



SHADE

SOLAR HOMES ADAPTING FOR DESERT EQUILIBRIUM



AS-BUILT DRAWING SET



U.S. DEPARTMENT OF ENERGY
SOLAR DECATHLON



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03	2.14.2013	100% DOE/NREL CD SUBMISSION
02	11.20.2012	80% DOE/NREL DD RE-SUBMISSION
01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
COVER

G-000

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SHEET TITLE
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REFERENCES

THE CONSTRUCTION SPECIFICATIONS INSTITUTE (CSI) MASTER FORMAT
ARCOM MASTERSPEC
U.S. NATIONAL CAD STANDARD AUTODESK REVIT
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) NATIONAL ELECTRIC CODE 2011
RS MEANS REED CONSTRUCTION DATA
INTERNATIONAL CODE COUNCIL 2012 INTERNATIONAL RESIDENTIAL CODE (IRC)
INTERNATIONAL CODE COUNCIL 2012 INTERNATIONAL BUILDING CODE (IBC)
INTERNATIONAL CODE COUNCIL/AMERICAN NATIONAL STANDARDS INSTITUTE (ICC/ANSI) A117.1
2010 STANDARDS FOR ACCESSIBLE DESIGN (ADA)
SOLAR DECATHLON BUILDING CODE

BUILDING DESIGN LOADS

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ROOF LIVE LOADS - SEE PROJECT MANUAL
ROOF DEAD LOADS - SEE PROJECT MANUAL
INTERIOR FLOOR LIVE LOADS - SEE PROJECT MANUAL
INTERIOR FLOOR DEAD LOADS - SEE PROJECT MANUAL
EXTERIOR DECKING LIVE LOADS - SEE PROJECT MANUAL
EXTERIOR DECKING DEAD LOADS - SEE PROJECT MANUAL

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SHEET TITLE
SITE AND BUILDING
REGULATORY
SUMMARY

G-010

Overview

SHADE is an 851 sq.ft. home that is constantly in tune with the living environment and seeks equilibrium with its surroundings. It takes advantage of the desert ecosystem by sitting within the landscape to create microclimates.

Desert

The home is meant to adapt to the environment that surrounds it. SHADE is located in the Southwest region of the United States, and is designed for the Phoenix, Sonoran Desert environment. Set in an inviting desert landscape, SHADE interacts with its surroundings through the use of a versatile deck space and “operable” walls which open up the interior spaces to the external environment. The landscape is a vital strategy to SHADE. Seasonal blooming, attraction of birds, bees and butterflies, as well as the encouragement of engagement with nature, create an interactive environment. SHADE does not only engage with the surroundings but displays it in architecture. The solar canopy highlights the Southwest’s unique abundance of the sun. The canopy has the ability to absorb solar radiation while providing shade for the inhabitants below. 1 sq.ft. of solar sun radiation = 1 sq.ft. of shade. A productive garden within the landscape strategy of SHADE encourages a net zero lifestyle on an energy standpoint, as well as a consuptive one.

Flexibility

Due to the homes’ functional flexibility, it encourages engagement with neighbors and the surrounding community. The large operable window on the south side of the home not only adds exterior square footage when opened, but allows for engagement with neighbors and passersby. The flex-space, which is comparable to a large living room, can easily be turned into a bedroom at night and a home office during the day. It not only transforms the living room but also spills into the dining room and kitchen. This entire space can be used as an extension of the living room. The southern portion of the flex-space, through the use of a collapsable table, is able to seat 8 guests for a dinner party, or 2 for a more intimate evening. This flex-space provides accommodation for the phenomena of the boomerang generation that is being experienced in today's day and age. Flexibility is embodied throughout the design concepts within SHADE.

Modularity

The notion of modularity was developed while addressing a typical condition in Phoenix and Albuquerque; abandoned inner ring suburban spaces and large sprawl. The home is designed as a kit of parts (modules and components). The components can be adapted in many ways to serve the existing housing stock and improve the use of existing buildings in a more sustainable way. The two interior modules were designed for ease of construction and economy. The mechanical module is centralized for efficiency and ease of systems distribution. The interior modules are prefabricated and later attached at a single seam which houses the connections and controls for the radiant comfort system, as well as electrical distribution. Not only is modularity functional for rapid change but economical as well.



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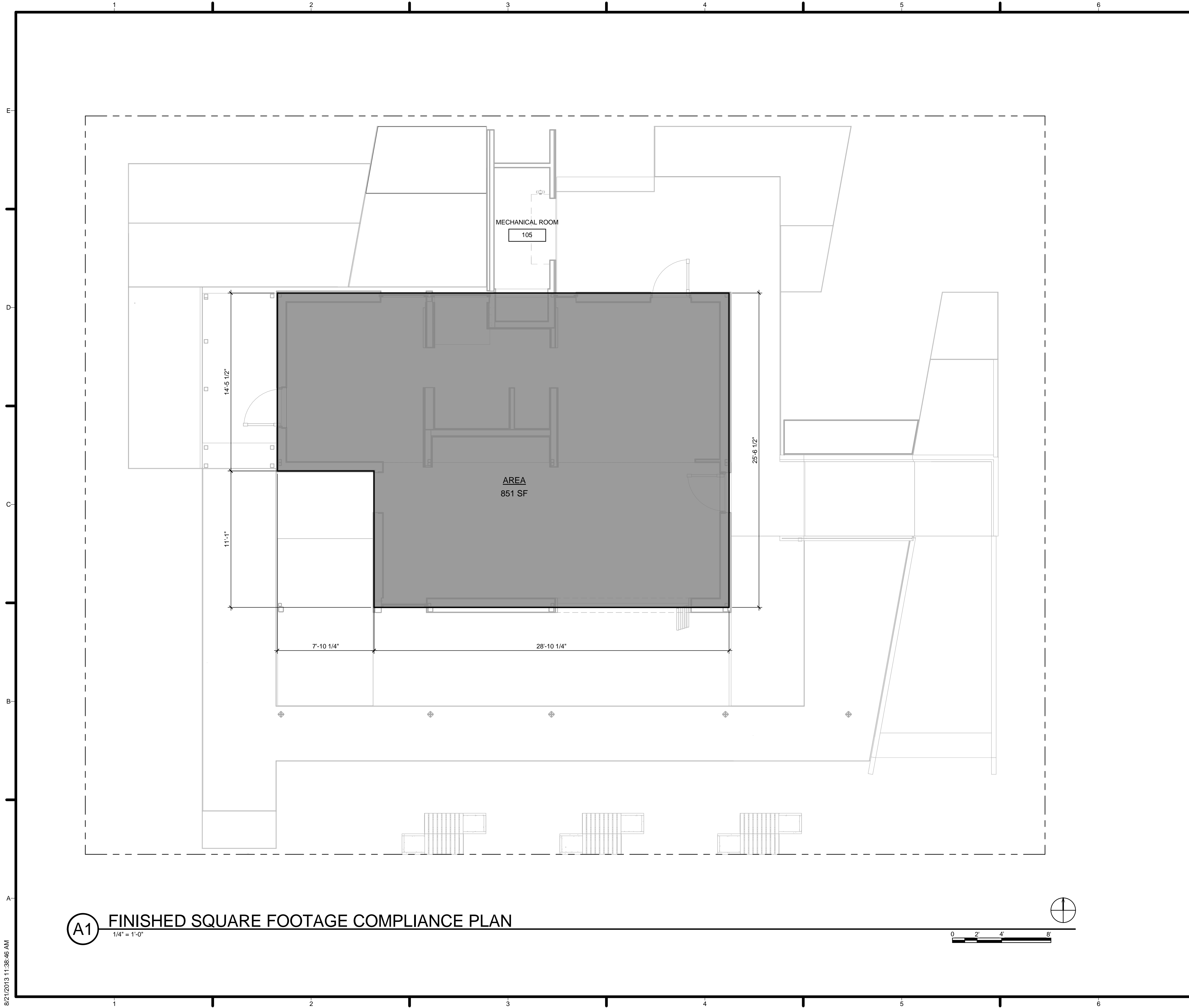
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SHEET TITLE
DESIGN INTENT

G-011



GENERAL SHEET NOTES

1. ALL FACE DIMENSIONS SHOWN ARE TO THE FINISHED FACE OF EXTERNAL WALLS
2. SHOWN IS SQUARE FOOTAGE OF FINISHED AREA
3. MECHANICAL ROOM IS NOT INCLUDED IN THIS CALCULATION
4. MECHANICAL ROOM IS NOT A CONDITIONED SPACE
5. FINISHED SQUARE FOOTAGE CALCULATIONS FOR THIS HOUSE WERE MADE BASED ON PLAN DIMENSIONS ONLY AND MAY VARY FROM THE FINISHED SQUARE FOOTAGE OF THE HOUSE AS BUILT.



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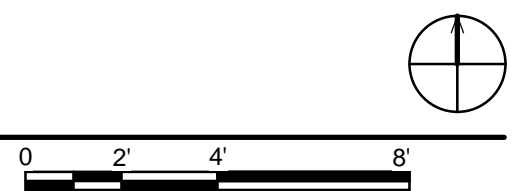
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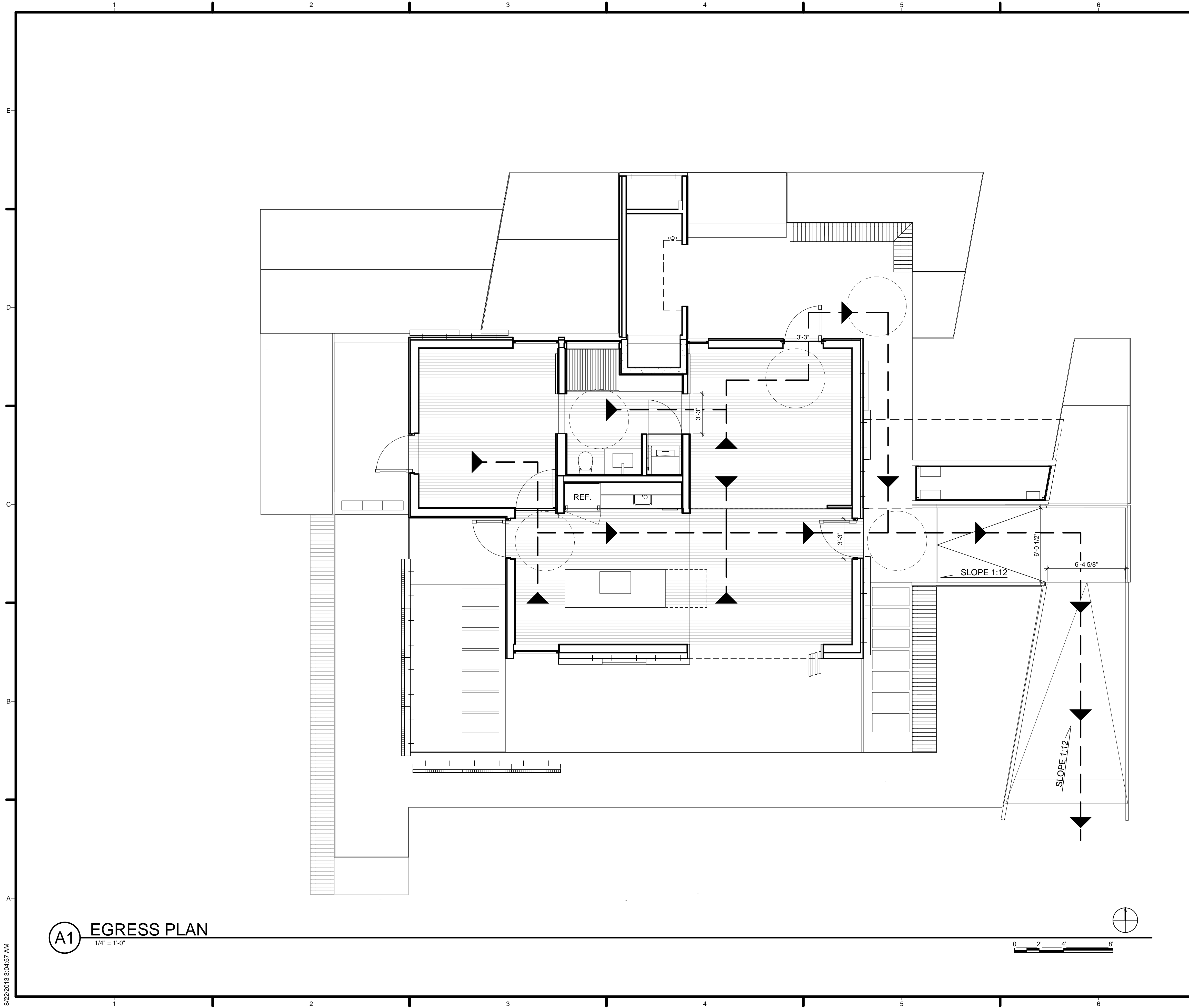
SHEET TITLE
FINISHED SQUARE FOOTAGE COMPLIANCE PLAN

G-101

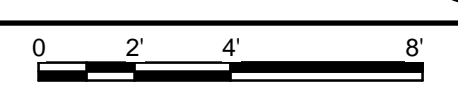
A1 FINISHED SQUARE FOOTAGE COMPLIANCE PLAN
 1/4" = 1'-0"



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(A1) EGRESS PLAN
1/4" = 1'-0"


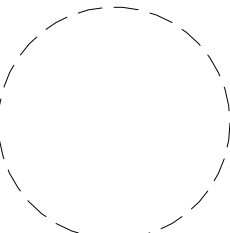


GENERAL SHEET NOTES

1. GENERAL MUSTER AREA IS TO BE SET ON DECATHLETE WAY, SOUTH OF LOT LINE.

REFERENCE KEYNOTES

SHEET KEYNOTES

-  DENOTES DIRECTION OF OUT
-  DENOTES TURNING RADIUS (5 FT)



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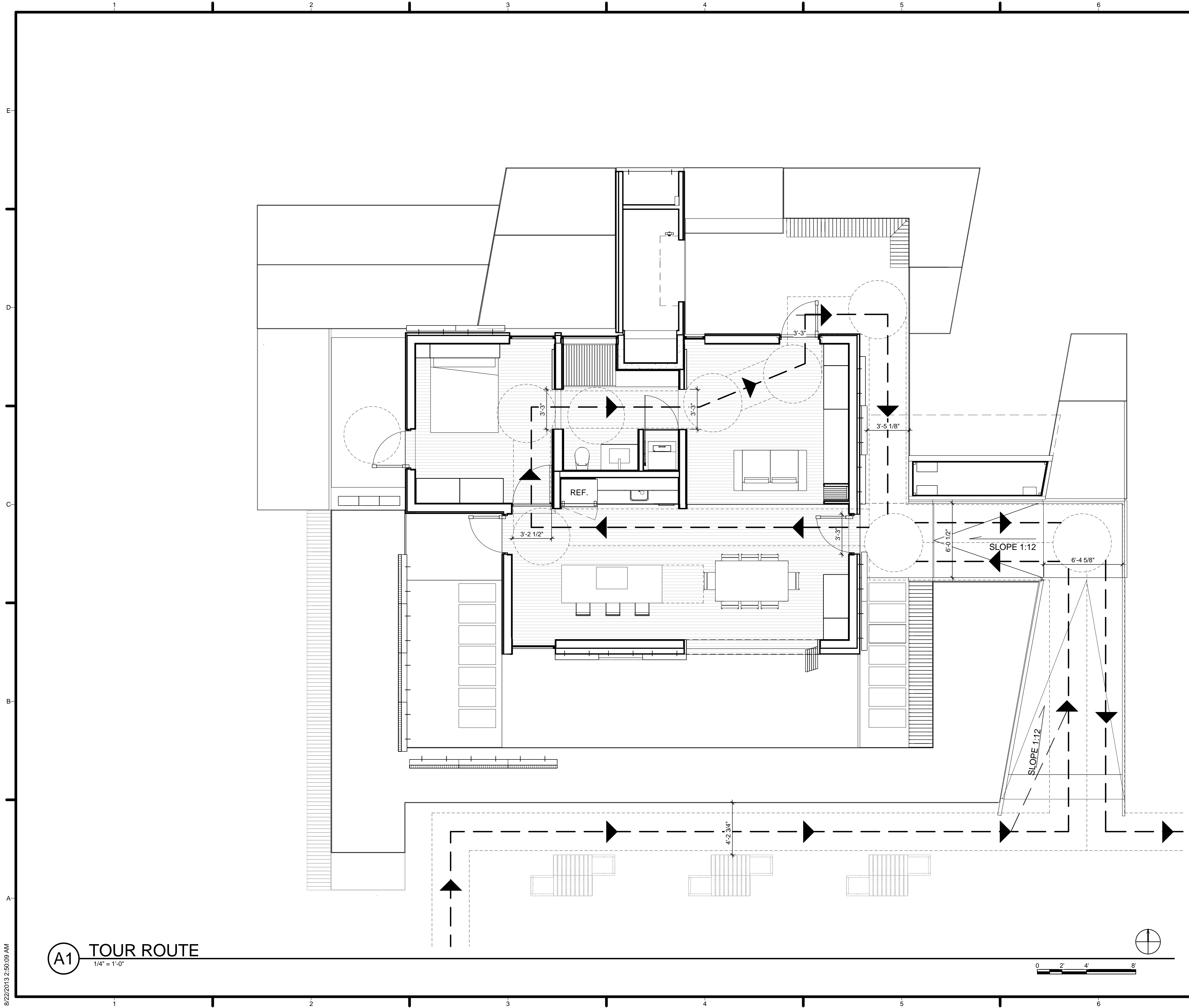
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SHEET TITLE

EGRESS PLAN

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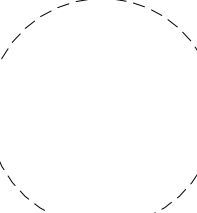
(A1) TOUR ROUTE
1/4" = 1'-0"

GENERAL SHEET NOTES

1. TOUR ROUTE COMPLIES WITH ADA GUIDELINES

REFERENCE KEYNOTES

SHEET KEYNOTES

-  DENOTES DIRECTION OF TOUR ROUTE
-  DENOTES TURNING RADIUS (5 FT)



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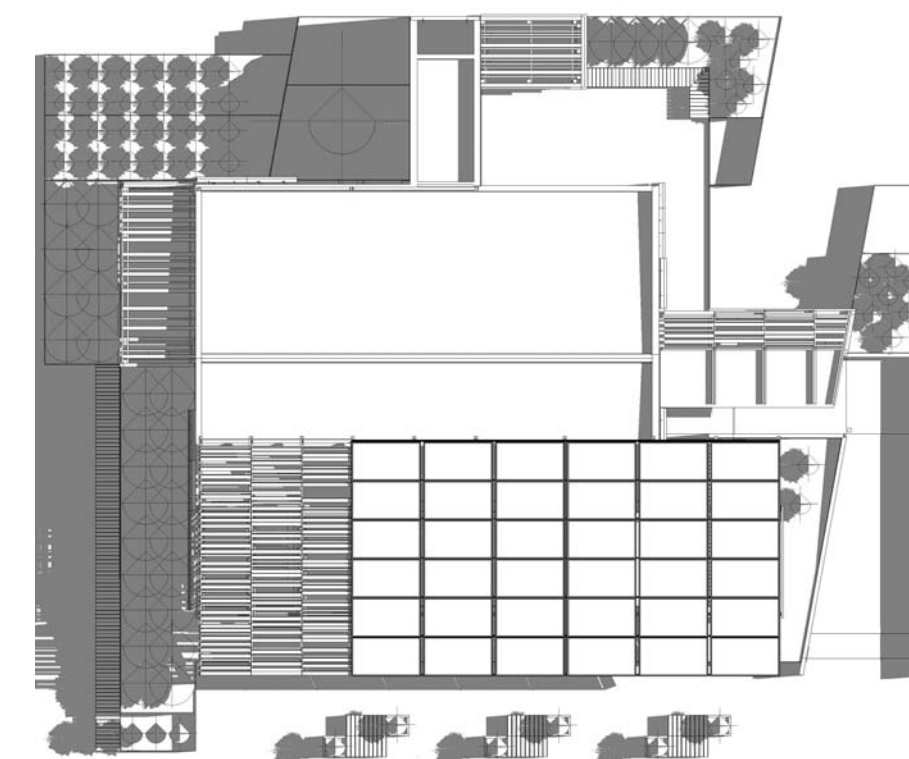
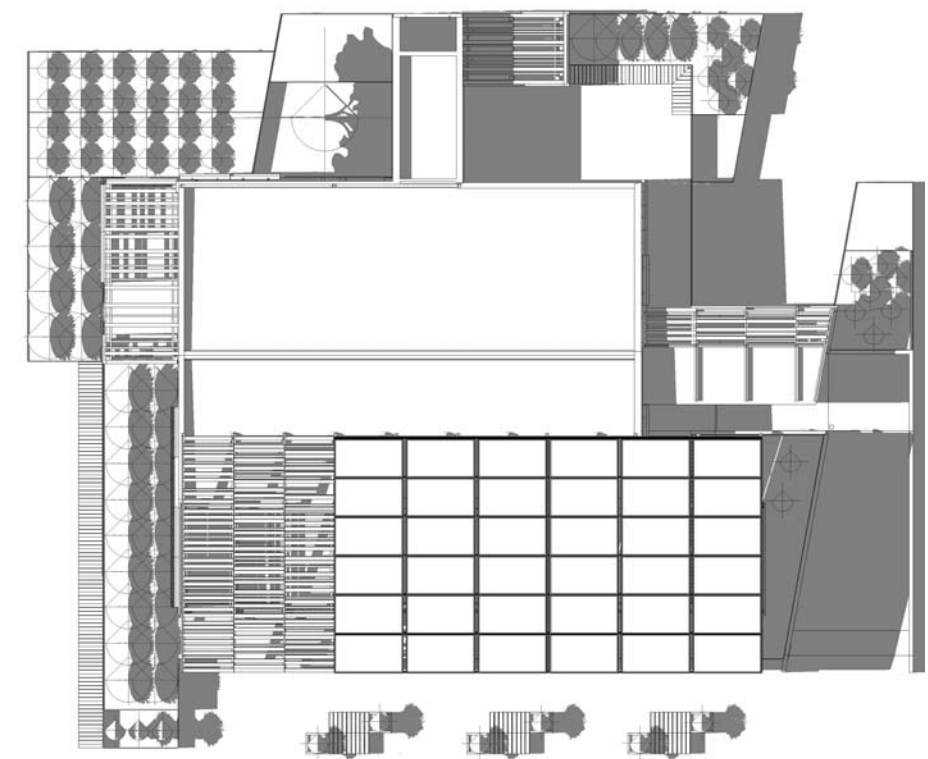
SHEET TITLE

ADA TOUR ROUTE COMPLIANCE PLAN

G-103

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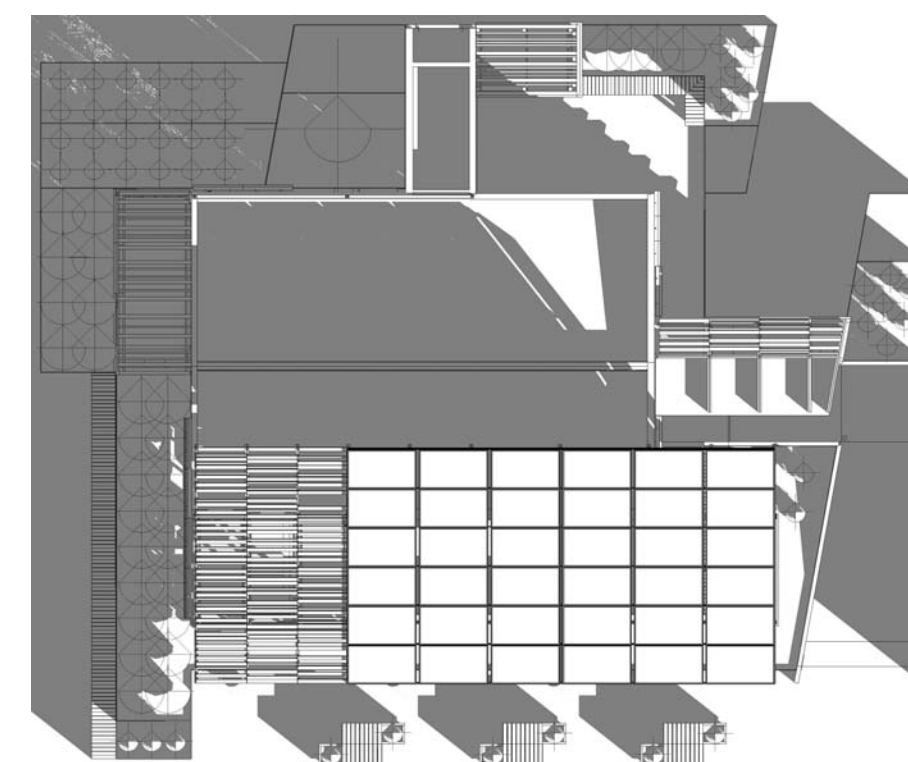
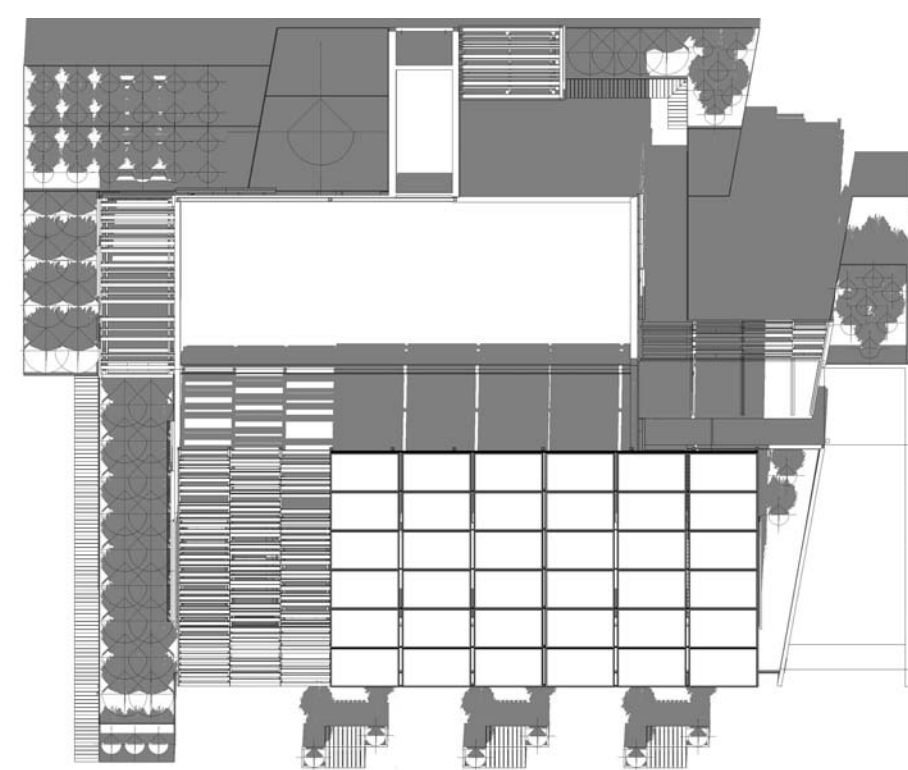
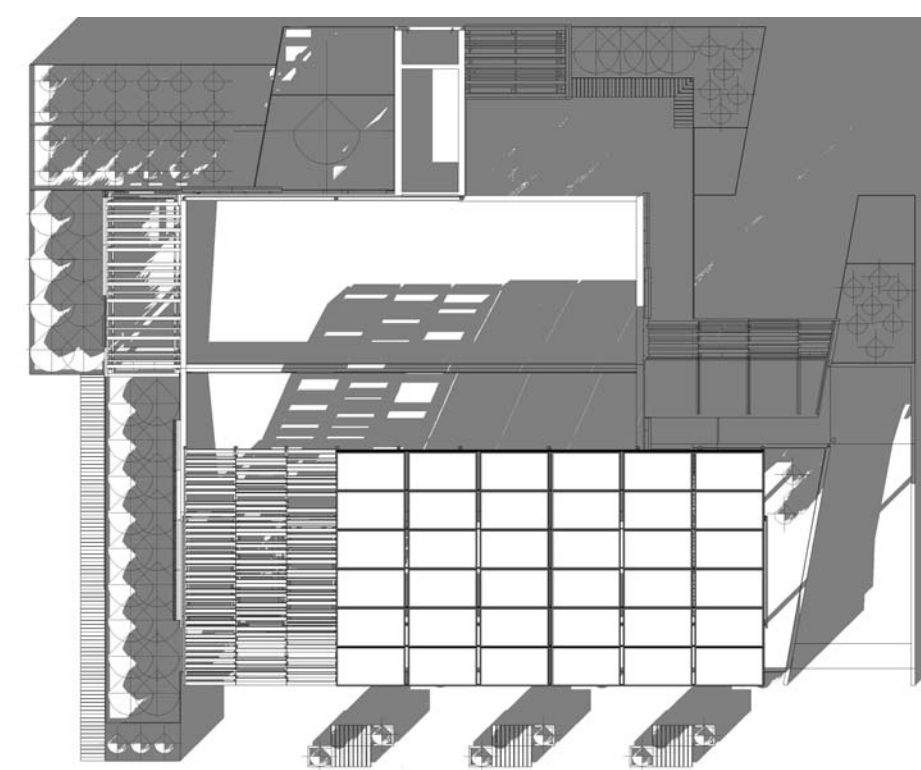
1 2 3 4 5 6 7



D1 SHADING PLAN - IRVINE, CALIFORNIA 1500 6/21
1 1/2" = 1'-0"

D3 SHADING PLAN - IRVINE, CALIFORNIA 1200 6/21
1 1/2" = 1'-0"

D5 SHADING PLAN - IRVINE, CALIFORNIA 0800 6/21
1 1/2" = 1'-0"



A1 SHADING PLAN - IRVINE, CALIFORNIA 1500 12/21
1 1/2" = 1'-0"

A3 SHADING PLAN - IRVINE, CALIFORNIA 1200 12/21
1 1/2" = 1'-0"

A5 SHADING PLAN - IRVINE, CALIFORNIA 0800 12/21
1 1/2" = 1'-0"



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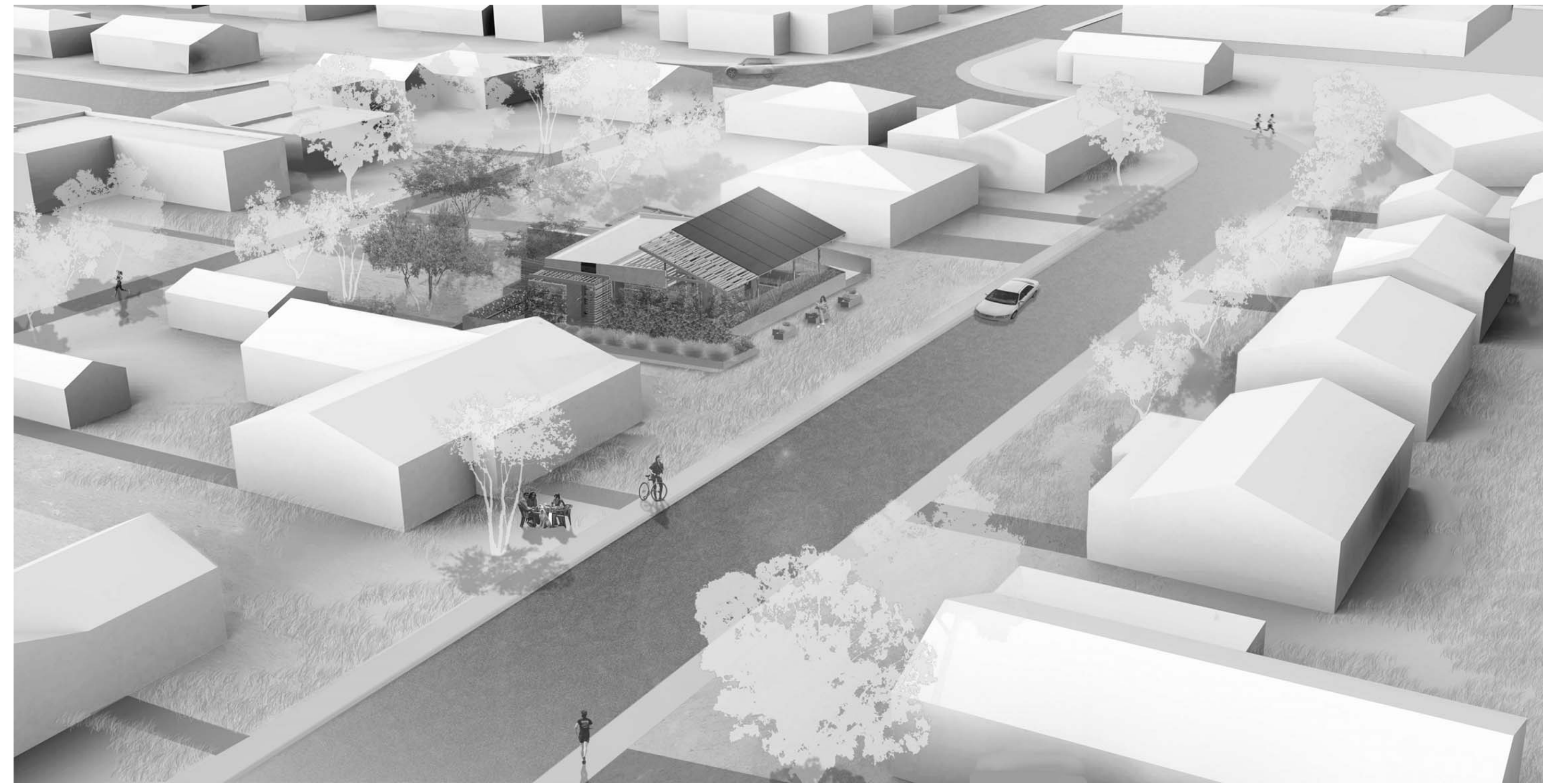
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SHEET TITLE
SHADING DIAGRAMS

G-601

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1 2 3 4 5 6 7



C1 SITE PERSPECTIVE



A1 WEST PERSPECTIVE



D5 FLEX SPACE / KITCHEN



B5 SOUTH PATIO



A5 FLEX SPACE



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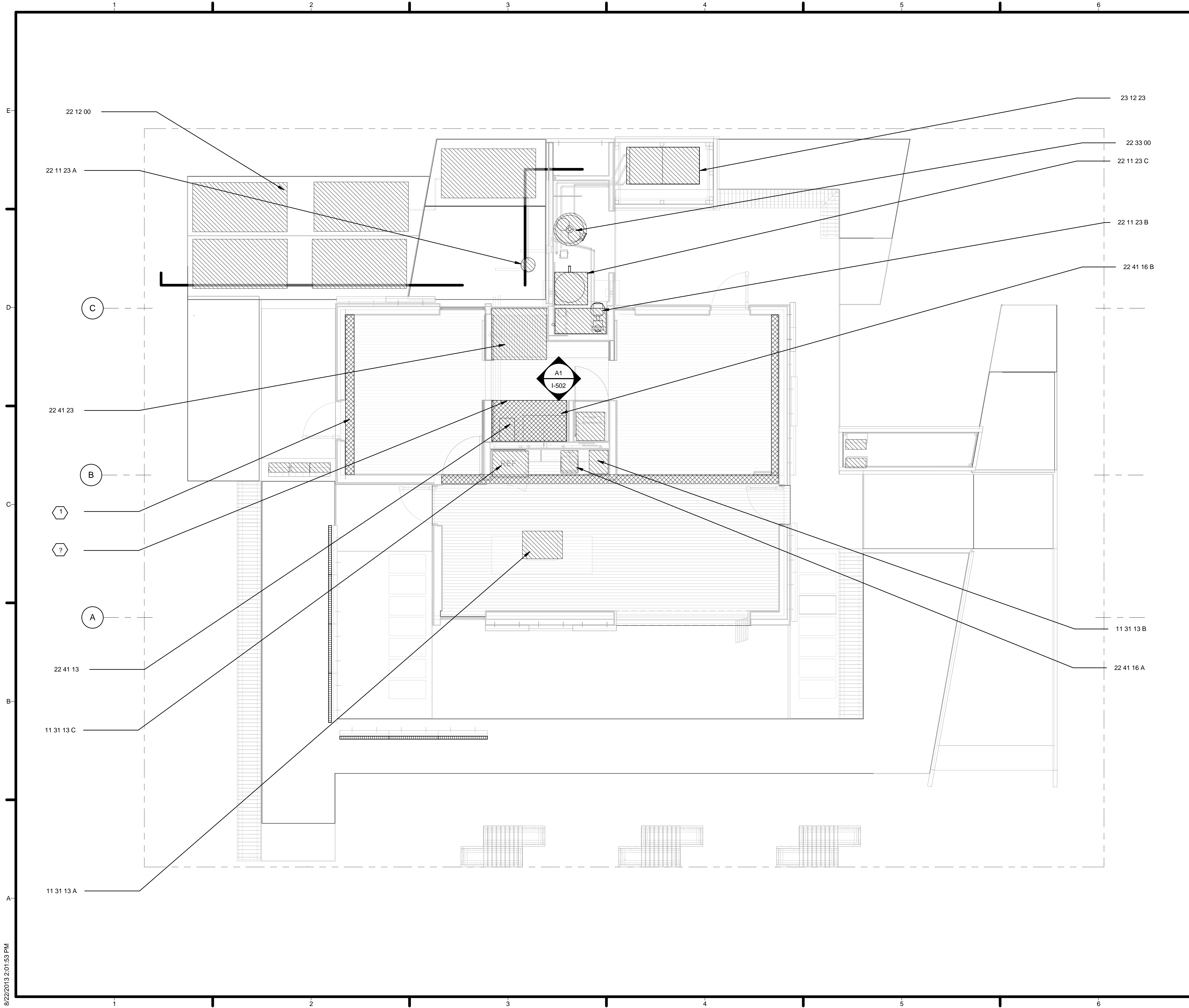


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 GENERAL PROJECT RENDERINGS

G-901



GENERAL SHEET NOTES

FOR DETAILED SPECIFICATIONS FOR TEAM SUPPLIED LIQUIDS REFER THE PROJECT MANUAL.

REFERENCE KEYNOTES

- 11 31 13 A RANGE
- 11 31 13 B DISH WASHER
- 11 31 13 C REFRIGERATOR
- 22 11 23 A WASTE WATER PUMP
- 22 11 23 B DOMESTIC SUPPLY PUMP
- 22 11 23 C THERMAL STORAGE
- 22 12 00 FACILITY WATER STORAGE TANK
- 22 33 00 DOMESTIC HYBRID WATER HEATER
- 22 41 13 WATER CLOSET
- 22 41 16 A KITCHEN SINK
- 22 41 16 B BATHROOM SINK
- 22 41 23 SHOWER BASE RECEPTOR
- 23 12 23 CHILLER

SHEET KEYNOTES

- 1 ACCESS PANEL FOR RADIANT TUBE COUPLINGS
- 2 ACCESS PANEL FOR FAN COIL UNIT



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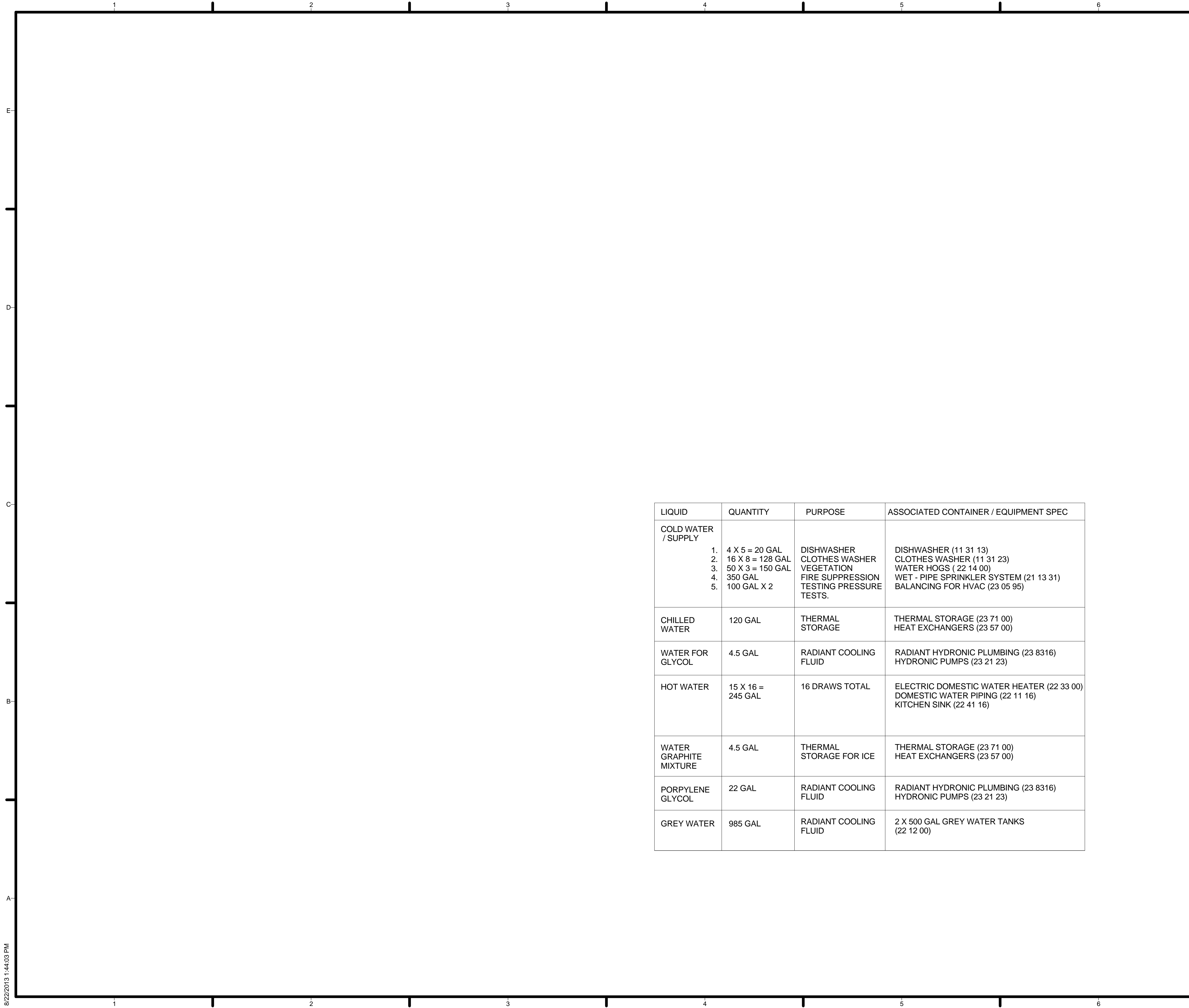


MARK	DATE	DESCRIPTION
05	8.22.2013	100% DOENREL AS-BUILTS
04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
LIQUID AND SPILL CONTAINMENT

H-101



GENERAL SHEET NOTES

FOR DETAILED SPECIFICATIONS FOR TEAM SUPPLIED LIQUIDS REFER THE PROJECT MANUAL.

REFERENCE KEYNOTES

SHEET KEYNOTES

LIQUID	QUANTITY	PURPOSE	ASSOCIATED CONTAINER / EQUIPMENT SPEC
COLD WATER / SUPPLY	1. 4 X 5 = 20 GAL 2. 16 X 8 = 128 GAL 3. 50 X 3 = 150 GAL 4. 350 GAL 5. 100 GAL X 2	DISHWASHER CLOTHES WASHER VEGETATION FIRE SUPPRESSION TESTING PRESSURE TESTS.	DISHWASHER (11 31 13) CLOTHES WASHER (11 31 23) WATER HOGS (22 14 00) WET - PIPE SPRINKLER SYSTEM (21 13 31) BALANCING FOR HVAC (23 05 95)
CHILLED WATER	120 GAL	THERMAL STORAGE	THERMAL STORAGE (23 71 00) HEAT EXCHANGERS (23 57 00)
WATER FOR GLYCOL	4.5 GAL	RADIANT COOLING FLUID	RADIANT HYDRONIC PLUMBING (23 8316) HYDRONIC PUMPS (23 21 23)
HOT WATER	15 X 16 = 245 GAL	16 DRAWS TOTAL	ELECTRIC DOMESTIC WATER HEATER (22 33 00) DOMESTIC WATER PIPING (22 11 16) KITCHEN SINK (22 41 16)
WATER GRAPHITE MIXTURE	4.5 GAL	THERMAL STORAGE FOR ICE	THERMAL STORAGE (23 71 00) HEAT EXCHANGERS (23 57 00)
PORPYLENE GLYCOL	22 GAL	RADIANT COOLING FLUID	RADIANT HYDRONIC PLUMBING (23 8316) HYDRONIC PUMPS (23 21 23)
GREY WATER	985 GAL	RADIANT COOLING FLUID	2 X 500 GAL GREY WATER TANKS (22 12 00)



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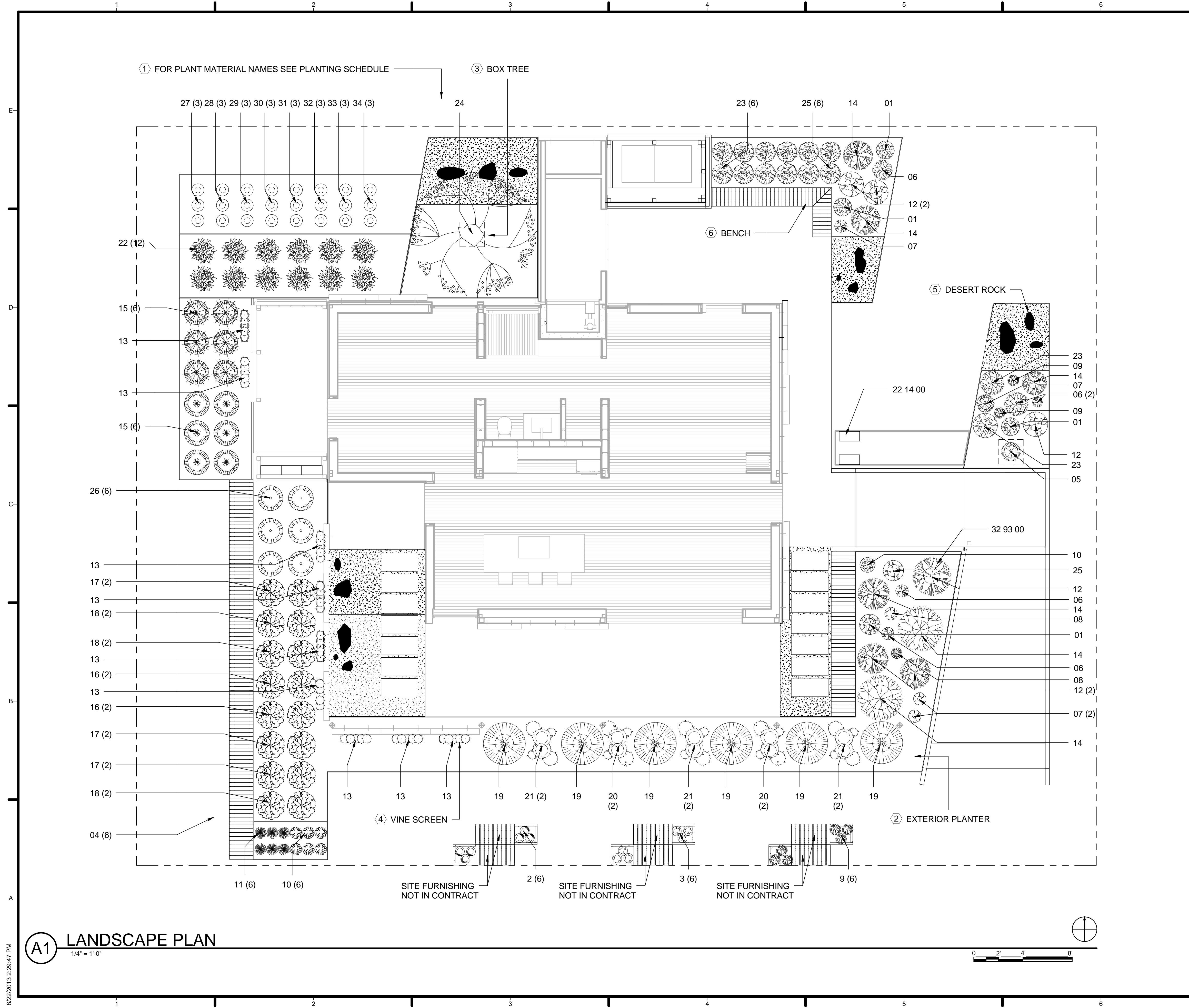


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SHEET TITLE
LIQUID AND SPILL CONTAINMENT SCHEDULE

H-601



GENERAL SHEET NOTES

1. PLACEMENT OF ALL POTS WILL BE INSIDE THE EXTERNAL MODULAR PLANTERS.
2. THE PLANTERS WILL ALL BE ALIGNED AT THEIR RESPECTIVE PLANTER HEIGHTS USING CONVENTIONAL LUMBER.

REFERENCE KEYNOTES

22 14 00 FACILITY STORM DRAINAGE
32 93 00 PLANTS

SHEET KEYNOTES

1. SEE L-601 FOR PLANTING SCHEDULE
2. SEE L-104 FOR THE LANDSCAPE MODULES PLAN
3. SEE L-503 FOR BOX TREE DETAIL (24)
4. SEE L-503 FOR VINE SCREEN DETAILS (13)
5. DESERT ROCK (6)
6. SEE L-504 FOR BENCH DETAILS



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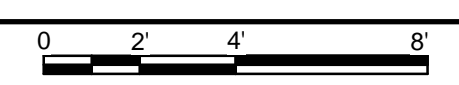
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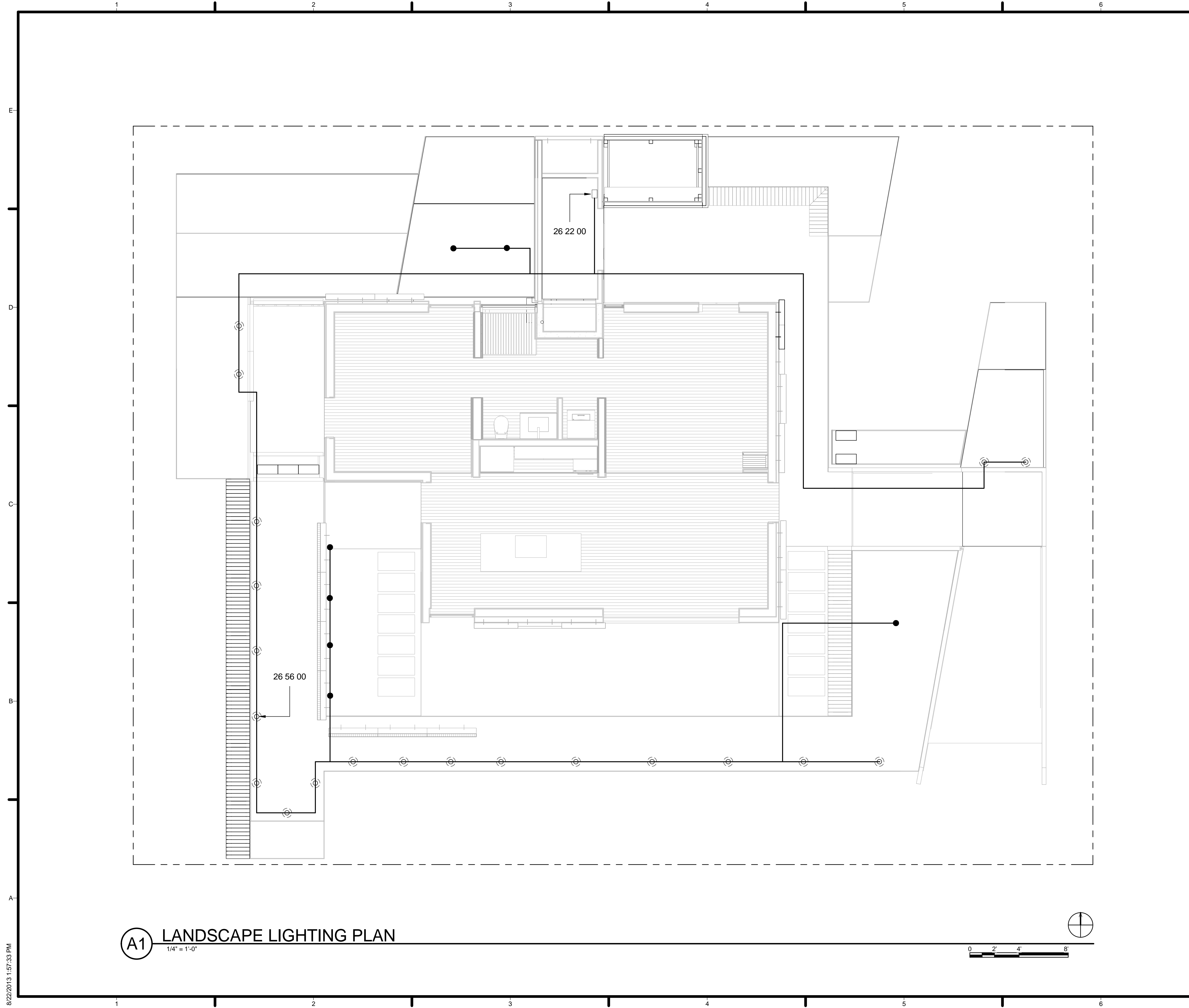
SHEET TITLE
LANDSCAPE AND PLANTING SITE PLAN

L-101

A1 LANDSCAPE PLAN
1/4" = 1'-0"



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A1 LANDSCAPE LIGHTING PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

1. THERE ARE A TOTAL OF 20 (FB) UP LIGHTS IN THE LANDSCAPE LIGHTING PLAN.
2. THERE ARE A TOTAL OF 7 (LE) DOWN LIGHTS IN THE LANDSCAPE LIGHTING PLAN.
3. THERE IS 1 LUXOR TRANSFORMER BOX LOCATED INSIDE THE MECHANICAL ROOM.
4. THERE IS A TOTAL OF 229' OF LOW-VOLTAGE WIRE INSIDE OF 1.5" PVC CONDUIT
5. THE UP LIGHTS ARE PLACED WITHIN 2 GALLON POTS THAT SIT ON 2X4 WOOD TO RAISE THEM TO GRADE
6. THE DOWN LIGHTS ARE FASTENED TO BEAMS ABOVE, OR ARE HUNG IN THE CANOPY OF THE TREE.

REFERENCE KEYNOTES

- 26 22 00 LOW-VOLTAGE TRANSFORMER
- 26 56 00 EXTERIOR LIGHTING

SHEET KEYNOTES

LEGEND

- 1. UP LIGHT, SEE DETAIL A4 ON SHEET L-501
- 2. DOWN LIGHT, SEE DETAIL D4 ON SHEET L-501
- 3. 2 GALLON POT
- 4. LOW VOLTAGE WIRE
- 5. TRANSFORMER, SEE DETAIL A1 ON SHEET L-501



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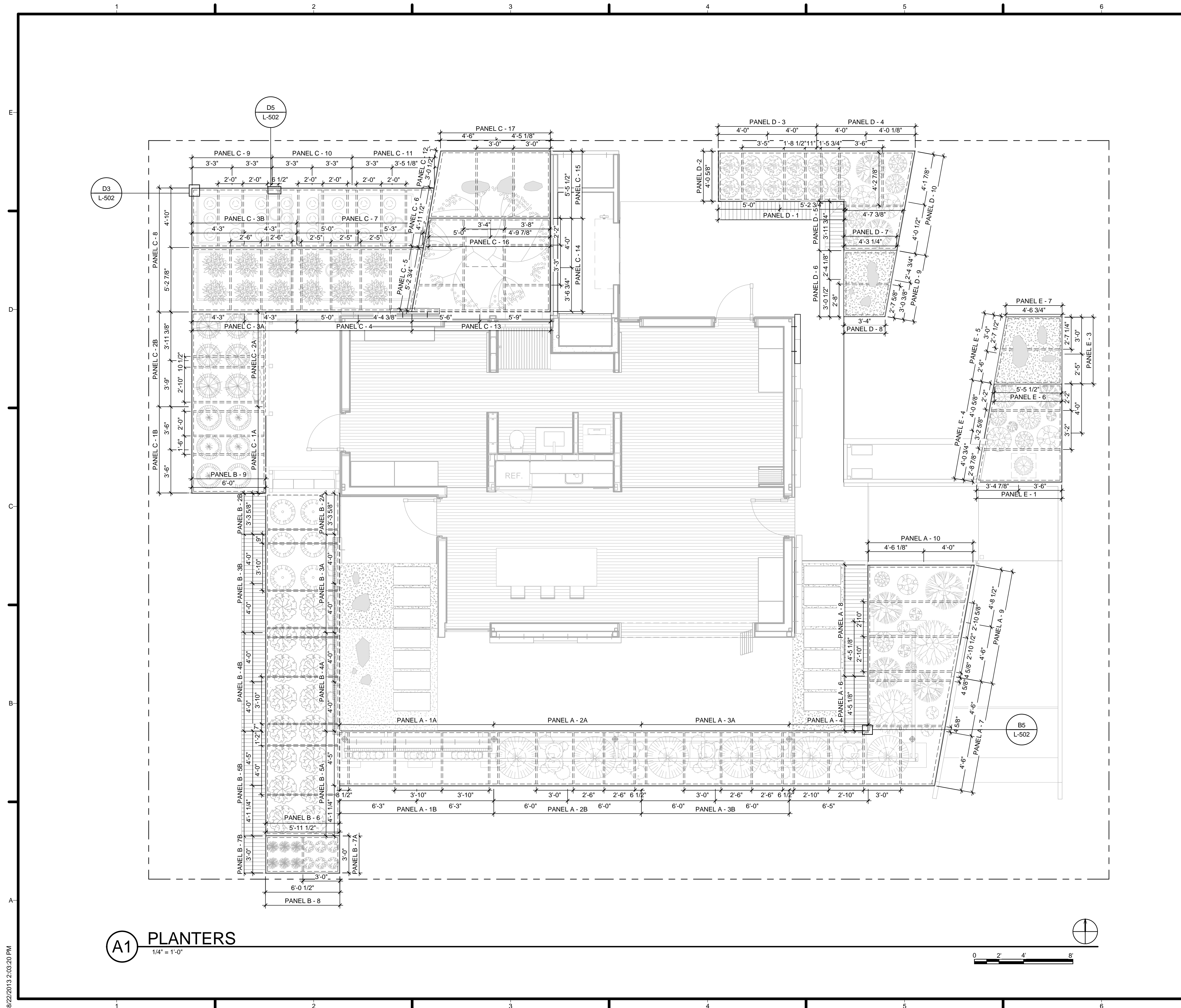
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SHEET TITLE
 EXTERIOR LIGHTING PLAN

L-103

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GENERAL SHEET NOTES

1. PLANTER PANELS:
PLANTERS ARE COMPRISED OF CANVAS CLAD PANELS ATTACHED ACROSS WITH JOIST HANGERS AND 2X4s. EACH "PANEL" CONSISTS OF 2 INDIVIDUALLY BUILT PANELS THAT ARE HINGED TO FOLD FLAT FOR SHIPPING. PANELS ARE ALSO STRUNG TOGETHER WITH THESE HINGES, BUT THE PINS ARE REMOVED TO PULL PANELS APART FOR SHIPPING.
2. ALL PLANTER PANELS WILL BE BUILT TO TYPICAL DETAILS (L-502), UNLESS OTHERWISE SPECIFIED IN THE PANEL SCHEDULE ON L-602.

REFERENCE KEYNOTES

SHEET KEYNOTES



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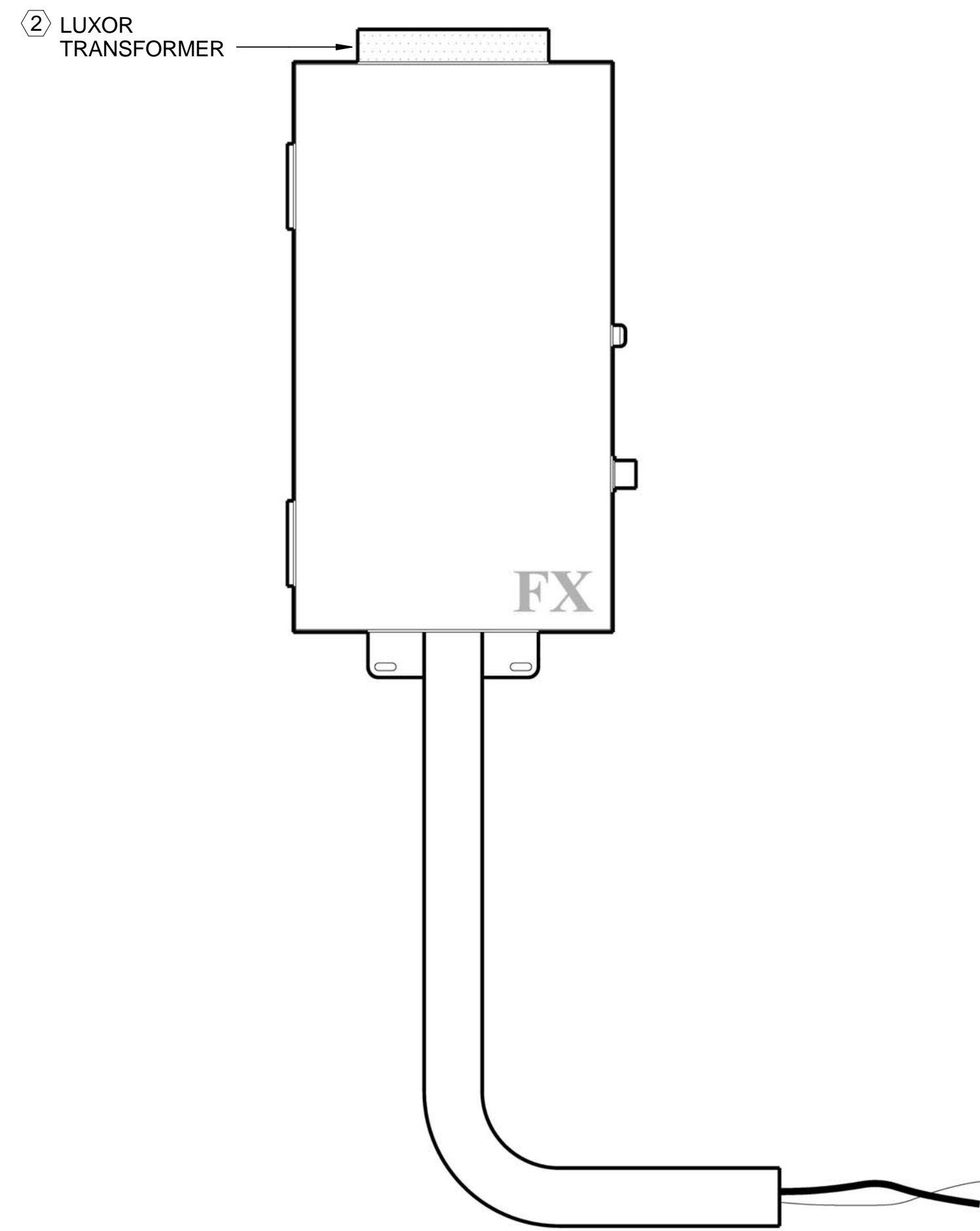
SHEET TITLE
PLANTER MODULES

L-104

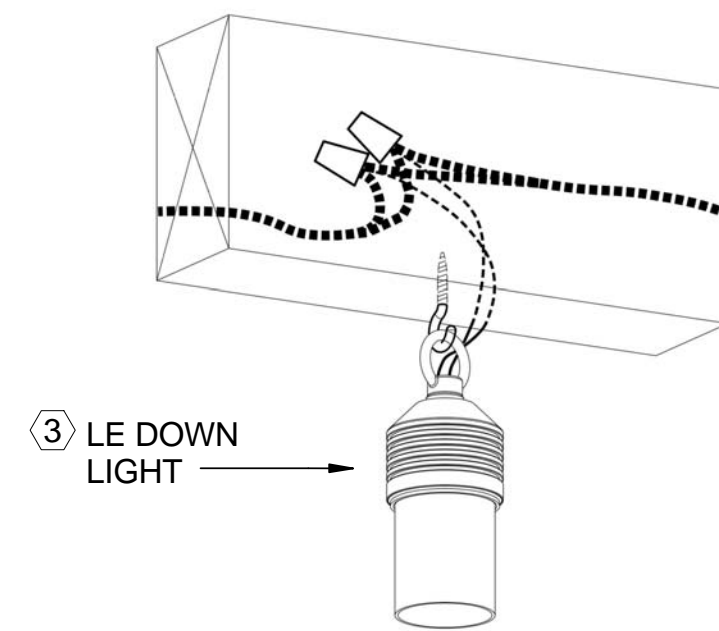
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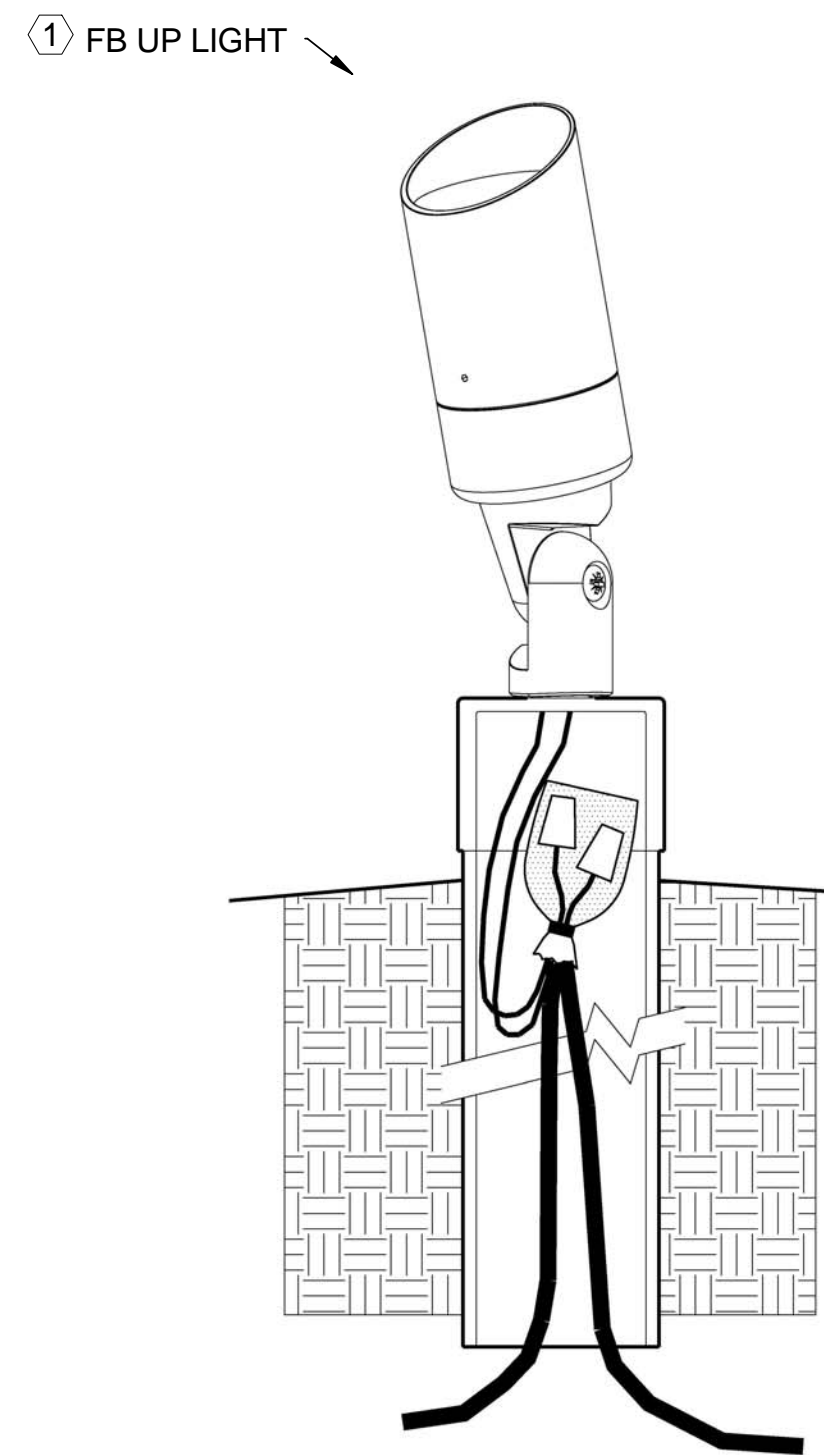
E
D
C
B
A



A1 FX LUMINAIRE LUXOR TRANSFORMER DETAIL
1 1/2" = 1'-0"



D4 FX LUMINAIRE LUNAIRE ECLAIRAGE (LE) DETAIL
1 1/2" = 1'-0"



A4 FX LUMINAIRE FREBE BEBE (FB) DETAIL
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. LIGHTING TRANSFORMER AND FIXTURES ARE FX LUMINAIRE PRODUCTS AND ARE ALL LED

REFERENCE KEYNOTES

SHEET KEYNOTES

1. FX LUMINAIRE FREBE BEBE (FB) FIXTURE. AIM FIXTURE A MINIMUM OF 10" OFF VERTICAL TO ALLOW WATER AND DIRT TO DRAIN OFF LENS CAP. CAP SHOULD BE 1/4" - 1/2" ABOVE GRADE. USE STANDARD PIPE SUPPLIED BY FX LUMINAIRE. PIPE PLACED WITHIN A 2 GALLON POT WITH SOIL POT SIZE: 9" WIDE X 8.5" TALL. LOW VOLTAGE CABLE WITH LITESPLICE LOOP COILED BELOW FIXTURE FOR SERVICE.
 2. FX LUMINAIRE LUXOR 150 WATTS TRANSFORMER COMPATIBLE WITH FX ZED ZD LIGHTS ONLY. MOUNT INSIDE BICYCLE STORAGE ROOM. LOW VOLTAGE WIRES TRAVEL TO UP LIGHTS THROUGH THE BASE OF THE EXTERIOR PLANTERS AND INTO EACH 2 GALLON POT HOUSING THE LED UP LIGHTS. ALL METAL PARTS MUST BE GROUNDED IN ACCORDANCE TO NEC GUIDELINES. RUN LOW VOLTAGE CABLES IN 1.5" GRAY PVC CONDUIT.
 3. FX LUMINAIRE LUNAIRE ECLAIRAGE (LE) HANG WITH HOOK SCREWED INTO BEAM. MAKE WATERPROOF CONNECTION TO 12-16 GA MAINLINE ON THE BACK SIDE OF BEAM OUT OF SIGHT.



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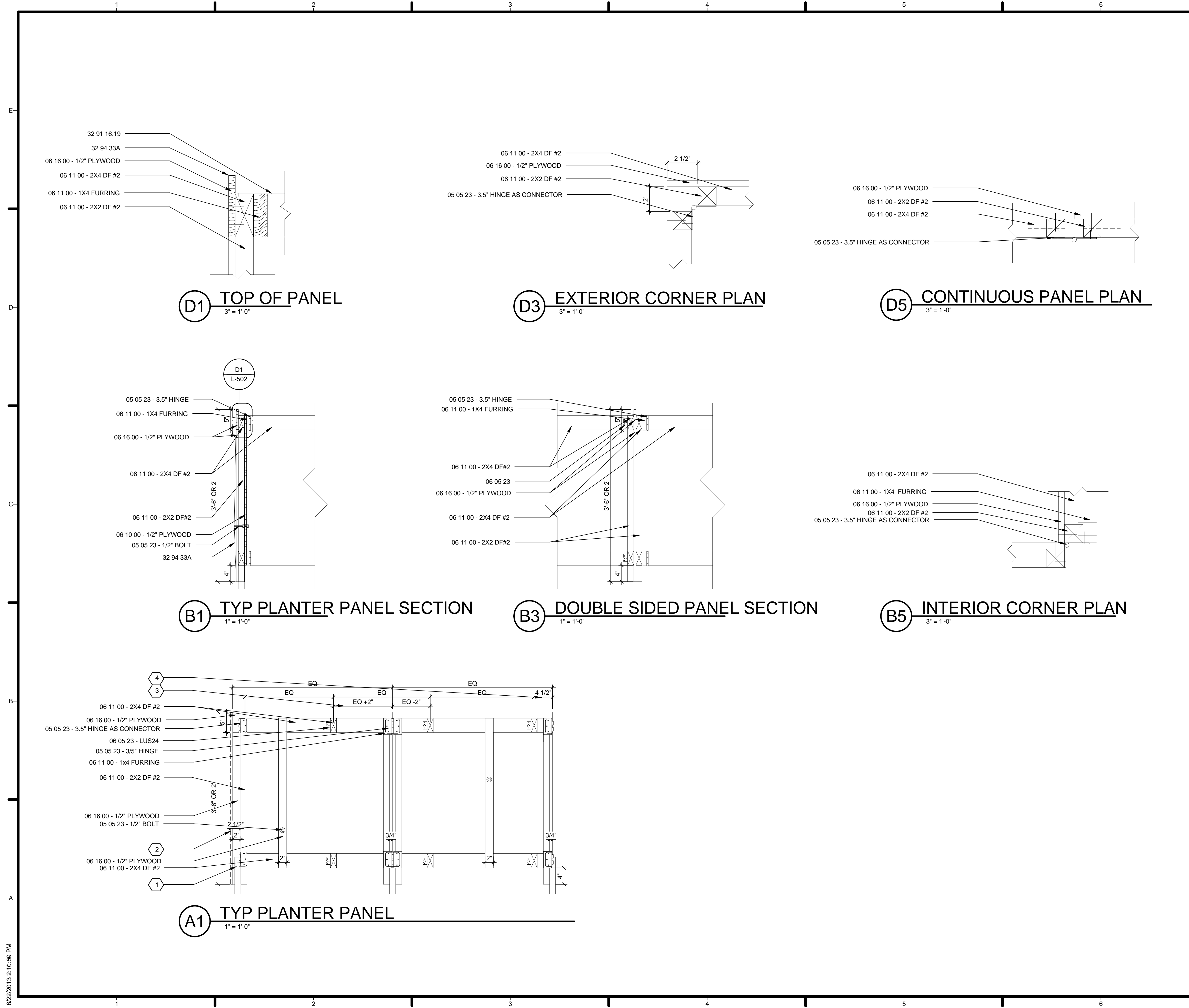
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SHEET TITLE
 LANDSCAPE LIGHTING DETAILS

L-501

1 2 3 4 5 6 7



GENERAL SHEET NOTES

1. PLANTERS ARE COMPRISED OF CANVAS CLAD PANELS ATTACHED ACROSS WITH JOIST HANGERS AND 2X4s. EACH "PANEL" CONSISTS OF 2 INDIVIDUALLY BUILT PANELS THAT ARE HINGED TO FOLD FLAT FOR SHIPPING. PANELS ARE ALSO STRUNG TOGETHER WITH THESE HINGES, BUT THE PINS ARE REMOVED TO PULL PANELS APART FOR SHIPPING.
2. ALL PLANTER PANELS WILL BE BUILT TO TYPICAL DETAILS, UNLESS OTHERWISE SPECIFIED IN THE PANEL SCHEDULE ON L-602. PANEL WIDTHS AND 2X4 BRACE SPACING CAN BE FOUND ON THE PLANTER PLAN: L-104

REFERENCE KEYNOTES

- 05 05 23 - METAL FASTENERS
- 06 05 23 - SIMPSON A34
- 06 10 00 - PLYWOOD BLOCKING
- 06 11 00 - WOOD FRAMING
- 06 16 00 - WOOD SHEATHING
- 32 91 16.19 NETTING PLANTING
- 32 94 33A - COTTON DUCK

SHEET KEYNOTES

1. 2X2 DF #2 AS ADJUSTABLE FOOTING TO MEET GRADE.
2. ON EXTERIOR CORNER PANELS, THE PANEL THAT PASSES THE CORNER WILL HAVE 2.5" BETWEEN THE 2X2 POST AND THE EDGE OF PLYWOOD, WHEREAS THE PANEL WHICH MEETS THE CORNER HAS ONLY 2".
3. JOIST HANGERS WILL STAGGER BY ATLEAST 2" TO PASS EACH OTHER WHEN THE PANEL IS FOLDED IN HALF.
4. ON CONTINUOUS (NON CORNER) PANELS; TYPICAL SPACING FROM THE END OF THE PANEL TO THE FIRST 2X4 WILL BE 4.5" ON CENTER, UNLESS THE PANEL IS CONTINUOUS ON BOTH ENDS, IN WHICH CASE ONE SIDE WILL BE ATLEAST 6.5" TO ACCOMIDATE THE CONDITION IN KEYNOTE 3.



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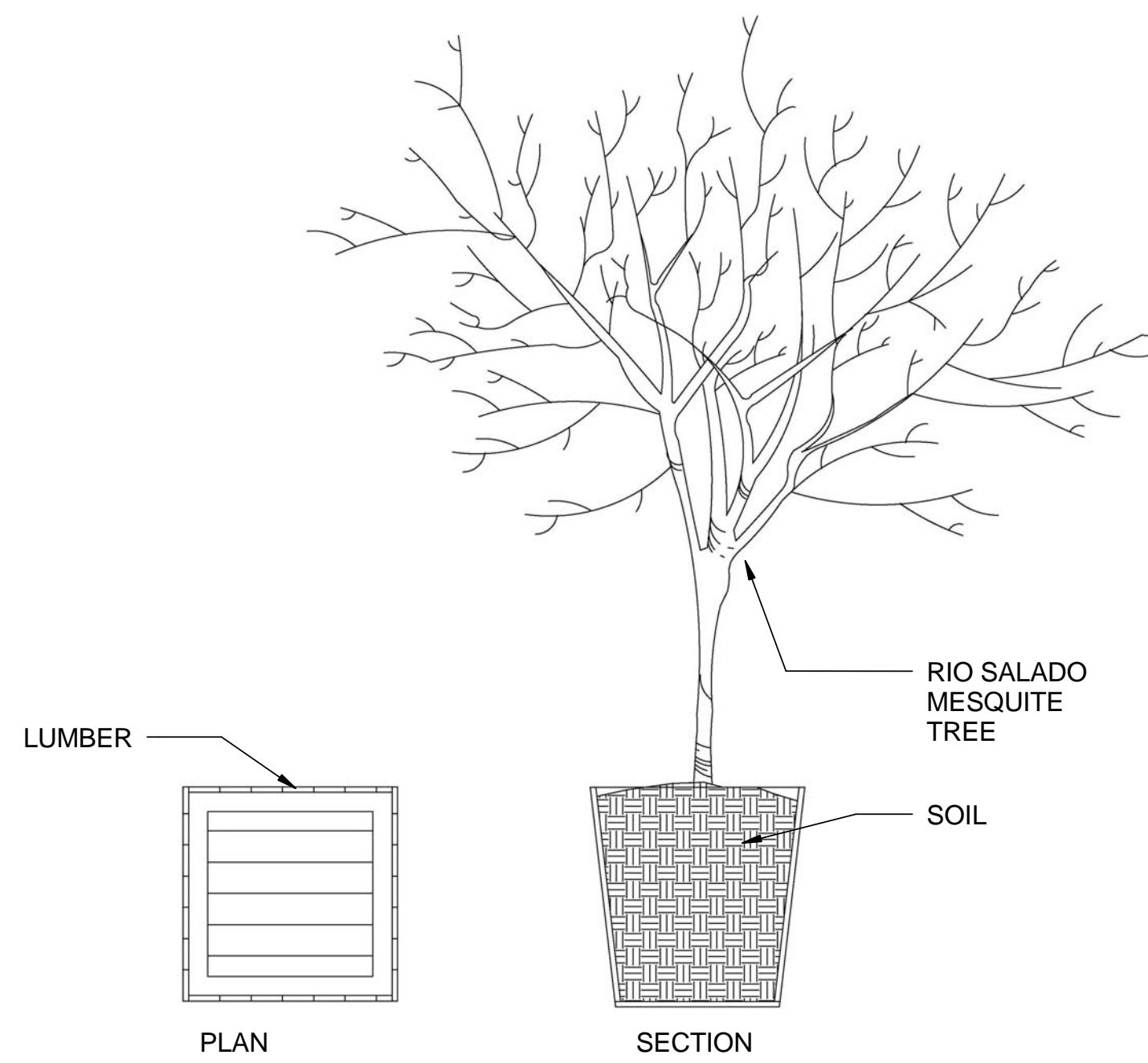


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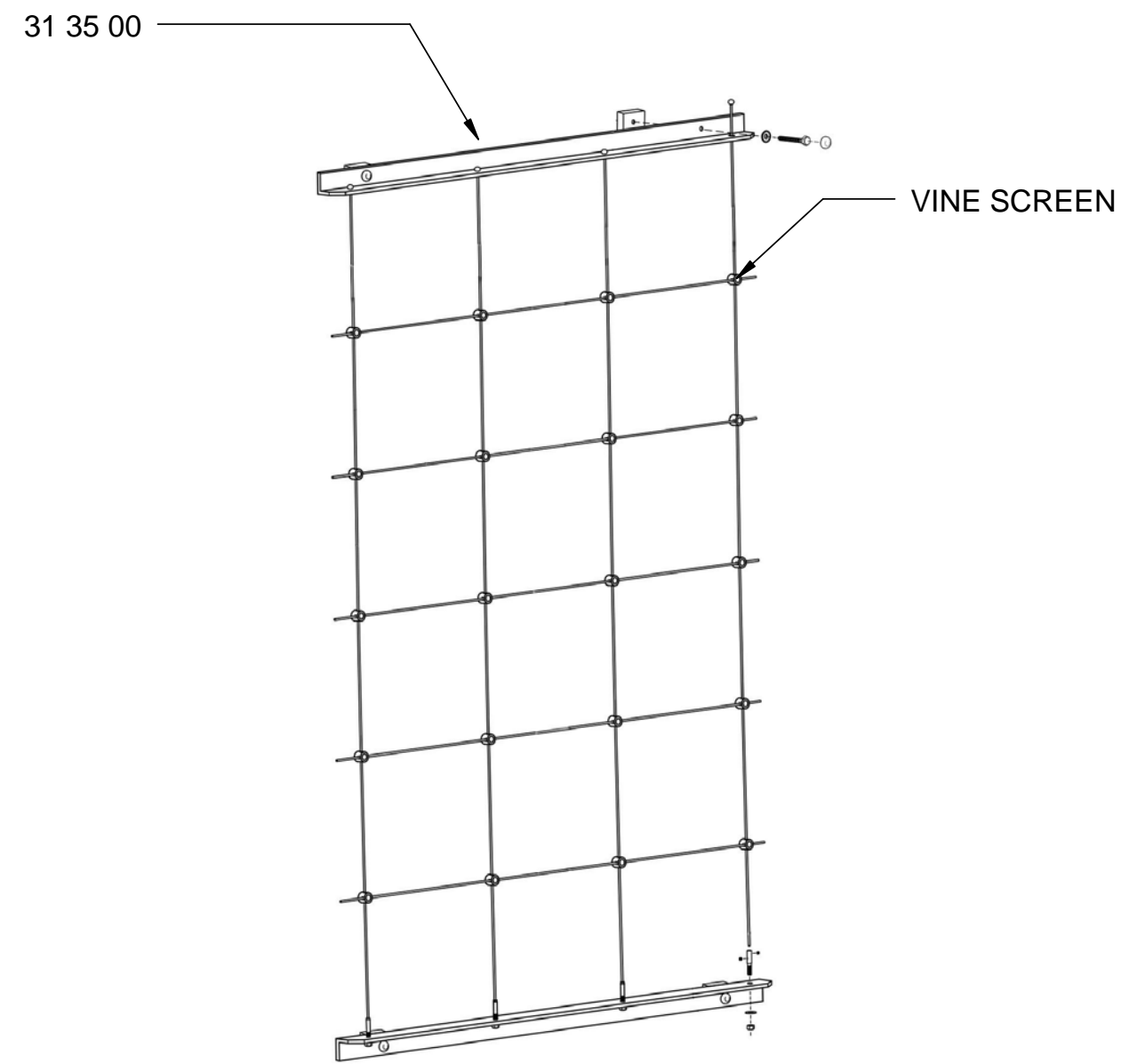
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SHEET TITLE
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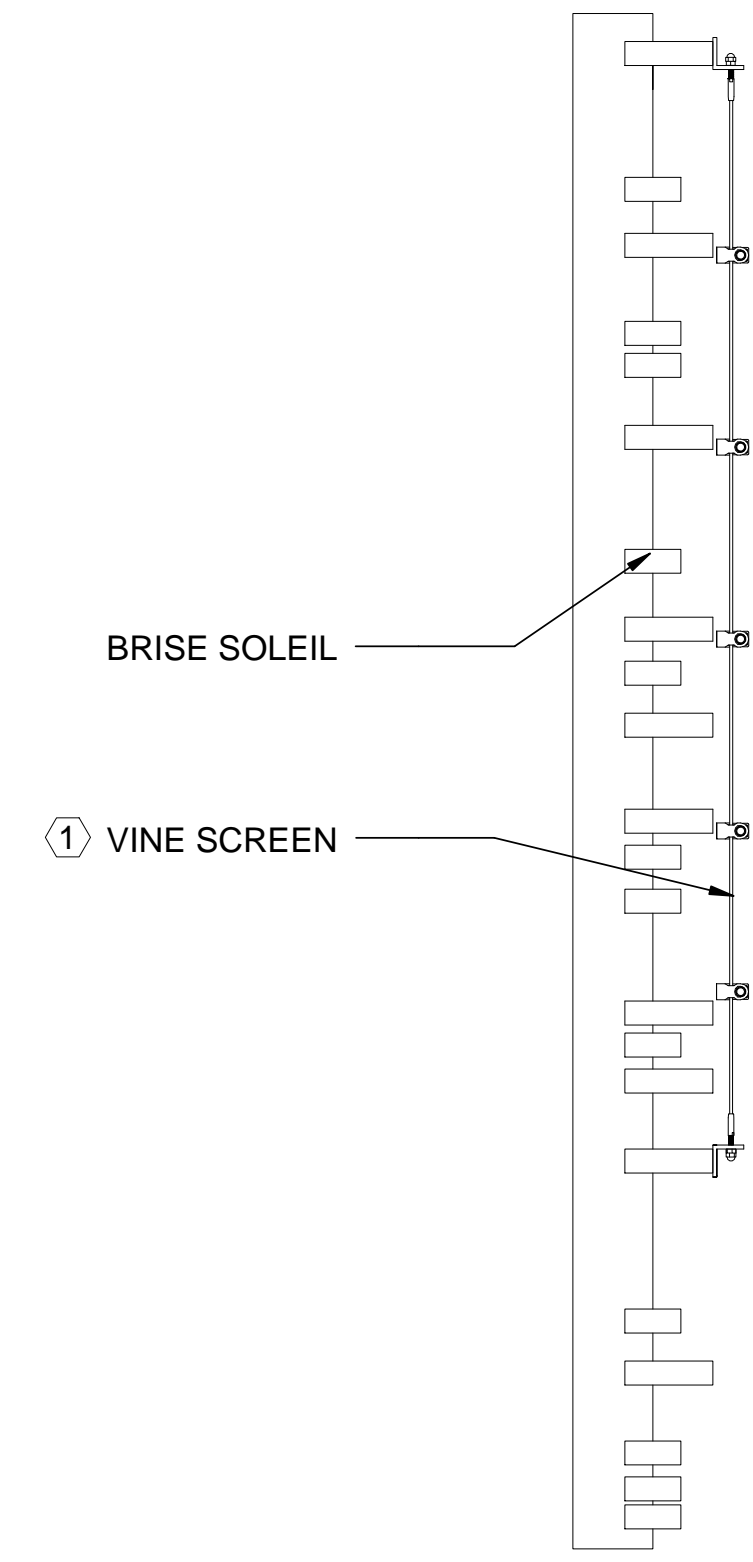
L-502



C1 TYP. BOX TREE DETAIL
1/4" = 1'-0"



C3 TYP. VINE SCREEN ISOMETRIC
1" = 1'-0"



C5 TYP. VINE SCREEN SIDE VIEW
1" = 1'-0"

GENERAL SHEET NOTES

1. THE VINE SCREENS ARE 3' X 5'
2. THE MOUNTING OF THE VINE SCREEN TO THE BRISE SOLEIL IS THROUGH 3/8" R/H UNC MOUNTING HARDWARE.

REFERENCE KEYNOTES

31 35 00 SCREENING DEVICES

SHEET KEYNOTES

1. EACH VINE SCREEN IS DESIGNED TO HOLD UP THE PLANT MATERIAL THAT IS SHOWN IN L-101.



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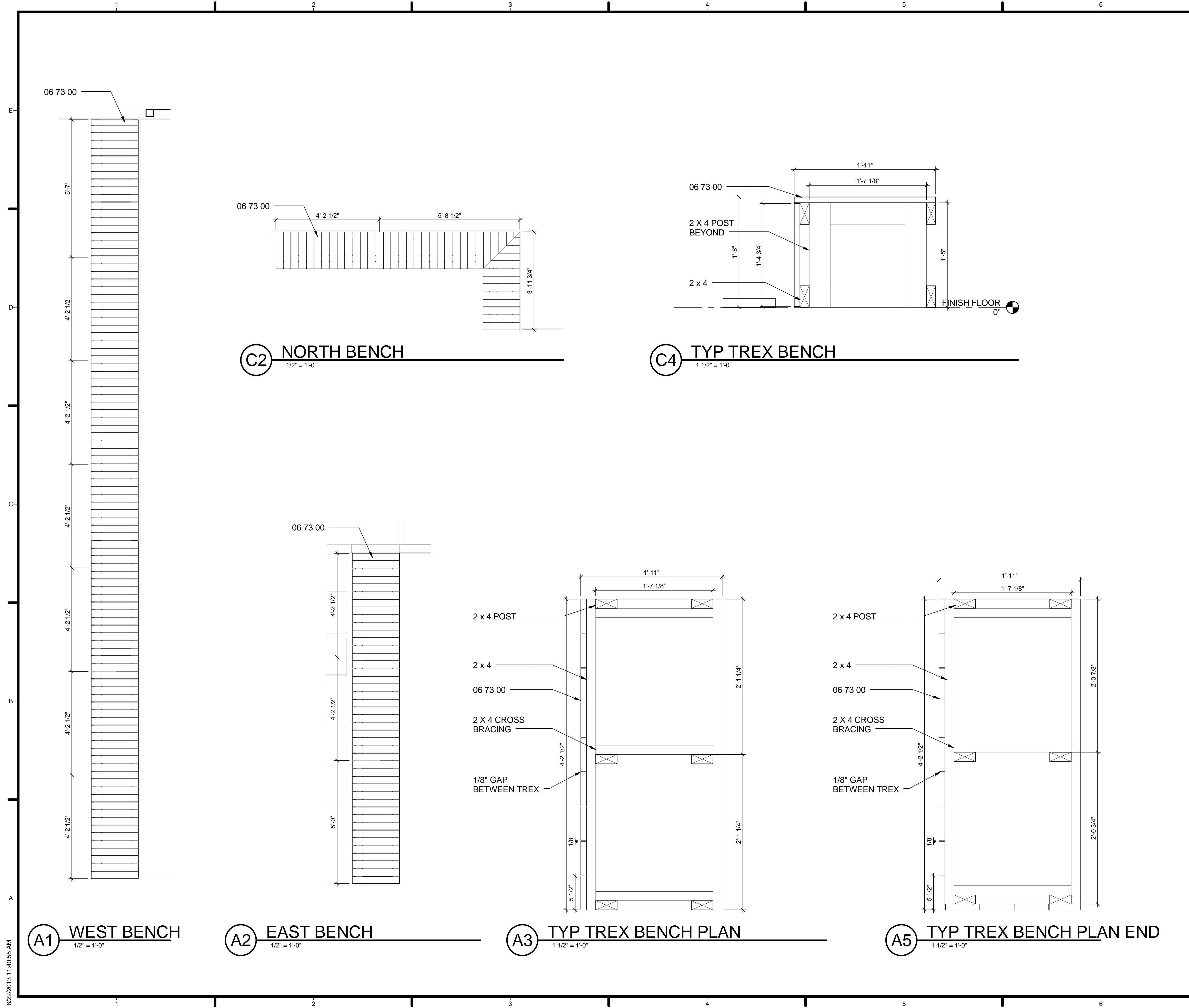


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SHEET TITLE
 LANDSCAPE DETAILS 2

L-503



GENERAL SHEET NOTES

1. BENCH CONSTRUCTION IS WOOD FRAMING CLADDED IN TREX. THE TREX IS MOUNTED TO THE WOOD USING SCREWS AT 12" O.C.

REFERENCE KEYNOTES

06 73 00 COMPOSITE DECKING

SHEET KEYNOTES



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SHEET TITLE
BENCH DETAILS

L-504

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PLANTING SCHEDULE

MARK	SCIENTIFIC NAME	COMMON NAME	TYPE	QUANTITY	GALLON/ BOX SIZE
1	CEREUS PERUVIANUS	PERUVIAN APPLE CACTUS	CACTUS	4	10 GAL
2	PEDILANTHUS MACROCARPUS	LADY'S SLIPPER	SUCCULENT	6	7 GAL
3	PORTULACARIA AFRA	ELEPHANT'S FOOD	SUCCULENT	6	5 GAL
4	MUHLENBERGIA CAPILLARIS	PINK MUHLY	GRASS	6	10 GAL
5	CARNEGIA GIGANTEA	SAGUARO	CACTUS	1	24" BOX
6	ECHINOCACTUS GRUSSONII	GOLDEN BARREL	CACTUS	5	5 GAL
7	AGAVE VICTORIAE-REGINAE	QUEEN VICTORIA'S AGAVE	AGAVE	2	3 GAL
8	AGAVE PARRYI	PARRY'S AGAVE	AGAVE	2	3 GAL
9	ALOE X 'BLUE ELF'	BLUE ELF ALOE	SUCCULENT	9	5 GAL
10	SETCREASEA PALLIDA	PURPLE HEART	PERENNIAL	7	1 GAL
11	PEDILANTHUS BRACTEATUS	SLIPPER PLANT	SUCCULENT	6	5 GAL
12	ENCELIA FARINOSA	BRITTLEBUSH	SHRUB	6	5 GAL
13	BOUGAINVILLEA SPECTABILIS	BOUGAINVILLEA	VINE	9	15 GAL
14	LARREA TRIDENTATA	CREOSOTE BUSH	SHRUB	6	5 GAL
15	MUHLENBERGIA RIGENS	DEER GRASS	GRASS	6	5 GAL
16	TECOMA SPARKLETTE	SPARKLETTE	SHRUB	4	15 GAL
17	TECOMA STANS 'GOLD STAR'	ARIZONA YELLOW BELLS	SHRUB	6	15 GAL
18	TECOMA X 'SPARKY'	SPARKY	SHRUB	6	15 GAL
19	HESPERALOE FUNIFERA	GIANT HESPERALOE	SUCCULENT	6	15 GAL
20	PENSTEMON BACCHARIFOLIUS	ROCK PENSTEMON	PERENNIAL	4	3 GAL
21	JUSTICIA SPICIGERA	MEXICAN HONEYSUCKLE	SHRUB	6	3 GAL
22	HYMENOXYLS ACAULIS	ANGELITA DAISY	SHRUB	12	5 GAL
23	CALLIANDARA CALIFORNICA	BAJA FAIRY DUSTER	SHRUB	7	5 GAL
24	PROSOPIS X 'RIO SALADO'	RIO SALADO MESQUITE	TREE	1	24" BOX
25	SIMMONDSIA CHINENSIS	JOJOBA	SHRUB	6	5 GAL
26	CAESALPINIA PULCHERRIMA	MEXICAN BIRD OF PARADISE	SHRUB	6	15 GAL
27	BRASSICA OLERACEA CAPITATA	CABBAGE	VEGETABLE	3	1 GAL
28	CITRULLUS LANATUS	WATERMELON	FRUIT	3	1 GAL
29	ERUCA VESICARIA SATAVA	ARUGULA	VEGETABLE	3	1 GAL
30	DAUCUS CAROTA SATIVUS	CARROT	VEGETABLE	3	1 GAL
31	BRASSICA OLERACEA ACEPHALA	COLLARD GREENS	VEGETABLE	3	1 GAL
32	LACTUCA SATIVA	LETTUCE	VEGETABLE	3	1 GAL
33	LYCOPERSICON ESCULENTUM	TOMATO	FRUIT	3	1 GAL
34	SPINACIA OLERASEA	SPINACH	VEGETABLE	3	1 GAL

GENERAL SHEET NOTES

1. THE PLANTING SCHEDULE ON THIS SHEET CORRESPONDS WITH THE PLANT MATERIALS REPRESENTED ON THE LANDSCAPE AND PLANTING SITE PLAN ON L-101

REFERENCE KEYNOTES

SHEET KEYNOTES



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SHEET TITLE
 PLANTING SCHEDULE

L-601

PLANTER PANELS SCHEDULE

MARK	PANEL TYPE	HEIGHT	WIDTHS		EXCEPTIONS
			SEGMENT A	SEGMENT B	
PANEL A - 1A	EXTERIOR CORNER ON SEGMENT A, CONTINUOUS ON SEGMENT B	1' 6"	6' 3"	6' 3"	8 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT A, 2X2 FEET ATTACH TO CANOPY CHASIS, PANEL MEETS CORNER
PANEL A - 1B	EXTERIOR CORNER ON SEGMENT A, CONTINUOUS ON SEGMENT B	3' 6"	6' 3"	6' 3"	8 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT A, LOWER BRACE SITS 8" BELOW UPPER, PANEL MEETS CORNER
PANEL A - 2A	CONTINUOUS ON BOTH ENDS	1' 6"	6"	6"	6 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, 2X2 FEET ATTACH TO CANOPY CHASIS
PANEL A - 2B	CONTINUOUS ON BOTH ENDS	3' 6"	6"	6"	6 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, LOWER BRACE SITS 8" BELOW UPPER
PANEL A - 3A	CONTINUOUS ON BOTH ENDS	1' 6"	6"	6"	6 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, 2X2 FEET ATTACH TO CANOPY CHASIS
PANEL A - 3B	CONTINUOUS ON BOTH ENDS	3' 6"	6"	6"	6 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, LOWER BRACE SITS 8" BELOW UPPER
PANEL A - 4	SINGLE SEGMENT PANEL WITH INTERIOR CORNER	1' 6"	6' 5"	6'	2X2 FEET ATTACH TO CANOPY CHASIS, PANEL PASSES CORNER
PANEL A - 5	CONTINUOUS ON SEGMENT A, EXTERIOR CORNER ON SEGMENT B	3' 6"	6' 5"	5' 3 5/8"	LOWER BRACE SITS 8" BELOW UPPER, PANEL PASSES CORNER
PANEL A - 6	SINGLE SEGMENT PANEL WITH INTERIOR CORNER	1' 6"	4' 5 1/8"	4' 6"	2X2 FEET ATTACH TO CANOPY CHASIS, PANEL MEETS CORNER
PANEL A - 7	NON ORTHOGONAL, EXTERIOR CORNER ON SEGMENT A, CONTINUOUS ON SEGMENT B	3' 6"	4' 6"	4' 6"	LOWER BRACE SITS 8" BELOW UPPER, PANEL MEETS CORNER
PANEL A - 8	CONTINUOUS ON SEGMENT A, EXTERIOR CORNER ON SEGMENT B	1' 6"	4' 5 1/8"	4' 7 3/8"	2X2 FEET ATTACH TO CANOPY CHASIS, PANEL PASSES CORNER
PANEL A - 9	NON ORTHOGONAL, CONTINUOUS ON SEGMENT A, EXTERIOR CORNER ON SEGMENT B	3' 6"	4' 6"	4' 6"	4 5/8" SPACING BEFORE FIRST 2X4 ON SEGMENT A, LOWER BRACE SITS 8" BELOW UPPER, PANEL PASSES CORNER
PANEL A - 10	EXTERIOR CORNER ON BOTH ENDS	3' 6"	4' 6 1/8"	4'	LOWER BRACE SITS 8" BELOW UPPER, PANEL MEETS CORNERS
PANEL B - 1	SINGLE SEGMENT, EXTERIOR CORNERS	3' 6"	6' 0 1/2"		PANEL PASSES BOTH CORNERS
PANEL B - 2A	SINGLE SEGMENT WITH EXTERIOR CORNER	3' 6"	3' 3 5/8"		PANEL MEETS CORNER
PANEL B - 2B	SINGLE SEGMENT WITH EXTERIOR CORNER	3' 6"	3' 3 5/8"		PANEL MEETS CORNER, 3' 6" ON ONE SIDE, 2' ON THE OTHER
PANEL B - 3A	CONTINUOUS ON BOTH ENDS	3' 6"	4'	4'	9" SPACING BEFORE FIRST 2X4 ON SEGMENT B
PANEL B - 3B	CONTINUOUS ON BOTH ENDS	3' 6"	4'	4'	9" SPACING BEFORE FIRST 2X4 ON SEGMENT B, 3' 6" ON ONE SIDE, 2' ON THE OTHER
PANEL B - 4A	CONTINUOUS ON BOTH ENDS	3' 6"	4'	4'	7" SPACING BEFORE FIRST 2X4 ON SEGMENT A
PANEL B - 4B	CONTINUOUS ON BOTH ENDS	3' 6"	4'	4'	7" SPACING BEFORE FIRST 2X4 ON SEGMENT A, 3' 6" ON ONE SIDE, 2' ON THE OTHER
PANEL B - 5A	EXTERIOR CORNER ON SEGMENT A, HIDDEN PANEL ON SEGMENT B	3' 6"	4' 1 1/4"	4' 5"	1' 2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, NO PLYWOOD LIP ON SEGMENT B, PASSES CORNER
PANEL B - 5B	EXTERIOR CORNER ON SEGMENT A	3' 6"	4' 1 1/4"	4' 5"	1' 2" SPACING BEFORE FIRST 2X4 ON SEGMENT B, DOUBLE SIDED, PASSES CORNER, 3' 6" ON ONE SIDE, 2' ON THE OTHER
PANEL B - 6	DOUBLE SIDED, SINGLE SEGMENT CORNER ON BOTH ENDS	3' 6"	5' 11 1/2"		DOUBLE SIDED, PANEL MEETS CORNERS, 3' 6" ON ONE SIDE, 2' ON THE OTHER SIDE
PANEL B - 7A	SINGLE SEGMENT, EXTERIOR CORNERS ON BOTH ENDS	1' 6"	3'		PANEL MEETS CORNER
PANEL B - 7B	SINGLE SEGMENT, EXTERIOR CORNER ON BOTH ENDS	1' 6"	3'		PANEL MEETS CORNER
PANEL B - 8	EXTERIOR CORNER ON BOTH ENDS	1' 6"	6' 0 1/2"		PANEL PASSES CORNERS
PANEL B - 9	EXTERIOR CORNERS	2'	6'		PANEL MEETS CORNER INSIDE PLANTER, PASSES EXTERIOR CORNER
PANEL C - 1A	EXTERIOR CORNER ON SEGMENT A	2'	3' 6"	3' 6"	PANEL MEETS CORNER
PANEL C - 1B	EXTERIOR CORNER ON SEGMENT A	2'	3' 6"	3' 6"	PANEL MEETS CORNER
PANEL C - 2A	EXTERIOR CORNER ON SEGMENT B	2'	3' 9"	3' 11 3/8"	PANEL MEETS CORNER
PANEL C - 2B	EXTERIOR CORNER ON SEGMENT B	2'	3' 9"	3' 11 3/8"	PANEL MEETS CORNER
PANEL C - 3A	DOUBLE SIDED, EXTERIOR CORNER ON SEGMENT A, CONTINUOUS ON SEGMENT B	3' 6"	4' 3"	4' 3"	PANEL MEETS CORNER
PANEL C - 3B	DOUBLE SIDED, EXTERIOR CORNER ON SEGMENT A, CONTINUOUS ON SEGMENT B	3' 6"	4' 3"	4' 3"	PANEL MEETS CORNER
PANEL C - 4	CONTINUOUS ON SEGMENT A, EXTERIOR CORNER ON SEGMENT B	3' 6"	5'	4' 4 3/8"	PANEL PASSES CORNER
PANEL C - 5	NON ORTHOGONAL, SINGLE SEGMENT, DOUBLE SIDED, EXTERIOR CORNER ON BOTH SIDES	3' 6"	5' 2 3/4"		PANEL MEETS CORNERS
PANEL C - 6	NON ORTHOGONAL, SINGLE SEGMENT, DOUBLE SIDED, EXTERIOR CORNER ON BOTH SIDES	3' 6"	4' 11 1/2"		PANEL PASSES CORNERS
PANEL C - 7	DOUBLE SIDED, EXTERIOR CORNER ON SEGMENT B	3' 6"	5'	5' 3 1/8"	PANEL MEETS CORNER
PANEL C - 8	EXTERIOR CORNER AT BOTH ENDS	3' 6"	5' 2 7/8"	4' 10"	PANEL PASSES BOTH CORNERS
PANEL C - 9	EXTERIOR CORNER ON SEGMENT A	3' 6"	3' 3"	3' 3"	PANEL MEETS CORNER
PANEL C - 10	CONTINUOUS ON BOTH SIDES	3' 6"	3' 3"	3' 3"	6 1/2" SPACING BEFORE FIRST 2X4 ON SEGMENT A
PANEL C - 11	EXTERIOR CORNER ON SEGMENT B	3' 6"	3' 3"	3' 5 1/8"	PANEL MEETS CORNER
PANEL C - 12	NON ORTHOGONAL, SINGLE SEGMENT, TWO EXTERIOR CORNER	3' 6"	3' 0 1/2"		PANEL MEETS BOTH CORNERS
PANEL C - 13	NO PLYWOOD LIP, EXTERIOR CORNERS	2'	5' 6"	5' 9"	PLYWOOD TABLE EXTENDS TO THE WINDOWS, MEETS CORNER SEGMENT A, PASSES CORNER SEGMENT B
PANEL C - 14	EXTERIOR CORNERS	2'	3' 6 3/4"	4'	MEETS BOTH CORNERS
PANEL C - 15	SINGLE SEGMENT, EXTERIOR CORNERS	3' 6"	5' 5 1/2"		CORNER ADJACENT TO 2' PLANTER; PANEL PASSES CORNER, MEETS OTHER CORNER
PANEL C - 16	DOUBLE SIDED, EXTERIOR CORNERS	3' 6"	5'	4' 9 7/8"	MEETS BOTH CORNERS
PANEL C - 17	EXTERIOR CORNERS	3' 6"	4' 6"	4' 5 1/8"	PANEL PASSES BOTH CORNERS
PANEL D - 1	EXTERIOR CORNER ON SEGMENT A, INTERIOR CORNER ON SEGMENT B	3' 6"	5'	5' 2 3/4"	PANEL PASSES BOTH CORNERS
PANEL D - 2	SINGLE SEGMENT, EXTERIOR CORNERS	3' 6"	4' 0 5/8"		PANEL MEETS BOTH CORNERS
PANEL D - 3	EXTERIOR CORNER ON SEGMENT A	3' 6"	4'	4' 0 1/8"	PANEL PASSES CORNER
PANEL D - 4	EXTERIOR CORNER ON SEGMENT B	3' 6"	4'	4' 0 1/8"	PANEL PASSES CORNER
PANEL D - 5	SINGLE SEGMENT, INTERIOR AND EXTERIOR CORNER	3' 6"	3' 11 3/4"		PANEL MEETS INTERIOR CORNER, PASSES EXTERIOR CORNER
PANEL D - 6	EXTERIOR CORNERS	2' 4"	3' 0 1/2"	2' 4 1/8"	PANEL PASSES CORNER ON SEGMENT A, MEETS CORNER ON SEGMENT B
PANEL D - 7	DOUBLE SIDED, SINGLE SEGMENT, EXTERIOR CORNERS	3' 6"	4' 3 1/4"		PANEL MEETS BOTH CORNERS
PANEL D - 8	SINGLE SEGMENT, EXTERIOR CORNERS	2' 4"	3' 4"		PANEL MEETS DECK SIDE CORNER, PASSES OPEN CORNER
PANEL D - 9	NON ORTHOGONAL, EXTERIOR CORNERS	2' 4"	2' 7 5/8"	2' 4 3/4"	PANEL MEETS BOTH CORNERS
PANEL D - 10	NON ORTHOGONAL, EXTERIOR CORNERS	3' 6"	4' 0 1/2"	4' 1 7/8"	PANEL PASSES CORNER ON SEGMENT A, MEETS CORNER ON SEGMENT B
PANEL E - 1	EXTERIOR CORNERS	3' 6"	3' 4 7/8"	3' 6"	PANEL MEETS BOTH CORNERS
PANEL E - 2	EXTERIOR CORNERS	3' 6"	4'	4'	PANEL PASSES BOTH CORNERS
PANEL E - 3	EXTERIOR CORNERS	2' 4"	2' 5"	3'	PANEL MEETS BOTH CORNERS
PANEL E - 4	NON ORTHOGONAL, EXTERIOR CORNERS	3' 6"	4' 0 3/4"	4' 0 5/8"	PANEL PASSES BOTH CORNERS
PANEL E - 5	NON ORTHOGONAL, EXTERIOR CORNERS	2' 4"	2' 6"	3'	PANEL MEETS BOTH CORNERS
PANEL E - 6	DOUBLE SIDED, SINGLE SEGMENT, EXTERIOR CORNERS	3' 6"	5' 5 1/2"		PANEL MEETS BOTH CORNERS
PANEL E - 7	SINGLE SEGMENT, EXTERIOR CORNERS	2' 4"	4' 6 3/4"		PANEL PASSES BOTH CORNERS



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MARK	DATE	DESCRIPTION
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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 PLANTER SCHEDULE

L-602

GENERAL

1. THE STRUCTURAL DRAWINGS SHOW THE COMPLETED PROJECT. THEY DO NOT INCLUDE COMPONENTS THAT MAY BE NECESSARY FOR CONSTRUCTION SAFETY. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION.
2. STRUCTURAL NOTES SHALL BE USED ALONG WITH THE SPECIFICATIONS. WHERE THE STRUCTURAL NOTES, DRAWINGS OR SPECIFICATIONS DISAGREE, THE CONTRACTOR MAY REQUEST A CLARIFICATION DURING THE BIDDING PERIOD.
3. PROVIDE ALL TEMPORARY BRACING, SHORING, GUYING OR OTHER MEANS TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION.
4. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR MECHANICAL, ELECTRICAL AND PLUMBING WITH THE APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.
5. VERIFY AND COORDINATE ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCIES OR INCONSISTENCIES.
6. STRUCTURAL DETAILS: DETAILS ARE APPLICABLE WHERE INDICATED BY SECTION CUT, BY NOTE OR BY DETAIL TITLE. PROVIDE SIMILAR DETAILS AT SIMILAR CONDITIONS UNLESS NOTED OTHERWISE. THE CONTRACTOR MAY REQUEST A CLARIFICATION DURING THE BIDDING PERIOD OTHERWISE THE MORE STRINGENT REQUIREMENTS SHALL CONTROL.
7. REFER TO ARCHITECTURAL DRAWINGS FOR ALL SLAB ELEVATIONS AND SLOPES NOT NOTED.
8. ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF A STRUCTURAL ENGINEER REGISTERED IN ARIZONA.
9. CHANGES TO THE DESIGN OF THE STRUCTURE WHICH ARE PROPOSED BY THE CONTRACTOR SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW BY THE STRUCTURAL ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL STRUCTURAL AND NON-STRUCTURAL ELEMENTS AFFECTED BY THE PROPOSED CHANGE. THE COST OF ANY DESIGN WORK NECESSITATED BY SUCH A PROPOSED CHANGE SHALL BE BORNE BY THE CONTRACTOR.
10. THE COST OF DESIGN WORK RESULTING FROM ERRORS OR OMISSIONS IN CONSTRUCTION SHALL BE BORNE BY THE CONTRACTOR.

