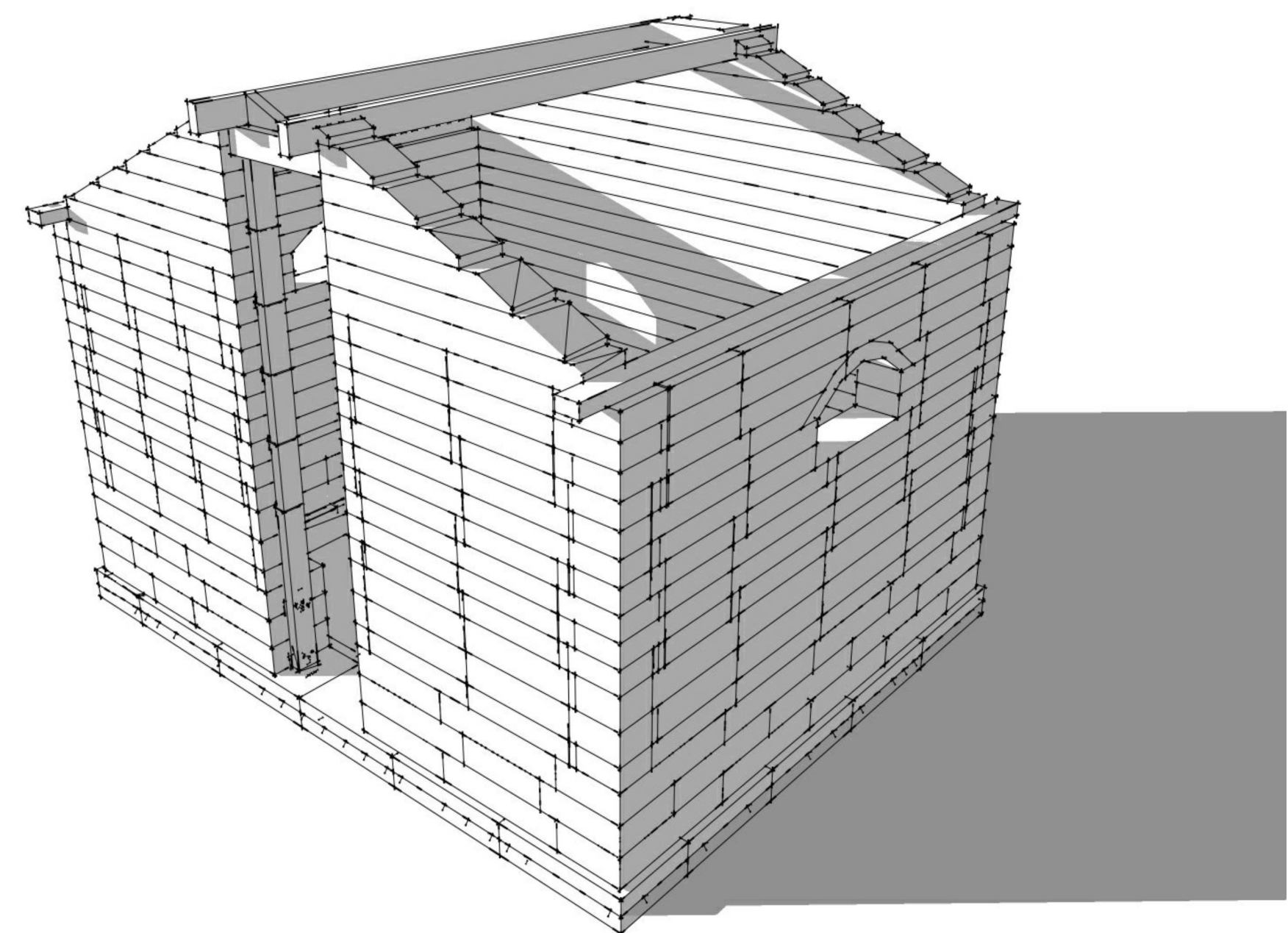
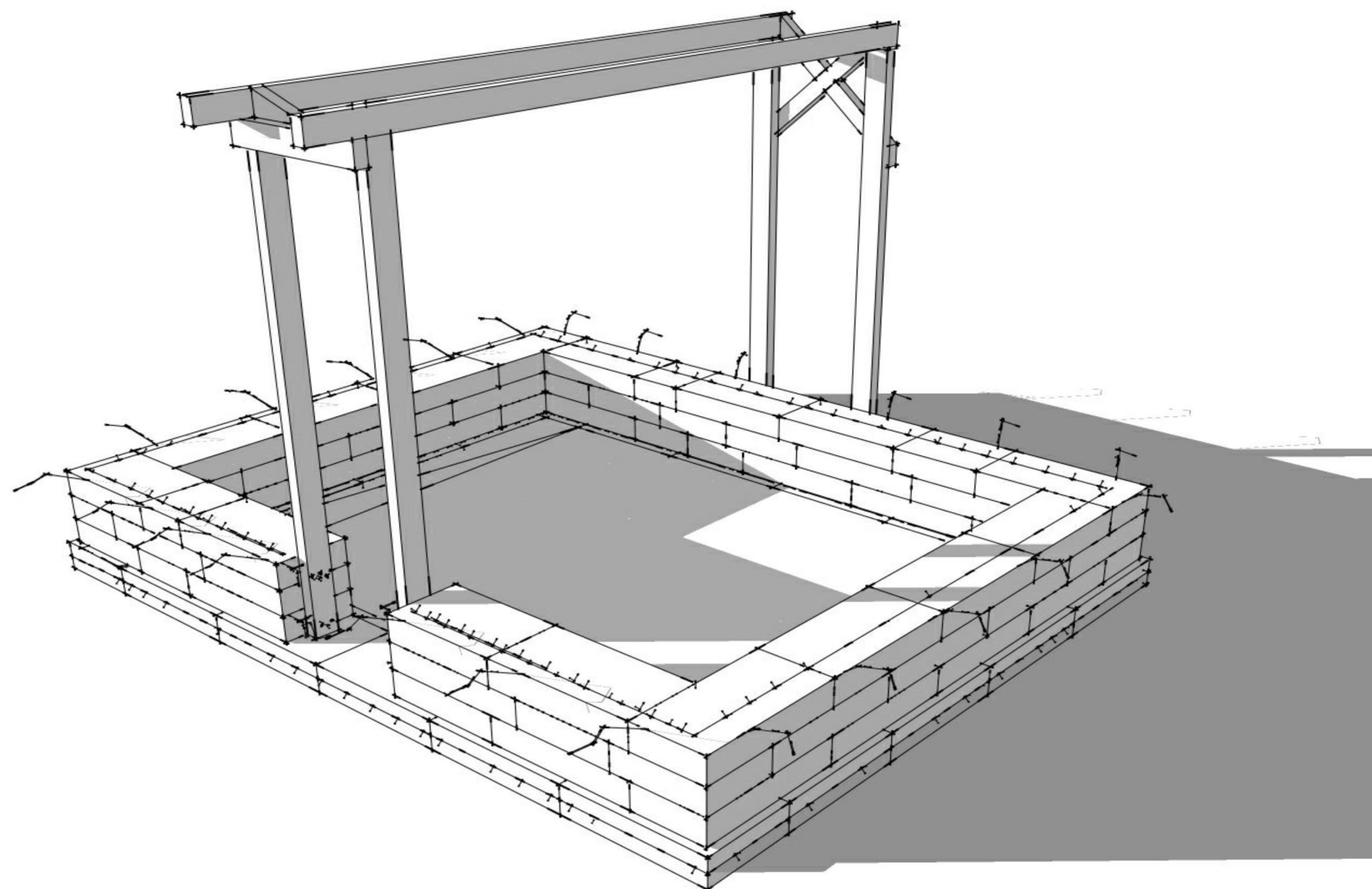


