### SURVEY

- THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN SUPPLIED BY REGISTERED SURVEYORS TO PROVIDE A BASIS FOR DESIGN. THE USE OF THIS SURVEY BASE DOES NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF THE SURVEY BASE OR ITS SUITABILITY AS A BASIS FOR CONSTRUCTION DRAWINGS.
- SHOULD DISCREPANCIES BE ENCOUNTERED DURING CONSTRUCTION BETWEEN THE SURVEY DATA AND ACTUAL FIELD DATA, CONTACT THE DESIGN ENGINEER.
- THE RELATIONSHIP OF IMPROVEMENTS TO BOUNDARIES ARE DIAGRAMMATIC ONLY. WHERE DISTANCES TO BOUNDARIES ARE CRITICAL THEY SHOULD BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION BY FURTHER SURVEY.

## **LEGEND**

### **EXISTING**:

- HYD  $\square$ HYDRANT
- SUBSOIL DRAIN FLUSH POINT

NBN PIT

- SP O
- SPRINKLER CONTROL BOX STOP VALVE
- SV 🗆
- TEL 🗆 TELSTRA PIT
- NBN 🖂
- STREET LIGHT
- 2128

EXISTING STORMWATER PIPE

EXISTING STORMWATER PIT

EXISTING TREE

# **GENERAL**

- ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH CAMDEN COUNCIL STANDARDS.
- 2. CAMDEN COUNCIL STANDARD DETAILS TO BE USED WHERE POSSIBLE.
- 3. UTILITY ADJUSTMENTS AT DEVELOPERS EXPENSE.
- 4. CONDUITS TO BE PLACED WHERE REQUIRED BY THE RELEVANT AUTHORITIES.
- 5. SUBSOIL DRAINAGE LINES TO BE PLACED AS INDICATED ON DRAWINGS.
- 6. A MINIMUM OF 3m OF SUBSOIL LINE SHALL BE LAID INTO UPSTREAM SIDE OF COUNCIL PITS.
- THE SPECIFICATIONS ARE SUBJECT TO FINAL DETAILED DESIGN AND SUPPLIER / MANUFACTURER APPOINTMENT, BUT WILL STILL BE OF A SIMILAR STANDARD TO THAT NOMINATED.

### **EROSION AND SEDIMENT CONTROL**

#### **GENERAL INSTRUCTIONS**

- . THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION TO THE SATISFACTION OF COUNCIL, NSW OFFICE OF WATER, OFFICE OF ENVIRONMENT AND HERITAGE, THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE DRAWINGS SHALL ONLY BE USED AS A GUIDE BY THE CONTRACTOR, AND SHALL REPRESENT THE MINIMUM REQUIREMENT ONLY.
- 2. THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH a. LOCAL AUTHORITY REQUIREMENTS
- b. FPA REQUIREMENTS c. NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN
- STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
- MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF
- CONTRACTOR IS TO ENSURE ALL EROSION & SEDIMENT CONTROL DEVICES ARE MAINTAINED IN GOOD WORKING ORDER AND OPERATE EFFECTIVELY. REPAIRS AND OR MAINTENANCE SHALL BE UNDERTAKEN AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.

ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.

#### LAND DISTURBANCE

- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE WILL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
- a. INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN, REFER DETAIL.
- b. CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
- c. INSTALL SEDIMENT BASIN AS SHOWN ON PLAN (D) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
- d. UNDERTAKE SITE DEVELOPMENT WORKS IN ACCORDANCE WITH THE ENGINEERING PLANS. WHERE POSSIBLE, PHASE DEVELOPMENT SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF WORKABLE SIZE.

#### **EROSION CONTROL**

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.

#### SEDIMENT CONTROL

- 9. STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARD AREAS, INCLUDING LIKELY AREAS OF CONCENTRATED OR HIGH VELOCITY FLOWS SUCH AS WATERWAYS. WHERE THEY ARE BETWEEN 2 AND 5 METRES FROM SUCH AREAS, SPECIAL SEDIMENT CONTROL MEASURES SHOULD BE TAKEN TO MINIMISE POSSIBLE POLLUTION TO DOWNSLOPE WATERS, E.G. THROUGH INSTALLATION OF SEDIMENT FENCING.
- 10. ANY SAND USED IN THE CONCRETE CURING PROCESS (SPREAD OVER THE SURFACE) WILL BE REMOVED AS SOON AS POSSIBLE AND WITHIN 10 WORKING DAYS FROM PLACEMENT.
- 11. WATER WILL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS IT IS RELATIVELY SEDIMENT FREE, I.E. THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
- 12. TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
- 13. ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- 14. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:

## OTHER MATTERS

- PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS
- INSTALLED OUTSIDE THE DRIP LINE
- ENSURING THAT NOTHING IS NAILED TO THEM PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
- ) ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE GREATER
- (II) A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
- (III) CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

## **SITEWORKS**

- . ALL WORKS TO BE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS, SPECIFICATIONS AND AUSTRALIAN STANDARDS. CONFLICTS SHALL BE REFERRED TO THE SUPERINTENDENT FOR
- 2. CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK, ANY DISCREPANCIES TO BE REPORTED TO THE DESIGN ENGINEER.
- B. THE CONTRACTOR IS TO DESIGN, OBTAIN APPROVALS AND CARRY OUT REQUIRED TEMPORARY TRAFFIC CONTROL PROCEDURES DURING CONSTRUCTION IN ACCORDANCE WITH RMS AND LOCAL AUTHORITY REGULATIONS AND REQUIREMENTS.
- 4. THE CONTRACTOR IS TO OBTAIN ALL AUTHORITY APPROVALS AS REQUIRED.
- . RESTORE ALL PAVED, COVERED, GRASSED AND LANDSCAPED AREAS TO THEIR ORIGINAL CONDITION ON COMPLETION OF WORKS.
- 6. ON COMPLETION OF ANY TRENCHING WORKS, ALL DISTURBED AREAS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL, GRASSED AREAS AND ROAD PAVEMENTS.
- 7. THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- 8. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO LODGMENT OF TENDER AND ON SITE 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.
- ). THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE ENGINEERING PLANS AND SPECIFICATIONS, AND ANY OTHER WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT OF THE SUBJECT SITE.
- 10. 14. THESE PLANS SHALL BE READ IN CONJUNCTION WITH ALL APPROVED DRAWINGS AND SPECIFICATIONS PREPARED BY OTHER PROJECT CONSULTANTS.
- 11. 10. DO NOT OBTAIN DIMENSIONS BY SCALING THE DRAWINGS. ALL DIMENSIONS ARE IN MILLIMETERS (mm) AND ALL LEVELS ARE IN METERS (m), UNO. ALL LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
- 12. 11. IN CASE OF DOUBT OR DISCREPANCY REFER TO THE DESIGN ENGINEER AND SUPERINTENDENT FOR CLARIFICATION OR CONFIRMATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. OTHERWISE THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF REMEDIATION WORKS.
- 13. 12. WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.
- 14. THE CONTRACTOR SHALL COMPLY WITH ALL STATUTORY AND INDUSTRIAL REQUIREMENTS FOR PROVISION OF A SAFE WORKING ENVIRONMENT INCLUDING TRAFFIC CONTROL.
- 15. THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES ACCESS TO ALL BUILDINGS ADJACENT THE WORKS IS NOT DISRUPTED.
- 16. WHERE NECESSARY THE CONTRACTOR SHALL PROVIDE SAFE PASSAGE OF VEHICLES AND/OR PEDESTRIANS THROUGH OR BY THE SITE.
- 17. WHERE NOTED ON THE DRAWINGS THAT WORKS ARE TO BE CARRIED BY OTHERS, (eg. ADJUSTMENT OF SERVICES), THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CO-ORDINATION OF THESE WORKS.
- 18. ALL VARIATIONS TO SPECIFIED PRODUCTS OR DESIGNS SHALL BE REFERRED TO THE DESIGN ENGINEER IN WRITING FOR APPROVAL.
- 19. ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
- PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
- ENSURING THAT NOTHING IS NAILED TO THEM PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:

GREATER

- ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICH EVER IS THE
- A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
- CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.
- 20. EPA AND COUNCIL REQUIREMENTS MUST BE ADHERED TO REGARDING THE LEVEL OF NOISE AND WORKING HOURS. TO ENSURE THAT RESIDENTS AND OTHER APPLICABLE NEIGHBOURS TO THE SITE ARE NOT DISTURBED UNREASONABLY. THE GENERATION OF NOISE MUST BE MINIMISED.

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# **EARTHWORKS**

- AT THE COMMENCEMENT OF THE CUT AND FILLING OPERATIONS FOR BULK EARTHWORKS A GEOTECHNICAL ENGINEER IS TO VISIT THE SITE & CONFIRM THE SUITABILITY OF THE METHODOLOGY OF ACHIEVING THE REQUIRED BUILDING PLATFORMS AND COMPACTION REQUIREMENTS. SUBSEQUENTLY, THE HEAD CONTRACTOR IS TO CONFIRM, IN WRITING TO THE DESIGNING CIVIL & STRUCTURAL ENGINEERS. THAT THE METHODOLOGY APPROVED AT THE TIME OF THE GEOTECHNICAL ENGINEERS VISIT WAS MAINTAINED DURING ALL THE BULK EARTHWORKS PROCESS.
- STRIP TOPSOIL, ORGANIC MATTER AND RUBBLE FROM CONSTRUCTION AREA TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE AS DIRECTED BY THE SUPERINTENDENT.
- WHERE FILLING, STRUCTURAL SLABS OR PAVEMENTS ARE REQUIRED, PROOF ROLL THE EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A SMOOTH DRUM VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER) IN THE PRESENCE OF THE SUPERINTENDENT. THE CONTRACTOR IS TO ALLOW TO REMOVE AND REPLACE A PROVISIONAL QUANTITY OF UNSUITABLE SUBGRADE MATTER.
- 4. ALL SOFT, WET OR UNSUITABLE MATERIAL IS TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
- EXCAVATED MATERIAL IS NOT TO BE USED AS STRUCTURAL FILL UNLESS APPROVED BY THE GEOTECHNICAL ENGINEER.
- THE CONTRACTOR IS TO PROVIDE CERTIFICATES VERIFYING THE QUALITY OF IMPORTED MATERIAL FOR THE SUPERINTENDENTS APPROVAL.
- ALL FILL MATERIAL SHALL BE PLACED IN MAXIMUM 200mm THICK LAYERS AND COMPACTED AT OPTIMUM MOISTURE CONTENT (+ OR - 2%) TO ACHIEVE A DRY DENSITY DETERMINED IN ACCORDANCE WITH AS1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS1289 E5.1.1.1:

LOCATION	COMPACTION REQUIREM
UNDER BUILDING SLABS	98% SMDD
LANDSCAPED AREAS	95% SMDD
ROADS & PAVED AREAS	98% SMDD

- FOR NON COHESIVE MATERIAL, COMPACT TO NOT LESS THAN UNDER ROAD 80% DENSITY OTHER AREA 75% DENSITY
- THE CONTRACTOR IS TO ALLOW FOR COMPACTION TESTING BY NATA REGISTERED LABORATORY FOR PLATFORMS AND FILL LAYERS IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 - FOR TYPE 1 OPERATIONS (MINIMUM 3 TESTS PER LAYER).
- 9. FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN: 1 TEST PER 200m<sup>3</sup> OF FILL PLACED PER 300mm LAYER OF FILL
- 3 TESTS PER VISIT 1 TEST PER 1000m<sup>2</sup> OF EXPOSED SUBGRADE TESTING SHALL BE "LEVEL 1" UNDERTAKEN IN ACCORDANCE D. WITH AS1398.
- 10. WHERE TEST RESULTS ARE BELOW THE SPECIFIED COMPACTION, RECOMPACT AND RETEST UNTIL SPECIFIED COMPACTION STANDARD IS 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:
- MAXIMUM SIZE 50mm, PASSING 75 MICRON SIEVE (<25%). PLASTICITY INDEX BETWEEN 2-15% AND CBR>8. FREE FROM ORGANIC AND PERISHABLE MATTER.
- 13. REFER TO THE SITE SPECIFIC GEOTECHNICAL REPORT FOR GENERAL REQUIREMENTS ON SITE PREPARATION AND RE-USE OF EXISTING SITE MATERIAL AS ENGINEERED FILL.
- 4. 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, ROLLER 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.
- 15. 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 EXTRA COST.
- 6. PROTECT FINAL SURFACE WITH EITHER A TEMPORARY LOOSE SOIL LAYER OR A GRANULAR SUB-BASE LAYER TO PREVENT DRYING OUT PRIOR TO ON-GROUND SLAB CONSTRUCTION.

## STORMWATER DRAINAGE NOTES

- 1. STORMWATER DESIGN CRITERIA:
- (A) ANNUAL EXCEEDANCE PROBABILITIES (AEP):
- MINOR (PIPED) NETWORK 1% (1 IN 100) MAJOR (OVERLAND FLOW) SYSTEM
- (B) RAINFALL INTENSITIES: ARR 1987
- RAINFALL FROM BUREAU OF METEOROLOGY WEBSITE (C) HYDROLOGIC METHOD:

DRAINS / ILSAX METHOD

- 2. PIPES 375 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- 3. PIPES 300 DIA AND LESS SHALL BE DWV GRADE (CLASS SN8) uPVC WITH SOLVENT WELDED JOINTS.
- 4. EQUIVALENT STRENGTH FRC PIPES MAY BE USED.
- 5. ALL PIPES ARE TO BE UNIFORMLY SUPPORTED ALONG THE LENGTH OF THE BARREL BY SUITABLE FILL MATERIAL. REFER TO BEDDING SUPPORT TYPE.
- 6. PIPES WITH SOCKETS SHALL BE LAID IN BEDDING WHERE SUITABLE RECESSES HAVE BEEN PROVIDED TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.
- 7. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE PN6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
- 8. PIPES TO BE INSTALLED TO TYPE HS2 SUPPORT IN ACCORDANCE WITH AS 3725 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE. WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).
- 9. REFER TO AS/NRS 3725:2007 TABLE B1 FOR REQUIRED FILL DEPTHS ABOVE PIPE BARREL PRIOR TO USE OF COMPACTION MACHINERY OR TRAVERSING OF PIPES BY GENERAL SITE EQUIPMENT.
- 10. WHERE WORKING METHODS REQUIRE HIGHER CLASS PIPE, THE CONTRACTOR SHALL REFER TO AS 3725 (2007) TO DETERMINE THE APPROPRIATE PIPE CLASS. PROPOSED PIPE CLASS SHALL BE REVIEWED BY ENSPIRE SOLUTIONS PRIOR TO INSTALLATION.
- 11. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS/NZS 3500.3:2015.
- 12. PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY ENSPIRE SOLUTIONS.
- FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.

13. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED

14. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.

15. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES, GRADES

16. GRATES AND COVERS SHALL CONFORM TO AS 3996.

SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.

- 17. ALL BOX CULVERTS SHALL BE STRUCTURALLY DESIGNED BY THE MANUFACTURER AND DELIVERED TO SITE AS FIT FOR PURPOSE.
- 18. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- 19. ALL EXISTING STORMWATER DRAINAGE LINES AND PITS THAT ARE TO REMAIN ARE TO BE INSPECTED AND CLEANED. DURING THIS PROCESS ANY PART OF THE STORMWATER DRAINAGE SYSTEM THAT WARRANTS REPAIR SHALL BE REPORTED TO THE SUPERINTENDENT/ENGINEER FOR FURTHER DIRECTIONS.

