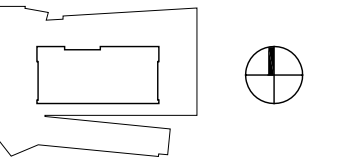




CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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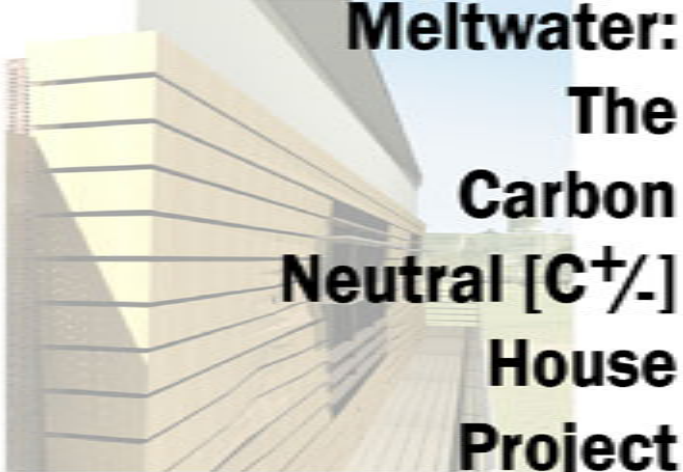


NTS

PROJECT STATUS: CD
SHEET NAME:

COVER

GO-00
SCALE: N.T.S.



**Meltwater:
The
Carbon
Neutral [C⁺/-]
House
Project**

**School
of
Architecture
and
Urban
Planning**



**College
of
Engineering
and
Applied
Sciences**



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MECHANICAL

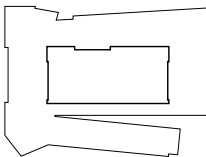
M6-00 HEATING & COOLING DIAGRAM



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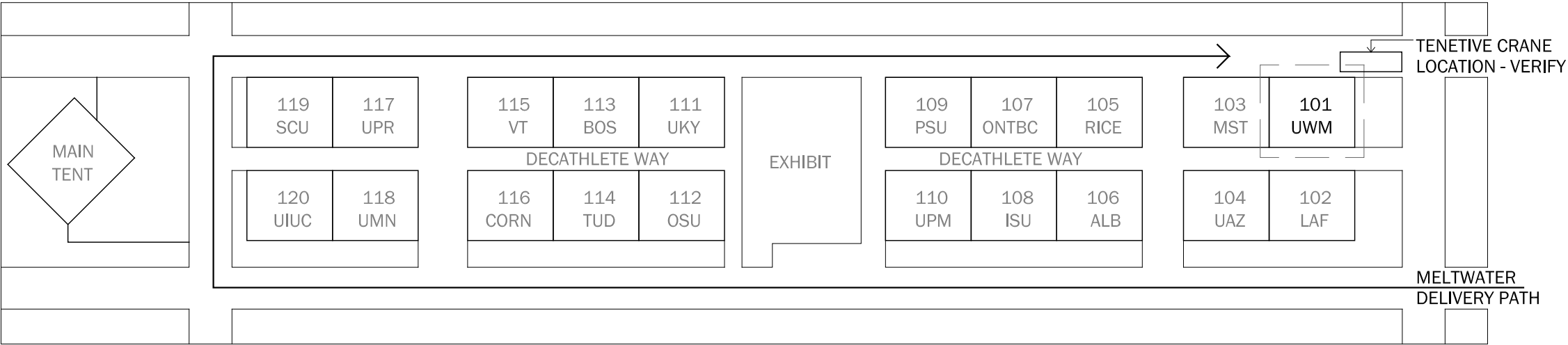


PROJECT STATUS: CD
SHEET NAME:

SHEET INDEX

G0-01

SCALE: N.T.S.



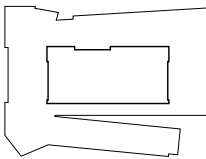
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C1-00 **VICINITY PLAN**
scale: 1/128" = 1'-0"



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PROJECT NO.: SD 2009

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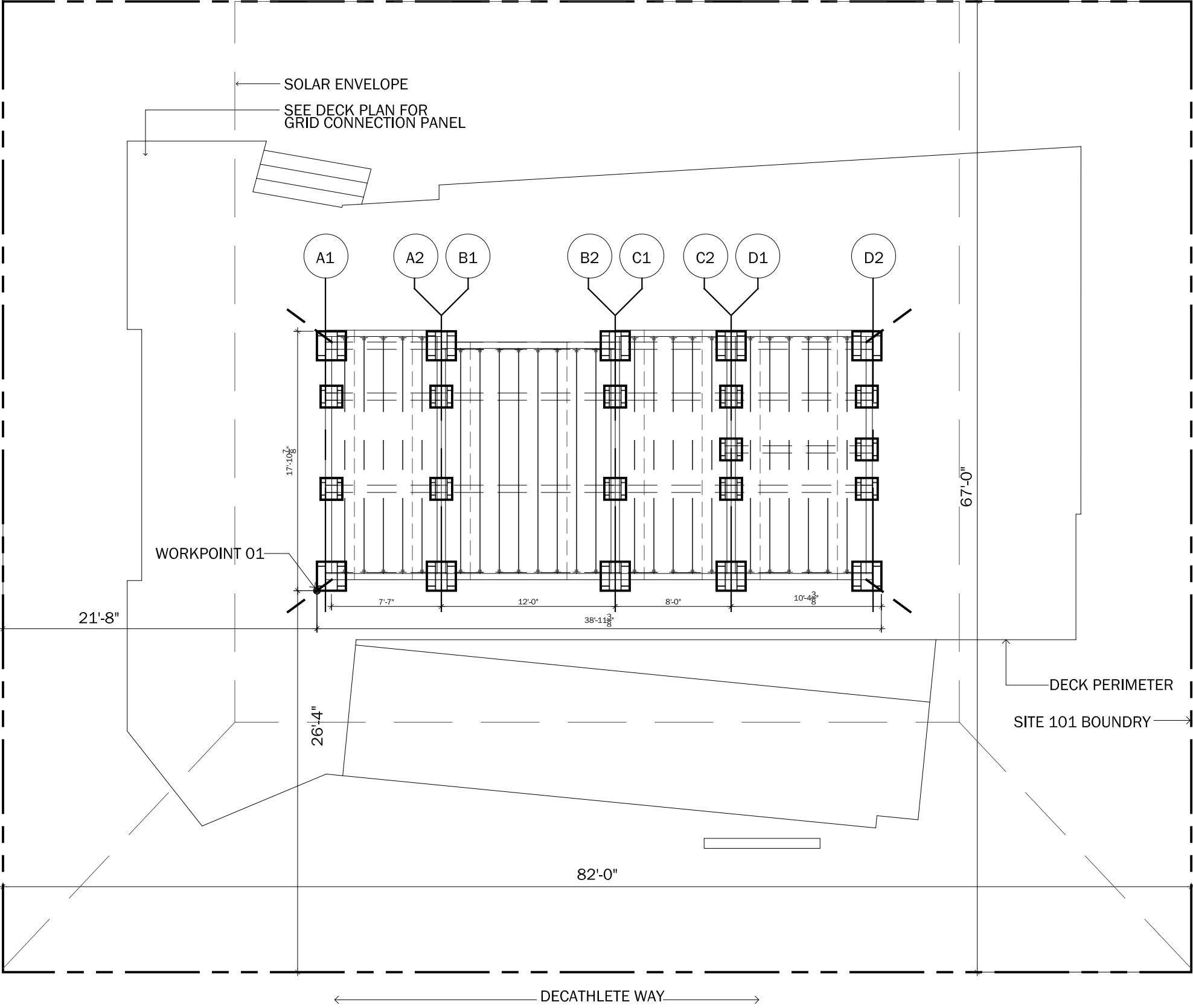
0' 32' 64' 128'

PROJECT STATUS: CD
SHEET NAME:

VACINITY PLAN

C1-00

SCALE: 1/128" = 1'-0"



1
C1-01

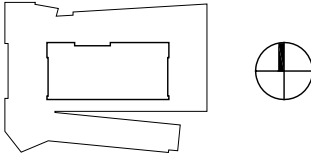
SITE PLAN
scale: $\frac{1}{8}" = 1'-0"$



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0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

SITE PLAN

C1-01

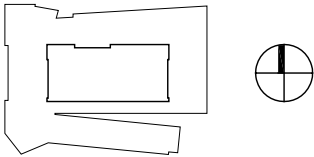
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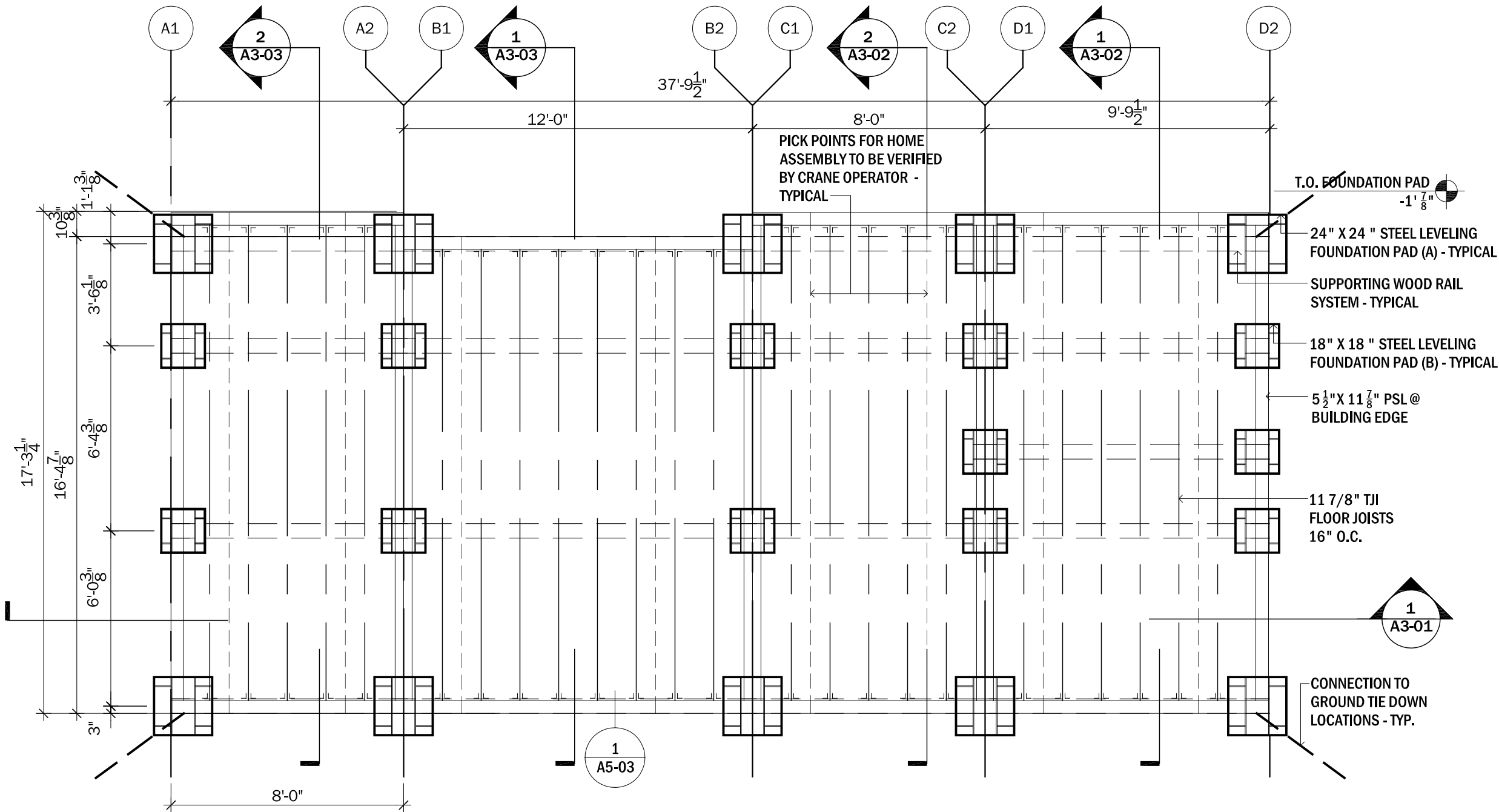
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

FOUNDATION PLAN

C1-02

SCALE: 1/4" = 1'-0"



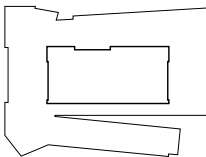
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C1-02 FOUNDATION PLAN
scale: $\frac{1}{4}$ " = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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NTS

PROJECT STATUS: CD
SHEET NAME:

SYMBOLS
ABBREVIATIONS

A0-00

SCALE: N.T.S.

ABBREVIATIONS

ALUM	ALUMINUM
C.L.	CENTER LINE
DIA.	DIAMETER
DW	DISH WASHER
DWGS	DRAWINGS
EL	ELEVATION
ELEC.	ELECTRICAL
EQ	EQUAL
FT	FEET
GAL	GALLON
GLZ	GLAZING
GWB	GYPSUM WALL BOARD
HB	HOSE BIB
HD	HEAD
HT	HEIGHT
JMB	JAMB
MATL	MATERIAL
MDF	MEDIUM DENSITY FIBERBOARD
MECH.	MECHANICAL
MM	MILLIMETER
MOD	MODULAR
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O.C.	ON CENTER
OSB	ORIENTED STRAND BOARD
P	PLUMBING
P.V.	PHOTOVOLTAIC
PERF	PERFORATED
PTD	PAINTED
QTY	QUANTITY
R.O.	ROUGH OPENING
RM.	ROOM
S.F.	SQUARE FEET
S.G.	SEMI-GLOSS
SIP	STRUCTURAL INSULATED PANEL
SL	SILL
ST	STORAGE TANK
T.O.	TOP OF
TEMP	TEMPORARY
THK	THICKNESS
TJI	TRUS JOIST I-JOIST
TYP	TYPICAL
W	WIDTH
WH	WATER HEATER

HATCH PATTERNS



GWB



TILE



STRAW-BOARD



POLY-CARBONATE



CLOSED CELL INSULATION



INSULATION @ SIP PANEL ROOF



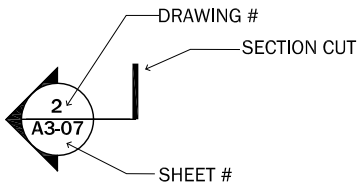
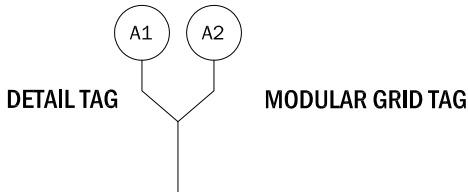
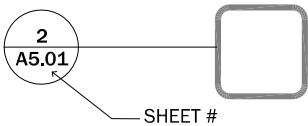
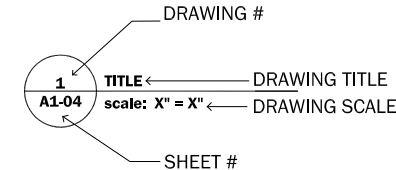
ALUMINUM WALK OFF GRATE



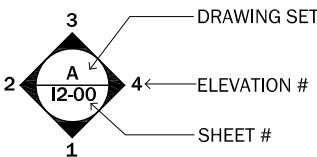
COTTON BATTING



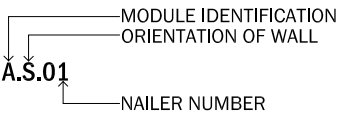
PERFORATED METAL



SECTION TAG



INTERIOR ELEVATION



NAILER DESIGNATION

(F) FIRE EXTINGUISHER

106 ROOM # TAG

15 WALL TYPE TAG

200 WINDOW TAG

107B DOOR TAG

ELEVATION TAG

WOOD GRAIN DIRECTIONAL TAG

WALL MOUNTED LIGHTING FIXTURE

WALL MOUNTED SWITCH

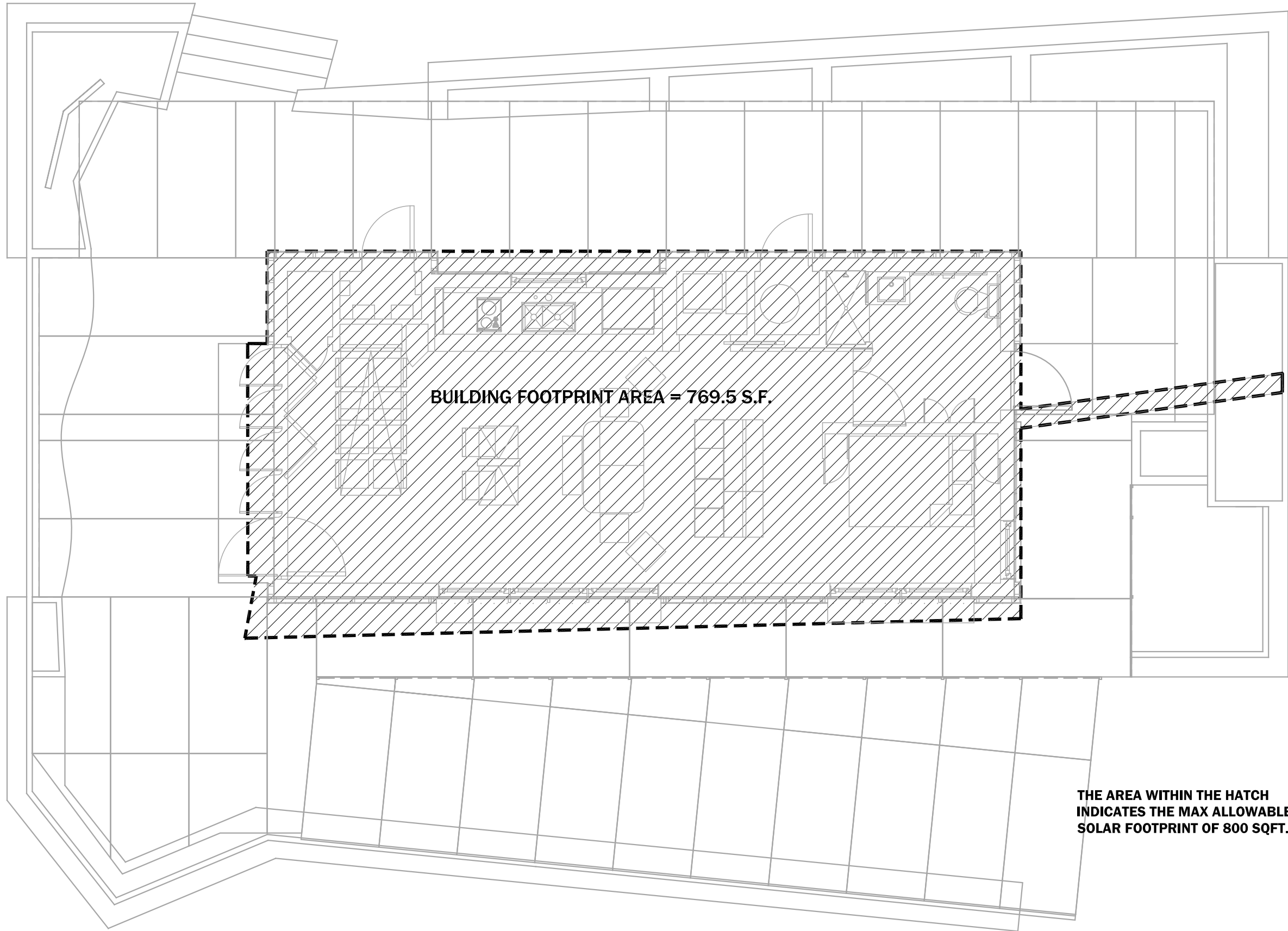
RECESSED, PENDENT AND ACCENT LIGHTING FIXTURE

LED STRIP LIGHTING

SEE E1-01 FOR ADDITIONAL ELECTRICAL POWER SYMBOLS AND ABBREVIATIONS

SEE P6-00 - P6-04 FOR PLUMBING SYMBOLS AND ABBREVIATIONS

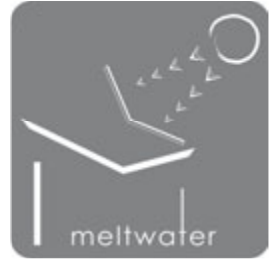
SEE M6-00 FOR MECHANICAL SYMBOLS AND



BUILDING FOOTPRINT AREA = 769.5 S.F.

THE AREA WITHIN THE HATCH
INDICATES THE MAX ALLOWABLE
SOLAR FOOTPRINT OF 800 SQFT.

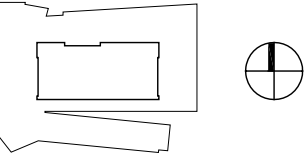
1
A0-01 **MAXIMUM ALLOWABLE FOOTPRINT**
scale: $\frac{3}{16}" = 1'-0"$



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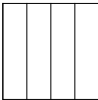
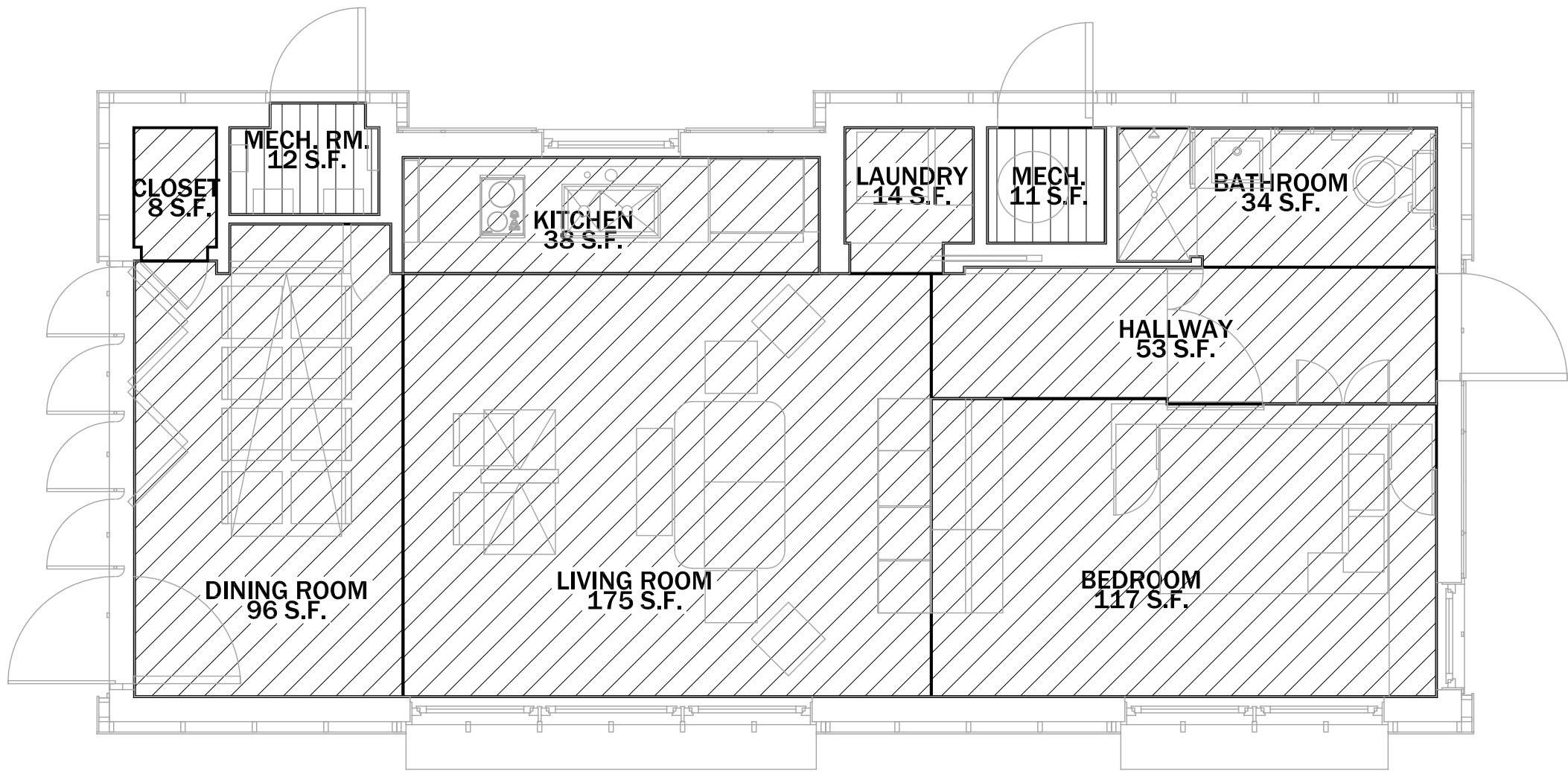
0' 1'-4" 2'-8" 5'-4"

PROJECT STATUS: CD
SHEET NAME:

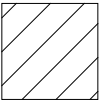
**MAXIMUM
ALLOWABLE
FOOTPRINT**

A0-01

SCALE: $\frac{3}{16}" = 1'-0"$



UNCONDITIONED AREA ROOM	AREA
MECHANICAL ROOM 1	12
MECHANICAL ROOM 2	11
TOTAL UNCONDITIONED AREA:	23 S.F.



CONDITIONED AREA ROOM	AREA
CLOSET	8 S.F.
DINING ROOM	96 S.F.
LIVING ROOM	175 S.F.
KITCHEN	38 S.F.
LAUNDRY	14 S.F.
HALLWAY	53 S.F.
BEDROOM	117 S.F.
BATHROOM	34 S.F.
TOTAL CONDITIONED AREA:	535 S.F.

1
A0-02

FIRE SAFETY - EGRESS PLAN
scale: 1/4" = 1'-0"



CLIENT NAME:DOE/NREL

PROJECT:SOLAR DECATHLON

PROJECT NO.:SD 2009

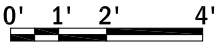
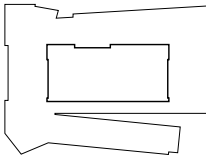
REVISION HISTORY

ISSUE DATE:2009.06.02

APPROVED BY:GDT/CTC

CHECKED BY:GDT/CTC

DRAWN BY:JPR



PROJECT STATUS:CD

SHEET NAME:

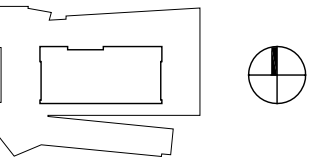
CONDITIONED AREA



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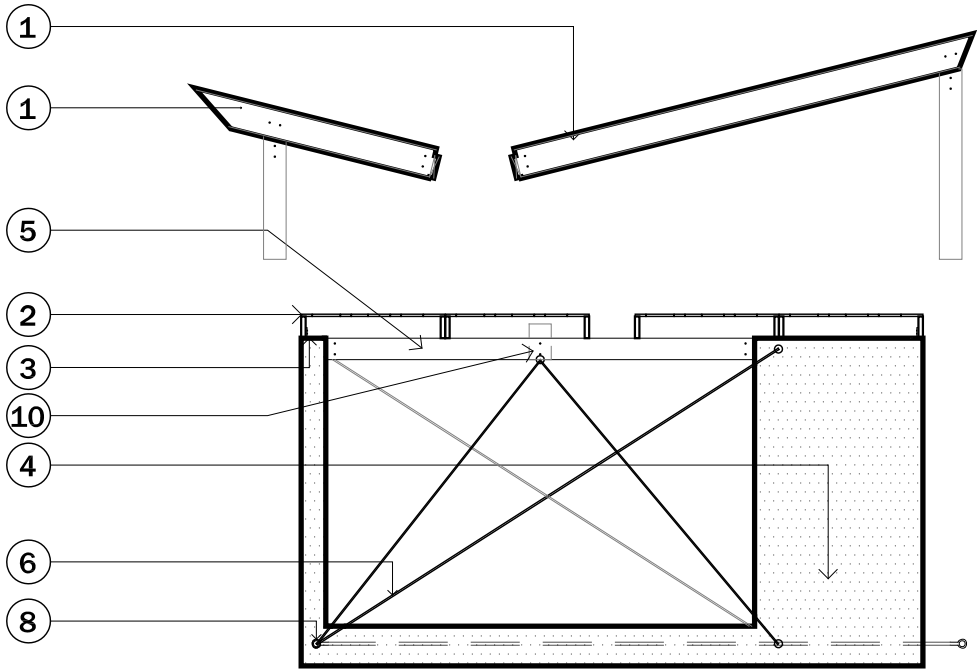


0' 1'-4" 2'-8" 5'-4"

PROJECT STATUS: CD
SHEET NAME:

MODULE SHIPMENT DESIGN

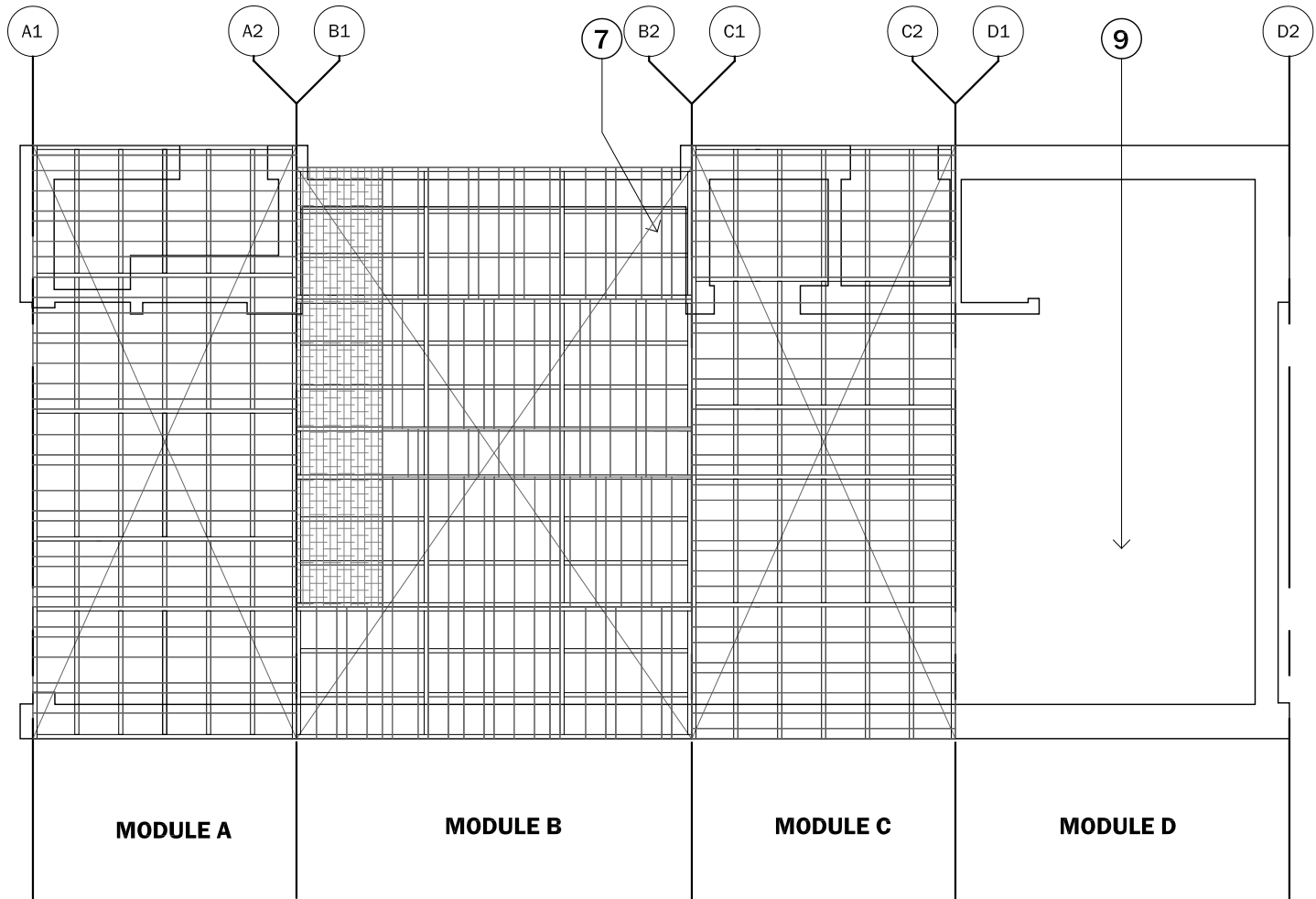
A0-03
SCALE: 3/16" = 1'-0"



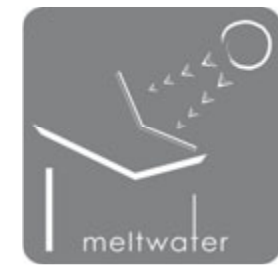
MELTWATER SHIPMENT KEYNOTES

1. SEPARATE ROOF MODULES SEE A1-01
2. PANELIZED DECKING - 4' X 8' LAYOUT
3. CONNECTION POINTS - TEMPORARY
4. TYPICAL MODULE ELEVATION
5. MOD BEAM
6. TENSION RODS - TEMPORARY
7. HORIZONTAL METAL STRAPPING
8. LOCATIONS FOR CRANE PICK POINTS
9. EAST MODULE - SHIP FULLY ASSEMBLED
10. CONNECTION POINT FOR MOD BEAM/VALLEY BEAM

2
A0-03 ELEVATION VEIW
scale: 3/16" = 1'-0"



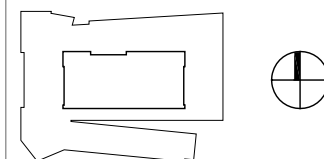
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A0-03 PLAN VEIW
scale: 3/16" = 1'-0"



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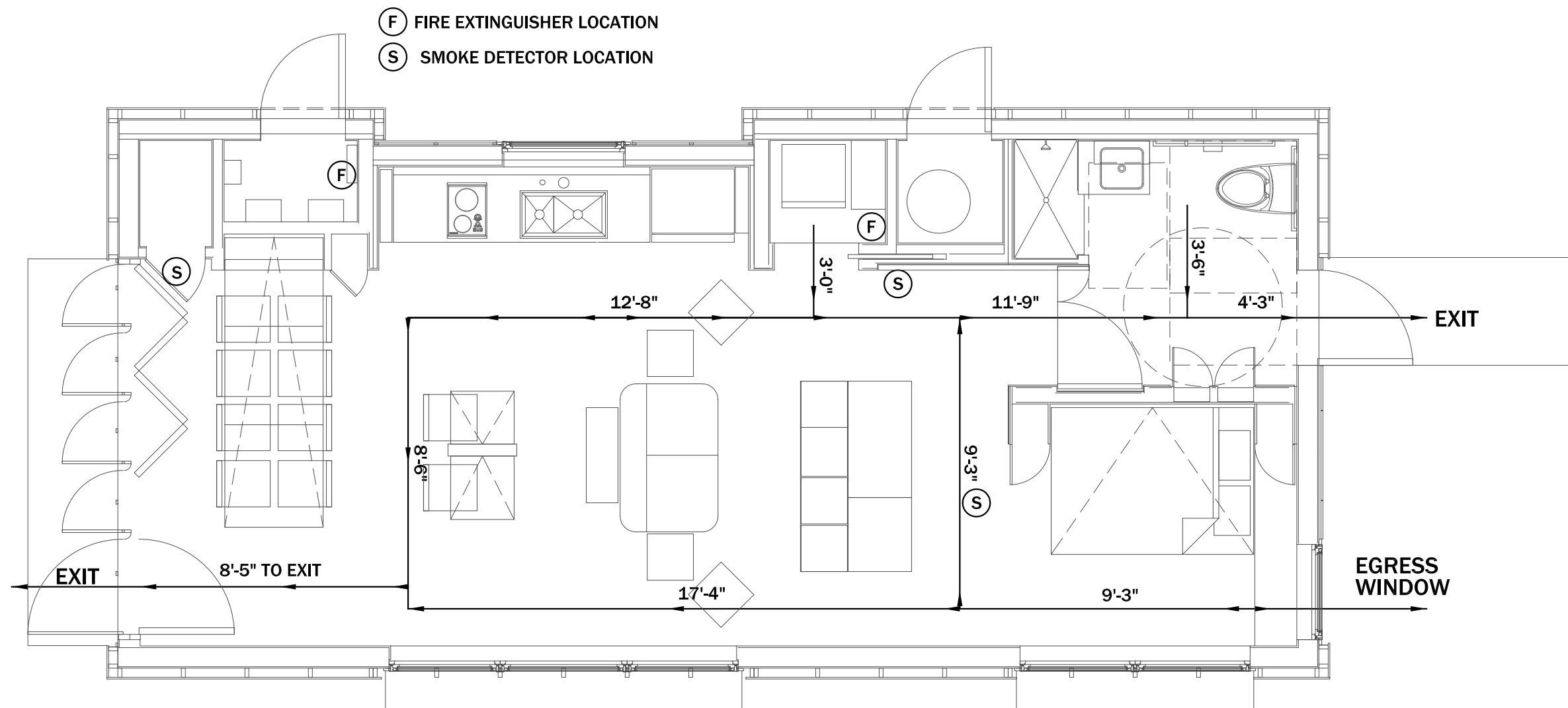
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PROJECT STATUS: CD
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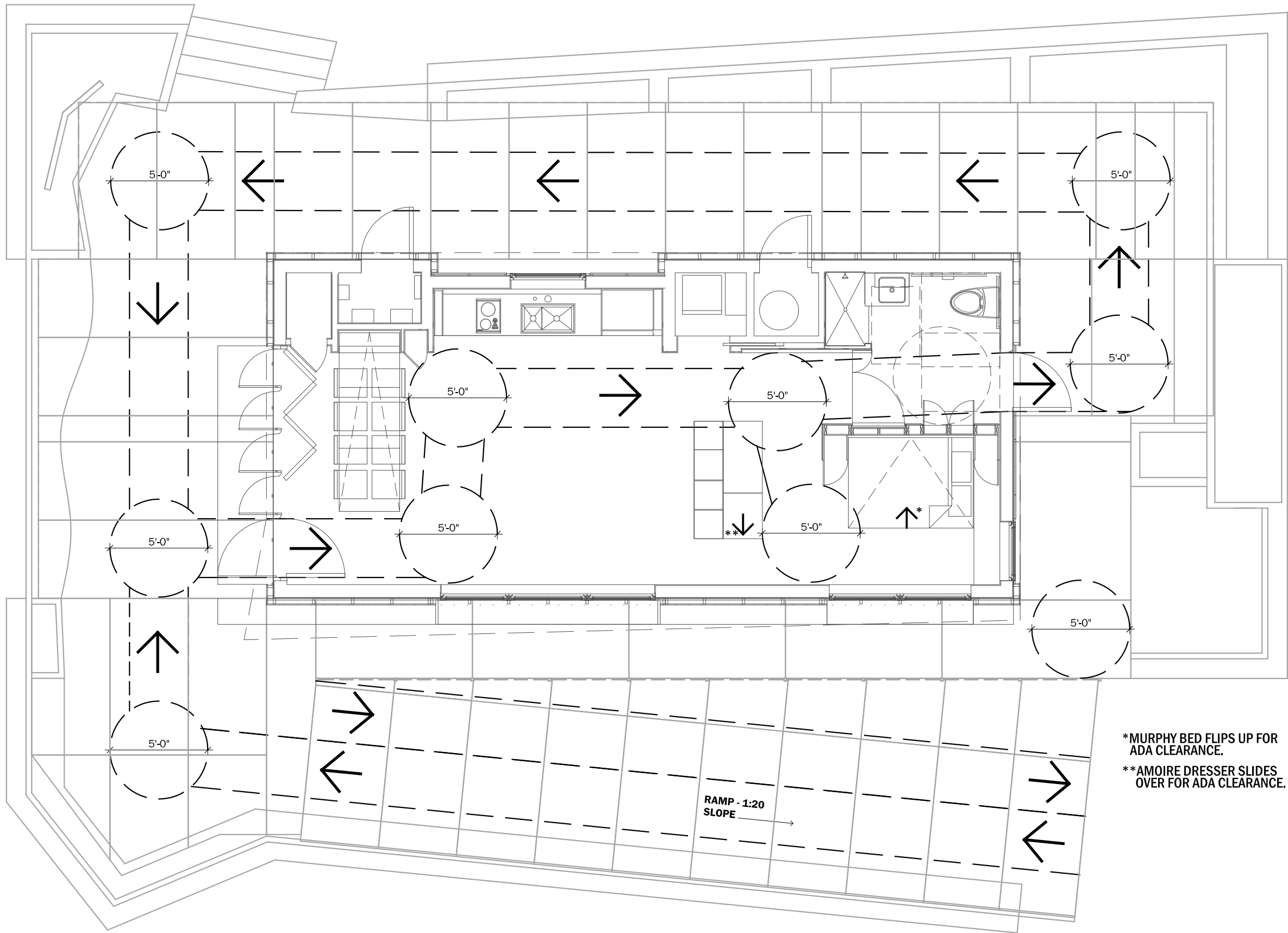
FIRE SAFETY/ EGRESS PLAN

A0-04

SCALE: 1/4" = 1'-0"



1
A0-04 **FIRE SAFETY - EGRESS PLAN**
scale: 1/4" = 1'-0"



*MURPHY BED FLIPS UP FOR
ADA CLEARANCE.
**AMOIRE DRESSER SLIDES
OVER FOR ADA CLEARANCE.

1

A0-05

ADA TOUR PLAN

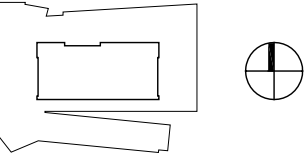
scale: 3/16" = 1'-0"



CLIENT NAME: DOE/NREL
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0' 1'-4" 2'-8" 5'-4"

PROJECT STATUS: CD
SHEET NAME:

ADA TOUR PLAN

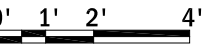
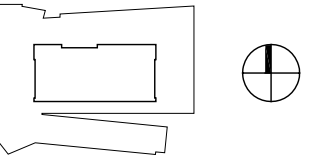
A0-05
SCALE: 3/16" = 1'-0"



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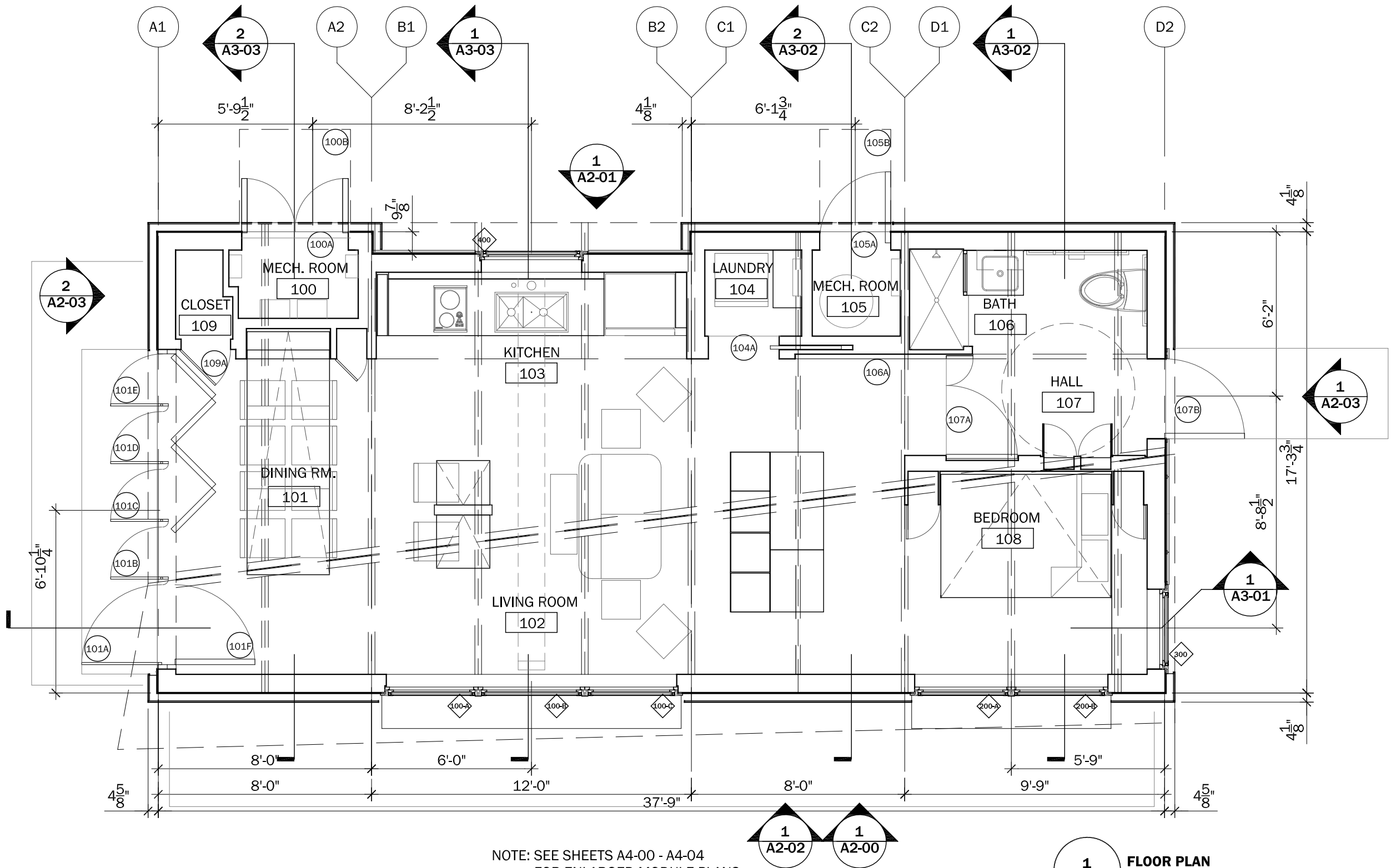


PROJECT STATUS: CD
SHEET NAME:

FLOOR PLAN

A1-00

SCALE: 1/4" = 1'-0"



NOTE: SEE SHEETS A4-00 - A4-04
FOR ENLARGED MODULE PLANS

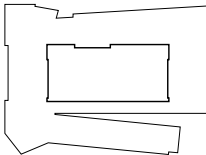
1 FLOOR PLAN
A1-00 scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: ERH



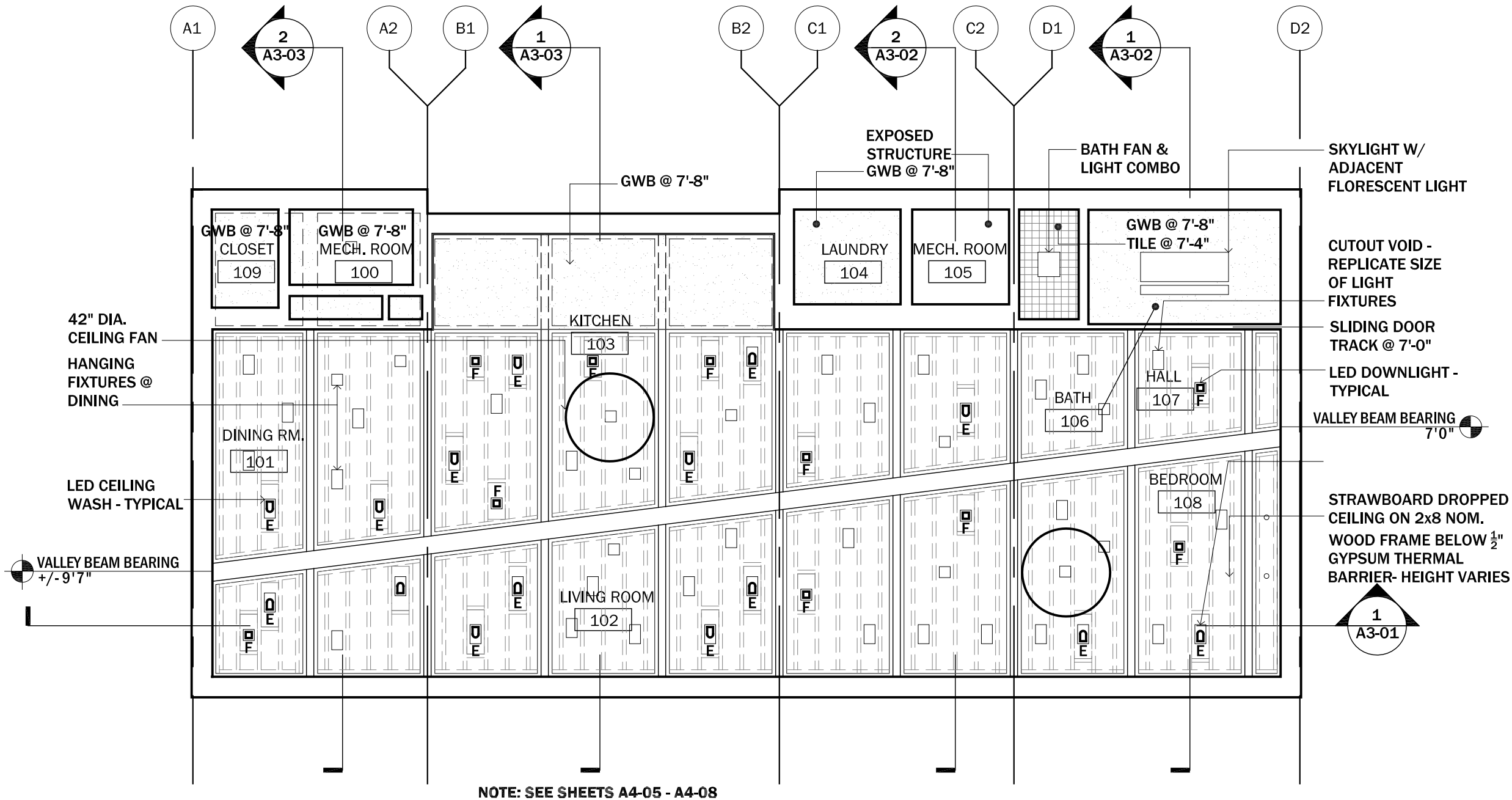
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

REFLECTED CEILING PLAN

A1-01

SCALE: 1/4" = 1'-0"



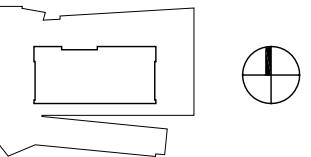
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A1-01 REFLECTED CEILING PLAN
scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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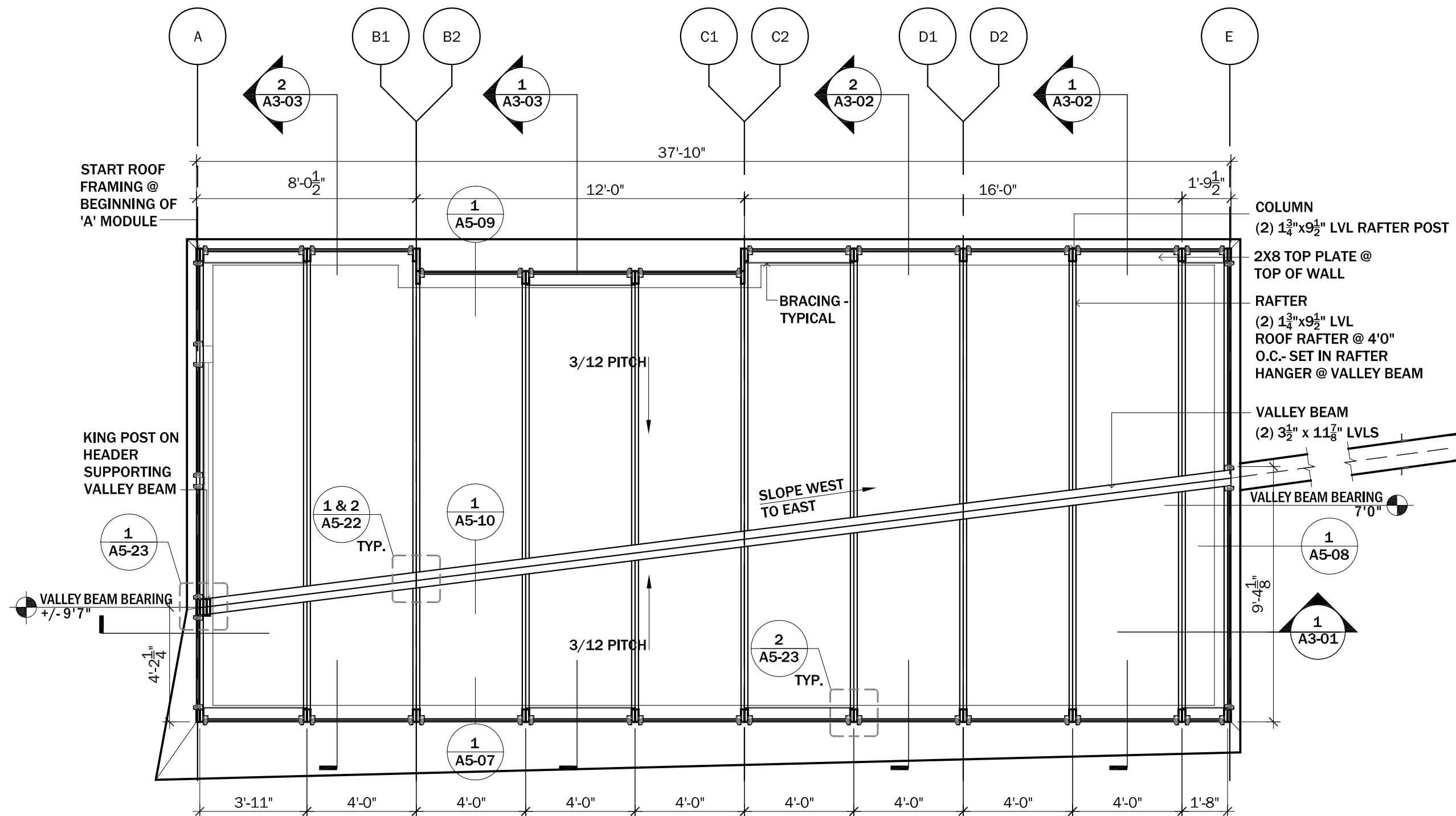
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PROJECT STATUS:	CD
SHEET NAME:	

ROOF FRAMING PLAN

A1-02

SCALE: 1/4" = 1'-0"



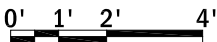
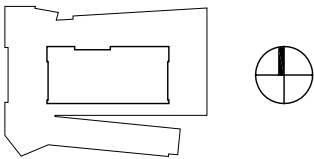
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A1-02 **ROOF FRAMING PLAN**
scale: $\frac{1}{4}" = 1'-0"$



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

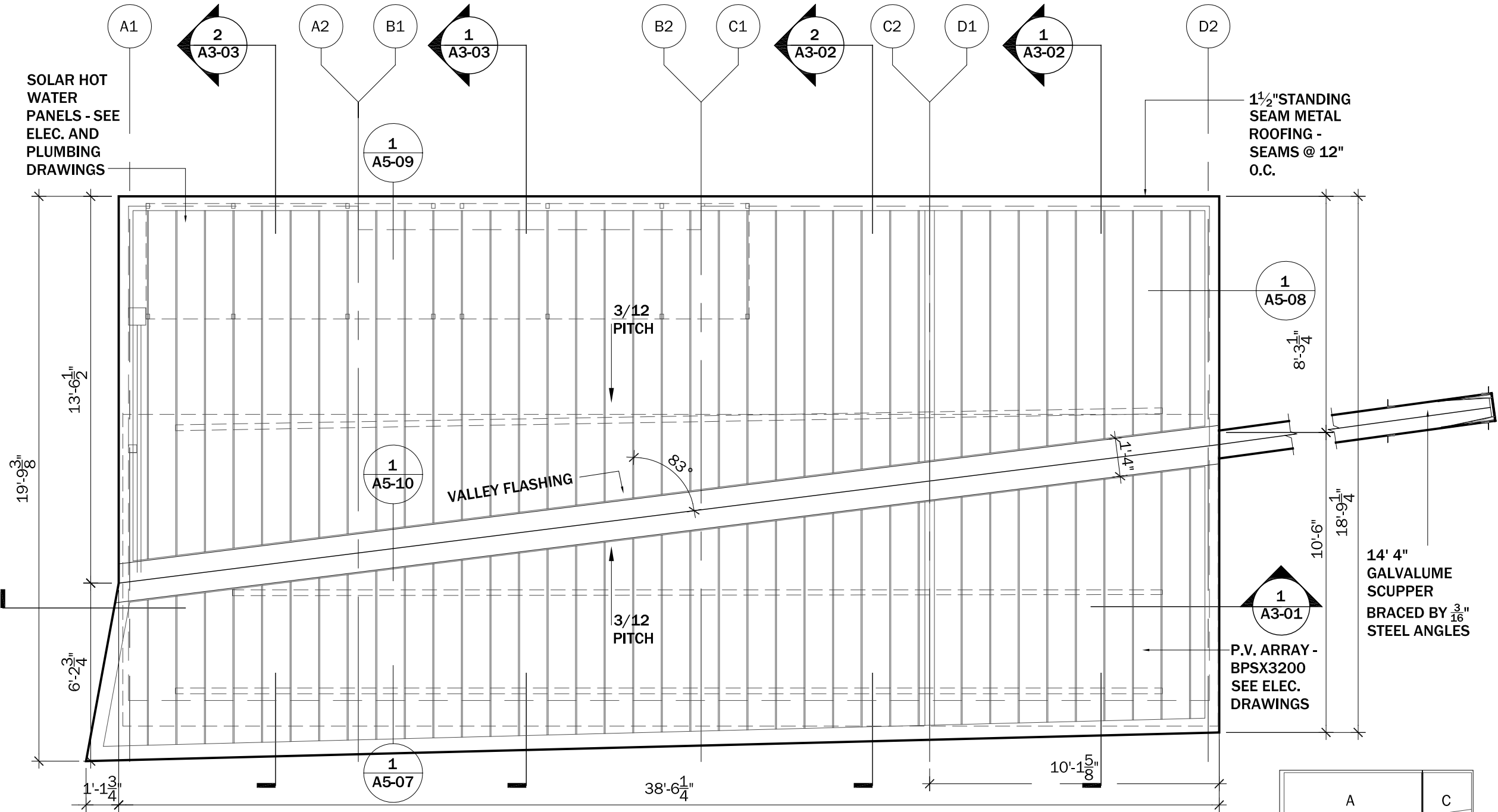
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
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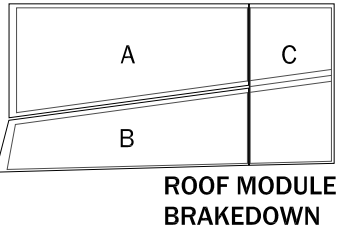
PROJECT STATUS: CD
SHEET NAME:

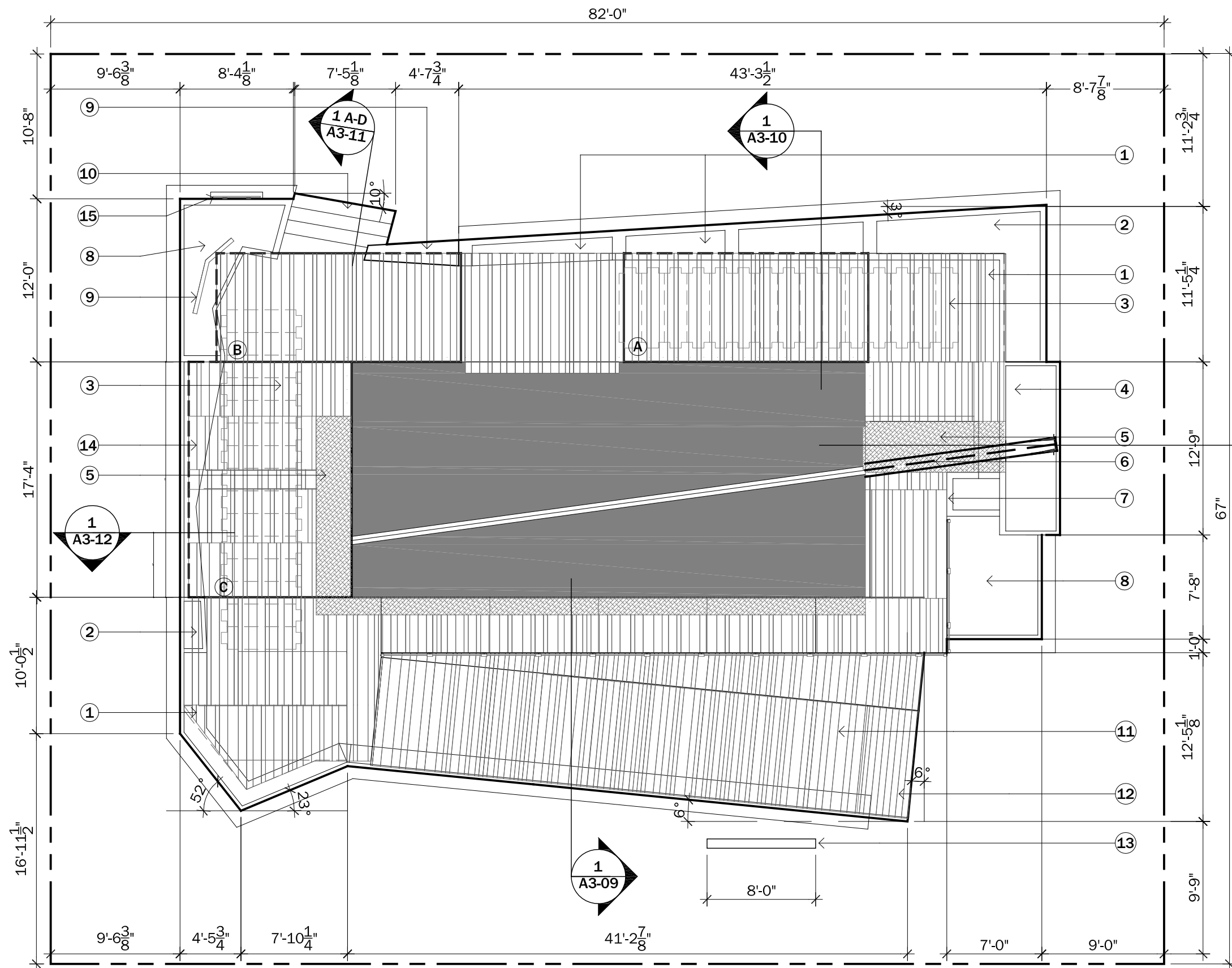
ROOF PLAN

A1-03
SCALE: 1/4" = 1'-0"



1
A1-03 ROOF PLAN
scale: 1/4" = 1'-0"





- 1. BENCH
- 2. PLANTER
- 3. RAIN HOG WATER BLADDER SYS.
- 4. REFLECTING POOL
- 5. SAFE TRACK ALUMINUM GRATE
- 6. EXTENDED SCUPPER
- 7. WATER GARDEN
- 8. "LARGE PLANT" GARDEN
- 9. DISPLAY BOARD
- 10. EXIT STAIR
- 11. ENTRY RAMP FROM MALL
- 12. SEE A1-05 FOR TYPICAL DECK MODULE
- 13. UNIVERSITY SIGN
- 14. ESKER BENCH SEE A3-12

15. GRID MOUNTING PANEL

DECK SECTIONS:
A,B,C USED FOR
BRACING DURING
SHIPPING, SEE
A1-08

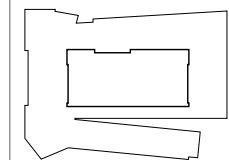
1
A1-04 **DECK PLAN**
SCALE: 1/8" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.06.02
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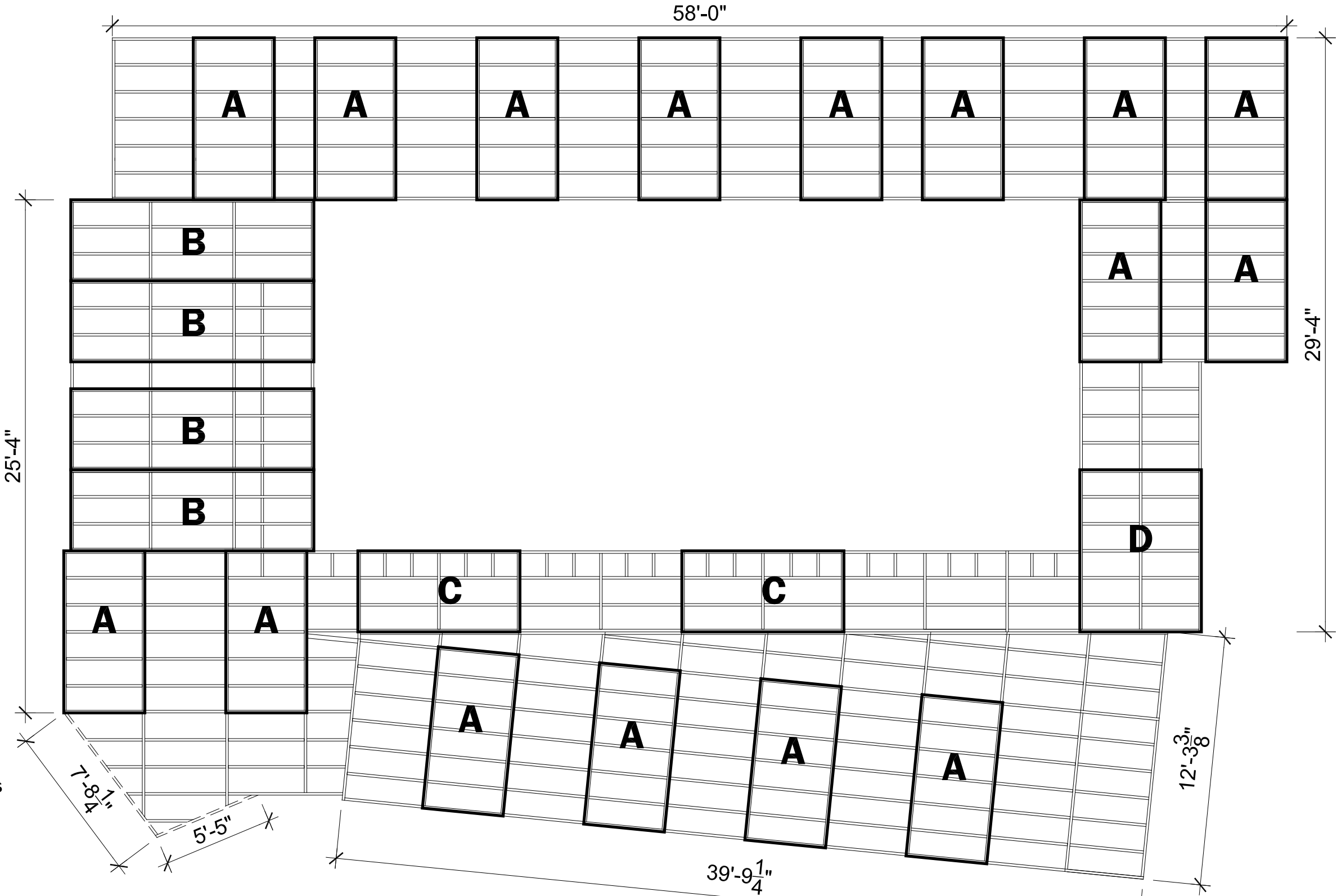
PROJECT STATUS: CD
SHEET NAME:

DECK
PLAN

A1-04

SCALE: 1/8" = 1'-0"

1. DECK BOARDS VARIES BETWEEN:
1-1/4" X 4"
1-1/4" X 6"
1-1/4" X 8"
1-1/4" X 10"
2. MODULE FRAME MEMBERS:
2" X 8" PINE
3. MODULE FRAME MEMBERS
2" X 10" PINE
4. MATSINC SAFETRACK
5. EAST MODULE FRAME MEMBERS
2" X 12" PINE



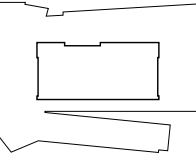
1
A1-05 DECK FRAMING - MOD TYPES
SCALE: 3/16" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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0 1' 2' 4'

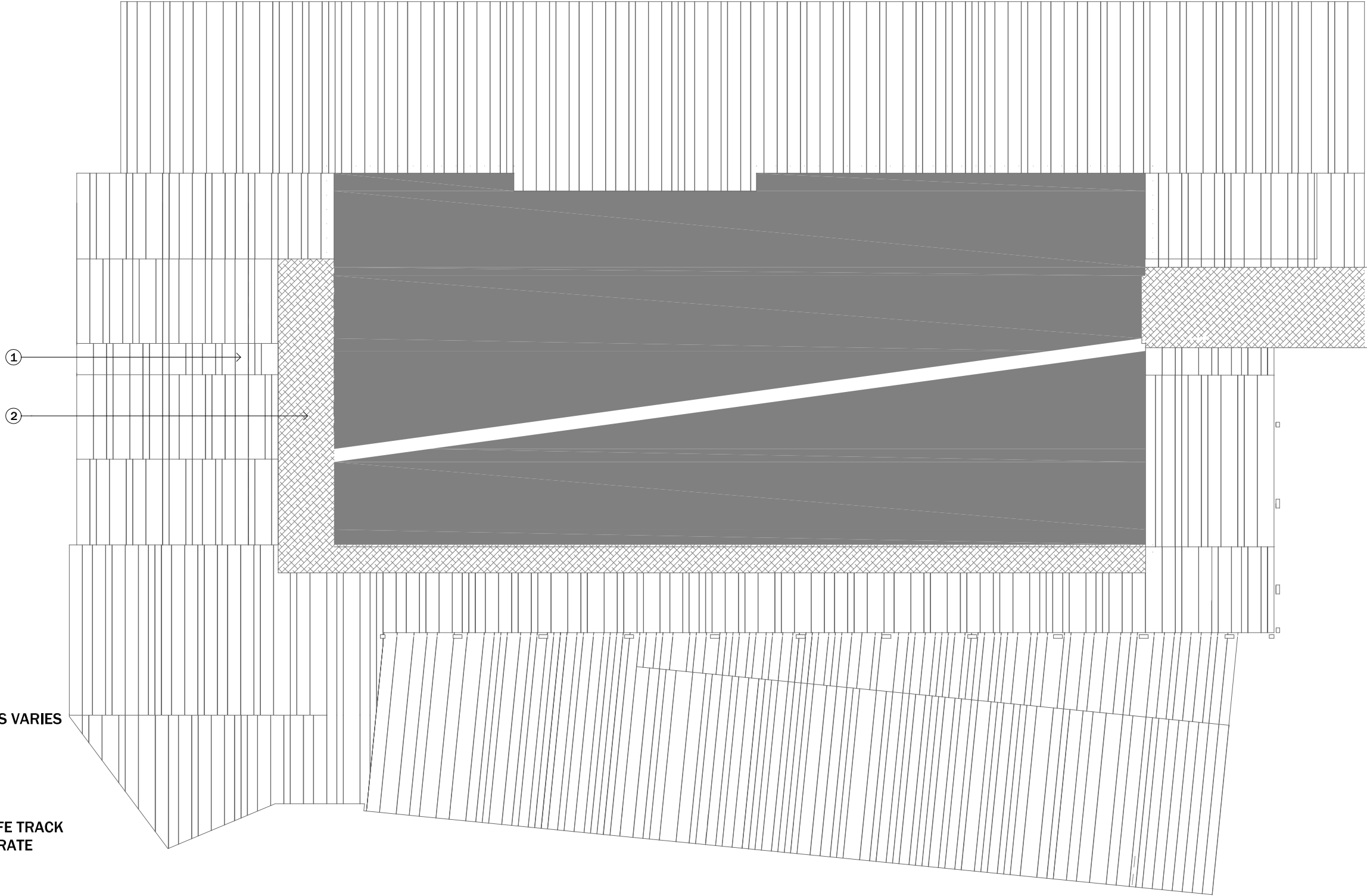
PROJECT STATUS: CD
SHEET NAME:

DECK
FRAMING
AND MODULE
TYPES

A1-05

SCALE: 1/4" = 1'-0"

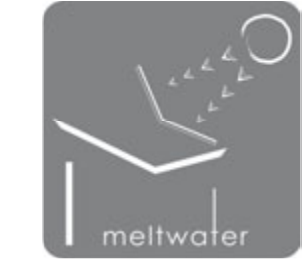
1. DECK BOARDS VARIES
BETWEEN:
1-1/4" X 4"
1-1/4" X 6"
1-1/4" X 8"
1-1/4" X 10"
2. MATSINC. SAFE TRACK
ALUMINUM GRATE



1

A1-06

DECK BOARDS
SCALE: 3/16" = 1'-0"



CLIENT NAME:DOE/NREL

PROJECT:SOLAR DECATHLON

PROJECT NO.:SD 2009

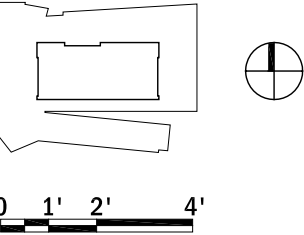
REVISION HISTORY	

ISSUE DATE:2009.06.02

APPROVED BY:GDT/CTC

CHECKED BY:GDT/CTC

DRAWN BY:MTR



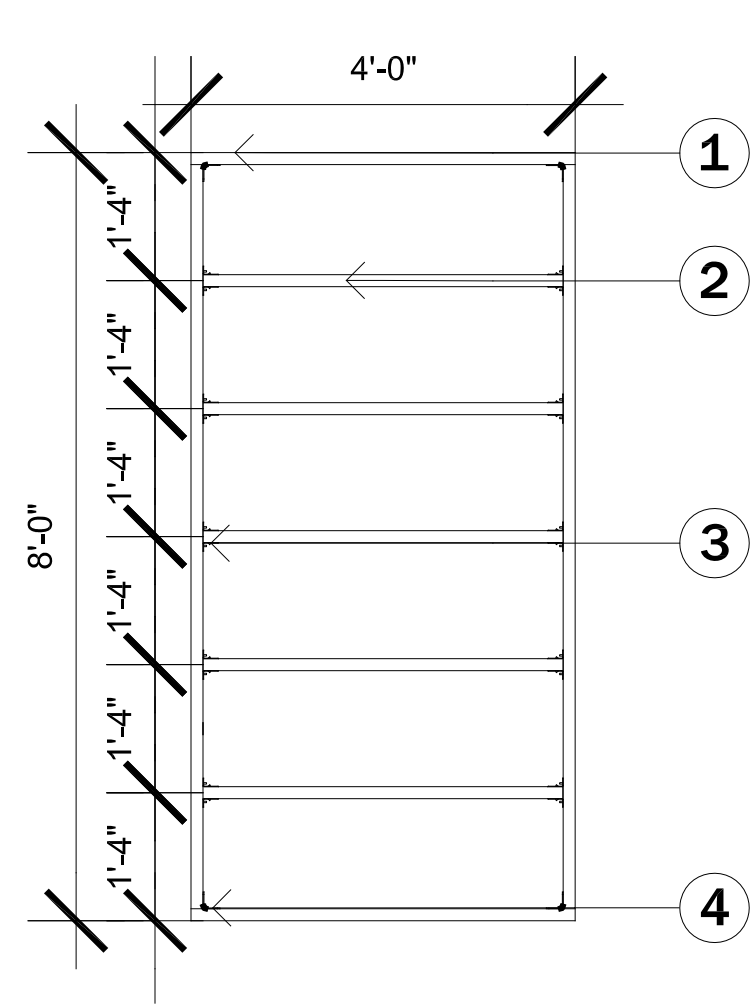
PROJECT STATUS:CD

SHEET NAME:

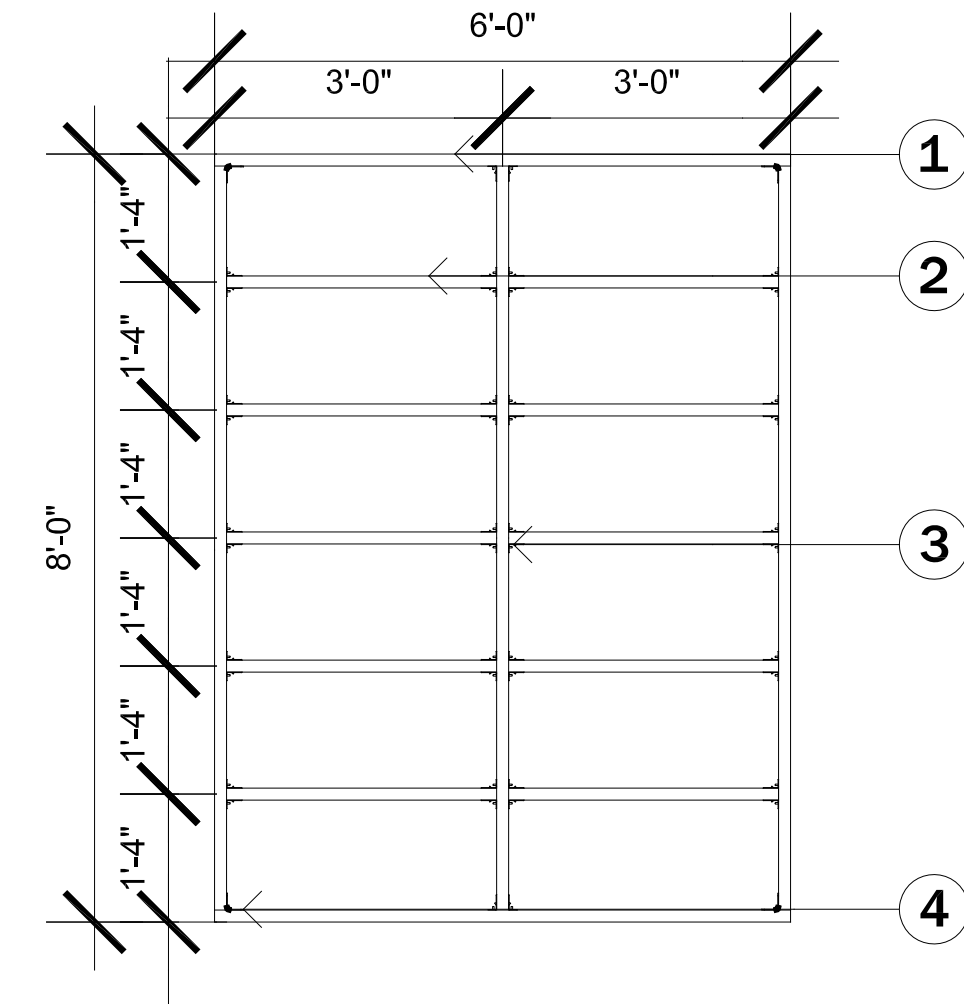
DECK
BOARDS

A1-06

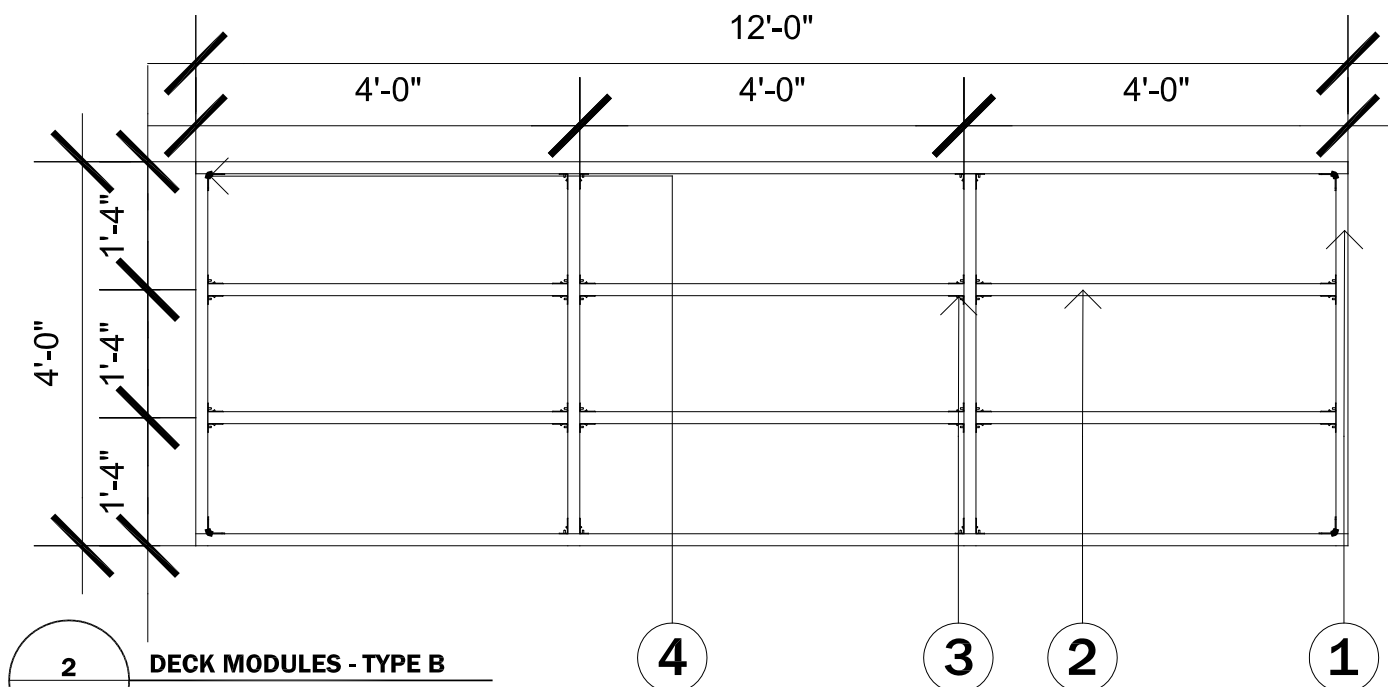
SCALE:1/4" = 1'-0"



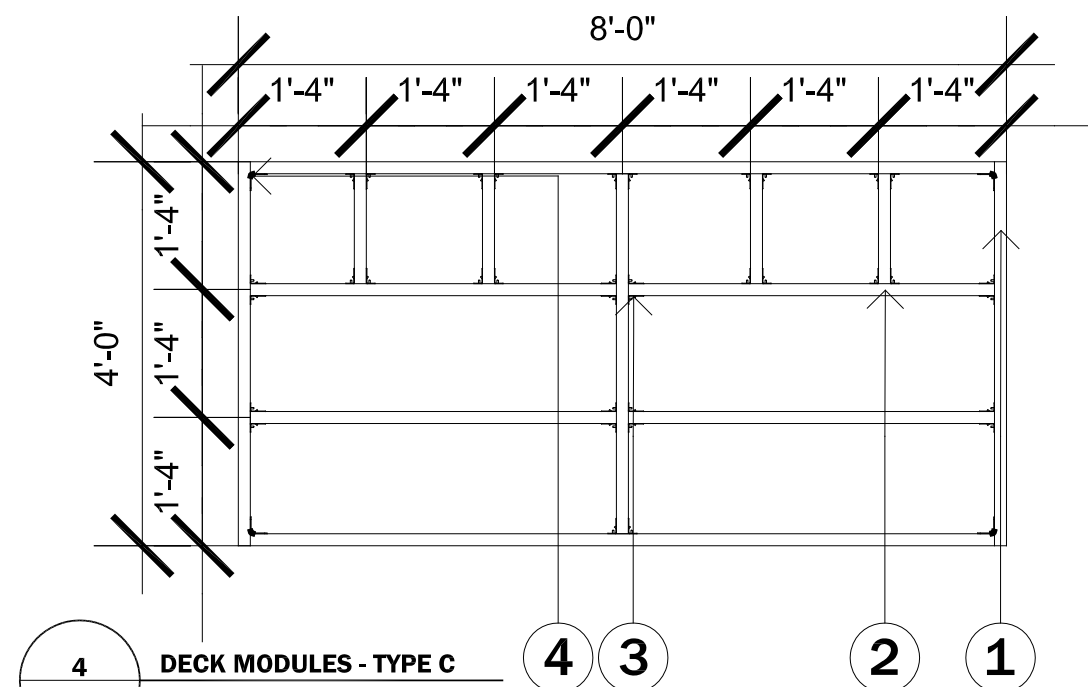
1
A1-07 **DECK MODULES - TYPE A**
SCALE: 1/2" = 1'-0"



3
A1-07 **DECK MODULES - TYPE D**
SCALE: 1/2" = 1'-0"



2
A1-07 **DECK MODULES - TYPE B**
SCALE: 1/2" = 1'-0"



4
A1-07 **DECK MODULES - TYPE C**
SCALE: 1/2" = 1'-0"

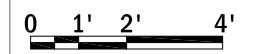
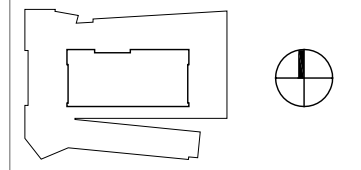
- 1. EXTERIOR FRAME
- 2x10 OR 2x12(MOD B)
- 2. INTERIOR JOISTS
- 2x10 OR 2x8 (MOD B)
- 3. JOIST HANGER
- LUS28, LUS210
- 4. ANGLE BRACKET
- ML26Z



CLIENT NAME: DOE/NREL
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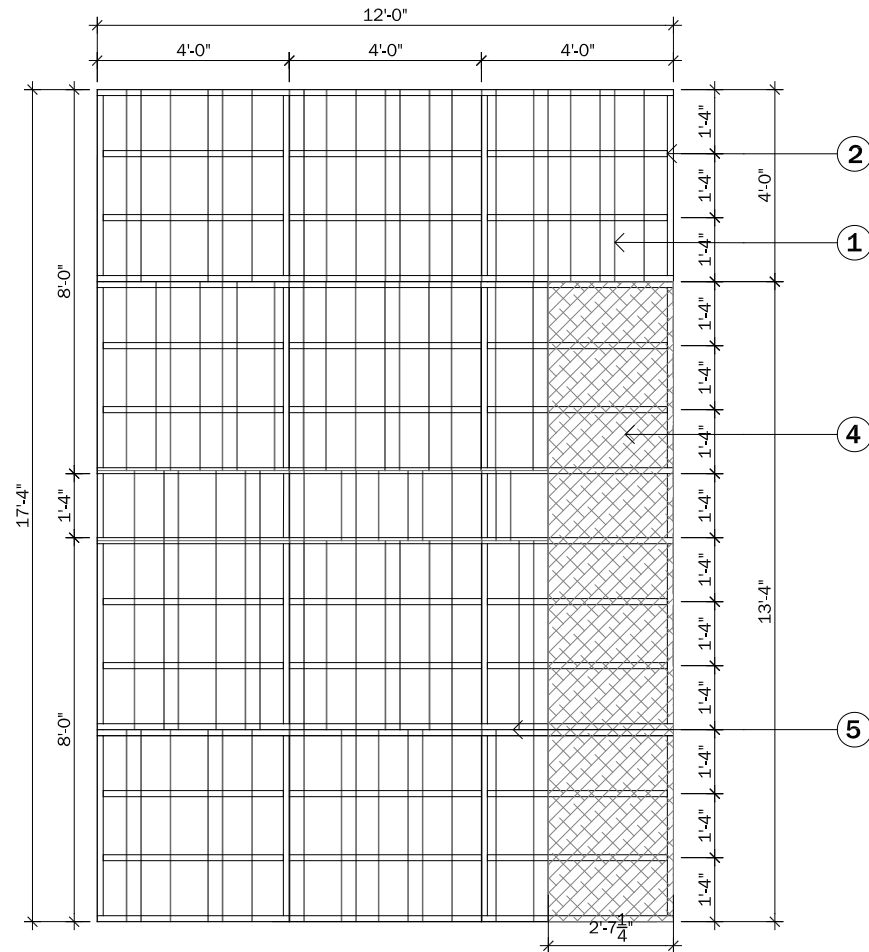
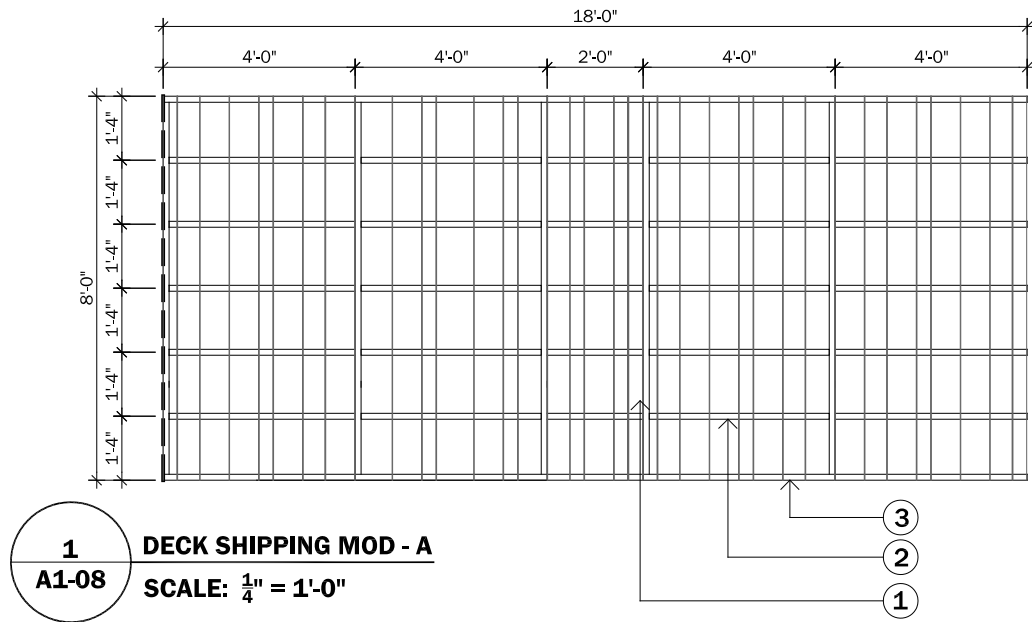


PROJECT STATUS: CD
SHEET NAME:

DECK MODULES

A1-07

SCALE: 1/4" = 1'-0"

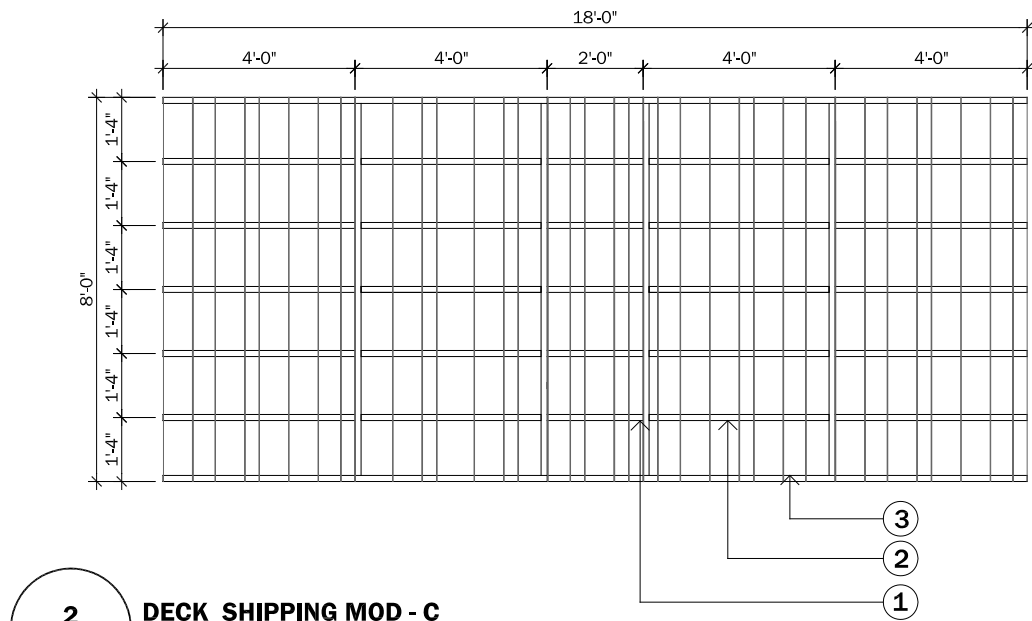


3

DECK SHIPPING MOD - B

A1-08

SCALE: $\frac{1}{4}" = 1'-0"$



1. DECK BOARDS VARIES BETWEEN:
1-1/4" X 4"
1-1/4" X 6"
1-1/4" X 8"
1-1/4" X 10"
2. MODULE FRAME MEMBERS:
2" X 8" PINE
3. MODULE FRAME MEMBERS
2" X 10" PINE
4. MATSINC SAFETRACK
5. EAST MODULE FRAME MEMBERS
2" X 12" PINE

