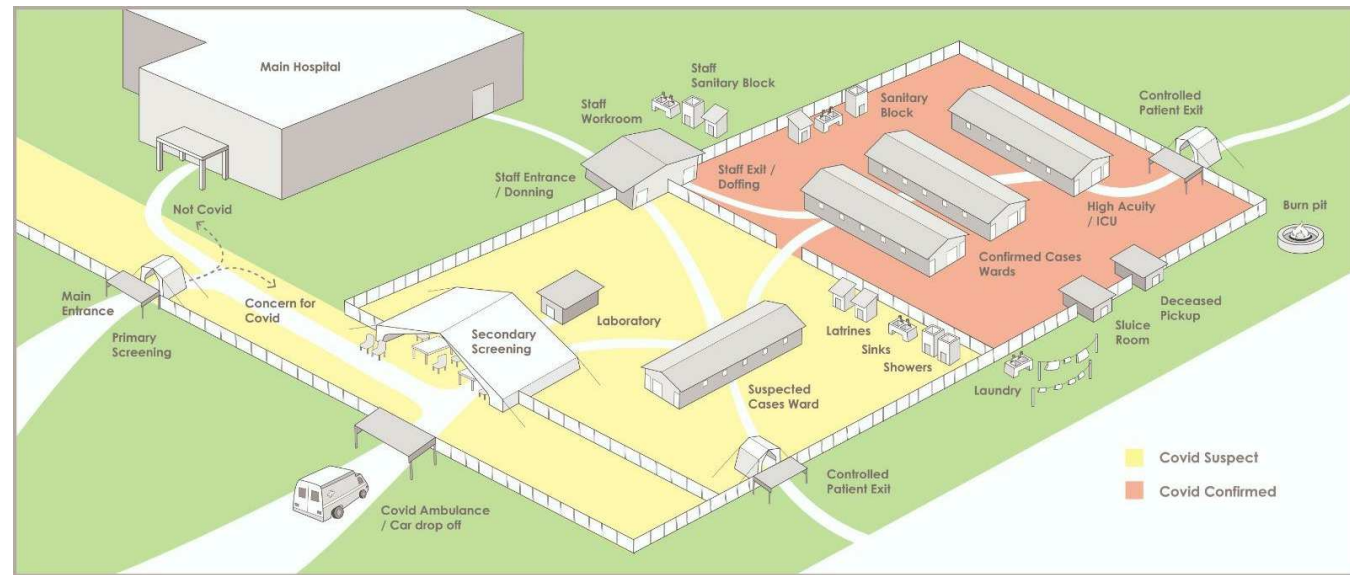




INFRASTRUCTURE RESPONSE TO COVID-19

Covid-19 Treatment Center Prototype Construction Documents

COVID-19 TREATMENT CENTER PROTOTYPE



USING THIS DOCUMENT

This document is intended to be used by medical providers who need to establish temporary facilities to provide treatment to patients with Covid-19 and their building contractors who will construct the facility. The document includes layout and construction plans to allow a contractor to construct a simple structure or group of structures to provide treatment. While the drawings assume the center will be located on or adjacent to an existing hospital campus, the center can also be constructed as a stand-alone facility on a plot of land with suitable utilities and access. Each treatment center should be provided with adequate sanitary facilities and power.

The flow chart below provides guidance for providers to determine what type of facility is needed and to direct users to the relevant sections of this document.

SHEET ORGANIZATION

The sheets in this document are organized into the following sections:

Campus Plans: B-01 through B-02

- Testing available campus
- No testing available campus

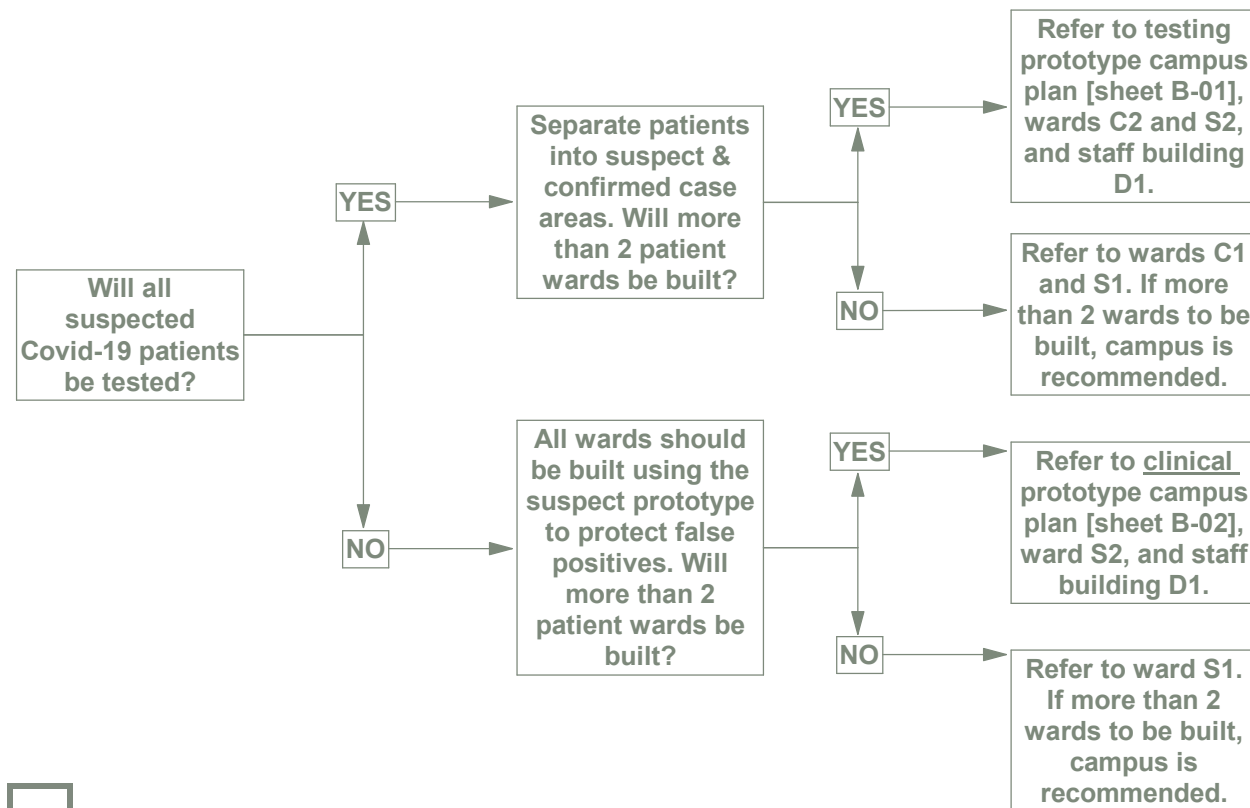
Building Plans: D-01 through S-05

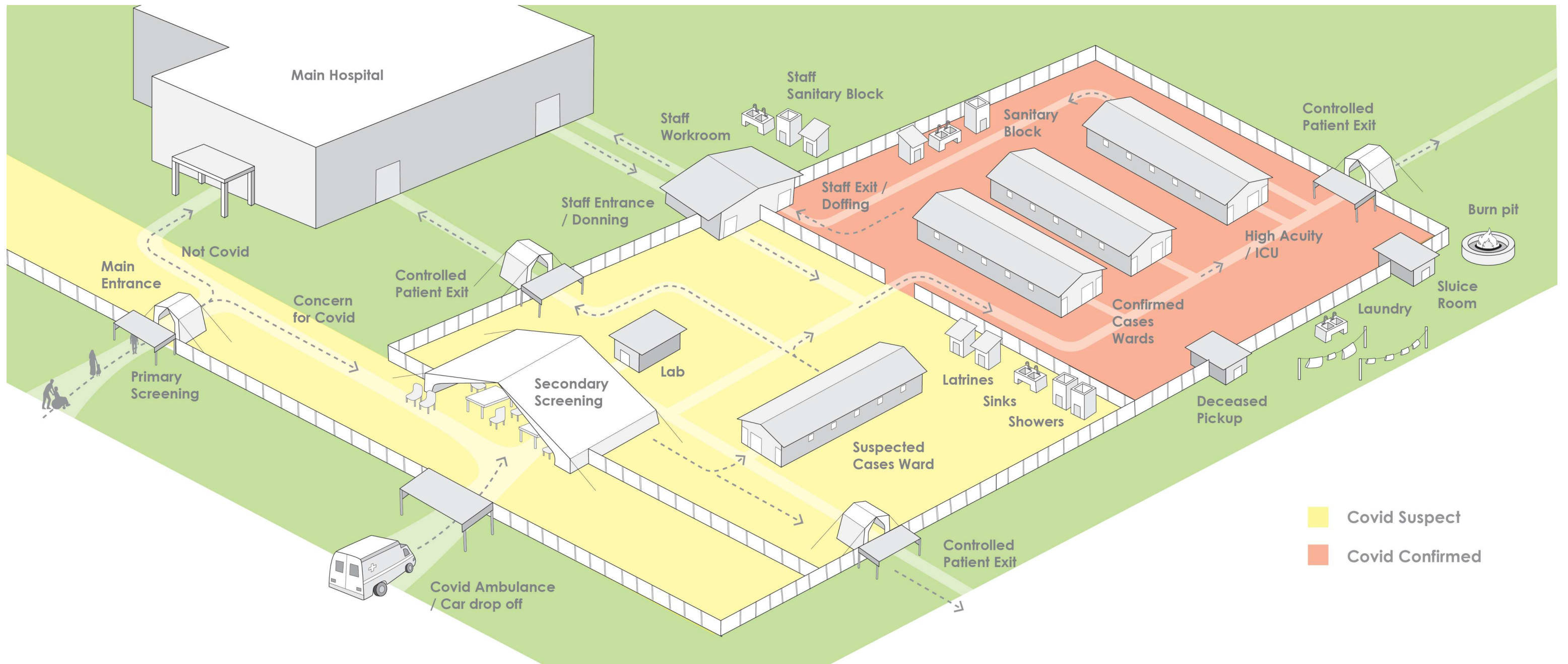
- Staff building: D-01 through D-05
- Ward C1 [Confirmed Ward 1]: C1-01 through C1-05
- Ward C2 [Confirmed Ward 2]: C2-01 through C2-05
- Ward S1 [Suspect Ward 1]: S1-01 through S1-05
- Ward S2 [Suspect Ward 2]: S2-01 through S2-05

Building Details: G-01 through G-22

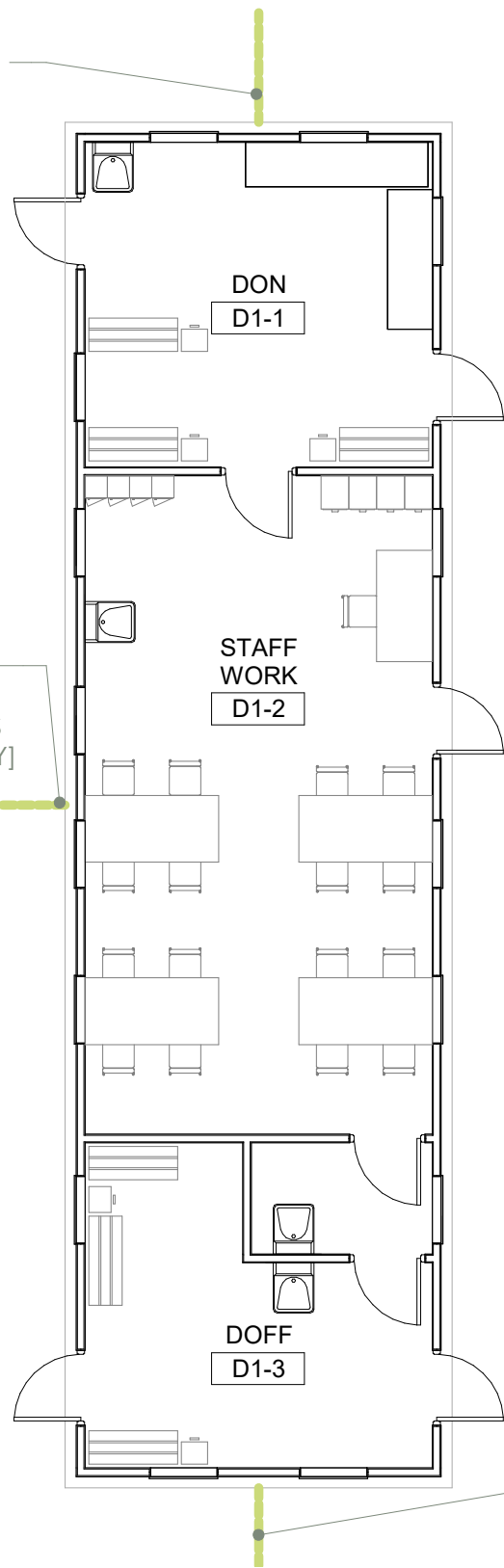
- Wall Details: G-01
- Roof Structure: G-10 through G-11A
- Electrical Details: G-21 through G-22
- Plumbing Details: G-31

Sheet List	
Sheet Number	Sheet Name
B-01	CAMPUS PLAN - TESTING
B-02	CAMPUS PLAN - NO TESTING
D1-01	STAFF BUILDING OVERVIEW
D1-02	STAFF BUILDING CONSTRUCTION PLANS
D1-03	STAFF BUILDING SECTIONS
D1-04	STAFF BUILDING ELEVATIONS
D1-05	STAFF BUILDING ELECTRICAL DRAWINGS
C1-01	WARD C1 OVERVIEW
C1-02	WARD C1 CONSTRUCTION PLANS
C1-03	WARD C1 BUILDING SECTIONS
C1-04	WARD C1 ELEVATIONS
C1-05	WARD C1 ELECTRICAL DRAWINGS
C2-01	WARD C2 OVERVIEW
C2-02	WARD C2 CONSTRUCTION PLANS
C2-03	WARD C2 BUILDING SECTIONS
C2-04	WARD C2 ELEVATIONS
C2-05	WARD C2 ELECTRICAL DRAWINGS
S1-01	WARD S1 OVERVIEW
S1-02	WARD S1 CONSTRUCTION PLANS
S1-03	WARD S1 SECTION
S1-04	WARD S1 ELEVATIONS
S1-05	WARD S1 ELECTRICAL DRAWINGS
S2-01	WARD S2 OVERVIEW
S2-02	WARD S2 CONSTRUCTION PLANS
S2-03	WARD S2 BUILDING SECTIONS
S2-04	WARD S2 ELEVATIONS
S2-05	WARD S2 ELECTRICAL DRAWINGS
G-01	WALL SECTIONS
G-10	STEEL TRUSS DETAILS
G-10A	STEEL TRUSS CUT DIAGRAM
G-11	WOOD TRUSS DETAILS
G-11A	WOOD TRUSS CUT DIAGRAM
G-21	EXAMPLE OF ELECTRICAL DISTRIBUTION PLAN
G-22	ELECTRICAL PANEL SCHEDULE & DETAILS
G-31	SINK OPTION DETAILS





TREATMENT CENTER PERIMETER FENCE



NOTE: INDICATES DOOR TRAVEL DIRECTION. SINGLE DIRECTION DOORS SHOULD BE LOCKED TO PREVENT BACKWARDS PASSAGE.

FENCE BETWEEN SUSPECT AND CONFIRMED AREAS [TESTING SITES ONLY]

TREATMENT CENTER PERIMETER FENCE

1 D1 - LAYOUT
SCALE 1:100

STAFF BUILDING 1 DESCRIPTION

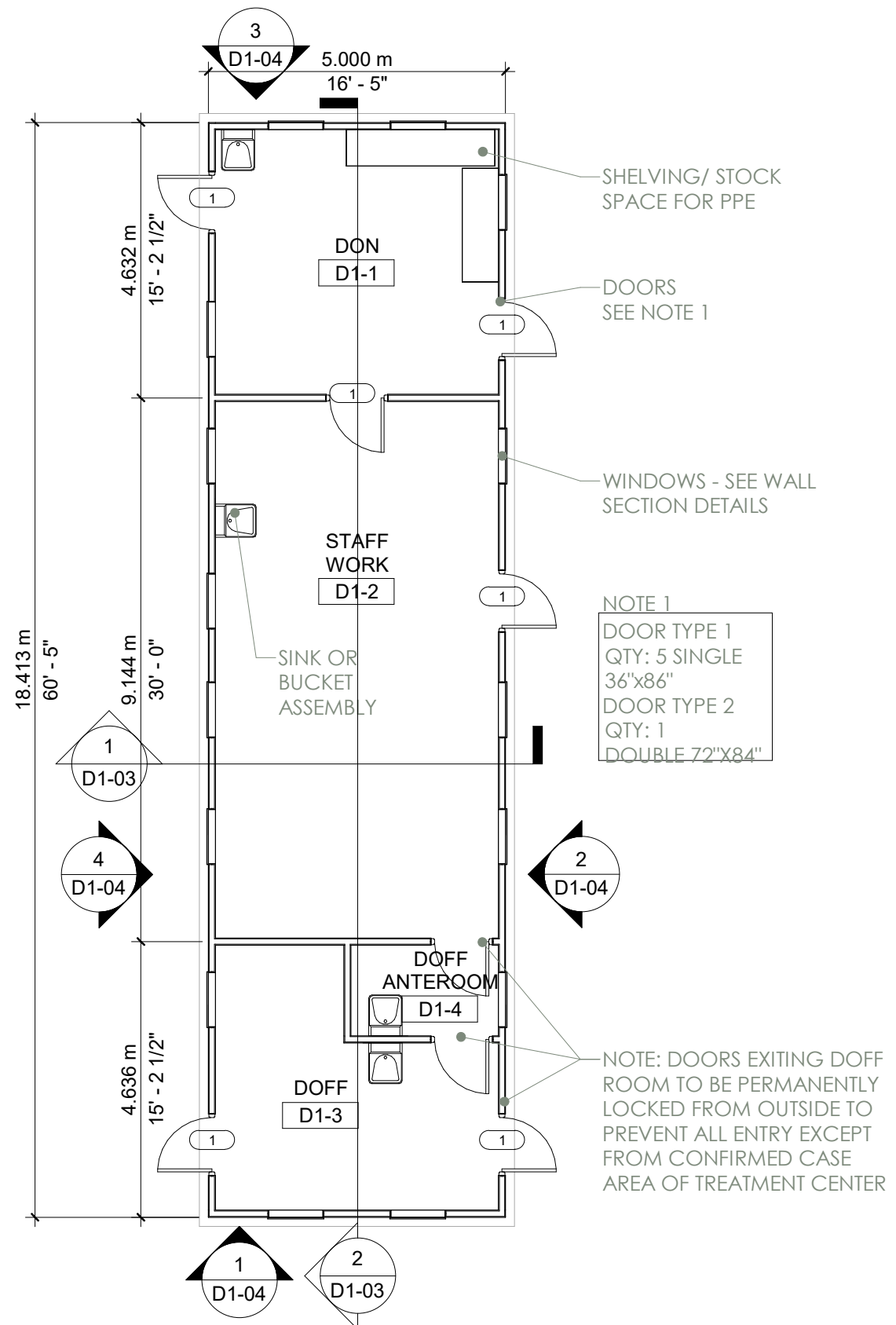
STAFF BUILDING 1 IS AN INTEGRATED WORKROOM, DON, AND DOFF BUILDING. THIS MODEL SHOULD BE USED FOR AREAS WHERE MULTIPLE COVID TREATMENT WARDS ARE CONSTRUCTED WITHIN A COVID TREATMENT CENTER AND A CENTRAL DON & DOFF SPACE MAKES SENSE. THIS PAIRS WITH WARDS C2 AND S2.

IN ORDER TO FACILITATE UNIDIRECTIONAL FLOW, THE BUILDING SHOULD BE CONSTRUCTED ON THE OUTSIDE FENCE LINE AND SPANNING BETWEEN THE SUSPECT AND CONFIRMED ZONES. IT CAN BE MIRRORED TO ACCOMMODATE THIS FLOW. THE STAFF WORKROOM EXIT SHOULD BE TO THE OUTSIDE OF THE CAMPUS.

A STAFF SANITARY BLOCK [INCLUDING SHOWER, TOILET, & SINK] SHOULD BE CONSTRUCTED OR AVAILABE NEAR THIS BUILDING OUTSIDE THE COVID AREAS.

