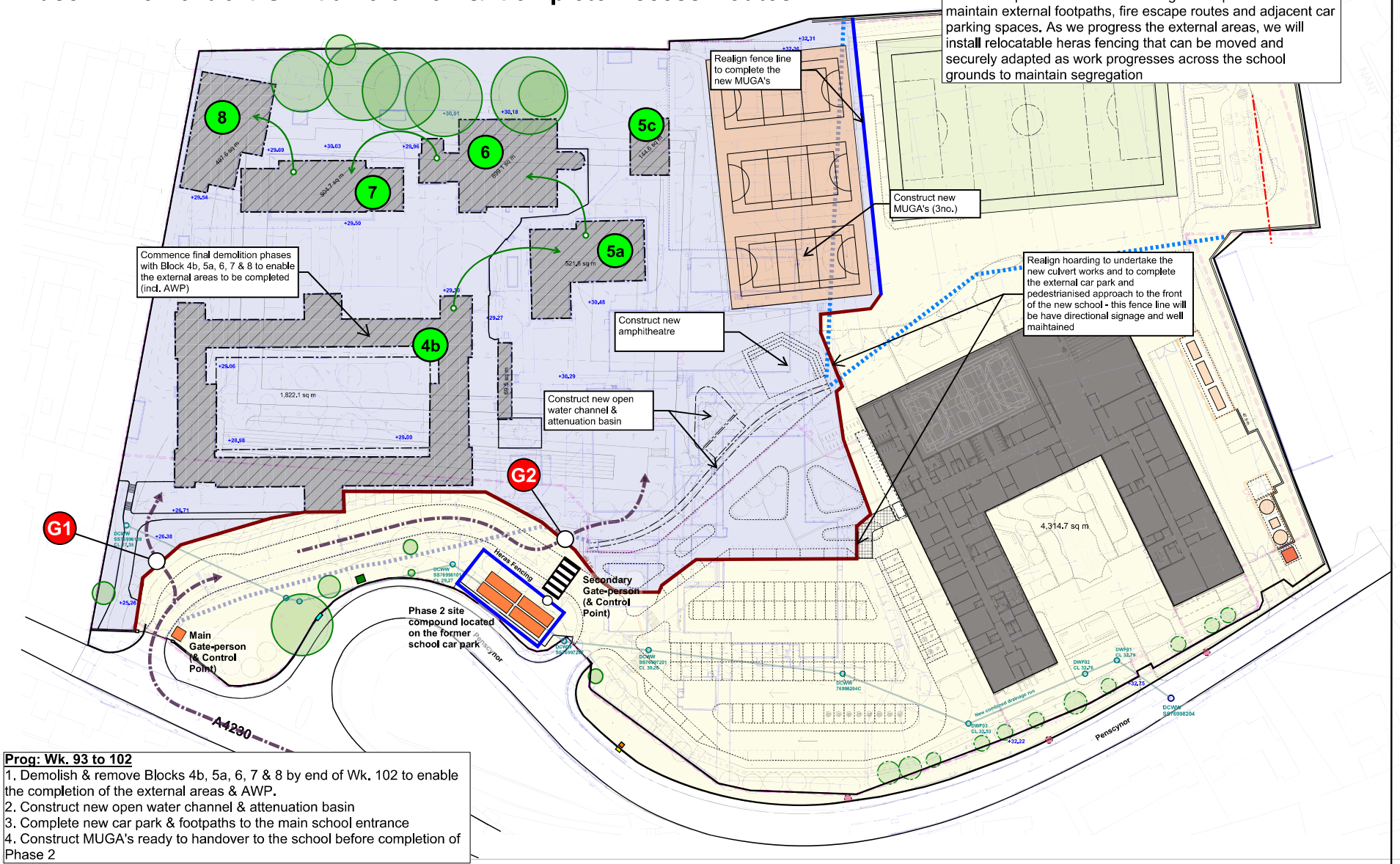
Llangatwg Community Comprehensive School

Timeslice 10:

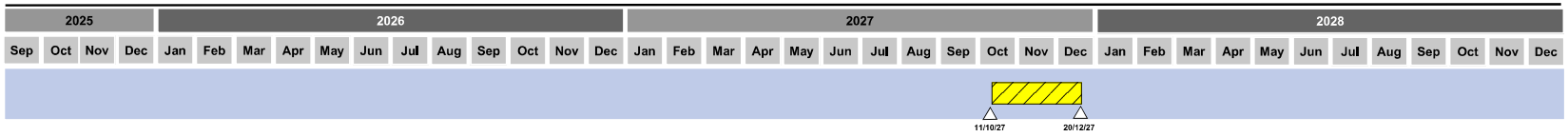
Phase 2 - Demolition/ SW Culvert Works/ Complete Access Routes

Upon removal of Blocks 1, 2, 3 & 4a allows us to commence the final phases of the works with the demolition of Blocks 4b, 5a, 6, 7 & 8 and the formation of the external landscaping. We will ensure the perimeter secure hoarding will be positioned to maintain external footpaths, fire escape routes and adjacent car parking spaces. As we progress the external areas, we will install relocatable heras fencing that can be moved and securely adapted as work progresses across the school grounds to maintain segregation



Prog: Wk. 93 to 102

1. Demolish & remove Blocks 4b, 5a, 6, 7 & 8 by end of Wk. 102 to enable the completion of the external areas & AWP.
2. Construct new open water channel & attenuation basin
3. Complete new car park & footpaths to the main school entrance
4. Construct MUGA's ready to handover to the school before completion of Phase 2

