

**Sources:**  
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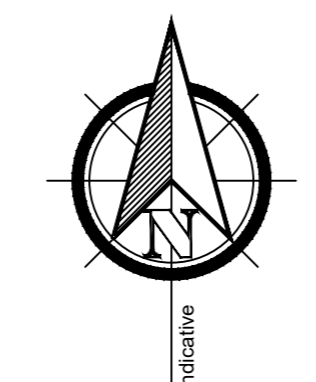
**Stations:**  
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 STN02 - 518970.579, 175484.687, 6.586  
 STN03 - 518969.606, 175528.346, 6.724

**Key:**

A/C	Air Conditioning Unit	PO	Post
B	Bollard	RL	Ridge Level
BP	Brick Paving	SRFC	Surface Change
BT	BT Inspection Cover	S/O	Smoke Outlet
CATV	Cable Television Inspection Cover	SV	Stop Valve
CP	Concrete Paving Slab	TCB	Telephone Call Box
DK	Dropped Kerb	TP	TacCPS Paving
DP	Down Pipe	W	Water Inspection Cover
EL	Eaves Level	WM	Water Meter
FH	Fire Hydrant		
G	Gully		
GP	Gate Post		
IC	Inspection Cover		
ILB	Illuminated Bollard		
IRS	Illuminated Road Sign		
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	S7
	S10



Project: Homebase, Richmond		Title: Topographic Survey Sheet 7	
Drawn By: SB	Scale: 1:100 @ A0	Date: August 2018	Dwg No: <b>LS2024/T/07RevA</b>

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PO	Post
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CPS	Telephone Call Box
TP	TacCPS Paving
W	Water Inspection Cover
WM	Water Meter

	S1	S2
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**Project:** Homebase, Richmond

