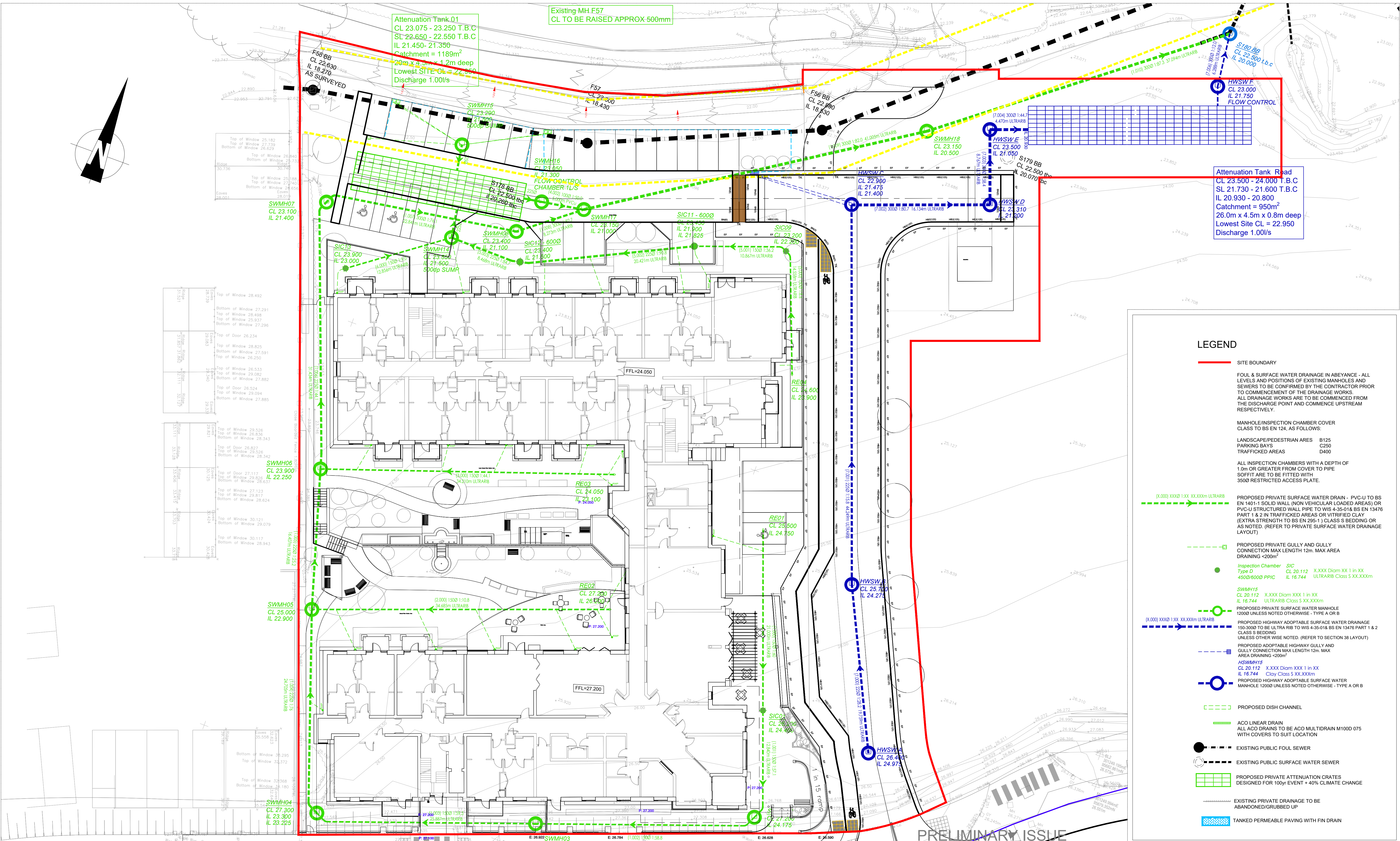




LEGEND

SITE BOUNDARY

FOUL & SURFACE WATER DRAINAGE IN ABEYANCE - ALL LEVELS AND POSITIONS OF EXISTING MANHOLES AND SEWERS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS. ALL DRAINAGE WORKS ARE TO BE COMMENCED FROM THE DISCHARGE POINT AND COMMENCE UPSTREAM RESPECTIVELY.

MANHOLE/INSPECTION CHAMBER COVER CLASS TO BS EN 124, AS FOLLOWS:

LANDSCAPE/PEDESTRIAN AREAS B125
PARKING BAYS C250
TRAFFICKED AREAS D400

ALL INSPECTION CHAMBERS WITH A DEPTH OF 1.0m OR GREATER FROM COVER TO PIPE SOFFIT ARE TO BE FITTED WITH 3500 RESTRICTED ACCESS PLATE.