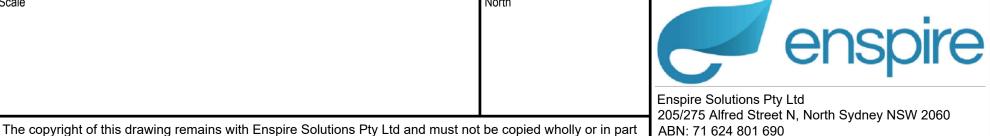
## **EXISTING SERVICES**

- ALL UTILITY SERVICES INDICATED ON THE DRAWINGS ORIGINATE FROM SUPPLIED DATA. 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
- CARE TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER ALL LIVE SERVICES, HAND EXCAVATION ONLY IN THESE AREAS.
- . 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, AND AT NO EXTRA COST.
- THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR ADJUSTMENT (IF REQUIRED) OF EXISTING SERVICES IN AREAS AFFECTED BY WORKS.
- . THE CONTRACTOR SHALL ALLOW IN THE PROGRAM FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF EXISTING SERVICES IN AREA AFFECTED BY WORKS UNLESS DIRECTED OTHERWISE ON THE DRAWINGS OR BY THE SUPERINTENDENT.
- . THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
- 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.
- 3. 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.
- PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION A THOROUGH SEARCH OF ALL SERVICE AUTHORITIES SHOULD BE MADE TO DETERMINE THE POSSIBLE LOCATION OF ANY FURTHER UNDERGROUND SERVICES.
- 10. AUTHORITY PLANS GENERALLY SHOW ONLY THE PRESENCE OF CABLES AND PLANT AND DO NOT WARRANT OR GUARANTEE THAT SUCH PLANS ARE ACCURATE. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY. THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR EXISTING SERVICES AND PLANT, BEFORE USING MACHINE EXCAVATORS SERVICES MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY IT'S LOCATION.
- 11. THE CONTRACTOR IS TO UNDERTAKE A DIAL-BEFORE-YOU-DIG SEARCH PRIOR TO ANY EXCAVATION AND MAINTAIN A CURRENT SET ON-SITE DURING EXCAVATION WORKS.
- 12. THE LOCATIONS OF UNDERGROUND SERVICES SHOWN IN THIS SET OF DRAWINGS HAVE BEEN PLOTTED FROM SURVEY INFORMATION AND SERVICE AUTHORITY INFORMATION. THE SERVICE INFORMATION HAS BEEN PREPARED ONLY TO SHOW THE APPROXIMATE POSITIONS OF ANY KNOWN SERVICES AND MAY NOT BE AS CONSTRUCTED OR ACCURATE.ENSPIRE SOLUTIONS CAN NOT GUARANTEE THAT THE SERVICES INFORMATION SHOWN ON THESE DRAWINGS ACCURATELY INDICATES THE PRESENCE OR ABSENCE OF SERVICES OR THEIR LOCATION AND WILL ACCEPT NO LIABILITY FOR INACCURACIES IN THE SERVICES
- INFORMATION SHOWN FROM ANY CAUSE WHATSOEVER. 13. CONTRACTORS SHALL TAKE DUE CARE WHEN EXCAVATING ONSITE INCLUDING HAND EXCAVATION WHERE NECESSARY. CONTRACTORS ARE TO CONTACT THE RELEVANT SERVICE AUTHORITY PRIOR TO COMMENCEMENT OF EXCAVATION WORKS. CONTRACTORS ARE TO UNDERTAKE A SERVICES SEARCH, PRIOR TO COMMENCEMENT OF WORKS

ON SITE. SEARCH RESULTS ARE TO BE KEPT ON SITE AT ALL TIMES.

5 | 27/07/2020 | RE-ISSUED FOR DEVELOPMENT APPLICATION CB | MC | MKH | MKH 4 | 25/03/2020 | RE-ISSUED FOR DEVELOPMENT APPLICATION MDH | MC | MKH | MKH 3 20/03/2020 ISSUED FOR DEVELOPMENT APPLICATION MDH | MC | MKH | MKH 2 | 13/03/2020 | ISSUED FOR FINAL COORDINATION MDH MC MKH 12/03/2020 ISSUED FOR FINAL COORDINATION MDH MC MKH DESCRIPTION DRN. DES. VERIF. APPL V. DATE



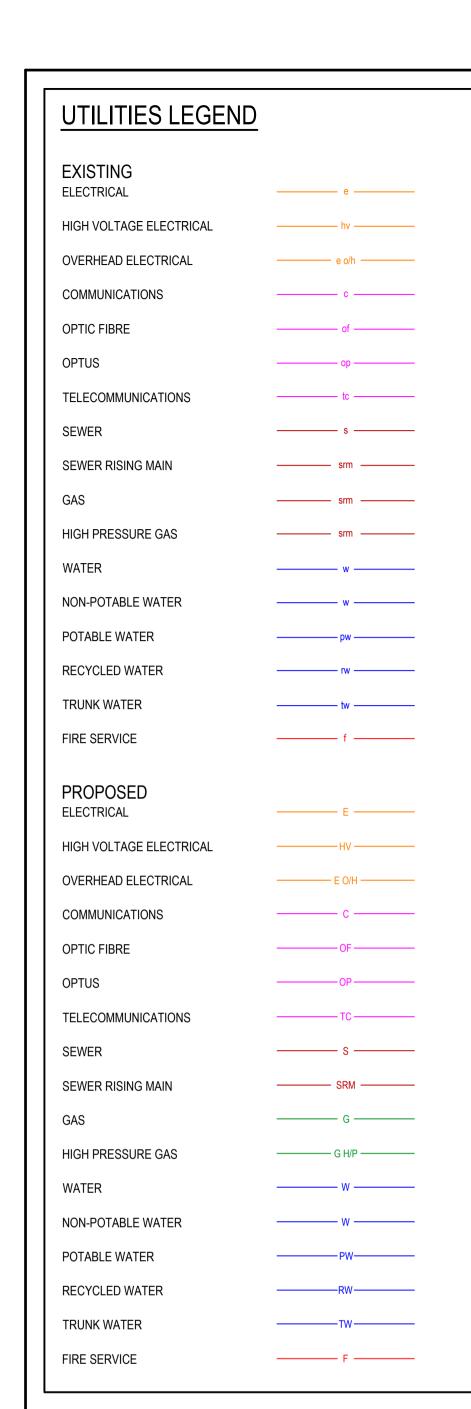


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THE HERMITAGE WAY N.T.S SLEDSWOOD VILLAGE CENTRE 12/03/2020 EVELOPMENT APPLICATION GENERAL NOTES AND LEGENDS SHEET 01

FOR INFORMATION ONLY NOT TO BE USED FOR CONSTRUCTION oject Number/Drawing Number

180032-HV-DA-C01.21





### **KERBS**

- 1. ALL KERBS, GUTTERS, DISH DRAINS AND CROSSINGS TO BE CONSTRUCTED ON 175mm GRANULAR BASECOURSE COMPACTED TO MINIMUM 95% MODIFIED DRY DENSITY (AS 1289 5.2.1).
- 2. EXPANSION JOINTS (E.J) TO BE FORMED FROM 10mm COMPRESSIBLE FOAM FILLER BOARD FOR THE FULL DEPTH OF THE SECTION AND CUT TO PROFILE. EXPANSION JOINTS TO BE LOCATED AT DRAINAGE PITS, ON TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX 12m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE EXPANSION JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- 3. WEAKENED PLANE JOINTS TO BE MIN 3mm WIDE AND LOCATED AT 3m CENTRES EXCEPT FOR INTEGRAL KERBS WHERE THE WEAKENED PLANE JOINTS ARE TO MATCH THE JOINT LOCATIONS IN THE SLABS.
- EXISTING ALLOTMENT DRAINAGE PIPES ARE TO BE BUILT INTO THE NEW KERB AND GUTTER WITH 100mm DIA HOLE OR IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.
- 5. IN THE REPLACEMENT OF KERB AND GUTTER:EXISTING ROAD PAVEMENT IS TO BE SAWCUT 600mm U.N.O FROM THE LIP
  OF GUTTER. UPON COMPLETION OF THE NEW KERB AND GUTTER NEW
  BASECOURSE AND SURFACE TO BE LAID 600mm WIDE U.N.O.

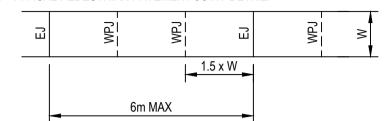
# **PAVEMENTS**

- 1. ALL PAVEMENT MATERIALS SHALL COMPLY WITH CURRENT RTA SPECIFICATIONS. PROVIDE MECHANICAL ANALYSIS FOR EACH BATCH OF PAVEMENT MATERIAL TO ENSURE CONFORMITY.
- 2. COMPACTION STANDARDS:
- A) BASE: 98% MODIFIED MAXIMUM DRY DENSITY
  B) SUBBASE: 95% MODIFIED MAXIMUM DRY DENSITY
- 3. THE CONTRACTOR SHALL CONFIRM THE DESIGN CBR WITH A MINIMUM OF 3 TESTS TAKEN AT SUBGRADE LEVEL. WHERE DISCREPANCY IS FOUND, CONTACT THE DESIGNING ENGINEER.
- 4. ALLOW FOR COMPACTION TESTING BY NATA REGISTERED LABORATORY FOR: BASE LAYER, SUBBASE LAYER, SUBGRADE IN ACCORDANCE WITH THE LATEST VERSION OF AS3798 FOR PAVEMENTS. ALLOW FOR AT LEAST TWO SUCCESSFUL COMPACTION TESTS IN EACH LAYER.
- 5. MATCH NEW PAVEMENT LAYERS NEATLY AND FLUSH WITH EXISTING WHERE REQUIRED.
- 6. KEY NEW BASE AND SUBBASE LAYERS INTO EXISTING WITH 150mm WIDE STEPS. ASPHALTIC CONCRETE WAERING COURSE IS TO EXTEND 150mm (MIN) PAST BASECOURSE INTERFACE.
- 7. TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.
- 8. ALL ASPHALTIC CONCRETE (AC) WORK TO BE PREPARED AND CARRIED OUT IN ACCORDANCE WITH GOOD ASPHALTIC PAVING PRACTICE AS DESCRIBED IN AS2734-1994 "ASPHALT (HOT-MIXED) PAVING GUIDE TO GOOD PRACTICE" AND CURRENT RMS SPECIFICATIONS (R116).
- 9. WHERE NOMINATED, THE CONTRACTOR SHALL ALLOW FOR ALL COMPONENTS OF PROPRIETARY JOINTING SYSTEMS INCLUDING FIXING, TEMPLATES & PEGGING TO ENSURE THAT ALL DOWEL BARS REMAIN IN THE CORRECT ALIGNMENT AND POSITION.
- 10. ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m³ OF BASECOURSE MATERIAL PLACED.
- 11. ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m³ OF SUB-BASE COURSE MATERIAL PLACED.
- 12. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH R.M.S. FORM 3051 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF THE DESIGN ENGINEER.
- 13. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.

# PAVEMENT JOINTS

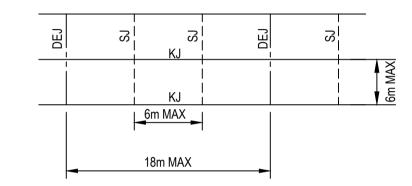
#### PEDESTRIAN PAVEMENTS

- ALL PEDESTRIAN PAVEMENTS ARE TO BE JOINTED AS FOLLOWS U.N.O ON THE DESIGN DRAWINGS.
- 2. EXPANSION JOINTS ARE TO BE LOCATED WHERE POSSIBLE AT TANGENT POINTS OF CURVES AND ELSEWHERE AT MAX. 6.0m CENTRES.
- 3. WEAKENED PLANE JOINTS ARE TO BE LOCATED AT A MAX. SPACING OF 1.5 x WIDTH OF THE PAVEMENT.
- 4. WHERE POSSIBLE JOINTS SHOULD BE LOCATED TO MATCH KERBING AND OR ADJACENT PAVEMENT JOINTS.
- 5. TYPICAL PEDESTRIAN PAVEMENT JOINT DETAIL.



#### VEHICULAR PAVEMENTS

- 6. ALL VEHICULAR PAVEMENTS TO BE JOINTED AS FOLLOWS U.N.O ON THE DESIGN DRAWINGS.
- 7. TIED KEYED CONSTRUCTION JOINTS SHOULD GENERALLY BE LOCATED LONGITUDINALLY AT A MAX OF 6.0m CENTRES
- 8. SAWN JOINTS SHOULD GENERALLY BE LOCATED LATERALLY AT A MAX OF 6.0m CENTRES WITH DOWELED EXPANSION JOINTS AT MAX 30.0m
- 9. TYPICAL VEHICULAR PAVEMENT JOINT DETAIL.



- PROVIDE 10mm EXPANSION FOAM BETWEEN NEW CONRETE WORKS AND EXISTING STRUCTURES.
- 11. LOCAL AUTHORITY REQUIREMENTS SHALL TAKE PRECEDENCE WITHIN THE PUBLIC ROAD RESERVE.
- 12. DOWELS TO BE PLACED ON PROPRIETARY CRADLES TO ENSURE CORRECT SPACING AND ALIGNMENT.

### SIGNAGE AND LINE MARKING

- 1. LINE MARKING AND PAINT SHALL BE IN ACCORDANCE WITH AS 2700 AND AS 2709 AND RMS SPECIFICATIONS.
- 2. ALL PAINT SHALL BE APPLIED BY MECHANICAL SPRAYER.
- LINE MARKING SHALL BE SPOTTED OUT AND APPROVED PRIOR TO SPRAYING.
- 4. PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm TO 0.40mm.
- 5. TRANSITION LINEMARKING TO SUIT EXISTING WHERE REQUIRED.ALL SIGNAGE TO BE INSTALLED IN ACCORDANCE WITH AUSTRALIAN STANDARDS.
- 6. REMOVE ALL REDUNDANT PAVEMENT MARKING AS REQUIRED.
- 7. PROVIDE RETRO-REFLECTORISED PAVEMENT MARKERS TO COUNCIL AND R.M.S. REQUIREMENTS.
- 8. ALL LINEMARKING TO BE WHITE IN COLOUR WITH THE EXCEPTION OF C2 AND C3 LINES AND LINEMARKING ON CONCRETE PAVEMENTS WHICH ARE TO BE YELLOW.
- 9. CARPARK LINEMARKING PAINT SHALL BE TYPE 3, CLASS A, AND THE COLOUR SHALL BE WHITE AND NOT DISCOLOURED BY BITUMEN. EACH LINE SHALL BE 80mm WIDE.
- 10. ALL SIGNAGE TO BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE R.M.S. REGULATORY SIGNS MANUAL.
- 11. RELOCATE OR REMOVE EXISTING SIGNS AS REQUIRED.
- 12. PROVIDE ADEQUATE APPROACH WARNING SIGNS DURING AND AFTER CONSTRUCTION.

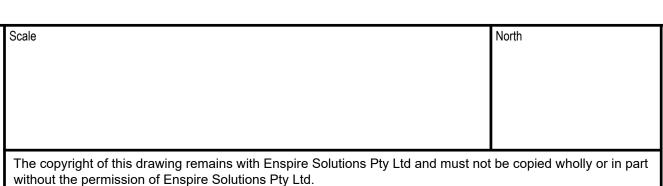
## GENERAL WORKS LEGEND SITE BOUNDARY SITE FENCE CONTOUR **BATTER** RETAINING WALL KERB AND GUTTER K&T KERB AND TOE KO KERB ONLY FLUSH KERB RK&G **ROLL KERB AND GUTTER** ROLL KERB AND TOE DISH DRAIN INTEGRAL KERB IKTE INTEGRAL KERB WITH THICKENED EDGE MK MOUNTABLE KERB IMK INTEGRAL MOUNTABLE KERB MOUNTABLE KERB AND GUTTER TIMBER EDGE KERB RAMP LAYBACK KERB KR 000 KERB RETURN NUMBER BULK EARTHWORKS PAD LEVEL BE BULK EARTHWORKS LEVEL **BULK EARTHWORKS STEP** <u>XX</u>\_\_\_\_ FFL FINISHED FLOOR LEVEL FINISHED LEVEL INVERT LEVEL SWALE DRAIN —>—>— TEMPORARY DRAINAGE CHANEL OVERLAND FLOW SURFACE FALL SUBSOIL DRAINAGE LINE \_\_\_\_ ss \_\_\_ ss \_\_\_ SUBSOIL FLUSHING POINT SUBSOIL INTERMEDIATE RISER o IR PIPE SIZE 375 STORMWATER DRAINAGE LINE $\longrightarrow$ FLOW DIRECTION (A01/01) STORMWATER LINE/PIT NUMBER KERB INLET PIT SURFACE INLET PIT/JUNCTION PIT HEADWALL

**GRATED TRENCH DRAIN** 

DOWNPIPE

5	27/07/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	CB	MC	MKH	MKI
4	25/03/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MK
3	20/03/2020	ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MK
2	13/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH	
1	12/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH	
REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APP

