PRE-TREATMENT PAVING OVERLAY RATED FOR HEAVY (TRUCK) TRAFFIC IN AREA INDICATED.
- 2 PROVIDE PAVING EXPANSION, ADJUSTMENT COLD PLANING PRE-TREATMENT & PAVING/PAVING OVERLAY FOR LIGHTER (AUTOMOTIVE) TRAFFIC TO ACHIEVE PARKING AS SHOWN.
- 3 PROVIDE NEW CONCRETE RESILIENT CURB WITH MOUNTED SECURITY FENCING AS INDICATED ON C-111. PROVIDE PAVING JOINT SEALANT FOR EXPANSION AND CONTRACTION WITHIN CEMENT CONCRETE PAVING AND JOINTS BETWEEN CEMENT CONCRETE (CURBING) AND ASPHALT PAVING.
- 4 AREA AROUND EXISTING CATCH BASIN (CB) IN PAVED AREAS SHALL HAVE EXISTING ASPHALT MILLED TO MINIMUM DEPTH OF 2" (15x15') FROM CB CENTER TO ALLOW FOR NEW ASPHALT OVERLAY TO CREATE A FLUSH TRANSITION TO EXISTING CATCH BASIN TOP FOR POSITIVE DRAINAGE.
- 5 NEW WAREHOUSE BUILDING PROPOSED LOCATION AND CONFIGURATION - SEE SHEET C-111.
- 6 PROVIDE VAN ACCESSIBLE H.C. STRIPING (SAFETY BLUE) WITH 4" WIDE DIAGONAL STRIPING IN THIS VICINITY (TWO H.C. SPOTS - THIS LOCATION).
- 7 PROVIDE ACCESSIBLE H.C. STRIPING (SAFETY BLUE) WITH 4" WIDE DIAGONAL STRIPING IN THIS VICINITY (TWO H.C. SPOTS - THIS LOCATION)
- 8 PROTECT UNAFFECTED LAWN, TREES & VEGETATION WITHIN AND AROUND EXISTING PARKING AREA. RESTORE ANY DAMAGE CAUSED BY WORK OF THIS PROJECT.
- 9 EXISTING PIPING/MATERIALS TO REMAIN AND BE REWORKED.
- 10 REWORK EXISTING SEWER MANHOLE COVERS, VALVE BOXES, CATCH BASINS, ETC. FLUSH WITH FINAL GRADE, TO ACCOMMODATE REVISED PAVING. (TYPICAL)
- 11 EXISTING CATCH BASIN TO BE RELOCATED.
- 12 CONTRACTOR TO MAINTAIN ACCESS TO DRIVE AND LOADING DOCK OF EXISTING BUILDING AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR TO COORDINATE WORK IN THIS AREA WITH GOVERNMENT PERSONNEL.

1 PARKING AREA PAVING & STRIPING CONCEPT PLAN
SCALE: 1" = 40'

PAVING & STRIPING KEY NOTES-CONT.:

- 13 REMOVE AND REPLACE EXISTING ISLAND CONCRETE CURB, LANDSCAPING AND IRRIGATION.
- 14 PROTECT IN PLACE EXISTING ISLAND CONCRETE CURB. REMOVE AND REPLACE LANDSCAPING AND IRRIGATION.

GENERAL NOTES:

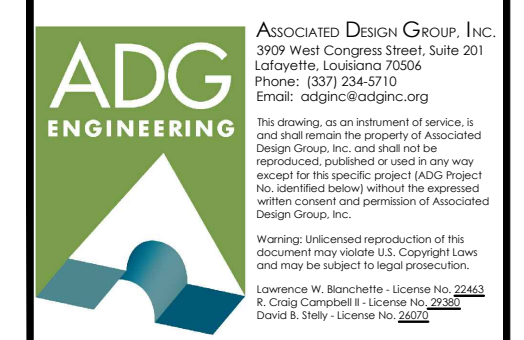
1. ASPHALT PATCHING, REMOVAL, REPLACEMENT, OVERLAY AND STRIPING IS REQUIRED AS PART OF THIS CONTRACT.
2. REFURBISH/RESURFACE EXISTING PARKING AREAS TO PROVIDE PARKING SPACES (H.C. & NON-H.C.) APPROXIMATELY AS SHOWN.
3. RE-STRIP LOT TO ACHIEVE CLEAR DESIGNATION OF 4 VAN ACCESSIBLE H.C. SPOTS & 4 (NON-VAN) H.C. SPOTS & CLEARLY IDENTIFIED RECTANGULAR AUTO PARKING SPOTS FOR 210 VEHICLES (202 PARKING SPOTS PLUS 8 H.C. PARKING SPOTS TOTAL)
4. VERIFY ALL GRADES AND SLOPE NEW ASPHALT TOPPING AS SHOWN AND TO DRAIN INLETS AS REQUIRED.
5. ADJUST ANY CATCH BASIN, MANHOLE, VALVE COVERS AS NEEDED TO FLUSH OUT WITH NEW SURFACE ELEVATION OF COMPLETED WORK.
6. CONTRACTOR SHALL PROVIDE ALL NECESSARY BARRICADES, SIGNAGE, REFLECTORS, SAFETY DEVICES AND WARNING LIGHTING AS NEEDED TO PROPERLY DEMARCATE CONSTRUCTION AREAS CLOSED TO STAFF OF PUBLIC. COORDINATE ANY/ALL DRIVE & ACCESS WAY CLOSURES WITH GOVERNMENT REPRESENTATIVE PRIOR TO CLOSURE.

PARKING COUNT:

TOTAL PARKING SPOTS:
182 + 8 HANDICAP SPACES

IDENTIFICATION HATCHING

	TRUCK (HEAVIER) TRAFFIC PAVING
	AUTOMOTIVE (LIGHTER) PARKING PAVING
	PROPOSED NEW WAREHOUSE BUILDING
	VAN ACCESSIBLE HANDICAPPED PARKING
	HANDICAPPED PARKING



ADD PROJECT NO: 21260-D

SEAL: CONCEPT DOCUMENTS
NOT FOR CONSTRUCTION

ENGINEER: _____
P.E. NO: _____
DATE: _____

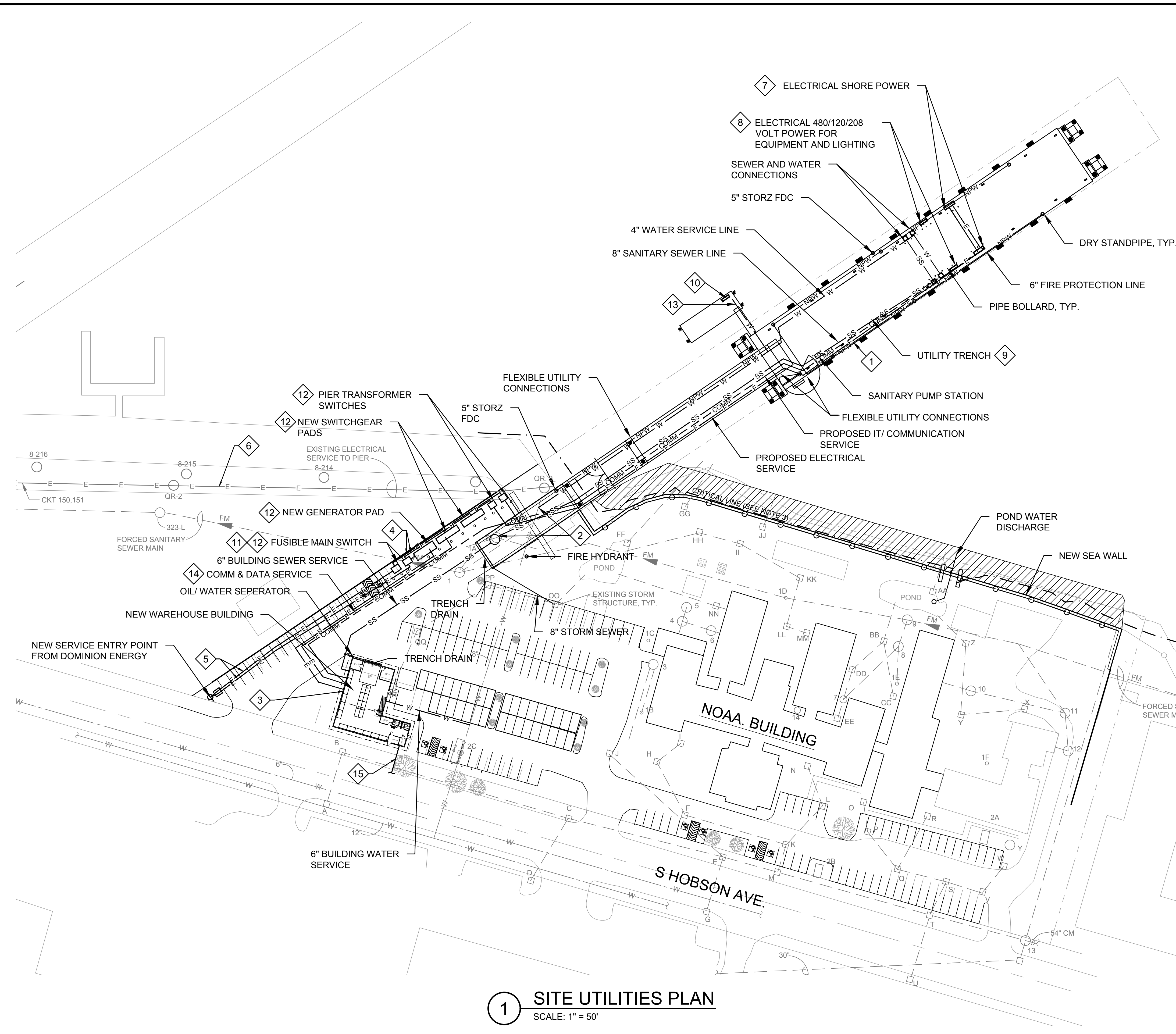


UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
SOUTHEAST MARINE OPERATIONS HUB PROJECT
FINAL CONCEPT DRAWINGS
2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
DRAWN BY: SPC
CHECKED BY: LWB/LM
FILE NAME: 21260-D_C-111-Paving striping.dwg
DRAWING TITLE: PARKING AREA PAVING & STRIPING CONCEPT PLAN

REV NO: X	SHEET NO: C-111
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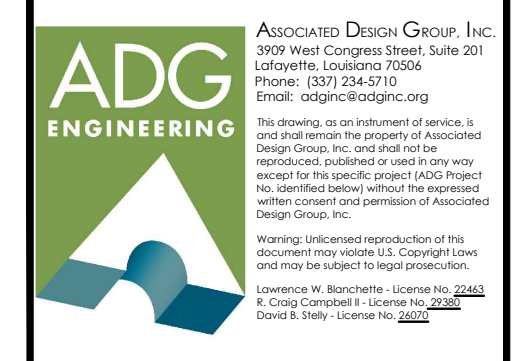
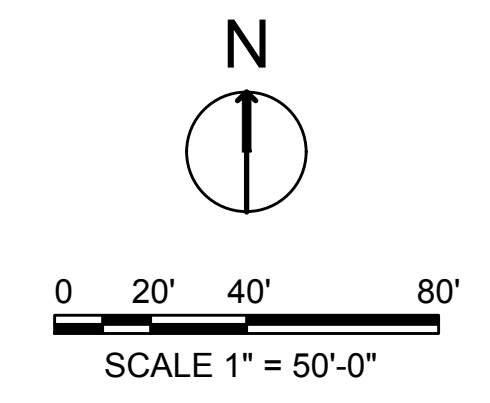
PLAN KEYNOTES:

