

# Koko

# Dome Reinstatement

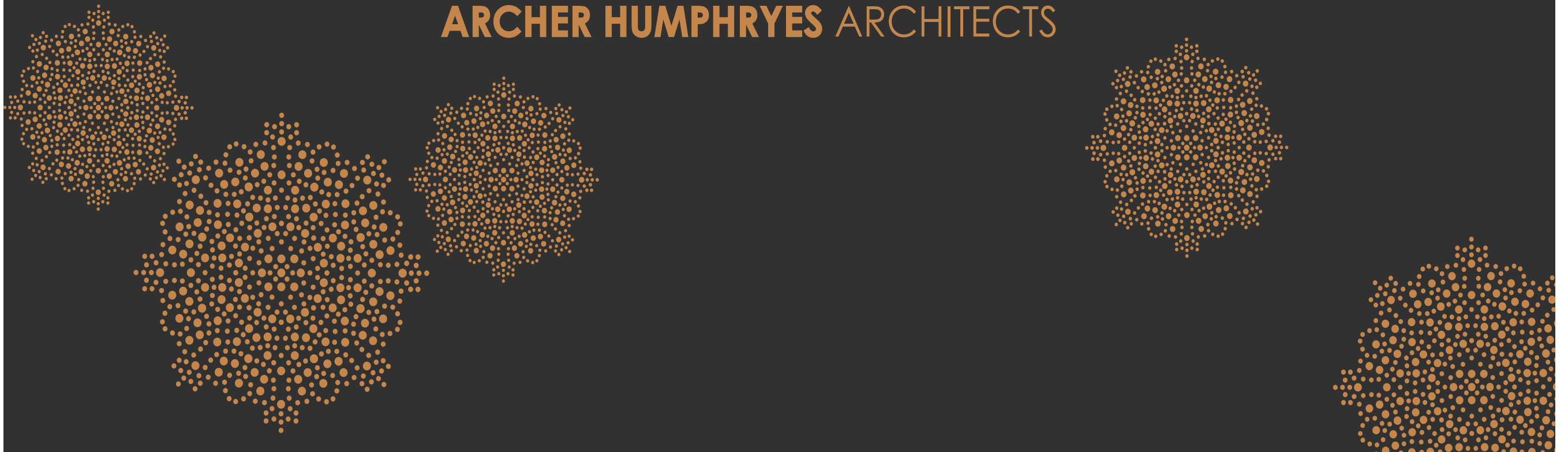
Heritage Drawings  
Stephen Levrant Heritage Architecture (SLHA)

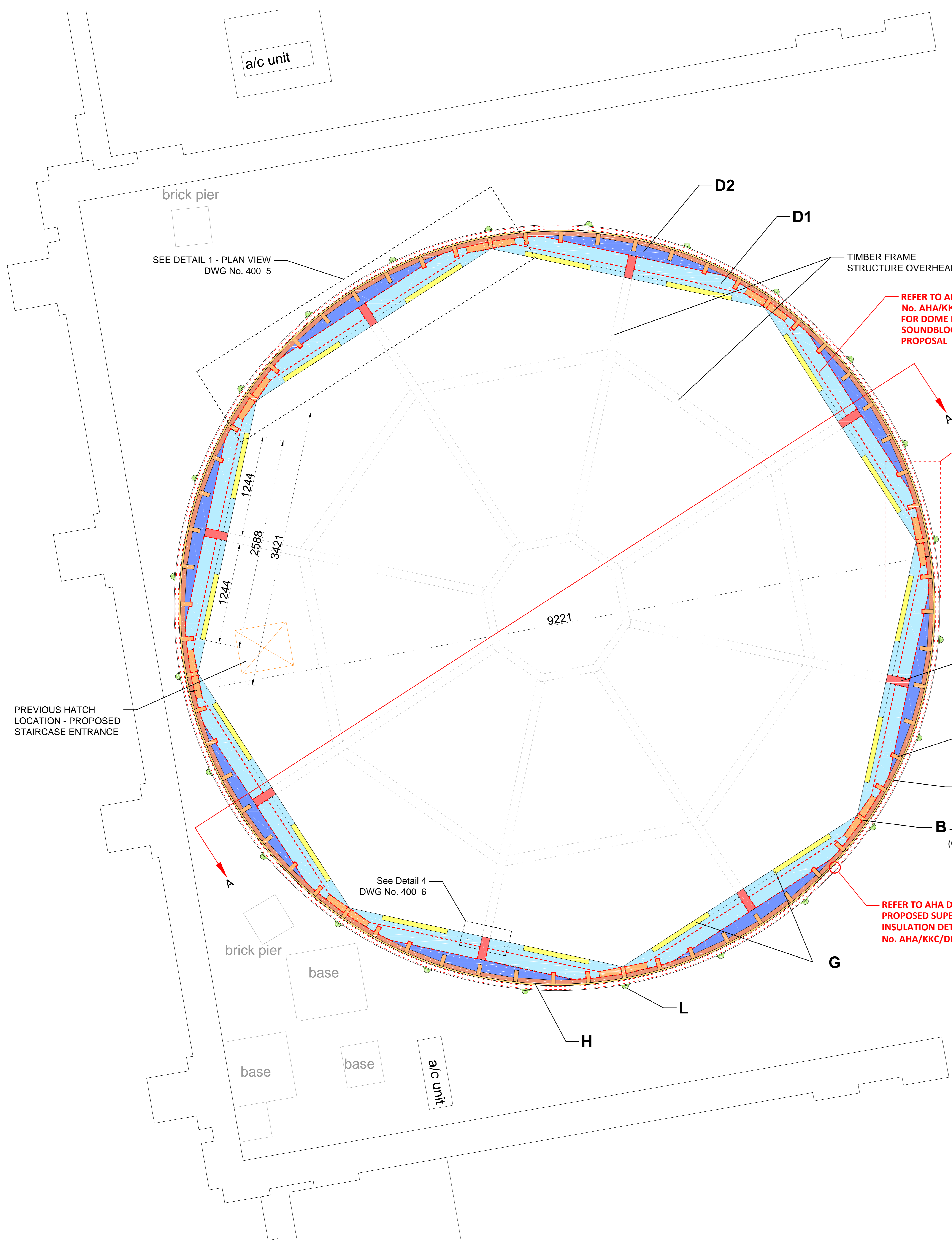
Planning + Listed Building Submission  
June 2020

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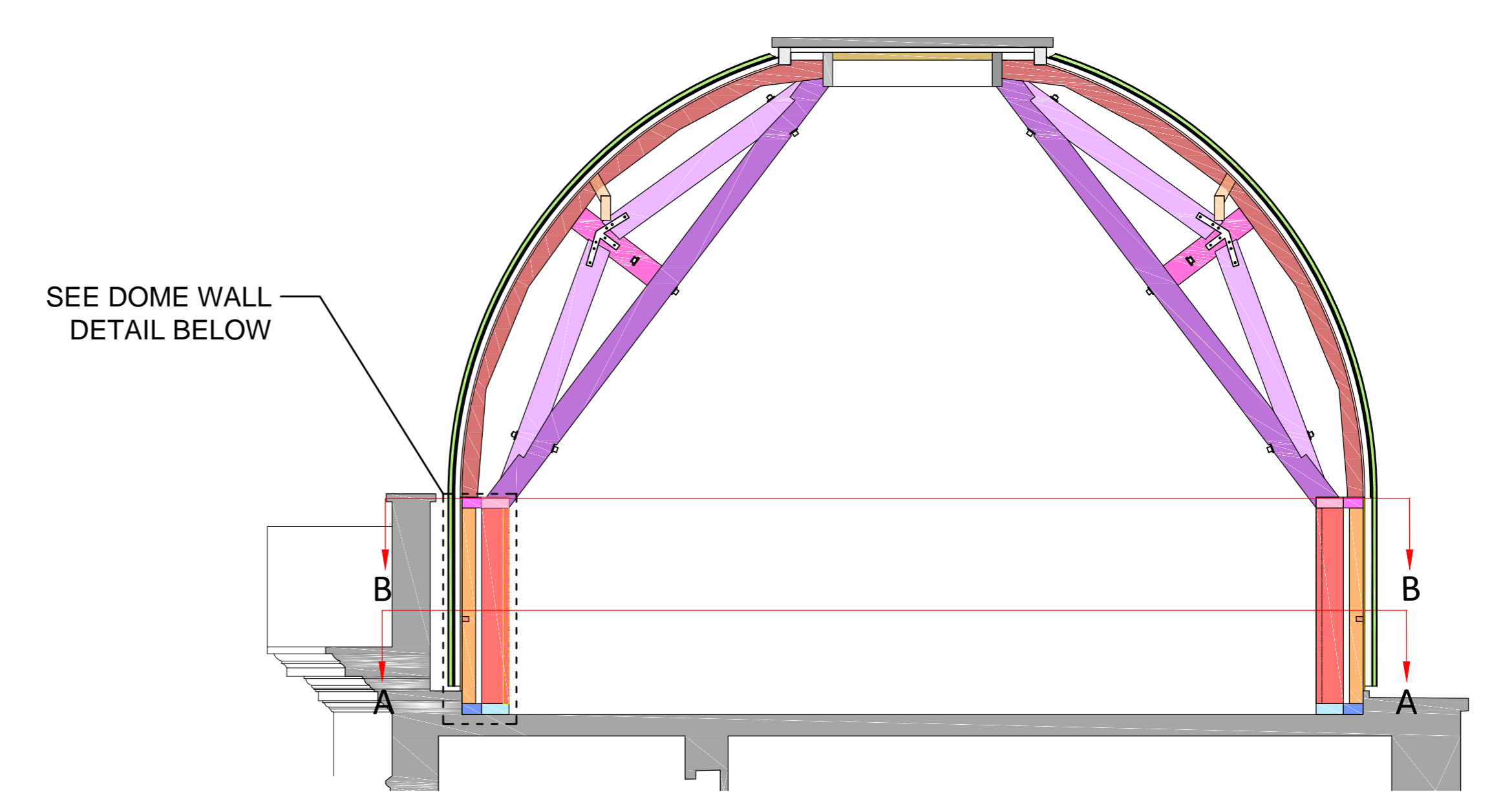
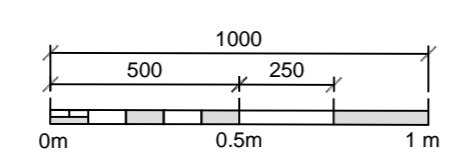
“ a great space is performance in progress.”

**ARCHER HUMPHRYES** ARCHITECTS

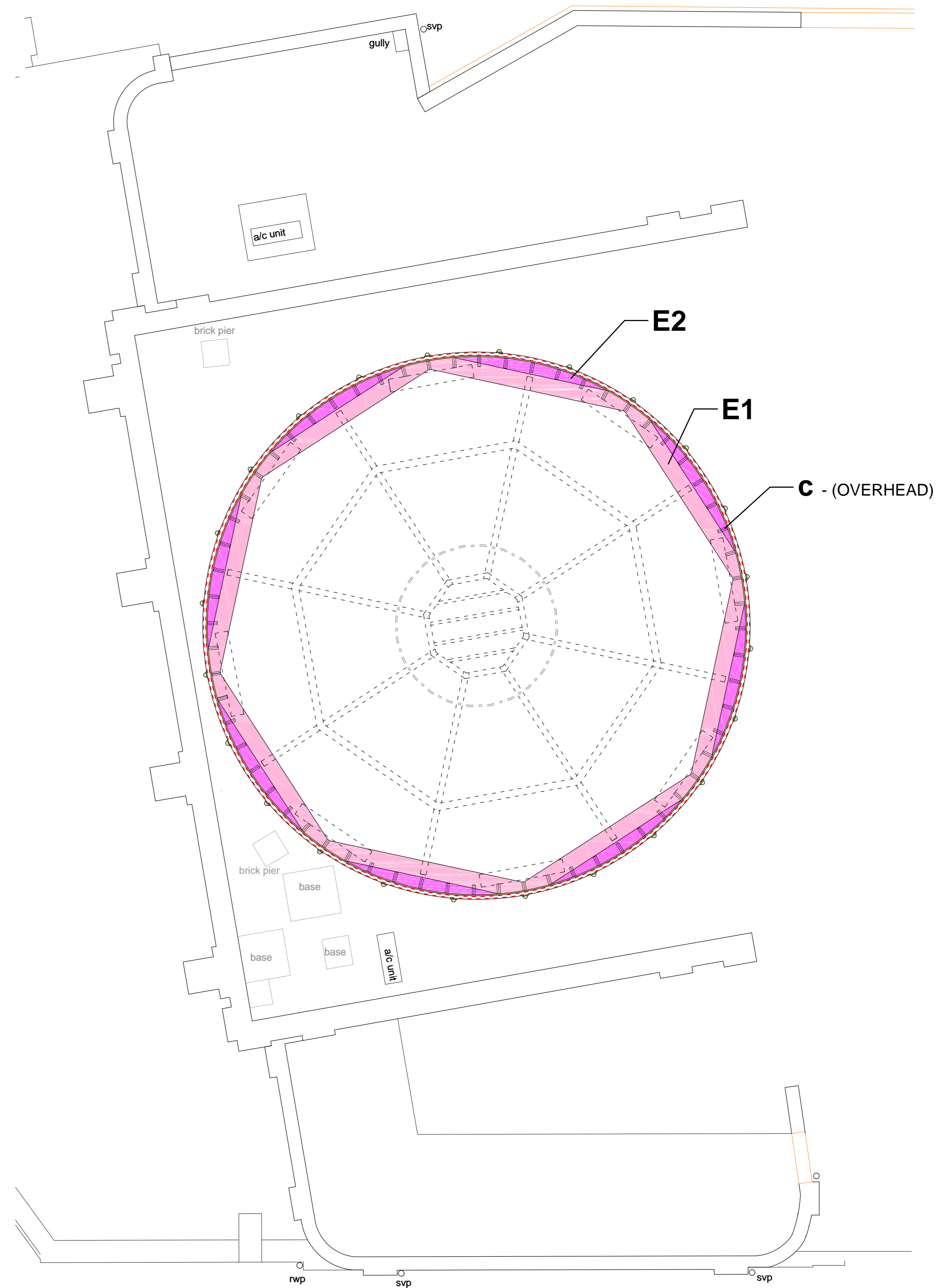
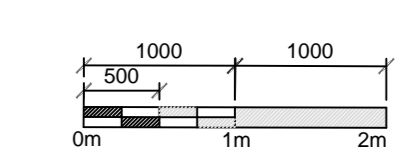




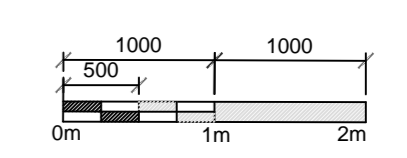
**DOME PLAN AA - LOWER STUD WALL CONSTRUCTION**  
SCALE - 1:20



**DOME SECTION AA : -**  
SCALE - 1:50



**DOME PLAN BB - UPPER RAFTER PLATE CONSTRUCTION**  
SCALE - 1:50



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**SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:**  
(from Post-fire Inventory Report)

**KEY:**

- PRINCIPAL TIMBER ELEMENT:**
- A. MAIN SUPPORT ELEMENT** (250x100mm)
- B. WALL STUD** (150x50mm @ 440 centers)
- WALL STUD TIES** (70x50mm)
- C. 2-PART RIBS** (170x27mm)
- D. LOWER STUD WALL PLATE**
- D1 - INNER PLATE** (280x110mm)
- D2 - OUTER PLATE** (200x110mm)
- E. UPPER RAFTER PLATE**
- E1 - INNER PLATE** (280x100mm)
- E2 - OUTER PLATE** (200x100mm)
- F. ROOF BOARDING** (80x20mm)
- G. MAIN POST SUPPORT BRACES** (125x80mm)
- H. WALL BOARDING** (260x18mm)
- L. INNER APEX RING BEAM** (260x100mm)
- J. OUTER APEX RING BEAM** (180x125mm)
- K. APEX ROOF JOISTS** (4 No. 80x45mm)
- L. TIMBER ROOF ROLLS** (24 No. 100x100mm)
- M. HORIZONTAL RAFTER WALL TIE** (220x100mm)
- N. PURLINS/STRUTS** (250x100mm/120x50mm)
- T. TRUSS (IN PLAN)**
- T1 - TIE BEAM** (250x100mm)
- T2 - KING POST** (250x100mm)
- T3 - PRINCIPAL RAFTERS** (250x100mm)
- T4 - IRON BRACING**

**DRAWING NOTES:**

- Please refer HTS (structural engineer) report (Job No. 1444; Ref No. GGS-01) for further comments on connection details. All HTS detail locations have been identified on the drawings in blue.
- Please refer AHA (lead architects) drawings for further details on acoustics insulation, DPM and copper cladding. All detail to be finalised by AHA and have been identified on the drawings in red.
- All structural timbers to be air-dried European redwood (timber for F - Roof boarding, H - Wall Boarding and L - Timber Roof Rolls) to be agreed with SHHA and AHA to match like for like Dome reinstatement.
- Clearmatt intumescent coating will be applied to the exposed timbers only.
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- Some historical details may need to be adapted to fit AHA proposed scheme for the dome (in terms of thermal/acoustic insulation, air conditioning/ventilation, interior finishes/fittings). AHA to provide the following details and locations.

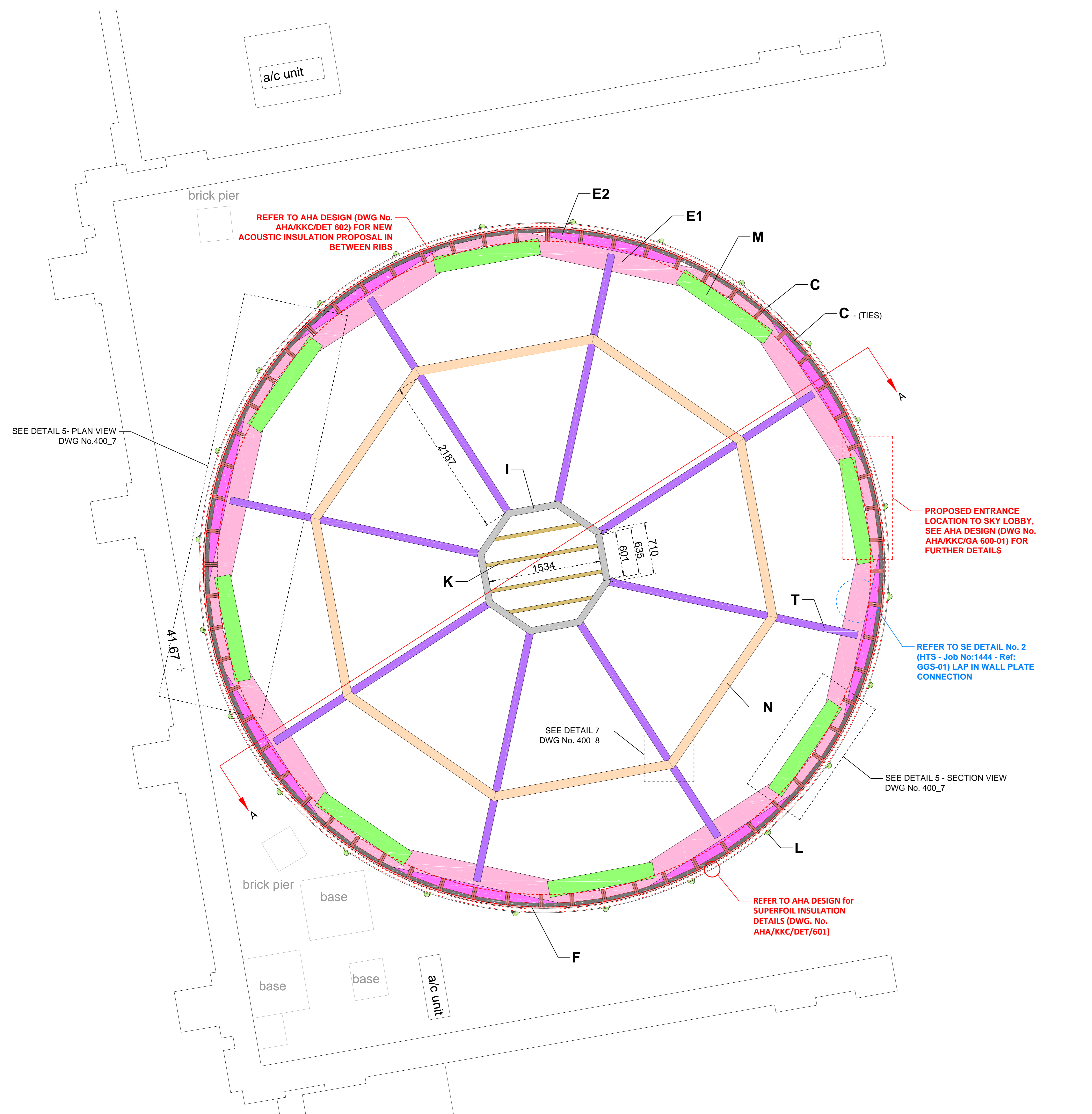
**JOB TITLE:**  
KOKO  
Camden  
(DESIGNED TITLE)  
Dome Timber Frame Construction -  
Wall Construction

**JOB No:** x0936  
**ENCL No:** 400\_1  
**REV:** A  
**DATE:** 05/20

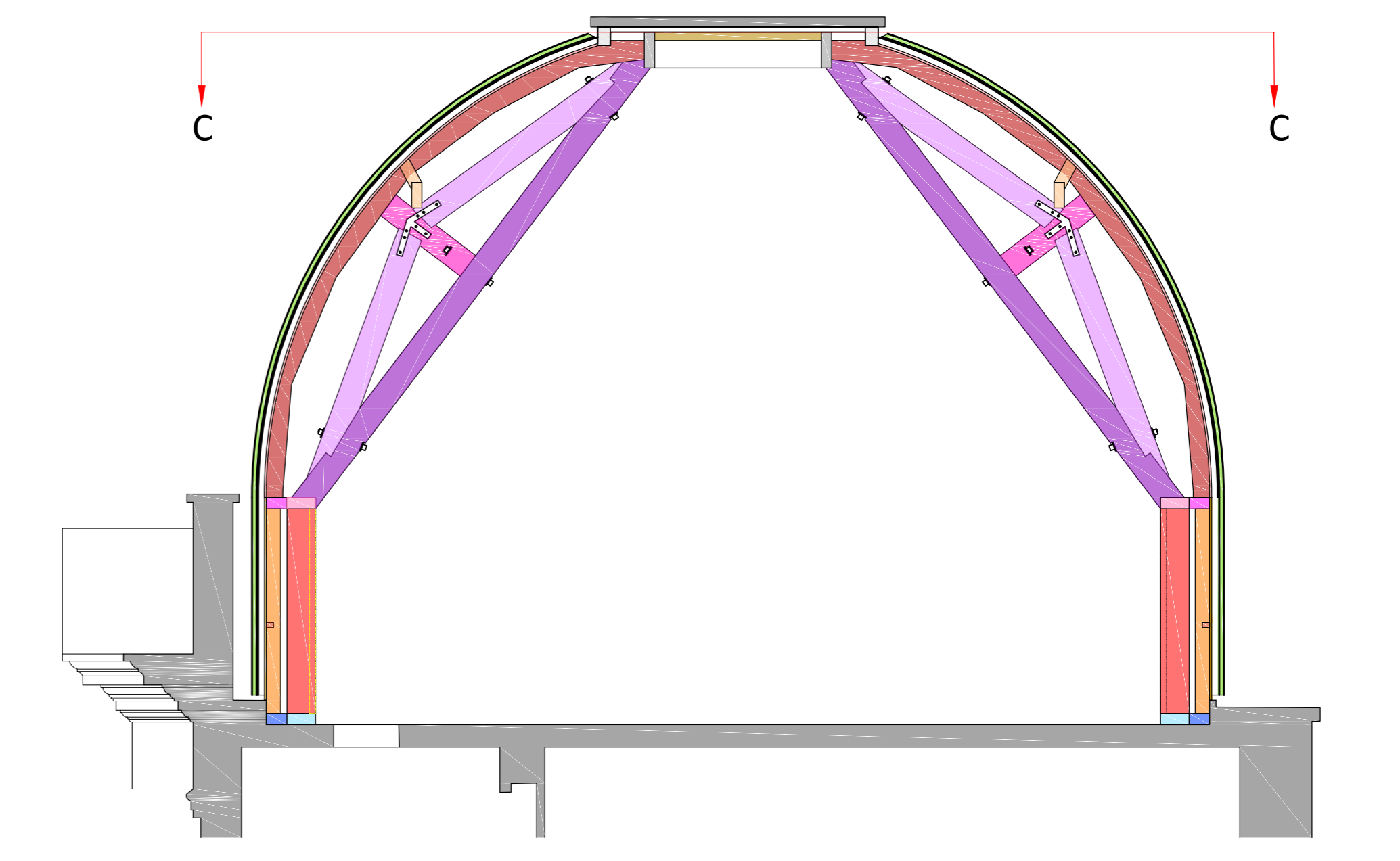
**DRAWN BY:** JJM  
**CHECKED BY:** MK  
**SCALE (EAS):** SHOWN

