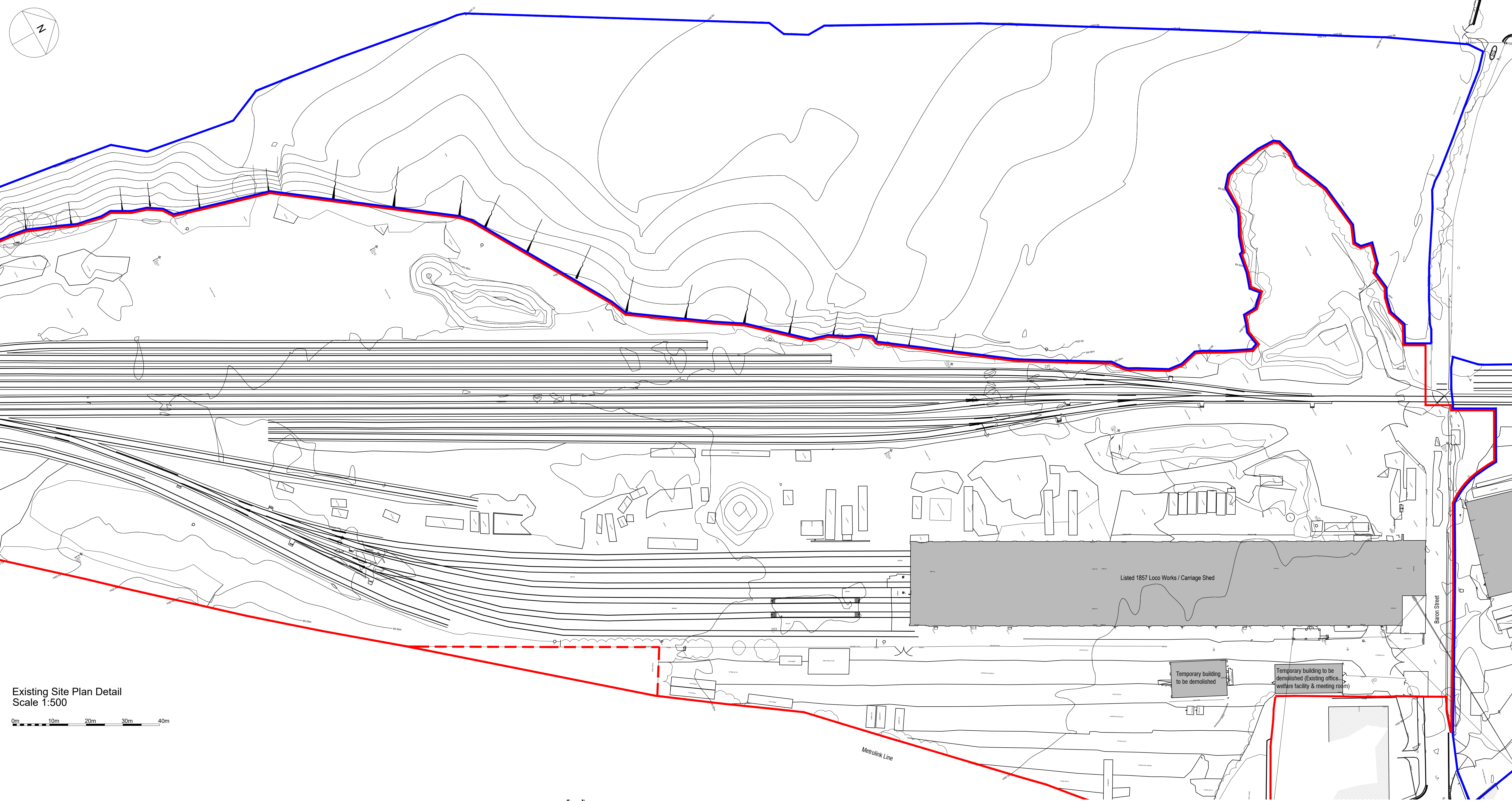
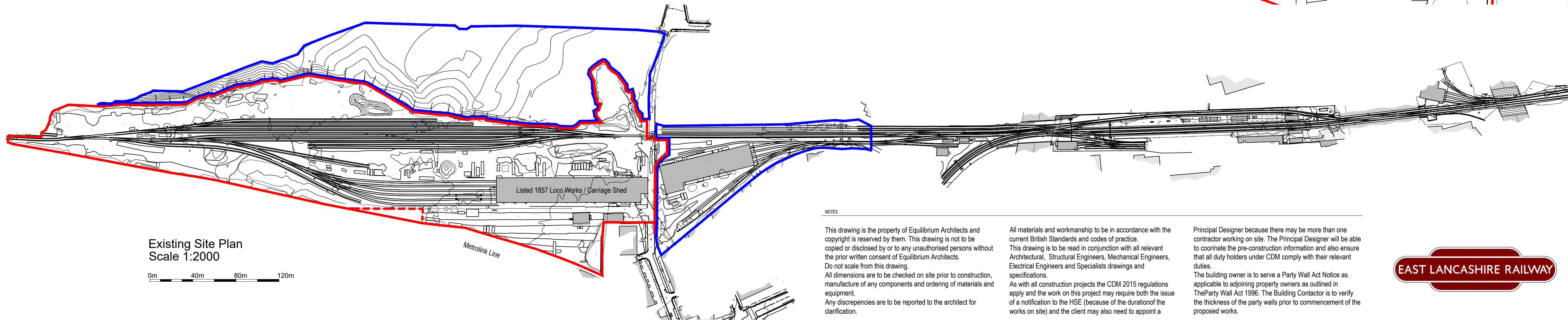




Existing Site Plan Detail
Scale 1:500

0m 10m 20m 30m 40m



Existing Site Plan
Scale 1:2000

0m 40m 80m 120m

NOTES

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Principal Designer because there may be more than one contractor working on site. The Principal Designer will be able to coordinate the pre-construction information and also ensure that all duty holders under CDM comply with their relevant duties.

The building owner is to serve a Party Wall Act Notice as applicable to adjoining property owners as outlined in The Party Wall Act 1996. The Building Contractor is to verify the thickness of the party walls prior to commencement of the proposed works.

