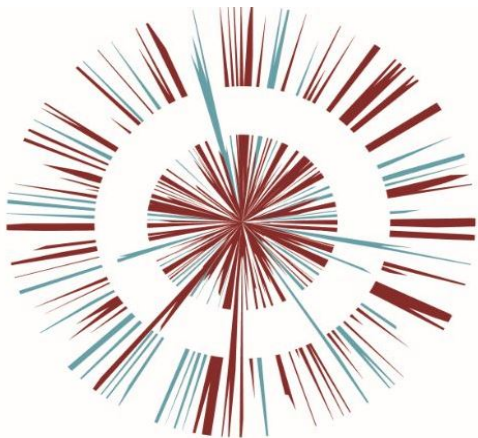




# OMEGA ZONE 8, ST HELENS

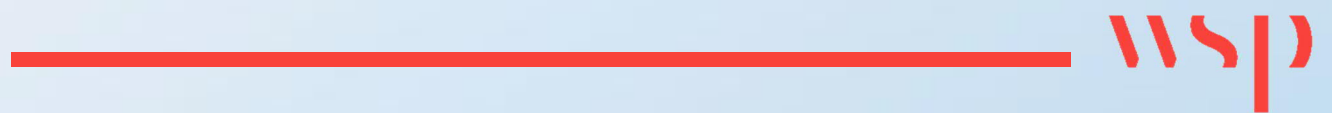
Omega St Helens Ltd / T. J. Morris Limited