- 1 UTILITIES TO BE ROUTED IN UTILITY TRENCH ON PIER. PROVIDE ACCESS HATCHES EVERY 50 FEET ALONG TRENCH TO ALLOW FOR MAINTENANCE ACCESS.
- 2 PROVIDE CONNECTIONS TO EXISTING SANITARY SEWER, AND DOMESTIC WATER LINE AT NEW PIER LOCATION. EXTEND UTILITIES TO NEW PIER PER UFC'S REQUIREMENTS.
- 3 PROVIDE WATER AND SANITARY SEWER SERVICE TO WAREHOUSE BUILDING.
- 4 PROVIDE CONNECTIONS TO NEW ELECTRICAL SERVICE. EXTEND ELECTRICAL SERVICE TO NEW PIER AND WAREHOUSE BUILDING. MAKE ALL CONNECTIONS AND SERVICES PER UFC REQUIREMENTS.
- 5 EXTEND 2 - 24KV CIRCUITS TO NEW UNIT SUBSTATION FOR PIER ROMEO. COORDINATE EXACT ROUTING AND INSTALLATION REQUIREMENTS IN FIELD.
- 6 REMOVE EXISTING 13.2 KV FEEDERS AND ASSOCIATED CONDUIT TO SOURCE.
- 7 1600 AMP PEDESTAL WITH 4 - 400AMP, 3 PHASE, 480V SHIP CONNECTIONS. SEE SECTION 10.1 FOR MORE SPECIFIC PEDESTAL REQUIREMENTS.
- 8 400AMP SMALL EQUIPMENT 277/480V, 3 PHASE, 4 WIRE PANEL WITH STEP DOWN TRANSFORMER FOR A MINIMUM 200AMP 120/208V PANEL
- 9 UTILITY TRENCH WITH TRAFFIC RATED REMOVABLE COVER FOR UTILITIES. PROVIDE ACCESS EVERY 50FT FOR FUTURE MAINTENANCE.
- 10 60AMP, 120/208V, 3 PHASE, 4 WIRE SERVICE TO SMALL BOAT DOCK.
- 11 23.9KV FUSIBLE SWITCHGEAR PER DOMINION ENERGY REQUIREMENTS AND EQUIPMENT
- 12 ELECTRICAL SWITCHGEAR TO BE ON PLATFORM SIZED TO BE ABOVE 100 YEAR FLOOD PLAIN. PROVIDE STAIRS TO ACCESS EQUIPMENT.
- 13 PROVIDE 3/4" DOMESTIC WATER LINE SERVICE TO NEW PIER.
- 14 EXTEND CONDUITS FROM INFORMATION TECHNOLOGY ROOM IN WAREHOUSE TO PIER FOR COMMUNICATIONS AND DATA CONNECTIONS TO VESSELS.
- 15 COMPLETE CONNECTIONS TO VOICE AND DATA SERVICE FROM LOCAL UTILITY COMPANY. COORDINATE WITH LOCAL UTILITY PROVIDERS FOR CONNECTION REQUIREMENTS.

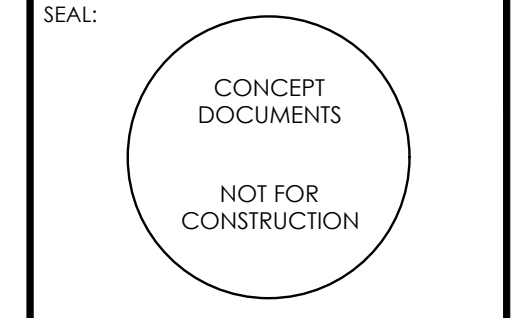
NOTES:

1. FIELD VERIFY DIMENSIONS.
2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
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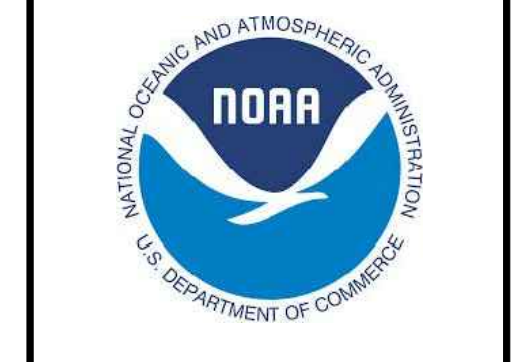
1 SITE UTILITIES PLAN
SCALE: 1" = 50'



ADD PROJECT NO: 21260-D



ENGINEER: _____
P.E. NO: _____
DATE: _____



UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
 OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
 SOUTHEAST MARINE OPERATIONS HUB PROJECT
 FINAL CONCEPT DRAWINGS
 2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
 DRAWN BY: SPC
 CHECKED BY: LWB/LM
 FILE NAME: 21260-D_C-112-Utility plan.dwg
 DRAWING TITLE: SITE UTILITIES PLAN

REV NO. X SHEET NO. C-112

KEY NOTES:

- 1 APPROXIMATELY 380FT CURB/WALL TO PREVENT SITE FLOODING. TOP OF WALL ELEV = +9.2 NAVD88
USE CAST-IN-PLACE SCDOT TYPICAL CANTILEVER CONCRETE RETAINING WALL
- 2 30FT X 100FT RAMP TO TRESTLE FROM +6.5 NAVD88 TO +14.5 NAVD88 (8% SLOPE) RETAIN RAMP SOIL WITH STEEL SHEET PILE WALL ASTM A328 AZ18-800 OR EQUIVALENT WITH 2FT X 2FT CONCRETE CAP AND RAILINGS.
RAMP FILLED WITH QUARRY RUN/ ENGINEERED FILL/CONCRETE PAVEMENT
TIP OF STEEL SHEET PILE = -2.5 NAVD88
STEEL SHEET PILE RETAINING UPTO 4FT OF SOIL SHALL BE CANTILEVER WALL.
STEEL SHEET PILE RETAINING MORE THAN 4FT OF SOIL UPTO 8.5FT SHALL BE HAVE TIE BACK SYSTEM AT 3FT BELOW TOP OF WALL.
- 3 30FT X 80FT STEEL TRUSS TRESTLE USING W-SECTIONS. SEE MEMBER SIZES ON DRAWINGS.
TRUSS HEIGHT = 16FT
W/ STEEL GRATED DECK (4" X 1/4" WITH 5FT SPAN) RATED FOR HS-20 VEHICULAR TRAFFIC.
- 4 2 - 48" DIA ASTM (5/8" THICK) A252 GRADE 50 STEEL PIPE PILE WITH 6FT X 6FT CONCRETE PILE CAP
PILE CAP TOP ELEV = +13.0 NAVD88
PILE TIP ELEV = -100.0 NAVD88
ASSUMING GROUND ELEV = -5.0 NAVD88
- 5 2 - 36" DIA (1/2" THICK) ASTM A252 GRADE 50 STEEL PIPE PILE WITH 5FT X 5FT CONCRETE PILE CAP
PILE CAP TOP ELEV = +13.0 NAVD88
PILE TIP ELEV = -80.0 NAVD88
ASSUMING GROUND ELEV = -5.0 NAVD88
- 6 30FT X 160FT STEEL TRUSS GANGWAY USING W-SECTIONS.
TRUSS HEIGHT = 16FT
W/ STEEL GRATED DECK (4" X 1/4" WITH 5FT SPAN) RATED FOR HS-20 VEHICULAR TRAFFIC
MAX 10% SLOPE AT LOWEST TIDE
- 7 60FT X 20FT SMALL VESSEL FLOATING DOCK (CONCRETE DOCK WITH 2FT FREEBOARD)
- 8 24" DIA STEEL PIPE ASTM A252 GRADE 50 PILES (1" WALL THICKNESS) (4 TOTAL)
PILE TOP ELEV = +18 NAVD88
MUDLINE = -27.96 NAVD88
PILE TIP ELEV = -85 NAVD88
- 9 5FT X 24FT PEDESTRIAN ALUMINUM GANGWAY

KEY NOTES-CONTINUED:

- 15 48" DIA STEEL PIPE ASTM A252 GRADE 50 PILES (3/4" WALL THICKNESS) (16 TOTAL). PILE SHALL BE FILLED WITH 5000 PSI CONCRETE AND MIN 1/8" REBARS. THE 4 PILES SHALL BE MIN 12FT APART TO AVOID GROUP ACTION. THEY SHALL BE CONNECTED AT TOP WITH 48" STEEL PIPES OR TRUSS SYSTEM. GROUP OF 4 PILE SHALL PERFORM AS PILE WITH FIXED PILE TOP
PILE TOP ELEV = +27 NAVD88
DREDGE DEPTH = -27.96 NAVD88
PILE TIP ELEV = -104 NAVD88
- 16 APROX. 606 FT LONG CANTILEVER STEEL SHEET PILE WALL ASTM A328 AZ18-800 OR EQUIVALENT
TOP OF WALL ELEV = +9.2 NAVD88
CONCRETE PILE CAP 30 IN (WIDE) X 18IN (HIGH)
STEEL SHEET PILE TIP = -35 NAVD88
ASSUMING GROUND ELEV = +5.0 NAVD88
PROVIDE RIP RAP IN FRONT OF WALL WITH 2FT BENCH AND 3:1 SLOPE TO EXISTING GROUND.
IN FUTURE BUILD UP PILE CAP TO +10.5 NAVD88
- 17 40FT STEEL SHEET PILE RETURN WALL

KEY NOTES-CONTINUED:

- 18 APPROXIMATELY 110FT CURB/ WALL TO PREVENT SITE FLOODING. TOP OF STRUCTURE ELEV = +7.5 NAVD88
USE CAST-IN-PLACE SCDOT TYPICAL CANTILEVER CONCRETE RETAINING WALL
- 19 STEEL PILE GUIDE STRUCTURE TO TRANSFER LATERAL LOAD FROM FLOATING PIER TO STEEL PIPE PILES
- 20 SECURITY GATE WITH CAC (COMMON ACCESS CARD) AND 3FT OVER HANG FENCE ON EITHER SIDE OF TRESTLE STRUCTURE.
- 21 4000 LBS (2 TON) JIB CRANE WITH 8FT MIN CLEAR HEIGHT UNDER BOOM AND SPAN OF 20FT.
- 22 4FT X 12FT (2 STEP) PLATFORM (WITH SS316 FRAME AND GRATED STEEL DECKING) ATTACHED TO FACE OF CONCRETE DOCK SIDE WALL FOR SUBMERSIBLE VESSEL ACCESS. SECOND STEP SHALL HAVE 6" TO 8" FREEBOARD.
- 23 ALL CORNERS OF THE FLOATING PIER AND PILE GUIDE SHALL HAVE CORNER BUMPERS TO AVOID DAMAGE TO PIER, PILE GUIDE, OR VESSEL.
- 24 PIER SHALL HAVE A 6-INCH DIAMETER STEEL PIPE BULL RAIL ALONG THE PERIMETER OF THE FLOATING PIER. BULL RAIL CENTER LINE SHALL BE 12-INCHES FROM THE EDGE OF THE PIER. TOP OF BULL RAIL SHALL BE 12-INCHES ABOVE THE DECK SURFACE.

