



New Playzone Pitch Proctor Learning Centre Manchester

Surface Water Strategy

R - 00282 – 001 – SDS – 0
June 2025

Report Originator(s)

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Revision Record

Revision	Date	Description	Written	Approved
0	25.06.25	First Issue	WRA	WRA



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Client

Labosport

Project

New Playzone Pitch, Proctor Learning Centre

Title

Surface Water Strategy

Page no. 2

Project ref 00282

Date June 2025

Contents

1.0	Introduction.....	3
1.1	Design Brief.....	3
1.2	Site Location	3
1.3	Current Land Use	3
1.4	Proposed Development.....	3
2.0	Surface Water Drainage	4
2.1	Existing Surface water drainage	4
2.2	Proposed Storm Drainage Discharge.....	4
2.3	Proposed Surface Water Drainage Strategy.....	5
2.4	SUDS	6
2.5	Maintenance.....	7
3.0	Conclusion	8

Appendices

Appendix A

Site Location Plan

Appendix B

Topographical Survey

Appendix C

Proposed Site Plan

Appendix D

United Utilities Asset Plan

Appendix E

Ground Investigation Extracts

Appendix F

Proposed Drained Areas

SEA Drawing 00282/E01

Appendix G

Proposed Drainage Layout

SEA Drawing 00282/E02



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Page no. 3

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1.0 Introduction

1.1 Design Brief

- 1.1.1 The client, Labosport, requires a surface water drainage design for the installation of a playzone pitch at Proctor Learning Centre, Manchester
- 1.1.2 This report provides design proposals to ensure surface water is managed adequately, along with a SUDS assessment and maintenance schedule.
- 1.1.3 This report has been prepared by SEA Consulting Engineers Ltd. The benefit is limited to our instructing client, Labosport.

1.2 Site Location

- 1.2.1 The proposed development lies within Manchester, on the southern outskirts of the city centre, at the following postal address:
Procter Learning Centre,
Hulme Street,
Hulme,
Manchester
M15 5EF
- 1.2.2 A site location plan is presented in Appendix A.

1.3 Current Land Use

- 1.3.1 The site is currently an artificial play area, and a topographical survey is presented in Appendix B

1.4 Proposed Development

The proposed development will comprise the refurbishment of the existing play area to form a playzone. A site layout is presented in Appendix C.

2.0 Surface Water Drainage

2.1 Existing Surface water drainage

- 2.1.1 The site is not served by any formal surface water drainage. However levels generally fall towards the existing building to the west. The hardstanding areas are provided with gullies; therefore, the existing site is assumed to drain to these gullies.
- 2.1.2 There are United Utilities (UU) combined sewers surrounding the site, their asset plan is presented in Appendix D. There are existing ICs serving the existing building and external areas, which we assume outfall to the surrounding combined sewers.

2.2 Proposed Storm Drainage Discharge

- 2.2.1 Paragraph 80 of the Planning Practice Guidance for 'Flood Risk and Coastal Change' defines the hierarchy of drainage options. Where reasonably practicable the aim should be to discharge stormwater as high up the following hierarchy of storm drainage options;
- Into the Ground (infiltration);
 - To a surface water body;
 - To a surface water sewer, highway drain or another drainage system, and
 - To combined sewer

- 2.2.2 Each of these is considered separately below;

Into the ground

- 2.2.3 A ground investigation has been undertaken by Soiltechnics Ltd, with infiltration testing carried out. They have concluded that the use of soakaways at this site is not viable. This is further backed up by the fact that no existing soakaway features are present on site. Extracts from the ground investigation are presented in Appendix E

To a surface water body

- 2.2.4 There are no existing watercourses or bodies within the vicinity of the site.

To a surface water sewer, highway drain or another drainage system

- 2.2.5 There are existing ICs chambers surrounding the existing building, which we assume currently drain the building's surface water and outfall into the existing UU combined sewer in Hulme Road. These offer a viable outfall for the new playzone drainage.



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Page no. 5

Project ref 00282

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2.3 Proposed Surface Water Drainage Strategy

- 2.3.1 Proposals are to drain the new playzone pitch to the existing surface water, which drains the existing building to the south.
- 2.3.2 As this is a refurbishment project, the existing surfacing and tarmac will be removed to 125mm depth to allow for the construction of a 100mm deep type 3 subbase along with a 25mm permeable surface course.
- 2.3.3 At the low point a lined filter trench shall be provided beneath the pitch build up with a 100mm perforated pipe to convey surface water to the outfall.
- 2.3.4 Appendix F presents the sites drained area, which equates to 550m². This area will have a minimal impact on the receiving drains. The new type 3 subbase and filter trench will also naturally slow surface water down prior to outfall.
- 2.3.5 A Drainage layout for the scheme is presented in Appendix G.

2.4 SUDS

- 2.4.1 The use of SUDS and pollution control measures have been assessed using the Simple Index Approach set out within the CIRIA SUDS Manual 2015. Based on table 26.2 of the SUDS Manual, the pollution indices for the site are set out in table 2.1 below.

Pollution Hazard Indices for Different land use classifications				
Land use	Pollution Hazard Level	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Residential Roofs	Very Low	0.2	0.2	0.05

Table 2.1 – Extract of table 26.2 of the SUD manual.

- 2.4.2 Residential roofs is considered to be the most appropriate category, due to the minimal pollution hazard associated with the proposed playzone, which will have no vehicle movements within its extent.
- 2.4.3 Surface water from the area will pass through the permeable subbase. Therefore acting very similar to permeable paving.
- 2.4.4 Table 26.3 of The SuDS Manual shows the mitigation indices for a range of Suds components for discharges to surface waters. An extract of this is provided in Table 2.2 below for the components relevant to the proposed development.