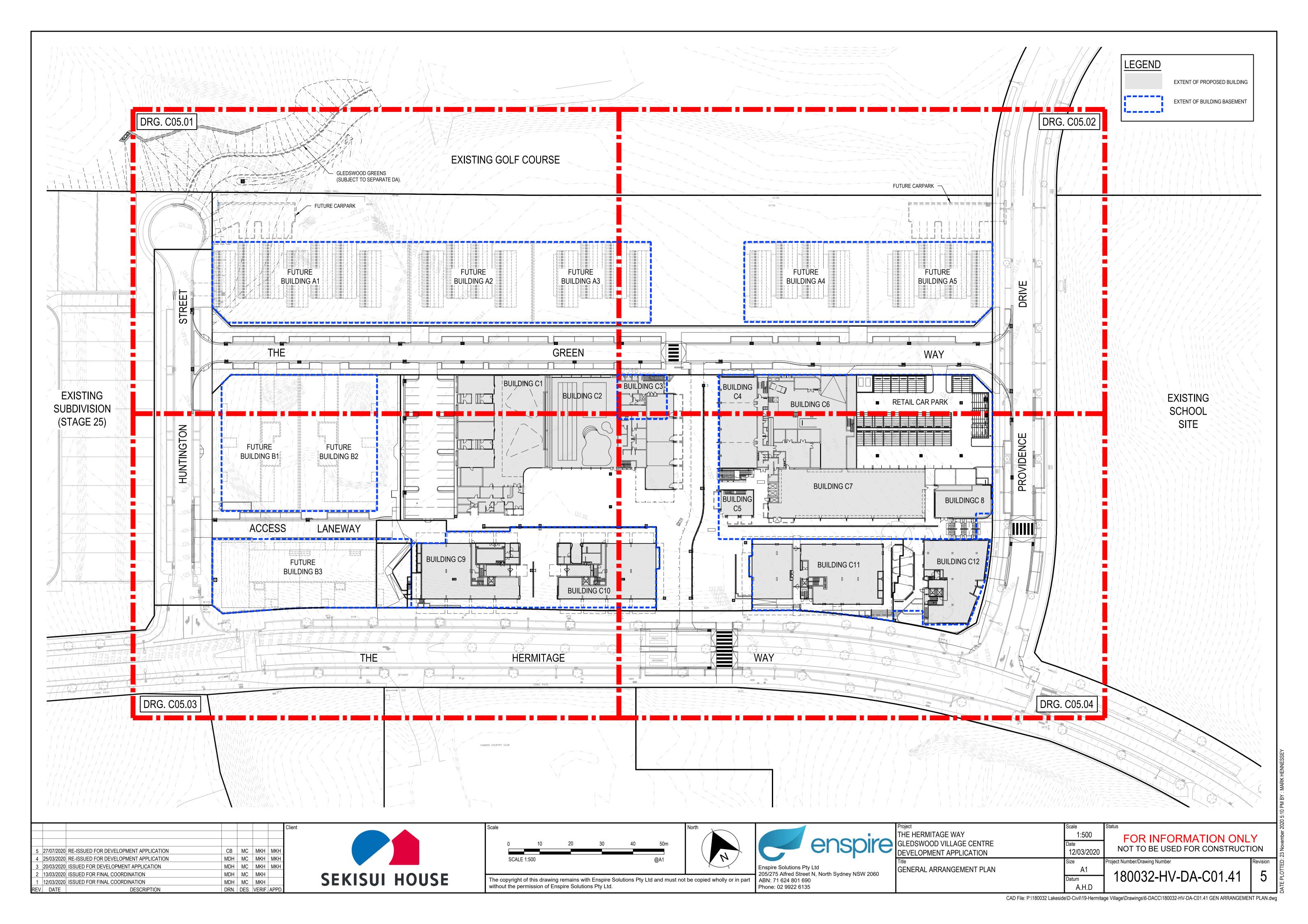


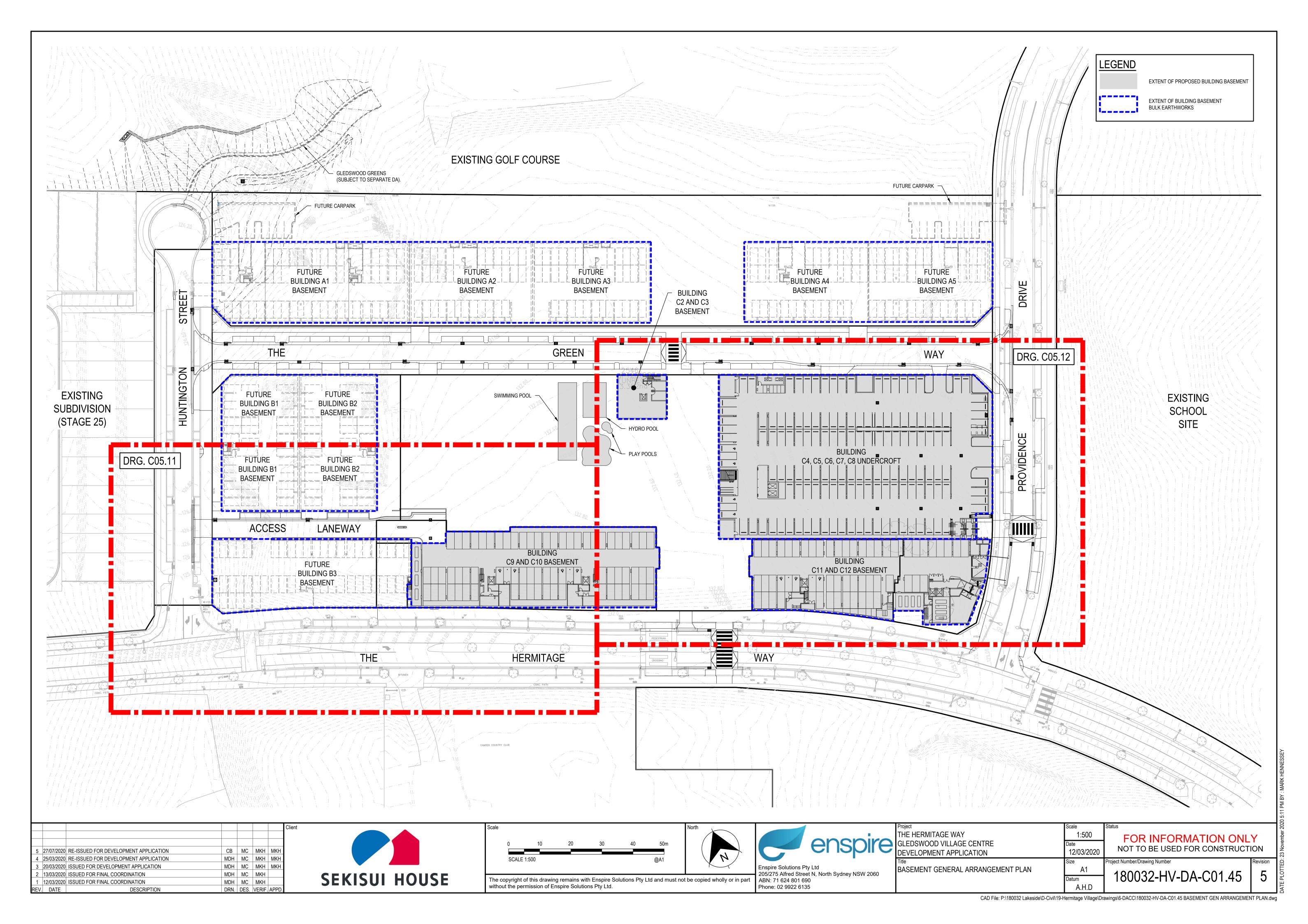


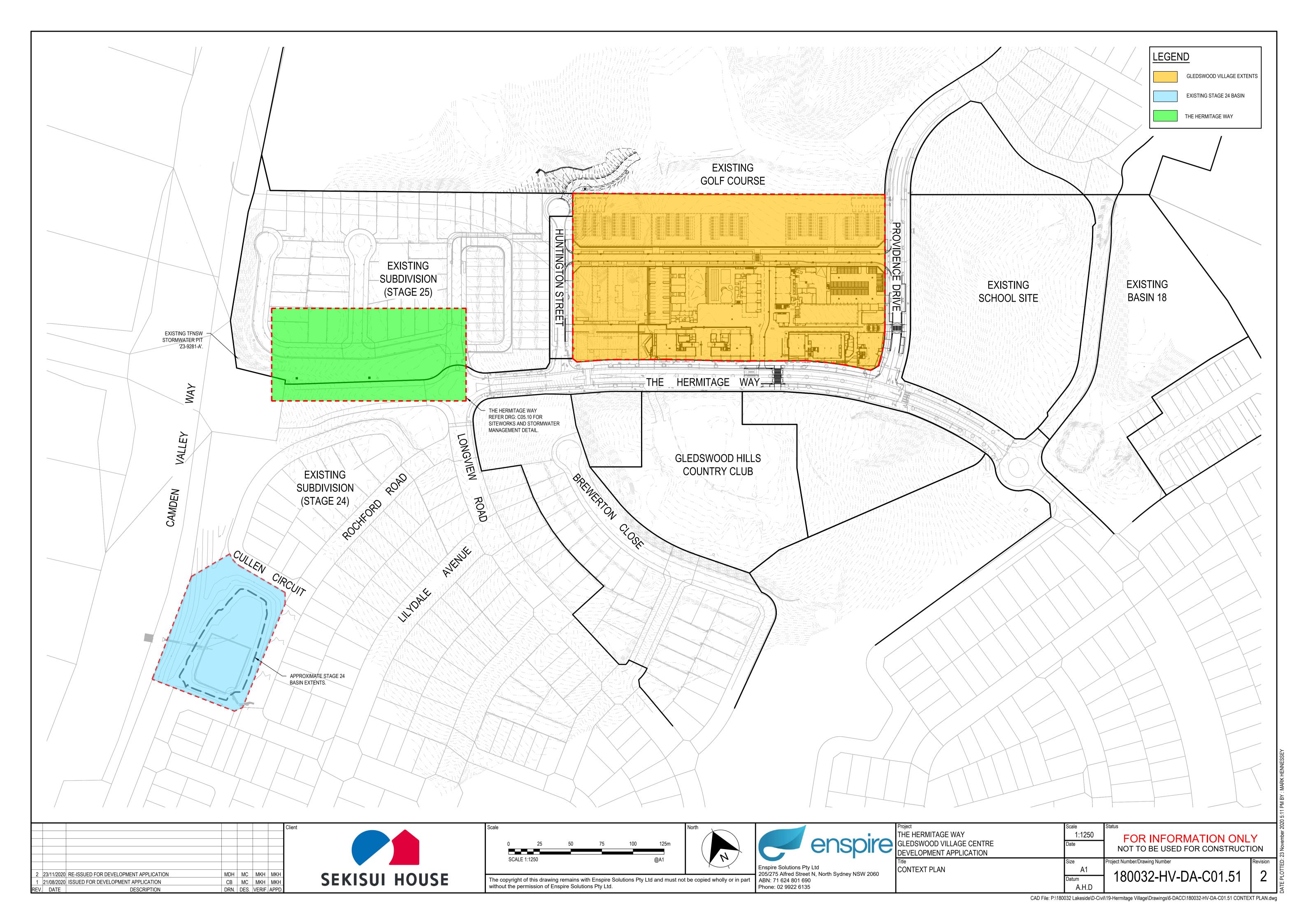


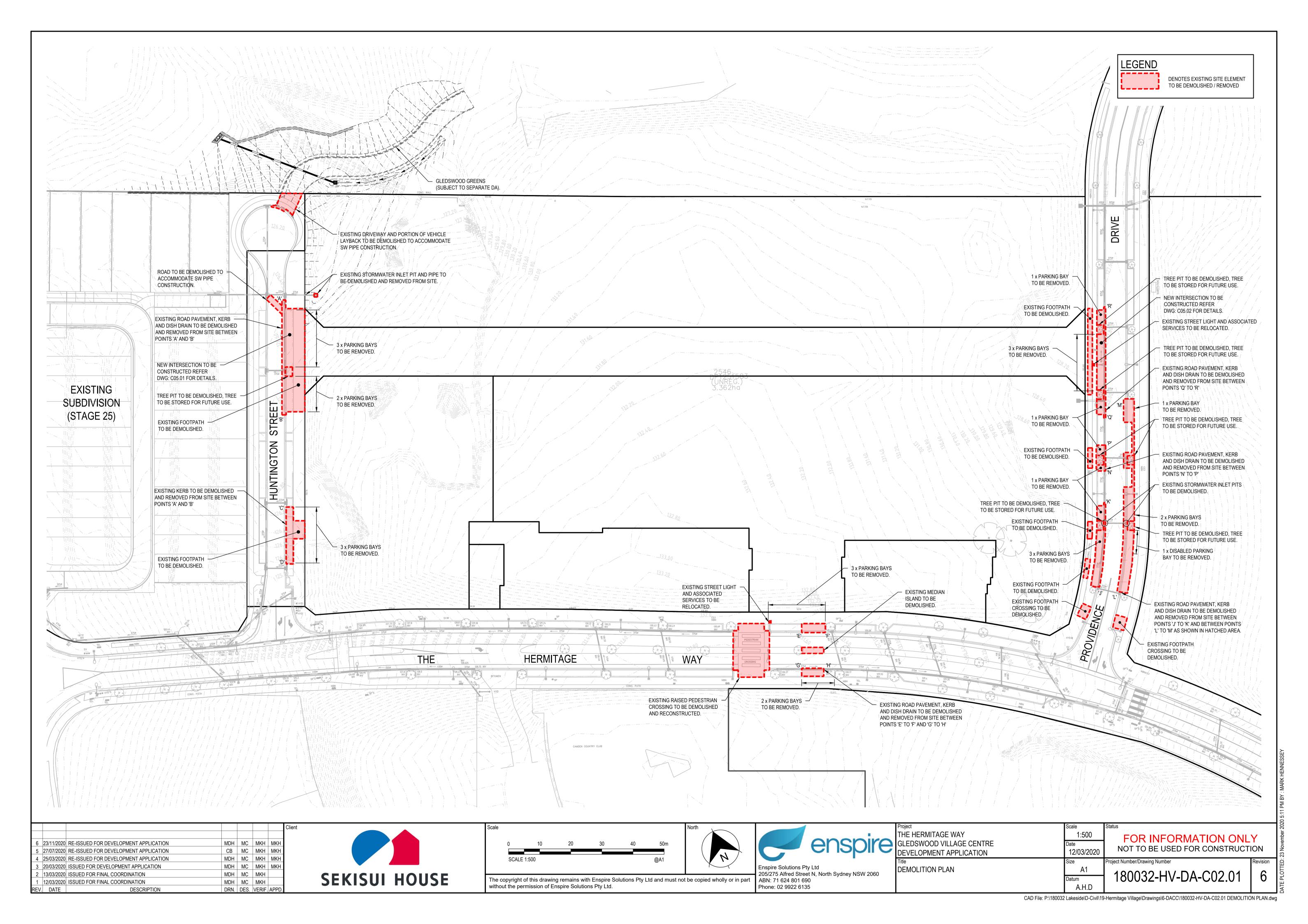
o DP

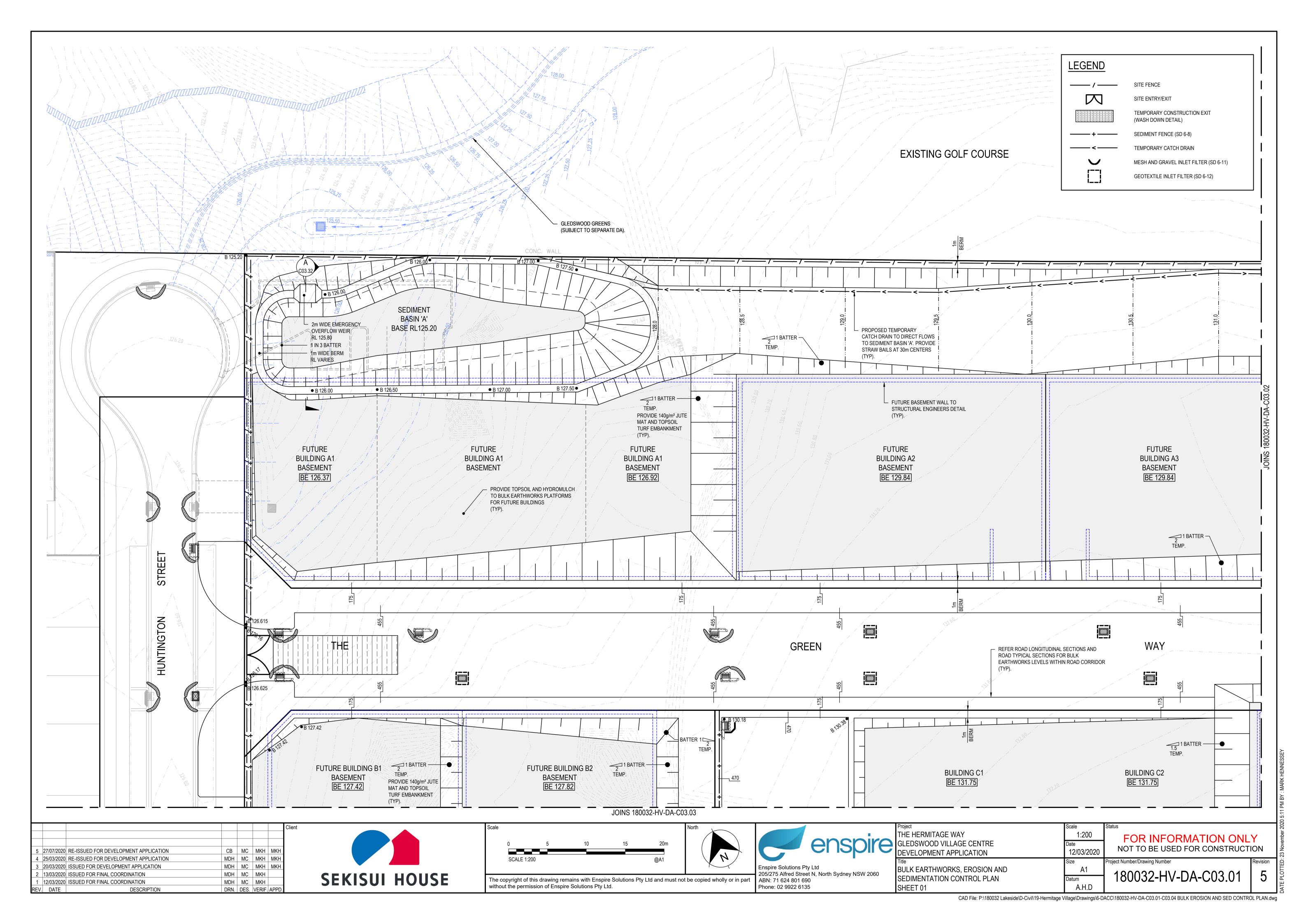
Project	Scale	Status		
THE HERMITAGE WAY	N.T.S	FOR INFORMATION ONLY		
GLEDSWOOD VILLAGE CENTRE	Date	NOT TO BE LISED FOR CONSTRUCTION		
DEVELOPMENT APPLICATION	12/03/2020			
Title	Size	Project Number/Drawing Number	Revision	
GENERAL NOTES AND LEGENDS	A1	400000 111/ 104 004 00	_	
	Datum	180032-HV-DA-C01.22	5	
SHEET 02	A.H.D			

