

② FINISHED SQUARE FOOTAGE
1/8" = 1'-0"

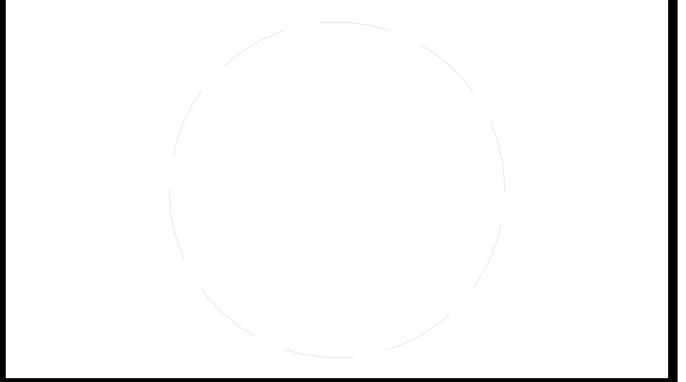
① ROOM AREAS AND EGRESS PLAN
1/4" = 1'-0"



TEAM NAME: ALFRED
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RESOURCE FURNITURE
APRICUS SOLAR HOT WATER
BIG ASS SOLUTIONS
KOHLER
THERMAL FOAMS
LABELLA ASSOCIATES D.P.C.



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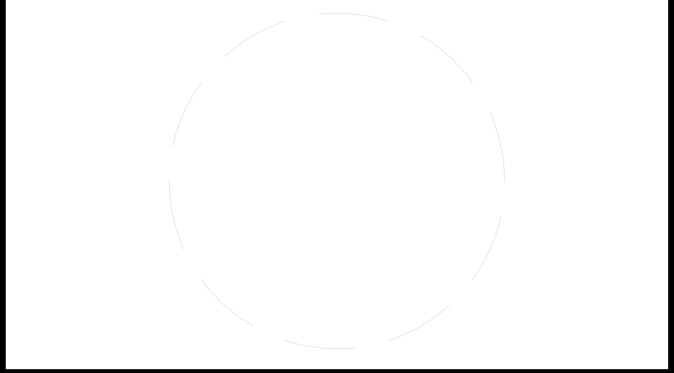
SHEET TITLE
FINISHED SF COMPLIANCE & EGRESS PLAN

G-101



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GENERAL PROJECT RENDERINGS

G-901



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SHEET TITLE

LIQUID LOCATION AND SPILL CONTAINMENT PLAN

H-101





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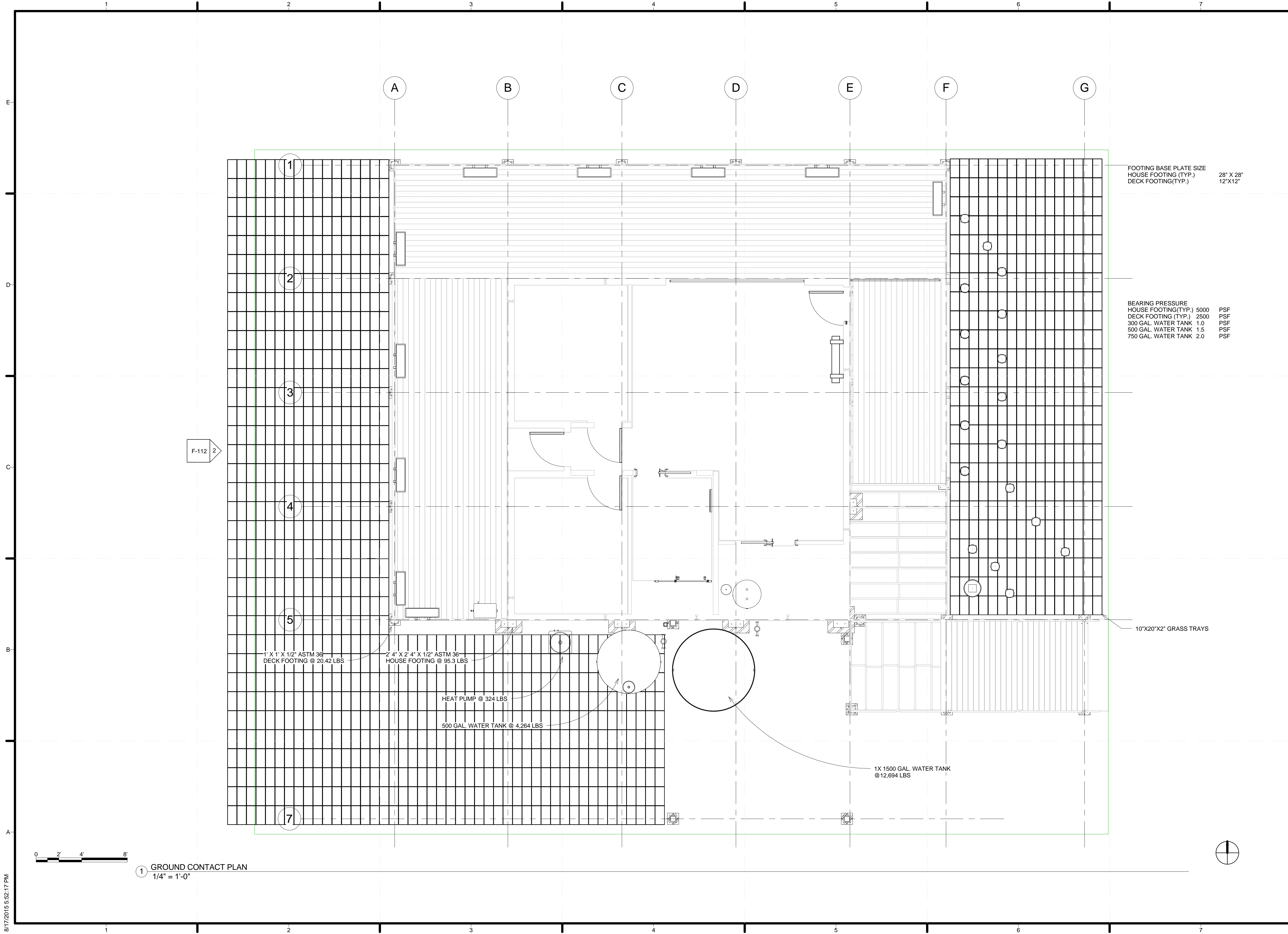
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SHEET TITLE
 GROUND CONTACT PLAN

C-101



FOOTING BASE PLATE SIZE
 HOUSE FOOTING (TYP.) 28" X 28"
 DECK FOOTING (TYP.) 12" X 12"

BEARING PRESSURE
 HOUSE FOOTING (TYP.) 5000 PSF
 DECK FOOTING (TYP.) 2500 PSF
 300 GAL. WATER TANK 1.0 PSF
 500 GAL. WATER TANK 1.5 PSF
 750 GAL. WATER TANK 2.0 PSF

1 GROUND CONTACT PLAN
 1/4" = 1'-0"

GENERAL NOTES:

- BUILDING CODES: BUILDING CODE OF NEW YORK STATE, 2010; CALIFORNIA BUILDING CODE, 2013; SOLAR DECATHLON 2015 BUILDING CODE, 2012 INTERNATIONAL RESIDENTIAL CODE.
- CONSTRUCTION LOADING: DURING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL LIMIT AND CONTROL CONSTRUCTION LOADING, INCLUDING BUT NOT LIMITED TO:
 - MATERIAL STOCKPILING AND CONSTRUCTION
 - EQUIPMENT TO PRECLUDE OVERSTRESSING, CONSTRUCTION LIVE LOAD IN EXCESS OF 20 PSF, OR DAMAGE TO ANY STRUCTURAL ELEMENT.
- COORDINATION WITH OTHER DISCIPLINES: THE CONTRACTOR SHALL COORDINATE ALL STRUCTURAL WORK WITH THE ARCHITECTURAL, ELECTRICAL, MECHANICAL, PLUMBING AND FIRE PROTECTION DRAWINGS AND SPECIFICATIONS.

FOUNDATION NOTE:

- NO GEOTECHNICAL INFORMATION WAS AVAILABLE AT THE TIME OF DESIGN. ASSUMED ALLOWABLE BEARING PRESSURE = 6,000 PSF IN ACCORDANCE WITH THE SOLAR DECATHLON 2015 BUILDING CODE.

WOOD FRAMING NOTE:

- WOOD CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF THE NATIONAL FOREST PRODUCTS ASSOCIATION'S (NFPA) NATIONAL DESIGN SPECIFICATIONS (NDS) AND CHAPTER 23 OF THE BUILDING CODE OF NYS, LATEST EDITION.
- MINIMUM DESIGN VALUES SHALL BE AS FOLLOWS (U.O.N. ON PLANS):
 - INTERIOR DIMENSIONAL LUMBER SHALL BE SPRUCE-PINE-FIR #2.
 - EXTERIOR DIMENSIONAL LUMBER FOR DECK FRAMINGS AND RAILINGS SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE #2.
 - ALL OTHER EXTERIOR DIMENSIONAL SHALL BE SPRUCE-PINE-FIR #2.
- TJI FRAMING
 - RIM BOARD: TJI 1 1/8" X (DEPTH TO MATCH JOIST DEPTH). SAWN LUMBER FOR RIM BOARD IS NOT PERMITTED. SEE MANUFACTURER'S SPECIFICATION FOR INSTALLATION REQUIREMENTS.
 - OPENINGS AND NOTCHES ARE PERMITTED ONLY IN ACCORDANCE WITH TJI MANUFACTURER'S RECOMMENDATIONS/SPECIFICATIONS AND MUST BE SUBMITTED TO ENGINEER FOR REVIEW.
 - SHEATHING MUST BE COMPLETELY ATTACHED TO EACH TJI JOIST BEFORE ADDITIONAL LOADS CAN BE PLACED ON THE SYSTEM.
 - DO NOT BEVEL CUT JOIST BEYOND INSIDE FACE OF WALL.
 - WOOD IN CONTACT WITH MASONRY, CONCRETE OR EARTH, OR WITHIN 1'-0" OF GRADE OR EXPOSED TO THE EXTERIOR SHALL BE PRESURE PRESERVATIVE TREATED.
- FRAMING ANCHORS AND MISCELLANEOUS METAL DEVICES FOR ALL FRAMING SHALL BE GALVANIZED STEEL OF AT LEAST 16 GAUGE THICKNESS (G90 FOR INTERIOR APPLICATION, G185 OR STAINLESS STEEL FOR EXTERIOR), INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. USE FASTENERS AND FASTENING METHODS RECOMMENDED BY THE MANUFACTURER. EXTERIOR EXPOSED ANCHORS AND ANCHORS IN CONTACT WITH PRESURE TREATED WOOD TO BE STAINLESS OR GALVANIZED (G185).
- BUILT UP FRAMING MEMBERS SHALL BE FASTENED IN ACCORDANCE WITH NDS STANDARDS U.O.N.
- NOTCHES, COPES, AND HOLES IN WOOD MEMBERS ARE NOT PERMITTED UNLESS SPECIFICALLY DETAILED. NOTCHES, COPES, AND HOLES IN PRE-ENGINEERED MEMBERS SHALL BE IN ACCORDANCE WITH AND APPROVED BY MANUFACTURER.
- ROOF TRUSSES, INCLUDING DESIGN FRAMING CONNECTORS, BRACING ERECTION AND QUALITY SHALL CONFORM TO THE SPECIFICATIONS AND RECOMMENDATIONS OF NFPA AND THE TRUSS PLATE INSTITUTE (TPI).
- SHEATHING SHALL BE RATED AS FOLLOWS (CHECK THAT IT MEETS DESIGN LOADS)
 - WALL: APA RATED 24" O.C. EXPOSURE I (7/16" MIN. THICKNESS)
 - FLOOR: APA RATED 24" O.C. EXPOSURE I (3/4" MIN. THICKNESS)
 - ROOF: APA RATED 48/24, EXPOSURE I (5/8" MIN. THICKNESS)
- SHEATHING SHALL BE CONTINUOUS OVER TWO OR MORE SUPPORTS FLOOR AND ROOF SHEATHING SHALL BE ORIENTED WITH THE STRENGTH AXIS PERPENDICULAR TO THE SUPPORTS. WALL SHEATHING CAN BE ORIENTED PERPENDICULAR OR PARALLEL.
- WALL SHEATHING SHALL HAVE 2X BLOCKING OR FRAMING MEMBERS BEHIND ALL PANEL EDGES.
- UNLESS NOTED OTHERWISE, THE MINIMUM FASTENING FOR SHEATHING SHALL BE AS FOLLOWS:
 - WALL: 8D COMMON NAILS @ 6" (EDGE) & 12" (FIELD)
 - FLOOR: GLUED AND 10D COMMON NAILS @ 6" O.C. (PANEL EDGES) AND 12" O.C. (FIELD)
 - ROOF: 10D COMMON NAILS @ 6" O.C. (PANEL EDGES) AND 12" O.C. (FIELD)
 - GWB: #6 - 1 1/4" SCREWS AT 8" (EDGE) AND 12" (FIELD)
- WOOD CONNECTORS: USP STRUCTURAL CONNECTORS USED AS BASIS OF DESIGN. SIMPSON STRONG-TIE CONNECTORS OF EQUAL STRENGTH ARE ACCEPTABLE.
- BOLTS THROUGH WOOD MEMBERS SHALL BE ASTM A307

STRUCTURAL DESIGN CRITERIA

TYPE	DESCRIPTION	DESIGN CRITERIA			CODE REFERENCE
		MARK	VALUE	UNITS	
BUILDING DATA	BUILDING OCCUPANCY CATEGORY		II		NYSBC TABLE 1604.5
FLOOR LIVE LOAD	INTERIOR FLOOR, DECKS, RAMPS	LL1	50	PSF	U.S. DEPT. OF ENERGY SOLAR DECATHLON 2015 BUILDING CODE
	EXTERIOR FLOOR, DECKS, RAMPS USED FOR EGRESS	LL2	100	PSF	
ROOF LIVE LOAD	ROOF CONSTRUCTION LOAD	LLr	20	PSF	
SNOW LOAD	IMPORTANCE FACTOR	IS	1.0		ASCE 7 -10 TABLE 1.5-2
	GROUND SNOW LOAD	Pg	40	PSF	NYSBC FIGURE 1608.2
	SNOW EXPOSURE FACTOR	Ce	1.0		ASCE 7 -10 TABLE 7-2
	THERMAL FACTOR	Ct	1.0		ASCE 7-10 TABLE 7-3
	FLAR ROOF SNOW	Pf	28	PSF	ASCE 7-10 SECTION 7.3
WIND LOAD (MAIN WIND RESISTING SYSTEM)	DRIFTING SNOW	AS REQ. PER ASCE 7-10			ASCE 7-10 SECTION 7.7
	ANALYSIS PROCEDURE	DIRECTIONAL DESIGN METHOD			ASCE 7-10 CHAPTER 27
	WIND EXPOSURE CATEGORY	C			SD 2015 BC
	IMPORTANCE FACTOR	Iw	1.0		ASCE 7-10 TABLE 1.5-2
	BASIC WIND SPEED (3 SEC. GUST)	V	115	MPH	ASCE 7-10 FIGURE 26.5-1A
WIND LOAD (COMPONENTS & CLADDING)	DESIGN WIND PRESSURE - HORIZONTAL		+21.1/19.2	PSF	ASCE 7-10 SECTION 27.4.1
	DESIGN WIND PRESSURE - VERTICAL		+16.0/-27.6	PSF	ASCE 7-10 SECTION 21.4.1
	DESIGN WIND PRESSURE - WALLS		+26.4/-35.2	PSF	ASCE 7-10 CHAPTER 30
EARTHQUAKE LOAD	DESIGN WIND PRESSURE - ROOF ZONES 1/2/3		+16.0/-31.3 +16.0/-36.2 +16.0/-48.4	PSF	ASCE 7-10 CHAPTER 30
	SEISMIC - FORCE RESISTING SYSTEM	A . LIGHT - FRAME WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS			ASCE 7-10 TABLE 12.2-1
	SEISMIC USE GROUP	II			ASCE 7-10 TABLE 1.5-1
	SOIL SITE CLASSIFICATION	D			CALIF. BC SECTION 1613.3.2
	SPECTRAL RESPONSE ACCELERATION AT 0.2 SEC	Sss	1.498	g	CALIF. BC FIGURE 1613.3.1(1)
	SPECTRAL RESPONSE ACCELERATION AT 0.1 SEC	S1	0.556	g	CALIF. BC FIGURE 1613.3.1(2)
	SEISMIC IMPORTANCE FACTOR	IE	1.00		ASCE 7-10 TABLE 1.5-2
	DESIGN SPECTRAL RESPONSE COEFFICIENT	SDS	0.999	g	CALIF. BC SECTION 1613.3.4
	DESIGN SPECTRAL RESPONSE COEFFICIENT	SD1	0.556	g	CALIF. BC SECTION 1613.3.4
	SEISMIC DESIGN CATEGORY	D2			IRC TABLE 301.2.2.1.1
ANALYSIS PROCEDURE	CS	0.154		ASCE 7-10 SECTION 12.8	
SEISMIC RESPONSE COEFFICIENT	R	6.5		ASCE 7-10 SECTION 12.8.1.1	
RESPONSE MODIFICATION FACTOR	V	9.2	KIPS	ASCE 7-10 TABLE 12.2-1	
NOTES	1. ALL DESIGN LOADS SHALL BE DETERMINED IN ACCORDANCE WITH THE "BUILDING CODE OF NEW YORK" (LATEST EDITION) ASCE 7-10 SECTION 12.8.1				
	2. MINIMUM DESIGN WIND PRESSURES SHALL NOT BE LESS THAN 16 PSF. 3. WIND LOADS ARE PROVIDED FOR THE TYPICAL "FIELD" SURFACES OF THE MAIN WIND FORCE RESISTING SYSTEM AND FOR COMPONENT AND CLADDING. INCREASED WIND PRESSURES AT EDGES, OVERHANGS, AND OTHER SURFACES ARE AS DEFINED IN ASCE 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES".				

STRUCTURAL ABBREVIATIONS LEGEND

ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
APPROX.	APPROXIMATE
ARCH.	ARCHITECT/ARCHITECTURAL
B.O.	BOTTOM OF
BCNYS '10	BUILDING CODE OF NEW YORK STATE 2010 EDITION
CIP	CAST-IN-PLACE
CONC.	CONCRETE
C.J.	CONSTRUCTION JOINT
CONT.	CONTINUOUS
COV.	COVER
DIA.	DIAMETER
E.F.	EACH FACE
E.S.	EACH SIDE
E.W.	EACH WAY
ELEV.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
(E)	EXISTING
FW	FLATWISE
F.D.	FLOOR DRAIN
F	FOOTING
FTG.	FOOTING
FNDN.	FOUNDATION
GA.	GAGE
GALV.	GALVANIZED
H.S.	HIGH STRENGTH
HORIZ.	HORIZONTAL
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
MANUF.	MANUFACTURER
MAX.	MAXIMUM
MECH.	MECHANICAL
MIN.	MINIMUM
(N)	NEW
O.C.	ON CENTER
P	PIER (SEE SCHEDULE)
PLF	POUNDS PER LINEAR FOOT
REINF.	REINFORCING, REINFORCEMENT
S.J.	SAW-CUT CONTROL JOINT
SPA. SP.	SPACE OR SPACING
STD.	STANDARD
SDI	STEEL DECK INSTITUTE
T&B	TOP & BOTTOM
T.O.	TOP OF
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
V.I.F.	VERIFY IN FIELD
VERT.	VERTICAL
W.W.R.	WELDED WIRE REINFORCEMENT
W/	WITH
W.P.	WORKING POINT



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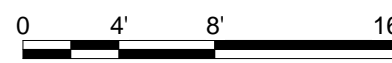
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STRUCTURAL SYMBOLS AND NOTES

S-001



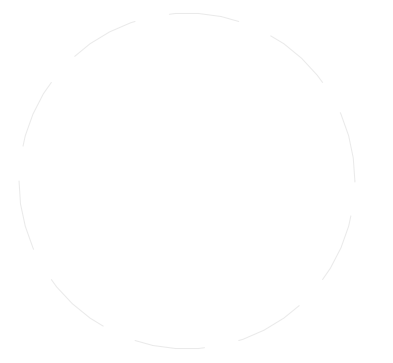


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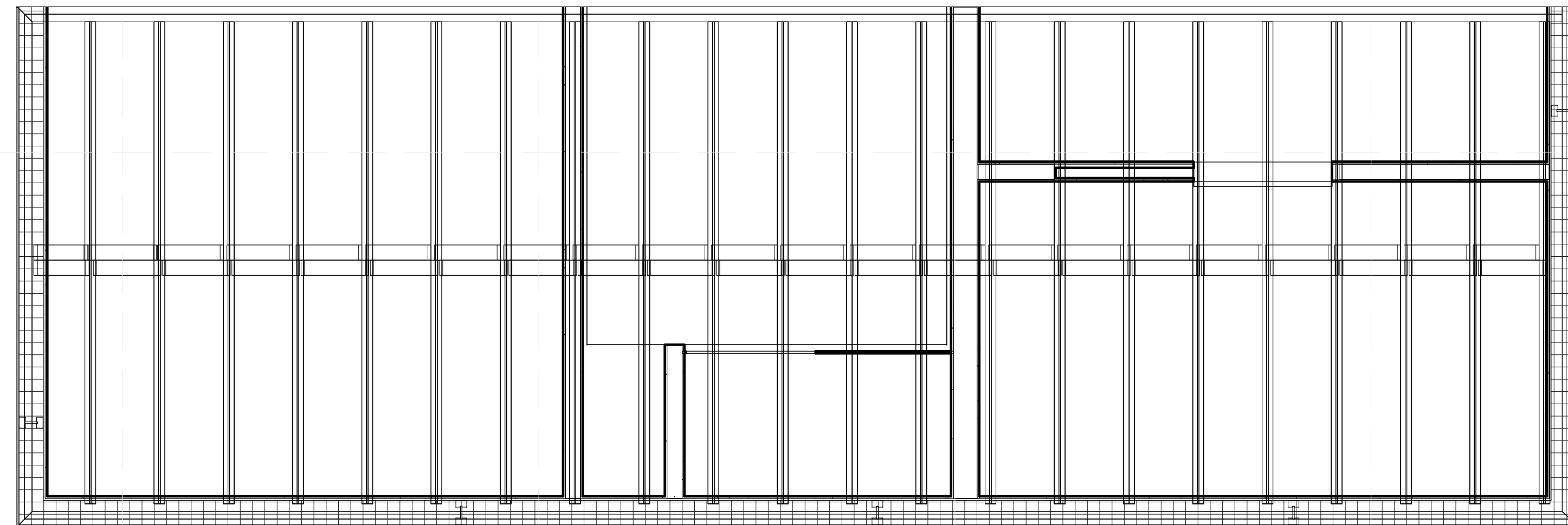
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MODULE 1

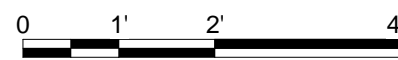
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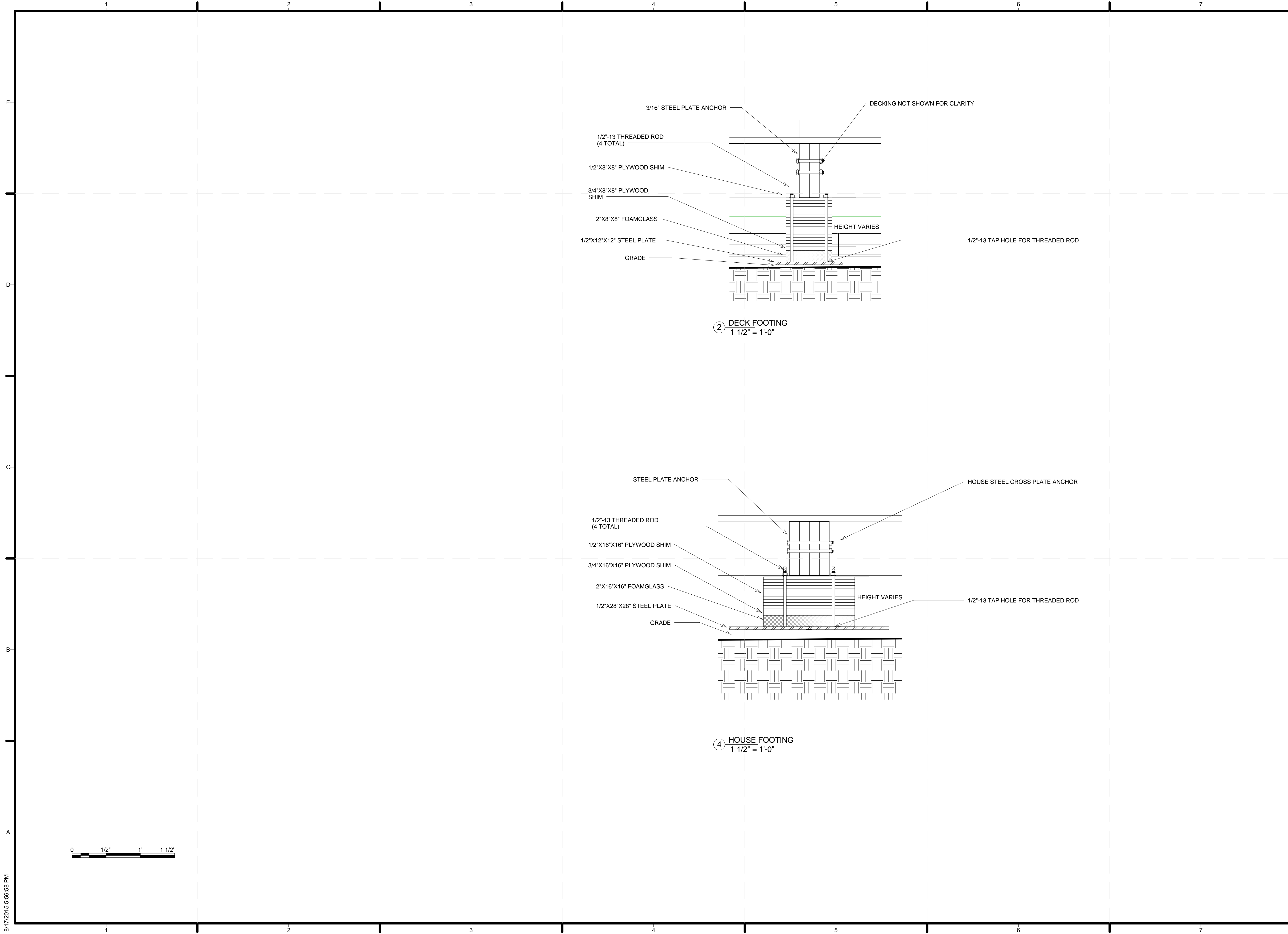
MODULE 1 DIMENSIONS
 WIDTH = 10 FT
 LENGTH = 30 FT
 HEIGHT = 9 FT 11 IN
 INCLUDES MECHANICAL ROOM, BATHROOM AND BEDROOM

TEMPORARY PLYWOOD SHEATHING ENCLOSURE FOR TRANSPORT AND BRACING SUPPORT



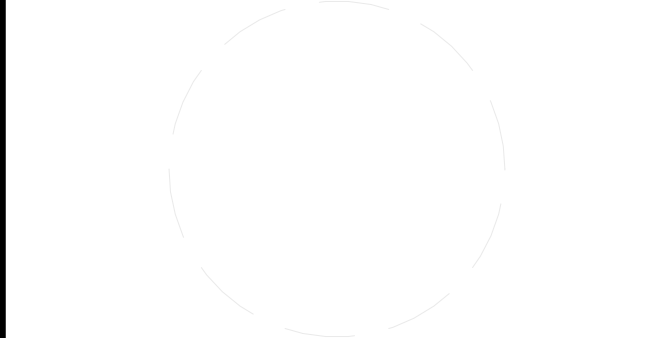
① STRUCTURAL MODULE 1
 1/2" = 1'-0"





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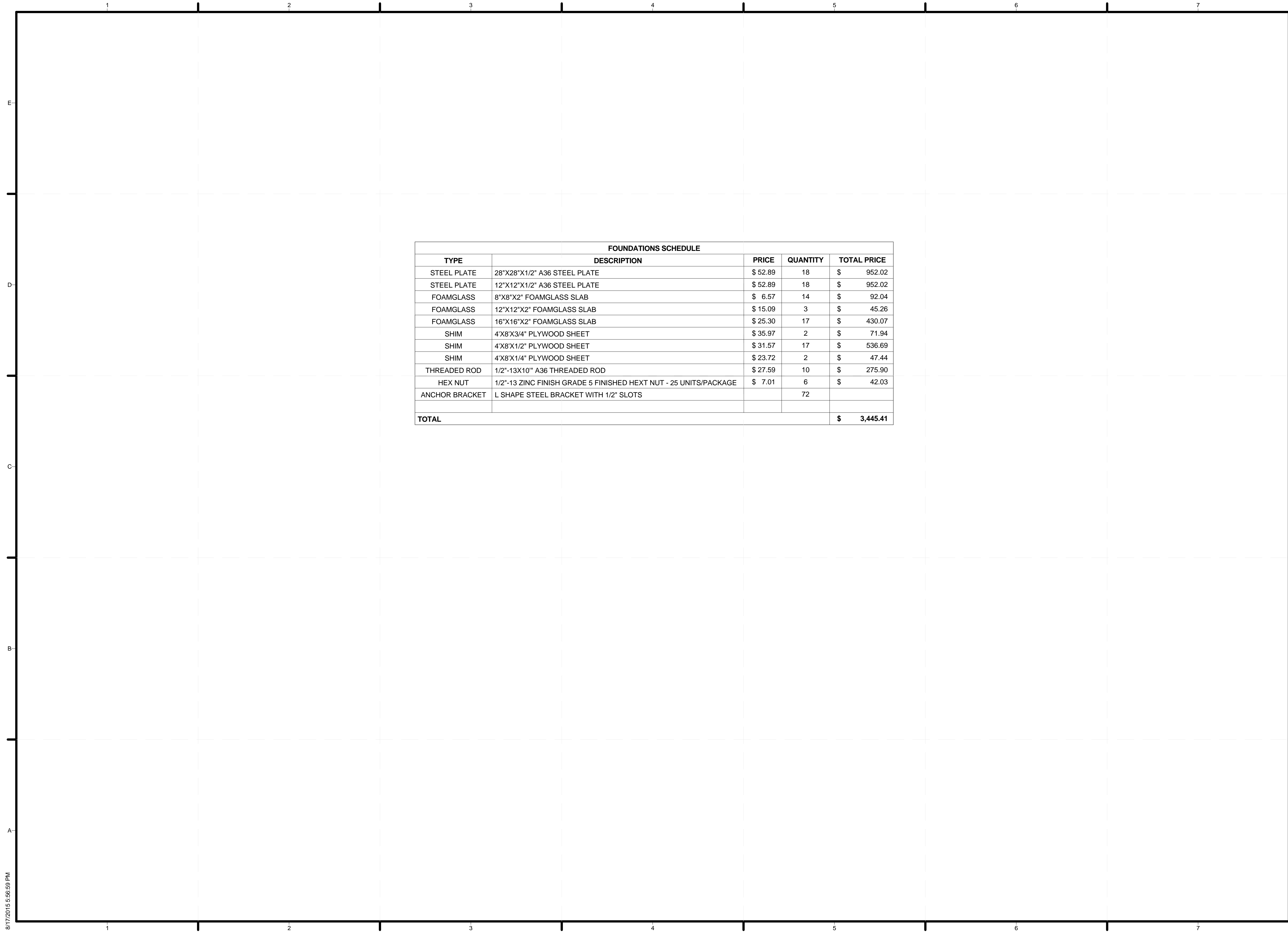
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TYPICAL DETAILS

S-701

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SHEET TITLE
 FOUNDATIONS
 SCHEDULE

S-702

FOUNDATIONS SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
STEEL PLATE	28"X28"X1/2" A36 STEEL PLATE	\$ 52.89	18	\$ 952.02
STEEL PLATE	12"X12"X1/2" A36 STEEL PLATE	\$ 52.89	18	\$ 952.02
FOAMGLASS	8"X8"X2" FOAMGLASS SLAB	\$ 6.57	14	\$ 92.04
FOAMGLASS	12"X12"X2" FOAMGLASS SLAB	\$ 15.09	3	\$ 45.26
FOAMGLASS	16"X16"X2" FOAMGLASS SLAB	\$ 25.30	17	\$ 430.07
SHIM	4"X8"X3/4" PLYWOOD SHEET	\$ 35.97	2	\$ 71.94
SHIM	4"X8"X1/2" PLYWOOD SHEET	\$ 31.57	17	\$ 536.69
SHIM	4"X8"X1/4" PLYWOOD SHEET	\$ 23.72	2	\$ 47.44
THREADED ROD	1/2"-13X10" A36 THREADED ROD	\$ 27.59	10	\$ 275.90
HEX NUT	1/2"-13 ZINC FINISH GRADE 5 FINISHED HEXT NUT - 25 UNITS/PACKAGE	\$ 7.01	6	\$ 42.03
ANCHOR BRACKET	L SHAPE STEEL BRACKET WITH 1/2" SLOTS		72	
TOTAL				\$ 3,445.41



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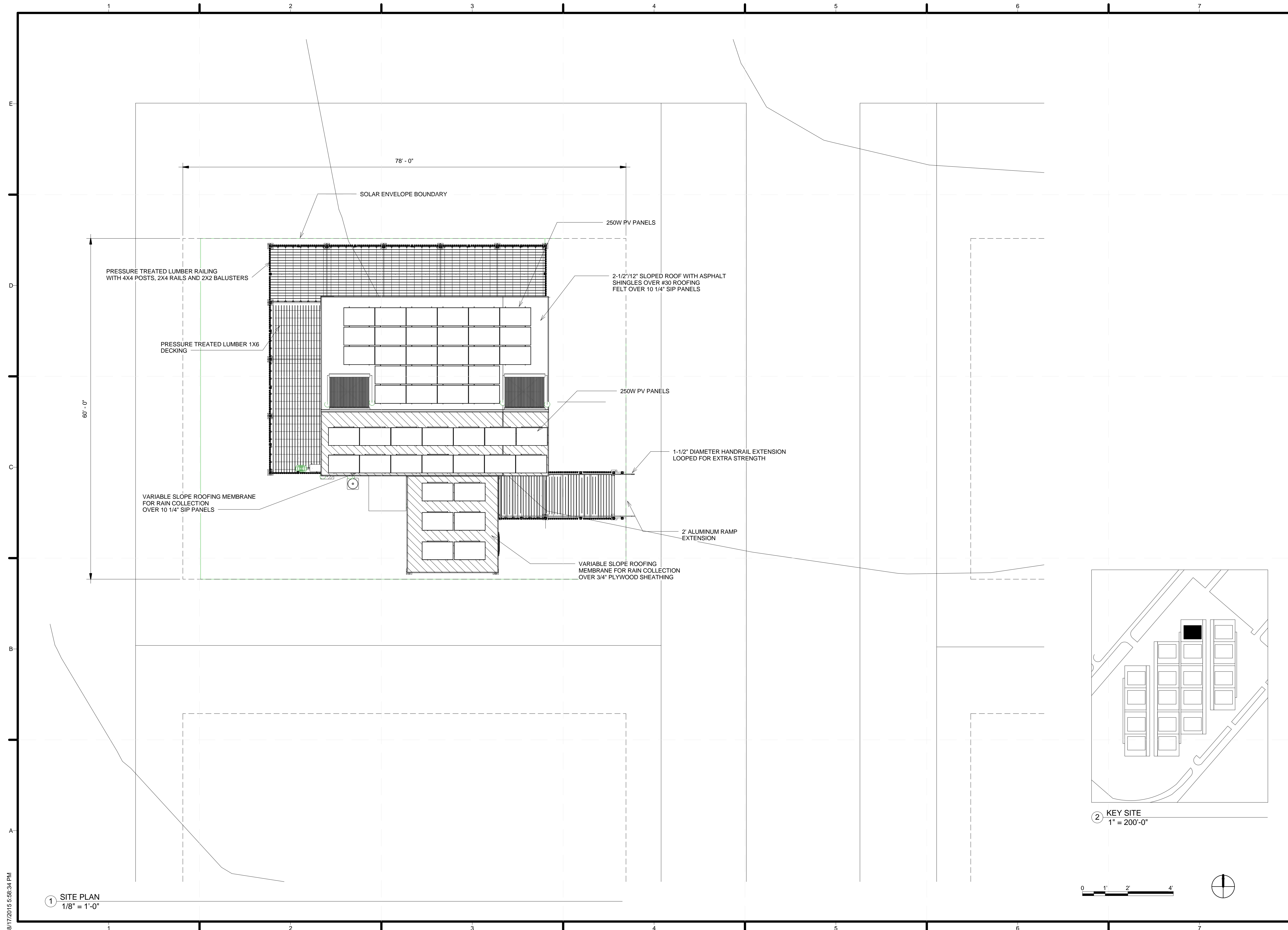
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 SITE PLAN

A-101



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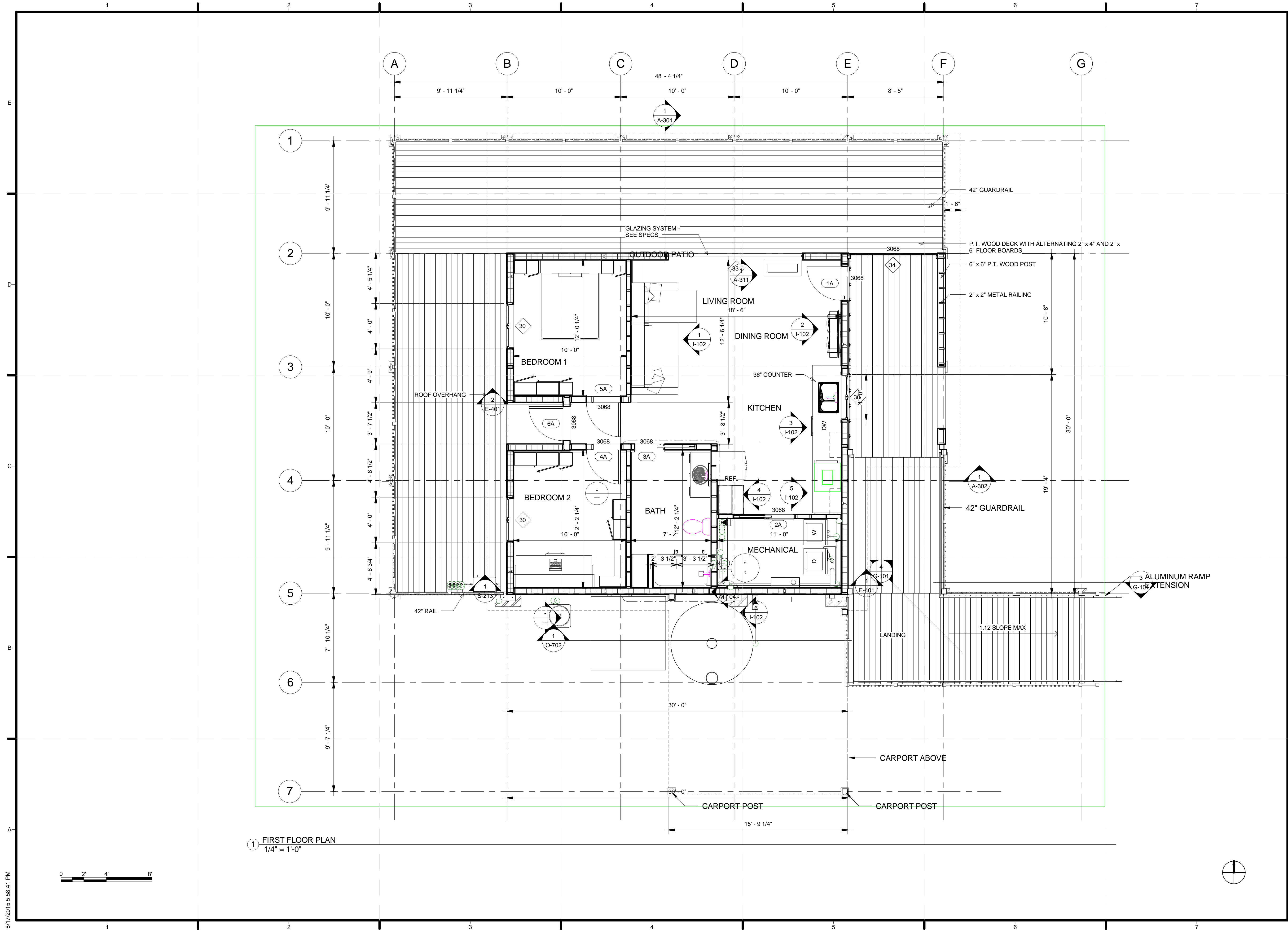


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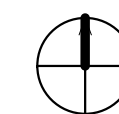
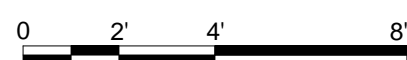
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SHEET TITLE
FIRST FLOOR PLAN

