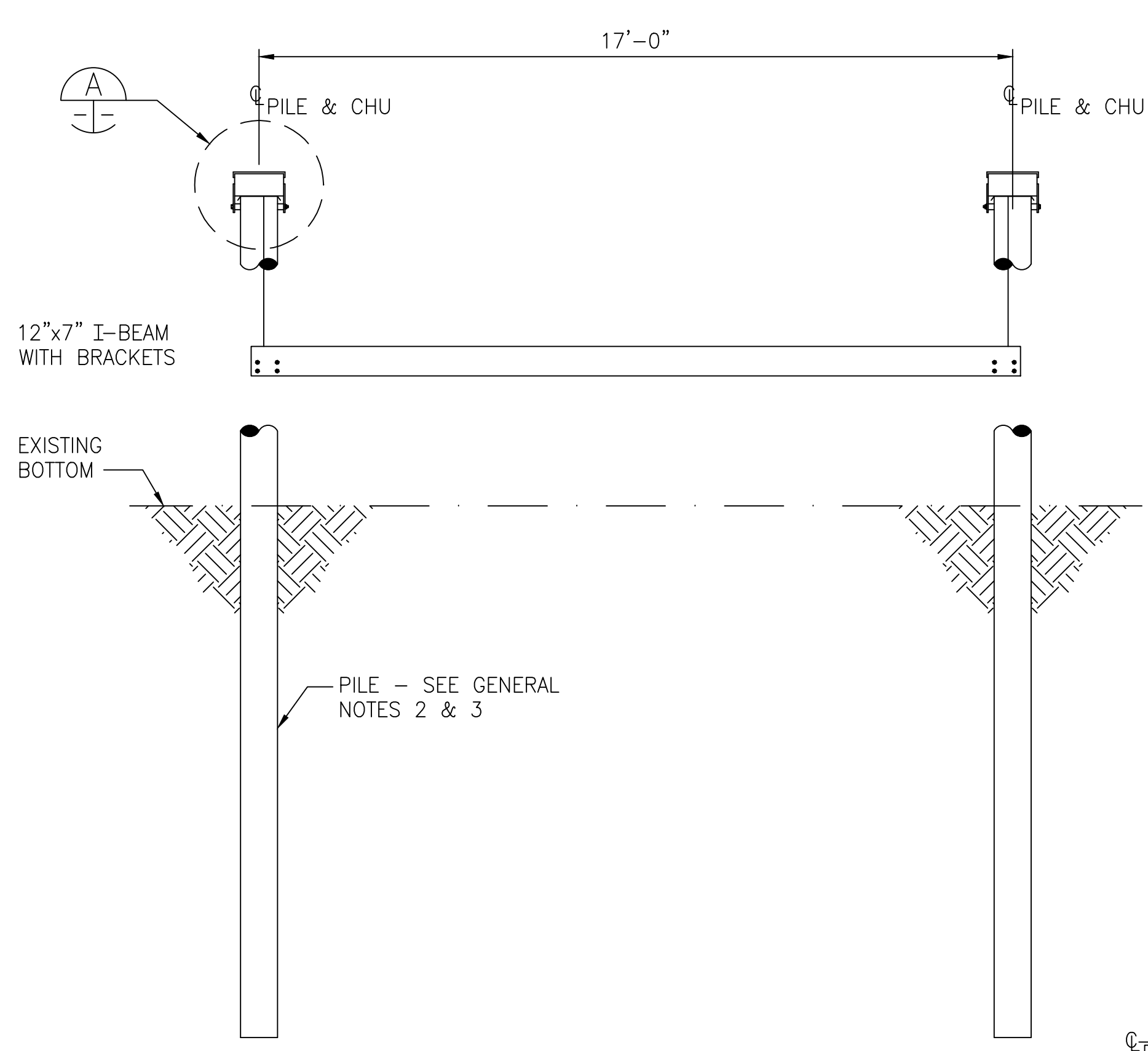


40,000 LB PLATFORM LIFT
PLAN VIEW
NTS

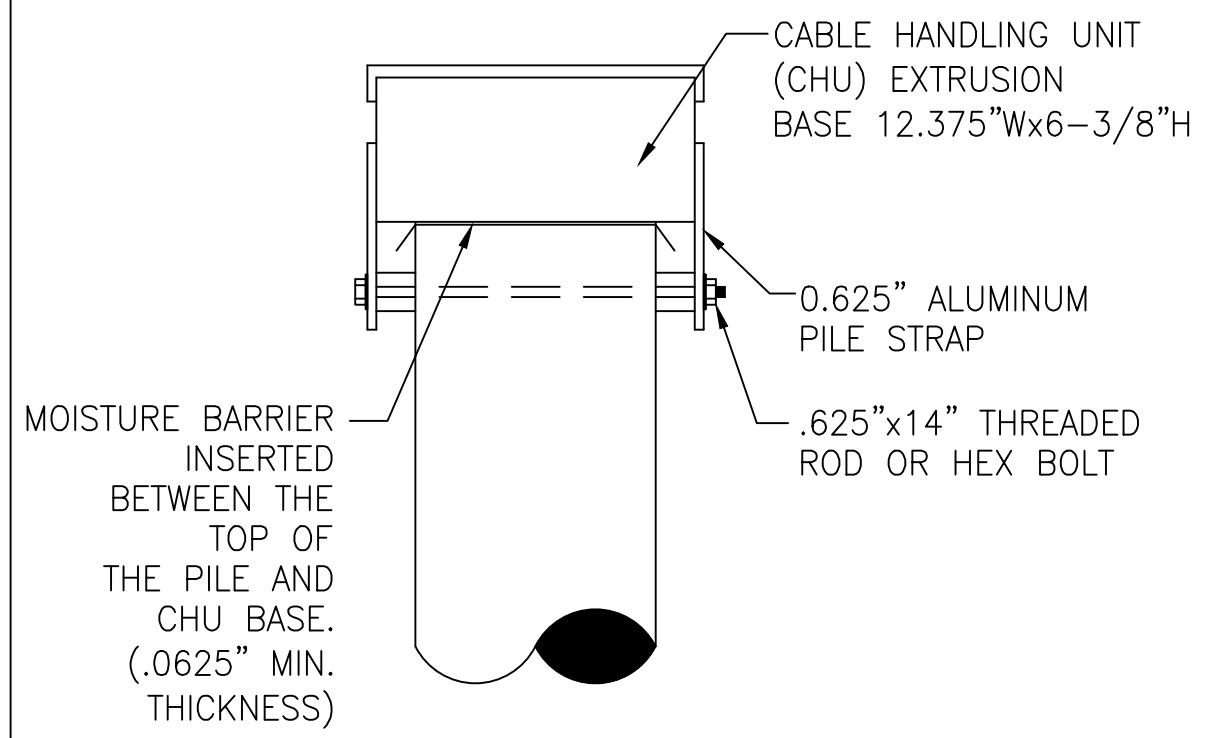


40,000 LB NO-PROFILE PLATFORM LIFT
CROSS SECTION
NTS

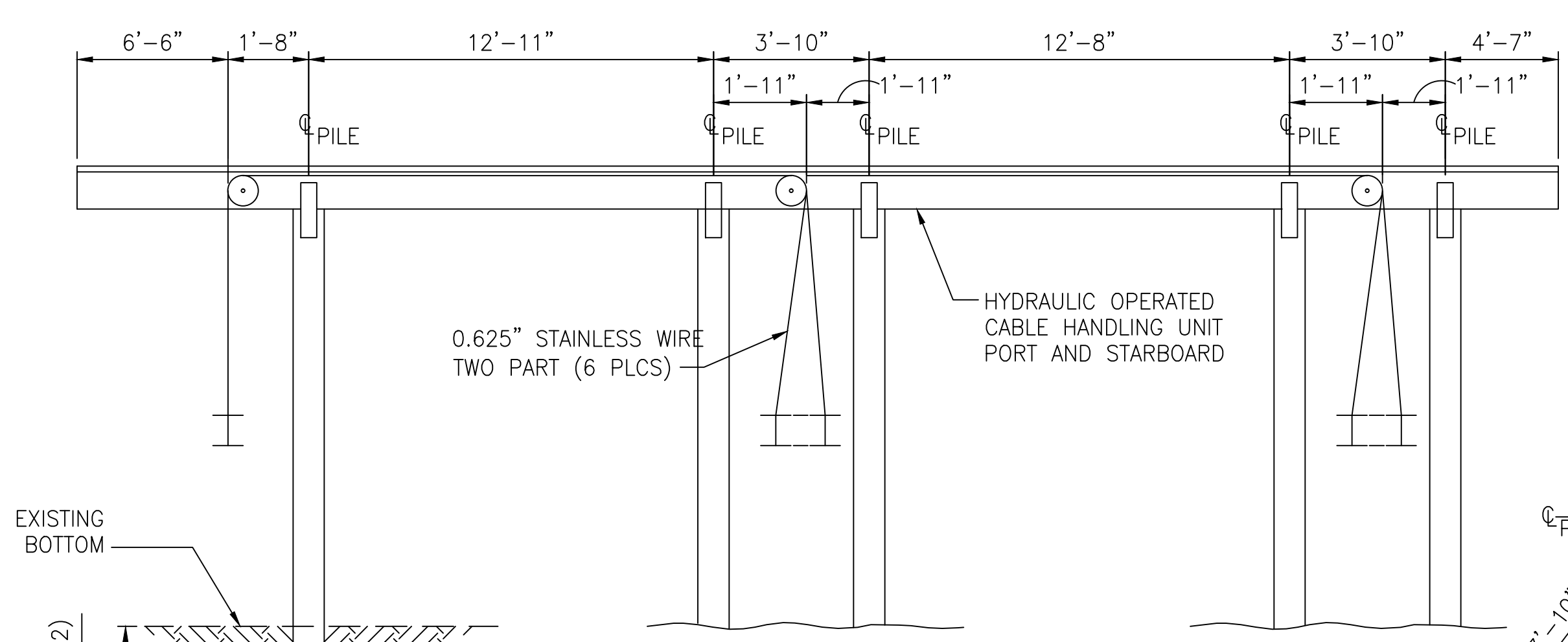
MPH	EXPOSURE (2)	WIND PRESSURE	PILE REACTIONS (5)	
			PERPENDICULAR TO CHU (3)	PARALLEL TO CHU (4)
180	C	52.1 PSF	2929#	1302#
180	D	63.0 PSF	3541#	1574#
170	C	46.4 PSF	2612#	1161#
170	D	49.7 PSF	3159#	1404#
160	C	41.1 PSF	2314#	1028#
160	D	56.2 PSF	2798#	1244#
150	C	36.2 PSF	2034#	904#
150	D	43.7 PSF	2459#	1093#
140	C	31.5 PSF	1772#	787#
140	D	38.1 PSF	2142#	952#
130	C	27.2 PSF	1528#	679#
130	D	32.8 PSF	1847#	821#
120	C	23.1 PSF	1302#	579#
120	D	28.0 PSF	1574#	699#