**Drawn By:** SB

**Scale:** 1:100 @ A0

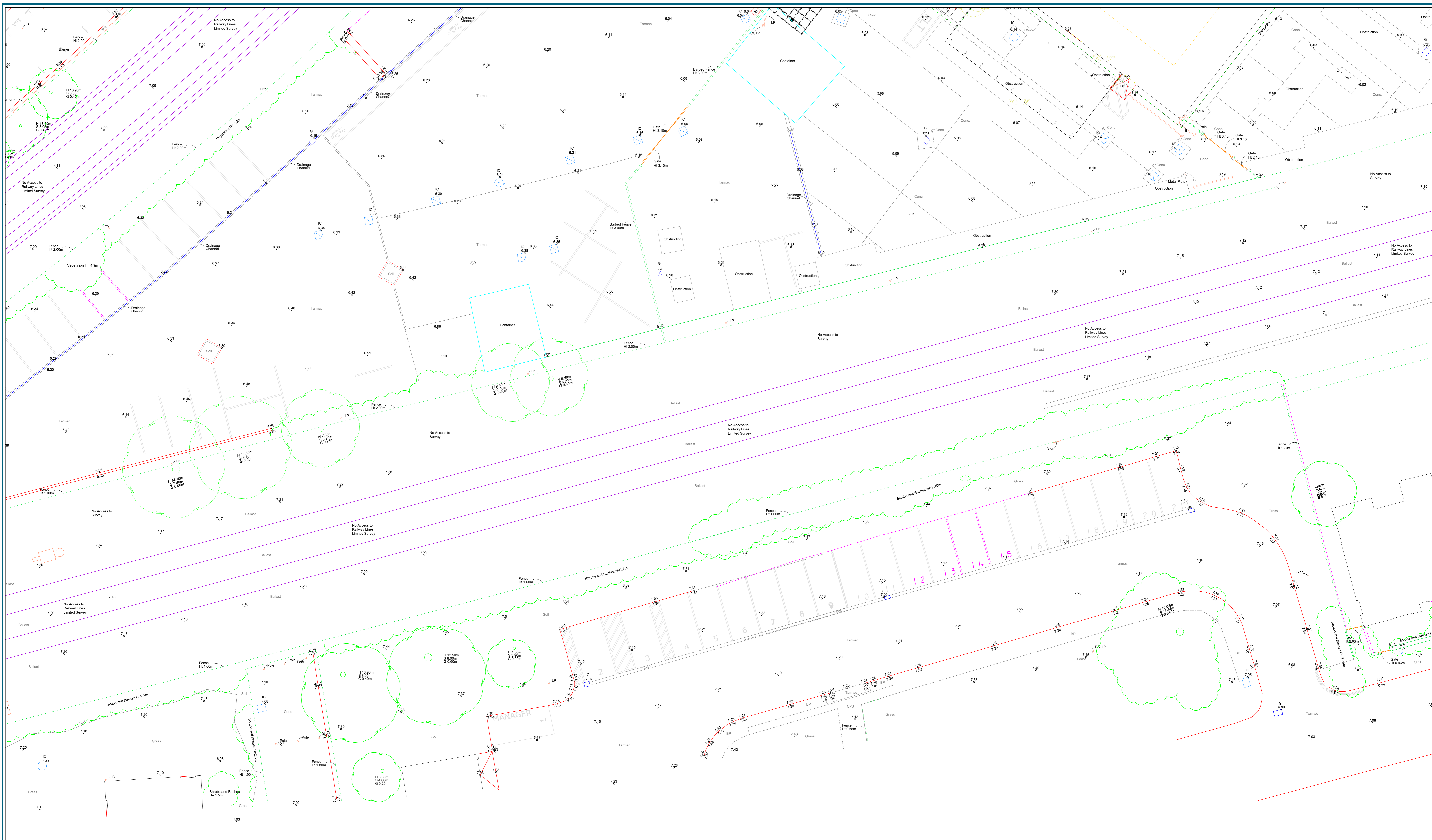
**Date:** August 2018

**Title:** Topographic Survey Sheet 8

**Dwg No:** LS2024/T/08RevA

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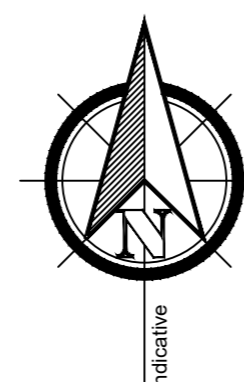