A-111



1 FIRST FLOOR PLAN
1/4" = 1'-0"





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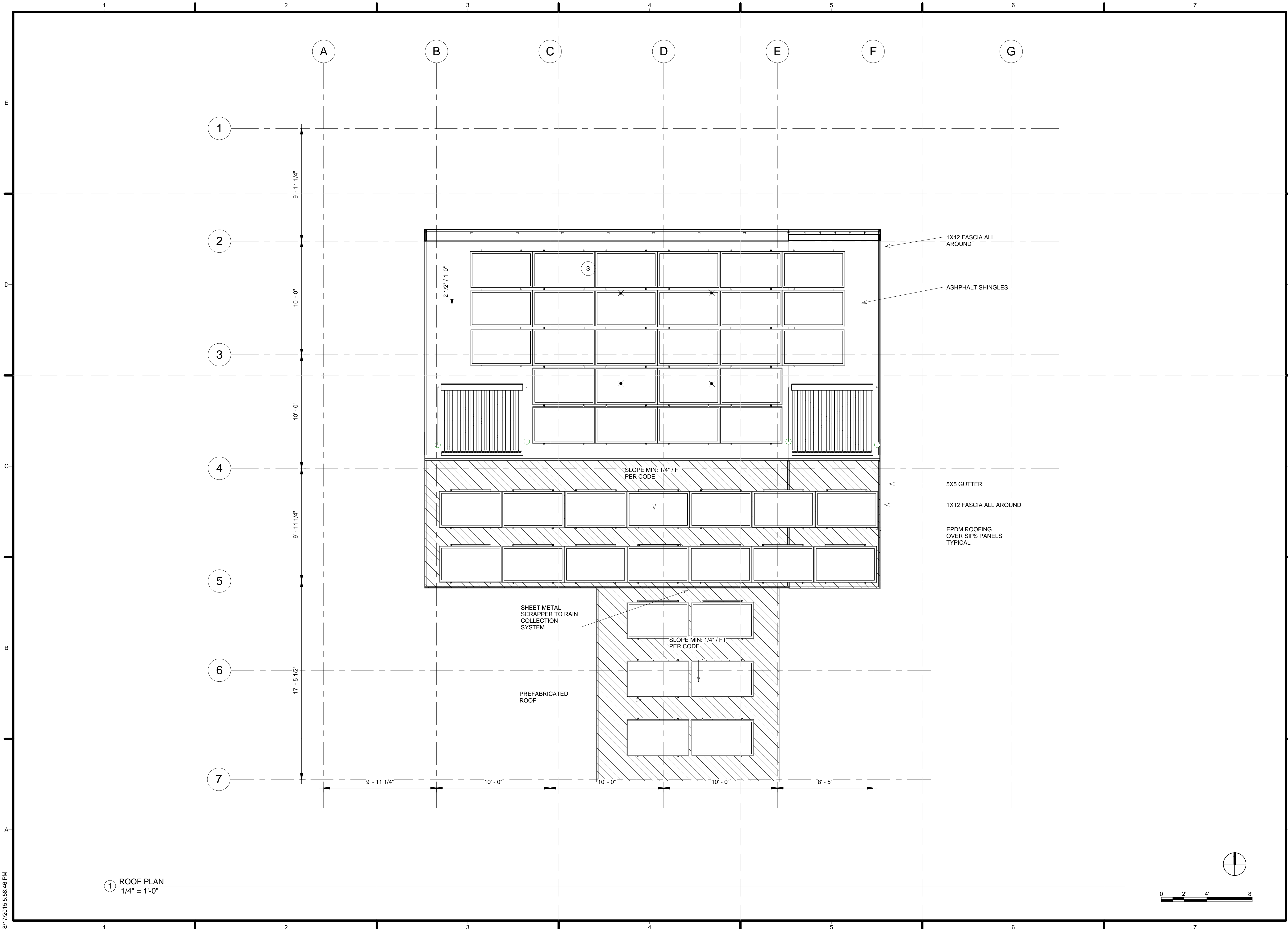
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ROOF PLAN

A-112

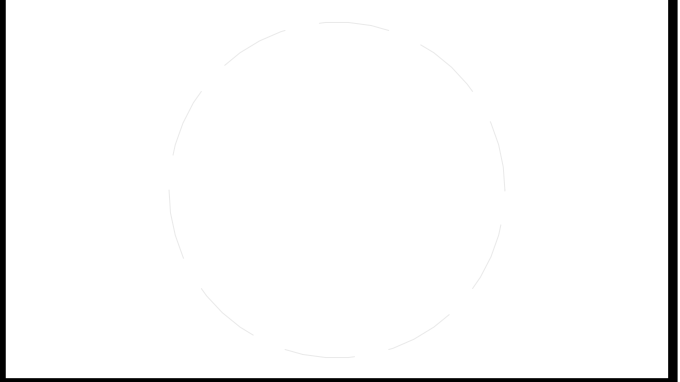


1 ROOF PLAN
1/4" = 1'-0"



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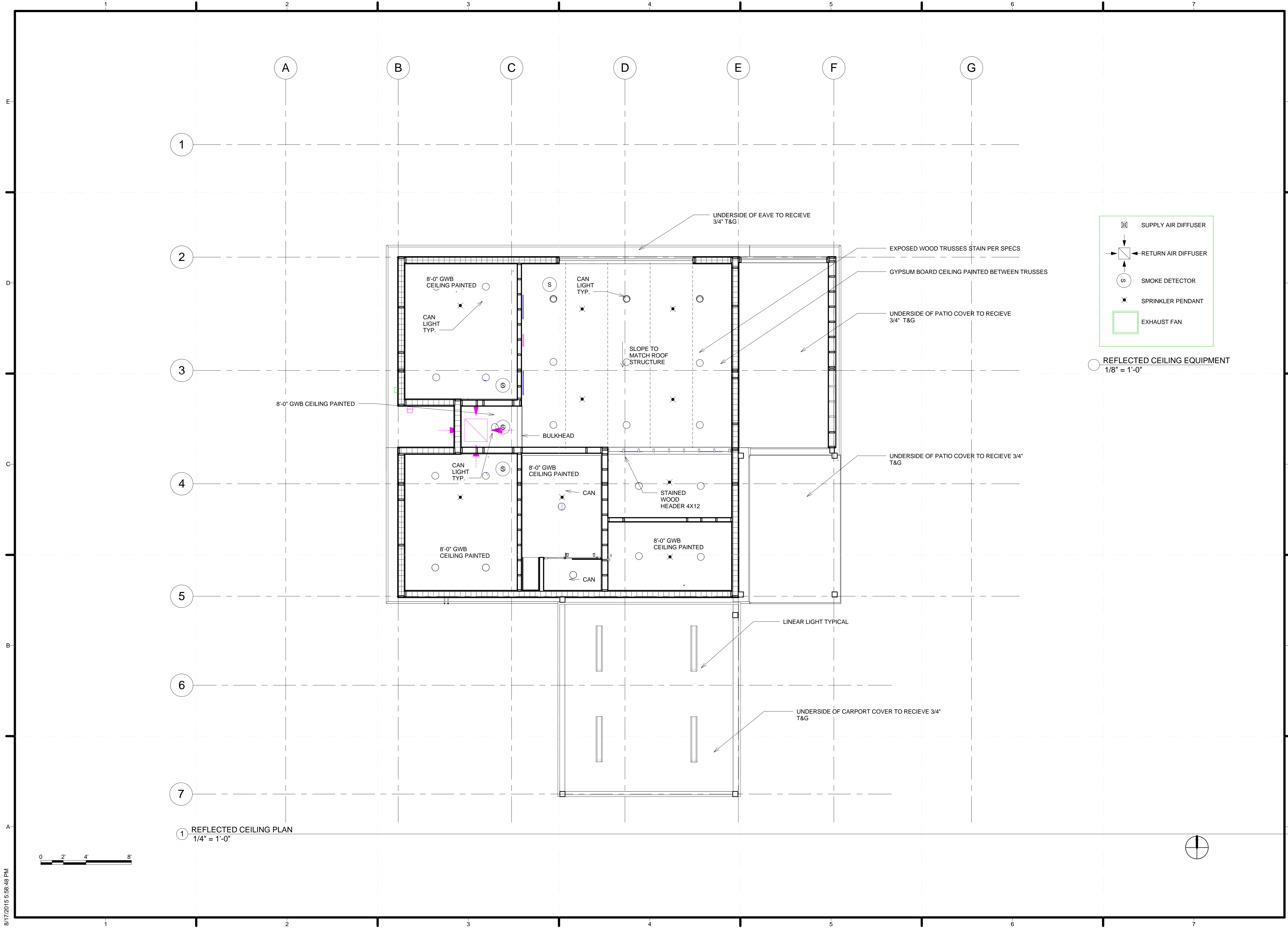


MARK	DATE	DESCRIPTION

SHEET TITLE

FIRST FLOOR
 REFLECTED CEILING
 PLAN

A-121



1 REFLECTED CEILING PLAN
 1/4" = 1'-0"

8/17/2015 5:56:48 PM



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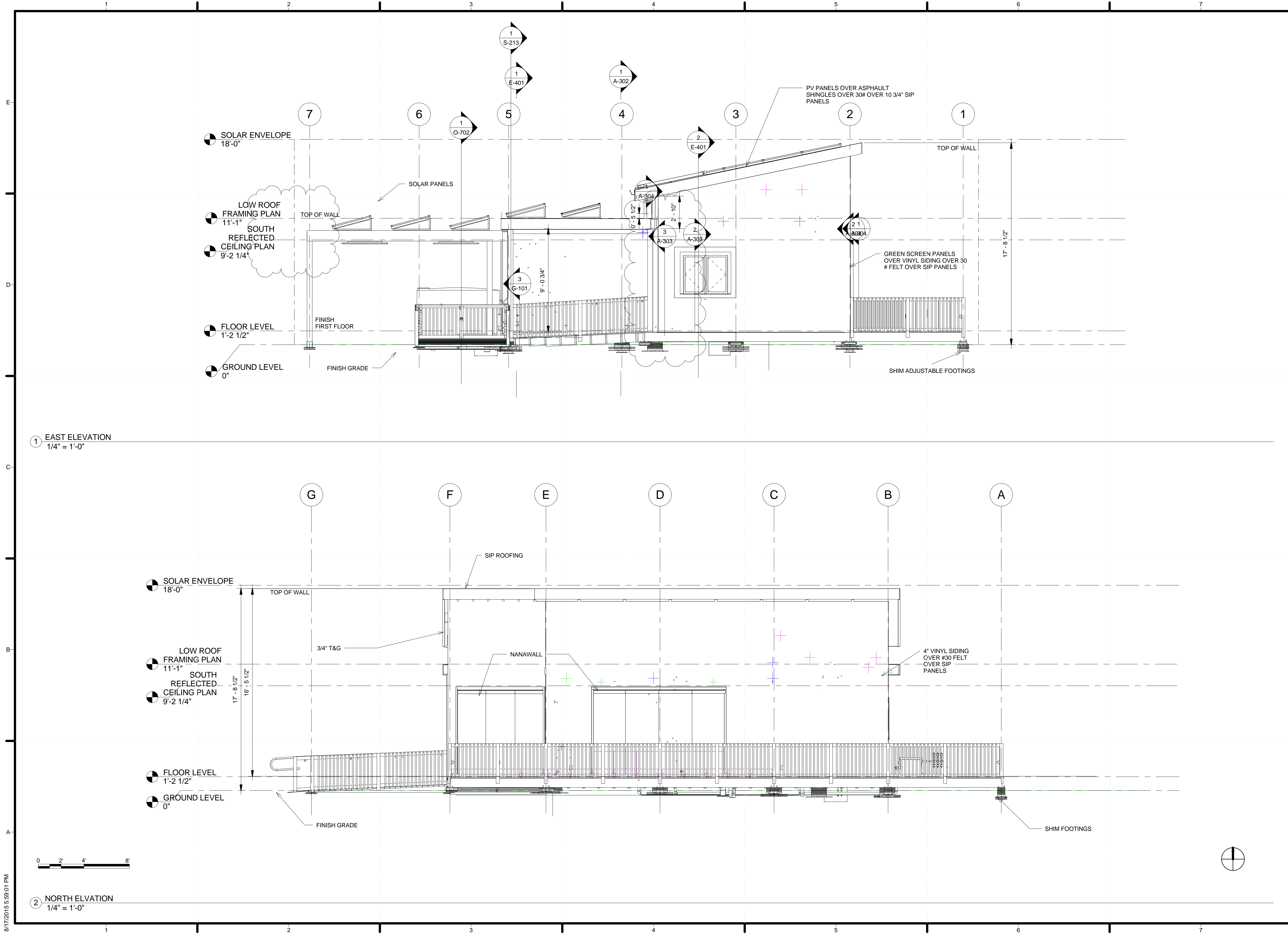


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1	Date 1	Revision 1

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SHEET TITLE
 EXTERIOR ELEVATIONS

A-212



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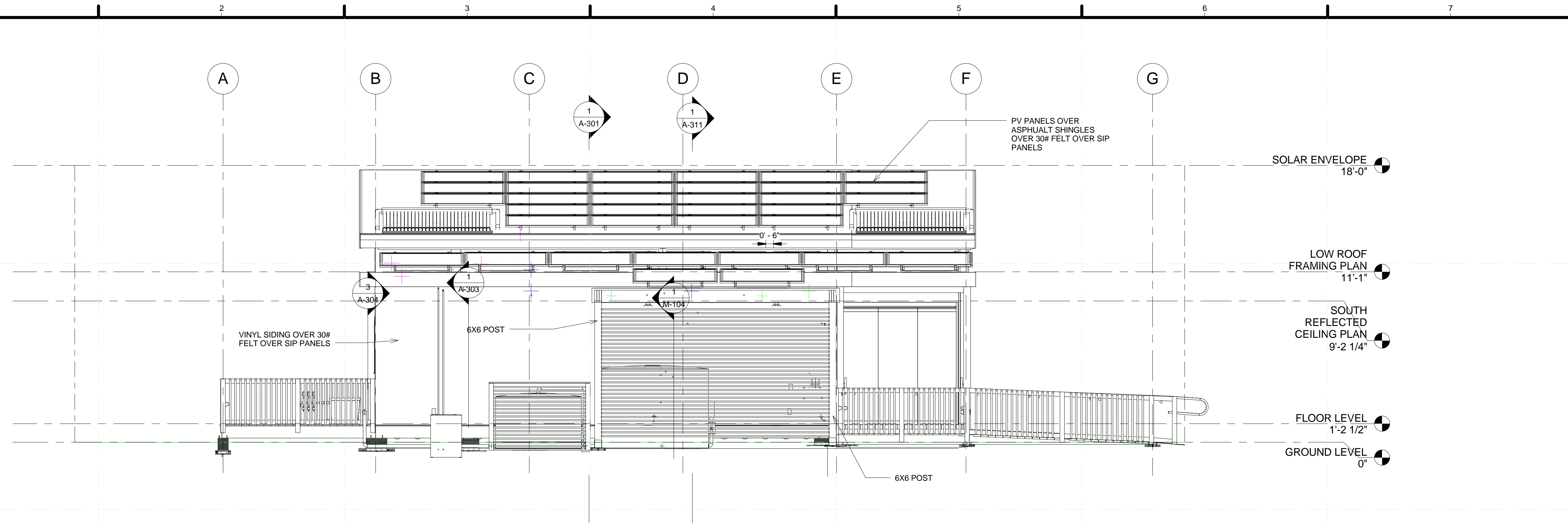
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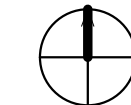
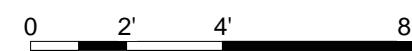
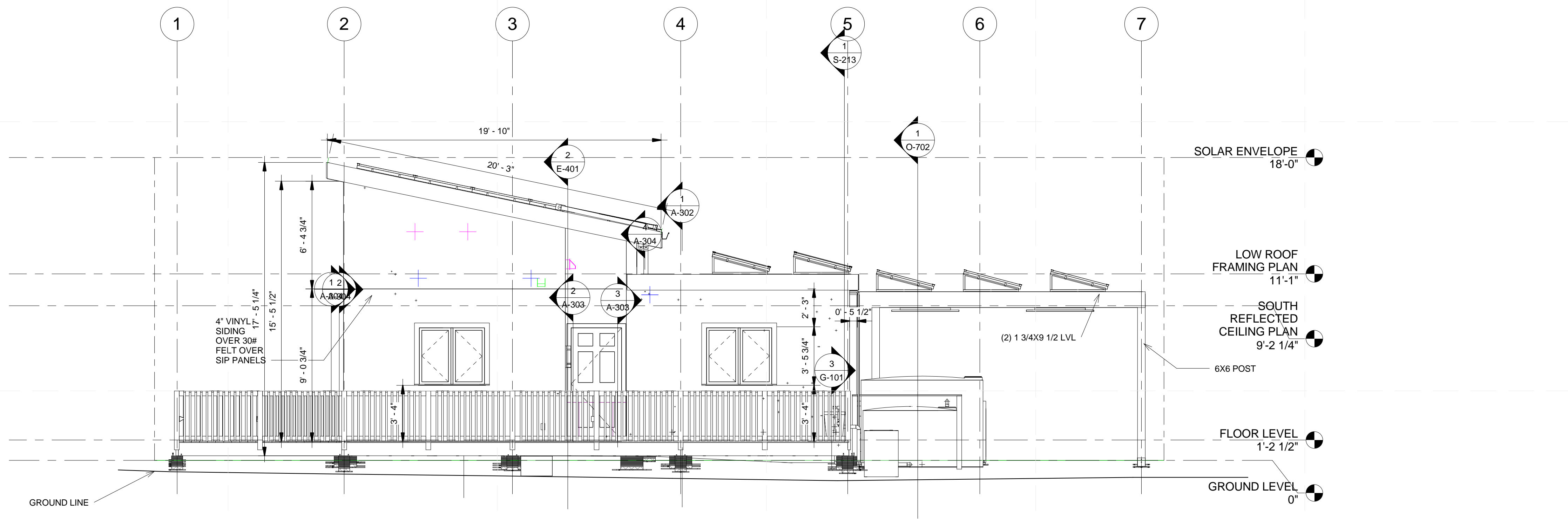
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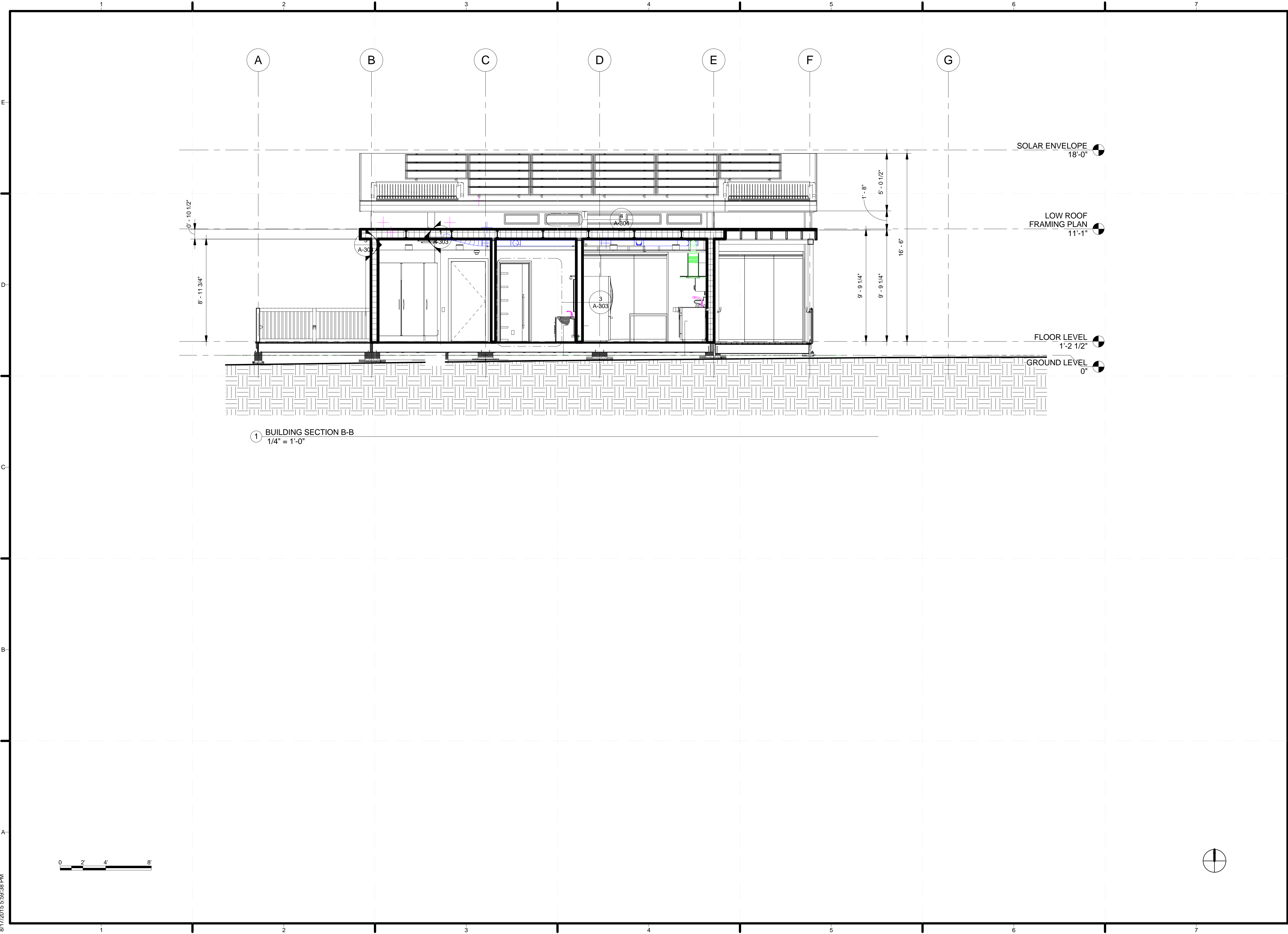
A-213

① SOUTH ELEVATION
1/4" = 1'-0"



② WEST ELEVATION
1/4" = 1'-0"





① BUILDING SECTION B-B
1/4" = 1'-0"



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SHEET TITLE

BUILDING SECTION

A-302



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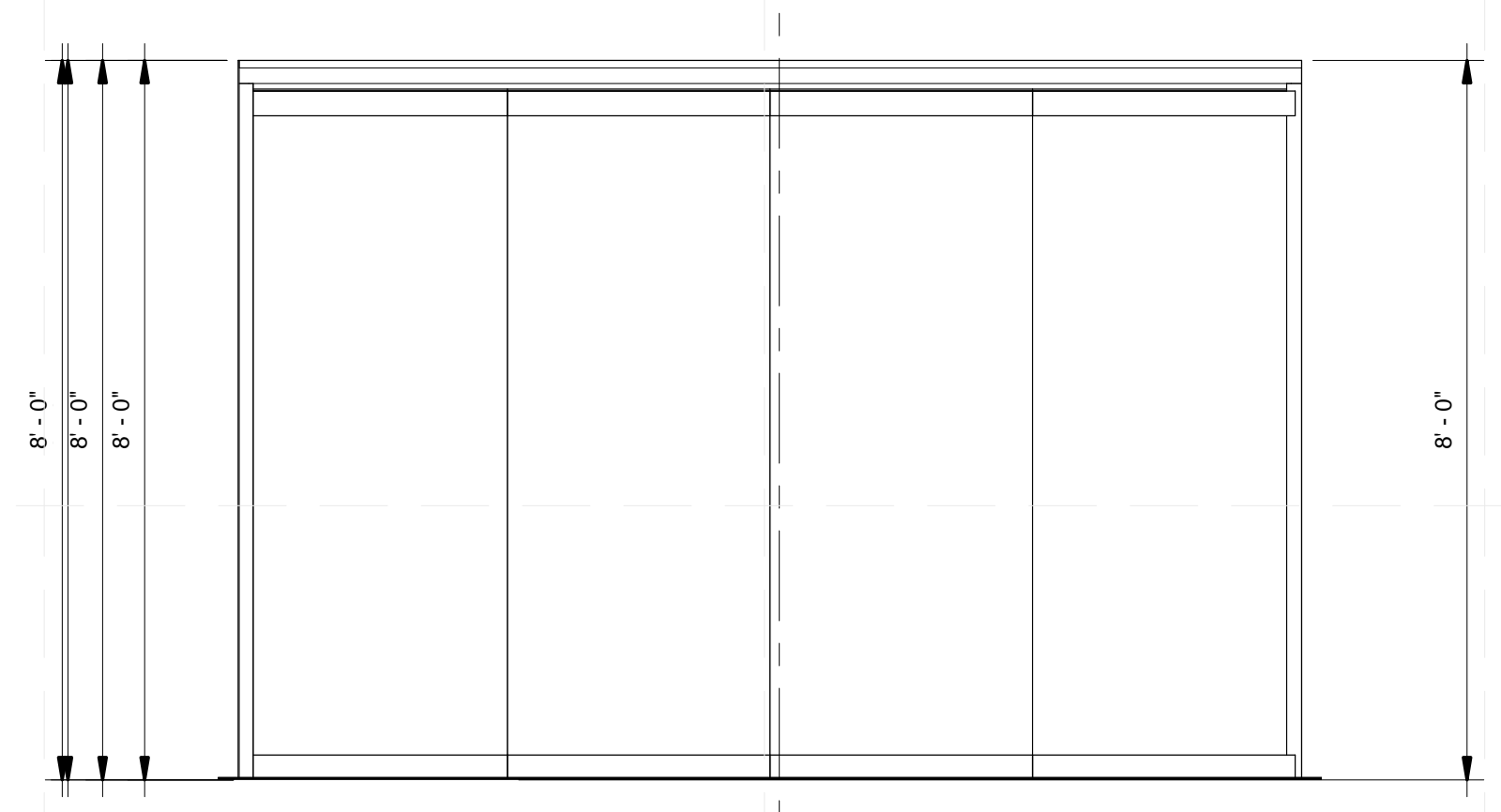


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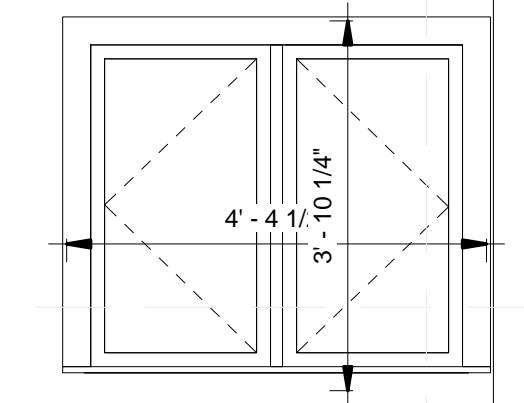
SHEET TITLE

WINDOW SCHEDULE

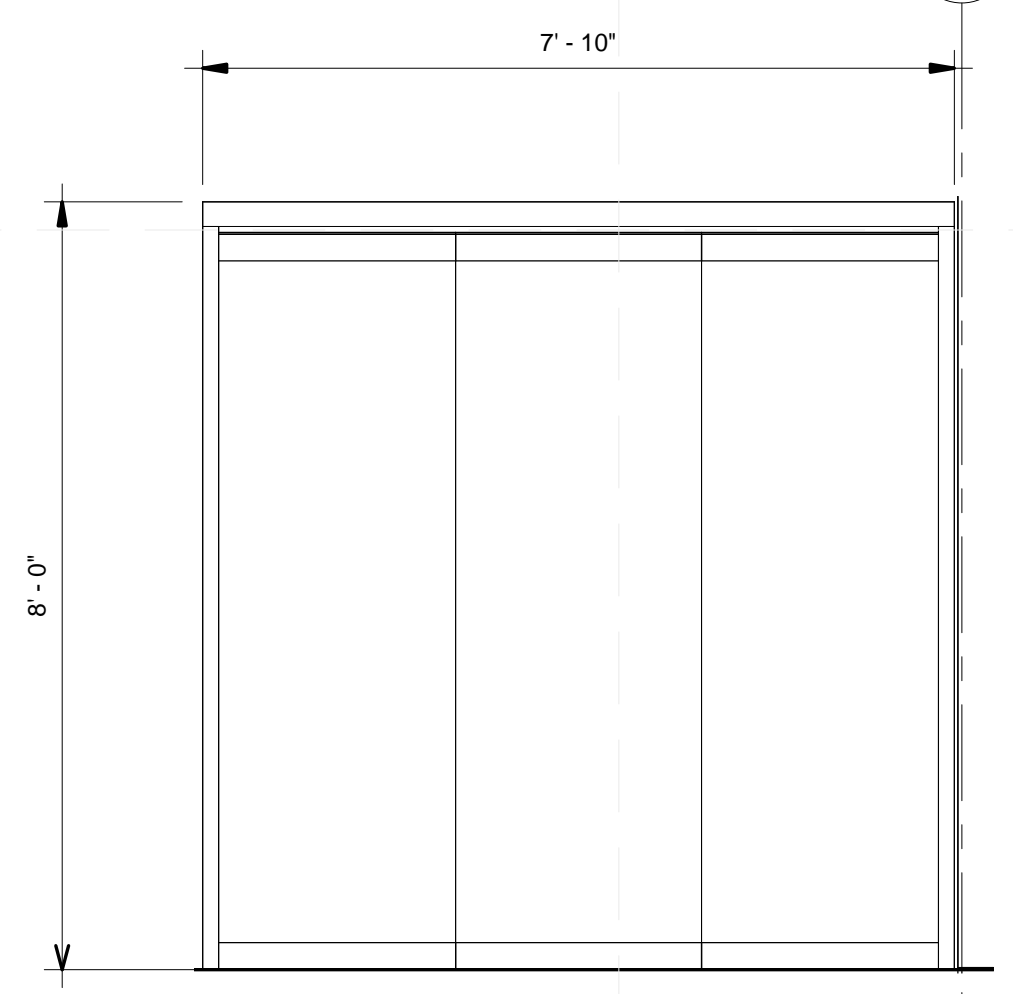
A-304



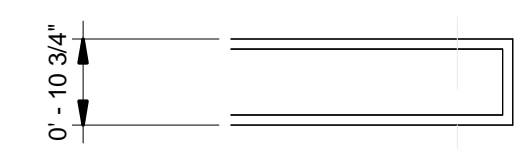
1 NANAWALL
 1/2" = 1'-0"



3 PELLA WINDOW 4' X 3'
 1/2" = 1'-0"

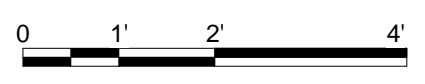


2 Section 9
 1/2" = 1'-0"



4 PELLA CLERESTORIES
 1/2" = 1'-0"

WINDOW SCHEDULE								
TYPE	DESCRIPTION	SIZE(IN)	COLOR	LOCATION	MANUFACTURE	PRICE	QUANTITY	TOTAL PRICE
CASEMENT	PROLINE, 2-WIDE CASEMENT	46X41	BROWN	BED/KITCHEN	PELLA	\$ 465.96	3	\$ 1,397.88
FIXED FRAME	SUPPORT PRODUCT, DIRECT SET FIXED FRAME	36X10	BROWN	CLEARSTORY	PELLA	\$ 195.51	5	\$ 977.55
GLAZING	NANAWALL FOLDING WITH SWING DOOR	141.75X95	BROWN	LIVINGROOM	NANAWALL	\$ 9,000.00	1	\$ 9,000.00
GLAZING	NANAWALL FOLDING	96X95	BROWN	LIVINGROOM	NANAWALL	\$ 9,000.00	1	\$ 9,000.00
TOTAL								\$ 20,375.43





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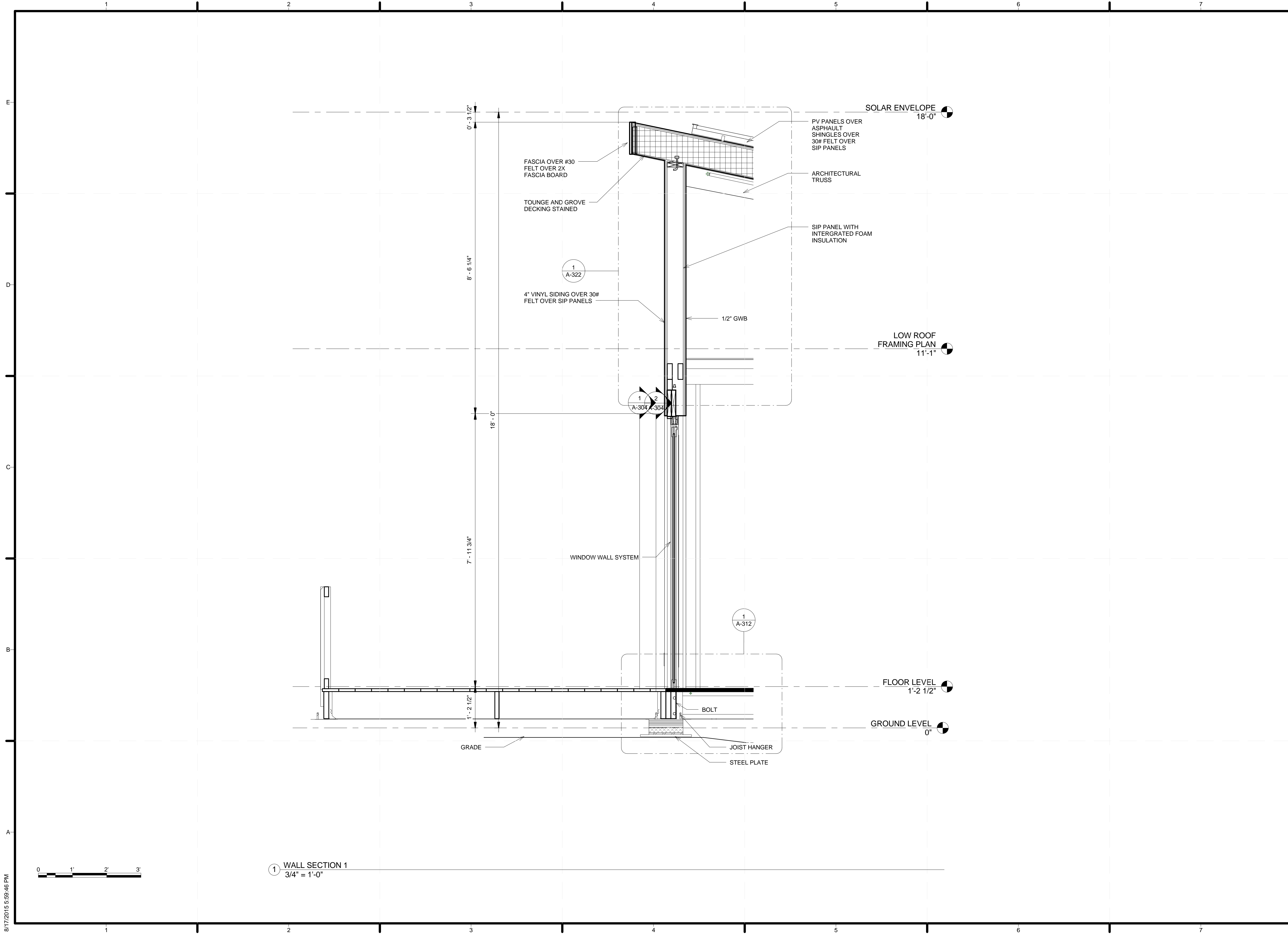


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SHEET TITLE
 WALL SECTIONS

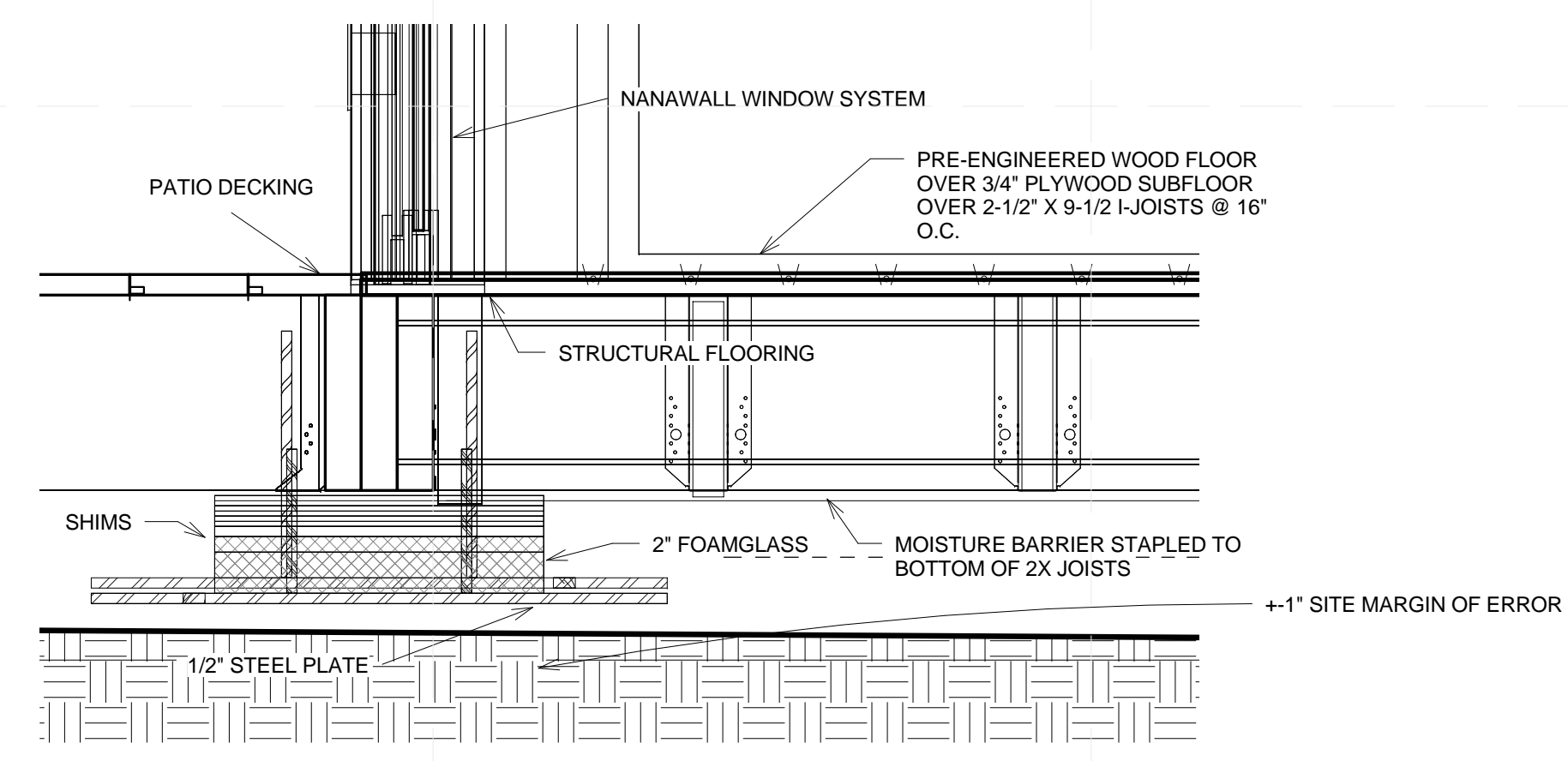
A-311



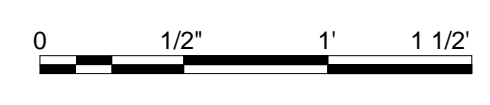
1 WALL SECTION 1
 3/4" = 1'-0"



8/17/2015 5:59:46 PM

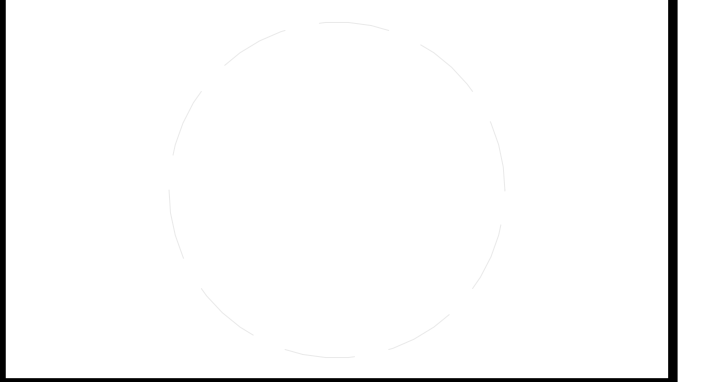


① WALL SECTION 1 - FLOOR SECTION
 1 1/2" = 1'-0"



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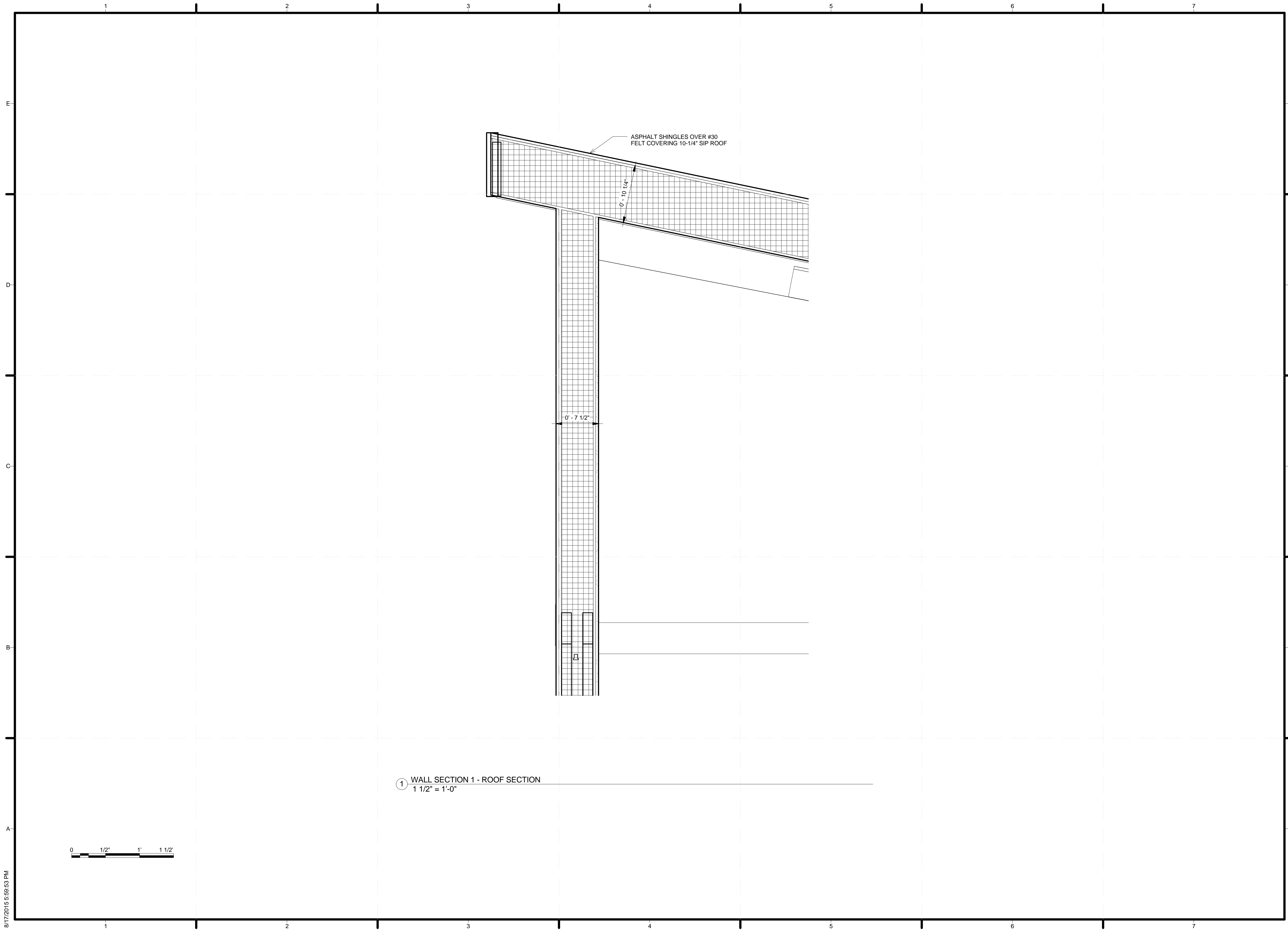
MARK	DATE	DESCRIPTION
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SHEET TITLE