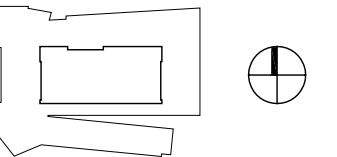
SEE A0-03 FOR
PLACEMENT ON
BUILDING MODULES



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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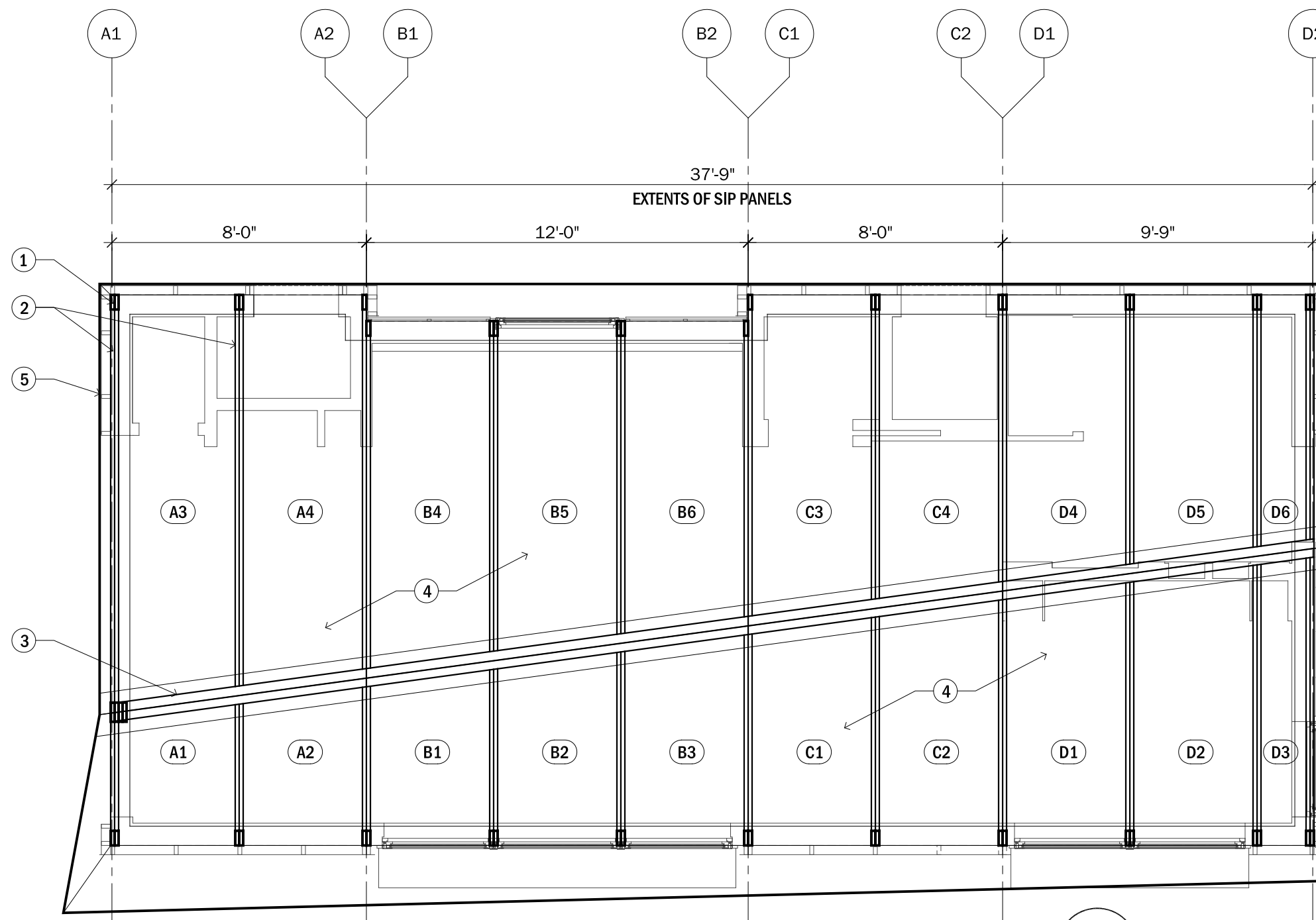
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

**DECK
SHIPPING
MODULES**

A1-08

SCALE: $\frac{1}{4}" = 1'-0"$



1
A1-10 SIP PANEL STRUCTRE AND PANEL DIAGRAM
SCALE: 1/4" = 1'-0"

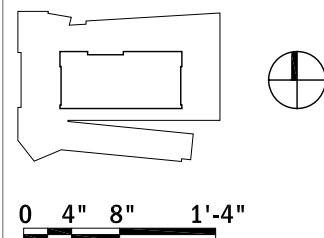
- PRIMARY STRUCTURE**
1. COLUMNS (2) 1 $\frac{3}{4}$ " x $\frac{91}{2}$ " LVL (TYP.)
 2. RAFTERS (2) 1 $\frac{3}{4}$ " x $\frac{91}{2}$ " LVL (TYP.)
 3. VALLEY BEAM (2) 3 $\frac{1}{2}$ " x 11 $\frac{7}{8}$ " LVL (TYP.)
- SECONDARY STRUCTURE (SIPS)**
4. 10 $\frac{1}{4}$ " STRUCTURAL INSULATION PANELS
1 $\frac{1}{2}$ " OSB SHEATHING
9 $\frac{1}{4}$ " RIGID INSULATION
1 $\frac{1}{2}$ " OSB SHEATHING
 5. EXTENTS OF ROOF ABOVE



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

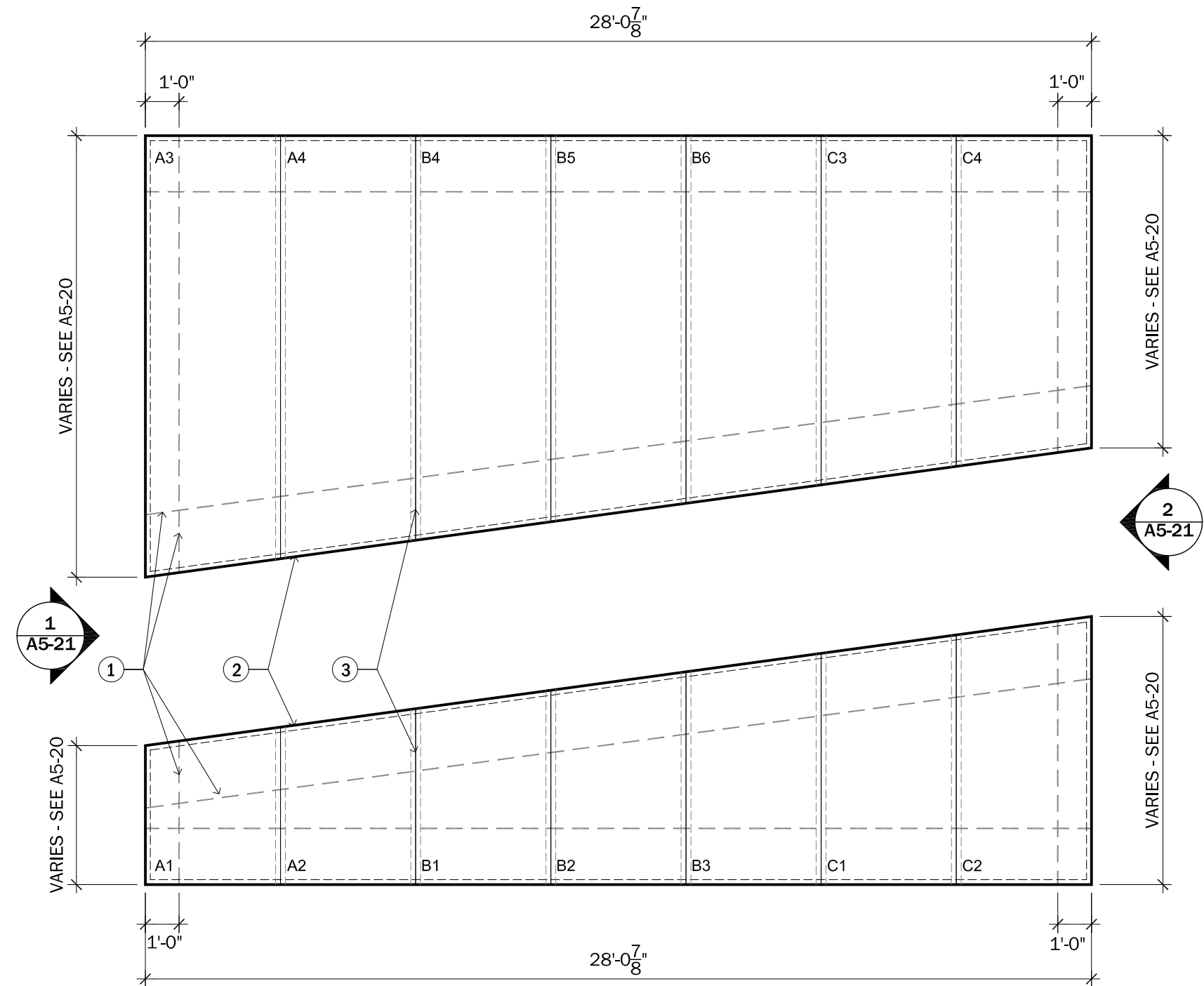
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
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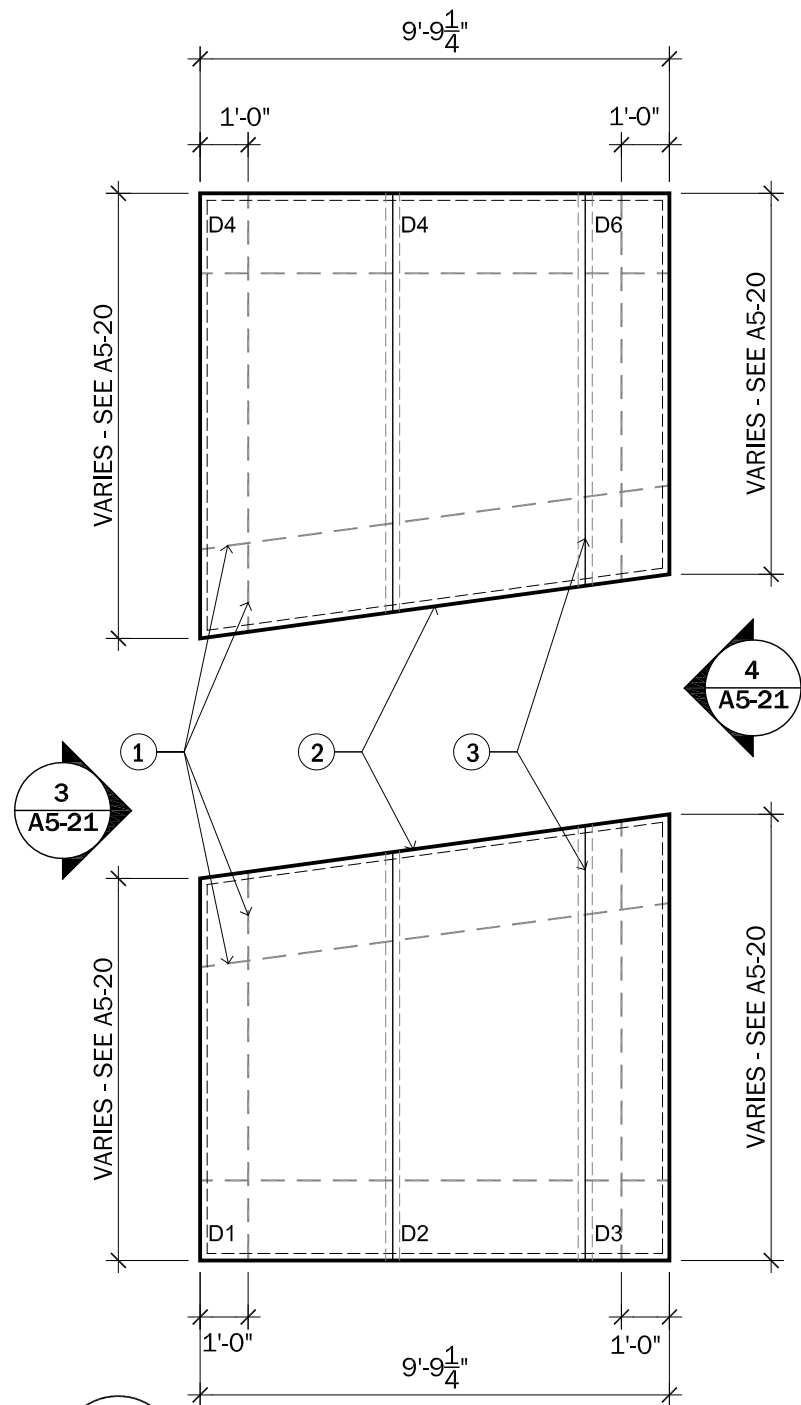
PROJECT STATUS: CD
SHEET NAME:

**SIP PANEL
STRUCTURE AND
PANEL DIAGRAM**

A1-10
SCALE: 1/4" = 1'-0"



1. MANUFACTURER FACTORY ROUTED ELECTRICAL CABLE CHASE
2. 1 3/4" LVL PLATE AT PERIMETER OF FINAL PANEL ASSEMBLY AS SHOWN
 - 1 3/4" x 9 1/4" LVL AT BUILDING EXTENTS
 - 1 3/4" x 11 7/8" LVL CUT AT 12:3 BEVEL TO FIT AT VALLEY
3. 3 1/2" x 9 1/4" ENGINEERED WOOD I-JOIST SPLICE AT PANELS



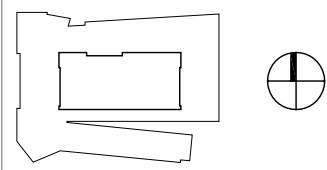
1
A1-11 **SIP ASSEMBLY PLAN DIAGRAM**
SCALE: 1/4" = 1'-0"



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0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

SIP DRAWINGS
ASSEMBLY DIAGRAM

A1-11

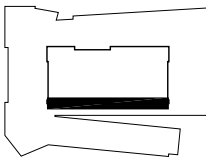
SCALE: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
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0 1' 2' 4'

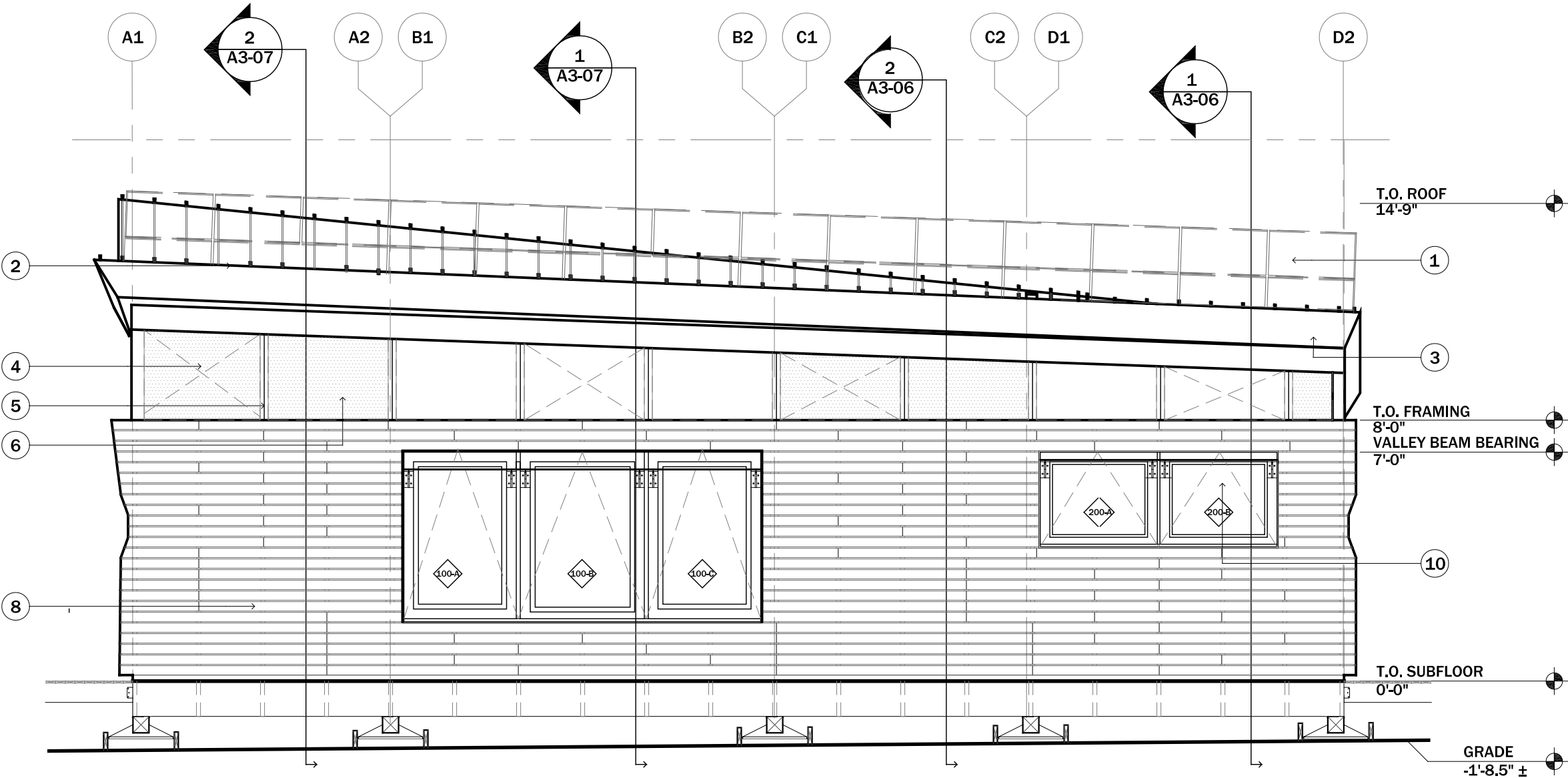
PROJECT STATUS: CD
SHEET NAME:

EXTERIOR SOUTH
ELEVATION

A2-00

SCALE: 1/4" = 1'-0"

1. P.V. ARRAY (SEE ELEC. DWGS.)
2. GALVALUME STANDING SEAM METAL ROOF SEAMS @12" O.C.
3. GALVALUME FASCIA
4. TENSION RODS
5. 1.5" X 5.5" COLUMN
6. TRANSLUCENT CLERESTORY WINDOWS
7. PERF. METAL SIDING
8. 1"X 4" NOMINAL PINE RAINSCREEN
9. BI-FOLDING DOOR



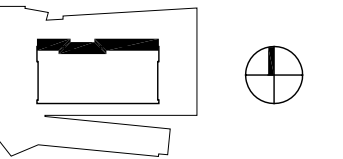
1 SOUTH ELEVATION
A2-00 Scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
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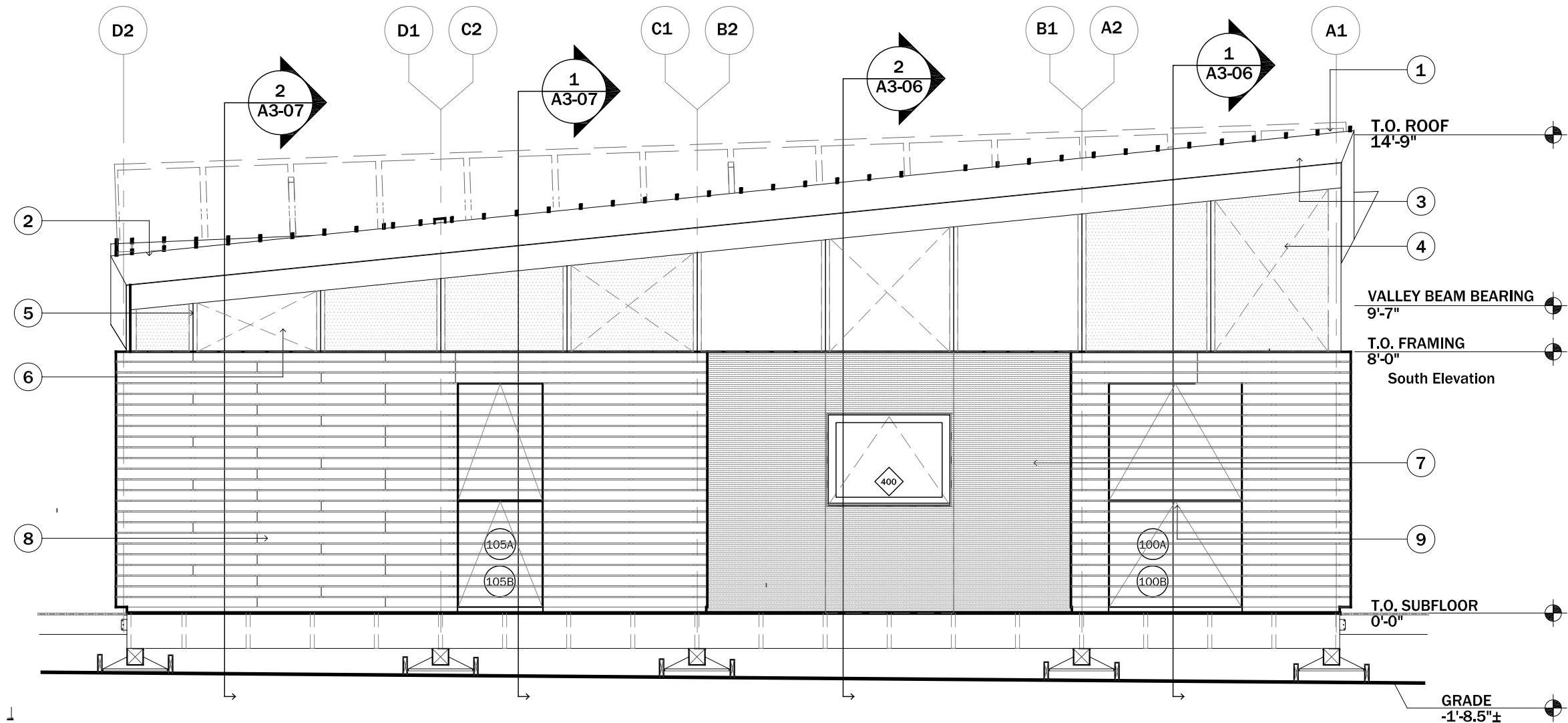
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

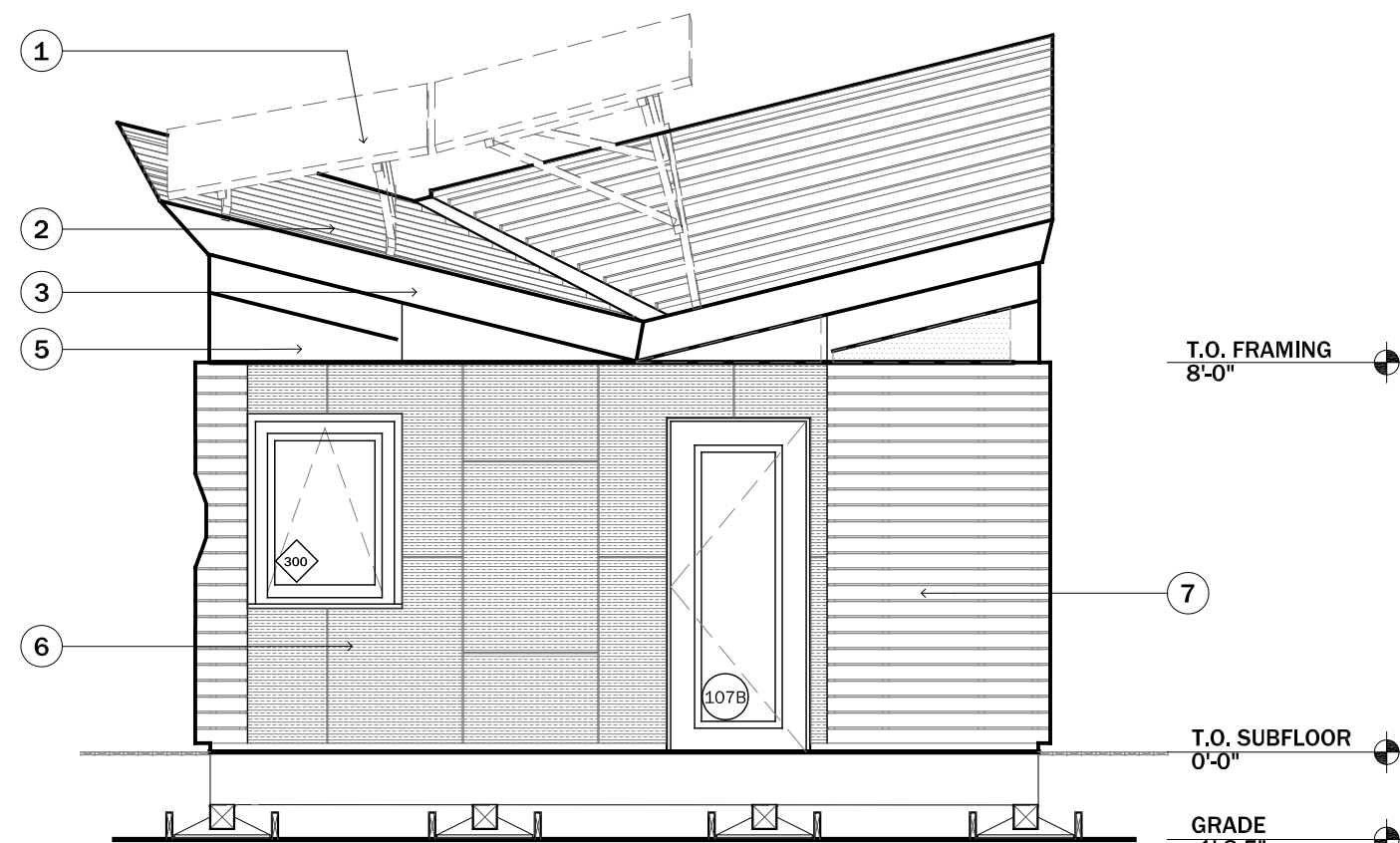
EXTERIOR NORTH
ELEVATION

A2-01
SCALE: 1/4" = 1'-0"

- 1. P.V. ARRAY (SEE ELEC. DWGS.)
- 2. GALVALUME STANDING SEAM METAL ROOF SEAMS @12" O.C.
- 3. GALVALUME FASCIA
- 4. TENSION RODS
- 5. 1.5" X 5.5" COLUMN
- 6. TRANSLUCENT CLERESTORY WINDOWS
- 7. PERF. METAL SIDING
- 8. 1"X 4" NOMINAL PINE RAINSCREEN
- 9. BI-FOLDING DOOR



1
A2-01 NORTH ELEVATION
Scale: 1/4" = 1'-0"



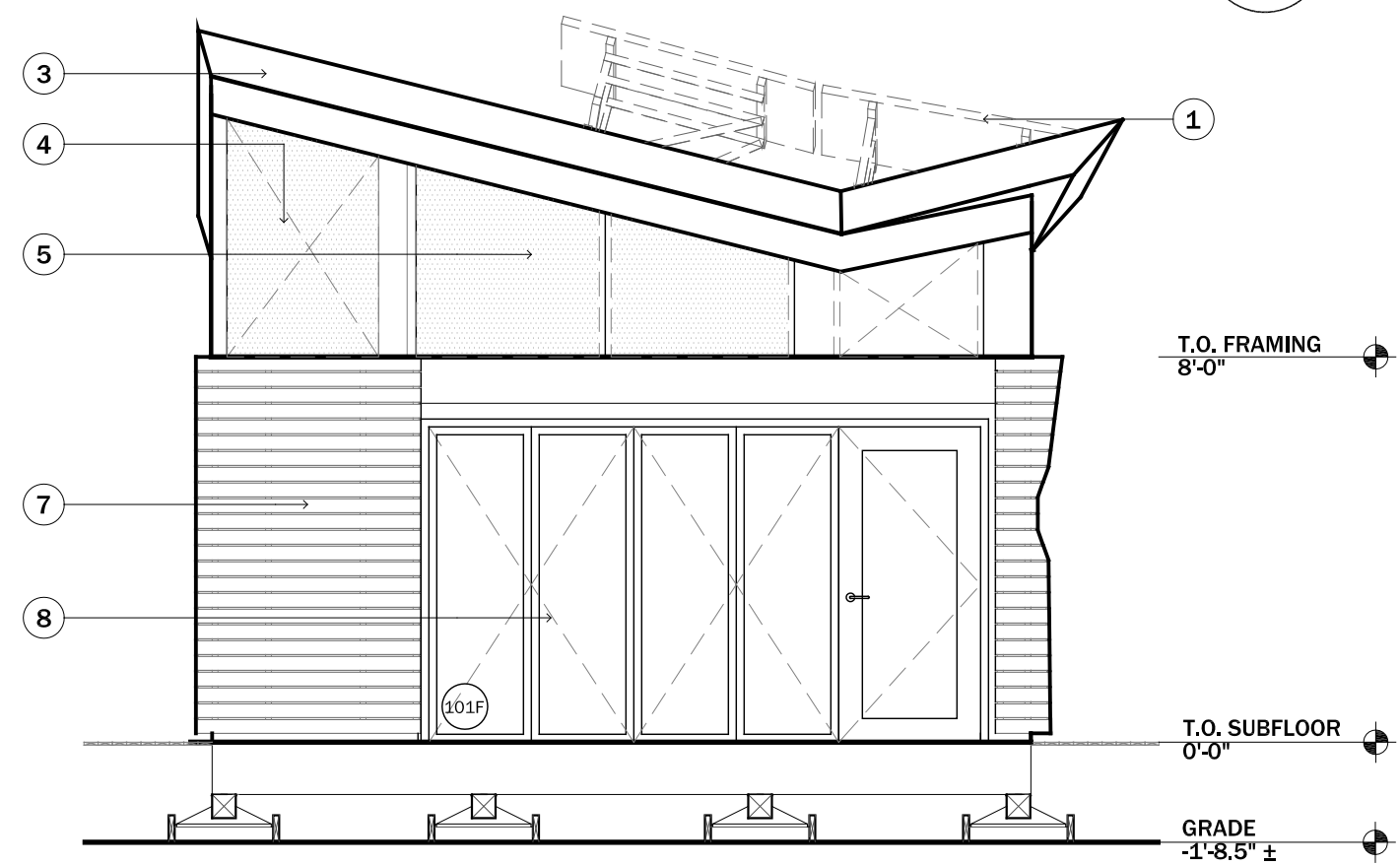
- 1. P.V. ARRAY (SEE ELEC. DWGS.)
- 2. GALVALUME STANDING SEAM METAL ROOF SEAMS @12" O.C.
- 3. GALVALUME FASCIA
- 4. TENSION RODS
- 5. TRANSLUCENT POLYCARBONATE CLERESTORY WINDOWS
- 6. PERFORATED METAL SIDING
- 7. 1" X 4" NOMINAL PINE RAINSCREEN
- 8. FOLDING DOOR SYSTEM
- 9. PERFORATED METAL DOOR
- 10. PERFORATED METAL EXTERIOR SUNSHADE DOORS

T.O. FRAMING
8'-0"

T.O. SUBFLOOR
0'-0"

GRADE
-1'-8.5"

1 EAST ELEVATION
A2-02 Scale: 1/4" = 1'-0"

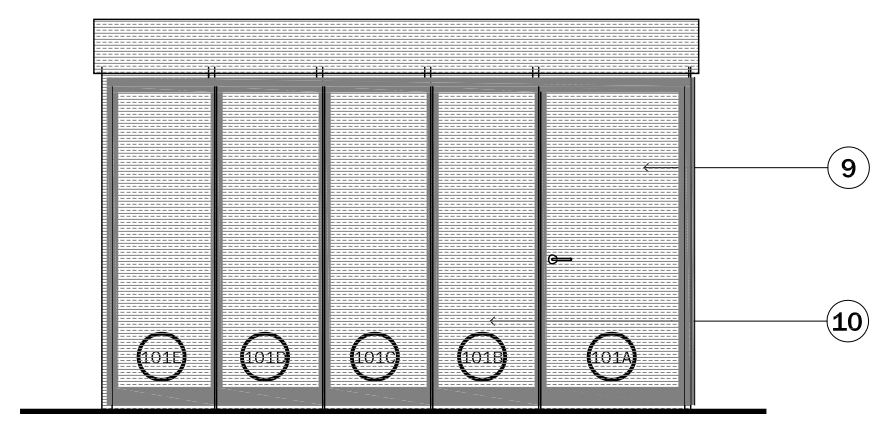


T.O. FRAMING
8'-0"

T.O. SUBFLOOR
0'-0"

GRADE
-1'-8.5" ±

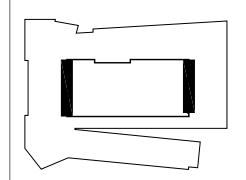
2 WEST ELEVATION
A2-02 Scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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DRAWN BY: KAW



0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

EXTERIOR EAST/WEST ELEVATIONS

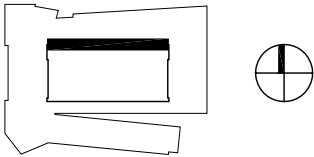
A2-02
SCALE: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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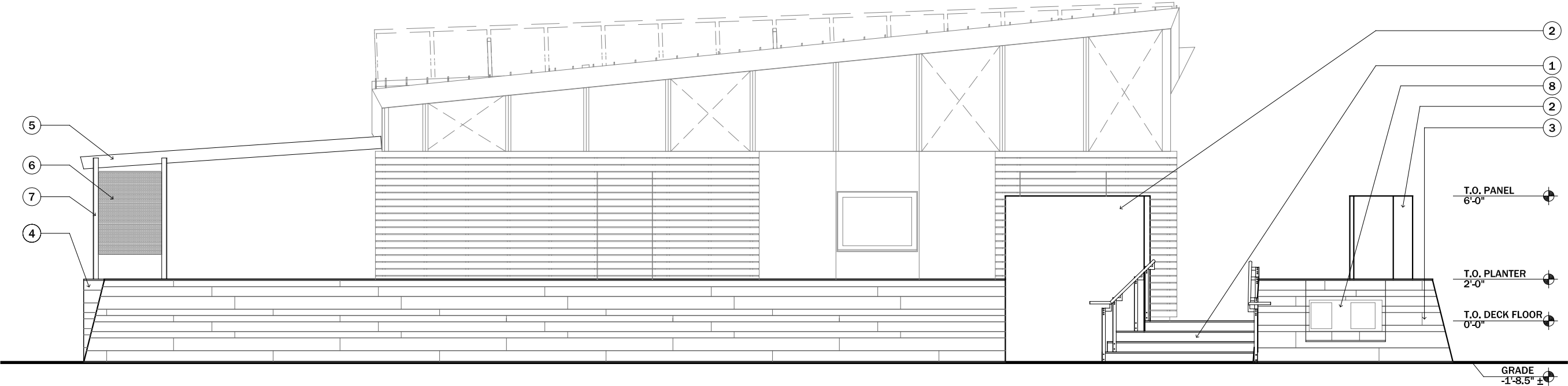
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

DECK - NORTH
ELEVATION

A2-03
SCALE: 3/16" = 1'-0"

- 1. EXIT STAIRS (SEE A3-11)
- 2. DISPLAY BOARDS
- 3. WOOD CLADDING (1" X VARIES NOMINAL)
- 4. REFLECTING POOL
- 5. SCUPPER
- 6. PERFORATED METAL PANEL
- 7. L3 X 3 X $\frac{3}{16}$ " STEEL ANGLE
- 8. GRID MOUNTING PANEL



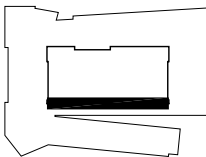
1
A2-03 **DECK - NORTH ELEVATION**
Scale: $\frac{3}{16}$ " = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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0 1' 2' 4'

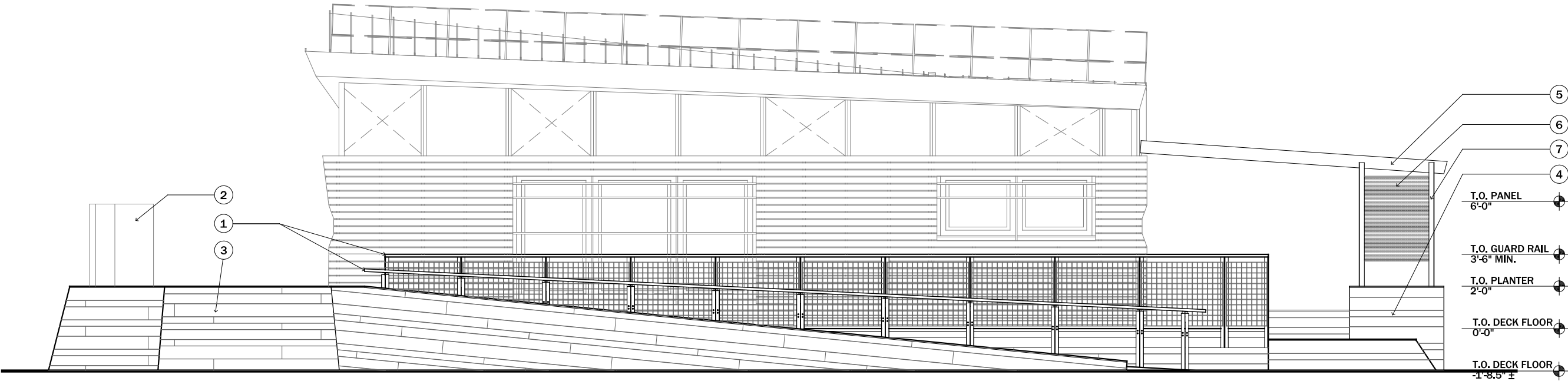
PROJECT STATUS: CD
SHEET NAME:

DECK - SOUTH
ELEVATION

A2-04

SCALE: 3/16" = 1'-0"

1. RAILING, GALVANIZED STEEL (SEE A5-18, A5-19)
2. DISPLAY BOARDS
3. WOOD CLADDING (1" X VARIES NOMINAL)
4. REFLECTING POOL
5. SCUPPER
6. PERFORATED METAL PANEL
7. L3 X 3 X $\frac{3}{16}$ " STEEL ANGLE



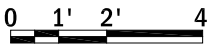
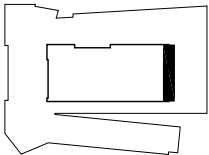
1
A2-04
DECK - SOUTH ELEVATION
Scale: $\frac{3}{16}$ " = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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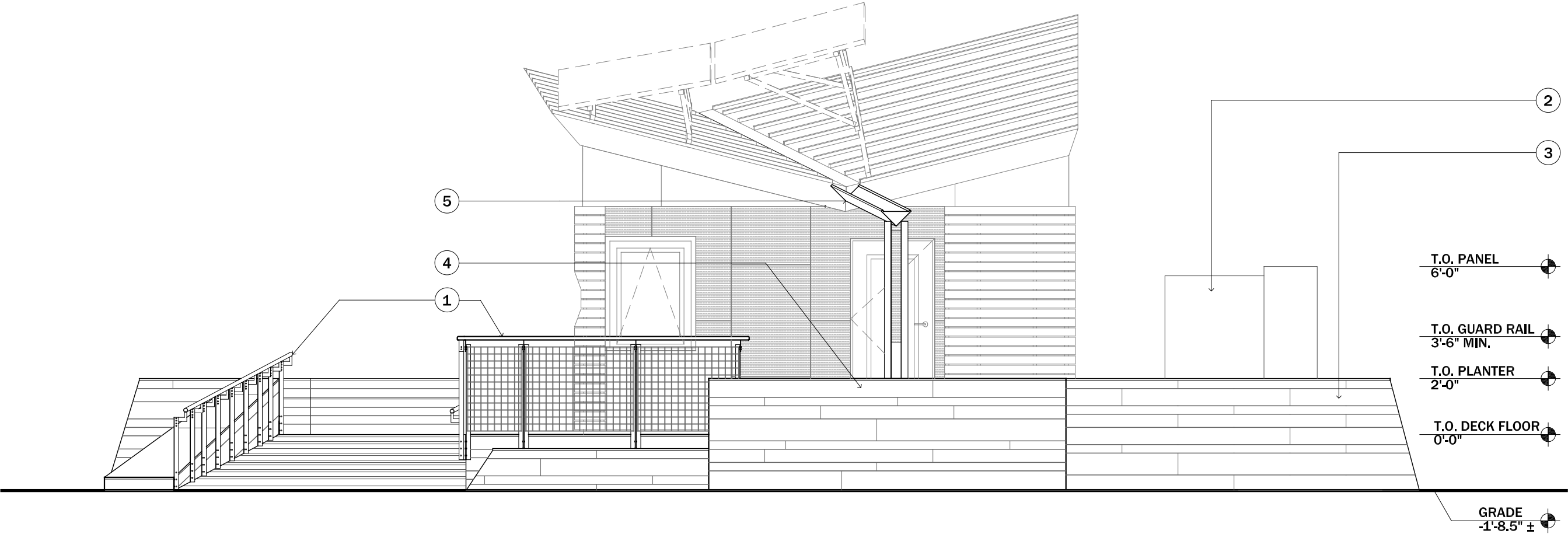
PROJECT STATUS: CD
SHEET NAME:

DECK - EAST
ELEVATION

A2-05

SCALE: 1/4" = 1'-0"

- 1. RAILING SYSTEM, GALVANIZED STEEL (SEE A5-18, A5-19)
- 2. DISPLAY BOARDS
- 3. WOOD CLADDING (1" X VARIES NOMINAL)
- 4. REFLECTING POOL
- 5. SCUPPER



1
A2-05

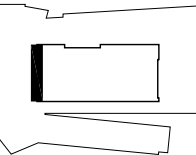
DECK - EAST ELEVATION
Scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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0 1' 2' 4'

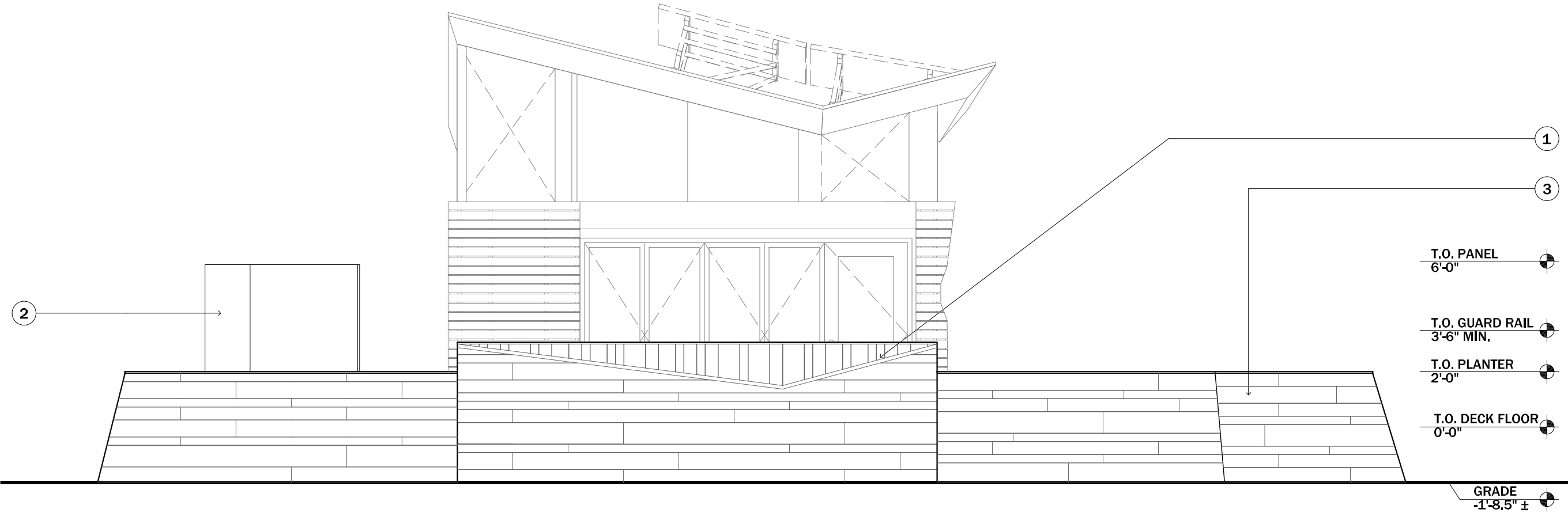
PROJECT STATUS: CD
SHEET NAME:

DECK - WEST
ELEVATION

A2-06

SCALE: 1/4" = 1'-0"

1. DECK BENCH
2. DISPLAY BOARDS
3. WOOD CLADDING (1" X VARIES NOMINAL)



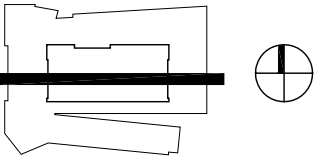
1 DECK - WEST ELEVATION
A2-06 Scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

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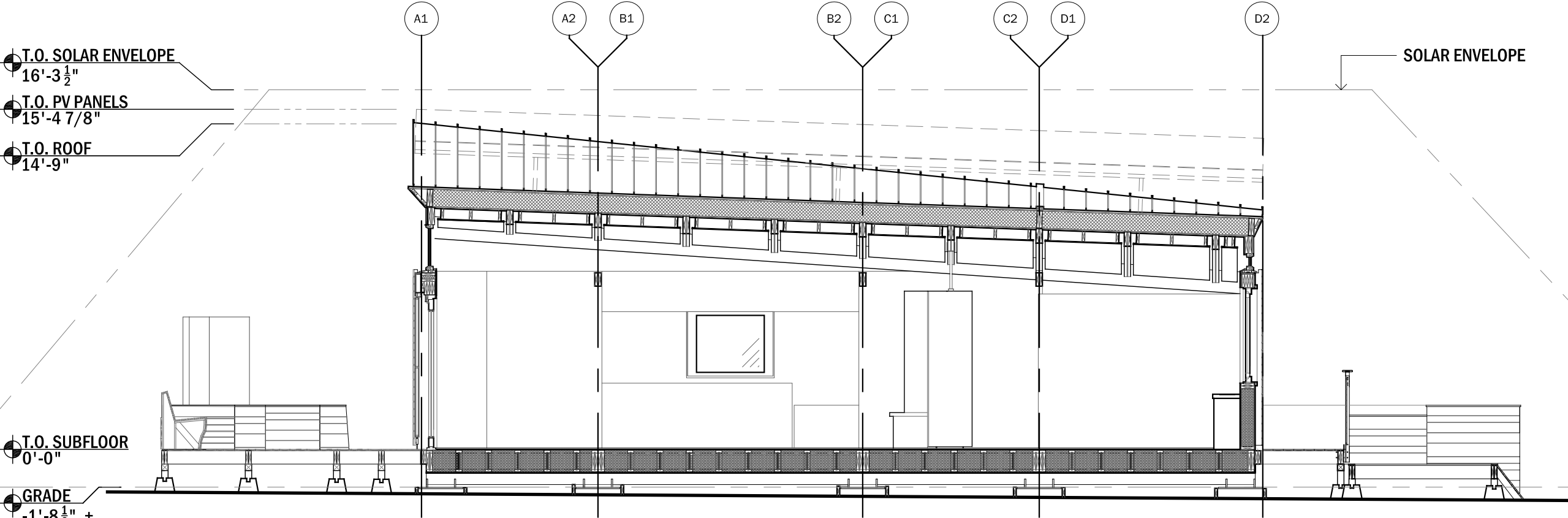


0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

BUILDING SOLAR
ENVELOPE SECTION

A3-00
SCALE: 3/16" = 1'-0"



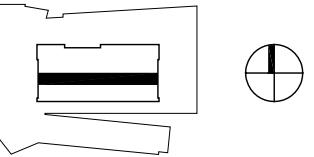
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A3-00 **BUILDING ENVELOPE SECTION**
scale: 3/16" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

ISSUE DATE: 2009.06.02
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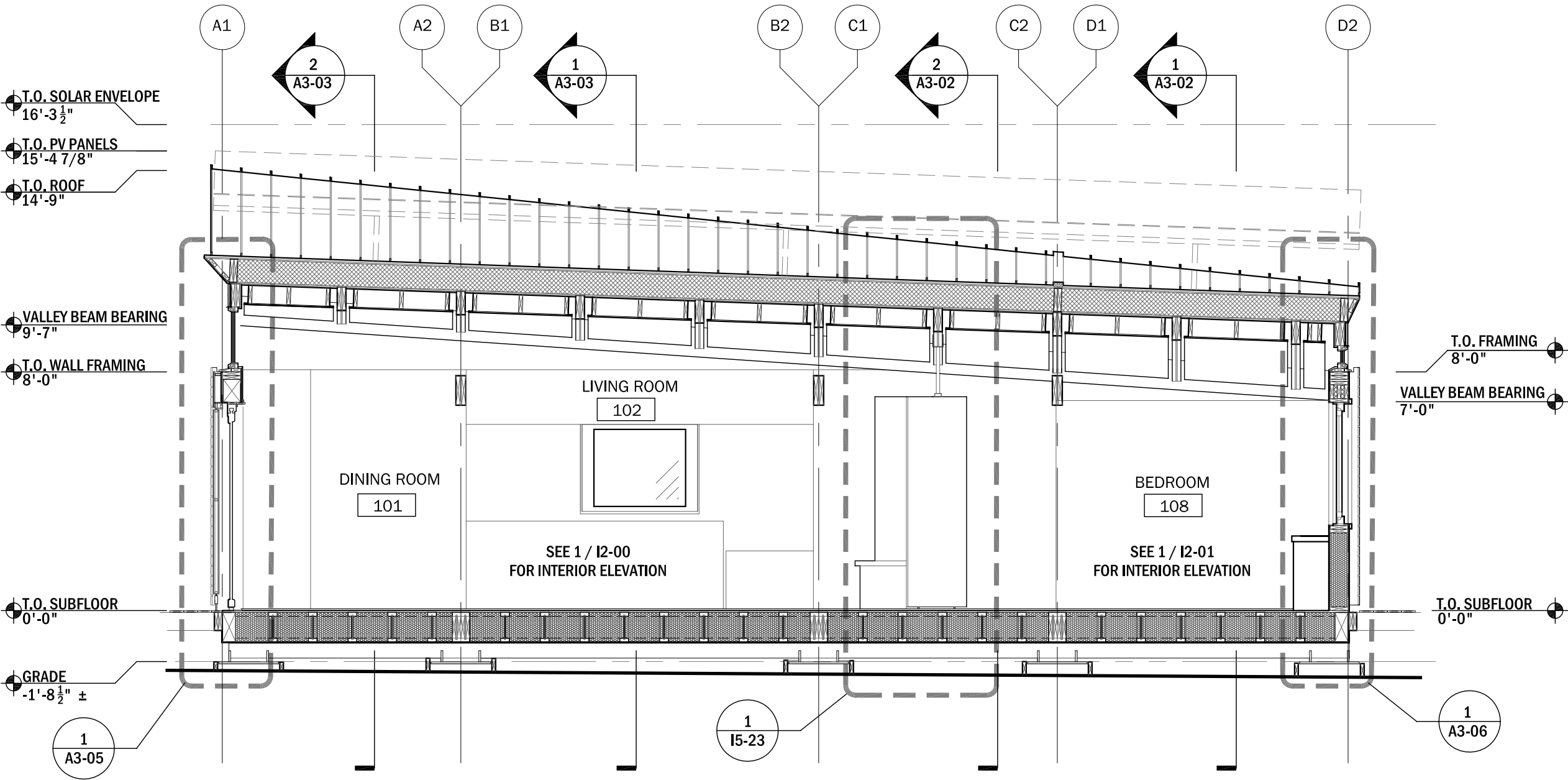
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

BUILDING SECTION

A3-01

SCALE: 1/4" = 1'-0"



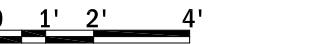
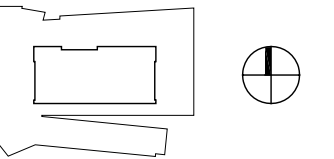
1 BUILDING SECTION
A3-01 scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

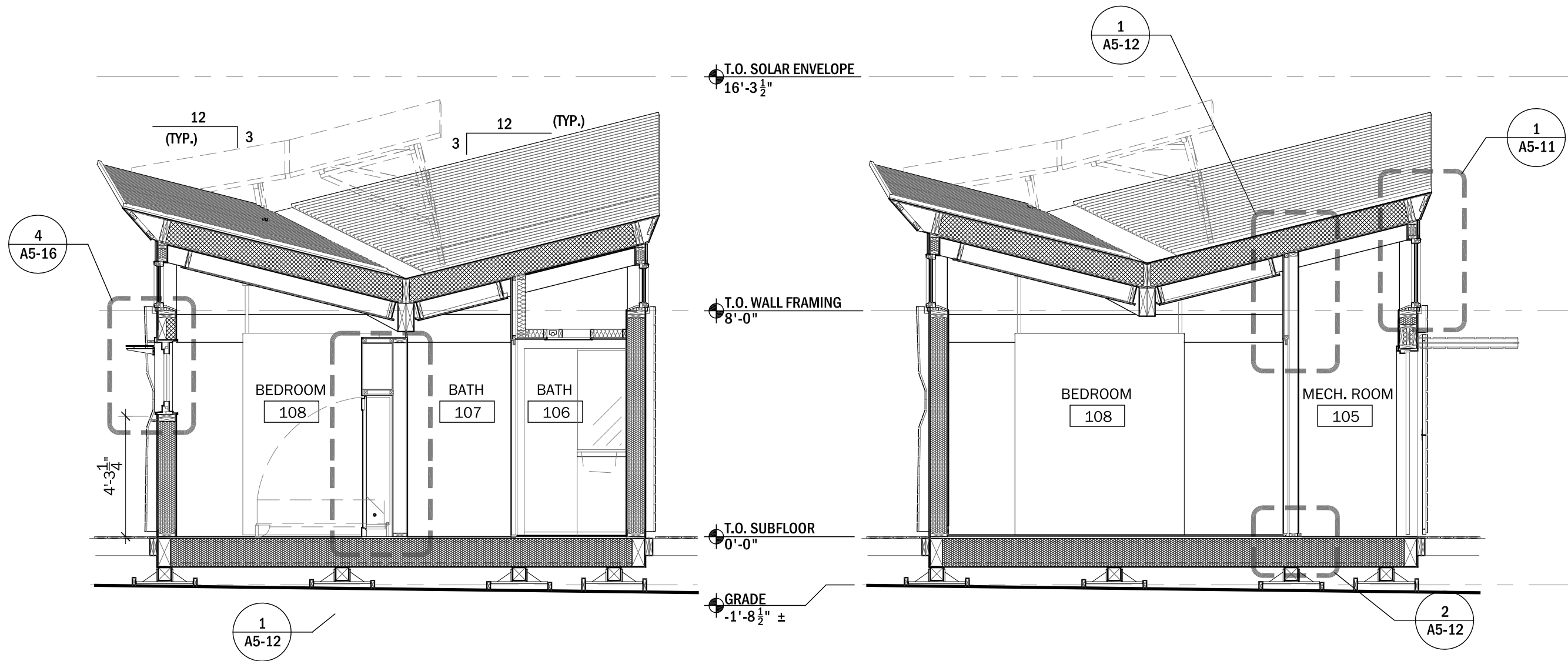
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
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PROJECT STATUS: CD
SHEET NAME:

BUILDING SECTIONS

A3-02
SCALE: 1/4" = 1'-0"



1 BUILDING SECTION
A3-02 scale: 1/4" = 1'-0"

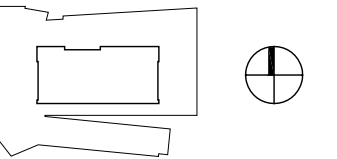
2 BUILDING SECTION
A3-02 scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
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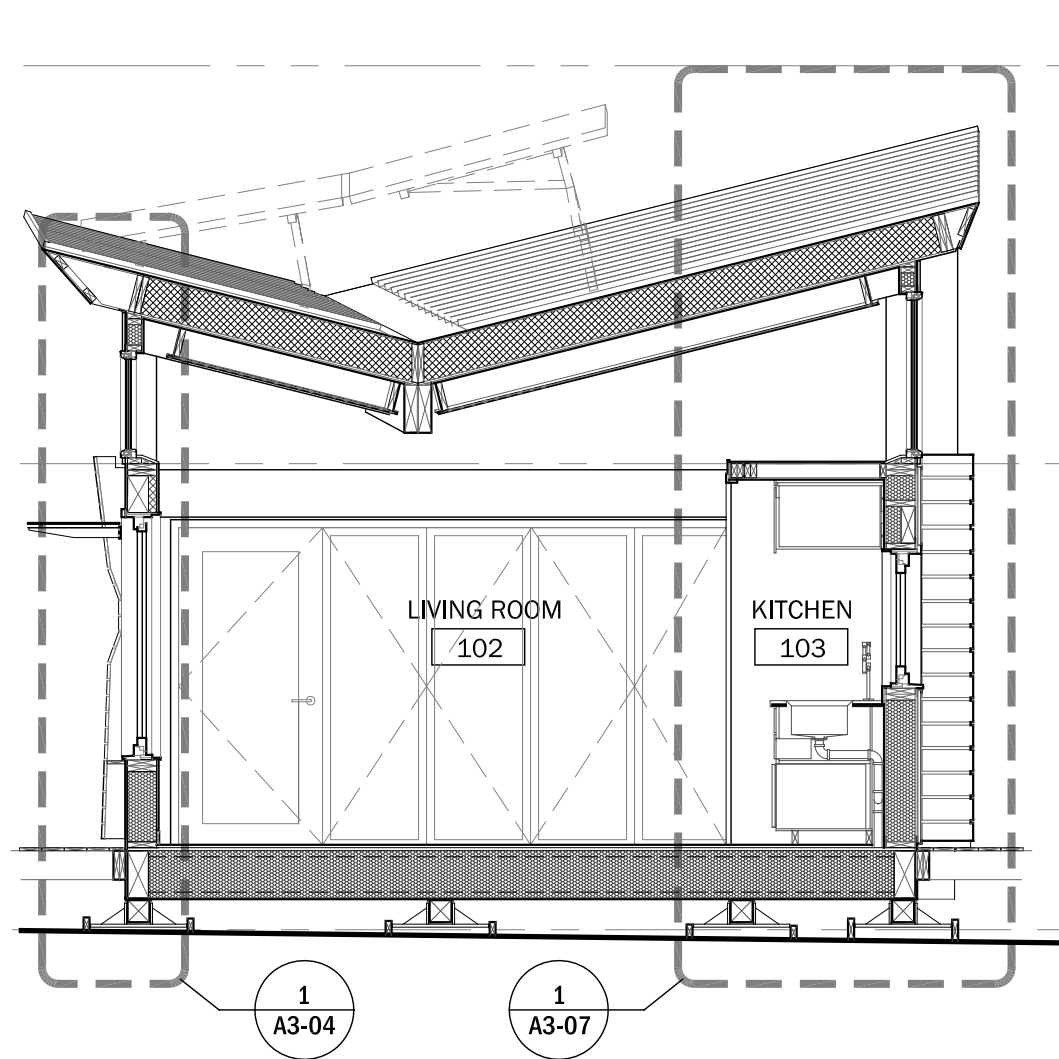


0 1' 2' 4'

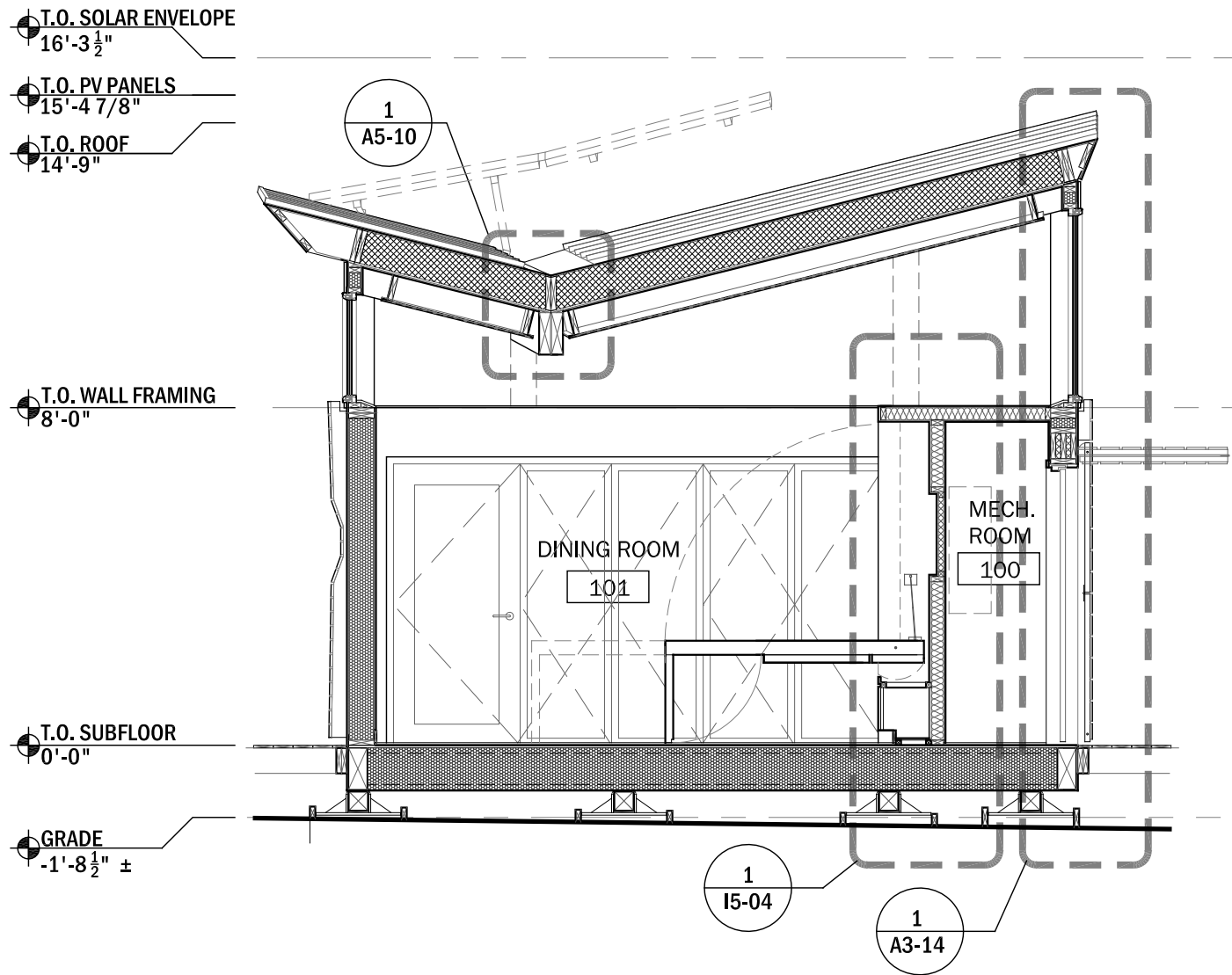
PROJECT STATUS: CD
SHEET NAME:

BUILDING SECTIONS

A3-03
SCALE: 1/4" = 1'-0"

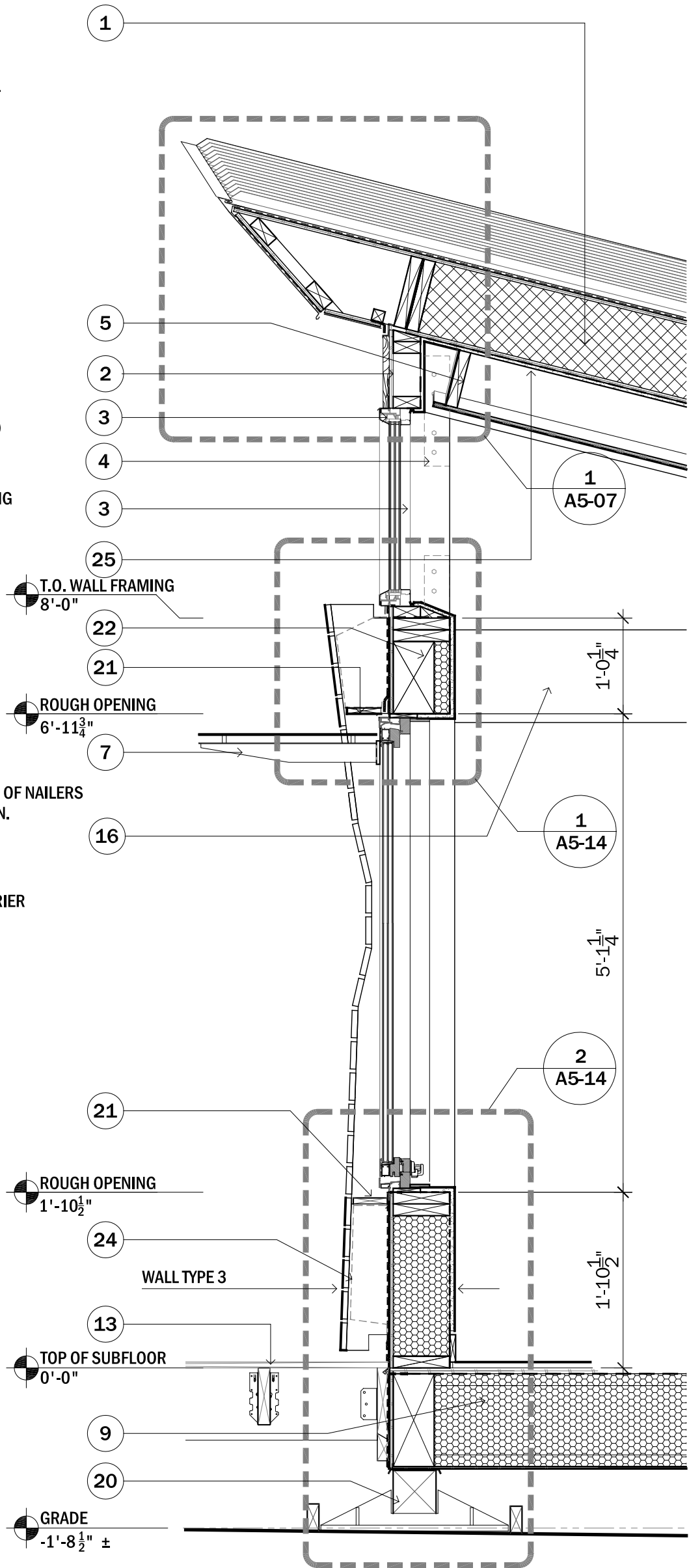


1
A3-03 **BUILDING SECTION**
scale: 1/4" = 1'-0"



2
A3-03 **BUILDING SECTION**
scale: 1/4" = 1'-0"

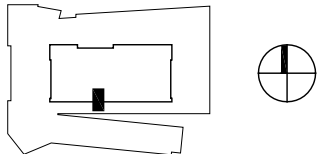
- 1 ROOF SYSTEM
STANDING SEAM GALVALUM ROOFING
WATER, VAPOR & ICE BARRIER
10¹/₄" SHEATHING & INSULATION PANEL
¹/₂" OSB SHEATHING
9¹/₄" RIGID INSULATION
¹/₂" OSB SHEATHING
AIR BARRIER
- 25 ¹/₂" GYPSUM WALL BOARD
- 2 ³/₈" STEEL PLATE CONNECTION
- 3 ³/₄" TRANSLUCENT GLAZING
- 4 COLUMNS
COLUMN
³/₈" SPACER
1 ³/₈ x 7 ¹/₄ LVL WOOD COLUMN
- 5 WOOD FRAMING
¹/₂" STRAW BOARD CEILING PANELS
- 7 PERFORATED METAL LOUVER (SEE A5-16)
- 9 FLOOR SYSTEM.
¹/₂" TREATED PLYWOOD SHEATHING
11 ⁷/₈" TJI FRAMING W/ WOOD BLOCKING
BLOWN IN INSULATION
³/₄" PLYWOOD SUBFLOOR
VAPOR BARRIER
³/₄" FINISH FLOORING
- 13 DECK (SEE A1-06)
- 16 MOD BEAM
1 ³/₄" x 11 ⁷/₈" LVL BEAM
³/₈" SPACER
1 ³/₄" x 11 ¹/₄" LVL BEAM
- 20 FOUNDATION
6" x 6" WOOD BEAMS SET IN STEEL
LEVELING FOUNDATION PADS
- 21 TREATED WOOD PLATE FASTENED TO END OF NAILERS
PAINTED BLACK AND PITCHED TO DRAIN.
- 22 STRUCTURAL WOOD HEADER
SEE HEADER SCHEDULE
- 24 INSECT SCREEN (TYP.)
- 25 ¹/₂" GYPSUM WALL BOARD THERMAL BARRIER



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.5.05
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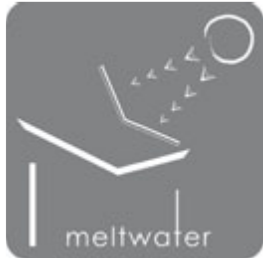
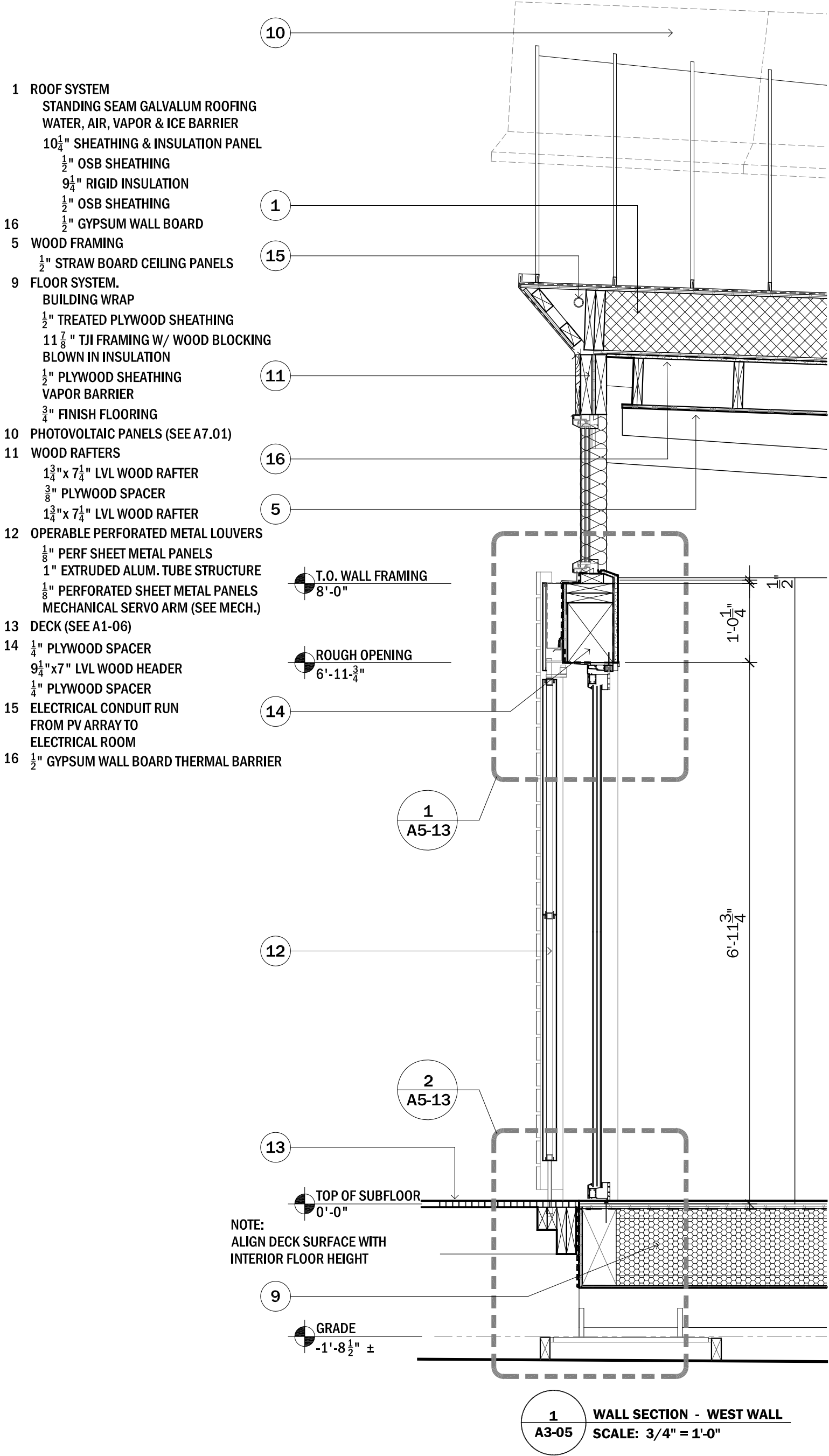
0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

WALL SECTION - SOUTH WALL

A3-04

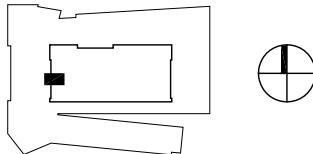
SCALE: 3/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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0 4" 8" 1'-4"

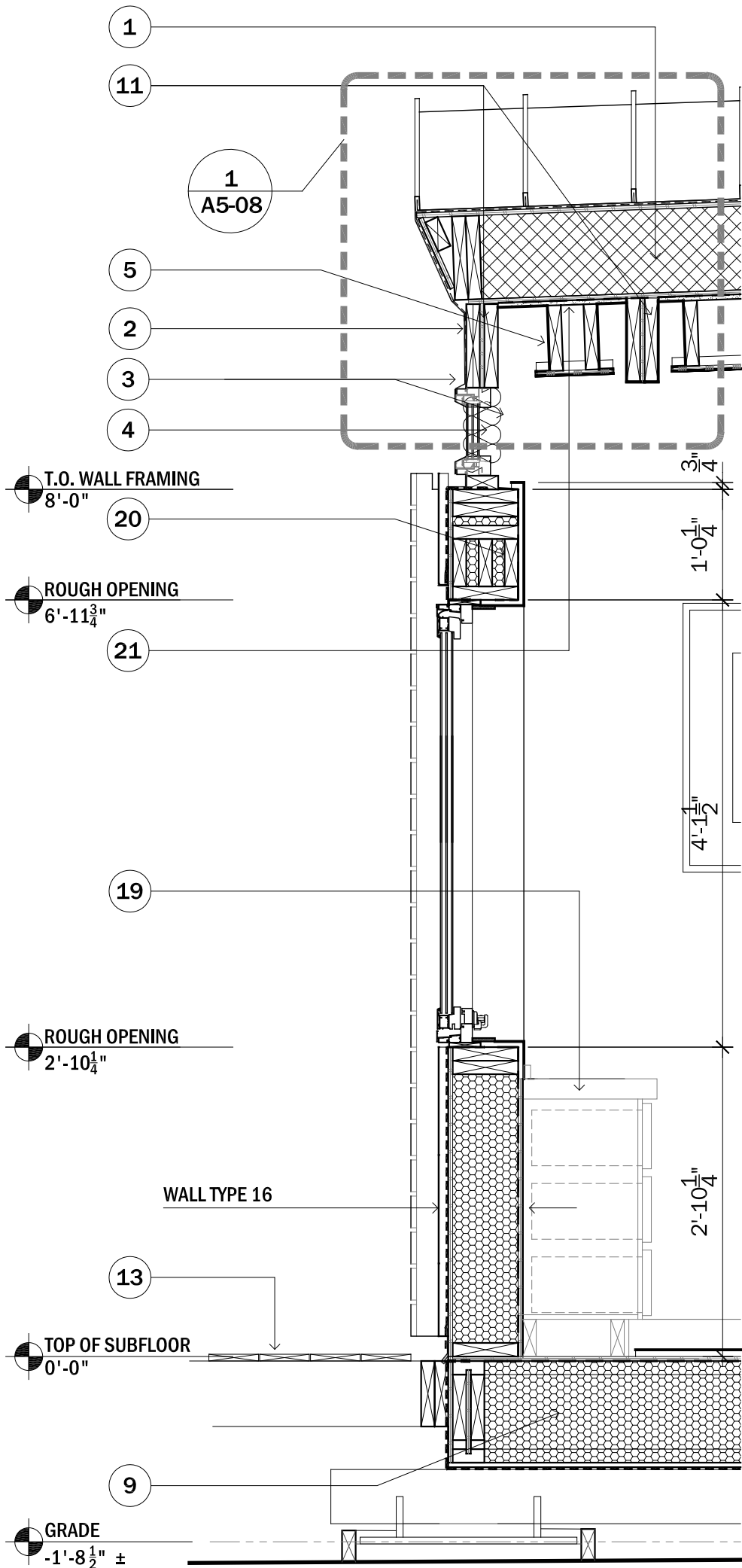
PROJECT STATUS: CD
SHEET NAME:

WALL SECTION - WEST WALL

A3-05

SCALE: 3/4" = 1'-0"

- 1 ROOF SYSTEM
STANDING SEAM GALVALUM ROOFING
WATER, AIR, VAPOR & ICE BARRIER
10 $\frac{1}{4}$ " SHEATHING & INSULATION PANEL
 $\frac{1}{2}$ " OSB SHEATHING
9 $\frac{1}{4}$ " RIGID INSULATION
 $\frac{1}{2}$ " OSB SHEATHING
- 16 $\frac{1}{2}$ " GYPSUM WALL BOARD
- 2 $\frac{3}{8}$ " STEEL PLATE CONNECTION
- 3 $\frac{3}{4}$ " TRANSLUCENT GLAZING
- 4 COLUMNS
COLUMN
 $\frac{3}{8}$ " SPACER
1 $\frac{3}{4}$ "x 7 $\frac{1}{4}$ " LVL WOOD FRAMING
- 5 2"x6" NOM. WOOD BLOCKING
 $\frac{1}{2}$ " STRAW BOARD CEILING PANELS
- 9 FLOOR SYSTEM.
BUILDING WRAP
 $\frac{1}{2}$ " TREATED PLYWOOD SHEATHING
11 $\frac{7}{8}$ " TJI FRAMING W/ WOOD BLOCKING
BLOWN IN INSULATION
 $\frac{3}{4}$ " PLYWOOD SUBFLOOR
VAPOR BARRIER
 $\frac{3}{4}$ " FINISH FLOORING
- 11 WOOD RAFTERS
2"x8" NOM. WOOD RAFTER
 $\frac{1}{2}$ " PLYWOOD SPACER
2"x8" NOM. WOOD RAFTER
- 13 DECK (SEE A1-06)
- 19 BUILT IN DRESSER



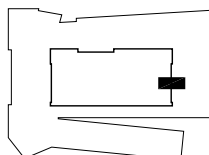
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A3-06 WALL SECTION - EAST WALL
SCALE: 3/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.5.05
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0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

WALL SECTION - EAST WALL

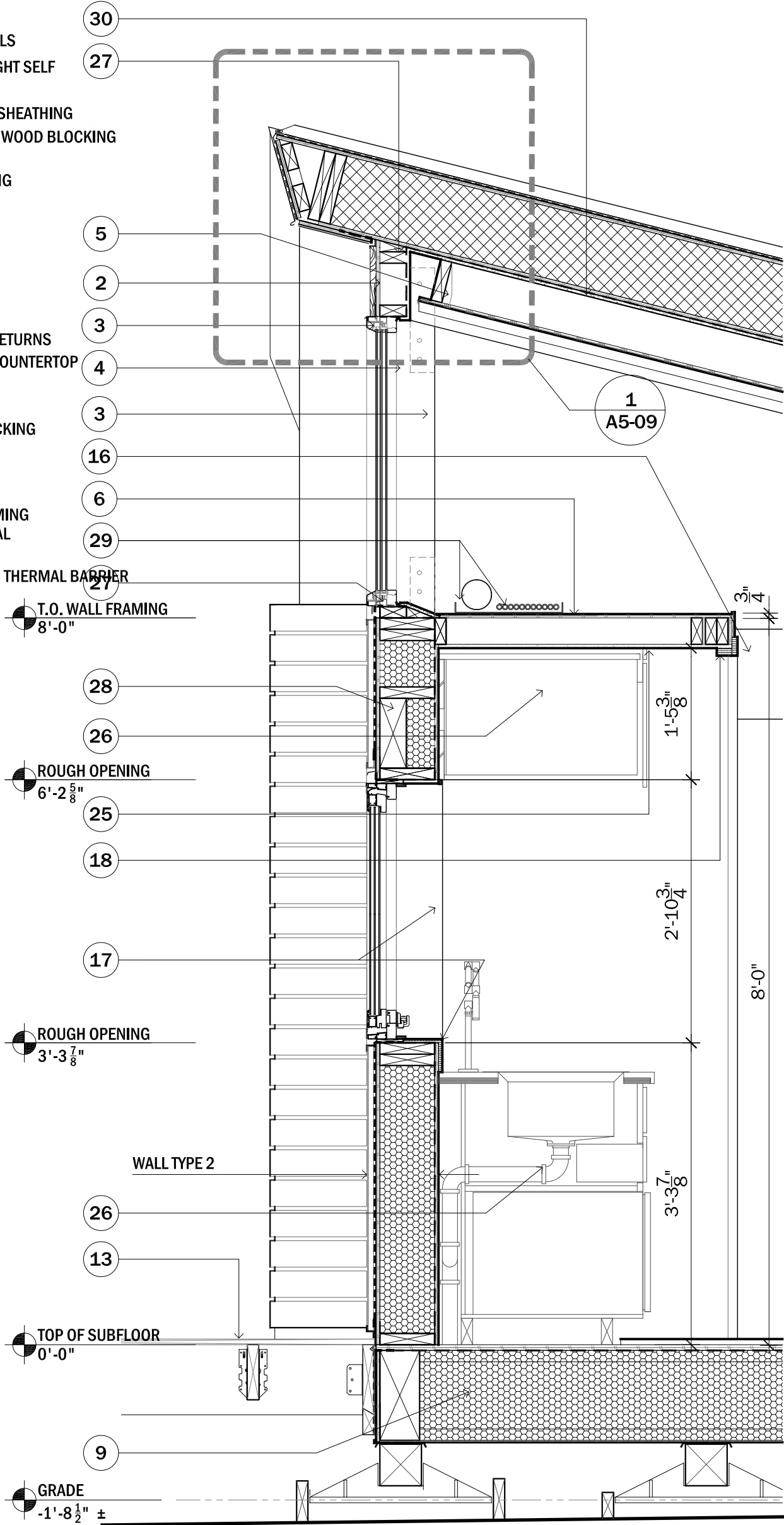
A3-06

SCALE: 3/4" = 1'-0"

- 2 $\frac{3}{8}$ " STEEL PLATE CONNECTION
3 $\frac{3}{4}$ " TRANSLUCENT GLAZING
4 COLUMNS
COLUMN
 $\frac{3}{8}$ " SPACER
 $1\frac{3}{4}$ " x $7\frac{1}{4}$ " LVL WOOD COLUMN

- 5 WOOD FRAMING
 $\frac{1}{2}$ " STRAW BOARD PANELS
6 $\frac{1}{2}$ " PAINTED PLYWOOD LIGHT SELF
9 FLOOR SYSTEM.
 $\frac{1}{4}$ " TREATED PLYWOOD SHEATHING
 $11\frac{7}{8}$ " TJI FRAMING W/ WOOD BLOCKING
BLOWN IN INSULATION
 $\frac{3}{4}$ " PLYWOOD SHEATHING
VAPOR BARRIER
 $\frac{3}{4}$ " FINISH FLOORING

- 13 DECK (SEE A1-06)
16 MOD BEAM
 $\frac{3}{4}$ " SPACER
 $1\frac{3}{4}$ " x $11\frac{7}{8}$ " LVL BEAM
17 TILE BACKSPASH AND RETURNS
18 CERAMIC TRIM MATCH COUNTERTOP
25 POLYCARBONATE SOFFIT
26 KITCHEN CABINETRY
27 2"x8" NOM. WOOD BLOCKING
28 $3\frac{1}{2}$ "x $9\frac{1}{4}$ " LVL HEADER
WITH NOM. 2"x8" TOP
AND BOTTOM PLATE
WITH NOM 2"x4" FRAMING
29 AIR DUCT AND ELECTRICAL
CONDUIT RUN
30 $\frac{1}{2}$ " GYPSUM WALL BOARD THERMAL BARRIER



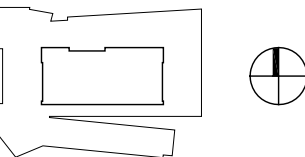
1 WALL SECTION - NORTH WALL @ KITCHEN
A3-07 SCALE: $\frac{3}{4}$ " = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.5.05
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0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

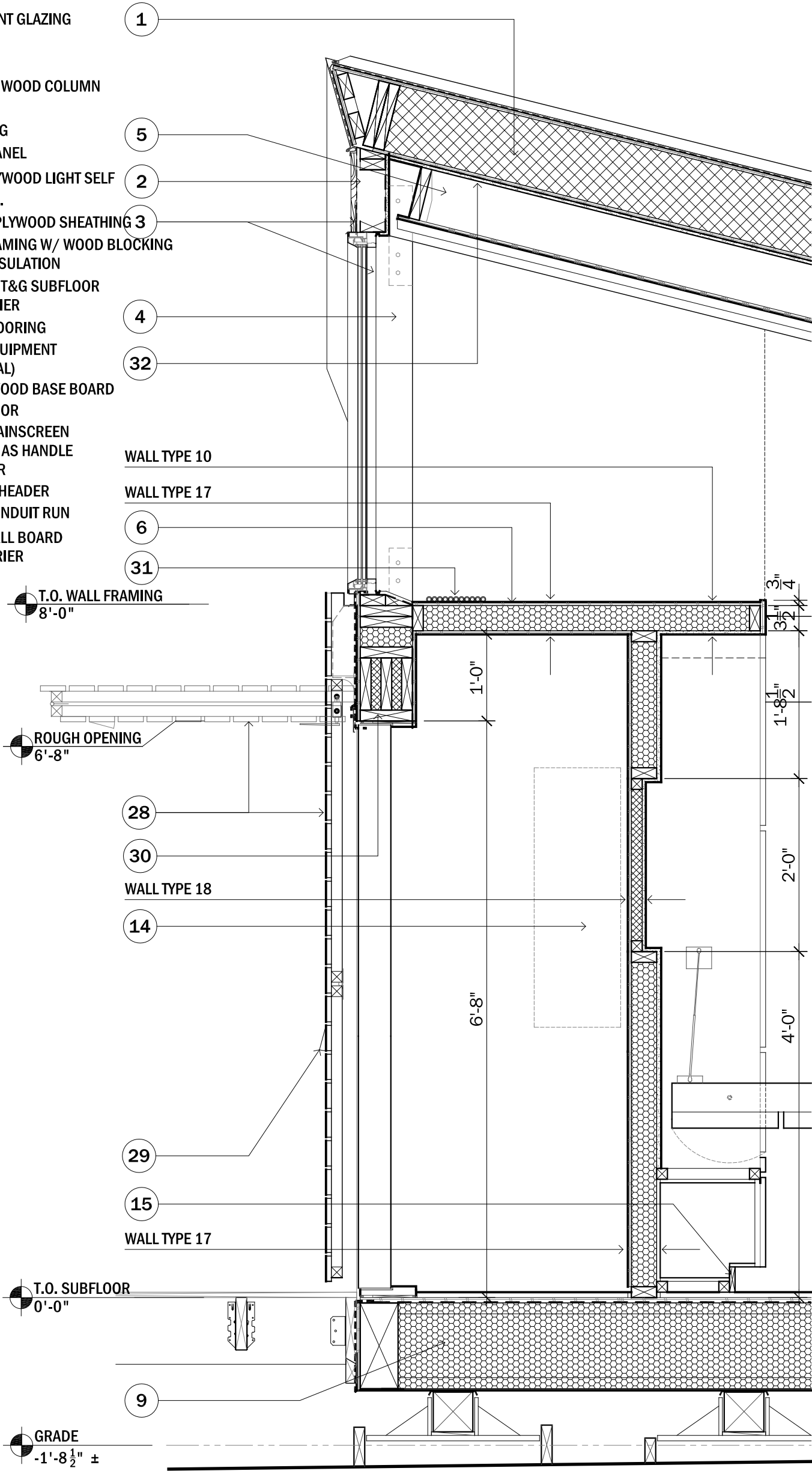
WALL SECTION - NORTH WALL @ KITCHEN

A3-07

SCALE: $\frac{3}{4}$ " = 1'-0"

- 1 ROOF SYSTEM
- STANDING SEAM GALVALUM ROOFING
- WATER, VAPOR & ICE BARRIER
- 10¹/₄" SHEATHING & INSULATION PANEL
- ¹/₂" OSB SHEATHING
- 9¹/₄" RIGID INSULATION
- ¹/₂" OSB SHEATHING
- AIR BARRIER
- 32 ¹/₂" GYPSUM WALL BOARD
- 2 ¹/₂" STEEL PLATE CONNECTION
- 3 ³/₄" TRANSLUCENT GLAZING
- 4 COLUMNS
- ³/₈" SPACER
- 1³/₄"x 7¹/₄" LVL WOOD COLUMN

- 5 WOOD FRAMING
- ¹/₂" CEILING PANEL
- 6 ¹/₂" PAINTED PLYWOOD LIGHT SELF
- 9 FLOOR SYSTEM.
- ¹/₄" TREATED PLYWOOD SHEATHING
- 11 ⁷/₈" TJI FRAMING W/ WOOD BLOCKING
- BLOWN IN INSULATION
- ³/₄" PLYWOOD T&G SUBFLOOR
- VAPOR BARRIER
- ³/₄" FINISH FLOORING
- 14 ELECTRICAL EQUIPMENT
- (SEE ELECTRICAL)
- 15 1"x4" NOM. WOOD BASE BOARD
- 28 BI-FOLDING DOOR
- 29 STEAM BENT RAINSCREEN
- BOARD USED AS HANDLE
- TO OPEN DOOR
- 30 10¹/₄"x7¹/₄" BOX HEADER
- 31 ELECTRICAL CONDUIT RUN
- 32 ¹/₂" GYPSUM WALL BOARD
- THERMAL BARRIER



1

A3-07

WALL SECTION - NORTH WALL @ KITCHEN

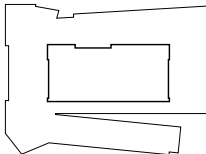
SCALE: 3/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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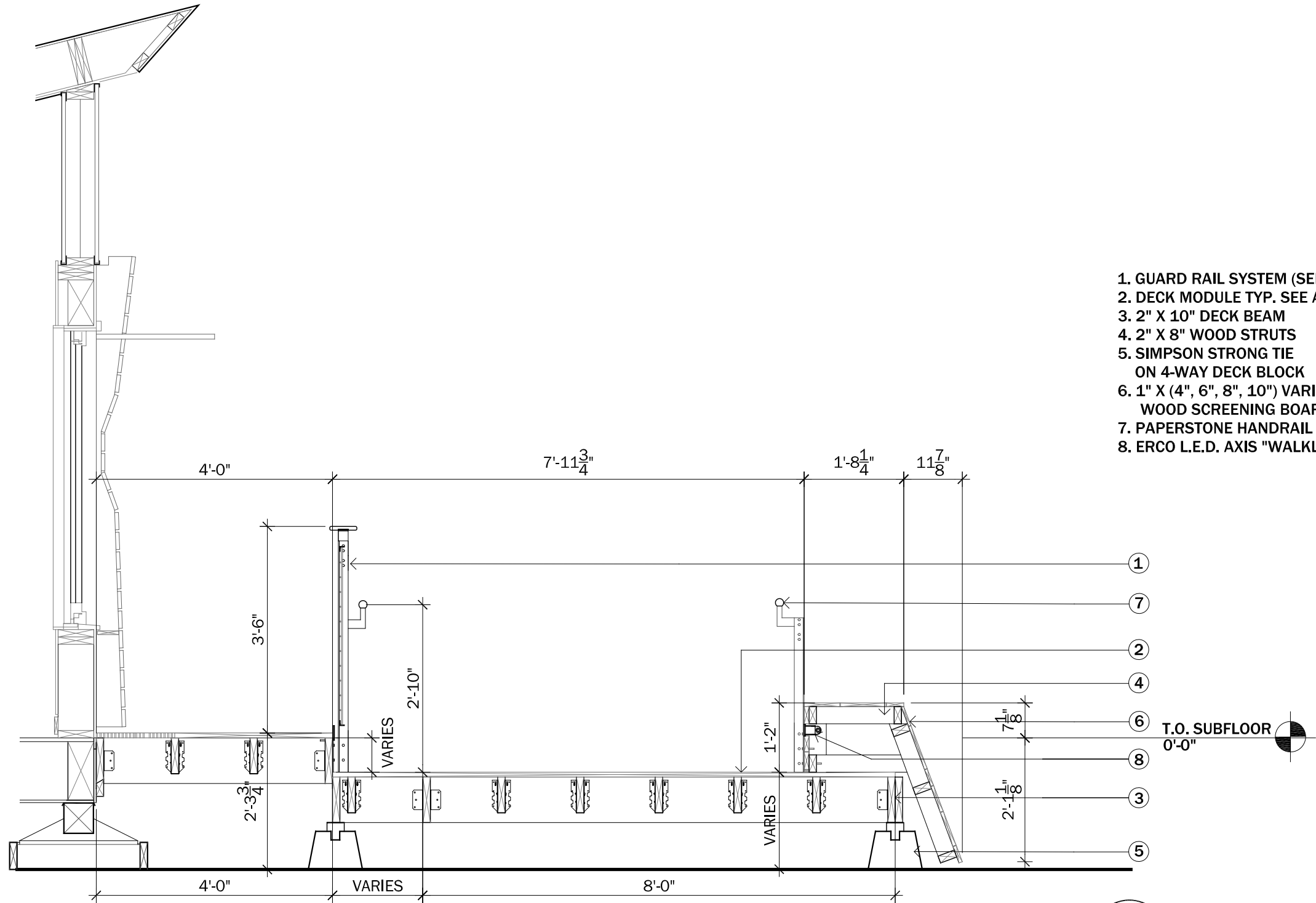
0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