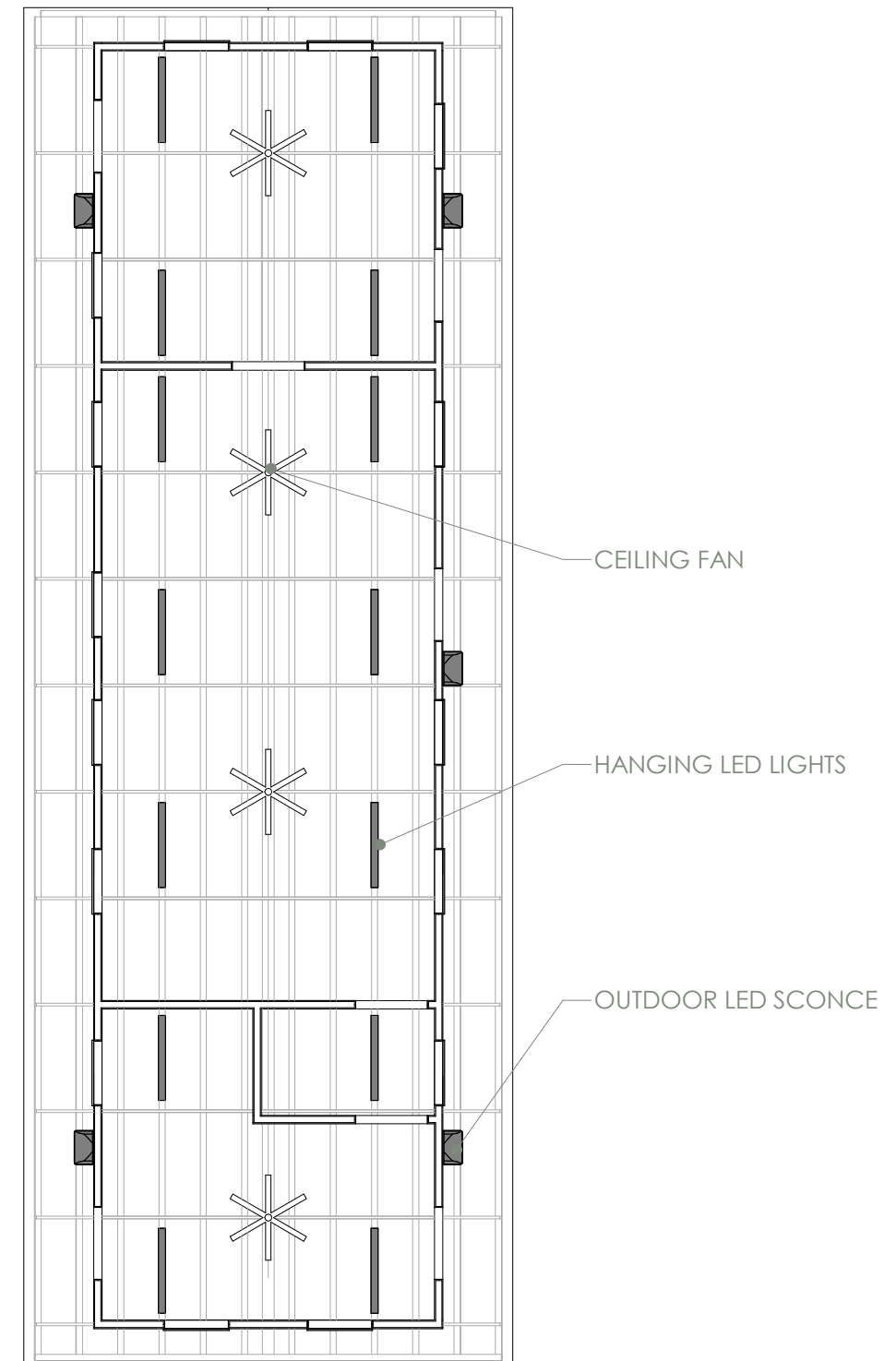


2 D1 AXON
SCALE



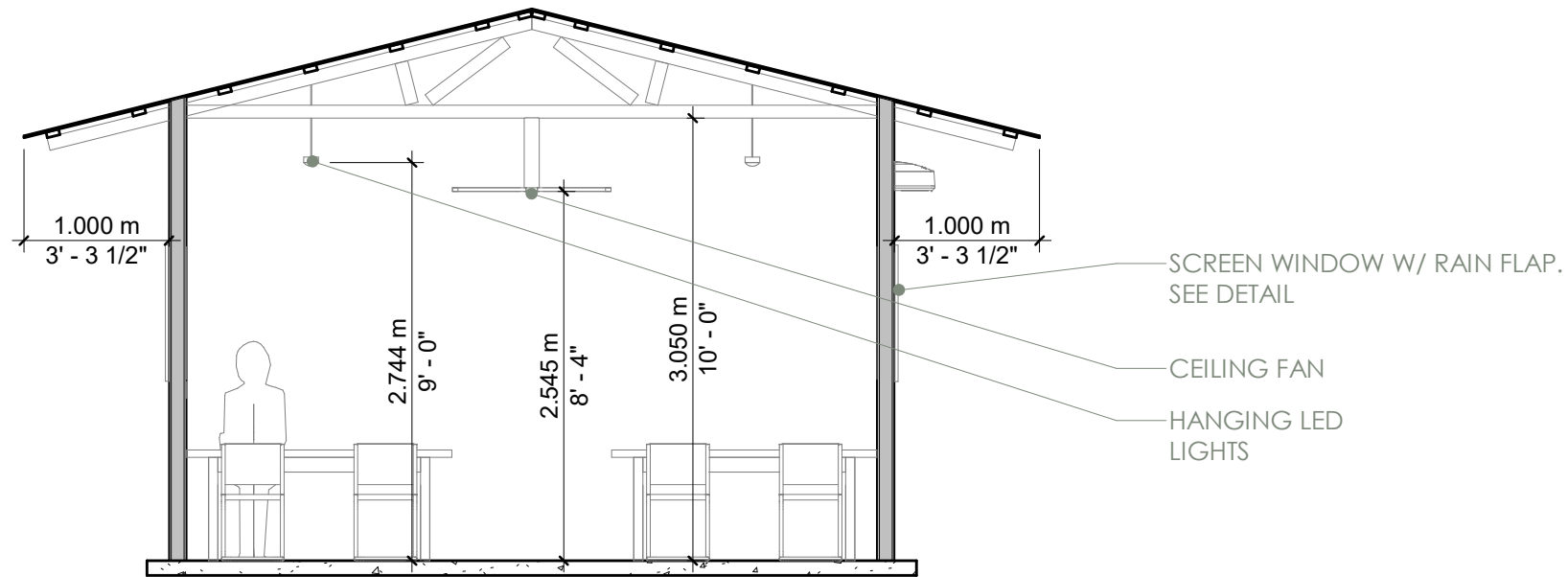
1 D1 - CONSTRUCTION PLAN

SCALE 1:100



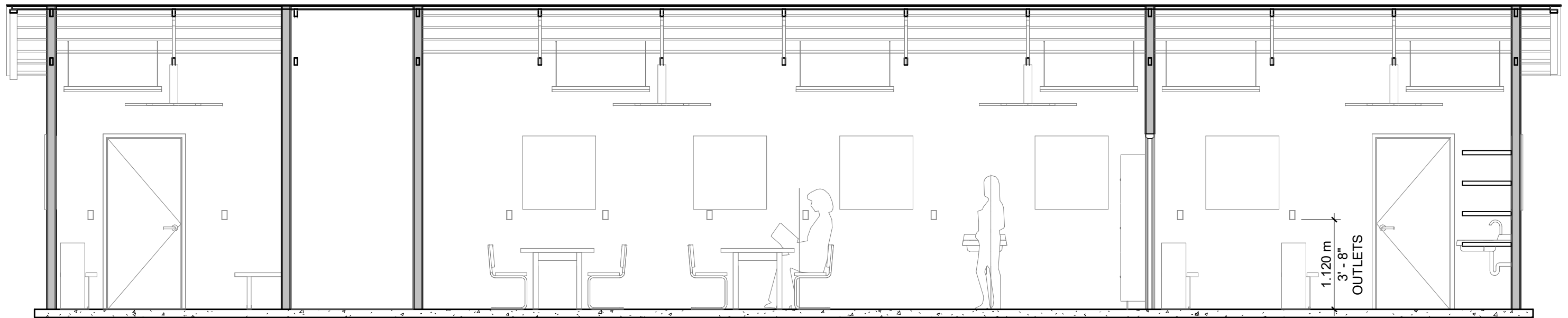
2 D1 - CEILING PLAN

SCALE 1:100



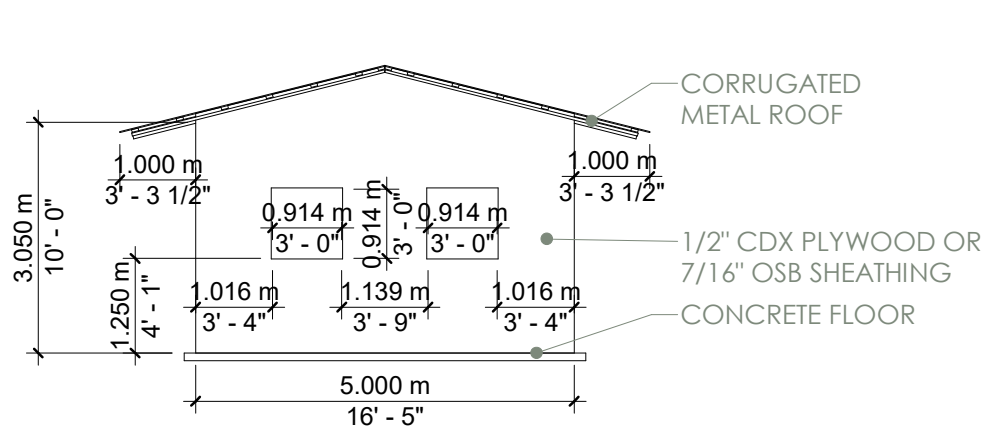
1 D1 SHORT SECTION

SCALE 1: 50

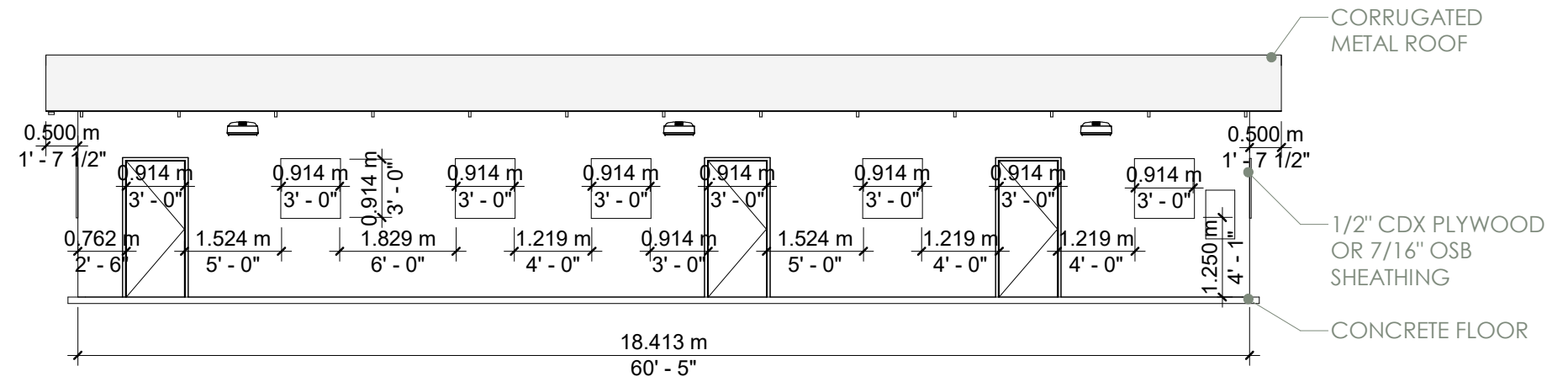


2 D1 LONG SECTION

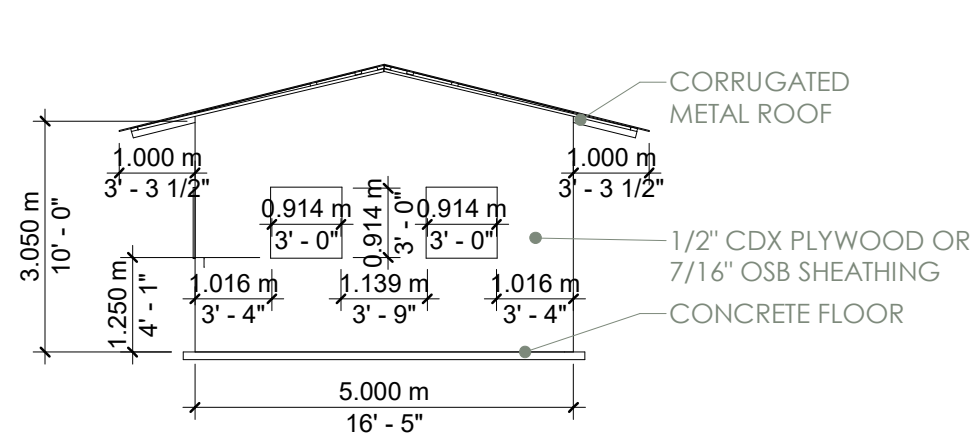
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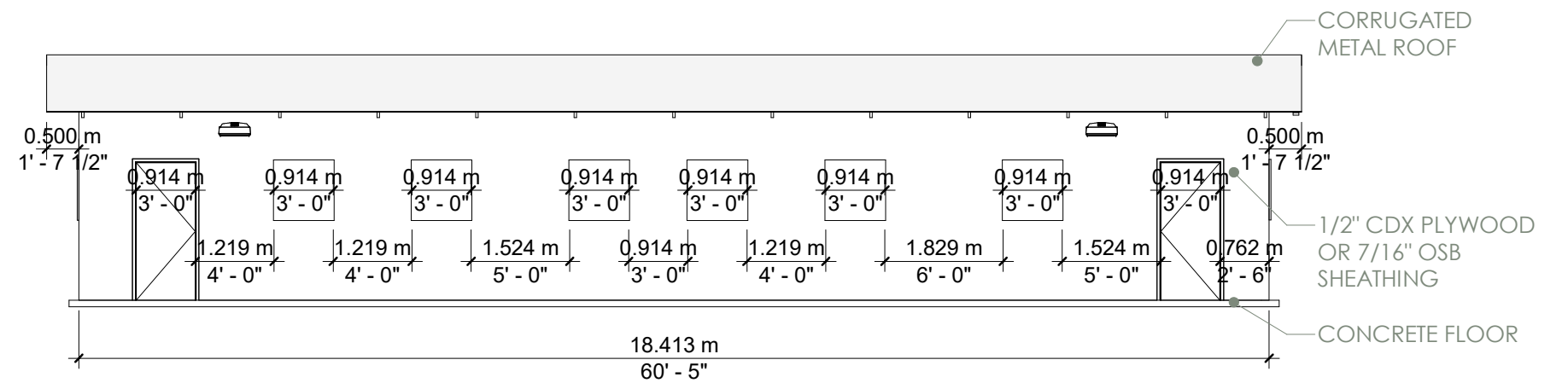
1 D1 NORTH
SCALE 1:100



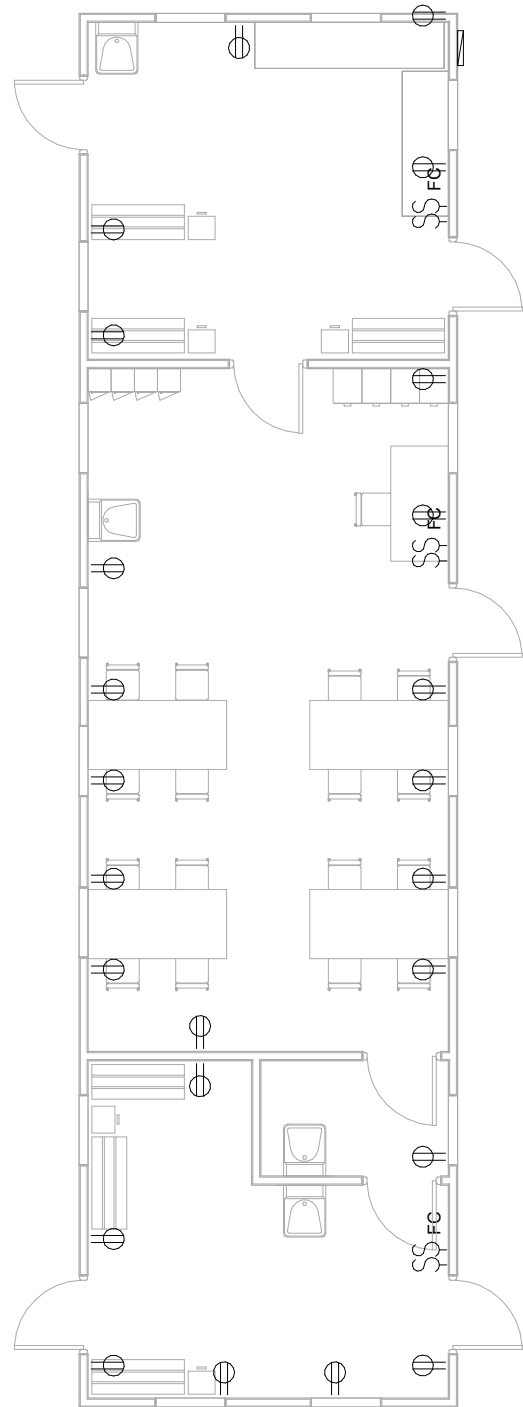
2 D1 EAST
SCALE 1:100



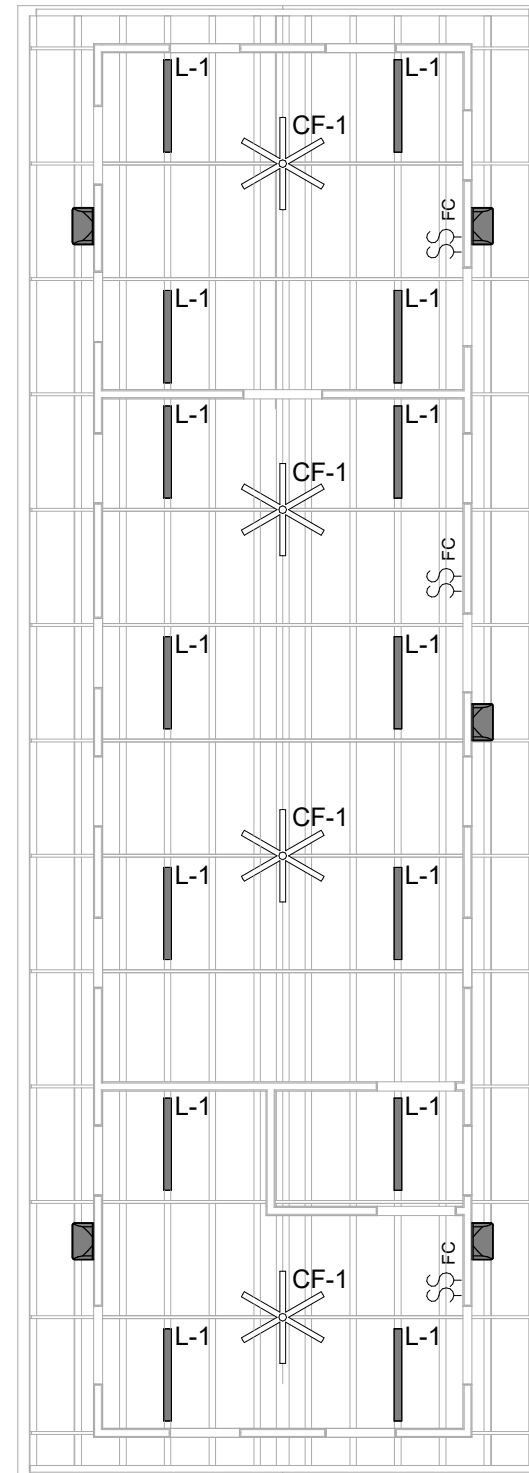
3 D1 SOUTH
SCALE 1:100



4 D1 WEST
SCALE 1:100



⊕	RECEPTACLE MOUNTED 1.12M AFF
⌞	LIGHT SWITCH MOUNTED 1.12M AFF
⌞ _{FC}	FAN CONTROL MOUNTED 1.12M AFF
L-1	HANGING LED LIGHT
CF-1	VARIABLE SPEED CEILING FAN
WS-1	LED WEATHERPROOF WALL SCNCE
ELECTRICAL LEGEND	

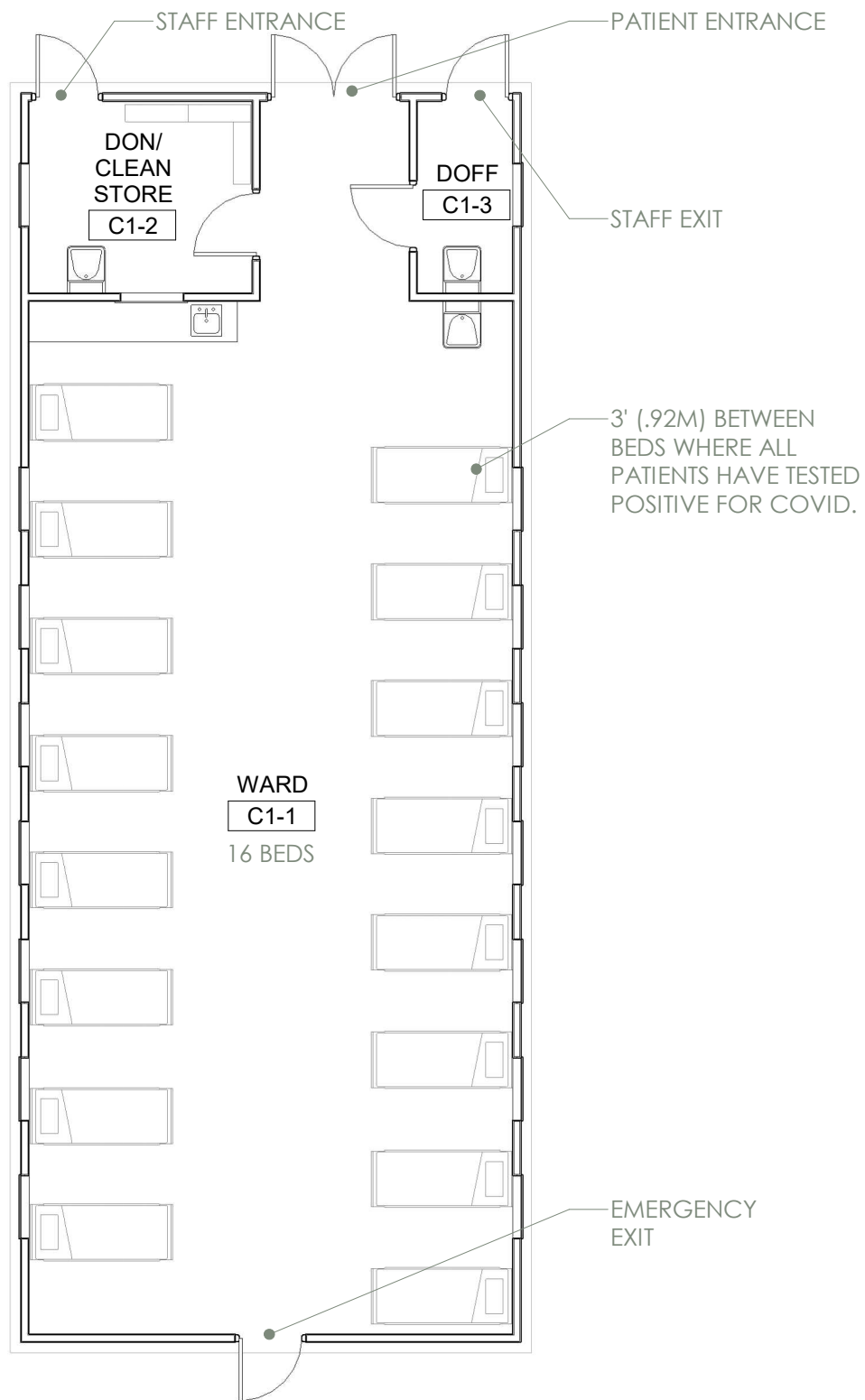


1 D1 - POWER PLAN

SCALE 1:100

2 D1 LIGHTING PLAN

SCALE 1:100



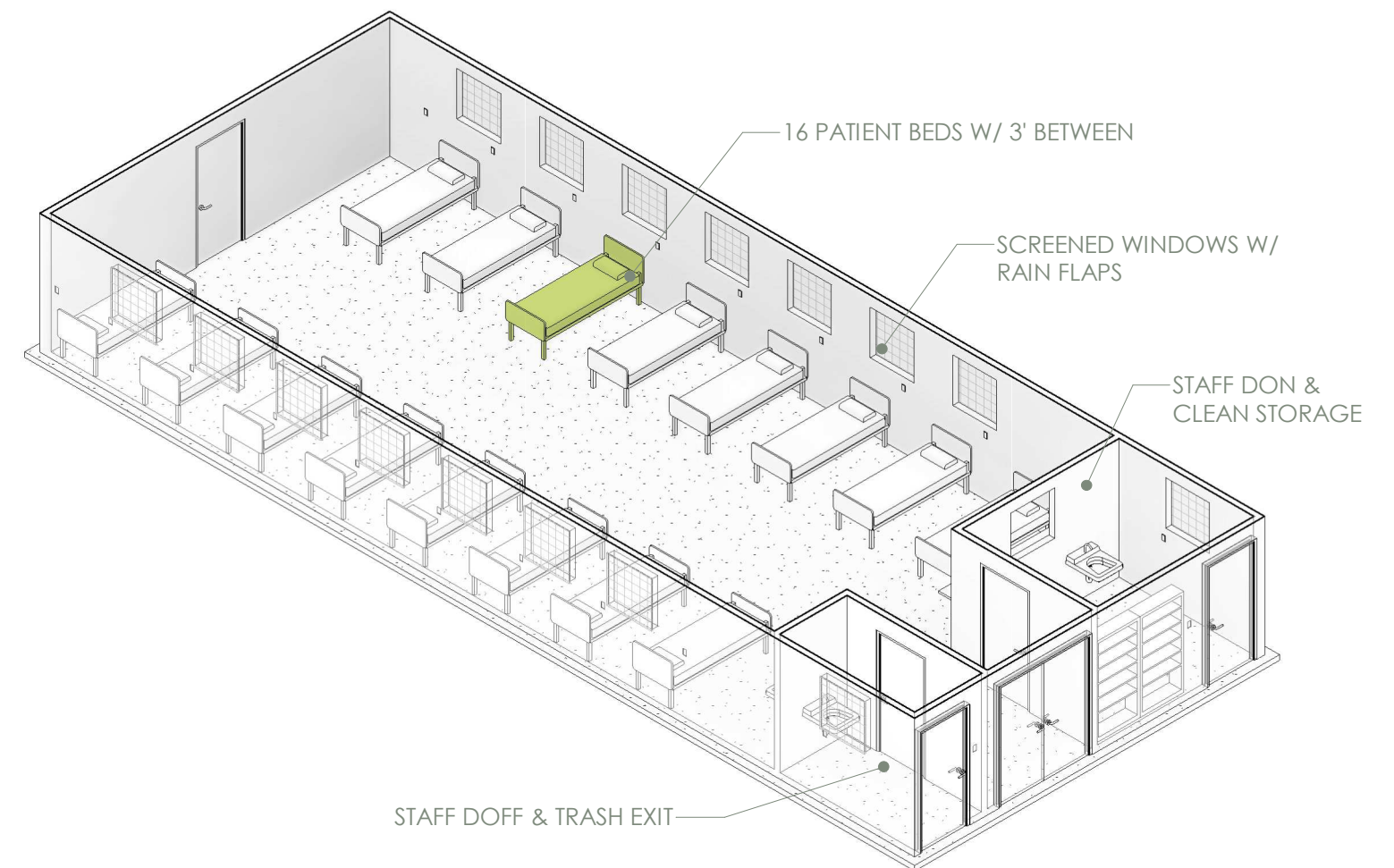
CONFIRMED WARD 1 DESCRIPTION

CONFIRMED WARDS SHOULD BE USED FOR THE FOLLOWING PATIENTS:

- PATIENTS WHO HAVE TESTED POSITIVE FOR COVID AND WHO REQUIRE HOSPITALIZATION

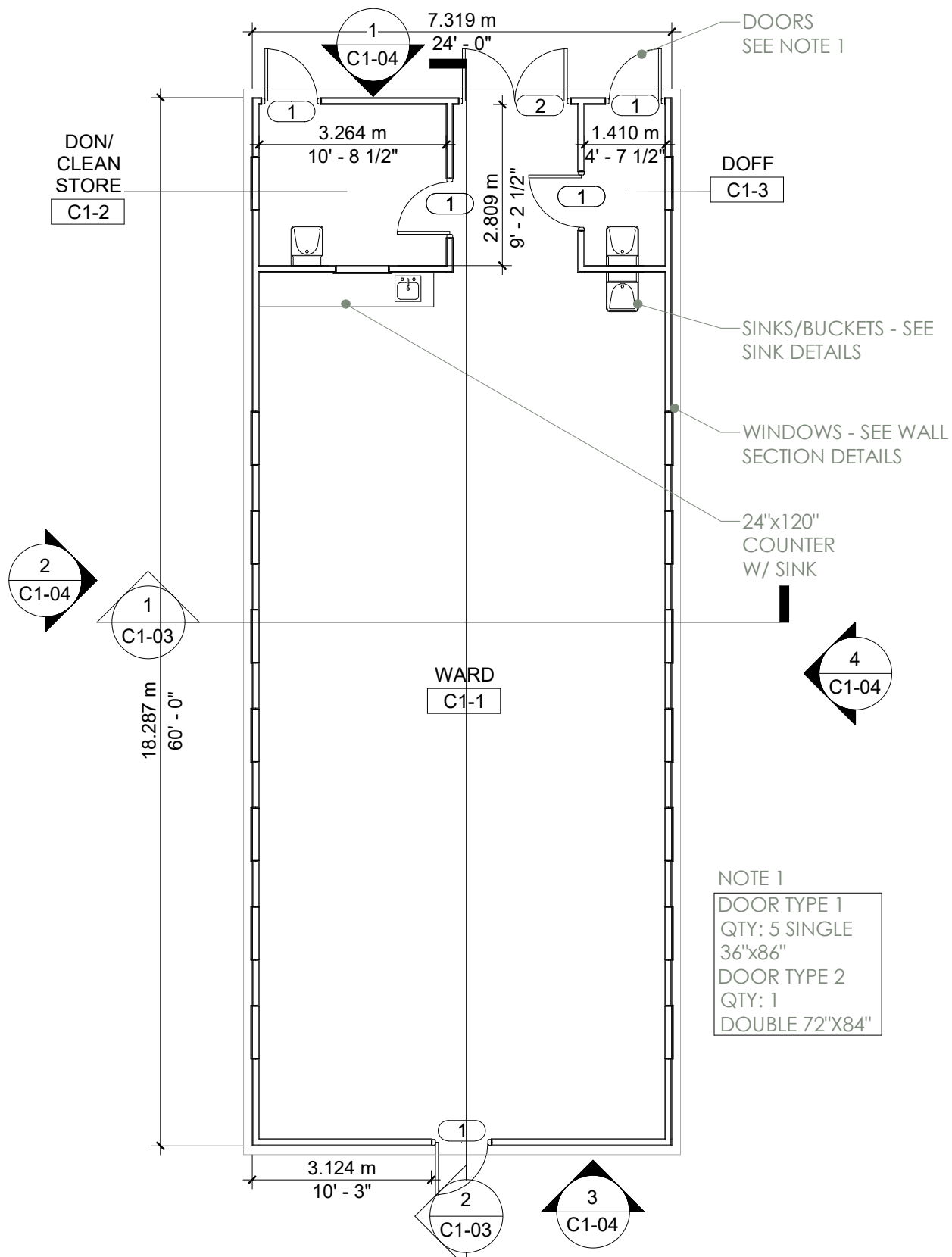
CONFIRMED WARDS ARE DISTINGUISHED BY NARROWER BED SPACING AND NO DIVIDER PANELS AS THERE IS NOT CONCERN ABOUT NOSOCOMIAL SPREAD IN AREAS WHERE ALL PATIENTS HAVE TESTED POSITIVE FOR COVID.

CONFIRMED WARD 1 INCLUDES STAFF DON & DOFF ROOMS. THIS IS RECOMMENDED ONLY IN AREAS WHERE ONE OR TWO WARDS ARE CONSTRUCTED. FOR FACILITIES IN WHICH MORE THAN TWO WARDS ARE CONSTRUCTED, REFER TO CONFIRMED WARD 2, WHICH IS DESIGNED TO BE ACCOMPANIED BY CENTRAL DON & DOFF SPACES.