FLOOR SECTION

A-312



1 WALL SECTION 1 - ROOF SECTION
 1 1/2" = 1'-0"

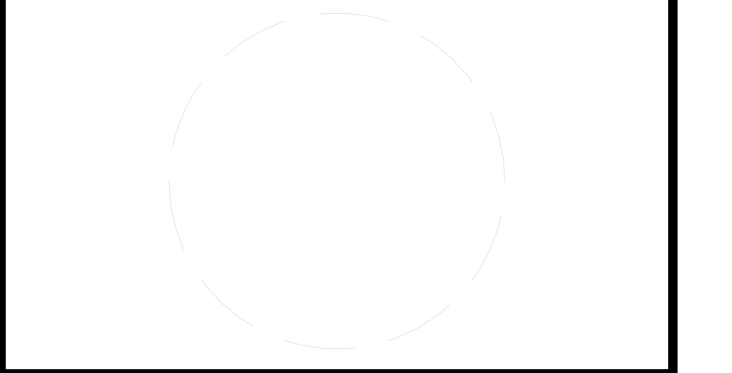


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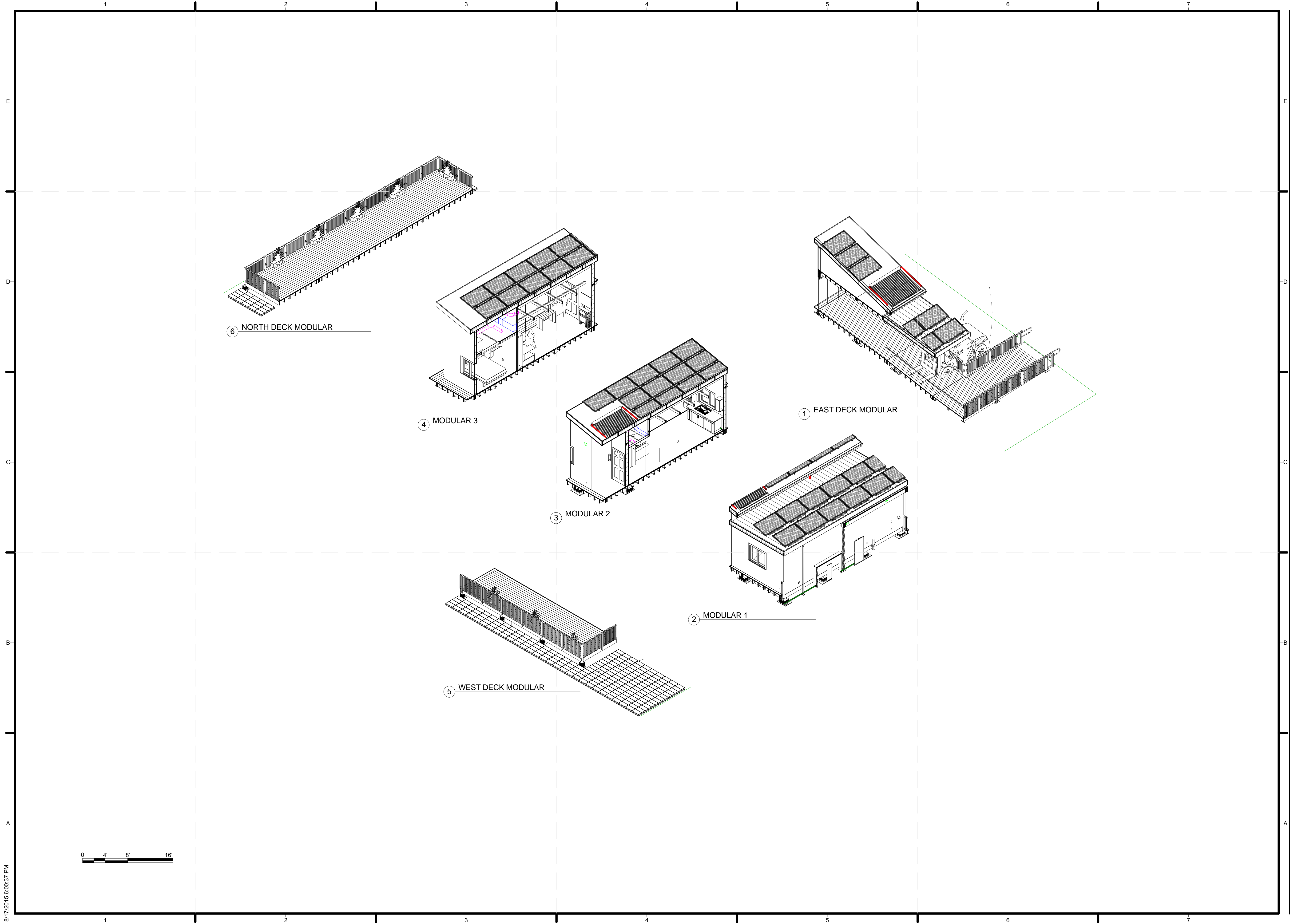


MARK	DATE	DESCRIPTION
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LOT NUMBER: 207
 DRAWN BY: CLAYTON LOUNSBERY
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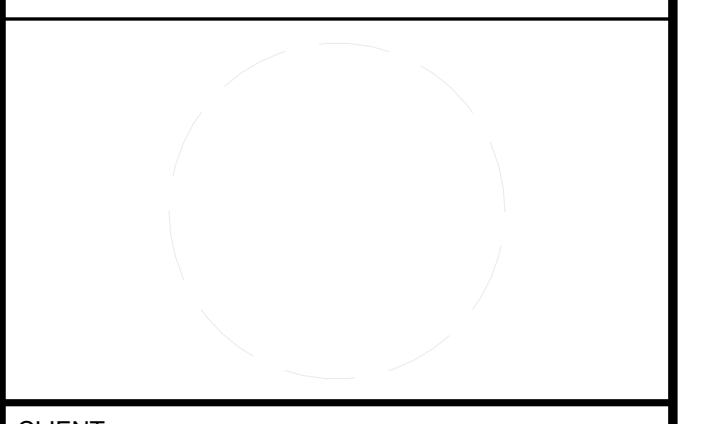
SHEET TITLE
 ROOF SECTION

A-322



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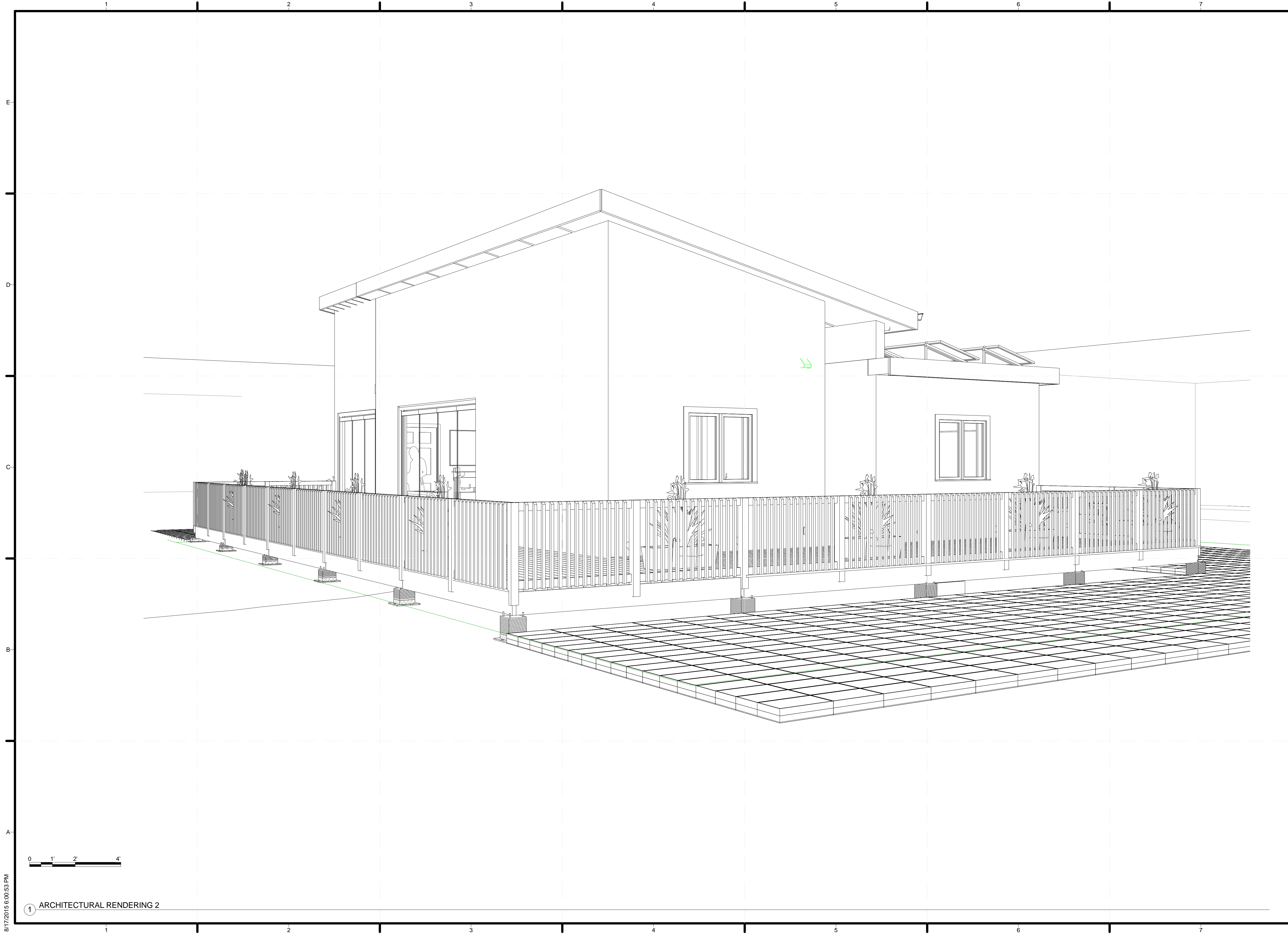


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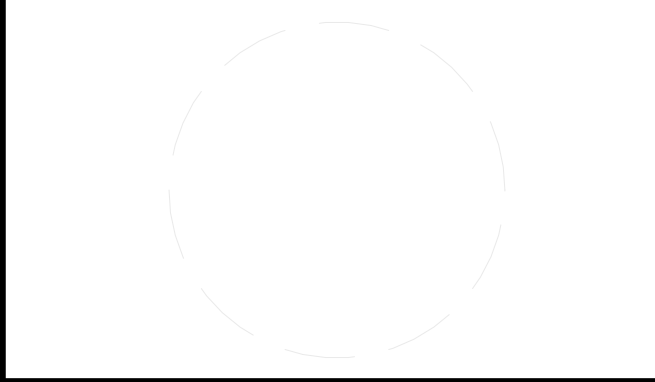
SHEET TITLE
 EXPLODED VIEW

A-401



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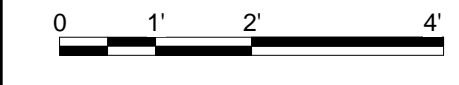


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SHEET TITLE
ARCHITECTURAL RENDERINGS

A-902



1 ARCHITECTURAL RENDERING 2

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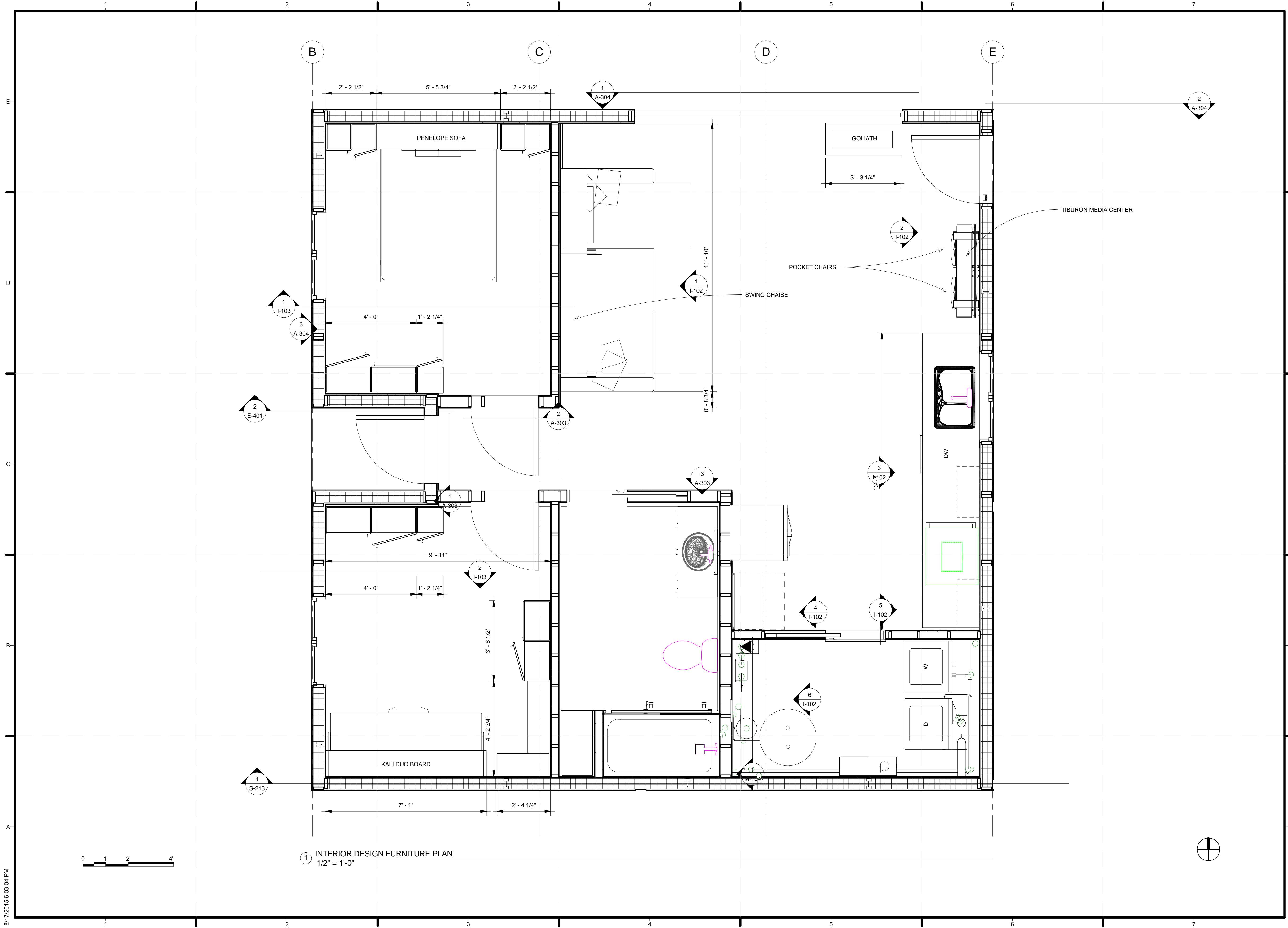


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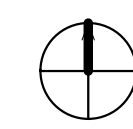
LOT NUMBER:	207
DRAWN BY:	STEPHANIE FLORES
CHECKED BY:	RON BARTH
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SHEET TITLE
INTERIOR DESIGN PLAN

I-101



① INTERIOR DESIGN FURNITURE PLAN
1/2" = 1'-0"



8/17/2015 6:03:04 PM



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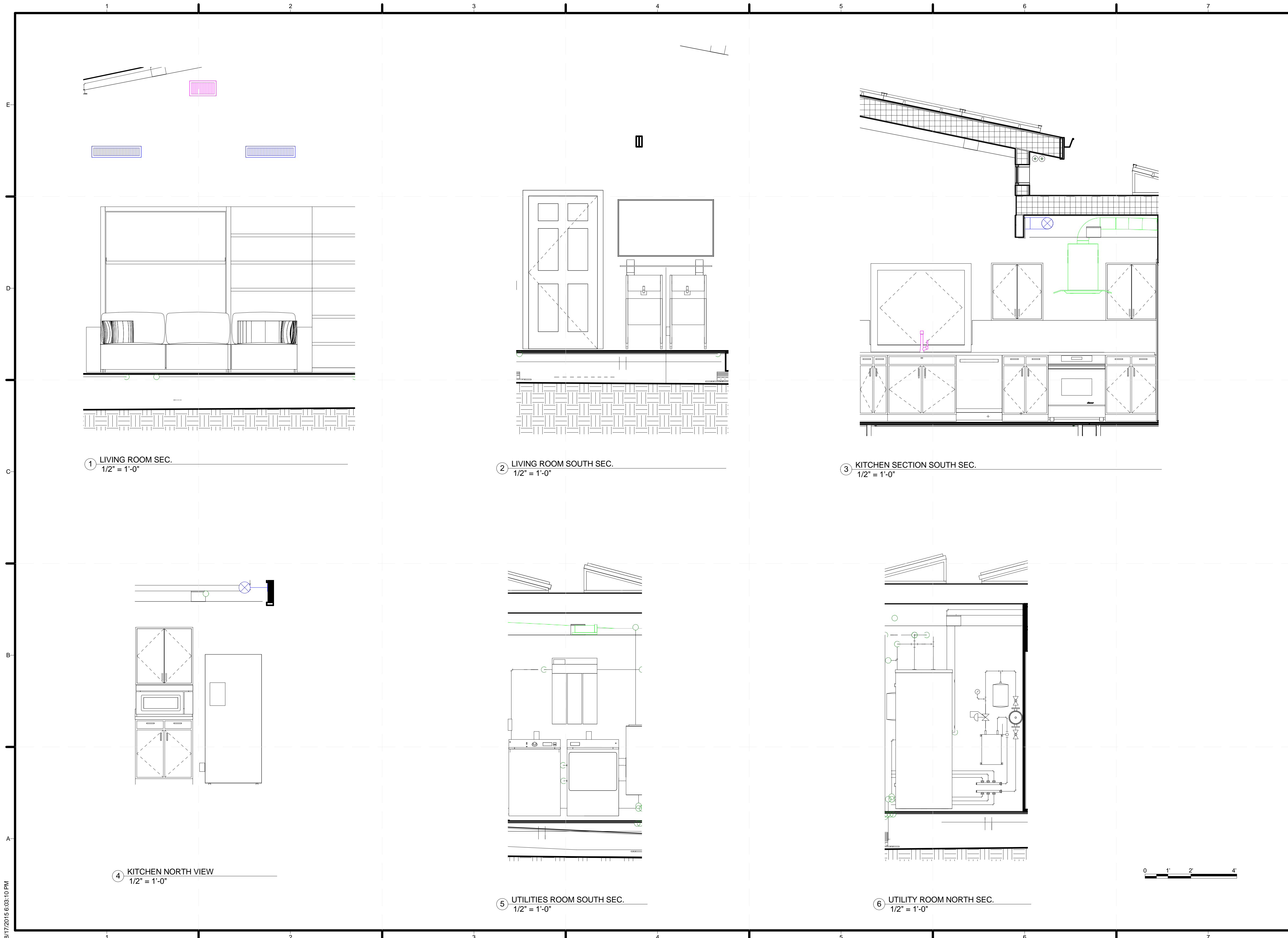
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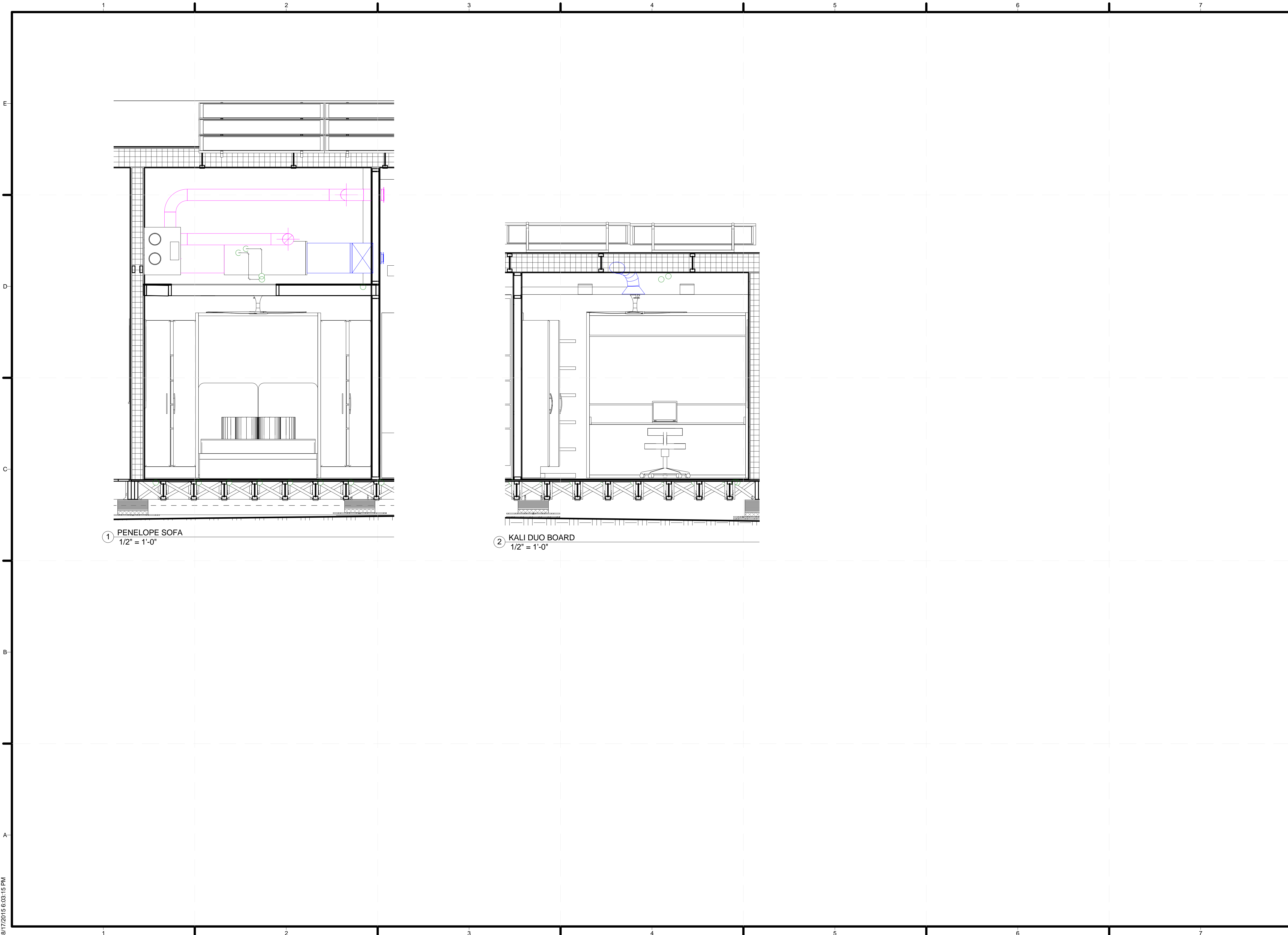
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SHEET TITLE

ELEVATIONS

I-102





① PENELOPE SOFA
1/2" = 1'-0"

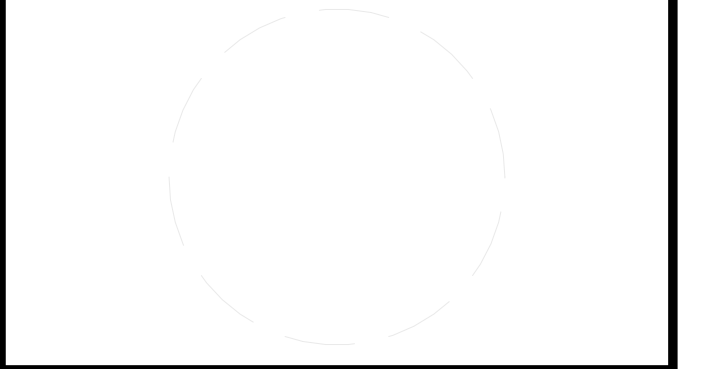
② KALI DUO BOARD
1/2" = 1'-0"

8/17/2015 6:03:15 PM



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ELEVATIONS

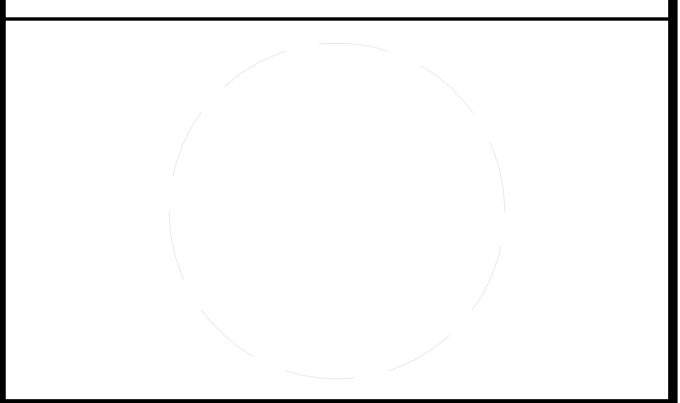
I-103



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SHEET TITLE
FURNITURE SCHEDULE

I-201

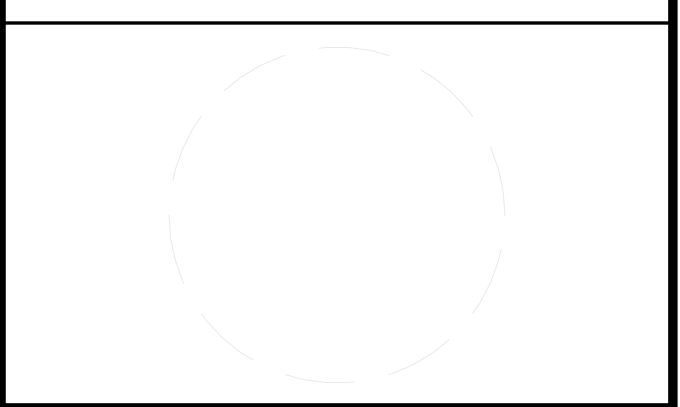
FURNITURE SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
KALI DUO BOARD 2200 2897	STRUCTURE: MELAMINE ROVERE OAK MORO BACK PANEL: WHITE MELAMINE FRONT PANEL: MELAMINE ROVERE OAK MORO DESK: WHITE MELAMINE FABRIC: SUPERCOTTON 36 FUMO CAT.1	\$ 4,300.00	1	\$ 4,300.00
MEMORY FOAM TWIN U1	MEMORY FOAM MATTRESS FOR BUNK OF A KALI	\$ 550.00	2	\$ 1,100.00
BOISERIE 2897A	BOISERIE PANEL: (PB86) 720 MELAMINE ROVERE OAK MORO 5 SHELVES: (MB63) 720 WHITE MELAMINE	\$ 1,135.00	1	\$ 1,135.00
A884 2897	WALK-IN CLOSET: 650X1389X1116X623 *DOOR OPEN TO THE LEFT STRUCTURE: MELAMINE ROVERE OAK MORO DOOR: MELAMINE ROVERE OAK MORO	\$ 2,384.00	1	\$ 2,384.00
A89601 2897	DOUBLE DOOR STORAGE: 1080X623 1 SHELF AND 1 HANGING BAR STRUCTURE: MELAMINE ROVERE OAK MORO FRONT DOORS: MELAMINE ROVERE OAK MORO	\$ 1,295.00	1	\$ 1,295.00
A85601 2897	SINGLE DOOR STORAGE: 540X623 1 SHELF AND 1 HANGING BAR STRUCTURE: MELAMINE ROVERE OAK MORO FRONT DOOR: MELAMINE ROVERE OAK MORO	\$ 905.00	4	\$ 3,620.00
PENELOPE SOFA 2897	STRUCTURE: MELAMINE ROVERE OAK MORO FRONT PANEL: MELAMINE ROVERE OAK MORO INTERIOR BACK PANEL: MELAMINE ROVERE OAK MORO SOFA AND HEADBOARD FABRIC: 14832/24 SWING CHAIR DIRECTION OF CHAIRS: RIGHT	\$ 6,352.00	1	\$ 6,352.00
MEMORY FOAM QUEENE	MEMORY FOAM MATTRESS QUEEN E SERIES STRUCTURE: MELAMINE ROVERE OAK MORO	\$ 1,250.00	1	\$ 1,250.00
SWING CHAIR 2897	SHWING CHAIR: WHITE MELAMINE FRONT PANEL: MELAMINE ROVERE OAK MORO BACK PANEL: WHITE MELAMINE BOISERIE: MELAMINE ROVERE OAK MORO SHELVES: WHITE MELAMINE SOFA	\$ 13,530.00	1	\$ 13,530.00
BOISERIE 2897B	BOISERIE BOARD SHELVES: WHITE MELAMINE FRONT PANEL: MELAMINE ROVERE OAK MORO BACK PANEL: MELAMINE ROVERE OAK MORO	\$ 980.00	1	\$ 980.00
MEMORY FOAM QUEENA	MEMORY FOAM MATTRESS QUEEN A SERIRES	\$ 1,250.00	1	\$ 1,250.00
FLIP CHAIR BLUE	FLIP CHAIR IN BLUE	\$ 350.00	1	\$ 350.00
GOLIATH PZ97	GOLIATH WOOD TABLE IN TOBACCO OAK VENEER	\$ 3,980.00	1	\$ 3,980.00
POCKET CHAIR S1 W2	S1 - CHROMED W2 - BEECHED STAINED CHERRY	\$ 395.00	10	\$ 3,950.00
POCKET HOOK S9	S9 - ALUMINIUM SATIN PAINTED STEEL	\$ 45.00	2	\$ 90.00
DELIVERY - IRVINE, CA				\$ 1,000.00
SUBTOTAL				\$ 46,566.00
TAX				\$ 3,958.11
TOTAL				\$ 50,524.11



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SHEET TITLE
INTERIOR FINISHES SCHEDULE

I-202

INTERIOR FINISHES SCHEDULE						
TYPE	DESCRIPTION	ID#	COLOR	PRICE	QUANTITY	TOTAL PRICE
PAINT	SHERWIN WILLIAMS MILD BLUE WALL PAINT	SW6533	MILD BLUE			
PAINT	SHERWIN WILLIAMS KESTREL WHITE WALL PAINT	SW7516	KESTREL WHITE			
PAINT	SHERWIN WILLIAMS BELGIAN WAFFLE WALL PAINT		BELGIAN WAFFLE			
PAINT	SHERWIN WILLIAMS COTTON WHITE CEILING PAINT	SW7104	COTTON WHITE			
TILES	DALTILE BRANCACCI FRESCO CAFFE 12 IN. X 12 IN.CERAMIC FLOOR AND WALL TILE (11 SQ. FT. / CASE)	BC0312121P2	FRESCO CAFFE	\$ 20.79	9	\$ 187.11
TILES	DALTILE BRANCACCI FRESCO CAFFE 2 IN. X 12 IN. CERAMIC ARCHED FLORAL DECO ACCENT WALL TILE	BC03212DECO1P	FRESCO CAFFE	\$ 14.53	12	\$ 174.36
BACKSPLASH	SLATE RADIANCE CACTUS 11-3/4 IN. X 12-1/2 IN. X 8 MM GLASS AND STONE RANDOM MOSAIC BLEND WALL TILE	SA57	CACTUS	\$ 16.87	13	\$ 219.31
COUNTERTOP	WILSONART AUTUM CARNIVAL	1877K3537660144	AUTUMN CARNIVAL	\$ 238.49	1	\$ 238.49
FINISHED FLOOR	WESTERN NEW YORK FLOOR COMPANY DARK OAK SNAP N' PLACE FLOOR BOARDS		DARK OAK		900SF	
SHEETROCK	12' HD DRYWALL/STUCCO MAIN BEAM	ARMHD8905		\$ 8.75	12	\$ 105.00
SHEETROCK	48"X1-1/2" CROSS TEE DRYWALL	ARMXL8945P		\$ 2.97	106	\$ 314.82
TRACK	1-5/8"X10' TRACK 20 GA/EQ	158TR20		\$ 3.32	15	\$ 49.80
TOTAL						\$ 819.27



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DININGWARE SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
DININGWARE	CORELLE® LIVINGWARE™ SAND SKETCH 16-PC DINNERWARE SET	\$ 39.99	2	\$ 79.98
SILVERWARE	CAMBRIDGE® SIENNA 65-PC FLATWARE SET	\$ 29.99	1	\$ 29.99
	CHICAGO CUTLERY® ELSTON™ 16-PC KNIFE SET	\$ 79.99	1	\$ 79.99
BAKEWARE	CORNINGWARE® ETCH® SAND 4-PC BAKEWARE SET	\$ 59.99	1	\$ 59.99
	BAKER'S SECRET® ESSENTIALS BISCUIT / BROWNIE PAN	\$ 3.99	1	\$ 3.99
	PYREX® SMART ESSENTIALS® 8-PC MIXING BOWL SET	\$ 19.99	1	\$ 19.99
	PYREX® EASY GRAB® 19-PC BAKE SET W/ BLUE PLASTIC LIDS	\$ 59.99	1	\$ 59.99
	PYREX® 100 2 CUP 100TH ANNIVERSARY MEASURING CUP, BLUE	\$ 4.89	1	\$ 4.89
	BAKER'S SECRET® ESSENTIALS LARGE BATTER MIXING BOWL	\$ 5.99	1	\$ 5.99
COOKINGWARE	LODGE® CAST-IRON GRILL / GRIDDLE	\$ 47.99	1	\$ 47.99
CUT BOARD SET	CHICAGO CUTLERY® WOODWORKS™ RUBBERWOOD 2-PC CUTTING BOARD SET AND FOR HOOKING	\$ 19.99	1	\$ 19.99
GLASSWARE	16-PC REALITY GLASSWARE SET	\$ 24.99	1	\$ 24.99
POTS/PANS SET	REVERE® 10-PC COPPER BOTTOM SET	\$ 149.99	1	\$ 149.99
UTENSILS	EKCO® 9" LOCKING TONGS	\$ 4.99	1	\$ 4.99
	EKCO® WHISK	\$ 3.99	1	\$ 3.99
	EKCO® SALAD TONGS	\$ 5.99	1	\$ 5.99
	EKCO® APPLE CORER	\$ 6.99	1	\$ 6.99
	EKCO® FLEXIBLE BLACK TURNER	\$ 6.99	1	\$ 6.99
	EKCO® MEASURING SPOON SET	\$ 3.99	1	\$ 3.99
	BAKER'S SECRET® ESSENTIALS 3-PC SPATULA / SCRAPER SET	\$ 2.99	1	\$ 2.99
	EKCO® 5-PC NYLON TOOL SET	\$ 14.99	1	\$ 14.99
	PAOI™ BAMBOO 8-PC TOOL SET	\$ 14.99	1	\$ 14.99
EKCO® ICE CREAM SCOOP	\$ 4.99	1	\$ 4.99	
SERVEWARE	GRAVY BOAT COORDINATES W/ CORELLE® WHITE	\$ 16.99	1	\$ 16.99
TABLETOP	SALT & PEPPER GIFT BOX COORDINATES W/ CORELLE® WHITE	\$ 9.99	1	\$ 9.99
TOTAL				\$ 685.64

MARK	DATE	DESCRIPTION

LOT NUMBER: 207

DRAWN BY: JESSICA SCOONES

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SHEET TITLE

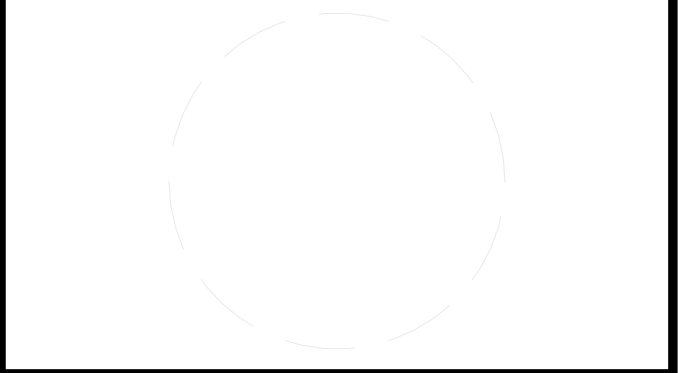
DININGWARE SCHEDULE

I-203



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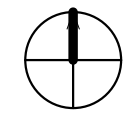
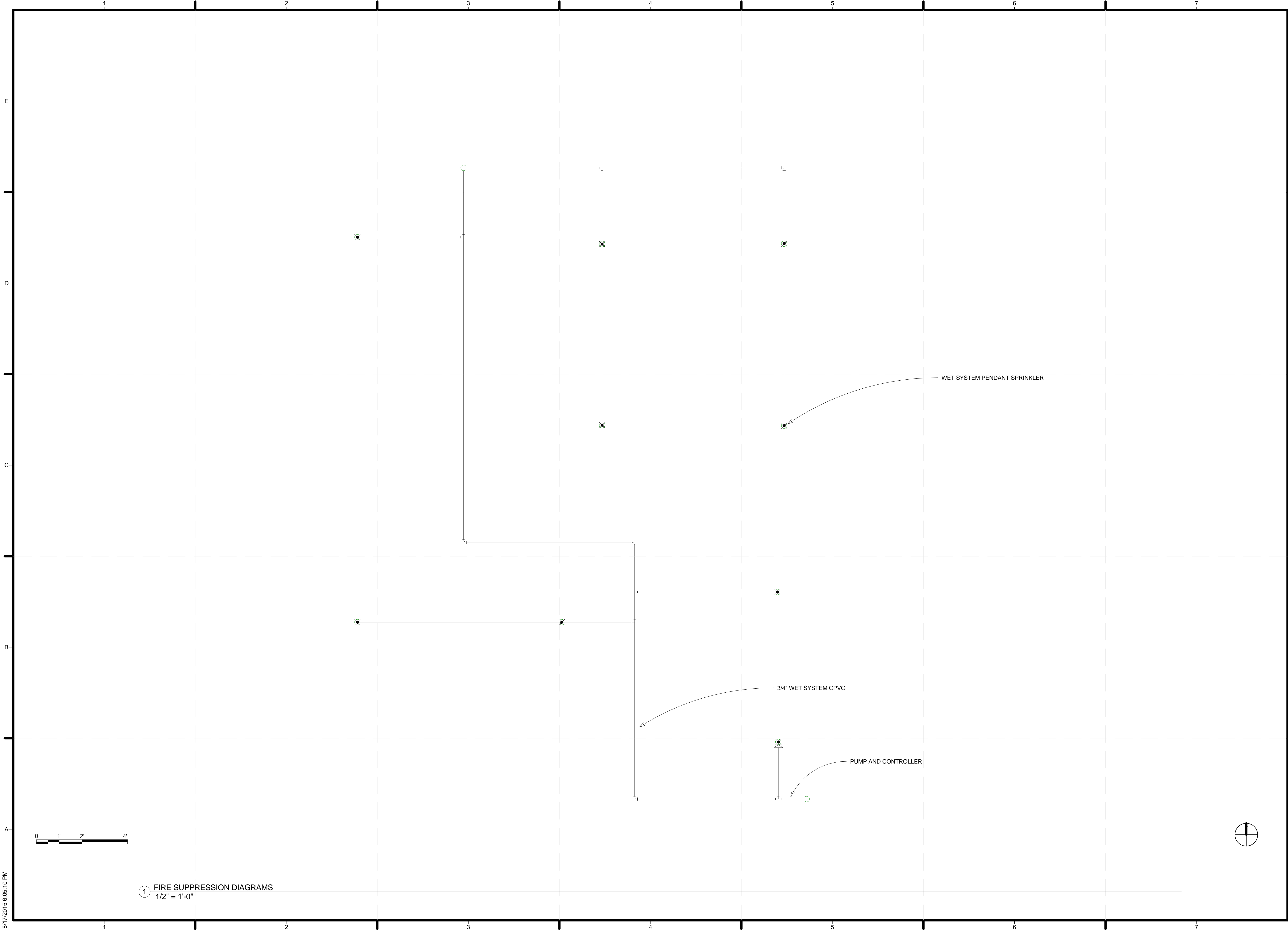
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SHEET TITLE
ELEVATIONS

F-111

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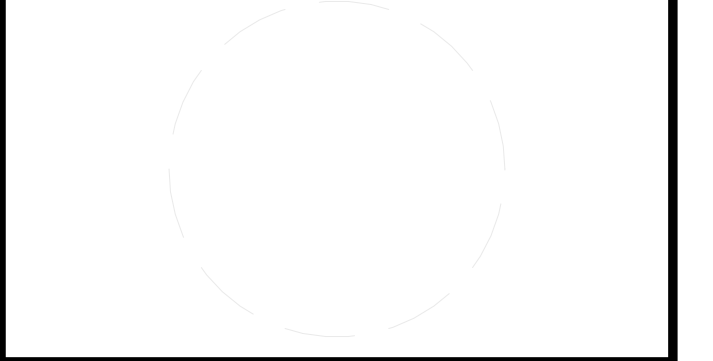


① FIRE SUPPRESSION DIAGRAMS
1/2" = 1'-0"