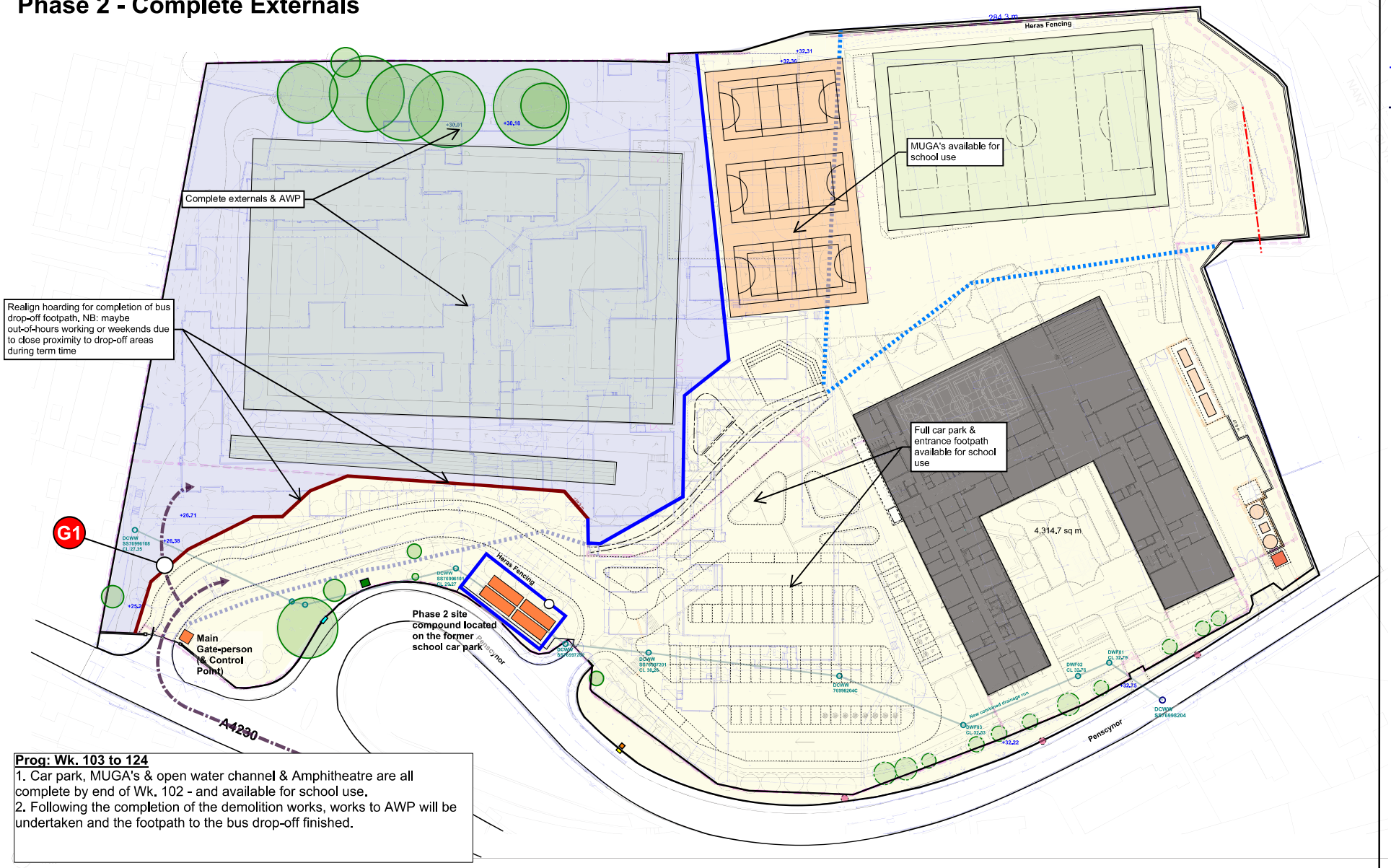


- Existing Trees (**to remain*)
- Existing LIVE School Buildings
- +10.00 Existing School Levels
- +10.00 Proposed Site Levels
- Heras Type Fencing with Counterweight Bases
- Solid Hoarding with Fixed Posts
- Solid Hoarding with Precast Concrete Support Bases laid on Existing Road Surface
- Site Accommodation/ Welfare
- G Lockable Vehicle Gates
- Crossing Point for Construction Personnel
- Tree Felling/ Root Protection
- Construction Traffic Routes
- School Pedestrian Routes
- School Vehicle/ Traffic Route
- Construction Zone
- School Occupied Zone
- 1 Demolition Sequence

Llangatwg Community Comprehensive School

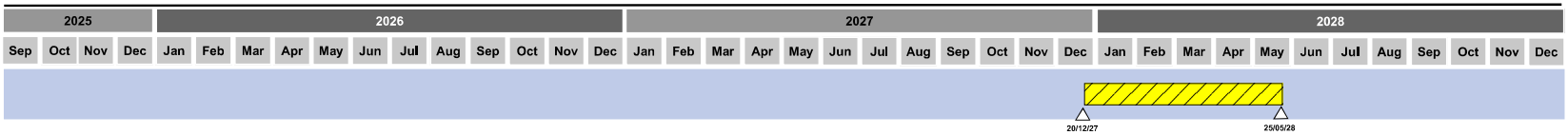
Timeslice 11:

Phase 2 - Complete Externals



Prog: Wk. 103 to 124

1. Car park, MUGA's & open water channel & Amphitheatre are all complete by end of Wk. 102 - and available for school use.
2. Following the completion of the demolition works, works to AWP will be undertaken and the footpath to the bus drop-off finished.



- Existing Trees (**to remain*)
- Existing LIVE School Buildings
- +10.00 Existing School Levels
- +10.00 Proposed Site Levels
- Heras Type Fencing with Counterweight Bases
- Solid Hoarding with Fixed Posts
- Solid Hoarding with Precast Concrete Support Bases laid on Existing Road Surface
- Site Accommodation/ Welfare
- G Lockable Vehicle Gates
- Crossing Point for Construction Personnel
- Tree Felling/ Root Protection
- Construction Traffic Routes
- School Pedestrian Routes
- School Vehicle/ Traffic Route
- Construction Zone
- School Occupied Zone
- 1 Demolition Sequence

Appendix C
Topographic Survey



Coordinate System

This survey has been connected to the Ordnance Survey (OS) National Grid and Datum using GPS observations and the OS Active Network.

A true OS coordinate was established close to the centre of the site. This survey has been coordinated to this point. Further OS coordinates were established to create a true OS bearing for angle orientation.

No scale factor has been applied to this survey. The coordinates shown are arbitrary and not true OS coordinates which do have a scale factor applied.

Notes

1. Dimensions should not be scaled. All dimensions should be verified on site prior to construction.
2. All dimensions on plan are in metres unless otherwise stated.
3. Some detail may have been obscured by parked vehicles, stored materials, overgrown vegetation and the like.
4. All rights reserved. Copyright of Gwalia Surveyors unless formally agreed otherwise.
5. The surveyed boundary features may not be legal boundaries.
6. Gwalia Surveyors cannot accept any responsibility for any damage to computer systems from viruses which may be contained in the data/file supplied.

Key to Abbreviations

Inspection Covers & Chambers

AV	Air Valve
BH	Borehole
BT	British Telecom Cover
CATCP	Catch Pit
CW	Combined Water
DC/CL	Drainage Channel
Elec.	Electric Distribution Cover
ER	Earth Rod
FH	Fire Hydrant
FW	Foul Water
G	Gully
GC	Gas Cover
GV	Gas Valve
IC	Inspection Cover
K/C	Kerb Outlet
MH	Manhole
RE	Rodding Eye
SC	Stop Cock
SP	Stop Valve
SW	Storm Water
TV	Cable Television Cover
UL	Uplighter
UTL	Unable to Lift
WM	Water Meter
WO	Washout

Ground Surface Types

Asp.	Asphalt
BP	Block Pavers
Conc.	Concrete
Flag.	Flagstone Paving
Tar.	Tarmac Paving

Measurement Descriptions

CL	Cover Level
d	Depth (m)
dia.	Diameter (mm)
FFL	Finished Floor Level
h	Feature Height (m)
IL	Invert Level
SL	Sump Level
SwL	Swith Level
WL	Water Level

Walls & Fence Types

BL	Block Wall
Br.	Brick Wall
B/W	Barbed Wire Fence
C/B	Close Boarded Fence
CE	Cleft Chestnut Fence
C/L	Chain Link Fence
C/P	Concrete Post
Gab.	Gabion Wall
H/R	Hand Rail
Ind.	Iron Railings
P/B	Post & Board
P/W	Post & Wire Fence
W/M	Wooden Trellis Fence
Ret.	Retaining Wall
St.	Stone Wall

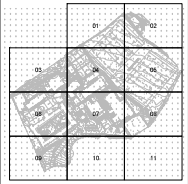
Street Furniture

B	Bollard
BB	Belisha Beacon
DP	Down Pipe
EP	Electricity Pole
FB	Flower Bed
JB	Junction Box
LP	Lamp Post
MP	Marker Post
P	Post
PB	Post Box
RS	Road Sign
RWP	Rain Water Pipe
SP	Sign Post
SV	Stop Valve
SVP	Soil Vent Pipe
TCB	Telephone Call Box
TL	Traffic Light
TP	Telegraph Pole
VP	Vent Pipe

Linetypes & Symbols

- Banks
- Buildings
- Building Overhead
- Change of Surface
- Fences
- Kerbs
- Overhead Cables
- Ridges & Eaves
- Steps
- Walls
- Vegetation
- Tree Canopy
- Combined Water
- Foul Water
- Storm Water
- Banking
- Flow Direction
- Gate
- Survey Station
- Tree