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S1	S2
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S8	S9
S7	S10

Project: Homebase, Richmond

Title: Topographic Survey Sheet 9

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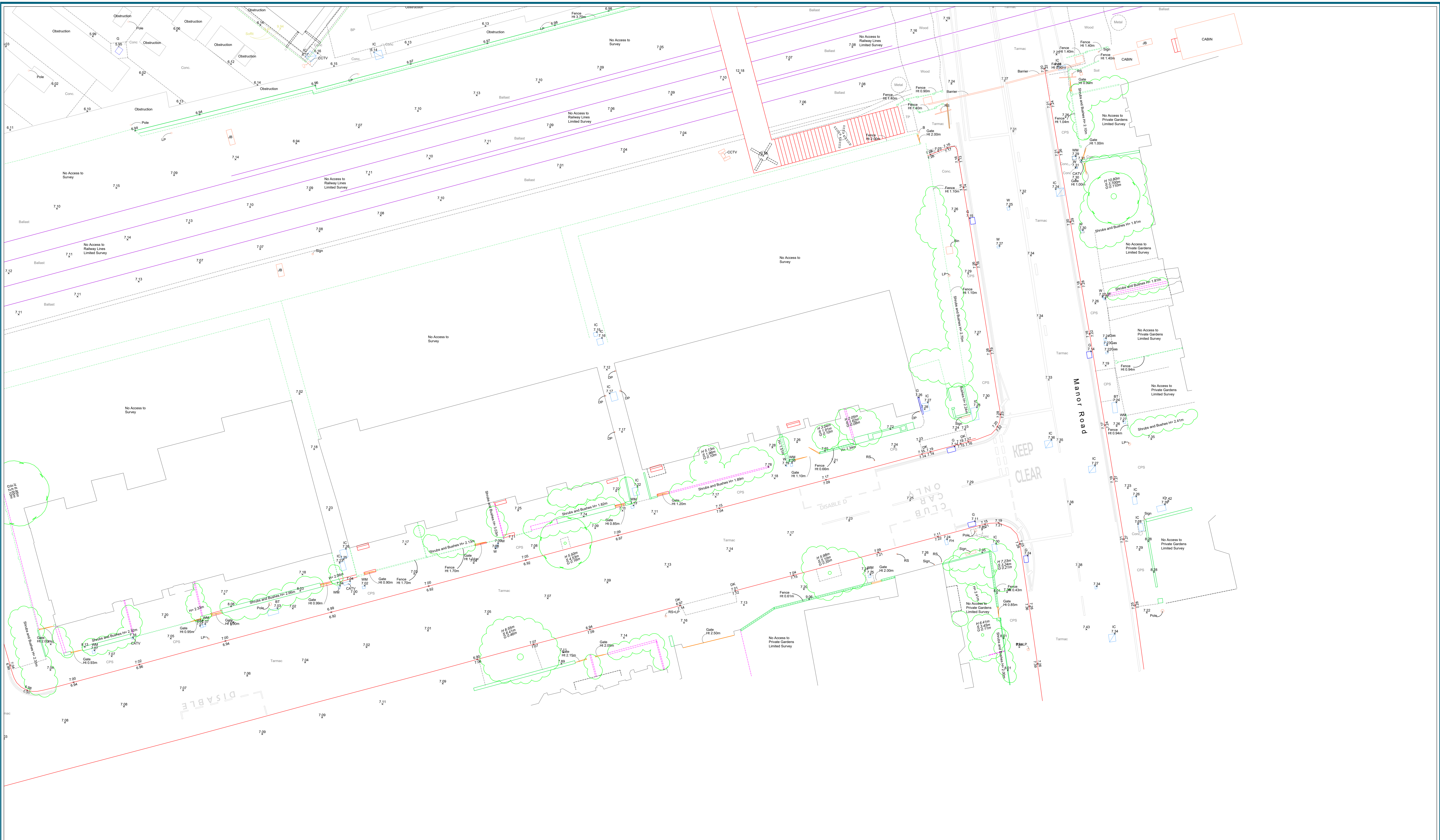
Drawn By: SB