Contents:

1. Floor Plan
2. Structural Plan
3. Front Elevation
4. Side Elevation
5. Rear Elevation
6. Section
7. Eaves Wall Detail
8. Gable Wall Detail & Strapping Diagram

5.7 m² area short- to medium-use low cost shelter with R3 walls. Straw logs (light straw clay in geotextile mesh tubing) on 380 height earthen base wall.

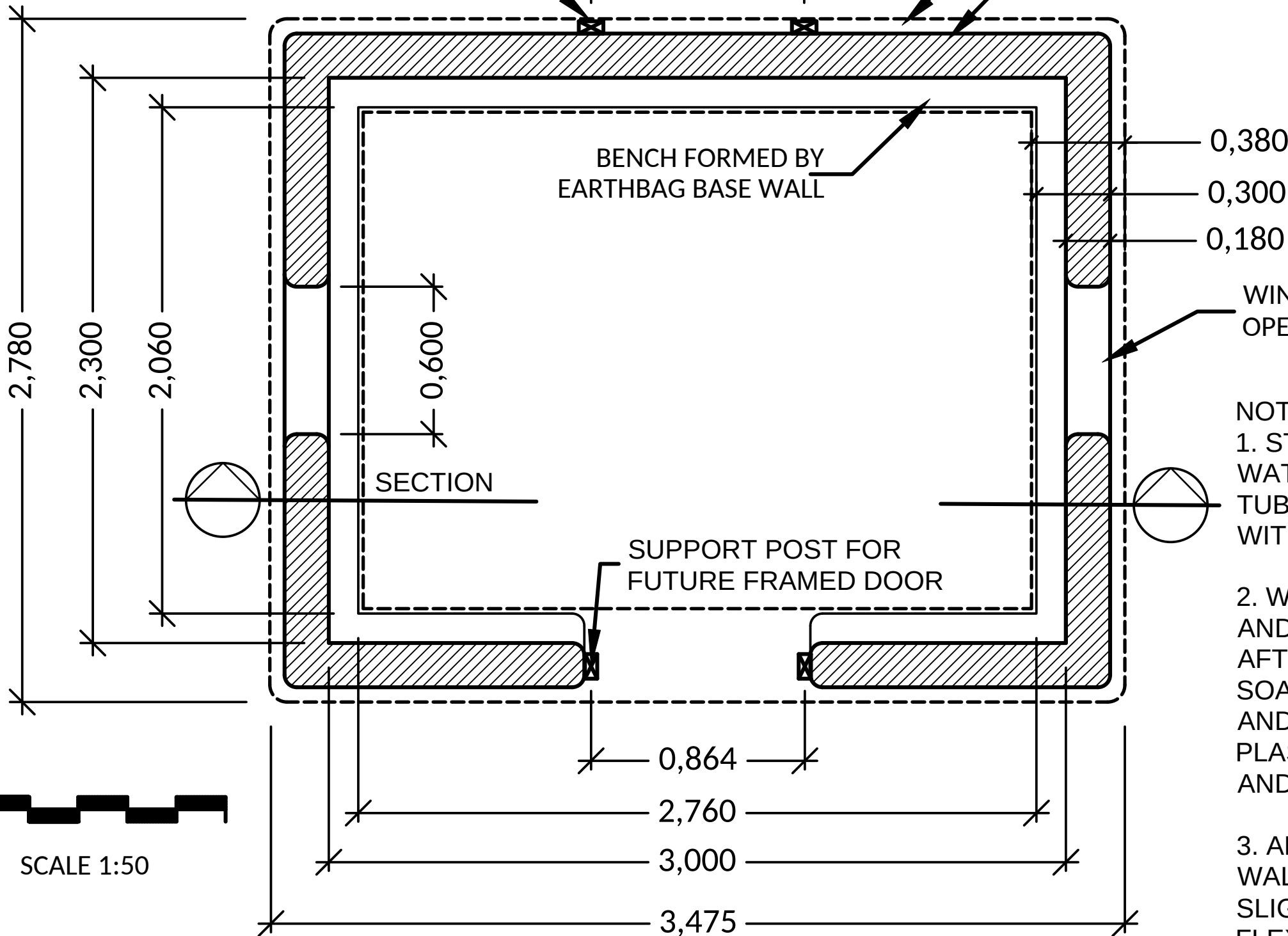


REAR SUPPORT POST TO STIFFEN STRAW LOGS (TYP.)

0,864

SAND OR GRAVEL BAG FOOTING

STRAW LOG UPPER WALL



BENCH FORMED BY EARTHBAG BASE WALL

0,380

0,300

0,180

WINDOW OPENING (TYP.)