Indicative mitigation indices			
Type of SUDS Component	Mitigation Indices		
	Total Suspended Solids (TSS)	Metals	Hydrocarbons
Permeable Paving	0.7	0.6	0.7

Table 2.2 – Extract from table 26.3 of the SUDS Manual

- 2.4.5 Based on the above it can be seen that the permeable subbase will provide adequate treatment for the site's surface water.

2.5 Maintenance

- 2.5.1 All new surface water will remain private and maintenance will be the responsibility of the landowner. The following maintenance plan shall be implemented.

Playzone and Permeable subbase

Maintenance Schedule		
Maintenance Category	Required Action	Frequency
Regular Maintenance	Brushing (Standard cosmetic sweep over all areas)	Once a year, after the autumn leaf fall, or reduced frequency as required, based on site specific observations of clogging or manufacturers recommendations. Particular attention to be paid to areas where water into pervious areas from adjacent impermeable areas as this area is most likely to collect sediment
Occasional maintenance	Stabilise and mow adjacent contributing areas	As required
	Removal of weeds or management using glyphosphate applied directly into the weeds by an applicator rather than spraying	As required
Remedial Actions	Remediate any landscaping which, through vegetation maintenance strip, has been raised to within 50mm of the finished surface	As required
	Remedial work to any depressions, rutting and cracked surfacing considered detrimental to the performance or hazard to users	As required
	Rehabilitation of surface and upper substructure by remedial sweeping	Every 10-15 years, or as required (if infiltration performance is reduced due to significant clogging)
Monitoring	Initial inspection	Monthly for 3 months after installation
	Inspect for areas of poor operation and/or weed growth – if required take remedial action	3-monthly, 48hrs after large storms for the first 6 months
	Establish slit accumulation rates and establish appropriate brushing frequencies.	Annually
	Monitor Inspection chambers	Annually



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Surface Water Strategy

Page no. 8

Project ref 00282

Date June 2025

3.0 Conclusion

3.1.1 Based on the above, and providing the above strategies are adopted, the developed site will not contribute further to flood risk and therefore satisfying the requirements of the National Planning Policies Framework.

3.1.2 References

- Department for Communities and Local Government (July 2021) - National Planning Policy Framework.
- BS 8533:2011 Assessing and managing flood risk in development – Code of Practice.
- CIRIA Report C635 Designing for exceedance in urban drainage – good practice.
- The SUDS Manual
- BS 8533:2011 Assessing and managing flood risk in development – Code of Practice.
- Design and Analysis of Urban Storm Drainage – The Wallingford procedure – Volume 1.



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Appendix A

Site Location Plan

LOCATION PLAN

CHECK ALL DIMENSIONS PRIOR TO COMMENCEMENT OF WORK

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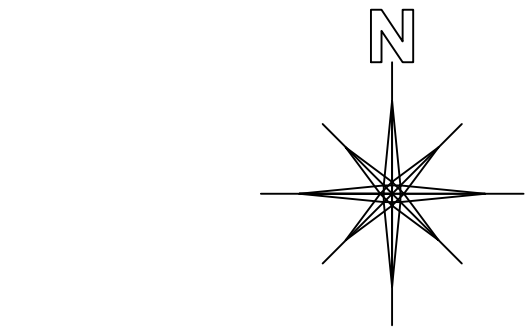
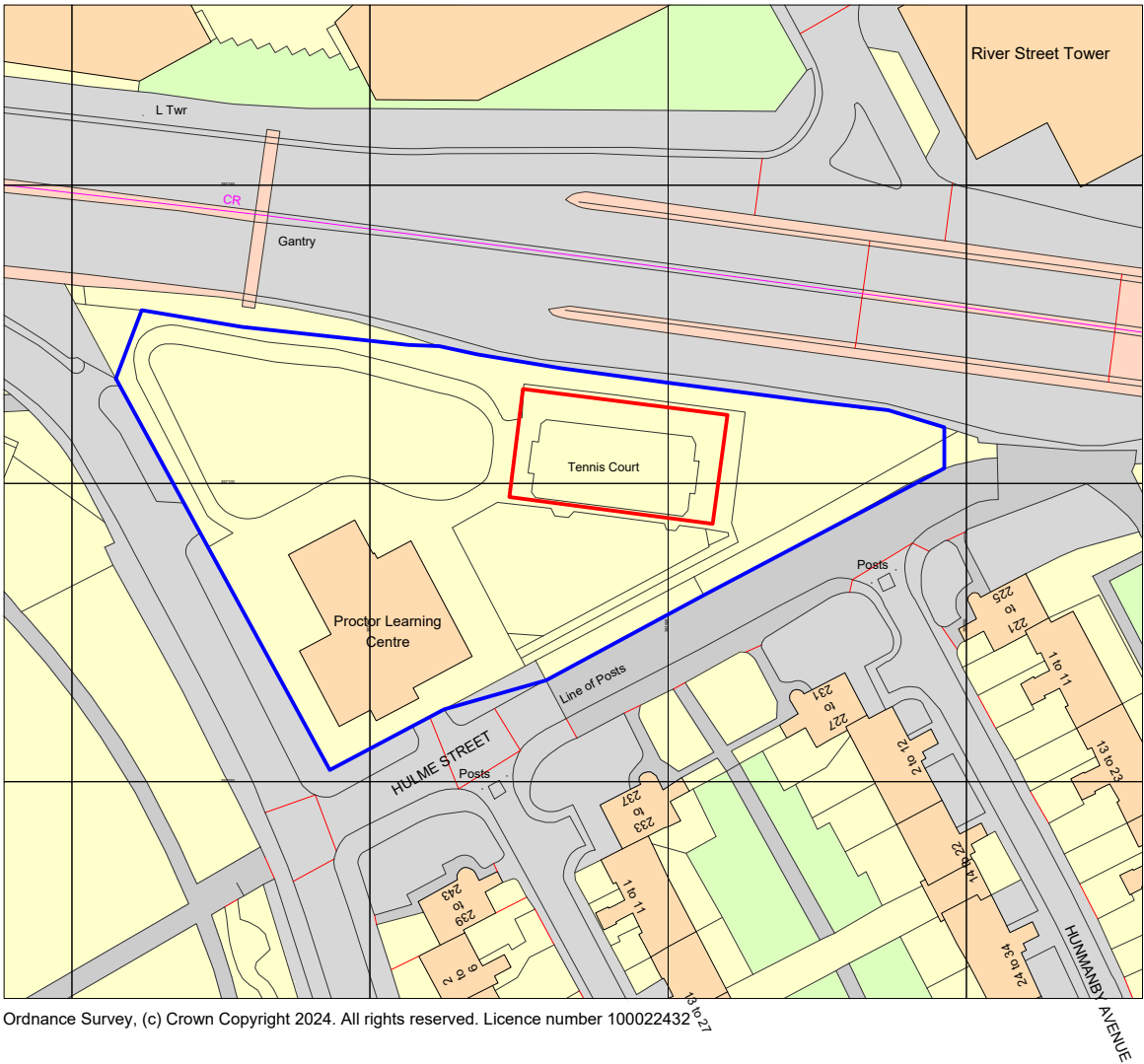
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 APPLICATION SITE AREA REQUIRED