DESIGN CRITERIA:

1. BUILDING CODE
 - A. SOLAR DECATHLON BUILDING CODE, 2009 I.R.C.
2. LOADINGS:
 - A. ROOF LIVE LOAD = 20 PSF (ON HORIZONTAL PROJECTION)
 - B. WIND LOAD 90 MPH ZONE EXPOSURE C
 - C. SEISMIC DESIGN CATEGORY: D2
 - D. SEISMIC SITE CLASS: D
 - E. SEISMIC SDS: 0.968 g
 - F. SEISMIC SD1: 0.512 g
 - G. SEISMIC R FACTOR: 7.0 (LIGHT FRAME SHEAR WALLS)
3. SOIL BEARING ALLOWABLE:
 - A. EXISTING SUBSOILS HAVING A MINIMUM BEARING CAPACITY OF 3000 PSF FOR TOTAL LOAD.
4. FUTURE EXPANSION: THIS PROJECT IS NOT DESIGNED FOR FUTURE EXPANSION.

MATERIALS AND EXECUTION:

1. STRUCTURAL AND MISCELLANEOUS STEEL:
 - A. MATERIAL PROPERTIES:
 - a) ALL PLATES, ANGLES, AND CHANNELS TO BE ASTM A 36 UNLESS OTHERWISE NOTED
 - b) ALL HSS MEMBERS TO BE ASTM A500.
 - c) ALL STEEL TO BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS, LATEST ADOPTION.
 - B. WELDING:
 - a) FOR STRUCTURAL STEEL TO BE IN ACCORDANCE WITH A.W.S. REQUIREMENTS FOR E70XX ELECTRODES.
 - C. BOLTS:
 - a) ALL BOLTS AND THREADED STUDS TO BE 3/4" DIAMETER ASTM A 307 UNLESS NOTED OTHERWISE.
 - b) ANCHOR BOLTS SHALL BE ASTM A 307 OR A 36.
 - D. DEFORMED BAR ANCHORS: TO BE ASTM A 496.
2. WOOD:
 - A. DIMENSIONAL LUMBER: ALL TO BE GRADE STAMPED PER W.C.L.B. RULES.
 - a) ALL JOISTS, BEAMS, PLATES, HEADERS AND OTHER LUMBER TO BE D.FIR/LARCH #1 UNLESS OTHERWISE NOTED.
 - B. PLYWOOD:
 - a) ROOF SHEATHING TO BE 1/2" EXTERIOR CD SHEATHING WITH EXTERIOR GLUE, IDENTIFICATION INDEX 24/0. NAIL WITH 8d NAILS AT 6" O.C. AT ALL EDGE SUPPORTS AND WITH 8d NAILS AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE.
 - b) EXTERIOR WALLS TO BE 1/2" EXPOSURE 1 CC SHEATHING WITH EXTERIOR GLUE. NAIL WITH 8d NAILS AT 6" O.C. AT ALL EDGE SUPPORTS AND WITH 8d NAILS AT 12" O.C. AT ALL INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE. SEE SHEAR WALL SCHEDULE FOR SHEAR WALL SHEATHING AND ATTACHMENT.
 - C. WOOD CONNECTORS:
 - a) ALL LUMBER CONNECTORS SPECIFIED AS "SIMPSON" TYPE TO BE MANUFACTURED BY "SIMPSON STRONG-TIE COMPANY, INC." OR PRE-APPROVED EQUAL.
3. SPECIAL INSPECTION: SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH I.B.C. CHAPTER 17 FOR THE FOLLOWING ITEMS.
 - A. FIELD WELDING, IF REQUIRED.

RSA STANDARD ABBREVIATIONS

ADD'L	ADDITIONAL	I.F.	INSIDE FACE
ADJ.	ADJACENT	INFO.	INFORMATION
A/E	DESIGN TEAM OF RECORD	INTR.	INTERIOR
ALT.	ALTERNATE	JT.	JOINT
ANC.	ANCHOR	K	KIPS
APPROX.	APPROXIMATE	LB.	POUND
ARCH.	ARCHITECTURAL/ARCHITECT	L.L.	LIVE LOAD
B/	BOTTOM OF	LLH	LONG LEG HORIZONTAL
BLDG.	BUILDING	LLV	LONG LEG VERTICAL
BM.	BEAM	L-W	LONG WAY
BOT.	BOTTOM	L.P.	LOW POINT
BRG.	BEARING	L.W.	LIGHTWEIGHT
CANT.	CANTILEVER	MAX.	MAXIMUM
C.I.P.	CAST IN PLACE	MECH.	MECHANICAL
C.J.	CONTROL JOINT	MEP	MECH., ELECT., PLUMBING, & F.P.
CLG.	CEILING	MFR.	MANUFACTURER
CLR.	CLEAR	MIN.	MINIMUM
CMU	CONCRETE MASONRY UNIT	MISC.	MISCELLANEOUS
COL.	COLUMN	N.F.	NEAR FACE
COMPS.	COMPOSITE	NO.	NUMBER
CONC.	CONCRETE	N.S.	NEAR SIDE
CONST.	CONSTRUCTION	N.T.S.	NOT TO SCALE
CONT.	CONTINUOUS	O.C.	ON CENTER
COORD.	COORDINATE	O.F.	OUTSIDE FACE
CONTR.	CONTRACTOR	OPP.	OPPOSITE
CTR.	CENTER	PC.	PIECE
DBL.	DOUBLE	PED.	PEDESTAL
DTL.	DETAIL	PERP.	PERPENDICULAR
DIA.	DIAMETER	PL.	PLATE
DIAG.	DIAGONAL	PREFAB.	PREFABRICATED
DIM.	DIMENSION	PSF	POUNDS PER SQUARE FOOT
D.L.	DEAD LOAD	PSI	POUNDS PER SQUARE INCH
DN.	DOWN	REINF.	REINFORCE(D), REINFORCEMENT
DWG(S)	DRAWING(S)	REQ'D	REQUIRED
EA.	EACH	REV.	REVISION
E/	EDGE OF	SCHED.	SCHEDULE
E.F.	EACH FACE	SECT.	SECTION
E.J.	EXPANSION JOINT	SIM.	SIMILAR
EL.	ELEVATION	SPEC.	SPECIFICATION
ELEC.	ELECTRICAL	SQ.	SQUARE
ENGR.	ENGINEER	S.S.	STAINLESS STEEL
E.O.R.	ENGINEER OF RECORD	STD.	STANDARD
EQ.	EQUAL	STIFF.	STIFFENER
E.S.	EACH SIDE	STL.	STEEL
EXP.	EXPANSION	STRUC.	STRUCTURAL
EXT.	EXTERIOR	SYM.	SYMMETRIC
E.W.	EACH WAY	T/	TOP OF
FDN.	FOUNDATION	T & B	TOP & BOTTOM
FIN.	FINISH	TEMP.	TEMPORARY
FLR.	FLOOR	THK.	THICK(NESS)
FRMG.	FRAMING	TYP.	TYPICAL
FT.	FEET	U.N.O.	UNLESS NOTED OTHERWISE
FTG.	FOOTING	VERT.	VERTICAL
GA.	GAGE	W/	WITH
GALV.	GALVANIZED	W.P.	WORK POINT
HDR.	HEADER	W-P	WATERPROOFING
HGR.	HANGER	#	NUMBER/SIZE
HORIZ.	HORIZONTAL		CENTERLINE
H.P.	HIGH POINT		DIAMETER
HT.	HEIGHT		PLATE
HVAC	HEATING, VENTILATION, & AIR CONDITIONING		

RSA STANDARD ABBREVIATIONS FOR WOOD

G-LAM	GLUE LAMINATED LUMBER	P.T.	PRESERVATIVE TREATED
LSL	LAMINATED STRAND LUMBER	R.O.	ROUGH OPENING
LVL	LAMINATED VENEER LUMBER	SQ.	SQUARE
NOM.	NOMINAL	T & G	TONGUE AND GROOVE
PSL	PARALLEL STRAND LUMBER		

DESIGN LOADS						
FLOOR LIVE LOADS	(PSF)	ROOF LOADS	(PSF)	WIND LOADS		SEISMIC
TYPICAL FLOOR	50	DEAD LOAD	15	COMPETITION WIND SPEED	85 MPH	SHORT PERIOD MAP VALUE
TYPICAL DECK	50	LIVE LOAD	20	WIND EXPOSURE	C	1.0 SEC PERIOD MAP VALUE
MEANS OF EGRESS	100	CEILING DEAD LOAD	15	IMPORTANCE FACTOR	2	RESIDENTIAL SEISMIC DESIGN CATEGORY
MECHANICAL + STORAGE	100	PV MODULES	2			
RAILINGS (CONCENTRATED)	200#					



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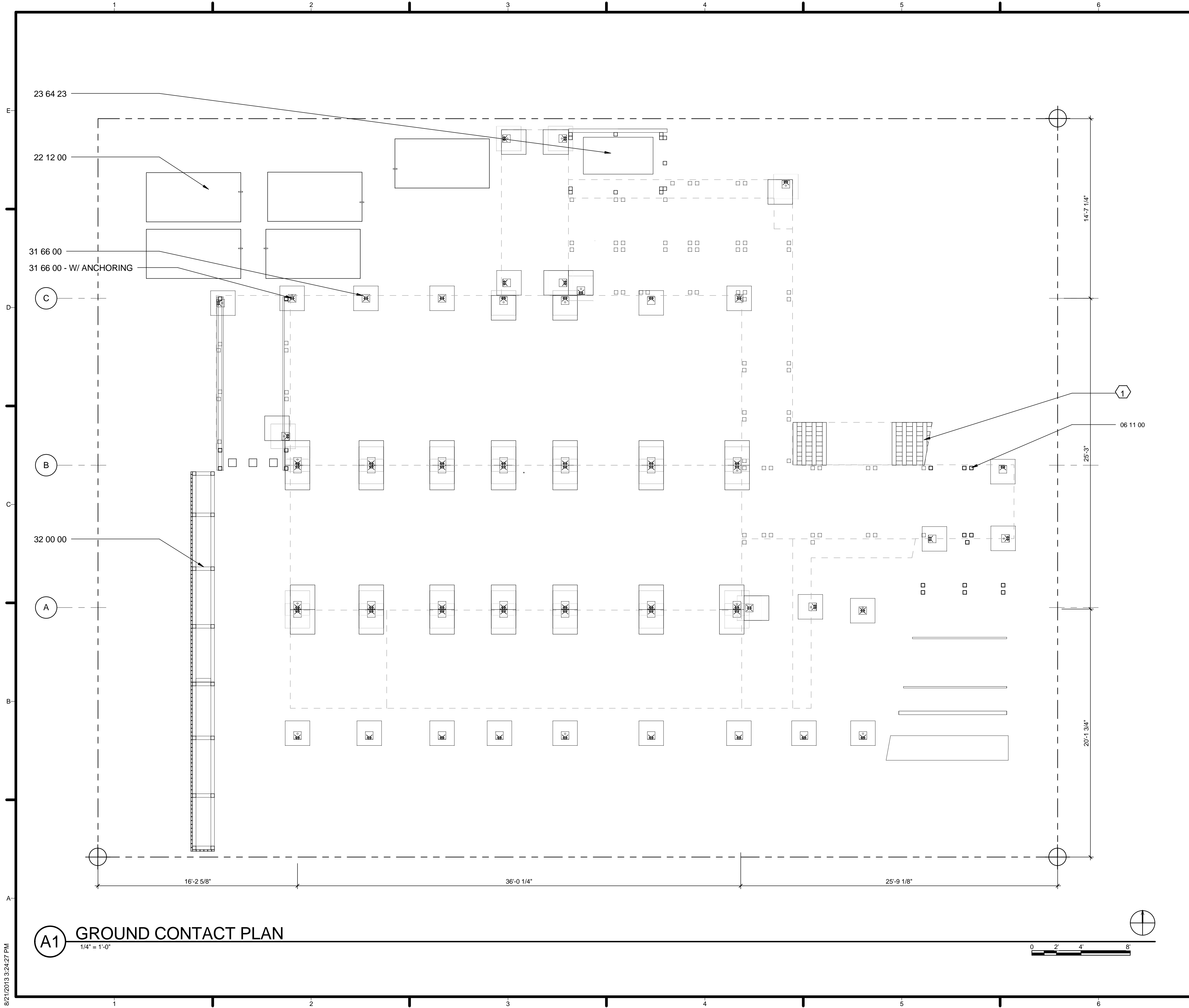


MARK	DATE	DESCRIPTION
05	8.22.2013	100% DOENREL AS-BUILTS
04	4.05.2013	100% DOENREL CD RE-SUBMISSION
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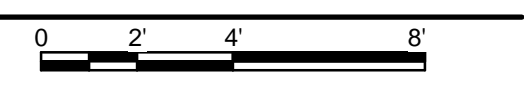
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SHEET TITLE
GENERAL STRUCTURAL NOTES

S-001



(A1) GROUND CONTACT PLAN
1/4" = 1'-0"



GENERAL SHEET NOTES

REFERENCE KEYNOTES

06 11 00 - 4x4 DF#2 TREATED
22 12 00 - FACILITY-POTABLE WATER
STORAGE TANK
23 64 23 - SCROLL WATER CHILLERS
31 66 00 - CENTRAL PIERS
32 00 00 - BENCHES

(1) SHEET KEYNOTES

1. 2X WOOD CRIBBING



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	OTTERBEIN ENGINEERING ROY OTTERBEIN, P.E.

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SHEET TITLE
GROUND CONTACT AND ANCHORING PLAN

S-100

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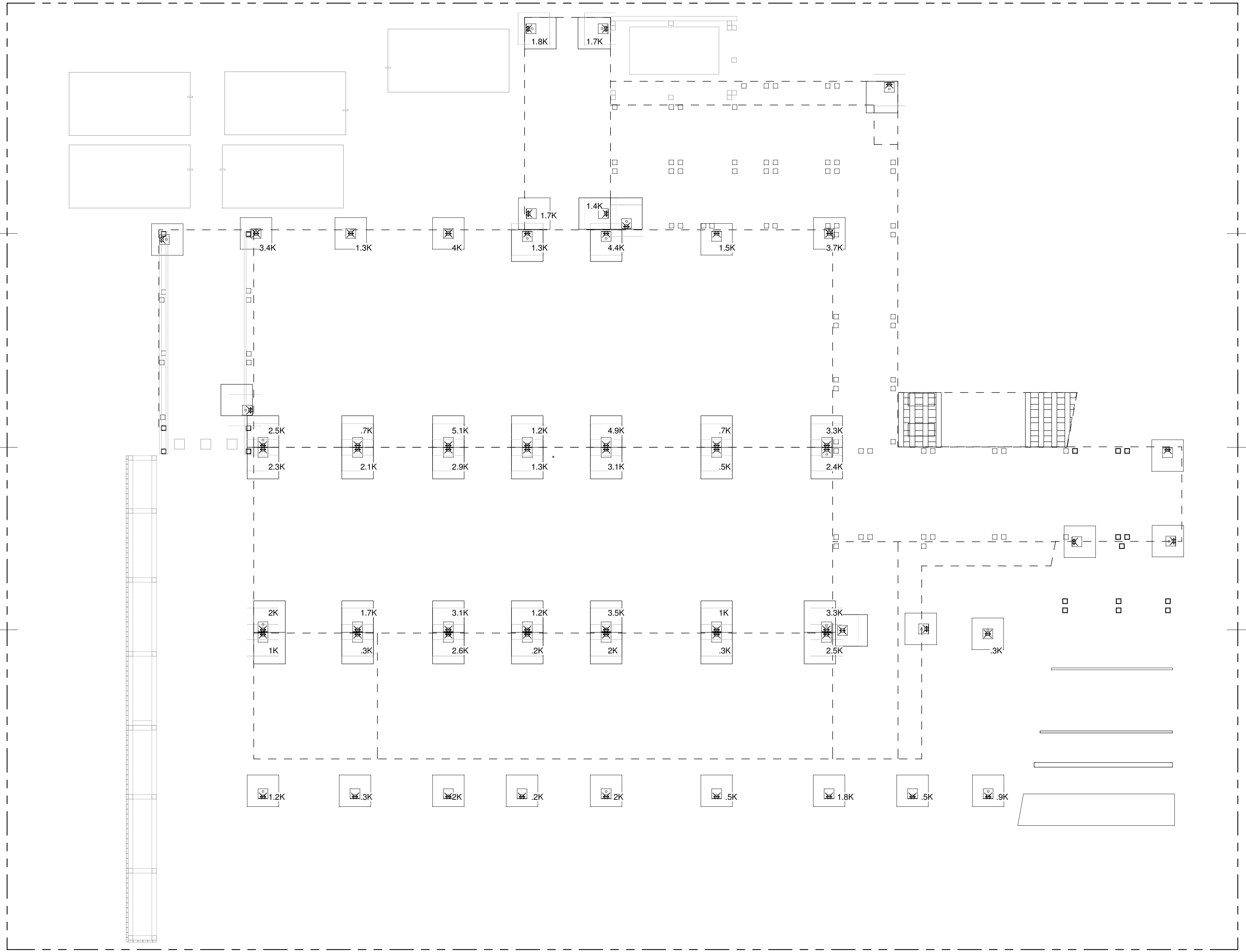
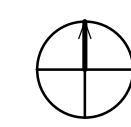
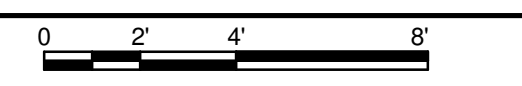
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04	4.05.2013	100% DOE/NREL CD RE-SUBMISSION
03	2.14.2013	100% DOE/NREL CD SUBMISSION
02	11.20.2012	80% DOE/NREL DD RE-SUBMISSION
01	10.11.2012	80% DOE/NREL DD SUBMISSION

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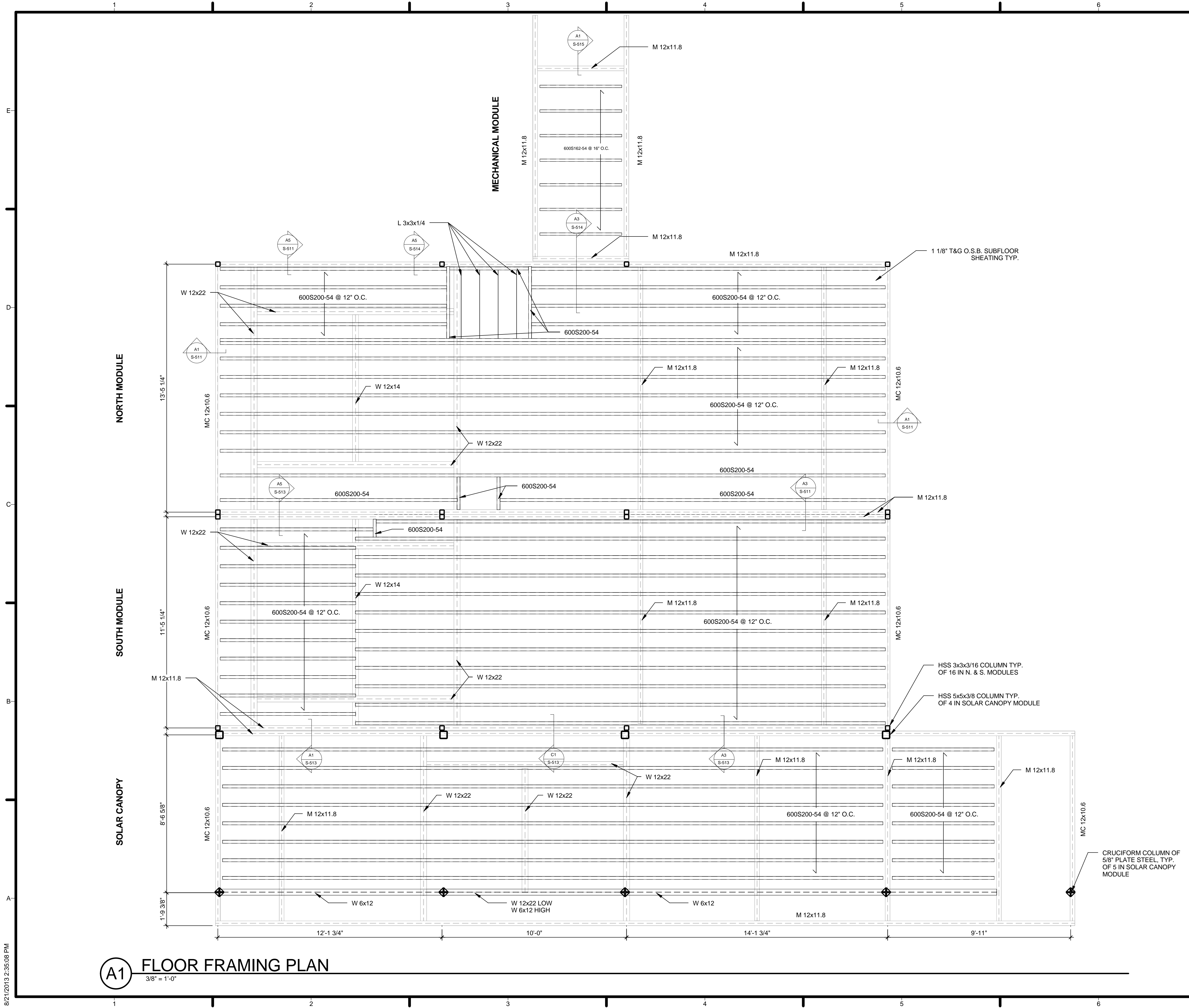
SHEET TITLE
BEARING PLAN

S-101

(A1) BEARING PLAN
 1/4" = 1'-0"



8/21/2013 9:19:47 PM



GENERAL SHEET NOTES

1. SEE S-600 FOR SHEAR WALL LOCATIONS



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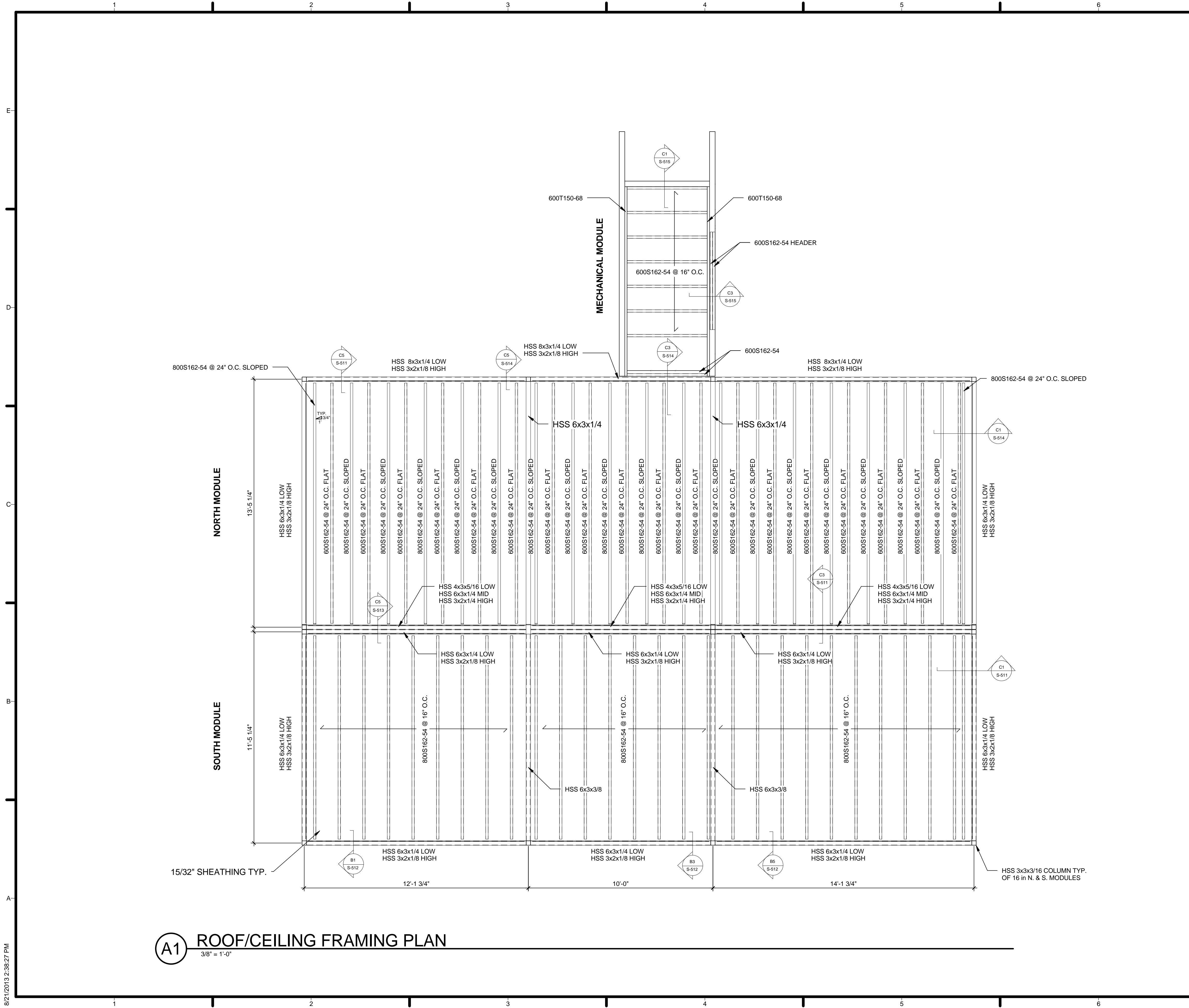
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02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
FIRST FLOOR FRAMING PLAN

S-102

8/21/2013 2:35:08 PM



GENERAL SHEET NOTES

1. SEE S-600 FOR SHEAR WALL LOCATIONS



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02	11.20.2012	80% DOE/NREL DD RE-SUBMISSION
01	10.11.2012	80% DOE/NREL DD SUBMISSION

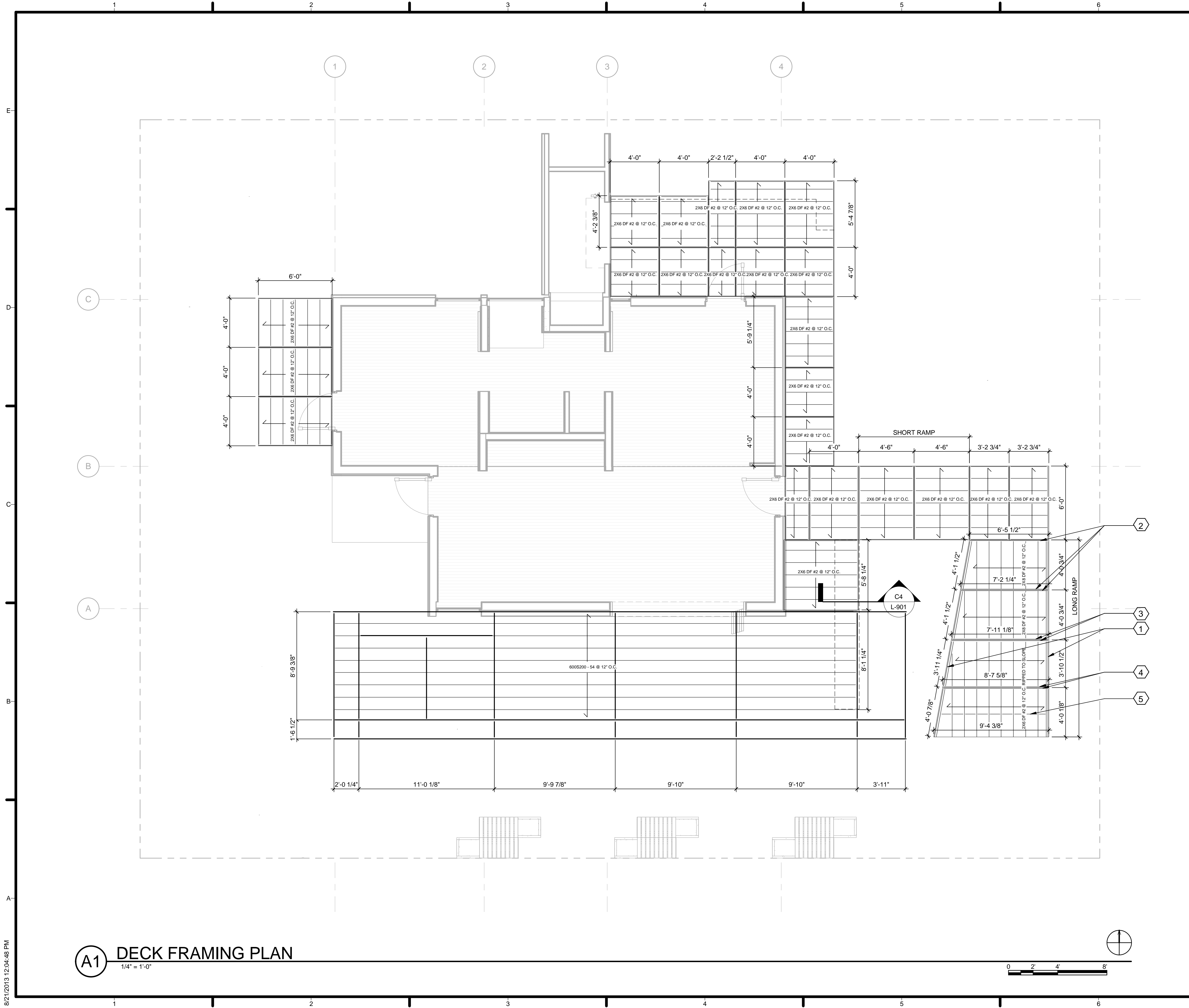
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SHEET TITLE
ROOF FRAMING PLAN

S-103

(A1) ROOF/CEILING FRAMING PLAN
 3/8" = 1'-0"

8/21/2013 2:38:27 PM



GENERAL SHEET NOTES

1. TYP. DECK RIM JOIST: 2X8 DF #2 WEATHER TREATED
2. TYP. DECK JOISTS: 2X6 DF #2 @ 12" O.C. WEATHER TREATED
3. LONG RAMP SLOPE: 1'/13.75'
4. SHORT RAMP: 1'/13.5'

REFERENCE KEYNOTES

SHEET KEYNOTES

1. 2 - 2X8 DF#2 WEATHER TREATED
2. 2X8 DF#2 WEATHER TREATED
3. 2X6 DF#2 WEATHER TREATED
4. 2X4 DF#2 WEATHER TREATED
5. 2X4 DF#2 WEATHER TREATED, OUT OF AXIS AS BLOCKING



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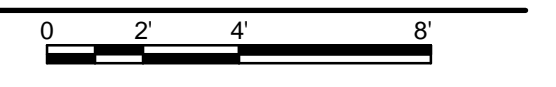
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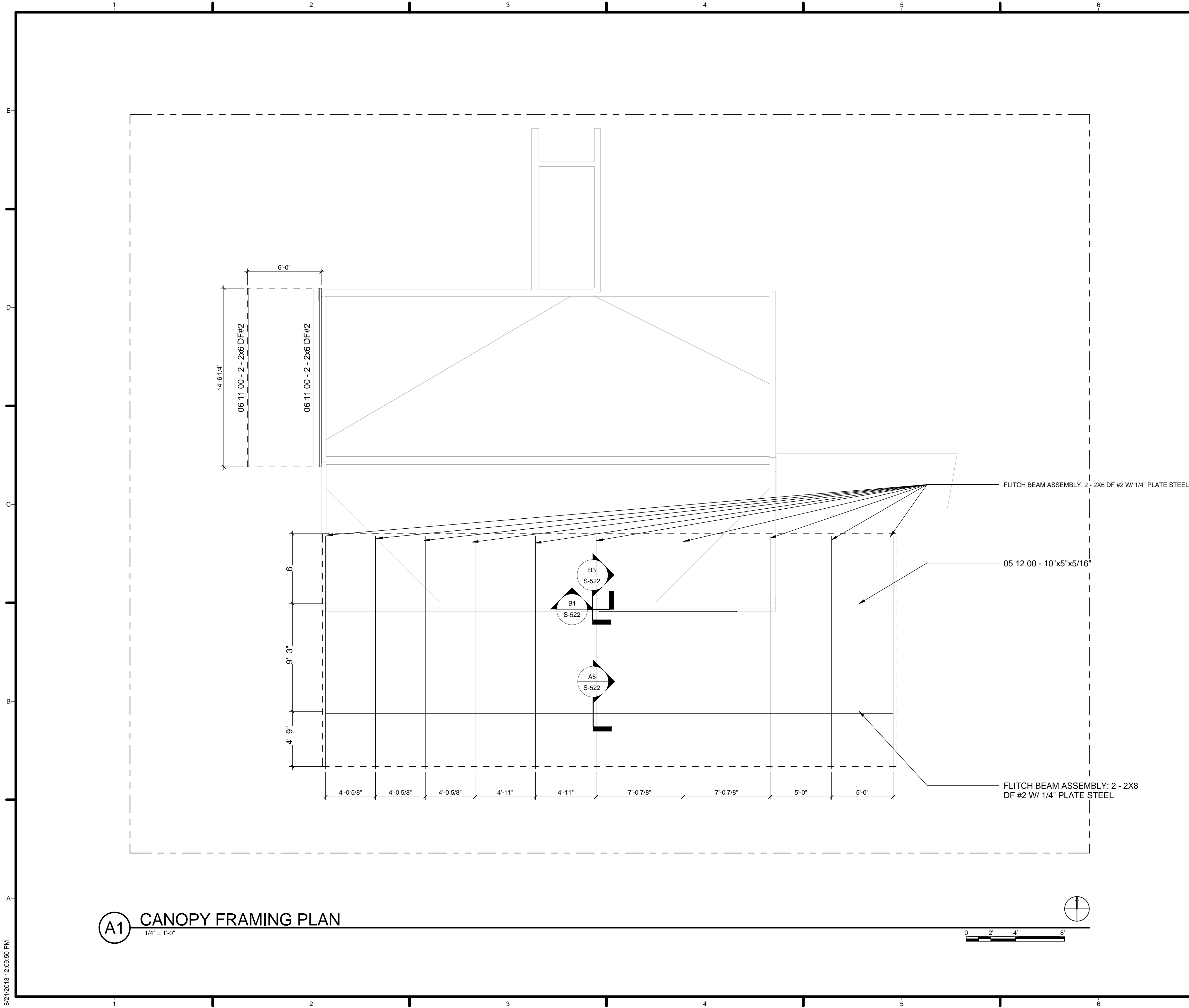
SHEET TITLE
DECK FRAMING PLAN

S-104

A1 DECK FRAMING PLAN
 1/4" = 1'-0"



8/21/2013 12:04:48 PM



(A1) CANOPY FRAMING PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

TYP. BEAM COMPOSED OF 2 - 2X MEMBERS OF DF #2 SANDWICHED AROUND AN EQUAL DEPTH MEMBER OF 1/4" PLATE STEEL.

REFERENCE KEYNOTES

05 12 00 - HSS
05 50 00 - PLATE STEEL
06 11 00 - WOOD FRAMING

SHEET KEYNOTES



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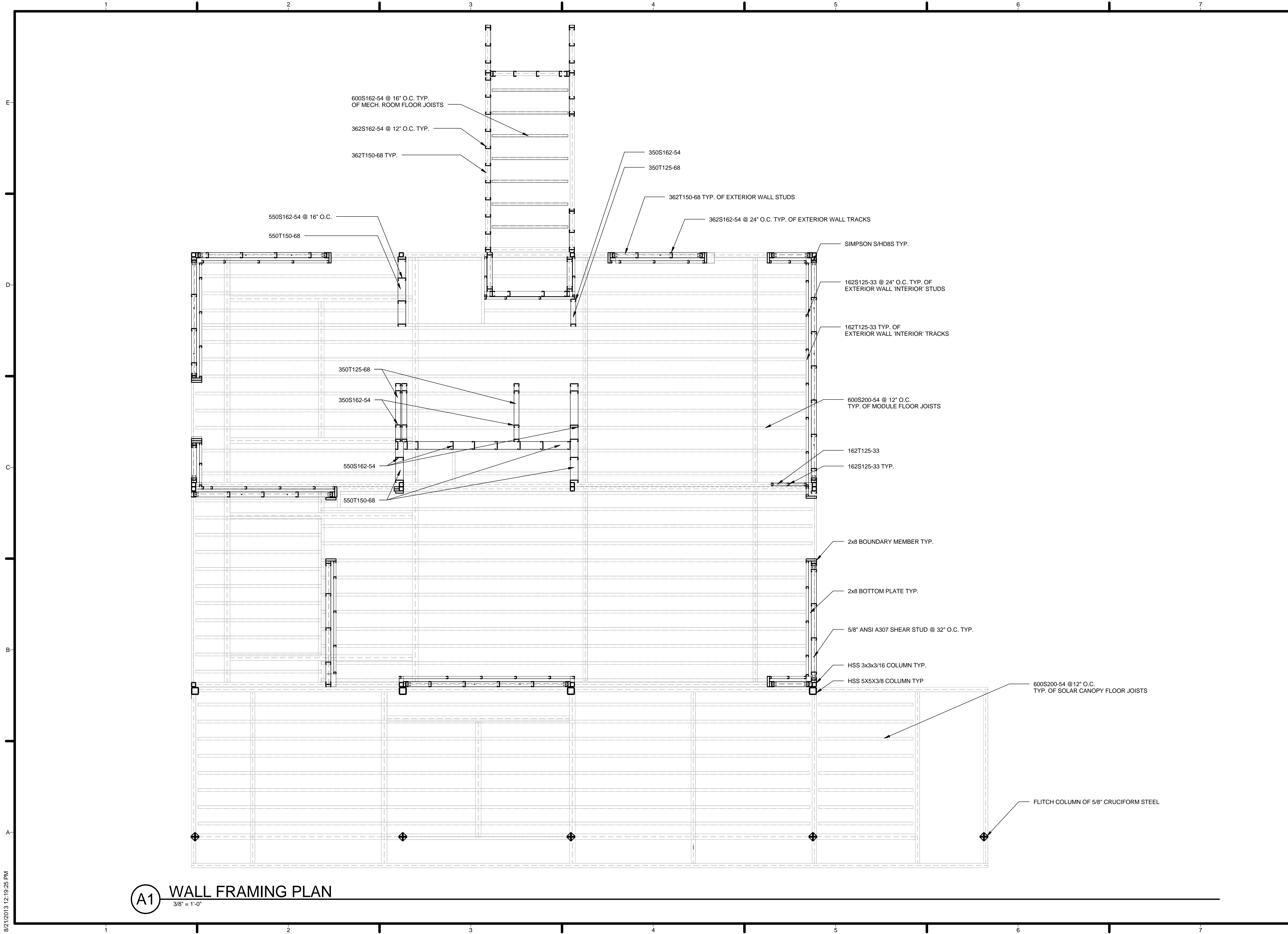
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02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
CANOPY FRAMING PLAN

S-105

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01	10.11.2012	80% DOE/NREL DD SUBMISSION

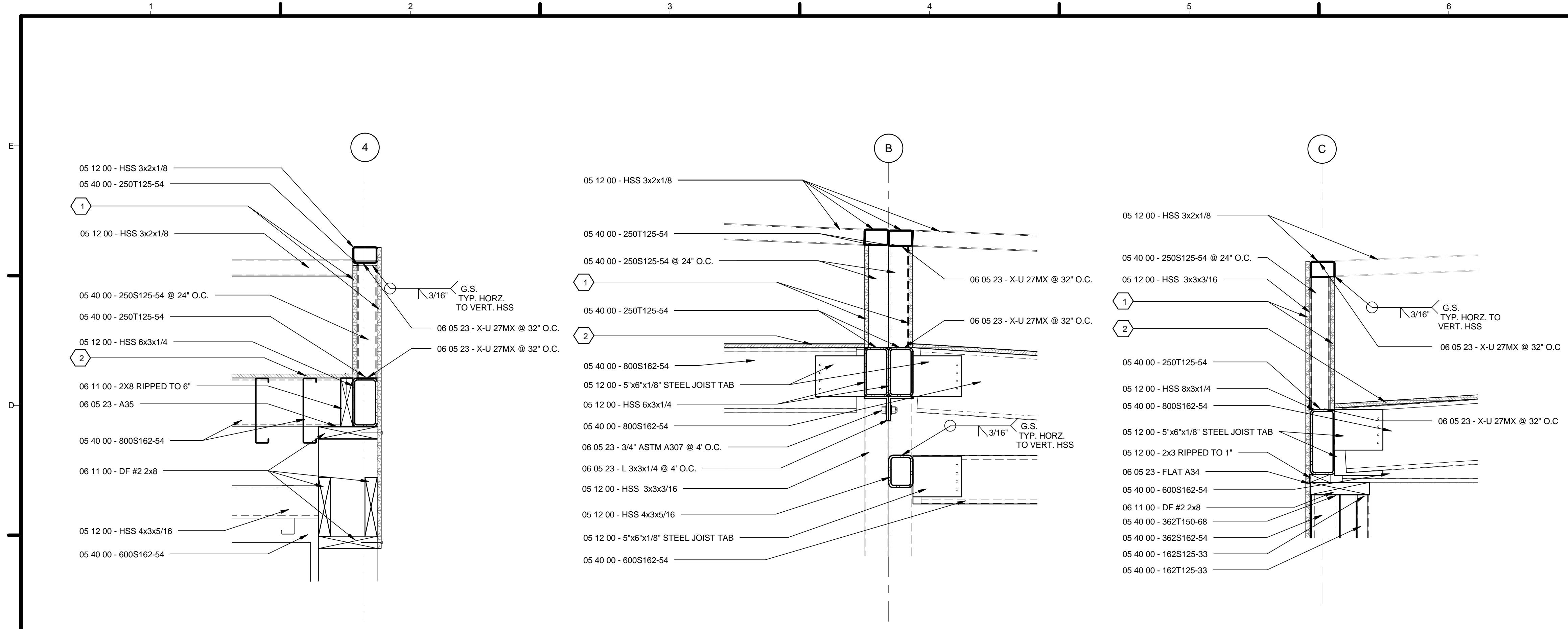
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SHEET TITLE
WALL FRAMING PLAN

S-106

A1 WALL FRAMING PLAN
 3/8" = 1'-0"

8/21/2013 12:19:25 PM



GENERAL SHEET NOTES

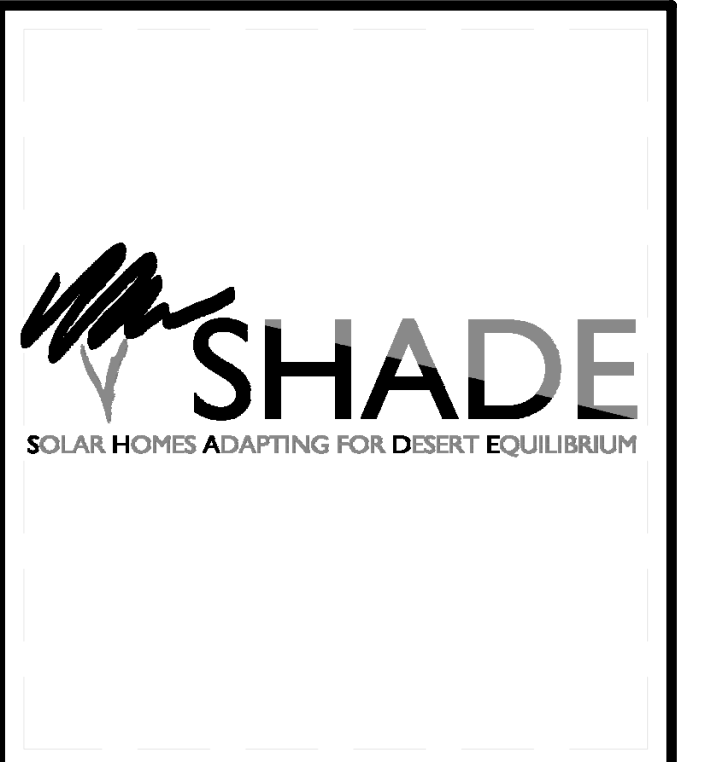
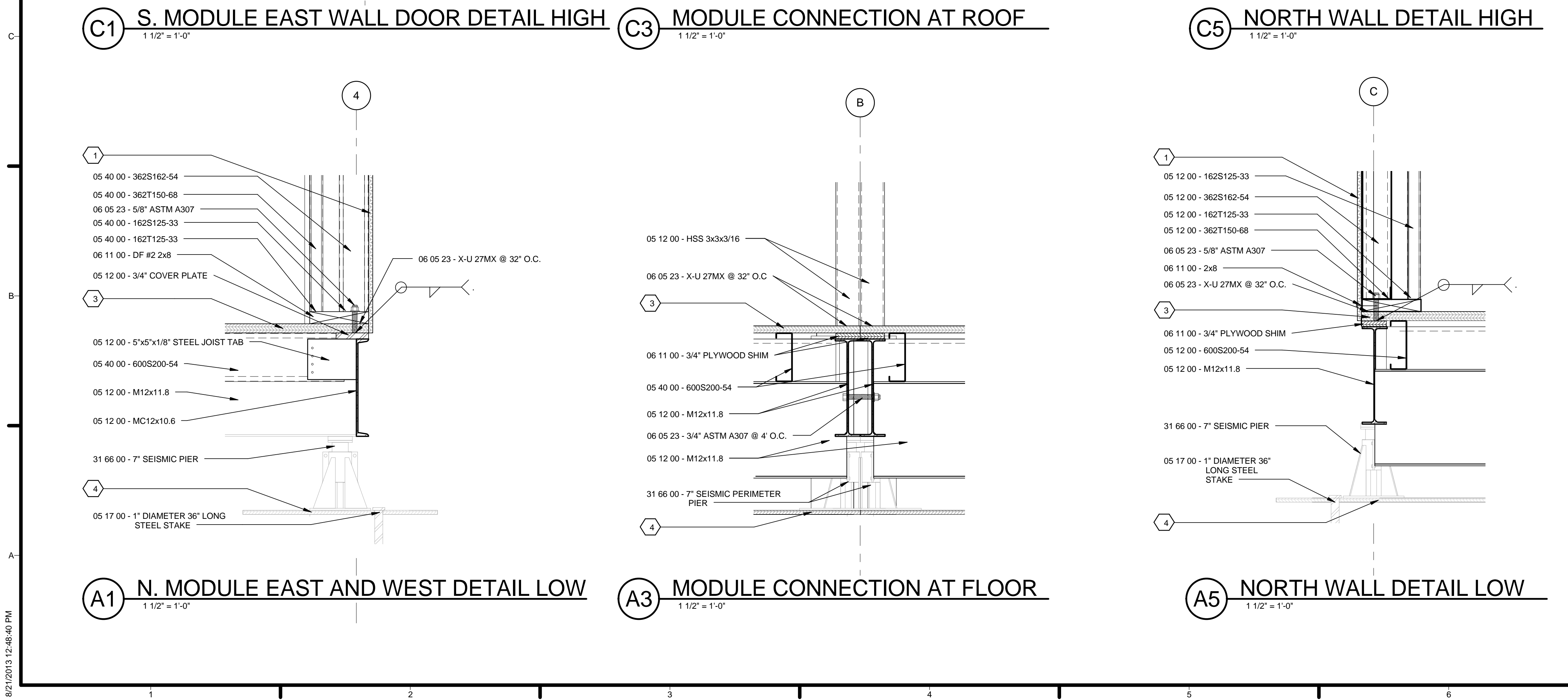
1. UNLESS OTHERWISE NOTED, ALL WOOD FRAMING SHALL BE DOUGLAS-FIR LARCH #2

REFERENCE KEYNOTES

- 05 12 00 - STRUCTURAL STEEL FRAMING
- 05 17 00 - STEEL STAKES
- 05 40 00 - COLD-FORMED METAL FRAMING
- 06 05 23 - WOOD, PLASTIC, AND COMPOSITE FASTENINGS
- 06 11 00 - WOOD FRAMING
- 31 66 00 - SPECIAL FOUNDATIONS

SHEET KEYNOTES

1. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH 1 1/2" - 0.14" KNURLED SHANK - 5/16" dia. BUGLE HEAD NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
2. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH #8 PPSD SCREW AT 6" O.C. ON ALL SUPPORTED EDGES
3. 1-1/8" T&G O.S.B FASTENED WITH #10 PPSD COLLATED SCREW AT 6" O.C.
4. 1/2" PLY WOOD PAD



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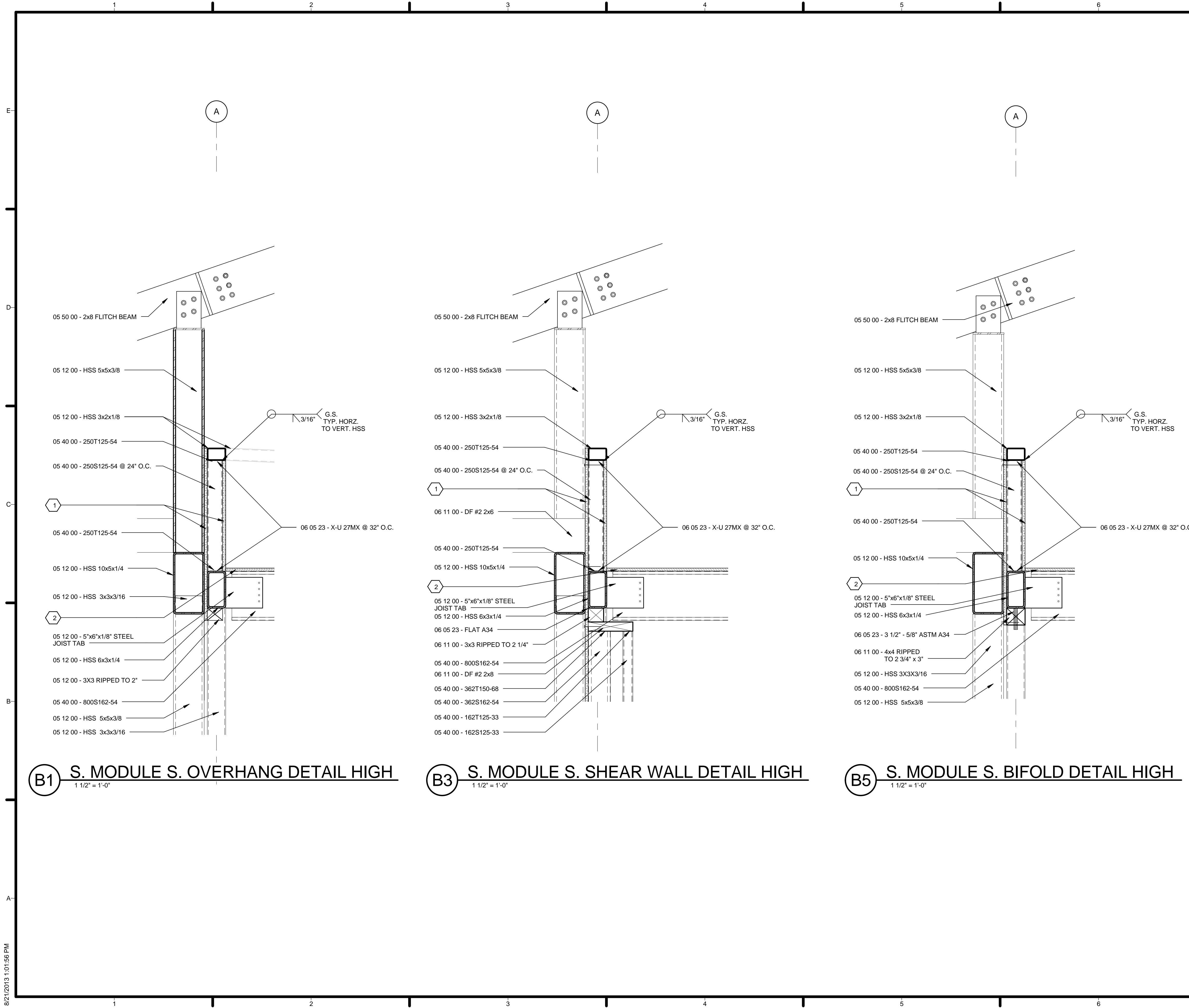


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02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
FRAMING DETAILS

S-511



B1 S. MODULE S. OVERHANG DETAIL HIGH
1 1/2" = 1'-0"

B3 S. MODULE S. SHEAR WALL DETAIL HIGH
1 1/2" = 1'-0"

B5 S. MODULE S. BIFOLD DETAIL HIGH
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. UNLESS OTHERWISE NOTED, ALL WOOD FRAMING SHALL BE DOUGLAS-FIR LARCH #2

REFERENCE KEYNOTES

- 05 12 00 - STRUCTURAL STEEL FRAMING
- 05 17 00 - STEEL STAKES
- 05 40 00 - COLD-FORMED METAL FRAMING
- 05 50 00 - METAL FABRICATIONS
- 06 05 23 - WOOD, PLASTIC, AND COMPOSITE FASTENINGS
- 06 11 00 - WOOD FRAMING

SHEET KEYNOTES

1. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH 1 1/2" - 0.14" KNURLED SHANK - 5/16" dia. BUGLE HEAD NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
2. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH #8 PPSD SCREW AT 6" O.C. ON ALL SUPPORTED EDGES



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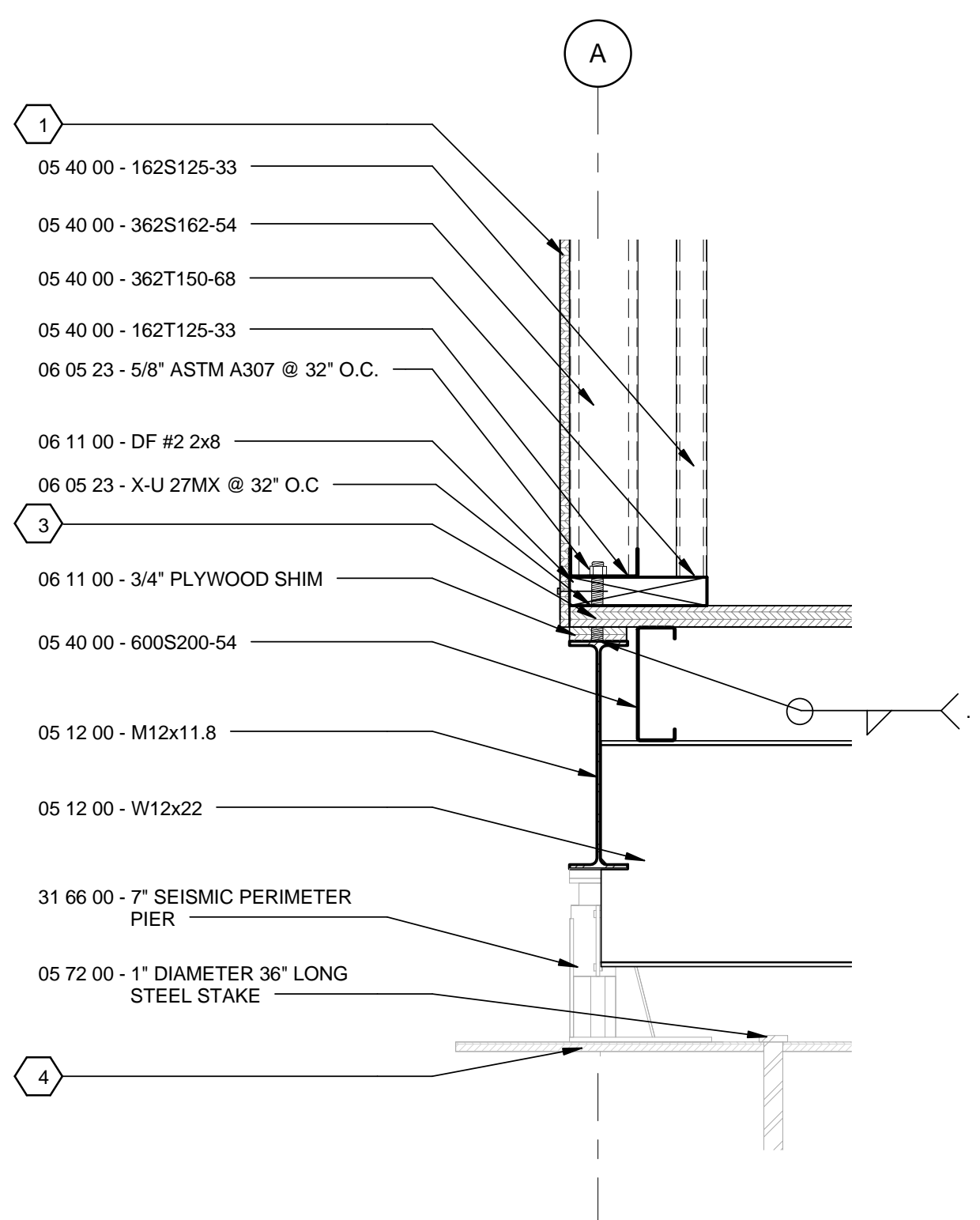


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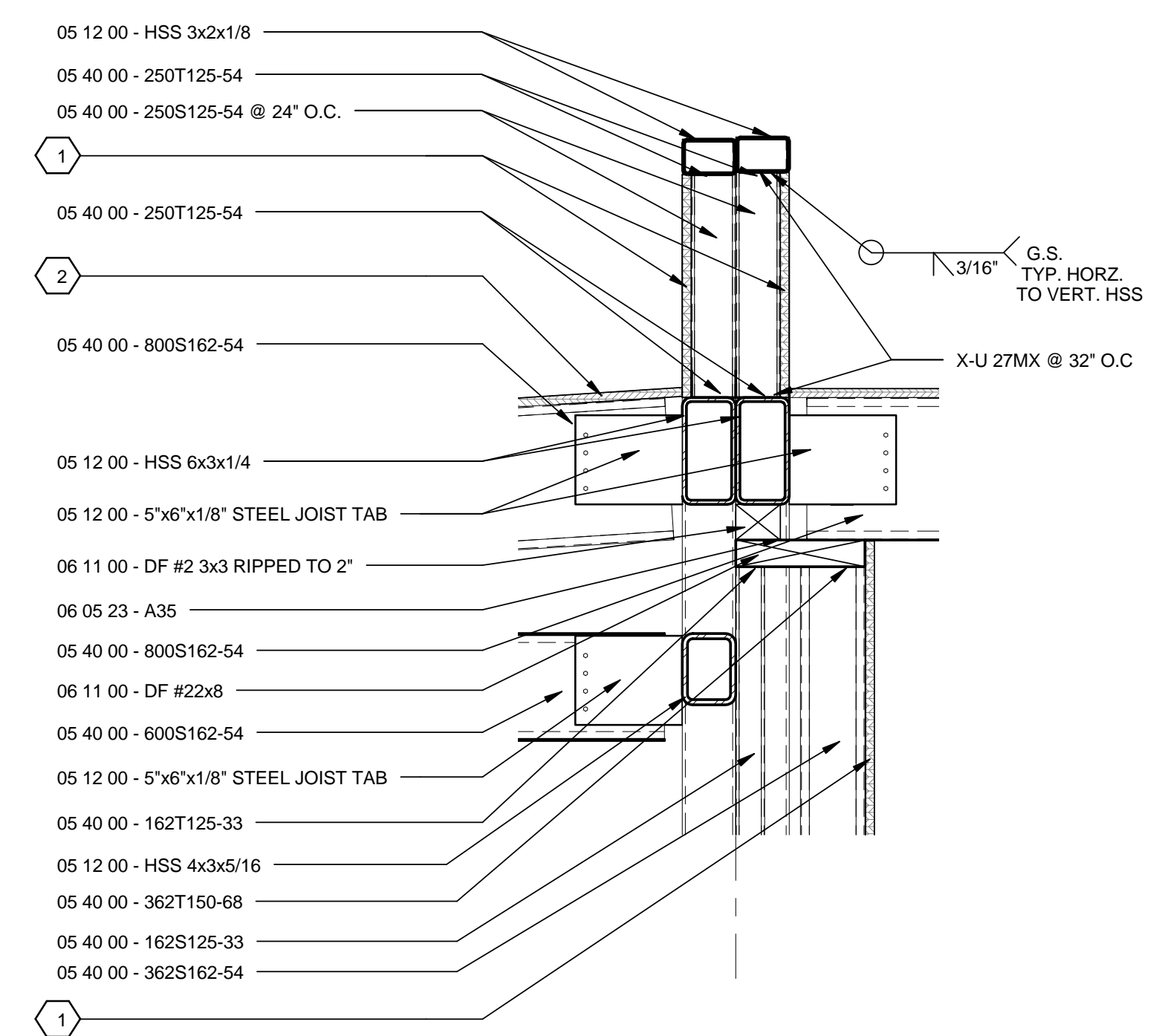
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SHEET TITLE: FRAMING DETAILS

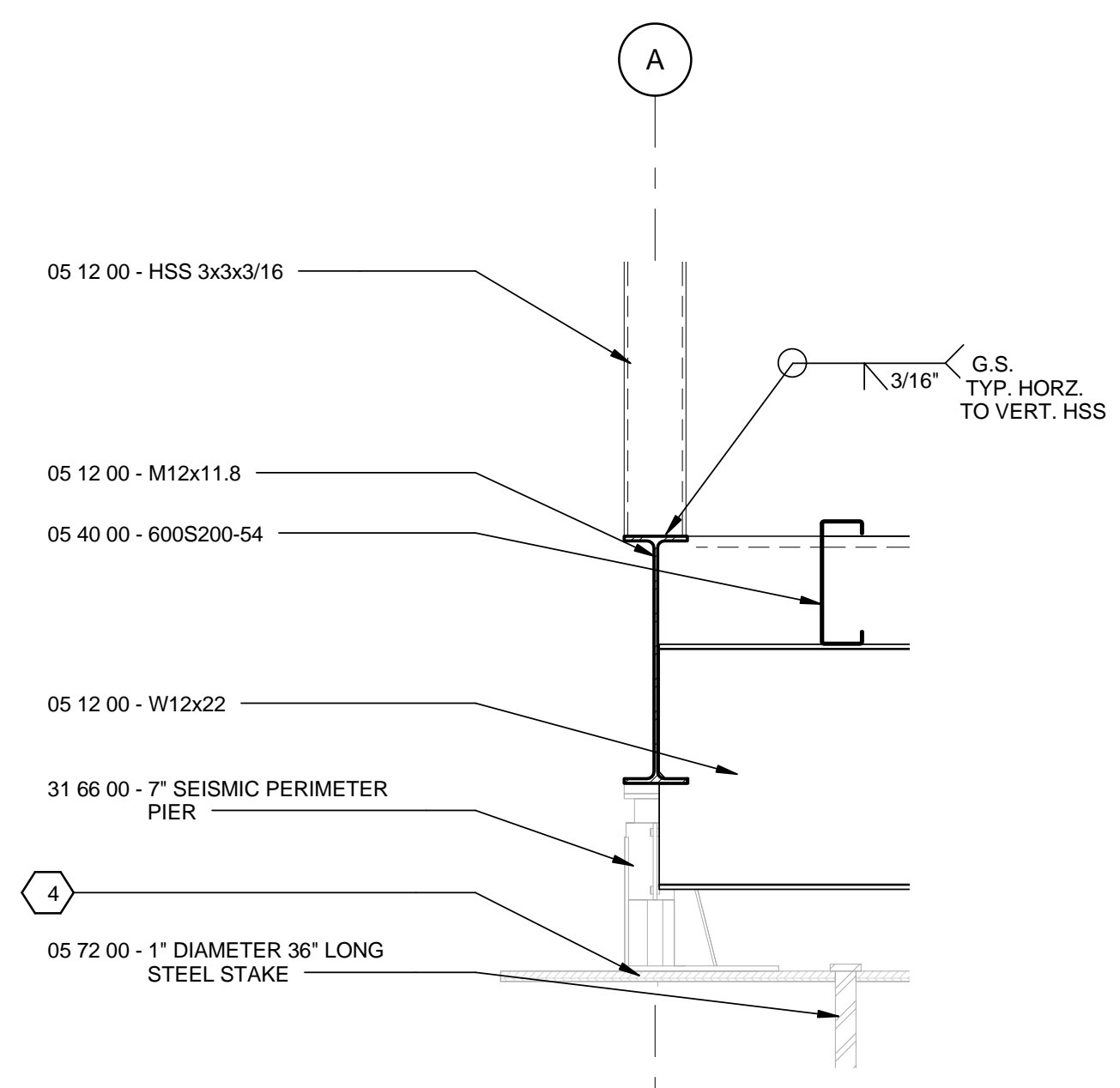
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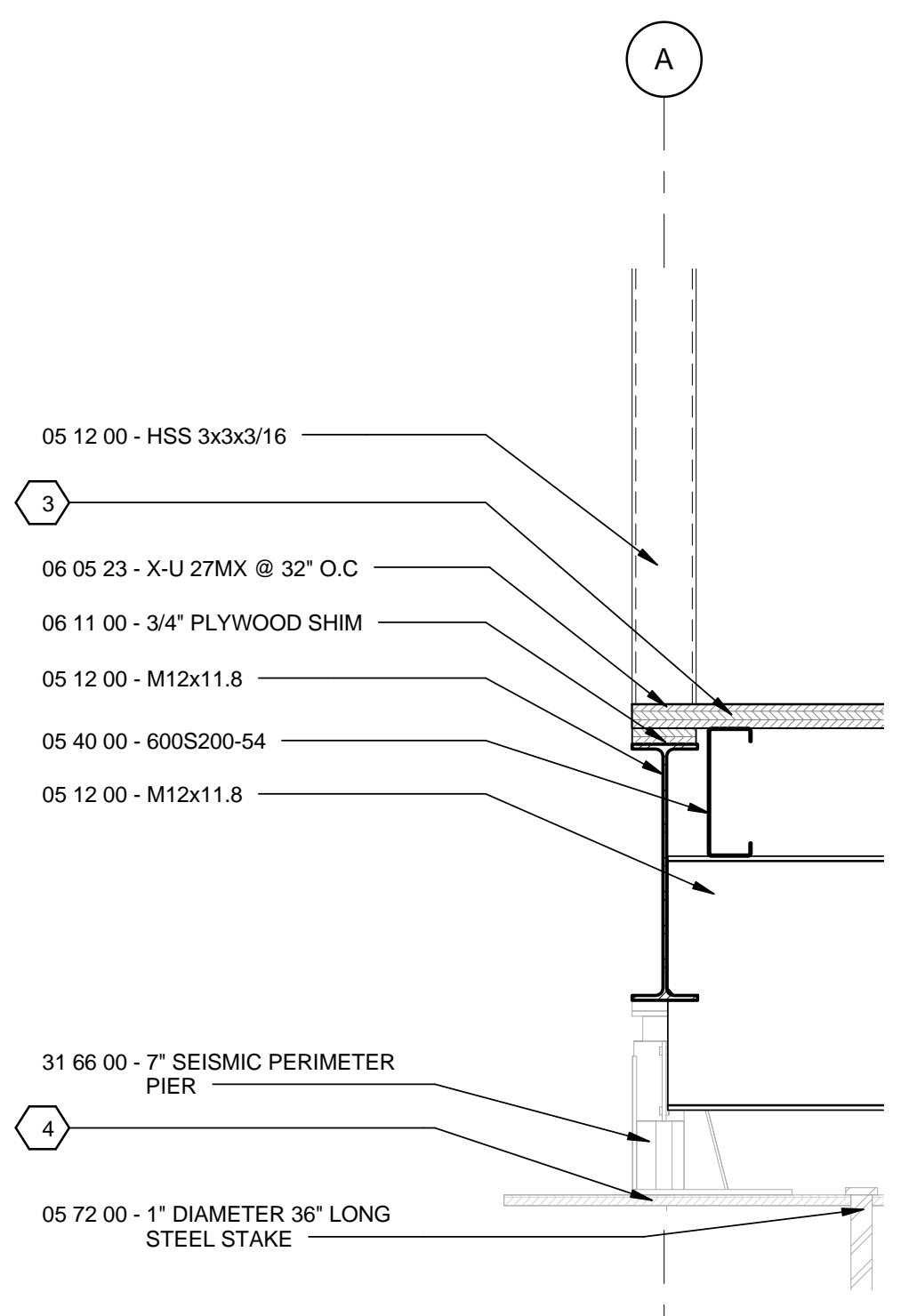
(C1) S. MODULE S. SHEAR WALL DETAIL LOW
1 1/2" = 1'-0"



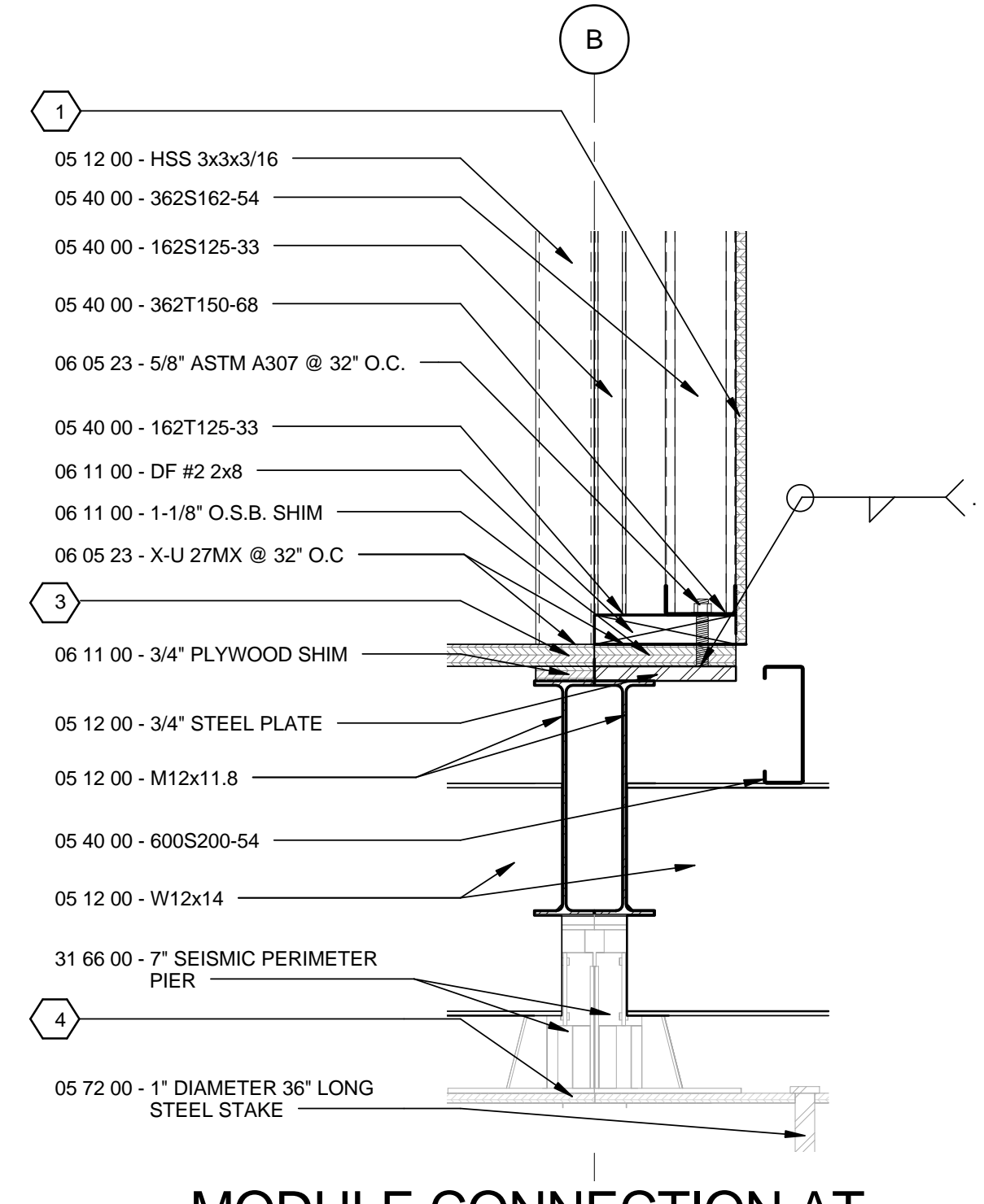
(C5) MODULE CONNECTION AT SHEAR WALL DETAIL HIGH
1 1/2" = 1'-0"



(A1) S. MODULE S. OVERHANG DETAIL LOW
1 1/2" = 1'-0"



(A3) S. MODULE S. BIFOLD DETAIL LOW
1 1/2" = 1'-0"



(A5) MODULE CONNECTION AT SHEAR WALL DETAIL LOW
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. UNLESS OTHERWISE NOTED, ALL WOOD FRAMING SHALL BE DOUGLAS-FIR LARCH #2

REFERENCE KEYNOTES

05 12 00 - STRUCTURAL STEEL FRAMING
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06 11 00 - WOOD FRAMING
31 66 00 - SPECIAL FOUNDATIONS

SHEET KEYNOTES

1. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH 1 1/2" - 0.14" KNURLED SHANK - 5/16" dia. BUGLE HEAD NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
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4. 1/2" PLY WOOD PAD



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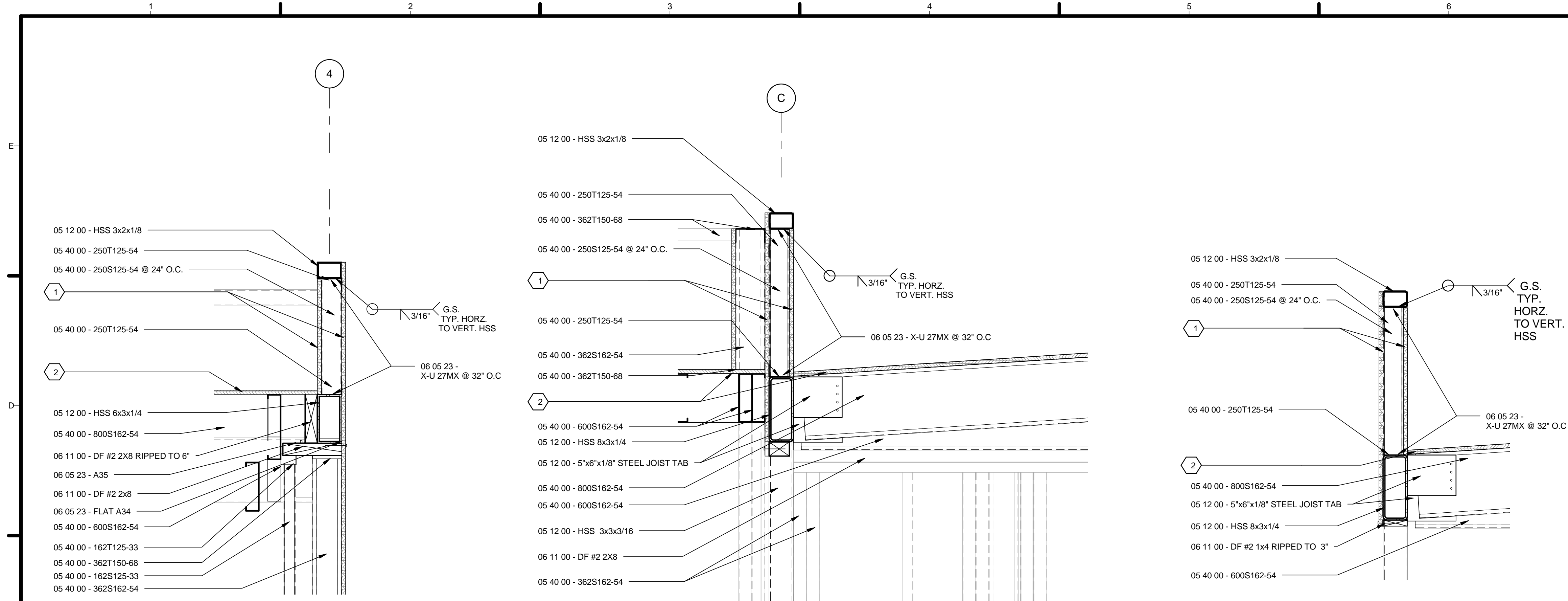


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SHEET TITLE
FRAMING DETAILS

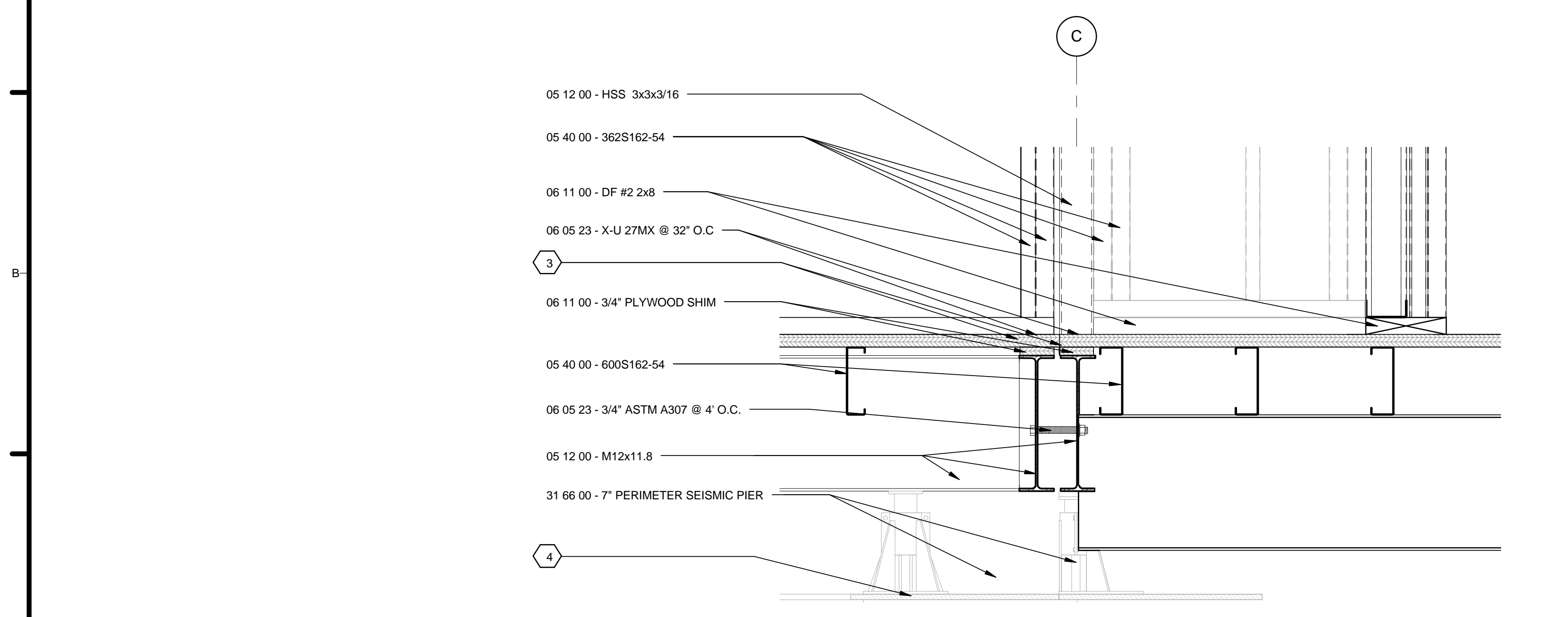
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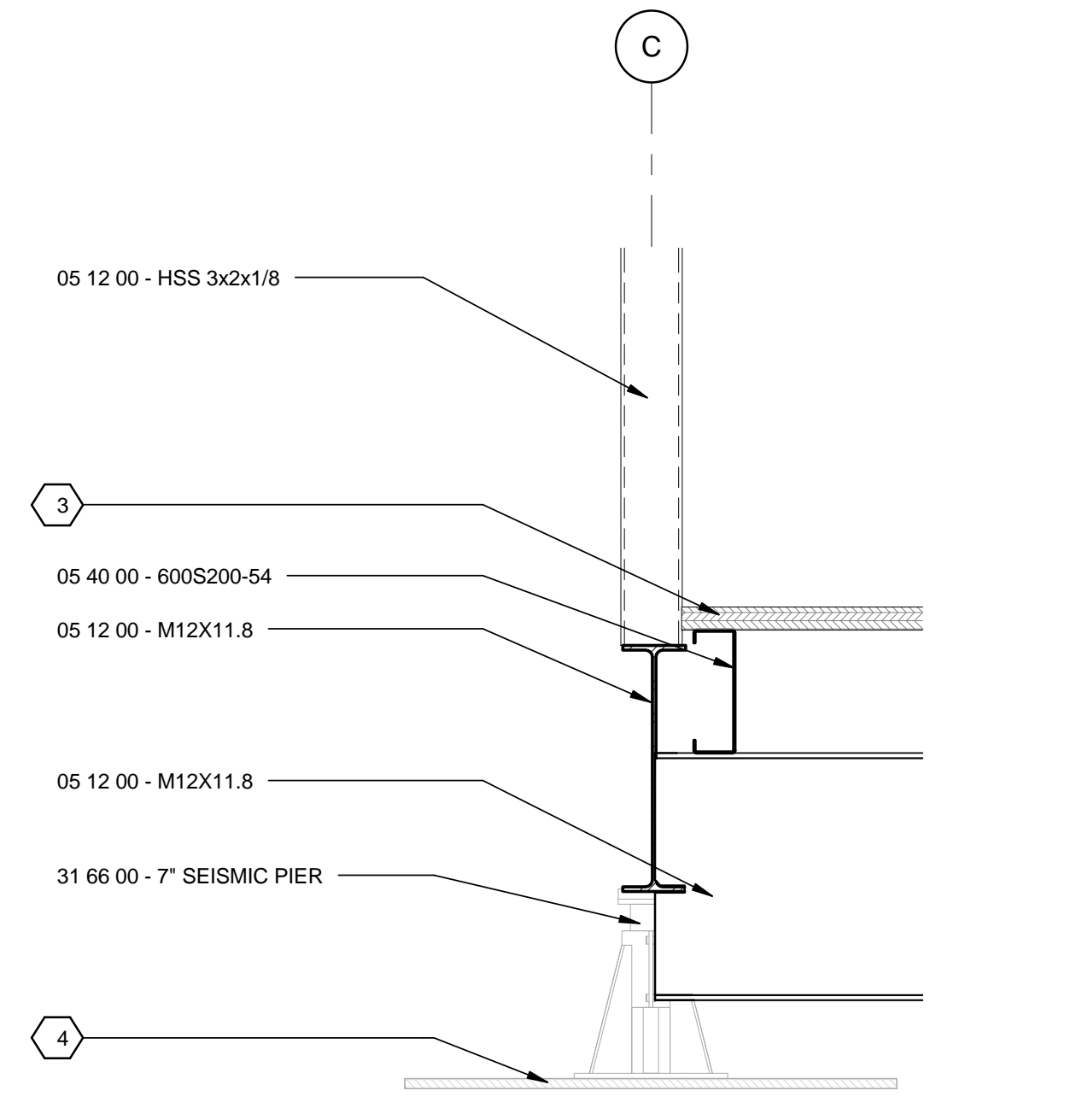
C1 N. MODULE EAST WALL DETAIL HIGH
 1 1/2" = 1'-0"

C3 N. MODULE MECH. CONNECTION DETAIL HIGH
 1 1/2" = 1'-0"

C5 N. MODULE NORTH WINDOW DETAIL HIGH
 1 1/2" = 1'-0"



A3 N. MODULE MECH. CONNECTION DETAIL LOW
 1 1/2" = 1'-0"



A5 N. MODULE NORTH WINDOW DETAIL LOW
 1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. UNLESS OTHERWISE NOTED, ALL WOOD FRAMING SHALL BE DOUGLAS-FIR LARCH #2

REFERENCE KEYNOTES

05 12 00 - STRUCTURAL STEEL FRAMING
 05 40 00 - COLD-FORMED METAL FRAMING
 06 05 23 - WOOD, PLASTIC, AND COMPOSITE FASTENINGS
 06 11 00 - WOOD FRAMING
 31 66 00 - SPECIAL FOUNDATIONS

SHEET KEYNOTES

- 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH 1 1/2" - 0.14" KNURLED SHANK - 5/16" dia. BUGLE HEAD NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
- 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH #8 PPSD SCREW AT 6" O.C. ON ALL SUPPORTED EDGES
- 1-1/8" T&G O.S.B FASTENED WITH #10 PPSD COLLATED SCREW AT 6" O.C.
- 1/2" PLY WOOD PAD



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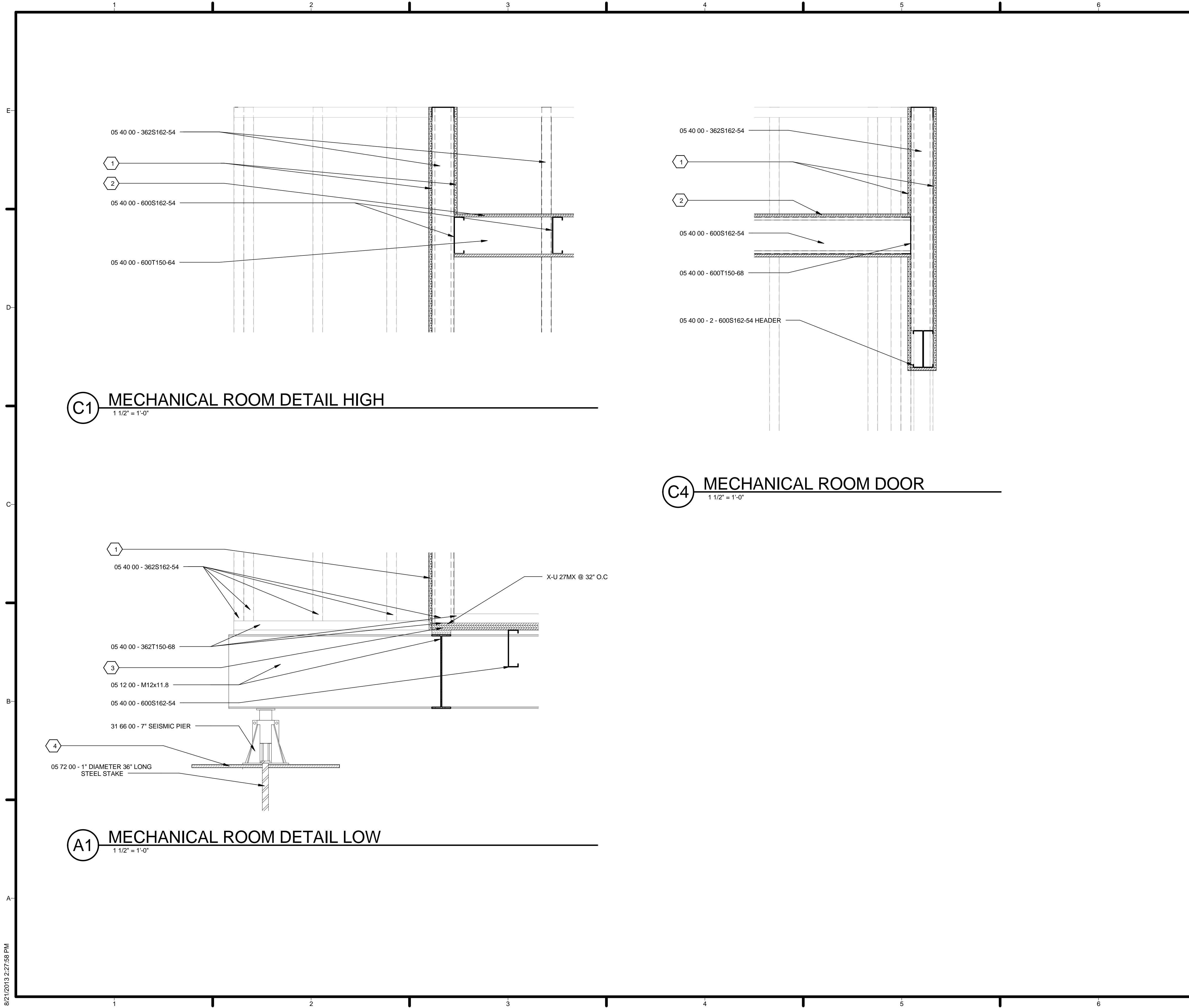


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
FRAMING DETAILS

S-514



GENERAL SHEET NOTES

1. UNLESS OTHERWISE NOTED, ALL WOOD FRAMING SHALL BE DOUGLAS-FIR LARCH #2

REFERENCE KEYNOTES

05 12 00 - STRUCTURAL STEEL FRAMING
 05 40 00 - COLD-FORMED METAL FRAMING
 05 72 00 - STEEL STAKES
 06 05 23 - WOOD, PLASTIC, AND COMPOSITE FASTENINGS
 06 11 00 - WOOD FRAMING
 31 66 00 - SPECIAL FOUNDATIONS

SHEET KEYNOTES

1. 15/32" APA RATED STRUCTURAL 1 PLYWOOD FASTENED WITH 1 1/2" - 0.14" KNURLED SHANK - 5/16" dia. BUGLE HEAD NAIL AT 6" O.C. AT PANEL EDGES AND 12" O.C. IN PANEL FIELD.
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4. 1/2" PLY WOOD PAD



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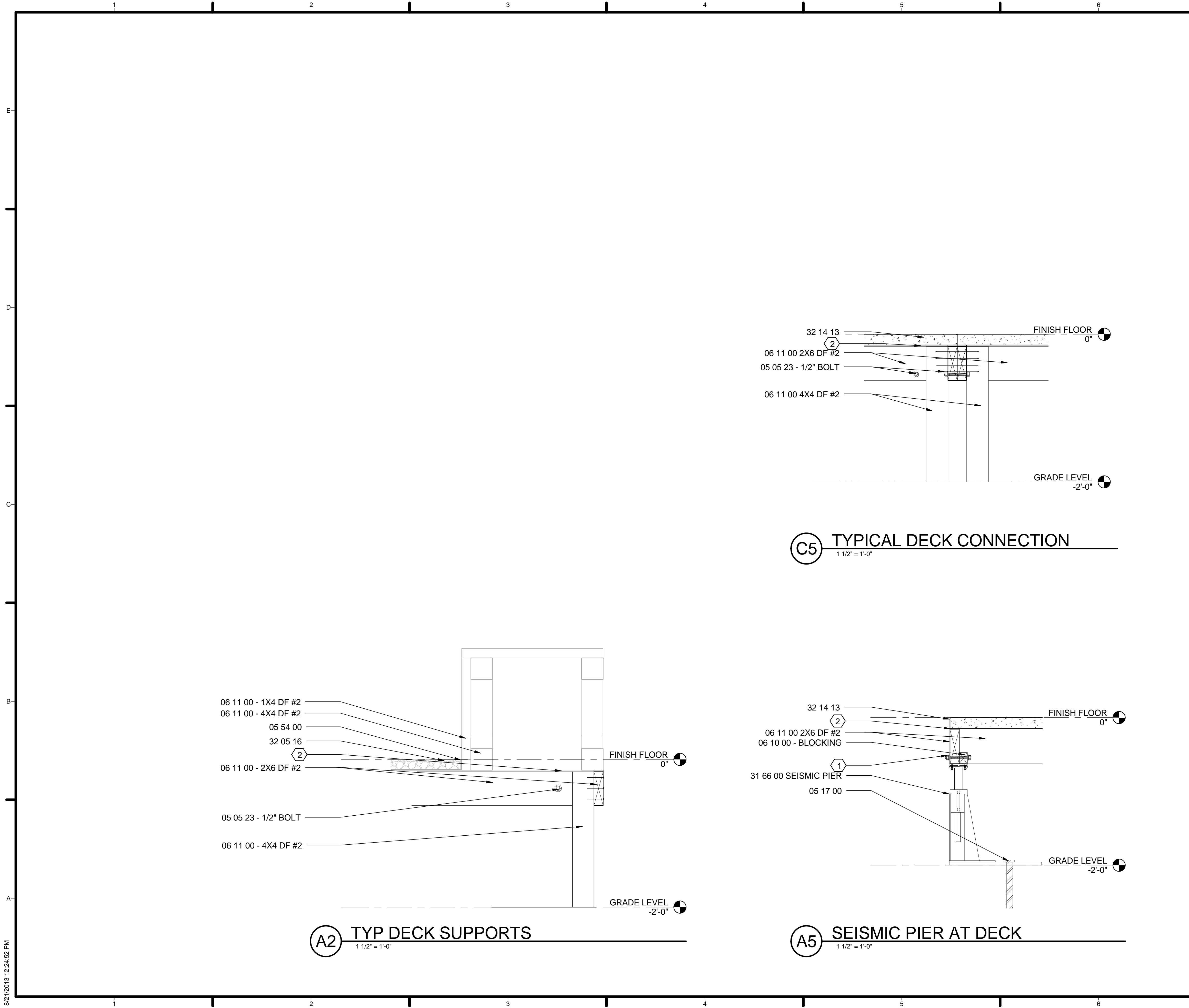
SHEET TITLE
EXTERIOR STRUCTURES FRAMING DETAILS

S-515

C1 MECHANICAL ROOM DETAIL HIGH
 1 1/2" = 1'-0"

C4 MECHANICAL ROOM DOOR
 1 1/2" = 1'-0"

A1 MECHANICAL ROOM DETAIL LOW
 1 1/2" = 1'-0"



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 05 23 - WOOD FASTENERS
- 05 17 00 - TENT STAKE
- 05 54 00 - PERFORATED METAL PAN
- 06 10 00 - BLOCKING
- 06 11 00 - WOOD FRAMING
- 31 66 00 - CENTRAL PIERS
- 32 05 16 - RIVER ROCK
- 32 14 13 - 24" x 24" x 2" GFRC PAVER

SHEET KEYNOTES

1. L BRACKETS BOLTED TO PIER WITH 1/2" BOLT
2. 1/4" NEOPRENE PAD



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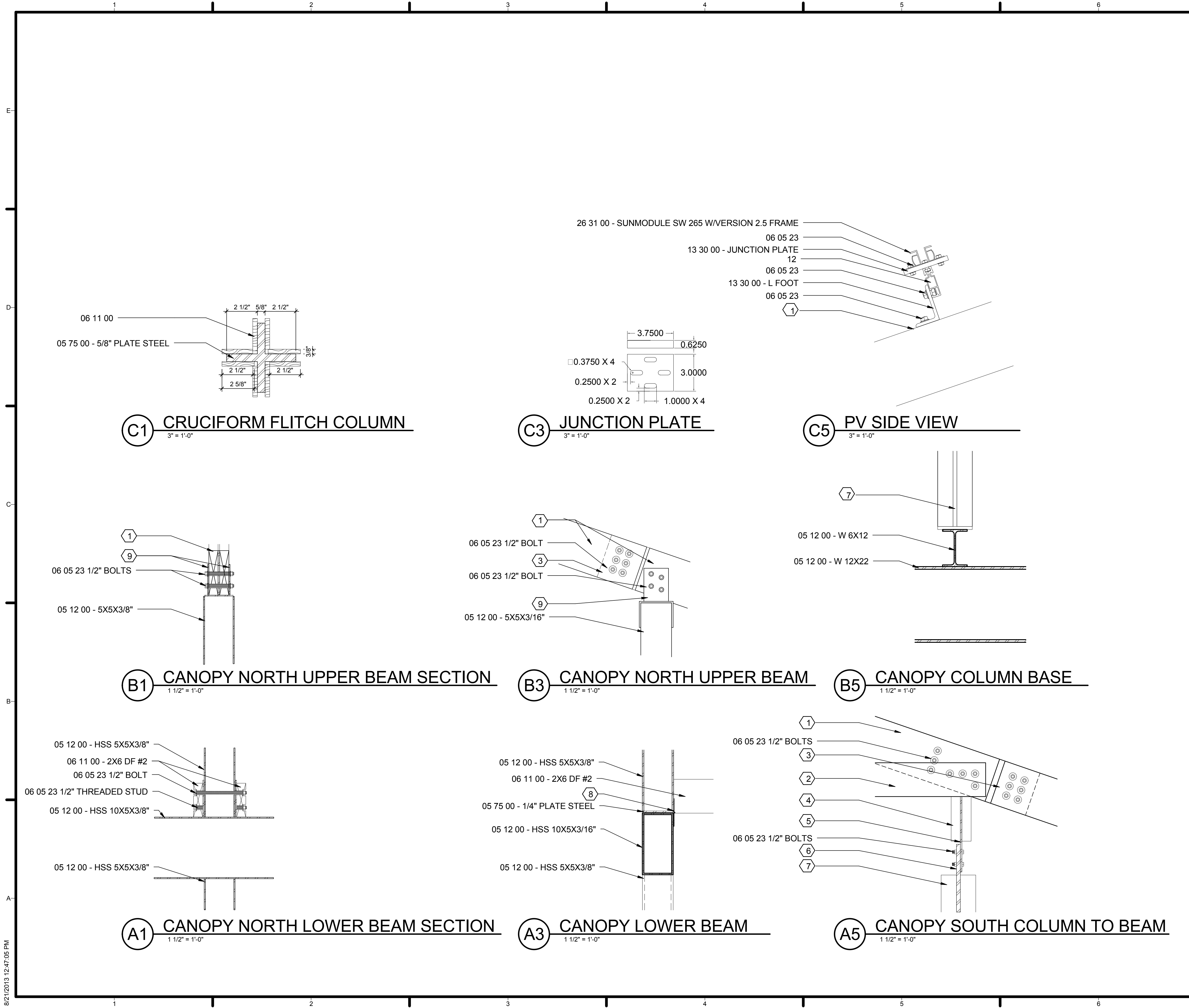
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03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 DECK DETAILS

S-521

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C1 CRUCIFORM FLITCH COLUMN
3" = 1'-0"

C3 JUNCTION PLATE
3" = 1'-0"

C5 PV SIDE VIEW
3" = 1'-0"

B1 CANOPY NORTH UPPER BEAM SECTION
1 1/2" = 1'-0"

B3 CANOPY NORTH UPPER BEAM
1 1/2" = 1'-0"

B5 CANOPY COLUMN BASE
1 1/2" = 1'-0"

A1 CANOPY NORTH LOWER BEAM SECTION
1 1/2" = 1'-0"

A3 CANOPY LOWER BEAM
1 1/2" = 1'-0"

A5 CANOPY SOUTH COLUMN TO BEAM
1 1/2" = 1'-0"

GENERAL SHEET NOTES

1. CANOPY STRUCTURE CONSISTS OF A FLITCH BEAM SYSTEM WHICH IS BOLTED AT ALL JOINTS AND TRANSITIONS BETWEEN CONTINUOUS PIECES. ALL STEEL IS EITHER WELDED OR LAPS AT BOLTED CONNECTIONS. THE BEAMS THAT RUN EAST/WEST ARE CONTINUOUS AND PART OF A RIGID FRAME. WHILE THE BEAMS THAT RUN NORTH/SOUTH ARE BROKEN AT THE CANTILEVERS IN ORDER TO FIT WITHIN A SHIPPABLE WIDTH. THESE BEAMS ARE ALSO HINGED AT THE SOUTH END TO ALLOW THEM TO LAY FLAT DURING TRAVEL AND FIT WITHIN A SHIPPABLE HEIGHT.