B	Updated Red / Blue line to Client's comment	13.01.2022
A	Updated Red & Blue Line to include Baron street works	10.01.2022
REV	DESCRIPTION	CHECK DATE

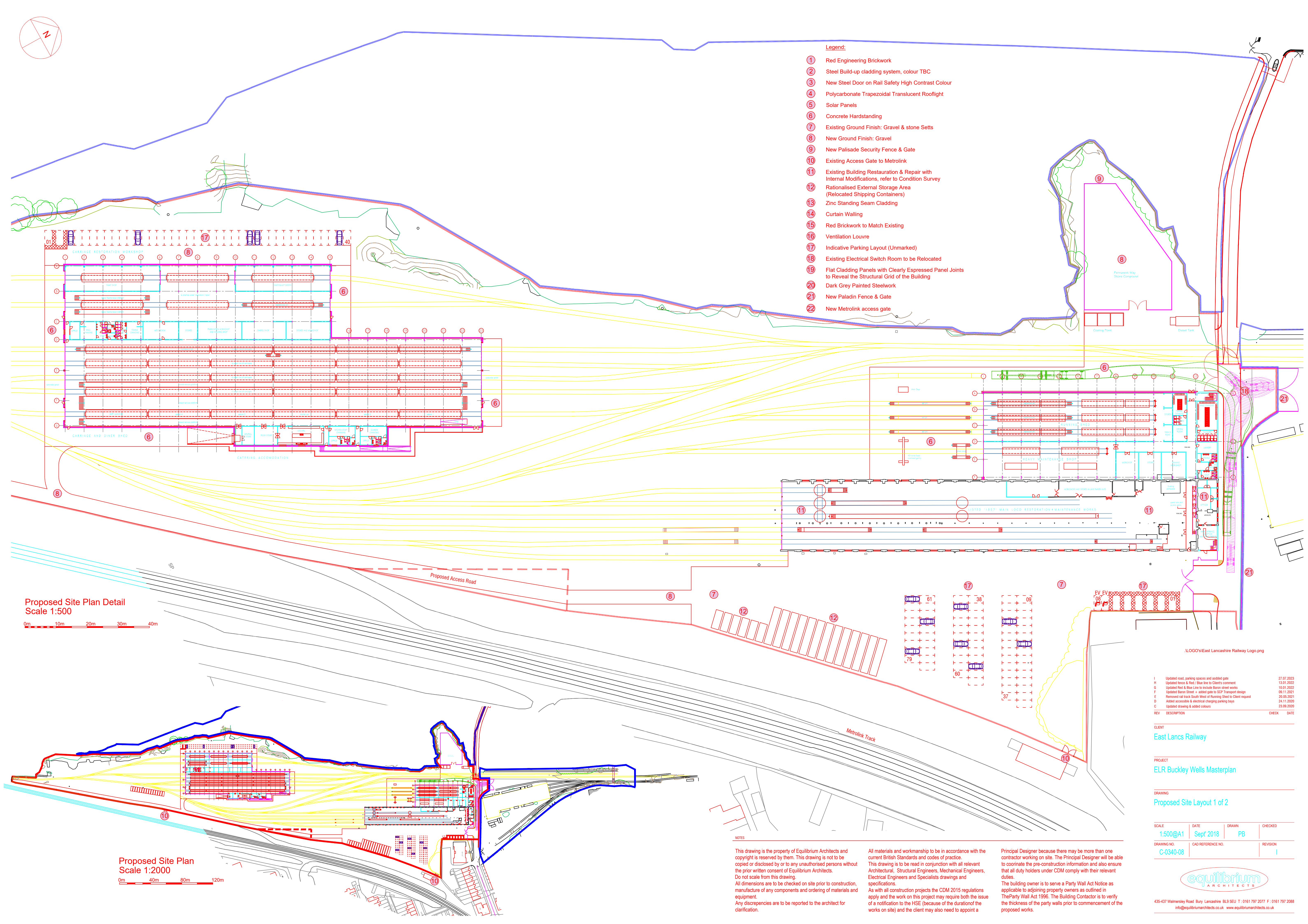
CLIENT
East Lancs Railway

PROJECT
ELR Buckley Wells Masterplan

DRAWING
Existing Site Layout

SCALE	DATE	DRAWN	CHECKED
1:500@A1	Sept' 2018	PB	
DRAWING NO.	CAD REFERENCE NO.	REVISION	
C-0340-01		B	





- ① Red Engineering Brickwork
- ② Steel Build-up cladding system, colour TBC
- ③ New Steel Door on Rail Safety High Contrast Colour
- ④ Polycarbonate Trapezoidal Translucent Rooflight
- ⑤ Solar Panels
- ⑥ Concrete Hardstanding
- ⑦ Existing Ground Finish: Gravel & stone Setts
- ⑧ New Ground Finish: Gravel
- ⑨ New Palisade Security Fence & Gate
- ⑩ Existing Access Gate to Metrolink
- ⑪ Existing Building Restoration & Repair with Internal Modifications, refer to Condition Survey
- ⑫ Rationalised External Storage Area (Relocated Shipping Containers)
- ⑬ Zinc Standing Seam Cladding
- ⑭ Curtain Walling
- ⑮ Red Brickwork to Match Existing
- ⑯ Ventilation Louvre
- ⑰ Indicative Parking Layout (Unmarked)
- ⑱ Existing Electrical Switch Room to be Relocated
- ⑲ Flat Cladding Panels with Clearly Expresed Panel Joints to Reveal the Structural Grid of the Building
- ⑳ Dark Grey Painted Steelwork
- ㉑ New Paladin Fence & Gate
- ㉒ New Metrolink access gate

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.\LOGO's\East Lancashire Railway Logo.png

I	Updated road, parking spaces and added gate	27.07.2023
H	Updated fence & Red / Blue line to Client's comment	13.01.2023
G	Updated Red & Blue line to include Baron street works	10.01.2023
F	Updated Baron Street - added gate to SC Transport design	09.11.2022
E	Removed rail track South West of Running Shed to Client request	20.05.2022
D	Added accessible & electrical charging parking bays	24.11.2020
C	Updated drawing & added colours	23.09.2020
REV	DESCRIPTION	CHECK DATE