Scale: 1:100 @ A0

Date: August 2018

Dwg No: LS2024/T/09RevA





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**Project:** Homebase, Richmond

**Drawn By:** SB

**Scale:** 1:100 @ A0

**Date:** August 2018

**Title:** Topographic Survey Sheet 10

**Dwg No:** LS2024/T/10RevA

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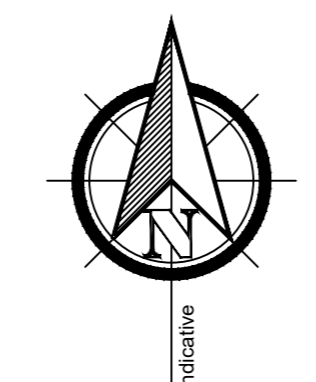
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**Project:** Homebase, Richmond

**Drawn By:** SB

**Scale:** 1:100 @ A0

**Date:** August 2018

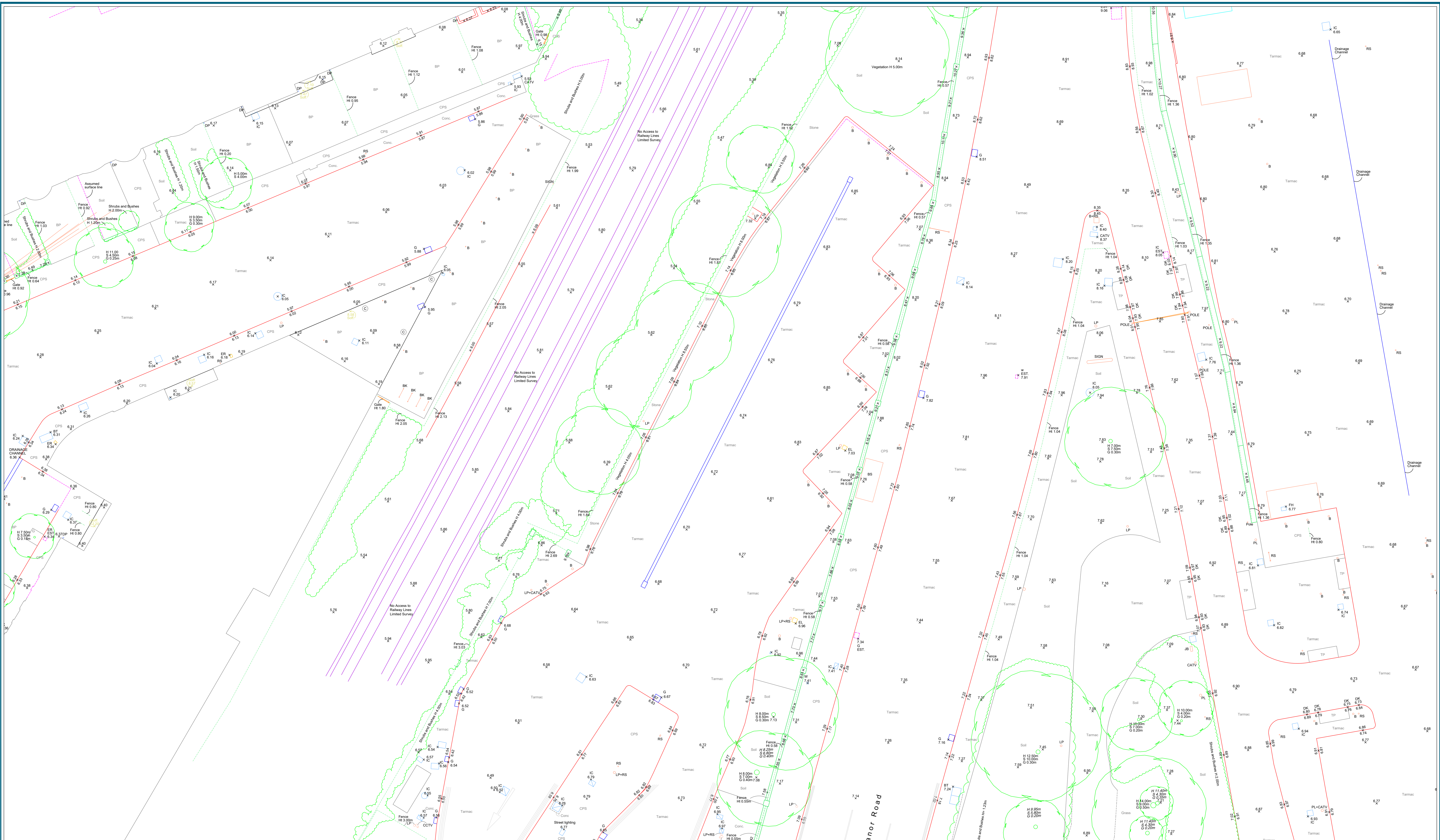
**Title:** Topographic Survey Sheet 11

**RevB:** Additional Area Added to Plan

**Dwg No:** LS2024/T/11RevA

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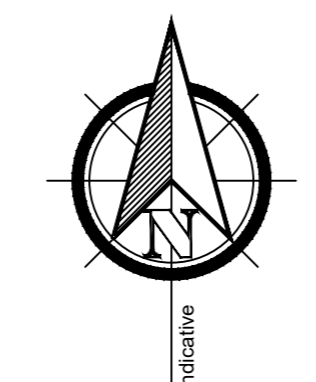
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**Project:** Homebase, Richmond