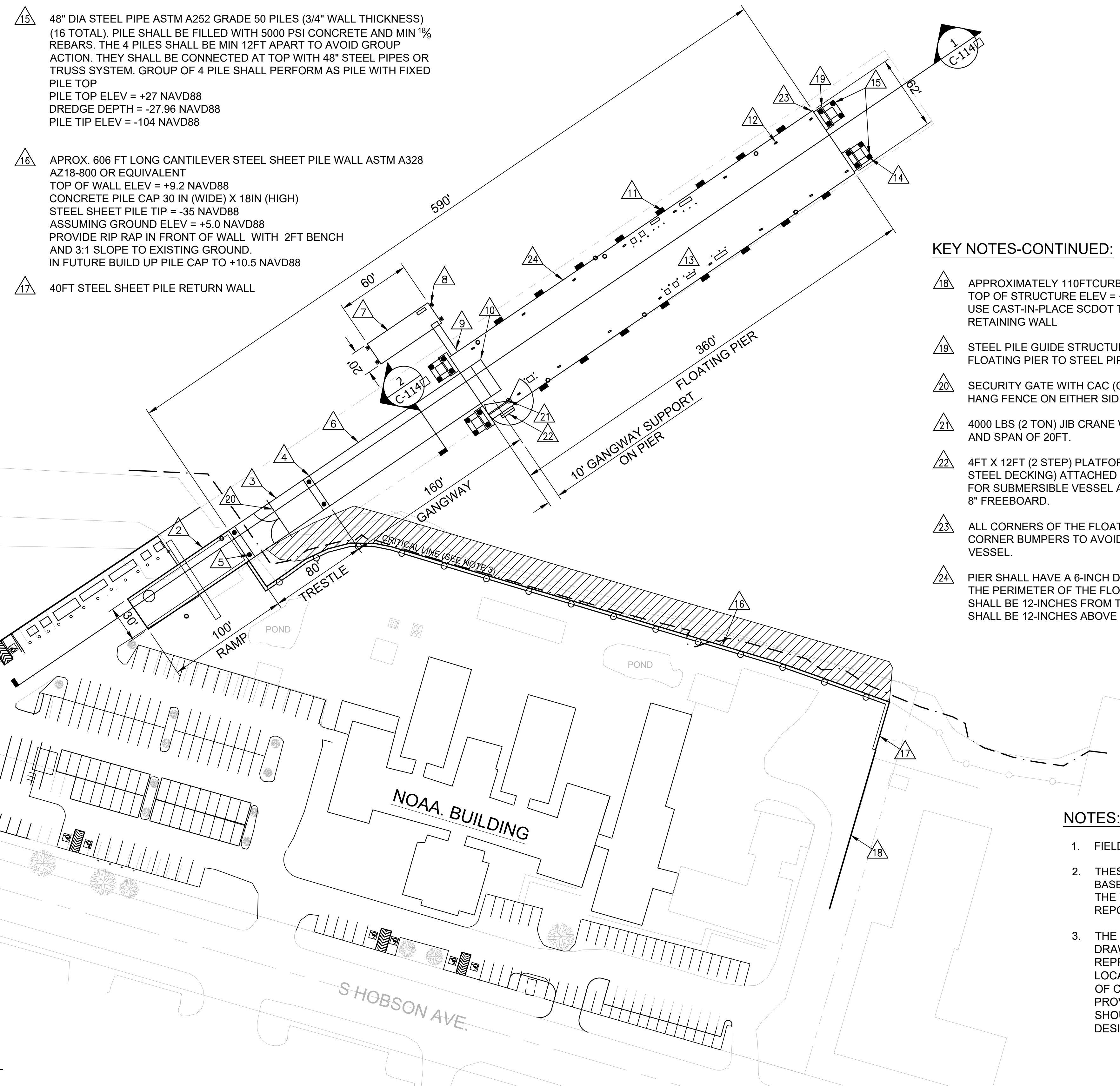
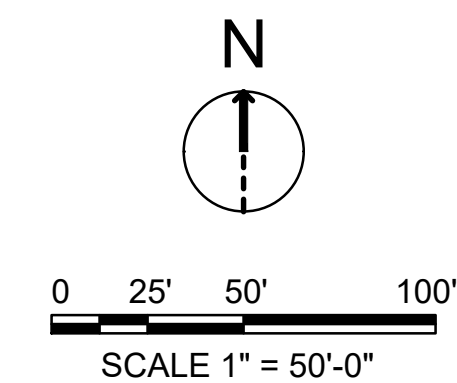
NOTES:

- 1. FIELD VERIFY DIMENSIONS.
- 2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
- 3. THE CRITICAL LINE LOCATION SHOWN ON DRAWING HAS PROVIDED BY OTHERS TO REPRESENT THE CRITICAL LINE APPROXIMATE LOCATION. THE GRAPHICAL REPRESENTATION OF CRITICAL LINE LOCATION ON DRAWINGS IS PROVIDED FOR REFERENCE ONLY AND SHOULD NOT BE RELIED ON FOR ANY FUTURE DESIGN, PERMITTING, OR CONSTRUCTION.

KEY NOTES-CONTINUED:

- 10 TRANSITION RAMP STRUCTURE FROM GANGWAY TO FLOATING PIER
- 11 YOKOHAMA 4FT X 6.5FT PNEUMATIC FENDER SYSTEM AT 40FT ON CENTER (TOTAL 16)
- 12 TRELLEBORG 100T DOUBLE BITT BOLLARD AT 50FT ON CENTER (TOTAL 16)
- 13 62FT X 360FT FLOATING PIER WITH 4FT FREEBOARD. THE FLOATING PIER SHALL BE DESIGNED TO BE REMOVABLE FOR SERVICING IF NEEDED
- 14 NAVIGATION LIGHTING AT END OF PIER ON TOP OF STEEL PILE

1 PIER AND SEAWALL LAYOUT
SCALE: 1" = 50'



ADG ENGINEERING
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ADG PROJECT NO: 21260-D

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ENGINEER: _____
P.E. NO: _____
DATE: _____



UNITED STATES DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION
 OFFICE OF MARINE AND AVIATION OPERATIONS (OMAO)
 SOUTHEAST MARINE OPERATIONS HUB PROJECT
 FINAL CONCEPT DRAWINGS
 2234 S. HOBSON AVE. NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022

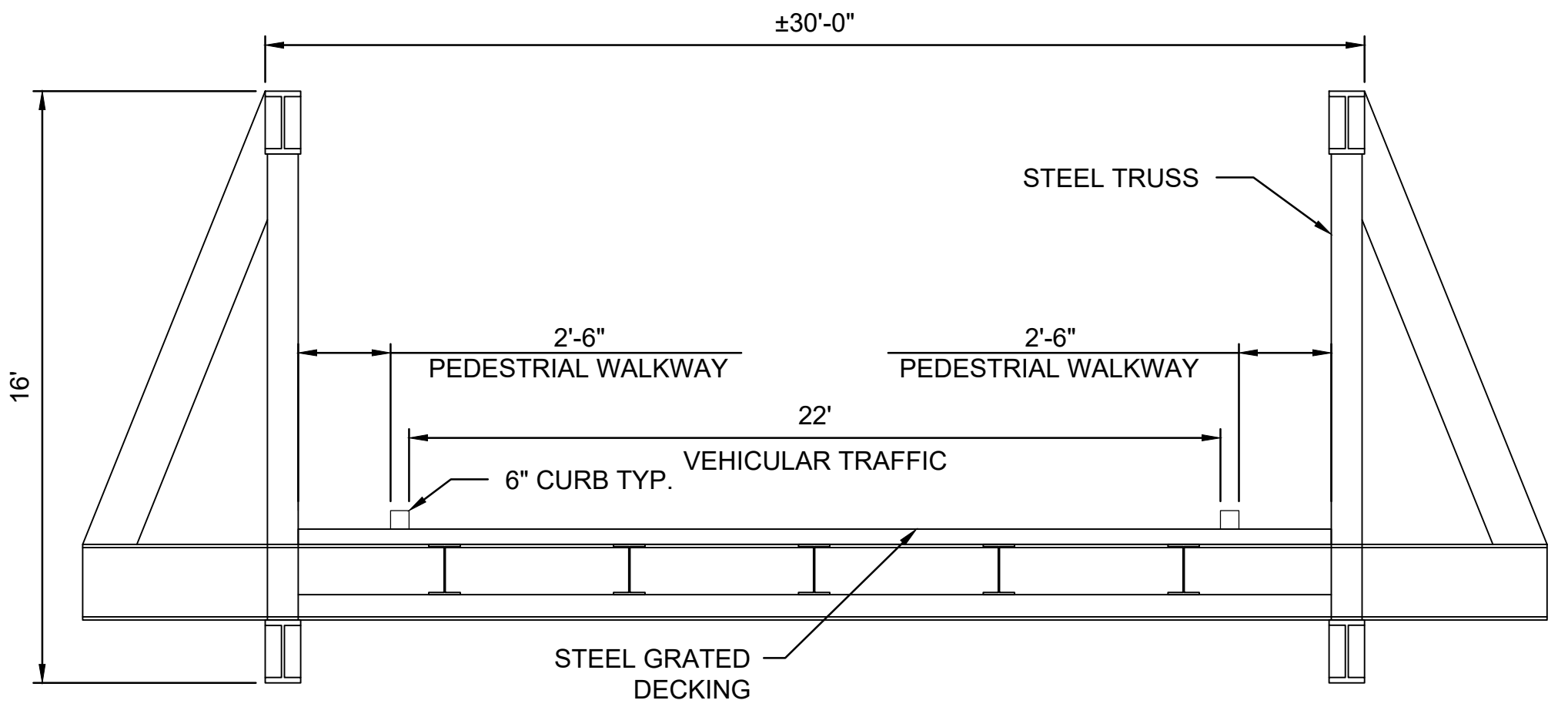
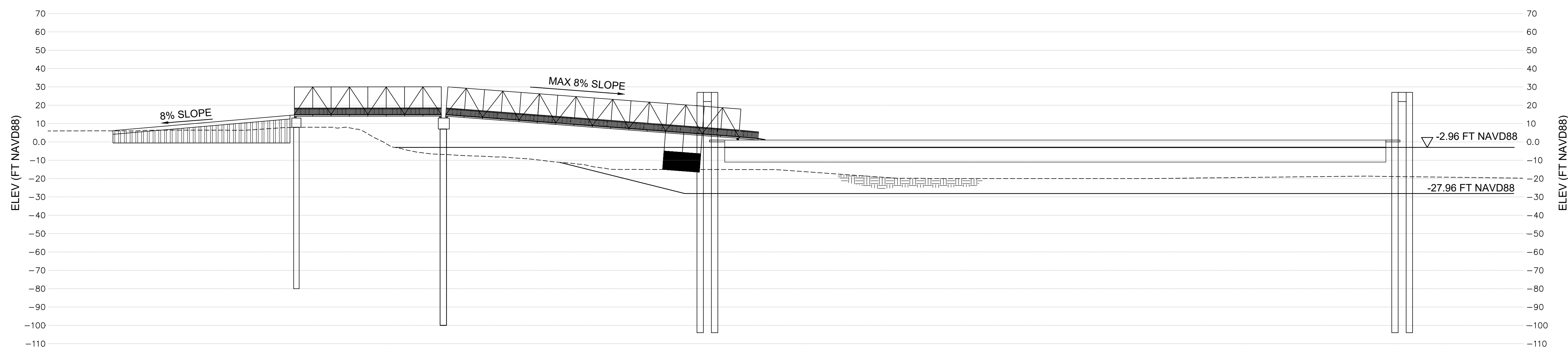
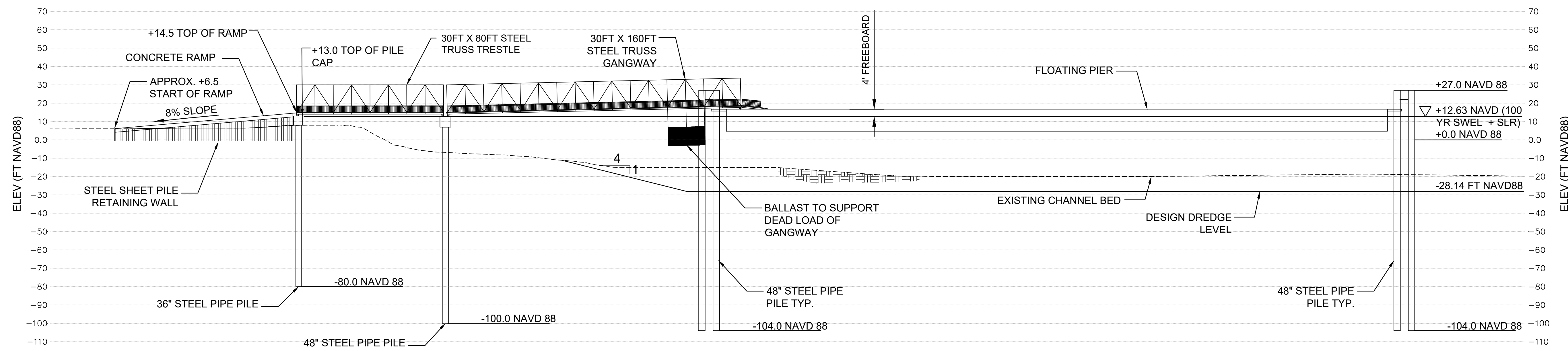
DRAWN BY: SPC