Flood Risk Assessment  
Appendix A  
OPP DOC. 1.2

# Appendix A

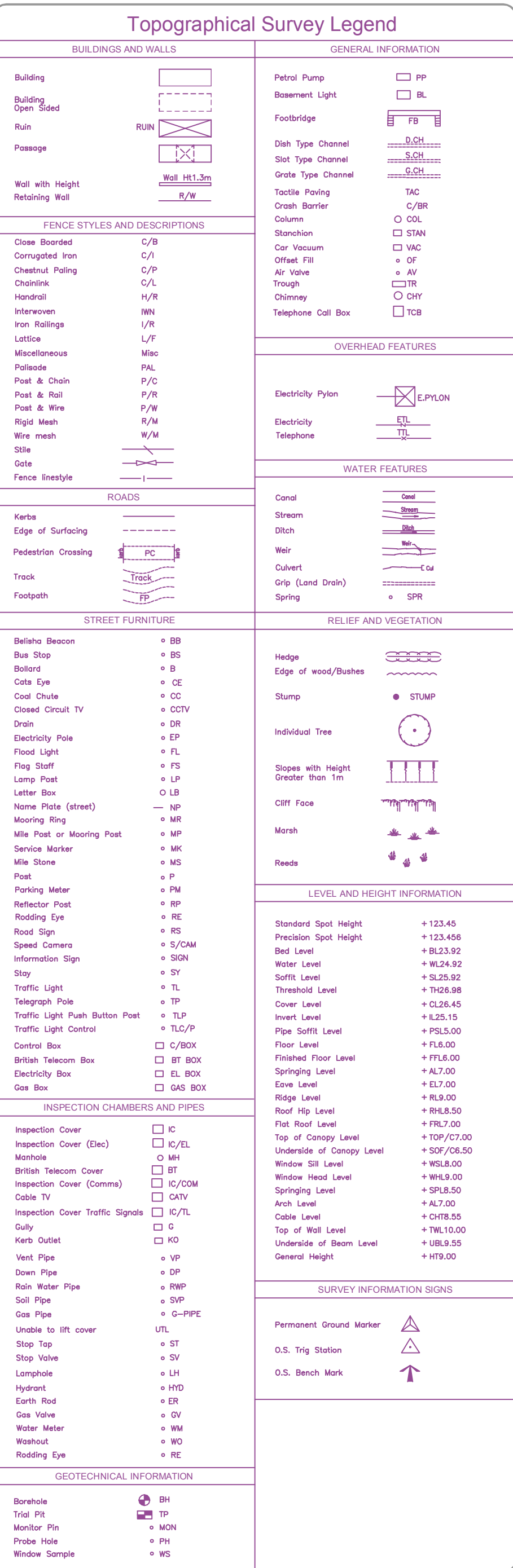
## TOPOGRAPHIC SURVEY



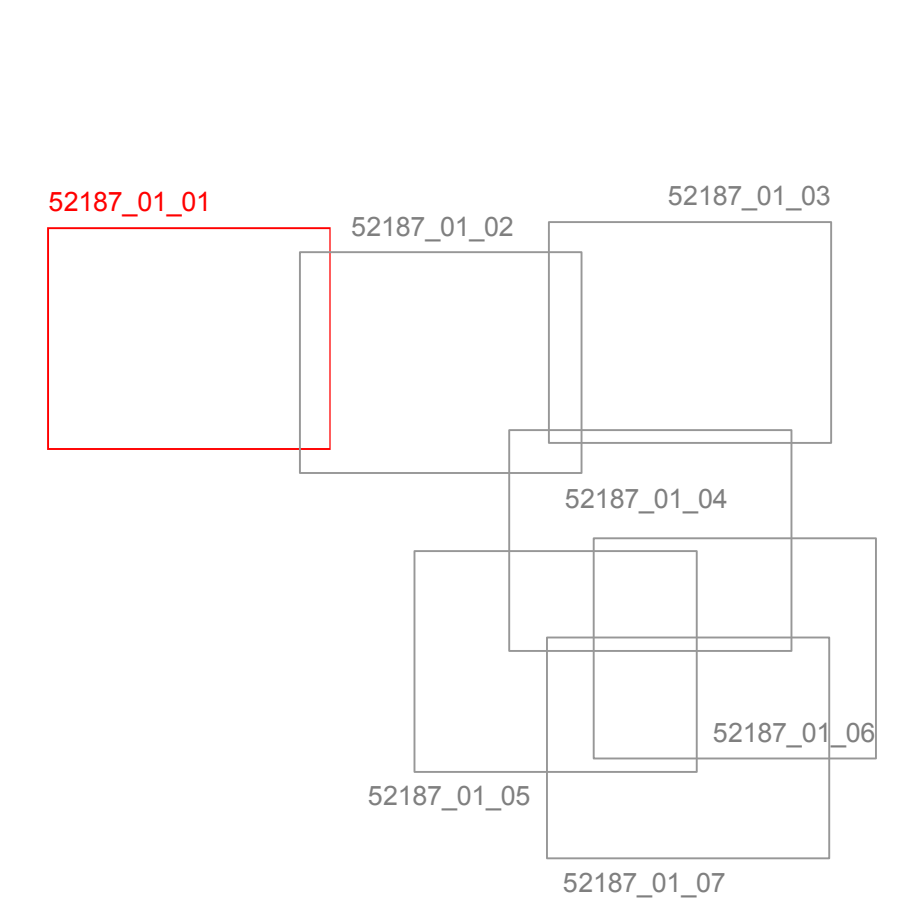


Survey Notes	
Grid:	Local, plane metric related to OS grid
Levels:	OS datum from GNSS positioning, converted using the National Geoid model OSGM15


Notes  
Unable to locate BT line.



Sheet Index



Rev.	Date	Description
A	Aug 2019	Additional areas surveyed
B	Sep 2019	Route of underground gas line & additional topographical survey added.
C	Oct 2019	Additional topographical survey added.



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HUGHES**  
CHARTERED  
LAND SURVEYORS

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www.malcolmhughes.co.uk  
livingston@mhs.co.uk

Accreditations







Client

WSP UK LTD  
THE VICTORIA, 150-182 THE QUAYS  
SALFORD, M50 3SP

Project

OMEGA WEST  
ST HELENS

Drawing Title

Topographical Survey

Sheet 1

Drawn By AS	05/04/19	Survey Date March 2019
Checked by ED	05/04/19	Scale 1:500@A0

Drawing No	52187_01	Revision	C
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Survey Notes

Grid: Local, plane metric related to OS grid  
Levels: OS datum from GNSS positioning, converted using the National Geoid model OSGM15

Notes

Unable to locate BT line.