**Drawn By:** SB

**Scale:** 1:100 @ A0

**Date:** August 2018

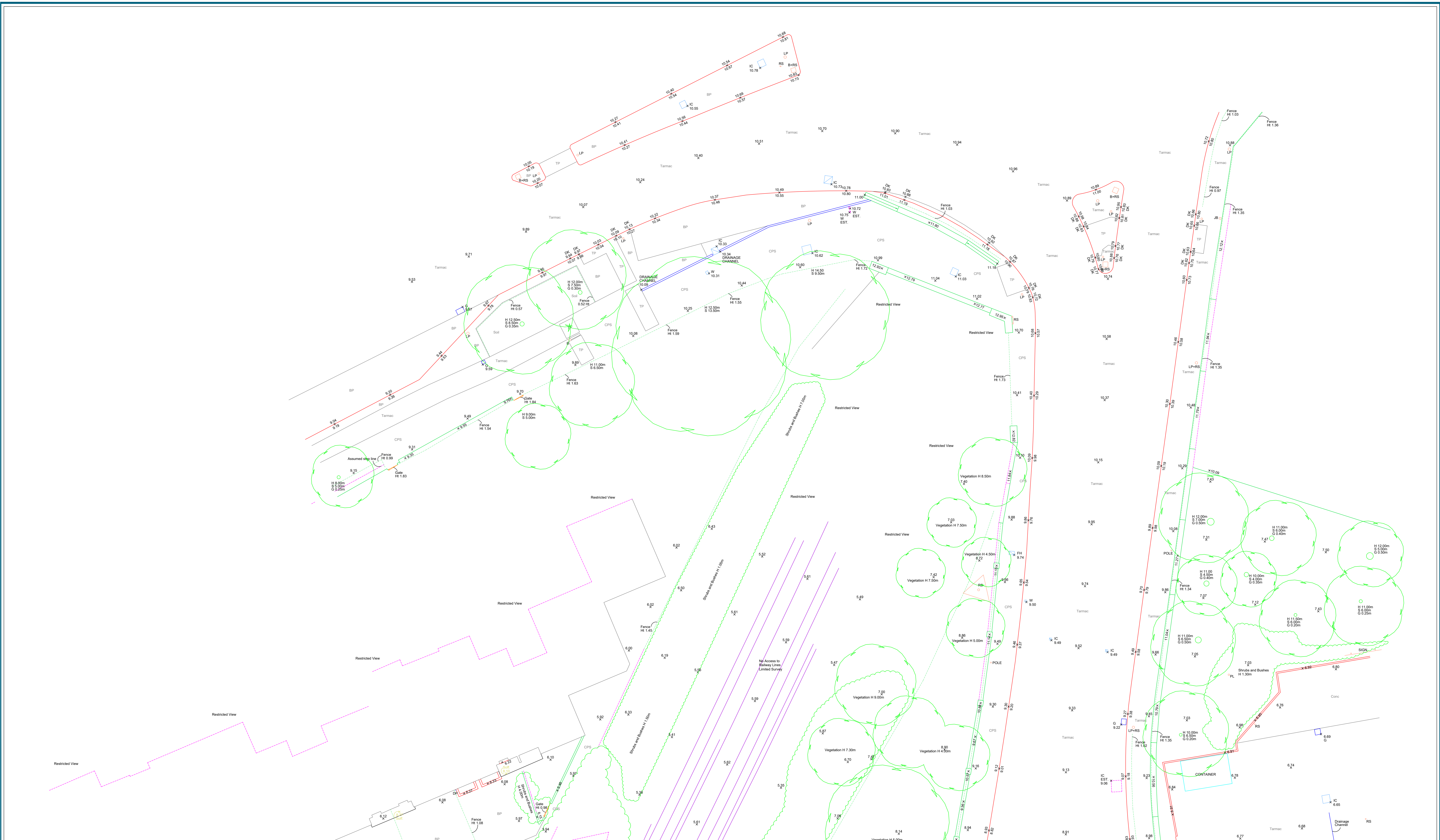
**Title:** Topographic Survey Sheet 12

**RevB:** Additional Area Added to Plan

**Dwg No:** LS2024/T/12RevA

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**Project:** Homebase, Richmond

**Drawn By:** SB

**Scale:** 1:100 @ A0

**Date:** August 2018

**Title:** Topographic Survey Sheet 13

**RevB:** Additional Area Added to Plan

**Dwg No:** LS2024/T/13RevA

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**APPENDIX G**

**Principles of Geo-Environmental Risk Assessment**





### Principles of Environmental Risk Assessment

The Environmental Protection Act 1990, Part II A Contaminated Land (Section 57 of the Environment Act 1995) and the Contaminated Land Regulations 2006 (and 2012 amendments) provide a basis on which to determine the risks and liabilities presented by a contaminated site. Contaminated Land is defined within Section 78A(2) of the Environmental Protection Act 1990, Part II A Contaminated Land (by commencement of Section 86 of The Water Act 2003 [Commencement Order No. 11] Order 2012) as:

*“Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that-*

- (a) Significant harm is being caused or there is significant possibility of such harm being caused; or
- (b) Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.”