CHECKED BY: LWB/LM

FILE NAME: 21260-D_C-113 Pier and Seawall Layout.dwg

DRAWING TITLE:
PIER AND SEAWALL LAYOUT

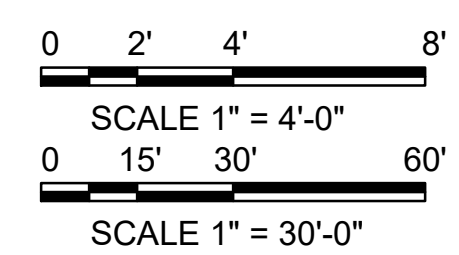
REV NO.	SHEET NO.
X	C-113



DESIGN LOW WATER CONDITION

1 PIER ELEVATIONS
 SCALE: 1" = 30'

- NOTES:**
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 2. THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
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REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
 DRAWN BY: SPC
 CHECKED BY: LWB/LM
 FILE NAME: 21260-D_C-114 Pier_Elevation.dwg
 DRAWING TITLE: PIER ELEVATIONS

REV. NO. X SHEET NO. C-114

NOTES:

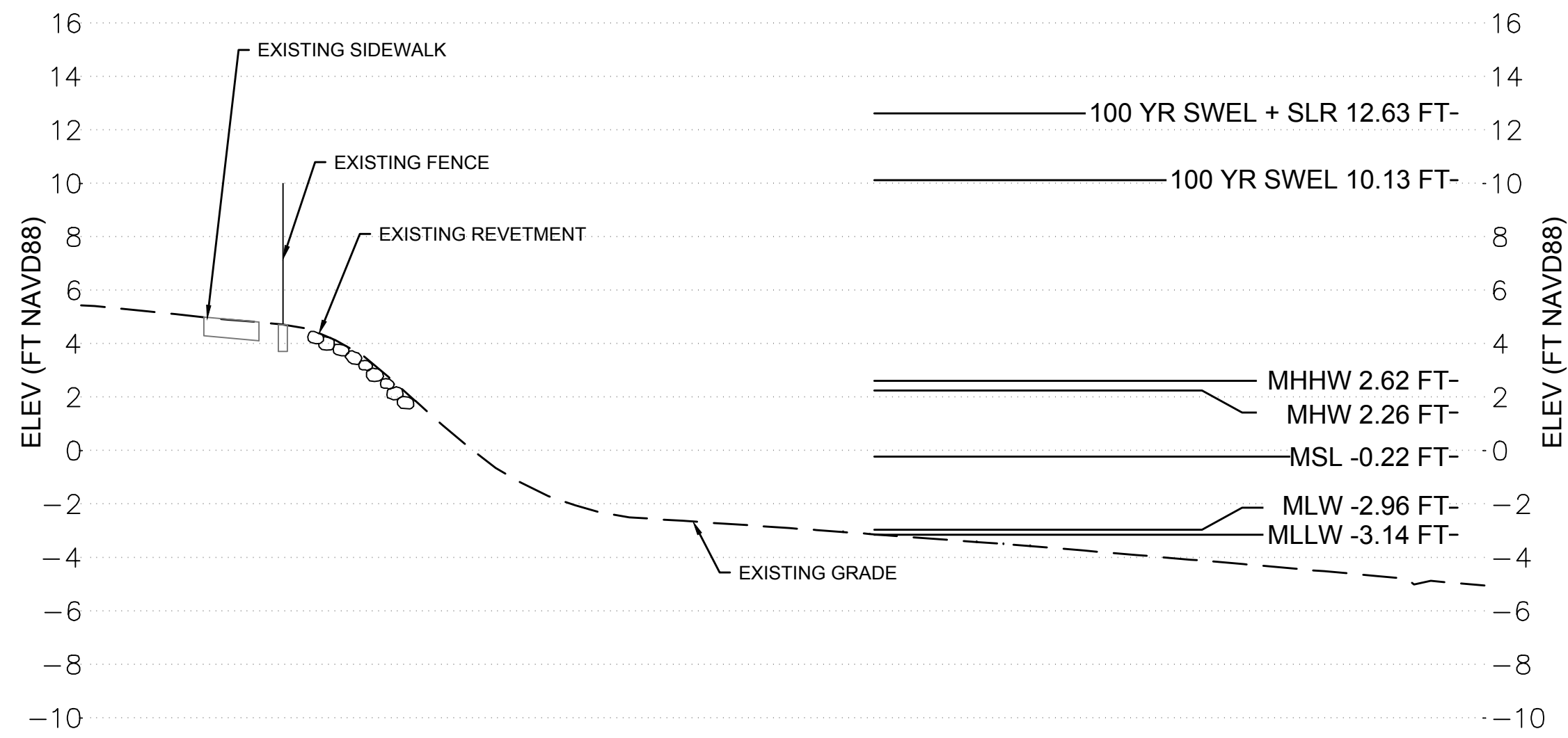
- FIELD VERIFY DIMENSIONS.
- THESE DRAWINGS ARE SUBJECT TO CHANGE BASED UPON INFORMATION PROVIDED WITHIN THE DRAFT ENVIRONMENTAL ASSESSMENT REPORT.
- THE CRITICAL LINE LOCATION SHOWN ON DRAWING HAS PROVIDED BY OTHERS TO REPRESENT THE CRITICAL LINE APPROXIMATE LOCATION. THE GRAPHICAL REPRESENTATION OF CRITICAL LINE LOCATION ON DRAWINGS IS PROVIDED FOR REFERENCE ONLY AND SHOULD NOT BE RELIED ON FOR ANY FUTURE DESIGN, PERMITTING, OR CONSTRUCTION.

0 2.5' 5' 10'

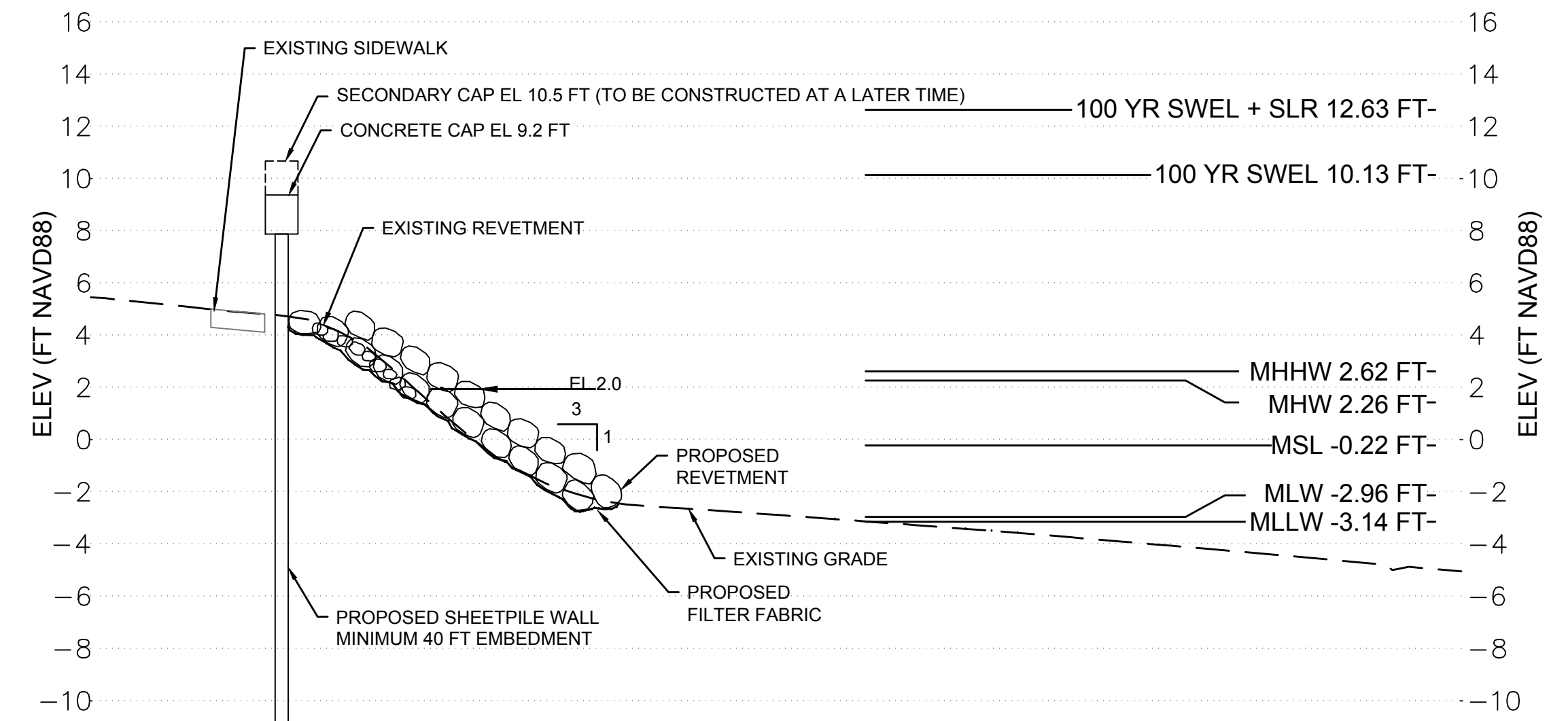
VERTICAL SCALE: 1" = 5'-0"

0 5' 10' 20'