CLIENT

East Lincs Railway

PROJECT

ELR Buckley Wells Masterplan

DRAWING

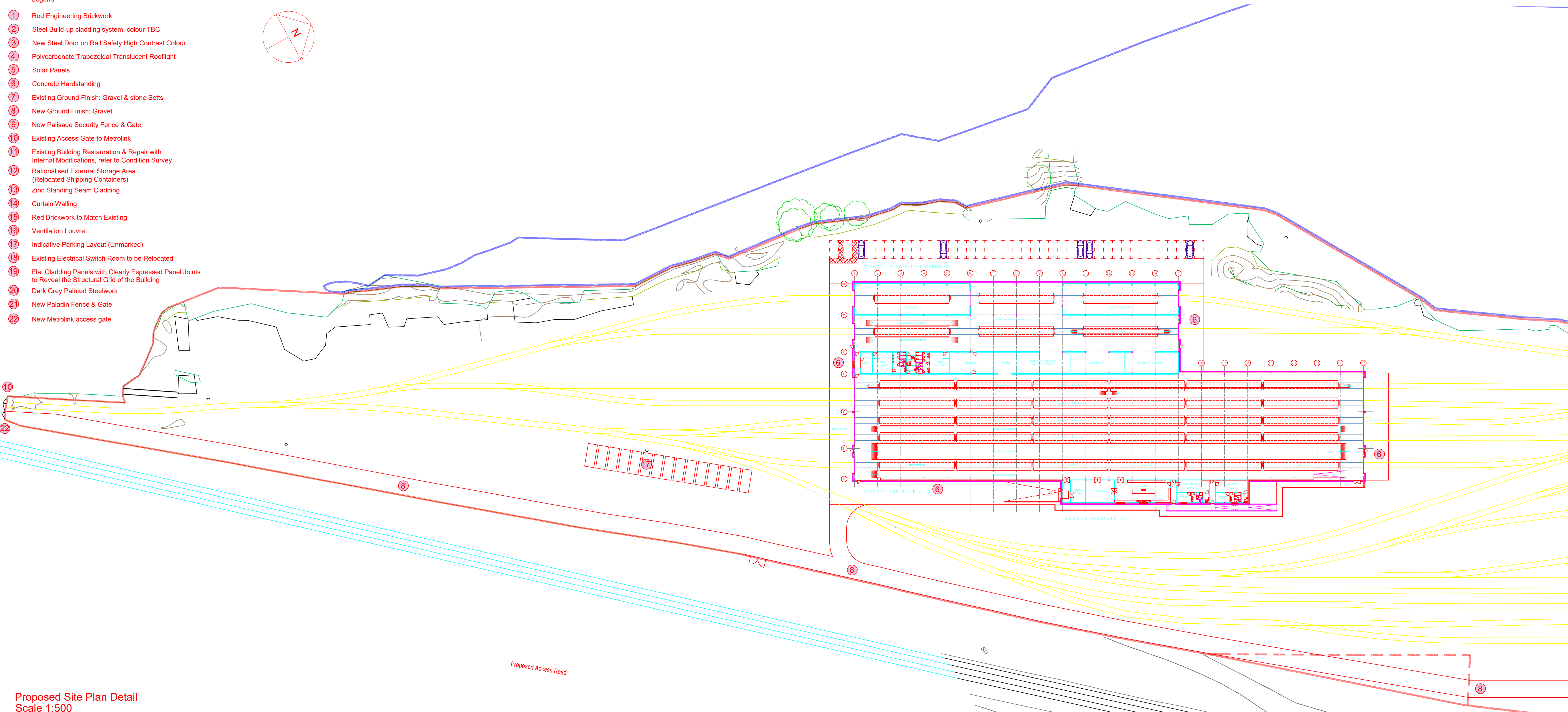
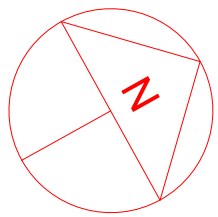
Proposed Site Layout 1 of 2

SCALE 1:500@A1	DATE Sept' 2018	DRAWN PB	CHECKED
DRAWING NO. C-0340-08	CAD REFERENCE NO.		REVISION 1



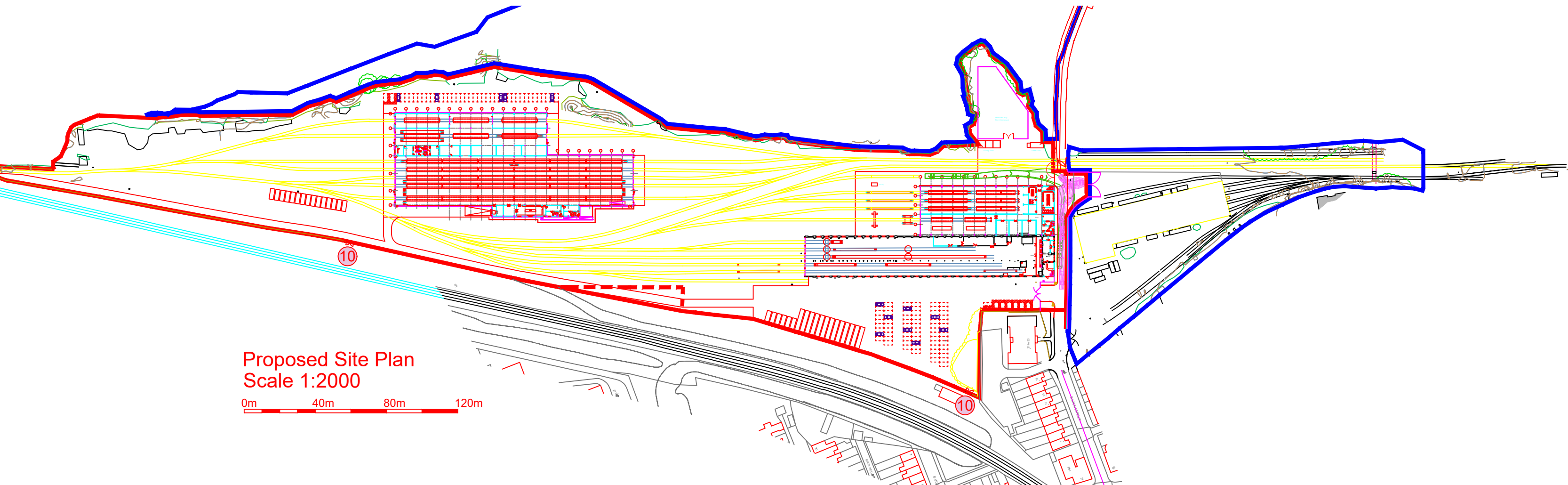
435-437 Walmersley Road Bury Lancashire BL9 5EU T : 0161 797 2077 F : 0161 797 2085
info@equilibriumarchitects.co.uk www.equilibriumarchitects.co.uk

