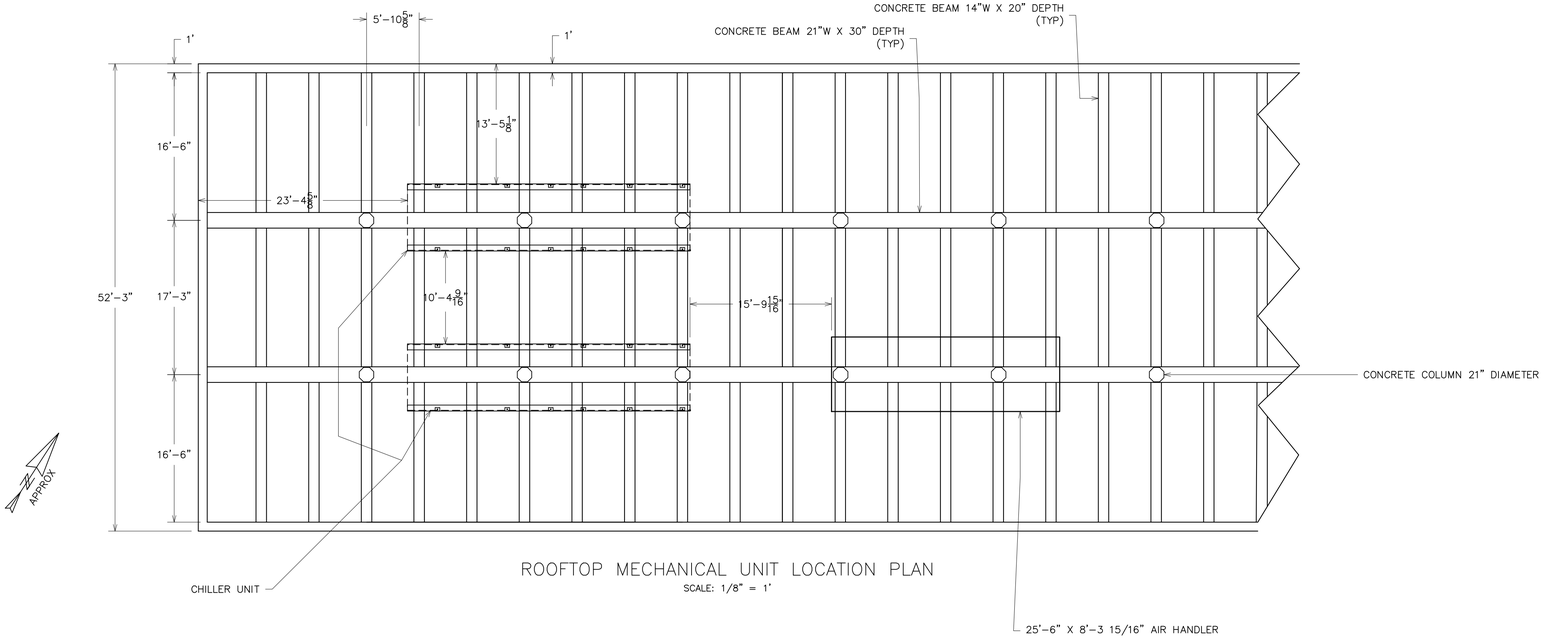
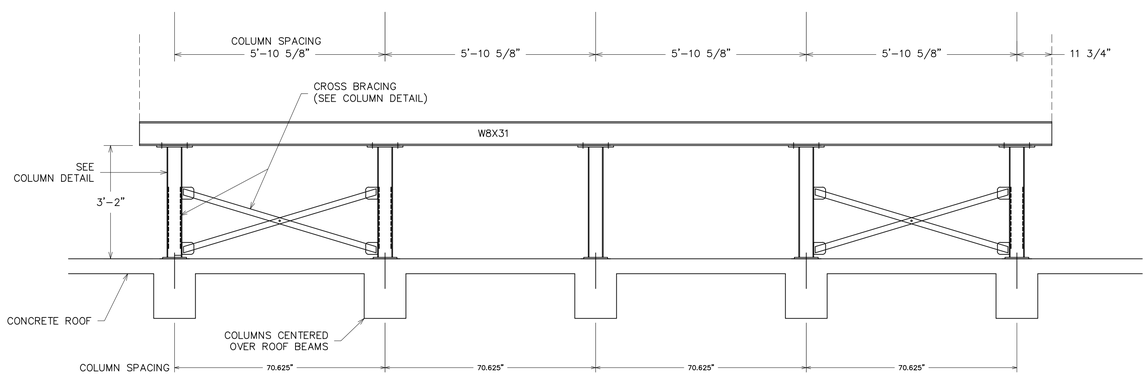