 LAND AREA UNDER OWNERSHIP OF CLIENT



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SIS UK
PLAYZONE FACILITY DEVELOPMENT

LOCATION PLAN

DRAWING			
PLANNING	MD	01	
DATE	LSUK 24-0480	07/02/2025	
PROJECT	A1	SCALE	1:1250
PAPER SIZE	A1	SCALE	1:1250



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Appendix B

Topographical Survey



GENERAL NOTES

This drawing is to be read and printed in full colour.

SURVEY NOTES

1. This plan should only be used for its original purpose. Brightsurv Ltd accepts no responsibility if supplied to any other party than the original client.
2. Certain areas of the site may have been inaccessible due to dense vegetation, vehicles etc on site at the time of survey, therefore not all services may be identified on the survey drawing.
3. Information Shown outside of the site boundary has been taken from Ordnance Survey records and would need verification to be relied upon.
4. The spread of vegetation shown is approximate only. Where canopy spread is critical then this shall be regularly checked. Generally only trees with a spread greater than 2.0m will be shown on the drawing.
5. Where the identity of a service is shown this is based on a visual id only. Where specific identification is required then additional survey work shall be undertaken.
6. Dimensions shown are in millimetres and levels in metres unless indicated.

Levels Levels relate to GPS observations.

LEGEND KEY					
AV	Air Valve	FL	Floor Level	RE	Rodding Eye
B	Bollard	F/Lt	Flood Light	RL	Ridge Level
BH	Borehole	FW	Foul Water	RS	Road Sign
BL	Bed Level	G	Gully	RWP	Rainwater Pipe
BS	Bus Stop	GV	Gas Valve	St	Stump
BT	BT Cover	Ht	Height	SL	Soffit Level
BW	Brick Wall	IC	Inspection Chamber	SV	Stop Valve
CATV	Cable TV Cover	IL	Invert Level	SVP	Soil & Vent Pipe
CB	Close Boarded	I/R	Iron Railing	SW	Surface Water
CL	Chain Link	KO	Kerb Outlet	SW	Stone Wall
CL	Cover Level	LB	Letter Box	THL	Threshold Level
Col	Column	LP	Lamp Post	TL	Traffic Light
C/RW	Concrete Retaining Wall	MH	Manhole	TP	Telegraph Pole
C/W	Concrete Wall	Mkr	Marker Post	U/S	Underside
C/Pt	Catch Pit	NP	Name Plate	UTL	Unable To Lift
DPC	Damp Proof Course	O/H	Overhead	VP	Vent Pipe
Dr	Drain	P	Post	WL	Water Level
EL	Eaves Level	PI	Pipe	WM	Water Meter
ER	Earth Rod	P/R	Post & Rail	WO	Wash Out
EP	Electricity Pole	PW	Post & Wire	WT	Water Tap
PH	Fire Hydrant	PL	Parapet Level		

Building		Tree Canopy	
Vegetation		Fence	
Control Station :		Boundary	
Bush/Shrub		Contours	
Tree		OH Telecom	
Tree (Multi-Bole)		OH Electric	
		Foul Water	
		Surface Water	
Bore Hole			
Gate			

Brightsurv Ltd.

9 Thickwillow
Godmanchester
PE29 2LR

Contact: Richard@brightsurv.co.uk
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Client Football Foundation