Sheet Layout

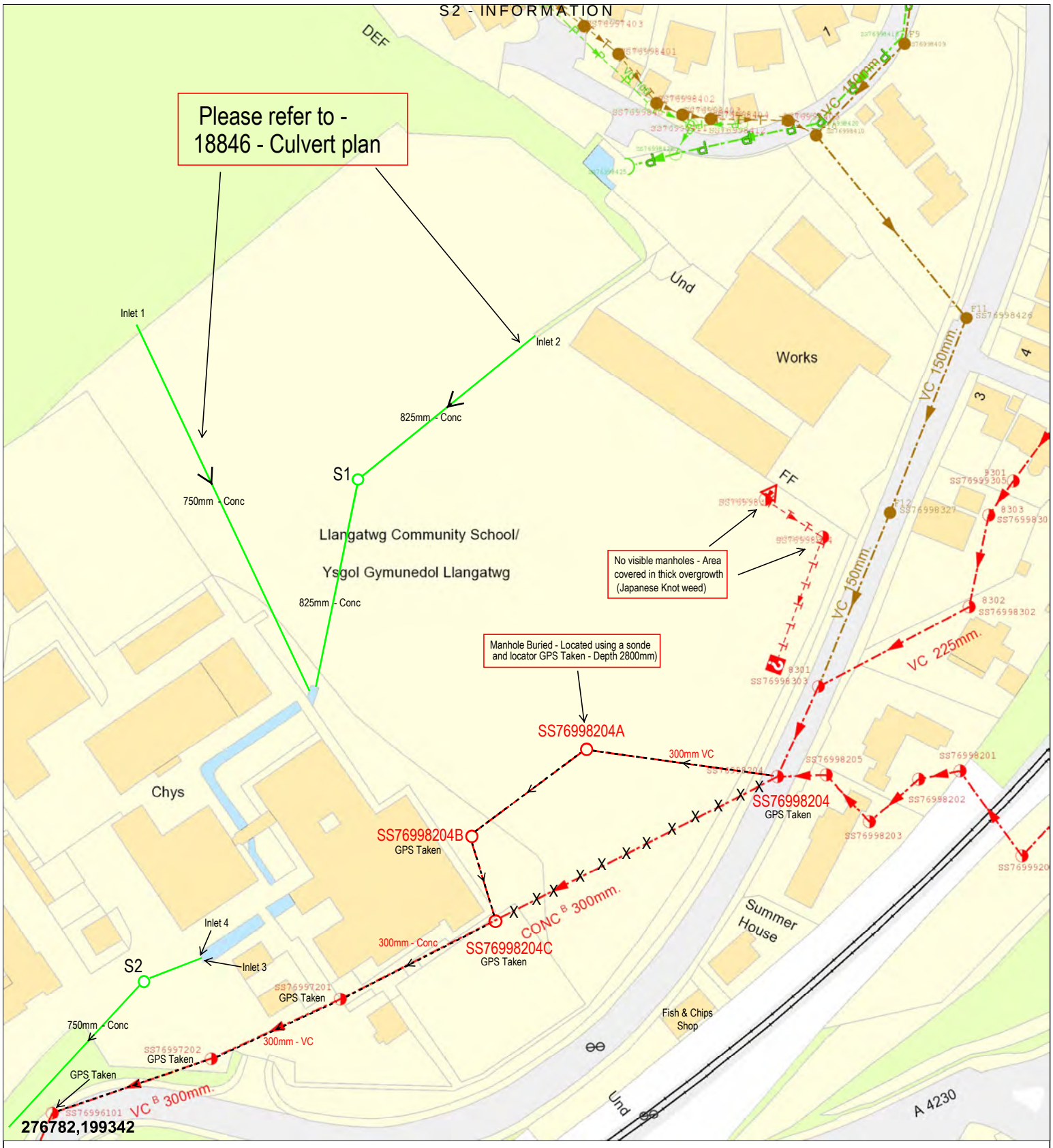


Rev.	Date	Drawn	Details

Gwalia SURVEYORS
Unit 1, Link Trade Park, Penarth Road, Cardiff, CF11 8TQ
Cardiff: 029 2111 1700 London: 020 3011 1099
w: gwaliasurveyors.co.uk
LAND | UTILITIES | BUILDING | BOUNDARY | BIM

Title:	Topographical Survey
Project:	Llangatwg Community School
Client:	Morgan Sindall
Drawn: NJ/CU	Checked: DR
Date: 15.10.2024	Scale: N.T.S.
Drawing Number: 3387-T-Overview	Rev.

Appendix D
Existing Drainage



DRAINTECH
helping to improve the drainage network
Job/Plan ref: 19656 - 01 - 002

Scale: 1:1250

03/10/2024

EXACT LOCATION OF ALL APPARATUS TO BE DETERMINED ON SITE

Dŵr Cymru Welsh Water

LEGEND

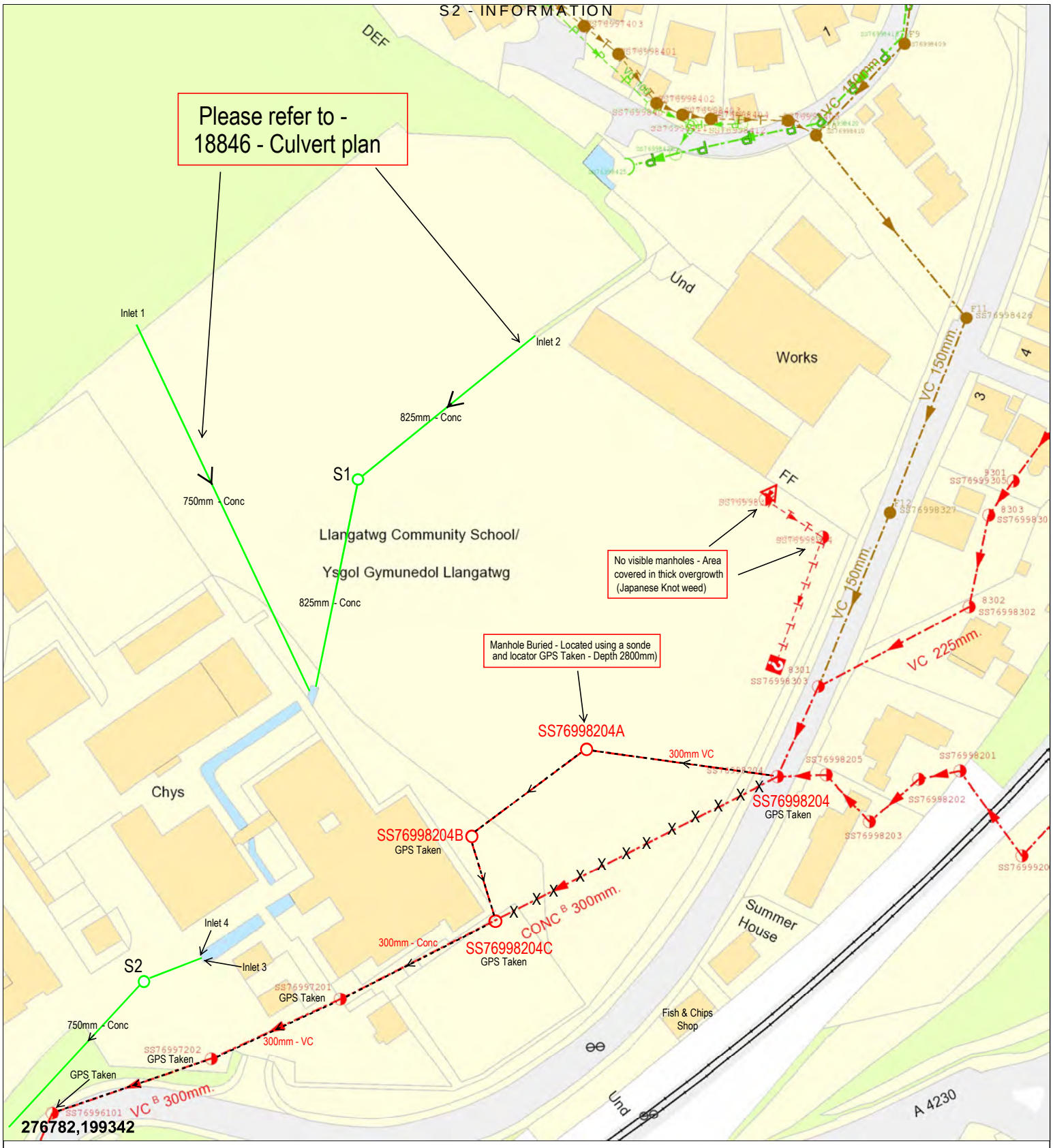
- Sluice Valve
- Air Valve SINGLE
- Tap
- Pressure Reducing Valve
- Meter
- Bulk Meter
- Fire Hydrant
- Cap
- Non Dwr Cymru
- Existing Distribution Main
- Inspection Chamber
- Gravity Sewer
- Rising Main
- Outfall
- Pumping Station
- Lamphole
- Combined Sewer Overflow
- Special Purpose Chamber
- Treatment Works
- Private Sewer Transfer
- Lateral Drain

NB: Sewer symbol colour indicates the sewer type
RED - Combined
GREEN - Surface Water
BROWN - Foul

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Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos cement or Pitch Fibre) may be found to be asbestos cement (AC) or Pitch Fibre (PF) . It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Dwr Cymru Cyfyngedig ('the Company') gives this infirmation as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby by the company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 based particular, but without prejudice to be generality of that foregoing, it should be noted that the records that are available to the company may not disclose the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of thisinformation is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the company's right to be compensated for any damageto its apparatus.