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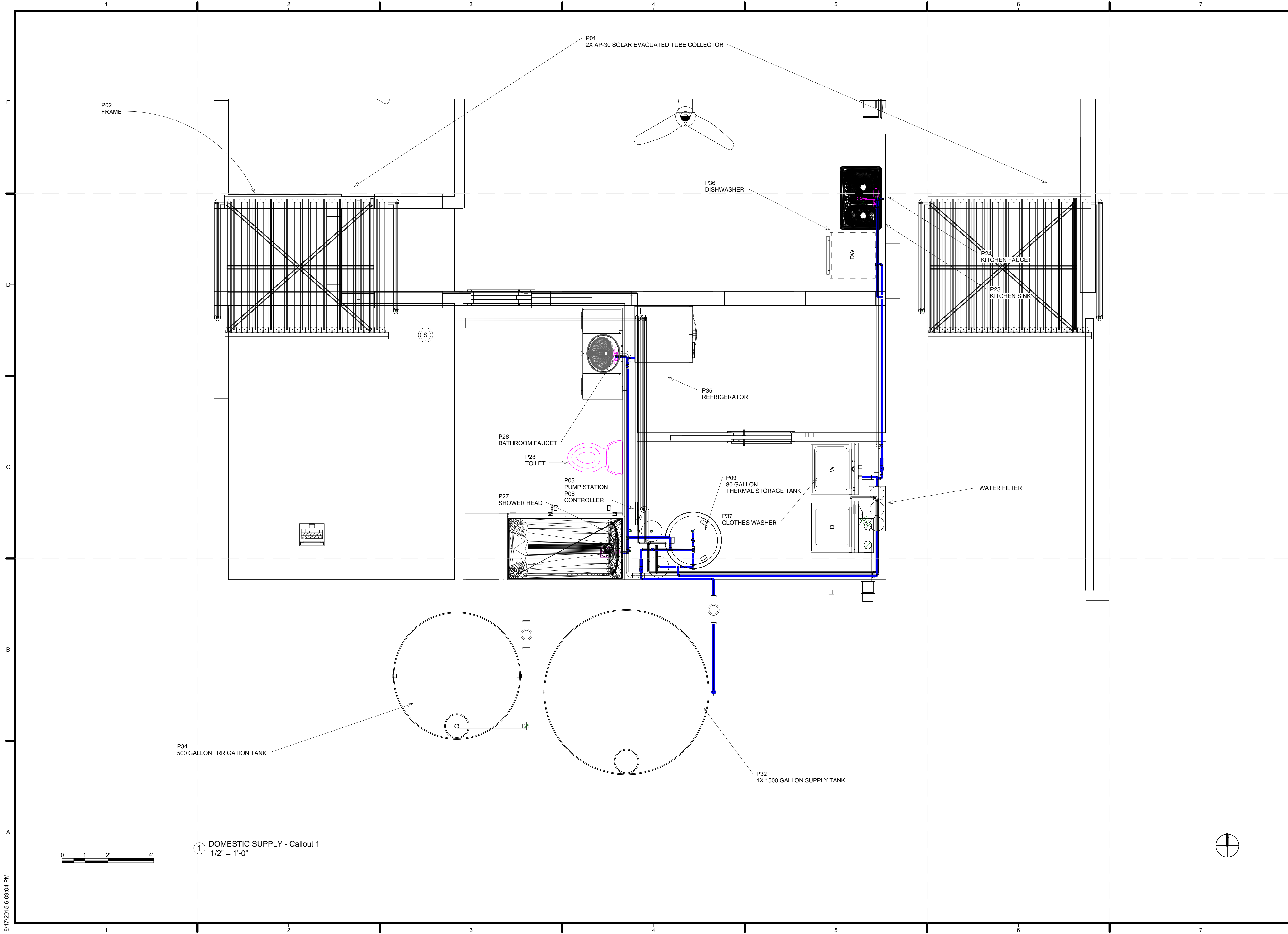
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FIRE PROTECTION DIAGRAMS

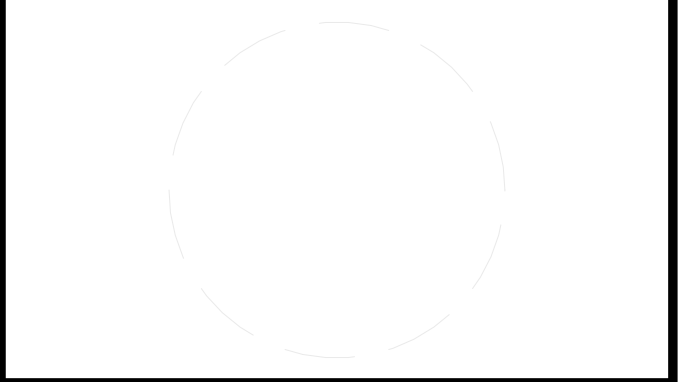
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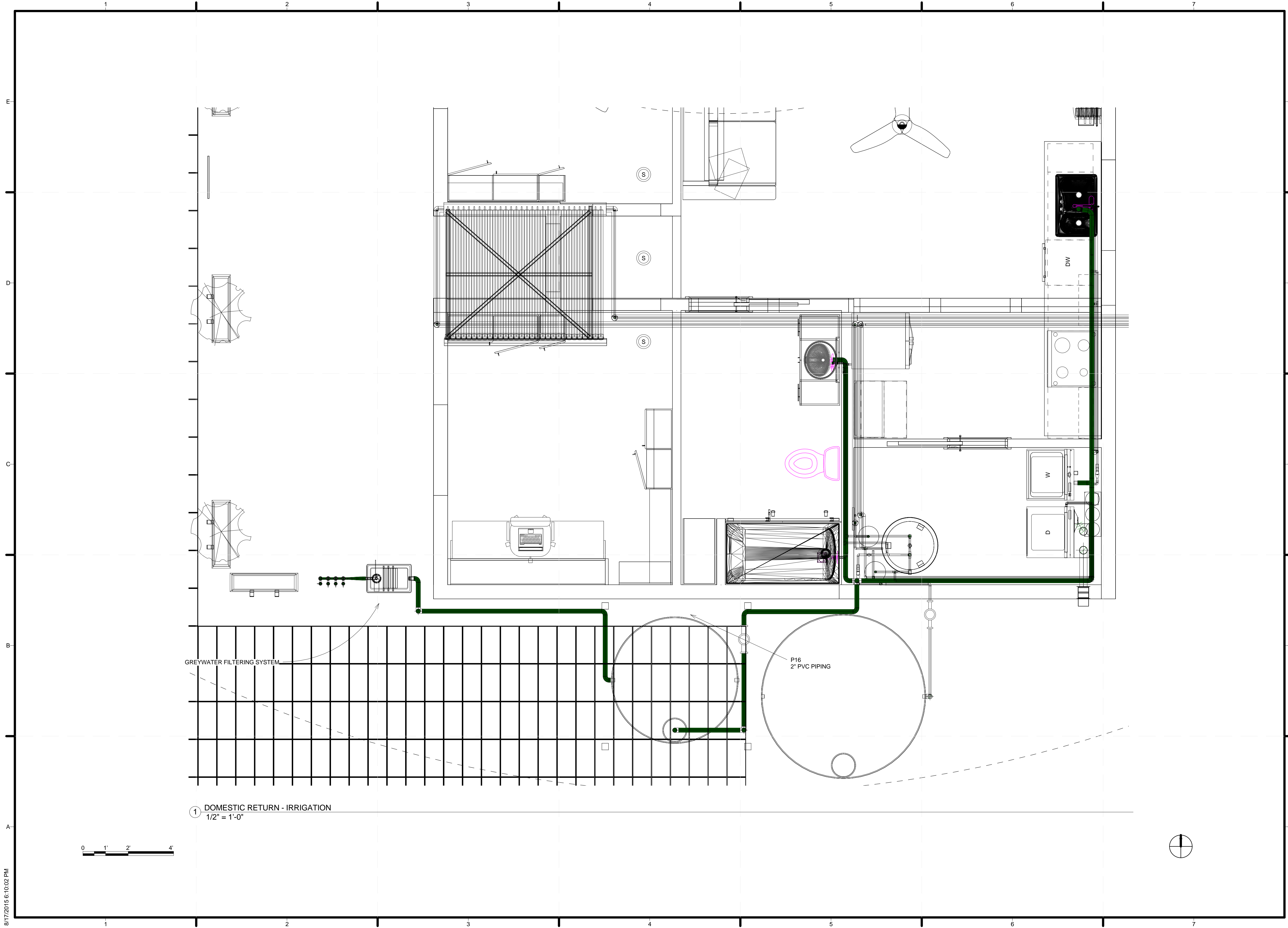
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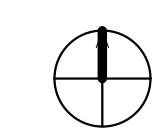
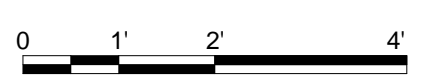
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SHEET TITLE
 DOMESTIC SUPPLY

P-102

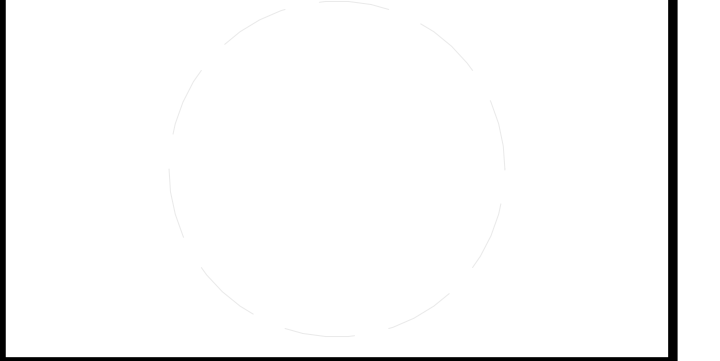


① DOMESTIC RETURN - IRRIGATION
 1/2" = 1'-0"



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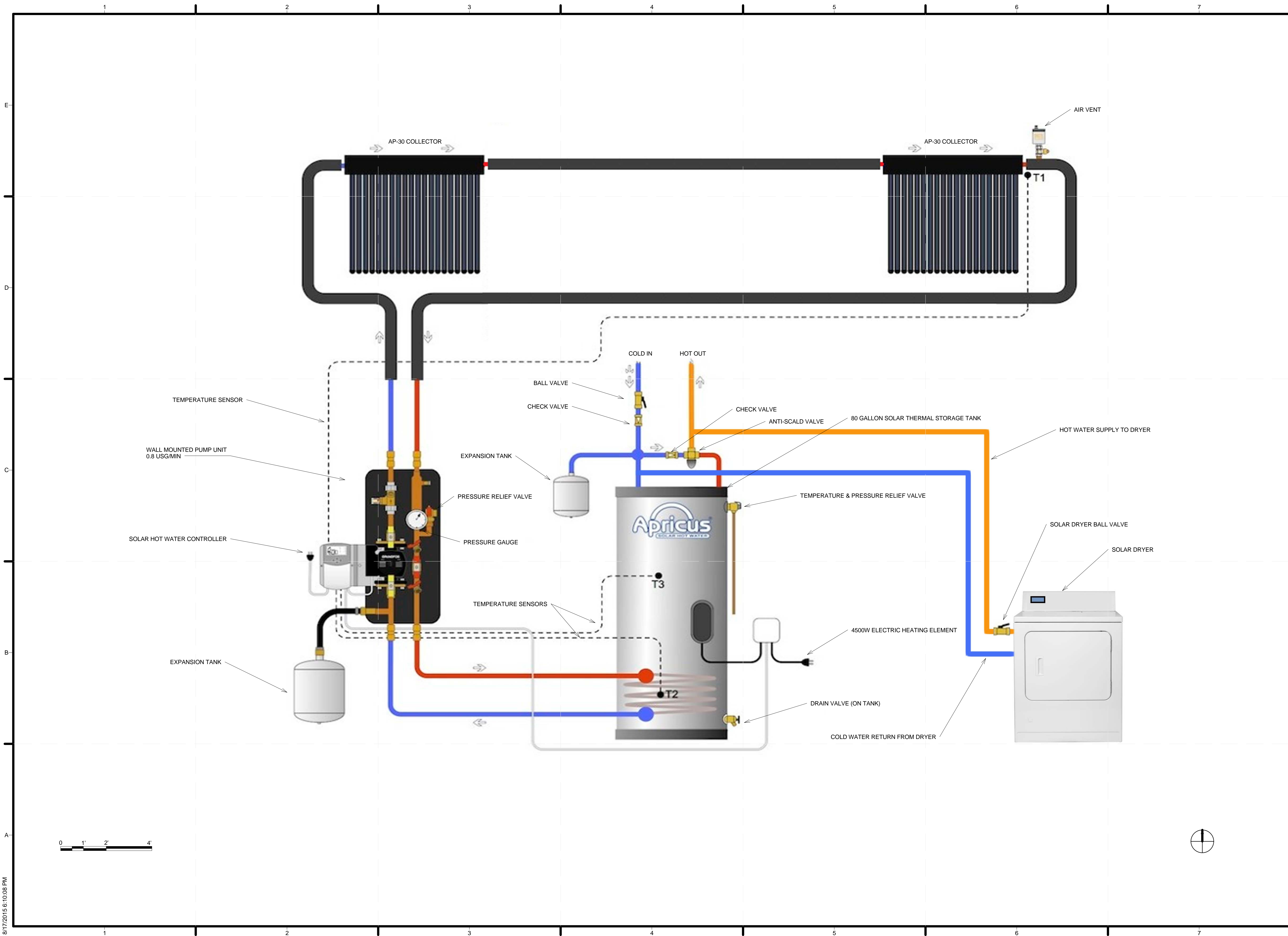
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SHEET TITLE
 DOMESTIC RETURN

P-103

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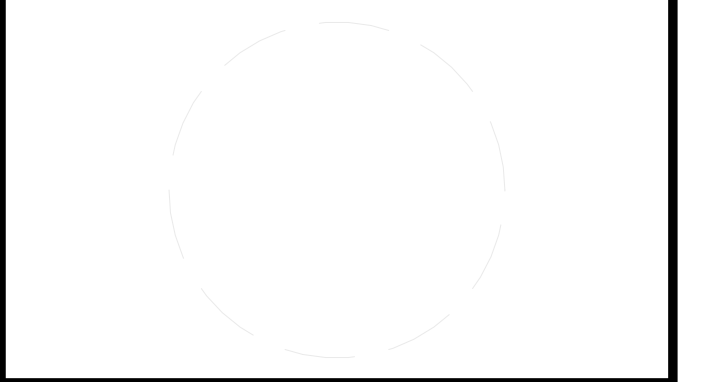
SHEET TITLE
SOLAR HOT WATER SYSTEM

P-104



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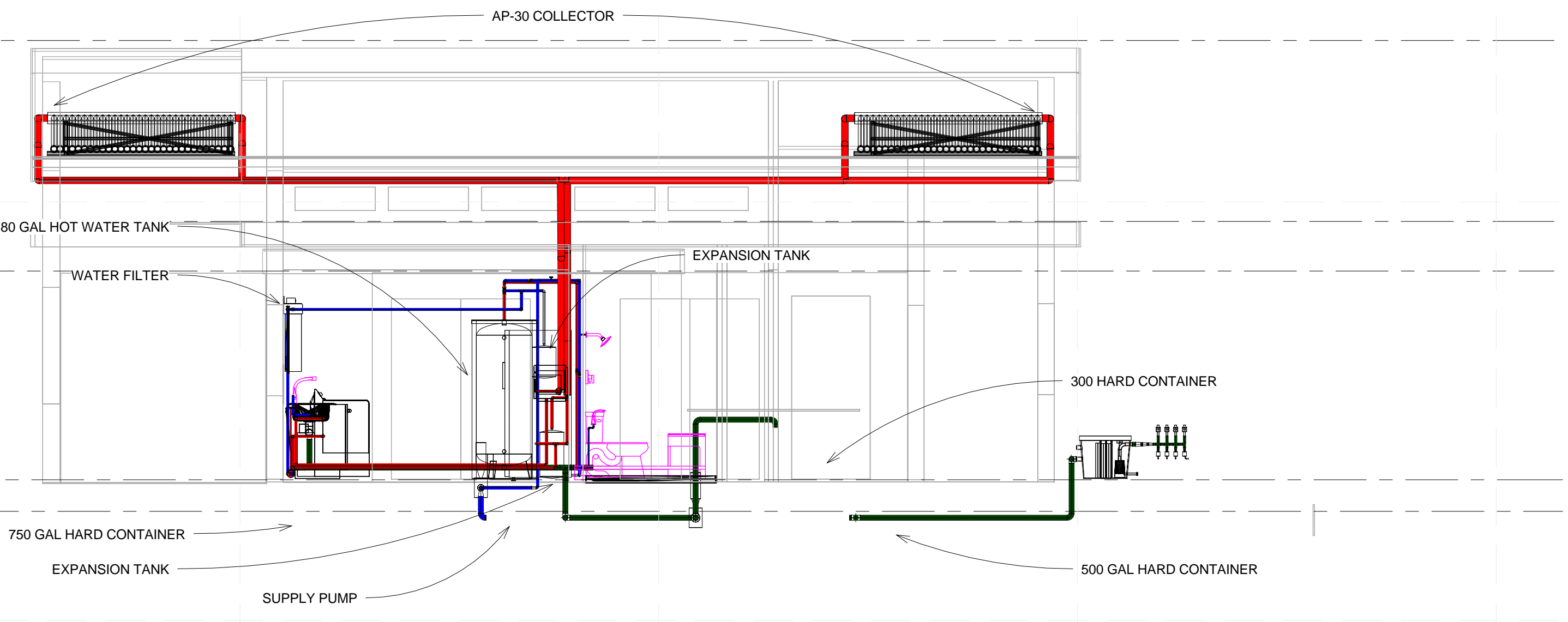
SHEET TITLE
PLUMBING ELEVATIONS

P-201

● SOLAR ENVELOPE
18'-0"
 ● LOW ROOF FRAMING PLAN
11'-1"
 ● SOUTH REFLECTED CEILING PLAN
9'-2 1/4"

● FLOOR LEVEL
1'-2 1/2"
 ● GROUND LEVEL
0"

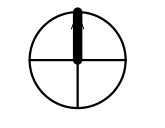
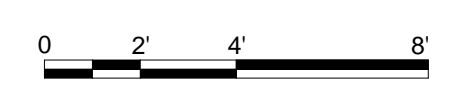
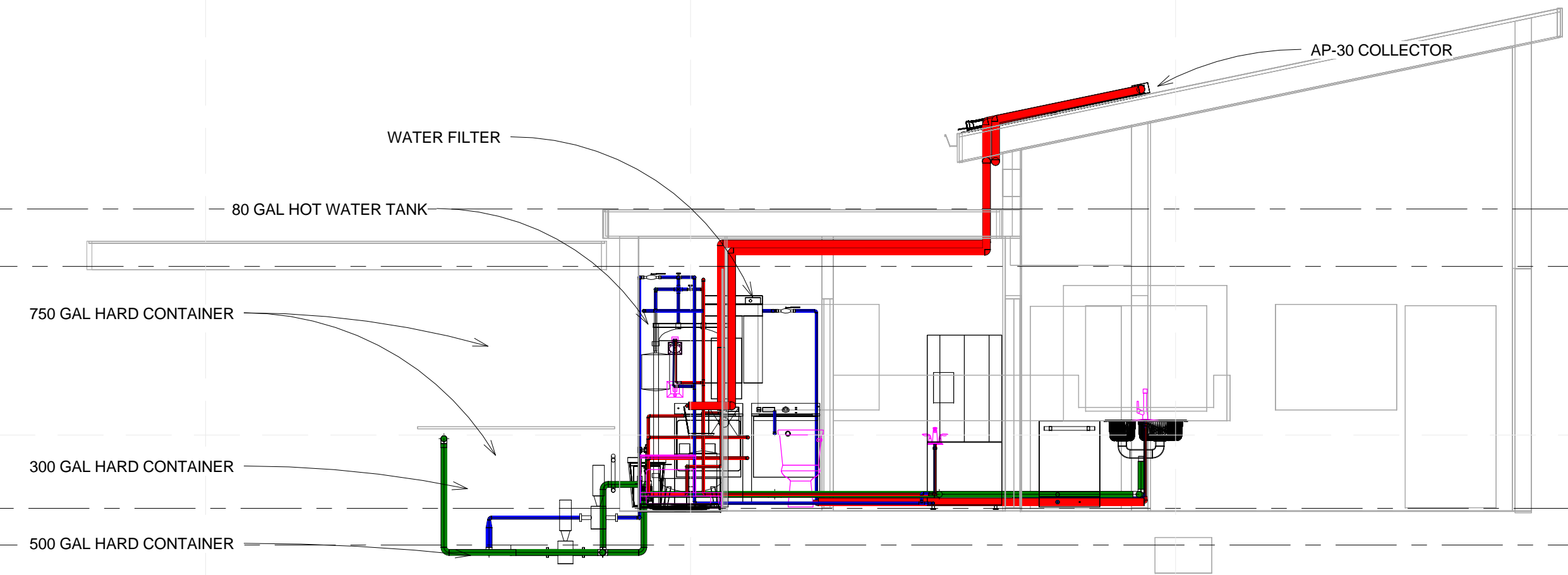
② PLUMBING - ELEVATION - NORTH
1/4" = 1'-0"



● SOLAR ENVELOPE
18'-0"
 ● LOW ROOF FRAMING PLAN
11'-1"
 ● SOUTH REFLECTED CEILING PLAN
9'-2 1/4"

● FLOOR LEVEL
1'-2 1/2"
 ● GROUND LEVEL
0"

① PLUMBING - ELEVATION - EAST
1/4" = 1'-0"



8/17/2015 6:10:56 PM



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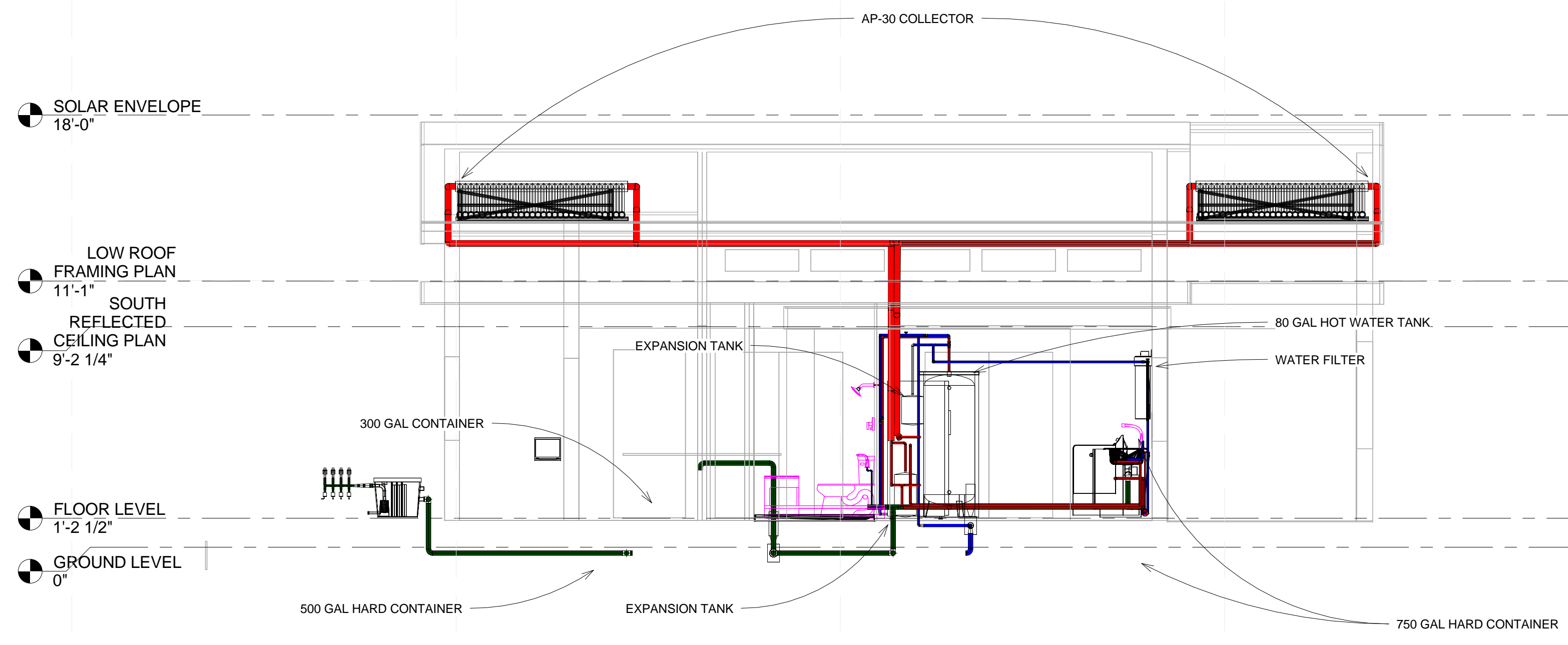


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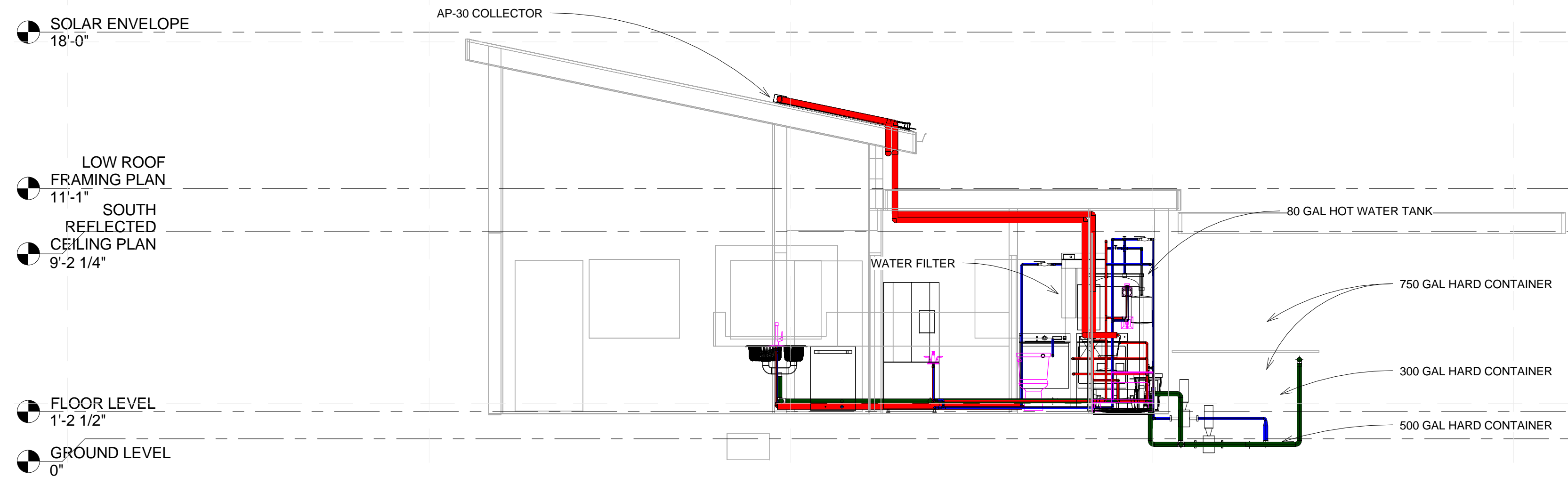
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SHEET TITLE
PLUMBING ELEVATIONS

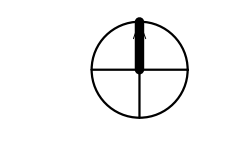
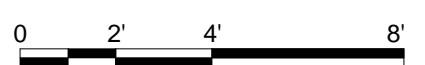
P-202

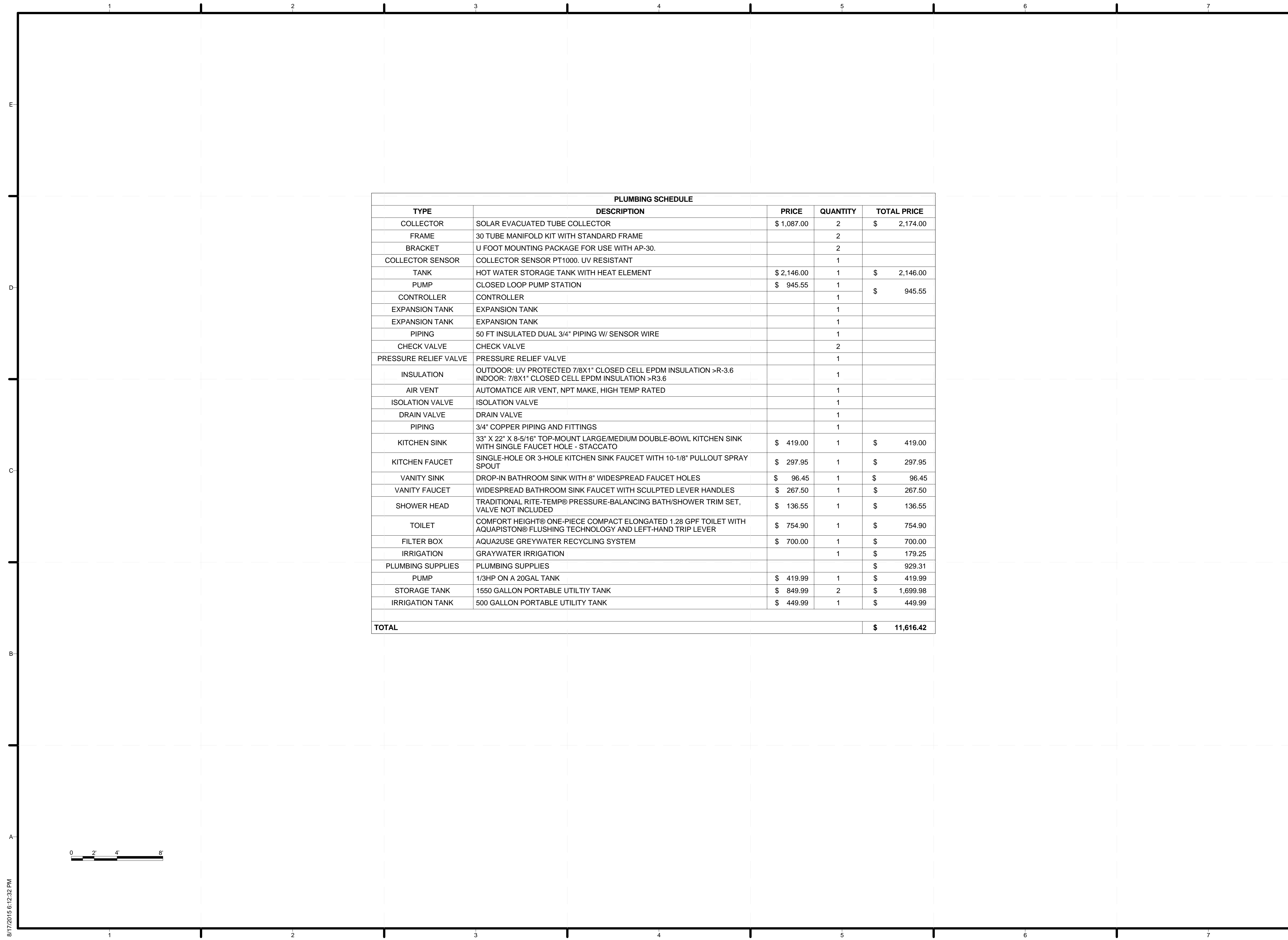


1 PLUMBING - ELEVATION - SOUTH
 1/4" = 1'-0"



2 PLUMBING - ELEVATION - WEST
 1/4" = 1'-0"





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SHEET TITLE
PLUMBING SCHEDULES

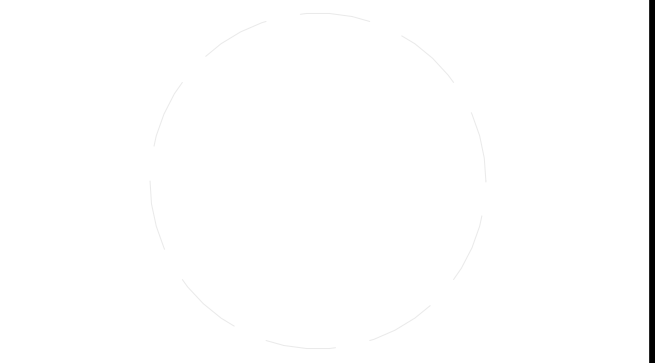
P-601



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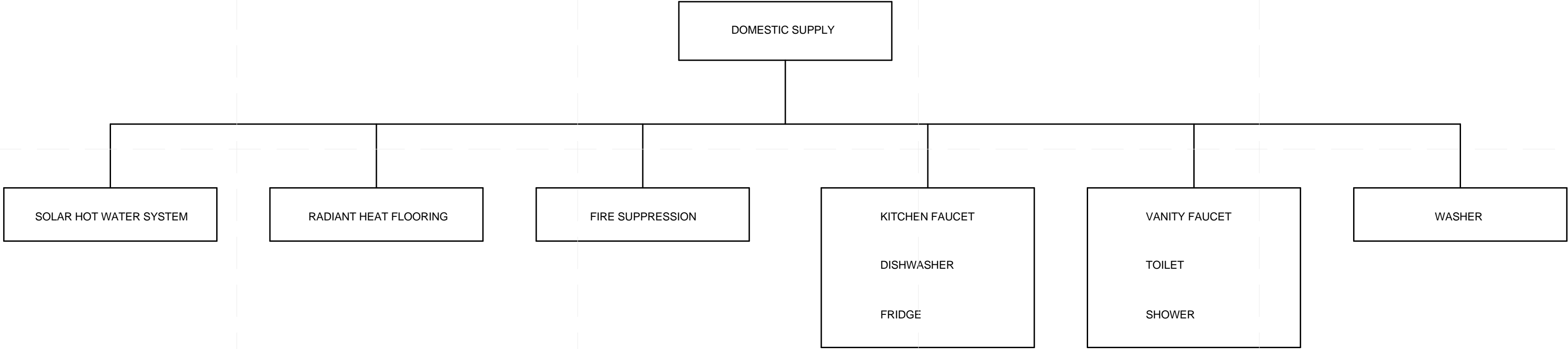


MARK	DATE	DESCRIPTION
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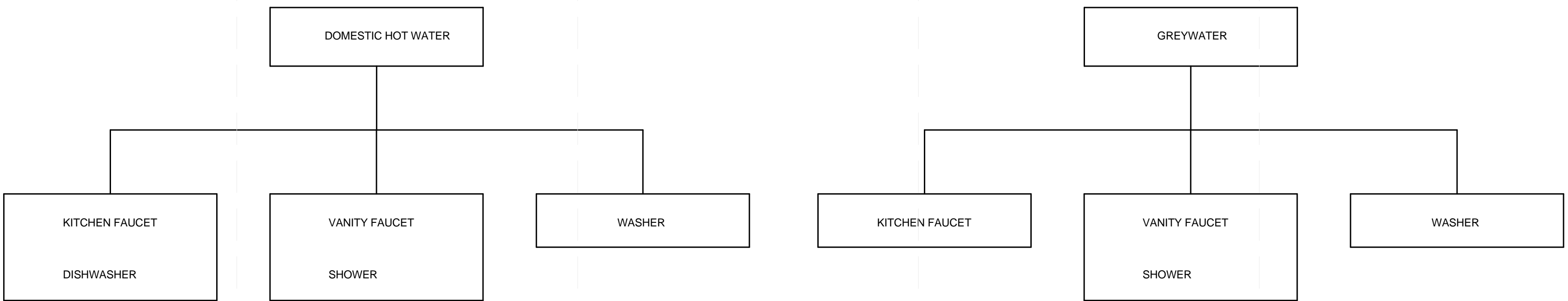
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SHEET TITLE
DOMESTIC PLUMBING DIAGRAMS

P-602

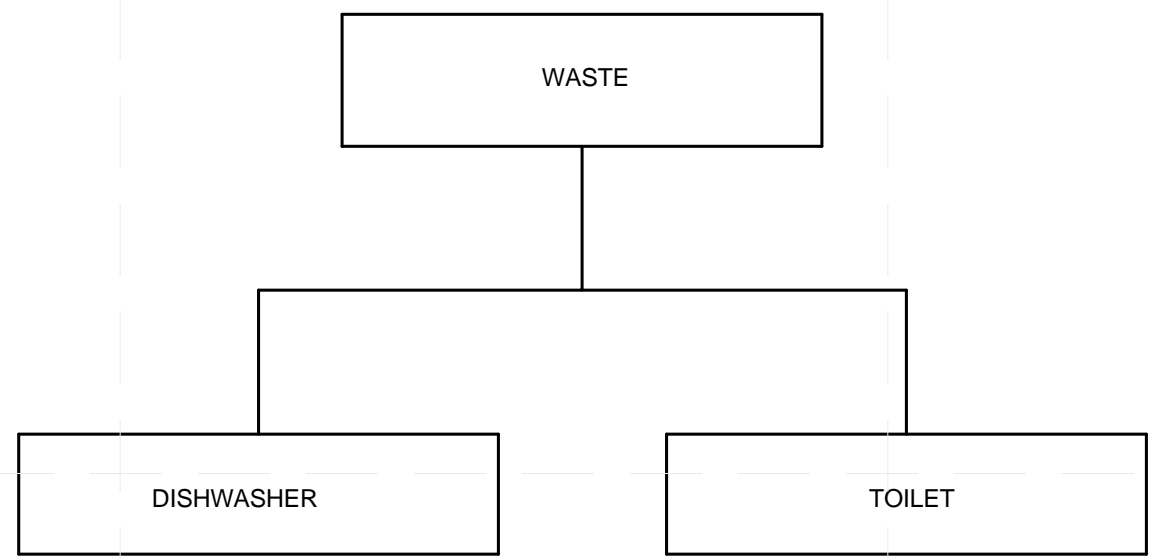


① DOMESTIC COLD WATER
 1/4" = 1'-0"

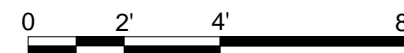


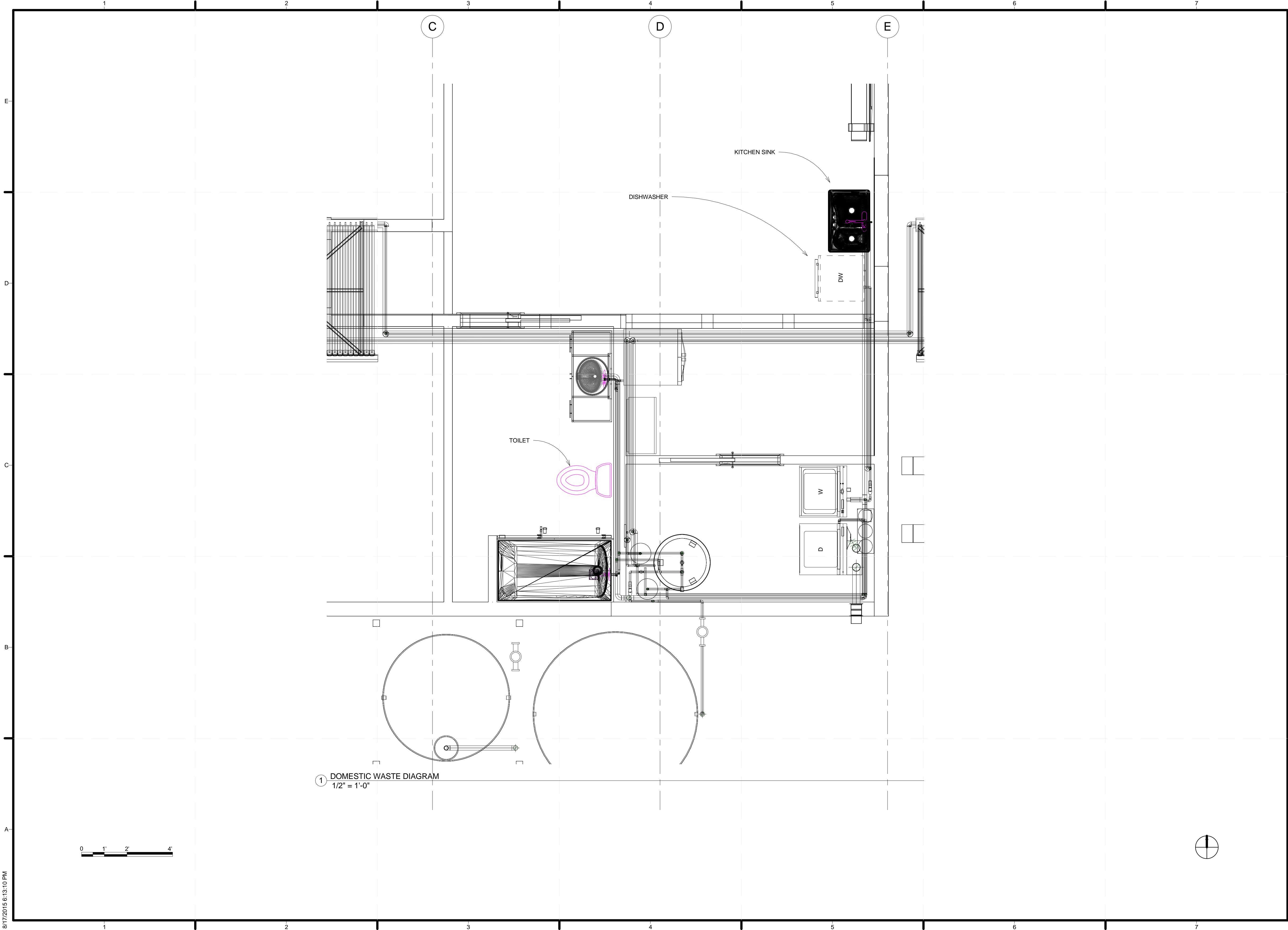
② DOMESTIC HOT WATER
 1/4" = 1'-0"

③ GREYWATER
 1/4" = 1'-0"



④ WASTE
 1/4" = 1'-0"



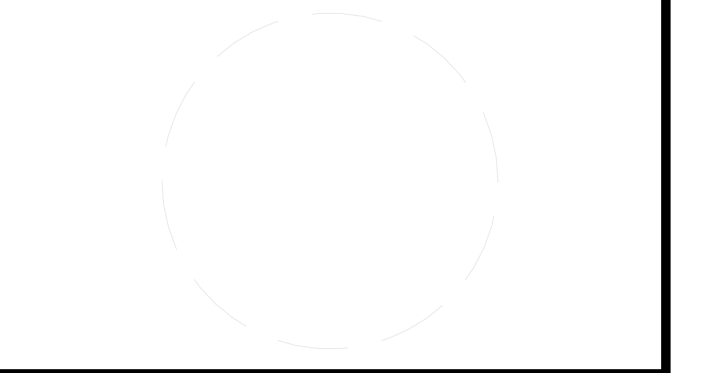


① DOMESTIC WASTE DIAGRAM
1/2" = 1'-0"



