

# 242-244 BEECROFT ROAD, EPPING

## CONSTRUCTION CERTIFICATE CIVIL ENGINEERING PACKAGE



LOCALITY PLAN

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### CIVIL DRAWING SCHEDULE

DWG No.	DRAWING TITLE
C30001	COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN
C30011	SPECIFICATION NOTES
C31001	CONCEPT SEDIMENT AND EROSION CONTROL PLAN
C31101	SEDIMENT AND EROSION CONTROL DETAILS
C33001	SITWORKS AND STORMWATER MANAGEMENT PLAN
C34101	STORMWATER LONGITUDINAL SECTIONS - SHEET 01
C34102	STORMWATER LONGITUDINAL SECTIONS - SHEET 02
C34201	STORMWATER CATCHMENT PLAN
C35001	ALIGNMENT CONTROL PLAN
C35101	LONGITUDINAL SECTIONS
C35301	SWALE ALIGNMENT CONTROL PLAN - SHEET 01
C35302	SWALE ALIGNMENT CONTROL PLAN - SHEET 02
C35401	SWALE LONGITUDINAL SECTIONS - SHEET 01
C35402	SWALE LONGITUDINAL SECTIONS - SHEET 02
C35501	SWALE CROSS SECTIONS - SHEET 01
C35502	SWALE CROSS SECTIONS - SHEET 02
C35503	SWALE CROSS SECTIONS - SHEET 03
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C35505	SWALE CROSS SECTIONS - SHEET 05
C36001	RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 01
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C36003	RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 03
C36004	RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 04
C36101	RETAINING WALL ELEVATIONS - SHEET 01
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C36103	RETAINING WALL ELEVATIONS - SHEET 03
C36104	RETAINING WALL ELEVATIONS - SHEET 04
C36105	RETAINING WALL ELEVATIONS - SHEET 05
C39101	DETAILS - SHEET 01
C39102	DETAILS - SHEET 02
C39103	DETAILS - SHEET 03

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
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04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
	<b>INTERNAL WORKS</b>

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
	<b>COVER SHEET, DRAWING SCHEDULE AND LOCALITY PLAN</b>

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C30001</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

**NOT FOR CONSTRUCTION**

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DRAWN: AFALLINS      DESIGNED: SFORD      JOB MANAGER: SFORD      VERIFIER: SFORD

TREE PROTECTION	
1.	REFER TO LANDSCAPE / ARCHITECTS/NORTHROPS PLAN FOR TREES TO BE RETAINED AND PROTECTED.
2.	ANY EXISTING/PROPOSED TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
2.1.	PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE.
2.2.	ENSURING THAT NOTHING IS NAILED TO ANY PART OF THE TREE.
2.3.	CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY. COUNCILS AND/OR INDEPENDENT ARBORISTS TO BE CONSULTED WHERE TREE ROOTS ARE TO BE REMOVED AND/OR CUT.

EXISTING SERVICES	
1.	ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
2.	CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATION, GAS OR ELECTRICAL SERVICES. HAND EXCAVATION ONLY IN THESE AREAS.
3.	THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING SERVICES THAT ARE TO BE RETAINED IN THE VICINITY OF THE PROPOSED WORKS. ANY AND ALL DAMAGE TO THESE SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTORS EXPENSE.
4.	THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
5.	THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT.
6.	THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS ARE NOT AFFECTED BY THE WORKS AND ARE MAINTAINED AND NOT INTERRUPTED.
7.	PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF THE PROGRAM FOR THE RELOCATION AND/OR CONSTRUCTION OF TEMPORARY SERVICES AND FOR ANY ASSOCIATED INTERRUPTION OF SUPPLY.
8.	THE CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN EXISTING SUPPLY TO BUILDINGS REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
9.	THE CONTRACTOR IS TO ALLOW TO POTHOLE ANY SERVICES WITHIN A PUBLIC RESERVE WITHIN THE EXTENT OF WORKS (E.G. STORMWATER CROSSINGS).

ACCESS AND SAFETY	
1.	THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
2.	THE CONTRACTOR SHALL PROVIDE TRAFFIC MANAGEMENT PLANS FOR THE PROPOSED WORKS COMPLETED BY A SUITABLY QUALIFIED PERSON AND APPROVED BY COUNCIL / REGULATORY AUTHORITY. WORK IS NOT TO COMMENCE ON SITE PRIOR TO APPROVAL OF TRAFFIC MANAGEMENT SCHEME.
3.	THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO BUILDINGS ADJACENT THE WORKS IS NOT INTERRUPTED.
4.	WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
5.	THE CONTRACTOR SHALL ENSURE PUBLIC ACCESS EXTERNAL TO THE SITE IS IN ACCORDANCE WITH COUNCIL / AUTHORITY / SITE MANAGERS REQUIREMENTS.

SEDIMENT AND SOIL EROSION	
1.	THE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY. THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME MEETING COUNCILS AND OTHER REGULATORY AUTHORITY REQUIREMENTS AND MAKE PAYMENT OF ALL FEES.
2.	THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE 'BLUE BOOK' (MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION), PRODUCED BY LANDCOM AND COUNCILS POLICIES. THESE MEASURES ARE TO BE INSPECTED AND MAINTAINED ON A DAILY BASIS.
3.	THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THE DRAWINGS, AND ADHERE TO ALL REGULATORY AUTHORITY REQUIREMENTS.
4.	THE CONTRACTOR SHALL INFORM ALL SUB CONTRACTORS OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSTREAM LANDS AND WATERWAYS.
5.	WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
5.1.	CONSTRUCT TEMPORARY STABILISED SITE ACCESS INCLUSIVE OF SHAKE DOWN / WASH PAD.
5.2.	INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES. WHERE FENCES ADJACENT EACH OTHER, THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.
5.3.	INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
6.	UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
7.	AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE UNPROTECTED AREAS WILL BE STABILISED / KEPT MOIST (NOT WET) TO KEEP DUST UNDER CONTROL ENSURING CONFORMITY TO REGULATORY AUTHORITY REQUIREMENTS.
8.	ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) SHALL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
9.	WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT BEEN FILTERED OUT.
10.	TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
11.	ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS, OPEN CHANNELS AND ROCK BATTERS DURING ALL PHASES OF CONSTRUCTION.
12.	EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING RAIN EVENTS.
13.	RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. CONTRACTOR TO PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.
14.	IF A TEMPORARY SEDIMENT BASIN IS REQUIRED, ENSURE SAFE BATTER SLOPES IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. MAINTAIN ADEQUATE STORAGE VOLUME IN ACCORDANCE WITH PLANS. TEMPORARY PUMP 'CLEAN FLOCCULATED' WATER TO AUTHORITIES STORMWATER SYSTEM. ENSURE WHOLE DISTURBED SITE RUN-OFF IS DIRECTED TO TEMPORARY SEDIMENT BASIN.

EARTHWORKS									
1.	AT THE COMMENCEMENT OF FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED COMPACTION EARTHWORKS REQUIREMENTS.								
2.	STRIP TOPSOIL, VEGETABLE MATTER AND RUBBLE TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE SUPERINTENDENT.								
3.	WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE, PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE SUPERINTENDENT OR CERTIFYING ENGINEER.								
4.	THE CONTRACTOR IS TO ALLOW FOR A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO PROVIDE ADVICE AND CERTIFICATION OF ANY WORKS ASSOCIATED WITH TREATING OR MANAGING UNSUITABLE GROUND CONDITIONS THROUGHOUT THE CONTRACT (e.g. STABILITY OF EXCAVATIONS, POOR SUBGRADE, THE EXISTING QUARRY AREA etc).								
5.	ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS BELOW.								
6.	PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE SUPERINTENDENTS APPROVAL.								
7.	ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS (LOOSE) AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289.2.1.1, AS1289.5.7.1 AND AS1289.5.8.8 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY:								
	<table border="1"> <thead> <tr> <th>LOCATION</th> <th>COMPACTION REQUIREMENT</th> </tr> </thead> <tbody> <tr> <td>LANDSCAPED AREAS</td> <td>98% SMD</td> </tr> <tr> <td>ROADS</td> <td>100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)</td> </tr> <tr> <td>PAVED AREAS</td> <td>100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)</td> </tr> </tbody> </table>	LOCATION	COMPACTION REQUIREMENT	LANDSCAPED AREAS	98% SMD	ROADS	100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)	PAVED AREAS	100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)
LOCATION	COMPACTION REQUIREMENT								
LANDSCAPED AREAS	98% SMD								
ROADS	100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)								
PAVED AREAS	100% SMD (IN ACCORDANCE WITH COUNCIL SPECIFICATIONS)								
8.	TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED N.A.T.A. REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE UNLESS AGREED DIFFERENTLY WITH THE PRINCIPAL.								
9.	ALLOW THE FOLLOWING COMPACTION TESTING BY N.A.T.A. REGISTERED LABORATORY FOR PLATFORMS AND FILL LAYERS IN ACCORDANCE WITH THE LATEST VERSION OF AS3798. (MINIMUM 3 TESTS PER LAYER) OR 1 TEST PER MATERIAL TYPE PER 250sqm OR 1 TEST.								
10.	WHERE TEST RESULTS ARE BELOW THE SPECIFIED COMPACTION, RECOMPACT (TYING FIRST AS NECESSARY) AND RETEST UNTIL SPECIFIED COMPACTION STANDARDS ARE ACHIEVED, OTHERWISE SUBGRADE REPLACEMENT IS REQUIRED IF COMPACTION STANDARDS ARE NOT ACHIEVED.								
11.	ALLOW FOR EXCAVATION IN ALL MATERIALS AS FOUND U.N.O. NO ADDITIONAL PAYMENTS WILL BE MADE FOR EXCAVATION IN WET OR HARD GROUND.								
12.	WHERE THERE IS INSUFFICIENT EXCAVATED MATERIAL SUITABLE FOR FILLING OR SUBGRADE REPLACEMENT, THE CONTRACTOR IS TO ALLOW TO IMPORT FILL. IMPORTED FILL SHALL COMPLY WITH THE FOLLOWING:								
12.1.	BE OF VIRGIN EXCAVATED NATURAL MATERIAL OR								
12.2.	CONTRACTOR TO PROVIDE EVIDENCE IT IS SUITABLE FOR USE								
12.3.	PLASTICITY INDEX BETWEEN 2-15% AND CBR > 8								
12.4.	FREE FROM ORGANIC AND PERISHABLE MATTER								
12.5.	MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (-25%)								
13.	THE CONTRACTOR SHALL PROGRAM THE EARTHWORKS OPERATION SO THAT THE WORKING AREAS ARE ADEQUATELY DRAINED DURING THE PERIOD OF CONSTRUCTION. THE SURFACE SHALL BE GRADED AND SEALED OFF TO REMOVE DEPRESSIONS, ROLLERS MARKS AND SIMILAR WHICH WOULD ALLOW WATER TO POND AND PENETRATE THE UNDERLYING MATERIAL. ANY DAMAGE RESULTING FROM THE CONTRACTOR NOT OBSERVING THESE REQUIREMENTS SHALL BE RECTIFIED AT THEIR COST.								
14.	IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE AND MAINTAIN THE INTEGRITY OF ALL SERVICES, CONDUITS AND PIPES DURING CONSTRUCTION, SPECIFICALLY DURING THE BACKFILLING AND COMPACTION PROCEDURE. ANY AND ALL DAMAGE TO NEW OR EXISTING SERVICES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST.								
	DEEP EXCAVATIONS								
15.	PRIOR TO THE COMMENCEMENT OF EXCAVATION WORKS GREATER THAN 1.5m IN DEPTH, THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER TO DETERMINE THE STABILITY OF MATERIAL BEING EXCAVATED AND BENCHING REQUIREMENTS / MINIMUM BATTER SLOPES.								
16.	THE CONTRACTOR MUST PROVIDE THE SUPERINTENDENT AND OR THE DESIGN ENGINEER WITH A COPY OF THE GEOTECHNICAL ENGINEERS REPORT PRIOR TO PRACTICAL COMPLETION.								
17.	THE CONTRACTOR IS TO PROVIDE SAFETY BARRIERS, FENCING AND THE LIKE IN ACCORDANCE WITH OH&S AND REGULATORY AUTHORITY REQUIREMENTS AND TO ENSURE THE WORK SITE IS SAFE AT ALL TIMES.								

LANDSCAPING	
1.	REFER TO DRAWINGS BY OTHERS FOR DETAILS OF PROPOSED LANDSCAPING TREATMENT.
2.	IF NO LANDSCAPING PLANS EXIST OR PLANS DO NOT SPECIFY GENERAL SURFACE STABILISATION THEN ALL DISTURBED SURFACE TO BE TEMPORARILY STABILISED WITH HYDROMULCH UPON COMPLETION OF WORKS. A 500mm STRIP OF TURF (C2 COUCH) IS TO BE PLACED BEHIND ALL NEW KERB.

STORMWATER DRAINAGE	
1.	ALL PIPES SHALL BE CLASS 2 RUBBER-RING JOINTED RCP U.N.O. WHERE uPVC PIPES HAVE BEEN SPECIFIED, THE FOLLOWING CLASS PIPEWORK IS TO BE ADOPTED U.N.O. Ø100mm OR LESS TO BE CLASS 'SMD' AND ABOVE Ø100mm TO BE CLASS 'SMB'. CLASS 4 PIPES ARE TO BE USED WHERE COVER OVER THE PIPE IS BELOW 600mm AND BENEATH A TRAFFICABLE PAVEMENT.
2.	uPVC STORMWATER LINES PASSING UNDER FLOOR SLABS TO BE CONCRETE ENCASED.
3.	FRC PIPES EQUAL TO THAT OF THE STEEL REINFORCED CONCRETE PIPE CLASS SPECIFIED ON THE DRAWINGS MAY BE USED SUBJECT TO APPROVAL FROM THE SUPERINTENDENT.
4.	ALL PIPE ARE TO BE LAID AT 1.0% MIN GRADE U.N.O.
5.	COVERS
5.1.	USE HOT DIPPED GALVANISED COVERS AND GRATES COMPLYING WITH RELEVANT COUNCIL AND AUSTRALIAN STANDARDS.
5.2.	ALL COVERS AND GRATES TO BE POSITIONED IN A FRAME AND MANUFACTURED AS A UNIT.
5.3.	ALL COVERS AND GRATES TO BE FITTING WITH POSITIVE COVER LIFTING KEYS
5.4.	OBTAIN SUPERINTENDENTS APPROVAL FOR THE USE OF CAST IRON SOLID COVERS AND GRATES. CAST IRON SOLID COVERS (IF APPROVED) TO CONSIST OF CROSS-WEBBED, CELLULAR CONSTRUCTION WITH THE RIBS UPPERMOST TO ALLOW INFILLING WITH CONCRETE. INSTALL POSITIVE COVER LIFTING KEYS AND PLASTIC PLUGS.
5.5.	UNLESS DETAILED OR SPECIFIED OTHERWISE, COVERS AND GRATES TO BE CLASS 'D' IN VEHICULAR PAVEMENTS AND CLASS 'B' ELSEWHERE.
5.6.	ALL GRATED TRENCH DRAINS SHOULD BE 'CLASS D' CAST IRON WITHIN VEHICULAR PAVEMENTS AND CLASS 'B' HEEL SAFE WITHIN PEDESTRIAN PAVEMENTS.
6.	ALL PIPE BENDS, JUNCTIONS, ETC ARE TO BE PROVIDED USING PURPOSE MADE FITTINGS OR STORMWATER PITS.
7.	ALL CONNECTIONS TO EXISTING DRAINAGE STRUCTURES SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND CEMENT RENDERED TO ENSURE A SMOOTH FINISH.
8.	ENSURE PIPEWORK DOES NOT PROTRUDE BEYOND THE INSIDE FACE OF THE PIT WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED). CONNECTION TO BE RENDERED AND MADE NEAT ON THE INSIDE FACE OF THE PIT
9.	THE CONTRACTOR SHALL SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISMILAR PIPEWORK.
10.	U.N.O. MATERIAL USED FOR BEDDING OF PIPES SHALL BE APPROVED NON-COHESIVE GRANULAR MATERIAL HAVING HIGH PERMEABILITY AND HIGH STABILITY WHEN SATURATED AND FREE OF ORGANIC AND CLAY MATERIAL.
11.	INSTALLATION SHALL BE U.N.O TYPE H2 UNDER ROADS AND H2 UNDER GENERAL AREAS IN ACCORDANCE WITH AS3725.
12.	THE CONTRACTOR SHALL ENSURE AND PROTECT THE INTEGRITY OF ALL STORMWATER PIPES DURING CONSTRUCTION. ANY AND ALL DAMAGE TO THESE PIPES AS A RESULT OF THESE WORKS SHALL BE REPAIRED BY THE CONTRACTOR UNDER THE DIRECTION OF THE SUPERINTENDENT AND AT NO EXTRA COST TO THE CONTRACT.
13.	NOTE THAT THE PIT COVER LEVEL NOMINATED IN GUTTERS ARE TO THE INVERT OF THE GUTTER WHICH ARE 40mm LOWER THAN THE PAVEMENT LEVEL AT LIP OF GUTTER. REFER KERB DETAILS FOR CONFIRMATION.
14.	SUBSOIL DRAINAGE
15.	Ø100mm SUBSOIL DRAINAGE LINES WITH NON-WOVEN GEOTEXTILE FILTER SOCK SURROUND SHALL BE CONNECTED TO A STORMWATER DRAINAGE PIT (AT MIN 1% LONGITUDINAL GRADE) AND PROVIDED IN THE FOLLOWING LOCATIONS:
15.1.	THE HIGH SIDE OF PROPOSED TRAFFICKED PAVEMENT AREAS.
15.2.	ALL PLANTER AND TREE BEDS PROPOSED ADJACENT TO PAVEMENT AREAS.
15.3.	BEHIND RETAINING WALLS (IN ACCORDANCE WITH RETAINING WALL DETAILS)
15.4.	UPSTREAM OF STORMWATER PITS
15.5.	BENEATH FLEXIBLE PAVEMENT ALONG A SAG PROFILE
15.6.	ALL OTHER AREAS SHOWN ON DRAWINGS.
15.7.	CONTRACTOR IS TO MAKE ALLOWANCE IN BOTH TENDER AND CONSTRUCTION COSTING TO ALLOW FOR SUBSURFACE DRAINAGE BEHIND ALL RETAINING WALLS / ABOVE LOCATIONS AND TO MAKE CONNECTION TO STORMWATER SYSTEM.
16.	WHERE SUBSOIL DRAINAGE PASSES BENEATH BUILDINGS / PAVED AREAS AND/OR PAVEMENTS, CONTRACTOR TO ENSURE Ø100mm CLASS 'SMD' uPVC DRAINAGE LINE IS USED AND THAT PROPRITY FITTINGS ARE USED TO RECONNECT SUBSOIL DRAINAGE LINE.
17.	THE CONTRACTOR SHALL INSTALL INSPECTION OPENINGS / CLEAROUTS TO ALL SUBSOIL DRAINAGE LINES AND DOWNPIPE LINES AS SPECIFIED ON DRAWINGS AND IN ACCORDANCE WITH COUNCIL SPECIFICATIONS. HOWEVER AS A MINIMUM THEY ARE TO BE PLACED AT MAXIMUM 30m CENTRES AND AT ALL UPSTREAM ENDPOINTS.
18.	PROVIDE 3.0m LENGTH OF Ø100 SUBSOIL DRAINAGE LINE WRAPPED IN NON-WOVEN GEOTEXTILE FILTER FABRIC TO THE UPSTREAM SIDE OF STORMWATER PITS, LAID IN STORMWATER PIPE TRENCHES AND CONNECTED TO DRAINAGE PIT.
19.	IN AREAS WHERE DUMPED / HAND PLACED ROCK IS USED AS A MEANS OF SCOUR PROTECTION, CONTRACTOR IS TO EXCAVATE A MINIMUM OF 100mm FROM PROPOSED SURFACE, LEVEL AND COMPACT SUBGRADE AS SPECIFIED. ROCK TO THEN BE PLACED ON GEOTEXTILE FILTER FABRIC A34.
20.	THE CONTRACTOR IS TO ENSURE THAT A MINIMUM 150mm CLEARANCE IS PROVIDED BETWEEN THE INTERNAL FACE OF PIPE AND ADJACENT INTERNAL PIT WALLS
21.	WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN 50mm CONCRETE BED (OR 75mm THICK BED OF 12mm BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. (E.G. CLEAN 5-12mm AGGREGATE)

PRECAST STORMWATER PITS	
1.	THE USE OF PRE-CAST STORMWATER DRAINAGE PITS IS NOT ACCEPTED WITHOUT CONFIRMATION BETWEEN NORTHROP ENGINEERS AND THE CONTRACTOR REGARDING QUALITY CONTROL AND CERTIFICATION OF FINISHES.
2.	REFER MANUFACTURERS SPECIFICATIONS FOR INSTALLATION GUIDELINES.
3.	PRECAST PIT TO BE PLACED ON MINIMUM 150mm THICK CONCRETE PAD AND BED MINIMUM 50mm WHILST CONCRETE IS STILL PARTIALLY WET.
4.	ENSURE PENETRATION IS CORED THROUGH PIT FACE TO ALLOW CONNECTION AND IS NOT OVERSEED.
5.	ENSURE A SEALED FINISH AT PIPE CONNECTIONS BY HAND-APPLYING MINIMUM 150mm THICK CONCRETE AROUND PIPE AT THE EXTERNAL FACE OF THE PIT. ENSURE CONCRETE DOES NOT AFFECT THE INTEGRITY OF THE SUBSOIL DRAINAGE CONNECTED TO THE PIT.
6.	ENSURE A SMOOTH SEALED FINISH AT PIPE CONNECTIONS BY HAND APPLYING CONCRETE AROUND THE PIPE ON THE INTERNAL FACE OF THE PIT TO FILL IN ANY VOIDS CREATED WHEN PENETRATION FOR THE PIPE WAS CORED.
7.	ENSURE PIPEWORK DOES NOT PROTRUDE BEYOND THE INSIDE FACE OF THE PIT WALL. PIPEWORK IS TO FINISH FLUSH WITH INTERNAL WALL (UNLESS OTHERWISE NOTED OR DETAILED). CONNECTION TO BE RENDERED AND MADE NEAT ON THE INSIDE FACE OF THE PIT.
8.	ENSURE THE OUTLET PIPE IS CONNECTED AT THE INVERT LEVEL OF THE PIT TO DRAIN. ALTERNATIVELY FILL THE BASE OF THE PIT WITH MASS CONCRETE (MIN 50mm THICK) OR APPROVED GROUTING COMPOUND (LESS THAN 50mm THICK) TO DRAIN.
9.	PROVIDE CONCRETE BENCHING TO SIDES OF PIT TO SUIT PIPE DIAMETER. HEIGHT TO MATCH MINIMUM 1/3 PIPE DIAMETER.

RAINWATER REUSE	
1.	PROVIDE RAINWATER RE-USE SYSTEM TO SUPPLY WATER FOR IRRIGATION OR FOR OTHER USES AS NOTED.
2.	GUTTER GUARD TO BE INSTALLED ON ALL EAVES GUTTERS.
3.	PRESSURE PUMP / TAP TO BE PROVIDED FOR THE REUSE OF CAPTURED TANK WATER.
4.	A PERMANENT SIGN IS TO BE LOCATED IN THE VICINITY OF THE TANK STATING THE WATER IS "NON POTABLE WATER" WITH APPROPRIATE HAZARD IDENTIFICATION.
5.	ALL RAINWATER SERVICES SHALL BE CLEARLY LABELLED "NON POTABLE WATER" WITH APPROPRIATE HAZARD IDENTIFICATION.
6.	PIPEWORK USED FOR RAINWATER SERVICES SHALL BE COLOURED LILAC IN ACCORDANCE WITH AS1345.
7.	ALL VALVES AND APERTURES SHALL BE CLEARLY AND PERMANENTLY LABELLED WITH SAFETY SIGNS TO COMPLY WITH AS1319.
8.	AN AIR GAP OR RPZD MUST BE INSTALLED TO ENSURE BACKFLOW PREVENTION (IF MAINS 'TOP UP' / BYPASS UTILISED)
9.	RAINWATER TANK RETICULATION SYSTEM AND MAINS WATER BYPASS ARRANGEMENT TO BE INSTALLED IN ACCORDANCE WITH AS/NZS 3500.1.2-2003 AND THE NSW CODE OF PRACTICE - PLUMBING AND DRAINAGE.
10.	A FIRST FLUSH FILTRATION DEVICE IS REQUIRED TO BYPASS THE FIRST 1mm OF RAINWATER.

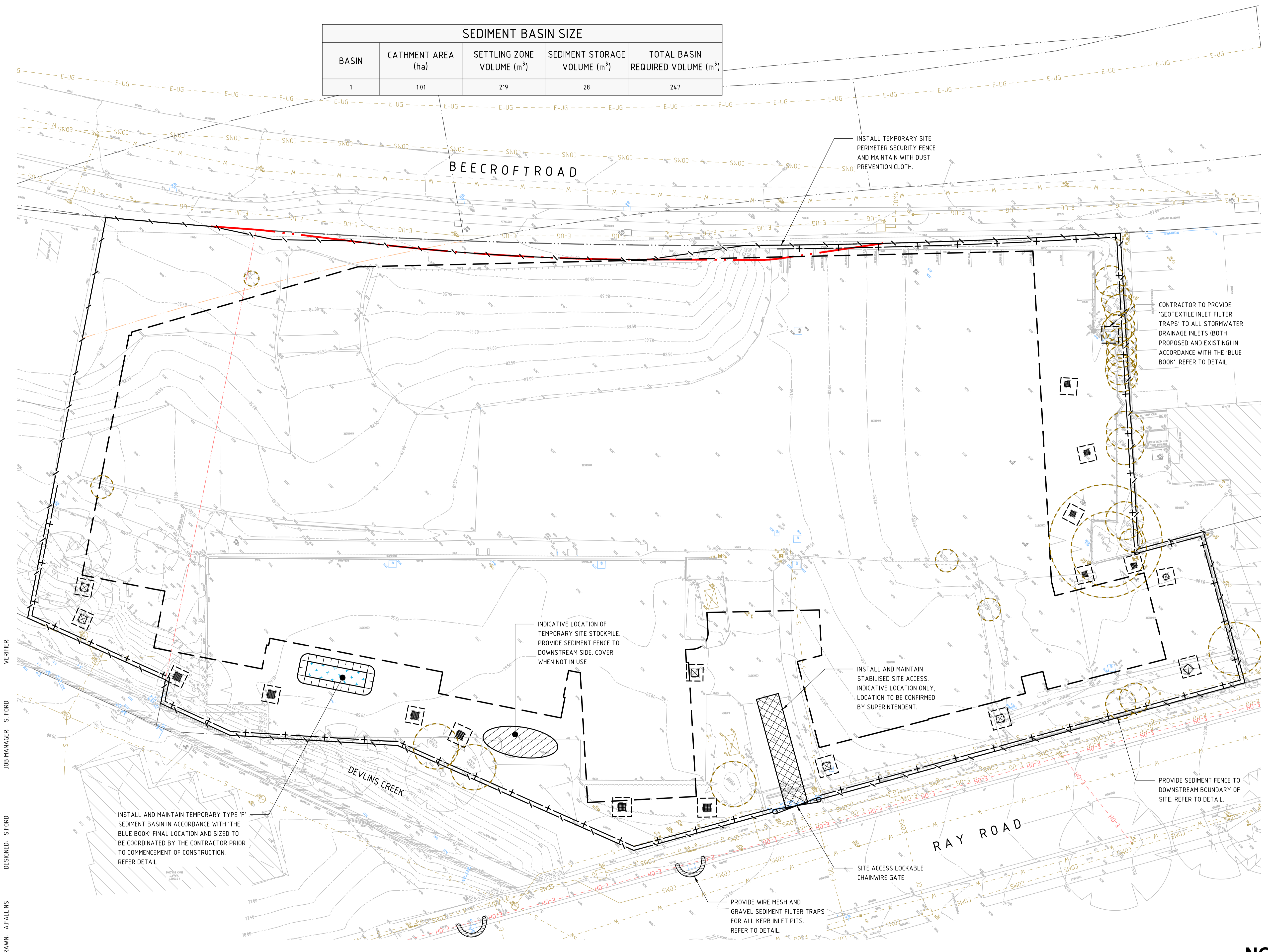
SURVEY	
1.	SURVEY SUPPLIED BY: LTS
1.1.	NUMBER: 51428 0010T
DRAWING TITLE:	PLAN OF DETAIL AND LEVELS OVER LOTS 220 AND 222 IN DP 1254/171 No.242-244 BEECROFT ROAD, EPPING
1.1.2.	REVISION DATE: 14/02/2025
1.1.3.	REVISION NUMBER: G
1.1.4.	GEOCENTRIC DATUM OF AUSTRALIA: 2020
2.	ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA OR DIAL BEFORE YOU DIG SEARCHES, THEREFORE THEIR ACCURACY AND COMPLETENESS IS NOT GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE AND CONFIRM THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY. NOTE SERVICE AUTHORITY REQUIREMENTS FOR LOCATING OF SERVICES PRIOR TO COMMENCEMENT OF WORKS.
3.	NORTHROP TAKE NO RESPONSIBILITY FOR THE ACCURACY AND/OR USE OF THIS SURVEY AND ITS CONTENTS.

SITEWORKS	
1.	ALL WORKS TO BE IN ACCORDANCE WITH RELEVANT LOCAL COUNCIL / REGULATORY AUTHORITIES REQUIREMENTS, ALL SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS BETWEEN SAID DOCUMENTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR DIRECTION.
2.	THE CONTRACTOR IS TO REVIEW THE DRAWINGS PRIOR TO PRICING AND COMMENCEMENT AND REPORT ANY DISCREPANCIES TO NORTHROP
3.	ANY PRODUCTS SPECIFIED OR USED TO BE VERIFIED BY THE CONTRACTOR AS BEING SAFE AND APPROPRIATE FOR USE. NORTHROP DO NOT TAKE ANY RESPONSIBILITY FOR THE USE OF UNSAFE PRODUCTS
4.	THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH ALL REGULATORY AUTHORITIES, INCLUSIVE OF LOCAL COUNCIL REGULATIONS AND REQUIREMENTS.
5.	THE CONTRACTOR IS TO OBTAIN ALL COUNCIL APPROVALS AS REQUIRED PRIOR TO COMMENCEMENT OF WORKS.
6.	RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT ON COMPLETION OF WORKS. WHERE PLANTING OF NEW GRASS IS NECESSARY REFER TO LANDSCAPE ARCHITECT AND / OR ARCHITECT DOCUMENTATION.
7.	ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION OR AS DIRECTED BY THE SITE SUPERINTENDENT, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS.
8.	THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR PRIOR TO COMMENCEMENT OF WORKS. THE CONTRACTOR IS TO ENSURE THAT SURVEY BOUNDARIES ARE DERIVED FROM A CADASTRAL SURVEY RATHER THAN A DETAIL SURVEY.
9.	THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ONSITE PRIOR TO LODGMENT OF TENDER AND ONSITE WORKS. THE PRICE AS TENDERED SHALL BE INCLUSIVE OF ALL WORKS SHOWN ON THE TENDER PROJECT DRAWINGS. ADDITIONAL PAYMENTS FOR WORKS SHOWN ON THE TENDER PROJECT DRAWINGS WILL NOT BE APPROVED.
10.	DO NOT OBTAIN DIMENSIONS BY SCALING DRAWINGS.
11.	IN CASE OF DOUBT OR DISCREPANCY REFER TO SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
12.	WHERE NEW WORKS ABOUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED. MAKE SMOOTH TRANSITION TO EXISTING FEATURES AND MAKE GOOD WHERE JOINED.
13.	TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
14.	ALL CIVIL ENGINEERING DESIGN HAS BEEN DOCUMENTED UNDER THE ASSUMPTION THAT ALL NECESSARY SITE CONTAMINATION REMEDIATION WORKS HAVE BEEN SATISFACTORILY COMPLETED (IF APPLICABLE) AND THAT THE SITE IS NOT AFFECTED BY ANY SOIL STRATA OR GROUNDWATER TABLE CONTAMINATION.
15.	NOTES ON DETAILS PROVIDED TAKE PRECEDENCE OVER SPECIFICATION NOTES UNLESS IN CONTRADICTION WITH COUNCIL/AUTHORITY SPECIFICATIONS/DETAILS. CONTRACTOR TO CONSULT WITH NORTHROP FOR ANY DISCREPANCIES.
16.	IF THE CONTRACTOR DISCOVERS HAZARDOUS/CONTAMINATED MATERIAL THE CONTRACTOR SHALL CONSULT WITH AN ENVIRONMENTAL SPECIALIST.
17.	THE CONTRACTOR IS RESPONSIBLE FOR DEALING WITH COMMUNITY COMPLAINTS ASSOCIATED WITH THE WORKS UNDER THE CONTRACT AND TO COMPENSATE FOR/RECTIFY ANY DAMAGE REASONABLY CAUSED BY THE CONTRACTOR.
18.	THE TERM 'MAKE GOOD' OR 'MAKE NEAT' IS IN REFERENCE TO THE SATISFACTION OF NORTHROP OR CERTIFYING ENGINEER. THE CONTRACTOR IS TO SEEK CLARIFICATION FROM NORTHROP OR THE CERTIFYING ENGINEER IF NECESSARY
19.	TOLERANCES TO BE IN ACCORDANCE WITH COUNCIL/AUTHORITY REQUIREMENTS. IN ABSENCE OF COUNCIL/AUTHORITY SPECIFICATIONS THE FOLLOWING TOLERANCES APPLY:
	xxx
	xxx
	xxx
	SERVICE TRENCHES
20.	SAWCUT EXISTING SURFACES PRIOR TO EXCAVATION. BACKFILL ALL TRENCHES UNDER EXISTING ROADS, PAVEMENTS AND PATHS WITH STABILISED SAND 5% CEMENT OR D6540 MATERIAL (5% CEMENT) COMPACTED IN 200mm THICK LAYERS TO 98% MMD TO UNDERSIDE OF PAVEMENT.
21.	BACKFILL ALL TRENCHES NOT UNDER ROADS, PAVEMENTS, PATHS AND BUILDINGS WITH APPROVED EXCAVATED OR IMPORTED MATERIAL COMPACTED TO 95% SMD.