ROOFTOP MECHANICAL UNIT LOCATION PLAN

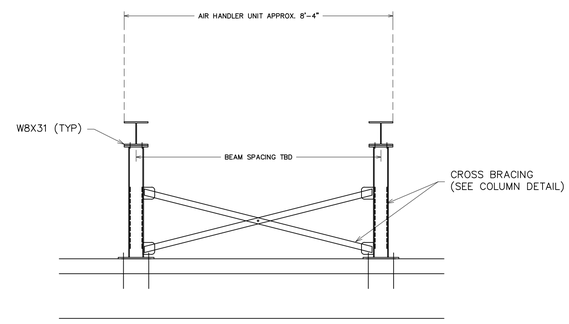
SCALE: 1/8" = 1'



SIDE STEEL ELEVATION (AIR HANDLER)

SCALE: 1/2" = 1'

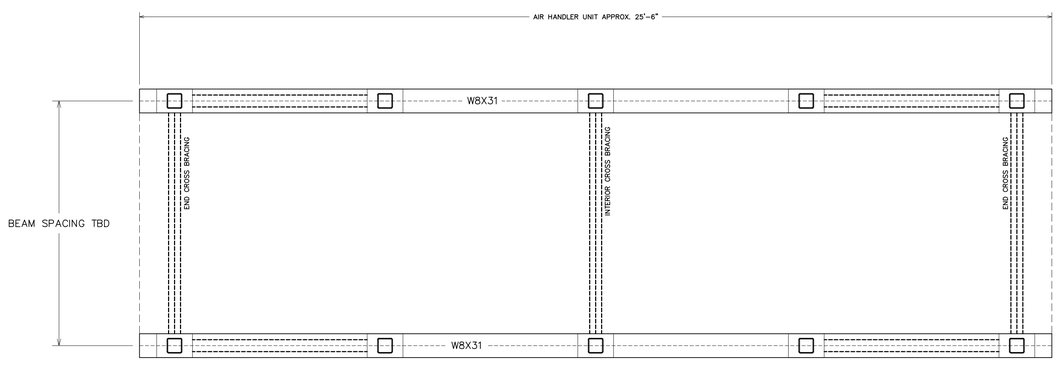
SEE GENERAL NOTE 10



END STEEL ELEVATION (AIR HANDLER)

SCALE: 1/2" = 1'

SEE GENERAL NOTE 10



STEEL PLAN (AIR HANDLER)

SCALE: 1/2" = 1'

SEE GENERAL NOTE 10

GENERAL NOTES

1.THIS PLAN PROVIDES A STRUCTURAL DESIGN FOR THE SUPPORT OF THREE PROPOSED MECHANICAL UNITS CONSISTING OF TWO CHILLERS AND ONE AIR HANDLER TO BE PLACED ON THE EXISTING ROOF OF THE SHIPYARD BREWERY IN PORTLAND, MAINE.

2. ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF ALL APPLICABLE STATE AND LOCAL CODES, INCLUDING BUT NOT LIMITED TO:

2009 INTERNATIONAL BUILDING CODE (IBC)
ANSI/ASCE 7-98
ACI 318-99 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE"
ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"
AISC STEEL CONSTRUCTION MANUAL
ANSI/AF&PA NDS-97

ANY DISCREPANCIES BETWEEN THE ABOVE LISTED CODES AND THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH WORK.

3. ALL WORK SHALL BE PERFORMED BY PERSONS QUALIFIED IN THEIR TRADE AND LICENSED TO PRACTICE SUCH TRADE IN THE STATE IN WHICH THE PROJECT IS LOCATED.

4. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH ANY ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS IN ADDITION TO SPECIFICATIONS AND ANY SHOP DRAWINGS PROVIDED BY SUBCONTRACTORS AND SUPPLIERS.

5. ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR (G.C.) AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION BEFORE PROCEEDING WITH THE AFFECTED PART OF WORK.

6. UNLESS OTHERWISE NOTED, DETAILS, SECTIONS, AND NOTES SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED TYPICAL FOR ALL SIMILAR DETAILS.

7. THESE DRAWINGS DO NOT SHOW SIZE, LOCATION, OR TYPE OF OPENINGS IN THE FOUNDATION SYSTEM FOR ELECTRICAL, PLUMBING, OR MECHANICAL EQUIPMENT. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF THESE ITEMS.

