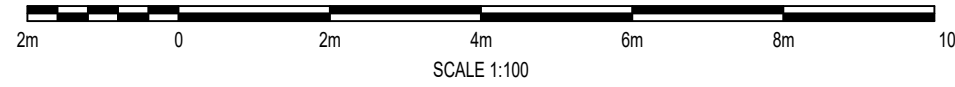
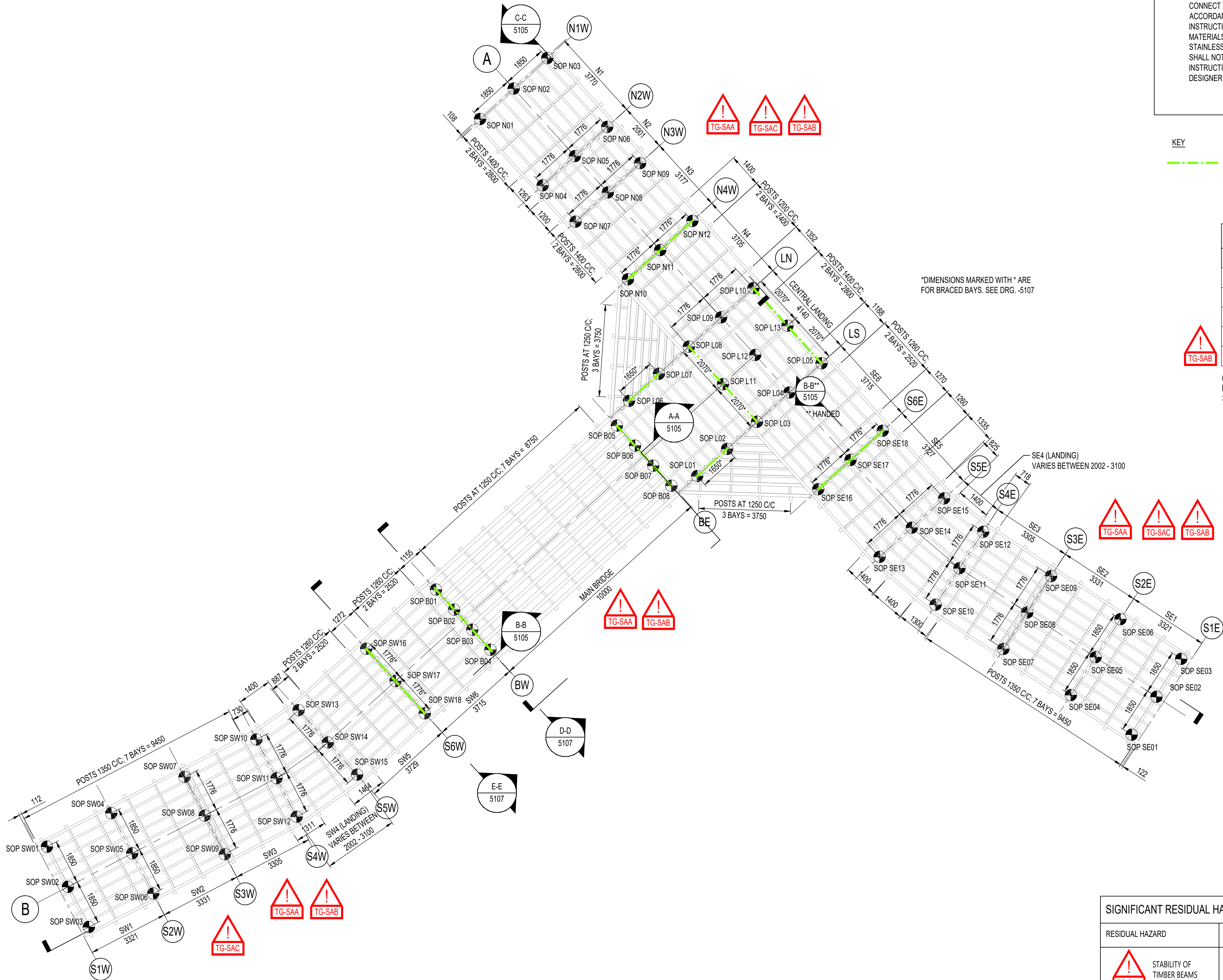


