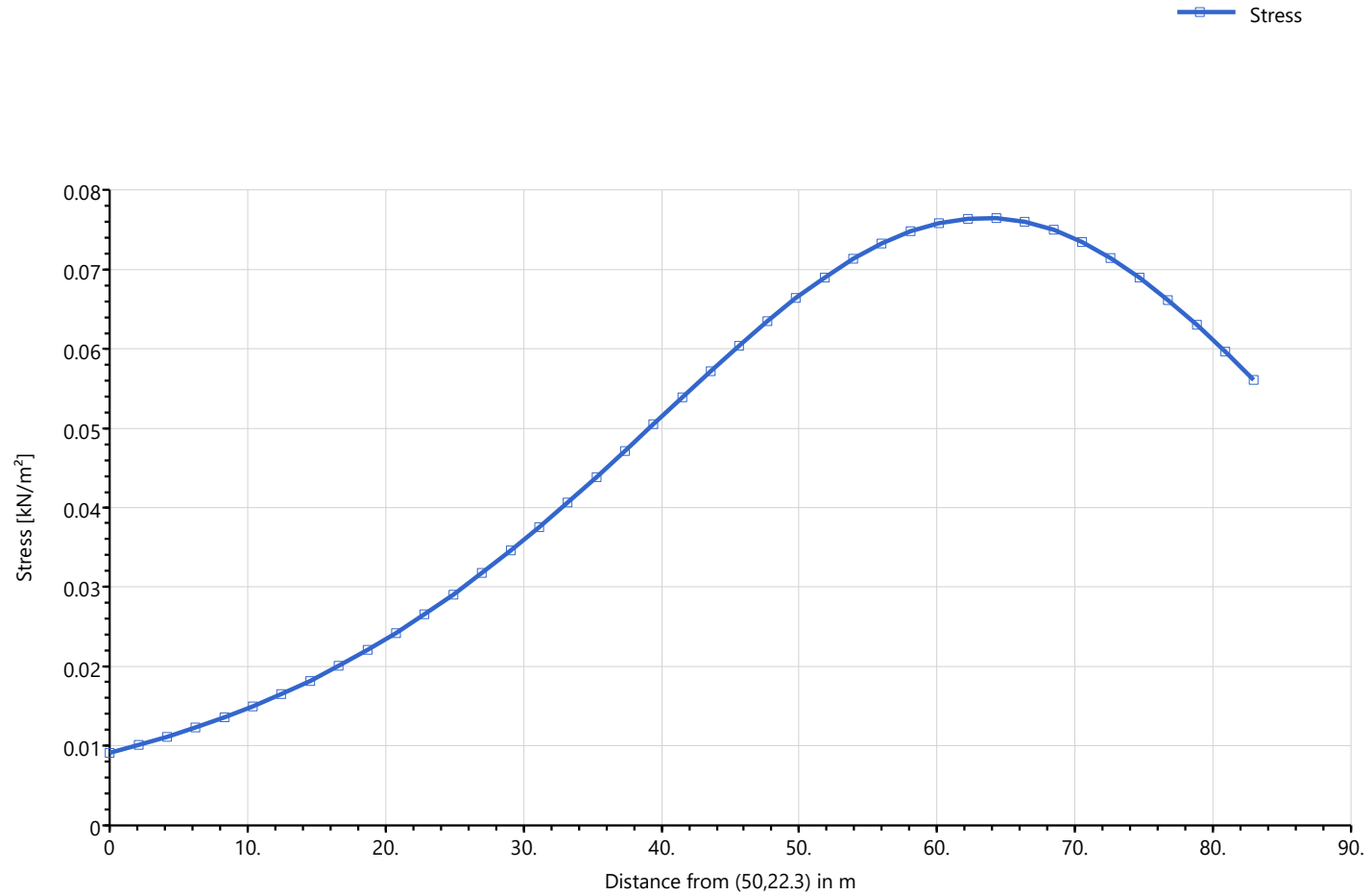


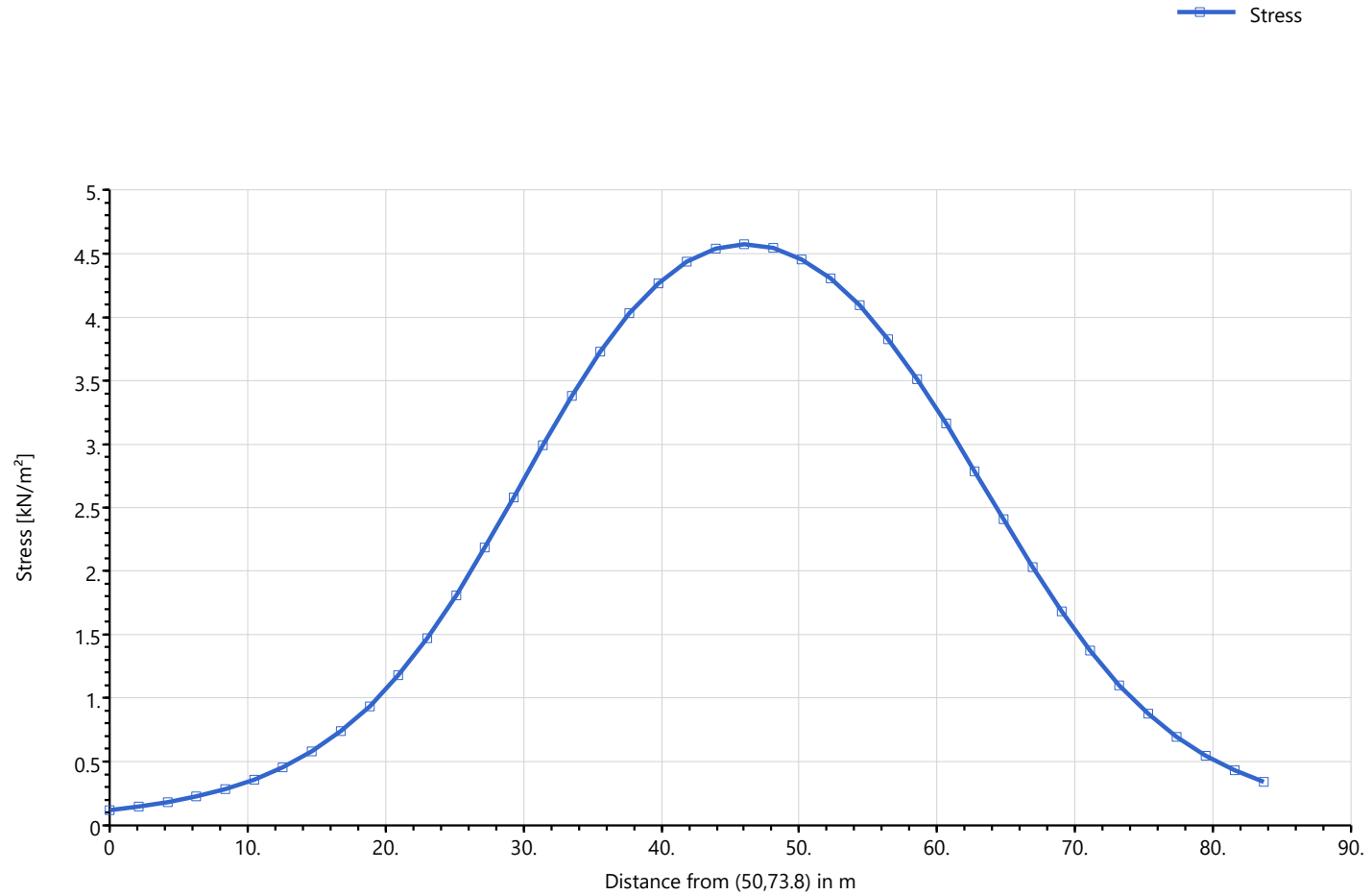
Job No.	Sheet No.	Rev.
J23003		
Drg. Ref.		
Made by ML	Date	Checked Date

Stress for Belsize Tunnel 1



Job No.	Sheet No.	Rev.
J23003		
Drg. Ref.		
Made by ML	Date	Checked Date

Stress for Belsize Tunnel 2





38a Fitzjohn's Avenue, London NW3 5JY
 Ground Movement Analysis and Building Damage Assessment
 Combined Installation and Excavation Movements

Job No.	Sheet No.	Rev.
J23003		
Drg. Ref.		
Made by ML	Date 11-Dec-2023	Checked Date

Specific Building Damage Results - Detail

Stage	Stage Name	Specific Building	Sub-building	Vertical Offset	Segment	Start	Length	Curvature	Deflection	Average	Max	Max
Gradient	Max Gradient	Min	Damage Category							Horizontal	Tensile	
Ref.	Building:	Name	Name	from Line for					Ratio	Strain	Strain	
of	of Vertical	Radius of		Vertical								
Horizontal	Displacement	Curvature		Movement								
Displacement	Curve			Calculations								
Curve						[m]	[m]	[m]	[%]	[%]	[%]	
[m]												
0	Base Model 1	45 Fitzjohn's Ave	45A	0.0	1	0.0	3.0167	None	0.031790	-0.0052011	0.029462	
156.06E-6	-0.0014307	562.24 0 (Negligible)			2	3.0167	6.0323	None	0.0	0.0	35.763E-9	