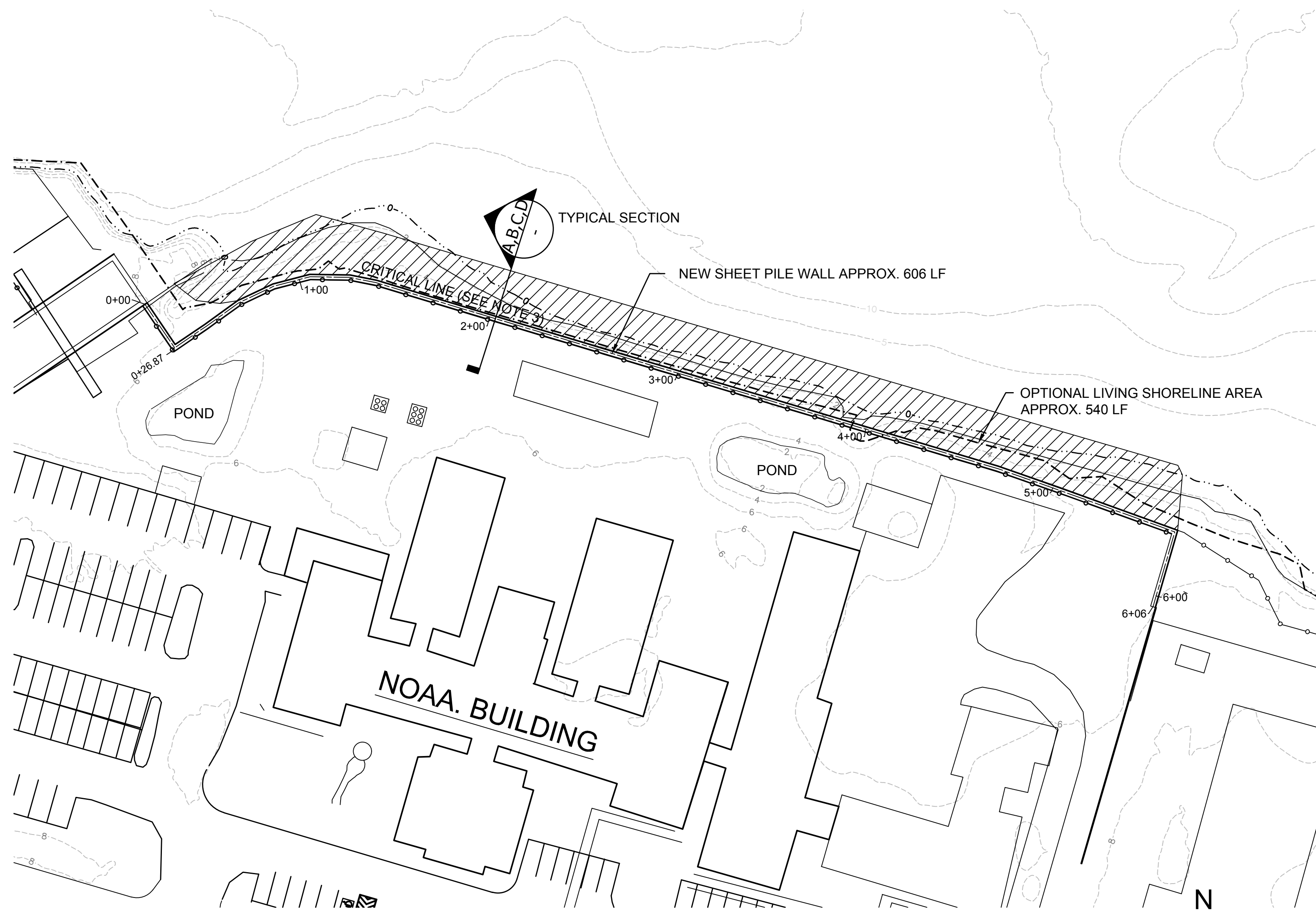
HORIZONTAL SCALE: 1" = 10'-0"



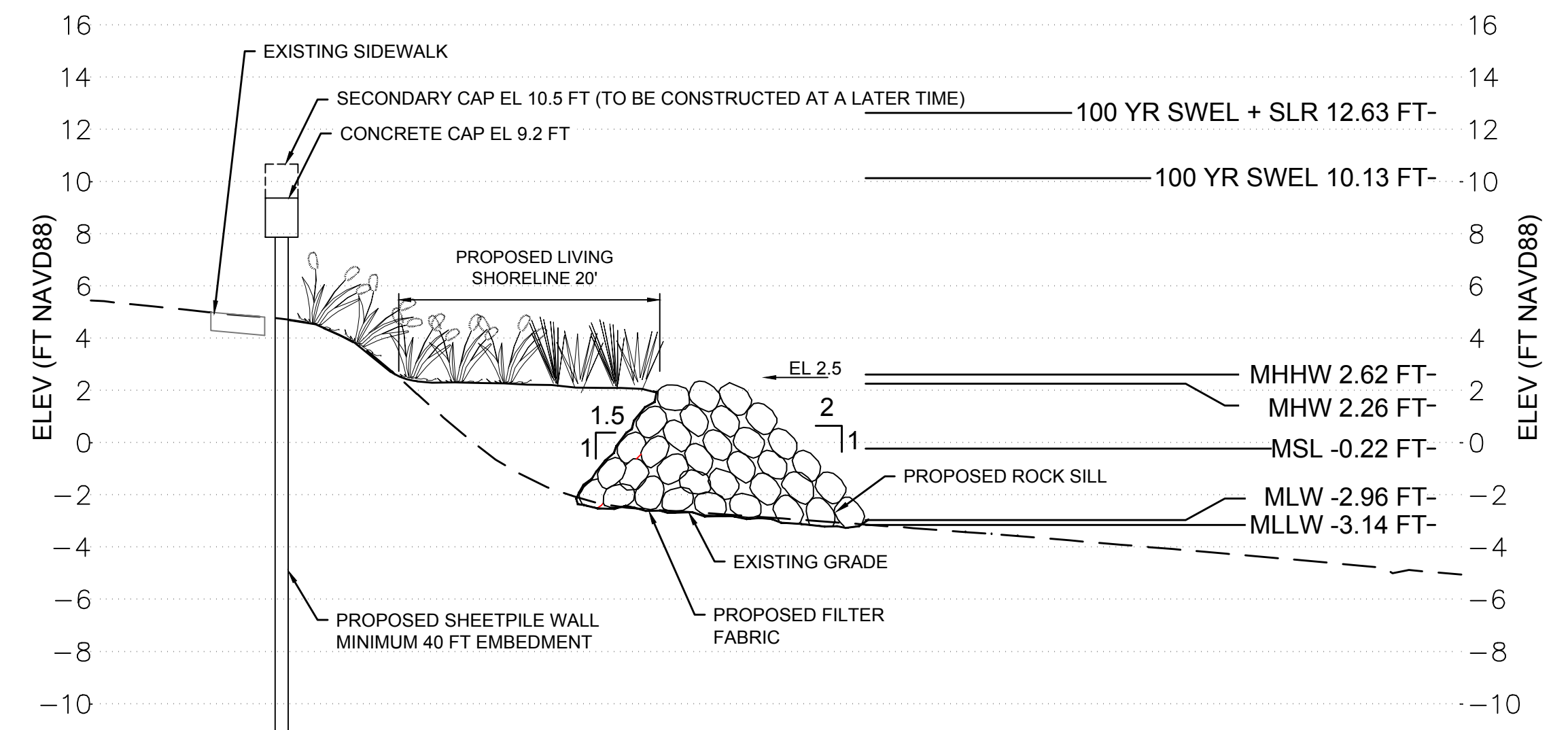
A EXISTING CONDITION TYPICAL SECTION
SCALE: 1" = 10' HORZ. / 1" = 5' VERT



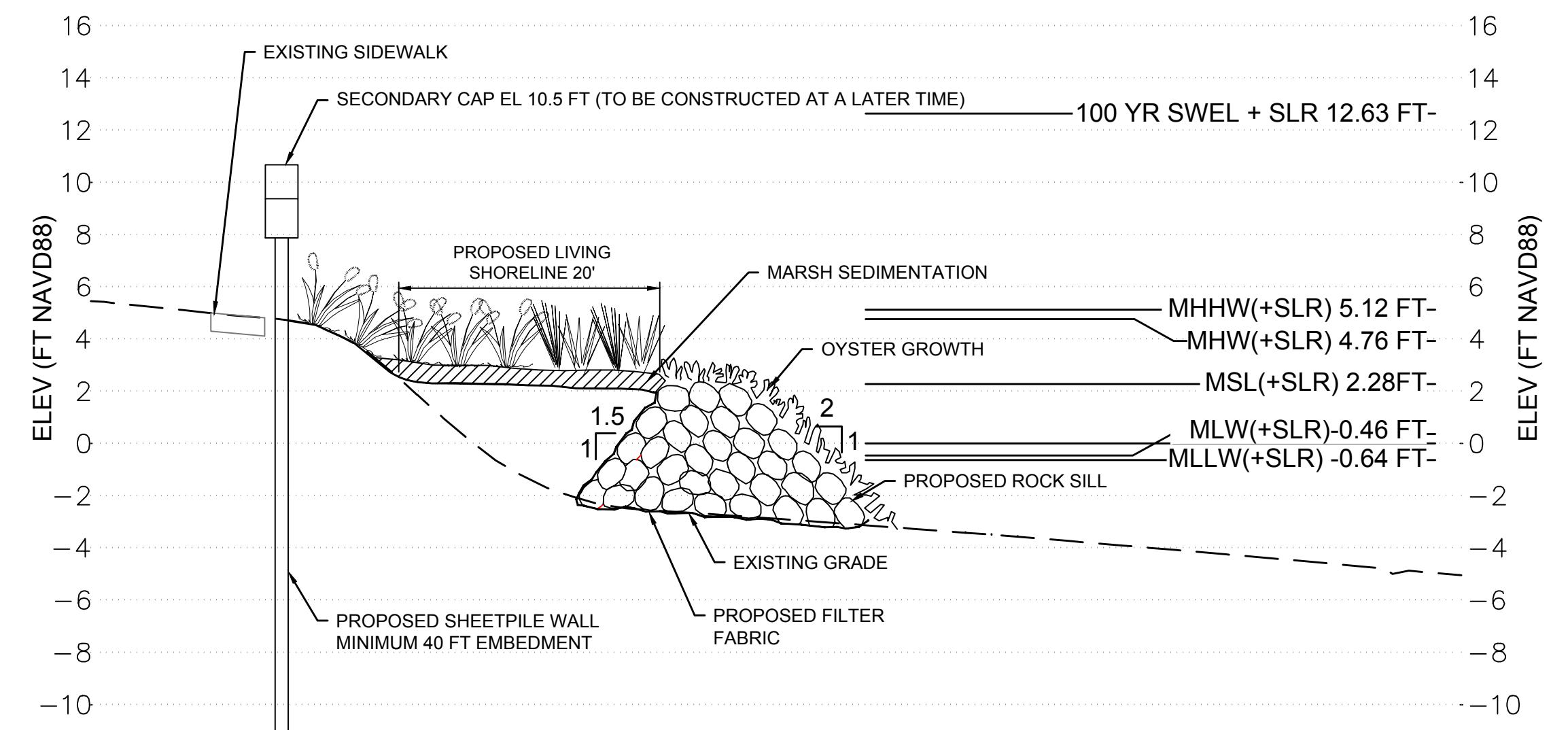
B PROPOSED WALL TYPICAL SECTION
SCALE: 1" = 10' HORZ. / 1" = 5' VERT



1 SITE PLAN WITH TYPICAL CROSS SECTION LOCATION
SCALE: 1" = 40'



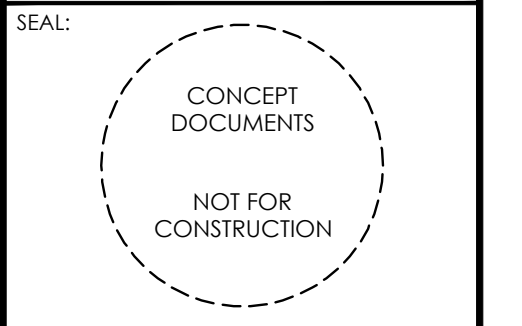
C OPTIONAL PROPOSED WALL WITH LIVING SHORELINE TYPICAL SECTION
SCALE: 1" = 10' HORZ. / 1" = 5' VERT



D OPTIONAL PROPOSED WALL WITH LIVING SHORELINE+50-YR SLR TYPICAL SECTION
SCALE: 1" = 10' HORZ. / 1" = 5' VERT



ADD PROJECT NO: 21260-D



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2234 S. HOBSON AVE., NORTH CHARLESTON, SC 29405

REV	DATE	DESCRIPTION

DATE ISSUED: MAY 6, 2022
DRAWN BY: SPC
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FILE NAME: 21260-D_C-115 Rvmt Xsections.dwg