DRAINTECH
helping to improve the drainage network
Job/Plan ref: 19656 - 01 - 002

Scale: 1:1250

03/10/2024

Dŵr Cymru Welsh Water

LEGEND

- Sluice Valve
- Air Valve SINGLE
- Tap
- Pressure Reducing Valve
- Meter
- Bulk Meter
- Fire Hydrant
- Cap
- Non Dwr Cymru
- Existing Distribution Main
- Inspection Chamber
- Gravity Sewer
- Rising Main
- Outfall
- Pumping Station
- Lamphole
- Combined Sewer Overflow
- Special Purpose Chamber
- Treatment Works
- Private Sewer Transfer
- Lateral Drain

NB: Sewer symbol colour indicates the sewer type
RED - Combined
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BROWN - Foul

EXACT LOCATION OF ALL APPARATUS TO BE DETERMINED ON SITE

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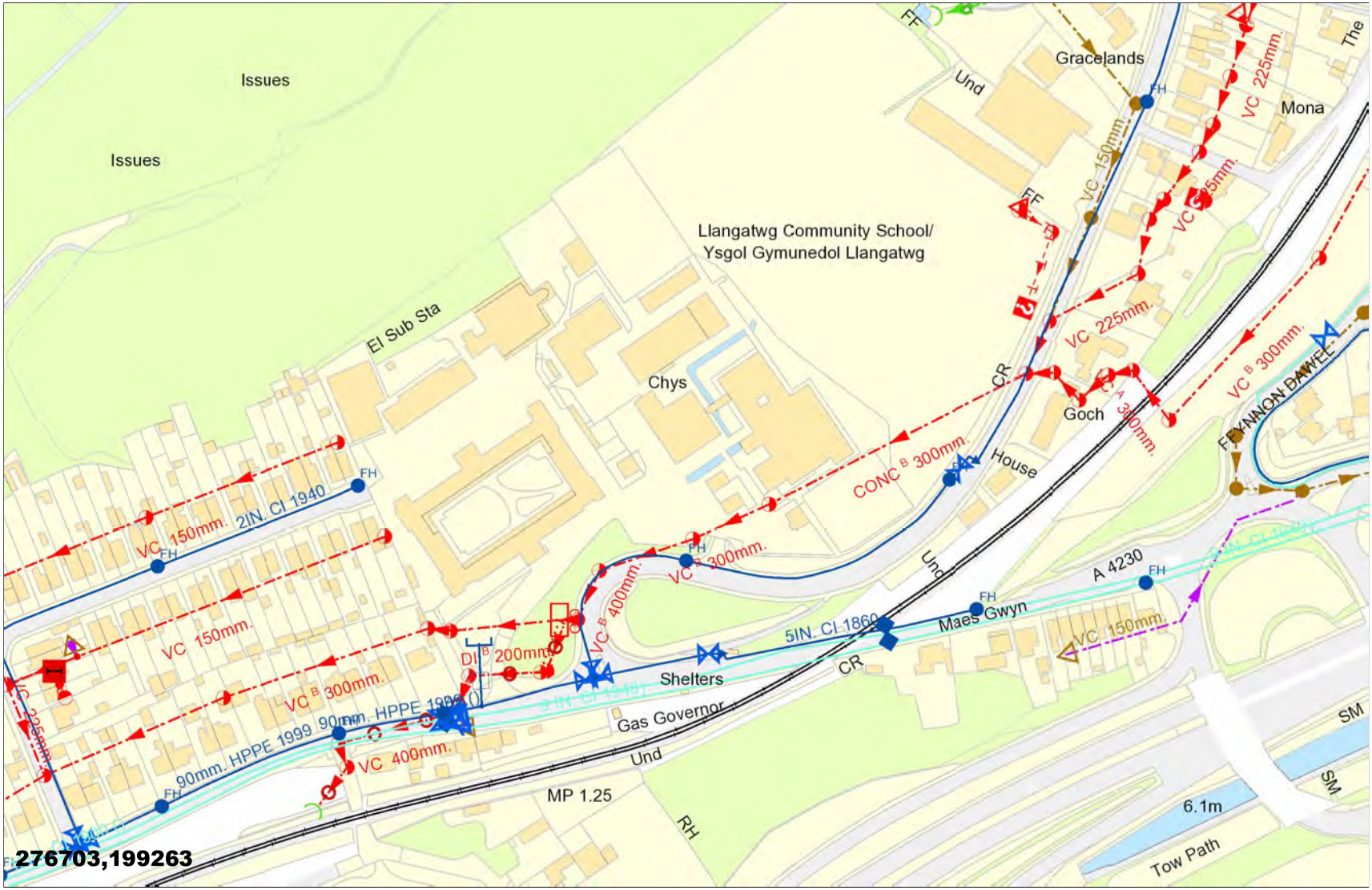
Dwr Cymru Cyfyngedig ('the Company') gives this infirmation as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon in the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby by the company, is done so in accordance with statutory requirements of sections 198 and 199 of the Water Industry Act 1991 based particular, but without prejudice to be generality of that foregoing, it should be noted that the records that are available to the company may not disclose the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of thisinformation is entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the company's right to be compensated for any damageto its apparatus.

Dŵr Cymru
Welsh Water

Llangatwg

13/03/2024

Scale: 1: 2500



LEGEND

Clean Water

- Sluice Val
- Air Val, SINGLE
- Tap
- Pressure Reducing Valve
- Meter
- BULK Meter
- FH
- Cap
- Existing Main
- NON COMPANY

Sewerage External

- Foul
- Surface Water
- Combined
- Rising Main
- Private
- Treatment Works
- Pumping Station
- Special Purpose
- Unknown End
- Change, Combined Overflow
- Outfall, FOUL
- Lamp Hole, Foul
- Private Sewer Transfer
- Lateral Drain
- Inspection Chamber