REFERENCE KEYNOTES

- 05 12 00 - STRUCTURAL STEEL
- 05 17 00 - TENT STAKE
- 05 75 00 - PLATE STEEL
- 06 05 23 - WOOD FASTENERS
- 06 11 00 - WOOD FRAMING
- 13 30 00 - UNIRAC SYSTEM
- 26 31 00 - PHOTOVOLTAIC COLLECTORS
- 31 66 00 - CENTRAL PIERS

SHEET KEYNOTES

1. FLITCH BEAM COMPRISED OF 2 - 2X8 DF #2 W/ 1/4" PLATE STEEL
2. 2X6 DF #2 SITTING ON EITHER SIDE OF HINGING FLITCH BEAM
3. PLATE STEEL FROM SPANNING FLITCH BEAM LAPS INTO CANTILEVERED FLITCH BEAM TO ALLOW FOR HINGING DURING TRANSPORTATION
4. FLITCH BEAM COMPRISED OF 2 - 2X8 DF #2 W/ 1/4" PLATE STEEL
5. STEEL PLATE TAB EXTENDS DOWN TO ACCEPT COLUMN
6. PARALLEL FLANGE OF CRUCIFORM COLUMN EXTENDS TO ACCEPT BEAM
7. FLITCH COLUMN COMPRISED OF 5/8" THICK CRUCIFORM PLATE STEEL SANDWICHED WITH 1/2" WOOD EPOXIED
8. GRAINGER BATTALION WELDED HINGE FOR DECONSTRUCTED TRANSPORTATION
9. WELDED SADDLE TO ACCEPT FLITCH BEAM



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01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
CANOPY DETAILS

S-522

GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 75 00 - ARCHITECTURAL METAL WORK
 06 11 00 - WOOD FRAMING
 06 73 00 - COMPOSITE DECKING
 32 94 33A - CANVAS

SHEET KEYNOTES



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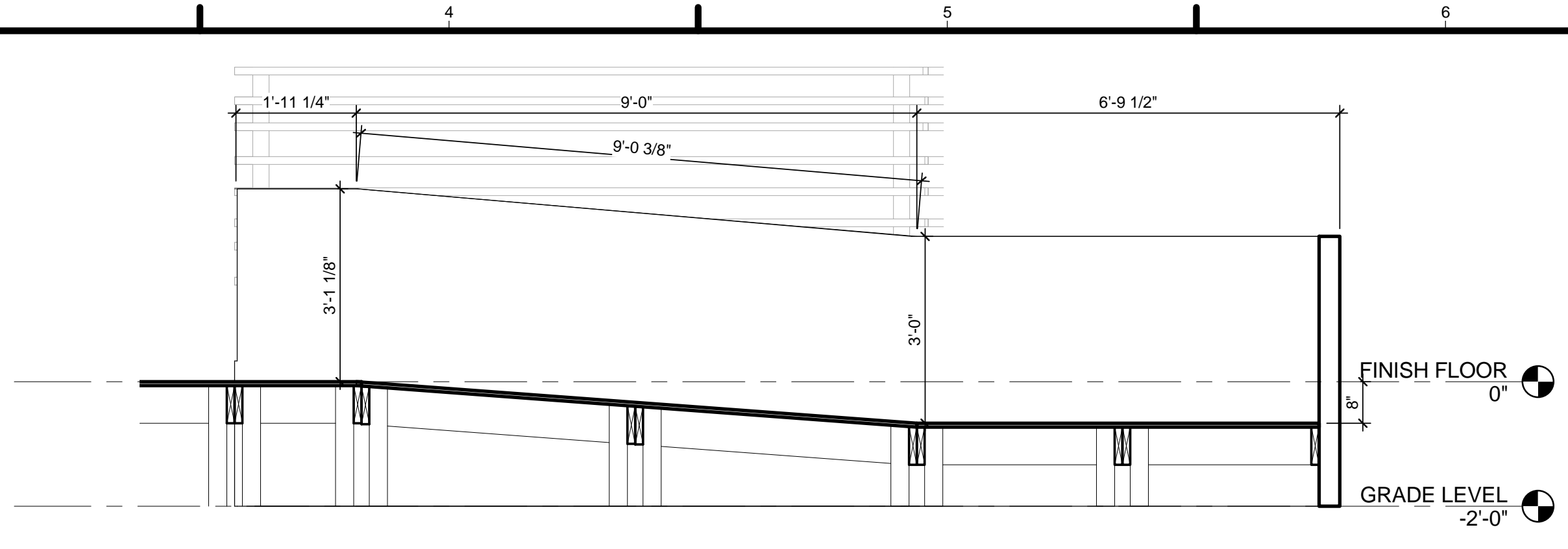
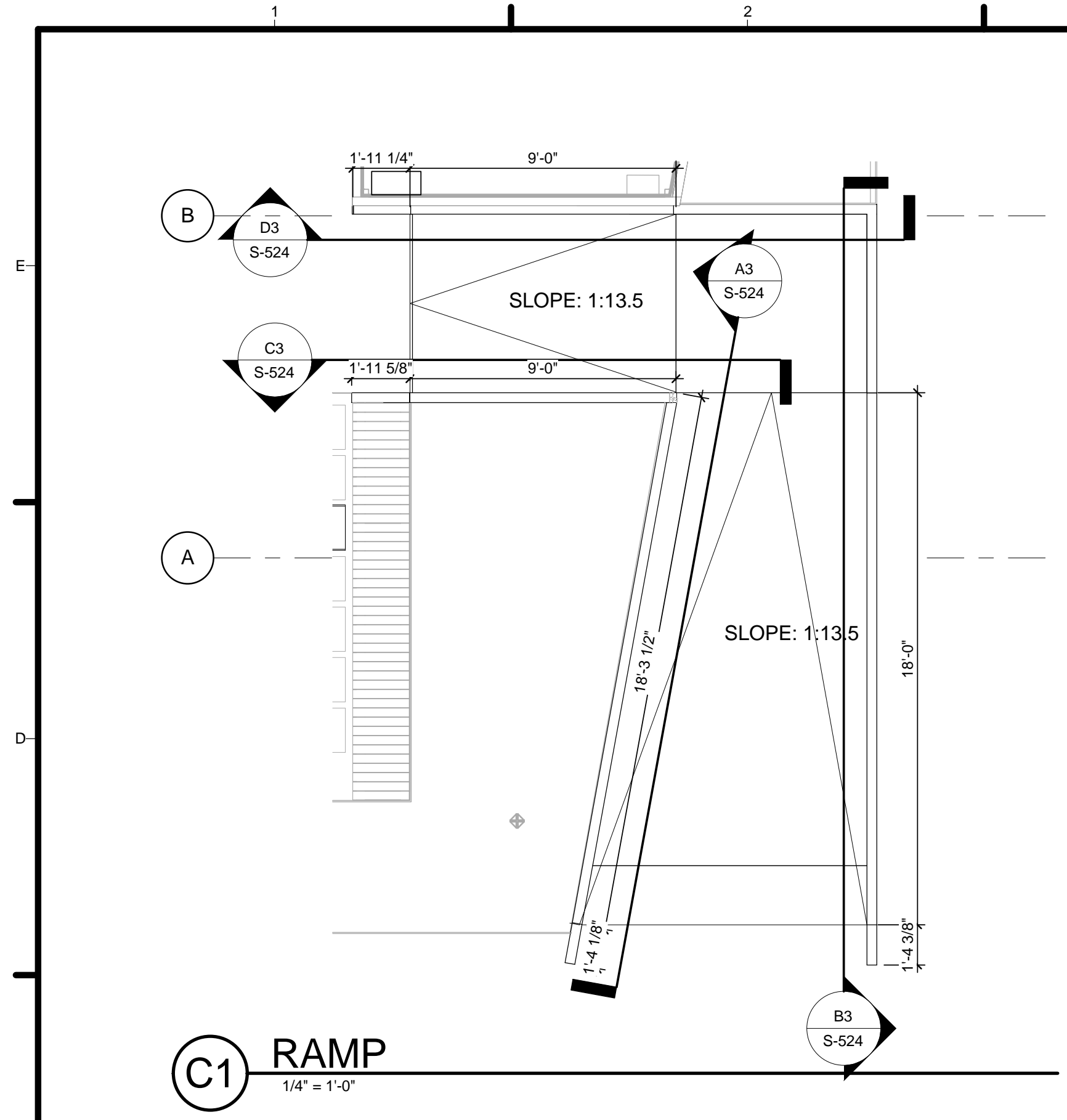
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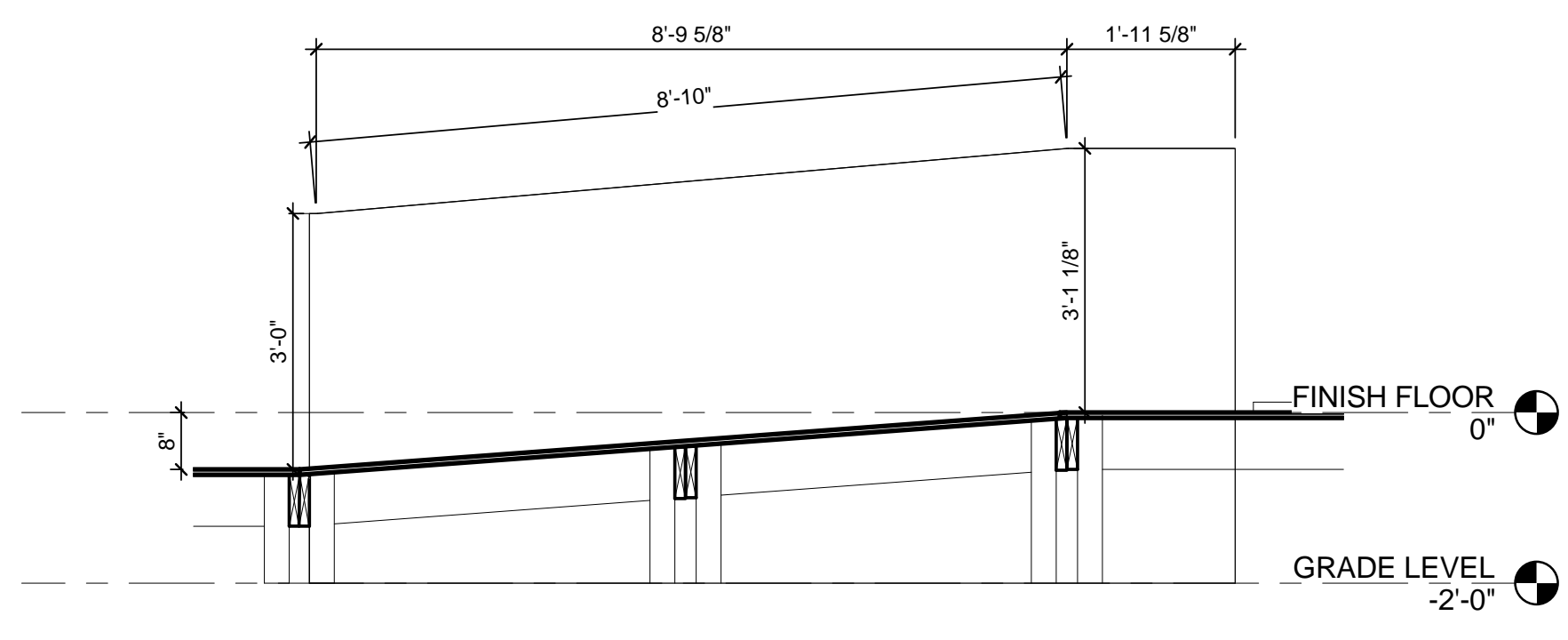
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RAMP DETAILS

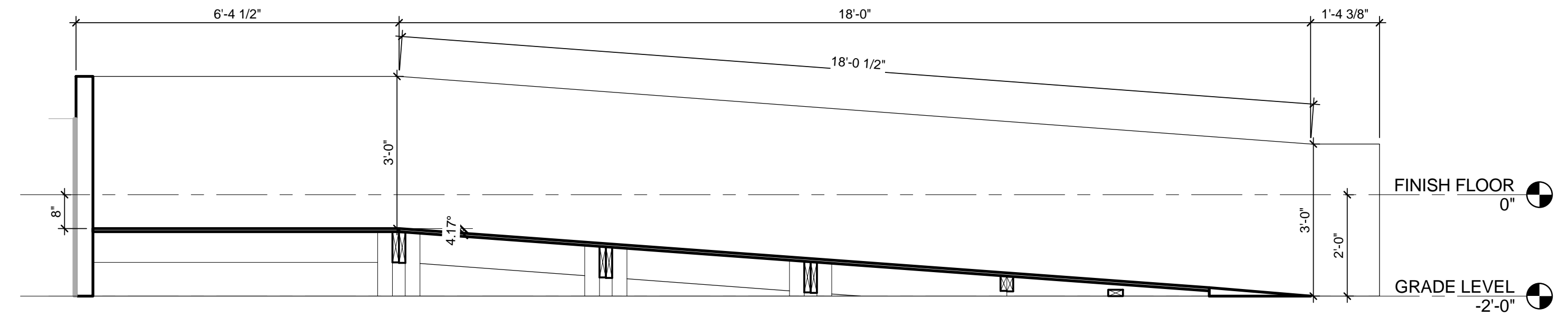
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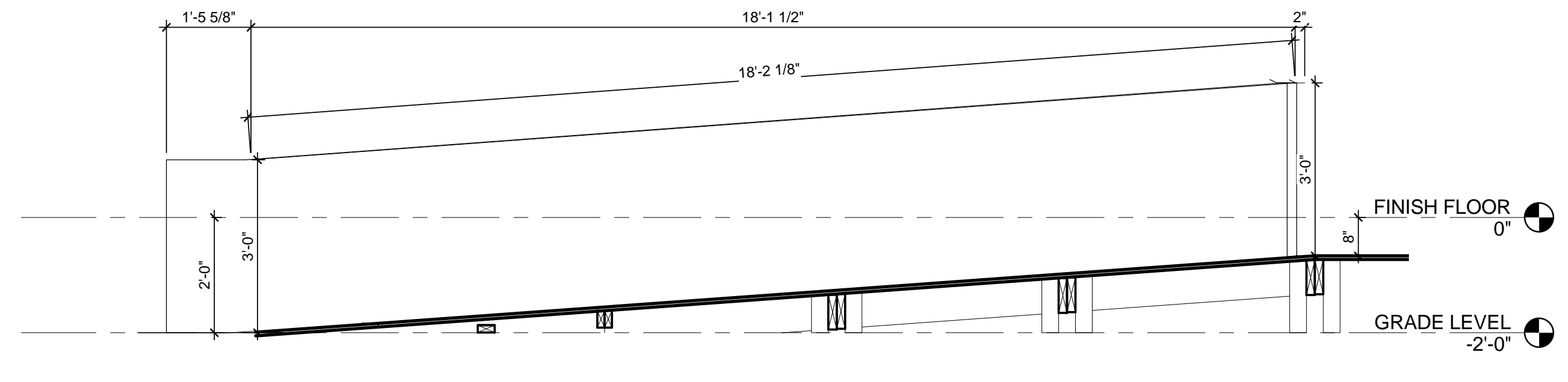
D3 SHORT RAMP SECTION NORTH
 1/2" = 1'-0"



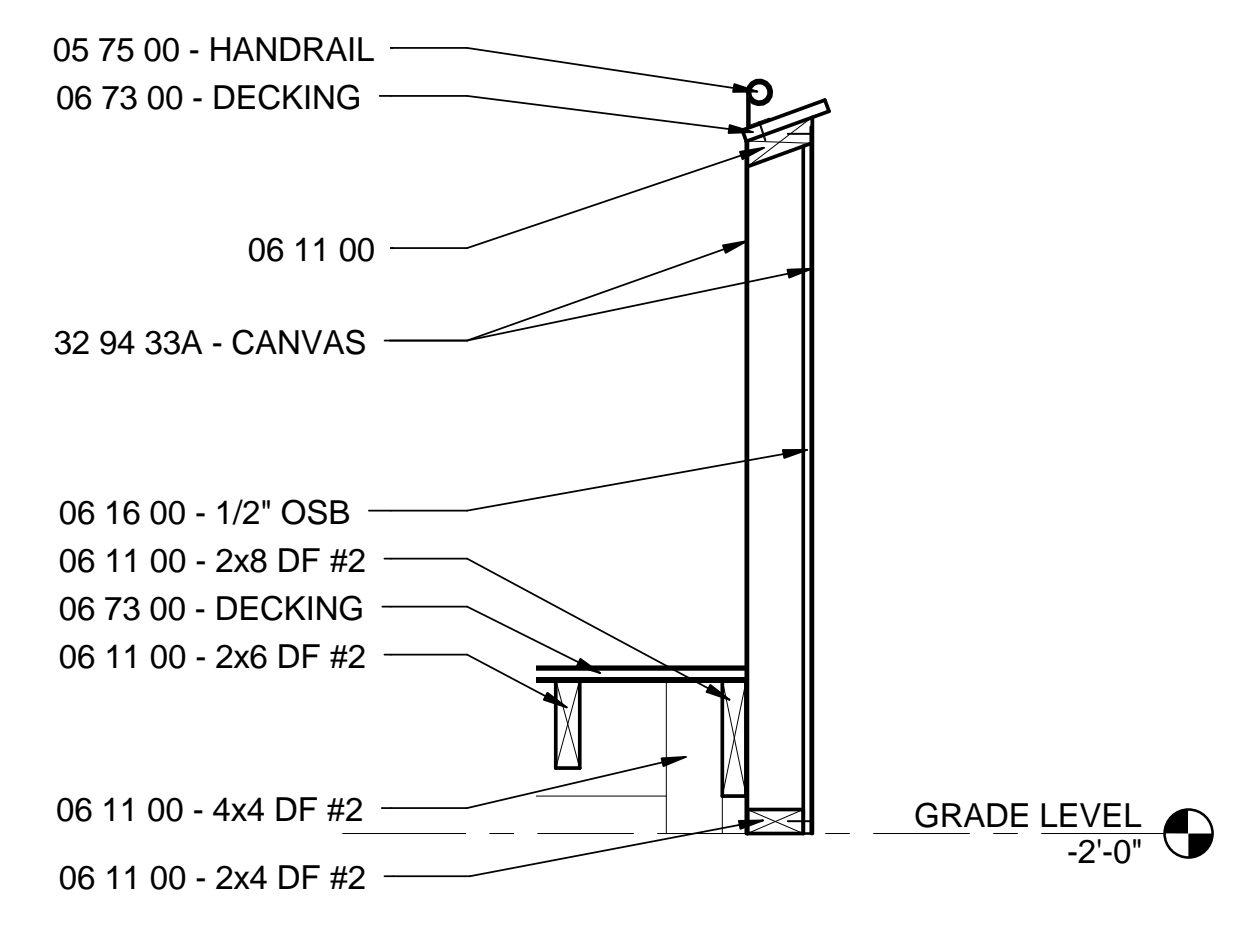
C3 SHORT RAMP SECTION SOUTH
 1/2" = 1'-0"



B3 LONG RAMP SECTION EAST
 1/2" = 1'-0"



A3 LONG RAMP SECTION WEST
 1/2" = 1'-0"



A1 TYP HAND RAIL WALL DETAIL
 1" = 1'-0"

GENERAL SHEET NOTES

- ALL BOLT HOLES ARE 9/16" DIAMETER
 - 1/4" PLATE STEEL ON EITHER SIDE OF UPPER COLUMNS HOLDS WOOD IN PLACE DURING TRANSPORT, AND PINS THE COLUMNS IN PLACE WHILE CONSTRUCTED.



REFERENCE KEYNOTES

05 12 00 - STRUCTURAL STEEL
 05 75 00 - PLATE STEEL
 06 05 23 - WOOD FASTENERS
 06 11 00 - WOOD FRAMING

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SHEET KEYNOTES

1. 9/16" HOLE FOR 1/2" BOLT

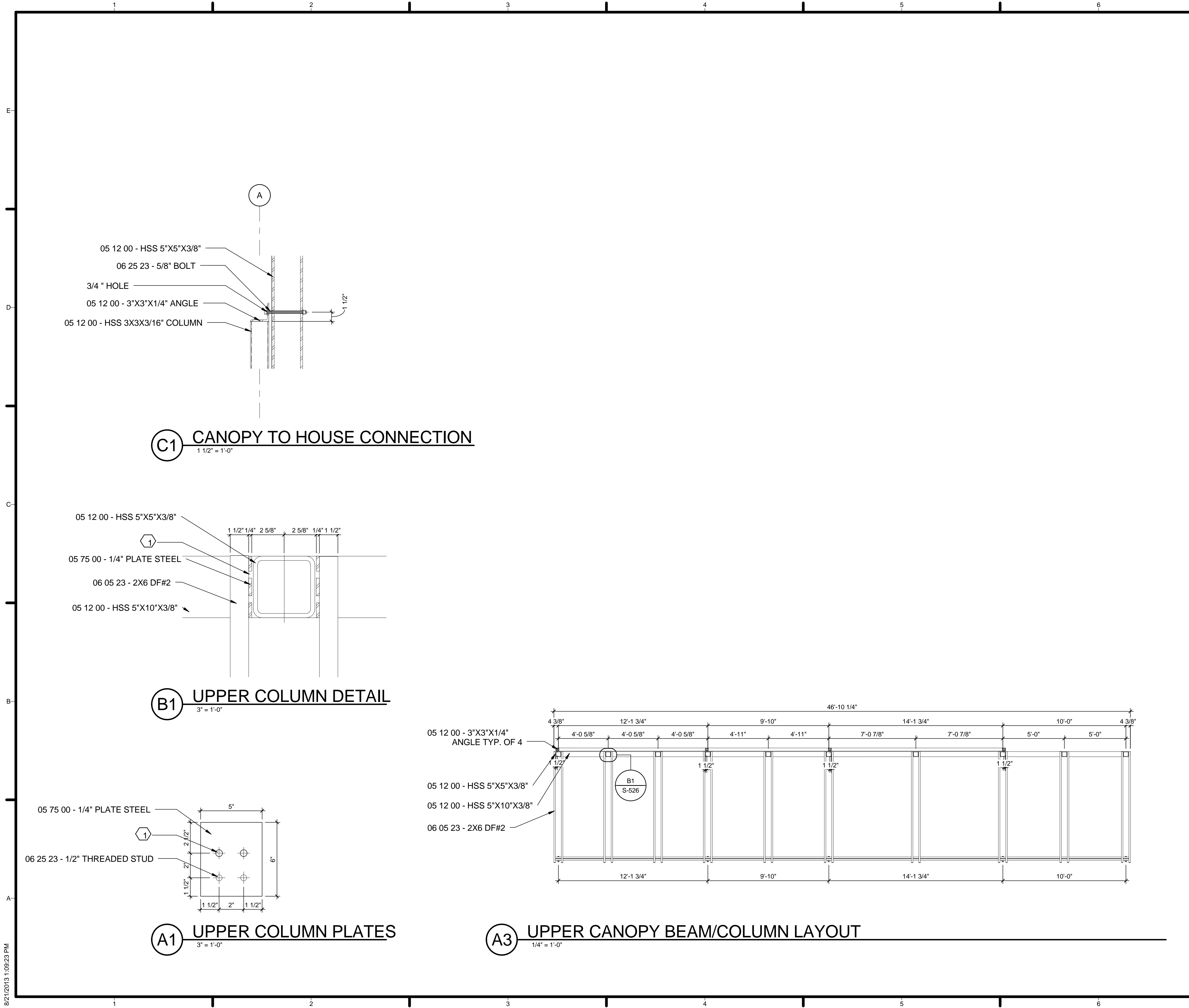
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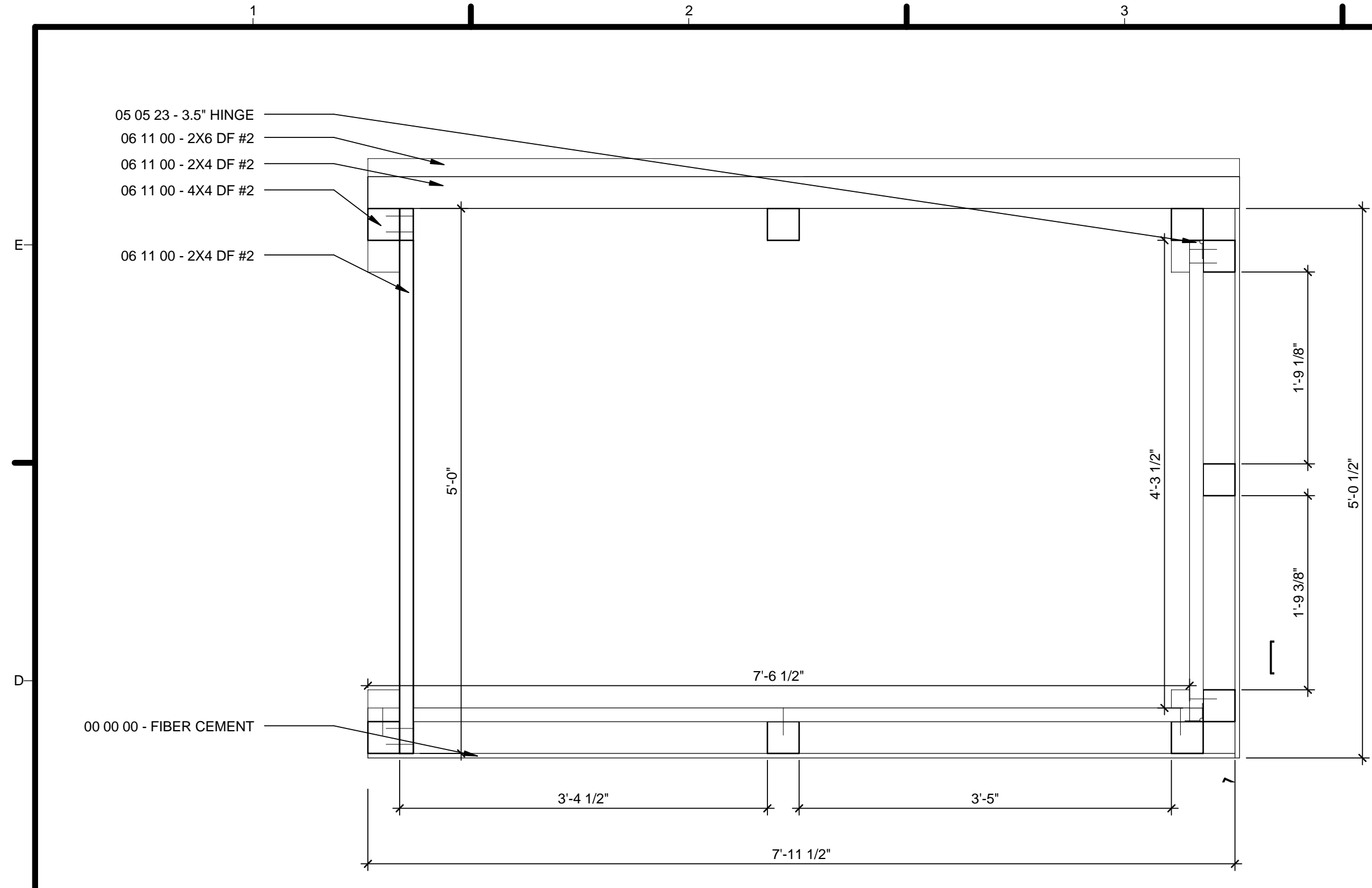
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CANOPY COMPONENTS

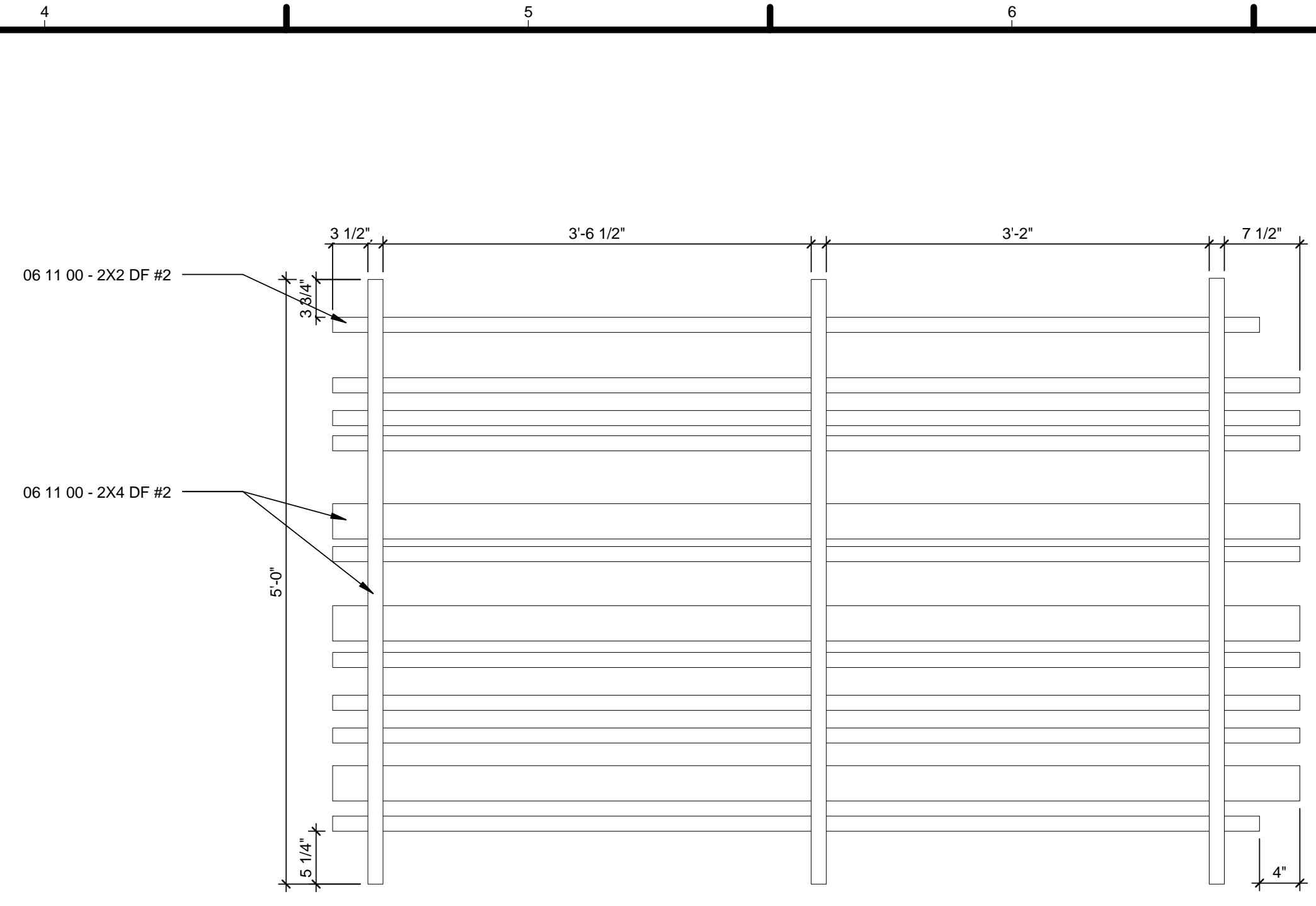
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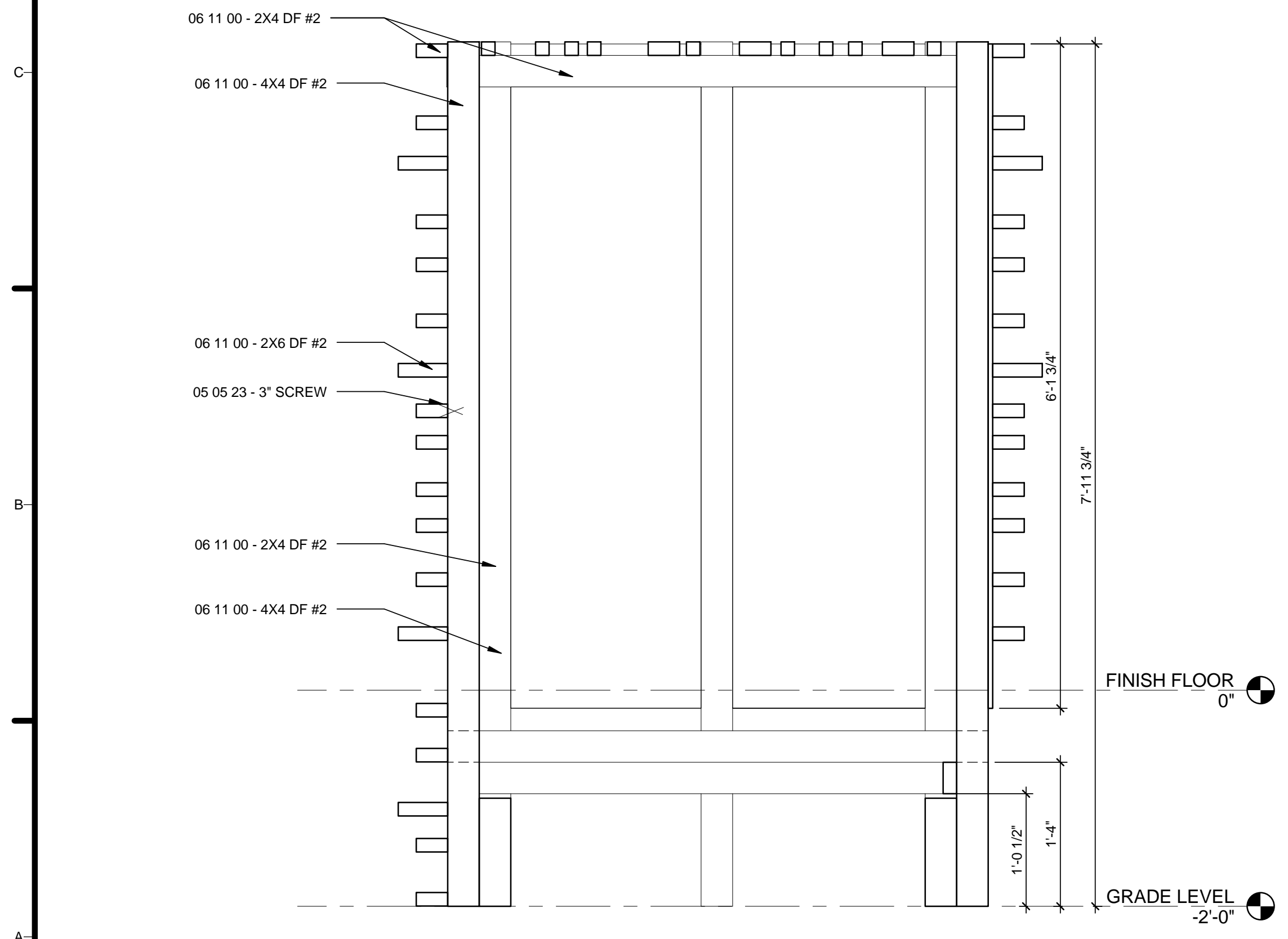
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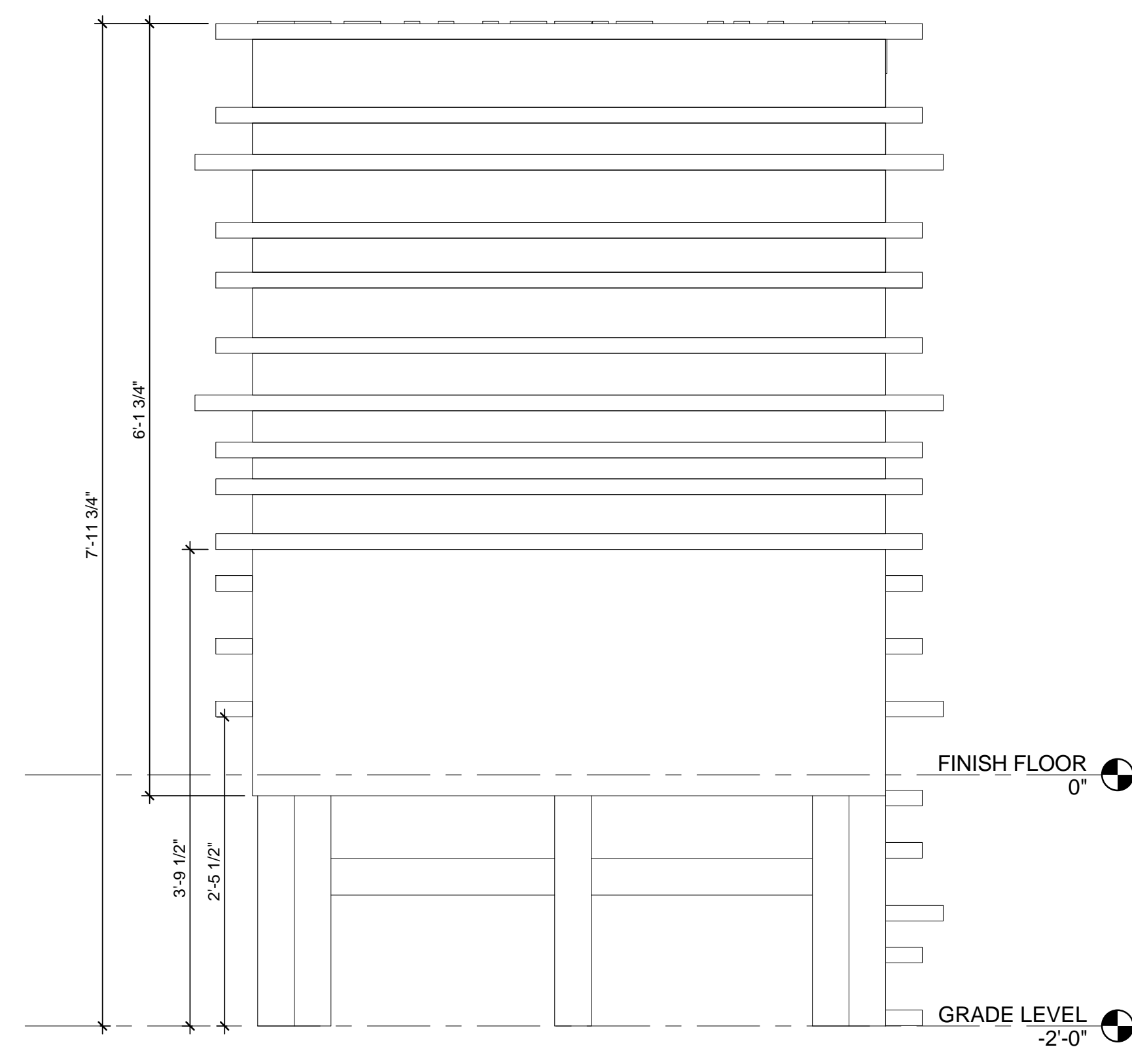
C1 CHILLER BOX PLAN
1" = 1'-0"



C5 CHILLER RCP
1" = 1'-0"



A1 CHILLER WEST ELEVATION
1" = 1'-0"



A5 CHILLER EAST ELEVATION
1" = 1'-0"



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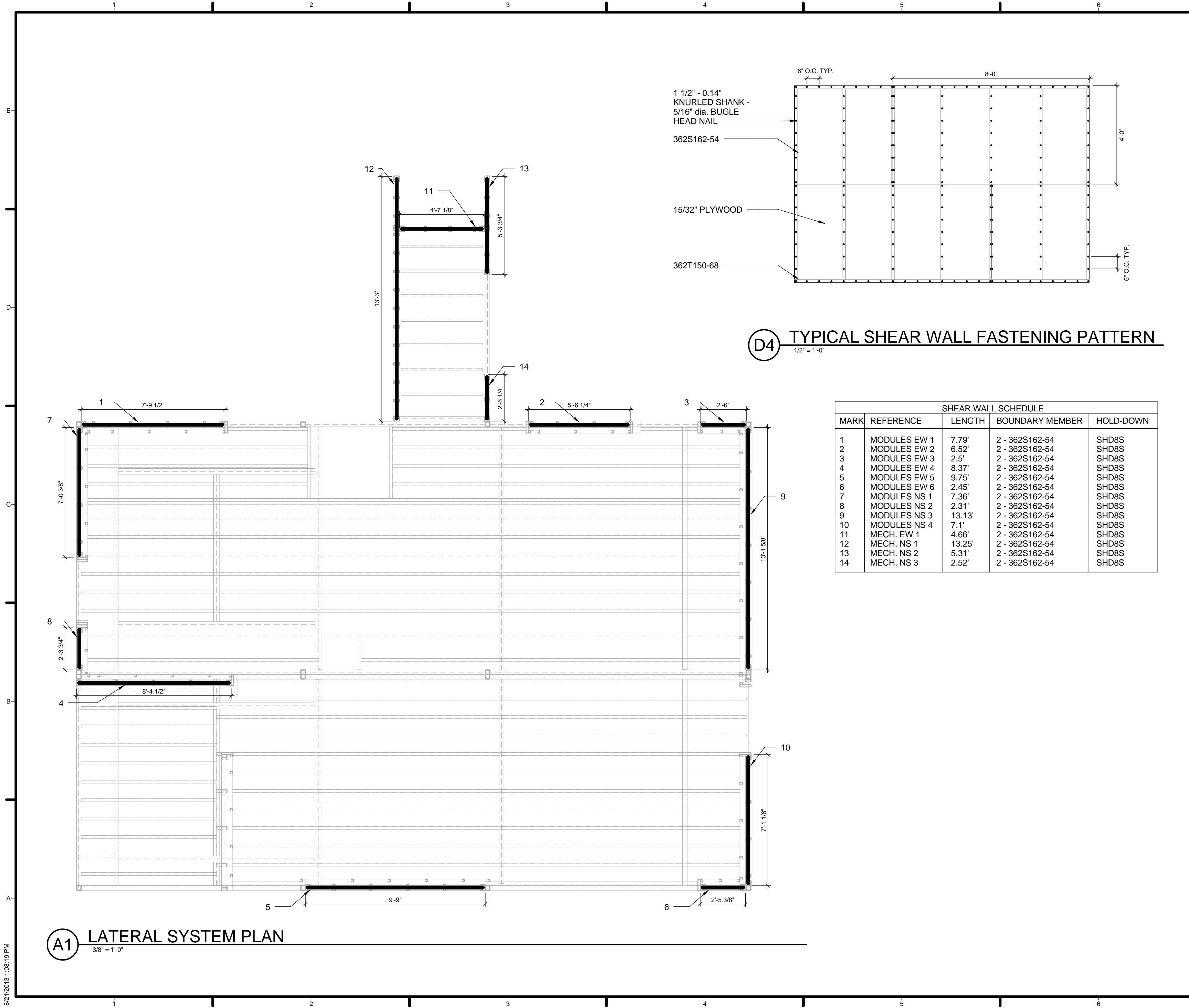


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SHEET TITLE
CHILLER BOX

S-530



GENERAL SHEET NOTES

1. REFER TO STRUCTURAL CALCULATIONS FOR SPECIFIC BRACING REQUIREMENTS



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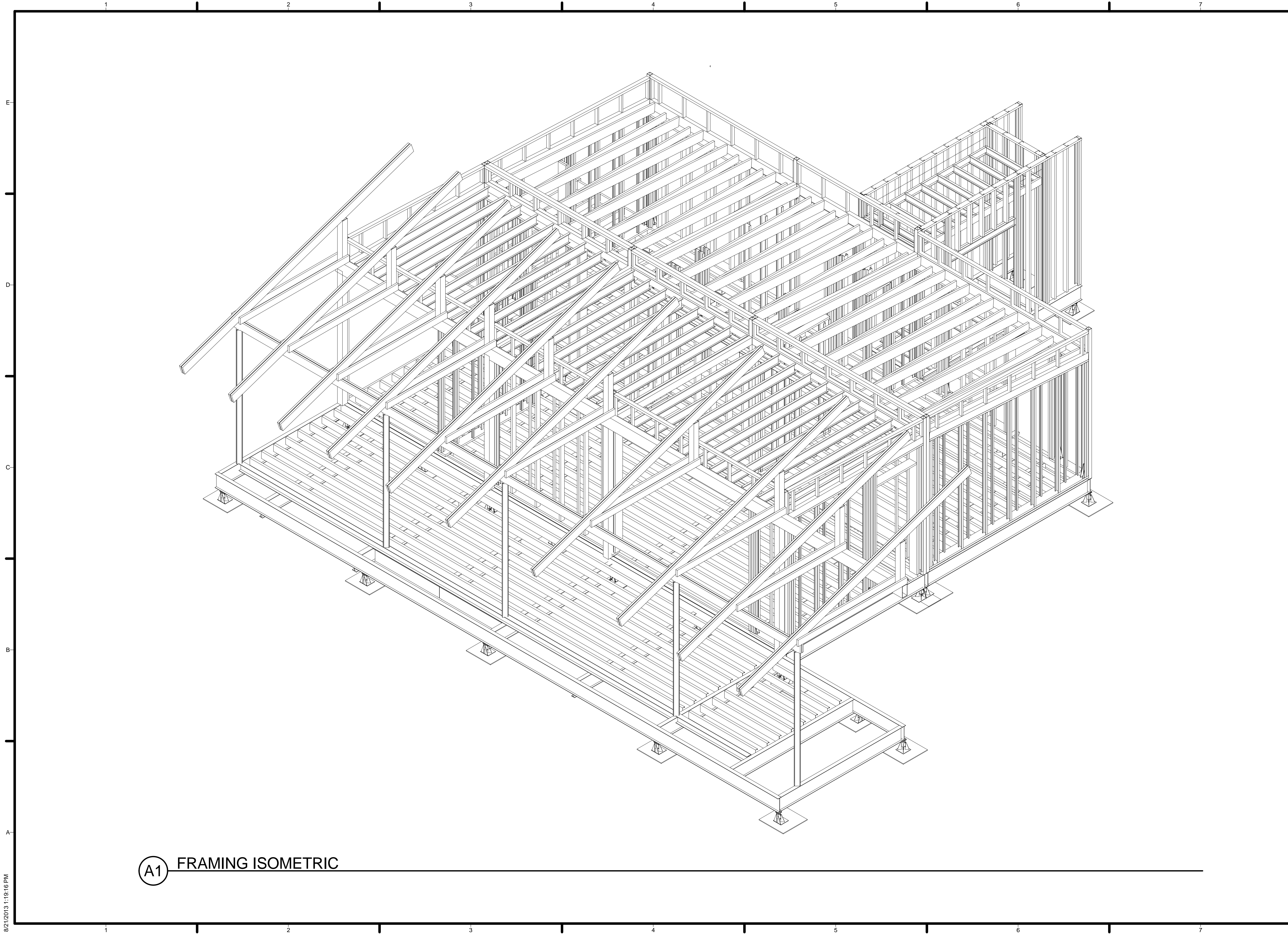


SHEAR WALL SCHEDULE				
MARK	REFERENCE	LENGTH	BOUNDARY MEMBER	HOLD-DOWN
1	MODULES EW 1	7.79'	2 - 362S162-54	SHD8S
2	MODULES EW 2	6.52'	2 - 362S162-54	SHD8S
3	MODULES EW 3	2.5'	2 - 362S162-54	SHD8S
4	MODULES EW 4	8.37'	2 - 362S162-54	SHD8S
5	MODULES EW 5	9.75'	2 - 362S162-54	SHD8S
6	MODULES EW 6	2.45'	2 - 362S162-54	SHD8S
7	MODULES NS 1	7.36'	2 - 362S162-54	SHD8S
8	MODULES NS 2	2.31'	2 - 362S162-54	SHD8S
9	MODULES NS 3	13.13'	2 - 362S162-54	SHD8S
10	MODULES NS 4	7.1'	2 - 362S162-54	SHD8S
11	MECH. EW 1	4.66'	2 - 362S162-54	SHD8S
12	MECH. NS 1	13.25'	2 - 362S162-54	SHD8S
13	MECH. NS 2	5.31'	2 - 362S162-54	SHD8S
14	MECH. NS 3	2.52'	2 - 362S162-54	SHD8S

A1 LATERAL SYSTEM PLAN
 3/8" = 1'-0"

D4 TYPICAL SHEAR WALL FASTENING PATTERN
 1/2" = 1'-0"

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(A1) FRAMING ISOMETRIC

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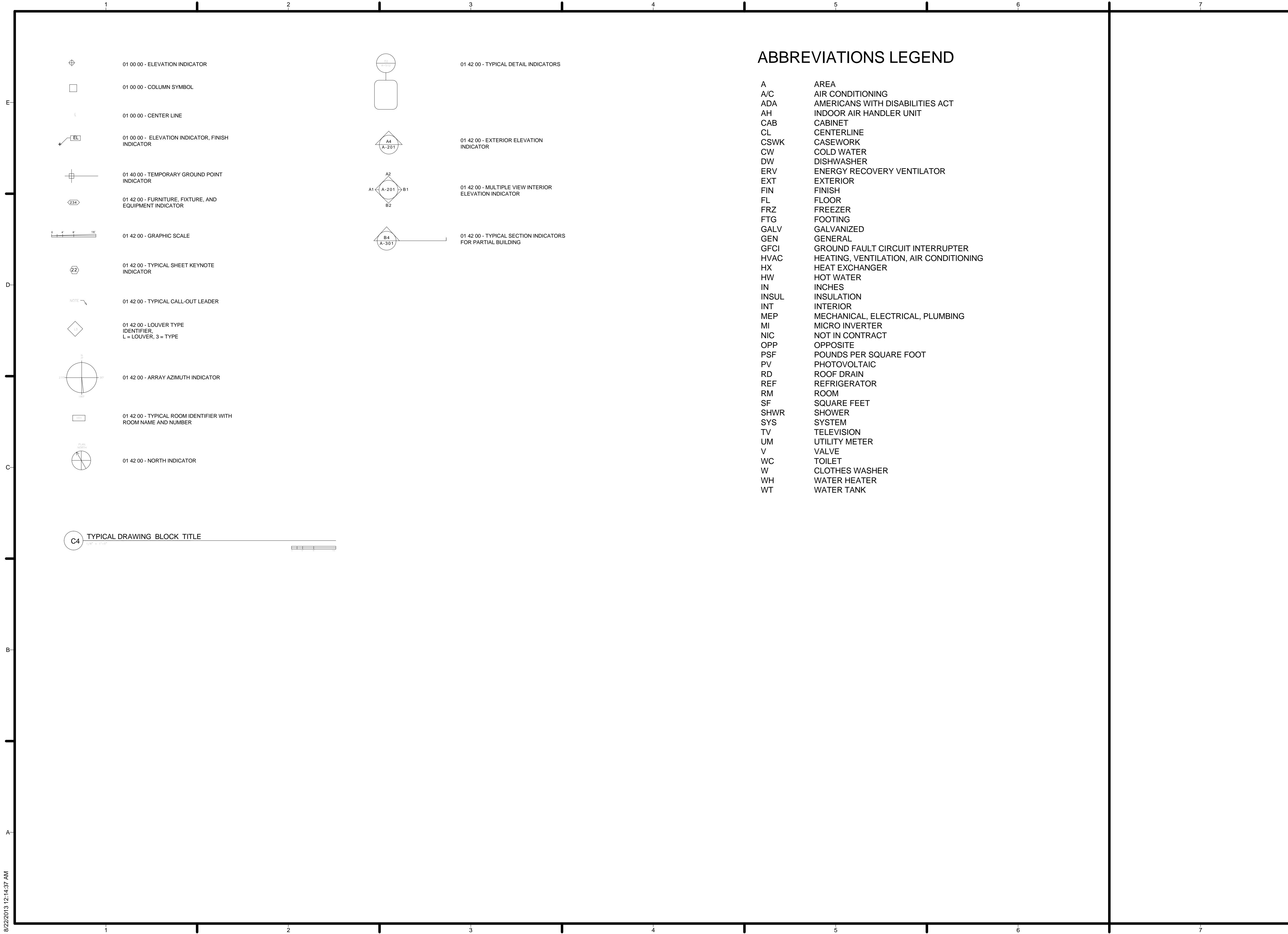


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SHEET TITLE
 FRAMING ISOMETRIC

S-901



ABBREVIATIONS LEGEND

A	AREA
A/C	AIR CONDITIONING
ADA	AMERICANS WITH DISABILITIES ACT
AH	INDOOR AIR HANDLER UNIT
CAB	CABINET
CL	CENTERLINE
CSWK	CASEWORK
CW	COLD WATER
DW	DISHWASHER
ERV	ENERGY RECOVERY VENTILATOR
EXT	EXTERIOR
FIN	FINISH
FL	FLOOR
FRZ	FREEZER
FTG	FOOTING
GALV	GALVANIZED
GEN	GENERAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HVAC	HEATING, VENTILATION, AIR CONDITIONING
HX	HEAT EXCHANGER
HW	HOT WATER
IN	INCHES
INSUL	INSULATION
INT	INTERIOR
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MI	MICRO INVERTER
NIC	NOT IN CONTRACT
OPP	OPPOSITE
PSF	POUNDS PER SQUARE FOOT
PV	PHOTOVOLTAIC
RD	ROOF DRAIN
REF	REFRIGERATOR
RM	ROOM
SF	SQUARE FEET
SHWR	SHOWER
SYS	SYSTEM
TV	TELEVISION
UM	UTILITY METER
V	VALVE
WC	TOILET
W	CLOTHES WASHER
WH	WATER HEATER
WT	WATER TANK



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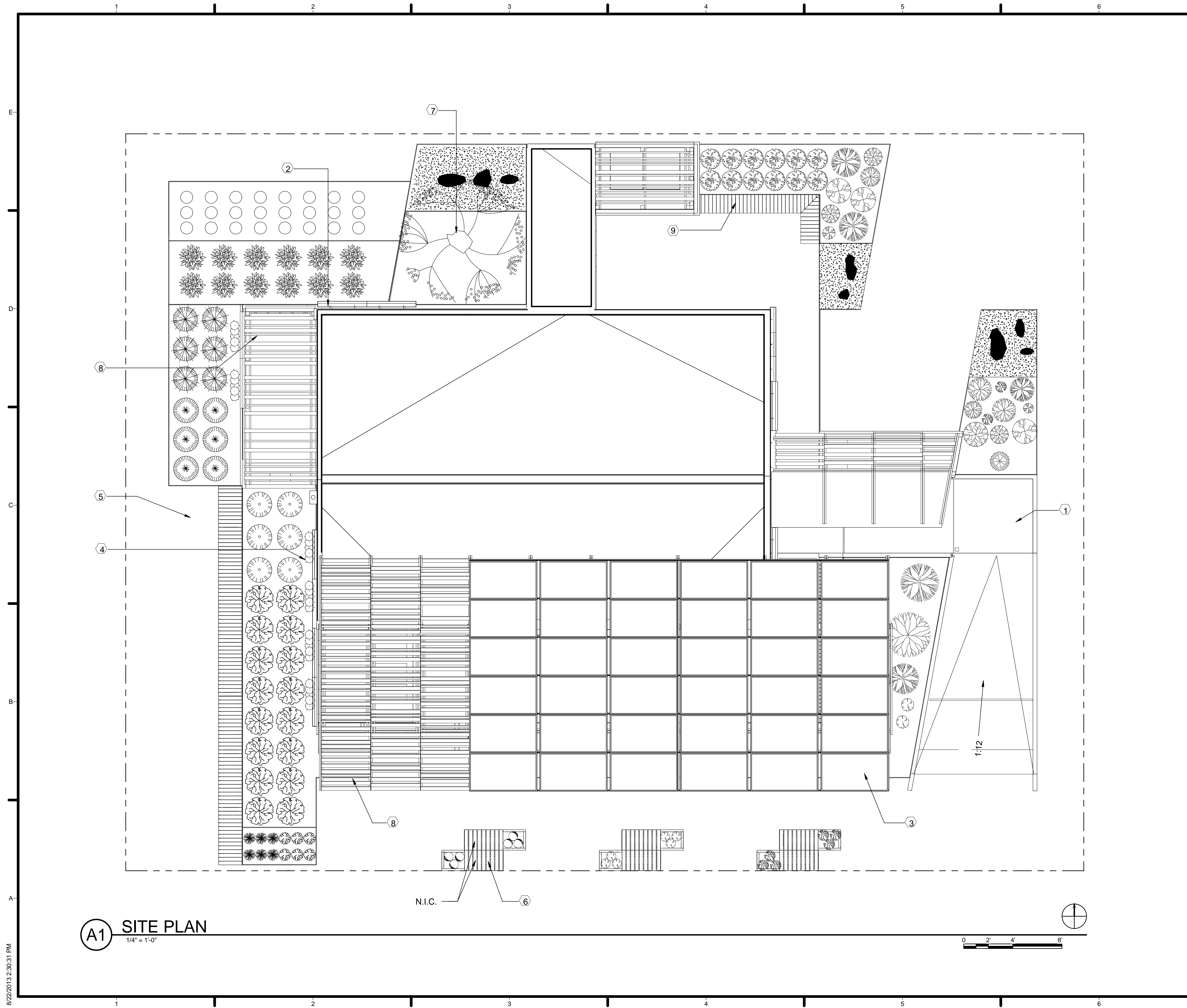


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SHEET TITLE
 ARCHITECTURAL SYMBOLS AND NOTES

A-001



GENERAL SHEET NOTES

1. SITE, AS SHOWN, IS FOR INFORMATIONAL PURPOSES ONLY. SUBJECT TO CHANGE.
2. ACCESS TO IRVINE GREAT PARK PROVIDED BY ORGANIZERS.
3. LOT LINES ESTABLISHED BY COMPETITION ORGANIZERS. TEAM HOUSES ARE TO COMPLY WITH GIVEN SOLAR ENVELOPE/LOT LINES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. DECKING (MODULES/MATERIAL)
2. WATER HOGS/RAINWATER HARVESTING
3. PV COLLECTORS
4. GREEN SCREEN
5. PLANTER MODULES
6. PLANTER BENCH NOT IN CONTRACT
7. BOX TREE
8. SHADE CANOPY STRUCTURE
9. BENCH



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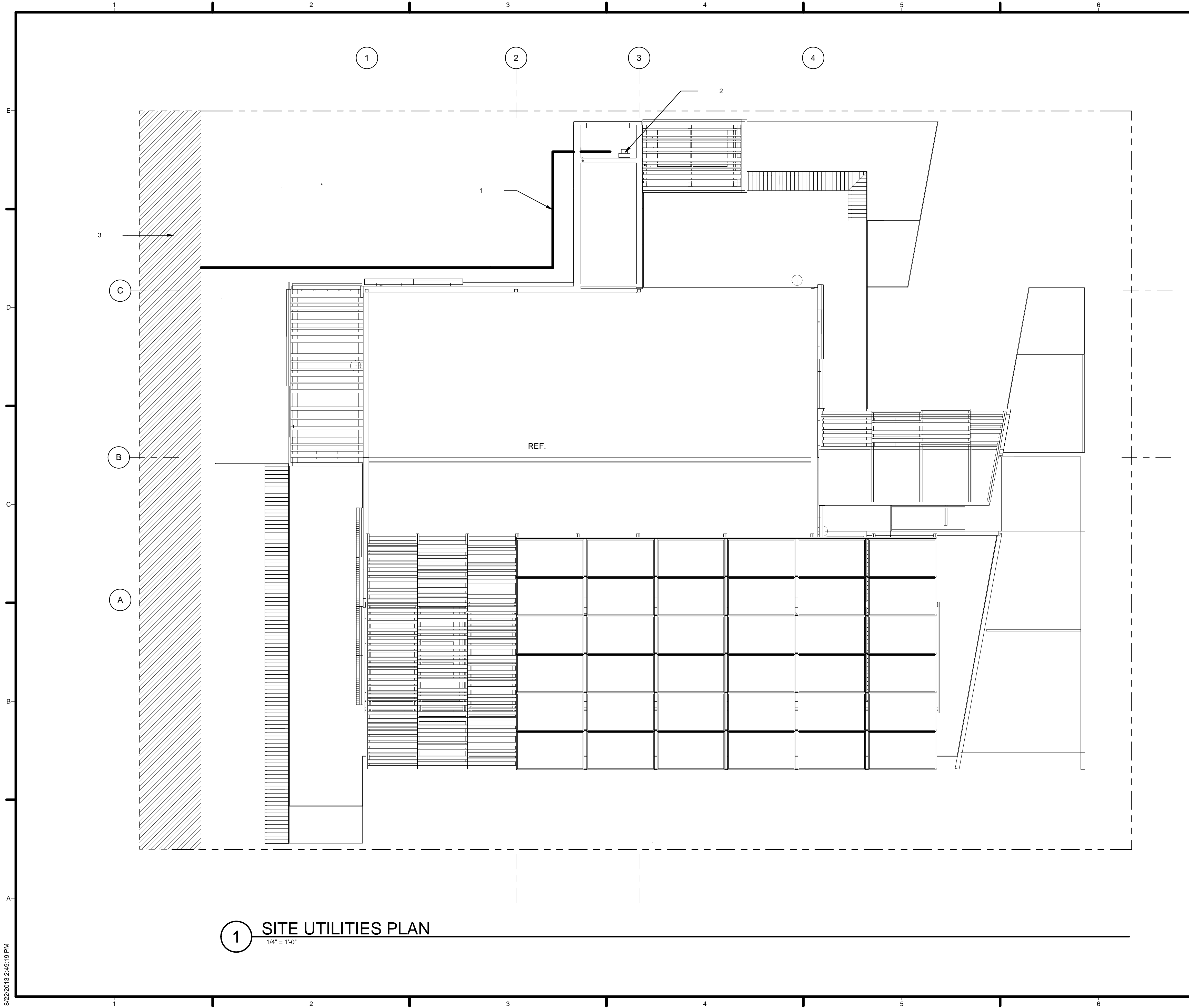
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SHEET TITLE
SITE PLAN

A-101

8/22/2013 2:30:31 PM



1 SITE UTILITIES PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- 1 UTILITY LINE FROM ORGANIZERS CORRIDOR
- 2 NET METER
- 3 UTILITY CORRIDOR



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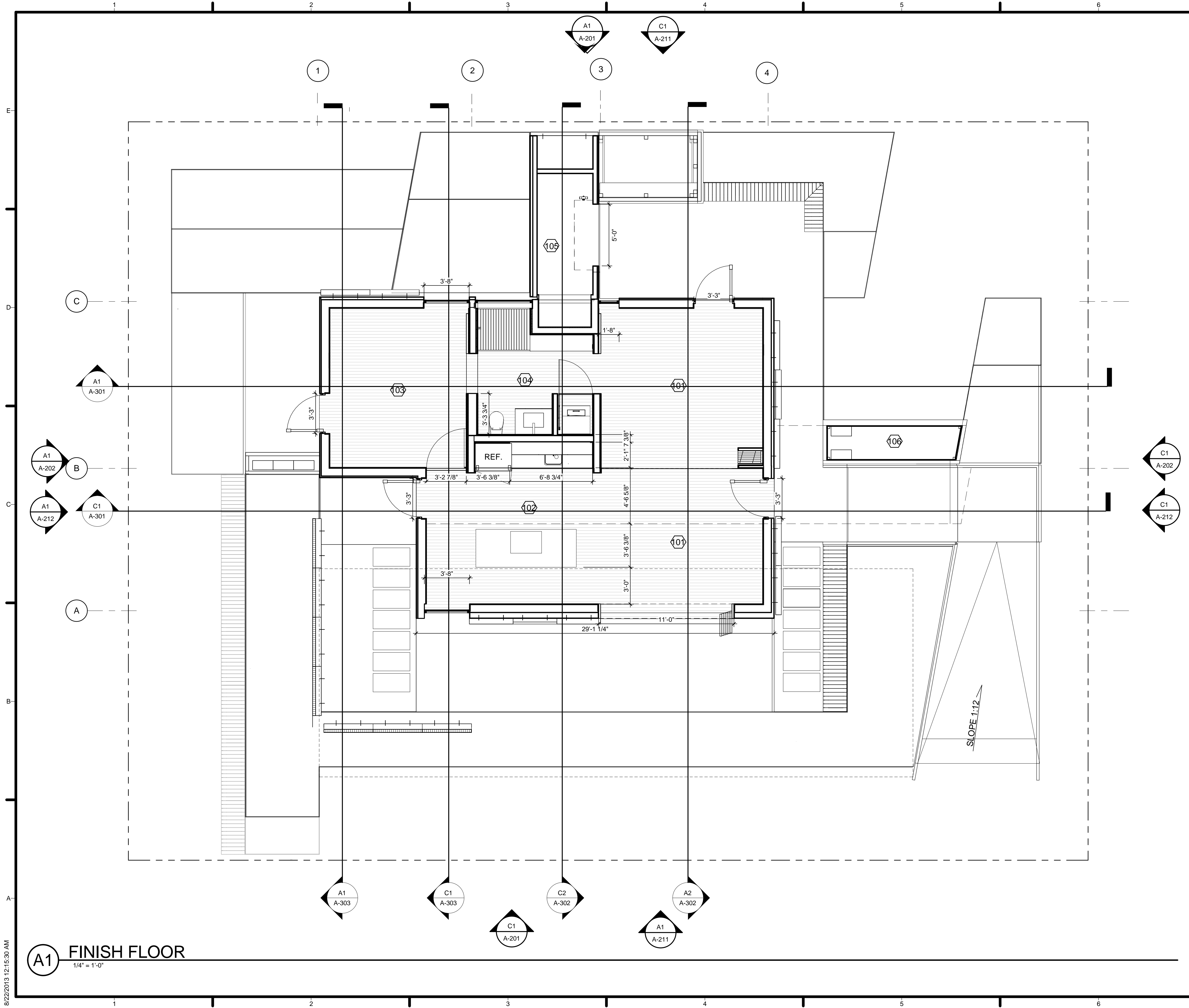
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SHEET TITLE
 SITE UTILITIES PLAN

A-102

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- 101. FLEX SPACE
- 102. KITCHEN
- 103. MASTER BEDROOM
- 104. BATHROOM
- 105. MECHANICAL ROOM
- 106. EXTERNAL STORAGE



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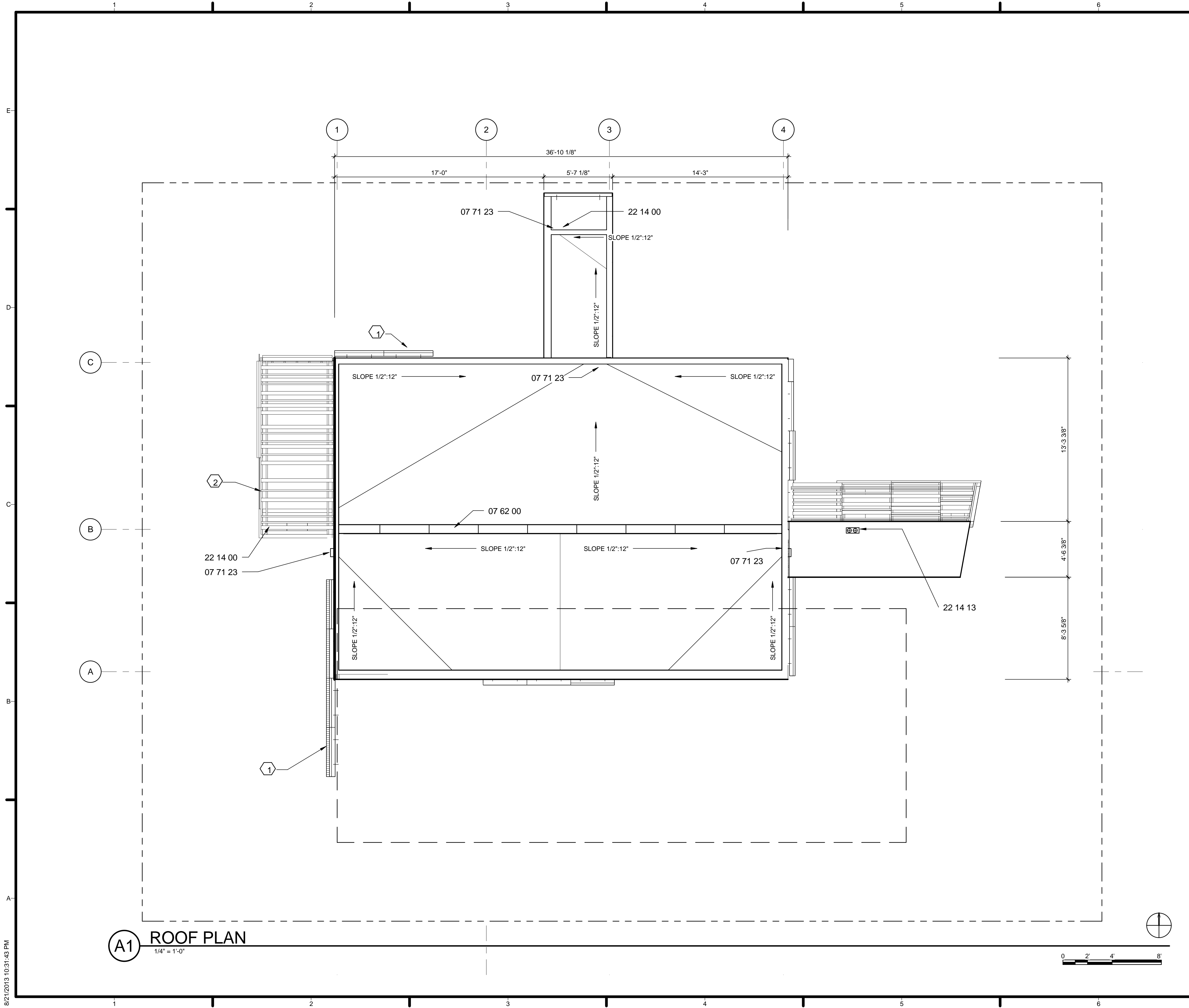
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SHEET TITLE
 FIRST FLOOR PLAN

A-111

A1 FINISH FLOOR
 1/4" = 1'-0"

8/22/2013 12:15:30 AM



A1 ROOF PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

1. SLOPES ON ROOF PLAN ARE APPROXIMATIONS. REFER TO STRUCTURAL PLANS FOR EXACT SLOPES
2. ROOF FINISH IS SPRAY APPLIED FOAM OVER RIGID INSULATION SHAPED FOR SLOPES

REFERENCE KEYNOTES

- 07 71 23 - DOWNSPOUT
- 07 71 23 - SCUPPER
- 22 14 00 - FACILITY RAINWATER TANK
- 22 14 13 - DRAIN
- 22 14 13 - OVERFLOW DRAIN
- 07 62 00 - FLASHING

SHEET KEYNOTES

- 1 VERTICAL SHADE SCREEN
- 2 OVERHEAD LOUVER SCREEN



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MARK	DATE	DESCRIPTION
05	8.22.2013	100% DOE/NREL AS-BUILTS
04	4.05.2013	100% DOE/NREL CD RE-SUBMISSION
03	2.14.2013	100% DOE/NREL CD SUBMISSION
02	11.20.2012	80% DOE/NREL CD RE-SUBMISSION
01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
ROOF PLAN

A-112





GENERAL SHEET NOTES

1. THE REFLECTED CEILING PLAN (A-121) SHOWS CEILING MOUNTED LIGHT FIXTURES ONLY. FOR FULL LIGHTING PLAN REFER TO E-104.
2. THIS SHEET CAN BE USED TO LOCATE SMOKE DETECTORS ONLY. FOR FULL FIRE SUPPRESSION SYSTEM REFER TO F-102.
3. FINISHED CEILING HEIGHT TO BE MEASURED FROM FINISHED FLOOR.

REFERENCE KEYNOTES

22 41 39 Residential Faucets, Supplies, and Trim
 23 38 00 Ventilation Hoods
 28 31 46 Smoke Detection Sensors

SHEET KEYNOTES

-  PLASTER
-  PLYWOOD
-  FIBER CEMENT
-  LINEAR COVE LIGHT



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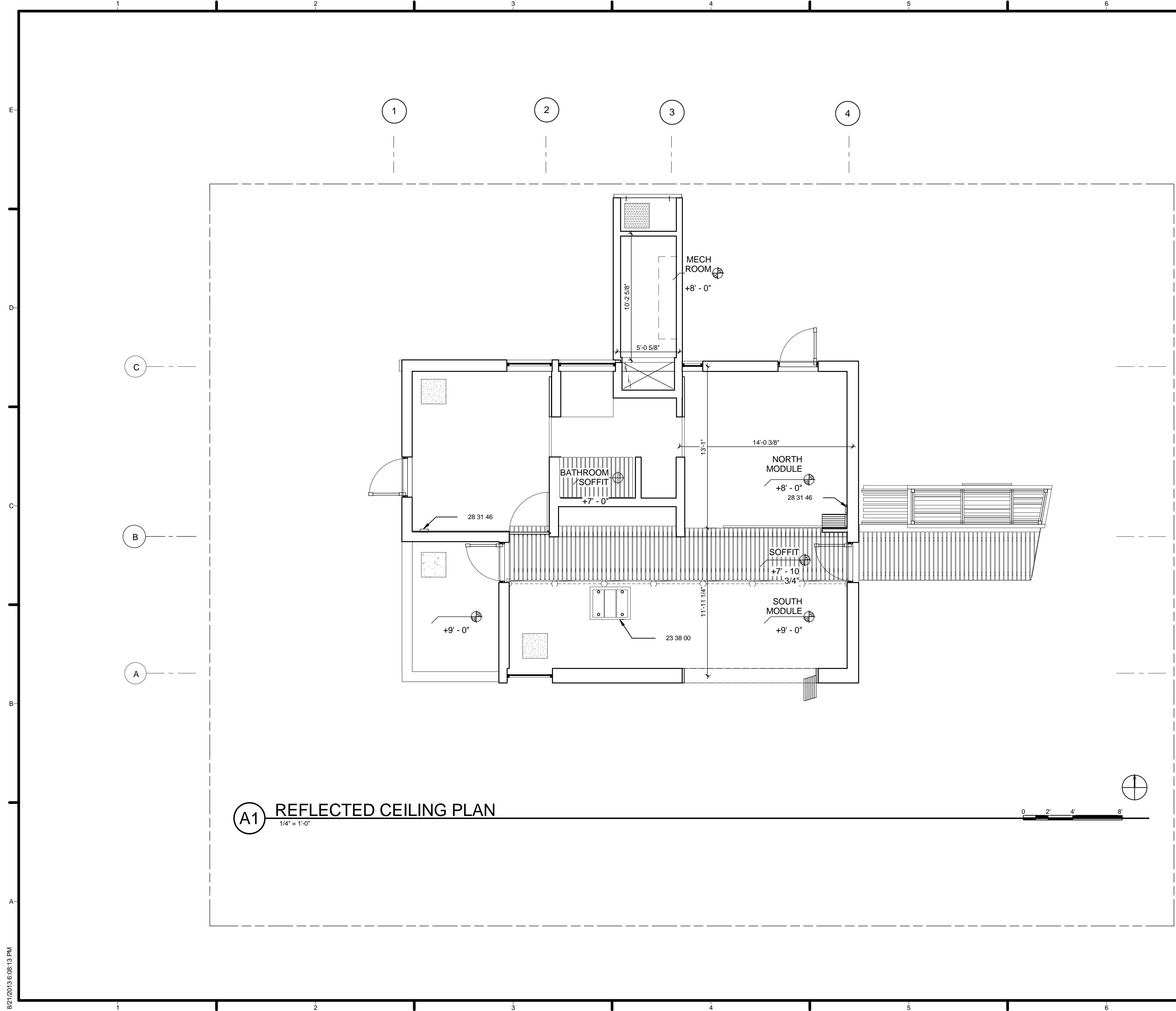


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01	10.11.2012	80% DOENREL DD SUBMISSION

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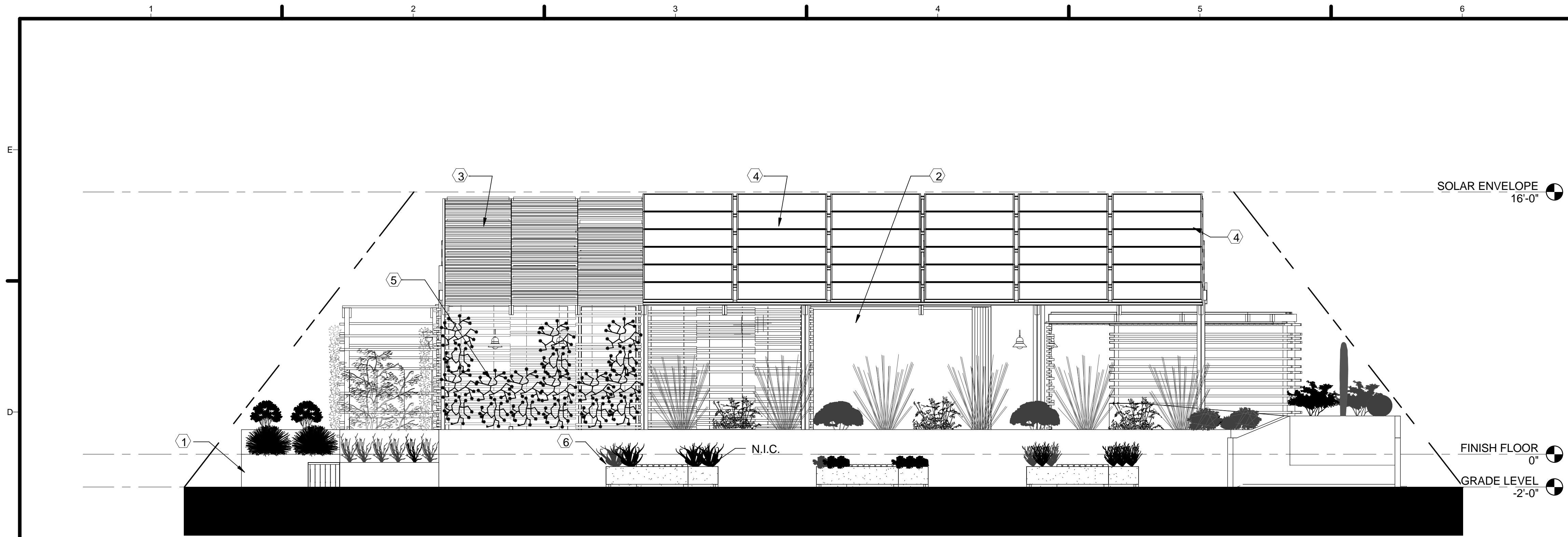
SHEET TITLE
REFLECTED CEILING PLAN

A-121

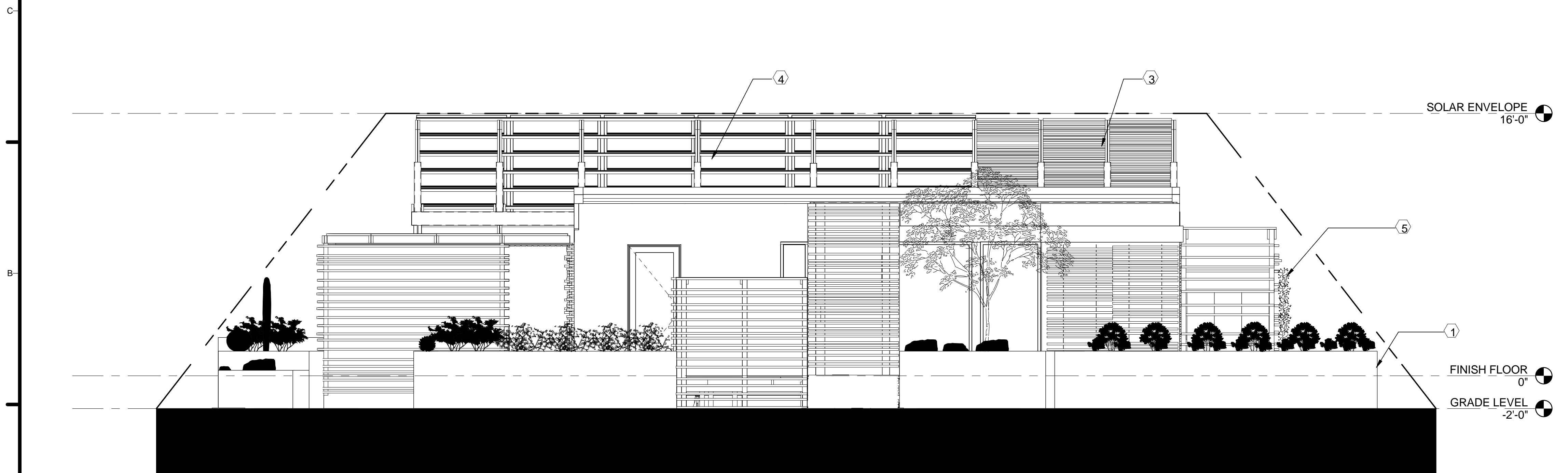


A1 REFLECTED CEILING PLAN
 1/4" = 1'-0"

8/21/2013 6:08:13 PM



C1 SOUTH
1/4" = 1'-0"



A1 NORTH
1/4" = 1'-0"

GENERAL SHEET NOTES

1. MAXIMUM ELEVATION DIFFERENCE BETWEEN HIGHEST GRADE POINT ON SITE AND TOP OF ROOF SHALL BE NO MORE THAN 18'0"
2. ALL COMPONENTS BESIDES FOUNDATION SYSTEM OF HOUSE ENVELOPE ARE SHOWN ON SITE ELEVATIONS. FOR FOUNDATION SYSTEM REFER TO S-101
3. FOR DETAILS ON PLANTER SYSTEM REFERENCE L-502 AND L-503

REFERENCE KEYNOTES

SHEET KEYNOTES

1. CONSTRUCTED PLANTER SYSTEM
2. SLIDING GLASS DOOR SYSTEM
3. SHADE SKIN STRUCTURE
4. PV COLLECTORS - MONOCRYSTALLINE 60 CELL 265 W SOLAR MODULES
5. VINE SCREEN
6. SITE FURNISHING



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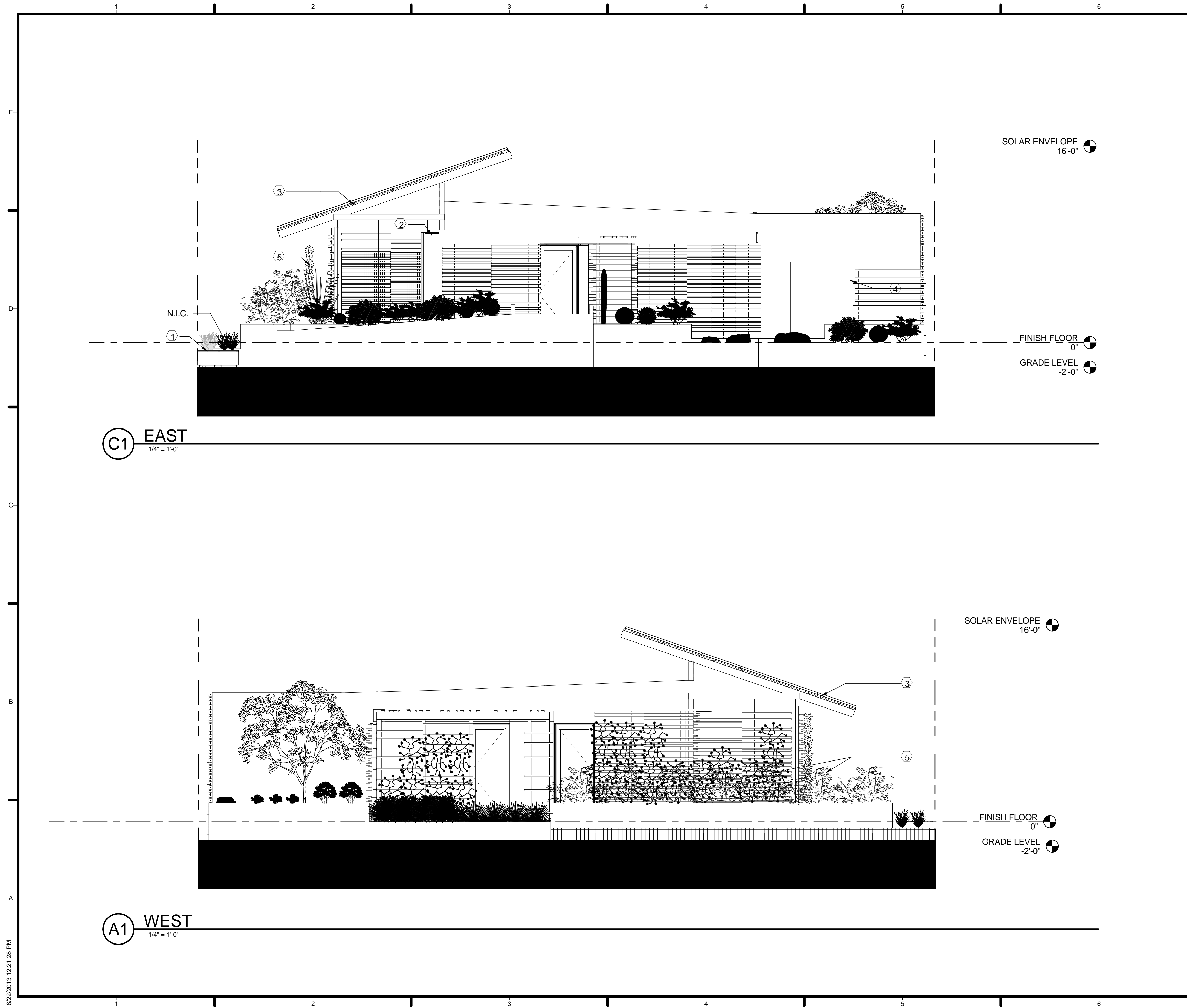


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02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
SITE ELEVATIONS

A-201



C1 EAST
1/4" = 1'-0"

A1 WEST
1/4" = 1'-0"

GENERAL SHEET NOTES

1. MAXIMUM ELEVATION DIFFERENCE BETWEEN HIGHEST GRADE POINT ON SITE AND TOP OF ROOF SHALL BE NO MORE THAN 18'0"
2. ALL COMPONENTS BESIDES FOUNDATION SYSTEM OF HOUSE ENVELOPE ARE SHOWN ON SITE ELEVATIONS. FOR FOUNDATION SYSTEM REFER TO S-101

REFERENCE KEYNOTES

SHEET KEYNOTES

1. SITE FURNISHING NOT IN CONTRACT
2. SLIDING GLASS DOOR SYSTEM
3. SHADE SKIN STRUCTURE
4. ROLLUP STORAGE DOOR SYSTEM
5. VINE SCREEN



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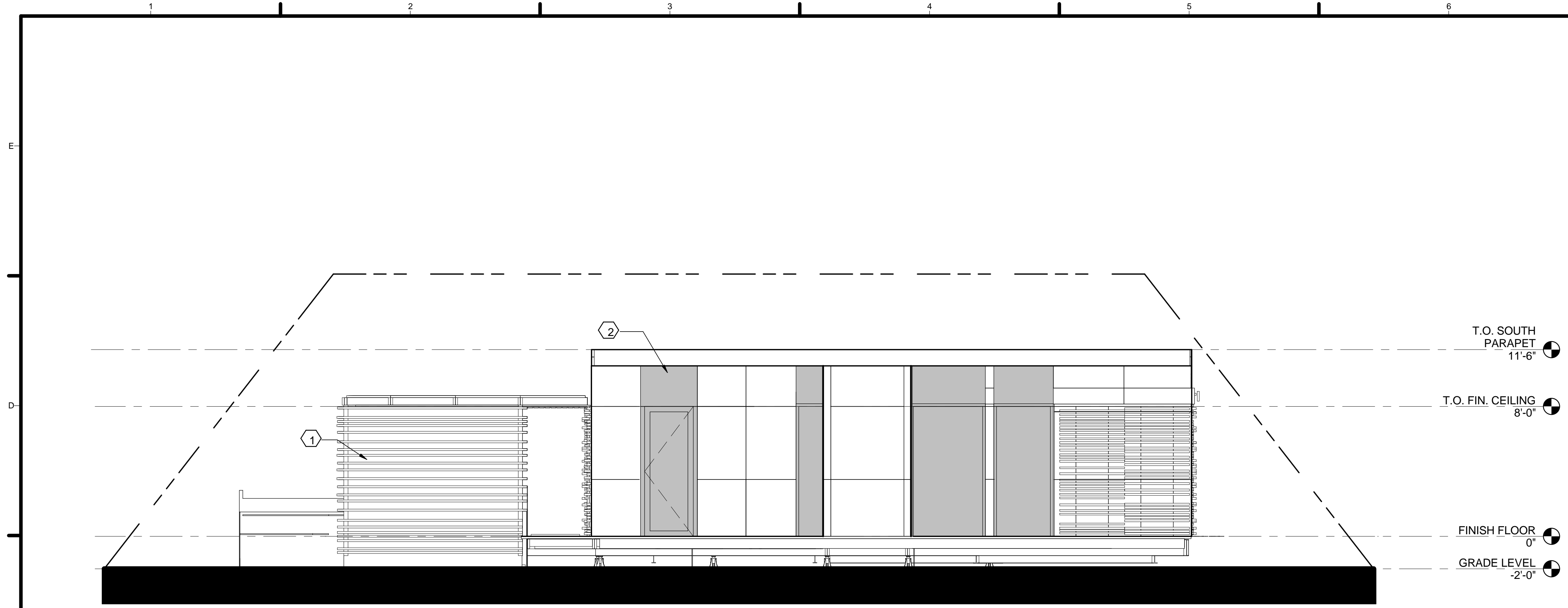


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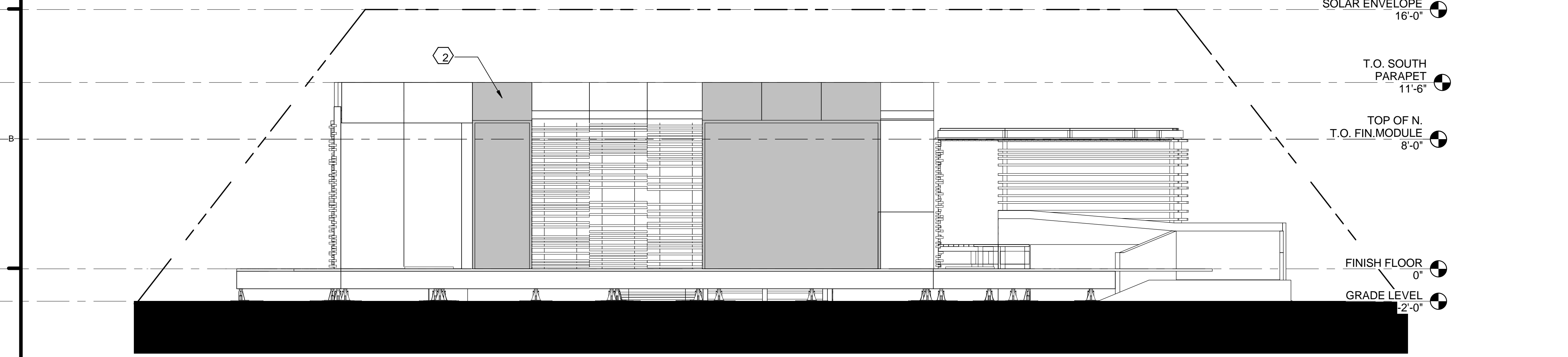
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SHEET TITLE
SITE ELEVATIONS

A-202



C1 BARE ELEVATIONS NORTH
1/4" = 1'-0"



A1 BARE ELEVATIONS SOUTH
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. FIBER CEMENT BOARD WITH RAIN SCREEN
2. FIBER CEMENT WITH BLACK LACQUER



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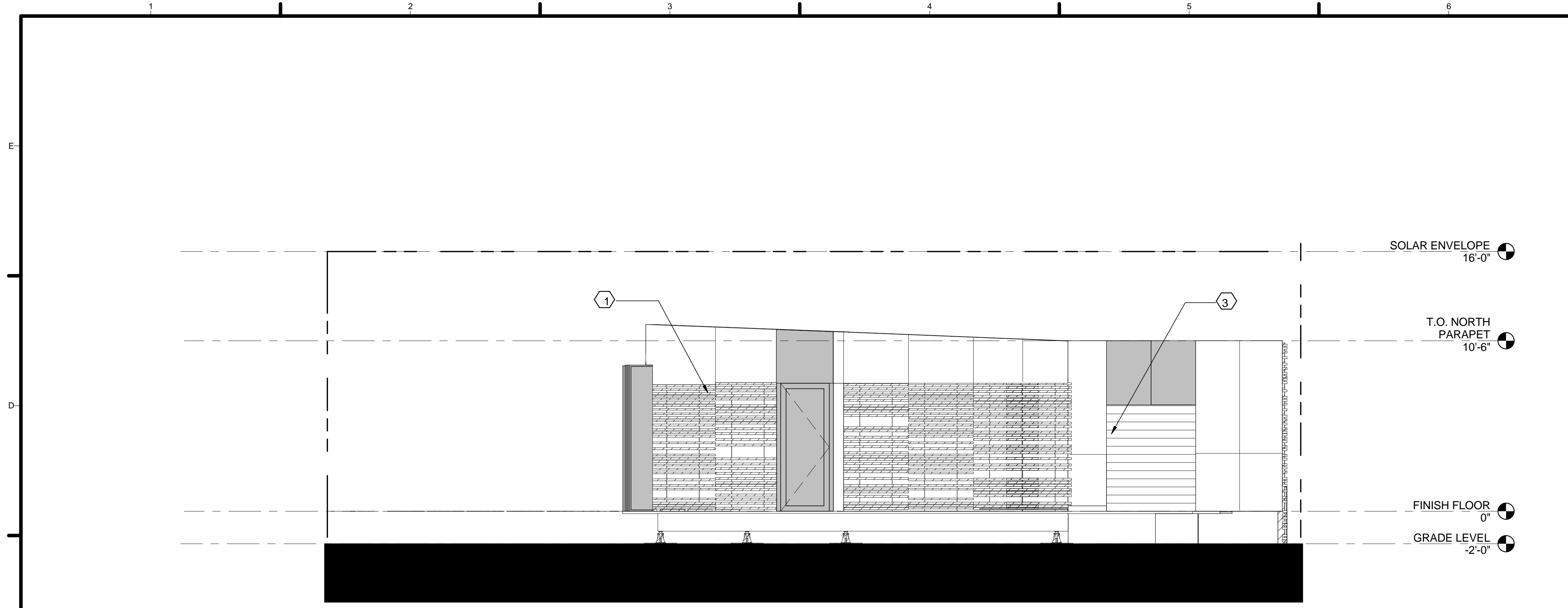


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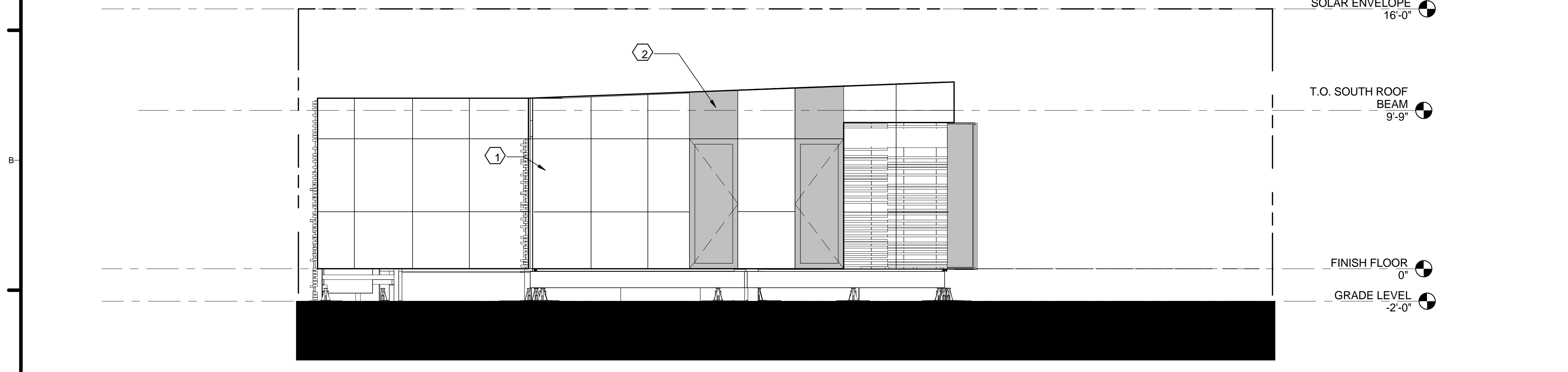
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SHEET TITLE
ELEVATIONS

A-211



C1 BARE ELEVATION EAST
1/4" = 1'-0"



A1 BARE ELEVATION WEST
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. FIBER CEMENT BOARD WITH RAIN SCREEN
2. BLACK VENEER OVERHEAD COILING DOOR
3. OVERHEAD COILING DOOR



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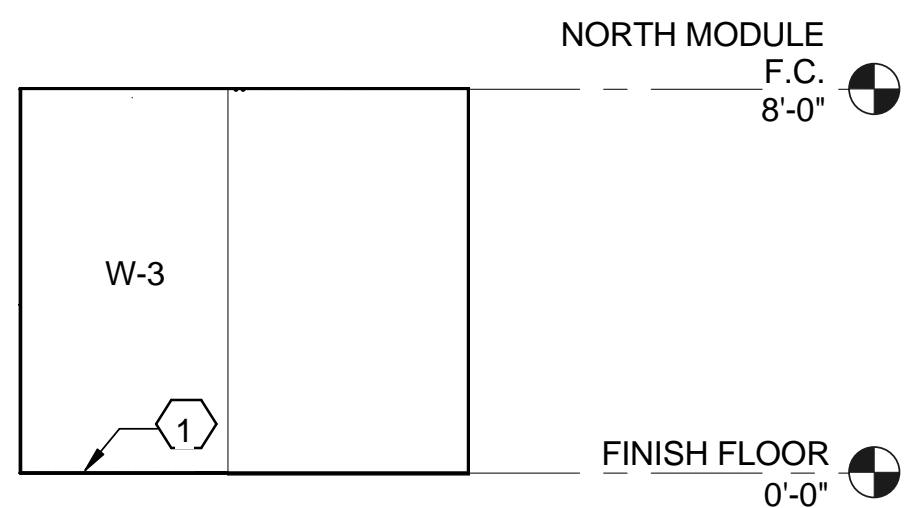


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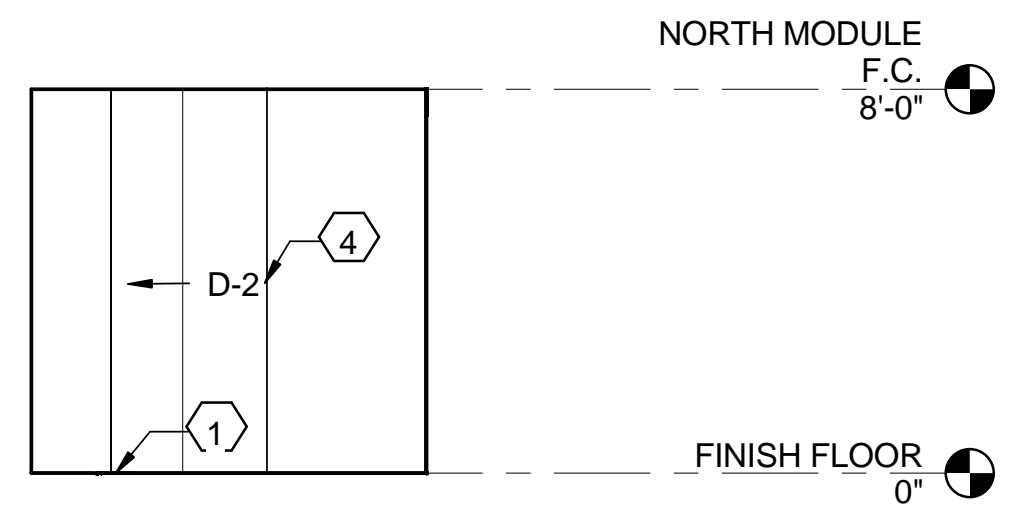
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SHEET TITLE
ELEVATIONS

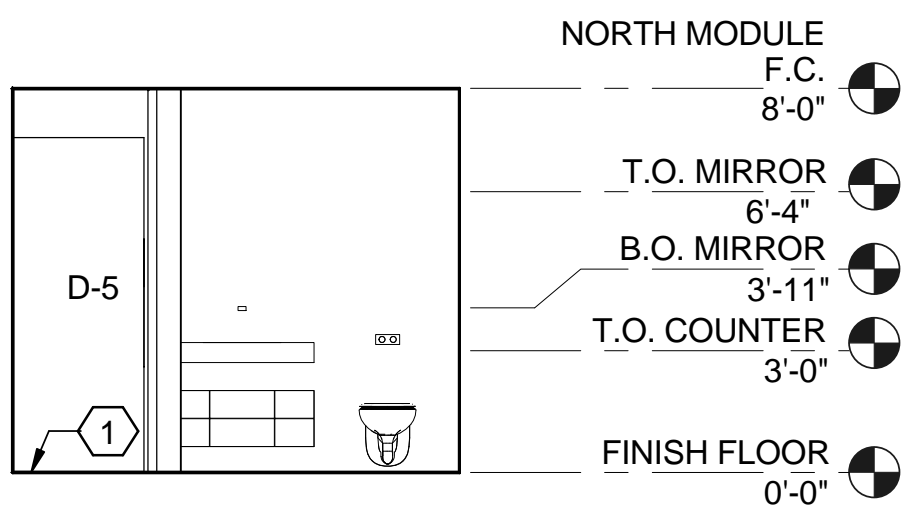
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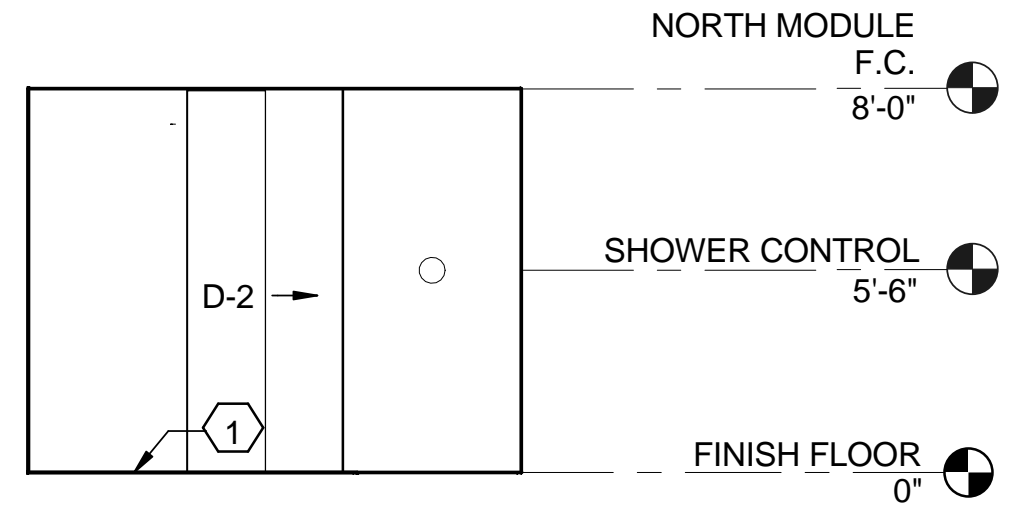
D2 BATH NORTH ELEVATION
1/4" = 1'-0"



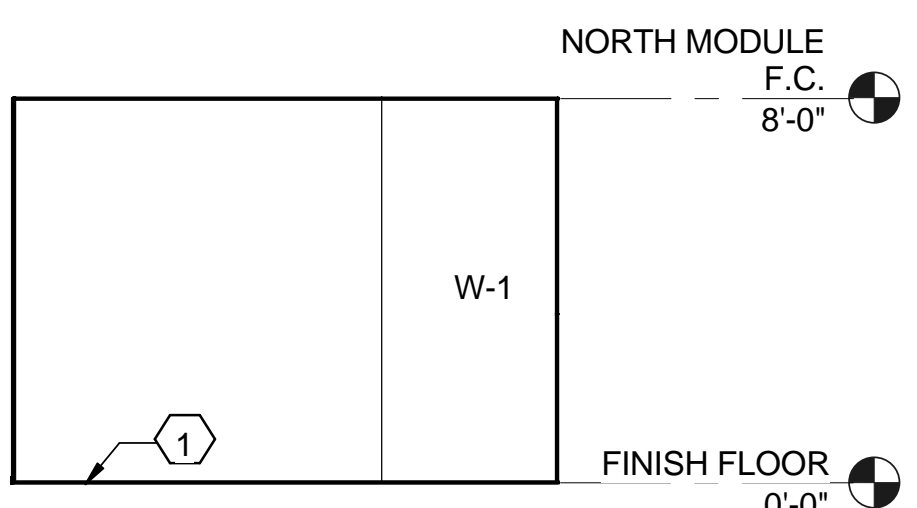
D4 BATH EAST ELEVATION
1/4" = 1'-0"



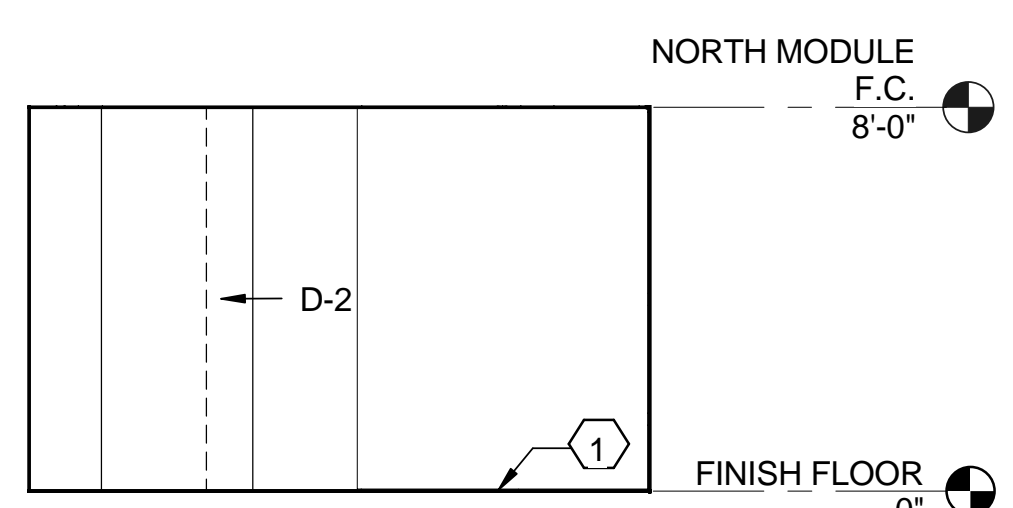
C2 BATH SOUTH ELEVATION
1/4" = 1'-0"



