

NOTE: CCTV SURVEY REQUIRED TO DETERMINE WHETHER OFF-SITE CONNECTIONS ARE PRESENT AT THE SITE.

NOTES

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RELEVANT SPECIFICATION, INR. RISK ASSESSMENTS (SEE CDM NOTES) AND ALL OTHER RELATED DRAWINGS ISSUED BY THE ENGINEER.
2. DO NOT SCALE FROM THIS DRAWING. WORK FROM FIGURED DIMENSIONS ONLY.
3. ALL DIMENSIONS SHOWN ON THIS DRAWING ARE IN METRES UNLESS OTHERWISE STATED.
4. ALL DIMENSIONS, LEVELS AND SURVEY GRID CO-ORDINATES ARE TO BE CHECKED ON SITE AND THE ENGINEER NOTIFIED IMMEDIATELY OF ANY DISCREPANCIES PRIOR TO THE COMMENCEMENT OF THE WORKS.
5. NO DEVIATION FROM THE DETAILS SHOWN ON THIS DRAWING IS PERMITTED WITHOUT PRIOR PERMISSION FROM THE ENGINEER.
6. ANY WORKS OUTSIDE RED SITE BOUNDARY ARE FOR INFORMATION PURPOSES ONLY. UNLESS SPECIFICALLY NOTED, ALL WORKS OUTSIDE THE SITE BOUNDARY WILL BE UNDERTAKEN BY OTHERS UNDER A SEPARATE CONTRACT.
7. REFER TO ARCHITECT'S AND STRUCTURAL ENGINEERS DETAILS FOR BOTH RAISED DPC / FLUSH THRESHOLD DETAIL AND TANKING DETAIL.
8. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY FULLY WITH THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, VOLUME ONE, SPECIFICATION FOR HIGHWAY WORKS AND THE LOCAL AUTHORITY SPECIFICATION FOR ROAD CONSTRUCTION AND STANDARD DETAILS.
9. THE PUBLIC HIGHWAY AND WORKS WILL BE KEPT CLEAN AND FREE OF DEBRIS BY USE OF WHEEL WASHING FACILITIES AND ROAD SWEEPERS TO THE COUNCIL'S SATISFACTION.
10. ALL SETTING OUT SHALL BE AGREED ON-SITE WITH THE ENGINEER, PRIOR TO THE COMMENCEMENT OF THE WORKS.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY APPROVALS FROM THE LOCAL AUTHORITY PRIOR TO COMMENCING WORKS ON THE HIGHWAY.

CONSTRUCTION NOTES:

1. ALL SOFT SPOTS AND VOIDS SHALL BE REMOVED BEFORE CONSTRUCTION AND REPLACED WITH SUFFICIENT FILL MATERIAL.
2. ROAD FORMATION TO BE IN ACCORDANCE WITH CLAUSE 616 AND COMPACTED IN ACCORDANCE WITH TABLE THE REQUIREMENTS OF 6/4 OF THE SPECIFICATION FOR HIGHWAY WORKS - SERIES 600 EARTHWORKS.
3. APPROVED RESIDUAL WEEDKILLER, WHICH DOES NOT CONTAIN ARTRAZINE OR SIMAZINE, MUST BE APPLIED TO ALL FORMATIONS.
4. ALL CONCRETE AND CEMENT MORTAR MUST BE SULPHATE RESISTING TO BS 4021.
5. ALL CARRIAGEWAY MATERIALS SHALL BE SUPPLIED AND LAID IN ACCORDANCE WITH BS EN 13106-1.
6. ALL MATERIALS IN CARRIAGEWAYS TO BE LAID BY MACHINE.
7. MINIMUM DEPTH OF 450mm CONSTRUCTION IS REQUIRED FOR NON-FROST SUSCEPTIBLE MATERIAL.
8. THE CONTRACTOR MUST VERIFY CBR VALUES ALONG EACH ACCESS ROAD AT 30m INTERVALS, THE RESULTS OF WHICH MUST BE SHOWN TO THE ENGINEER FOR CONFORMANCE OF THE CARRIAGEWAY CONSTRUCTION SUBMIT ON THIS DRAWING, PRIOR TO COMMENCING THE WORKS.