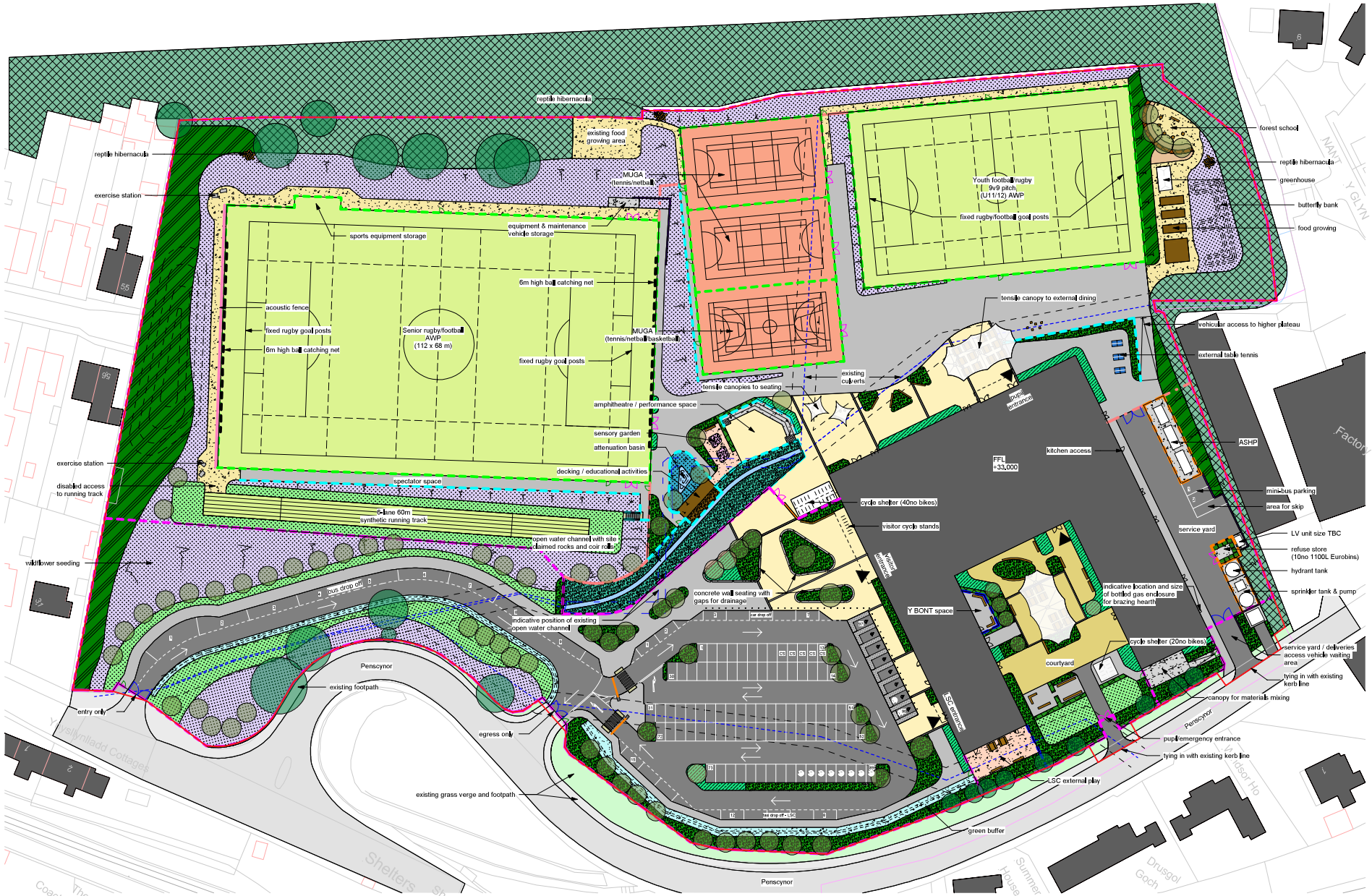
Dwr Cymru Cyfyngedig ('the Company') gives this information as to the position of its underground apparatus by way of general guidance only and on the strict understanding that it is based on the best information available and no warranty as to its correctness is relied upon In the event of excavations or other works made in the vicinity of the company's apparatus and any onus of locating the apparatus before carrying out any excavations rests entirely on you. The information which is supplied hereby the company, is done so in accordance with statutory requirements of sections 198 and 199 f the water industry Act 1991 based upon the best Information available and in particular, but without prejudice to the generality of the foregoing, it should be noted that the records that are available to the Company may not disclosure the existence of a drain sewer or disposal main laid before 1 September 1989, or if they do, the particulars thereof including their position underground may not be accurate. It must be understood that the furnishing of this information us entirely without prejudice to the provision of the New Roads and Street Works Act 1991 and the company's right to be compensated for any damage to its apparatus.

EXACT LOCATION OF ALL APPARATUS TO BE DETERMINED ON SITE

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Whilst every reasonable effort has been taken to correctly record the pipe material of DCWW assets, there is a possibility that in some cases pipe material (other than Asbestos Cement or Pitch Fibre) may be found to be Asbestos Cement (AC) or Pitch Fibre (PF). It is therefore advisable that the possible presence of AC or PF pipes be anticipated and considered as part of any risk assessment prior to excavation

Appendix E
Landscape Masterplan



KEY

Application boundary

HARD LANDSCAPE

- Vehicular asphalt to engineers details
- Pedestrian asphalt to engineers details
- Asphalt to multi-sports area to specialist's details
- Feature paving to external spaces
- Feature paving to courtyard
- Block paving bands
- Resin bound gravel
- Bark mulch to food growing and forest school area
- Self-binding gravel
- Concrete slab
- Synthetic grass sports pitch

SOFT LANDSCAPE

- Existing trees to be retained
- Existing trees to be removed
- Proposed trees
- Proposed trees to rain gardens
- Existing vegetation to be retained
- Amenity grass
- Species rich wildflower meadow
- Ornamental planting
- Sensory garden planting
- Rain garden planting
- Swales planting
- Bioretention planting to attenuation basin and open water channel
- Formal hedge planting
- Native hedge mix planting

BOUNDARY TREATMENT

- 2400mm high self-locking vertical bar railings fencing to secure line - to replace existing fencing - to include 12x12cm gaps at base every 10m to allow for wildlife access
- 3000mm high weldmesh fencing to sports areas including 1100mm high rebound fencing to lower panels where required
- 1800mm high self-locking vertical bar fencing to internal secure line
- 1800mm high timber 'hit-n-miss' fencing to service yard enclosures
- 1100mm high railings
- 1500mm high vertical bar railings to external classrooms
- Acoustic fence to Senior pitch's western end - height to acoustic engineer's recommendation
- 6000mm high ball catching net to Senior pitch's western end
- 2400mm high feature wall to main entrance
- 5000mm clear width double leaf swing gate to entrance. Height and infill panels to match adjacent fence
- 3000mm clear width double leaf swing gate. Height and infill panels to match adjacent fence
- 1200mm clear width single leaf swing gate. Height and infill panels to match adjacent fence
- Manually operated lift arm to car park

EXTERNAL FURNITURE

- Timber seating
- Picnic type table
- Bollards to front entrance
- Cycle racks
- Door with barrier

SuDS FEATURES

- Attenuation basin
- Proposed swale to civil engineer's layout and details

Tensile canopies




Cycle shelter and hoops




Exercise station examples




Activities





Rev	Description	Drawn	Checked	Date Issued
P3	Senior pitch moved to the south. Dual pool storage to Senior pitch moved to the west.		GC	04.05.25
P4	Amendments to entrance approach, amphitheatre, open water channel, central pupil space, courtyard and service yard.		GC	29.05.25
P5	Amendments to car park barrier control, main entrance and amphitheatre layouts.		GC	19.06.25
P6	Service yard minor amendment around skip / bailey.		GC	31.06.25
P7	Running track location amended, steps and ramp access added. Enlarged enhancements added to forest school area.		GC	04.09.25
P8	Ramp to running track omitted.		GC	11.09.25
P9	Issued for PAC.		GC	19.09.25
P10	Minor updates to entrance area and cycle shelters sizes.		GC	03.10.25

0m 10m 20m 30m 40m 50m

VISUAL SCALE 1:500 @ A1

North

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Drawn GC

Date APR 25

Scale @ A1 1 : 500

Status S2

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Drawings and models powered by Austin-Smith:Lord Ltd's **BIM** using AutoDesk **Revit**