**STEPHEN LEVRANT**  
HERITAGE ARCHITECTURE

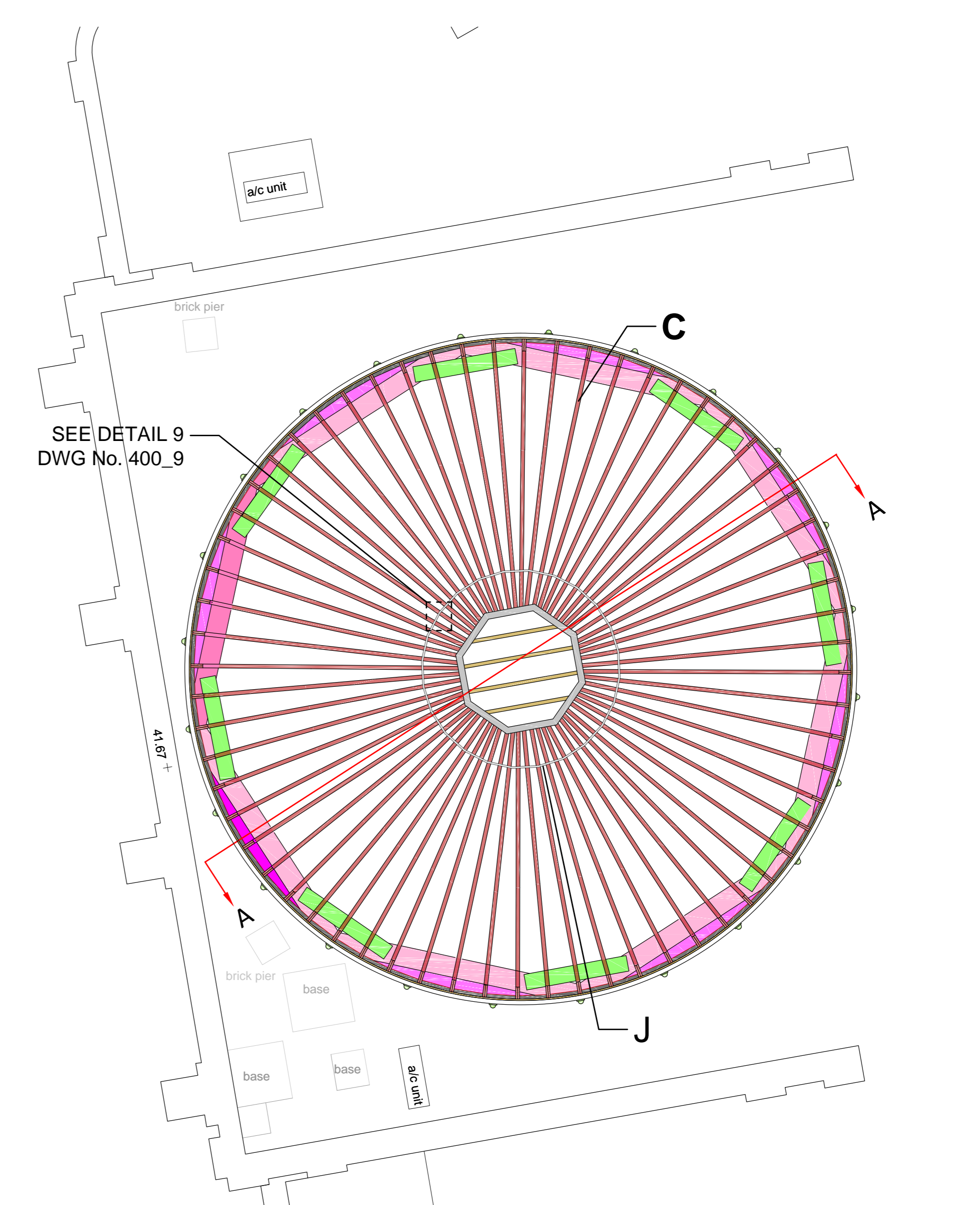
62 British Grove, London, W4 2NE,  
E-mail: info@heritagearchitecture.co.uk  
T: 020 8748 9001



**DOME PLAN CC - TIMBER FRAME ROOF CONSTRUCTION (2-PART RIBS OVERHEAD SHOWN ON THE RIGHT) SCALE - 1:20**



**DOME SECTION AA - SCALE - 1:50**



**DOME PLAN CC - 2-PART RIBS ARRANGEMENT SCALE - 1:50**

N

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(From Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
<span style="color: red;">■</span>	A. MAIN SUPPORT POST (250x100mm)
<span style="color: orange;">■</span>	B. WALL STUD (150x50mm @ 440 centers)
<span style="color: brown;">■</span>	WALL STUD TIES (70x50mm)
<span style="color: purple;">■</span>	C. 2-PART RIBS (170x27mm)
<span style="color: lightblue;">■</span>	D. LOWER STUD WALL PLATE (280x110mm)
<span style="color: blue;">■</span>	D1 - INNER PLATE (280x110mm)
<span style="color: darkblue;">■</span>	D2 - OUTER PLATE (200x110mm)
<span style="color: pink;">■</span>	E. UPPER RAFTER PLATE (280x100mm)
<span style="color: magenta;">■</span>	E1 - INNER PLATE (200x100mm)
<span style="color: cyan;">■</span>	E2 - OUTER PLATE (80x20mm)
<span style="color: red;">■</span>	F. ROOF BOARDING (125x60mm)
<span style="color: yellow;">■</span>	G. MAIN POST SUPPORT BRACES (260x18mm)
<span style="color: orange;">■</span>	H. WALL BOARDING (24 No. 80x45mm)
<span style="color: grey;">■</span>	L. INNER APEX RING BEAM (24 No. 100x100mm)
<span style="color: lightgrey;">■</span>	J. OUTER APEX RING BEAM (180x125mm)
<span style="color: brown;">■</span>	K. APEX ROOF JOISTS (4 No. 80x45mm)
<span style="color: green;">■</span>	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
<span style="color: lightgreen;">■</span>	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
<span style="color: orange;">■</span>	N. PURLINS/STRUTS (250x100mm/120x50mm)
<span style="color: purple;">■</span>	T. TRUSS (IN PLAN) (250x100mm)
<span style="color: magenta;">■</span>	T1 - TIE BEAM (250x100mm)
<span style="color: cyan;">■</span>	T2 - KING POST (250x100mm)
<span style="color: red;">■</span>	T3 - PRINCIPAL RAFTERS (250x100mm)
<span style="color: lightblue;">■</span>	T4 - IRON BRACING

Please note:  
Principal timber elements cross-section dimension are indicated in brackets above.

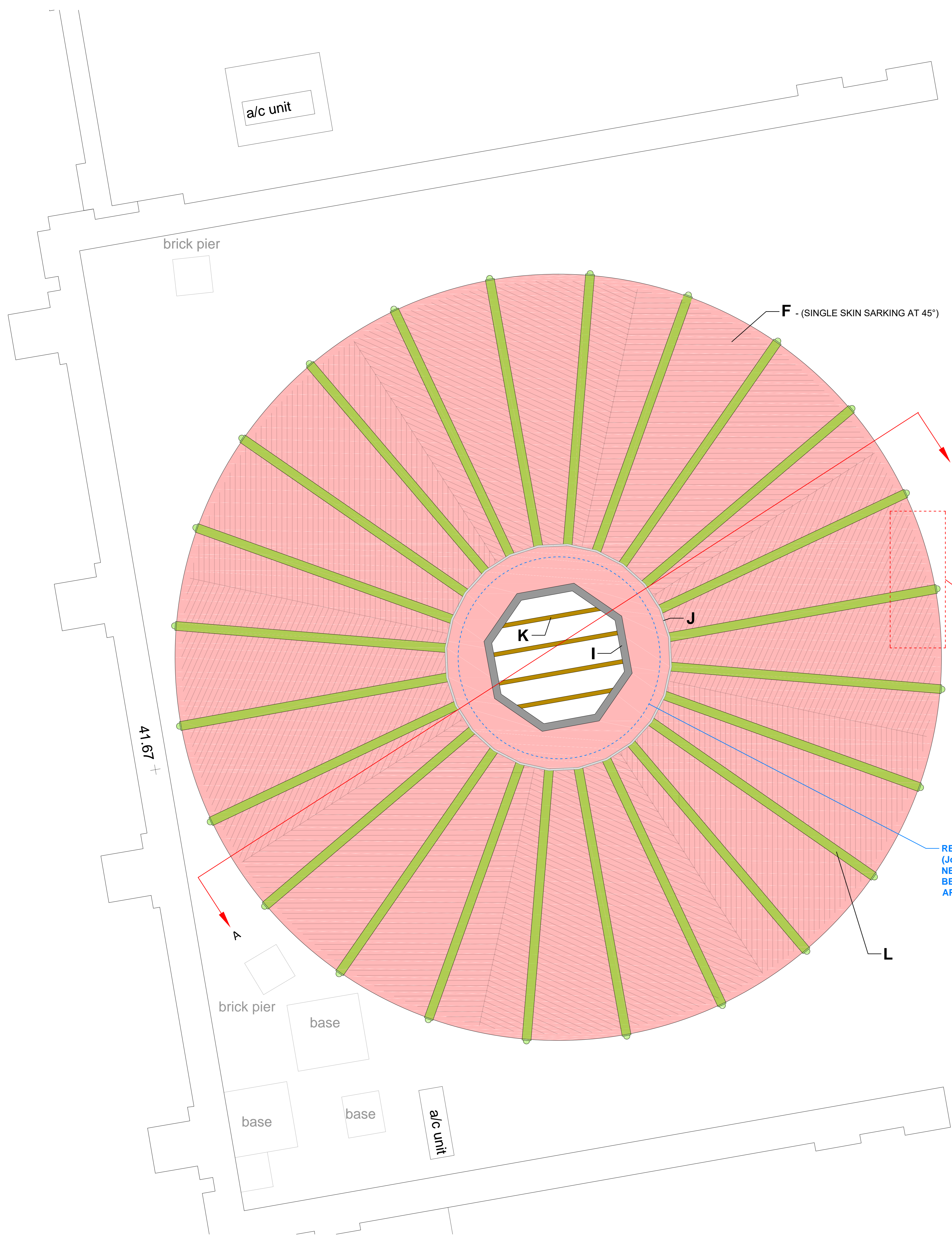
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- All dimensions correspond to the existing dome surveys. SHA'S post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post-fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
- Some historical details may need to be adapted to fit AHA proposed scheme for the dome (in terms of thermal/acoustic insulation, air conditioning/ventilation, interior finishes/fittings). AHA to provide the following details and locations.

JOB TITLE  
**KOKO**  
Camden  
DESIGNED TITLE  
Dome Timber Frame Construction -  
Roof Construction  
JOB No. DWG No. REV. DATE  
x0936 400\_2 A 05/20  
DRAWN BY CHECKED BY SCALE (BAS)  
JJM MK SHOWN



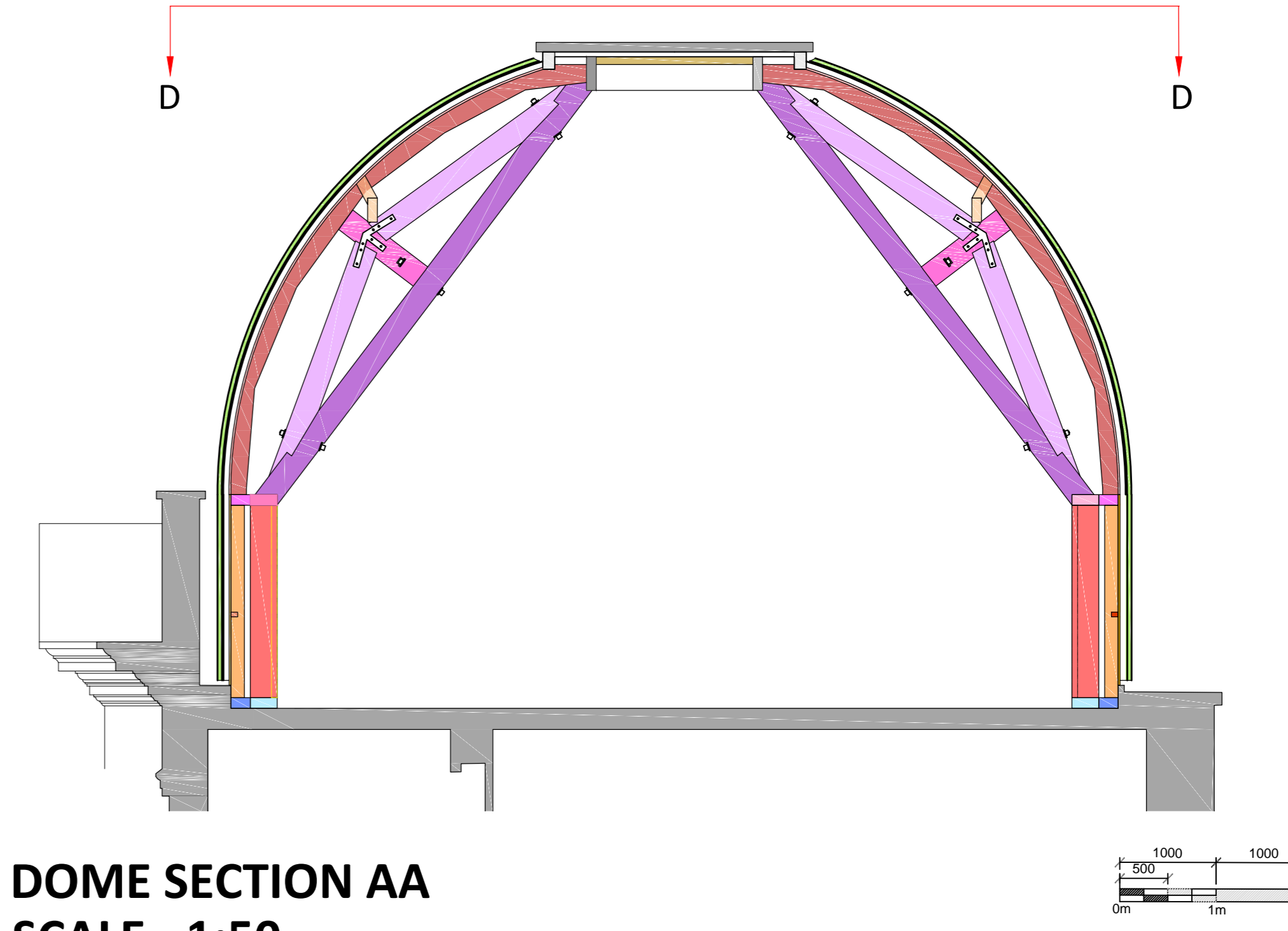
**DOMe PLAN DD - TIMBER FRAME SHELL CONSTRUCTION**  
**SCALE - 1:20**



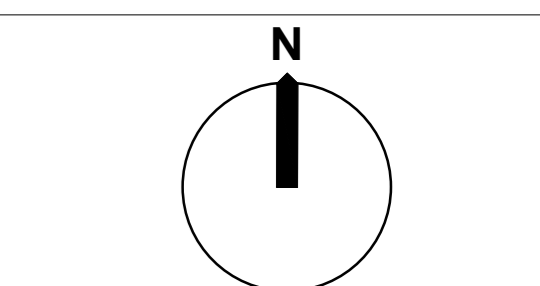
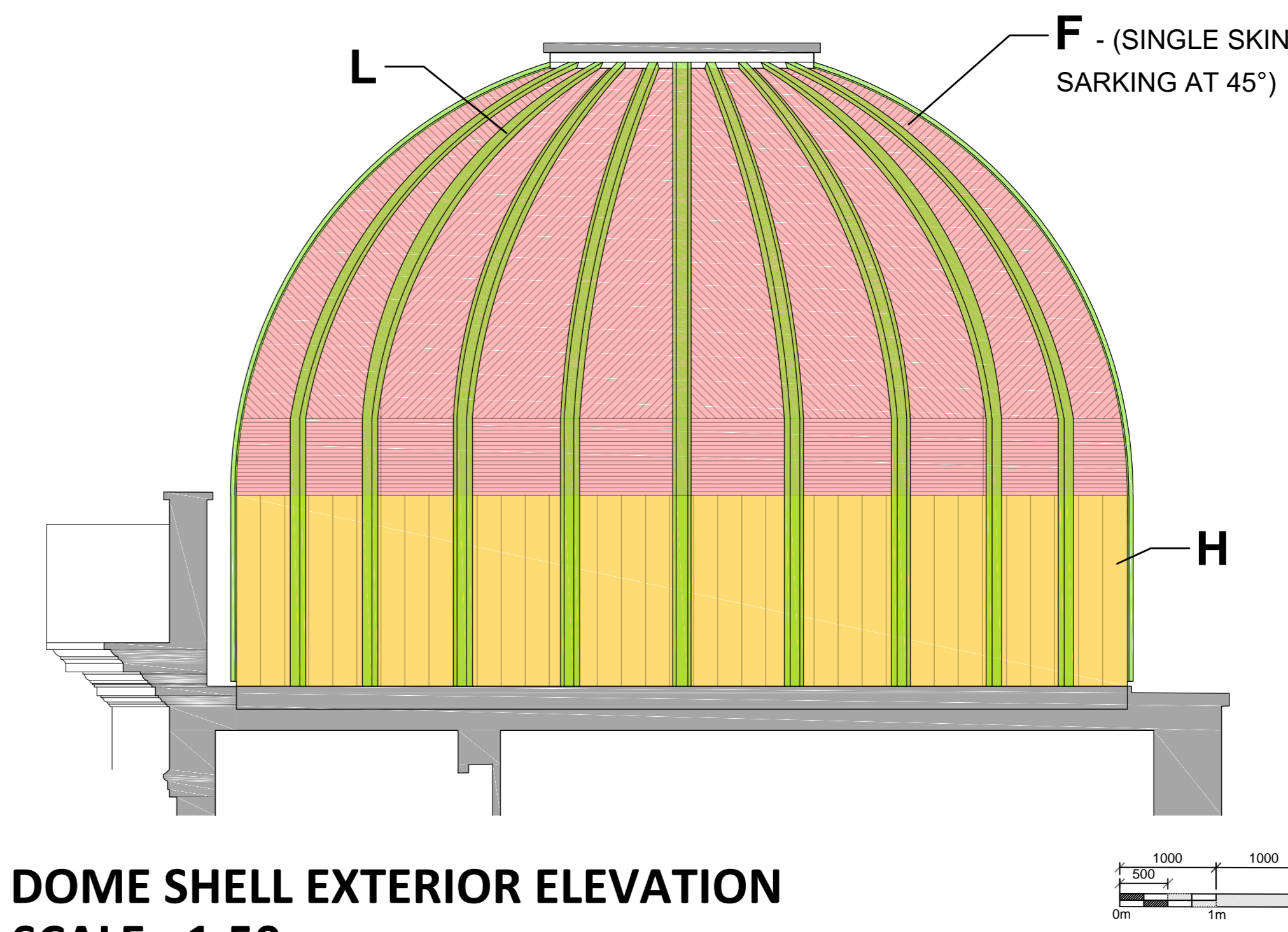
**PROPOSED ENTRANCE LOCATION TO SKY LOBBY, REFER TO AHA DESIGN (DWG No. AHA/KKC/GA 600-01) FOR FURTHER DETAILS**

**REFER TO HTS DETAIL No. 17 (Job No:1444 - Ref: GGS-01) FOR NEW ROOF BOARDING BETWEEN INNER AND OUTER APEX RING BEAM**

**DOMe SECTION AA**  
**SCALE - 1:50**



**DOMe SHELL EXTERIOR ELEVATION**  
**SCALE - 1:50**



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 (from Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
A	MAIN SUPPORT POST (250x100mm)
B	WALL STUD (150x50mm @ 440 centers)
C	WALL STUD TIES (70x50mm)
D	2-PART RIBS (170x27mm)
D1	LOWER STUD WALL PLATE (280x110mm)
D2	INNER PLATE (280x110mm)
D3	OUTER PLATE (200x110mm)
E	UPPER RAFTER PLATE (280x100mm)
E1	INNER PLATE (280x100mm)
E2	OUTER PLATE (200x100mm)
F	ROOF BOARDING (80x20mm)
G	MAIN POST SUPPORT BRACES (125x80mm)
H	WALL BOARDING (260x18mm)
I	INNER APEX RING BEAM (260x100mm)
J	OUTER APEX RING BEAM (150x125mm)
K	APEX ROOF JOISTS (4 No. 80x45mm)
L	TIMBER ROOF ROLLS (24 No. 100x100mm)
M	HORIZONTAL RAFTER WALL TIE (220x100mm)
N	PURLINS/STRUTS (250x100mm/120x50mm)
T	TRUSS (IN PLAN)
T1	TIE BEAM (250x100mm)
T2	KING POST (250x100mm)
T3	PRINCIPAL RAFTERS (250x100mm)
T4	IRON BRACING

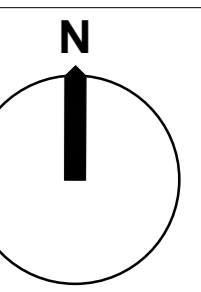
Please note: Principal timber elements cross-section dimension are indicated in brackets above.

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  - All dimensions correspond to the existing dome surveys. SHA'S post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post-fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
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JOB TITLE			
KOKO			
Camden			
DESIGNED TITLE			
Dome Timber Frame Construction - Shell Construction			
JOB No.	ENGR No.	REV	DATE
x0936	400_3	A	05/20
DRAWN BY	CHECKED BY	SCALE (BAU)	
JJM	MK	SHOWN	



62 British Grove, London, NW4 2NE.  
 E-mail: info@stephenlevantarchitecture.co.uk  
 T: 020 8748 9001



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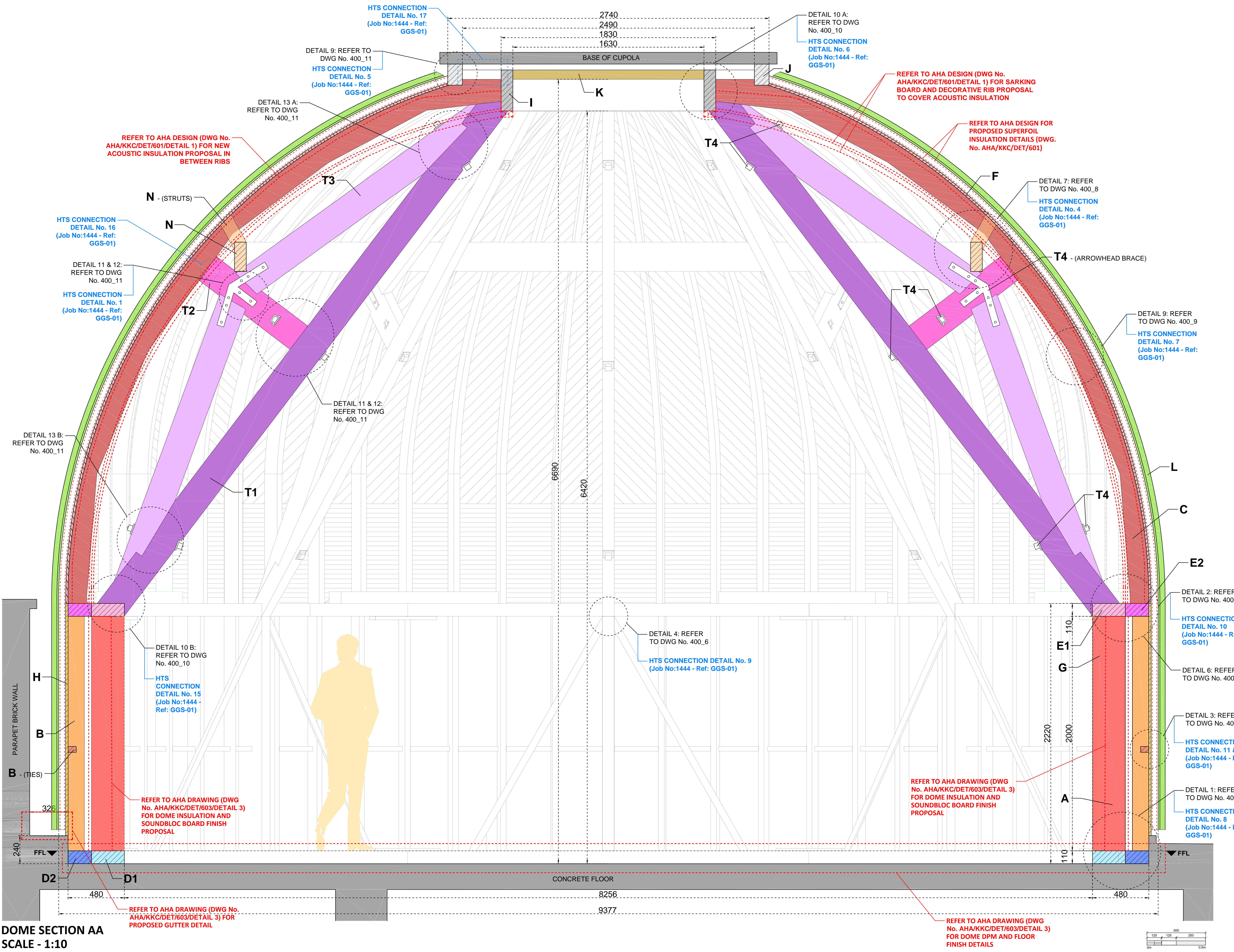
SHA'S PRINCIPAL ELEMENTS REFERENCE CODE: (From Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
A	MAIN SUPPORT POST (250x100mm)
B	WALL STUD (155x50mm @ 440 centers)
C	WALL STUD TIES (70x50mm)
D	2-PART RIBS (170x27mm)
E	LOWER STUD WALL PLATE
D1	INNER PLATE (250x110mm)
D2	OUTER PLATE (200x110mm)
F	UPPER RAFTER PLATE
E1	INNER PLATE (280x100mm)
E2	OUTER PLATE (200x100mm)
F	ROOF BOARDING (80x20mm)
G	MAIN POST SUPPORT BRACES (125x60mm)
H	WALL BOARDING (280x18mm)
I	INNER APEX RING BEAM (350x100mm)
J	OUTER APEX RING BEAM (180x120mm)
K	APEX ROOF JOISTS (4 No. 80x45mm)
L	TIMBER ROOF ROLLS (24 No. 100x100mm)
M	HORIZONTAL RAFTER WALL TIE (220x100mm)
N	PURLINS/STRUTS (250x100mm/120x50mm)
T	TRUSS (IN PLAN)
T1	TIE BEAM (250x100mm)
T2	KING POST (250x100mm)
T3	PRINCIPAL RAFTERS (250x100mm)
T4	IRON BRACING

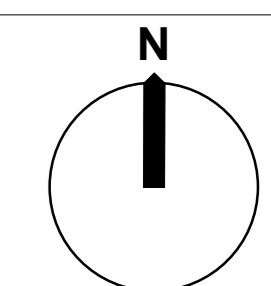
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JOB TITLE  
KOKO  
Camden  
DRAWING TITLE  
Dome Timber Frame Construction -  
Dome Section AA  
JOB NO.  
400\_4\_A  
DATE  
05/20  
DRAWN BY  
JJM  
CHECKED BY  
MK  
SCALE (R.A.)  
1:10 @ A0