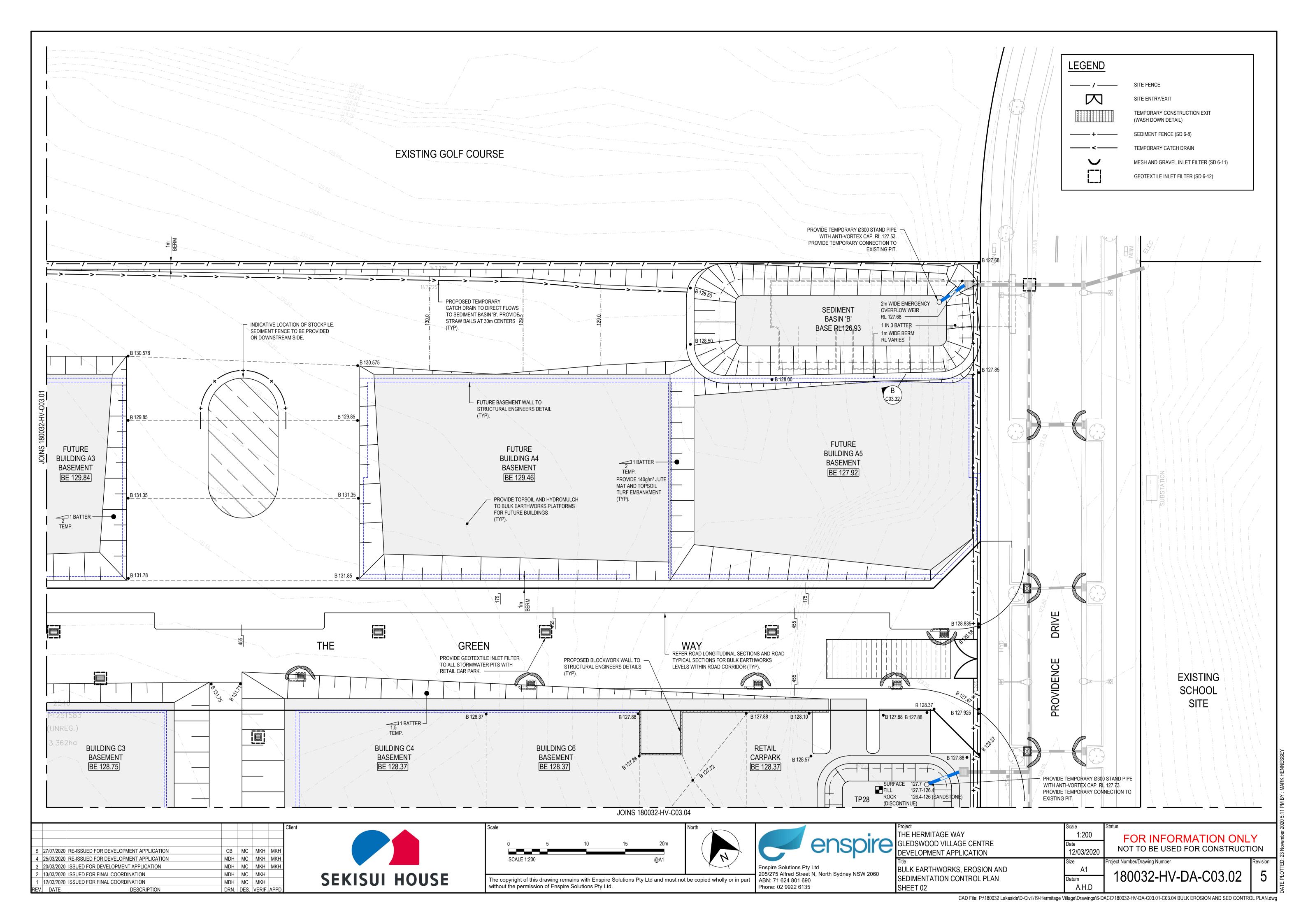


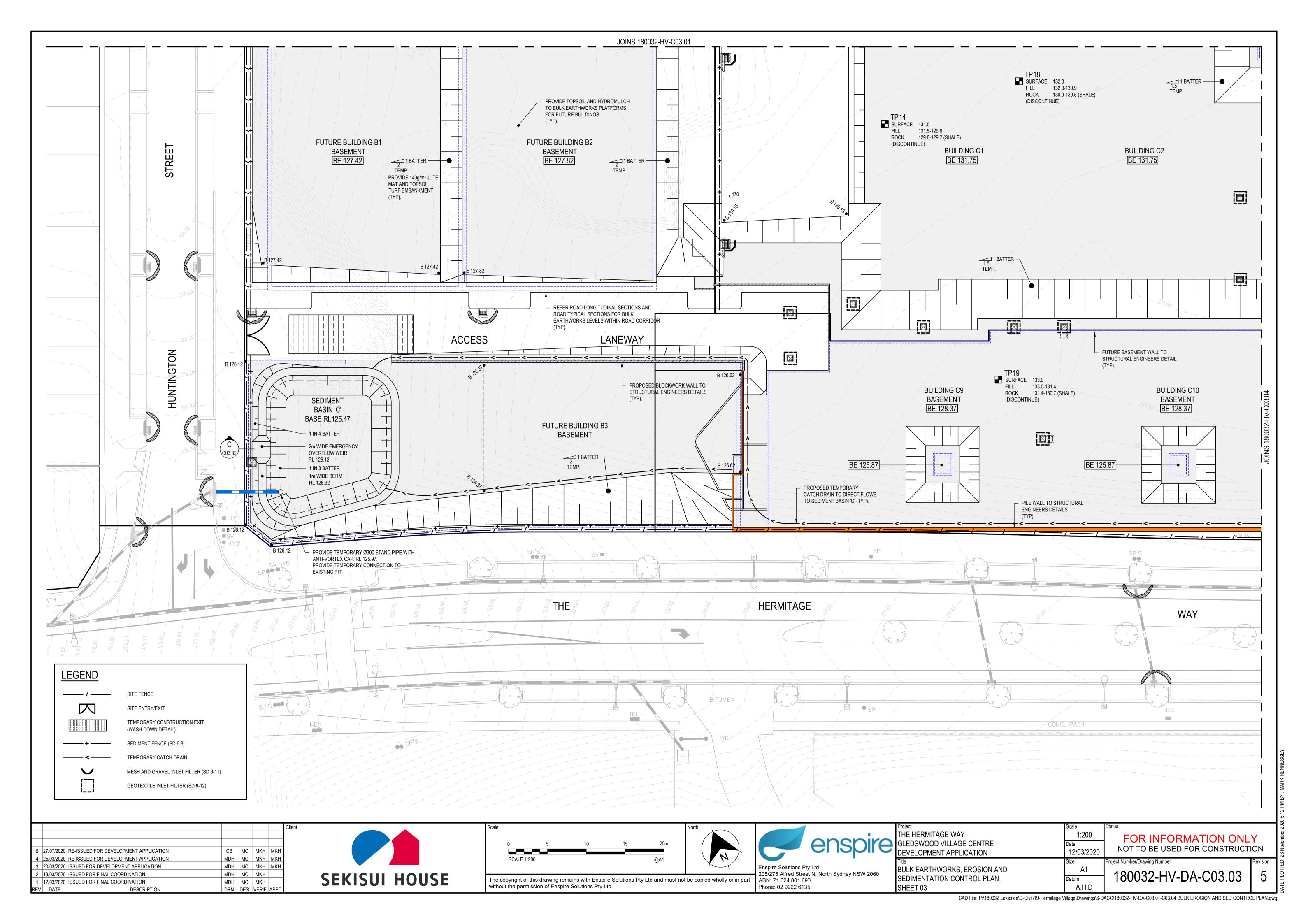


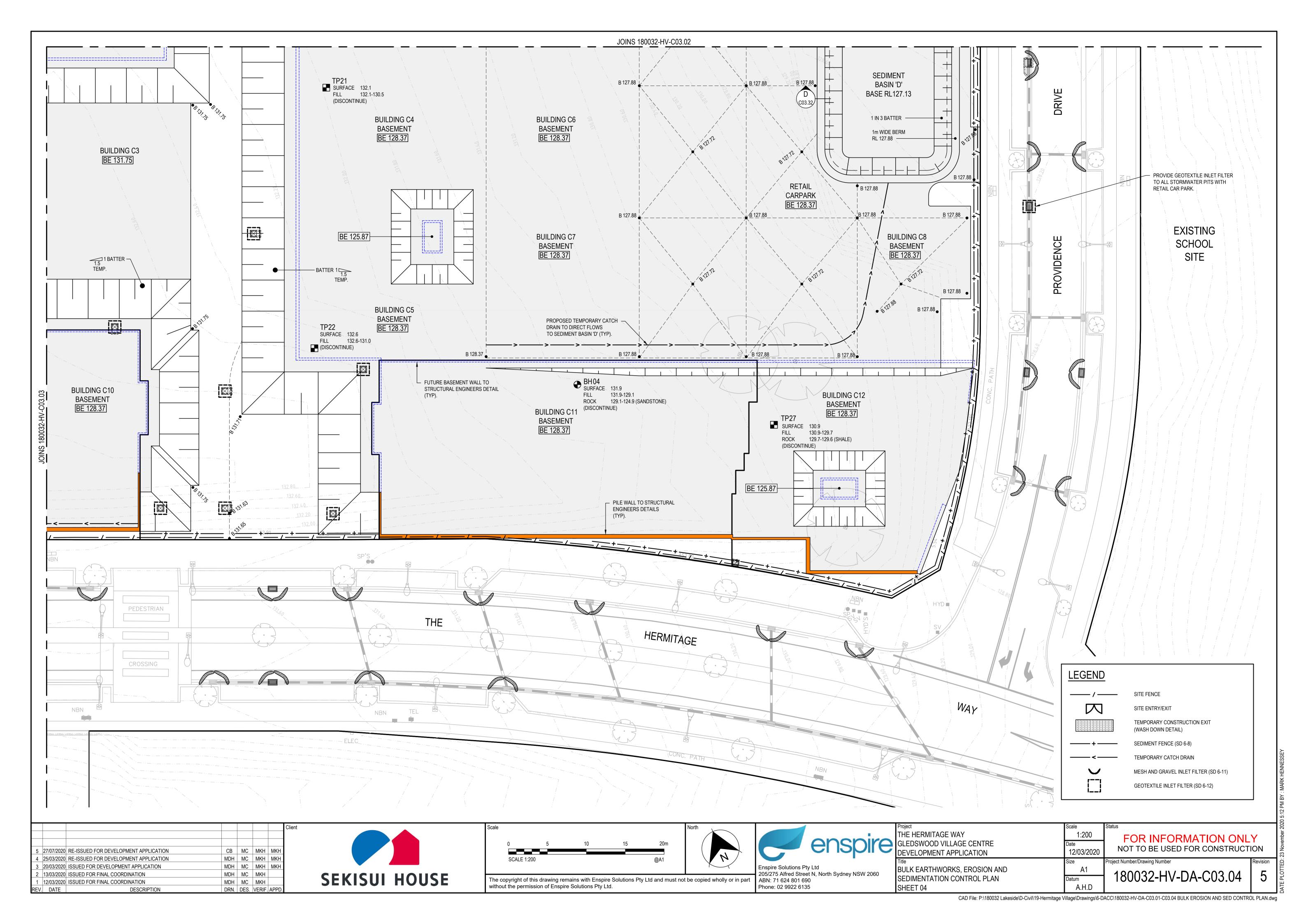








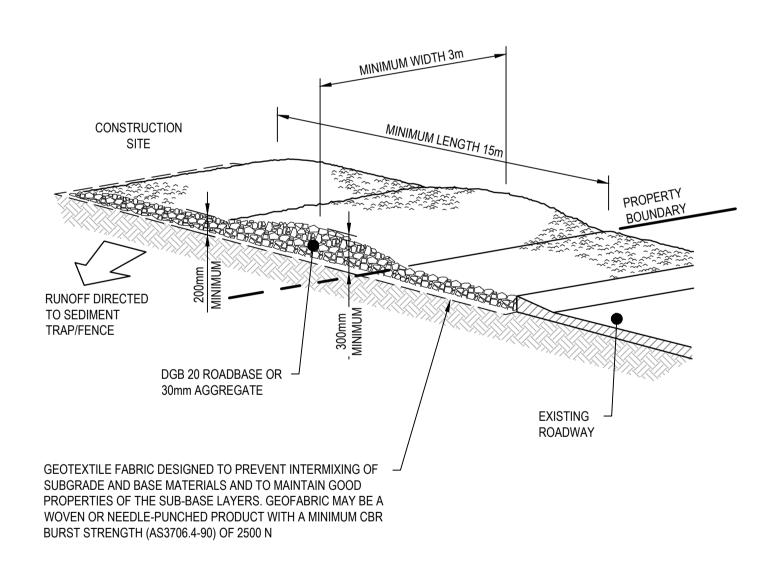




#### **CONSTRUCTION NOTES**

- 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.
- 2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.
- 3. DRIVE 1.5 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.
- 4. 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.
- 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP.
- 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.