**NOT FOR CONSTRUCTION**

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT	ARCHITECT	ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE	PROJECT	DRAWING TITLE	JOB NUMBER	
01	ISSUED FOR INFORMATION	AF	SF		06.02.25	BEECROFT PROPERTY DEVELOPMENT PTY LTD	TURNER	THE COPYRIGHT OF THIS DRAWING REMAINS WITH NORTHROP CONSULTING ENGINEERS PTY LTD	242-244 BEECROFT ROAD, EPPING	CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION	212798	
02	ISSUED FOR INFORMATION	VC	SF		19.03.25							
03	ISSUED FOR INFORMATION	ME	SF		14.07.25							
04	ISSUED FOR INFORMATION	AF	SF		30.09.25							
										INTERNAL WORKS	DRAWING NUMBER	REVISION
											C30011	04
											DRAWING SHEET SIZE = A1	

SEDIMENT BASIN SIZE				
BASIN	CATHMENT AREA (ha)	SETTLING ZONE VOLUME (m <sup>3</sup> )	SEDIMENT STORAGE VOLUME (m <sup>3</sup> )	TOTAL BASIN REQUIRED VOLUME (m <sup>3</sup> )
1	1.01	219	28	247



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	EXISTING SERVICES
	PROPOSED BASEMENT BUILDING FOOTPRINT
	EXISTING CONTOURS
	SEDIMENT FENCE
	SECURITY FENCE
	WIRE MESH AND GRAVEL SEDIMENT FILTER
	GEOTEXTILE INLET FILTER TRAPS
	STABILISED SITE ACCESS
	STOCKPILE
	SEDIMENT BASIN
	TREE TO BE REMOVED
	TREE TO BE RETAINED

- GENERAL NOTES:**
- REFER SPECIFICATIONS NOTES FOR SEDIMENT AND SOIL EROSION CONTROL GENERAL REQUIREMENTS.
  - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
  - ALL SEDIMENT AND SOIL EROSION CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH THE 'BLUE BOOK'. CONTRACTOR TO ENSURE THESE MEASURES ARE IN PLACE AND MAINTAINED AT ALL TIMES DURING CONSTRUCTION WORKS.
  - CONTRACTOR TO PROVIDE 'WIRE MESH AND GRAVEL SEDIMENT FILTER' TO ALL PAVED / ROAD AREAS (BOTH PROPOSED AND EXISTING) IN ACCORDANCE WITH THE 'BLUE BOOK'.
  - CONTRACTOR TO PROVIDE 'GEOTEXTILE INLET FILTER TRAPS' TO ALL STORMWATER DRAINAGE INLETS (BOTH PROPOSED AND EXISTING) IN ACCORDANCE WITH THE 'BLUE BOOK'.
  - ALL PITS OPEN TO ATMOSPHERE TO BE PROTECTED IN ACCORDANCE WITH THE 'BLUE BOOK'.

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF	SF		06.02.25
02	ISSUED FOR INFORMATION	VC	SF		19.03.25
03	ISSUED FOR INFORMATION	ME	SF		14.07.25
04	ISSUED FOR INFORMATION	AF	SF		30.09.25

CLIENT  
**BEECROFT PROPERTY DEVELOPMENT PTY LTD**

ARCHITECT  
**TURNER**

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SCALE 1:250@A1

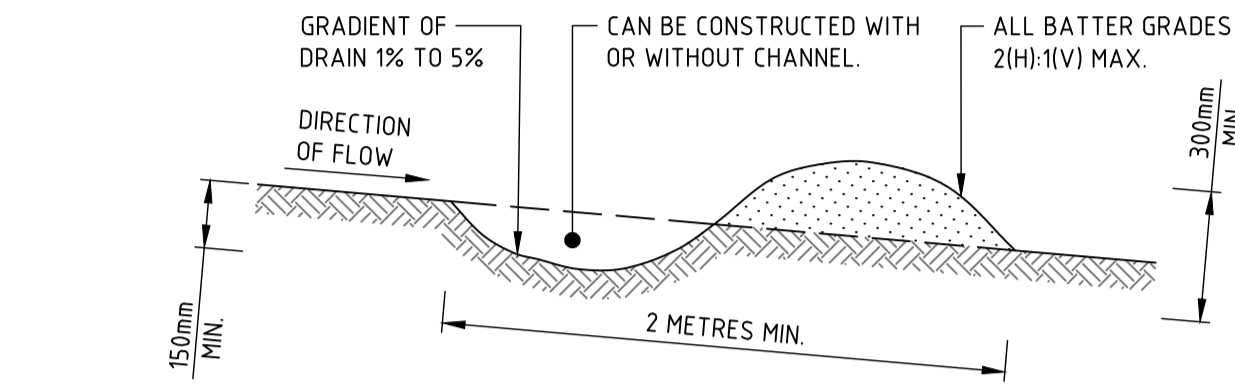
**NORTHROP**  
Sydney  
Level 11 345 George Street, Sydney NSW 2000  
Ph (02) 9241 4188 Fax (02) 9241 4324  
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**CONCEPT SEDIMENT AND SOIL EROSION CONTROL PLAN**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C31001</b>	REVISION <b>04</b>
DRAWING SHEET SIZE = A1	

**NOT FOR CONSTRUCTION**

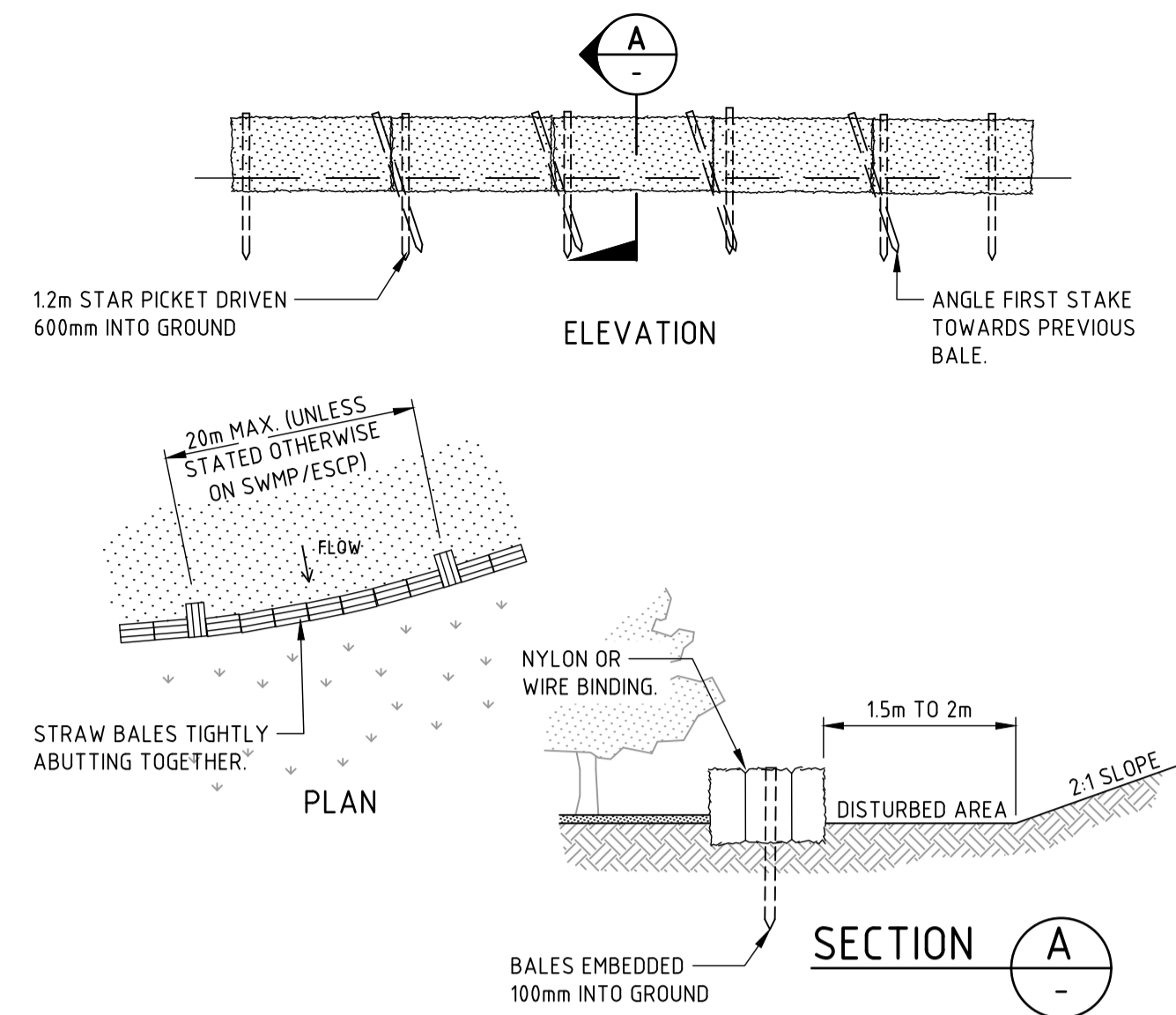


**CONSTRUCTION NOTES**

- BUILD WITH GRADIENTS BETWEEN 1 AND 5 PERCENT.
- AVOID REMOVING TREES AND SHRUBS IF POSSIBLE - WORK AROUND THEM.
- ENSURE THE STRUCTURES ARE FREE OF PROJECTIONS OR OTHER IRREGULARITIES THAT COULD IMPEDE WATER FLOW.
- BUILD THE DRAINS WITH CIRCULAR, PARABOLIC OR TRAPEZOIDAL CROSS SECTIONS, NOT V SHAPED.
- ENSURE THE BANKS ARE PROPERLY COMPACTED TO PREVENT FAILURE.
- COMPLETE PERMANENT OR TEMPORARY STABILISATION WITHIN 10 DAYS OF CONSTRUCTION.

NOTE: ONLY TO BE USED AS TEMPORARY BANK WHERE MAXIMUM UPSLOPE LENGTH IS 80 METRES.

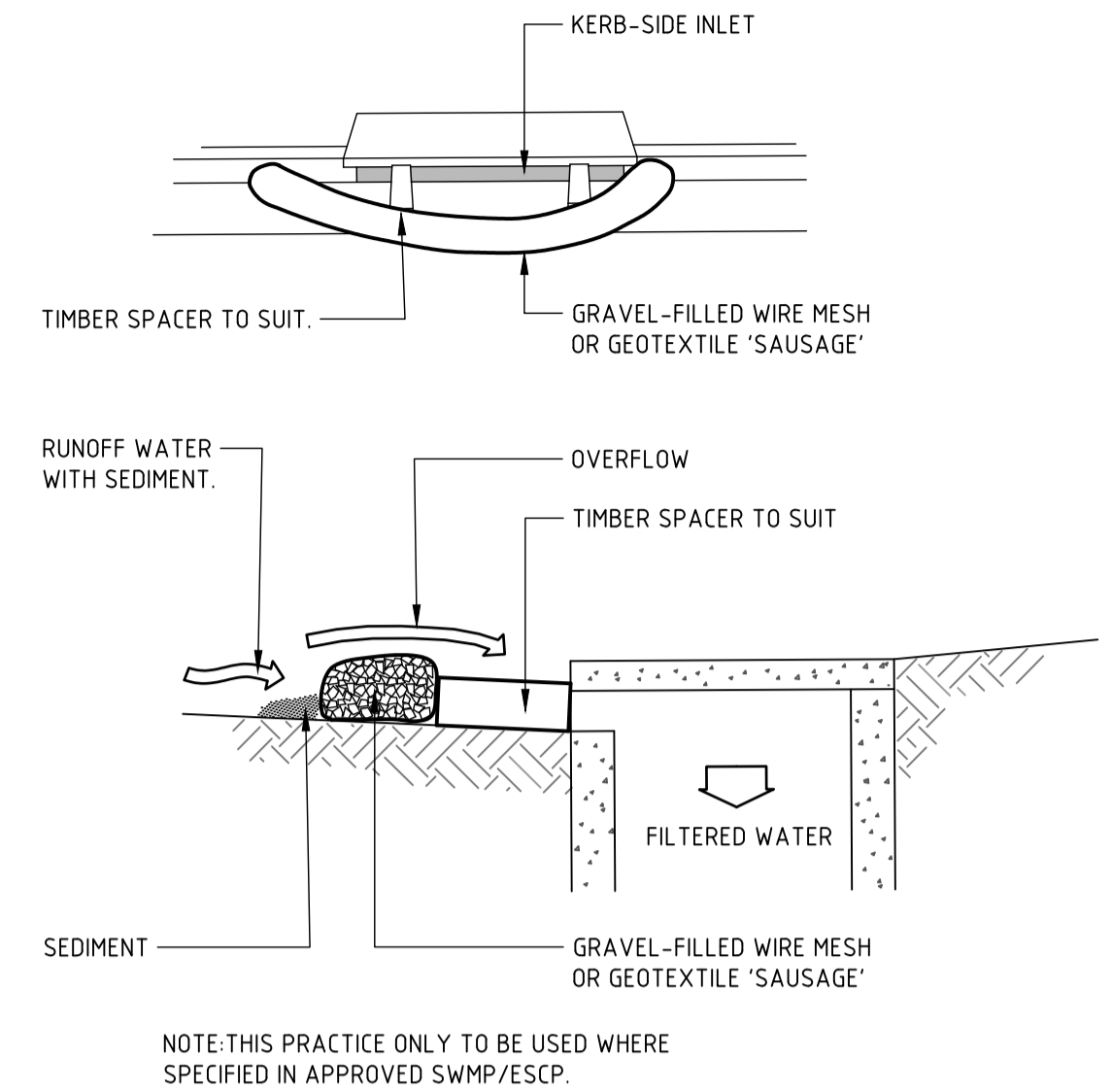
**DRAINAGE SWALE - LOW FLOW**



**CONSTRUCTION NOTES**

- CONSTRUCT THE STRAW BALE FILTER AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE.
- PLACE BALES LENGTHWISE IN A ROW WITH ENDS TIGHTLY ABUTTING. USE STRAW TO FILL ANY GAPS BETWEEN BALES. STRAWS ARE TO BE PLACED PARALLEL TO GROUND.
- ENSURE THAT THE MAXIMUM HEIGHT OF THE FILTER IS ONE BALE.
- EMBED EACH BALE IN THE GROUND 75mm TO 100mm AND ANCHOR WITH TWO 12 METRE STAR PICKETS OR STAKES. ANGLE THE FIRST STAR PICKET OR STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE. DRIVE THEM 600mm INTO THE GROUND AND, IF POSSIBLE, FLUSH WITH THE TOP OF THE BALES. WHERE STAR PICKETS ARE USED AND THEY PROTRUDE ABOVE THE BALES, ENSURE THEY ARE FITTED WITH SAFETY CAPS.
- WHERE A STRAW BALE FILTER IS CONSTRUCTED DOWNSLOPE FROM A DISTURBED BATTER, ENSURE THE BALES ARE PLACED 1 TO 2 METRES DOWNSLOPE FROM THE TOE.
- ESTABLISH A MAINTENANCE PROGRAM THAT ENSURES THE INTEGRITY OF THE BALES IS RETAINED - THEY COULD REQUIRE REPLACEMENT EACH TWO TO FOUR MONTHS.

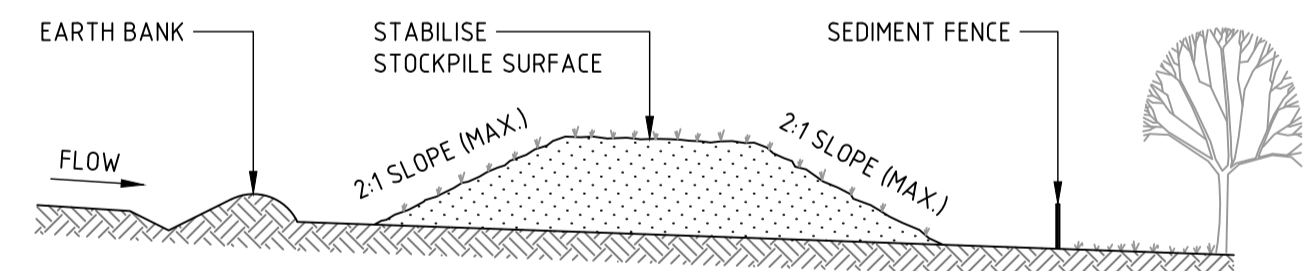
**STRAW BALE FILTER**



**CONSTRUCTION NOTES**

- INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.
- FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
- FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
- FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
- SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY FIRMLY ABUT EACH OTHER AND SEDIMENT-LADEN WATERS CANNOT PASS BETWEEN.

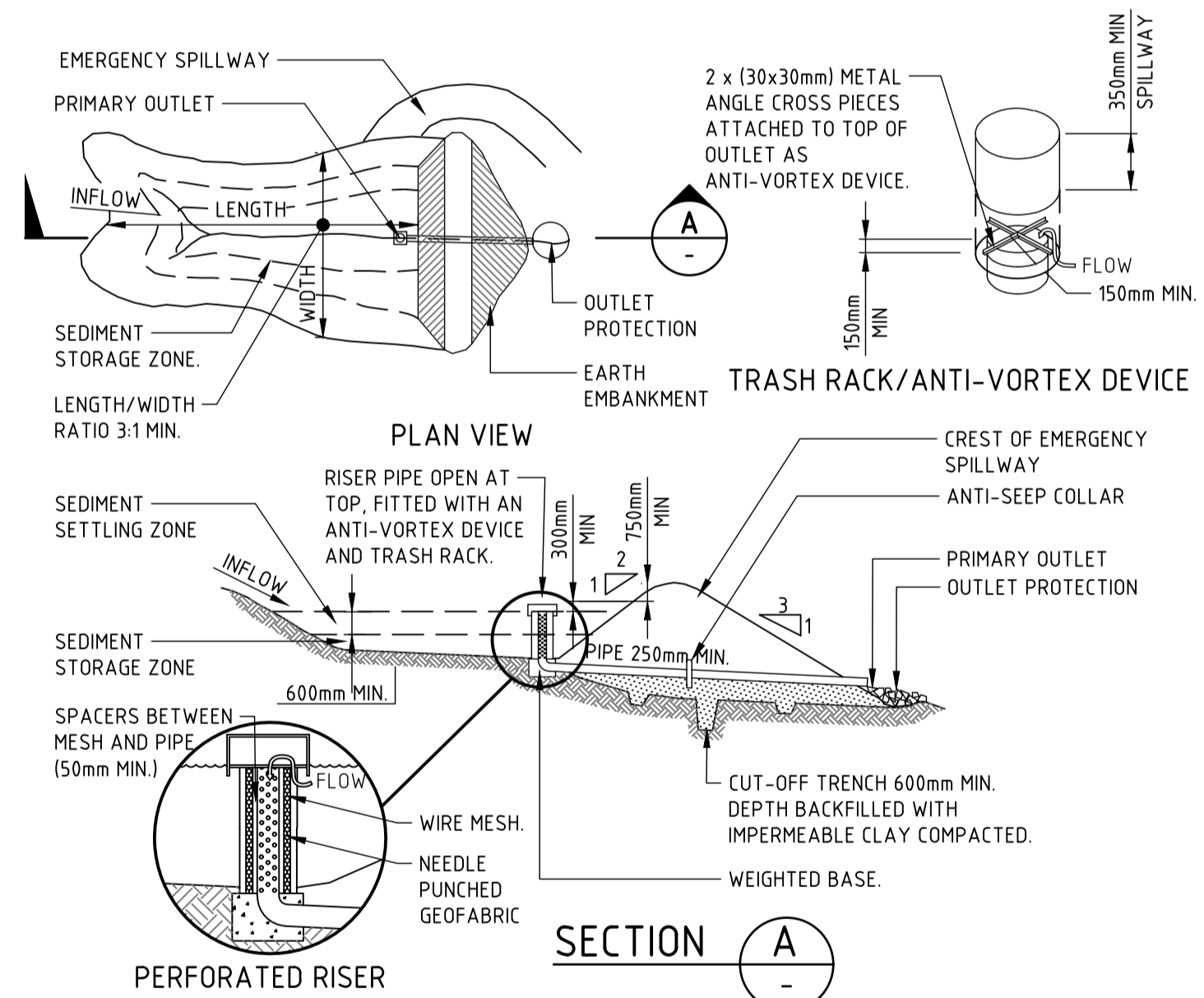
**WIRE MESH AND GRAVEL SEDIMENT FILTER**



**CONSTRUCTION NOTES**

- PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
- CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
- WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2m IN HEIGHT.
- WHERE THEY ARE TO BE IN PLACE FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED ESCP OR SWMP TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
- CONSTRUCT EARTH BANKS (STANDARD DRAWING 5-5) ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES (STANDARD DRAWING 6-8) 1 TO 2m DOWNSLOPE.

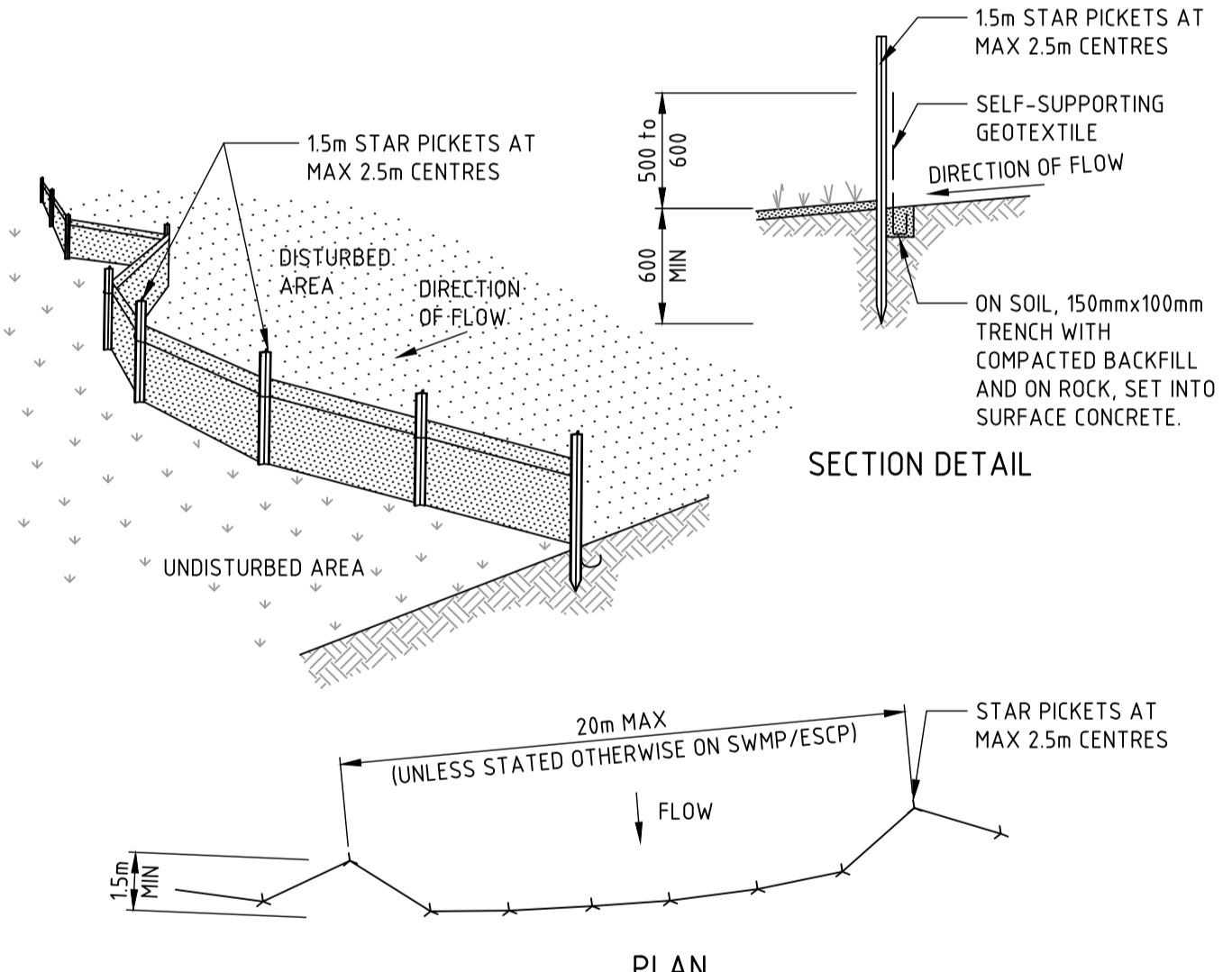
**STOCKPILE**



**CONSTRUCTION NOTES**

- REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
- FORM A CUT OFF TRENCH UNDER THE CENTRELINE OF THE EMBANKMENT 600mm DEEP AND 1200mm WIDE, EXTENDING TO A POINT ON THE WATERCOURSE WALL ABOVE THE RISER SILL LEVEL.
- MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.
- SELECT FILL ACCORDING TO THE SWMP THAT IS FREE FROM ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
- PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND THE COMPACTED FILL TO THE EXISTING SUBSTRATE.
- SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
- INSTALL THE PIPE OUTLET WITH SEEPAGE COLLARS AS SPECIFIED IN THE SWMP AND STANDARD DRAWING 6-3B.
- FORM BATTER GRADES AT 2(H):1(V) UPSTREAM AND 3(H):1(V) DOWNSLOPE OR AS SPECIFIED IN THE SWMP.

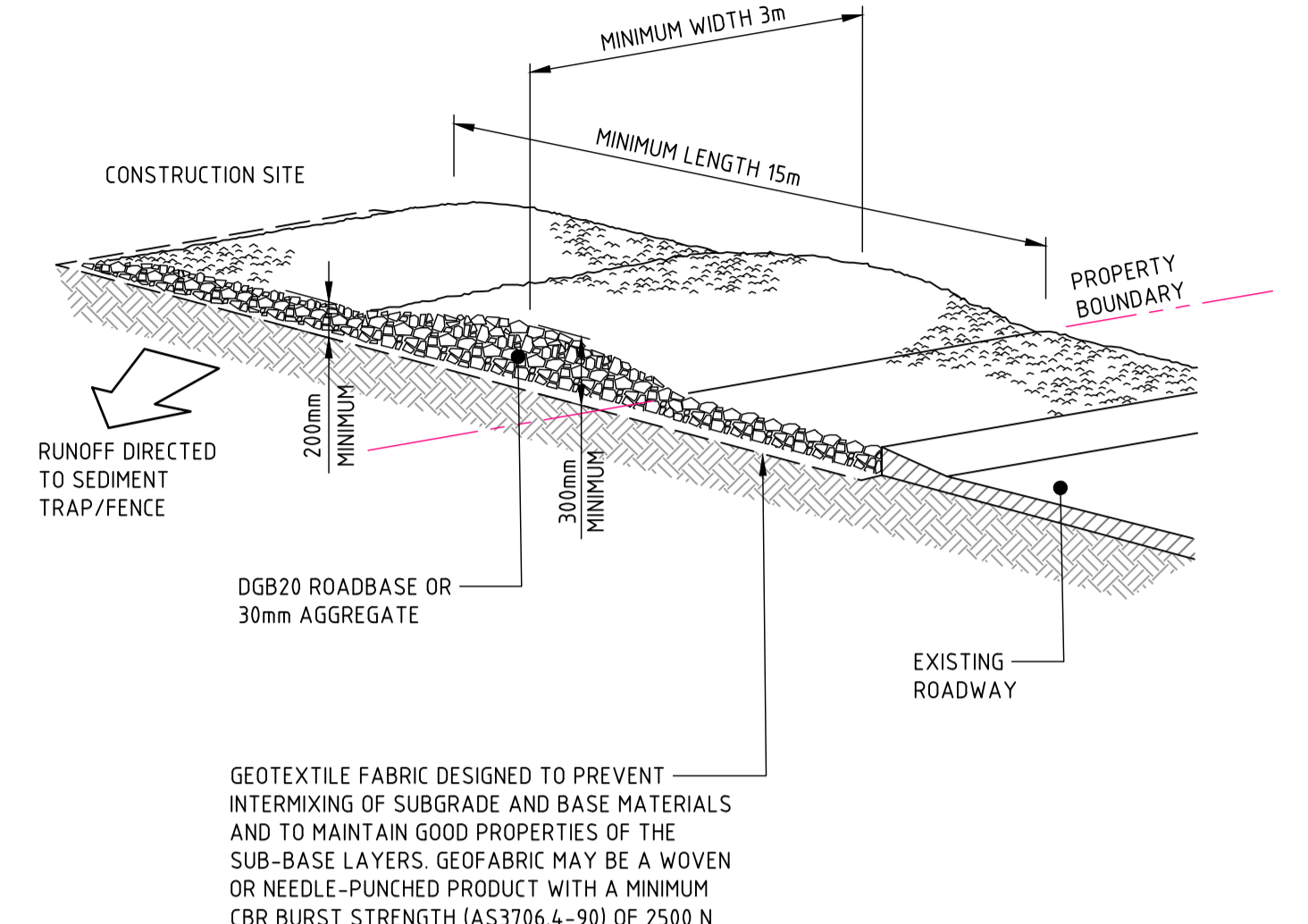
(APPLIES TO 'TYPE C' SOILS ONLY)  
**EARTH SEDIMENT BASIN - DRY**



**CONSTRUCTION NOTES**

- CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.
- CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- DRIVE 15 METRE LONG STAR PICKETS INTO GROUND AT 2.5 METRE INTERVALS (MAX) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.
- FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.
- JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
- BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

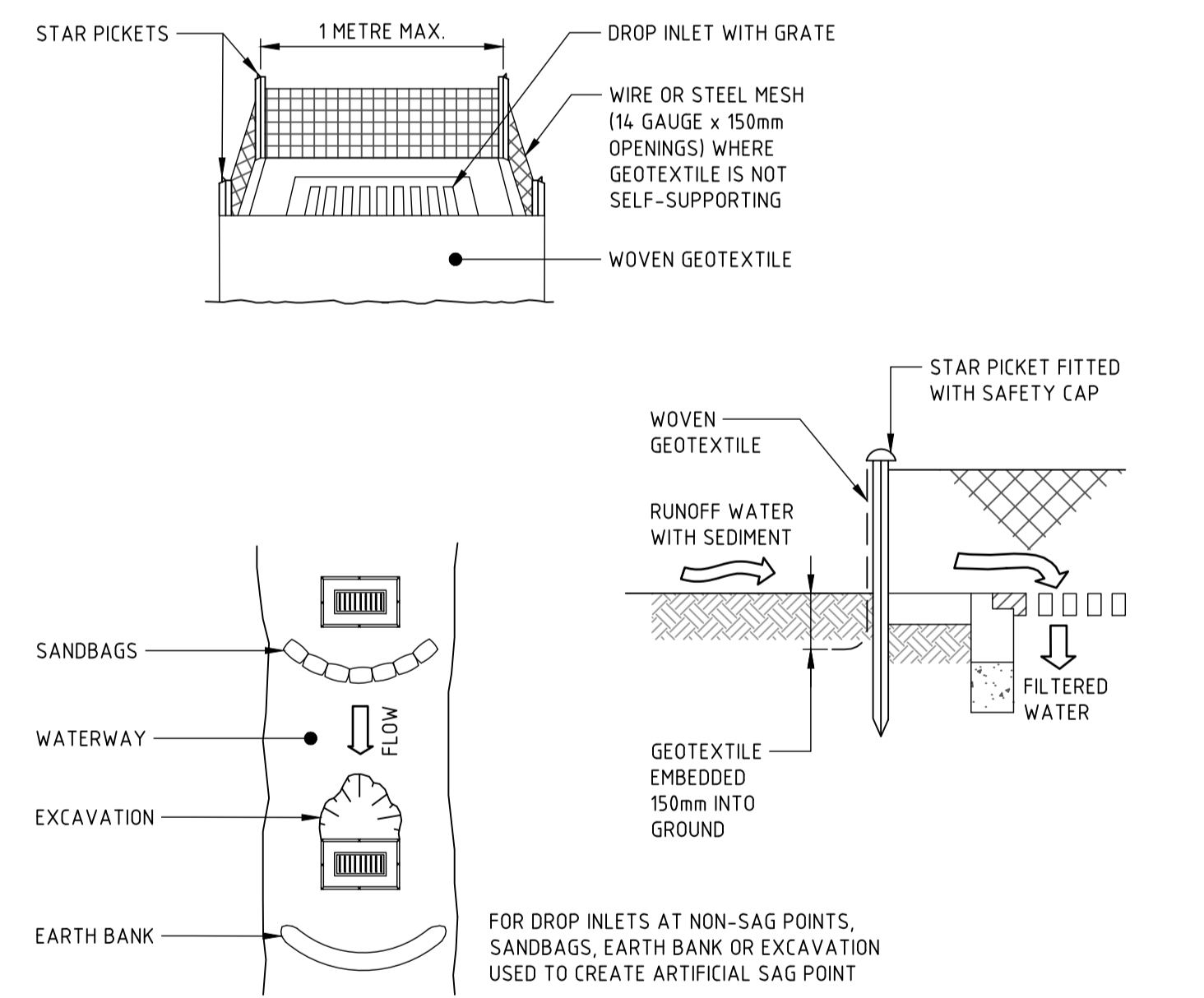
**SEDIMENT FENCE**



**CONSTRUCTION NOTES**

- STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
- COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
- ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
- WHERE A SEDIMENT FENCE JOINS ONTO THE STABILISED ACCESS, CONSTRUCT A HUMP IN THE STABILISED ACCESS TO DIVERT WATER TO THE SEDIMENT FENCE.