SECTION

0,600

SUPPORT POST FOR FUTURE FRAMED DOOR

0,864

2,760

3,000

3,475

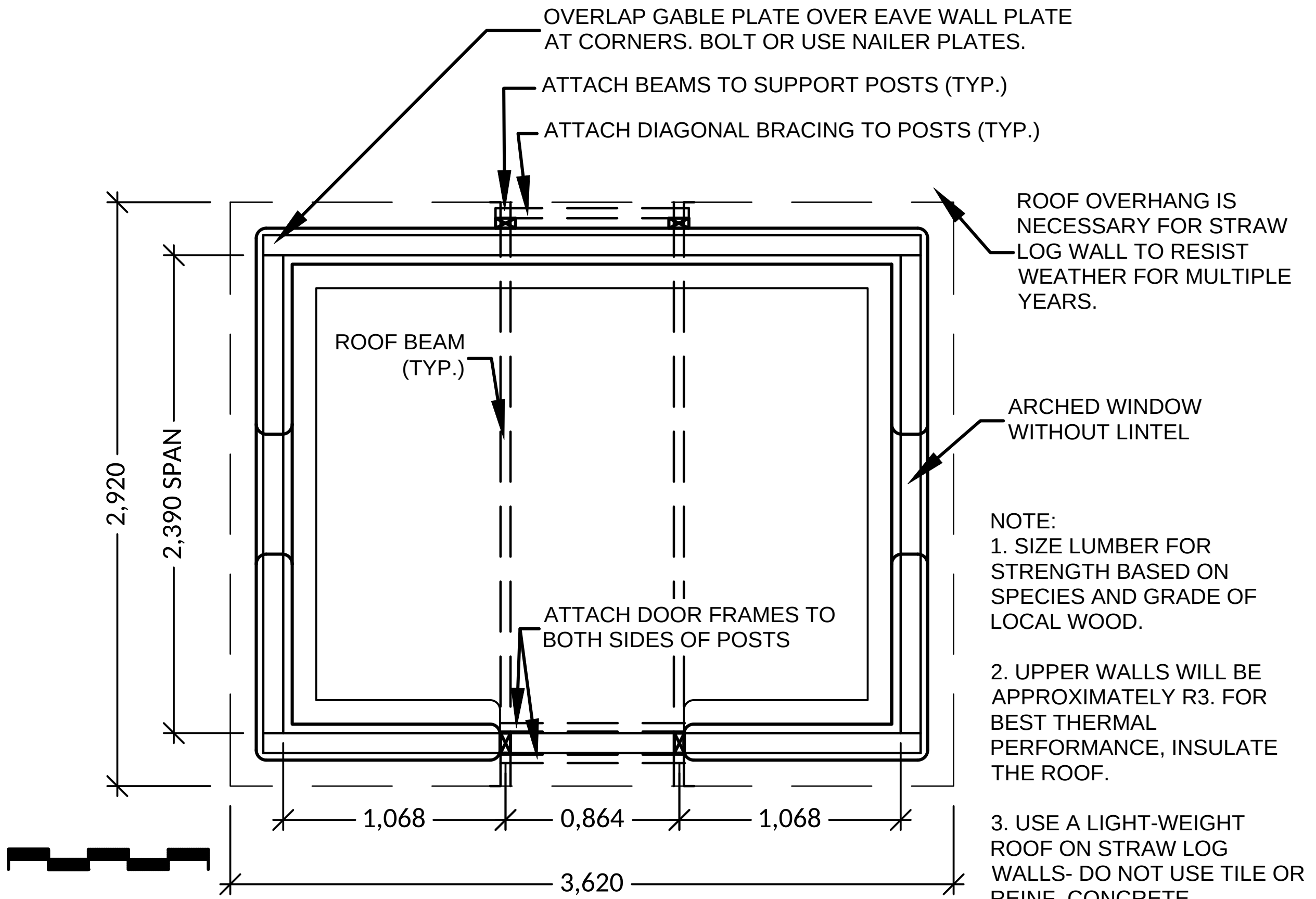
NOTE:

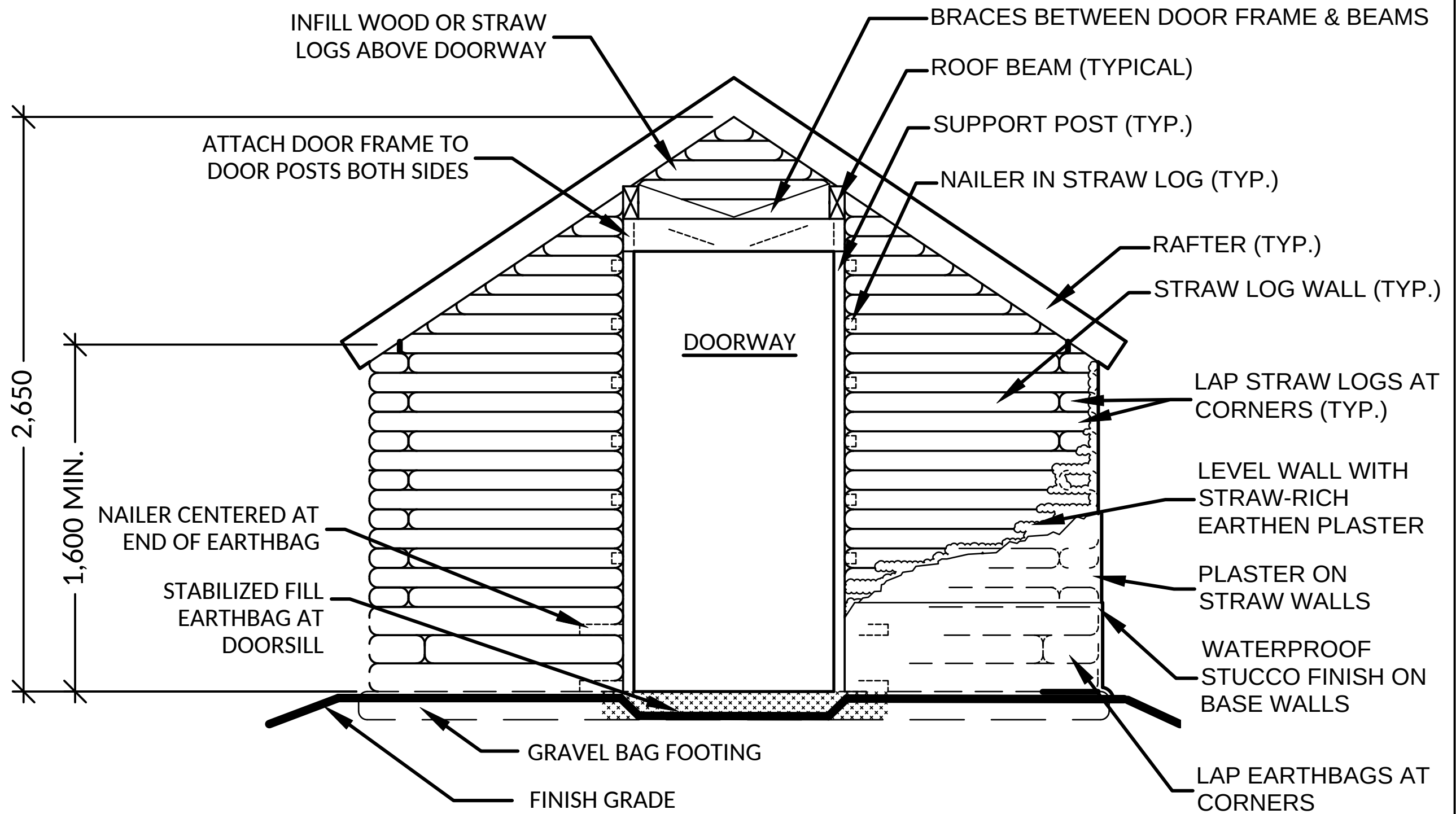
1. STRAW LOGS ARE MESH WATTLE EROSION CONTROL TUBING STUFFED FIRMLY WITH STRAW.