Project Procters
Manchester

Title Topographical Survey

Scale at A3 1:250 Drawn by RB Checked by RB Date Feb 2024

Status For Information Project ref BR1894 Drawing no. T01 Revision



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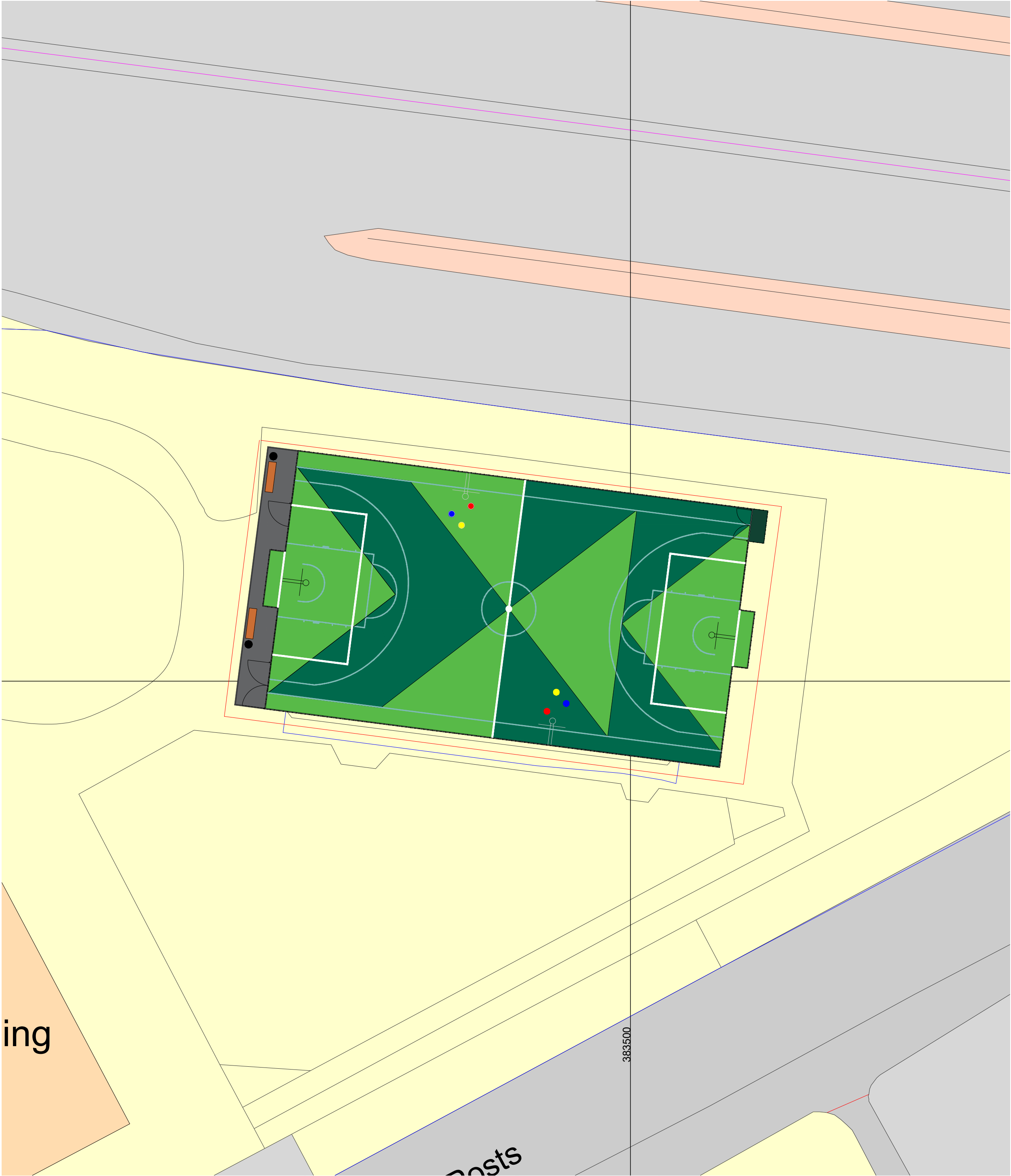
Title

Surface Water Strategy

Appendix C

Proposed Site Plan

DEVELOPMENT LAYOUT



FACILITY TYPE
FOOTBALL AND BASKETBALL
PAINTED POROUS ASPHALT (MACADAM) SURFACED PLAYZONE WITH PERIMETER FENCING, FLOODLIGHTING, HARD-STANDING AREA AND EQUIPMENT

CONSTRUCTION
REMOVAL OF EXISTING SYNTHETIC TURF AND POLYMERIC SURFACING
PIERCE, TAC AND POROUS ASPHALT (MACADAM) SURFACE OVERLAY
PAINTED WITH SLIP RESISTANCE AS PER ENGLAND BASKETBALL REQUIREMENTS

DIMENSIONS
FENCE TO FENCE = 30 X 17M
2NR GOAL RECESSES = 3.66 X 1M
SPECTATOR AREA = 17 X 2M
ACCESS ROUTE = LINKED TO EXISTING PATHWAYS TO THE WEST

LINE MARKINGS
FOOTBALL GOAL BOXES = 10.0 X 5.0M
BASKETBALL COURT MARKINGS

PERIMETER FENCING
3.0M HIGH TWIN BAR PANEL FENCING (RAL 6005 - DARK GREEN)
AND 4.0M HIGH TWIN BAR PANEL FENCING BEHIND THE GOALS (RAL 9016 - WHITE)

1NR DOUBLE MAINTENANCE / EMERGENCY GATE ACCESS
WITH ONE SIDE TO HAVE AN EGRESS ONLY PANIC BAR WITH A CLOSING MECHANISM,
OTHER SIDE TO HAVE LOCKABLE DROP BOLT WITH ROBUST COMBINATION LOCK

1NR SINGLE GATE MOUNTING FRAME FOR CIA / CLUBSPARK GATE ON SITE
BOUNDARY
1NR SINGLE GATE FOR DIRECT PLAYZONE ACCESS
1NR DOUBLE GATE TO STORAGE AREA

FLOODLIGHTING
FENCE MOUNTED LED 4 COLUMN SYSTEM
AVERAGE LUX = 120LUX
UNIFORMITY = 0.65

EQUIPMENT
2NR GOALS (INTEGRAL TO FENCING)
4NR FENCE MOUNTED BASKETBALL HOOPS
2NR BENCHES
2NR WASTE BINS
1NR STORAGE AREA

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AUTHOR
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CLIENT
PLAYZONE FACILITY DEVELOPMENT