PILE / COLUMN SETTING OUT		
SOP_NO	EASTING	NORTHING
SOP B01	481299.897	167703.905
SOP B02	481300.639	167703.087
SOP B03	481301.380	167702.269
SOP B04	481302.122	167701.451
SOP B05	481307.278	167710.596
SOP B06	481308.019	167709.778
SOP B07	481308.761	167708.960
SOP B08	481309.502	167708.142
SOP L01	481310.554	167708.537
SOP L02	481311.776	167709.645
SOP L03	481312.999	167710.754
SOP L04	481314.314	167711.946
SOP L05	481315.630	167713.139
SOP L06	481307.773	167711.604
SOP L07	481308.995	167712.713
SOP L08	481310.217	167713.821
SOP L09	481311.533	167715.014
SOP L10	481312.849	167716.207
SOP L11	481311.608	167712.287
SOP L12	481312.924	167713.480
SOP L13	481314.239	167714.673
SOP N01	481301.696	167723.108
SOP N02	481303.068	167724.350
SOP N03	481304.439	167725.593
SOP N04	481304.252	167720.401
SOP N05	481305.568	167721.593
SOP N06	481306.883	167722.786
SOP N07	481305.595	167718.919
SOP N08	481306.911	167720.112
SOP N09	481308.227	167721.305
SOP N10	481307.729	167716.565
SOP N11	481309.045	167717.758
SOP N12	481310.361	167718.951
SOP SE01	481328.280	167697.981
SOP SE02	481329.292	167699.530
SOP SE03	481330.303	167701.079
SOP SE04	481325.800	167699.600
SOP SE05	481326.812	167701.149
SOP SE06	481327.823	167702.698
SOP SE07	481323.052	167701.483
SOP SE08	481324.023	167702.970
SOP SE09	481324.994	167704.457
SOP SE10	481320.284	167703.289
SOP SE11	481321.255	167704.777
SOP SE12	481322.226	167706.264
SOP SE13	481317.998	167705.240
SOP SE14	481319.313	167706.433
SOP SE15	481320.629	167707.626
SOP SE16	481315.494	167708.002
SOP SE17	481316.810	167709.194
SOP SE18	481318.125	167710.387
SOP SW01	481284.026	167693.416
SOP SW02	481284.882	167691.775
SOP SW03	481285.737	167690.135
SOP SW04	481286.652	167694.785
SOP SW05	481287.507	167693.144
SOP SW06	481288.363	167691.504
SOP SW07	481289.640	167696.259
SOP SW08	481290.461	167694.684
SOP SW09	481291.282	167693.109
SOP SW10	481292.571	167697.787
SOP SW11	481293.392	167696.212
SOP SW12	481294.213	167694.637
SOP SW13	481294.293	167698.986
SOP SW14	481295.496	167697.670
SOP SW15	481296.679	167696.355
SOP SW16	481297.055	167701.490
SOP SW17	481298.248	167700.174
SOP SW18	481299.441	167698.858



KEY PLAN
(NOTE ALL DIMENSIONS ABOVE ARE IN TRUE PLAN)
SCALE 1:100



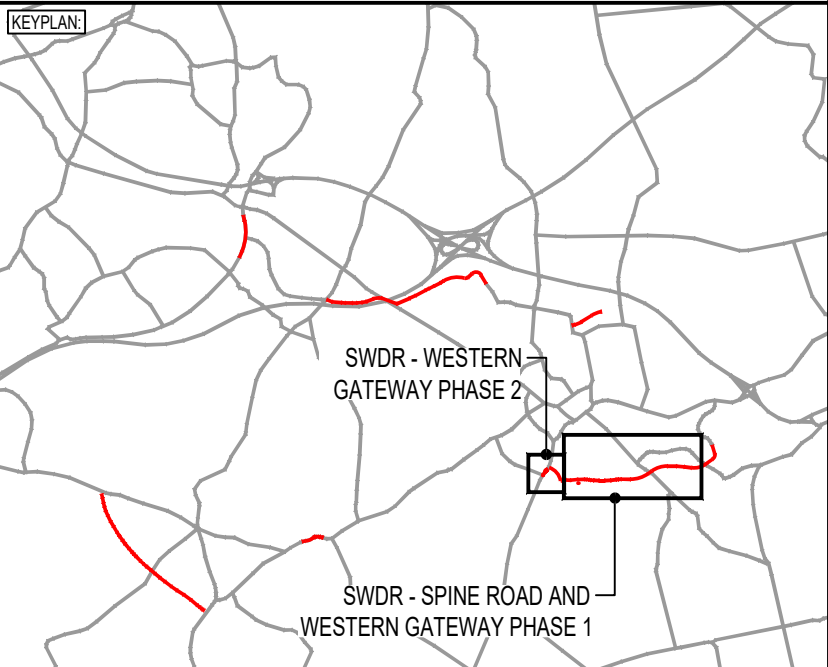
- NOTES (CONTINUED):
- BOLTS AND NUTS SHALL BE STAINLESS STEEL (AS PER ABOVE SPECIFICATION) WITH STRENGTH CLASS 80 TO BS EN ISO 3506-1 AND BS EN ISO 3506-2 RESPECTIVELY.
 - M14 STUDS AND NUTS FOR PARAPET POST CONNECTIONS SHALL BE CLASS 8.8 TO BS EN ISO 3506-1 AND BS EN ISO 4032 RESPECTIVELY. STUDS, WASHERS AND NUTS TO BE HOT DIP GALVANISED. FOR WASHER SIZES SEE DETAIL ON DRG. -5106.
 - DOWELS SHALL BE STAINLESS STEEL (AS PER ABOVE SPECIFICATION) CLASS 80 CONFORMING TO BS EN 14592 AND BS EN ISO 3506-1.
 - PROPRIETARY CONNECTION BRACKETS, E.G. JOIST HANGERS AND OTHER 3D PLATES, SHALL CONFORM TO ETAG 015; ALL OTHER METAL CONNECTORS SHALL CONFORM TO BS EN 14545. ALL SHALL BE HOT DIP GALVANISED, STAINLESS STEEL (AS PER ABOVE SPECIFICATION), OR OTHERWISE DECLARED SUITABLE FOR SERVICE CLASS 3 CONDITIONS BY THE MANUFACTURER INCLUDING FASTENERS TO CONNECT THE BRACKETS TO THE TIMBER. FASTENERS SHALL BE IN ACCORDANCE WITH ETAG 015 AND THE MANUFACTURER'S INSTRUCTIONS TO ACHIEVE THEIR STATED LOAD CAPACITIES. MATERIALS SHALL BE CONSISTENT, E.G. ALL GALVANISED OR ALL STAINLESS STEEL. WHERE NAILS ARE USED, PRE-DRILLED HOLES SHALL NOT EXCEED 0.8X NAIL DIA. UNLESS THE MANUFACTURER'S INSTRUCTIONS DO NOT PERMIT PRE-DRILLING, IN WHICH CASE THE DESIGNER SHALL BE CONSULTED.