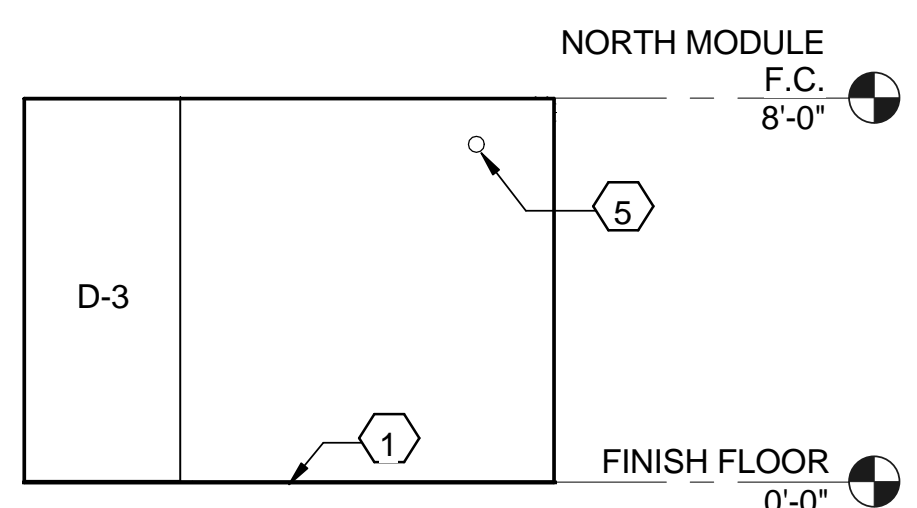
C4 BATH WEST ELEVATION
1/4" = 1'-0"



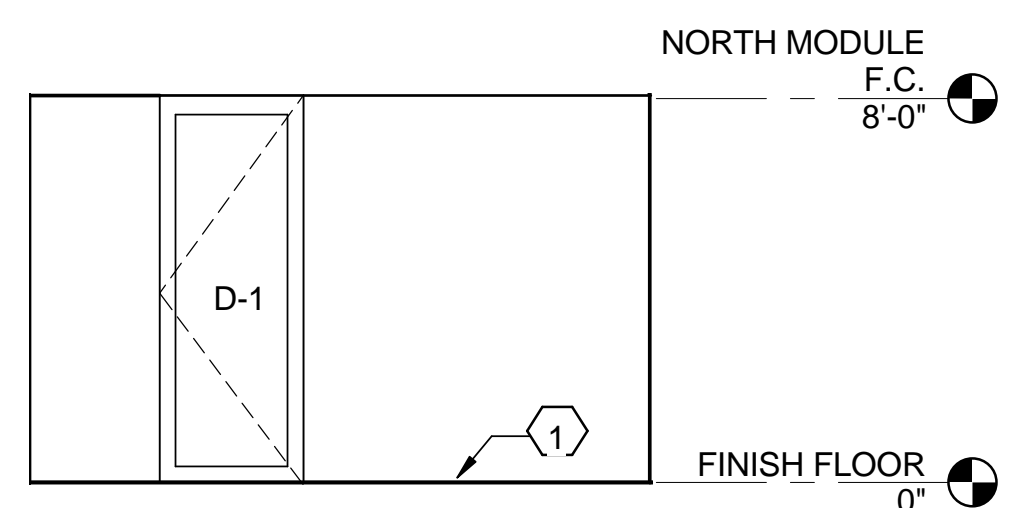
B2 BEDROOM NORTH ELEVATION
1/4" = 1'-0"



B4 BEDROOM EAST ELEVATION
1/4" = 1'-0"



A2 BEDROOM SOUTH ELEVATION
1/4" = 1'-0"



A4 BEDROOM WEST ELEVATION
1/4" = 1'-0"

GENERAL SHEET NOTES

1. ALL HEIGHT DIMENSIONS ARE RELATIVE TO THE TOP OF THE FINISH FLOOR
2. SEE SCHEDULES FOR WALL FINISHES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. CARPENTRY, FINISHES, AND GYPSUM
2. FIXTURES
3. TEMPERATURE CONTROL VALVE
4. CLOSET
5. SMOKE DETECTOR



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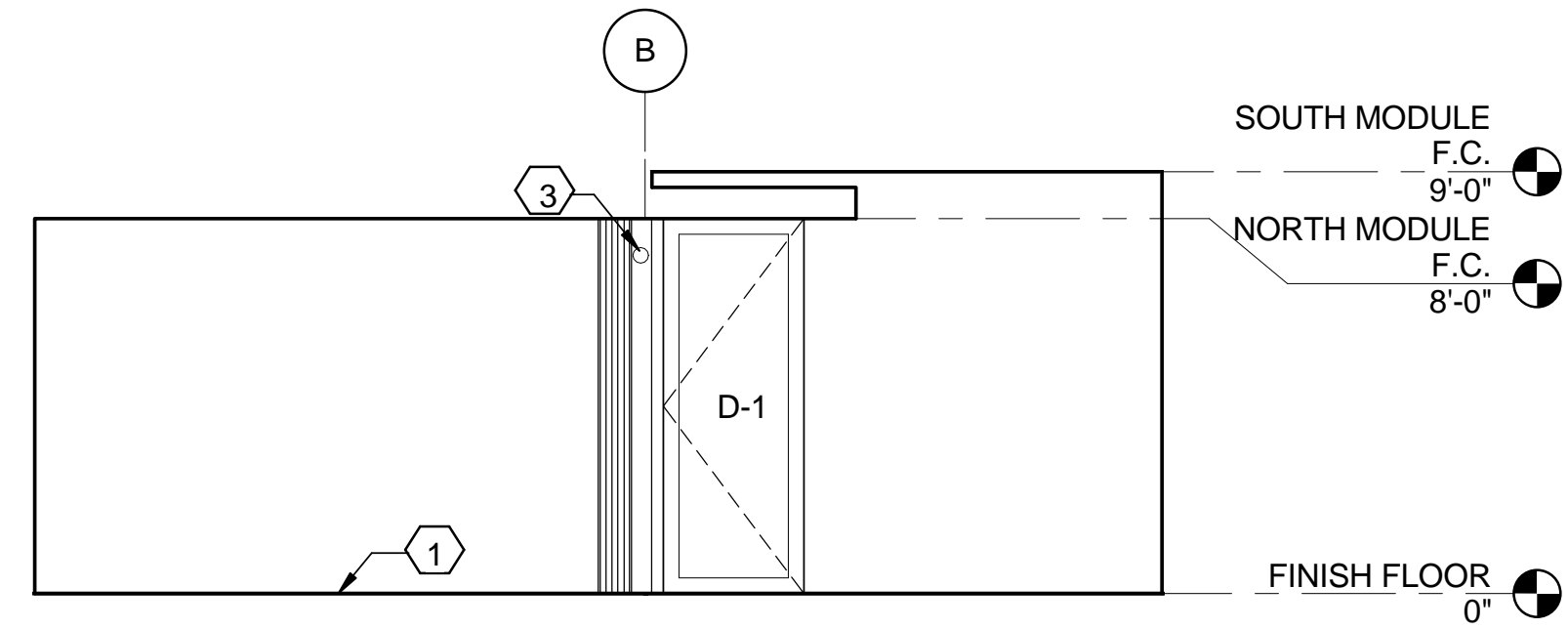


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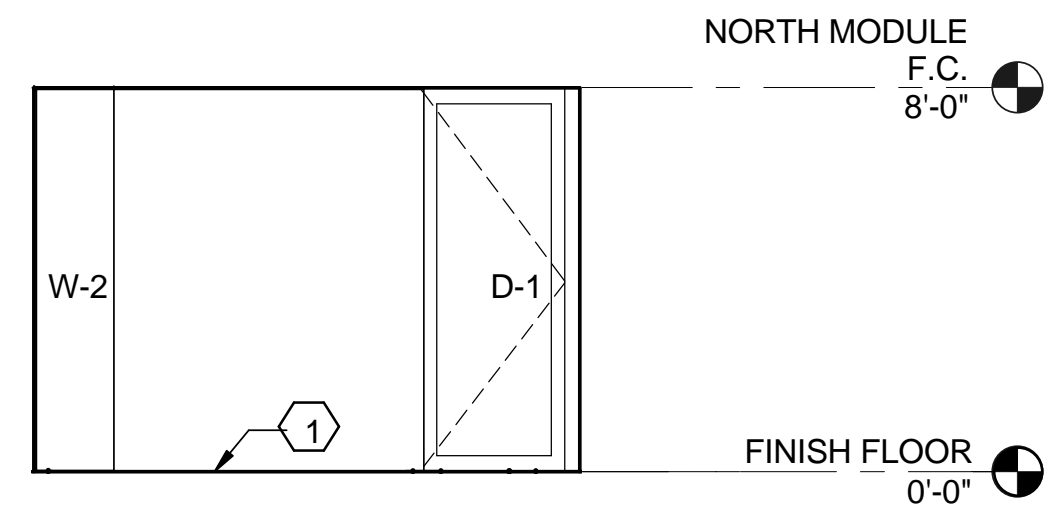
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SHEET TITLE
INTERIOR ELEVATIONS

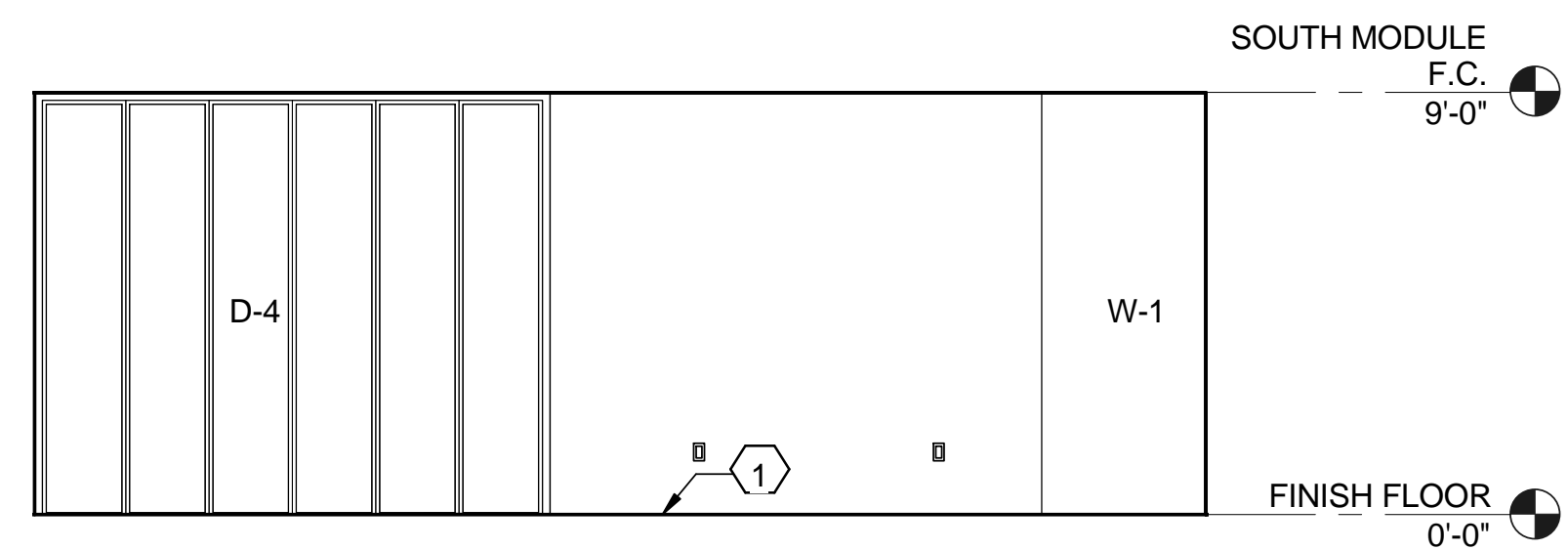
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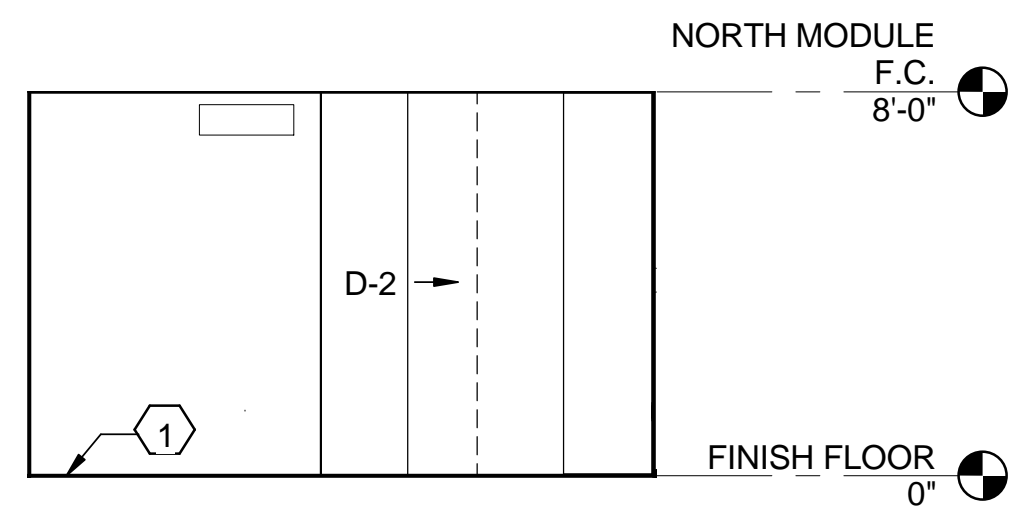
D1 FLEX SPACE EAST ELEVATION
1/4" = 1'-0"



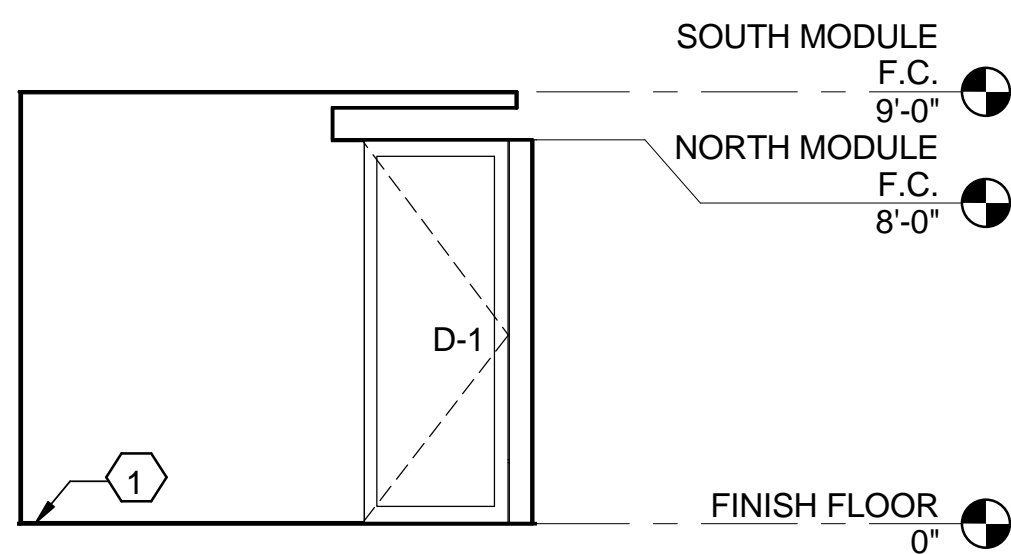
D4 FLEX SPACE NORTH ELEVATION
1/4" = 1'-0"



C1 FLEX SPACE WALL ELEVATION
1/4" = 1'-0"



C4 FLEX SPACE WEST ELEVATION
1/4" = 1'-0"



B4 KITCHEN WEST ELEVATION
1/4" = 1'-0"

GENERAL SHEET NOTES

1. ALL HEIGHT DIMENSIONS ARE RELATIVE TO THE TOP OF THE FINISH FLOOR
2. SEE SCHEDULES FOR WALL FINISHES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. CARPENTRY, FINISHES, AND GYPSUM
2. FIXTURES
3. SMOKE DETECTOR



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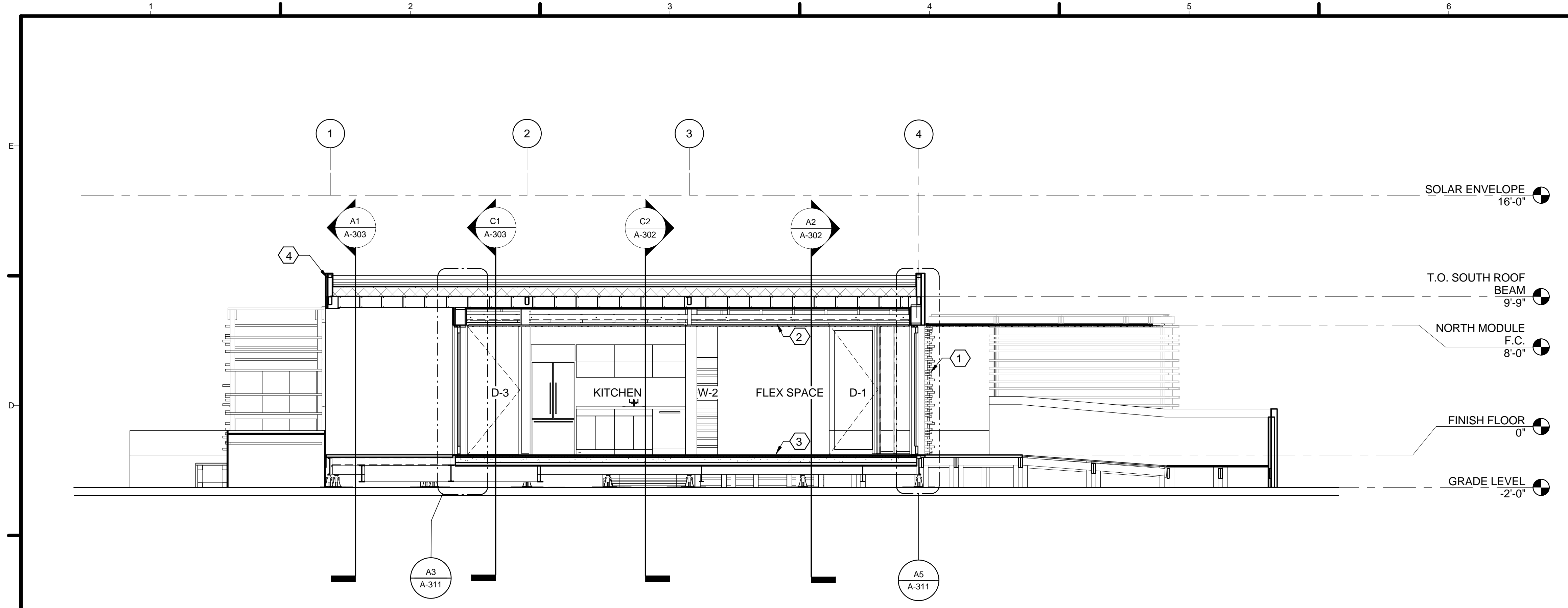


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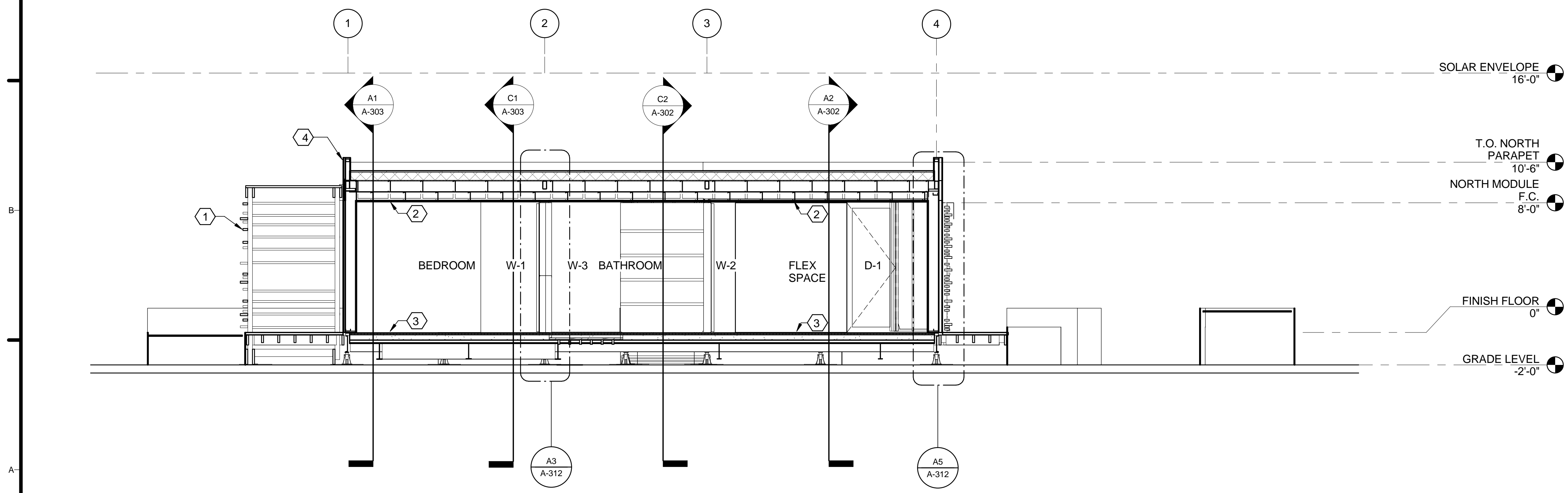
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SHEET TITLE
INTERIOR ELEVATIONS

A-214



C1 SECTION 1
1/4" = 1'-0"



A1 SECTION 2
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. BRISE SOLEIL 2X4s AND 2X6s INSTERTED INTO 14 GA. SHEET STEEL
2. BEKA SYSTEM W/ 1/4" PLASTER FLOOR FINISH OVER 3/4" PLYWOOD
3. FIBER CEMENT BOARD RAIN SCREEN



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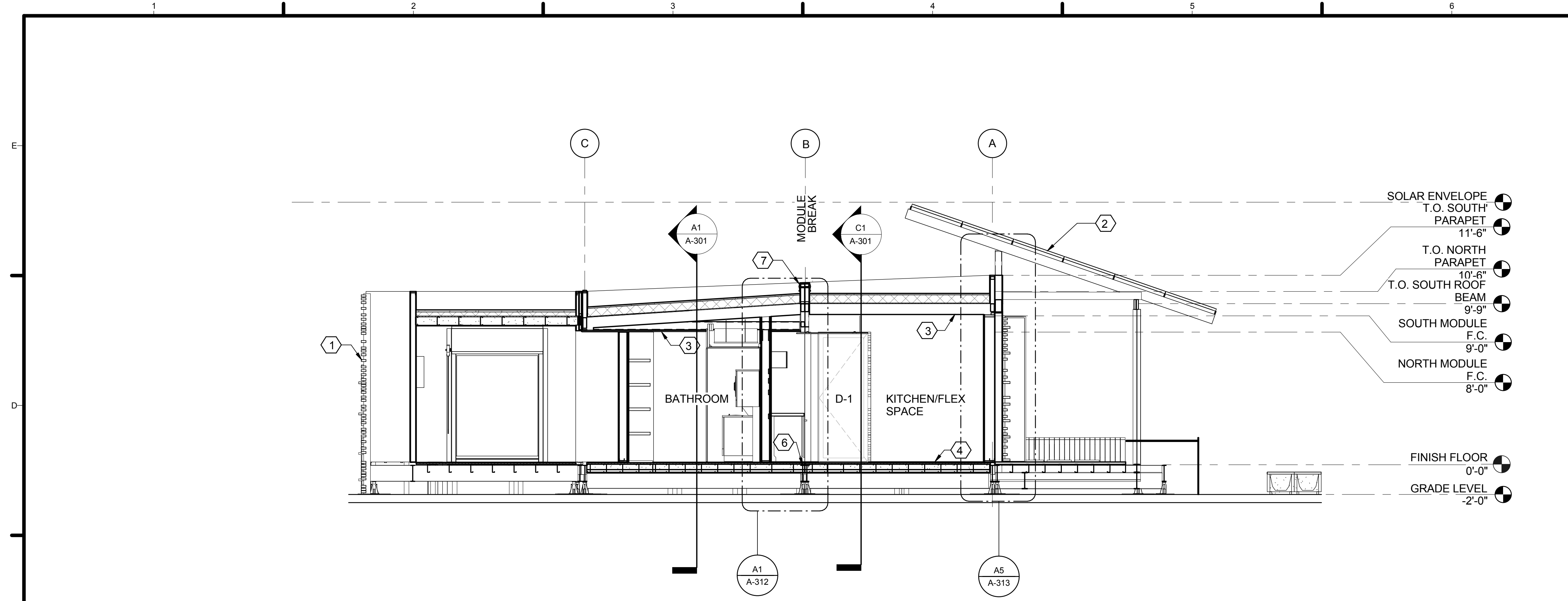


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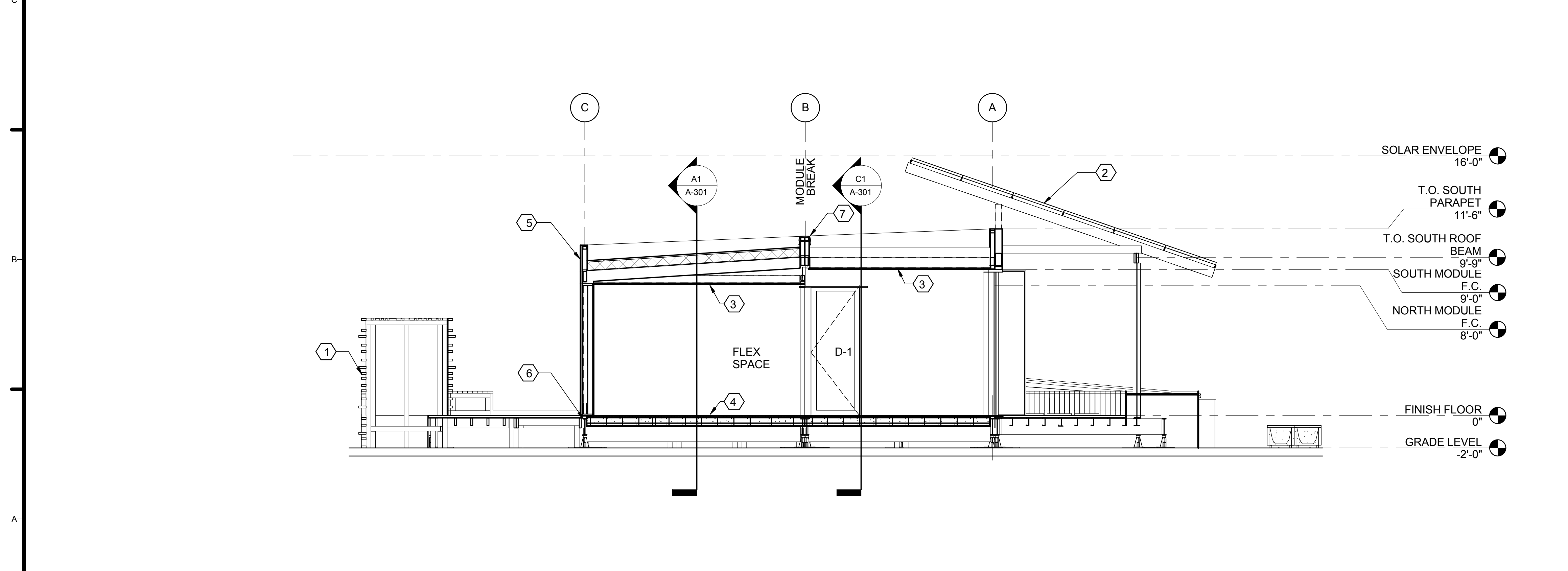
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SHEET TITLE
BUILDING SECTIONS

A-301



C2 SECTION 3
1/4" = 1'-0"



A2 SECTION 4
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. BRISE SOLEIL 2X4s AND 2X6s INSTERTED INTO 14 GA. SHEET STEEL MONOCRYSTALLINE 60 CALL 265 W SOLAR MODULES
2. BEKA SYSTEM W/ 1/4" PLASTER FLOOR FINISH OVER 3/4" PLYWOOD FIBER CEMENT BOARD RAIN SCREEN STRUCTURAL STEEL MODULE CONNECTION
3. CAP FLASHING FOR MODULE CONNECTION



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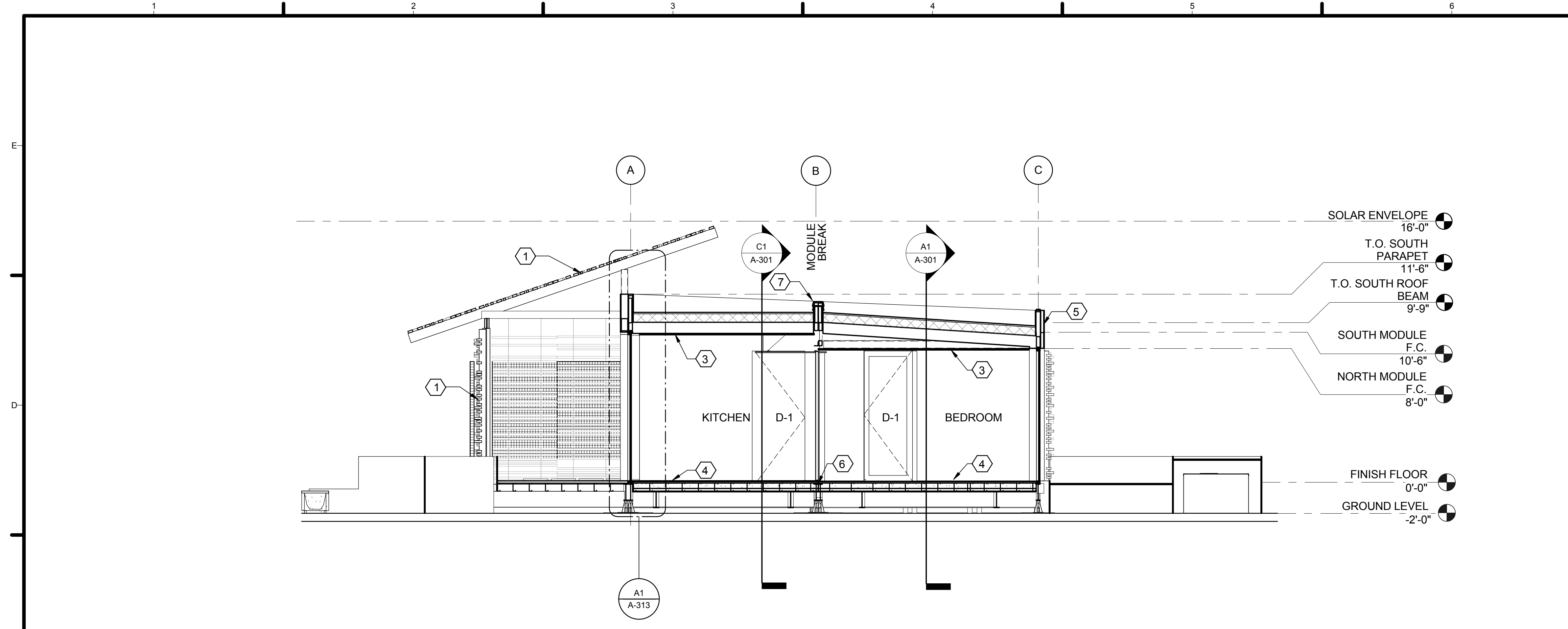


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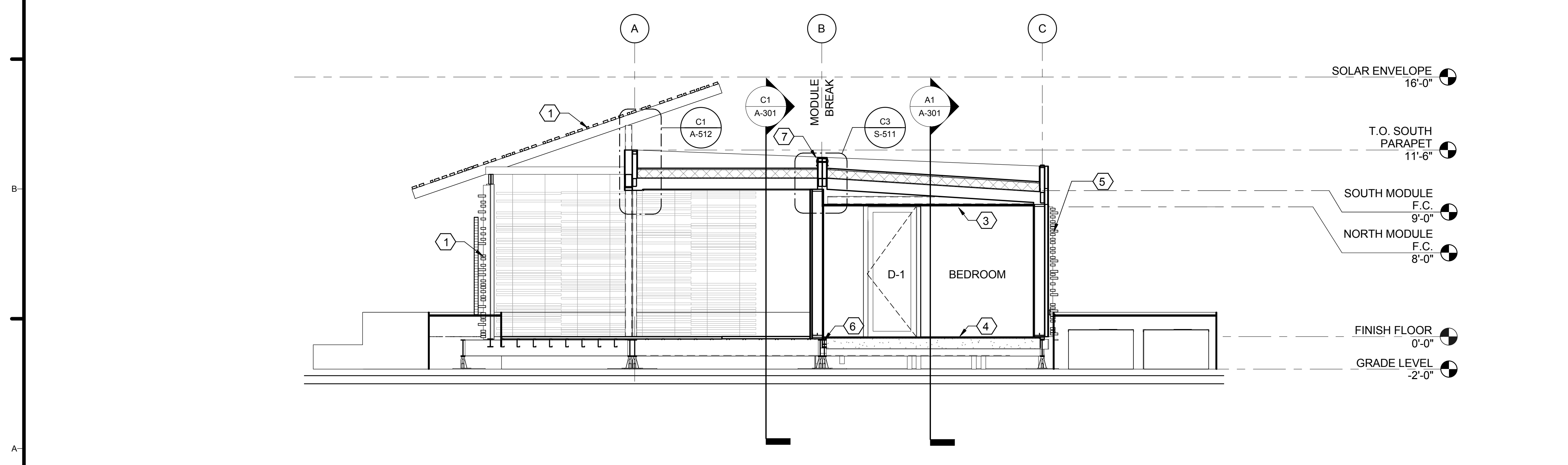
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SHEET TITLE
BUILDING SECTIONS

A-302



C1 SECTION 5
1/4" = 1'-0"



A1 SECTION 6
1/4" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

1. BRISE SOLEIL 2X4s AND 2X6s INSTERTED INTO 14 GA. SHEET STEEL MONOCRYSTALLINE 60 CALL 265 W SOLAR MODULES
2. BEKA SYSTEM W/ 1/4" PLASTER FLOOR FINISH OVER 3/4" PLYWOOD
3. FIBER CEMENT BOARD RAIN SCREEN
4. STRUCTURAL STEEL MODULE CONNECTOR
5. CAP FLASHING FOR MODULE CONNECTION



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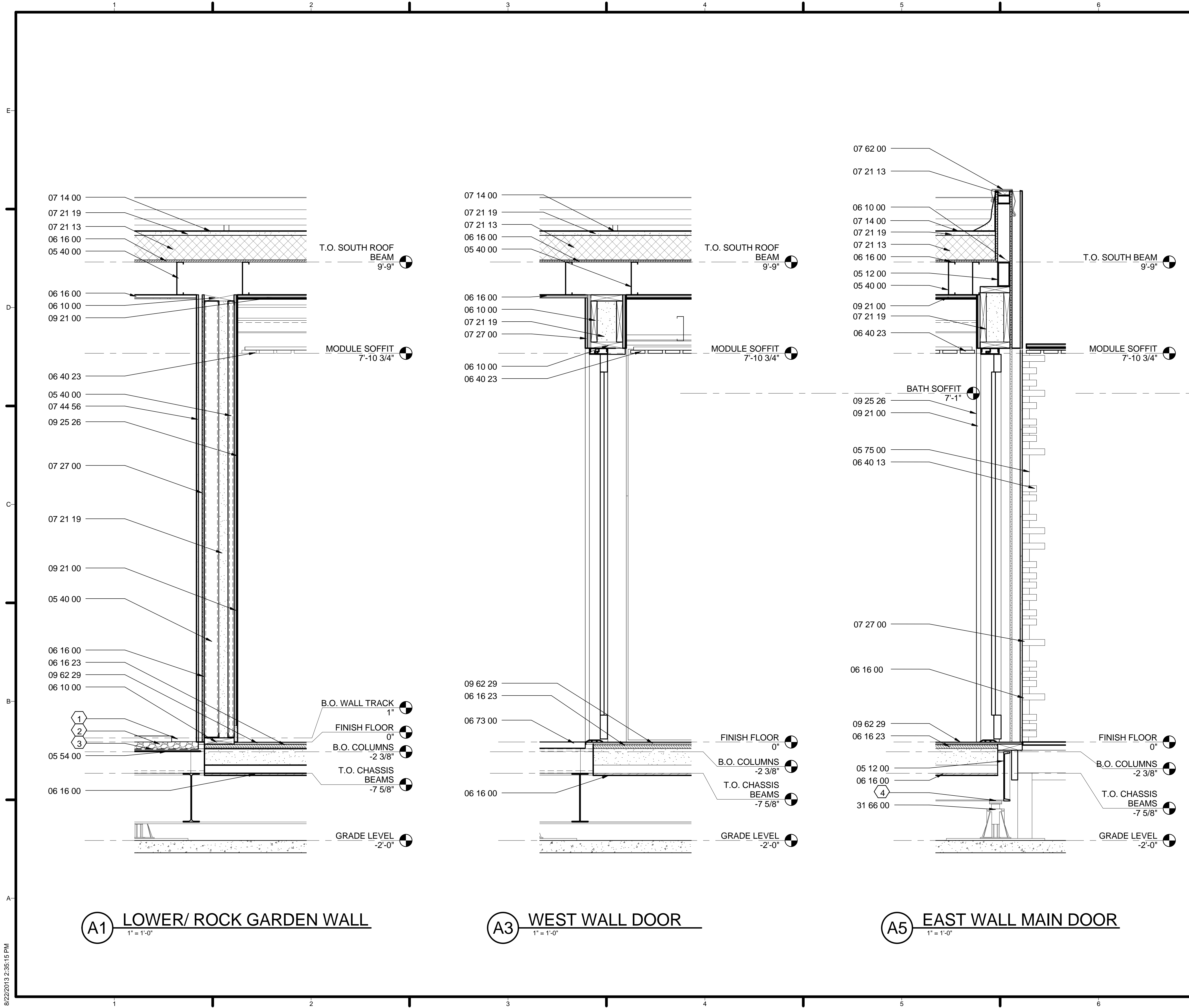


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SHEET TITLE
BUILDING SECTIONS

A-303



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 - HSS
- 05 40 00 - METAL FRAMING
- 05 54 00 - METAL FLOOR PAN
- 05 75 00 - DEC. FORMED METAL
- 06 05 23 - JOIST HANGER
- 06 10 00 - BLOCKING
- 06 16 00 - SHEATHING
- 06 16 23 - SUBFLOOR
- 06 40 13 - EXT. ARCH. WOODWORK
- 06 40 23 - INT. ARCH. WOODWORK
- 06 73 00 - COMPOSITE DECKING
- 07 13 00 - KERDI BOARD
- 07 14 00 - FLUID-APPLIED WATERPROOFING
- 07 21 13 - BOARD INSULATION
- 07 21 19 - FOAMED IN PLACE INSULATION
- 07 27 00 - WATER-RESISTIVE WEATHER BARRIER
- 07 44 56 - FIBER CEMENT BOARD
- 07 62 00 - FLASHING
- 07 90 00 - JOINT PROTECTION (CAULKING)
- 08 35 13.13 - ACCORDION DOORS
- 08 95 00 - VENTS
- 09 21 00 - PLASTER AND GYPSUM BOARD ASSEMBLY
- 09 25 26 - NATURAL CLAY PLASTERING
- 09 62 29 - MARMOLEUM FLOORING
- 26 31 00 - PHOTOVOLTAIC COLLECTORS
- 31 66 00 - SPECIAL FOUNDATIONS (PIERS)

SHEET KEYNOTES

1. 1 3/4" PRECAST CONCRETE PAVER
2. RIVER ROCK
3. FELT PAN LINER
4. WELD PLATE



TEAM NAME: TEAM ASUNM
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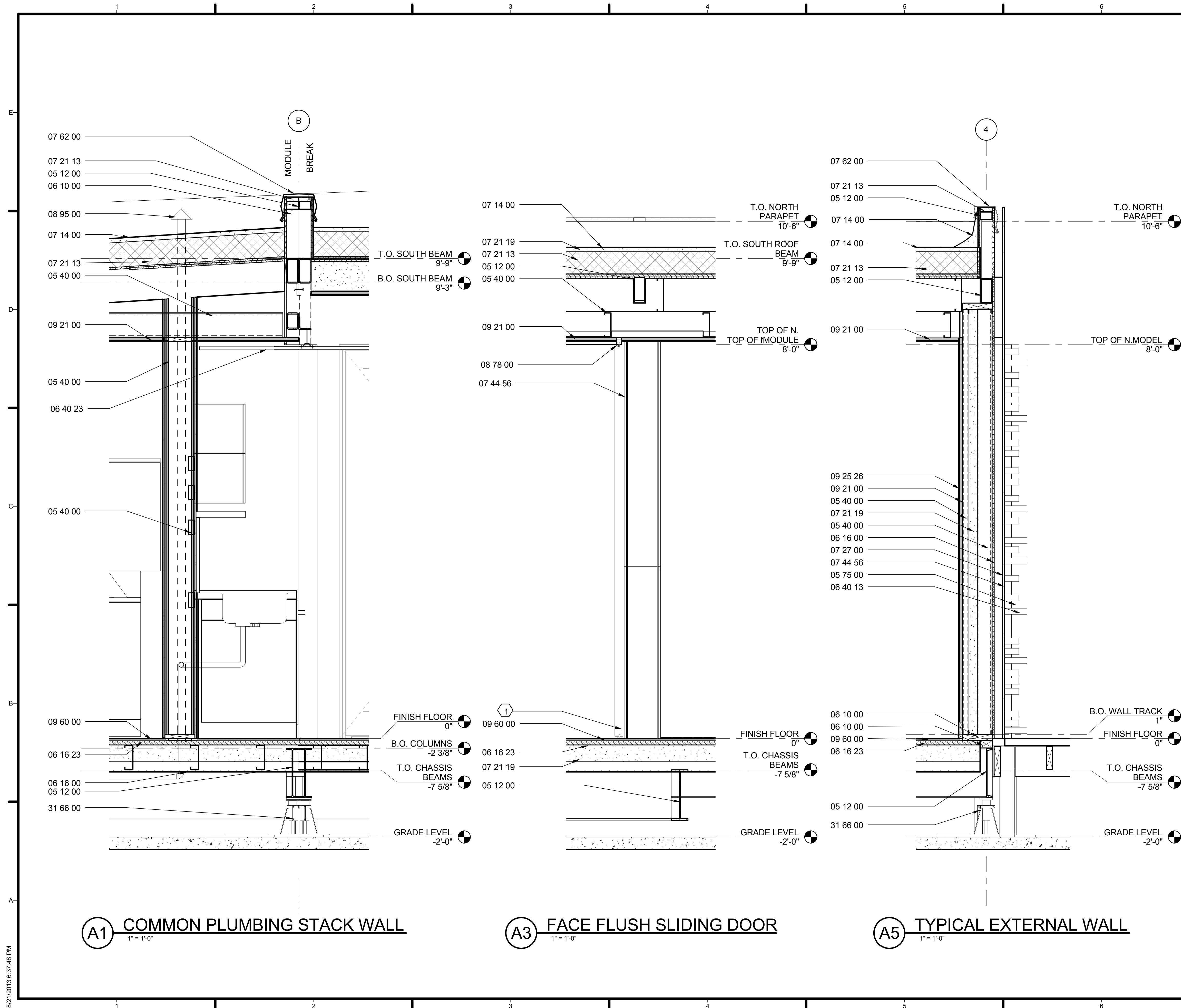
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03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
WALL SECTIONS

A-311

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 – HSS
- 05 40 00 – METAL FRAMING
- 05 54 00 – METAL FLOOR PAN
- 05 75 00 – DEC. FORMED METAL
- 06 05 23 – JOIST HANGER
- 06 10 00 – BLOCKING
- 06 16 00 – SHEATHING
- 06 16 23 – SUBFLOOR
- 06 40 13 – EXT. ARCH. WOODWORK
- 06 40 23 – INT. ARCH. WOODWORK
- 06 73 00 – COMPOSITE DECKING
- 07 13 00 – SHEET WATERPROOFING
- 07 14 00 – FLUID-APPLIED WATERPROOFING
- 07 21 13 – BOARD INSULATION
- 07 21 19 – FOAMED IN PLACE INSULATION
- 07 27 00 – WATER-RESISTIVE WEATHER BARRIER
- 07 44 56 – FIBER CEMENT BOARD
- 07 62 00 – FLASHING
- 07 90 00 – JOINT PROTECTION (CAULKING)
- 08 35 13.13 – ACCORDION DOORS
- 08 95 00 – VENTS
- 09 21 00 – PLASTER AND GYPSUM BOARD ASSEMBLY
- 09 25 26 – NATURAL CLAY PLASTERING
- 09 60 00 – MARMOLEUM FLOORING
- 26 31 00 – PHOTOVOLTAIC COLLECTORS
- 31 66 00 – SPECIAL FOUNDATIONS (PIERS)

SHEET KEYNOTES

- 1. BARN DOOR



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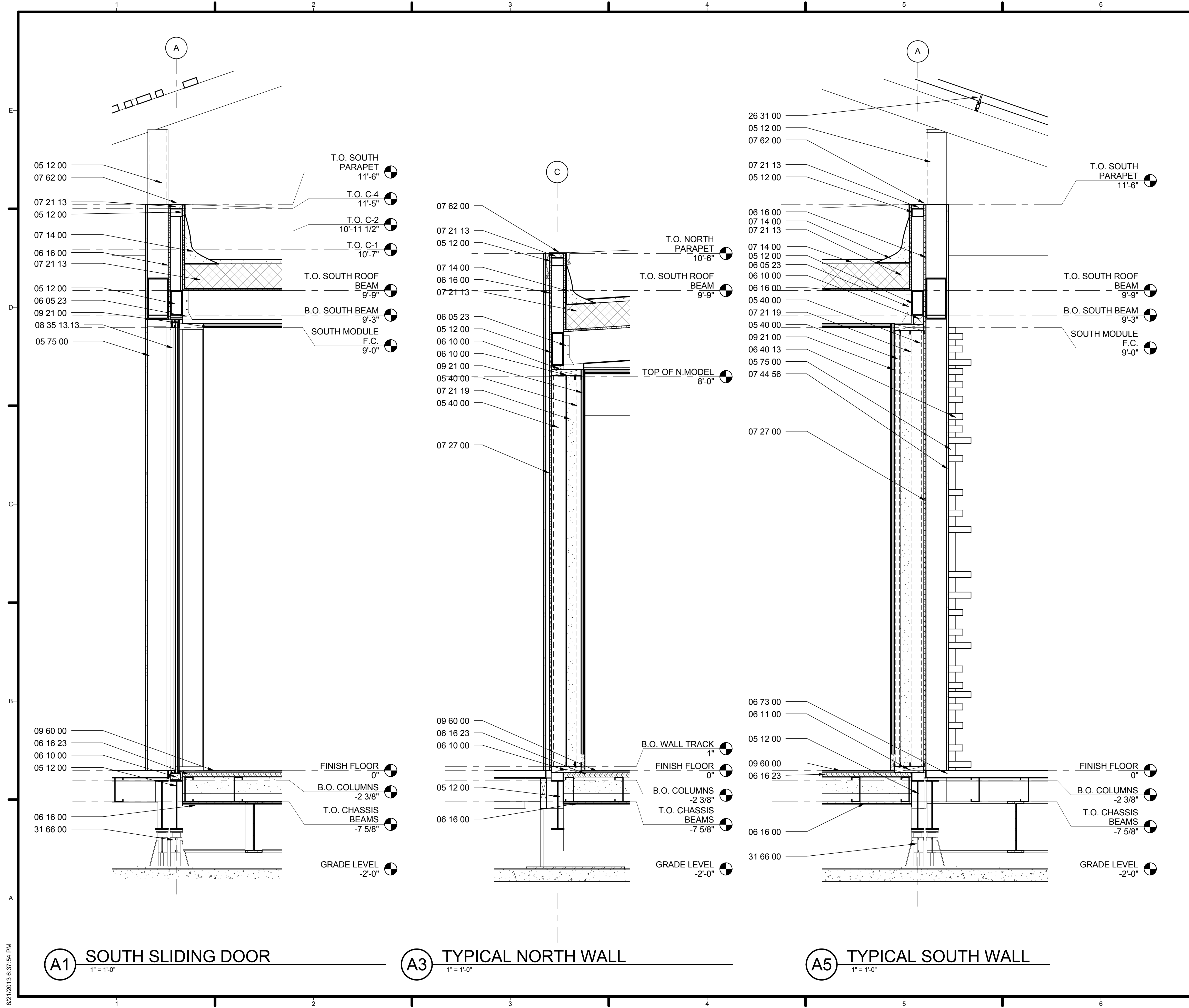


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SHEET TITLE
WALL SECTIONS

A-312



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 - HSS
- 05 40 00 - METAL FRAMING
- 05 54 00 - METAL FLOOR PAN
- 05 75 00 - DEC. FORMED METAL
- 06 05 23 - JOIST HANGER
- 06 10 00 - BLOCKING
- 06 16 00 - SHEATHING
- 06 16 23 - SUBFLOOR
- 06 40 13 - EXT. ARCH. WOODWORK
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- 06 73 00 - COMPOSITE DECKING
- 07 13 00 - SHEET WATERPROOFING
- 07 14 00 - FLUID-APPLIED WATERPROOFING
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- 07 21 19 - FOAMED IN PLACE INSULATION
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- 07 44 56 - FIBER CEMENT BOARD
- 07 62 00 - FLASHING
- 07 90 00 - JOINT PROTECTION (CAULKING)
- 08 35 13.13 - ACCORDION DOORS
- 09 21 00 - PLASTER AND GYPSUM BOARD ASSEMBLY
- 09 25 26 - NATURAL CLAY PLASTERING
- 09 60 00 - MARMOLEUM FLOORING
- 26 31 00 - PHOTOVOLTAIC COLLECTORS
- 31 66 00 - SPECIAL FOUNDATIONS (PIERS)

SHEET KEYNOTES

1. 1 3/4" PRECAST CONCRETE PAVER
2. RIVER ROCK
3. FELT PAN LINER
4. STEEL ANGLE
5. PLYWOOD FINISH
6. WELD PLATE



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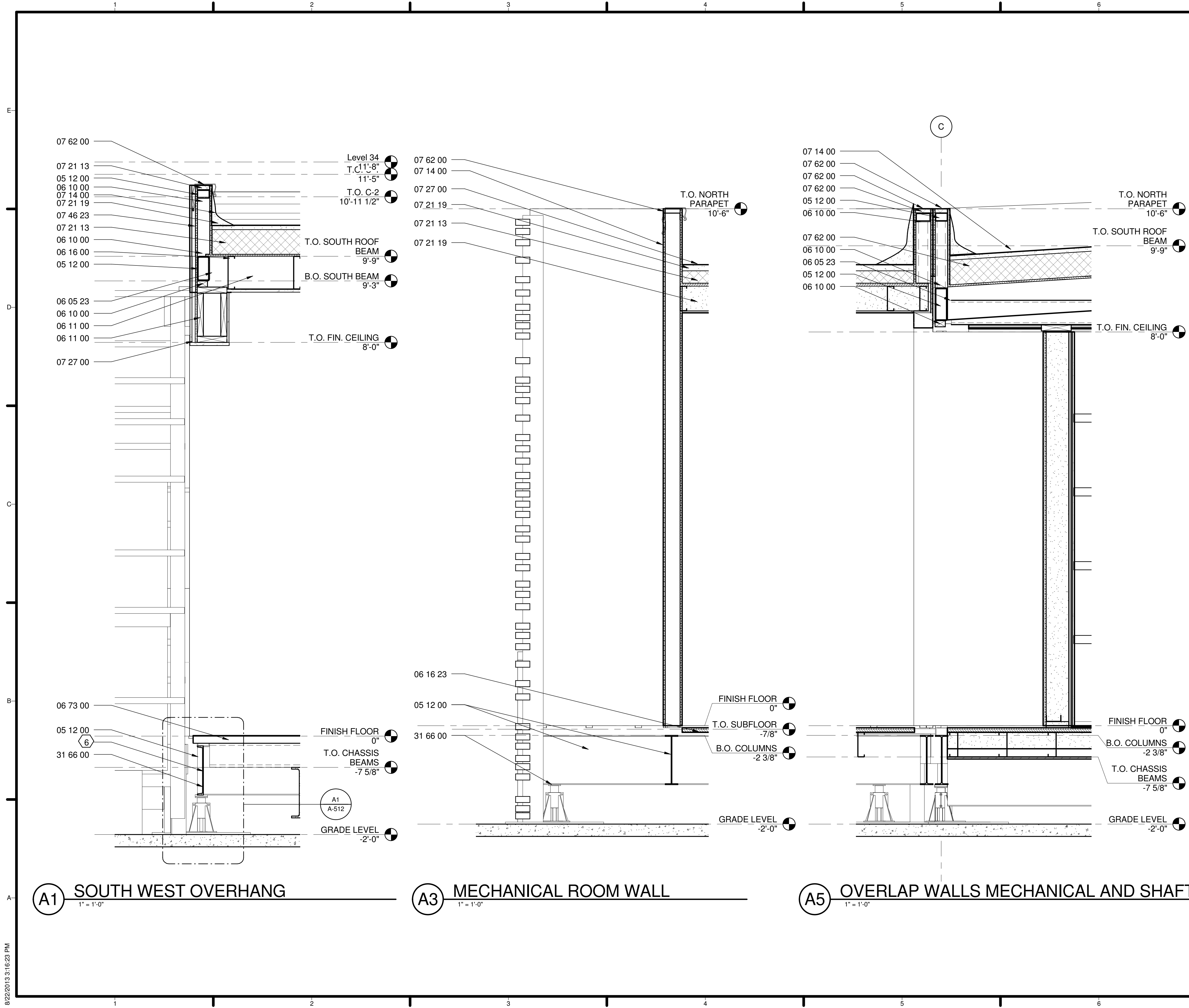
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SHEET TITLE
WALL SECTIONS

A-313

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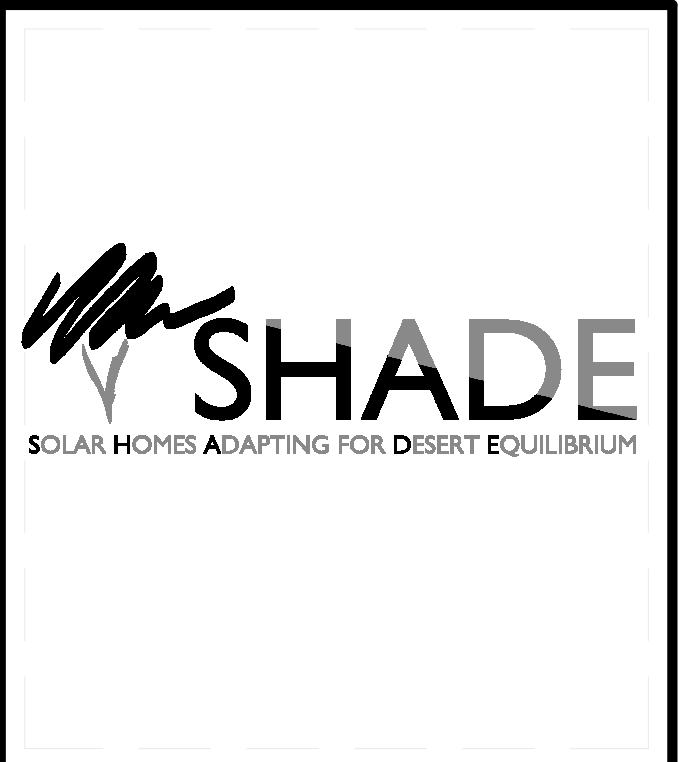
GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 - HSS
- 05 54 00 - METAL FLOOR PAN
- 05 75 00 - DEC. FORMED METAL
- 06 05 23 - JOIST HANGER
- 06 10 00 - BLOCKING
- 06 11 00 - WOOD FRAMING
- 06 16 00 - SHEATHING
- 06 16 23 - SUBFLOOR
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- 07 21 19 - FOAMED IN PLACE INSULATION
- 07 27 00 - WATER RESISTIVE WEATHER BARRIER
- 07 44 56 - FIBER CEMENT BOARD
- 07 46 23 - T-1-11 EXTERIOR SHEATHING
- 07 62 00 - FLASHING
- 07 90 00 - JOINT PROTECTION (CAULKING)
- 09 21 00 - PLASTER AND GYPSUM BOARD ASSEMBLY
- 09 25 26 - NATURAL CLAY PLASTERING
- 09 60 00 - MARMOLEUM FLOORING
- 31 66 00 - SPECIAL FOUNDATIONS (PIERS)

SHEET KEYNOTES

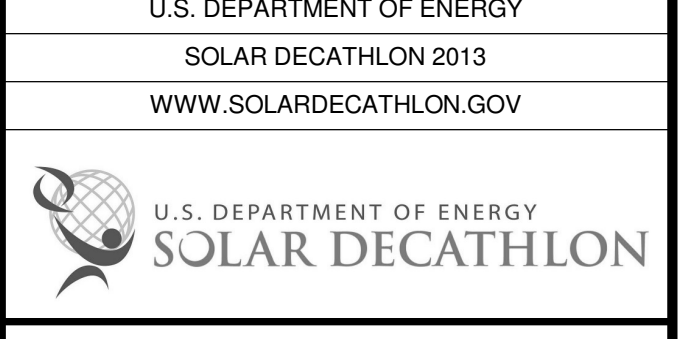
1. 1 3/4" PRECAST CONCRETE PAVER
2. RIVER ROCK
3. FELT PAN LINER
4. STEEL ANGLE
5. PLYWOOD FINISH
6. WELD PLATE



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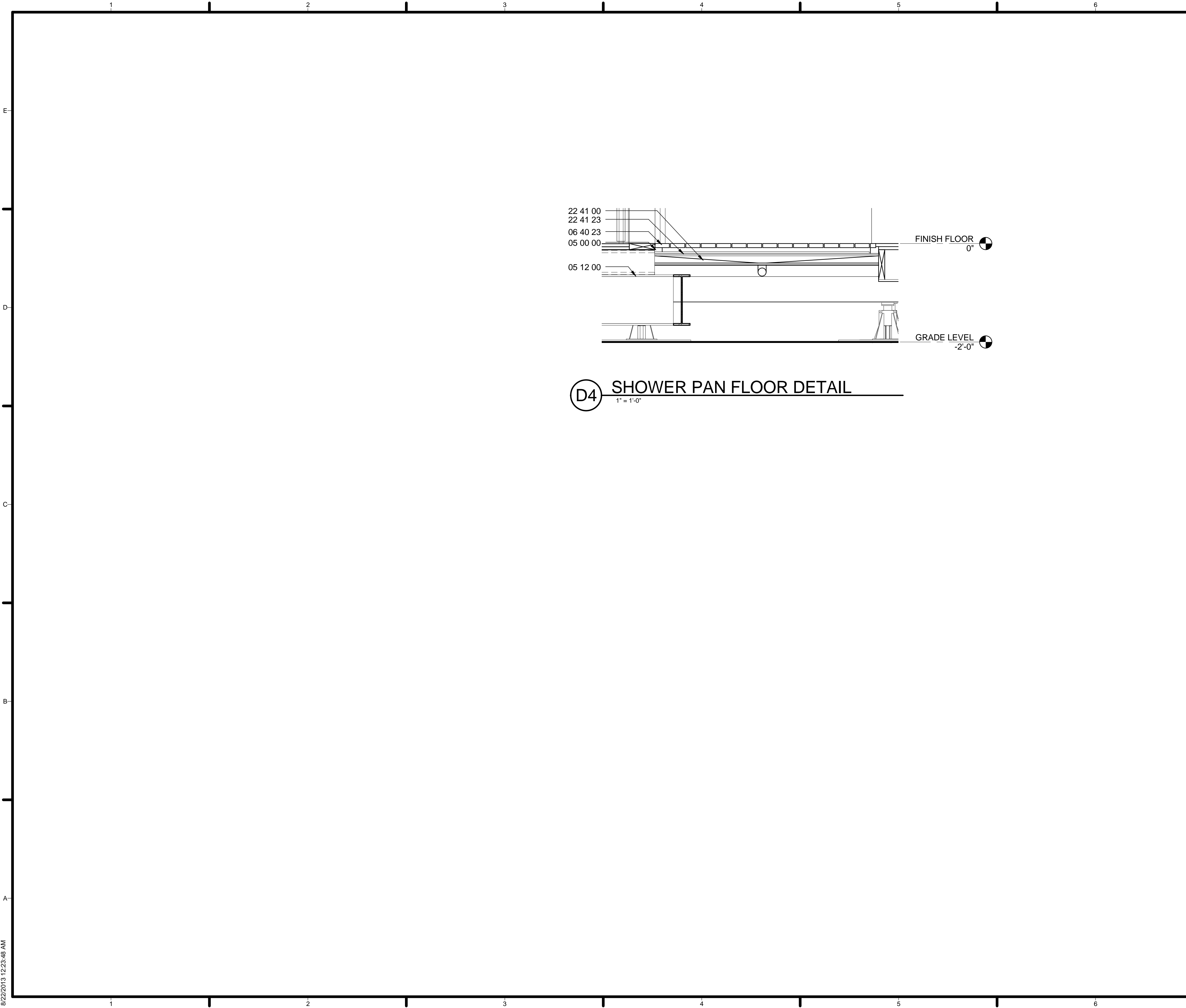


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01	10.11.2012	80% DOE/NREL DD SUBMISSION

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WALL SECTIONS

A-314



D4 SHOWER PAN FLOOR DETAIL
1" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 00 00 STEEL ANGLE
- 05 12 00 STRUCTURAL STEEL FRAMING
- 06 11 00 WOOD FRAMING
- 06 40 23 BAMBOO
- 22 41 00 DRAINAGE PANS
- 22 41 23 SHOWER RECEPTOR AND BASIN

SHEET KEYNOTES



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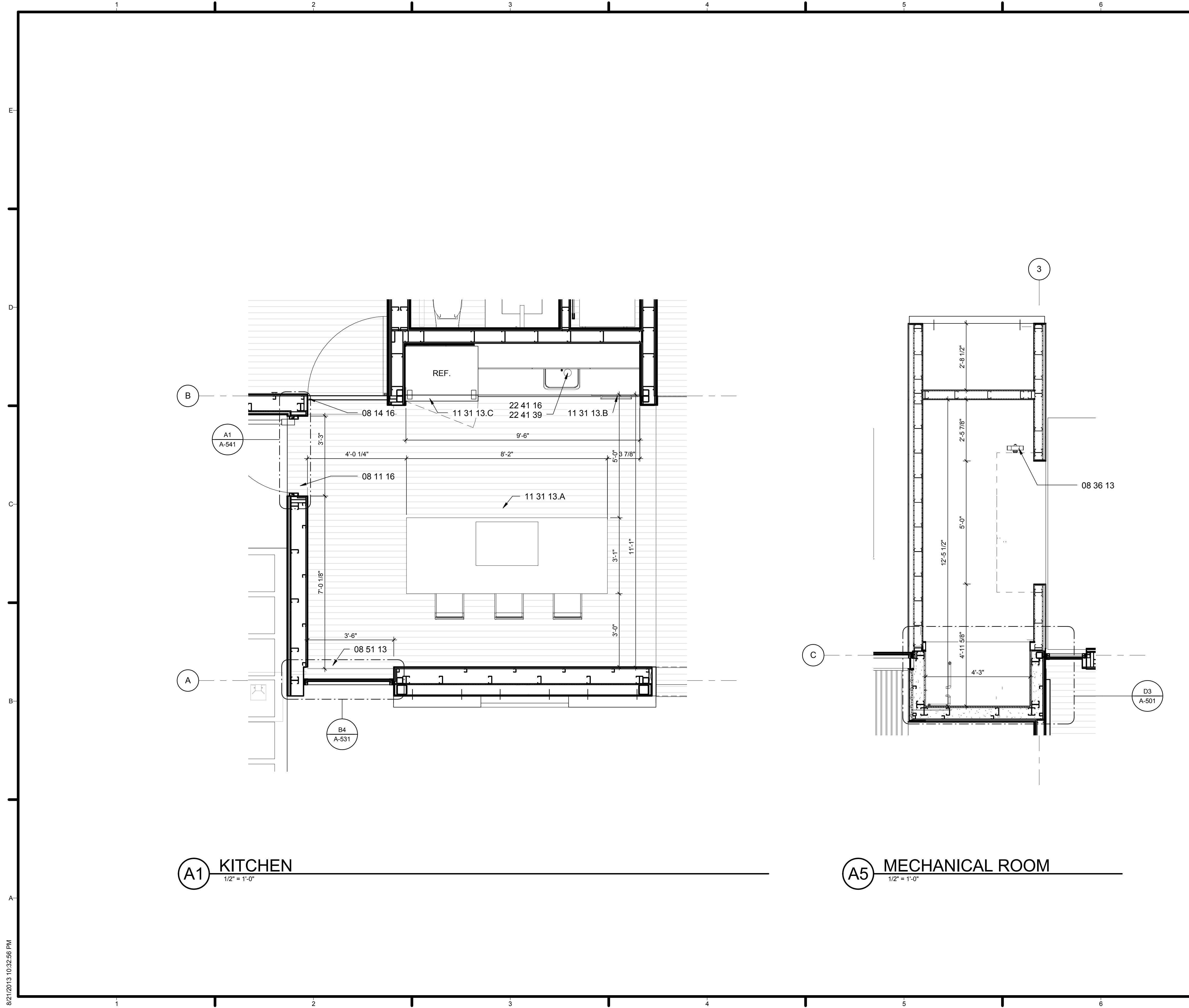


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SHEET TITLE
FLOOR SECTIONS AND DETAILS

A-321



A1 KITCHEN
1/2" = 1'-0"

A5 MECHANICAL ROOM
1/2" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 08 11 16 - 36" EXTERIOR DOOR
- 08 14 16 - 36" POCKET DOOR
- 08 14 16 - 36" PIVOT-SLIDE DOOR
- 08 14 16 - 40" FLUSH PANEL DOOR
- 08 36 13 - 6' WIDE OVERHEAD DOOR
- 08 51 13 - 42" WINDOW
- 08 51 13 - 54" WINDOW
- 11 31 23 - WASHER AND DRYER
- 22 12 00 - WATER STORAGE TANK
- 22 41 13 - WALL MOUNTED TOILET
- 22 41 39.B - SINK
- 22 41 39.D - BATHROOM FAUCET
- 22 41 23 - SHOWER PAN
- 22 41 59 - SHOWER HEAD

SHEET KEYNOTES



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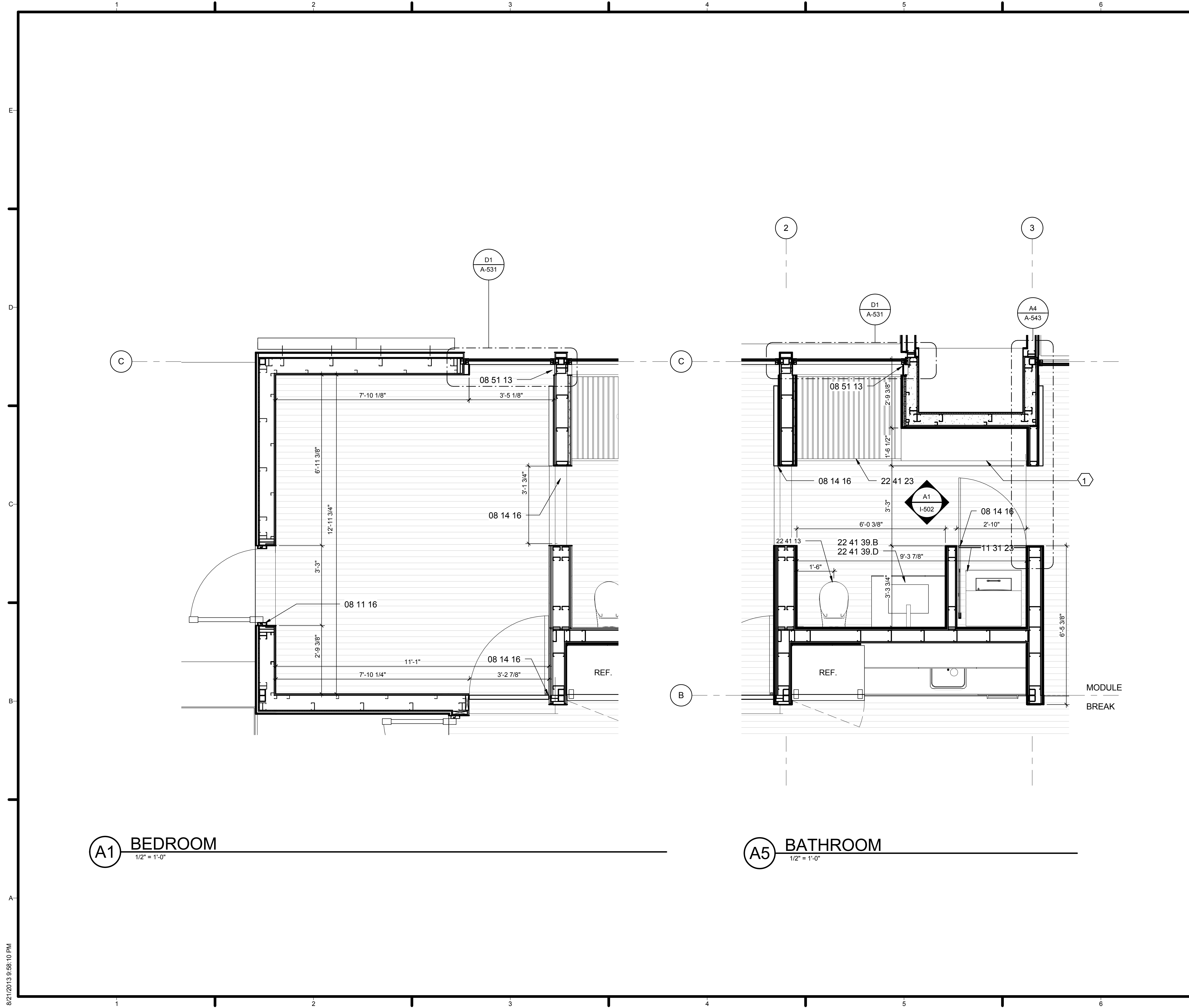


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 LARGE SCALE PLANS

A-401



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 08 11 16 - 36" EXTERIOR DOOR
- 08 14 16 - 36" POCKET DOOR
- 08 14 16 - 36" PIVOT-SLIDE DOOR
- 08 14 16 - 40" FLUSH PANEL DOOR
- 08 51 13 - 42" WINDOW
- 08 51 13 - 54" WINDOW
- 11 31 23 - WASHER AND DRYER
- 22 41 13 - WALL MOUNTED TOILET
- 22 41 39.B - SINK
- 22 41 39.D - BATHROOM FAUCET
- 22 41 23 - SHOWER PAN
- 22 41 59 - SHOWER HEAD

SHEET KEYNOTES

- 1 SHELVING



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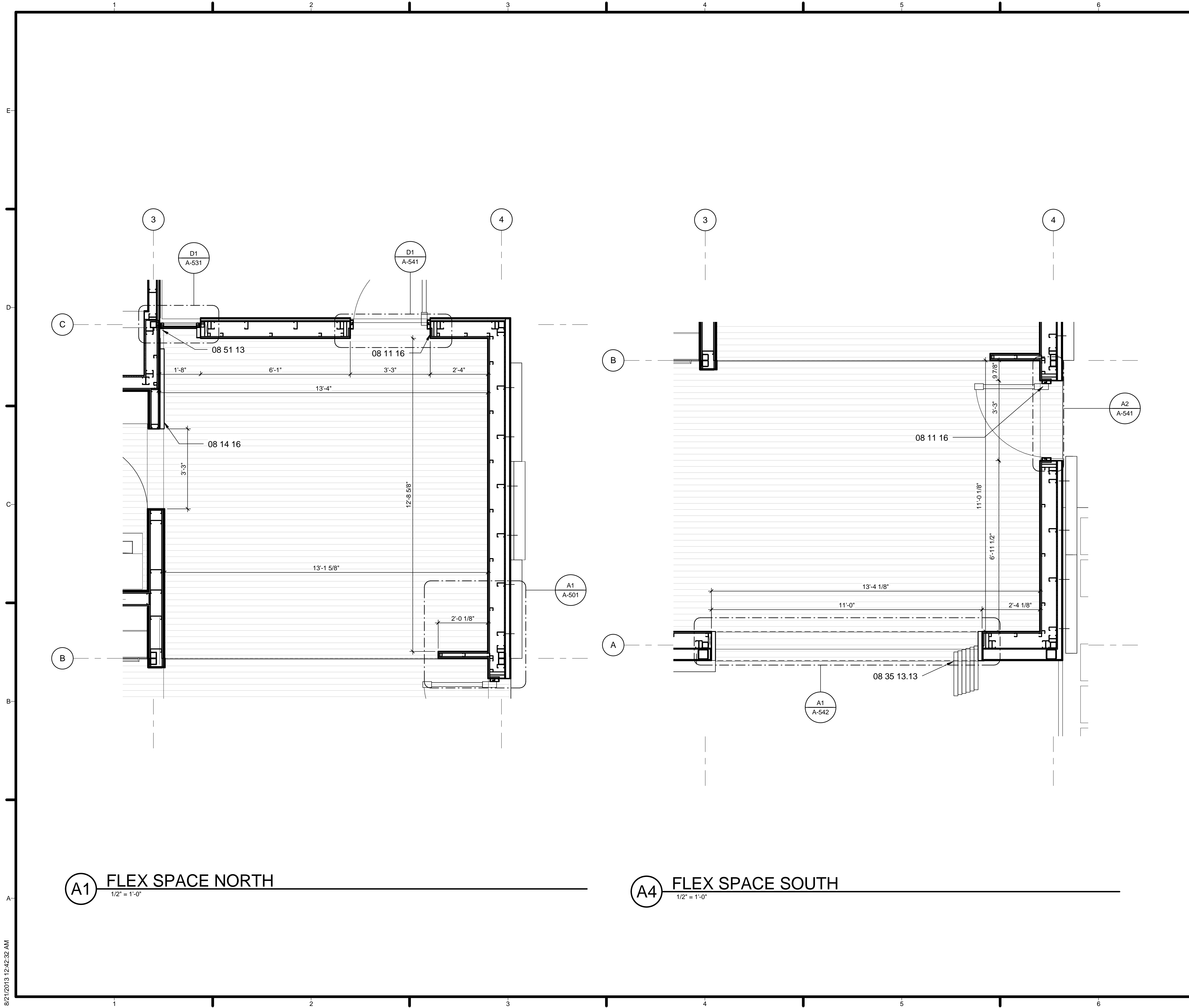


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 LARGE SCALE PLANS

A-402



GENERAL SHEET NOTES

REFERENCE KEYNOTES

08 11 16 - 36" ALUMINUM DOOR
 08 14 16 - 36" BARN DOOR
 08 35 13.13 - 11' PANORAMA
 PANEL DOOR
 08 51 13 - 20" FIXED WINDOW

SHEET KEYNOTES



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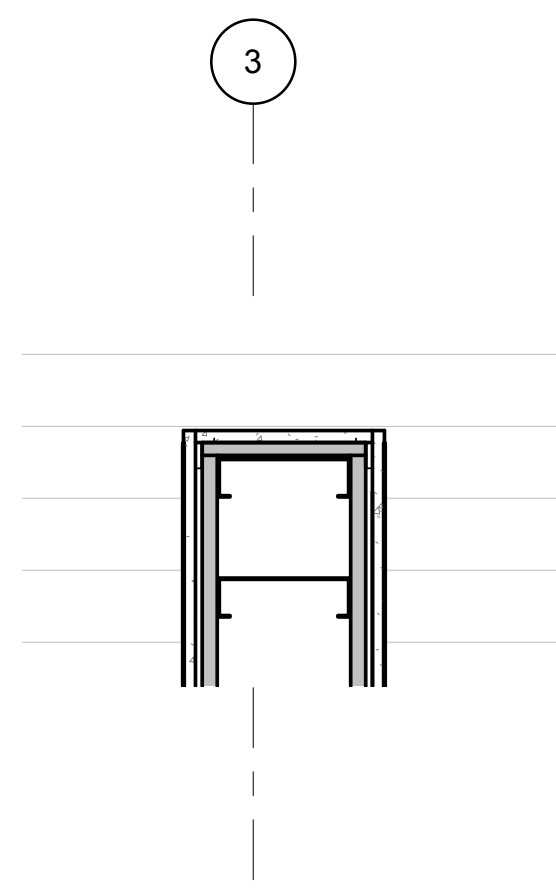


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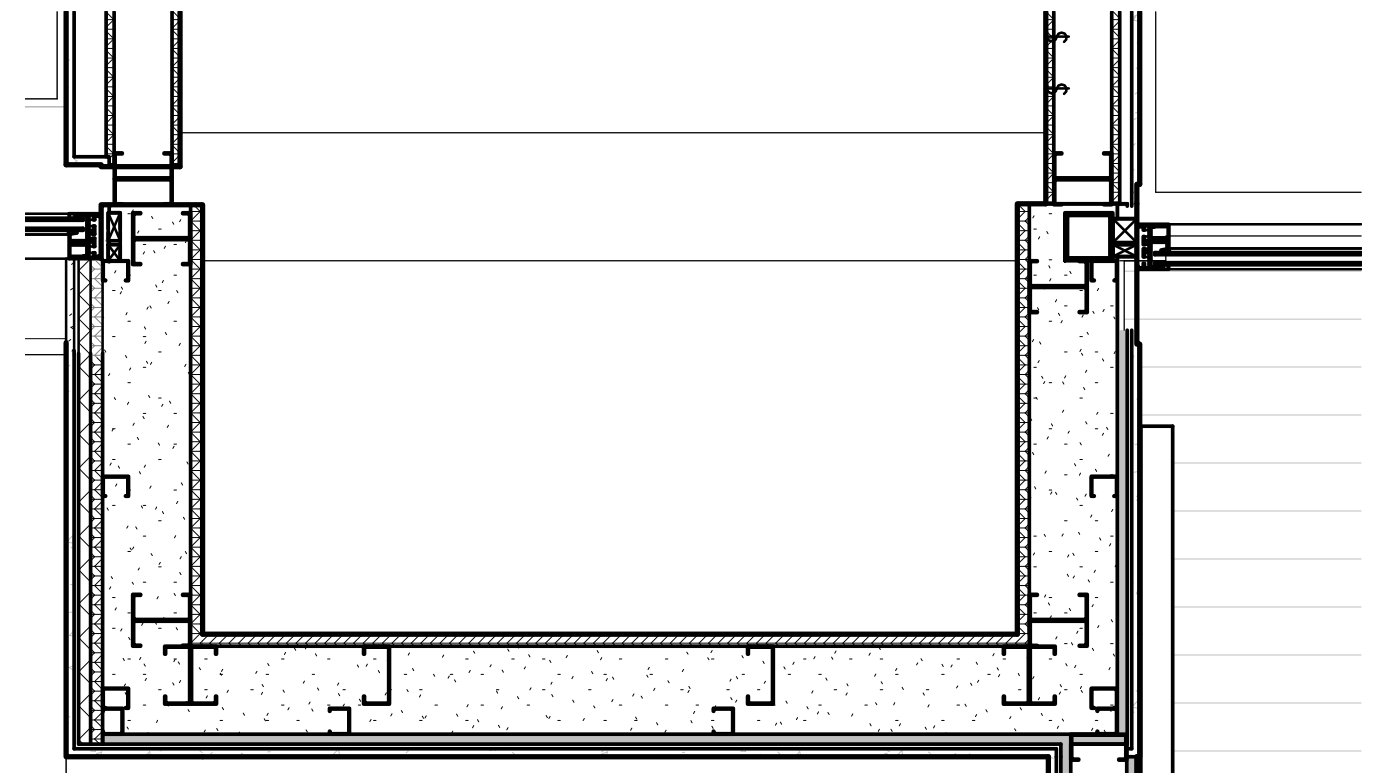
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SHEET TITLE
 LARGE SCALE PLANS

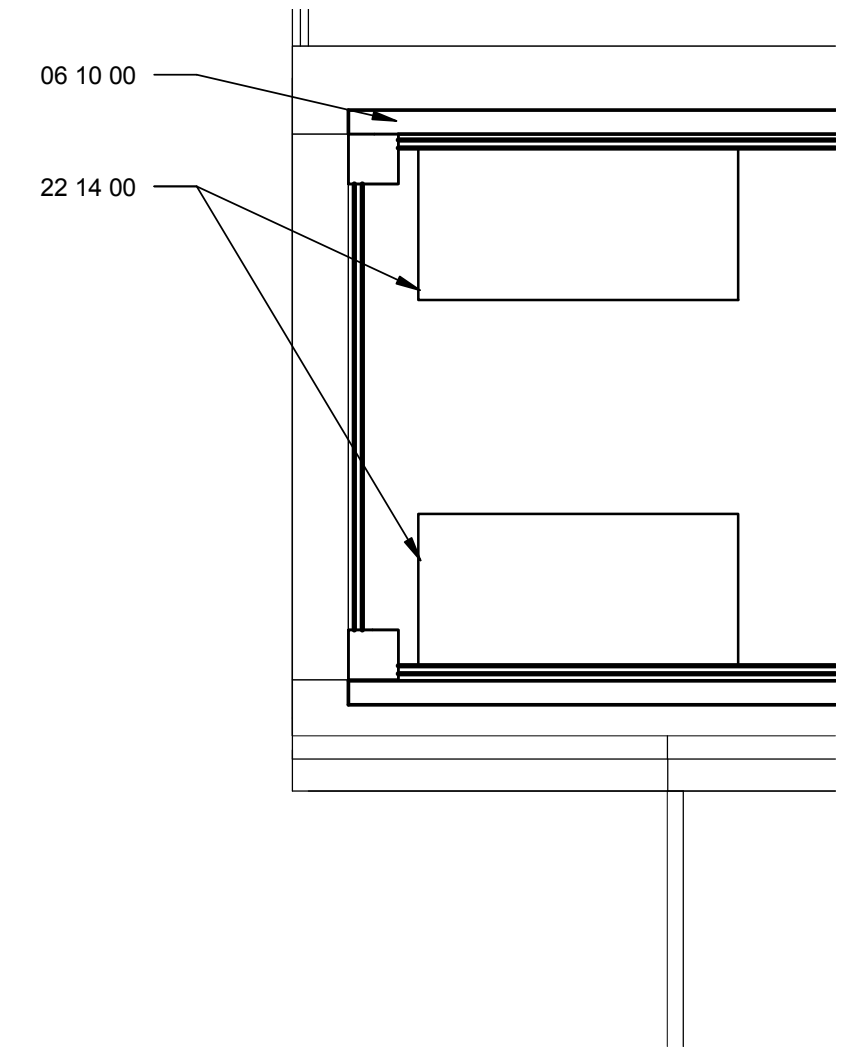
A-403



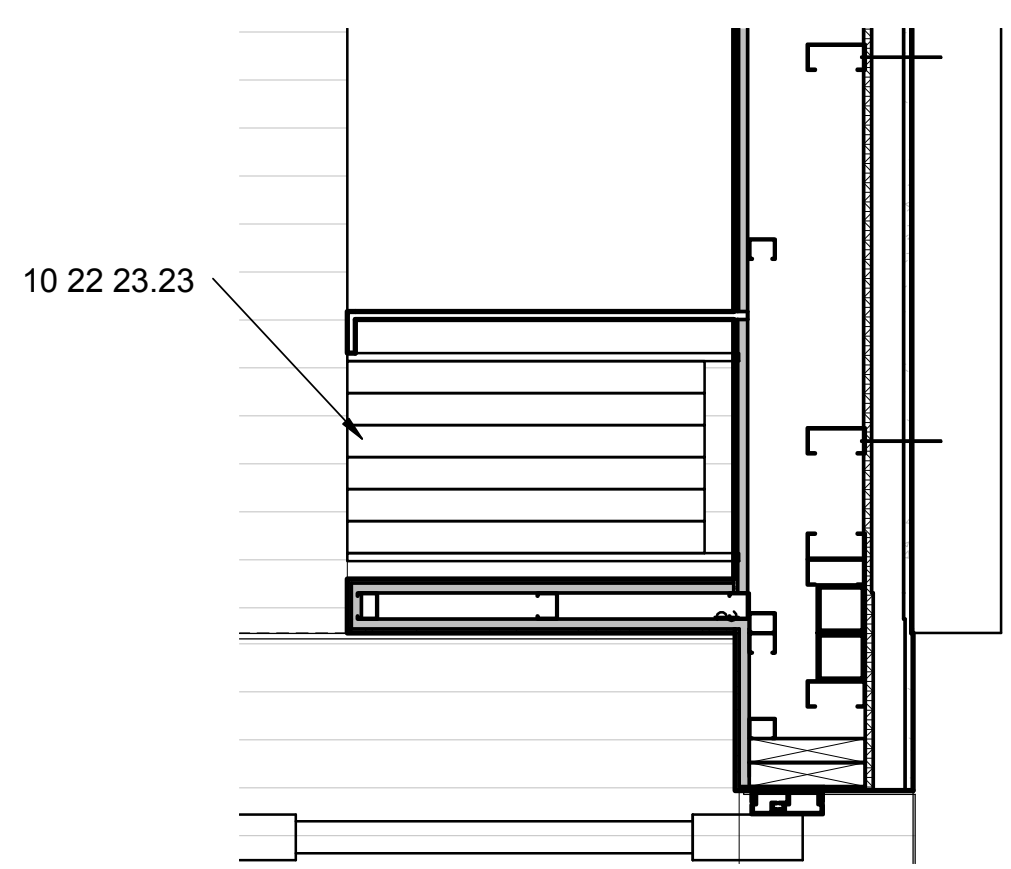
D1 TYPICAL FIBER CEMENT END DETAIL
1 1/2" = 1'-0"



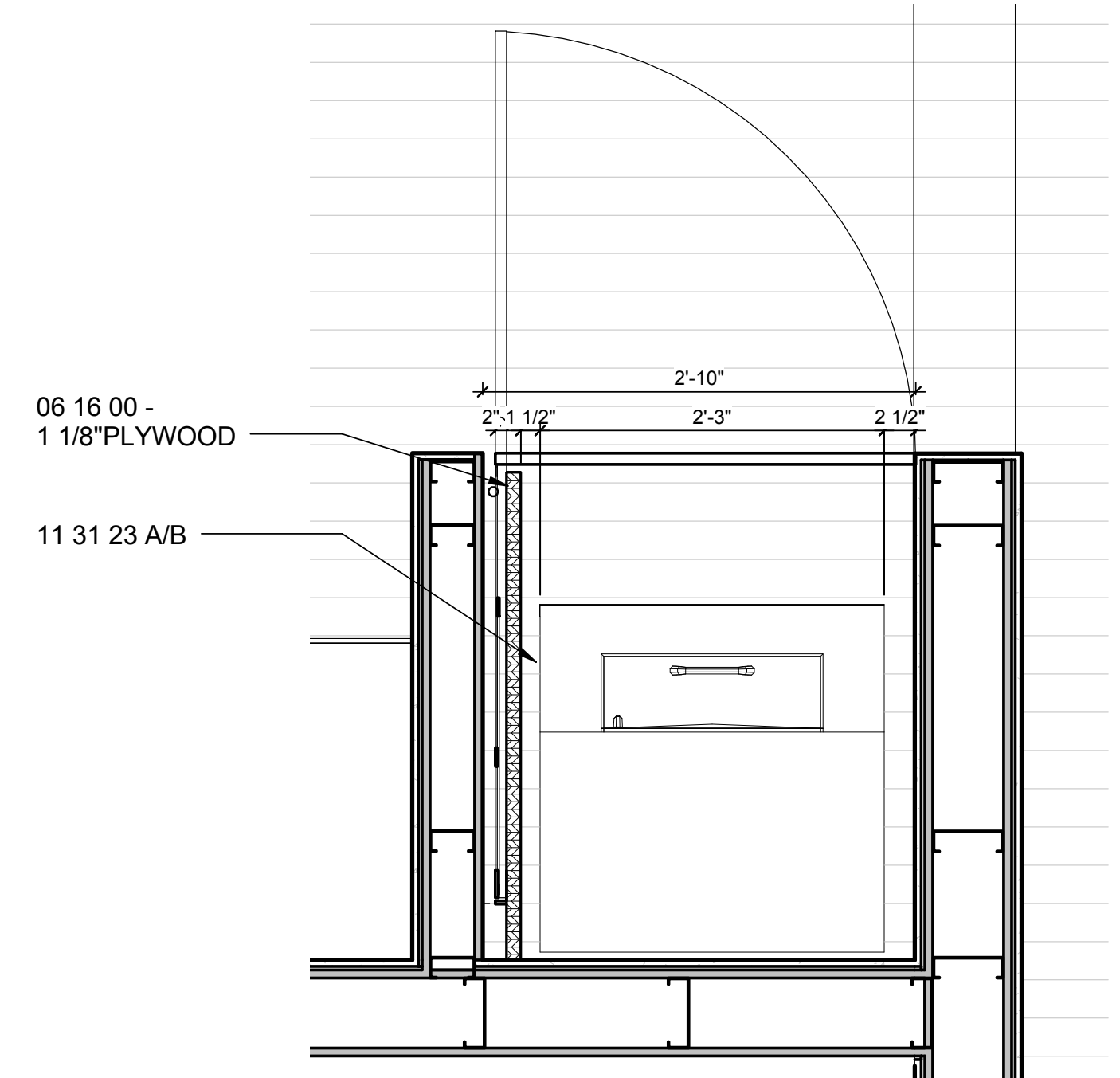
D3 MECHANICAL CHASE
1" = 1'-0"



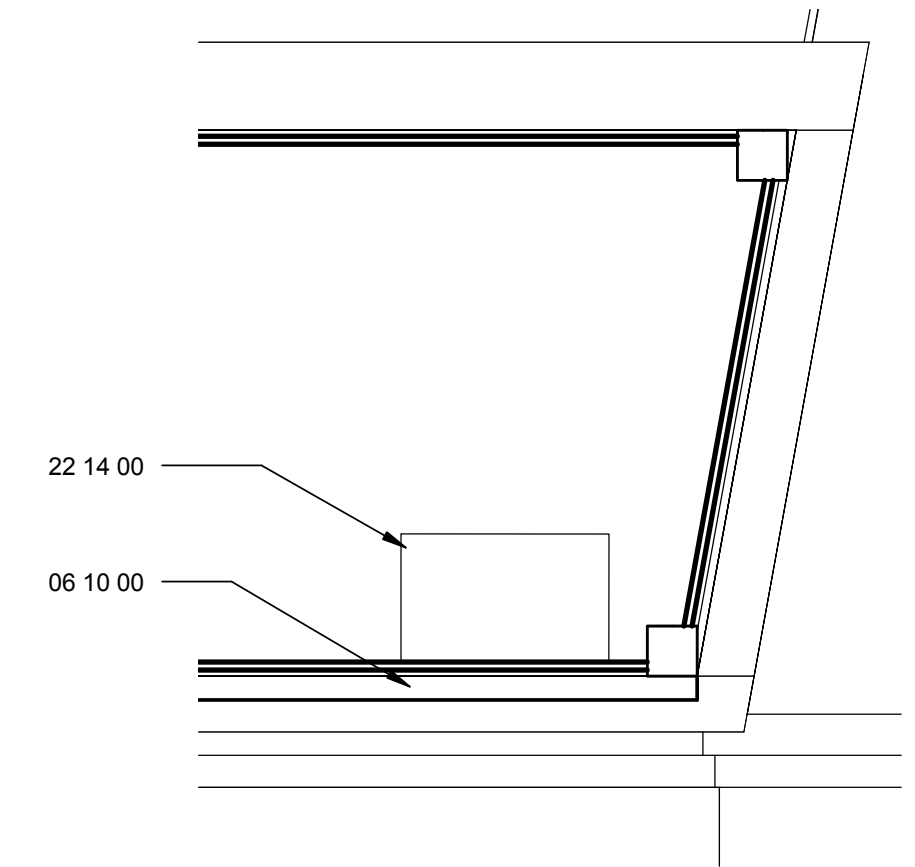
D5 STORAGE WATER HOGS
1" = 1'-0"



A1 FOLDING SLIDER STACK
1" = 1'-0"



A3 FOLDING + SLIDING ASSEMBLY
1" = 1'-0"



A5 CORNER DETAIL STORAGE
1" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 06 10 00 - ROUGH CARPENTRY
- 06 16 00 - SHEATHING
- 10 22 23.23 - OPERABLE PARTITION SYSTEM
- 11 31 23 A/B - RESIDENTIAL LAUNDRY APPLIANCES
- 22 14 00 - FACILITY STORM DRAINAGE

SHEET KEYNOTES



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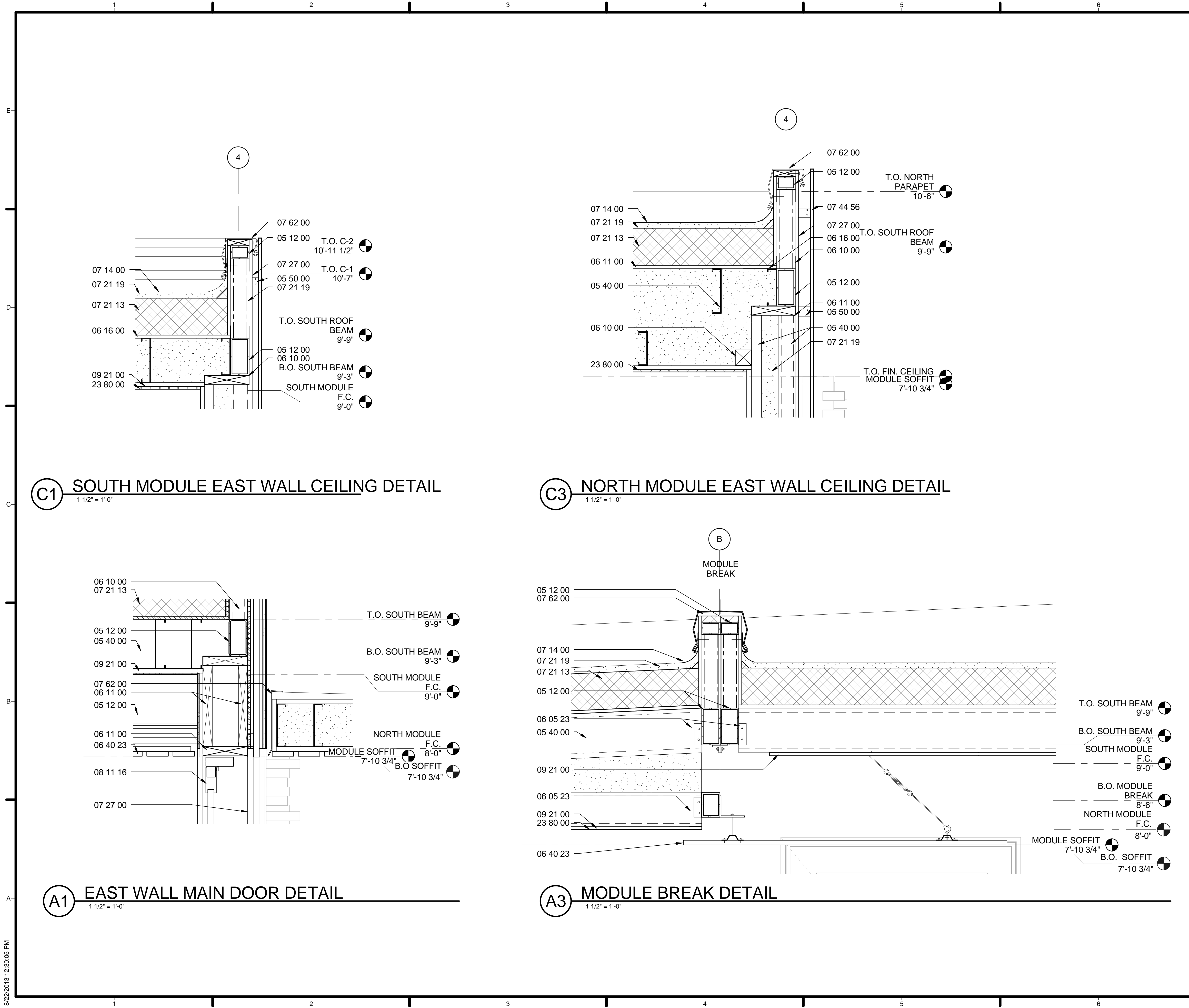


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01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
PLAN DETAILS

A-501



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 00 00 STEEL ANGLE
- 05 12 00 STRUCTURAL STEEL FRAMING
- 05 40 00 METAL FRAMING
- 06 05 23 JOIST HANGERS
- 06 10 00 ROUGH CARPENTRY
- 06 11 00 WOOD FRAMING
- 06 16 00 EXTERIOR SHEATHING
- 06 40 23 BAMBOO
- 07 14 00 FLUID-APPLIED WATERPROOFING
- 07 21 13 BOARD INSULATION
- 07 27 00 FOAMED-IN-PLACE INSULATION
- 07 27 00 WATER RESISTIVE WEATHER BARRIER
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 07 62 00 SHEET METAL FLASHING AND TRIM
- 07 90 00 JOINT PROTECTION
- 08 11 16 ALUMINUM DOOR AND FRAMING
- 09 21 00 PLASTERING
- 09 25 26 NATURAL CLAY PLASTERING
- 23 80 00 BEKA

SHEET KEYNOTES



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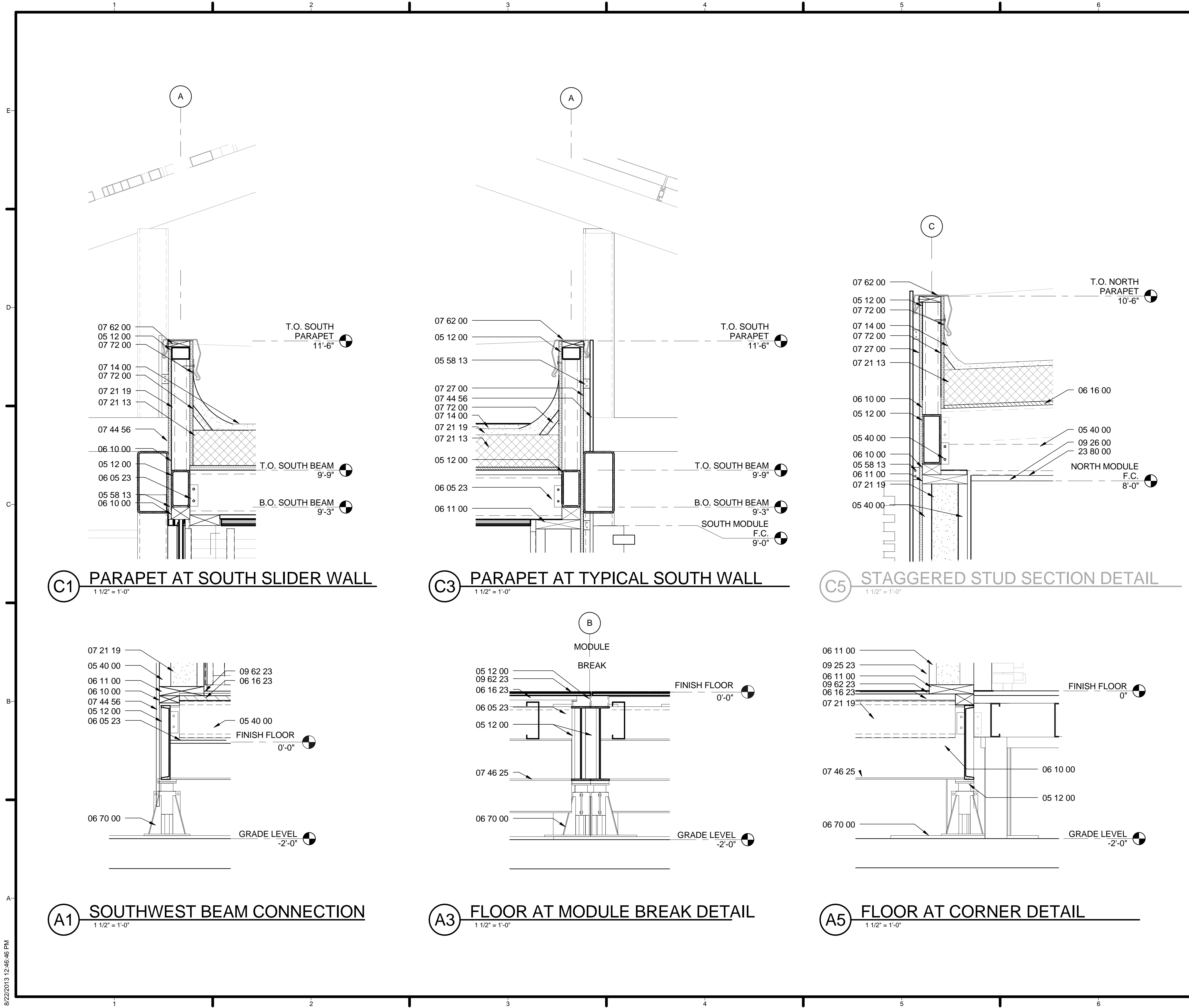
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SHEET TITLE
 SECTION DETAILS

A-511

8/22/2013 12:30:05 PM



GENERAL SHEET NOTES

1. REFER TO G-001 FOR GENERAL NOTES AND FURNITURE DETAILS.

REFERENCE KEYNOTES

- 05 00 00 STEEL ANGLE
- 05 12 00 STRUCTURAL STEEL FRAMING
- 05 40 00 METAL FRAMING
- 05 58 13 FABRICATED METAL STRIPS
- 06 05 23 JOIST HANGERS
- 06 10 00 ROUGH CARPENTRY
- 06 11 00 WOOD FRAMING
- 06 16 00 EXTERIOR SHEATHING
- 06 16 23 SUBFLOORING
- 06 40 23 BAMBOO
- 06 70 00 JACK PAD
- 07 14 00 FLUID APPLIED WATERPROOFING
- 07 21 13 BOARD INSULATION
- 07 21 19 FOAMED-IN-PLACE INSULATION
- 07 27 00 WATER RESISTIVE WEATHER BARRIER
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 07 46 25 T1-11
- 07 62 00 SHEET METAL FLASHING AND TRIM
- 07 72 00 TERMINATION BAR
- 07 72 00 CANT STRIP
- 07 90 00 JOINT PROTECTION
- 08 11 16 ALUMINUM DOOR AND FRAMING
- 09 25 26 NATURAL CLAY PLASTERING
- 09 26 00 VENEER PLASTERING
- 09 62 23 BAMBOO FLOORING
- 23 80 00 BEKA

SHEET KEYNOTES



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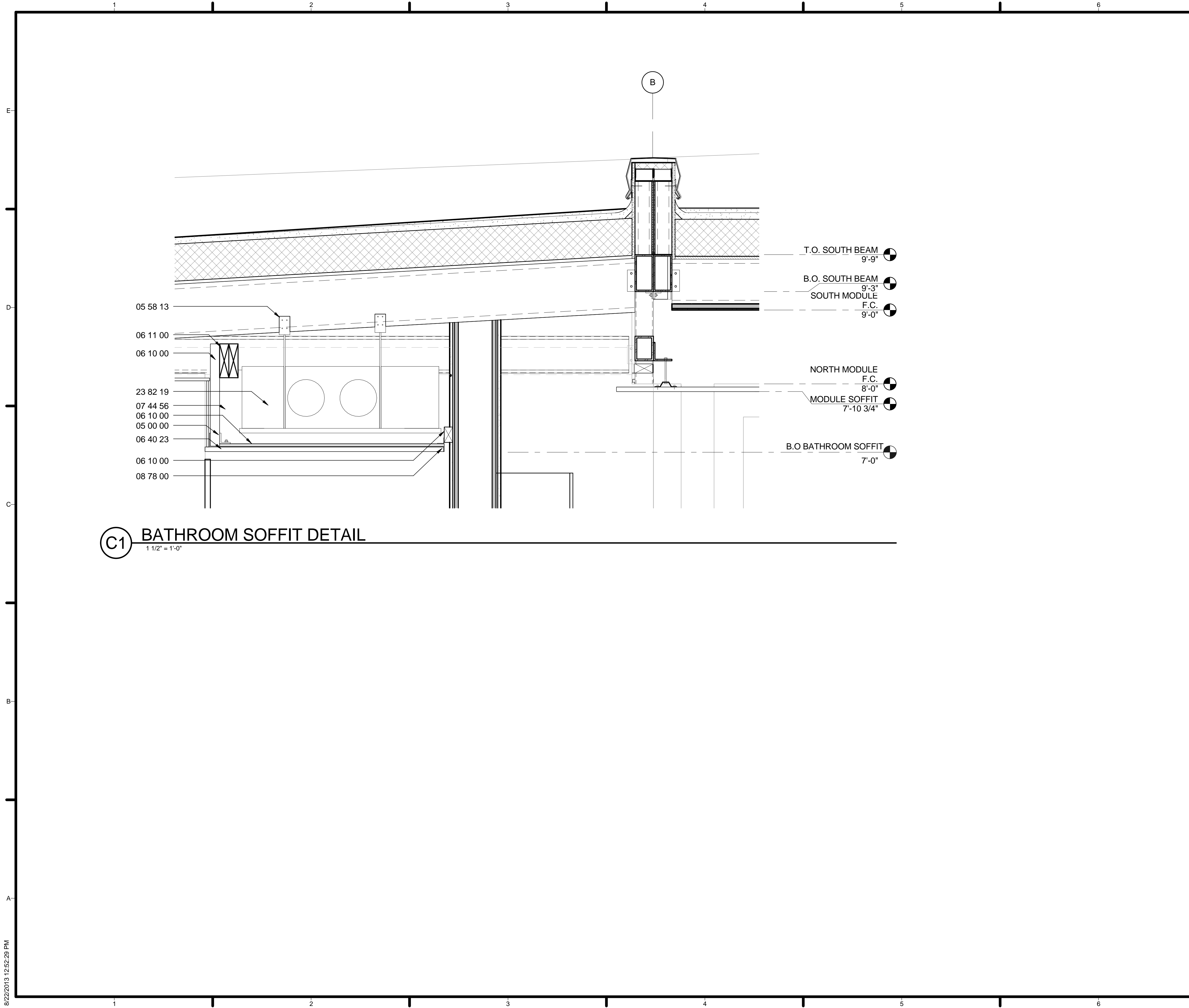
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04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
SECTION DETAILS