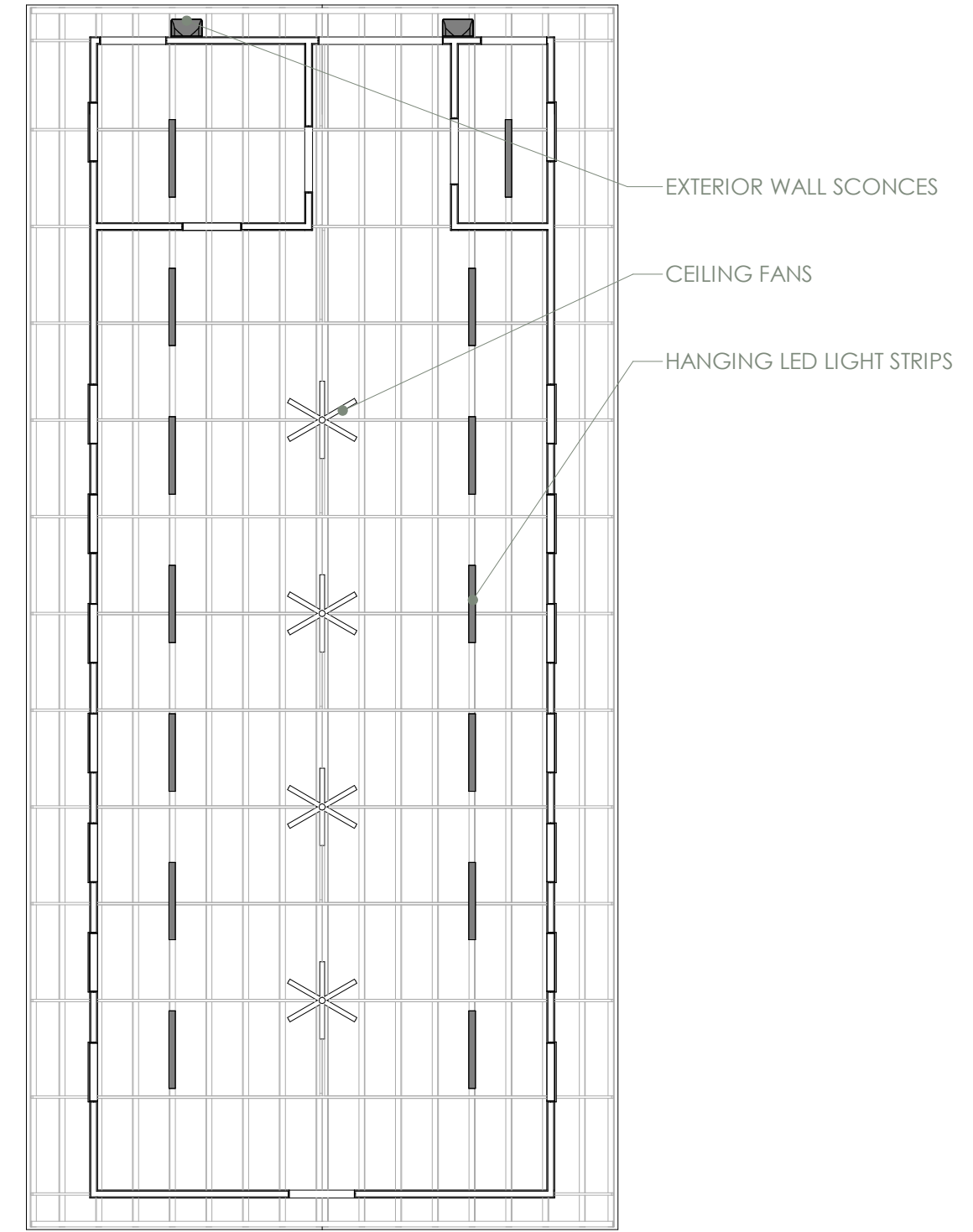


1 C1 - LAYOUT
SCALE 1:100

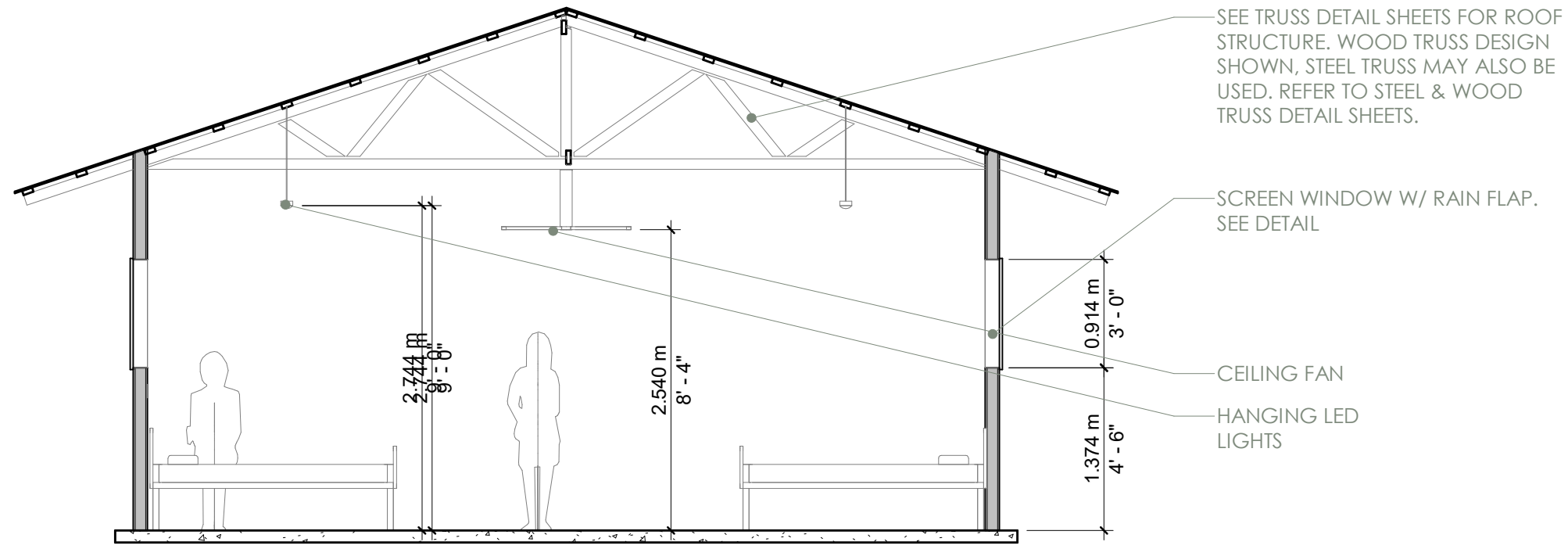
2 C1 WARD AXON
SCALE



1 C1 - CONSTRUCTION PLAN
SCALE 1:100

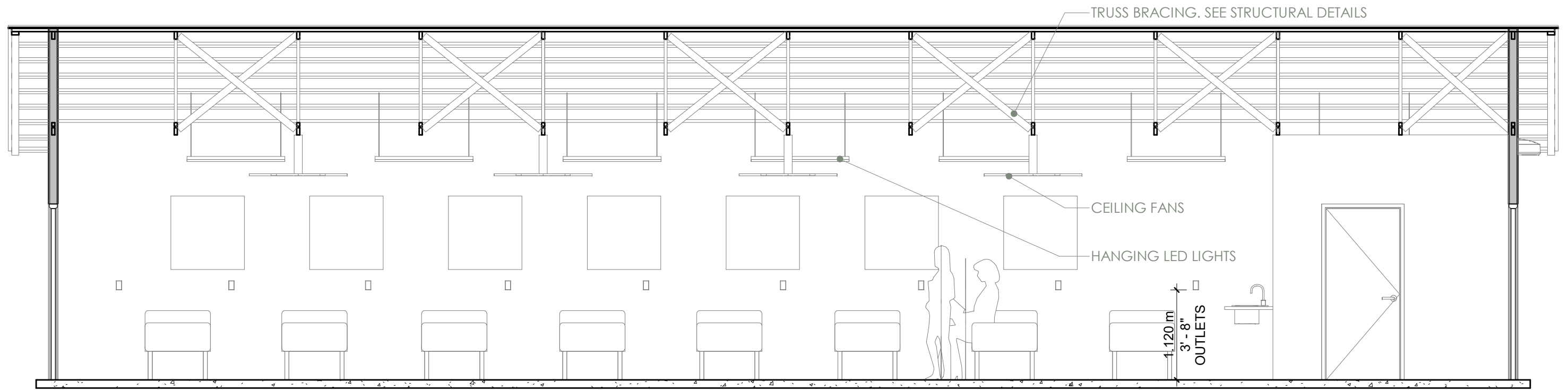


2 C1 WARD CEILING PLAN
SCALE 1:100



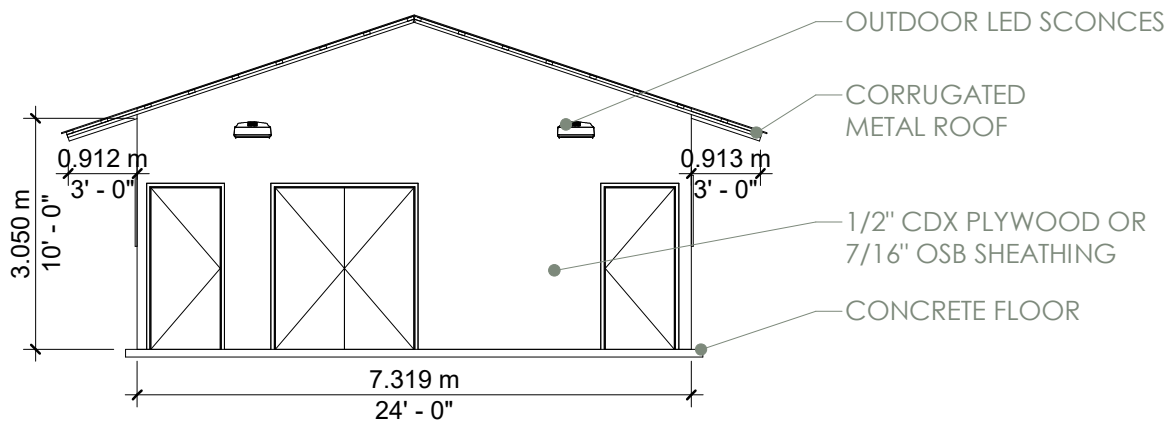
1 C1 SHORT SECTION

SCALE 1: 50

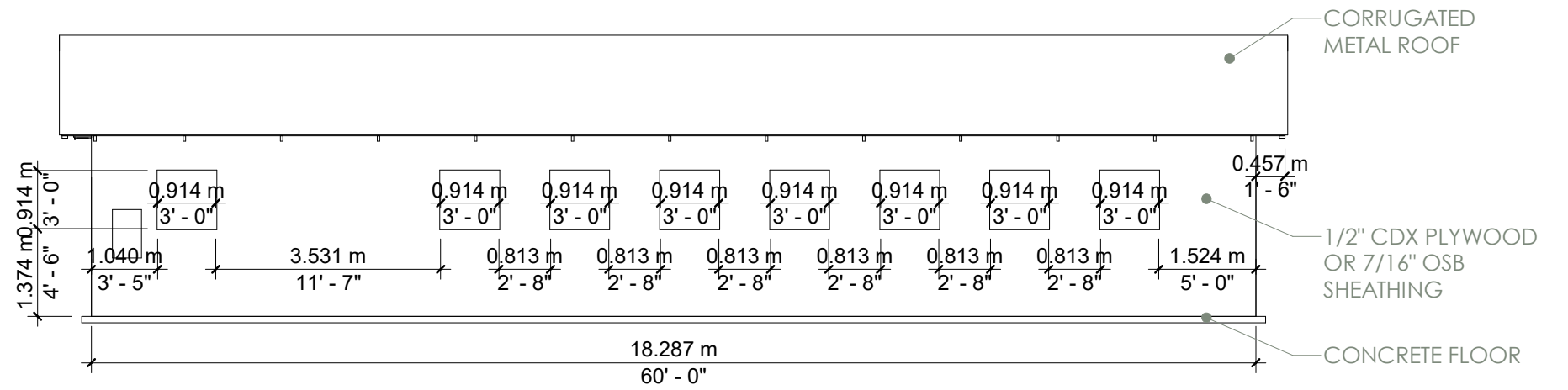


2 C1 LONG SECTION

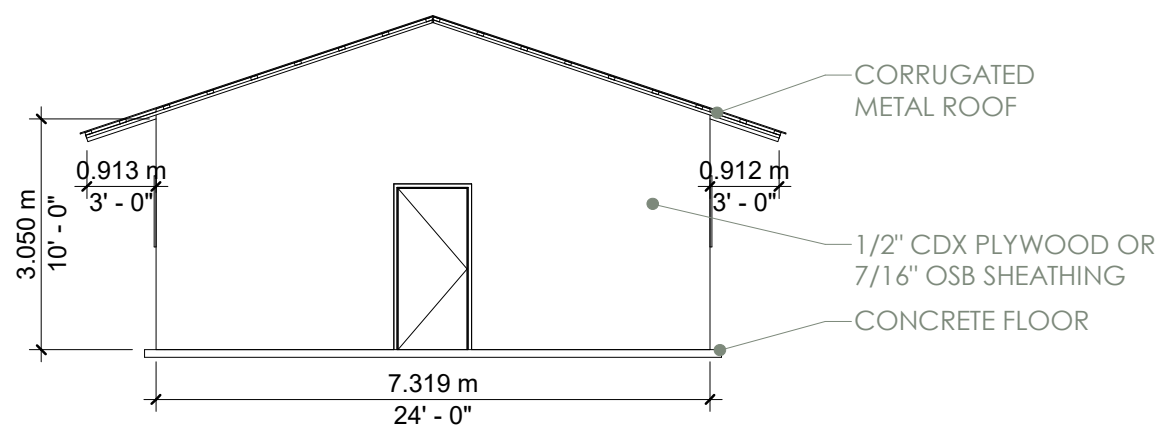
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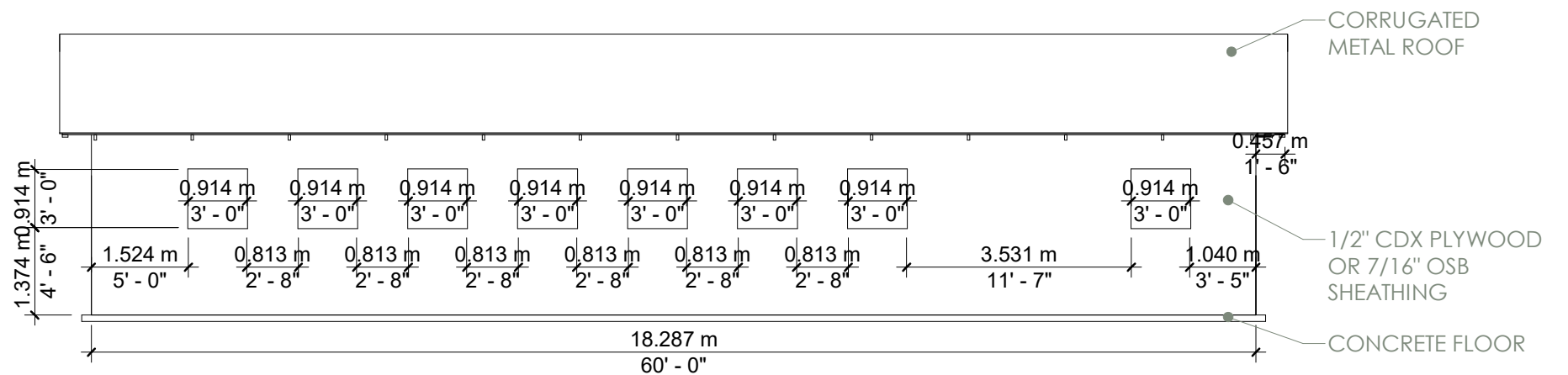
1 C1 WARD NORTH
SCALE 1:100



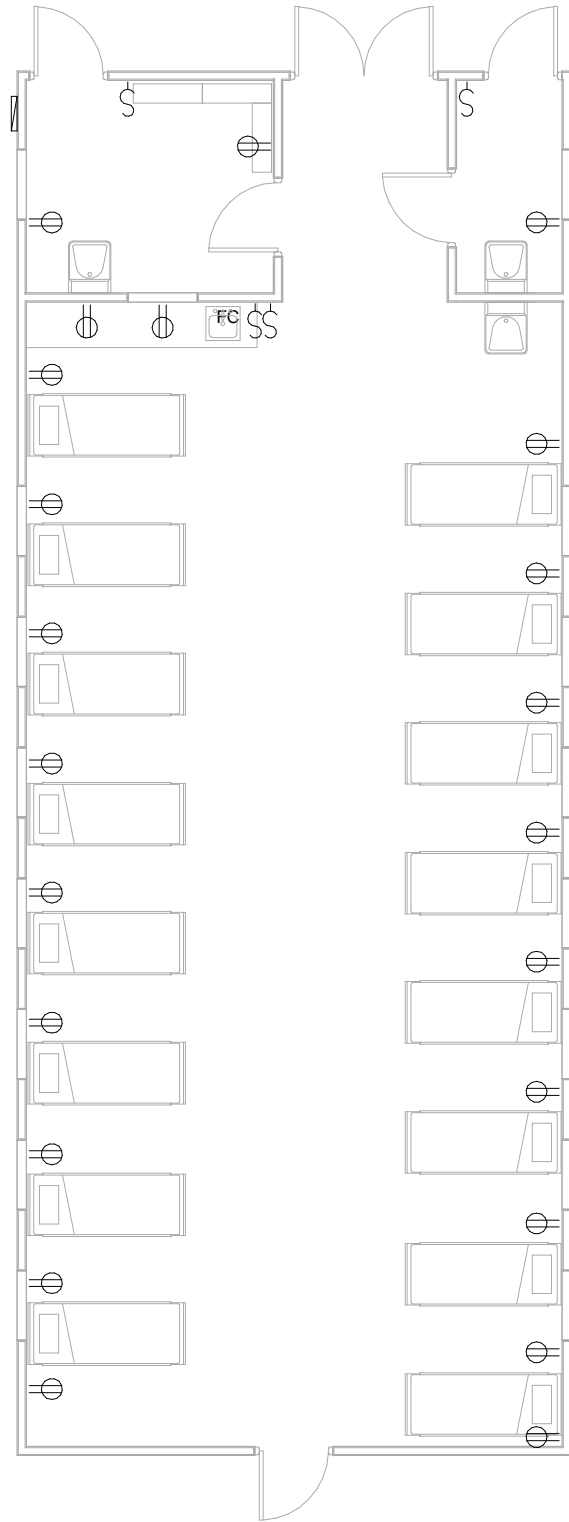
2 C1 WARD WEST
SCALE 1:100



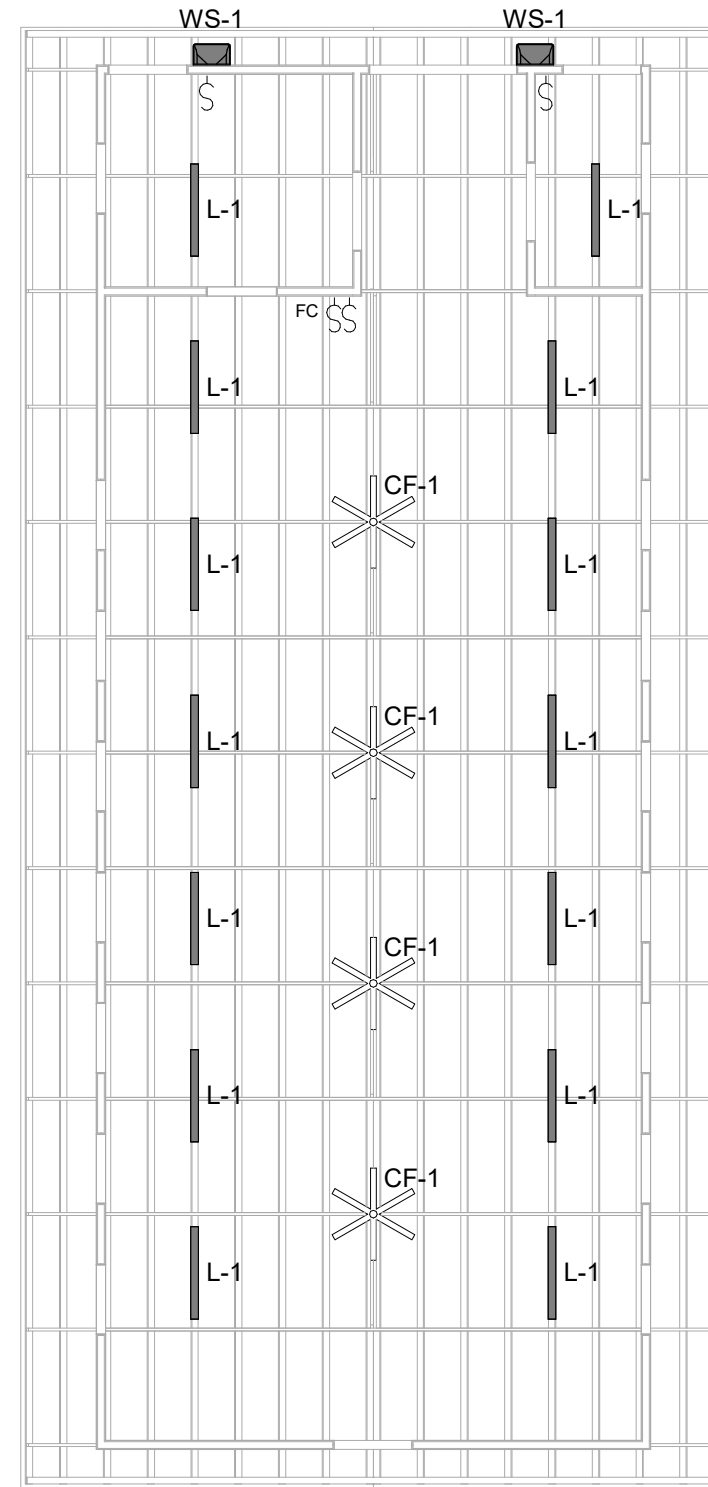
3 C1 WARD SOUTH
SCALE 1:100



4 C1 WARD EAST
SCALE 1:100

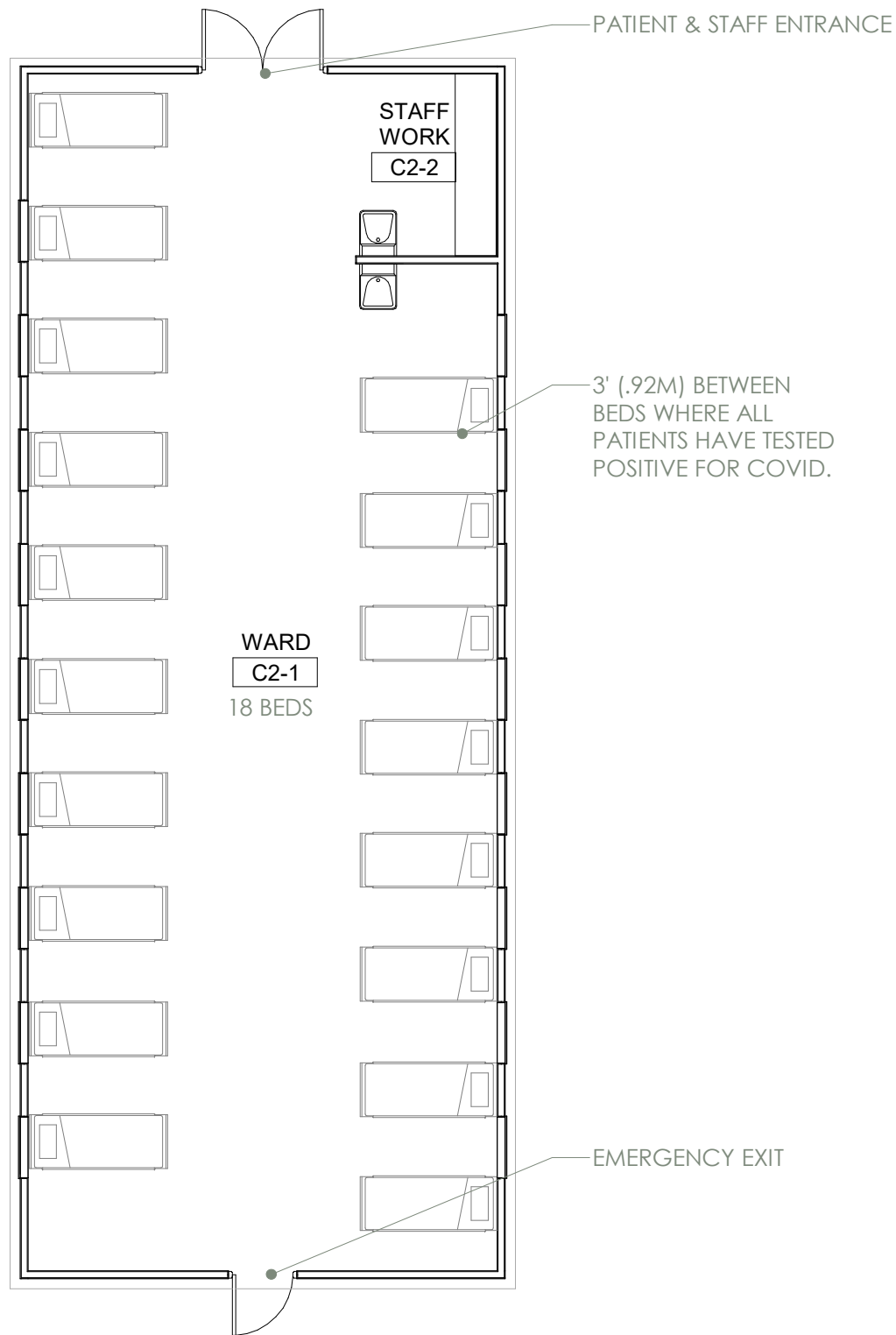


⊕	RECEPTACLE MOUNTED 1.12M AFF
⊗	LIGHT SWITCH MOUNTED 1.12M AFF
⊗ _{FC}	FAN CONTROL MOUNTED 1.12M AFF
L-1	HANGING LED LIGHT
CF-1	VARIABLE SPEED CEILING FAN
WS-1	LED WEATHERPROOF WALL SCNCE
ELECTRICAL LEGEND	



1 C1 - POWER PLAN
SCALE 1:100

2 C1 LIGHTING PLAN
SCALE 1:100



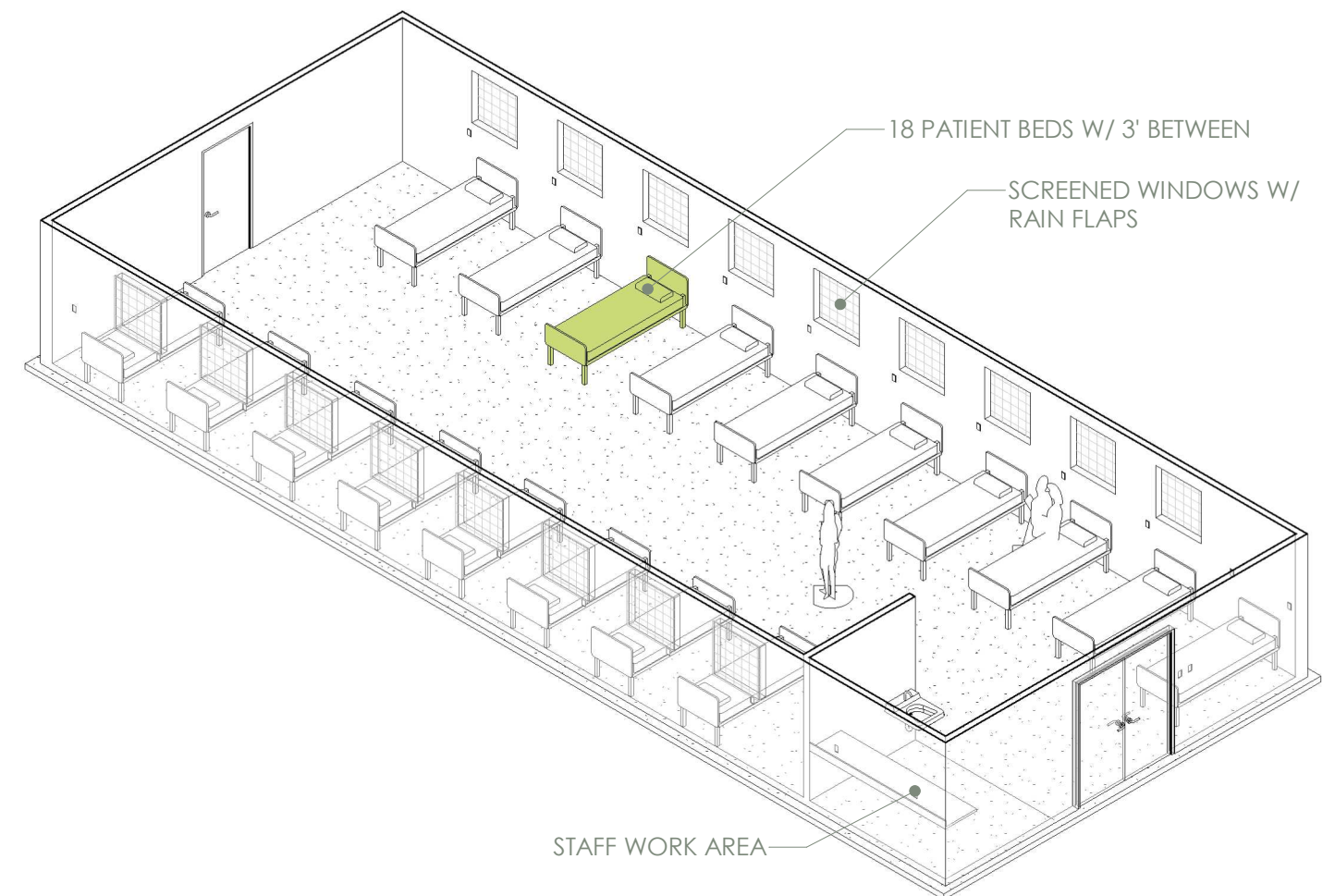
CONFIRMED WARD 2 DESCRIPTION

CONFIRMED WARDS SHOULD BE USED FOR THE FOLLOWING PATIENTS:

- PATIENTS WHO HAVE TESTED POSITIVE FOR COVID AND WHO REQUIRE HOSPITALIZATION

CONFIRMED WARDS ARE DISTINGUISHED BY NARROWER BED SPACING AND NO DIVIDER PANELS AS THERE IS NOT CONCERN ABOUT NOSOCOMIAL SPREAD IN AREAS WHERE ALL PATIENTS HAVE TESTED POSITIVE FOR COVID.

