

**FORMER TETROSYL WORKS,
BEVIS GREEN, BURY**

**REMEDIATION EARTHWORKS
COMPLETION REPORT –
PHASE 1**

For: Urban Regen Ltd.

November 2020

Report Ref: R2174C-R04-v2

DOCUMENT CONTROL SHEET

Report Title: Former Tetrosyl Works, Bevis Green, Bury
Remediation Earthworks Completion Report – Phase 1

Client: Urban Regen Ltd

Report Reference Number: R2174C-R04

Report Status: Final

Version: v2

Report Date: November 2020

Signed for Smith Grant LLP

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Document Revision Record:

Version	Report Status	Date	Details of Revision
v1	Draft	27.10.20	Issue to client for comment, pending provision of site records and drawings.
v2	Final	20.11.20	Final for issue including previously outstanding site records and drawings.

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1. Introduction

- 1.1. Urban Regen Ltd. (URL) was instructed by Barratt Homes Manchester (BH) to carry out remediation and preparatory earthworks in accordance with the approved Outline Remediation Strategy (report ref. R2174-R01-v2) produced by Smith Grant LLP (SGP) to prepare a parcel of land off Mill Road, Bury, Greater Manchester for residential redevelopment with private gardens, associated infrastructure and public open space.
- 1.2. To allow development to commence as early as possible, SGP has been instructed by URL to produce individual Completion Reports following phased completion of the earthworks. This report refers to the Phase 1 area located in the northwest of the site as detailed on Drawing D01. For the avoidance of doubt, this report only refers to the Phase 1 area only, the extent of which is indicated on the attached Drawings. Site details are:

Table 1.1: Site Details

Address	Former Tetrosyl Works, Mill Road, Bury, BL9 6RE
National Grid Reference	380950, 413950
Local Authority	Bury Metropolitan Borough Council (BMBC)
Site Area	Total ~104,000m ² / development area ~72,000m ²
Previous Site Use	Office, warehouse, and packaging operations for chemical products used in vehicle maintenance
Planning Reference	63533
Proposed Use	Residential development with private gardens, associated infrastructure, and public open space.

Figure 1.1 Site Location



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- 1.3. Planning Permission for redevelopment of the site has been granted by BMBC (ref. 63533). The Planning Conditions relevant to land contamination issues are reproduced below:

Table 1.2: Planning Conditions relating to Contaminated Land

4	No development, other than site clearance, demolition, or works relating to site investigation remediation or ground works, shall commence unless and until: - • A contaminated land Preliminary Risk Assessment report to assess the actual/potential contamination and/or ground gas/landfill gas risks at the site shall be submitted to, and approved in writing by, the Local Planning Authority. • Where actual/potential contamination and/or ground gas/landfill gas risks have been identified, detailed site investigation and suitable risk assessment shall be submitted to and approved in writing by the Local Planning Authority. • Where remediation/protection measures is/are required, a detailed Remediation Strategy shall be submitted to, and approved in writing by, the Local Planning Authority.
5	Following the provisions of Condition 4 of this planning permission, where remediation is required, the approved Remediation Strategy must be carried out to the satisfaction of the Local Planning Authority within agreed timescales; and A Site Verification Report detailing the actions taken and conclusions at each stage of the remediation works, including substantiating evidence, shall be submitted to, and approved in writing by the Local Planning Authority prior to the development being brought into use.

- 1.4. An Outline Remediation Strategy (ORS) for the whole Tetrosyl development site, including Phase 1, was prepared by SGP (ref: R2174-R01-v2; May 2019). The general provisions of the ORS were approved by both BMBC (ref: CL584.240719.1; July 2019) and the Environment Agency (EA) (February 2020) provided that further targeted site investigation and risk assessment was carried out to confirm risks from ground gas and vapours and to pollution of controlled waters, with subsequent Detailed Remediation Strategies (DRS) produced if such risks were identified.
- 1.5. SGP has since produced a Phase 1 Supplementary Site Investigation (report ref: R2174C-R02-v1; June 2020) which included targeted soil sampling in the two identified potential hotspots within Phase 1 and a ground gas and VOC vapour monitoring programme in all parts of Phase 1 and an area to the south. A Phase 1 Supplementary Groundwater Investigation (report ref: R2174c-R03-v1, October 2020) has also been completed. It is noted that these investigations cover all of Phase 1 and an area to the south which is currently being utilised for the temporary stockpiling of materials.
- 1.6. All of the investigations tested the various media for a comprehensive range of organic contaminants. Although low concentrations of some substituted compounds were detected, nearly all of the substances detected, and all those present at elevated concentrations, were aromatic or aliphatic hydrocarbons. The site investigation confirmed the presence of soil hydrocarbon contamination at the locations of suspected hotspots 'HS12' and 'HS15' in Phase 1. The VOC

vapour and groundwater monitoring indicated that localised low levels of hydrocarbon VOC impacts were widespread, but concentrations with the potential to impact human health were limited to the eastern parts of the Phase 1 area. Significant groundwater contamination within the Phase 1 area was found to be localised to an area near HS12 at WS311, but pollution migration impacting the aquifer downgradient of this location was not occurring, so specific measures to address soils contamination beyond the removal of the primary and secondary sources was not required.

- 1.7. Based on the findings of the investigations, and the outcomes of the risk assessments, it was determined that that deviation from the provisions of the existing ORS are not required with respect to the management of risks to human health or controlled waters within Phase 1. A supplementary DRS was therefore not deemed necessary for Phase 1, with the requirements for Planning Condition 4 for this area satisfied by the provisions within the ORS.
- 1.8. SGP carried out site inspections contemporaneously with the remediation earthworks and observed excavations to remove impacted soils from the two contamination hotspots area and collected verification samples from residual soils and from recovered materials in accordance with the Verification Plan.
- 1.9. This Completion / Verification Report contains the following information / records:
 - details of completed remediation activities;
 - a summary of SGP's inspection records and notes;
 - validation data;
 - conclusions as to the adequacy of the works completed, and;
 - recommendations for any further mitigation required during the construction phase of development.
- 1.10. Those elements of the Remediation Strategy concerning preparatory earthworks have been implemented by URL. The construction phase of development will now be carried out by BH.

2. Outline Remediation Strategy and Phase 1 Supplementary Site Investigations

2.1. Contamination Sources

2.1.1. The contamination assessment detailed in the ORS and confirmed by the supplementary site investigations identified the following contamination sources within Phase 1:

- the presence of made ground soils confirmed locally as containing elevated concentrations of metals, PAHs, non-volatile hydrocarbons, and trace asbestos fibre (these contaminants are assumed to be widespread within the site made ground soils);
- hydrocarbon hotspot in the centre-east of Phase 1 attributed to the past presence of an above ground storage tank (diesel) located to the direct north of former 'Building 2' - referred to as HS12, and;
- hydrocarbon hotspot in the northeast of Phase 1 attributed to the past presence of an above ground storage tank (heating oil) located to the direct north of former 'Building 3' - referred to as HS15.

2.2. Assessment of Ground Gas / VOC Risks

2.2.1. As described in the Phase 1 Supplementary Site Investigation, a VOC sampling programme was undertaken which detected the presence of low-level hydrocarbon vapours within the monitoring wells installed across Phase 1. Based on the recorded concentrations, the eastern part of Phase 1 was determined as requiring precautionary VOC resistant membranes.

2.2.2. A ground gas monitoring programme was also undertaken which identified elevated moderately concentrations of carbon dioxide and methane at various locations across Phase 1. It was therefore determined that outside of the areas that require a VOC resistant membrane, CS2 / NHBC Amber 1 gas protection measures were required as a minimum for all plots within Phase 1. More comprehensive gas protection measures may be required in the southwest of Phase 1 due to the recorded presence of elevated methane, however this area does not fall within the Phase 1 boundary and will be assessed in a future phase of earthworks inspections.

2.3. Assessment of Groundwater Pollution Risks

2.3.1. As described in the Phase 1 Supplementary Groundwater Investigation, most groundwater monitoring wells, including all of those at the downgradient monitoring positions to the suspected potential source areas, and downgradient for all parts of Phase 1, did not contain elevated concentrations of pollutants. While significantly elevated concentrations of hydrocarbons were present near HS 15, the source does not appear to be causing pollution downgradient. Therefore, while the removal of impacted made ground and soils at this location was considered beneficial, measures to address concentrations within the groundwater and unsaturated rock aquifer were not

deemed necessary. AT HS15, where more pronounced groundwater impacts were recorded, similar means of removing primary and secondary sources were recommended, however consultation with the Environment Agency indicated that further steps to reduce free product that had entered the groundwater at this location would be desirable.

2.4. Remediation Objectives

2.4.1. The remediation objectives and implementation plan for the preparatory-stage earthworks were designed to address any potential contamination that may persist on site and could present a risk to human health receptors and built development following redevelopment of the site to a residential use. Key remediation objectives were therefore:

- break significant or potentially significant future pollutant linkages resulting from the change of land use;
- remove / remediate significant pollution sources if identified during the works that pose a risk to man and/or the environment;
- respond appropriately to contingencies, in particularly the discovery of currently uncharacterised contamination;
- removal of obstructions, relict services and other deleterious materials identified during the preparatory works;
- recover materials with the potential for re-use within the development (i.e. aggregates);
- manage all emissions to controlled waters and the atmosphere (i.e. dust) during the remediation works to protect local residents, and;
- allow appropriate additional protection measures to be implemented during construction.

2.5. Scope of Remediation Earthworks

2.5.1. Enabling works included:

- demolition of existing buildings following asbestos strip;
- establishment of security fencing, site offices and welfare facilities;
- vegetation clearance, and;
- removal of surface waste deposits.

2.5.2. Remediation earthworks included:

- removal of ground floor slabs, roads, relict foundations, and other sub-structures;
- excavation of made ground materials to allow inspection of ground conditions and facilitate the removal of obstructions, relict structures, and voids, followed by replacement and compaction of site fills;
- excavation of the 'HS12' and 'HS15' hydrocarbon hotspots and removal of the arisings to an area within the wider development for either treatment or disposal;

- crushing of suitable hard materials onsite (i.e. masonry, concrete, and brick) to recover aggregate for reuse in roadways and plot footprints, and;
- filling / regrading of the site to specified levels for foundation, road, and sewer construction, and to permit the subsequent formation of the agreed clean soil cover in private gardens by the developer.

2.6. The Strategy specified that an independent contaminated land consultant would attend site to inspect the works throughout the preparatory earthworks programme to allow inspection of the ground conditions, oversee excavation of the hydrocarbon hotspots, and to confirm the presence / absence of any previously unidentified contamination. It was also specified that records of the inspections and the results of all verification and validation testing be submitted to the Regulatory Authority within a Completion Report.

3. Description of Works

3.1. General Approach

- 3.1.1. The Phase 1 preparatory and remediation earthworks were carried out over a 3-month period from June 2020 to September 2020. A record of SGP's inspections of the works is provided in Section 4 with information provided by URL used to supplement SGP's observations of the works, as summarised below.
- 3.1.2. Following the demolition works and removal of surface wastes and vegetation, relict surface slabs / hardstanding and foundations were broken out and excavated and the recovered materials were transferred to a feedstock stockpile in the wider Phase 1 area to the south. Excavation of the 'HS12' and 'HS15' hydrocarbon hotspots were also carried out during the early stages of the works under the observation of SGP which is discussed in more detail in Sections 4.2 and 4.3.
- 3.1.3. Excavation and replacement of made ground soils then commenced with the recovery of relict structures and oversized masonry which were added to the feedstock stockpile to the south of Phase 1. Made ground was excavated down to natural ground which was encountered at shallow depths (<2m) in all areas; the depth of excavation and replacement of made ground is indicated on the URL 'Base of Excavation' drawing (ref: 333 - 1120 - 001). The site was then regraded to development formation levels allowing for the provision of 600mm soil cover in future garden areas which is to be placed by the developer. Over nearly all of Phase 1, this involved a 'cut' into natural soils, and rockhead, although made ground was placed to some limited areas.
- 3.1.4. The feedstock stockpile of site recovered concrete / masonry underwent inspection, breaking, crushing, and screening to produce aggregate which was, in part, reused on Phase 1 for the construction of roads and temporary works, specifically construction platforms for future dwellings.
- 3.1.5. The appended URL 'As Built Survey' drawing (ref: 333 - 1120 - 002) indicates the final site levels achieved.

3.2. Materials Management

- 3.2.1. Waste materials removed from the site included scrap metal, wood, and general waste (plastics etc.). URL has provided a Waste & Disposal Log and records of the scrap metal removed offsite (Appendix C). Detailed documentation relating to the transfer of materials from the site is held by URL which is available upon request.
- 3.2.2. Following processing of the hardstanding / masonry recovered during the Phase 1 preparatory earthworks, a total of 3,800m³ of aggregate was generated. Of this, approximately 1,000m³ was placed within Phase 1 for basal road construction and ~800m³ to form development platforms for the construction of dwellings; the remaining circa 2,000m³ of site-generated aggregate remains

stockpiled within the wider Phase 1 area to the south. Testing of this material has been carried out by SGP and is discussed in Section 4.4.

3.2.3. Japanese Knotweed has been excavated within the wider development area which has been treated and buried at depth within Phase 1. The location of the Knotweed burial is indicated on MMP Tracking Record – 28/09/20 (Appendix D).

3.2.4. Regrade to remediation formation levels was achieved by the cutting and movement of materials in accordance with the site Materials Management Plan (MMP), Phase 1 has generated a large surplus of materials which have been removed to a temporary stockpile to the south of Phase 1 on the former works car park. This material will be utilised as bulk fill in subsequent earthworks phases.

3.2.5. Copies of URL's material tracking records are provided in Appendix D.

3.3. Unforeseen Contamination

3.3.1. No previously uncharacterised contamination was encountered during the works. Exposed made ground soils were consistent with the previous site characterisation.

3.4. Constraints and Limitations

3.4.1. The only constraints to the remediation earthworks completed within the Phase 1 working area was the potential presence of live services to the west of the site and the presence of a security fence which needed to be retained; the remediation works have therefore been taken up to 1m of the western site boundary: this area was not previously developed or used for storage of polluting materials and there appears to be a natural soil profile present where exposed so this has not contained the works undertaken to manage land contamination risks.

4. Inspections and Testing

4.1. Site Attendance and Testing

4.1.1. SGP attended site 15 times during the Phase 1 preparatory earthworks over a 3-month period (25.06.20 - 28.09.20). A photographic record of the works has been made and representative images are presented in Appendix A.

4.1.2. Where samples were collected for chemical analysis, appropriate containers were used, the samples were stored in a chilled cool box and were couriered to accredited laboratories (Element Material Technology, Deeside and Chemtest Ltd, Newmarket). SGP retains chain of custody documentation and laboratory analysis certificates are provided in Appendix B.

4.1.3. A summary of the dates and records of inspections undertaken by SGP within the subject area is presented below:

Table 4.1 Summary of inspection records

Date	Description of works	SGP activities	Records
25.06.20	No remediation works at time of inspection. Slab of 'Building 3' broken out prior to visit.	Site inspection	App A: Photos 1-3
02.07.20	Excavation of 'HS12' hydrocarbon hotspot.	Site inspection / observing hotspot excavation / soil sampling.	App A: Photos 4-8 App B: 20/8505
10.07.20	No remediation works at time of inspection.	Site inspection	N/A
16.07.20	Excavation of 'HS15' hydrocarbon hotspot; breakout of 'Building 2' slab; excavation and replacement of made ground soils completed in north prior to inspection.	Site inspection / observing hotspot excavation / soil sampling.	App A: Photos 9-15 App B: 20/9342
22.07.20	Excavation and replacement of made ground soils in west.	Site inspection	App A: Photos 16
31.07.20	Crushing of hardstanding recovered from Phase 1 to produce aggregate for reuse on site.	Site inspection / aggregate sampling	App A: Photo 17 App B: 20/20751-2
06.08.20	Regrade of site levels in west; excavation and replacement of made ground soils completed in central areas prior to inspection.	Site inspection	App A: Photos 18-21
13.08.20	No remediation works at time of inspection.	Site inspection	App A: Photos 22-24
17.08.20	Regrade of site levels in north and compaction of relocated soils.	Site inspection	App A: Photo 25
27.08.20	No remediation works at time of inspection; flooded areas in south of site being pumped using tractor and bowser.	Site inspection	App A: Photos 26-27
02.09.20	Regrade of site levels in centre-northwest; site recovered aggregate placed in footprints of future dwellings for use as development platforms in north and west prior to site inspection.	Site inspection	App A: Photos 28-30

Date	Description of works	SGP activities	Records
10.09.20	Regrade of site levels in centre-northeast.	Site inspection	App A: Photos 31
16.09.20	Regrade of site levels in southwest.	Site inspection	App A: Photos 32-34
21.09.20	Regrade of site levels in south; aggregate placed as road base along roadways in east prior to site inspection.	Site inspection	App A: Photos 35-37
28.09.20	Regrade of site levels in southeast and removal of excess soils to stockpile in wider Phase 1 area to south. Remediation works complete in central and northern areas.	Site inspection	App A: Photos 38-45

4.2. 'HS12' Hydrocarbon Hotspot Removal

- 4.2.1. SGP attended site on 02nd July 2020 to oversee and validate the removal of impacted soils associated with the 'HS12' hydrocarbon hotspot. The works involved the excavation and side-cast of soils exhibiting contamination indicators such as: hydrocarbon odours, staining and/or significantly elevated readings of volatile organic compounds (VOCs) above 50ppm when screened with a photoionization detector (PID), as per the requirements of the SGP Outline Remediation Strategy / E3P Remediation & Enabling Works Strategy.
- 4.2.2. A concrete slab was initially broken out in the 'HS12' area to approximately 0.25m bgl beneath which impacted soils were encountered and excavated down to sandstone bedrock to depths of between 0.8m-1.2m bgl. The excavation was undertaken by URL with SGP in attendance and impacted soils were removed laterally and vertically until either competent bedrock was encountered (base and southern sidewall) or until significant contamination indicators were no longer present (northern, eastern, and western sidewalls). The sidewalls were screened with a PID until measured concentrations were below the specified control limit (<50ppm) to confirm the adequacy of the works. The highest PID reading of the arisings was 79ppm and no readings above 10ppm were recorded at any of the excavation extents.
- 4.2.3. The total area of the excavation measured approximately 4m x 10m with ~30m³ of impacted soils removed and subsequently placed on an impermeable surface within the wider development area. The location of the 'HS12' hotspot area is shown on Drawing D01 and the excavation extents and locations of the validation samples are indicated on figure 4.1 below.
- 4.2.4. Eight samples ('HS12-SS1' to 'HS12-SS8') were collected by SGP from the sidewalls and base of the excavation which were submitted for banded hydrocarbon analysis. The results are compared to the screening criteria presented in Table 6.1 of the SGP Outline Remediation Strategy and are summarised in Table 4.2 below. A copy of the laboratory report (Element ref. 20/8505) is provided in Appendix B.

Figure 4.1: 'HS12' Validation Sample Locations

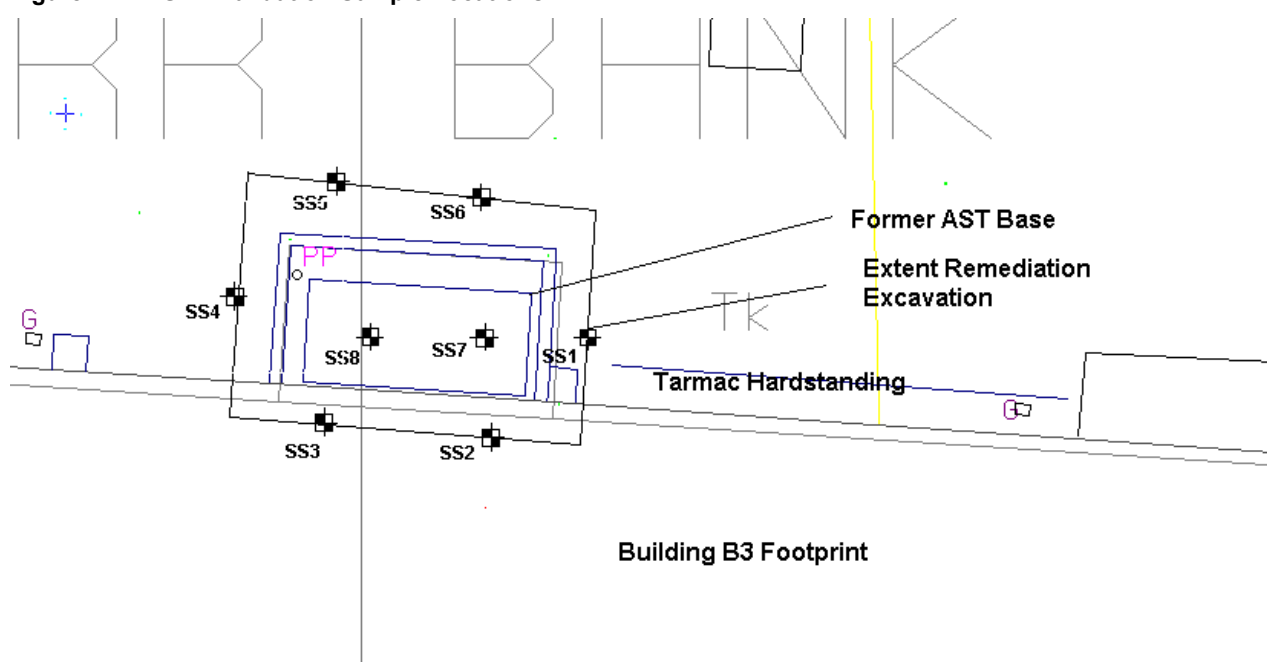


Table 4.2 'HS12' Hydrocarbon Hotspot Removal Validation Samples Results

Contaminant	Samples	Range of Concentrations (mg/kg unless stated)	Screening criteria (mg/kg unless stated) *	Exceedances: number & sample(s)
Aliphatic TPH >C5-C6	8	<0.1	42	None
Aliphatic TPH >C6-C8	8	<0.1-0.9	100	None
Aliphatic TPH >C8-C10	8	<0.1-4.3	27	None
Aliphatic TPH >C10-C12	8	<0.2-195.1	130	1: HS12-SS4
Aliphatic TPH >C12-C16	8	4-790	1,100	None
Aliphatic TPH >C16-C21	8	24-1,064	65,000	None
Aliphatic TPH >C21-C35	8	59-515	65,000	None
Aromatic TPH >C5-C7	8	<0.1	70	None
Aromatic TPH >C7-C8	8	<0.1	130	None
Aromatic TPH >C8-C10	8	<0.1-0.4	34	None
Aromatic TPH >C10-C12	8	<0.2-73.3	74	None
Aromatic TPH >C12-C16	8	<4-402	140	1: HS12-SS4
Aromatic TPH >C16-C21	8	<7-535	260	1: HS12-SS4
Aromatic TPH >C21-C35	8	<7-298	1,100	None

4.2.5. Minor to moderate exceedances of the screening criteria were reported in a single sample 'HS12-SS4' collected from the western excavation extent for the aliphatic hydrocarbon C10-12 fraction at 195.1 mg/kg (screening criteria 130 mg/kg) and the aromatic hydrocarbon fractions C12-16 at 402 mg/kg (screening criteria 140 mg/kg) and C16-21 at 535 mg/kg (screening criteria 260 mg/kg). The impacted superficial material was deemed to have been fully removed although the downgradient monitoring boreholes in the south of Phase did not indicate substantial pollution migration from the area, the presence of free product in the nearby WS311

4.3. HS15' Hydrocarbon Hotspot Removal

- 4.3.1. SGP attended site on 16th July 2020 to oversee and validate the removal of impacted soils associated with the 'HS15' hydrocarbon hotspot. The works again involved the excavation and side-cast of soils exhibiting contamination indicators such as hydrocarbon odours, staining and/or significantly elevated readings of VOCs above 50ppm when screened with a PID.
- 4.3.2. Impacted soils were encountered at surface level within the 'HS15' area and were excavated down to sandstone bedrock to depths of between 1.2m-1.6m bgl. Remedial excavations were undertaken by URL with SGP in attendance and impacted soils were removed laterally and vertically until either competent bedrock was encountered (base) or until significant contamination indicators were no longer present (sidewalls). The sidewalls were screened with a PID until measured concentrations were below the specified control limit (<50ppm) to confirm the adequacy of the works. The highest PID reading recorded from the arisings was 150ppm and no readings above 10ppm were recorded along the sidewalls, although impacted bedrock was noted at the base of the excavation with PID readings up to 70ppm recorded following stripping back of superficial materials and weathered rock to competent strata.
- 4.3.3. The total area of the excavation measured approximately 124m³ with circa 75m³ of impacted soils removed and subsequently placed on an impermeable surface within the wider development area. The location of the 'HS15' hotspot area is shown on Drawing D01 and the excavation extents and locations of the validation samples are provided in figure 4.2 below. Thirteen samples ('HS15-SS1' to 'HS15-SS13') were collected by SGP from the sidewalls and base of the excavation which were submitted for banded hydrocarbon analysis. The results are compared to the screening criteria presented in Table 6.1 of the SGP Outline Remediation Strategy and are summarised in Table 4.3 below. A copy of the laboratory report (Element ref. 20/9342) is provided in Appendix B.