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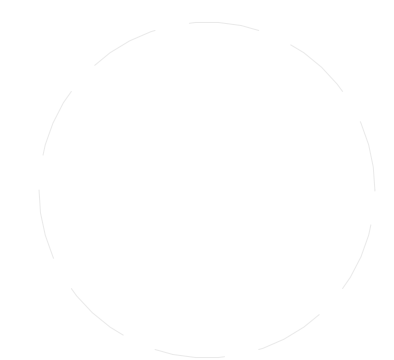

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SHEET TITLE
 DOMESTIC WASTE
 DIAGRAMS

P-603

	1	2	3	4	5	6	7	
E	<p>SECTION M1306 1. CLEARANCES FROM COMBUSTIBLE CONSTRUCTION</p> <p>M1306.1 APPLIANCE CLEARANCE. APPLIANCES SHALL BE INSTALLED WITH THE CLEARANCES FROM UNPROTECTED COMBUSTIBLE MATERIALS AS INDICATED ON THE APPLIANCE LABEL AND IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.</p> <p>SECTION M1307 2. APPLIANCE INSTALLATION</p> <p>M1307.1 GENERAL 2a. INSTALLATION OF APPLIANCES SHALL CONFORM TO THE CONDITIONS OF THEIR LISTING AND LABEL AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.</p> <p>THE MANUFACTURER'S OPERATING AND INSTALLATION INSTRUCTIONS SHALL REMAIN ATTACHED TO THE APPLIANCE.</p> <p>MECHANICAL ROOM FLOOR IS WATER RESISTANT</p> <p>2b. M1307.2 ANCHORAGE OF APPLIANCES. APPLIANCES DESIGNED TO BE FIXED IN POSITION SHALL BE FASTENED OR ANCHORED IN AN APPROVED MANNER.</p> <p>M1307.6 PLUMBING CONNECTIONS. POTABLE WATER AND DRAINAGE SYSTEM CONNECTIONS TO EQUIPMENT AND APPLIANCES REGULATED BY THIS CODE SHALL BE IN ACCORDANCE WITH CHAPTERS 29 AND 30. THIS CODE SHALL BE IN ACCORDANCE WITH CHAPTERS 29 AND 30.</p> <p>SECTION M1308 MECHANICAL SYSTEMS INSTALLATION</p> <p>3a. M1308.1 DRILLING AND NOTCHING. WOOD-FRAMED STRUCTURAL MEMBERS SHALL BE DRILLED, NOTCHED OR ALTERED IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS R502.8, R602.5, R602.6.1 AND R802.7.</p> <p>HOLES IN LOAD-BEARING MEMBERS OF COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION SHALL BE PERMITTED. ONLY IN ACCORDANCE WITH SECTIONS R505.2.5, R603.2.5 AND R804.2.5, IN ACCORDANCE WITH THE PROVISIONS OF SECTIONS R505.3.5, R603.3.4 AND R804.3.4, CUTTING AND NOTCHING OF FLANGES AND LIPS OF LOAD-BEARING MEMBERS OF COLD-FORMED STEEL LIGHT FRAME CONSTRUCTION SHALL NOT BE PERMITTED.</p> <p>STRUCTURAL INSULATED PANELS (SIPS) SHALL BE DRILLED AND NOTCHED OR ALTERED IN ACCORDANCE WITH THE 4. PROVISIONS OF SECTION R612.9. INSTRUCTIONS.</p> <p>4a. SECTION M1401 GENERAL</p> <p>4b. M1401.1 INSTALLATION. HEATING AND COOLING EQUIPMENT AND APPLIANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND THE REQUIREMENTS OF THIS CODE.</p> <p>4c. M1401.2 ACCESS, HEATING AND COOLING EQUIPMENT SHALL BE LOCATED WITH RESPECT TO BUILDING CONSTRUCTION AND OTHER EQUIPMENT TO PERMIT MAINTENANCE, SERVICING AND REPLACEMENT. CLEARANCES SHALL BE MAINTAINED TO PERMIT CLEANING OF HEATING AND COOLING SURFACES; REPLACEMENT OF FILTERS, BLOWERS, MOTORS, CONTROLS AND VENT CONNECTIONS; LUBRICATION OF MOVING PARTS; AND ADJUSTMENTS.</p> <p>4d. M1401.4 EXTERIOR INSTALLATIONS. EQUIPMENT INSTALLED OUTDOORS SHALL BE LISTED AND LABELED FOR OUTDOOR INSTALLATION. SUPPORTS AND FOUNDATIONS SHALL PREVENT EXCESSIVE VIBRATION, SETTLEMENT OR MOVEMENT OF THE EQUIPMENT. SUPPORTS AND FOUNDATIONS SHALL BE LEVEL AND CONFORM TO THE MANUFACTURER'S INSTALLATION</p> <p>M1401.5 FLOOD HAZARD. IN AREAS PRONE TO FLOODING AS ESTABLISHED BY TABLE R301.2(1), HEATING AND COOLING EQUIPMENT AND APPLIANCES SHALL BE LOCATED OR INSTALLED IN ACCORDANCE WITH SECTION R322.1.6.</p>							
D	<p>SECTION M1403 5. HEAT PUMP EQUIPMENT</p> <p>5a. M1403.1 HEAT PUMPS. THE MINIMUM UNOBSTRUCTED TOTAL AREA OF THE OUTSIDE AND RETURN AIR DUCTS OR OPENINGS TO A HEAT PUMP SHALL BE NOT LESS THAN 6 SQUARE INCHES PER 1,000 BTU/H (13 208MM2/KW) OUTPUT RATING OR AS INDICATED BY THE CONDITIONS OF THE LISTING OF THE HEAT PUMP. ELECTRIC HEAT PUMPS SHALL CONFORM TO UL 1995.</p> <p>5b. M1403.2 FOUNDATIONS AND SUPPORTS. SUPPORTS AND FOUNDATIONS FOR THE OUTDOOR UNIT OF A HEAT PUMP SHALL BE RAISED AT LEAST 3 INCHES (76 MM) ABOVE THE GROUND TO PERMIT FREE DRAINAGE OF DEFROST WATER, AND SHALL CONFORM TO THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.</p> <p>SECTION M1411 6. HEATING AND COOLING EQUIPMENT</p> <p>6a. M1411.1 APPROVED REFRIGERANTS. REFRIGERANTS USED IN DIRECT REFRIGERATING SYSTEMS SHALL CONFORM TO THE APPLICABLE PROVISIONS OF ANSIASHRAE 34.</p> <p>6b. M1411.3 CONDENSATE DISPOSAL. CONDENSATE FROM ALL COOLING COILS OR EVAPORATORS SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. SUCH PIPING SHALL MAINTAIN A MINIMUM HORIZONTAL SLOPE IN THE DIRECTION OF DISCHARGE OF NOT LESS THAN 1/8 UNIT VERTICAL IN 12 UNITS HORIZONTAL (I-PERCENT SLOPE). CONDENSATE SHALL NOT DISCHARGE INTO A STREET, ALLEY OR OTHER AREAS WHERE IT WOULD CAUSE A NUISANCE.</p> <p>6c. M1411.3.1 AUXILIARY AND SECONDARY DRAIN SYSTEMS. IN ADDITION TO THE REQUIREMENTS OF SECTION M1411.3, A SECONDARY DRAIN OR AUXILIARY DRAIN PAN SHALL BE REQUIRED FOR EACH COOLING OR EVAPORATOR COIL WHERE DAMAGE TO ANY BUILDING COMPONENTS WILL OCCUR AS A RESULT OF OVERFLOW FROM THE EQUIPMENT DRAIN PAN OR STOPPAGE IN THE CONDENSATE DRAIN PIPING. SUCH PIPING SHALL MAINTAIN A MINIMUM HORIZONTAL SLOPE IN THE DIRECTION OF DISCHARGE OF NOT LESS THAN 1/8 UNIT VERTICAL IN 12 UNITS HORIZONTAL (I-PERCENT SLOPE). DRAIN PIPING SHALL BE A MINIMUM OF 3/4-INCH (19 MM) NOMINAL PIPE SIZE. ONE OF THE FOLLOWING METHODS SHALL BE USED:</p> <p>1. AN AUXILIARY DRAIN PAN WITH A SEPARATE DRAIN SHALL BE INSTALLED UNDER THE COILS ON WHICH CONDENSATION WILL OCCUR. THE AUXILIARY PAN DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE PAN SHALL HAVE A MINIMUM DEPTH OF 1.5 INCHES (38 MM), SHALL NOT BE LESS THAN 3 INCHES (76 MM) LARGER THAN THE UNIT OR THE COIL DIMENSIONS IN WIDTH AND LENGTH AND SHALL BE CONSTRUCTED OF CORROSION-RESISTANT MATERIAL. GALVANIZED SHEET STEEL PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0236-INCH (0.6010 MM) (NO. 24 GAGE). NONMETALLIC PANS SHALL HAVE A MINIMUM THICKNESS OF NOT LESS THAN 0.0625 INCH (1.6 MM).</p> <p>2. A SEPARATE OVERFLOW DRAIN LINE SHALL BE CONNECTED TO THE DRAIN PAN INSTALLED WITH THE EQUIPMENT. THIS OVERFLOW DRAIN SHALL DISCHARGE TO A CONSPICUOUS POINT OF DISPOSAL TO ALERT OCCUPANTS IN THE EVENT OF A STOPPAGE OF THE PRIMARY DRAIN. THE OVERFLOW DRAIN LINE SHALL CONNECT TO THE DRAIN PAN AT A HIGHER LEVEL THAN THE PRIMARY DRAIN CONNECTION.</p> <p>3. AN AUXILIARY DRAIN PAN WITHOUT A SEPARATE DRAIN LINE SHALL BE INSTALLED UNDER THE COILS ON WHICH CONDENSATION WILL OCCUR. THIS PAN SHALL BE EQUIPPED WITH A WATER LEVEL DETECTION DEVICE CONFORMING TO UL 508 THAT WILL SHUT OFF THE EQUIPMENT SERVED PRIOR TO OVERFLOW OF THE PAN. THE PAN SHALL BE EQUIPPED WITH A FITTING TO ALLOW FOR DRAINAGE. THE AUXILIARY DRAIN PAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH ITEM 1 OF THIS SECTION.</p> <p>4. A WATER LEVEL DETECTION DEVICE CONFORMING TO UL 508 SHALL BE INSTALLED THAT WILL SHUT OFF THE EQUIPMENT SERVED IN THE EVENT THAT THE PRIMARY DRAIN IS BLOCKED. THE DEVICE SHALL BE INSTALLED IN THE PRIMARY DRAIN LINE, THE OVERFLOW DRAIN LINE OR THE EQUIPMENT-SUPPLIED DRAIN PAN, LOCATED AT A POINT HIGHER THAN THE PRIMARY DRAIN LINE CONNECTION AND BELOW THE OVERFLOW RIM OF SUCH PAN.</p>							
C	<p>6d. M1411.3.2 DRAIN PIPE MATERIALS AND SIZES. COMPONENTS OF THE CONDENSATE DISPOSAL SYSTEM SHALL BE CAST IRON, GALVANIZED STEEL, COPPER, POLYBUTYLENE, POLYETHYLENE, ABS, CPVC OR PVC PIPE OR TUBING. ALL COMPONENTS SHALL BE SELECTED FOR THE PRESSURE AND TEMPERATURE RATING OF THE INSTALLATION. JOINTS AND CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE MATERIALS SPECIFIED IN CHAPTER 30. CONDENSATE WASTE AND DRAIN LINE SIZE SHALL BE NOT LESS THAN 3/4-INCH (19 MM) INTERNAL DIAMETER AND SHALL NOT DECREASE IN SIZE FROM THE DRAIN PAN CONNECTION TO THE PLACE OF CONDENSATE DISPOSAL. WHERE THE DRAIN PIPES FROM MORE THAN ONE UNIT ARE MANIFOLDED TOGETHER FOR CONDENSATE DRAINAGE, THE PIPE OR TUBING SHALL BE SIZED IN ACCORDANCE WITH AN APPROVED METHOD.</p> <p>6e. M1411.4 AUXILIARY DRAIN PAN. CATEGORY IV CONDENSING APPLIANCES SHALL HAVE AN AUXILIARY DRAIN PAN WHERE DAMAGE TO ANY BUILDING COMPONENT WILL OCCUR AS A RESULT OF STOPPAGE IN THE CONDENSATE DRAINAGE SYSTEM. THESE PANS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SECTION M1411.3.</p> <p>6f. M1411.5 INSULATION OF REFRIGERANT PIPING. PIPING AND FITTINGS FOR REFRIGERANT VAPOR (SUCTION) LINES SHALL BE INSULATED WITH INSULATION HAVING A THERMAL RESISTIVITY OF AT LEAST R-4 AND HAVING EXTERNAL SURFACE PERMEANCE NOT EXCEEDING 0.05 PERM [2.87NG/(S • M2 • PA)] WHEN TESTED IN ACCORDANCE WITH ASTM E 96.</p> <p>CHAPTER 15 7. EXHAUST SYSTEMS</p> <p>M1501.1 OUTDOOR DISCHARGE. THE AIR REMOVED BY EVERY MECHANICAL EXHAUST SYSTEM SHALL BE DISCHARGED TO THE OUTDOORS. AIR SHALL NOT BE EXHAUSTED INTO AN ATTIC, SOFFIT, RIDGE VENT OR CRAWL SPACE.</p> <p>SECTION M1506 8. EXHAUST DUCTS</p> <p>M1506.1 DUCTS. WHERE EXHAUST DUCT CONSTRUCTION IS NOT SPECIFIED IN THIS CHAPTER, CONSTRUCTION SHALL COMPLY WITH CHAPTER 16.</p> <p>SECTION M1507 9. MECHANICAL VENTILATION</p> <p>9a. M1507.1 GENERAL. WHERE TOILET ROOMS AND BATHROOMS ARE MECHANICALLY VENTILATED, THE VENTILATION EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THIS SECTION.</p> <p>9b. M1507.3 VENTILATION RATE. VENTILATION SYSTEMS SHALL BE DESIGNED TO HAVE THE CAPACITY TO EXHAUST THE MINIMUM AIR FLOW RATE DETERMINED IN ACCORDANCE WITH TABLE M1507.3.</p> <p>9c. TABLE M1507.3 MINIMUM REQUIRED EXHAUST RATES FOR ONE- AND TWO-FAMILY DWELLINGS AREA TO BE VENTILATED VENTILATION RATES</p> <p>KITCHENS 100 CFM INTERMITTENT OR 25 CFM CONTINUOUS MECHANICAL EXHAUST CAPACITY OF BATHROOMS-TOILET ROOMS 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS FOR SI: 1 CUBIC FOOT PER MINUTE = 0.4719 LIS.</p> <p>CHAPTER 16 10. DUCT SYSTEMS</p> <p>10a. M1601.1 DUCT DESIGN. DUCT SYSTEMS SERVING HEATING, COOLING AND VENTILATION EQUIPMENT SHALL BE FABRICATED IN ACCORDANCE WITH THE PROVISIONS OF THIS SECTION AND ACCA MANUAL D OR OTHER APPROVED METHODS.</p> <p>10b. M1601.1.1 ABOVE-GROUND DUCT SYSTEMS. ABOVE-GROUND DUCT SYSTEMS SHALL CONFORM TO THE FOLLOWING:</p> <p>1. EQUIPMENT CONNECTED TO DUCT SYSTEMS SHALL BE DESIGNED TO LIMIT DISCHARGE AIR TEMPERATURE TO A MAXIMUM OF 250°F (121°C).</p> <p>2. FACTORY-MADE AIR DUCTS SHALL BE CONSTRUCTED OF CLASS 0 OR CLASS 1 MATERIALS AS DESIGNATED IN TABLE M1601.1.1 (1).</p>							
B	<p>3. FIBROUS DUCT CONSTRUCTION SHALL CONFORM TO THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS OR NAIMA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS.</p> <p>4. MINIMUM THICKNESS OF METAL DUCT MATERIAL SHALL BE AS LISTED IN TABLE M1601.1.1 (2). GALVANIZED STEEL SHALL CONFORM TO ASTM A 653.</p> <p>5. USE OF GYPSUM PRODUCTS TO CONSTRUCT RETURN AIR DUCTS OR PLENUMS IS PERMITTED, PROVIDED THAT THE AIR TEMPERATURE DOES NOT EXCEED 125°F (52°C) AND EXPOSED SURFACES ARE NOT SUBJECT TO CONDENSATION.</p> <p>6. DUCT SYSTEMS SHALL BE CONSTRUCTED OF MATERIALS HAVING A FLAME SPREAD INDEX NOT GREATER THAN 200.</p> <p>7. STUD WALL CAVITIES AND THE SPACES BETWEEN SOLID FLOOR JOISTS TO BE USED AS AIR PLENUMS SHALL COMPLY WITH THE FOLLOWING CONDITIONS:</p> <p>7.1. THESE CAVITIES OR SPACES SHALL NOT BE USED AS A PLENUM FOR SUPPLY AIR.</p> <p>7.2. THESE CAVITIES OR SPACES SHALL NOT BE PART OF A REQUIRED FIRE-RESISTANCE-RATED ASSEMBLY.</p> <p>7.3. STUD WALL CAVITIES SHALL NOT CONVEY AIR FROM MORE THAN ONE FLOOR LEVEL.</p> <p>7.4. STUD WALL CAVITIES AND JOIST-SPACE PLENUMS SHALL BE ISOLATED FROM ADJACENT CONCEALED SPACES BY TIGHT-FITTING FIRE BLOCKING IN ACCORDANCE WITH SECTION R602.8</p> <p>10c. M1601.2 FACTORY-MADE DUCTS. FACTORY-MADE AIR DUCTS OR DUCT MATERIAL SHALL BE APPROVED FOR THE USE INTENDED, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. EACH PORTION OF A FACTORY-MADE AIR DUCT SYSTEM SHALL BEAR A LISTING AND LABEL INDICATING COMPLIANCE WITH UL 181 AND UL 181A OR UL 181B.</p> <p>10d. M1601.2.1 VIBRATION ISOLATORS. VIBRATION ISOLATORS INSTALLED BETWEEN MECHANICAL EQUIPMENT AND METAL DUCTS SHALL BE FABRICATED FROM APPROVED MATERIALS AND SHALL NOT EXCEED 10 INCHES (254 MM) IN LENGTH.</p> <p>10e. M1601.3 DUCT INSULATION MATERIALS. DUCT INSULATION MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:</p> <p>1. DUCT COVERINGS AND LININGS, INCLUDING ADHESIVES WHERE USED, SHALL HAVE A FLAME SPREAD INDEX NOT HIGHER THAN 25, AND A SMOKE-DEVELOPED INDEX NOT OVER 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723, USING THE SPECIMEN PREPARATION AND MOUNTING PROCEDURES OF ASTM E 2231.</p> <p>10f. M1601.4 INSTALLATION. DUCT INSTALLATION SHALL COMPLY WITH SECTIONS M1601.4.1 THROUGH M1601.4.7.</p> <p>10g. M1601.4.1 JOINTS AND SEAMS. JOINTS OF DUCT SYSTEMS SHALL BE MADE SUBSTANTIALLY AIRTIGHT BY MEANS OF TAPES, MASTICS, LIQUID SEALANTS, GASKETING OR OTHER APPROVED CLOSURE SYSTEMS. CLOSURE SYSTEMS USED WITH RIGID FIBROUS GLASS DUCTS SHALL COMPLY WITH UL181A AND SHALL BE MARKED 181A-P FOR PRESSURE-SENSITIVE TAPE, 181A-M FOR MASTIC OR 181 A-H FOR HEAT-SENSITIVE TAPE. CLOSURE SYSTEMS USED WITH FLEXIBLE AIR DUCTS AND FLEXIBLE AIR CONNECTORS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED 181B-PX FOR PRESSURE-SENSITIVE TAPE OR 181B-M FOR MASTIC. DUCT CONNECTIONS TO FLANGES OF AIR DISTRIBUTION SYSTEM EQUIPMENT OR SHEET METAL FITTINGS SHALL BE MECHANICALLY FASTENED. MECHANICAL FASTENERS FOR USE WITH FLEXIBLE NONMETALLIC AIR DUCTS SHALL COMPLY WITH UL 181B AND SHALL BE MARKED 181B-C. CRIMP JOINTS FOR ROUND METAL DUCTS SHALL HAVE A CONTACT LAP OF AT LEAST 1 1/2 INCHES (38 MM) AND SHALL BE MECHANICALLY FASTENED BY MEANS OF AT LEAST THREE SHEET-METAL SCREWS OR RIVETS EQUALLY SPACED AROUND THE JOINT. CLOSURE SYSTEMS USED TO SEAL METAL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.</p>							
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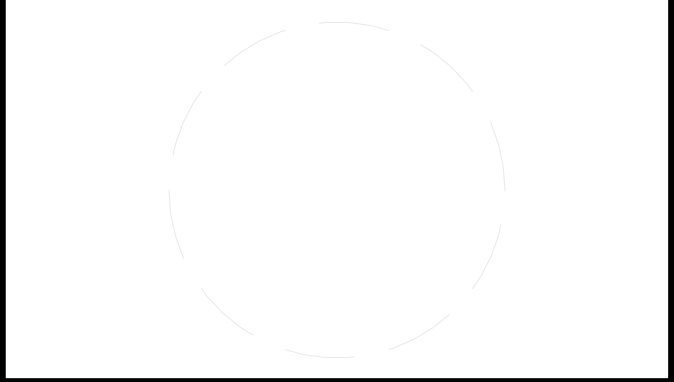


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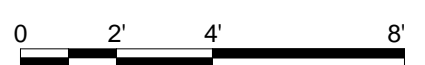
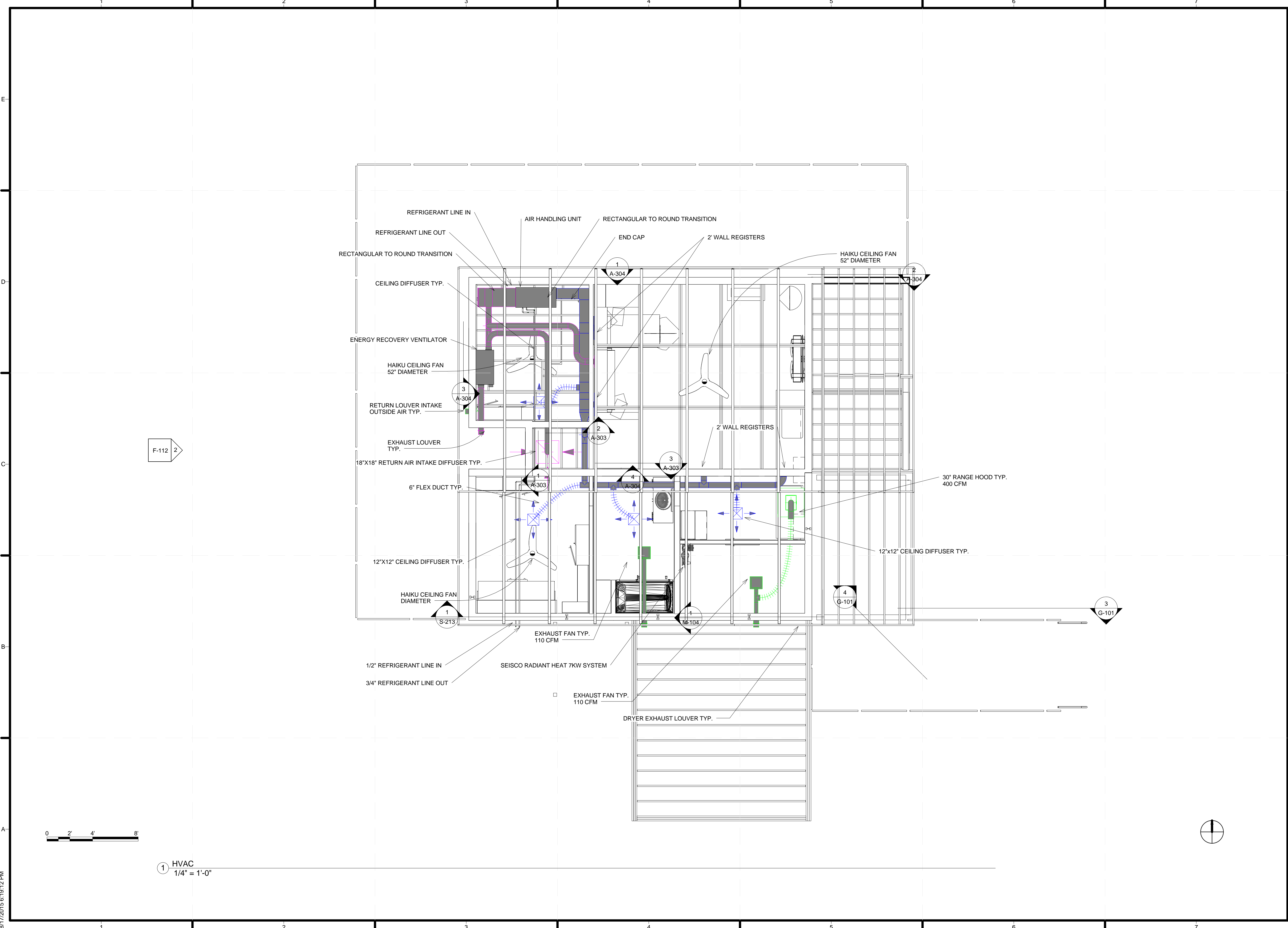


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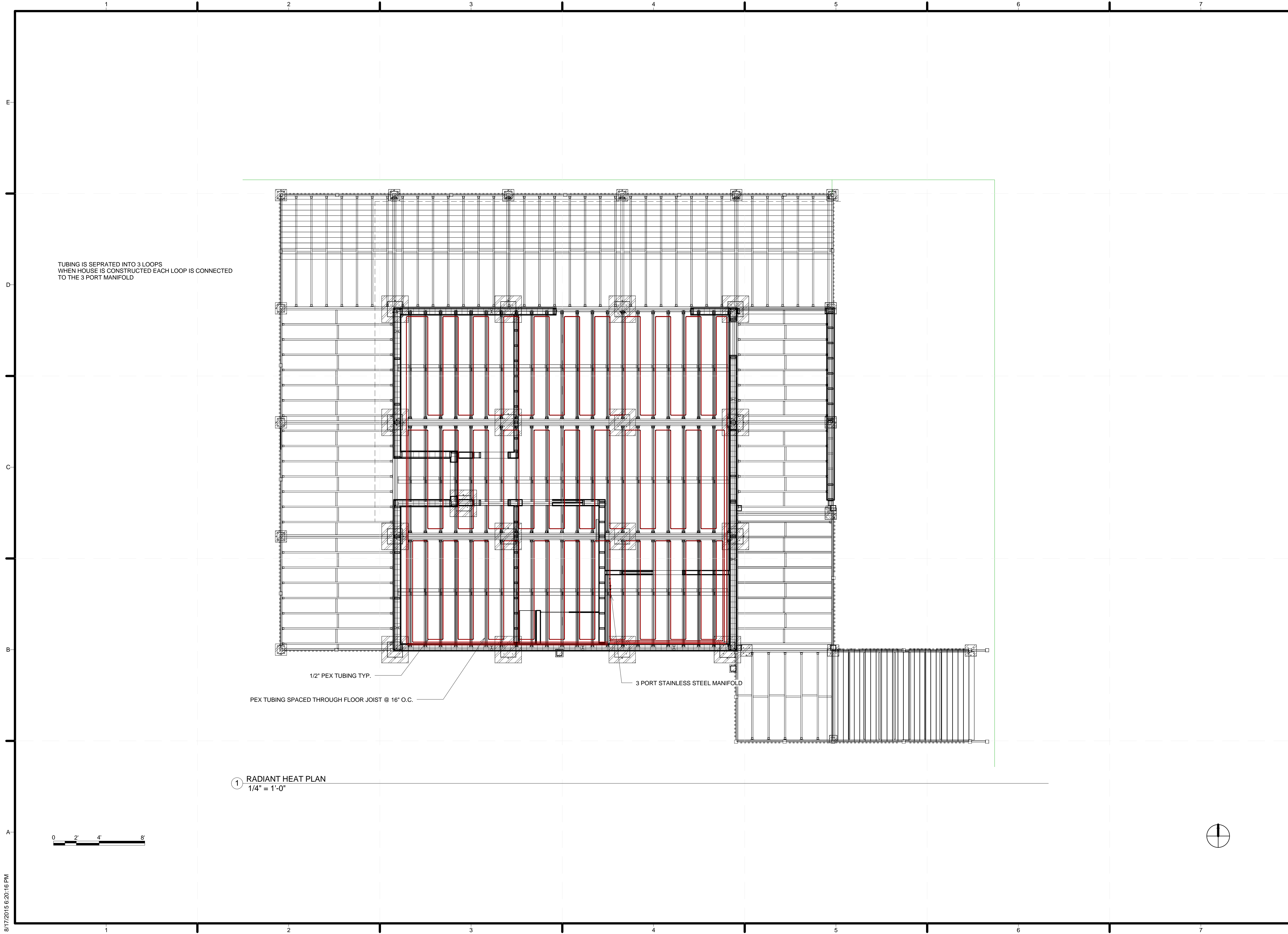
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1 HVAC
 1/4" = 1'-0"

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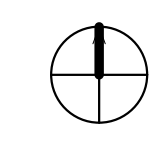
TUBING IS SEPRATED INTO 3 LOOPS
 WHEN HOUSE IS CONSTRUCTED EACH LOOP IS CONNECTED
 TO THE 3 PORT MANIFOLD

1/2" PEX TUBING TYP.

PEX TUBING SPACED THROUGH FLOOR JOIST @ 16" O.C.

3 PORT STAINLESS STEEL MANIFOLD

1 RADIANT HEAT PLAN
 1/4" = 1'-0"

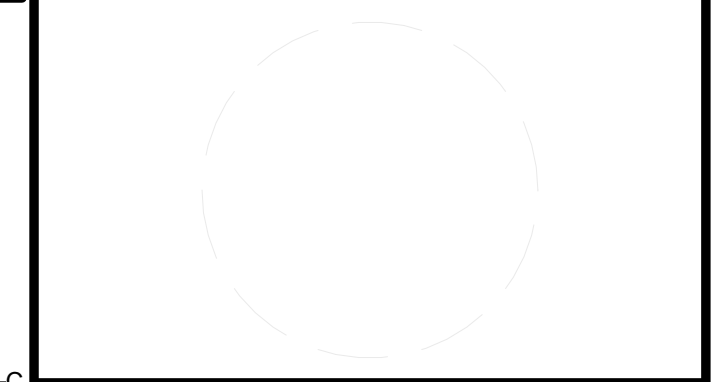


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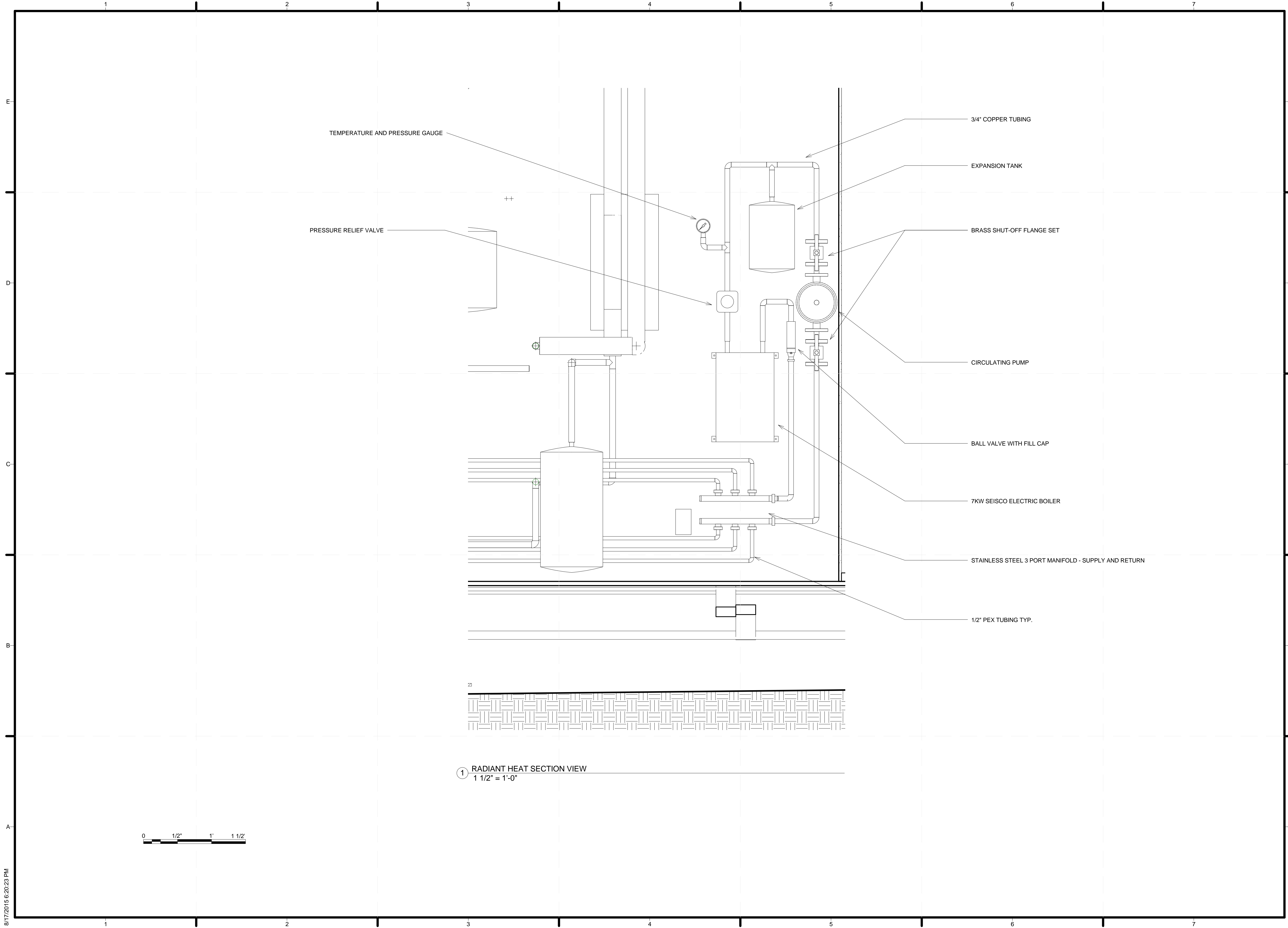


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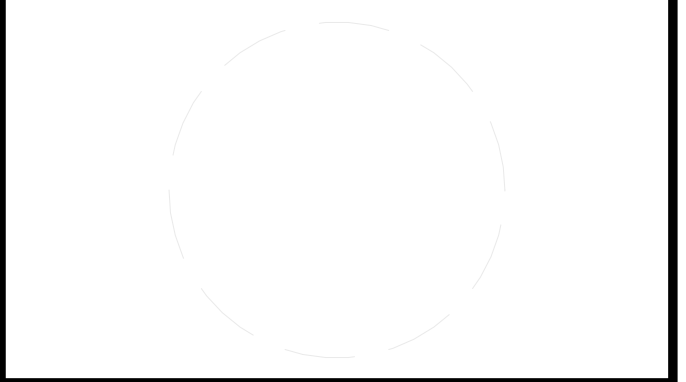
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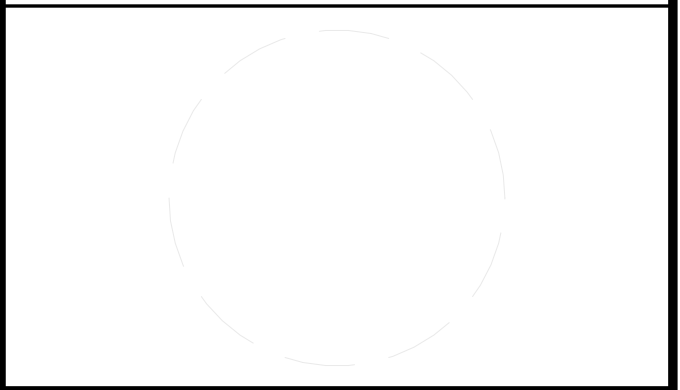
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RADIANT HEAT SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
MANIFOLD	MAXIFOLD 3 LOOP STAINLESS STEEL MANIFOLD KIT	\$ 254.00	1	\$ 254.00
PUMP			1	
EXPANSION TANK			1	
PUMP RELAY			1	
PRESSURE GAUGE			1	
TEMPERATURE GAUGE			1	
AIR BLEED		\$ 698.00	1	\$ 698.00
FILL/PURGE VALVES			1	
FILL/PURGE PUMP			1	
SHUT OFF			1	
COPPER PIPING			1	
		\$		
PEX TUBING	1/2" PEX TUBING 500'	268.00	1	\$ 268.00
		\$		
BOILER	SEISCO SH-07 MICRO BOILER	726.00	1	\$ 726.00
TOTAL				\$ 1,946.00



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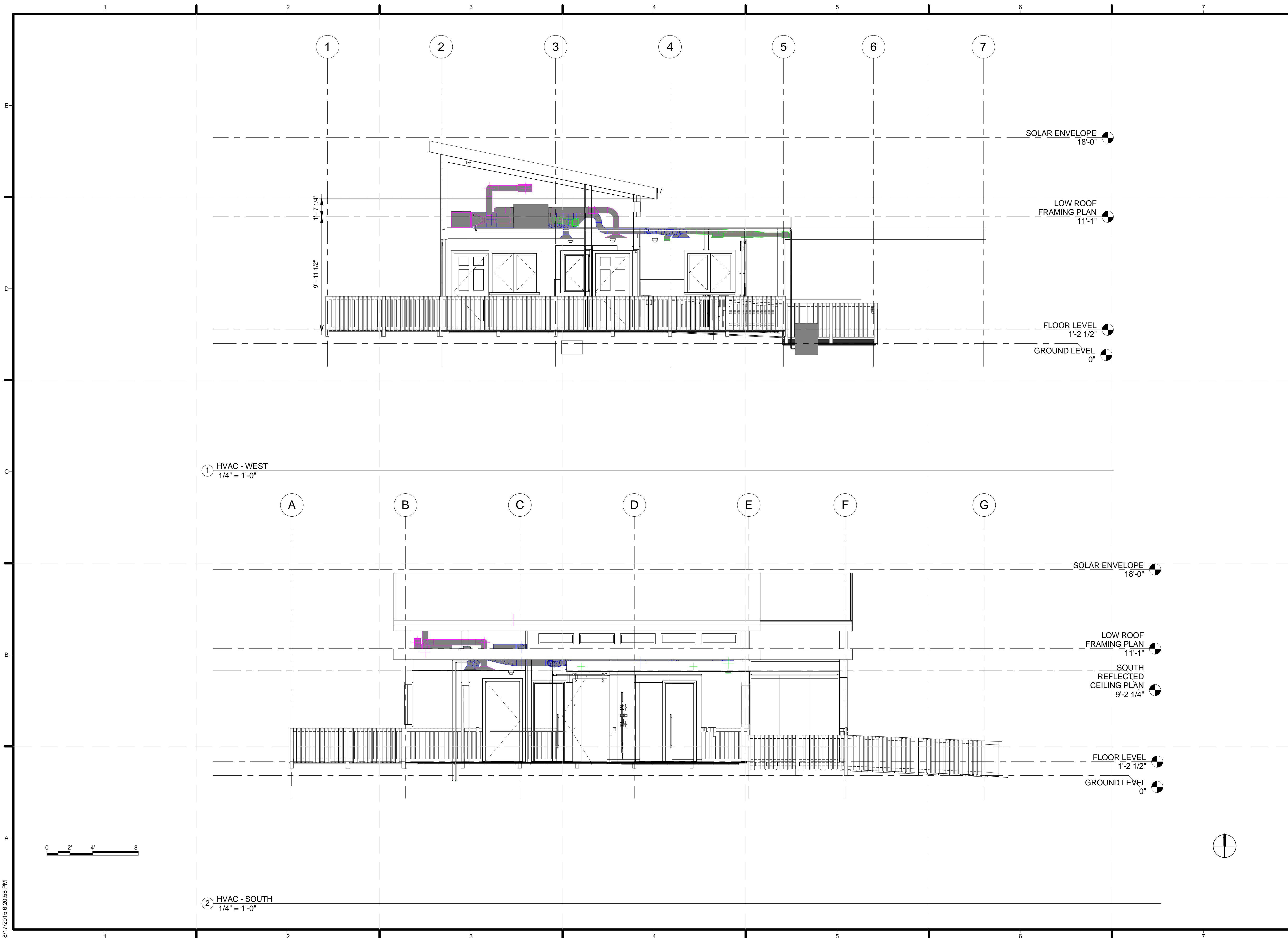
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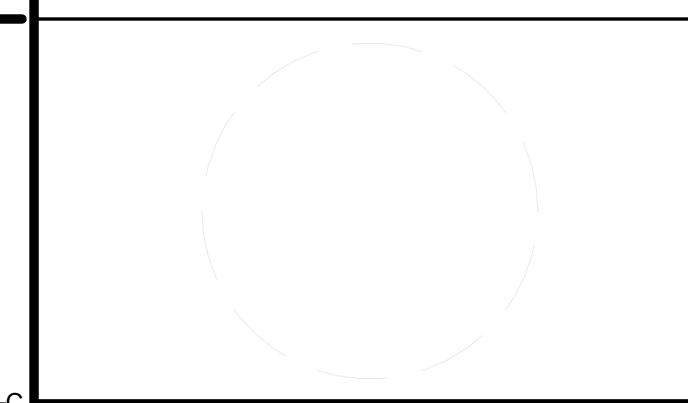
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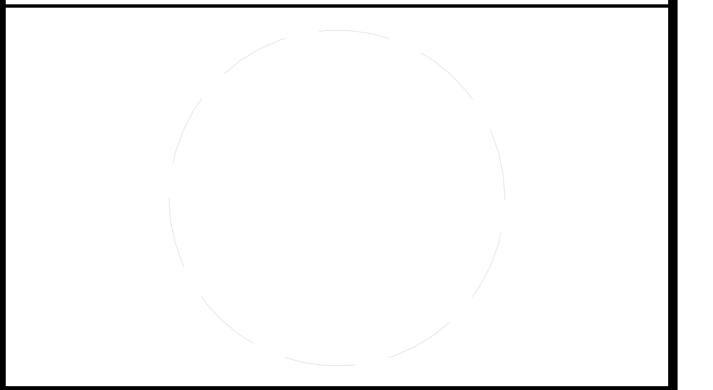
MECHANICAL SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
AHU	INFINITY SERIES 2T COMMUNICATING VARIABLE - SPEED FAN COIL		1	
HEAT PUMP	2T INFINITY SERIES WITH INFINITY TOUCH CONTROL	\$ 5,070.00	1	\$ 5,070.00
ERV	PERFORMANCE ENERGY RECOVERY VENTILATOR		1	
HRV	HRV HOOD KIT		2	
RECTANGULAR DUCT	18"X8"X15' RECTANGULAR DUCT		1	
END ELL	18"X8" END ELL		1	
PLENUM	22"X17 1/2"X24" LONG PLENUM		1	
TRANSITION	11"X16" TO 8"X18" TRANSITION		1	
TRANSITION	18"X8"X8" RECTANGULAR TO ROUND DUCT TRANSITION		1	
DUCT FITTINGS	6" STOD		3	
DUCT FITTINGS	6" ON 8" TAPS W/ DAMPER		4	
ROUND DUCT	6"X60' ROUND DUCT		1	
DUCT FITTINGS	6" 90 DEGREE ELBOW DUCT FITTINGS		16	
DUCT FITTINGS	6" SLIP COUPLINGS		1	
ROUND DUCT	8"X30' ROUND DUCT		1	
DUCT FITTINGS	8" 90 DEGREE ELBOW DUCT FITTINGS		4	
DUCT FITTINGS	8" SLIP COUPLINGS	\$ 1,681.00	2	\$ 1,681.00
END CAP	8" END CAP		1	
REDUCER	8"X6" REDUCER		1	
ROUND DUCT	12"X20' ROUND DUCT		1	
DUCT FITTINGS	12" 90 DEGREE ELBOW DUCT FITTINGS		2	
TAKE OFF	12" TAKE OFFS NO DAMPER		2	
GRILL	600 CFM GRILL & BOX		1	
EXHAUST GRILL	200 CFM CEILING EXHAUST GRILL (RETURN)		1	
WALL REGISTERS	125 CFM WALL REGISTERS (SUPPLY)		4	
CEILING GRILLS	100 CFM CEILING GRILLS (SUPPLY)		4	
ZIP SCREWS	SELF TAPPING SCREWS		1	
DUCT SEAL	DUCT SEALING MATERIAL		1	
REGISTER BOOT	4"X12"X6" ROUND REGISTER BOOT		2	
BOOT	4"X12"X6" BOOTS		2	
BATHROOM EXHAUST FAN	PANASONIC 1.5-SONES 100-CFM WHITE BATHROOM FAN ENERGY STAR	\$ 108.74	2	\$ 217.48
WALL VENT KIT	PANASONIC POLYPROPYLENE WALL VENT KIT	\$ 92.13	3	\$ 276.39
RANGE HOOD	400 CFM WHIRLPOOL GOLD DUCTED WALL-MOUNTED 30" RANGE HOOD	\$ 449.00	1	\$ 449.00
FAN	HAIKU BAMBOO 52, SHORT MOUNT, COCOA WITH SENSEME	\$ 1,240.00	2	\$ 2,480.00
FAN	HAIKU BAMBOO 52, EXTENDED 32" MOUNT, COCOA WITH SENSEME	\$ 1,270.00	1	\$ 1,270.00
TOTAL				\$ 11,443.87