- Legend:
- 1 Red Engineering Brickwork
 - 2 Steel Build-up cladding system, colour TBC
 - 3 New Steel Door on Rail Safety High Contrast Colour
 - 4 Polycarbonate Trapezoidal Translucent Rooflight
 - 5 Solar Panels
 - 6 Concrete Hardstanding
 - 7 Existing Ground Finish: Gravel & stone Setts
 - 8 New Ground Finish: Gravel
 - 9 New Palisade Security Fence & Gate
 - 10 Existing Access Gate to Metrolink
 - 11 Existing Building Restauration & Repair with Internal Modifications, refer to Condition Survey
 - 12 Rationalised External Storage Area (Relocated Shipping Containers)
 - 13 Zinc Standing Seam Cladding
 - 14 Curtain Walling
 - 15 Red Brickwork to Match Existing
 - 16 Ventilation Louvre
 - 17 Indicative Parking Layout (Unmarked)
 - 18 Existing Electrical Switch Room to be Relocated
 - 19 Flat Cladding Panels with Clearly Expresed Panel Joints to Reveal the Structural Grid of the Building
 - 20 Dark Grey Painted Steelwork
 - 21 New Paladin Fence & Gate
 - 22 New Metrolink access gate



Proposed Site Plan Detail
Scale 1:500

0m 10m 20m 30m 40m



Proposed Site Plan
Scale 1:2000

0m 40m 80m 120m

NOTES

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Any discrepancies are to be reported to the architect for clarification.

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This drawing is to be read in conjunction with all relevant Architectural, Structural Engineers, Mechanical Engineers, Electrical Engineers and Specialists drawings and specifications.
As with all construction projects the CDM 2015 regulations apply and the work on this project may require both the issue of a notification to the HSE (because of the durationof the works on site) and the client may also need to appoint a

Principal Designer because there may be more than one contractor working on site. The Principal Designer will be able to coordinate the pre-construction information and also ensure that all duty holders under CDM comply with their relevant duties.
The building owner is to serve a Party Wall Act Notice as applicable to adjoining property owners as outlined in TheParty Wall Act 1996. The Building Contactor is to verify the thickness of the party walls prior to commencement of the proposed works.

REV	DESCRIPTION	CHECK	DATE
CLIENT			
East Lancs Railway			
PROJECT			
ELR Buckley Wells Masterplan			
DRAWING			
Proposed Site Layout 2 of 2			
SCALE	DATE	DRAWN	CHECKED
1:500@A1	July 2023	PM	
DRAWING NO	CAD REFERENCE NO	REVISION	
C-0340-12			



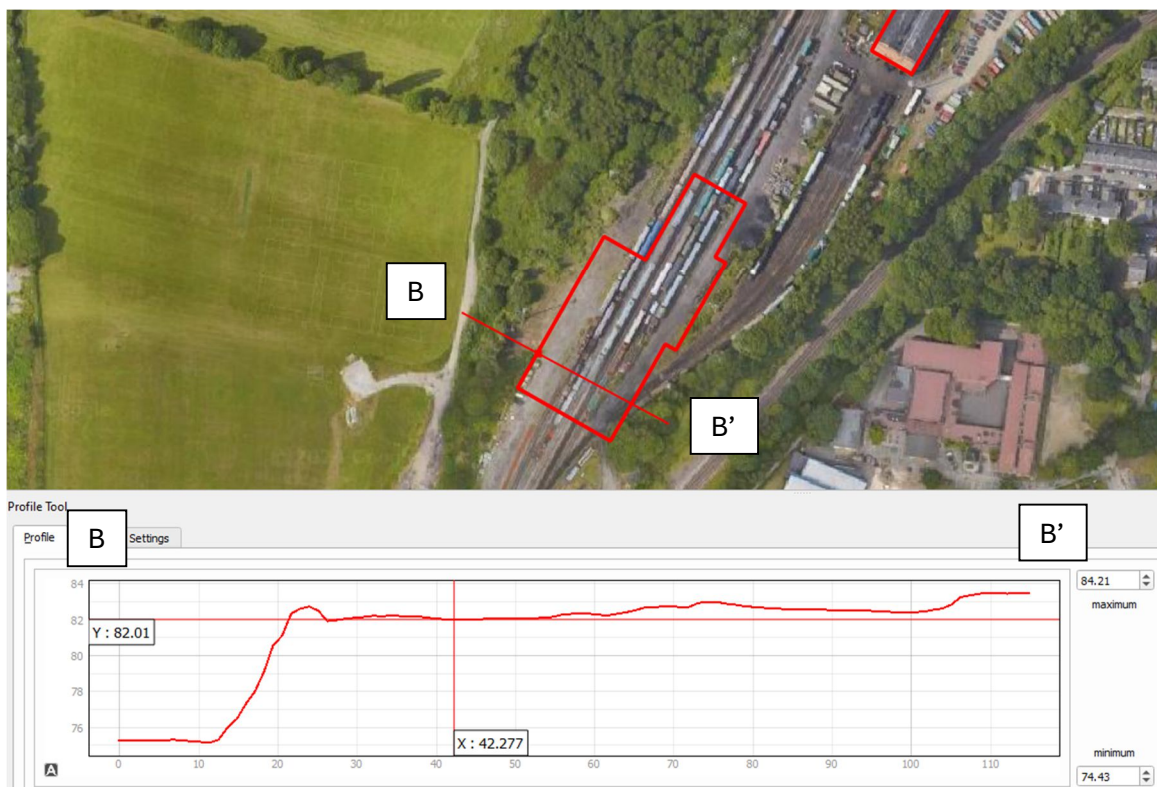
Appendix B

Slope Stability Modelling Report and Sections

Section A-A'



Section B-B'



About this Report

This report has been generated using LimitState:GEO, a software application capable of directly identifying the critical collapse mechanism for a wide variety of geotechnical stability problems, including those involving slopes, retaining walls, footings etc.

