

**ASBP** The Alliance  
for Sustainable  
Building Products

**PATRON MEMBER**

**CST**

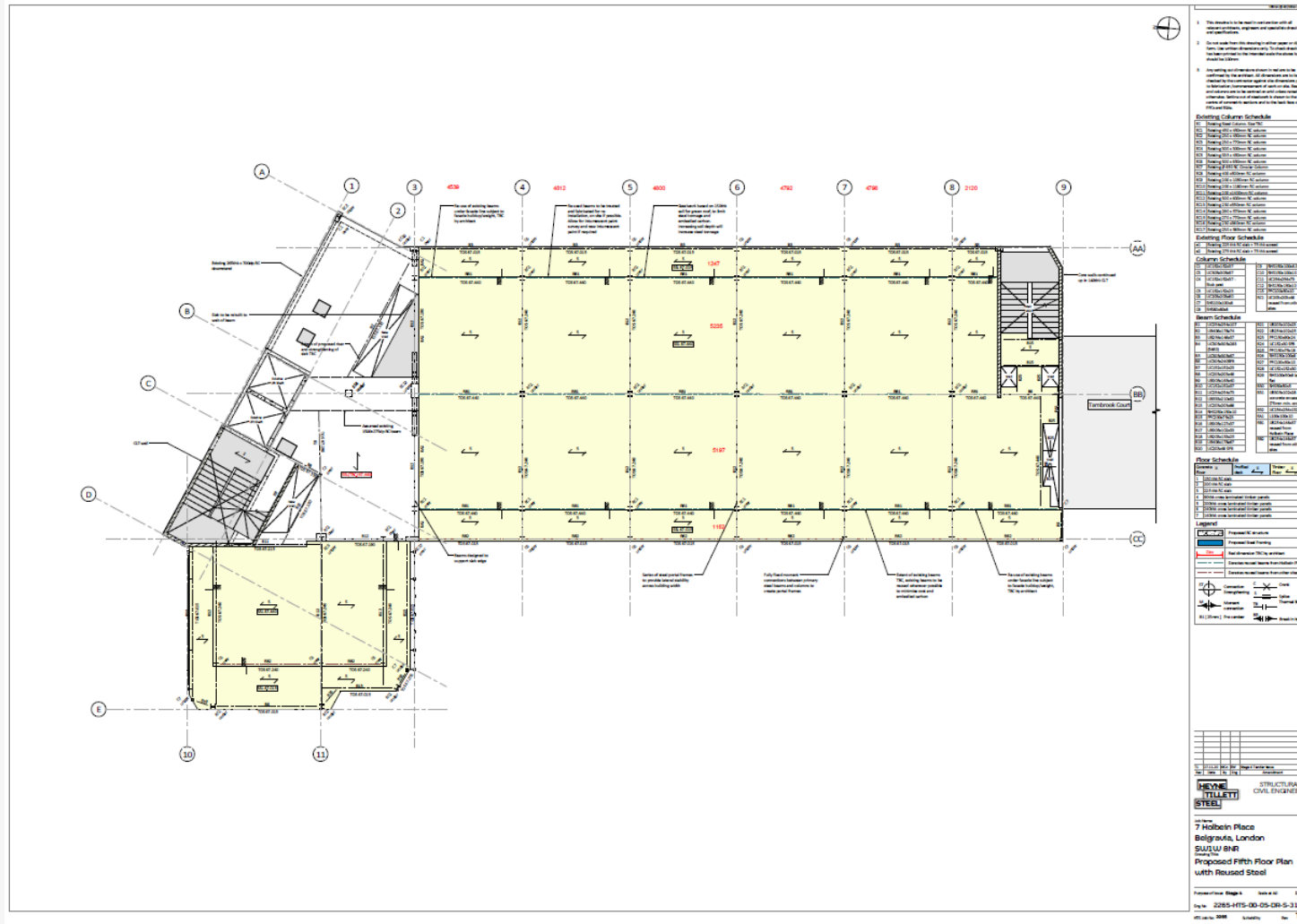
**CLEVELAND STEEL & TUBES LTD**

# Supplying reused steel for Holbein Gardens

**Holbein Gardens Steel Reuse Case Study**

Thursday 20<sup>th</sup> October 2022

# First Enquiry



# Client Material

---

Beam Size	Lengths on site	Number
256x102x28(TBC) UB	1	1
	2.35	1
	3.2	2
	4.5	2
	4.6	2
	4.75	3
	4.85	3
	5	1
	5.1	1
	5.2	1
5.4	1	
178x102x19 UB	2.8	2
	3.05	1
	3.3	1
	3.95	1