CDM NOTES:

1. THE ATTENTION OF THE CLIENT AND THE PRINCIPAL CONTRACTOR IS DRAWN TO THE FOLLOWING POTENTIAL RISKS IN CONJUNCTION WITH THE PROPOSED ON-SITE AND OFF-SITE WORKS AS DESIGNED FOR THIS PROJECT:
2. WORKS IN THE VICINITY OF LIVE SERVICES WILL BE NECESSARY AND THE ADVICE OF ALL STATUTORY SERVICE COMPANIES MUST BE SOUGHT BEFORE ANY WORKS COMMENCE.
3. WORKS WITHIN AND ABOUT THE EXISTING HIGHWAY WILL ENTAIL TRAFFIC HAZARDS AND ALL APPROPRIATE SAFETY MEASURES INCLUDING BARRIERS, SIGNS AND LIGHTING MUST BE UNDERTAKEN TO THE APPROVAL OF THE LOCAL AUTHORITY, THE HIGHWAY AUTHORITY AND THE POLICE.
4. HAZARDOUS MATERIALS INCLUDING CEMENT AND BITUMINOUS MATERIALS ARE SPECIFIED AND THE MANUFACTURER'S ADVICE ON SAFE HANDLING PROCEDURES MUST BE OBTAINED AND MADE CLEAR TO ALL OPERATIVES.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATING ALL EXISTING SERVICES WITHIN THE WORKS OF THE WORKS AND ENSURE THESE ARE PROTECTED THROUGHOUT THE DURATION OF THE WORKS. ALL UTILITY ELEMENT SHOULD BE CLEARLY MARKED ON THE GROUND PRIOR TO COMMENCEMENT OF THE WORKS.
6. THE CONTRACTOR MUST ENSURE ALL WORKING AREAS ARE FULLY SECURE.

GEOCELLULAR STORAGE TANK 1.0
COVER LEVEL: 58.60m AOD
SOFFIT LEVEL: 57.70m AOD
INVERT LEVEL: 56.90m AOD
PLAN AREA: 50m²
DEPTH OF STORAGE: 0.8m
POROSITY: 95%
VOLUME OF STORAGE: 38m³

**TOTAL PERMEABLE PAVING PROVIDED
ACROSS NORTHERN CATCHMENT:**
PERMEABLE PAVING AREA: 275.8m²
DEPTH: 500mm
VOID RATIO: 30%
EFFICIENCY: 60%
PERMEABLE PAVING STORAGE: 24.8m³

GEOCELLULAR STORAGE TANK 2.0	
COVER LEVEL	58.06m AOD
SOFFIT LEVEL	57.16m AOD
INVERT LEVEL	56.36m AOD
PLAN AREA	62m ²
AVE. DEPTH OF STORAGE	0.8m
POROSITY	95 %
VOLUME OF STORAGE	47.1m ³

GEOCELLULAR STORAGE TANK 3.0	
COVER LEVEL	58.45mAOD
SOFFIT LEVEL	57.55mAOD
INVERT LEVEL	56.75mAOD
PLAN AREA	56m ²
AVE. DEPTH OF STORAGE	0.8m
POROSITY	95 %
VOLUME OF STORAGE	42.6m ³

GEOCELLULAR STORAGE TANK 5.0	
COVER LEVEL	57.35m
SOFFIT LEVEL	56.45m
INVERT LEVEL	55.65m
PLAN AREA	42m ²
AVE. DEPTH OF STORAGE	0.8m
POROSITY	95 %
VOLUME OF STORAGE	31.9m ³

GEOCELLULAR STORAGE TANK 4.0	
COVER LEVEL	57.74m AOD
SOFFIT LEVEL	56.84m AOD
INVERT LEVEL	56.04m AOD
PLAN AREA	56m ²
Ave. Depth of Storage	0.8m
POROSITY	95 %
VOLUME OF STORAGE	42.6m ³

SOUTHERN CATCHMENT
DEVELOPMENT AREA: 0.777ha
PERCENTAGE IMPERMEABLE: 48.6%
MEASURED IMPERMEABLE AREA: 0.378ha
DISCHARGE RATE: 2.5l/s
TOTAL STORAGE VOLUME: 242.8m³