8. ALL SHOP DRAWINGS PROVIDED BY OTHERS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO THE FABRICATION OF MATERIAL OR THE PURCHASE OF NON-RETURNABLE STOCK. QUANTITY AND DIMENSIONAL REVIEW IS THE CONTRACTOR'S RESPONSIBILITY.

9. ANY AND ALL TEMPORARY BRACING OR SHORING WHICH IS NEEDED TO HOLD THE STRUCTURE IN A SAFE AND STABLE POSITION UNTIL THE BUILDING IS COMPLETE, IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

10. THE CHILLER DIMENSIONS AND ASSOCIATED ISOLATOR MOUNTING LOCATIONS WERE PROVIDED BY THE CHILLER MANUFACTURER. FINAL ISOLATER PLATE DIMENSIONS AND BOLT HOLE LOCATIONS SHALL BE VERIFIED BY THE OWNER/G.C. PRIOR TO CONSTRUCTION. NO SPECIFIC MOUNTING LOCATIONS FOR THE AIR HANDLER WERE PROVIDED.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL WORK SHALL CONFORM TO ALL REQUIREMENTS OF THE 2009 INTERNATIONAL BUILDING CODE.

2. STRUCTURAL STEEL WORK SHALL CONFORM TO "SPECIFICATIONS FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC CURRENT EDITION)", "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS (AISC CURRENT EDITION)", AND "STRUCTURAL WELDING CODE (AWS DI.1-98)".

3. STRUCTURAL STEEL SHALL BE NEW STEEL CONFORMING TO THE FOLLOWING:
A) ROLLED SHAPES AND PLATES – ASTM A36 (EXCEPT AS NOTED BELOW)
B) WIDE FLANGE SHAPES ASTM A572, 50 KSI
C) STRUCTURAL TUBES – ASTM A500, GRADE B
D) ANCHOR RODS – ASTM F1554 GRADE 36

4. ALL BOLTED CONNECTIONS SHALL USE NEW BOLTS. SLIP-CRITICAL BOLTS ARE PROHIBITED FROM ALL CONNECTIONS. ALL BOLTS SHALL BE INSTALLED AS BEARING TO A 'SNUG-TIGHTENED' CONDITION, UNLESS NOTED OTHERWISE ON THE DRAWINGS. ALL BOLTED CONNECTIONS SHALL BE DESIGNED, FABRICATED, AND INSTALLED IN COMPLIANCE WITH RCSC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS", DATED JUNE 23, 2000.

5. SINGLE ANGLE SHEAR CONNECTIONS SHALL NOT BE USED.

6. VOIDS BENEATH COLUMN BASE PLATES SHALL BE DRY PACKED WITH NON-SHRINK CONSTRUCTION GROUT BEFORE APPLICATION OF LOADS.

7. WELDED CONNECTIONS SHALL BE MADE BY AMERICAN WELDING SOCIETY (AWS) QUALIFIED WELDERS USING FILLER MATERIAL CONFORMING TO E70XX.

8. PROVIDE TEMPORARY ERECTION BRACING TO HOLD STRUCTURAL STEEL FRAMING SECURELY IN PLACE. MAINTAIN BRACING UNTIL FLOOR DECK AND PERMANENT LATERAL BRACING ARE FULLY INSTALLED. BRACING REQUIREMENTS ARE NOT PROVIDED BY THE E.O.R.

9. STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE CONNECTIONS ARE FINALLY BOLTED OR WELDED.

10. ALL BOLTS AND FIELD WELDING MUST BE COMPLETED PRIOR TO RELEASING HOISTING CABLES.

11. FIELD CUTTING OF STRUCTURAL STEEL OR ANY MODIFICATIONS SHALL NOT BE MADE WITHOUT APPROVAL BY ENGINEER.

LOCATION PLAN AND NOTES

S-0

ROOFTOP MECHANICAL UNIT INSTALLATION
SHIPYARD BREWERY
PORTLAND, MAINE

NO.	DESCRIPTION	DATE
	REVISIONS	

STATE OF MAINE
LEWIS CHAMBERLAIN
No. 9762
LICENSED
PROFESSIONAL ENGINEER

FOR: SEA DOG REALTY
86 NEWBURY STREET
PORTLAND, ME 04101

ATTAR ENGINEERING, INC.
CIVIL ◆ STRUCTURAL ◆ MARINE
1284 STATE ROAD – ELIOT, MAINE 03903
PHONE: (207)439-6023 FAX: (207)439-2128

SCALE: AS NOTED	APPROVED BY:	DRAWN BY: CLS
DATE: 10/14/15		REVISION : DATE – : –
JOB NO: C126-15	CAD FILE: SHIPYARD CHILLER 2	SHEET S-0