**DOME SECTION AA**  
**SCALE - 1:10**



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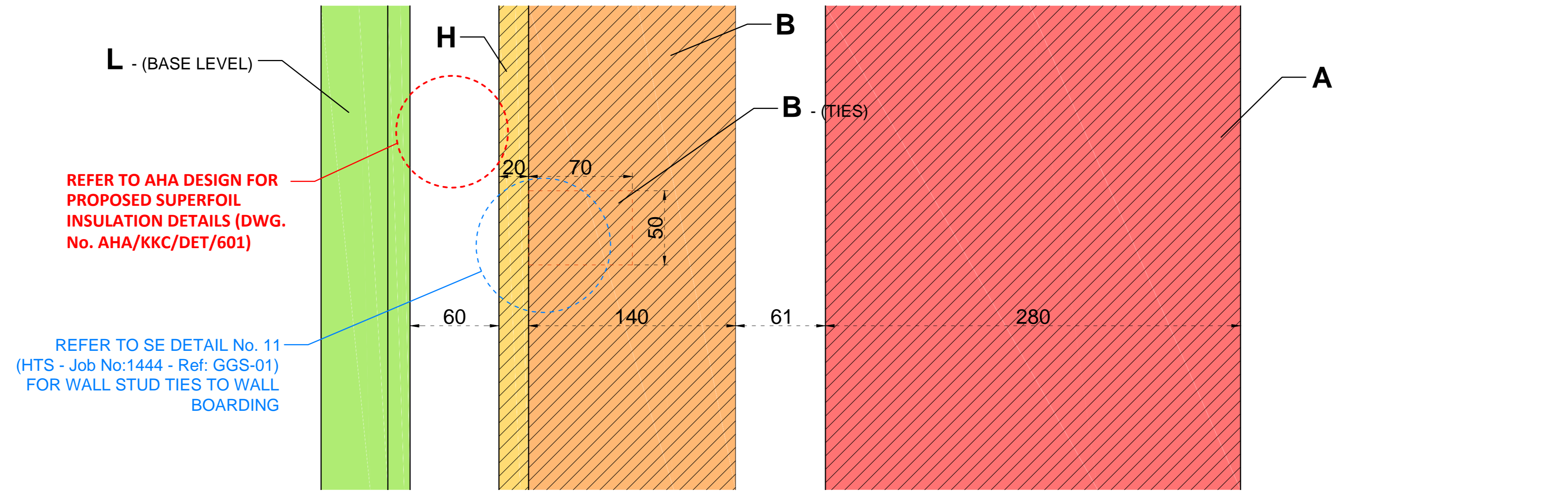
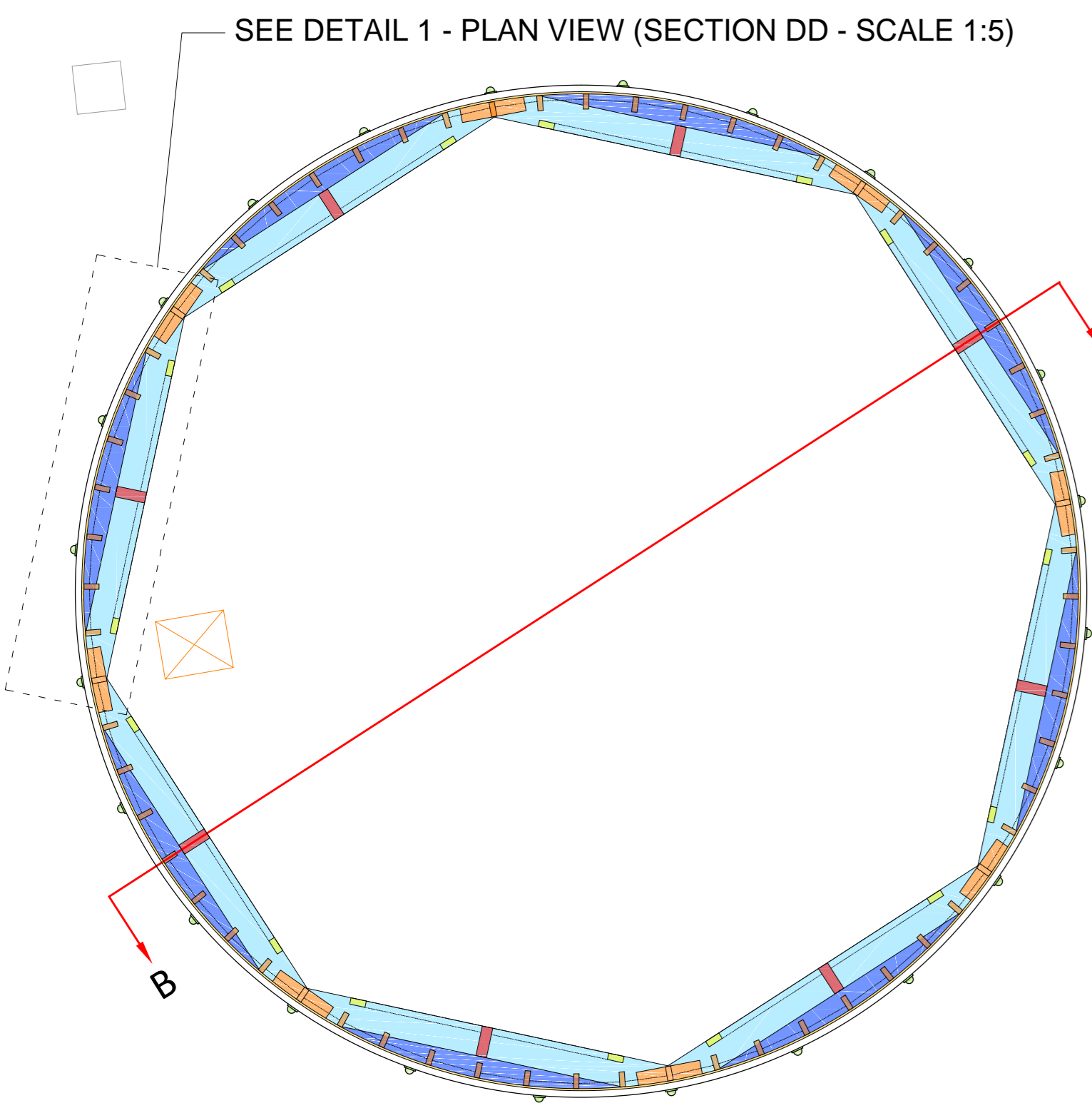
SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:  
(from Post-fire Inventory Report)

PRINCIPAL TIMBER ELEMENT:	KEY:
A. MAIN SUPPORT POST (250x100mm)	A. MAIN SUPPORT POST (250x100mm)
B. WALL STUD (150x50mm @ 440 centers)	B. WALL STUD (150x50mm @ 440 centers)
WALL STUD TIES (70x50mm)	B - (TIES)
C. 2-PART RIBS (170x27mm)	C. 2-PART RIBS (170x27mm)
D. LOWER STUD WALL PLATE (280x110mm)	D. LOWER STUD WALL PLATE (280x110mm)
D1 - INNER PLATE (280x110mm)	D1 - INNER PLATE (280x110mm)
D2 - OUTER PLATE (200x110mm)	D2 - OUTER PLATE (200x110mm)
E. UPPER RAFTER PLATE (280x100mm)	E. UPPER RAFTER PLATE (280x100mm)
E1 - INNER PLATE (280x100mm)	E1 - INNER PLATE (280x100mm)
E2 - OUTER PLATE (200x100mm)	E2 - OUTER PLATE (200x100mm)
F. ROOF BOARDING (80x20mm)	F. ROOF BOARDING (80x20mm)
G. MAIN POST SUPPORT BRACES (125x60mm)	G. MAIN POST SUPPORT BRACES (125x60mm)
H. WALL BOARDING (260x18mm)	H. WALL BOARDING (260x18mm)
L. INNER APEX RING BEAM (250x100mm)	L. INNER APEX RING BEAM (250x100mm)
J. OUTER APEX RING BEAM (180x125mm)	J. OUTER APEX RING BEAM (180x125mm)
K. APEX ROOF JOISTS (4 No. 80x45mm)	K. APEX ROOF JOISTS (4 No. 80x45mm)
L. TIMBER ROOF ROLLS (24 No. 100x100mm)	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
M. HORIZONTAL RAFTER WALL TIE (220x100mm)	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
N. PURLINS/STRUTS (250x100mm/120x50mm)	N. PURLINS/STRUTS (250x100mm/120x50mm)
T. TRUSS (IN PLAN)	T. TRUSS (IN PLAN)
T1 - TIE BEAM (250x100mm)	T1 - TIE BEAM (250x100mm)
T2 - KING POST (250x100mm)	T2 - KING POST (250x100mm)
T3 - PRINCIPAL RAFTERS (250x100mm)	T3 - PRINCIPAL RAFTERS (250x100mm)
T4 - IRON BRACING	T4 - IRON BRACING

Please note: Principal timber elements cross-section dimension are indicated in brackets above.

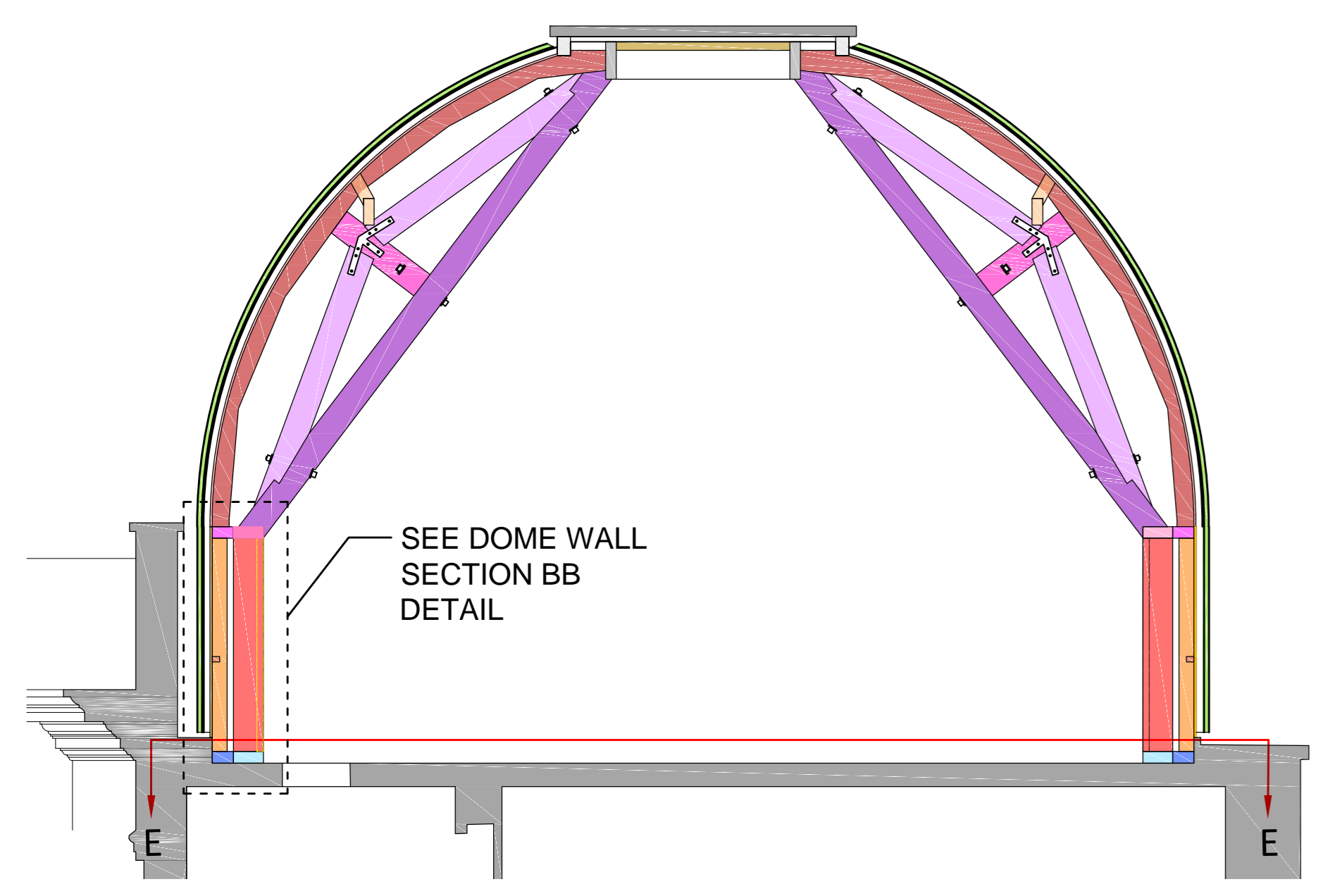
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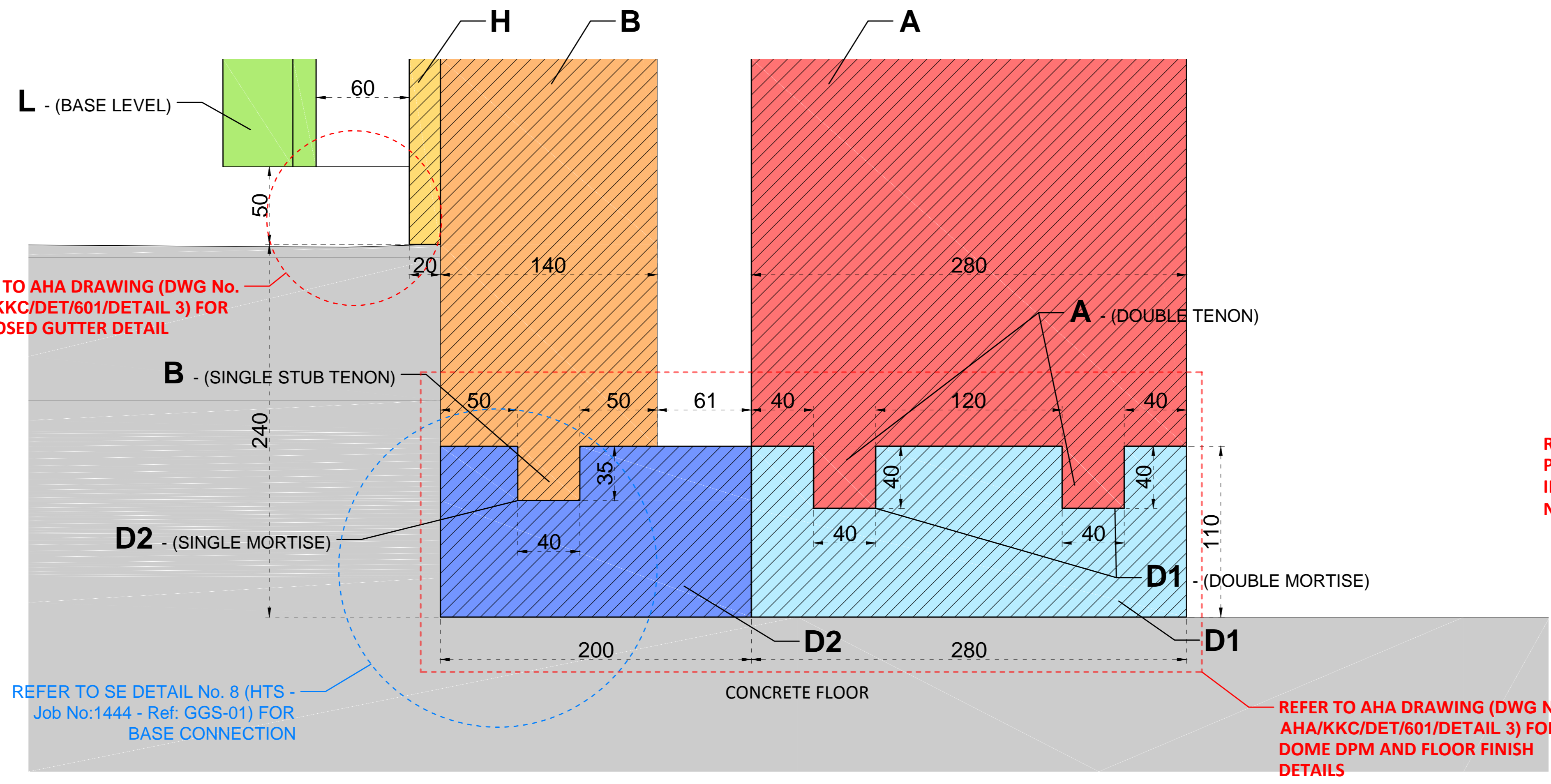


DETAIL 3: TIMBER ROOF ROLLS (AT BASE LEVEL), WALL BOARDING AND WALL STUDS (INCLUDING TIES) SCALE - 1:2

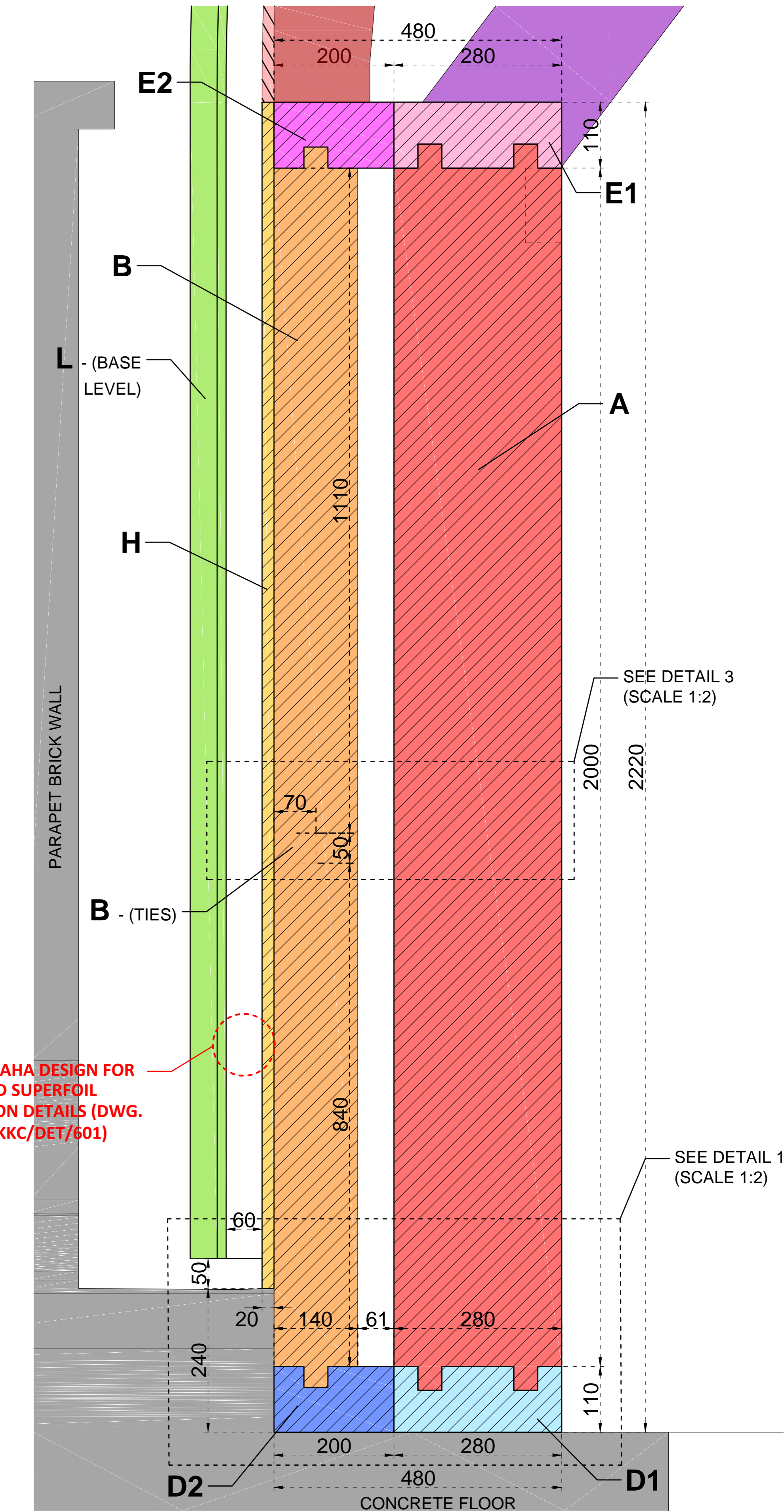
DOME PLAN DD - BELOW UPPER RAFTER PLATE SCALE - 1:50



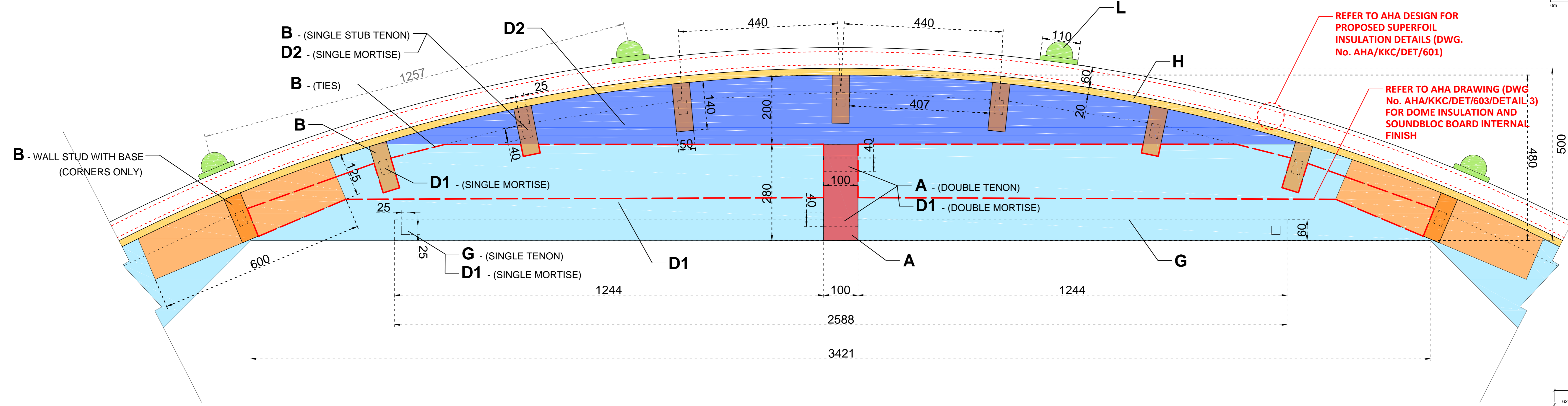
DOME SECTION BB SCALE - 1:50



DETAIL 1: - LOWER STUD WALL PLATE ON CONCRETE FLOOR & MORTISE AND TENON SECTION THROUGH MAIN POSTS AND WALL STUDS SCALE - 1:2



DOME WALL SECTION BB DETAIL SCALE - 1:5

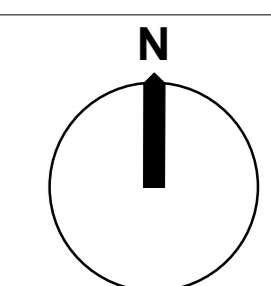


DETAIL 1: LOWER STUD WALL PLATE PLAN VIEW (SECTION EE) SCALE - 1:5

JOB TITLE  
KOKO  
Camden  
DRAWING TITLE  
Dome Timber Frame Construction -  
Wall Construction Details (Sheet 1)  
JOB No. 0303 Rev DATE  
x0936 400\_5 A 05/20  
DRAWN BY CHECKED BY SCALE (BARS)  
JJM MK SHOWN



STEPHEN LEVRANT  
HERITAGE ARCHITECTURE  
62 British Grove, London, W4 2NE,  
E-mail: info@stephenlevrant.com  
T: 020 8748 9001



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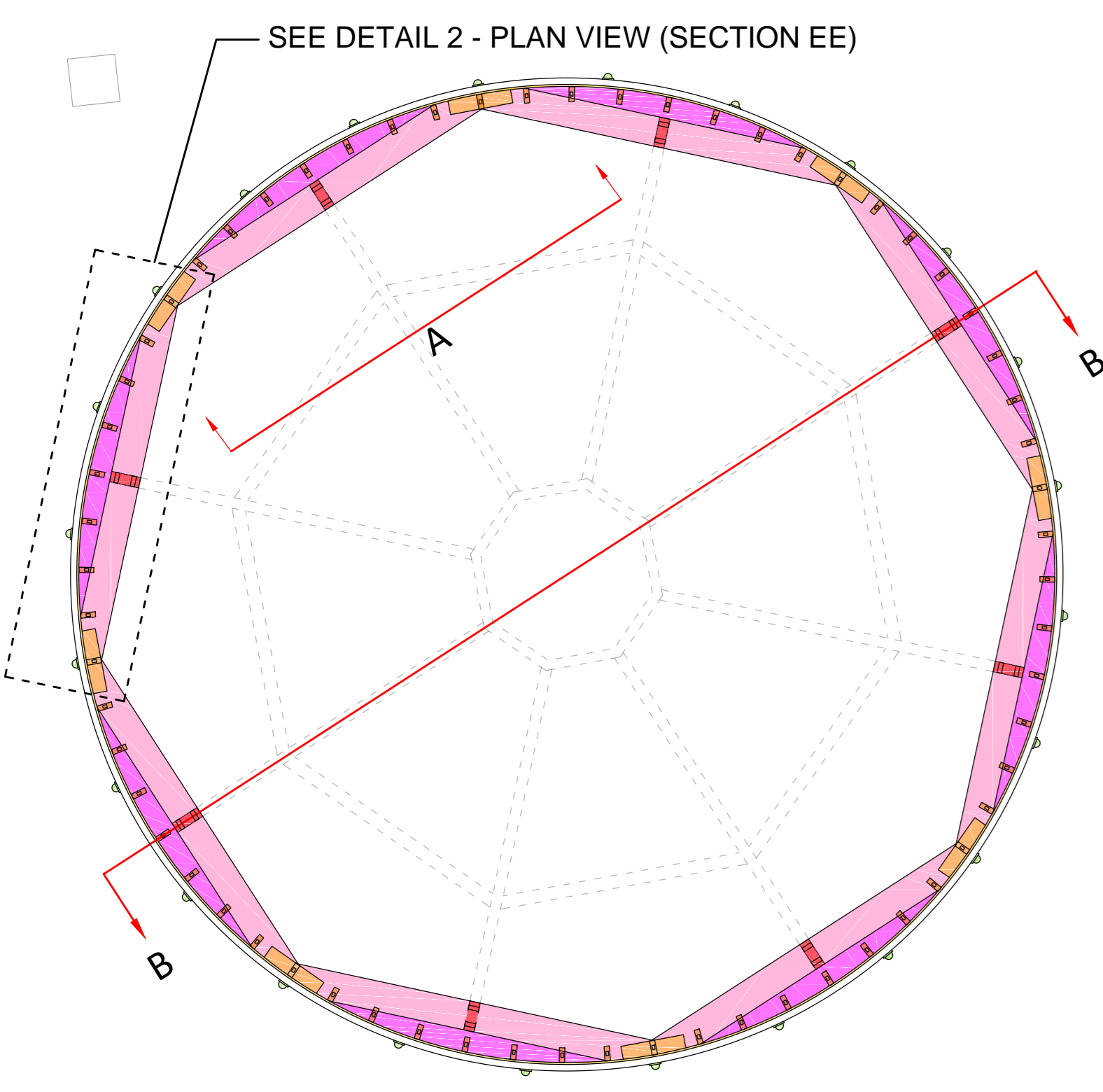
SHA'S PRINCIPAL ELEMENTS REFERENCE CODE: (from Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
A	MAIN SUPPORT POST (250x100mm)
B	WALL STUD (150x50mm @ 440 centers)
C	WALL STUD TIES (70x50mm)
D	2-PART RIBS (170x27mm)
E	LOWER STUD WALL PLATE (280x110mm)
F	INNER PLATE (280x110mm)
G	OUTER PLATE (200x110mm)
H	UPPER RAFTER PLATE (280x100mm)
I	E1 - INNER PLATE (280x100mm)
J	E2 - OUTER PLATE (200x100mm)
K	F. ROOF BOARDING (80x20mm)
L	G. MAIN POST SUPPORT BRACES (125x80mm)
M	H. WALL BOARDING (260x18mm)
N	L. INNER APX RING BEAM (250x100mm)
O	O. OUTER APX RING BEAM (180x125mm)
P	K. APX RING JOISTS (4 No. 80x45mm)
Q	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
R	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
S	N. PURLINS/STRUTS (250x100mm/120x50mm)
T	T. TRUSS (IN PLAN) (250x100mm)
U	T1 - TIE BEAM (250x100mm)
V	T2 - KING POST (250x100mm)
W	T3 - PRINCIPAL RAFTERS (250x100mm)
X	T4 - IRON BRACING