Austin-Smith:Lord

Project Llangatwg Comprehensive School

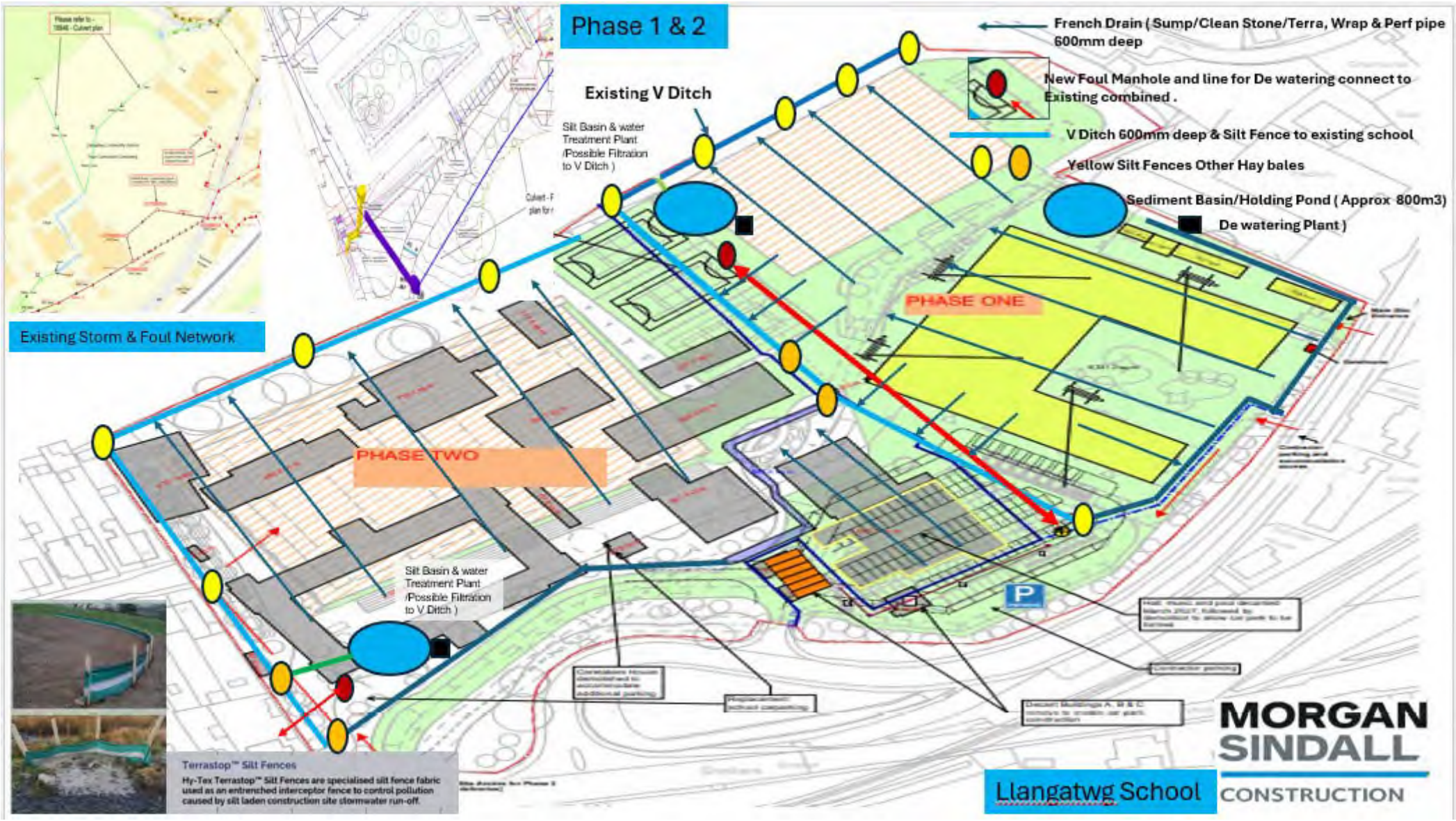
Description Landscape Masterplan

Job No. 324012

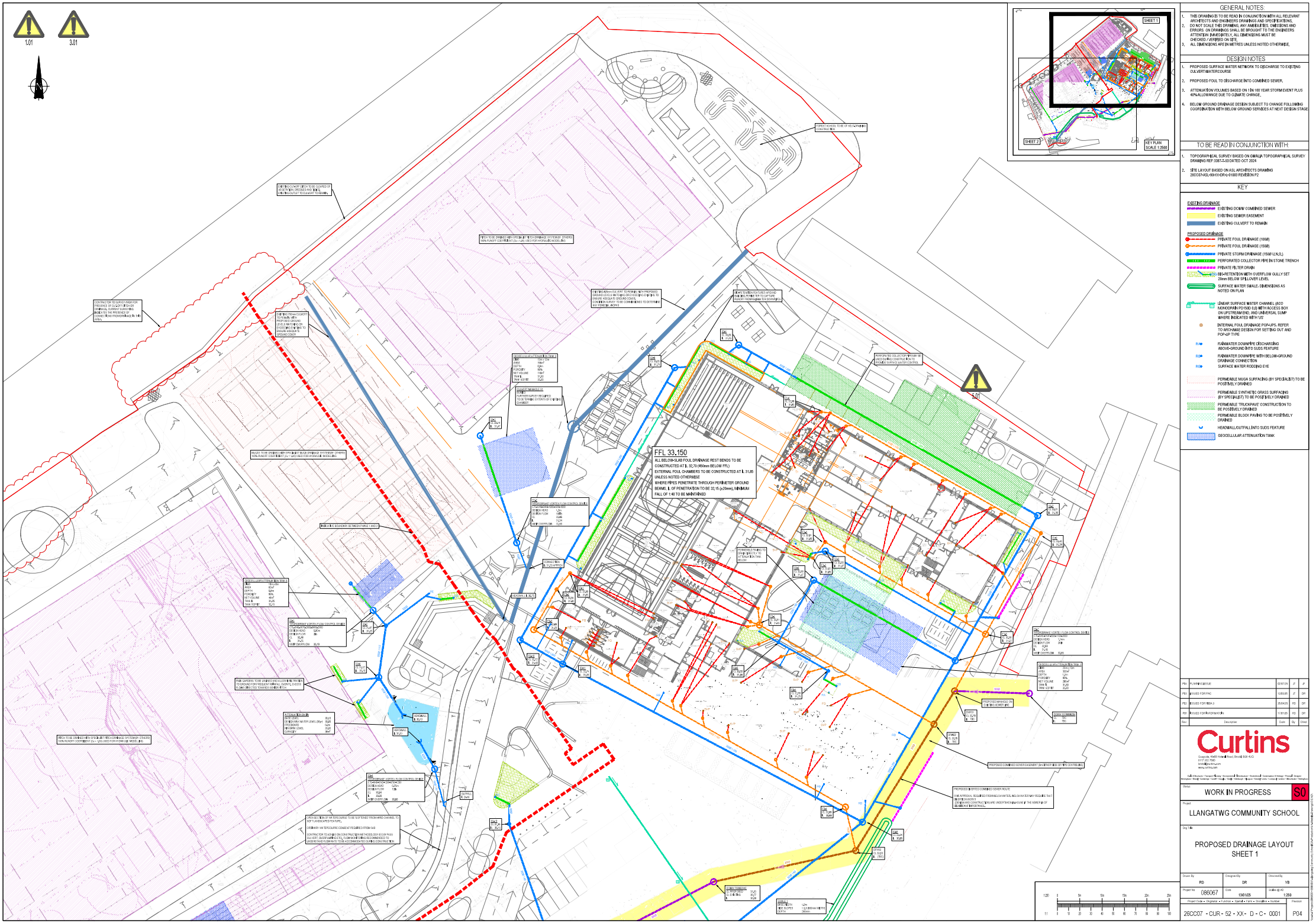
Drawing No. 26CC07-ASL-36-XX-D-L-1001

Revision P10

Appendix F
Morgan Sindall site Layout Plan


Phase 1 & 2
French Drain (Sump/Clean Stone/Terra, Wrap & Perf pipe 600mm deep
New Foul Manhole and line for De watering connect to Existing combined .
Existing V Ditch
Silt Basin & water Treatment Plant /Possible Filtration to V Ditch)
V Ditch 600mm deep & Silt Fence to existing school
Yellow Silt Fences Other Hay bales
Sediment Basin/Holding Pond (Approx 800m3)
De watering Plant)
PHASE ONE
PHASE TWO
Existing Storm & Foul Network
Silt Basin & water Treatment Plant /Possible Filtration to V Ditch)
Terrastop™ Silt Fences
Hy-Tex Terrastop™ Silt Fences are specialised silt fence fabric used as an entrenched interceptor fence to control pollution caused by silt laden construction site stormwater run-off.
MORGAN SINDALL
CONSTRUCTION
Llangatwg School

Appendix G
Proposed Drainage



GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
2. DO NOT SCALE THIS DRAWING, ANY AMBIGUITIES, OMISSIONS AND ERRORS ON DRAWINGS SHALL BE BROUGHT TO THE ENGINEERS ATTENTION IMMEDIATELY. ALL DIMENSIONS MUST BE CHECKED / VERIFIED ON SITE.
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

DESIGN NOTES

1. PROPOSED SURFACE WATER NETWORK TO DISCHARGE TO EXISTING CULVERT/WATERCOURSE
2. PROPOSED FOUL TO DISCHARGE INTO COMBINED SEWER.
3. ATTENUATION VOLUMES BASED ON 1 IN 100 YEAR STORM EVENT PLUS 40%ALLOWANCE DUE TO CLIMATE CHANGE.
4. BELOW GROUND DRAINAGE DESIGN SUBJECT TO CHANGE FOLLOWING COORDINATION WITH BELOW GROUND SERVICES AT NEXT DESIGN STAGE

TO BE READ IN CONJUNCTION WITH:

1. TOPOGRAPHICAL SURVEY BASED ON GWALIA TOPOGRAPHICAL SURVEY DRAWING REF:3387-S-03 DATED OCT 2024
2. SITE LAYOUT BASED ON ASL ARCHITECTS DRAWING 26CC07-ASL-99-XX-DR-L-01003 REVISION P2

KEY

EXISTING DRAINAGE
- EXISTING DOWN COMBINED SEWER
- EXISTING SEWER EASEMENT
- EXISTING CULVERT TO REMAIN

PROPOSED DRAINAGE
- PRIVATE FOUL DRAINAGE (150Ø)
- PRIVATE FOUL DRAINAGE (150Ø)
- PRIVATE STORM DRAINAGE (150Ø U/N.O.)
- PERFORATED COLLECTOR PIPE IN STONE TRENCH
- PRIVATE FILTER DRAIN
- BIO-RETENTION WITH OVERFLOW GULLY SET 20mm BELOW SPILLOVER LEVEL
- SURFACE WATER SWALE. DIMENSIONS AS NOTED ON PLAN
- LINEAR SURFACE WATER CHANNEL (ACO MONODRAIN PD 150D OJ) WITH ACCESS BOX ON UPSTREAM END, AND UNIVERSAL SUMP WHERE INDICATED WITH 'US'
- INTERNAL FOUL DRAINAGE POP-UPS. REFER TO ARCHIMAGE DESIGN FOR SETTING OUT AND POP-UP TYPE
- RAINWATER DOWNPIPE DISCHARGING ABOVE-GROUND INTO SUDS FEATURE
- RAINWATER DOWNPIPE WITH BELOW-GROUND DRAINAGE CONNECTION
- SURFACE WATER RODDING EYE
- PERMEABLE MUGA SURFACING (BY SPECIALIST) TO BE POSITIVELY DRAINED
- PERMEABLE SYNTHETIC GRASS SURFACING (BY SPECIALIST) TO BE POSITIVELY DRAINED
- PERMEABLE TRUCKPAVE® CONSTRUCTION TO BE POSITIVELY DRAINED
- PERMEABLE BLOCK PAVING TO BE POSITIVELY DRAINED
- HEADWALL/OUTFALL INTO SUDS FEATURE
- GEOCELLULAR ATTENUATION TANK

Rev	Description	Date	By	Chkd
P05	PLANNING ISSUE	02.07.25	JF	JF
P04	ISSUED FOR PAC	13.06.25	JF	DR
P03	ISSUED FOR REVIEW	20.04.25	RD	DR
P02	ISSUED FOR INFORMATION	17.01.25	RD	DR

Curtins
Clwyd Ho, 45-49 Rhondda Road, Bristol, BS8 4JG
0117 203 7500
bristol@curtins.com
www.curtins.com

Status: WORK IN PROGRESS — S0

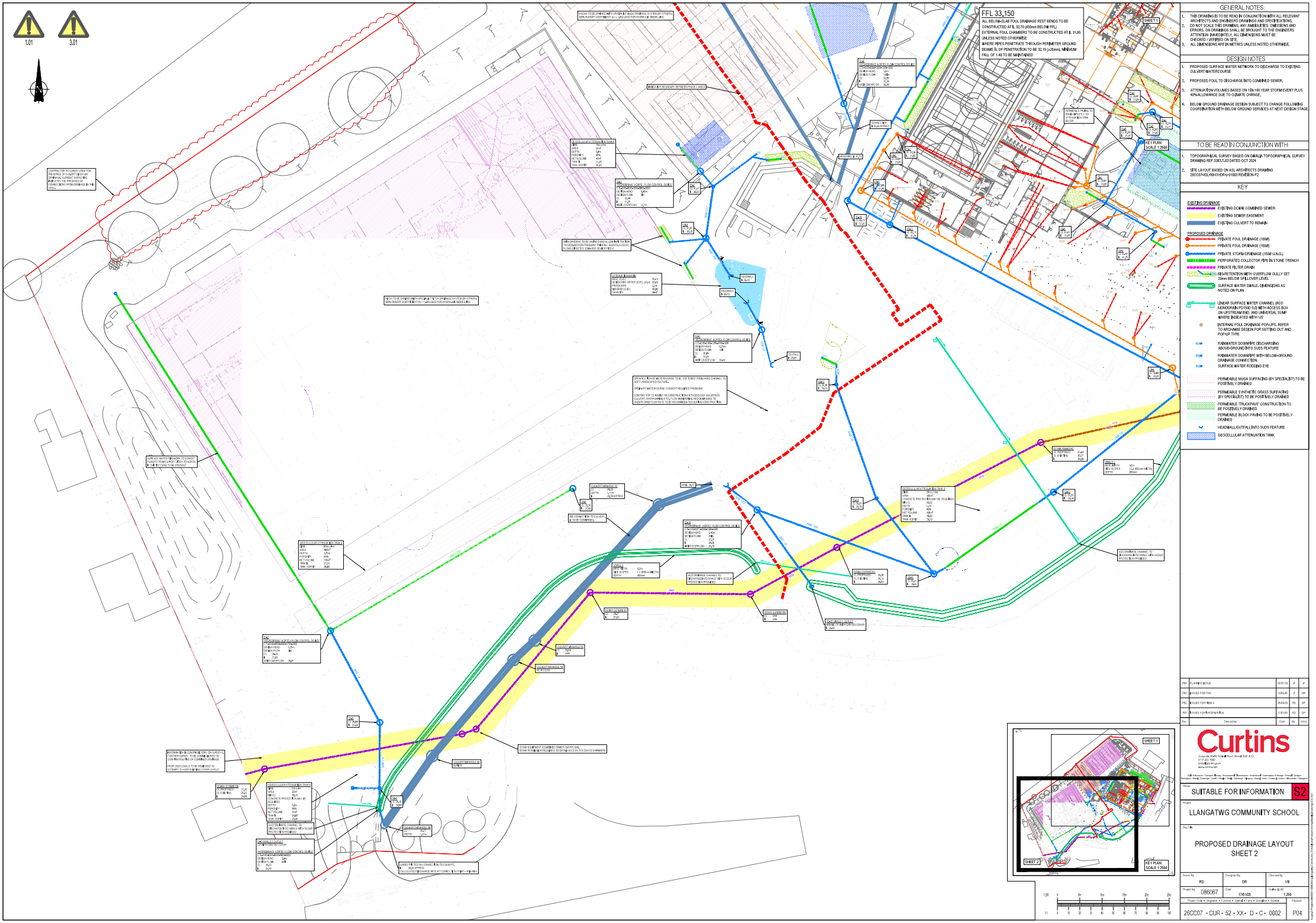
Project: LLANGATWG COMMUNITY SCHOOL

Dwg Title: PROPOSED DRAINAGE LAYOUT SHEET 1

Drawn By	Designed By	Checked By
RD	DR	YB

Project No: 086067 | Date: 15/01/25 | Scales @ A0: 1:250

Project Code - Originator - Location - Spatial - Form - Discipline - Number | Revision
26CC07 - CUR - 52 - XX - D - C - 0001 | P04



GENERAL NOTES:

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND SPECIFICATIONS.
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3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE.