DRAWING TITLE: REVIEMENT CROSS SECTIONS

REV NO. X	SHEET NO. C-115
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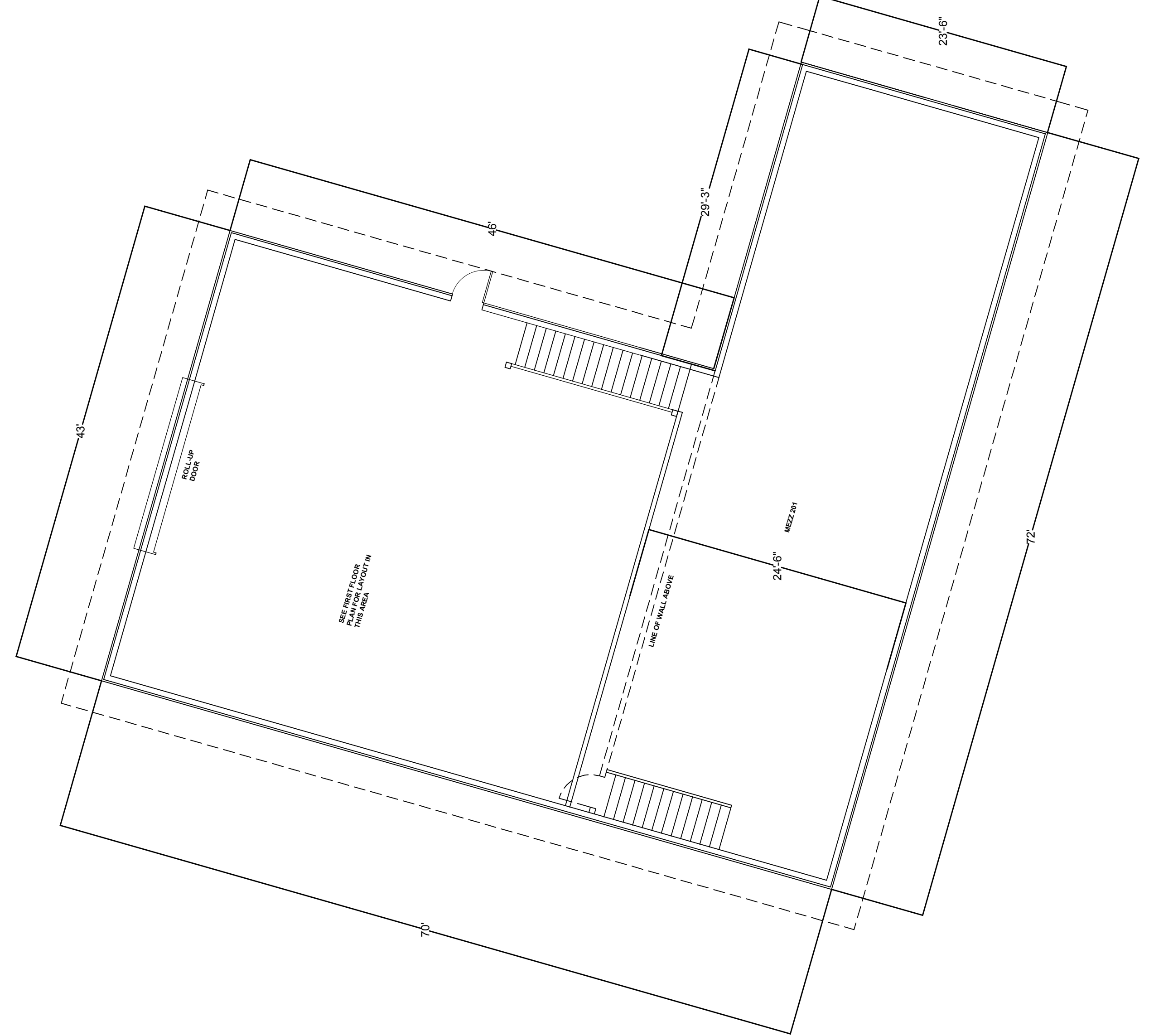
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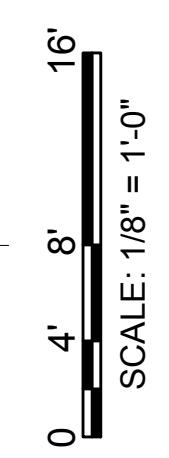
FILE NAME: 21260-D_A-100.dwg

DRAWING TITLE: WAREHOUSE BUILDING FLOOR PLANS

REV. NO. X SHEET NO. A-100



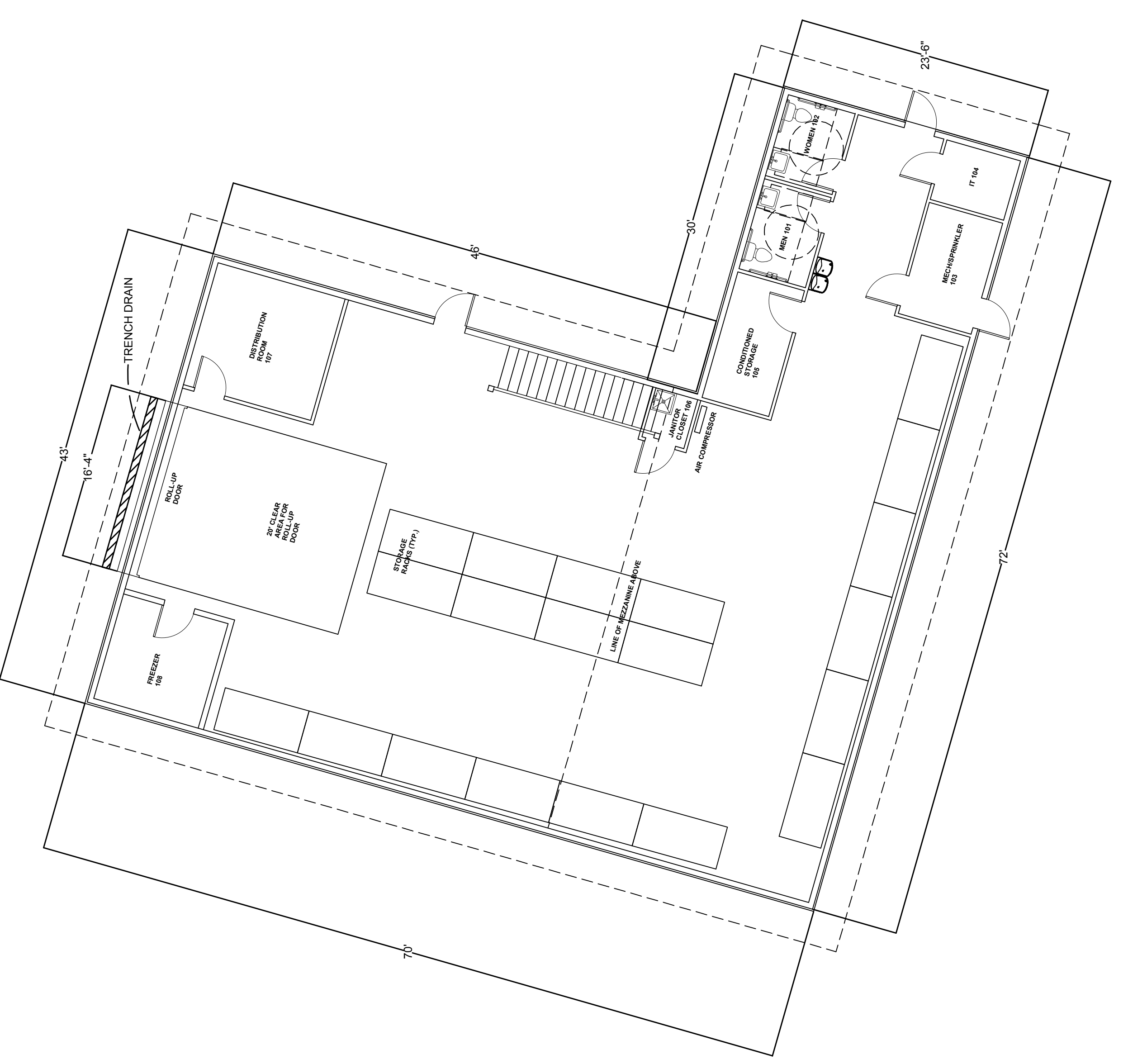
2 WAREHOUSE BUILDING - MEZZANINE LEVEL
SCALE: 1/8" = 1'-0"



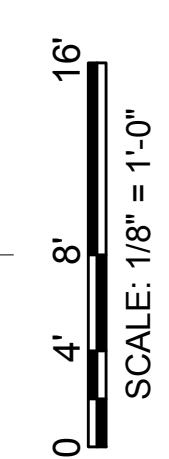
NOTE:
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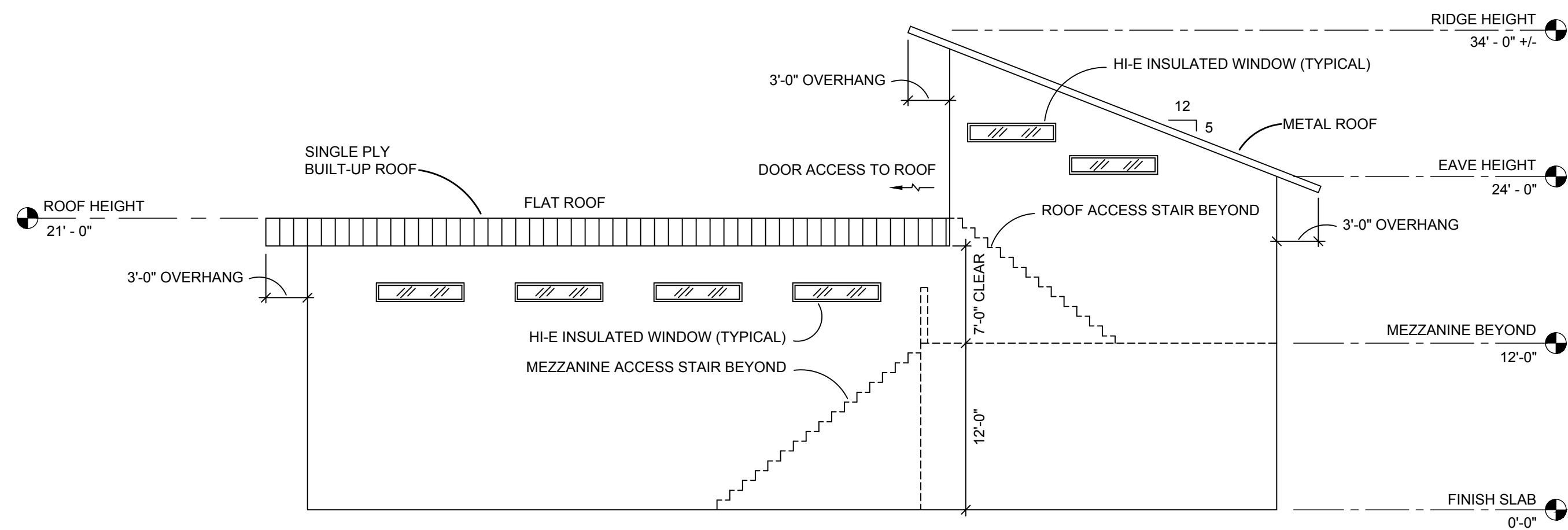
GROUND FLOOR SQUARE FOOTAGE: 3,525 SQ. FT.
MEZZANINE LEVEL SQUARE FOOTAGE: 1,876 SQ. FT.
TOTAL: 5,201 SQ. FT.

NOTE:
FIELD VERIFY DIMENSIONS.