The software utilizes the Discontinuity Layout Optimization (DLO) procedure to obtain a solution (Smith and Gilbert 2007). The main steps involved are: (i) distribution of nodes across the problem domain; (ii) connection of every node to every other node with potential discontinuities (e.g. slip-lines); (iii) application of rigorous optimization techniques to identify the critical subset of potential discontinuities, and hence also the critical failure mechanism and margin of safety.

The accuracy of the DLO solution is controlled by the specified nodal density. Within the set of all possible discontinuities linking pairs of nodes, all potential translational failure mechanisms are considered, whether anticipated or not by the engineer. Failure mechanisms involving rotations along the edges of solid bodies in the problem can also be identified. Thus in this case the solution identified by the DLO procedure is guaranteed to be the most critical solution for the problem posed. This means that there is no need to prescribe any aspect of the collapse mechanism prior to an analysis, or to separately consider different failure modes. The critical mechanism and collapse load factor are determined according to the well established upper bound theorem of plasticity.

LimitState:GEO reports the solution to a problem both visually as a collapse mechanism and numerically in terms of an Adequacy Factor, which is defined as the factor by which specified loads must be increased, or material strengths decreased, in order for the system under consideration to reach a collapse state.

REFERENCE

Smith, C.C. and Gilbert, M. (2007) Application of discontinuity layout optimization to plane plasticity problems, Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, Vol. 463, 2086, pp 2461-2484.

Summary

Name	Date of Analysis	Name of Engineer	Organization
Buckley Wells	Fri Apr 12 2024	CWh	

Reference #	Location	Map Reference	Tags
LKC 23 1449			

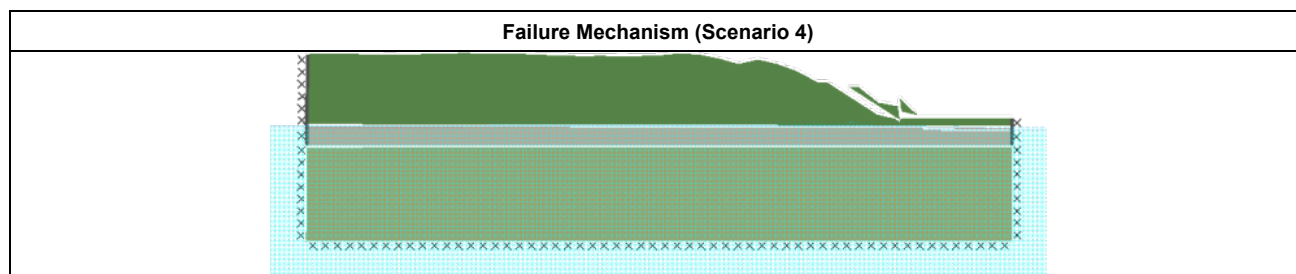
Comments

Target Nodal Density	Nodal Spacing Scale Factor	Water	Model Translational Failures?	Model Rotational Failures?	Seismic Accelerations: Horiz. / Vert. (g)
Medium (500 nodes)	0.718622	Enabled	True	Along edges	None

Scenario	Partial Factor Set	Short / Long Term?**	Analysis Type	Adequacy Factor
1	EC7 DA1/1	Short Term	Factor Strength(s)	2.432
2	EC7 DA1/1	Long Term	Factor Strength(s)	1.551
3	EC7 DA1/2	Short Term	Factor Strength(s)	1.737
4*	EC7 DA1/2	Long Term	Factor Strength(s)	1.241

*This report provides details of this scenario, which has been identified as the most critical.

****For Mohr Coulomb materials with Drainage Behaviour specified as 'drained/undrained', undrained properties are used in a short term analysis, and drained properties are used in a long term analysis.**



Analysis Options

Factor Strength(s)

Solution Tolerance (%)	Automatic Adequacy on Load(s)	Factor on Load(s)	Artificial Cohesion (kN/m ² (kPa))
1	True	1	0.1

Geometry

(all distances in m)

All Geometrical Objects

No. of Vertices (V)	No. of Boundaries (B)	No. of Solids (S)
42	46	3

Boundary Objects

ID	Start Vertex ID (x, y)	End Vertex ID (x, y)	Baseline Nodal Spacing	Support Type	Material(s)
B1	V1 (51, -8)	V2 (92, -8)	0.5	Fixed	-
B2	V2 (92, -8)	V98 (92, -2.5)	0.5	Fixed	-
B3	V3 (92, -1)	V93 (85, -1)	0.5	Free	-
B4	V4 (84, -0.031)	V5 (83, 0.18)	0.5	Free	-
B5	V5 (83, 0.18)	V6 (82, 1.1)	0.5	Free	-
B6	V6 (82, 1.1)	V7 (81, 1.1)	0.5	Free	-
B7	V7 (81, 1.1)	V8 (79, 1.7)	0.5	Free	-
B8	V8 (79, 1.7)	V9 (78, 2.1)	0.5	Free	-
B9	V9 (78, 2.1)	V10 (77, 2.4)	0.5	Free	-