**STABILISED SITE ACCESS**



**CONSTRUCTION NOTES**

- FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
- FOLLOW STANDARD DRAWING 6-7 AND STANDARD DRAWING 6-8 FOR INSTALLATION PROCEDURES FOR THE STRAW BALES OR GEOFABRIC. REDUCE THE PICKET SPACING TO 1 METRE CENTRES.
- IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN THE DRAWING.
- DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

**GEOTEXTILE INLET FILTER TRAPS**

**NOT FOR CONSTRUCTION**

DRAWN: A.FALLINS  
DESIGNED: S.FORD  
JOB MANAGER: S.FORD  
VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF	SF	SF	06.02.25
02	ISSUED FOR INFORMATION	VC	SF	SF	19.03.25
03	ISSUED FOR INFORMATION	ME	SF	SF	14.07.25
04	ISSUED FOR INFORMATION	AF	SF	SF	30.09.25

CLIENT  
**BEECROFT PROPERTY DEVELOPMENT PTY LTD**

ARCHITECT  
**TURNER**

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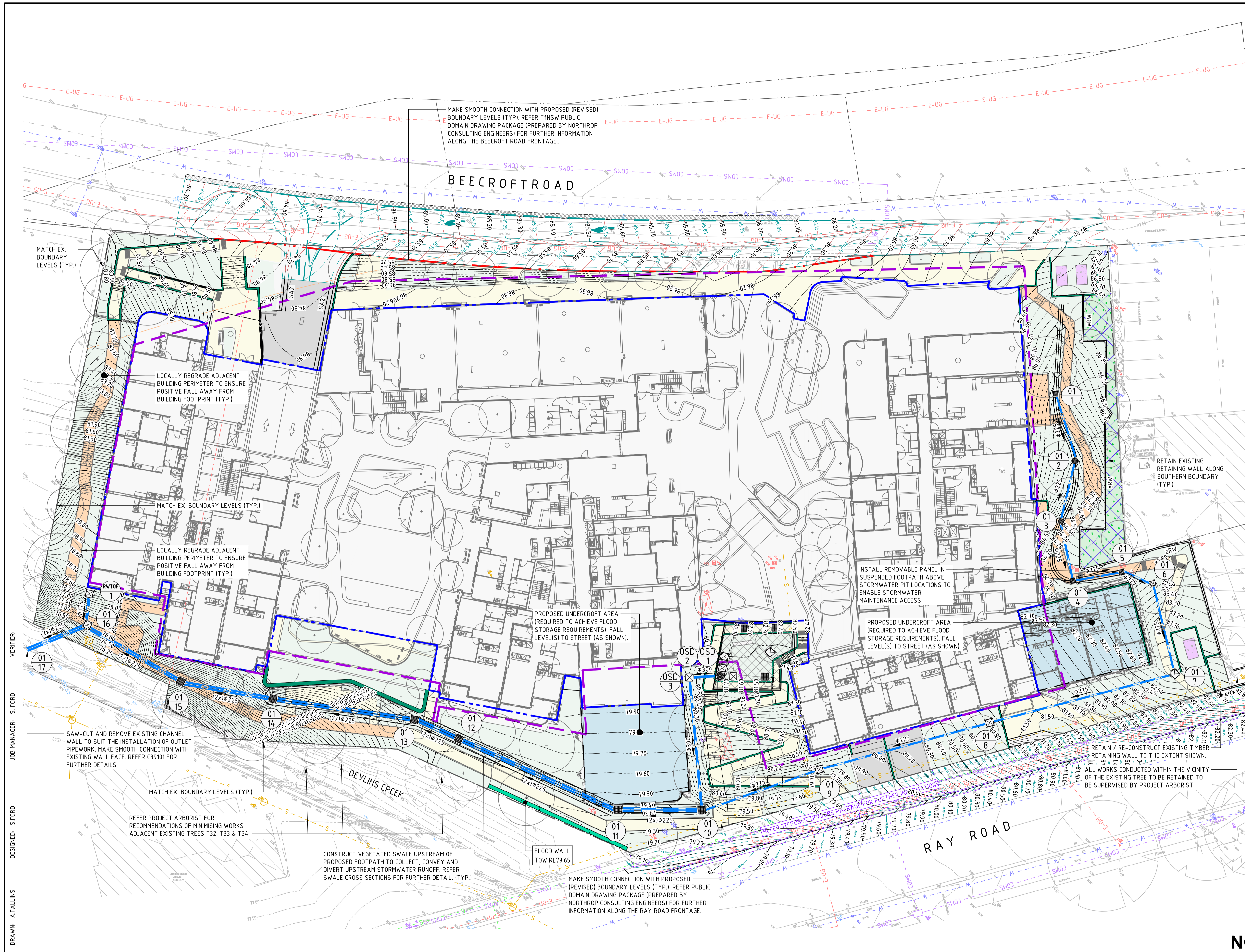
NOT TO SCALE

**NORTHROP**  
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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**SEDIMENT AND SOIL EROSION CONTROL DETAILS**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C31101</b>	REVISION <b>04</b>
DRAWING SHEET SIZE = A1	



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	BASEMENT EXTENT
	BUILDING / PODIUM LEVEL(S) & SITE GRADING DESIGN BY PROJECT ARCHITECT (OTHERS)
	PROPOSED KERB
	EXISTING KERB
	SEPARATE APPROVAL REFER TO EXTERNAL SITE PACKAGES FOR DETAILS
	RMS KERB TYPE 'SA2'
	MATCH TO EXISTING
	PROPOSED SPOT HEIGHT
	EXISTING SPOT HEIGHT
	EXISTING TO BE REMOVED
	PROPOSED CONTOURS
	EXISTING CONTOURS
	DRAINAGE SWALE
	PROPOSED RETAINING WALL
	EXISTING RETAINING WALL
	LIMIT OF WORKS
	HARDSTAND - REFER PROJECT ARCHITECT / STRUCTURAL ENGINEER FOR FURTHER DETAILS
	FOOTPATH PAVEMENT - REFER TO DETAILS
	SUBSTATION SLAB - REFER TO PROJECT ARCHITECT AND ASP 3 ENGINEER FOR FURTHER INFORMATION
	PROPOSED UNDERCROFT AREA
	FOOTPATH (SUSPENDED) - REFER PROJECT LANDSCAPE ARCHITECT FOR FURTHER DETAILS
	LANDSCAPE
	EXISTING LANDSCAPE - TO REMAIN UNDISTURBED
	EXISTING DRAINAGE STRUCTURE
	NEW DRAINAGE STRUCTURE
	PROPOSED STORMWATER PIPE

- GENERAL NOTES:**
- SURVEY SUPPLIED BY: LTS
  - 1.1.1. NUMBER: 51428 001DT
  - 1.1.2. DRAWING TITLE: PLAN OF DETAIL AND LEVELS OVER LOTS 220 AND 222 IN DP 1251471 No.242-244 BEECROFT ROAD, EPPING
  - 1.1.3. REVISION DATE: 14/02/2025
  - 1.1.4. REVISION NUMBER: 6
  - 1.1.5. GEOCENTRIC DATUM OF AUSTRALIA: 2020
  - REFER SPECIFICATIONS NOTES FOR STORMWATER AND SITEWORKS GENERAL REQUIREMENTS.
  - ALL WORKS TO BE CARRIED OUT IN ACCORDANCE WITH COUNCIL / RELEVANT AUTHORITY SPECIFICATIONS AND DETAILS.
  - CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).
  - SUBSOIL DRAINAGE TO RETAINING WALLS, KERBS AND SWALE DRAINS NOT SHOWN FOR CLARITY - REFER RELEVANT DETAILS.
  - REFER HYDRAULIC ENGINEERS / ARCHITECTS DRAWINGS FOR DOWNPIPE LOCATIONS AND SIZING.
  - STORMWATER PIT / PIPEWORK LOCATED WITHIN THE BUILDING FOOTPRINT / PODIUM SPECIFIED BY THE PROJECT HYDRAULIC ENGINEER.
  - CONTRACTOR TO ALLOW TO ADJUST AND LIAISE WITH RELEVANT SERVICE AUTHORITIES IN RELATION TO EXISTING SERVICE ADJUSTMENT AND MODIFICATIONS.
  - FINISHED SURFACE LEVELS OF AREAS OVER BASEMENT BY PROJECT LANDSCAPE ARCHITECT.
  - SUPPLY AND INSTALL OCEAN PROTECT 'OCEAN GUARD' INSERTS TO ALL GRATED SURFACE INLET STORMWATER PITS.
  - DUE TO FLOOD REQUIREMENTS. ALL LANDSCAPE / ARCHITECTURAL FEATURES ALONG THE RAY ROAD FRONTAGE MUST BE CONSISTENT WITH THE LEVELS SHOWN ON THIS PLAN. CONSULTATION WITH THE PROJECT CIVIL / FLOOD ENGINEER IS REQUIRED FOR ANY CHANGES TO THESE LEVELS.

VERIFIER: S. FORD  
 JOB MANAGER: S. FORD  
 DESIGNED: S. FORD  
 DRAWN: A. FALLINS

**NOT FOR CONSTRUCTION**

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE	CLIENT
02	ISSUED FOR INFORMATION	AF	SF		20.12.24	BEECROFT PROPERTY DEVELOPMENT PTY LTD
03	ISSUED FOR INFORMATION	AF	SF		06.02.25	
04	ISSUED FOR INFORMATION	VC	SF		19.03.25	
05	ISSUED FOR INFORMATION	VC	SF		25.03.25	
06	ISSUED FOR INFORMATION	ME	SF		14.07.25	
07	ISSUED FOR INFORMATION	AF	SF		30.09.25	

CLIENT: BEECROFT PROPERTY DEVELOPMENT PTY LTD

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SCALE 1:250 @ A1

0 2 4 6 8 10 12m

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 Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT: 242-244 BEECROFT ROAD, EPPING

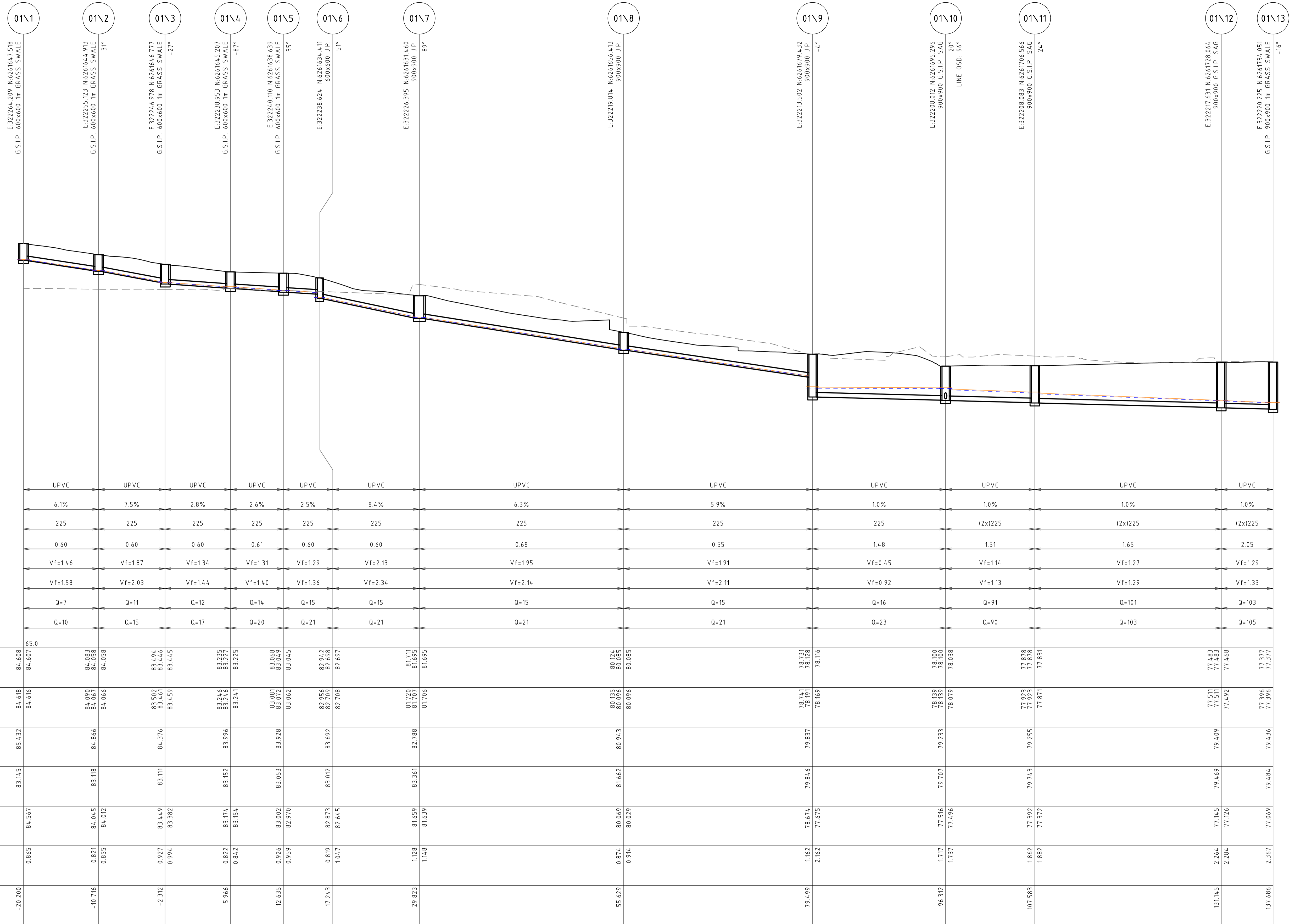
INTERNAL WORKS

DRAWING TITLE: CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION

SITEWORKS AND STORMWATER MANAGEMENT PLAN

JOB NUMBER: 212798	REVISION: 07
DRAWING NUMBER: C33001	DRAWING SHEET SIZE = A1

DRAWN: AFALLINS DESIGNED: SFORD JOB MANAGER: S. FORD VERIFIER:



LINE 01

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
02	ISSUED FOR INFORMATION	AF		SF	20.12.24
03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

CLIENT	ARCHITECT
BEECROFT PROPERTY DEVELOPMENT PTY LTD	TURNER

CLIENT	ARCHITECT
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SCALE	SCALE
SCALE 1:200@A1	SCALE 1:50@A1

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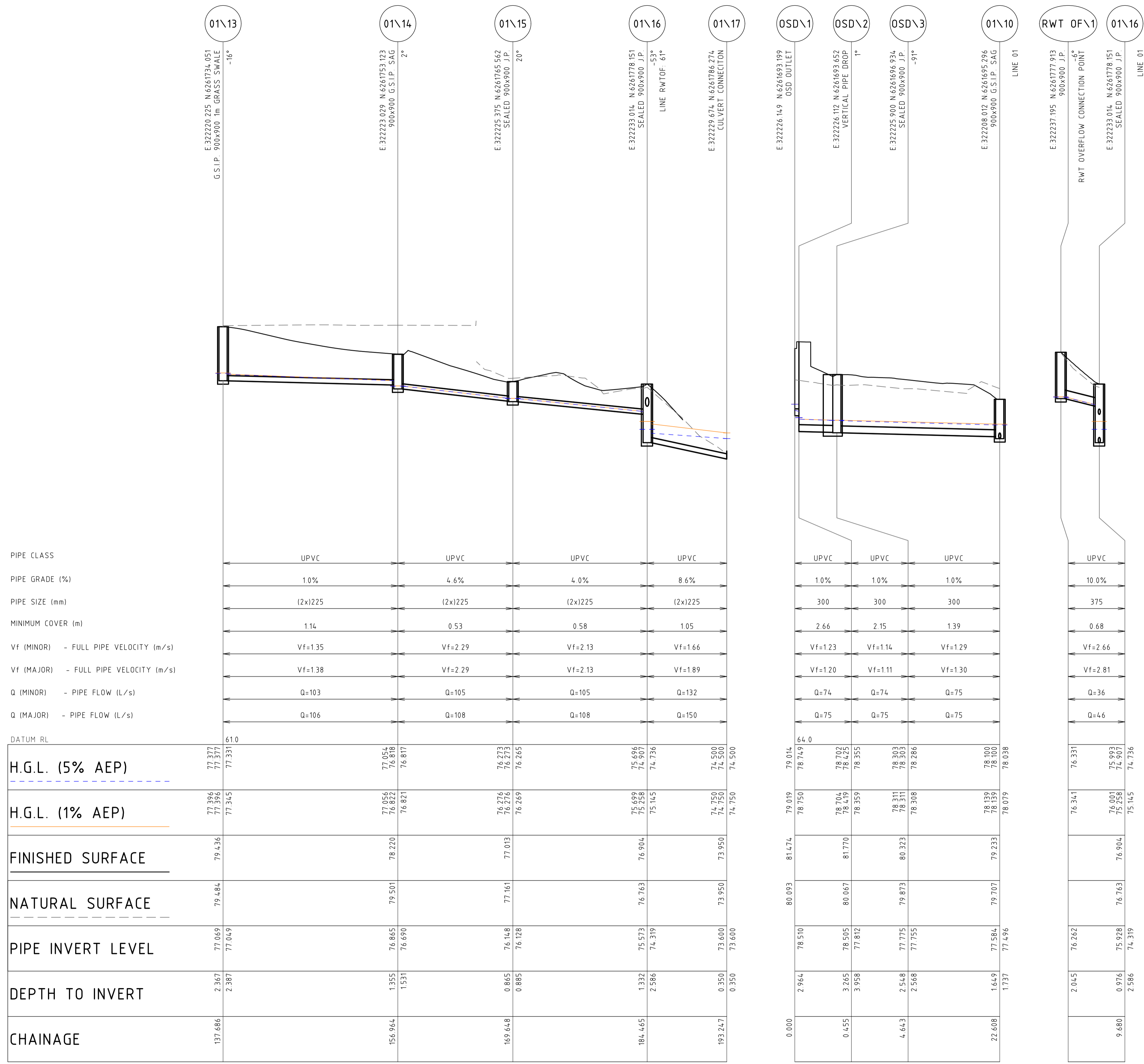
PROJECT
242-244 BEECROFT ROAD, EPPING INTERNAL WORKS

DRAWING TITLE
CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION STORMWATER LONGITUDINAL SECTIONS - SHEET 01

JOB NUMBER	DRAWING NUMBER	REVISION
212798	C34101	06

FORMER: C:\PUB\ADMIN\INSTRUMENTS\PROJECTS\242-244 BEECROFT ROAD\_EPPING\DWG\01 - C34101.DWG

DRAWN: AFALLINS DESIGNED: SFORD JOB MANAGER: S.FORD VERIFIER:



PIPE CLASS	PIPE GRADE (%)	PIPE SIZE (mm)	MINIMUM COVER (m)	Vf (MINOR) - FULL PIPE VELOCITY (m/s)	Vf (MAJOR) - FULL PIPE VELOCITY (m/s)	Q (MINOR) - PIPE FLOW (L/s)	Q (MAJOR) - PIPE FLOW (L/s)
UPVC	1.0%	(2x)225	1.14	Vf=1.35	Vf=1.38	Q=103	Q=106
UPVC	4.6%	(2x)225	0.53	Vf=2.29	Vf=2.29	Q=105	Q=108
UPVC	4.0%	(2x)225	0.58	Vf=2.13	Vf=2.13	Q=105	Q=108
UPVC	8.6%	(2x)225	1.05	Vf=1.66	Vf=1.89	Q=132	Q=150
UPVC	1.0%	300	2.66	Vf=1.23	Vf=1.20	Q=74	Q=75
UPVC	1.0%	300	2.15	Vf=1.14	Vf=1.11	Q=74	Q=75
UPVC	1.0%	300	1.39	Vf=1.29	Vf=1.30	Q=75	Q=75
UPVC	10.0%	375	0.68	Vf=2.66	Vf=2.81	Q=36	Q=46

DATUM RL	CHAINAGE	DEPTH TO INVERT	PIPE INVERT LEVEL	NATURAL SURFACE	FINISHED SURFACE	H.G.L. (1% AEP)	H.G.L. (5% AEP)
61.0	137.486	2.367	77.059	79.464	79.436	77.396	77.337
	156.964	1.355	76.865	79.501	78.720	77.056	76.872
	169.648	0.865	76.148	77.161	77.013	76.276	76.273
	184.465	1.332	75.573	76.763	76.904	75.699	75.696
	193.247	0.350	73.600	73.950	73.950	74.750	74.736
	0.000	2.964	78.510	80.093	81.474	79.019	79.014
	0.455	3.255	78.505	80.067	81.770	78.704	78.702
	4.643	2.548	77.775	79.873	80.323	78.311	78.303
	22.608	1.649	77.584	79.707	79.233	78.139	78.100
		1.737	77.496	78.079	78.079	78.079	78.038
		2.045	76.262			76.341	76.331
	9.680	0.976	75.928	76.763	76.904	76.001	75.993
		2.586	74.319			75.258	74.907

LINE 01 LINE OSD LINE RWTOF

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05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

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ARCHITECT  
**TURNER**

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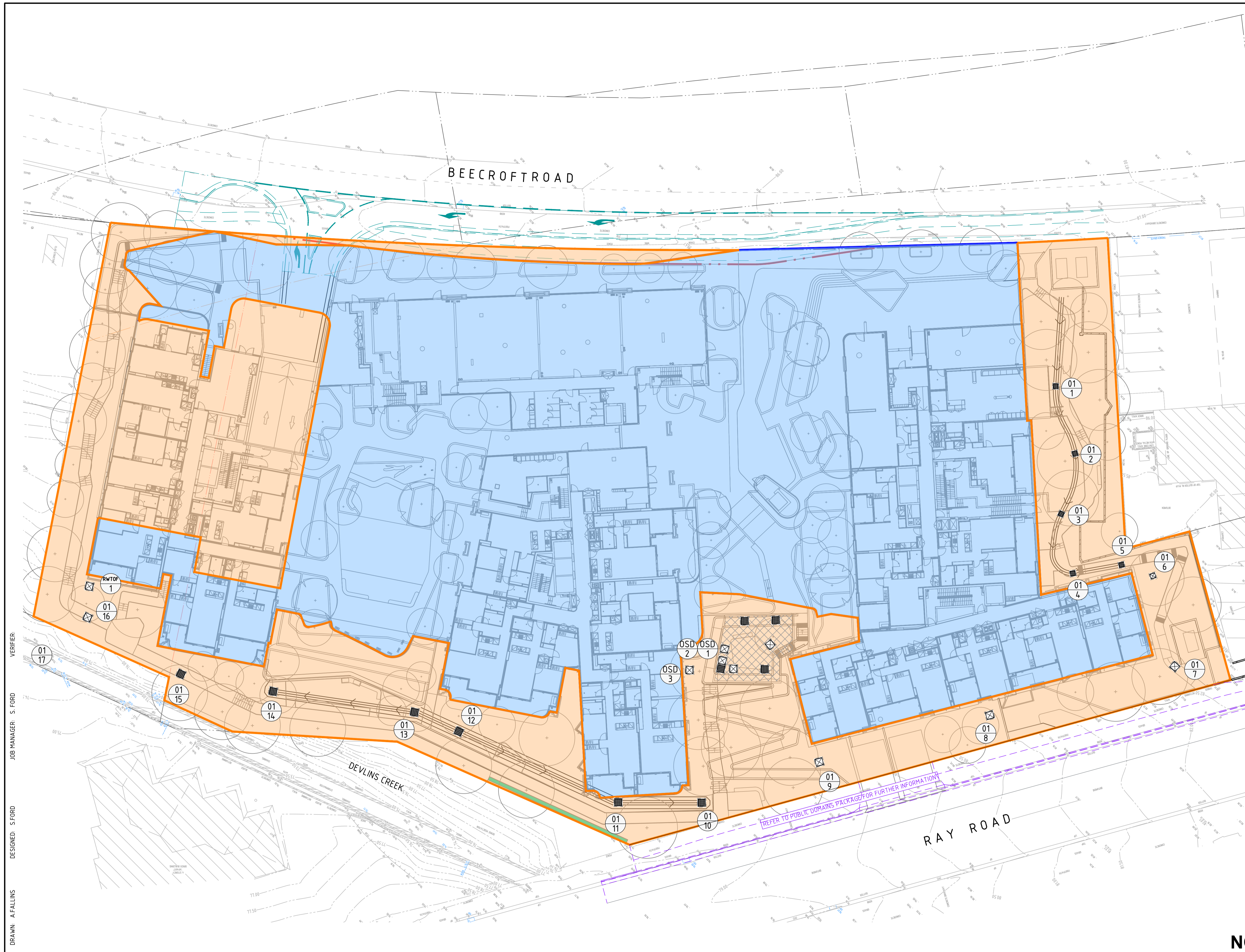
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Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**STORMWATER LONGITUDINAL SECTIONS - SHEET 02**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C34102</b>	REVISION <b>06</b>
DRAWING SHEET SIZE = A1	

FORMER: C:\WORK\ADMIN\INSTRUMENTS\PROJECTS\242-244 BEECROFT ROAD\_EPPING\DWG\34102\REL\_C34102.dwg



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	CATCHMENT TO OSD (6460m <sup>2</sup> )
	CATCHMENT BYPASSING OSD (3660m <sup>2</sup> )
	EXISTING DRAINAGE STRUCTURE
	NEW DRAINAGE STRUCTURE
	DRAINAGE SWALE

GENERAL NOTES:	
1.	REFER TO CIVIL DRAWINGS / STORMWATER REPORT / DRAINS FILE FOR HYDROLOGICAL AND HYDRAULIC CALCULATIONS. CATCHMENTS INDICATED AND THEIR CORRESPONDING PITS ARE THOSE WHICH HAVE BEEN USED FOR MODELLING PURPOSES.
2.	REFER HYDRAULIC ENGINEERS CALCULATIONS FOR ROOF DRAINAGE.

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF	SF		06.02.25
02	ISSUED FOR INFORMATION	VC	SF		19.03.25
03	ISSUED FOR INFORMATION	AF	SF		30.09.25

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SCALE 1:200@A1

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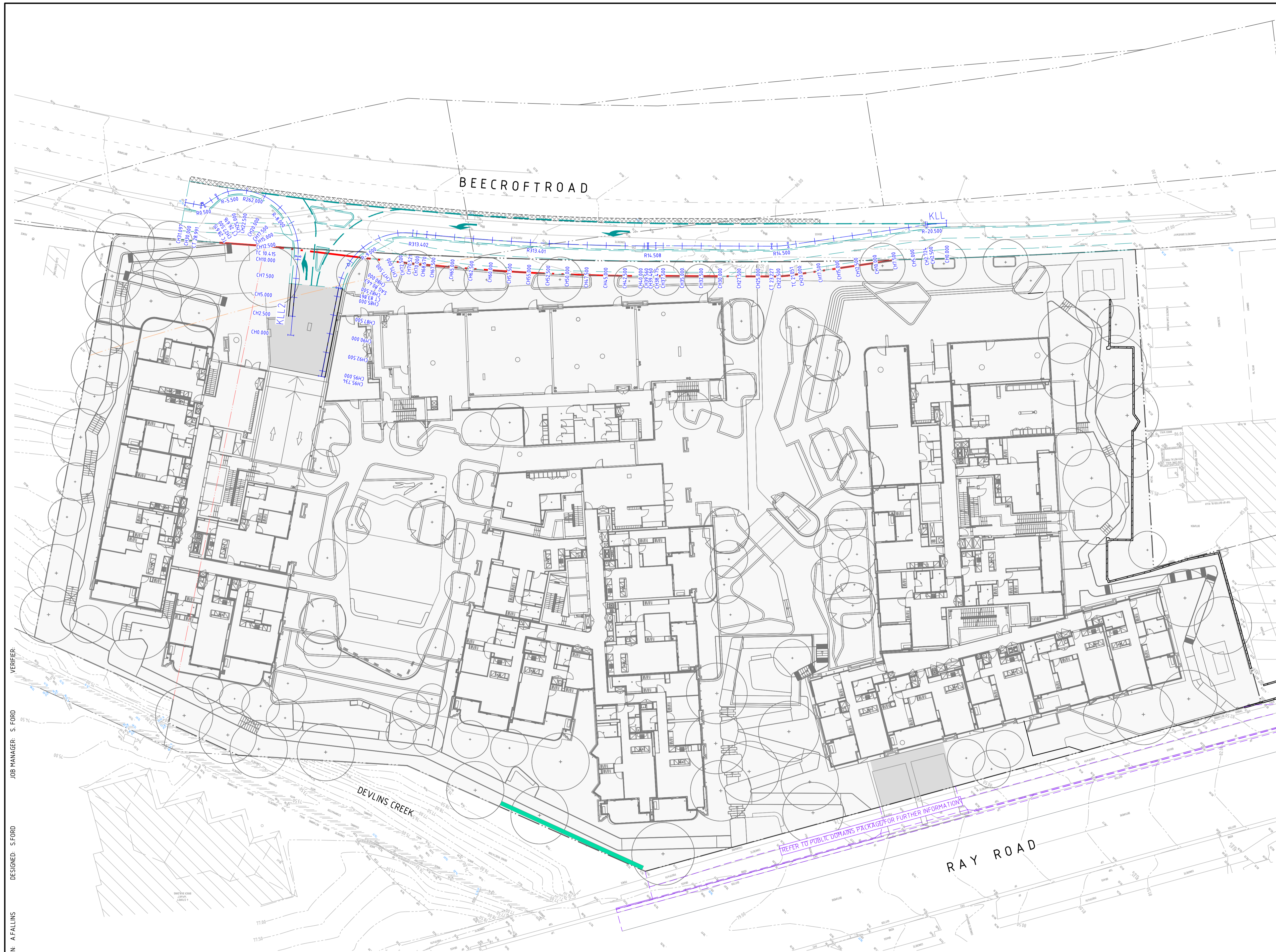
**PROJECT**  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

**DRAWING TITLE**  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**STORMWATER CATCHMENT PLAN**

<b>JOB NUMBER</b> 212798	
<b>DRAWING NUMBER</b> C34201	<b>REVISION</b> 03
DRAWING SHEET SIZE = A1	

**NOT FOR CONSTRUCTION**

REFER TO PUBLIC DOMAINS PACKAGE FOR FURTHER INFORMATION



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	KLL CONTROL LINE
	CHAINAGE
	TANGENT POINT

GENERAL NOTES:	
1.	SURVEY SUPPLIED BY: LTS
1.1.1.	NUMBER: 51428 0010T
1.1.2.	DRAWING TITLE: PLAN OF DETAIL AND LEVELS OVER LOT 220 DP1251471 No.242-244 BEECROFT ROAD, EPPING
1.1.3.	REVISION DATE: 13/08/2021
1.1.4.	REVISION NUMBER: A
1.1.5.	GEOCENTRIC DATUM OF AUSTRALIA: 2020
2.	CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).

DRAWN: A.FALLINS  
 DESIGNED: S.FORD  
 JOB MANAGER: S.FORD  
 VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF	SF		10.12.24
02	ISSUED FOR INFORMATION	AF	SF		20.12.24
03	ISSUED FOR INFORMATION	AF	SF		06.02.25
04	ISSUED FOR INFORMATION	VC	SF		19.03.25
05	ISSUED FOR INFORMATION	ME	SF		14.07.25
06	ISSUED FOR INFORMATION	AF	SF		30.09.25

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**ARCHITECT**  
**TURNER**

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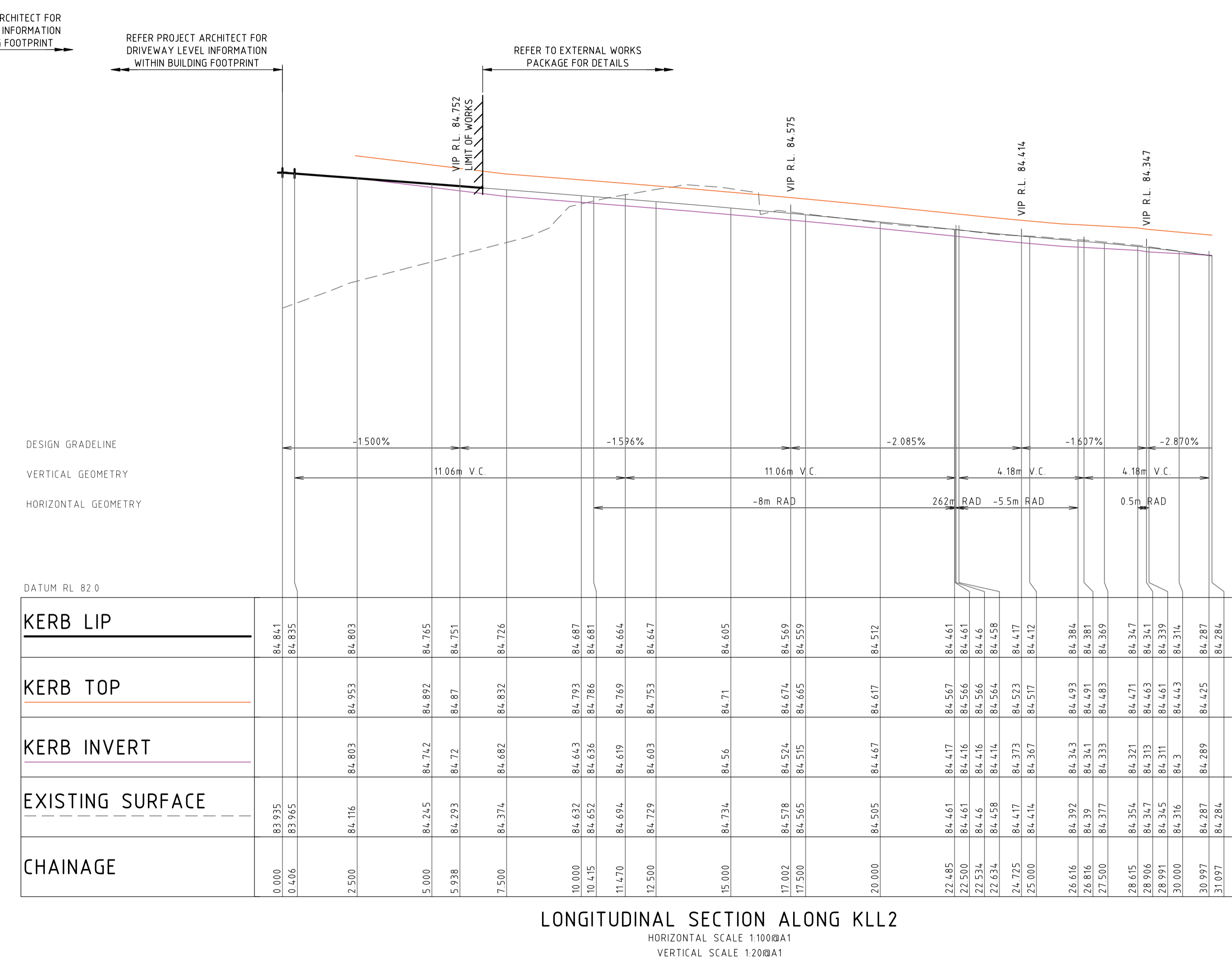
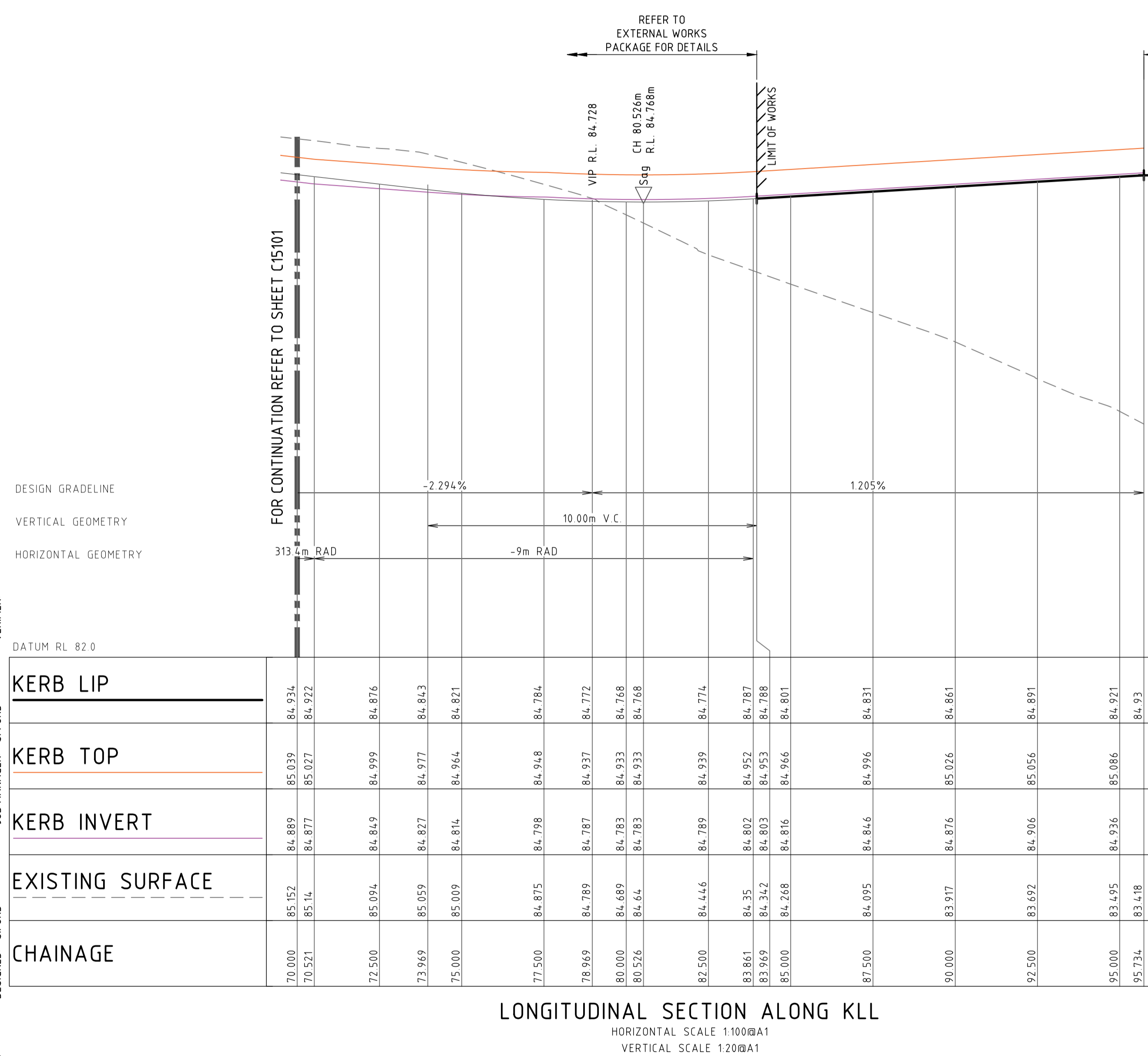
**PROJECT**  
**242-244 BEECROFT ROAD,  
 EPPING**  
**INTERNAL WORKS**

**DRAWING TITLE**  
**CIVIL ENGINEERING PACKAGE  
 DEVELOPMENT APPLICATION**  
**ALIGNMENT CONTROL PLAN**

<b>JOB NUMBER</b> 212798	
<b>DRAWING NUMBER</b> C35001	<b>REVISION</b> 06
DRAWING SHEET SIZE = A1	

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DRAWN: AFALLINS  
 DESIGNED: SFORD  
 VERIFIER: S.FORD  
 JOB MANAGER: S.FORD



REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
02	ISSUED FOR INFORMATION	AF		SF	20.12.24
03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
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SCALE 1:100 @ A1  
 SCALE 1:20 @ A1

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**LONGITUDINAL SECTIONS**

JOB NUMBER  
**212798**

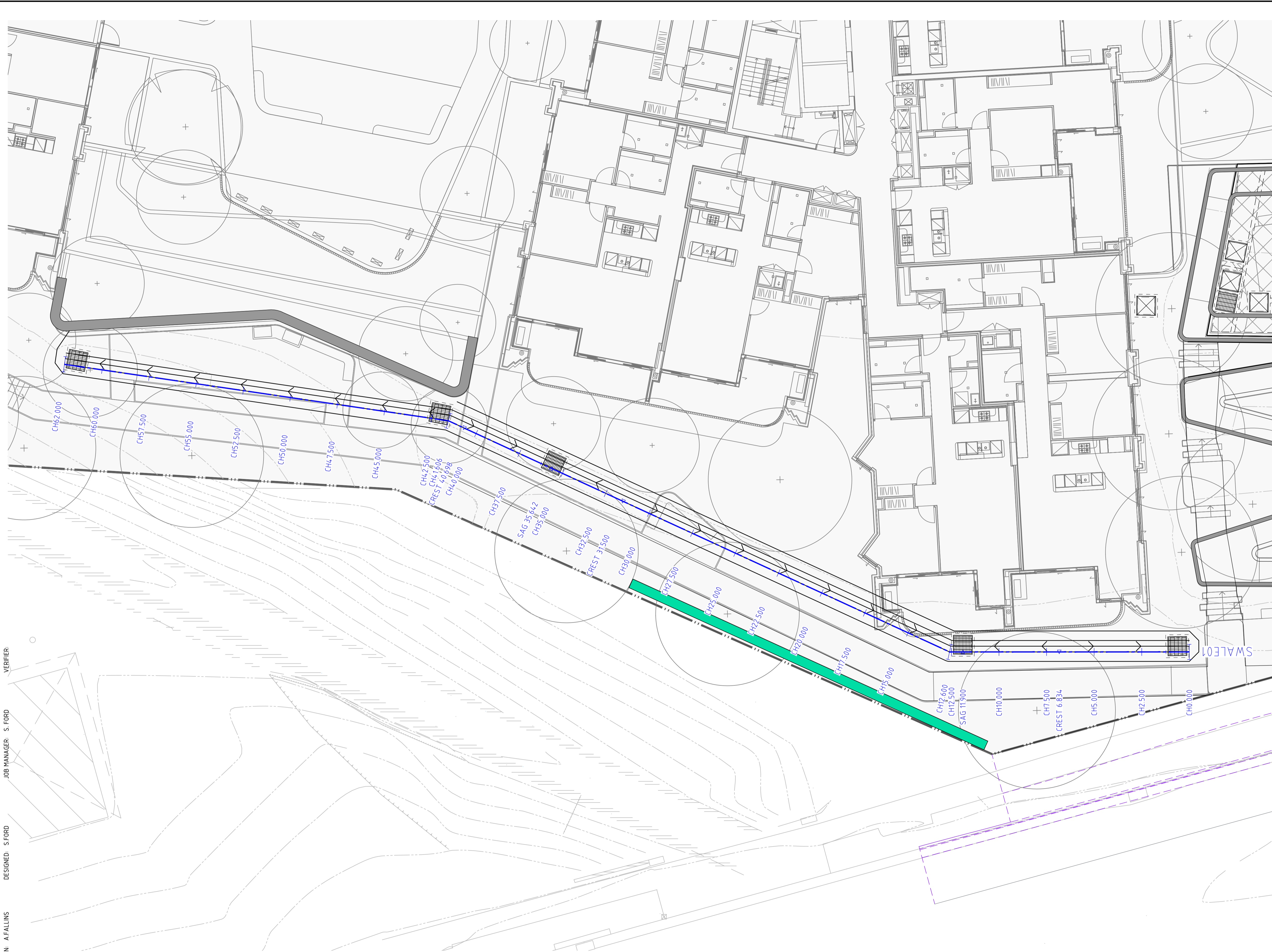
DRAWING NUMBER  
**C35101**

REVISION  
**06**

DRAWING SHEET SIZE = A1

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FORMER CIVILS/ADMINISTRATORS/PROJECTS/242-244 BEECROFT ROAD\_EPPING/242-244 BEECROFT ROAD - CIVIL/242-244 BEECROFT ROAD



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	SWALE CONTROL LINE
	CHAINAGE
	TANGENT POINT

GENERAL NOTES:	
1.	SURVEY SUPPLIED BY: LTS
1.1.1.	NUMBER: 51428 0010T
1.1.2.	DRAWING TITLE: PLAN OF DETAIL AND LEVELS OVER LOT 220 DP1251471 No.242-244 BEECROFT ROAD, EPPING
1.1.3.	REVISION DATE: 13/08/2021
1.1.4.	REVISION NUMBER: A
1.1.5.	GEOCENTRIC DATUM OF AUSTRALIA: 2020
2.	CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

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02	ISSUED FOR INFORMATION	AF		SF	20.12.24
03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

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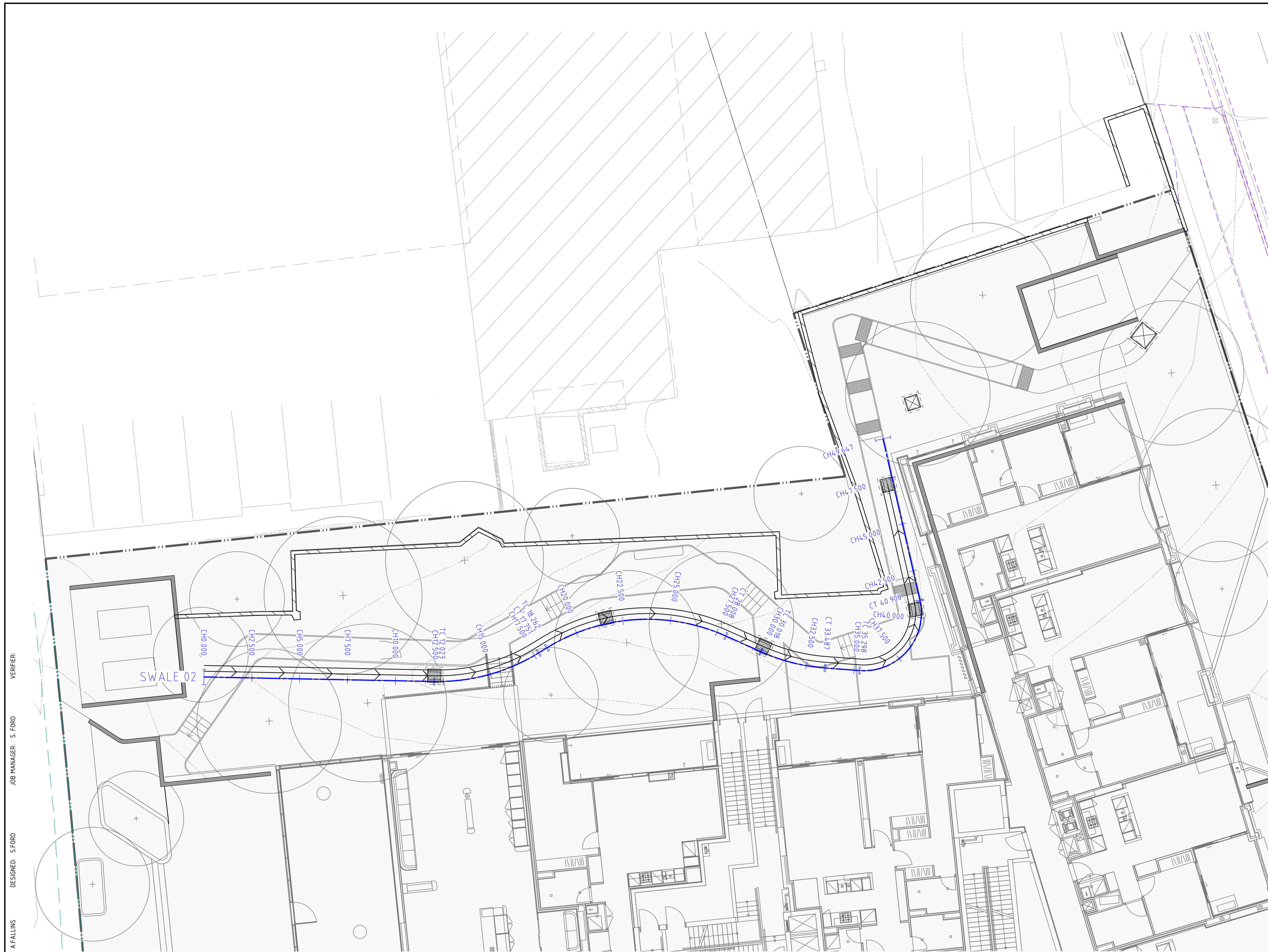
PROJECT  
**242-244 BEECROFT ROAD,  
EPPING**

**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE  
DEVELOPMENT APPLICATION  
SWALE ALIGNMENT CONTROL PLAN  
- SHEET 01**

JOB NUMBER <b>212798</b>	REVISION <b>06</b>
DRAWING NUMBER <b>C35301</b>	DRAWING SHEET SIZE = A1

SOURCE: C:\WORK\2025\212798\242-244 BEECROFT ROAD\FIG 01 SWALE CONTROL.dwg



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	SWALE
	CONTROL LINE
	CHAINAGE
	TANGENT POINT

GENERAL NOTES:	
1.	SURVEY SUPPLIED BY: LTS
1.1.1.	NUMBER: 51428 001DT
1.1.2.	DRAWING TITLE: PLAN OF DETAIL AND LEVELS OVER LOT 220 DP1251471 No.242-244 BEECROFT ROAD, EPPING
1.1.3.	REVISION DATE: 13/08/2021
1.1.4.	REVISION NUMBER: A
1.1.5.	GEOCENTRIC DATUM OF AUSTRALIA: 2020
2.	CAD FILES TO BE SUPPLIED IN AUTOCAD FORMAT FOR SETOUT PURPOSES (UPON REQUEST).

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

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ARCHITECT	<b>TURNER</b>
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ARCHITECT	<b>TURNER</b>
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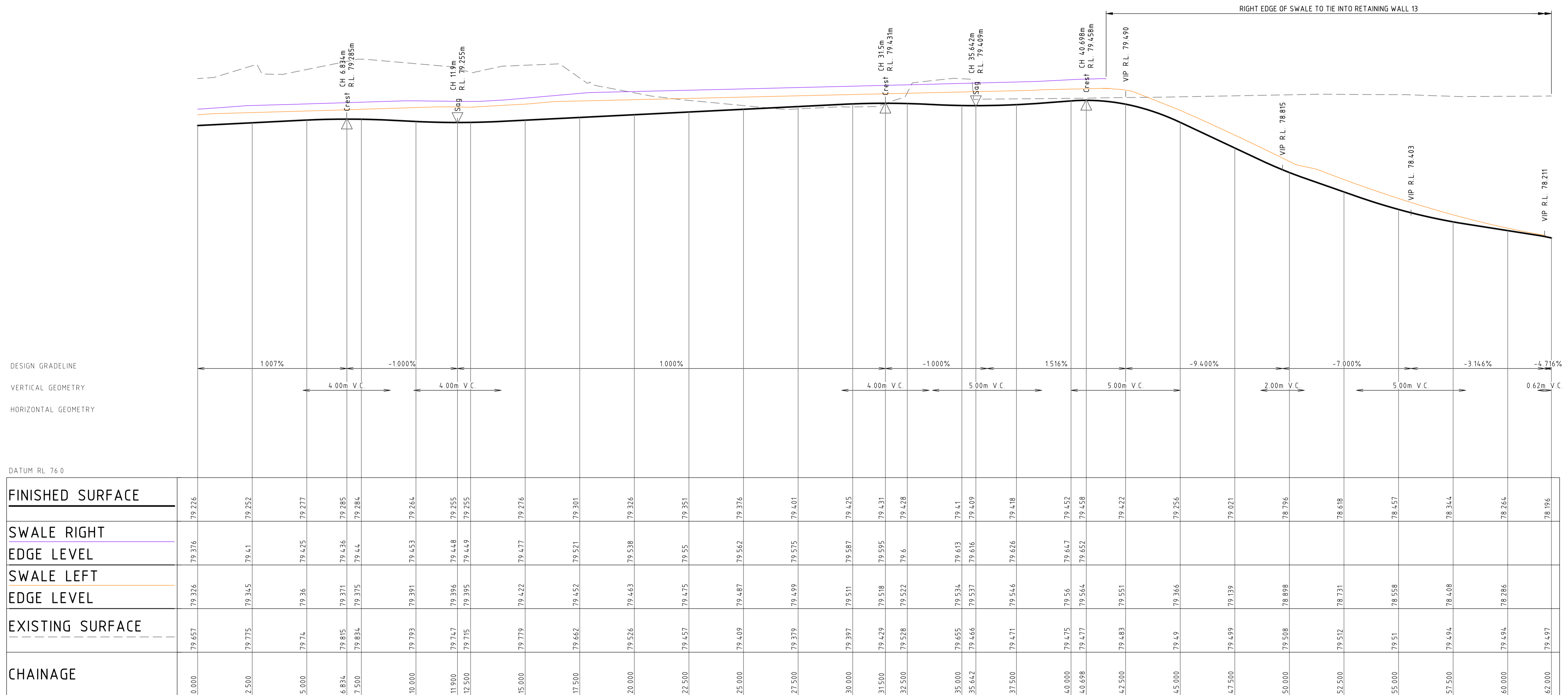
PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE ALIGNMENT CONTROL PLAN - SHEET 02</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35302</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

PROJECT: C:\WORK\2025\242-244 BEECROFT ROAD\242-244 BEECROFT ROAD - CIVIL\DWG - C35302\_06\_C35302.dwg

DRAWN: AFALLINS    DESIGNED: SFORD    JOB MANAGER: S. FORD    VERIFIER:



LONGITUDINAL SECTION ALONG SWALE01  
 HORIZONTAL SCALE 1:100@A1  
 VERTICAL SCALE 1:20@A1

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CLIENT	BEECROFT PROPERTY DEVELOPMENT PTY LTD
ARCHITECT	TURNER
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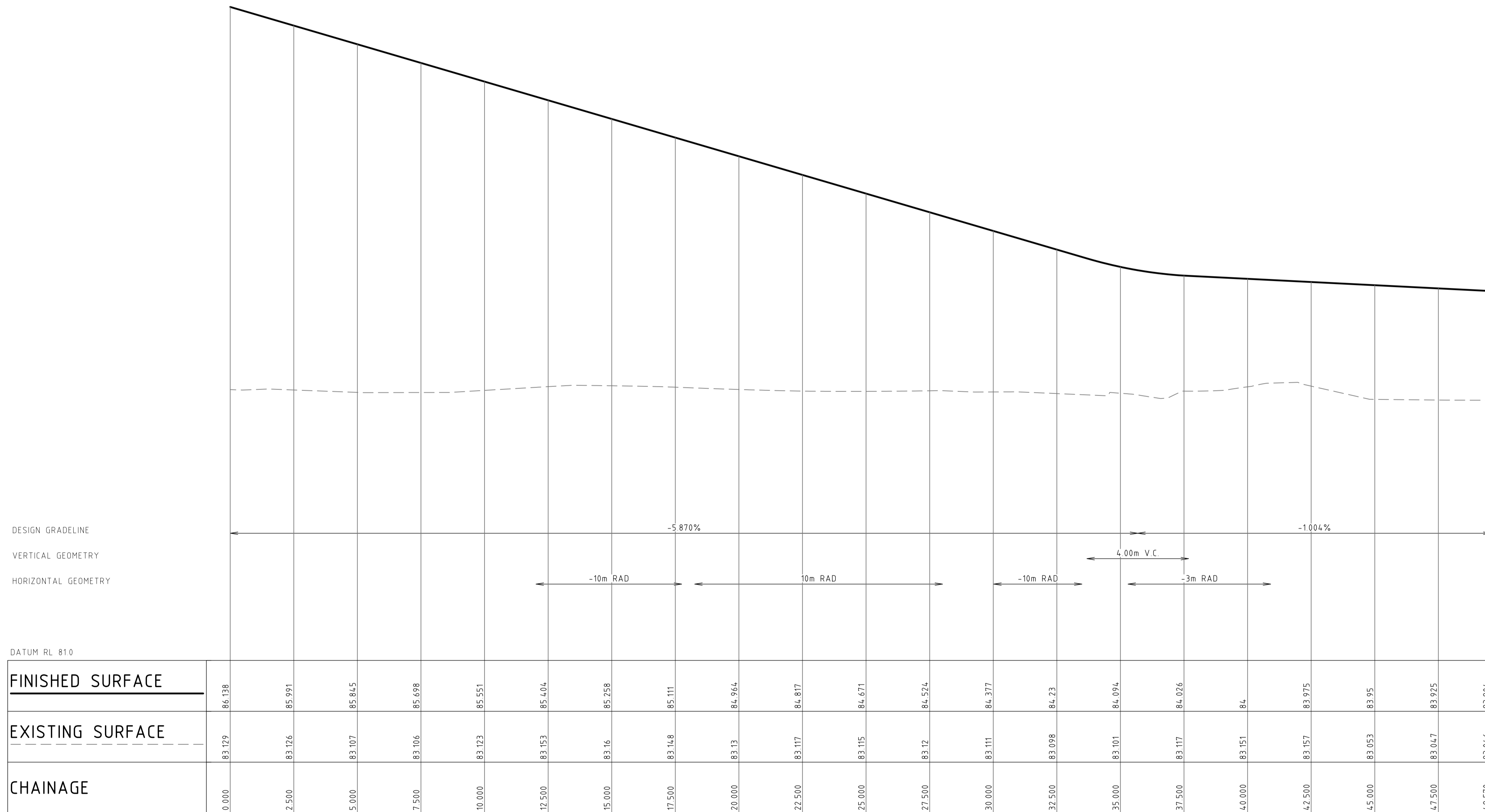
PROJECT	242-244 BEECROFT ROAD, EPPING
INTERNAL WORKS	

DRAWING TITLE	CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION
SWALE LONGITUDINAL SECTIONS - SHEET 01	

JOB NUMBER	212798
DRAWING NUMBER	C35401
REVISION	06
DRAWING SHEET SIZE = A1	

SOURCE: C:\WORK\BEECROFT\ROADS\242-244 BEECROFT ROAD\FIG 01 SWALE CAD.DWG - C:\CITR\BEECROFT.DWG

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:



LONGITUDINAL SECTION ALONG SWALE 02  
 HORIZONTAL SCALE 1:100@A1  
 VERTICAL SCALE 1:20@A1

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF	SF		06.02.25
02	ISSUED FOR INFORMATION	VC	SF		19.03.25
03	ISSUED FOR INFORMATION	AF	SF		30.09.25

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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

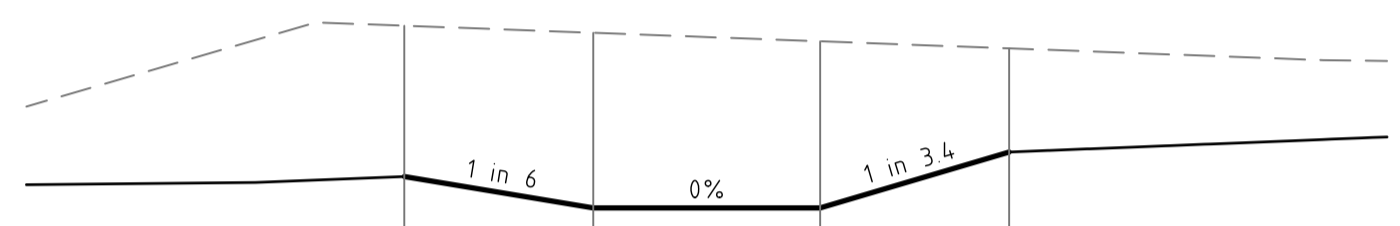
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE LONGITUDINAL SECTIONS - SHEET 02</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35402</b>
REVISION	<b>03</b>
DRAWING SHEET SIZE = A1	

FILENAME: C:\Users\ADMINISTRATOR\Documents\PROJECTS\242-244 BEECROFT ROAD\FIG 02 SWALE CROSS - C35402 SWALE LONGITUDINAL.dwg

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S. FORD    VERIFIER:

Centreline Data  
X = 322207.708  
Y = 6261699.666  
Z = 79.277

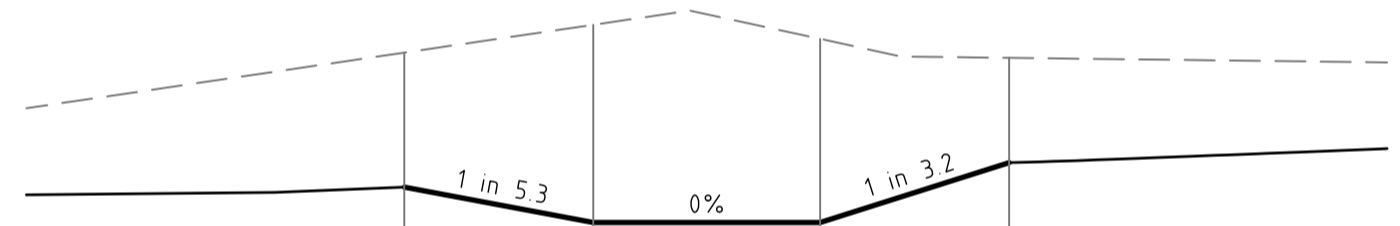


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 5.000

Centreline Data  
X = 322207.708  
Y = 6261697.166  
Z = 79.252

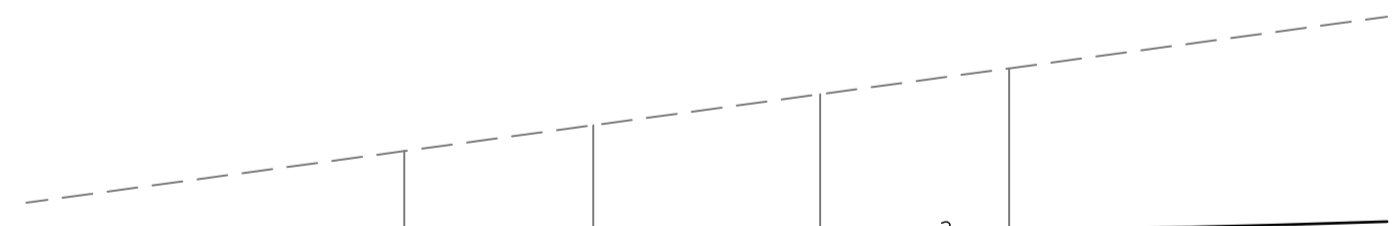


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 2.500

Centreline Data  
X = 322207.708  
Y = 6261694.666  
Z = 79.227

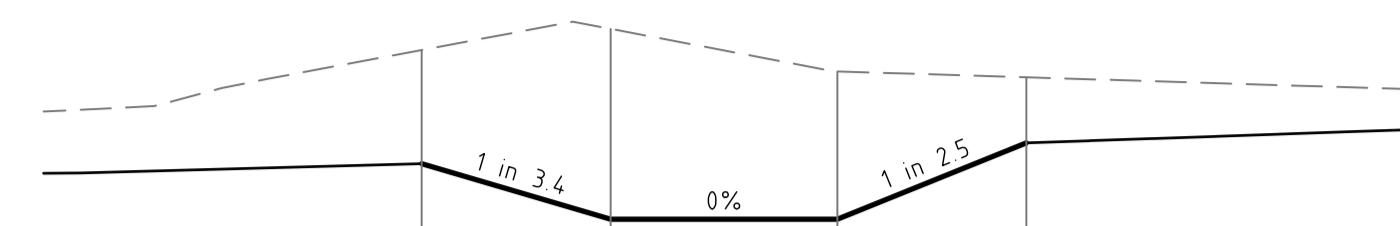


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 0.000

Centreline Data  
X = 322208.713  
Y = 6261709.446  
Z = 79.276

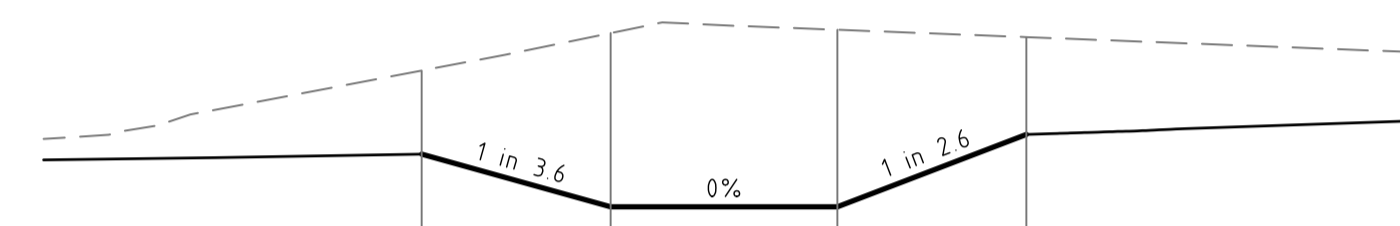


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 15.000

Centreline Data  
X = 322207.708  
Y = 6261707.166  
Z = 79.255

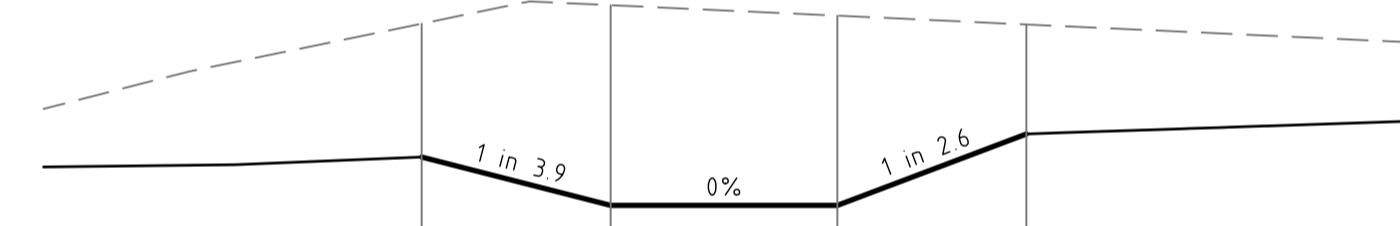


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 12.500

Centreline Data  
X = 322207.708  
Y = 6261704.666  
Z = 79.264

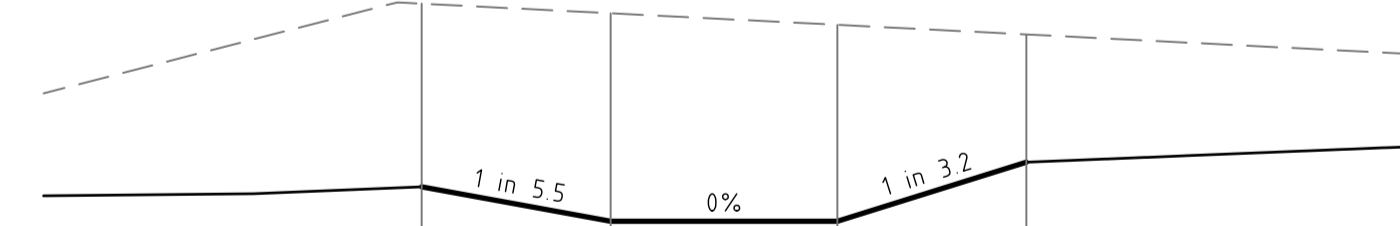


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 10.000  
SWALE 01

Centreline Data  
X = 322207.708  
Y = 6261702.166  
Z = 79.284

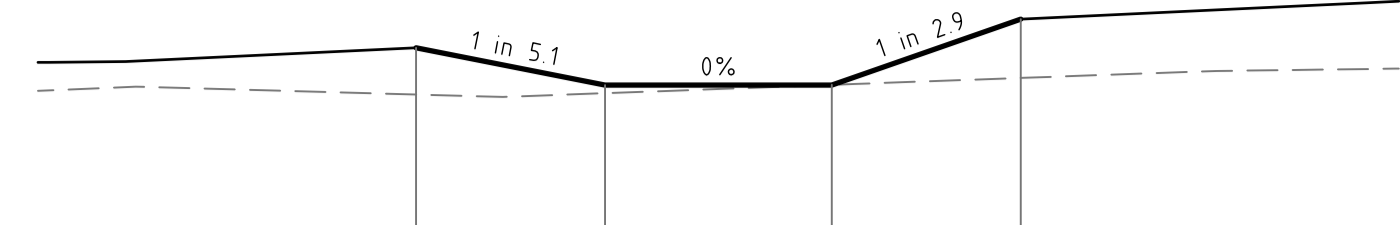


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 7.500

Centreline Data  
X = 322213.949  
Y = 6261720.796  
Z = 79.401

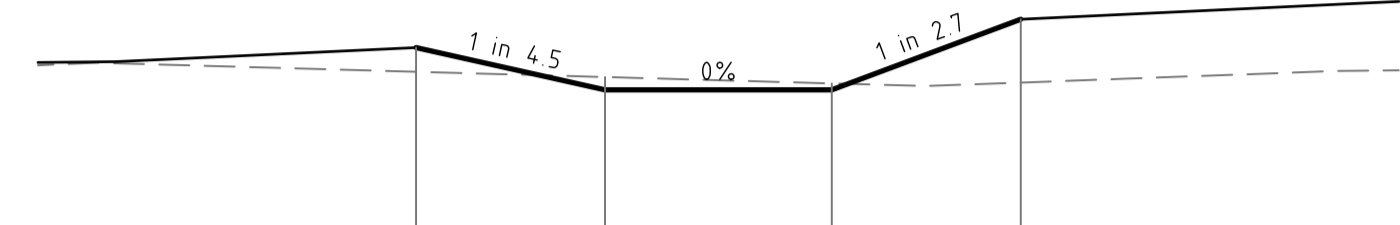


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 27.500

Centreline Data  
X = 322212.902  
Y = 6261718.526  
Z = 79.376

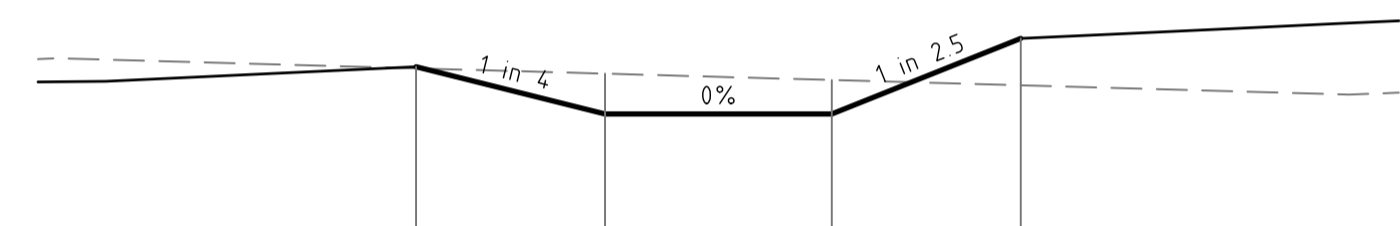


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 25.000

Centreline Data  
X = 322211.855  
Y = 6261716.256  
Z = 79.351

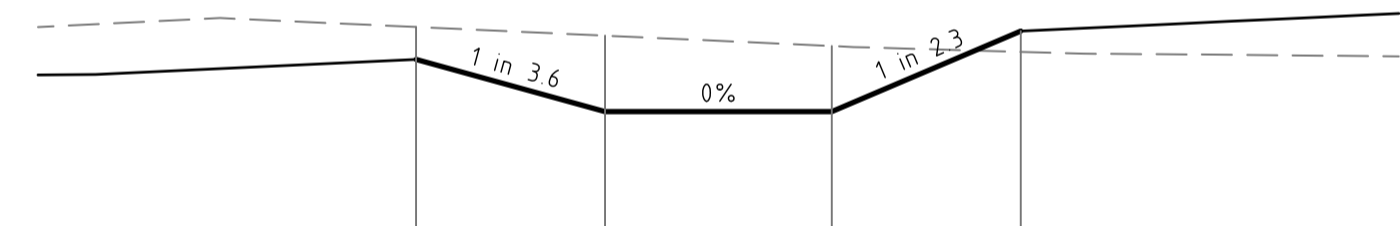


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 22.500

Centreline Data  
X = 322210.807  
Y = 6261713.986  
Z = 79.326

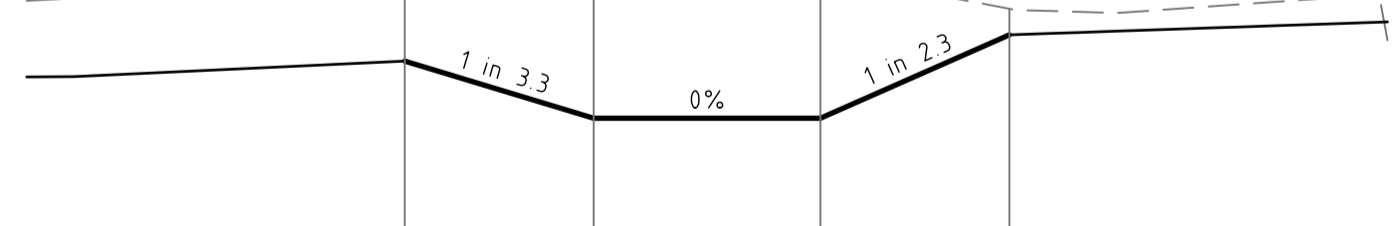


DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

CHAINAGE 20.000

Centreline Data  
X = 322209.760  
Y = 6261711.716  
Z = 79.301



DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET	-0.500	0.000	0.600	1.100

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
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03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
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06	ISSUED FOR INFORMATION	AF		SF	30.09.25

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**SWALE CROSS SECTIONS - SHEET 01**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C35501</b>	REVISION <b>06</b>
DRAWING SHEET SIZE = A1	

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

Centreline Data  
X = 322218.137  
Y = 6261729.877  
Z = 79.418

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 37.500

Centreline Data  
X = 322217.090  
Y = 6261727.607  
Z = 79.410

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 35.000

Centreline Data  
X = 322216.043  
Y = 6261725.337  
Z = 79.428

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 32.500

Centreline Data  
X = 322214.996  
Y = 6261723.067  
Z = 79.425

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 30.000

Centreline Data  
X = 322220.350  
Y = 6261736.964  
Z = 79.256

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 45.000

Centreline Data  
X = 322219.987  
Y = 6261734.490  
Z = 79.422

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 42.500

Centreline Data  
X = 322219.184  
Y = 6261732.147  
Z = 79.452

DATUM RL 79.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 40.000

Centreline Data  
X = 322221.441  
Y = 6261744.384  
Z = 78.618

DATUM RL 78.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 52.500

Centreline Data  
X = 322221.077  
Y = 6261741.910  
Z = 78.796

DATUM RL 78.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 50.000

Centreline Data  
X = 322220.714  
Y = 6261739.437  
Z = 79.021

DATUM RL 78.0

FINISHED SURFACE				
EXISTING SURFACE				
OFFSET				

CHAINAGE 47.500

SWALE 01

**NOT FOR CONSTRUCTION**

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04	ISSUED FOR INFORMATION	VC	SF		19.03.25
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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE CROSS SECTIONS - SHEET 02</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35502</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

P:\0244 BEECROFT ROAD\242-244 BEECROFT ROAD\_212798\_CROSS - 02\242-244 BEECROFT ROAD\_212798\_CROSS - 02.dwg

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S. FORD    VERIFIER:

Centreline Data  
X = 322222.168  
Y = 626174.9331  
Z = 78.344

DATUM RL 78.0

FINISHED SURFACE			
EXISTING SURFACE			
OFFSET			

CHAINAGE 57.500

Centreline Data  
X = 322221.805  
Y = 626174.6857  
Z = 78.457

DATUM RL 78.0

FINISHED SURFACE			
EXISTING SURFACE			
OFFSET			

CHAINAGE 55.000

Centreline Data  
X = 322222.823  
Y = 626175.3783  
Z = 78.196

DATUM RL 77.0

FINISHED SURFACE			
EXISTING SURFACE			
OFFSET			

CHAINAGE 62.000

Centreline Data  
X = 322222.532  
Y = 626175.1804  
Z = 78.264

DATUM RL 77.0

FINISHED SURFACE			
EXISTING SURFACE			
OFFSET			

CHAINAGE 60.000

SWALE 01

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
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03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE CROSS SECTIONS - SHEET 03</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35503</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

FORMER: C:\WORK\ADMIN\INSTRUMENTS\PROJECTS\242-244 BEECROFT ROAD\FIG 03\SWALE CROSS - C35503\FIG\_C35503.dwg

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S. FORD    VERIFIER:

Centreline Data  
X = 322263.753  
Y = 626164.7837  
Z = 85.404

DATUM RL 85.0

FINISHED SURFACE		85.404	85.404
EXISTING SURFACE		83.147	83.153
OFFSET		-0.600	0.000

CHAINAGE 12.500

Centreline Data  
X = 322266.248  
Y = 626164.7686  
Z = 85.551

DATUM RL 85.0

FINISHED SURFACE		85.551	85.551
EXISTING SURFACE		83.118	83.123
OFFSET		-0.600	0.000

CHAINAGE 10.000

Centreline Data  
X = 322271.237  
Y = 626164.7360  
Z = 85.845

DATUM RL 85.0

FINISHED SURFACE		85.845	85.845
EXISTING SURFACE		83.094	83.107
OFFSET		-0.600	0.000

CHAINAGE 5.000

Centreline Data  
X = 322276.227  
Y = 626164.7034  
Z = 86.138

DATUM RL 86.0

FINISHED SURFACE		86.138	86.138
EXISTING SURFACE		83.126	83.129
OFFSET		-0.600	0.000

CHAINAGE 0.000

Centreline Data  
X = 322254.246  
Y = 626164.5104  
Z = 84.817

DATUM RL 84.0

FINISHED SURFACE		84.817	84.817
EXISTING SURFACE		83.111	83.117
OFFSET		-0.600	0.000

CHAINAGE 22.500

Centreline Data  
X = 322256.686  
Y = 626164.5621  
Z = 84.964

DATUM RL 84.0

FINISHED SURFACE		84.964	84.964
EXISTING SURFACE		83.125	83.130
OFFSET		-0.600	0.000

CHAINAGE 20.000

Centreline Data  
X = 322258.938  
Y = 626164.6697  
Z = 85.111

DATUM RL 85.0

FINISHED SURFACE		85.111	85.111
EXISTING SURFACE		83.144	83.148
OFFSET		-0.600	0.000

CHAINAGE 17.500

Centreline Data  
X = 322261.274  
Y = 626164.7570  
Z = 85.258

DATUM RL 85.0

FINISHED SURFACE		85.258	85.258
EXISTING SURFACE		83.155	83.160
OFFSET		-0.600	0.000

CHAINAGE 15.000

Centreline Data  
X = 322244.781  
Y = 626164.7878  
Z = 84.230

DATUM RL 84.0

FINISHED SURFACE		84.230	84.230
EXISTING SURFACE		83.098	83.098
OFFSET		-0.600	0.000

CHAINAGE 32.500

Centreline Data  
X = 322247.129  
Y = 626164.7037  
Z = 84.377

DATUM RL 84.0

FINISHED SURFACE		84.377	84.377
EXISTING SURFACE		83.112	83.111
OFFSET		-0.600	0.000

CHAINAGE 30.000

Centreline Data  
X = 322249.367  
Y = 626164.5923  
Z = 84.524

DATUM RL 84.0

FINISHED SURFACE		84.524	84.524
EXISTING SURFACE		83.114	83.120
OFFSET		-0.600	0.000

CHAINAGE 27.500

Centreline Data  
X = 322251.755  
Y = 626164.5207  
Z = 84.671

DATUM RL 84.0

FINISHED SURFACE		84.671	84.671
EXISTING SURFACE		83.110	83.115
OFFSET		-0.600	0.000

CHAINAGE 25.000

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REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
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03	ISSUED FOR INFORMATION	AF		SF	06.02.25
04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE CROSS SECTIONS - SHEET 04</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35504</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

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DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S. FORD    VERIFIER:

Centreline Data  
X = 322238.674  
Y = 6261645.652  
Z = 84.000

DATUM RL 83.0			
FINISHED SURFACE		84.000	84.000
EXISTING SURFACE		83.147	83.151
OFFSET		-0.600	0.000

CHAINAGE 40.000

Centreline Data  
X = 322239.923  
Y = 6261647.735  
Z = 84.026

DATUM RL 83.0			
FINISHED SURFACE		84.026	84.026
EXISTING SURFACE		83.081	83.117
OFFSET		-0.600	0.000

CHAINAGE 37.500

Centreline Data  
X = 322242.307  
Y = 6261648.225  
Z = 84.094

DATUM RL 83.0			
FINISHED SURFACE		84.094	84.094
EXISTING SURFACE		83.104	83.101
OFFSET		-0.600	0.000

CHAINAGE 35.000

Centreline Data  
X = 322239.815  
Y = 6261638.586  
Z = 83.928

DATUM RL 83.0			
FINISHED SURFACE		83.928	83.928
EXISTING SURFACE		83.059	83.048
OFFSET		-0.600	0.000

CHAINAGE 47.170

Centreline Data  
X = 322239.428  
Y = 6261640.721  
Z = 83.950

DATUM RL 83.0			
FINISHED SURFACE		83.950	83.950
EXISTING SURFACE		83.061	83.053
OFFSET		-0.600	0.000

CHAINAGE 45.000

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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
<b>INTERNAL WORKS</b>	

DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
<b>SWALE CROSS SECTIONS - SHEET 05</b>	

JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C35505</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

FILENAME: C:\DRAWING\2025\242-244 BEECROFT ROAD\242-244-05.dwg



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	PROPOSED RETAINING WALL 'FACE' AREA
	PROPOSED RETAINING WALL - REFER TO LANDSCAPE ARCHITECT FOR FURTHER DETAIL
	EXISTING RETAINING WALL
<b>RW</b>	CONTROL LINE
	CHAINAGE
	TANGENT POINT

DRAWN: A.FALLINS  
 DESIGNED: S.FORD  
 JOB MANAGER: S.FORD  
 VERIFIER:

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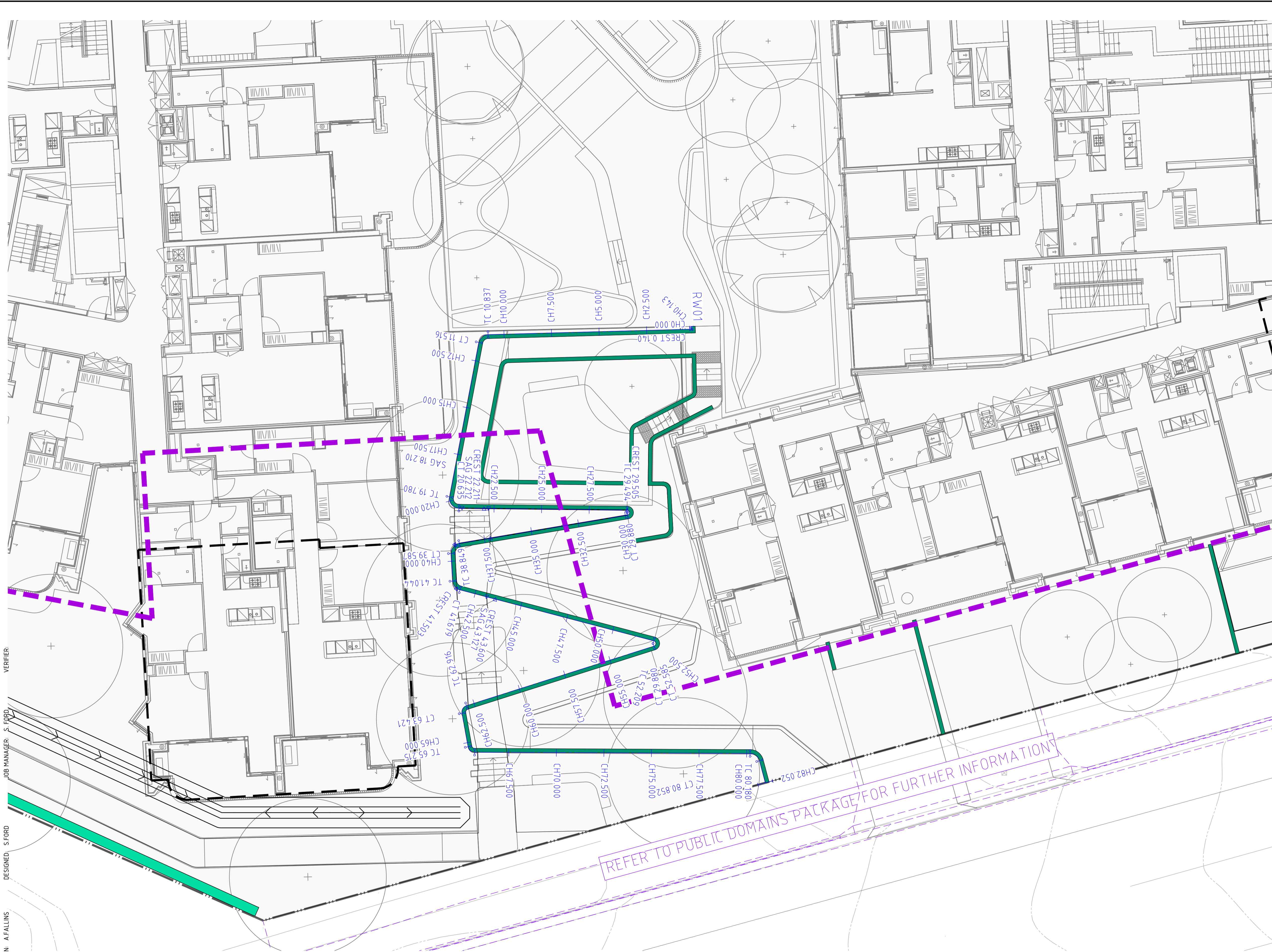
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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 01**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C36001</b>	REVISION <b>06</b>
DRAWING SHEET SIZE = A1	



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	PROPOSED RETAINING WALL 'FACE' AREA
	PROPOSED RETAINING WALL - REFER TO LANDSCAPE ARCHITECT FOR FURTHER DETAIL
	EXISTING RETAINING WALL
	RW CONTROL LINE
	CHAINAGE
	TANGENT POINT

DRAWN: A FALLINS  
 DESIGNED: S FORD  
 JOB MANAGER: S FORD  
 VERIFIER:

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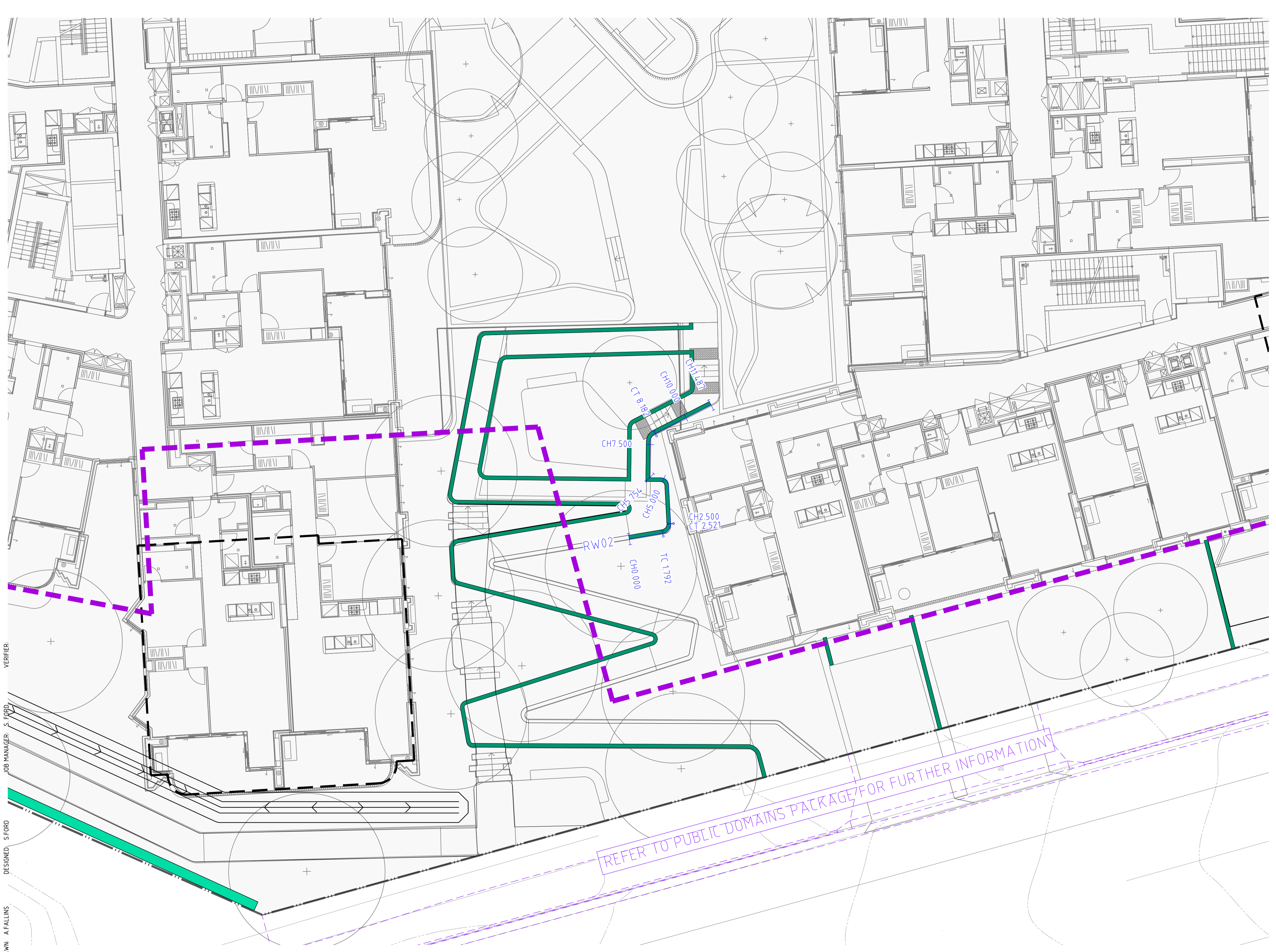
SCALE 1:100 @ A1

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**INTERNAL WORKS**

**DRAWING TITLE**  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 02**

<b>JOB NUMBER</b> 212798	
<b>DRAWING NUMBER</b> C36002	<b>REVISION</b> 06
DRAWING SHEET SIZE = A1	



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	PROPOSED RETAINING WALL 'FACE' AREA
	PROPOSED RETAINING WALL - REFER TO LANDSCAPE ARCHITECT FOR FURTHER DETAIL
	EXISTING RETAINING WALL
<b>RW</b>	CONTROL LINE
	CHAINAGE
	TANGENT POINT

DRAWN: A FALLINS  
 DESIGNED: S FORD  
 JOB MANAGER: S FORD  
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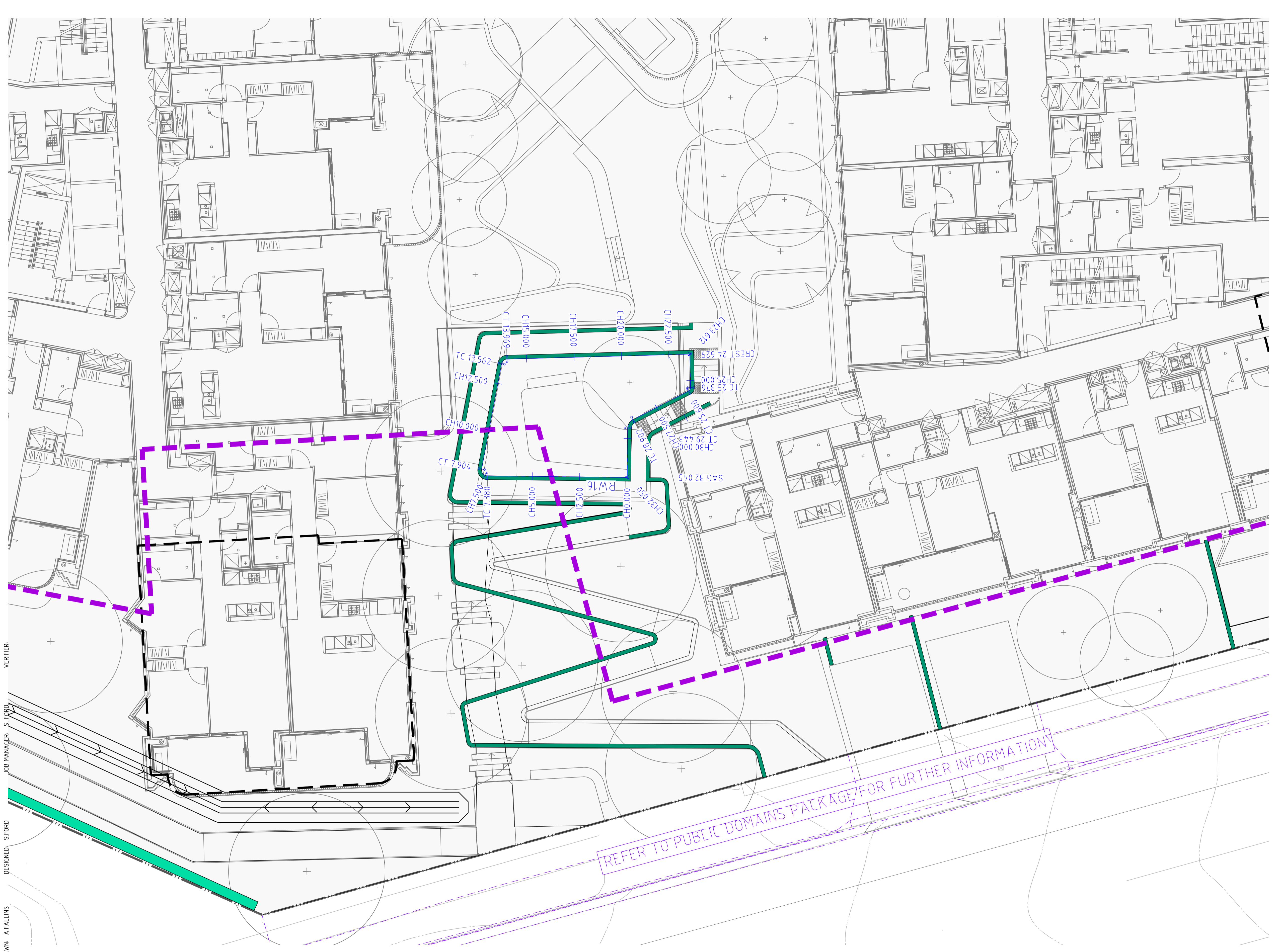
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**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

**DRAWING TITLE**  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 03**

<b>JOB NUMBER</b> 212798	
<b>DRAWING NUMBER</b> C36003	<b>REVISION</b> 06
DRAWING SHEET SIZE = A1	



LEGEND	
	PROPOSED BOUNDARY LINE
	EXISTING BOUNDARY LINE
	EXISTING EASEMENT LINE
	REDUNDANT BOUNDARY LINE
	SEPARATE APPROVAL REFER TO INTERNAL WORKS PACKAGE FOR DETAILS
	PROPOSED RETAINING WALL 'FACE' AREA
	PROPOSED RETAINING WALL - REFER TO LANDSCAPE ARCHITECT FOR FURTHER DETAIL
	EXISTING RETAINING WALL
	CONTROL LINE
	CHAINAGE
	TANGENT POINT

DRAWN: AFALLINS  
 DESIGNED: SFORD  
 JOB MANAGER: SFORD  
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04	ISSUED FOR INFORMATION	VC	SF		19.03.25
05	ISSUED FOR INFORMATION	ME	SF		14.07.25
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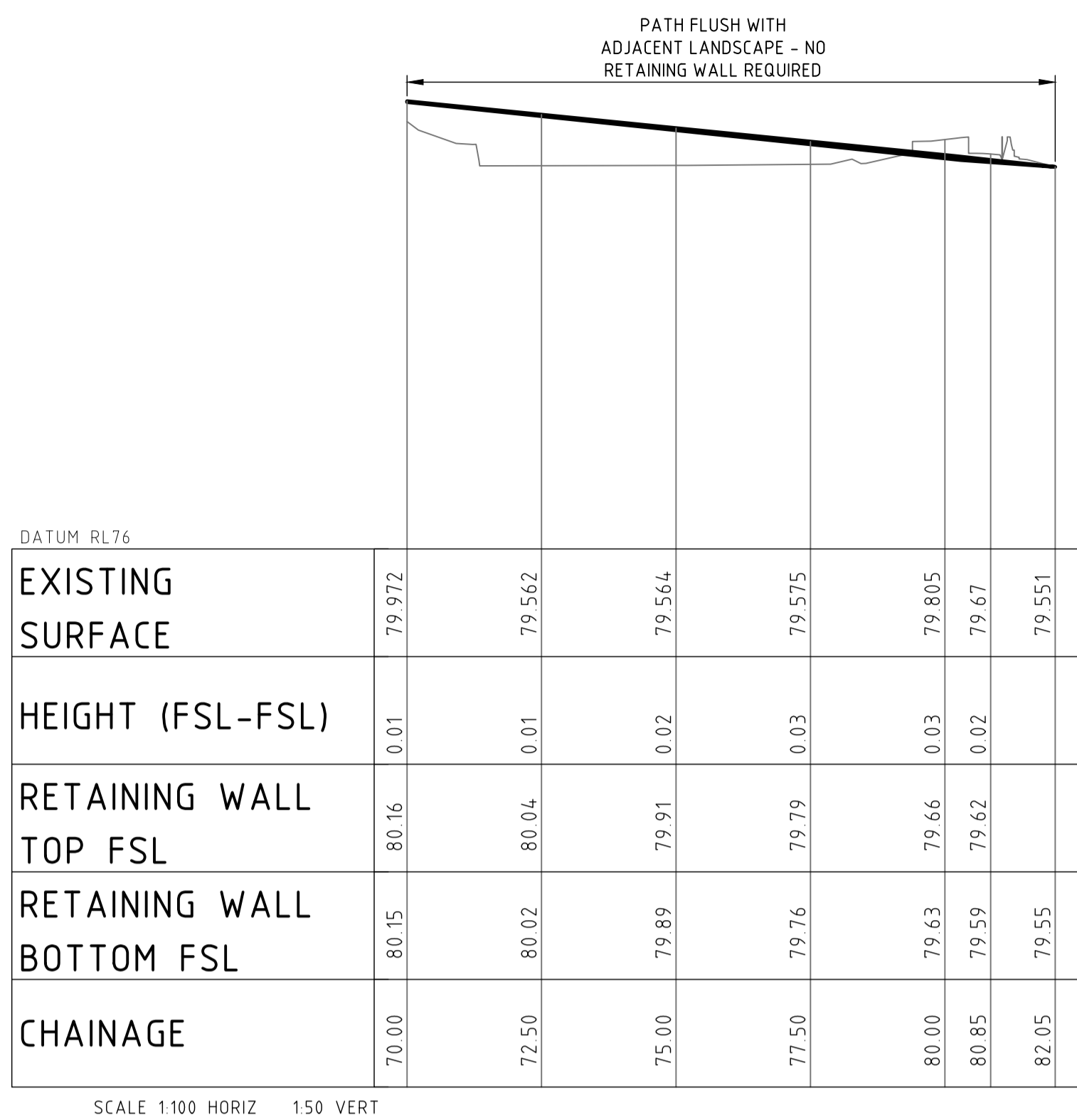
PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ALIGNMENT CONTROL PLAN - SHEET 04**

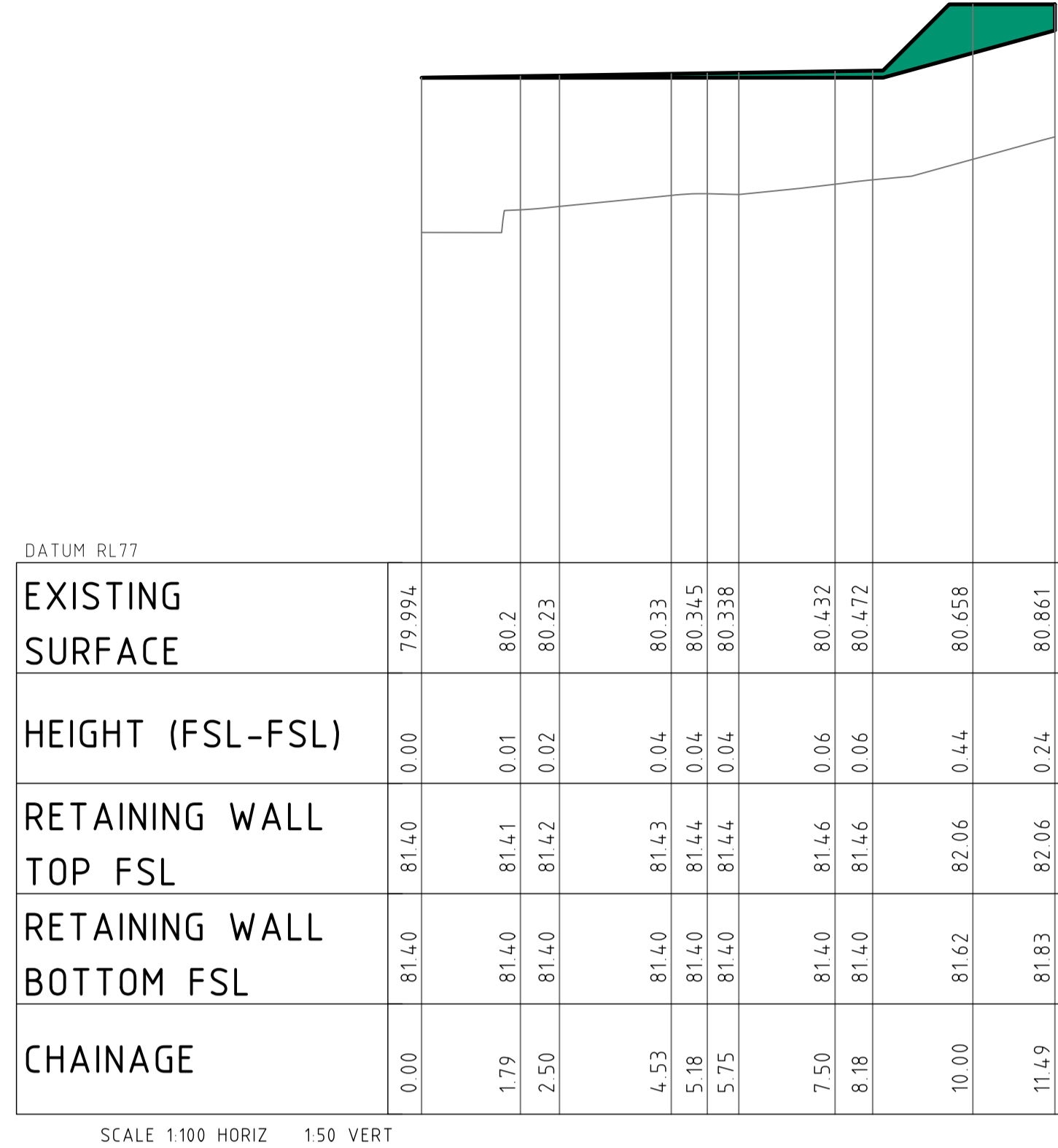
JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C36004</b>	REVISION <b>06</b>
DRAWING SHEET SIZE = A1	

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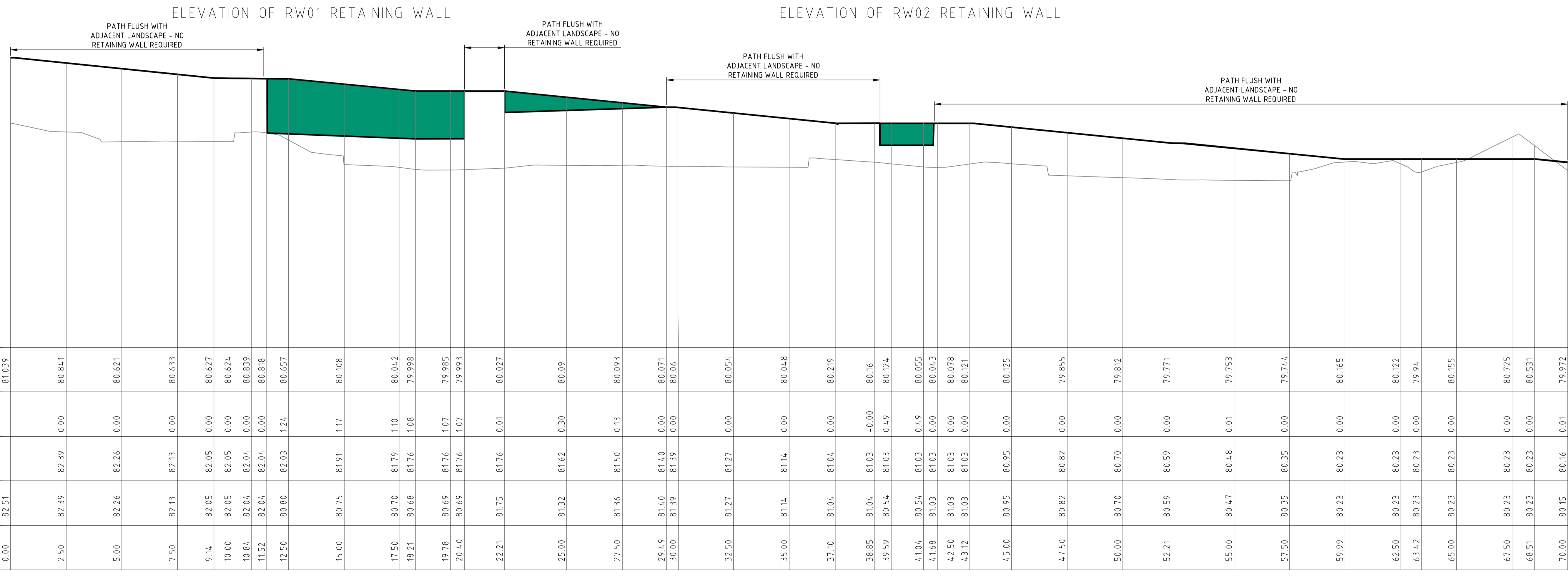
SCALE 1:100 HORIZ 150 VERT



SCALE 1:100 HORIZ 150 VERT

**LEGEND**

DENOTES PROPOSED WALL 'FACE' AREA.