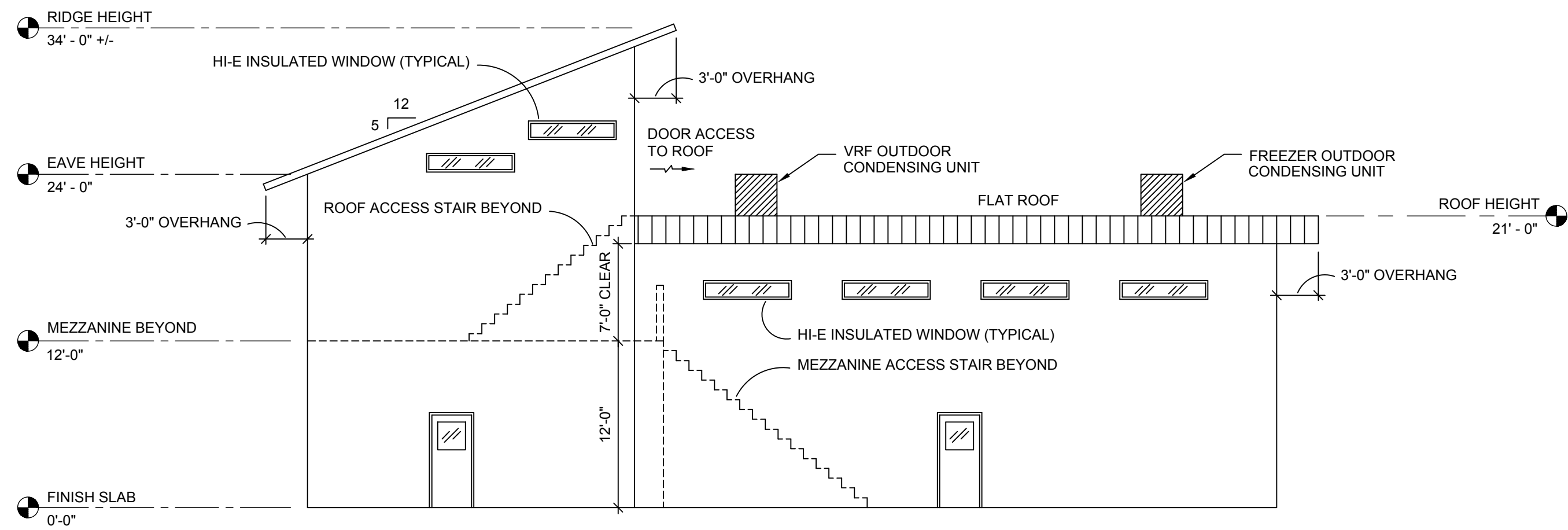


1 WAREHOUSE BUILDING - 1ST FLOOR
SCALE: 1/8" = 1'-0"

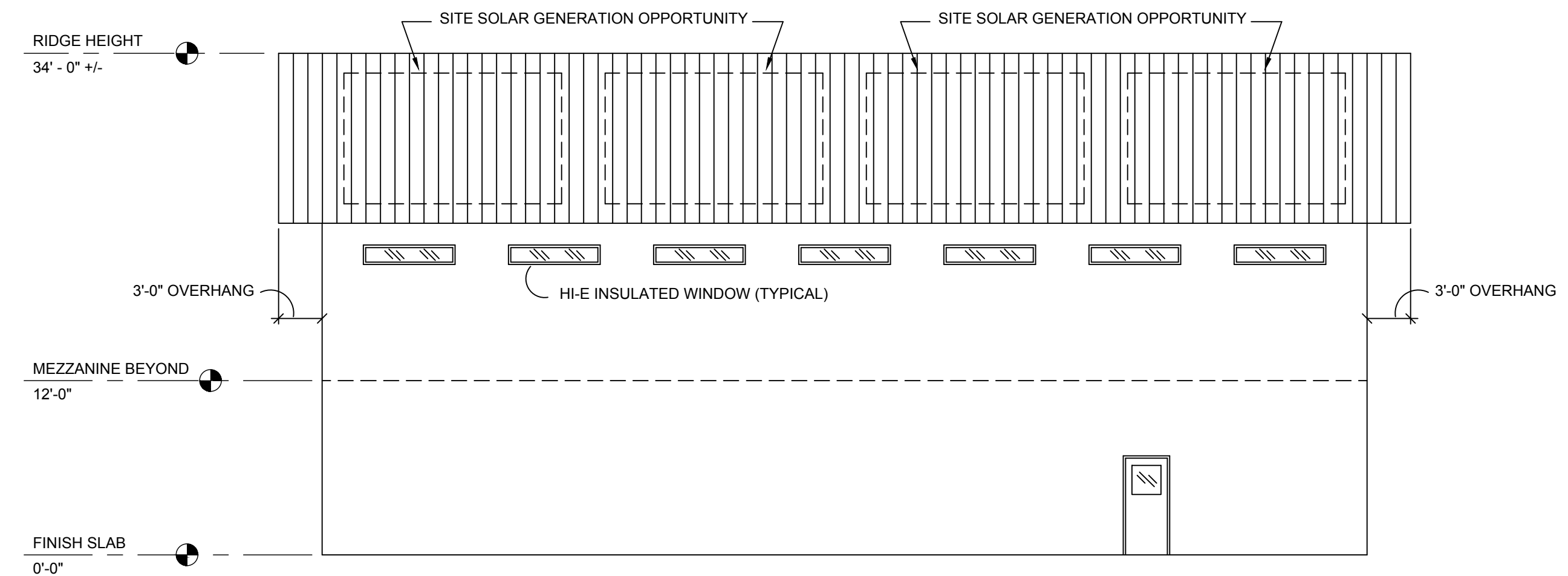




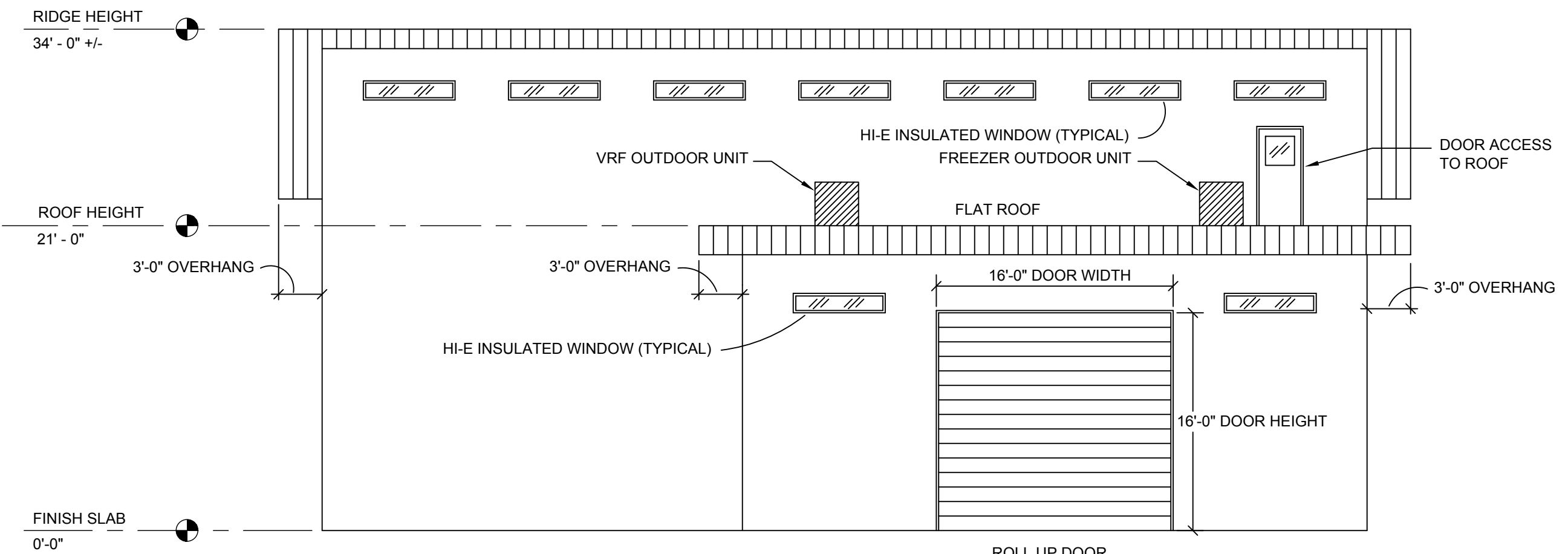
1 WAREHOUSE BUILDING - WEST ELEVATION
SCALE: 1/8" = 1'-0"



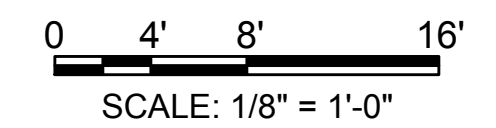
2 WAREHOUSE BUILDING - EAST ELEVATION
SCALE: 1/8" = 1'-0"



3 WAREHOUSE BUILDING - SOUTH ELEVATION
SCALE: 1/8" = 1'-0"



4 WAREHOUSE BUILDING - NORTH ELEVATION
SCALE: 1/8" = 1'-0"



GROUND FLOOR SQUARE FOOTAGE:
3,525 SQ.FT.
MEZZANINE LEVEL SQUARE FOOTAGE:
1,676 SQ.FT.
TOTAL: 5,201 SQ.FT.

NOTE:
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NOTE:
FIELD VERIFY DIMENSIONS.