0.0	0.0 -	0 (Negligible)			1	0.0	2.7010	None	702.49E-6	0.034206	0.034420	
-348.54E-6	-437.39E-6	33041. 0 (Negligible)	45B	0.0	1	0.0	1.7690	None	0.0	0.0	35.763E-9	
0.0	0.0 -	0 (Negligible)	45C	0.0	1	0.0	2.7510	None	739.21E-6	0.034662	0.034891	
-353.34E-6	440.32E-6	31992. 0 (Negligible)	45D	0.0	1	0.0	11.880	None	0.0	0.0	35.763E-9	
0.0	0.0 -	0 (Negligible)	43A	0.0	1	0.0	11.880	None	0.015683	-0.0033679	0.016753	
122.81E-6	0.0011982	5230.4 0 (Negligible)			2	11.880	7.0609	None	0.0099098	0.0018669	0.016921	
122.81E-6	0.0011982	5789.8 0 (Negligible)			3	18.941	12.738	None	0.0017607	330.09E-6	0.0029987	
-34.503E-6	-80.623E-6	79963. 0 (Negligible)	43B	0.0	1	0.0	12.000	None	622.44E-6	0.0	889.38E-6	
0.0	-135.85E-6	162470. 0 (Negligible)	43C	0.0	1	0.0	9.0141	None	0.0029964	0.0	0.0044838	
0.0	-135.85E-6	34126. 0 (Negligible)			2	9.0141	10.786	None	0.0	0.0	35.763E-9	
0.0	0.0 -	0 (Negligible)			3	19.800	11.879	None	565.81E-9	0.028767	0.028768	
-393.83E-6	-199.96E-6	186.30E+6 0 (Negligible)	43D	0.0	1	0.0	12.000	None				

Tensile horizontal strains are +ve, compressive horizontal strains are -ve.



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