DATUM RL76	
EXISTING SURFACE	81.039
HEIGHT (FSL-FSL)	0.00
RETAINING WALL TOP FSL	82.39
RETAINING WALL BOTTOM FSL	82.39
CHAINAGE	0.00

SCALE 1:100 HORIZ 150 VERT

ELEVATION OF RW01 RETAINING WALL

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SCALE 1:100 @ A1  
SCALE 1:50 @ A1

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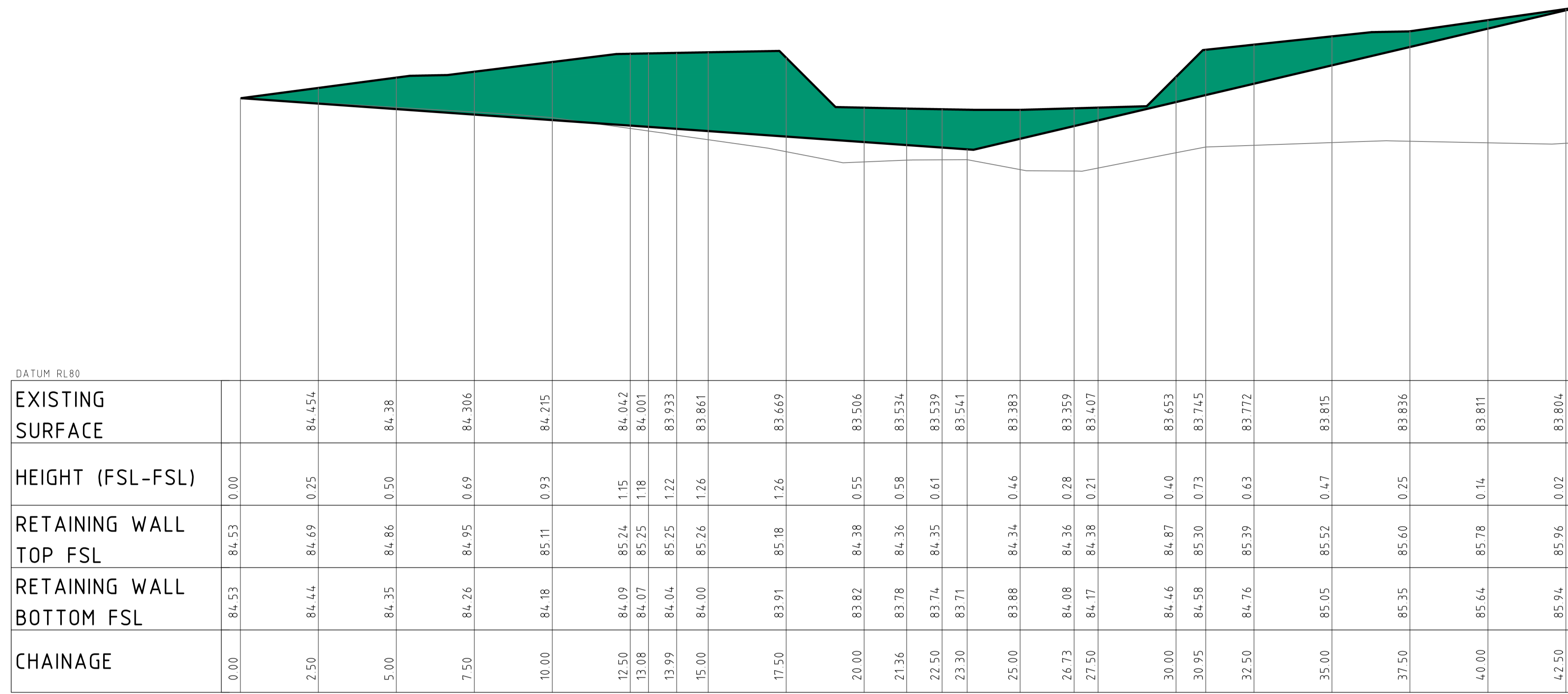
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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ELEVATIONS - SHEET 01**

JOB NUMBER <b>212798</b>	
DRAWING NUMBER <b>C36101</b>	REVISION <b>06</b>
DRAWING SHEET SIZE = A1	

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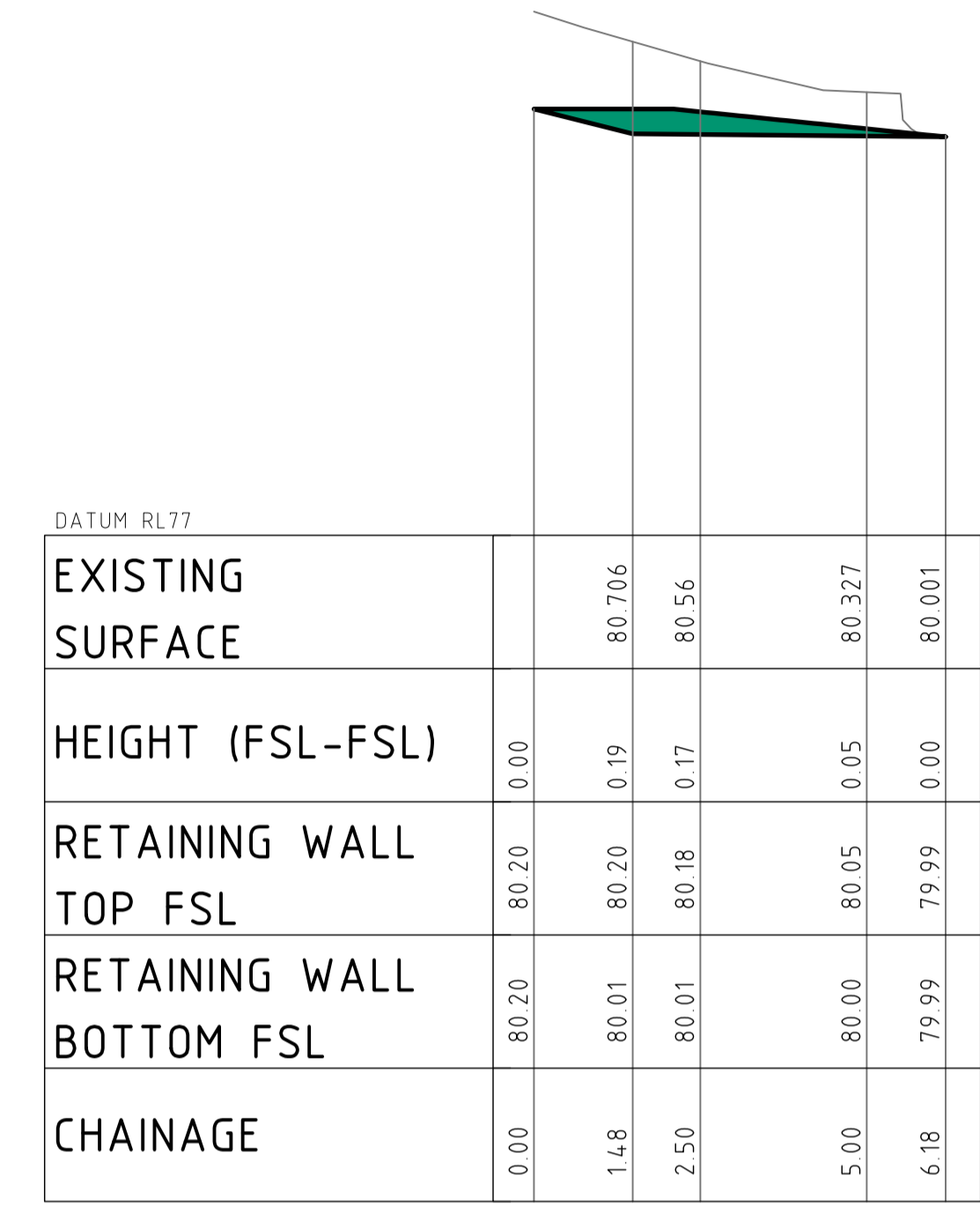


SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW04 RETAINING WALL

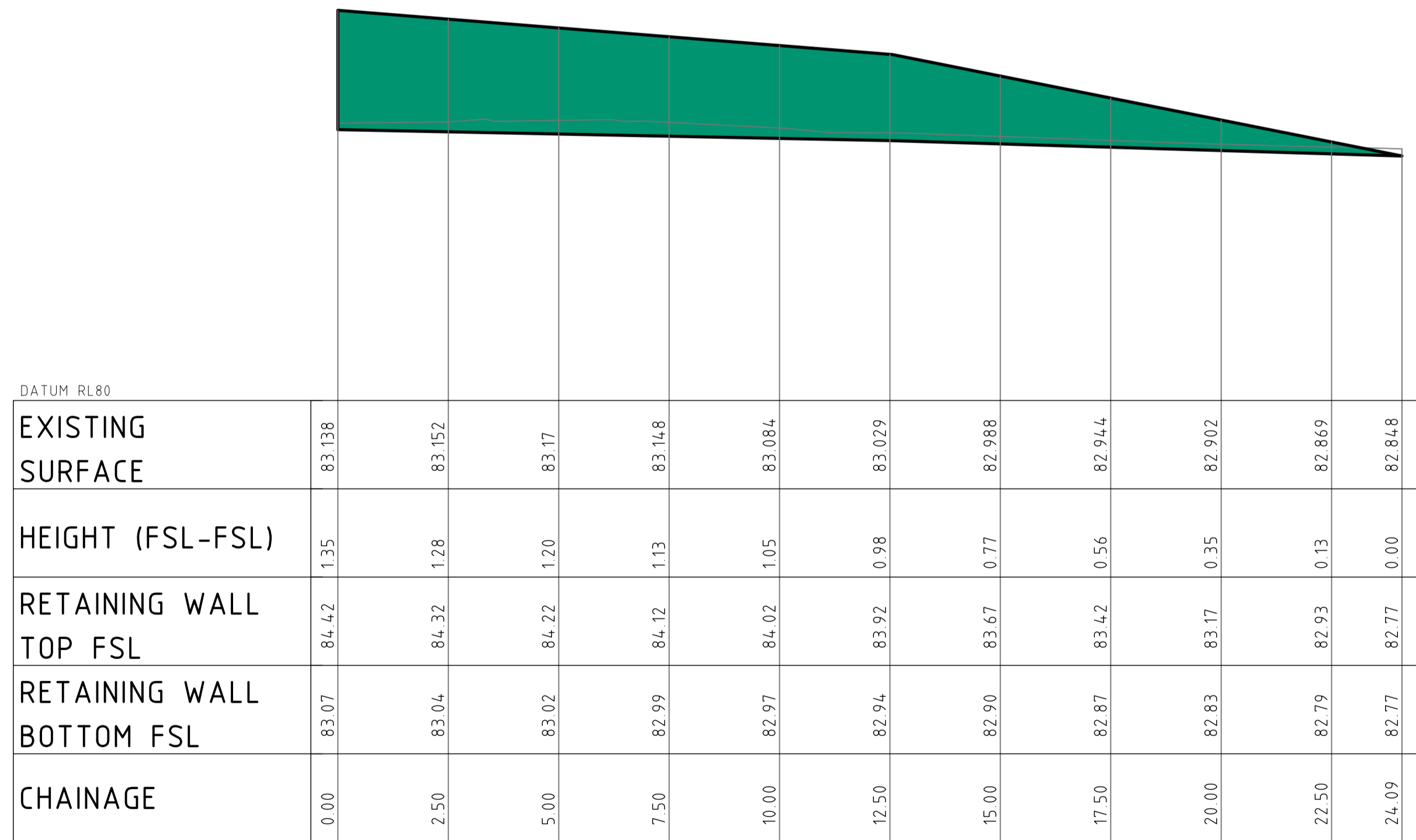
**LEGEND**

DENOTES PROPOSED WALL 'FACE' AREA.



SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW05 RETAINING WALL



SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW03 RETAINING WALL

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**


DRAWING TITLE  
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**RETAINING WALL ELEVATIONS - SHEET 02**

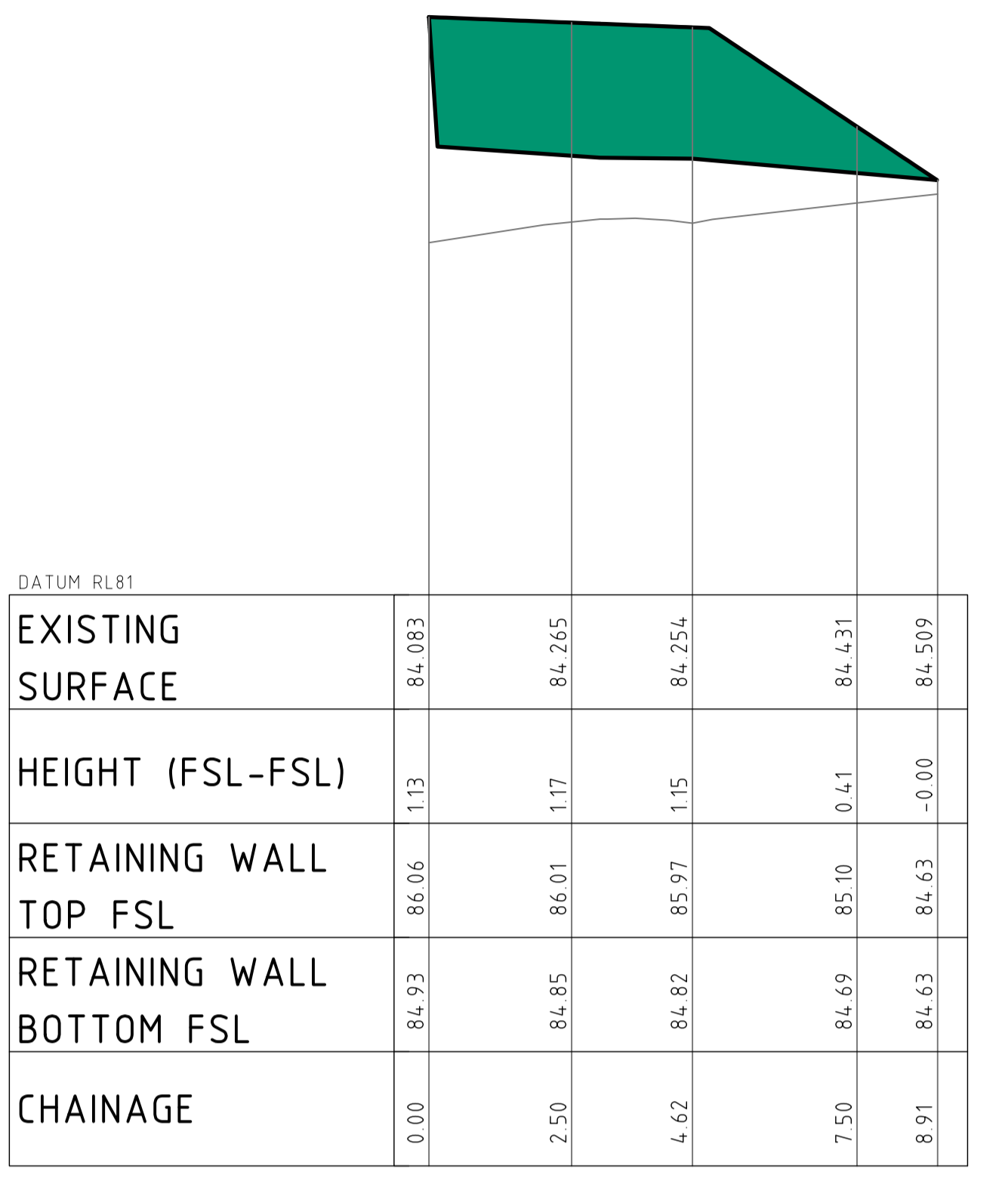
JOB NUMBER	
<b>212798</b>	
DRAWING NUMBER	REVISION
<b>C36102</b>	<b>06</b>
DRAWING SHEET SIZE = A1	

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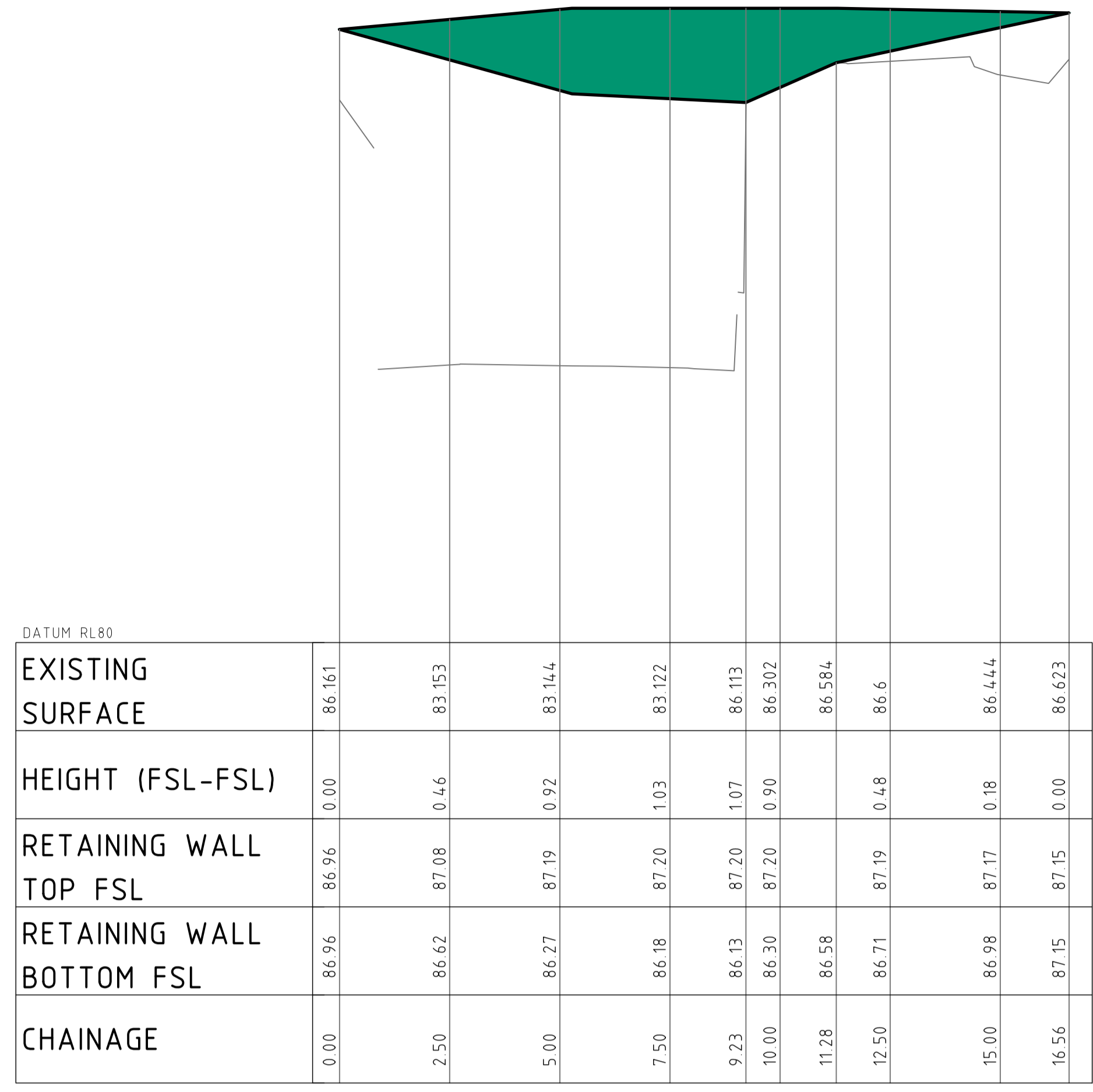
 DENOTES PROPOSED WALL 'FACE' AREA.



DATUM RL81

EXISTING SURFACE	84.083		84.265	84.254	84.431	84.509
HEIGHT (FSL-FSL)	1.13		1.17	1.15	0.41	-0.00
RETAINING WALL TOP FSL	86.06		86.01	85.97	85.10	84.63
RETAINING WALL BOTTOM FSL	84.93		84.85	84.82	84.69	84.63
CHAINAGE	0.00	2.50	4.62	7.50	8.91	

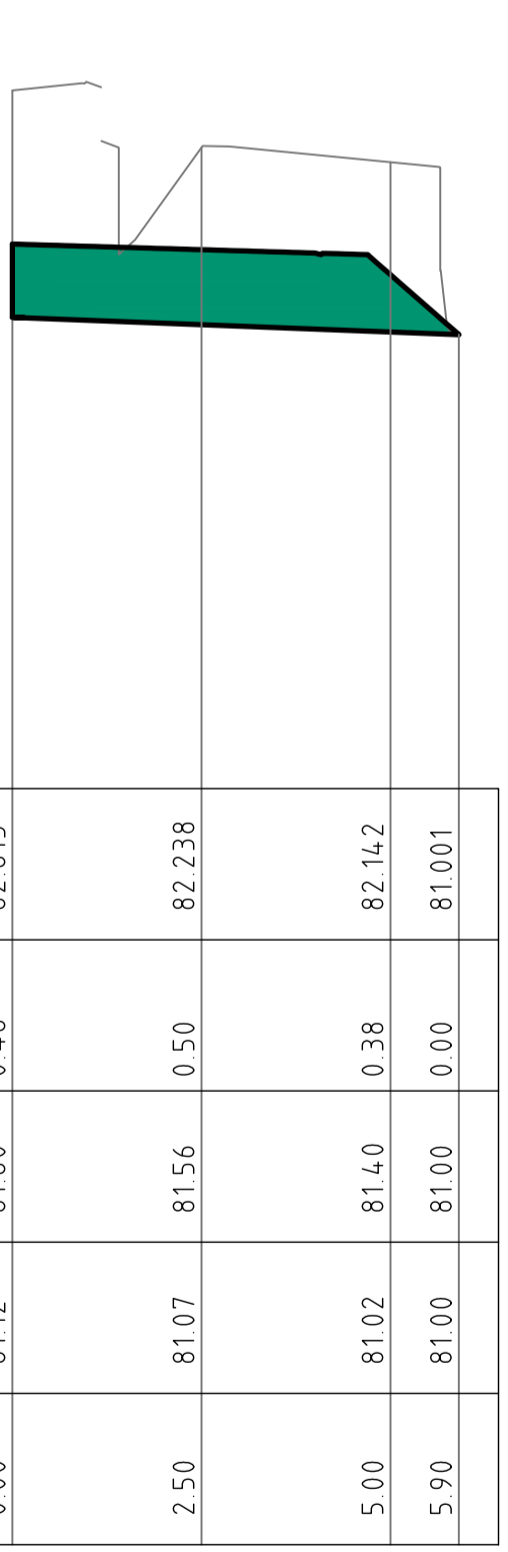
SCALE 1:100 HORIZ 1:50 VERT  
ELEVATION OF RW10 RETAINING WALL



DATUM RL80

EXISTING SURFACE	86.161		83.153	83.144	83.122	86.113	86.302	86.584	86.6	86.444	86.623
HEIGHT (FSL-FSL)	0.00		0.46	0.92	1.03	1.07	0.90		0.48	0.18	0.00
RETAINING WALL TOP FSL	86.96		87.08	87.19	87.20	87.20	87.20		87.19	87.17	87.15
RETAINING WALL BOTTOM FSL	86.96		86.62	86.27	86.18	86.13	86.30	86.58	86.71	86.98	87.15
CHAINAGE	0.00	2.50	5.00	7.50	9.23	10.00	11.28	12.50	15.00	16.56	

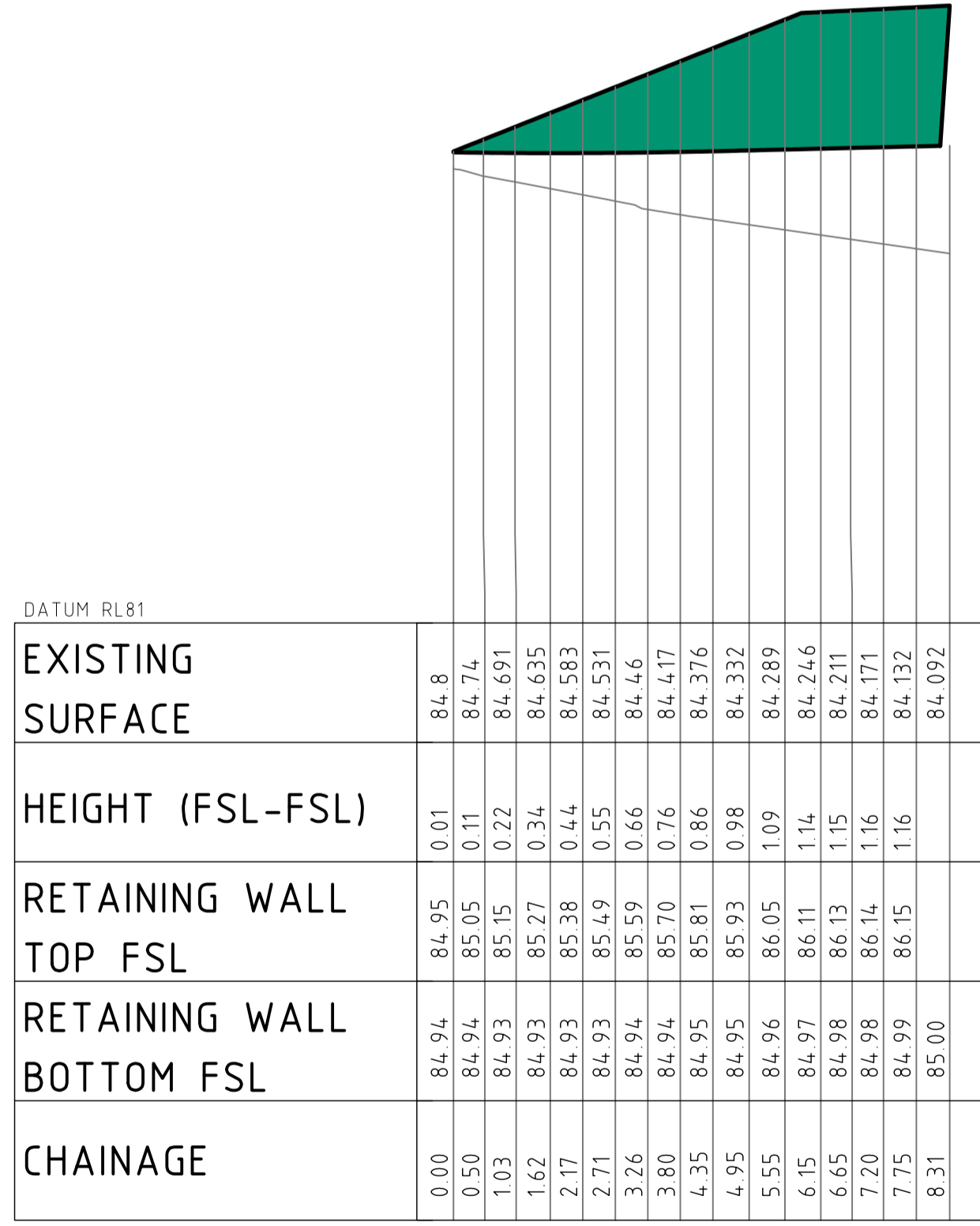
SCALE 1:100 HORIZ 1:50 VERT  
ELEVATION OF RW11 RETAINING WALL



DATUM RL78

EXISTING SURFACE	82.615		82.238	82.142	81.001
HEIGHT (FSL-FSL)	0.48		0.50	0.38	0.00
RETAINING WALL TOP FSL	81.60		81.56	81.40	81.00
RETAINING WALL BOTTOM FSL	81.12		81.07	81.00	81.00
CHAINAGE	0.00	2.50	5.00	5.90	

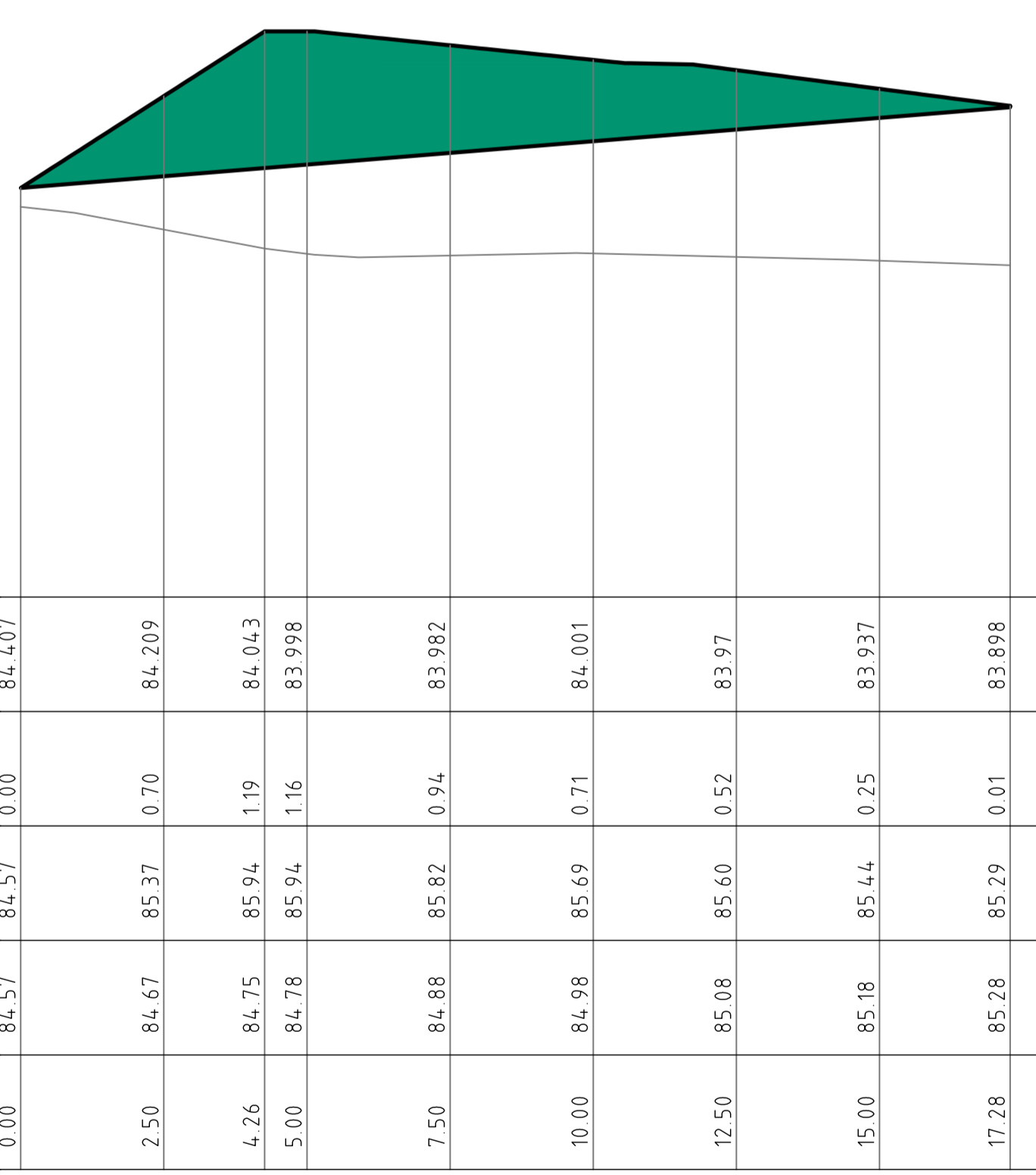
SCALE 1:100 HORIZ 1:50 VERT  
ELEVATION OF RW06 RETAINING WALL



DATUM RL81

EXISTING SURFACE	84.8	84.74	84.691	84.635	84.531	84.46	84.417	84.376	84.332	84.289	84.246	84.211	84.171	84.132	84.092
HEIGHT (FSL-FSL)	0.01	0.11	0.22	0.34	0.44	0.55	0.66	0.76	0.86	0.98	1.09	1.14	1.15	1.16	1.16
RETAINING WALL TOP FSL	84.95	85.05	85.15	85.27	85.38	85.49	85.59	85.70	85.81	85.93	86.05	86.11	86.13	86.14	86.15
RETAINING WALL BOTTOM FSL	84.94	84.94	84.93	84.93	84.93	84.94	84.94	84.95	84.95	84.96	84.97	84.98	84.98	84.99	85.00
CHAINAGE	0.00	0.50	1.03	1.62	2.17	2.71	3.26	3.80	4.35	4.95	5.55	6.15	6.65	7.20	7.75

SCALE 1:100 HORIZ 1:50 VERT  
ELEVATION OF RW07 RETAINING WALL



DATUM RL81

EXISTING SURFACE	84.407		84.209	84.043	83.998	83.982	84.001	83.97	83.937	83.898
HEIGHT (FSL-FSL)	0.00		0.70	1.19	1.16	0.94	0.71	0.52	0.25	0.01
RETAINING WALL TOP FSL	84.57		85.37	85.94	85.94	85.82	85.69	85.60	85.44	85.29
RETAINING WALL BOTTOM FSL	84.57		84.67	84.78	84.78	84.88	84.98	85.08	85.18	85.28
CHAINAGE	0.00	2.50	4.26	5.00	7.50	10.00	12.50	15.00	17.28	

SCALE 1:100 HORIZ 1:50 VERT  
ELEVATION OF RW08 RETAINING WALL

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

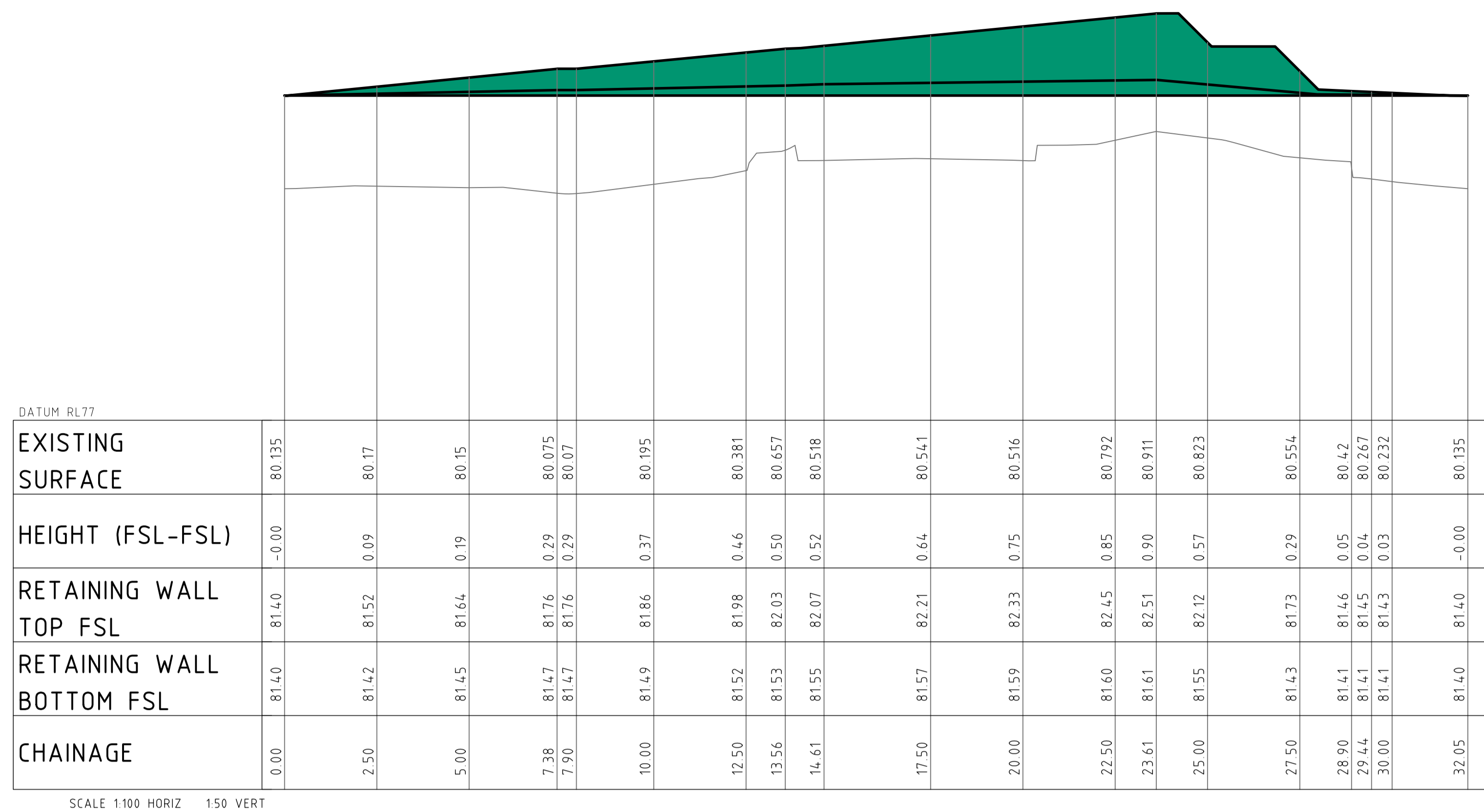
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**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ELEVATIONS - SHEET 03**

JOB NUMBER  
**212798**

DRAWING NUMBER <b>C36103</b>	REVISION <b>06</b>
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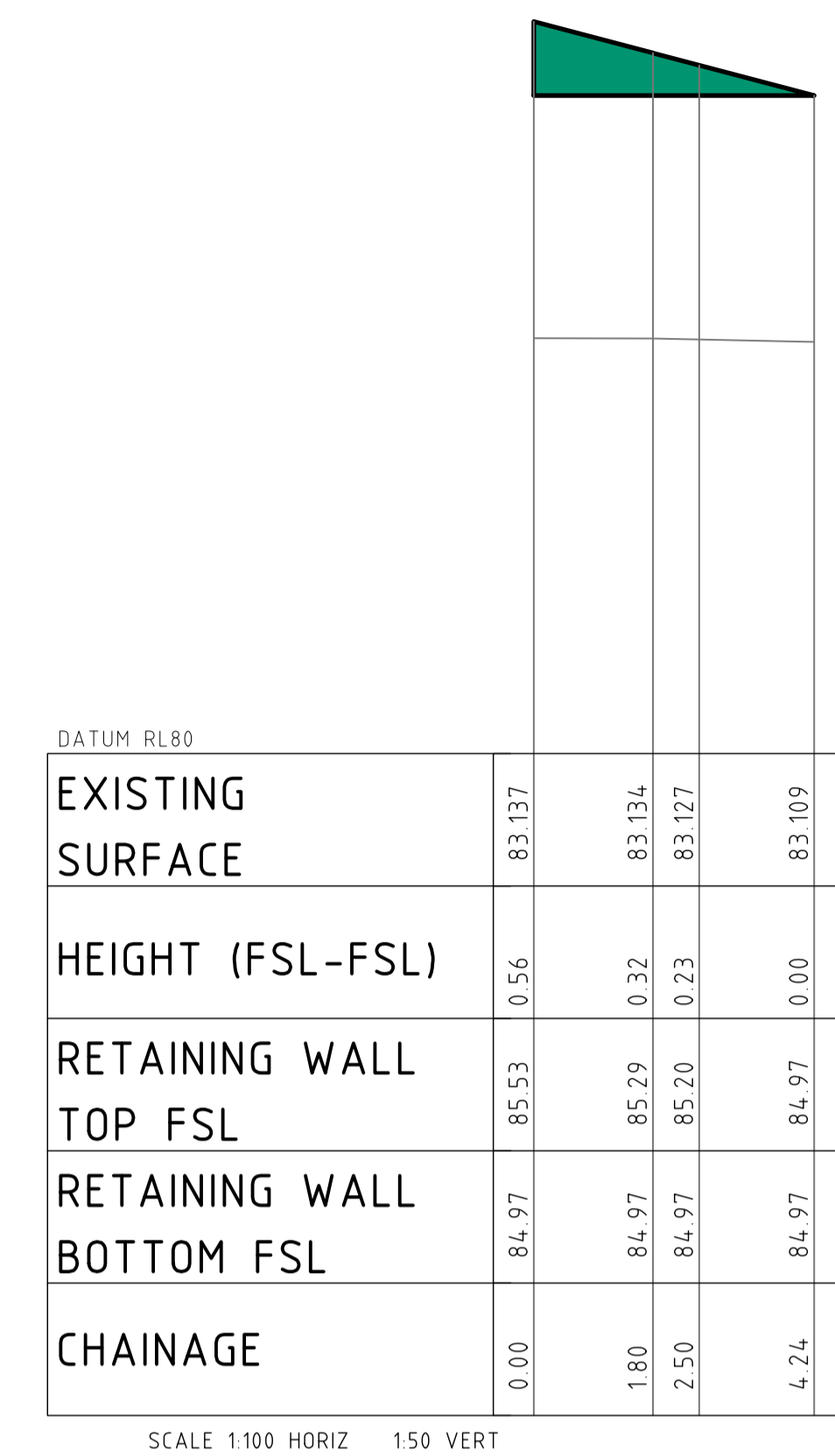
DRAWING SHEET SIZE = A1