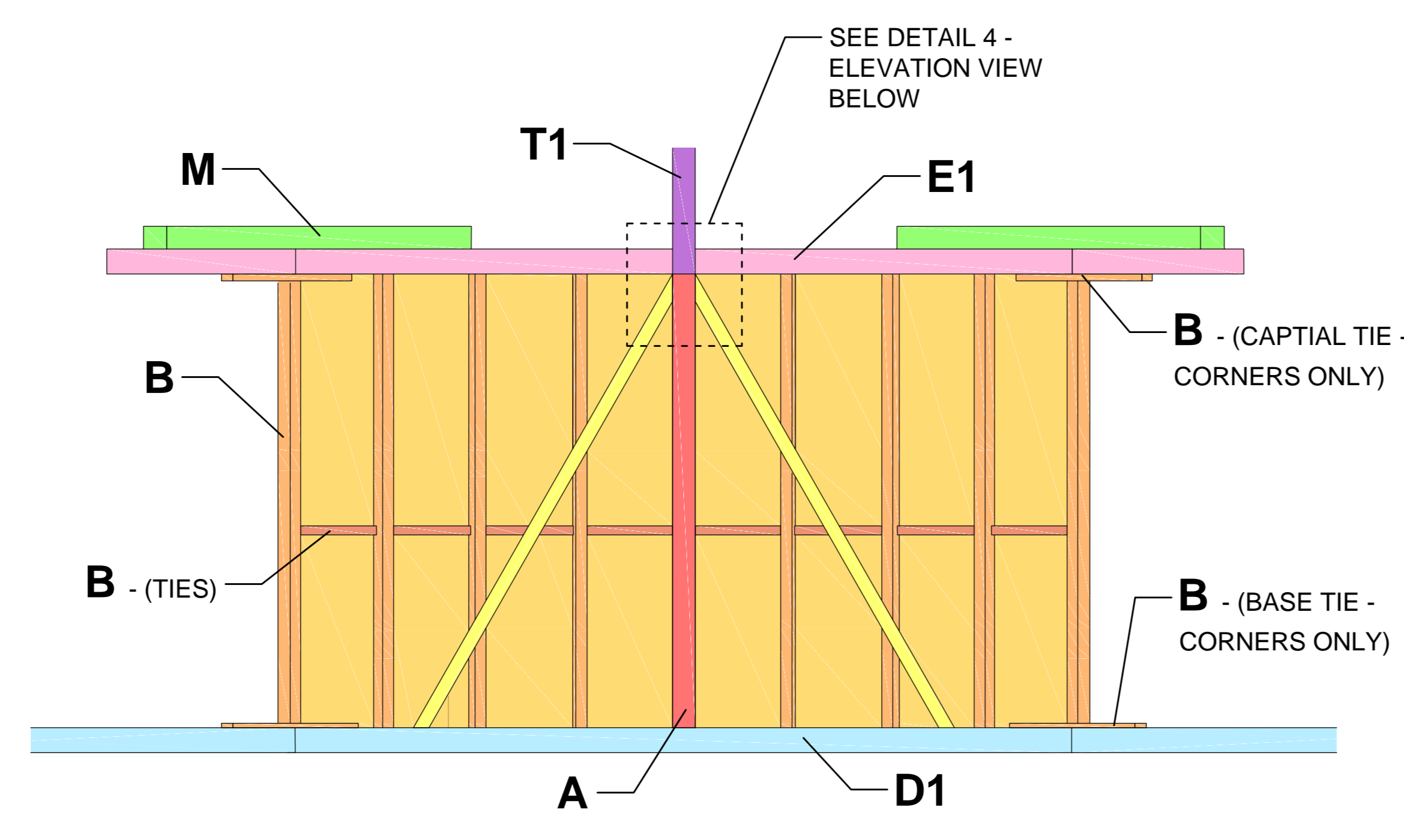
Please note: Principal timber elements cross-section dimension are indicated in brackets above.

DRAWING NOTES:

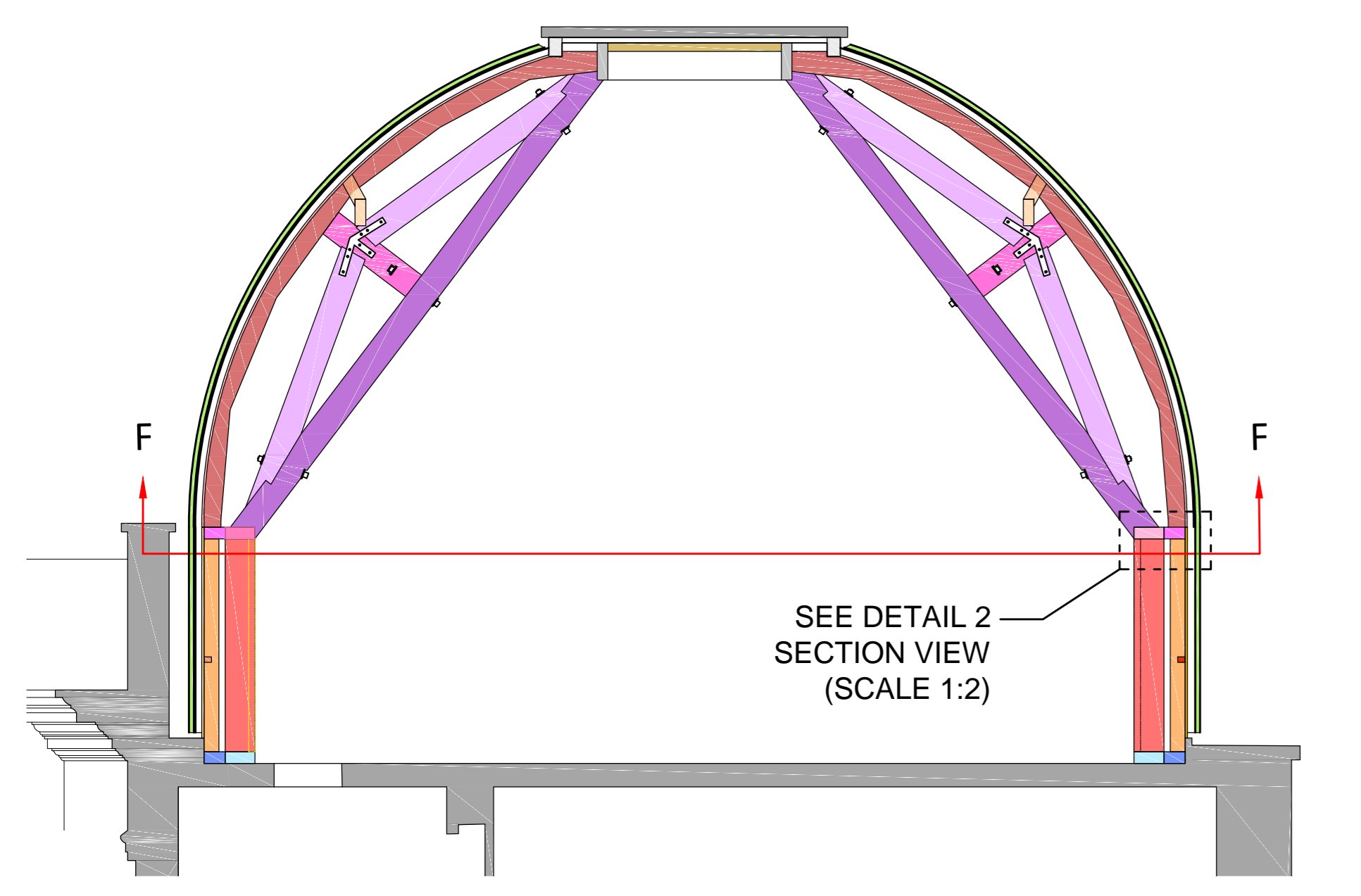
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- Please refer AHA (lead architect) drawings for further details on acoustics insulation, DPM and copper cladding. All detail to be finalised by AHA and have been identified on the drawings in red.
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- Clearmatt intumescent coating will be applied to the exposed timbers only.
- All dimensions correspond to the existing dome surveys. SHA's post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post Fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
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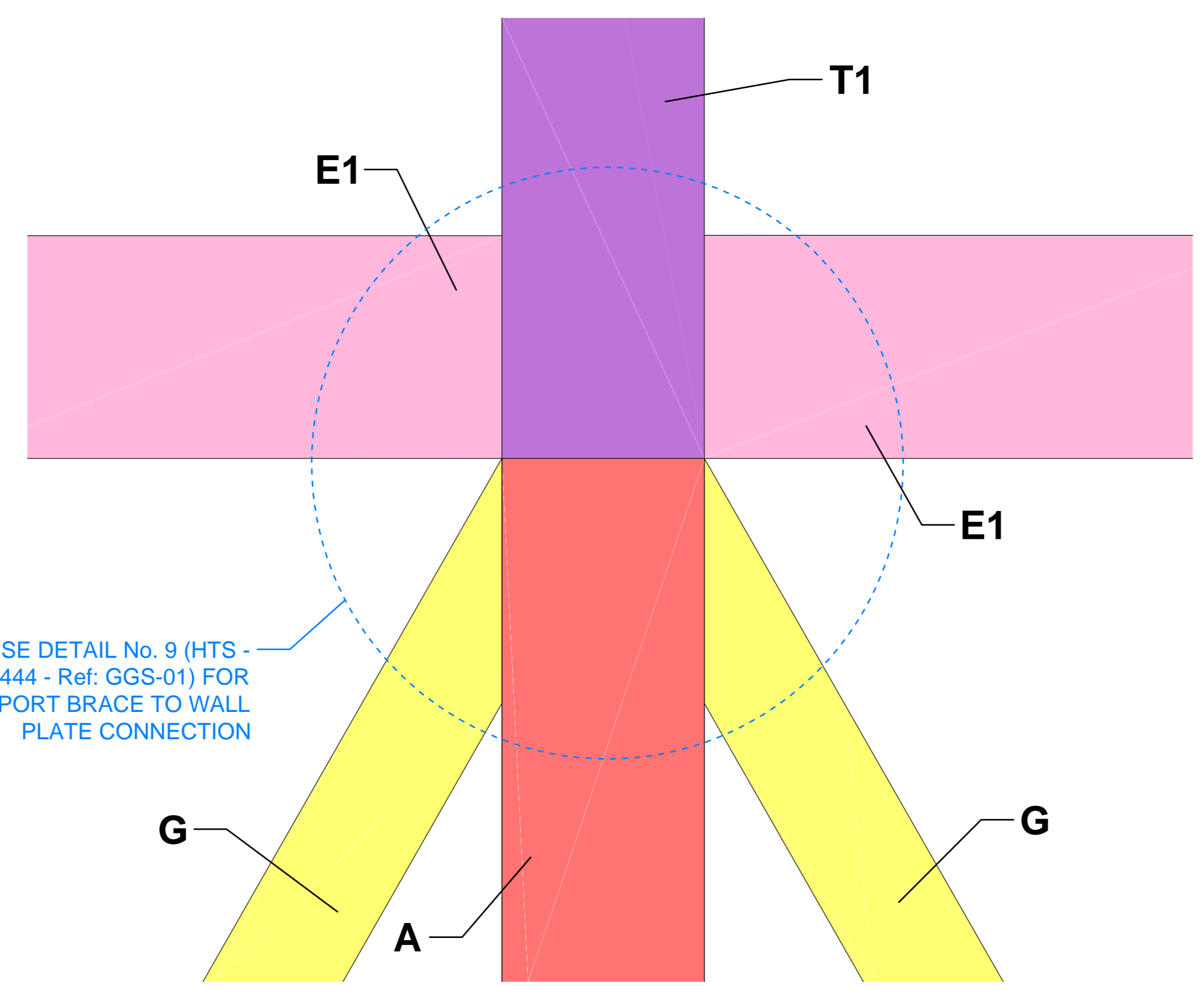
DOME PLAN EE - BOTTOM FACE OF UPPER RAFTER PLATE SCALE - 1:50



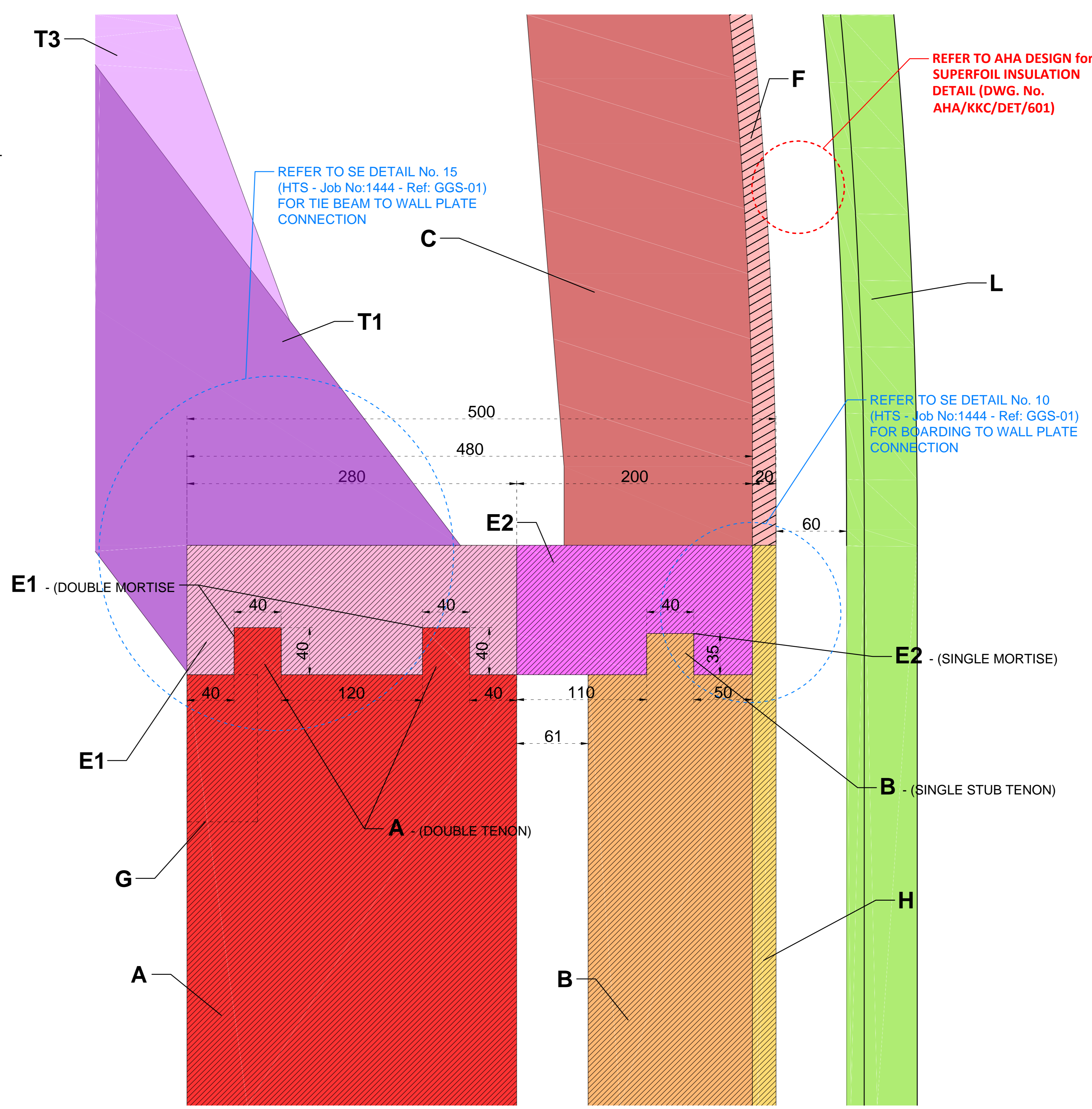
DOME INTERIOR WALL ELEVATION A SCALE - 1:20



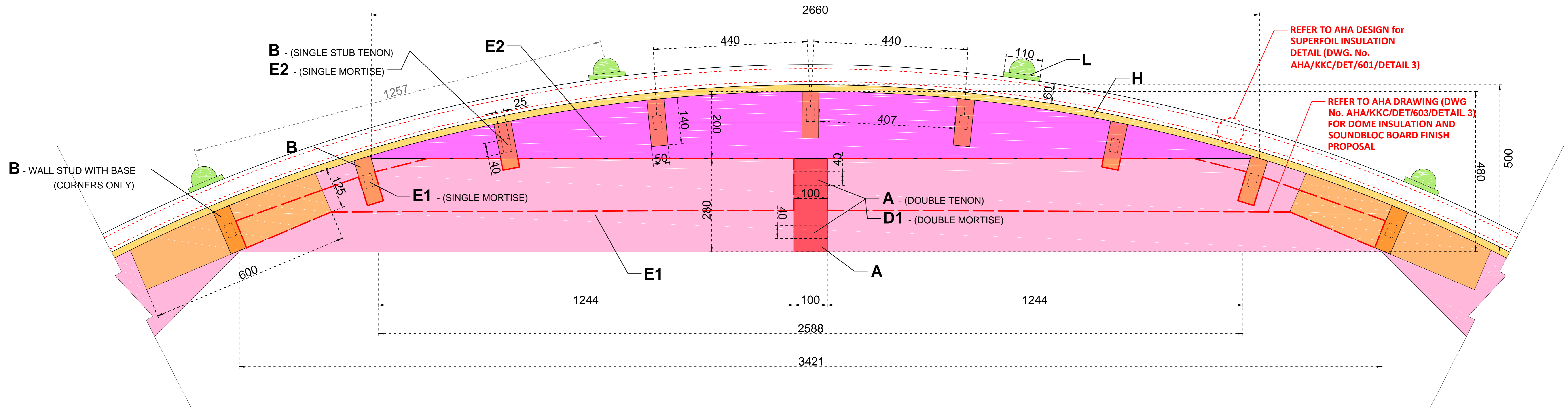
DOME SECTION BB SCALE - 1:50



DETAIL 4: MAIN SUPPORT POST BRACES SCALE - 1:2



DETAIL 2: UPPER RAFTER PLATE SECTION BB THROUGH MORTISE AND TENON SCALE - 1:2

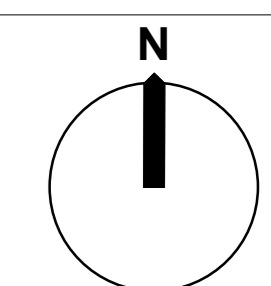


DETAIL 2: UPPER RAFTER PLATE BOTTOM FACE PLAN VIEW (SECTION FF) SCALE - 1:5

JOB TITLE  
KOKO  
Camden  
DESIGNED TITLE  
Dome Timber Frame Construction -  
Wall Construction Details (Sheet 2)  
JOB No. 0936 400\_6 A 05/20  
DRAWN BY: JMM MK SHOWN  
CHECKED BY: SCALE (BAU)  
SHOWN



62 British Grove, London, W4 2NE, UK  
E-mail: info@heritagearchitecture.co.uk  
T: 020 8748 9001



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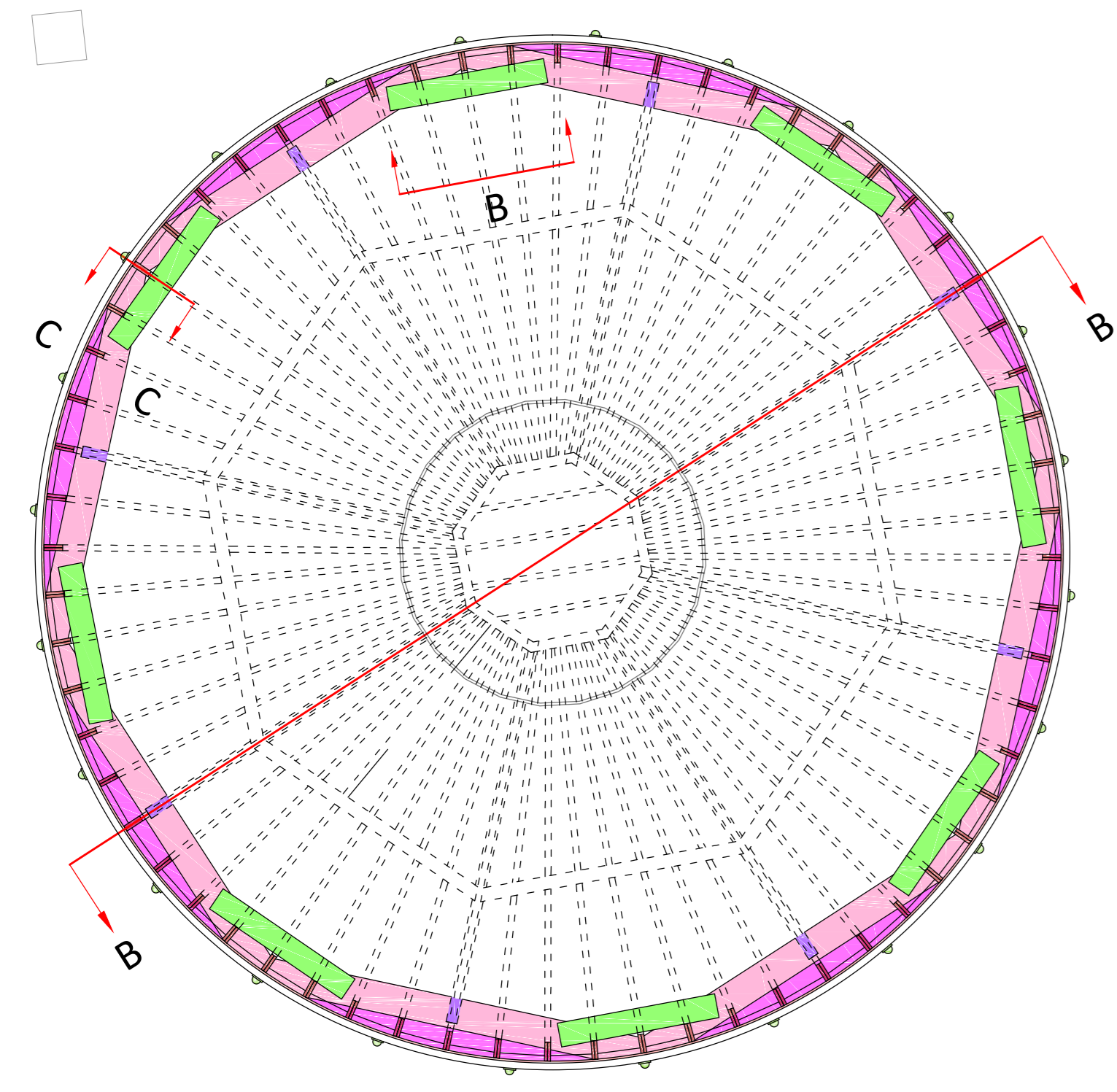
SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:  
(from Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
<span style="color:red">■</span>	A. MAIN SUPPORT POST (250x100mm)
<span style="color:orange">■</span>	B. WALL STUD (150x50mm @ 440 centers)
<span style="color:lightblue">■</span>	WALL STUD TIES (70x50mm)
<span style="color:yellow">■</span>	C. 2-PART RIBS (170x27mm)
<span style="color:lightblue">■</span>	D. LOWER STUD WALL PLATE
<span style="color:blue">■</span>	D1 - INNER PLATE (280x110mm)
<span style="color:blue">■</span>	D2 - OUTER PLATE (200x110mm)
<span style="color:purple">■</span>	E. UPPER RAFTER PLATE
<span style="color:purple">■</span>	E1 - INNER PLATE (280x100mm)
<span style="color:purple">■</span>	E2 - OUTER PLATE (200x100mm)
<span style="color:lightblue">■</span>	F. ROOF BOARDING (80x20mm)
<span style="color:yellow">■</span>	G. MAIN SUPPORT BRACES (125x80mm)
<span style="color:orange">■</span>	H. WALL BOARDING (260x18mm)
<span style="color:grey">■</span>	L. INNER APEX RING BEAM (350x100mm)
<span style="color:grey">■</span>	J. OUTER APEX RING BEAM (150x125mm)
<span style="color:orange">■</span>	K. APEX ROOF JOISTS (4 No. 80x45mm)
<span style="color:green">■</span>	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
<span style="color:green">■</span>	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
<span style="color:orange">■</span>	N. PURLINS/STRUTS (250x100mm/120x50mm)
<span style="color:purple">■</span>	T. TRUSS (IN PLAN)
<span style="color:purple">■</span>	T1 - TIE BEAM (250x100mm)
<span style="color:purple">■</span>	T2 - KING POST (250x100mm)
<span style="color:purple">■</span>	T3 - PRINCIPAL RAFTERS (250x100mm)
<span style="color:purple">■</span>	T4 - IRON BRACING

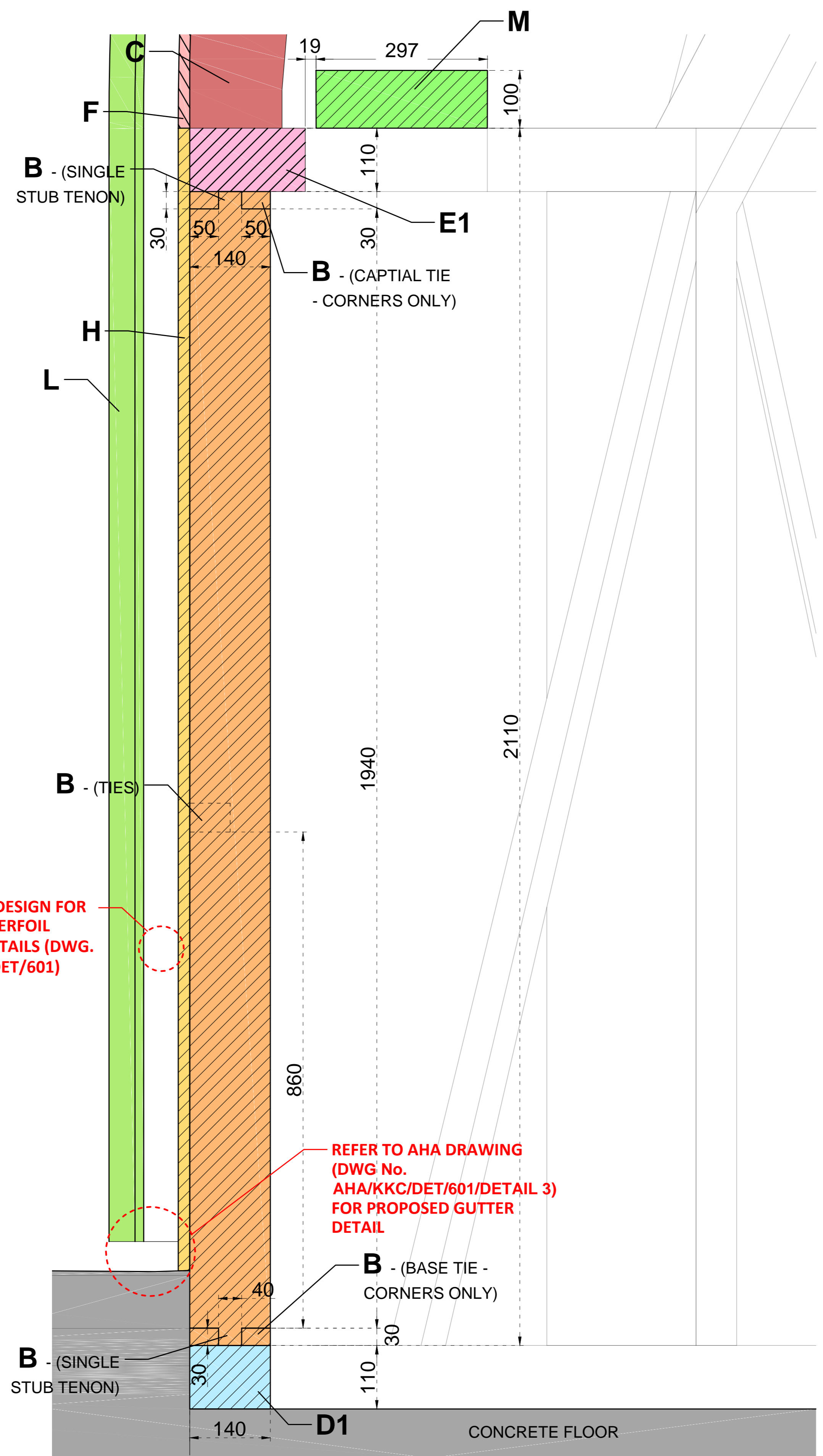
Please note: Principal timber elements cross-section dimension are indicated in brackets above.