A-512

8/22/2013 12:46:46 PM



C1 BATHROOM SOFFIT DETAIL
 1 1/2" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 00 00 STEEL ANGLE
- 05 58 13 FABRICATED METAL STRIPS
- 06 10 00 ROUGH CARPENTRY
- 06 11 00 WOOD FRAMING
- 06 16 00 EXTERIOR SHEATHING
- 06 40 23 BAMBOO
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 78 00 SPECIAL FUNCTION HARDWARE
- 23 80 00 BEKA

SHEET KEYNOTES



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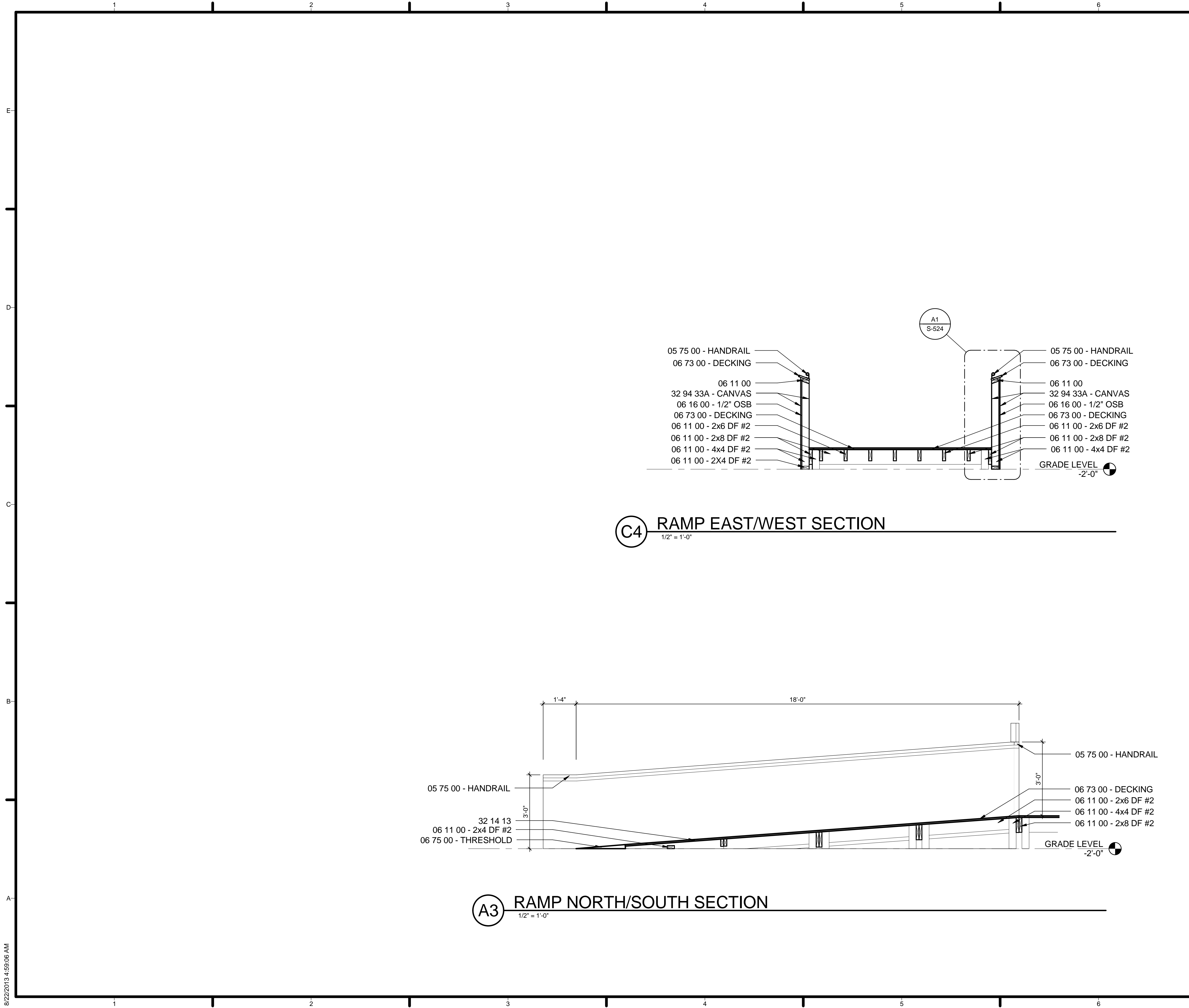


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SECTION DETAILS

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GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 75 00 - ARCHITECTURAL METAL WORK
 06 11 00 - WOOD FRAMING
 06 73 00 - COMPOSITE DECKING
 32 94 33A - CANVAS

SHEET KEYNOTES



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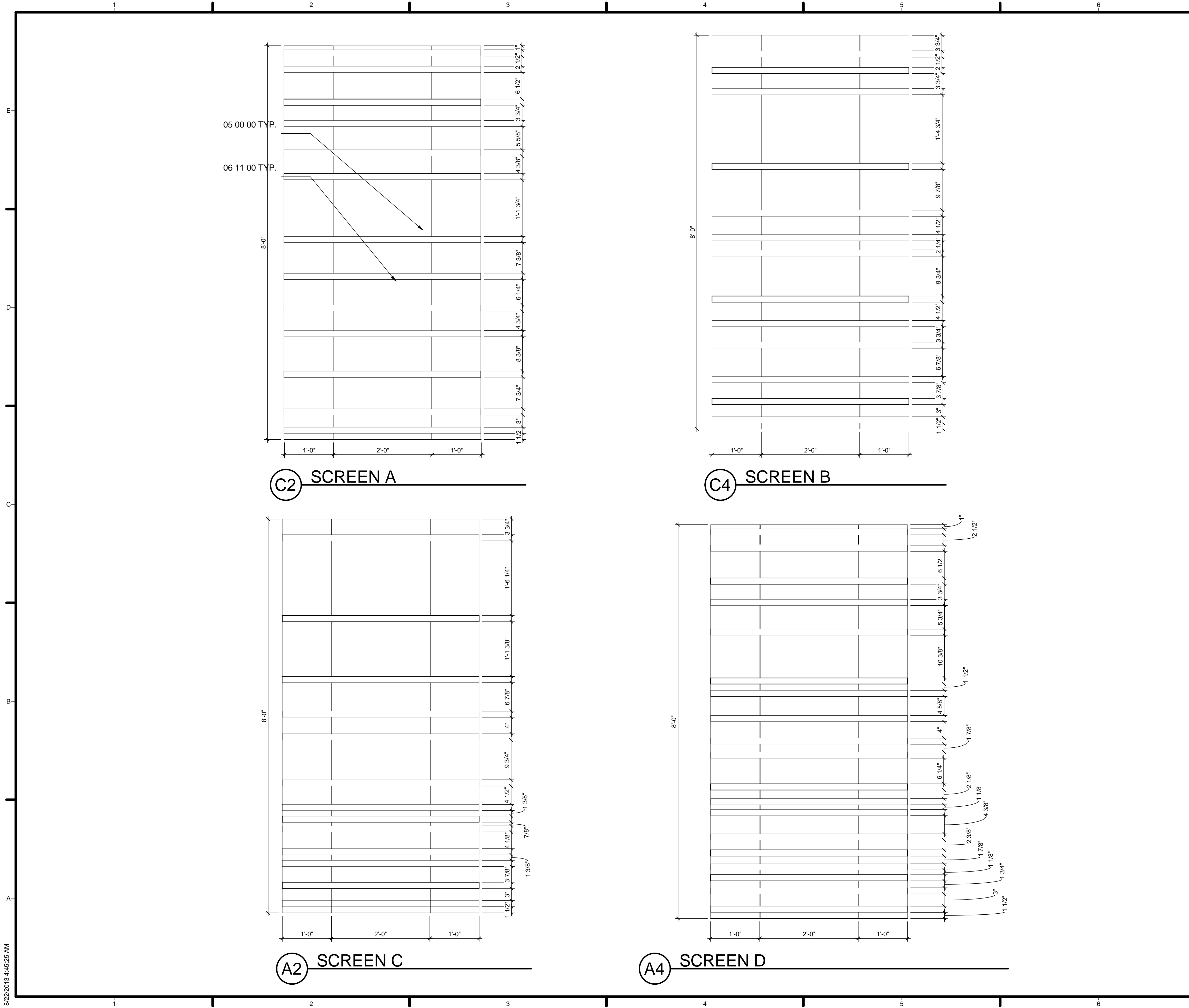


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 RAMP

A-515



C2 SCREEN A

C4 SCREEN B

A2 SCREEN C

A4 SCREEN D

GENERAL SHEET NOTES

REFERENCE KEYNOTES

05 00 00 14 GA. METAL RIBS
 06 11 00 1" X 4" NOMINAL SWT COÖÄ

SHEET KEYNOTES



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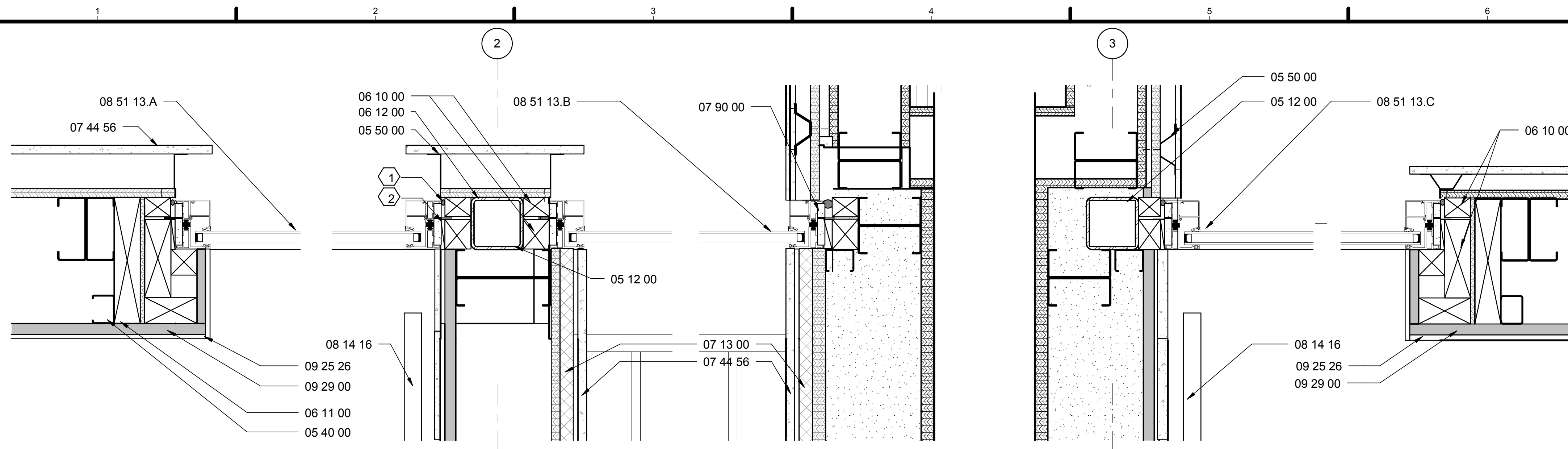


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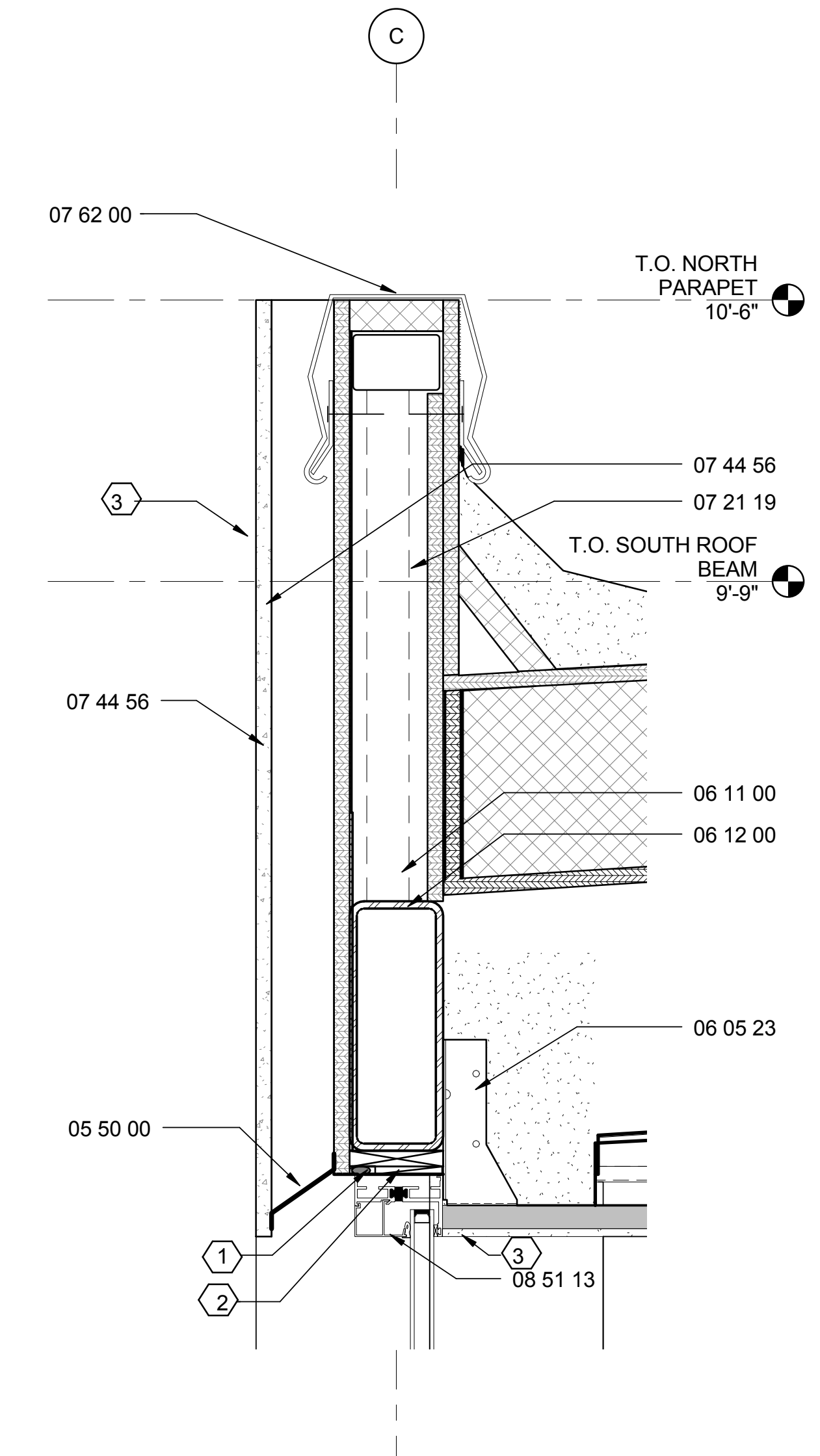
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SHEET TITLE
ELEVATION DETAILS

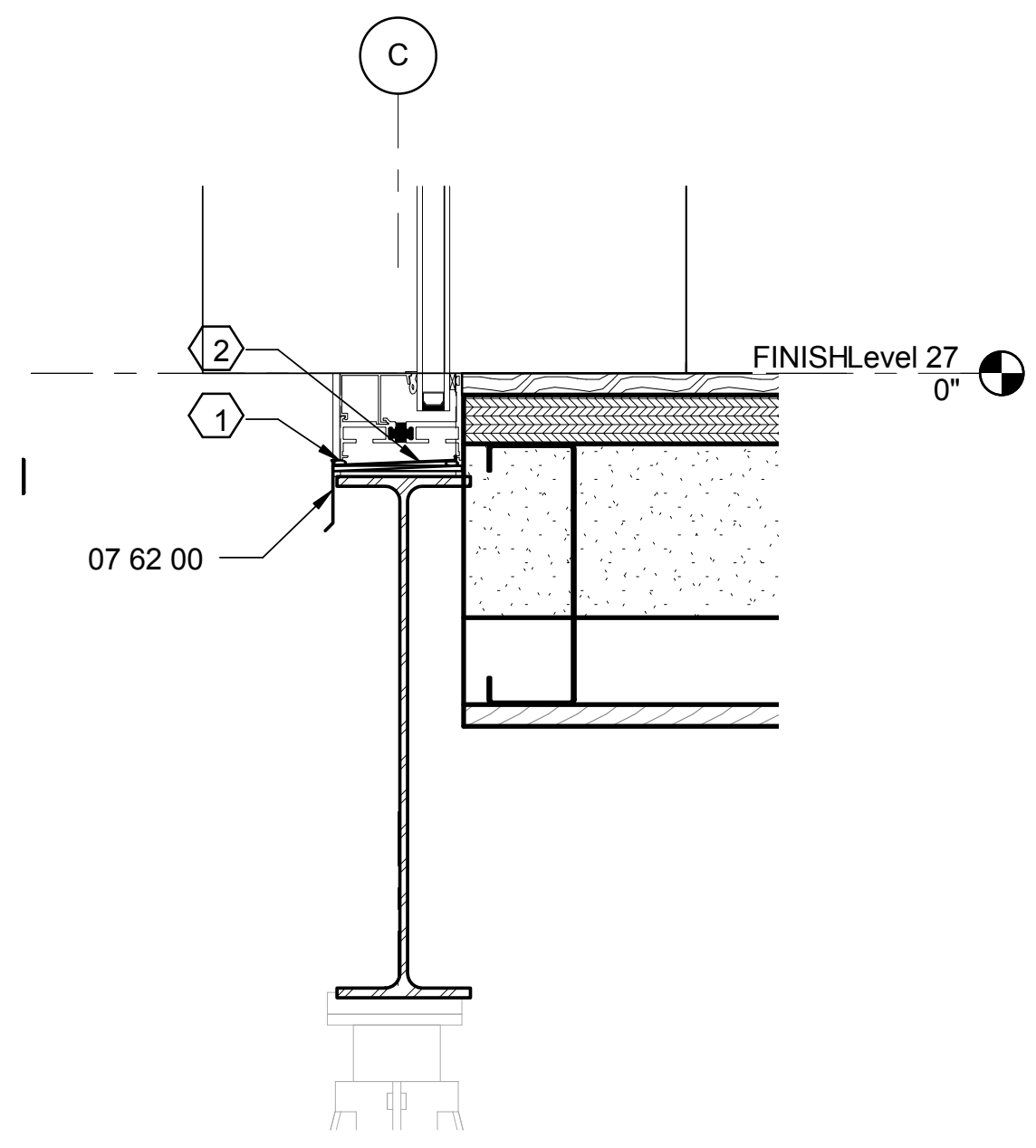
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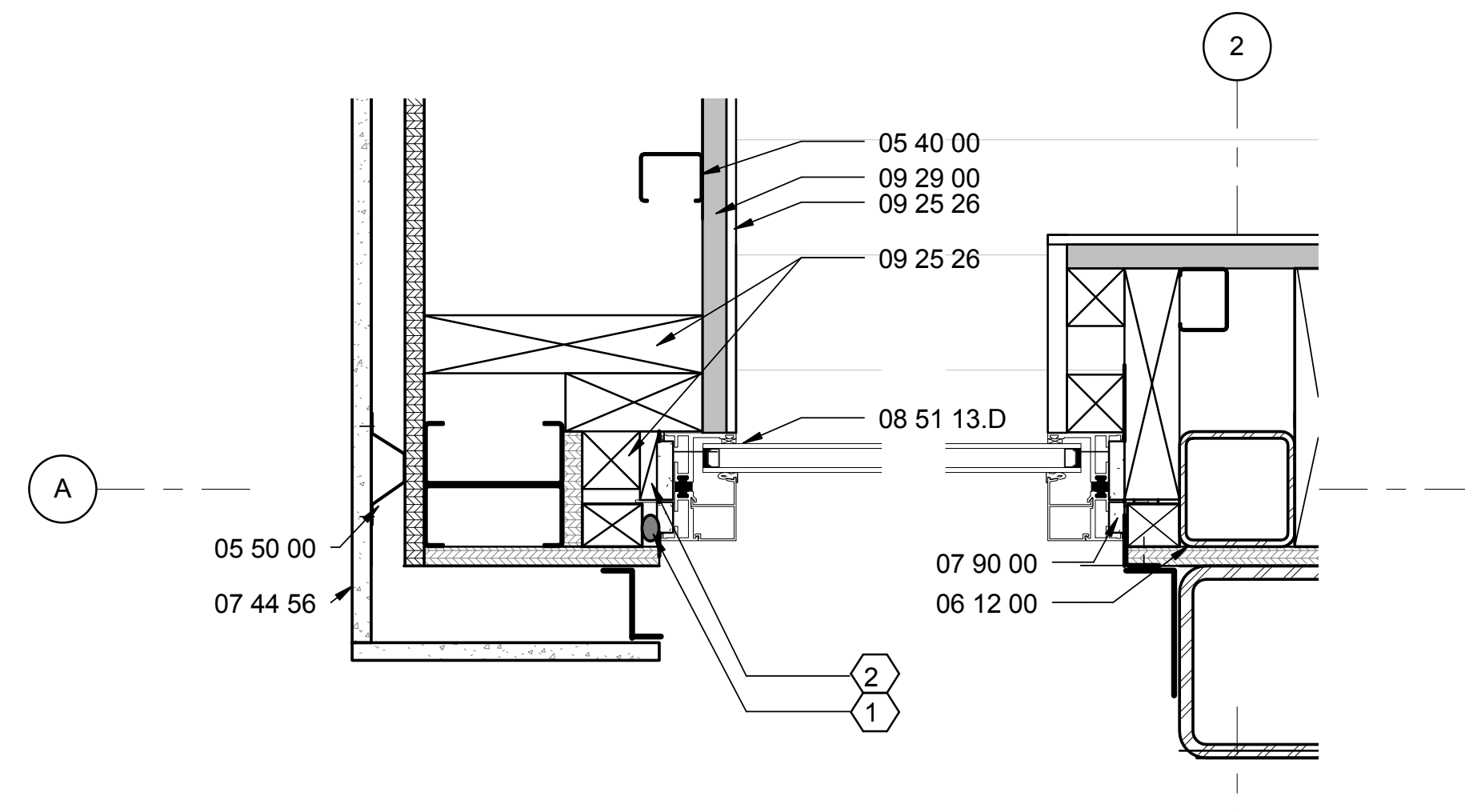
D1 N. MODULE WINDOW JAMB DETAILS
3" = 1'-0"



A1 HEAD AT WINDOW
3" = 1'-0"



A3 SILL AT WINDOW
3" = 1'-0"



B4 KITCHEN WINDOW DETAIL
3" = 1'-0"

GENERAL SHEET NOTES

GLASS STOPS REMOVED FROM EXTEIOR FOR REPAIRS

REFERENCE KEYNOTES

- 05 40 00 - COLD FORMED METAL FRAMING
- 05 50 00 - RAINSCREEN CLIPS
- 06 12 00 - HSS
- 06 05 23 - JOIST HANGER
- 06 10 00 - BLOCKING
- 06 11 00 - LUMBER FRAMING
- 06 40 23 - BAMBOO FINISH
- 07 13 00 - SHEET WATERPROOFING
- 07 21 19 - FOAM-IN-PLACE INSULATION
- 07 44 56 - FIBER CEMENT PANELS
- 07 62 00 - FLASHING
- 07 90 00 - EMSEAL MANUAL
- 08 14 16 - FLUSH FINISH BARN DOOR
- 08 51 13.A - 44" X 100" WINDOW
- 08 51 13.B - 55 1/4" X 100" WINDOW
- 08 51 13.C - 20" X 100" WINDOW
- 08 51 13.D - 44" X 112" WINDOW
- 09 25 26 - CLAY PLASTER FINISH
- 09 29 00 - GYPSUM BOARD
- 31 66 00 - SPECIAL FOUNDATIONS (PIERS)

SHEET KEYNOTES

1. NEOPRENE BACKER ROD
2. SHIM
3. BLACK LACQUER ON FIBER CEMENT



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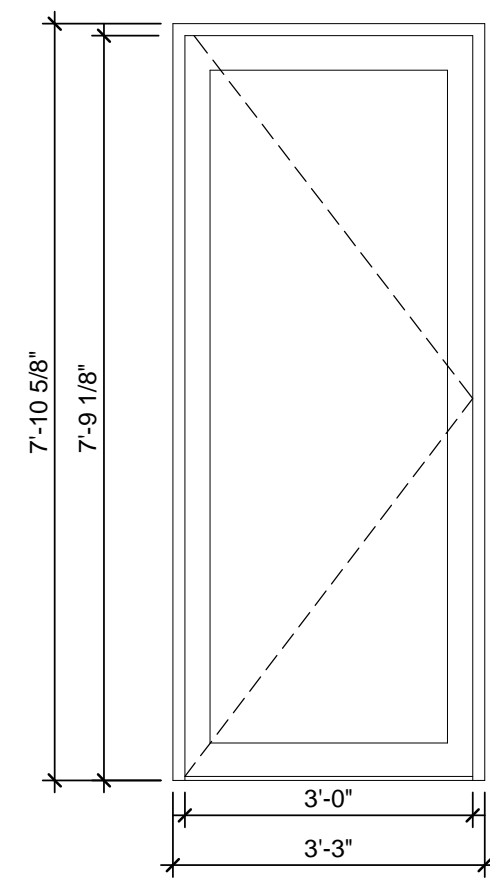


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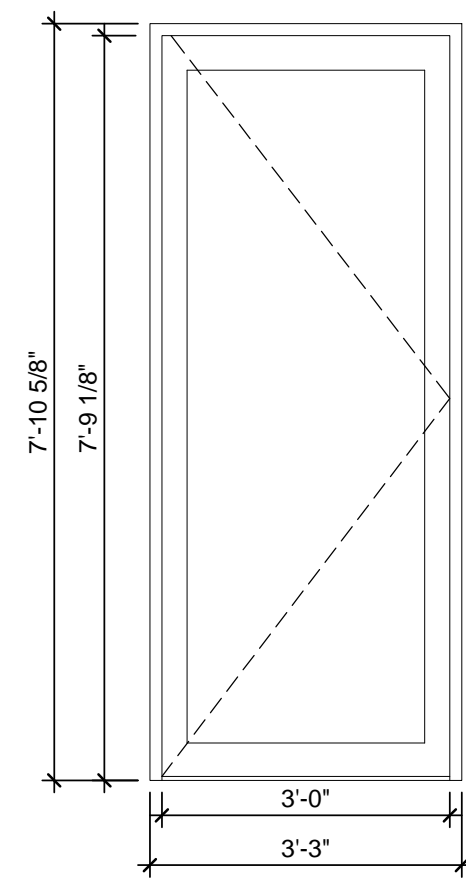
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SHEET TITLE
WINDOW DETAILS

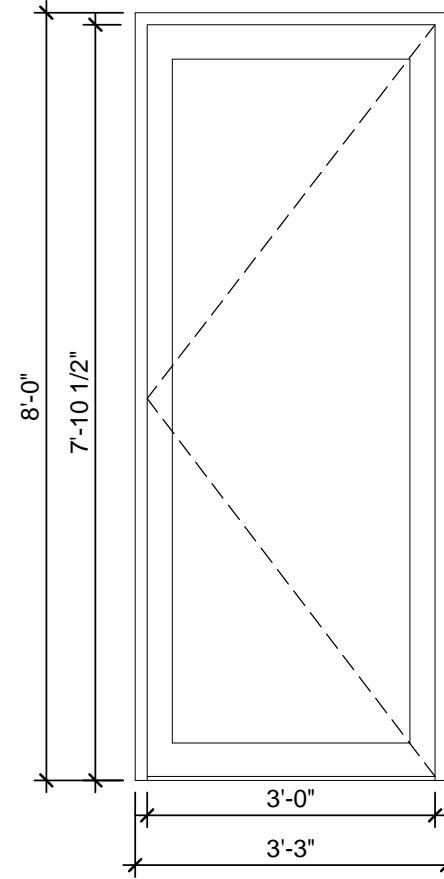
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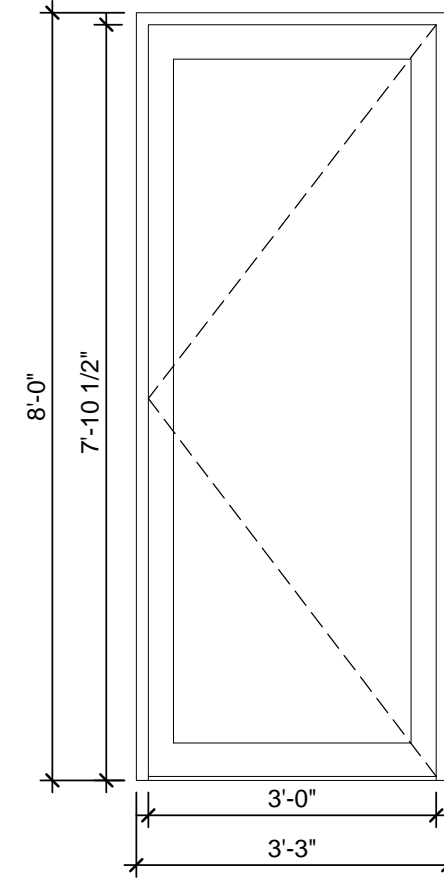
FRONT DOOR
(INSWING)



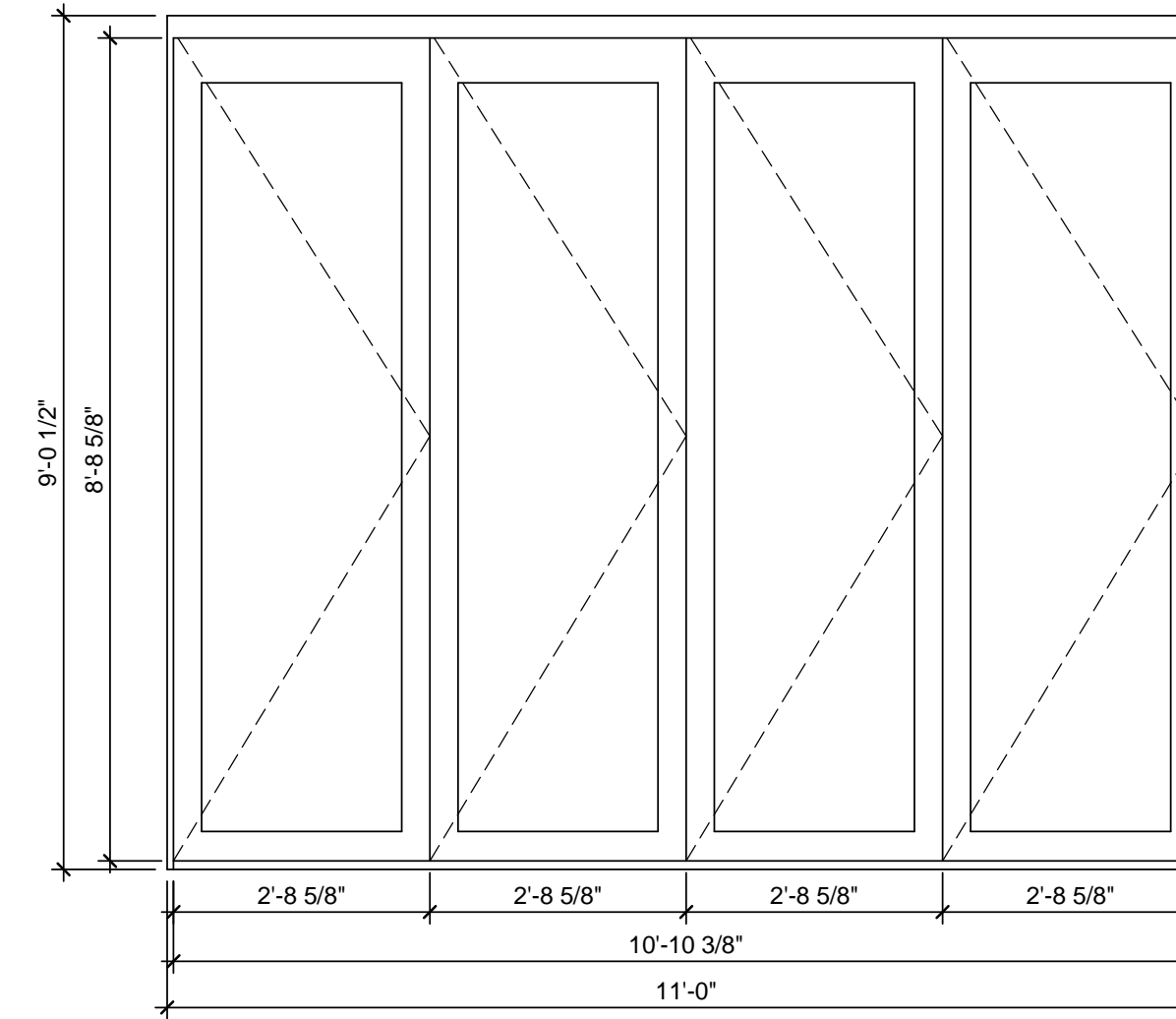
KITCHEN DOOR
(OUTSWING)



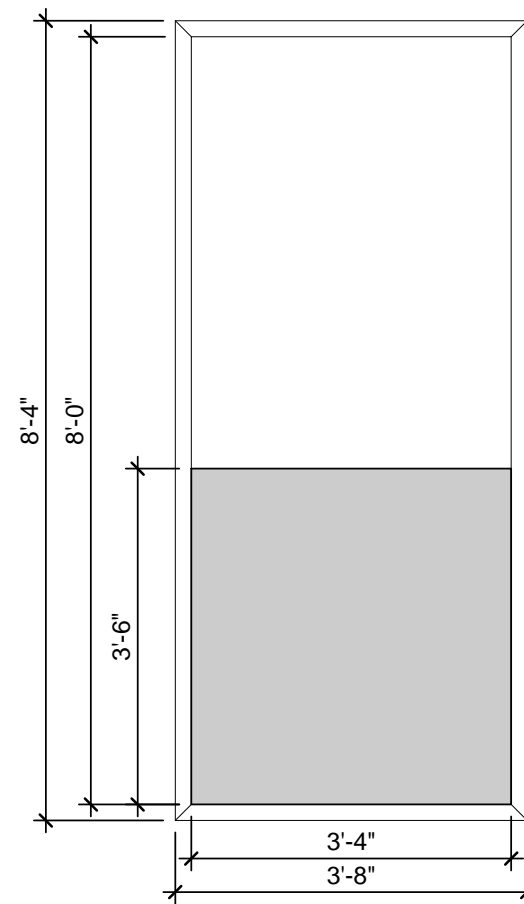
BEDROOM DOOR
(OUTSWING)



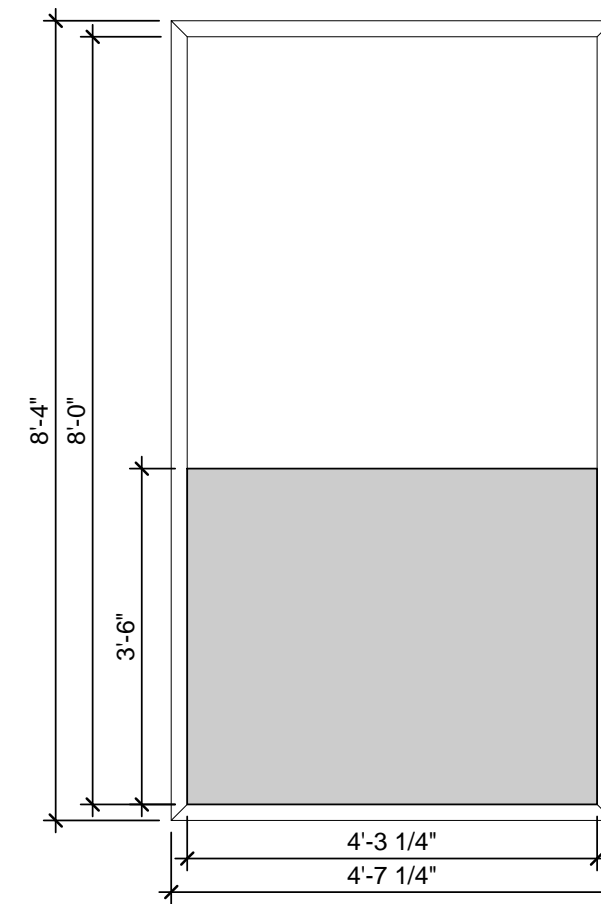
FLEX-SPACE DOOR
(OUTSWING)



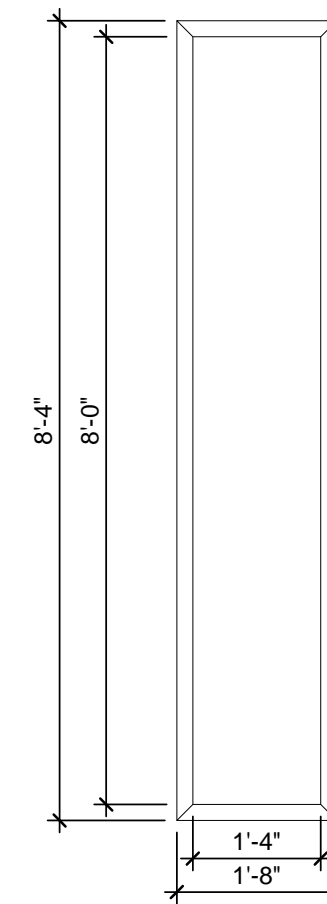
FRONT BI-FOLD DOOR



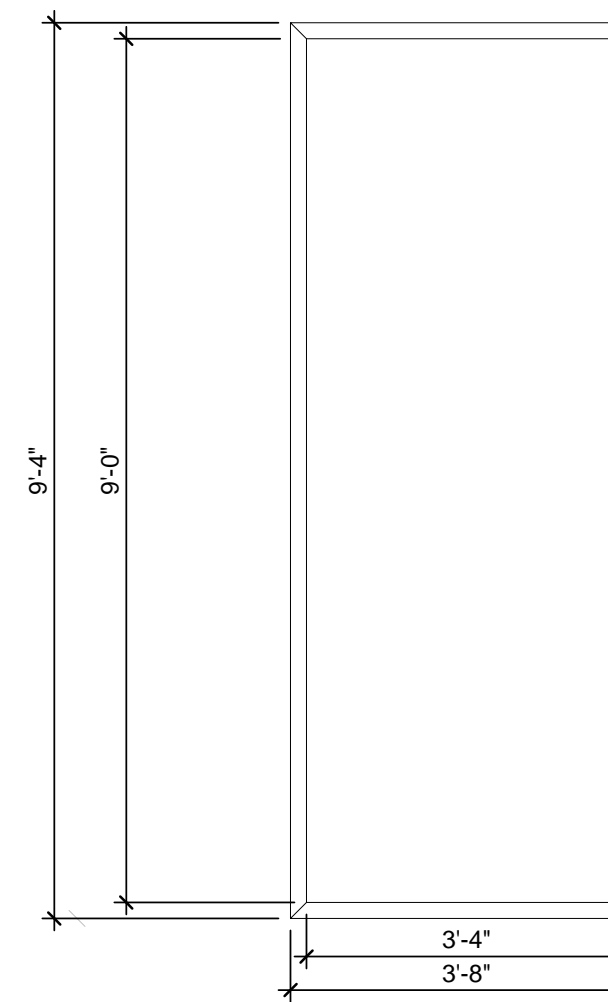
BEDROOM WINDOW



BATHROOM WINDOW



FLEX SPACE WINDOW



KITCHEN WINDOW

B3 WINDOW ELEVATIONS
1/2" = 1'-0"



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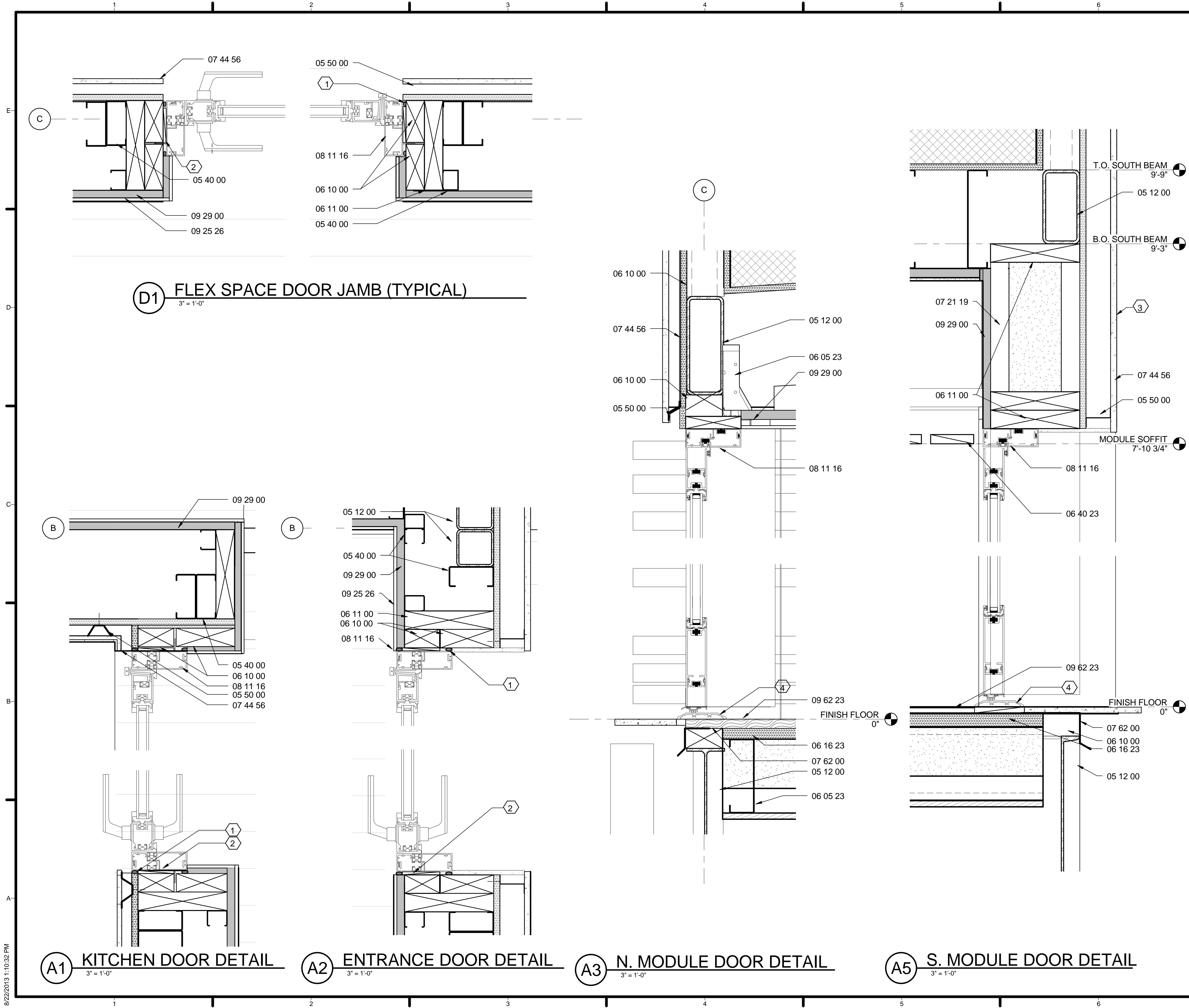


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
WINDOW ELEVATIONS

A-532



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 - HSS
- 05 40 00 - COLD FORMED METAL FRAMING
- 05 50 00 - RAIN SCREEN CLIPS
- 06 05 23 - JOIST HANGER
- 06 10 00.A - 2"X BLOCKING
- 06 10 00.B - 1" ROUGH SAWN BLOCKING
- 06 11 00.A - 2"X8" WOOD FRAMING
- 06 16 23 - SUBFLOOR
- 06 40 23 - BAMBOO FINISH
- 07 44 56 - FIBER CEMENT PANELS
- 07 21 19 - FOAM-IN-PLACE INSULATION
- 08 11 16 - ALUMINUM EXTERIOR DOOR
- 09 25 26 - CLAY PLASTER FINISH
- 09 29 00 - 5/8" GYPSUM BOARD
- 09 60 00 - MARMOLEUM FLOORING

SHEET KEYNOTES

1. NEOPRENE BACKER ROD
2. SHIM
3. BLACK LACQUER ON FIBER CEMENT
4. 1/2" COMMERCIAL THRESHOLD



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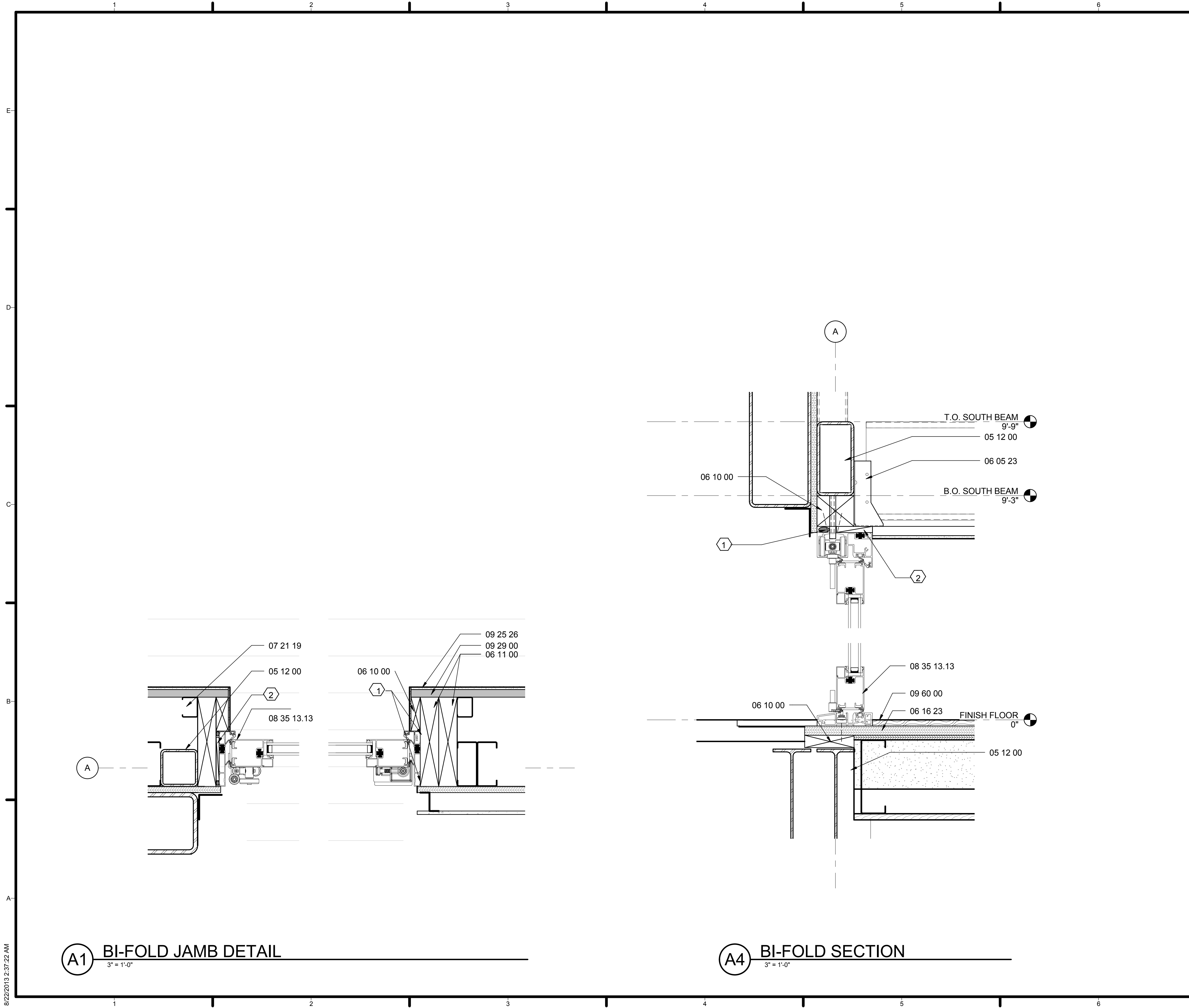


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02	11.20.2012	80% DOE/NREL DD RE-SUBMISSION
01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
DOOR DETAILS

A-541



GENERAL SHEET NOTES

REFERENCE KEYNOTES

- 05 12 00 - HSS
- 05 40 00 - COLD FORMED METAL FRAMING
- 05 50 00 - RAINSCREEN CLIPS
- 06 05 23 - JOIST HANGER
- 06 10 00 - BLOCKING
- 06 11 00 - WOOD FRAMING
- 06 16 23 - SUBFLOORING
- 06 40 23 - BAMBOO FINISH
- 07 44 56 - FIBER CEMENT PANELS
- 07 21 19 - FOAM-IN-PLACE INSULATION
- 08 35 13.13 - BI-FOLDING DOOR
- 09 25 26 - CLAY PLASTER FINISH
- 09 29 00 - 5/8" GYPSUM BOARD
- 09 60 00 - MARMOLEUM FLOORING

SHEET KEYNOTES

1. NEOPRENE BACKER ROD
2. SHIM
3. BLACK LACQUER ON FIBER CEMENT



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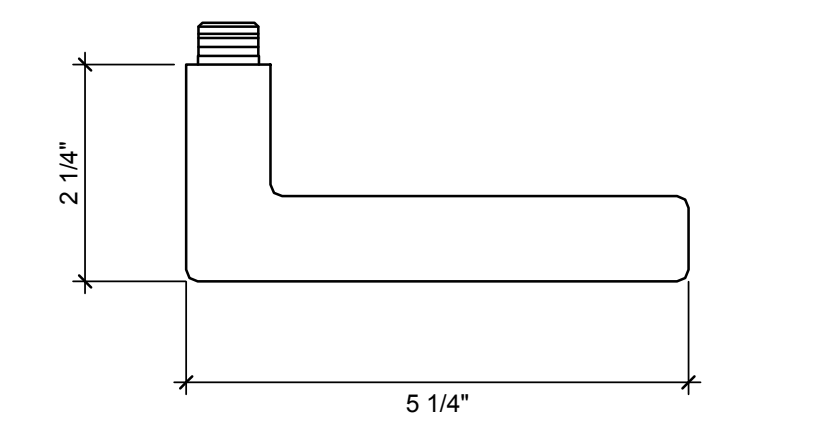
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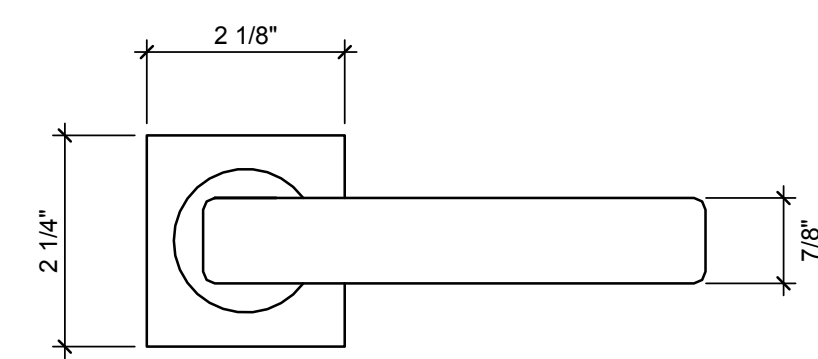
SHEET TITLE
 DOOR DETAILS

A-542

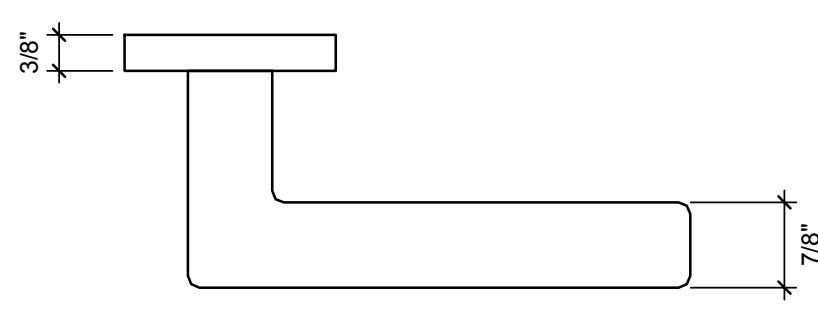
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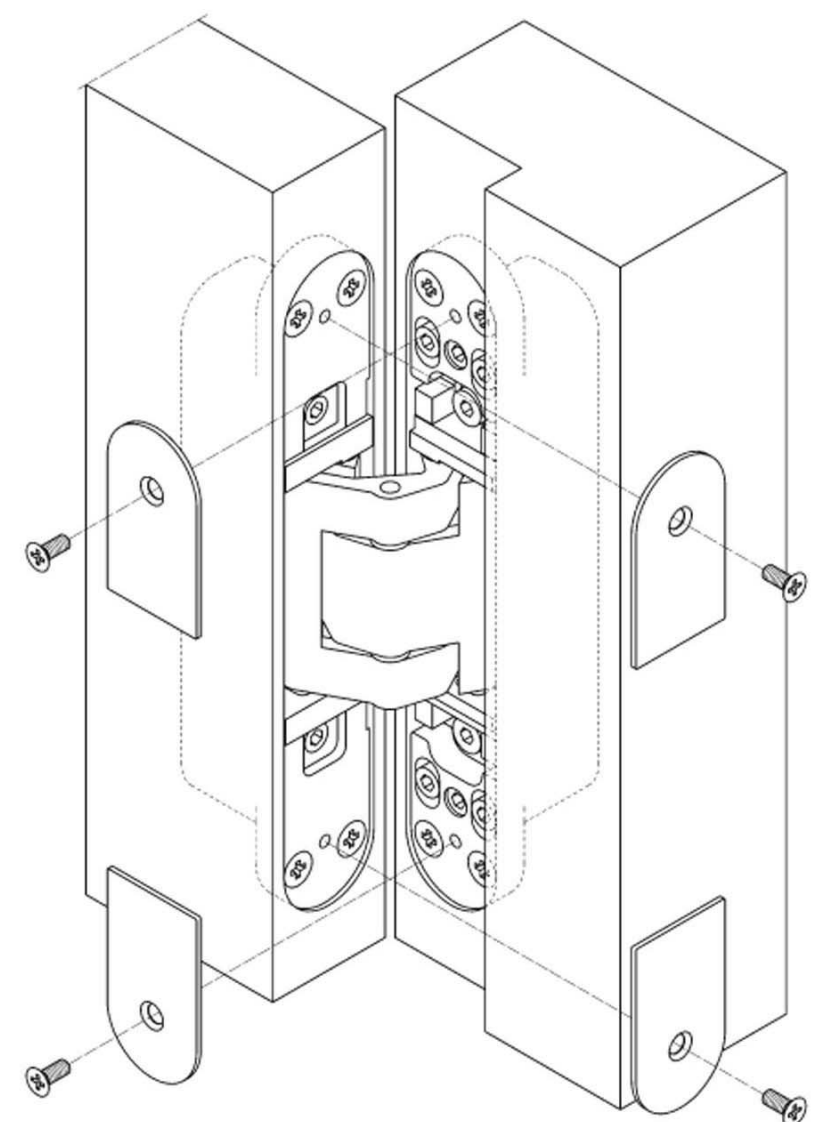
LEVER TOP VIEW



FRONT VIEW

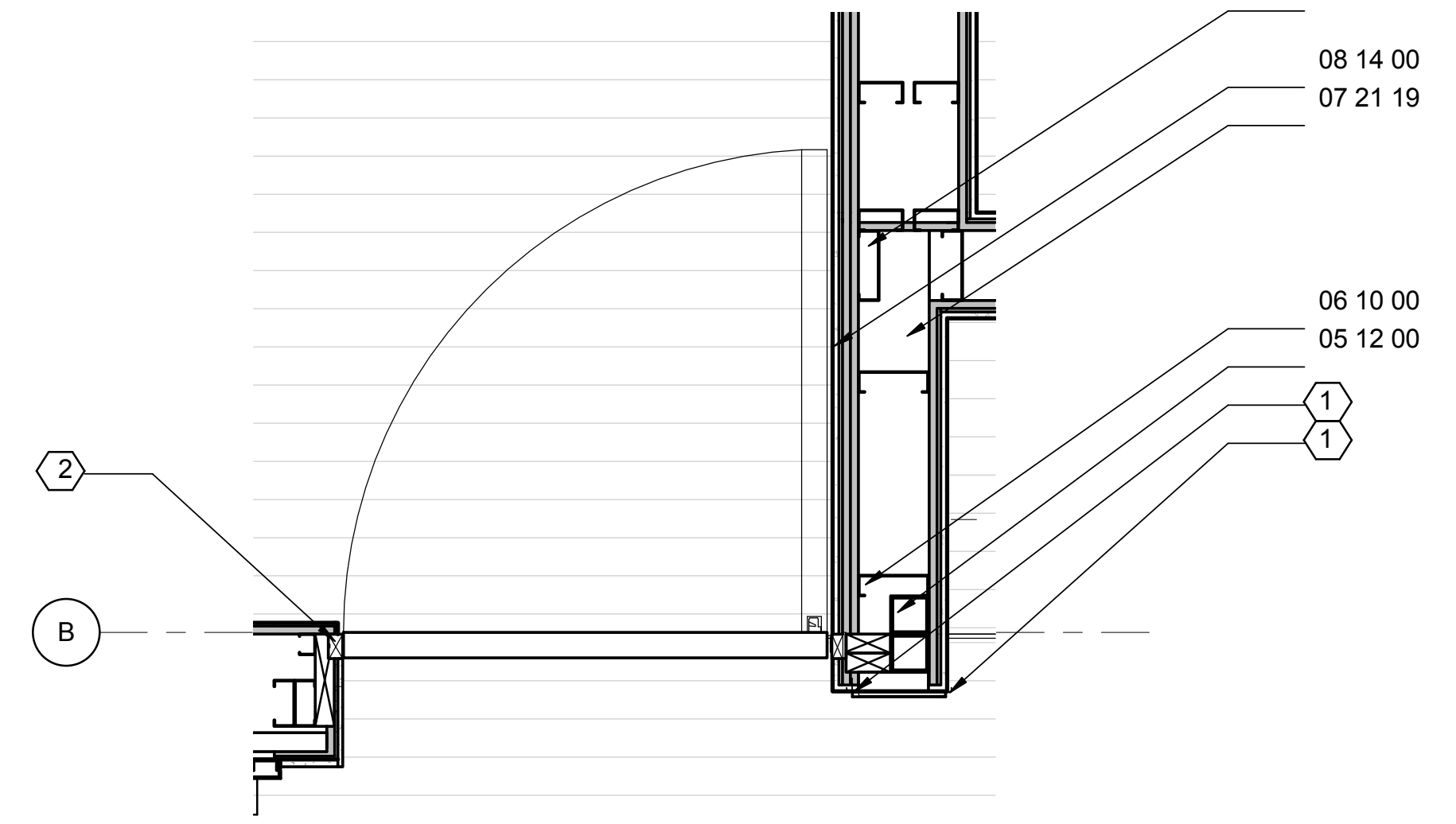
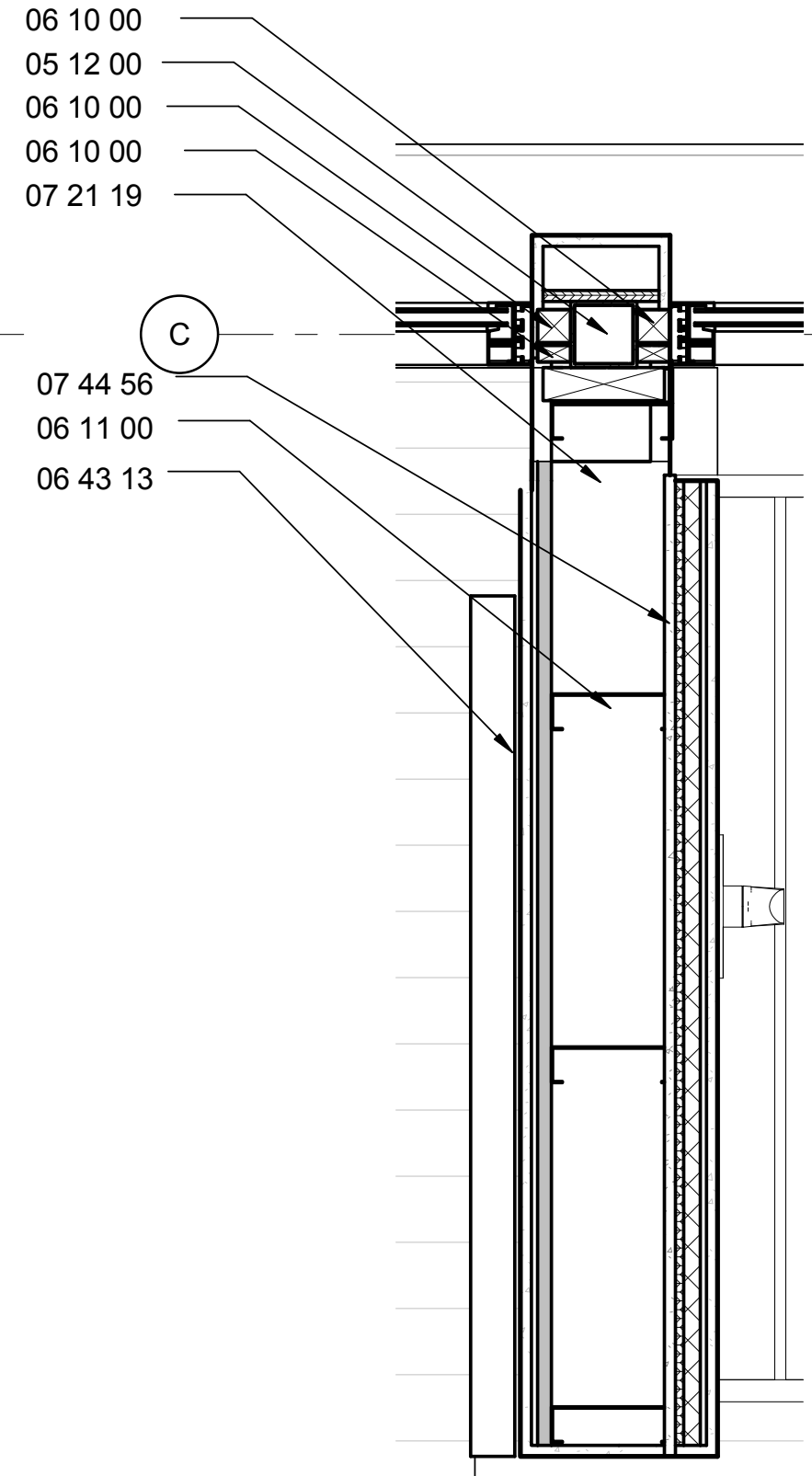
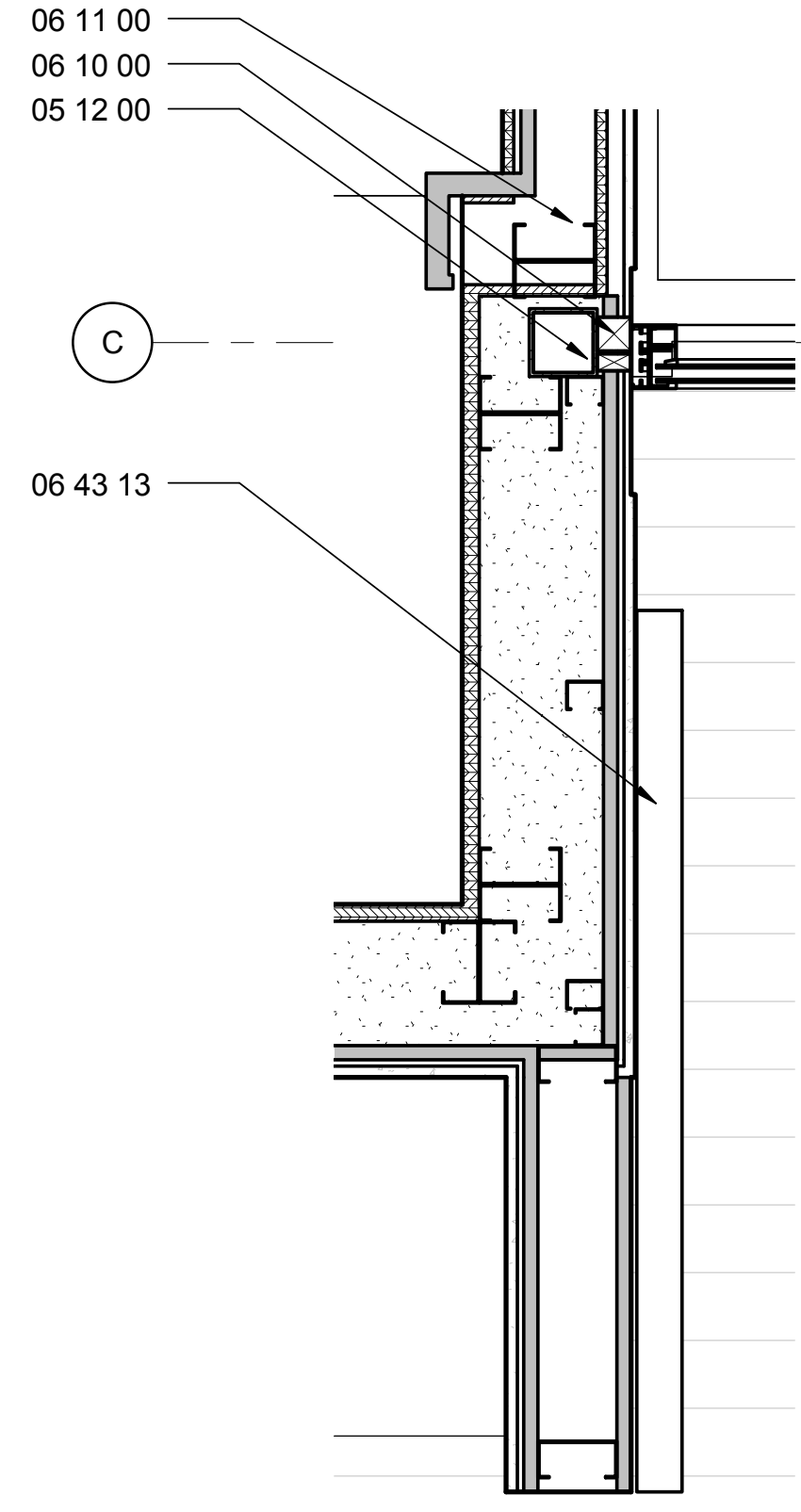


TOP VIEW

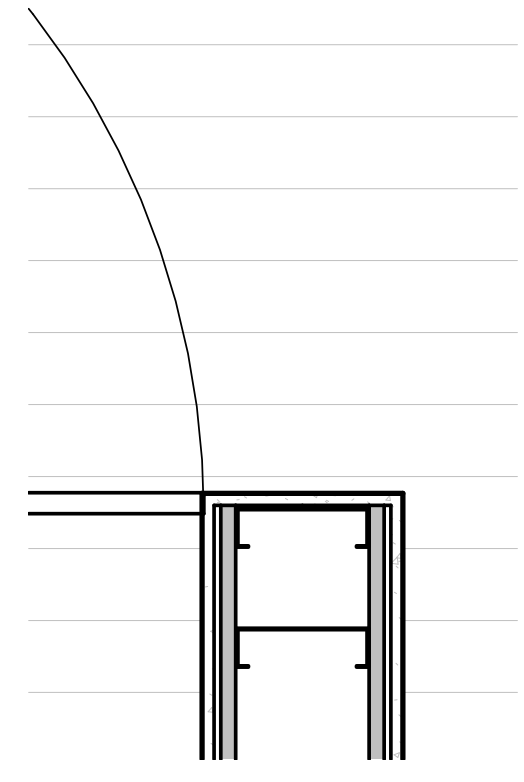


C3 DOOR HINGE
1/2" = 1'-0"

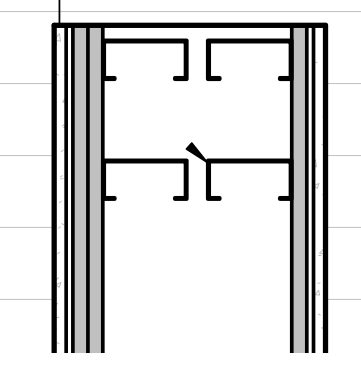
C1 DOOR LEVER
6" = 1'-0"



A1 BEDROOM DOOR DETAIL
1" = 1'-0"



A4 FLEX SPACE BARN DOOR
1 1/2" = 1'-0"



A6 WEST BARN DOOR

GENERAL SHEET NOTES

1. VOGA PRIVACY RIGHT HANDED DOOR LEVER
2. TECTUS CONCEALED DOOR HINGE
3. HAFELE POCKET DOOR KIT

REFERENCE KEYNOTES

- 05 12 00 - STRUCTURAL STEEL FRAMING
- 06 10 00 - ROUGH CARPENTRY
- 06 43 13 - SOLID LUMBER PANELING
- 07 21 19 - FOAMED-IN-PLACE INSULATION
- 07 44 56 - FIBER CEMENT PANELS
- 08 14 00 - WOOD DOORS
- 09 21 00 - PLASTER AND GYPSUM ASSEMBLIES

SHEET KEYNOTES

1. CEMENT PANEL CORNER TRIM
2. STRIKE PLATE



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SHEET TITLE
DOOR DETAILS

A-543

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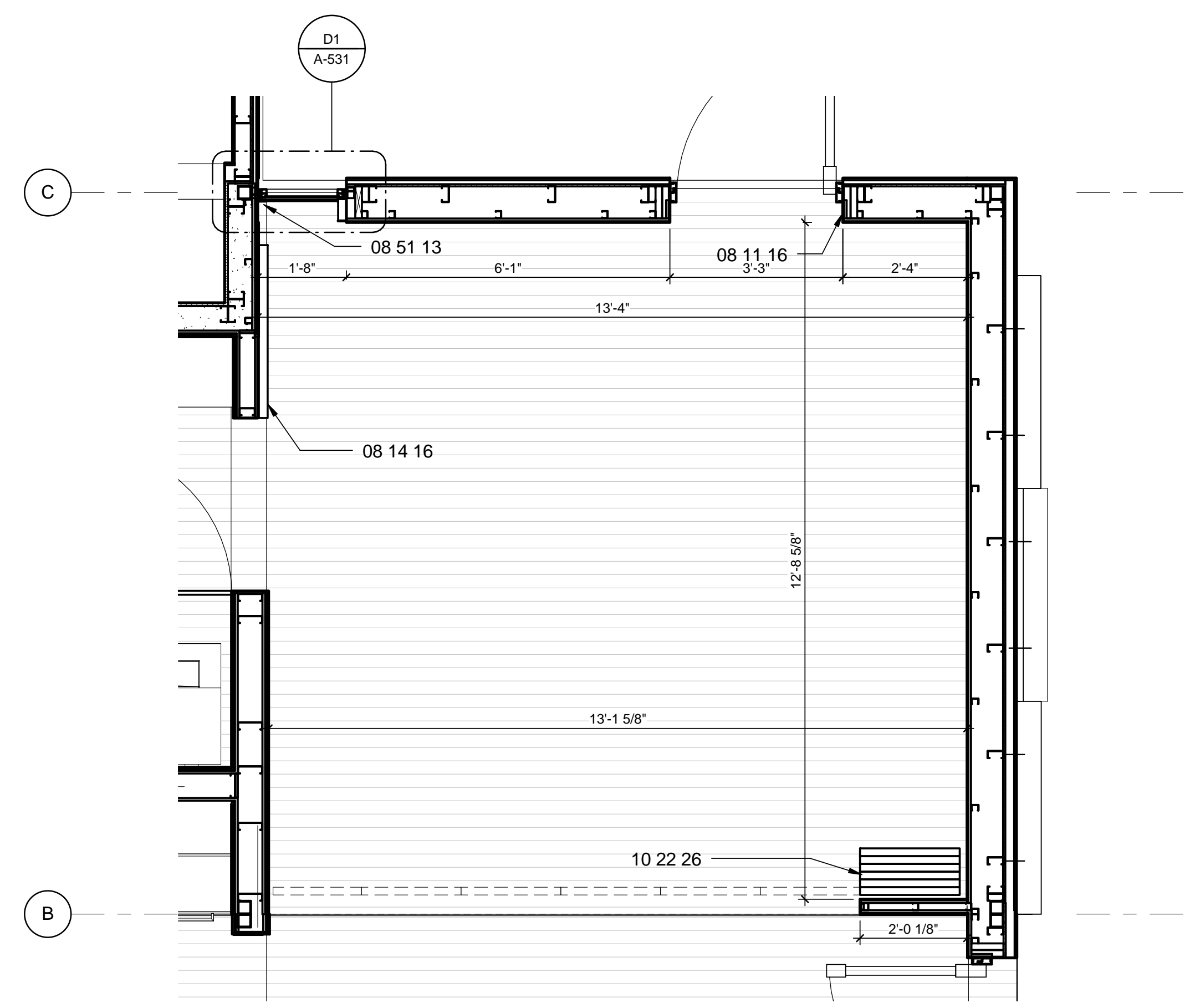


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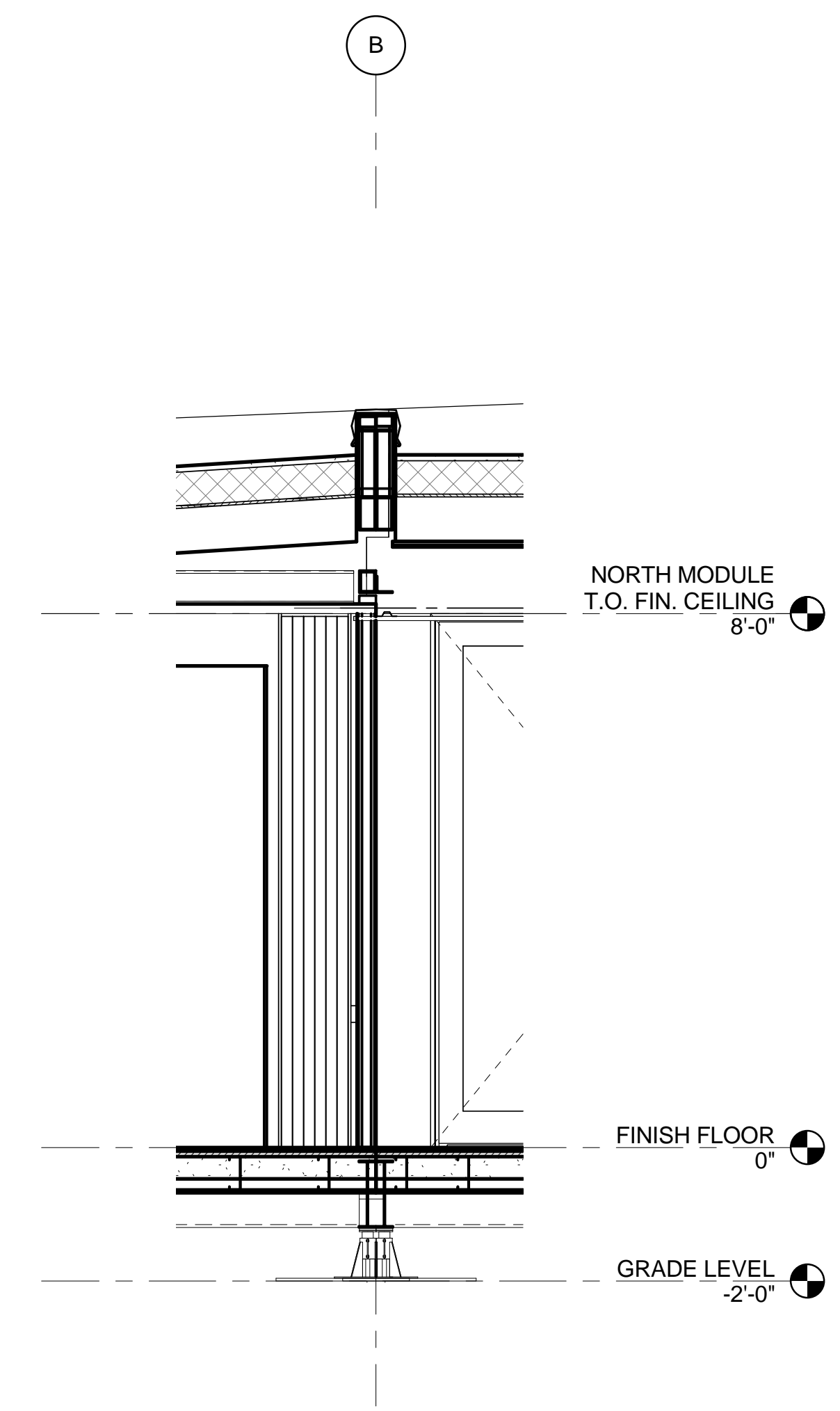
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 DOOR DETAILS

A-544



A1 FLEX SPACE NORTH PLAN
 1/2" = 1'-0"



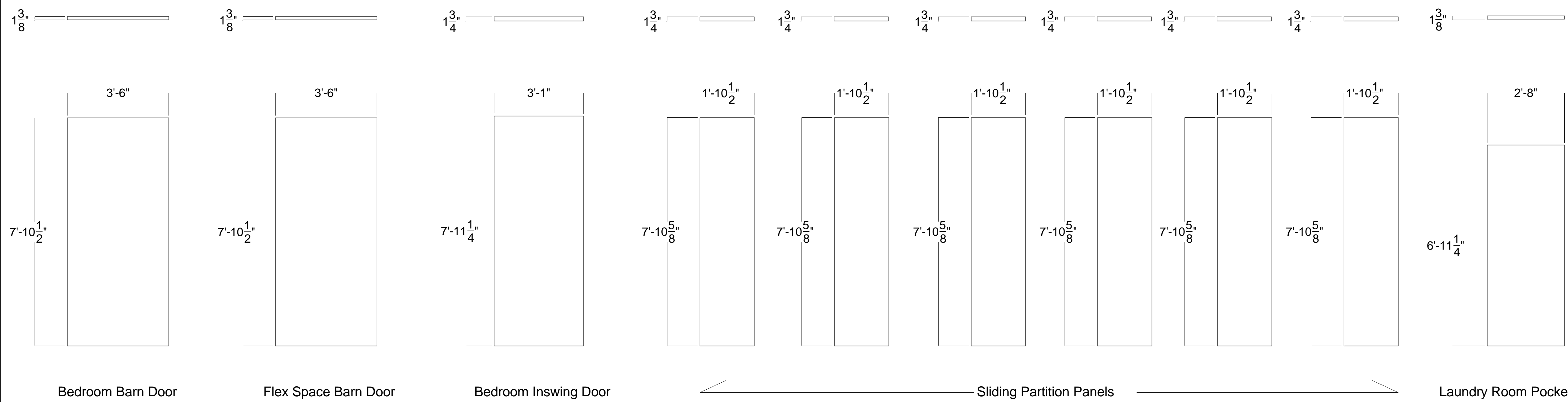
A5 APERTO POCKET
 1/2" = 1'-0"



- Notes:
1. All doors to be UP Core.
 2. Mortising pattern to be provided
 3. Doors to be made of Birch Wood
 4. Finish to be Plain Sliced Select White Birch
 5. All door heights include under-cut
 6. All door hardware to be Hafele Architectural Hardware.
 7. Hafele Hardware to be provided by owner.
 8. Slido Classic - Hafele Hardware - to be used for Bedroom and Flex Space Barn Doors
 9. Hafele Tectus Hinges to be used for Bedroom Inswing Door.
 10. Hafele - HAWA Aperto Hardware to be used for Sliding Partition Panels
 11. Hafele - Concepta Hardware to be used for Laundry Room Pocket Panel Door.

Panel Schedule:	Quantity:	Height:	Width:	Thickness:	Mortise Pattern:
Barn Door	2	7'-10.5"	3'-6"	1 3/8"	Hafele Slido Classic + Mortise Pull (2 Sides)
Inswing Door	1	7'-11.25"	3'-1"	1 3/4"	Tectus Hinge + Almar Handles Lever Set (2-3/8")
Partition Door	6	7'-10 5/8"	1'-10.5"	1 3/4"	HAWA Aperto
Pocket Door:	1	6'-11.25"	2'-8"	1 3/8"	HAWA Concepta

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Partition Panels to be Set-Match 3 + 3 For Aperto Partition Wall

(A1) DOOR ELEVATIONS
1/2" = 1'-0"

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05	8.22.2013	100% DOENREL AS-BUILTS
04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
DOOR ELEVATIONS

A-545

8/22/2013 12:14:03 AM

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- 1. 2x4 LUMBER
- 2. 2x6 LUMBER
- 3. 18 GAUGE STEEL
- 4. 5/8" FIBER CEMENT BOARD
- 5. BOLTS
- 6. STEEL ANGLE
- 7. STAGGERED STUD WALL



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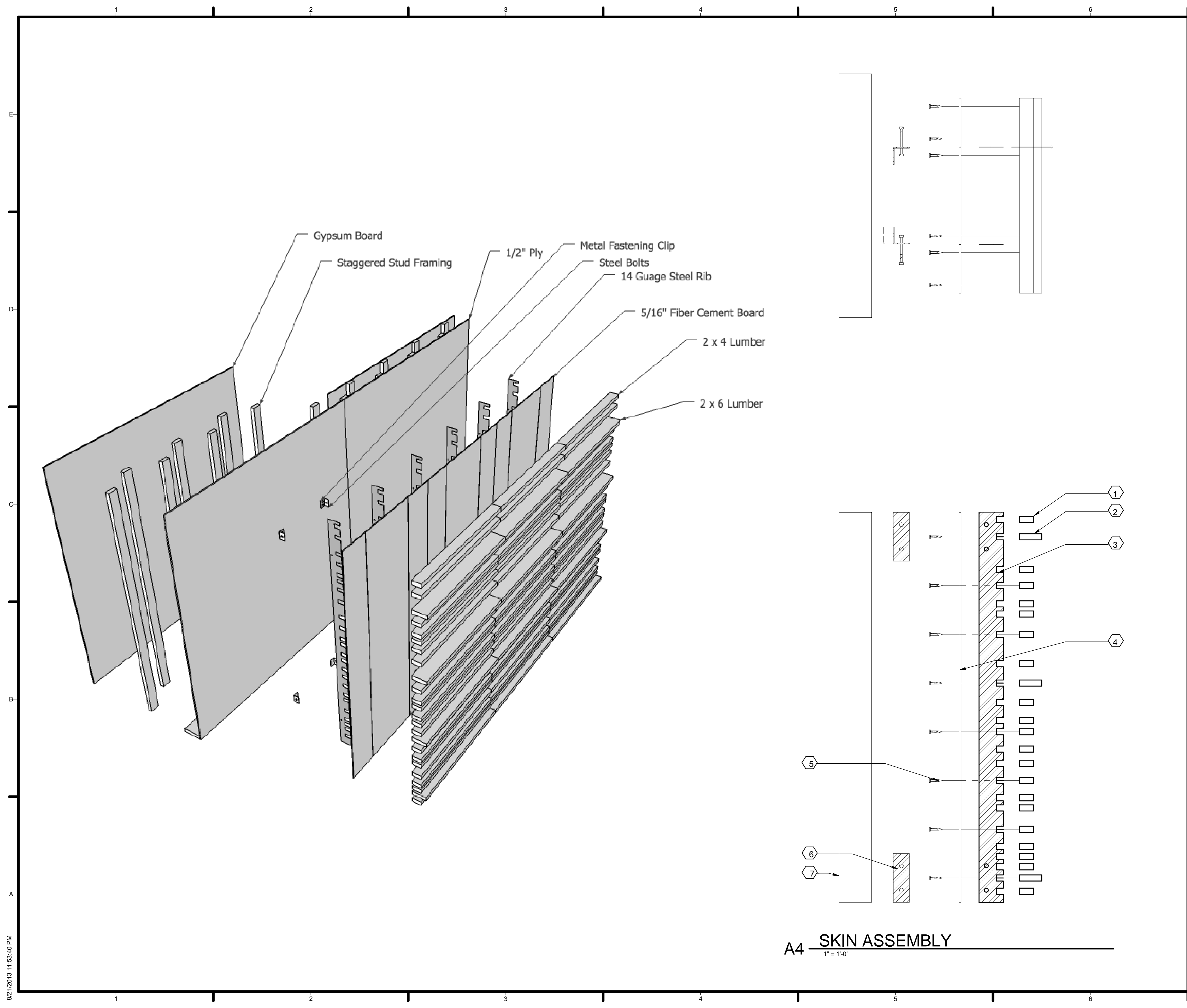


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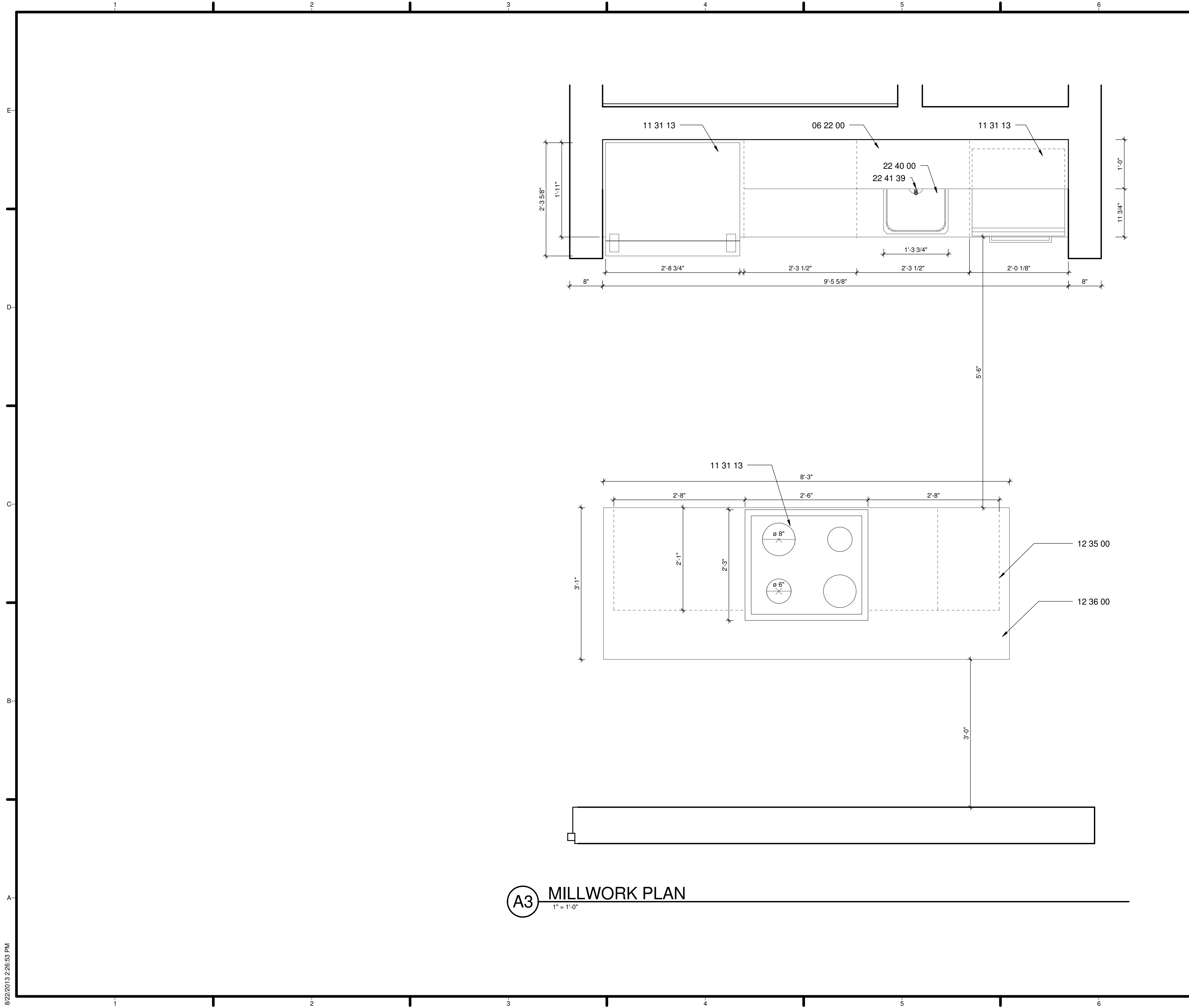
SHEET TITLE
SIDING DETAILS

A-571



A4 SKIN ASSEMBLY
 1" = 1'-0"

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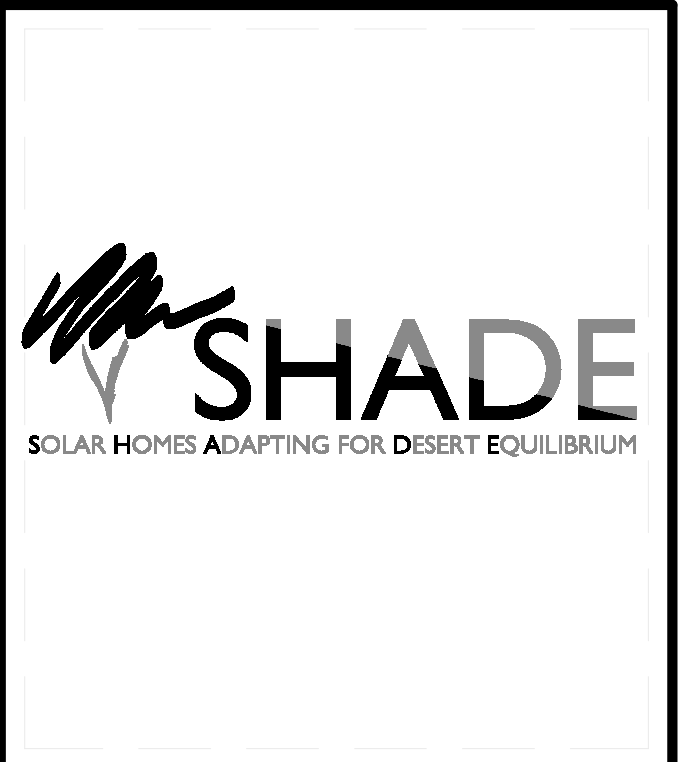
GENERAL SHEET NOTES

1. PLEASE REFER TO A-582 VIEW 1 AND 2 FOR NORTH AND SOUTH KITCHEN ELEVATION

REFERENCE KEYNOTES

06 22 00 - MILLWORK
 11 31 13 - REFRIDGERATOR
 11 31 13 - OVEN AND RANGE
 11 31 13 - DISHWASHER
 12 36 00 - COUNTERTOP
 22 40 00 - KITCHEN SINK
 22 41 39 - KITCHEN FAUCET

SHEET KEYNOTES



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01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE
MILLWORK PLAN

A-581

ROOM FINISH SCHEDULE							
ROOM NO	ROOM NAME	FINISH				COMMENTS	
		FLOOR	BASE	WALL	CEILING		
101	FLEX SPACE	FORBO MARMOLEUM STRIATO 'PETRIFIED WOOD' FLOOR	N/A	AMERICAN CLAY 'ARDEN' CLAY WALL LOMALINA FINISH	PLASTER	9	8' CEILING IN NORTH MODULE OF FLEX SPACE
102	KITCHEN	FORBO MARMOLEUM STRIATO 'PETRIFIED WOOD' FLOOR	N/A	AMERICAN CLAY 'ARDEN' CLAY WALL LOMALINA FINISH	PLASTER	9	
103	BEDROOM	FORBO MARMOLEUM STRIATO 'PETRIFIED WOOD' FLOOR	N/A	AMERICAN CLAY 'ARDEN' CLAY WALL LOMALINA FINISH	PLASTER	8	
104	BATHROOM	FORBO MARMOLEUM STRIATO 'PETRIFIED WOOD' FLOOR	N/A	AMERICAN CLAY 'ARDEN' CLAY WALL LOMALINA FINISH	PLASTER	8	
105	MECHANICAL ROOM	HARDI BOARD					
106							

WINDOW SCHEDULE						
MARK	FRAME DIMENSION		MANUFACTURER	MODEL	FINISH	COMMENTS
	WIDTH	HEIGHT				
6	4'-7 1/4"	8'-4"	WESTERN WINDOWS	SERIES 700, THERMALLY BROKEN	DARK BRONZE ANODIZED	SANDBLASTED TO A HEIGHT OF 42 INCHES
8	3'-8"	9'-4"	WESTERN WINDOWS	SERIES 700, THERMALLY BROKEN	DARK BRONZE ANODIZED	
56	1'-8"	8'-4"	WESTERN WINDOWS	SERIES 700, THERMALLY BROKEN	DARK BRONZE ANODIZED	
58	3'-8"	8'-4"	WESTERN WINDOWS	SERIES 700, THERMALLY BROKEN	DARK BRONZE ANODIZED	SANDBLASTED TO A HEIGHT OF 42 INCHES

DOOR SCHEDULE							
Mark	WIDTH	HEIGHT	MANUFACTURER	MODEL	FINISH	HARWARE FINISH	COMMENTS
1	11'-0"	9'-0 1/2"	WESTERN WINDOWS	SERIES 900, THERMALLY BROKEN	DARK BRONZE ANODIZED	BLACK/BRONZE	
2	3'-3"	8'-0"	WESTERN WINDOWS	SERIES 900, THERMALLY BROKEN	DARK BRONZE ANODIZED	BLACK/BRONZE	
3	3'-3"	8'-0"	WESTERN WINDOWS	SERIES 900, THERMALLY BROKEN	DARK BRONZE ANODIZED	BLACK/BRONZE	
4	3'-3"	8'-0"	WESTERN WINDOWS	SERIES 900, THERMALLY BROKEN	DARK BRONZE ANODIZED	BLACK/BRONZE	
5	3'-3"	8'-0"	WESTERN WINDOWS	SERIES 900, THERMALLY BROKEN	DARK BRONZE ANODIZED	BLACK/BRONZE	
7	6'-0"	6'-8"	COOKSON	COUNTER DOOR			
10	3'-6"	8'-0"	GRAHAM DOORS	EARTH DOOR	SELECT WHITE BIRCH		
11	3'-6"	8'-0"	GRAHAM DOORS	EARTH DOOR	SELECT WHITE BIRCH		
12	3'-1"	8'-0"	GRAHAM DOORS	EARTH DOOR	SELECT WHITE BIRCH		
13	2'-4"	8'-0"	GRAHAM DOORS	EARTH DOOR	SELECT WHITE BIRCH		



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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 SCHEDULES

A-601

GENERAL SHEET NOTES

1. ALL MOVABLE COMPONENTS SHALL BE DEMONSTRATED DURING THE COMPETITION JURIED WALK THROUGH. PENDING SD RULES.
2. SHEET KEYNOTE #2- RESOURCE FURNITURE LGM TAVOLO DESK/BED COMBO TO PIVOT FROM DESK TO BED.

REFERENCE KEYNOTES

SHEET KEYNOTES

1. RESOURCE FURNITURE KUBICO SOFA, N.I.C.
2. RESOURCE FURNITURE LGM TAVOLO DESK/BED COMBO, N.I.C.
3. RESOURCE FURNITURE GOLIATH TABLE, N.I.C.
4. RESOURCE FURNITURE POCKET FOLDING CHAIR, N.I.C.
5. RESOURCE FURNITURE ITO BED/SOFA COMBO, N.I.C.
6. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5" WIDE x 24.5" DEEP, N.I.C.
7. RESOURCE FURNITURE SINGLE DOOR WARDROBE 14.25" WIDE x 13.75" DEEP, N.I.C.
8. RESOURCE FURNITURE SINGLE DOOR WARDROBE 21.25" WIDE x 24.5" DEEP, N.I.C.
9. RESOURCE FURNITURE TAVILINI LOW TABLE ADLOOKTRIALTO, N.I.C.