# The Material – “Star Wars”

## Sack Lunch Steelwork

Blue - To check

Location	152x89x16UB			178x102x19UB			203x102x23UB			203x133x25UB			152x152x23UC		
	No.	Length	Total	No.	Length	Total	No.	Length	Total	No.	Length	Total	No.	Length	Total
Market Square							2	2.70	5.40				5	4.25	21.25
Kingo Jet							4	3.50	14.00						
							3	4.25	12.75						
Spaceship - Bridge										6	6.50	39.00			
										6	4.00	24.00			
										4	4.72	18.88			
										8	4.11	32.88			
										8	4.05	32.40			
										2	2.97	5.94			
										4	3.51	14.04			
										8	5.20	41.60			
										4	5.45	21.80			
Spaceship - Lab										8	4.05	32.40			
										4	4.11	16.44			
										8	5.20	41.60			
										4	5.45	21.80			
Spaceship - Walkways										12	6.19	74.28			
										8	6.09	48.72			
										4	7.31	29.24			
										2	4.19	8.38			
										19	4.59	87.21			
										1	2.76	2.76			
Other Workshop Scrap (excluding grey steel)	3	4.50	13.50	12	2.90	34.80	2	3.75	7.50						
				11	2.40	26.40									
				1	1.68	1.68									
<b>Total Metres</b>			<b>13.50</b>			<b>62.88</b>			<b>39.65</b>			<b>593.37</b>			<b>21.25</b>
<b>Total Tonnage</b>	0.016	<b>0.22</b>		0.019	<b>1.19</b>		0.023	<b>0.91</b>		0.025	<b>14.83</b>		0.023	<b>0.49</b>	



## The material part 2

---



US Embassy Façade retention



Material from stockiest with no certs  
Destined for scrap



# Material Offer

3835\_Steel Takeoff.xlsx [Protected View] - Excel

roy fishwick RF

File Home Insert Page Layout Formulas Data Review View Help Acrobat Tell me what you want to do

PROTECTED VIEW Be careful—email attachments can contain viruses. Unless you need to edit, it's safer to stay in Protected View. Enable Editing

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	
1	<b>Steel Takeoff</b>																				
2	<b>Type</b>	<b>Grad</b>	<b>Type</b>	<b>Quantit</b>	<b>Eurban Lev</b>	<b>Eurban Grou</b>	<b>New / Re</b>	<b>Stockist</b>	<b>Revit Cut Leng</b>	<b>kg/</b>	<b>Weight</b>										
3	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
4	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
5	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
6	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
7	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
8	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.24	46.1	149.364										
9	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.24	46.1	149.364										
10	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.24	46.1	149.364										
11	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.24	46.1	149.364										
12	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.24	46.1	149.364										
13	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
14	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
15	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
16	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
17	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
18	SHS100x100x8	S355	Column	1	4	SC	New		3.02	22.6	68.252										
19	SHS100x100x8	S355	Column	1	4	SC	New		3.44	22.6	77.744										
20	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
21	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
22	UC203x203x46	S355	Column	1	4	SC	Reused	Cleveland	3.02	46.1	139.222										
23	SHS100x100x8	S355	Column	1	4	SC	New		3.02	22.6	68.252										
24	SHS100x100x8	S355	Column	1	4	SC	New		3.02	22.6	68.252										
25	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
26	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
27	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
28	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
29	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
30	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
31	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
32	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										
33	UC203x203x46 / HEA200	S355	Column	1	5	SC	Reused	Cleveland	3.73	46.1	171.953										

Material identified as reused or new  
Specification allowed for either so  
Substitutions occurred over time

# Letter of Intent - securing the material

---

2<sup>nd</sup> June 2021  
Roy Fishwick Managing Director  
Dalton, Thirsk  
North Yorkshire  
YO7 3JN  
United Kingdom  
**Letter of Intent to Purchase Steel**

Dear Roy,

I am writing to confirm that Grosvenor Estate Belgravia intend to use the materials cited in the enclosed list on our upcoming scheme at 7 Holbein Place.