Associated Design Group, Inc.
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Phone: (504) 234-5710
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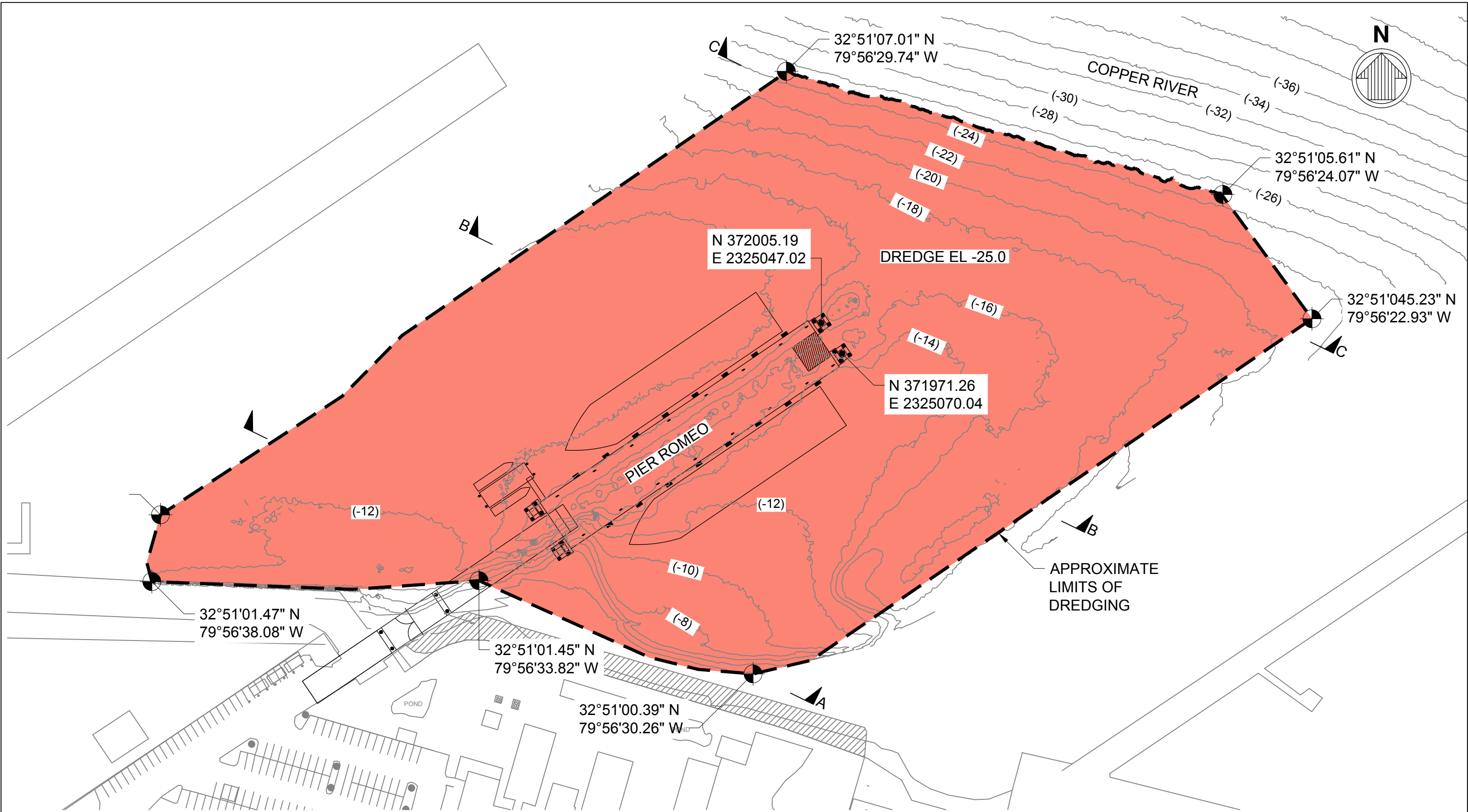
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DATE ISSUED: MAY 6, 2022
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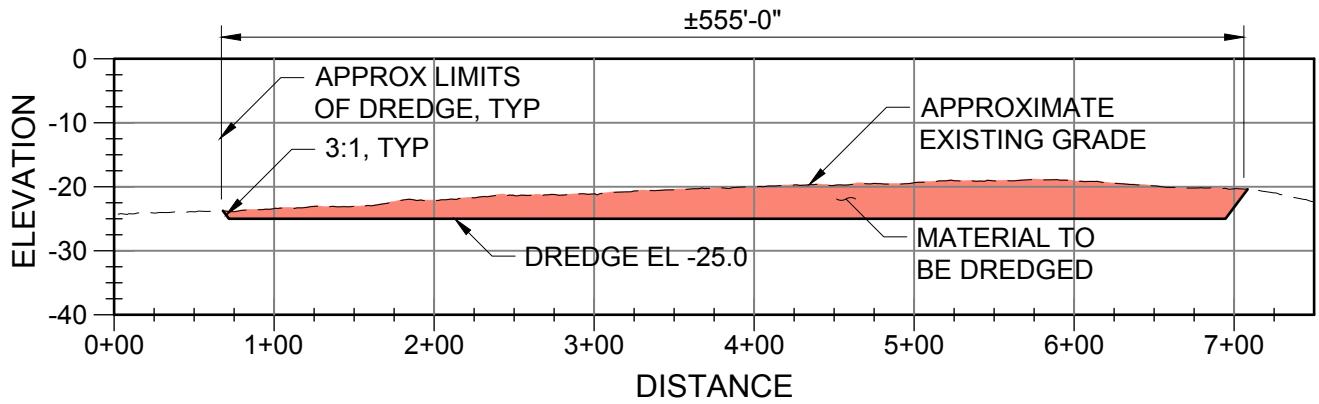
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REV NO. X SHEET NO. A-101

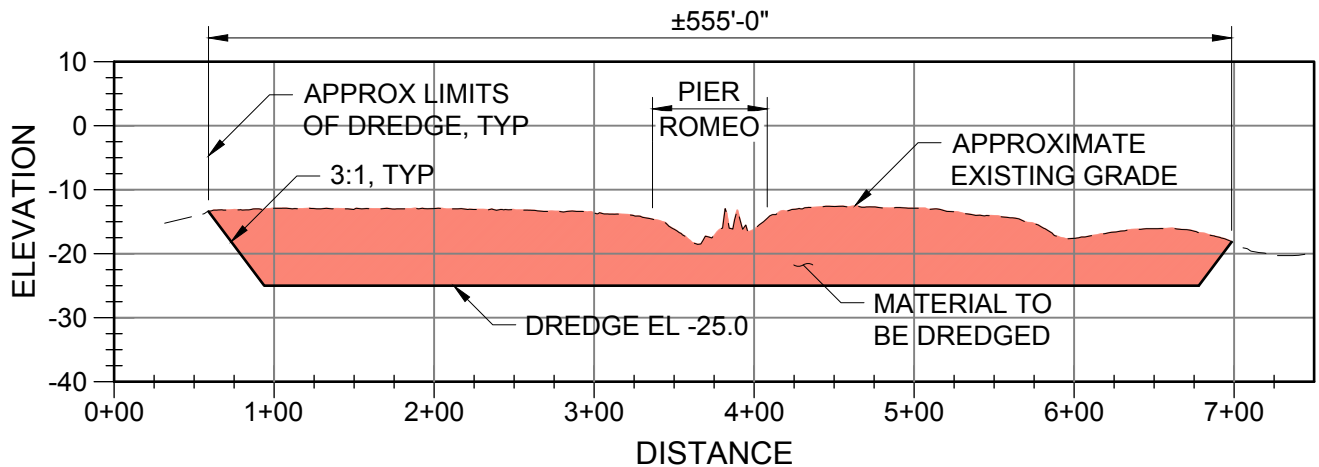


DREDGING AREA CONCEPT PLAN
SCALE: 1"=100'

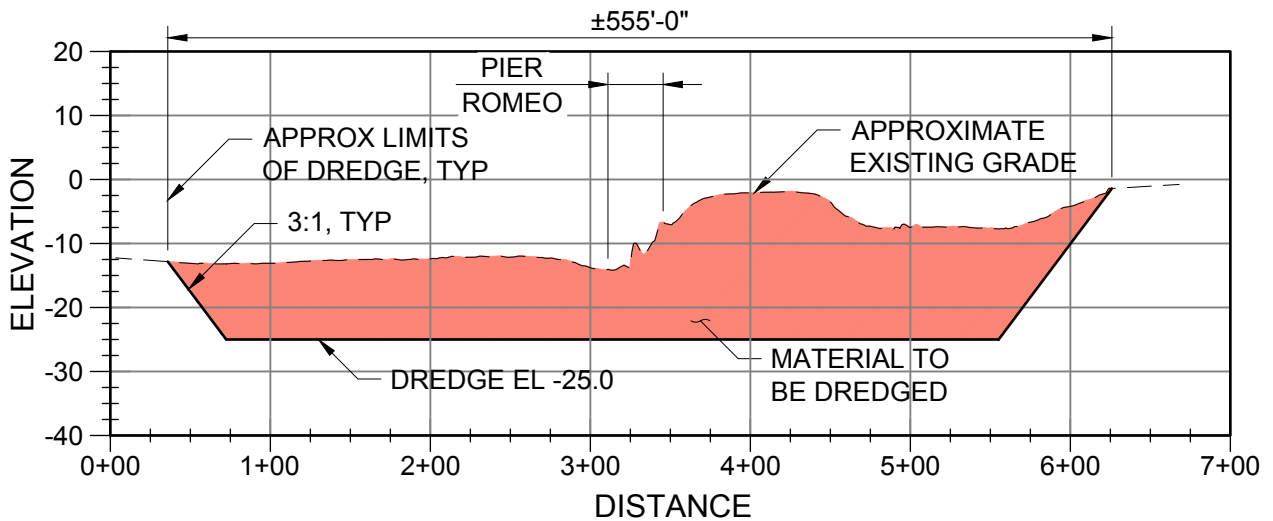




DREDGE SECTION C-C



DREDGE SECTION B-B

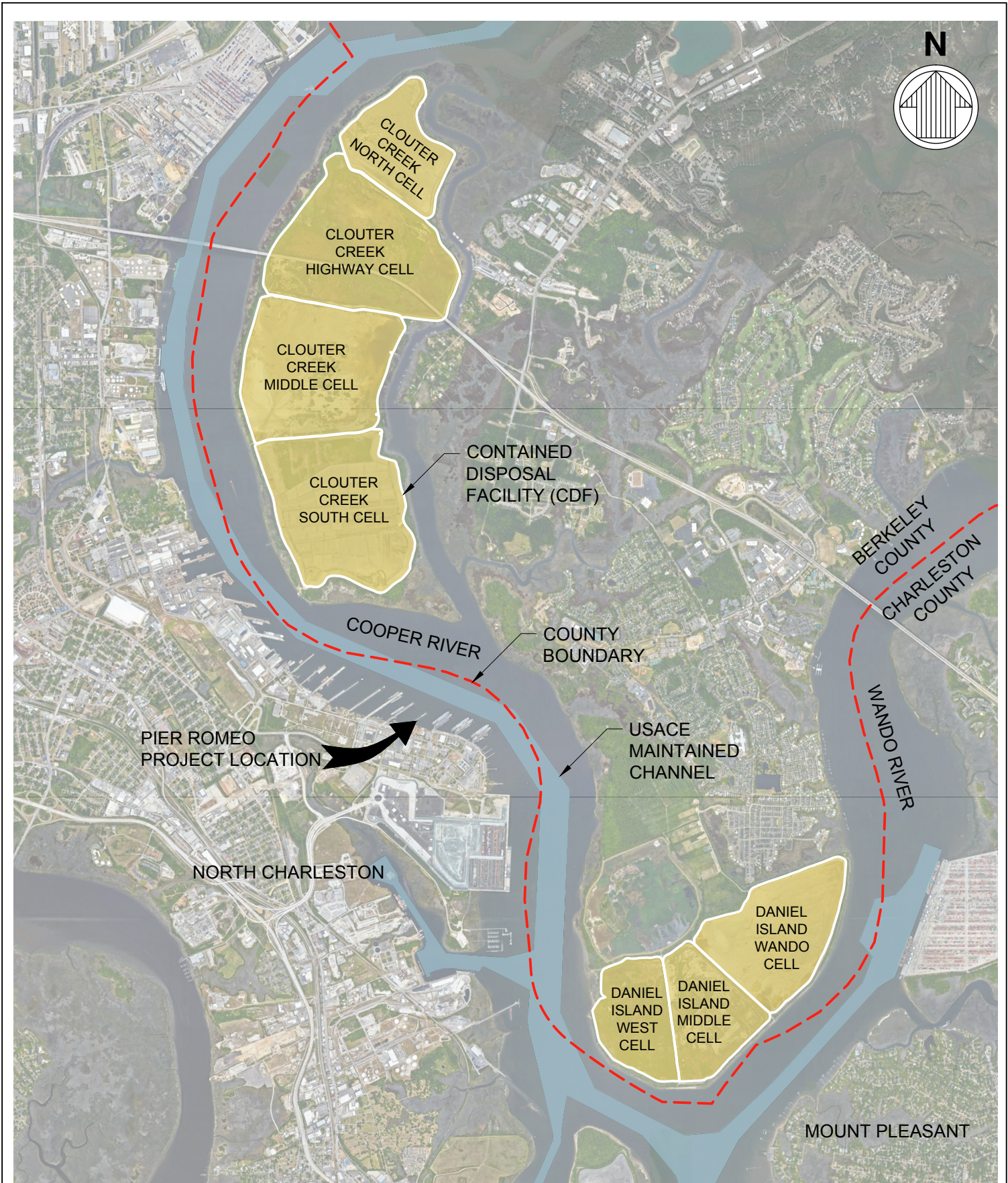


DREDGE SECTION A-A

DREDGE AREA TYPICAL SECTIONS

SCALE: NOTED





POTENTIAL DREDGING MATERIAL DISPOSAL SITES

SCALE: 1"=100'