Section 57 of the Environment Act 1995 requires that any site identified as being “contaminated” by the Local Authority will be registered by them and remediation will be required to render the site fit for use.

The presence of contamination is not the sole factor for deciding whether a site is contaminated. Relevant parties should identify site-specific risks and provide objective, cost-effective methods to manage the contamination in a manner which satisfies the proposed end-use.

A risk-based approach, which takes both technical and non-technical aspects into consideration when making decisions on contamination resulting from past, present or future human activities, is advocated. The assessment of environmental risks generally relies on the identification of three principal elements forming a ‘pollutant or contaminant linkage’:

<b>Source:</b>	the contaminant
<b>Pathway:</b>	the route through which the contaminant can migrate, and
<b>Receptor:</b>	all human, animal, plant, controlled water or property that may be adversely affected (harmed) by the contaminant

In the absence of one of these elements, on a given site, there is no risk. Where all three elements are present, risk assessment is required to determine the significance of the harm or pollution that is being or may be caused. As outlined above, the terms of the Contaminated Land regime specify that remediation need only be implemented where a site is causing, or there is a significant possibility that it will cause, significant harm, or that pollution of controlled waters is being caused or there is a significant possibility of such pollution being caused.

Development of contaminated land is usually addressed through the application of planning and development legislation and guidance (i.e. NPPF). The suitable for use approach is regarded as the most appropriate basis to deal with contaminated land, taking account of environmental, social and economic objectives. The assessment is made in the context of the proposed land use.



**Risk Classification Matrix**

		Consequence			
		Severe (Sv)	Medium (Md)	Mild (Mi)	Minor (Mr)
Probability	High (Hi)	Very high risk	High Risk	Moderate Risk	Moderate/low risk
	Likely (Li)	High risk	Moderate risk	Moderate/low risk	Low risk
	Low likelihood (Lw)	Moderate risk	Moderate/low risk	Low risk	Very low risk
	Unlikely (Ul)	Moderate/low risk	Low risk	Very low risk	Very low risk

After CIRIA Report C552, Contaminated Land Risk Assessment A Guide to Good Practice, 2001

**Classification of Consequence**

Classification	Definition	Examples
<b>Severe</b>	Short-term (acute) risk to human health likely to result in “significant harm” as defined by the Environment Protection Act 1990, Part IIA. Short-term risk of pollution (note: Water Resources Act contains no scope for considering significance of pollution) of sensitive water resource. Catastrophic damage to buildings/property. A short-term risk to a particular ecosystem or organisation forming part of such ecosystem (note: the definitions of ecological systems within the Draft Circular on Contaminated Land, DETR, 2000).	High concentrations of cyanide on the surface of an informal recreation area. Major spillage of contaminants from site into controlled water. Explosion, causing building collapse (can also equate to a short-term human health risk if buildings are occupied).
<b>Medium</b>	Chronic damage to Human Health (“significant harm” as defined in DETR, 2000). Pollution of sensitive water resources (note: Water Resources Act contains no scope for considering significance of pollution). A significant change in a particular ecosystem or organism forming part of such ecosystem, (note: the definitions of ecological systems within Draft Circular on Contaminated Land, DETR, 2000).	Concentration of a contaminant from site exceeds the generic or site-specific assessment criteria. Leaching of contaminants from a site to a major or minor aquifer. Death of a species within a designated nature reserve. Lesser toxic and asphyxiate effects of carbon dioxide
<b>Mild</b>	Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services (“significant harm” as defined in the Draft Circular on Contaminated Land, DETR, 2000). Damage to sensitive buildings/structures/services or the environment.	Pollution of non-classified groundwater. Damage to building rendering it unsafe to occupy (e.g. foundation damage resulting in instability).
<b>Minor</b>	Harm, although not necessarily significant harm, which may result in a financial loss or expenditure to resolve. Non-permanent health effects to human health (easily prevented by means such as personal protective clothing, etc). Easily repairable effects of damage to buildings, structures and services.	The presence of contaminants at such concentrations that protective equipment is required during site works. The loss of plants in a landscaping scheme. Discoloration of concrete.



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