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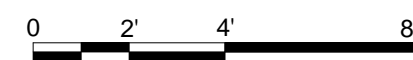
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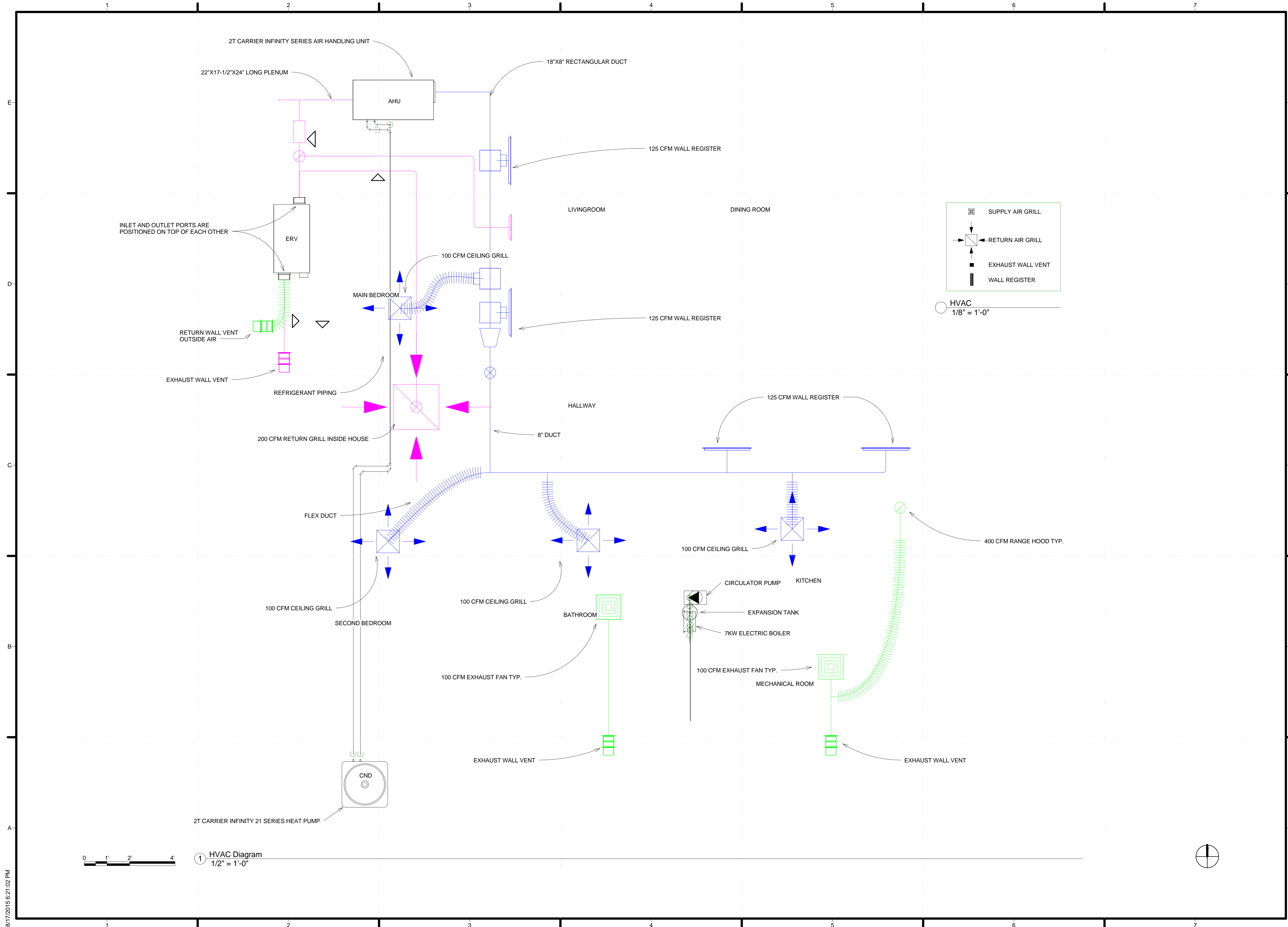
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SHEET TITLE

MECHANICAL SCHEDULE

M-601

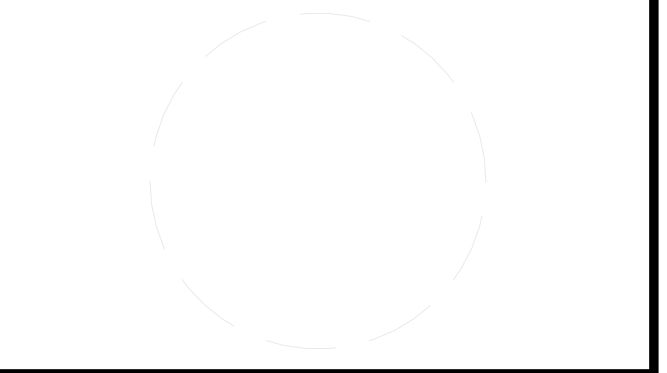




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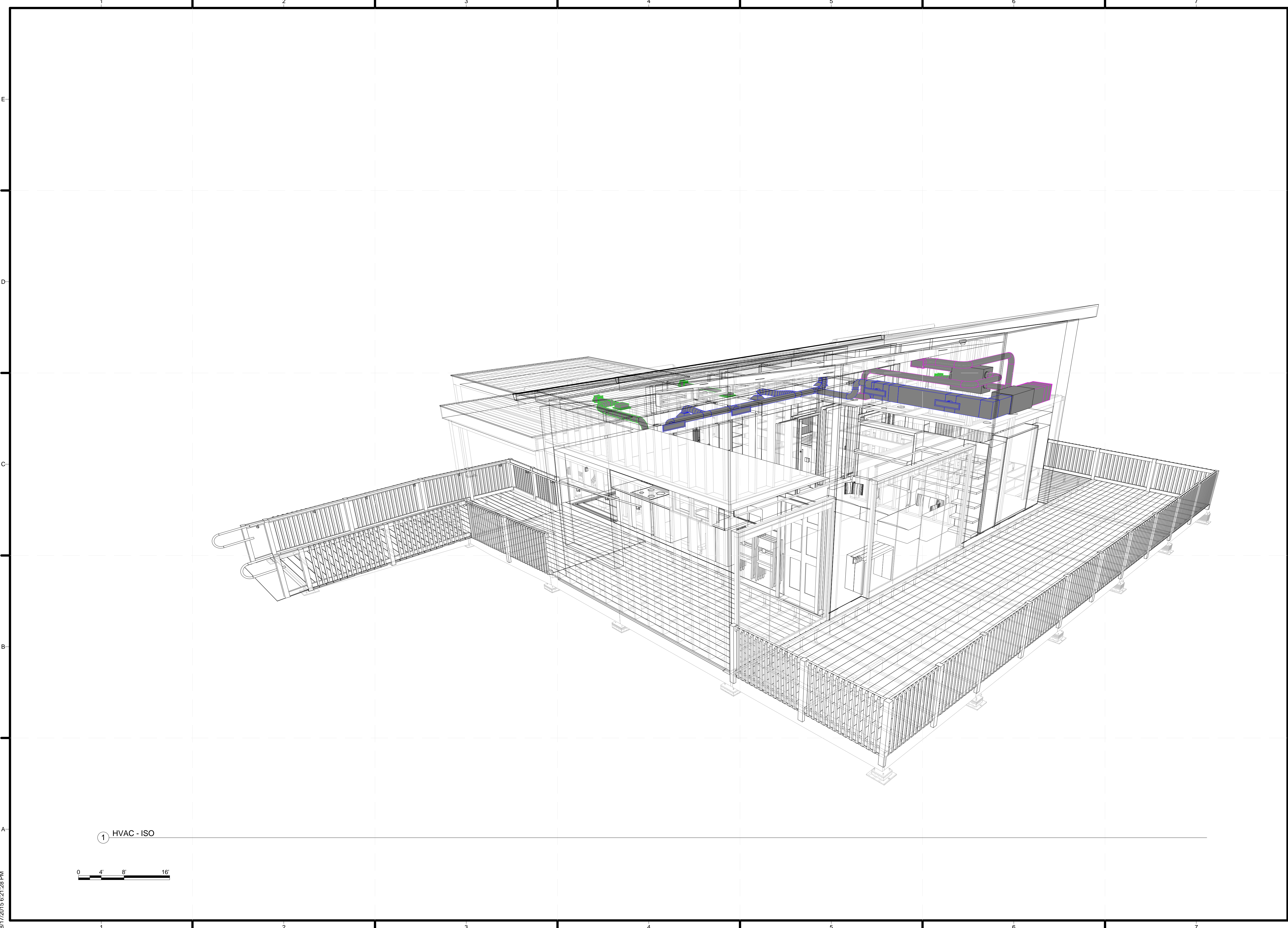


MARK	DATE	DESCRIPTION

SHEET TITLE
 HVAC DIAGRAMS

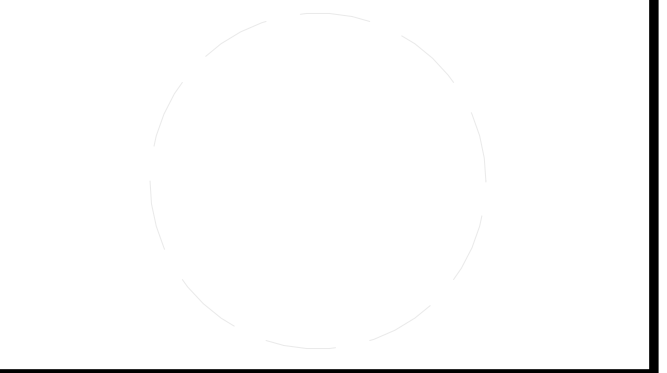
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SHEET TITLE
MECHANICAL ISOMETRIC

M-901

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 ① HVAC - ISO
 0 4' 8' 16'

SYMBOL LEGEND

	120V DUPLEX RECEPTACLE
	120V USB DUPLEX RECEPTACLE
	120V GFI DUPLEX RECEPTACLE
	240V SINGLE RECEPTACLE
	120V TWO DUPLEX RECEPTACLE
	JUNCTION BOX
	CURRENT TRANSFORMER (CT)
	CIRCUIT BREAKER
	SOLAR PANEL
	UTILITY METER
	SINGLE GANG SWITCH
	DOUBLE GANG SWITCH
	TRIPLE GANG SWITCH
	DIMMER SWITCH
	THERMOSTAT
	WIRED CONNECTION
	WIRELESS CONNECTION
	UTILITY METER
	LINE1 LUG
	LINE2 LUG
	NEUTRAL LUG
	GROUND LUG
	DC POSITIVE LUG
	DC NEGATIVE LUG

ABBREVIATION LIST

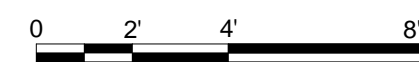
AC	ALTERNATING CURRENT
AWG	AMERICAN WIRE GAUGE
DC	DIRECT CURRENT
EMT	ELECTRICAL METALLIC TUBING - CONDUIT
ERV	ENERGY RECOVERY VENTILATOR
MCB	MAIN CIRCUIT BREAKER
NM-B	NON-METALLIC SHEATHED CABLE
PV	PHOTOVOLTAIC
THHN	THERMOPLASTIC HIGH HEAT-RESISTANT NYLON-COATED - WIRE INSULATION

ABBREVIATION LIST

E-001	ELECTRICAL SYMBOLS AND NOTES
E-101	ELECTRICAL DISTRIBUTION PLAN
E-103	INTERIOR LIGHTING PLAN
E-104	EXTERIOR LIGHTING PLAN
E-105	LIGHTING SCHEDULE
E-401	ELEVATION VIEW
E-601	ONE-LINE DIAGRAM
E-602	THREE-LINE DIAGRAM
E-603	SCHEDULES

ELECTRICAL NOTES

- | | | |
|---|---|--|
| <p>1 ENTIRE INSTALLATION SHALL CONFORM TO N.E.C., NFC AND SOLAR DECATHLON BUILDING CODE</p> <p>2 ANY JUNCTION BOX PULL BOX SHALL BE PROPERLY SIZED ACCORDING TO <u>N.E.C. 314.16</u></p> <p>3 MINIMUM WIRE SIZE FOR AC LOADS SHALL BE #14AWG</p> <p>4 PROVIDE IDENTIFICATION OF ALL BRANCH CIRCUITS ON A TYPEWRITTEN DIRECTORY CARD IN THE PANEL DOOR</p> <p>5 CONDUIT SHALL BE GALVANIZED STEEL RIGID HEAVY WALL, ELECTRIC-METALLIC TUBING (E.M.T.) WITH WATERTIGHT FITTING OR PVC</p> <p>6 EXCEPT WHERE OTHERWISE INDICATED WIRE SHALL BE COPPER WITH 600 VOLT INSULATION</p> <p>7 ENTIRE INSTALLATION SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST-CLASS WORKMANLIKE MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE</p> | <p>9 MAXIMUM LOAD FOR ALL BRANCH CIRCUITS IS 80%</p> <p>10 COORDINATE WITH EQUIPMENT SUPPLIER FOR ALL FINAL CONNECTION REQUIREMENTS BEFORE INSTALLATION OF CONDUIT WIRE</p> <p>11 BOND WIRE SHALL BE RUN IN ALL CONDUIT WHERE REQUIRED</p> <p>12 GROUND TYPE BUSING SHALL BE USED AS REQUIRED</p> <p>13 FOR ALL LOCATION OF MECHANICAL EQUIPMENT REFER TO MECHANICAL DRAWINGS</p> <p>14 ALL PANEL BOARDS SHALL BE PROVIDED WITH A FACTORY INSTALLED GROUND BUS FOR CONNECTING TO GROUND THE GREEN WIRE IN ALL CONDUITS</p> <p>15 NO "UF" TYPE CONDUCTORS ALLOWED. ALL DROPS TO FIXTURES AND EQUIPMENT SHALL BE DONE IN FLEXIBLE METALLIC CONDUIT EXCEPT AS NOTED. WORK INSIDE DRY WALL PARTITIONS AND HUNG CEILING IS TO BE "EMT"</p> <p>16 CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE. NO PLUG IN CIRCUIT BREAKERS ALLOWED</p> <p>17 USE ELECTRICAL SOCKETS AS SPECIFIED IN THE ELECTRICAL DRAWINGS</p> <p>18 THE CONDUCTOR USED ARE SPECIFIED IN THE ELECTRICAL PLAN AND SHALL COMPLY WITH <u>N.E.C. TABLE 310.16 AND 310.17</u></p> <p>19 CABLE BETWEEN PULL BOXES SHALL NOT CONTAIN MORE THAN THE EQUIVALENT OF FOUR QUARTER BENDS (360 DEGREES TOTAL) ACCORDING TO N.E.C</p> | <p>IMPORTANT NOTES</p> <p>1 ALL EXTERIOR OUTLETS MUST BE TYPE GROUND FAULT OR SUPPLIED BY A GROUND FAULT BREAKER</p> <p>2 ALL EXTERIOR OUTLETS MUST HAVE WATERPROOF COVERS AS SPECIFIED IN N.E.C.</p> <p>3 THE PV GROUNDING CABLE SHALL BE THE FIRST TO BE CONNECTED OR DISCONNECTED DURING PV INSTALLATION OR DEINSTALLATION</p> |
|---|---|--|



① ELECTRICAL SYMBOLS AND NOTES
1/4" = 1'-0"

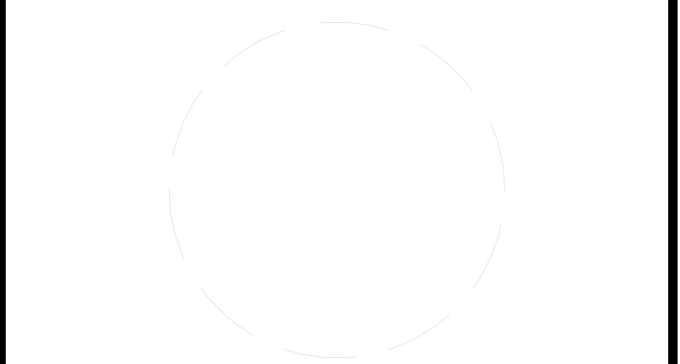


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SHEET TITLE
ELECTRICAL SYMBOLS AND NOTES

E-001



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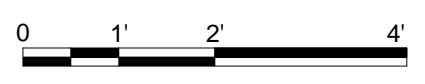
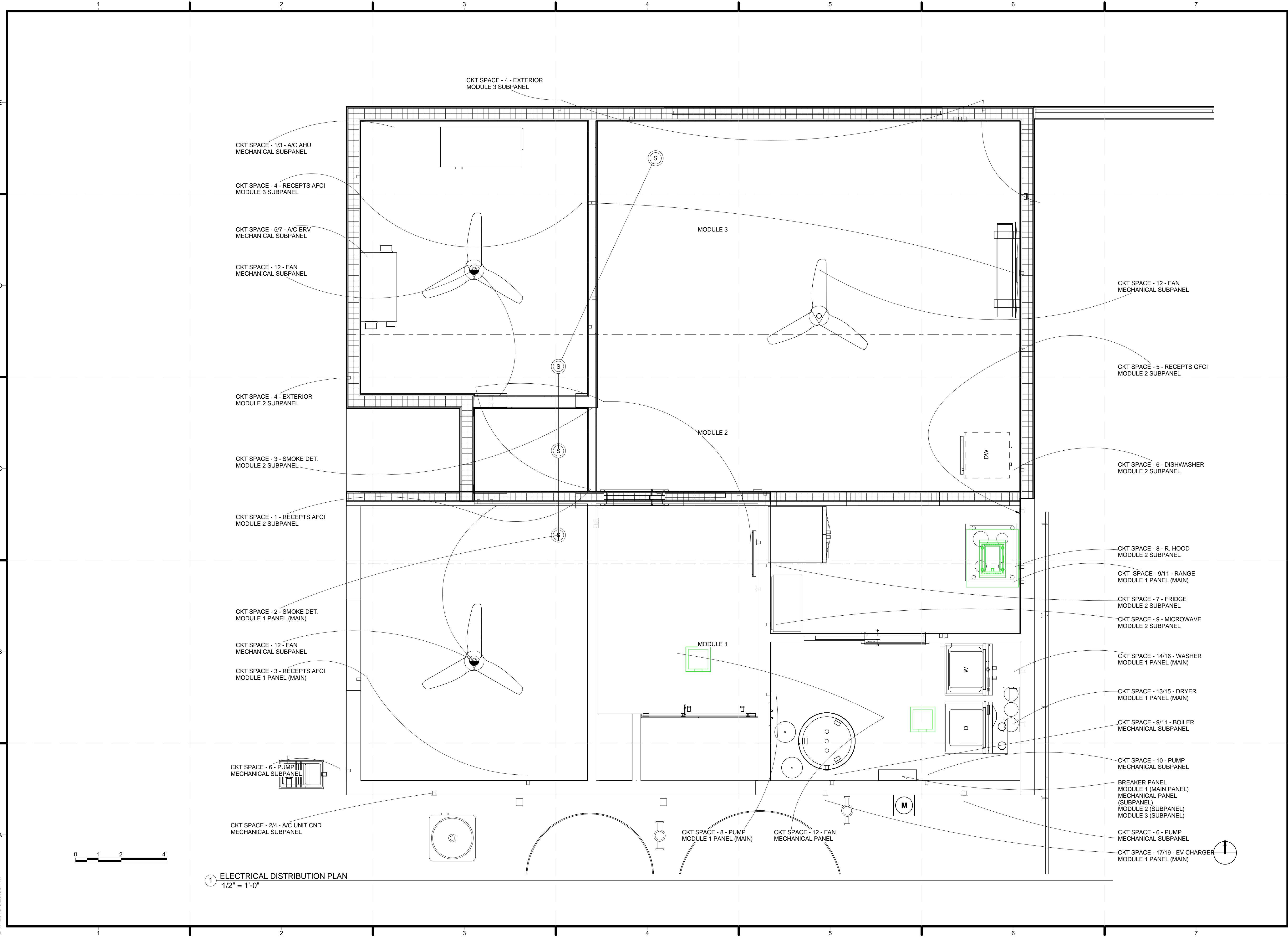
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ELECTRICAL DISTRIBUTION PLAN

E-101



1 ELECTRICAL DISTRIBUTION PLAN
 1/2" = 1'-0"

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ELECTRICAL DISTRIBUTION SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
PANEL	CUTCH42NLPN225K 225A LD-CTR	\$ 208.73	1	\$ 208.73
COVER	CUTCH8KF C-H CH8KF FLUSH COVER FOR 'K'	\$ 24.50	1	\$ 24.50
RECEPTACLE	CUTCHFCAF115PN ARC FAULT 1P 15A	\$ 38.95	15	\$ 584.25
RECEPTACLE	CUTCHFCAF120PN	\$ 38.95	14	\$ 545.30
RECEPTACLE	CUTCHF220 EATON 2 POLE 20 AMP "CH" STYLE (TAN HANDLE)	\$ 13.49	2	\$ 26.98
RECEPTACLE	CUTCHF230 EATON 2 POLE 30 AMP "CH" STYLE (TAN HANDLE)	\$ 13.49	1	\$ 13.49
BREAKER	CUTCH250 C-H CH250 2 P-50A-240V CB	\$ 13.49	1	\$ 13.49
TOTAL				\$ 1,416.74

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SHEET TITLE
 ELECTRICAL DISTRIBUTION SCHEDULE

E-102



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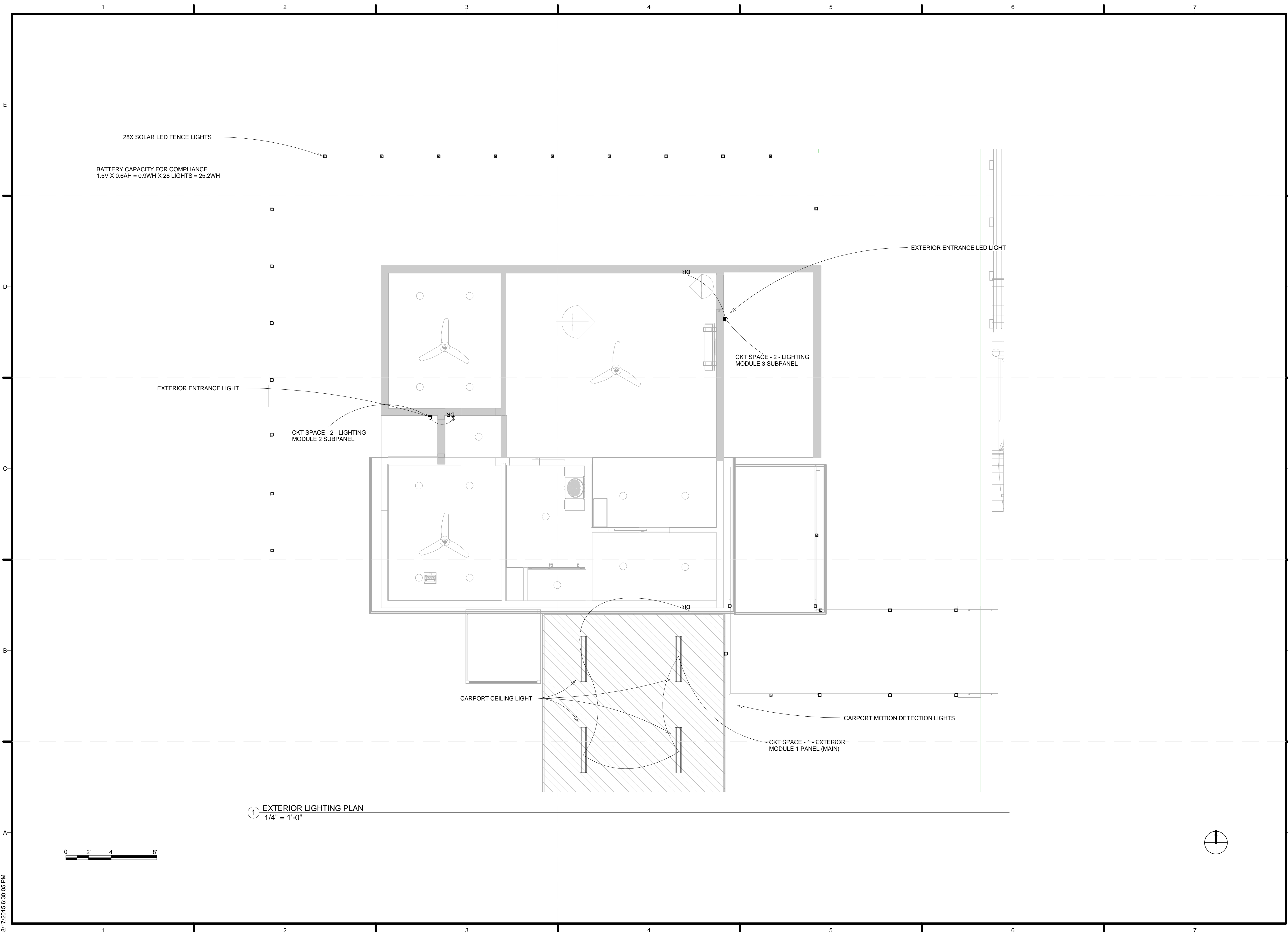


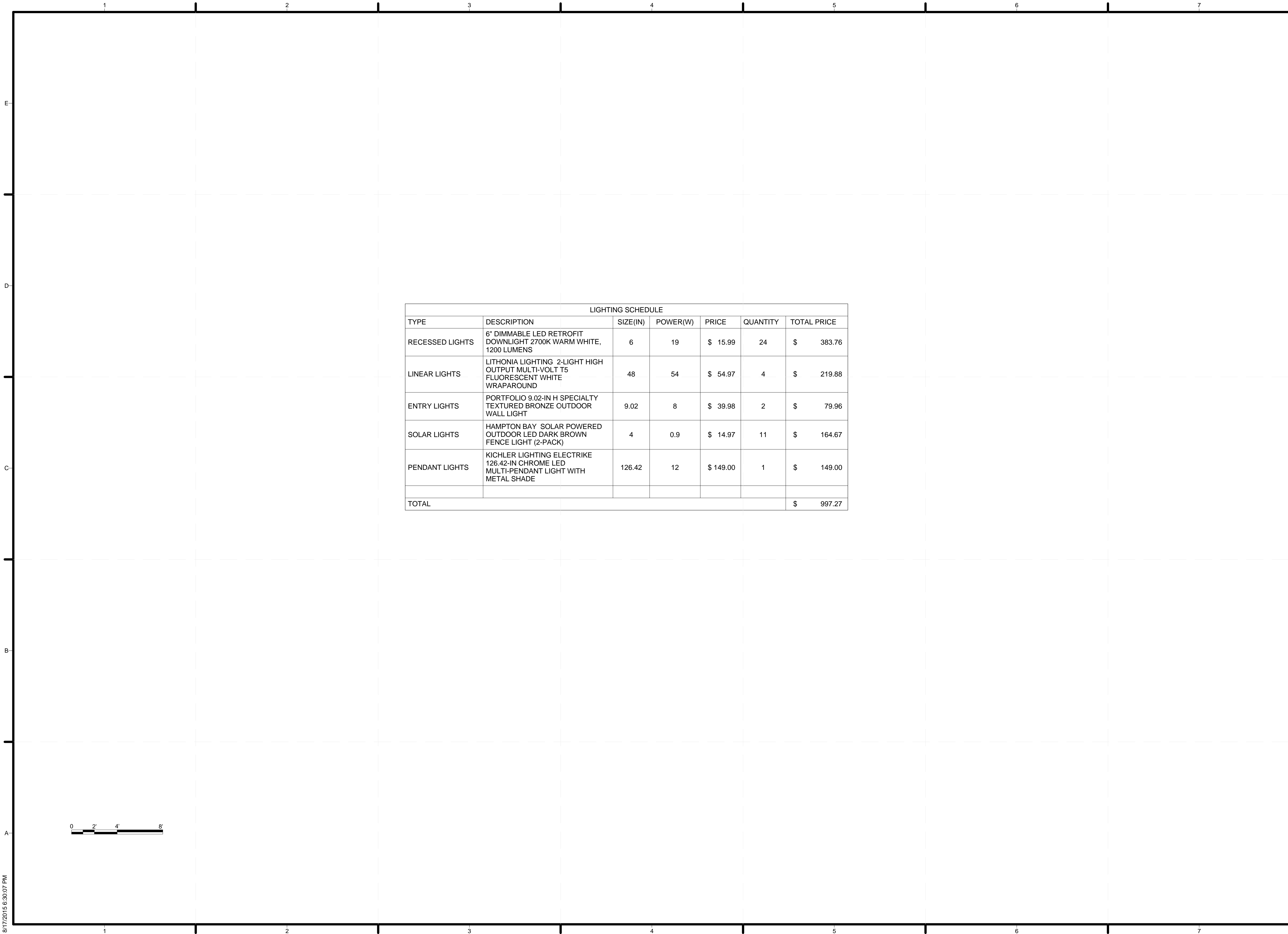
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SHEET TITLE
EXTERIOR LIGHTING PLAN

E-104



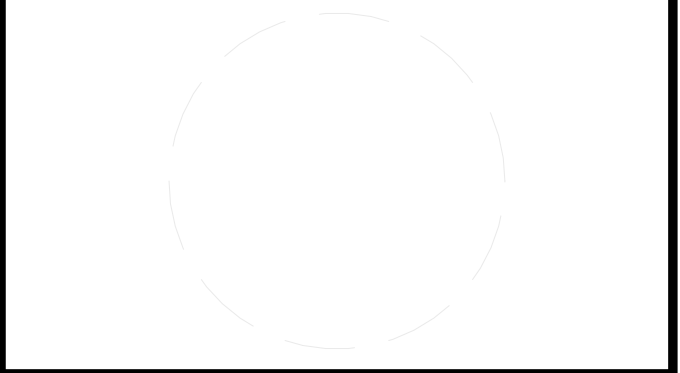


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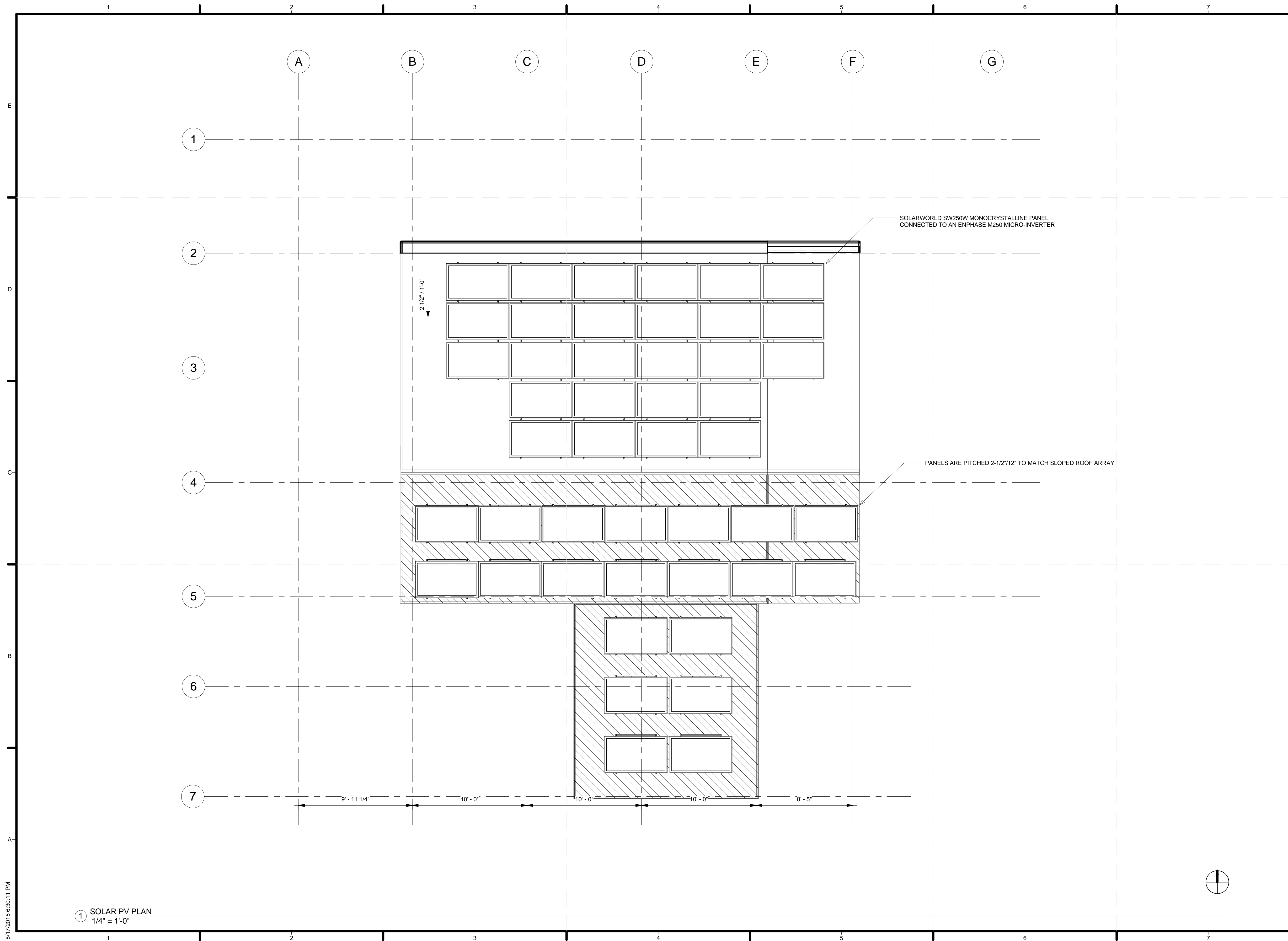
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SHEET TITLE
LIGHTING SCHEDULE

E-105

LIGHTING SCHEDULE						
TYPE	DESCRIPTION	SIZE(IN)	POWER(W)	PRICE	QUANTITY	TOTAL PRICE
RECESSED LIGHTS	6" DIMMABLE LED RETROFIT DOWNLIGHT 2700K WARM WHITE, 1200 LUMENS	6	19	\$ 15.99	24	\$ 383.76
LINEAR LIGHTS	LITHONIA LIGHTING 2-LIGHT HIGH OUTPUT MULTI-VOLT T5 FLUORESCENT WHITE WRAPAROUND	48	54	\$ 54.97	4	\$ 219.88
ENTRY LIGHTS	PORTFOLIO 9.02-IN H SPECIALTY TEXTURED BRONZE OUTDOOR WALL LIGHT	9.02	8	\$ 39.98	2	\$ 79.96
SOLAR LIGHTS	HAMPTON BAY SOLAR POWERED OUTDOOR LED DARK BROWN FENCE LIGHT (2-PACK)	4	0.9	\$ 14.97	11	\$ 164.67
PENDANT LIGHTS	KICHLER LIGHTING ELECTRIKE 126.42-IN CHROME LED MULTI-PENDANT LIGHT WITH METAL SHADE	126.42	12	\$ 149.00	1	\$ 149.00
TOTAL						\$ 997.27



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SHEET TITLE
SOLAR PV PLAN

E-201

SOLAR PV SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
CAP	ENPHASE WATERTIGHT CAP FOR M250 CABLE	\$ 2.85	6	\$ 17.10
CABLE	ENPHASE TRUNK CABLE TERMINATOR FOR M250	\$ 16.71	3	\$ 50.13
CABLE	ENPHASE TRUNK CABLE M250-240V0 PORTRAIT	\$ 25.97	60	\$ 1,558.20
PASSTHROUGH	SOLADECK PASSTHROUGH AC/DC	\$ 69.11	1	\$ 69.11
GROUNDING LUG	IRONRIDGE GROUNDING LUGS 2-PK	\$ 7.91	3	\$ 23.73
L-FOOT	IRONRIDGE SLOTTED L-FOOT, 4-PK, CLR	\$ 10.35	13	\$ 134.55
CLAMP	IRONRIDGE GROUND MID CLAMP 2", 4-PK, CLR	\$ 8.05	10	\$ 80.50
RAIL	IRONRIDGE XR100 RAIL 132", CLR	\$ 33.55	4	\$ 134.20
RAIL	IRONRIDGE XR100 RAIL 204", CLR	\$ 50.63	8	\$ 405.04
RAIL	IRONRIDGE XR100 END CAP, 10-SETS	\$ 8.64	2	\$ 17.28
END CAP	IRONRIDGE END CLAMP, A, 1.34", 33.3 - 34.8MM, CLEAR, QTY. 4, 29-7000-134	\$ 6.90	6	\$ 41.40
END CLAMP	IRONRIDGE MOUNTING KIT FOR MICROINVERTERS(ENPHASE), INCLUDES TWO 1/4"X3/4" SS T-BOLT AND HARDWARE, QTY. 1, ECOFASTEN 6"X6" STAINLESS STEEL BASE PLATE	\$ 1.70	13	\$ 22.10
BASE PLATE	ECOFASTEN 6"X6" STAINLESS STEEL BASE PLATE W/ 8 FASTENER HOLES AND ONE 1" 3/8 - 16 STUD - NO DIMPLE DOWN	\$ 12.75	90	\$ 1,147.50
FLASHING	6"X6" STAINLESS STEEL BASE PLATE W/ 8 FASTENER HOLES AND ONE 1" 3/8 - 16 STUD - NO DIMPLE DOWN	\$ 8.38	90	\$ 754.20
L BRACKET	6"X6" STAINLESS STEEL L BRACKET WITH 1 CS FASTENER HOLES IN THE HORIZONTAL LEG AND 2 SLOTTED HOLES IN THE VERTICAL LEG	\$ 4.59	90	\$ 413.10
PV PANEL	SOLARWORLD SW250 MONO	\$ 295.00	46	\$ 13,570.00
MICRO-INVERTER	ENPHASE M250 MICRO-INVERTER	\$ 160.00	46	\$ 7,360.00
TOTAL				\$ 25,798.14

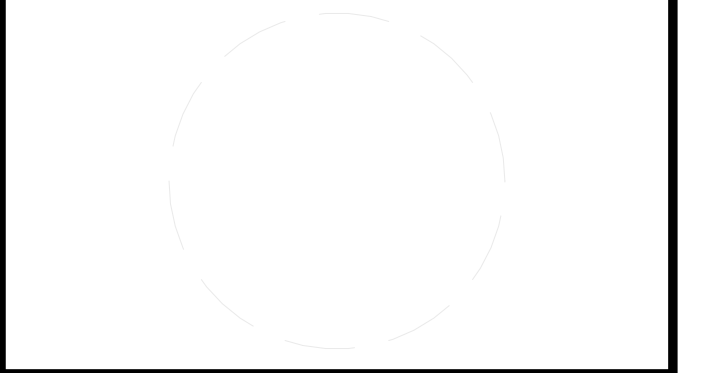


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SHEET TITLE
SOLAR PV SCHEDULE