WALL SECTION -
MECHANICAL ROOM

A3-08

SCALE: 3/4" = 1'-0"



- 1. GUARD RAIL SYSTEM (SEE A5-18, A5-19)
- 2. DECK MODULE TYP. SEE A1-07
- 3. 2" X 10" DECK BEAM
- 4. 2" X 8" WOOD STRUTS
- 5. SIMPSON STRONG TIE
ON 4-WAY DECK BLOCK
- 6. 1" X (4", 6", 8", 10") VARIES
WOOD SCREENING BOARDS
- 7. PAPERSTONE HANDRAIL
- 8. ERCO L.E.D. AXIS "WALKLIGHT"

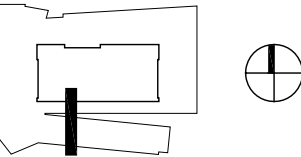
1
A3-09
DECK SECTION
SCALE: 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

ISSUE DATE: 2009.05.12
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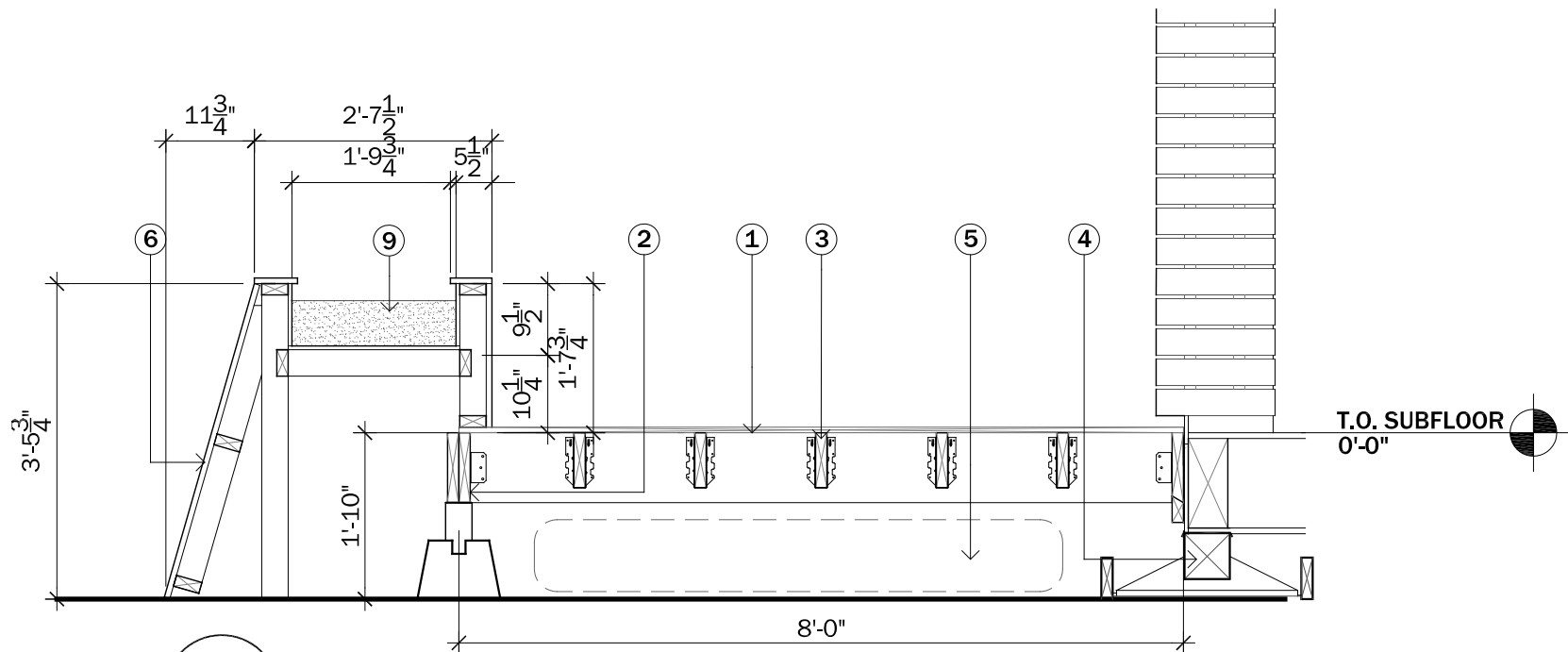


PROJECT STATUS: CD
SHEET NAME:

**DECK
SECTION**

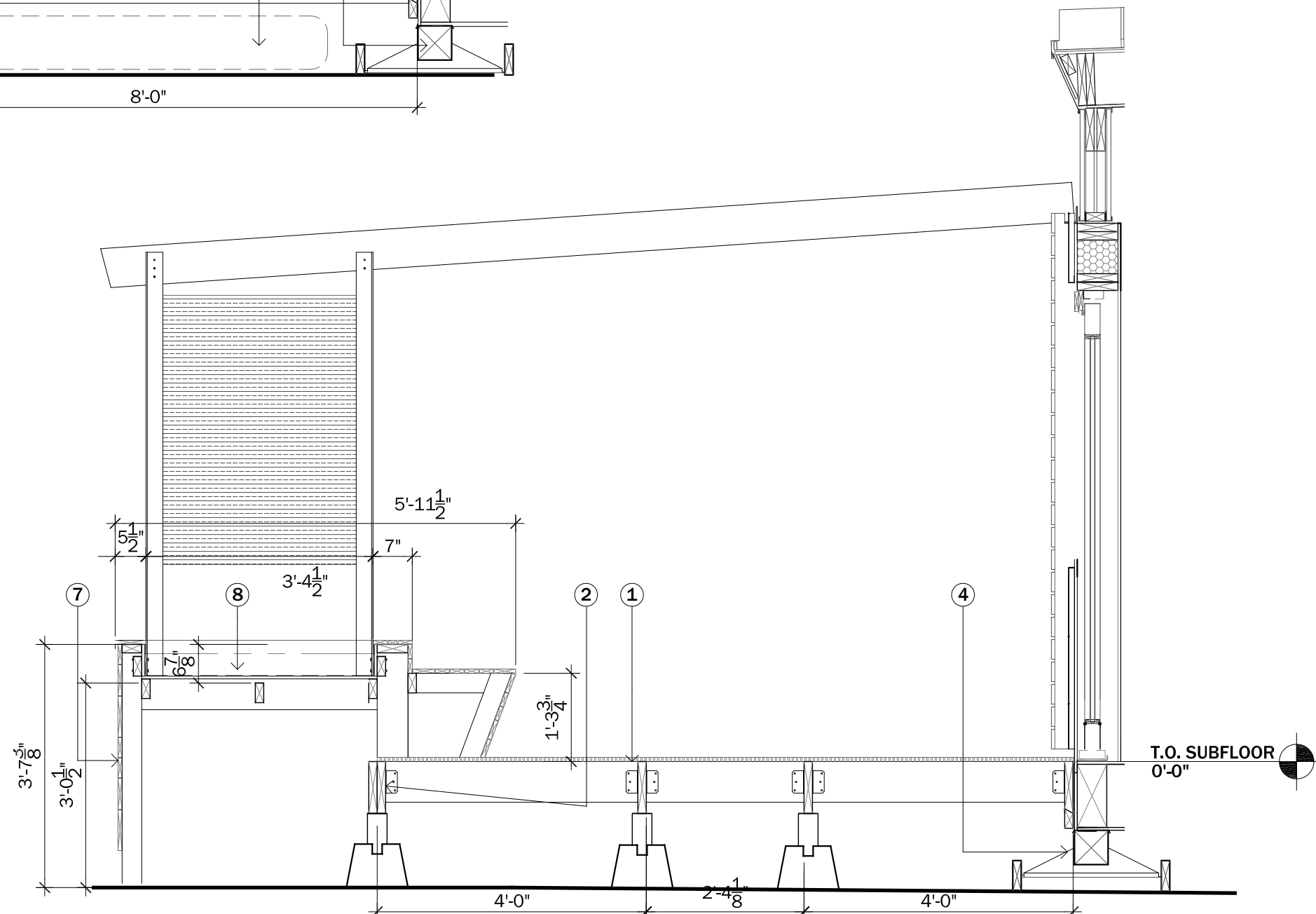
A3-09

SCALE: 1/2" = 1'-0"

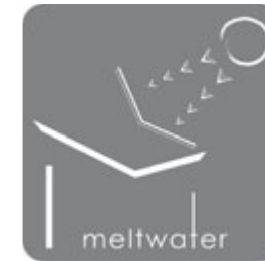


1
A3-10 **DECK SECTION**
SCALE: 1/2" = 1'-0"

1. DECK MODULE SEE TYP. A1-07
2. 2" X 10" DECK BEAM
3. 2" X 8" WOOD STRUTS
4. STEEL FOUNDATION PAD
5. 50 GALLON RAIN HOG (70"L X 20"W X 9 1/2")
6. 1" X (4", 6", 8", 10") VARIES
7. RUBBER MEMBRANE
8. PLANTER
9. REFLECTING POOL



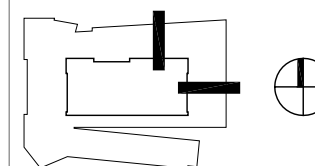
2
A3-10 **DECK SECTION**
SCALE: 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.05.12
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0 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

DECK SECTIONS

A3-10

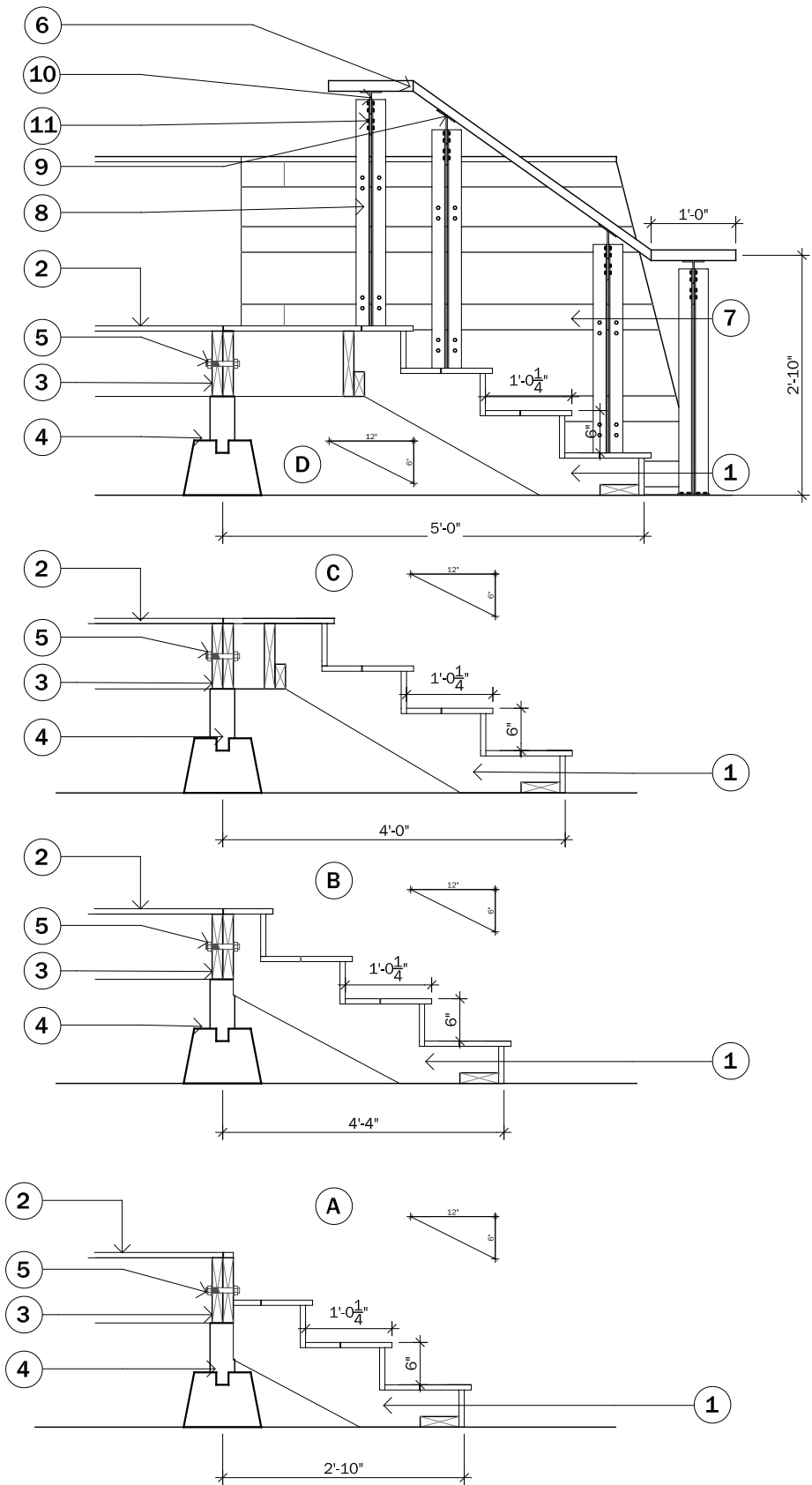
SCALE: 1/2" = 1'-0"

1

A3-11

DECK SECTION - A-D

SCALE: 1/2" = 1'-0"



1. PINE WOOD STAIR RISER
2. DECK MODULE SEE A1-07
3. 2" X 10" DECK JOIST
4. SIMPSON STRONG TIE ON 4-WAY DECK BLOCK
5. 3/4" DIAMETER BOLT ASSEMBLY
6. PAPERSTONE HANDRAIL @ 34" ABOVE TREADS
7. 1' X VARIES (NOMINAL) WALNUT WOOD DECK WALL CLADDING
8. L2 X 2 X 3/16" GALVANIZED STEEL ANGLE
9. 3/16" GALVANIZED STEEL PLATE
10. T3 X 3 X 3/16" GALVANIZED STEEL T-BAR
11. 3/8" DIAMETER HEX BOLT/MATING SCREW

NOTE:
VERIFY SITE CONDITIONS TO
CONSTRUCT RISERS

CLIENT NAME:DOE/NREL

PROJECT: SOLAR DECATHLON

PROJECT NO.:SD 2009

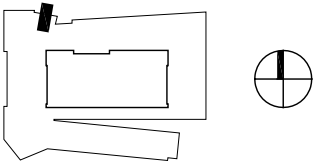
REVISION HISTORY

ISSUE DATE:2009.05.12

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CHECKED BY:GDT/CTC

DRAWN BY:AWM/JPR



PROJECT STATUS:CD

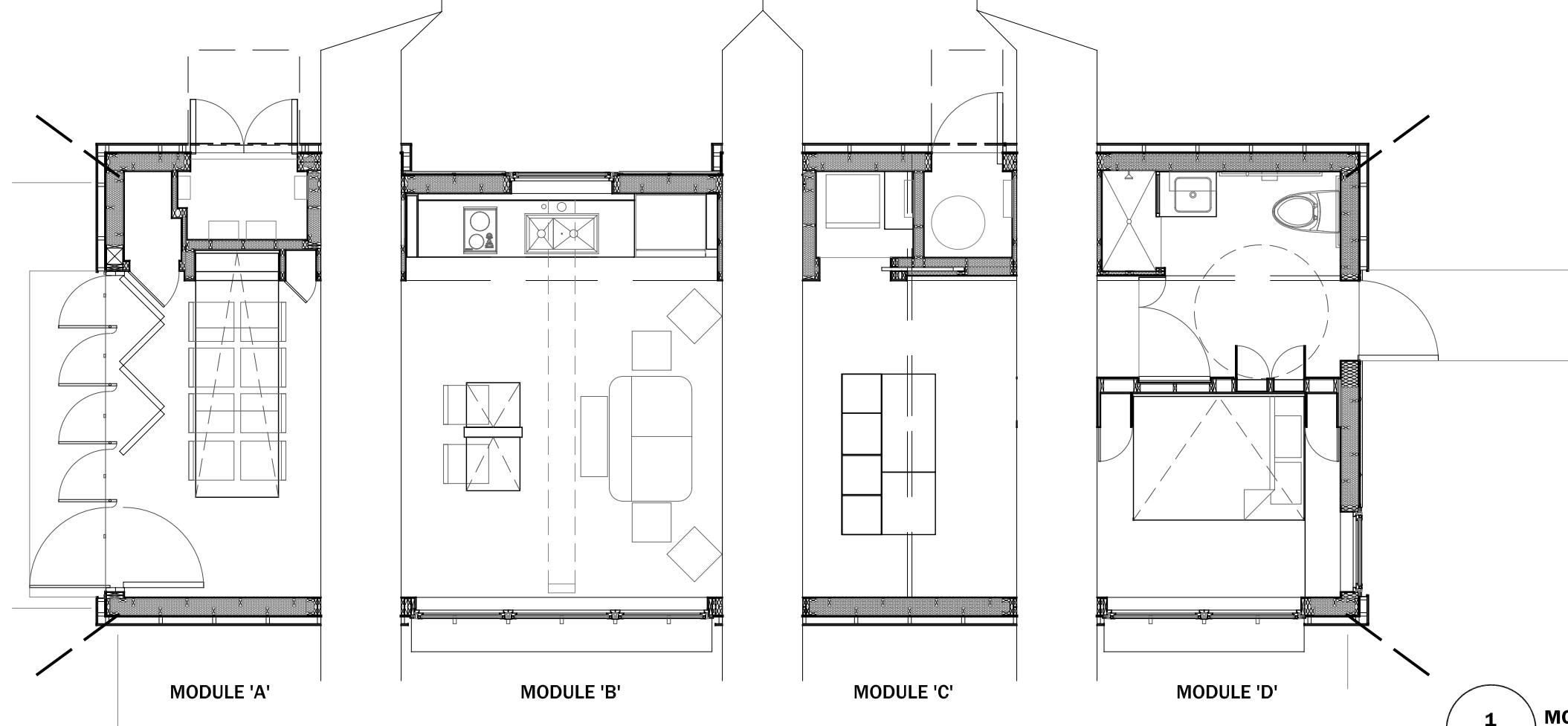
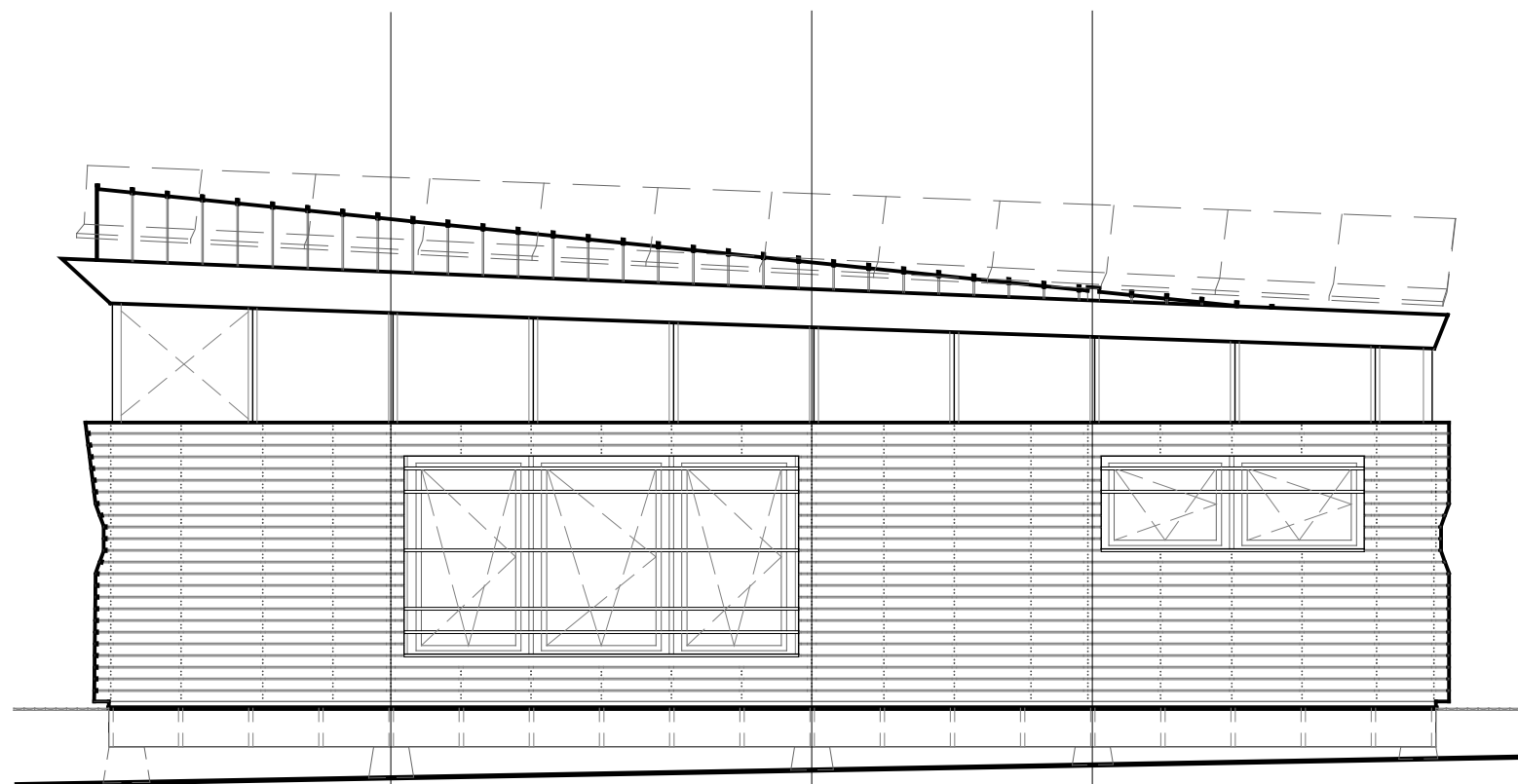
SHEET NAME:

DECK

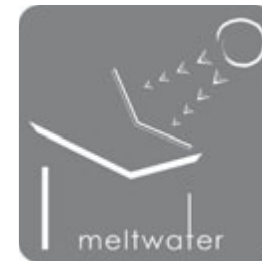
SECTIONS

A3-11

SCALE:1/2" = 1'-0"



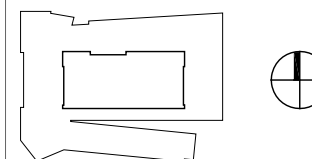
1
A4-00 **MODULE BREAKDOWN**
scale: 3/16" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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DRAWN BY: ERH



0' 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
BREAKOUT

A4-00

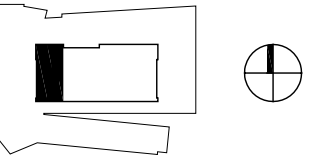
SCALE: 3/16" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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REVISION HISTORY	

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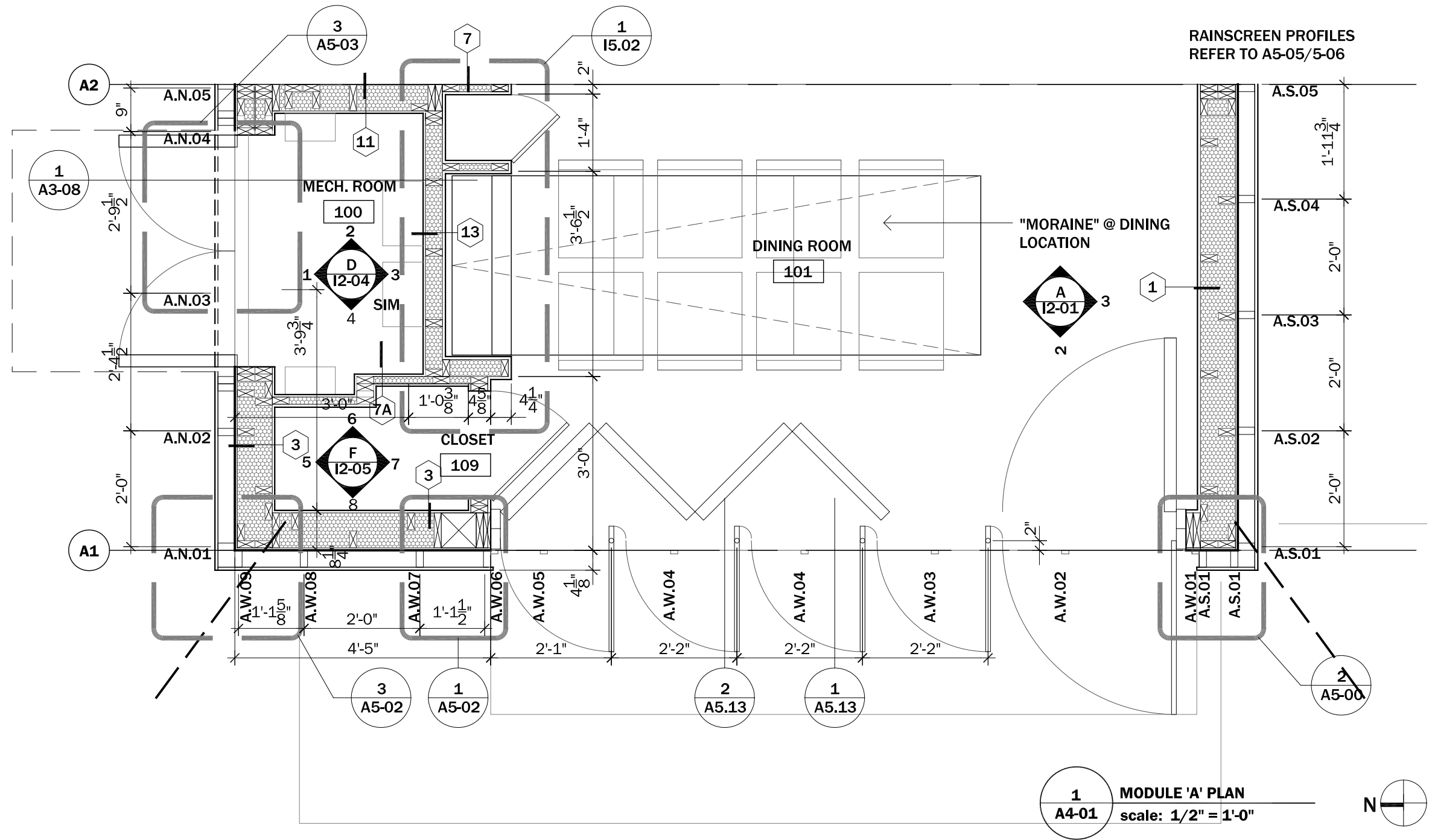


0' 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
PLAN - A

A4-01
SCALE: 1/2" = 1'-0"

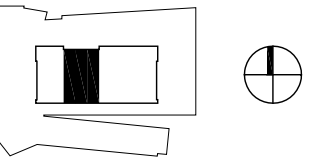




CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: ERH

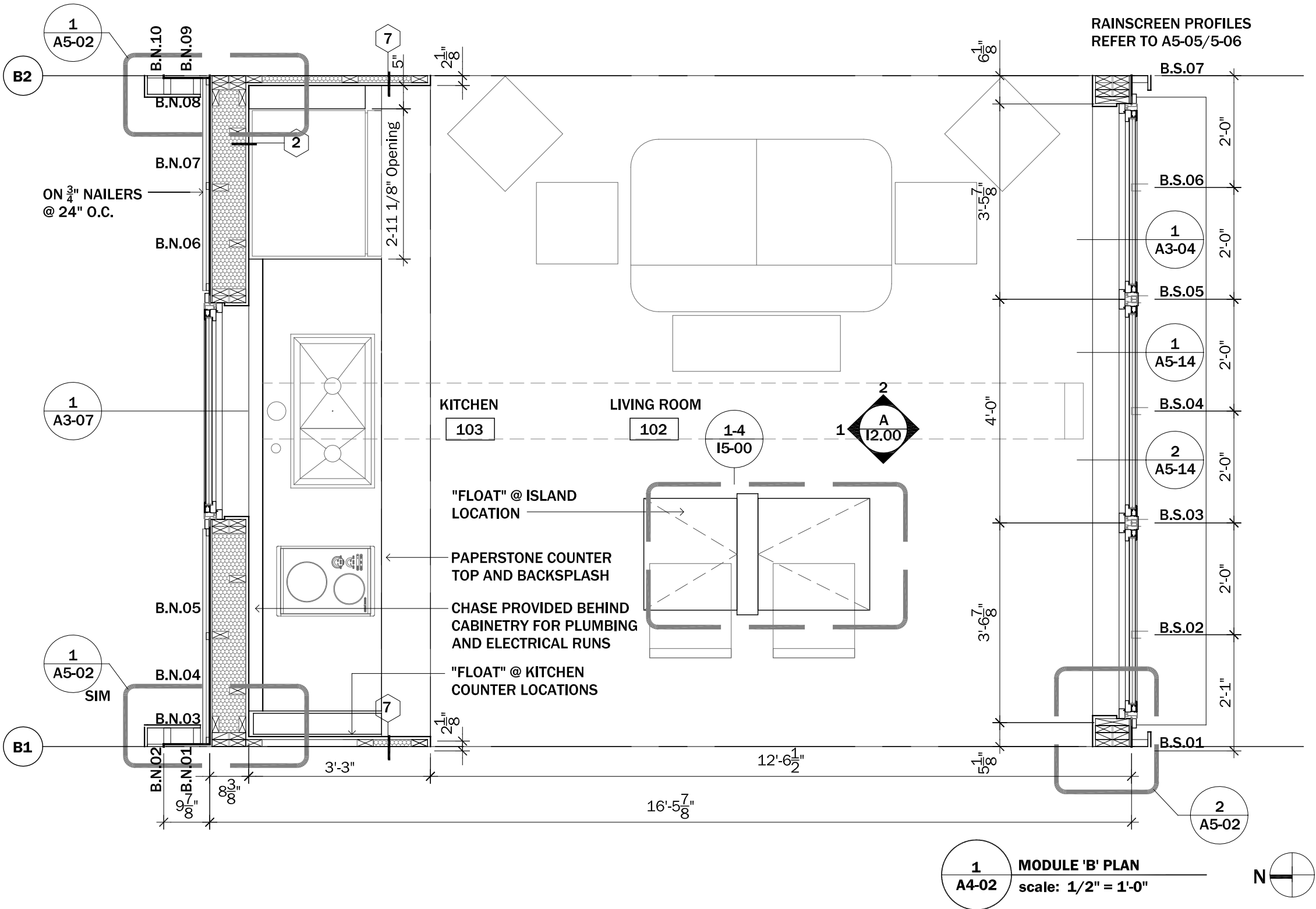


0' 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
PLAN - B

A4-02
SCALE: 1/2" = 1'-0"

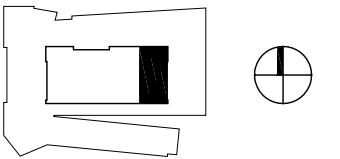




CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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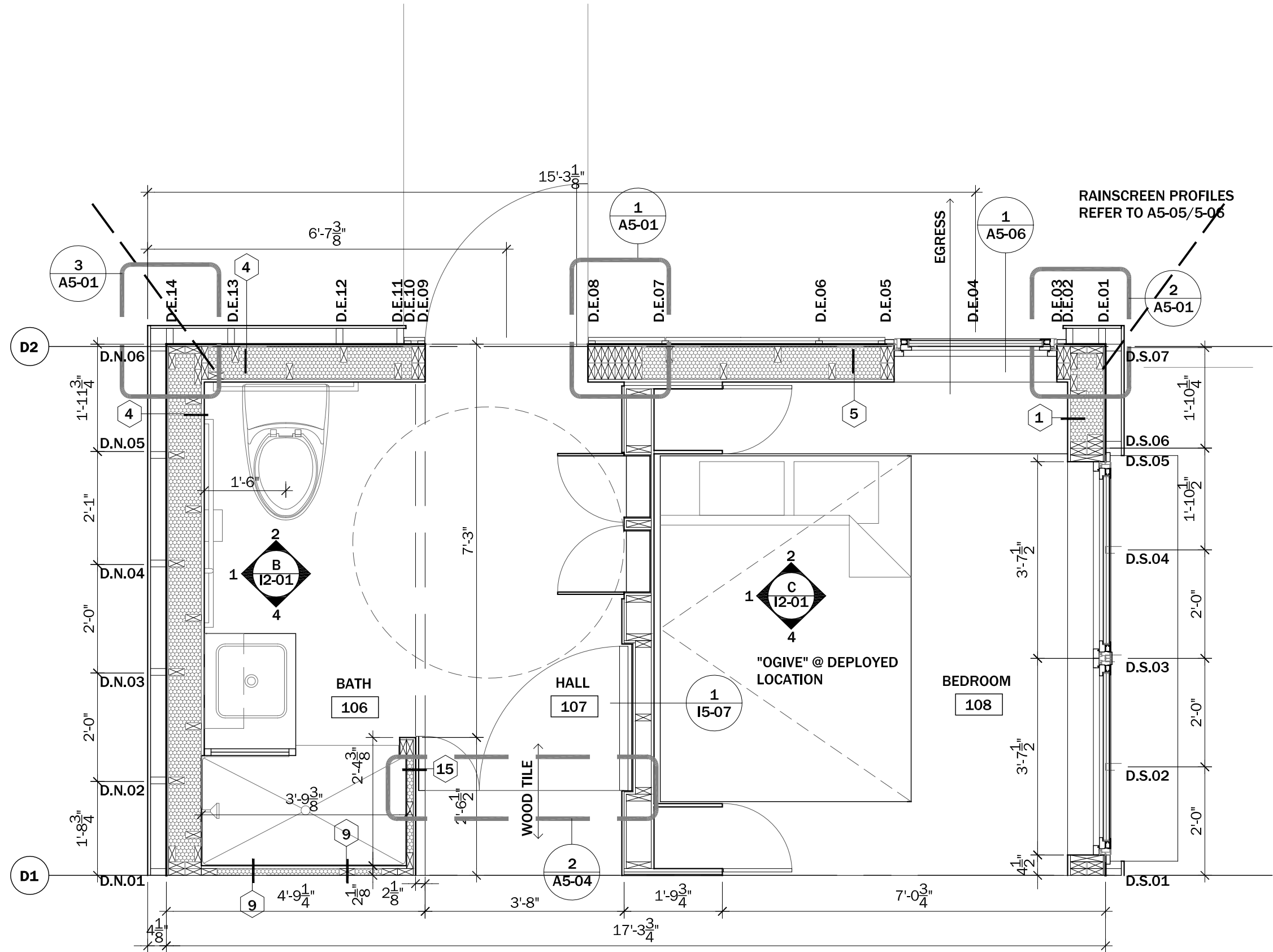
0' 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
PLAN - D

A4-04

SCALE: 1/2" = 1'-0"



1
A4-04
MODULE 'D' PLAN
scale: 1/2" = 1'-0"

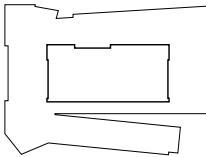




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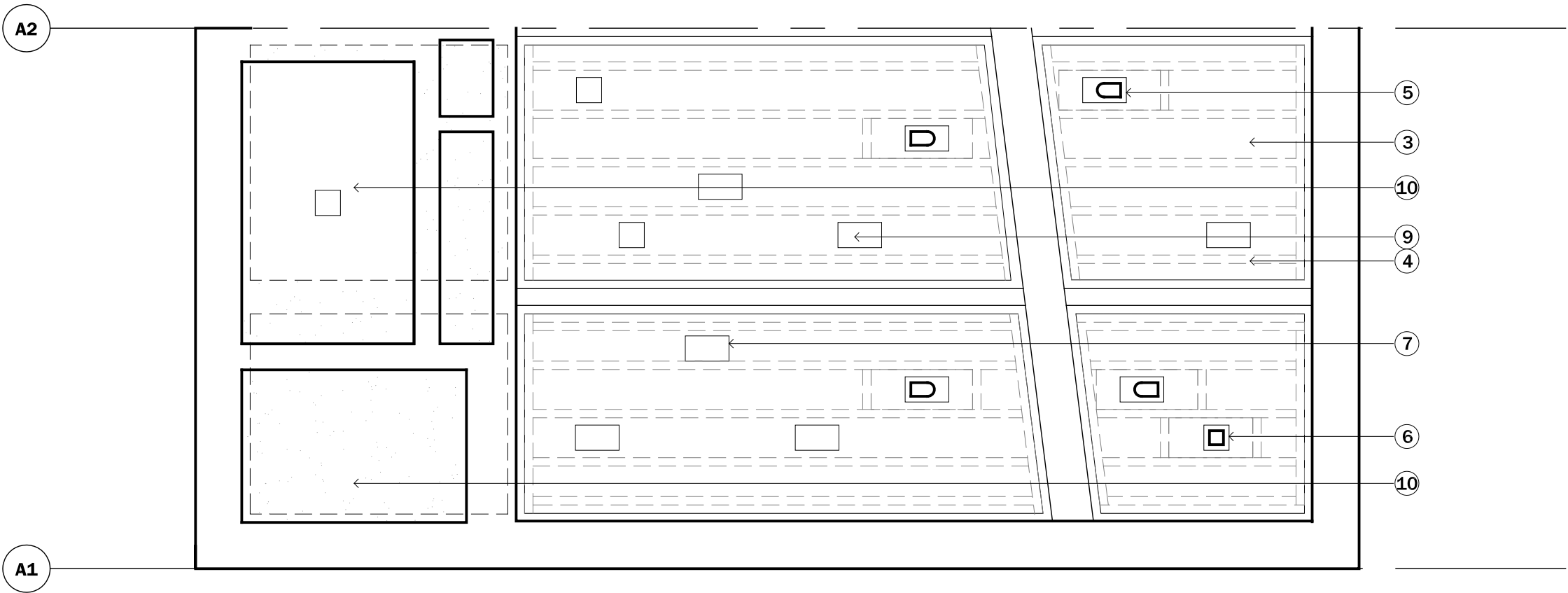
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PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
RCP - A

A4-05
SCALE: 1/2" = 1'-0"

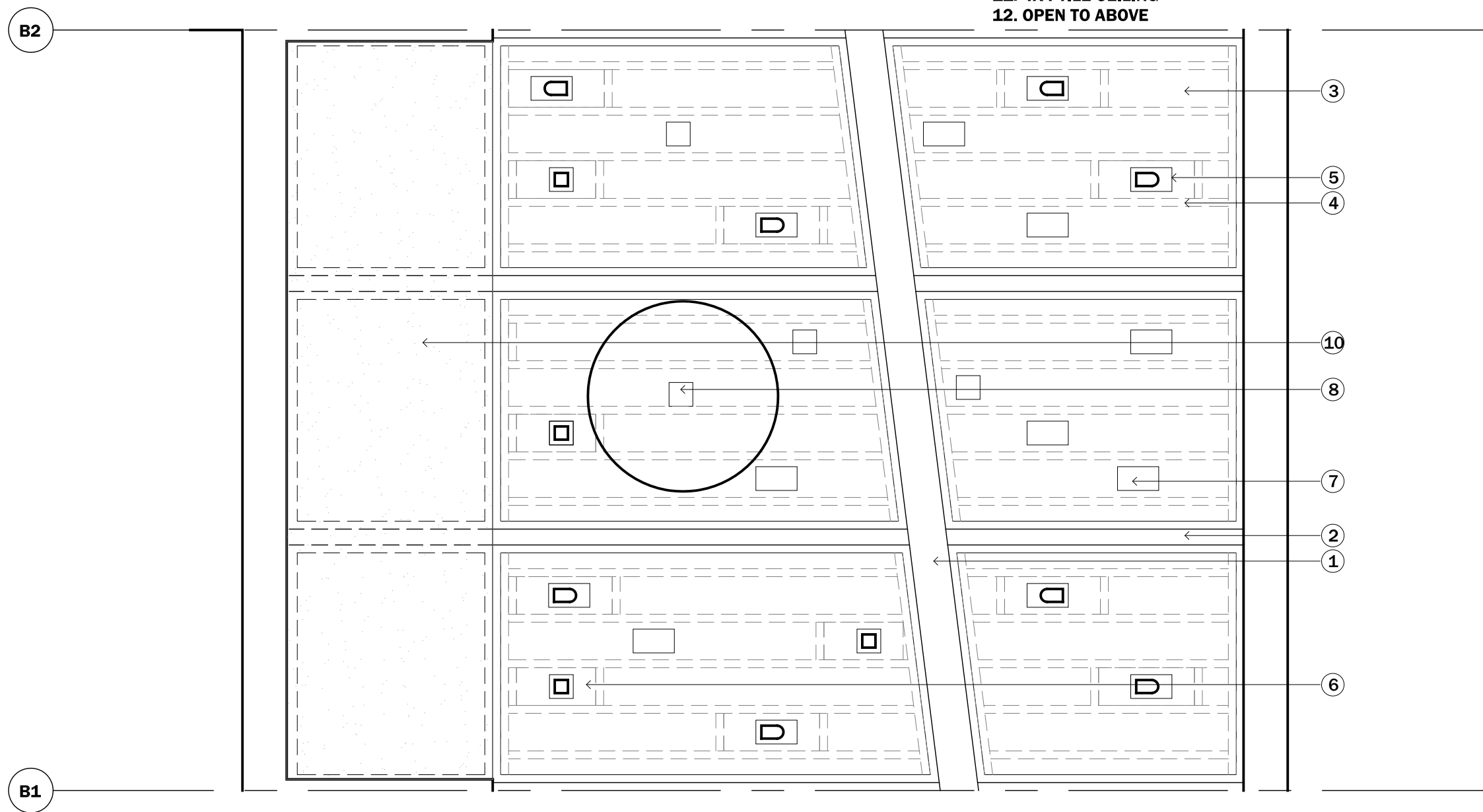
- RCP - KEYNOTES**
- 1. VALLEY BEAM
 - 2. RAFTER
 - DROPPED CEILING SYSTEM**
 - 10. 1/2" GYPSUM BOARD THERMAL BARRIER
 - 3. 1/2" STRAWBOARD PANEL
 - 4. 2x8 NOM WOOD FRAME
 - STRAWBOARD SUB STRUCTURE**
 - 5. LED LIGHT FIXTURE A - WALL WASH
 - 6. LED LIGHT FIXTURE B - DOWNLIGHT
 - 7. VOID IN STRAWBOARD PANEL
 - 8. CEILING FAN LOCATION
 - 9. DROP PENDENT LIGHTS
 - 10. 1/2" GYPSUM BOARD THERMAL BARRIER
 - DRYWALL CEILING**
 - 11. 4X4 TILE CEILING
 - 12. OPEN TO ABOVE



1
A4-05

MODULE 'A' REFLECTED CEILING PLAN
scale: 1/2" = 1'-0"

N



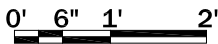
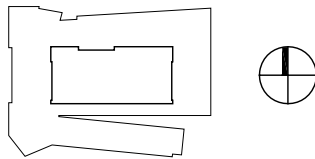
- RCP - KEYNOTES**
- 1. VALLEY BEAM
 - 2. RAFTER
 - DROPPED CEILING SYSTEM**
 - 10. 1/2" GYPSUM BOARD THERMAL BARRIER
 - 3. 1/2" STRAWBOARD PANEL
 - 4. 2x8 NOM WOOD FRAME
 - STRAWBOARD SUB STRUCTURE**
 - 5. LED LIGHT FIXTURE A - WALL WASH
 - 6. LED LIGHT FIXTURE B - DOWNLIGHT
 - 7. VOID IN STRAWBOARD PANEL
 - 8. CEILING FAN LOCATION
 - 9. DROP PENDENT LIGHTS
 - 10. 1/2" GYPSUM BOARD THERMAL BARRIER
 - DRYWALL CEILING**
 - 11. 4X4 TILE CEILING
 - 12. OPEN TO ABOVE



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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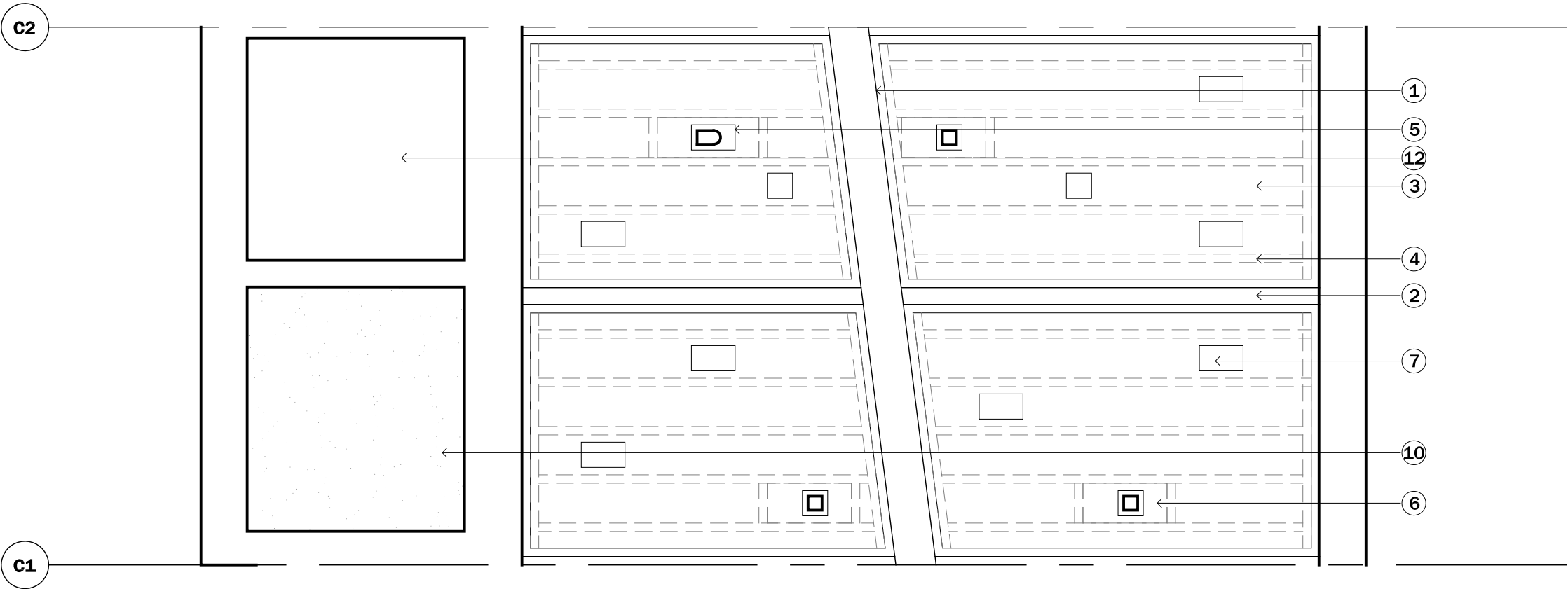
PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
RCP - B

A4-06
SCALE: 1/2" = 1'-0"

RCP - KEYNOTES

1. VALLEY BEAM
2. RAFTER
- DROPPED CEILING SYSTEM
10. 1/2" GYPSUM BOARD THERMAL BARRIER
3. 1/2" STRAWBOARD PANEL
4. 2x8 NOM WOOD FRAME
- STRAWBOARD SUB STRUCTURE
5. LED LIGHT FIXTURE A - WALL WASH
6. LED LIGHT FIXTURE B - DOWNLIGHT
7. VOID IN STRAWBOARD PANEL
8. CEILING FAN LOCATION
9. DROP PENDENT LIGHTS
- 10.1/2" GYPSUM BOARD THERMAL BARRIER
- DRYWALL CEILING
11. 4X4 TILE CEILING
12. OPEN TO ABOVE



1

A4-07

MODULE 'C' REFLECTED CEILING PLAN

scale: 1/2" = 1'-0"



CLIENT NAME: DOE/NREL

PROJECT: SOLAR DECATHLON

PROJECT NO.: SD 2009

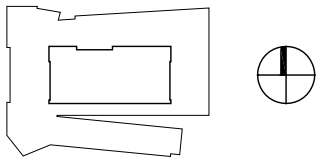
REVISION HISTORY

ISSUE DATE: 2009.06.02

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CHECKED BY: GDT/CTC

DRAWN BY: ERH



0' 6" 1' 2'

PROJECT STATUS: CD

SHEET NAME:

ENLARGED MODULE
RCP - C

A4-07

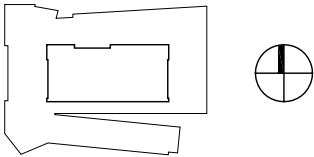
SCALE: 1/2" = 1'-0"



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PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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0' 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

ENLARGED MODULE
RCP - D

A4-08
SCALE: 1/2" = 1'-0"

RCP - KEYNOTES

1. VALLEY BEAM
2. RAFTER

DROPPED CEILING SYSTEM

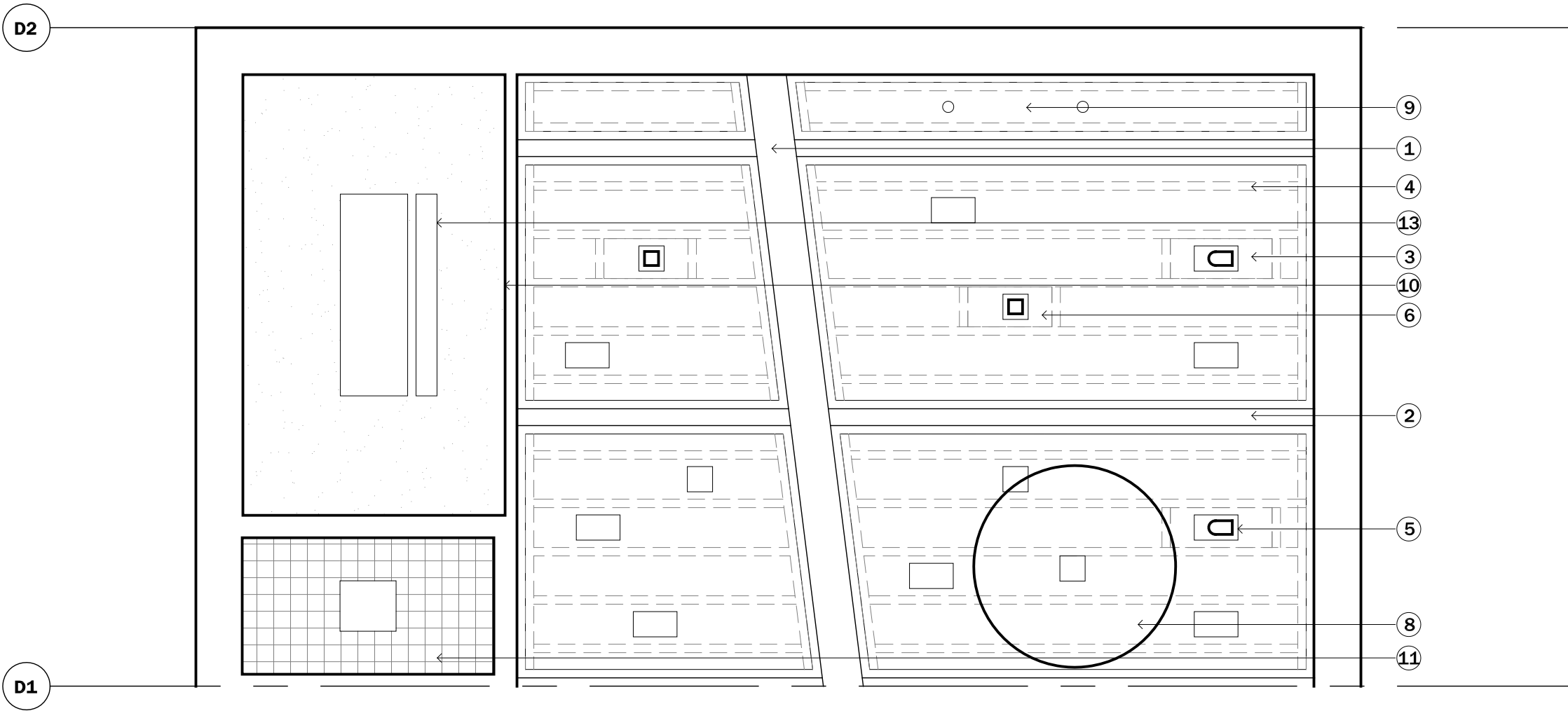
10. 1/2" GYPSUM BOARD THERMAL BARRIER
3. 1/2" STRAWBOARD PANEL
4. 2x8 NOM WOOD FRAME

STRAWBOARD SUB STRUCTURE

5. LED LIGHT FIXTURE A - WALL WASH
6. LED LIGHT FIXTURE B - DOWNLIGHT
7. VOID IN STRAWBOARD PANEL
8. CEILING FAN LOCATION
9. DROP PENDENT LIGHTS

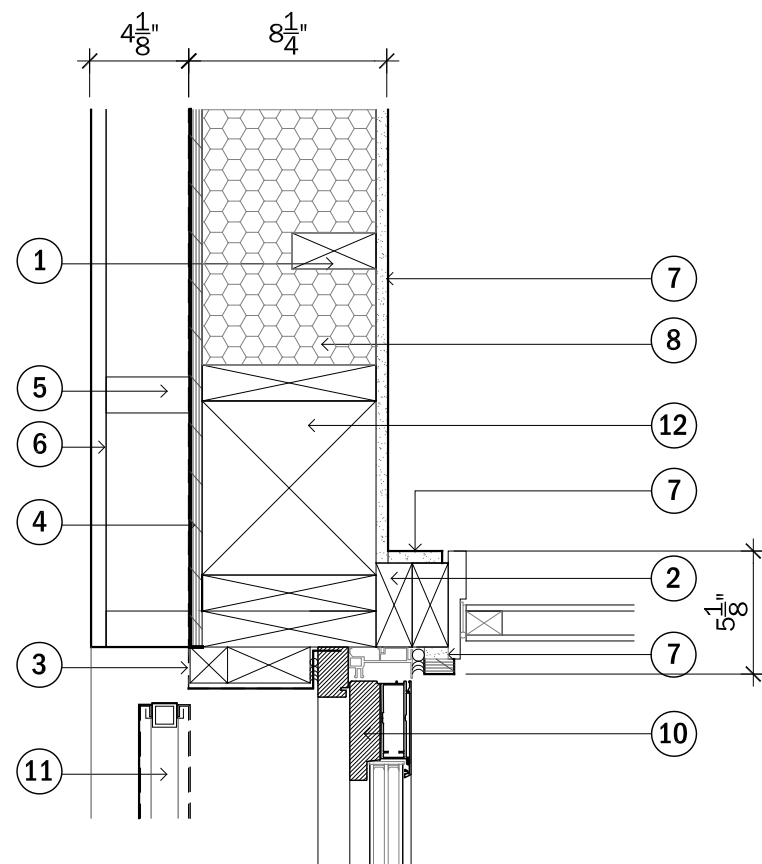
10. 1/2" GYPSUM BOARD THERMAL BARRIER
DRYWALL CEILING

11. 4X4 TILE CEILING
12. OPEN TO ABOVE
13. SKYLIGHT WITH ADJACENT FLUORESCENT LIGHT
FIXTURE

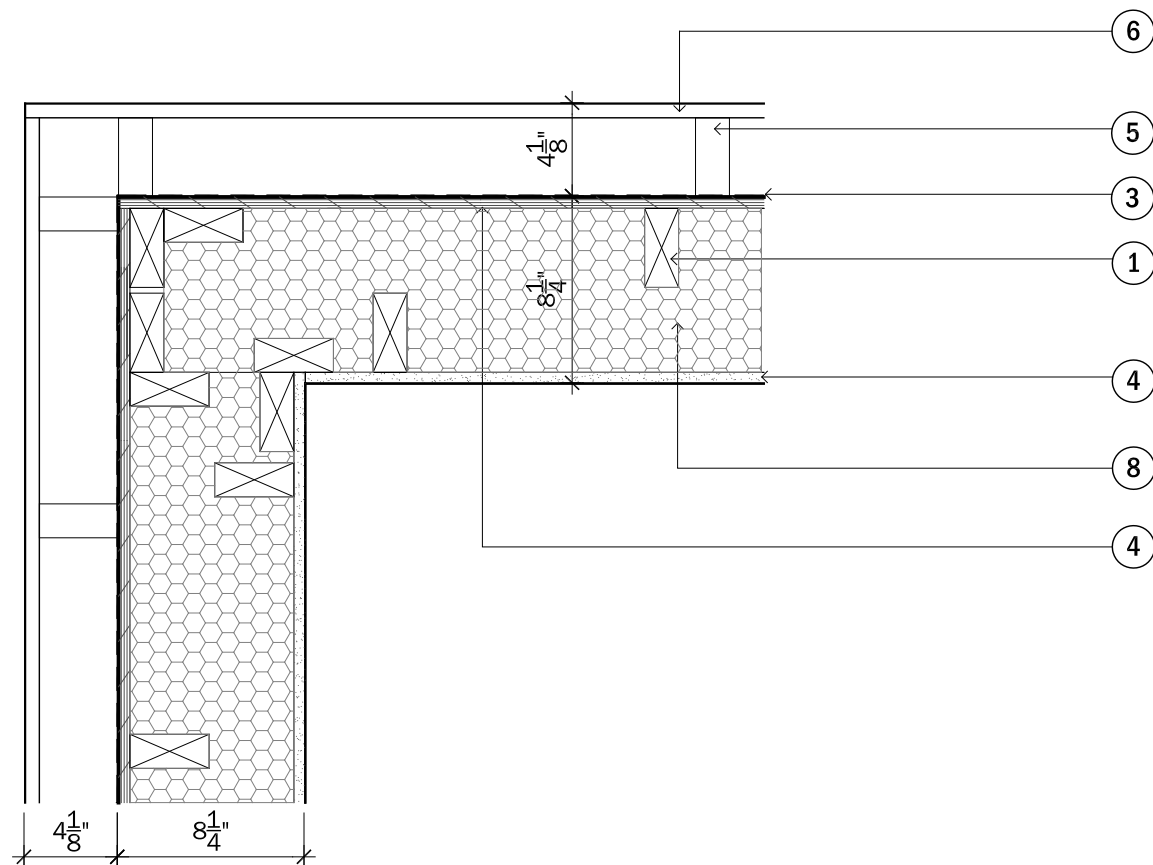


1
A4-08 **MODULE 'D' REFLECTED CEILING PLAN**
scale: 1/2" = 1'-0"

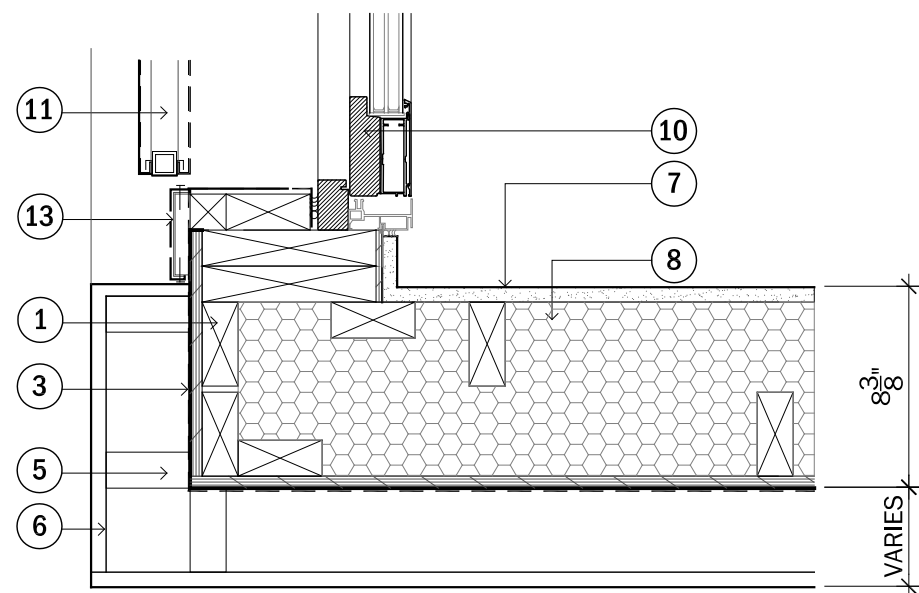




1
A5-00 **JAMB DETAIL - WEST**
scale: 1 1/2" = 1'-0"



3
A5-00 **NW CORNER- PLAN DETAIL**
scale: 1 1/2" = 1'-0"



2
A5-00 **JAMB DETAIL- SW CORNER**
scale: 1 1/2" = 1'-0"

PLAN DETAILS - KEYNOTES

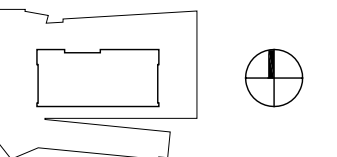
1. OFFSET 2X4 STUD FRAMING, EXTERIOR
2. 2X4 STUD FRAMING, INTERIOR
3. SHEET APPLIED WEATHER BARRIER
4. 1/2" PLYWOOD
5. VERTICAL, WOOD RAINSCREEN NAILERS
6. HORIZONTAL, WOOD RAINSCREEN BOARDS
7. 5/8" GYPSUM WALL BOARD
8. SPRAY APPLIED CLOSED CELL INSULATION
9. H WINDOW - WOOD, ALUMINUM CLAD AWNING WINDOW W/ TRIPLE PANE, LOW E INSULATED GLAZING
10. H WINDOW FOLDING DOOR SYSTEM- WOOD, ALUMINUM CLAD W/ TRIPLE PANE, LOW E INSULATED GLAZING
11. CUSTOM PERFORATED METAL SCREEN SYSTEM
12. 7 1/4" X 7 1/4" PSL COLUMN
13. CUSTOM PERFORATED METAL SIDING



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

PLAN DETAILS - EXTERIOR

A5-00

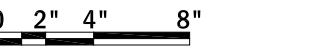
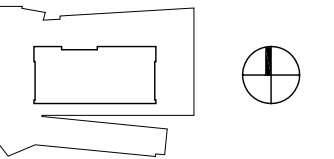
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

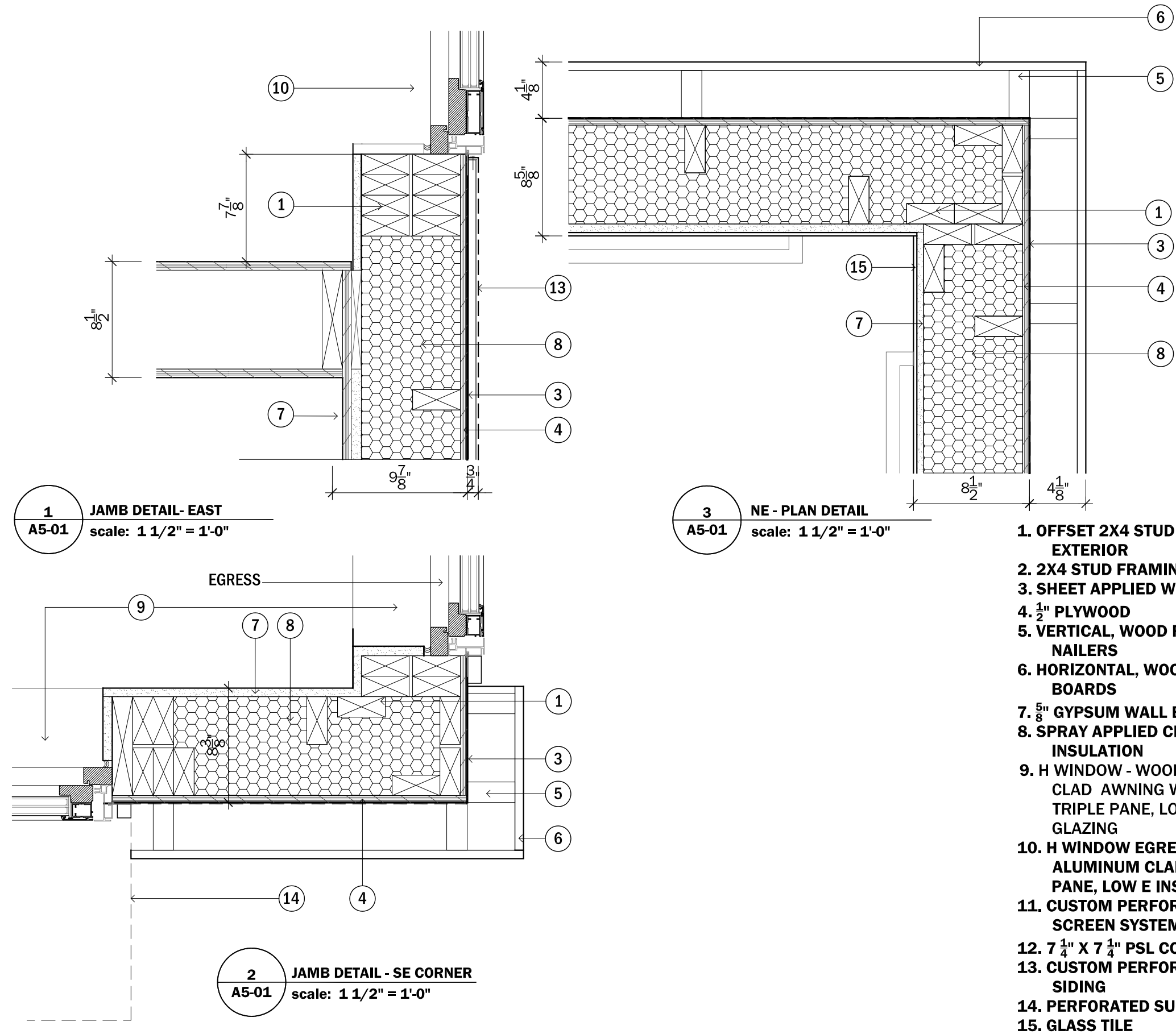
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
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PROJECT STATUS: CD
SHEET NAME:

PLAN DETAILS - EXTERIOR

A5-01
SCALE: 1 1/2" = 1'-0"

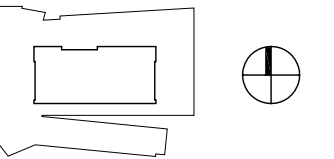




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PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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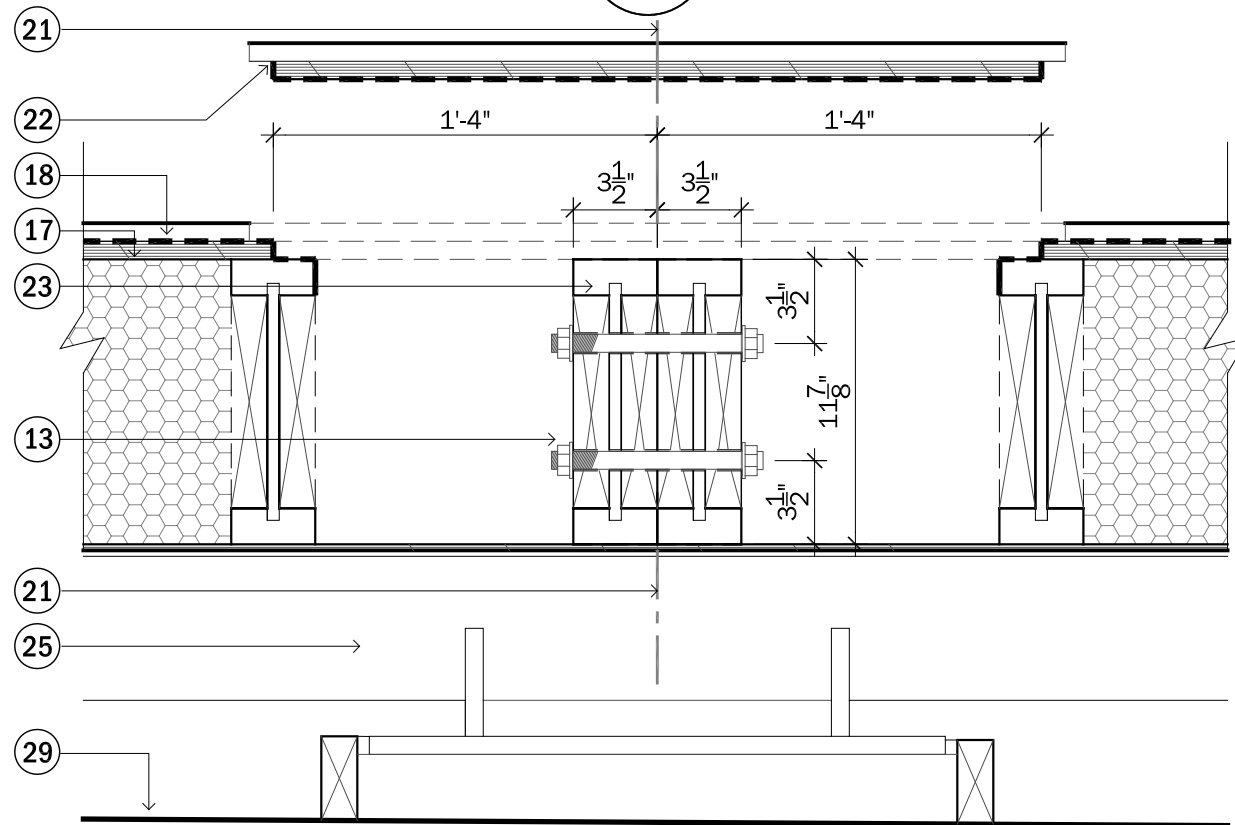
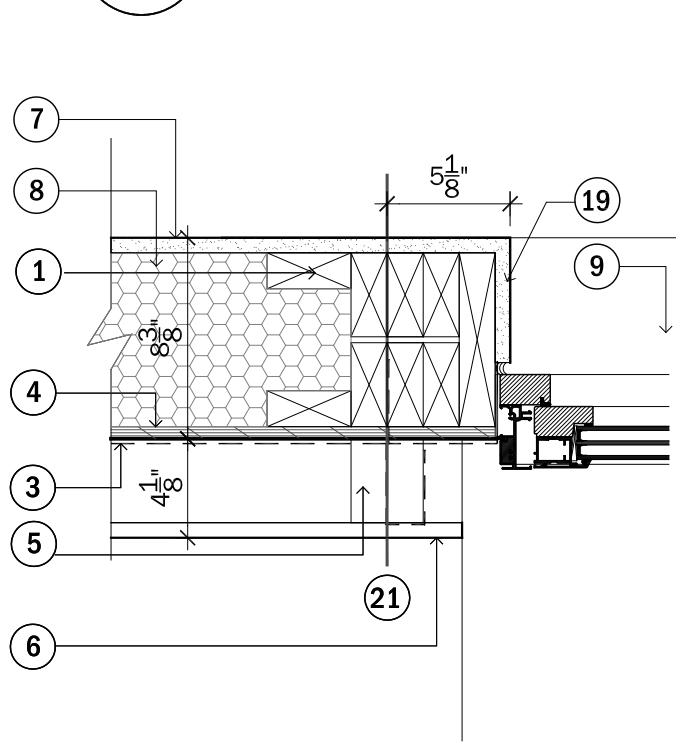
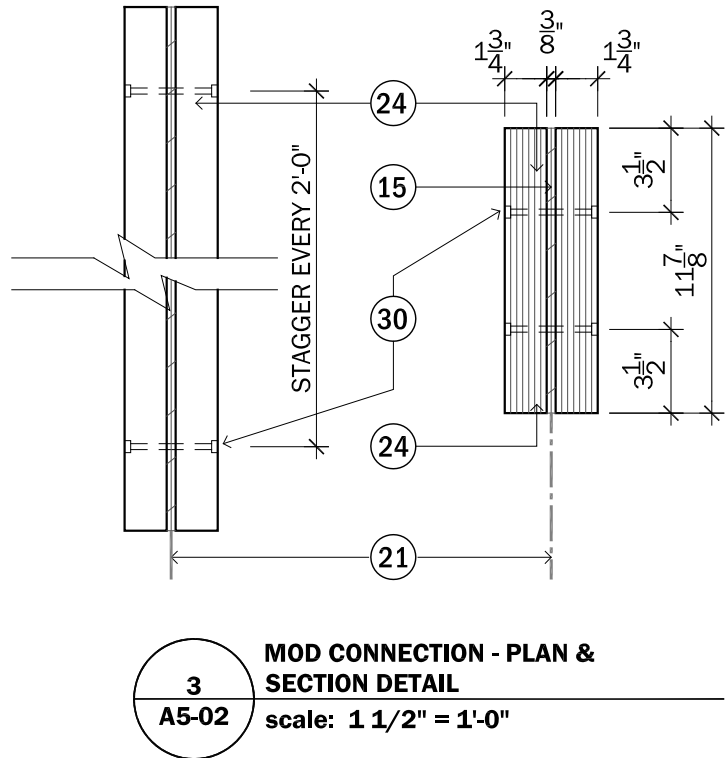
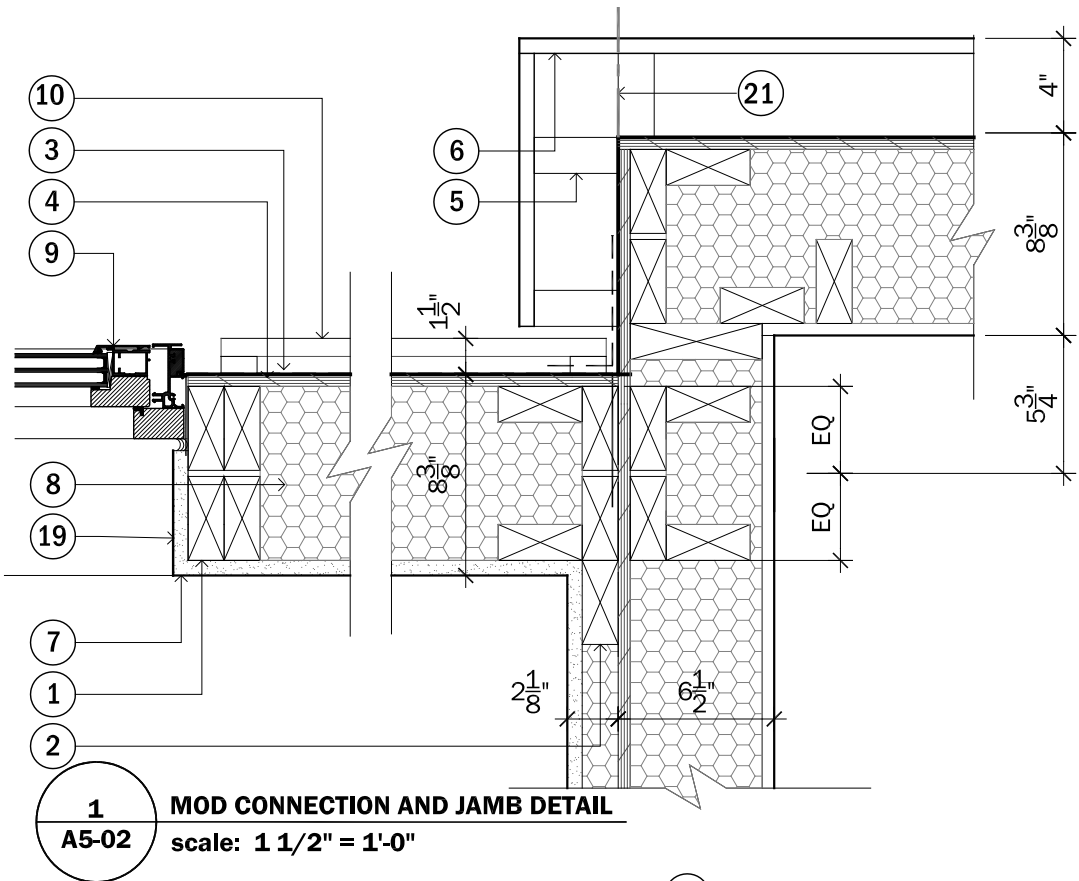
0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

PLAN DETAILS - MOD CONNECTIONS

A5-02

SCALE: 1 1/2" = 1'-0"



1 1/2" DETAIL KEYNOTES

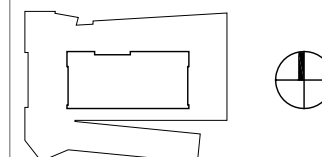
1. OFFSET 2X4 STUD FRAMING, EXTERIOR
2. 2X4 STUD FRAMING, INTERIOR
3. SHEET APPLIED WEATHER BARRIER
4. 1/2" PLYWOOD
5. VERTICAL TREATED WOOD NAILERS
6. HORIZONTAL WOOD RAINSCREEN BOARDS
7. 5/8" GYPSUM WALL BOARD
8. SPRAY APPLIED CLOSED CELL INSULATION
9. H WINDOW WOOD, ALUMINUM CLAD WINDOWS
10. PERFORATED METAL RAINSCREEN
12. 5/8" DIA. GALVANIZED STEEL SLEEVE
13. 1/2" DIA. BOLT
15. 3/8" HARDWOOD SPACER
17. SUB-FLOORING
18. FINISHED FLOOR MATERIAL
19. CAULK, SHIM, SEALANT AND BACKER ROD TO MANUFACTURER'S SPECS
20. JOIST HANGER
21. MODULE LINE
22. REMOVABLE PIECE FOR ACCESS TO MOD CONNECTION
23. TJI FLOOR STRUCTURE
24. 1 3/4" X 11 7/8" LVL MOD BEAM
25. ALUMINUM FOUNDATION PAD W/ WOOD RAIL
28. WOOD POCKET DOOR
29. GRADE
30. 1/4" BOLT RECESSED INTO COUNTERSUNK HOLE.