**DRAWING NOTES:**

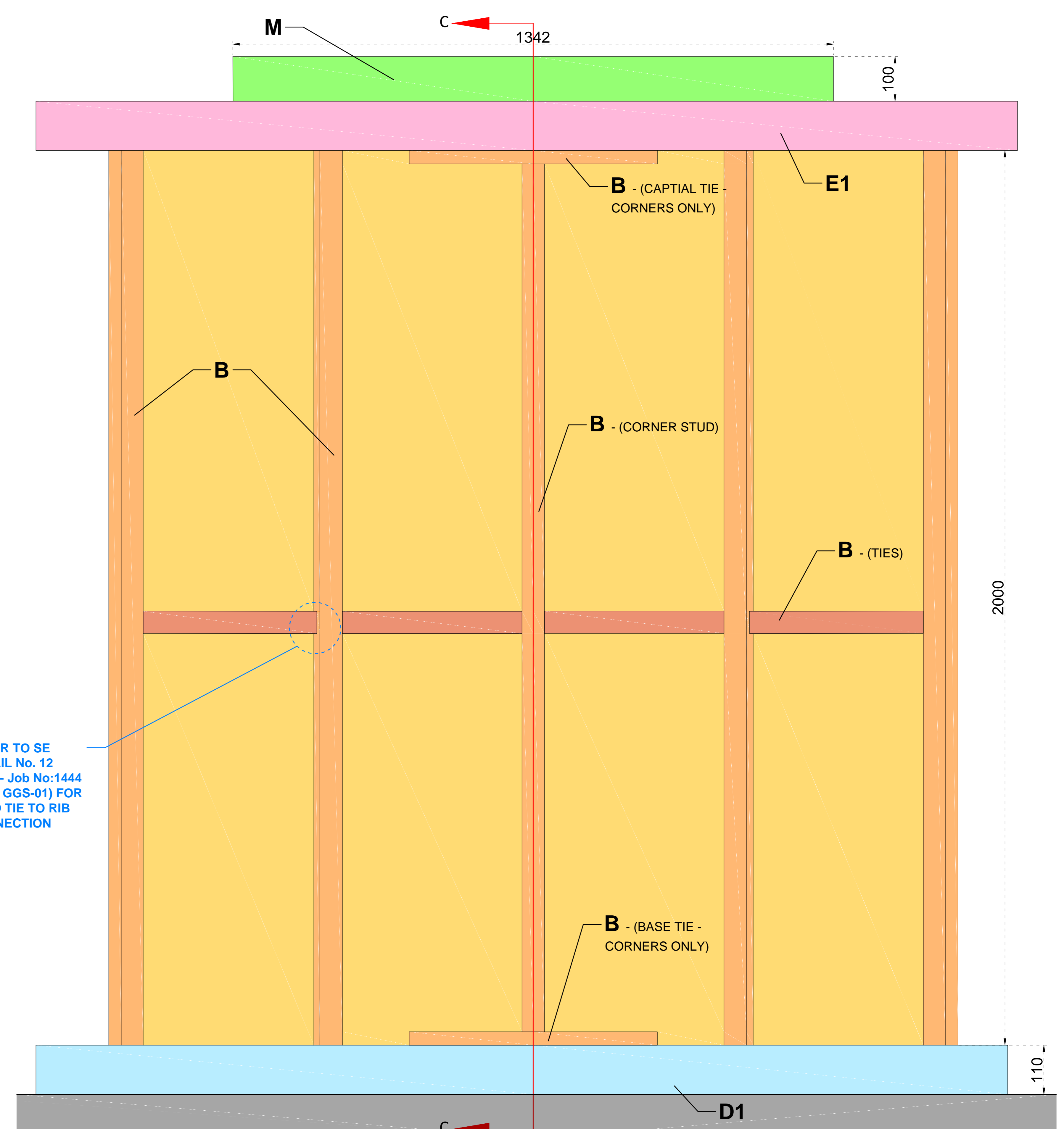
- Please refer HTS (structural engineer) report (Job No. 1444; Ref No. GGS-01) for further comments on connection details. All HTS detail locations have been identified on the drawings in blue.
- Please refer AHA (lead architect) drawings for further details on acoustics insulation, DPM and copper cladding. All detail to be finalised by AHA and have been identified on the drawings in red.
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- All dimensions correspond to the existing dome surveys. SHA's post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post-fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
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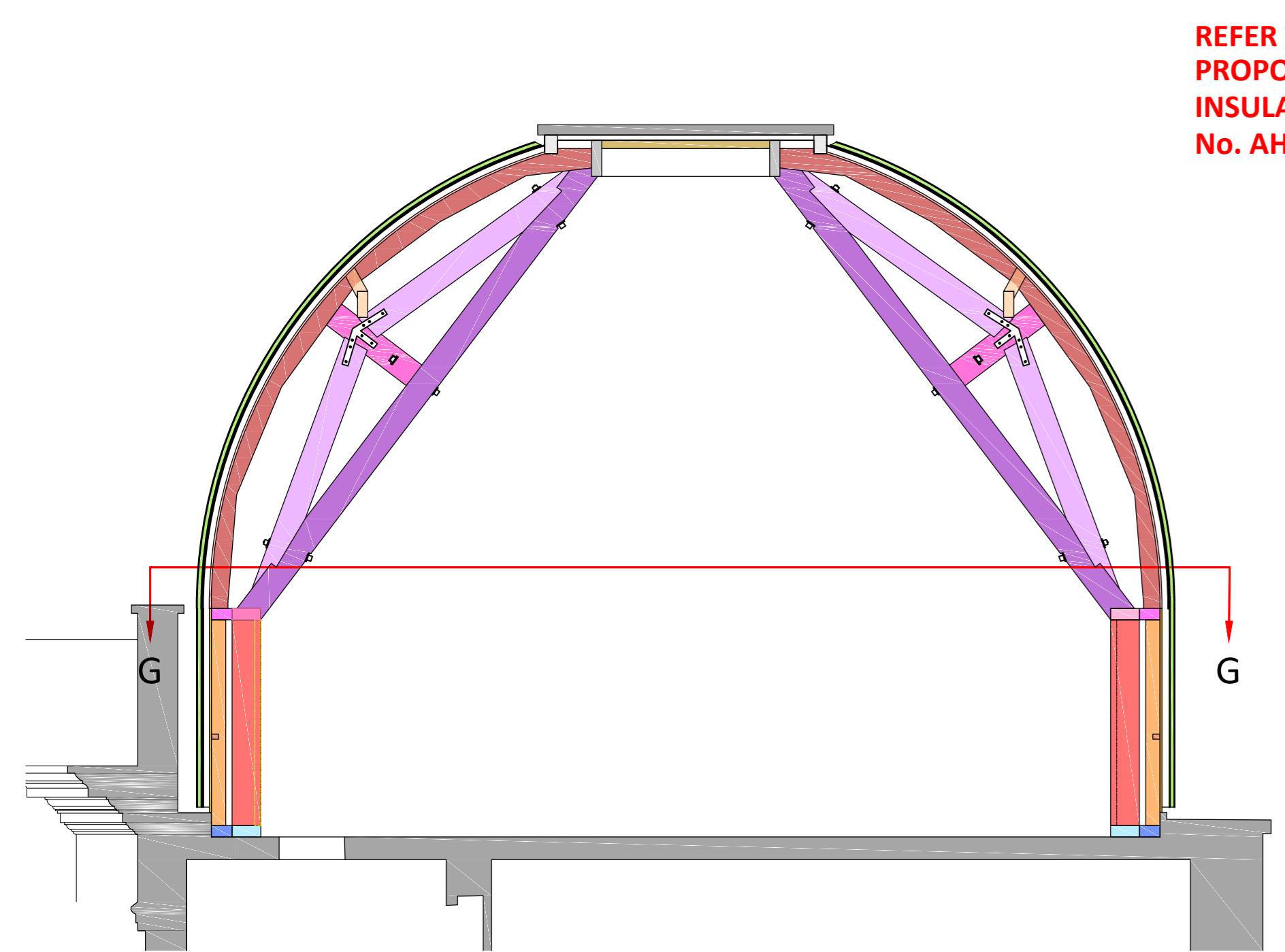
**DOME PLAN FF - ABOVE UPPER RAFTER PLATE**  
SCALE - 1:50



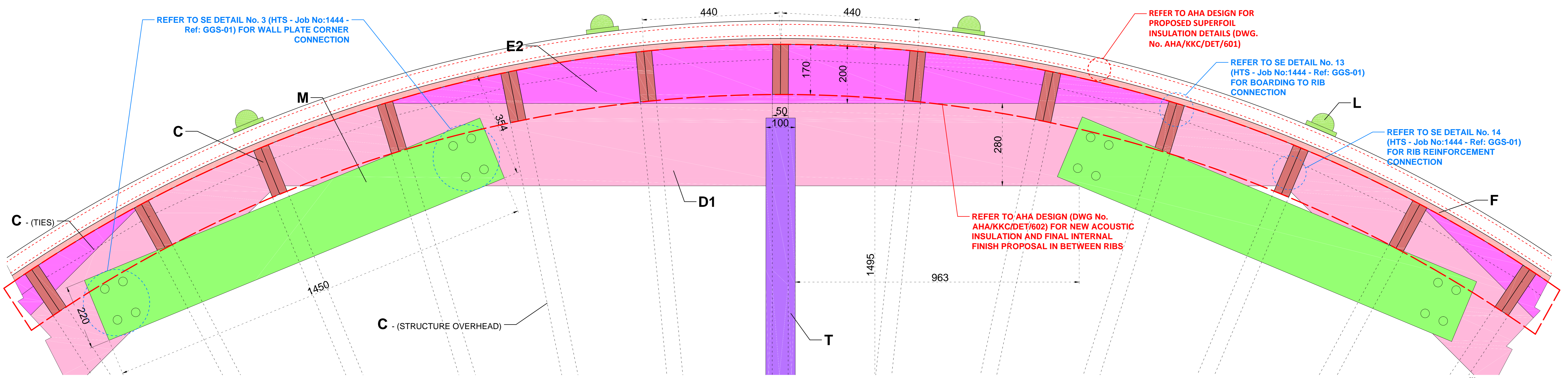
**DOME WALL SECTION CC**  
SCALE - 1:5



**DOME WALL INTERIOR ELEVATION B - HORIZONTAL RAFTER WALL TIE POSITION**  
SCALE 1:5



**DOME SECTION BB**  
SCALE - 1:50



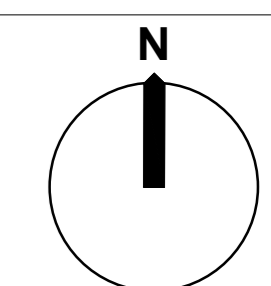
**DETAIL 5: PLAN VIEW - UPPER RAFTER (TOP FACE) & HORIZONTAL RAFTER WALL TIE (SECTION GG)**  
SCALE - 1:5

JOB TITLE  
KOKO  
Camden  
DESIGNED TITLE  
Dome Timber Frame Construction -  
Wall Construction Details (Sheet 3)  
JOB NO. DATE  
x0936 400\_7 A 05/20  
DRAWN BY CHECKED BY SCALE (BAS)  
JJM MK SHOWN



62 British Grove, London, W4 2NE,  
E-mail: info@heritagearchitecture.co.uk  
T: 020 8448 9001





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SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:  
(from Post-fire Inventory Report)

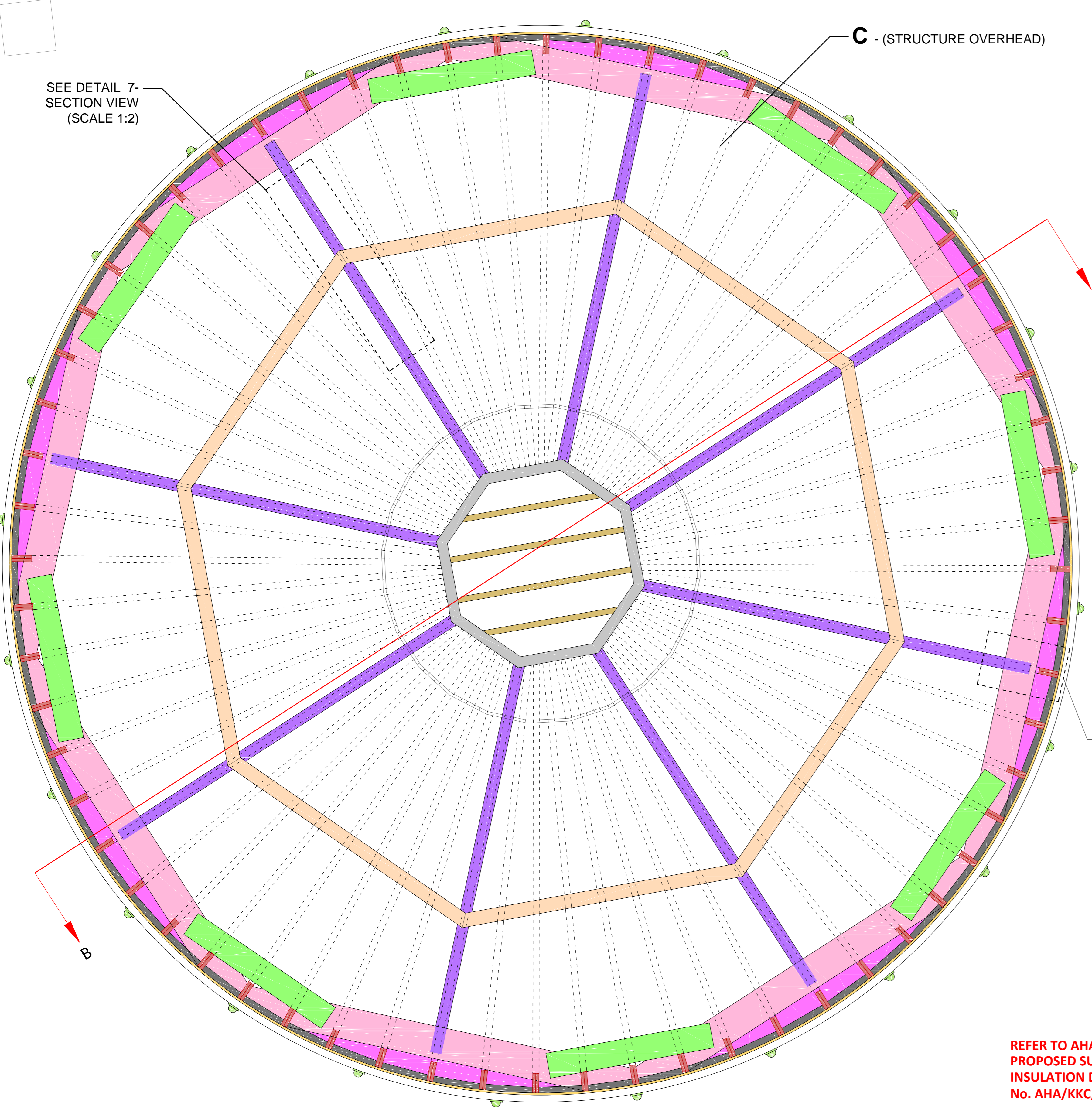
KEY:	PRINCIPAL TIMBER ELEMENT:
<span style="color:red">■</span>	A. MAIN SUPPORT POST (250x100mm)
<span style="color:orange">■</span>	B. WALL STUD (150x50mm @ 440 centers)
<span style="color:purple">■</span>	C. 2-PART RIBS (170x27mm)
<span style="color:blue">■</span>	D. LOWER STUD WALL PLATE (280x110mm)
<span style="color:lightblue">■</span>	D1 - INNER PLATE (280x110mm)
<span style="color:darkblue">■</span>	D2 - OUTER PLATE (200x110mm)
<span style="color:lightgreen">■</span>	E. UPPER RAFTER PLATE (280x100mm)
<span style="color:yellowgreen">■</span>	E1 - INNER PLATE (280x100mm)
<span style="color:yellow">■</span>	E2 - OUTER PLATE (200x100mm)
<span style="color:lightyellow">■</span>	F. ROOF BOARDING (80x20mm)
<span style="color:lightgrey">■</span>	G. MAIN POST SUPPORT BRACES (125x60mm)
<span style="color:grey">■</span>	H. WALL BOARDING (260x18mm)
<span style="color:darkgrey">■</span>	L. INNER APEX RING BEAM (260x100mm)
<span style="color:lightgrey">■</span>	J. OUTER APEX RING BEAM (180x125mm)
<span style="color:darkgrey">■</span>	K. APEX ROOF JOISTS (4 No. 80x45mm)
<span style="color:lightgreen">■</span>	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
<span style="color:yellowgreen">■</span>	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
<span style="color:orange">■</span>	N. PURLINS/STRUTS (250x100mm/120x50mm)
<span style="color:purple">■</span>	T. TRUSS (IN PLAN)
<span style="color:blue">■</span>	T1 - TIE BEAM (250x100mm)
<span style="color:yellowgreen">■</span>	T2 - KING POST (250x100mm)
<span style="color:purple">■</span>	T3 - PRINCIPAL RAFTERS (250x100mm)
<span style="color:grey">■</span>	T4 - IRON BRACING

Please note: Principal timber elements cross-section dimension are indicated in brackets above.

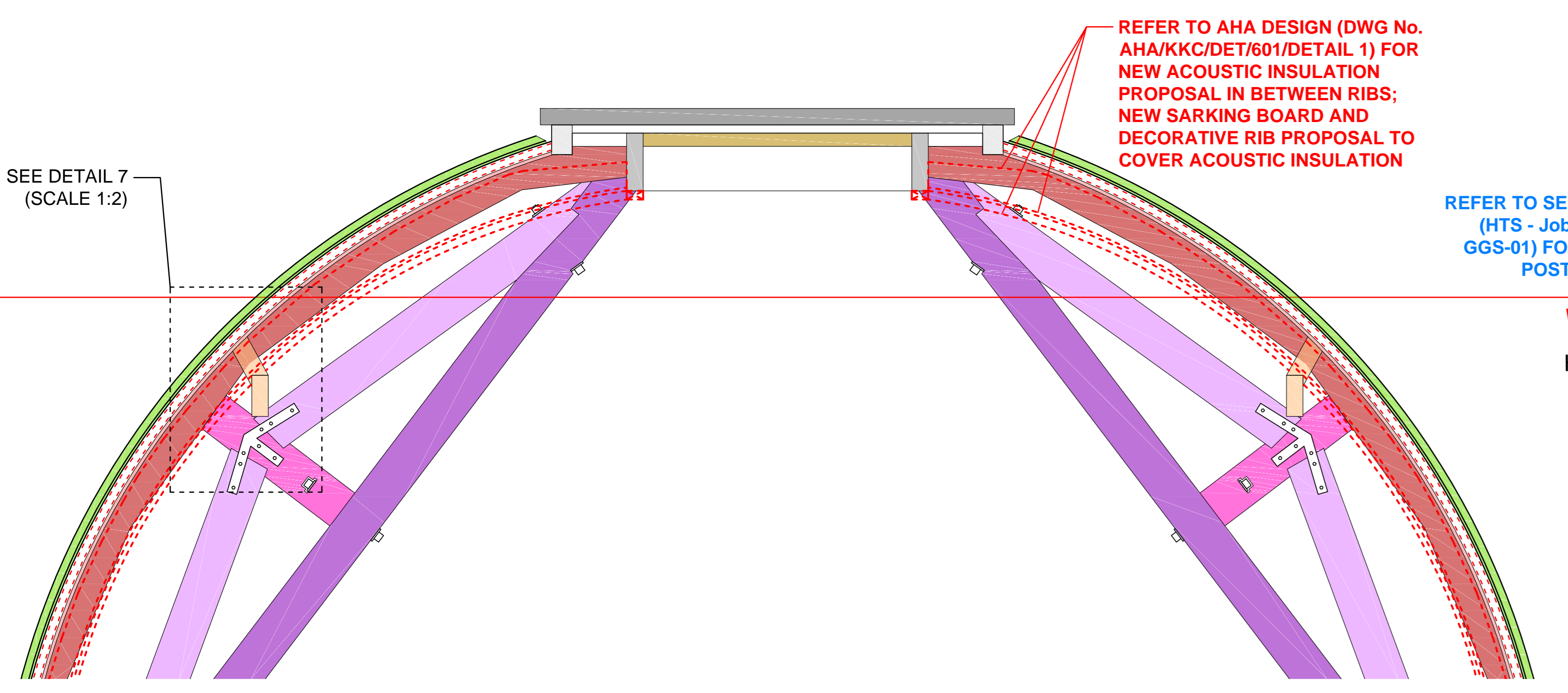
DRAWING NOTES:

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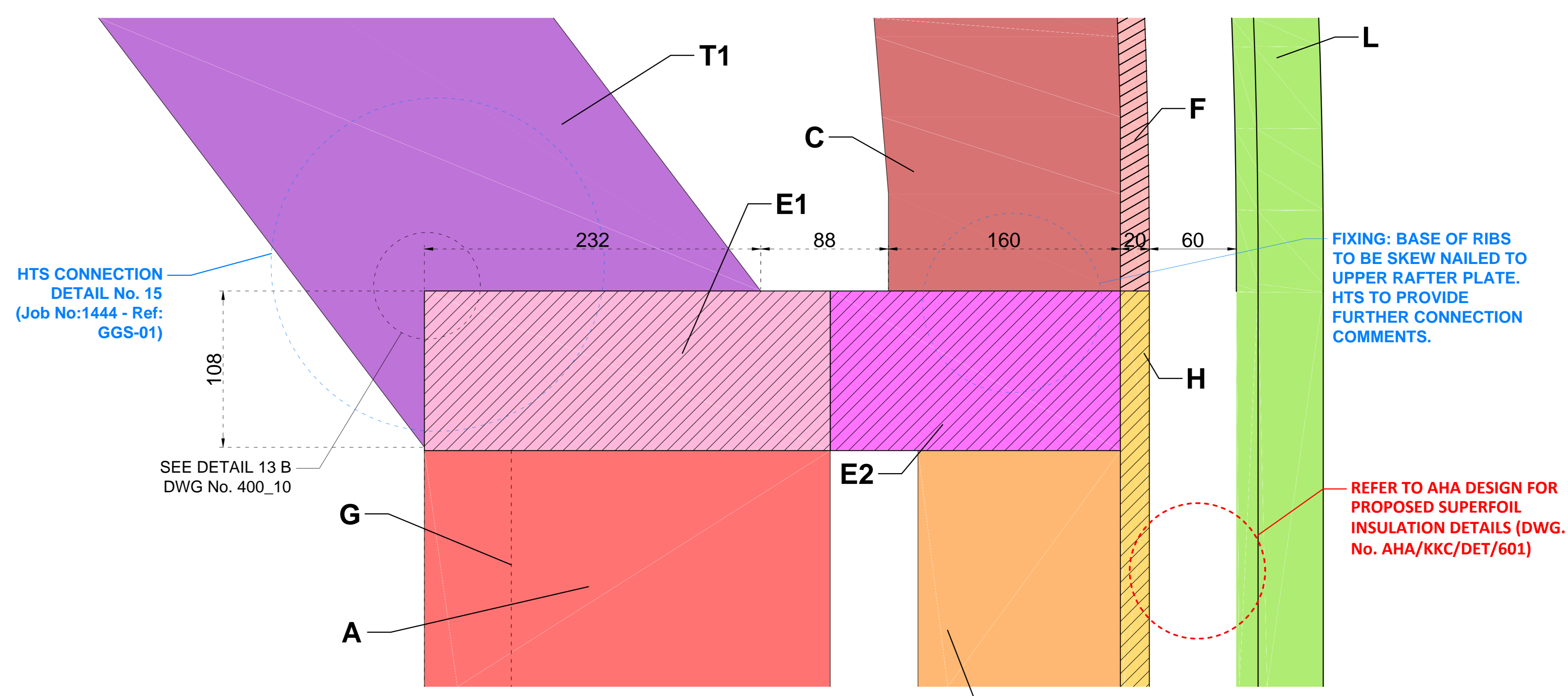
JOB TITLE  
**KOKO**  
DRAWING TITLE  
Camden  
Dome Timber Frame Construction -  
Roof Construction Details (Sheet 1)  
JOB No. 0936    DWG No. 400\_8    REV. A    DATE 05/20  
DRAWN BY: JJM    CHECKED BY: MK    SCALE: (B4)    SHOWN