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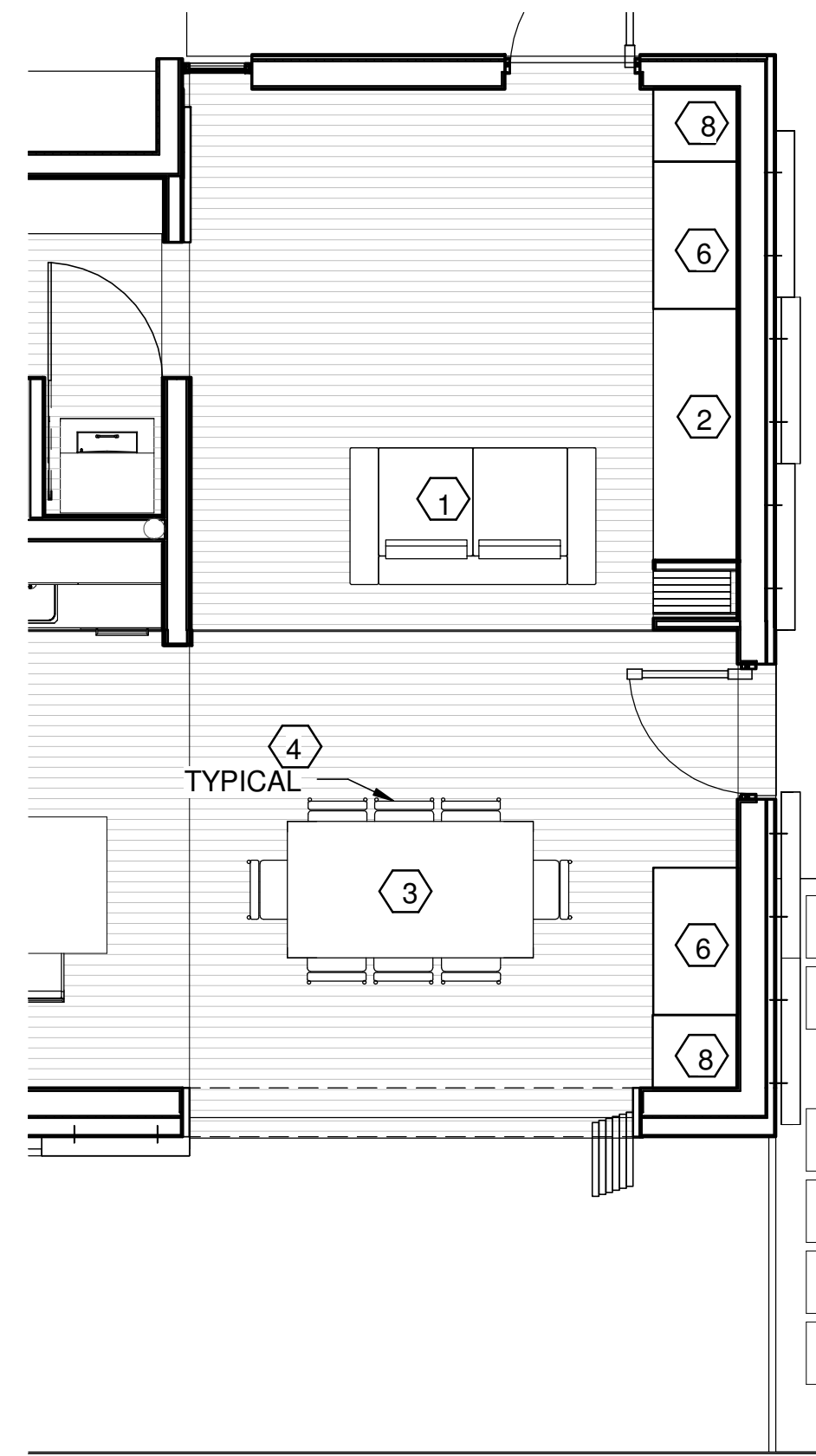
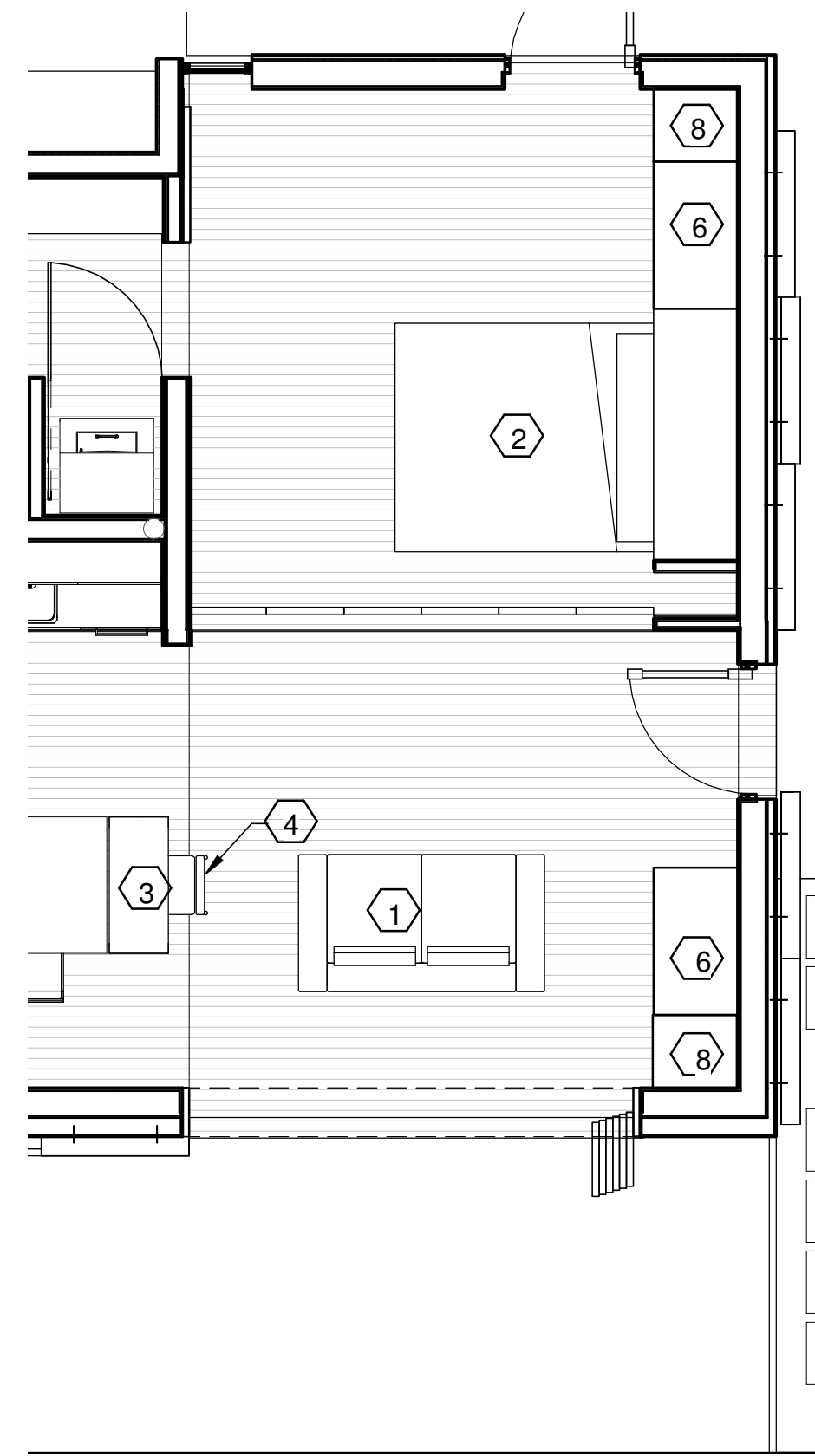
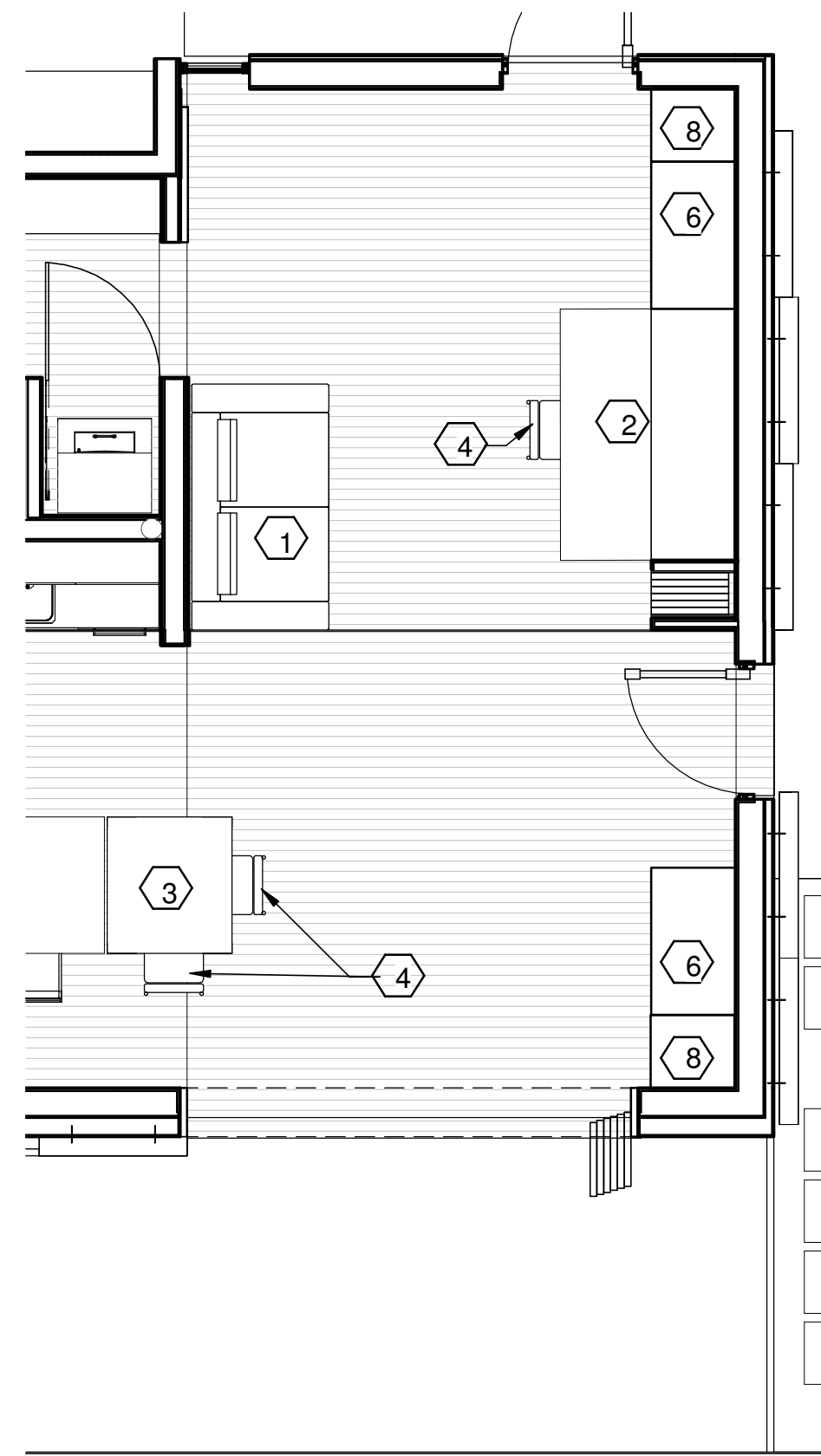


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SHEET TITLE
MOVEABLE COMPONENT DIAGRAM

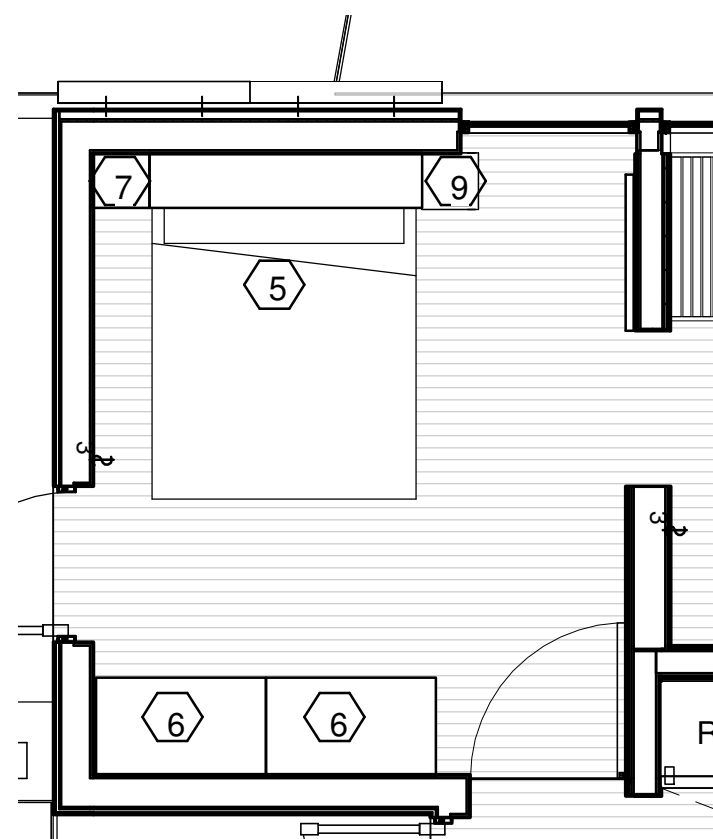
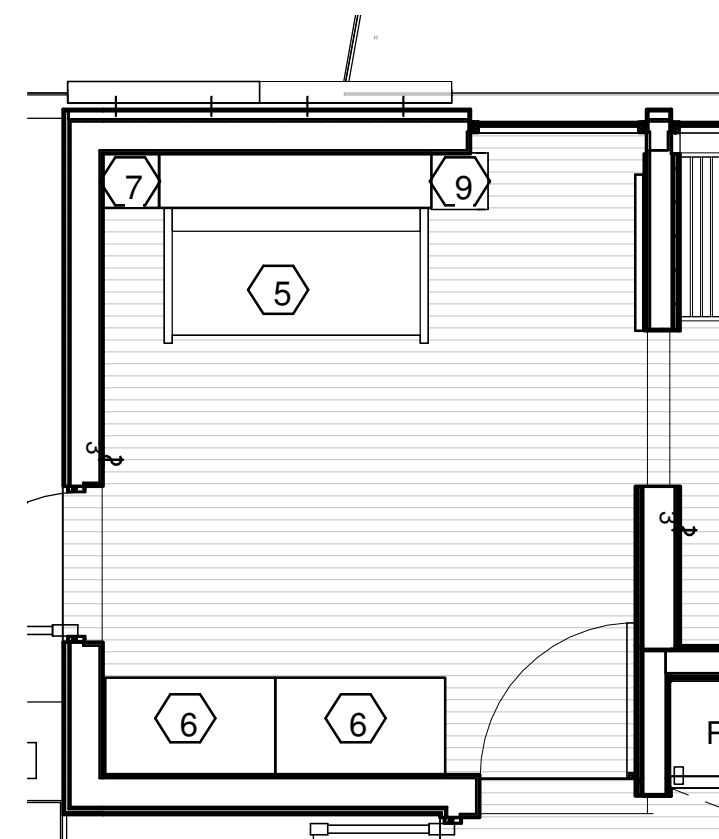
A-603



C1 FURNITURE LAYOUT OFFICE
 1/4" = 1'-0"

C3 FURNITURE LAYOUT BEDROOM/LIVING
 1/4" = 1'-0"

C5 FURNITURE LAYOUT FLEX SPACE
 1/4" = 1'-0"



A2 FURNITURE LAYOUT BEDROOM OPTION 2
 1/4" = 1'-0"

A4 FURNITURE LAYOUT BEDROOM
 1/4" = 1'-0"



C2 FURNITURE LAYOUT INDOOR MOVIE NIGHT
1/4" = 1'-0"

C4 FURNITURE LAYOUT OUTDOOR MOVIE NIGHT
1/4" = 1'-0"

GENERAL SHEET NOTES

1. ALL MOVABLE COMPONENTS SHALL BE DEMONSTRATED DURING THE COMPETITION JURIED WALK THROUGH. PENDING SD RULES.

REFERENCE KEYNOTES

SHEET KEYNOTES

1. RESOURCE FURNITURE KUBICO SOFA, N.I.C.
2. RESOURCE FURNITURE LGM TAVOLO DESK/BED COMBO, N.I.C.
3. CEILING MOUNTED PROJECTOR
4. RESOURCE FURNITURE GOLIATH TABLE, N.I.C.
5. RESOURCE FURNITURE POCKET FOLDING CHAIR, N.I.C.
6. RETRACTABLE MOVIE SCREEN
7. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5" WIDE x 24.5" DEEP, N.I.C.
8. RESOURCE FURNITURE SINGLE DOOR WARDROBE 21.25" WIDE x 24.5" DEEP, N.I.C.



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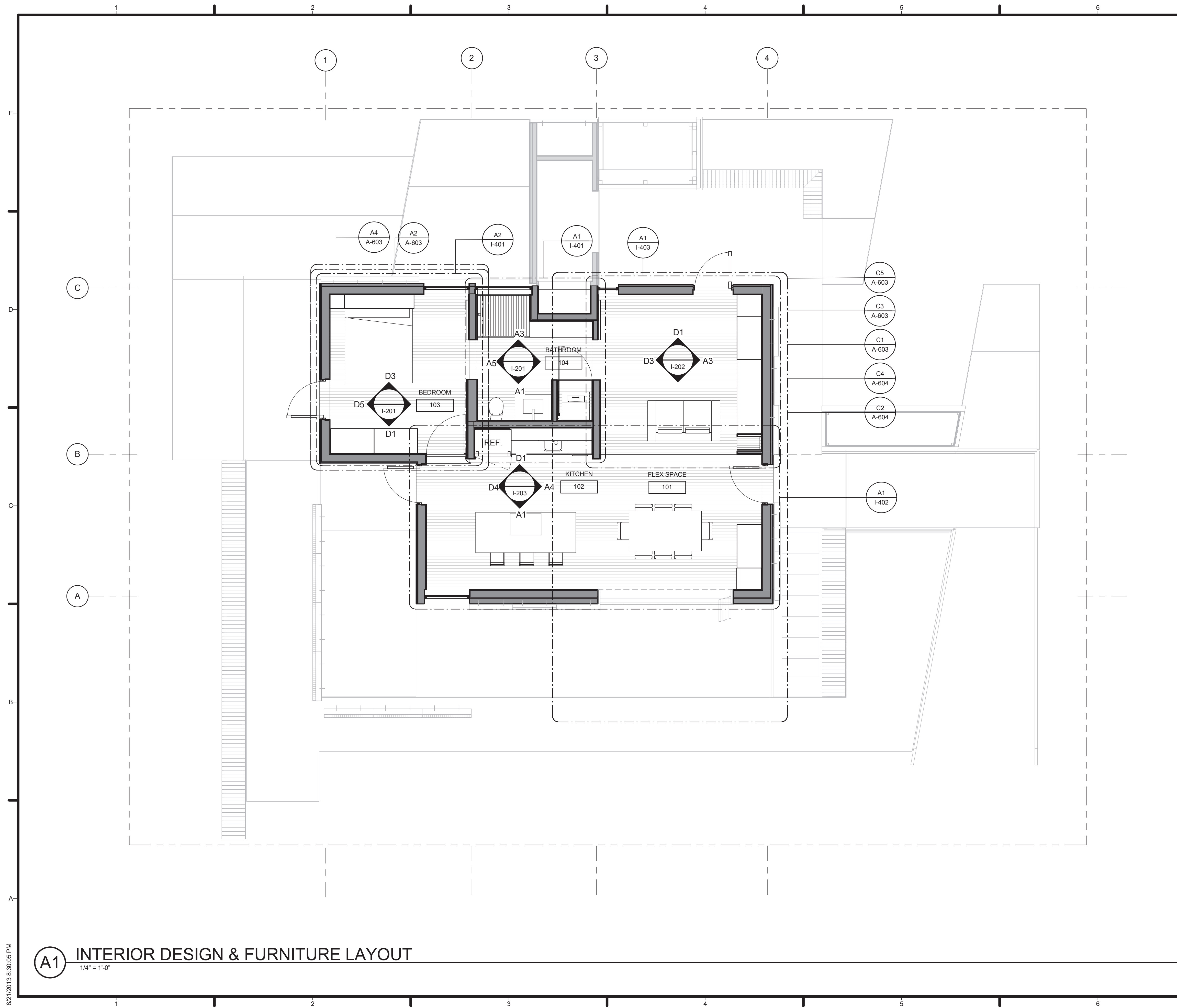


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
MOVEABLE COMPONENT DIAGRAM

A-604



GENERAL SHEET NOTES

1. SHEET INDICATES INTERIOR DESIGN AND FURNITURE LAYOUT.
2. REFER TO SHEETS A-603, A-604 FOR FURNITURE SCHEDULE.
3. REFER TO SHEETS A-401, A-402, A-403 FOR INTERIOR DIMENSIONS.
4. REFER TO SHEETS I-401, I-402, I-403 FOR INTERIOR MATERIALS AND SPECIFICATIONS.
5. REFER TO SHEET I-502 FOR CASEWORK DETAILS.

REFERENCE KEYNOTES

SHEET KEYNOTES

- 101 FLEX SPACE
- 102 KITCHEN
- 103 BEDROOM
- 104 BATHROOM



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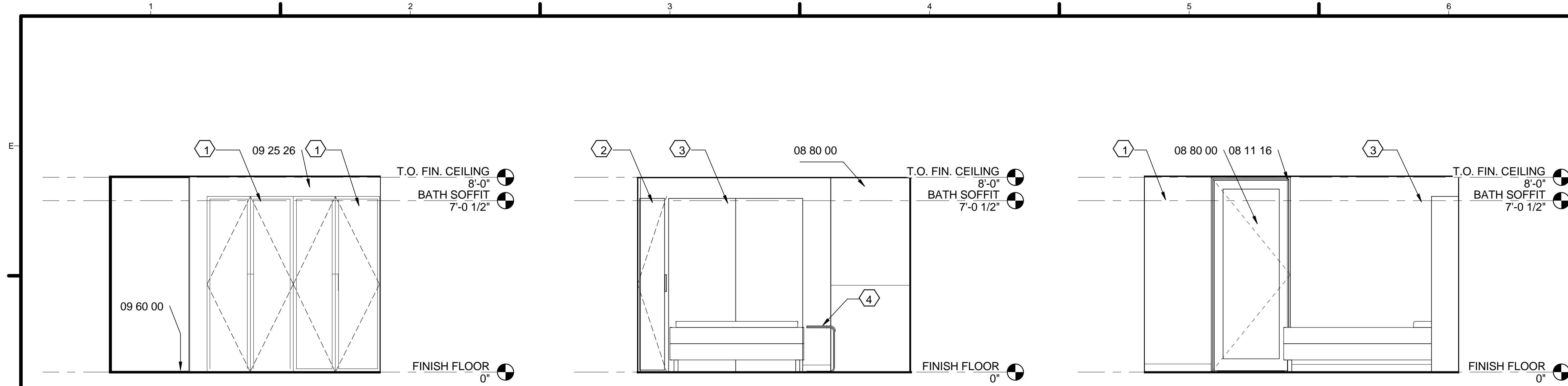
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SHEET TITLE
INTERIOR DESIGN AND FURNITURE PLAN

I-102

A1 INTERIOR DESIGN & FURNITURE LAYOUT
 1/4" = 1'-0"

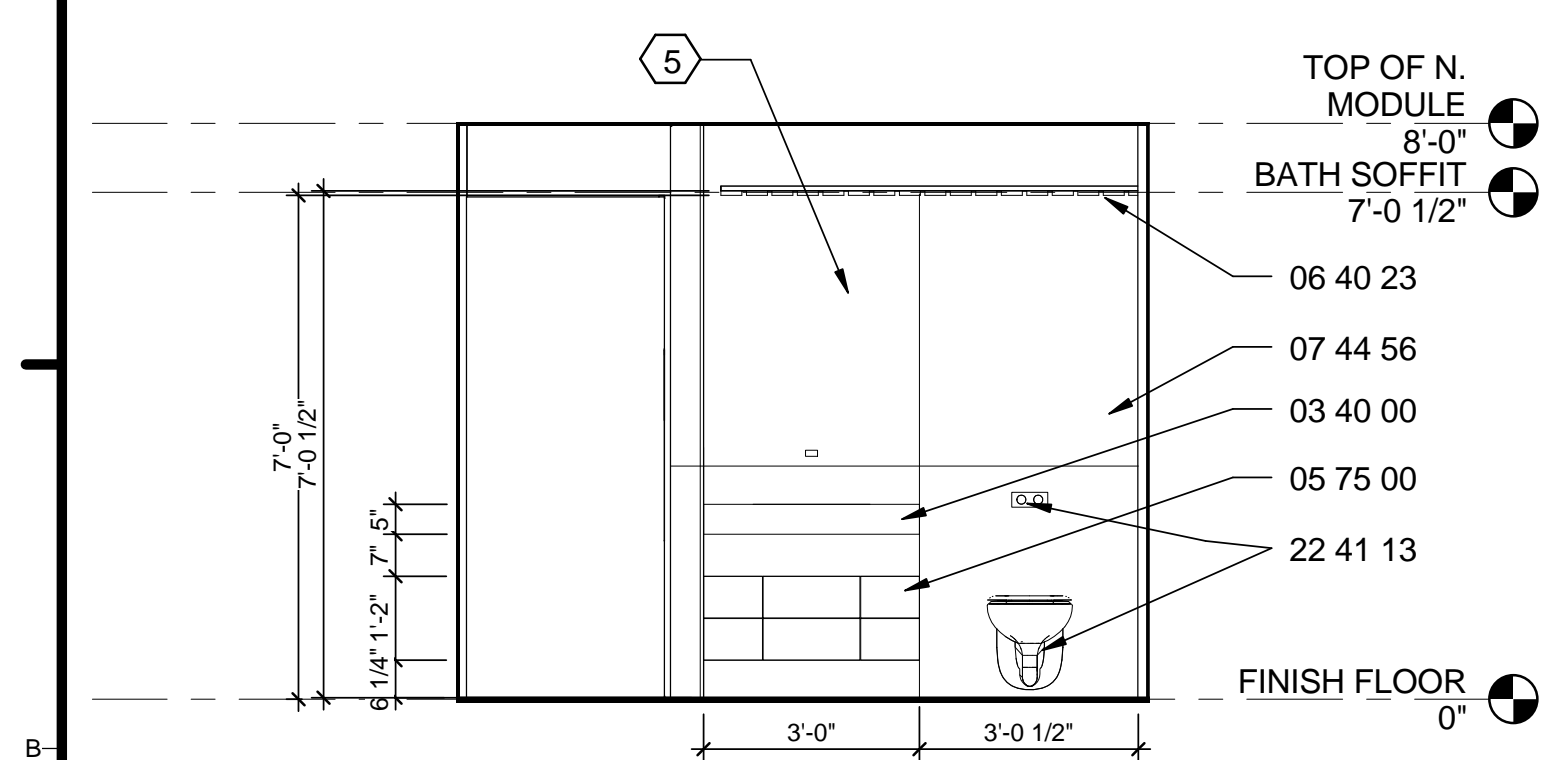
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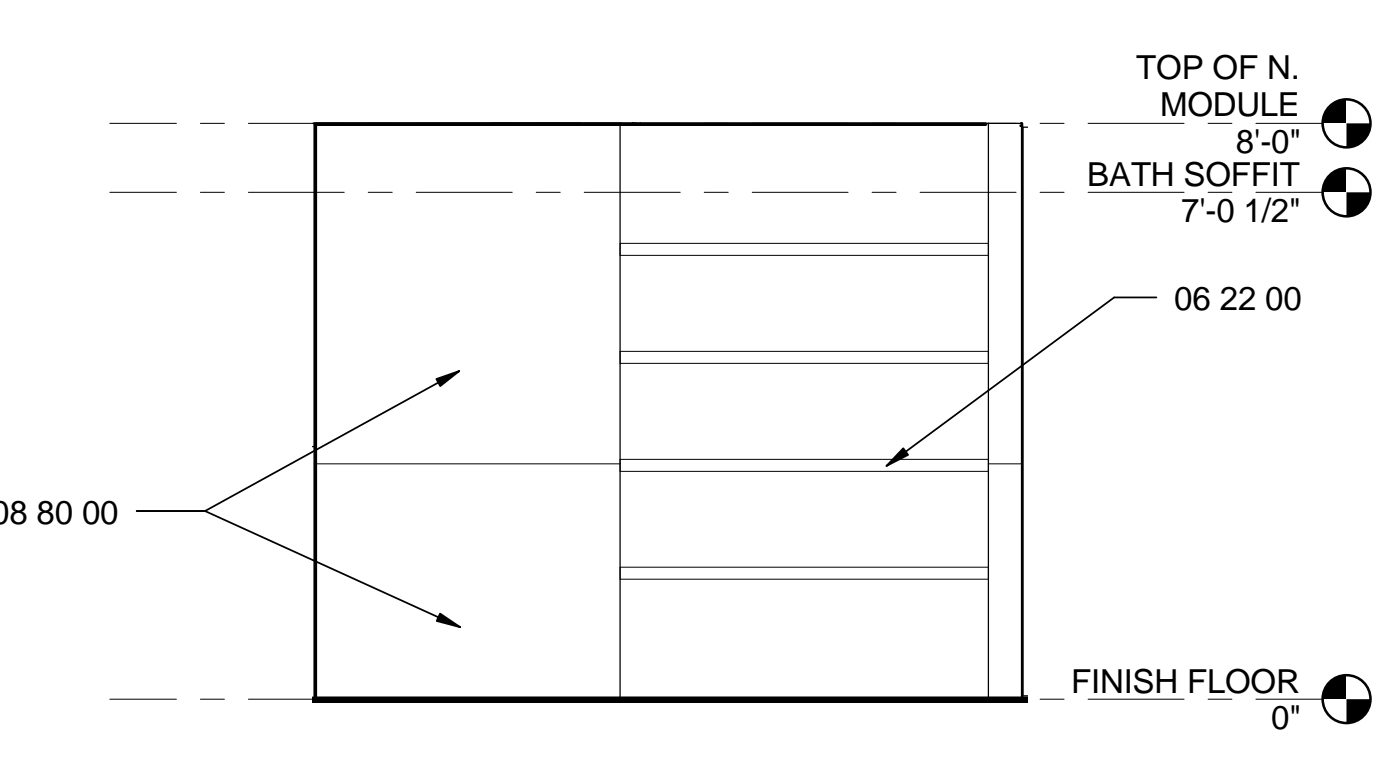
D1 I.D. ELEVATION BED SOUTH
3/8" = 1'-0"

D3 I.D. ELEVATION BED NORTH
3/8" = 1'-0"

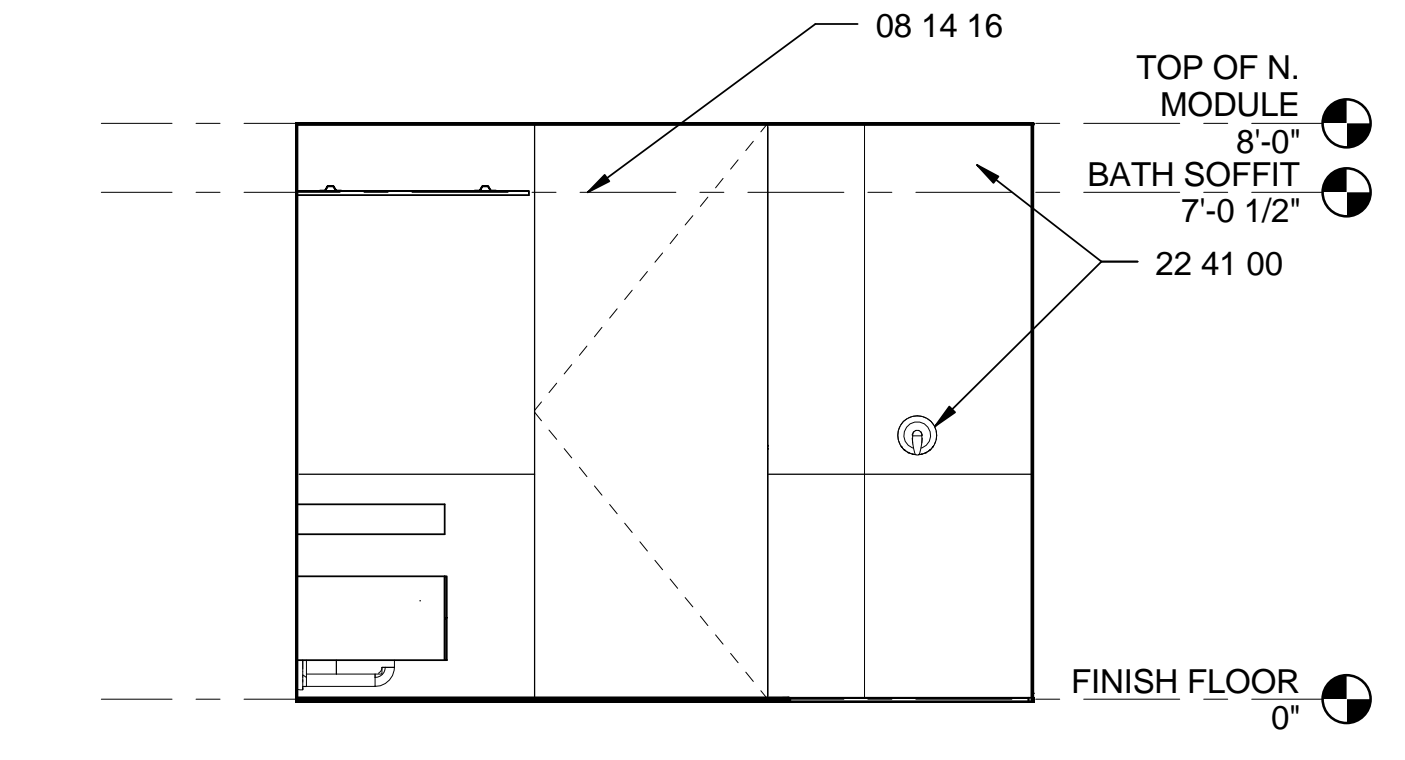
D5 I.D. ELEVATION BED WEST
3/8" = 1'-0"



A1 I.D. ELEVATION BATH SOUTH
3/8" = 1'-0"



A3 I.D. ELEVATION BATH NORTH
3/8" = 1'-0"



A5 I.D. ELEVATION BATH WEST
3/8" = 1'-0"

GENERAL SHEET NOTES

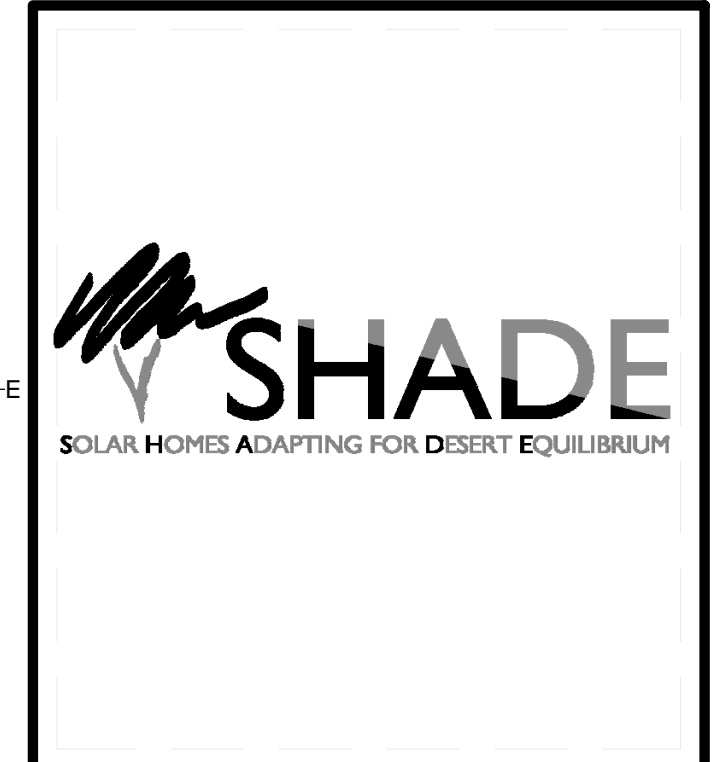
1. SHEET INDICATES INTERIOR DESIGN AND MATERIAL, FIXTURE AND FURNITURE CALL OUTS.
2. REFER TO SHEETS A-603, A-604 FOR FURNITURE SCHEDULE.
3. REFER TO SHEETS A-401, A-402, A-403 FOR INTERIOR DIMENSIONS IN PLAN.
4. REFER TO SHEETS I-401, I-402, I-403 FOR ADDITIONAL INTERIOR MATERIALS AND SPECIFICATIONS.

REFERENCE KEYNOTES

- 03 40 00 PRECAST CONCRETE
- 05 75 00 ARCHITECTURAL METAL WORKS
- 06 22 00 MILLWORK
- 06 40 23 ARCHITECTURAL WOODWORK
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 11 16 ALUMINUM DOORS AND FRAMES
- 08 14 16 INTERIOR FLUSH DOORS
- 08 51 13 ALUMINUM WINDOWS
- 08 80 00 EXTERIOR GLAZING
- 09 60 00 FLOORING
- 22 41 00 RESIDENTIAL PLUMBING FIXTURES
- 22 41 13 TOILET

SHEET KEYNOTES

1. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5" WIDE x 24.5" DEEP, N.I.C.
2. RESOURCE FURNITURE SINGLE DOOR WARDROBE 14.25" WIDE x 13.75" DEEP, N.I.C.
3. RESOURCE FURNITURE ITO BED/COUCH COMBO, N.I.C.
4. RESOURCE FURNITURE TAVOLINI LOW TABLE ADLOOKTRIALTO, N.I.C.
5. 36" X 44 3/4" WALL MOUNTED MIRROR WITH --BATH FIXTURE CUTOUTS.



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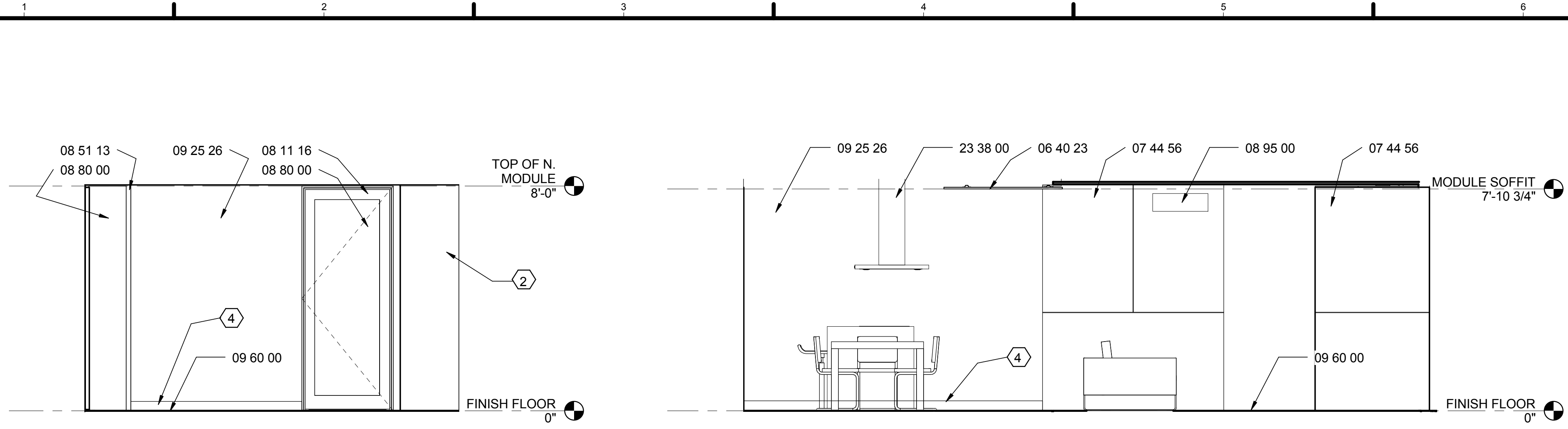


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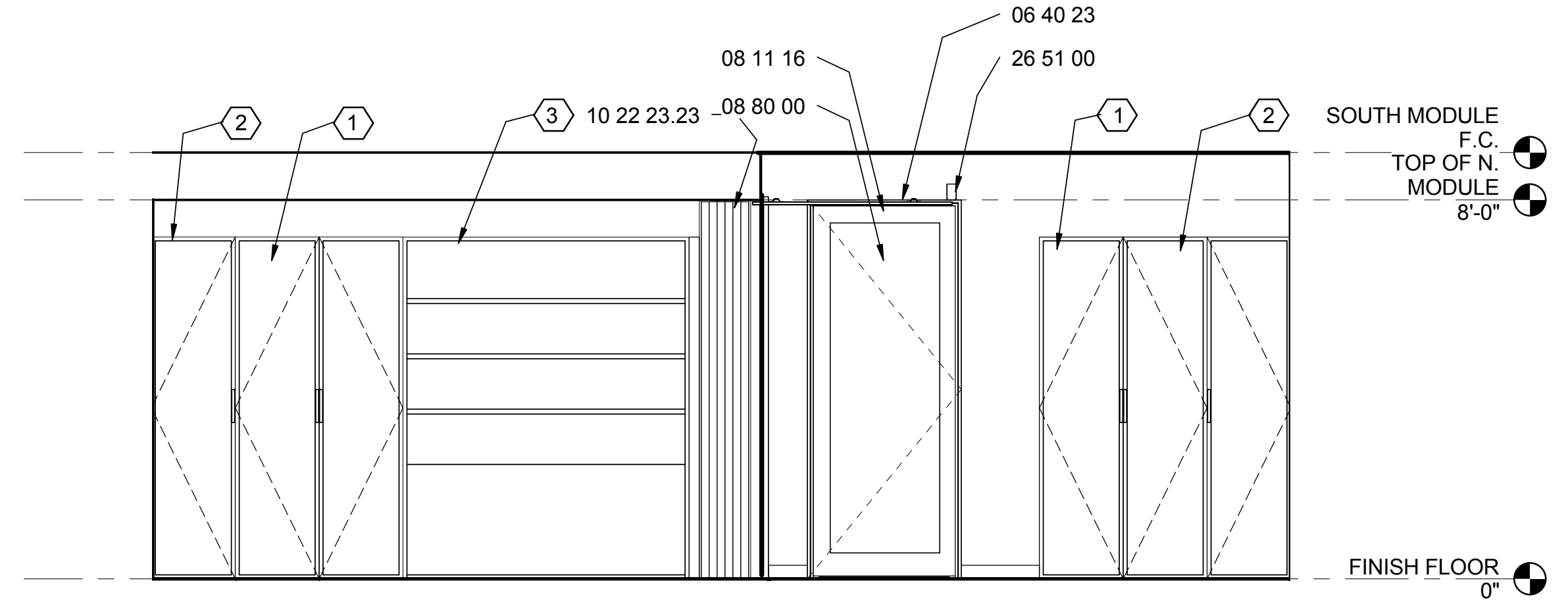
SHEET TITLE
INTERIOR DESIGN ELEVATIONS

I-201



D1 I.D. ELEVATION FLEX NORTH
3/8" = 1'-0"

D3 I.D. ELEVATION FLEX WEST
3/8" = 1'-0"



A3 I.D. ELEVATION FLEX EAST
3/8" = 1'-0"

GENERAL SHEET NOTES

1. SHEET INDICATES INTERIOR DESIGN AND MATERIAL, FIXTURE AND FURNITURE CALL OUTS.
2. REFER TO SHEETS A-603, A-604 FOR FURNITURE SCHEDULE.
3. REFER TO SHEETS A-401, A-402, A-403 FOR INTERIOR DIMENSIONS IN PLAN.
4. REFER TO SHEETS I-401, I-402, I-403 FOR ADDITIONAL INTERIOR MATERIALS AND SPECIFICATIONS.

REFERENCE KEYNOTES

- 06 40 23 ARCHITECTURAL WOODWORK/CEMENTITIOUS PANELS
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 11 16 ALUMINUM DOORS AND FRAMES
- 08 51 13 ALUMINUM WINDOWS
- 08 80 00 EXTERIOR GLAZING
- 08 95 00 VENTILLATION HOOD
- 09 25 26 NATURAL CLAY PLASTERING
- 09 60 00 FLOORING
- 10 22 23.23 MOVEABLE PARTITION SYSTEM
- 23 38 00 VENTILATION HOODS
- 26 51 00 INTERIOR LIGHTING

SHEET KEYNOTES

1. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5" WIDE x 24.5" DEEP, N.I.C.
2. RESOURCE FURNITURE SINGLE DOOR WARDROBE 14.25" WIDE x 13.75" DEEP, N.I.C.
3. RESOURCE FURNITURE LGM TAVOLO DESK/BED COMBO, N.I.C.
4. BIRCH PLYWOOD 4" BASE BOARD STAINED MIDNIGHT BLACK.



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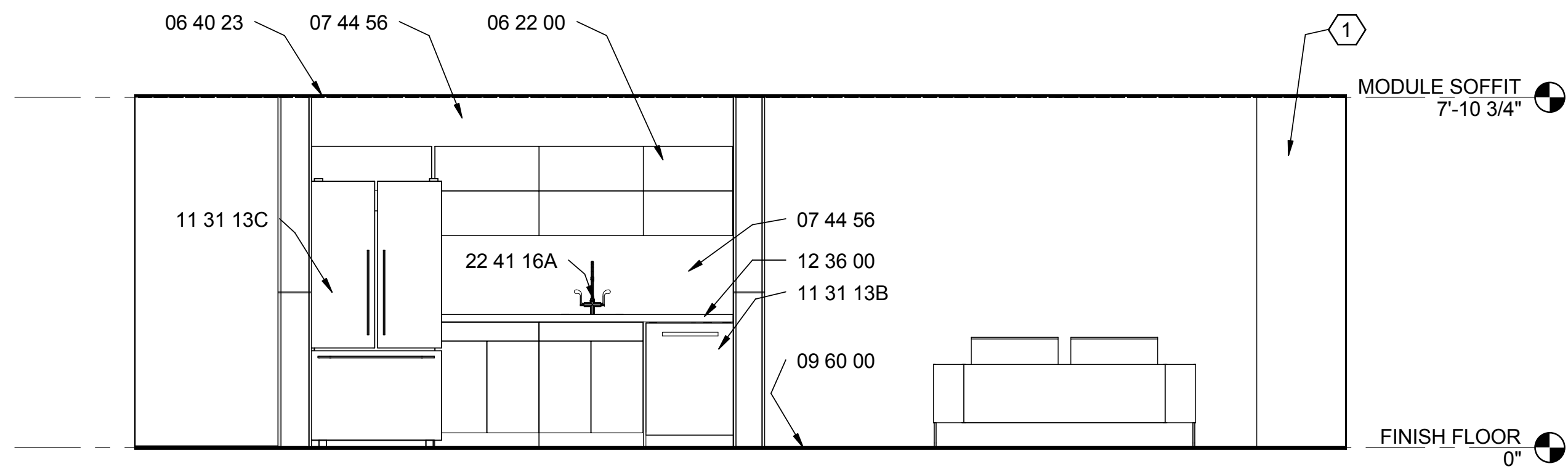


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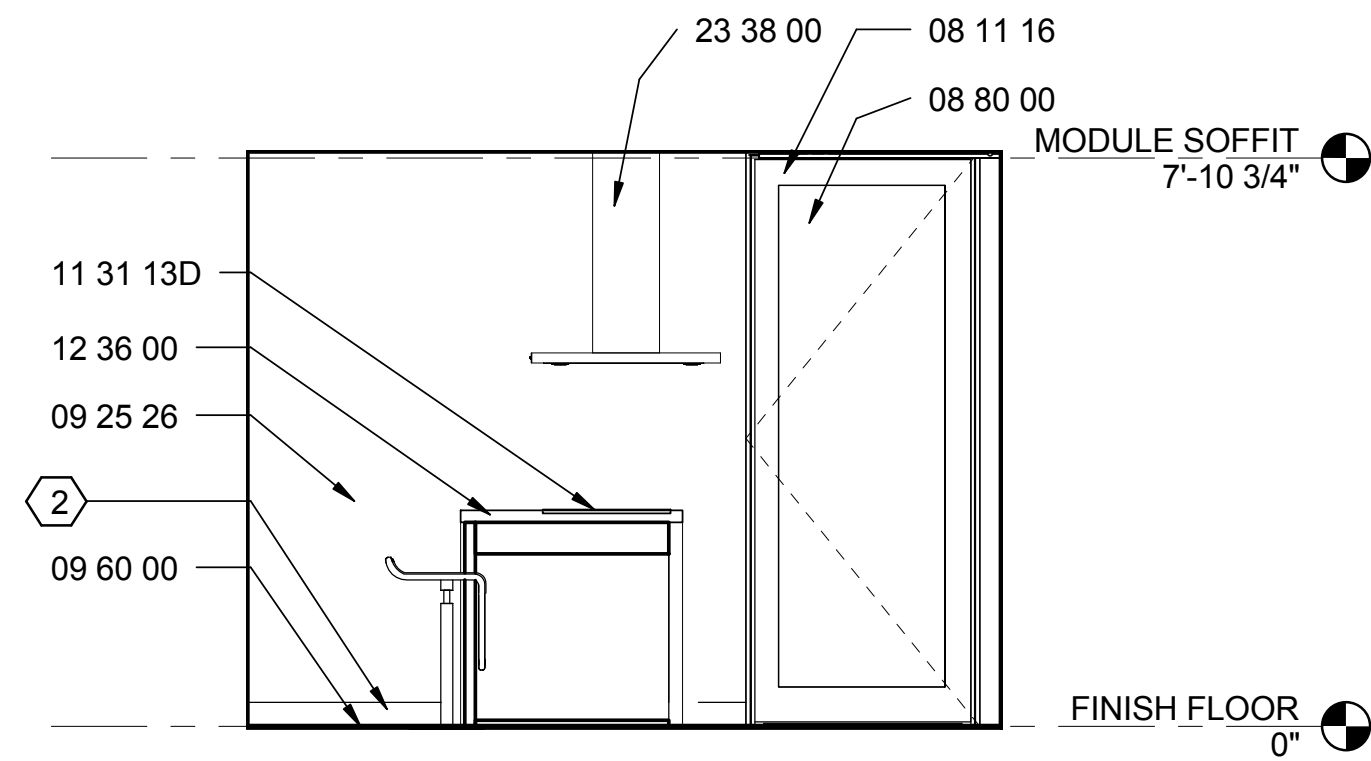
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SHEET TITLE
 INTERIOR DESIGN ELEVATIONS

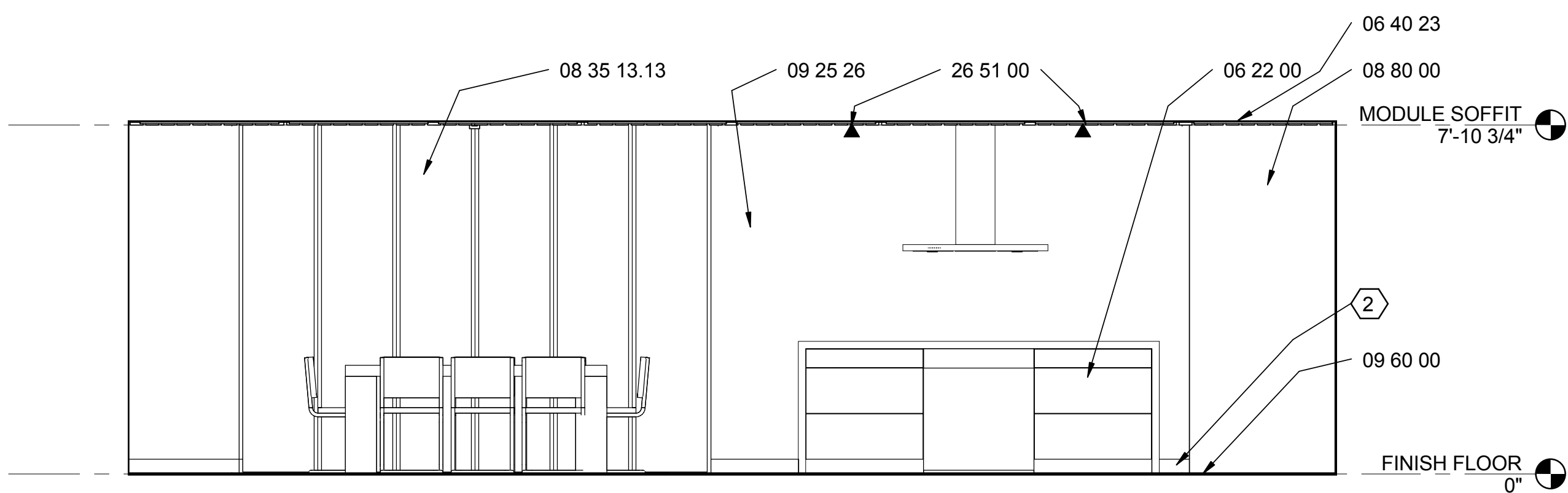
I-202



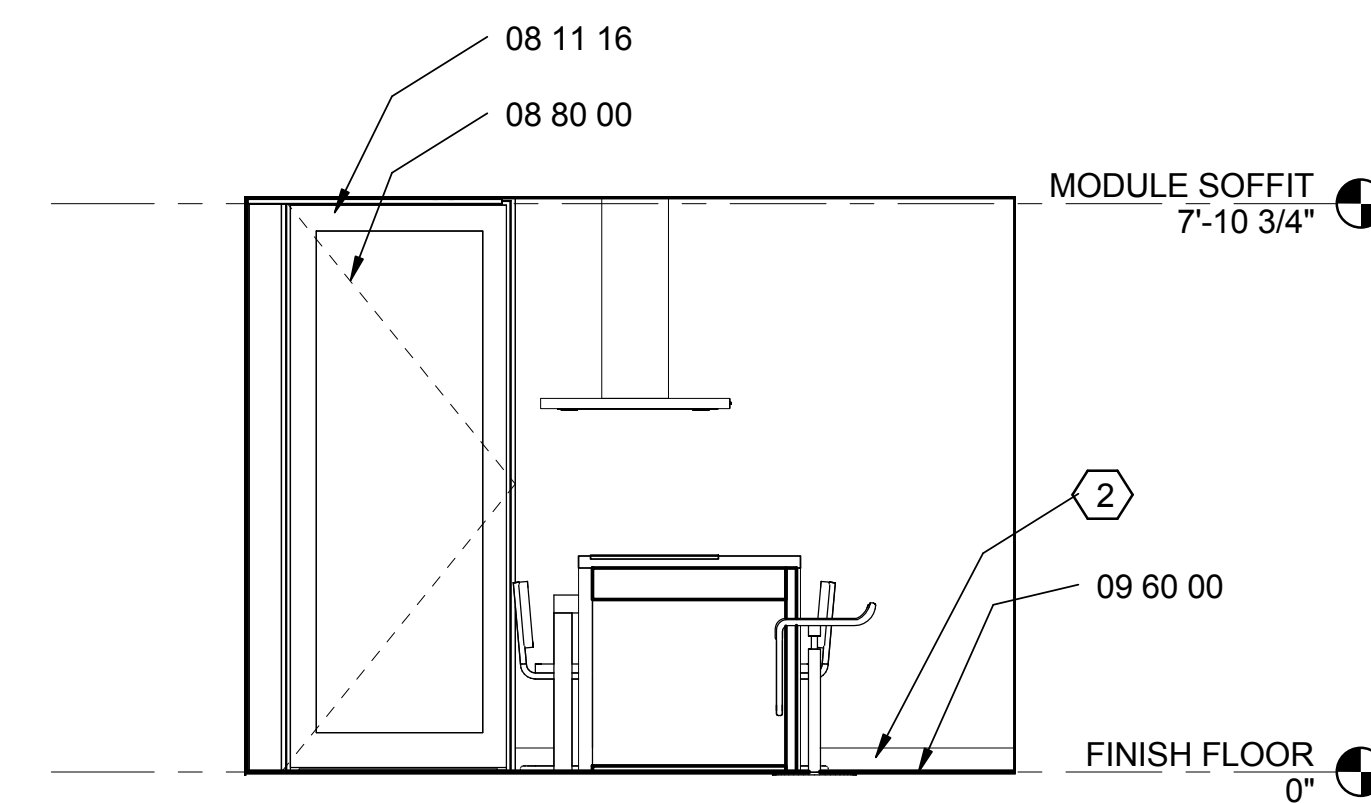
D1 I.D. ELEVATION KITCHEN NORTH
3/8" = 1'-0"



D4 I.D. ELEVATION KITCHEN WEST
3/8" = 1'-0"



A1 I.D. ELEVATION KITCHEN SOUTH
3/8" = 1'-0"



A4 I.D. ELEVATION KITCHEN EAST
3/8" = 1'-0"

GENERAL SHEET NOTES

1. SHEET INDICATES INTERIOR DESIGN AND MATERIAL, FIXTURE AND FURNITURE CALL OUTS.
2. REFER TO SHEETS A-603, A-604 FOR FURNITURE SCHEDULE.
3. REFER TO SHEETS A-401, A-402, A-403 FOR INTERIOR DIMENSIONS IN PLAN.
4. REFER TO SHEETS I-401, I-402, I-403 FOR ADDITIONAL INTERIOR MATERIALS AND SPECIFICATIONS.

REFERENCE KEYNOTES

- 06 22 00 MILLWORK
- 06 40 23 ARCHITECTURAL WOODWORK
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 11 16 ALUMINUM DOORS AND FRAMES
- 08 35 13.13 ACCORDIAN FOLDING DOORS
- 08 51 13 ALUMINUM WINDOWS
- 08 80 00 EXTERIOR GLAZING
- 08 95 00 VENTILLATION HOOD
- 09 25 26 NATURAL CLAY PLASTERING
- 09 60 00 FLOORING
- 10 22 23.23 MOVEABLE PARTITION SYSTEM
- 11 31 13B DISHWASHER
- 11 31 13C FRIDGE
- 11 31 13D COOKTOP
- 22 41 16A RESIDENTIAL LAVATORIES AND SINKS
- 23 38 00 VENTILATION HOODS
- 26 51 00 INTERIOR LIGHTING

SHEET KEYNOTES

1. RESOURCE FURNITURE LGM TAVOLO DESK/BED COMBO, N.I.C.
2. BIRCH PLYWOOD 4" BASE BOARD STAINED MIDNIGHT BLACK.



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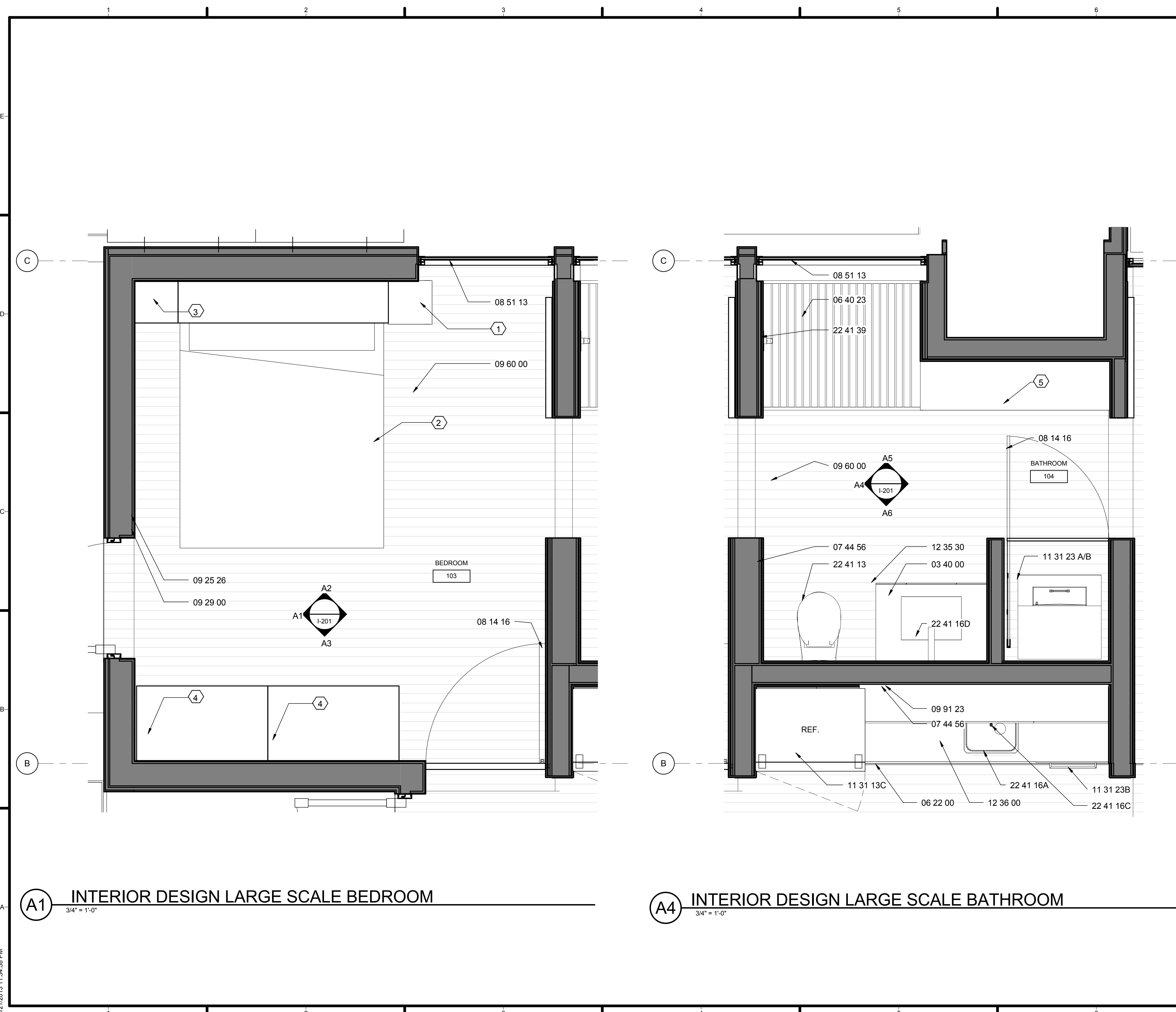


MARK	DATE	DESCRIPTION
05	8.22.2013	100% DOENREL AS-BUILTS
04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 INTERIOR DESIGN ELEVATIONS

I-203



GENERAL SHEET NOTES

1. REFER TO A-401, A-402, A-403 FOR INTERIOR DIMENSIONS.
2. REFER TO PROJECT MANUAL FOR REFERENCE KEYNOTES AND SPECIFICATIONS OF MATERIALS.

REFERENCE KEYNOTES

- 03 40 00 PRECAST CONCRETE
- 06 22 00 MILLWORK
- 06 40 23 ARCHITECTURAL WOODWORK
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 14 16 INTERIOR FLUSH DOORS
- 08 51 13 ALUMINIUM WINDOW
- 09 25 26 NATURAL CLAY PLASTERING
- 09 29 00 GYPSUM BOARD
- 09 60 00 FLOORING
- 09 91 23 INTERIOR PAINTING
- 11 31 13C REFRIGERATOR
- 11 31 23A DRYER
- 11 31 23B WASHER
- 12 36 00 COUNTERTOP
- 22 41 13 TOILET
- 22 41 16A KITCHEN SINK
- 22 41 16B KITCHEN FAUCET
- 22 41 16D BATHROOM FAUCET
- 22 41 39 RESIDENTIAL FAUCETS, SUPPLIES, AND TRIM

SHEET KEYNOTES

1. RESOURCE FURNITURE TAVILINI LOW TABLE ADLOOKTRIALTO
2. RESOURCE FURNITURE ITO BED/SOFA COMBO
3. RESOURCE FURNITURE SINGLE DOOR WARDROBE 14.25" WIDE x 13.75" DEEP
4. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5" WIDE x 24.5" DEEP
5. RESOURCE FURNITURE BATHROOM SHELVING



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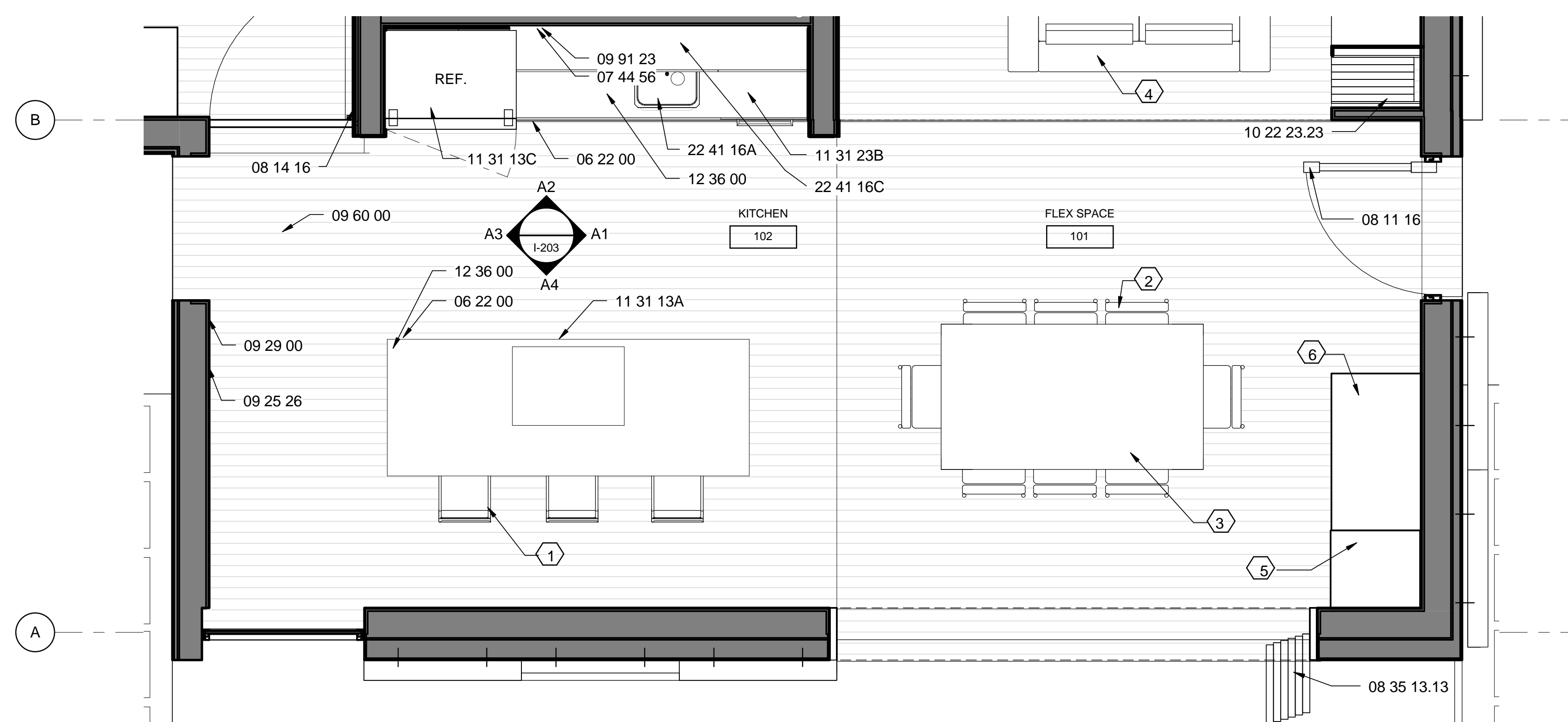
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SHEET TITLE
 LARGE-SCALE INTERIOR DESIGN PLANS

I-401

8/21/2013 11:34:56 PM



A1 INTERIOR DESIGN LARGE SCALE DINING AND KITCHEN
1/2" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO A-401, A-402, A-403 FOR INTERIOR DIMENSIONS.
2. REFER TO PROJECT MANUAL FOR REFERENCE KEYNOTES AND SPECIFICATIONS OF MATERIALS.

REFERENCE KEYNOTES

- 06 22 00 MILLWORK
- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITION PANELS
- 08 11 16 ALUMINUM DOORS AND FRAMES
- 08 14 16 INTERIOR FLUSH DOOR
- 08 35 13.13 ACCORDION FOLDING DOORS
- 08 51 13 ALUMINUM WINDOWS
- 09 25 26 NATURAL CLAY PLASTERING
- 09 29 00 GYPSUM BOARD
- 09 62 23 FLOORING
- 09 91 23 INTERIOR PAINTING
- 10 22 23.23 MOVEABLE PARTITION SYSTEM
- 11 31 13A ELECTRIC OVEN
- 11 31 13B DISHWASHER
- 11 31 13C REFRIGERATOR
- 11 31 13D COOKTOP
- 12 36 00 COUNTERTOP
- 22 41 16A KITCHEN SINK
- 22 41 16C KITCHEN FAUCET

SHEET KEYNOTES

1. BAR STOOLS, N.I.C.
2. RESOURCE FURNITURE POCKET FOLDING CHAIR, N.I.C.
3. RESOURCE FURNITURE GOLIATH TABLE N.I.C.
4. RESOURCE FURNITURE KUBICO SOFA N.I.C.
5. RESOURCE FURNITURE SINGLE DOOR 21.25"X24.5", N.I.C.
6. RESOURCE FURNITURE DOUBLE DOOR 42.5"X24.5", N.I.C.



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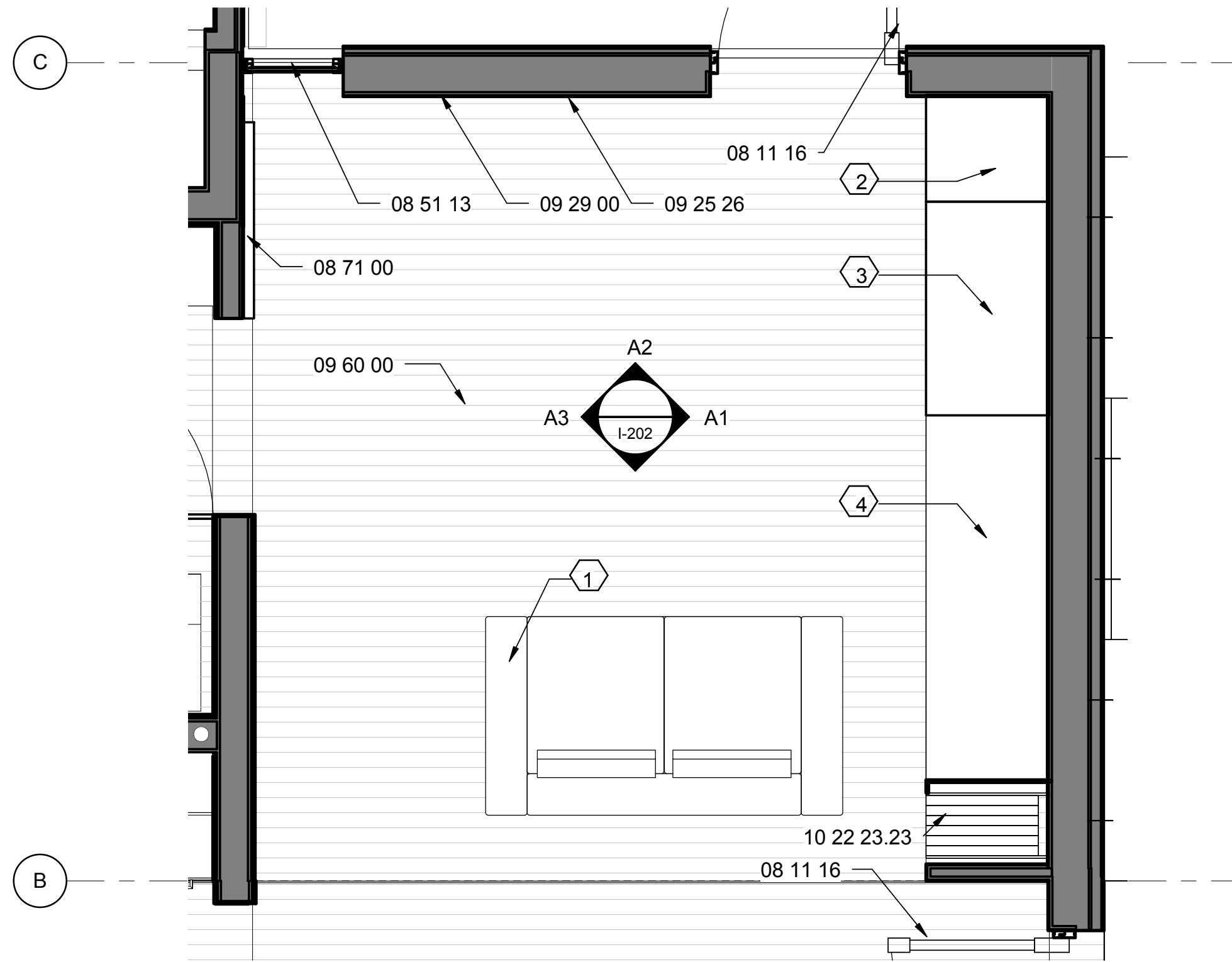


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SHEET TITLE
 LARGE SCALE
 INTERIOR DESIGN
 PLANS

I-402



A3 INTERIOR DESIGN LARGE SCALE FLEX NORTH
 1/2" = 1'-0"

GENERAL SHEET NOTES

1. REFER TO A-401, A-402, A-403 FOR INTERIOR DIMENSIONS.
2. REFER TO PROJECT MANUAL FOR REFERENCE KEYNOTES AND SPECIFICATIONS OF MATERIALS.

REFERENCE KEYNOTES

- 07 44 56 MINERAL-FIBER-REINFORCED CEMENTITIOUS PANELS
- 08 11 16 ALUMINUM DOORS AND FRAMES
- 08 14 16 INTERIOR FLUSH DOOR
- 08 51 13 ALUMINUM WINDOWS
- 09 25 26 NATURAL CLAY PLASTER FINISH
- 09 29 00 GYPSUM BOARD
- 09 60 00 FLOORING
- 09 91 23 INTERIOR PAINTING
- 10 22 23.23 MOVEABLE PARTITION WALL

SHEET KEYNOTES

1. RESOURCE FURNITURE KUBICO SOFA
2. RESOURCE FURNITURE SINGLE DOOR WARDROBE 21.25"x24.5"
3. RESOURCE FURNITURE DOUBLE DOOR WARDROBE 42.5"x24.5"
4. RESOURCE FURNITURE TAVOLO BED/DESK COMBO



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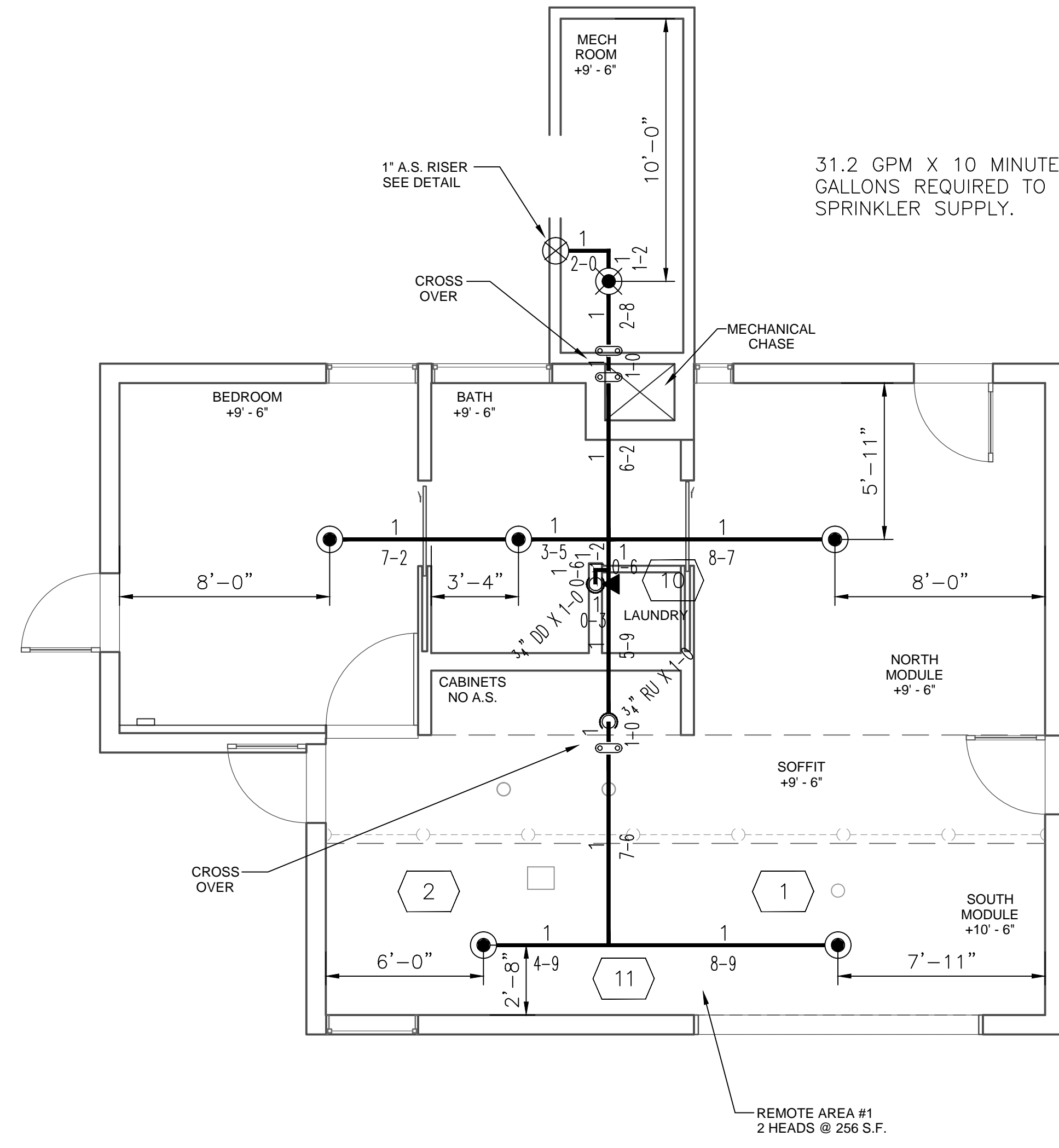
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SHEET TITLE
 LARGE SCALE INTERIOR DESIGN PLANS

I-403

I, TERRY P. LEET, CERTIFY THAT I DID NOT DESIGN THIS FIRE SPRINKLER SYSTEM. I CERTIFY THAT I HAVE REVIEWED THE DRAWINGS AND TO THE BEST OF MY KNOWLEDGE THESE DRAWINGS COMPLY WITH ALL APPLICABLE CODES AND NFPA STANDARDS (NFPA 13D, 13B). IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO FOLLOW THE FIRE SPRINKLER PLANS CAREFULLY AND TO INSURE THAT THE INSTALLATION IS IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.

TERRY P. LEET NICEST LEVEL IV #09503 DATE: 8/7/13 EXPIRES: 12/01/14



31.2 GPM X 10 MINUTES = 312 X 10% = 343.2 GALLONS REQUIRED TO BE DEDICATED FOR FIRE SPRINKLER SUPPLY.

BIKE STORAGE
NO A.S. REQUIRED

HYDRAULIC DATA

AREA#	1 - SOUTH MODULE
SPACING	2 @ 16' X 16'
PSI @ SOURCE	35.0
GPM @ SOURCE	26.2

FIRE SPRINKLER PIPING PLAN
SCALE: 1/4" = 1'-0"

NOTES

- ALL ELEMENTS OF THIS DESIGN AND INSTALLATION ARE TO CONFORM WITH NFPA-13D STANDARDS AND LOCAL CODES.
- THE WATER SUPPLY AND FEMALE ADAPTER TO BE PROVIDED BY OTHERS AT APPROX. 3'-0" A.F.F. AT THE RISER LOCATION(S) SHOWN.
- (1) 6" MIN 110 VOL. ELEC. BELL SUPPLIED BY HOUSE CURRENT WILL BE MOUNTED ON THE STRUCTURES EXTERIOR NEXT TO THE RISER. THE FLOW SWITCH WILL BE CONNECTED INTO THE ELECTRIC BELL FOR ON-SITE DEVICE ACTIVATION REPORTING.
- ALL ELECTRIC WIRING IS BY OTHERS.
- HANGER SPACING AS FOLLOWS: 5'-6" O.C. FOR 3/4" PIPE, 6'-0" O.C. FOR 1" PIPE, 6'-6" O.C. FOR 1-1/4" PIPE, 7'-0" O.C. FOR 1-1/2" THRU 2" PIPE.
- FOR SPRINKLER HEAD SPACING AND DESIGN CRITERIA, SEE MFR'S SPECS ON PLANS.
- ALL INSULATION TO BE INSTALLED ABOVE OR AROUND CENTRAL BLAZEMASTER PIPING.
- THIS SYSTEM TO BE HYDROSTATICALLY TESTED, AT 50 PSI ABOVE STREET PRESSURE, BUT NOT LESS THAN 150 PSI, FOR MIN. 24 HOURS.
- ALL OVERHEAD SYSTEM MATERIALS TO BE CPVC.
- ALL REPLACEMENT SPRINKLERS TO BE EQUAL TO EXISTING.
- (1-0): INDICATES PIPE C.L. DIMENSION ON THE SLOPE.
- ALL PIPING TO BE 3/4" UNLESS NOTED OTHERWISE.
- USE OF THESE DRAWINGS BY THE INSTALLING CONTRACTOR SHALL INDICATE ACCEPTANCE OF ALL THE INFORMATION PROVIDED ON THESE PLANS AND SHALL TRANSFER FINAL RESPONSIBILITY OF THE CORRECTNESS OF THE SYSTEM TO THE INSTALLING CONTRACTOR.
- ADDITIONAL SPRINKLER HEADS OVER AND ABOVE THOSE SPECIFICALLY NOTED ON THESE DRAWINGS MAYBE REQUIRED DEPENDING ON THE REQUIRED ROUTING AROUND TRUSSES, HVAC DUCTWORK, HOODS AND OTHER SIMILAR OBSTRUCTIONS. FIELD VERIFY EXISTING CONDITIONS DURING CONSTRUCTION AND PROVIDE ANY AND ALL ADDITIONAL HEADS AS REQUIRED FOR FULL COVERAGE AND A COMPLETE, CODE COMPLIANT SYSTEM.

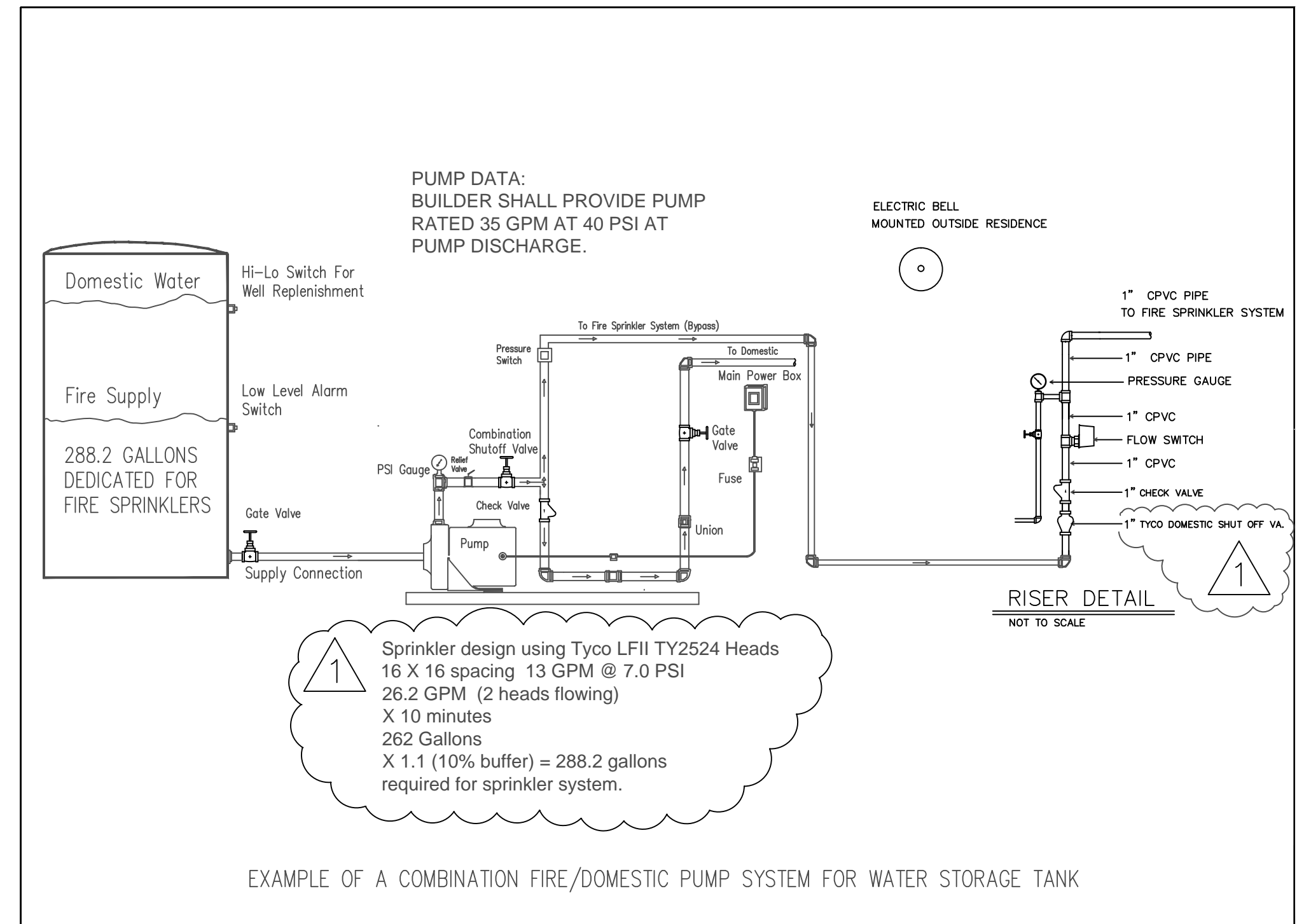
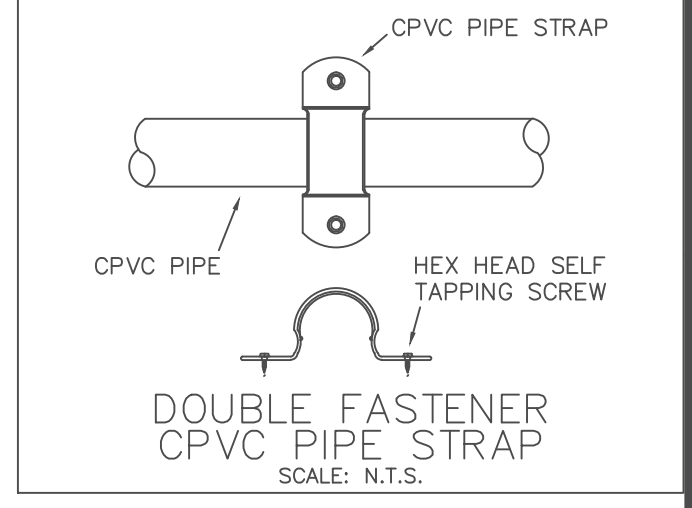
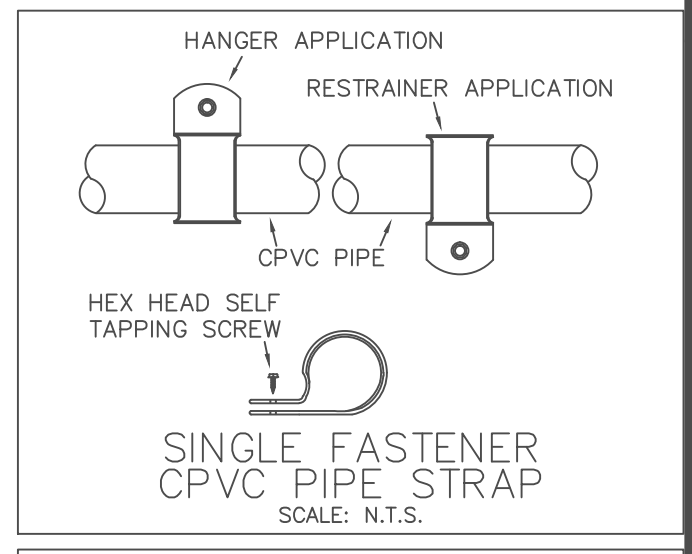
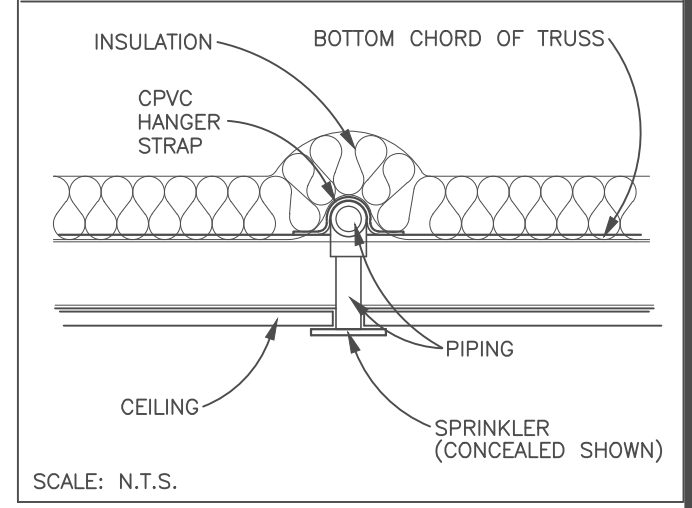
SCOPE OF WORK

INSTALL A NEW FIRE SPRINKLER SYSTEM IN A SINGLE FAMILY HOME

DESIGN CRITERIA

PER NFPA 13D 2010 EDITION
CALCULATE THE MOST DEMANDING SINGLE HEAD AND THE MOST DEMANDING TWO HEADS AT 0.05 DENSITY

INSTALLATION DETAIL



SPRINKLER LEGEND

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#
●	5	PEND	WHITE	160	4.90	1/2"	TY2524	TYCO	LFII CONCEALED
◀	1	SIDE	WHITE	175	4.20	1/2"	TY1334	TYCO	LFII SEMI REC
⊗	1	PEND	WHITE	175	4.90	1/2"	TY2234	TYCO	LFII SEMI REC



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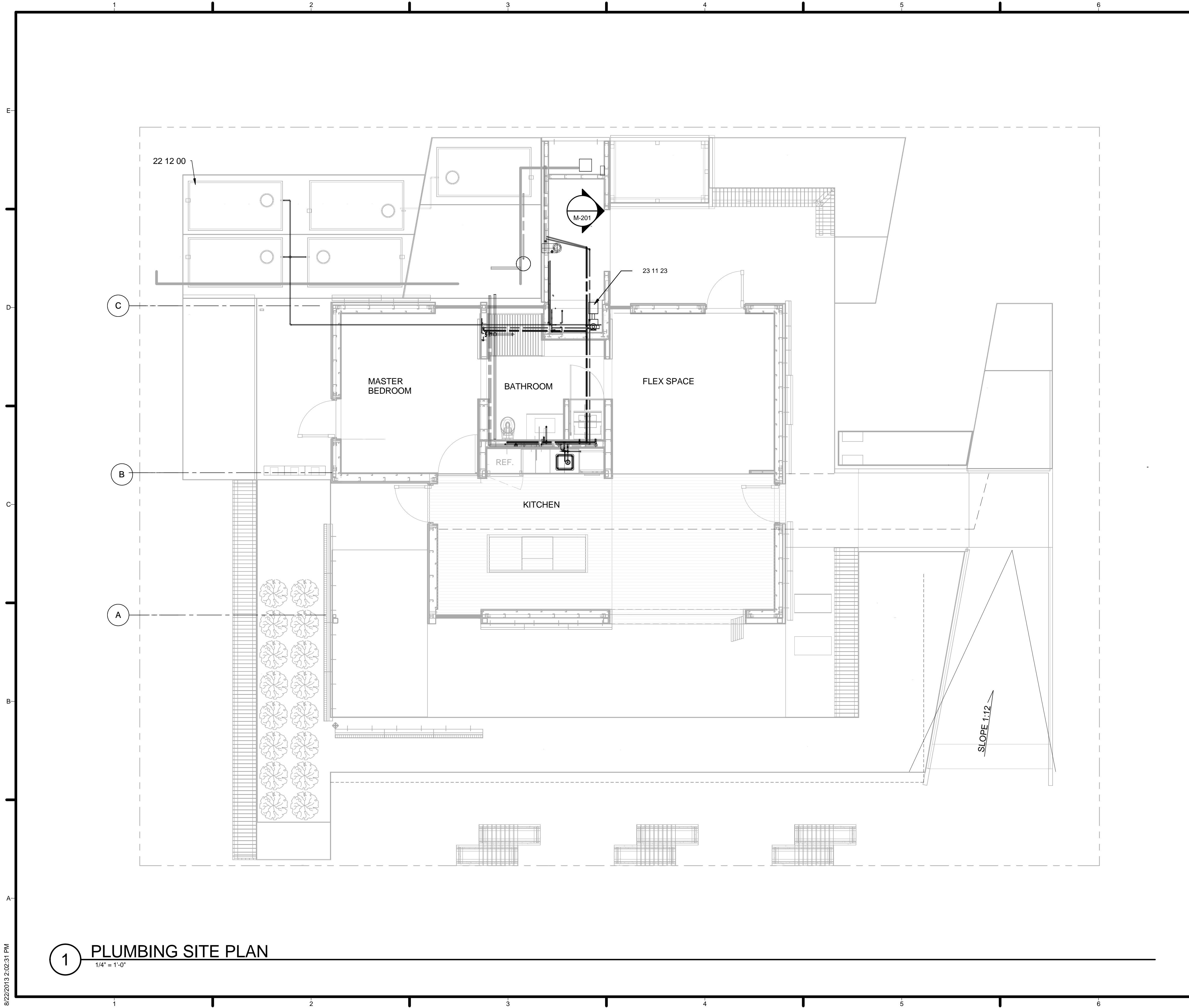
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MARK	DATE	DESCRIPTION
1	3-5-13	REVISED SPRINKLER DEMAND

LOT NUMBER: 117
DRAWN BY: J GRANTHAM
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FIRE SPRINKLERS

F-102



1. ALL DRAINS TO SLOPE > 1/8"=1' AS PER CODE.
2. 3X 500 GALLON TANK FOR DAY 7 - WATER DELIVERY.
3. 2 X 500 GALLON TANK FOR FINAL DAY WASTE REMOVAL.

- 22 12 00 PORTABLE WATER STORAGE TANK
1. 500 GALLON CRM-ZT HARD TANK.
 2. DOMESTIC WATER SUPPLY.
 3. COLD WATER SUPPLY (CW)
 4. COLD WATER RETURN (CW1)
 5. HOT WATER SUPPLY (HW)
 6. HOT WATER RETURN (HW1)
 7. WASTE WATER
 8. CONDENSATE DRAIN
 9. PUMP FOR WASTE.
 10. PUMP FOR DOMESTIC WATER SUPPLY.



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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 PLUMBING SITE PLAN

P-101

1 PLUMBING SITE PLAN
 1/4" = 1'-0"

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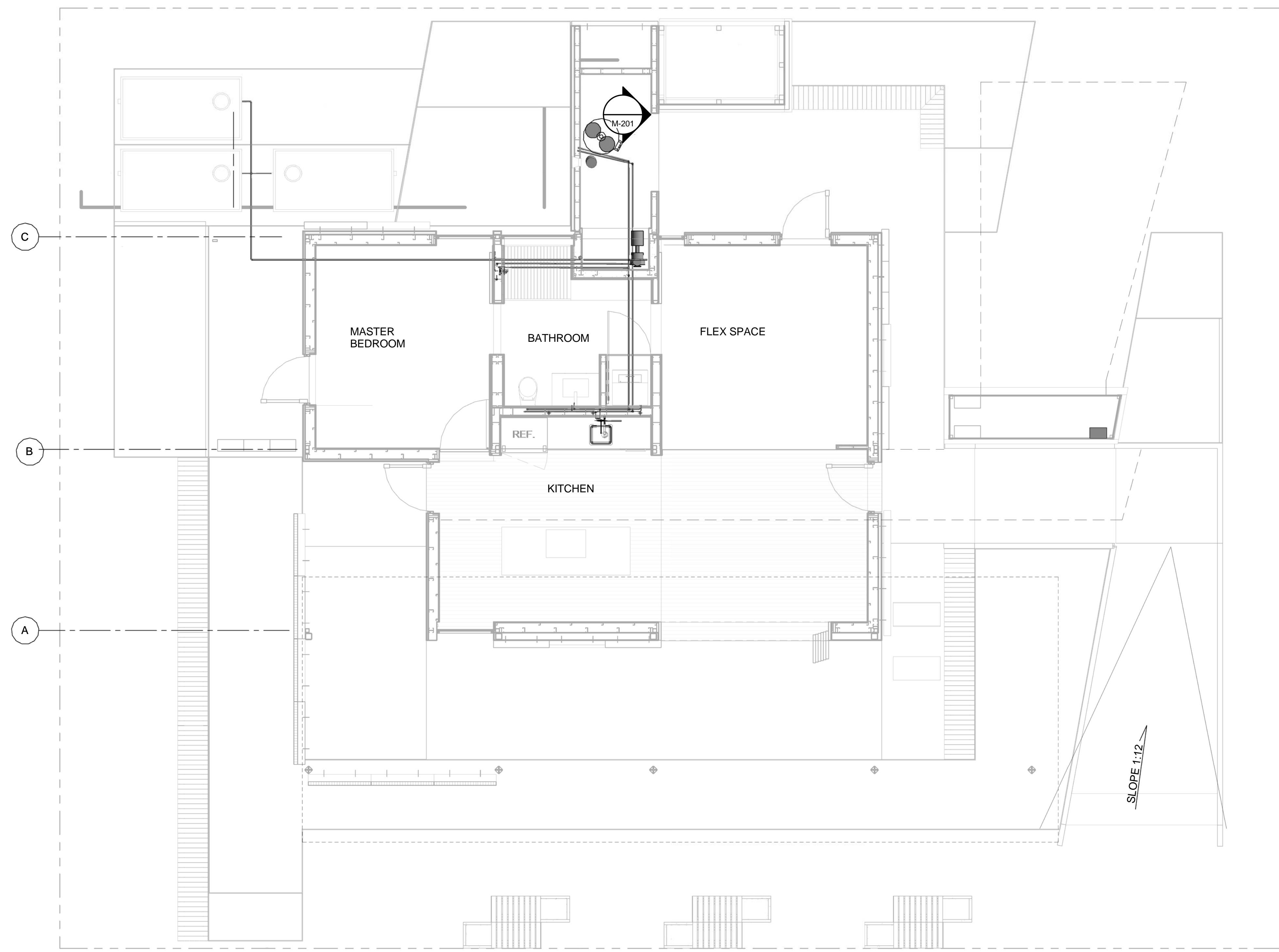


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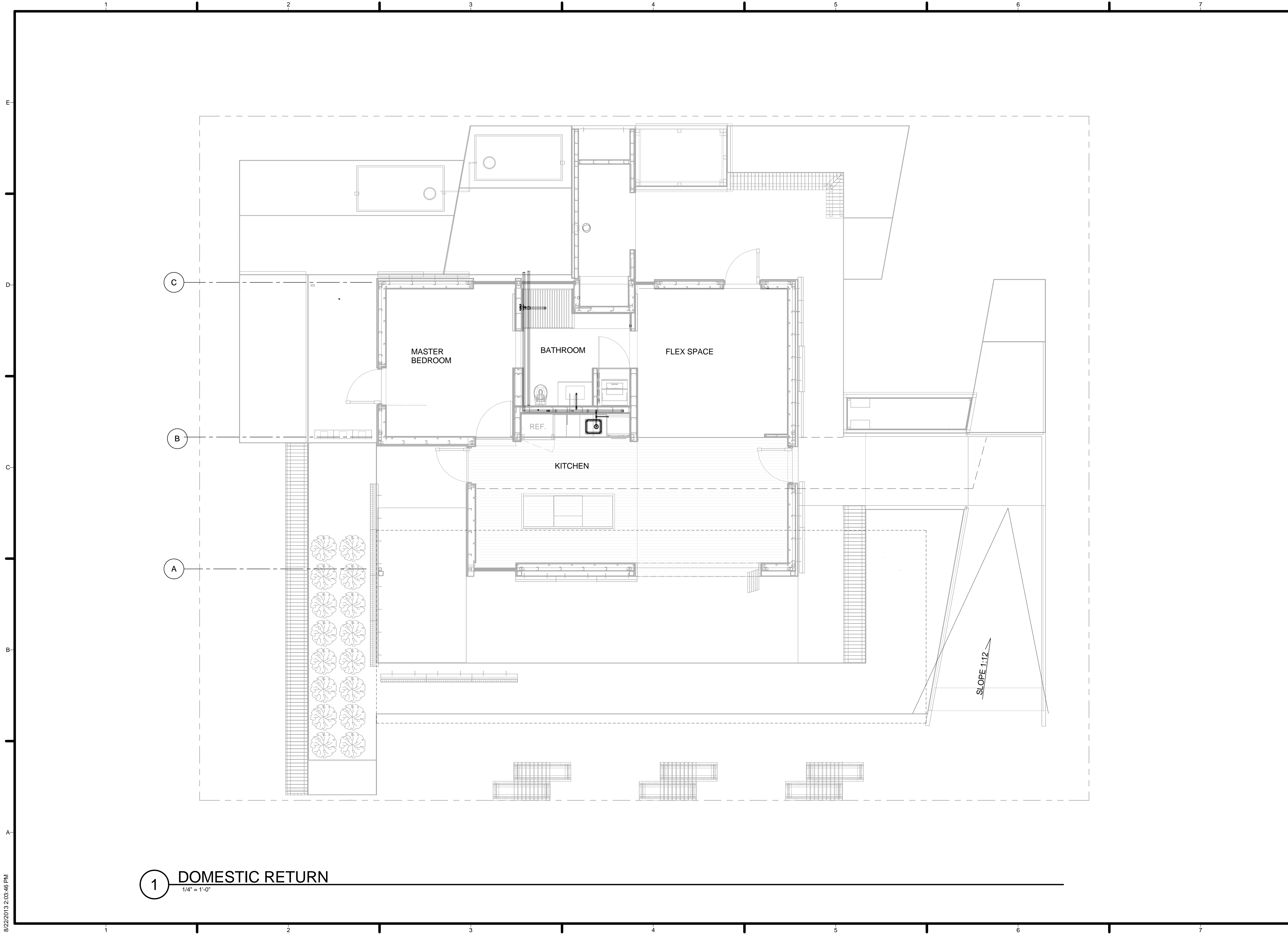
SHEET TITLE
 DOMESTIC SUPPLY

P-102



1 DOMESTIC SUPPLY
 1/4" = 1'-0"

8/22/2013 2:02:48 PM



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SHEET TITLE
 DOMESTIC RETURN

P-103

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PLUMBING FIXTURE SCHEDULE													
MARK	DESCRIPTION	COUNT	MANUFACTURER	MODEL	SUPPLY FITTING	SUPPLY PIPE	DRAIN	TRAP	CONNECTION				COMMENTS
									CW	HW	WASTE	VENT	
1		1											
2		1											
21		1											
23		1											
25		1											

PIPE SCHEDULE									
Classification Code	Length	Inner Diameter	Type	Keynote	Schedule/Type				
23-60 30 11 11	1 7/8"	0"	Cold Water	DOMESTIC SUPPLY	None				
23-60 30 11 11	6'-0 1/8"	0"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	8'-7"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	11'-0 1/8"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	1'-10 1/4"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	4'-0"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	35'-9 3/8"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	17'-7 1/4"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	110'-9 1/8"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	2'-10 3/4"	1"	Cold Water	DOMESTIC SUPPLY	A				
23-60 30 11 11	1"	2"	Cold Water	DOMESTIC SUPPLY	None				
23-60 30 11 11	8'-7"	1"	Hot Water		A				
23-60 30 11 11	23'-4"	1"	Hot Water		A				
23-60 30 11 11	95'-11 3/8"	1"	Hydronic return-PP	23 83 16	3				
23-60 30 11 11	5'-8 3/4"	1"	Hydronic return-PP	23 83 16	3				
23-60 30 11 11	1'-0 5/8"	1"	Hydronic return-PP	23 83 16	None				
23-60 30 11 11	106'-10 3/4"	1"	Hydronic supply-PP	23 83 16	3				
23-60 30 11 11	13'-4 7/8"	1"	Hydronic supply-PP	23 83 16	3				
23-60 30 11 11	1'-3 5/8"	1"	Hydronic supply-PP	23 83 16	None				
23-60 30 11 11	1 1/8"	1"	Hydronic supply-PP	23 83 16	None				
23-60 30 11 11	11 1/8"	1"	Hydronic supply-PP	23 83 16	None				
23-60 30 11 11	Family	Type	1"	Waste	Overall Size	Schedule	Count		
23-60 30 11 11			1"	Waste		Schedule 40			
23-60 30 11 11	82'-0 3/8"	Standard	2"	1"ø	Waste		2	Schedule 40	
M_Cross - Generic	575'-3 3/4"	Coupling - Generic		1"ø-1"ø			1		
M_Cross - Generic		Cross - Generic		1"ø-1"ø-1"ø-1"ø			2		
M_Cross - Generic		Cross - Generic		2"ø-2"ø-2"ø-2"ø			1		
M_Elbow - Generic		Elbow - Generic		1"ø-1"ø			145		
M_Elbow - Generic		Elbow - Generic		2"ø-2"ø			8		
M_Elbow - Generic		Elbow - Generic		3"ø-3"ø			5		
M_Tee - Generic		Tee - Generic		1"ø-1"ø-1"ø			25		
M_Tee - Generic		Tee - Generic		2"ø-2"ø-2"ø			2		
M_Tee - Generic		Tee - Generic waste		1"ø-1"ø-1"ø			1	Assembly Code	
M_Transition - Generic	Family	Transition - Generic	Count	1"ø	Type	Overall Size	Description	55	Keynote
M_Transition - Generic		Transition - Generic		2"ø-1"ø				3	
M_Transition - Generic		Transition - Generic	12	3/4"	2"ø-2"ø	1"ø-1"ø		3	
M_Transition - Generic		Transition - Generic	1	5/8"	1"ø-1"ø-1"ø	1"ø-1"ø-1"ø	Equa-Flo HD Pressure-Balancing Valve	1	D2010700
M_Transition - Generic		Transition - Generic		3"ø-3"ø					

Grand total: 255

	QTY	*****	UNIT	*****	TOTAL	*****	*****	*****	*****	
		DFU	HWFU	CWFU	H&CWFU		DFU	HWFU	CWFU	H&CWFU
FULL BATH	1	5	1.5	2.7	3.6		5	1.5	2.7	3.6
KITCHEN GROUP	1	3	1.9	1.0	2.5		3	1.9	1.0	2.5
SINK	0	2	1.0	1.0	1.4		0	0.0	0.0	0.0
LAUNDRY GROUP	0	3	1.8	1.8	2.5		0	0.0	0.0	0.0
CLOTHES WASH	1	2	1.0	1.0	1.4		2	1.0	1.0	1.4
SHOWER/TUB		2	1.0	1.0	1.4		0	0.0	0.0	0.0
DISHWASHER	0	2	1.4		1.4		0	0.0	0.0	0.0
LAV/BAR SINK		1	0.5	0.5	0.7		0	0.0	0.0	0.0
WC	0	3		2.2	2.2		0	0.0	0.0	0.0
HOSE BIBB				2.5	2.5		0	0.0	0.0	0.0
FLOOR DRAIN		2					0	0.0	0.0	0.0
TOTAL							10	4.4	4.7	7.5

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04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
 PLUMBING SCHEDULES

P-601



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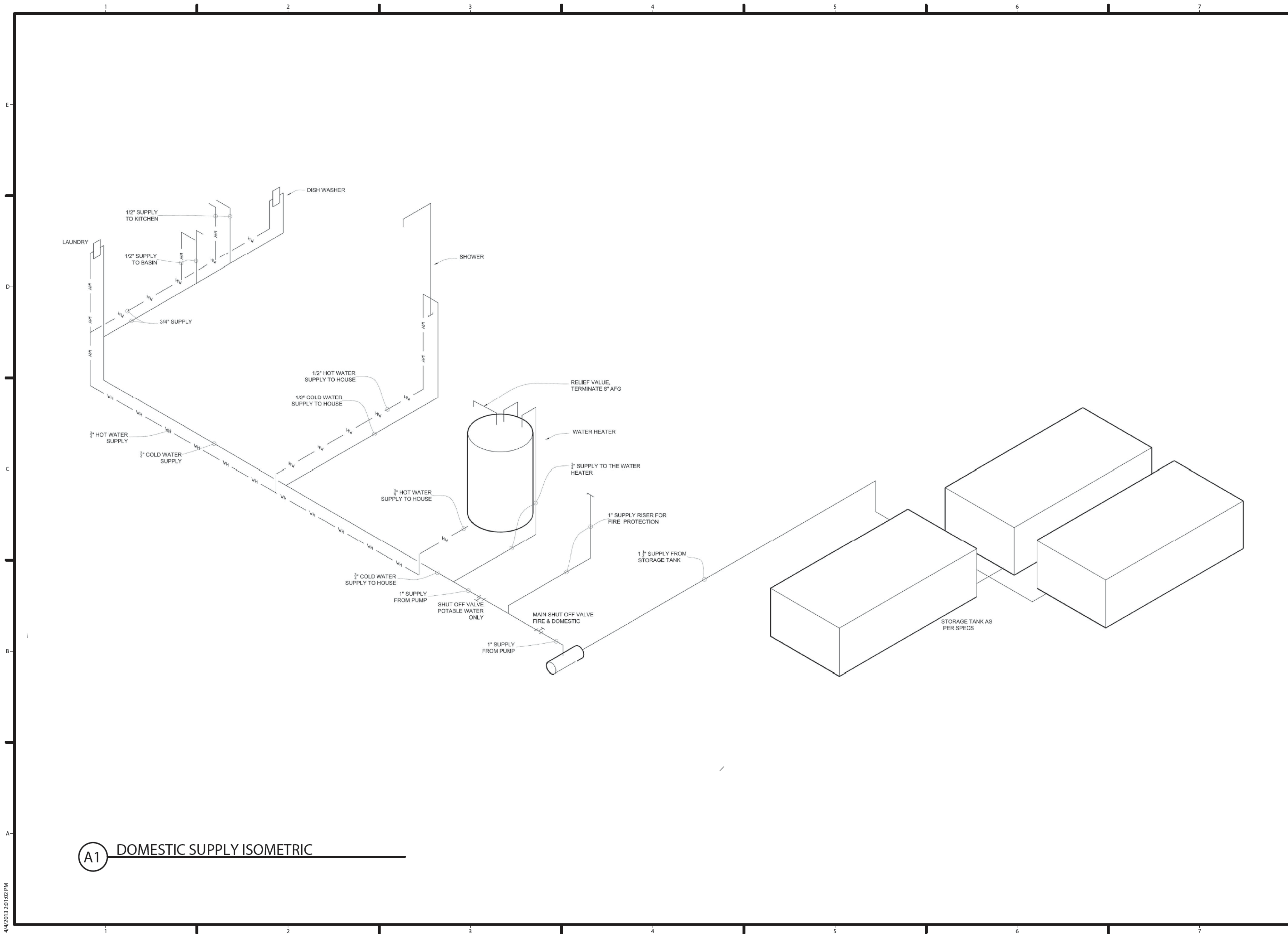


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SHEET TITLE
SUPPLY ISOMETRICS

P-901



(A1) DOMESTIC SUPPLY ISOMETRIC



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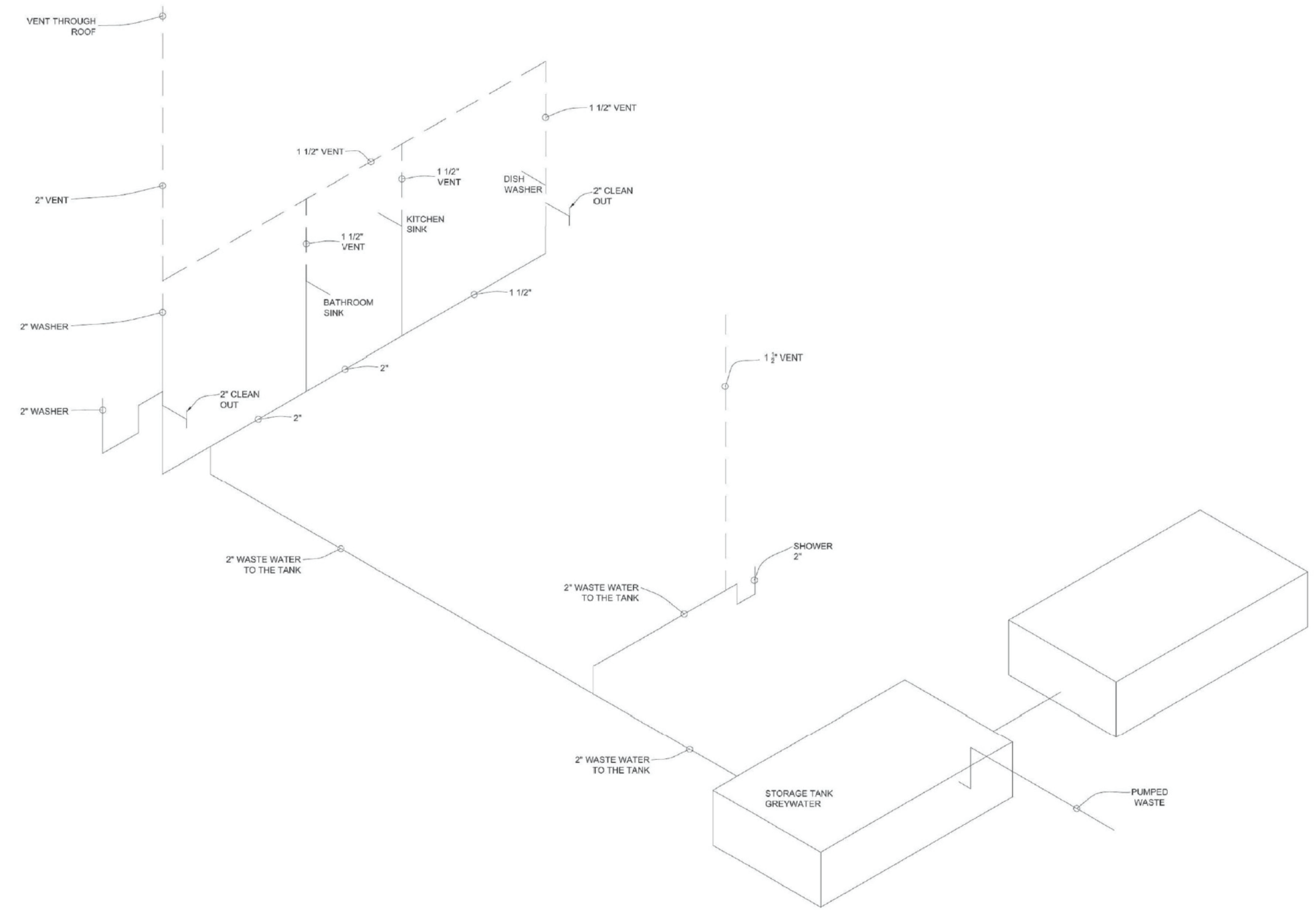