CONFIRMED WARD 1 DOES NOT INCLUDE STAFF DON & DOFF ROOMS. THIS IS RECOMMENDED ONLY IN AREAS WHERE CENTRAL DON & DOFF SPACES ARE AVAILABLE TO SUPPORT MULTIPLE WARDS. FOR AREAS WHERE NO CENTRAL DON & DOFF AREAS ARE AVAILABLE, WARD C1 IS RECOMMENDED.

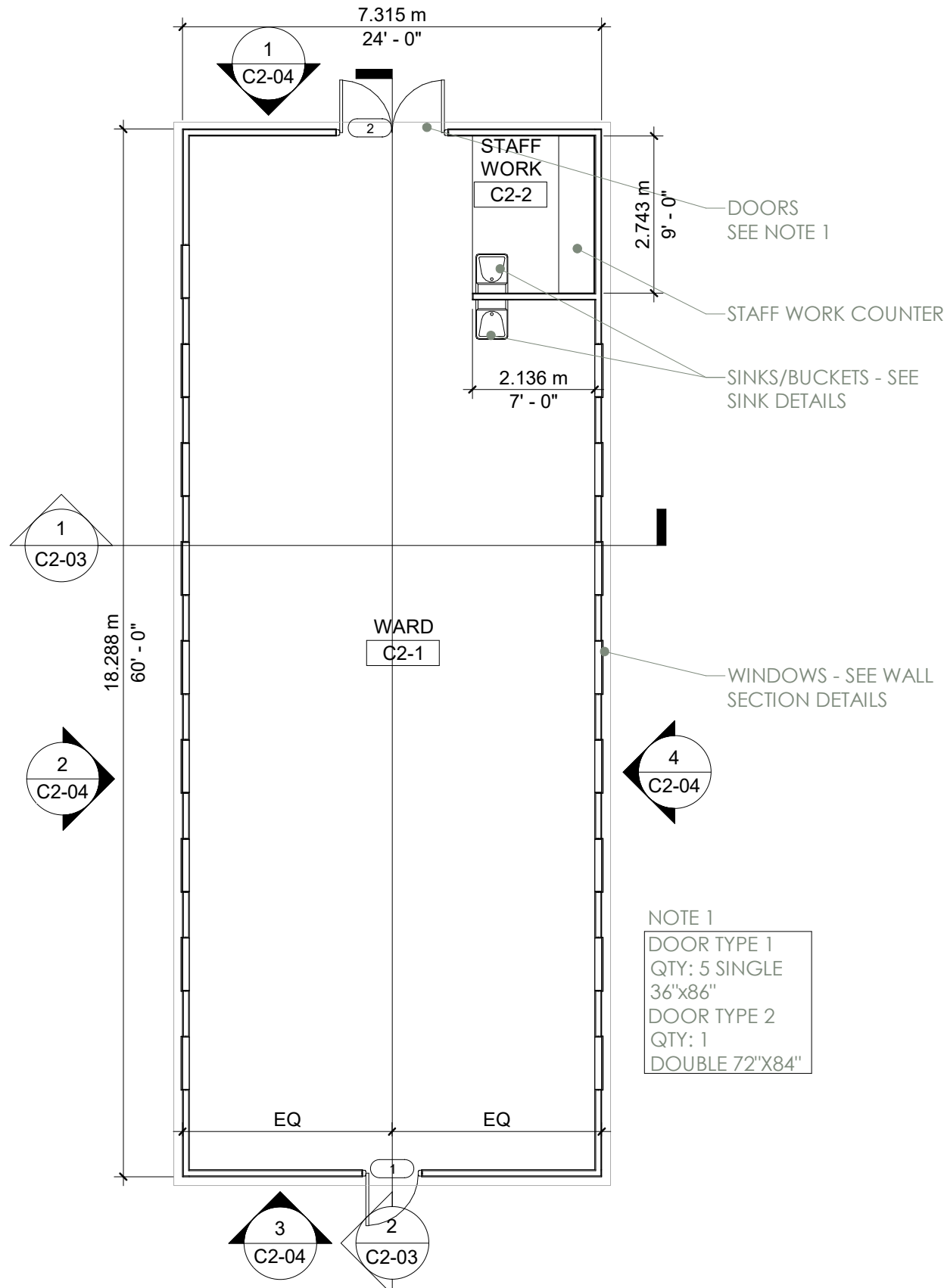


1 C2 - LAYOUT

SCALE 1:100

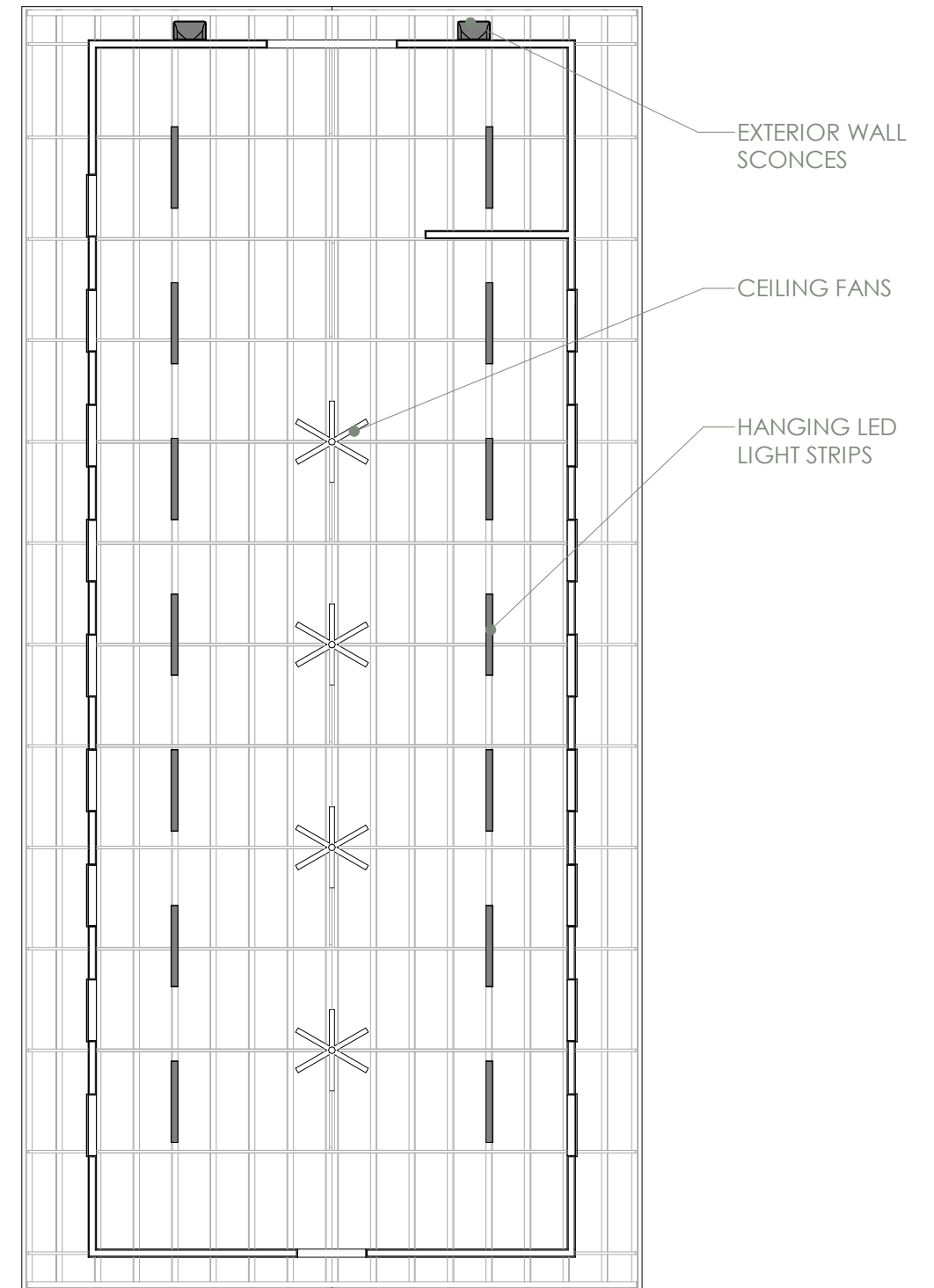
2 C2 WARD AXON

SCALE



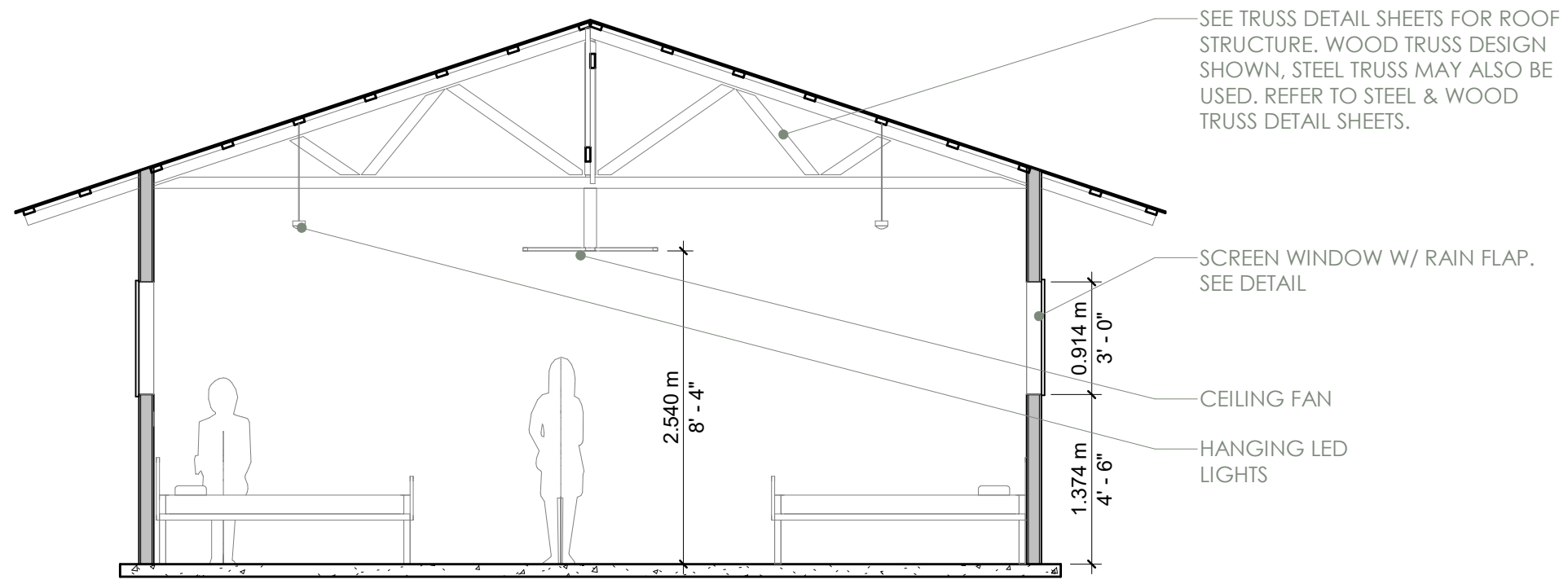
1 C2 - CONSTRUCTION PLAN

SCALE 1:100



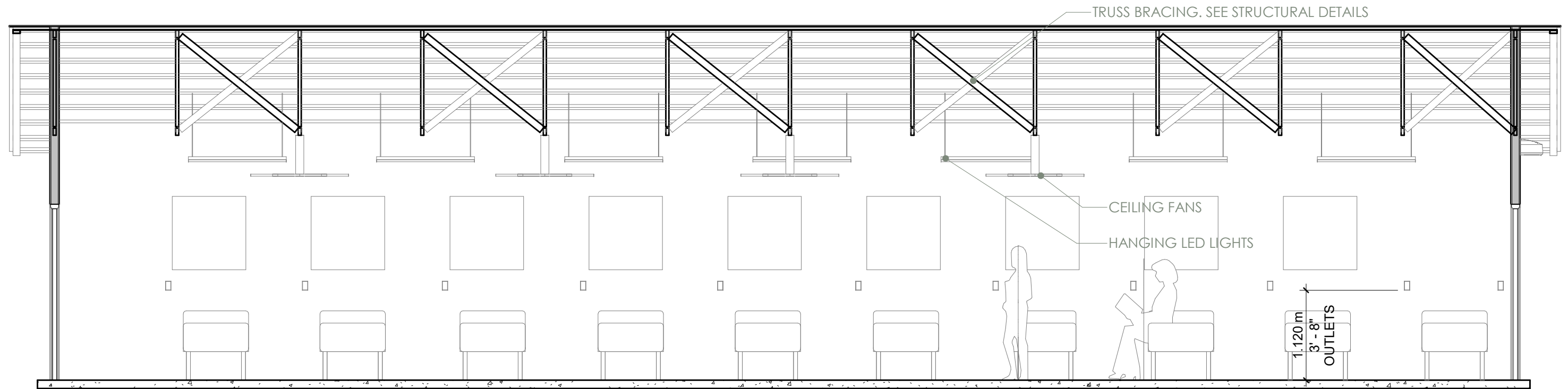
2 C2 WARD CEILING PLAN

SCALE 1:100



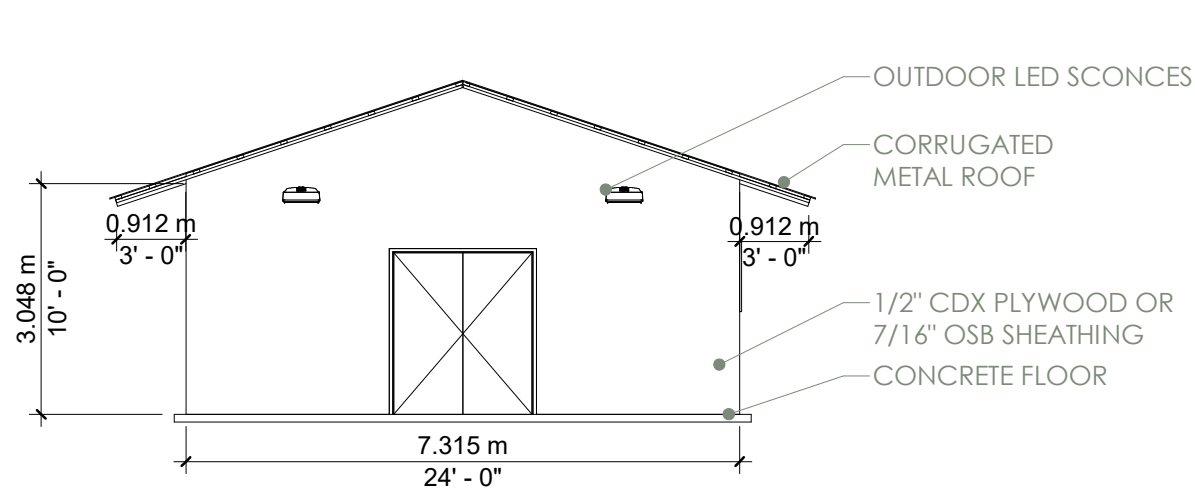
1 C2 SHORT SECTION

SCALE 1:50

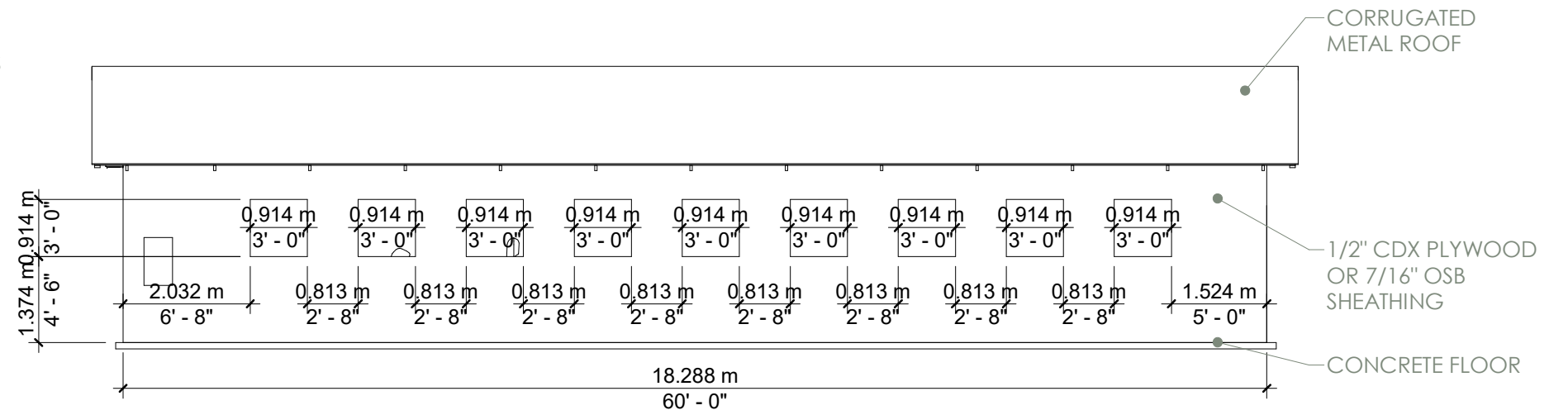


2 C2 LONG SECTION

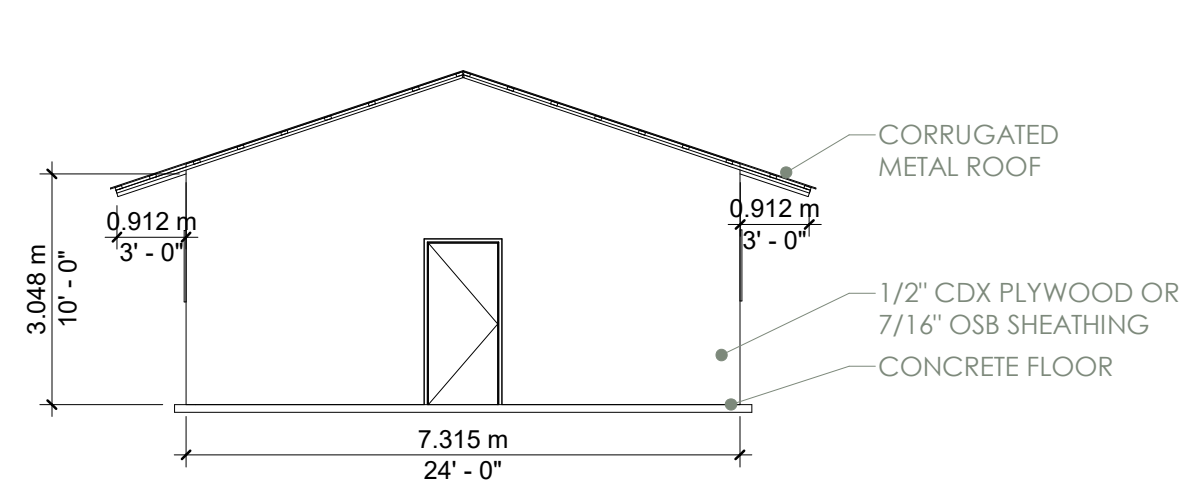
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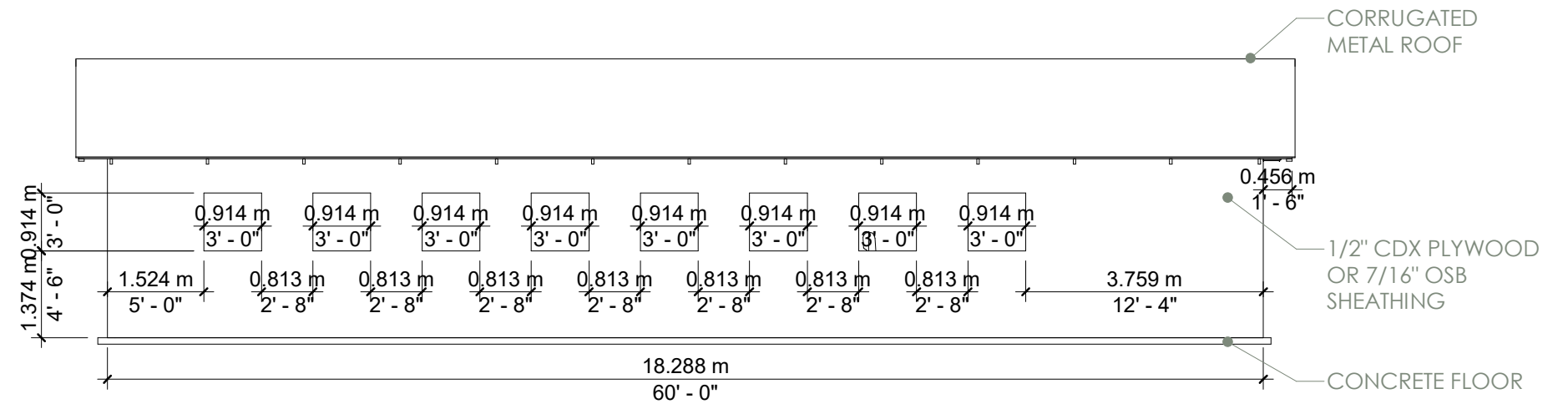
1 C2 WARD NORTH
SCALE 1:100



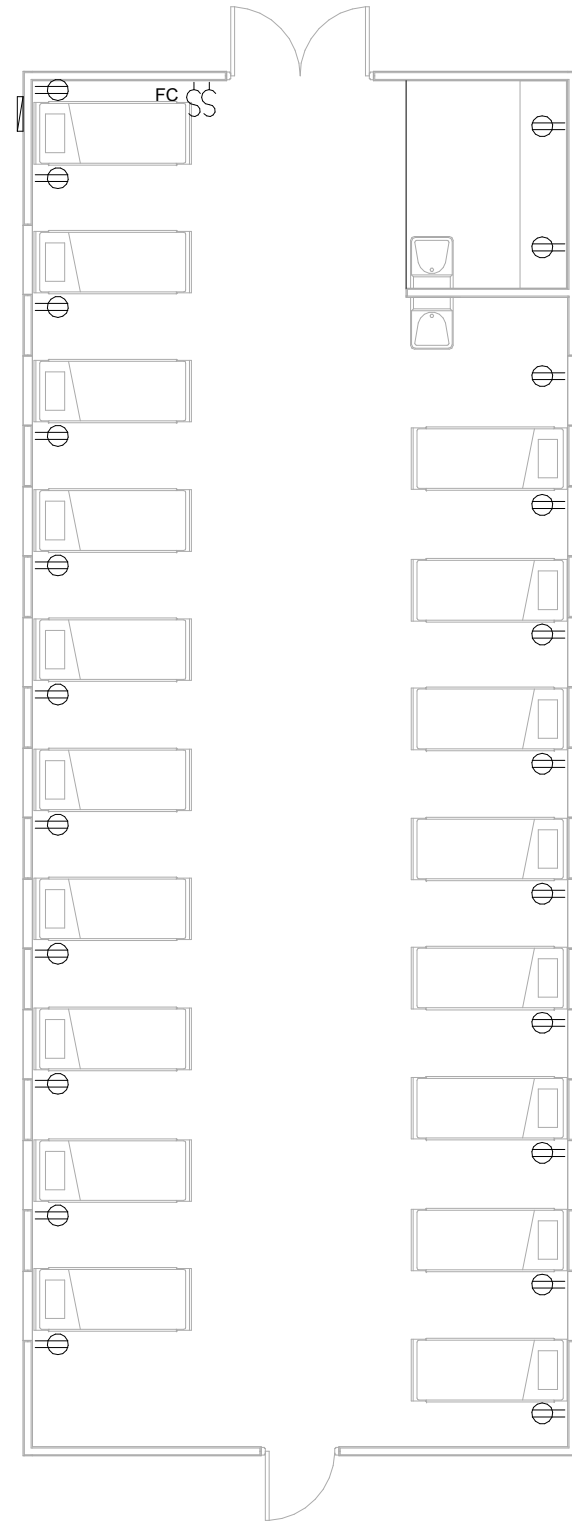
2 C2 WARD WEST
SCALE 1:100



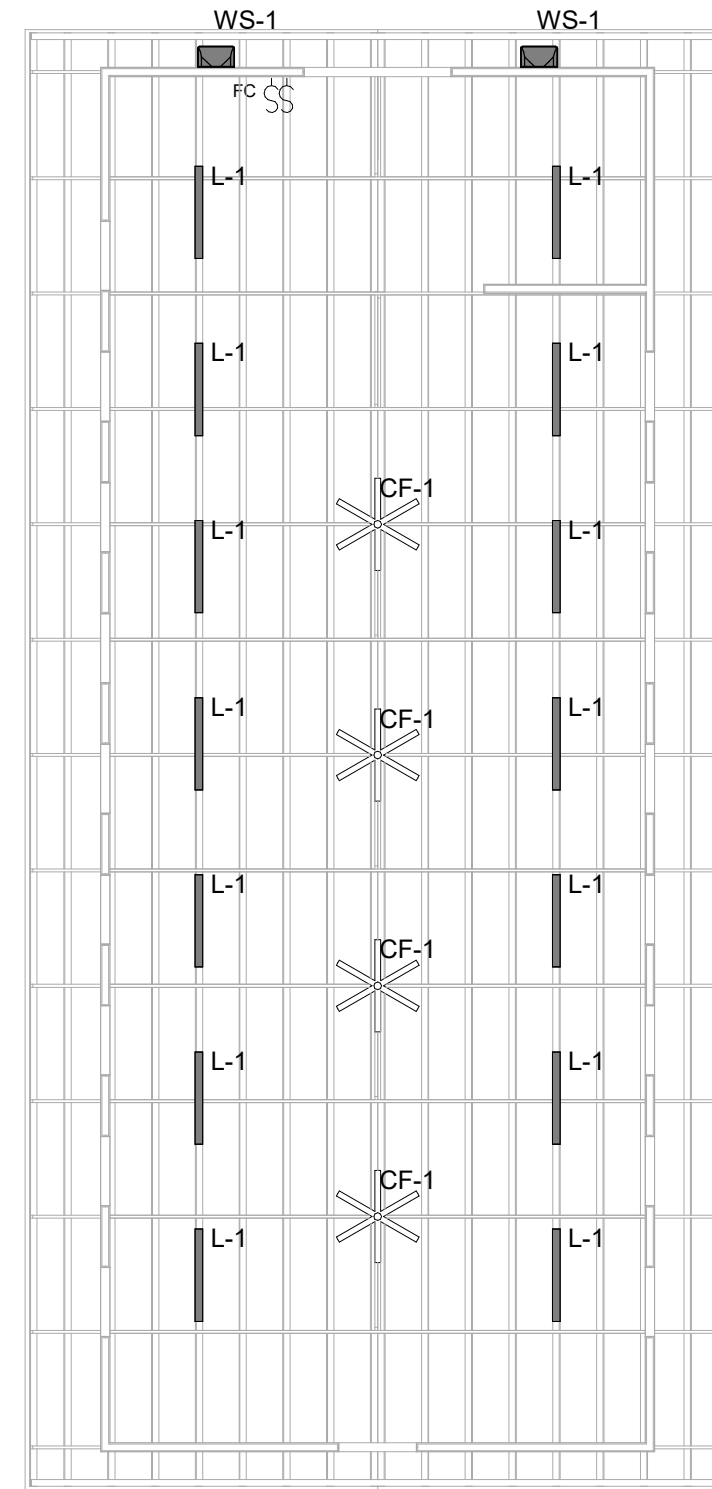
3 C2 WARD SOUTH
SCALE 1:100



4 C2 WARD EAST
SCALE 1:100



⊕	RECEPTACLE MOUNTED 1.12M AFF
⌞	LIGHT SWITCH MOUNTED 1.12M AFF
⌞ _{FC}	FAN CONTROL MOUNTED 1.12M AFF
L-1	HANGING LED LIGHT
CF-1	VARIABLE SPEED CEILING FAN
WS-1	LED WEATHERPROOF WALL SCNCE
ELECTRICAL LEGEND	