The list below has now been included in the Contract with Blenheim House Construction who shall be placing the order with Cleveland Steel & Tubes Ltd direct in the coming weeks.

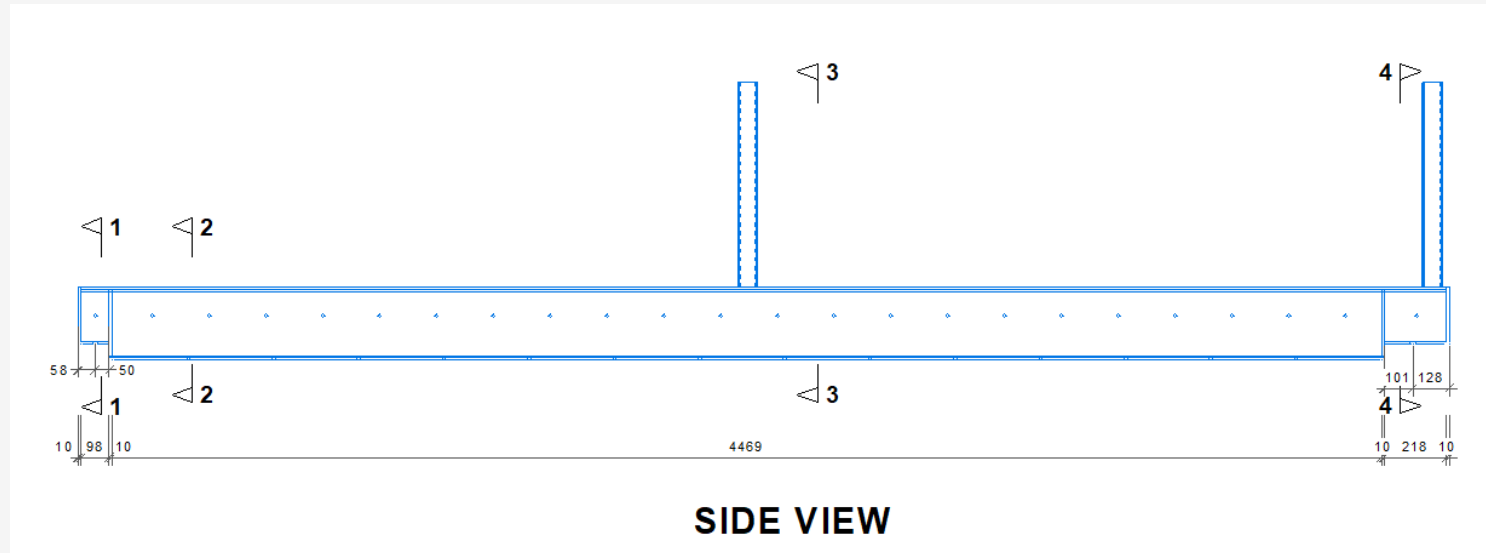
The Building Contract is due to be signed w/c 7<sup>th</sup> June, following which Blenheim House shall be in a position to formally place the order for these steels and make payment. Following contract execution, the team shall also be in touch to finalise the logistics associated with the steels being removed from Bermondsey.

As per your correspondence with Tom Cutler (Capital & Provincial), we trust that this is acceptable to ensure materials are held for use on 7 Holbein Place.

We look forward to hearing from you in due course to discuss the fabrication process and logistics and are excited to build a working relationship with regard to the re-use of steelwork across the estate.