2. WALLS HAVE STRENGTH AND FIRE RESISTANCE AFTER STRAW IS FULLY SOAKED WITH LIQUID CLAY AND SURFACES ARE PLASTERED WITH EARTH AND/ OR HYDRAULIC LIME.

3. AFTER DRYING, EAVE WALL MAY COMPRESS SLIGHTLY MORE THAN L/ 180 FLEXURE WITHOUT FAILURE UNDER >0.77 kN/M² (16 PSF) SNOW LOADING.

SCALE 1:50





SCALE 1:50

NOTE:

1. PERMANENT CONSTRUCTION REQUIRES GRAVEL BAG COURSES AND RUBBLE FOOTING TO BELOW FROST LINE. ALWAYS PITCH FINISH GRADE AWAY FROM NATURAL WALLS FOR GOOD DRAINAGE.

2. STRAW LOG WALLS ARE A FORM OF LIGHT STRAW CLAY (LSC) AND REQUIRE DRY WEATHER TO DRY AFTER SOAKING. IN HUMID CLIMATES COVER WITH BREATHABLE FINISH PLASTERS

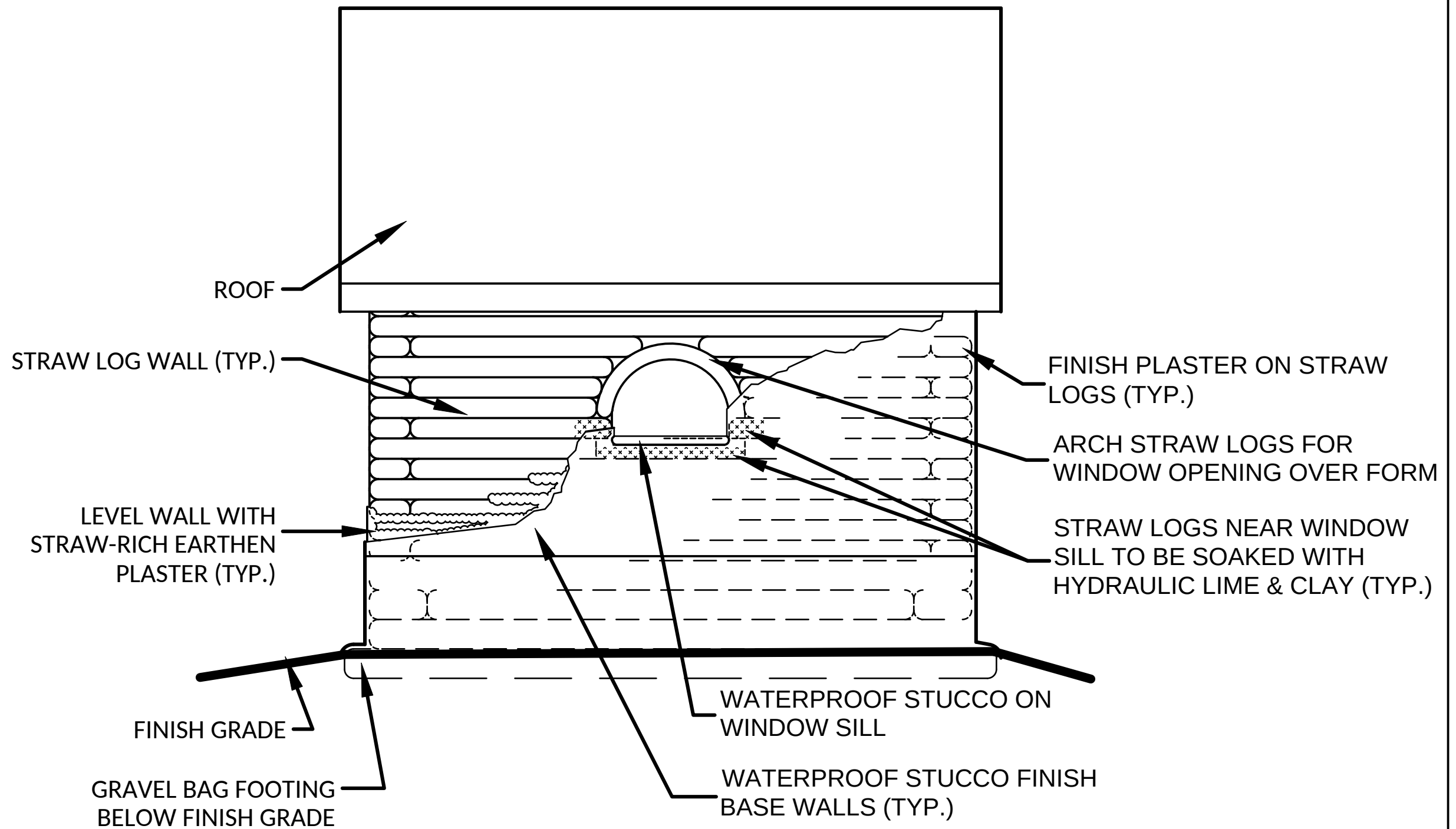
BuildSimple.org
 simple_earth@yahoo.com
 1 (505) 312-7163