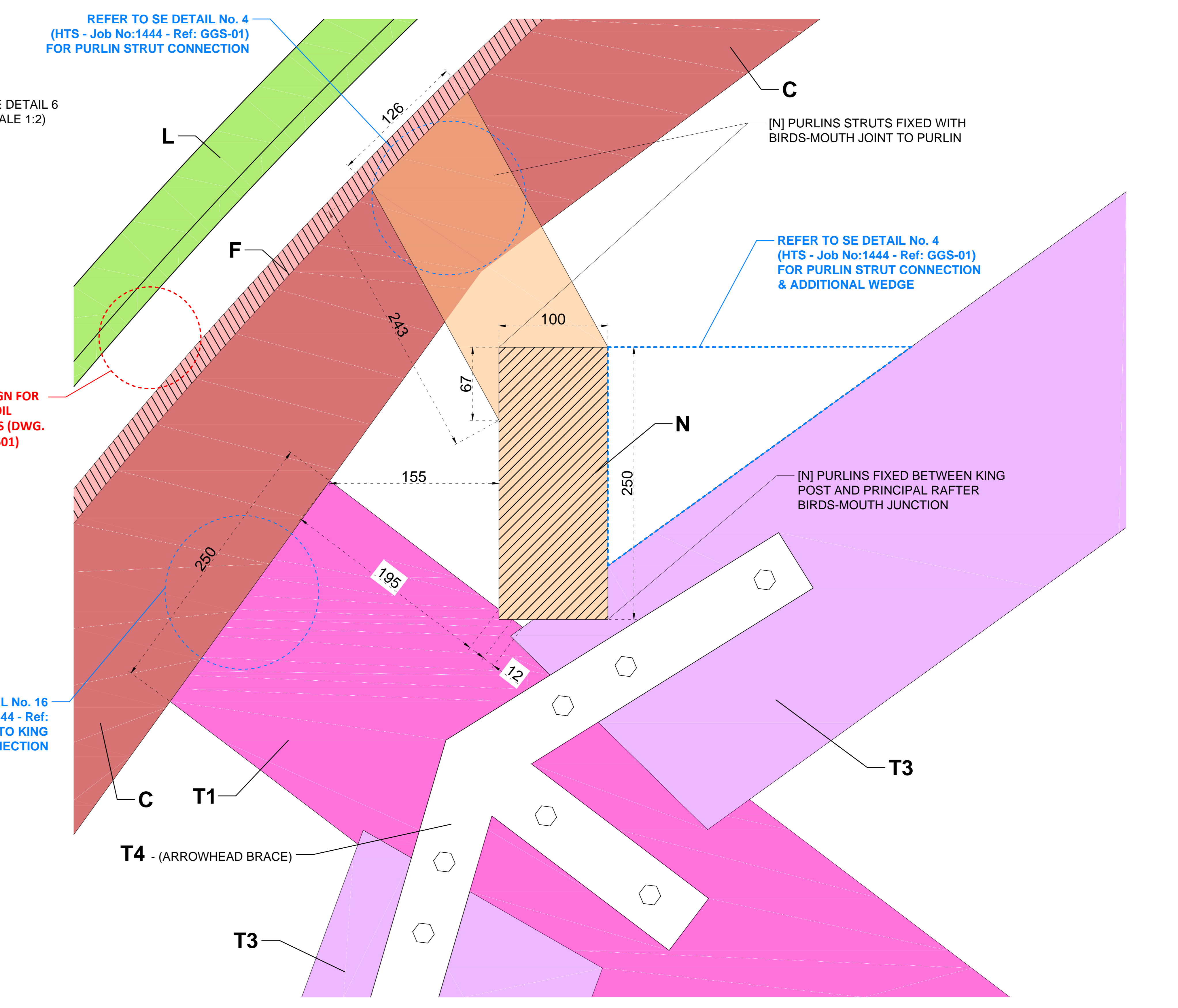
**DOME PLAN HH - ABOVE PURLINS  
SCALE - 1:20**



**DOME SECTION BB - PLAN GG SECTION LINE  
SCALE - 1:20**



**DETAIL 6: 2-PART RIB FIXING TO UPPER RAFTER PLATE  
SCALE - 1:2**



**DETAIL 7: JUNCTION BETWEEN PURLINS, KING POST TRUSS, PRINCIPAL RAFTERS  
AND 2-PART RIBS  
SCALE - 1:2**

SEE DETAIL 7-  
SECTION VIEW  
(SCALE 1:2)

HTS CONNECTION  
DETAIL No. 15  
(Job No:1444 - Ref:  
GGS-01)

SEE DETAIL 13 B  
DWG No. 400\_10

SEE DETAIL 6  
(SCALE 1:2)

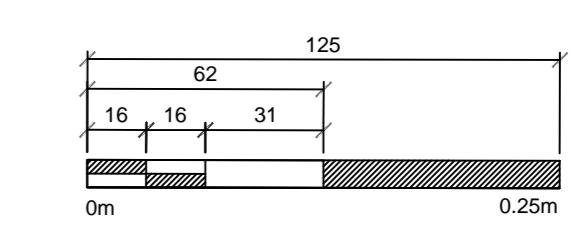
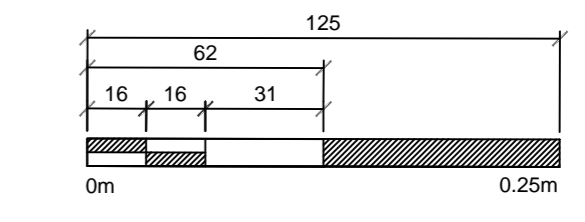
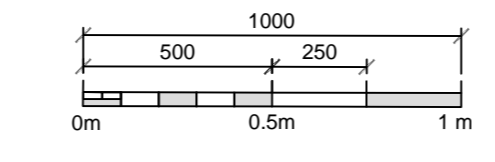
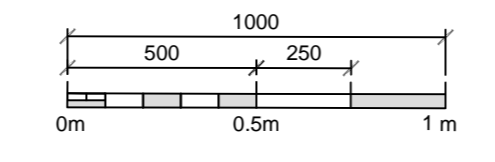
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(HTS - Job No:1444 - Ref:  
GGS-01)  
FOR PURLIN STRUT CONNECTION

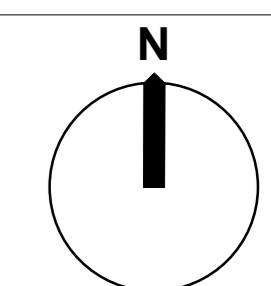
REFER TO AHA DESIGN FOR  
PROPOSED SUPERFOIL  
INSULATION DETAILS (DWG.  
No. AHA/KKC/DET/601)

REFER TO SE DETAIL No. 4  
(HTS - Job No:1444 - Ref:  
GGS-01)  
FOR PURLIN STRUT CONNECTION  
& ADDITIONAL WEDGE

REFER TO AHA DESIGN (DWG No.  
AHA/KKC/DET/601/DETAIL 1) FOR  
NEW ACOUSTIC INSULATION  
PROPOSAL IN BETWEEN RIBS;  
NEW SARKING BOARD AND  
DECORATIVE RIB PROPOSAL TO  
COVER ACOUSTIC INSULATION

REFER TO SE DETAIL No. 16  
(HTS - Job No:1444 - Ref:  
GGS-01) FOR RIB TO KING  
POST CONNECTION





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SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:  
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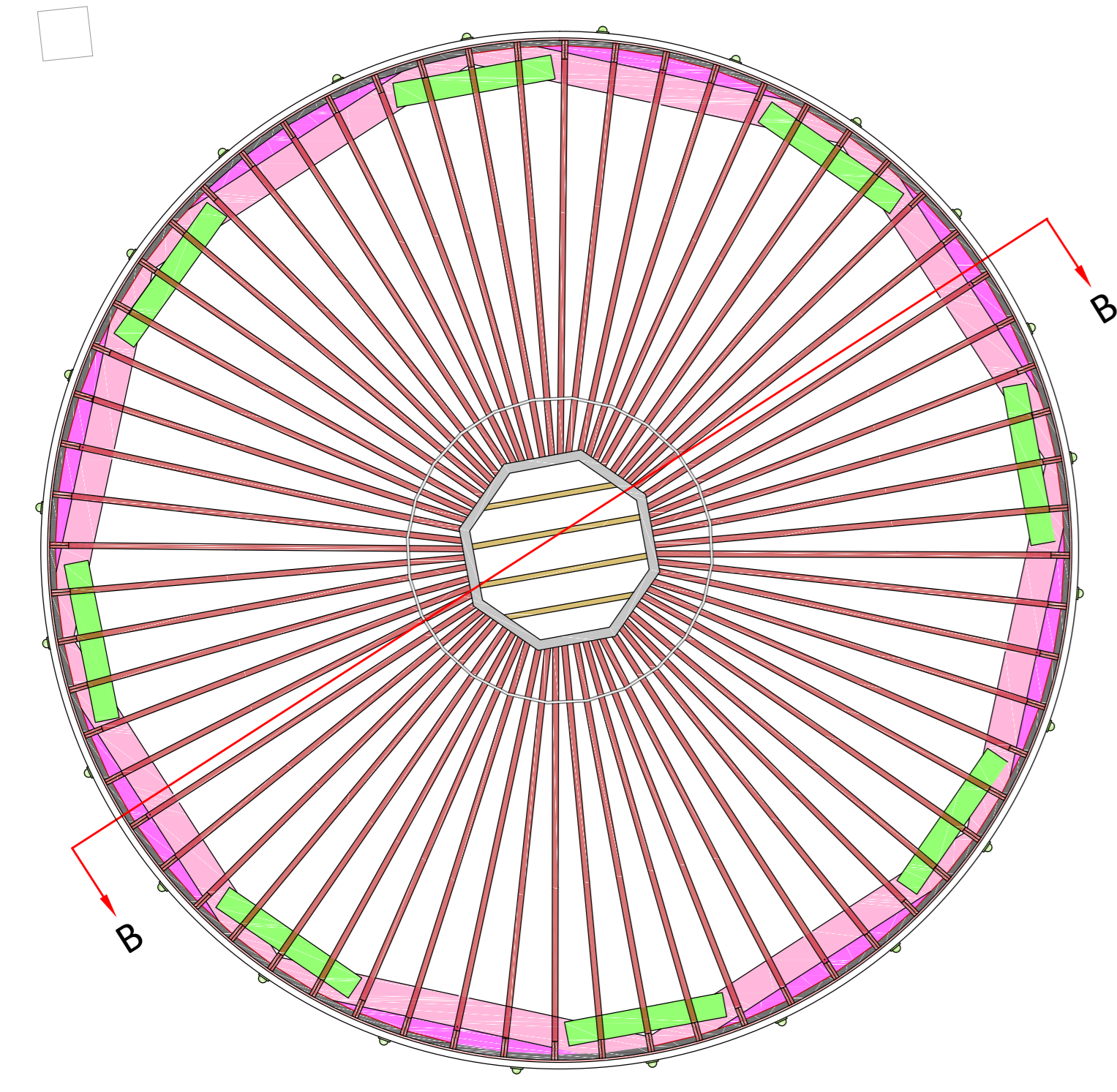
KEY:	PRINCIPAL TIMBER ELEMENT:
Red	A. MAIN SUPPORT POST (250x100mm)
Orange	B. WALL STUD (150x50mm @ 440 centers)
Dark Orange	WALL STUD TIES (70x50mm)
Dark Red	C. 2-PART RIBS (170x27mm)
Light Blue	D. LOWER STUD WALL PLATE (280x110mm)
Blue	D1 - INNER PLATE (280x110mm)
Dark Blue	D2 - OUTER PLATE (200x110mm)
Pink	E. UPPER RAFTER PLATE (280x100mm)
Light Pink	E1 - INNER PLATE (280x100mm)
Light Purple	E2 - OUTER PLATE (200x100mm)
Red	F. ROOF BOARDING (80x20mm)
Yellow	G. MAIN POST SUPPORT BRACES (125x80mm)
Orange	H. WALL BOARDING (260x18mm)
Grey	L. INNER APEX RING BEAM (250x100mm)
Light Grey	J. OUTER APEX RING BEAM (180x125mm)
Dark Green	K. APEX ROOF JOISTS (4 No. 80x45mm)
Light Green	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
Dark Green	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
Light Green	N. PURLINS/STRUTS (250x100mm/120x50mm)
Blue	T. TRUSS (IN PLAN)
Light Blue	T1 - TIE BEAM (250x100mm)
Dark Blue	T2 - KING POST (250x100mm)
Light Purple	T3 - PRINCIPAL RAFTERS (250x100mm)
Dark Purple	T4 - IRON BRACING

Please note: Principal timber elements cross-section dimension are indicated in brackets above.

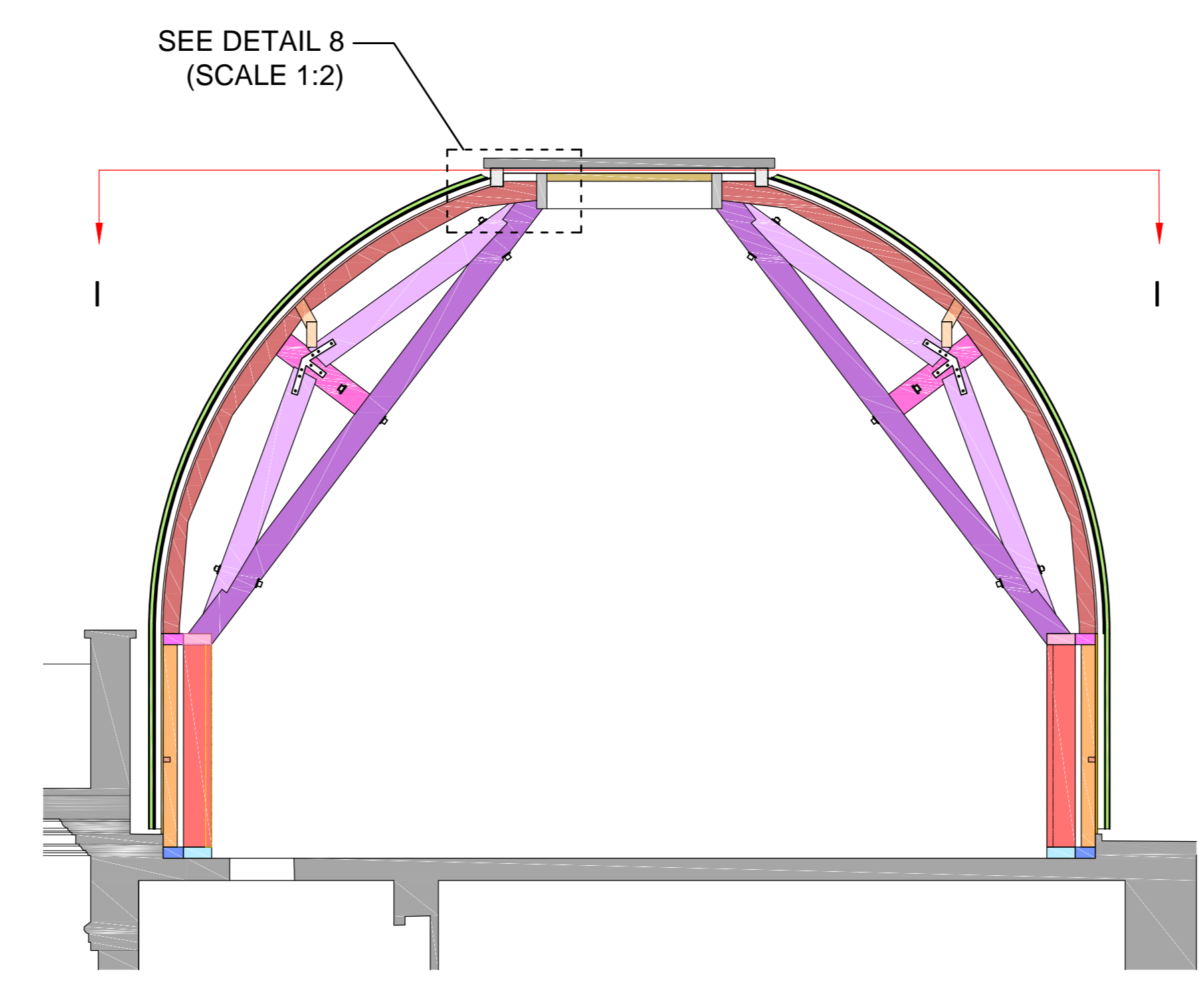
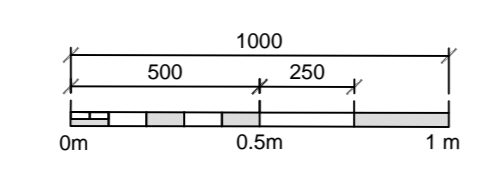
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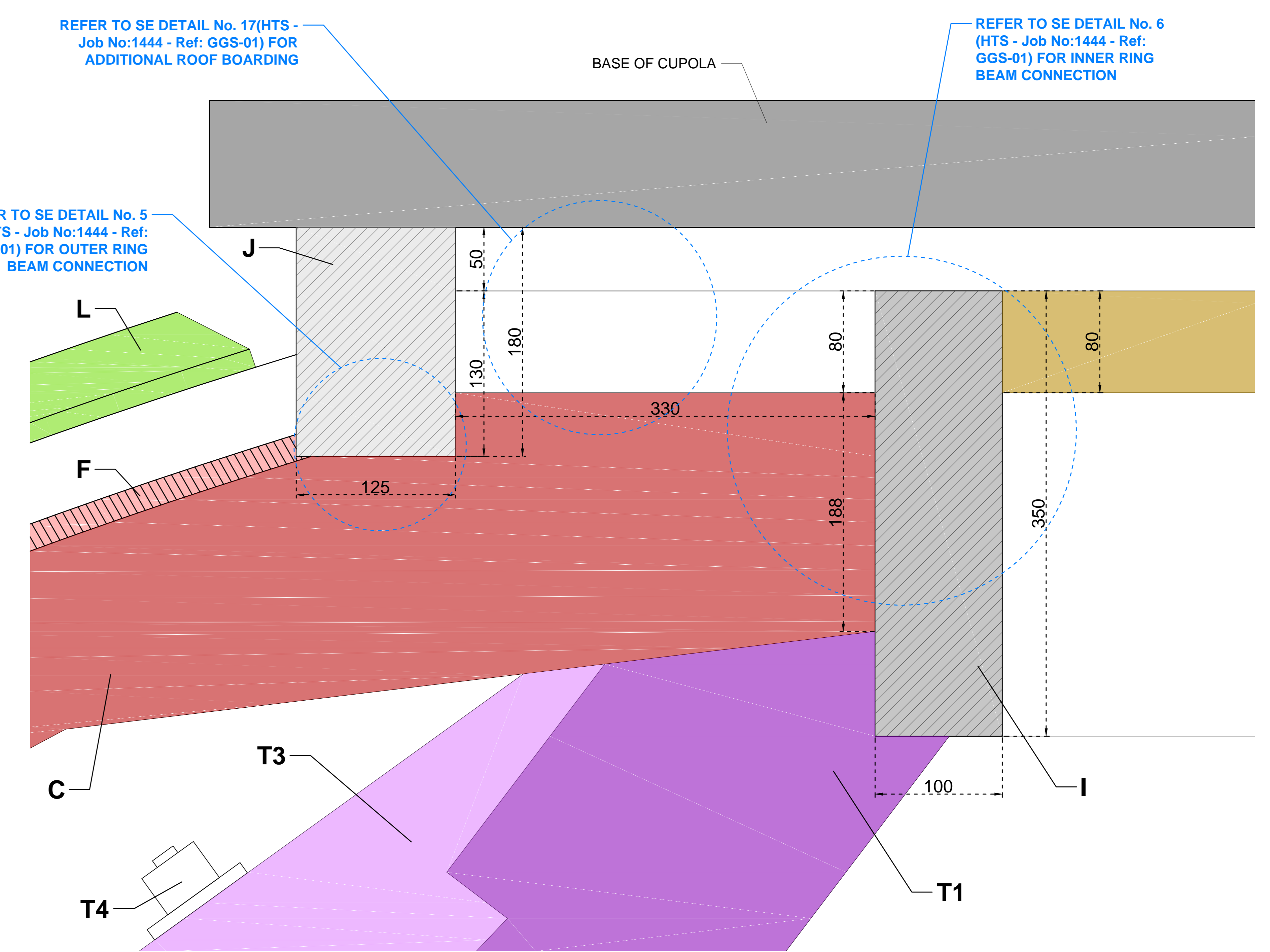
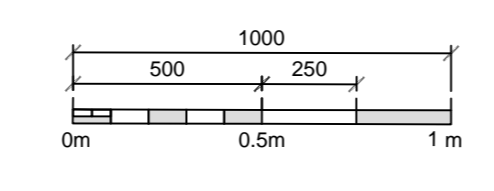
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KOKO  
Camden  
DRAWING TITLE  
Dome Timber Frame Construction -  
Roof Construction Details (Sheet 2)  
JOB No. DATE  
x0936 400\_9 A 05/20  
DRAWN BY CHECKED BY SCALE (BAS)  
JJM MK SHOWN



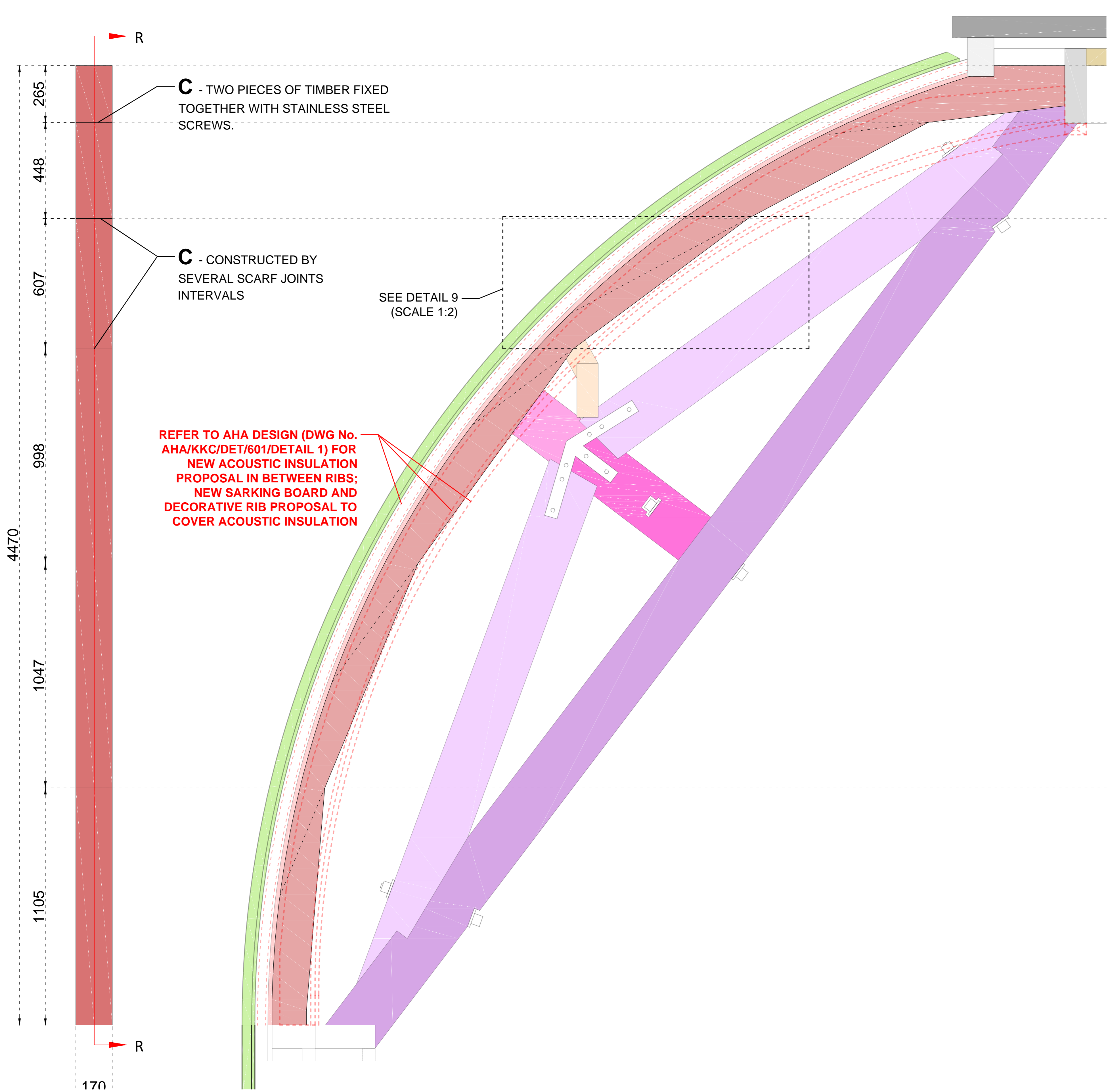
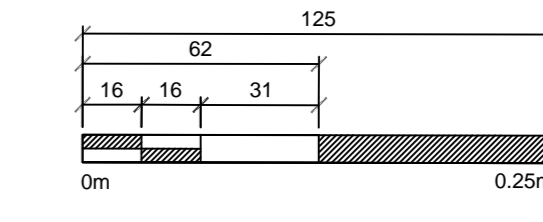
DOME PLAN II - OVERHEAD 2-PART RIB POSITIONS  
SCALE - 1:50