Figure 4.2: 'HS15' Validation Sample Locations

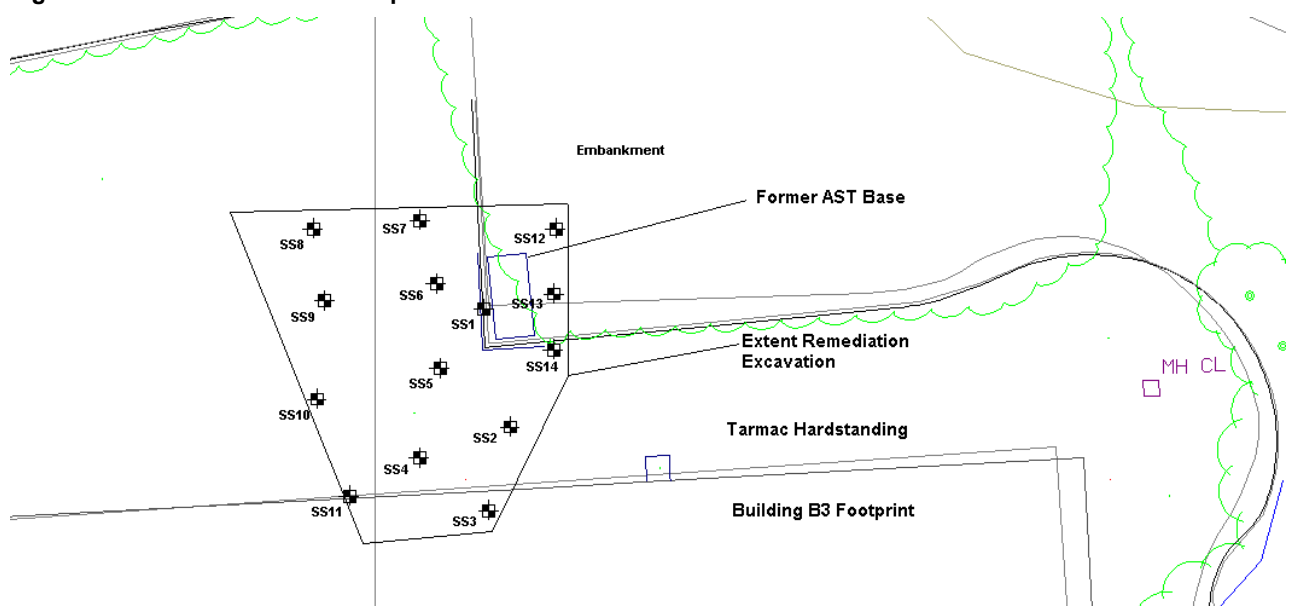


Table 4.3 'HS15' Hydrocarbon Hotspot Removal Validation Samples Results

Contaminant	Samples	Range of Concentrations (mg/kg unless stated)	Screening criteria (mg/kg unless stated) *	Exceedances: number & sample(s)
Aliphatic TPH >C5-C6	13	<0.1	42	None
Aliphatic TPH >C6-C8	13	<0.1-0.3	100	None
Aliphatic TPH >C8-C10	13	<0.1->>43.1	27	1: HS15-SS1
Aliphatic TPH >C10-C12	13	<0.2-18.4	130	None
Aliphatic TPH >C12-C16	13	4-13	1,100	None
Aliphatic TPH >C16-C21	13	<7-27	65,000	None
Aliphatic TPH >C21-C35	13	<7-135	65,000	None
Aromatic TPH >C5-C7	13	<0.1	70	None
Aromatic TPH >C7-C8	13	<0.1	130	None
Aromatic TPH >C8-C10	13	<0.1-0.8	34	None
Aromatic TPH >C10-C12	13	<0.2-3224.2	74	3: HS15-SS1, HS15-SS5 & HS15-SS6
Aromatic TPH >C12-C16	13	<4-10	140	None
Aromatic TPH >C16-C21	13	<7-14	260	None
Aromatic TPH >C21-C35	13	<7-344	1,100	None

4.3.4. A minor exceedance of the screening criteria was reported in sample 'HS15-SS1' for the aliphatic hydrocarbon C8-10 fraction at 43.1 mg/kg (screening criteria 27 mg/kg) which was collected from the southwest corner of the excavation, although it should be noted that this result fell outside of the laboratory's calibration range and should be treated as a minimum value.

4.3.5. Three exceedances of the screening criteria were reported for the aromatic hydrocarbon C10-12 fraction at 3224.2 mg/kg (sample 'HS15-SS1'), 348 mg/kg (sample 'HS15-SS6') and 121.9 mg/kg (sample 'HS15-SS5') against a screening value of 74 mg/kg. The most significant exceedance was reported in excess of 40x the screening criteria and was collected from the southwest corner of the excavation ('HS15-SS1') with the other 2 exceedances collected from the bedrock base ('HS15-SS5') and eastern sidewall ('HS15-SS6').

4.3.6. The impacted superficial material was deemed to have been fully removed although some impacts to the underlying rock are apparent. Given the standing recommendations for cover systems and VOC vapour protection measures in this area, and the results of groundwater monitoring indicating no significant pollution migration has occurred, no further excavation was required in the 'HS12' hotspot area which is discussed in more detail in Section 5.

4.4. Validation of Site Generated Aggregate

4.4.1. Approximately 3,800m³ of aggregate was generated from recovered hardstanding, sub-surface relict structures and oversized materials during the Phase 1 preparatory earthworks. Approximately 1,800m³ of this material was placed in Phase 1 along roadways as sub-base (~1,000m³) and within plot footprints as development platforms (~800m³) with the remaining circa 2,000m³ stockpiled within the wider Phase 1 site area at the time of completion of the Phase 1 remediation works.

- 4.4.2. SGP attended site and collected a total of 9 samples of this material in stockpile on 31.07.20 satisfying the 1 per 500m³ sampling frequency specified in the SGP Outline Remediation Strategy.
- 4.4.3. Samples were submitted to Eurofins Chemtest Ltd for asbestos analysis to determine its suitability for reuse within the development and the results are provided in laboratory certificate 20-20751-2 (samples: SW-Agg-S1 to SW-Agg-S9). The laboratory certificate is provided in Appendix B and the results are summarised in table 4.4 below.
- 4.4.4. No assessment criterion was provided within the Remediation Strategy for asbestos used in roadways / plot footprints and so the laboratory quantification limit of detection (<0.001%) has been utilised. Any exceedances of the quantification limit require further assessment to determine the suitability of the material for use.

Table 4.4 Site Generated Aggregate Testing Results

Contaminant	Samples	Range of Concentrations (mg/kg unless stated)	Residential Use	
			Screening criteria (mg/kg unless stated)	Exceedances: number & sample(s)
Asbestos	9	<0.001%	0.001%	None

- 4.4.5. Positive identification of asbestos was reported in all 9 samples comprising chrysotile (fibres / clumps). Quantification analysis was then scheduled to determine the mass of fibres present which confirmed that all samples with a positive fibre identification contained concentrations below laboratory detection limits (<0.001%).

5. Conclusions

- 5.1. URL has carried out the Phase 1 preparatory and remediation earthworks at the former Tetrosyl Works, Mill Road, Bury site and SGP has undertaken independent inspections and testing of materials in accordance with the approved Remediation Strategy.
- 5.2. The ground conditions encountered were consistent with those described in the previous reporting and no revisions to the agreed Strategy have been required as a result of the inspections, investigations and assessments carried out contemporaneously with the remediation earthworks. While removal of the hydrocarbon impacted soils for HS12 & HS15 was deemed an appropriate remediation objective, based on the lack of very large exceedances of human health criteria for VOC vapours (See Report R2174-R02) and downgradient groundwater impacts (See Report R2174-R03), some residual impacts to the underlying sandstone were deemed acceptable for these areas.
- 5.3. Excavation of the 'HS12' hydrocarbon hotspot has been carried out in accordance with the Remediation Strategy and the validation samples collected from the excavation extents generally confirmed successful removal of the impacted soils. Minor to moderate exceedances were, however, reported within a single sample collected from the western excavation extent for several aliphatic and aromatic hydrocarbons but these were dominated by the presence of heavier, less volatile fractions in the underlying sandstone rock.
- 5.4. Application of a 600mm clean, soil cover system and installation of gas protection measures, which include provision for VOC vapour membranes in this area (see Section 6), will offer adequate protection to future site users from the residual concentrations identified. However, based on the groundwater results from nearby monitoring well WS311 and consultations with the environment Agency measures to reduce the amount of free product present in the local groundwater are required.
- 5.5. Excavation of the 'HS15' hydrocarbon hotspot has been carried out in accordance with the Remediation Strategy and the validation samples collected from the excavation extents generally confirmed successful removal of the impacted soils. Exceedances were, however, reported within 3 of the 13 samples for the aliphatic C8-10 and aromatic C10-12 hydrocarbon fractions. The exceeding samples were collected from the bedrock base, for which there is no requirement for removal.
- 5.6. Application of a 600mm clean, soil cover system and installation of gas protection measures, which include provision for VOC vapour membranes in this area (see Section 6), will offer adequate protection to future site users from the residual concentrations identified. Groundwater concentrations at this location were lower, and the lack of any impacts in the immediately

downgradient monitoring wells did not indicate any migration has taken place. No further measures to reduce or remove residual sources are therefore planned for this area.

- 5.7. Testing of the Phase 1 generated aggregate has been completed in accordance with the Remediation Strategy with screening for asbestos. In the absence of assessment / suitability criteria, the analytical quantification limit of <0.001% was adopted. Incidences of asbestos fibres were reported within all of the samples of site-generated aggregate; however, quantification of the fibre masses were below quantification limits (<0.001%) in all instances.
- 5.8. It is concluded that the Phase 1 preparatory remediation earthworks have been completed in accordance with the ORS, and that remaining mitigation measures to manage residual risks may be limited to those requiring implementation under the construction stage remediation plan as set out in the ORS and supplementary site investigation reporting and risk assessments for the Phase 1 area with the single acceptance of the area immediately around HS12 / WS311 where further measures to assess the level of residual free product within the Rough Rock Aquifer are required.

6. Recommendations

- 6.1. It is recommended that due to the presence of trace asbestos fibre within the placed site-generated aggregate appropriate control measures in accordance with CAR2012 should be implemented during any disturbance to it to minimise the level of exposure to site workers. This is likely to entail dust suppression techniques as would be required anyway to minimise dust generation as part of best practice.
- 6.2. In accordance with the recommendations contained within the SGP Outline Remediation Strategy, the developer is required to place a soil cover system in all gardens / landscaped areas comprising the following:
- a minimum 100mm break layer of compacted recycled aggregate – OR – a suitable warning / barrier geotextile at the compacted interface of the formation / base of soil cover in all gardens, and;
 - 600mm clean soil cover within garden areas typically comprising 450mm of subsoil and 150mm of imported topsoil (all plots), with a reduced thickness of 450mm in landscape areas.
- 6.3. The importation of garden / landscaping soils is required and should be carried out at a frequency of 1 sample per 100m³, reduced to 1 sample per 250m³ for natural soil sourced from characterised greenfield sources. Imported soils will be tested for the suite of analysis as per Table 6.2 of the SGP Outline Remediation Strategy.
- 6.4. The soil cover system should be independently validated in accordance with the Remediation Strategy at a frequency of 1 depth test per 3 plots. In areas of public open space areas, test pits should be excavated on a 25m grid to confirm the depth of placed soils.
- 6.5. The Phase 1 Supplementary Site Investigation (SGP R2174-R02-v1) recommended that hydrocarbon resistant gas protection measures are installed within dwellings in the eastern part of the site following the identification of elevated soil vapour concentrations in this area. This corresponds to the area prescribed in R2174-R02 according to the layout plans provided by BHM (ref: 456/ED/02). For all other plots within Phase 1 where hydrocarbon resistant membranes are not recommended, gas protection measures compliant to NHBC-Amber 1 standards are required to be installed.
- 6.6. Validation of installed gas protection measures should be verified in accordance with CIRIA: C735 'Good practice on the testing and verification of protection systems for buildings against hazardous ground gasses. Approval of proposed precautionary gas protection measures and the level of

verification within all plots in the absence of further assessment should be sought from the Local Authority in the first instance.

- 6.7. A United Utilities Pipeline Risk Assessment is required to be completed for Phase 1 prior to development to determine whether protected pipelines are needed.
- 6.8. Upon completion of the construction phase of works, a Verification Completion Report containing the findings of the verification inspections (i.e. gas membrane and soil depth inspections) and soil testing information will be required for submission to the Local Authority to demonstrate compliance with the recommendations contained within this report.
- 6.9. With the adoption of the above normal practices for Brownfield development, and on the information available to it, SGP concludes that the preparatory remedial works for Phase 1 of the former Tetrosyl Works, Bevis Green, Bury site have been completed in accordance with the agreed Strategy
- 6.10. Some further assessment of conditions local to HS12 / WS311 will be carried out to check the extent and further reduce, where practicable and in agreement with the Environment Agency, the level for free product present in the groundwater. This will be reported in a separate supplementary submission, however for the rest of Phase 1, the construction phase of development may commence.

Limitations

- 6.11. SGP reserves the right to alter any of the foregoing information in the event of new information being disclosed or provided and in the light of changes to legislation, guidelines, and responses by the statutory and regulatory authorities.
- 6.12. This report has been prepared by Smith Grant LLP, for the sole and exclusive use of Urban Regen Ltd and Barratt Homes Manchester, the benefit of this report may not be assigned to any third party without the prior agreement in writing of Smith Grant LLP.
- 6.13. Reasonable skill, care and diligence has been exercised within the timescale and budget available, and in accordance with the technical requirements of the brief. Notwithstanding the efforts made by the professional team in undertaking the assessment and preparing this report, it is possible that other ground conditions and contamination as yet undetected may exist. Reliance on the findings of this report must therefore be limited accordingly. Such reliance must be based on the whole report and not on extracts which may lead to incomplete or incorrect conclusions when taken out of context.

DRAWINGS



WARNING TO HOUSE-PURCHASERS
Property Rediscovers Act 1989
Buyers are warned that this is a working drawing and is not intended to be treated as a descriptive material description, in relation to any particular property or development, any of the specified matters prescribed by any order made under the above Act. The contents of this drawing may be subject to change at any time and alterations and variations can occur during the progress of the works without restriction of the drawing. Consequently the layout, form, content and dimensions of the finished construction may differ materially from those shown. Nor do the contents of this drawing constitute a contract, part of any contract or warranty.

LIGHTING APPARATUS LEGEND

Lighting Column: Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base as supplied by Mallefite to Bury Metropolitan Council Street Lighting Specification.
Manufacturer Reference: 010MDPT

Luminaire:
Proposed post top mounted Philips DigStreet luminaire

Manufacturer Ref: BGP760 20LED DW50

Lumen Output: 6,000lm

Colour Temperature: Cool White

Luminaire Tilt Inclination: 0°

Control Gear: DALI enabled driver

Control Type: Philips CityTouch node 35lux (1:0.5 ratio)

Dimming Profile: SEE SCHEDULE

Supply: DNO

Primary Isolator: DNO Approved Double Pole

Secondary Isolator: N/A

Internal Wiring: Wiring to luminaire shall be 1.5mm² PVC insulated flexible cable

Door Orientation: Side Road - Facing road

Lighting Column: Proposed galvanised tubular steel lighting column of 6.0 metre nominal height with a planted base as supplied by Mallefite to Bury Metropolitan Council Street Lighting Specification.
Manufacturer Reference: 010MDPT

Luminaire:
Proposed post top mounted Philips DigStreet luminaire

Manufacturer Ref: BGP760 20LED DX10

Lumen Output: 6,000lm

Colour Temperature: Cool White

Luminaire Tilt Inclination: 0°

Control Gear: DALI enabled driver

Control Type: Philips CityTouch node 35lux (1:0.5 ratio)

Dimming Profile: 80%

Supply: DNO

Primary Isolator: DNO Approved Double Pole

Secondary Isolator: N/A

Internal Wiring: Wiring to luminaire shall be 1.5mm² PVC insulated flexible cable

Door Orientation: Side Road - Facing road

Lighting Column: Existing lighting column to be replaced.

Manufacturer Reference: N/A

Luminaire:
N/A

Manufacturer Ref: N/A

Lumen Output: N/A

Colour Temperature: N/A

Luminaire Tilt Inclination: N/A

Control Gear: N/A

Control Type: N/A

Dimming Profile: N/A

Supply: DNO

Primary Isolator: DNO Approved Double Pole

Secondary Isolator: N/A

Internal Wiring: Wiring to luminaire shall be 1.5mm² PVC insulated flexible cable

Door Orientation: Side Road - Facing road

- ENGINEERING LAYOUT NOTES**
- All adoptable drainage works have been designed and are to be constructed in accordance with 'Sewers for Adoption, 8th Edition', and United Utilities 'Guidelines for Sewer for Adoption 8th Edition'. Where specification conflicts, the guidelines and this provision.
 - United Utilities Standard details to be used are:
SND/19/001A Manhole Type 1
SND/19/002A Manhole Type 2 and Invert Access Detail
SND/19/003A Show Surface Water Manhole Detail - From Type 4
SND/19/004A Show Surface Water Manhole Detail - Reduced Horizontal (less than 2.0m) - For Pipe Sizes 450mm and Above
SND/19/005A Flow Control Manhole Detail
SND/19/006A External Bounding Detail
SND/19/007A Pipe Bounding Detail
SND/19/008A Variable Manhole - Outside Notes
SND/19/009A Headed Type 1 and 2 Detail
SND/19/010A Typical Outfall Details Type 2 & Type 3
 - All clay pipe work shall be Extra Strength Clayware to BS 205 and BS 65 (SW pipes only).
 - All present concrete pipes shall be in Class 120 in accordance with BS5911 Part 1, BS EN 1916 and bear the BS Markings.
 - All adoptable drainage to be installed in Class 5 granular material unless otherwise stated.
 - All concrete manholes and soakaways rings, concrete cover slabs and CDS to be manufactured to BS EN 1917 and BS 5911 Part 3.
 - Flow Notes to be Black Polyethylene Pipes complying to BS EN 12244-2. Polyethylene fittings, including fusion joints, and electro-fusion fittings shall comply with BS EN 12244-2.
 - All levels relate to Ordnance Datum. Contractor to ensure that this drawing is read in conjunction with the site specific Topographical Survey provided by Barratt Manchester and the Benchmark information provided.
 - This drawing is to be read in accordance with all other relevant drawings.
 - The contractor shall be responsible for ensuring that any existing invert levels indicated on the drawings are correct before work commences.
 - All proposed connections to the sewer shall be 150mm unless stated otherwise.
 - All private house drainage shall be 150mm and all one-off connections shall be 150mm of a minimum gradient of 1:80 unless otherwise stated and set in accordance with Part 8 of the Building Regulations.
 - Rainfall from private surfaces shall not discharge across the Highway. Gullies or channels shall be provided as appropriate to prevent this.
 - From crossings shall be provided at the inner tangent points of all junctions.
 - Pipes shall be protected from concentrated loading by construction traffic during the construction period when roadwork cover to the pipe may make them vulnerable to damage.
 - Underground (UB) levels of the road formation level are to be carried out to determine the depth of pavement construction required. This is to be approved by the adopting authority prior to construction of the road pavements.
 - Overheadwater to ensure that plot drainage is within the curbside of the plot they serve where possible and inspection covers kept within boundaries where possible.
 - Contractor to provide United Utilities with sufficient notice prior to commencement of Sewer works on their inspection telephone number: Tel 0845 802 0465.
 - Contractor to obtain all necessary Highway opening notices from the relevant Local Authority, obtain approval to work on United Utilities Sewerage Systems, obtain approval to method statement from the Environment Agency for any work affecting its waterways.

ENGINEERING KEY

— S1 —	Adoptable S.W. Sewer & Manhole	— F1 —	Adoptable F.W. Sewer & Manhole
(10.25)	S. Water Drop-Out and Invert	10.25	Foul Drop-Out and Invert
— D —	Adoptable Road Gully		Street Name Plate
— Y —	Yard Gully		Drainage Channel

FLOW CONTROL DETAILS

MH Ref.	Max. Output	Details
S38	1350%	180mm orifice plate, 0.6 discharge coefficient
S48	850%	151mm orifice plate, 0.6 discharge coefficient
S57	830%	168mm orifice plate, 0.6 discharge coefficient

- M Cover levels updated to suit the latest 16.06.20 LB planning layout rev L
- L Amended to suit latest planning layout rev 11.06.20 DK
- K polystyrene crates outside plot 144 amended to fit within PCS
- J Street Lighting design added. 14.01.20 DK
- I Polystyrene crate volume increased for SW 1,009 & 1,010 to suit amended drainage details. Office diameters amended to suit. 04.12.19 DK
- H Flow controls changed to orifice plates. SW Pipe 2,000 updated from 1509 to 2259. 20.11.19 DK
- G Planning layout rev G inserted, plots 265,266 lifted to suit Cole Ecodon's river modelling requirements. Drainage CLs & ILS amended at the end of Road7/ Road7TH to tie in with lifted road levels. 18.10.19 DK
- F Planning layout rev F inserted, plots 10-21 amended slightly to suit. 10.09.19 DK
- E Fully amended road & sewer design added to suit latest planning layout rev E. 09.08.19 DK
- D FFLs amended to suit cut & fill rev A. 02.07.19 DK
- C FFLs amended to latest planning layout 21.02 rev B. 04.01.19 DK
- B FFLs amended to latest planning layout rev J. Drainage design removed. 10.01.18 DK
- A Full road & sewer design added. 06.11.17 DK

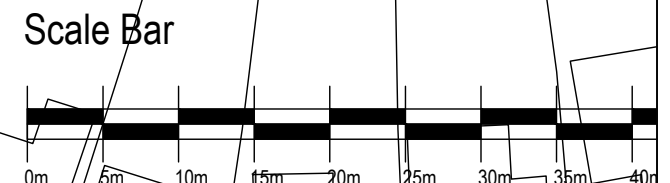
REV DESCRIPTION DATE DRAWN

BARRATT HOMES

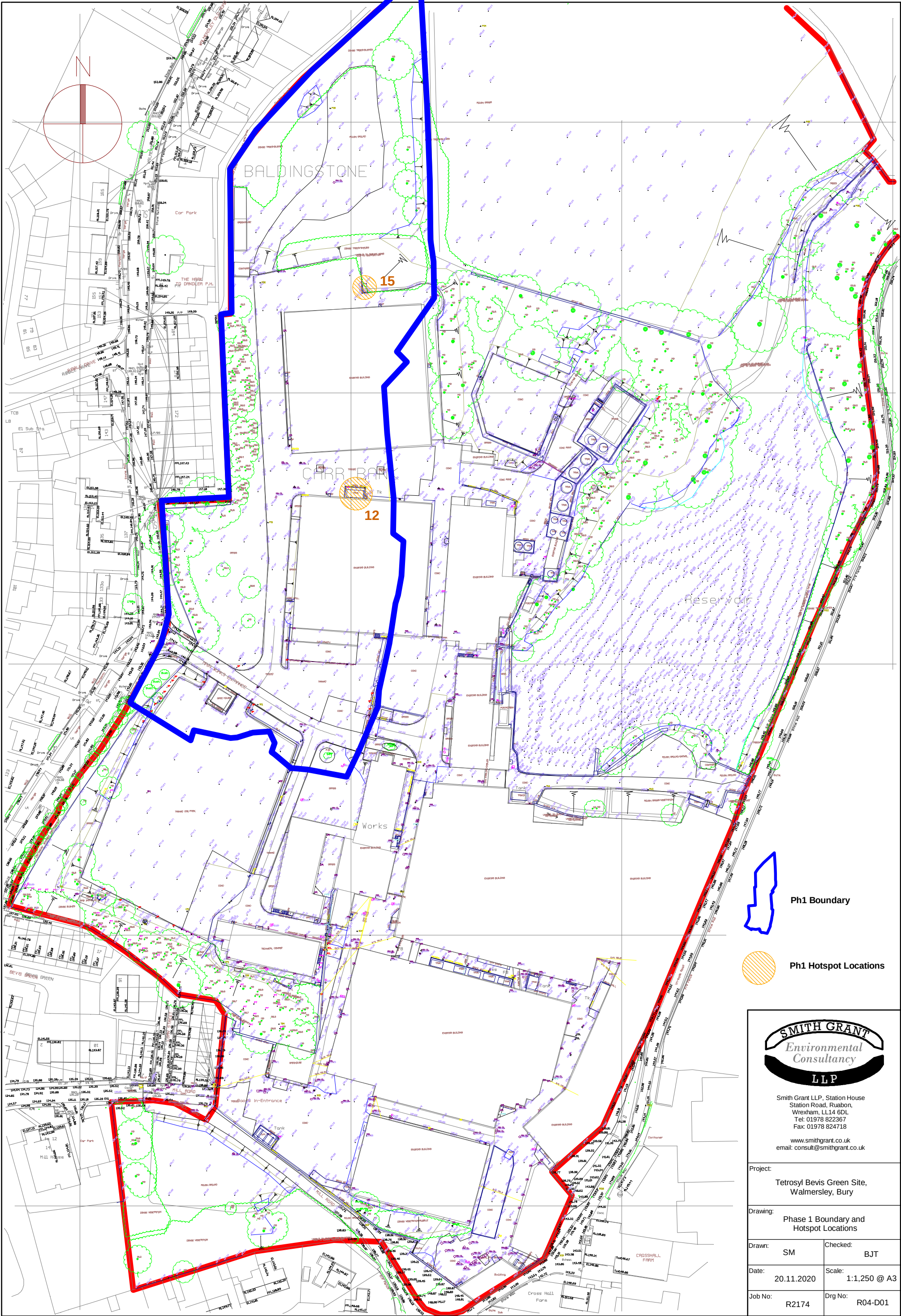
MANCHESTER

Barratt Homes Manchester
(A division of BDW Trading Ltd)
4 Brindley Road
Manchester
M16 9HQ
Tel: 0161 872 0161
Fax: 0161 855 2820