3/9/2023

Revisions

Front Elevation
 Schematic Small Straw Log Shelter

3
 of 8



SCALE 1:50

NOTE: EARTHEN BUILDING COMPONENTS CAN BE STABILIZED (FOR WATER-RESISTANCE) BY ADDING 3% OF POWDERED HYDRAULIC LIME OR PORTLAND CEMENT BY VOLUME.

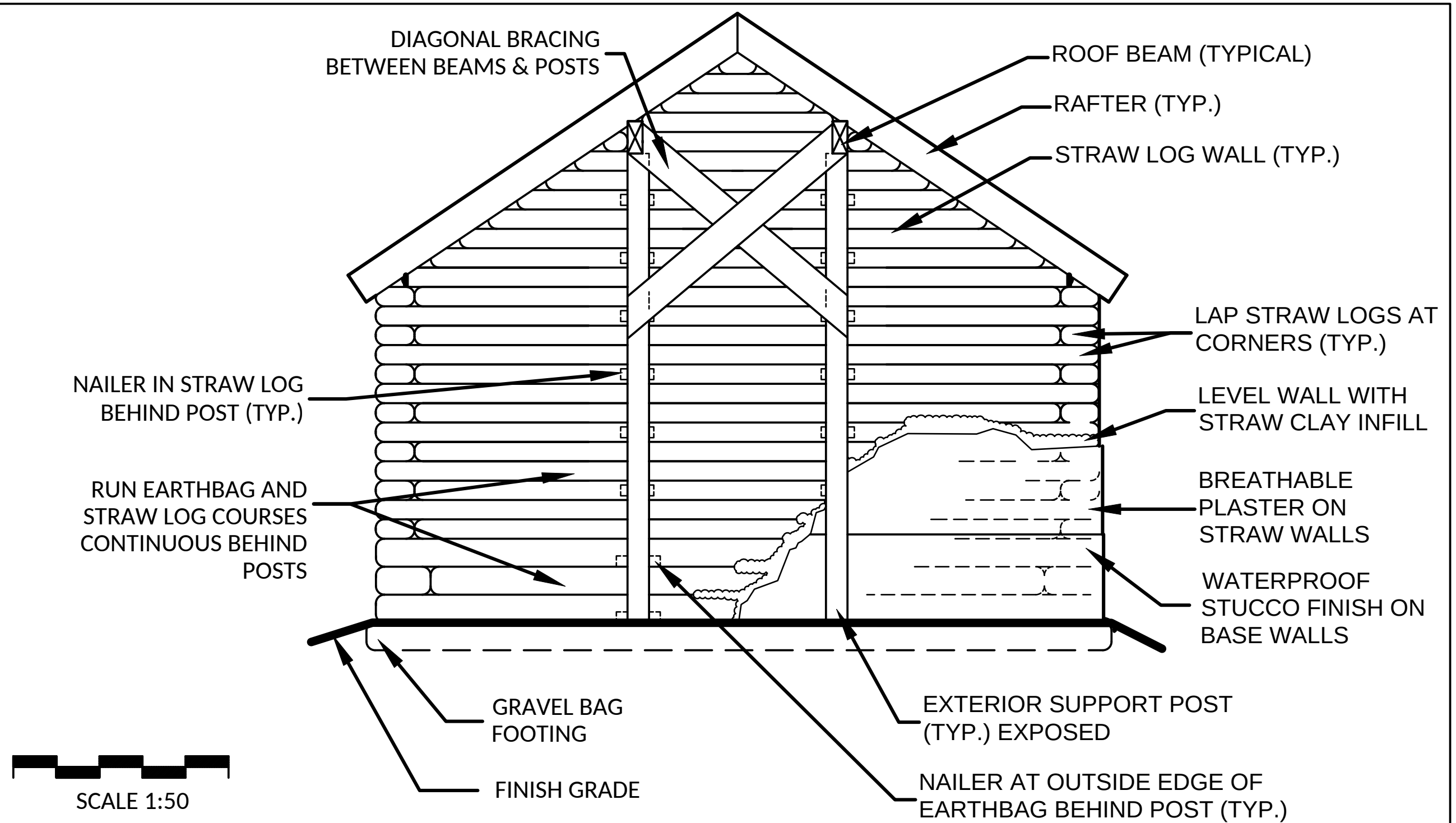
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3/9/2023