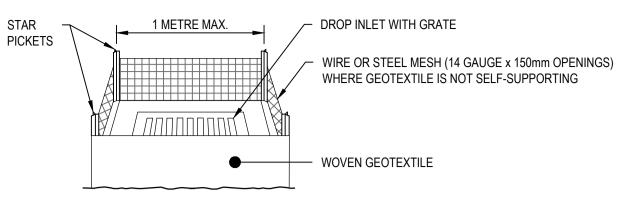
# SEDIMENT FENCE (SD 6-8)

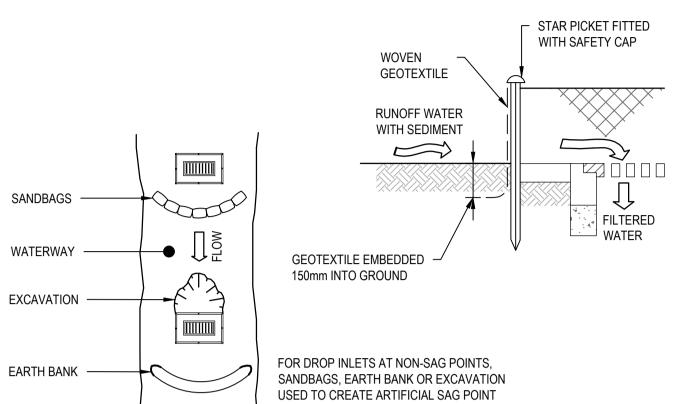


#### **CONSTRUCTION NOTES**

- 1. STRIP THE TOPSOIL, LEVEL THE SITE AND COMPACT THE SUBGRADE.
- 2. COVER THE AREA WITH NEEDLE-PUNCHED GEOTEXTILE.
- 3. CONSTRUCT A 200mm THICK PAD OVER THE GEOTEXTILE USING ROAD BASE OR 30mm AGGREGATE.
- 4. ENSURE THE STRUCTURE IS AT LEAST 15 METRES LONG OR TO BUILDING ALIGNMENT AND AT LEAST 3 METRES WIDE.
- 5. 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 (SD 6-14)

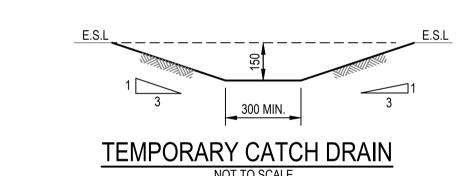


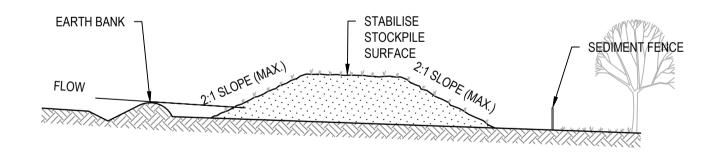


#### **CONSTRUCTION NOTES**

- FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE OR STRAW BALES.
- 2. 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.
- 3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS SHOWN IN
- 4. DO NOT COVER THE INLET WITH GEOTEXTILE UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR ALL WATERS TO BYPASS IT.

# GEOTEXTILE INLET FILTER (SD 6-12)

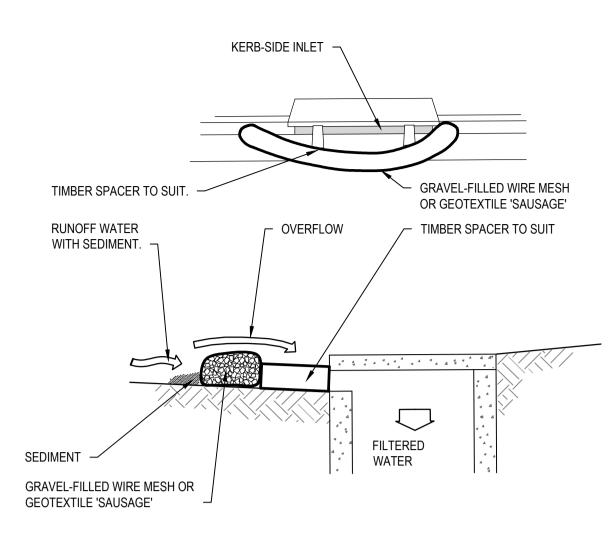




#### CONSTRUCTION NOTES

- PLACE STOCKPILES MORE THAN 2m (PREFERABLY 5m) FROM EXISTING VEGETATION, CONCENTRATED WATER
- FLOW, ROADS AND HAZARD AREAS.
- 2. 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.
- 5. 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.

# STOCKPILES (SD 4-1)



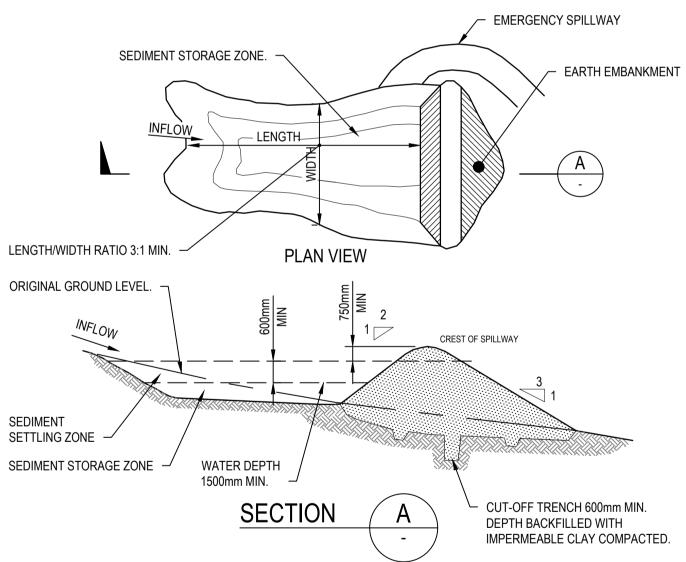
# NOTE:THIS PRACTICE ONLY TO BE USED WHERE SPECIFIED IN APPROVED SWMP/ESCP.

#### **CONSTRUCTION NOTES**

1. INSTALL FILTERS TO KERB INLETS ONLY AT SAG POINTS.

- 2. 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.
- 3. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
- 4. 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.

## MESH AND GRAVEL INLET FILTER (SD 6-11)



## CONSTRUCTION NOTES

- 1. REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
- CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTRELINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
- 3. MAINTAIN THE TRENCH FREE OF WATER AND RECOMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE
- SWMP TO 95 PER CENT STANDARD PROCTOR DENSITY.

  4. SELECT FILL FOLLOWING THE SWMP THAT IS FREE OF ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
- 5. PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO
- 6. SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE
- CONSTRUCT THE EMERGENCY SPILLWAY.

THE EXISTING SUBSTRATE.

8. REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.

(SEDIMENT BASIN)

 5
 27/07/2020
 RE-ISSUED FOR DEVELOPMENT APPLICATION
 CB
 MC
 MKH
 MKH

 4
 25/03/2020
 RE-ISSUED FOR DEVELOPMENT APPLICATION
 MDH
 MC
 MKH
 MKH

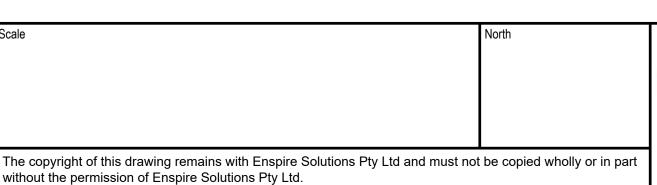
 3
 20/03/2020
 ISSUED FOR DEVELOPMENT APPLICATION
 MDH
 MC
 MKH
 MKH

 2
 13/03/2020
 ISSUED FOR FINAL COORDINATION
 MDH
 MC
 MKH

 1
 12/03/2020
 ISSUED FOR FINAL COORDINATION
 MDH
 MC
 MKH

 REV.
 DATE
 DESCRIPTION
 DRN.
 DES.
 VERIF.
 APPD







Phone: 02 9922 6135

Project
THE HERMITAGE WAY
GLEDSWOOD VILLAGE CENTRE
DEVELOPMENT APPLICATION

Title
EROSION AND SEDIMENTATION CONTROL DETAILS

Scale
N.T.S
Date
12/03/2020

Status

FOR INFORMATION ONLY
NOT TO BE USED FOR CONSTRUCTION

Project Number/Drawing Number

Revision
180032-HV-DA-C03.21

Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr) 242 268 44 40  Soil Loss Class 3 3 1 1 See Table 4.2, page 4-13  Soil loss (m³/ha/yr) 186 206 34 31 Conversion to cubic metres  Sediment basin storage (soil) volume (m³) 31 36 4 4 See Sections 6.3.4(i) for calculations  Sediment basin settling (water) volume (m³) 158 166 104 129 See Sections 6.3.4(i) for calculations	1. Erosion Hazard and Sediment Basins									
Site area	Site Name:	: Gledswood Village								
Site area	Site Location:	Camd	en							
Site area	Precinct/Stage:	Gleds	wood \	/illage						
Site area   A   B   C   D   Notes	Other Details:									
Disturbed catchment area (ha)	Site area		2-77	200	200-104	of Stru	cture	Notes		
Soil analysis (enter sediment type if known, or laboratory particle size data)	Total catchment area (ha)	0.99	1.04	0.65	0.81					
Sediment Type (C, F or D) if known:   D D D D D   From Appendix C (if known)	Disturbed catchment area (ha)	0.99	1.04	0.65	0.81					
Sediment Type (C, F or D) if known:   D D D D D   From Appendix C (if known)										
% sand (fraction 0.02 to 2.00 mm)         31         46         26         26         69	Soil analysis (enter sediment t	ype if	known	, or lab	orator	y parti	cle siz	e data)		
## Sitt (fraction 0.002 to 0.02 mm) ## 31	Sediment Type (C, F or D) if known:	D	D	D	D			From Appendix C (if known)		
% silt (fraction 0.002 to 0.02 mm)         31         31         31         31         fraction. E.g. enter 10 for 10%           % clay (fraction finer than 0.002 mm)         69	% sand (fraction 0.02 to 2.00 mm)							Enter the percentage of each soil		
% clay (fraction finer than 0.002 mm)   69   69   69   69   69   69   69   6	% silt (fraction 0.002 to 0.02 mm)	31	31	31	31					
See Section 6.3.3(e). Auto-calculated	% clay (fraction finer than 0.002 mm)	69	69	69	69			ilaction. L.g. enter 10 for 1076		
Rainfall data	Dispersion percentage	10.0	10.0	10.0	10.0			E.g. enter 10 for dispersion of 10%		
Rainfall data	% of whole soil dispersible	8.45	8.45	8.45	8.45			See Section 6.3.3(e). Auto-calculated		
Design rainfall depth (no of days)   5   5   5   5   5   5   5   5   5	Soil Tex ture Group	D	D	D	D			Automatic calculation from above		
Design rainfall depth (no of days)   5   5   5   5   5   5   5   5   5										
Design rainfall depth (percentile)   75   75   75   75   75   75   75   7	Rainfall data									
Design rainfall depth (percentile)   75   75   75   75   75   75   75   7	Design rainfall depth (no of days)	5	5	5	5			See Section 6.3.4 and particularly		
X-day, y-percentile rainfall event (mm)   20.2	Design rainfall depth (percentile)	75	75	75	75					
IFD: 2-year, 6-hour storm (if known)	x-day, y-percentile rainfall event (mm)	20.2	20.2	20.2	20.2			rame or on pages of a rama of go.		
FD: 2-year, 6-hour storm (if known)	Rainfall R-factor (if known)							Only need to enter one or the other here		
Rainfall erosivity ( <i>R</i> -factor)   2020   2020   2020   2020   Auto-filled from above	IFD: 2-y ear, 6-hour storm (if known)	9.5	9.5	9.5	9.5			,		
Rainfall erosivity ( <i>R</i> -factor)   2020   2020   2020   2020   Auto-filled from above										
Soil erodibility (K-factor)										
Slope length (m)		2020	2020	2020	2020			Auto-filled from above		
Slope gradient (%)  Length/gradient (LS -factor)  Erosion control practice (P -factor)  1.23  1.36  0.22  0.20  Erosion control practice (P -factor)  1.3  1.3  1.3  1.3  1.3  1.3  1.3  Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)  Storage (soil) zone design (no of months)  2  2  2  2  3  Minimum is generally 2 months  Cv (Volumetric runoff coefficient)  0.79  0.79  0.79  0.79  0.79  0.79  See Table F2, page F-4 in Appendix F  Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr)  Soil Loss Class  3  3  1  1  See Table 4.2, page 4-13  Soil loss (m³/ha/yr)  186  206  34  31  Conversion to cubic metres  Sediment basin storage (soil) volume (m³)  Sediment basin storage (soil) volume (m³)  158  166  104  129  See Sections 6.3.4(i) for calculations	- ' '				Charles Nation Production & Co. Co.					
Length/gradient ( <i>LS</i> -factor)  Erosion control practice ( <i>P</i> -factor)  1.23 1.36 0.22 0.20  Frosion control practice ( <i>P</i> -factor)  1.3 1.3 1.3 1.3 1.3 1.3  Ground cover ( <i>C</i> -factor)  1 1 1 1 1 1  Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)  Storage (soil) zone design (no of months)  2 2 2 2 2 Minimum is generally 2 months  Cv (Volumetric runoff coefficient)  0.79 0.79 0.79 0.79 See Table F2, page F-4 in Appendix F  Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr)  242 268 44 40  Soil Loss Class  3 3 1 1 See Table 4.2, page 4-13  Soil loss (m³/ha/yr)  186 206 34 31 Conversion to cubic metres  Sediment basin storage (soil) volume (m³)  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  158 166 104 129 See Sections 6.3.4(i) for calculations		140	170	1.0	50 80 - 60					
Erosion control practice ( <i>P</i> -factor)  1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3 1.3	,	11.00	4.6							
Ground cover (C-factor)         1         2         2         2         2         2         2         2         2         2         2         3         3         0.79         0.79         0.79         0.79         0.79         See Table F2, page F-4 in Appendix F           Calculations and Type D/F Sediment Basin Volumes           Soil loss (t/ha/yr)         242         268         44         40		_	_	_	_			rill/interrill ratio.		
Sediment Basin Design Criteria (for Type D/F basins only. Leave blank for Type C basins)  Storage (soil) zone design (no of months)  2 2 2 2 2 Minimum is generally 2 months  Cv (Volumetric runoff coefficient)  0.79 0.79 0.79 0.79 See Table F2, page F-4 in Appendix F  Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr)  242 268 44 40  Soil Loss Class 3 3 1 1 See Table 4.2, page 4-13  Soil loss (m³/ha/yr)  186 206 34 31 Conversion to cubic metres  Sediment basin storage (soil) volume (m³)  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  158 166 104 129 See Sections 6.3.4(i) for calculations		1.3	1.3	1.3	1.3	1.3	1.3			
Storage (soil) zone design (no of months)  2 2 2 2	Ground cover (C-factor)	1 '	1	1	1	1 )	1			
Cv (Volumetric runoff coefficient)  0.79  0.79  0.79  0.79  0.79  See Table F2, page F-4 in Appendix F  Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr)  242  268  44  40  Soil Loss Class  3  3  1  See Table 4.2, page 4-13  Conversion to cubic metres  Sediment basin storage (soil) volume (m³)  31  36  4  4  See Sections 6.3.4(i) for calculations  Sediment basin settling (water) volume (m³)  See Sections 6.3.4(i) for calculations	Sediment Basin Design Criteria	a (for l	Type D	/F basi	ns only	/. Leav	e blan	k for Type C basins)		
Calculations and Type D/F Sediment Basin Volumes  Soil loss (t/ha/yr) 242 268 44 40  Soil Loss Class 3 3 1 1 See Table 4.2, page 4-13  Soil loss (m³/ha/yr) 186 206 34 31 Conversion to cubic metres  Sediment basin storage (soil) volume (m³) 31 36 4 4 See Sections 6.3.4(i) for calculations  Sediment basin settling (water) volume (m³) 158 166 104 129 See Sections 6.3.4(i) for calculations	Storage (soil) zone design (no of months)	2	2	2	2			Minimum is generally 2 months		
Soil loss (t/ha/yr)  Soil Loss Class  Soil loss (m³/ha/yr)  Soil loss (m³/ha/yr)  Soil loss (m³/ha/yr)  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)	Cv (Volumetric runoff coefficient)	0.79	0.79	0.79	0.79			See Table F2, page F-4 in Appendix F		
Soil loss (t/ha/yr)  Soil Loss Class  Soil loss (m³/ha/yr)  Soil loss (m³/ha/yr)  Soil loss (m³/ha/yr)  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)	Calculations and Type D/E See	limont	Racin	Volum	05					
Soil Loss Class  3 3 1 1  See Table 4.2, page 4-13  Soil loss (m³/ha/yr)  186 206 34 31  Conversion to cubic metres  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  158 166 104 129  See Sections 6.3.4(i) for calculations										
Soil loss (m³/ha/yr)  Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  186  206  34  31  Conversion to cubic metres  See Sections 6.3.4(i) for calculations  Sediment basin settling (water) volume (m³)  158  166  104  129  See Sections 6.3.4(i) for calculations					1			See Table 4.2 nage 4-13		
Sediment basin storage (soil) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)  Sediment basin settling (water) volume (m³)  See Sections 6.3.4(i) for calculations					31					
Sediment basin settling (water) volume (m³)  158  166  104  129  See Sections 6.3.4(i) for calculations		AL		100						
Counter scaling (water) volume (iii)	2		1.00		***					
I Sediment has in total violume (m²)	Sediment basin settling (water) volume (m <sup>3</sup> )	189	202	108	133			222 2222 C.o. I(i) Ioi dallociduolio		