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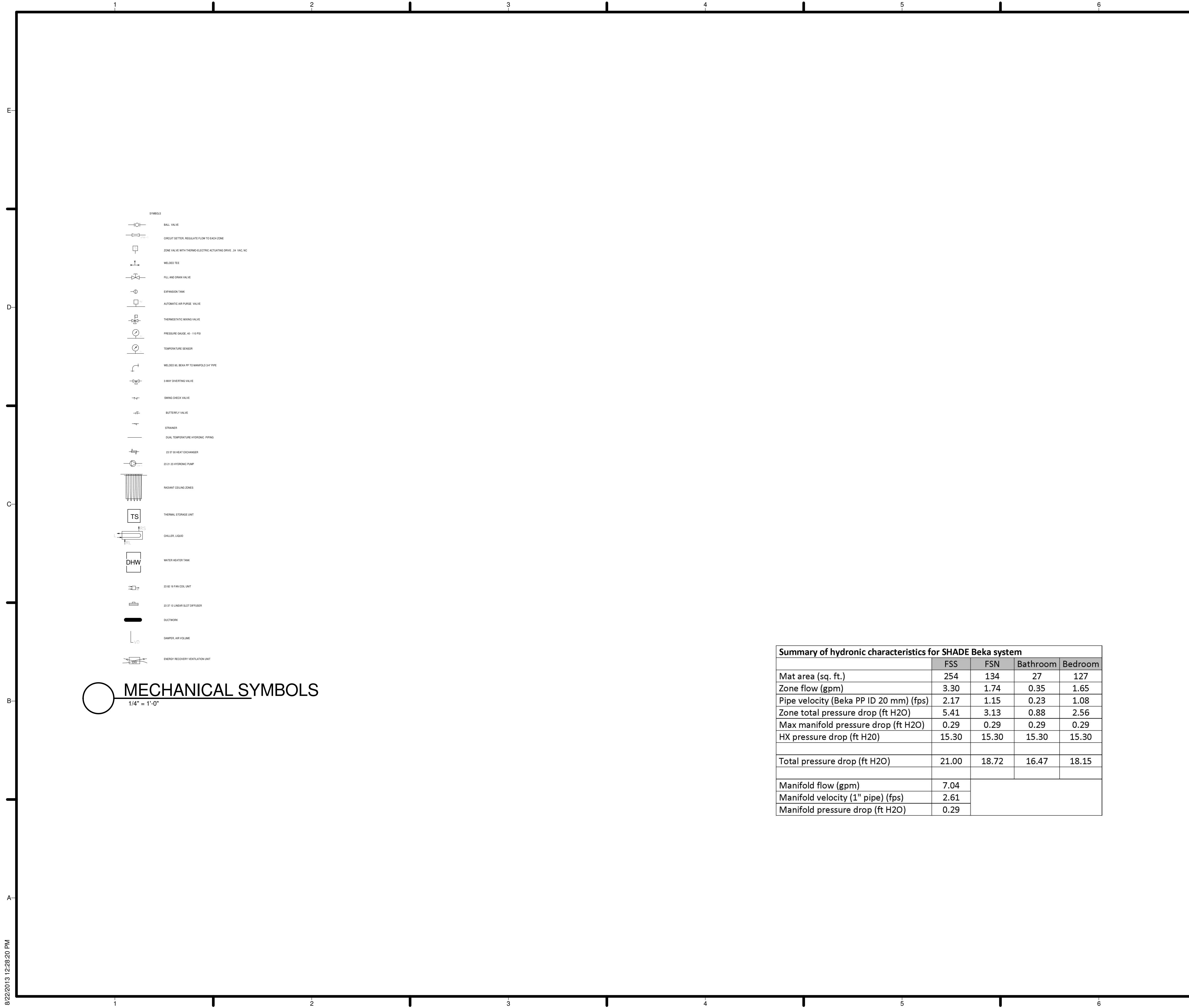
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SHEET TITLE
 RETURN ISOMETRICS

P-902



A1 DOMESTIC RETURN ISOMETRIC



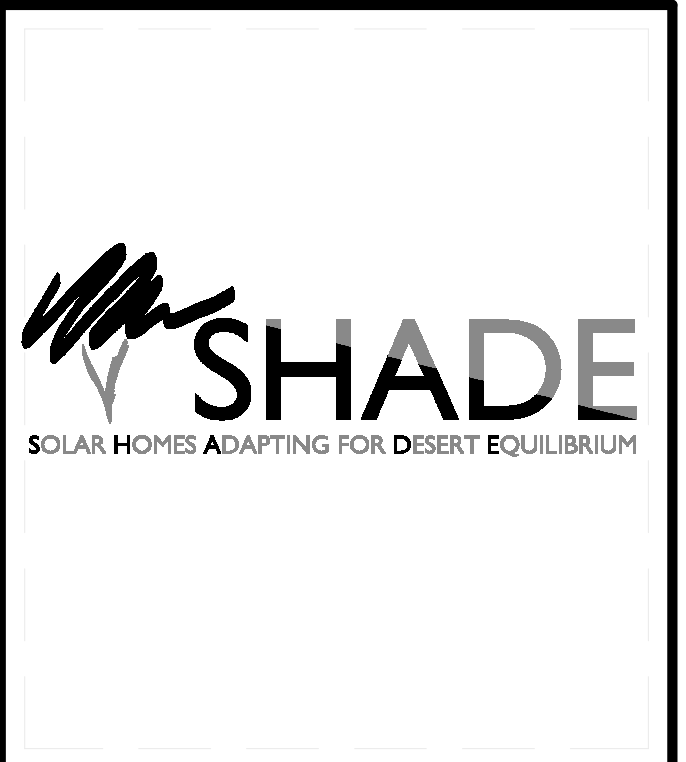
GENERAL SHEET NOTES

1. SEE T-601 FOR HVAC CONTROLS

REFERENCE KEYNOTES

SHEET KEYNOTES

Summary of hydronic characteristics for SHADE Beka system				
	FSS	FSN	Bathroom	Bedroom
Mat area (sq. ft.)	254	134	27	127
Zone flow (gpm)	3.30	1.74	0.35	1.65
Pipe velocity (Beka PP ID 20 mm) (fps)	2.17	1.15	0.23	1.08
Zone total pressure drop (ft H2O)	5.41	3.13	0.88	2.56
Max manifold pressure drop (ft H2O)	0.29	0.29	0.29	0.29
HX pressure drop (ft H2O)	15.30	15.30	15.30	15.30
Total pressure drop (ft H2O)	21.00	18.72	16.47	18.15
Manifold flow (gpm)	7.04			
Manifold velocity (1" pipe) (fps)	2.61			
Manifold pressure drop (ft H2O)	0.29			



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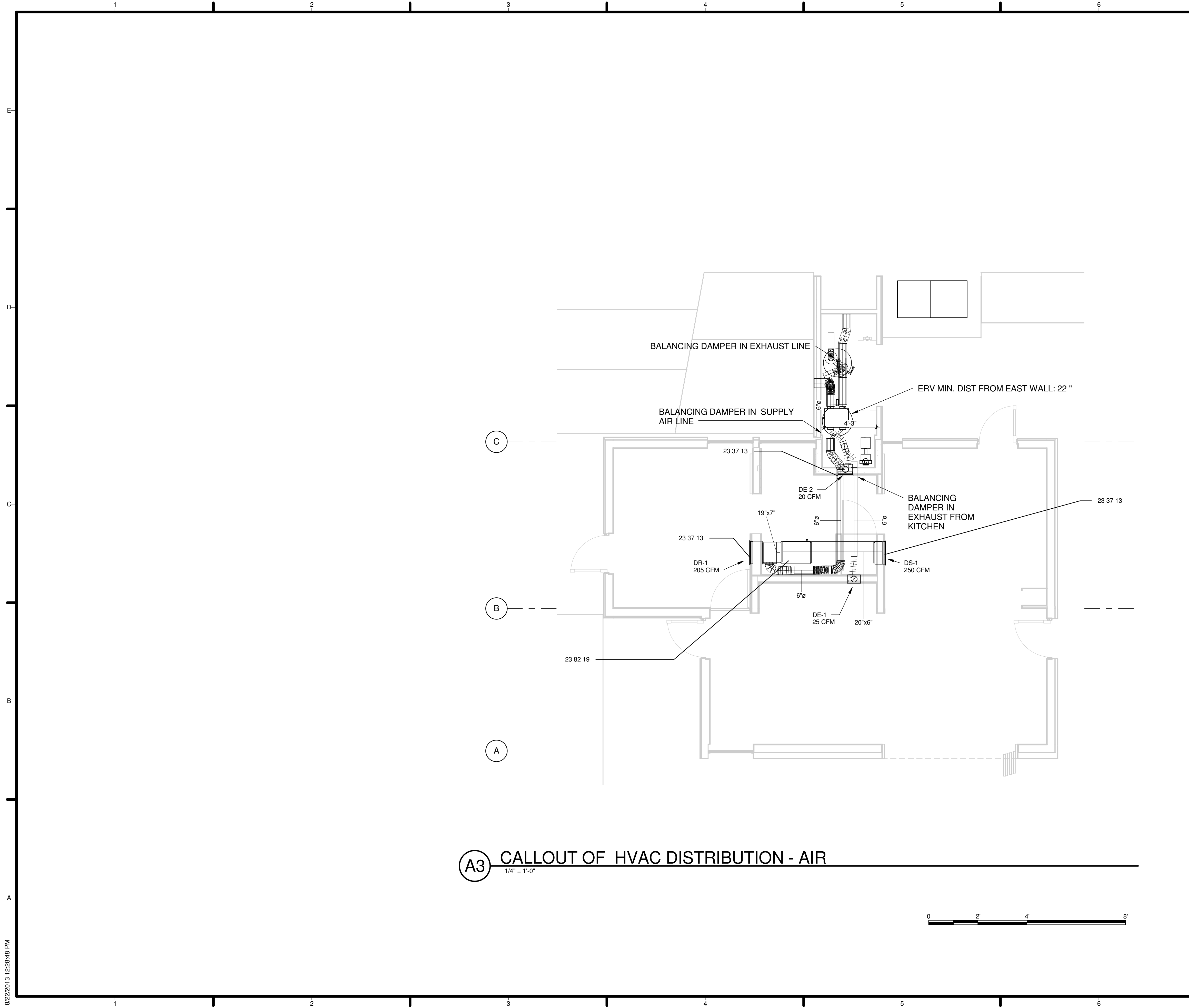


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SHEET TITLE
MECHANICAL SYMBOLS AND NOTES

M-001



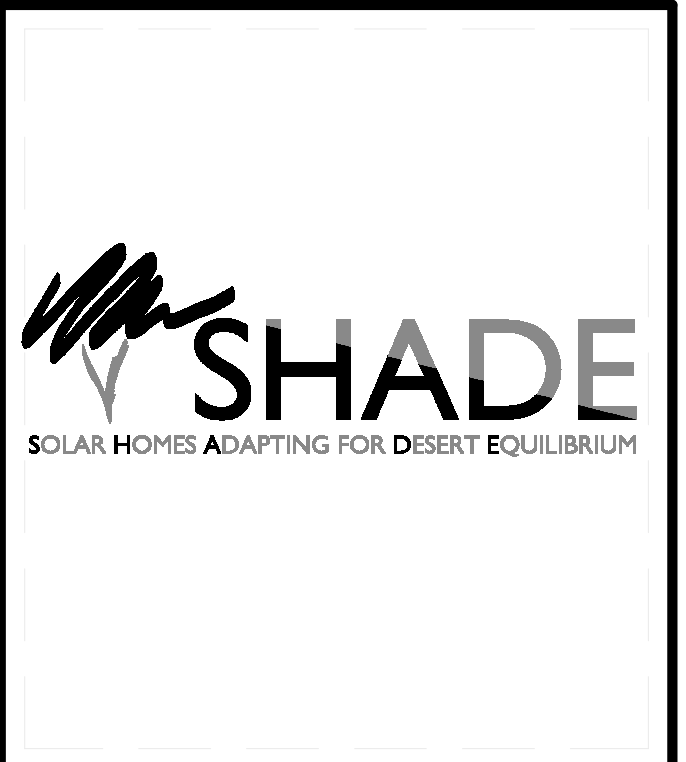
GENERAL SHEET NOTES

- INSTALLATION INSTRUCTIONS:
1. FABRIC ISOLATION AT ALL CONNECTION POINTS BETWEEN FAN COIL UNIT AND RIGID DUCT
 2. USE SOUND LINING OR DUCT BOARD IN RETURN DUCT TO FAN COIL UNIT
 3. FLEX DUCT AT ALL CONNECTIONS BETWEEN ERV AND RIGID DUCT
 4. INSULATE (R-6) VENTILATION AIR DUCT FROM ERV TO RETURN DUCT
 5. INSULATE (R-6) AND LINE WITH VAPOR BARRIER INTAKE TO ERV AND EXHAUST FROM ERV
 6. USE 3/4" COPPER FOR SUPPLY/RETURN LINES TO FCU COIL; RUN PIPES IN SAME JOIST SPACE AS SUPPLY DUCT

REFERENCE KEYNOTES

23 37 13	Diffusers, Registers, and Grilles
23 82 19	Fan Coil Units

SHEET KEYNOTES



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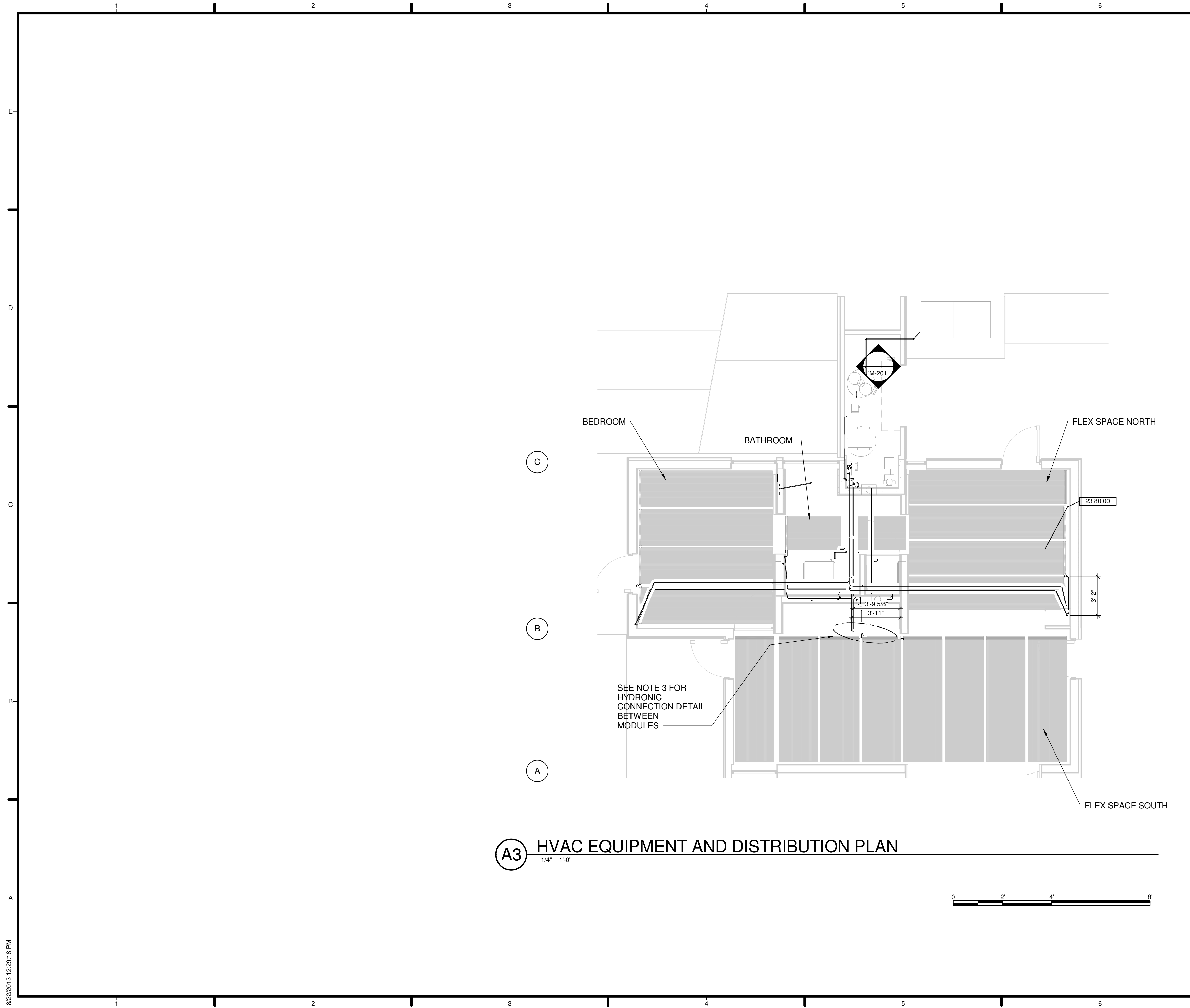


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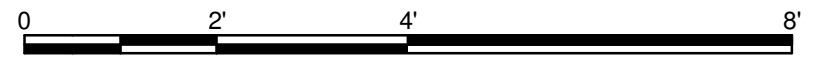
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SHEET TITLE
HVAC EQUIPMENT AND DISTRIBUTION PLAN

M-101-A



A3 HVAC EQUIPMENT AND DISTRIBUTION PLAN
1/4" = 1'-0"



GENERAL SHEET NOTES

1. ALL HYDRONIC PIPING TO RADIANT MATS BEKA POLYPROPYLENE RANDOM COPOLYMER ID 20 mm OD 24 mm UNLESS OTHERWISE SPECIFIED
2. ALL HYDRONIC LINES INSULATED WITH MIN. 1/2" PIPE INSULATION
3. CONNECTION FOR FSS MATS ACROSS THE MODULE BREAK MADE WITH PLAST-O-MATIC BALL VALVES AND PUSH LOK HOSE RATED FOR > 100 PSIG

REFERENCE KEYNOTES

23 80 00 Decentralized HVAC Equipment

SHEET KEYNOTES



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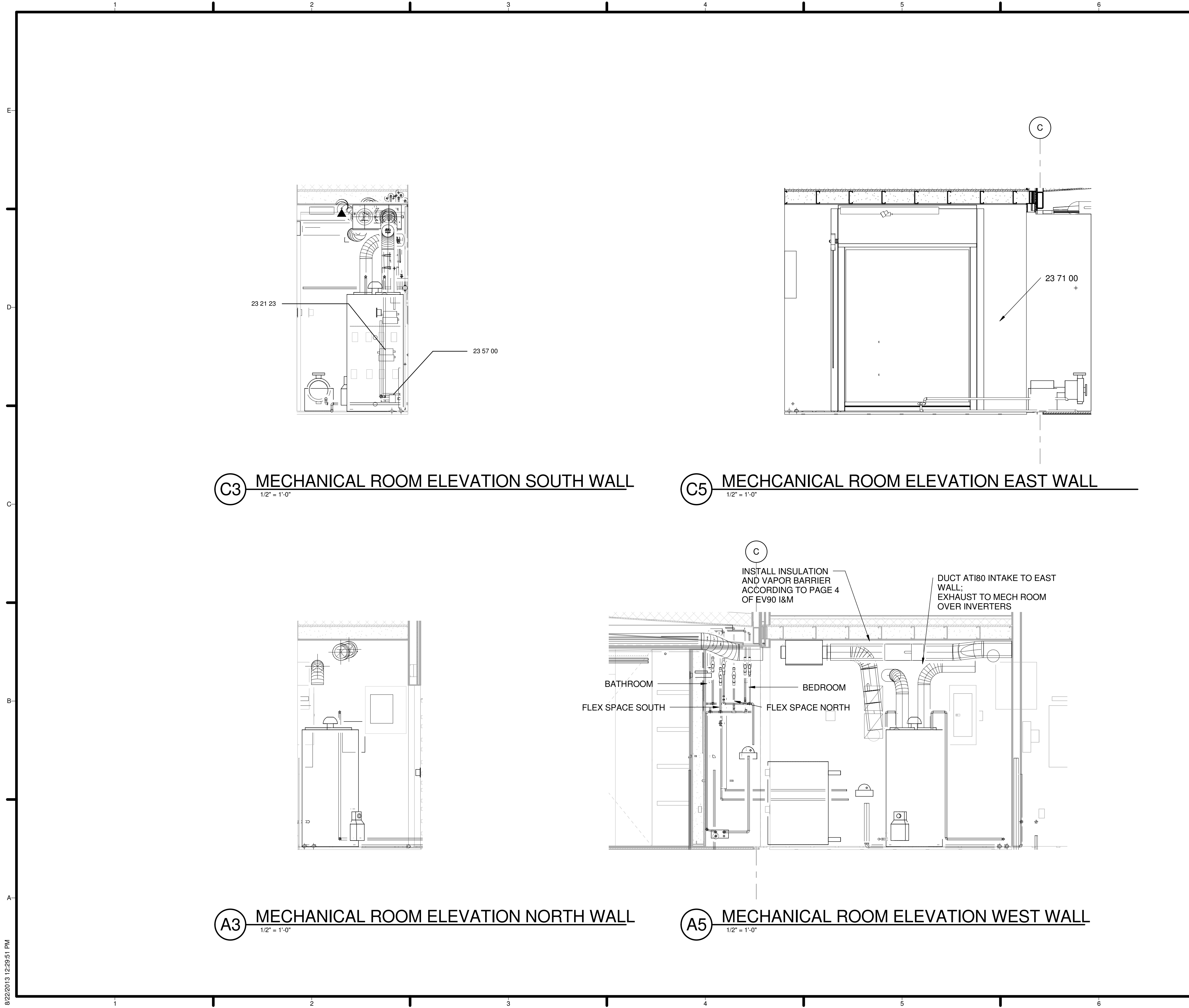


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SHEET TITLE
HVAC EQUIPMENT AND DISTRIBUTION PLAN

M-101-B



GENERAL SHEET NOTES

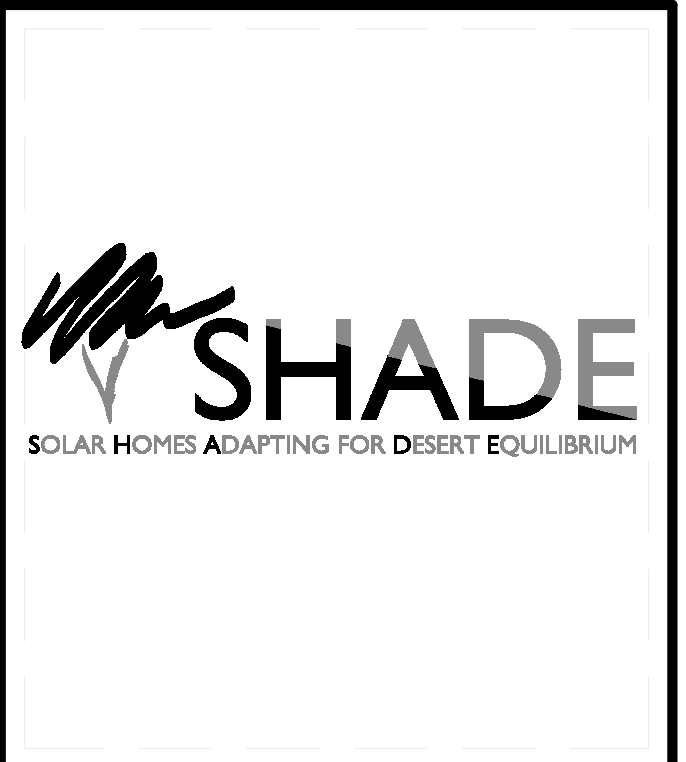
1. MANIFOLD SHOWN HERE AS INDICATION ONLY USE ALL COMPONENTS CALLED FOR IN M-602 C-4

REFERENCE KEYNOTES

22 33 00 Electric Domestic Water Heaters
 23 21 23 Hydronic Pumps
 23 57 00 Heat Exchangers for HVAC

23 71 00 THERMAL STORAGE UNIT

SHEET KEYNOTES



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SHEET TITLE
MECHANICAL ELEVATIONS

M-201

GENERAL SHEET NOTES

1. HEIGHT TO DIFFUSER BOTTOM INDICATED IN DETAILS, MEASURED FROM ROUGH-IN FLOOR
2. ALL PLENUMS INTERIOR PAINTED FLAT BLACK
3. FRESH AIR INTAKE INSTALLED 3' LOWER THAN EXHAUST AS PER 2012 IRC 1506.2 (SEE A1)



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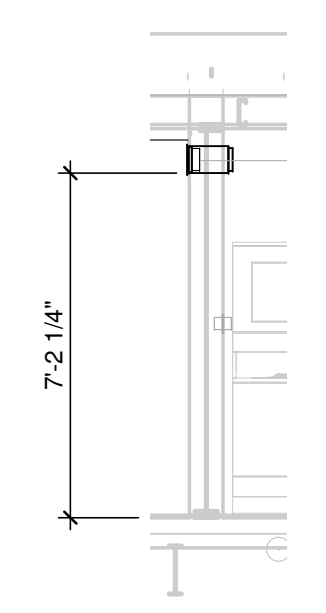
SHEET KEYNOTES

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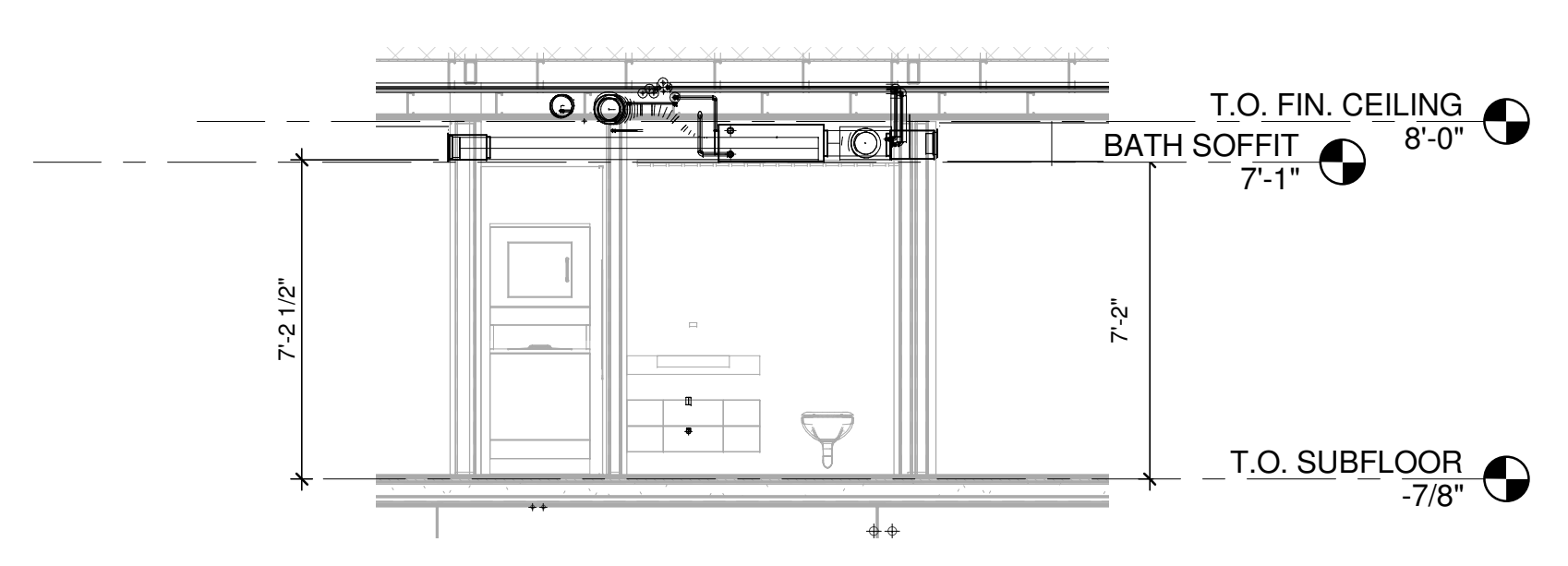
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SHEET TITLE
MECHANICAL DETAILS

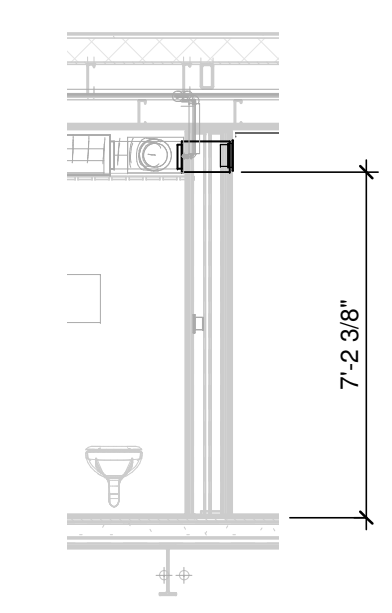
M-501



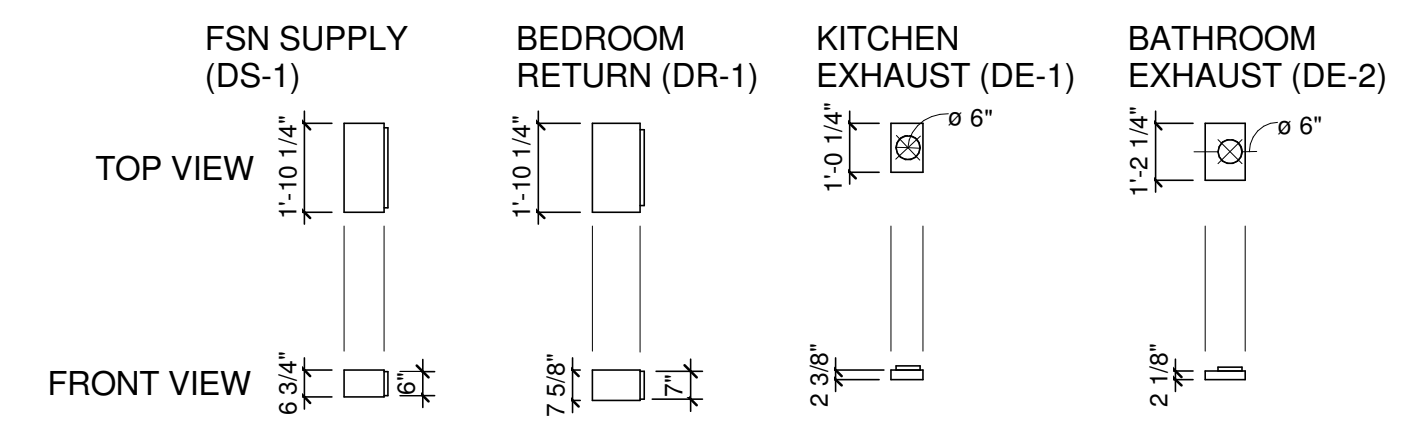
(D1) FSN SUPPLY DIFFUSER
 1/4" = 1'-0"



(D3) AIR-SIDE SECTION
 1/4" = 1'-0"

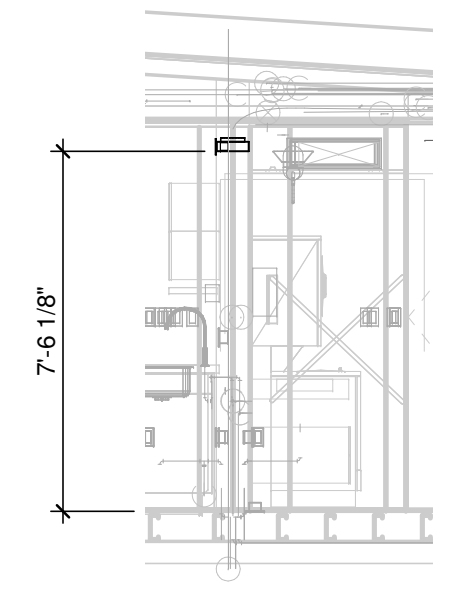


(D5) BEDROOM RETURN DIFFUSER
 1/4" = 1'-0"

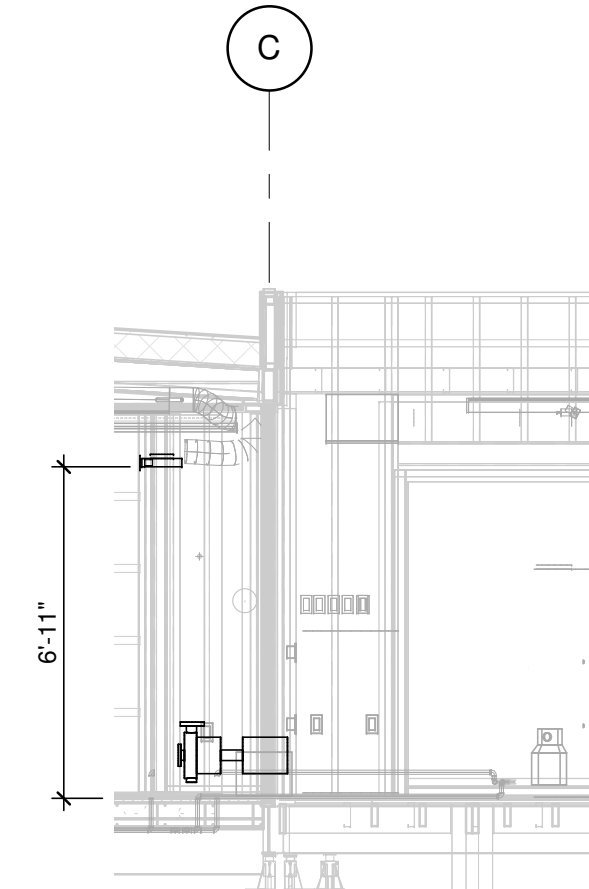


(C1) DIFFUSER NECK DIMENSIONS
 1/4" = 1'-0"

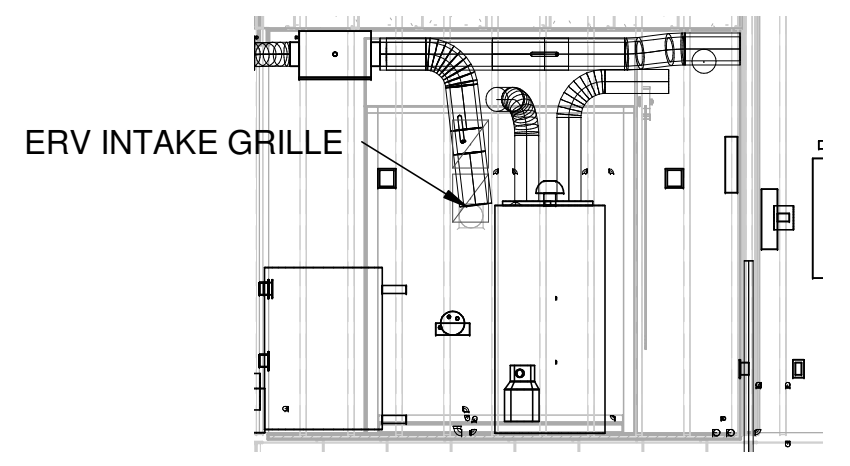
CAN SIZES (L" X W"):
 FLEX SPACE NORTH SUPPLY: 22 1/4 X 6 3/4
 BEDROOM RETURN: 22 1/4 X 7 5/8
 KITCHEN EXHAUST: 12 1/4 X 2 3/8
 BATHROOM EXHAUST: 14 1/4 X 10 2 1/8



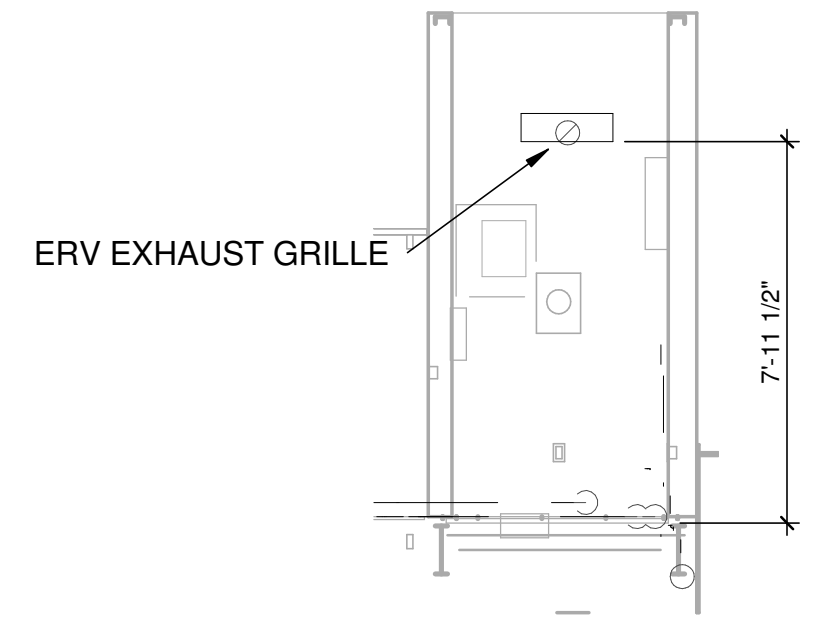
(C3) KITCHEN EXHAUST DIFFUSER
 1/4" = 1'-0"



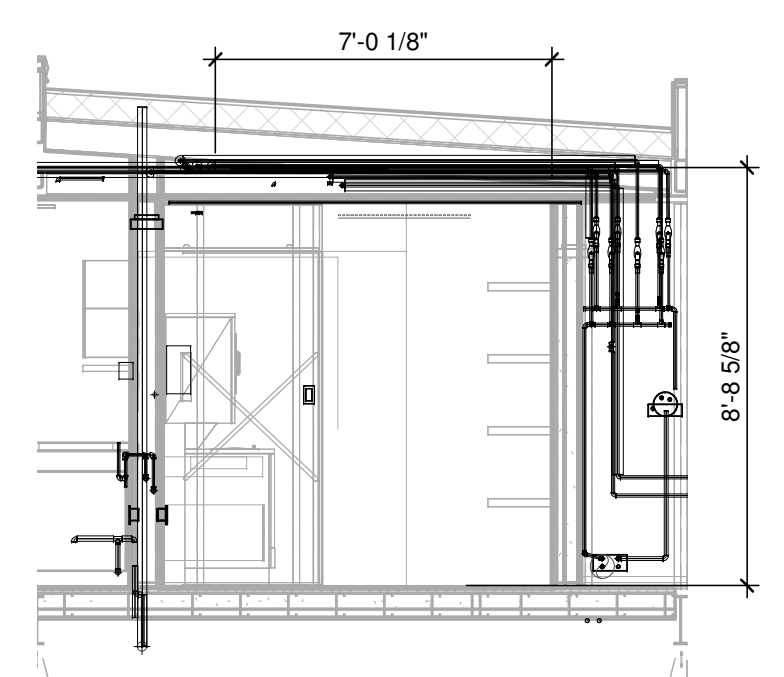
(C5) BATHROOM EXHAUST DIFFUSER
 1/4" = 1'-0"



(A1) EXHAUST AND INTAKE HEIGHTS
 1/4" = 1'-0"



(A3) MECHANICAL ROOM NORTH WALL
 1/4" = 1'-0"



(A4) HYDRONIC SUPPLY REFERENCE DIMENSIONS
 1/4" = 1'-0"

GENERAL SHEET NOTES

1. ANY SUBSTITUTIONS MUST BE APPROVED BY ENGINEER



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SHEET TITLE
SCHEDULES

M-601

BEKA MAT SCHEDULE							
Room: Number	Type	Length mm	Width mm	Mat Area	MatID	Circuit	SetFlowto (L/m)
	P6	3099	955	32 SF	4-01-C2	C2	1.5
	P6	3099	955	32 SF	4-02-C2	C2	1.5
	P6	3099	955	32 SF	4-03-C2	C2	1.5
	P6	3099	955	32 SF	4-04-C2	C2	1.5
	P6	3099	955	32 SF	4-05-C2	C2	1.5
	P6	3099	955	32 SF	4-06-C2	C2	1.5
	P6	3099	955	32 SF	4-07-C2	C2	1.5
	P6	3099	955	32 SF	4-08-C2	C2	1.5
				255 SF			12.4
BATHROOM							
104	P4	2972	838	27 SF	2-03-C5	C5	1.3
				27 SF			1.3
BEDROOM							
103	P3	3302	895	32 SF	1-01-C4	C4	1.5
103	P3	3302	895	32 SF	1-02-C4	C4	1.5
103	P3	3302	895	32 SF	1-03-C4	C4	1.5
103	P3	3302	895	32 SF	1-04-C4	C4	1.5
				127 SF			6.2
FLEX SPACE							
101	P2	3886	819	34 SF	3-01-C1	C1	1.7
101	P2	3886	819	34 SF	3-02-C1	C1	1.7
101	P2	3886	819	34 SF	3-03-C1	C1	1.7
101	P2	3886	819	34 SF	3-04-C1	C1	1.7
				137 SF			6.6
17				546 SF			26.5

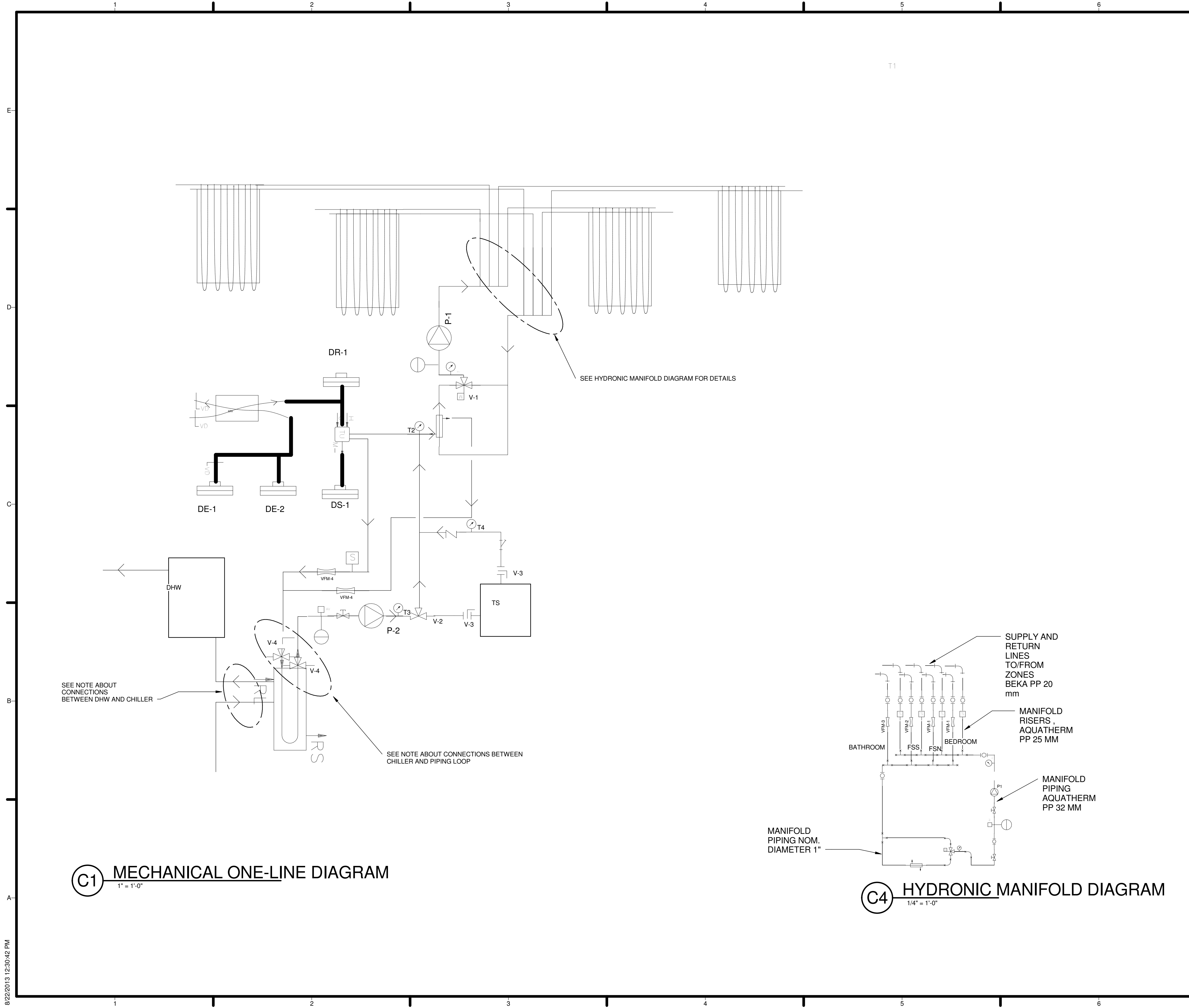
DIFFUSER SCHEDULE						
ID	Service	Location	Manufacturer and Model Number	Hardware	Finish	CFM
DS-1	Supply	FSN	TITUS FL-30-1-11-JT 22" ECXX	H3 clip	Mill	250
DR-1	Return	Bedroom	TITUS MLR-39-22-1B-4-04-ZZ		Mill	205
DE-1	Exhaust	Kitchen	TITUS MLR-39-12-1B-1-04-ZZ		Mill	25
DE-2	Exhaust	Bathroom	TITUS MLR-38-14-1B-1-04-ZZ		Mill	20

PUMP SCHEDULE								
ID	Service	Manufacturer and Model Number	Fluid type	Maximum flow rate (GPM)	Max. Static pressure (ft. water)	Volt/Ph/Hz	Weight (lbs.)	Dimensions (L x W x H) (in.)
P-1	Circulating pump, radiant ceiling	Grundfos Magna 32-100N	25% Prop. Glycol	50	32.8	208-240/1/60	13.3	8.31" x 7.875" x 7.125"
P-2	Circulating pump, thermal storage/fan coil unit	Bell&Gossett EcoCirc 19-14 Vario	50 % Prop. Glycol	14	19	115/1/60	9.25	7.46" x 4.17" x 6.5"
P-3	Domestic water pump, fire suppression	Goulds GT15	Potable water	64	120	115-230/1/60	60	21.1875" x 8.25" x 9.25"

PIPING SPECIALTIES SCHEDULE		
VALVE/SENSOR ID	MODEL	NOTES
V-1	HONEYWELL VBN3AF3	USED WITH MODULATING OUTPUT OF T775 FOR MIXING
V-2	HONEYWELL VBN3AH3	USED WITH ON/OFF OUTPUT OF T775 FOR DIVERTING
V-3	TRC 1.5" BUTTERFLY	
V-4	HONEYWELL VC8114ZZ11	USED WITH 24 VAC SIGNAL TO CHANGE OVER H/C
VFM-1	GRISWOLD QSOCPOFFO	
VFM-2	GRISWOLD QSODPOFFO	
VFM-3	GRISWOLD QSOAPOFFO	
VFM-4	GRISWOLD QSIEPOFFO	OR EQUIVALENT
T1	HONEYWELL C7031-D2003	IMMERSION WELL WITH SENSOR, TO T775
T2	HONEYWELL 50071579	STRAPPED TO LINE AND INSULATED, TO T775
T3	HONEYWELL C7031-D2003	IMMERSION WELL WITH SENSOR, TO T775
T4	HONEYWELL 50071579	STRAPPED TO LINE AND INSULATED, TO T775

FAN COIL UNIT SCHEDULE										
ID	Manufacturer and Model Number	Type/ Drive	Air type	Air		Fan	Electrical		Weight (lbs.)	Dimensions (L x W x H) (in.)
				Maximum airflow rate (CFM)	Static pressure (in. water)	Fan Speed (RPM)	Motor size (HP)	Volt		
FCU-1	Johnson Controls #FHP-020 4 row coil	Centrifugal/ Direct	Supply	260	0.375	variable (ECM)	1/3	120/240	61	26 3/8 x 30 x 10

ERV SCHEDULE									
ID	Manufacturer and Model Number	Type/ Drive	Air type	Air		Electrical		Weight (lbs.)	Dimensions (L x W x H) (in.)
				Maximum airflow rate (CFM)	Static pressure (in. water)	Motor size (HP)	Volt/Ph/Hz		
ERV-1	Renewaire #EV-90	Centrifugal/ Direct	Supply/ Exhaust	110	0.1	0.03	120/1/60	36	28 1/2 x 21 1/2 x 14 3/4



GENERAL SHEET NOTES

1. ZONE VALVES 24 VAC NC, HONEYWELL V8043E1145/U OR EQUIVALENT
2. CIRCUIT SETTERS FOR THE FOLLOWING FLOW RATES (GPM): FSN: 1.74; FSS: 3.31; BathR: 1.65; BathR: 0.35
3. FLOW RATE FOR BathR MAY BE BELOW LOWEST SETTING -- VERIFY CHOICE OF CIRCUIT SETTER WITH ENGINEER
4. MIXING VALVE TEMPERATURE: 60 F (C), 140 F (H)
5. CHILLER HAS SUPPLY AND RETURN STUBS FOR COOLING AND HEATING LOOPS USE THREE-WAY DIVERTING VALVES TO CONNECT TO THE PIPING LOOP
6. CONNECTION DHW SUPPLY AND RETURN TO HEAT RECOVERY STUBS ON CHILLER
7. ALL EXPANSION TANKS 2.1 GAL UNLESS OTHERWISE SPECIFIED BY ENGINEER

REFERENCE KEYNOTES

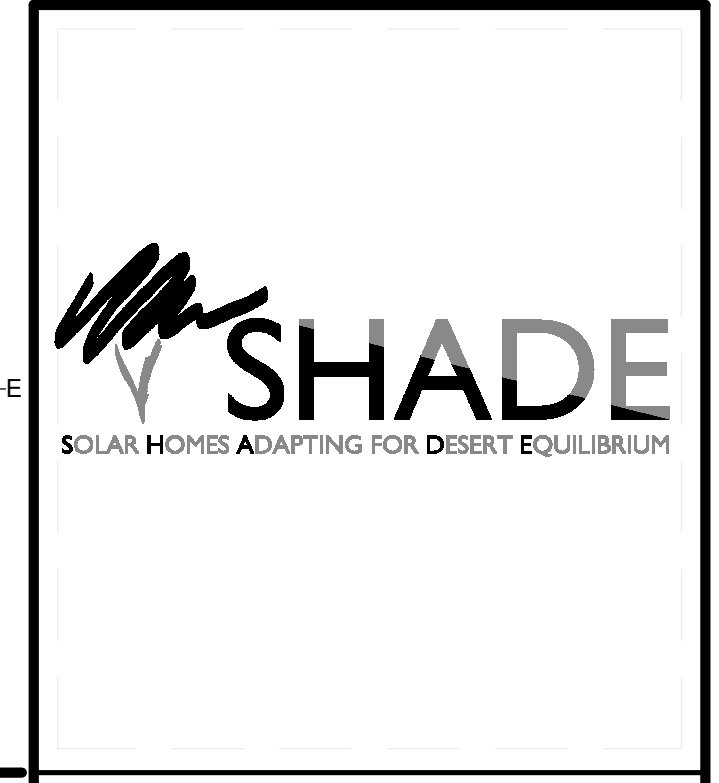
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SHEET KEYNOTES



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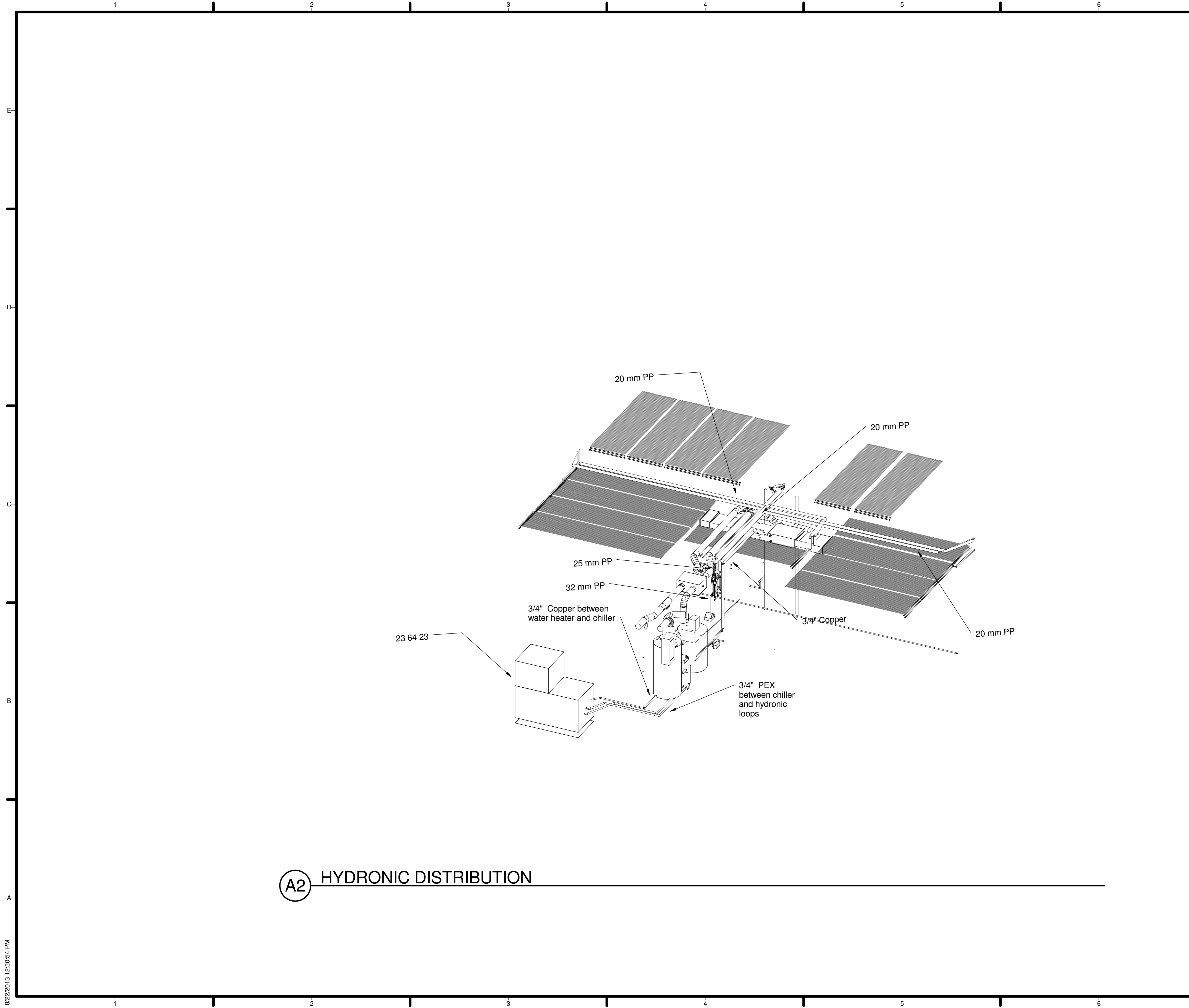
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01	10.11.2012	80% DOE/NREL DD SUBMISSION

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SHEET TITLE

MECHANICAL DIAGRAMS

M-602



A2 HYDRONIC DISTRIBUTION

GENERAL SHEET NOTES

- 1. ALL PIPE DIMENSIONS ARE DIAMETERS
- 2. NO SUBSTITUTIONS OF PIPE SIZES OR MATERIALS WITHOUT APPROVAL OF ENGINEER

REFERENCE KEYNOTES

23 64 23 SCROLL WATER CHILLER

SHEET KEYNOTES



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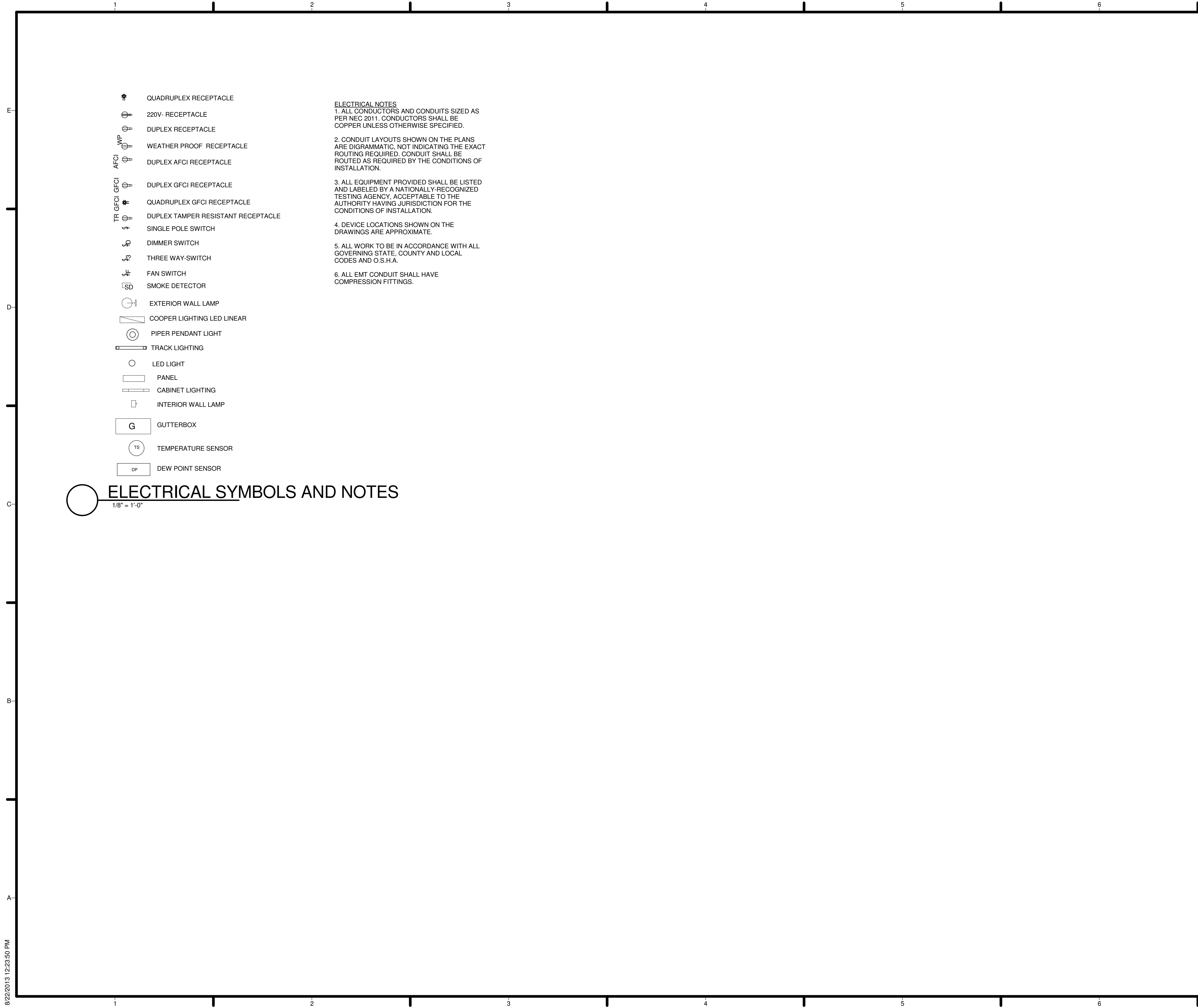


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SHEET TITLE
 HVAC ISOMETRICS

M-901



GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES

- # QUADRUPLEX RECEPTACLE
- 220V RECEPTACLE
- DUPLEX RECEPTACLE
- WEATHER PROOF RECEPTACLE
- DUPLEX AFCI RECEPTACLE
- DUPLEX GFCI RECEPTACLE
- QUADRUPLEX GFCI RECEPTACLE
- DUPLEX TAMPER RESISTANT RECEPTACLE
- SINGLE POLE SWITCH
- DIMMER SWITCH
- THREE WAY-SWITCH
- FAN SWITCH
- SMOKE DETECTOR
- EXTERIOR WALL LAMP
- COOPER LIGHTING LED LINEAR
- PIPER PENDANT LIGHT
- TRACK LIGHTING
- LED LIGHT
- PANEL
- CABINET LIGHTING
- INTERIOR WALL LAMP
- GUTTERBOX
- TEMPERATURE SENSOR
- DEW POINT SENSOR

ELECTRICAL NOTES
 1. ALL CONDUCTORS AND CONDUITS SIZED AS PER NEC 2011. CONDUCTORS SHALL BE COPPER UNLESS OTHERWISE SPECIFIED.
 2. CONDUIT LAYOUTS SHOWN ON THE PLANS ARE DIGRAMMATIC, NOT INDICATING THE EXACT ROUTING REQUIRED. CONDUIT SHALL BE ROUTED AS REQUIRED BY THE CONDITIONS OF INSTALLATION.
 3. ALL EQUIPMENT PROVIDED SHALL BE LISTED AND LABELED BY A NATIONALLY-RECOGNIZED TESTING AGENCY, ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION FOR THE CONDITIONS OF INSTALLATION.
 4. DEVICE LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE.
 5. ALL WORK TO BE IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY AND LOCAL CODES AND O.S.H.A.
 6. ALL EMT CONDUIT SHALL HAVE COMPRESSION FITTINGS.

ELECTRICAL SYMBOLS AND NOTES
 1/8" = 1'-0"



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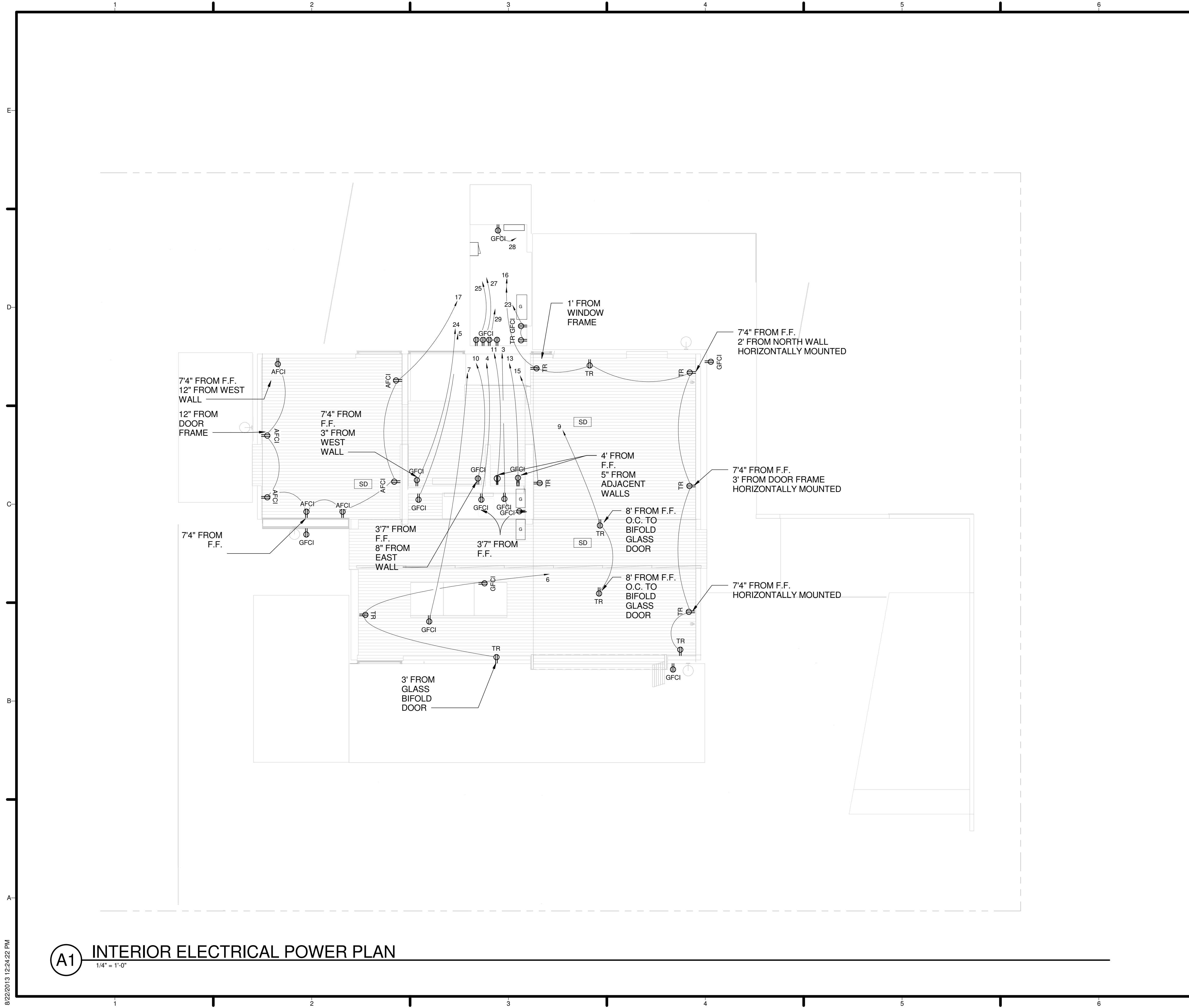


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SHEET TITLE
ELECTRICAL SYMBOLS AND NOTES

E-001



GENERAL SHEET NOTES

- 1 ALL RECEPTACLES ARE AT 16" FROM FINISHED FLOOR UNLESS OTHERWISE SPECIFIED.
- 2 ALL SWITCHES ARE PICO LUTRON SWITCHES.
- 3. ALL RECEPTACLES ARE O.C. TO HOST WALL UNLESS OTHERWISE SPECIFIED.

REFERENCE KEYNOTES

SHEET KEYNOTES



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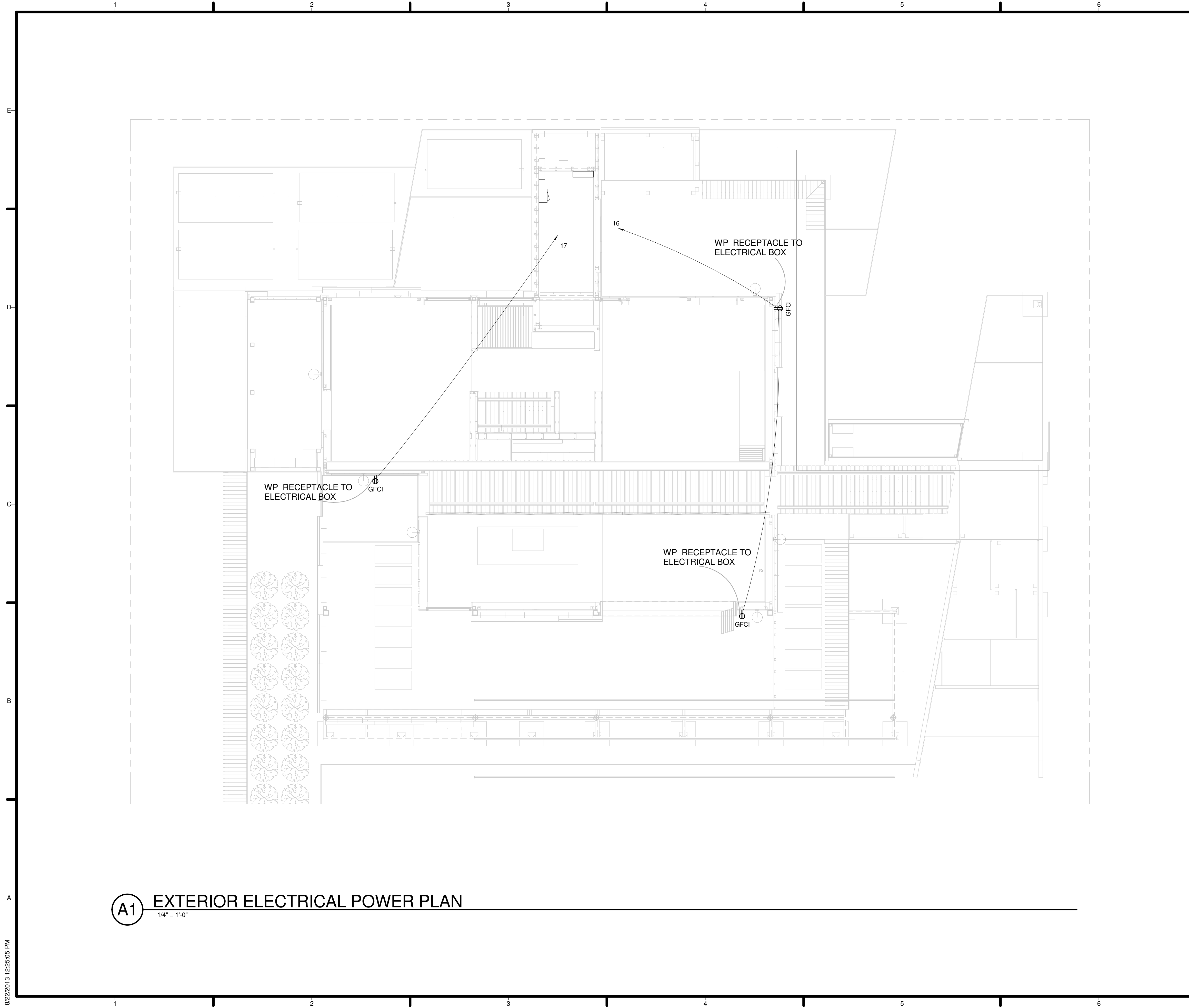
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SHEET TITLE
**INTERIOR ELECTRICAL
 DIST. PLAN**

E-101

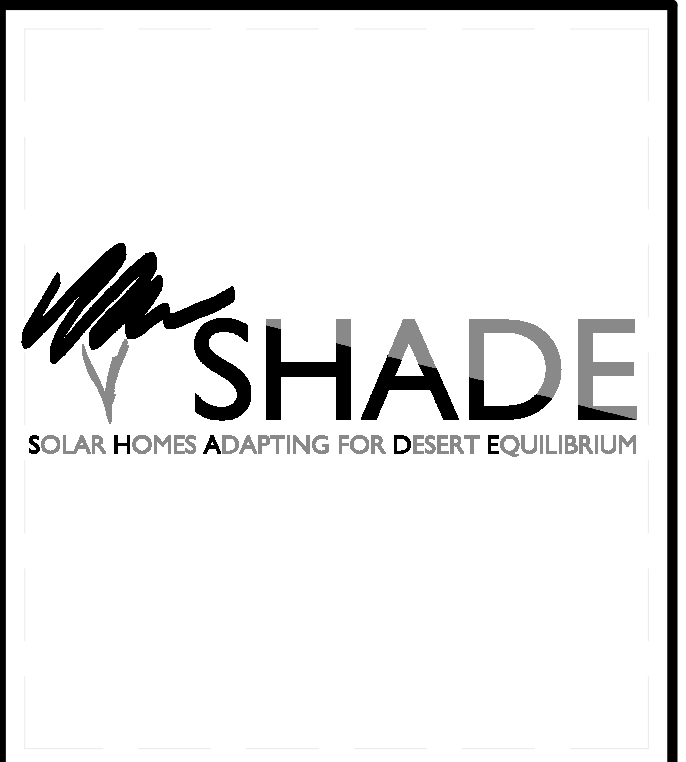
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GENERAL SHEET NOTES

REFERENCE KEYNOTES

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SHEET TITLE
 EXTERIOR ELECTRICAL
 DIST. PLAN

E-102

A1 EXTERIOR ELECTRICAL POWER PLAN
 1/4" = 1'-0"

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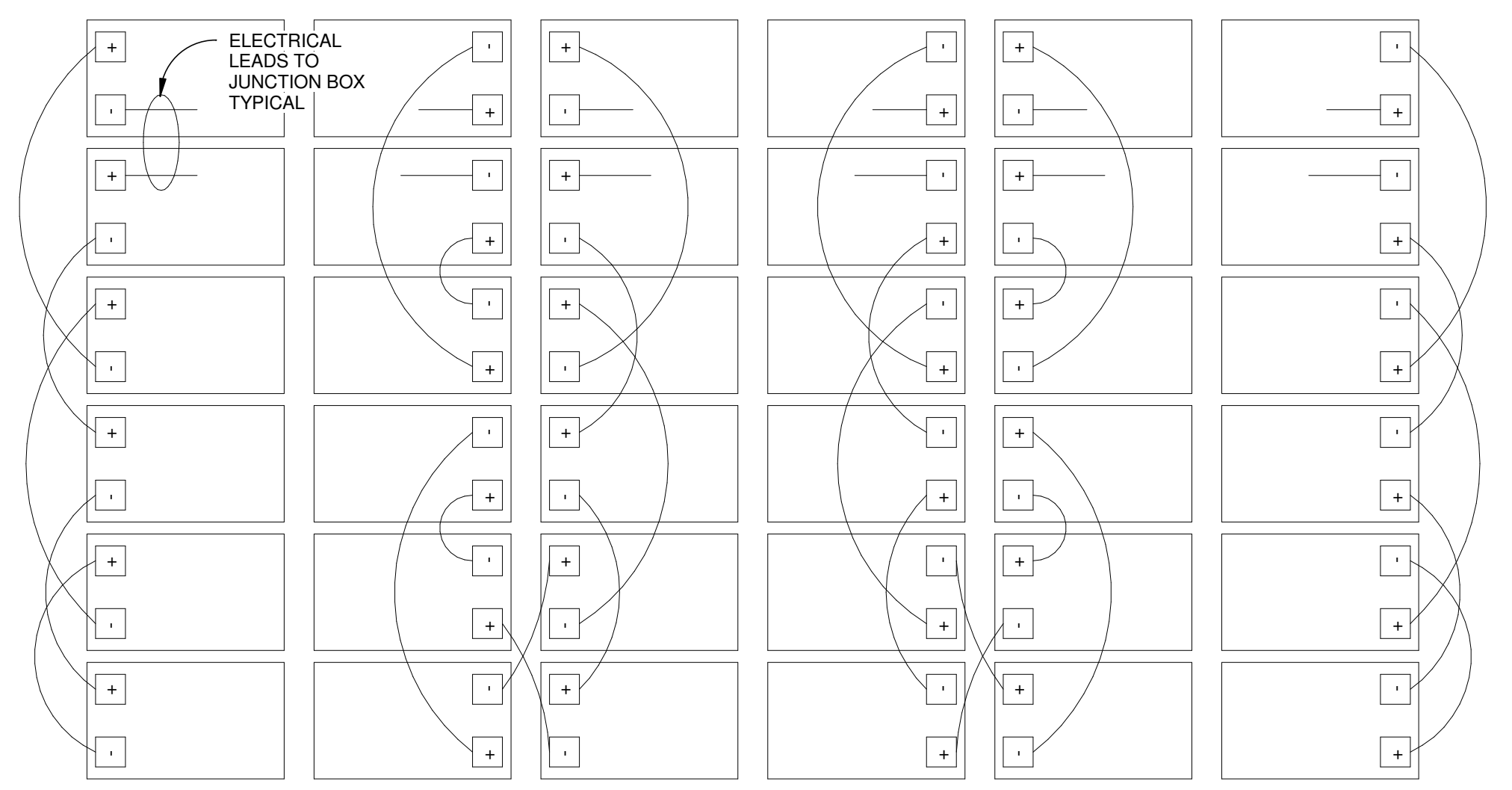
SHEET TITLE
PV WIRING PLAN

E-103

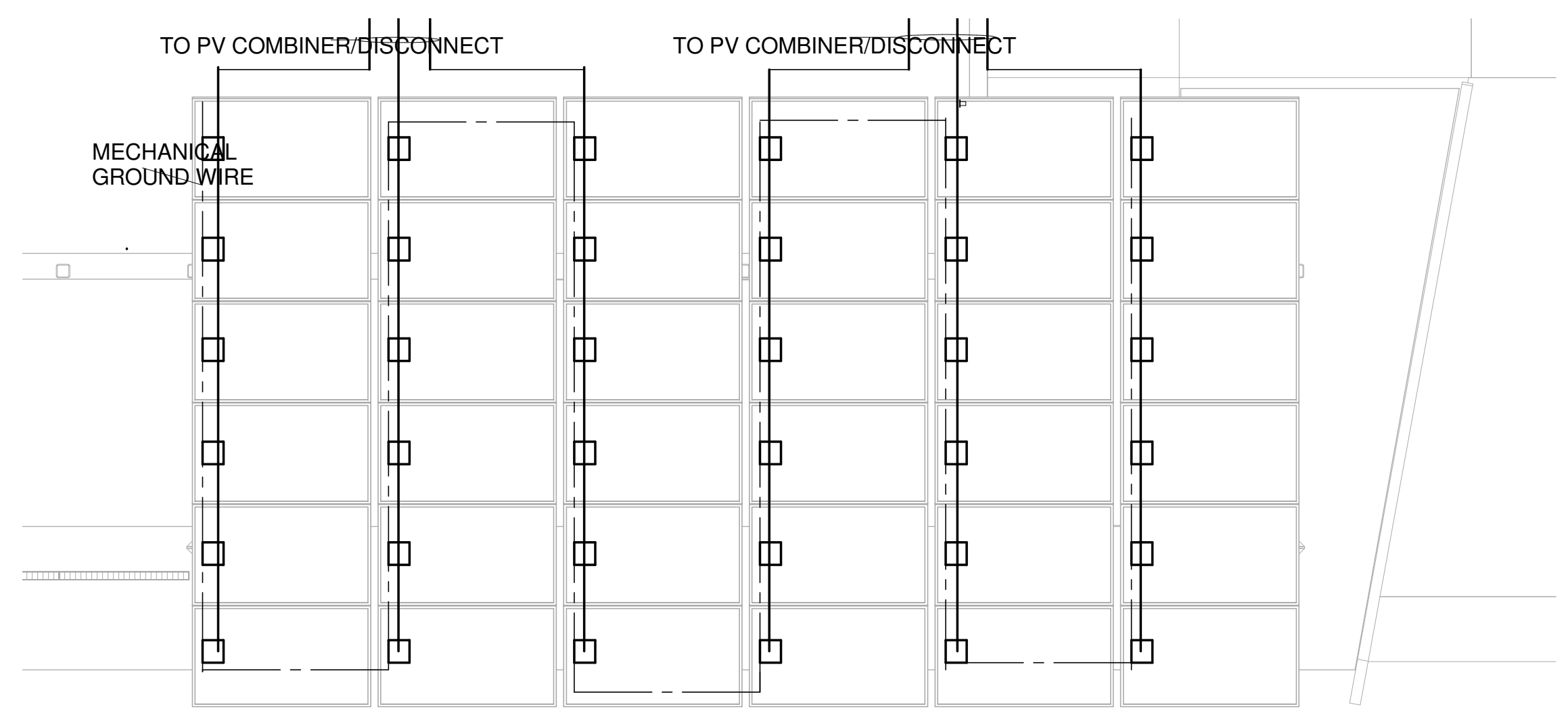
GENERAL SHEET NOTES

REFERENCE KEYNOTES

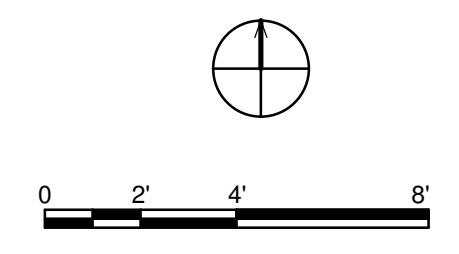
SHEET KEYNOTES



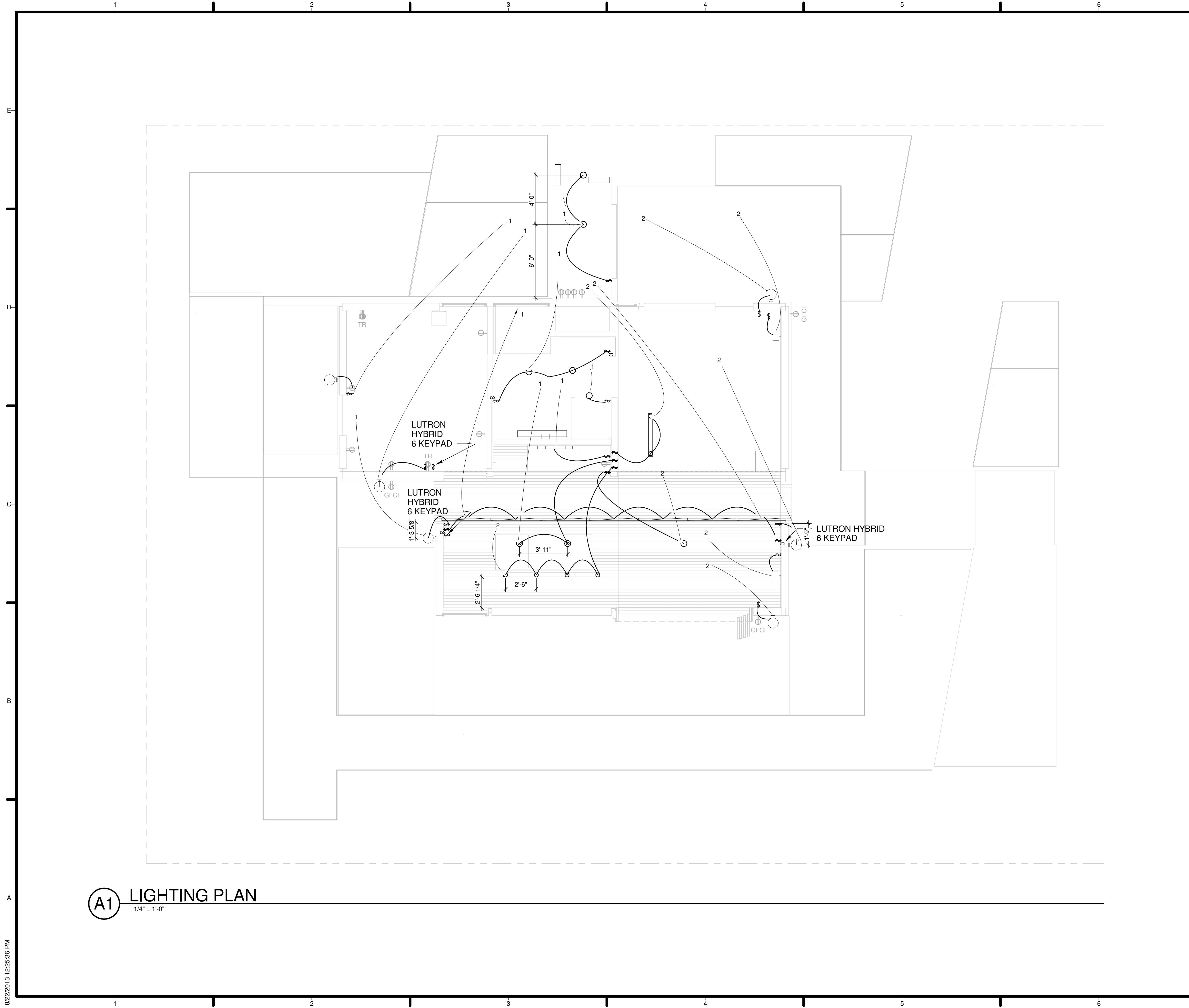
C1 PV WIRING DIAGRAM
 1/4" = 1'-0"



A1 PV WIRING PLAN
 1/4" = 1'-0"



8/22/2013 12:25:23 PM



A1 LIGHTING PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES

1. ALL SWITCHES ARE LUTRON PICO SWITCHES UNLESS OTHERWISE SPECIFIED.

REFERENCE KEYNOTES

SHEET KEYNOTES

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SHEET TITLE
LIGHTING PLAN

E-104

PV calculations 08/07/13

Maximum Array Section Voltage

SolarWorld Sunmodule SW 265W

Open-circuit voltage	$V_{oc} = 38.1V$	[SolarWorld DATASHEET]
MPPT-circuit voltage	$V_{mp} = 31.9V$	[SolarWorld DATASHEET]
Voltage Temperature coefficient	-3 [%/°C]	[SolarWorld DATASHEET]
Lowest expected temperature	-12°C	[ASHRAE EXTREME MIN DATA]

Calculations

Maximum module Voltage

$$V_{max\ oc} = 38.1V + [38.1 * (-12°C - 25°C) * (\frac{-3\%}{°C})]$$

$$V_{max\ oc} = 42.33V \text{ (per Module)}$$

Minimum module Voltage

$$V_{min\ mp} = 31.9V + [31.9 * (51.5°C - 25°C) * (\frac{-3\%}{°C})]$$

$$V_{min\ mp} = 29.36V \text{ (per Module)}$$

Max Array Voltage (9 modules in series)

$$\text{Array Voltage} = (9 \text{ modules}) * (42.33V)$$

$$\text{Maximum Array Section Voltage} = 380.97V$$

Min Array Voltage (9 modules in series)

$$\text{Array Voltage} = (9 \text{ modules}) * (29.36V)$$

$$\text{Minimum Array Section Voltage} = 264.24V$$

From Junction Boxes to Inverters (Circuit Sizing and Current)

Short circuit current I_{sc}	8.82A	[SolarWorld DATASHEET]
Expected Ambient Temperature	34°C	[ASHRAE's 2% Design Temp]
Conduit Temp Adjustment for Conduit exposed to Sunlight	33°C	[table 310.15(B)(3)(c)], 0-13mm above roof
Effective Temperature	68°C	[Expected Ambient Temp + Conduit Adj Temp]
Temp Correction Factor	.58	[table 310.15(B)(2)(a)]
Adjustment factor for conduit	.8	[table 310.15(B)(3)(a)]
Conductor insulation rating	90°C	

Maximum Circuit Current [690.8 (A)]

$$I_{max} = (I_{sc})(1.25) \quad [690.8(A)(1)]$$

$$= (8.82A)(1.25)$$

$$I_{max} = 11.03A$$

Overcurrent Device Rating

$$I_{cont} = (I_{max})(1.25) \quad [690.8(B)(1)(a)]$$

$$= (11.03A)(1.25)$$

$$I_{cont} = 13.79A$$

Conductor Ampacity (Greater or A or B) [690.8(B)(2)]

A). $Amp_1 = (I_{cont})(1.25) \quad [690.8(B)(2)(a)]$

$$= (13.79A)(1.25)$$

$$Amp_1 = 17.24A$$

B). $Amp_2 = (I_{cont}) \div (.58) \div (.8) \quad [690.8(B)(2)(b)]$

$$= (13.79A) \div (.58) \div (.8)$$

$$Amp_2 = 29.40A$$

Use minimum of #10 AWG for $Amp_2 = 25.40A$

Notes:

- Three current-carrying conductors in conduit, correction fill factor=.8
- Modules connected in series, overcurrent protection device not required.

Inverter Output (Circuit Sizing and Current)

Inverter output current ($I_{inverter}$)	23A	[PVI-5000-US Datasheet]
Conductor insulation rating	75°C	
Temperature Correction Factor	.94	[table 310.15(B)(2)(a)]
Adjustment factor for conduit	.8	[table 310.15(B)(3)(a)]

Overcurrent Protection Device

$$OCPD = (I_{inverter})(1.25) \quad [690.8(B)(1)(a)]$$

$$OCPD = (23A)(1.25)$$

$$OCPD = 28.75A$$

Conductor Ampacity (Greater or A or B) [690.8(B)(2)]

A). $Amp_1 = (I_{inverter})(1.25) \quad [690.8(B)(2)(a)]$

$$Amp_1 = (23A)(1.25)$$

$$Amp_1 = 28.75A$$

B). $Amp_2 = (23A) \div (.94) \div (.8) \quad [690.8(B)(2)(b)]$

$$Amp_2 = 30.59A$$

Minimum conductor size must be #10 AWG to ensure OCPD is compliant with NEC.

Notes:

- Four current-carrying conductors in conduit, correction fill factor=.8

DC Voltage Drop

DC Resistance Values	1.29 Ω/1,000ft	[Table 8 Conductor Properties, NEC]
Longest Cable Run	75ft	
Voltage at Nominal Power	31.9V	[SolarWorld DATASHEET]
Current at Nominal Power	8.33A	[SolarWorld DATASHEET]
Wire (AWG)	#10	

Array voltage at Nominal power

$$V_{array} = (V_{mpp})(9)$$

$$V_{array} = (31.9V)(9)$$

$$V_{array} = 287.1V$$

Wire Resistance

$$R_{wire} = (\frac{resistance}{1000ft})(wire\ length)$$

$$R_{wire} = (\frac{1.29\Omega}{1000ft})(75ft)$$

$$R_{wire} = 0.09675\Omega$$

Wire Voltage Drop

$$V_{wire} = (I_{mpp})(R_{wire})$$

$$V_{wire} = (8.33A)(.09675)$$

$$V_{wire} = 0.806V$$

Percentage Drop

$$\%Drop = \frac{V_{wire}}{V_{array}}$$

$$\%Drop = \frac{0.806V}{287.1V}$$

$$\%Drop = 0.28\%$$

GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES



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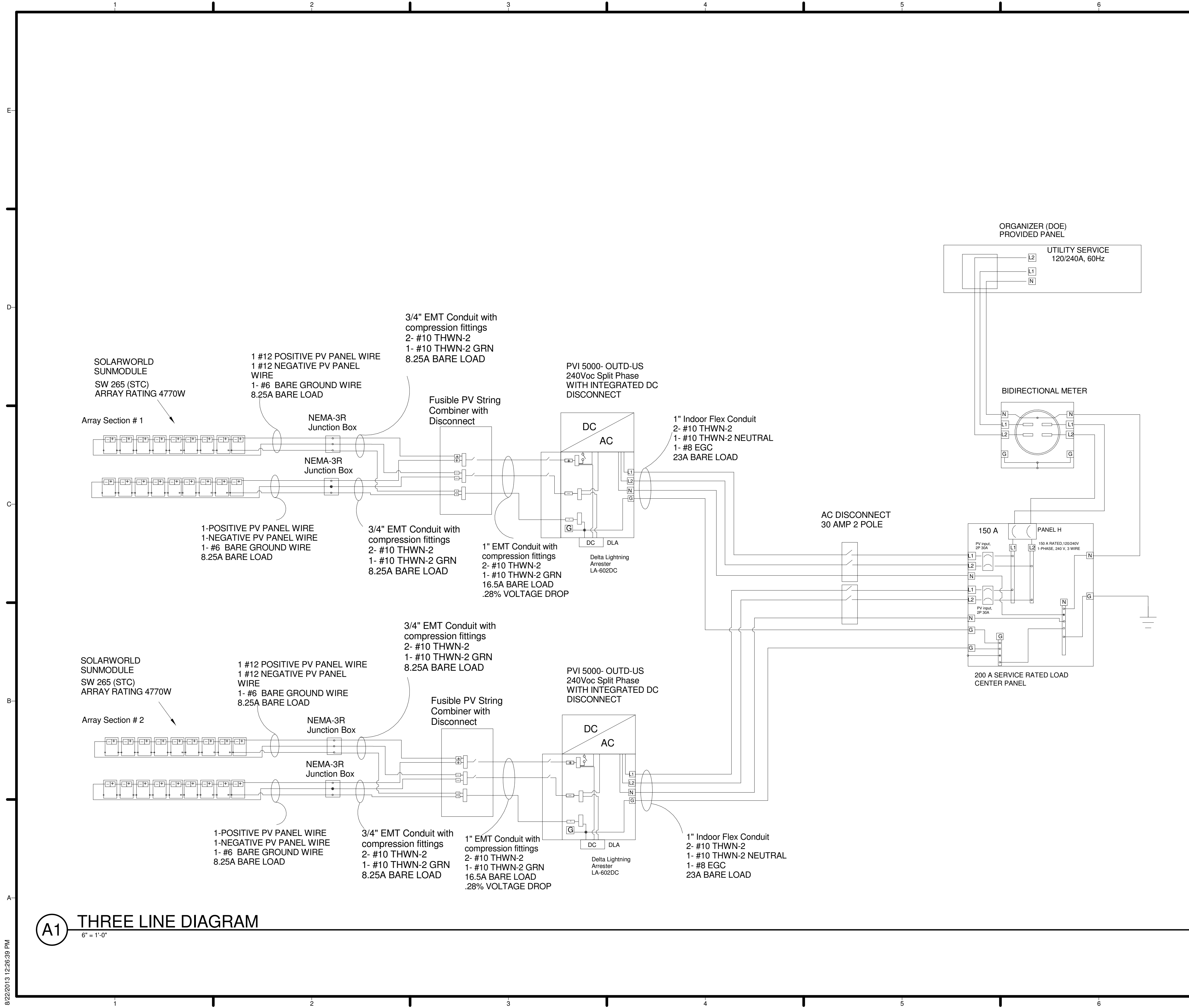
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SHEET TITLE

PV CALCULATIONS

E-107



GENERAL SHEET NOTES

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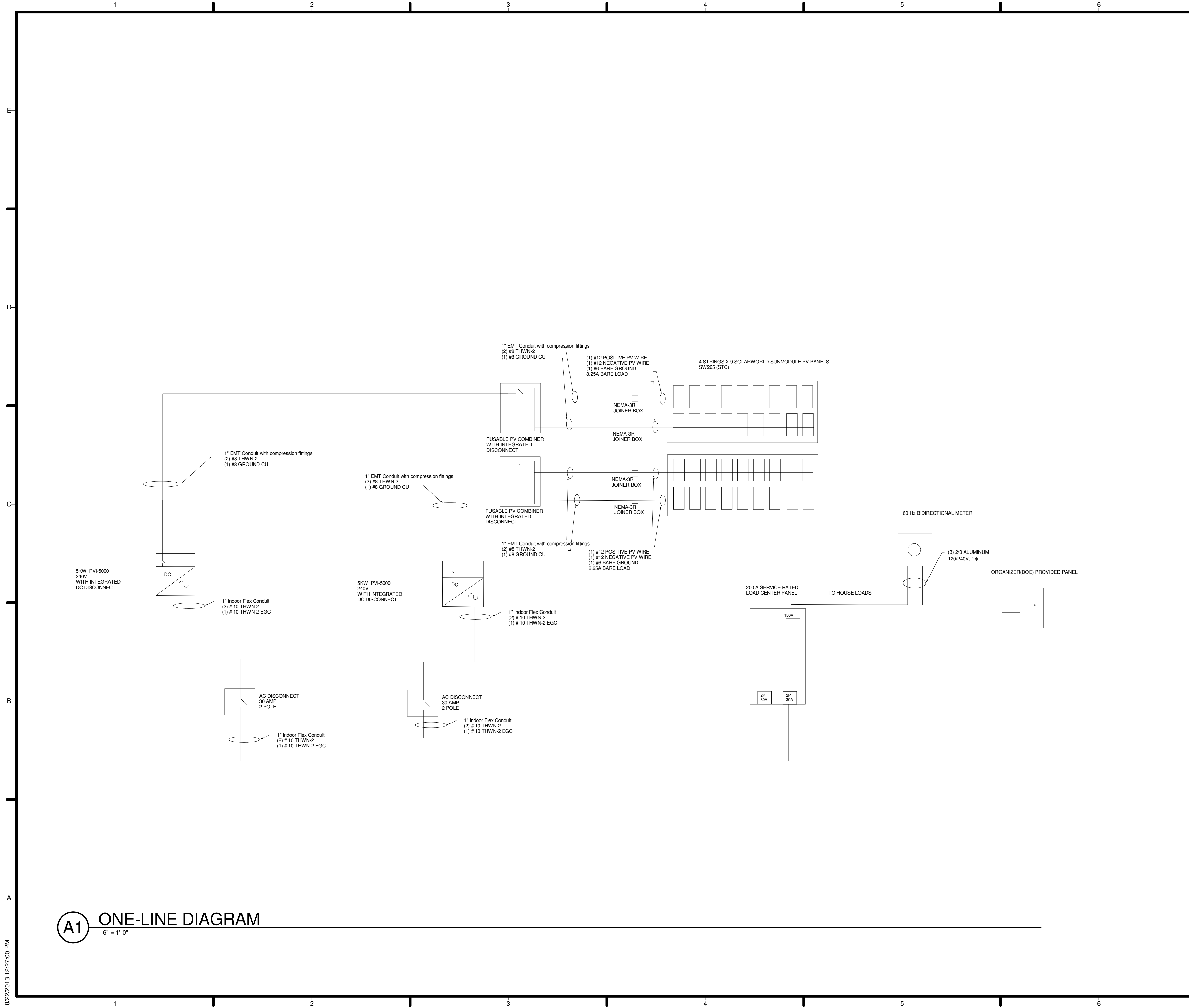
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SHEET TITLE
THREE-LINE DIAGRAM

E-602

A1 THREE LINE DIAGRAM
 6" = 1'-0"

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A1 ONE-LINE DIAGRAM
6" = 1'-0"

GENERAL SHEET NOTES

REFERENCE KEYNOTES

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SHEET TITLE
ONE-LINE DIAGRAM

E-603

8/22/2013 12:27:00 PM

8/22/2013 12:27:10 PM

Panel Name/Location:				ASUNM				Main Breaker Amps		150	
Single Phase Three Wire Residential				Voltage Line to Neutral:				120	Voltage L1 to L2		240
Load Name	Load Amps	Breaker Amps	Ckt#	L1 Load, W	L2 Load, W	Ckt#	Breaker Amps	Load Amps	Load Name		
A LIGHTING	3	15	1	360			15	3	LIGHTING	A	
				360		2					
SM. APP	12.5	20	3		1500		20	12.5	SM. APP		
					1500	4					
REFRIG	7.1	15	5	852			20	10	Micro/Island GFCI/Ext GFCI		
				1500		6					
HOOD VENT	0.66	15	7		80		20	15	DISH/GD		
					1200	8					
A Flex Rec/Projector/Ext GFCI	12	20	9	1440			20	40	BATH GFCI		
				360		10					
DRYER	23	30	11		2760		50	40	RANGE		
					4800	12					
DRYER	23	30	13	2760			50	12	RANGE		
				4800		14					
WASHER	12.5	20	15		1500		20	5	LIVING REC/Ext GFCI	A	
					1440	16					
A BED REC/Ext GFCI	12	20	17	1440			15	0.5	LANDSCAPE LT		
				600		18					
WATER HEAT	23	30	19		2760		15	1.5	FLUID PUMP		
					60	20					
WATER HEAT	23	30	21	2760			20	1.5	MECH GFCI		
				180		22					
HOME CONT SYS	1.5	15	23		180		15	0.75	BEKA PUMP		
					90	24					
FAN COIL UNIT	0.325	15	25	39			15	0.75	BEKA PUMP		
				90		26					
ERV	0.35	15	27		42		15	6.1	CHILLER	HACR	
					732	28				HACR	
HOUSE PUMP	2	15	29	240			15	6.1	CHILLER		
				732		30					
A Smoke Det	0.3	15	31		0.32						
						32					
			33				30				
						34					
			35				30		INVERTER		
						36					
			37				30		INVERTER		
						38					
			39				30		INVERTER		
						40					
			41				30		INVERTER		
						42					

GENERAL SHEET NOTES

ELECTRICAL NOTES
1. ALL CONDUCTORS SIZED AS PER NEC 2012

REFERENCE KEYNOTES

SHEET KEYNOTES



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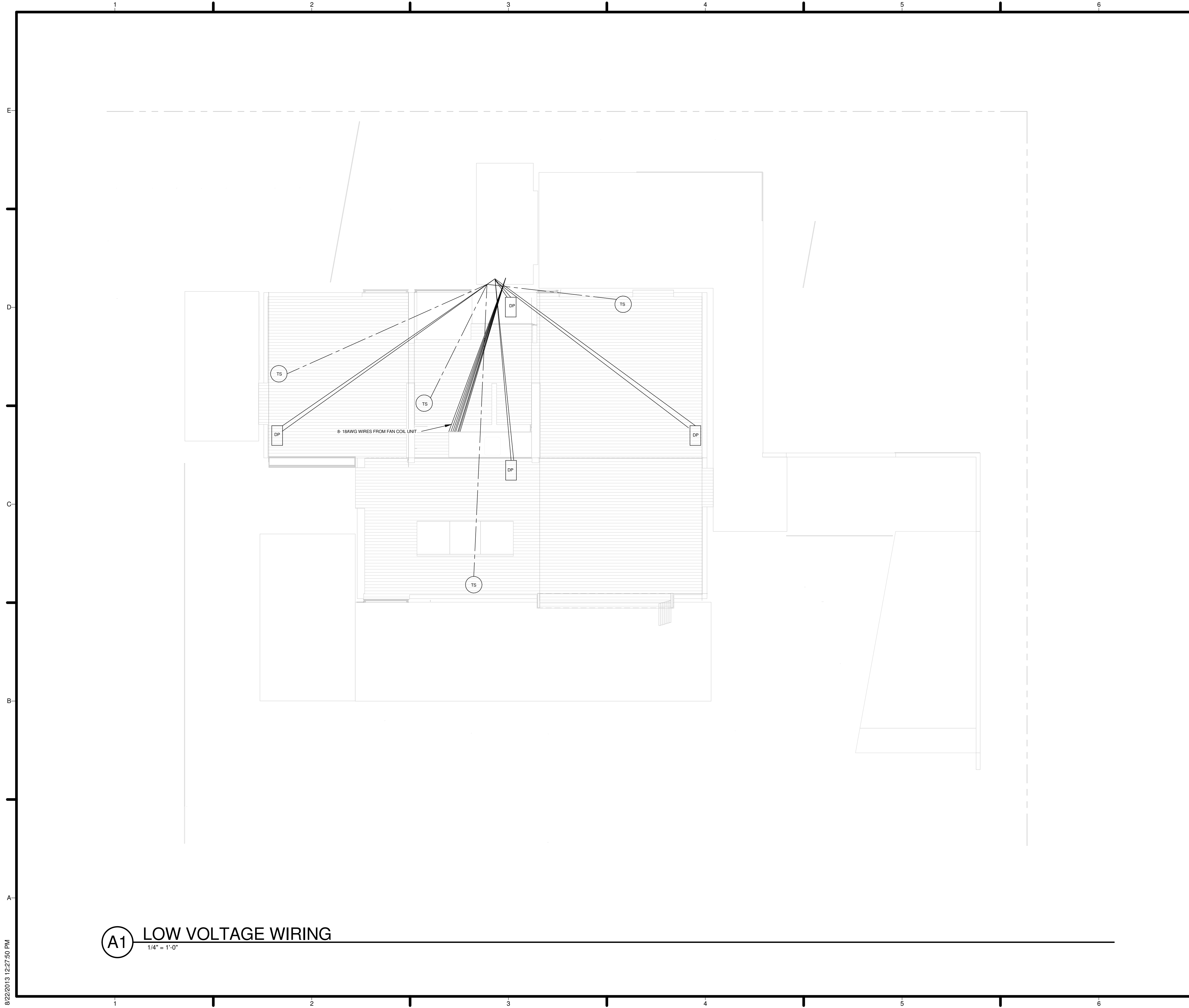
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MARK	DATE	DESCRIPTION

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SHEET TITLE

SCHEDULES

E-604



GENERAL SHEET NOTES

1. ALL LOW VOLTAGE WIRES TERMINATE IN THE MECHANICAL ROOM THROUGH THE CHASE.
2. CAT5 IS USED TO CONNECT THE TEMPERATURE SENSORS TO THE THERMOSTAT.
3. 18 AWG WIRE IS USED TO CONNECT THE DEW POINT SENSORS TO THE THERMOSTAT.
4. RUN ALL WIRES INSIDE THE CEILING.
5. RCS TEMPERATURE SENSOR MOUNTED AT A HEIGHT OF 7FT FROM THE FINISHED FLOOR.
6. HSS-DPS DEWPOINT SENSOR MOUNTED TO THE UNINSULATED SUPPLY LINE IN EACH RADIANT ZONE.