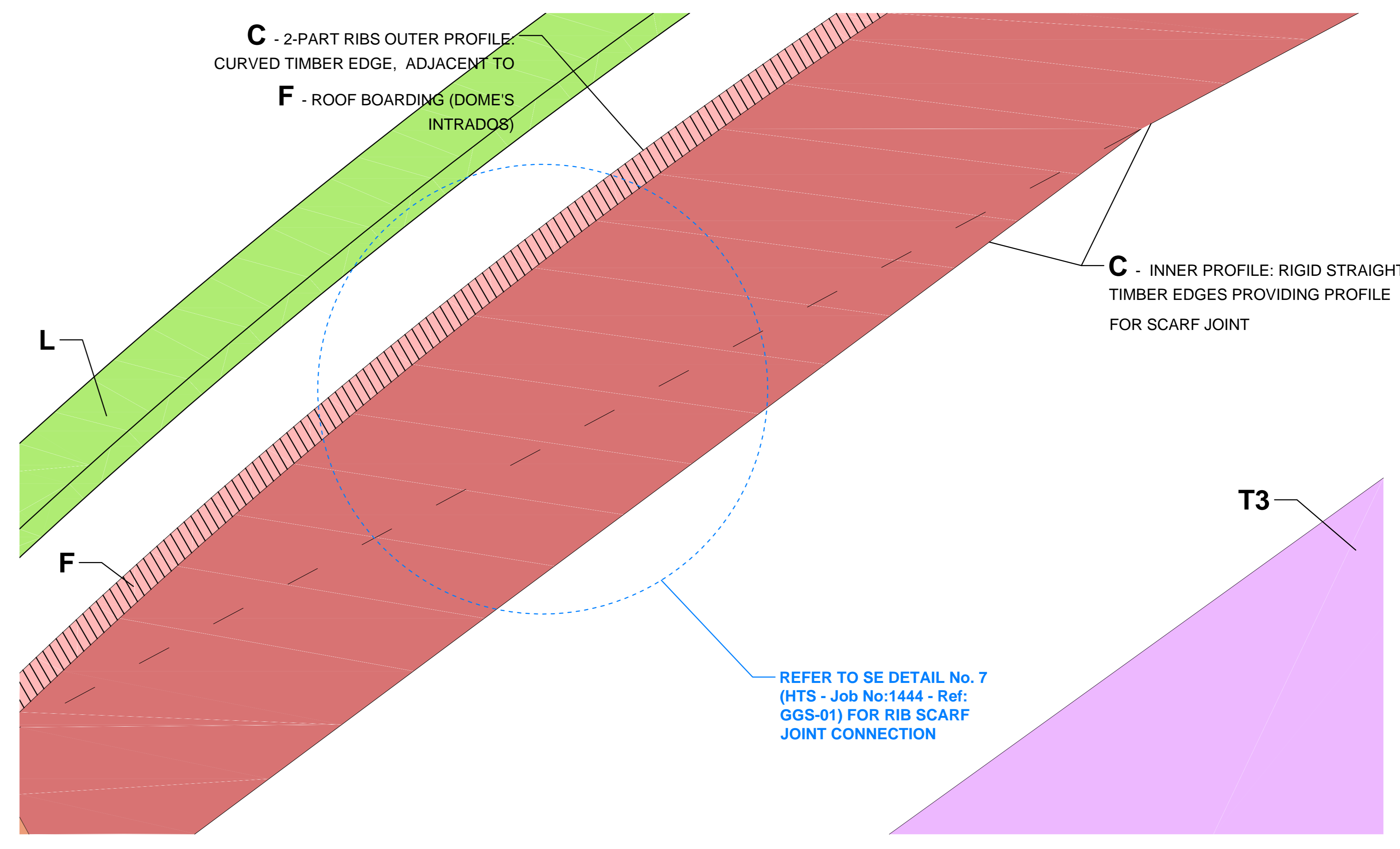
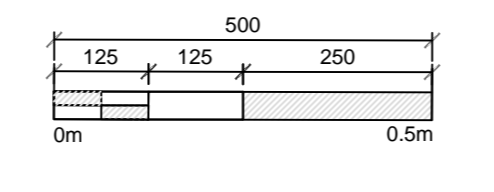
DOME SECTION BB  
SCALE - 1:50



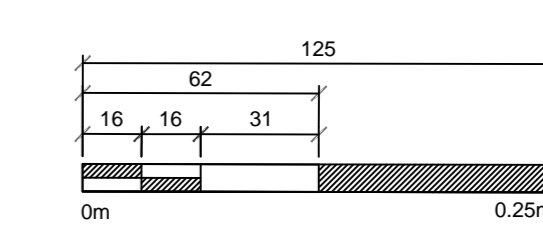
DETAIL 8: SECTION DETAIL OF OUTER APEX RING BEAM AND 2-PART RIBS  
SCALE - 1:2

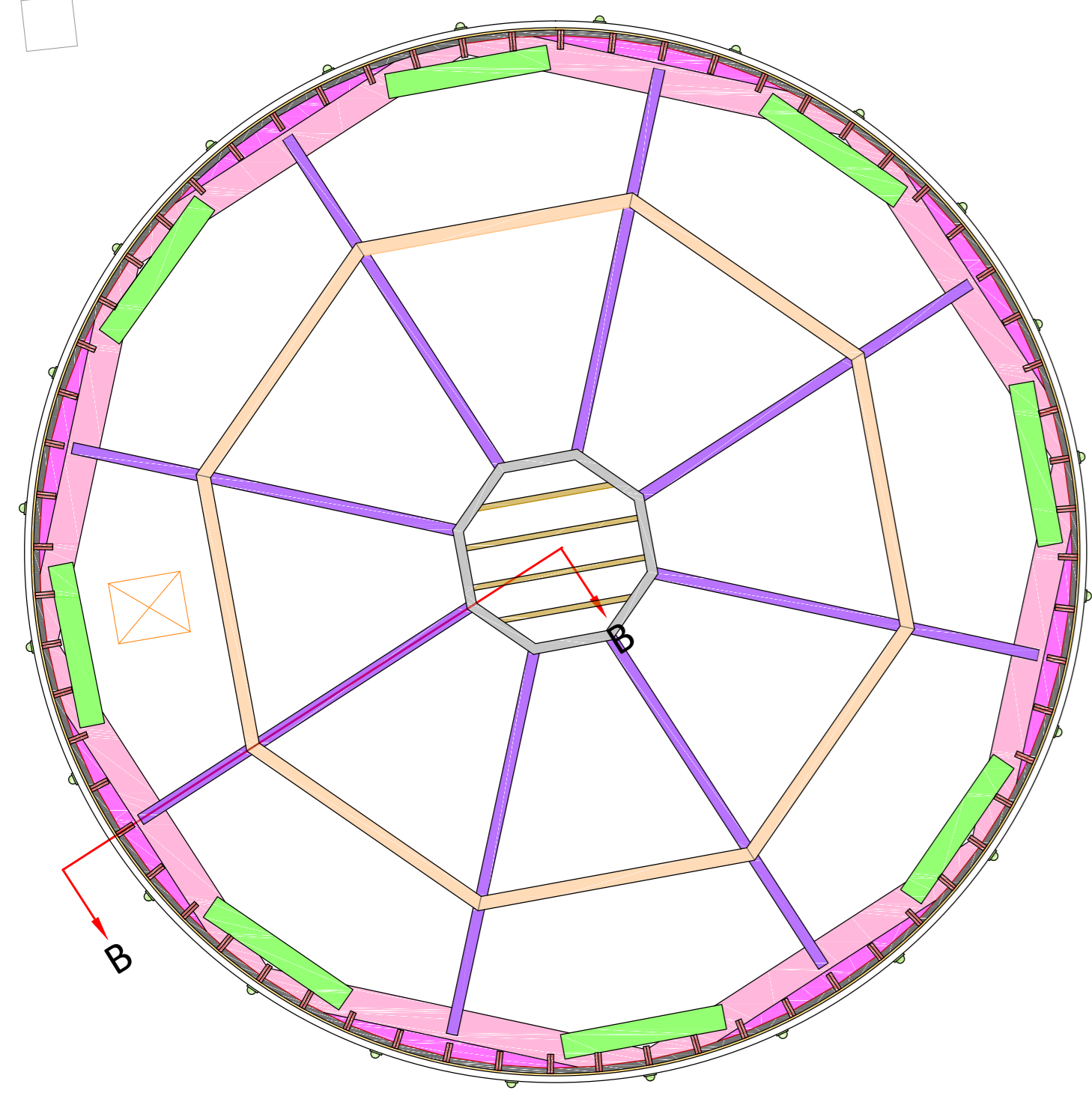


2-PART RIBS CROSS-SECTION RR  
SCALE - 1:10

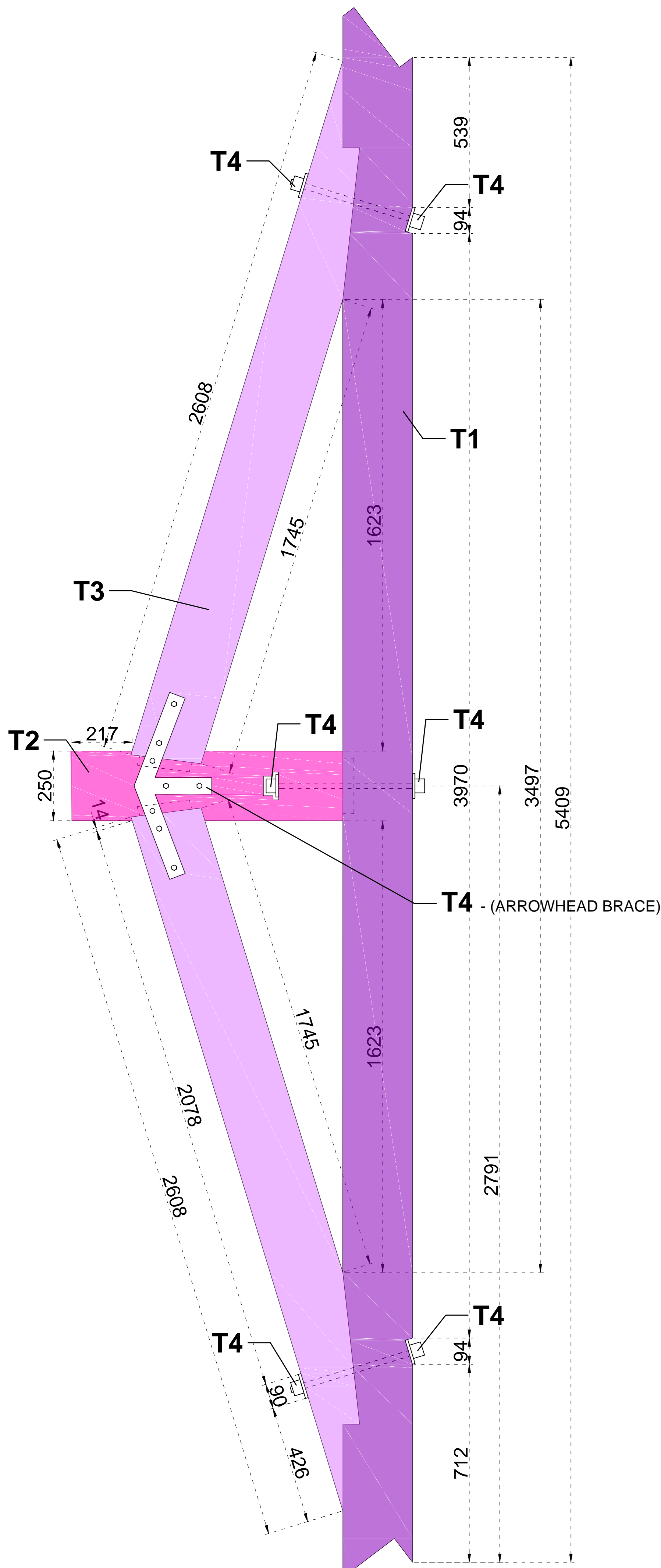
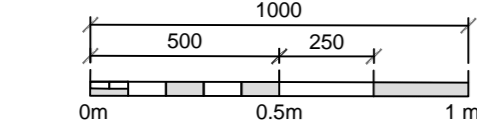


DETAIL 9: 2-PART RIBS SCARF JOINT DETAILS  
SCALE - 1:2

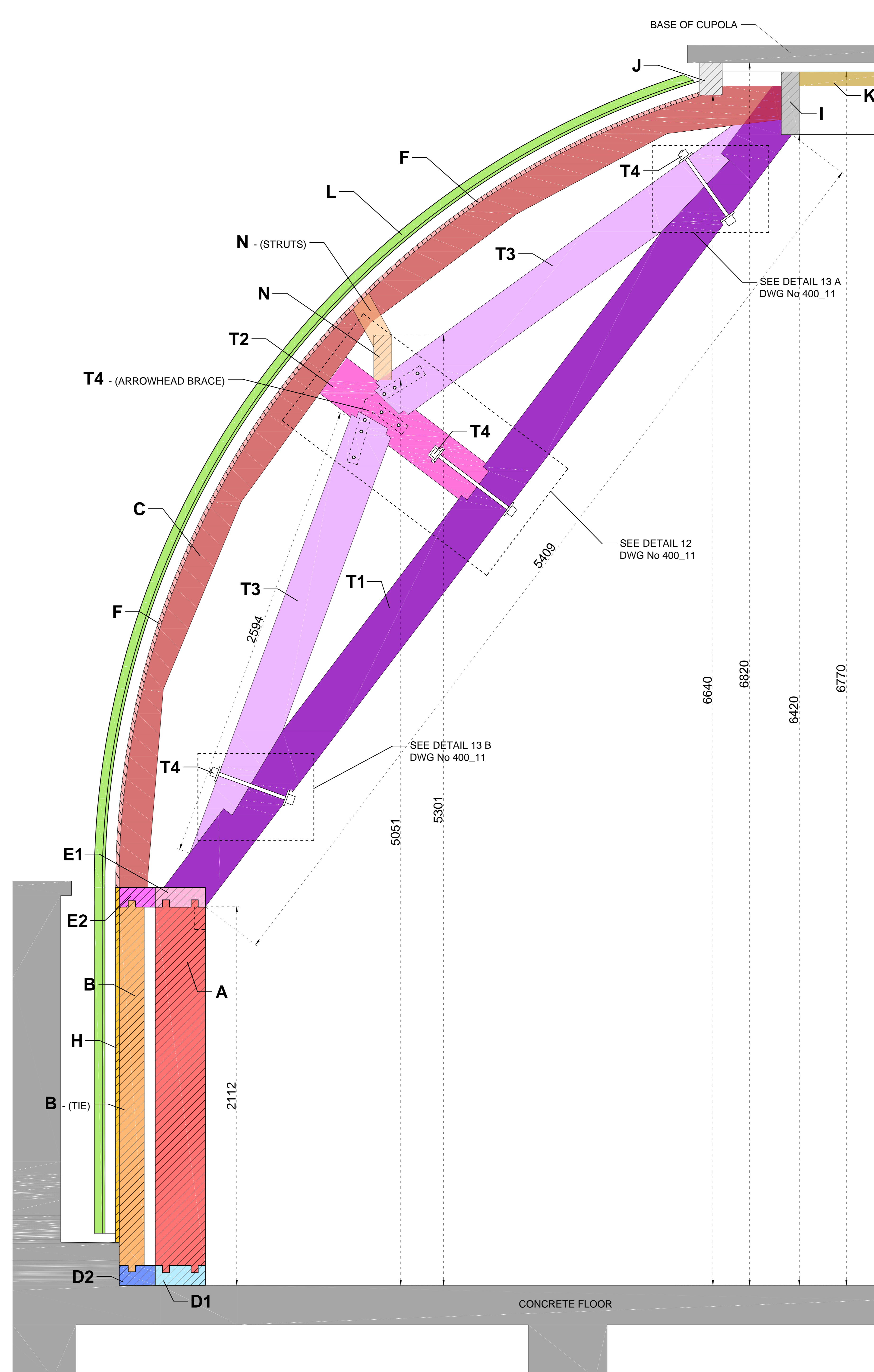
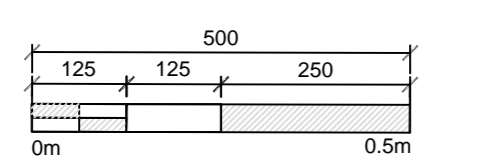




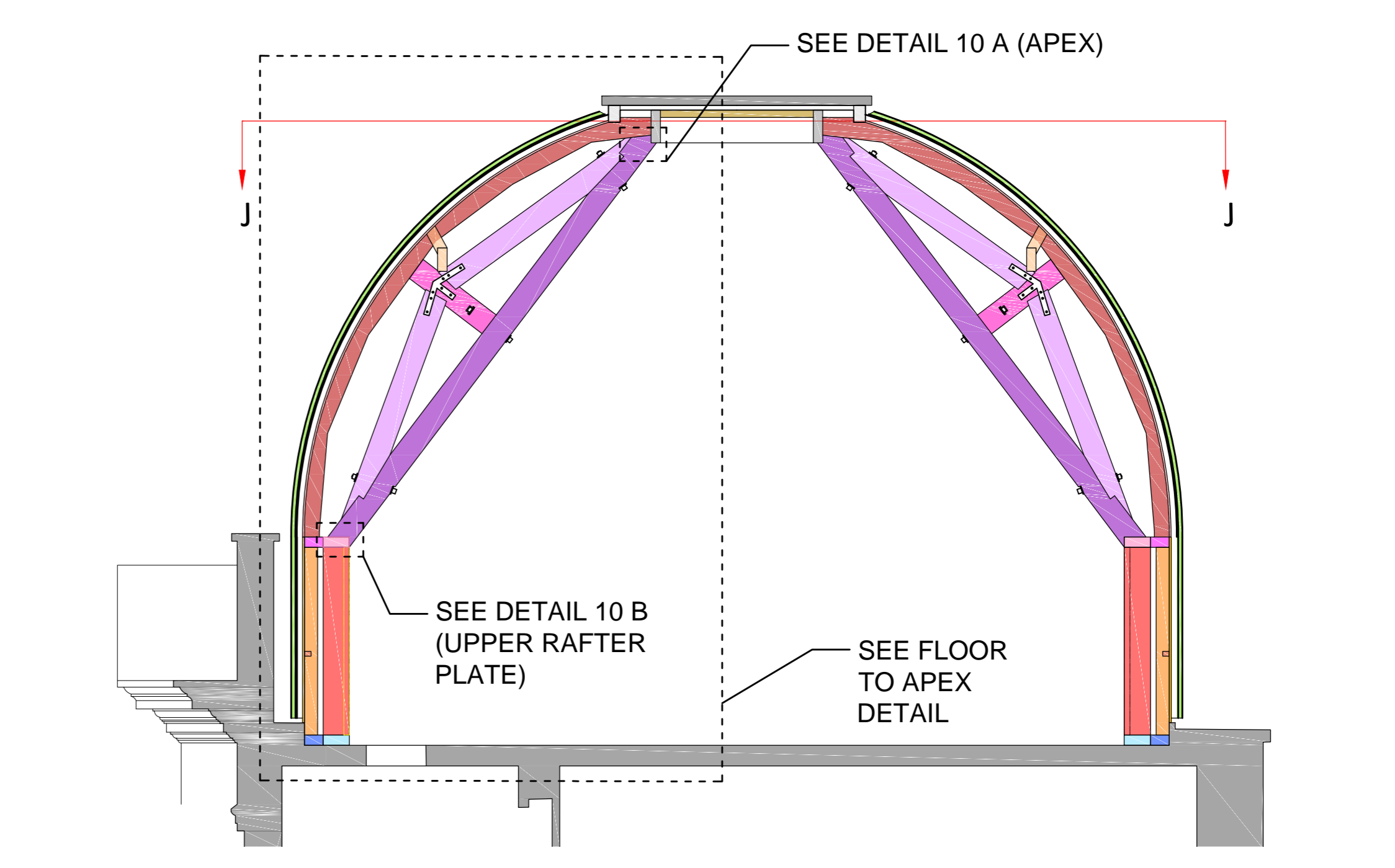
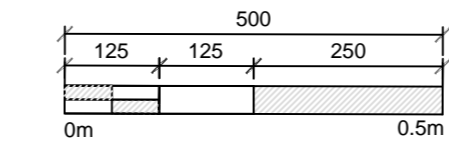
**DOME PLAN JJ - TRUSS POSITIONS**  
SCALE - 1:50



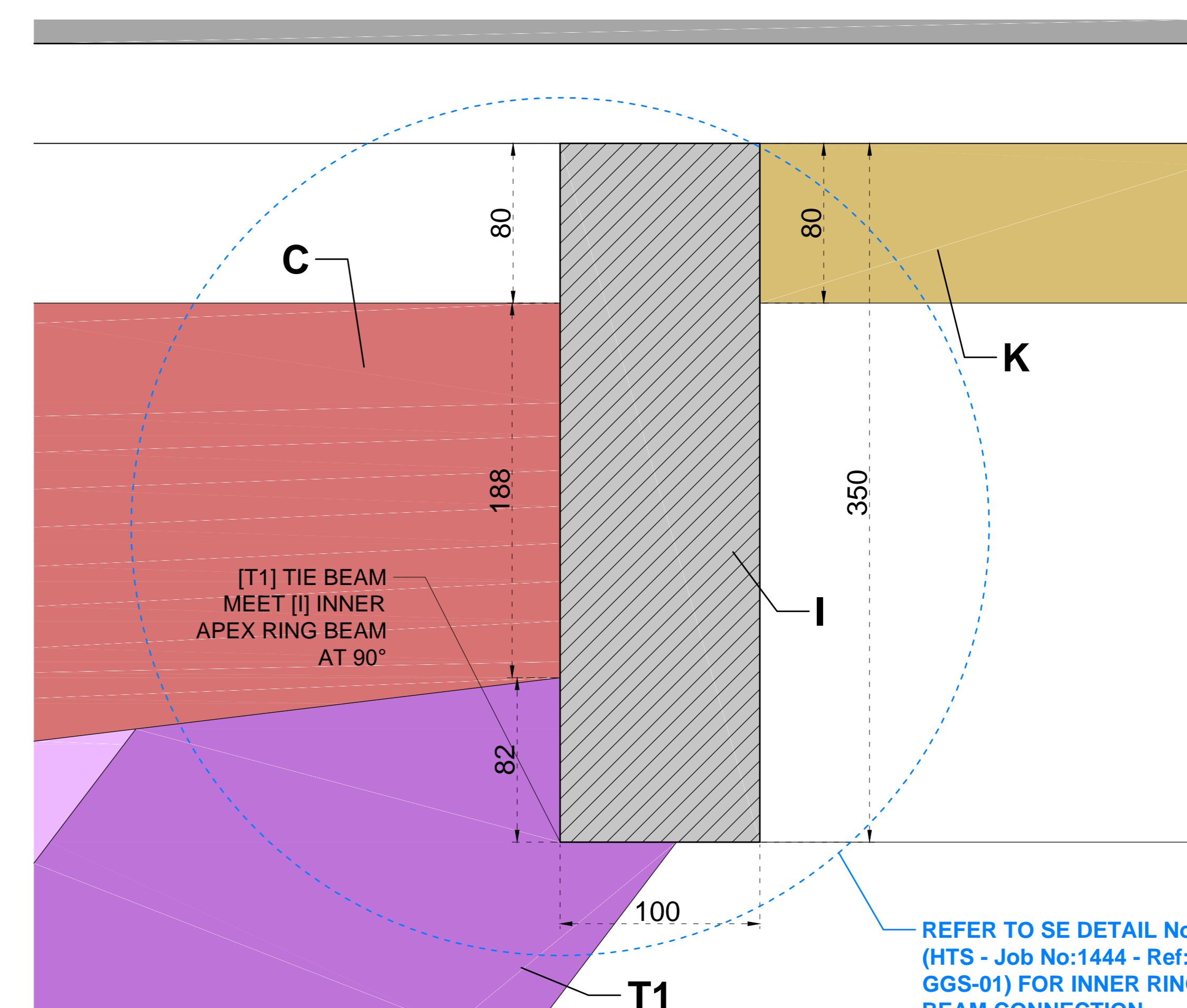
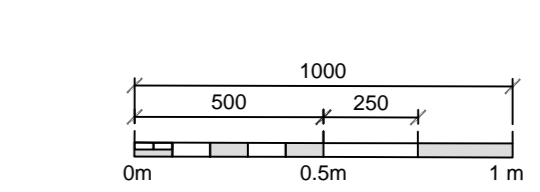
**KING-POST TRUSS ELEVATION**  
SCALE - 1:10



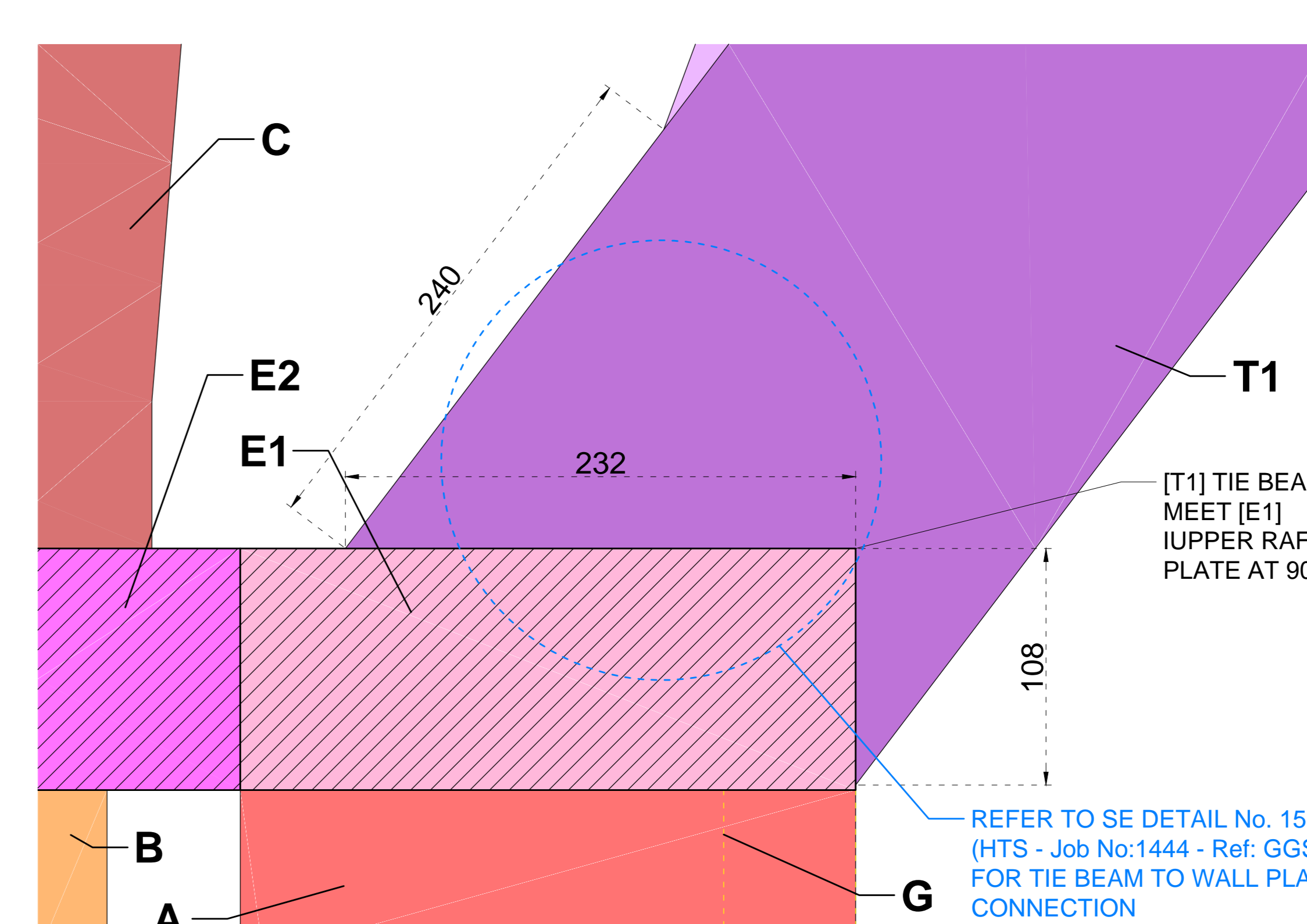
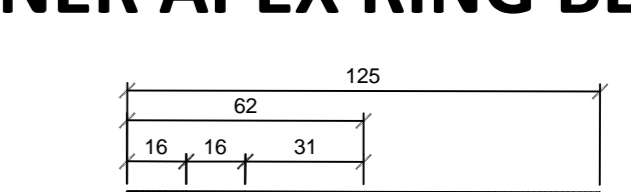
**KING-POST TRUSS - FLOOR TO APEX SECTION BB**  
SCALE - 1:10



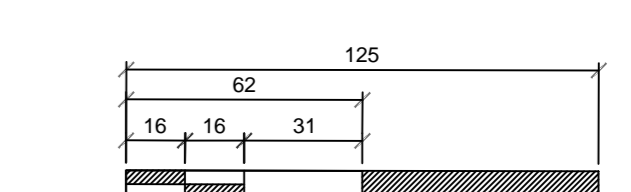
**DOME SECTION BB - PLAN JJ SECTION LINE**  
SCALE - 1:50



**DETAIL 10 A: BIRDS-MOUTH JUNCTION AT INNER APEX RING BEAM**  
SCALE - 1:2



**DETAIL 10 B: BIRDS-MOUTH JUNCTION AT UPPER RAFTER PLATE**  
SCALE - 1:2



Please note that information used to produce these drawings is based on measured survey data supplied by others. Heritage Architecture cannot be held responsible for any inaccuracies that may exist. Please do not scale from the drawings. All dimensions should be verified on site. Any inconsistencies should be reported to the project architect.