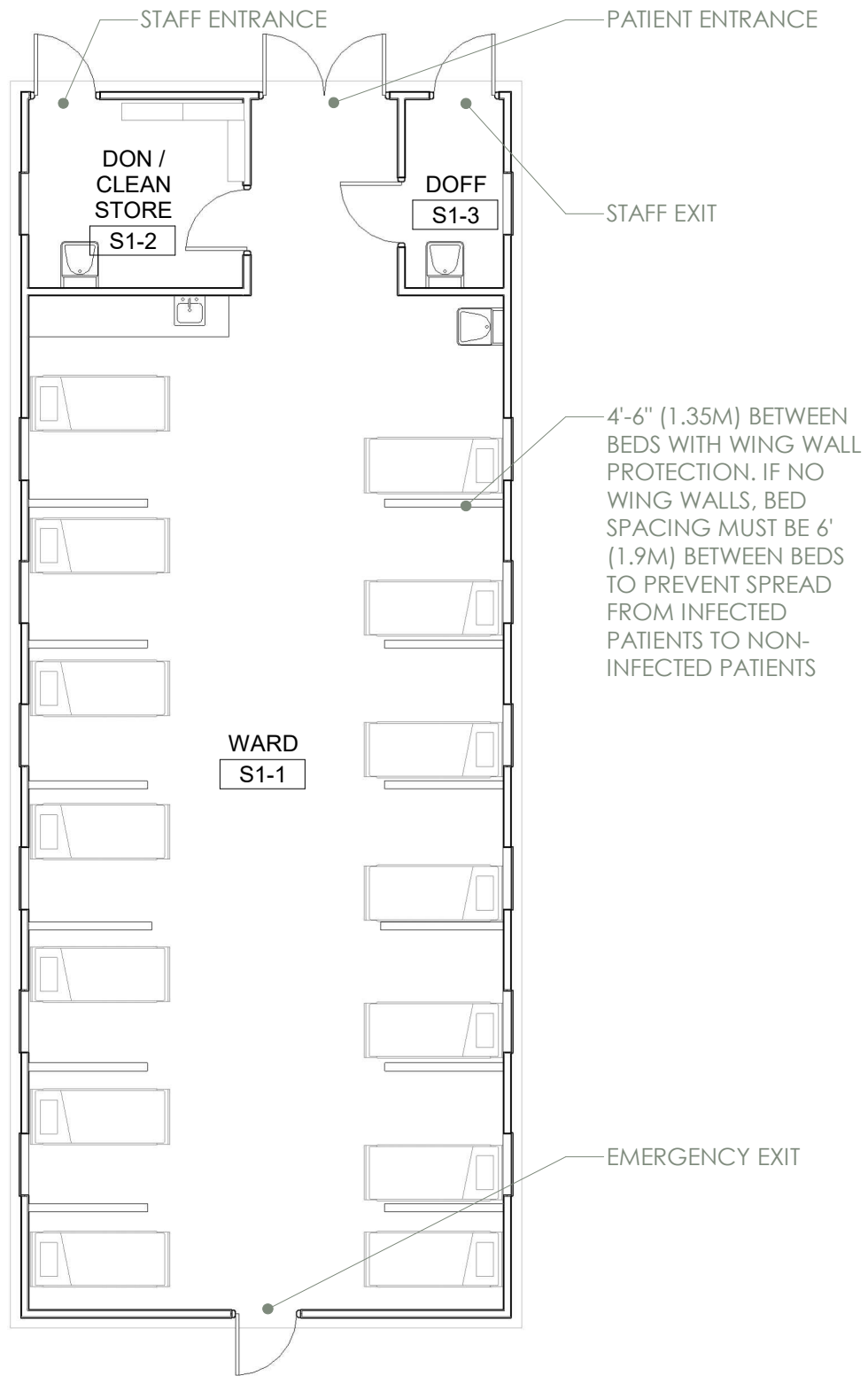


1 C2 - POWER PLAN

SCALE 1:100

2 C2 LIGHTING PLAN

SCALE 1:100



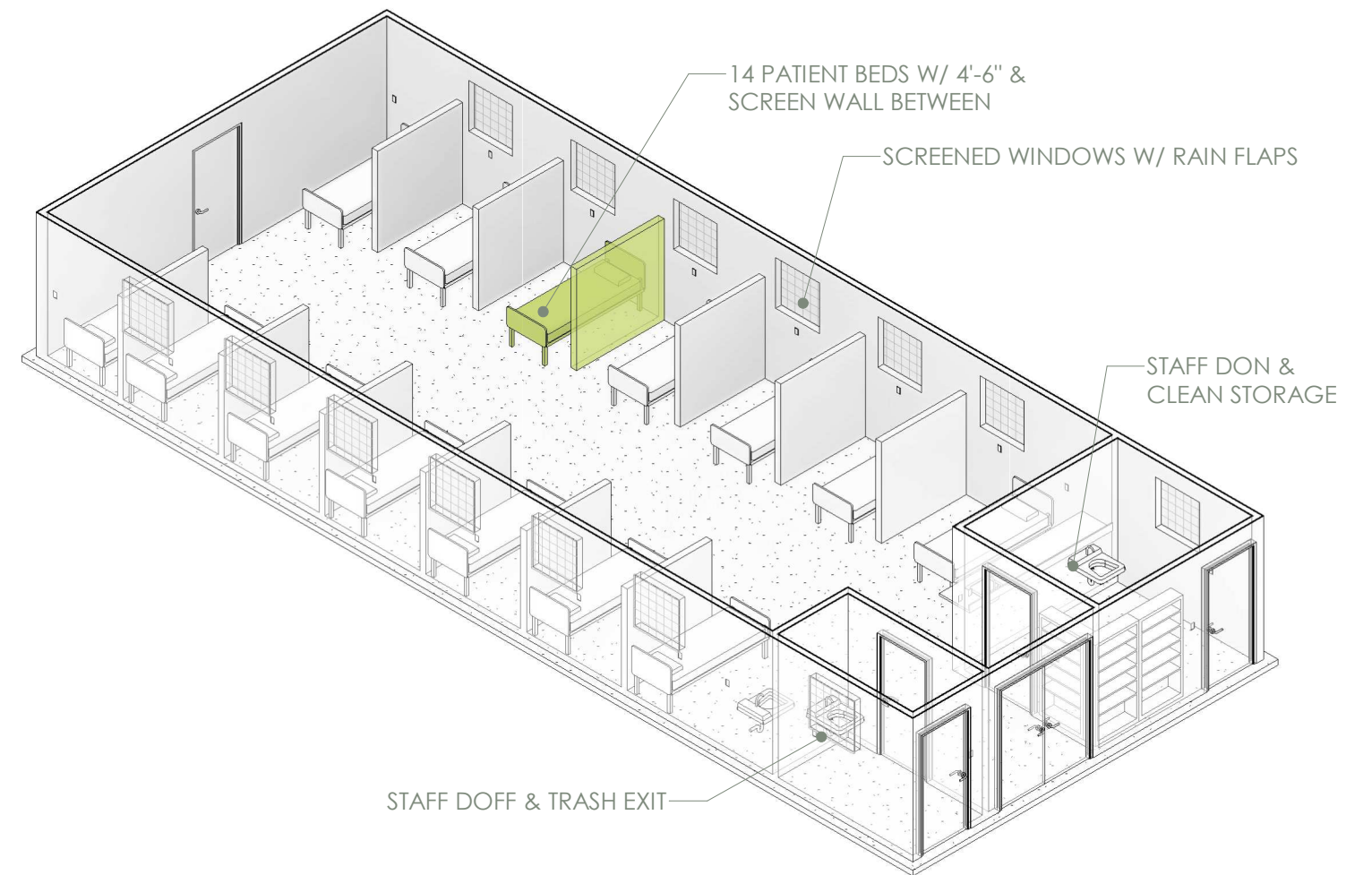
SUSPECT WARD 1 DESCRIPTION

SUSPECT WARDS SHOULD BE USED FOR THE FOLLOWING PATIENTS:

- PATIENTS WHO HAVE BEEN CLINICALLY DIAGNOSED AS COVID POSITIVE
- PATIENTS WHO HAVE BEEN TESTED AND ARE AWAITING RESULTS

SUSPECT WARDS ARE DISTINGUISHED BY WIDER BED SPACING AND DIVIDER PANELS BETWEEN BEDS TO PROTECT PATIENTS WHO MAY NOT HAVE COVID FROM NOSOCOMIAL SPREAD.

SUSPECT WARD 1 INCLUDES STAFF DON & DOFF ROOMS. THIS IS RECOMMENDED ONLY IN AREAS WHERE ONE OR TWO WARDS ARE CONSTRUCTED. FOR FACILITIES IN WHICH MORE THAN TWO WARDS ARE CONSTRUCTED, REFER TO SUSPECT WARD 2, WHICH IS DESIGNED TO BE ACCOMPANIED BY CENTRAL DON & DOFF SPACES.

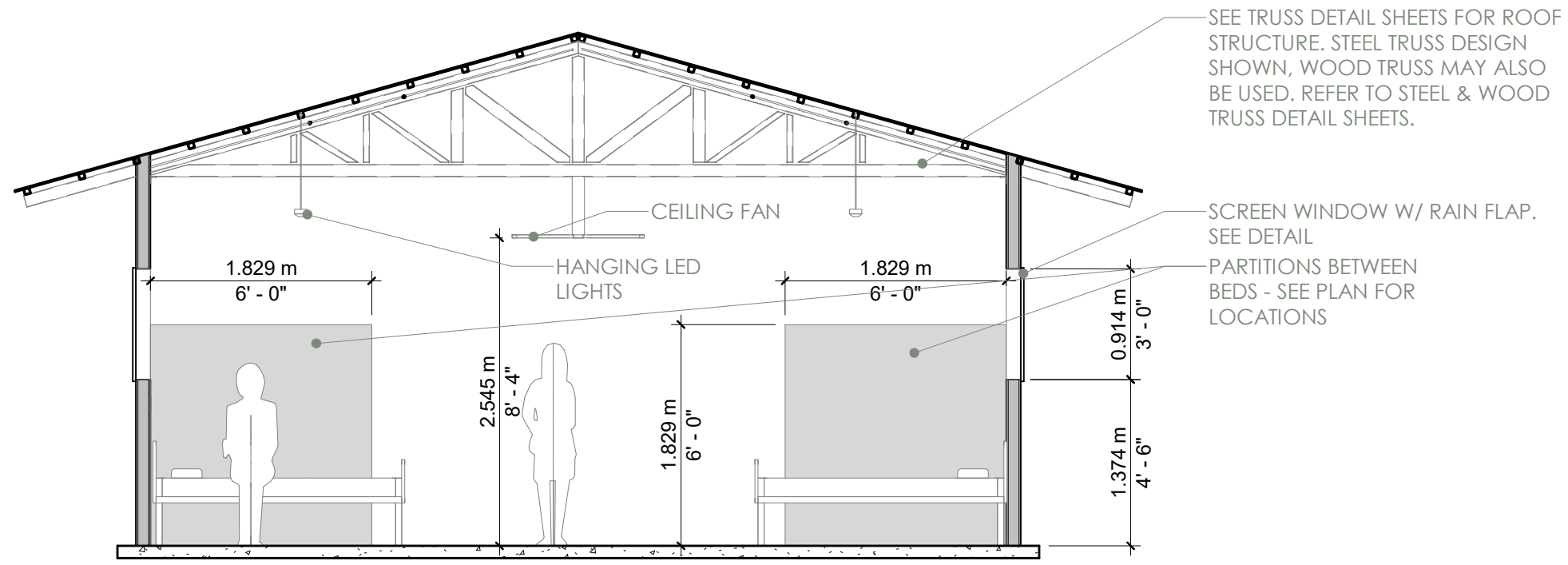


1 S1 - LAYOUT

SCALE 1:100

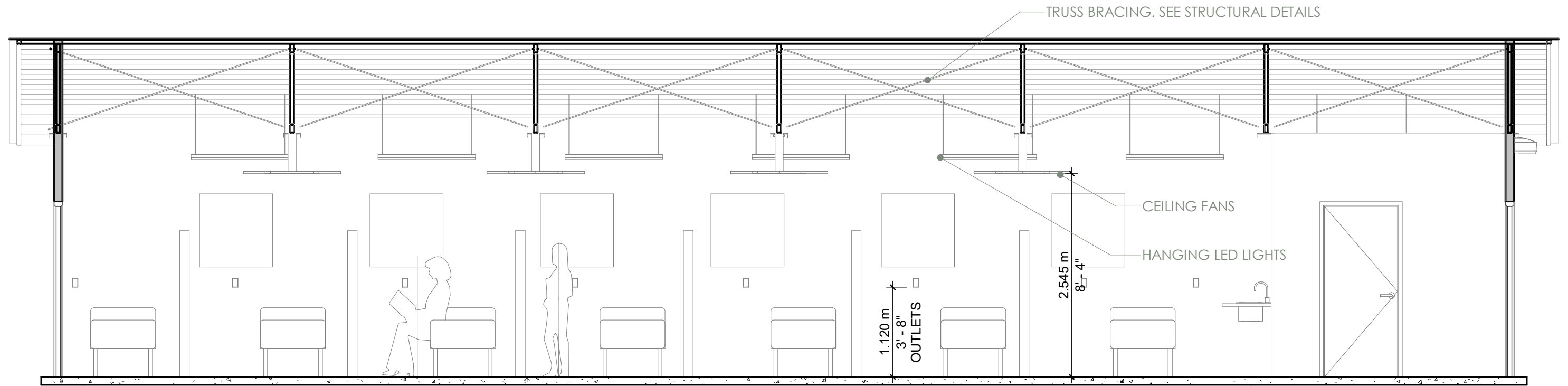
2 S1 WARD AXON

SCALE



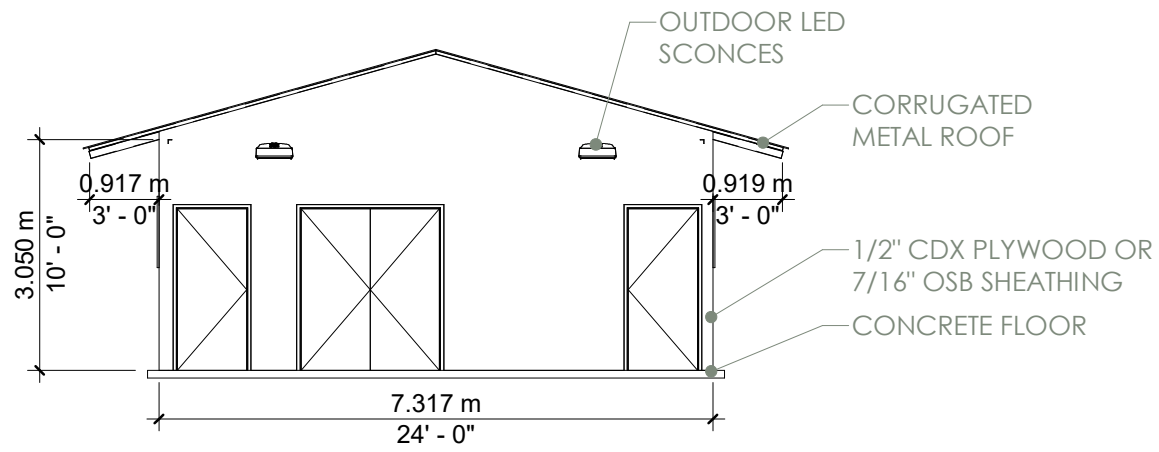
1 S1 SHORT SECTION

SCALE 1: 50

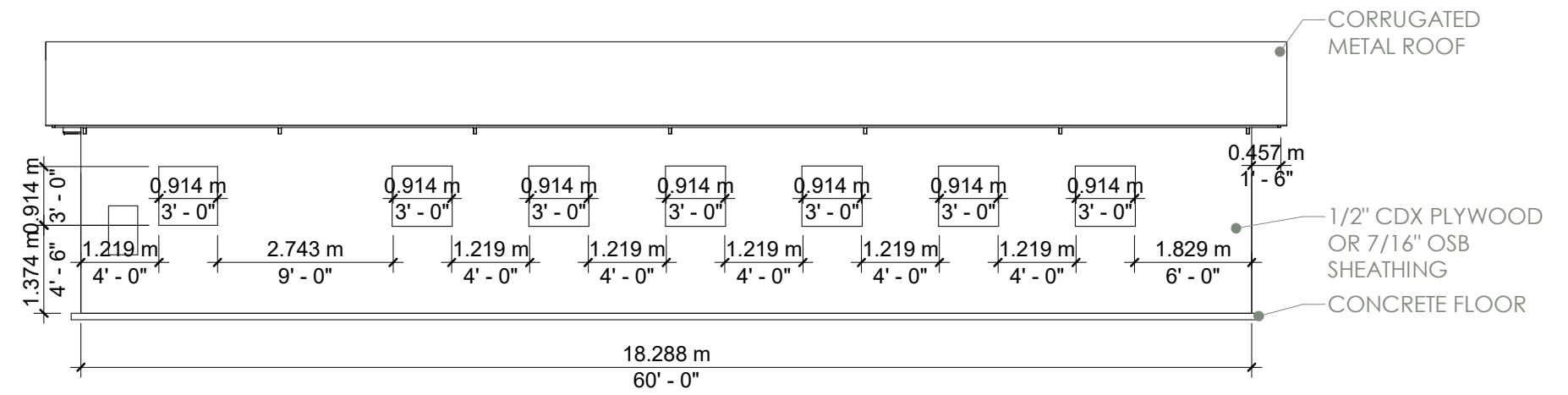


2 S1 LONG SECTION

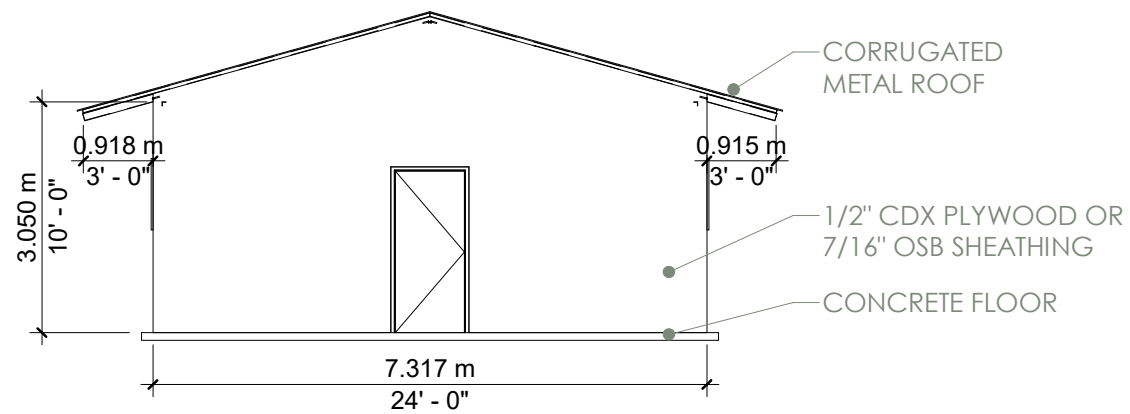
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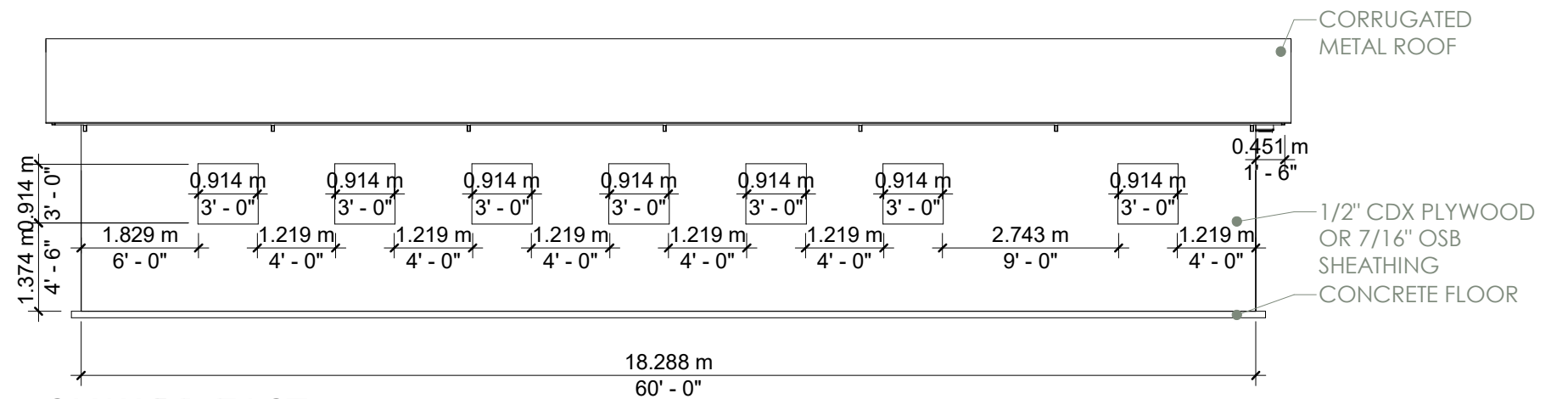
1 S1 WARD NORTH
SCALE 1:100



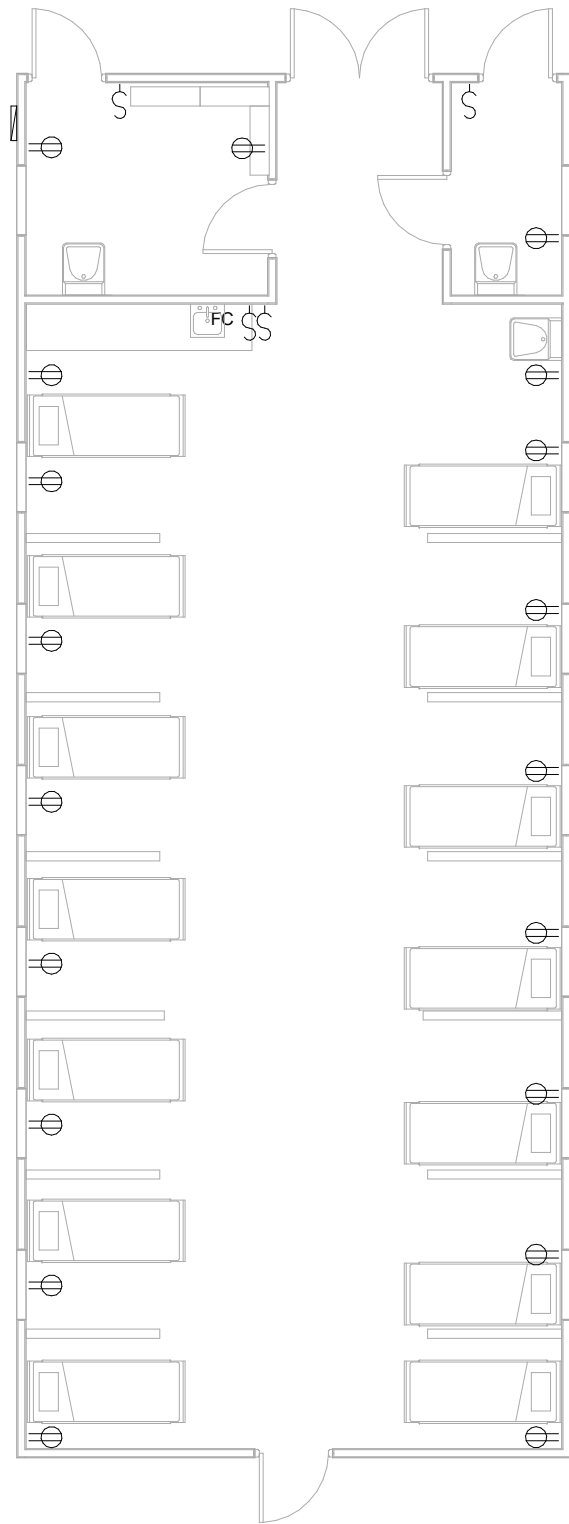
2 S1 WARD WEST
SCALE 1:100



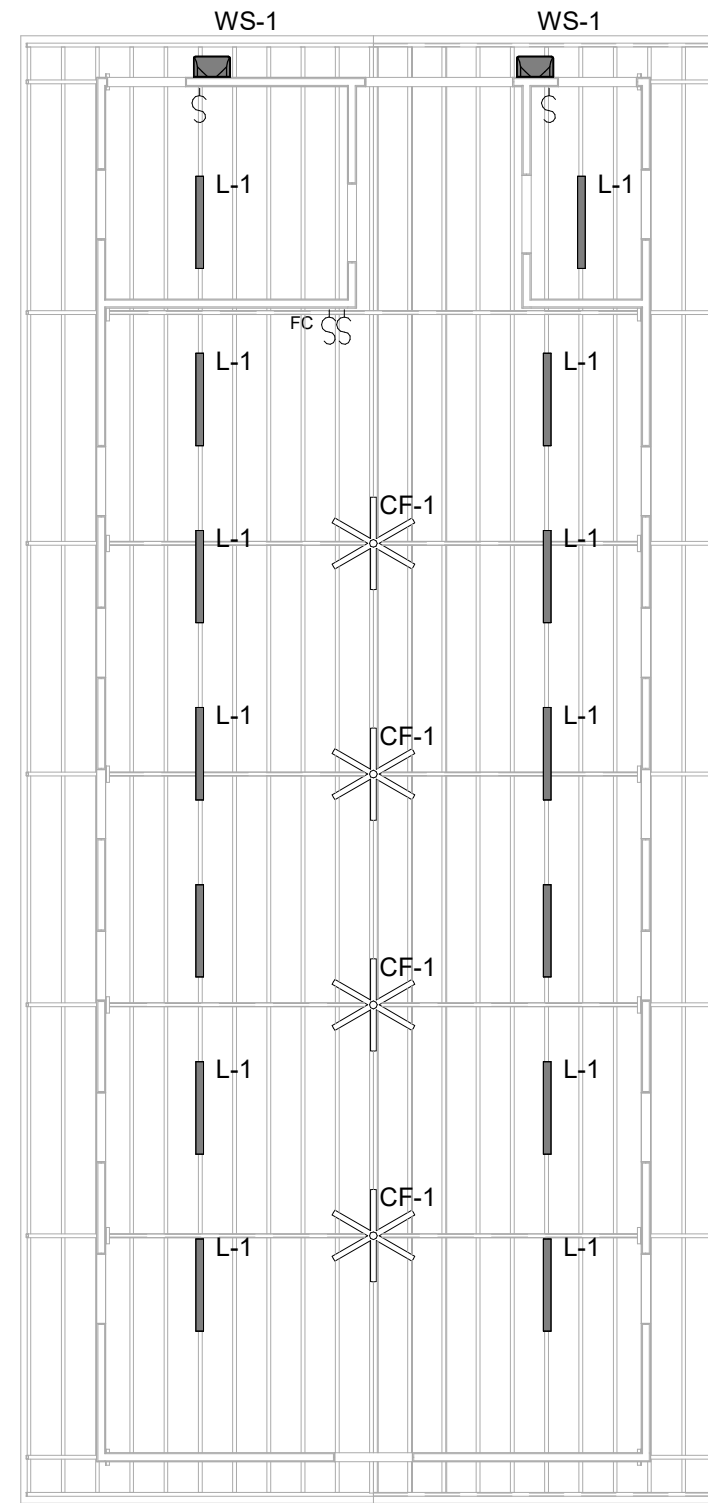
3 S1 WARD SOUTH
SCALE 1:100



4 S1 WARD EAST
SCALE 1:100



⊕	RECEPTACLE MOUNTED 1.12M AFF
⊥	LIGHT SWITCH MOUNTED 1.12M AFF
⊥ _{FC}	FAN CONTROL MOUNTED 1.12M AFF
L-1	HANGING LED LIGHT
CF-1	VARIABLE SPEED CEILING FAN
WS-1	LED WEATHERPROOF WALL SCONCE
ELECTRICAL LEGEND	