TOTAL PERMEABLE PAVING PROVIDED ACROSS
SOUTHERN CATCHMENT:
PERMEABLE PAVING AREA: 873.6m²
DEPTH: 500mm
VOID RATIO: 30%
EFFICIENCY: 60%
TOTAL PERMEABLE PAVING STORAGE: 78.6m³

FOUL AND SURFACE WATER DRAINAGE KEY

- DEVELOPMENT BOUNDARY**

PROPOSED ADAPTABLE FOUL WATER SEWER & MANHOLE (WITH MANHOLE REF. No.)

PROPOSED ADAPTABLE SURFACE WATER SEWER & MANHOLE (WITH MANHOLE REF. No.)

EXISTING THAMES FLOOD WATER SURFACE WATER & MANHOLE

EXISTING THAMES FLOOD WATER SURFACE WATER SEWER & MANHOLE

MANHOLE REFERENCE COVER LEVEL
INVERT LEVEL
(TEXT COLOUR INDICATES PROPOSED NETWORK TYPE)

SF-9
CL: 93.719m
IL: 91.919m

PROPOSED BURIED STORAGE

PROPOSED PERMEABLE PAVING (30% VOIDS)

FW TYPE 4 NON-ENTRY ACCESS CHAMBER (4500)
MAX DEPTH TO INVERT 3m OR
"TEGRA" NON-ENTRY ACCESS CHAMBER (6000)
(BD DENOTES BACKDROP)

FW TYPE 5 NON-ENTRY ACCESS CHAMBER (4500)
MAX DEPTH TO INVERT 1m

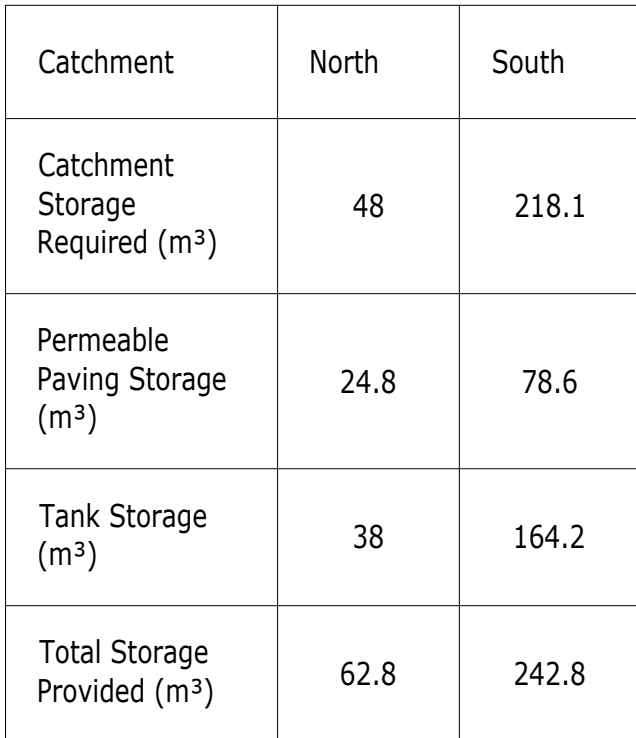
SW TYPE 4 NON-ENTRY ACCESS CHAMBER (4500)
FOR PIPE DIAMETERS OF 150mm OR LESS.
MAX DEPTH TO INVERT 3m

OVERLAND EXCEEDANCE ROUTE

FFL

PROPOSED FINISHED FLOOR LEVEL

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B	REVISED TO SUIT LATEST SITE LAYOUT	JL	AW	BB	22.12.21
A	UPDATED TO SUIT SITE LAYOUT.	AW	AW	BB	28.07.21
Rev	Description	Drn	Chk	App	Date

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Client

BELLWAY HOMES

Project Title: **DEE ROAD FIRE STATION**
DEE ROAD, READING

Drawing Title:

PROPOSED DRAINAGE STRATEGY

AI Scale 1:250	Date JULY 2022	Designed by JL
Drawn by	Checked by	Approved by

Drawing Number	2106740-005	Rev B
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