PROJECT
DEVELOPMENT LAYOUT

DRAWING			
STATUS	PLANNING	MD	01
PROJECT	LSUK 24-0480	07/02/2025	
REVISION	A1	SCALE	1:200



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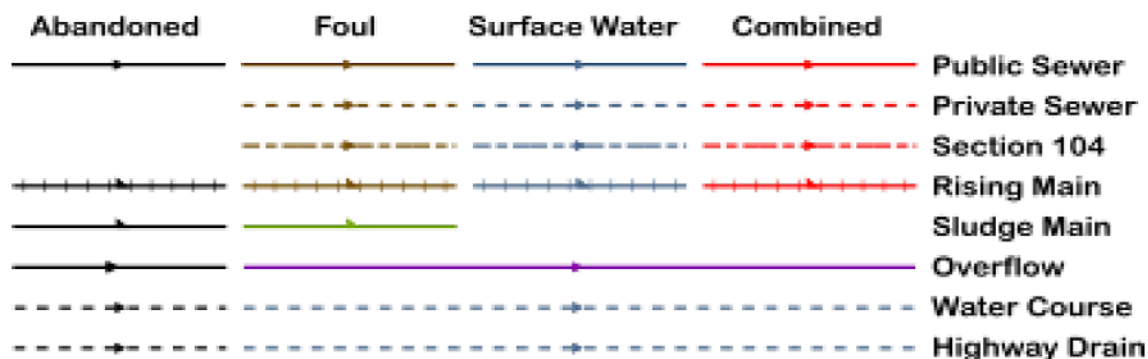
Title

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Appendix D

United Utilities Asset Plan

Wastewater Symbolology



All point assets follow the standard colour convention: **red** – combined **brown** - foul
blue – surface water **purple** - overflow

Manhole	Side Entry Manhole
Head of System	Outfall
Extent of Survey	Screen Chamber
Rodding Eye	Inspection Chamber
Inlet	Bifurcation Chamber
Discharge Point	Lamp Hole
Vortex	T Junction / Saddle
Penstock	Catchpit
Washout Chamber	Valve Chamber
Valve	Vent Column
Air Valve	Vortex Chamber
Non Return Valve	Penstock Chamber
Soakaway	Network Storage Tank
Gully	Sewer Overflow
Cascade	Ww Treatment Works
Flow Meter	Ww Pumping Station
Hatch Box	Septic Tank
Oil Interceptor	Control Kiosk
Summit	
Drop Shaft	Change of Characteristic
Orifice Plate	



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Appendix E

Ground Investigation Extracts

7 Geotechnical Discussion

7.1 Scheme Overview

- 7.1.1 The following assessments are made on the investigatory data presented in the preceding sections of this report and are made with reference to the specific nature of the development. Should scheme proposals change then it is recommended that the validity of the conclusions of this report in relation to the revised scheme are checked.
- 7.1.2 The proposed development is for refurbishment of an existing floodlit synthetic multi-use games area (MUGA) into a LED floodlit tarmacadam PlayZone pitch for football and basketball use. Retention and upgrading of existing floodlights is being considered at present. In view of the scheme proposals, the geotechnical elements considered in this report are outlined below:
- a) Floodlight reuse
 - b) Pitch foundations
 - c) Drainage

7.2 Floodlight Foundations

- 7.2.1 It is understood the existing floodlights could be reused and upgraded to LED as part of the refurbishment project.
- 7.2.2 Made Ground soils were observed at the base of all exploratory holes to the maximum exploratory depth of 1.1m. Such deposits are not considered suitable for supporting concentrated foundation loads of any potential new floodlights due to their variable composition, low strength/density and compressible nature. Accordingly, foundations should extend, as a minimum, through such deposits. Given site history, it is unlikely that Made Ground would extend to depths greater than 1.5m to 2.0m bgl.
- 7.2.3 Should new floodlights be required it is recommended that boreholes are undertaken to inform foundation design.

7.3 Artificial Pitch Foundations

- 7.3.1 It is anticipated that the proposed PlayZone will be located at or about existing ground levels, with the formation located Made Ground soils. It is assumed that the subbase to the existing MUGA will be reused where possible. It should be noted however, the subbase contained a fair proportion of fines and may not be considered suitable for reuse.
- 7.3.2 CBR value of 1.7% has been determined for the existing subgrade from remoulded CBR laboratory testing on a composite sample of Made Ground subgrade, referenced CBR01. The results are presented in Appendix E.
- 7.3.3 It should be noted that 25% of the material sent for analysis was removed after screening through a 20mm sieve therefore this CBR value is unlikely to be representative of the in-situ CBR value of the Made Ground subgrade and is considered overly conservative.
- 7.3.4 Based on the two DCP results, and composition, a CBR design value of 10% can be adopted for subbase (if left undisturbed) and subgrade soils at the site.