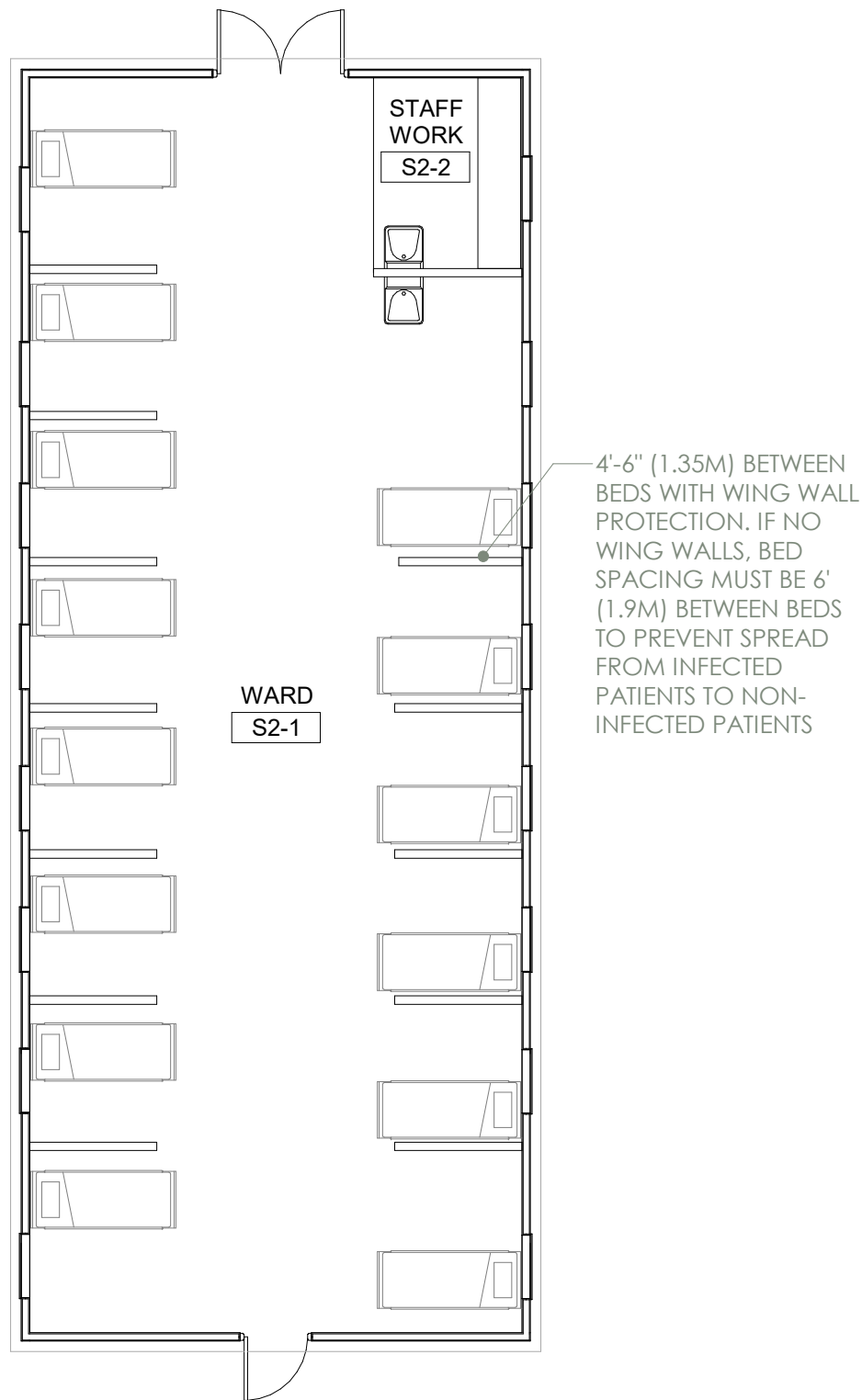


1 S1 - POWER PLAN

SCALE 1:100

2 S1 LIGHTING PLAN

SCALE 1:100



1 S2 - LAYOUT
SCALE 1:100

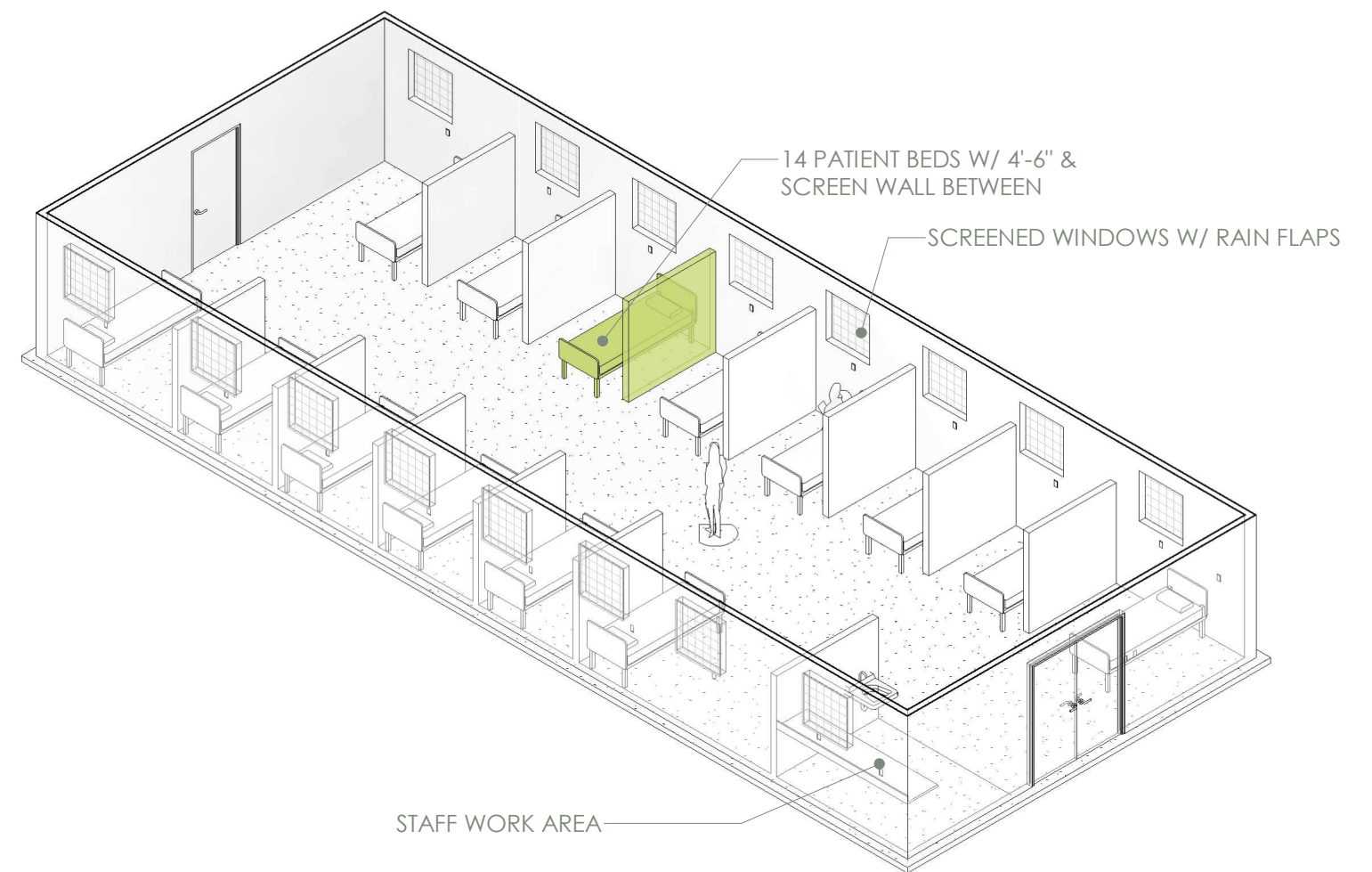
SUSPECT WARD 2 DESCRIPTION

SUSPECT WARDS SHOULD BE USED FOR THE FOLLOWING PATIENTS:

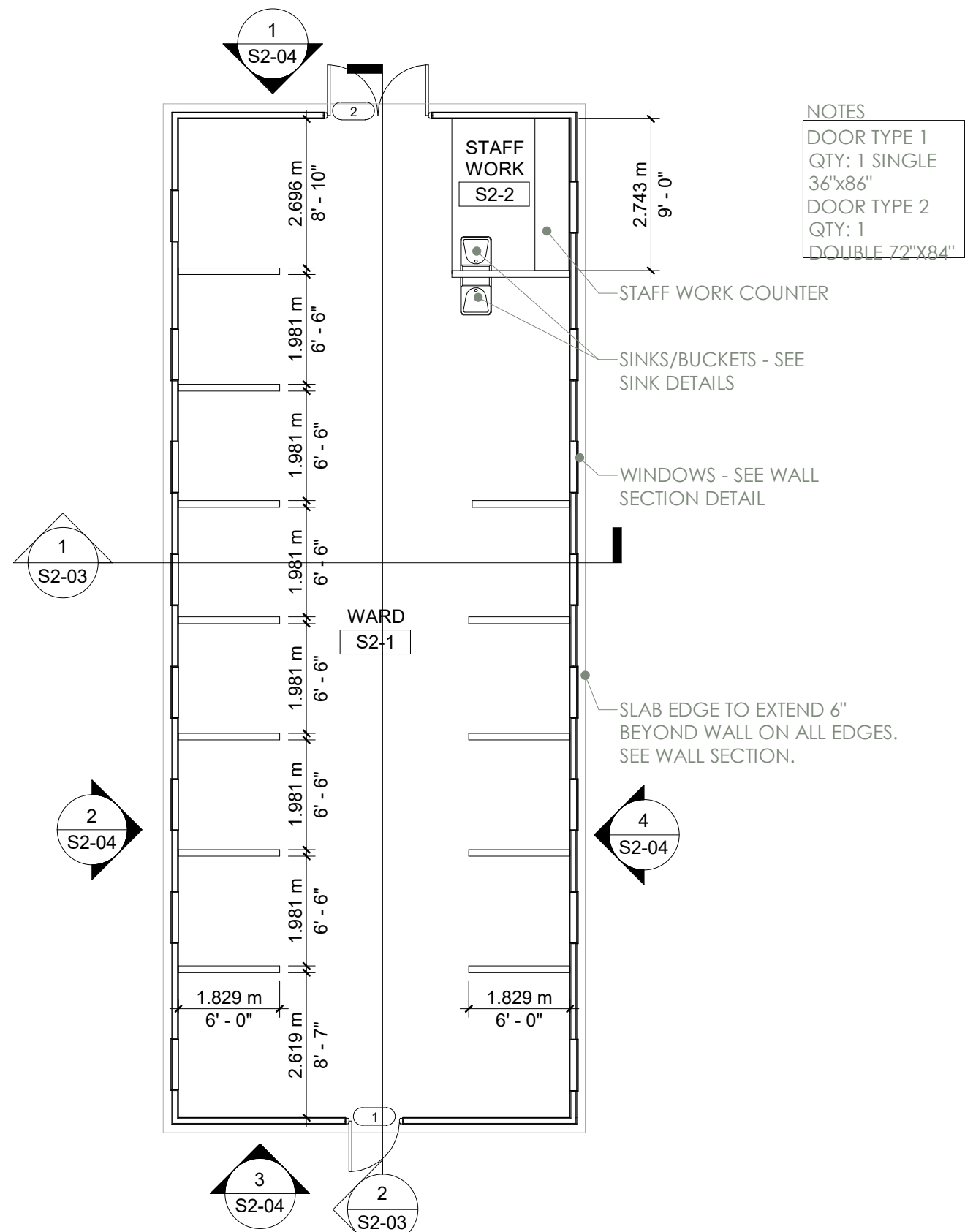
- PATIENTS WHO HAVE BEEN CLINICALLY DIAGNOSED AS COVID POSITIVE
- PATIENTS WHO HAVE BEEN TESTED AND ARE AWAITING RESULTS

SUSPECT WARDS ARE DISTINGUISHED BY WIDER BED SPACING AND DIVIDER PANELS BETWEEN BEDS TO PROTECT PATIENTS WHO MAY NOT HAVE COVID FROM NOSOCOMIAL SPREAD.

SUSPECT WARD 2 DOES NOT INCLUDE STAFF DON & DOFF ROOMS. THIS IS RECOMMENDED ONLY IN AREAS WHERE CENTRAL DON & DOFF SPACES ARE AVAILABLE TO SUPPORT MULTIPLE WARDS. FOR AREAS WHERE NO CENTRAL DON & DOFF AREAS ARE AVAILABLE, WARD S1 IS RECOMMENDED.