KEY
--- CROSS BRACING APPLIED TO COLUMNS. SEE CROSS SECTIONS ON DRAWING -5107

TIMBER MASS (1)	
ELEMENT SIZE (mm)	kg/m
75 x 200	14.4
100 x 200	19.2
125 x 200	24.0
100 x 300	28.8
150 x 300	43.2

(1) MASSES ARE APPROXIMATE BASED ON A MEAN DENSITY OF 960kg/m³ FOR CLASS D70 TIMBER TO BS EN 338

- DO NOT SCALE
- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE.
 - ALL LEVELS ARE IN METRES AOD UNLESS NOTED OTHERWISE.
 - ALL DIMENSIONS ARE IN TRUE PLAN. DIMENSIONS BETWEEN GRID LINES ARE TO COLUMN / PILE SUPPORT CENTRELINES. PARAPET POST CENTRES ARE IN TRUE PLAN (I.E. ALONG A TRUE HORIZONTAL).
 - ALL TIMBER ELEMENTS INCLUDING THE DECKING BOARDS SHALL BE EKFI OR OTHER TIMBER WITH STRENGTH CLASS D70 TO BE EN 338 (STRENGTH GRADE SHALL BE HS TO BS 5756) AND DURABILITY CLASS 1 TO BS EN 350 (NO SAPWOOD) CONFORMING TO BS EN 14081 DERIVED FROM AN FSC (FOREST STEWARDSHIP COUNCIL) CERTIFIED SOURCE AND SUPPLIER, OR EQUIVALENT SUSTAINABLY SOURCED CERTIFICATION BODY (E.G. PROGRAMME FOR THE ENDORSEMENT OF FOREST CERTIFICATION, PEFC) APPLICABLE TO THE FULL CHAIN OF CUSTODY.
 - DIMENSIONAL DEVIATION FOR SECTION SIZES (TARGET SIZES) SHALL BE IN ACCORDANCE WITH BS EN 336 TOLERANCE CLASS 1.
 - FASTENER SPECIFICATIONS: ALL CONNECTIONS SHALL BE DESIGNED BY THE TIMBER FABRICATOR FOR THE FORCES SHOWN ON THESE DESIGN DRAWINGS. DESIGN SHALL BE IN ACCORDANCE WITH BS EN 1995-1-1 OR AS OTHERWISE GUIDED BY ALTERNATIVE FORMULAE FROM INDUSTRY-RECOGNISED DESIGN GUIDES FOR BS EN 1995-1-1 (FOR EXAMPLE, THE IStructE / TRADA 'MANUAL FOR THE DESIGN OF TIMBER BUILDING STRUCTURES TO EUROCODE 5' 2ND EDITION).
 - STAPLES OR NAILS SHALL NOT BE PERMITTED UNLESS NOTED OTHERWISE OR REQUIRED AS PART OF PROPRIETARY CONNECTION BRACKETS (SEE BELOW). ALL FASTENERS SHALL BE CE MARKED CONFORMING TO BS EN 14592 AND BE AUSTENITIC STAINLESS STEEL GRADE 1.4436, 1.4301 OR 1.4310 TO BS EN 10088-1 UNLESS NOTED OTHERWISE. ANY SCREWS ALREADY SHOWN IN THIS DESIGN SHALL HAVE THE FOLLOWING MINIMUM ULTIMATE TENSILE STRENGTHS:
(i) WOOD SCREW DIAMETER 6mm AND LESS - 540Nmm²
(ii) WOOD SCREW DIAMETER GREATER THAN 6mm AND ALL COACH SCREWS - 400Nmm²
 - ALL SCREWS / BOLTS SHALL BE INSTALLED VIA PRE-DRILLED HOLES AS PER BS EN 1995. THE LEAD HOLE FOR THE SMOOTH SHANK SHALL HAVE THE SAME DIAMETER AS THE SHANK, AND THE SAME DEPTH AS THE SHANK'S LENGTH. FOR SELF-DRILLING SCREWS, THE LEAD HOLE DIAMETER SHALL NOT BE GREATER THAN THE INNER THREAD DIAMETER.
 - DECKING BOARDS SHALL BE FIXED WITH COUNTERSUNK SCREWS.
 - WHERE COACH SCREWS ARE USED WITH THE HEAD SIDE TIGHTENED ONTO TIMBER, WASHERS SHALL BE PROVIDED WITH MINIMUM STRENGTH OF 400Nmm² TO BS EN ISO 7091 OR BS 4320. MINIMUM SIZE SHALL BE 3 X SCREW DIA AND THICKNESS 0.3 X SCREW DIA.