Yours sincerely,

# Matching Up



350 individual drawings – almost no duplication  
Each member had to be matched to drawing for compatibility  
Engineer approached if holes/attachments an issue

CLT meant web stiffeners had to be removed for timber to sit in





# Traceability

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
110										Source	sample	cert			
111	SB05	6	203	203	46		3061	1		carey					
112	SB05	7	203	203	46		2713	1		carey					
113	SB05	8	152	152	37		2286	1		carey					
114	SB05	9	203	203	46		4041	1		carey					
115	SB05	10	203	203	60		4937	1		carey					
116	SB05	11	305	165	40		3154	1		holbein					
117	SB05	12	200	75	23		1164	1		sb					
118	SB05	13	152	152	37		3158	1		carey					
119	SB05	14	254	102	25		1325	1		holbein					
120	SB05	15	254	254	73		4673	1		anderson					
121	SB05	16	200	100	8		3140	1		prime					
122	SB05	17	200	100	8		3651	1		prime					
123	SB05	18	254	254	73		4917	1		prime					
124	SB05	19	254	102	25		3802	1		holbein					
125	SB05	20	400	200	10		6563	1		prime					
126	SB05	21	120	120	10		600	2		anderson					
127	SB05	22	12	12	10		600	6		anderson					
128	SB05	23	152	152	37		3756	1		carey					

# Certification

109 Bowsfield Lane  
Stockton-on-Tees  
TS18 3NF  
United Kingdom  
Tel: 01642 604661  
Fax: 01642 670300



0025

REPORT NO: MC 1200 / 4		MECHANICAL TESTING REPORT		SHEET 1 OF 1									
CUSTOMER: Cleveland Steel & Tube.													
Dalton Thirsk YO7 3JN.													
TEST PIECE: 203 x 203 x 46.			TYPE OF TEST: Tensile /Charpy 'V' Notch / Analysis.										
ORDER/CLIENT REF: 138359 (Ticket 229)			IDENTIFICATION NUMBER: 203 x 203 x 46 Carey.										
DATE RECEIVED: 29 / 03 / 22.			MATERIAL SPEC: BS EN 10025 S355 J2.										
TEST CODE: BS EN ISO 6892-1 2019 & BS EN ISO 148-1 2016			REFERENCE SPEC:										
TENSILE TEST – BS EN ISO 6892-1 2019 B10.													
SAMPLE NO	GAUGE LENGTH	THICKNESS DIA mm	WIDTH mm	AREA mm <sup>2</sup>	YIELD STRESS N/mm <sup>2</sup>	MAX STRESS N/mm <sup>2</sup>	ELONG %	BREAK POINT	REDUCTION OF AREA %				
203x203 x46	50mm	9.96	12.02	119.72	408	518	33.5	-	-				
COMMENTS:													
CST ref: Roy.													
BEND TEST –													
SAMPLE NO	TYPE	RESULTS & COMMENTS											
-----	-----	-----											
-----	-----	-----											
CHEMICAL ANALYSIS													
SAMPLE NO	C	Si	Mn	S	P	Ni	Cr	Mo	Cu	Ti	Nb	V	CEV
203x203x46	0.09	0.19	1.08	0.028	0.022	0.15	0.14	0.04	0.39	<0.01	0.01	0.04	0.35%
COMMENTS:													
Analysis results are transcribed from Element certificate ref: X251856													
CHARPY IMPACT TEST – BS EN ISO 148-1 2016.													
MACHINE NOMINAL ENERGY VALUE = 450J. 8mm RADIUS STRIKER.													
SPECIMEN SIZE: 55 x 10 x 7.5mm													
SAMPLE NO	TEMP	IMPACT JOULES	AVERAGE	COMMENTS									
203x203x46	-20°C	208, 156, 132	165										
THE RESULTS OBTAINED DO NOT COMPLY WITH SPECIFICATION													
Signed: D. McClurg. Assistant Test House Manager Test Date: 07 / 04 / 22.		Test Witnessed By:		Test Witnessed By:									

This report signifies acceptance or otherwise with regard only to the acceptance criteria of the applicable standard. Such compliance, or otherwise, does not infer or imply suitability and / or fitness for any particular use or purpose. No other communication by Oceaneering, whether oral or written, shall be construed as an opinion as to whether the weld or other work inspected should be accepted or rejected.

LAB-FRM-003a Issue 1 Rev 2



2773



Cleveland Steel & Tubes Ltd  
Dalton Industrial Estate  
Thirsk  
North Yorkshire  
YO7 3JN

14

Welded steel items – marked A21202 & A21201 for Severfield (UK)  
Ltd Contract No. C1155  
MCFC Etihad Stadium Expansion

Declaration of Performance – No. 83982/JZ

Execution Class 2

BS EN 1090-1: 2009 + A1: 2011

**Intended uses:**  
Structural metallic construction components intended for use in steel structures and concrete structures where the components can be made from hot rolled, cold-formed or with other technologies produced profiles with various shapes, flat products (plates, sheet, strip), bars, castings, forgings made of steel materials.