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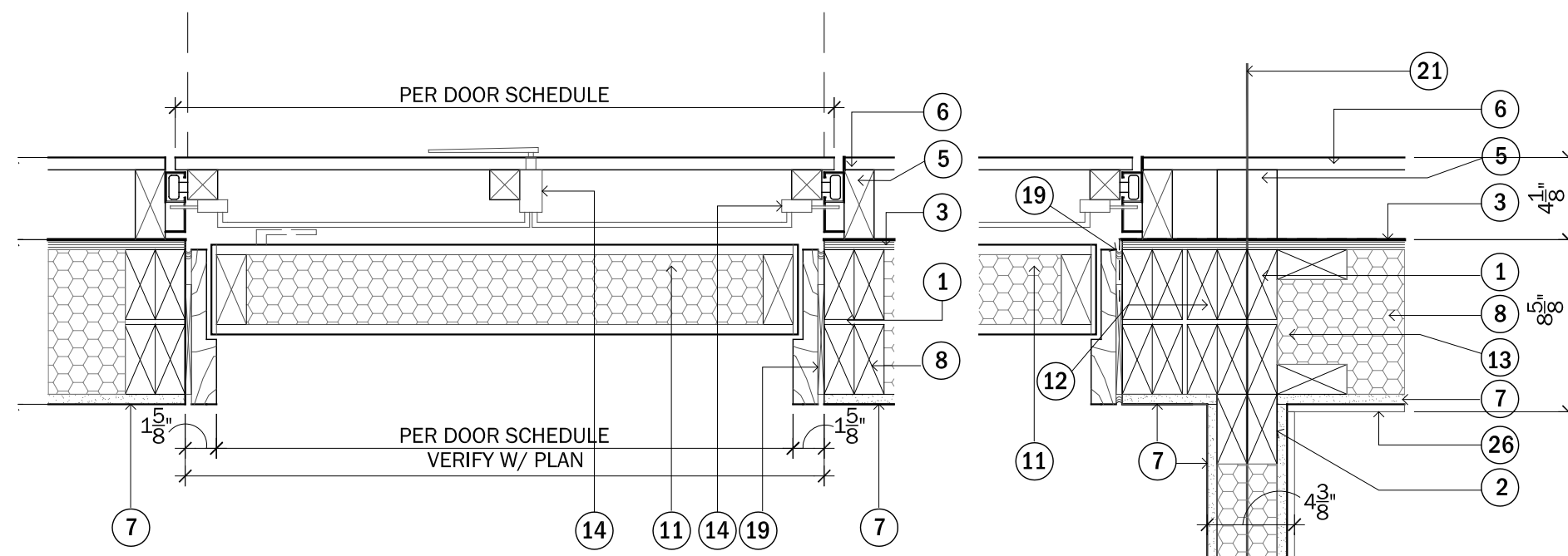
0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

PLAN DETAILS - MOD CONNECTIONS & DOOR DETAILS

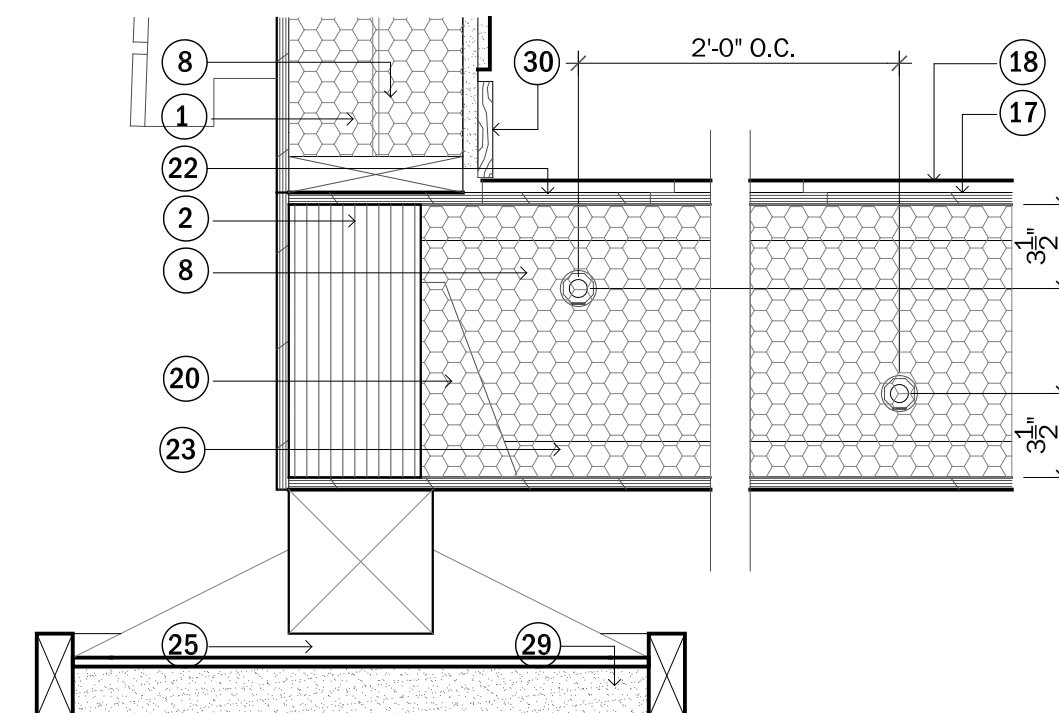
A5-03

SCALE: 1 1/2" = 1'-0"



1
A5-03
**DOOR JAMB DETAIL &
BIFOLD RAINSCREEN**
scale: 1 1/2" = 1'-0"

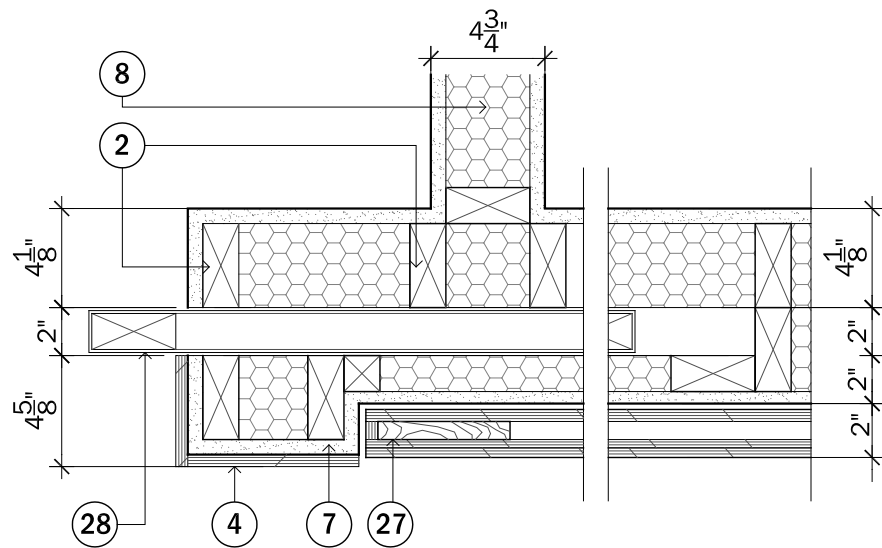
2
A5-03
MOD CONNECTION
scale: 1 1/2" = 1'-0"



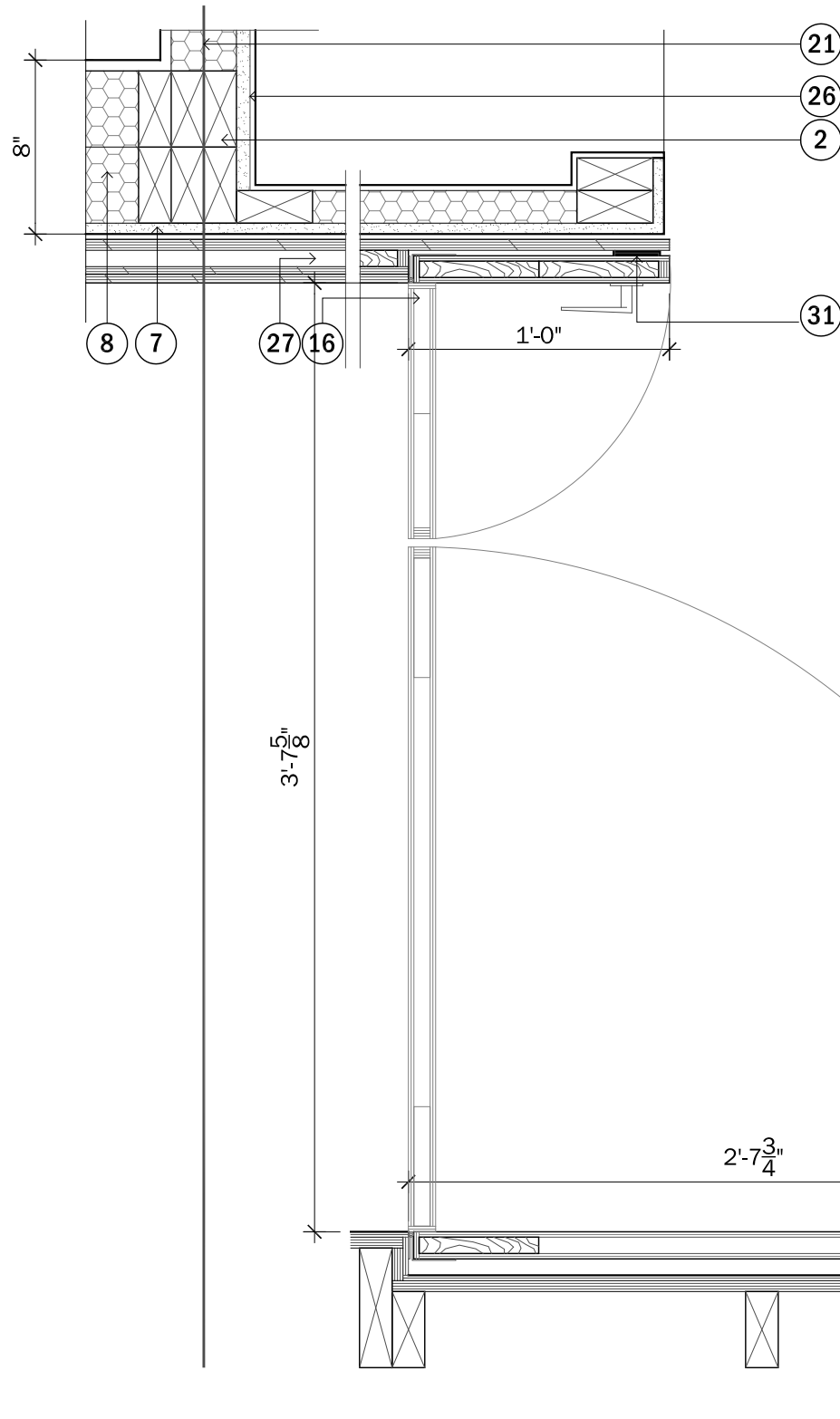
3
A5-03
MOD CONNECTION
scale: 1 1/2" = 1'-0"

1 1/2" DETAIL KEYNOTES

1. 2X8 STUD FRAMING
2. 5 1/4" X 11 7/8" PSL RIM BOARD
3. SHEET APPLIED WEATHER BARRIER
4. 1/2" PLYWOOD
5. VERTICAL TREATED WOOD NAILERS
6. HORIZONTAL WOOD RAINSCREEN BOARDS
7. 5/8" GYPSUM WALL BOARD
8. SPRAY APPLIED CLOSED CELL INSULATION
11. METAL/SIP INSULATED DOOR IN WOOD FRAME
12. METAL PLATE - DRILLED AND THREADED, 1/2" DIA. HOLE
13. 1/2" DIA. BOLT
14. STEEL VERTICAL BI FOLD DOOR TRACK W/ LOCKING MECHANISM
16. CONCEALED HINGE SYSTEM
17. SUB-FLOORING
18. FINISHED FLOOR MATERIAL
19. CAULK, SHIM, SEALANT AND BACKER ROD TO MANUFACTURER'S SPEC.
20. JOIST HANGER
21. MODULE LINE
22. REMOVABLE PIECE FOR ACCESS TO MOD CONNECTION
23. TJI FLOOR STRUCTURE
24. MOD BEAM
25. STEEL FOUNDATION PAD W/ WOOD RAIL
26. GLASS SUBWAY TILE
29. GRADE
30. 4" WOOD BASE



1
A5-04 POCKET DOOR DETAIL
scale: 1 1/2" = 1'-0"



2
A5-04 DOUBLE DOOR DETAIL @
BATHROOM/HALL
scale: 1 1/2" = 1'-0"

1 1/2" DETAIL KEYNOTES

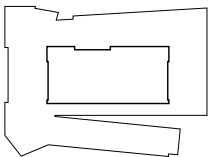
- 2. 2X4 STUD FRAMING, INTERIOR
- 4. 1/2" VENEER
- 7. 5/8" GYPSUM WALL BOARD
- 8. SPRAY APPLIED CLOSED CELL INSULATION
- 16. CONCEALED HINGE SYSTEM
- 21. MODULE LINE
- 26. GLASS SUBWAY TILE
- 27. HOLLOW CORE DOOR W/ 1X6 HARDWOOD FRAME & CROSS BRACING
- 28. WOOD POCKET DOOR
- 31. MAGNETIC DOOR HOLD AND PRIVACY HARDWARE



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0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

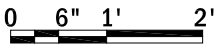
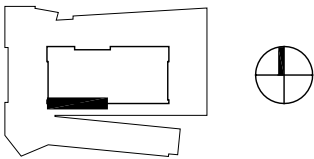
PLAN DETAILS - DOORS



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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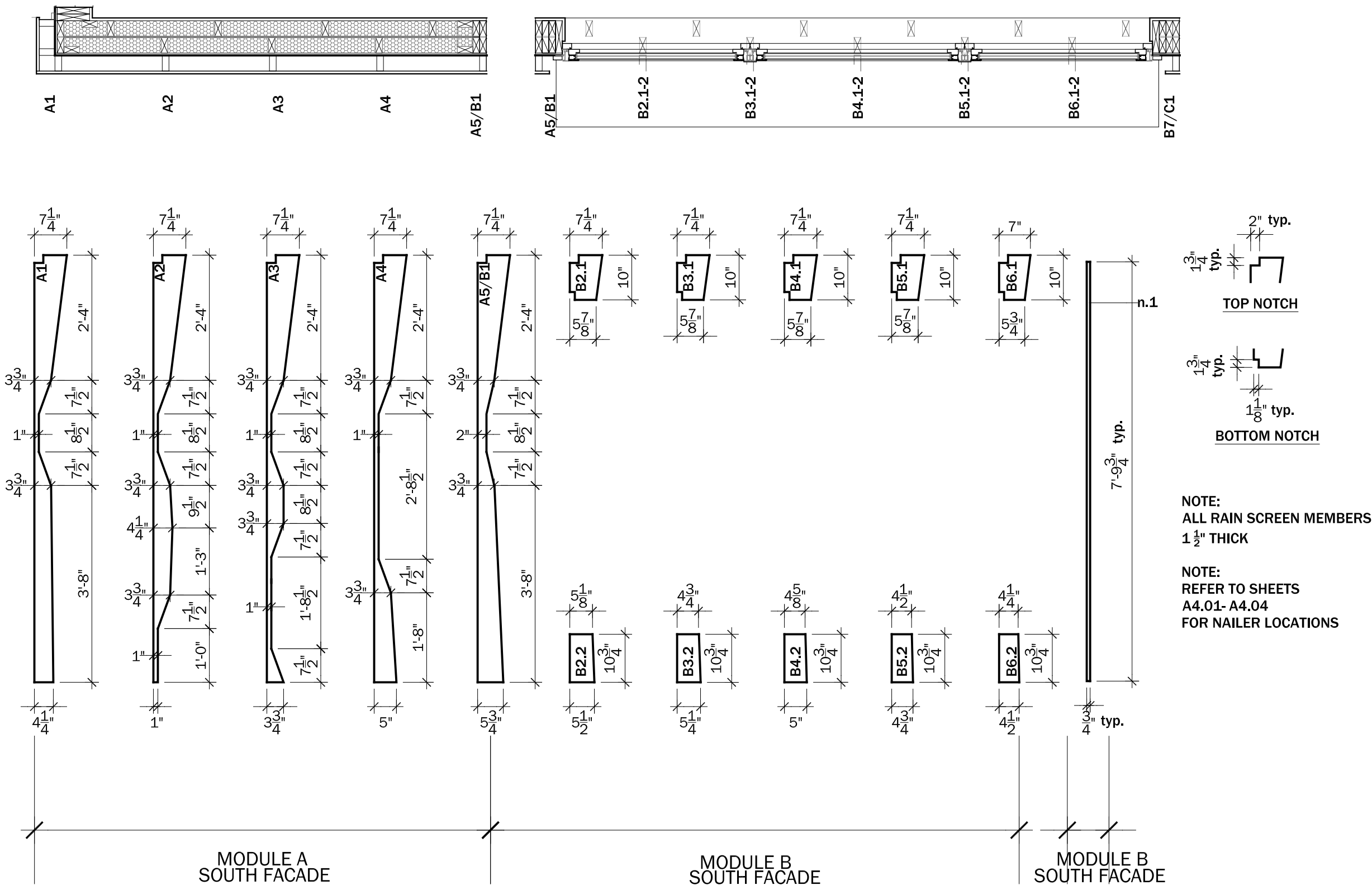
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: KAW

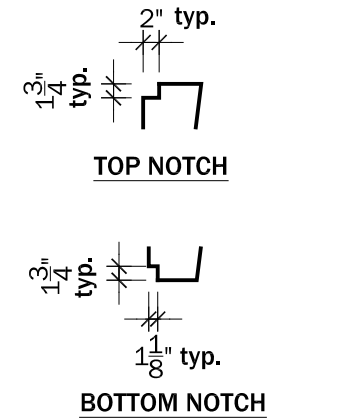
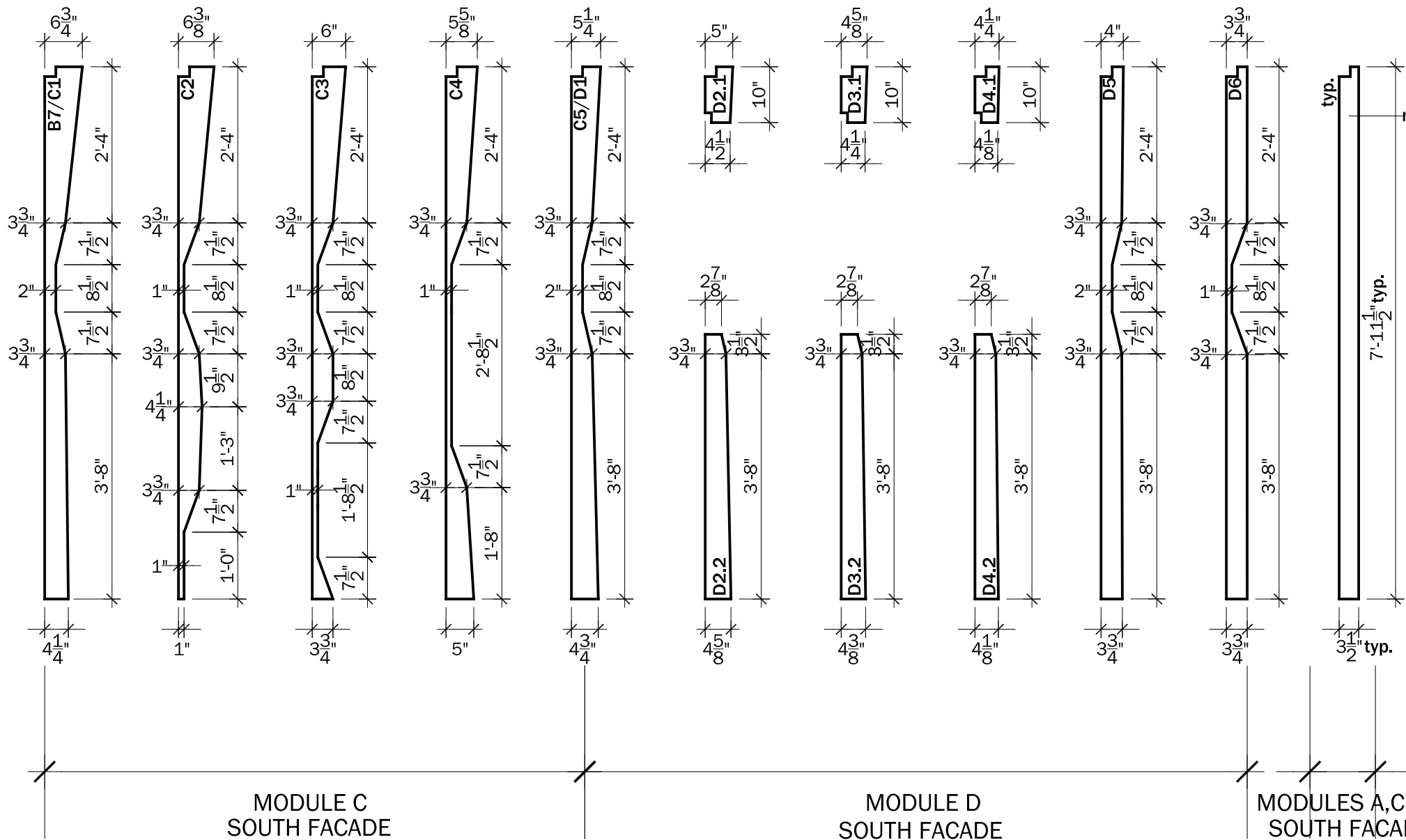
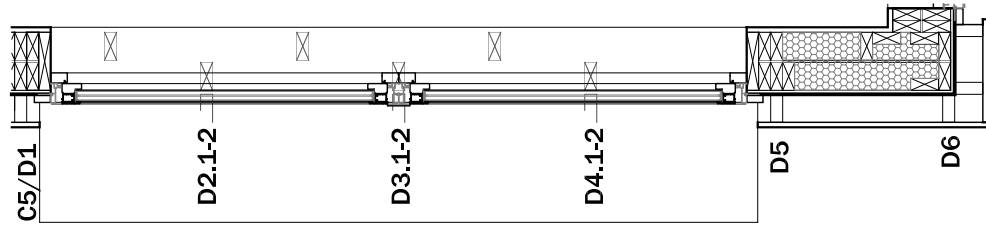
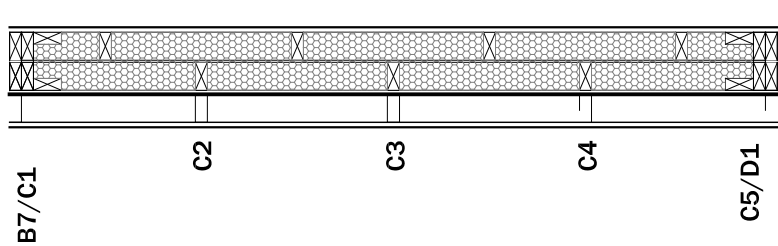


PROJECT STATUS: CD
SHEET NAME:

RAIN SCREEN PROFILES

A5-05
SCALE: 1/2" = 1'-0"





NOTE:
ALL RAIN SCREEN MEMBERS
1 1/2" THICK

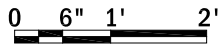
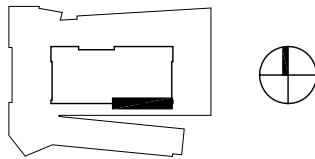
NOTE:
REFER TO SHEETS
A4.01- A4.04
FOR NAILER LOCATIONS



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

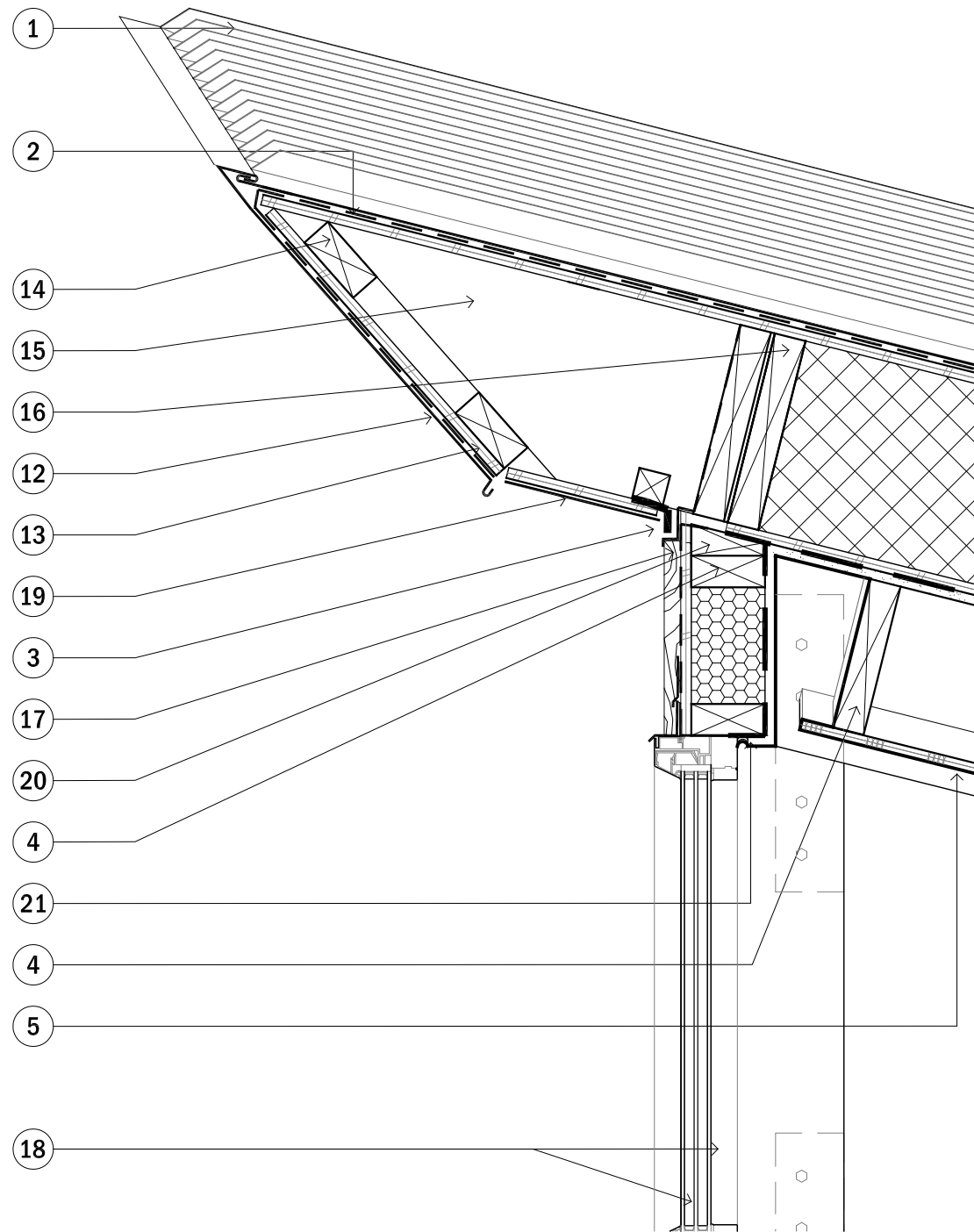
REVISION HISTORY	

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CHECKED BY: GDT/CTC
DRAWN BY: KAW



PROJECT STATUS: CD
SHEET NAME:

RAIN SCREEN
PROFILES



1
A5-07 **SOUTH ROOF CONNECTION DETAIL**
SCALE: 1 1/2" = 1'-0"

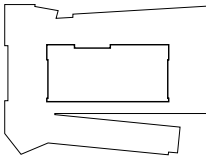
- 1 STANDING SEAM GALVALUME ROOFING
- 2 WATER, AIR, VAPOR & ICE BARRIER
- 3 CONTINUOUS GALVALUME METAL FLASHING
- 4 2"x8" NOM. WOOD FRAMING FOR DROPPED CEILING PANEL
- 5 1/2" CEILING PANEL
- 8 2"x8" NOM. WOOD BLOCKING
- STRUCTURAL INSULATION PANEL (SIP)
- 9 1/2" OSB
- 10 9 1/4" RIGID INSULATION
- 9 1/2" OSB
- 12 GALVALUME METAL FASCIA
- 13 1/2" OSB BACKER BOARD
- 14 2"x4" NOM. WOOD BLOCKING
- 15 2" x 10" NOM. WOOD BLOCKING CUT TO PROFILE @ 24" O.C. SEE A5-15
- 16 1 3/4"x9 1/4" LVL END PLATE IN SIP CAVITY
- 17 ALUMINUM MULLION CAP
- 18 3/4" TRANSLUCENT GLAZING
- 19 GALVALUME SOFFIT.
- 20 2"x4" NOM. BEVEL TOP PLATE
- 21 BLIND STEEL PLATE CONNECTION
- WOOD COLUMNS
- 22 1 3/4"x11 7/8" LVL RAFTER AND COLUMN
- 7 1/2" PLYWOOD SPACER
- 22 1 3/4"x11 7/8" LVL RAFTER AND COLUMN



CLIENT NAME: DOE/NREL
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DRAWN BY: JAS

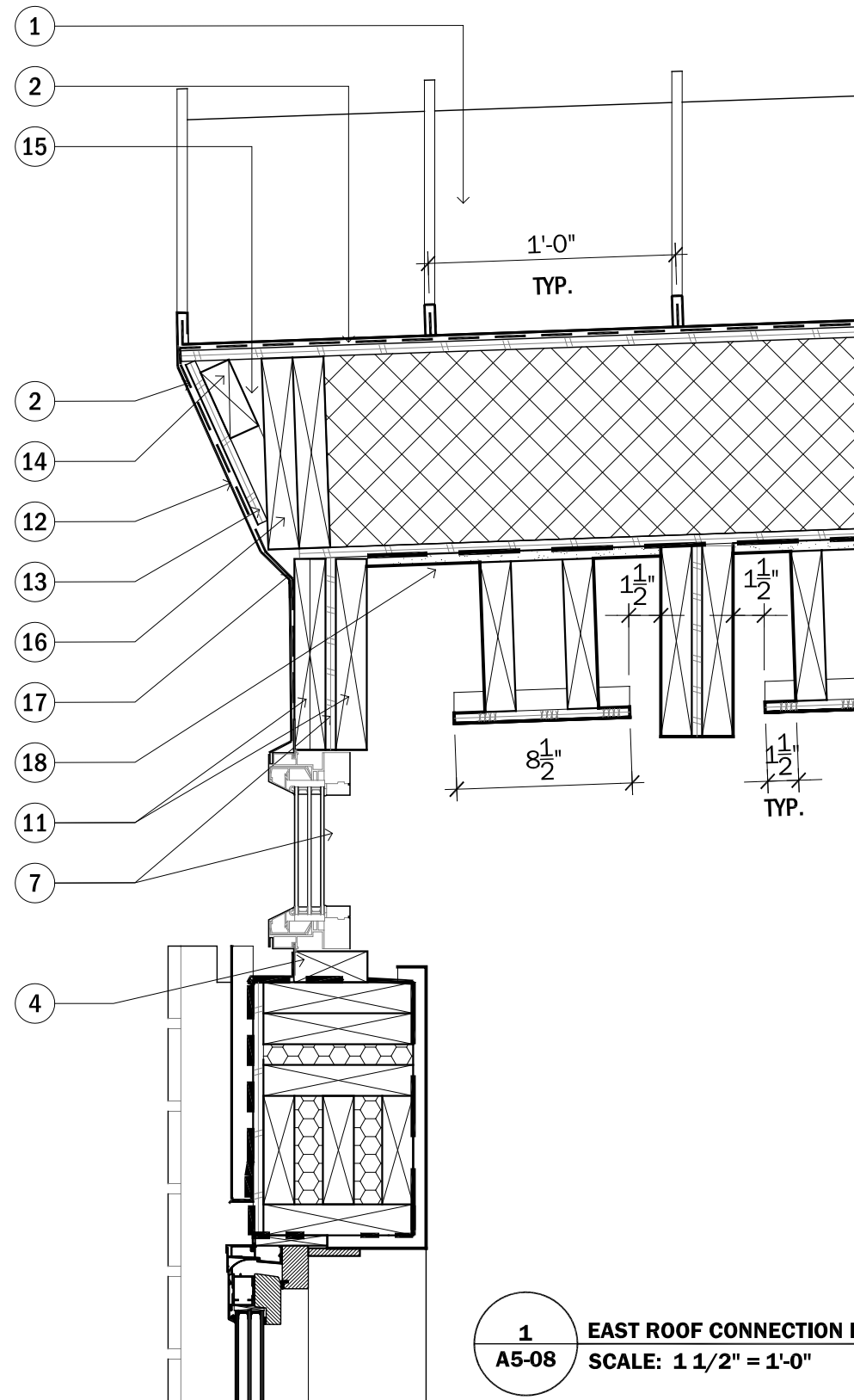


0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

ROOF DETAIL - SOUTH

A5-07
SCALE: 1 1/2" = 1'-0"



- 1 STANDING SEAM GALVALUME ROOFING
- 2 WATER, AIR, VAPOR & ICE BARRIER
- 4 2"x4" NOM. WOOD BLOCKING
- STRUCTURAL WOOD RAFTERS
- 11 1 3/4"x1 7/8" LVL RAFTER
- 7 1/2" PLYWOOD SPACER
- 11 1 3/4"x1 7/8" LVL RAFTER
- 12 GALVALUME METAL FASCIA
- 13 1/2" PLYWOOD BACKING FOR METAL FASCIA
- 14 2"x4" NOM. WOOD BLOCKING
- 15 2" x 10" NOM. WOOD BLOCKING CUT TO PROFILE @ 24" O.C. SEE A5-15
- 16 2"x10" NOM. WOOD BLOCKING
- 17 CONTINUOUS METAL FLASHING
- 18 1/2" GYPSUM BOARD THERMAL BARRIER

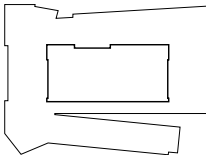
1 EAST ROOF CONNECTION DETAIL
A5-08 SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

ISSUE DATE: 2009.06.02
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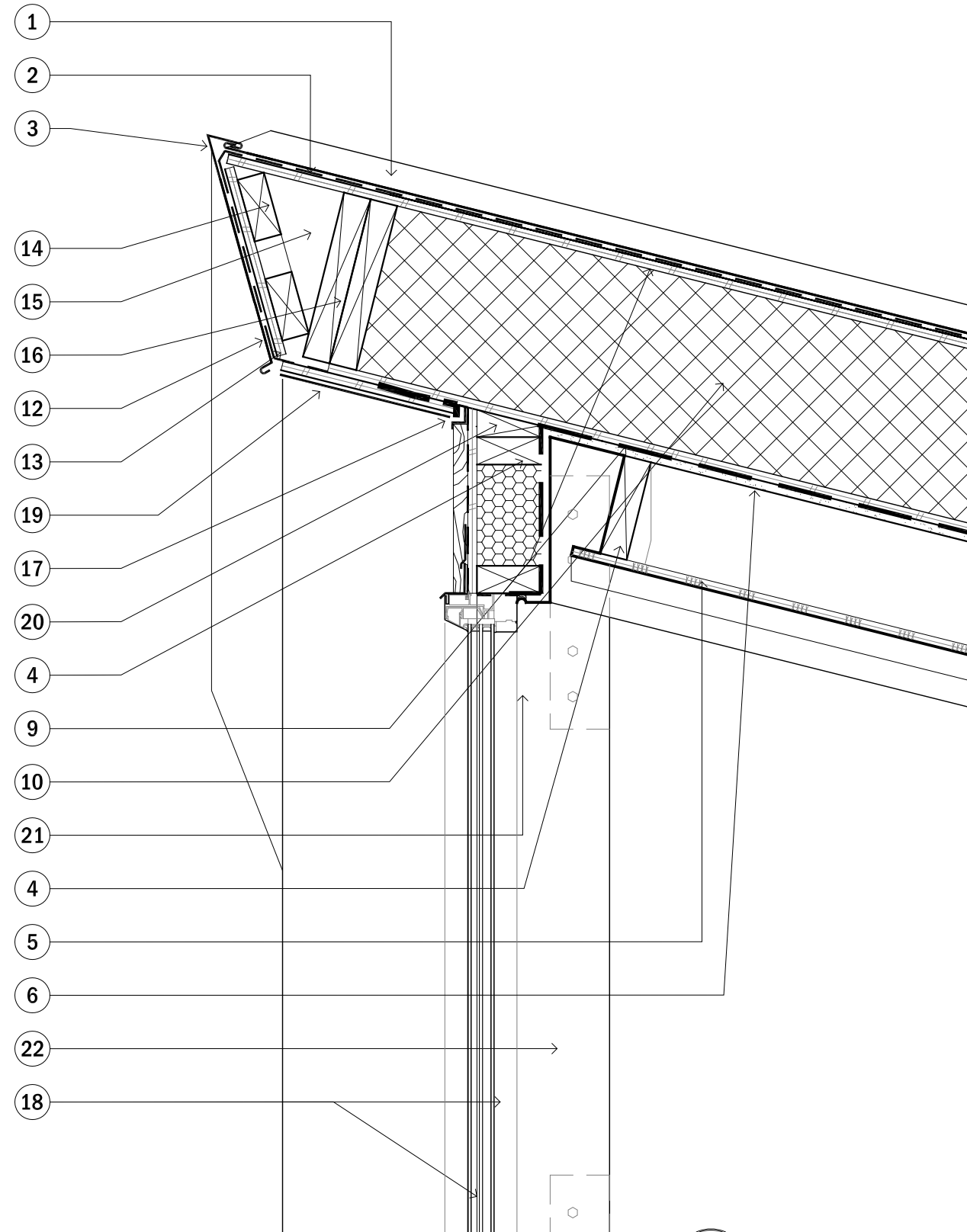


0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

ROOF DETAIL - EAST

A5-08
SCALE: 1 1/2" = 1'-0"



- 1 STANDING SEAM GALVALUME ROOFING
- 2 WATER, AIR, VAPOR & ICE BARRIER
- 3 CONTINUOUS GALVALUME METAL FLASHING
- 4 2"x8" NOM. WOOD FRAMING FOR DROPPED CEILING PANEL
- 5 1/2" STRAW BOARD CEILING PANELS
- 6 1/2" GYPSUM BOARD THERMAL BARRIER SHEATHING & INSULATION PANEL (SIP)
- 9 1/2" OSB
- 10 9 1/4" RIGID INSULATION
- 9 1/2" OSB
- 12 GALVALUME METAL FASCIA
- 13 1/2" OSB BACKER BOARD
- 14 2"x4" NOM. WOOD BLOCKING
- 15 2" x 10" NOM. WOOD BLOCKING CUT TO PROFILE @ 24" O.C. SEE A5-15
- 16 2"x10" NOM. WOOD BLOCKING
- 17 ALUMINUM MULLION CAP
- 18 3/4" TRANSLUCENT GLAZING
- 19 GALVALUME SOFFIT.
- 20 WOOD SHIMS
- 21 BLIND KNIFE STEEL PLATE CONNECTION
- 22 1 3/4"x11 7/8" LVL RAFTER AND COLUMN
1/2" PLYWOOD SPACER
1 3/4"x11 7/8" LVL RAFTER AND COLUMN

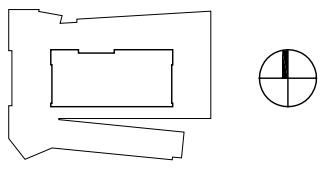
1
A5-09 ROOF CONNECTION DETAIL AT KITCHEN SOFFIT
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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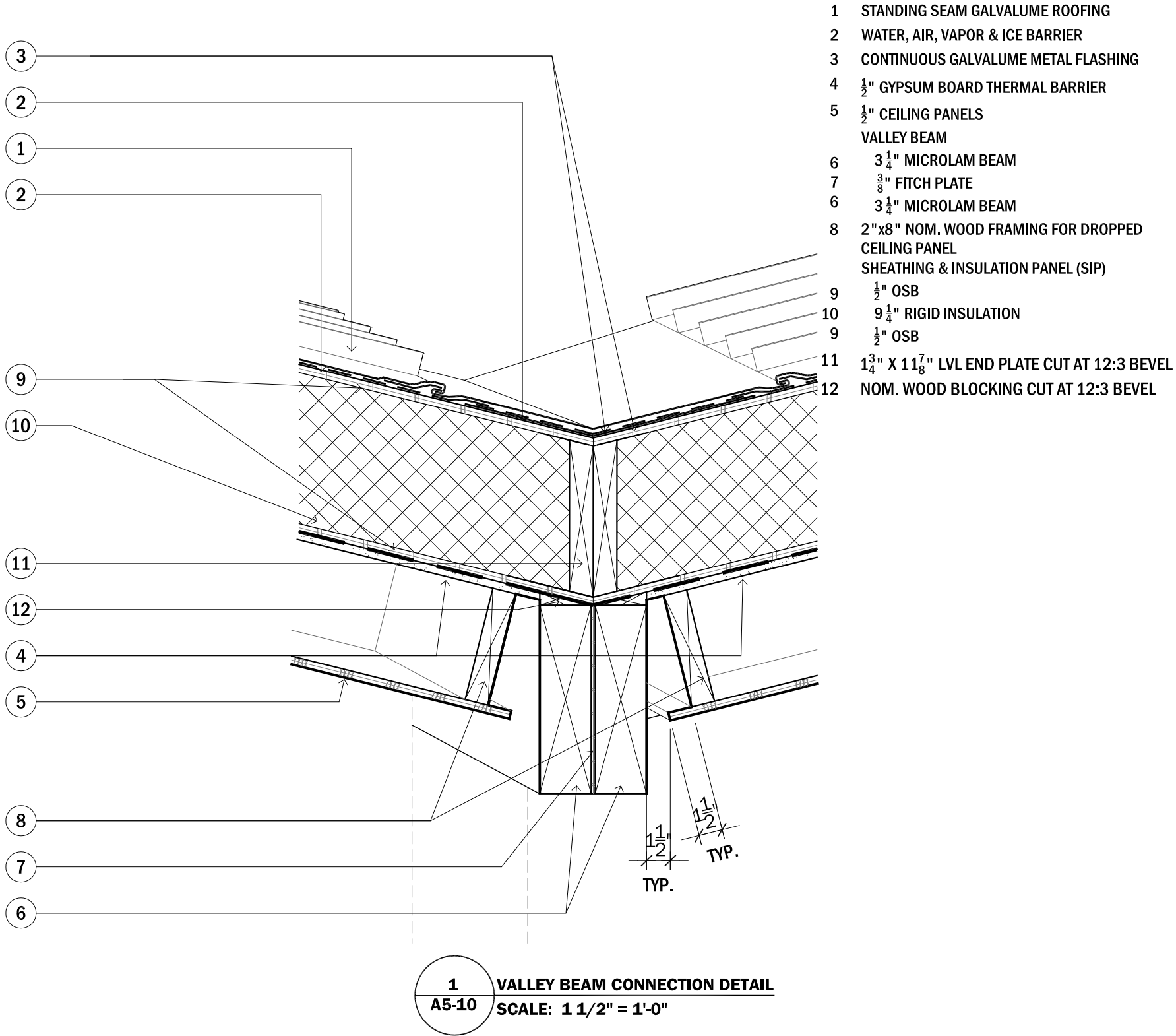
0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

ROOF DETAIL
NORTH AT KITCHEN

A5-09

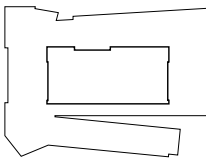
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
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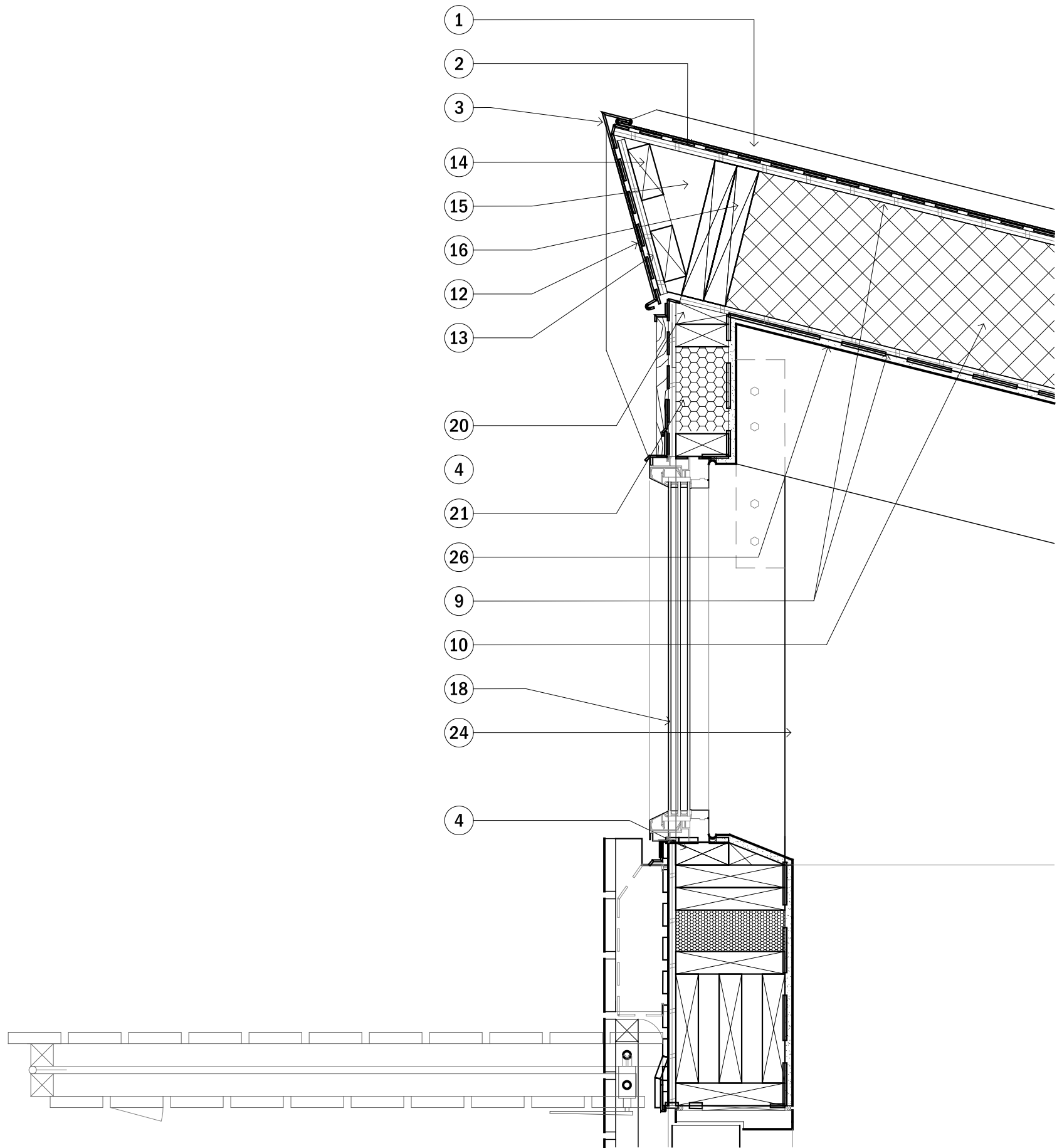


0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

ROOF DETAIL -
VALLEY BEAM

A5-10
SCALE: 1 1/2" = 1'-0"



- 1 STANDING SEAM GALVALUME ROOFING
- 2 WATER, AIR, VAPOR & ICE BARRIER
- 3 CONTINUOUS GALVALUME METAL FLASHING
- 9 1/2" OSB
- 10 9 1/4" RIGID INSULATION
- 12 GALVALUME METAL FASCIA
- 13 1/2" PLYWOOD BACKING FOR METAL FASCIA
- 14 2"x4" NOM. WOOD BLOCKING
- 15 2" x 10" NOM. WOOD BLOCKING CUT TO PROFILE @ 24" O.C. SEE A5-15
- 16 1 3/4"x9 1/4" LVL PLATE IN SIP ASSEMBLY
- 18 TRANSLUCENT GLAZING
- 20 2"x4" NOM. WOOD BEVEL AND BLOCKING
- 21 BLIND STEEL PLATE CONNECTION
- 24 1/2" GYPSUM WALL BOARD
- 26 1/2" GYPSUM BOARD THERMAL BARRIER

1

A5-11

MECHANICAL ROOM POLYCARBONATE DETAIL

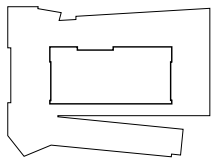
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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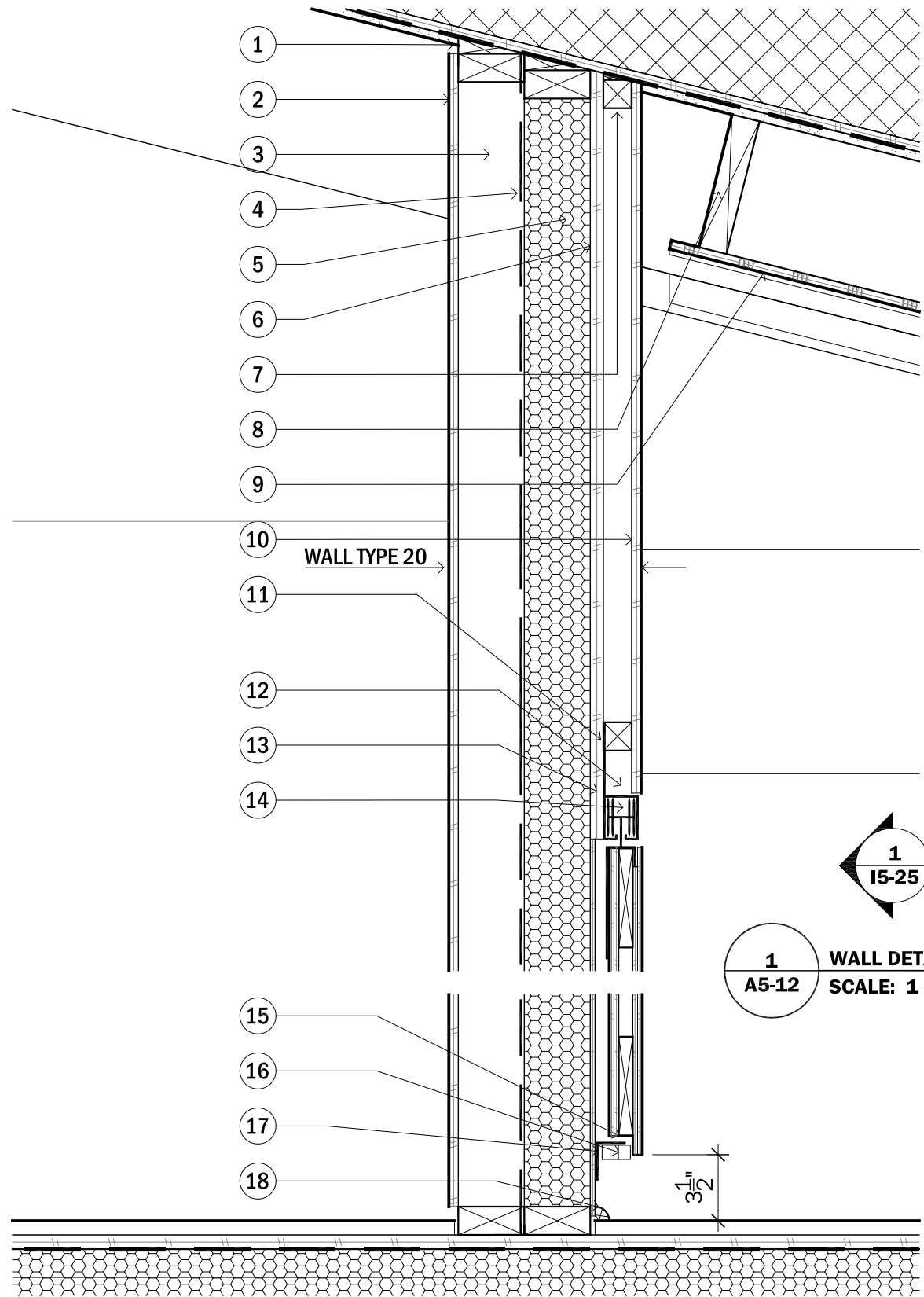
0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

NORTH MECH. DOOR
SECTION DETAIL

A5-11

SCALE: 1 1/2" = 1'-0"



- 1 WOOD SHIMS
- 2 1/2" GYPSUM WALL BOARD
- 3 2"x4" NOM. WOOD FRAME WALL
- 4 VAPOR BARRIER
- 5 2"x4" NOM. WOOD FRAME WALL WITH BLOWN IN INSULATION
- 6 3/4" PLYWOOD
- 7 2"x2" NOM. WOOD BLOCKING
- 8 2"x8" NOM. WOOD BLOCKING
- 9 1/2" CEILING PANEL
- 10 1/2" FINISH WOOD VENEER
- 11 TRACK SYSTEM WALL CLIP
- 12 TROLLEY SYSTEM TRACK AND WHEELS
- 13 1/4" FINISH WOOD VENEER
- 14 SLIDING DOOR SYSTEM
 - 1/4" FINISH WOOD VENEER
 - 1/4" MDF
 - 1"x6" NOM. WOOD FRAME
 - 1/4" MDF
 - 1/4" FINISH WOOD VENEER
- 15 1" x 1" EXTRUDED ALUMINUM ANGLE
- 16 1 1/2" DIA. GUIDE WHEEL
- 17 2" x 1 1/2" EXTRUDED ALUMINUM ANGLE
- 18 QUARTER ROUND

1
15-25

1
A5-12 WALL DETAIL @ SLIDING DOOR
SCALE: 1 1/2" = 1'-0"

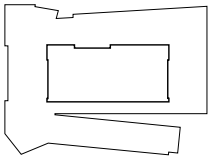
2
A5-12 BASE DETAIL @ SLIDING DOOR
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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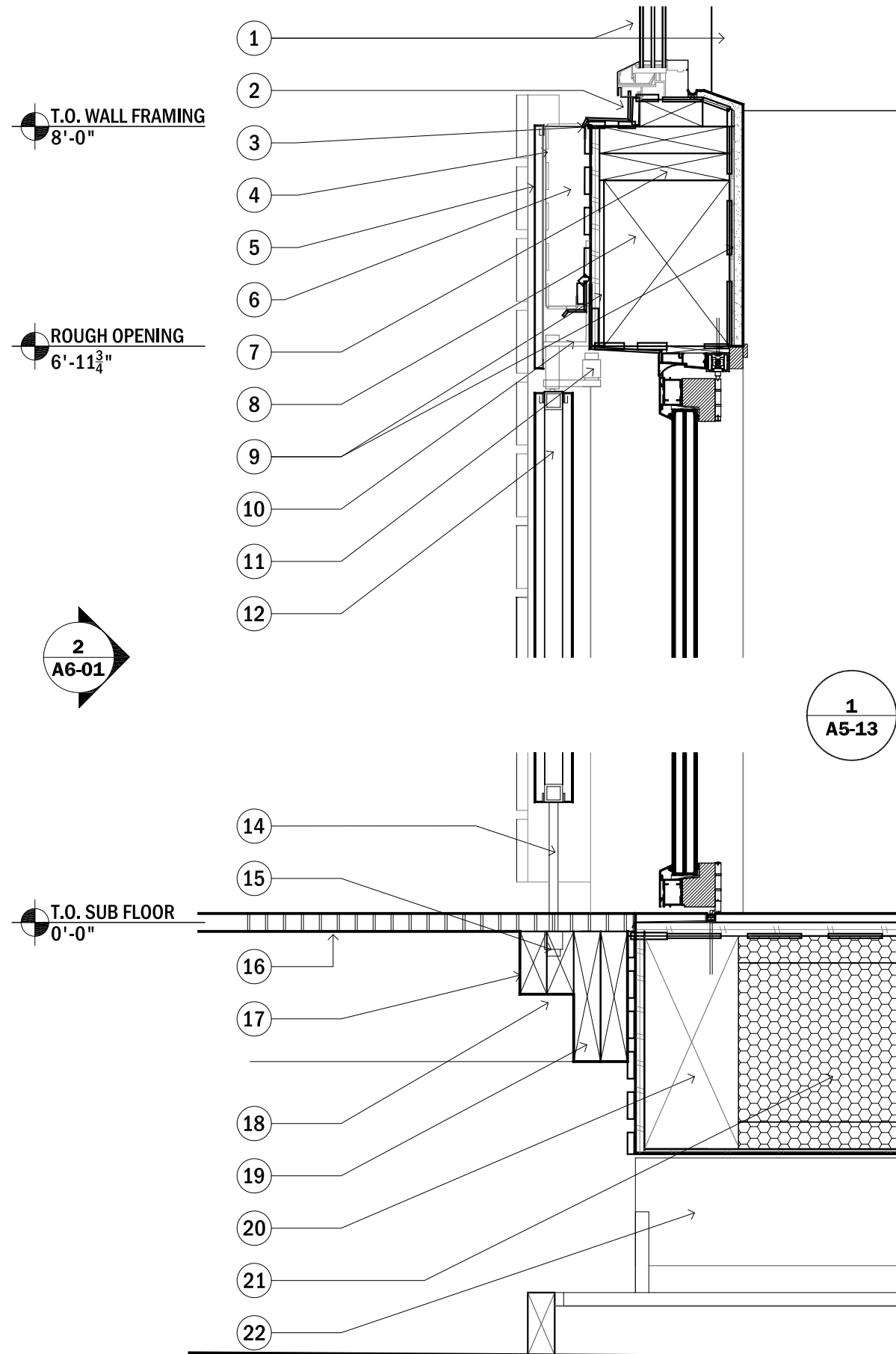
0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

INTERIOR WALL DETAIL
SECTION DETAILS

A5-12

SCALE: 1 1/2" = 1'-0"



- 1 $\frac{3}{4}$ " TRANSLUCENT GLAZING
- 2 CONTINUOUS METAL FLASHING
- 3 CONTINUOUS GALVALUME METAL FLASHING
- 4 BUG SCREENING
- 5 PERFORATED METAL PANEL
- 6 $1\frac{1}{2}$ " x $2\frac{1}{2}$ " WOOD NAILERS @ 24" O.C.
- 7 TOP OF HEADER
(2) 2x 8" NOM. TOP PLATES
- 8 DOOR HEADER
7"x $9\frac{1}{4}$ " LVL
- 9 $1\frac{1}{4}$ " PLYWOOD SPACER
- 10 EXTRUDED ALUMINUM ANGLE SUPPORT
CONNECTING TO LOUVRE PANEL AXEL
- 11 1" SQUARE EXTRUDED ALUMINUM BAR TO
OPERATE LOUVRE PANELS
- 12 PERFORATED METAL LOUVRE PANELS.
 $\frac{1}{8}$ " PERFORATED METAL PANEL
1" SQUARE ALUMINUM EXTRUDED TUBE
FRAME
 $\frac{1}{8}$ " PERFORATED METAL PANEL
- 14 VERTICAL AXLE FOR LOUVRE SYSTEM
- 15 NEOPRENE SLEEVED TUBE IN WOOD BLOCKING.
- 16 ALUMINUM METAL GRATE
- 17 2"x4" NOM. WOOD BLOCKING
- 18 BOLTED CONNECTION AT END OF AXLE
- 19 2"x8" NOM. DECK FRAMING SEE A1.11
- 20 PSL RIM
 $5\frac{1}{4}$ "x $11\frac{7}{8}$ " PSL RIM BOARD
- 21 FLOOR SYSTEM.
 $\frac{1}{4}$ " PLYWOOD SHEATHING
 $11\frac{7}{8}$ " TJI FRAMING W/ WOOD BLOCKING
BLOWN IN INSULATION
 $\frac{3}{4}$ " PLYWOOD SHEATHING
VAPOR BARRIER
 $\frac{3}{4}$ " FINISH FLOORING
- 22 TEMP. FOUNDATION AT MOD CONNECTIONS
STEEL PLATE FOUNDATION PAD WITH
6"x6" NOM. WOOD TIMBER

2 DOOR SILL DETAIL
A5-13 SCALE: 1 1/2" = 1'-0"

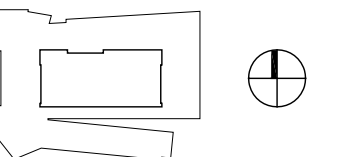
1 DOOR HEAD DETAIL
A5-13 SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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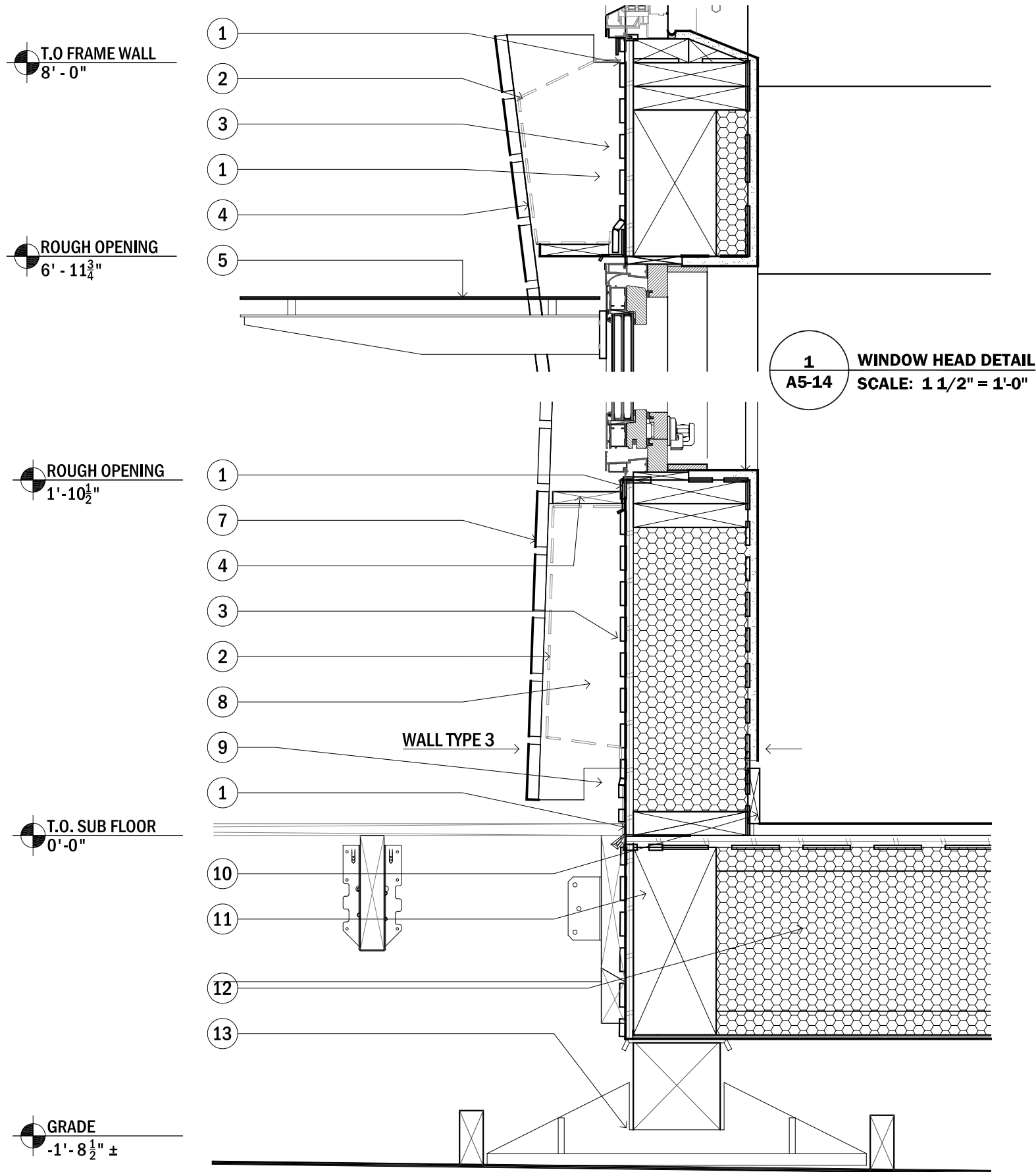
0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

WEST ELEVATION SECTION DETAILS

A5-13

SCALE: 1 1/2" = 1'-0"



- 1 CONTINUOUS METAL FLASHING
- 2 INSECT SCREEN
- 3 BUILDING WRAP
- 4 CONTINUOUS TREATED WOOD SHIELD PAINTED BLACK AND PITCHED TO DRAIN
- 6 $\frac{5}{8}$ " GWB RETURN. TYP FOR ALL WINDOWS.
- 7 1"x4" NOM. SEALED WOOD RAINSCREEN BOARDS
- 8 RAINSCREEN NAILERS A5.09
- 9 2"x2" AREA REMOVED FROM NAILERS AT MODULE CONNECTIONS TO ALLOW FOR CONTINUOUS FLASHING OVERLAP.
- 10 1"x4" NOM. WOOD BASE BOARD
- 11 PSL RIM
 $\frac{5}{4}$ "x $1\frac{7}{8}$ " PSL RIM BOARD
- 12 FLOOR SYSTEM.
 $\frac{1}{4}$ " PLYWOOD SHEATHING
11 $\frac{7}{8}$ " TJI FRAMING W/ WOOD BLOCKING BLOWN IN INSULATION
 $\frac{3}{4}$ " PLYWOOD SHEATHING
VAPOR BARRIER
 $\frac{3}{4}$ " FINISH FLOORING
- 13 TEMP. FOUNDATION AT MOD CONNECTIONS
STEEL PLATE FOUNDATION PAD WITH 6"x6" NOM. WOOD TIMBER

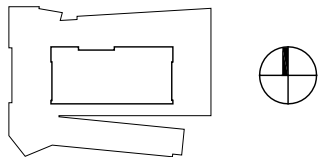
2 WINDOW SILL DETAIL
A5-14 SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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REVISION HISTORY

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0 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

WINDOW HEAD AND SILL SECTION DETAILS

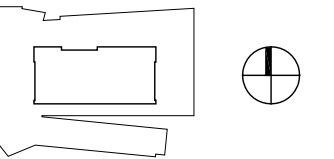
A5-14
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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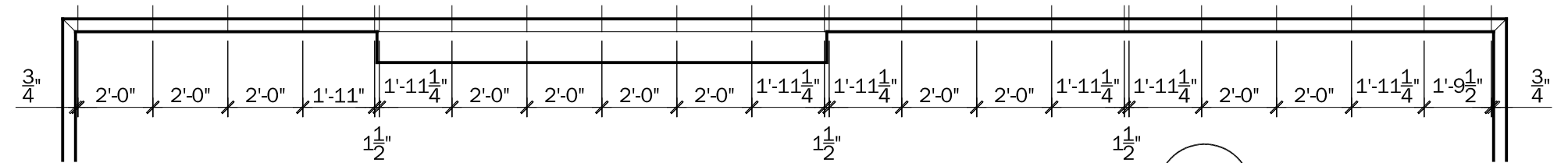
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

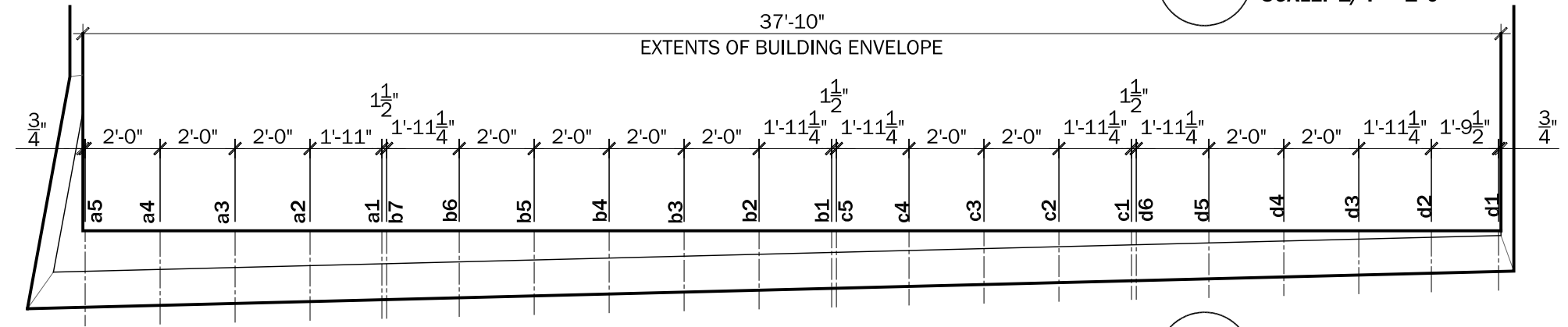
ROOF PROFILE
SECTION DETAILS

A5-15

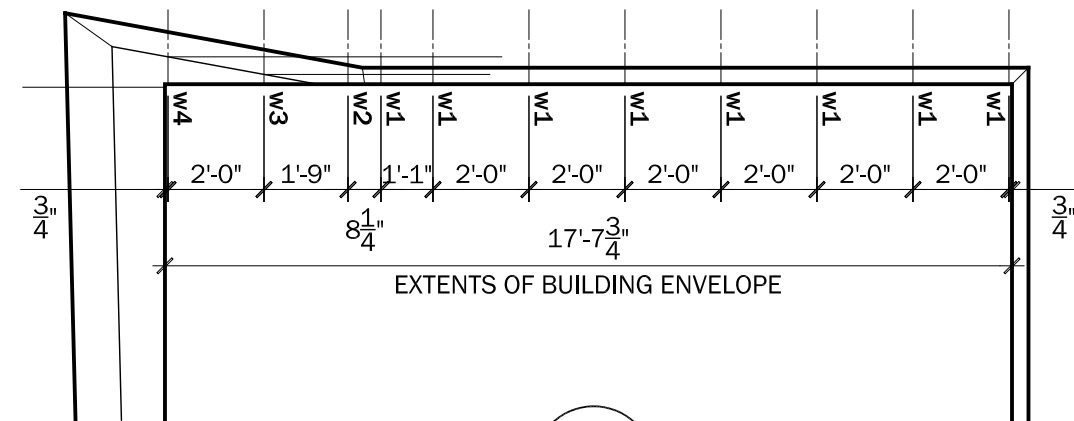
SCALE: 1 1/4" = 1'-0"



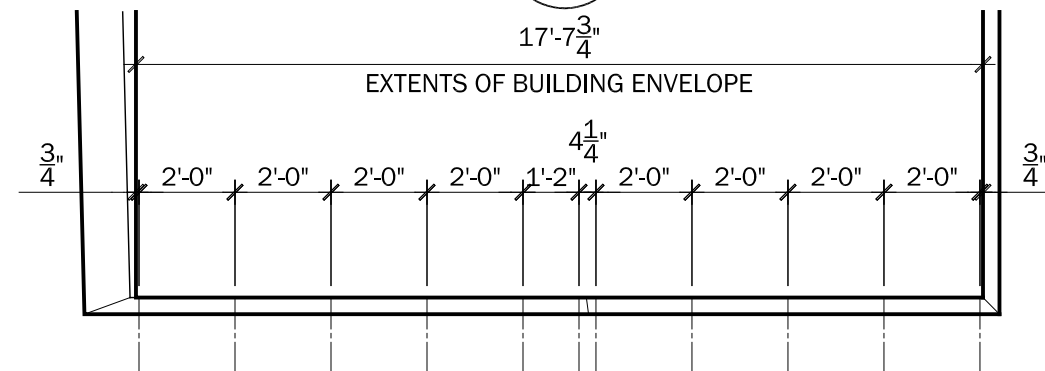
1
A5-15 NORTH SOFFIT REFLECTED PLAN
SCALE: 1/4" = 1'-0"



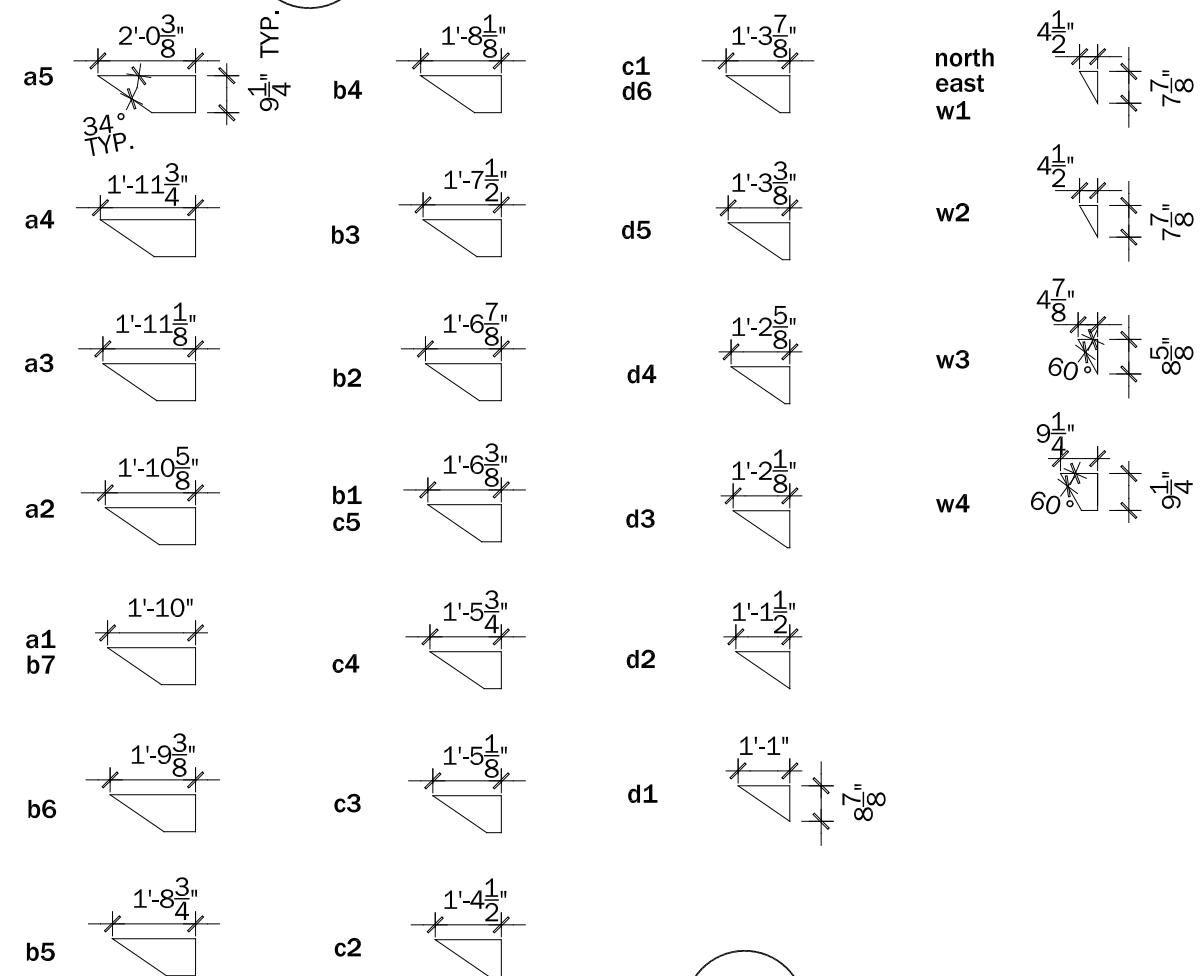
2
A5-15 SOUTH SOFFIT REFLECTED PLAN
SCALE: 1/4" = 1'-0"



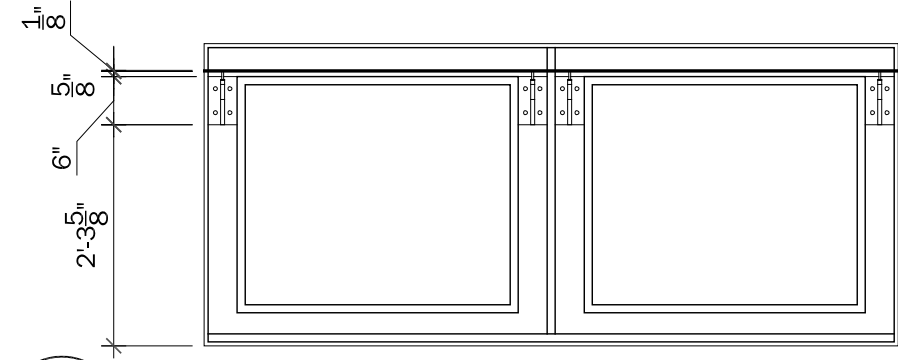
3
A5-15 WEST SOFFIT REFLECTED PLAN
SCALE: 1/4" = 1'-0"



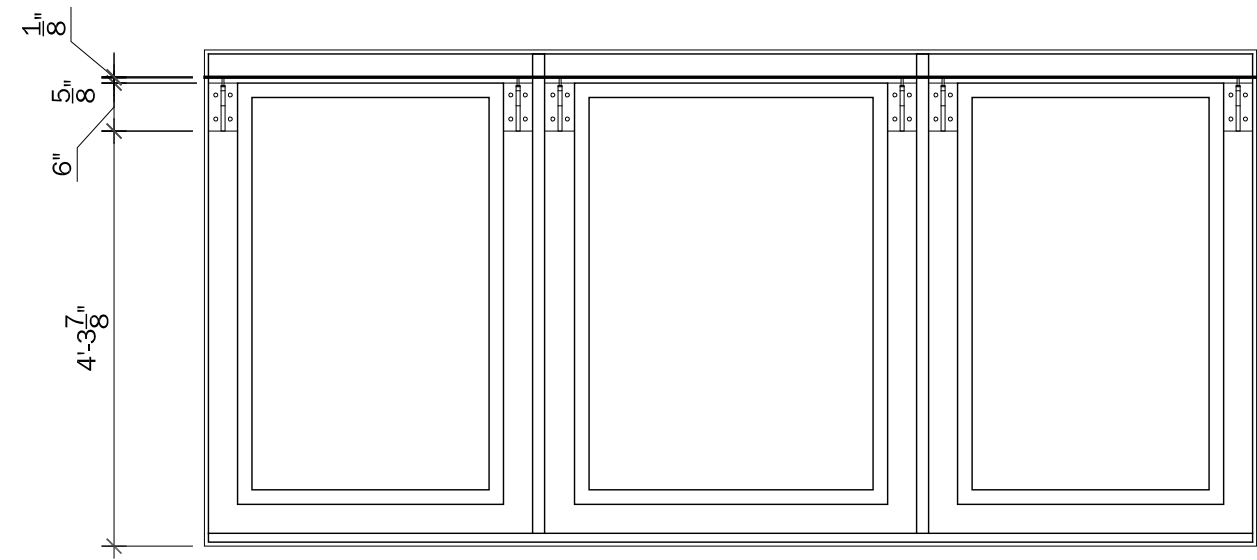
4
A5-15 EAST SOFFIT REFLECTED PLAN
SCALE: 1/4" = 1'-0"



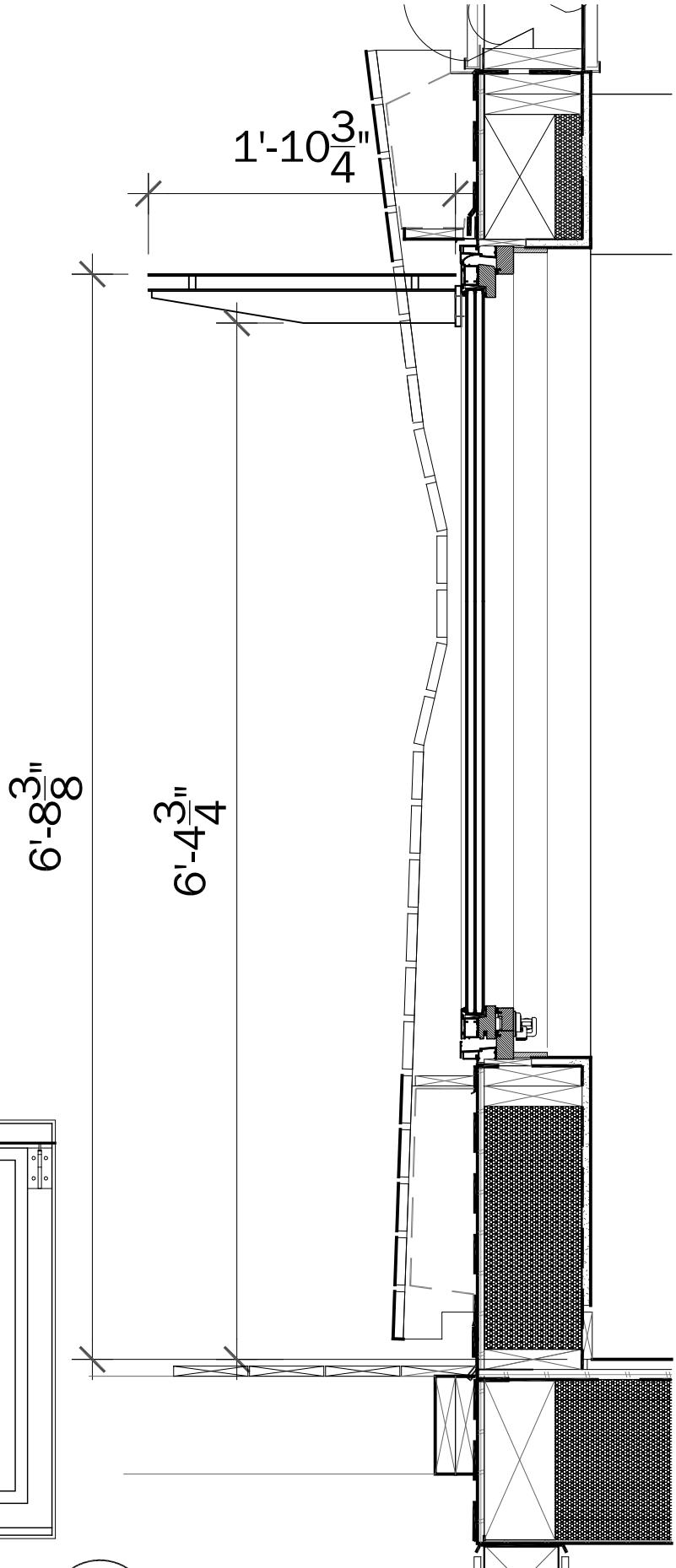
5
A5-15 SOFFIT BLOCKING PROFILE
SCALE: 1/4" = 1'-0"



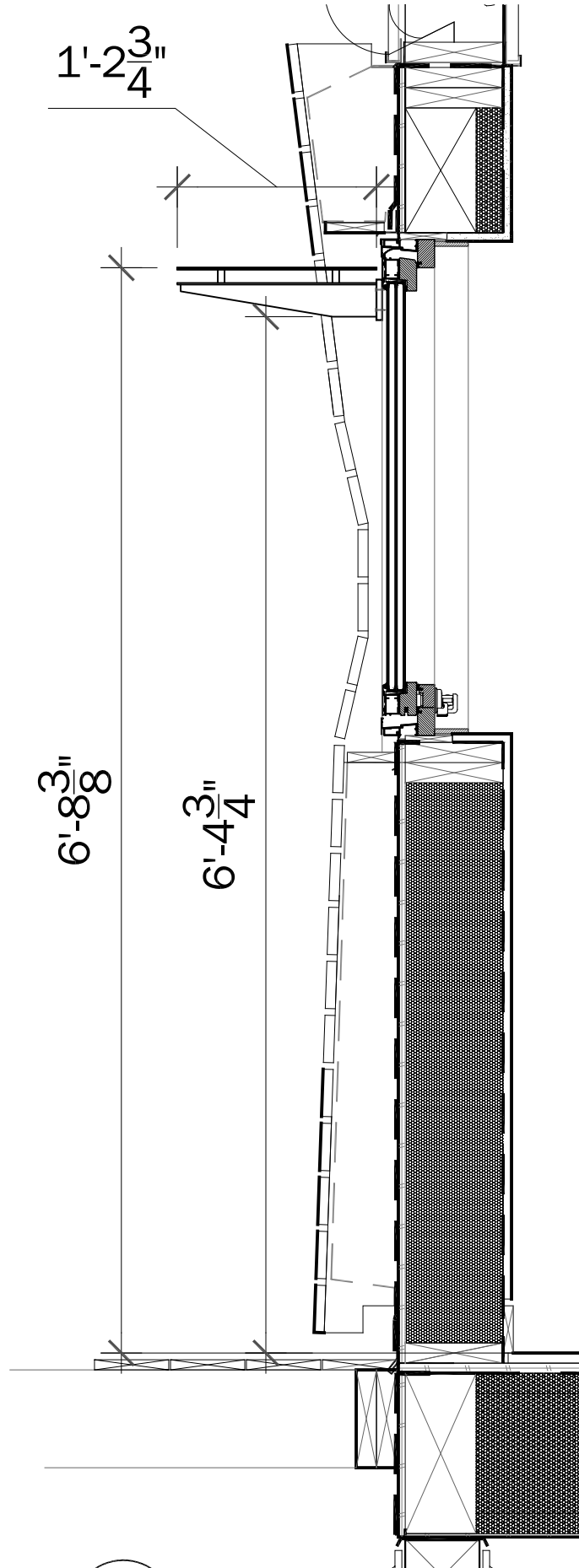
1 LOUVER FRAME ELEVATION
A5-16 SCALE: 1/2" = 1'-0"



2 LOUVER FRAME ELEVATION
A5-16 SCALE: 1/4" = 1'-0"



3 BEDROOM WINDOW LOUVER DETAIL
A5-16 SCALE: 1 1/2" = 1'-0"



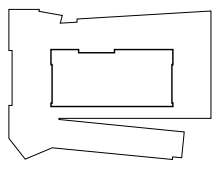
4 LIVING ROOM WINDOW LOUVER DETAIL
A5-16 SCALE: 1" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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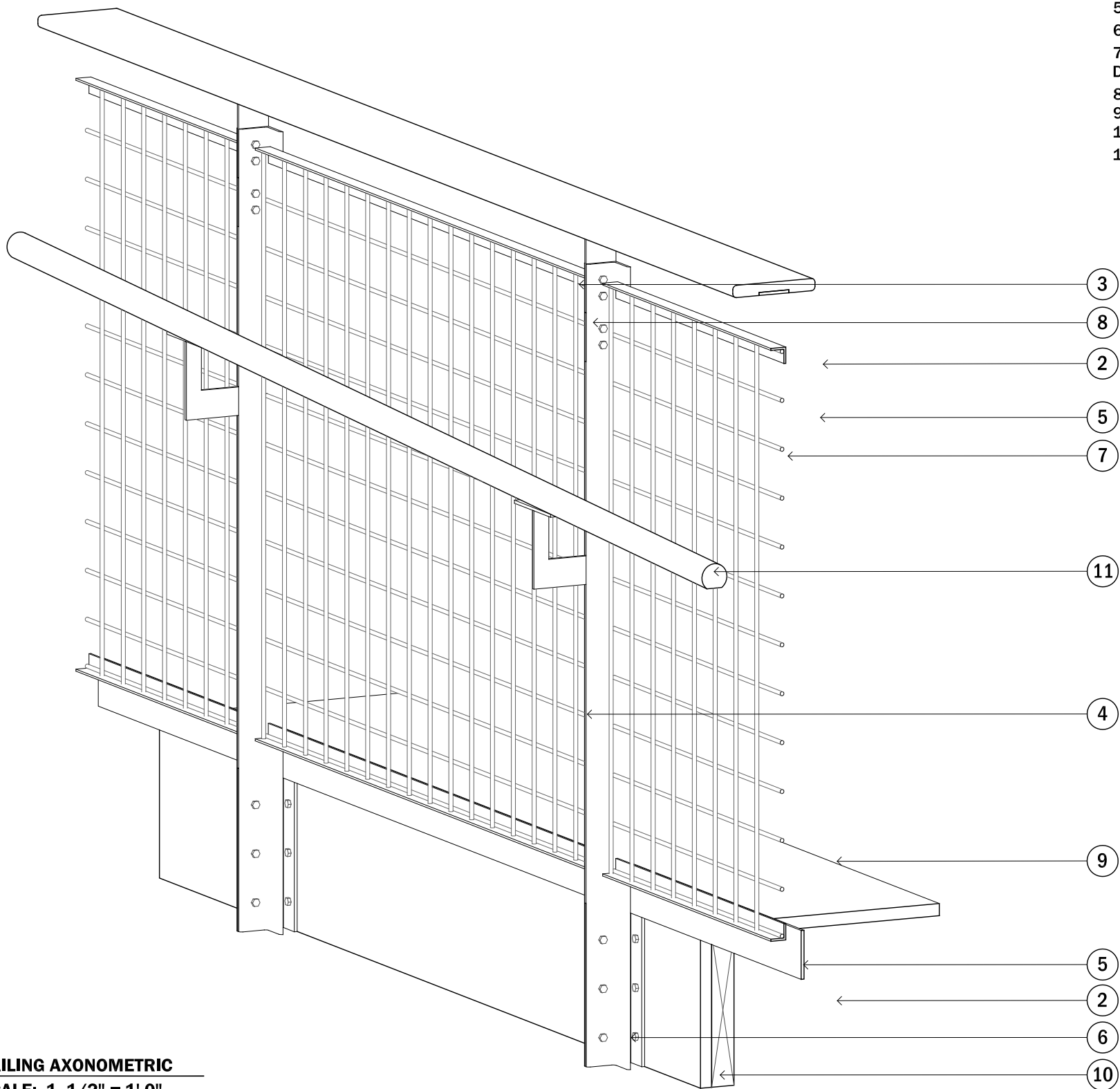
VARIES

PROJECT STATUS: CD
SHEET NAME:

LOUVER DETAILS

A5-16

SCALE: VARIES



- 1. WOOD GUARD RAIL (1" X 6" NOMINAL)
- 2. $\frac{3}{16}$ " STEEL PLATE
- 3. T5 X 5 X $\frac{3}{16}$ " GALVANIZED STEEL T-BAR
- 4. L2 X 2 X $\frac{3}{16}$ " GALVANIZED STEEL ANGLE
- 5. L1 X 1 X $\frac{1}{8}$ " GALVANIZED STEEL ANGLE
- 6. T3 X 3 X $\frac{3}{16}$ " GALVANIZED STEEL T-BAR
- 7. GALVANIZED WELDED WIRE MESH - $\frac{1}{4}$ " DIAMETER, 3" SQUARE GRID
- 8. $\frac{3}{8}$ " DIAMETER HEX BOLT/MATING SCREW
- 9. DECK BOARDS (1" X VARIES)
- 10. 2" X 10" NOMINAL DECK JOIST
- 11. 1 $\frac{1}{2}$ " DIAMETER PAPERSTONE HAND RAIL

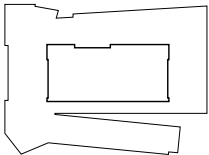
1 RAILING AXONOMETRIC
A5-18 SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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VARIES

PROJECT STATUS: CD
SHEET NAME:

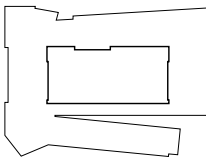
DECK RAILING MATERIALS



CLIENT NAME: DOE/NREL
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VARIES

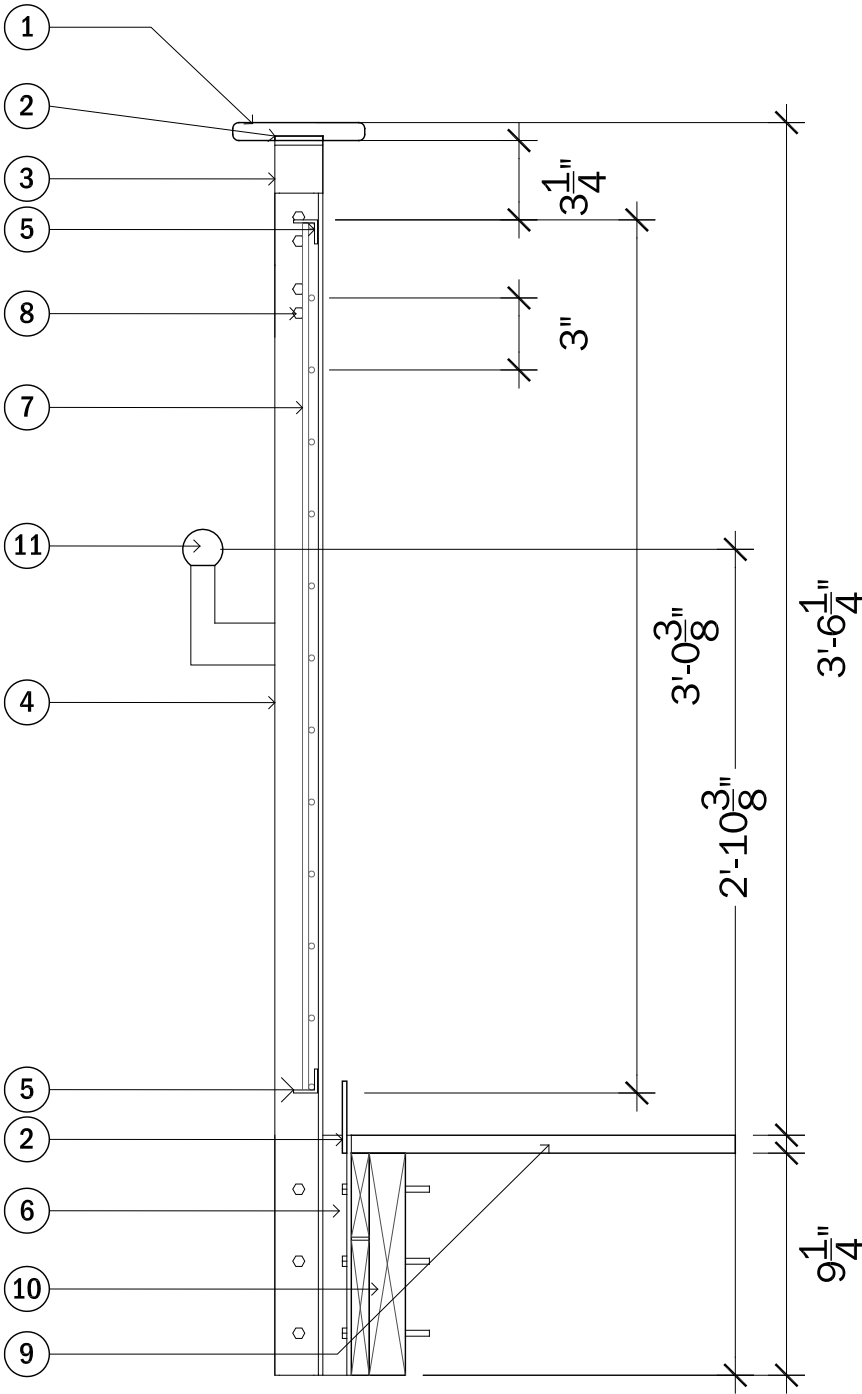
PROJECT STATUS: CD
SHEET NAME:

DECK RAILING
DETAILS

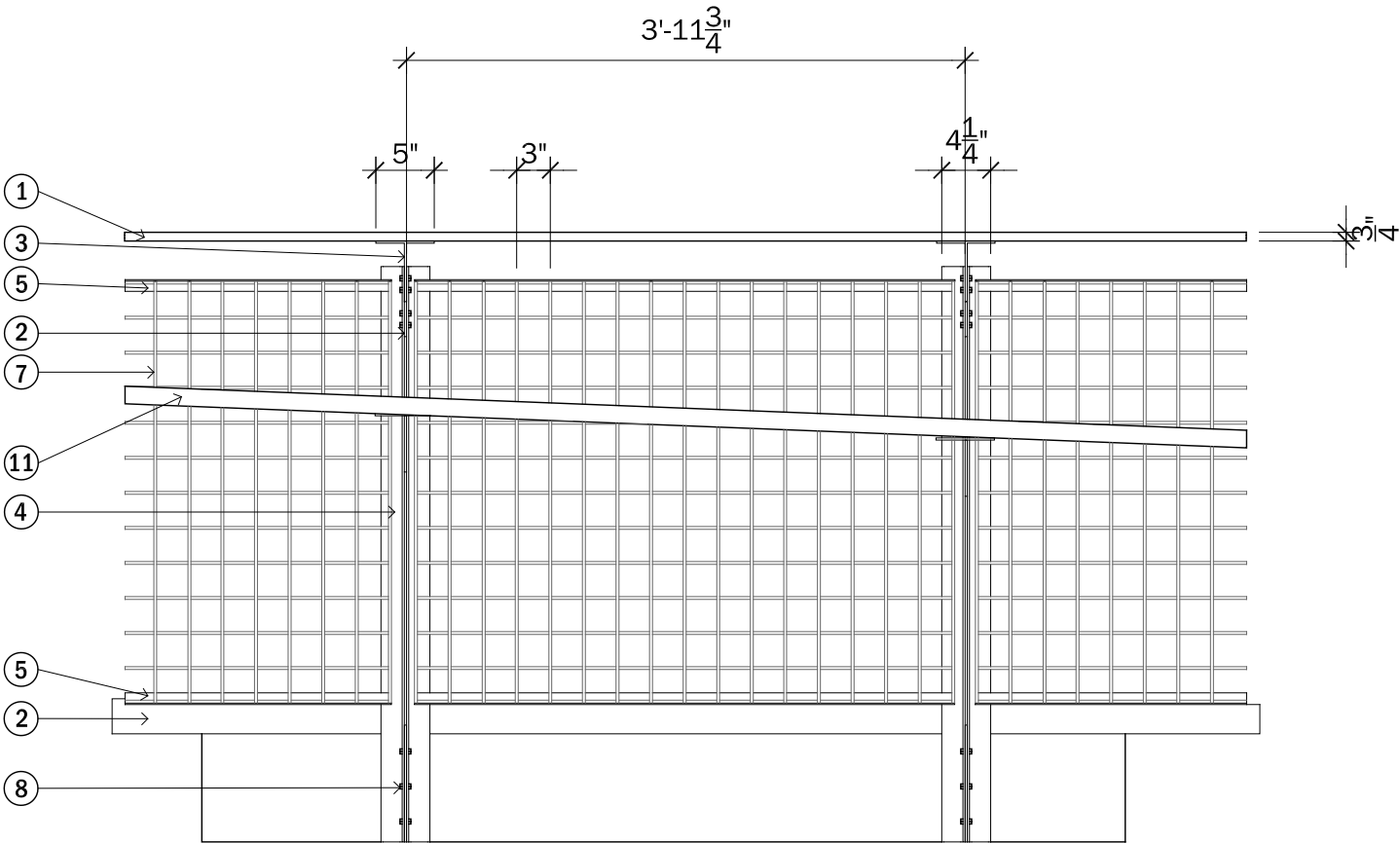
A5-19

SCALE: VARIES

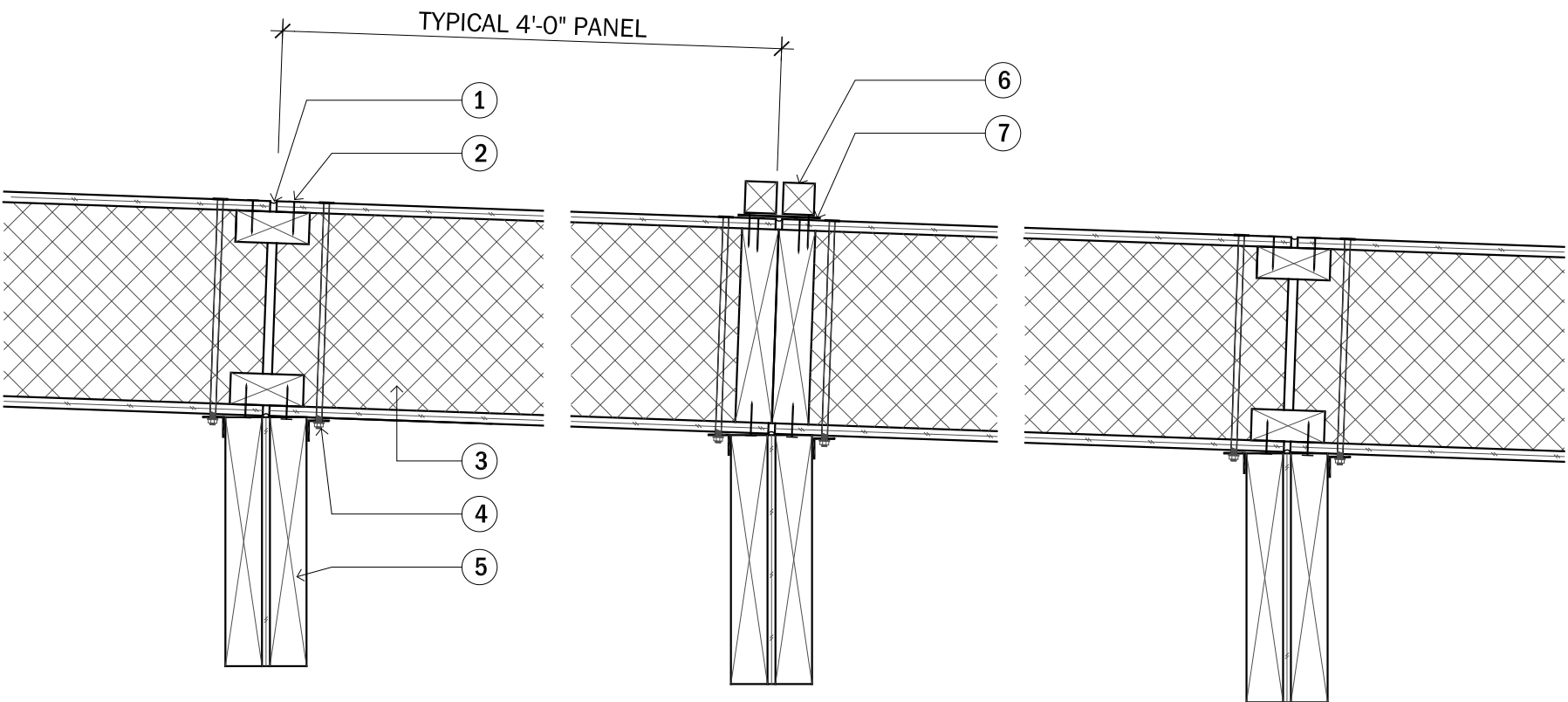
1. WOOD GUARD RAIL (1" X 6" NOMINAL)
2. $\frac{3}{16}$ " STEEL PLATE
3. T5 X 5 X $\frac{3}{16}$ " GALVANIZED STEEL T-BAR
4. L2 X 2 X $\frac{3}{16}$ " GALVANIZED STEEL ANGLE
5. L1 X 1 X $\frac{1}{8}$ " GALVANIZED STEEL ANGLE
6. T3 X 3 X $\frac{3}{16}$ " GALVANIZED STEEL T-BAR
7. GALVANIZED WELDED WIRE MESH - $\frac{1}{4}$ " DIAMETER, 3" SQUARE GRID
8. $\frac{3}{8}$ " DIAMETER HEX BOLT/MATING SCREW
9. DECK BOARDS (1" X VARIES)
10. 2" X 10" NOMINAL DECK JOIST
11. 1 $\frac{1}{2}$ " DIAMETER PAPERSTONE HAND RAIL



1 RAILING SECTION
A5-19 SCALE: 1 1/2" = 1'-0"



2 RAILING ELEVATION
A5-19 SCALE: 3/4" = 1'-0"



1
A5-20 **TYPICAL SIP CONNECTION DETAIL**
SCALE: 1 - 1/2" = 1'-0"

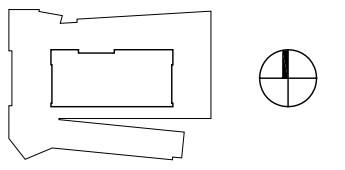
1. MANUFACTURER RECOMMENDED GAP AT JOINTS $\frac{5}{16}$ " WITH EXPANDABLE SEALANT
 2. PANELS CONNECTED TO I-JOIST SPLICE
 3. $\frac{1}{4}$ " THREADED ROD CONNECTING SIPS TO PRIMARY STRUCTURE STAGGERED EVERY 2'-0"
 4. $1\frac{1}{2}$ " SLEEVED STEEL ANGLE CLIP TO CONNECT SIPS TO PRIMARY STRUCTURE
 5. RAFTER
- CONNECTION AT SEAM
6. 2x2 NOM WOOD BLOCKING TO COVER JOINT. SEAL JOINTS AND COVER WITH GALVALUM CAP TO CONNECT ROOF PANELS
 7. METAL STRAP HOLDING PANELS TOGETHER



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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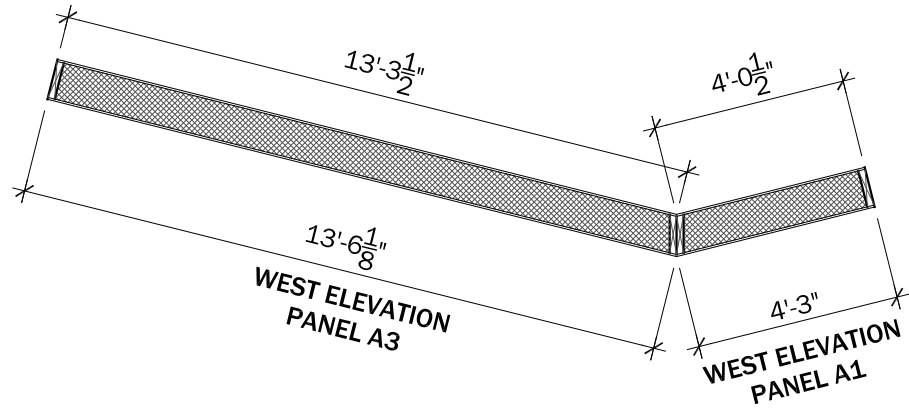
0 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