Topographical Survey Legend

BUILDINGS AND WALLS

Building

Roof

Passage

Wall with height

Retaining Wall

Roof

Roof

Roof

Roof

Roof

POWER LINES

Power Line

Power Line

Power Line

Power Line

Power Line

Power Line

Power Line

Power Line

Power Line

Power Line

ROADS

Edge of Tarmac

Footpath

Footpath

Footpath

Footpath

Footpath

Footpath

Footpath

Footpath

Footpath

STREET FURNITURE

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

Bus Stop

OVERHEAD FEATURES

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

Electricity Pylon

WATER FEATURES

Canal

Canal

Canal

Canal

Canal

Canal

Canal

Canal

Canal

Canal

RULES AND VEGETATION

Hedge

Hedge

Hedge

Hedge

Hedge

Hedge

Hedge

Hedge

Hedge

Hedge

LEVELS AND HEIGHT INFORMATION

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

Intermediate Spot Height

SURVEY INFORMATION SIGNS

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Permanent Ground Marker

Sheet Index

52187\_01\_01

52187\_01\_02

52187\_01\_03

52187\_01\_04

52187\_01\_05

52187\_01\_06

52187\_01\_07

Rev.

Date

Description

A

Aug 2018

Additional areas surveyed

B

Sep 2018

Route of underground gas line & additional topographical survey added

C

Oct 2018

Additional topographical survey added

MALCOLM

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RICS

THE SURVEY ASSOCIATION

ICES

BSI

ISO 9001

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Project

OMEGA WEST

ST HELENS

Drawing Title

Topographical Survey

Sheet 3

Drawn By

AS

05/04/19

Survey Date

March 2019

Checked by

ED

05/04/19

Scale

1:500@A0

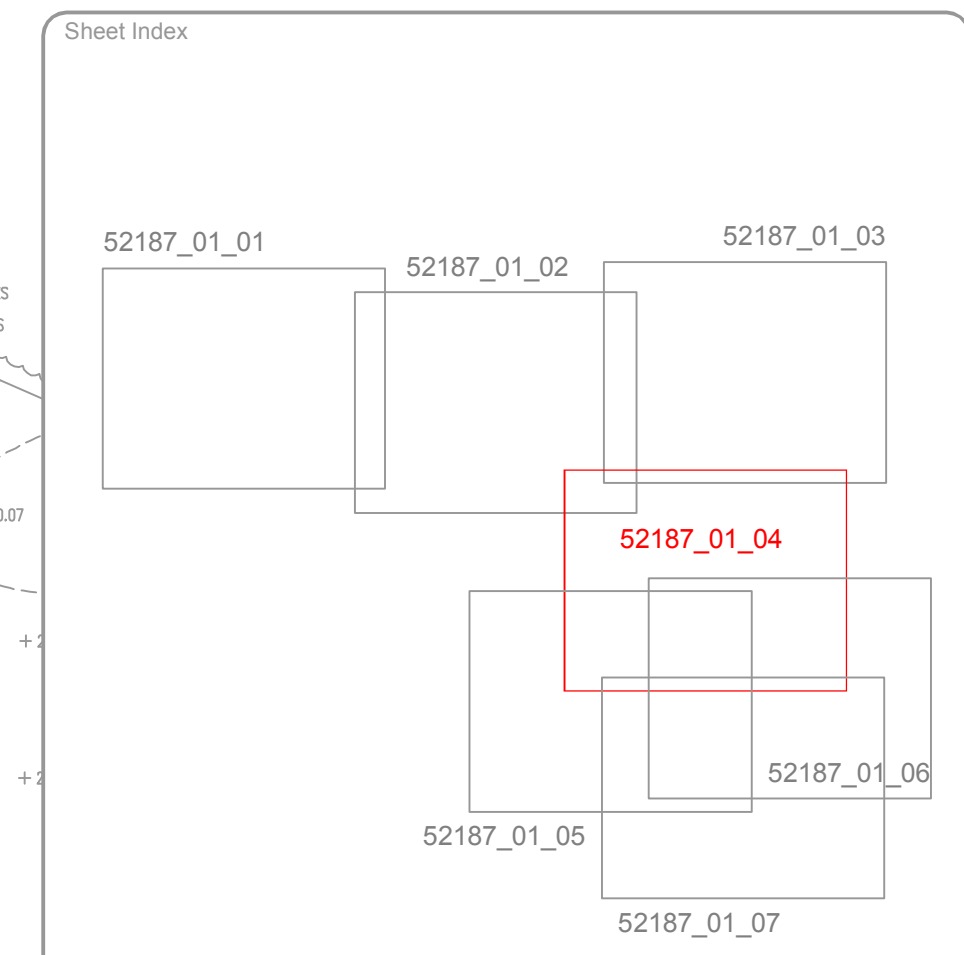
Drawing No

52187\_01

Revised

C



[illegible]

Rev.	Date	Description
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C	Oct 2019	Additional topographical survey added.



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SALFORD, M50 3SP

2017	Project	OMEGA WEST ST HELENS
------	---------	-------------------------

Drawing Title

Topographical Survey

Sheet 4

Drawn By AS 05/04/19		Survey Date March 2019	
Checked by ED 05/04/19		Scale 1:500@A0	
Drawing No 52187_01			Revision C







[illegible]



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Project

OMEGA WEST  
ST HELENS

Drawing Title			
Topographical Survey Sheet 6			
Drawn By		Survey Date	
AS		March 2019	