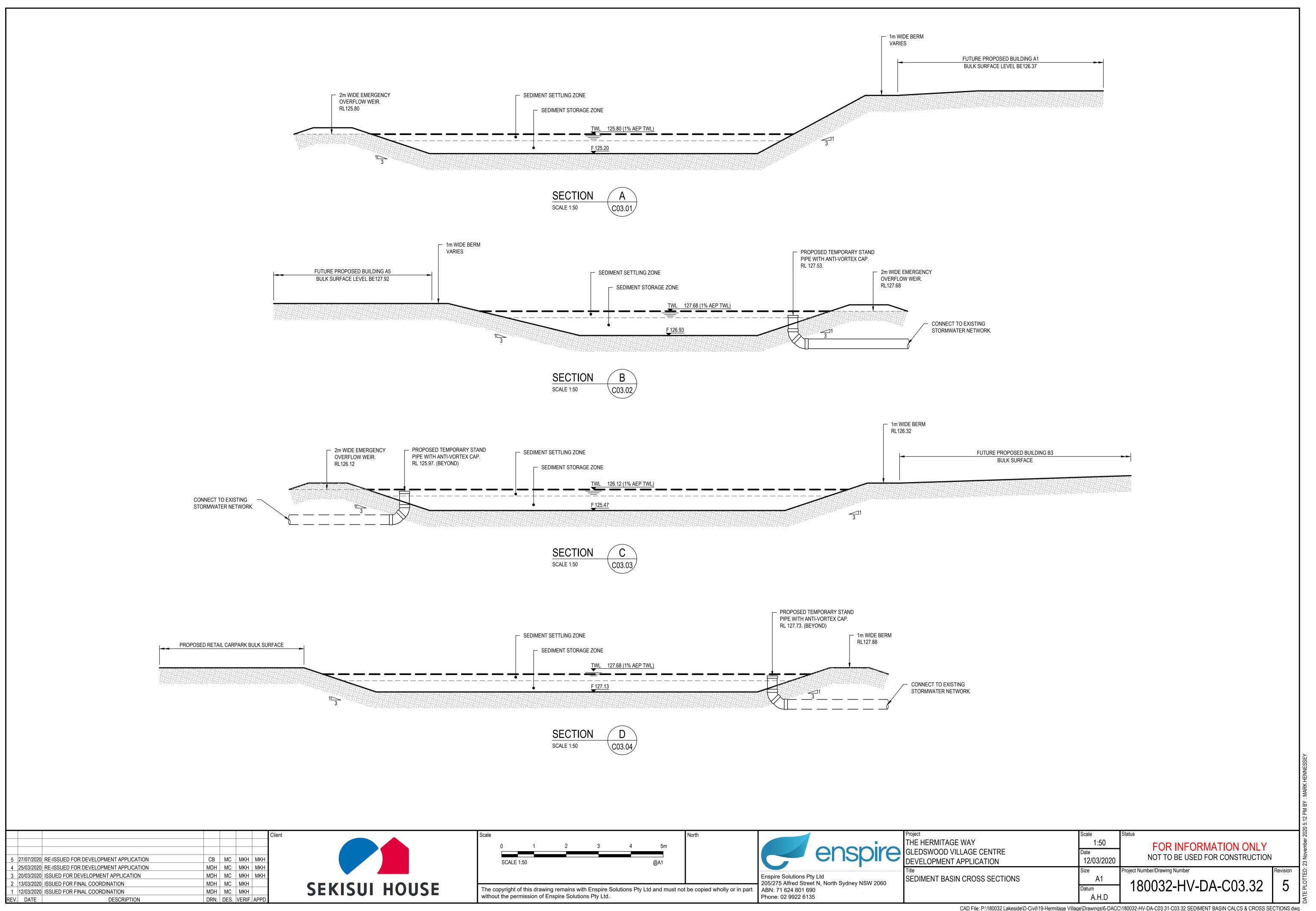
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4	25/03/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	l
3	20/03/2020	ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	l
2	13/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH		l
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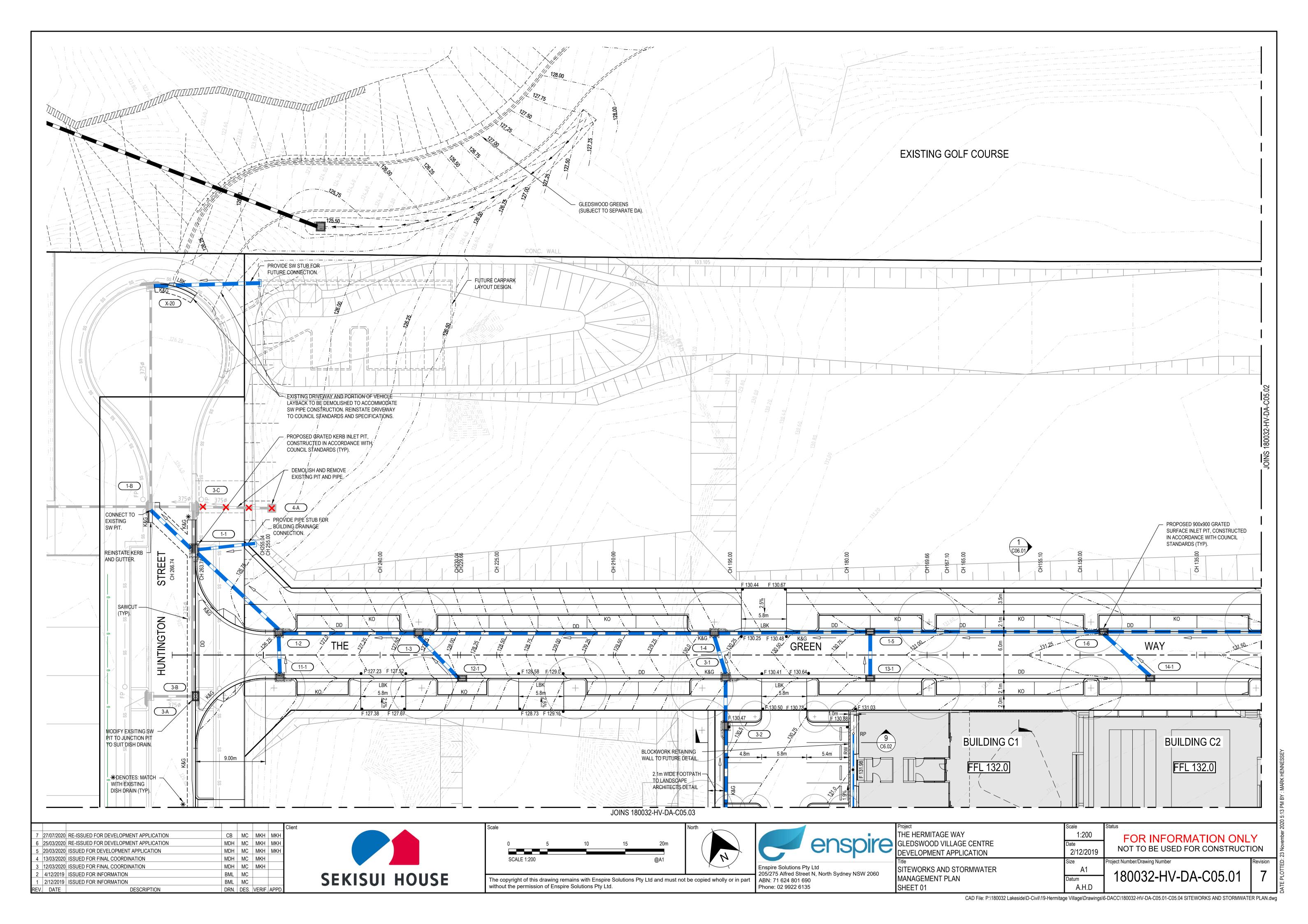
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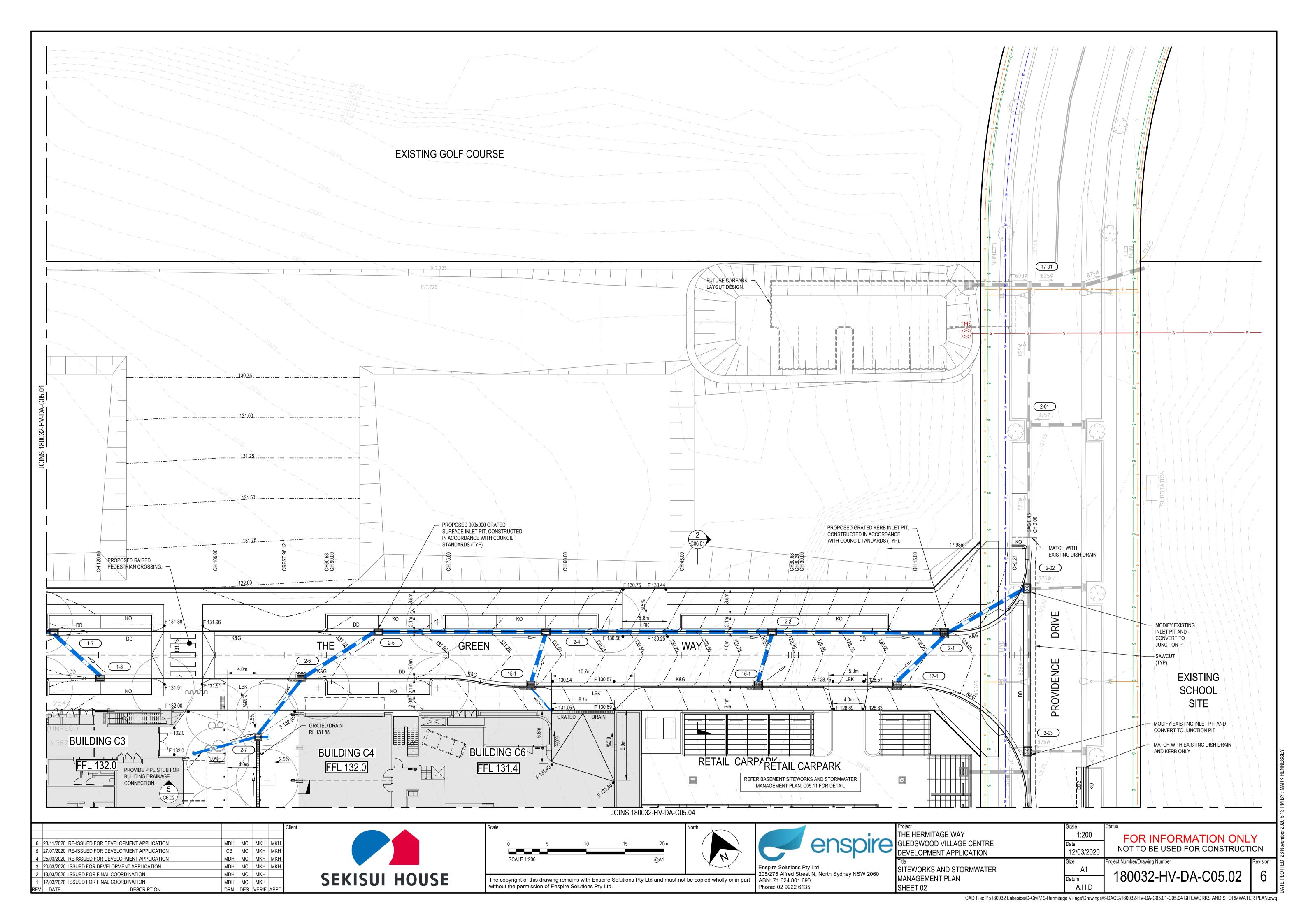
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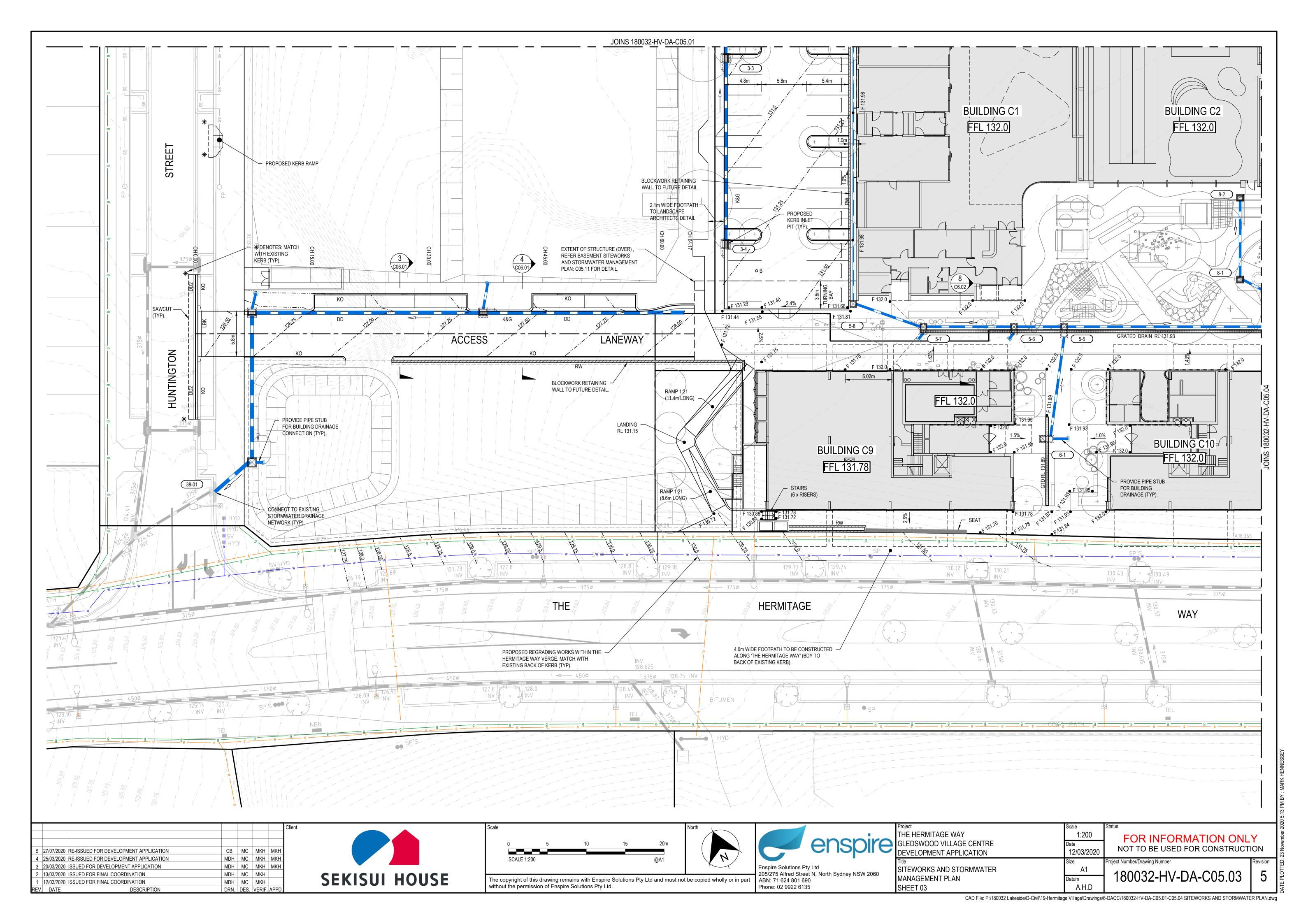
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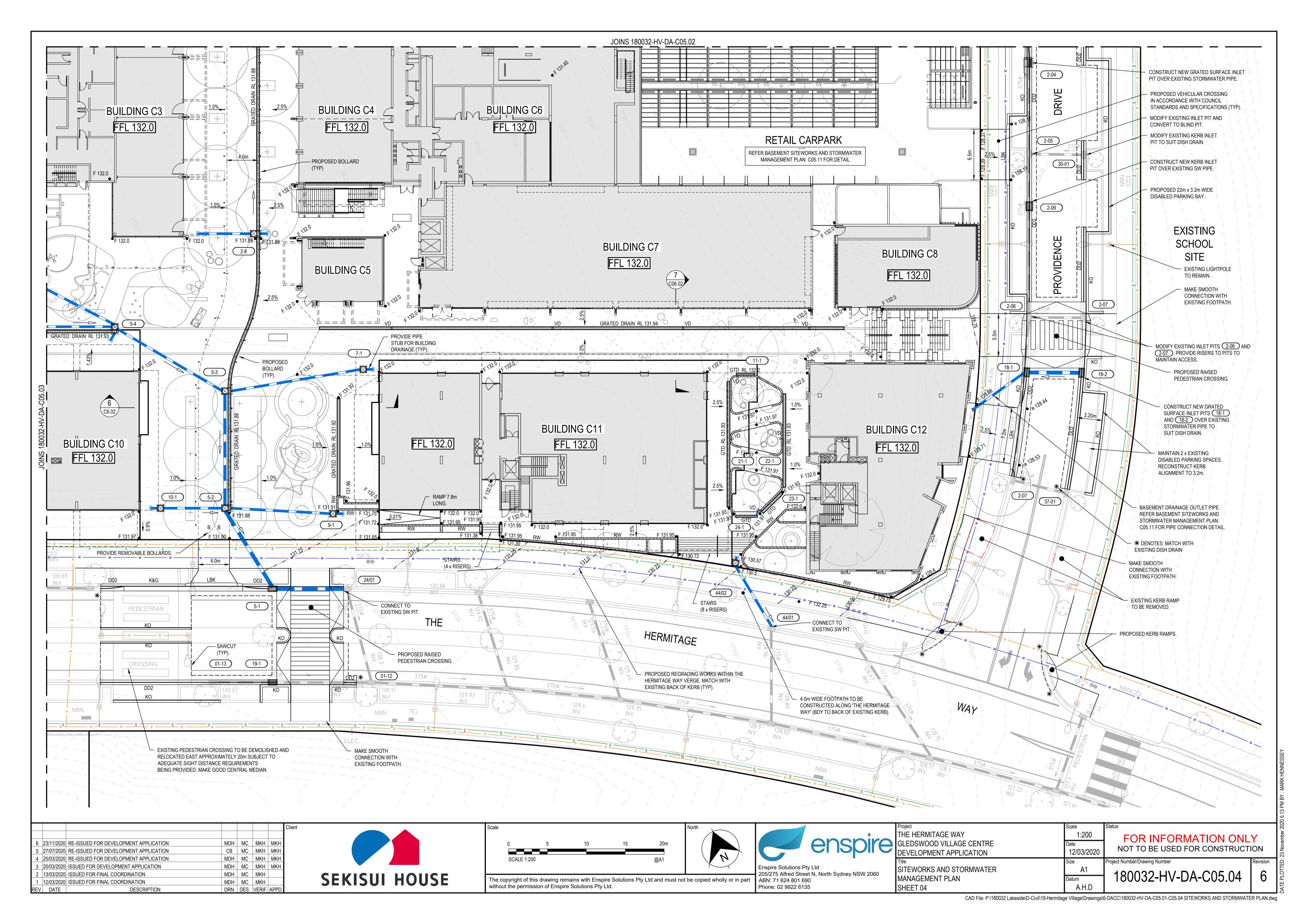