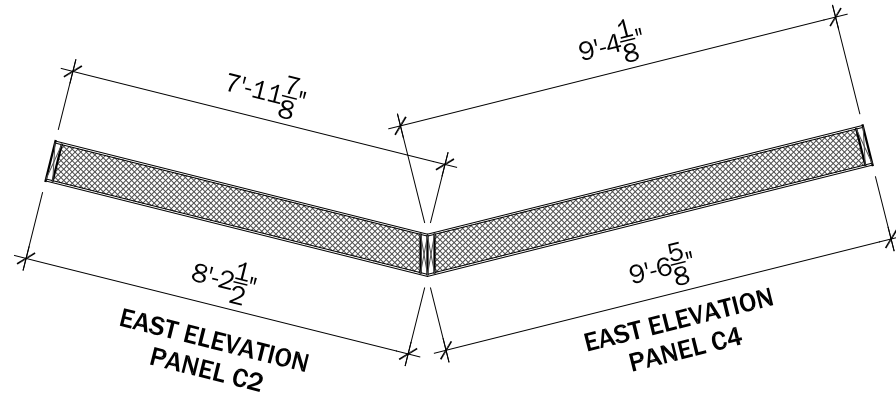
SIP DRAWINGS
TYPICAL SIP
CONNECTION

A5-20

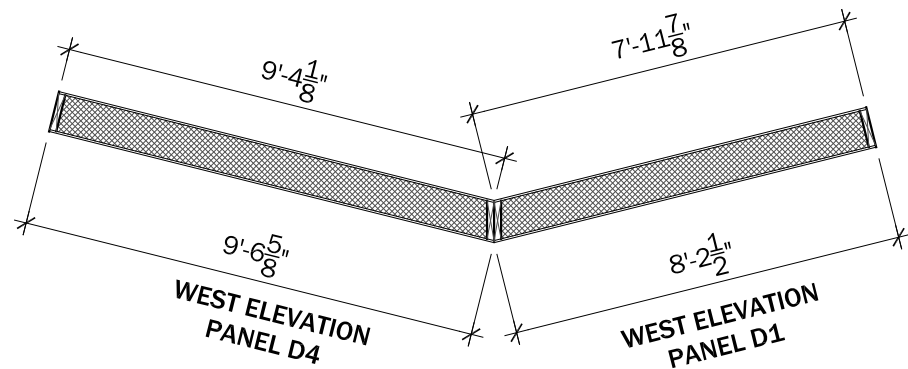
SCALE: 1 - 1/2" = 1'-0"



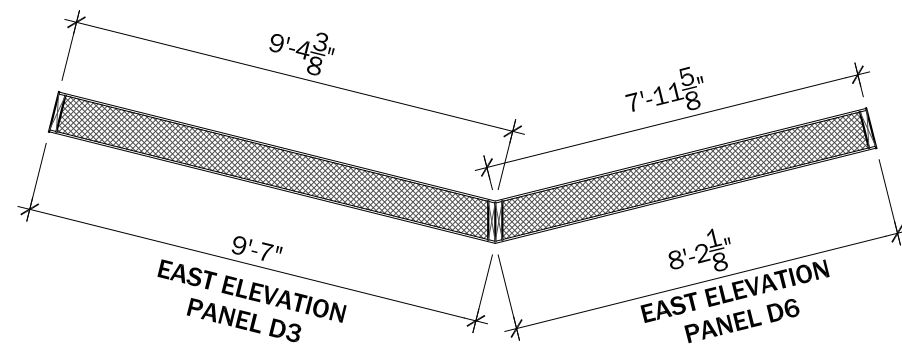
1
A5-21 SIP PANEL SECTION DETAIL - WEST
SCALE: 1/4" = 1'-0"



2
A5-21 SIP PANEL SECTION DETAIL - C MOD EAST
SCALE: 1/4" = 1'-0"



3
A5-21 SIP PANEL SECTION DETAIL - D MOD WEST
SCALE: 1/4" = 1'-0"



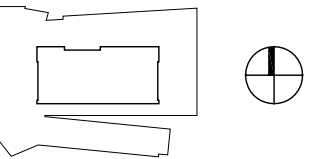
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A5-21 SIP PANEL SECTION DETAIL - EAST
SCALE: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

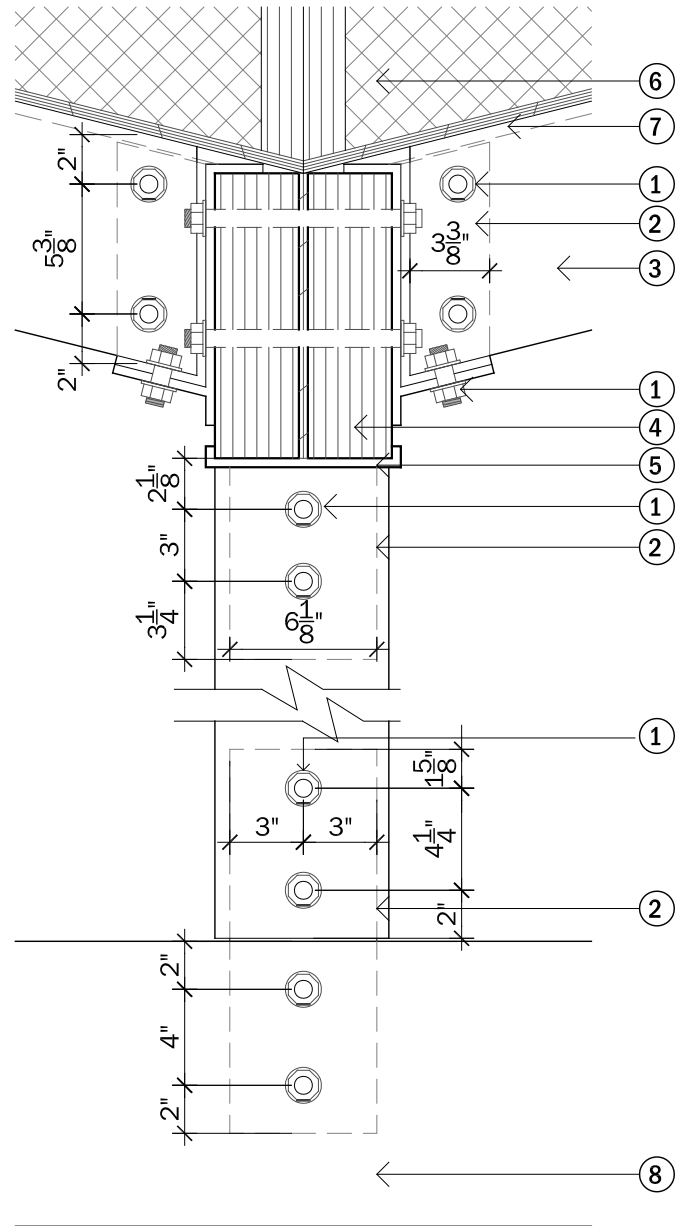
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: JAS



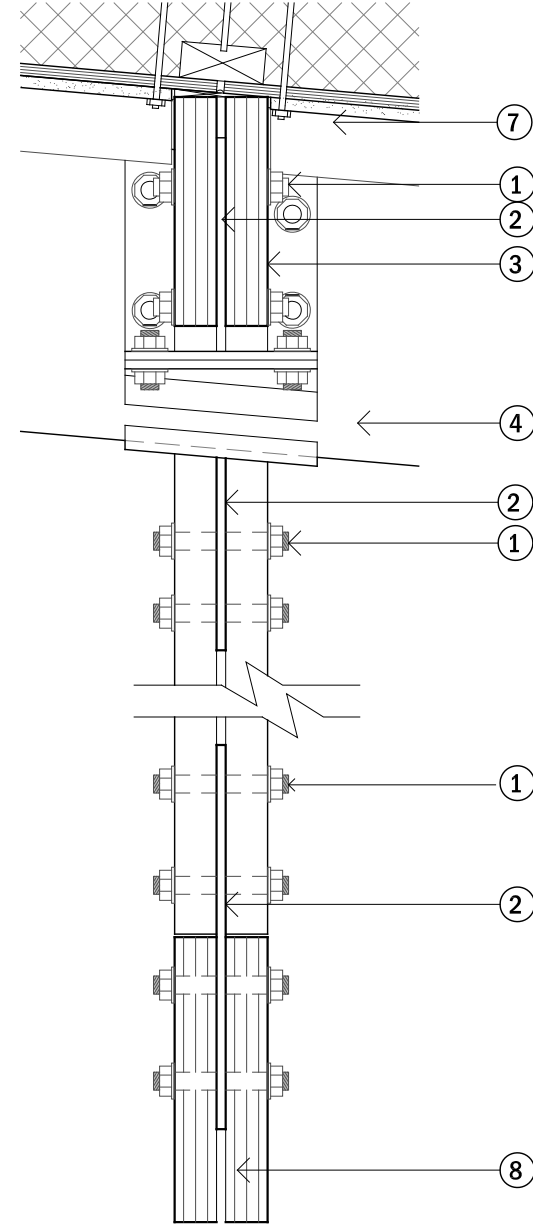
PROJECT STATUS: CD
SHEET NAME:

SIP DRAWINGS
SECTION DETAILS

A5-21
SCALE: 1/4" = 1'-0"



1
A5-22 **PLATE CONNECTION DETAIL**
SCALE: 1 1/2" = 1'-0"



2
A5-22 **PLATE CONNECTION DETAIL**
SCALE: 1 1/2" = 1'-0"

VALLEY AND MODULAR BEAM - KEYNOTES

1. 1/2" BOLT - PER STRUCTURAL CALCULATIONS
2. 3/8" STEEL CONNECTION PLATE SIZED TO STRUCTURAL REQUIREMENTS
3. 1 3/4" X 9 1/4" LVL @ 3/12 PITCH
4. 3 1/2" X 11 7/8" LVL VALLEY BEAM
5. 3/8" STEEL PLATE - VALLEY BEAM SUPPORT
6. SIP PANEL SUPPORTED BY LVL'S - SEE STRUCTURAL NARRATIVE
7. 1/2" DRYWALL ADHERED TO SIP - BEYOND
8. 1 3/4" X 11 7/8" LVL MOD BEAM
9. TENSION ROD BRACING - 3/8" TUBE STEEL
10. EXTERIOR WALL ASSEMBLY - VERIFY W/ A4.01 - A4.04
11. 1 3/4" X 7 1/4" LVL POST

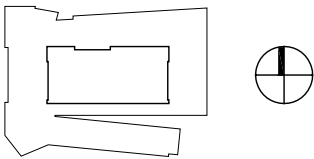
GENERAL: A5-20 & 5-21 FOR SIP DETAILS ABOVE
RAFTER, VALLEY AND POST CONDITIONS



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
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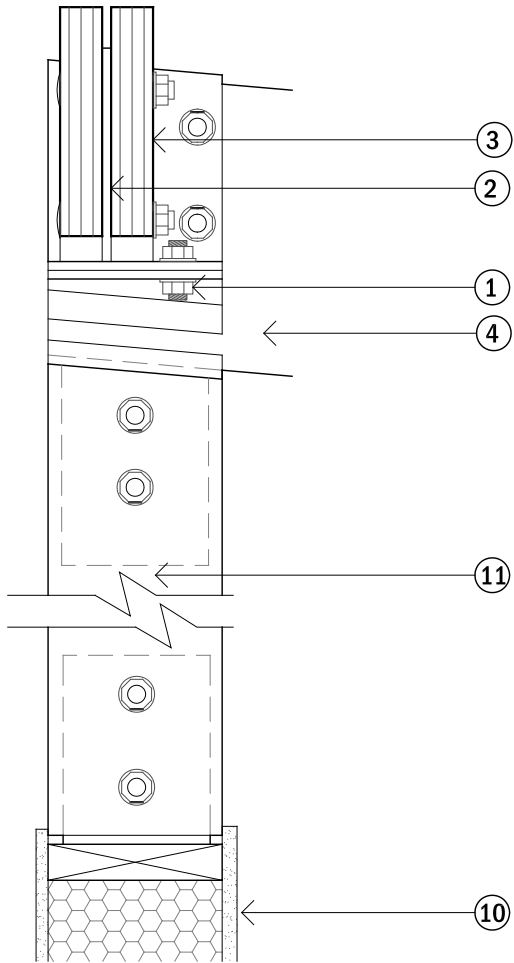
0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

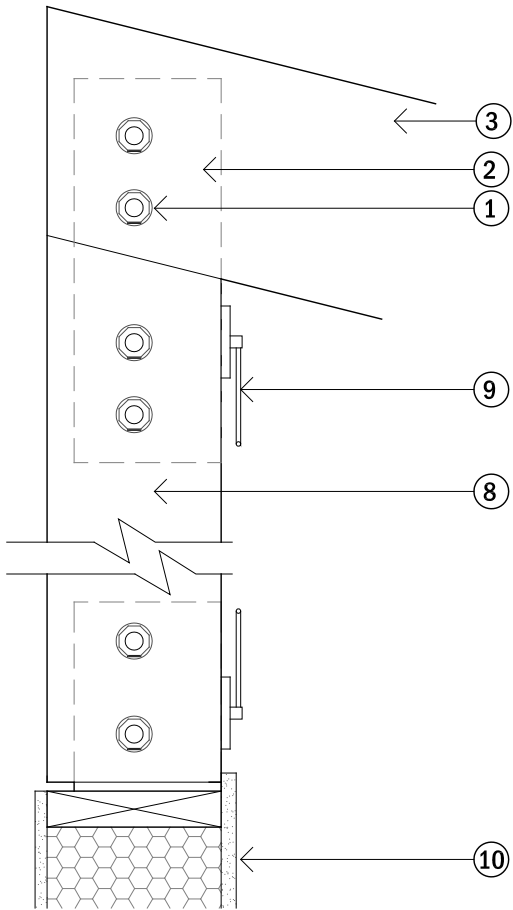
**VALLEY AND MOD
BEAM DETAILS**

A5-22

SCALE: 1 1/2" = 1'-0"



1 PLATE CONNECTION DETAIL
A5-23 SCALE: 1 1/2" = 1'-0"



2 PLATE CONNECTION DETAIL
A5-23 SCALE: 1 1/2" = 1'-0"

VALLEY AND MODULAR BEAM - KEYNOTES

- 1. 1/2" BOLT - PER STRUCTURAL CALCULATIONS
- 2. 3/8" STEEL CONNECTION PLATE SIZED TO STRUCTURAL REQUIREMENTS
- 3. 1 3/4" X 9 1/4" LVL @ 3/12 PITCH
- 4. 3 1/2" X 11 7/8" LVL VALLEY BEAM
- 5. 3/8" STEEL PLATE - VALLEY BEAM SUPPORT
- 6. SIP PANEL SUPPORTED BY LVL'S - SEE STRUCTURAL NARRATIVE
- 7. 1/2" DRYWALL ADHERED TO SIP - BEYOND
- 8. 1 3/4" X 11 7/8" LVL MOD BEAM
- 9. TENSION ROD BRACING - 3/8" TUBE STEEL
- 10. EXTERIOR WALL ASSEMBLY - VERIFY W/ A4.01 - A4.04
- 11. 1 3/4" X 7 1/4" LVL POST

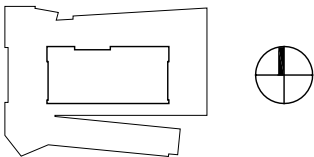
GENERAL: A5-20 & 5-21 FOR SIP DETAILS ABOVE RAFTER, VALLEY AND POST CONDITIONS



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

VALLEY AND MOD BEAM DETAILS

A5-23

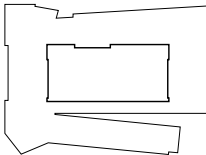
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CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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ISSUE DATE: 2009.06.02
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NTS

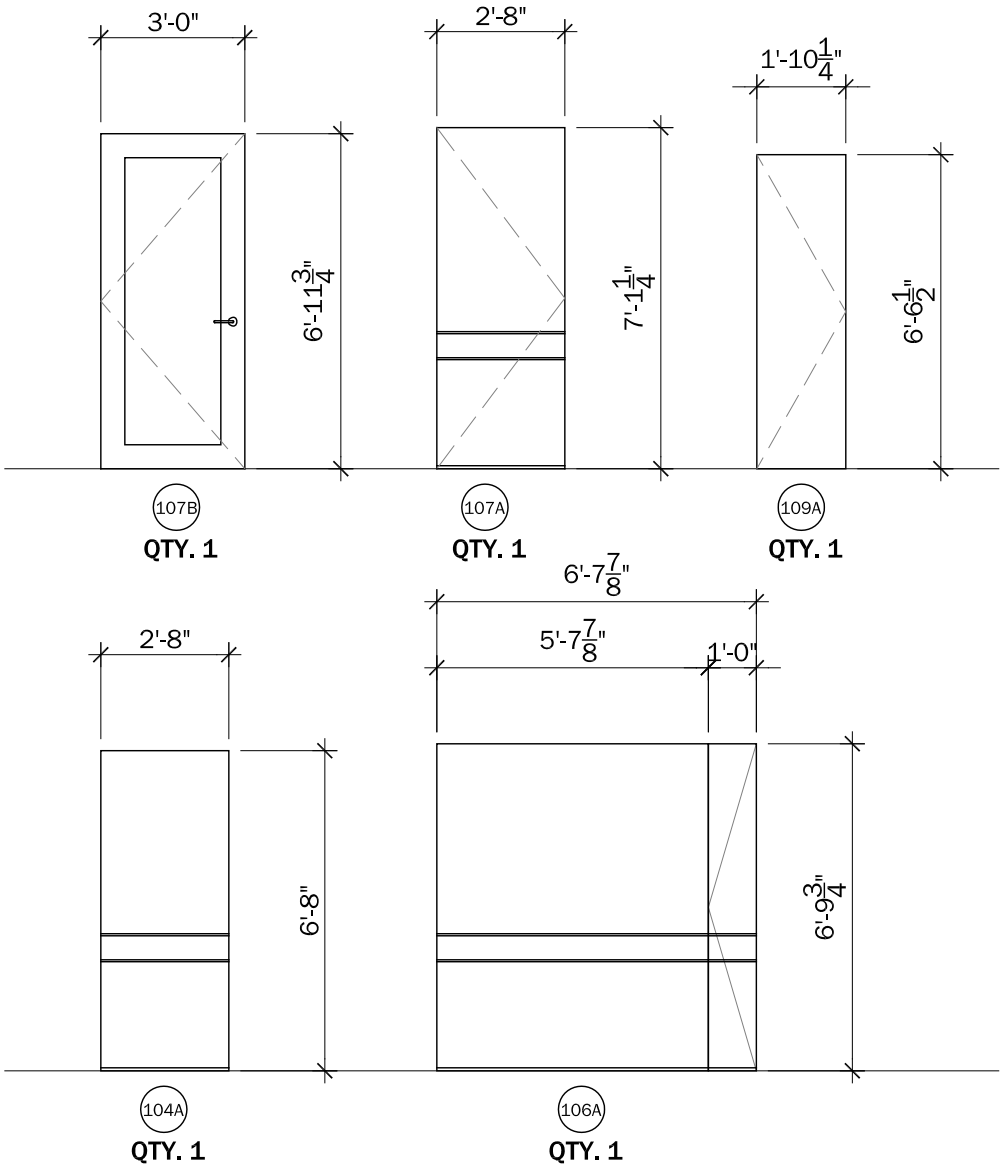
PROJECT STATUS: CD
SHEET NAME:

ROOM AND CABINETRY
FINISH SCHEDULE

A6-00

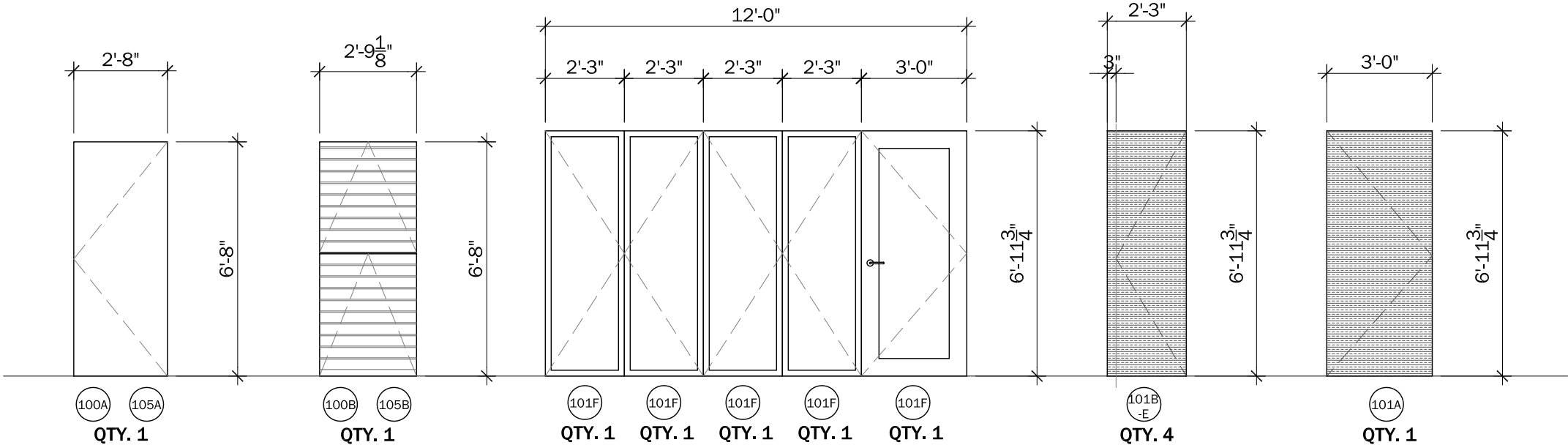
SCALE: NOT TO SCALE

Meltwater: UWM Carbon Neutral House Project										
The University of Wisconsin-Milwaukee Solar Decathlon 2009 Submittal										
Room Finish Schedule										
ROOM FINISH SCHEDULE										
ROOM NO	ROOM NAME	BASE	FLOOR	WALLS				TRIM &	CEILING	NOTES
				N	S	E	W	BACKSPLASH	MATL	
100	MECHANICAL	OTHER	OTHER	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	N/A	G.W.B.&PTD.	CEILING PAINTED SEMI-GLOSS EGGSHELL
101	DINNING ROOM	CHERRY	4" WOOD	CHERRY (STAINED)	G.W.B. (PTD EGGSHELL)	N/A	GLASS (NONE)	CHERRY (STAINED)	STRAWBOARD FRAMED OVER CONT. G.W.B	STRAWBOARD FRAMED BELOW DRYWALL
102	LIVING ROOM	CHERRY	4" WOOD	CHERRY (STAINED)	G.W.B. (PTD EGGSHELL) W DRYWALL PANELLING	N/A	N/A	CHERRY (STAINED)	STRAWBOARD FRAMED OVER CONT. G.W.B	STRAWBOARD FRAMED BELOW DRYWALL; SEE CABINETRY SCHEDULE FOR ENTERTAINMENT CENTER FINISHES
103	KITCHEN	CHERRY	4" WOOD	G.W.B. (AMERICAN CLAY FINISH)	N/A	G.W.B. (AMERICAN CLAY FINISH)	G.W.B. (AMERICAN CLAY FINISH)	PAPERSTONE BACKSPLASH	POLYCARBONATE	SEE CABINETRY SCHEDULE FOR CABINET FINISHES
104	LAUNDRY	MDF (PAINTED)	4" WOOD	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	N/A	G.W.B.&PTD.	MDF -WHITE PAINT FINISH; SEE CABINETRY SCHEDULE FOR SHELVE FINISHES
105	MECHANICAL	OTHER	OTHER	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	G.W.B. (PTD EGGSHELL)	N/A	G.W.B.&PTD.	
106	BATHROOM	TILE	TILE	GLASS TILE WAINSCOAT, METAL TILE CHAIR RAIL, G.W.B. ABOVE (AMERICAN CLAY FINISH)	GLASS TILE	GLASS TILE WAINSCOAT, METAL TILE CHAIR RAIL, G.W.B. ABOVE (AMERICAN CLAY FINISH)	GLASS TILE	TILE	TILE, G.W.B., PTD.	CEILING PTD S.G. EGGSHELL & CEILING SHOWER TO BE TILED; SEE CABINETRY SCHEDULE FOR CABINET FINISHES
107	HALL	CHERRY	4" WOOD	CHERRY (STAINED)	CHERRY (STAINED)	G.W.B. (PTD EGGSHELL)	N/A	CHERRY (STAINED)	STRAWBOARD FRAMED OVER CONT. G.W.B	STRAWBOARD FRAMED BELOW DRYWALL
108	BEDROOM	CHERRY	4" WOOD	CHERRY (STAINED)	G.W.B. (PTD EGGSHELL) W DRYWALL PANELLING	G.W.B. (PTD EGGSHELL) W DRYWALL PANELLING	N/A	CHERRY (STAINED)	STRAWBOARD FRAMED OVER CONT. G.W.B	STRAWBOARD FRAMED BELOW DRYWALL; SEE CABINETRY SCHEDULE FOR CABINET AND MURPHY BED FINISHES



DOOR AND FRAME SCHEDULE																		
DOOR									FRAME						FIRE RATING LABEL	HARDWARE		NOTES
MARK	SIZE			MATL	EL	GLZ	LOUVER		MATL	EL	GLZ	DETAIL				SET NO	KEYSIDE RM NO	
	W	HT	THK				W	HT				HD	JMB	SL				
100A	4'-0"	6'-8"	4-1/2"	WOOD	A2.01	N/A			WD	N			1/A5-03		E4		ALGOMA	
100B	4'-1 1/8"	6'-8"	2-1/4"	WOOD	A2.01	N/A			WD/MTL	N			1/A5-03		E5			
101A	3'-0"	6'-11 3/4"	1-1/4"	PERFORATED METAL	A2.03	N/A			MTL	W			1,2/A5-00		N/A			
101B	2'-3"	6'-11 3/4"	1-1/4"	PERFORATED METAL	A2.03	N/A			MTL	W			1,2/A5-00		N/A			
101C	2'-3"	6'-11 3/4"	1-1/4"	PERFORATED METAL	A2.03	N/A			MTL	W			1,2/A5-00		N/A			
101D	2'-3"	6'-11 3/4"	1-1/4"	PERFORATED METAL	A2.03	N/A			MTL	W			1,2/A5-00		N/A			
101E	2'-3"	6'-11 3/4"	2-1/8"	PERFORATED METAL	A2.03	N/A			MTL	W			1,2/A5-00		N/A			
101F	11'-8"	6'-11 3/4"	2-1/8"	WOOD, MTL/GLASS	A2.03	NOTE 1,2,3,4			WD/MTL	W			1,2/A5-00		E1, E2		H WINDOW NOTE 4	
104A	2'-8"	6'-8"	1-1/2"	WOOD	A2.10	N/A			WD	IN			1/A5-04		I2		ALGOMA	
105A	2-8"	6'-8"	4-1/2"	WOOD	A2.01	N/A			WD	N			1/A5-03		E4		ALGOMA	
105B	2-9 1/8"	6'-8"	2-1/4"	WOOD	A2.01	N/A			WD/MTL	N			1/A5-03		E5			
106A	6'-7 7/8"	6'-9 3/4"	1-3/4"	WOOD	A2.10	N/A			WD	IN			2/A5-04		I3		A5.05/.30/A6.06 ALGOMA	
107A	2'-8"	7'-1 1/4"	1-1/2"	WOOD	A2.12	N/A			WD	IN			2/A5-04		I3		A5.05/.30/A6.06 ALGOMA	
107B	3'-0"	6'-11 3/4"	1-3/4"	WOOD, MTL/GLASS	A2.03	NOTE 1,2,3,4,5			WD/MTL	E			1/A5-01		E3		H WINDOW NOTE 4	
109A	1'-10 1/4"	6'-6 1/2"	1-3/4"	WOOD	A2.03	N/A			WD/MTL	IN			1/A5-00		I1			
Notes:																		
1) Cardinal LoE3 Pane, Level 2 LoE366, Level 5 LoE178, Argon Filled Cavities																		
2) All glazing in door systems to be tempered.																		
3) All Glazing to have Neat Coating on Exterior.																		
4) Exterior door finishing: Lintec Anodized Finish (ANO-303) Dark Bronze.																		
5) Level 3 of Glazing System to be Matte Frosted for Privacy																		

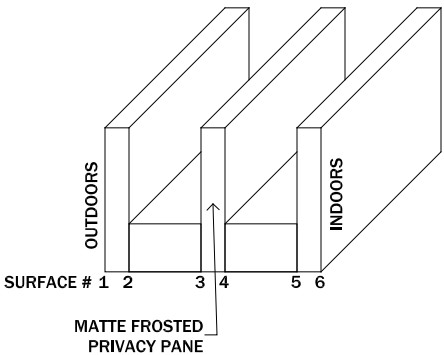
1 DOOR SCHEDULE
Scale: 1/4"=1'-0"



T = REPRESENTS TEMPERED GLASS

2 DOOR ELEVATIONS
Scale: 1/4"=1'-0"

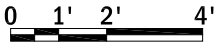
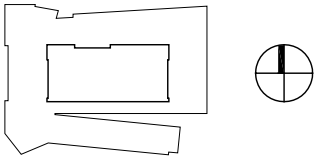
3 GLAZING DETAILFOR DOOR
Scale: N.T.S.



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

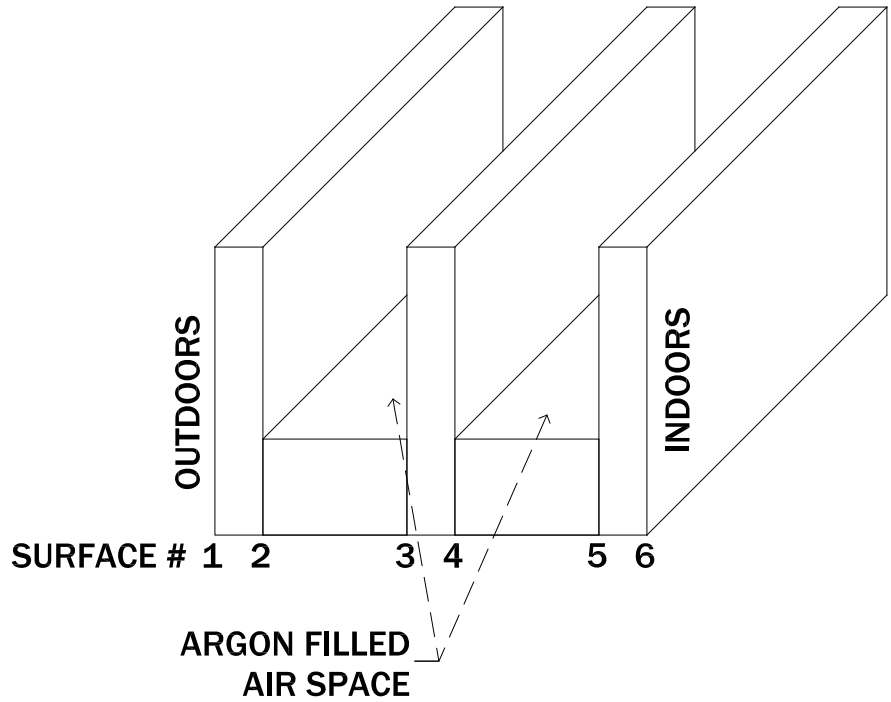
ISSUE DATE: 2009.05.12
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: KAW



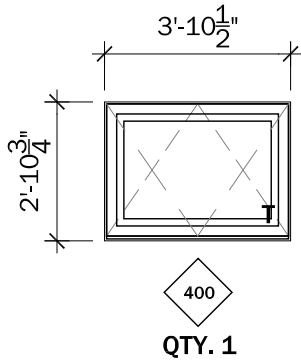
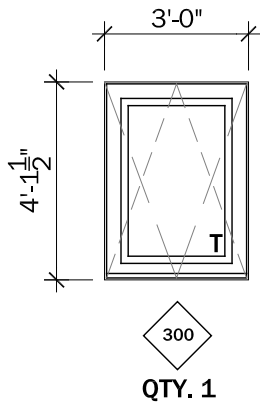
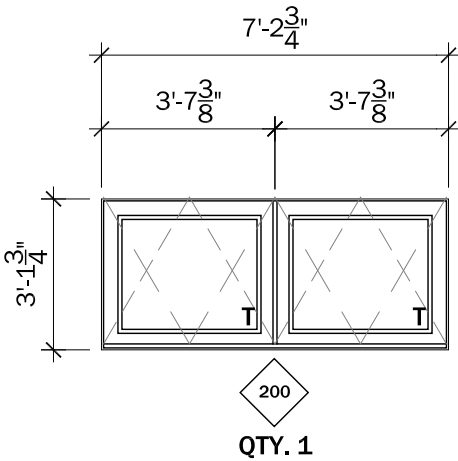
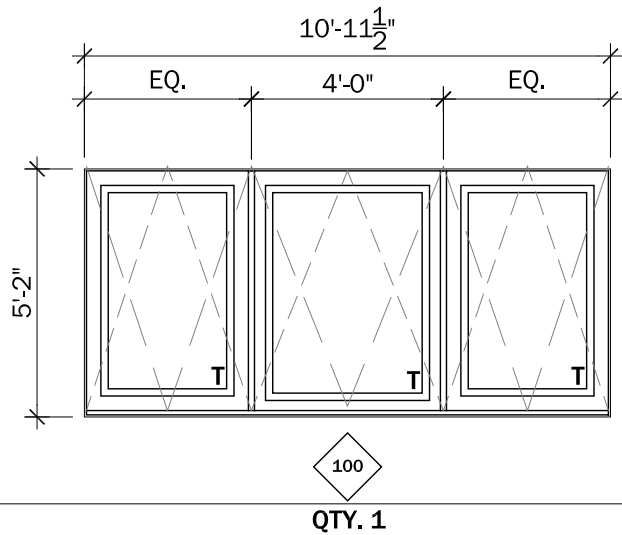
PROJECT STATUS: CD
SHEET NAME:

DOOR SCHEDULE

A6-01
SCALE: 1/4" = 1'



1
A6-02 WINDOW GLAZING DETAIL
Scale: N.T.S.



T = REPRESENTS TEMPERED GLASS

WINDOW SCHEDULE												
MARK	SIZE		TYPE	MATL	GLZ	FIRE RATING	DETAIL					NOTES
	WIDTH	HEIGHT					HEAD	JAMB	SILL	HORIZ MULL	VERT MULL	
100	10'-11 1/2"	5'-2"	H-WINDOW ; AWNING	WOOD	NOTE 1,3		A5.14	A5.07	A5.14			NOTE 4
200	7'-2 3/4"	3'-1 3/4"	H-WINDOW ; AWNING	WOOD	NOTE 1,3		A5.14	A5.07	A5.14			NOTE 4
300	3'-0"	4'-1 1/2"	H-WINDOW ; AWNING	WOOD	NOTE 1,3		A5.14	A5.07	A5.14			NOTE 4
400	3'-10 1/2"	2'-10 3/4"	H-WINDOW ; AWNING	PAPERSTONE	NOTE 1,3		A5.14	A5.07	A5.14			NOTE 4,5

Notes:

1) Cardinal Glass, Triple Pane, Low-E, 366, Clear 179

2) All Glazing to be Tempered.

3) All Glazing to have Neat Coating on Exterior.

4) Exterior window finishing; Lintec Anodized Finish (ANO-303) Dark Bronze.

5) Interior Frame to be Fabricated with Paperstone

2
A6-02 WINDOW SCHEDULE
Scale: N.T.S.

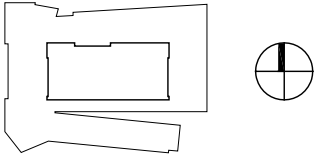
3
A6-02 WINDOW ELEVATIONS
Scale: 1/4"=1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: KAW



0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

WINDOW SCHEDULE

A6-02

SCALE: 1/4" = 1'

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WINDOW SCHEDULE												
MARK	ROUGH OPENING		TYPE	MATL	GLZ	FIRE RATING	DETAIL					NOTES
	WIDTH	HEIGHT					HEAD	JAMB	SILL	HORIZ MULL	VERT MULL	
S1	3'-6 1/8"	2'-8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.02			
S2	3'-8"	2'-6 3/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.03			
S3	3'-8"	2'-4 5/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.04			
S4	3'-8"	2'-2 7/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.05			
S5	3'-8"	2'-1 1/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.06			
S6	3'-8"	1'-11 1/2"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.07			
S7	3'-8"	1'-9 3/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.08			
S8	3'-8"	1'-8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.09			
S9	3'-8"	1'-6 3/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.10			
S10	1'-3 1/4"	1'-4 5/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.11			
E1	3'-4 3/4"	1'-2 1/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.12			
E4	3'-6 1/8"	1'-1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.13			
N1	1'-3 1/4"	1'-3 3/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.14			
N2	3'-8"	1'-8 5/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.15			
N3	3'-8"	2'-1 1/2"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.16			
N4	3'-8"	2'-6 1/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.17			
N5	3'-8"	2'-11 1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.18			
N6	3'-8"	3'-1 1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.19			
N7	3'-8"	3'-6 1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.20			
N8	3'-8"	3'-11"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.21			
N9	3'-8"	4'-6 1/2"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.22			
N10	3'-6 1/8"	4'-11 1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.23			
W1	3'-1 1/4"	4'-10 1/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.24			
W2	4'-2 1/4"	3'-10 5/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.25			
W3	4'2 1/4"	2'-9 1/4"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.26			
W4	3'-5 1/8"	2'-5 1/8"	H-WINDOW ; CASEMENT	WOOD / ALUM	NOTE 1,2,3		A5.07	A5.07	A1.27			

Notes:

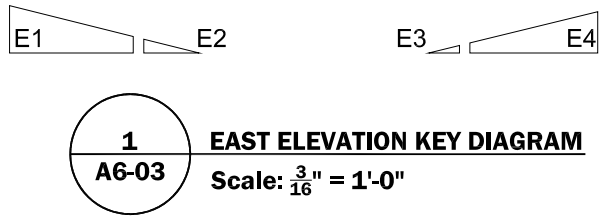
- 1) Cardinal LoE3 Pane
- 2) All Glazing to have Neat Coating on Exterior.
- 3) Exterior window finishing; Lintec Anodized Finish (ANO-303) Dark Bronze.

3

A6-03

WINDOW SCHEDULE

Scale: N.T.S.

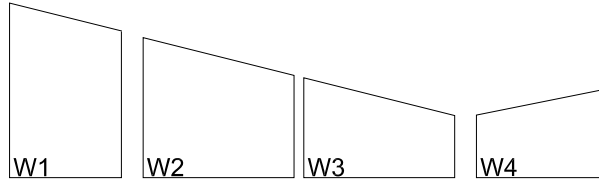


1

A6-03

EAST ELEVATION KEY DIAGRAM

Scale: $\frac{3}{16}$ " = 1'-0"

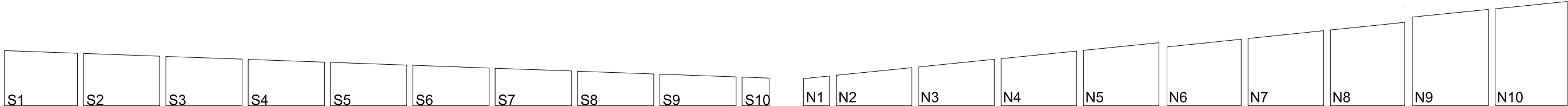


2

A6-03

WEST ELEVATION KEY DIAGRAM

Scale: $\frac{3}{16}$ " = 1'-0"



4

A6-03

SOUTH ELEVATION KEY DIAGRAM

Scale: $\frac{3}{16}$ " = 1'-0"

5

A6-03

NORTH ELEVATION KEY DIAGRAM

Scale: $\frac{3}{16}$ " = 1'-0"



CLIENT NAME:DOE/NREL

PROJECT: SOLAR DECATHLON

PROJECT NO.:SD 2009

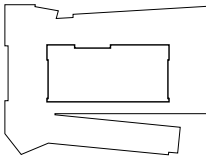
REVISION HISTORY

ISSUE DATE:2009.05.12

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DRAWN BY:KAW



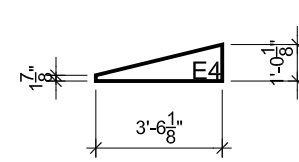
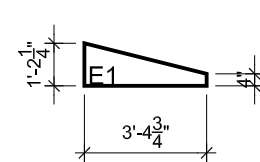
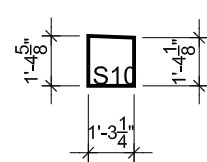
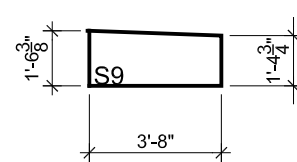
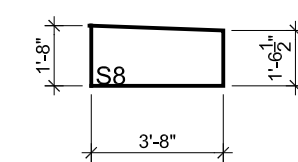
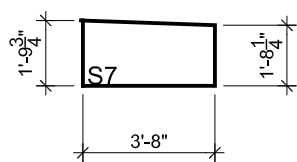
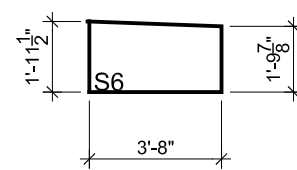
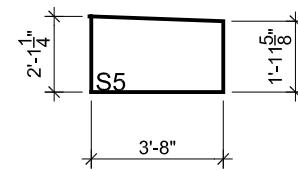
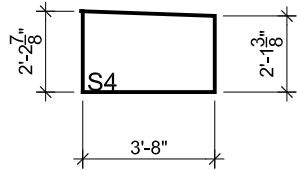
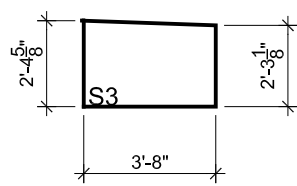
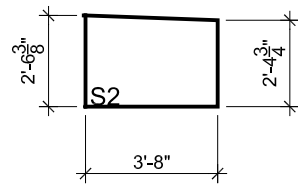
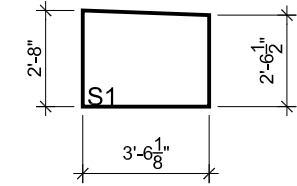
PROJECT STATUS:CD

SHEET NAME:

WINDOW SCHEDULE
CLERESTORY

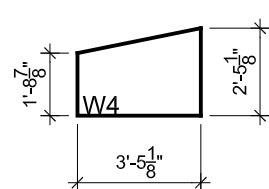
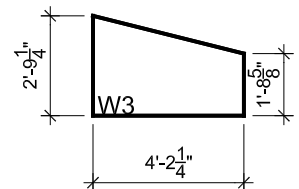
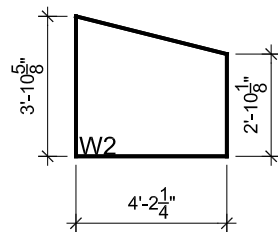
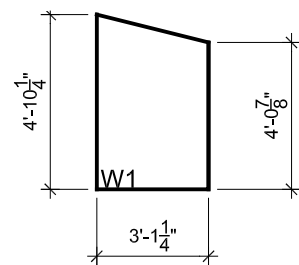
A6-03

SCALE:3/16" = 1'

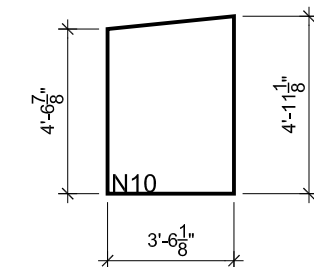
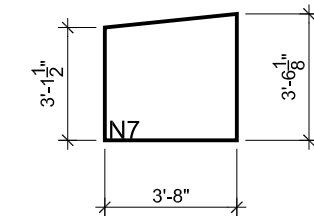
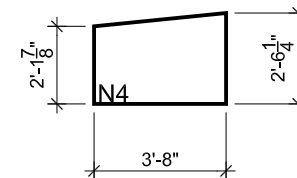
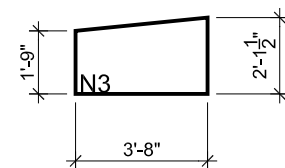
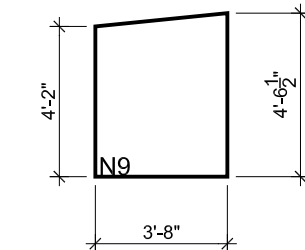
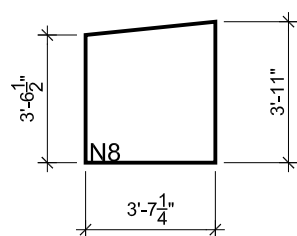
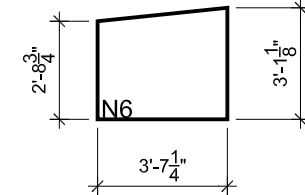
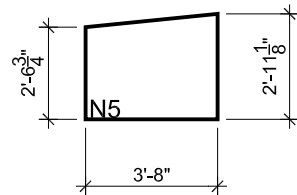
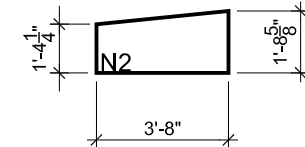
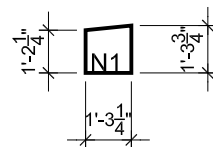


1
A6-04 **SOUTH CLERESTORY ROUGH OPENINGS**
Scale: $\frac{3}{16}" = 1'-0"$

2
A6-04 **EAST CLERESTORY ROUGH OPENINGS**
Scale: $\frac{3}{16}" = 1'-0"$



3
A6-04 **WEST CLERESTORY ROUGH OPENINGS**
Scale: $\frac{3}{16}" = 1'-0"$



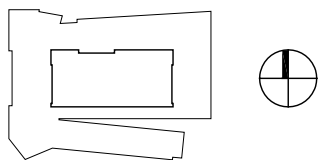
4
A6-04 **NORTH CLERESTORY ROUGH OPENINGS**
Scale: $\frac{3}{16}" = 1'-0"$



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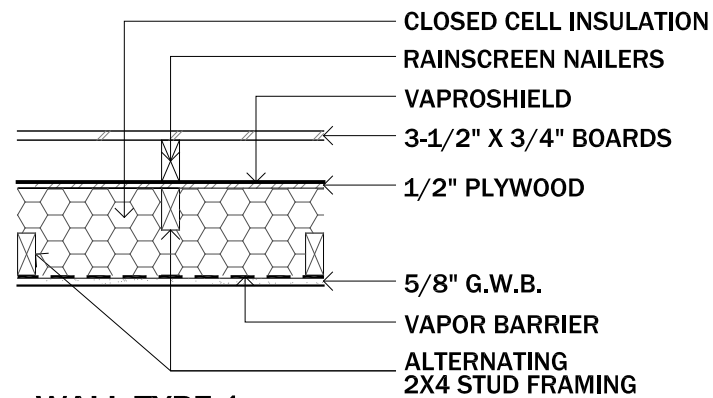


PROJECT STATUS: CD
SHEET NAME:

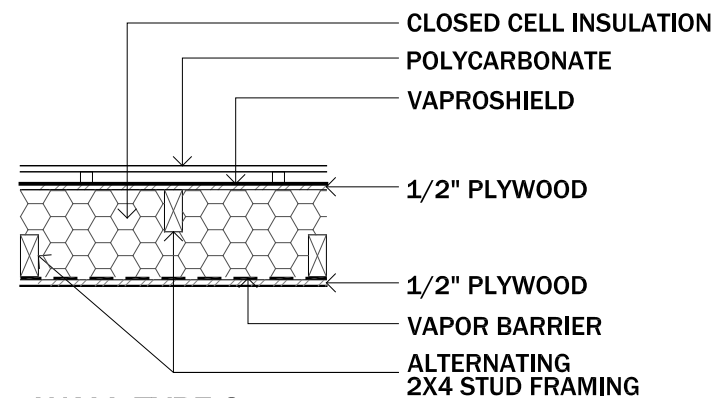
WINDOW SCHEDULE CLERESTORY

A6-04

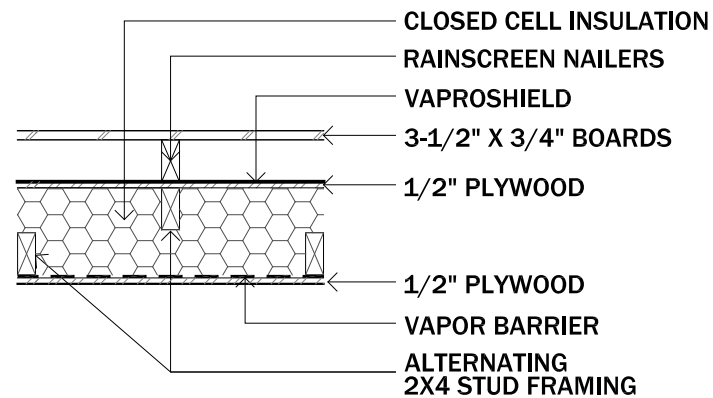
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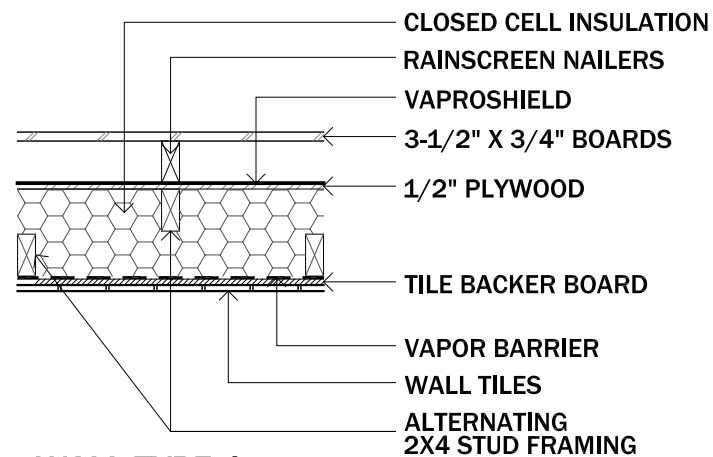
WALL TYPE 1



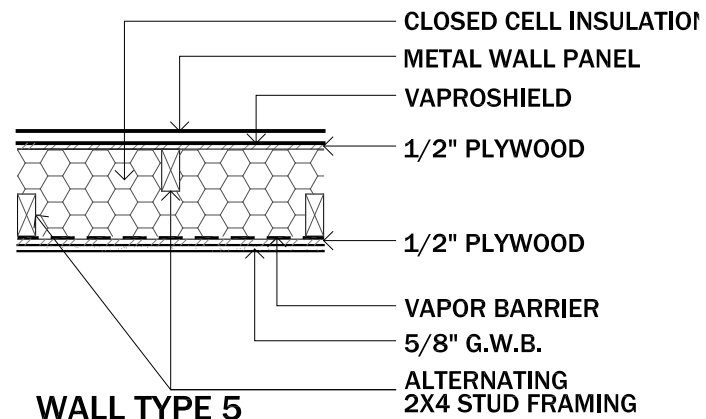
WALL TYPE 2



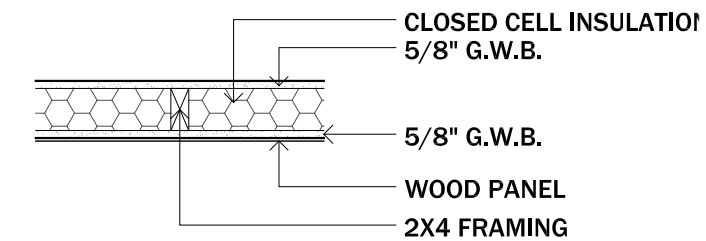
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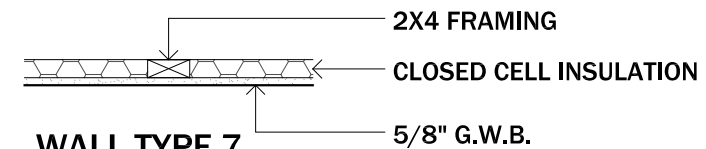
WALL TYPE 4



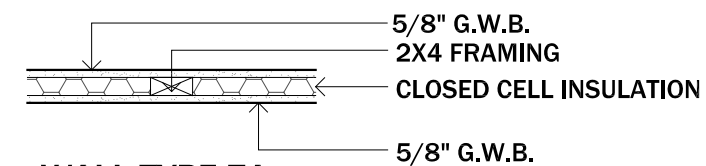
WALL TYPE 5



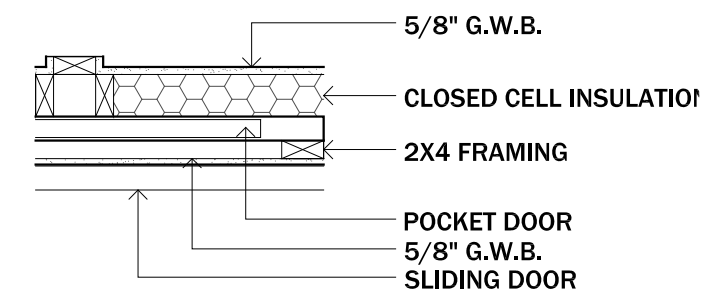
WALL TYPE 6



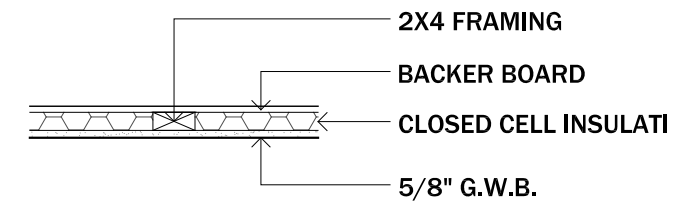
WALL TYPE 7



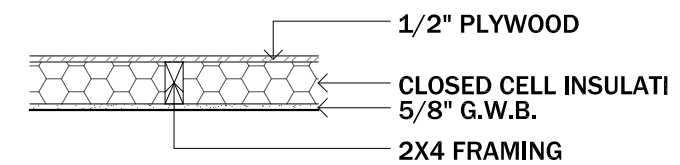
WALL TYPE 7A



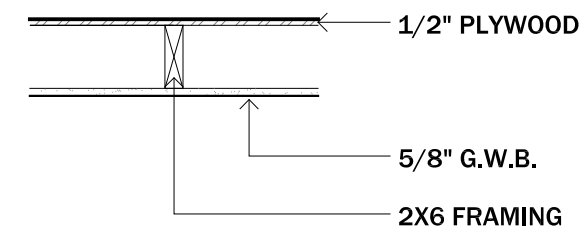
WALL TYPE 8



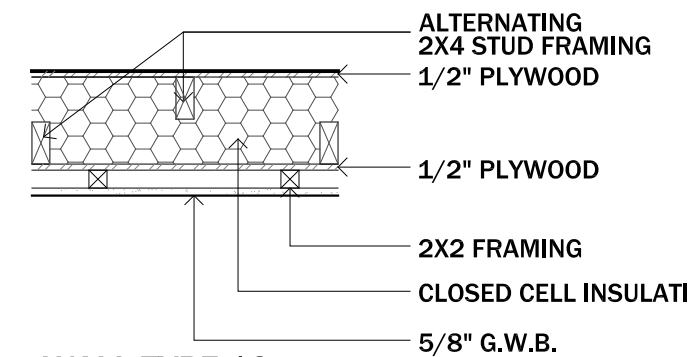
WALL TYPE 9



WALL TYPE 10



WALL TYPE 11



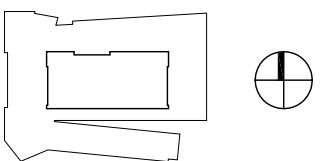
WALL TYPE 12



CLIENT NAME: DOE/NREL
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DRAWN BY: SS



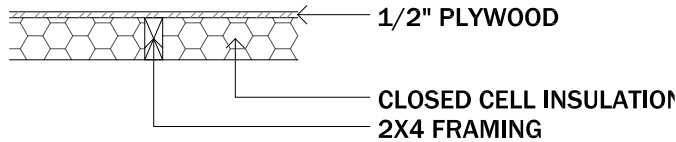
0' 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

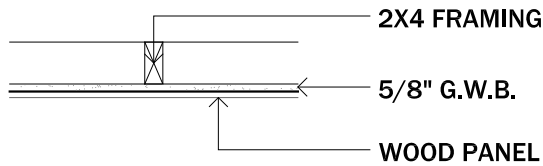
**WALL TYPES
SCHEDULE**

A6-10

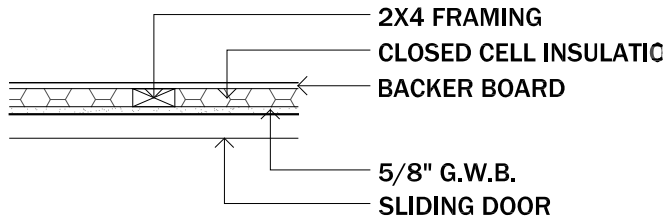
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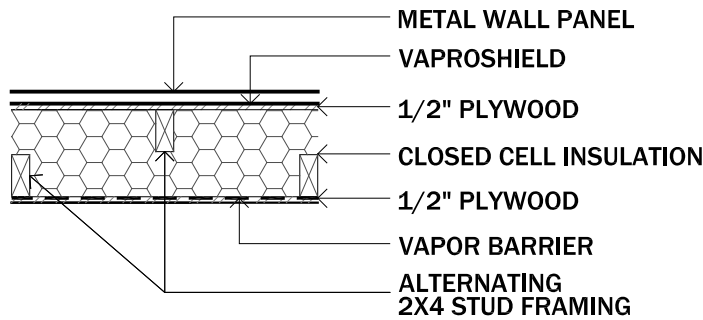
WALL TYPE 13



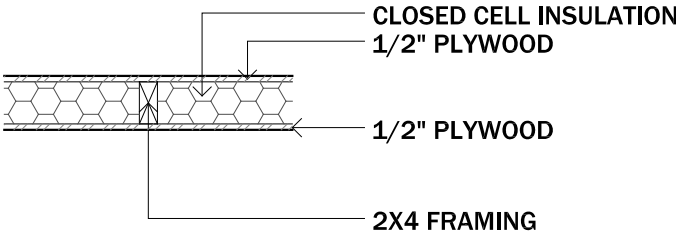
WALL TYPE 14



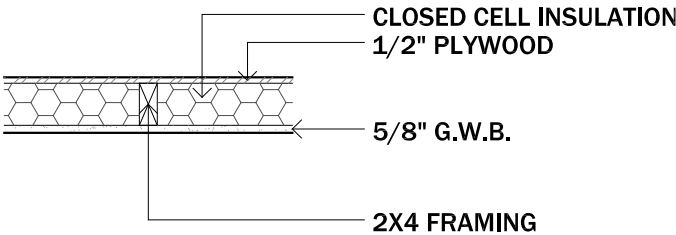
WALL TYPE 15



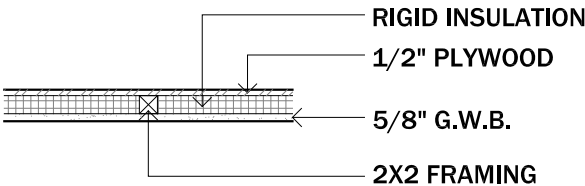
WALL TYPE 16



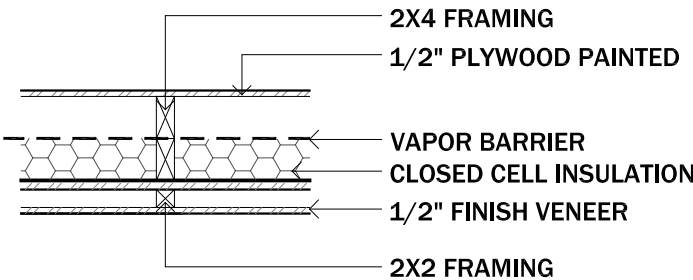
WALL TYPE 17



WALL TYPE 18



WALL TYPE 19



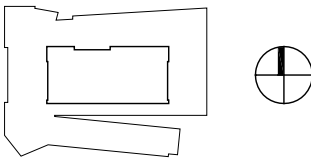
WALL TYPE 20



CLIENT NAME: DOE/NREL
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0' 4" 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

WALL TYPES
SCHEDULE

A6-11

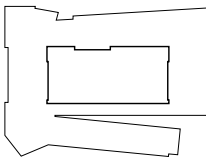
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REVISION HISTORY

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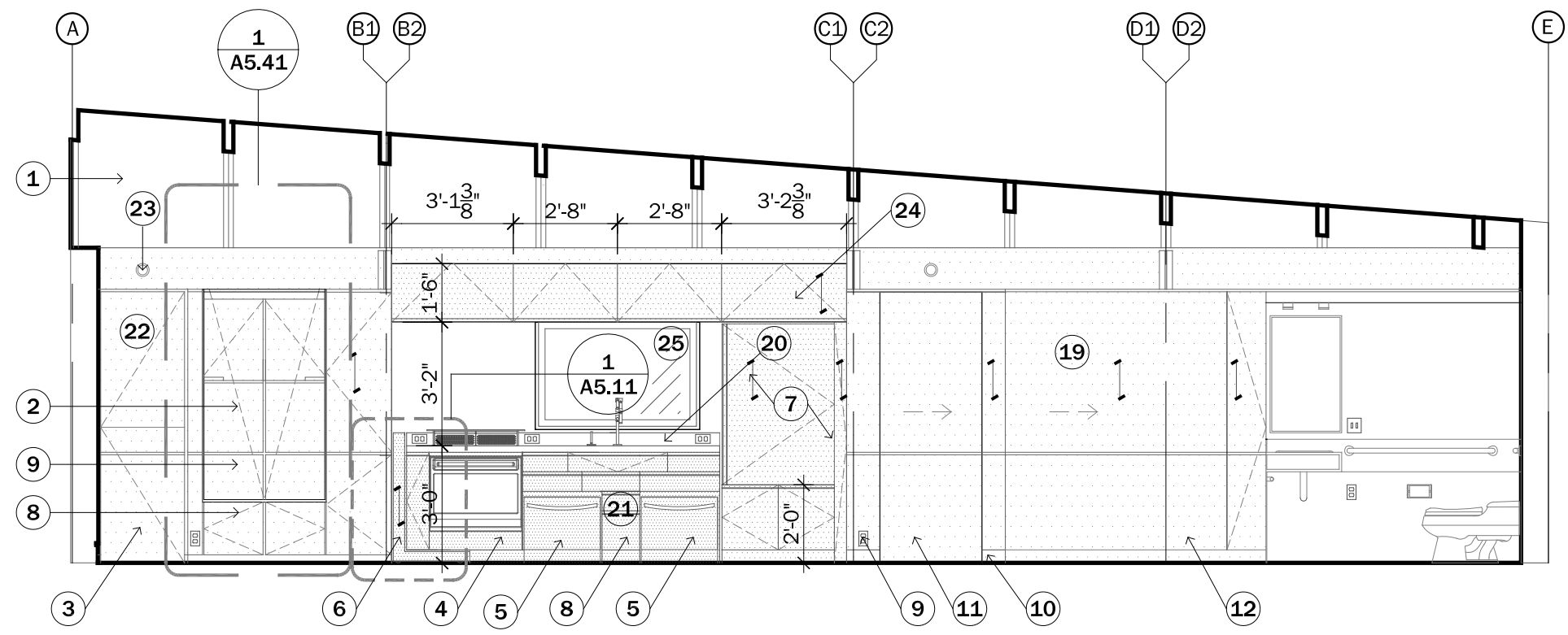
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PROJECT STATUS: CD
SHEET NAME:

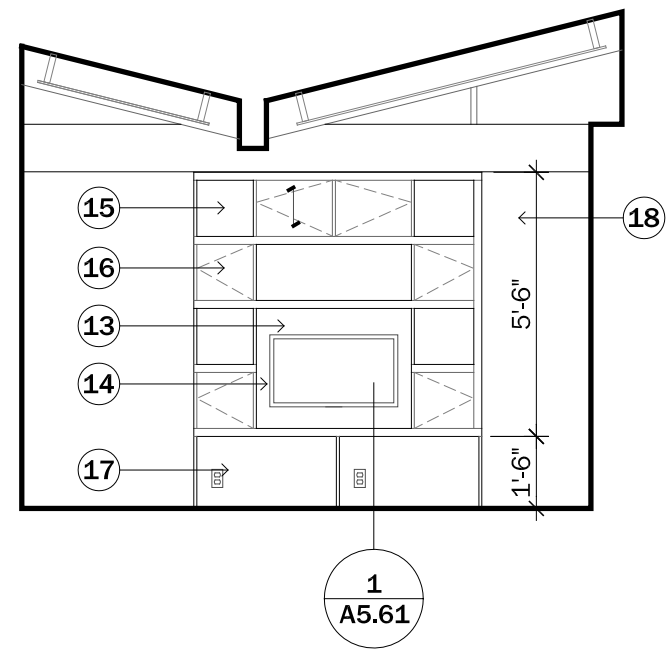
ROOM & CABINETRY
FINISH SCHEDULE

A6-12
SCALE: NOT TO SCALE

CABINETRY SCHEDULE										
ROOM NO	CABINETRY NAME	BASE MATERIAL	FINISH	SURFACE				COUNTER	HARDWARE	NOTES
				TOP	SIDE	FRONT	BACK			
101	DINING TABLE	CHERRY	CLEAR COAT STAIN	N/A	CHERRY (STAINED)	CHERRY (STAINED)	CHERRY (STAINED)	PAPERSTONE (BLACK)	PROCORE - TICINUM	CHERRY FINISH ON PANELING PATTERN AND STRUCTURE
101	PANTRY CLOSET DOOR	CHERRY	CLEAR COAT STAIN	SHELVES, CHERRY (STAINED)	INTERIOR, CHERRY (STAINED)	CHERRY (STAINED)	INTERIOR, CHERRY (STAINED)	N/A	PROCORE - TICINUM	CHERRY FINISH ON PANELING PATTERN AND STRUCTURE
102	ENTERTAINMENT CENTER	CHERRY	CLEAR COAT STAIN	PAPERSTONE (BLACK)	CHERRY (STAINED)	MDF (PAINTED)	CHERRY (PAINTED)	PAPERSTONE (BLACK)	PROCORE - TICINUM	PAINTED MDF - ACCENT COLOR
103	KITCHEN: BASE CABINETS (MAIN)	KEIRI BOARD	CLEAR COAT STAIN	MDF (UNFINISHED)	KEIRI BIARD (STAINED)	KEIRI BIARD (STAINED)	MDF (UNFINISHED)	PAPERSTONE (BLACK) & BACKSPLASH	PROCORE - LINDAVIA	FRAMELESS CABINET CONSTRUCTION - NO BANDING ON EDGES
103	DISHWASHER - VENEER	KEIRI BOARD	CLEAR COAT STAIN	N/A	N/A	KEIRI BIARD (STAINED)	N/A	N/A	N/A	FIELD APPLIED VENEER
103	KITCHEN: WALL CABINETS & BASE (ACCENT)	CHERRY	BLACK LAQUER	MDF (UNFINISHED)	CHERRY (STAINED)	CHERRY (STAINED)	MDF (UNFINISHED)	N/A	PROCORE - LINDAVIA	FRAMELESS CABINET CONSTRUCTION - BLACK LAQUER TO SHOW GRAIN OF CHERRY MATERIAL
103	REFRIDGERATOR - VENEER	CHERRY	BLACK LAQUER	N/A	CHERRY (STAINED)	CHERRY (STAINED)	N/A	N/A	N/A	CHERRY VENEER SUPPLIED BY MANUFACTORER - STAINED TO MATCH
106	SINK BASE	WOOD FRAMING W/ PAPERSTONE VENEER	BEE WAX FINISH	PAPERSTONE (BLACK)	PAPERSTONE (BLACK)	PAPERSTONE (BLACK)	MDF (PAINTED)	PAPERSTONE (BLACK)	PROCORE - TICINUM	PAPERSTONE W/ A KEIRI BOARD ACCENT ON FRONT FACE @ COUNTER HEIGHT
107	MURPHY BED - NORTH FACE (MAIN)	CHERRY	CLEAR COAT STAIN	N/A	CHERRY (STAINED)	CHERRY (STAINED)	CHERRY (STAINED)	N/A	PROCORE - TICINUM	FRAMELESS CABINET CONSTRUCTION



A-1
I2-00
NORTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



A-2
I2-00
LIVING 102 - EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$

INTERIOR ELEVATIONS KEYNOTES

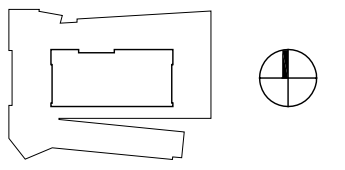
1. CARDINAL GLASS - CLERESTORY GLAZING BEYOND
2. DROP DOWN DINING TABLE- "MORAINE"
3. FOLDING CHAIR STORAGE
4. OVEN AND RANGE
5. DOUBLE STACKED DISHWASHER
6. MOVEABLE KITCHEN ISLAND- "FLOAT"
7. REFRIGERATOR ON CUSTOM CABINETRY
8. CUSTOM MAPLE CASEWORK, SEE DETAILS ON SHEET A5.40-A5.62.
9. WOOD PANEL
10. 4" WOOD BASE
11. LAUNDRY ROOM POCKET DOOR
12. SLIDING BATHROOM PARTITION
13. OPEN TO BEHIND
14. TELEVISION OPENING 42" FLAT PANEL
15. OPEN SHELVING
16. CLOSED CABINETRY
17. STORAGE OTTOMANS
18. OPEN
19. CHERRY WOOD WITH CLEAR COAT
20. SLATE PAPERSTONE
21. $\frac{1}{2}"$ NEAPOLITAN PLYBOO
22. CLOSET DOOR - CHERRY FINISH TO MATCH PANEL
23. SMOKE DETECTOR - SEE A0-04 FOR LOCATIONS
24. CHERRY WOOD WITH BLACK LACQUER FINISH
25. WINDOW/DOOR, SEE SCHEDULE ON SHEET A6.03-A6.04.



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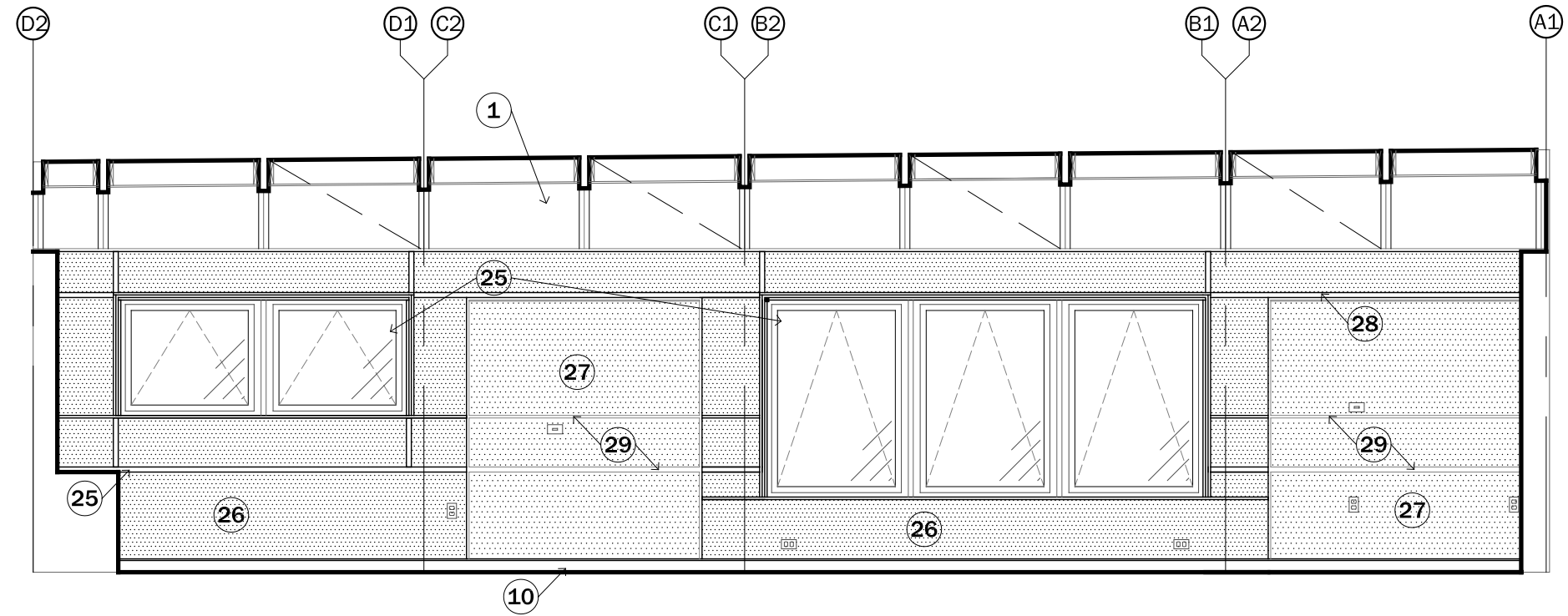
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

INTERIOR ELEVATIONS

I2-00

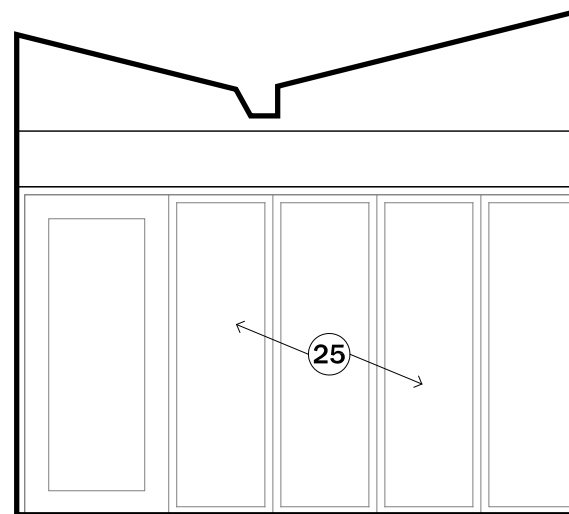
SCALE: $\frac{1}{4}" = 1'-0"$



A-3
I2-01
SOUTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$

INTERIOR ELEVATIONS KEYNOTES

1. CARDINAL GLASS - CLERESTORY GLAZING BEYOND
10. 4" WOOD BASE
25. WINDOW/DOOR, SEE SCHEDULE ON SHEET A6.03-A6.04.
26. $\frac{1}{2}"$ STRAWBOARD PANELS
27. $\frac{1}{2}"$ GYPSUM WALL BOARD
28. WALNUT TRIM
29. ALUMINUM GYPSUM BOARD REVEAL



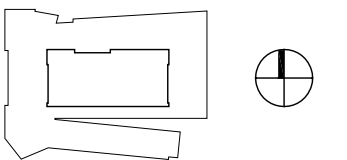
A-4
I2-01
DINING 101 - WEST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



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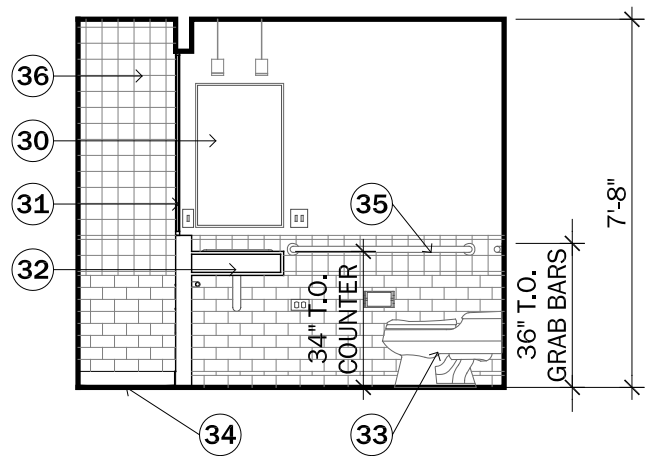
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

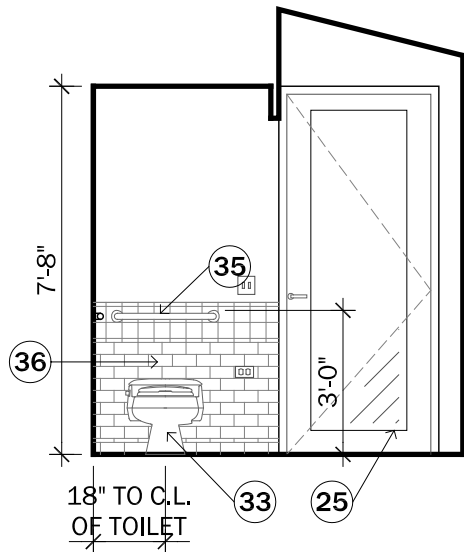
INTERIOR ELEVATIONS

I2-01

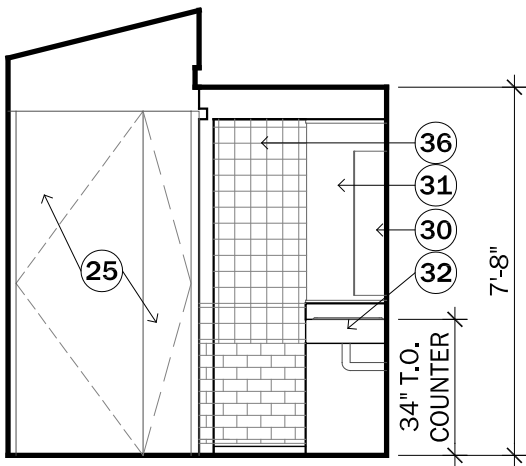
SCALE: $\frac{1}{4}" = 1'-0"$



B-1
I2-02
BATHROOM 106 -
NORTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



B-2
I2-02
BATHROOM 106 -
EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



B-4
I2-02
BATHROOM 106 -
WEST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$

INTERIOR ELEVATIONS KEYNOTES

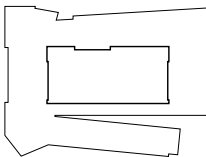
- 25. WINDOW/DOOR, SEE SCHEDULE ON SHEET A6.03-A6.04.
- 30. MIRROR WITH RECESSED BATH CABINET
- 31. FROSTED GLASS PANEL
- 32. ADA SINK WITH BUILT IN SHELVING
- 33. ADA TOILET
- 34. TILED SHOWER PITCHED TO FLOOR DRAIN
- 35. ADA GRAB BAR
- 36. WALL TILES



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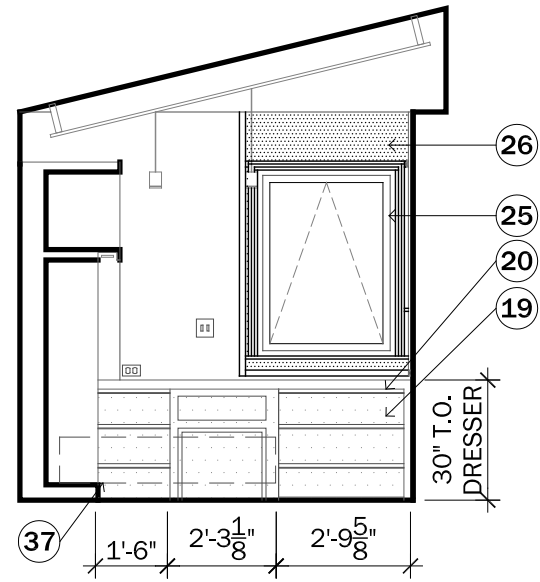
0' 1' 2' 4'

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SHEET NAME:

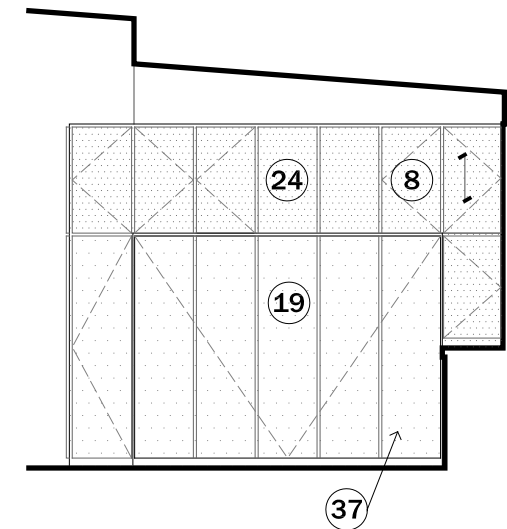
INTERIOR
ELEVATIONS

I2-02

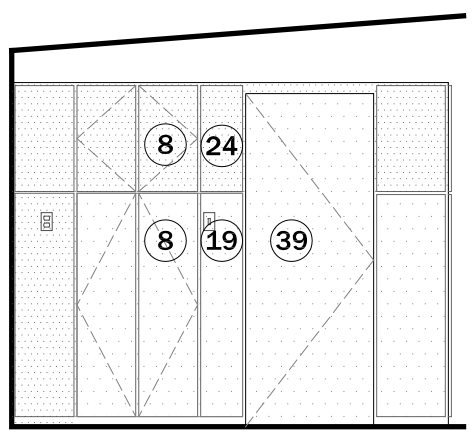
SCALE: $\frac{1}{4}" = 1'-0"$



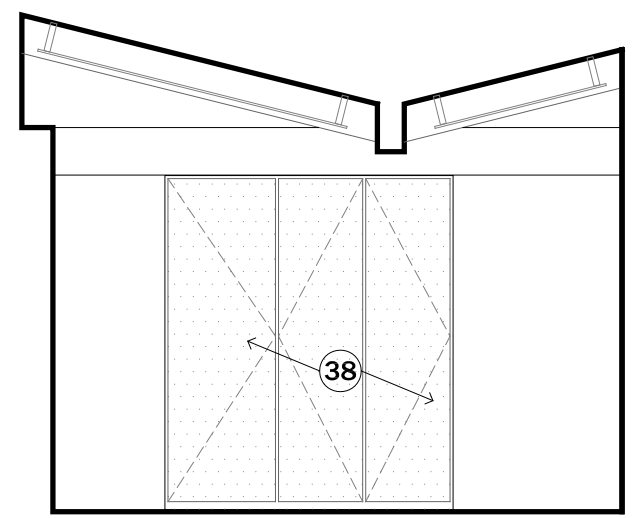
C-1
I2-03
BEDROOM 108 -
NORTH ELEVATION
scale: 1/4" = 1'-0"



C-2
I2-03
BEDROOM 108 -
EAST ELEVATION
scale: 1/4" = 1'-0"



C-3
I2-03
BEDROOM 108 -
WEST ELEVATION
scale: 1/4" = 1'-0"



C-4
I2-03
BEDROOM 108 -
WEST ELEVATION
scale: 1/4" = 1'-0"

INTERIOR ELEVATIONS KEYNOTES

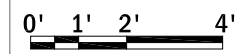
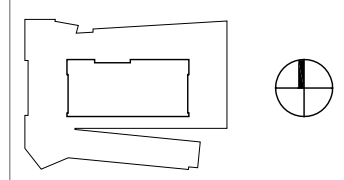
- 8. CUSTOM MAPLE CASEWORK, SEE DETAILS ON SHEET A5.40-A5.62.
- 10. 4" WOOD BASE
- 19. CHERRY WOOD WITH CLEAR COAT
- 20. SLATE PAPERSTONE
- 23. 1/2" STRAWBOARD PANELS
- 24. CHERRY WOOD WITH BLACK LACQUER FINISH
- 25. WINDOW/DOOR, SEE SCHEDULE ON SHEET A6.03-A6.04.
- 37. MURPHY BED WITH BUILT IN CHERRY CABINETS
- 38. AMOIRE DRESSER
- 39. RECESSED BATHROOM DOOR



CLIENT NAME: DOE/NREL
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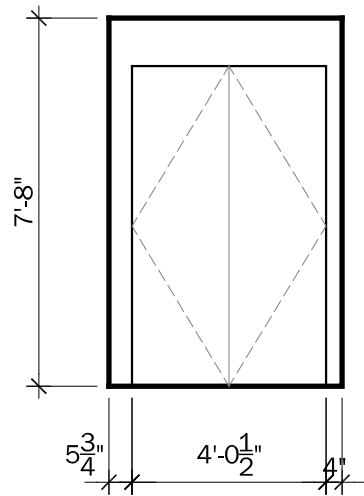


PROJECT STATUS: CD
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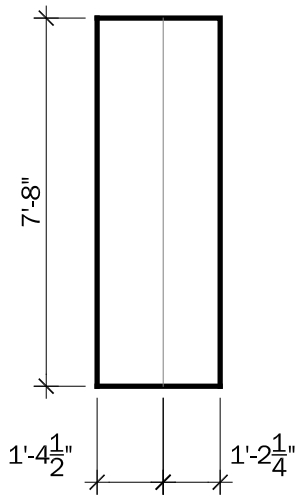
INTERIOR
ELEVATIONS

I2-03

SCALE: 1/4" = 1'-0"

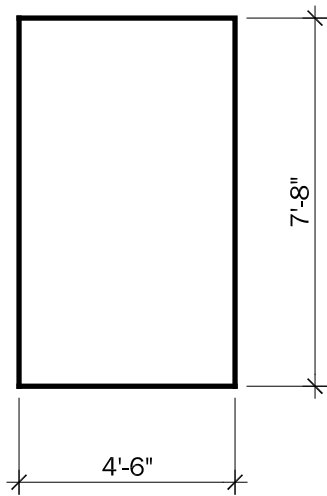


D-1
I2-04
MECHANICAL 100 - NORTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$

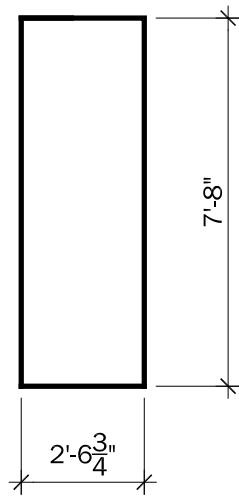


D-2
I2-04
MECHANICAL 100 - EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$

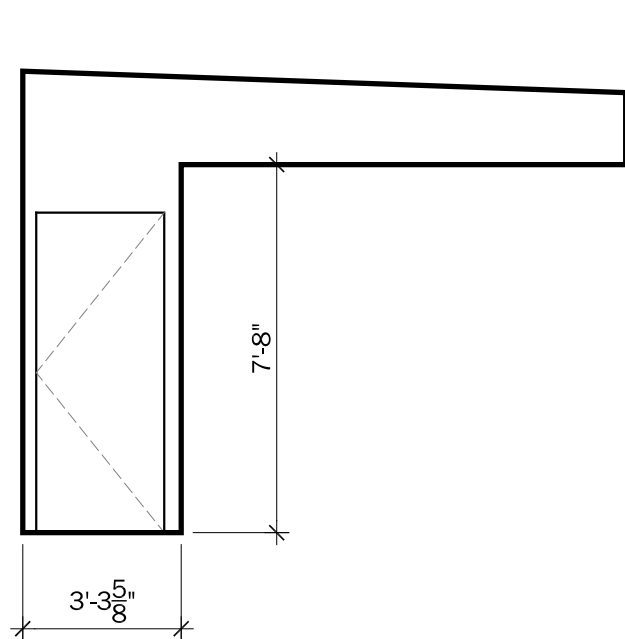
GENERAL:
SEE "Q" SHEETS FOR
EQUIPMENT LOCATIONS



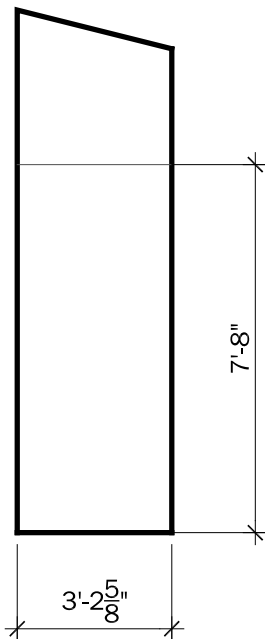
D-3
I2-04
MECHANICAL 100 - SOUTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



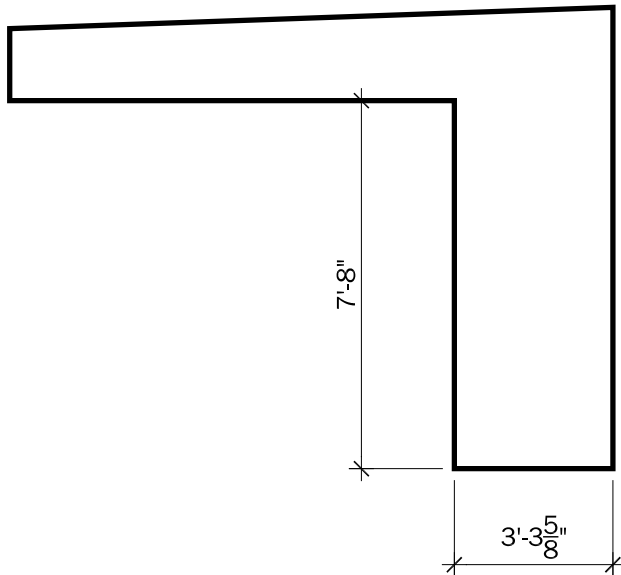
D-4
I2-04
MECHANICAL 100 - WEST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



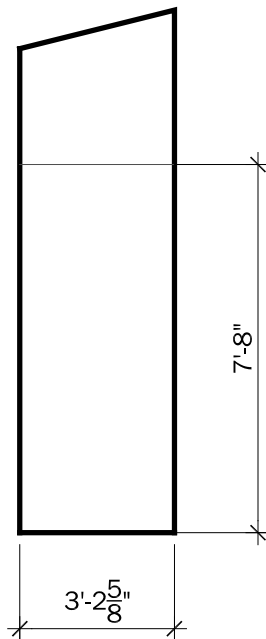
D-5
I2-04
MECHANICAL 105 - NORTH ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



D-6
I2-04
MECHANICAL 105 - EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



D-7
I2-04
MECHANICAL 105 - EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



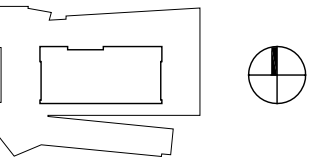
D-8
I2-04
MECHANICAL 105 - EAST ELEVATION
scale: $\frac{1}{4}" = 1'-0"$



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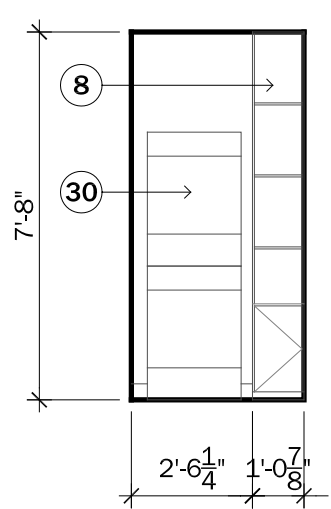
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

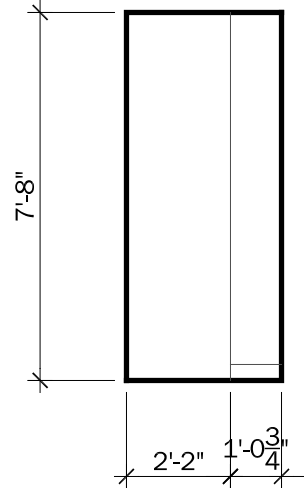
INTERIOR ELEVATIONS

I2-04

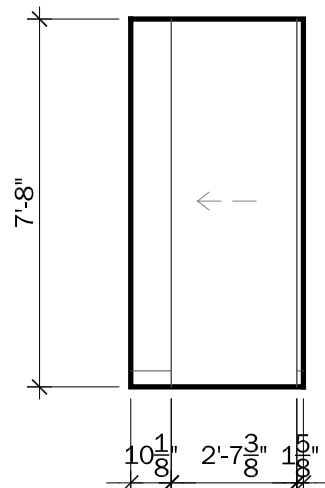
SCALE: $\frac{1}{4}" = 1'-0"$



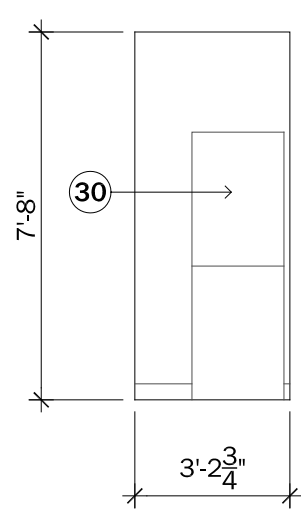
E-1
I2-05 **LAUNDRY 104 - NORTH ELEVATION**
scale: 1/4" = 1'-0"