WIND LOADS
NTS

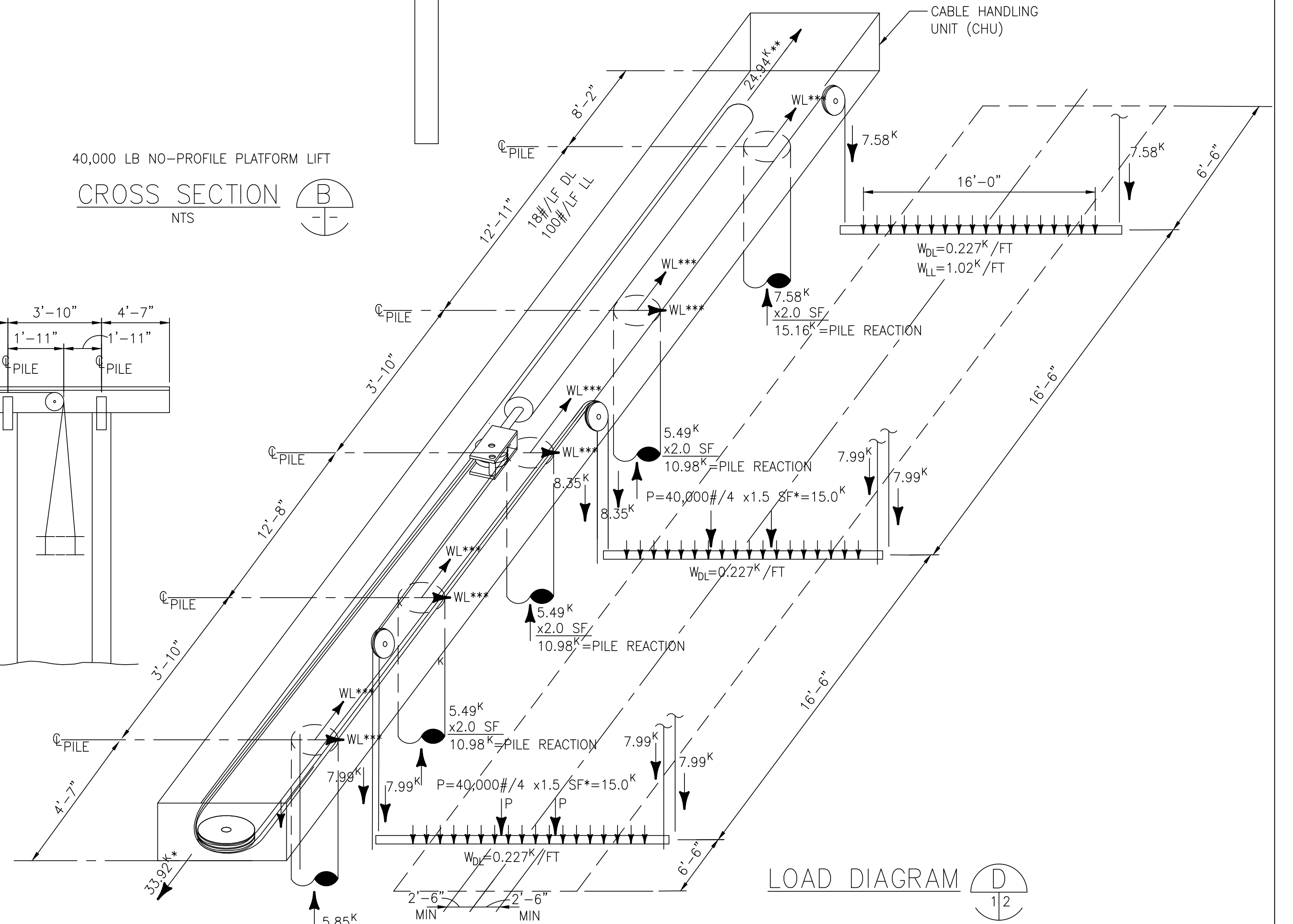
- NOTES:
- THE ALUMINUM BOAT HOIST STRUCTURE HAS BEEN DESIGNED FOR 180 MPH, RISK CATEGORY II EXPOSURE D.
 - EXPOSURE C APPLIES TO WATER EXPOSURE FOR AN UPWIND DISTANCE BETWEEN 1,500 AND 5,000 FEET. EXPOSURE D APPLIES TO WATER EXPOSURE FOR AN UPWIND DISTANCE OF 5,000 FEET OR GREATER.
 - WIND SPEED APPLIED TO 450 SQUARE FOOT SURFACE AREA AND DISTRIBUTED TO 8 PILES SUPPORTING THE BOAT CRADLE.
 - WIND PRESSURE APPLIED TO 250 SQUARE FOOT SURFACE AREA AND DISTRIBUTED TO 10 PILES.
 - PERPENDICULAR & PARALLEL PILE REACTIONS ARE NOT APPLIED SIMULTANEOUSLY.