## Declaration of Performance

CST Job No. 83982/JZ

**Type:** Welded steel items to Execution Class 2 in accordance with component specification for Severfield (UK) Ltd Contract C1155 - MCFC Etihad Stadium Expansion, Marked A21202 & A21201

**Intended use/s:** Structural metallic construction components intended for use in steel structures and concrete structures where the components can be made from hot rolled, cold-formed or with other technologies produce profiles with various shapes, flat products (plates, sheet, strip), bars, castings, forgings made of steel materials.

**Manufacturer:** Cleveland Steel & Tubes Ltd  
Dalton Industrial Estate  
Thirsk  
North Yorkshire  
YO7 3JN

**System of assessment and verification of constancy of performance:** System 2+

**Notified Body:** Steel Construction Certification Scheme  
4, Whitehall Court  
Westminster  
London  
SW1A 2ES

**Notified Body No:** 2773

Steel Construction Certificate Scheme has performed (i) initial inspection of the manufacturing plant and factory product control and (ii) continuous surveillance, assessment and evaluation of factory production control and issued Factory Production Control certificate 2773-CPR-0093 and Welding certificate 2773-CPR-0093-WC.

Essential characteristics	Performance	Harmonised technical specification
Tolerances on dimensions and shape	EN 1090-2	EN 1090-1: 2009 + A1: 2011
Weldability	EN 10025-2, S355J2	EN 1090-1: 2009 + A1: 2011
Fracture toughness/impact resistance	S355J2 (27J @ -20°C)	EN 1090-1: 2009 + A1: 2011

# Finished Item





# DISRUPT Steel reuse project



**Project aim:** Develop a blueprint/guide for businesses to enter the market of steel reuse

Sponsor



Partners



Supporter



# DISRUPT Steel reuse project



## Steel reuse case studies:

Entopia building

Holbein Gardens

55 Great Suffolk Street

Meridian Water project

Brent Cross Town Primary Substation

Elephant & Castle Town centre redevelopment

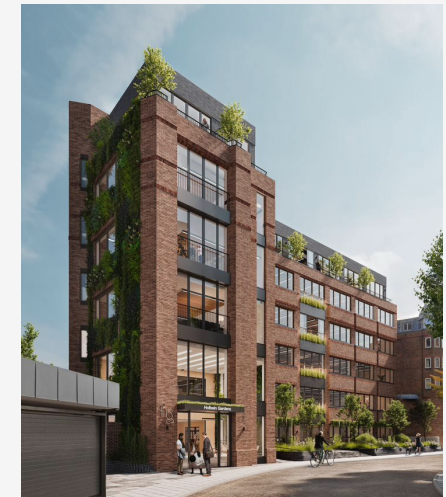
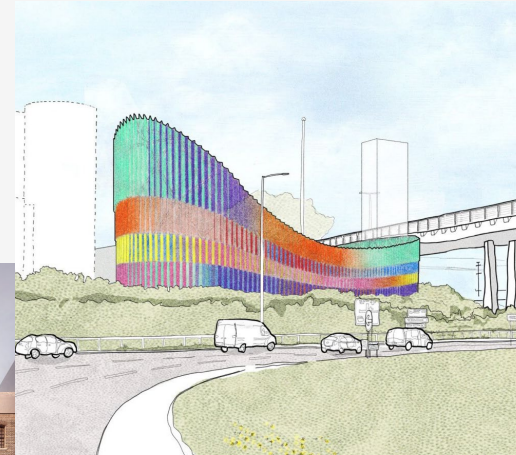
French Railways House and 50 Jermyn Street

Network Building

Agricultural buildings

Domestic extension projects

Subsea drilling out of the wind farms



# Thank you



Contact details...

[roy@cleveland-steel.com](mailto:roy@cleveland-steel.com)

01845 577789

[www.Cleveland-steel.com](http://www.Cleveland-steel.com)