REFERENCE KEYNOTES

SHEET KEYNOTES



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SHEET TITLE
LOW VOLTAGE WIRING

E-606

A1 LOW VOLTAGE WIRING
 1/4" = 1'-0"

8/22/2013 12:27:50 PM

Manufacturer and Mode	Lamps	Description	Voltage
TECHLIGHTING POD TRACK LIGHTING HEAD-TL700M02POD03AC	6 50w lamps	Modern head surrounded by a translucent glass orb	12v
CABLE+JACK-POWERJACK CANOPY 700PJCINC	1 Unit	Incandescent ceiling light	120v
FERGUSON PIPER PENDANT TL700MOPPRLED	2 6W Lamps	A thin piper pendant track light	12v
LITHONIA LIGHTING 5IN MATTE WHITE LED RECESSED BAFFLE KIT	5 Lamps	Includes a 5 IN decorative trim with integrated LED'S	12v
NOVO LIGHTED MIRROR	1 39w Mirror	Backlit mirror	120v
FERGUSON N PROGRESS PP564231	300w	P5642 - Up/Down lighting.	120v
COOPER LIGHTING LC32 LIGHT LEVEL 1	9w/ft Multiple Strips	LED strip light	120v
NELSON LAMP-SAUCCER PENDANT	1 150W Lamp	A Modern pendant lamp	120v
LED STRIP	1.65w/250mm	Hafele strip lighting	12v
LED PUCK	1.25w	Hafele puck lighting	12v

GENERAL SHEET NOTES

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SHEET TITLE
 FIXTURE SCHEDULE

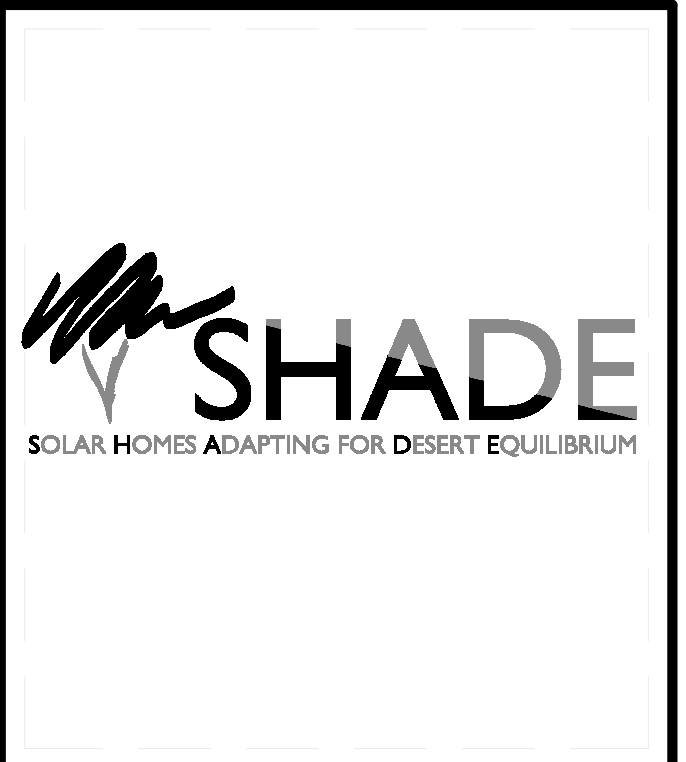
E-6044



GENERAL SHEET NOTES

REFERENCE KEYNOTES

SHEET KEYNOTES



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SHEET TITLE
 TELECOMMUNICATIONS SYMBOLS AND NOTES

T-001

GENERAL SHEET NOTES

- 1. ALL CONNECTIONS ARE 24VAC UNLESS OTHERWISE SPECIFIED
- 2. 18-2 AWG WIRE AND CAT 5 ARE USED FOR WIRING
- 3. THE PLC USED IS 2 TIER AND HAS TWO LEVELS FOR CONNECTIONS



REFERENCE KEYNOTES

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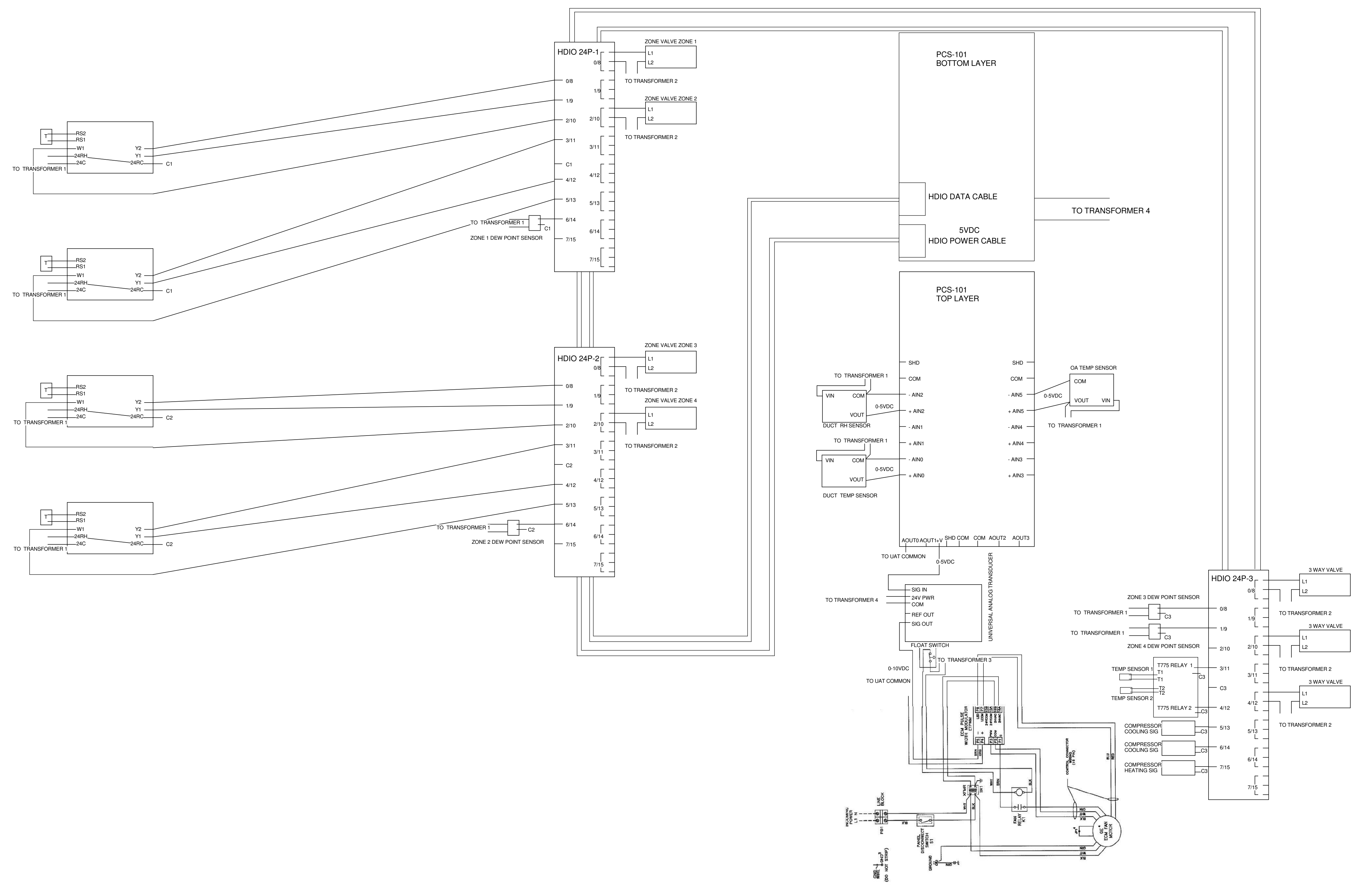


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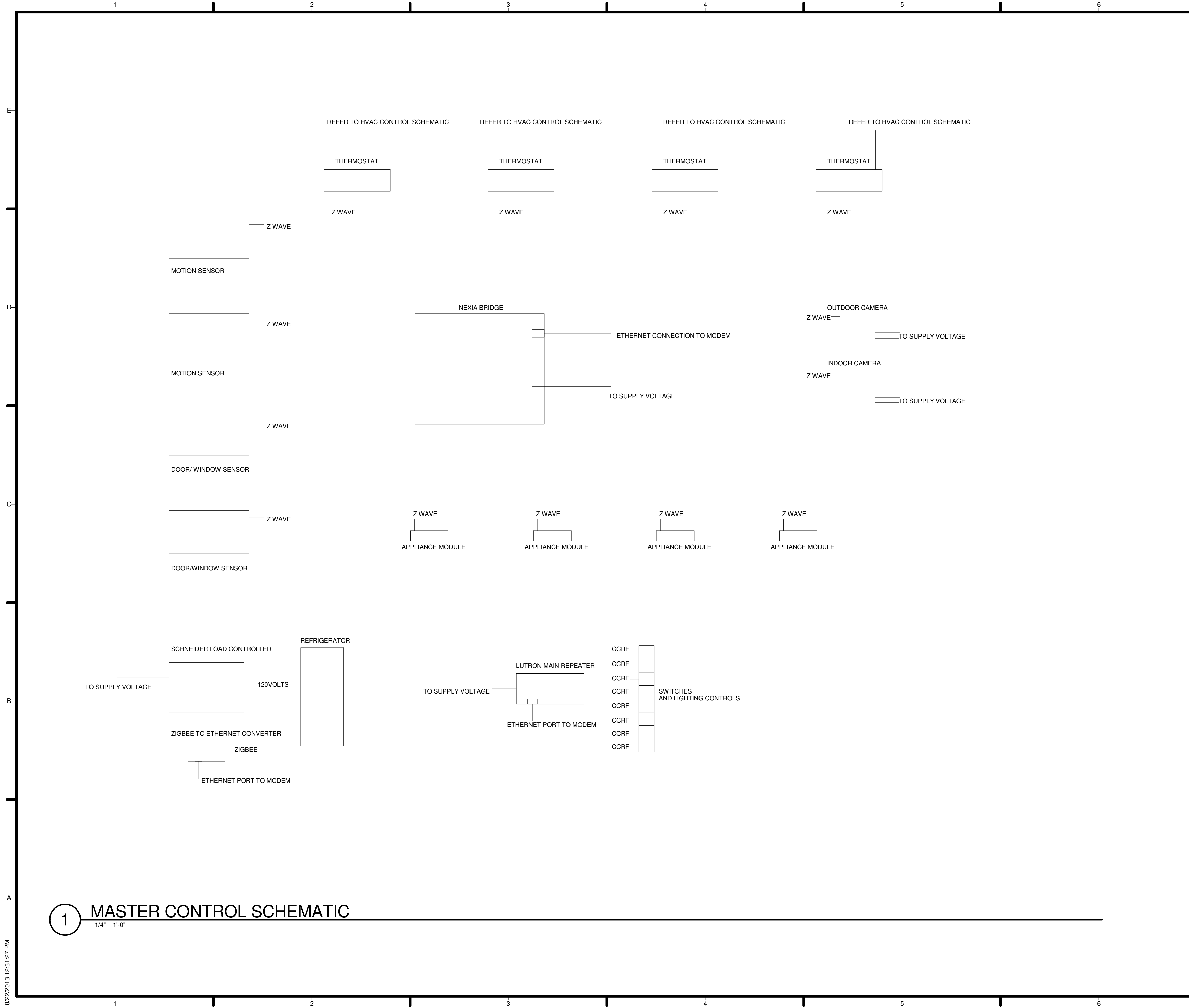
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SHEET TITLE
 HVAC CONTROL

T-601



A1 HVAC CONTROL
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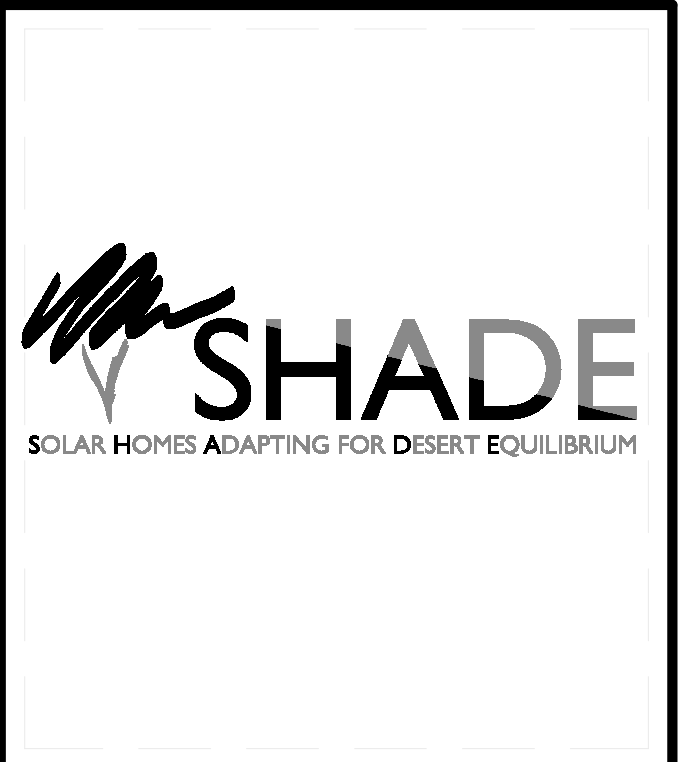
GENERAL SHEET NOTES

- 1. ALL Z WAVE ARE TWO WAY COMMUNICATION BETWEEN DEVICE AND NEXIA BRIDGE
- 2. ALL CCRF IS TWO WAY COMMUNICATION BETWEEN DEVICE AND LUTRON MAIN REPEATER THROUGH THE CLEAR CONNECT RF PROTOCOL
- 3. REFER TO HVAC CONTROL SCHEMATIC- SHEET T-601 FOR INFORMATION REGARDING THE HVAC CONTROL SYSTEM

REFERENCE KEYNOTES

SHEET KEYNOTES

1 MASTER CONTROL SCHEMATIC
1/4" = 1'-0"



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SHEET TITLE
MASTER CONTROL SCHEMATIC

T-602



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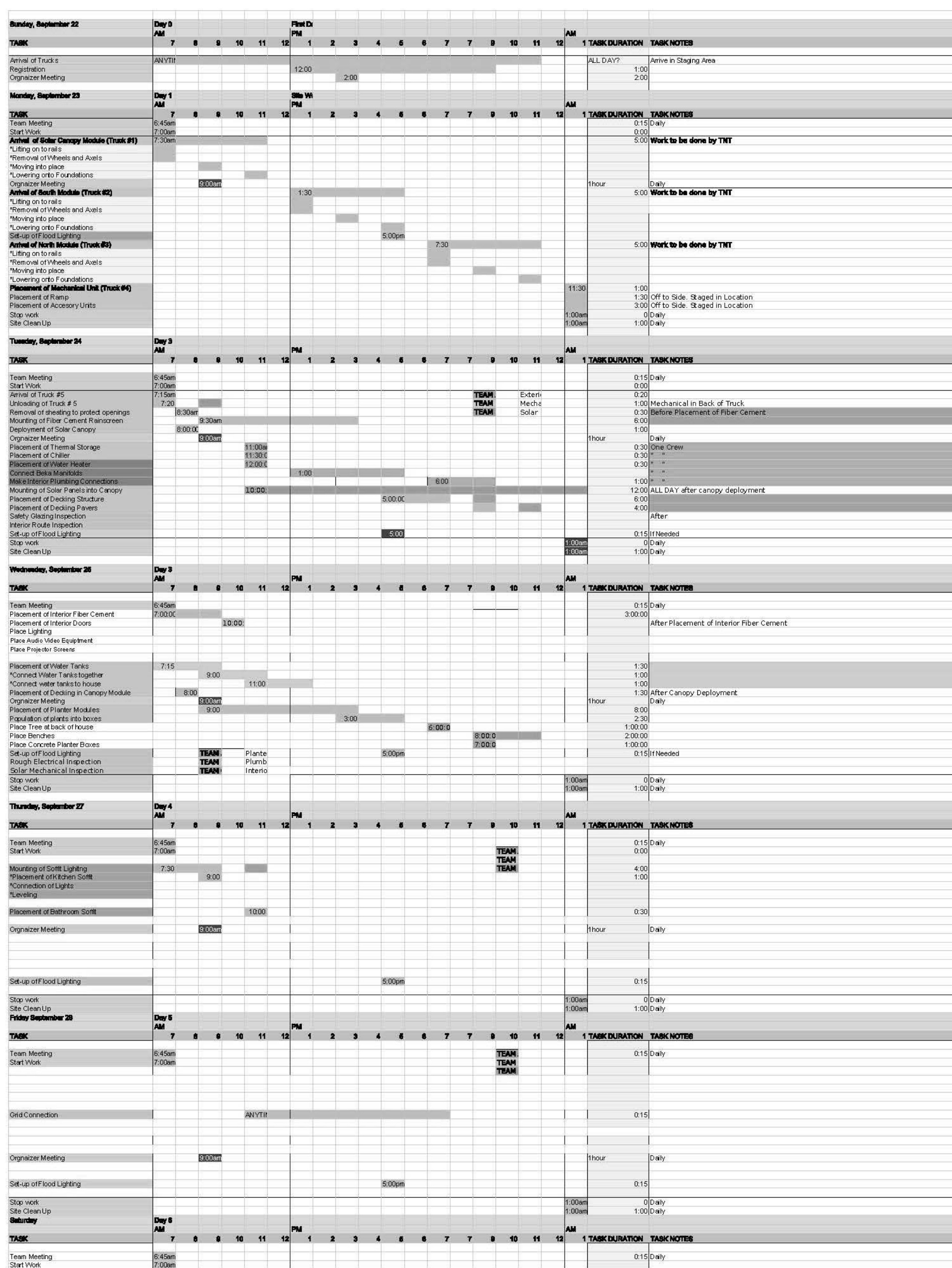


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SHEET TITLE
CONSTRUCTION SCHEDULE

O-101



8/21/2013 11:52:20 PM

A1 CONSTRUCTION SCHEDULE
 3/64" = 1'-0"

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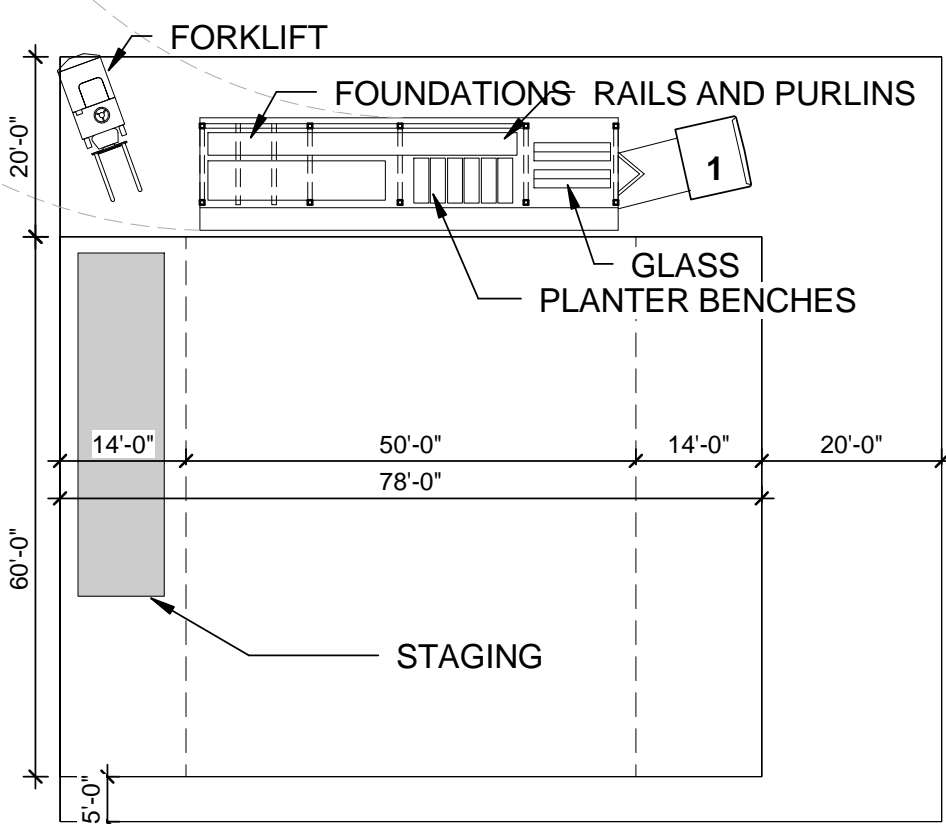


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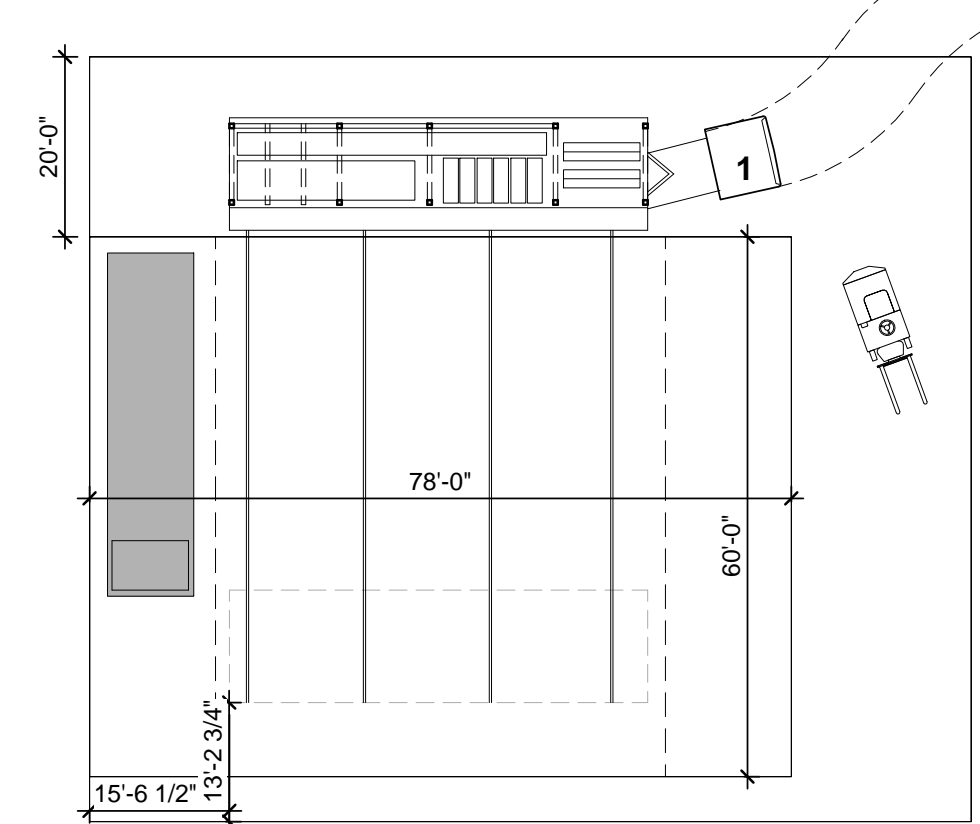
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SHEET TITLE
ARRIVAL SEQUENCE PLANS

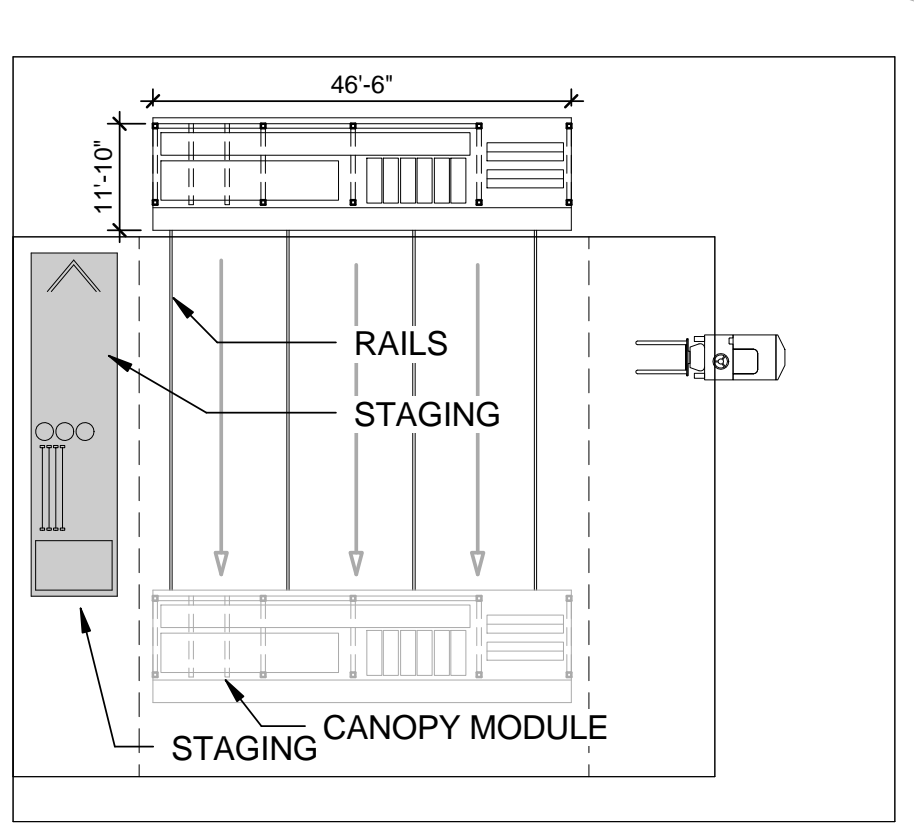
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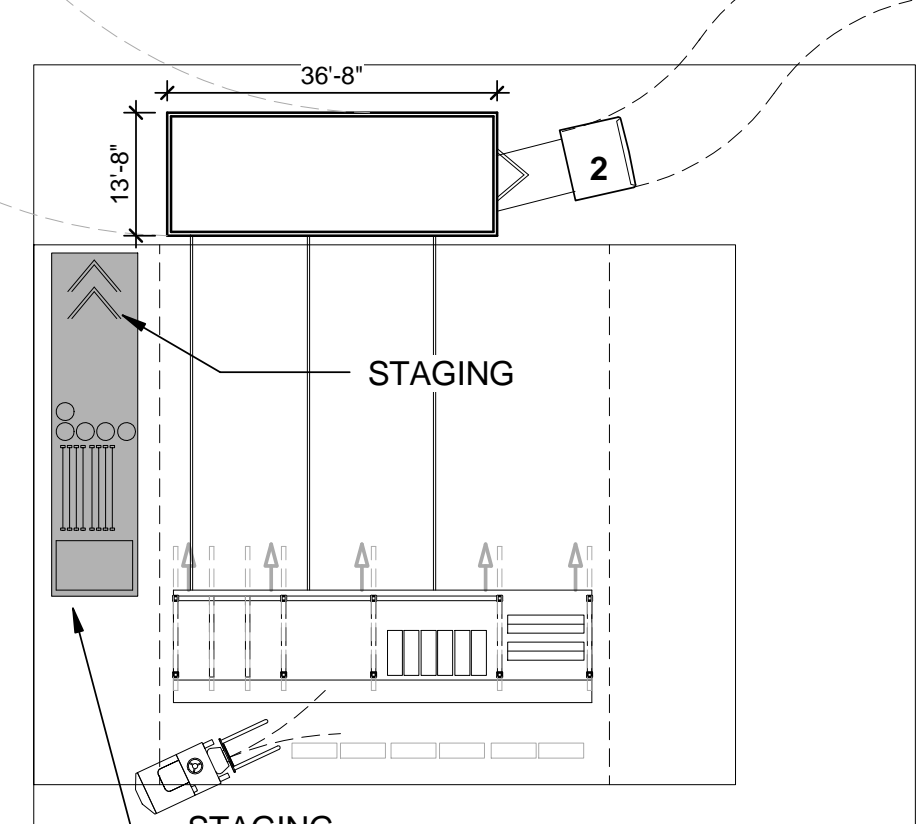
STEP 1: ARRIVAL AND STAGING
 DAY 1 7:00AM
 DURATION: 1 HOURS
 FOUNDATIONS, RAILS, AND SURVEYING EQUIPMENT ARRIVE WITH FIRST MODULE CONSISTING OF THE SOLAR CANOPY. UPON ARRIVAL THE TRUCK WILL ARRIVE ON THE NORTH END OF THE SITE. THEN ONE TEAM WILL START TO UNLOAD FOUNDATIONS AND RAILS WHILE ANOTHER PROCEEDS TO MARK THE DROP LOCATION OF THE FIRST MODULE.



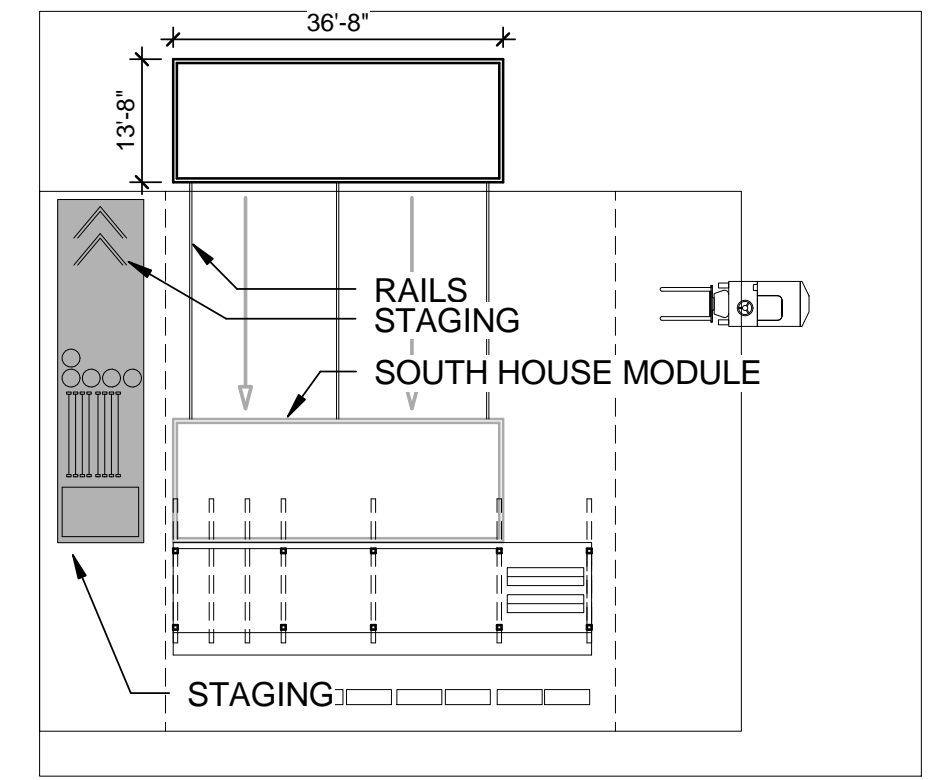
STEP 2: SITE SURVEYING
 DAY 1 7:00AM TO 8:00AM
 DURATION: 1 HOURS
 ONCE THE SITE HAS BEEN SURVEYED AND THE PROPER PLACEMENT LOCATION OF THE FIRST MODULE HAS BEEN DETERMINED THEN RAILS TO ROLL THE MODULE IN CAN BE PLACED. BEFORE PLACEMENT OF THE MODULE THE TRUCK CARRYING THE MODULE ALIGNS ITS SELF AS WELL AS POSSIBLE BEFORE LEAVING.



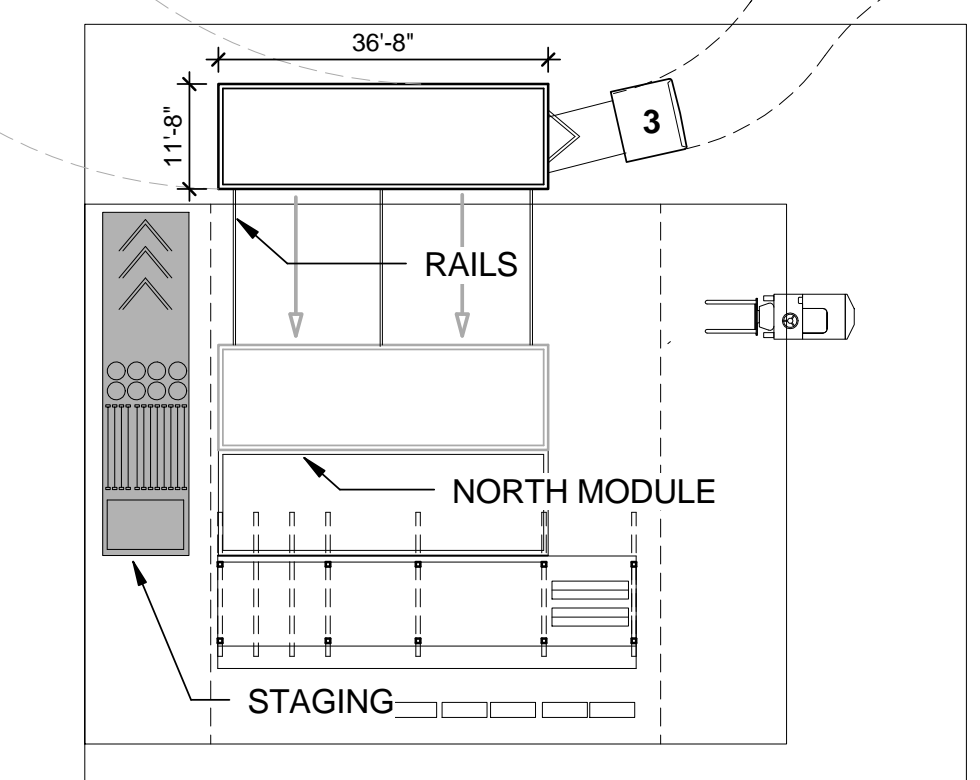
STEP 3: PLACEMENT OF SOLAR CANOPY MODULE
 DAY 1 8:00AM TO 12:00PM
 DURATION: 4-5 HOURS
 AFTER THE RAILS HAVE BEEN PLACED AND THE MODULE ALIGNED TO IT, THE MODULE CAN BE LIFTED USING JACKS TO BE MOUNTED ONTO THE RAILS. ONCE LIFTED WHEELS, AXLES, AND HITCHES ARE REMOVED AND STAGED ON THE SIDE. RAILS ARE THEN PLACED UNDER THE MODULES AND IT IS LOWERED ONTO THE RAILS. THEN THE MODULE IS PULLED AND PUSHED INTO ITS DESIRED LOCATION. ONCE IN ITS DESIRED LOCATION THE MODULE IS LIFTED AGAIN OFF THE RAILS TO ALLOW FOR REMOVAL OF THE RAILS UNDER THE MODULE AND PLACEMENT OF THE FOUNDATIONS. ONCE THE FOUNDATIONS HAVE BEEN PLACED AND ANCHORED THE MODULE IS LOWERED ONTO THE FOUNDATIONS AND ATTACHED TO THEM.



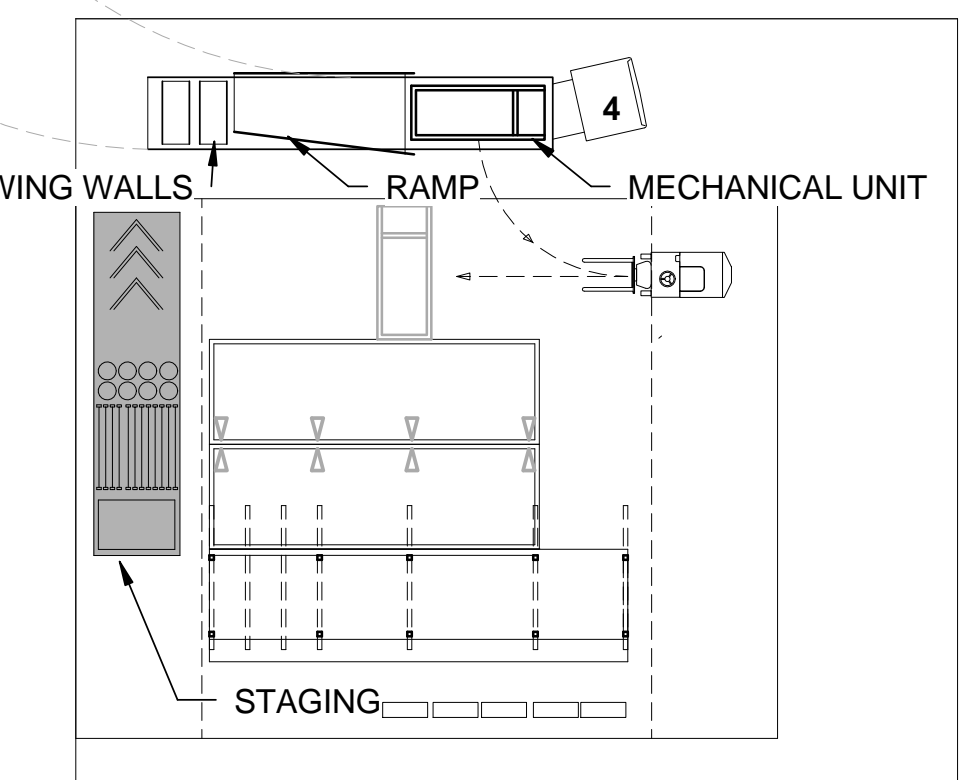
STEP 4: DEPLOYMENT OF SOLAR CANOPY
 DAY 1 NOON-2:00PM
 DURATION: 2-3 HOURS
 ONCE THE SOLAR CANOPY UNIT IS PLACED THE SECOND MODULE CAN ARRIVE ON SITE. WHILE WAITING FOR THE SECOND MODULE TO ARRIVE BEAMS AND PLANTERS FROM THE SOLAR CANOPY MUST BE DEPLOYED.



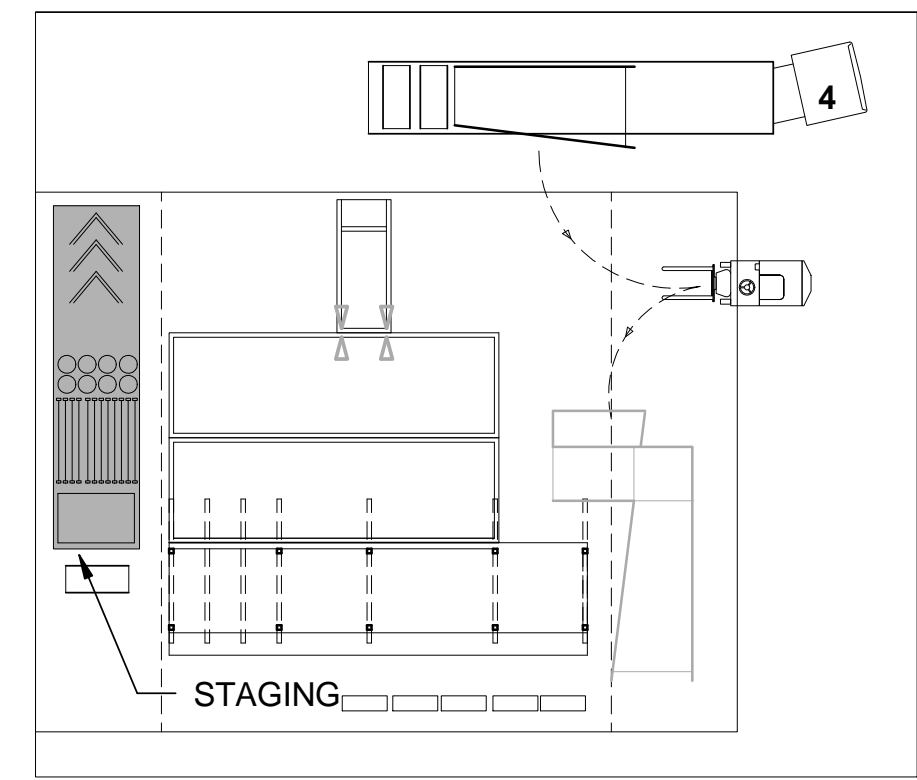
STEP 5: PLACEMENT OF SOUTH MODULE
 DAY 1 1:00PM TO 5:00PM
 DURATION: 4-5 HOURS
 ONCE THE FIRST MODULE IS IN PLACE THE SECOND MODULE DRIVES INTO POSITION. THE SAME STEPS ARE THEN REPEATED. THE MODULE IS LIFTED ON TO RAILS AND WHEELS, AXLES, AND HITCHES ARE REMOVED AND STAGED ON THE SIDE. THEN THE MODULE IS ROLLED INTO PLACE ON THE RAILS AND THE FOUNDATIONS ARE PLACED UNDER THE MODULE AND IT IS THEN LOWERED INTO POSITION. AFTER THE SOUTH MODULE IS IN PLACE THE TWO IN PLACE MODULES MAY BE BOLTED TOGETHER.



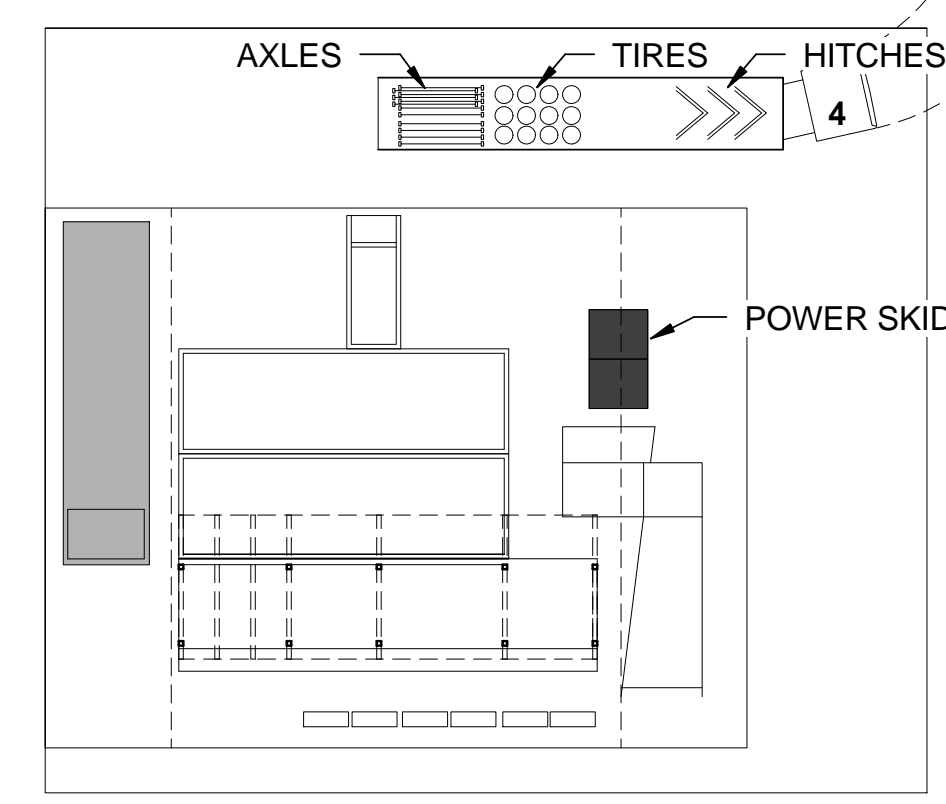
STEP 6: PLACEMENT OF NORTH MODULE
 DAY 1 5:00PM TO 9:00PM
 DURATION: 4-5 HOURS
 ONCE THE SECOND MODULE IS IN PLACE THE THIRD MODULE DRIVES INTO POSITION. THE SAME STEPS ARE THEN REPEATED. THE MODULE IS LIFTED ON TO RAILS AND WHEELS AND AXLE ARE REMOVED AND STAGED ON THE SIDE. THEN THE MODULE IS ROLLED INTO PLACE ON THE RAILS AND THE FOUNDATIONS ARE PLACED UNDER THE MODULE AND IT IS THEN LOWERED INTO POSITION.



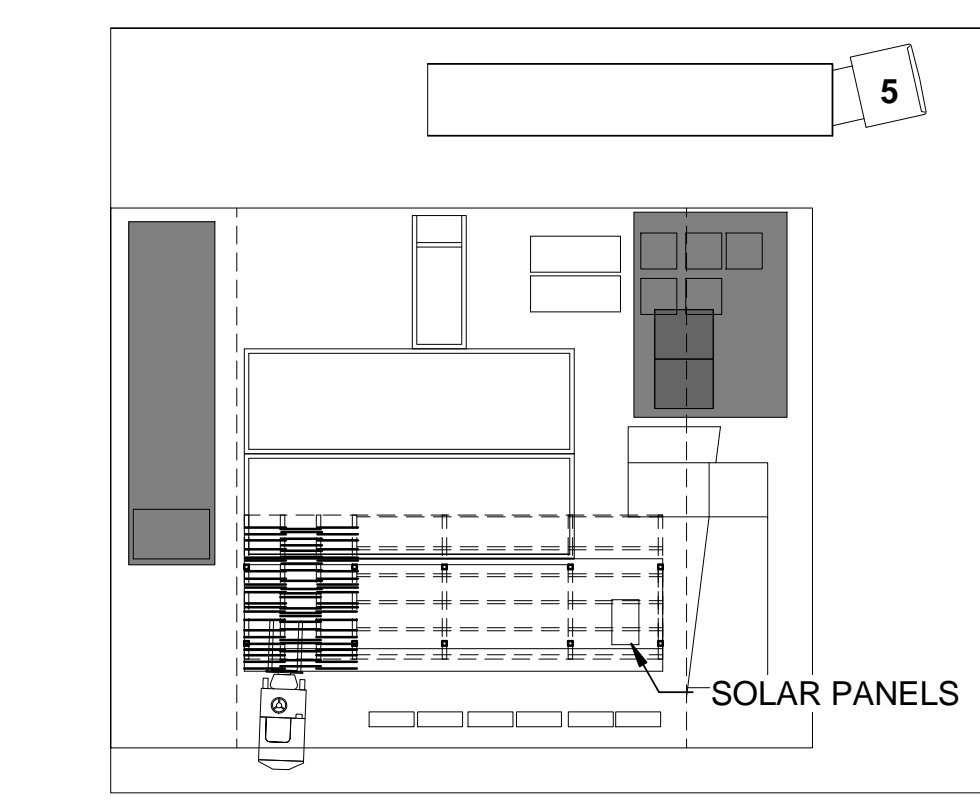
STEP 7: PLACEMENT OF MECHANICAL UNIT
 DAY 1 9:00PM TO 11:00PM
 DURATION: 2-3 HOURS
 ONCE THE ALL THREE MODULES OF THE HOME ARE IN PLACE ON THEIR FOUNDATIONS THE FOURTH TRUCK CARRYING THE MECHANICAL MODULE, RAMP, AND ACCESSORY UNITS WILL COME TO THE SITE. THE MECHANICAL MODULE WILL BE POSITIONED WITH A FORK LIFT MUCH IN THE SAME WAY THE OTHER THREE MODULES WERE PLACED.



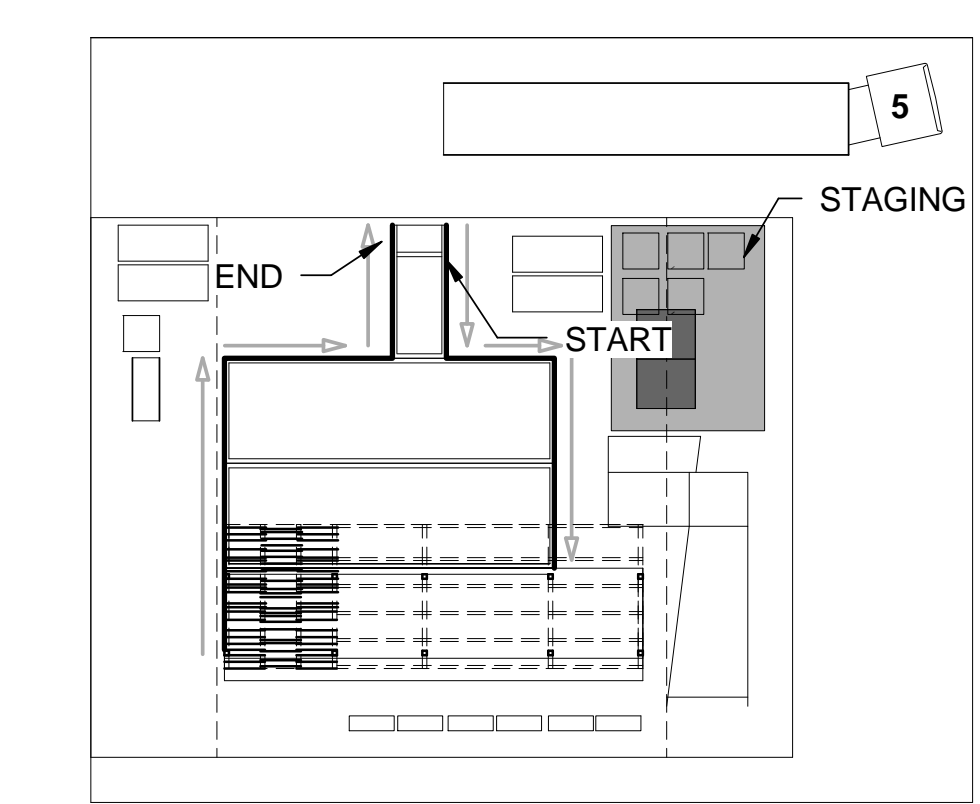
STEP 7: STAGING OF RAMP AND ACCESSORY UNITS
 DAY 1 11:00-1:00AM
 DURATION: 2-3 HOURS
 AFTER THE MECHANICAL UNIT IS PLACED ON ITS FOUNDATIONS THE RAMP AND ACCESSORY UNITS ARE MOVED INTO THEIR POSITIONS WITH A FORK LIFT AND ARE STAGED UNTIL THEY CAN PROPERLY PUT INTO PLACE. ONCE ALL UNITS ARE OFF OF THE TRUCK BED WHEELS AND AXLES ARE LOADED BACK ONTO THE TRUCK REMOVED FROM THE SITE.



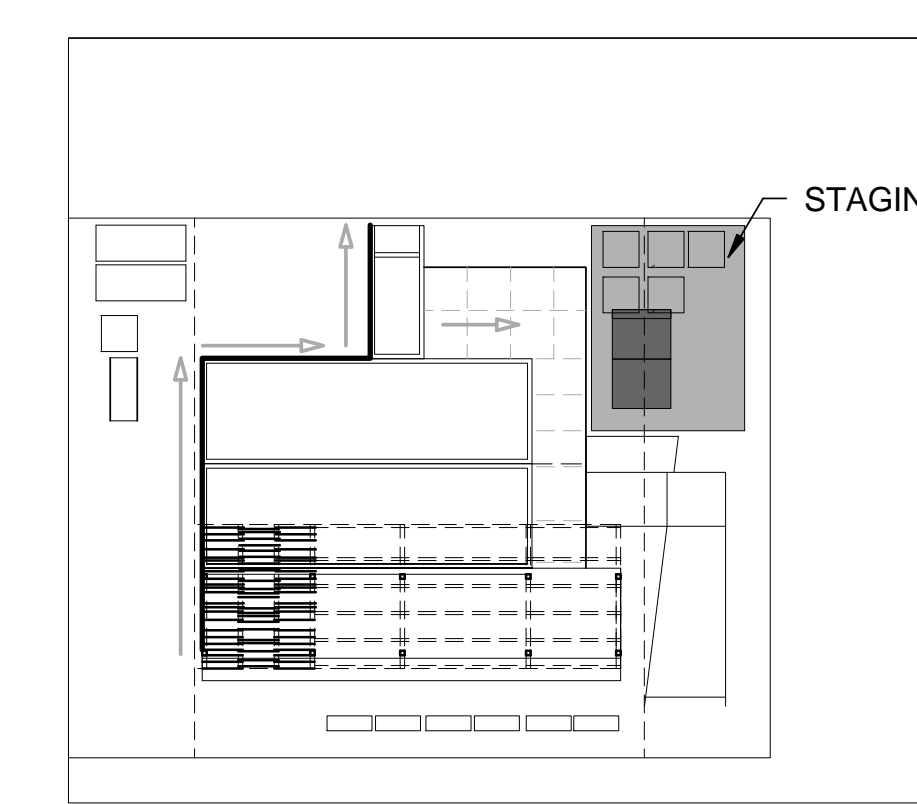
STEP 9: REMOVAL OF WHEELS, AXLES, AND HITCHES
 DAY 1 12:00-1:00AM
 DURATION: 1 HOURS
 ONCE SPACE ON THE FOURTH TRUCK HAS OPENED UP BY REMOVAL OF THE MECHANICAL UNIT, RAMP AND ACCESSORY UNITS THEN WHEELS, AXLES, AND HITCHES FROM THE FIRST THREE TRUCKS ARE LOADED TO BE REMOVED FROM THE SITE TO END THE DAY.



STEP 10: ATTACHMENT OF THE FIBERCEMENT SKIN
 DAY 2 7:00AM-MIDNIGHT
 DURATION: 12 HOURS
 TO BEGIN THE SECOND DAY THE FIFTH TRUCK WILL ARRIVE ON SITE. THIS TRUCK CARRIES THE HOMES RAINSCREEN, SOLAR PANELS, AND DECKING STRUCTURE. TO START THE DAYS WORK THE TRUCK WILL BE UN LOADED WHILE A TEAM STARTS TO MOUNT PURLINS FOR THE SOLAR CANOPY. ONCE PURLINS ARE IN PLACE SHADE SCREENS AND SOLAR PANELS CAN BE PLACED ONTO THE CANOPY MOVING WEST TO EAST TO AVOID CONFLICT WITH THE RAINSCREEN TEAM. UNLOADED ELEMENTS WILL BE STAGED ON EITHER SIDE OF THE HOUSE ACCORDING TO THEIR USE.



STEP 11: ATTACHMENT OF THE FIBERCEMENT SKIN
 DAY 2 8:00AM-1:00PM
 DURATION: 4-5 HOURS
 ONCE THE RAINSCREEN ELEMENTS HAVE BEEN REMOVED FROM THE TRUCK AND STAGED A TEAM CAN START PLACING RAINSCREEN PANELS ON THE EAST SIDE OF THE MECHANICAL UNIT AND WORK AROUND THE HOUSE CLOCKWISE. SIMULTANEOUSLY A TEAM ON THE INSIDE OF THE HOUSE WILL BEGIN MAKING PLUMBING AND ELECTRICAL CONNECTIONS AND THE LAST ELEMENTS OF TRUCK FIVE CAN BE UNLOADED.



STEP 12: SETTING OF DECKING STRUCTURE
 DAY 2 10:00AM-3:00PM
 DURATION: 5-6 HOURS
 ONCE TRUCK FIVE HAS BEEN COMPLETELY UNLOADED IT MY LEAVE THE SITE. AFTER TRUCK FIVE HAS BEEN COMPLETELY UNLOADED AND ALL ELEMENTS STAGED AND THE RAINSCREEN TEAM HAS CLEARED THE NORTH-EAST CORNER OF THE HOUSE ANOTHER TEAM MAY BEGIN SETTING AND LEVELING THE DECKING STRUCTURE AGAIN STARTING ON THE EAST SIDE OF THE MECHANICAL UNIT AND WORKING CLOCK WISE AROUND THE HOUSE. WORK CONTINUES ON THE SOLAR CANOPY AND RAINSCREEN

A1 ARRIVAL SEQUENCE
 3/64" = 1'-0"

8/21/2013 12:43:32 AM



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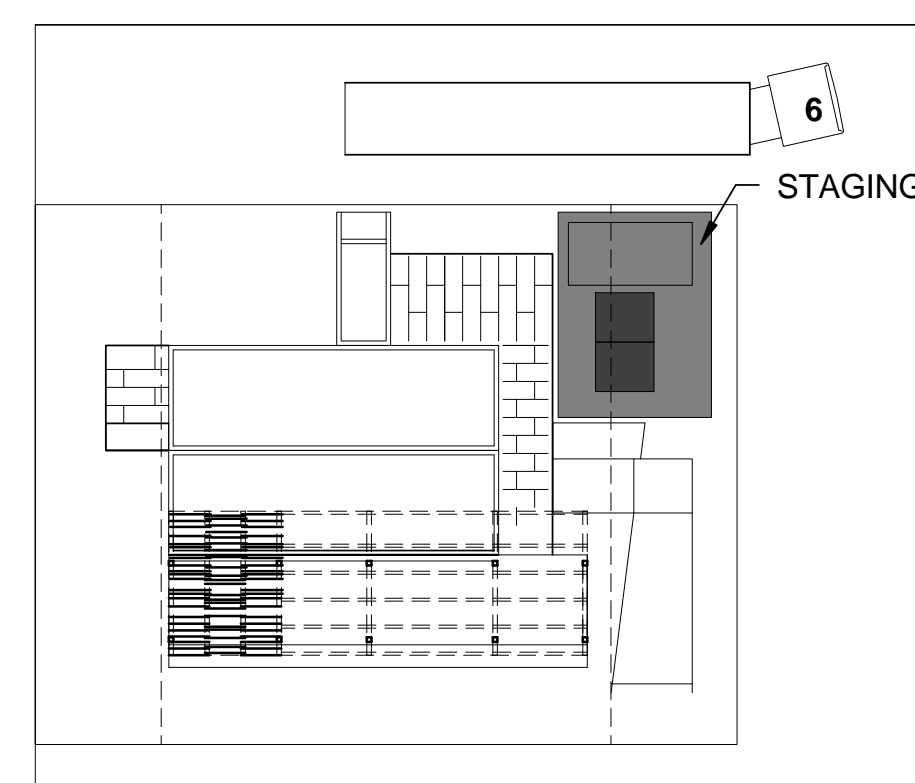


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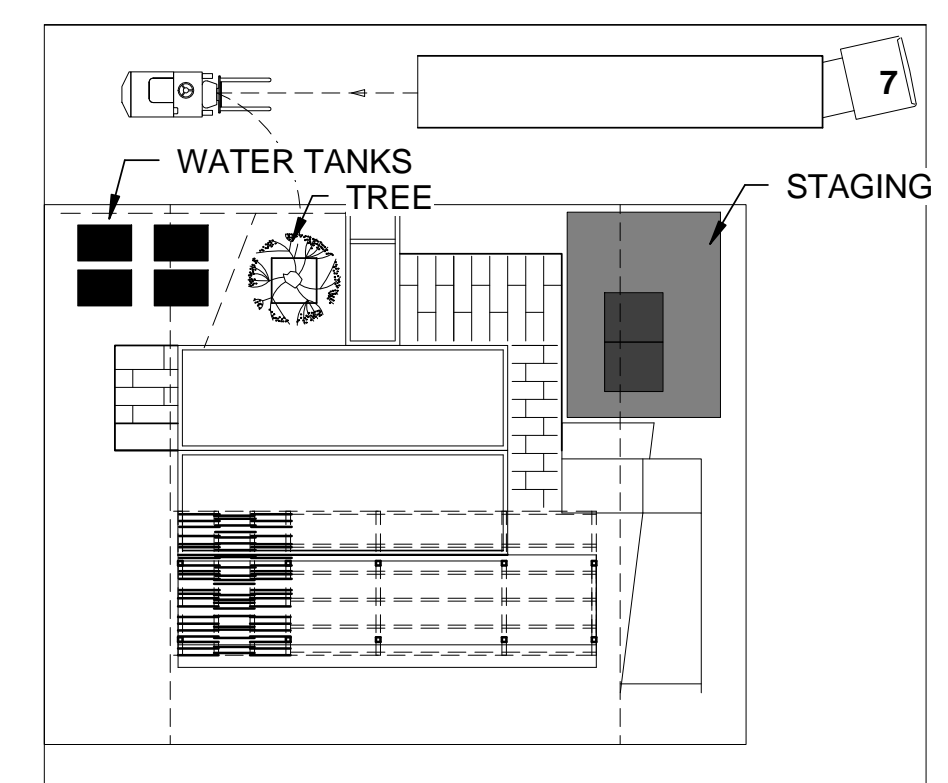
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SHEET TITLE
 ARRIVAL SEQUENCE PLAN

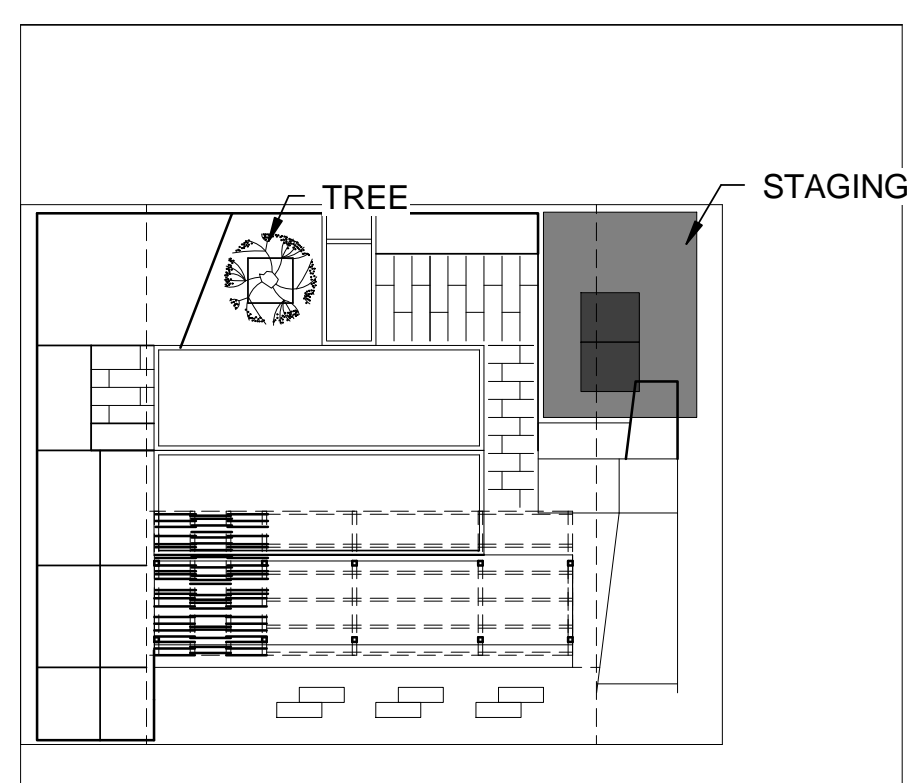
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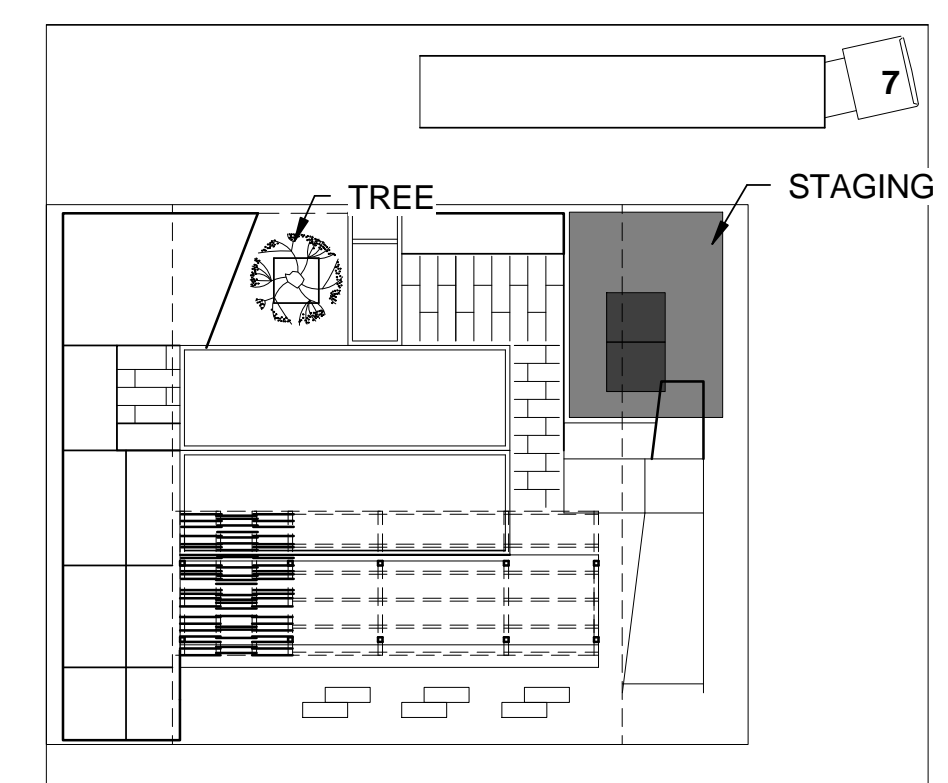
STEP 13: PLACEMENT OF DECKING PAVERS
 DAY 2 5:00PM-MIDNIGHT
 DURATION: 3-4 HOURS
 IN THE AFTERNOON OF DAY TWO AND SIGNIFICANT PROGRESS HAS BEEN MADE ON PLACING THE DECKING STRUCTURE. TRUCK SIX MAY ARRIVE ON SITE. TRUCK SIX CARRIES THE TEAMS DECKING SURFACE, WATER TANKS, AND PLANTER BOXES. FIRST THE DECKING SURFACE WILL BE UNLOADED AND START TO BE PLACED ON ALREADY SET DECKING MODULES. THE WATER TANKS AND PLANTER MODULES ARE TO BE REMOVED FROM THE TRUCK AND STAGED FOR USE ON DAY 3.



STEP 14: TREE AND WATER TANK PLACEMENT
 DAY 3 7:00-9:00AM
 DURATION: 2-3 HOURS
 TO BEGIN DAY 3 THE SEVENTH TRUCK CONTAINING LANDSCAPE MATERIALS ARRIVES ON SITE. FIRST TO BE UNLOADED OFF THIS TRUCK WILL BE THE SITES LARGE TREE. THE TREE WILL BE REMOVED FROM THE TRUCK AND PLACED IN ITS PRE MARKED LOCATION. ONCE THE TREE IS IN PLACE WATER TANKS ARE THE PLACED INTO THE PROPER LOCATIONS ON THE NORTHWEST CORNER OF THE SITE AND A TEAM MAY BEGIN MAKING PLUMPING CONNECTIONS BETWEEN THEM AND THE HOUSE. PLANTS AND SITE COVERINGS ARE UNLOADED FROM THE TRUCK AND STAGED FOR LATER USE.

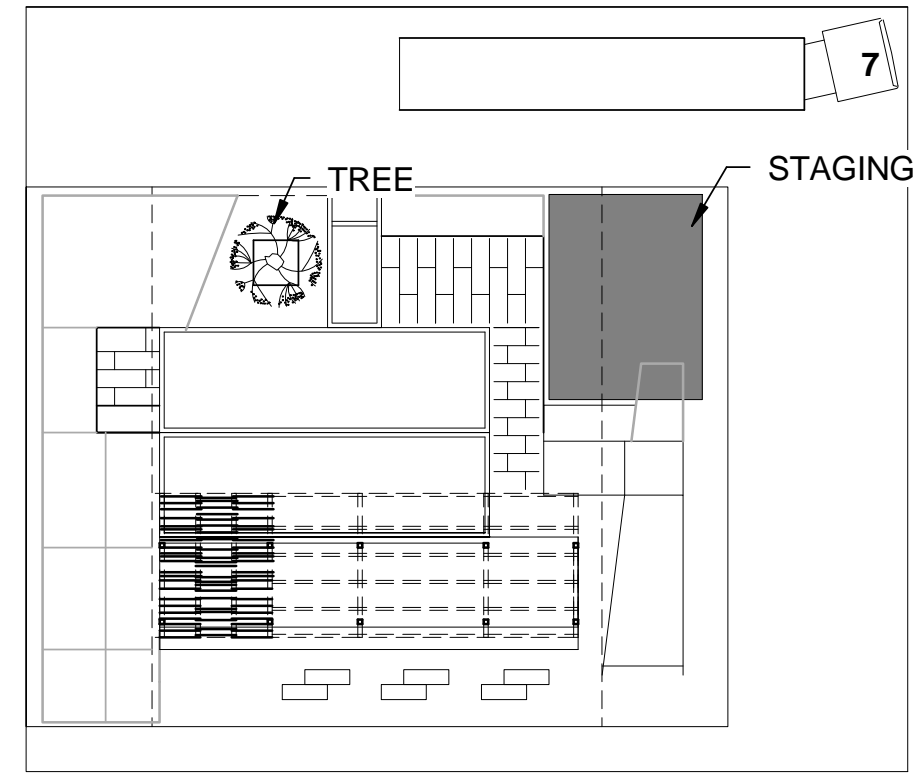


STEP 15: PLACEMENT OF PLANTER BOXES
 DAY 3 9:00AM-2PM
 DURATION: 5-6 HOURS
 AFTER THE TREE AND WATER TANKS HAVE BEEN PLACED ON SITE A CREW BEGINS TO CONNECT THE WATER TANKS TOGETHER AND TO THE MECHANICAL UNIT. ANOTHER CREW BEGINS TO WORK AROUND THE HOUSE ASSEMBLING THE PLANTER BOXES.

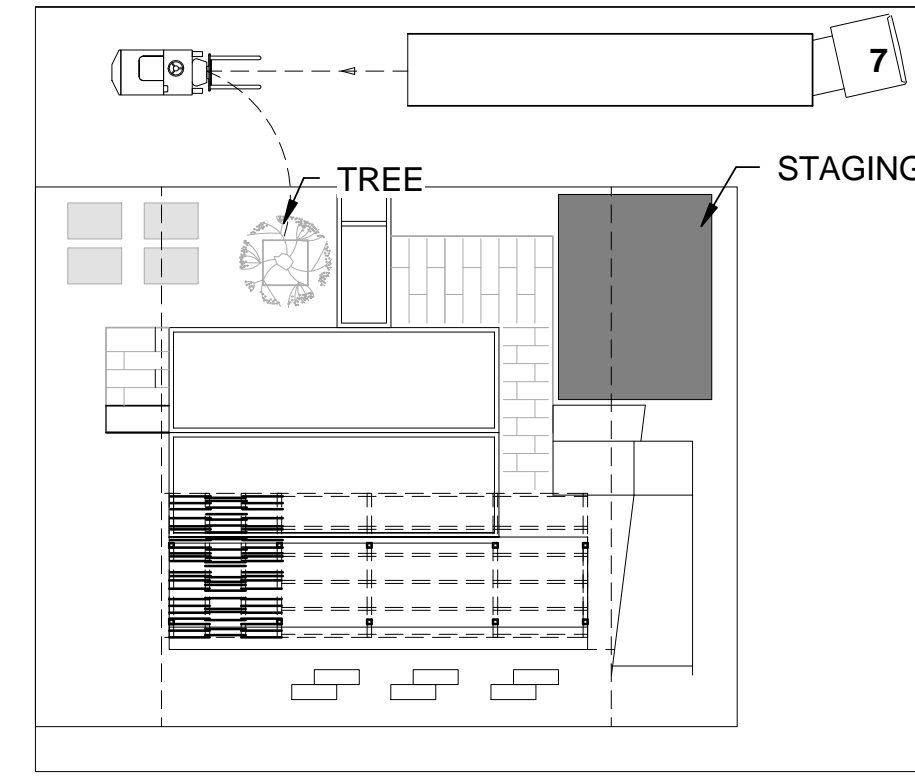


STEP 16: POPULATION OF PLANTERS
 DAY 3 11:00AM-3:00PM
 DURATION: 3-4 HOURS
 AFTER PROGRESS ON SETTING UP PLANTER MODULES HAS BEEN MADE A TEAM CAN FOLLOW BEHIND THEM AND PLACE PLANTS AND MATTING INTO THE MODULES TO START FORMING THE HOMES UNIQUE LANDSCAPE. ONCE PLANTS AND MATTING HAS BEEN PLACED IN EACH MODULE THAT MODULE MAY THEN BE FILLED WITH THE APPROPRIATE MULCH OR GRAVEL.

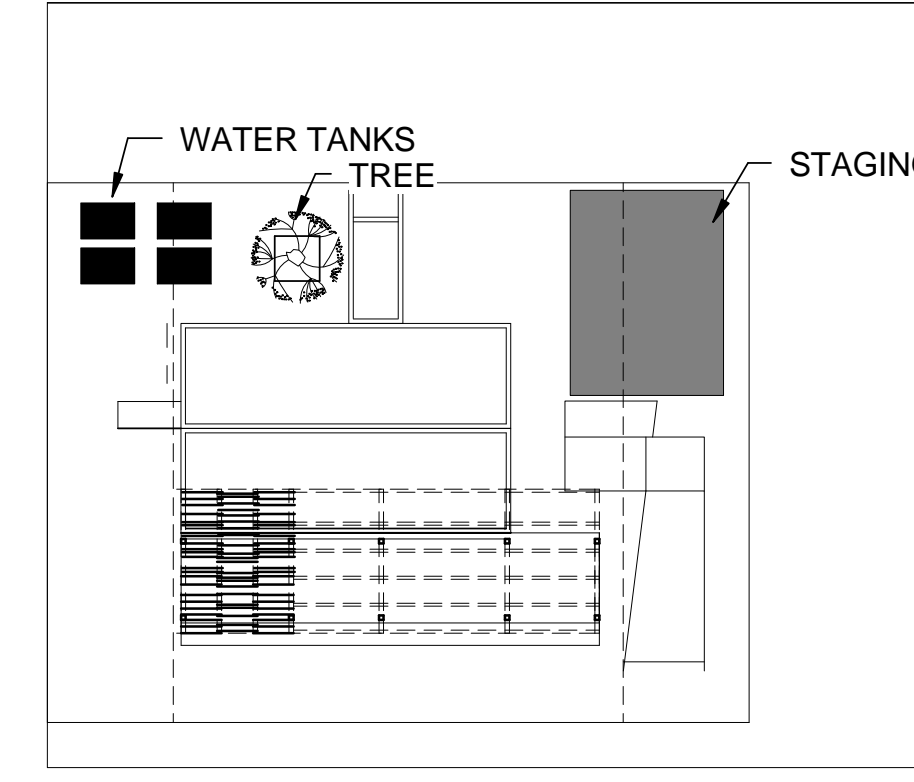
A1 ARRIVAL SEQUENCE 2
 3/64" = 1'-0"



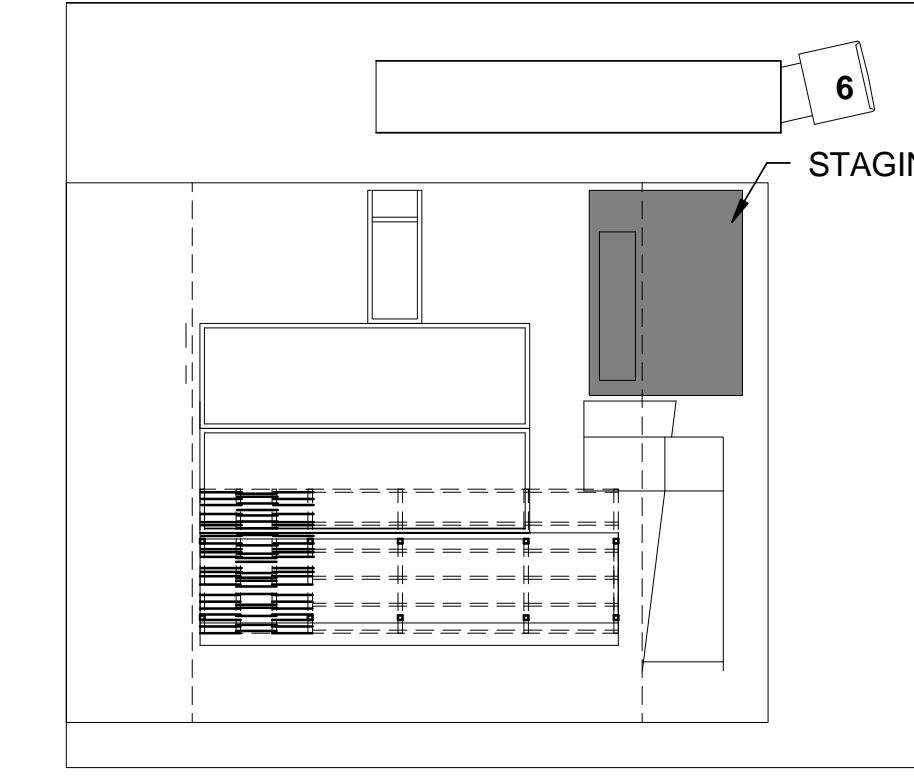
STEP 1: REMOVAL OF LANDSCAPE PLANTER ELEMENTS AND LANDSCAPE ARE REMOVED FROM THE SITE AND STAGED ON THE SIDE.



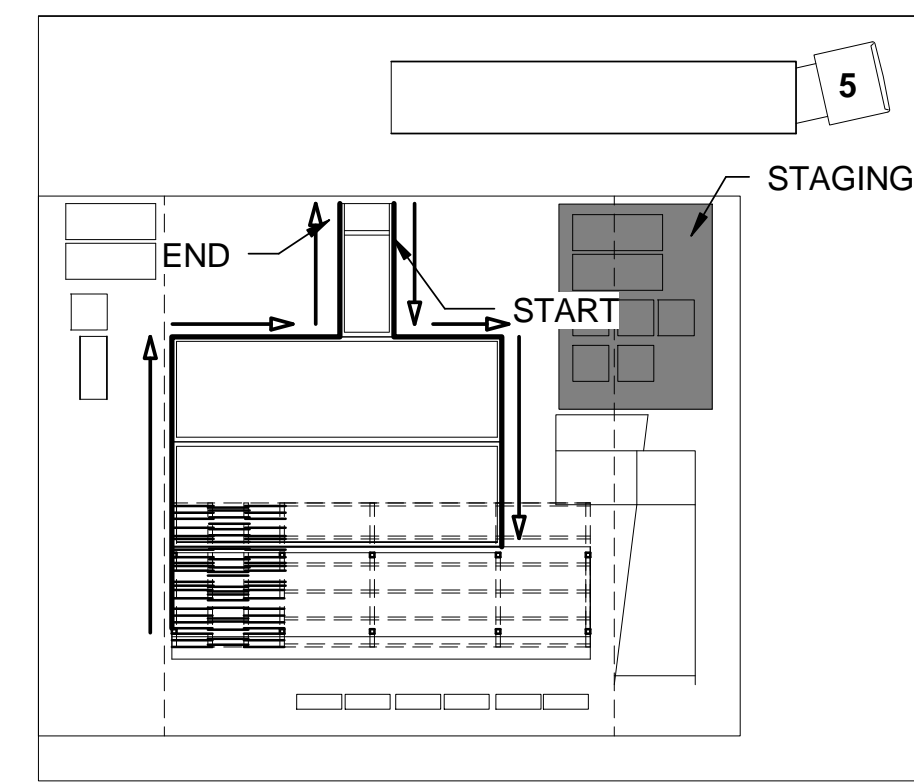
STEP 2: TAKE DOWN OF DECKING PAVERS ARE REMOVED FROM DECKING AND PLACED ON A TRUCK. WATER TANKS ARE ALSO LOADED ONTO THIS TRUCK. AFTER DECKING PAVERS HAVE BEEN REMOVED DECKING STRUCTURE MAY BE UNBOLTED AND MOVED ASIDE TO BE LOADED ONTO THE NEXT TRUCK.



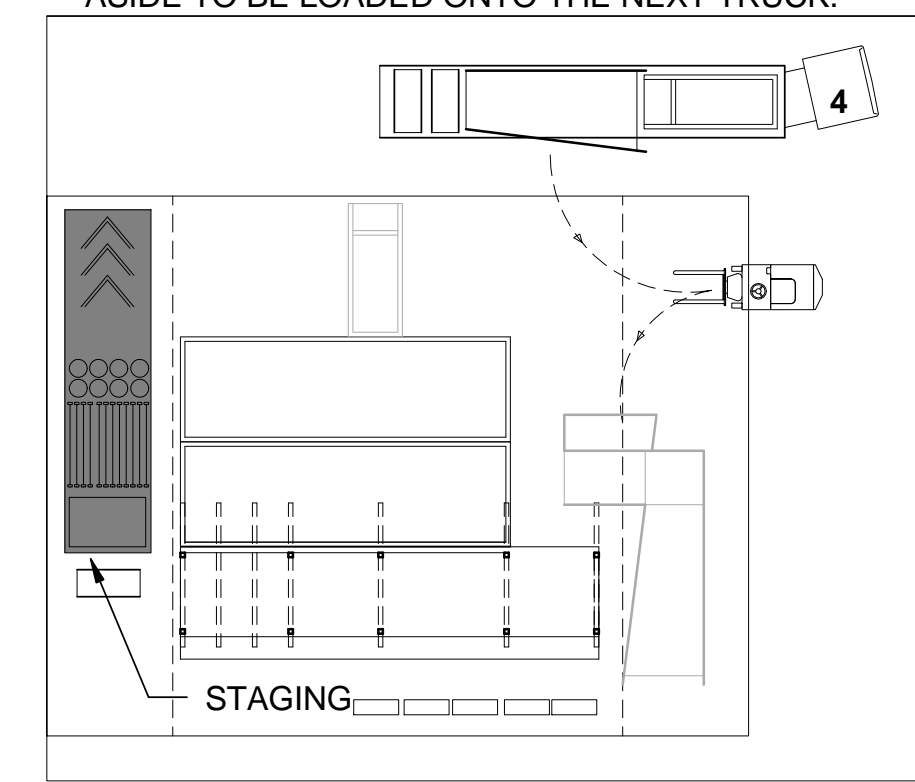
STEP 3: TAKE DOWN OF SOLAR PANELS ONCE PLANTERS AND DECKING HAS BEEN REMOVED FROM THE FRONT PART OF THE SITE A CREW CAN GET UP ON LADDERS AND SCAFFOLDING AND BEGIN TO REMOVE SOLAR PANELS AND PURLINS.



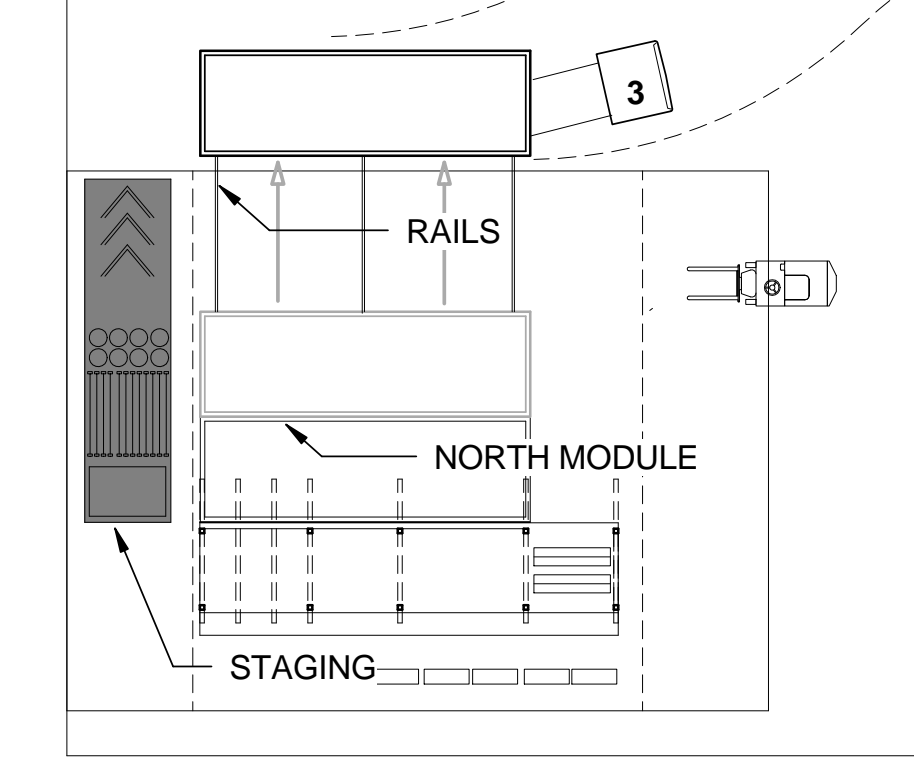
STEP 4: REMOVAL OF OVERHAED SHADE SCREENS ONCE ALL DECKING AND PLANTER ELEMENTS HAVE BEEN TAKEN DOWN AND REMOVED FROM THE SITE OVERHAED SHADE SCREENS ARE TAKEN DOWN AND STAGED TO BE REMOVED FROM THE SITE.



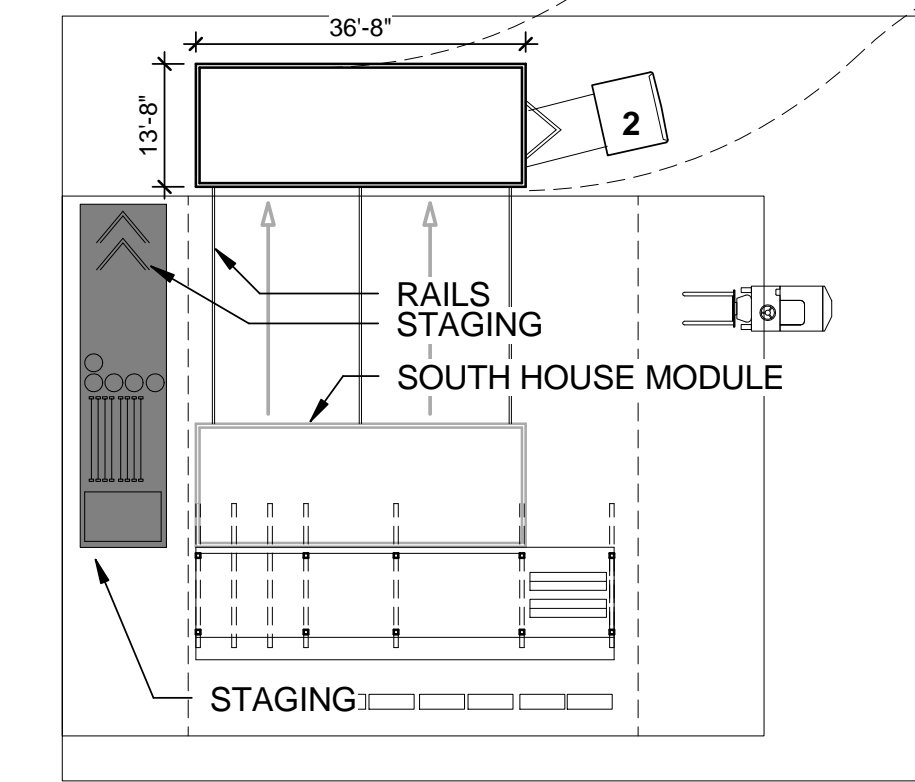
STEP 5: DEMOUNTING OF BUILDING SKIN WHILE OVERHEAD SHADE SCREENS ARE BEING REMOVED FROM THE BUILDING SKIN AND RAINSCREEN CAN BE UNMOUNTED FROM THE HOUSE.



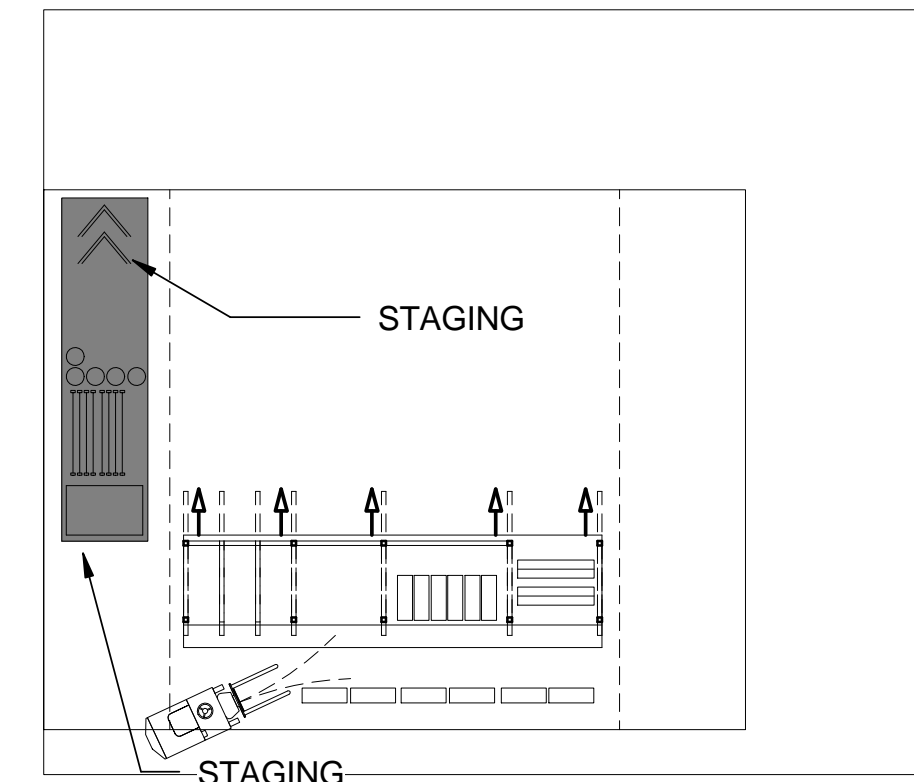
STEP 6: REMOVAL OF ACESORY UNITS ONCE THE BUILDING SKIN HAS BEEN REMOVED ALL ACESORY UNITS AND THE MECHANICAL ROOM CAN BE LOADED ONTO A FLATBED TO BE REMOVED FROM THE SITE.



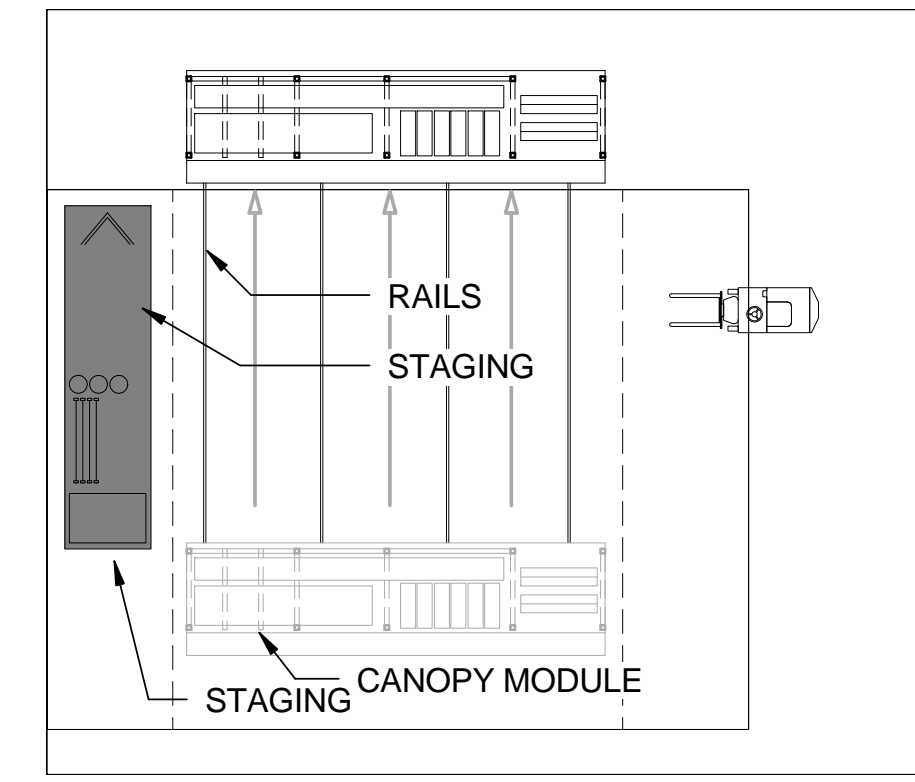
STEP 7: REMOVAL OF NORTH MODULE AFTER THE ACESORY UNITS ARE MOVED OFF SITE IT IS TIME TO REMOVE THE HOUSE MODULES. THE FIRST MODULE TO BE REMOVED IS THE NORTH MODULE. THE MODULE WILL BE LIFTED AND ROLLED BACK OUT TO THE EXPANDED SITE ON THE NORTH END OF THE LOT ON RAILS. ONCE ON THE NORTH END OF THE LOTS WHEELS AXELS AND HITCHES WILL BE REPLACED ONTO THE HOUSE AND IT WILL BE SET BACK ONTO THE GROUND TO BE PULLED AWAY BY A TRUCK.



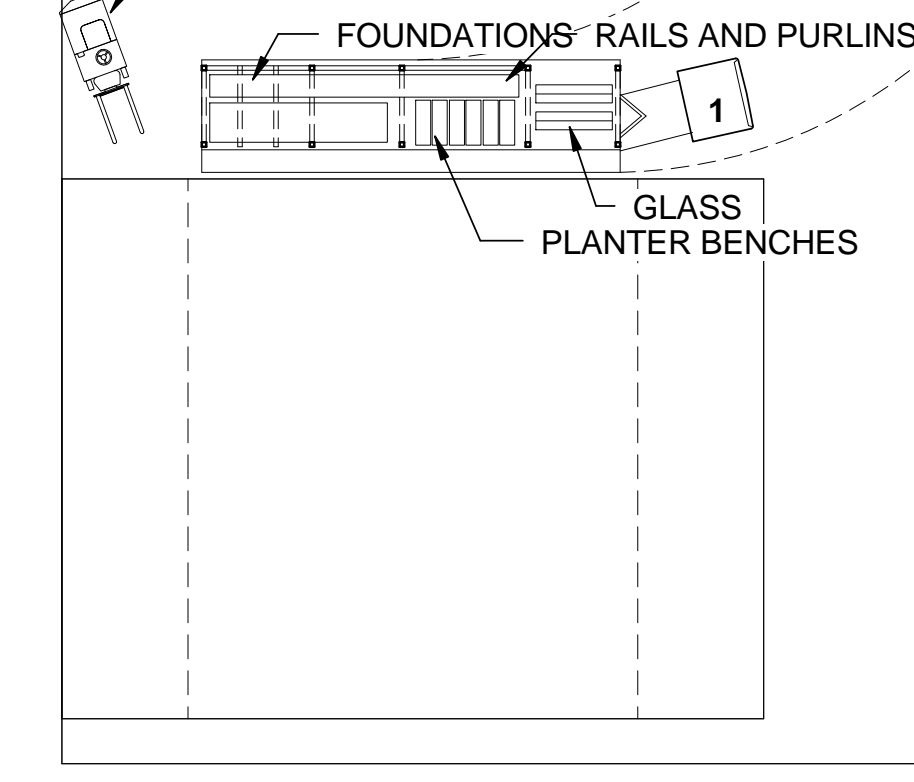
STEP 8: ROMOVAL OF SOUTH MODULE AFTER THE ACESORY UNITS ARE MOVED OFF SITE IT IS TIME TO REMOVE THE HOUSE MODULES. THE FIRST MODULE TO BE REMOVED IS THE NORTH MODULE. THE MODULE WILL BE LIFTED AND ROLLED BACK OUT TO THE EXPANDED SITE ON THE NORTH END OF THE LOT ON RAILS. ONCE ON THE NORTH END OF THE LOTS WHEELS AXELS AND HITCHES WILL BE REPLACED ONTO THE HOUSE AND IT WILL BE SET BACK ONTO THE GROUND TO BE PULLED AWAY BY A TRUCK.



STEP 9: TAKE DOWN OF SOLAR CANOPY BEFORE THE SOLAR CANOPY MODULE CAN BE REMOVED THE BEAMS THAT HOLD UP THE CANOPY NEED TO BE UNFOLDED AND RETURNED TO SHIPPING POSITION. ONCE THE MODULE HAS BEEN RETURNED TO SHIPPING POSITION IT CAN BE RELOADED WITH THE REMAINING ELEMENTS TO BE REMOVVED FROM THE SITE



STEP 10: REMOVAL OF SOLAR CANOPY AFTER THE ACESORY UNITS ARE MOVED OFF SITE IT IS TIME TO REMOVE THE HOUSE MODULES. THE FIRST MODULE TO BE REMOVED IS THE NORTH MODULE. THE MODULE WILL BE LIFTED AND ROLLED BACK OUT TO THE EXPANDED SITE ON THE NORTH END OF THE LOT ON RAILS. ONCE ON THE NORTH END OF THE LOTS WHEELS AXELS AND HITCHES WILL BE REPLACED ONTO THE HOUSE AND IT WILL BE SET BACK ONTO THE GROUND TO BE PULLED AWAY BY A TRUCK.



STEP 11: REMOVAL OF ACHORS AND FOUNDATIONS AFTER THE LAST MODULE HAS LEFT THE SITE ANCHORS ARE TO BE SAWED OFF OR DRIVEN INTO THE GROUND TO BE COVERED.



STEP 12: CLEANING OF SITE AFTER WORK HAS BEEN DONE ON ACHORS ANYTHING REMAINING ON THE SITE IS CLEANED AND/OR REMOVED FROM THE SITE LEAVING THE SITE IN ITS ORIGINAL CONDITION.



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MARK	DATE	DESCRIPTION
05	8.22.2013	100% DOENREL AS-BUILTS
04	4.05.2013	100% DOENREL CD RE-SUBMISSION
03	2.14.2013	100% DOENREL CD SUBMISSION
02	11.20.2012	80% DOENREL DD RE-SUBMISSION
01	10.11.2012	80% DOENREL DD SUBMISSION

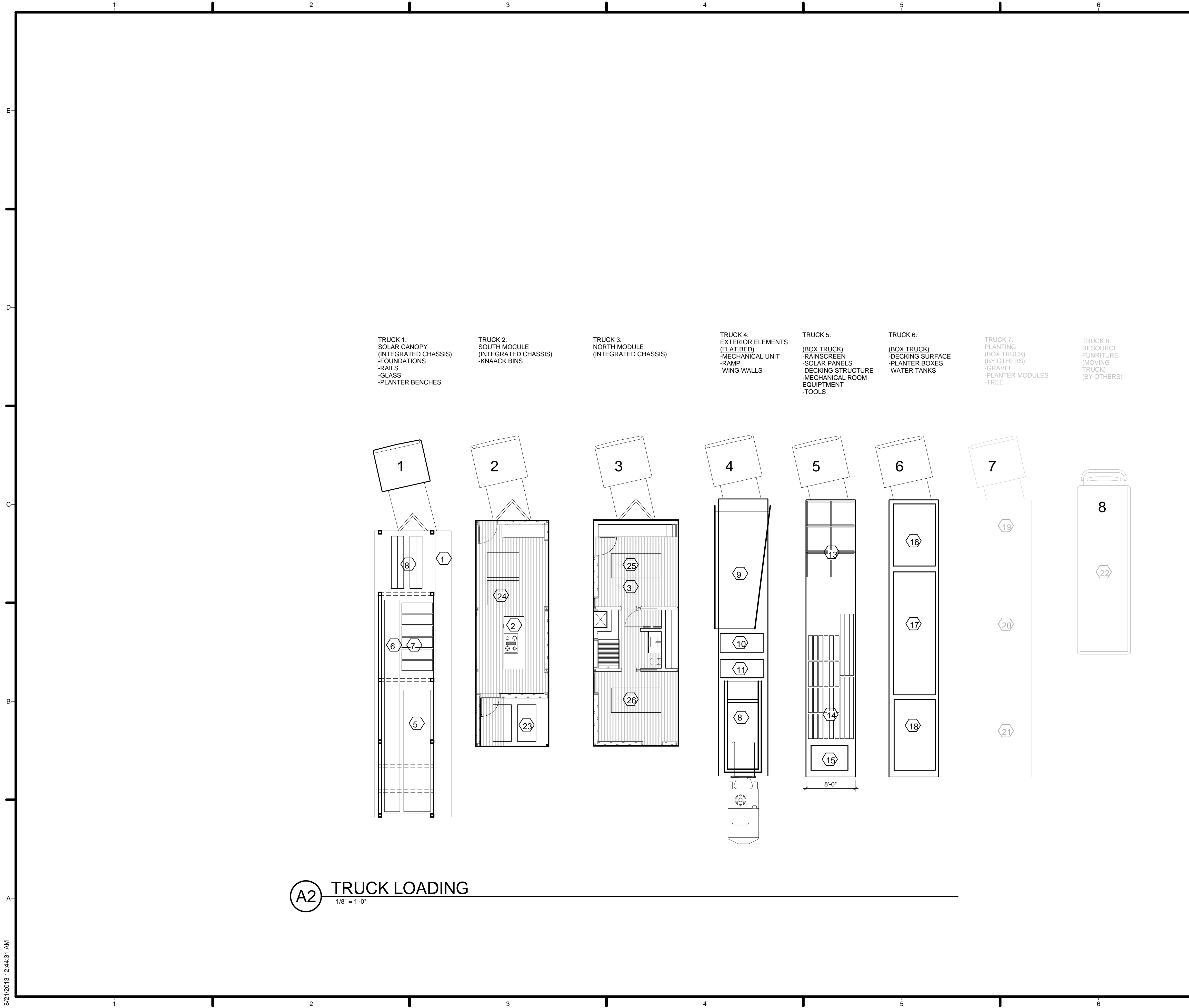
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SHEET TITLE
 DEPARTURE SEQUENCE PLAN

O-301

A1 DEPARTURE SEQUENCE
 3/64" = 1'-0"

8/21/2013 12:44:04 AM



A2 TRUCK LOADING
1/8" = 1'-0"

GENERAL SHEET NOTES

1. MODULES SHOW WITHOUT ROOFS TO SHOW ORIENTATION ON TRUCK
2. PLANTS SHIPPED BY OTHERS AND ARRIVAL IS COORDINATED WITH COMPETITION SCHEDULE.
3. TOOLS WILL BE STORED ON SITE IN SHED UNIT

REFERENCE KEYNOTES

SHEET KEYNOTES

1. SOLAR CANOPY W/ PLANTER
2. SOUTH MODULE
3. NORTH MODULE
4. FOOTINGS
5. FOUNDATIONS/SURVEYING EQUIPMENT
6. RAILS/PURLINS/FLASHING CAPS
7. PLANTER BENCHES
8. MECHANICAL UNIT
9. RAMP
10. EAST WING WALL
11. WEST WING WALL
13. DECKING STRUCTURE
14. FIBER CEMENT RAIN/SHADESCREENS
15. SOLAR PANELS
16. DECKING SURFACE
17. PLANTER BOXES
18. WATER TANKS
19. MULCH OR ROCKS
20. PLANTS
21. TREE
22. INTERIOR ELMENTS
23. KNAACK BINS
24. SOFFIT PIECES
25. SCAFFLDING
26. STUFF THAT GOES IN THE HOUSE



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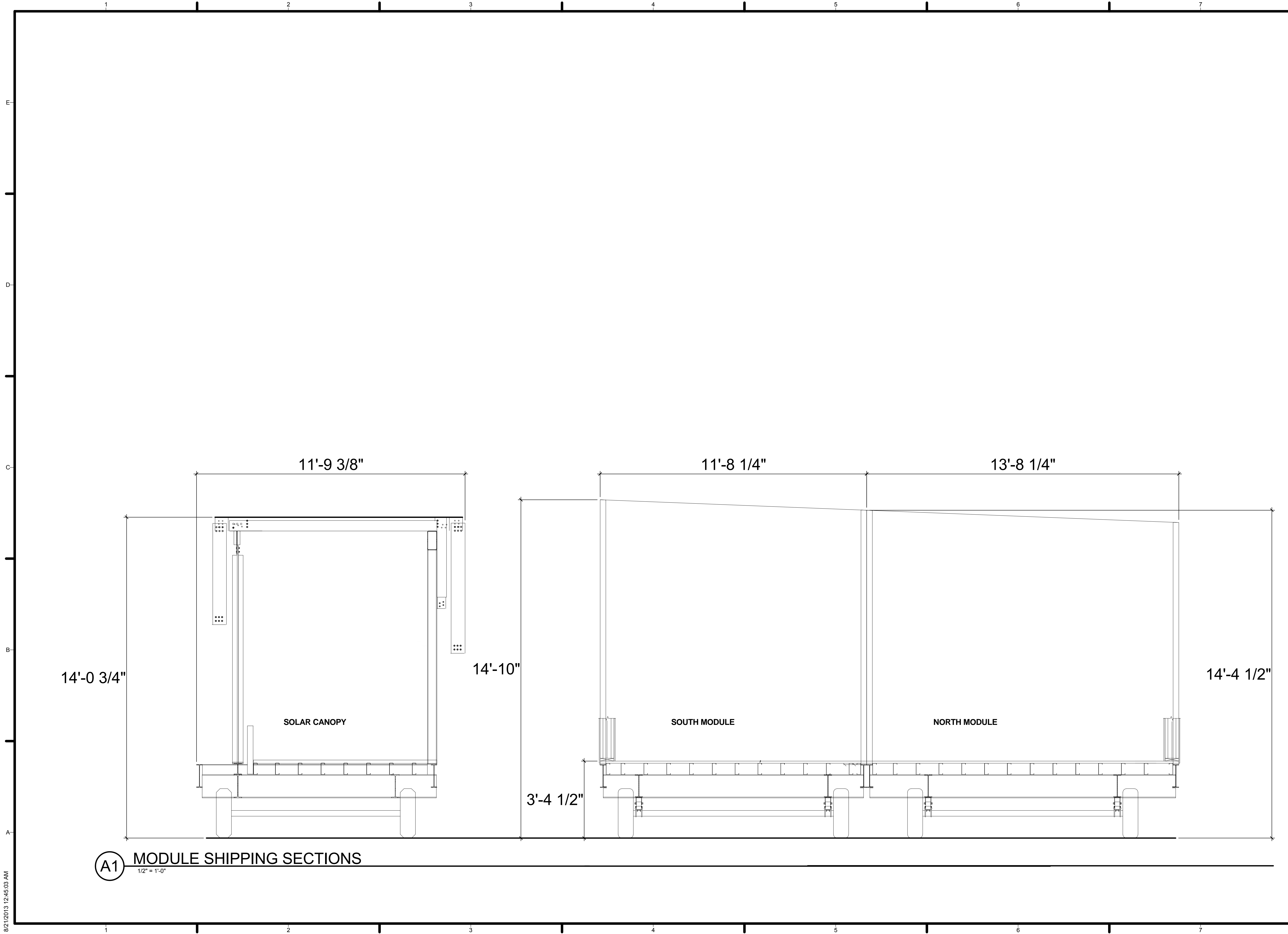


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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
TRUCK LOADING DIAGRAM

O-601



(A1) MODULE SHIPPING SECTIONS
1/2" = 1'-0"



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01	10.11.2012	80% DOENREL DD SUBMISSION

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SHEET TITLE
MODULE SHIPPING

O-602

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