DRAWN: AFALLINS DESIGNED: SFORD JOB MANAGER: S. FORD VERIFIER:



SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW16 RETAINING WALL

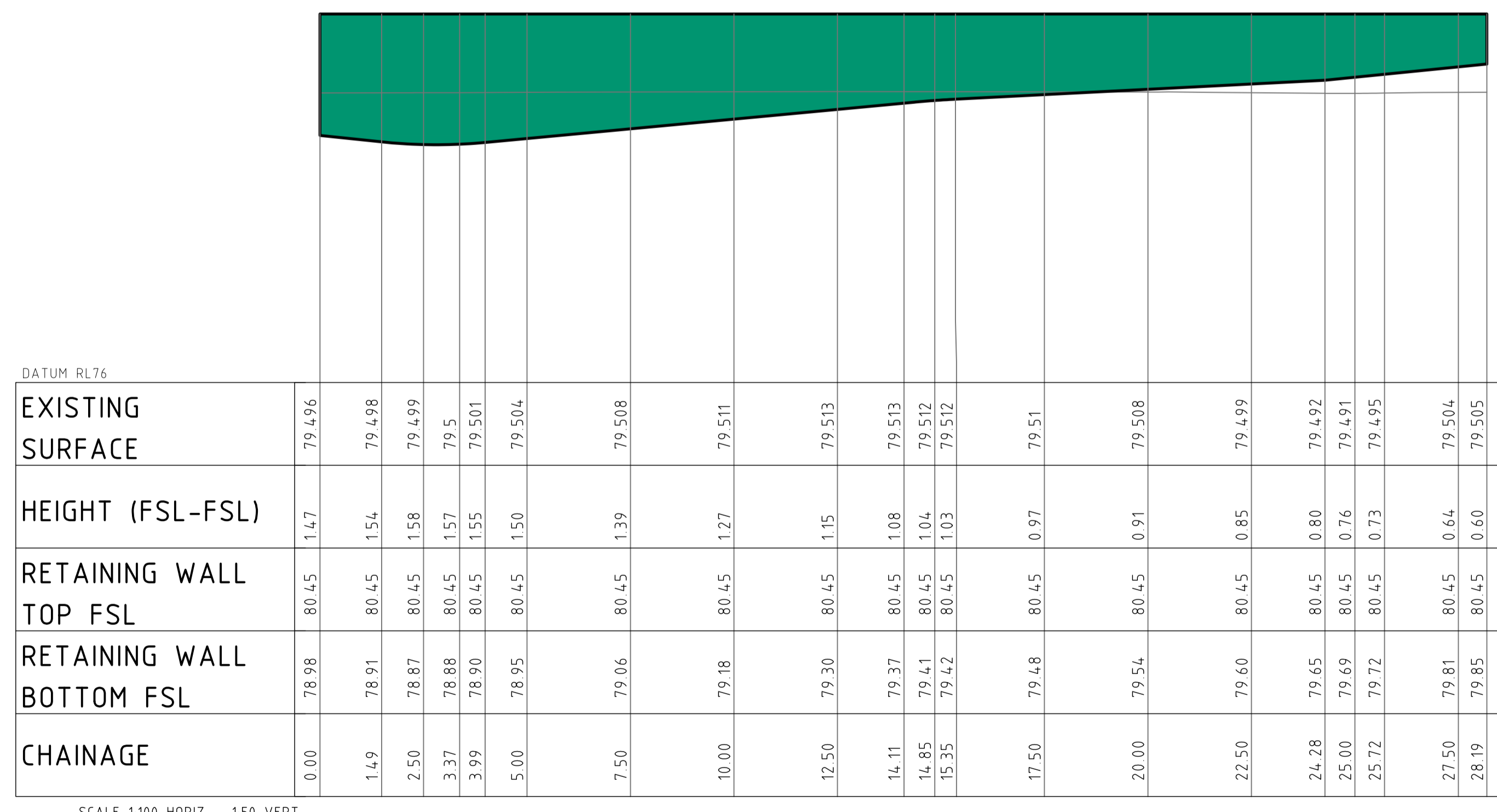


SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF BOW18 RETAINING WALL

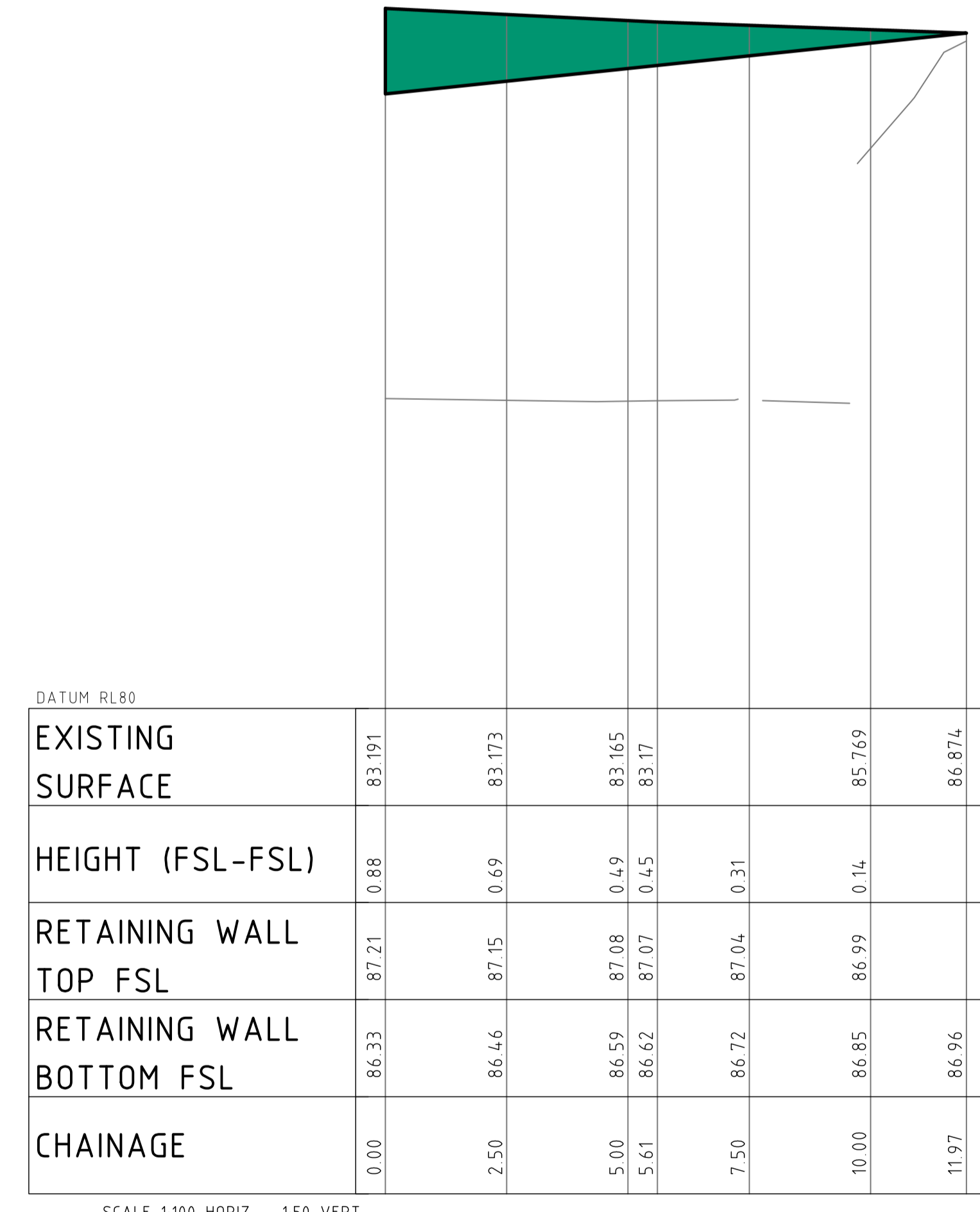
**LEGEND**

DENOTES PROPOSED WALL 'FACE' AREA.



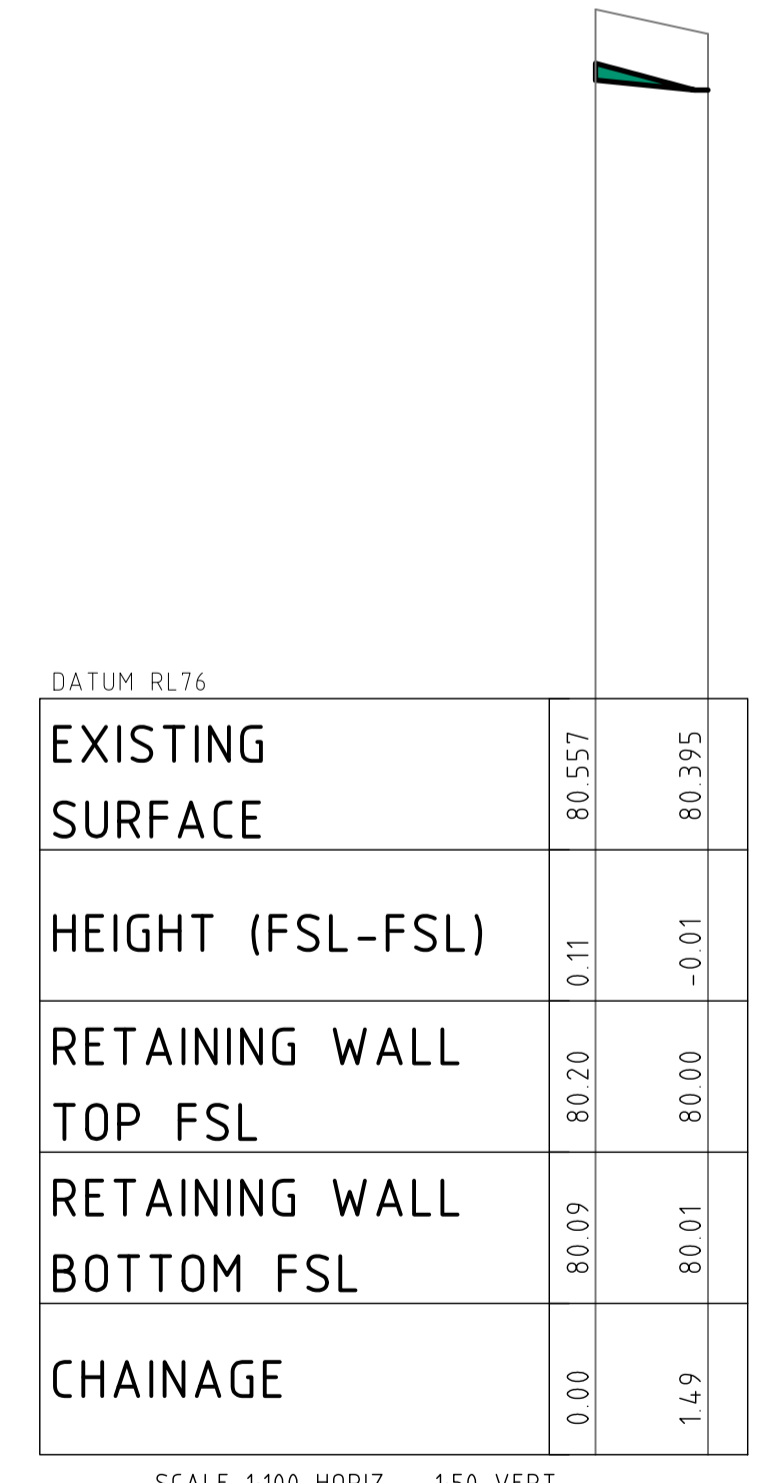
SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW13 RETAINING WALL



SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW15 RETAINING WALL



SCALE 1:100 HORIZ 1:50 VERT

ELEVATION OF RW17 RETAINING WALL

**NOT FOR CONSTRUCTION**

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04	ISSUED FOR INFORMATION	VC		SF	19.03.25
05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

CLIENT  
**BEECROFT PROPERTY DEVELOPMENT PTY LTD**

ARCHITECT  
**TURNER**

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SCALE 1:100 @ A1  
SCALE 1:50 @ A1

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**RETAINING WALL ELEVATIONS - SHEET 04**

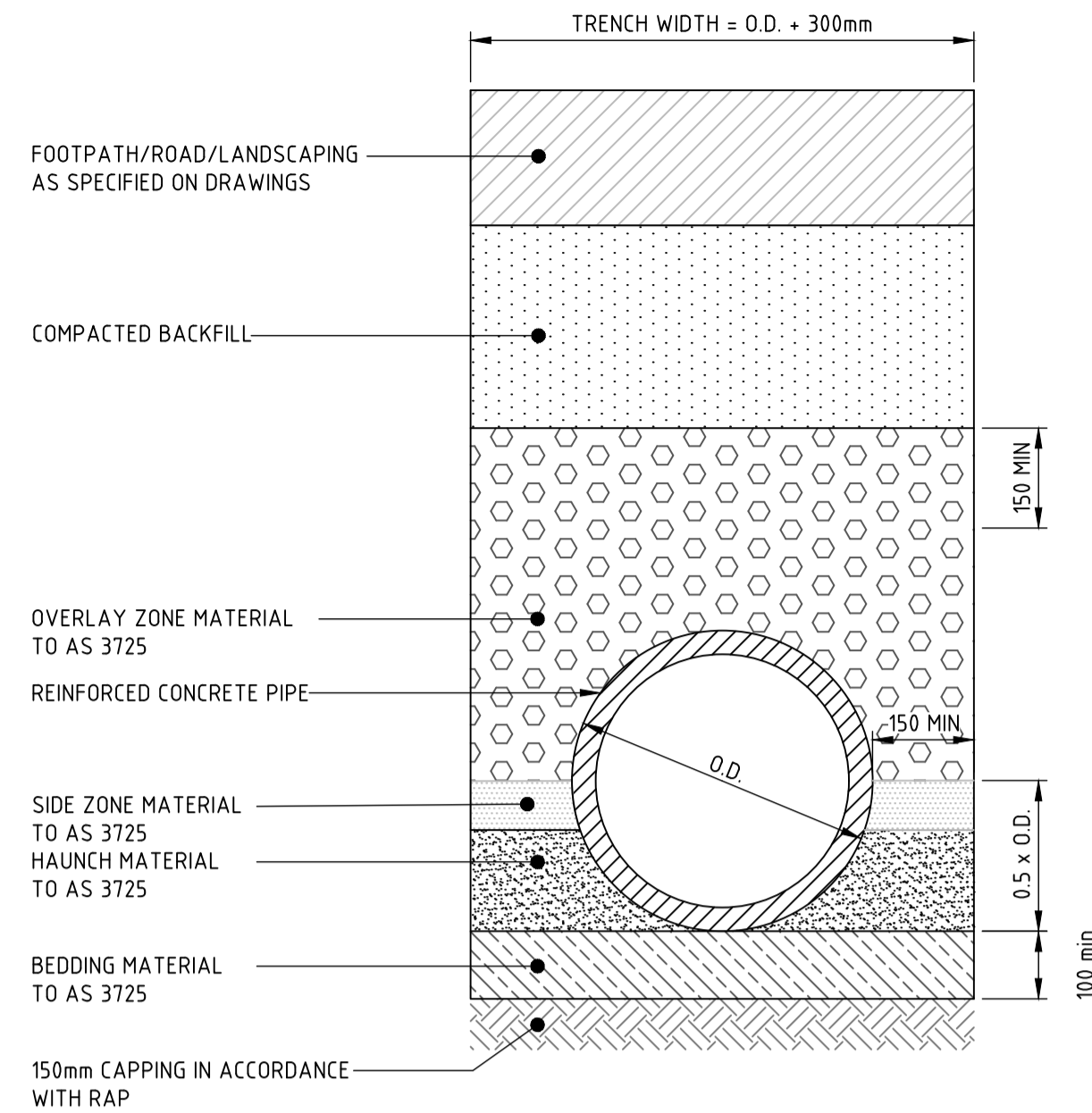
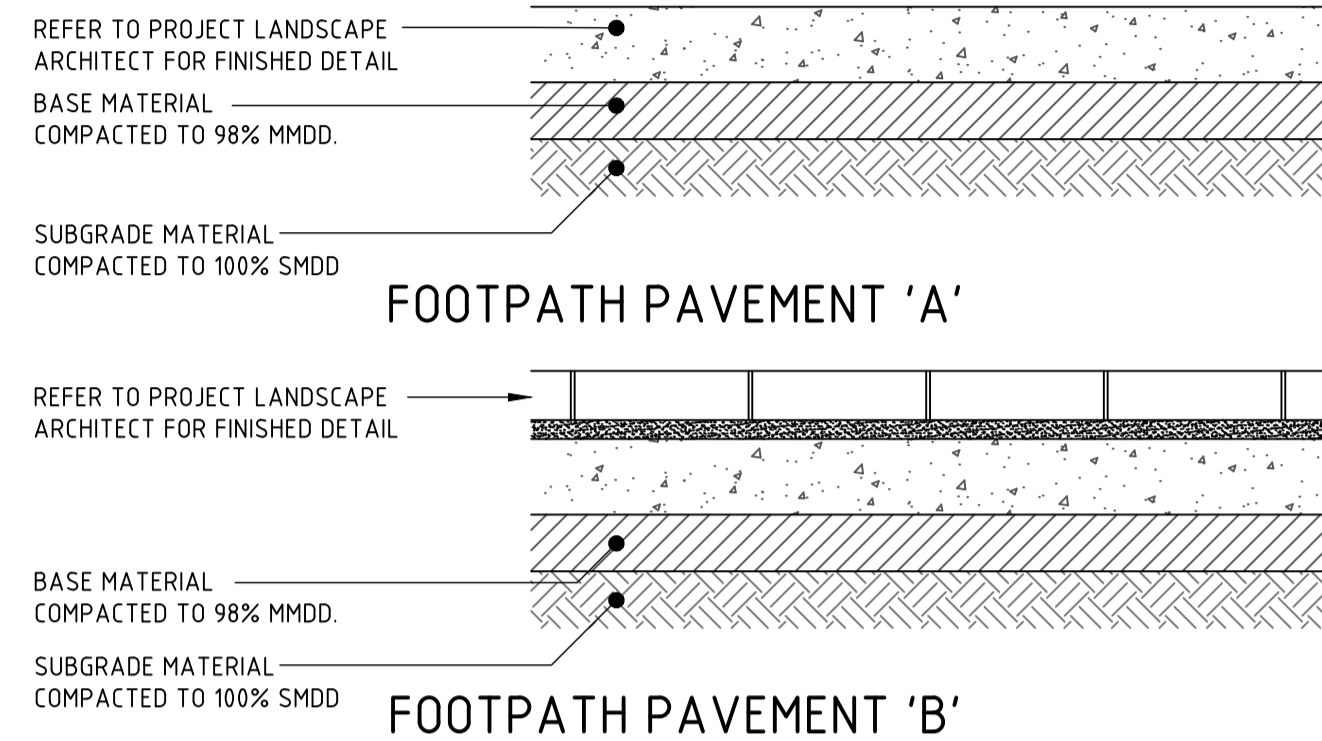
JOB NUMBER  
**212798**

DRAWING NUMBER  
**C36104**

REVISION  
**06**

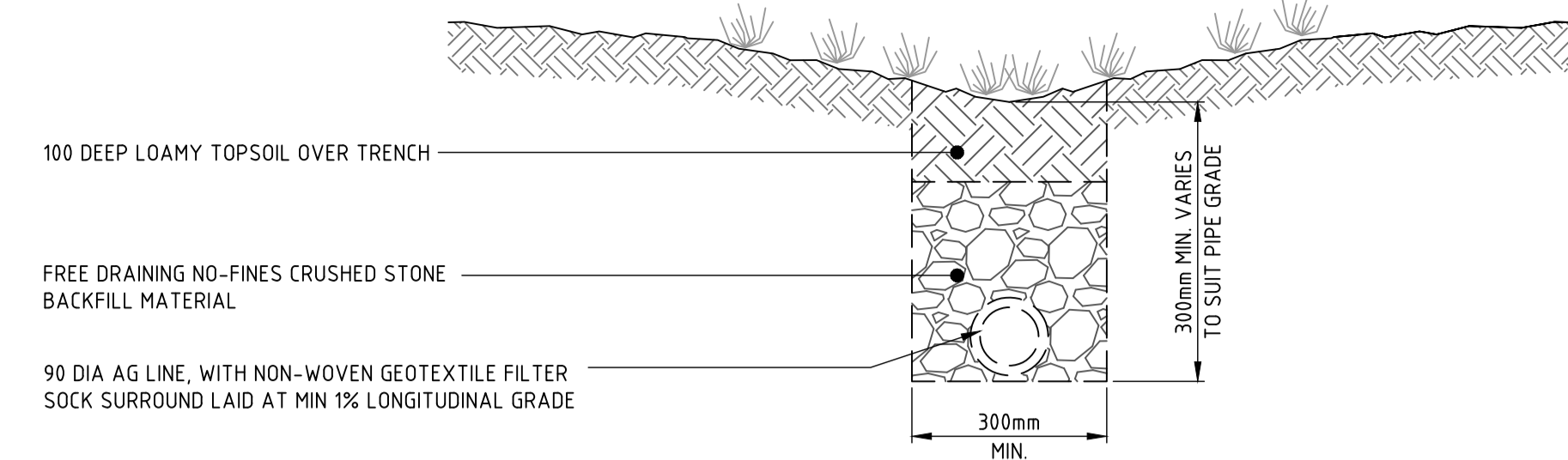
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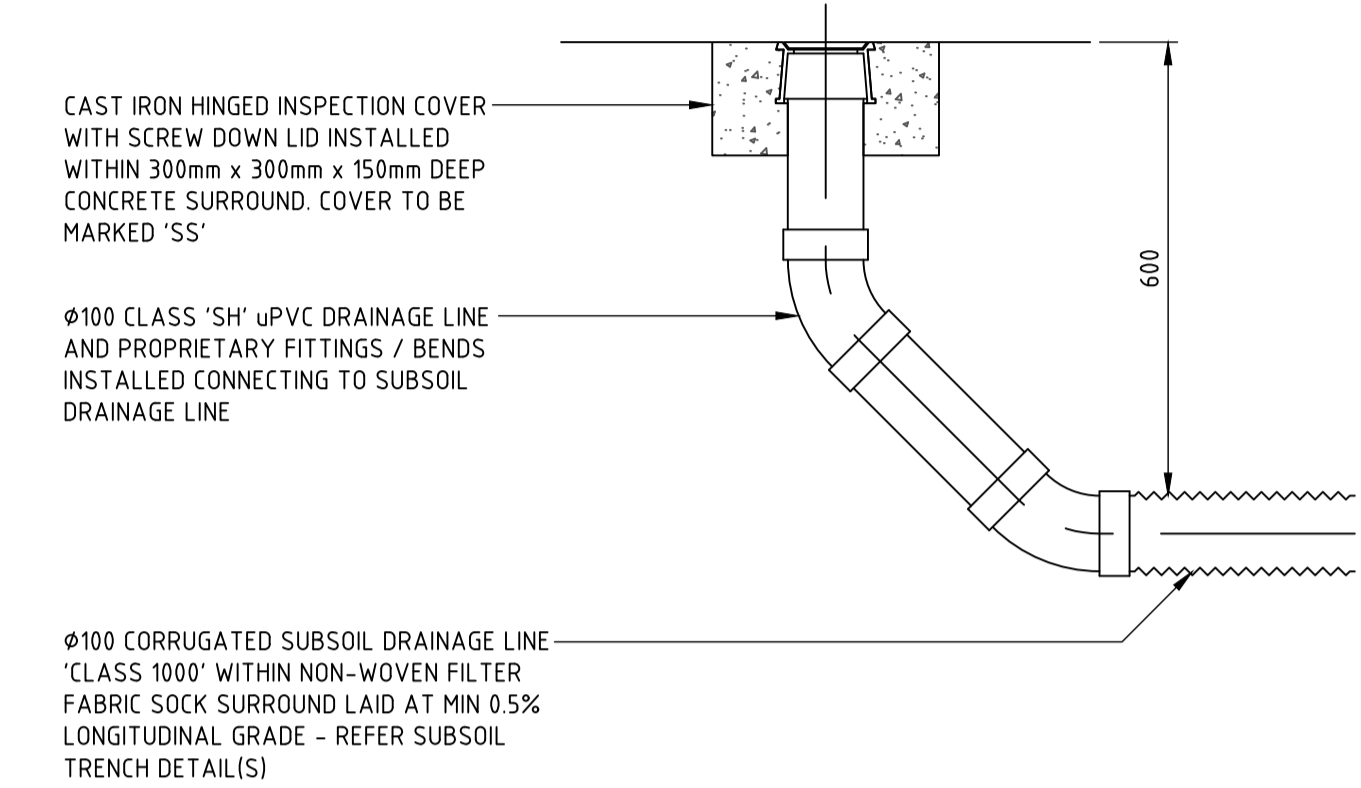
**TYPICAL PIPE TRENCH - GENERAL AREAS (REINFORCED CONCRETE PIPE)**

- TRENCH WIDTH MAY NEED TO BE INCREASED SUBJECT TO ACHIEVING COMPACTION. ENSURE MINIMUM 300mm CLEARANCE BETWEEN, WHEN USING MULTIPLE PIPES TO ACHIEVE ADEQUATE COMPACTION.
- MINIMUM PIPE COVER NOT UNDER ROADS TO BE 300mm U.O.
- THE CONTRACTOR SHALL ENSURE THAT SHORING OF TRENCHES IS INSTALLED AS REQUIRED BY STATUTORY REQUIREMENTS.
- ENSURE BACKFILLING COMPACTION MEETS THE FOLLOWING STANDARDS;
  - TRENCHES UNDER PAVED AREAS / BUILDING - 100% SMDD
  - TRENCHES NOT UNDER PAVEMENTS - 95% SMDD



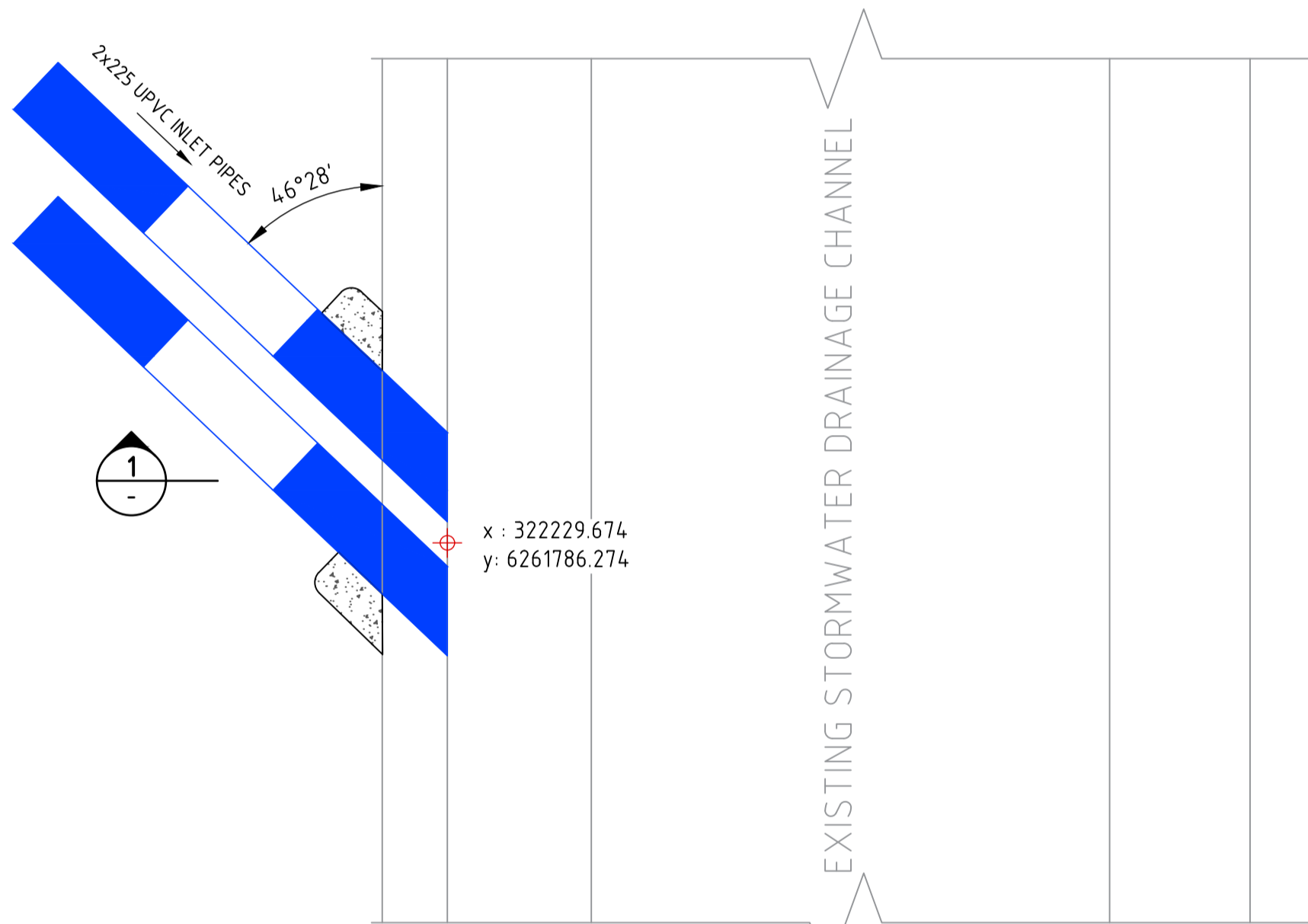
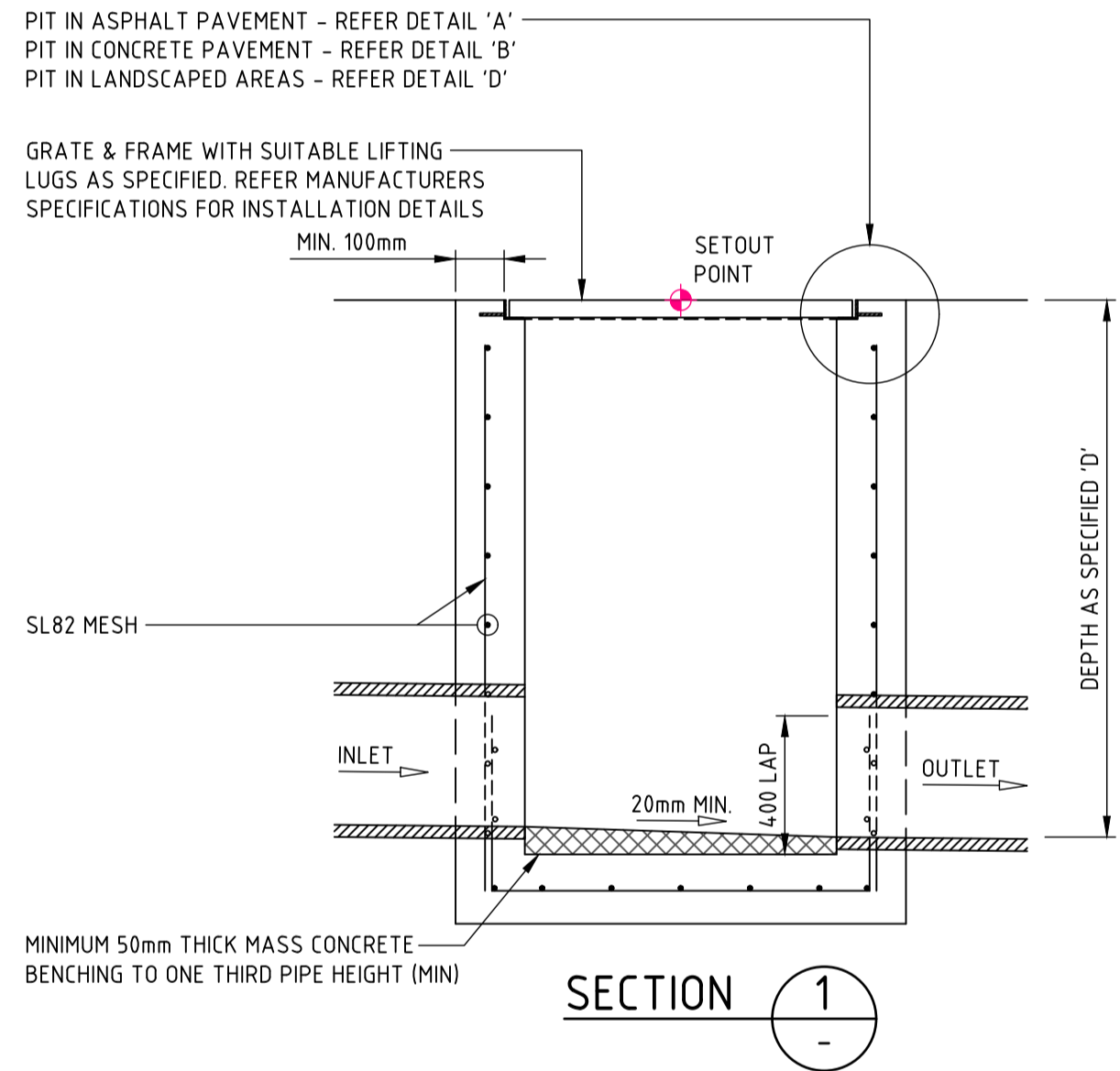
**TYPICAL SWALE DETAIL (1000 WIDE) WITH SUBSOIL DRAIN**

NOTE: USED SEALED uPVC PIPE WHERE SUBSOIL DRAINAGE LINES CROSS BENEATH PAVEMENT AREAS



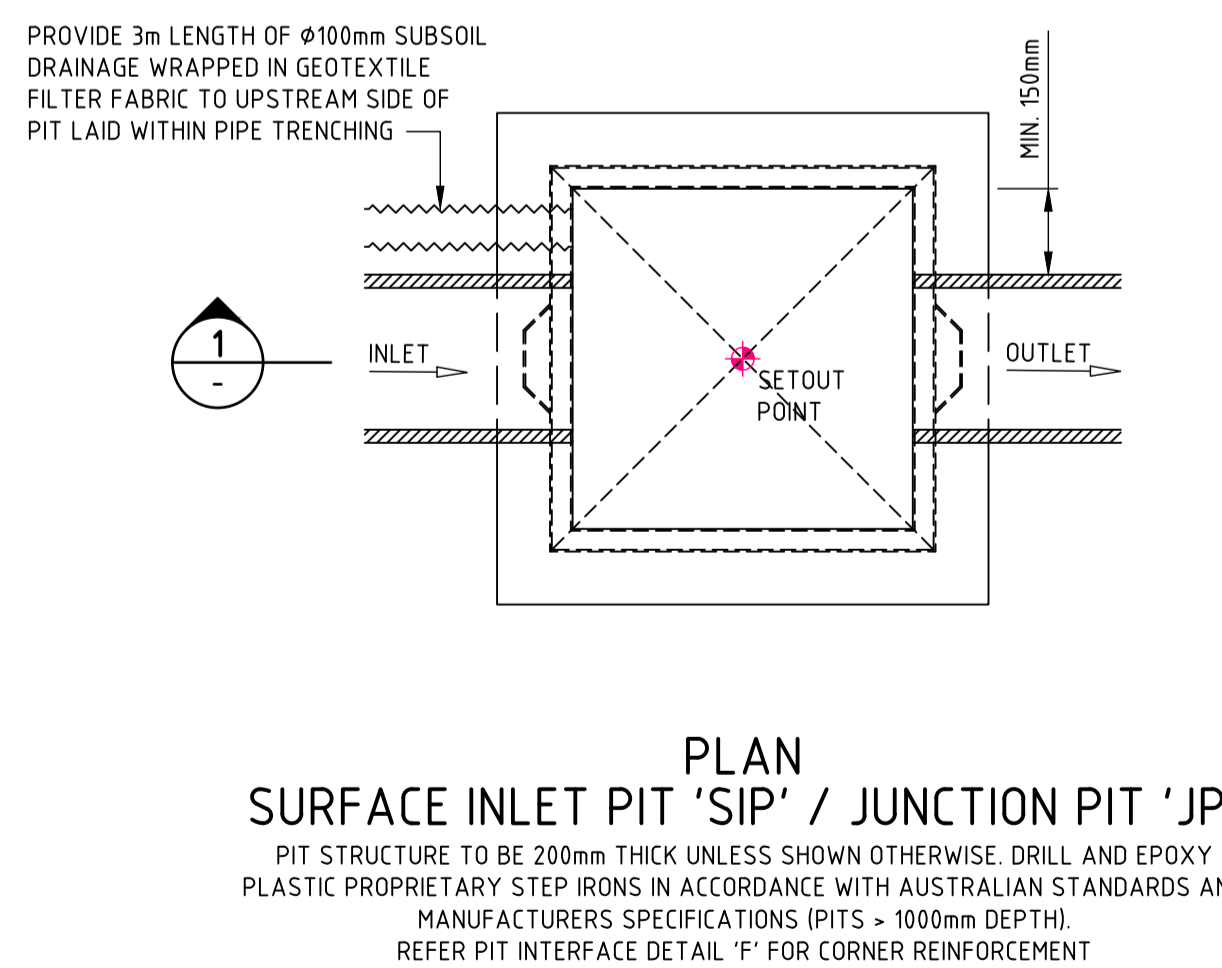
**SUBSOIL DRAINAGE CLEAROUT 'CO'**

CLEAROUT TO BE INSTALLED AT UPSTREAM POINTS ALONG SUBSOIL DRAINAGE LINES @ MAX 30m CENTRES AND DISCHARGING TO DRAINAGE STRUCTURES @ MAX 60m CENTRES.