P04	07/10/2021	BPH	STRUCTURE NAME UPDATED IN DRG TITLE	KL	CMF
P03	25/08/2021	BPH	FURTHER CAT 2 CHECK COMMENTS ADDRESSED	KL	CMF
P02	13/08/2021	BPH	CAT2 CHECK AND TAA COMMENTS ADDRESSED	KL	CMF
REV	DATE	BY	DESCRIPTION	CHK	APP

DRAWING STATUS: **SUITABLE FOR REVIEW & COMMENT** **S3**

DESIGNER: **Tony Gee and Partners LLP**
Hardy House
140 High Street
Esher, Surrey
KT10 9QJ
Tel: 01372 461600
www.tonygee.com
Consulting Civil, Structural and Geotechnical Engineers

CONTRACTOR:

Balfour Beatty

CLIENT: **WOKINGHAM BOROUGH COUNCIL**

Shute End, Wokingham, Berkshire RG40 1BN
Tel: (0118) 974 6000 Web: www.wokingham.gov.uk

PROJECT: **WOKINGHAM MAJOR HIGHWAYS PROGRAMME
SPINE ROAD AND WESTERN GATEWAY PHASE 1**

TITLE: **NEW GYPSY LANE FOOTBRIDGE / BOARDWALK
STRUCTURE REFERENCE: 3094
KEY PLAN**

SCALE @ A1:	N/A	CHECKED:	KL	APPROVED:	CMF
PROJECT NO:	C118047	DESIGNED:	EPM	DRAWN:	TCH
DRAWING NO:	WMPH-TG-SRWG1-DR-SE-5102	DATE:	February 21	REV:	P04

SIGNIFICANT RESIDUAL HAZARDS		
RESIDUAL HAZARD	STAGE	SUGGESTED CONTROL MEASURE
STABILITY OF TIMBER BEAMS	C/M/D	WHERE BEAMS ARE BEING INDIVIDUALLY LIFTED ONTO CROSS HEADS, CONTRACTOR SHALL ENSURE THEIR STABILITY AGAINST TOPPLING BY PROVIDING TEMPORARY RESTRAINT UNTIL CONNECTED WITH NOGGINGS.
HEAVY TIMBER ELEMENTS	C/M/D	TIMBER ELEMENTS HAVE HIGH DENSITY OF NOMINALLY 960kg/m ³ . REFER TO TIMBER MASS TABLE ABOVE. CONTRACTOR TO AVOID MANUAL HANDLING OF MAIN BEAMS AND CROSS HEADS AND USE MECHANICAL LIFTING METHODS.
OVERLOADING PILES PUSHING THEM OUT OF VERTICALITY	C	PILES NOT DESIGNED FOR EXCESSIVE LATERAL LOADING FROM ADJACENT HEAVY SURCHARGE. CONTRACTOR TO ENSURE NO LOADING FROM PLANT / MATERIALS WITHIN 2m OF ANY PILE EXCEPT SMALL PLANT NECESSARY ONLY TO INSTALL PILES.
NOTE: The above hazards do not include every hazard or assumption, but identify significant residual construction hazards that are not likely to be obvious to a competent contractor and those that could be difficult to manage effectively. Refer also to the designer's risk documentation.		