Job	Tetrosyl Bury
Title	Engineering Layout
Design By	DK
Date	02.04.15
Drawing Number	456/ED/02
Rev	N
C.A.D By	DK
Scale	1:500



Finished Floor levels updated to suit the latest External levels plans. 28.07.20 LB



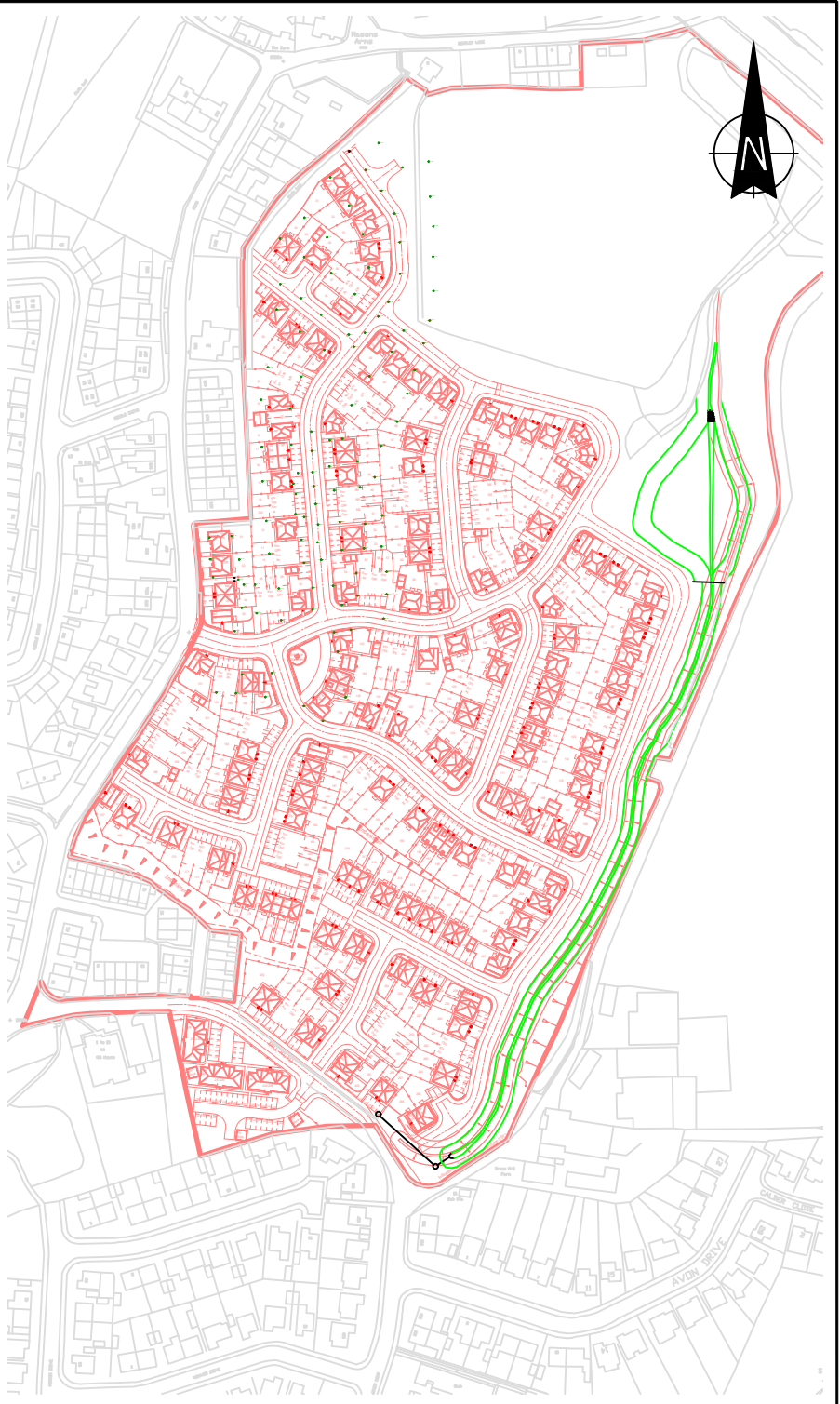
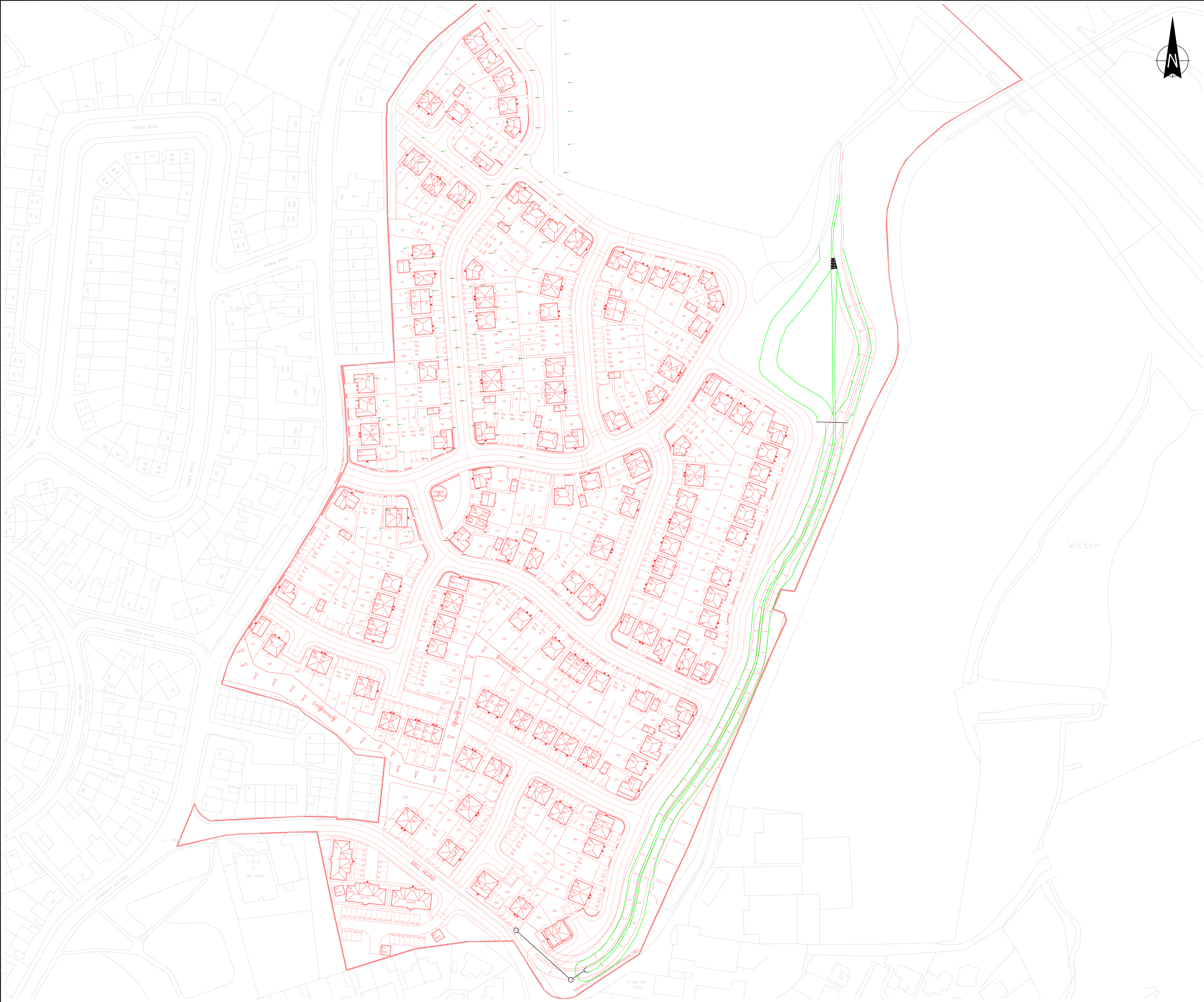
Ph1 Boundary

Ph1 Hotspot Locations



Smith Grant LLP, Station House
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Project: Tetrosyl Bevis Green Site, Walmersley, Bury	
Drawing: Phase 1 Boundary and Hotspot Locations	
Drawn: SM	Checked: BJT
Date: 20.11.2020	Scale: 1:1,250 @ A3
Job No: R2174	Drg No: R04-D01



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System: OSGB36(2)		Co-ord Type: Grid		Primary Survey Control: Leica SmartNet	
				Secondary Survey Control:	
Rev	Date	Amendment			Drawn Checked



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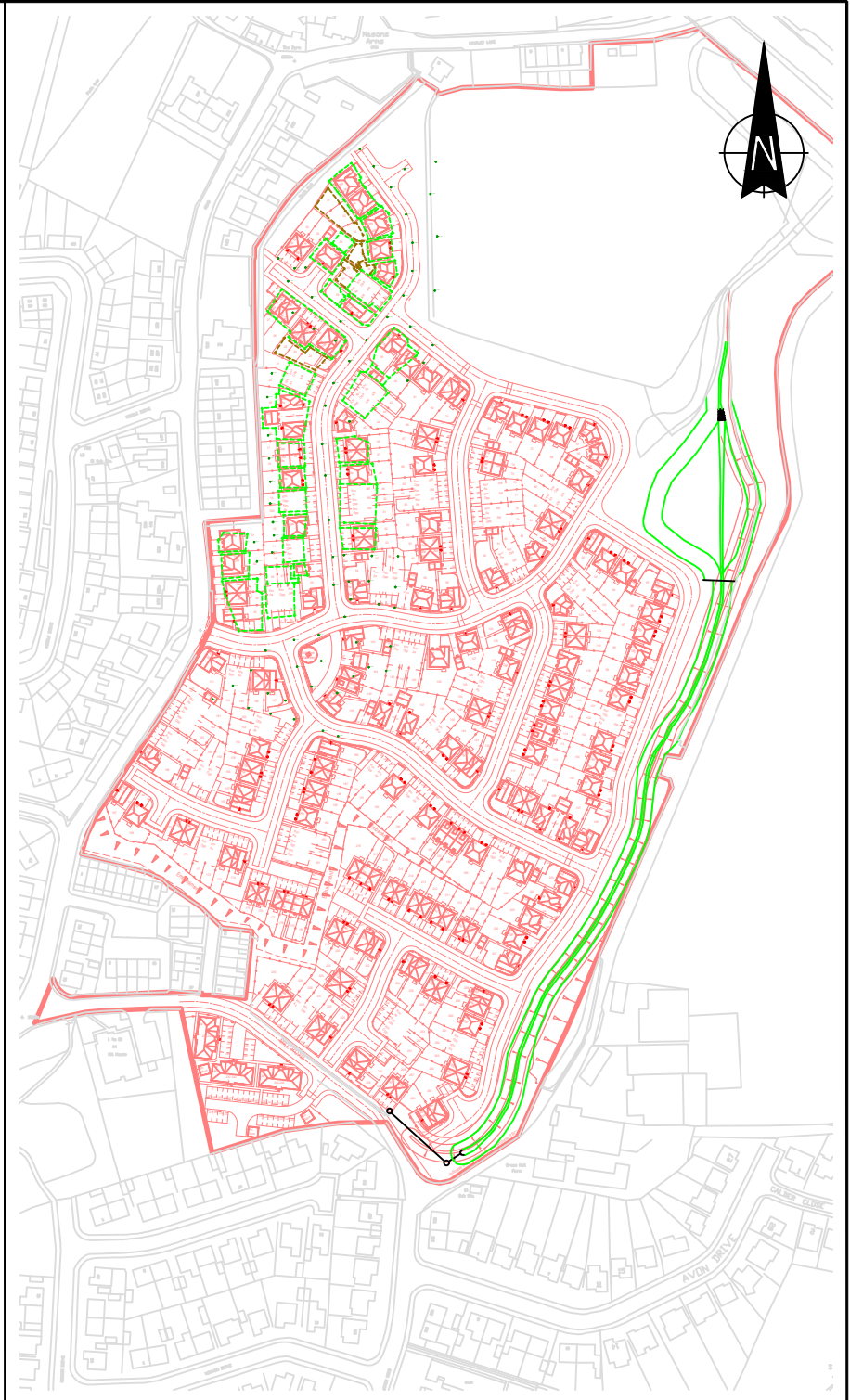
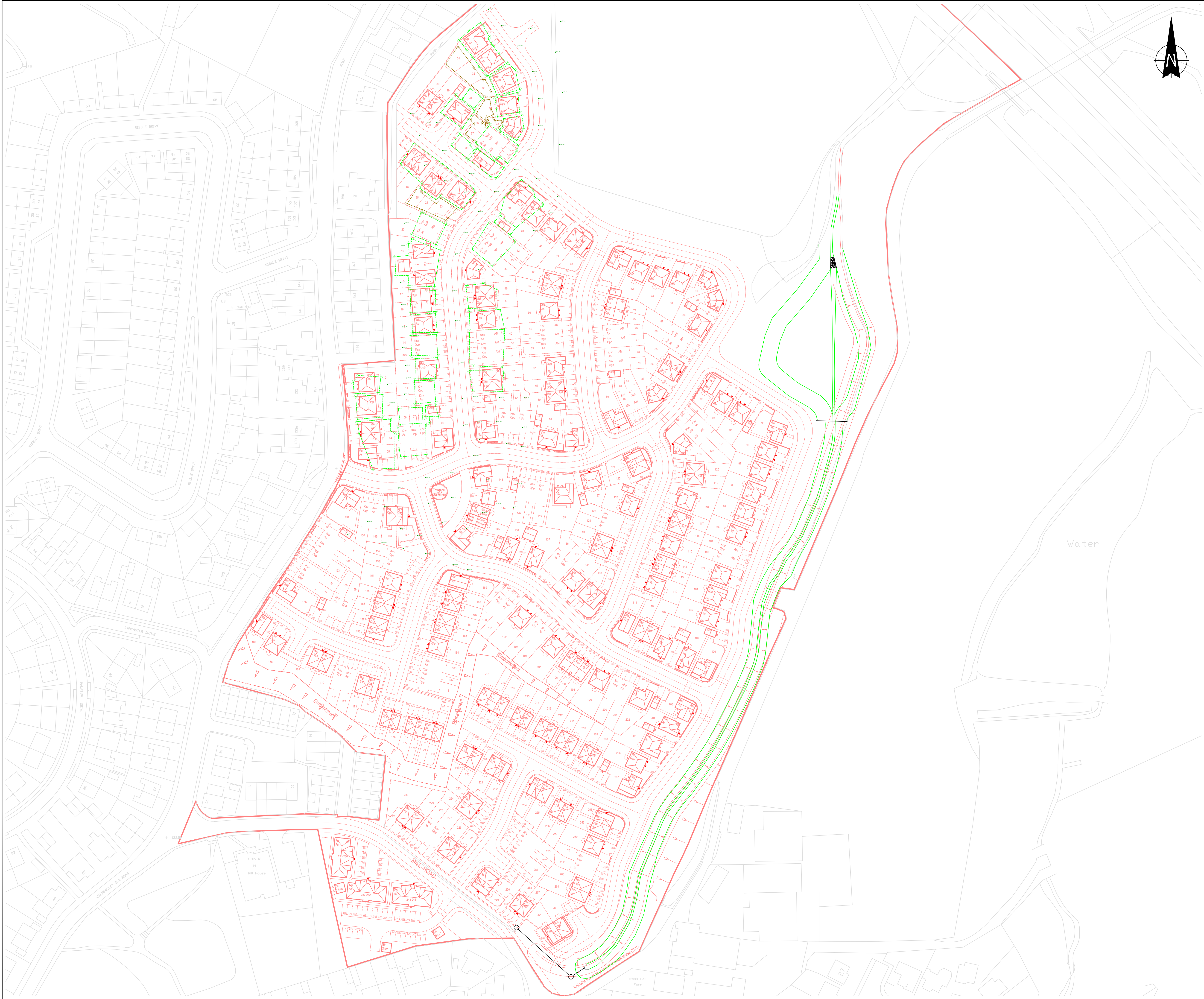
Client:
**Barrat Homes
Manchester**

Project:
Tetsoryl, Bury

Title:
Base of Excavation

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
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Drawing No: 333 - 1120 - 001	Revision:
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Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



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Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **As Built Survey**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
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Drawing No:	Revision:
333 - 1120 - 002	

APPENDIX A

Site Photographs

1.



25.06.20 – View south-southeast from north of site: slab of 'Building 3' broken out and transferred to stockpile in wider Phase 1 area prior to inspection.

2.



25.06.20 – View south from north of site: slab of 'Building 3' broken out and transferred to stockpile in wider Phase 1 area prior to inspection.

3.



25.06.20 – Remnants of demolished 'Building 3' and small vegetation stockpile in north of site.

4.



02.07.20 – Location of 'HS12' hotspot prior to excavation works.

5.



02.07.20 – Excavation of 'HS12' hotspot.

6.



02.07.20 – Excavation of 'HS12' hotspot complete (1/2 - view west)

7.



02.07.20 – Excavation of 'HS12' hotspot complete (2/2 - view east).

8.



02.07.20 – 'HS12' hotspot excavation arisings.

9.



16.07.20 – Excavation of 'HS15' hotspot (1/2).

10.



16.07.20 – Excavation of 'HS15' hotspot (2/2).

11.



16.07.20 – Excavation of 'HS15' hotspot complete.

12.



16.07.20 – 'HS15' hotspot excavation arisings.

13.



16.07.20 – Excavation and replacement of made ground soils complete in north (1/2).

14.



16.07.20 – Excavation and replacement of made ground soils complete in north (2/2).

15.



16.07.20 – View south from north of site: breakout of 'Building 2' slab visible in far distance.

16.



22.07.20 – Excavation and replacement of made ground soils along western boundary.

17.



31.07.20 – Stockpile of crushed aggregate in wider Phase 1 area to south; feedstock recovered during Phase 1a earthworks (i.e. building slabs).

18.



06.08.20 – Excavation and replacement of made ground soils complete in central areas of site.

19.



06.08.20 – Regrade of site levels in west (1/3)

20.



06.08.20 – Regrade of site levels in west (2/3)

21.



06.08.20 – Regrade of site levels in west (3/3)

22.



13.08.20 – View northwest from centre of eastern boundary.

23.



13.08.20 – View west from centre of eastern boundary.

24.



13.08.20 – View southwest from centre of eastern boundary.

25.



17.08.20 – Regrade of site levels in north (visible in far distance) and compaction of relocated soils.

26.



27.08.20 – Pumping of flooded areas in south of site using tractor and bowser (1/2 - view west).

27.



27.08.20 – Pumping of flooded areas in south of site using tractor and bowser (2/2 - view north).

28.



02.09.20 – Site recovered aggregate placed in footprints of future dwellings for use as development platforms in west.

29.



02.09.20 – Regrade of site levels in centre-northwest.

30.



02.09.20 – Site recovered aggregate placed in footprints of future dwellings for use as development platforms in north.

31.



10.09.20 – Regrade of site levels in centre-northeast (visible in far distance).

32.



16.09.20 – Regrade of site levels in southwest (1/3).

33.



16.09.20 – Regrade of site levels in southwest (2/3).

34.



16.09.20 – Regrade of site levels in southwest (3/3).

35.



21.09.20 – Regrade of site levels in south (1/2).

36.



21.09.20 – Regrade of site levels in south (2/2).

37.



21.09.20 – Site recovered aggregate placed as road base along roadways in east.

38.



28.09.20 – Remediation works complete in north: view west from northeast of site

39.



28.09.20 – Remediation works complete in central areas: view southwest from northeast of site (civil engineering works ongoing).

40.



28.09.20 – Remediation works complete in central areas: view northwest from centre of eastern boundary (civil engineering works ongoing).

41.



28.09.20 – Remediation works complete in central areas: view west from centre of eastern boundary.

42.



28.09.20 – Remediation works complete in central areas: view southwest from centre of eastern boundary.

43.



28.09.20 – Regrade of site levels in southeast (1/2).

44.



28.09.20 – Removal of excess soils from southeast to stockpile in wider Phase 1 area to south (1/2).

45.



28.09.20 – Removal of excess soils from southeast to stockpile in wider Phase 1 area to south (2/2).

NO PHOTOGRAPH

APPENDIX B

Chemical Analysis Results

Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL



Attention : Scott Miller
Date : 14th July, 2020
Your reference : R2174C
Our reference : Test Report 20/8505 Batch 2
Location : Tetrosyl, Bury
Date samples received : 2nd July, 2020
Status : Final report
Issue : 1

Eight samples were received for analysis on 2nd July, 2020 of which eight were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:



Phil Sommerton BSc

Senior Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Smith Grant LLP
Reference: R2174C
Location: Tetrosyl, Bury
Contact: Scott Miller
EMT Job No: 20/8505

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	13-14	15-16	17-18	19-20	21-22	23-24	25-26	27-28			Please see attached notes for all abbreviations and acronyms		
Sample ID	HS12-SS1	HS12-SS2	HS12-SS3	HS12-SS4	HS12-SS5	HS12-SS6	HS12-SS7	HS12-SS8					
Depth	0.00-1.20	0.00-1.20	0.00-0.80	0.00-0.80	0.00-0.80	0.00-1.20	0.80	1.20					
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J					
Sample Date	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020					
Sample Type	Clayey Sand	Clayey Sand	Sand	Clay	Sand	Clayey Sand	Sand	Clayey Sand					
Batch Number	2	2	2	2	2	2	2	2					
Date of Receipt	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020	02/07/2020			LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 ^{#M}	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	0.9 ^{SV}	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	0.3	<0.1	4.3 ^{SV}	<0.1	<0.1	<0.1	0.2			<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	20.8	<0.2	195.1	<0.2	<0.2	5.7	6.2			<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 ^{#M}	11	154	15	790	5	4	31	36			<4	mg/kg	TMS/PM8/PM16
>C16-C21 ^{#M}	58	441	190	1064	44	24	90	108			<7	mg/kg	TMS/PM8/PM16
>C21-C35 ^{#M}	201	394	160	515	59	76	80	117			<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-35	270	1010	365	2569	108	104	207	267			<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Aromatics													
>C5-EC7 [#]	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC7-EC8 [#]	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	<0.1	<0.1	<0.1	0.4 ^{SV}	<0.1	<0.1	<0.1	<0.1			<0.1	mg/kg	TM36/PM12
>EC10-EC12 [#]	<0.2	10.2	<0.2	73.3	<0.2	<0.2	<0.2	<0.2			<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 [#]	<4	76	4	402	<4	<4	11	11			<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 [#]	16	189	56	535	20	<7	27	35			<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 [#]	199	180	50	298	<7	<7	<7	10			<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-35 [#]	215	455	110	1309	20	<19	38	56			<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Total aliphatics and aromatics(C5-35)	485	1465	475	3878	128	104	245	323			<38	mg/kg	TMS/PM8/PM16/PM12/PM10
MTBE [#]	<5	<5	<5	<5 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
Benzene [#]	<5	<5	<5	<5 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
Toluene [#]	<5	<5	<5	<5 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
Ethylbenzene [#]	<5	<5	<5	50 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
m/p-Xylene [#]	<5	<5	<5	200 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
o-Xylene [#]	<5	<5	<5	93 ^{SV}	<5	<5	<5	<5			<5	ug/kg	TM36/PM12
Natural Moisture Content	9.1	13.2	12.2	31.4	8.4	9.5	7.2	11.4			<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clayey Sand	Sand	Clay	Sand	Clayey Sand	Sand	Clayey Sand				None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Light Brown	Medium Brown	Medium Brown	Medium Brown	Light Brown	Medium Brown				None	PM13/PM0
Other Items	stones	stones	stones	stones and sand	stones	stones	stones	stones				None	PM13/PM0

Client Name: Smith Grant LLP

Reference: R2174C

Location: Tetrosyl, Bury

Contact: Scott Miller

[illegible]

Please note that only samples that are deviating are mentioned in this report. If no samples are listed it is because none were deviating. Only analyses which are accredited are recorded as deviating if set criteria are not met.