DESIGN NOTES

1. PROPOSED SURFACE WATER NETWORK TO DISCHARGE TO EXISTING CULVERT/WATERCOURSE
2. PROPOSED FOUL TO DISCHARGE INTO COMBINED SEWER.
3. ATTENUATION VOLUMES BASED ON 1 IN 100 YEAR STORM EVENT PLUS 40%ALLOWANCE DUE TO CLIMATE CHANGE.
4. BELOW GROUND DRAINAGE DESIGN SUBJECT TO CHANGE FOLLOWING COORDINATION WITH BELOW GROUND SERVICES AT NEXT DESIGN STAGE

TO BE READ IN CONJUNCTION WITH:

1. TOPOGRAPHICAL SURVEY BASED ON GWALIA TOPOGRAPHICAL SURVEY DRAWING REF:338/T+T/3 DATED OCT 2024
2. SITE LAYOUT BASED ON ASL ARCHITECTS DRAWING 26CC07-ASL-99-XX-DR-L-01003 REVISION P2

KEY

EXISTING DRAINAGE
- EXISTING DOWN COMBINED SEWER
- EXISTING SEWER EASEMENT
- EXISTING CULVERT TO REMAIN

PROPOSED DRAINAGE
- PRIVATE FOUL DRAINAGE (150Ø)
- PRIVATE FOUL DRAINAGE (150Ø)
- PRIVATE STORM DRAINAGE (150Ø U.N.O.)
- PERFORATED COLLECTOR PIPE IN STONE TRENCH
- PRIVATE FILTER DRAIN
- BIO-RETENTION WITH OVERFLOW GULLY SET 25mm BELOW SPILLOVER LEVEL
- SURFACE WATER SWALE, DIMENSIONS AS NOTED ON PLAN
- LINEAR SURFACE WATER CHANNEL (ACO MONODRAIN PO100 0.0) WITH ACCESS BOX ON UPSTREAM END, AND UNIVERSAL SUMP WHERE INDICATED WITH 'US'
- INTERNAL FOUL DRAINAGE POP-UPS, REFER TO ARCHAME DESIGN FOR SETTING OUT AND POP-UP TYPE
- RWP RAINWATER DOWNPIPE DISCHARGING ABOVE-GROUND INTO SUDS FEATURE
- RWP RAINWATER DOWNPIPE WITH BELOW-GROUND DRAINAGE CONNECTION
- RWP SURFACE WATER RODDING EYE
- PERMEABLE MUSA SURFACING (BY SPECIALIST) TO BE POSITIVELY DRAINED
- PERMEABLE SYNTHETIC GRASS SURFACING (BY SPECIALIST) TO BE POSITIVELY DRAINED
- PERMEABLE TRUCKPAVE' CONSTRUCTION TO BE POSITIVELY DRAINED
- PERMEABLE BLOCK PAVING TO BE POSITIVELY DRAINED
- HEADWALL/OUTFALL INTO SUDS FEATURE
- GEOCELLULAR ATTENUATION TANK

Rev	Description	Date	By	Chkd
P03	PLANNING ISSUE	20.09.05	JF	JF
P02	ISSUED FOR PAC	13.06.05	JF	DR
P01	ISSUED FOR REVIEW	29.04.05	RD	DR
A01	ISSUED FOR INFORMATION	17.01.05	RD	DR

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Status: SUITABLE FOR INFORMATION S2

Project: LLANGATWG COMMUNITY SCHOOL

Dwg Title: PROPOSED DRAINAGE LAYOUT SHEET 2

Drawn By	Designed By	Checked By
RD	DR	YB

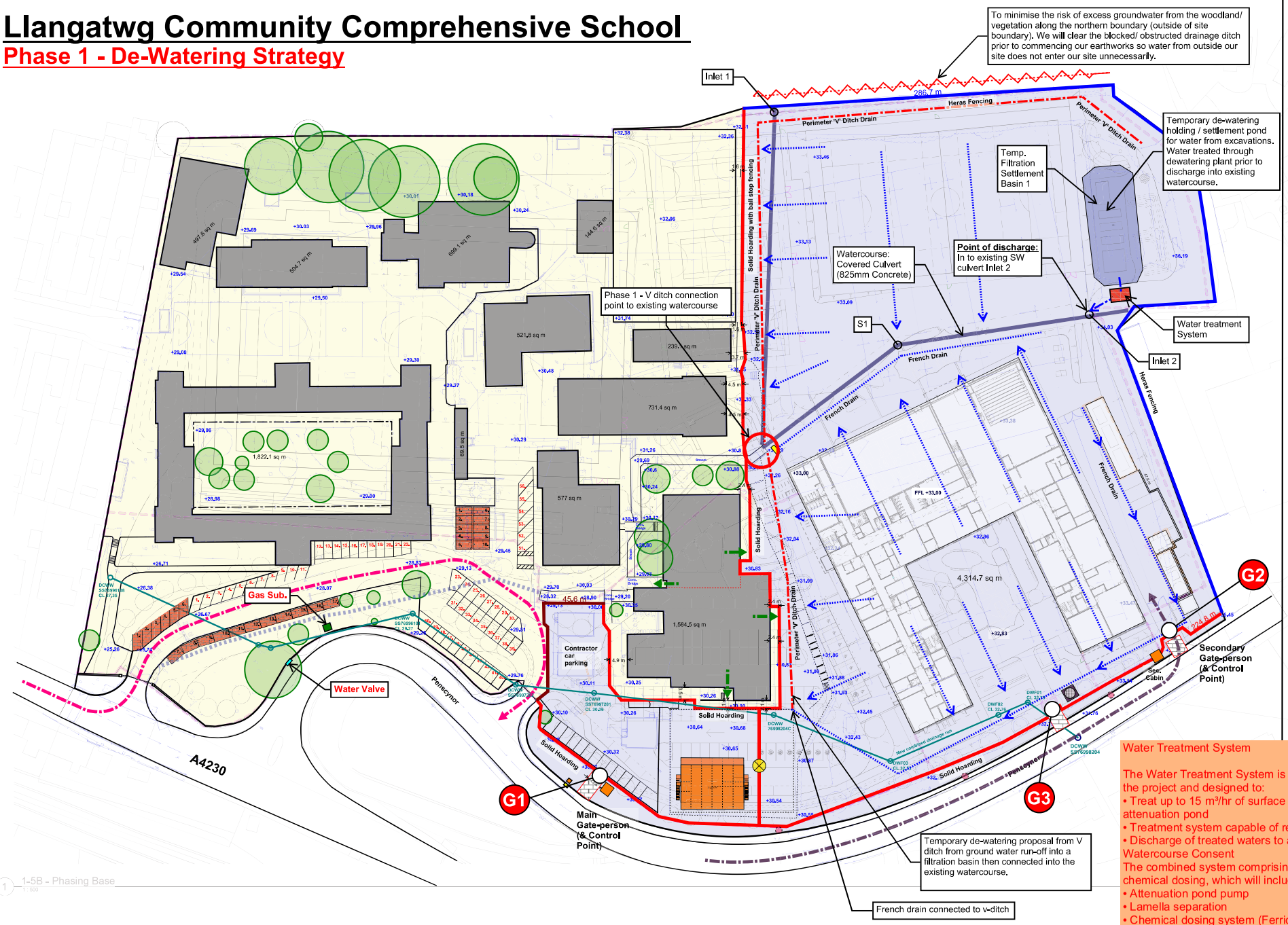
Project No: 086067 | Date: 17.01.05 | Scales @ A0: 1:250

Project Code - Originator - Function - Spatial - Form - Discipline - Number: 26CC07 - CUR - 52 - XX - D - C - 0002 | Revision: P04

Appendix H
Phase 1 De-Watering Strategy

Llangatwg Community Comprehensive School

Phase 1 - De-Watering Strategy



- Existing Trees (*to remain*)
- Existing LIVE School Buildings
- +10.00 Existing School Levels
- +10.00 Proposed Site Levels
- Heras Type Fencing with Counterweight Bases
- Solid Hoarding with Fixed Posts
- Solid Hoarding with Precast Concrete Support Bases laid on Existing Road Surface
- Site Accommodation/ Welfare
- G Lockable Vehicle Gates
- French Drain (Sump/ Clean Stone/ Terram Wrap & Perforated Pipe) 600mm Deep
- Temp. Perimeter 'V' Ditch/ Silt Barrier (600mm Deep)
- Existing Covered SW Culvert
- Construction Zone
- School Occupied Zone

Water Treatment System

The Water Treatment System is tailored to the specific requirements of the project and designed to:

- Treat up to 15 m³/hr of surface water stored within on onsite attenuation pond
- Treatment system capable of removing suspended solids
- Discharge of treated waters to an onsite culvert under an Ordinary Watercourse Consent

The combined system comprising lamella separation along with chemical dosing, which will include:

- Attenuation pond pump
- Lamella separation
- Chemical dosing system (Ferric Chloride and Sodium Hydroxide), which we consider will be sufficient for the duration of the project.
- 5m3 clean water tank
- Discharge pump (if required) dependant on levels
- Totalising meter

The system will also be fully automated via a PLC control panel, telemetry and safety devices, including safety shut down switches at various points throughout the system, to prevent things such as bund overfill. We will also be able to remotely restart the system in the event of power failure.