PILE CONNECTION
DETAIL
1 1/2\"/>



SIDE VIEW
NTS



LOAD DIAGRAM
D
1/2

GENERAL NOTES:

- WAY MARINE DESIGN, INC. IS AN ALUMINUM BOAT LIFT MANUFACTURER. THIS DRAWING IS THE WORK PRODUCT OF THEIR SPECIALTY ENGINEER FOR THE BOAT LIFT PLATFORM, HOIST RIGGING COMPONENTS, HOUSING AND SUPPORT REACTIONS.
- PILE MATERIAL, DIAMETER, AND DEPTH TO BE DETERMINED BY OTHERS BASED ON THE REACTIONS PROVIDED AND LOCAL SOIL CONDITIONS.
- IF WOOD PILING IS USED, IT SHALL BE TREATED WITH 2.5 #/FT³ CCA. IF STEEL PILING IS USED, A CATHODIC ISOLATION BARRIER SHALL BE PROVIDED BETWEEN THE STEEL PILE AND THE ALUMINUM CHU.
- THE CONTRACTOR SHALL DETERMINE THE SUITABILITY OF ANY EXISTING STRUCTURES AND VERIFY ALL DIMENSIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS, METHODS, SEQUENCES AND PROCEDURES.
- ALL HARDWARE TO BE STAINLESS STEEL UNLESS OTHERWISE NOTED.
- THE LIFT IS DESIGNED PER FLORIDA BUILDING CODE 7TH EDITION (2020).
 - DECK LIVE LOAD = 60 PSF.
 - WIND LOAD- THE ALUMINUM BOAT HOIST STRUCTURE HAS BEEN DESIGNED PER ASCE 7-16 SOLID SIGN CRITERIA FOR 180 MPH, RISK CATEGORY II EXPOSURE D.
 - SEE TABLE FOR PILE REACTIONS FOR LATERAL WIND LOADS OF VARYING SPEEDS AND EXPOSURE CLASSIFICATIONS.
 - HOIST LIVE LOAD = 40,000 POUNDS

- * 1.5 SAFETY FACTOR TO ACCOUNT FOR IMPACT, UNBALANCED LOADING/OVERLOADING/AND HOIST ACCELERATION AT CROSS BEAMS, CABLES, AND SINGLE PULLEYS
- ** 1.1 SAFETY FACTOR FOR HOIST ACCELERATION AT MULTIPLE CABLE PULLEYS AND PISTON.
- *** WL EQUALS WINDLOAD. SEE SCHEDULE ABOVE.
- **** 60 PSF LIVE LOAD NOT APPLIED CONCURRENT WITH BOAT LOADS AND IS NOT A HOIST REQUIREMENT.

GEORGE J. LEVERETT PE
STRUCTURAL ENGINEERING, LLC
3606 RIVER HALL DRIVE JACKSONVILLE FL, 32217
CERTIFICATE OF AUTHORIZATION No 28761
(904) 955-0336

NO PROFILE BOAT LIFT		40,000 LB PLATFORM	
SCALE: AS NOTED	APPROVED BY:	DRAWN BY: APN	
DATE: 12/31/20	OWNER:	REVISED:	
GEORGE J. LEVERETT, P.E. FL PE# 38336		ADDRESS:	
		WMD 40KPL PERM	