Revisions

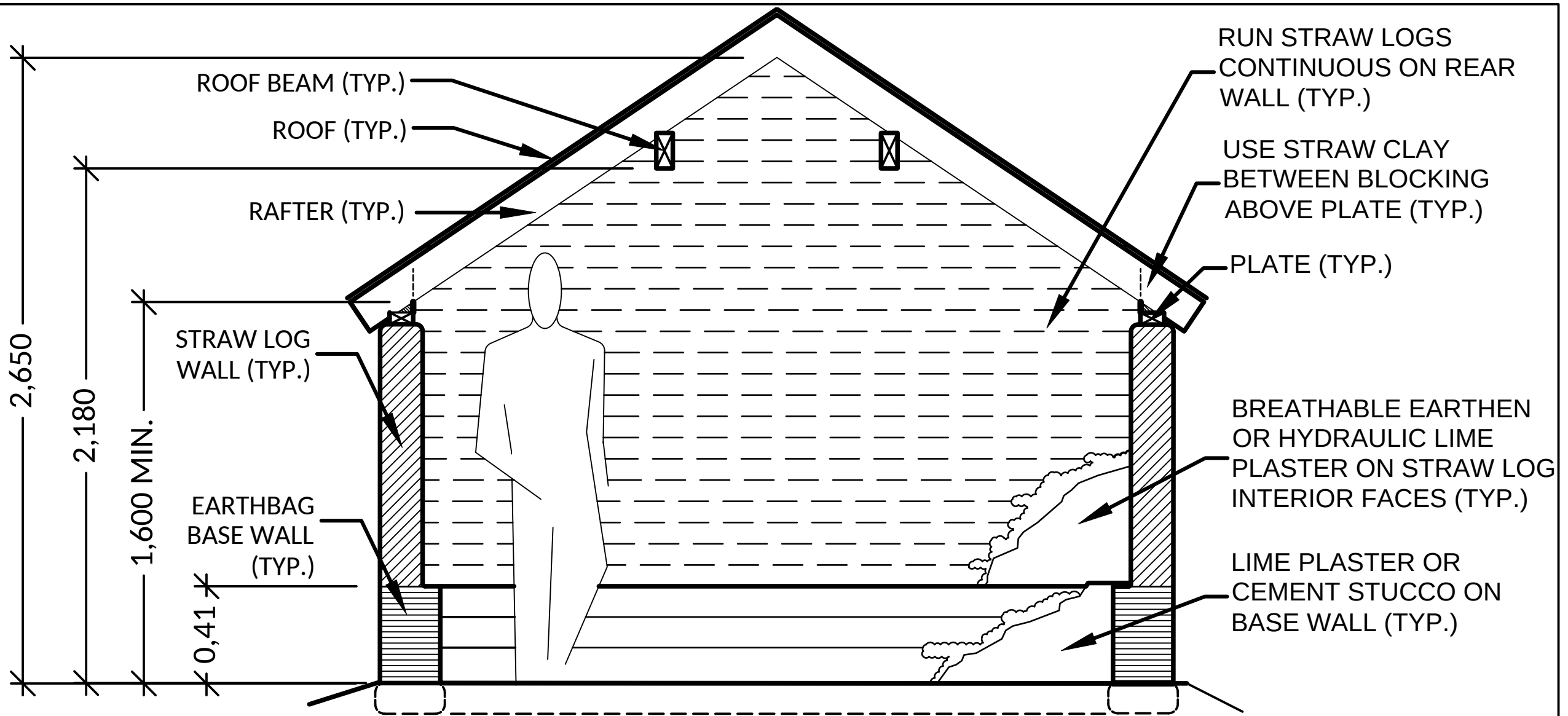
Side Elevation
 Schematic Small Straw Log Shelter

4
 of 8



NOTE:

1. RAISE WOOD FRAME BY ATTACHING POSTS TO NAILERS IN EARTHEN BASE WALL, TO BEAMS AND TO BRACING.
2. FOLLOW CONSTRUCTION STEPS FOR STRAW LOG WALLS ON SHEET 8.



NOTES:

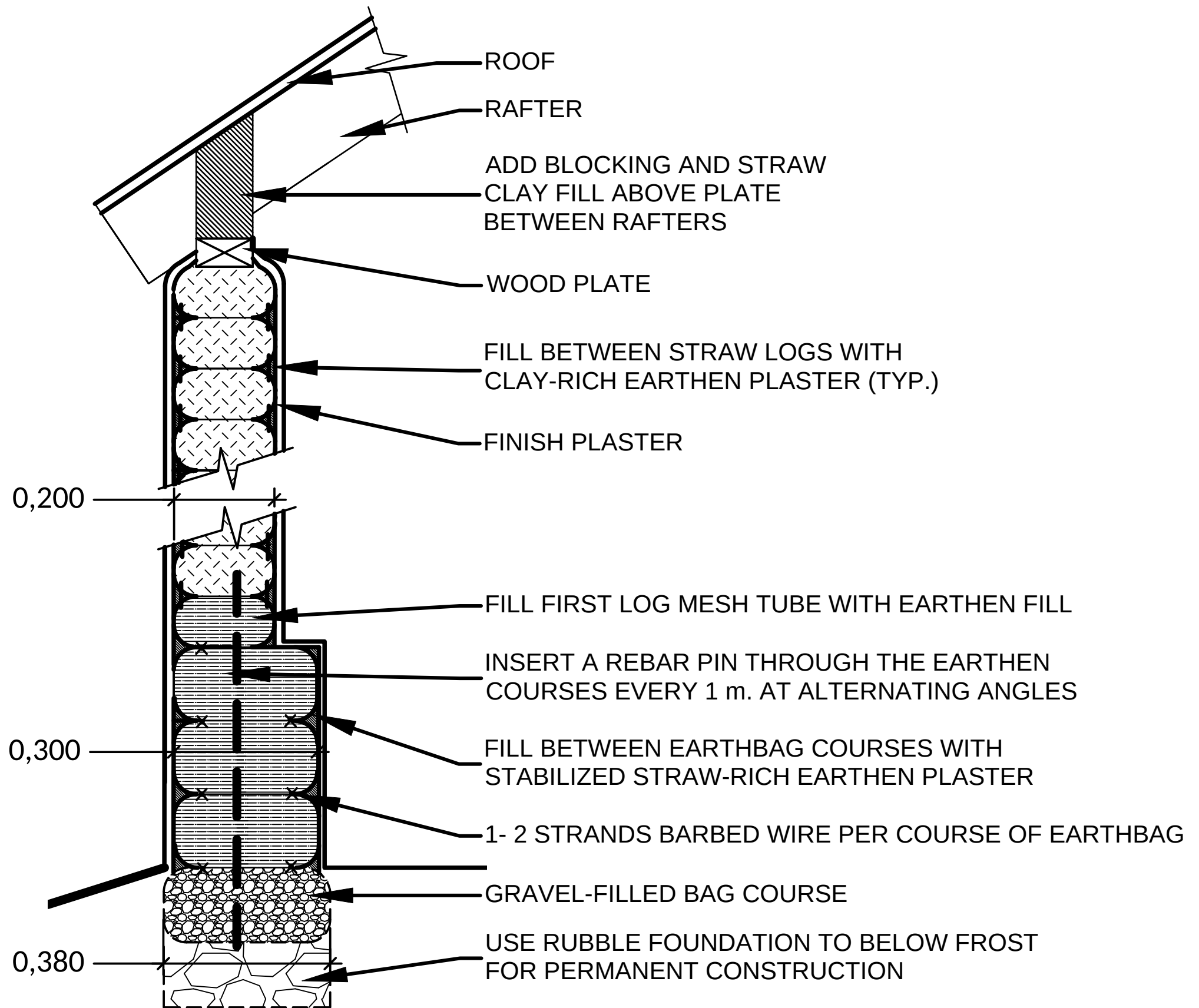
1. END STRAW LOGS ON CONTINUOUS WALLS WITH OVERLAPS BETWEEN COURSES. SEW TUBE ENDS TOGETHER BOTH SIDES.