E-2
I2-05 **LAUNDRY 104 - EAST ELEVATION**
scale: 1/4" = 1'-0"



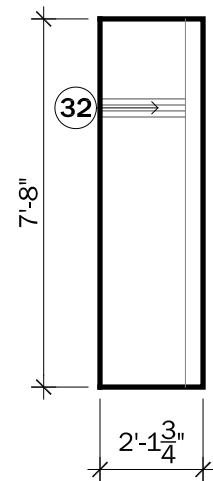
E-3
I2-05 **LAUNDRY 104 - SOUTH ELEVATION**
scale: 1/4" = 1'-0"



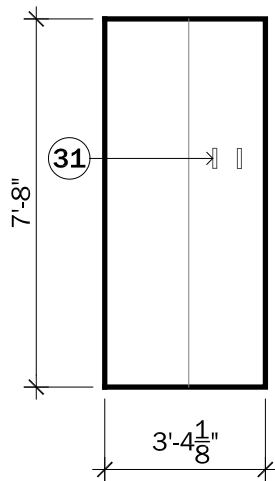
E-4
I2-05 **LAUNDRY 104 - WEST ELEVATION**
scale: 1/4" = 1'-0"

INTERIOR ELEVATIONS KEYNOTES

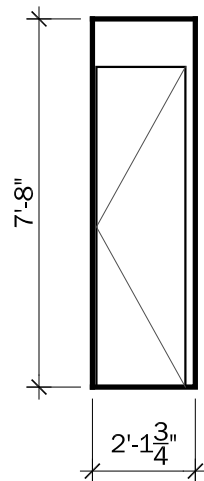
- 8. CUSTOM CABINETRY
 - 30. WASHER AND DRYER
 - 31. HOOKS
 - 32. POLE AND SHELF
- GENERAL: SEE "Q" SHEETS FOR EQUIPMENT LAYOUT



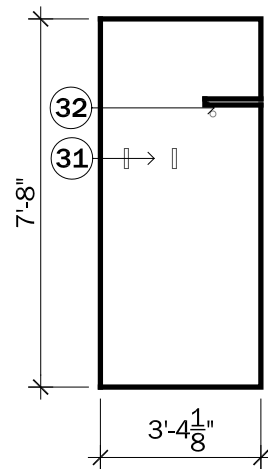
F-5
I2-05 **CLOSET 109 - NORTH ELEVATION**
scale: 1/4" = 1'-0"



F-6
I2-05 **CLOSET 109 - EAST ELEVATION**
scale: 1/4" = 1'-0"



F-7
I2-05 **CLOSET 109 - SOUTH ELEVATION**
scale: 1/4" = 1'-0"



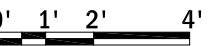
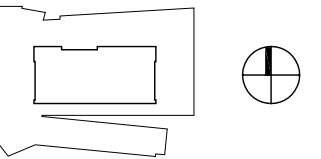
F-8
I2-05 **CLOSET 109 - WEST ELEVATION**
scale: 1/4" = 1'-0"



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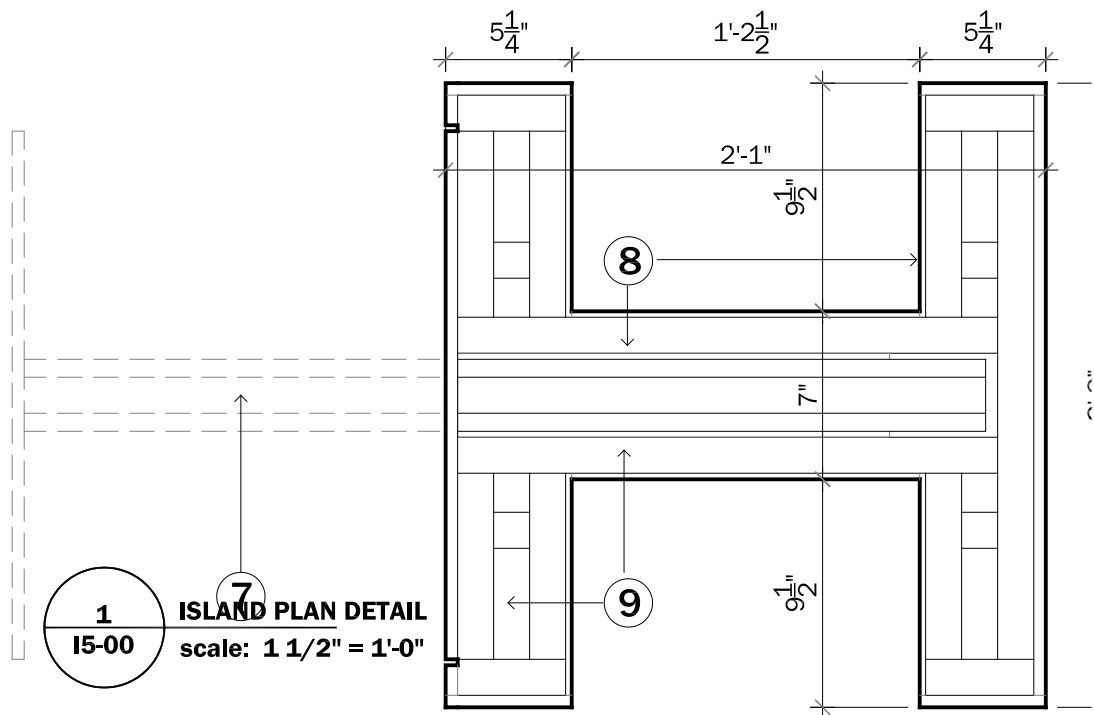


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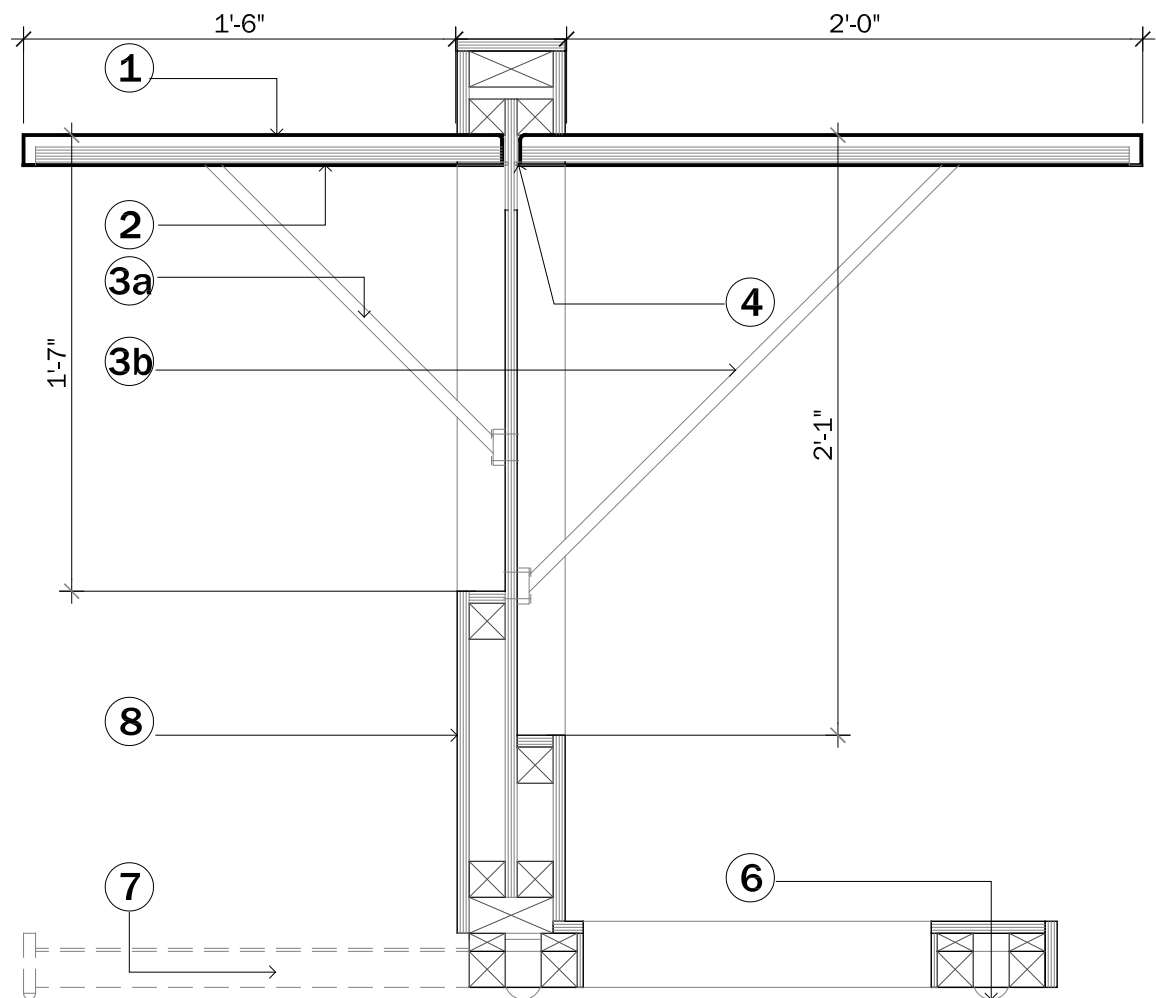
INTERIOR ELEVATIONS

I2-05

SCALE: 1/4" = 1'-0"



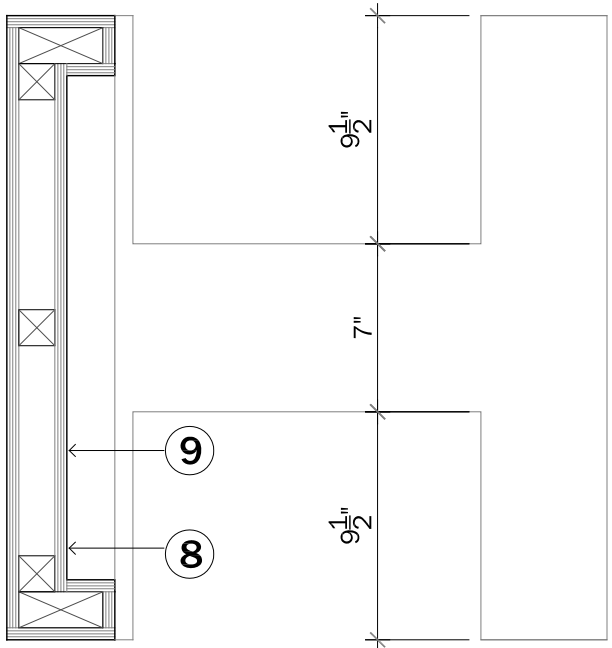
1
ISLAND PLAN DETAIL
15-00
scale: 1 1/2" = 1'-0"



2
ISLAND SECTION DETAIL
15-00
scale: 1 1/2" = 1'-0"

ISLAND KEYNOTES

1. FINISHED PAPERSTONE COUNTERTOP
2. DROP DOWN LEAF EXTENSIONS
- 3a. 30 CM "FASTLEG" SLIDING DROP LEAF SUPPORT - SHOCK ABSORBER LOCATED ADJACENT
- 3b. 45 CM "FASTLEG" SLIDING DROP LEAF SUPPORT - SHOCK ABSORBER LOCATED ADJACENT
4. HAFELE OR "FASTLEG" SPECIFIED CONCEALED HINGE
6. (4) 2" CASTERS W/ LOCKING MECHANISM
7. (2) 500LB. UNDERMOUNT DRAWER SLIDE MOUNTED TO CANTILEVER SUPPORT SYSTEM
8. PLYBOO VENEER
9. 2X WOOD FRAMING



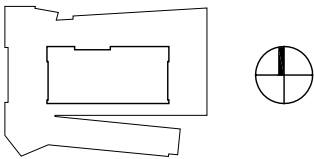
3
ISLAND PLAN-SECTION DETAIL
15-00
scale: 1 1/2" = 1'-0"



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0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL -
KITCHEN ISLAND

15-00

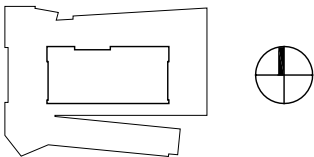
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
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0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

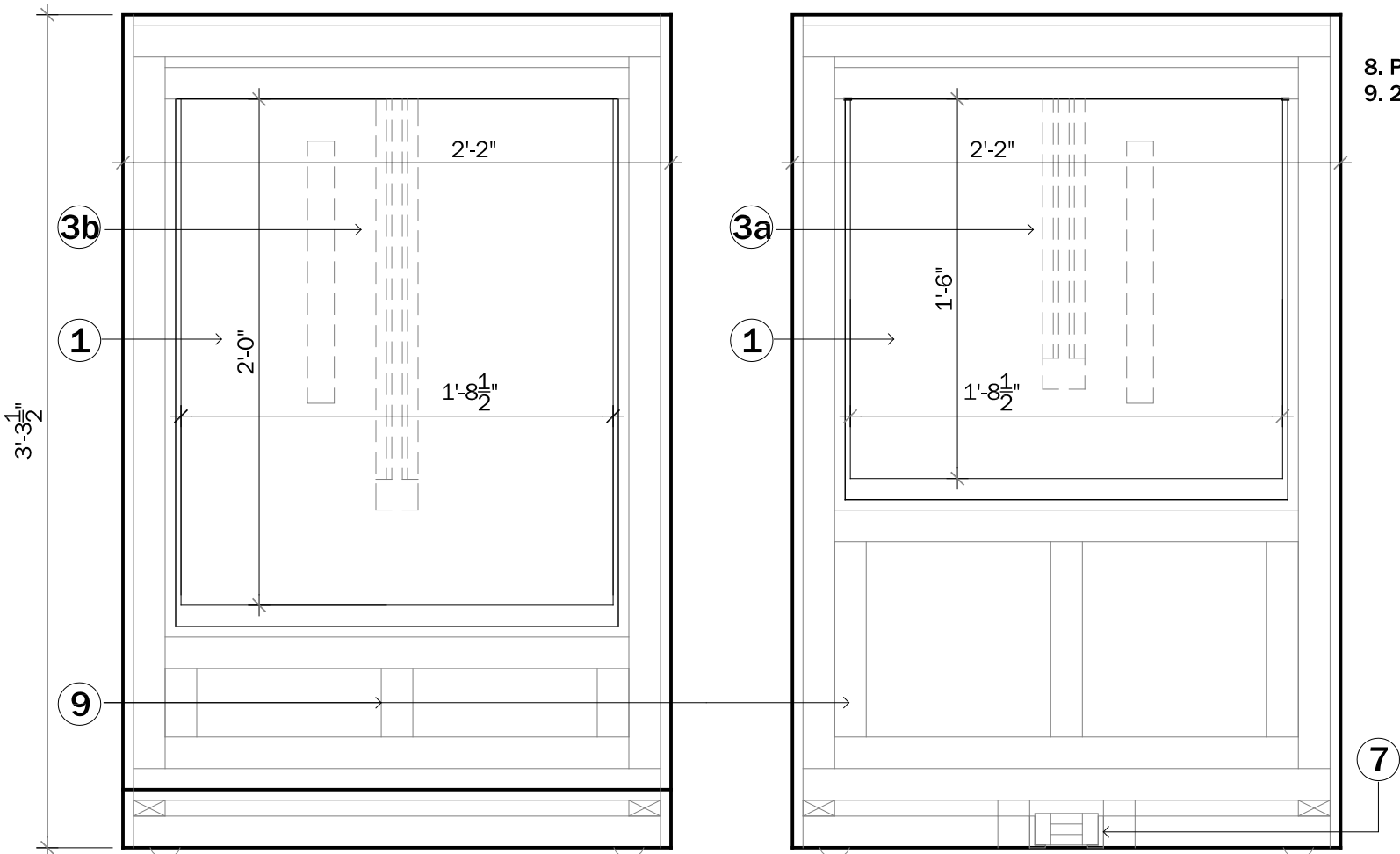
CASEWORK DETAIL -
KITCHEN ISLAND

I5-01

SCALE: 1 1/2" = 1'-0"

ISLAND KEYNOTES

- 1. FINISHED PAPERSTONE COUNTERTOP
- 2. DROP DOWN LEAF EXTENSIONS
- 3A. 30 CM "FASTLEG" SLIDING DROP LEAF SUPPORT - SHOCK ABSORBER LOCATED ADJACENT
- 3b. 45 CM "FASTLEG" SLIDING DROP LEAF SUPPORT - SHOCK ABSORBER LOCATED ADJACENT
- 4. HAFELE OR "FASTLEG" SPECIFIED CONCEALED HINGE
- 6. (4) 2" CASTERS W/ LOCKING MECHANISM
- 7. (2) 500LB. UNDERMOUNT DRAWER SLIDE MOUNTED TO CANTILEVER SUPPORT SYSTEM
- 8. PLYBOO VENEER
- 9. 2X WOOD FRAMING



1 ISLAND FRONT ELEV. DETAIL
I5-01 scale: 1 1/2" = 1'-0"

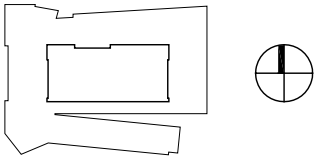
2 ISLAND REAR ELEV. DETAIL
I5-01 scale: 1 1/2" = 1'-0"



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0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

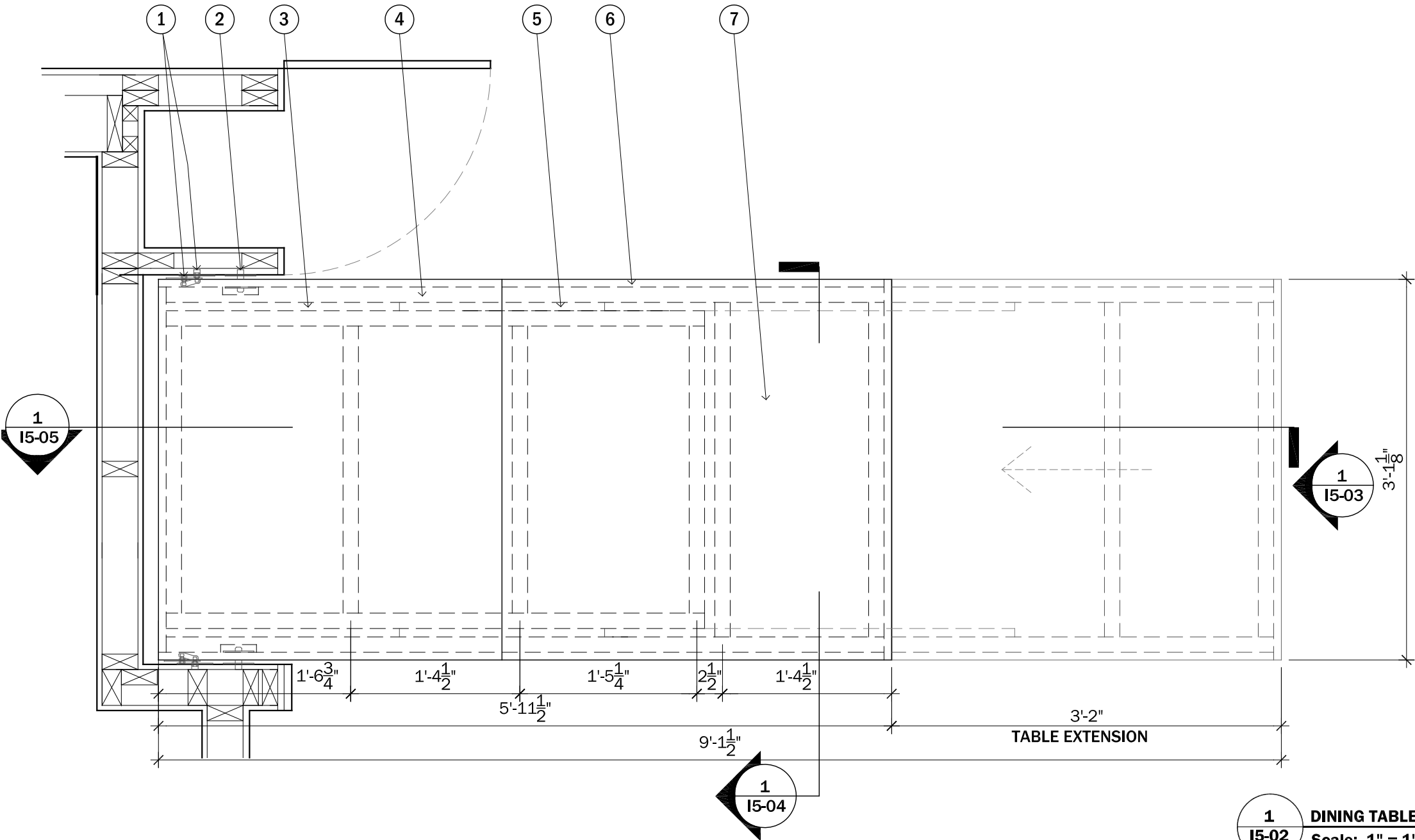
CASEWORK DETAIL-
DINING TABLE

I5-02

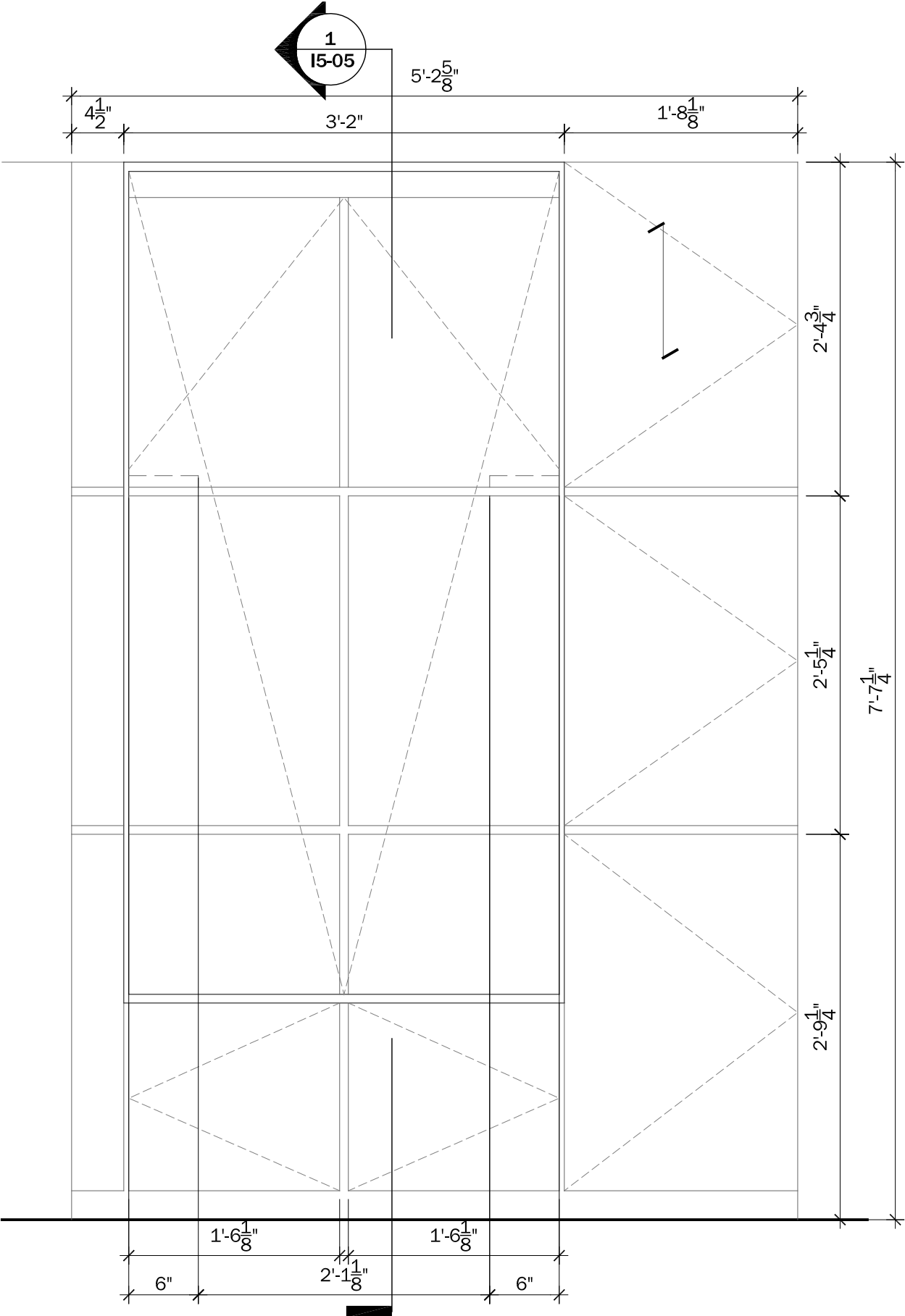
SCALE: 1" = 1'-0"

DINING TABLE KEYNOTES

- 1. C.A.B BALL STUD PLATES
- 2. C.A.B METAL PIVOT
- 3. BLOCKING BETWEEN FRAMING
- 4. 2" X 3" WOOD STUD FRAME
- 5. ROCKLER TABLE EXTENSION SLIDES 29686
- 6. 3/4" X 2 1/2" SIDE RAIL
- 7. 3' 2" X 3' 1 1/8" TABLE LEAF WITH 3/4" X 2 1/2" SIDE RAIL MADE OF CHERRY FINISHED PLYWOOD



1
I5-02 DINING TABLE DETAIL PLAN
Scale: 1" = 1'-0"



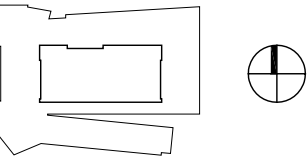
1
I5-03 **DINING TABLE DETAIL PLAN**
Scale: 1" = 1'-0"



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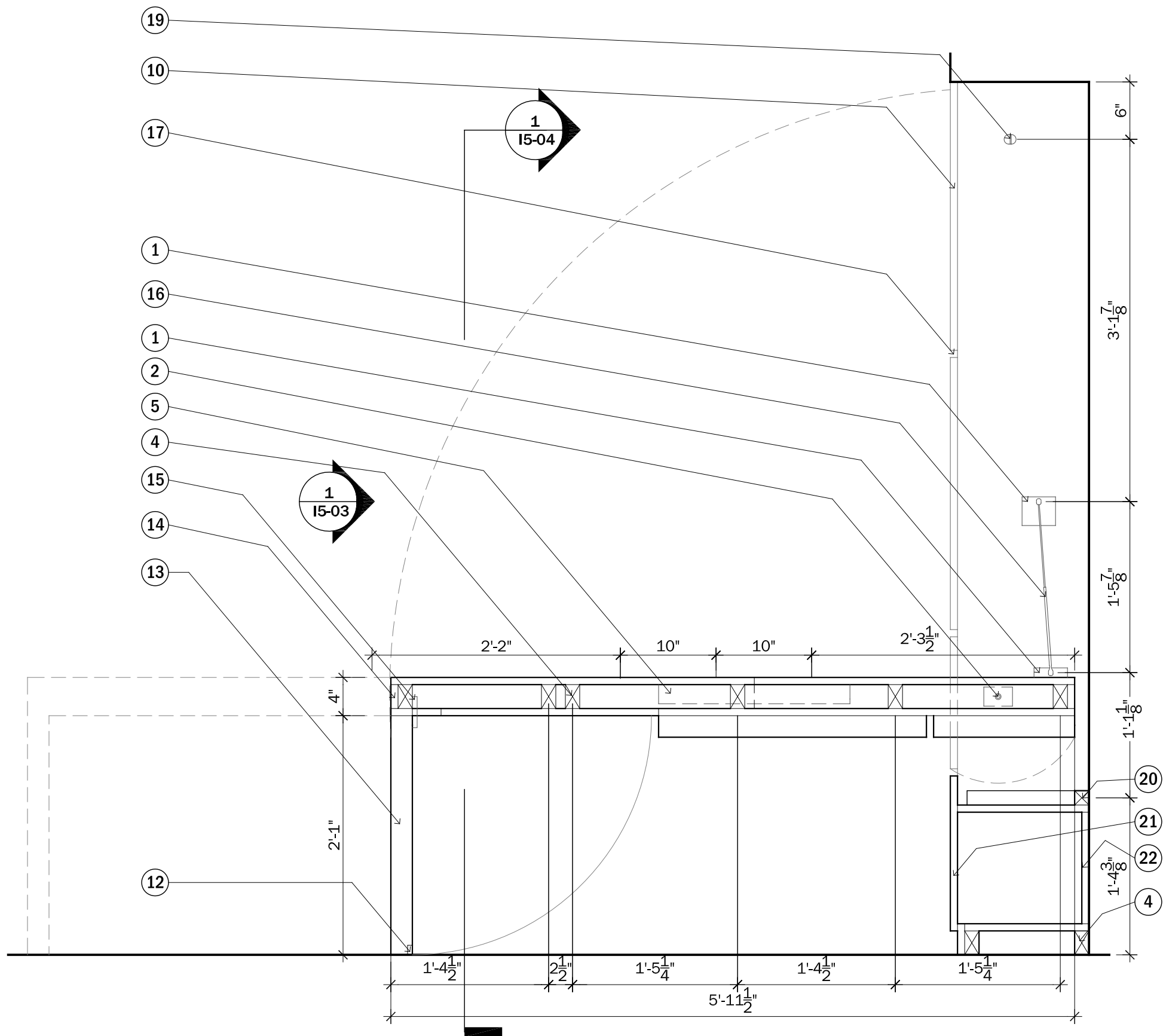
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

**CASEWORK DETAIL-
DINING TABLE**

I5-03
SCALE: 1" = 1'-0"

SCALE: 1" = 1'-0"



INTERIOR ELEVATIONS KEYNOTES

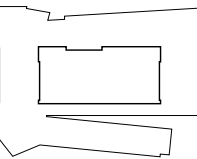
- 1. C.A.B BALL STUD PLATES
- 2. C.A.B METAL PIVOT
- 4. 2" X 3" WOOD STUD FRAME
- 5. ROCKLER TABLE EXTENSION SLIDES 29686
- 10. 3/4" CHERRY FINISHED PLYWOOD
- 12. 1/2" X 1" X 6" CUT OUT FOR GRAB
- 13. 2 1/4" X 2' 1" CHERRY TABLE LEG
- 14. 3/4" SIDE RAIL
- 15. C.A.B DOUBLE-ACTING FULLY CONCEALED LEG HINGES
- 16. C.A.B PISTON
- 17. ALL REVEALS ARE 3/4" WIDE
- 19. C.A.B TABLE STOP
- 20. 2" X 2" CABINET SUPPORT
- 21. 3/4" CHERRY FINISHED PLYWOOD CABINET DOOR EXENDED PAST TOP OF CABINET TO KEEP 3/4" REVEALS
- 22. 3/4" PLYWOOD CABINET BACK



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0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
DINING TABLE

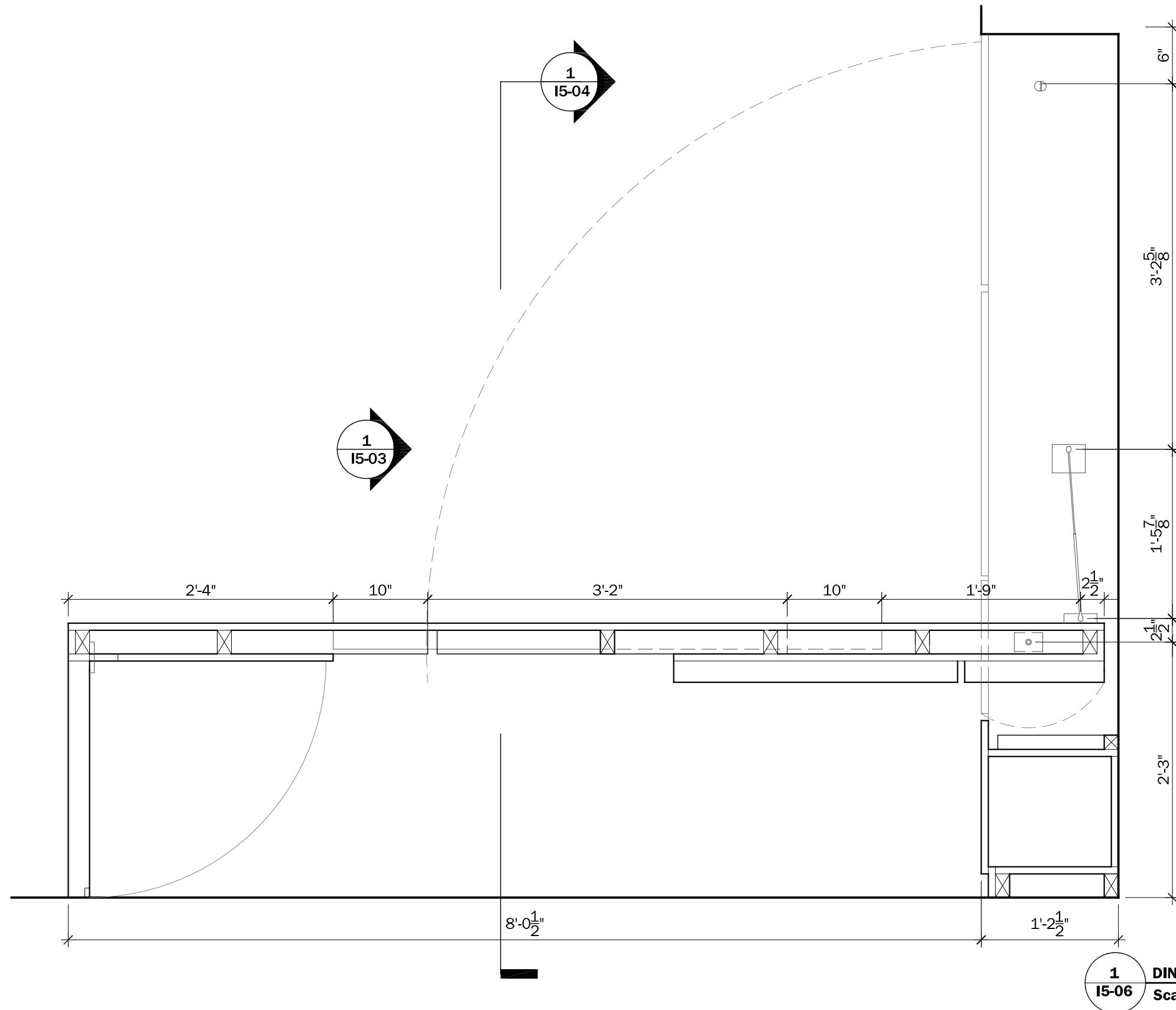
15-05

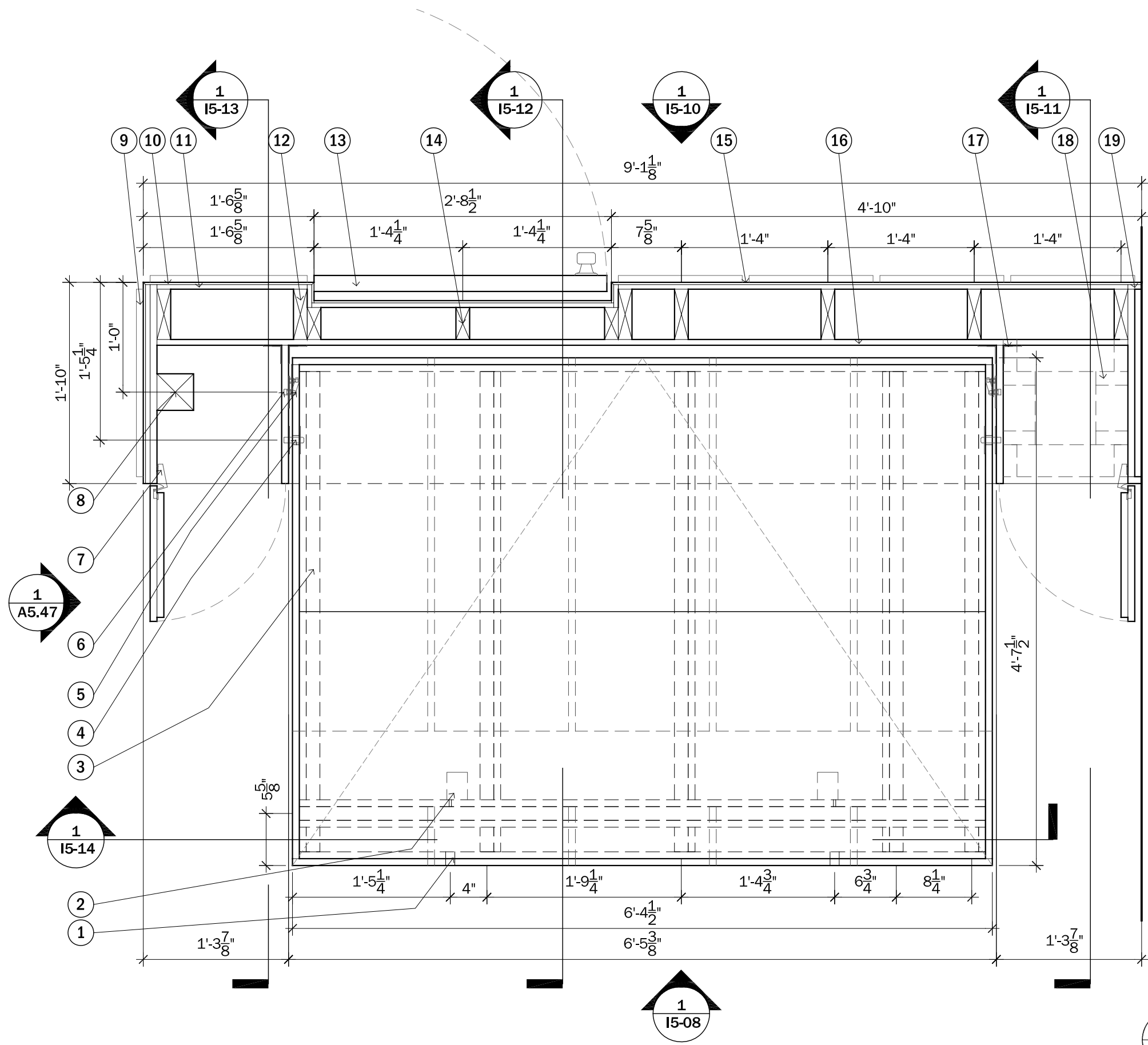
SCALE: 1" = 1'-0"

1 DINING TABLE DETAIL PLAN
I5-05 Scale: 1" = 1'-0"



SCALE: 1" = 1'-0"





- MURPHY BED KEYNOTES**
1. C.A.B LOCKING SPRING LATCH
 2. C.A.B DOUBLE-ACTING FULLY CONCEALED LEG HINGES
 3. 1" X 3" WOOD STUD
 4. C.A.B METAL PIVOT
 5. C.A.B PISTON
 6. C.A.B BALL STUD PLATES
 7. 90 DEGREE FULL OVERLAY OVER 3/4" CABINERY MEMBER
 8. 4"X 4" SUPPORT COLUMN FOR VALLEY BEAM
 9. 3/4" CHERRY FINISHED PLYWOOD PANEL
 10. 1/4" CHERRY FINISHED PLYWOOD
 11. 1/2" PLYWOOD
 12. 2" X 6" WOOD STUD
 13. 1 3/4" X 2'8" X 7'2" DOOR
 14. 2" X 4" WOOD STUD
 15. ALL REVEALS ARE 3/4"
 16. 5/8" CHERRY FINISHED PLYWOOD
 17. 2" METAL L BRACKET
 18. 2" X 4" WOOD STUD
 19. 1/2" TRIM TO COVER SPACE BETWEEN CASEWORK AND WALL

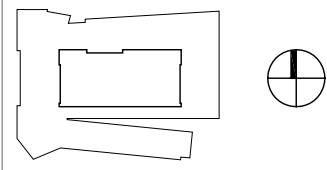
1
I5-07 **MURPHY BED DETAIL PLAN**
Scale: 1" = 1'-0"



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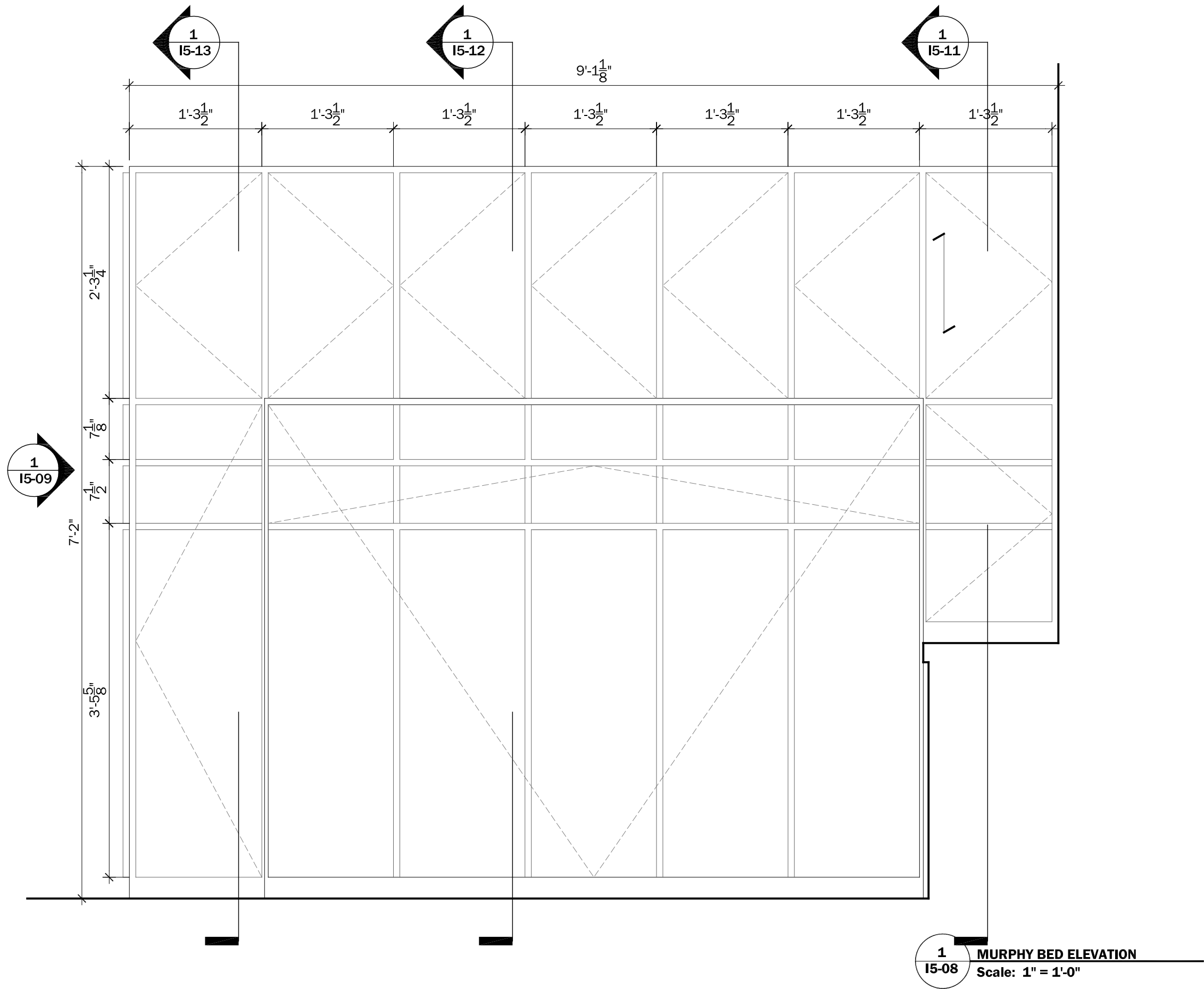


0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

**CASEWORK DETAIL-
MURPHY BED**

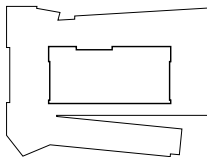
I5-07
SCALE: 1" = 1'-0"



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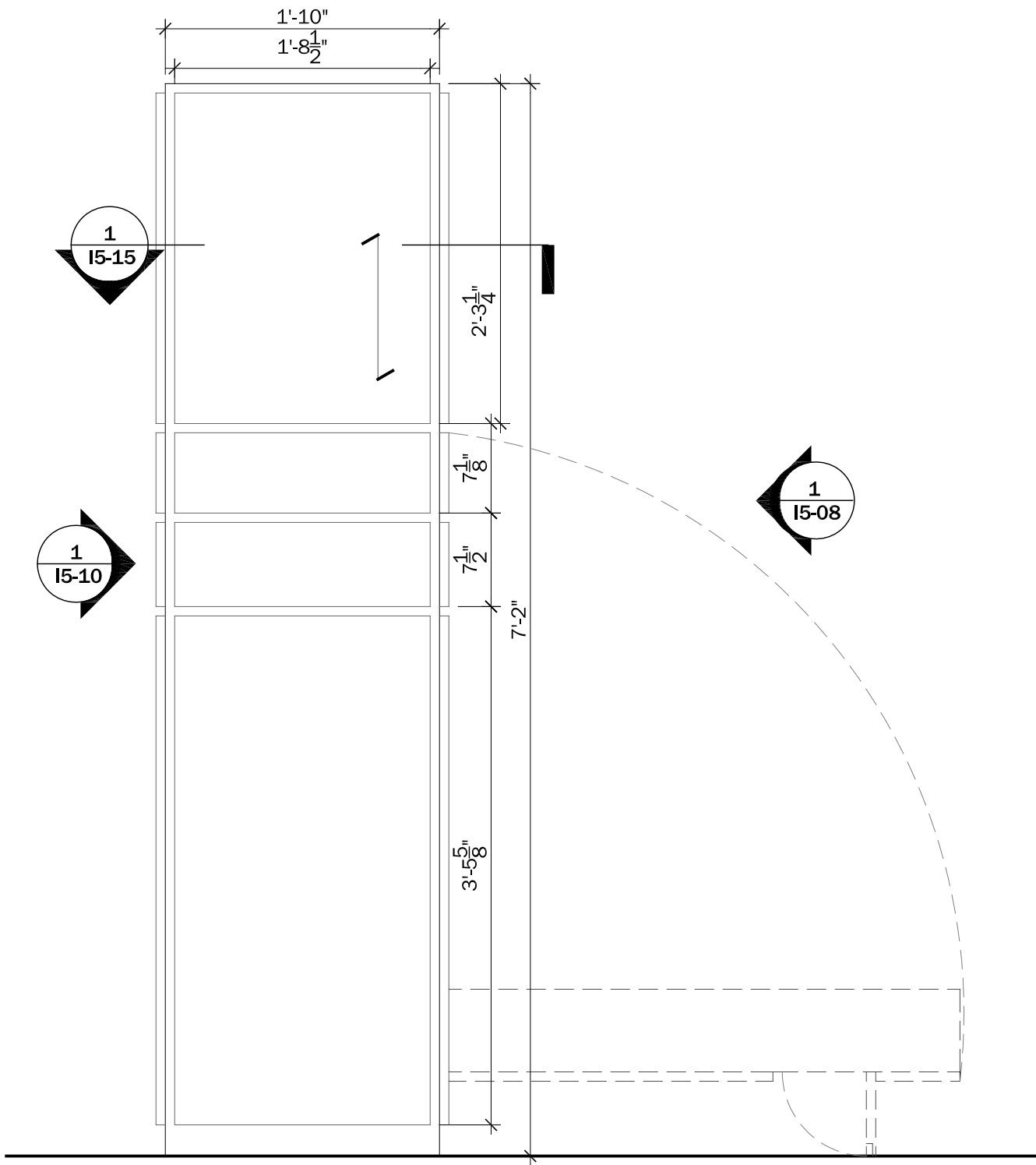
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL- MURPHY BED

15-08

SCALE: 1" = 1'-0"



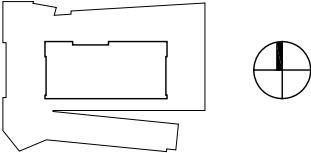
1
I5-09 **MURPHY BED ELEVATION**
Scale: 1" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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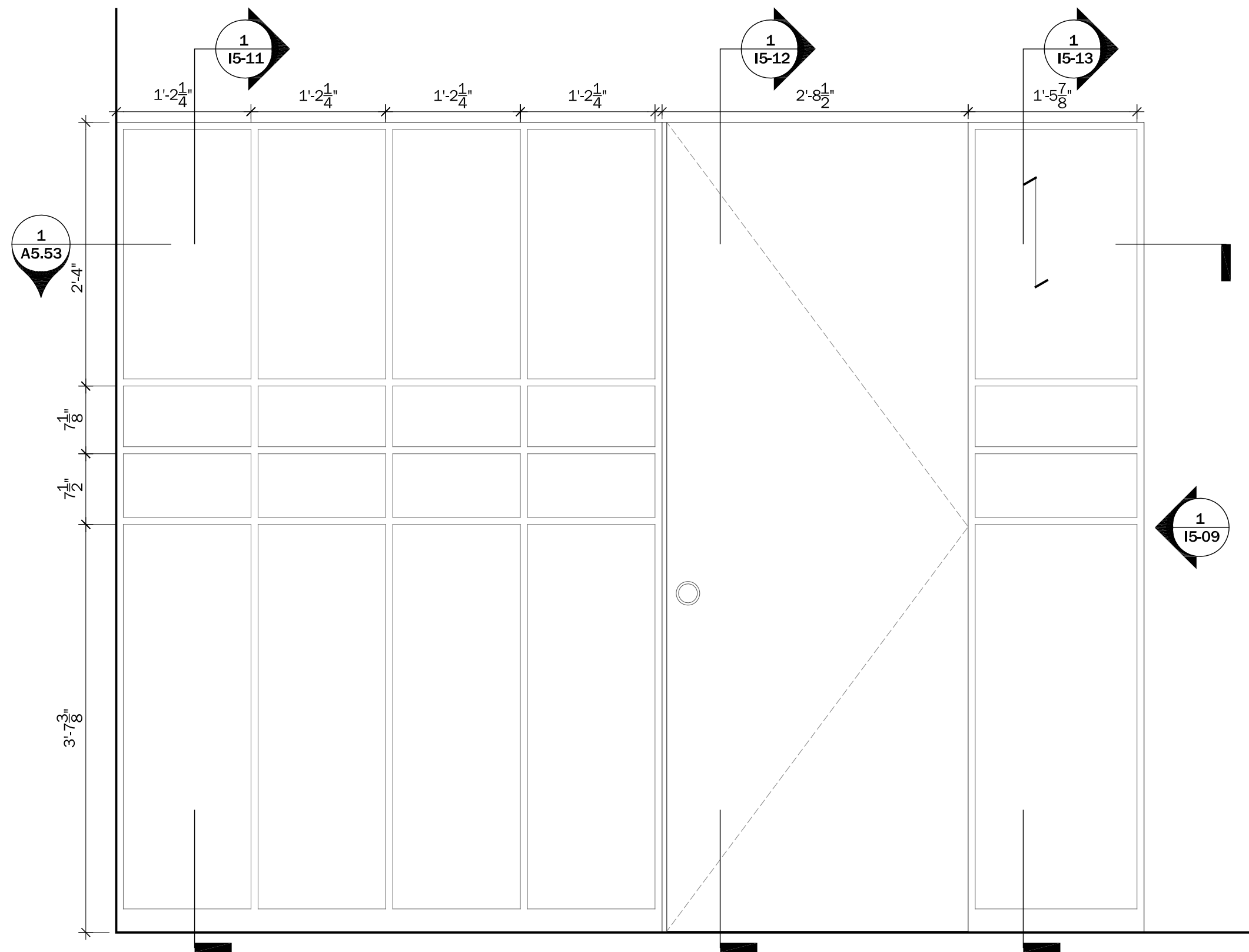
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
MURPHY BED

I5-09

SCALE: 1" = 1'-0"



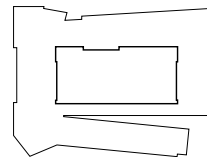
1
I5-10 **MURPHY BED ELEVATION**
Scale: 1" = 1'-0"



CLIENT NAME: DOE/NREL
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PROJECT NO.: SD 2009

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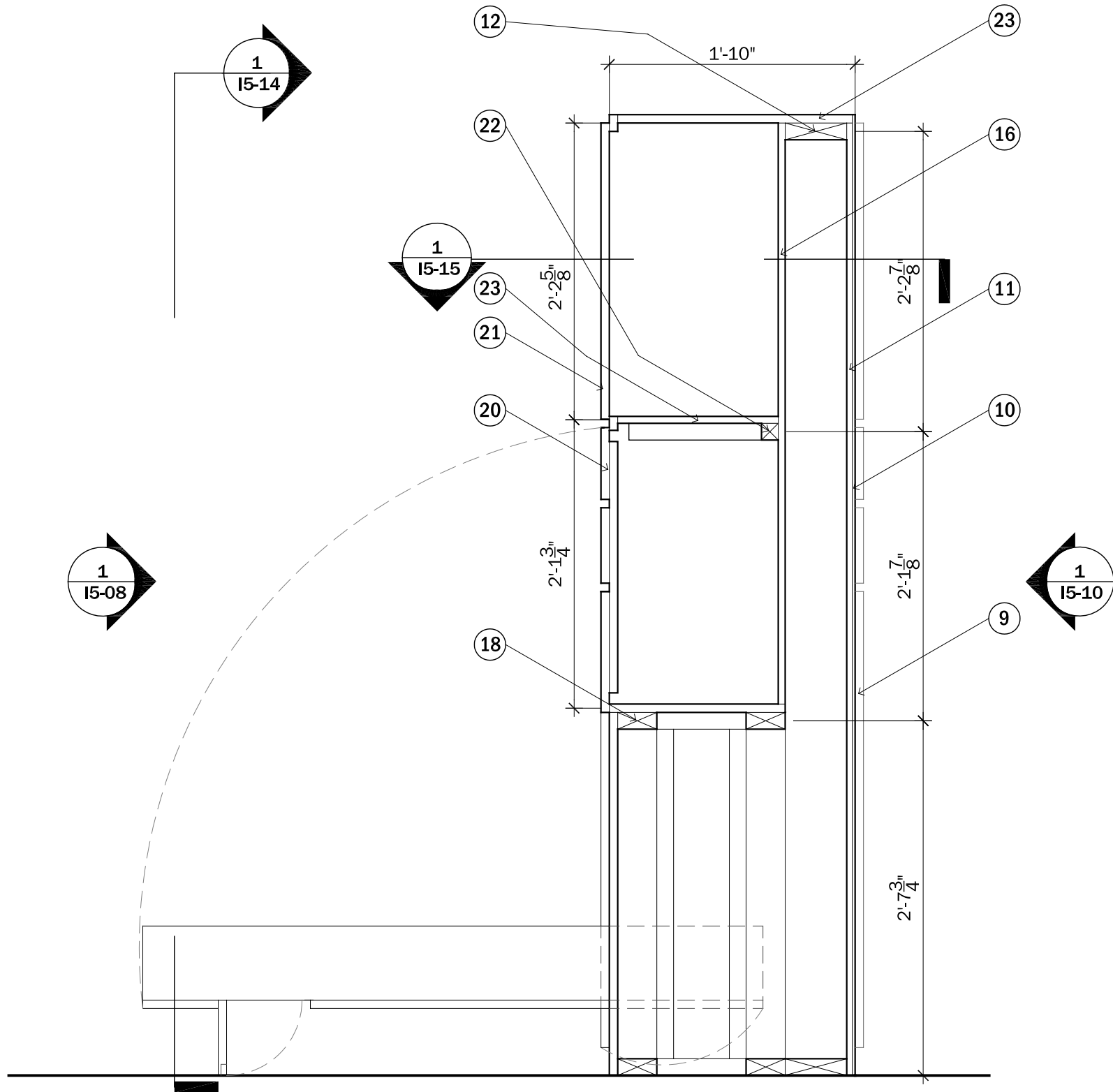
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL- MURPHY BED

I5-10

SCALE: 1" = 1'-0"



MURPHY BED KEYNOTES

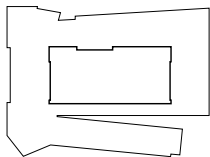
- 9. 3/4" CHERRY FINISHED PLYWOOD PANEL
- 10. 1/4" CHERRY FINISHED PLYWOOD
- 11. 1/2" PLYWOOD
- 12. 2" X 6" WOOD STUD
- 16. 5/8" CHERRY FINISHED PLYWOOD
- 18. 2" X 4" WOOD STUD
- 20. 3/4" CHERRY FINISHED PANEL OVER 3/4" CHERRY FINISHED PLYWOOD CABINET DOORS
- 21. 3/4" CHERRY FINISHED PLYWOOD CABINET DOOR
- 22. 2" X 2" WOOD CABINET SUPPORT
- 23. 3/4" CHERRY FINISHED PLYWOOD



CLIENT NAME: DOE/NREL
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REVISION HISTORY

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0" 3" 6" 1'

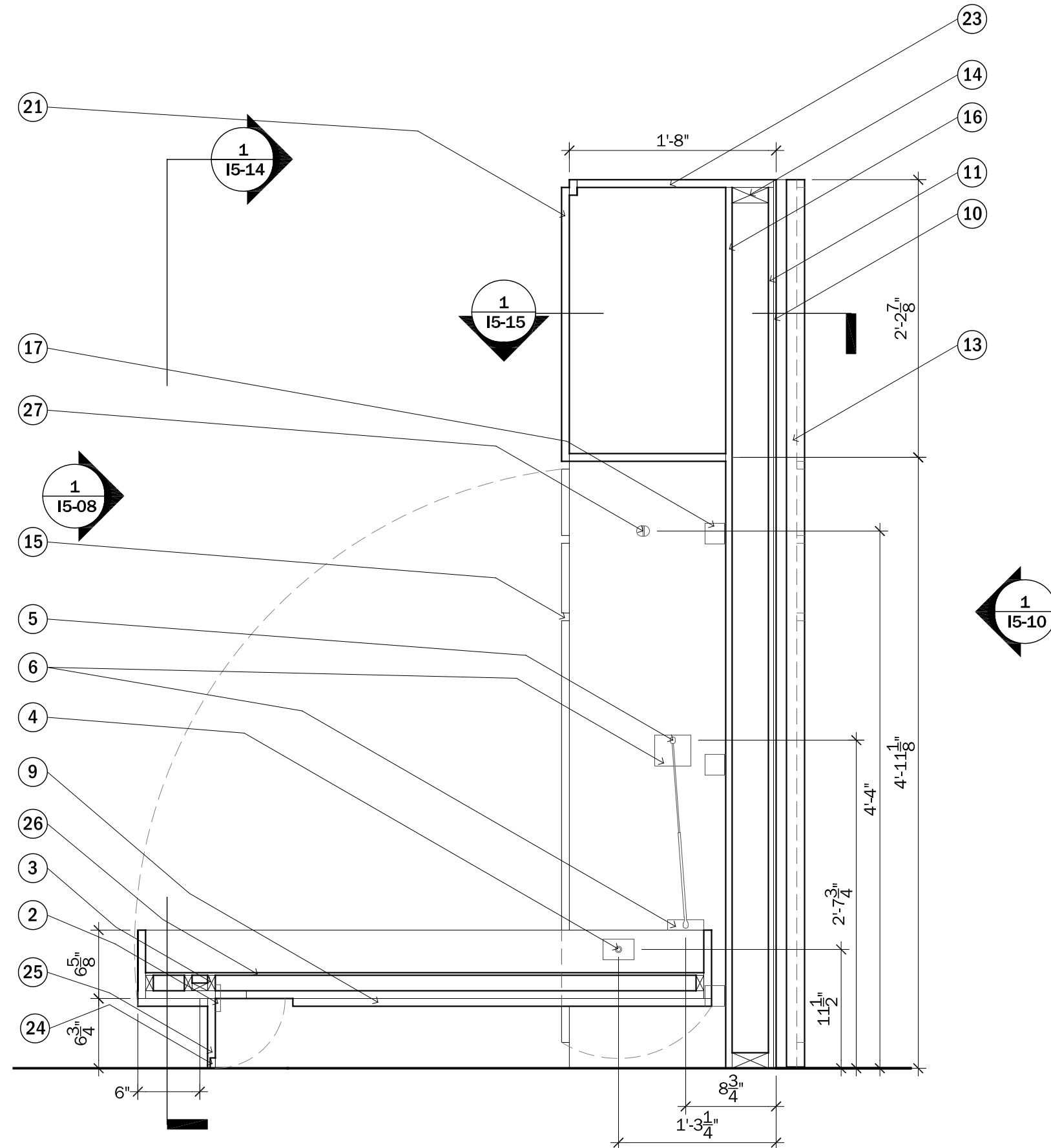
PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
MURPHY BED

I5-11

SCALE: 1" = 1'-0"

1 I5-11 MURPHY BED DETAIL SECTION
Scale: 1" = 1'-0"



MURPHY BED KEYNOTES

2. C.A.B DOUBLE-ACTING FULLY CONCEALED LEG HINGES
3. 1" X 3" WOOD STUD
4. C.A.B METAL PIVOT
5. C.A.B PISTON
6. C.A.B BALL STUD PLATES
9. 3/4" CHERRY FINISHED PLYWOOD PANEL
10. 1/4" CHERRY FINISHED PLYWOOD
11. 1/2" PLYWOOD
13. 1 3/4" X 2'8" X 7'2" DOOR
14. 2" X 4" WOOD STUD
15. ALL REVEALS ARE 3/4"
16. 5/8" CHERRY FINISHED PLYWOOD
17. 2" METAL L BRACKET
21. 3/4" CHERRY FINISHED PLYWOOD CABINET DOOR
23. 3/4" CHERRY FINISHED PLYWOOD
24. 1" X 1/2" X 6" RECESS FOR HANDLE
25. 3/4" X 6 3/4" CHERRY PANEL LEG
26. 1/4" PLYWOOD
27. C.A.B BED STOP

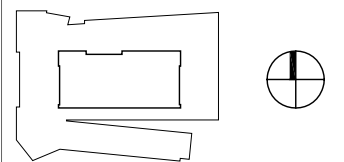
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I5-12 MURPHY BED DETAIL SECTION
Scale: 1" = 1'-0"



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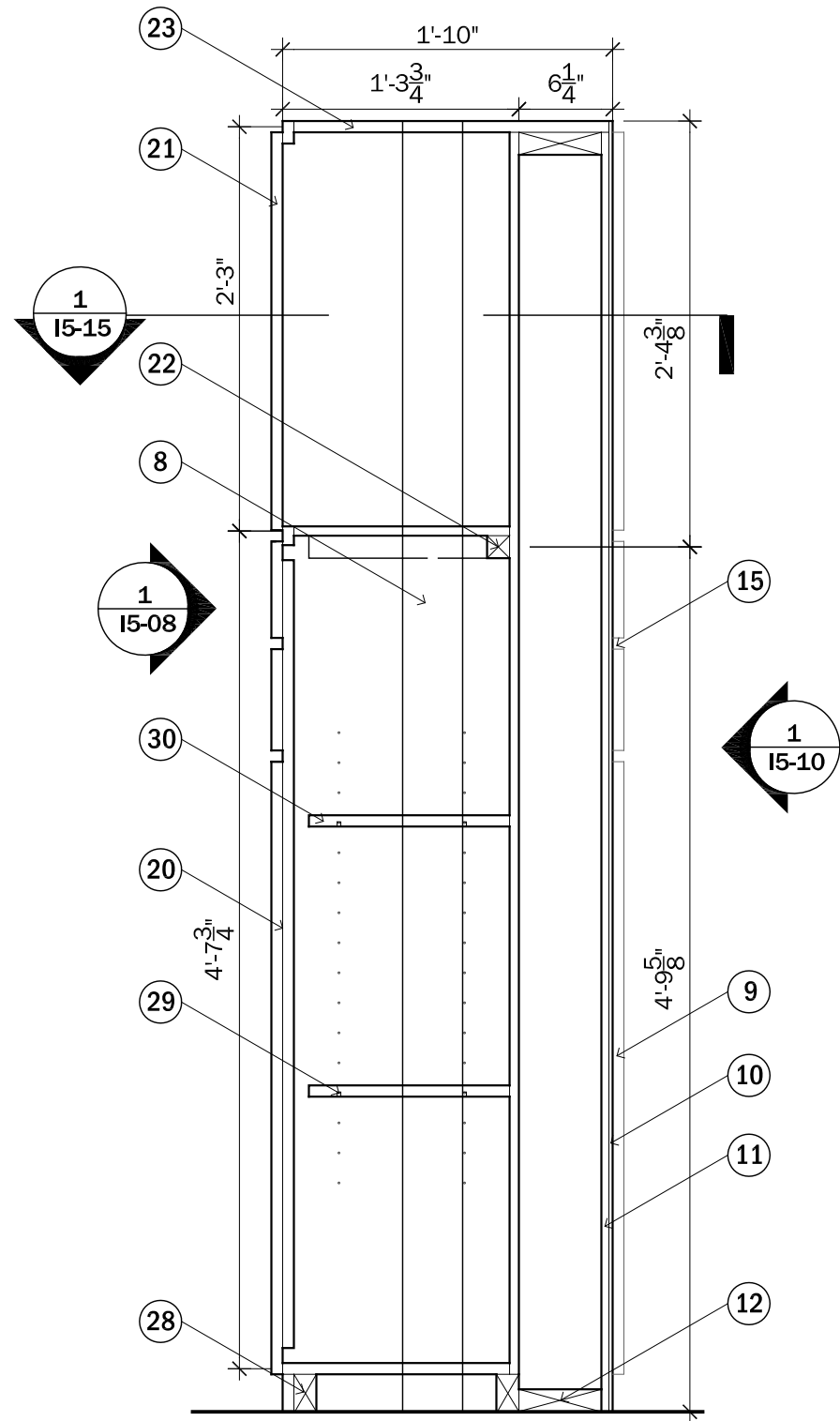
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
MURPHY BED

I5-12

SCALE: 1" = 1'-0"



MURPHY BED KEYNOTES

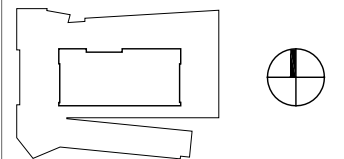
8. 4" X 4" SUPPORT COLUMN FOR VALLEY BEAM
9. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD PANEL
10. $\frac{1}{4}$ " CHERRY FINISHED PLYWOOD
11. $\frac{1}{2}$ " PLYWOOD
12. 2" X 6" WOOD STUD
15. ALL REVEALS ARE $\frac{3}{4}$ "
20. $\frac{3}{4}$ " CHERRY FINISHED PANEL OVER $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD CABINET DOORS
21. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD CABINET DOOR
22. 2" X 2" WOOD CABINET SUPPORT
23. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD
28. 2" X 3" WOOD STUD
29. SHELF PIN
30. $\frac{3}{4}$ " ADJUSTABLE HEIGHT SHELVING



CLIENT NAME: DOE/NREL
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0" 3" 6" 1'

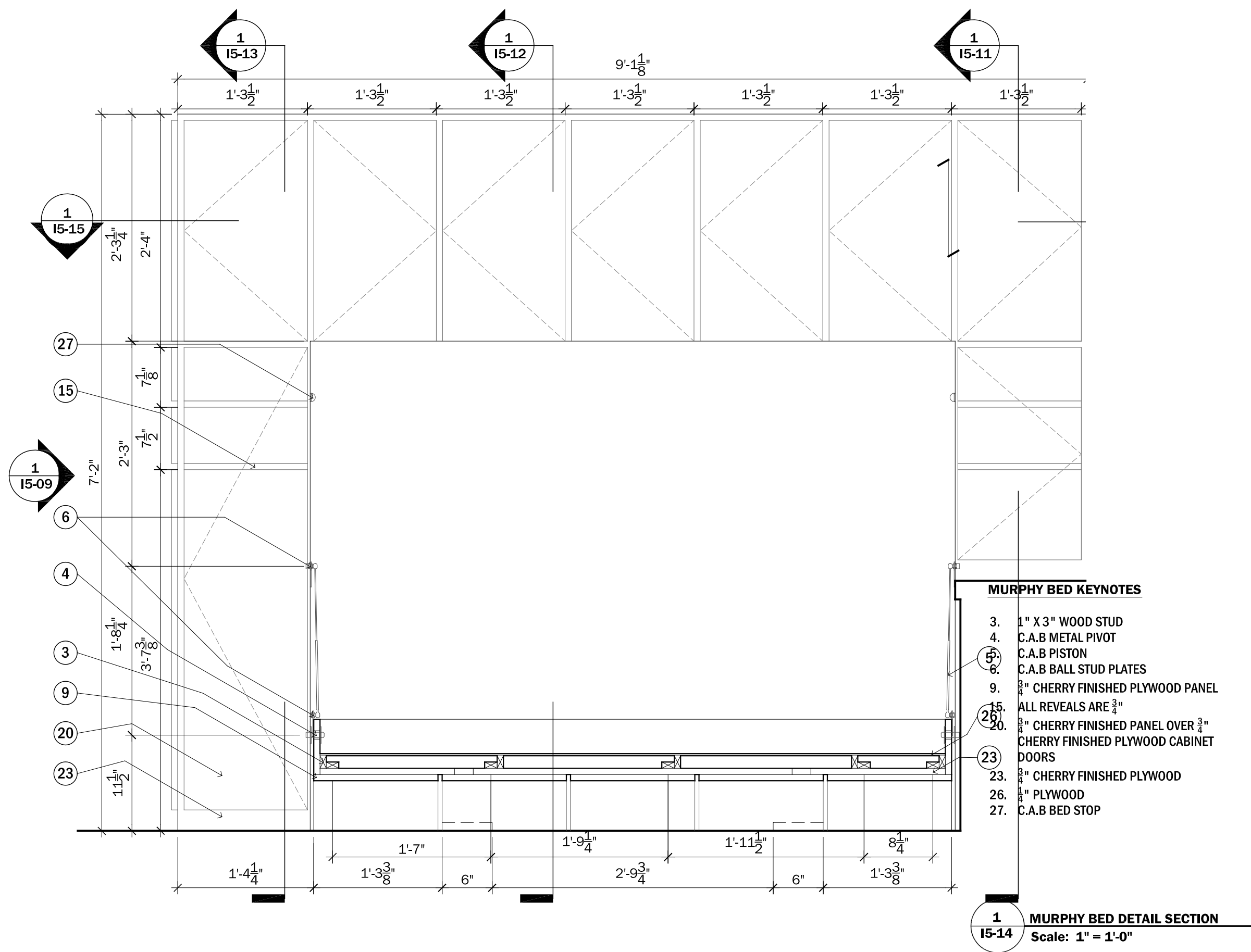
PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
MURPHY BED

I5-13

SCALE: 1" = 1'-0"

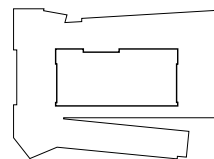
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I5-13 **MURPHY BED DETAIL SECTION**
Scale: 1" = 1'-0"



CLIENT NAME: DOE/NREL
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PROJECT NO.: SD 2009

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0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL- MURPHY BED

I5-14

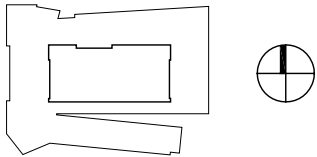
SCALE: 1" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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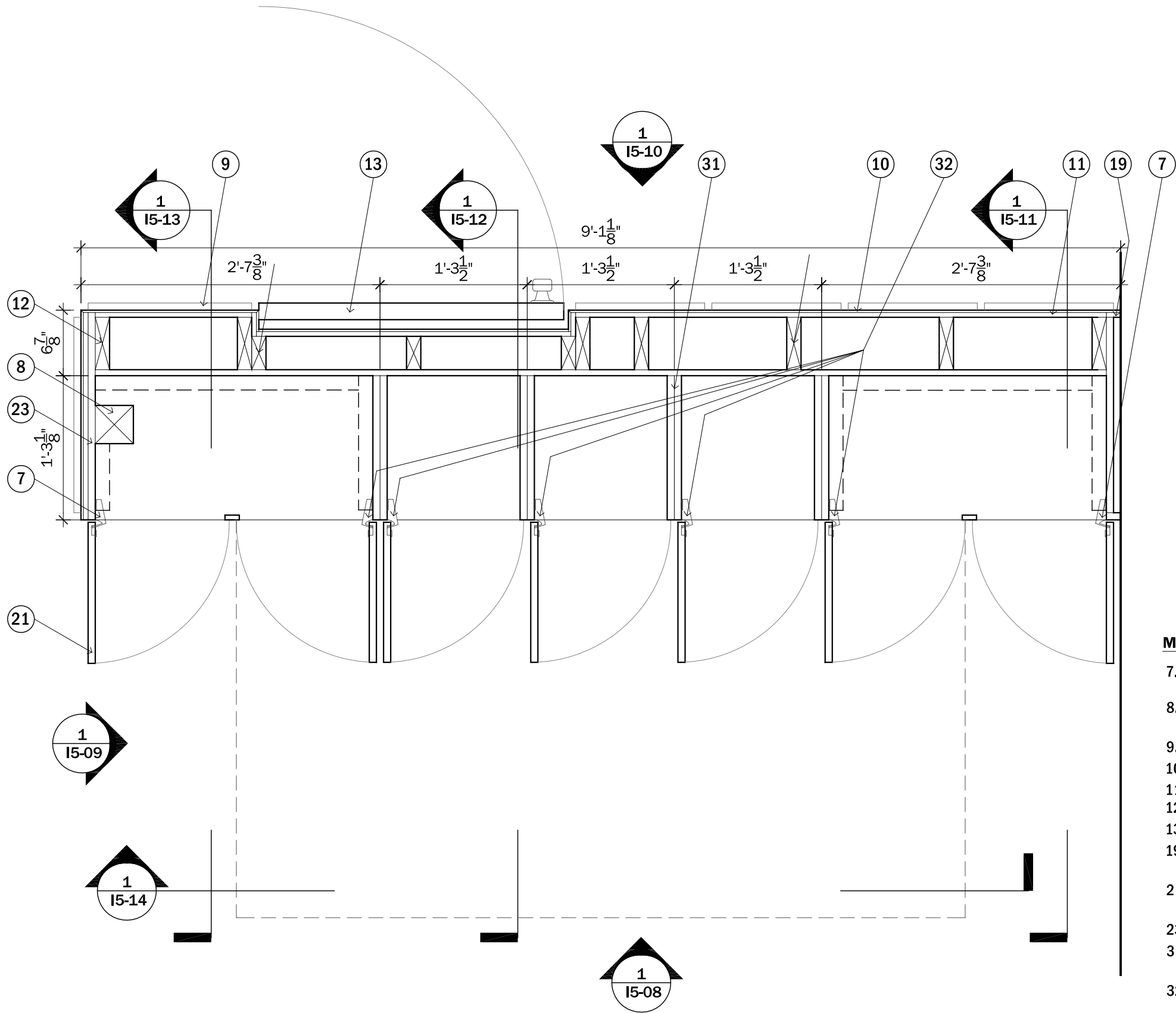
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PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
MURPHY BED

I5-15

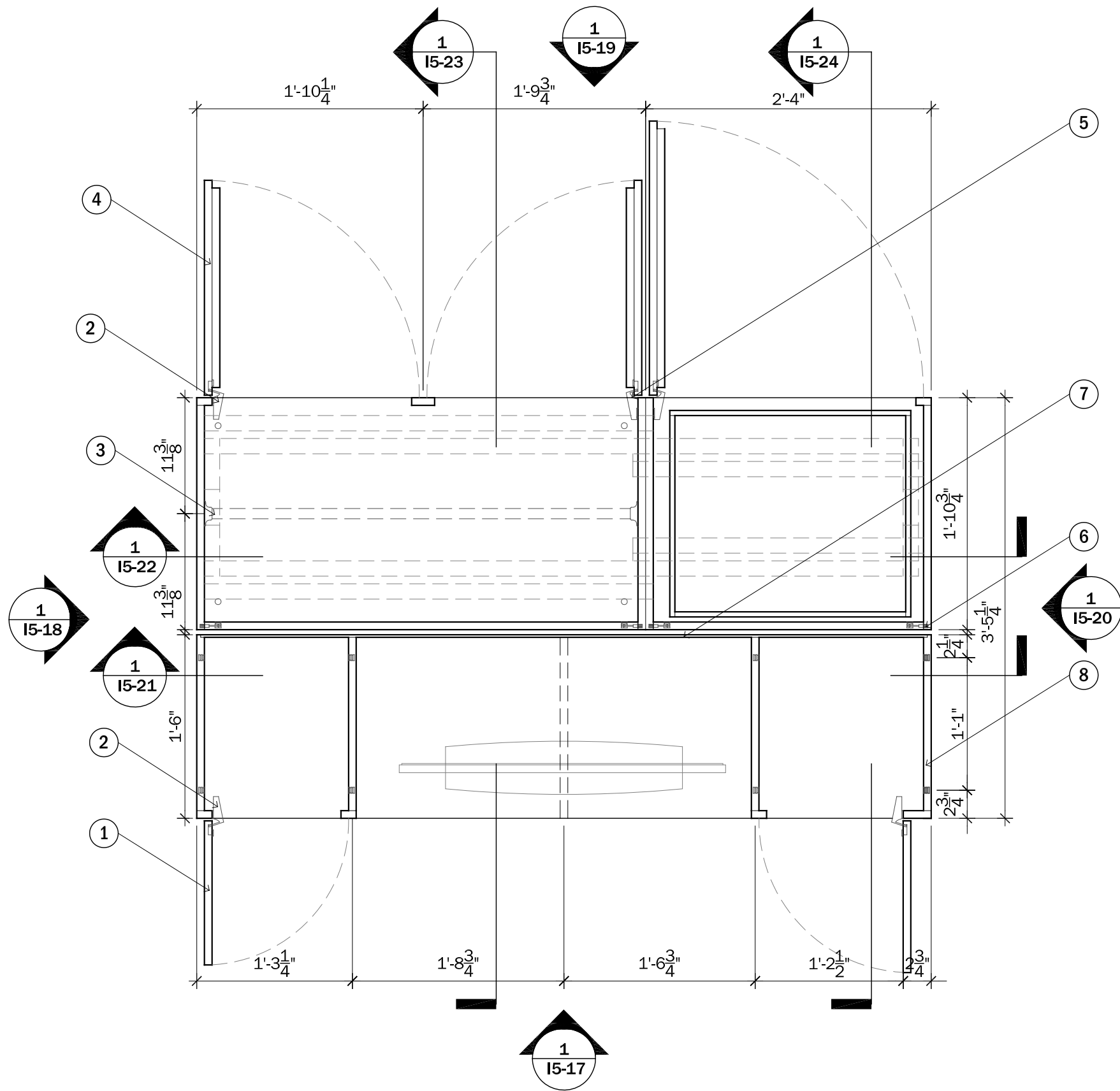
SCALE: 1" = 1'-0"



MURPHY BED KEYNOTES

- 7. 90 DEGREE FULL OVERLAY OVER $\frac{3}{4}$ " CABINETRY MEMBER
- 8. 4" X 4" SUPPORT COLUMN FOR VALLEY BEAM
- 9. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD PANEL
- 10. $\frac{1}{4}$ " CHERRY FINISHED PLYWOOD
- 11. $\frac{1}{2}$ " PLYWOOD
- 12. 2" X 6" WOOD STUD
- 13. $1\frac{3}{4}$ " X 2'8" X 7'2" DOOR
- 19. $\frac{1}{2}$ " TRIM TO COVER SPACE BETWEEN CASEWORK AND WALL
- 21. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD CABINET DOOR
- 23. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD
- 31. TWO $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD LAMINATED TOGETHER
- 32. 90 DEGREE HALF OVERLAY OVER $\frac{3}{4}$ " MEMBER

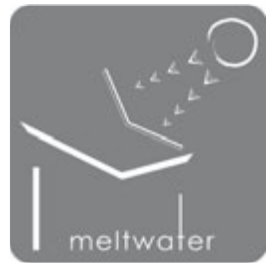
1 I5-15 MURPHY BED DETAIL PLAN
Scale: 1" = 1'-0"



ARMOIRE AND ENTERTAINMENT CENTER

KEYNOTES

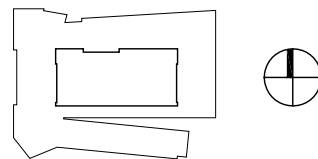
1. $\frac{3}{4}$ " CHERRY FINISHED PLWOOD CABINET DRAWER
2. 90 DEGREE FULL OVERLAY OVER $\frac{3}{4}$ " PLYWOOD MEMBER
3. 1" METAL WARDROBE ROD
4. $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD PANEL OVER $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD CABINET DOOR
5. 90 DEGREE HALF OVERLAY OVER $\frac{3}{4}$ " PLYWOOD MEMBER
6. $\frac{3}{4}$ " MINIFIX FASTENER
7. $\frac{1}{4}$ " FROSTED GLASS ADHERED TO WOOD MEMBERS
8. ALL MEMBERS CONSTRUCTED OF $\frac{3}{4}$ " CHERRY FINISHED PLYWOOD



CLIENT NAME: DOE/NREL
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0" 3" 6" 1'

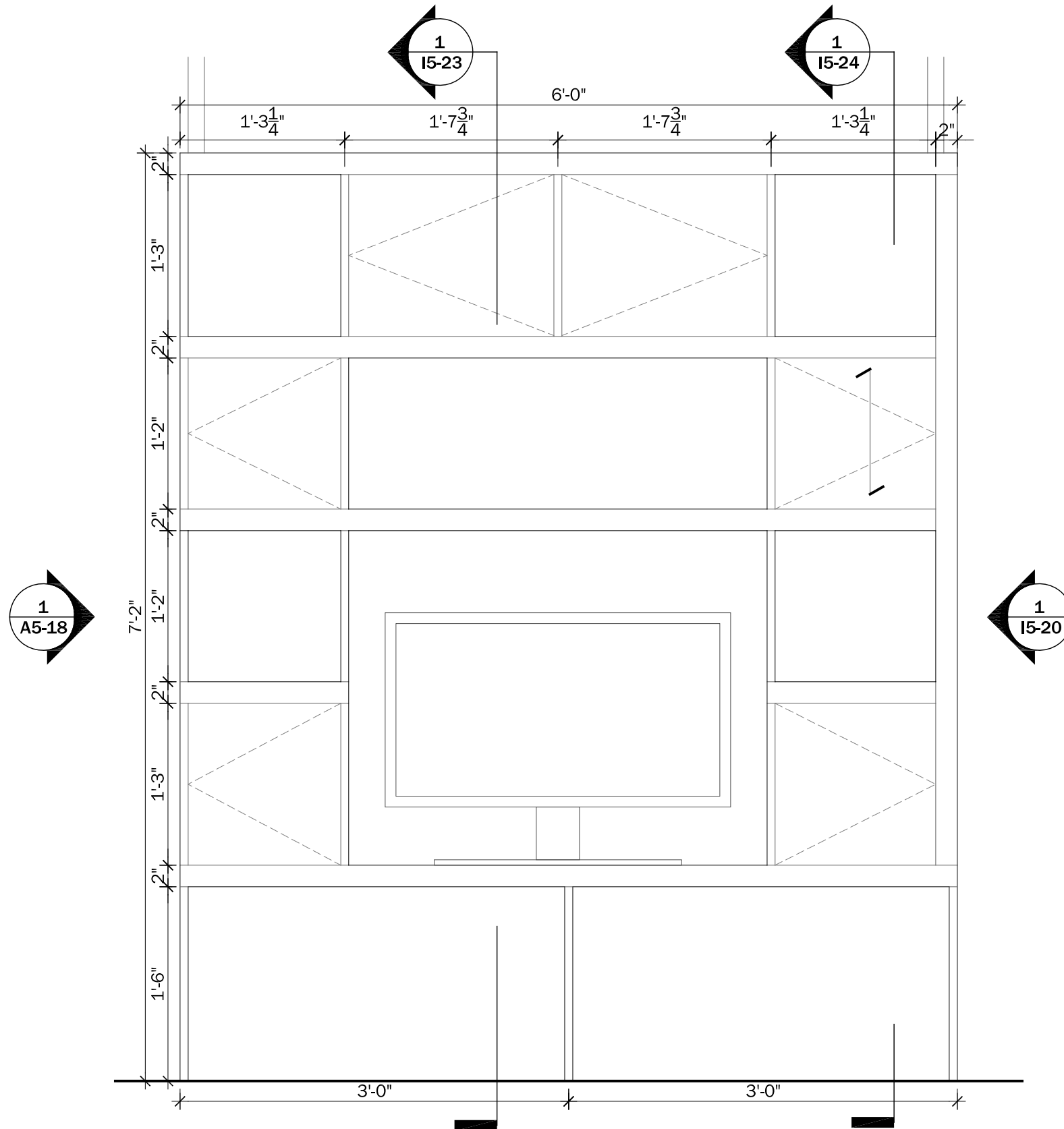
PROJECT STATUS: CD
SHEET NAME:

**CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER**

I5-16

SCALE: 1" = 1'-0"

1 ARMOIRE AND ENTERTAINMENT CENTER DETAIL PLAN
I5-16 Scale: 1" = 1'-0"



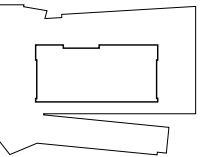
1
I5-17 ENTERTAINMENT CENTER DETAIL ELEVATION
Scale: 1" = 1'-0"



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0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER

I5-17

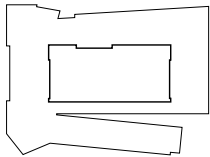
SCALE: 1" = 1'-0"



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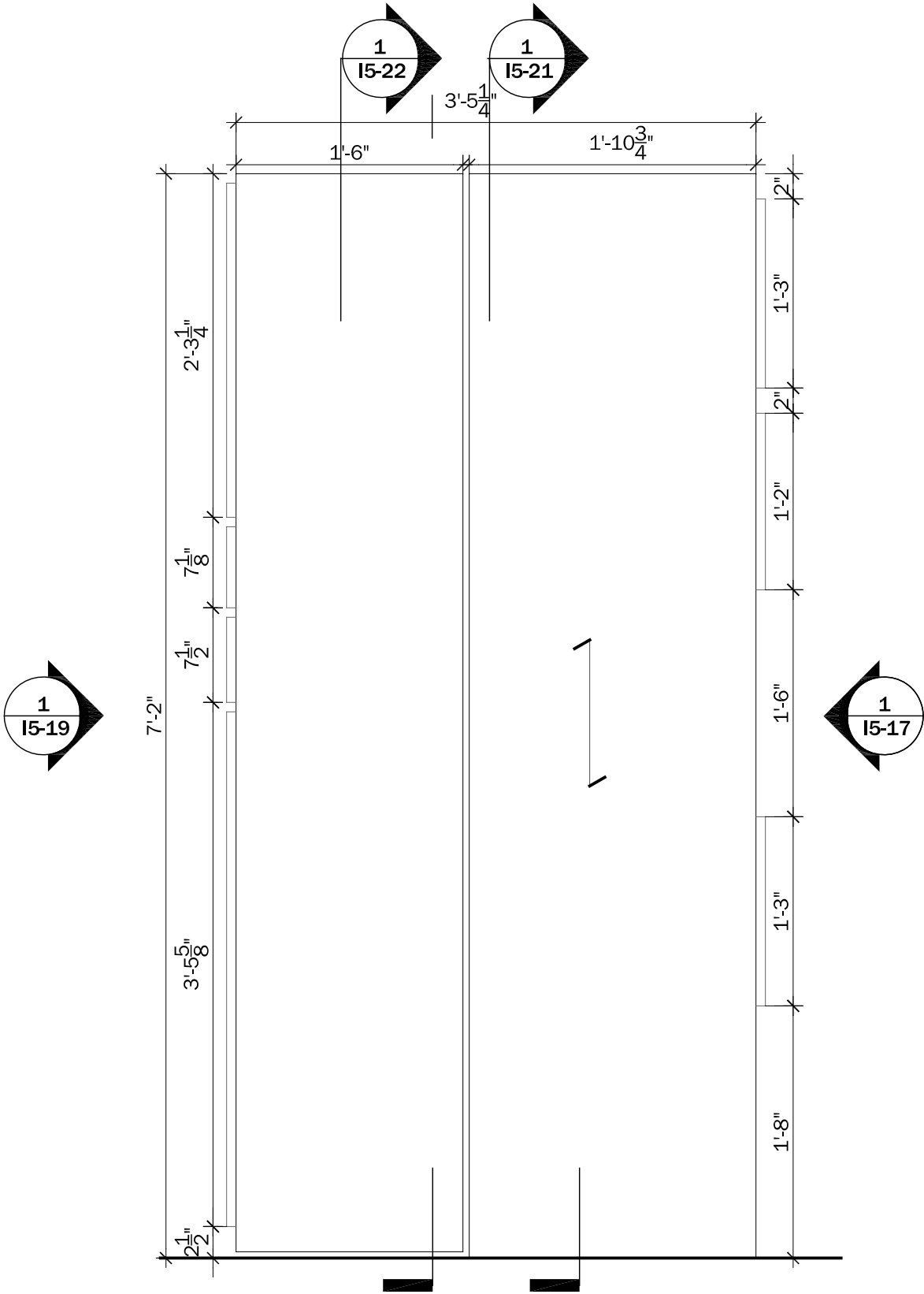
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PROJECT STATUS: CD
SHEET NAME:

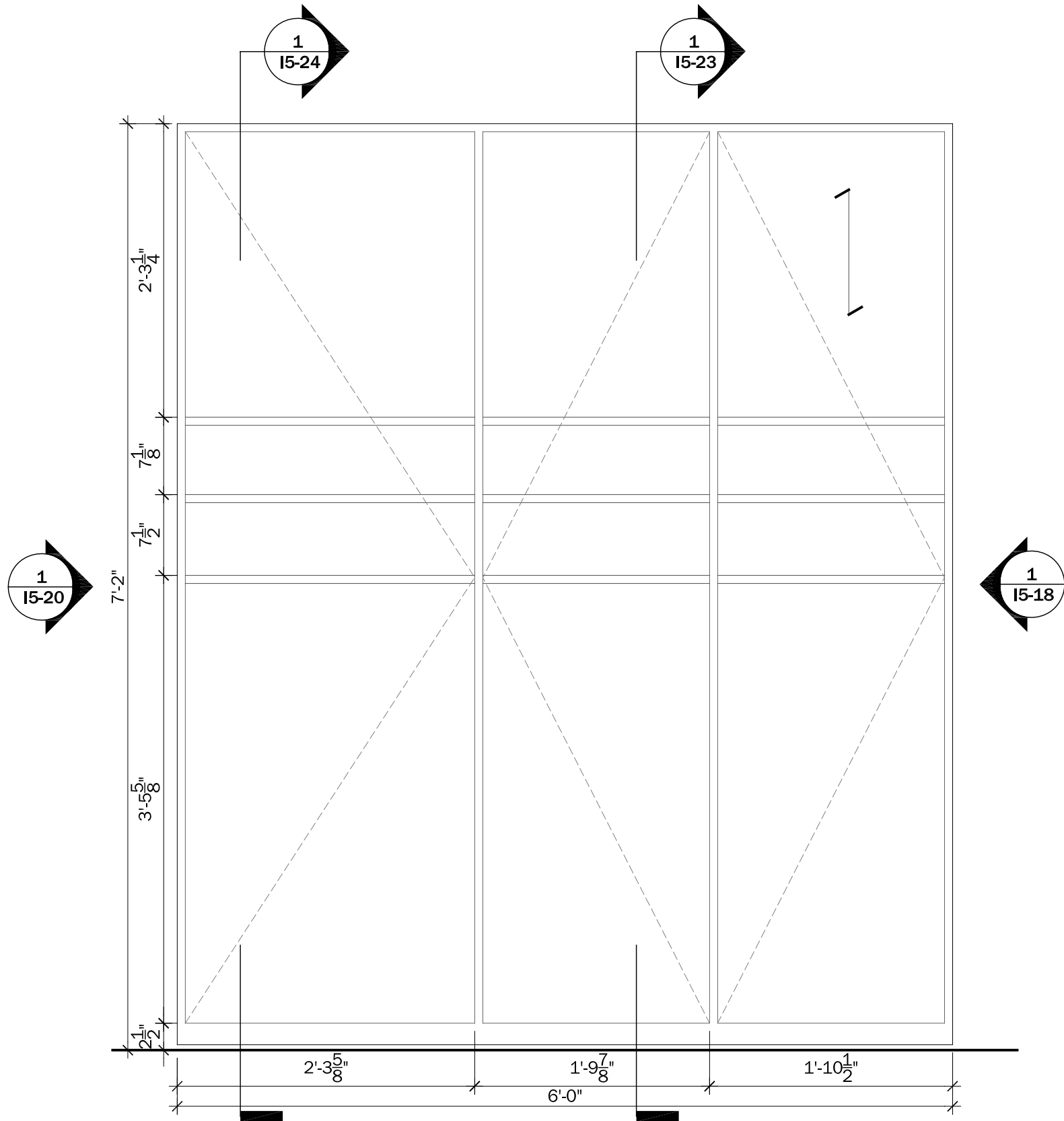
CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER

I5-18

SCALE: 1" = 1'-0"



1
I5-18 ARMOIRE AND ENTERTAINMENT CENTER DETAIL ELEVATION
Scale: 1" = 1'-0"



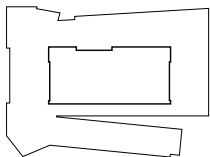
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I5-19 **ARMOIRE DETAIL ELEVATION**
Scale: 1" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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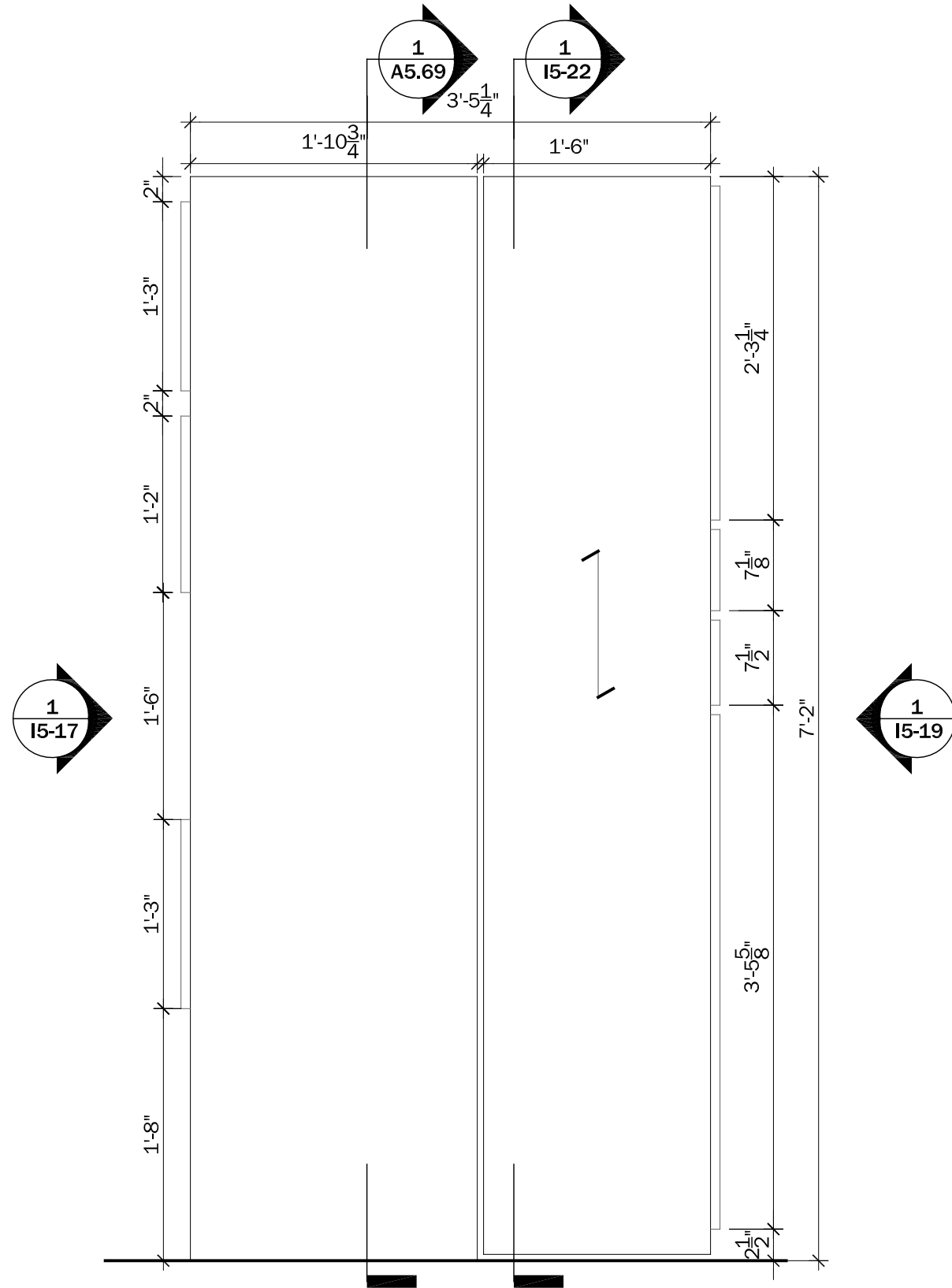
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER

I5-19

SCALE: 1" = 1'-0"



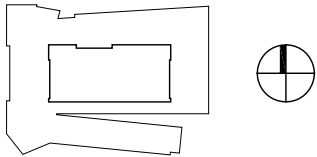
1
I5-20 **ARMOIRE AND ENTERTAINMENT CENTER DETAIL ELEVATION**
Scale: 1" = 1'-0"



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PROJECT NO.: SD 2009

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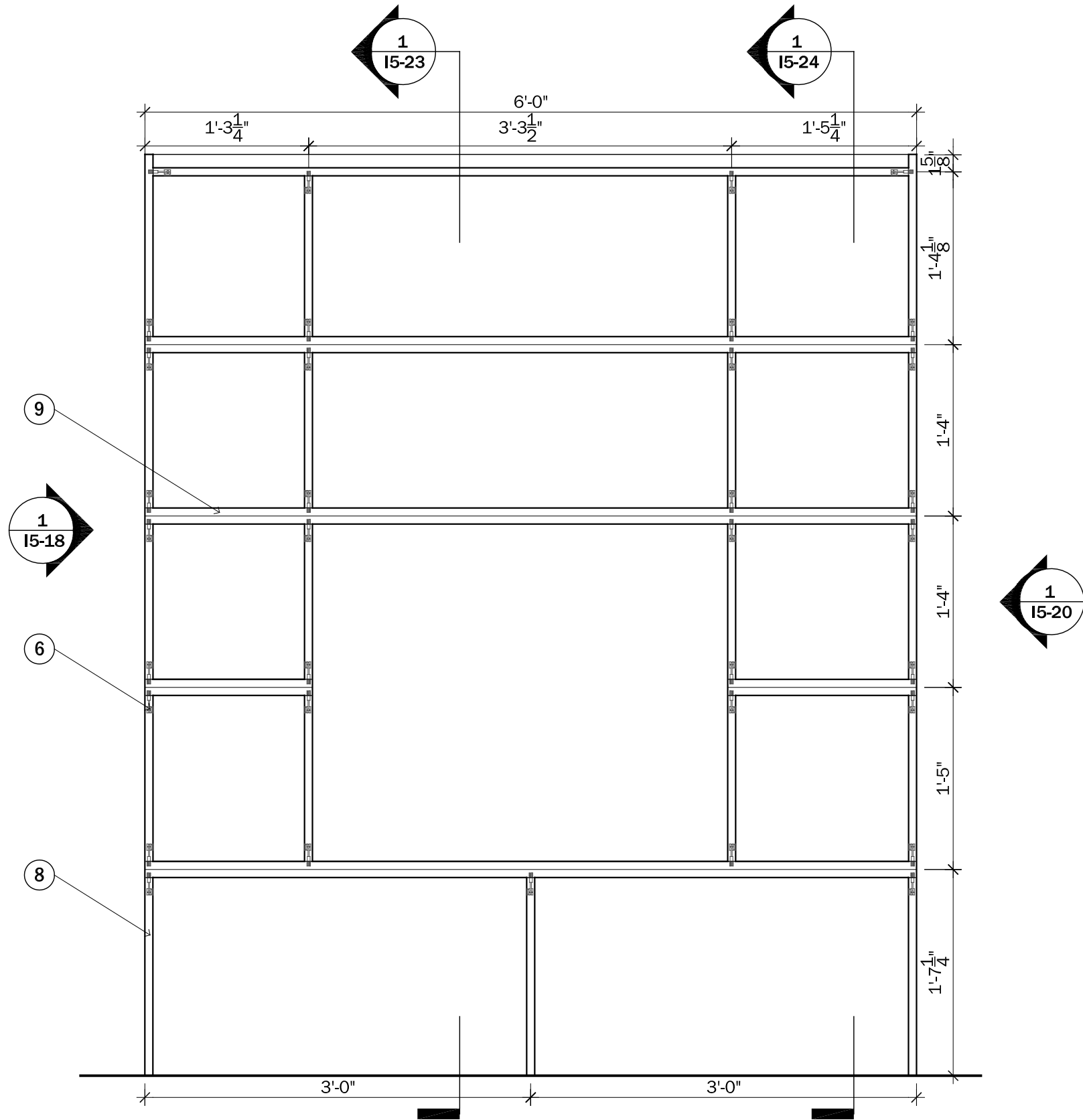
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

**CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER**

I5-20

SCALE: 1" = 1'-0"



ENTERTAINMENT CENTER KEYNOTES

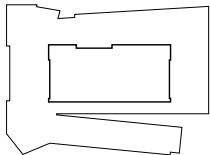
- 6. 3/4" MINIFIX FASTENE
- 8. ALL MEMBERS CONSTRUCTED OF 3/4" CHERRY FINISHED PLYWOOD
- 9. TWO 3/4" CHERRY FINISHED PLYWOOD LAMINATED TOGETHER



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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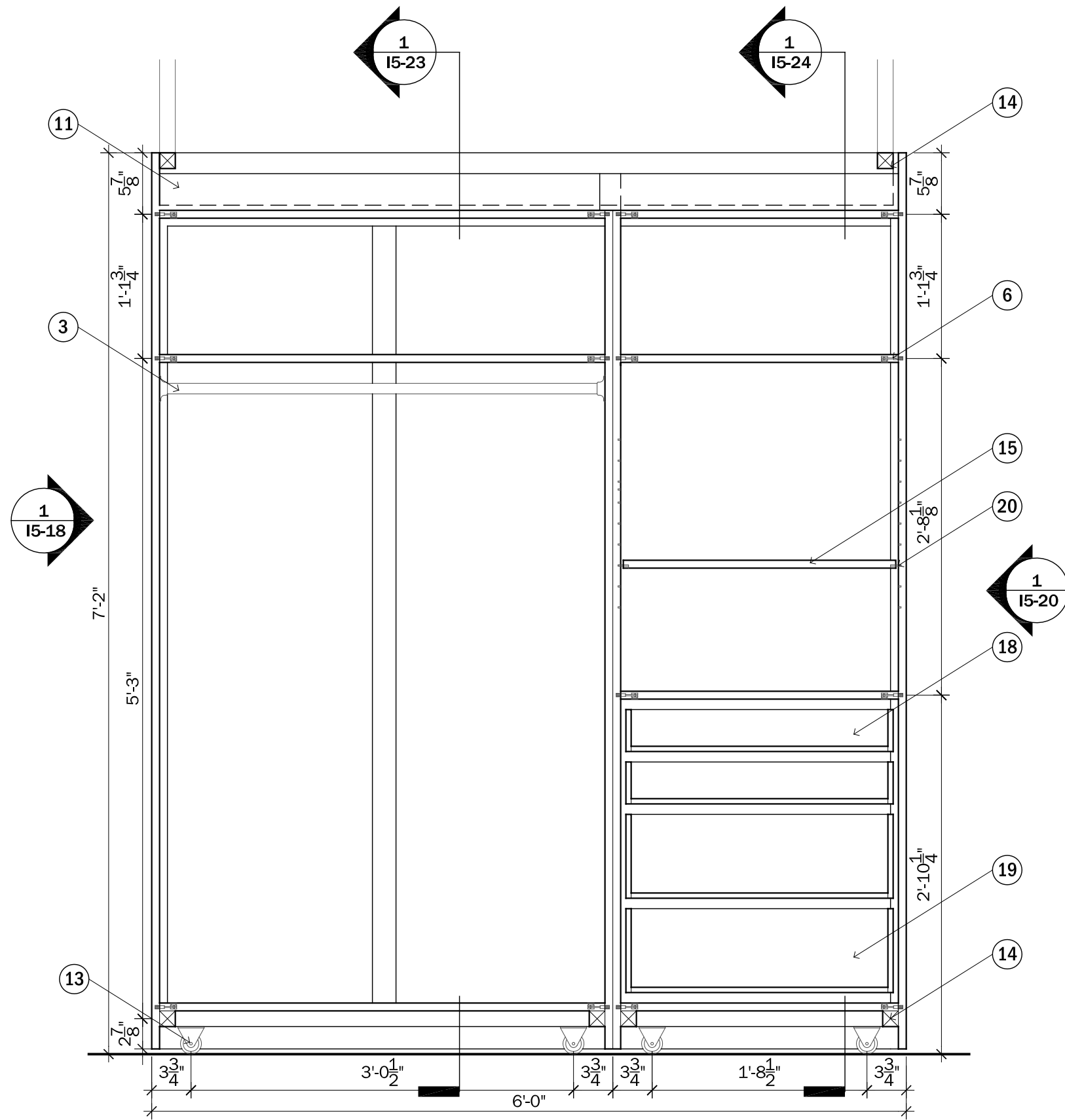
0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER

15-21

SCALE: 1" = 1'-0"



ARMOIRE KEYNOTES

- 3. 1" METAL WARDROBE ROD
- 6. 3/4" MINIFIX FASTENER
- 11. 2" X 4" WOOD STUD
- 13. 2" RIGID CASTER
- 14. 2" X 2" WOOD STUD
- 15. 3/4" ADJUSTABLE HEIGHT CHERRY FINISHED PLYWOOD SHELVING
- 18. 4" DRAWER
- 19. 8" DRAWER
- 20. SHELF PIN

CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
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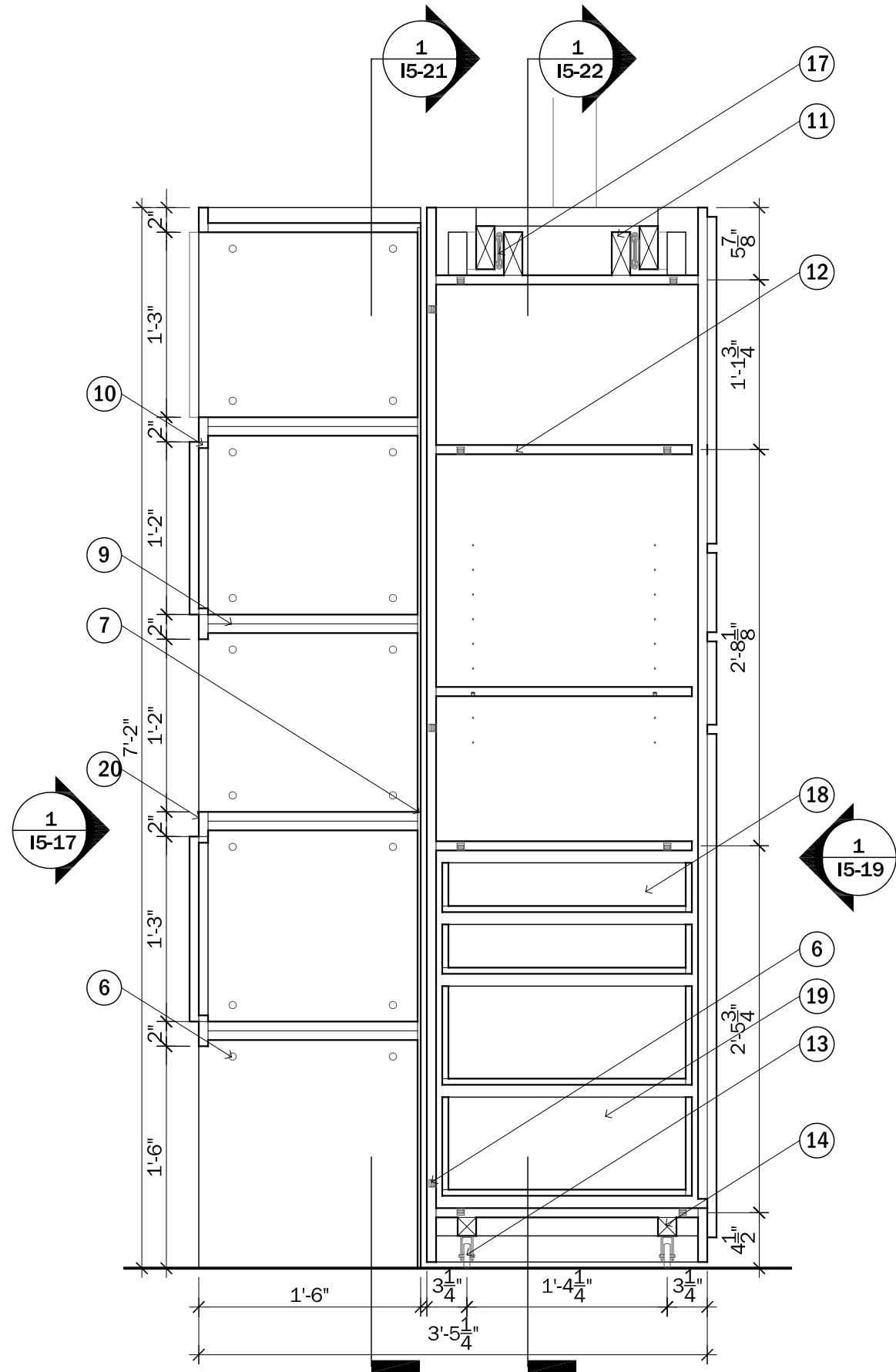
REVISION HISTORY

ISSUE DATE: 2009.06.02
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PROJECT STATUS: CD
SHEET NAME:
CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER
15-22
SCALE: 1" = 1'-0"

1 ARMOIRE DETAIL SECTION
15-22 Scale: 1" = 1'-0"

1 ARMOIRE AND ENTERTAINMENT CENTER DETAIL SECTION I5-23 Scale: 1" = 1'-0"






ARMOIRE AND ENTERTAINMENT CENTER

KEYNOTES

- 6. 3/4" MINIFIX FASTENER
- 7. 1/4" RESIN PANEL ADHERED TO WOOD MEMBERS
- 9. TWO 3/4" CHERRY FINISHED PLYWOOD LAMINATED TOGETHER
- 10. 3/4" X 1/2" CHERRY TRIM FOR CABINET DOOR STOP
- 11. 2" X 4" WOOD STUD
- 12. 3/4" CHERRY FINISHED PLYWOOD SHELVING
- 13. 2" RIGID CASTER
- 14. 2" X 2" WOOD STUD
- 17. ACCURIDE 9301-28 SLIDE
- 18. 4" DRAWER
- 19. 8" DRAWER
- 20. 3/4" X 2" CHERRY FACE FRAME

1 ARMOIRE AND ENTERTAINMENT CENTER DETAIL SECTION
15-24 Scale: 1" = 1'-0"


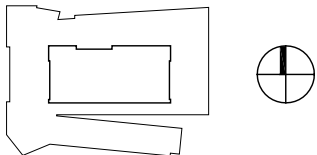




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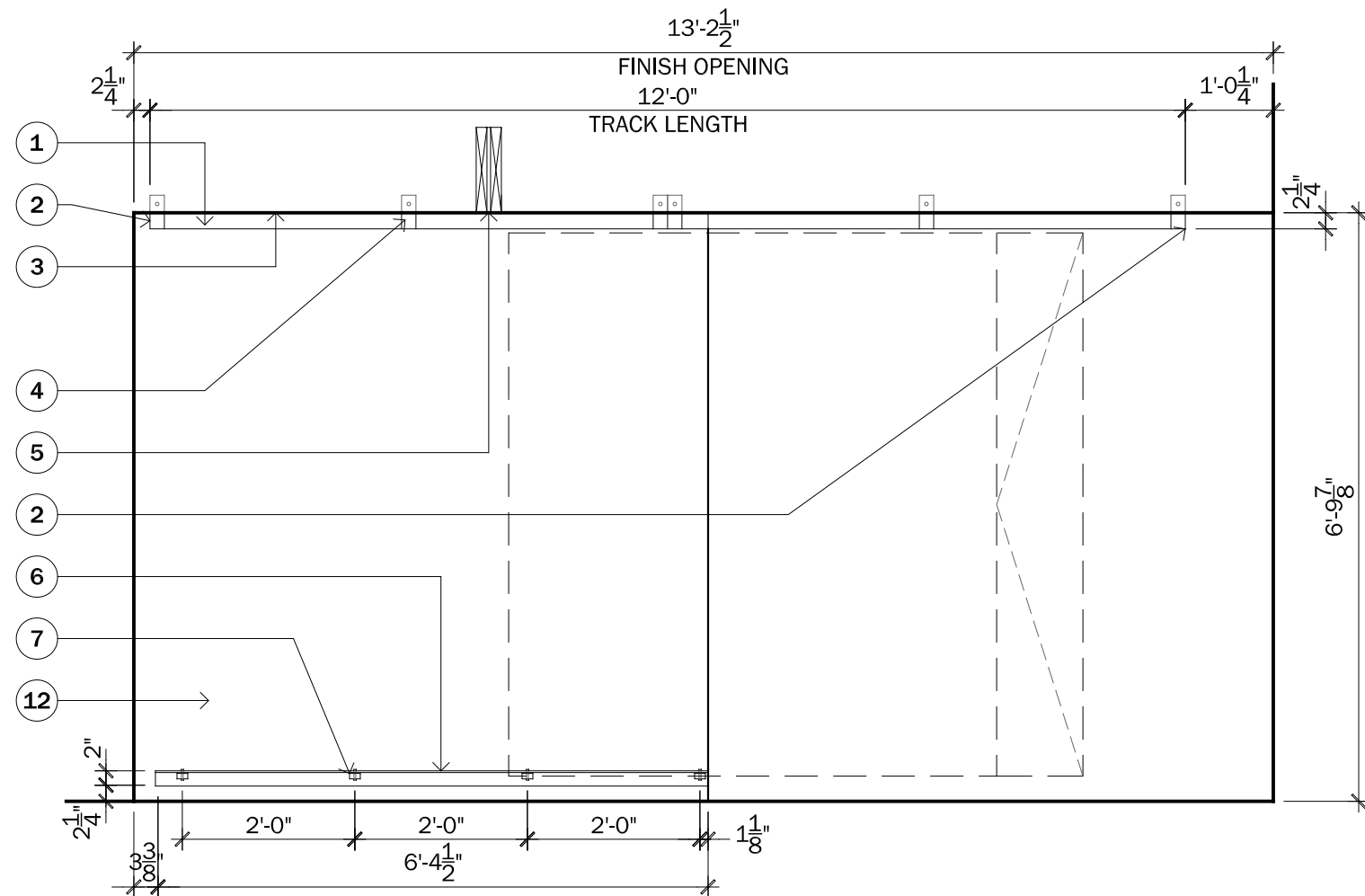


0" 3" 6" 1'

PROJECT STATUS: CD
SHEET NAME:

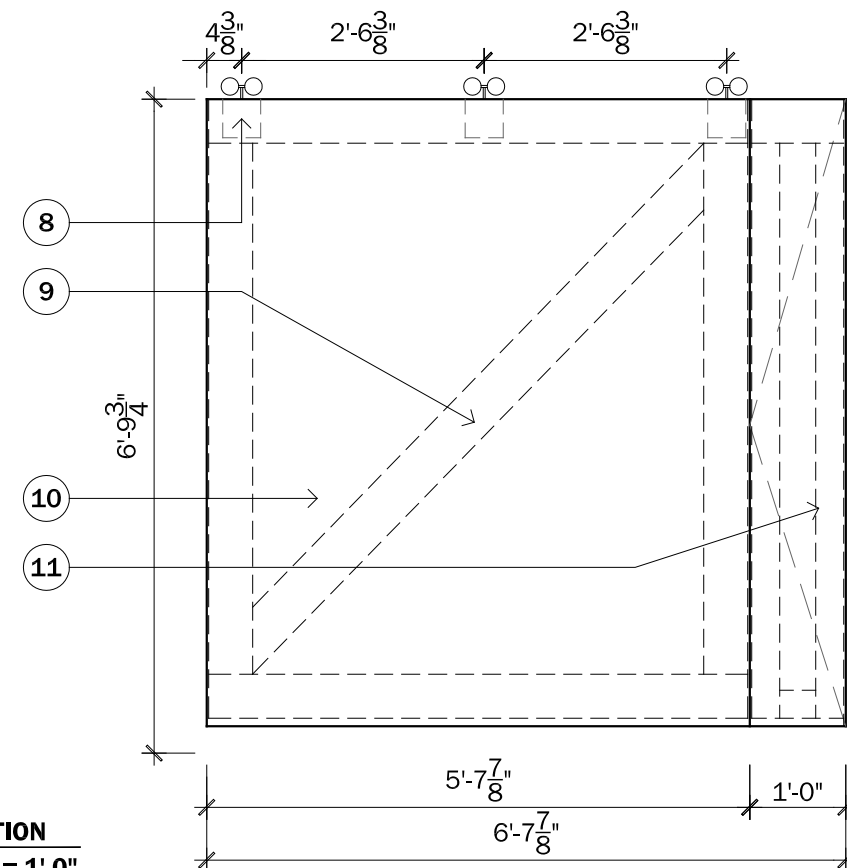
CASEWORK DETAIL-
ARMOIRE AND
ENTERTAINMENT
CENTER

15-24
SCALE: 1" = 1'-0"



1
15-25 BATHROOM DOOR TRACK DETAILS
SCALE: 1/2" = 1'-0"

- 1 EXTRUDED ALUMINUM TRACK FOR TROLLEY DOOR SYSTEM
- 2 TRACK END CAP
- 3 EDGE OF FINISH PANEL / WALL SYSTEM
- 4 VERTICAL WALL CLIPS FOR ALUMINUM TRACK
- 5 MOD BEAM
- 6 EXTRUDED ALUMINUM ANGLE FOR GUIDE WHEELS.
- 7 1 1/2" DIA GUIDE WHEEL ATTACHED TO ANGLE @ 24" O.C.
- 8 TROLLEY WHEEL SYSTEM ANCHORED TO ALUMINUM FRAME
- 9 1"x6" NOM. WOOD FRAME FOR DOOR SYSTEM
- 10 PANELIZED DOOR SYSTEM.
1/4" WOOD VENEER
1/4" MDF
1"x6" NOM. WOOD FRAME
1/4" MDF
1/4" VENEER
- 11 HINGED DOOR ATTACHED TO SLIDING DOOR SYSTEM.
- 12 1/4" VENEER TO MATCH WALL AND DOOR VENEER ON 2"x4" NOM. WOOD FRAMING.



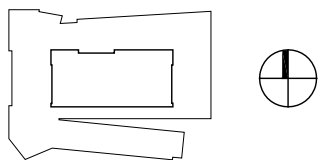
2
15-25 DOOR ELEVATION
SCALE: 1/2" = 1'-0"



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0 6" 1' 2'

PROJECT STATUS: CD
SHEET NAME:

BATHROOM DOOR DETAILS

15-25

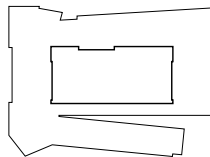
SCALE: 1 1/2" = 1'-0"



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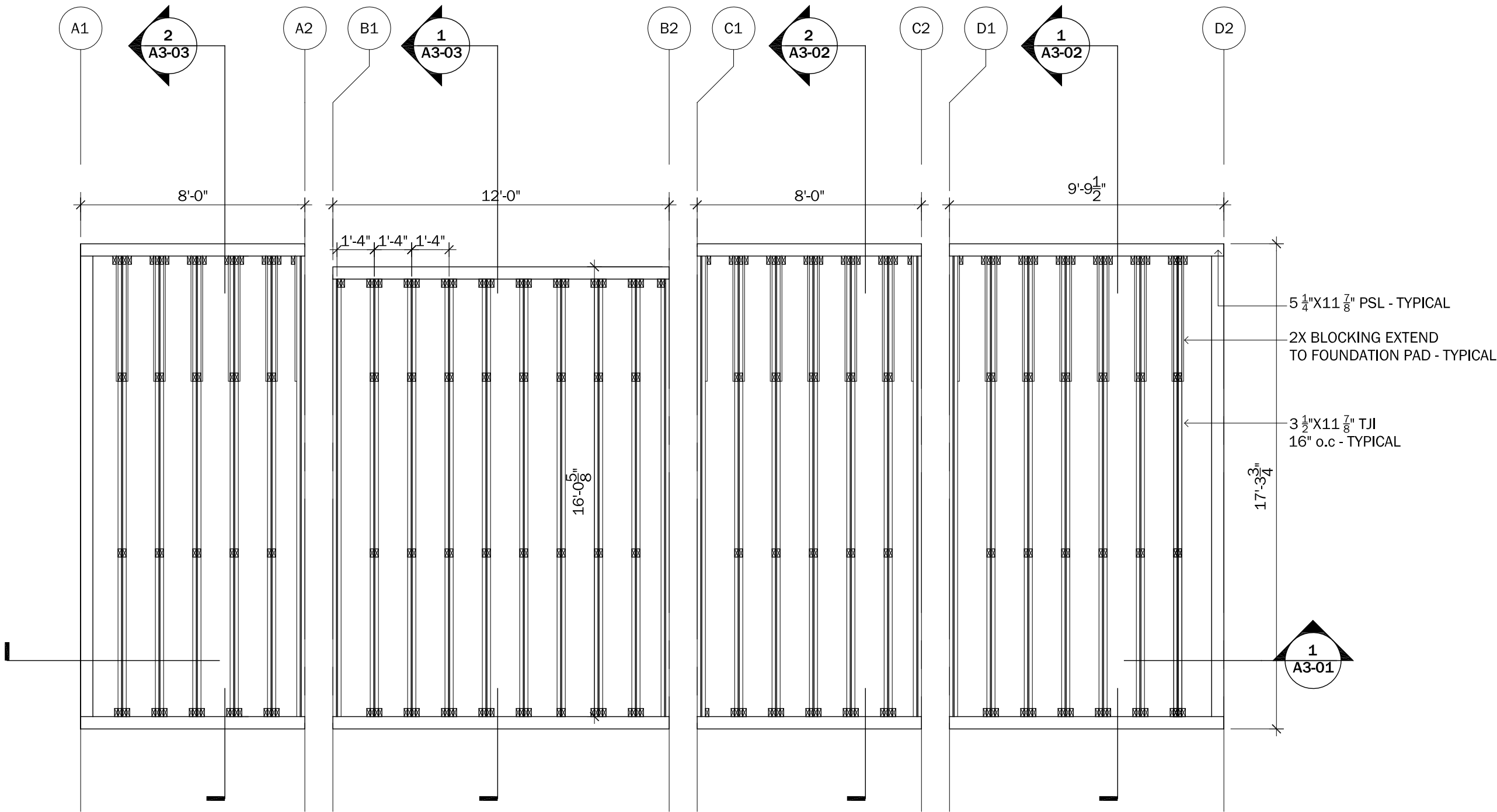
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

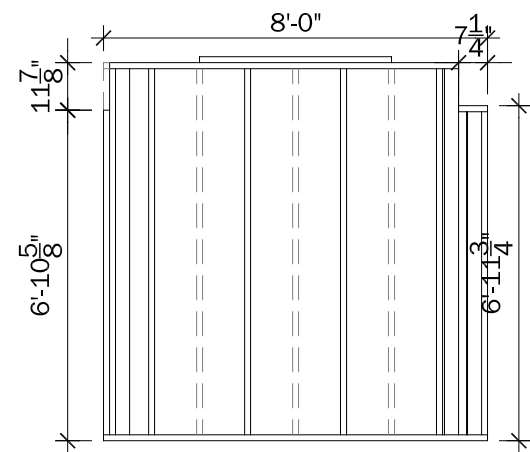
FLOOR FRAMING PLAN

S1-00

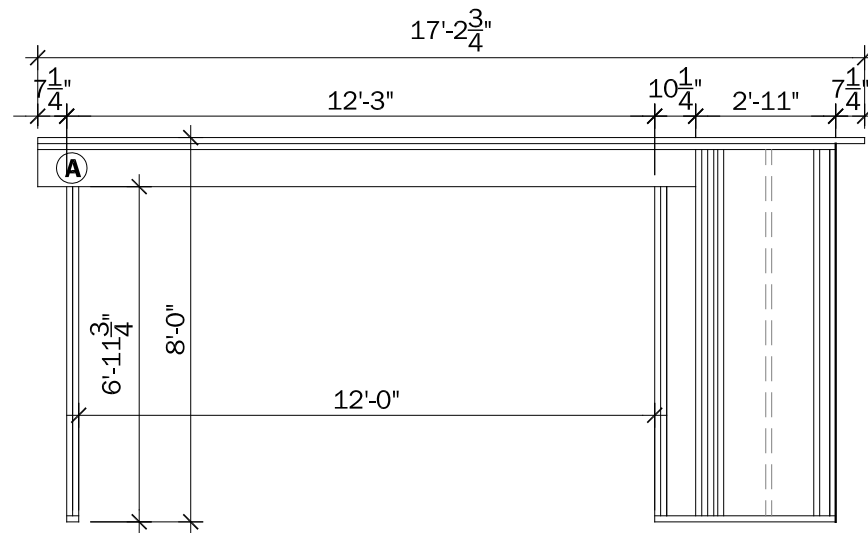
SCALE: 1/4" = 1'-0"



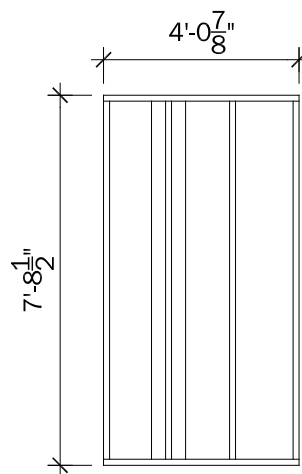
1
S1-00
FLOOR FRAMING PLAN
scale: 1/4" = 1'-0"



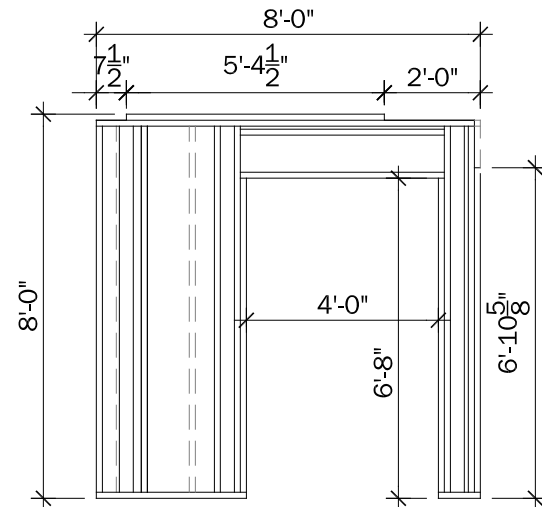
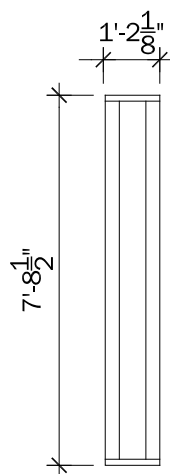
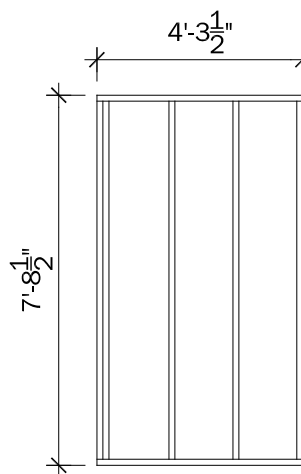
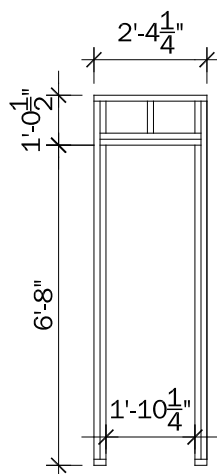
1
S2-00 MOD A - South Framing Elevation
Scale: 1/4" = 1'-0"



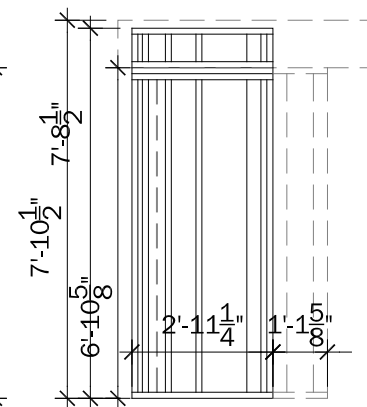
2
S2-00 MOD A - West Framing Elevation
Scale: 1/4" = 1'-0"



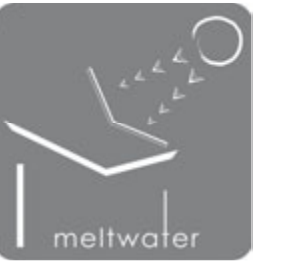
3
S2-00 MOD A - North (mech) Framing Elevation
Scale: 1/4" = 1'-0"



4
S2-00 MOD A - North Framing Elevation
Scale: 1/4" = 1'-0"



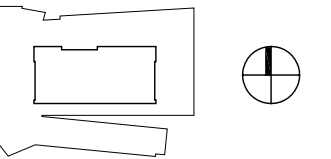
5
S2-00 MOD A - East Framing Elevation
Scale: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

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DRAWN BY: AWM/JPR



PROJECT STATUS: CD
SHEET NAME:

FRAMING
ELEVATIONS

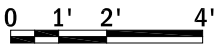
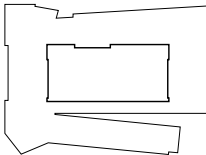
S2-00
SCALE: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
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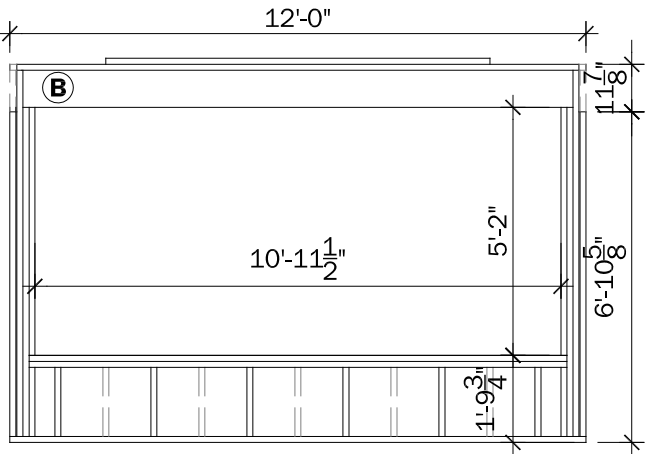


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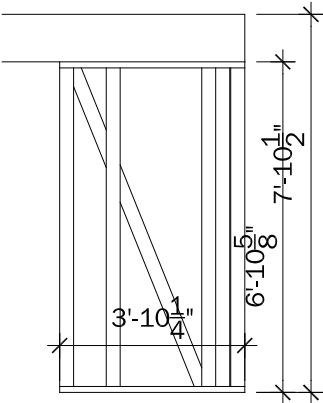
FRAMING
ELEVATIONS

S2-01

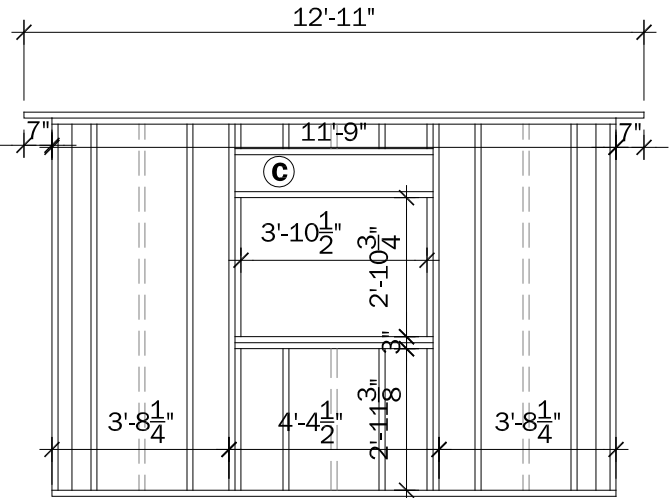
SCALE: 1/4" = 1'-0"



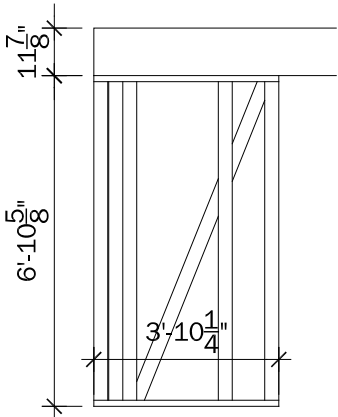
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S2-01 MOD B - South Framing Elevation
Scale: 1/4" = 1'-0"



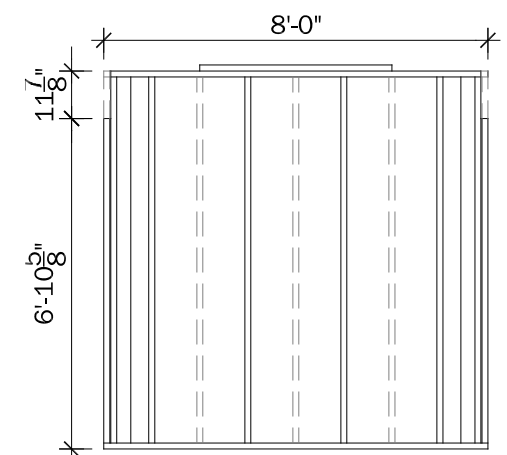
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S2-01 MOD B - West Framing Elevation
Scale: 1/4" = 1'-0"



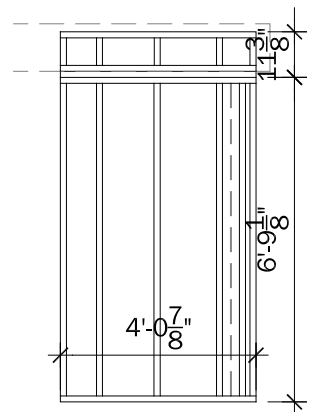
3
S2-01 MOD B - North (mech) Framing Elevation
Scale: 1/4" = 1'-0"



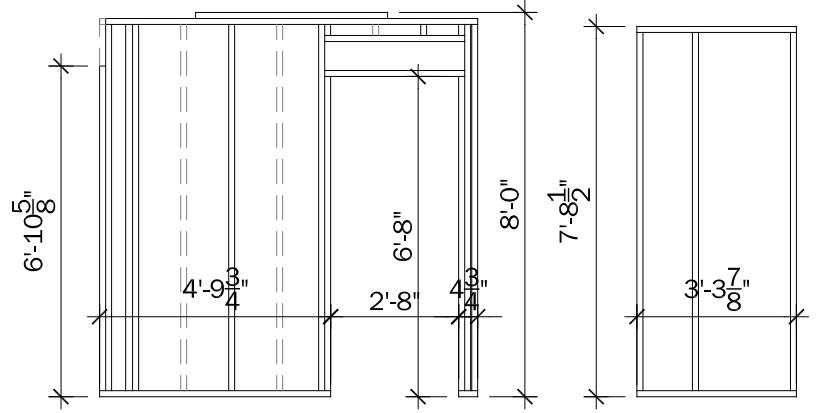
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S2-01 MOD B - East Framing Elevation
Scale: 1/4" = 1'-0"



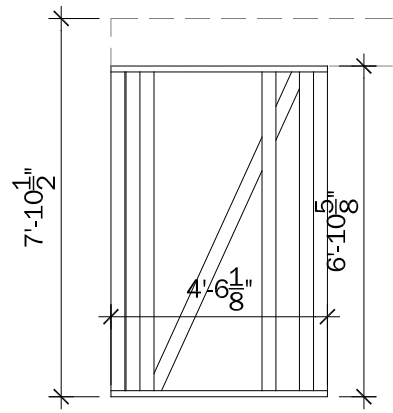
1
S2-02 **MOD C - South Framing Elevation**
Scale: 1/4" = 1'-0"



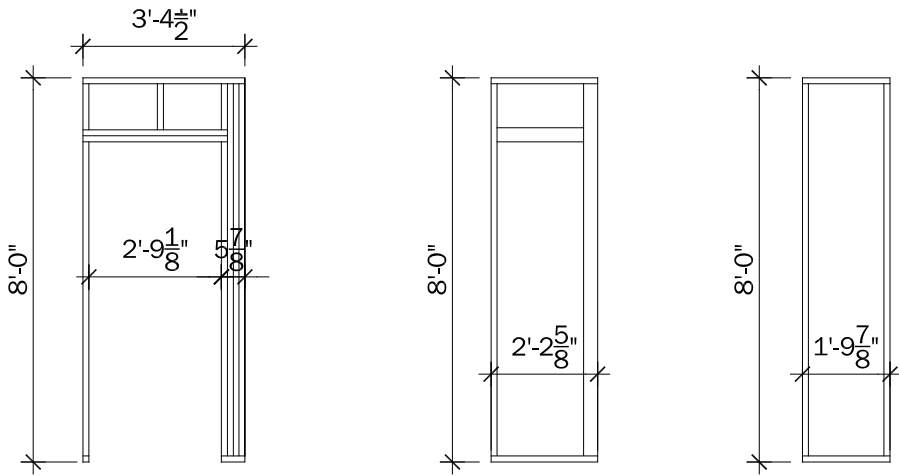
2
S2-02 **MOD C - West Framing Elevation**
Scale: 1/4" = 1'-0"



3
S2-02 **MOD C - North Framing Elevation**
Scale: 1/4" = 1'-0"



4
S2-02 **MOD C - East Framing Elevation**
Scale: 1/4" = 1'-0"



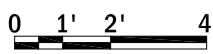
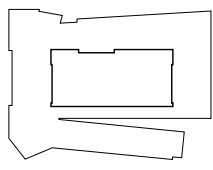
5
S2-02 **MOD C - North (mech) Framing Elevation**
Scale: 1/4" = 1'-0"



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SHEET NAME:

FRAMING
ELEVATIONS

S2-02

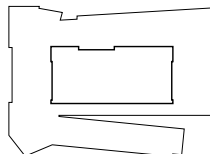
SCALE: 1/4" = 1'-0"



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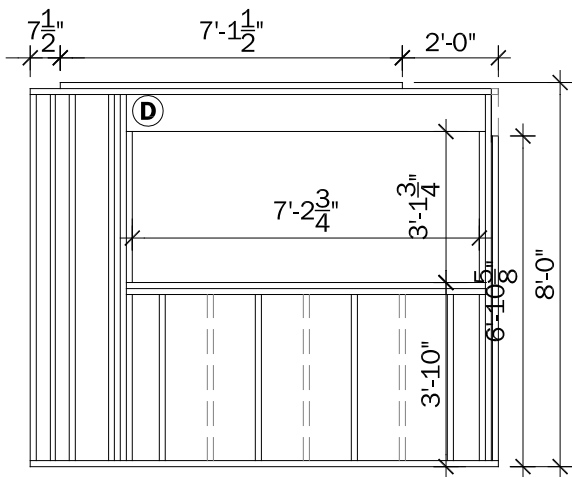
0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

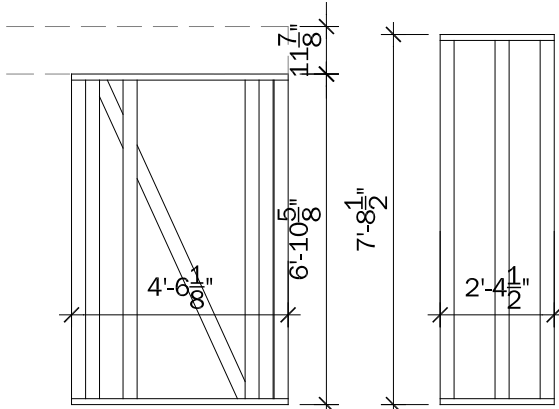
FRAMING
ELEVATIONS

S2-03

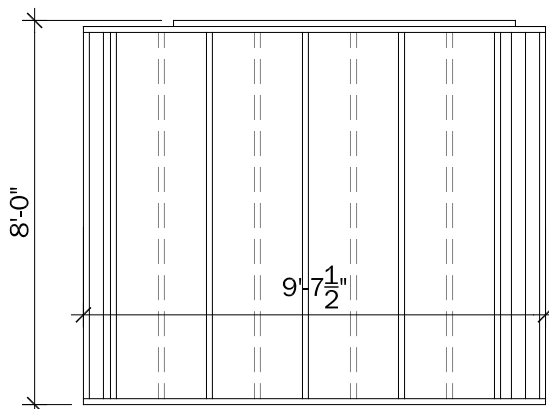
SCALE: 1/4" = 1'-0"



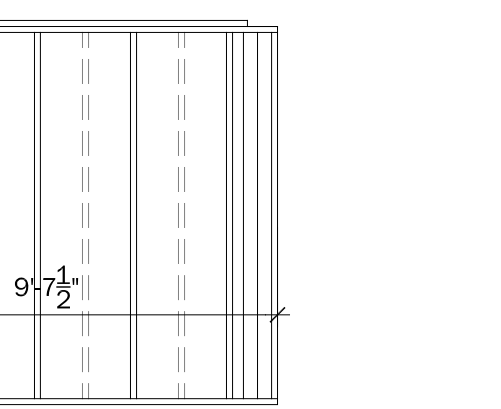
1
S2-03 MOD D - South Framing Elevation
Scale: 1/4" = 1'-0"



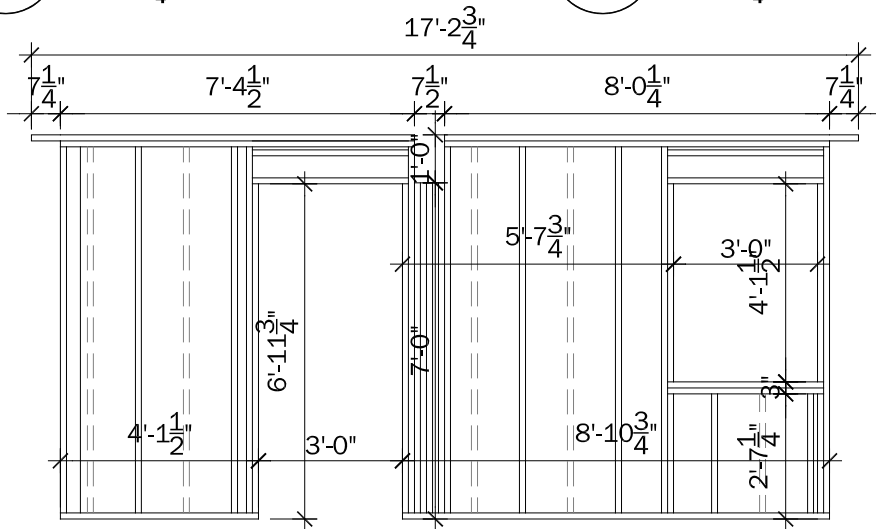
2
S2-03 MOD D - West Framing Elevation
Scale: 1/4" = 1'-0"



3
S2-03 MOD D - North (bath) Framing Elevation
Scale: 1/4" = 1'-0"



4
S2-03 MOD D - North Framing Elevation
Scale: 1/4" = 1'-0"



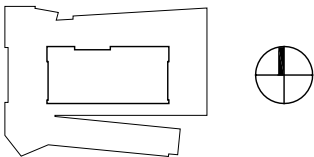
5
S2-03 MOD D - East Framing Elevation
Scale: 1/4" = 1'-0"



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0 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

FRAMING
ELEVATIONS - HEADERS

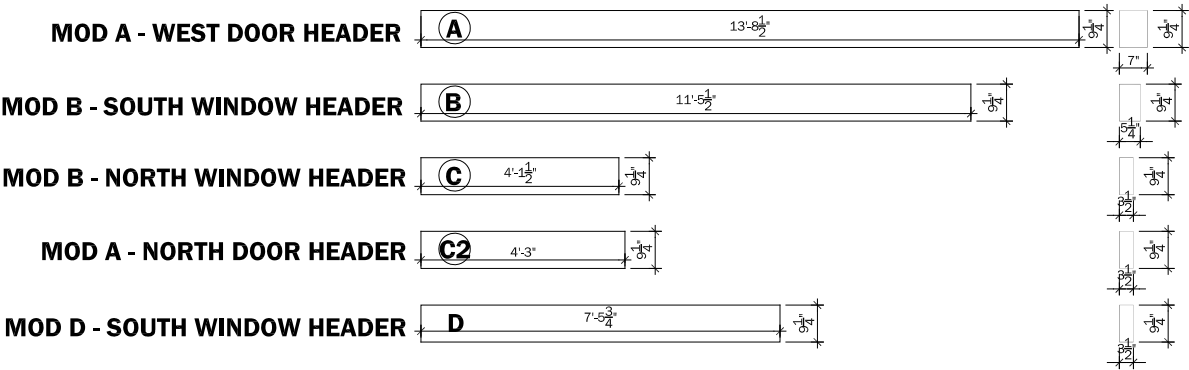
S2-04

SCALE: 1/4" = 1'-0"

DIMENSIONAL LUMBER HEADERS



ENGINEERED LUMBER HEADERS



MoBe 01 aW

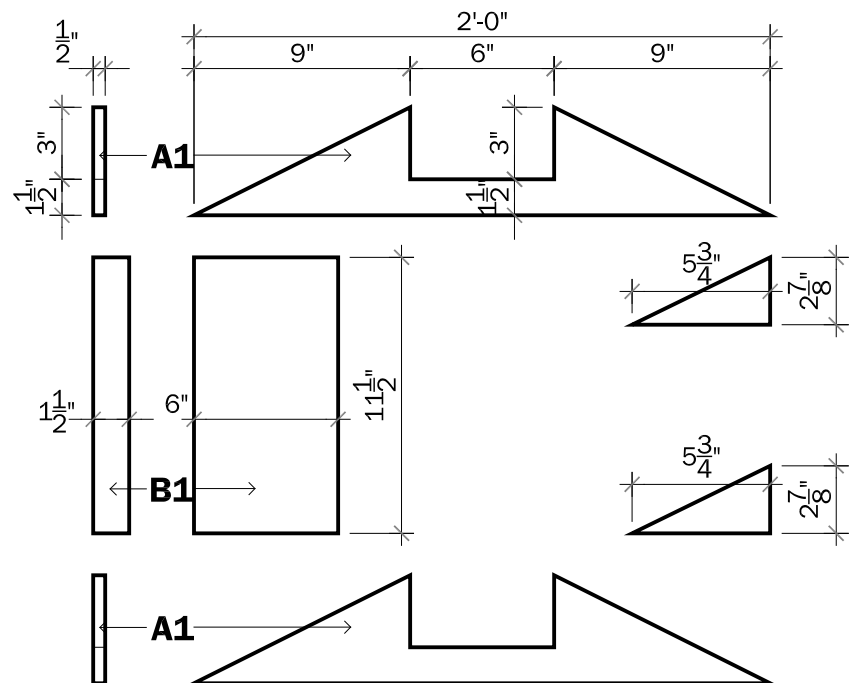
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MoBAHd02

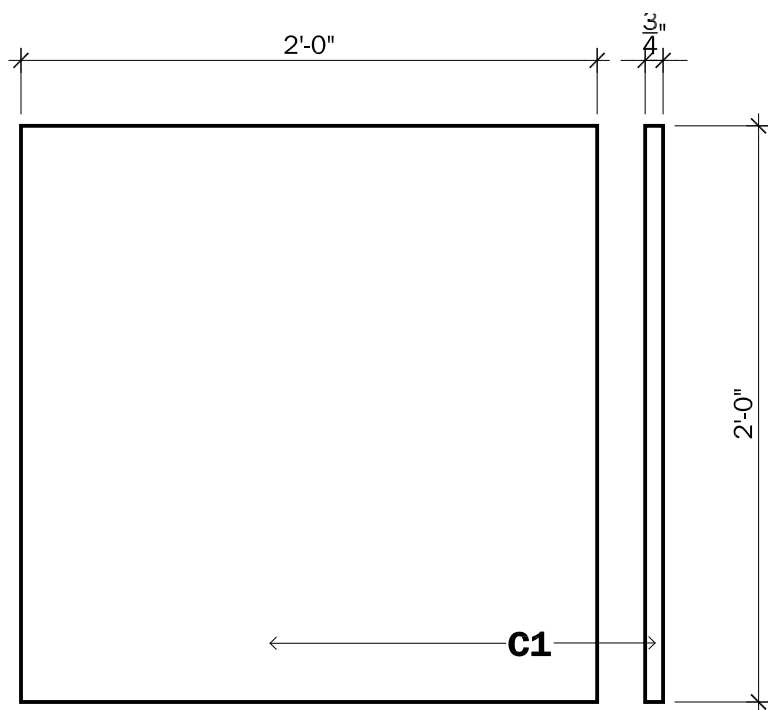
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MoDDHd03

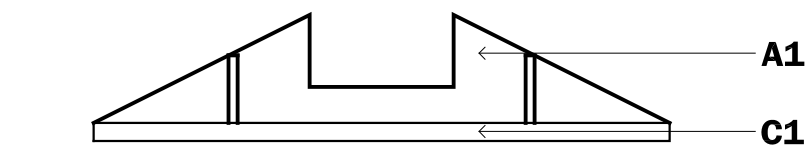
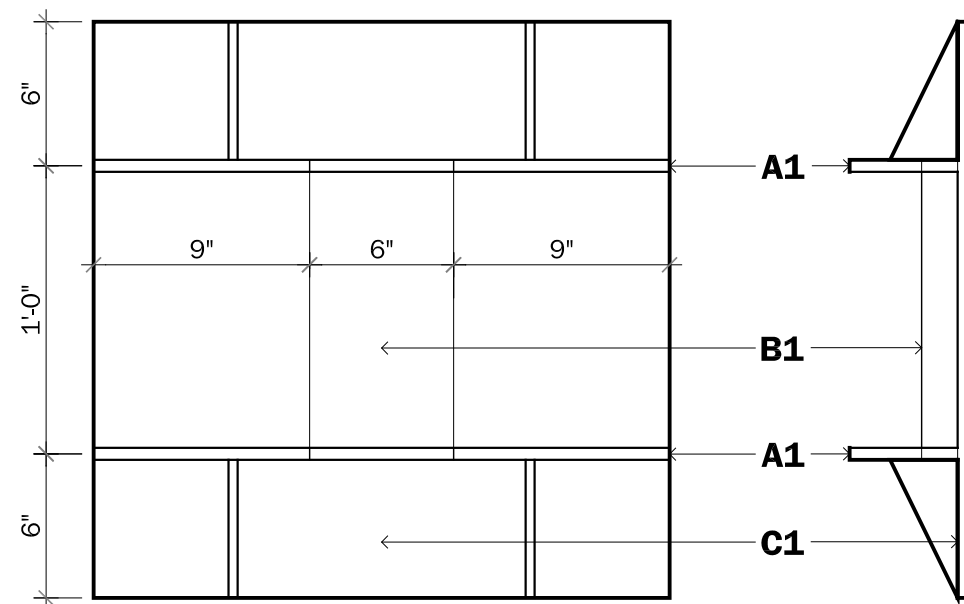
1
S2-04
FRAMING ELEVATIONS - HEADERS
Scale: 1/4" = 1'-0"



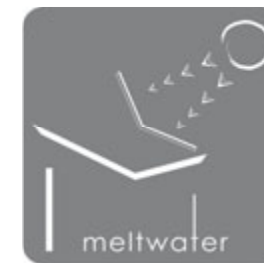
1
S5-00 **FOUNDATION PAD STAND SHEETS**
scale: 1 1/2" = 1'-0"



2
S5-00 **FOUNDATION PAD BASE SHEET**
scale: 1 1/2" = 1'-0"



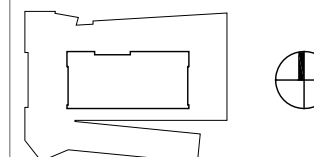
3
S5-00 **FOUNDATION PAD ASSEMBLY**
scale: 1 1/2" = 1'-0"



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REVISION HISTORY

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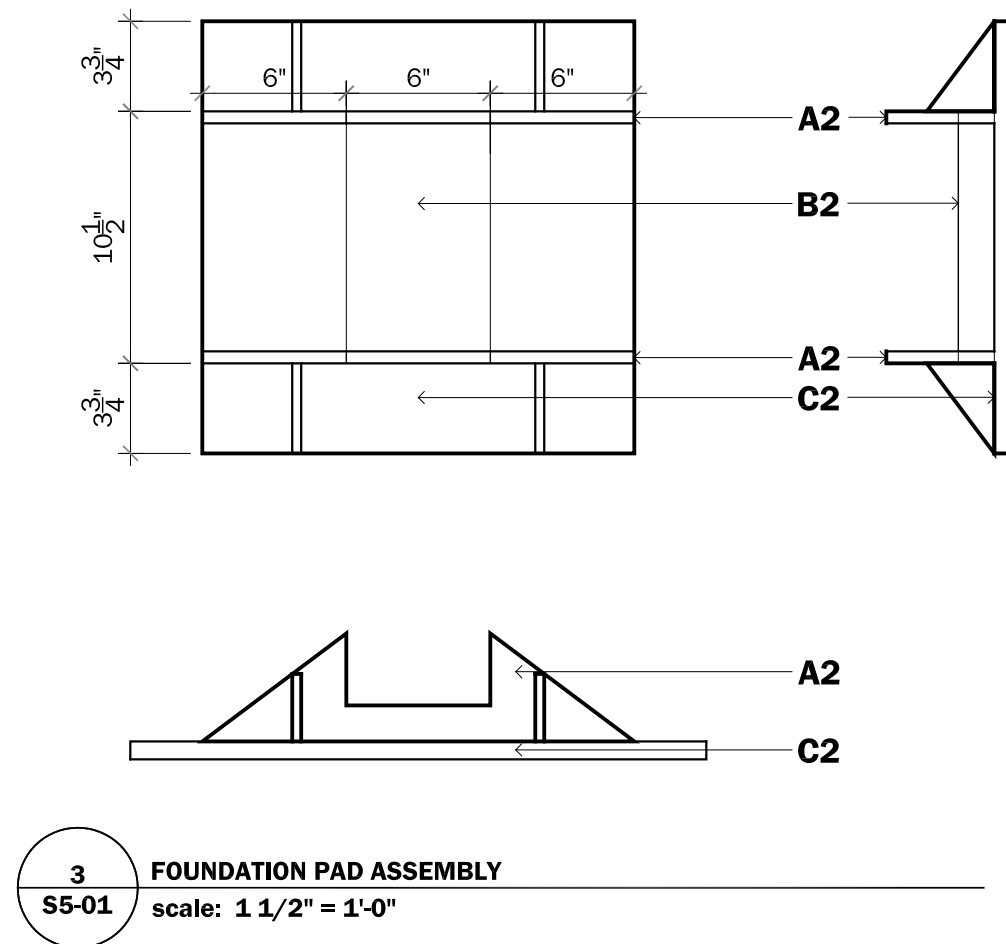
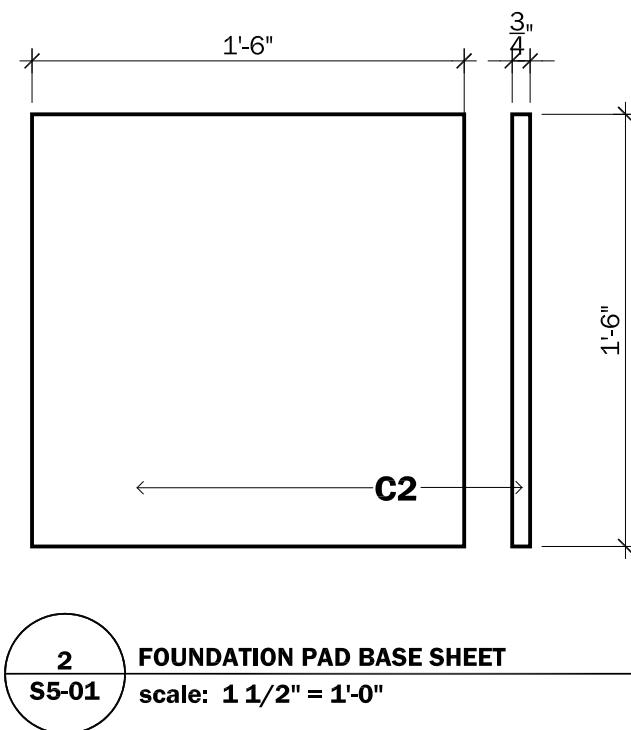
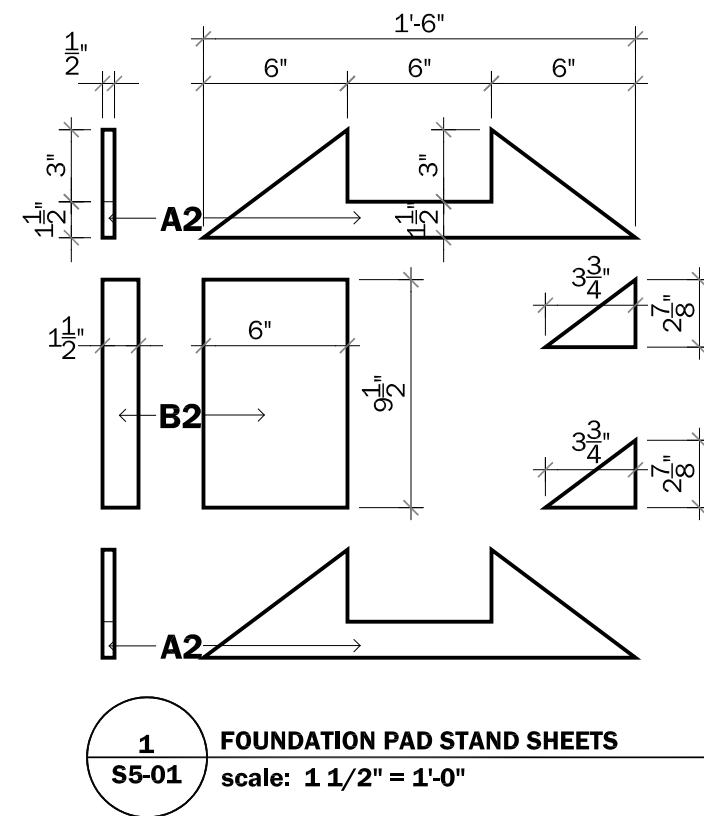
0" 2" 4" 8"

PROJECT STATUS: CD
SHEET NAME:

FOUNDATION PAD A - ASSEMBLY DETAILS

S5-00

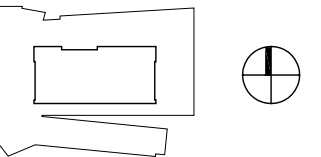
SCALE: 1 1/2" = 1'-0"



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0" 2" 4" 8"

PROJECT STATUS: CD
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FOUNDATION PAD B -
ASSEMBLY DETAILS

S5-01

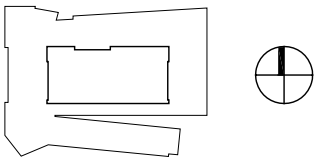
SCALE: 1 1/2" = 1'-0"



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0" 4" 8" 1-4"

PROJECT STATUS: CD
SHEET NAME:

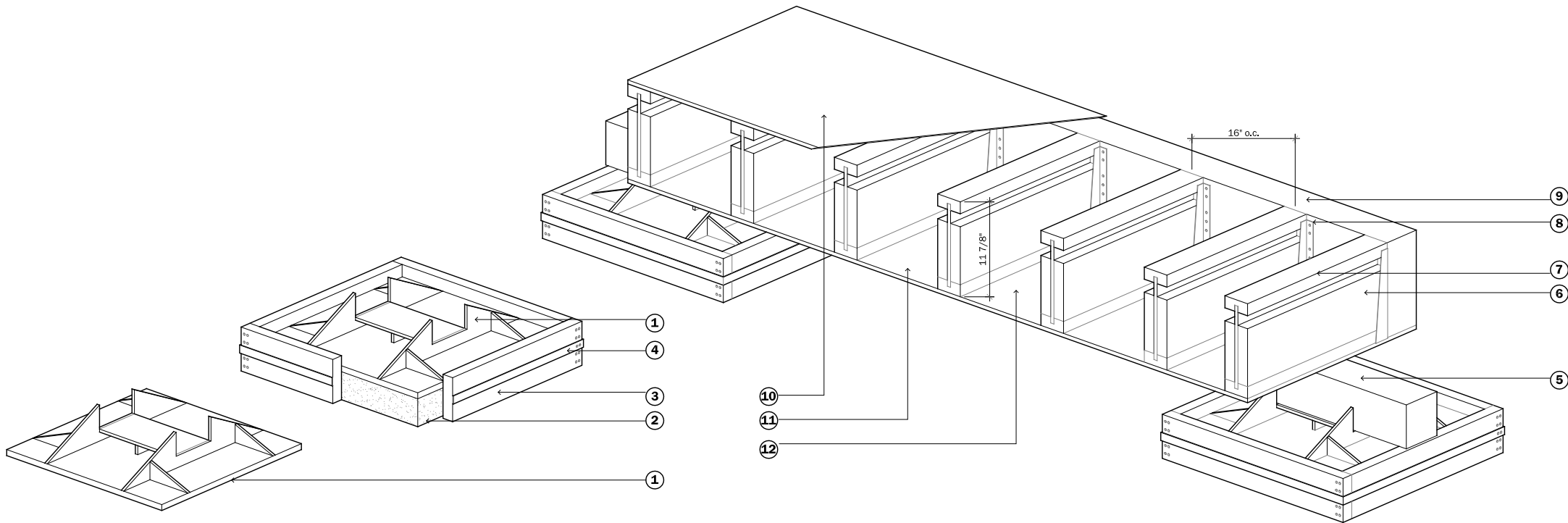
FOOTING AND FLOOR FRAMING - AXON

S9-00

SCALE: 3/4" = 1'-0"

FOOTING AND FLOOR ASSEMBLY

1. 18" OR 24" METAL FOOTING - SEE C1.00 FOR LOCATIONS
2. SAND - WRAP WITH GEOTEXTILE FABRIC AND ANCHOR
3. 2X WOOD FRAMING AROUND SAND BASE
4. METAL STRAPPING
5. 6X6 WOOD RAIL SET ON METAL FOOTINGS
6. 2X8 WOOD BLOCKING
7. 11 7/8" TJI FLOOR FRAMING SPACED 16" o.c.
8. SAMPSON STRONG TIE JOIST HANGER
9. 5 1/4" X 11 7/8" PSL RIM JOIST
10. 3/4" SUB-FLOORING - GLUE AND SCREW TO TJI'S
11. 1/2" TREATED SHEATHING
12. FILL ALL VOIDS WITH HONEYWELL BLOWN INSULATION



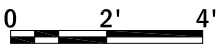
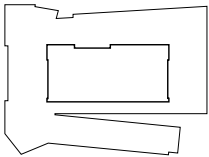
1 FOOTING AND FLOOR FRAMING - AXON
S9-00 scale: 3/4" = 1'-0"



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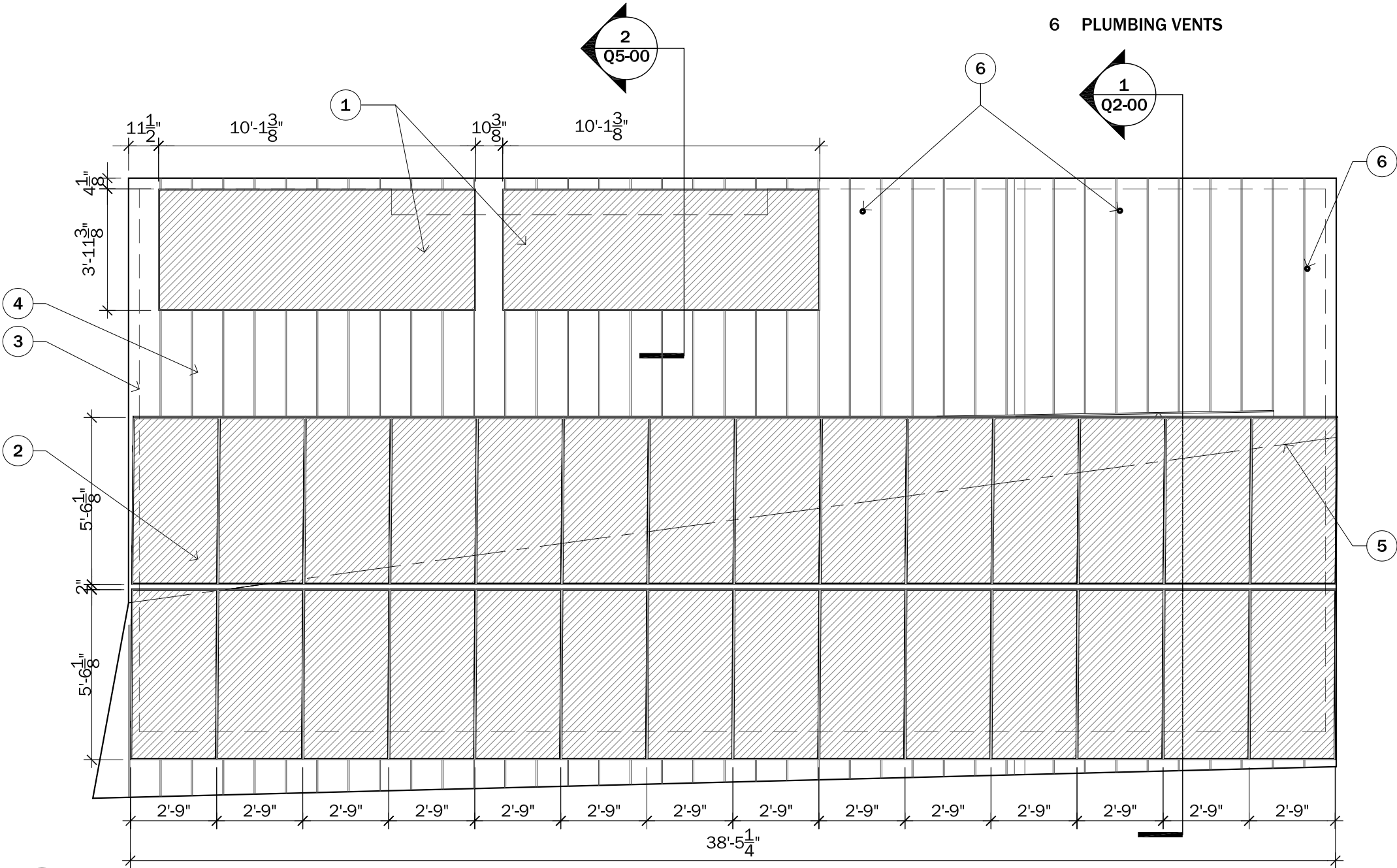
PROJECT STATUS: CD
SHEET NAME:

PV PANEL PLAN

Q1-00

SCALE: 1/4" = 1'-0"

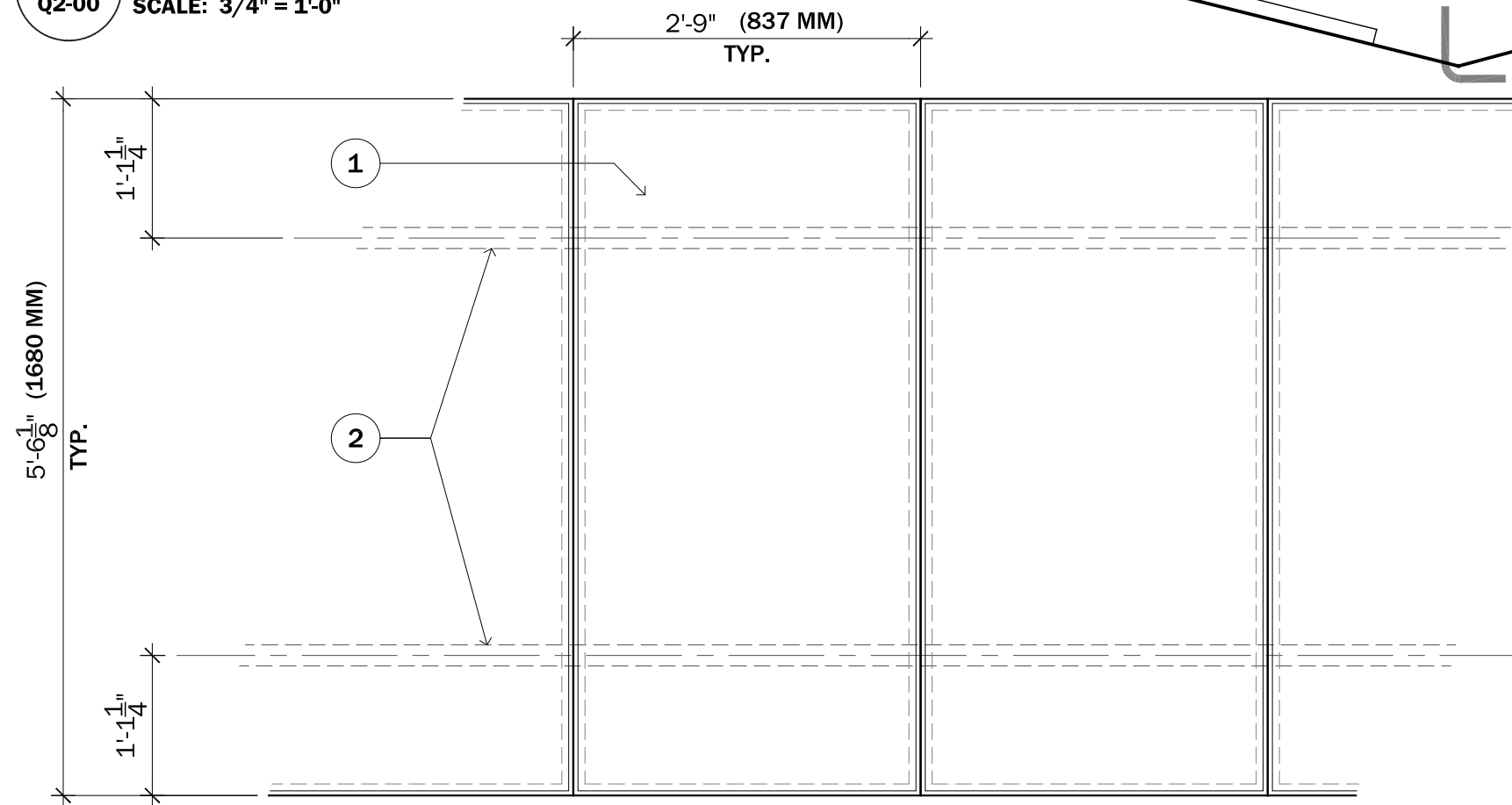
- 1 DOMESTIC SOLAR HOT WATER PANELS
- 2 PHOTOVOLTAIC PANELS
- 3 EXTENTS OF STRUCTURE BELOW
- 4 GALVALUME STANDING SEAM METAL ROOF
- 5 VALLEY BELOW
- 6 PLUMBING VENTS



1 PV PANEL PLAN
Q1-00 SCALE: 1/4" = 1'-0"

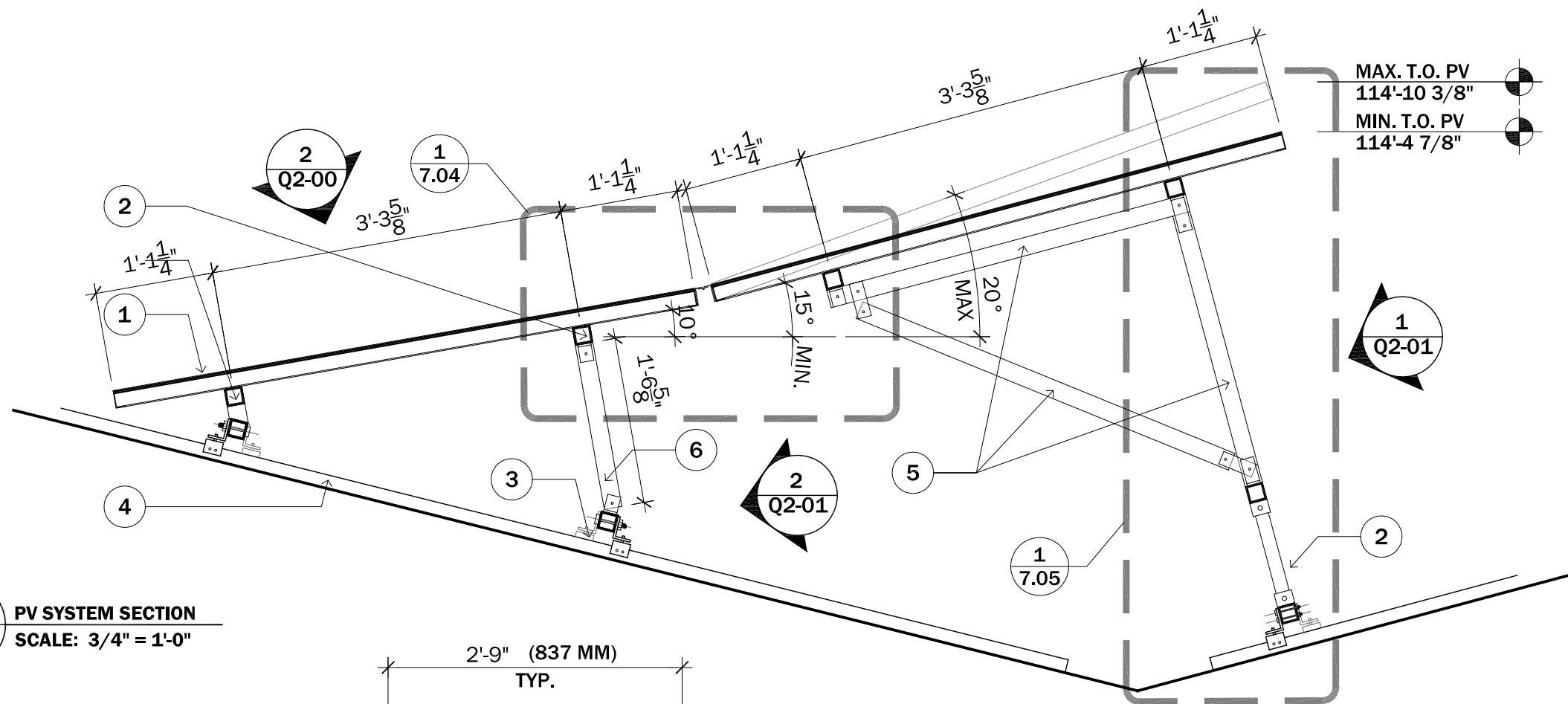
1
Q2-00

PV SYSTEM SECTION
SCALE: 3/4" = 1'-0"



2
Q2-00

PV PANEL ELEVATION
SCALE: 3/4" = 1'-0"



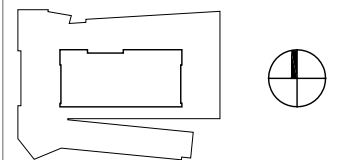
- 1 PHOTOVOLTAIC PANEL SYSTEM
- 2 2" SQUARE ALUMINUM TUBE STRUCTURAL SUPPORT
- 3 S-5! STANDING SEAM CLIPS
- 4 1 1/2" GALVALUME STANDING SEAM ROOF.
- 5 2" SQUARE ALUMINUM TUBE STRUCTURAL SUPPORT SYSTEM
- 6 2" SQUARE ALUMINUM TUBE STRUCTURAL BRACING



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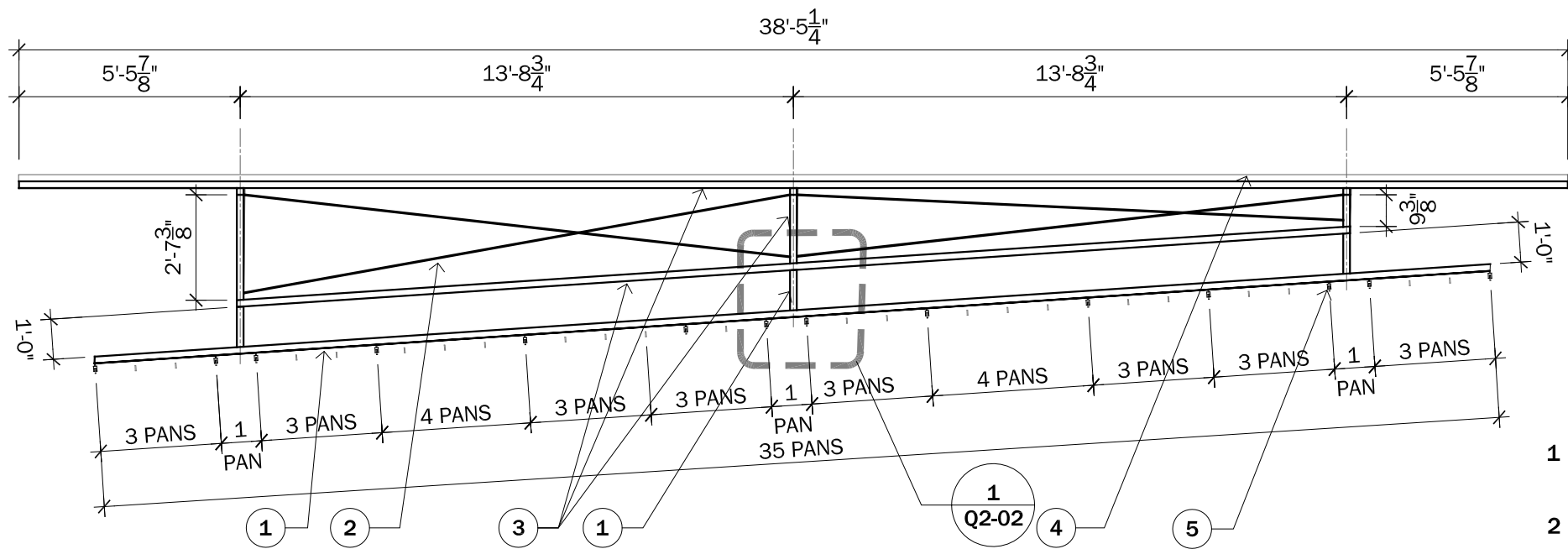
0 8" 1'-4"

PROJECT STATUS: CD
SHEET NAME:

PV PANEL SECTION
PV PANEL ELEVATION

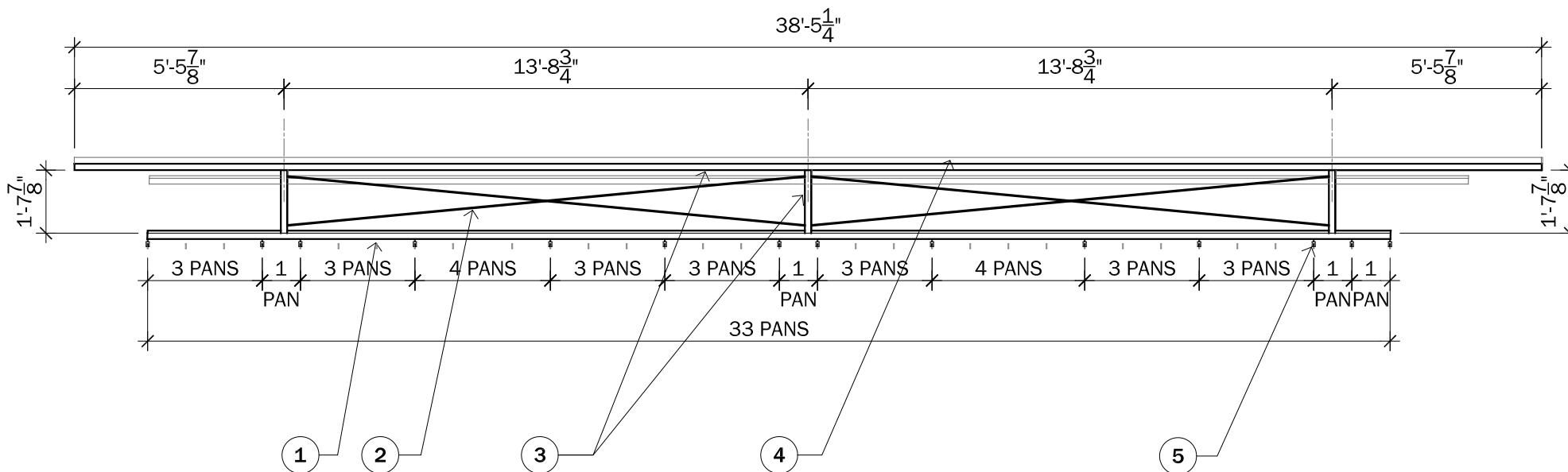
Q2-00

SCALE: 3/4" = 1'-0"



1 NORTH PV PANEL STRUCTURAL ELEVATION
Q2-01 SCALE: 1/4" = 1'-0"

- 1 2" SQUARE ALUMINUM TUBE STRUCTURAL SUPPORT
- 2 1/8" ALUMINUM TWISTED CABLE CROSS BRACING
- 3 2" SQUARE ALUMINUM TUBE STRUCTURAL SUPPORT SYSTEM
- 4 PHOTOVOLTAIC (PV) PANEL SYSTEM
- 5 S-5! STANDING SEAM METAL CLIPS



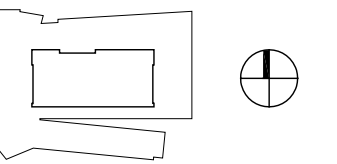
2 SOUTH PV PANEL STRUCTURAL ELEVATION
Q2-01 SCALE: 1/4" = 1'-0"