E-202



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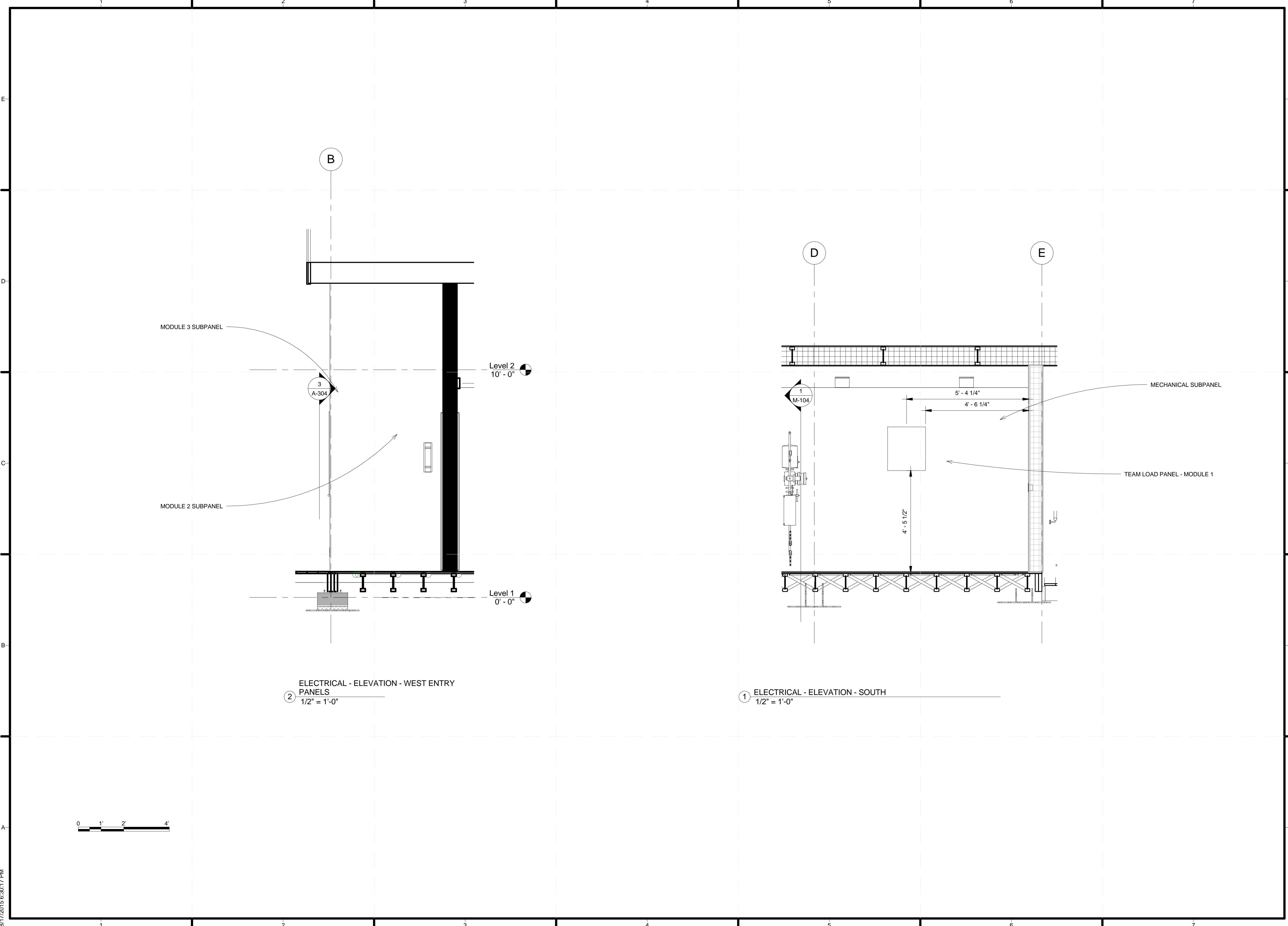


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SHEET TITLE
 ELEVATION VIEW

E-401

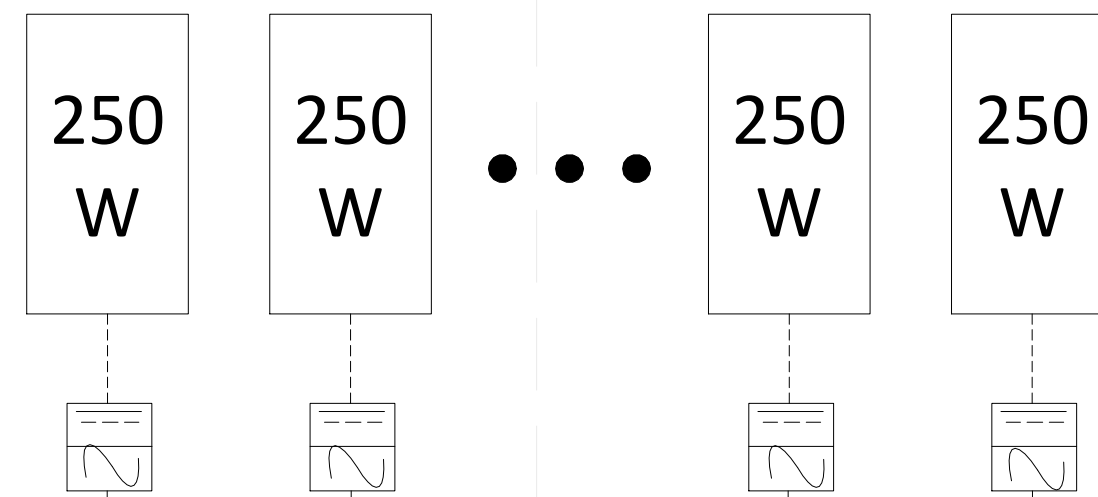


ONE LINE PV DIAGRAM

PV ARRAY
11,500W,240V,45A

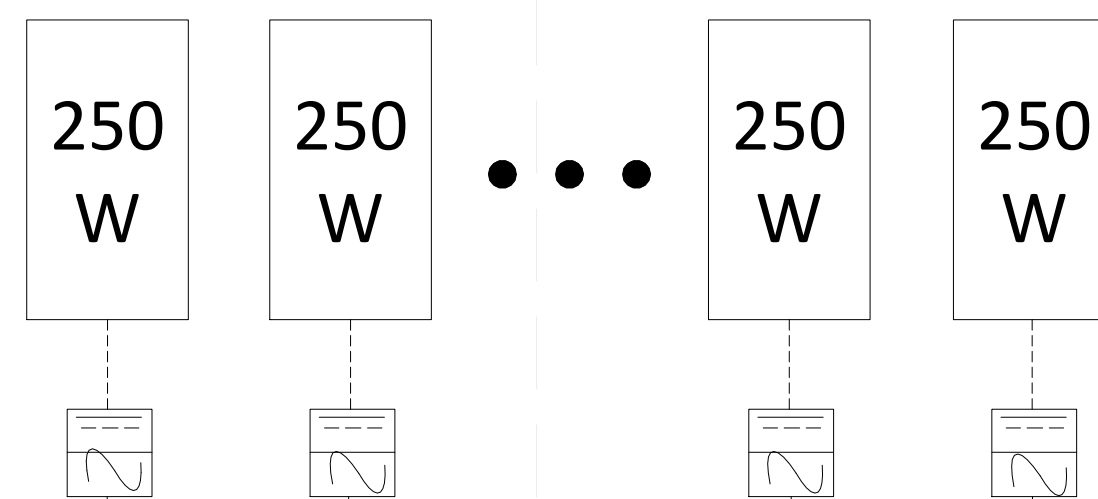
8 IN X 6 IN X 4 IN
JUNCTION BOXES = TYPE 3 WEATHERPROOF BOX

16 PANELS STRING 1



1 #12 AWG ENGAGE CABLE

14 PANELS STRING 2

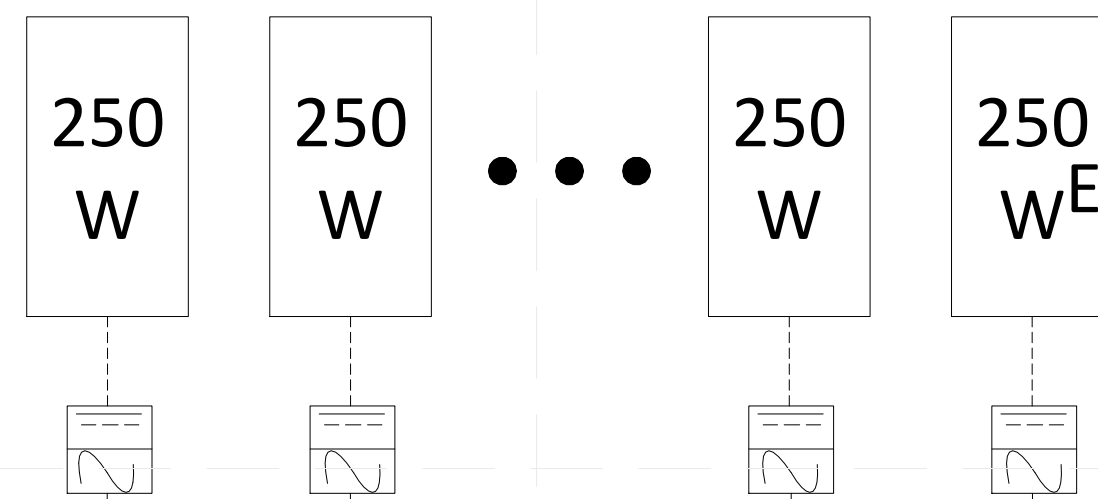


JUNCTION BOX

7 #12 AWG THWN
1/2" EMT

JUNCTION BOX

16 PANELS STRING 3

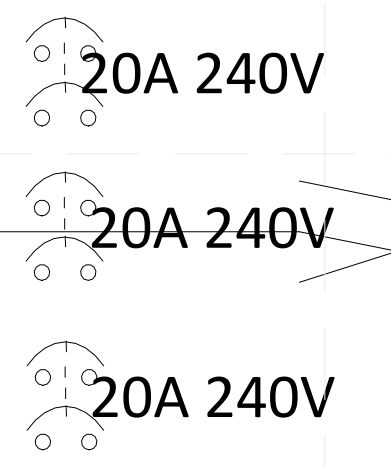


1 #12 AWG ENGAGE CABLE

10 #12 AWG THWN
3/4" EMT

1 #12 AWG ENGAGE CABLE

200 AMP MAIN BREAKER
FED,
SINGLE PHASE
SQUARE D PANEL



GROUND
#4 AWG

3 2/0 AWG CU
1 #4 CU GROUNDING
2" PVC

100A

MECHANICAL

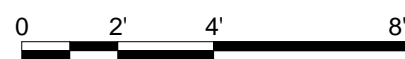
60A

MODULE 2

40A

MODULE 3

UTILITY
BIDIRECTIONAL
METER



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ONE-LINE DIAGRAM

E-601

Space	Conductors	Amps	Circuit	Circuit	Amps	Conductors	Space
SES in MODULE 1 (MAIN) 200 AMP RATED							
FEEDERS: 3 - 3/0 & 1 - #4 CU							
1	#10	30	RANGE	A/C UNIT CND	30	#10	2
3	#10	30	RANGE	A/C UNIT CND	30	#10	4
5	#10	30	DRYER	BOILER	30	#10	6
7	#10	30	DRYER	BOILER	30	#10	8
9	#12	20	WASHER	EV CHARGER	30	#10	10
11	#12	20	A/C AHU	EV CHARGER	30	#10	12
13	#12	20	A/C ERV	PUMP	20	#12	14
15	#12	20	FRIDGE	PUMP	20	#12	16
17	#12	20	MICROWAVE	PUMP	20	#12	18
19	#12	20	CNT RECEPTS	DISHWASHER	20	#12	20
21	#12	20	CNT RECEPTS	RECEPTS AFCI	20	#12	22
23	#12	20	RECEPTS AFCI	EXTERIOR	20	#12	24
25	#12	20	RECEPTS AFCI	LIGHTING	15	#14	26
27	#14	15	LIGHTING	LIGHTING	15	#14	28
29	#14	15	LIGHTING	RECEPTS GFCI	15	#14	30
31	#14	15	LIGHTING	SOLAR PV	20	#12	32
33	#12	20	SOLAR PV	SOLAR PV	20	#12	34
35	#12	20	SOLAR PV	SOLAR PV	20	#12	36
37				SOLAR PV	20	#12	38
39							40
41							42
LOAD: SEE OVERALL LOAD CALCS							
NOTE: ALL SMOKE DETECTORS TO BE INTERCONNECTED							
ALL BREAKERS HAVE MINIMUM OF 10 KAIC PROTECTION							

Electrical Loads Calculation per NEC 220				
Interior SF	880	SF		
Exterior SF	1,200	SF		
Total SF	2,080	SF		
	SF	VA/SF	Load	
General Lighting/Recepts	880	5	4,400	VA
	Circuits	VA/Circuit	Load	
Small Appliances	3	1,500	4,500	VA
Special Loads			Load	
Dishwasher			3,000	VA
Range			4,500	VA
Microwave			1,500	VA
Washer			1,500	VA
R./ Hood			400	VA
Clothes Dryer			4,000	VA
Water Heater			4,500	VA w/ Solar Assist
Radiant Heat Line Pump			500	VA
Solar Water Heater Pump			500	VA
Pump			500	VA
Grey Water Pump			500	VA
EV Charger			7,200	VA
			28,600	VA
			37,500	VA
Demand Factor				
1st 10,000 @ 100%			10,000	VA
Remaining @ 40%			11,000	VA
			21,000	VA
Heating and Cooling	Quantity	VA/Unit	Load	
Radiant Heating	1	3,381	3,381	VA
A/C Energy Recovery Ventilator	1	720	720	VA
A/C Fan Coil Interior	1	1,200	1,200	VA
A/C Condesor Exterior	1	2,500	2,500	VA
			7,801	VA
Future Loads (Estimate)			15,000	VA
			Total Load	43,801 VA
	Total Load	Voltage	Service Amps	
Service Required	43,801	240	183	Amps
Service Provided			200	Amps



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 SCHEDULES

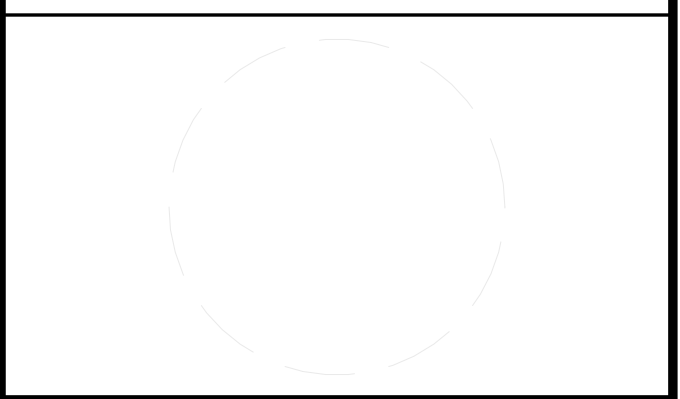
E-603





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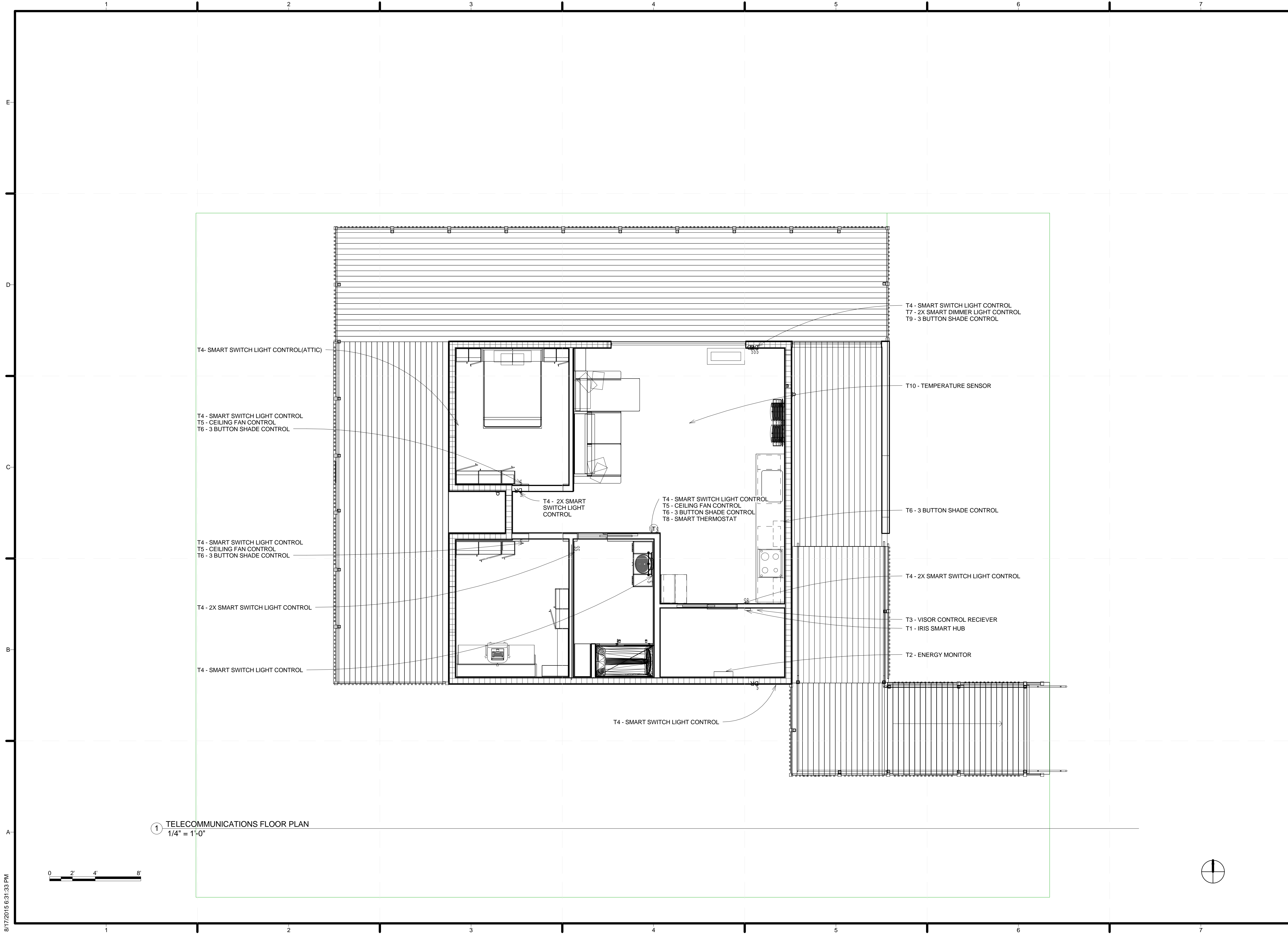


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SHEET TITLE
**TELECOMMUNICATIONS
 PLAN**

T-101



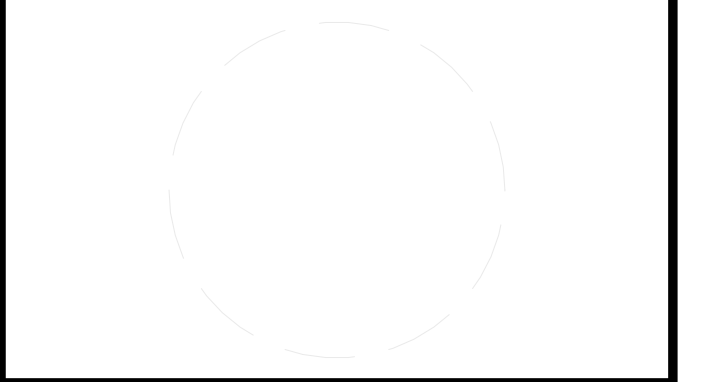
① TELECOMMUNICATIONS FLOOR PLAN
 1/4" = 1'-0"



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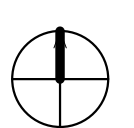
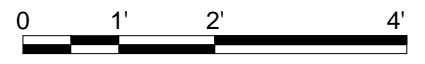
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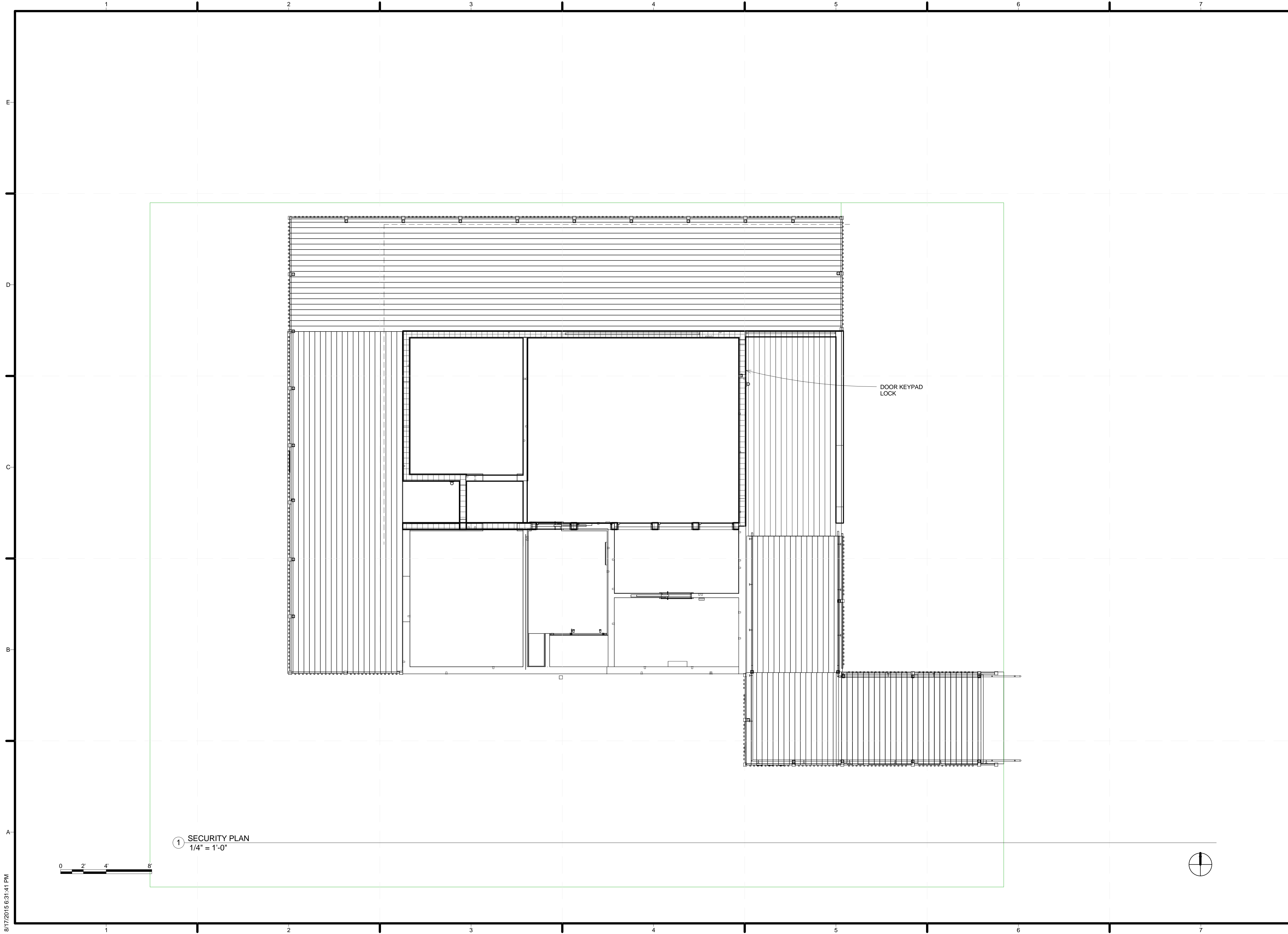
SHEET TITLE
 TELECOMMUNICATIONS SCHEDULE

T-102

TELECOMMUNICATIONS SCHEDULE				
TYPE	DESCRIPTION	PRICE	QUANTITY	TOTAL PRICE
SYSTEM	SMART HUB	\$ 49.99	1	\$ 49.99
LIGHT SWITCH	GE 15-AMP IRIS WHITE SINGLE POLE 3-WAY DECORATOR LIGHT SWITCH	\$ 35.00	12	\$ 420.00
DIMMABLE LIGHT SWITCH	GE 15-AMP 600-WATT WHITE 3-WAY CFL/LED DIGITAL DIMMER	\$ 39.96	2	\$ 79.92
IRRIGATION TIMER	ORBIT 12-STATION INDOOR/OUTDOOR IRRIGATION TIMER	\$ 129.00	1	\$ 129.00
ENTRY LOCK	SCHLAGE CENTURY SATIN NICKEL SINGLE-CYLINDER MOTORIZED TOUCHSCREEN ELECTRONIC ENTRY DOOR DEADBOLT WITH KEYPAD	\$ 199.00	1	\$ 199.00
THERMOSTAT	IRIS 7-DAY TOUCH SCREEN PROGRAMMABLE THERMOSTAT	\$ 89.00	1	\$ 89.00
ENERGY MONITOR	BLUE LINE INNOVATIONS POWERCOST MONITOR WIFI BRIDGE & SENSOR	\$ 37.50	1	\$ 37.50
TOTAL				\$ 1,004.41

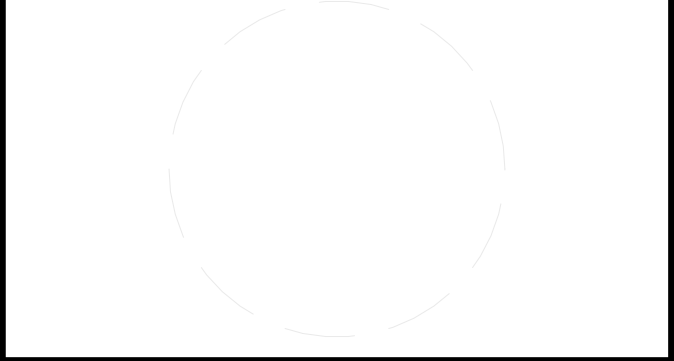


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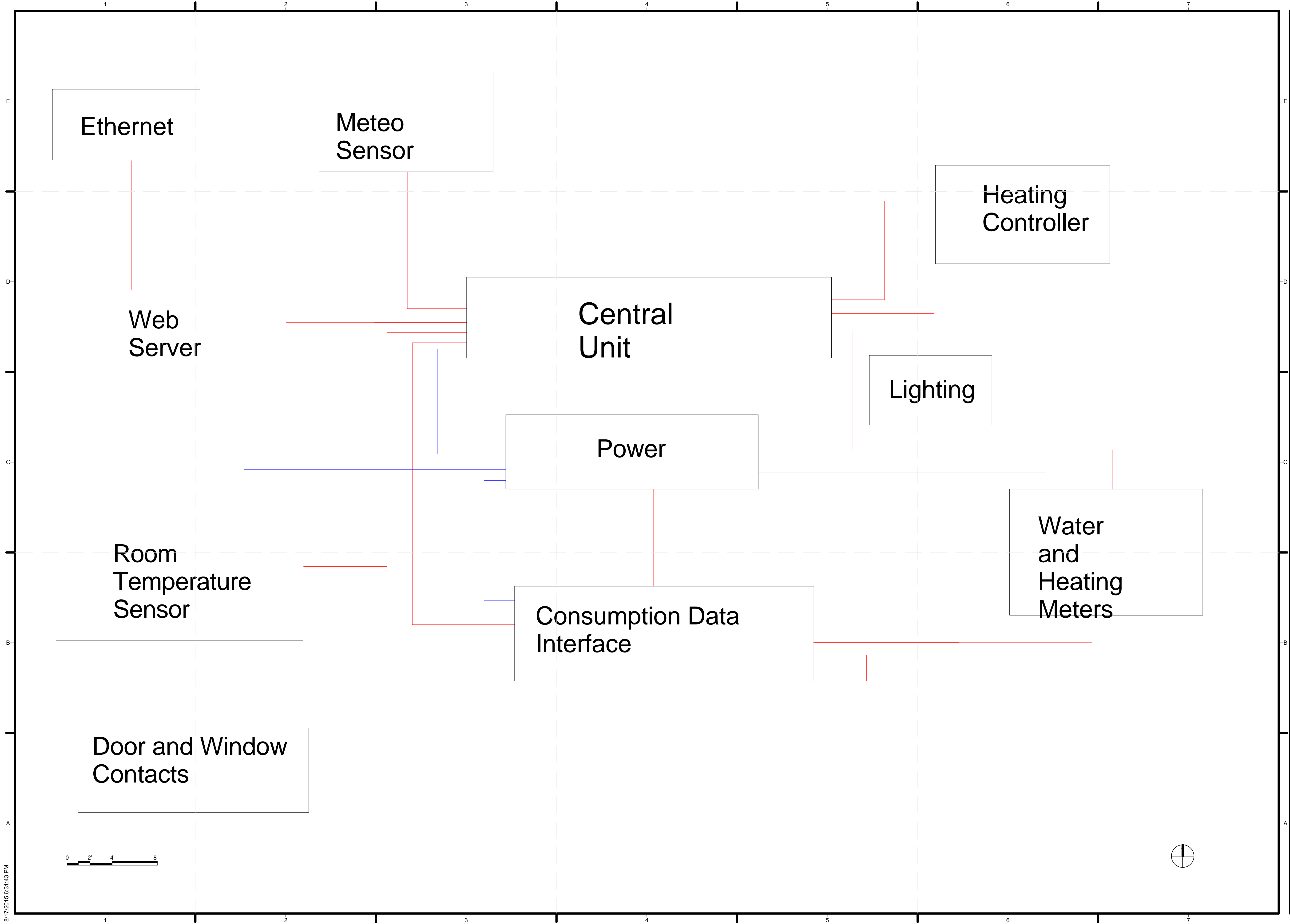
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SHEET TITLE
SECURITY PLAN

T-111

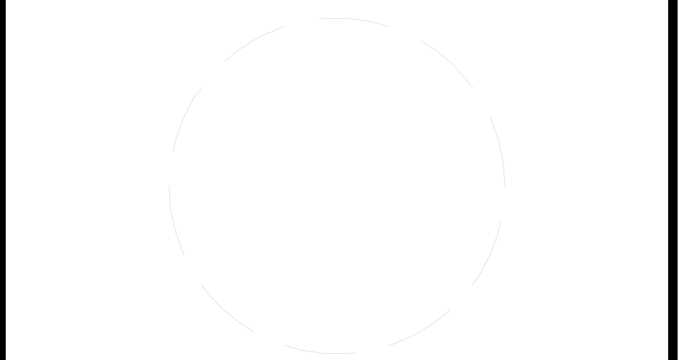
① SECURITY PLAN
 1/4" = 1'-0"

8/17/2015 6:31:41 PM



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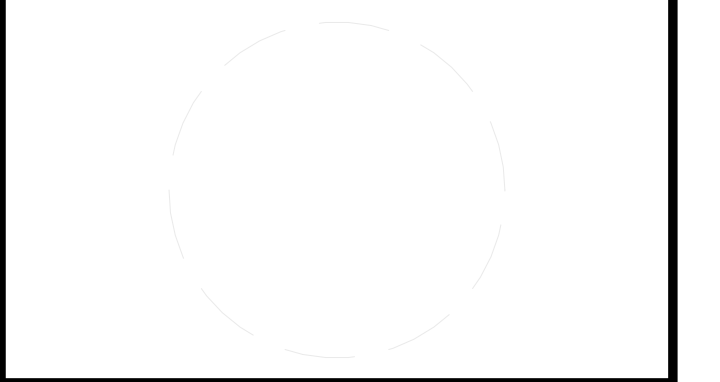
SHEET TITLE
**TELECOMMUNICATIONS
 DIAGRAM**

T-601



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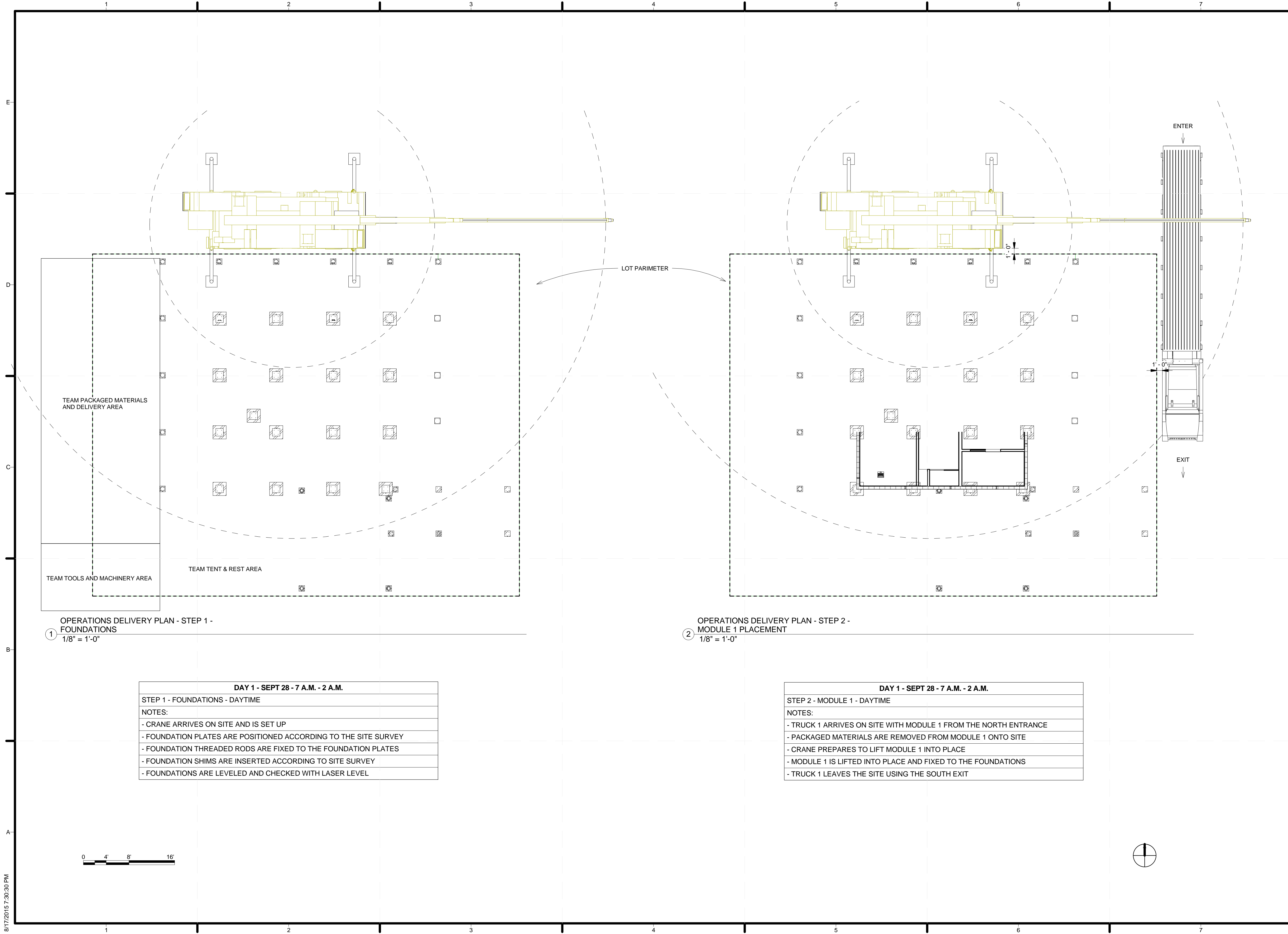


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SHEET TITLE
 ARRIVAL SEQUENCE PLANS

O-101

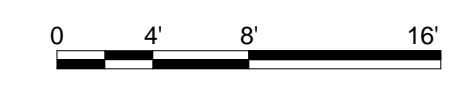


1 OPERATIONS DELIVERY PLAN - STEP 1 - FOUNDATIONS
 1/8" = 1'-0"

2 OPERATIONS DELIVERY PLAN - STEP 2 - MODULE 1 PLACEMENT
 1/8" = 1'-0"

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.
 STEP 1 - FOUNDATIONS - DAYTIME
 NOTES:
 - CRANE ARRIVES ON SITE AND IS SET UP
 - FOUNDATION PLATES ARE POSITIONED ACCORDING TO THE SITE SURVEY
 - FOUNDATION THREADED RODS ARE FIXED TO THE FOUNDATION PLATES
 - FOUNDATION SHIMS ARE INSERTED ACCORDING TO SITE SURVEY
 - FOUNDATIONS ARE LEVELLED AND CHECKED WITH LASER LEVEL

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.
 STEP 2 - MODULE 1 - DAYTIME
 NOTES:
 - TRUCK 1 ARRIVES ON SITE WITH MODULE 1 FROM THE NORTH ENTRANCE
 - PACKAGED MATERIALS ARE REMOVED FROM MODULE 1 ONTO SITE
 - CRANE PREPARES TO LIFT MODULE 1 INTO PLACE
 - MODULE 1 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS
 - TRUCK 1 LEAVES THE SITE USING THE SOUTH EXIT

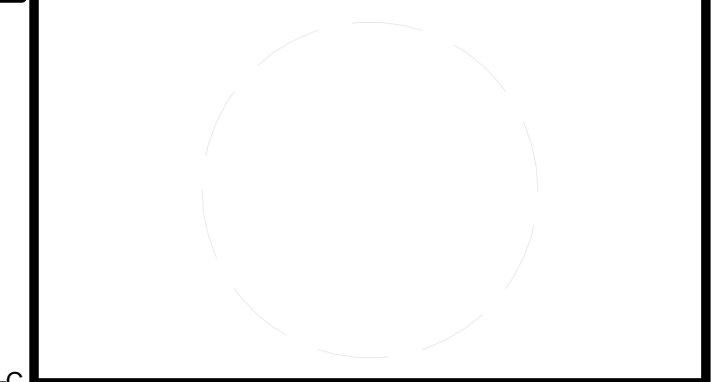




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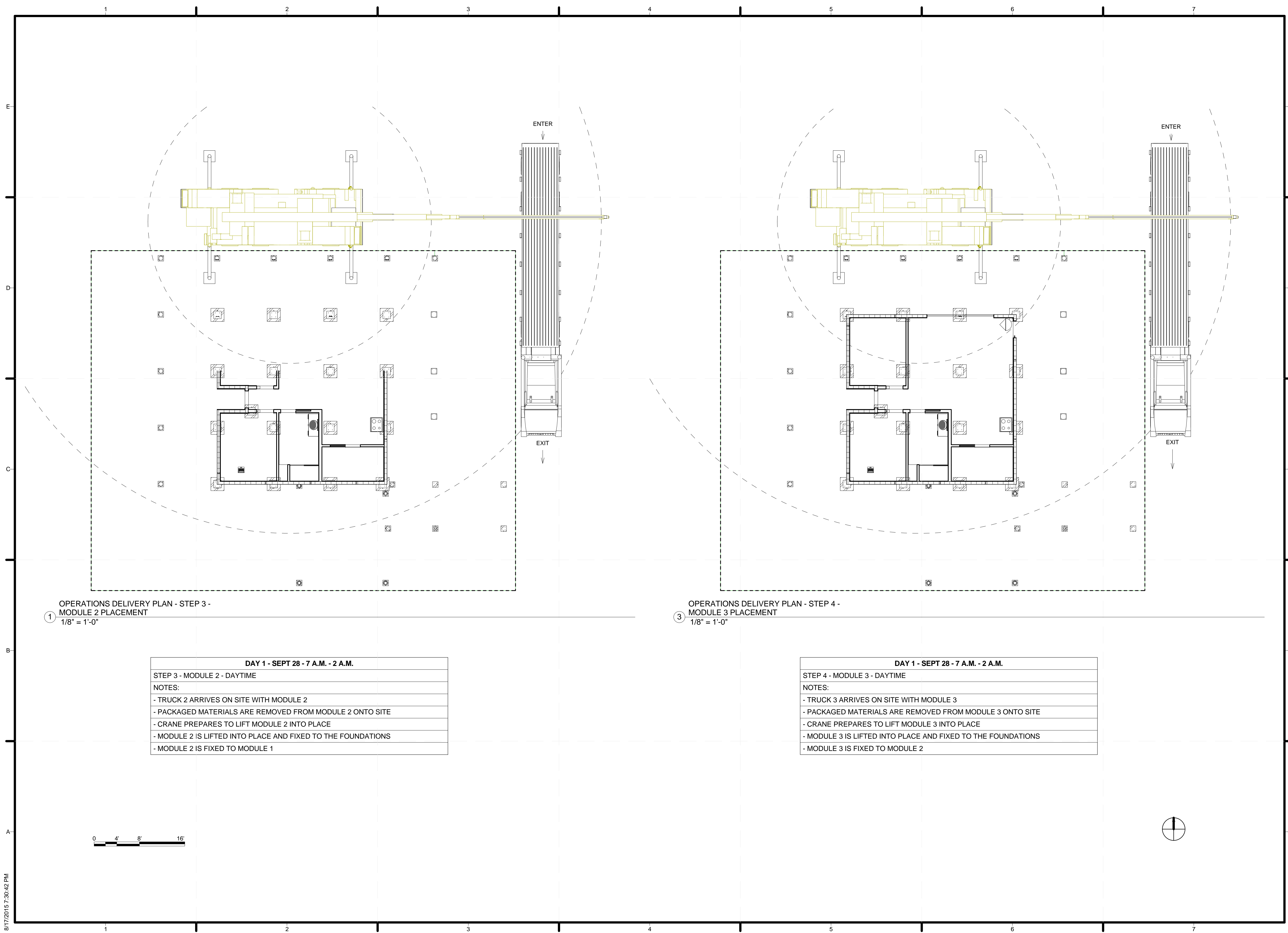