PROPOSED PRIVATE SURFACE WATER DRAIN - PVC-U TO BS EN 1401-1 SOLID WALL (NON VEHICULAR LOADED AREAS) OR PVC-U STRUCTURED WALL PIPE TO WIS 4-35-018 BS EN 13476 PART 1 & 2 IN TRAFFICKED AREAS OR VITRIFIED CLAY (EXTRA STRENGTH TO BS EN 295-1) CLASS S BEDDING OR AS NOTED. (REFER TO PRIVATE SURFACE WATER DRAINAGE LAYOUT)

PROPOSED PRIVATE GULLY AND GULLY CONNECTION MAX LENGTH 12m. MAX AREA DRAINING <200m²

Inspection Chamber S/C
Type D CL 20.112 X.XXX Diam XXX 1 in XX
4500/6000 PPIC IL 16.744 ULTRARIB Class S XX.XXXm

SWMH15
CL 20.112 X.XXX Diam XXX 1 in XX
IL 16.744 ULTRARIB Class S XX.XXXm

PROPOSED PRIVATE SURFACE WATER MANHOLE 1200x UNLESS NOTED OTHERWISE - TYPE A OR B

PROPOSED HIGHWAY ADAPTABLE SURFACE WATER DRAINAGE 150-300x TO BE ULTRARIB TO WIS 4-35-018 BS EN 13476 PART 1 & 2 CLASS S BEDDING UNLESS OTHERWISE NOTED. (REFER TO SECTION 38 LAYOUT)

PROPOSED ADAPTABLE HIGHWAY GULLY AND GULLY CONNECTION MAX LENGTH 12m. MAX AREA DRAINING <200m²

HWSW15
CL 20.112 X.XXX Diam XXX 1 in XX
IL 16.744 Clay Class S XX.XXXm

PROPOSED HIGHWAY ADAPTABLE SURFACE WATER MANHOLE 1200x UNLESS NOTED OTHERWISE - TYPE A OR B

PROPOSED DISH CHANNEL

ACO LINEAR DRAIN
ALL ACO DRAINS TO BE ACO MULTIDRAIN M1000 675 WITH COVERS TO SUIT LOCATION

EXISTING PUBLIC FOUL SEWER

EXISTING PUBLIC SURFACE WATER SEWER

PROPOSED PRIVATE ATTENUATION CRATES DESIGNED FOR 100yr EVENT + 40% CLIMATE CHANGE

EXISTING PRIVATE DRAINAGE TO BE ABANDONED/GRUBBED UP

TANKED PERMEABLE PAVING WITH FIN DRAIN

NOTES

- All rights described in chapter IV of the copyright, designs and patents act 1988 have been generally asserted
- Where any drawing is to be read in conjunction with another, including specialists, the two drawings shall be cross-checked and any discrepancies reported to the structural engineer before the work is put in hand
- This drawing is to read in conjunction with all relevant architects, M&E services and engineers drawings and specifications
- All dimensions are in millimeters, all levels are in metres, unless shown otherwise
- Any discrepancies in dimensions or details on or between these drawings/specifications should be drawn to the attention of the structural engineer in writing for clarification
- Drawing prepared solely for the use of client, as detailed in text box, and is not to be copied, lent or used by any third party without written permission

SETTING OUT TO ARCHITECTS DRAWINGS.

DO NOT SCALE FROM THIS DRAWING. ALL LEVELS AND POSITIONS OF EXISTING MANHOLES AND SEWERS TO BE CONFIRMED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF THE DRAINAGE WORKS. ANY DISCREPANCIES ARE TO BE REPORTED TO THE ENGINEER.

ALL DRAINAGE WORKS ARE TO BE COMMENCED FROM THE DISCHARGE POINT AND COMMENCE UPSTREAM RESPECTIVELY.
ALL COVER LEVELS SHOWN ARE APPROXIMATE AND SHOULD BE ADJUSTED LOCALLY TO SUIT FINISHED LEVELS AND LANDSCAPING.
ALL SEWERS CLOSER THAN 3.0m TO A BUILDING TO BE PROTECTED BY 150mm MIN C20 CONCRETE SURROUND AND/OR FOUNDATIONS TO POSITIONED 150mm LOWER THAN INVERT LEVEL.

DRAINAGE NOTES:

- THIS DRAWING IS TO BE USED FOR BELOW GROUND DRAINAGE ONLY. ABOVE GROUND DRAINAGE INCLUDING STACK PIPE POSITIONS, RWPS & SPECIFICATION SHALL BE TAKEN FROM M&E ENGINEER'S DRAWINGS.
- ALL SPIS TO HAVE RODDING ACCESS POINTS AT NO HIGHER THAN 1.5m ABOVE FFL.
- ALL RWP CONNECTIONS TO BE TRAPPED AND PROVIDED WITH RODDING ACCESS.
- VENTILATION TO BE PROVIDED AT THE HEAD OF FOUL RUNS IN ACCORDANCE WITH BUILDING REGULATIONS.
- FOUL DRAINAGE FROM REST BEND TO INSPECTION CHAMBER TO BE Ø100mm WITH GRADIENT OF 1/40, BUT NO STEEPER THAN 1/12.