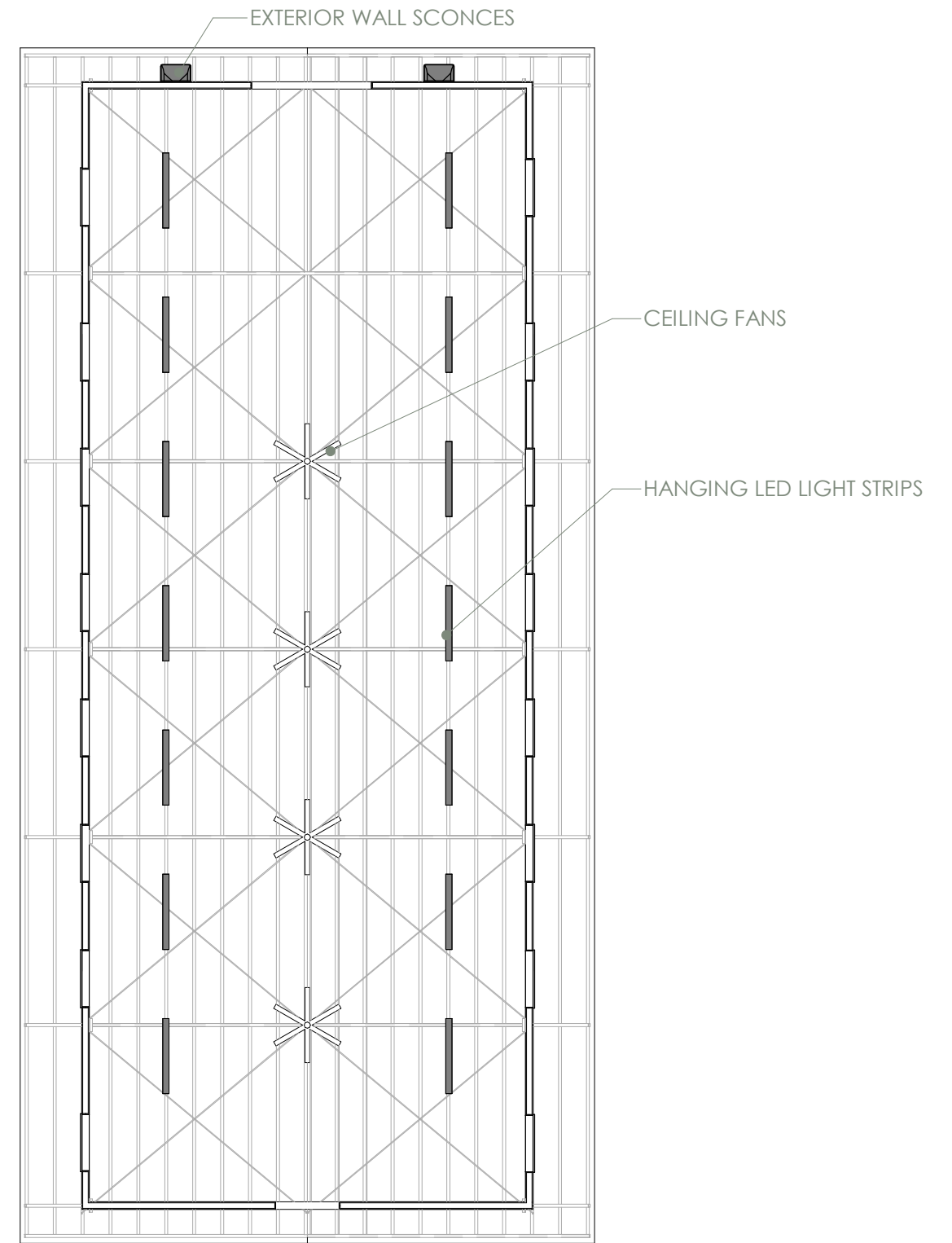


2 S2 WARD AXON
SCALE



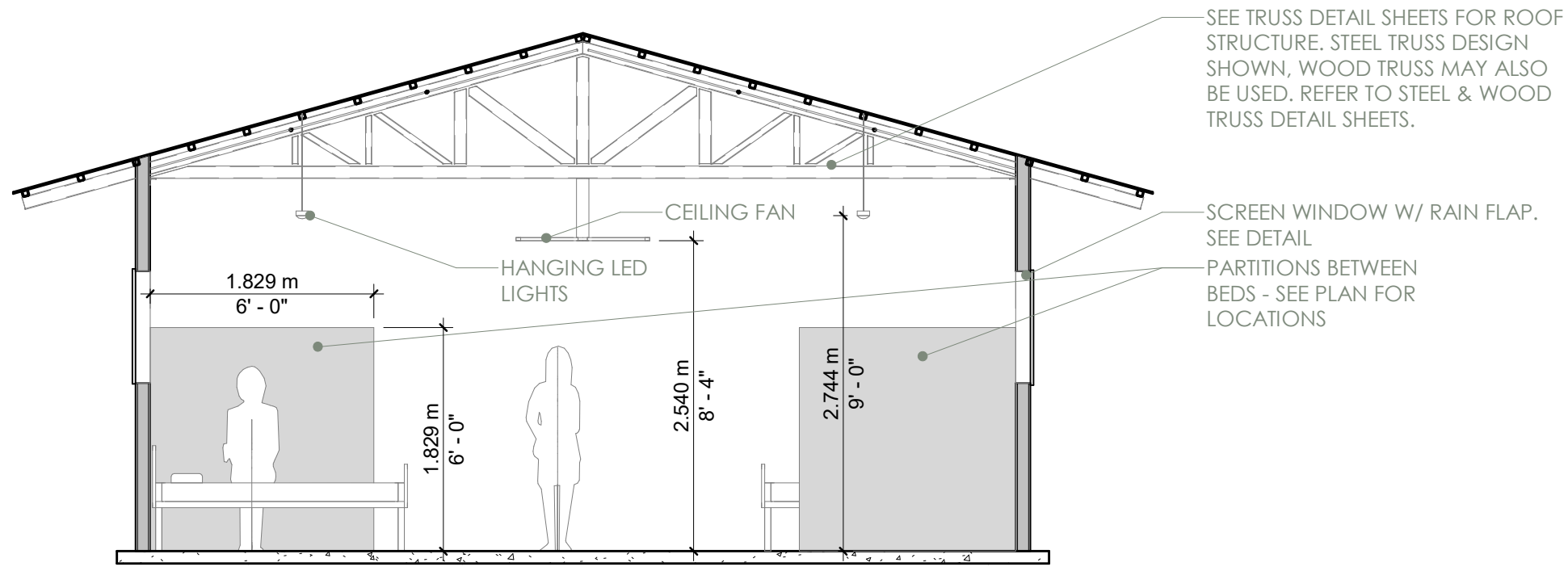
1 S2 - CONSTRUCTION PLAN

SCALE 1:100



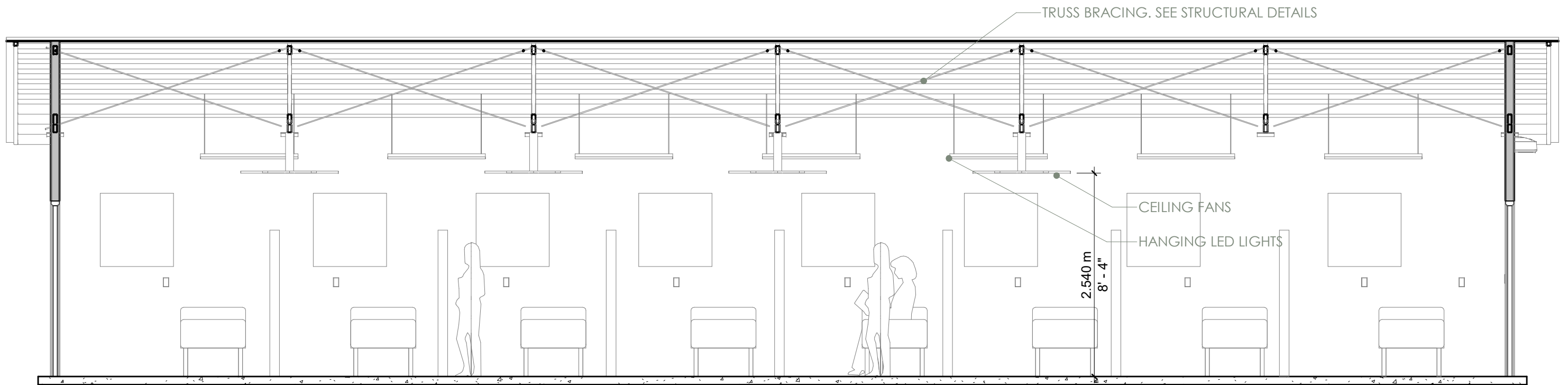
2 S2 WARD CEILING PLAN

SCALE 1:100



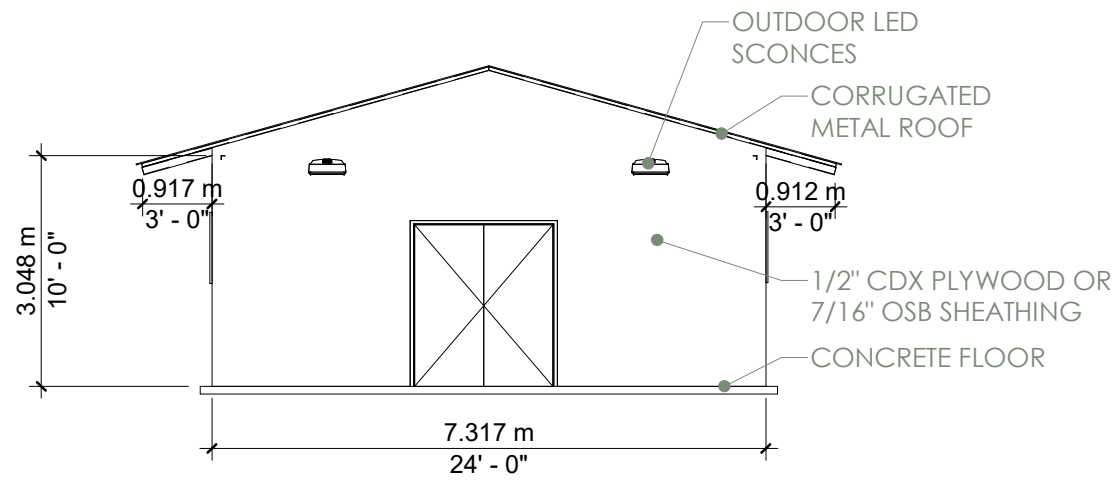
1S2 SHORT SECTION

SCALE 1:50

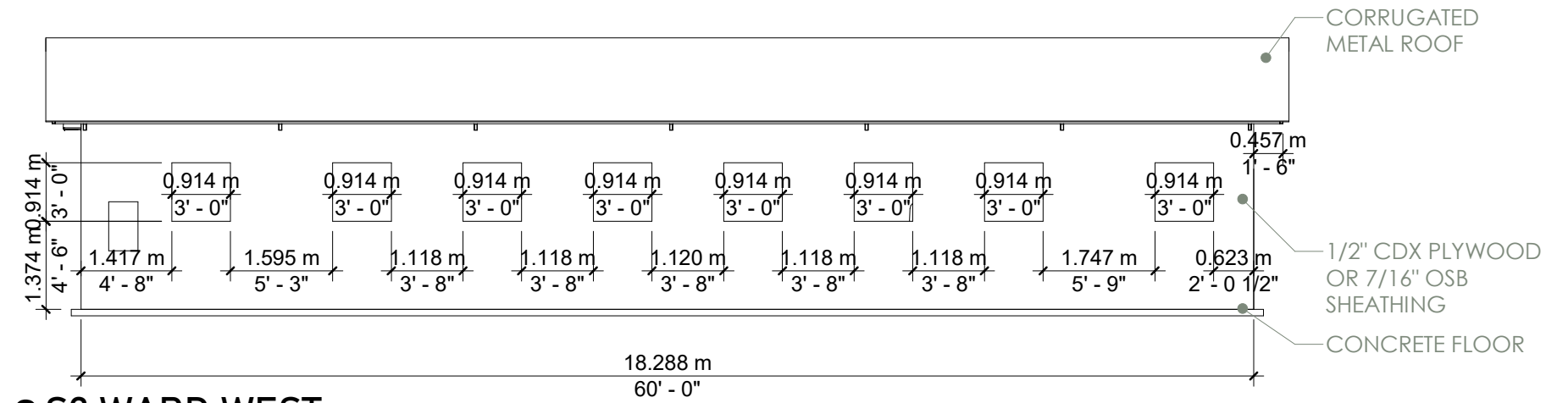


2S2 LONG SECTION

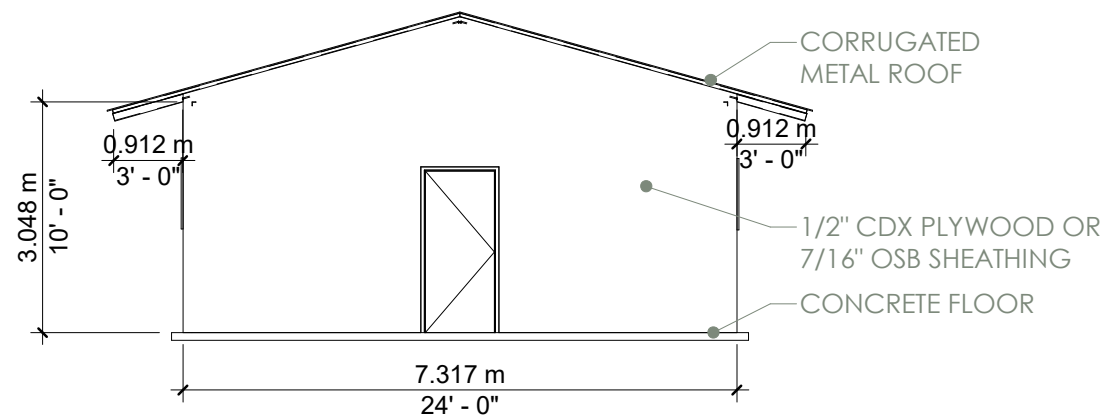
SCALE 1:50



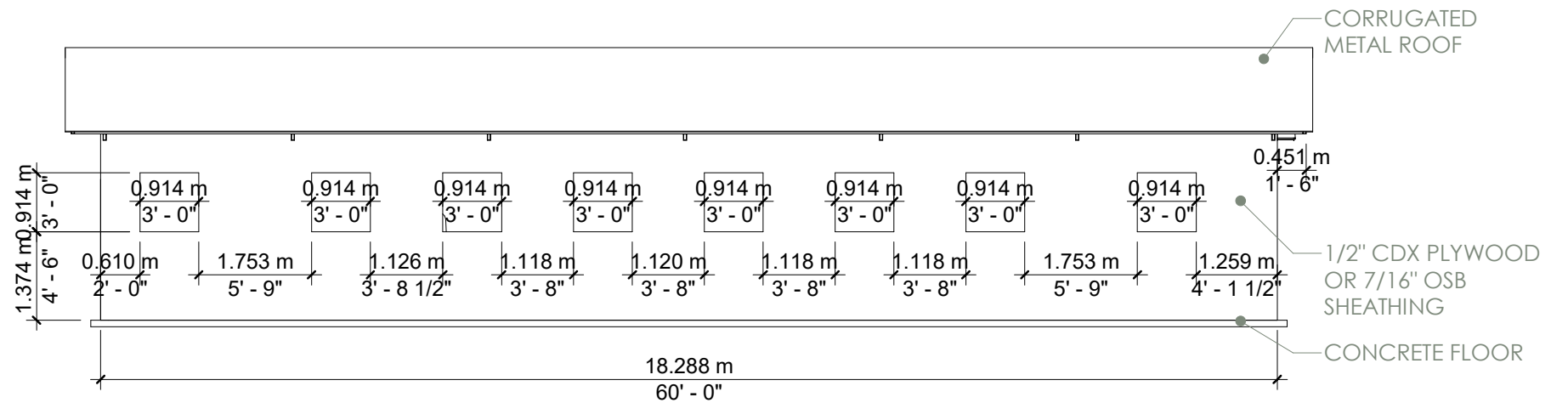
1 S2 WARD NORTH
SCALE 1:100



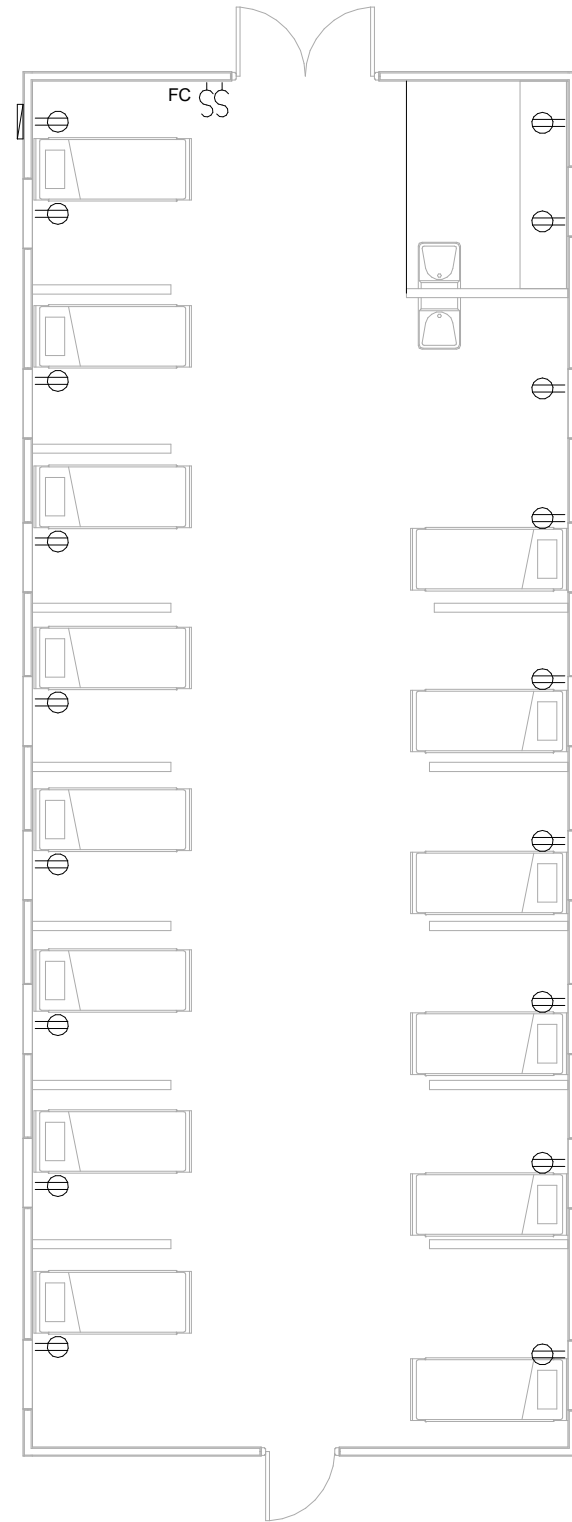
2 S2 WARD WEST
SCALE 1:100



3 S2 WARD SOUTH
SCALE 1:100

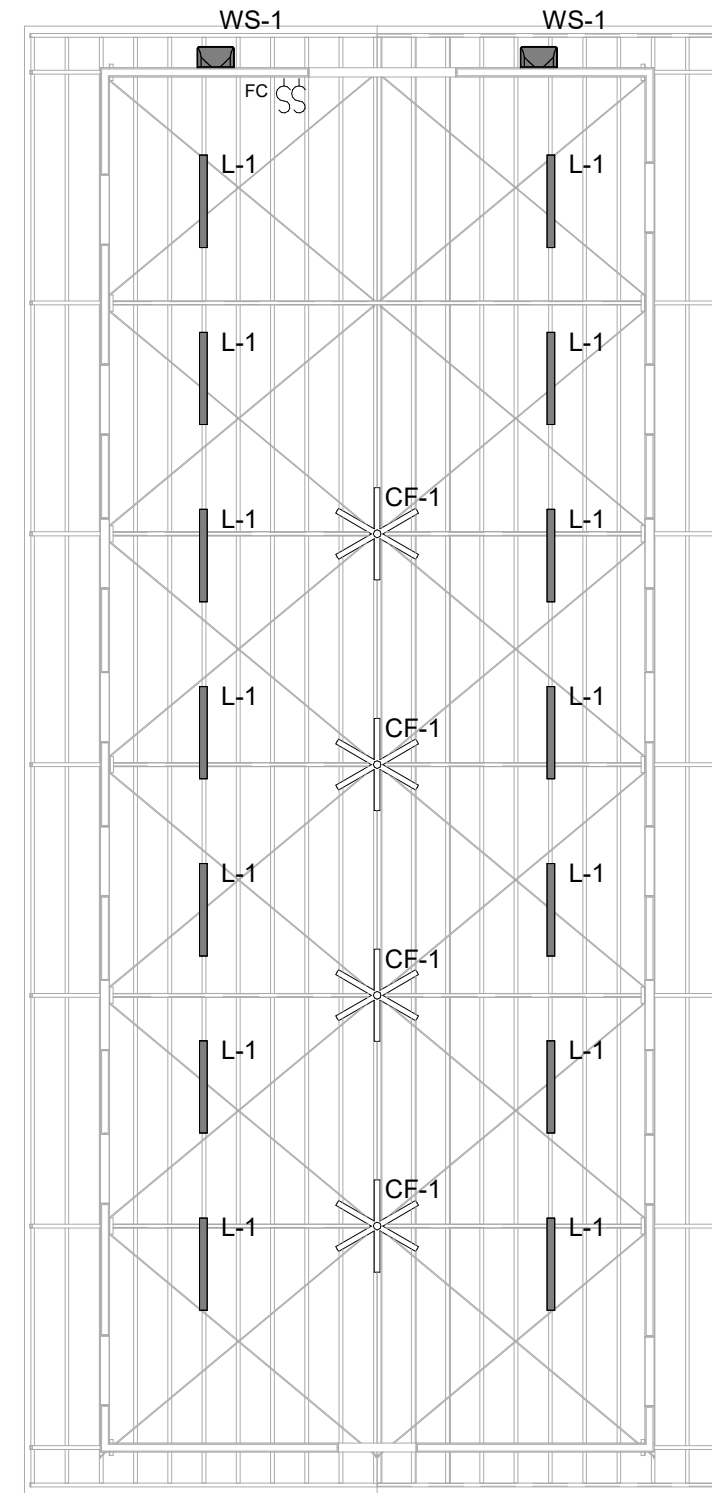


4 S2 WARD EAST
SCALE 1:100



- ⊕ RECEPTACLE MOUNTED 1.12M AFF
- § LIGHT SWITCH MOUNTED 1.12M AFF
- §_{FC} FAN CONTROL MOUNTED 1.12M AFF
- L-1 HANGING LED LIGHT
- CF-1 VARIABLE SPEED CEILING FAN
- WS-1 LED WEATHERPROOF WALL SCONCE

ELECTRICAL LEGEND

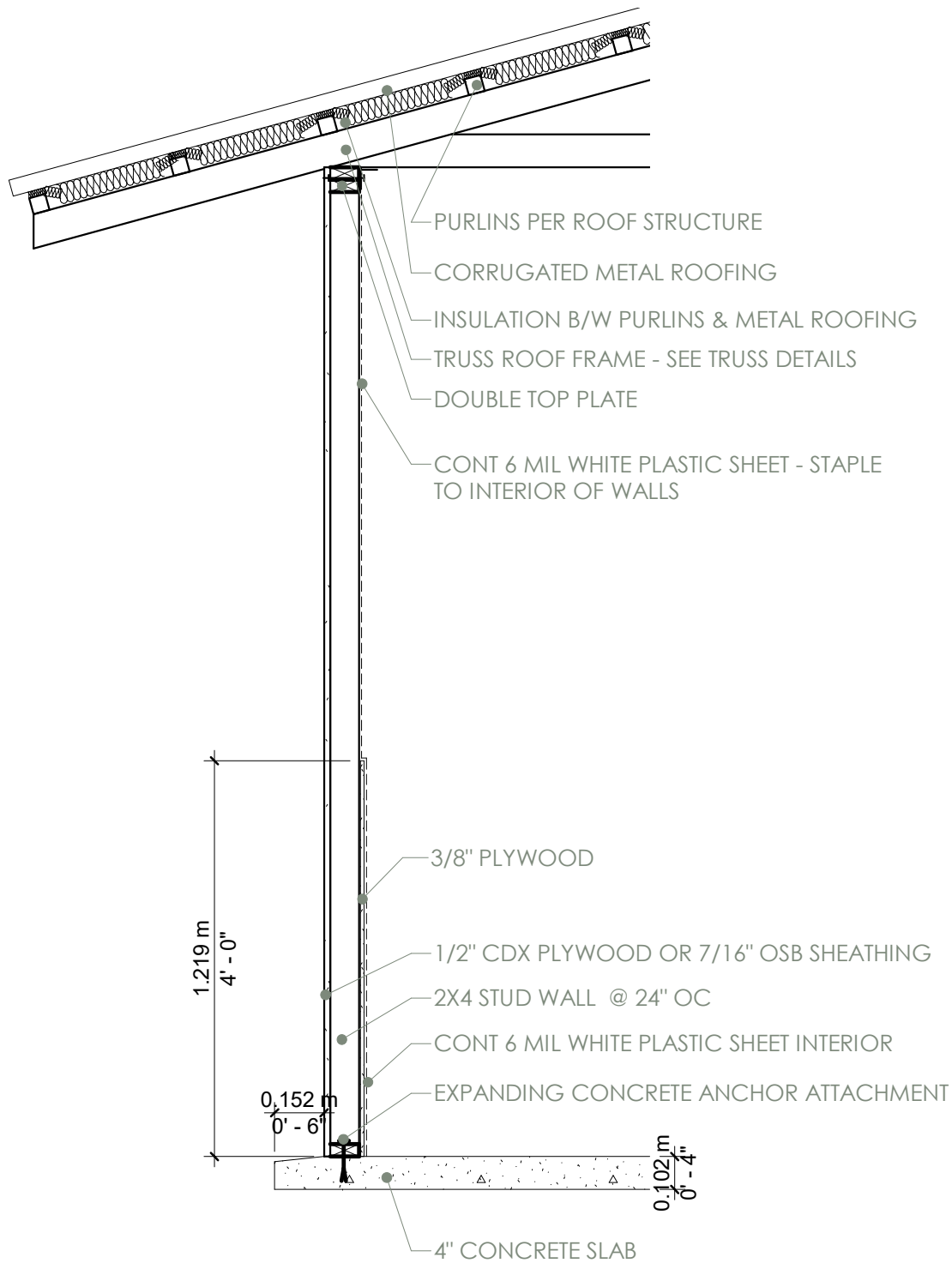


1 S2 - POWER PLAN

SCALE 1:100

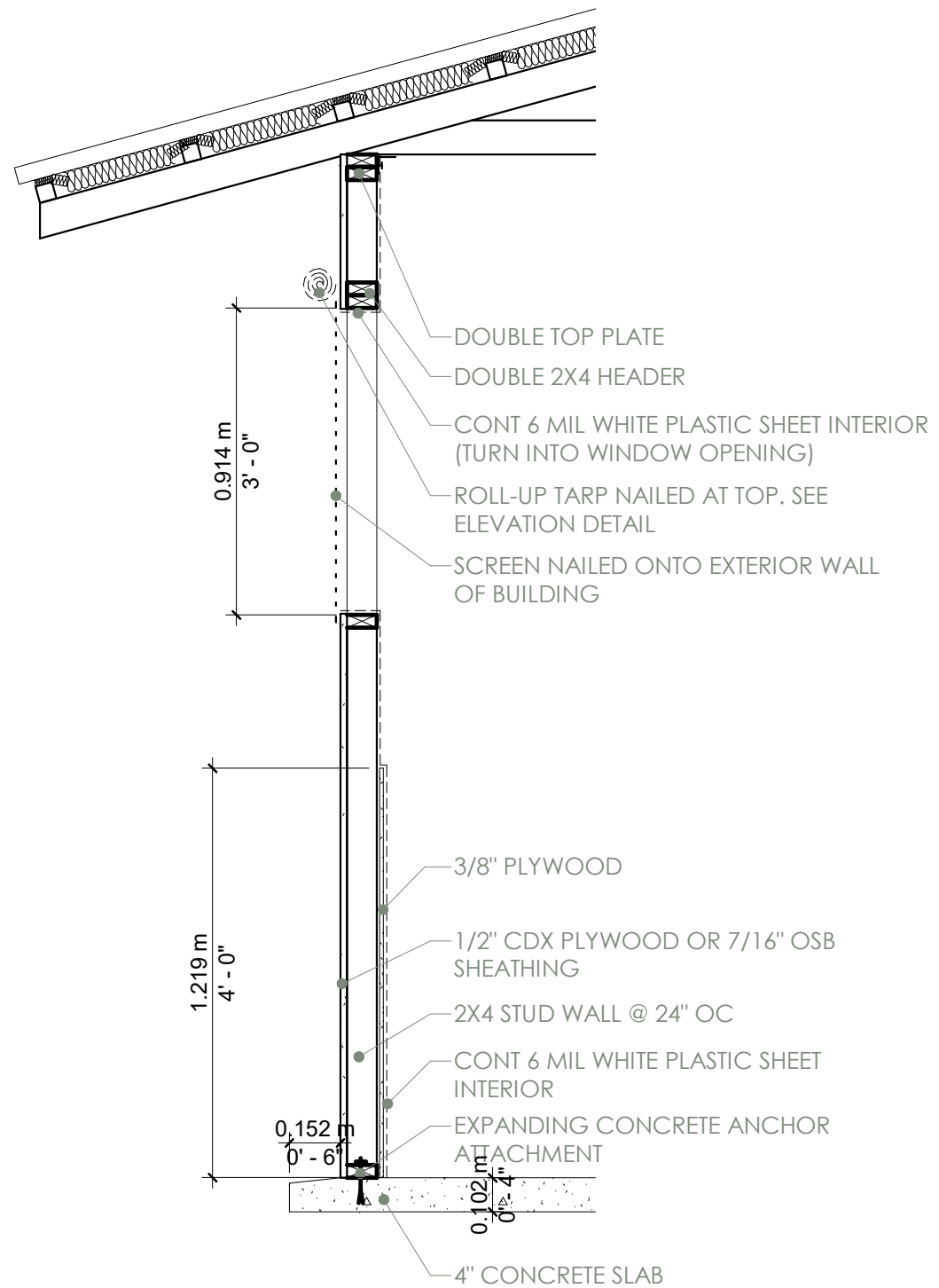
2 S2 LIGHTING PLAN

SCALE 1:100



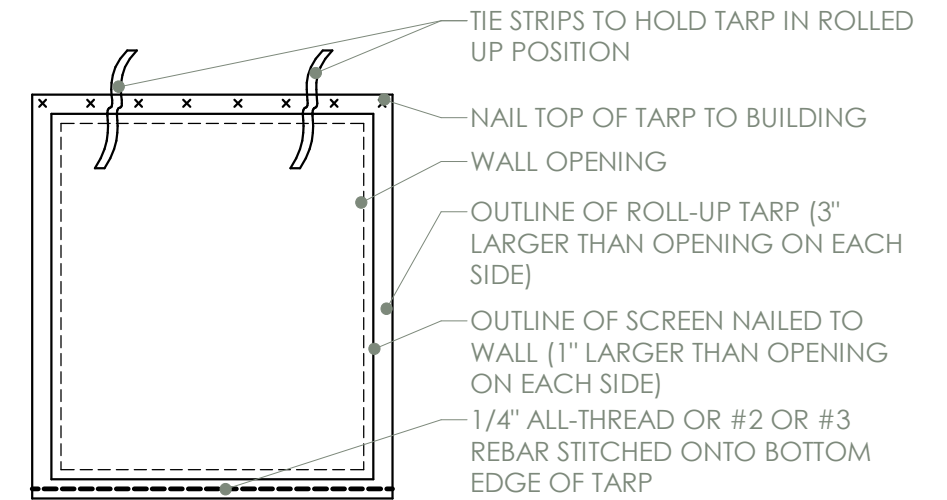
2 WALL DETAIL @ WALL

SCALE 1 : 20



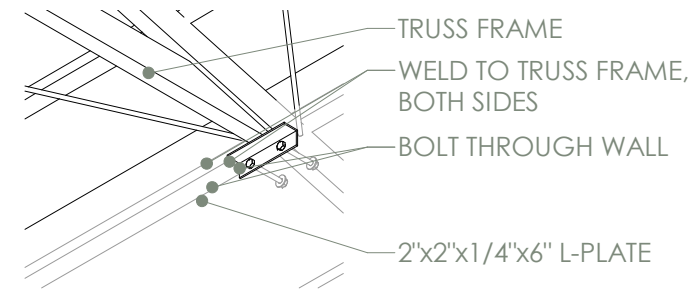
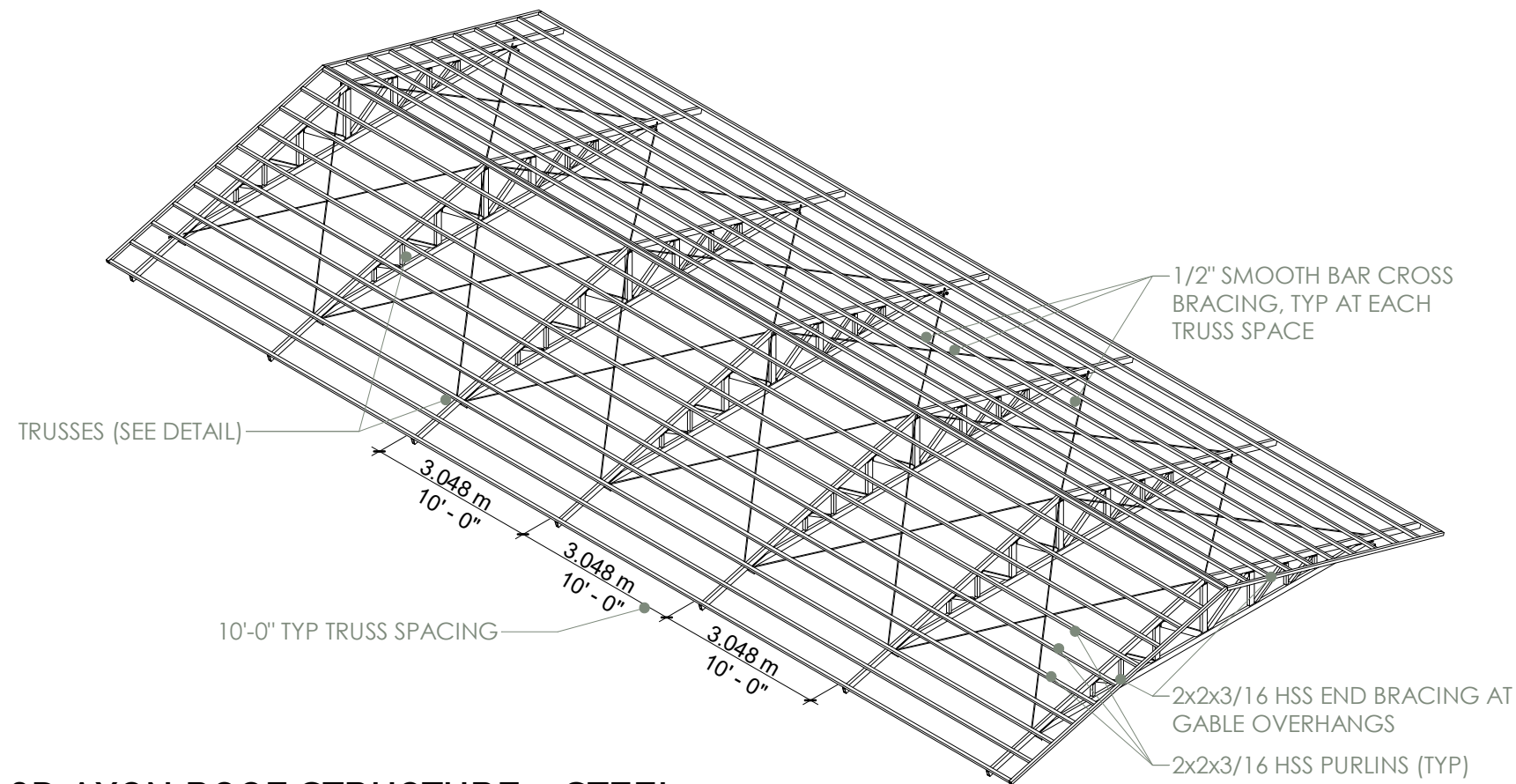
1 WALL DETAIL @ SCREEN/TARP