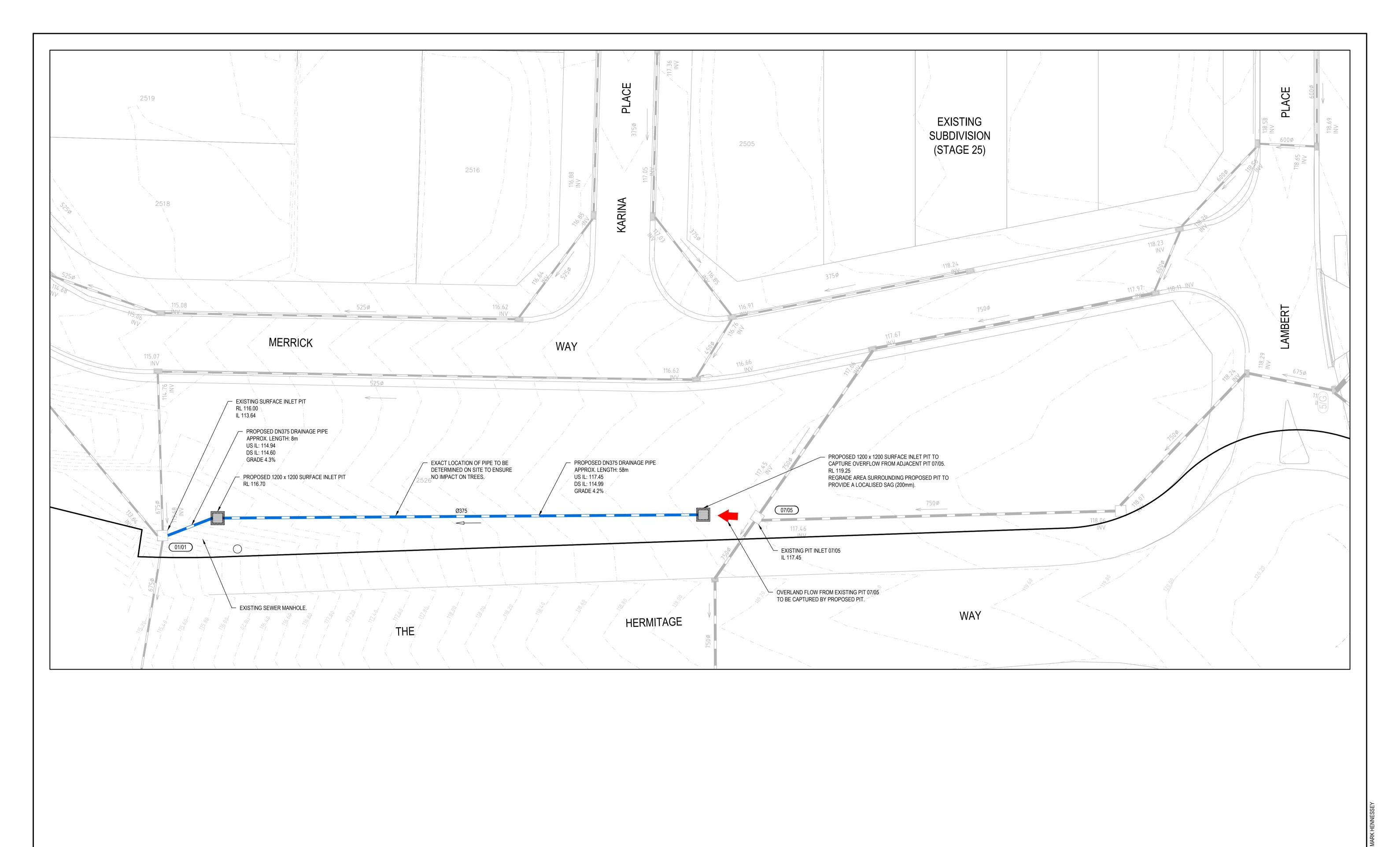






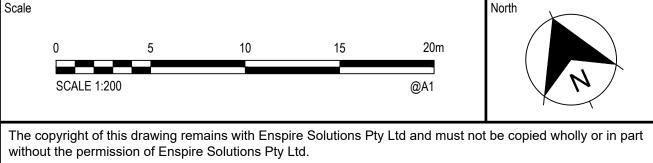


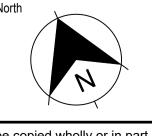




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6	23/11/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	
5	27/07/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	СВ	MC	MKH	MKH	
4	25/03/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	
3	20/03/2020	ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	
2	13/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH		
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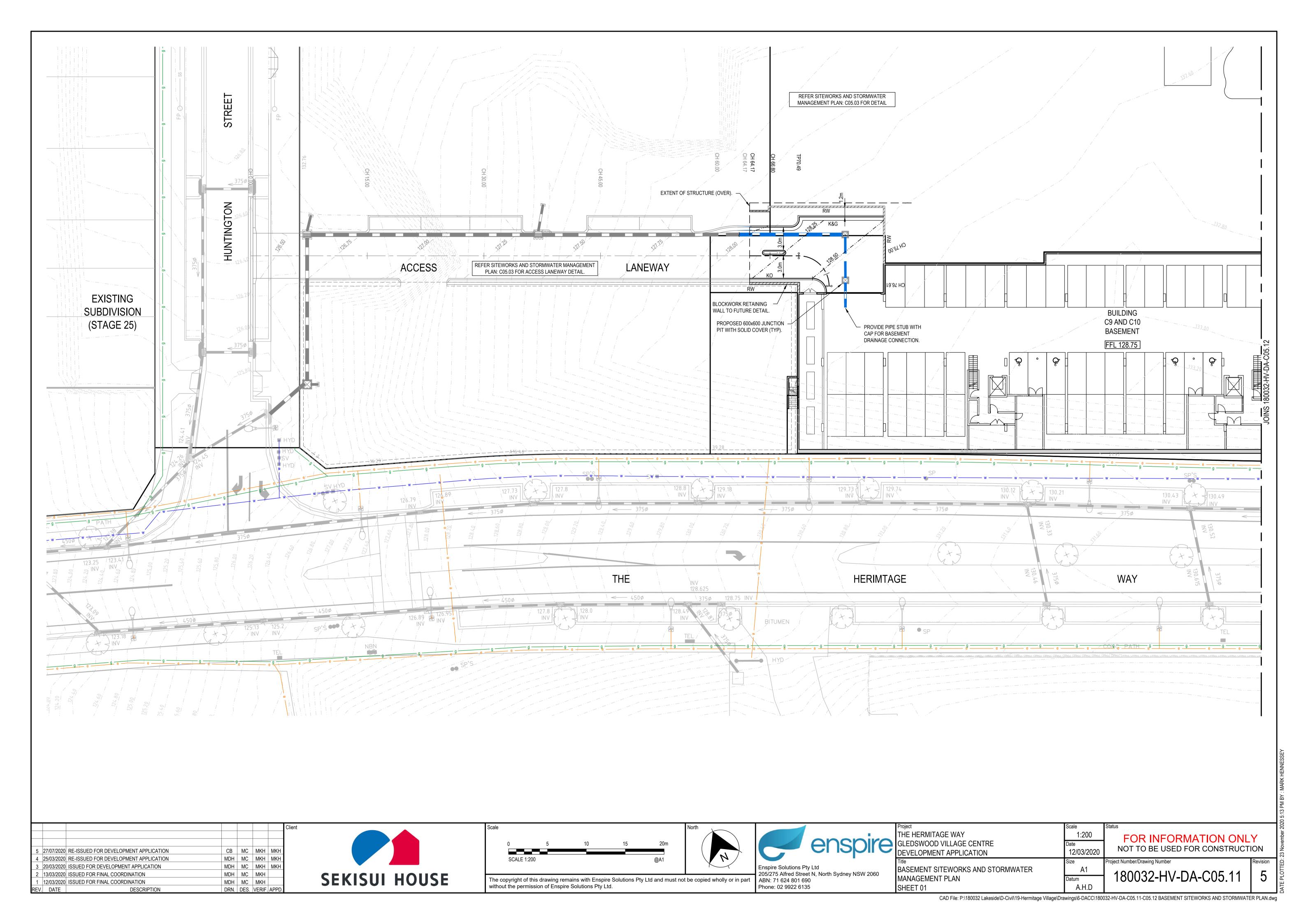