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/8505

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% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

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The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

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DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/8505

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GC/FID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GC/FID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes

Smith Grant LLP
Station House
Station Road
Ruabon
Wrexham
LL14 6DL



Attention : Phillip Magraw
Date : 28th July, 2020
Your reference : R2174C
Our reference : Test Report 20/9342 Batch 1
Location : Tetrosyl
Date samples received : 16th July, 2020
Status : Final report
Issue : 1

Fourteen samples were received for analysis on 16th July, 2020 of which fourteen were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.
All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:



Phil Sommerton BSc
Senior Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Smith Grant LLP
Reference: R2174C
Location: Tetrosyl
Contact: Phillip Magraw
EMT Job No: 20/9342

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-2	3-4	5-6	7-8	9-10	11-12	13-14	15-16	17-18	19-20	Please see attached notes for all abbreviations and acronyms		
Sample ID	HS15-S01	HS15-SS1	HS15-SS2	HS15-SS3	HS15-SS4	HS15-SS5	HS15-SS6	HS15-SS7	HS15-SS8	HS15-SS9			
Depth	0.30	0.30	0.30	1.50	0.30	1.60	1.20	1.50	1.00	0.60			
COC No / misc													
Containers	V J	V J	V J	V J	V J	V J	V J	V J	V J	V J			
Sample Date	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020			
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	16/07/2020	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 ^{#M}	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	0.3 ^{SV}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>C8-C10	>>43.1	<0.1	<0.1	<0.1	<0.1	6.3	0.6	0.5	0.2	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	18.4	<0.2	<0.2	<0.2	<0.2	1.9	6.0	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4	<4	13	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 ^{#M}	10	<7	13	<7	<7	27	<7	13	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 ^{#M}	52	51	135	<7	<7	93	<7	74	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-35	124	51	148	<19	<19	141	<19	88	<19	<19	<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Aromatics													
>C5-EC7 [#]	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>EC7-EC8 [#]	<0.1 ^{SV}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	0.8 ^{SV}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1 ^{SV}	<0.1	mg/kg	TM36/PM12
>EC10-EC12 [#]	3224.2	<0.2	<0.2	<0.2	<0.2	121.9	348.0	16.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 [#]	10	<4	<4	<4	<4	9	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 [#]	10	<7	14	<7	<7	13	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 [#]	109	83	344	<7	<7	97	<7	67	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-35 [#]	3354	83	358	<19	<19	241	348	83	<19	<19	<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Total aliphatics and aromatics(C5-35)	3478	134	506	<38	<38	382	348	171	<38	<38	<38	mg/kg	TMS/PM8/PM16/PM12/PM10
MTBE [#]	<5 ^{SV}	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
Benzene [#]	<5 ^{SV}	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
Toluene [#]	15 ^{SV}	<5	<5	<5	<5	<5	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
Ethylbenzene [#]	36 ^{SV}	<5	<5	<5	<5	7	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
m/p-Xylene [#]	311 ^{SV}	<5	<5	<5	<5	31	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
o-Xylene [#]	422 ^{SV}	<5	<5	<5	<5	19	<5	<5	<5	<5 ^{SV}	<5	ug/kg	TM36/PM12
Natural Moisture Content	13.4	12.5	6.3	14.3	14.8	6.7	16.7	26.2	6.9	8.9	<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand		None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown	Medium Brown		None	PM13/PM0
Other Items	stones, water	stones	stones	stones, vegetation	stones	stones	stones	stones	stones	stones		None	PM13/PM0

Element Materials Technology

Client Name: Smith Grant LLP
Reference: R2174C
Location: Tetrosyl
Contact: Phillip Magraw
EMT Job No: 20/9342

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	21-22	23-24	25-26	27-28							Please see attached notes for all abbreviations and acronyms		
Sample ID	HS15-SS10	HS15-SS11	HS15-SS12	HS15-SS13									
Depth	0.80	1.20	1.20	1.40									
COC No / misc													
Containers	V J	V J	V J	V J									
Sample Date	16/07/2020	16/07/2020	16/07/2020	16/07/2020									
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand									
Batch Number	1	1	1	1									
Date of Receipt	16/07/2020	16/07/2020	16/07/2020	16/07/2020							LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 ^{#M}	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C6-C8 ^{#M}	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>C8-C10	18.5	3.2	<0.1	0.6							<0.1	mg/kg	TM36/PM12
>C10-C12 ^{#M}	<0.2	<0.2	<0.2	<0.2							<0.2	mg/kg	TM5/PM8/PM16
>C12-C16 ^{#M}	<4	<4	<4	<4							<4	mg/kg	TM5/PM8/PM16
>C16-C21 ^{#M}	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
>C21-C35 ^{#M}	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
Total aliphatics C5-35	<19	<19	<19	<19							<19	mg/kg	TM5/PM8/PM16/PM12/PM10
Aromatics													
>C5-EC7 [#]	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC7-EC8 [#]	<0.1	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC8-EC10 ^{#M}	0.4	<0.1	<0.1	<0.1							<0.1	mg/kg	TM36/PM12
>EC10-EC12 [#]	8.8	6.2	<0.2	13.4							<0.2	mg/kg	TM5/PM8/PM16
>EC12-EC16 [#]	<4	<4	<4	<4							<4	mg/kg	TM5/PM8/PM16
>EC16-EC21 [#]	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
>EC21-EC35 [#]	<7	<7	<7	<7							<7	mg/kg	TM5/PM8/PM16
Total aromatics C5-35 [#]	<19	<19	<19	<19							<19	mg/kg	TM5/PM8/PM16/PM12/PM10
Total aliphatics and aromatics(C5-35)	<38	<38	<38	<38							<38	mg/kg	TM5/PM8/PM16/PM12/PM10
MTBE [#]	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
Benzene [#]	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
Toluene [#]	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
Ethylbenzene [#]	<5	<5	<5	<5							<5	ug/kg	TM36/PM12
m/p-Xylene [#]	101	18	<5	<5							<5	ug/kg	TM36/PM12
o-Xylene [#]	370	53	<5	<5							<5	ug/kg	TM36/PM12
Natural Moisture Content	9.9	9.5	22.8	12.6							<0.1	%	PM4/PM0
Sample Type	Clayey Sand	Clayey Sand	Clayey Sand	Clayey Sand								None	PM13/PM0
Sample Colour	Medium Brown	Medium Brown	Medium Brown	Medium Brown								None	PM13/PM0
Other Items	stones, loam	stones	stones, loam	stones								None	PM13/PM0

Client Name: Smith Grant LLP

Reference: R2174C

Location: Tetrosyl

Contact: Phillip Magraw

[illegible]

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NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 20/9342

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Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

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% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

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DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher, this result is not accredited.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 20/9342

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GC/FID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GC/FID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes	Yes	AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
PM13	A visual examination of the solid sample is carried out to ascertain sample make up, colour and any other inclusions. This is not a geotechnical description.	PM0	No preparation is required.			AR	No
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GC/FID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE re	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes	Yes	AR	Yes



2183

Amended Report

Report No.:	20-20751-2		
Initial Date of Issue:	13-Aug-2020	Date of Re-Issue:	14-Aug-2020
Client	Smith Grant LLP		
Client Address:	Station House, Station Road Ruabon Wrexham LL14 6DL		
Contact(s):	Phillip Magraw		
Project	R2174C Tetrosyl, Bury		
Quotation No.:		Date Received:	07-Aug-2020
Order No.:		Date Instructed:	07-Aug-2020
No. of Samples:	9		
Turnaround (Wkdays):	8	Results Due:	18-Aug-2020
Date Approved:	14-Aug-2020		
Approved By:			
Details:	Glynn Harvey, Technical Manager		

Results - Soil

Project: R2174C Tetrosyl, Bury

Client: Smith Grant LLP	Chemtest Job No.:				20-20751	20-20751	20-20751	20-20751	20-20751	20-20751	20-20751	20-20751	20-20751
Quotation No.:	Chemtest Sample ID.:				1044754	1044755	1044756	1044757	1044758	1044759	1044760	1044761	1044762
	Sample Location:				SW-Agg-S1	SW-Agg-S2	SW-Agg-S3	SW-Agg-S4	SW-Agg-S5	SW-Agg-S6	SW-Agg-S7	SW-Agg-S8	SW-Agg-S9
	Sample Type:				SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Date Sampled:				31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020	31-Jul-2020
	Asbestos Lab:				LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL	LIVERPOOL
Determinand	Accred.	SOP	Units	LOD									
ACM Type	U	2192		N/A	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps	Fibres/Clumps
Asbestos Identification	U	2192	%	0.001	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile	Chrysotile
ACM Detection Stage	U	2192		N/A	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy	Stereo Microscopy
Asbestos by Gravimetry	U	2192	%	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Asbestos	U	2192	%	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Test Methods

SOP	Title	Parameters included	Method summary
2192	Asbestos	Asbestos	Polarised light microscopy / Gravimetry

Report Information

Key

U	UKAS accredited
M	MCERTS and UKAS accredited
N	Unaccredited
S	This analysis has been subcontracted to a UKAS accredited laboratory that is accredited for this analysis
SN	This analysis has been subcontracted to a UKAS accredited laboratory that is not accredited for this analysis
T	This analysis has been subcontracted to an unaccredited laboratory
I/S	Insufficient Sample
U/S	Unsuitable Sample
N/E	not evaluated
<	"less than"
>	"greater than"

Comments or interpretations are beyond the scope of UKAS accreditation

The results relate only to the items tested

Uncertainty of measurement for the determinands tested are available upon request

None of the results in this report have been recovery corrected

All results are expressed on a dry weight basis

The following tests were analysed on samples as received and the results subsequently corrected to a dry weight basis TPH, BTEX, VOCs, SVOCs, PCBs, Phenols

For all other tests the samples were dried at < 37°C prior to analysis

All Asbestos testing is performed at the indicated laboratory

Issue numbers are sequential starting with 1 all subsequent reports are incremented by 1

Sample Deviation Codes

- A - Date of sampling not supplied
- B - Sample age exceeds stability time (sampling to extraction)
- C - Sample not received in appropriate containers
- D - Broken Container
- E - Insufficient Sample (Applies to LOI in Trommel Fines Only)

Sample Retention and Disposal

All soil samples will be retained for a period of 45 days from the date of receipt

All water samples will be retained for 14 days from the date of receipt

Charges may apply to extended sample storage

If you require extended retention of samples, please email your requirements to:
customerservices@chemtest.com

APPENDIX C

URL Waste & Disposal Logs

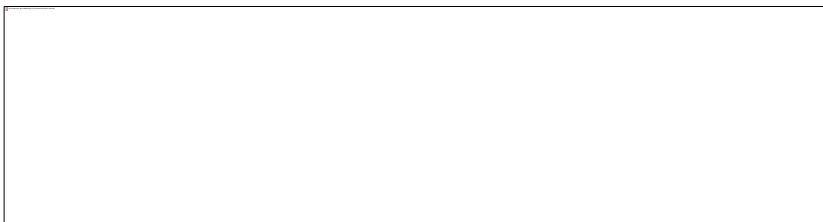
Contract:
Contract No:
Date:
Week No:



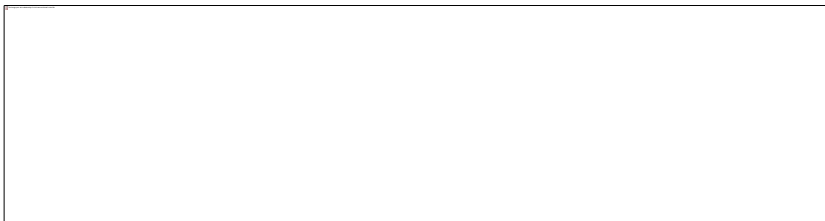
Tetrosyl, Bury

333
18/10/20
39

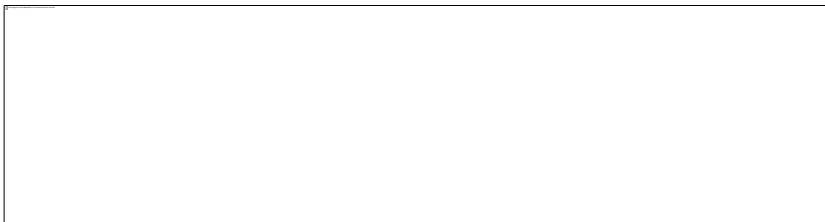
				W/E	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	
Cost Category	Ref	Supplier	Unit	16/02/20	23/02/20	01/03/20	08/03/20	15/03/20	22/03/20	29/03/20	05/04/20	12/04/20	19/03/20	17/03/20	24/03/20	31/03/20	07/04/20	14/04/20	21/04/20	28/04/20	05/05/20	12/05/20	19/05/20	26/05/20	02/06/20	09/06/20	14/06/20	21/06/20	28/06/20	05/07/20	12/07/20	19/07/20	26/07/20	02/08/20	09/08/20	16/08/20	23/08/20	30/08/20	06/09/20	13/09/20	20/09/20	27/09/20		
WASTE & DISPOSAL																																												
SKIPS (insert more rows as required)																																												
8 y waste skip		Dickinsons	item																								1.0																	
40 cu yard Gen waste skip delivery		Dickinsons				1.0																																						
40 cu yard Gen waste skip delivery		Dickinsons				1.0																																						
40 cu yard wood skip delivery		Dickinsons				1.0																																						
40 cu yard Gen waste skip collection		Dickinsons					1.0																																					
24-2-20 Gen waste empty		Dickinsons					1.0																																					
9-3-20 Gen waste empty		Dickinsons					1.0																																					
9-3-20 Gen waste empty		Dickinsons					1.0																																					
9-3-20 wood empty		Dickinsons					1.0																																					
24-3-20 Gen waste empty and collection		Dickinsons								1.0																																		
5-3-20 Gen waste empty and collection		Dickinsons								1.0																																		
9-3-20 Gen waste empty		Dickinsons																																										
7-7-20 gen waste empty Mick delivered		Dickinsons																													1.0													
8-7-20 gen waste empty Mick delivered		Dickinsons																													1.0													
9-7-20 wood empty Mick delivered		Dickinsons																														1.0												
23-7-20 wood empty Mick delivered		Dickinsons																															1.0											
31-7-20 gen waste empty Mick delivered		Dickinsons																																										
04/08/2020 wood		Dickinsons																																										
5/9/20 gen waste		Dickinsons																																										



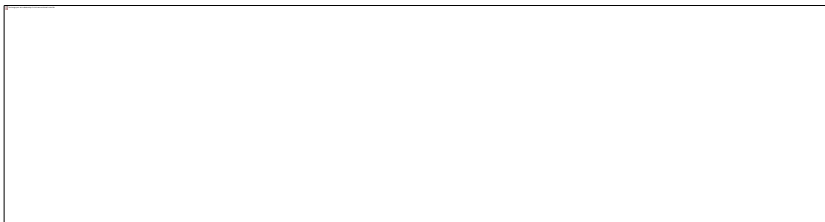
SITE: Tetrosyl 333		DATE: 2-3-20	
SKIP CODE 17 04 07		NOTE No 845370	
VEHICLE REG: MJ17WKF		DRIVER: C Davies	
Time of Collection: 0915			
Size of Skip	40		
40 Yard			
Content: (Identify which)		Comments:	
RE-BAR & Steel pipe (ONLY)			
Steel Plate and Girders			
Cast Pipe			
Steel Pipes			
Rebar			
Mixed Metals			
Light Iron			
(N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)			
PHOTO OF CONTENTS See Opposite			



SITE: Tetrosyl 333		DATE: 3-3-20	
SKIP CODE 17 04 07		NOTE No 775489	
VEHICLE REG: pu64uux		DRIVER: Jordan	
Time of Collection: 1320			
Size of Skip	40		
40 Yard			
Content: (Identify which)		Comments:	
RE-BAR & Steel pipe (ONLY)		Roller shutter doors, metal sheeting and metal purlins from building 5	
Steel Plate and Girders		No photo	
Cast Pipe			
Steel Pipes			
Rebar			
Mixed Metals			
Light Iron			
(N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)			
PHOTO OF CONTENTS See Opposite			



SITE: Tetrosyl 333		DATE: 4-3-20a	
SKIP CODE 17 04 07		NOTE No 769378	
VEHICLE REG: ??		DRIVER: ??	
Time of Collection:11:00			
Size of Skip	40		
40 Yard			
Content: (Identify which)		Comments:	
RE-BAR & Steel pipe (ONLY)			
Steel Plate and Girders			
Cast Pipe			
Steel Pipes			
Rebar			
Mixed Metals			
Light Iron			
(N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)			
PHOTO OF CONTENTS See Opposite			



SITE: Tetrosyl 333		DATE: 4-3-20b	
SKIP CODE 17 04 07		NOTE No 845206	
VEHICLE REG: PK11 bwv		DRIVER: Nathen	
Time of Collection:16:30			
Size of Skip	40		
40 Yard			
Content: (Identify which)		Comments:	
RE-BAR & Steel pipe (ONLY)			
Steel Plate and Girders			
Cast Pipe			
Steel Pipes			
Rebar			
Mixed Metals			
Light Iron			
(N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)			
PHOTO OF CONTENTS See Opposite			

urbanregen



SITE: Tetrosyl 333		DATE: 5-3-20a	
SKIP CODE 17 04 07		NOTE No 8454207	
VEHICLE REG: PK11BWU		DRIVER: Nathan	
Time of Collection: 0800			
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

urbanregen



SITE: Tetrosyl 333		DATE: 5-3-20b	
SKIP CODE 17 04 07		NOTE No 845667	
VEHICLE REG: PK11BWN		DRIVER: Nathan	
Time of Collection: 1030			
Size of Skip	40		
40			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

urbanregen



SITE: Tetrosyl 333		DATE: 5-3-20c	
SKIP CODE 17 04 07		NOTE No 845667	
VEHICLE REG: PL13kfn		DRIVER:John	
Time of Collection: 0930			
Size of Skip Bulkier	Bulkier		
Content: (Identify which)		Comments:	
RE-BAR & Steel pipe (ONLY)			
Steel Plate and Girders			
Cast Pipe			
Steel Pipes			
Rebar			
Mixed Metals			
Light Iron			
(N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)			
PHOTO OF CONTENTS See Opposite			

urbanregen

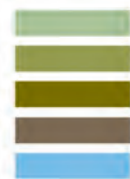


SITE: Tetrosyl 333		DATE: 5-3-20d	
SKIP CODE 17 04 07		NOTE No 845384	VEHICLE REG: MJ17WKF DRIVER: C Davies
Time of Collection: 1530			
Size of Skip 40	40		
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			



SITE: Tetrosyl 333		DATE: 16-3-20b	
SKIP CODE 17 04 07		NOTE No 774722	
Time of Collection: 1400		VEHICLE REG: DK19wcn DRIVER: Carl	
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

urbanregen



SITE: Tetrosyl 333		DATE: 24-2-20	
SKIP CODE 17 04 07		NOTE No 770773	VEHICLE REG: ma17opu DRIVER: G Lowe
Time of Collection: 1400			
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

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SITE: Tetrosyl 333		DATE: 27-2-20	
SKIP CODE 17 04 07		NOTE No 845454	VEHICLE REG: PO67UWY DRIVER: Ryan
Time of Collection: 1200			
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: No photo	
PHOTO OF CONTENTS See Opposite			

urbanregen



SITE: Tetrosyl 333		DATE: 27-2-20 a	
SKIP CODE 17 04 07		NOTE No	VEHICLE REG: DRIVER: Mick
Time of Collection: 1200			
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