SCALE 1 : 20



3 WINDOW FRAMING DETAIL - SCREEN/TARP

SCALE 1 : 20

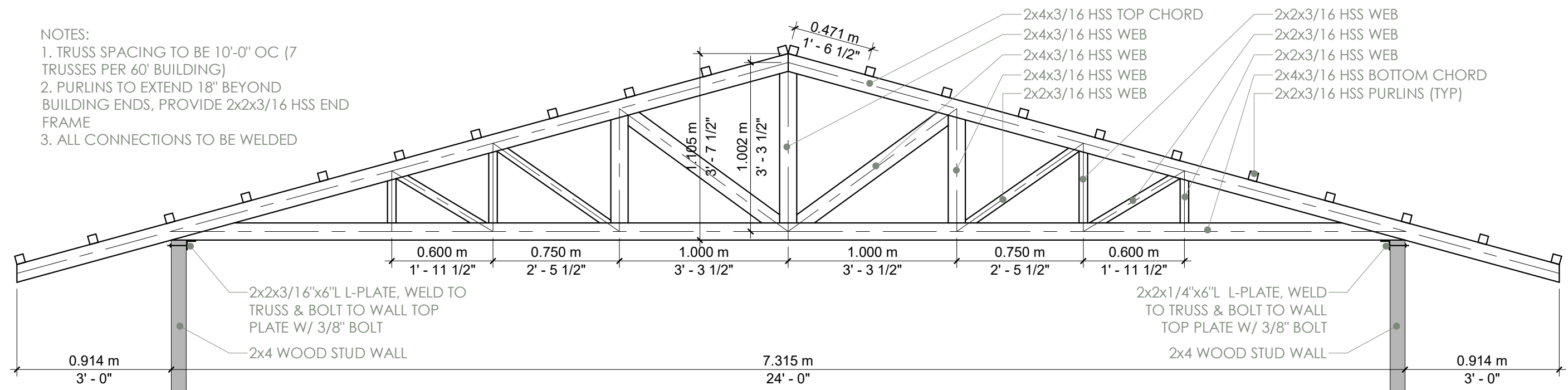


3 3D AXON ROOF ATTACHMENT SCALE

2 3D AXON ROOF STRUCTURE - STEEL SCALE

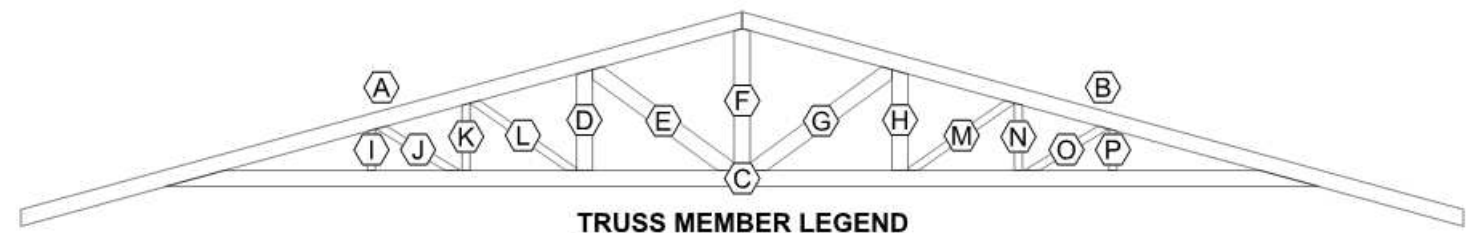
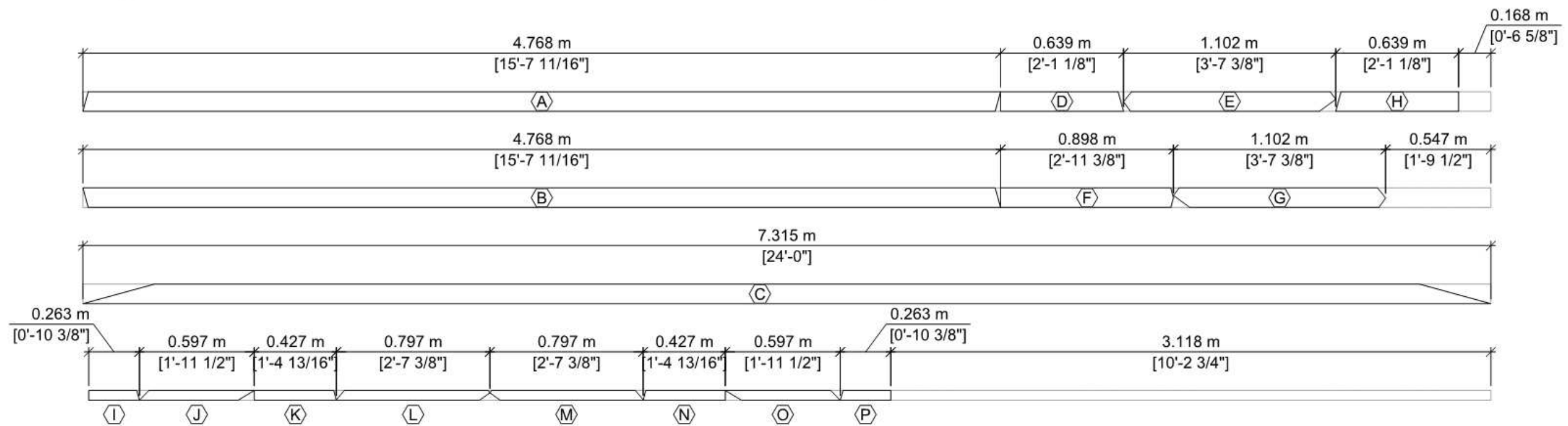
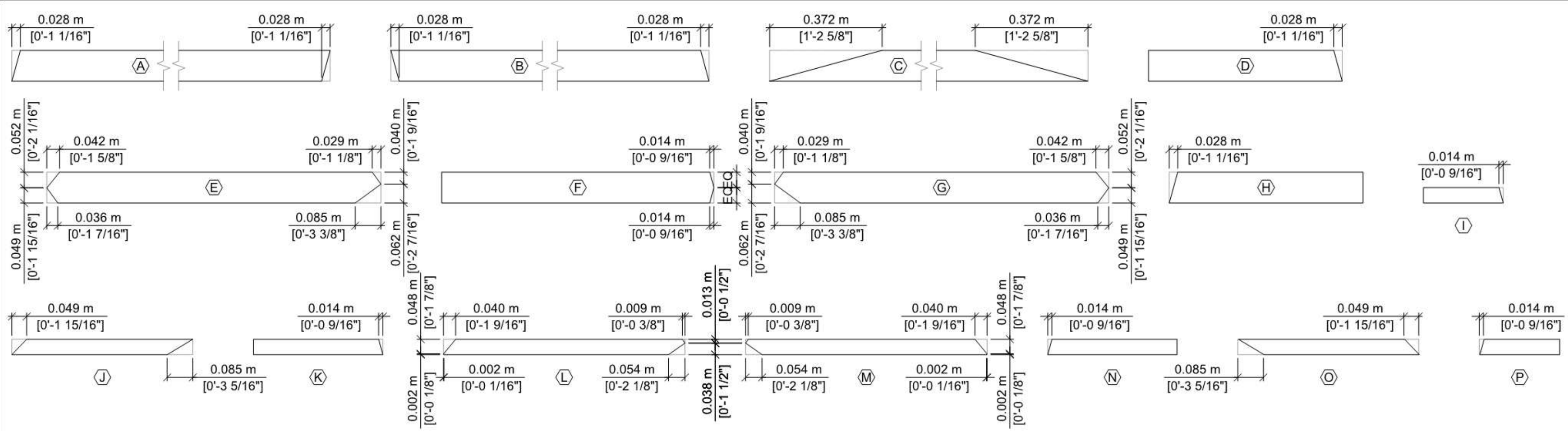
NOTES:

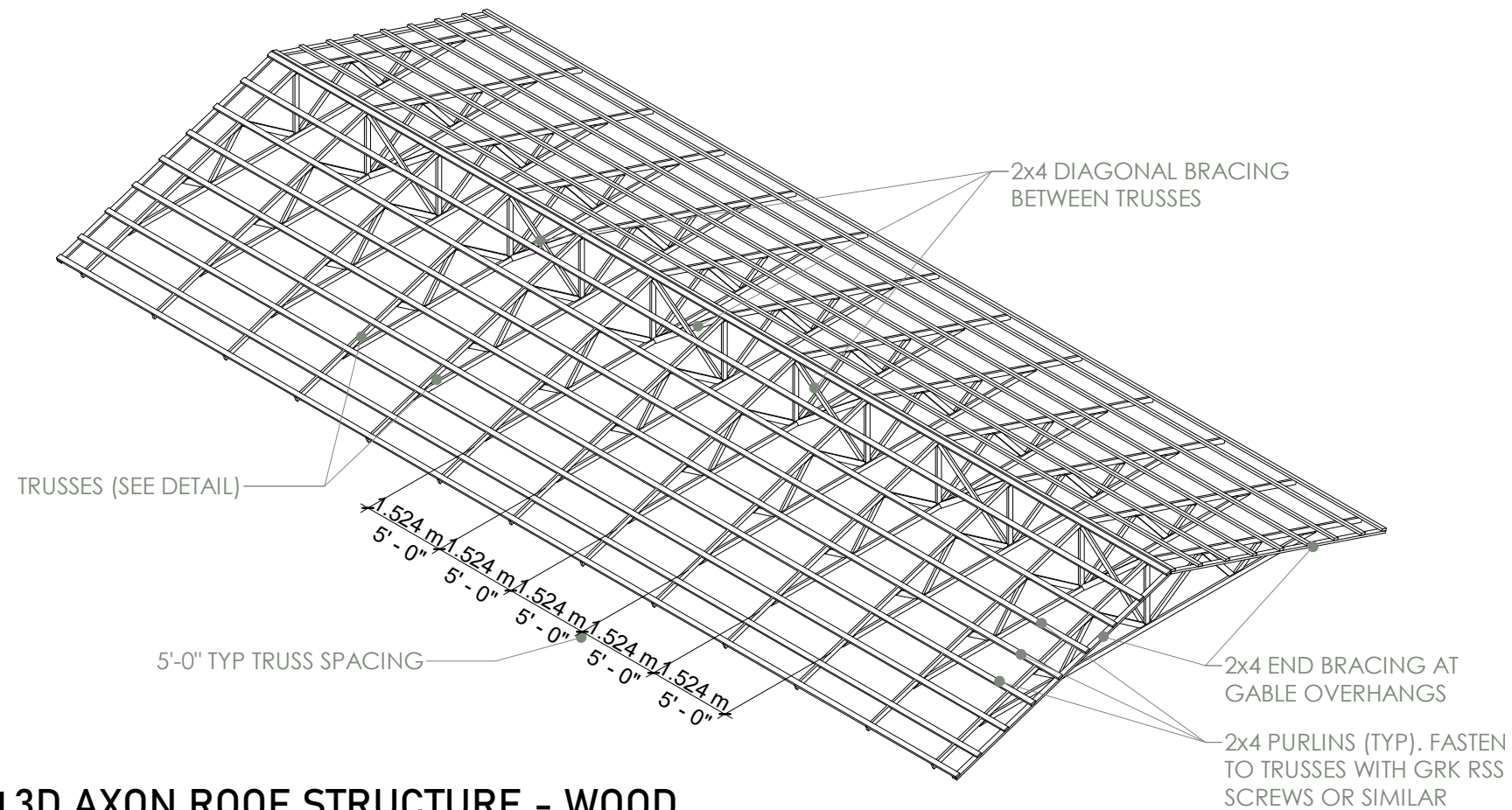
1. TRUSS SPACING TO BE 10'-0" OC (7 TRUSSES PER 60' BUILDING)
2. PURLINS TO EXTEND 18" BEYOND BUILDING ENDS, PROVIDE 2x2x3/16 HSS END FRAME
3. ALL CONNECTIONS TO BE WELDED



1 TRUSS DETAIL - STEEL SCALE 1:25

NOTE: DETAILS ARE PROVIDED FOR BOTH STEEL AND WOOD TRUSSES. SELECTION OF ROOF STRUCTURAL SYSTEM SHOULD BE MADE BASED ON AVAILABILITY OF MATERIAL AND LABOR TO BUILD TRUSSES.



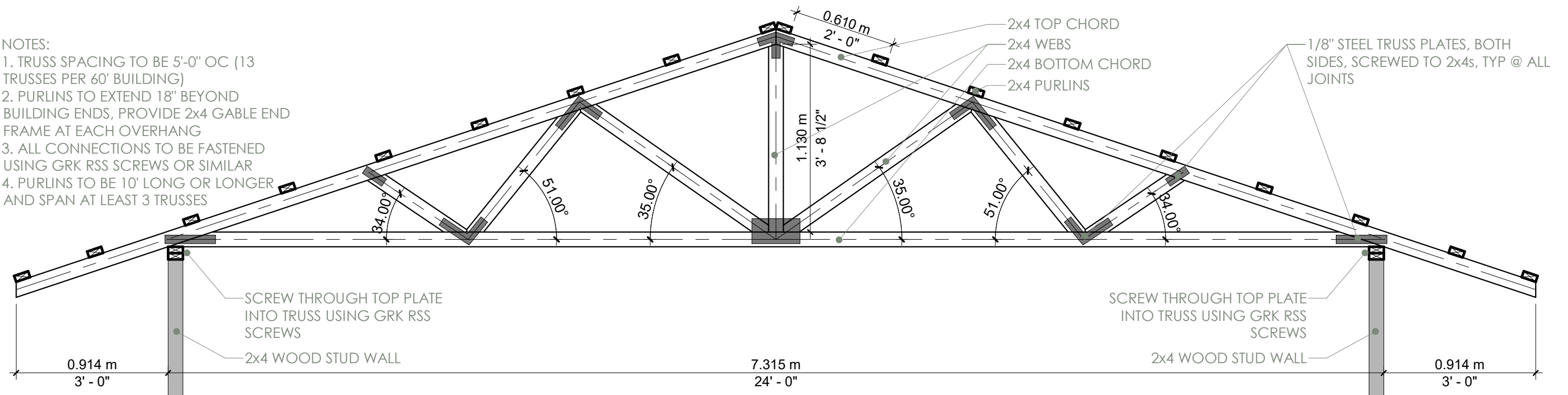


1 3D AXON ROOF STRUCTURE - WOOD

SCALE

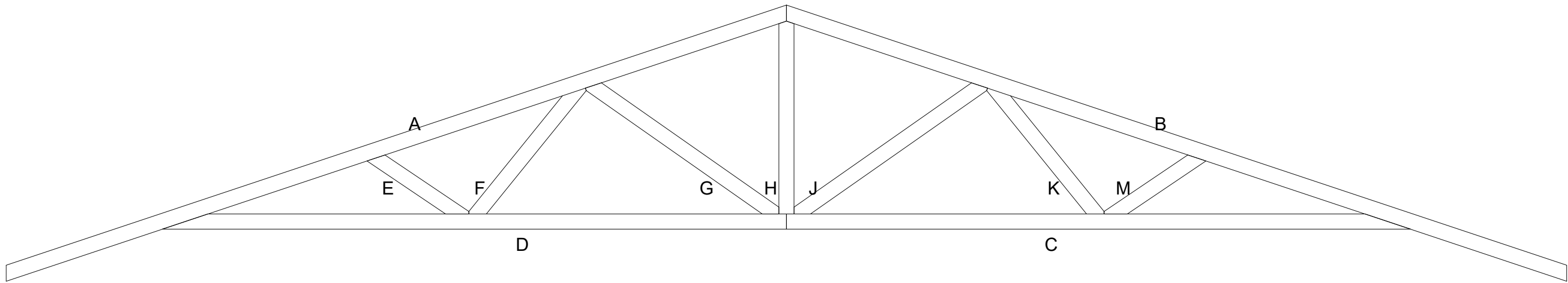
NOTES:

1. TRUSS SPACING TO BE 5'-0" OC (13 TRUSSES PER 60' BUILDING)
2. PURLINS TO EXTEND 18" BEYOND BUILDING ENDS, PROVIDE 2x4 GABLE END FRAME AT EACH OVERHANG
3. ALL CONNECTIONS TO BE FASTENED USING GRK RSS SCREWS OR SIMILAR
4. PURLINS TO BE 10' LONG OR LONGER AND SPAN AT LEAST 3 TRUSSES



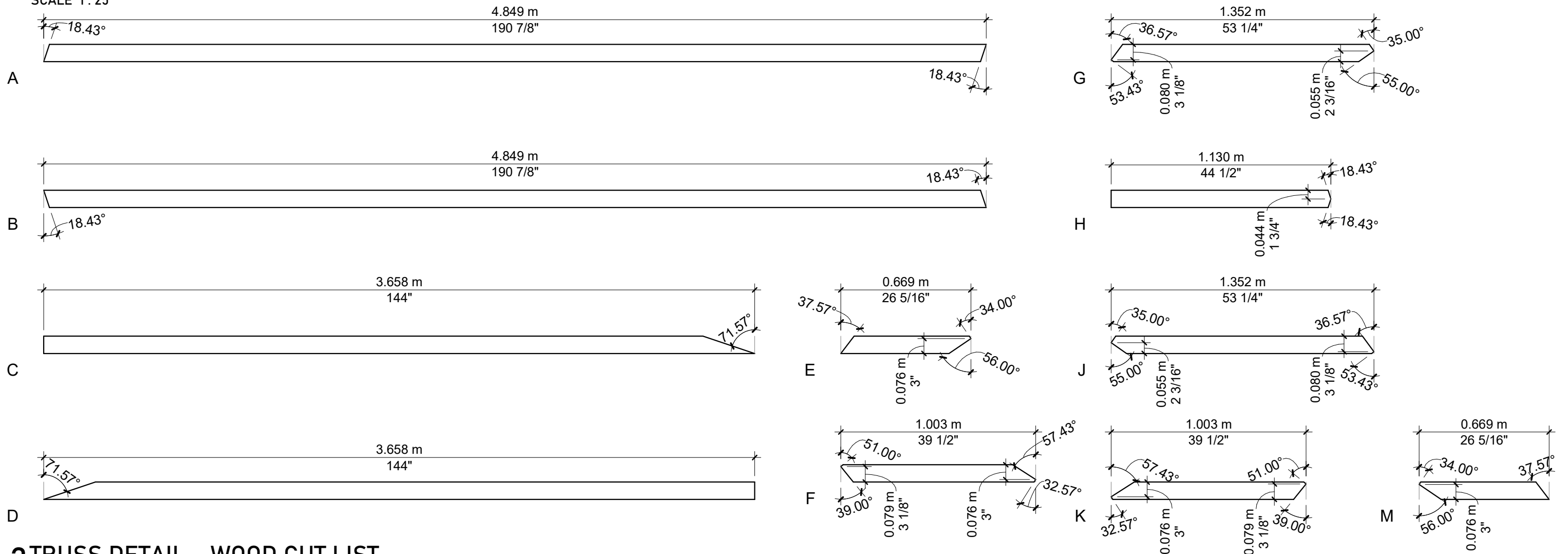
2 TRUSS DETAIL - WOOD

SCALE 1:25



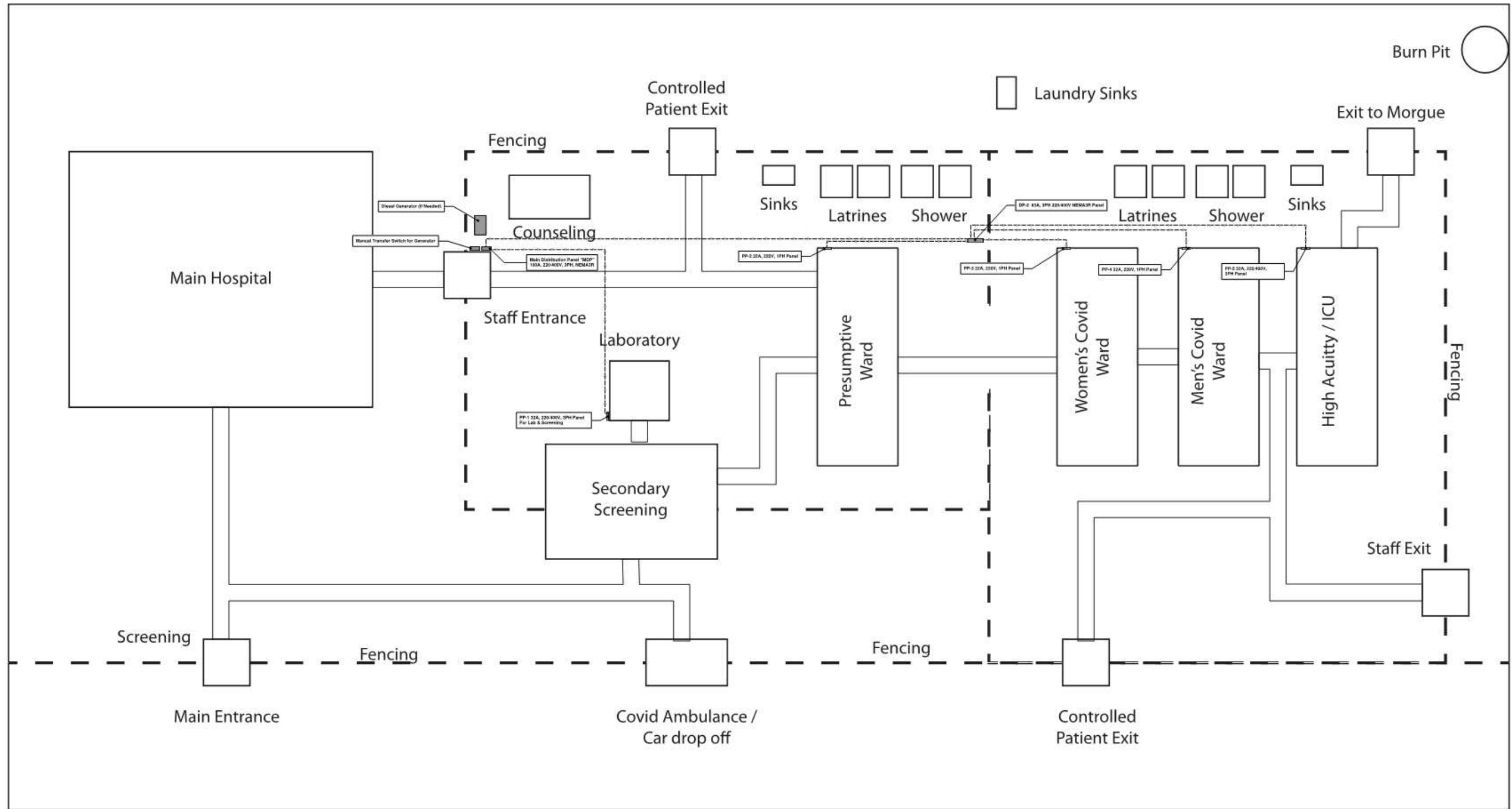
1 TRUSS DETAIL - WOOD CUT LIST KEY

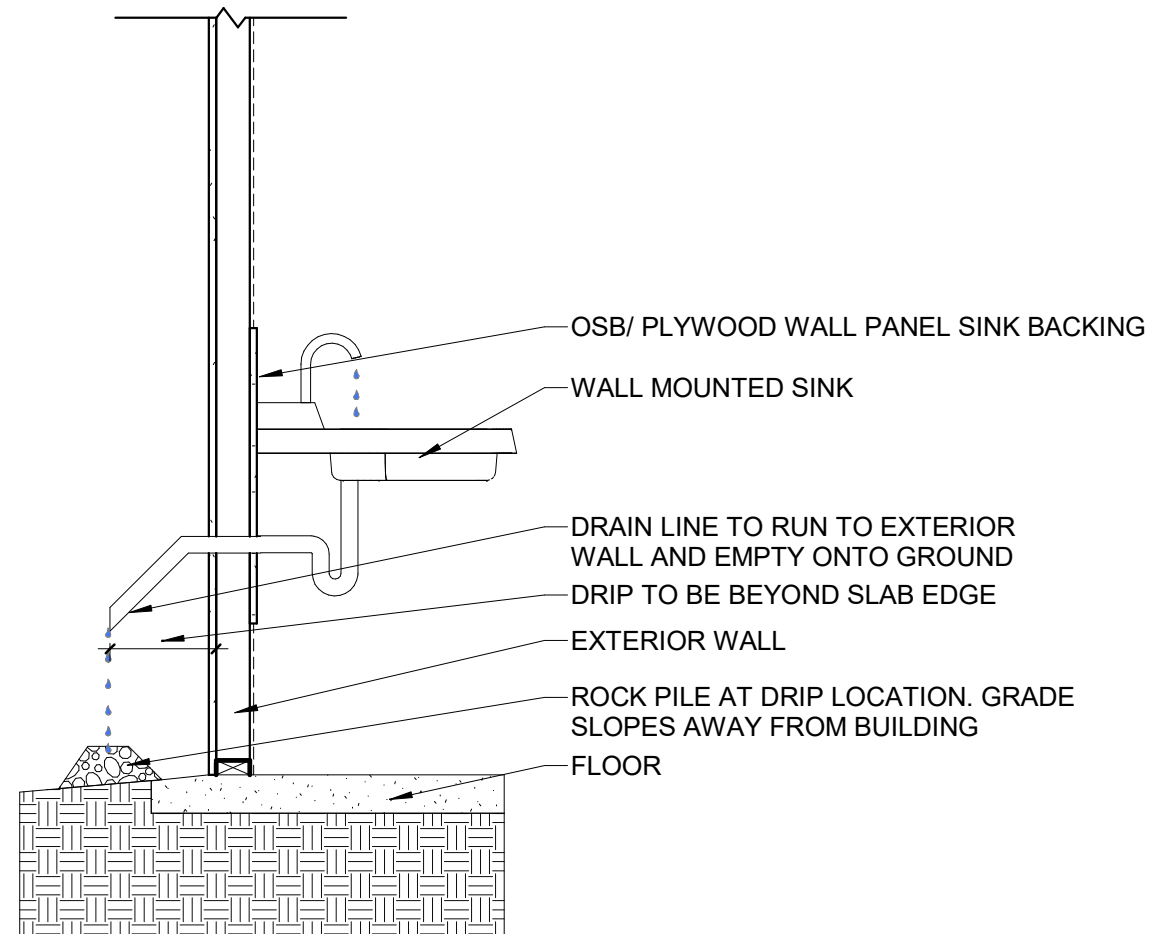
SCALE 1 : 25



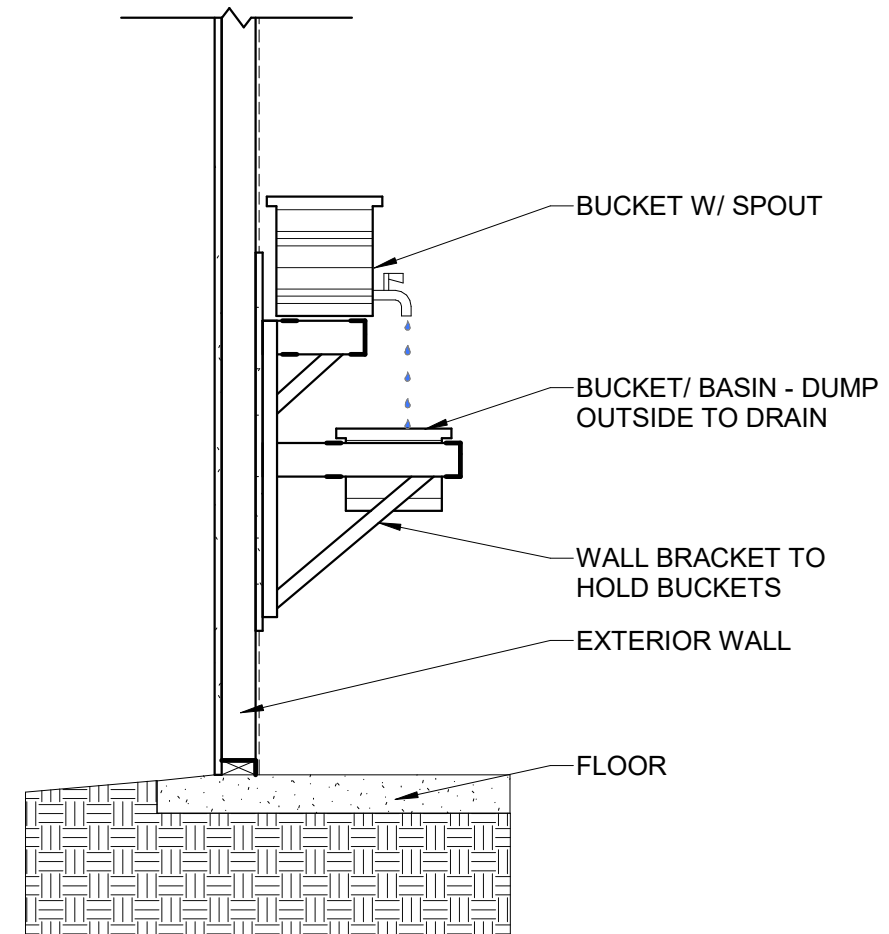
2 TRUSS DETAIL - WOOD CUT LIST

SCALE 1 : 20





OPTION A: PLUMBED SINK



OPTION B: BUCKET SINK