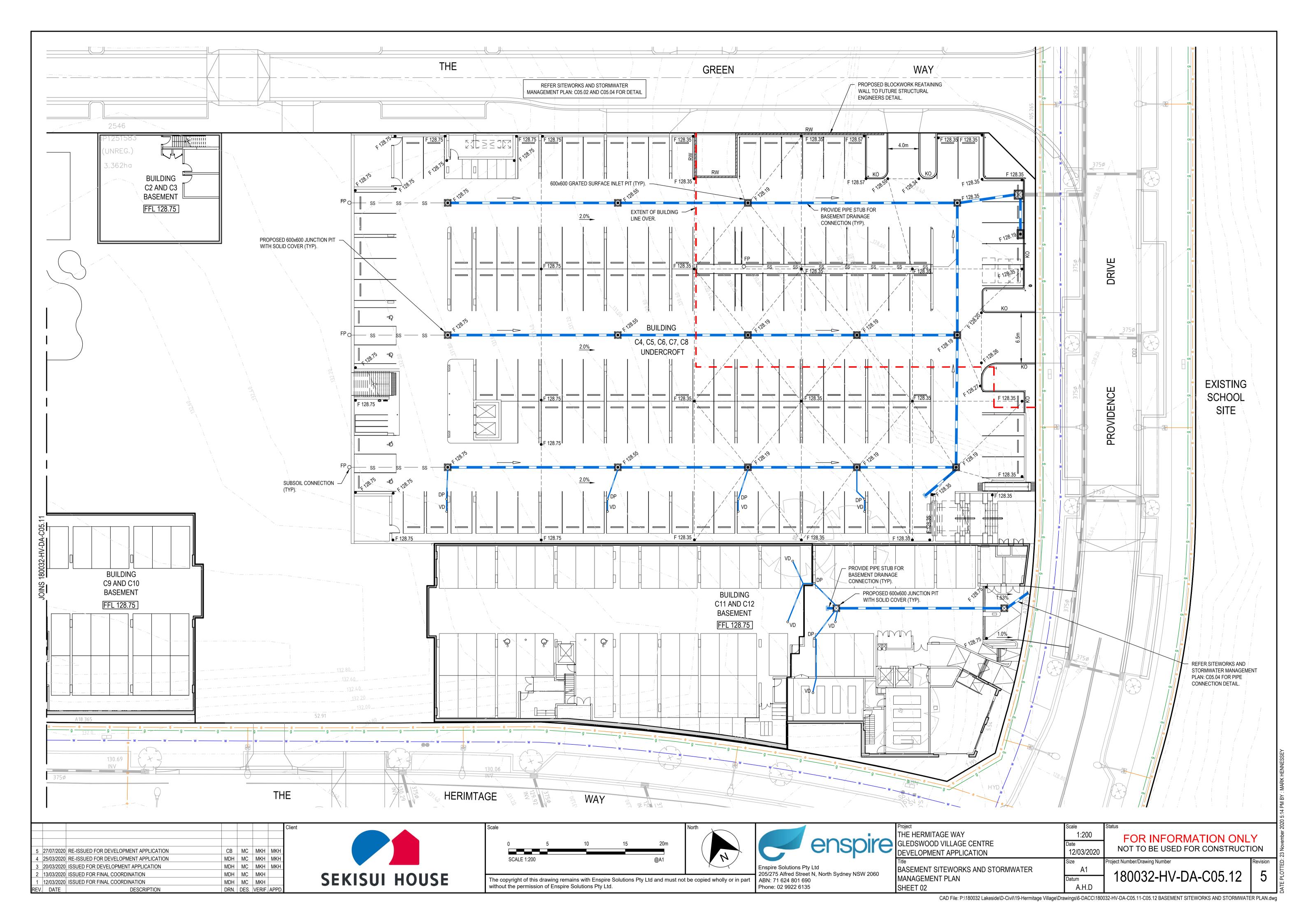


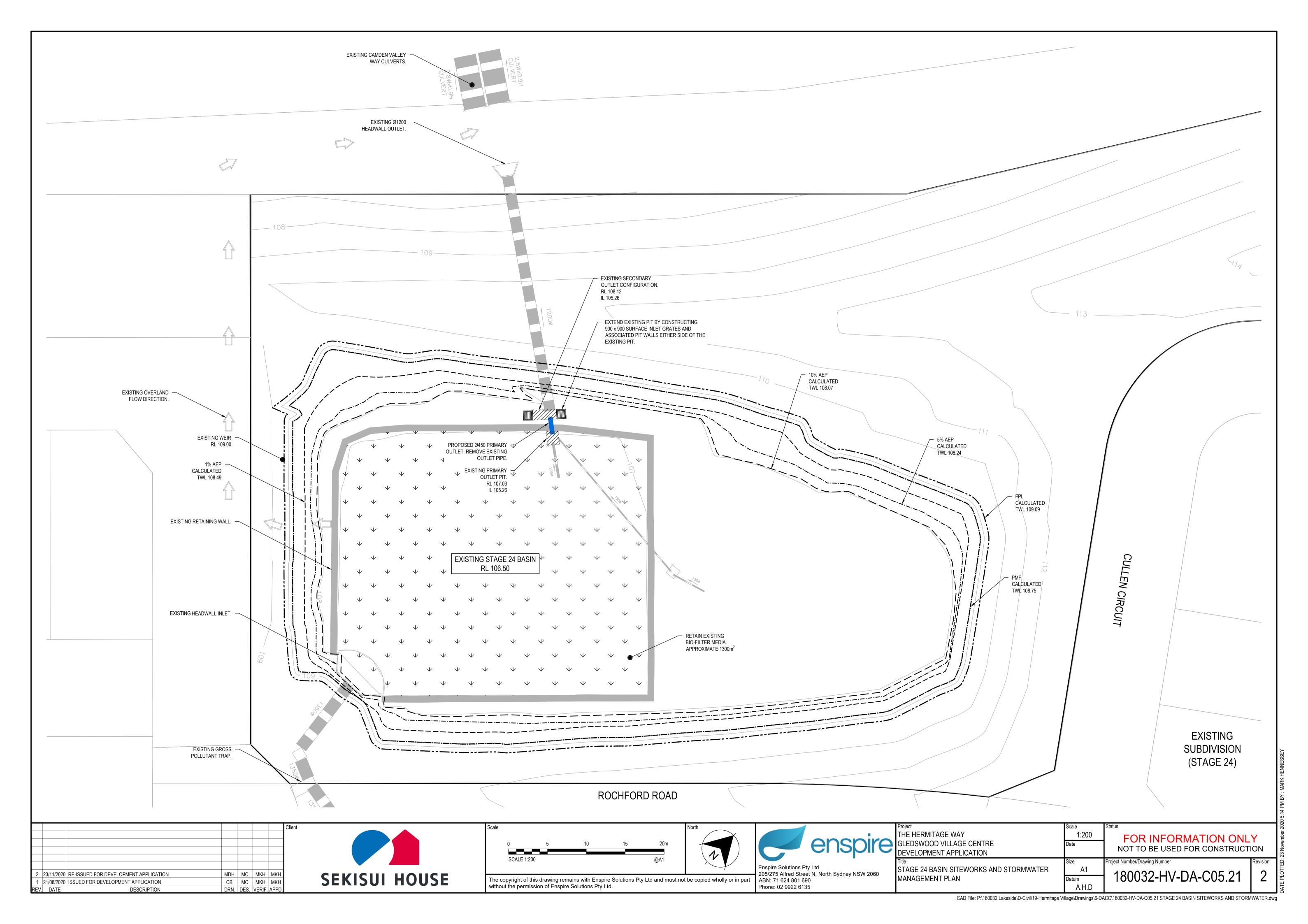


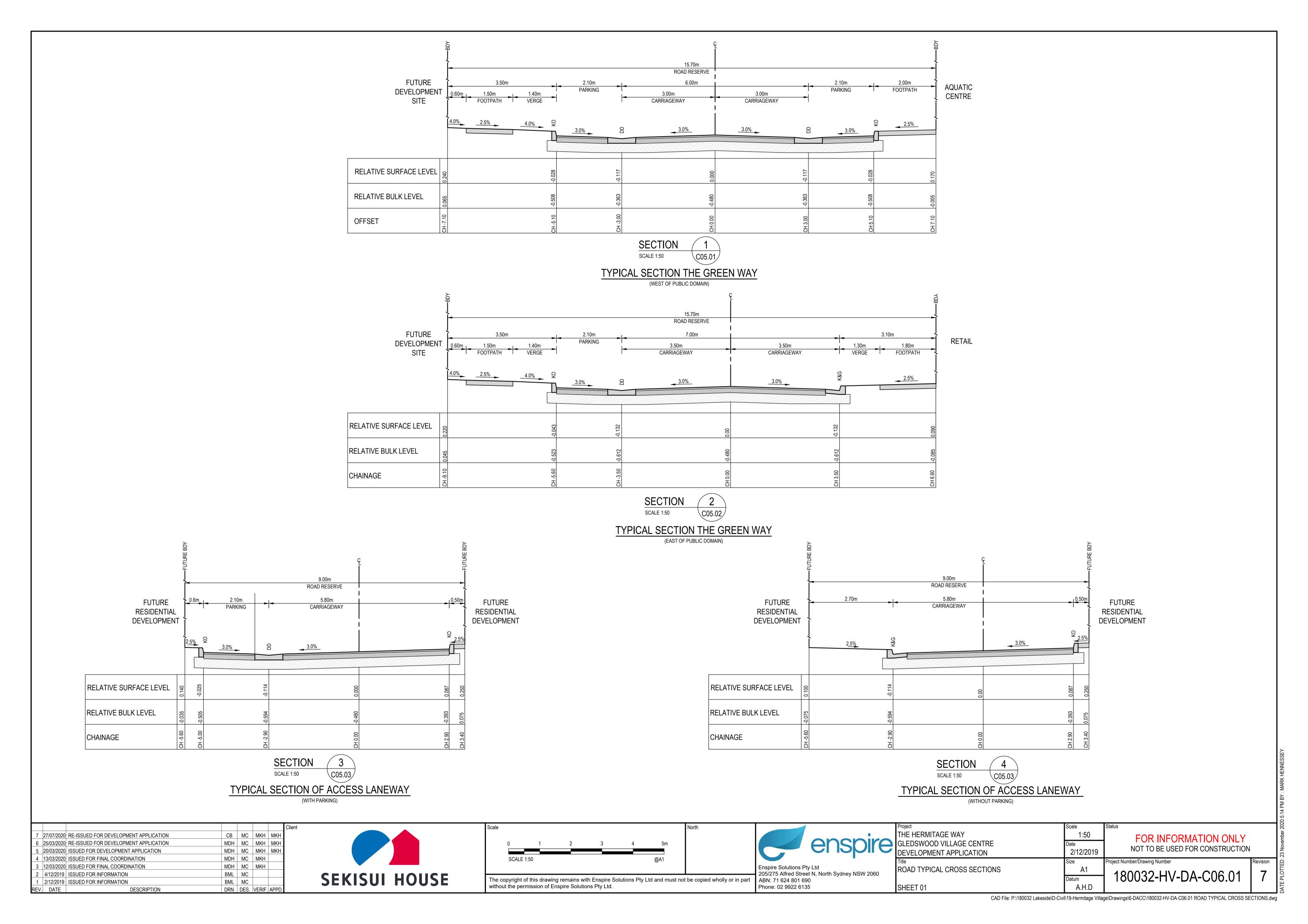
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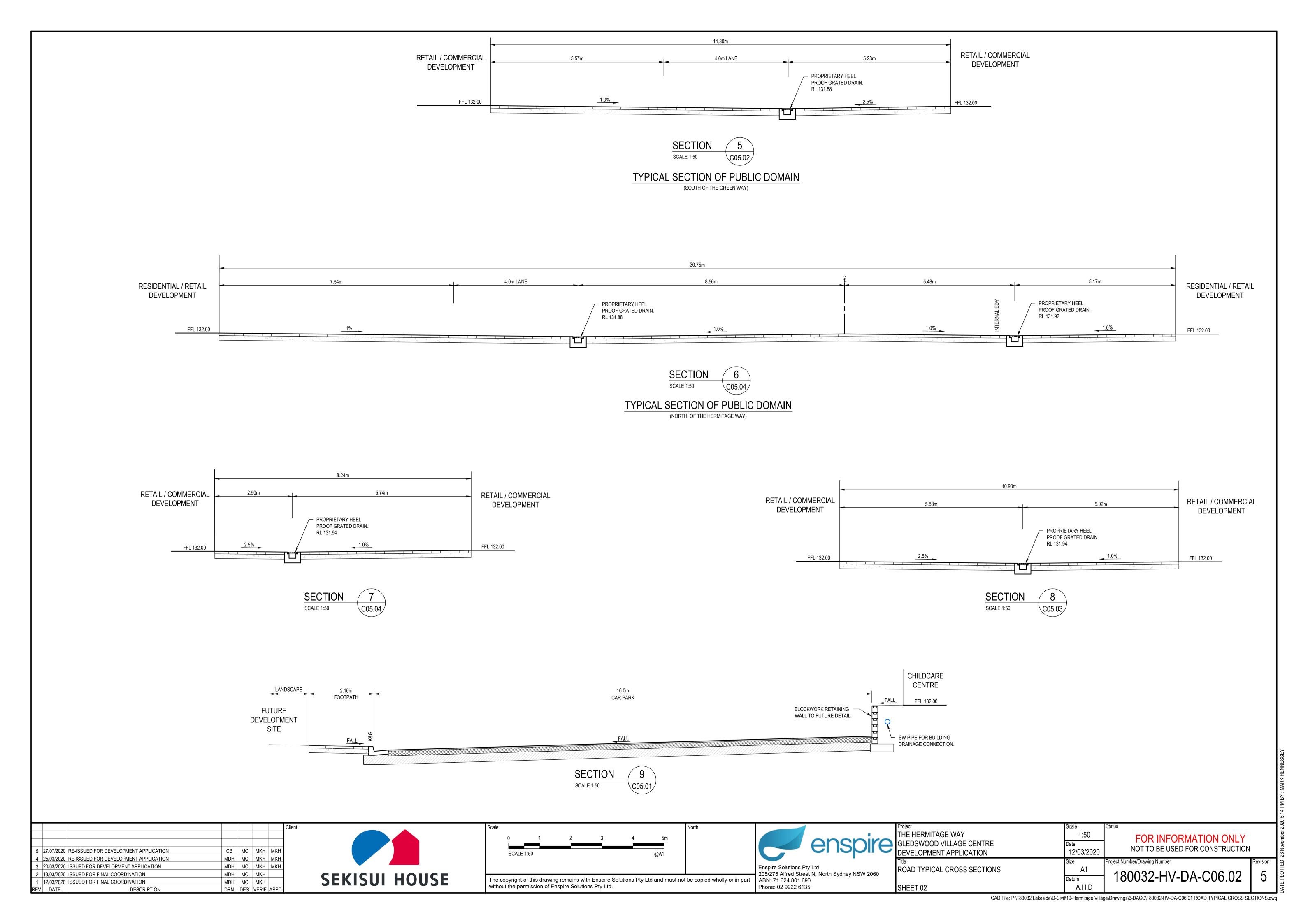
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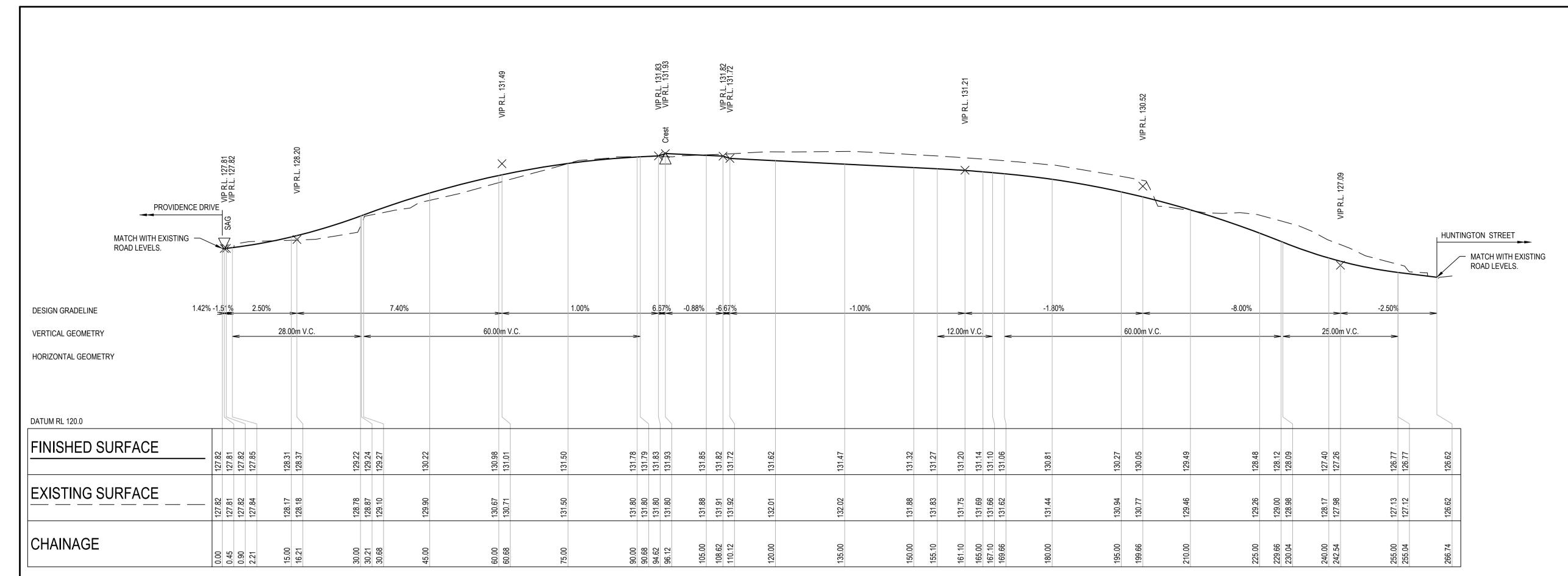






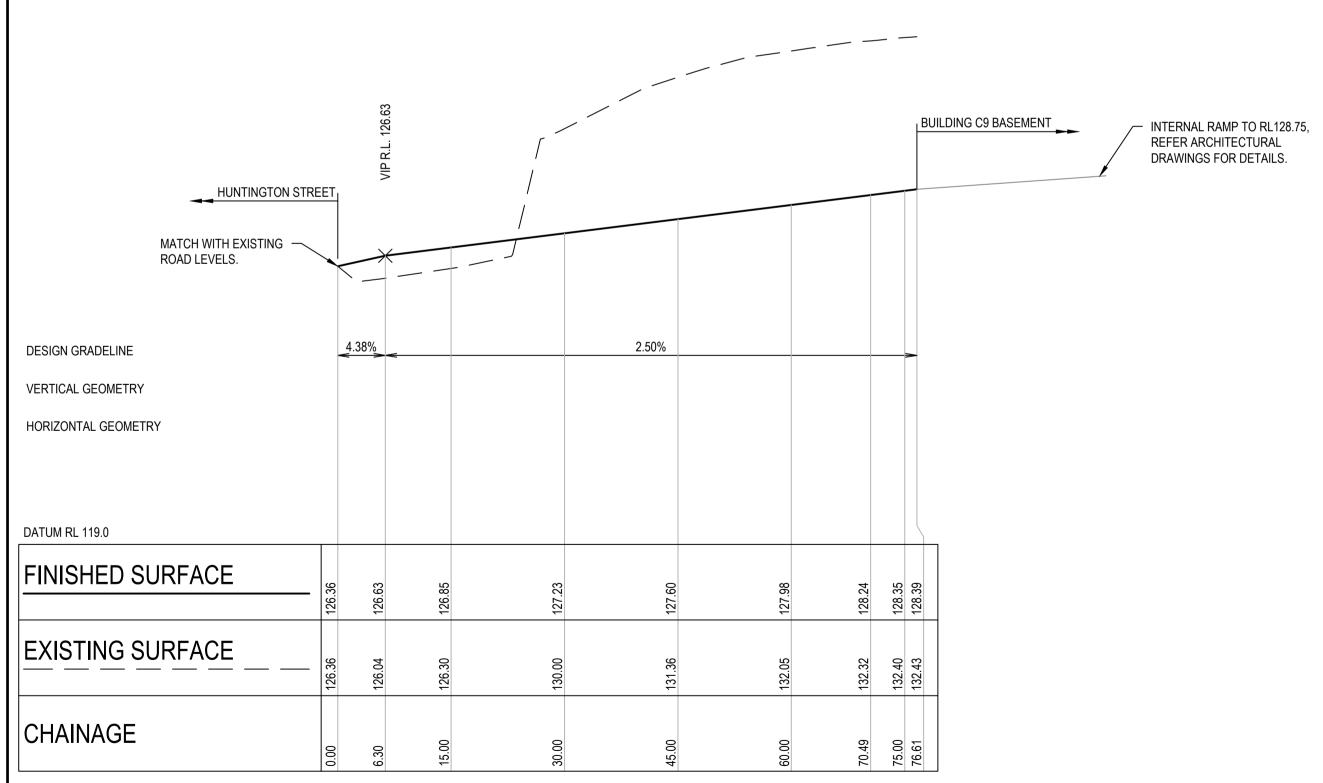






# THE GREEN WAY - LONGITUDINAL SECTION

SCALE 1:500 HORI SCALE 1:100 VERT



# ACCESS LANEWAY - LONGITUDINAL SECTION

SCALE 1:500 HORI SCALE 1:100 VERT

							Client
7	27/07/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	СВ	MC	MKH	MKH	
6	25/03/2020	RE-ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	
5	20/03/2020	ISSUED FOR DEVELOPMENT APPLICATION	MDH	MC	MKH	MKH	
4	13/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH		
3	12/03/2020	ISSUED FOR FINAL COORDINATION	MDH	MC	MKH		
2	4/12/2019	ISSUED FOR INFORMATION	BML	MC			
1	2/12/2019	ISSUED FOR INFORMATION	BML	MC			
REV.	DATE	DESCRIPTION	DRN.	DES.	VERIF.	APPD.	1



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Project	Scale	Status		
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GLEDSWOOD VILLAGE CENTRE	Date			
DEVELOPMENT APPLICATION	2/12/2019	NOT TO BE USED FOR CONSTRUCTION		
Title	Size	Project Number/Drawing Number	Revision	
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