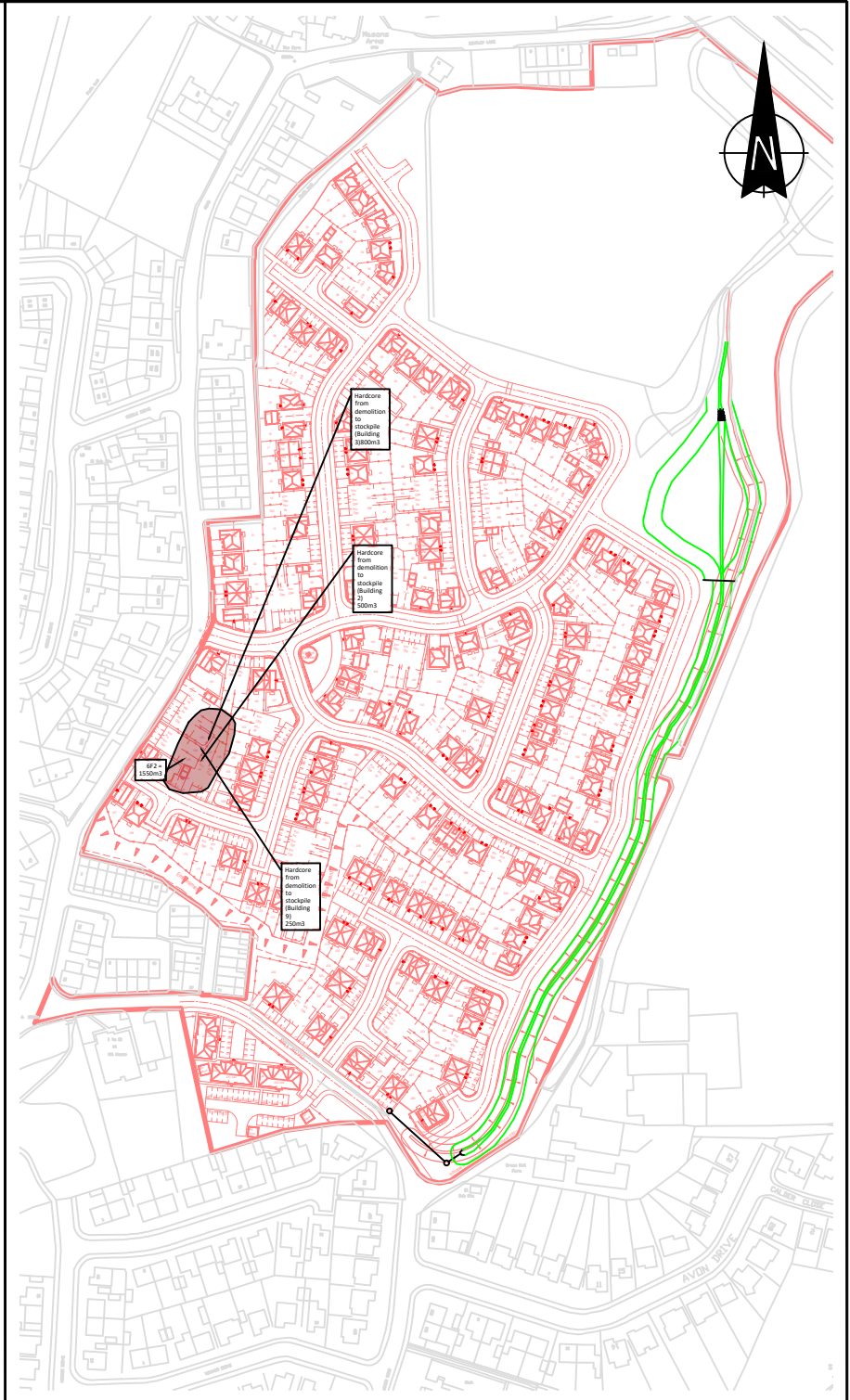
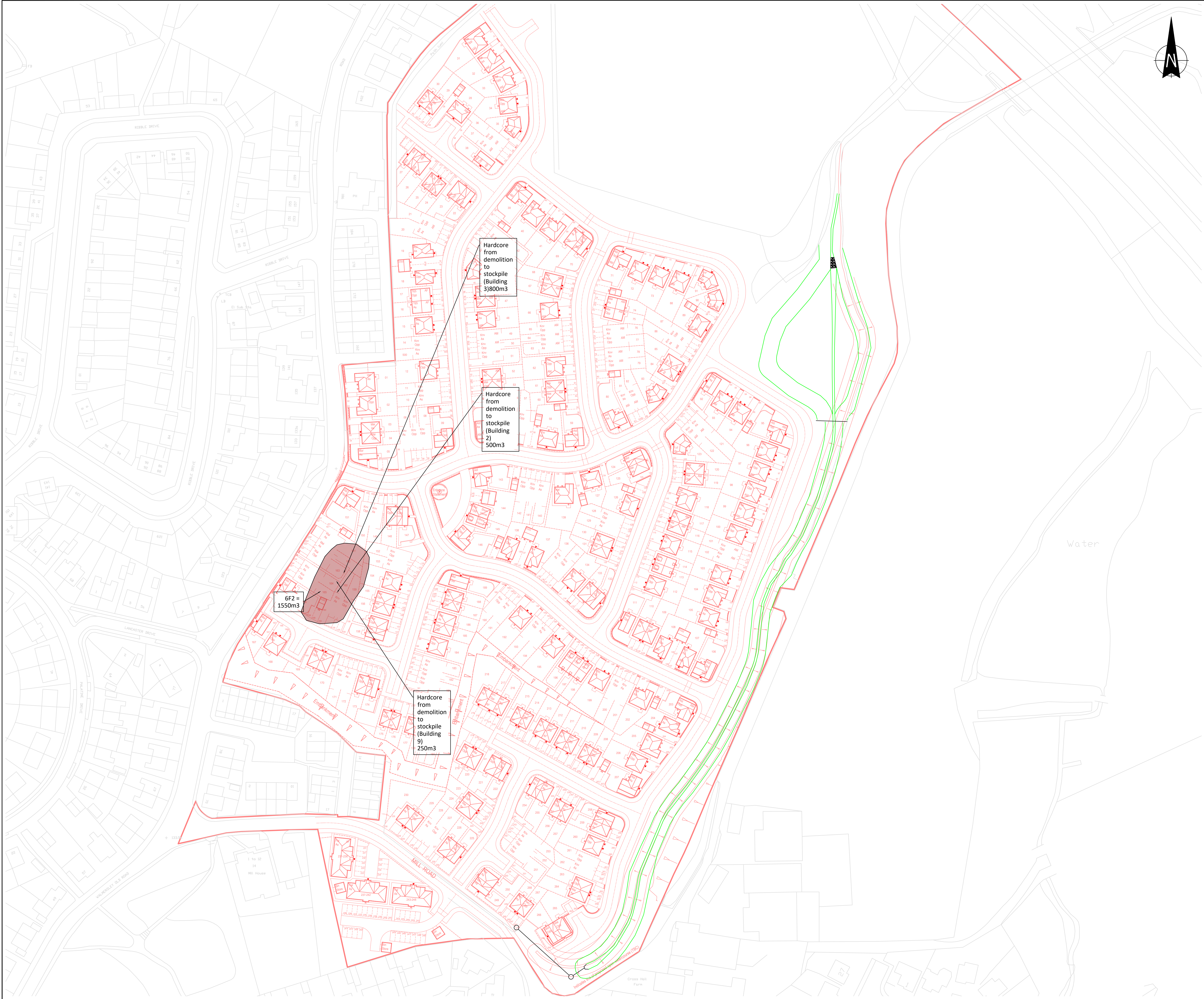
urbanregen



SITE: Tetrosyl 333		DATE: 27-2-20 b	
SKIP CODE 17 04 07		NOTE No	VEHICLE REG: DRIVER: Mick
Time of Collection: 1300			
Size of Skip	40		
40 Yard			
Content: (Identify which) RE-BAR & Steel pipe (ONLY) Steel Plate and Girders Cast Pipe Steel Pipes Rebar Mixed Metals Light Iron (N.B. THESE MATERIALS ARE TO BE SEPARATED AS MUCH AS POSSIBLE)		Comments: 	
PHOTO OF CONTENTS See Opposite			

APPENDIX D

URL Material Tracking Records



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:		Primary Survey Control:	
OSGB36(2)		Grid		Leica SmartNet	



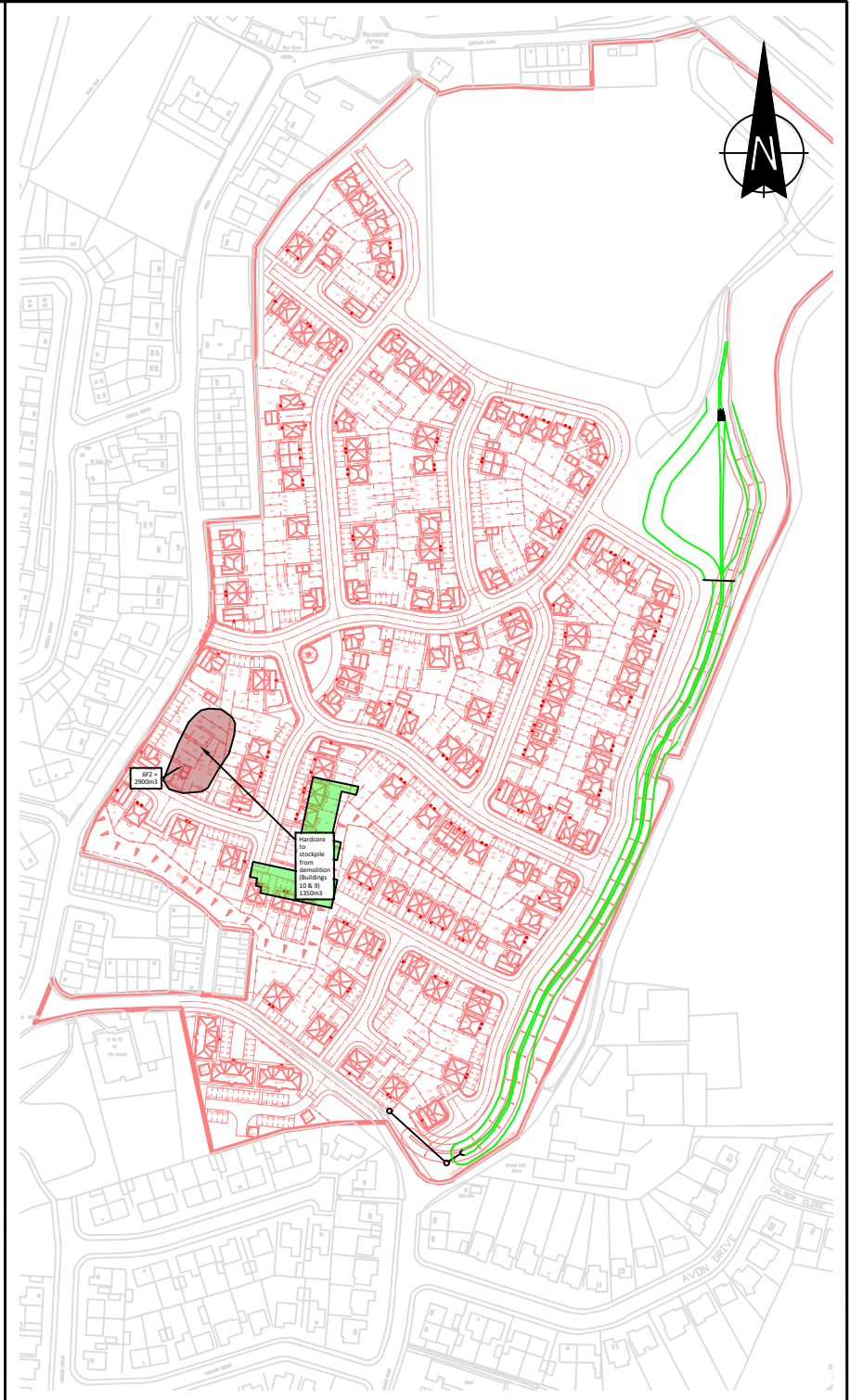
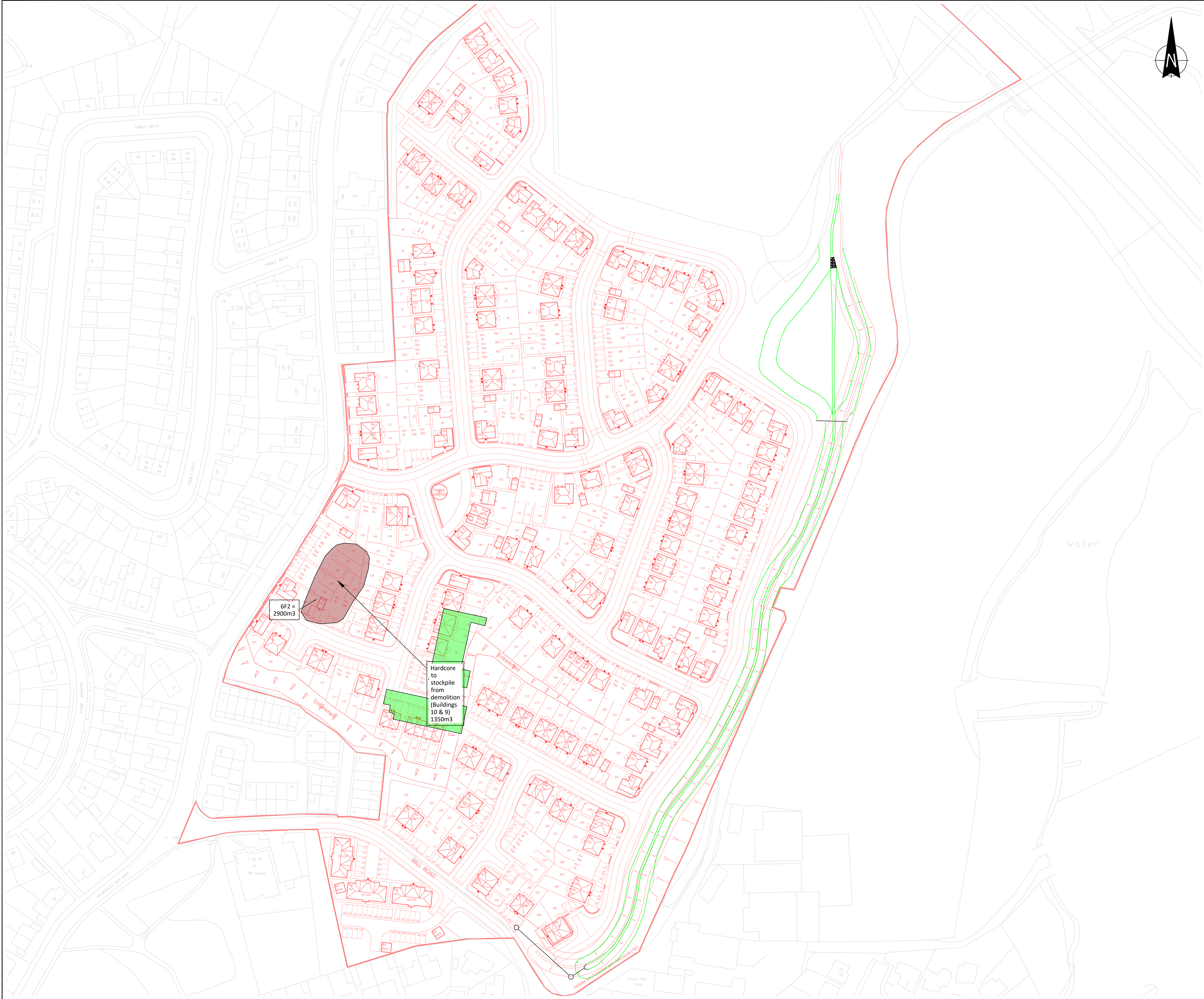
Urban Regen Ltd.
23 Springdale,
Edgworth,
Barton,
BL7 0PS
Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client: Barrat Homes Manchester

Project: Tetsoryl, Bury

Title: MMP Tracking Record
WC - 22/06/2020

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



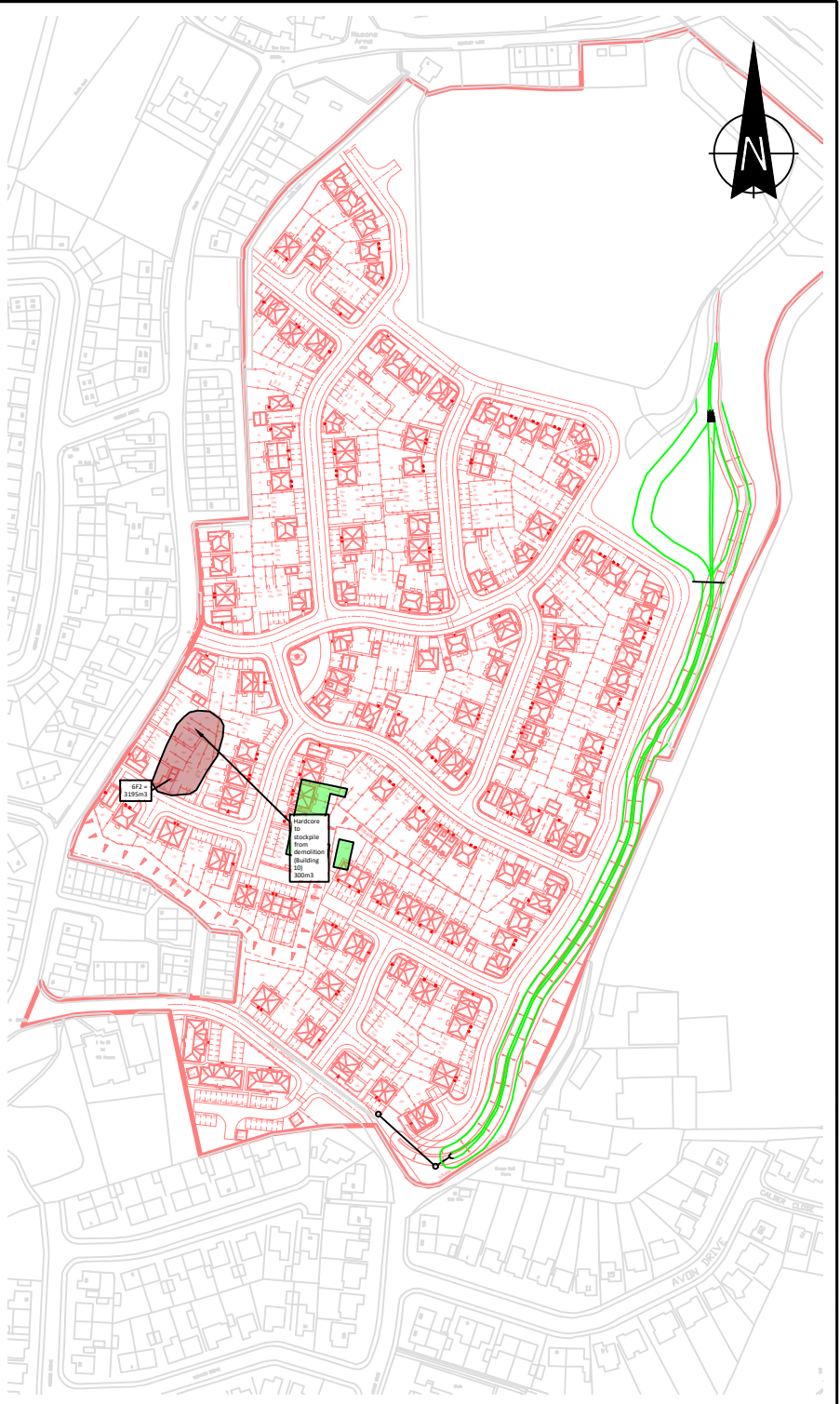
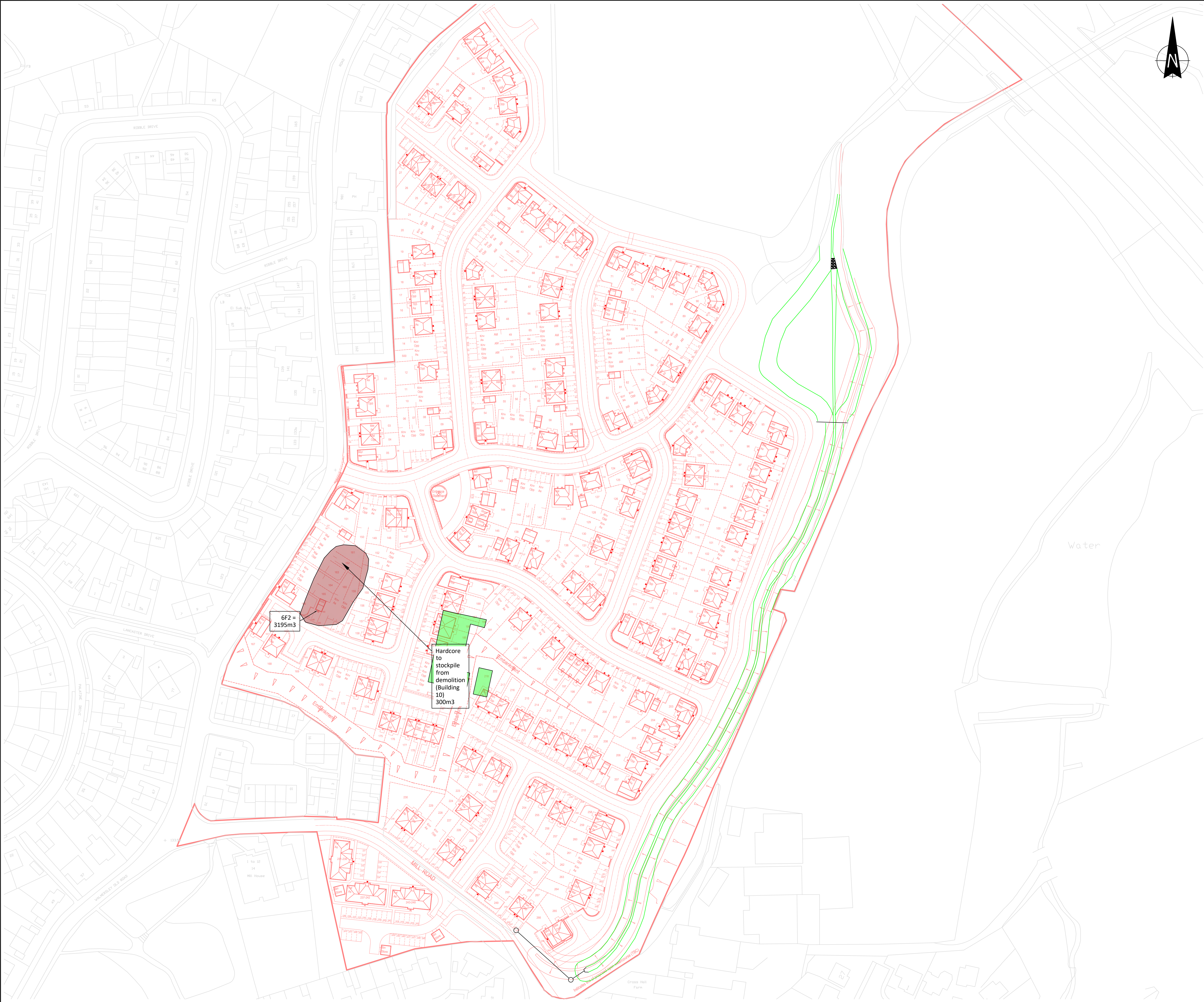
Urban Regen Ltd.
23 Springdale,
Edgeworth,
Barton,
BL7 0PS
Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records
WC - 29/06/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:				
Co-ord System: OSGB36(2)		Co-ord Type: Grid	Primary Survey Control: Leica SmartNet	Secondary Survey Control:
Rev	Date	Amendment	Drawn Checked	



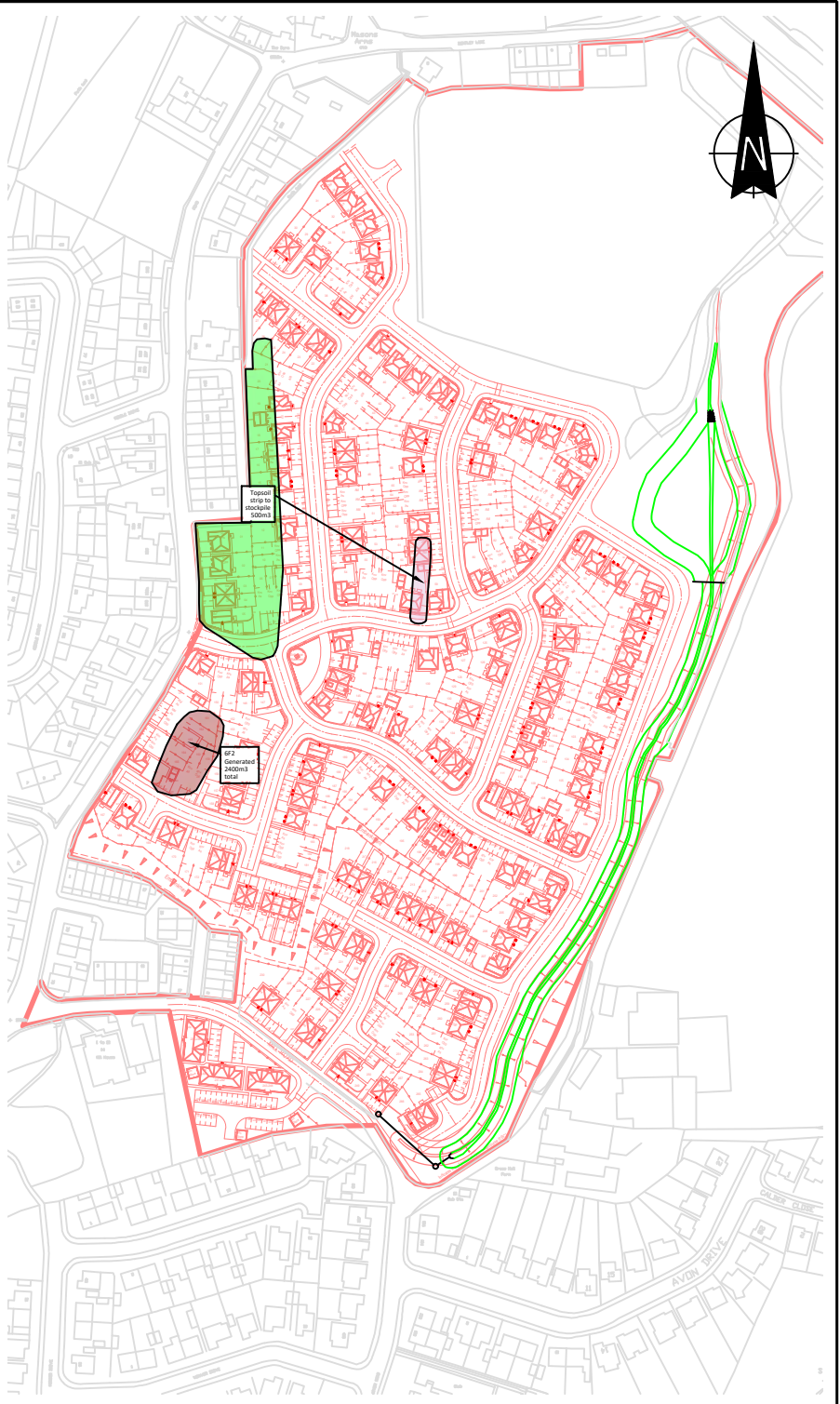
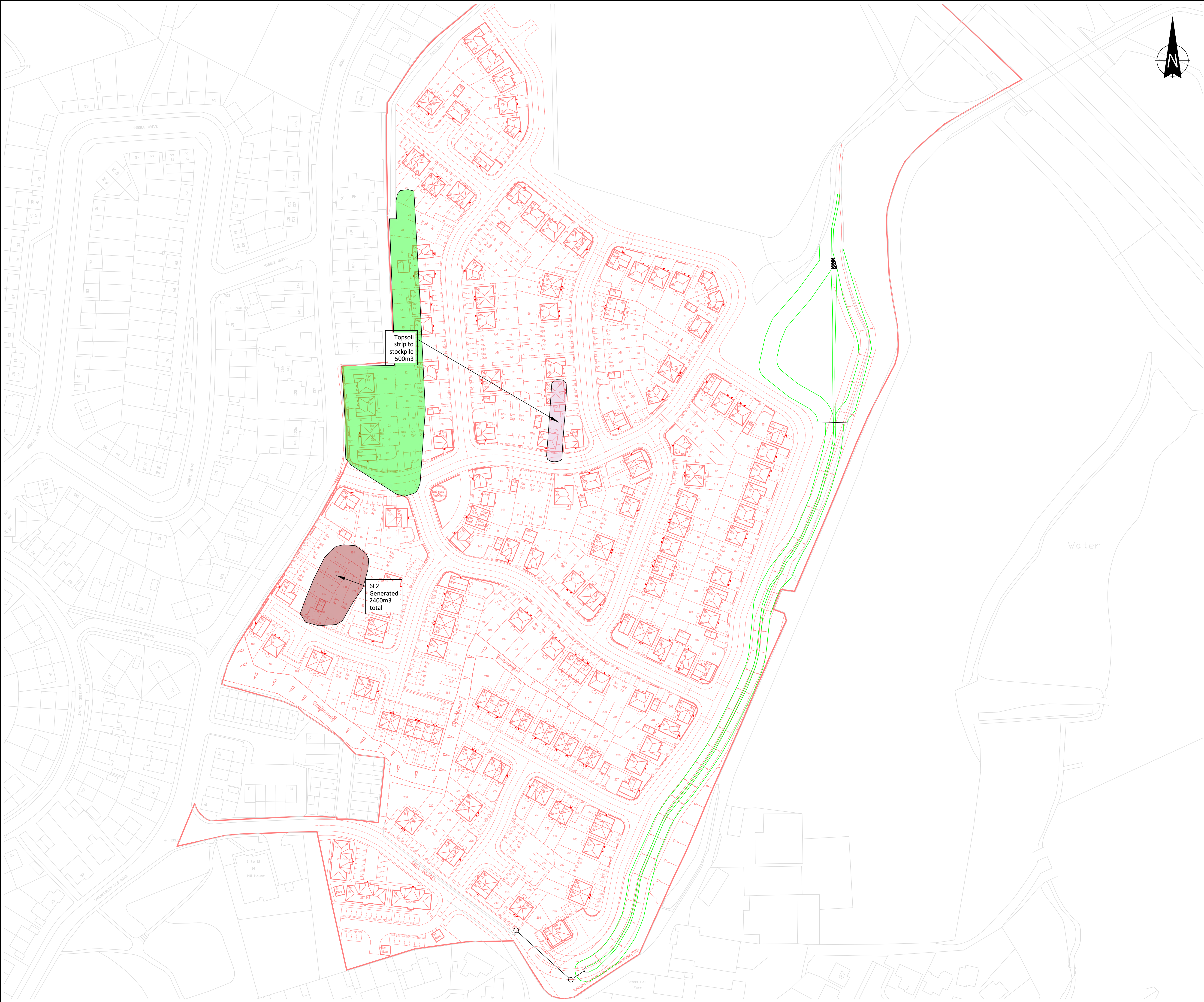
Urban Regen Ltd.
23 Springdale,
Edgeworth,
Barton,
BL7 0PS
Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Traking Records
WC - 06/07/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:				
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(2)		Grid	Leica SmartNet	
Rev	Date	Amendment		Drawn Checked