B10	V10 (77, 2.4)	V11 (76, 2.1)	0.5	Free	-
B11	V11 (76, 2.1)	V12 (75, 2.4)	0.5	Free	-
B12	V12 (75, 2.4)	V13 (74, 2.7)	0.5	Free	-
B13	V13 (74, 2.7)	V14 (73, 2.7)	0.5	Free	-
B14	V14 (73, 2.7)	V15 (72, 2.6)	0.5	Free	-
B15	V15 (72, 2.6)	V16 (70, 2.6)	0.5	Free	-
B16	V16 (70, 2.6)	V17 (69, 2.5)	0.5	Free	-
B17	V17 (69, 2.5)	V18 (68, 2.6)	0.5	Free	-
B18	V18 (68, 2.6)	V19 (67, 2.6)	0.5	Free	-
B19	V19 (67, 2.6)	V20 (66, 2.6)	0.5	Free	-
B20	V20 (66, 2.6)	V21 (65, 2.6)	0.5	Free	-
B21	V21 (65, 2.6)	V22 (64, 2.7)	0.5	Free	-
B22	V22 (64, 2.7)	V23 (63, 2.7)	0.5	Free	-
B23	V23 (63, 2.7)	V24 (61, 2.7)	0.5	Free	-
B24	V24 (61, 2.7)	V25 (60, 2.7)	0.5	Free	-
B25	V25 (60, 2.7)	V26 (59, 2.7)	0.5	Free	-
B26	V26 (59, 2.7)	V27 (58, 2.7)	0.5	Free	-
B27	V27 (58, 2.7)	V28 (57, 2.7)	0.5	Free	-
B28	V28 (57, 2.7)	V29 (56, 2.7)	0.5	Free	-
B29	V29 (56, 2.7)	V30 (55, 2.7)	0.5	Free	-
B30	V30 (55, 2.7)	V31 (54, 2.7)	0.5	Free	-
B31	V31 (54, 2.7)	V32 (52, 2.7)	0.5	Free	-
B32	V32 (52, 2.7)	V33 (51, 2.7)	0.5	Free	-
B77	V33 (51, 2.7)	V97 (51, -1.5)	0.5	Fixed	-
B93	V93 (85, -1)	V4 (84, -0.031)	0.5	Free	-
B94	V96 (92, -1.5)	V3 (92, -1)	0.5	Fixed	-
B95	V97 (51, -1.5)	V99 (51, -2.6)	0.5	Fixed	-
B96	V96 (92, -1.5)	V112 (87, -1.5)	0.5	Free	-
B97	V98 (92, -2.5)	V114 (92, -1.6)	0.5	Fixed	-
B98	V99 (51, -2.6)	V1 (51, -8)	0.5	Fixed	-
B99	V98 (92, -2.5)	V99 (51, -2.6)	0.5	Free	-
B118	V112 (87, -1.5)	V97 (51, -1.5)	0.5	Free	-
B119	V113 (83, -1.4)	V112 (87, -1.5)	0.25	Free	-
B120	V97 (51, -1.5)	V113 (83, -1.4)	0.25	Free	-
B121	V114 (92, -1.6)	V96 (92, -1.5)	0.5	Fixed	-
B122	V115 (89, -1.6)	V114 (92, -1.6)	0.25	Free	-
B123	V112 (87, -1.5)	V115 (89, -1.6)	0.25	Free	-

* Loaded boundary.

Solid Objects

ID	Vertex IDs (x, y)	Boundary IDs	Baseline Nodal Spacing (x / y)	Material(s)/Water Regime(s)
S95*	V99 (51,-2.6) V1 (51,-8) V2 (92,-8) V98 (92,-2.5)	B98 B1 B2 B99	1 / 1	Medium-Dense Sand
S93	V96 (92,-1.5) V3 (92,-1) V93 (85,-1) V4 (84,-0.031) V5 (83,0.18) V6 (82,1.1) V7 (81,1.1) V8 (79,1.7) V9 (78,2.1) V10 (77,2.4) V11 (76,2.1) V12 (75,2.4) V13 (74,2.7) V14 (73,2.7) V15 (72,2.6) V16 (70,2.6) V17 (69,2.5) V18 (68,2.6) V19 (67,2.6) V20 (66,2.6) V21 (65,2.6) V22 (64,2.7) V23 (63,2.7) V24 (61,2.7) V25 (60,2.7) V26 (59,2.7) V27 (58,2.7) V28 (57,2.7) V29 (56,2.7) V30 (55,2.7) V31 (54,2.7) V32 (52,2.7) V33 (51,2.7) V97 (51,-1.5) V112 (87,-1.5)	B94 B3 B93 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15 B16 B17 B18 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 B31 B32 B77 B118 B96	1 / 1	Made Ground
S96	V98 (92,-2.5) V114 (92,-1.6) V96 (92,-1.5) V112 (87,-1.5) V97 (51,-1.5) V99 (51,-2.6)	B97 B121 B96 B118 B95 B99	1 / 1	Soft Clay

* Loaded solid (self weight).

Water Table

(all distances in m)

Water Table Status	Vertices (x, y)
Enabled	(51.3418, -1.46142) (82.6, -1.4) (88.6, -1.6)

Water Regimes

(potentials in m, pressures in kN/m² (kPa))

(No water regime defined)

Materials

(unit weights (weight densities) in kN/m³, strengths in kN/m² (kPa), angles in degrees, datum level in m, undrained strength gradient in kN/m² (kPa)/m)

Mohr-Coulomb Material(s)

Key	Name	Unit Weight (Saturated Unit Weight)	Drainage Behaviour	c' (φ')	c _u (datum) (gradient) (grid)
	Medium-Dense Sand	16 (20)	Always drained	0* (37.5*)	0 (0) (0) (-)
	Made Ground	19 (19)	Drained/undrained	1* (30*)	20 (0) (0) (-)
	Soft Clay	19 (19)	Drained/undrained	2* (18*)	30 (0) (0) (-)

*Property used in Scenario 4 (described in this report).