Checked By		Scale	
ED		1:500/A0	
Drawing No			Revision
52187_01			C



Notes

Local: plane metric related to OS grid

Grid: Levels: OS datum from GNSS points converted using the National Grid datum OSGM15


Notes

Unstable to 0.6 ft line.


Topographical Survey Legend

BUILDINGS AND WALLS


Building




Building Attached



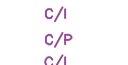
Run




Wall



Wall with Height




Wall with Top




ENCE STYLES AND DESCRIPTIONS


Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze



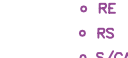
Clay Breeze




Clay Breeze




Clay Breeze




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Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze




Clay Breeze



Clay Breeze




Clay Breeze




GENERAL INFORMATION


Point Pump




Boundary




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change




Date Type Change



Date Type Change




Date Type Change




OVERHEAD FEATURES

Electricity Pole




Electricity




WATER FEATURES


Canal




Stream




Drain




Water




Spring




Gate (See Grid Note)



Quarry




Gravel




ROADS


kerbs




Edge of Surfacing



Footpath




Town




STREET FURNITURE


Belted Bench




Bus Stop




Bus



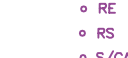
Car




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist




Clay Cist



Clay Cist




Clay Cist




RELIEF AND VEGETATION


Hedge




Edge of Wood/Bush




Shrub




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass




Grass



Grass




Grass




LEVELS AND HEIGHT INFORMATION


Mean Sea Level




Mean Sea Level



Mean Sea Level




Mean Sea Level




INSPECTION CHAMBERS AND PIPES


Inspection Chamber




Inspection Chamber (Open)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



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Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)



Inspection Chamber (Closed)

Rev.	Date	Description
A	Aug 2019	Additional areas surveyed
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C	Oct 2019	Additional topographical survey added.



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Project

OMEGA WEST  
ST HELENS

Drawing Title

Topographical Survey

Sheet 7

Drawn By	AS	05/04/19	Survey Date	March 2019
Checked by	ED	05/04/19	Scale	1:500@A0
Drawing No			Revision	
52187_01			C	