2. STRAW LOGS WETTED WITH CLAY SLIP FLATTEN UNDER THE WEIGHT OF THE ADDED LIQUID TO A FLAT OVAL. THEY MAY ALSO SHRINK DURING DRYING TO REACH 9 cm HIGH x 18 cm WIDE. DO NOT ATTACH FRAME TO NAILERS UNTIL STRAW LOG PANELS ARE LEATHER-HARD.

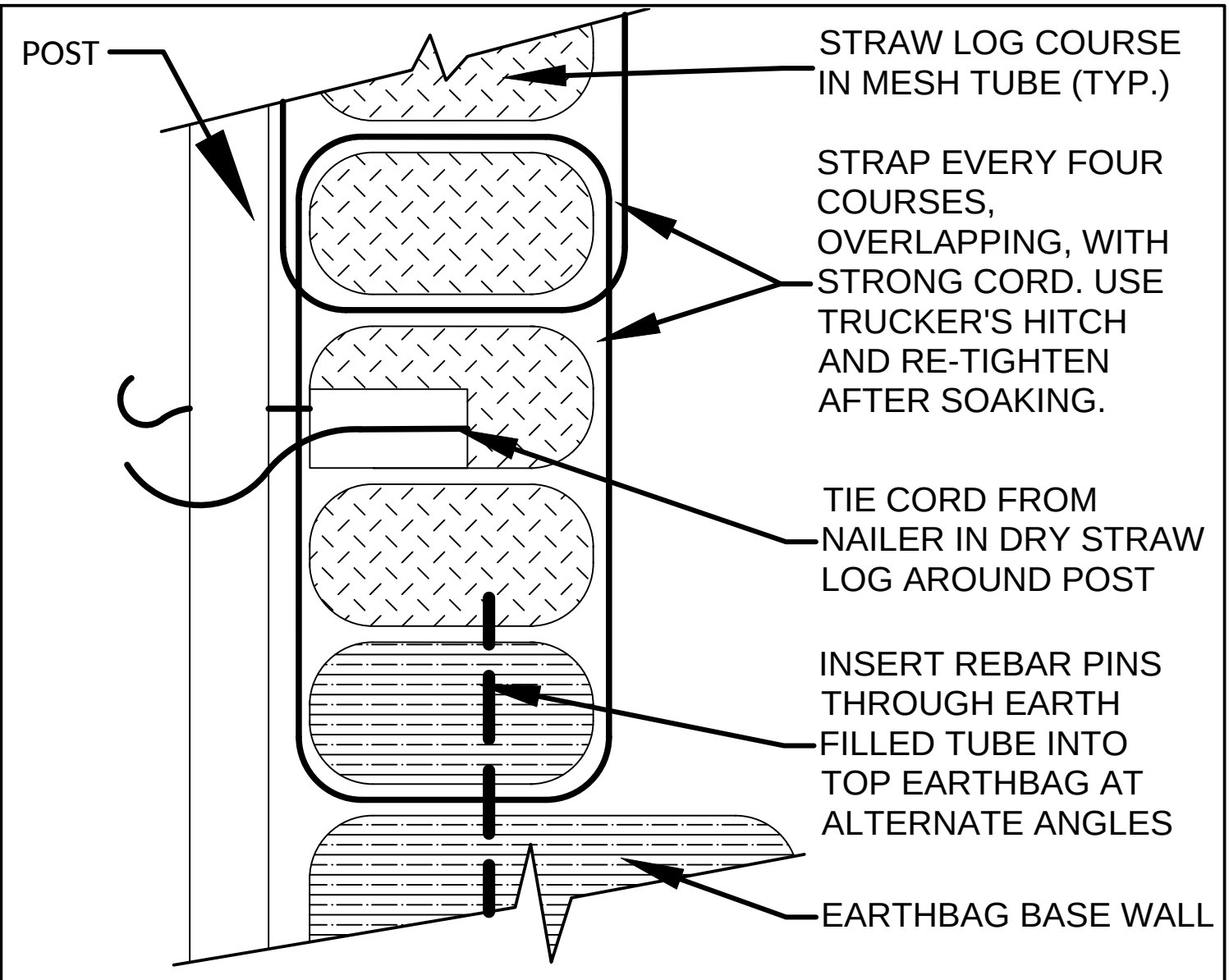
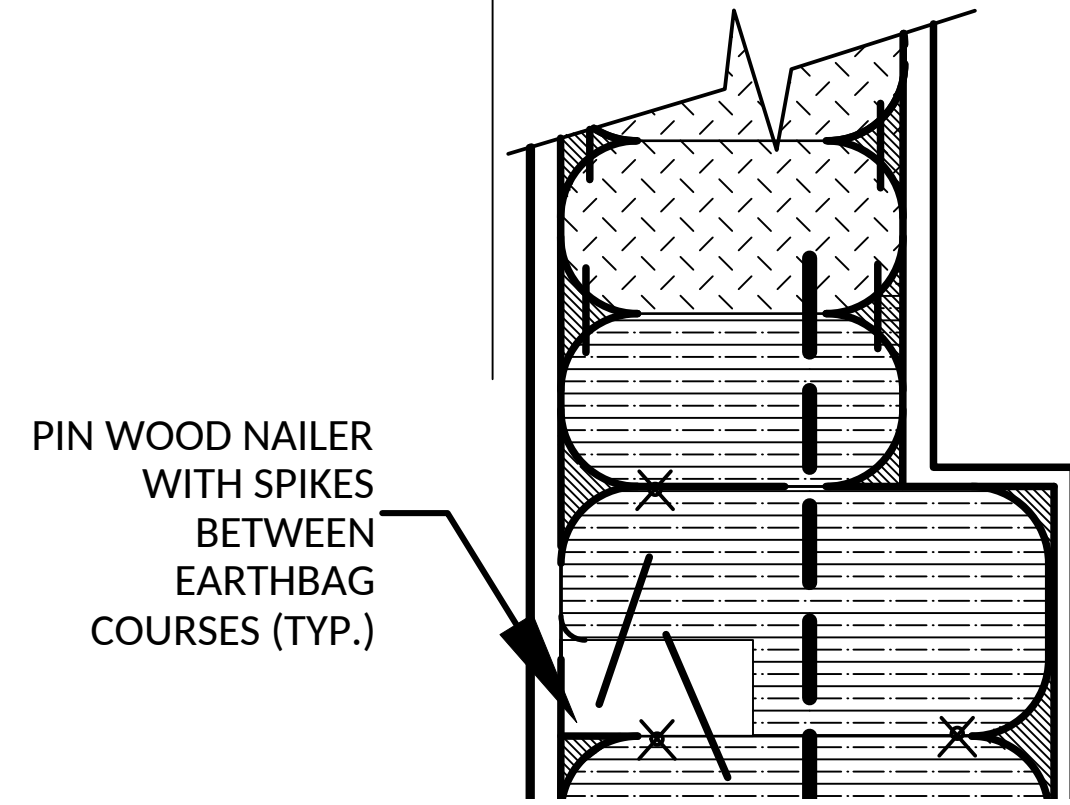
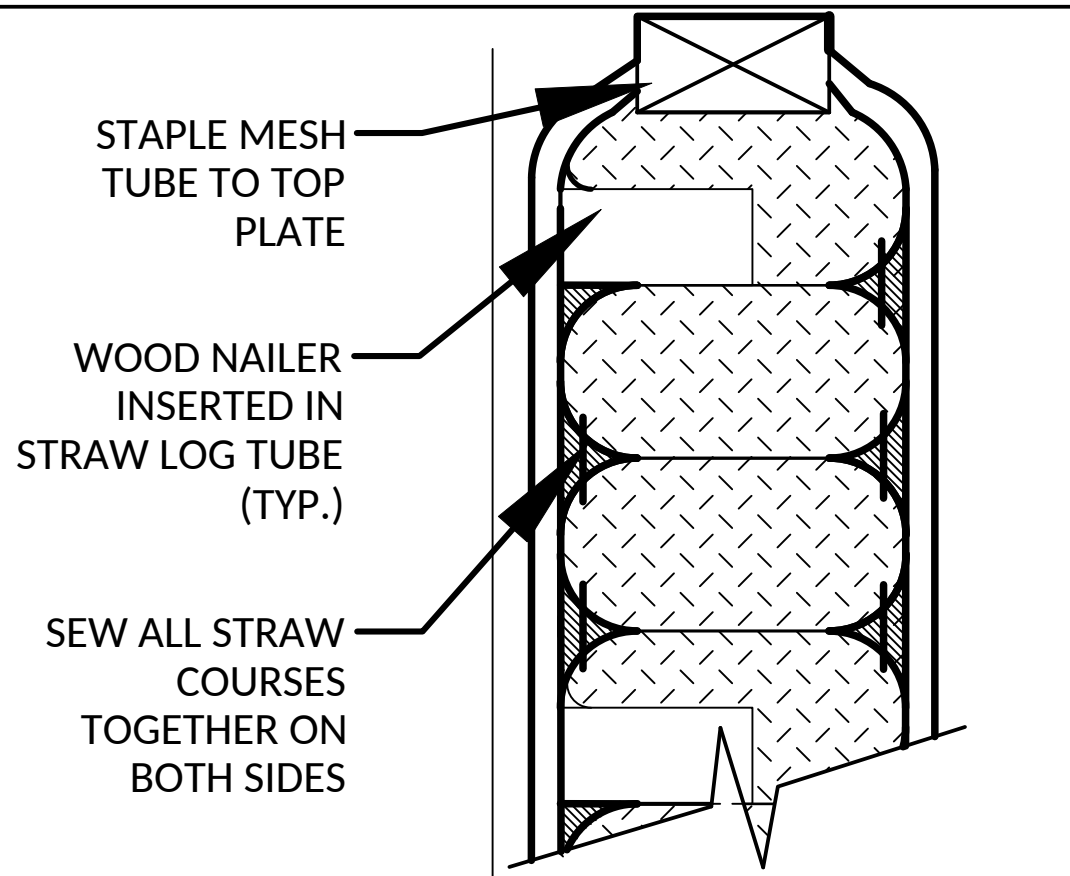
3. LIGHT STRAW CLAY SHRINKS 8% VERTICALLY DURING DRYING. DO NOT ADD WOOD PLATES OR ROOF UNTIL AFTER WALLS HAVE DRIED. PROVIDE EXTRA CORD TIES EVERY 30 cm ALONG THE TOP COURSES OR LEAVE TOP COURSE DRY UNTIL FINAL HEIGHT IS REACHED, TO ALLOW EASY ATTACHMENT OF EXTRA STRAW LOGS AS NEEDED.



SCALE 1:50



SCALE 1:20



STRAPPING DIAGRAM: NOT TO SCALE

- ORDER OF CONSTRUCTION:
1. LAY STRAW LOG (S. L.) COURSES FLAT TO SEW TOGETHER BEFORE BUILDING.
 2. SEW LOWEST S. L. COURSE TO EARTHEN TUBE, TIE HIGHER COURSES TO POSTS. STRAP STRAW WALLS VERTICALLY TO COMPRESS.
 2. SOAK AND ADD LEVELING PLASTER TO 1 m HEIGHT S. L. MAXIMUM PER DAY.
 3. ATTACH POSTS TO S. L. NAILERS AFTER WALL HARDENS (3 DAYS). ADD MORE STRAW LOGS ON TOP AS NEEDED.
 4. ADD PLATE AND RAFTERS AFTER ALL S. L. WALLS ARE FULLY SOAKED & DRY.

NAILERS FOR POST ATTACHMENT: NOT TO SCALE