Partial Factors

Factor	EC7 DA1/1	EC7 DA1/1	EC7 DA1/2	EC7 DA1/2*
Unfavourable: permanent	1.35	1.35	1	1
Unfavourable: variable	1.5	1.5	1.3	1.3
Unfavourable: accidental	1	1	1	1
Favourable: permanent	1	1	1	1
Favourable: variable	0	0	0	0
Favourable: accidental	0	0	0	0
c'	1	1	1.25	1.25
tanφ'	1	1	1.25	1.25
c _u	1	1	1.4	1.4

*These partial factors were used in Scenario 4 (described in this report).

Loads

(normal and shear loads in kN/m² (kPa))

Solid Objects

Loaded Object	Type	Loading Type	Adequacy?
S95	Permanent (unfactored self weight: 20 kN/m ³)	neutral	true
S109	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true

S110	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true
S111	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true
S112	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true

About this Report

This report has been generated using LimitState:GEO, a software application capable of directly identifying the critical collapse mechanism for a wide variety of geotechnical stability problems, including those involving slopes, retaining walls, footings etc.

The software utilizes the Discontinuity Layout Optimization (DLO) procedure to obtain a solution (Smith and Gilbert 2007). The main steps involved are: (i) distribution of nodes across the problem domain; (ii) connection of every node to every other node with potential discontinuities (e.g. slip-lines); (iii) application of rigorous optimization techniques to identify the critical subset of potential discontinuities, and hence also the critical failure mechanism and margin of safety.

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LimitState:GEO reports the solution to a problem both visually as a collapse mechanism and numerically in terms of an Adequacy Factor, which is defined as the factor by which specified loads must be increased, or material strengths decreased, in order for the system under consideration to reach a collapse state.

REFERENCE

Smith, C.C. and Gilbert, M. (2007) Application of discontinuity layout optimization to plane plasticity problems, Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, Vol. 463, 2086, pp 2461-2484.

Summary

Name	Date of Analysis	Name of Engineer	Organization
Buckley Wells	Fri Apr 12 2024	CWh	

Reference #	Location	Map Reference	Tags
LKC 23 1449	Buckley Wells		

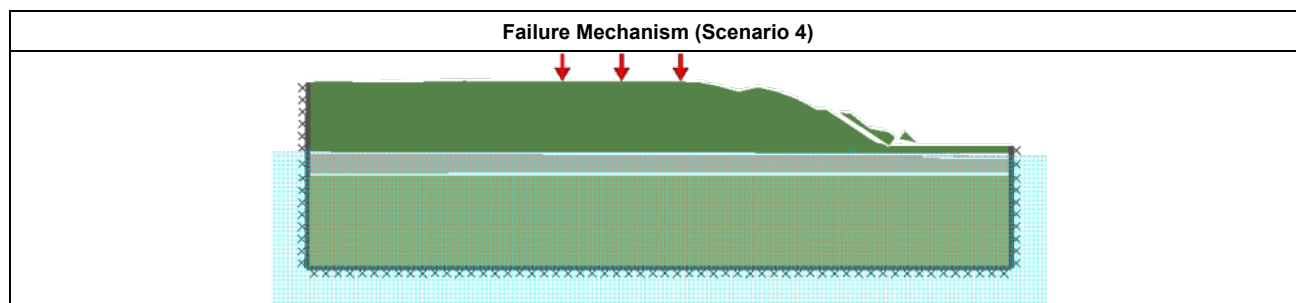
Comments

Target Nodal Density	Nodal Spacing Scale Factor	Water	Model Translational Failures?	Model Rotational Failures?	Seismic Accelerations: Horiz. / Vert. (g)
Medium (500 nodes)	0.723528	Enabled	True	Along edges	None

Scenario	Partial Factor Set	Short / Long Term?**	Analysis Type	Adequacy Factor
1	EC7 DA1/1	Short Term	Factor Strength(s)	2.361
2	EC7 DA1/1	Long Term	Factor Strength(s)	1.54
3	EC7 DA1/2	Short Term	Factor Strength(s)	1.686
4*	EC7 DA1/2	Long Term	Factor Strength(s)	1.232

*This report provides details of this scenario, which has been identified as the most critical.

****For Mohr Coulomb materials with Drainage Behaviour specified as 'drained/undrained', undrained properties are used in a short term analysis, and drained properties are used in a long term analysis.**



Analysis Options

Factor Strength(s)

Solution Tolerance (%)	Automatic Adequacy on Load(s)	Factor on Load(s)	Artificial Cohesion (kN/m ² (kPa))
1	True	1	0.1

Geometry

(all distances in m)

All Geometrical Objects

No. of Vertices (V)	No. of Boundaries (B)	No. of Solids (S)
37	41	3

Boundary Objects

ID	Start Vertex ID (x, y)	End Vertex ID (x, y)	Baseline Nodal Spacing	Support Type	Material(s)
B1	V1 (51, -8)	V2 (92, -8)	0.5	Fixed	-
B2	V2 (92, -8)	V98 (92, -2.5)	0.5	Fixed	-
B3	V3 (92, -1)	V93 (85, -1)	0.5	Free	-
B4	V4 (84, -0.031)	V5 (83, 0.18)	0.5	Free	-
B5	V5 (83, 0.18)	V6 (82, 1.1)	0.5	Free	-
B6	V6 (82, 1.1)	V7 (81, 1.1)	0.5	Free	-
B7	V7 (81, 1.1)	V8 (79, 1.7)	0.5	Free	-
B8	V8 (79, 1.7)	V9 (78, 2.1)	0.5	Free	-