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 ARRIVAL SEQUENCE PLANS

O-102



① OPERATIONS DELIVERY PLAN - STEP 3 -
 MODULE 2 PLACEMENT
 1/8" = 1'-0"

③ OPERATIONS DELIVERY PLAN - STEP 4 -
 MODULE 3 PLACEMENT
 1/8" = 1'-0"

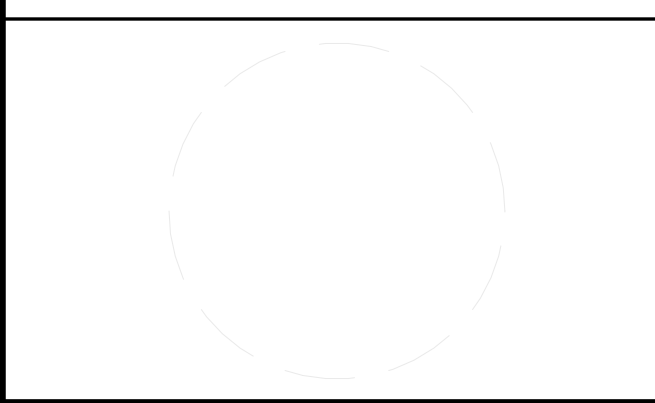
DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.
 STEP 3 - MODULE 2 - DAYTIME
 NOTES:
 - TRUCK 2 ARRIVES ON SITE WITH MODULE 2
 - PACKAGED MATERIALS ARE REMOVED FROM MODULE 2 ONTO SITE
 - CRANE PREPARES TO LIFT MODULE 2 INTO PLACE
 - MODULE 2 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS
 - MODULE 2 IS FIXED TO MODULE 1

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.
 STEP 4 - MODULE 3 - DAYTIME
 NOTES:
 - TRUCK 3 ARRIVES ON SITE WITH MODULE 3
 - PACKAGED MATERIALS ARE REMOVED FROM MODULE 3 ONTO SITE
 - CRANE PREPARES TO LIFT MODULE 3 INTO PLACE
 - MODULE 3 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS
 - MODULE 3 IS FIXED TO MODULE 2



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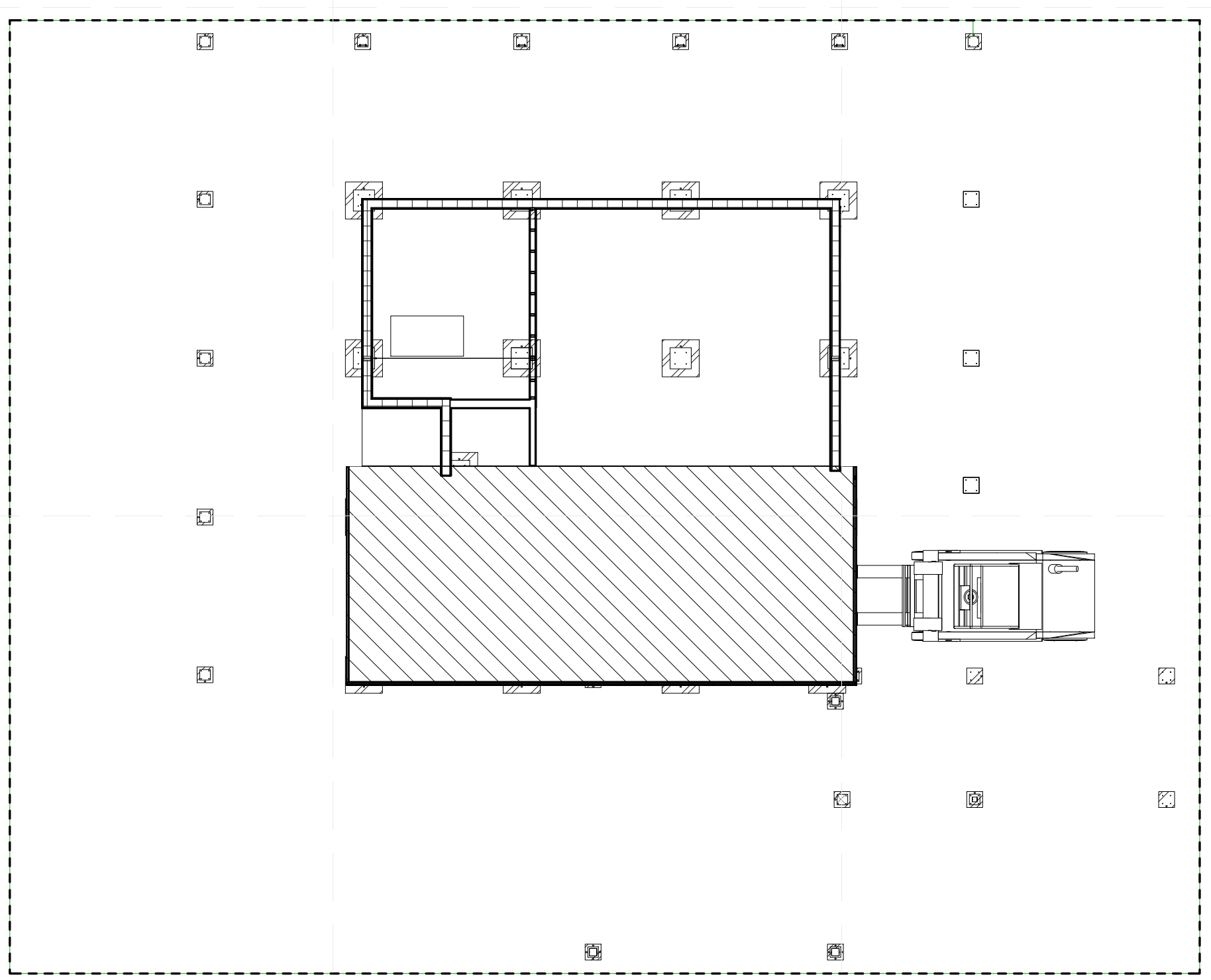


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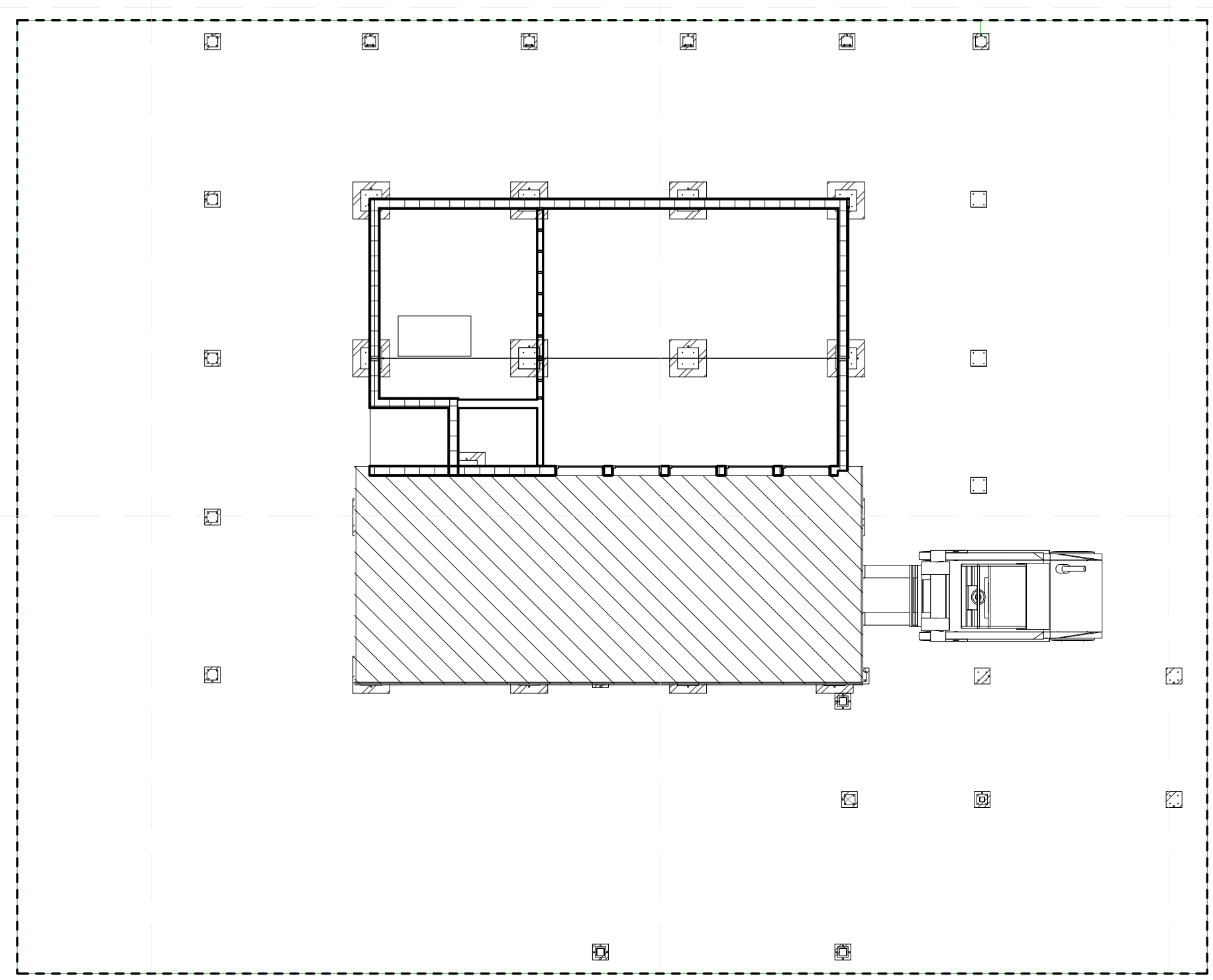
SHEET TITLE
 ARRIVAL SEQUENCE PLANS

O-103



③ OPERATIONS DELIVERY PLAN - STEP 5 - FLAT ROOF PLACEMENT
 1/8" = 1'-0"

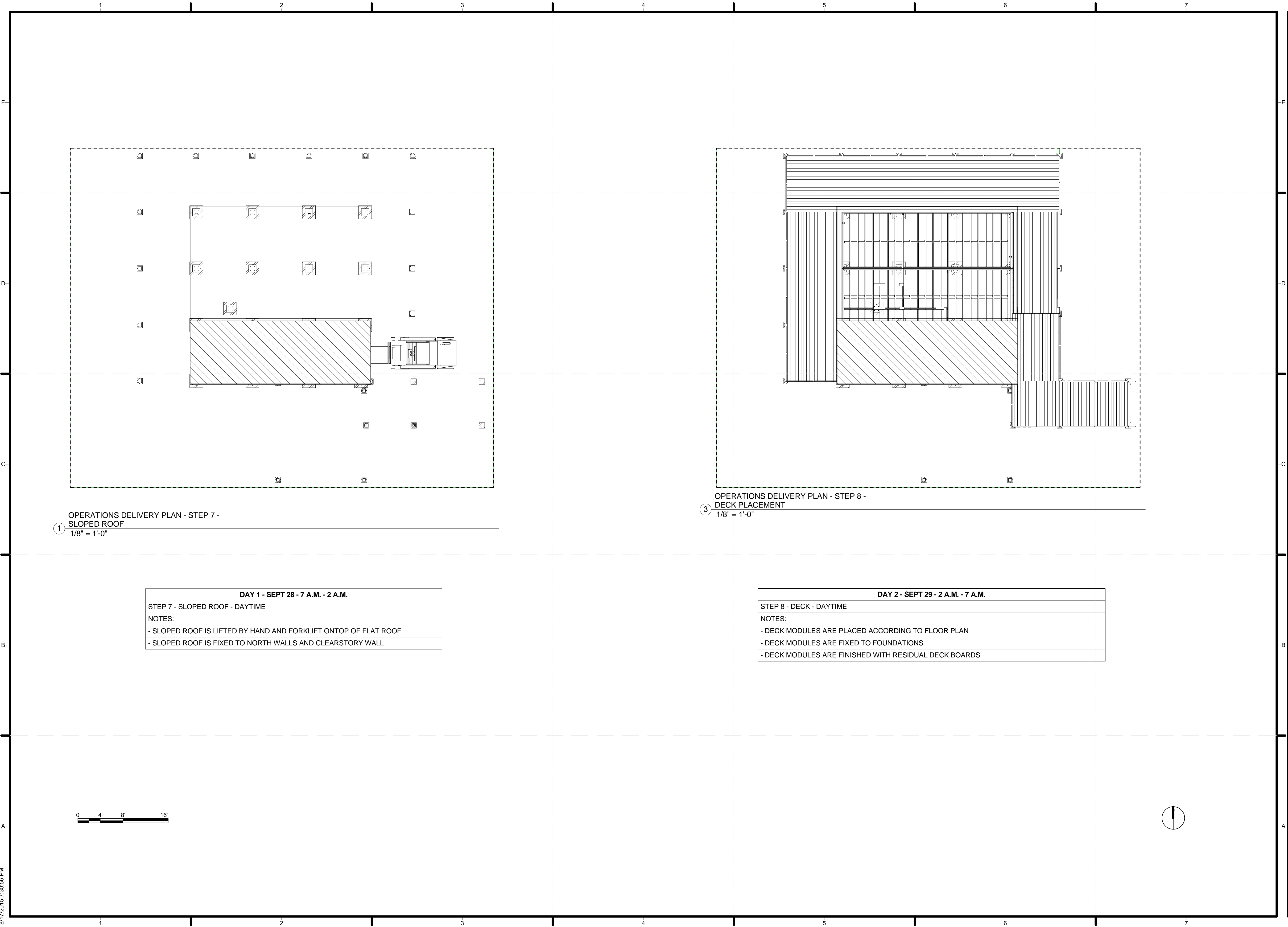
DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.	
STEP 5 - FLAT ROOF - DAYTIME	
NOTES:	
- FLAT ROOF IS LIFTED BY HAND AND FORKLIFT ONTOP OF OF SOUTH SIDE	
- FLAT ROOF IS FIXED TO WALLS	



① OPERATIONS DELIVERY PLAN - STEP 6 - CLEARSTORY WALL & UPPER WALLS
 1/8" = 1'-0"

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.	
STEP 6 - CLEARSTORY WALL & UPPER WALLS - DAYTIME	
NOTES:	
- CLEARSTORY WALL IS LIFTED BY HAND AND FORKLIFT ONTOP OF FLAT ROOF	
- CLEARSTORY WALL IS FIXED TO FLAT ROOF	
- UPPER WALLS ARE LIFTED BY HAND AND FORKLIFT ONTOP OF NORTH SIDE	
- UPPER WALLS ARE FIXED TO NORTH WALLS	





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O-104																			

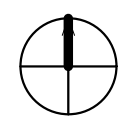
① OPERATIONS DELIVERY PLAN - STEP 7 -
SLOPED ROOF
1/8" = 1'-0"

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.

STEP 7 - SLOPED ROOF - DAYTIME

NOTES:

- SLOPED ROOF IS LIFTED BY HAND AND FORKLIFT ONTOP OF FLAT ROOF
- SLOPED ROOF IS FIXED TO NORTH WALLS AND CLEARSTORY WALL



③ OPERATIONS DELIVERY PLAN - STEP 8 -
DECK PLACEMENT
1/8" = 1'-0"

DAY 2 - SEPT 29 - 2 A.M. - 7 A.M.

STEP 8 - DECK - DAYTIME

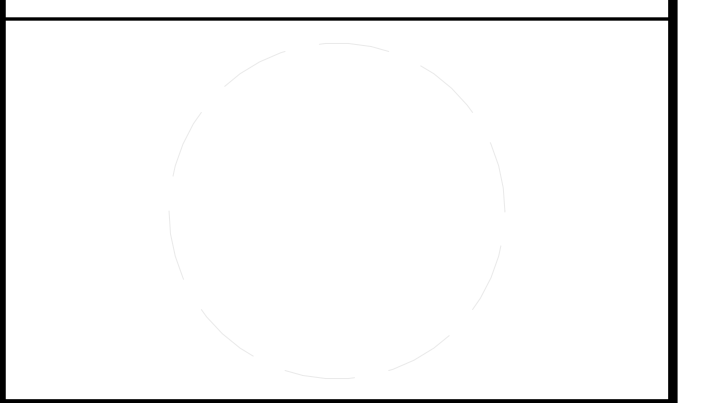
NOTES:

- DECK MODULES ARE PLACED ACCORDING TO FLOOR PLAN
- DECK MODULES ARE FIXED TO FOUNDATIONS
- DECK MODULES ARE FINISHED WITH RESIDUAL DECK BOARDS



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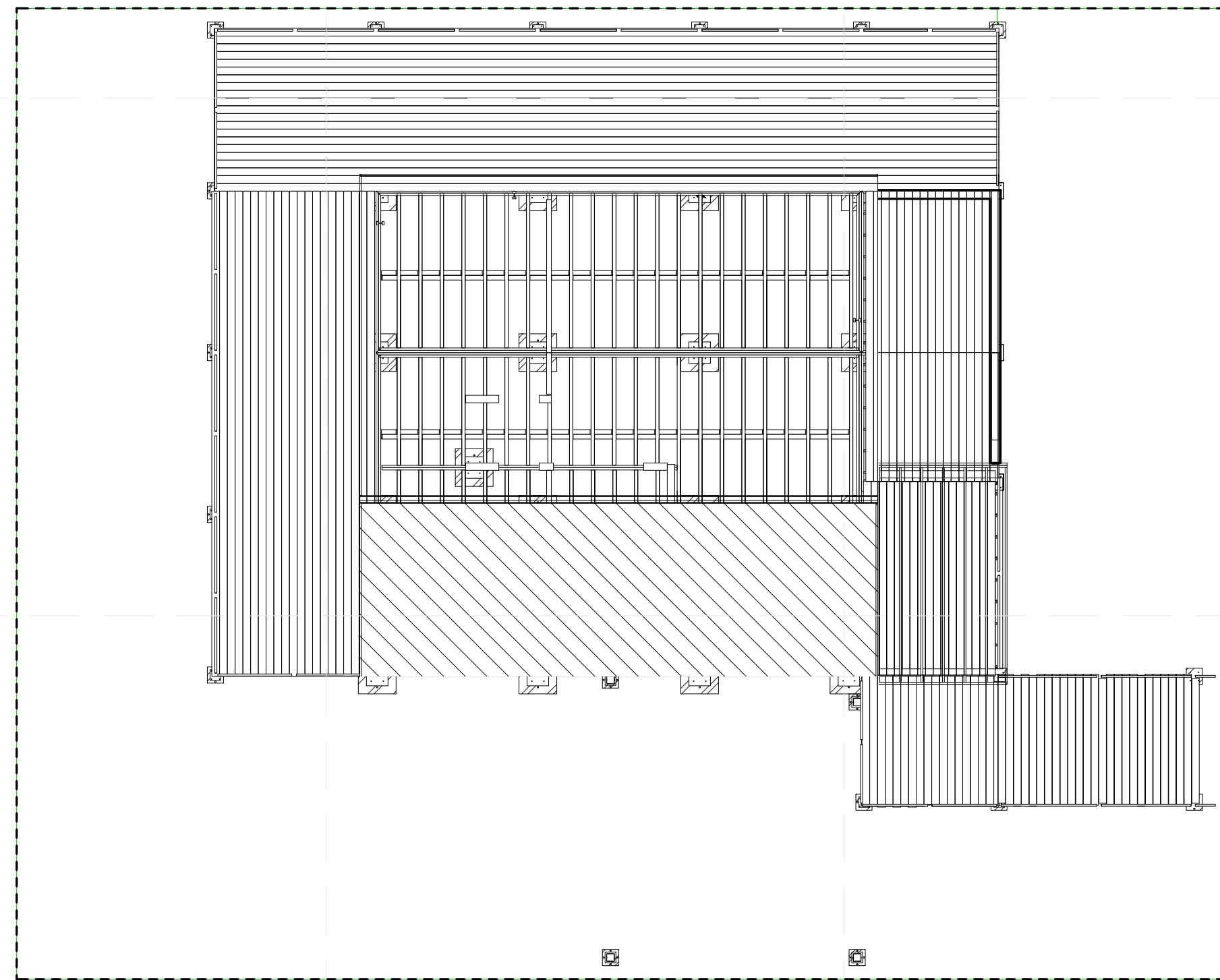


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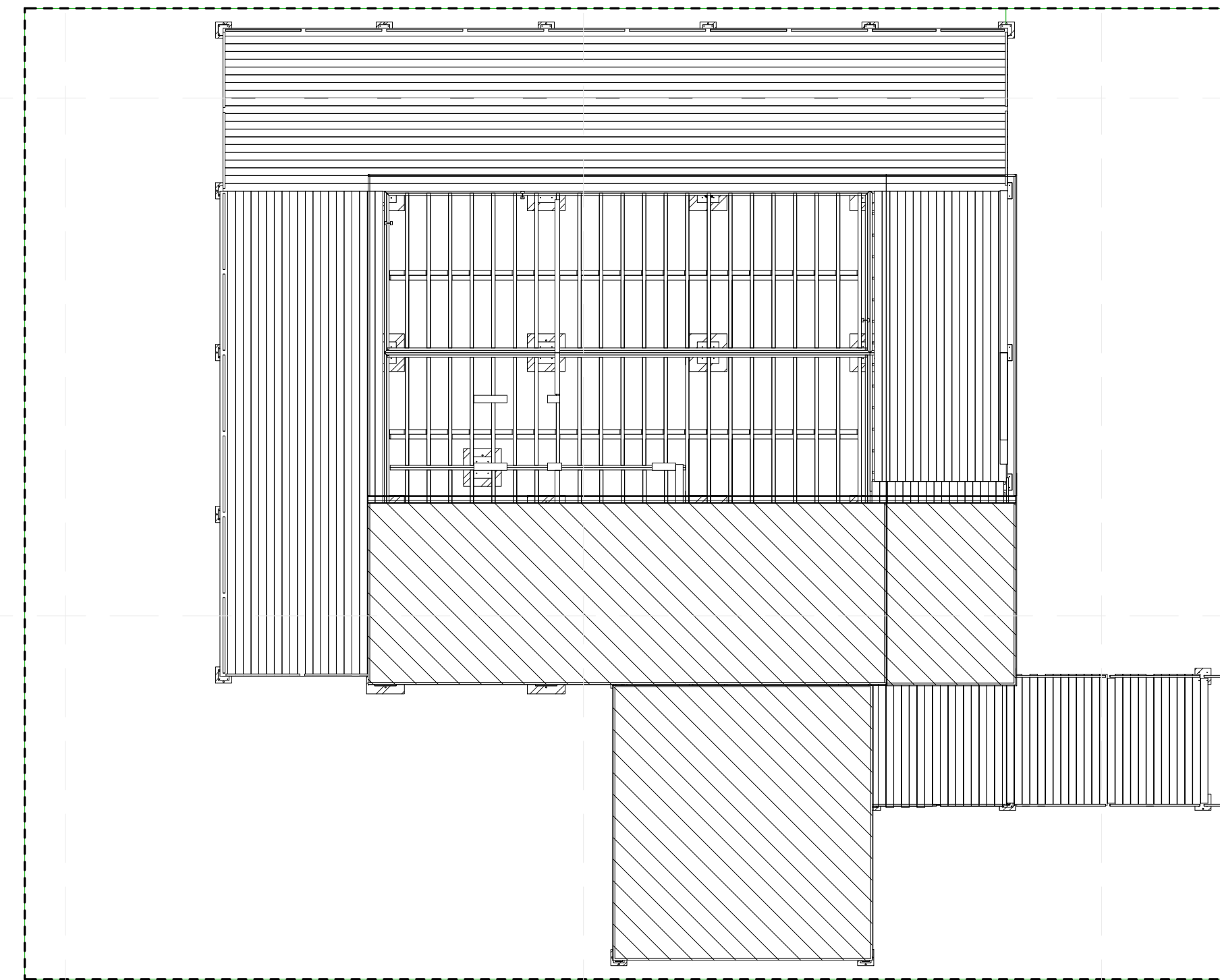
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SHEET TITLE
 ARRIVAL SEQUENCE PLANS

O-105



① OPERATIONS DELIVERY PLAN - STEP 9 - EXTENSION WALLS PLACEMENT
 1/8" = 1'-0"



④ OPERATIONS DELIVERY PLAN - STEP 10 - EXTENSION ROOFS PLACEMENT
 1/8" = 1'-0"

DAY 2 - SEPT 29 - 2 A.M. - 7 A.M.	
STEP 9 - EXTENSION WALLS & BRACING CEILING - DAYTIME	
NOTES:	
- EXTENSION WALLS ARE LIFTED ONTO DECK	
- EXTENSION WALLS ARE FIXED TO DECK	
- BRACING CEILING IS LIFTED ONTOP OF EXTENSION WALLS	
- BRACING CEILING IS FIXED TO EXTENSION WALLS	
- UPPER EXTENSION WALLS ARE LIFTED ONTOP OF BRACING CEILING	
- UPPER EXTENSION WALL ARE FIXED TO BRACING CEILING	

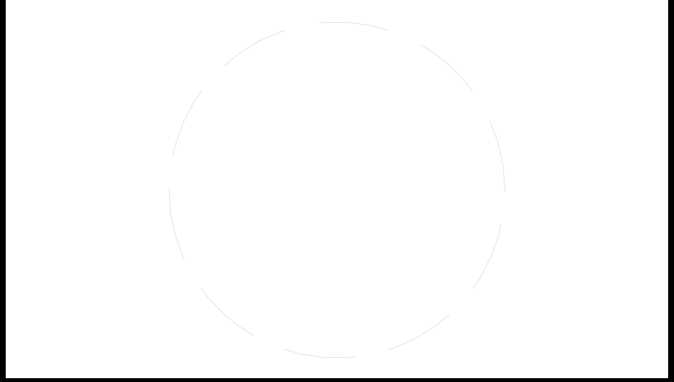
DAY 2 - SEPT 29 - 2 A.M. - 7 A.M.	
STEP 10 - EXTENSION ROOFS - DAYTIME	
NOTES:	
- EXTENSION ROOFS ARE LIFTED BY HAND AND FORKLIFT ONTOP OF UPPER EXTENSION WALLS	
- EXTENSION ROOFS ARE FIXED TO UPPER EXTENSION WALLS	
- EAST EXTENSION ROOF IS BUILT ON SITE AND LIFTED BY HAND AND FORKLIFT	
- EAST EXTENSION ROOF IS FIXED TO 6X6 COLUMNS AND TO FLAT ROOF END	
- CARPORT ROOF IS BUILT ON SITE AND LIFTED BY HAND AND FORKLIFT	
- CARPORT ROOF IS FIXED TO 6X6 COLUMNS AND SOUTH WALL	



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U.S. DEPARTMENT OF ENERGY
SOLAR DECATHLON 2015
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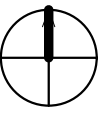
MARK	DATE	DESCRIPTION

LOT NUMBER: 207
DRAWN BY: ANDREW HYDOCK
CHECKED BY: GEORGE RICHARDSON
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SHEET TITLE
ARRIVAL SEQUENCE
PLAN DETAILS

O-602

DAY 1 - SEPT 28 - 7 A.M. - 2 A.M.		DAY 2 - SEPT 29 - 2 A.M. - 7 A.M.	
STEP 1 - FOUNDATIONS - DAYTIME		STEP 8 - DECK - DAYTIME	
NOTES: - CRANE ARRIVES ON SITE AND IS SET UP - FOUNDATION PLATES ARE POSITIONED ACCORDING TO THE SITE SURVEY - FOUNDATION THREADED RODS ARE FIXED TO THE FOUNDATION PLATES - FOUNDATION SHIMS ARE INSERTED ACCORDING TO SITE SURVEY - FOUNDATIONS ARE LEVELED AND CHECKED WITH LASER LEVEL		NOTES: - DECK MODULES ARE PLACED ACCORDING TO FLOOR PLAN - DECK MODULES ARE FIXED TO FOUNDATIONS - DECK MODULES ARE FINISHED WITH RESIDUAL DECK BOARDS	
STEP 2 - MODULE 1 - DAYTIME		STEP 9 - EXTENSION WALLS & BRACING CEILING - DAYTIME	
NOTES: - TRUCK 1 ARRIVES ON SITE WITH MODULE 1 FROM THE NORTH ENTRANCE - PACKAGED MATERIALS ARE REMOVED FROM MODULE 1 ONTO SITE - CRANE PREPARES TO LIFT MODULE 1 INTO PLACE - MODULE 1 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS - TRUCK 1 LEAVES THE SITE USING THE SOUTH EXIT		NOTES: - EXTENSION WALLS ARE LIFTED ONTO DECK - EXTENSION WALLS ARE FIXED TO DECK - BRACING CEILING IS LIFTED ONTOP OF EXTENSION WALLS - BRACING CEILING IS FIXED TO EXTENSION WALLS - UPPER EXTENSION WALLS ARE LIFTED ONTOP OF BRACING CEILING - UPPER EXTENSION WALL ARE FIXED TO BRACING CEILING	
STEP 3 - MODULE 2 - DAYTIME		STEP 10 - EXTENSION ROOFS - DAYTIME	
NOTES: - TRUCK 2 ARRIVES ON SITE WITH MODULE 2 - PACKAGED MATERIALS ARE REMOVED FROM MODULE 2 ONTO SITE - CRANE PREPARES TO LIFT MODULE 2 INTO PLACE - MODULE 2 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS - MODULE 2 IS FIXED TO MODULE 1		NOTES: - EXTENSION ROOFS ARE LIFTED BY HAND AND FORKLIFT ONTOP OF UPPER EXTENSION WALLS - EXTENSION ROOFS ARE FIXED TO UPPER EXTENSION WALLS - EAST EXTENSION ROOF IS BUILT ON SITE AND LIFTED BY HAND AND FORKLIFT - EAST EXTENSION ROOF IS FIXED TO 6X6 COLUMNS AND TO FLAT ROOF END - CARPORT ROOF IS BUILT ON SITE AND LIFTED BY HAND AND FORKLIFT - CARPORT ROOF IS FIXED TO 6X6 COLUMNS AND SOUTH WALL	
STEP 4 - MODULE 3 - DAYTIME		INSPECT ALL FASTENING OF DECKING, EXTENSION WALL, BRACING CEILING, UPPER EXTENSION WALLS, EXTENSION ROOF AND ROOFING BEFORE ROOFING	
NOTES: - TRUCK 3 ARRIVES ON SITE WITH MODULE 3 - PACKAGED MATERIALS ARE REMOVED FROM MODULE 3 ONTO SITE - CRANE PREPARES TO LIFT MODULE 3 INTO PLACE - MODULE 3 IS LIFTED INTO PLACE AND FIXED TO THE FOUNDATIONS - MODULE 3 IS FIXED TO MODULE 2		STEP 11 - ROOFING - DAYTIME	
STEP 5 - FLAT ROOF - DAYTIME		NOTES: - ASPHALT SHINGLES ARE NAILED TO SLOPED ROOF - FLAT ROOF MEMBRANE IS PLACED ON FLAT ROOF ACCORDING TO ROOF PLAN	
NOTES: - FLAT ROOF IS LIFTED BY HAND AND FORKLIFT ONTOP OF SOUTH SIDE - FLAT ROOF IS FIXED TO WALLS		STEP 12 - PAINT AND INTERIOR FINISHES - EVENING	
STEP 6 - CLEARSTORY WALL & UPPER WALLS - DAYTIME		NOTES: - WALLS ARE PAINTED ACCORDING TO INTERIOR DESIGN PLAN - CEILINGS ARE PAINTED ACCORDING TO INTERIOR DESIGN PLAN - BACKSPASH AND COUNTERTOP IS INSTALLED ACCORDING TO INTERIOR DESIGN PLAN	
NOTES: - CLEARSTORY WALL IS LIFTED BY HAND AND FORKLIFT ONTOP OF FLAT ROOF - CLEARSTORY WALL IS FIXED TO FLAT ROOF - UPPER WALLS ARE LIFTED BY HAND AND FORKLIFT ONTOP OF NORTH SIDE - UPPER WALLS ARE FIXED TO NORTH WALLS		INSPECT PAINTING AND TILE PLACEMENT	
STEP 7 - SLOPED ROOF - DAYTIME			
NOTES: - SLOPED ROOF IS LIFTED BY HAND AND FORKLIFT ONTOP OF FLAT ROOF - SLOPED ROOF IS FIXED TO NORTH WALLS AND CLEARSTORY WALL			
INSPECT ALL FASTENING OF FOUNDATIONS, MODULES AND ROOFS			





Main construction schedule grid with columns for days (1-7) and rows for tasks (A-E). Includes tasks like 'STEP 13 - NANAWALL - DAYTIME', 'STEP 18 - PV SYSTEM - DAYTIME', 'STEP 22 - ELECTRICAL & GRID TIE - DAYTIME', etc.

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CONSULTANTS

- RESOURCE FURNITURE
APRICUS SOLAR HOT WATER
BIG ASS SOLUTIONS
KOHLER
THERMAL FOAMS
LABELLA ASSOCIATES D.P.C.



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Table with columns: MARK, DATE, DESCRIPTION. Includes fields for LOT NUMBER, DRAWN BY, CHECKED BY, COPYRIGHT.

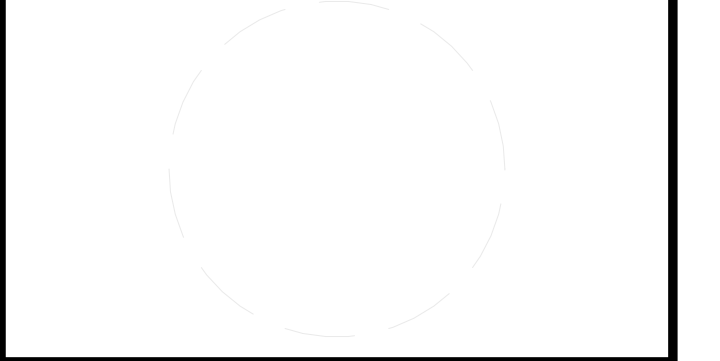
SHEET TITLE
ARRIVAL SEQUENCE
PLAN DETAILS

O-603



TEAM NAME: ALFRED
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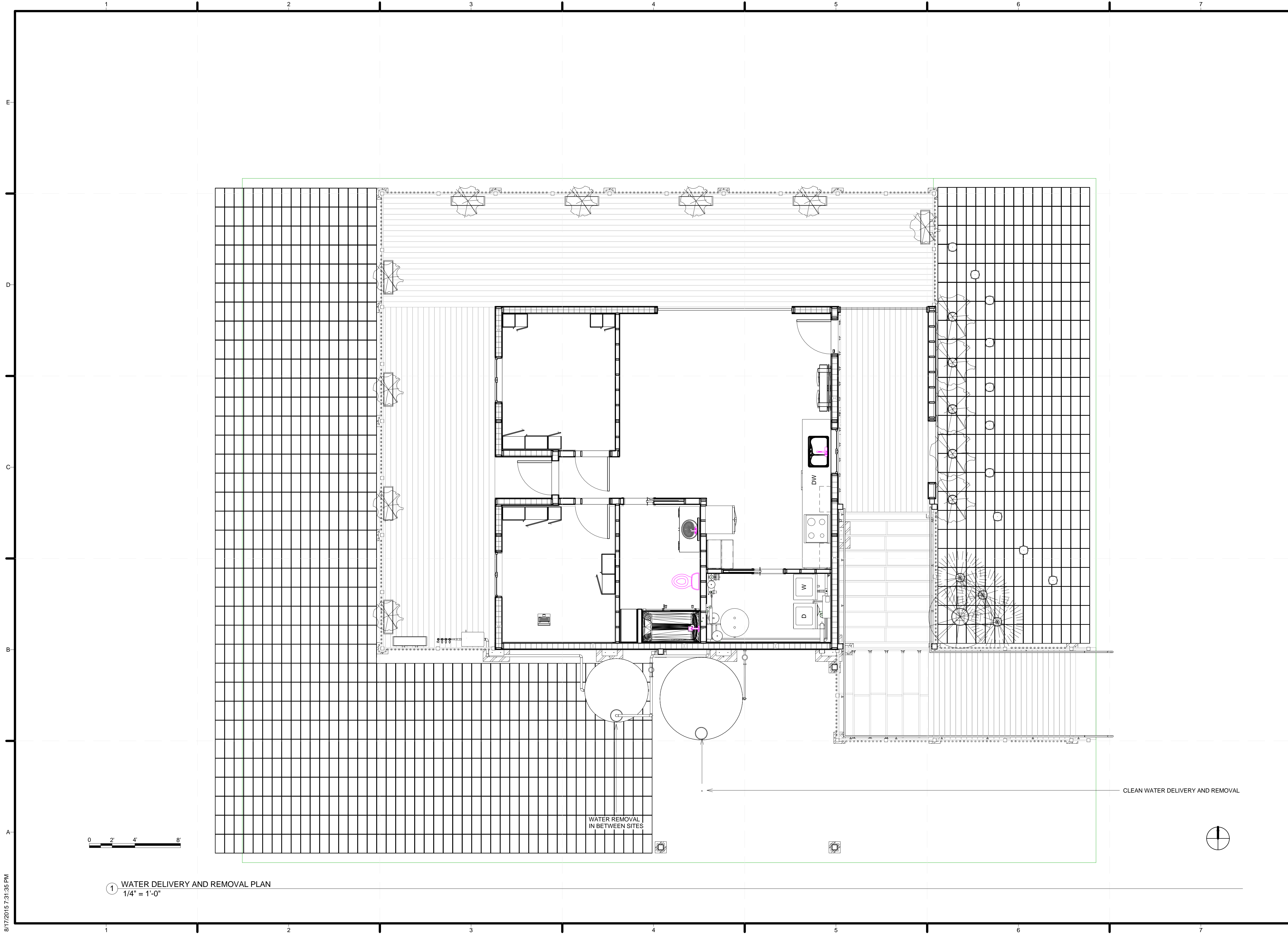
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SHEET TITLE
WATER DELIVERY AND REMOVAL

O-701



① WATER DELIVERY AND REMOVAL PLAN
 1/4" = 1'-0"

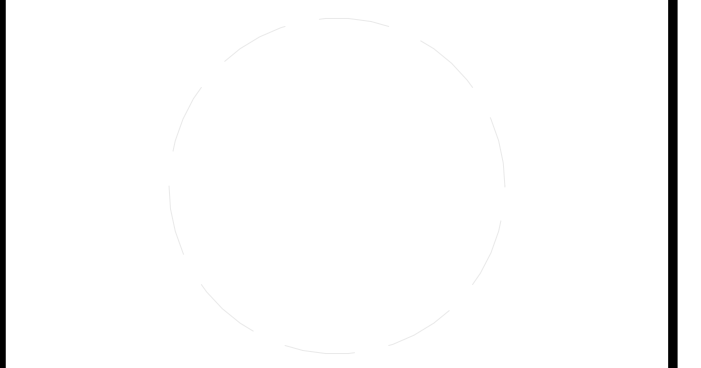
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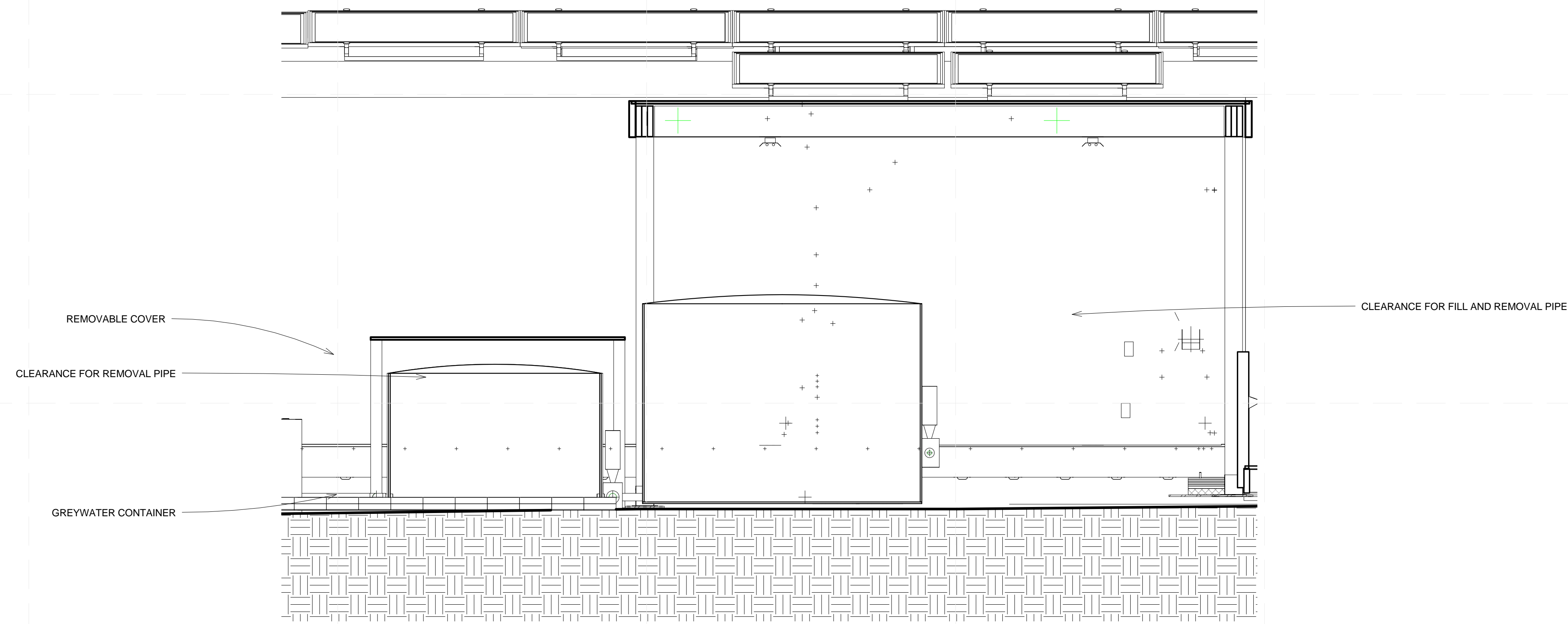


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SHEET TITLE
 WATER DELIVERY AND
 REMOVAL SECTION

O-702



① WATER DELIVERY AND REMOVAL SECTION
 1/2" = 1'-0"