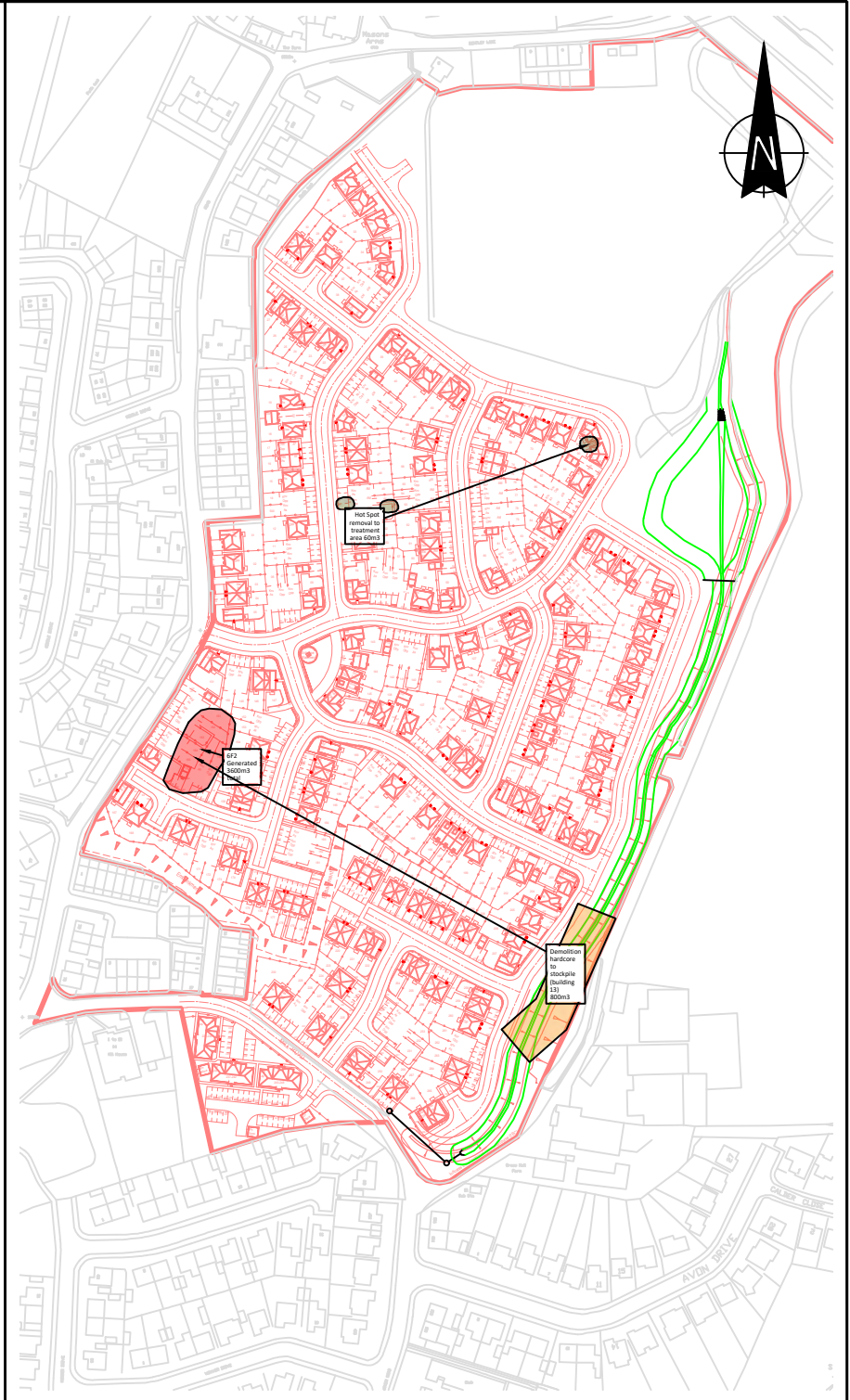
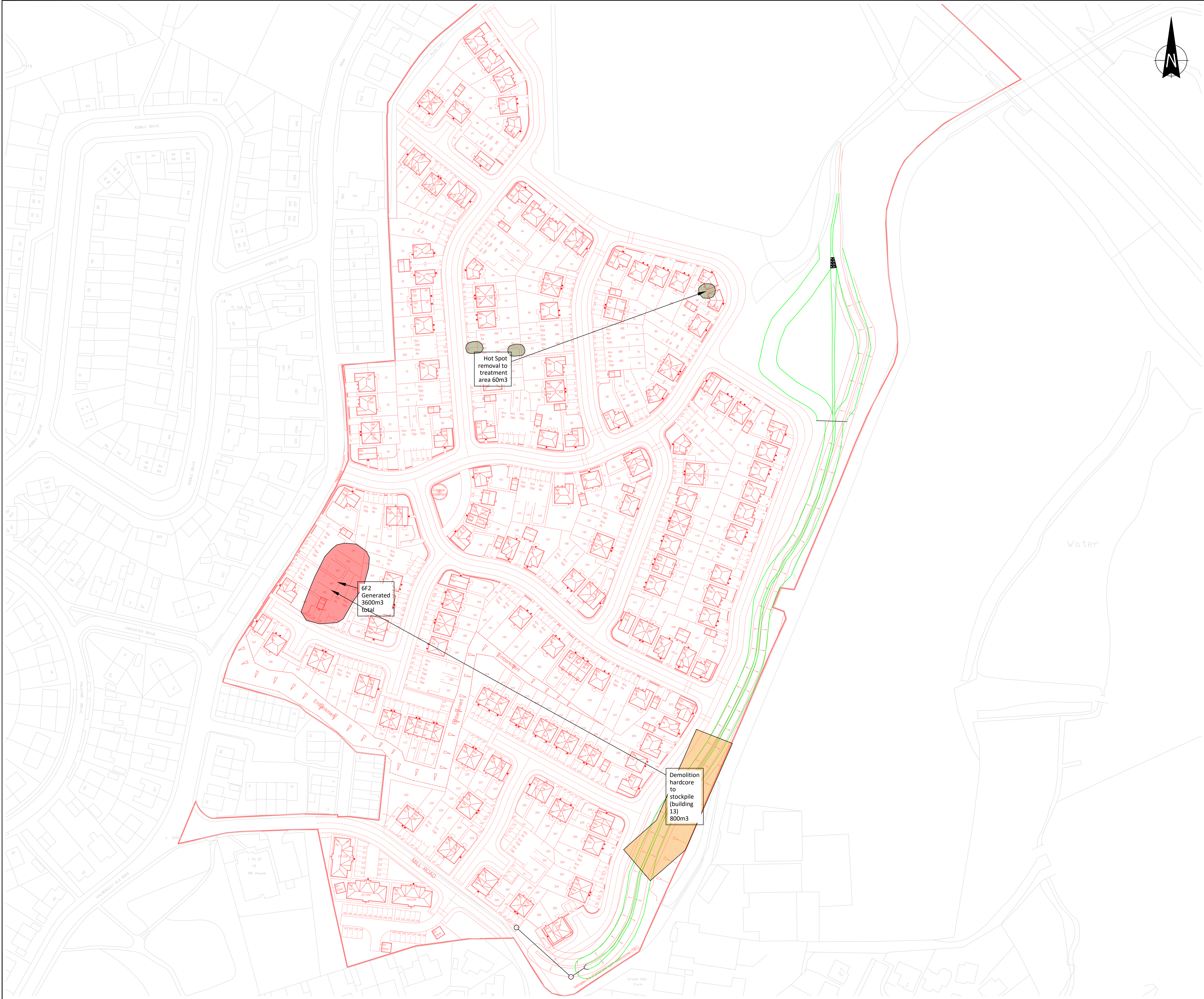
Urban Regen Ltd.
23 Springdale,
Edgeworth,
Barton,
BL7 0PS
Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records WC - 20/07/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:				
Co-ord System: OSGB36(2)		Co-ord Type: Grid	Primary Survey Control: Leica SmartNet	Secondary Survey Control:
Rev	Date	Amendment	Drawn Checked	



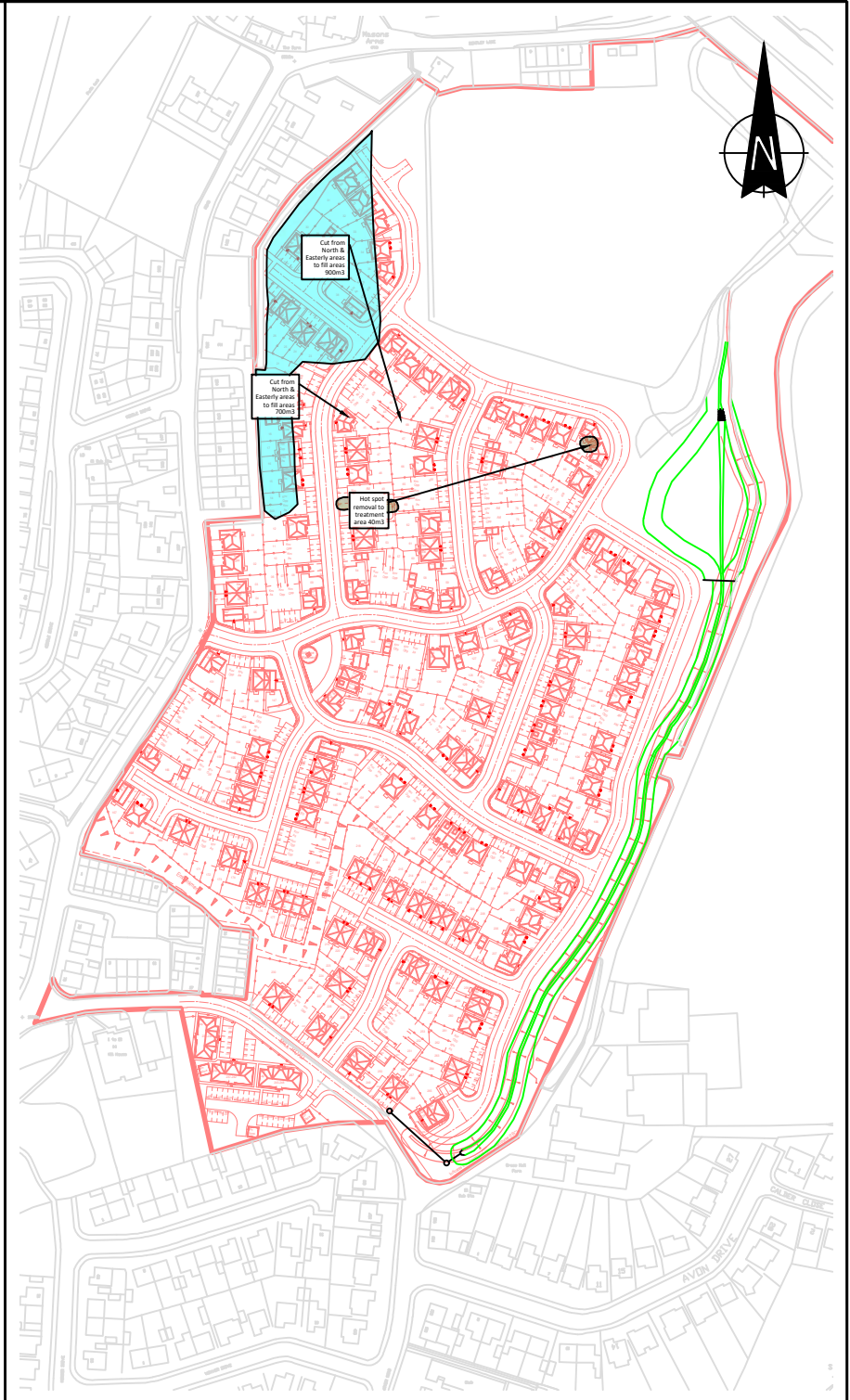
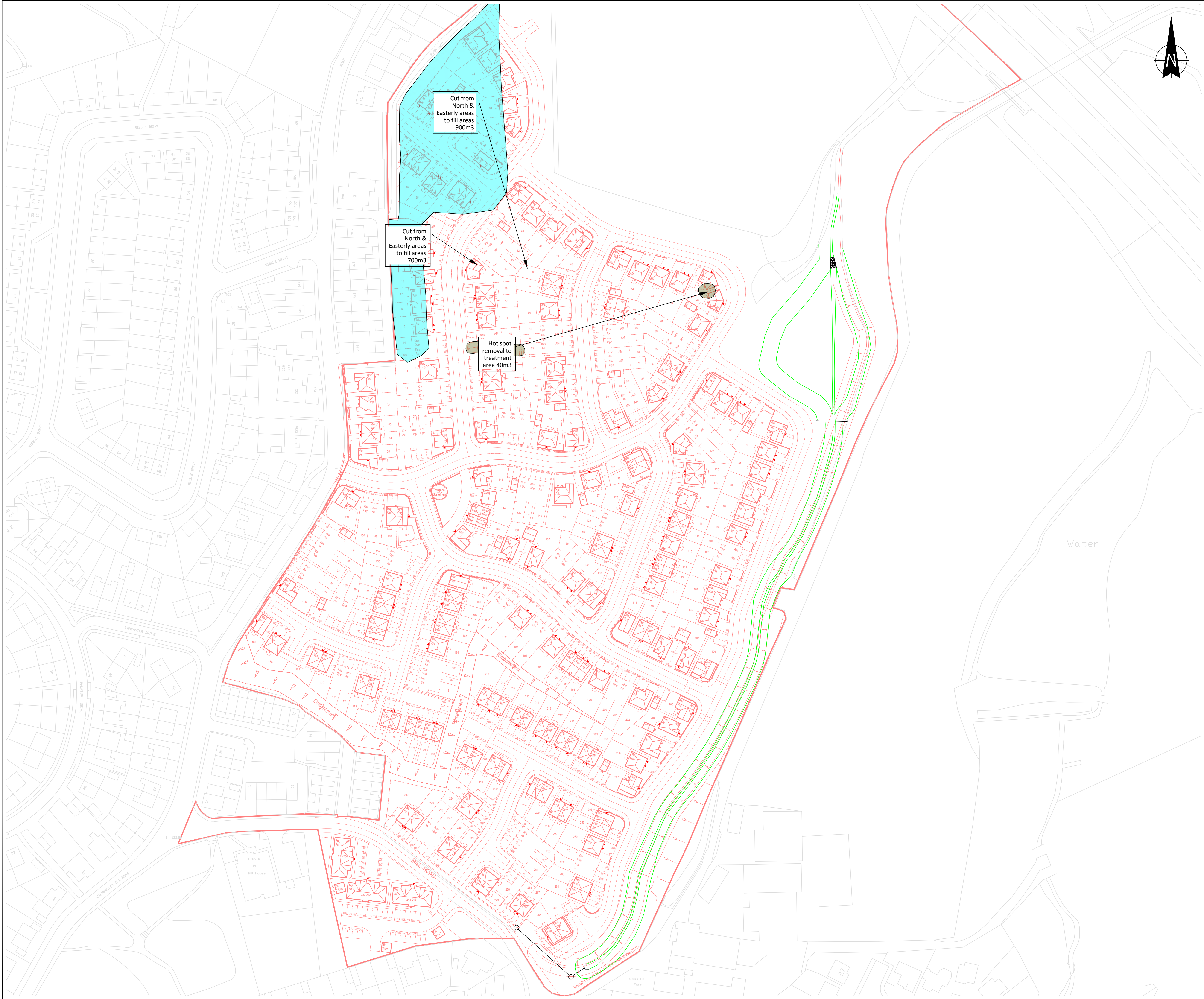
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23 Springdale,
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Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client:
Barrat Homes Manchester

Project:
Tetsoryl, Bury

Title:
**MMP Tracking Record
WC - 27/07/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System: OSGB36(2)		Co-ord Type: Grid		Primary Survey Control: Leica SmartNet	
Secondary Survey Control:					
Rev	Date	Amendment			Drawn
					Checked



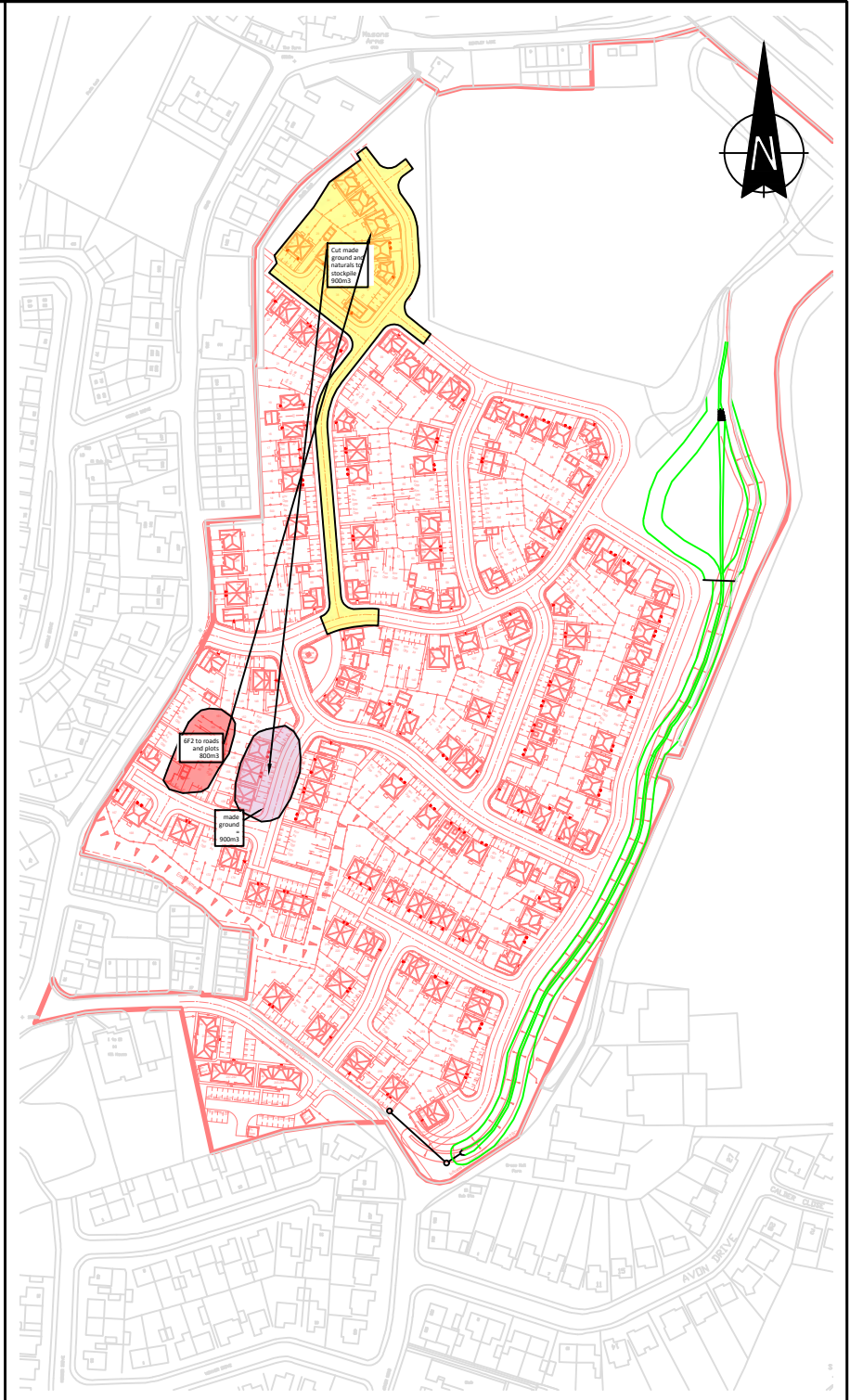
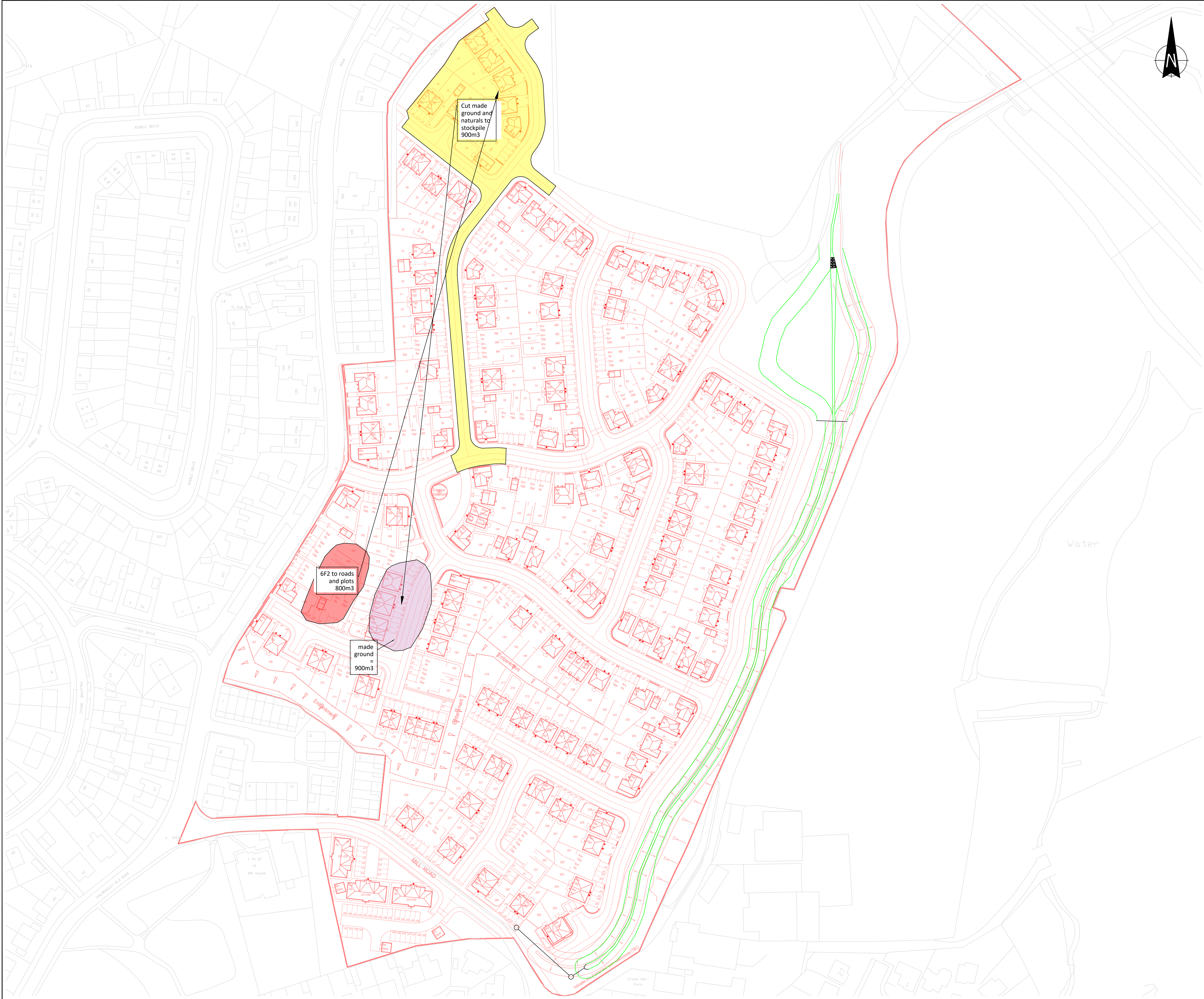
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Web: www.urbanregen.co.uk

Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Record
WC - 08/03/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



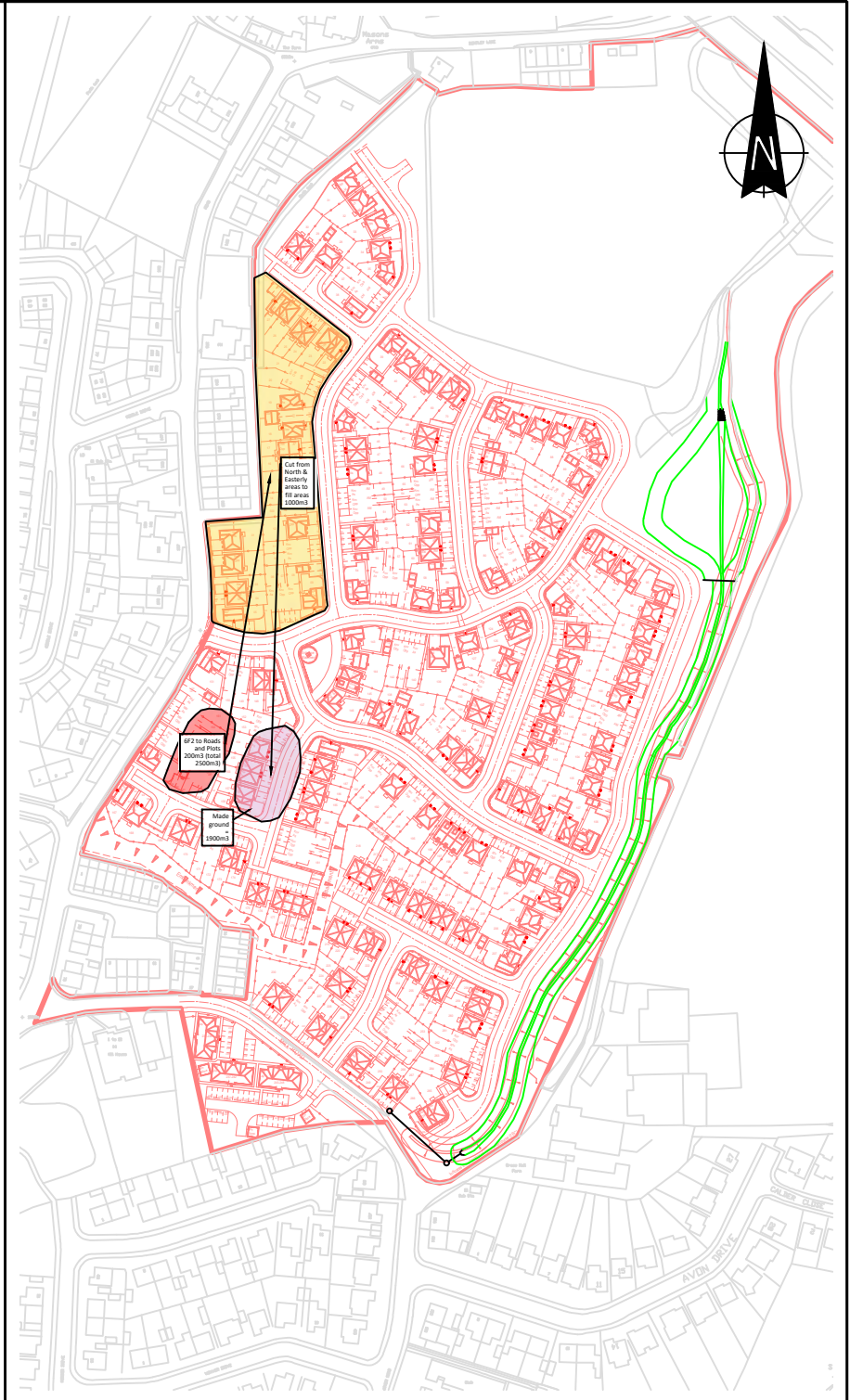
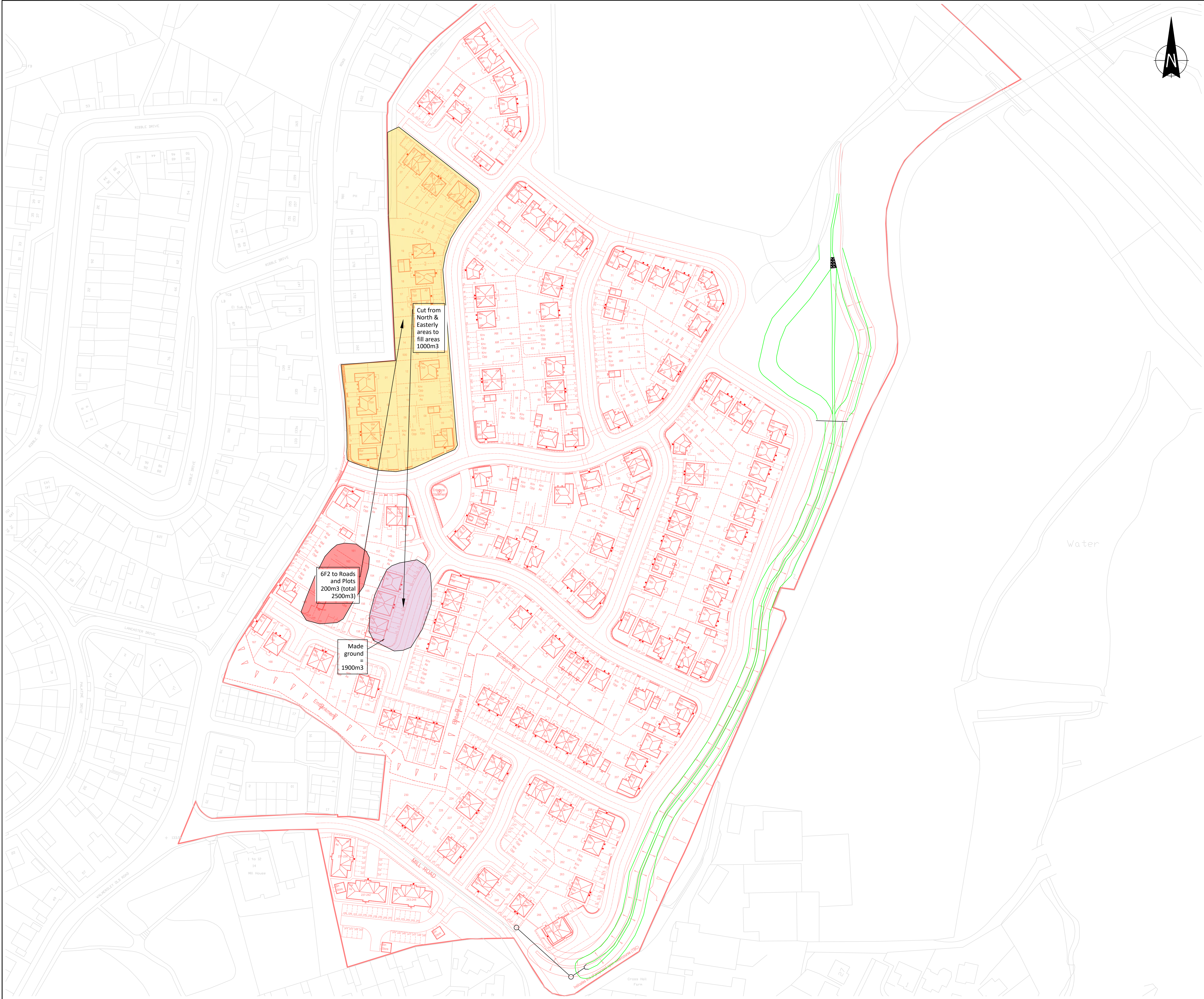
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Barton,
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Tel: 071204 595 933
Email: info@urbanregen.co.uk
Web: www.urbanregen.co.uk

Client: Barrat Homes Manchester

Project: Tetsoryl, Bury

Title: MMP Tracking Records WC - 20/08/2020

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



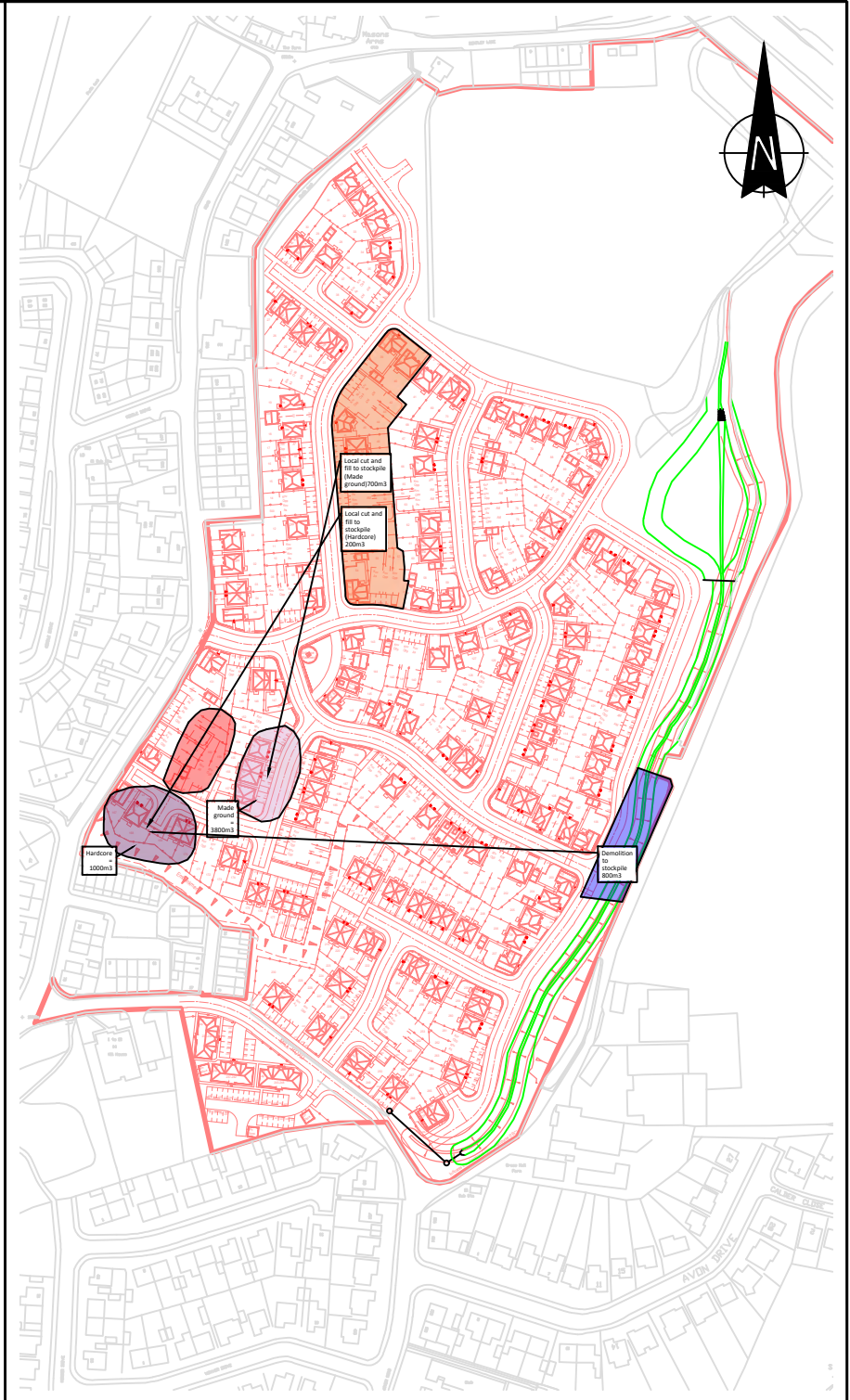
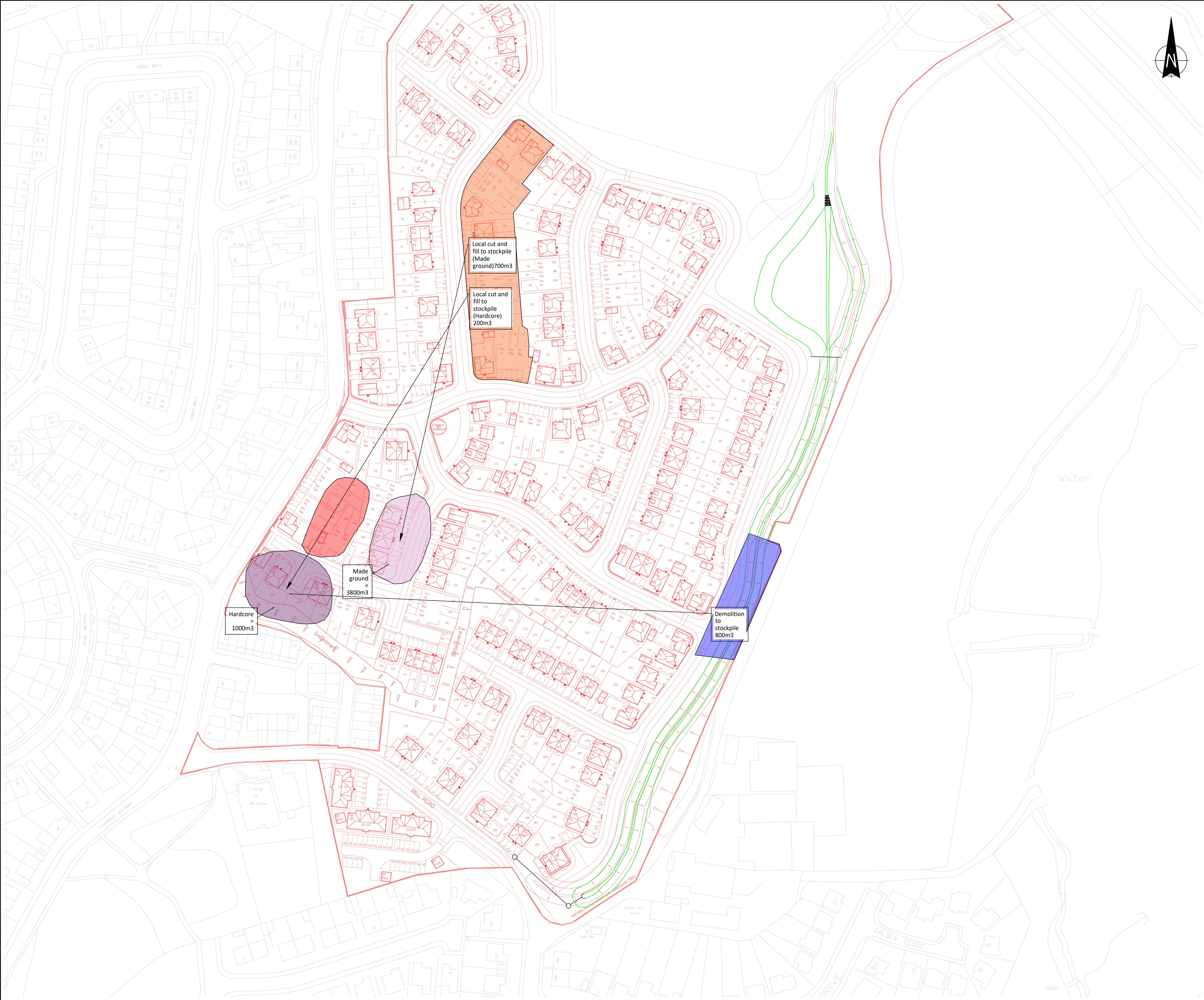
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Client: Barrat Homes Manchester

Project: Tetsoryl, Bury

Title: MMP Tracking Records WC - 17/08/20

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:			
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(2)	Grid	Leica SmartNet	

Rev	Date	Amendment	Drawn	Checked



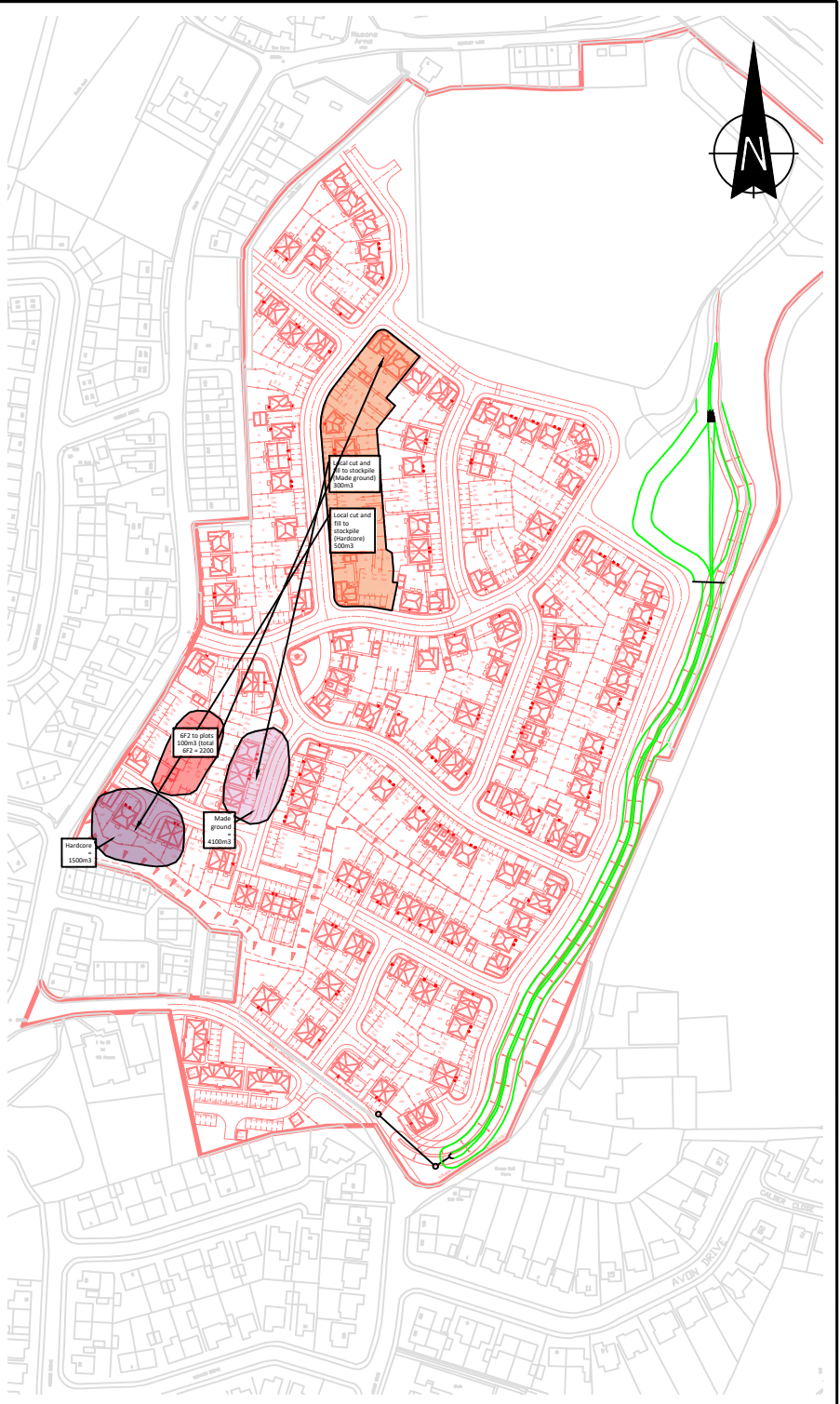
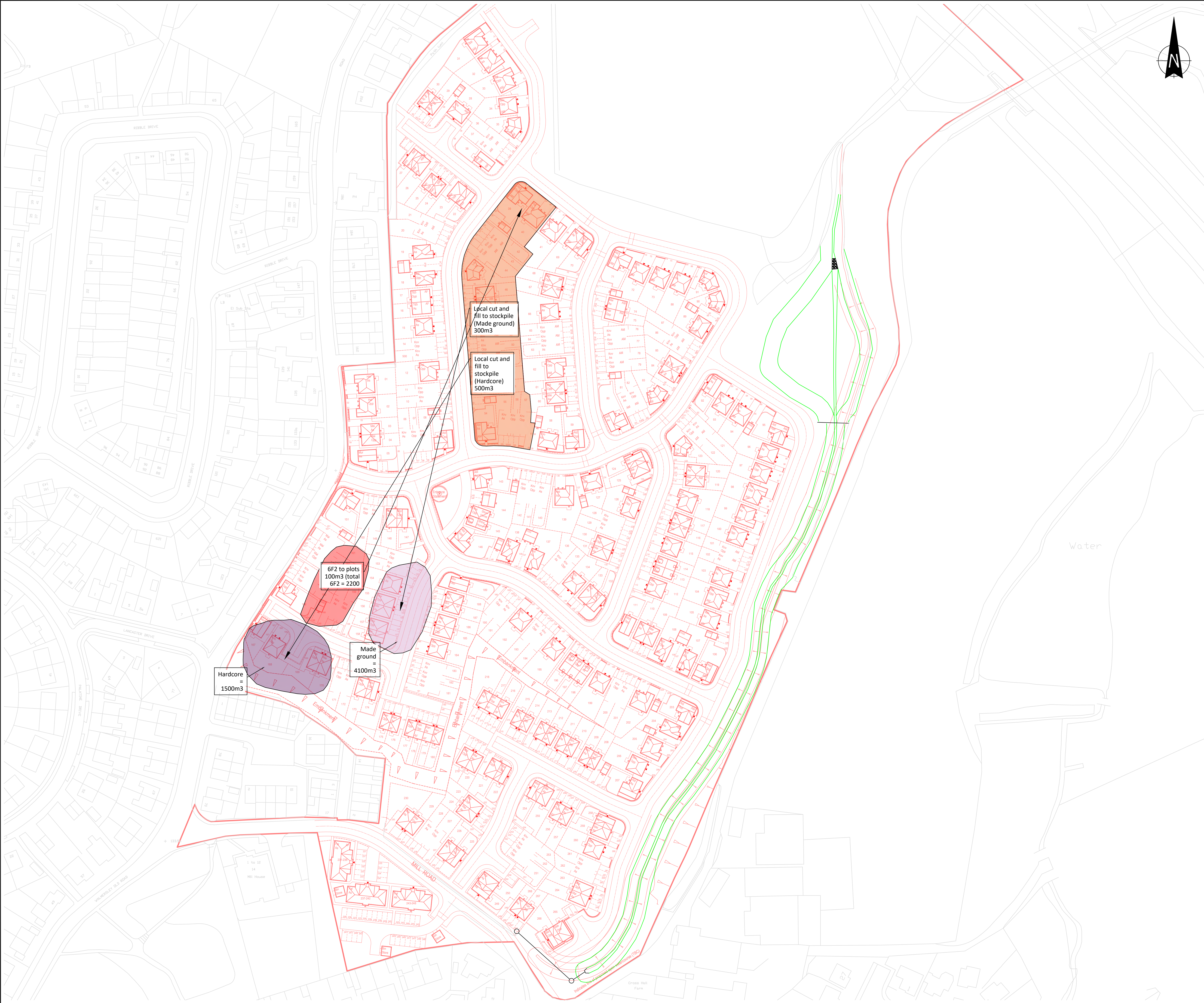
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Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records
WC - 31/08/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:			
Co-ord System: OSGB36(2)	Co-ord Type: Grid	Primary Survey Control: Leica SmartNet	Secondary Survey Control:

Rev	Date	Amendment	Drawn	Checked



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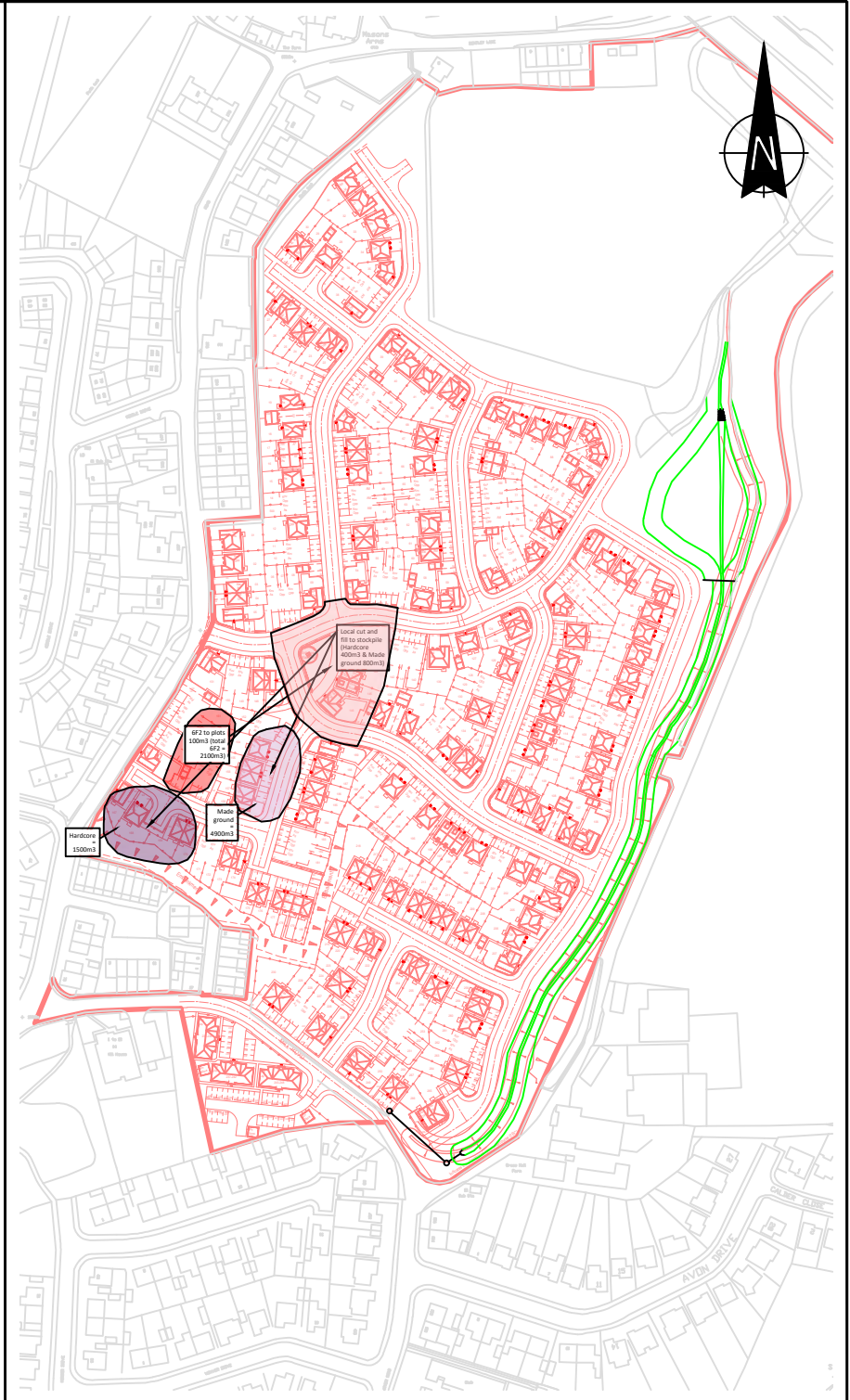
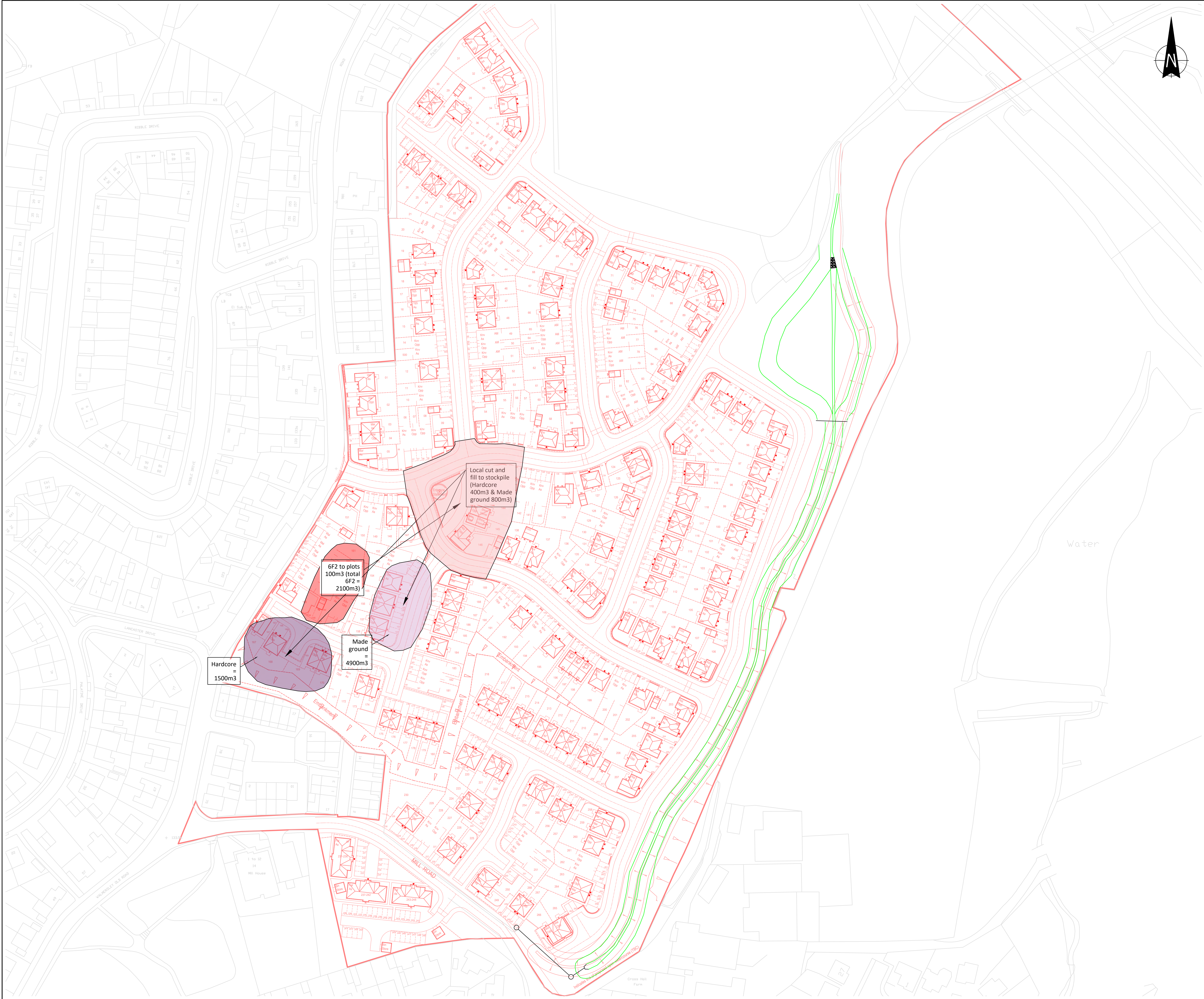
Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records
WC - 07/09/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
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Drawing No:	Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



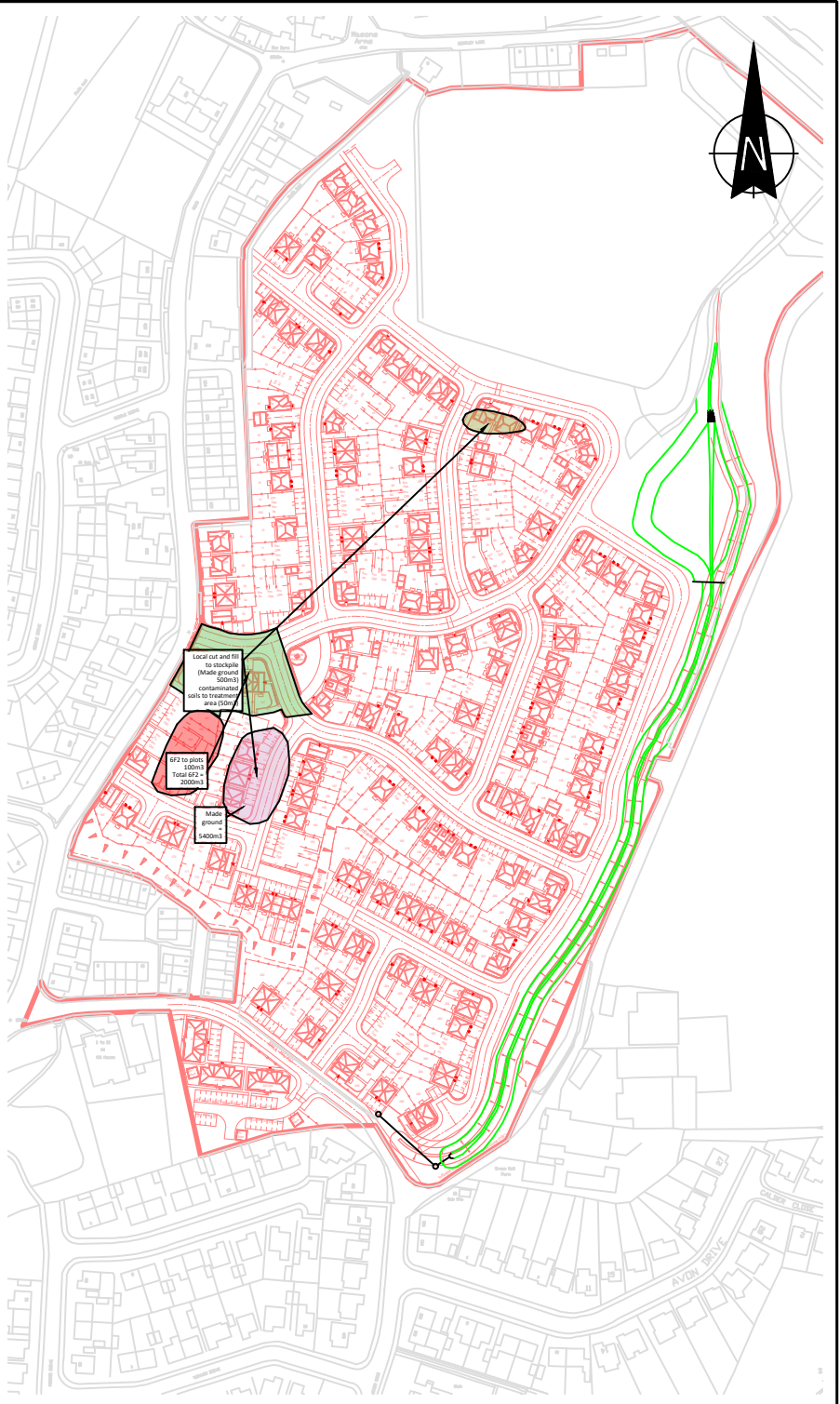
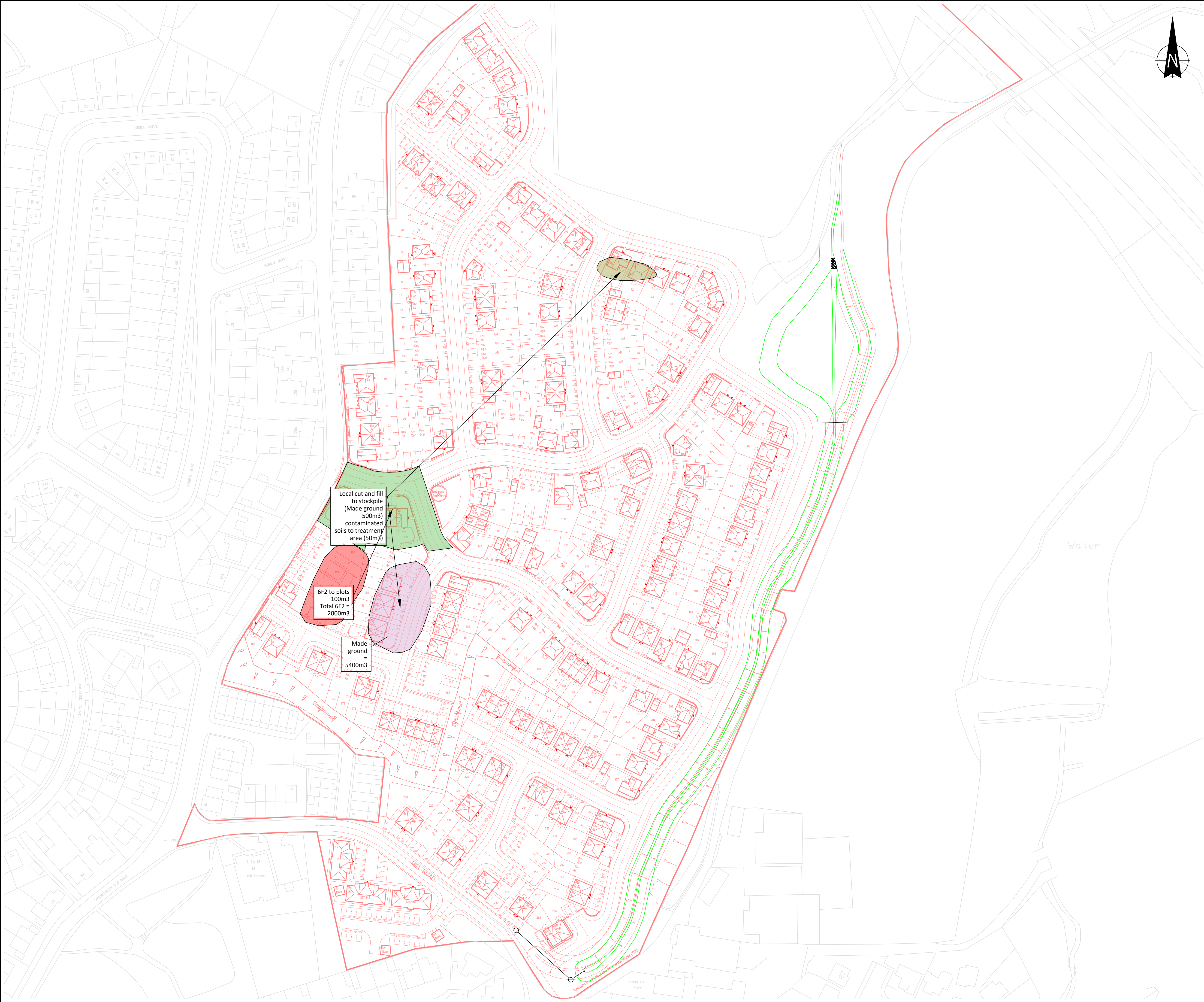
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Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records WC - 14/09/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:					
Co-ord System:		Co-ord Type:	Primary Survey Control:	Secondary Survey Control:	
OSGB36(2)		Grid	Leica SmartNet		
Rev	Date	Amendment			Drawn Checked



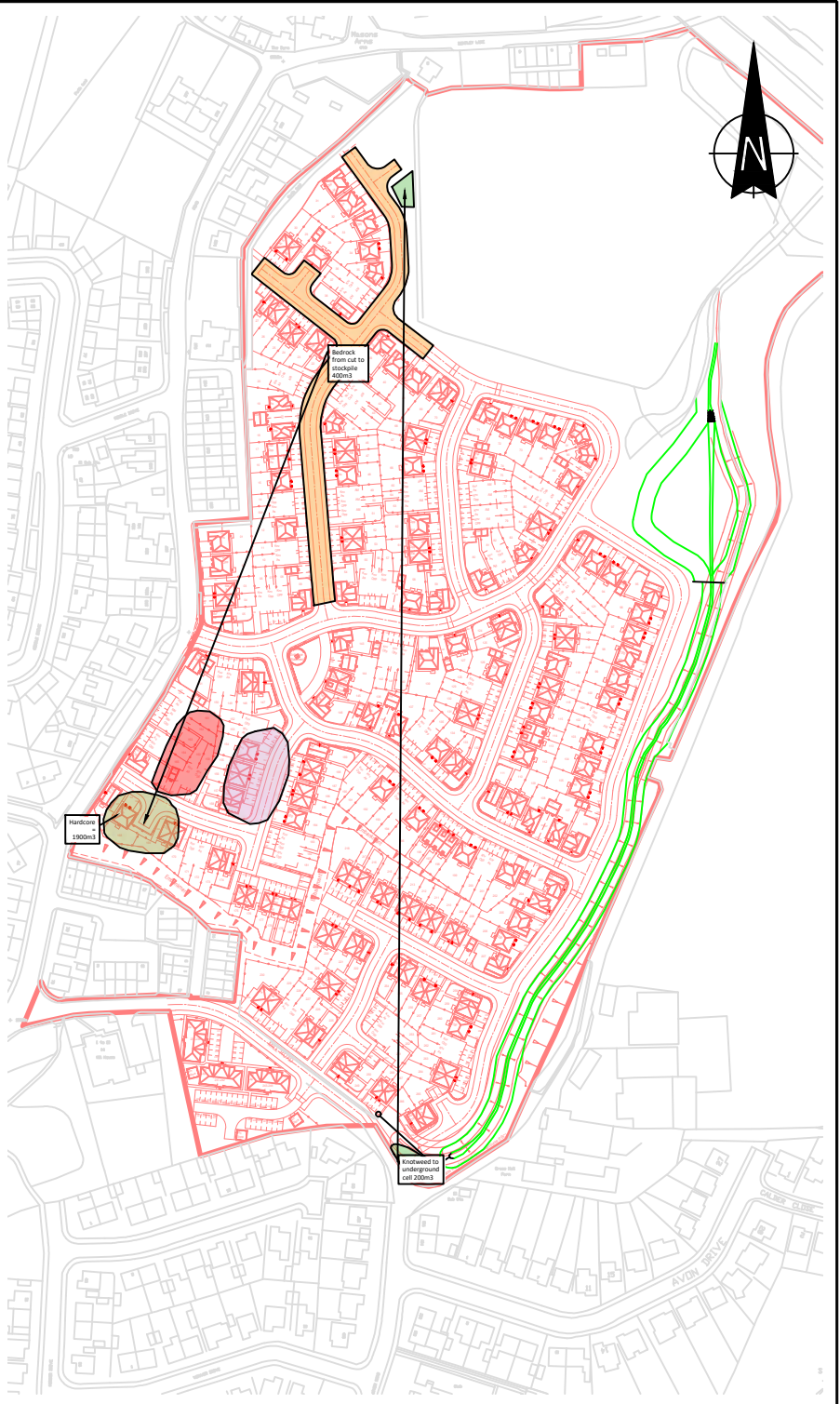
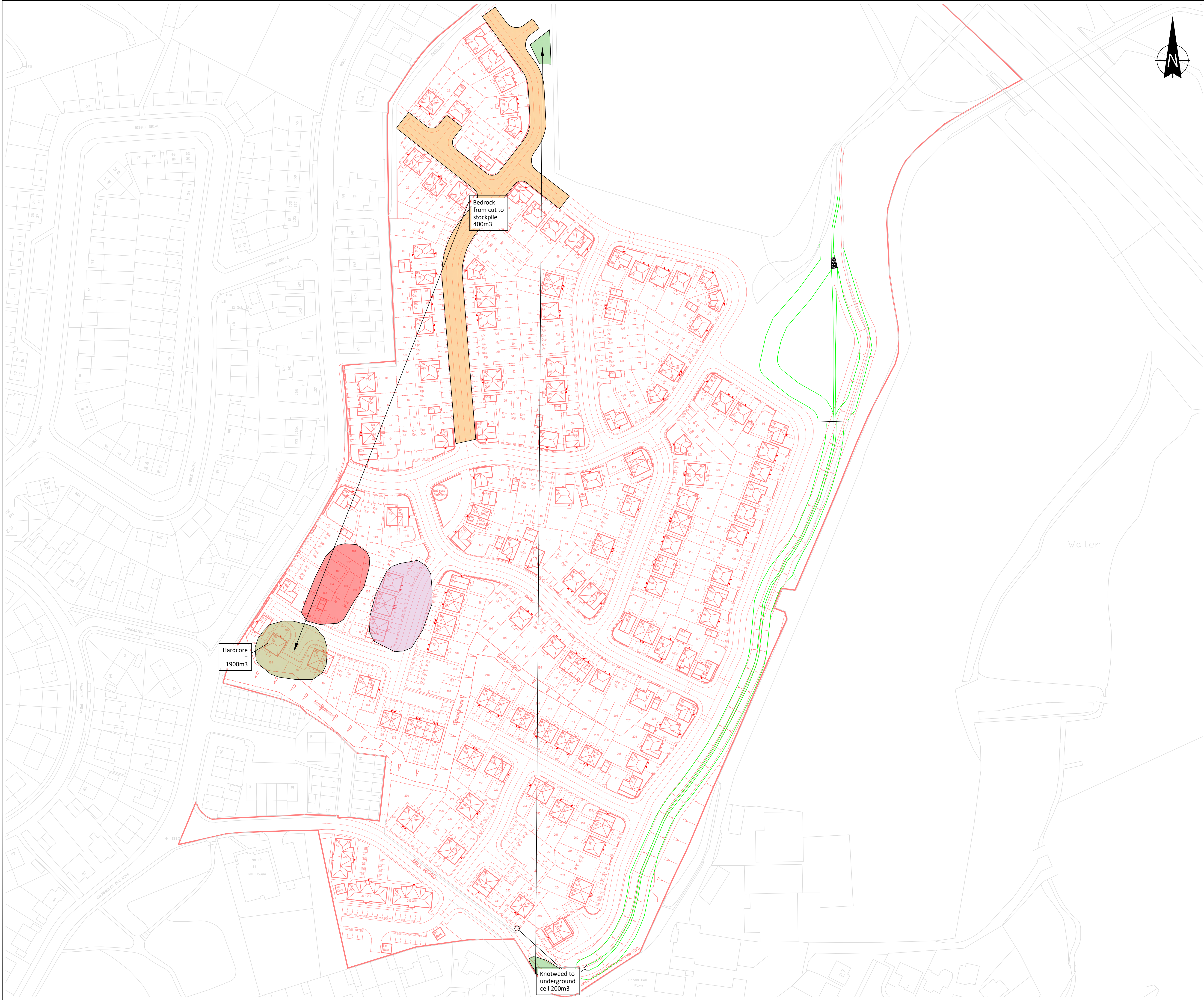
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Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records
WC - 21/09/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
Drawing No:			Revision:



Location Plan Scale 1:5000

Notes:

Survey Information:			
Co-ord System:	Co-ord Type:	Primary Survey Control:	Secondary Survey Control:
OSGB36(2)	Grid	Leica SmartNet	

Rev	Date	Amendment	Drawn	Checked



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Client: **Barrat Homes Manchester**

Project: **Tetsoryl, Bury**

Title: **MMP Tracking Records
WC - 28/09/20**

Scale:	First Issue:	Drawn: G.Bailey	Checked: A.Smith
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Drawing No:	Revision:
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