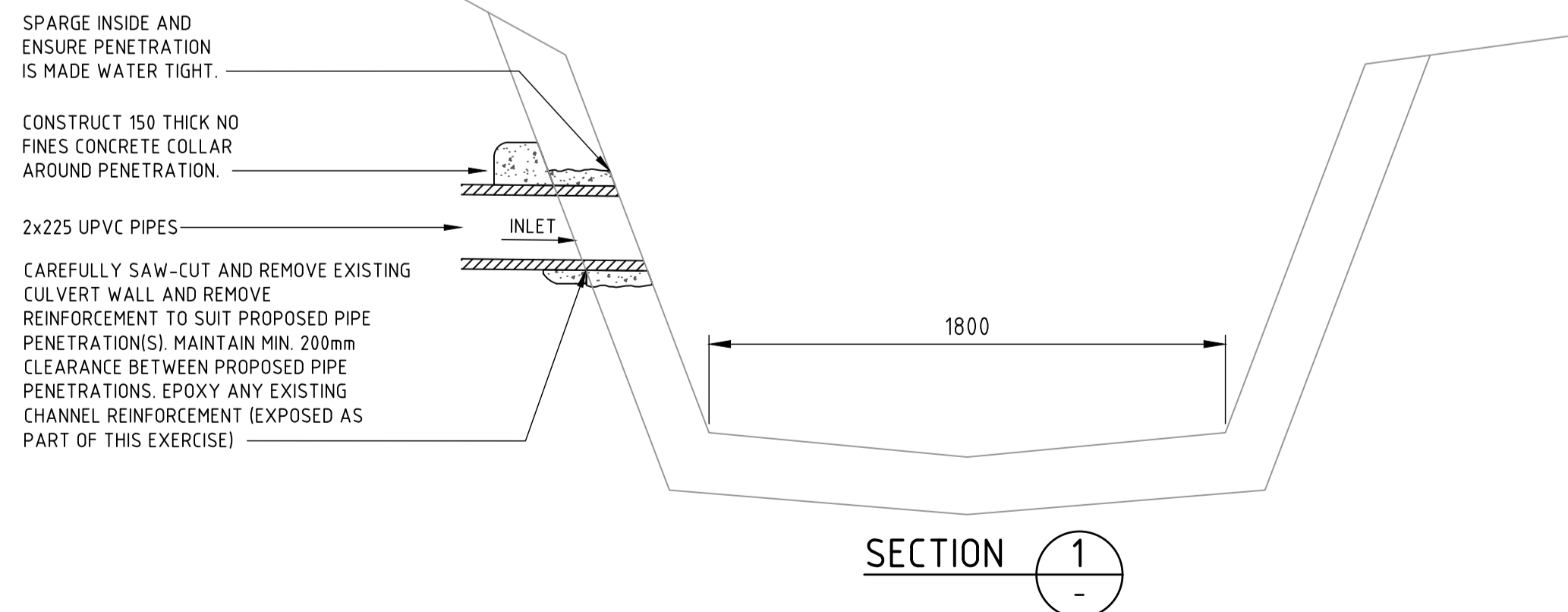
**DRAINAGE CHANNEL - NEW PIPE CONNECTION PLAN**

THE CONTRACTOR SHALL REQUEST THE SUPERINTENDENT INSPECT THE CONDITION OF THE EXISTING CHANNEL PRIOR TO MODIFICATION. IF THE EXISTING CHANNEL IS IN POOR CONDITION, THE CONTRACTOR SHALL REMOVE AND RECONSTRUCT A NEW SECTION OF THE CHANNEL IN ACCORDANCE WITH SUPERINTENDENTS INSTRUCTIONS.

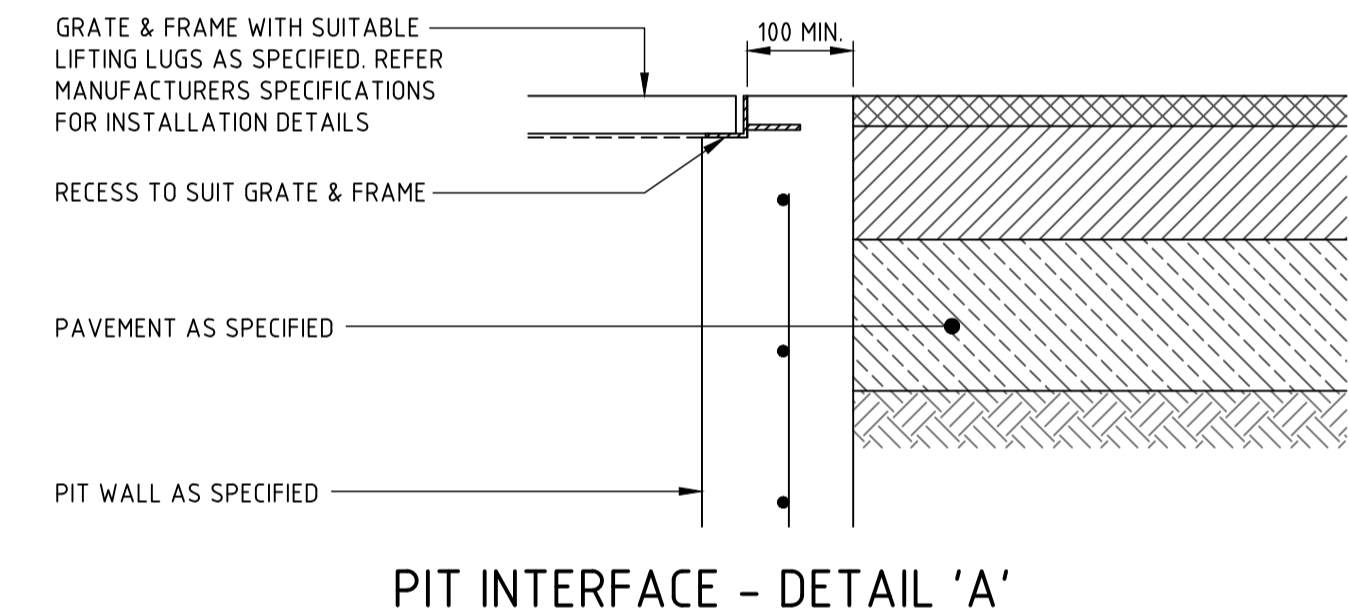


**PLAN SURFACE INLET PIT 'SIP' / JUNCTION PIT 'JP'**

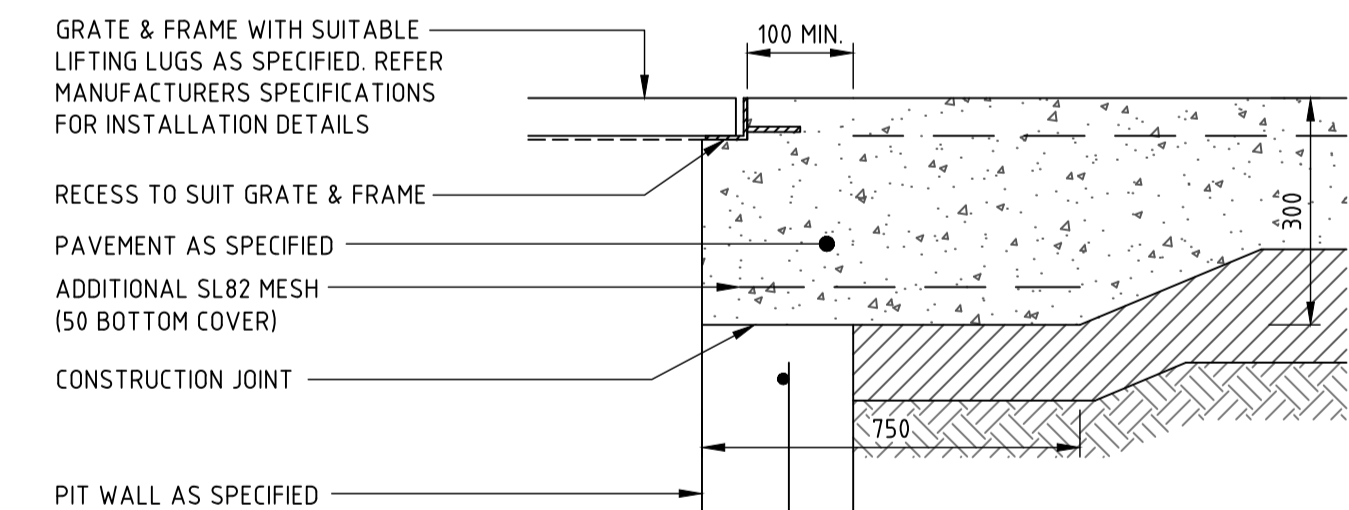
PIT STRUCTURE TO BE 200mm THICK UNLESS SHOWN OTHERWISE. DRILL AND EPOXY PLASTIC PROPRIETARY STEP IRONS IN ACCORDANCE WITH AUSTRALIAN STANDARDS AND MANUFACTURERS SPECIFICATIONS (PITS > 1000mm DEPTH). REFER PIT INTERFACE DETAIL 'F' FOR CORNER REINFORCEMENT



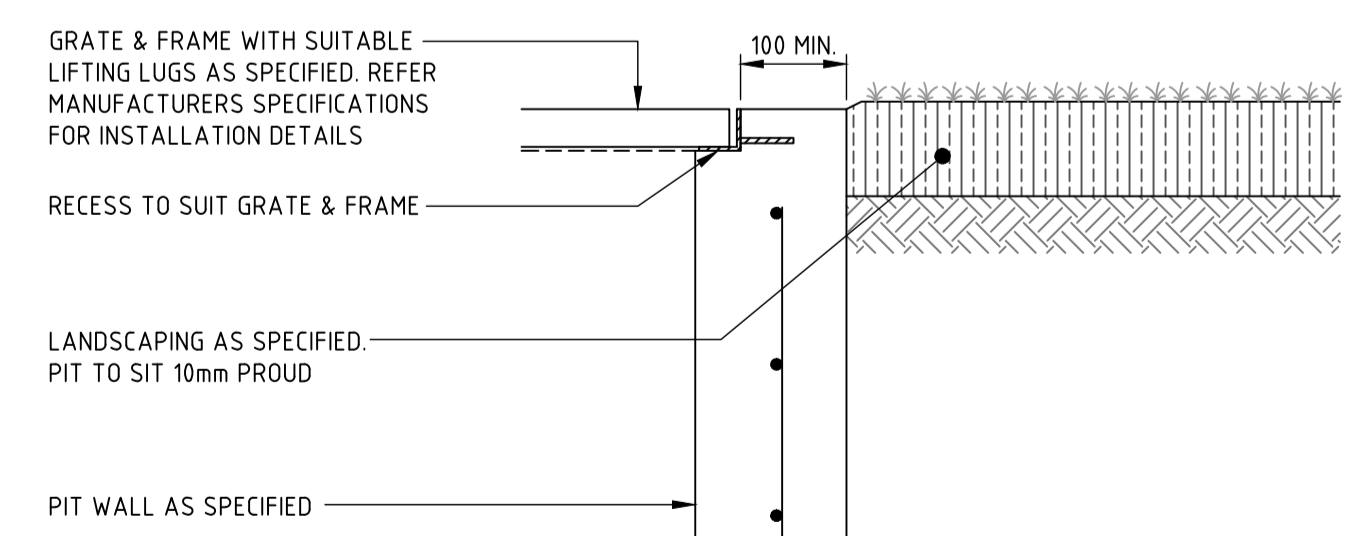
**SECTION 1**



**PIT INTERFACE - DETAIL 'A'**



**PIT INTERFACE - DETAIL 'B'**



**PIT INTERFACE - DETAIL 'D'**

**NOT FOR CONSTRUCTION**

VERIFIER: S.FORD  
JOB MANAGER: S.FORD  
DESIGNED: S.FORD  
DRAWN: A.FALLINS

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
01	ISSUED FOR INFORMATION	AF		SF	10.12.24
02	ISSUED FOR INFORMATION	AF		SF	20.12.24
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05	ISSUED FOR INFORMATION	ME		SF	14.07.25
06	ISSUED FOR INFORMATION	AF		SF	30.09.25

CLIENT	<b>BEECROFT PROPERTY DEVELOPMENT PTY LTD</b>
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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

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ARCHITECT	ALL DIMENSIONS TO BE VERIFIED ON SITE BEFORE COMMENCING WORK. NORTHROP ACCEPTS NO RESPONSIBILITY FOR THE USABILITY, COMPLETENESS OR SCALE OF DRAWINGS TRANSFERRED ELECTRONICALLY. THIS DRAWING MAY HAVE BEEN PREPARED USING COLOUR, AND MAY BE INCOMPLETE IF COPIED TO BLACK & WHITE.
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PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

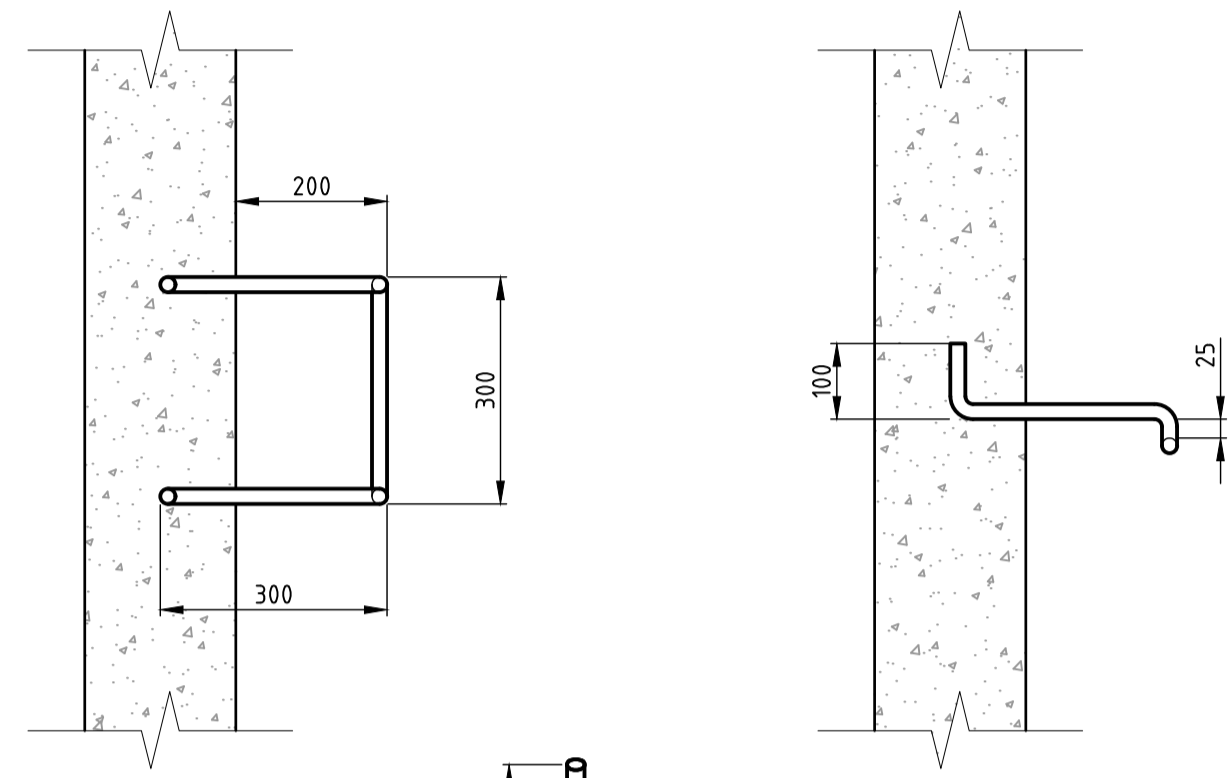
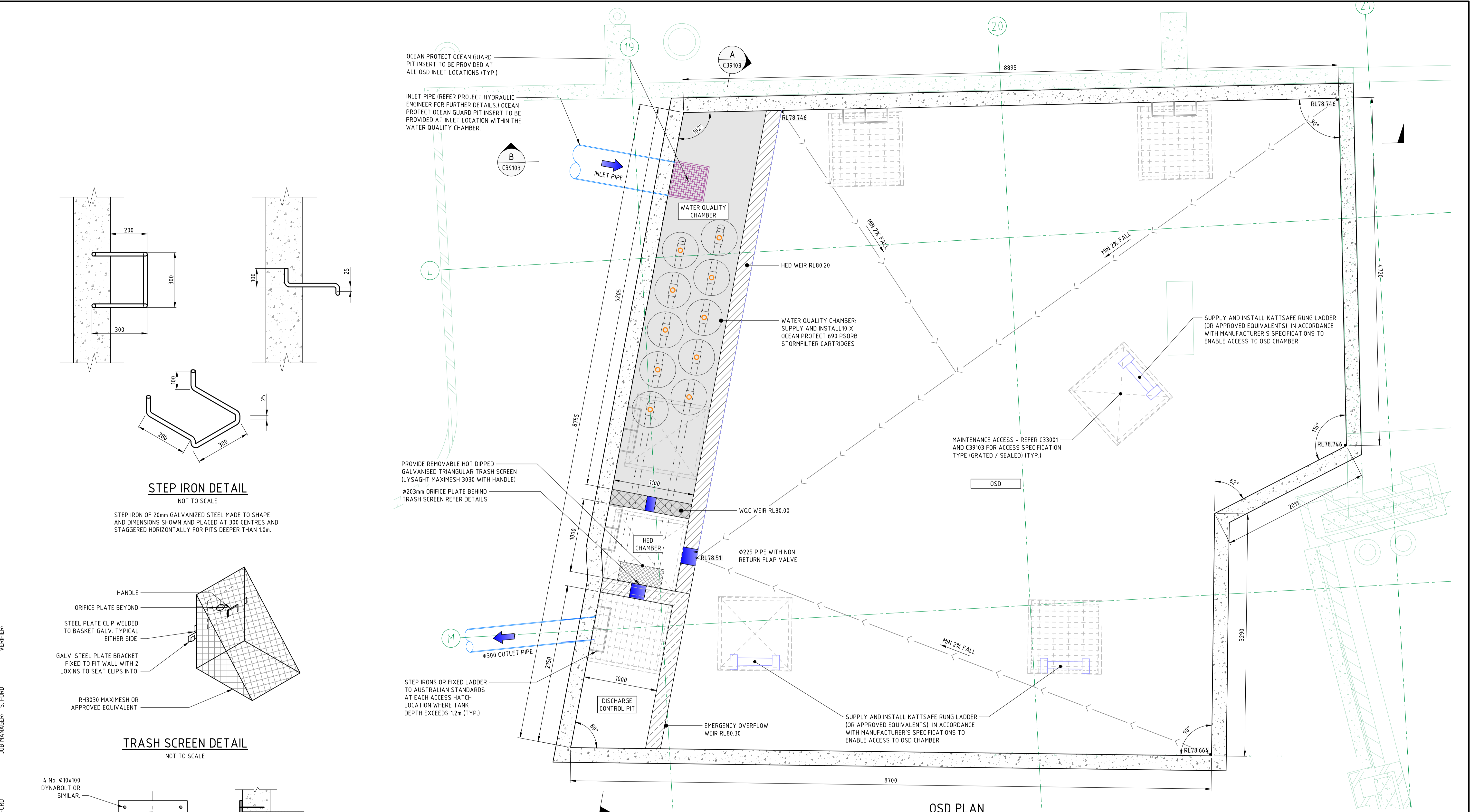
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PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

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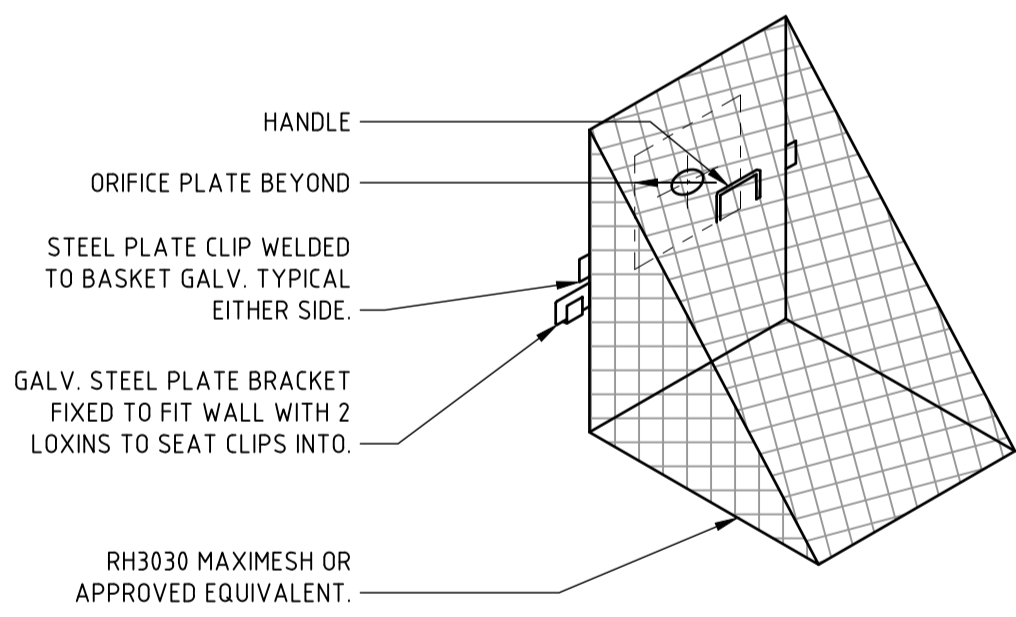
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ARCHITECT	<b>TURNER</b>
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PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

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PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	

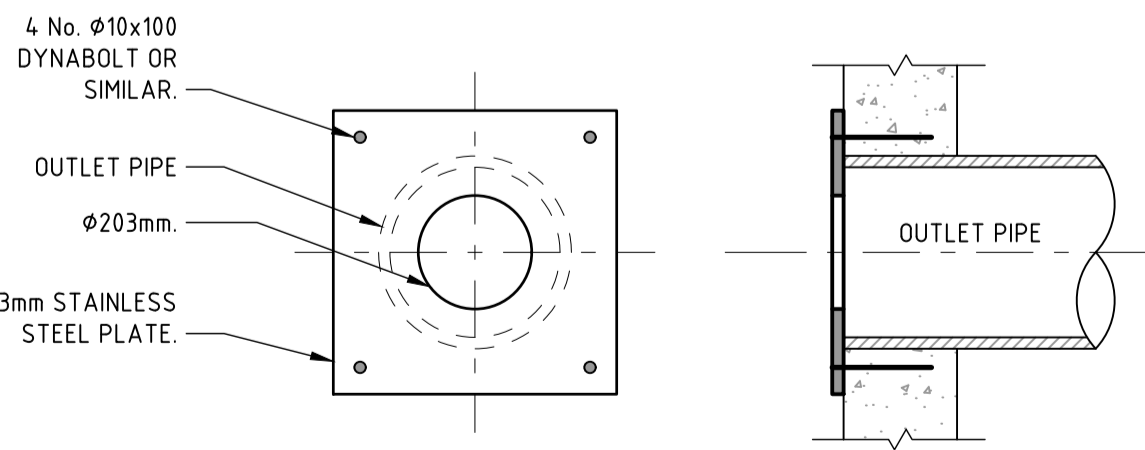
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ARCHITECT	<b>TURNER</b>
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PROJECT	<b>242-244 BEECROFT ROAD, EPPING</b>
PROJECT	<b>INTERNAL WORKS</b>
DRAWING TITLE	<b>CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION</b>
DRAWING TITLE	<b>DETAILS - SHEET 01</b>
JOB NUMBER	<b>212798</b>
DRAWING NUMBER	<b>C39101</b>
REVISION	<b>06</b>
DRAWING SHEET SIZE = A1	



STEP IRON OF 20mm GALVANIZED STEEL MADE TO SHAPE AND DIMENSIONS SHOWN AND PLACED AT 300 CENTRES AND STAGGERED HORIZONTALLY FOR PITS DEEPER THAN 1.0m.



**TRASH SCREEN DETAIL**  
NOT TO SCALE



**ORIFICE PLATE DETAIL**  
NOT TO SCALE

VERIFIER: S.FORD  
JOB MANAGER: S.FORD  
DESIGNED: S.FORD  
DRAWN: A.FALLINS

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05	ISSUED FOR INFORMATION	ME	SF		14.07.25
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CLIENT  
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ARCHITECT  
**TURNER**

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SCALE 1:25@A1

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**DETAILS - SHEET 02**

JOB NUMBER  
**212798**

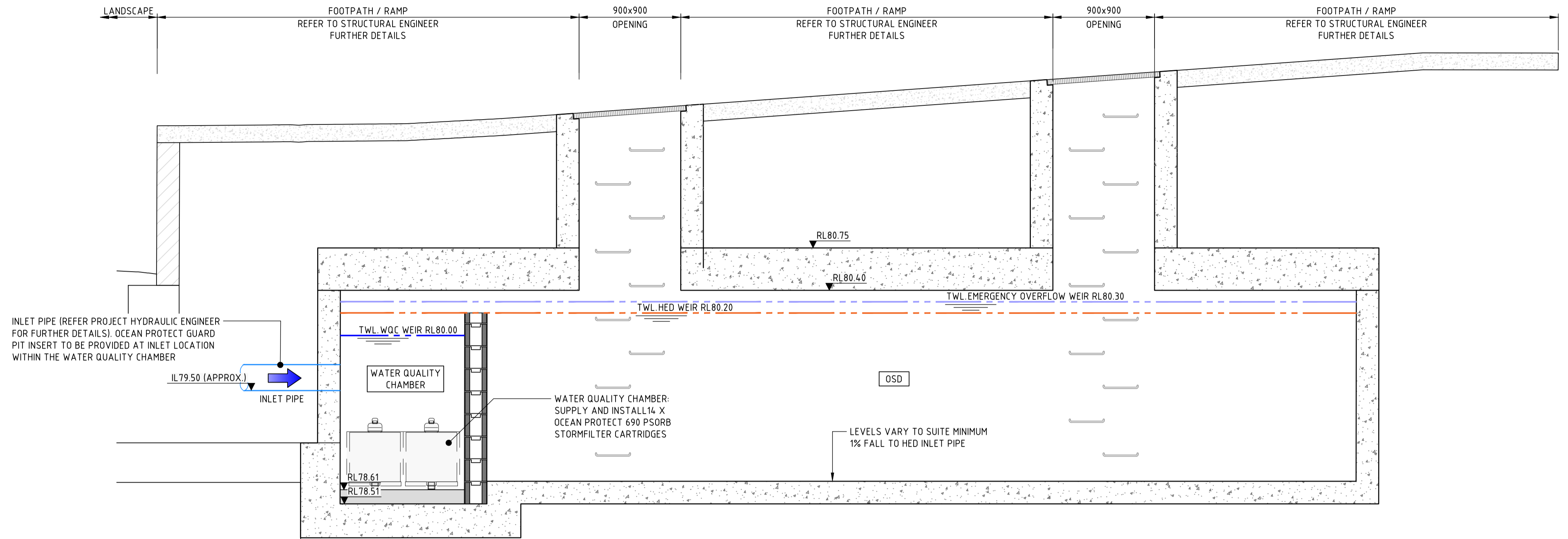
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**C39102**

REVISION  
**06**

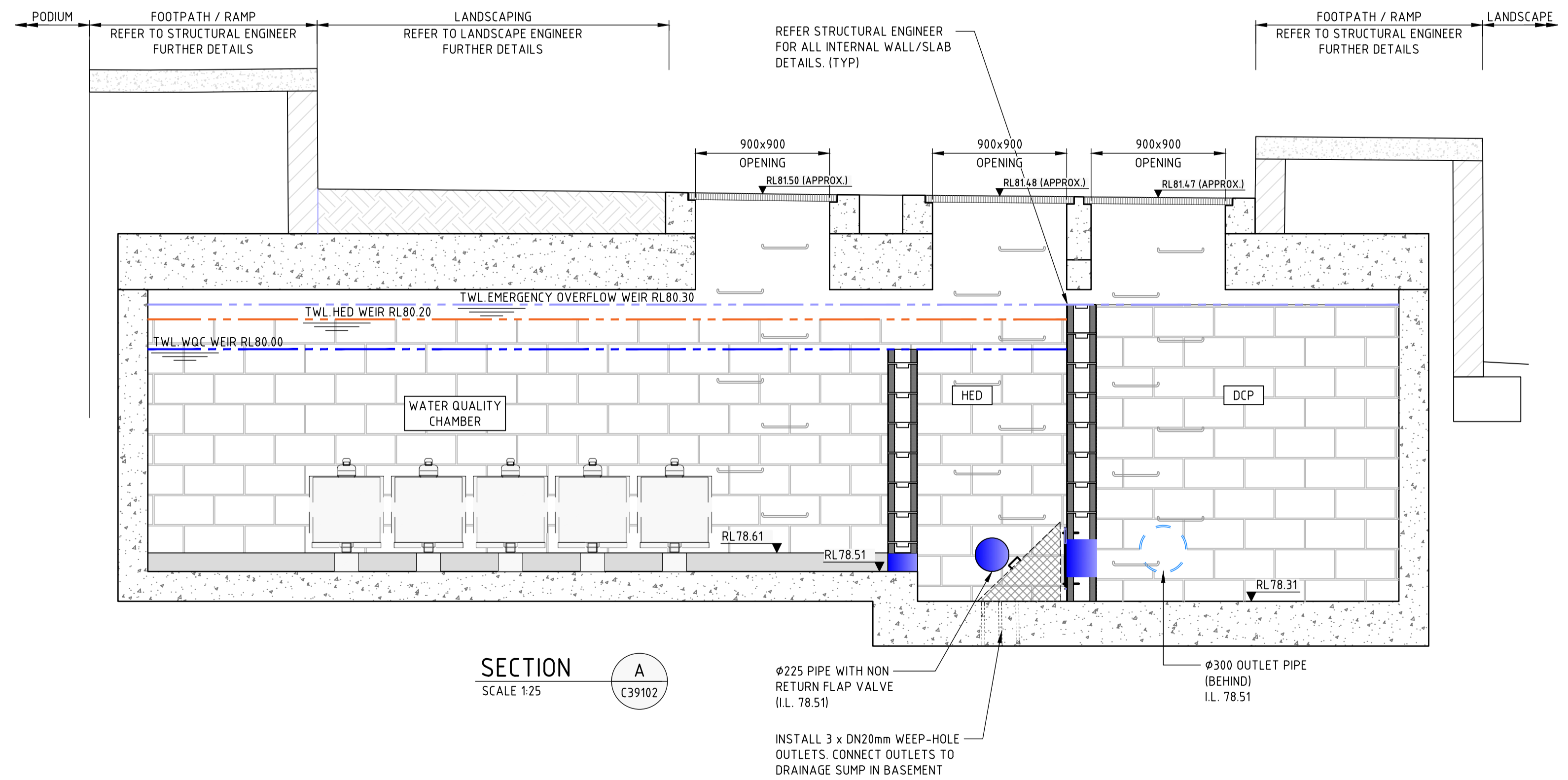
DRAWING SHEET SIZE = A1

**NOT FOR CONSTRUCTION**

- GENERAL NOTES**
- MAINTENANCE ACCESS REQUIREMENTS (PER CITY OF PARRAMATTA STORMWATER DRAINAGE DESIGN GUIDELINES):
    - GRATES ACCESSING THE TANK SHALL BE A MINIMUM OF 900mm X 900mm, AND A
    - MAXIMUM LIFTING WEIGHT OF 20 KG. AS A MINIMUM, GRATES SHALL BE LOCATED:
      - OVER THE PRIMARY OUTLET; AND
      - OVER THE SECONDARY OUTLET IF THE TANK PROVIDES BOTH EXTENDED DETENTION
      - AND FLOOD DETENTION STORAGE;
    - ACCESS GRATES SHALL BE PLACED AT THE EXTREMITIES OF THE TANK WITH A MAXIMUM DISTANCE OF 3M FROM ANY POINT IN THE TANK TO THE EDGE OF THE NEAREST GRATE.
  - ACCESS HATCHES (GRADED OR SEALED) HAVE BEEN SHOWN IN PLAN (REFER C33001) AND IN THIS SECTION TO BE IN ACCORDANCE WITH THE ABOVE GUIDELINES. NOTING - EACH INDIVIDUAL CHAMBER MUST MEET THESE REQUIREMENTS. VENTILATION REQUIREMENTS HAVE BEEN ACHIEVED BY CONSIDERING THE TANK AS A WHOLE.
  - REFER TO STRUCTURAL ENGINEERS DRAWINGS FOR FURTHER OSD TANK DETAILS



SECTION B  
SCALE 1:25



SECTION A  
SCALE 1:25

DRAWN: A.FALLINS    DESIGNED: S.FORD    JOB MANAGER: S.FORD    VERIFIER:

REVISION	DESCRIPTION	ISSUED	VER'D	APP'D	DATE
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CLIENT  
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ARCHITECT  
**TURNER**

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SCALE 1:20 @ A1

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PROJECT  
**242-244 BEECROFT ROAD, EPPING**  
**INTERNAL WORKS**

DRAWING TITLE  
**CIVIL ENGINEERING PACKAGE DEVELOPMENT APPLICATION**  
**DETAILS - SHEET 03**

JOB NUMBER  
**212798**

DRAWING NUMBER  
**C39103**

REVISION  
**04**

DRAWING SHEET SIZE = A1

**NOT FOR CONSTRUCTION**

FORMER: C:\WORK\ADMIN\PROJECTS\242-244 BEECROFT ROAD\FIG 03-04-00000 - C39103-03.dwg