**SHA'S PRINCIPAL ELEMENTS REFERENCE CODE:**  
(from Post-fire Inventory Report)

**KEY:**

- PRINCIPAL TIMBER ELEMENT:**
  - A. MAIN SUPPORT POST (250x100mm)
  - B. WALL STUD (150x50mm @ 440 centers)
  - C. WALL STUD TIES (70x50mm)
  - D. 2-PART RIBS (170x27mm)
- BRACES:**
  - D1 - INNER PLATE (280x110mm)
  - D2 - OUTER PLATE (200x110mm)
  - E. UPPER RAFTER PLATE (280x100mm)
  - E1 - INNER PLATE (280x100mm)
  - E2 - OUTER PLATE (200x100mm)
  - F. ROOF BOARDING (80x20mm)
  - G. MAIN POST SUPPORT BRACES (125x60mm)
  - H. WALL BOARDING (260x18mm)
  - I. INNER APEX RING BEAM (250x100mm)
  - J. OUTER APEX RING BEAM (150x125mm)
  - K. APEX ROOF JOISTS (4 No. 80x45mm)
  - L. TIMBER ROOF ROLLS (24 No. 100x100mm)
  - M. HORIZONTAL RAFTER WALL TIE (220x100mm)
  - N. PURLINS/STRUTS (250x100mm/120x50mm)
  - T. TRUSS (IN PLAN):
    - T1 - TIE BEAM (250x100mm)
    - T2 - KING POST (250x100mm)
    - T3 - PRINCIPAL RAFTERS (250x100mm)
    - T4 - IRON BRACING (250x100mm)

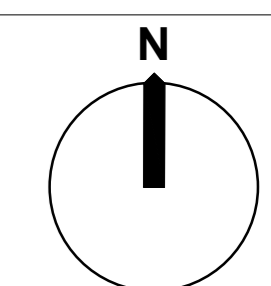
Please note: Principal timber elements cross-section dimension are indicated in brackets above.

**DRAWING NOTES:**

- Please refer HTS (structural engineer) report (Job No. 1444; Ref No. GGS-01) for further comments on connection details. All HTS detail locations have been identified on the drawings in blue.
- Please refer AHA (lead architect) drawings for further details on acoustics insulation, DPM and copper cladding. All detail to be finalised by AHA and have been identified on the drawings in red.
- All structural timbers to be air-dried European redwood (Ember for - Roof boarding, H. Wall Boarding and - Timber Roof Rolls) to be agreed with SHA and AHA) to match like for like Dome reinstatement.
- Clearcoat intumescent coating will be applied to the exposed timbers only.
- All dimensions correspond to the existing dome surveys. SHA'S post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post-fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
- Some historical details may need to be adapted to fit AHA proposed scheme for the dome (in terms of thermal/acoustic insulation, air conditioning/ventilation, interior finishes/fittings). AHA to provide the following details and locations.

**JOB TITLE:** KOKO  
**CLIENT:** Camden  
**PROJECT TITLE:** Dome Timber Frame Construction - King-Post Truss Details (Sheet 1)  
**JOB No.:** 0936  
**DATE:** 04/05/20  
**SCALE:** (BAU)  
**DRAWN BY:** JJM  
**CHECKED BY:** MK  
**SCALE SHOWN:**

**STEPHEN LEVYANT HERITAGE ARCHITECTURE**  
62 British Grove, London, W4 2NE, UK  
E-mail: info@heritagearchitect.co.uk  
T: 020 8748 9001



Please note that information used to produce these drawings is based on measured survey supplied by others. Heritage Architecture cannot be held responsible for any inaccuracies that may exist. Please do not scale from the drawings. All dimensions should be verified on site. Any inconsistencies should be reported to the project architect.

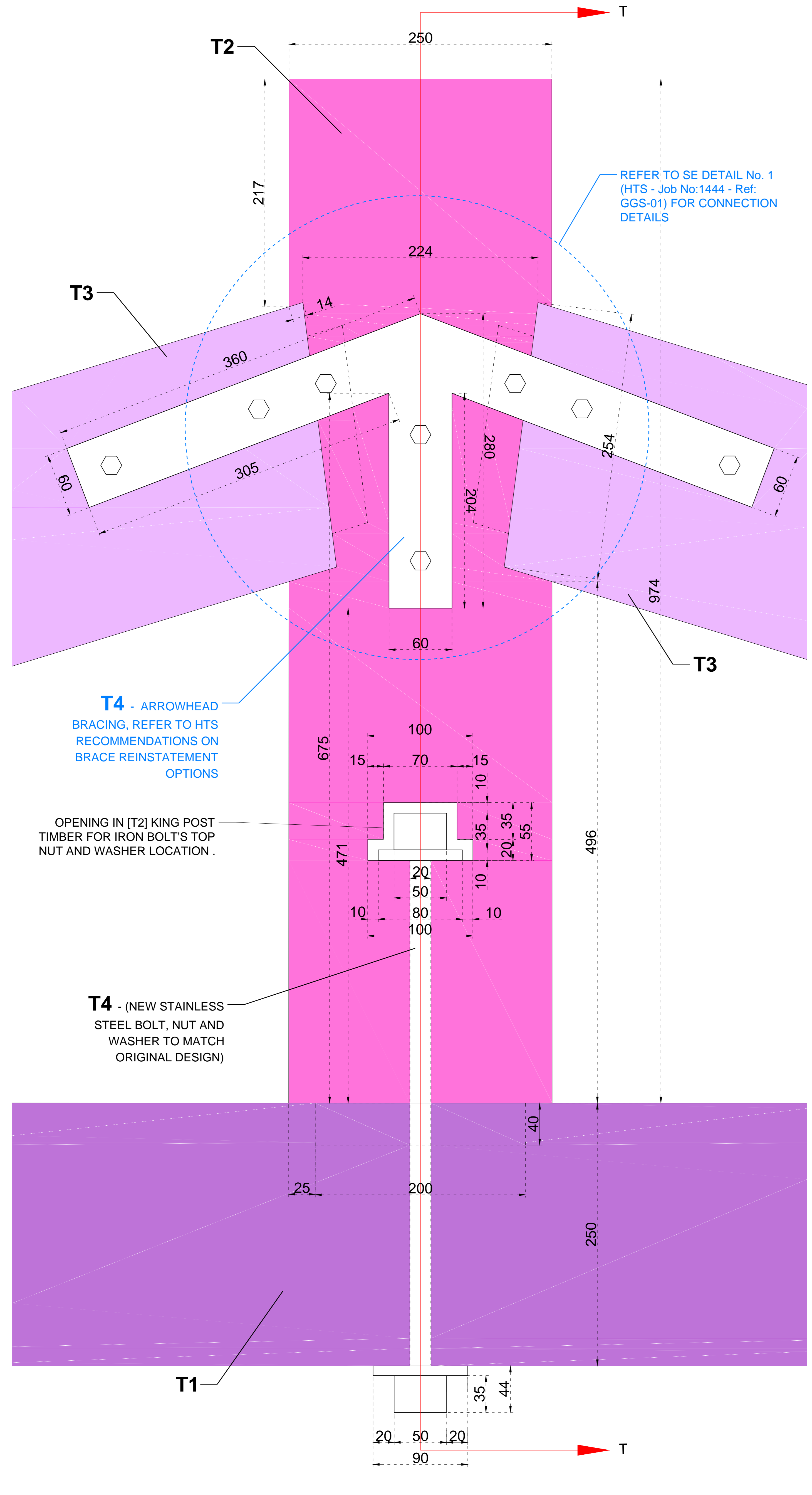
SHA'S PRINCIPAL ELEMENTS REFERENCE CODE: (from Post-fire Inventory Report)

KEY:	PRINCIPAL TIMBER ELEMENT:
<span style="color: red;">■</span>	A. MAIN SUPPORT POST (250x100mm)
<span style="color: orange;">■</span>	B. WALL STUD (150x50mm @ 440 centers)
<span style="color: brown;">■</span>	WALL STUD TIES (70x50mm)
<span style="color: darkred;">■</span>	C. 2-PART RIBS (170x27mm)
<span style="color: lightblue;">■</span>	D. LOWER STUD WALL PLATE (280x110mm)
<span style="color: blue;">■</span>	D1 - INNER PLATE (280x110mm)
<span style="color: darkblue;">■</span>	D2 - OUTER PLATE (200x110mm)
<span style="color: pink;">■</span>	E. UPPER RAFTER PLATE (280x100mm)
<span style="color: magenta;">■</span>	E1 - INNER PLATE (200x100mm)
<span style="color: purple;">■</span>	E2 - OUTER PLATE (80x20mm)
<span style="color: lightpurple;">■</span>	F. ROOF BOARDING (125x60mm)
<span style="color: yellow;">■</span>	G. MAIN POST SUPPORT BRACES (260x18mm)
<span style="color: orangeyellow;">■</span>	H. WALL BOARDING (260x18mm)
<span style="color: grey;">■</span>	I. INNER APEX RING BEAM (260x100mm)
<span style="color: lightgrey;">■</span>	J. OUTER APEX RING BEAM (180x125mm)
<span style="color: darkgrey;">■</span>	K. APEX ROOF JOISTS (4 No. 80x45mm)
<span style="color: green;">■</span>	L. TIMBER ROOF ROLLS (24 No. 100x100mm)
<span style="color: lightgreen;">■</span>	M. HORIZONTAL RAFTER WALL TIE (220x100mm)
<span style="color: yellowgreen;">■</span>	N. PURLINS/STRUTS (250x100mm/120x50mm)
<span style="color: cyan;">■</span>	T. TRUSS (IN PLAN)
<span style="color: blue;">■</span>	T1 - TIE BEAM (250x100mm)
<span style="color: purple;">■</span>	T2 - KING POST (250x100mm)
<span style="color: magenta;">■</span>	T3 - PRINCIPAL RAFTERS (250x100mm)
<span style="color: lightpurple;">■</span>	T4 - IRON BRACING (250x100mm)

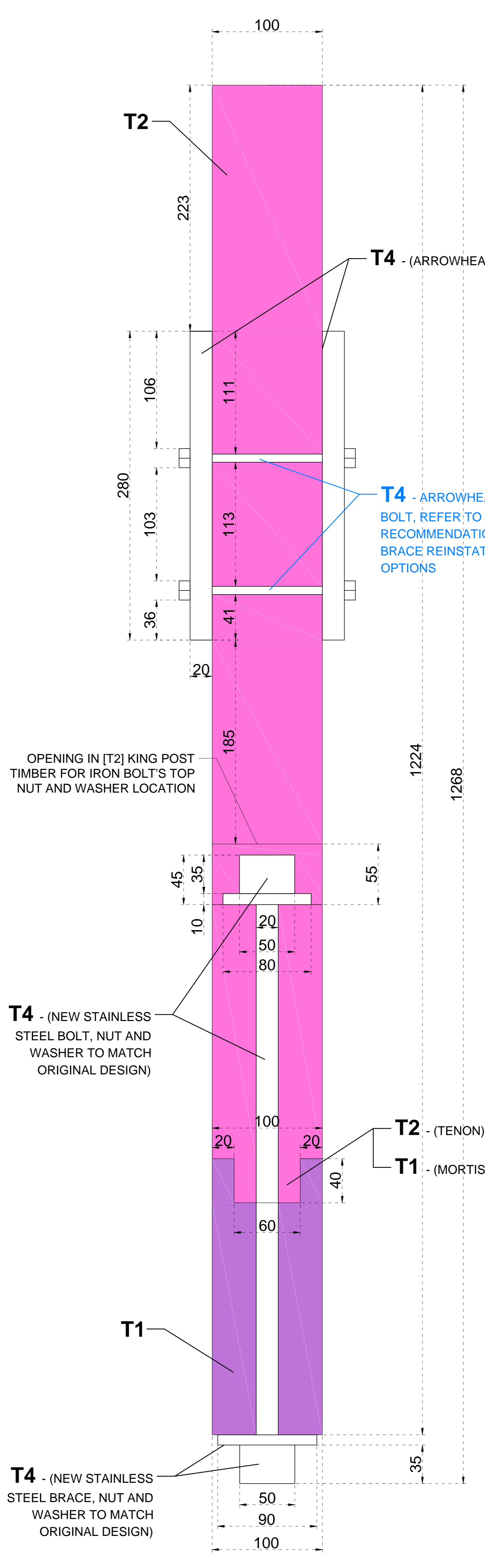
Please note: Principal timber elements cross-section dimension are indicated in brackets above.

**DRAWING NOTES:**

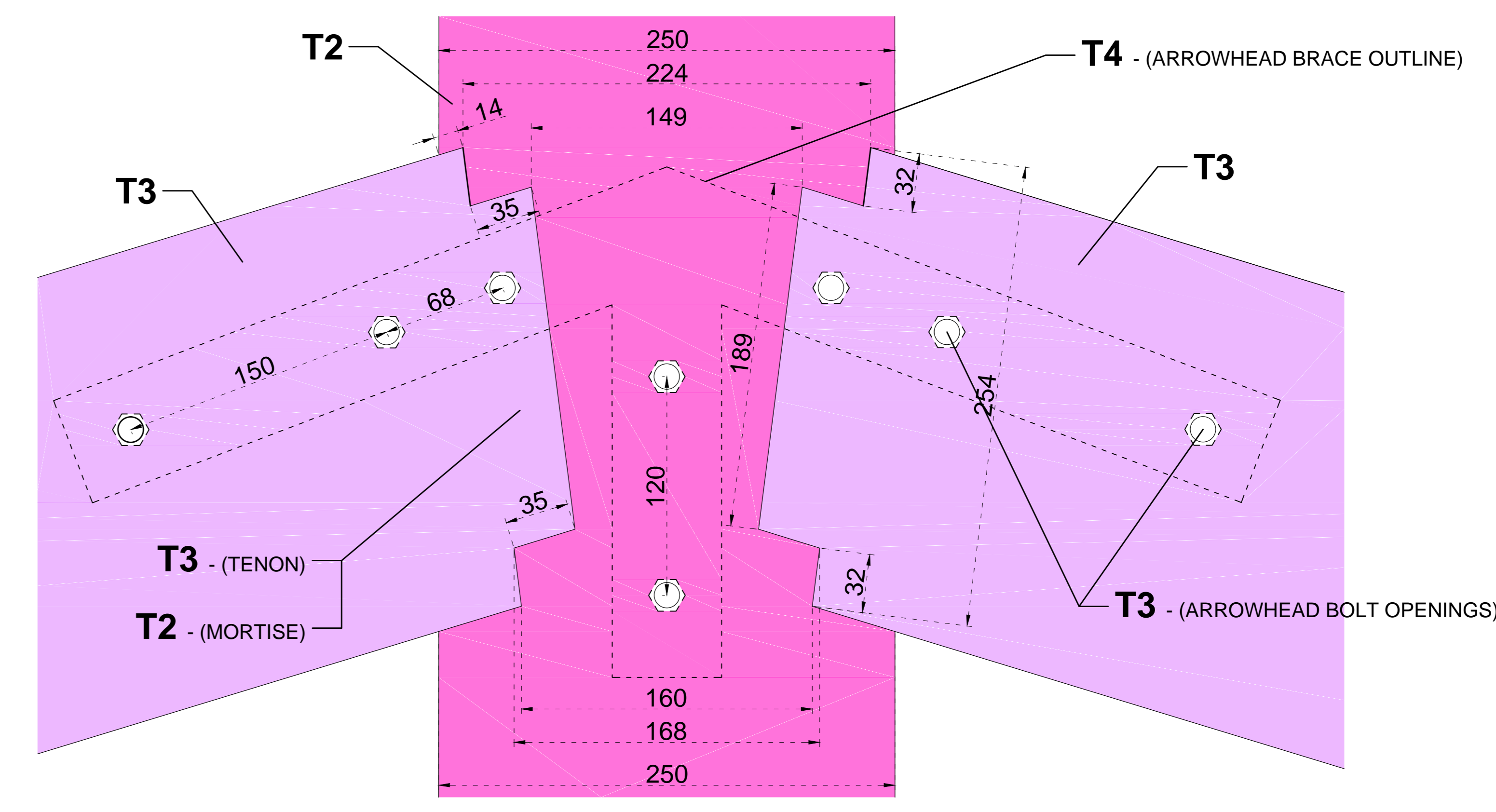
- Please refer HTS (structural engineer) report (Job No. 1444; Ref No. GGS-01) for further comments on connection details. All HTS detail locations have been identified on the drawings in blue.
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- Clearmatt Intumescent coating will be applied to the exposed timbers only.
- All dimensions correspond to the existing dome surveys. SHA's post-fire measured survey notes and report (R002: Dome Historic Timber Structure - Post-fire Inventory Report). Details to be finalised with the structural engineer (HTS) input; further design development by the appointed timber specialist contractor.
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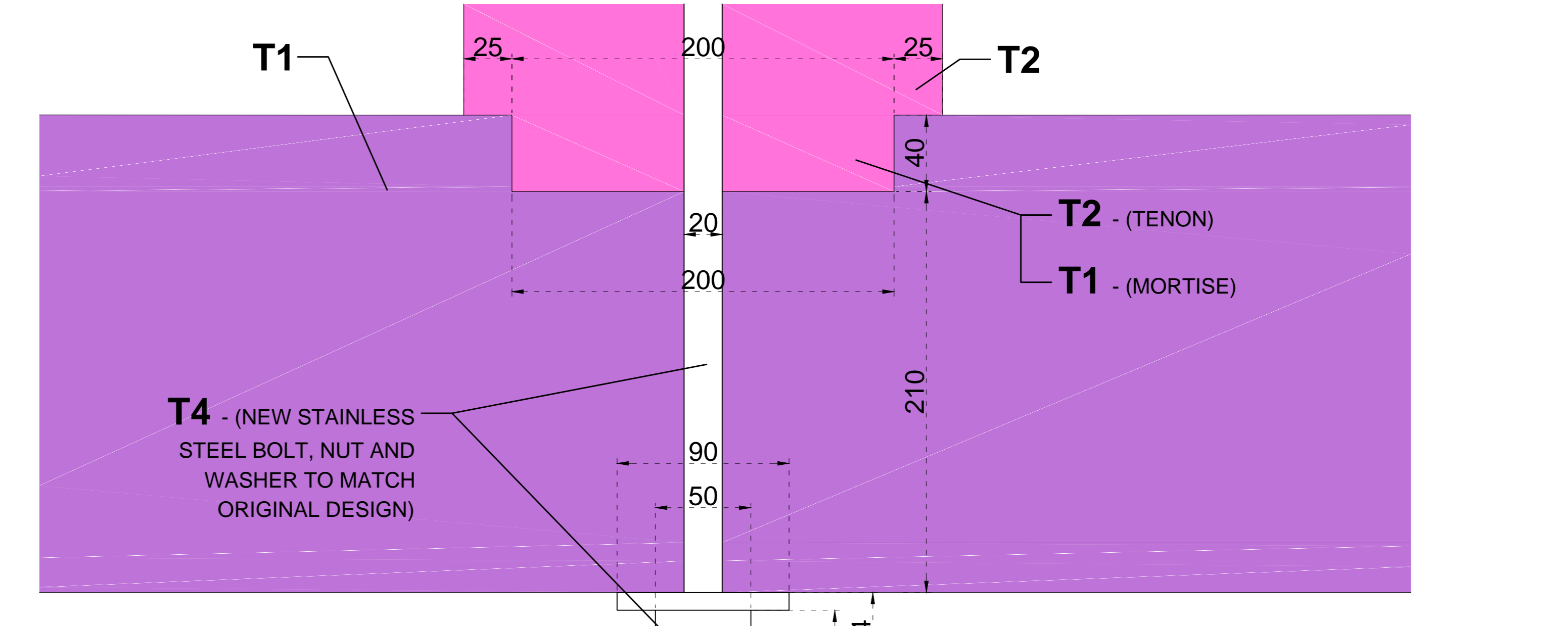
**DETAIL 11: TRUSS ELEVATION KING POST TO PRINCIPAL RAFTERS AND TIE BEAM SCALE - 1:2**



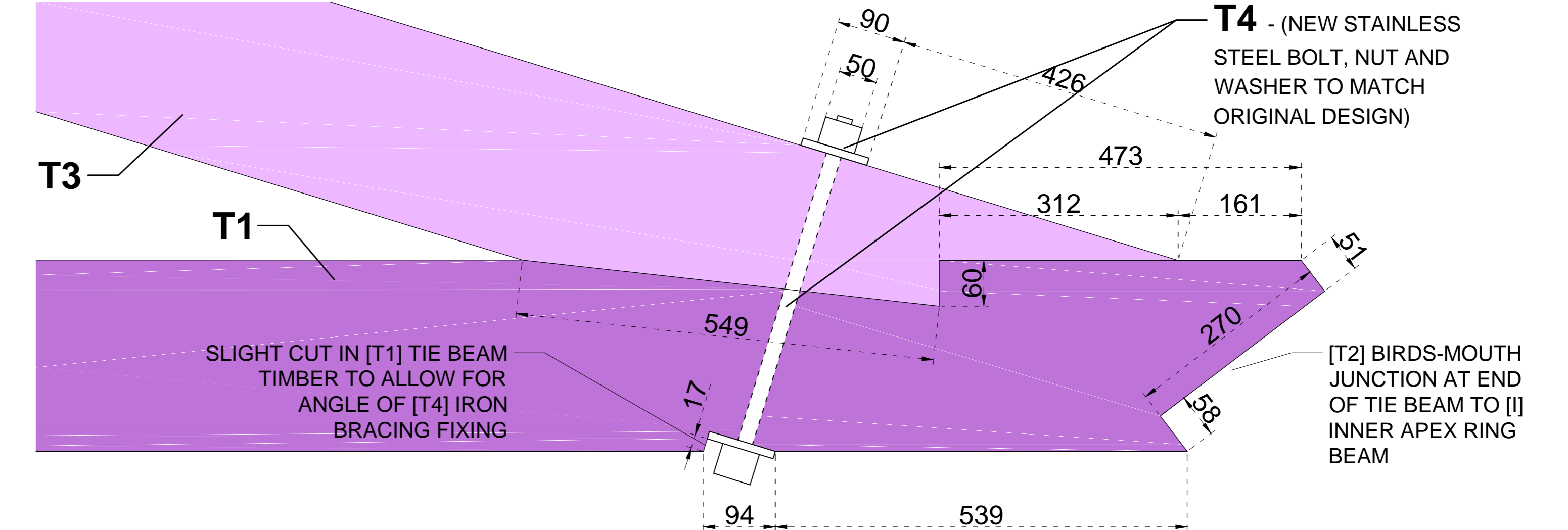
**DETAIL 12: SECTION TT SCALE - 1:2**



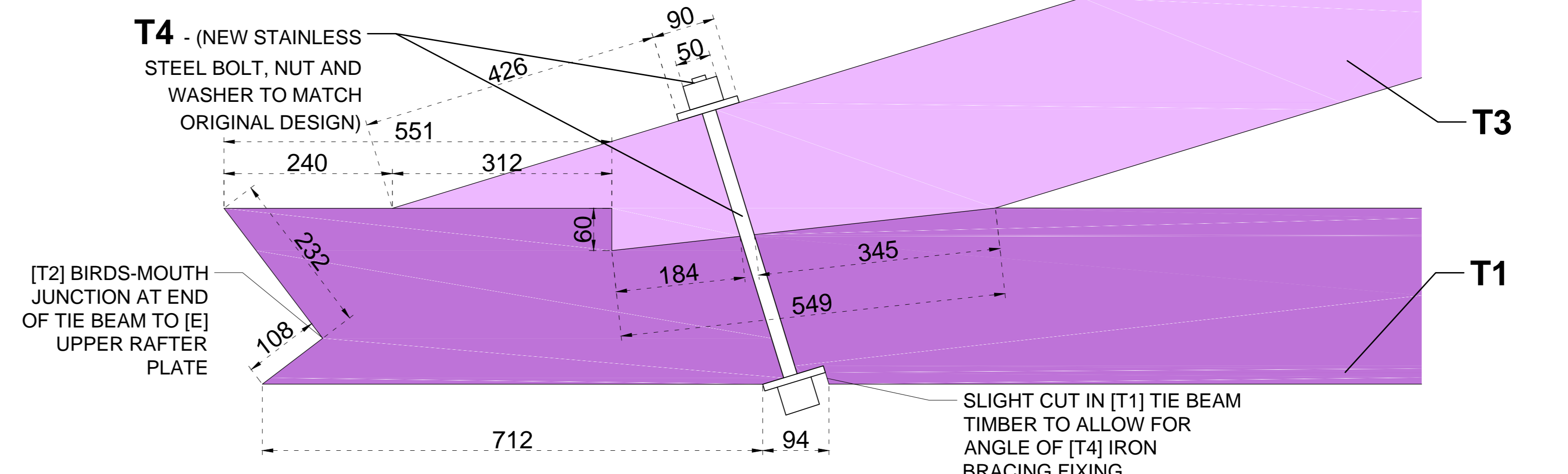
**DETAIL 12: TRUSS SECTION KING POST TO PRINCIPAL RAFTERS MORTISE AND TENON SCALE - 1:2**



**DETAIL 12: KING POST TO TIE BEAM SECTION STUB MORTISE AND TENON SCALE - 1:2**



**DETAIL 13 A: SCARF JOINT ELEVATION BETWEEN PRINCIPAL RAFTERS AND TIE BEAM SCALE - 1:5**



**DETAIL 13 B: SCARF JOINT SECTION BETWEEN PRINCIPAL RAFTERS AND TIE BEAM SCALE - 1:5**