- 7.3.5 It is recommended that the formation level is trimmed and rolled following the requirements outlined in the Specification for Highway Works Series 600. Such a process will identify any soft/loose areas, which should either be excavated out and backfilled with a suitable well compacted material similar to those exposed in the sides of the resulting excavation, or large cobbles of a good quality stone rolled into the formation to stabilise the 'soft/loose' area.
- 7.3.6 Due to the composition, variable density/strength and thickness of Made Ground at the site, it is recommended such soils present at and below formation levels are appropriately conditioned to achieve a more uniform level of compaction and minimise levels of differential settlement which could otherwise manifest across the PlayZone surfacing.
- 7.3.7 Alternatively, consideration should be given to excavating, sorting and compacting the initial 1m depth of Made Ground to achieve consistent levels of compaction across the proposed PlayZone and minimising the potential effects of differential settlement, in addition to the use of a geosynthetic reinforcement.
- 7.3.8 In addition, increasing and homogenising the density of the Made Ground through ground improvement techniques such as rolling dynamic compaction (RDC) or permeation grouting/lime & cement stabilisation could be undertaken. These are notably expensive and would require specialist input at the feasibility stage.
- 7.3.9 The Made Ground soils are considered frost susceptible, and this may override the CBR criteria for pavement foundation design purposes.
- 7.3.10 The silty nature of the Made Ground soils will render them moisture susceptible with small increases in moisture content giving rise to a rapid loss of support to construction plant. It is therefore recommended that the sub-base is laid as soon as practicable following establishment of formation.

7.4 Drainage

- 7.4.1 Infiltration testing has been undertaken at the site following the principles of BRE 365: Soakaway Design (2016).
- 7.4.2 Subbase and underlying subgrade Made Ground were encountered as a granular material, with significant fines content. Indicative testing was undertaken within TP02 and TP03 for each strata respectively, however only one cycle could be undertaken in each due to the very slow dissipation of water added. Due to insufficient infiltration over a test period of 88-89 minutes, permeability could not be determined.
- 7.4.3 As a result, such soils are considered to be effectively impermeable for the purposes of drainage design.
- 7.4.4 In addition, discharge of stormwater collected by the proposed development into Made Ground deposits are not considered amenable. Water freely/directly discharged into the Made Ground could cause collapse of air voids contained in these deposits, which promotes compaction of the soils around the soakaway causing depression of the general area around the soakaway as well as potentially affecting pipe runs leading to the soakaway. In addition, soakaways would promote leaching of contaminants within the Made Ground soil.

- 7.4.5 The underlying natural Glaciofluvial Deposits could be amenable to disposal of stormwater collected by the development, however, further testing in boreholes or mechanically excavated trial pits would be required to determine such hypothesis.
- 7.4.6 No existing soakaway features were observed on site during ground investigation works; however, a full drainage survey was not undertaken.
- 7.4.7 As an alternative, it is possible that the PlayZone drainage could key into the existing surface water drainage system currently used by the referral centre. If this is considered an option for the development a comprehensive drainage assessment will be required to determine the potential impact on the capacity of the existing systems, to identify the invert levels of existing features, and to confirm drainage gradients achievable across the proposed PlayZone area.
- 7.4.8 In addition, a 375mm diameter combined sewer is present along Hulme street, adjacent to the south-eastern boundary of the site. Given the proximity of the combined sewer, this is considered to be a feasible and practical option for the disposal of surface water collected by the proposed pitch development, subject to obtaining relevant permissions. However, a comprehensive drainage assessment will be required to determine the potential impact on the capacity of the existing systems and to confirm drainage gradients will be achievable across the proposed pitch area.



Key:
Exploratory Holes

 Hand Pit

 DCPs (CBR)

 Infiltration Testing

Site Features

 Site Boundary

 Extent of proposed PlayZone

Notes
1) Base image provided by Google.
2) All drawn features are approximate.

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Map data © 2023 Google

A	March 2024	First issue
REV	DATE	COMMENT ON VARIATION

soiltechnics
environmental • geotechnical • building fabric

PROJECT
Procter Young Peoples Centre, Manchester

TITLE
Exploratory Hole Location Plan

DRAWING No.
STV6311-D01-A

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
ARTIFICIAL TURF (MADE GROUND)	0.03								
ASPHALT (MADE GROUND)	0.12								
Greyish brown sandy very silty GRAVEL of fine to coarse subangular limestone. (MADE GROUND - SUBBASE)	0.30								
Bluish grey very gravelly silty medium to coarse SAND. Gravel is fine to coarse angular to subangular clinker, brick and ceramic. (MADE GROUND)	0.48								
TRIAL PIT TERMINATED AT 0.48m									

Notes Trial pit sides remained upright and stable upon completion. Terminated at scheduled depth.	Title Trial pit record	Dimensions (w x l) 0.30m x 0.30m	Date(s) 02/02/2024
	Method Hand tools	Logged by JT	Sheet number Sheet 1 of 1
Groundwater observations Water at 0.48 rising to 0.43 after 20 minutes.	Level (m OD) -	Compiled by AM	Revision A
	Co-ordinates -	Checked by DH	TP01

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
ARTIFICIAL TURF (MADE GROUND) ASPHALT (MADE GROUND)	0.03								
Grey sandy very silty GRAVEL of medium to coarse angular to subangular limestone. (MADE GROUND - SUBBASE)	0.14						0.14	0.33	B
Dark grey very gravelly very silty medium to coarse SAND. Gravel is fine to coarse angular to subangular limestone, brick and coal. (MADE GROUND)	0.33						0.40	0.60	B
TRIAL PIT TERMINATED AT 0.61m	0.61								

Notes Trial pit sides remained upright and stable upon completion. Terminated at scheduled depth. Infiltration testing performed.	Title Trial pit record	Dimensions (w x l) 0.30m x 0.30m	Date(s) 05/02/2024
	Method Hand tools	Logged by JT	Sheet number Sheet 1 of 1
Groundwater observations Groundwater not encountered.	Level (m OD) -	Compiled by AM	Revision A
	Co-ordinates -	Checked by DH	TP02