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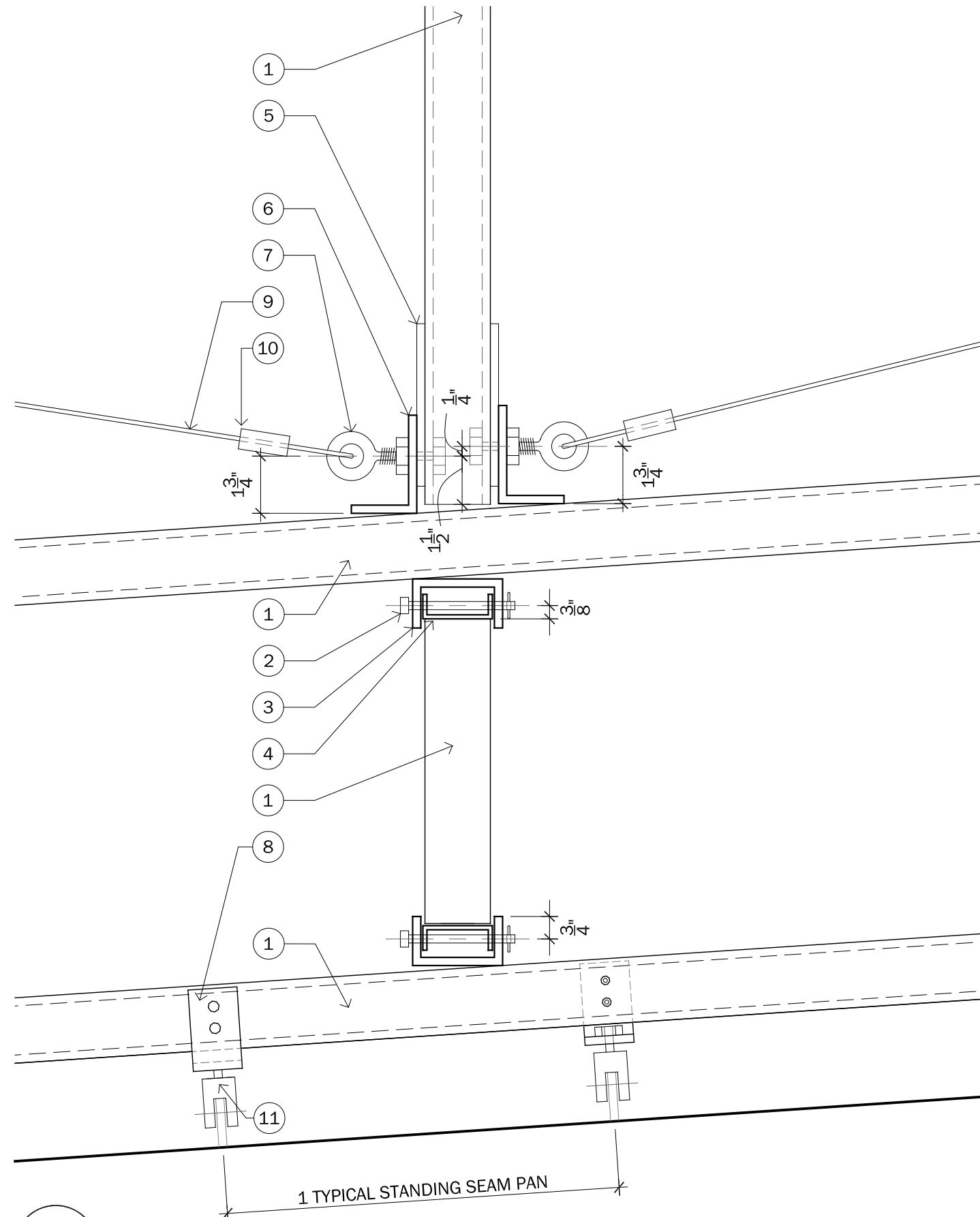
0 2' 4'

PROJECT STATUS: CD
SHEET NAME:

PV PANEL STRUCTURAL ELEVATION

Q2-01

SCALE: 1/4" = 1'-0"



- 1 2" SQUARE EXTRUDED ALUMINUM STRUCTURAL SUPPORT
- 2 3 1/2" X 1/4" DIA. PIN WITH COTTER PIN
- 3 2 3/4" X 1 1/2" X 1/4" EXTRUDED ALUMINUM C-CHANNEL PRE DRILLED FOR PIN CONNECTION
- 4 2 1/8" X 3/4" EXTRUDED ALUMINUM C-CHANNEL CONNECTED TO PISTON AND PRE DRILLED FOR PIN CONNECTION.
- 5 1/4" ALUMINUM PLATE CONNECTING 2" STRUCTURAL MEMBERS
- 6 2" X 3" X 1/4" EXTRUDED ALUMINUM CLIP PRE DRILLED FOR EYEBOLT CONNECTION. SHIMMED AND SCREWED AT BOTTOM CONNECTION.
- 7 EYE BOLT
- 8 2 1/2" X 2" X 1/4" EXTRUDED ALUMINUM CLIP PRE DRILLED FOR THROUGH BOLT CONNECTION.
- 9 1/8" DIA. THREADED ALUMINUM CABLE
- 10 ALUMINUM CLAMP ON THREADED CABLE
- 11 S-51 STANDING SEAM CLIP

NOTE:
SEE ALSO Q5-03 FOR AXON

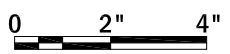
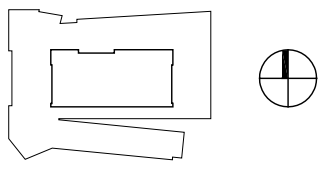
1
Q2-02 **PV CONNECTION DETAIL**
SCALE: 3" = 1'-0"



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PROJECT STATUS: CD
SHEET NAME:

PV DETAIL ELEVATION

Q2-02

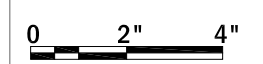
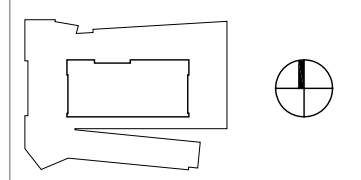
SCALE: 3" = 1'



CLIENT NAME: DOE/NREL
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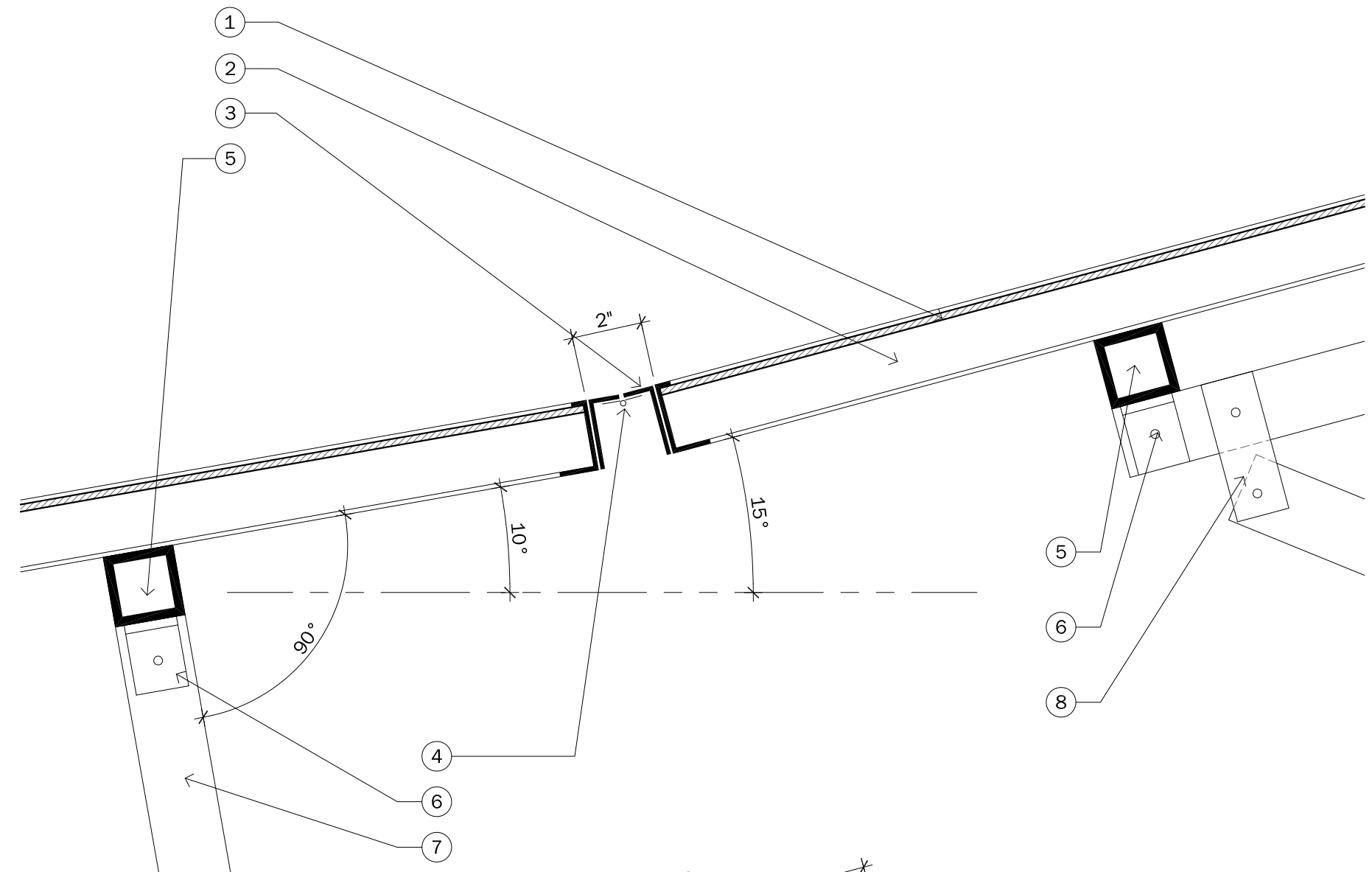


PROJECT STATUS: CD
SHEET NAME:

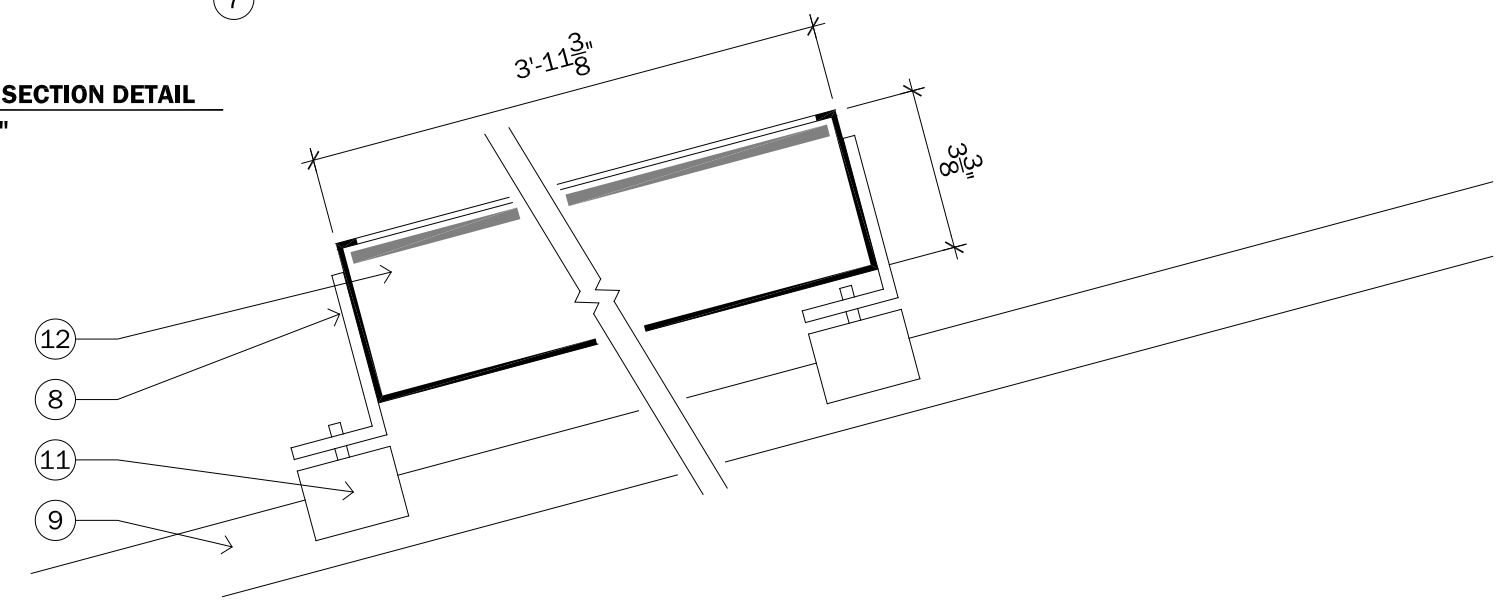
PV SECTION DETAILS

Q5-00
SCALE: 3" = 1'-0"

- 1 PHOTOVOLTAIC PANEL
- 2 EXTRUDED ALUMINUM PHOTOVOLTAIC FRAME (BY MANUFACTURER)
- 3 L 2 x 3/4 x 1/4 CONTINUOUS EXTRUDED ALUMINUM ANGLE
- 4 STAINLESS STEEL HEAVY DUTY DOOR HINGE @ 4'-0" ON CENTER
- 5 2" SQUARE EXTRUDED ALUMINUM TUBE WITH 1/4" WALL STRUCTURAL SUPPORT ENTIRE LENGTH OF PV ARRAY
- 6 2" ALUMINUM ANGLE CLIP WITH PIN CONNECTION
- 7 ALUMINUM STRUCTURAL SUPPORT. 2" SQUARE EXTRUDED ALUMINUM TUBE WITH 1/4" WALLS.
- 8 4" ALUMINUM ANGLE CLIP WITH PIN CONNECTION
- 9 2 1/2" X 2" X 1/4" EXTRUDED ALUMINUM CLIP PRE DRILLED FOR THROUGH BOLT CONNECTION.
- 10 ALUMINUM C-CHANNEL BRACKET WITH PIN CONNECTION TO PISTON
- 11 S-5! STANDING SEAM CLIP
- 12 DOMESTIC SOLAR HOT WATER PANEL



1
Q5-00
PV CONNECTION SECTION DETAIL
SCALE: 3" = 1'-0"



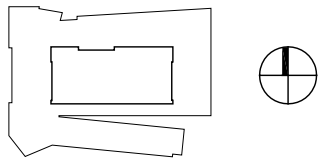
2
Q5-00
SOLAR HOT WATER PANEL SECTION DETAIL
SCALE: 3" = 1'-0"



CLIENT NAME: DOE/NREL
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0 4" 8"

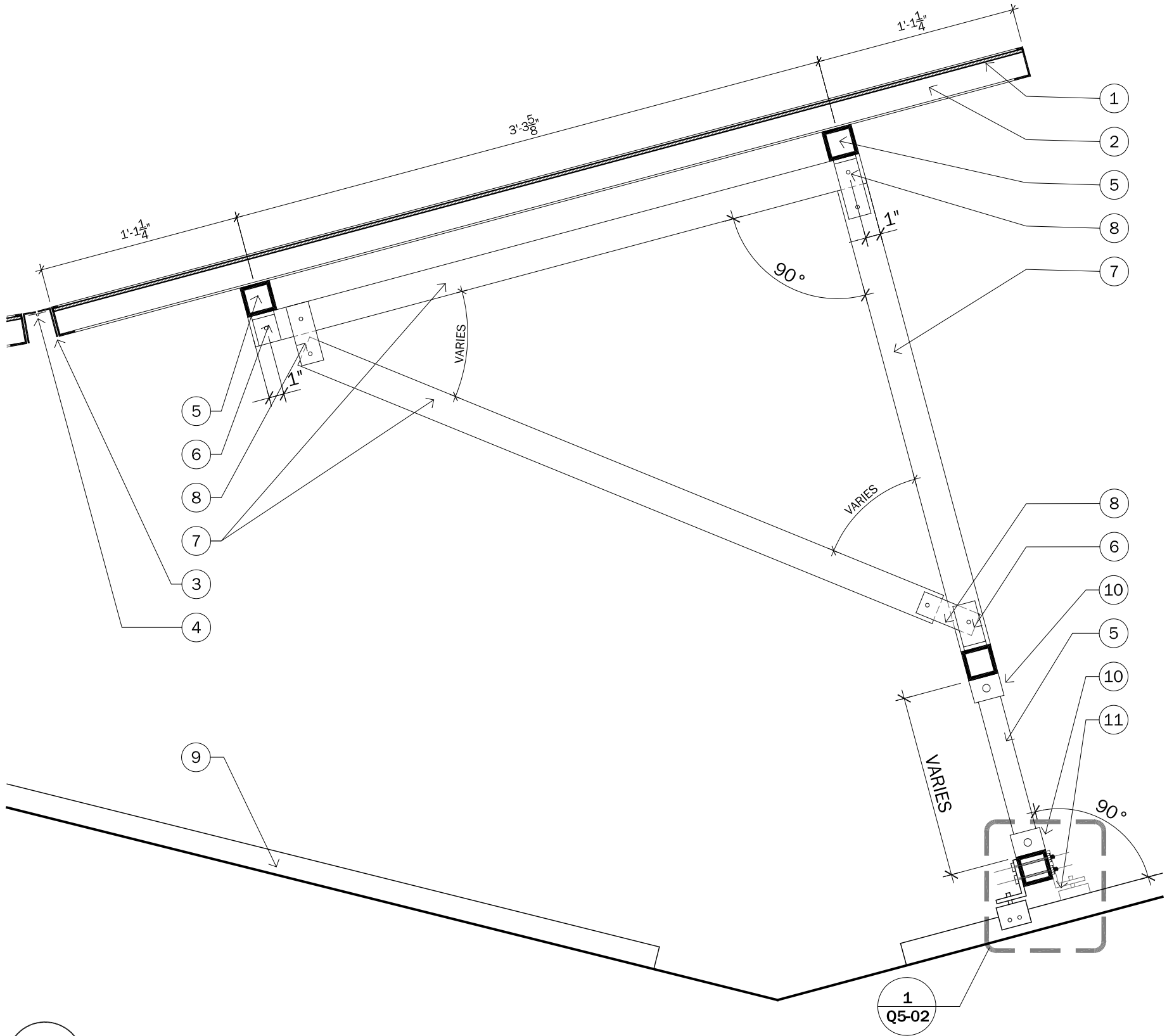
PROJECT STATUS: CD
SHEET NAME:

PV SECTION DETAIL

Q5-01

SCALE: 1 1/2" = 1'-0"

- 1 PHOTOVOLTAIC PANEL
- 2 EXTRUDED ALUMINUM PHOTOVOLTAIC FRAME (BY MANUFACTURER)
- 3 L 2 x 3/4 x 1/4 CONTINUOUS EXTRUDED ALUMINUM ANGLE
- 4 STAINLESS STEEL HEAVY DUTY DOOR HINGE @ 4'-0" ON CENTER
- 5 2" SQUARE EXTRUDED ALUMINUM TUBE WITH 1/4" WALL STRUCTURAL SUPPORT ENTIRE LENGTH OF PV ARRAY
- 6 2" ALUMINUM ANGLE CLIP WITH PIN CONNECTION
- 7 ALUMINUM STRUCTURAL SUPPORT. 2" SQUARE EXTRUDED ALUMINUM TUBE WITH 1/4" WALLS.
- 8 4" ALUMINUM ANGLE CLIP WITH PIN CONNECTION
- 9 2 1/2" X 2" X 1/4" EXTRUDED ALUMINUM CLIP PRE DRILLED FOR THROUGH BOLT CONNECTION.
- 10 ALUMINUM C-CHANNEL BRACKET WITH PIN CONNECTION TO PISTON
- 11 S-5! STANDING SEAM CLIP
- 12 DOMESTIC SOLAR HOT WATER PANEL



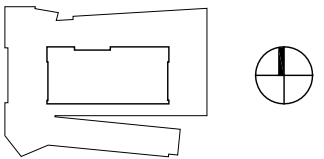
1
Q5-01 PV SECTION DETAIL
SCALE: 1 1/2" = 1'-0"



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

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DRAWN BY: JAS



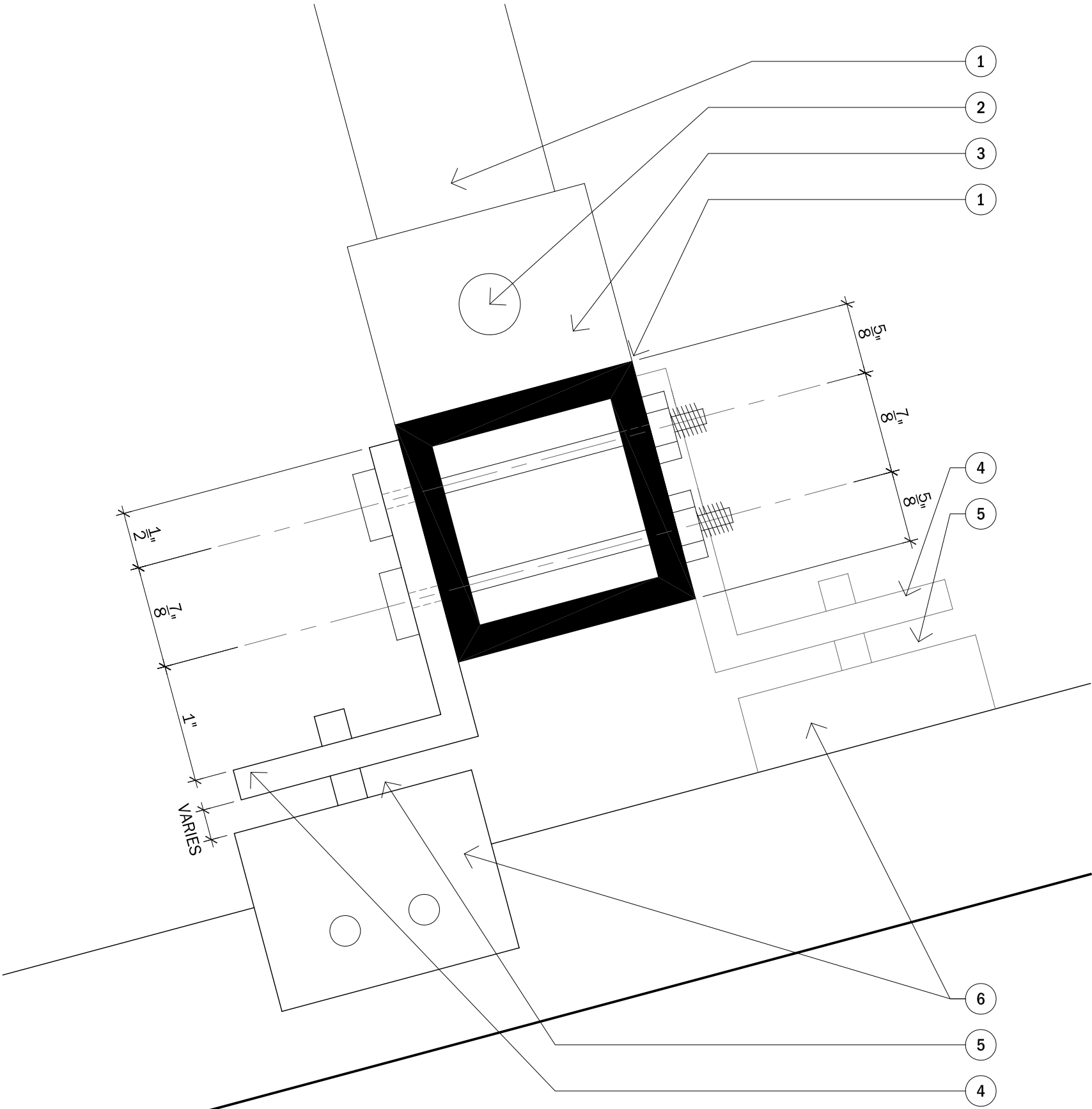
0 1/2" 1"

PROJECT STATUS: CD
SHEET NAME:

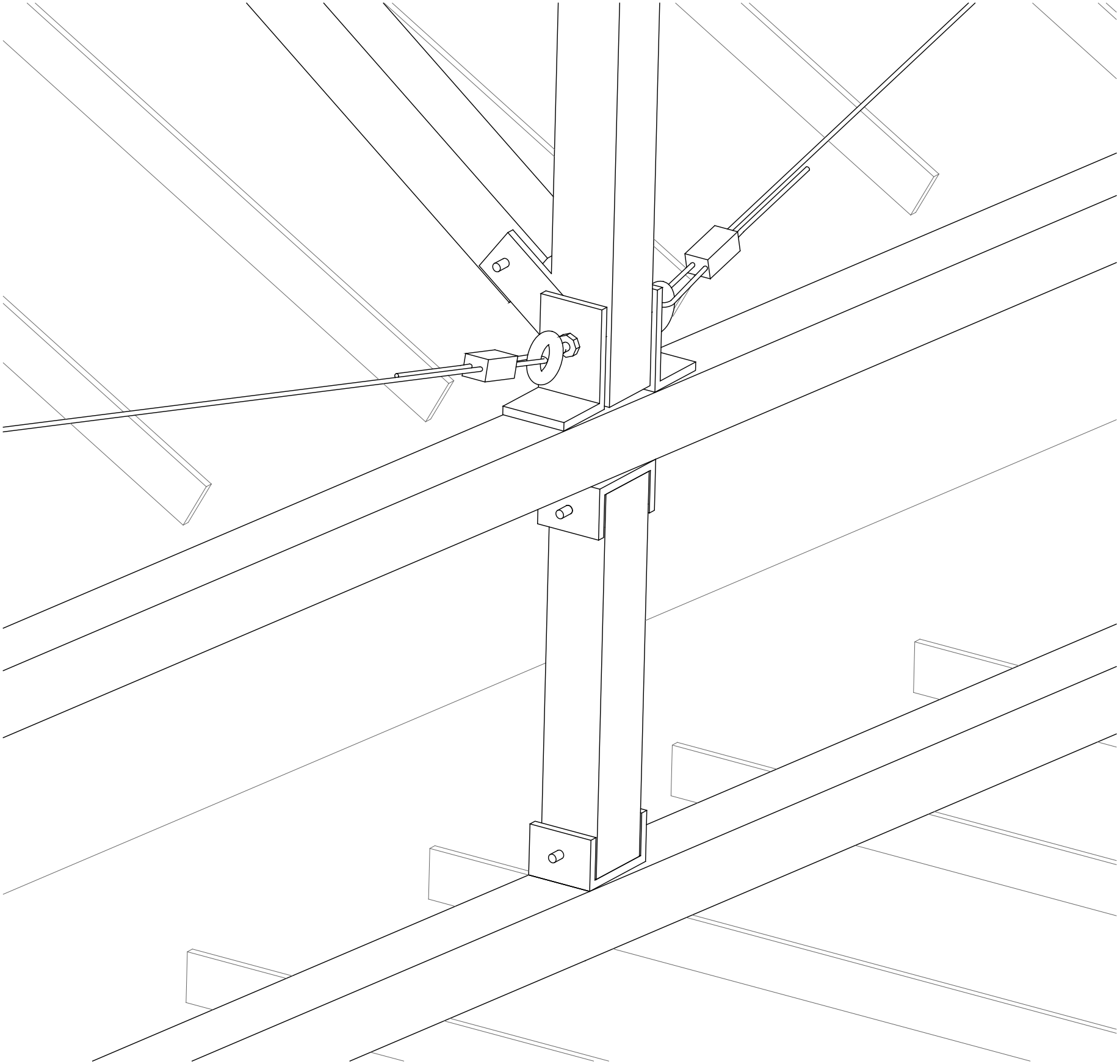
PV SECTION DETAIL @
BASE CONNECTION

Q5-02
SCALE: 1" = 1"

- 1 2" SQUARE EXTRUDED ALUMINUM STRUCTURAL SUPPORT
- 2 3 1/2" X 1/4" DIA. PIN WITH COTTER PIN
- 3 2 3/4" X 1 1/2" X 1/4" EXTRUDED ALUMINUM C-CHANNEL PRE DRILLED FOR PIN CONNECTION
- 4 2 1/2" X 2" X 1/4" EXTRUDED ALUMINUM CLIP PRE DRILLED FOR THROUGH BOLT CONNECTION.
- 5 1/4" SPACER ± 1/16"
- 6 S-5! STANDING SEAM CLIP



1
Q5-02
PV SECTION DETAIL @ BASE CONNECTION
SCALE: 1" = 1"



1

Q5-03

PV PANEL CONNECTION AXON

SCALE: NOT TO SCALE



CLIENT NAME:

DOE/NREL

PROJECT:

SOLAR DECATHLON

PROJECT NO.:

SD 2009

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2009.06.02

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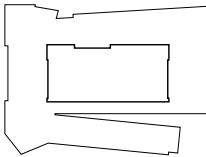
GDT/CTC

CHECKED BY:

GDT/CTC

DRAWN BY:

JAS



PROJECT STATUS:

CD

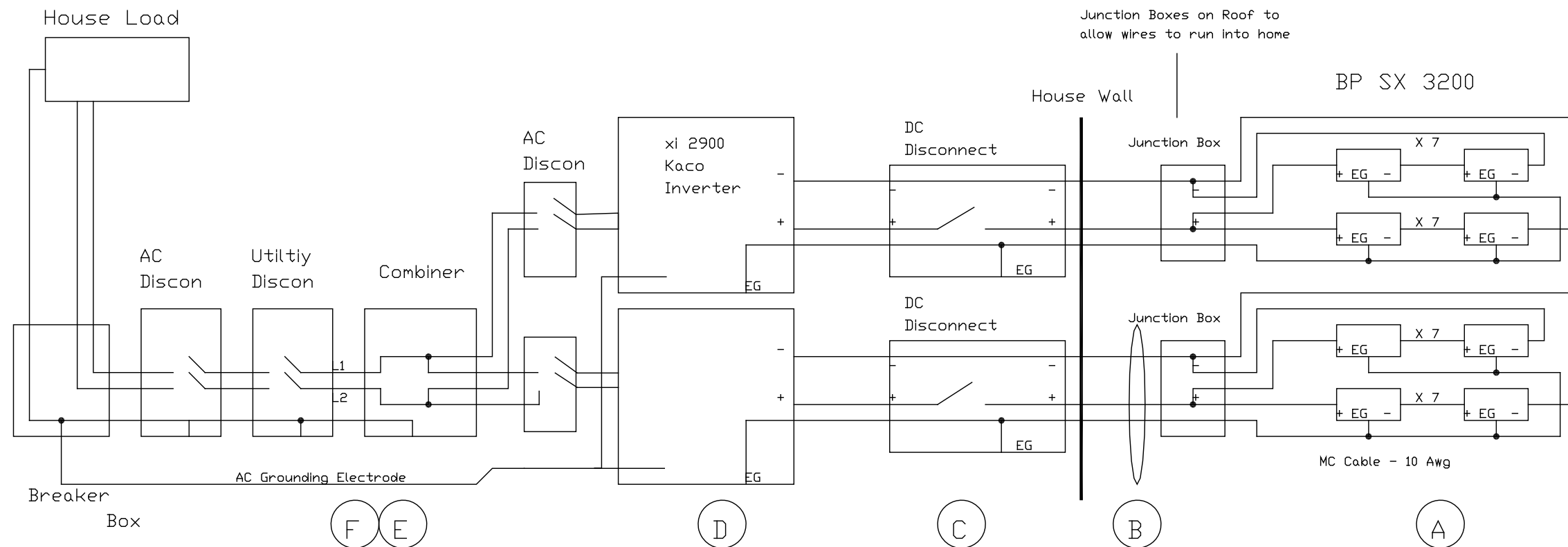
SHEET NAME:

PV PANEL CONNECTION
AXON

Q5-03

SCALE:

NTS



A 7 PV Modules Per String / 2 Strings Per Inverter

$Voc = \# \text{ Modules} \times Voc \rightarrow 7 \times 30.8V = 215.6Vdc \times \text{Temp coefficient } 1.22 (-14F \text{ to } -22F) = 250.9V$

Max Inverter DC Input voltage = 400Vdc $Isc = 8.7A$ MC Cable - 10 Awg

B Conduit Size : 3/4 Inch - 10 Awg Conductor
Rating for Conductors = 43A at 90 deg C - Table 310.13(A) NEC 2008

C $ISC \times 2 \text{ Strings} \times 1.56 \rightarrow 8.7 \times 2 \times 1.56 = 27.14 A$ (Max Current going into DC Disconnect) 30 Amp / 250 Volt Dc Disconnect

D Inverter Max DC Input Power Rating 3.8kWp

E $3100/240 = 12.92$ 12.92×2 (both lines combined) $\times 1.25 = 32.3A$ (Current Rating for AC Disconnect)

1 **PV SYSTEM DIAGRAM**
Q6-00 **NOT TO SCALE**

Junction Boxes on Roof to
allow wires to run into home

House Wall

BP SX 3200

MC Cable - 10 Awg

Calculations:

$Voc = 30.8V$

$Voc \text{ Coef: } 0.121mV/deg \text{ C}$

$STC \text{ Temp} = 25 \text{ deg C}$

$Max \text{ Low Temp} = -34 \text{ deg C}$

$0.121V/deg \text{ C} \times 59 \text{ deg C} = 7.139V$

$Voc \text{ Max} = (30.8V + 7.139V) \times 7 = 265.57V$

$Vmp = 24.5V$ $Imp = 5.5A$

$Power \text{ Coef: } -0.55\%/deg \text{ C}$

$STC \text{ Temp} = 25 \text{ deg C}$

$Max \text{ High Temp} = 75 \text{ deg C}$

$0.55\% \times 50 \text{ deg C} = 27.5\%$

$1.275 \times 24.5V = 31.24V \times 7 = 218.66V$

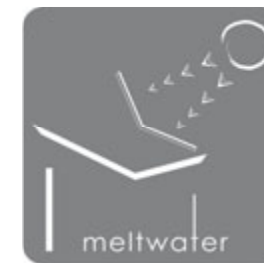
$218.66V \times 5.5A \times 2 = 2405.28watts$

$Vmp = 24.5V$ $Imp = 5.5A$

$String \text{ Vmp} = 24.5V \times 7 = 171.5V$

$Voltage \text{ Drop (VD)} = 8.16A \times 45ft/1000ft \times 1.24ohms = 0.309V$

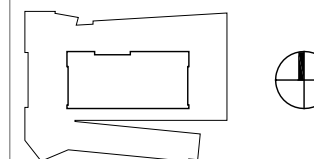
$0.309V/171.5V \times 100 = 0.18\% \text{ Max Per String}$



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PROJECT STATUS: CD
SHEET NAME:

PV SYSTEM DIAGRAM

Q6-00

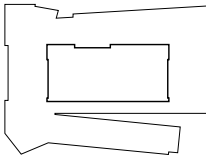
SCALE: N.T.S.



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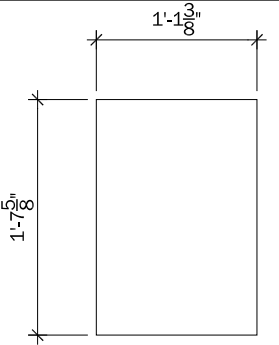
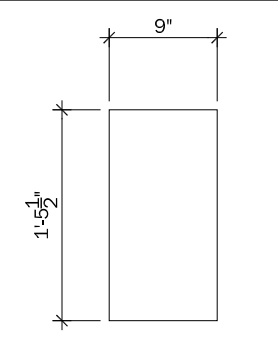
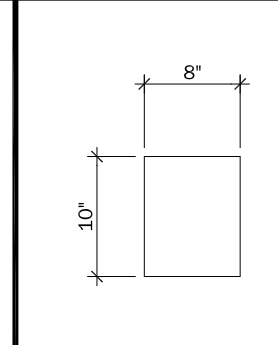
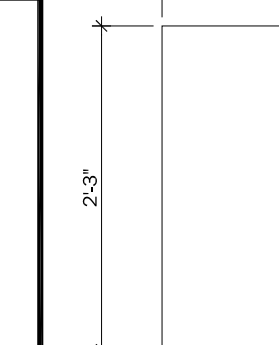
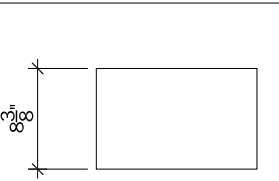
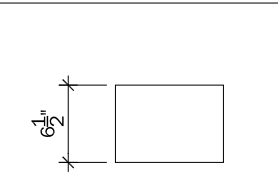
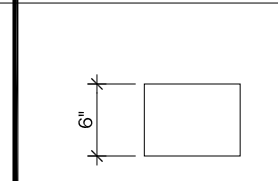
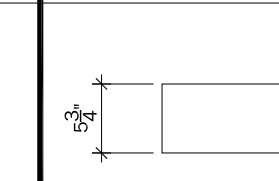
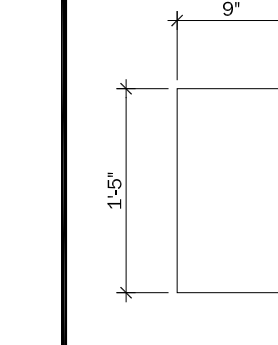
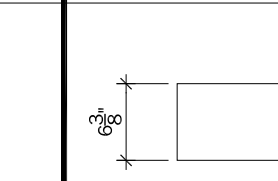


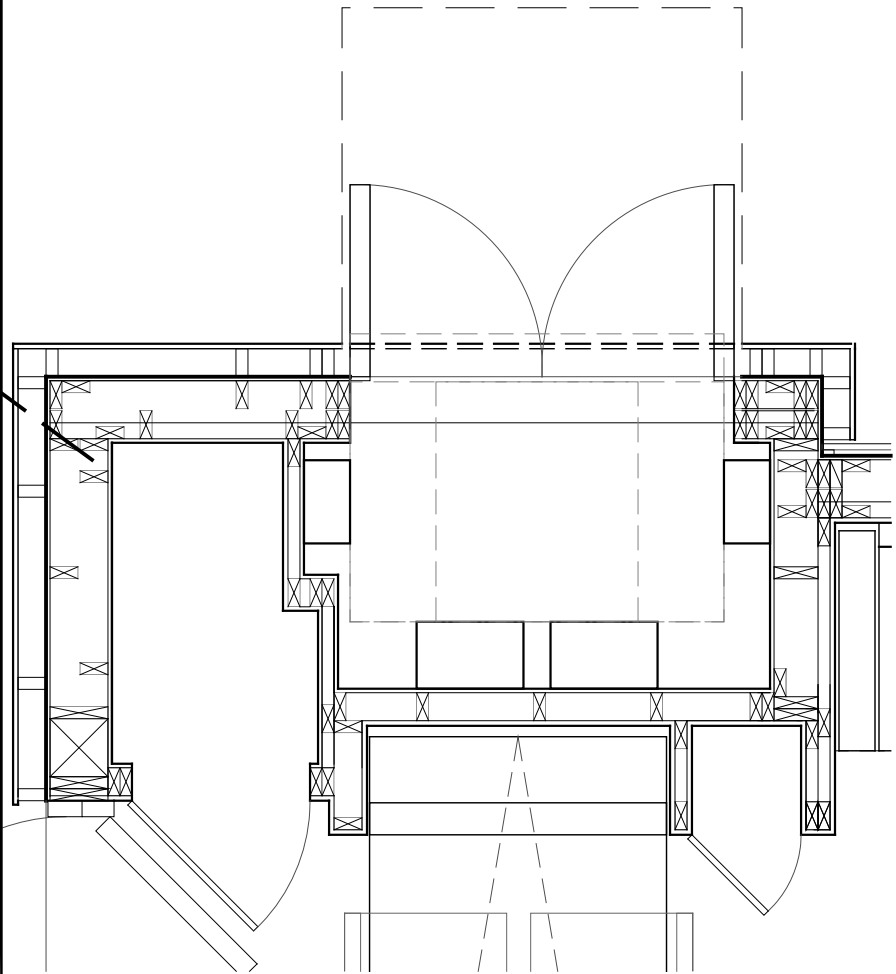
NTS

PROJECT STATUS: CD
SHEET NAME:

APPLIANCE SCHEDULE

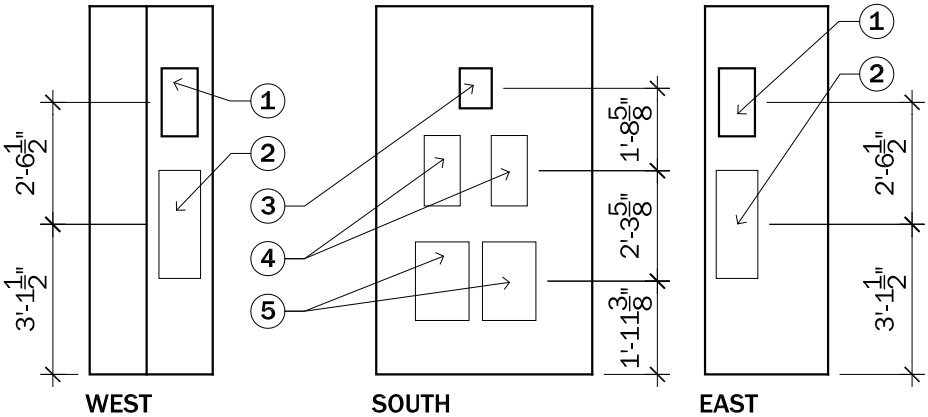
Meltwater: UWM Carbon Neutral House Project										
The University of Wisconsin-Milwaukee Solar Decathlon 2009 Submittal										
Appliance Schedule										
APPLIANCE SCHEDULE										
ROOM NO	ROOM NAME	TYPE	MANUFACTURER	MODEL NUMBER	COLOR	FINISH	DIMENSIONS			NOTES
							WIDTH	HEIGHT	DEPTH	
103	KITCHEN	OVEN	Gaggenau	BO 281-610	Stainless steel-backed full glass door	Brushed	29 5/8"	26 3/8"	21 9/16"	
		RANGE	Wolf	CT\151\S	Stainless steel trim black finished ceramic cooktop	n/a	15"	3 1/2"	21"	
		DOWNDRAFT EXHAUST	Wolf	DD30I	Carbon Stainless Steel with black trim	Brushed	30"	9"	2"	
		REFRIGERATOR	Sun Frost	RF12	Cherry wood veneer with black lacquer to match cabinetry	Stained Wood	34 1/2"	49 1/2"	27 3/4"	
		DISHWASHER	Fisher&Paykel	DD224-P5 double DishDrawer	Stainless Steel	Brushed	23 1/2"	33 1/2"	24 7/16"	
104	LAUNDRY	WASHING MACHINE	ASKO	W6222	Black	gloss paint	23 1/2"	33 1/2"	24 7/16"	stackable
		CLOTHES DRYER	ASKO	T712	Black	gloss paint	23 1/2"	33 1/2"	27 7/8"	stackabe

MECHANICAL ROOM EQUIPMENT SCHEDULE				
ELEVATION				
				
DETAILS	INVERTERS	DC DISCONNECT	COMBINER	BREAKER PANEL
	QUANTITY: 2	QUANTITY: 2	QUANTITY: 1	QUANTITY: 2
	DIMENSIONS WIDTH: 1'-1 ³ / ₈ " HEIGHT: 1'-7 ⁵ / ₈ " DEPTH: 8 ⁵ / ₈ "	DIMENSIONS WIDTH: 9" HEIGHT: 1'-5 ¹ / ₂ " DEPTH: 6 ¹ / ₂ "	DIMENSIONS WIDTH: 8" HEIGHT: 10" DEPTH: 6"	DIMENSIONS WIDTH: 10 ³ / ₈ " HEIGHT: 2'-3" DEPTH: 5 ³ / ₄ "
	FLOOR CLEARANCE WIDTH: 3'-10 ³ / ₄ " DEPTH: 10'-0"	FLOOR CLEARANCE WIDTH: 3'-10 ³ / ₄ " DEPTH: 10'-0"	FLOOR CLEARANCE WIDTH: 3'-10 ³ / ₄ " DEPTH: 10'-0"	FLOOR CLEARANCE WIDTH: 2'-6" DEPTH: 3'-10 ³ / ₄ "
	LOCATION SOUTH WALL	LOCATION SOUTH WALL	LOCATION SOUTH WALL	LOCATION EAST AND WEST WALL
				



1
Q6-02
MECHANICAL ROOM FLOOR PLAN
SCALE: 1/2" = 1'-0"

1. AC DISCONNECT
2. CIRCUIT BREAKER PANEL
3. COMBINER
4. DC DISCONNECT
5. INVERTERS



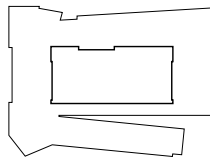
2
Q6-02
MECHANICAL ROOM INTERIOR ELEVATIONS
SCALE: 1/4" = 1'-0"



CLIENT NAME: DOE/NREL
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PROJECT STATUS: CD
SHEET NAME:

MECHANICAL ROOM
EQUIPMENT LAYOUT

Q6-02

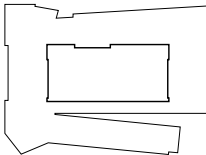
SCALE: 1/4" = 1'-0"



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PROJECT STATUS: CD
SHEET NAME:

CIRCUIT BREAKER
SCHEDULE

Q6-03

SCALE: N.T.S.

UWM - MELTWATER BREAKER BOX LAYOUT SCHEDULE			
Breaker Box # 1		Breaker Box #2	
Item(s)	Amp Breaker	Item(s)	Amp Breaker
ERV/HAVC	50A	Kitchen Hot Water	44A
Bath Hot Water	44A	Oven	30A
Clothes Washer	30A	Range	20A
Clothes Dryer	30A	Lighting	15A
Fridge	15A	Down Draft Blower	15A
House Lighting (Mod 1 & 2)	15A	Plugs (Mod 1 & 2)	15A
House Lighting (Mod 3 & 4)	15A	Plugs (Mod 3 & 4)	15A
OutDoor Lights (Mod 1 & 2)	15A	OutDoor Plugs (Mod 1 & 2)	15A
OutDoor Lights (Mod 3 & 4)	15A	OutDoor Plugs (Mod 3 & 4)	15A
Empty		Power Supply & Dishwasher	15A
Empty		Computer & Entertainment	15A
Empty		Computer & Entertainment	15A
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
Empty		Empty	
15A Breakers are Siemens 1-pole AFCI Breaker combination: Meets requirements of NEC 210.12 NEC 250.52 will be met by section (1)(A), use of an 8ft grounding rod.			

1
Q6-03

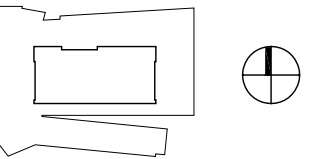
CIRCUIT BREAKER SCHEDULE
NOT TO SCALE



CLIENT NAME: DOE/NREL
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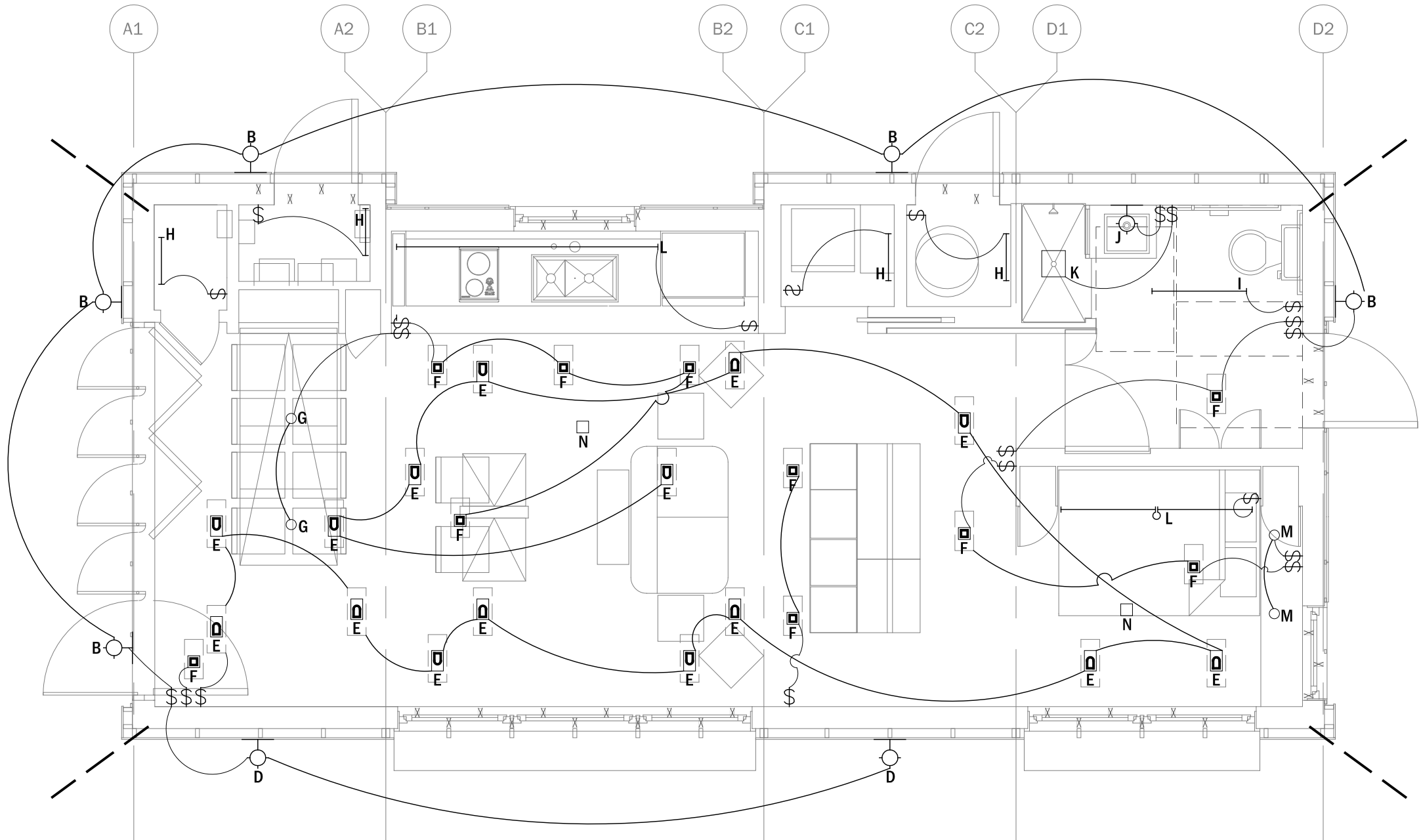
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

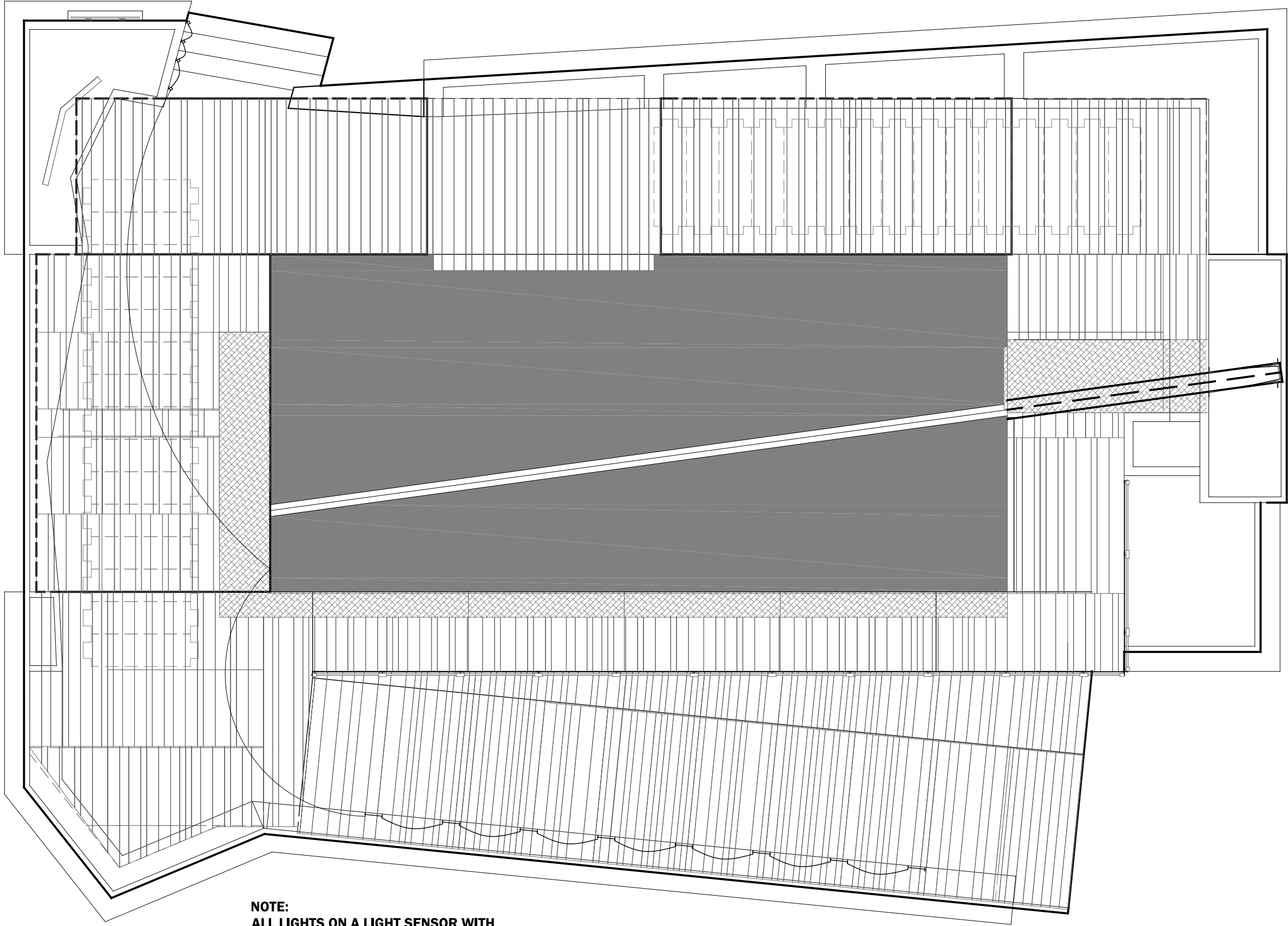
LIGHTING PLAN AND FIXTURE SCHEDULE

E1-00

SCALE: 1/4" = 1'-0"



1
E1-00 **LIGHTING PLAN AND FIXTURE SCHEDULE**
scale: 1/4" = 1'-0"



NOTE:
ALL LIGHTS ON A LIGHT SENSOR WITH
A MANUAL OVERRIDE SWITCH INSIDE

1
E1-01

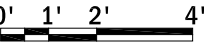
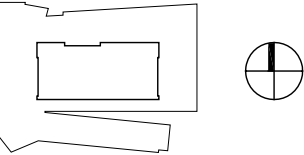
DECK LIGHTING PLAN
scale: $\frac{3}{16}" = 1'-0"$



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY	

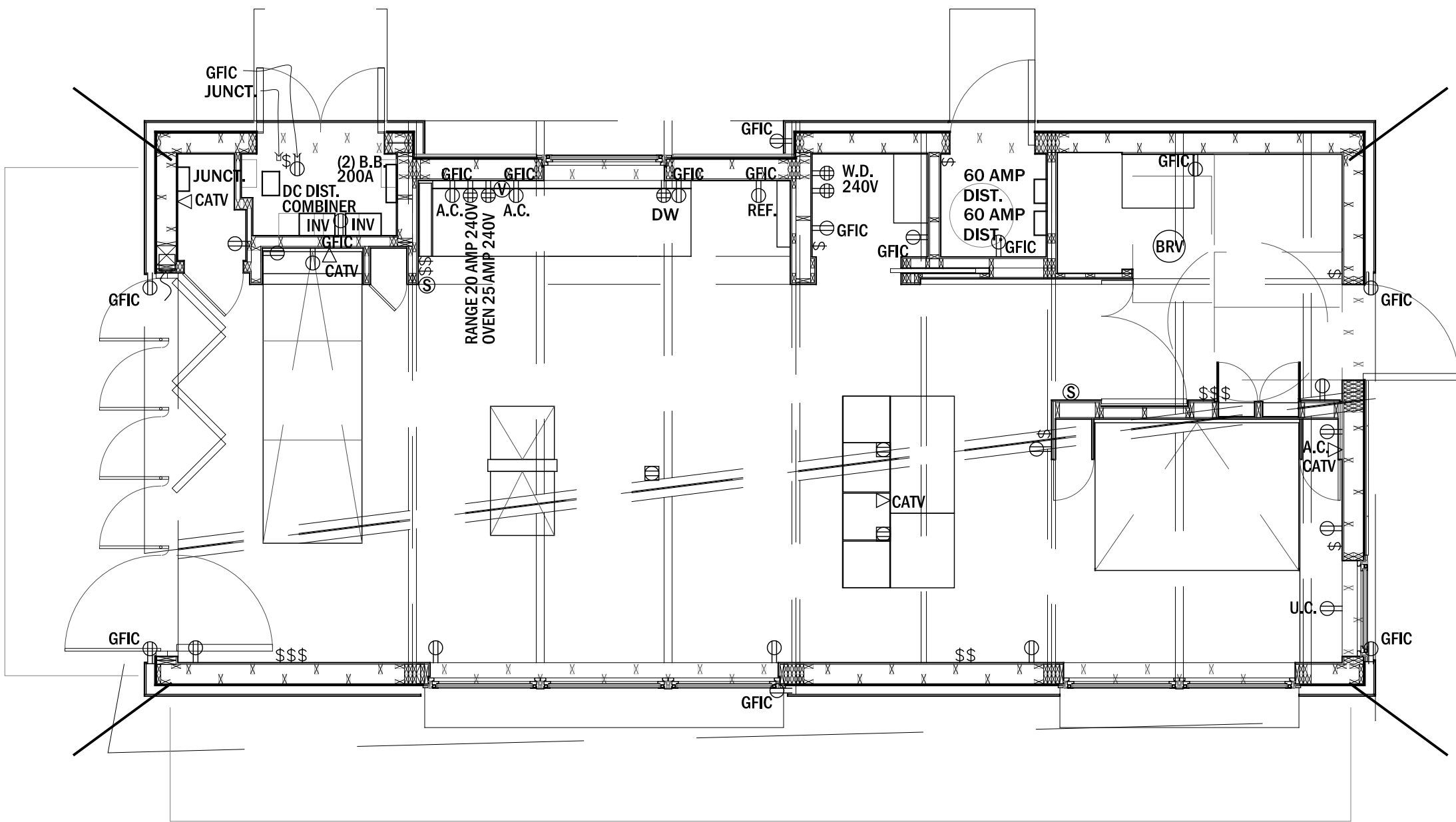
ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
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PROJECT STATUS: CD
SHEET NAME:

DECK LIGHTING PLAN

E1-01
SCALE: $\frac{3}{16}" = 1'-0"$



*ALL OUTLETS TO BE AT STANDARD HEIGHTS OF 16" AFTER FINISH FLOOR UNLESS NOTED OTHERWISE.

*ALL GFCI OUTLETS TO BE WATERPROOF.

*ALL SMOKE DETECTORS TO BE HARDWIRED TOGETHER AND EACH TO HAVE ITS OWN INTERNAL BATTERY BACKUP. ALL INSTALLATION OF SMOKE DETECTORS TO COMPLY WITH NFPA 72.

* A MINIMUM OF TWO EXTERIOR OUTLETS TO BE LOCATED ON DECK FOR UTILITY PURPOSES.

SYMBOL LEGEND & NOTES:

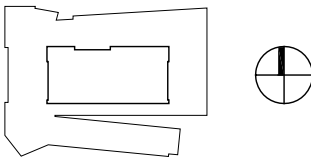
- ⊕ DUPLEX OUTLET
- ⊕ QUAD OUTLET
- ⊕ FLOOR OUTLET
- △ DATA OUTLET
- Ⓢ SMOKE DETECTOR
- Ⓥ DOWNDRAFT VENT
- ⓇⓋ BATHROOM VENT
- ACTUATOR
- ~ ACTUATOR
- A.C. ABOVE COUNTER
- U.C. UNDER COUNTER
- GFCI GROUND FAULT INTERRUPTER CIRCUIT
- CATV CABLE TV
- REF. REFRIGERATOR
- D.W. DISHWASHER
- W.D. WASHER & DRYER
- B.B. BREAKER BOX
- 200A 200 AMP
- 240V 240 VOLT OUTLET
- PLC PROGRAMMABLE LOGIC CONTROLLER
- INV INVERTER



CLIENT NAME: DOE/NREL
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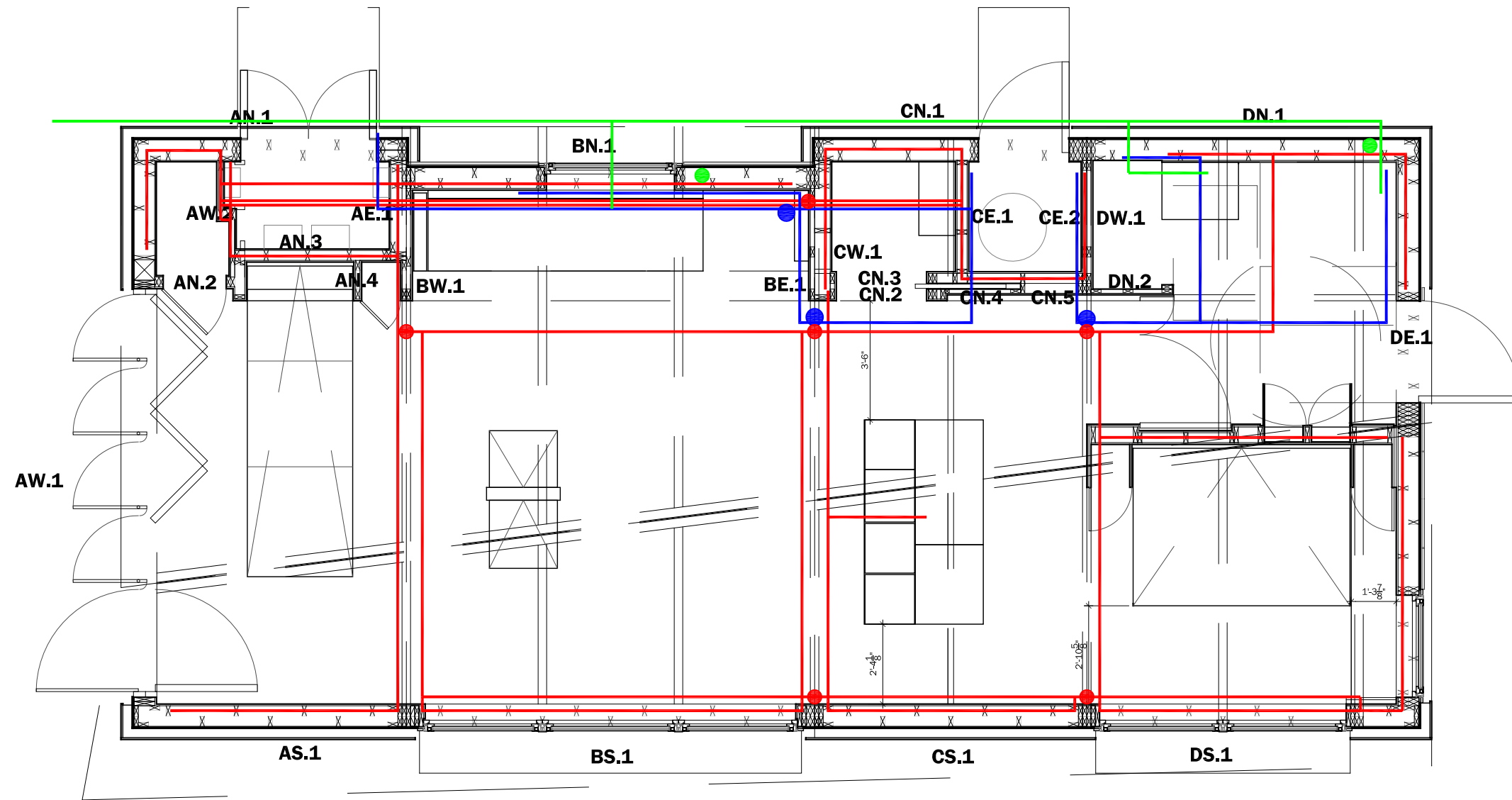
0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

RECEPTACLE AND POWER PLAN

E1-02

SCALE: 1/4" = 1'-0"



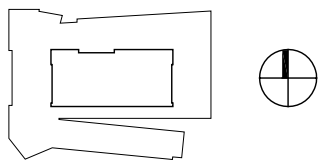
- ELECTRICAL
- PLUMBING CONNECTIONS AT MOD LINES
- PLUMBING
- ELECTRICAL CONNECTIONS AT MOD LINES OR ABOVE LIGHT SHELF
- VENT OR WASTE



CLIENT NAME: DOE/NREL
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0'

PROJECT STATUS: CD
SHEET NAME:

CONDUIT AND PLUMBING DIAGRAM

E1-03

SCALE: 3/16" = 1'-0"

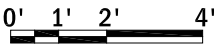
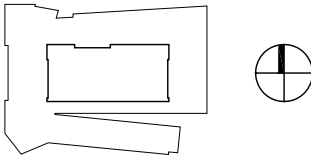
LIGHTING FIXTURE AND FAN SCHEDULE										
MAR K	DESCRIPTION	MOUNTING	MFR	MODEL	DETAILS					NOTES
		BRACKET			LUMINARIE TYPE	DIM	SIZE (cm unless noted)	QUANTITY	WATT	
										-
A	OUTDOOR PATH LIGHTING	FACE MOUNTED	ERCO	AXIS WALKLIGHT - 33733.000	LED	NO	278 X 72 X 90	8	1.7	GRAPHITE HOUSING
B	OUTDOOR FAÇADE LIGHTING	FACE MOUNTED	ERCO	CYLINDER FAÇADE 85024.000	LOW-VOLTAGE HALOGEN	YES	175 x 72 d.	3	100	GRAPHITE HOUSING
C	OUTDOOR STAIR LIGHTING	RECESSED WALL	ERCO	ORIENTATION LUMINARE 33768.000	LED	NO	56d. X 70	4	0.5	GRAPHITE HOUSING
D	FAÇADE UPLIGHTING	FACE MOUNTED	ERCO	FLOOD FAÇADE LUMINAIRES 34170.000	LED	NO	633 X 89 X 84	2	12	GRAPHITE HOUSING
E	INTERIOR AMBIENT LIGHTING	RESESSED FIXTURE	RSA LIGHTING	COMBO MINI CM1S	LED - MR16	NO	4.5" X 7.6"	15	3	MR16 NOT PROVIDED
F	INTERIOR DOWNLIGHT	RECESSED FIXTURE	RSA LIGHTING	COMBO MINI CM6S	LED - MR16	NO	4.5" X 4.5"	10	3	MR16 NOT PROVIDED
G	DINING TABLE LIGHTING	PENDENT	EUREKA	LARGE BEATBOX 4237-XLQ	LOW-VOLTAGE HALOGEN	YES	16" X 4" X 4"	2	60	MATCH OFFICE/BEDROOM
H	INTERIOR TASK LIGHTING FIXTURE	WALL MOUNTED	PHILLIPS/ ALKO	TABEAU	T5 FLORESENT	NO	3 5/8" X 3'	4	39	CLOSETS AND MECHANICAL ROOMS
I	BATHROOM LIGHTING	RECESSED FIXTURE	ALIGHT	ALURE2 C SERIES	T5 FLORESENT	YES	3' X 3-3/4" X 1 7/8"	2	120	SATIN BLACK HOUSING - MOUNTED NEXT TO SKYLIGHT
J	BATHROOM TASK LIGHTING	WALL MOUNTED	EUREKA	SPICA3482-014	LOW-VOLTAGE HALOGEN	NO	10" X 11" X 5"	1	20	FINISH TO MATCH BATHROOM FIXTURES
K	BATHROOM EXHAUST AND LIGHT COMBO	RECESSED	MARLEY	MM6671CF	FLORESENT	NO	9" X 10"	1	13	-
L	KITCHEN AND BEDROOM TASK LIGHTING	UNDERCABINET	PHILLIPS/ ALKO	INCHLINE ILF SERIES	T5 FLORESENT	NO	36" X 1 1/8" X 3"	4	35	-
M	BEDROOM / OFFICE	PENDENT	EUREKA	LARGE BEATBOX 4237-XLQ	LOW-VOLTAGE HALOGEN	YES	16" X 4" X 4"	2	60	MATCH DINING TABLE
										-
N	FAN	SURFACE MOUNTED	MODERN FAN COMPANY	ALTUS	N/A	N/A	36" SPAN	2	N/A	001 FAN SPEED CONTROL, 17" DOWNROD, NO LIGHTING PACKAGE



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SHEET NAME:

FIXTURE SCHEDULE

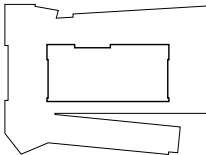
PLUMBING FIXTURE SCHEDULE								
NO.	ITEM	MANUFACTURER	MODEL	DRAINAGE		SUPPLY		STORAGE
				WASTE	VENT	HOT	COLD	-
-	REFRIGERATOR	SUN FROST	RF12	-	-	-	-	-
P1	KITCHEN SINK	KOHLER	K-3325	2"	1-1/2"	-	-	-
P2	KITCHEN FAUCET	KOHLER	K-6227	-	-	1/2"	1/2"	-
P3	DISHWASHER	DCS BY FISCHER AND PAYKEL	DD224-P5	2"	-	1/2"	-	-
P4	CLOTHES WASHER	ASKO	W6222	2"	1-1/2"	1/2"	1/2"	-
P5	LAVATORY FAUCET	KOHLER	K-8211-K	-	-	1/2"	1/2"	-
P6	LAVATORY SINK	KOHLER	K-2611	2"	1-1/2"	-	-	-
P7	WATER CLOSET	KOHLER	K-3597	3"	3"	-	1/2"	-
P8	SHOWER MIXING VALVE	KOHLER	K-438	-	-	1/2"	1/2"	-
P9	SHOWER HEAD	KOHLER	K-997-CP	-	-	1/2"	1/2"	-
P10	SHOWER DRAIN	KOHLER	K-9135	3"	1-1/2"	-	-	-
P11	FREEZE PROOF HOSE BIB	MERRILL	MAD4	-	-	-	1/2"	-
ST-1	DOMESTIC SUPPLY TANK	-	-	-	-	1"	1"	600 GAL.
ST-2	WASTE WATER TANK	-	-	4"	-	-	-	600 GAL.
HT-1	DOMESTIC HOT WATER TANK	-	-	-	-	-	-	80 GAL.
HT-2	TANKLESS WATER HEATER	STIEBEL ELTRON	TEMPRA 15	-	-	1/2"	-	-
HT-3	TANKLESS WATER HEATER	STIEBEL ELTRON	TEMPRA 24	-	-	1/2"	-	-
HT-4	SOLAR THERMAL WATER TANK	-	-	-	-	-	-	-



CLIENT NAME: DOE/NREL
PROJECT: SOLAR DECATHLON
PROJECT NO.: SD 2009

REVISION HISTORY

ISSUE DATE: 2009.06.02
APPROVED BY: GDT/CTC
CHECKED BY: GDT/CTC
DRAWN BY: DH

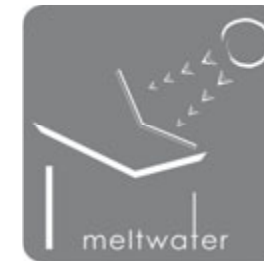


NTS

PROJECT STATUS: CD
SHEET NAME:

PLUMBING FIXTURE SCHEDULE

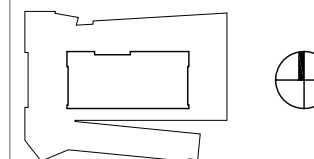
P6-00
SCALE: N.T.S.



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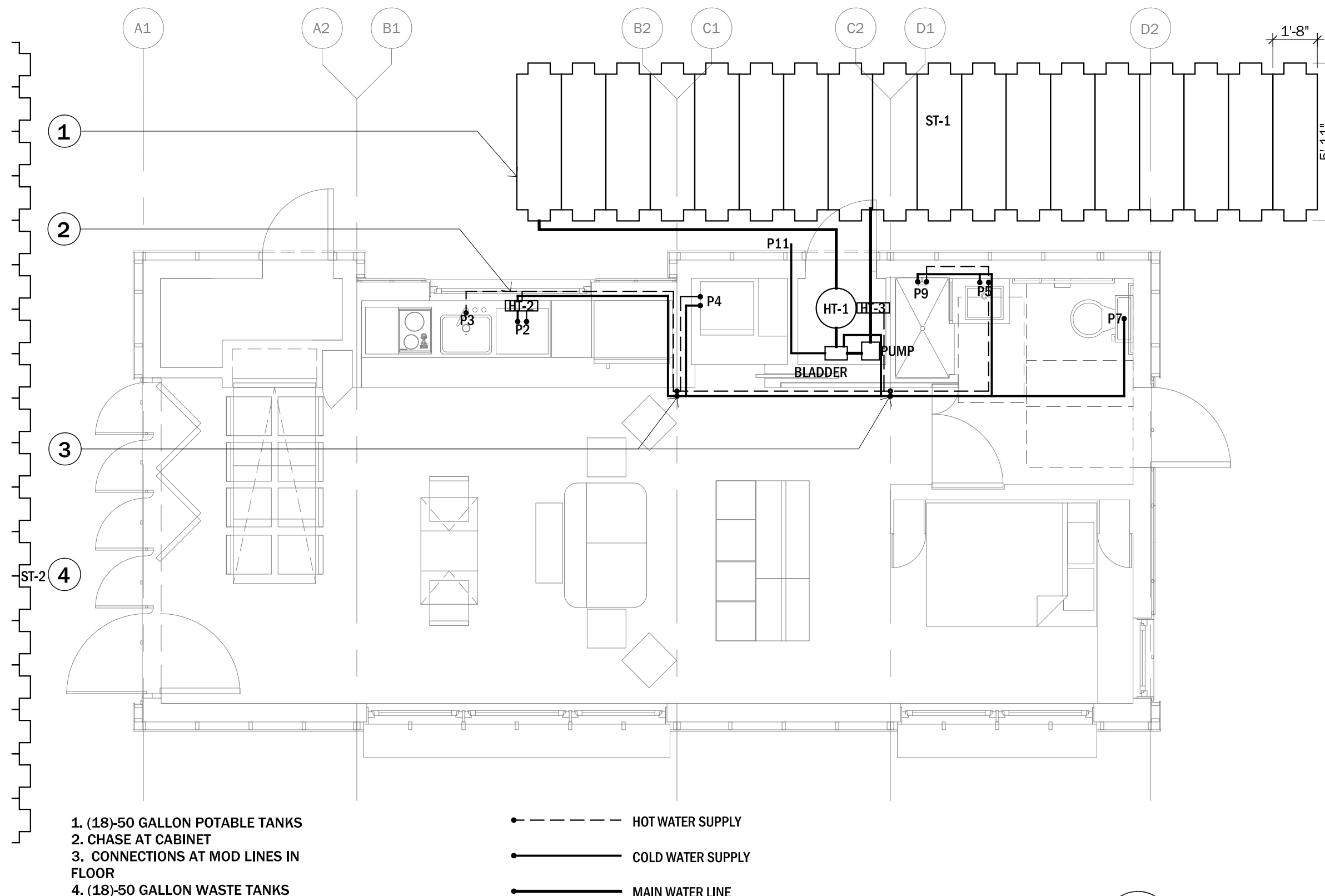
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PROJECT STATUS: CD
SHEET NAME:

PLUMBING SUPPLY DIAGRAM

P6-01

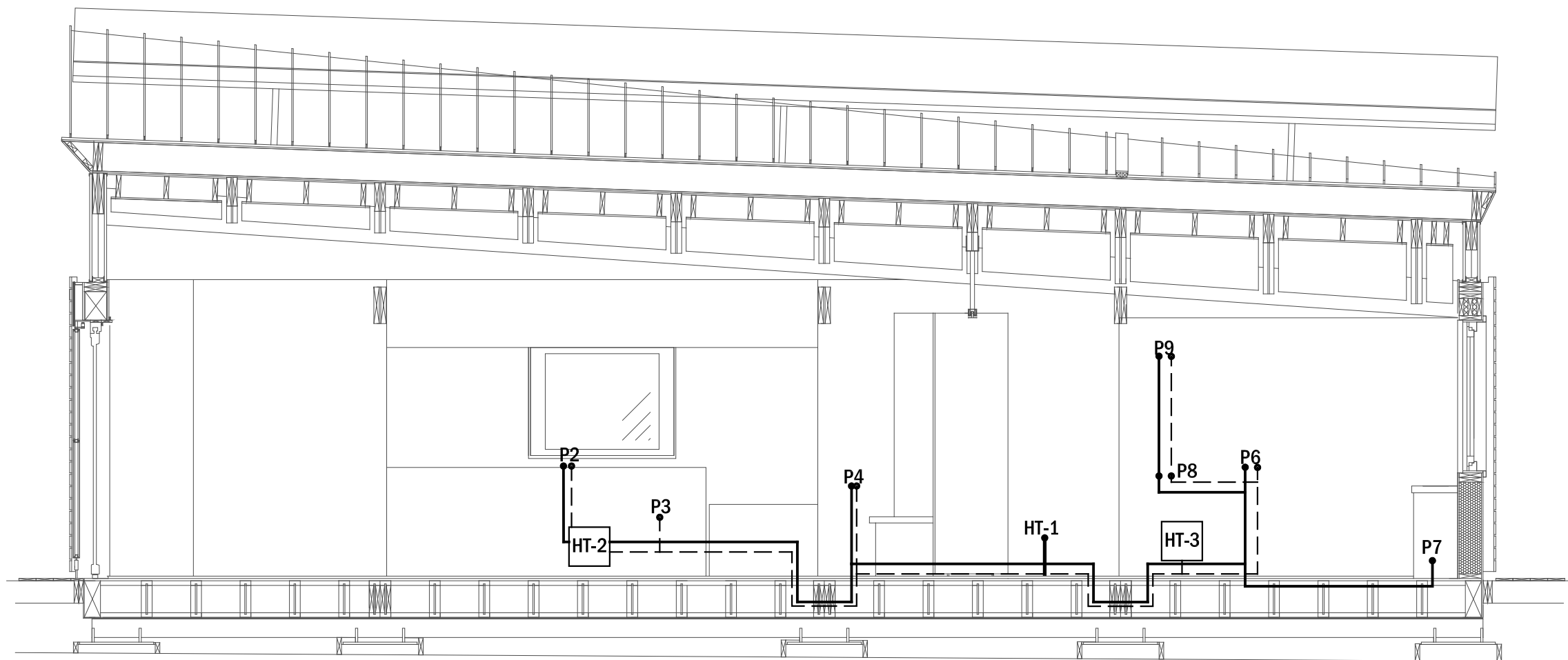
SCALE: 1/4" = 1'-0"



1. (18)-50 GALLON POTABLE TANKS
2. CHASE AT CABINET
3. CONNECTIONS AT MOD LINES IN FLOOR
4. (18)-50 GALLON WASTE TANKS

- HOT WATER SUPPLY
- COLD WATER SUPPLY
- MAIN WATER LINE

1
P6-01
PLUMBING SUPPLY DIAGRAM
scale: 1/4" = 1'-0"



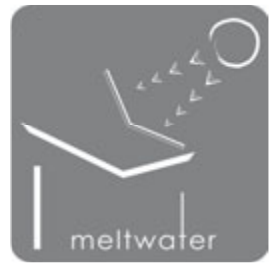
- - - - - - HOT WATER SUPPLY
- ——— COLD WATER SUPPLY
- ——— MAIN WATER LINE

1

P6-02

PLUMBING SUPPLY DIAGRAM

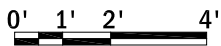
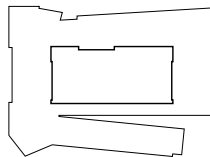
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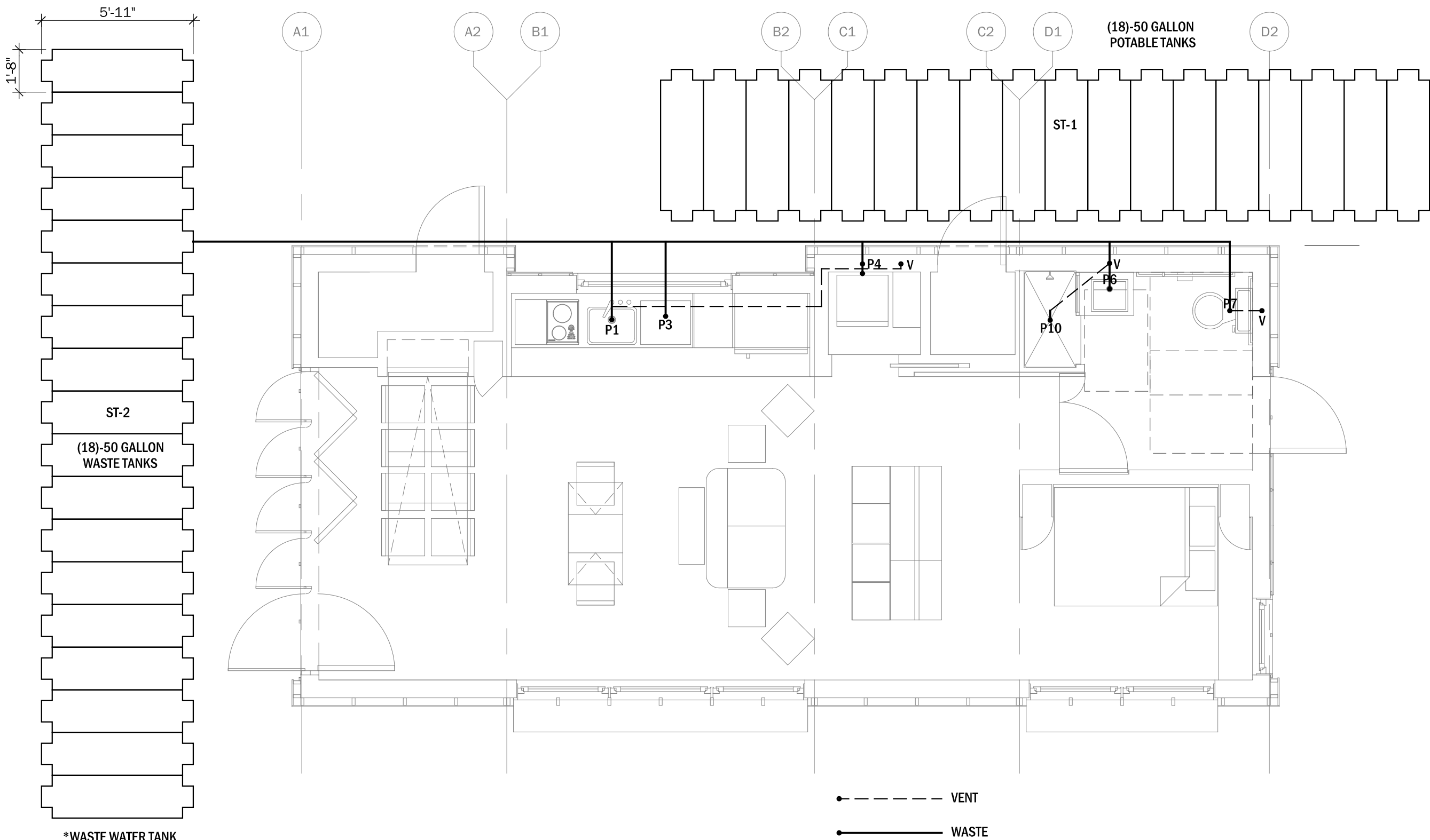


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SHEET NAME:

PLUMBING SUPPLY
DIAGRAM

P6-02

SCALE: $1/4" = 1'-0"$



*WASTE WATER TANK
TO BE LOCATED
UNDER PLANTER
DECK.

--- VENT
— WASTE

1
P6-03

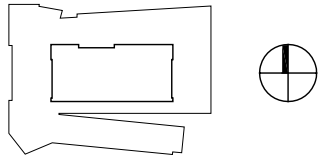
PLUMBING WASTE AND VENT DIAGRAM
scale: 1/4" = 1'-0"



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0' 1' 2' 4'

PROJECT STATUS: CD
SHEET NAME:

**PLUMBING WASTE
AND VENT DIAGRAM**

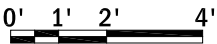
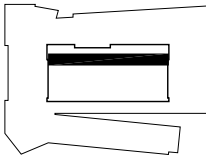
P6-03
SCALE: 1/4" = 1'-0"



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REVISION HISTORY	

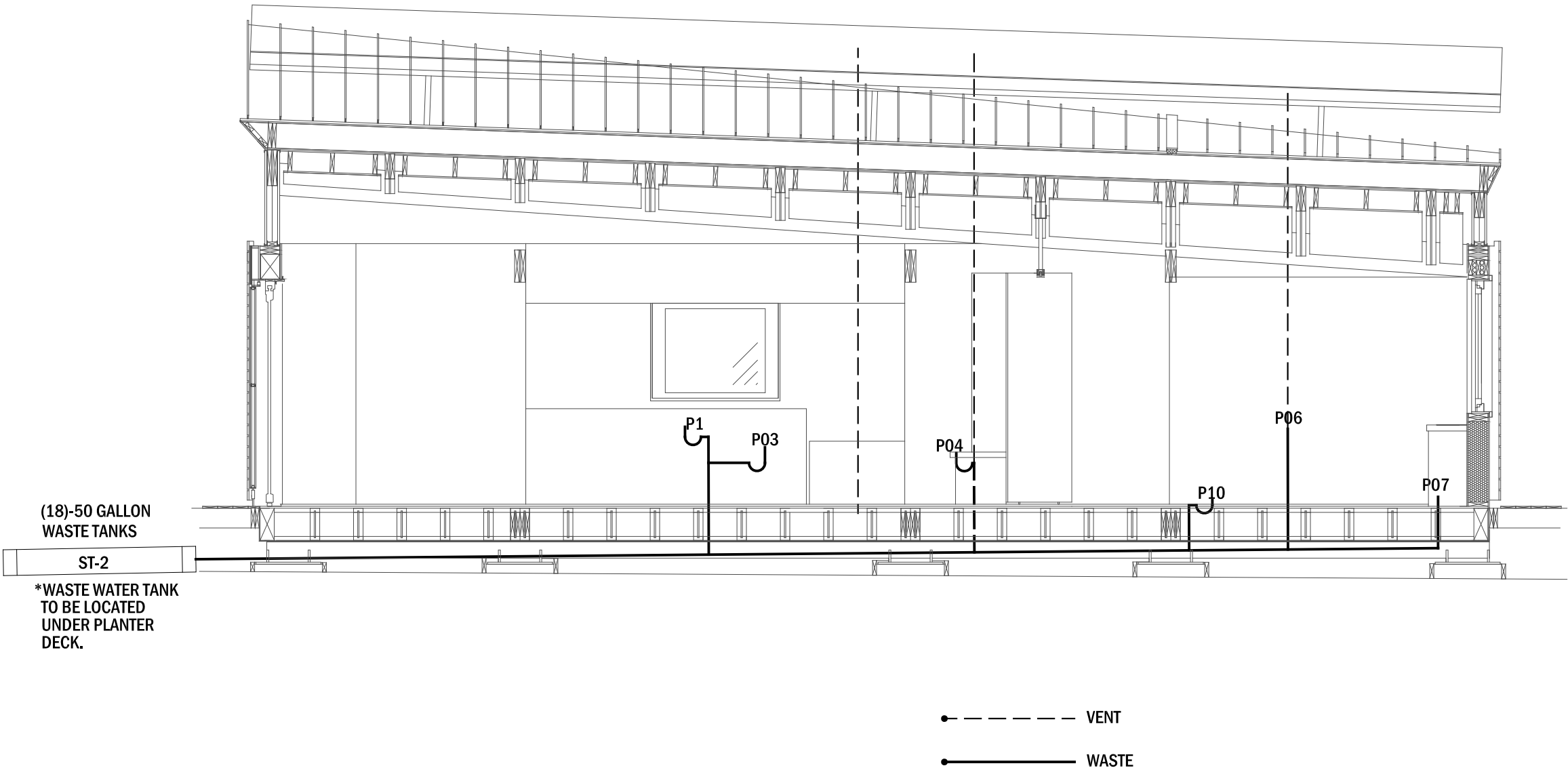
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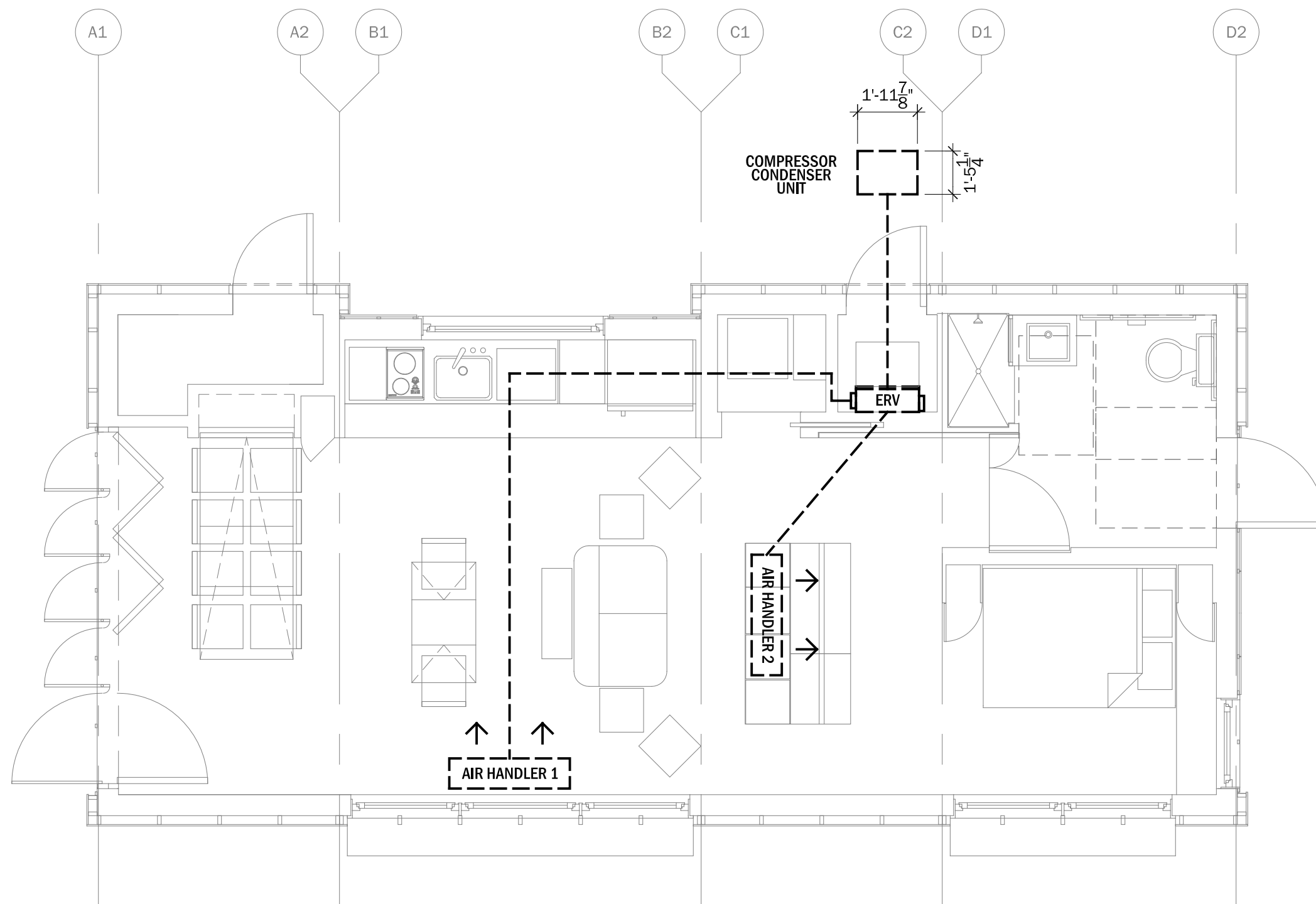


PROJECT STATUS: CD
SHEET NAME:

PLUMBING WASTE
& VENT DIAGRAM

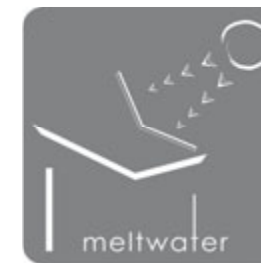
P6-04
SCALE: 1/4" = 1'-0"





HEATING/COOLING SYSTEM NOTES
* ERV TO BE RENEWAIRE MODEL #EV-70.
* COMPRESSOR CONDENSER UNIT AND AIR HANDLER
TO BE SOLCOL MILLENIA 1.5 TON PACKAGE SYSTEM.

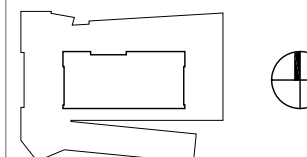
1
M6-00 **HEATING/COOLING SYSTEM DIAGRAM**
scale: $\frac{1}{4}" = 1'-0"$



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0' 1' 2' 4'

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HEATING/COOLING SYSTEM DIAGRAM

M6-00

SCALE: $\frac{1}{4}" = 1'-0"$