B9	V9 (78, 2.1)	V10 (77, 2.4)	0.5	Free	-
B10	V10 (77, 2.4)	V11 (76, 2.1)	0.5	Free	-
B11	V11 (76, 2.1)	V12 (75, 2.4)	0.5	Free	-
B12	V12 (75, 2.4)	V13 (74, 2.7)	0.5	Free	-
B13	V13 (74, 2.7)	V14 (73, 2.7)	0.5	Free	-
B19*	V14 (73, 2.7)	V20 (66, 2.7)	0.5	Free	-
B20	V20 (66, 2.7)	V21 (65, 2.7)	0.5	Free	-
B21	V21 (65, 2.7)	V22 (64, 2.7)	0.5	Free	-
B22	V22 (64, 2.7)	V23 (63, 2.7)	0.5	Free	-
B23	V23 (63, 2.7)	V24 (61, 2.7)	0.5	Free	-
B24	V24 (61, 2.7)	V25 (60, 2.7)	0.5	Free	-
B25	V25 (60, 2.7)	V26 (59, 2.7)	0.5	Free	-
B26	V26 (59, 2.7)	V27 (58, 2.7)	0.5	Free	-
B27	V27 (58, 2.7)	V28 (57, 2.7)	0.5	Free	-
B28	V28 (57, 2.7)	V29 (56, 2.7)	0.5	Free	-
B29	V29 (56, 2.7)	V30 (55, 2.7)	0.5	Free	-
B30	V30 (55, 2.7)	V31 (54, 2.7)	0.5	Free	-
B31	V31 (54, 2.7)	V32 (52, 2.7)	0.5	Free	-
B32	V32 (52, 2.7)	V33 (51, 2.7)	0.5	Free	-
B77	V33 (51, 2.7)	V97 (51, -1.5)	0.5	Fixed	-
B93	V93 (85, -1)	V4 (84, -0.031)	0.5	Free	-
B94	V96 (92, -1.5)	V3 (92, -1)	0.5	Fixed	-
B95	V97 (51, -1.5)	V99 (51, -2.6)	0.5	Fixed	-
B96	V96 (92, -1.5)	V128 (87, -1.5)	0.5	Free	-
B97	V98 (92, -2.5)	V130 (92, -1.6)	0.5	Fixed	-
B98	V99 (51, -2.6)	V1 (51, -8)	0.5	Fixed	-
B99	V98 (92, -2.5)	V99 (51, -2.6)	0.5	Free	-
B142	V128 (87, -1.5)	V97 (51, -1.5)	0.5	Free	-
B143	V129 (83, -1.4)	V128 (87, -1.5)	0.25	Free	-
B144	V97 (51, -1.5)	V129 (83, -1.4)	0.25	Free	-
B145	V130 (92, -1.6)	V96 (92, -1.5)	0.5	Fixed	-
B146	V131 (89, -1.6)	V130 (92, -1.6)	0.25	Free	-
B147	V128 (87, -1.5)	V131 (89, -1.6)	0.25	Free	-

* Loaded boundary.

Solid Objects

ID	Vertex IDs (x, y)	Boundary IDs	Baseline Nodal Spacing (x / y)	Material(s)/Water Regime(s)
S95*	V99 (51,-2.6) V1 (51,-8) V2 (92,-8) V98 (92,-2.5)	B98 B1 B2 B99	1 / 1	Medium-Dense Sand
S93	V96 (92,-1.5) V3 (92,-1) V93 (85,-1) V4 (84,-0.031) V5 (83,0.18) V6 (82,1.1) V7 (81,1.1) V8 (79,1.7) V9 (78,2.1) V10 (77,2.4) V11 (76,2.1) V12 (75,2.4) V13 (74,2.7) V14 (73,2.7) V20 (66,2.7) V21 (65,2.7) V22 (64,2.7) V23 (63,2.7) V24 (61,2.7) V25 (60,2.7) V26 (59,2.7) V27 (58,2.7) V28 (57,2.7) V29 (56,2.7) V30 (55,2.7) V31 (54,2.7) V32 (52,2.7) V33 (51,2.7) V97 (51,-1.5) V128 (87,-1.5)	B94 B3 B93 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B19 B20 B21 B22 B23 B24 B25 B26 B27 B28 B29 B30 B31 B32 B77 B142 B96	1 / 1	Made Ground
S96	V98 (92,-2.5) V130 (92,-1.6) V96 (92,-1.5) V128 (87,-1.5) V97 (51,-1.5) V99 (51,-2.6)	B97 B145 B96 B142 B95 B99	1 / 1	Soft Clay

* Loaded solid (self weight).

Water Table

(all distances in m)

Water Table Status	Vertices (x, y)
Enabled	(51.3418, -1.46142) (82.6, -1.4) (88.6, -1.6)

Water Regimes

(potentials in m, pressures in kN/m² (kPa))

(No water regime defined)

Materials

(unit weights (weight densities) in kN/m^3 , strengths in kN/m^2 (kPa), angles in degrees, datum level in m, undrained strength gradient in kN/m^2 (kPa)/m)

Mohr-Coulomb Material(s)

Key	Name	Unit Weight (Saturated Unit Weight)	Drainage Behaviour	c' (ϕ')	c_u (datum) (gradient) (grid)
	Medium-Dense Sand	16 (20)	Always drained	0* (37.5*)	0 (0) (0) (-)
	Made Ground	19 (19)	Drained/undrained	1* (30*)	20 (0) (0) (-)
	Soft Clay	19 (19)	Drained/undrained	2* (18*)	30 (0) (0) (-)

*Property used in Scenario 4 (described in this report).

Partial Factors

Factor	EC7 DA1/1	EC7 DA1/1	EC7 DA1/2	EC7 DA1/2*
Unfavourable: permanent	1.35	1.35	1	1
Unfavourable: variable	1.5	1.5	1.3	1.3
Unfavourable: accidental	1	1	1	1
Favourable: permanent	1	1	1	1
Favourable: variable	0	0	0	0
Favourable: accidental	0	0	0	0
c'	1	1	1.25	1.25
$\tan\phi'$	1	1	1.25	1.25
c_u	1	1	1.4	1.4

*These partial factors were used in Scenario 4 (described in this report).

Loads

(normal and shear loads in kN/m^2 (kPa))

Boundary Objects

Loaded Object	Type	Loading Type	Adequacy?	Normal	Shear
B19	Variable Load	neutral	true	5	0

Solid Objects

Loaded Object	Type	Loading Type	Adequacy?
S95	Permanent (unfactored self weight: 20 kN/m^3)	neutral	true
S125	Permanent (unfactored self weight: 19 kN/m^3)	neutral	true

S126	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true
S127	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true
S128	Permanent (unfactored self weight: 19 kN/m ³)	neutral	true

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