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
ARTIFICIAL TURF (MADE GROUND)	0.03								
ASPHALT (MADE GROUND)	0.10						0.10	0.30	B
Grey slightly sandy silty GRAVEL of medium to coarse angular to subangular limestone. (MADE GROUND - SUBBASE)									
	0.28						0.28	0.60	B
Brown very gravelly very silty medium to coarse SAND with low cobble of concrete. Gravel is fine to coarse angular to subangular brick, concrete, clinker and ceramic. (MADE GROUND)									
	0.60								
TRIAL PIT TERMINATED AT 0.60m									

Notes Trial pit sides remained upright and stable upon completion. Terminated due to obstruction. Infiltration testing performed.	Title Trial pit record	Dimensions (w x l) 0.30m x 0.30m	Date(s) 02/02/2024
	Method Hand tools	Logged by JT	Sheet number Sheet 1 of 1
Groundwater observations Groundwater not encountered.	Level (m OD) -	Compiled by AM	Revision A
	Co-ordinates -	Checked by DH	TP03

STRATA				WATER STRIKES	IN SITU TESTING		SAMPLING		
DESCRIPTION	DEPTH (m)	REDUCED LVL (m OD)	LEGEND		TYPE / DEPTH (m)	RESULT	FROM (m)	TO (m)	TYPE
ARTIFICIAL TURF (MADE GROUND) ASPHALT (MADE GROUND)	0.03								
Grey very sandy very clayey GRAVEL of medium to coarse subangular limestone. (MADE GROUND - SUBBASE)	0.15						0.20	0.30	B
Dark brown very soft slightly gravelly sandy CLAY with occasional rootlets. Gravel is coarse to medium angular to subangular brick fragments. (MADE GROUND)	0.40						0.45		B
Orangish brown gravelly very clayey medium SAND with lenses of soft clay. Gravel is fine to medium angular to subangular brick and ceramic. (MADE GROUND)	0.54						0.60	1.20	B
TRIAL PIT TERMINATED AT 0.60m									

Notes Trial pit sides remained upright and stable upon completion. Terminated at scheduled depth.	Title Trial pit record	Dimensions (w x l) 0.30m x 0.30m	Date(s) 05/02/2024
	Method Hand tools	Logged by JT	Sheet number Sheet 1 of 1
Groundwater observations Groundwater not encountered.	Level (m OD) -	Compiled by AM	Revision A
	Co-ordinates -	Checked by DH	TP04

[illegible]

Notes Trial pit sides remained upright and stable upon completion. Terminated at scheduled depth.	Title Trial pit record	Dimensions (w x l) 0.30m x 0.30m	Date(s) 05/02/2024
	Method Hand tools	Logged by JT	Sheet number Sheet 1 of 1
Groundwater observations Groundwater not encountered.	Level (m OD) -	Compiled by AM	Revision A
	Co-ordinates -	Checked by DH	TP05



CONSULTING ENGINEERS

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Client

Labosport

Project

New Playzone Pitch, Proctor Learning Centre

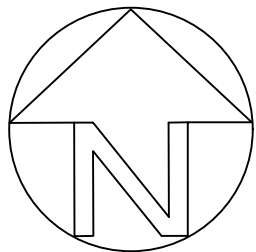
Title

Surface Water Strategy

Appendix F

Proposed Drained Areas

SEA Drawing 00282/E01



GENERAL

Do not scale from this drawing.

All dimensions are in millimetres unless noted otherwise.

All setting out to architects drawings.

Drawing to be read in conjunction with all other SEA drawings and architects drawings.

This scheme has been designed using the survey information provided by others. It shall be the responsibility of the contractor to verify levels, boundaries etc prior to commencing any works on site. SEA Consulting Engineers Ltd. shall not accept any responsibility for errors resulting from the survey.

All setting out to be in accordance with the Architect's drawings, the Contractor is to check all dimensions and levels prior to commencement of work and report any discrepancies to the Engineer, including any encountered during construction works.

All dimensions should be checked on site prior to construction. Please notify the Engineer of any discrepancies before commencing or continuing any work.

HEALTH, SAFETY & THE ENVIRONMENT

In accordance with the Health and Safety at Work etc Act 1973 and the Construction (Design and Management) Regulations 2015, designs and details on this drawing have been the subject of a Designers Risk Assessment, to identify risks in construction, use, or demolition of the scheme.

It is not considered necessary for Designers to highlight obvious and/or common risks (such as deep excavations, manual handling and working around heavy plant) which Contractors should be familiar with.

So as far as is reasonably practicable, risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced.