- THE FIRST MANHOLE UPSTREAM FROM THE CONNECTION TO THE EXISTING FOUL WATER SEWER SHALL BE FITTED WITH A SUITABLE SCREEN, WHICH WILL REMAIN IN PLACE UNTIL THE NEW SEWER BECOMES LIVE. FOR TYPE 3 MANHOLES, OUTLET TO BE BUNGED WITH SUITABLE STOPPER AND CHAIN WHICH CAN BE REMOVED ON COMPLETION OF WORK
- TO CARRY OUT WORK IN THE PUBLIC HIGHWAY THE CONTRACTOR WILL BE REQUIRED TO APPLY FOR A ROAD OPENING PERMIT (S 50).
- THE CONTRACTOR IS REQUIRED TO MAKE AN APPLICATION TO SWW TO CARRY OUT WORKS ON PUBLIC SEWERS (S 106).
- ALL SWD TO BE MINIMUM 150mm DIAMETER UNLESS OTHERWISE STATED. ALL FWD TO BE MINIMUM 100mm DIAMETER UNLESS OTHERWISE STATED. ALL HIGHWAY DRAINAGE TO BE A MINIMUM 150mm DIAMETER UNLESS OTHERWISE STATED.

- GULLY & LINEAR DRAIN POSITIONS ARE SHOWN TO THE BEST INTERPRETATION OF THE PROPOSED LEVELS. ADJUSTMENTS MAY HAVE TO BE MADE ON SITE WHEN THE EXACT LOW POINTS IN THE HARD SURFACING ARE DETERMINED. IF THERE IS ANY CONFUSION PLEASE CONTACT THE DRAINAGE CONSULTANT.
- SPECIFICATION CLAUSES REFER TO DOT SPECIFICATION FOR HIGHWAY WORKS-VOLUME 1 UNLESS STATED OTHERWISE.
- DESIGN GROUP D2, FLEXIBILITY AT JOINTS TO BE IN ACCORDANCE WITH CI 504.5 USING COMPRESSIBLE JOINT FILLER BOARD WITH THICKNESS AS IN TABLE A.

NOMINAL PIPE DIAM	THICKNESS OF COMPS
<450mm	18mm
450-1200mm	36mm
>1200mm	54mm

- ALL NEW SEWERS TO HAVE SUITABLE MARKER TAPE LAID 300mm ABOVE TOP OF PIPE.
- WHERE SEWERS ARE LOCATED BENEATH ADAPTABLE HIGHWAY THE BACKFILL MATERIAL SHALL BE ACCEPTED BY AUTHORITIES ENGINEER AND BE:
- MAIN BACK FILL- SUITABLE EXCAVATED SUB-SOIL MATERIAL TO DOT SPECIFICATION FOR HIGHWAYS WORKS VOLUME 1 CL 16. 505 SERIES 800 CLASS 2 OR 3. LOWER TRENCH FILL- AS MAIN BACK FILL MATERIAL, BUT SELECTED AS DOT CLASS 8, TABLE 6-1
- EXCAVATED GRANULAR FILLING MATERIAL WHICH IS EVENLY GRADED CRUSHED OR BROKEN WEATHERED UPPER ROCK OR SAND/GRAVEL OR BROKEN ROAD CONSTRUCTION MATERIALS. THE LARGEST PIECES SHALL HAVE A MAXIMUM DIMENSION NOT EXCEEDING 100mm.
- TYPE 1 OR TYPE 2 GRANULAR SUB BASE MATERIAL TO DOT SPECIFICATION FOR HIGHWAY WORKS- VOLUME 1 CL 803 OR 804

- THE CONTRACTOR IS TO VERIFY EXACT DETAILS OF EXISTING SERVICES, ALL GROUND LEVELS AND BUILDING SITE DIMENSIONS ALONG PROPOSED PIPE ROUTES PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ARE TO BE REPORTED TO THE CONSULTANT.
- MINIMUM COVER TO SEWERS SHOULD BE 350mm IN DOMESTIC GARDENS, 500mm IN DOMESTIC DRIVEWAYS AND PARKING AREAS WITH GROSS VEHICLE WEIGHT LESS THAN 7.5 TONNES, 800mm IN DOMESTIC DRIVEWAYS, AGRICULTURAL LAND, PARKING AREAS AND NARROW STREETS, WITH LIMITED ACCESS TO VEHICLES WITH GROSS WEIGHT GREATER THAN 7.5 TONNES AND 1.2m IN HIGHWAY ROADS.
- THE FOUNDATION OF THE BUILDING SHOULD BE 150mm BELOW THE INVERT LEVEL OF THE PIPE.

PRELIMINARY ISSUE

Client
LiveWest

Project Title
CRANBROOK EXTRA
CARE FACILITY

Drawing Title
DRAINAGE STRATEGY



TRUE Consulting Engineers
Specialist advisors in innovative solutions

Scales 1:250			
Drn. MQ	Chkd. DJS	Appd. SJM	Date. 12/20/23
Job No. 1835		Drawing No. C-GA-100	

Mark	Date	By	Chk'd	Revision Notes
P2	09/12/24	JL	MQ	PRELIMINARY ISSUE
P1	18/12/23	DW	DJS	PRELIMINARY ISSUE