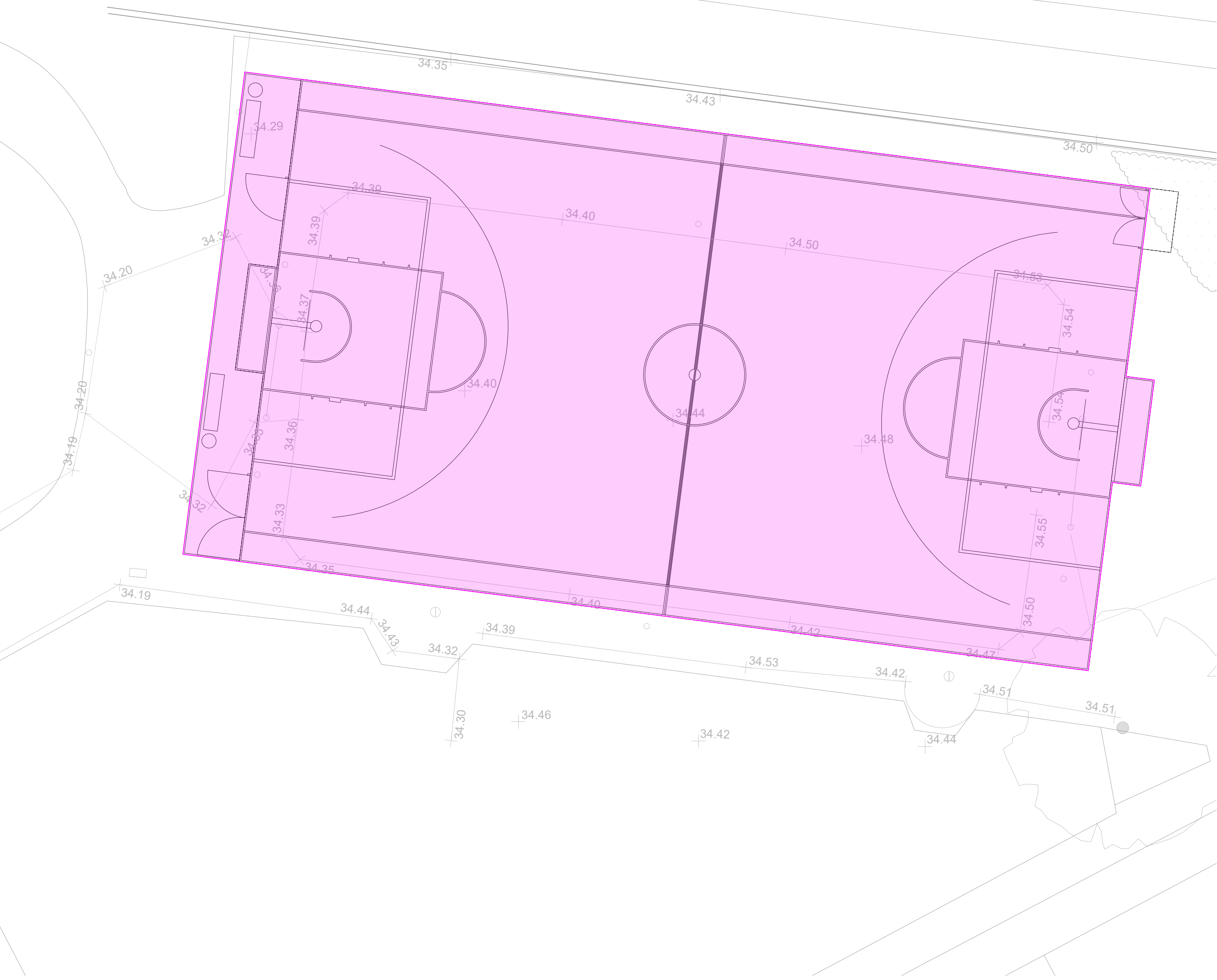
Significant unusual residual risks are identified below, beside the measures which have been adopted to eliminate and/or reduce them:

None identified.

DRAWING KEY:



Proposed Drained Area = 550m²



Rev.	Date	By	Description
 CONSULTING ENGINEERS [CONSULTING CIVIL & STRUCTURAL ENGINEERS] E: warren@seace.co.uk T: 07976310054			
PROJECT NEW PLAYZONE PITCH PROCTOR LEISURE CENTRE MANCHESTER			
DRAWING PROPOSED DRAINED AREAS			
SCALE: 1:100@A2		DATE: 24.06.2024	
DRAWN BY: WRA		REV: -	
STATUS: FOR APPROVAL			
DWG No: 00282/E01			-



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Client

Labosport

Project

New Playzone Pitch, Proctor Learning Centre

Title

Surface Water Strategy

Appendix G

Proposed Drainage Layout

SEA Drawing 00282/E02



Do not scale from this drawing.

All dimensions are in millimetres unless noted otherwise.

All setting out to architects drawings.

Drawing to be read in conjunction with all other SEA drawings and architects drawings.

This scheme has been designed using the survey information provided by others. It shall be the responsibility of the contractor to verify levels, boundaries etc prior to commencing any works on site. SEA Consulting Engineers Ltd. shall not accept any responsibility for errors resulting from the survey.

All setting to be in accordance with the Architect's drawings, the Contractor is to check all dimensions and levels prior to commencement of work and report any discrepancies to the Engineer, including any encountered during construction works.

All dimensions should be checked on site prior to construction. Please notify the Engineer of any discrepancies before commencing or continuing any work.

HEALTH, SAFETY & THE ENVIRONMENT

In accordance with the Health and Safety at Work etc Act 1973 and the Construction (Design and Management) Regulations 2015, designs and details on this drawing have been the subject of a Designers Risk Assessment, to identify risks in construction, use, or demolition of the scheme.

It is not considered necessary for Designers to highlight obvious and/or common risks (such as deep excavations, manual handling and working around heavy plant) which Contractors should be familiar with.

So as far as is reasonably practicable, risks inherent in the design have been eliminated. Where it has been considered that elimination of a risk (or part of a risk) is not reasonably practicable, it has been reduced.

Significant unusual residual risks are identified below, beside the measures which have been adopted to eliminate and/or reduce them:

None identified.

DRAWING KEY

— — — — Proposed Surface water

28.400⁺ Proposed Pitch spot levels

1:500 Proposed pitch gradients

Existing surfacing and tarmac removed to 125mm depth to allow for new 25mm porous surface and 100mm type 3 subbase to fall towards new filter trench at low point as shown.

Proposed extent of filter trench provided with perforated pipe, Filter material to be type 3 material.

Overland flow direction in case of system failure



Rev.	Date	By	Description
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SEA
CONSULTING ENGINEERS
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PROJECT

NEW PLAYZONE PITCH
PROCTOR LEISURE CENTRE
MANCHESTER

DRAWING

PROPOSED DRAINAGE LAYOUT

SCALE: 1:100@A2	DATE: 24.06.2024
DRAWN BY: WRA	REV: -

STATUS: FOR APPROVAL

DWG No: 00282/E02	-
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