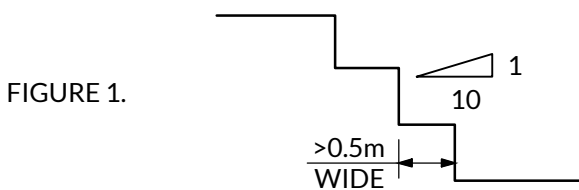


BULK EARTHWORKS NOTES

- THE CONTRACTOR IS TO FENCE THE LIMIT OF WORKS PRIOR TO THE PRE-START MEETING WITH COUNCIL.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED PRIOR TO COMMENCEMENT OF CLEARING AND GRUBBING WORKS.
- EXCAVATION AND FILLING IS TO BE CARRIED OUT TO THE PLAN LEVELS, DIMENSIONS AND BATTERS AS DRAWN. WORKS ARE TO BE GENERALLY IN ACCORDANCE WITH AS 3798 'GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS' & THE PROJECT GEOTECHNICAL REPORT, AS WELL AS THE LOCAL AUTHORITY STANDARDS.
- ANY CLEARING REQUIRED TO BE UNDERTAKEN BY THE CONTRACTOR IS TO BE STRICTLY IN ACCORDANCE WITH THE COUNCIL APPROVED VEGETATION MANAGEMENT PLAN.
- ALL SOILS CONTAINING ORGANIC AND DELETERIOUS MATTER IN THE TOPSOIL ZONE OF SOILS SHALL BE STRIPPED FROM THE CONSTRUCTION AREA. THIS MATERIAL IS NOT CONSIDERED SUITABLE FOR REUSE AS STRUCTURAL FILL. SOFT WET SOILS AND EXISTING FILL IS TO BE REMOVED PRIOR TO THE PLACEMENT OF STRUCTURAL FILL.
- TREES ARE TO BE MULCHED & STOCKPILED ON SITE FOR USE WITH LANDSCAPING. WHERE PARTS OF TREES CANNOT BE MULCHED, THEY ARE TO BE REMOVED FROM SITE IN ACCORDANCE WITH LOCAL AUTHORITY REQUIREMENTS.
- SLOPING GROUND SHOULD BE BENCHED TO 'KEY IN' FILL MATERIAL AND OPTIMIZE COMPACTION. THE BENCHES SHOULD SLOPE BACK AT 1V:10H AND BE AT LEAST 0.5m WIDE. WIDER BENCHES TO ACCOMMODATE THE WIDTH OF THE ROLLER MAY NEED TO BE ADAPTED IN SOME SITUATIONS. REFER FIGURE 1.
- TOPSOIL APPROVED BY THE ENGINEER WHICH IS SUITABLE FOR REUSE IS TO BE CORRECTLY STOCKPILED ON SITE.
- ALL OF THE SITE SHALL BE FREE DRAINING DURING ALL PHASES OF THE PROJECT. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT THE SITE AND SURROUNDING AREAS FROM DAMAGE RESULTING FROM STORMWATER RUNOFF DURING CONSTRUCTION. DRAINAGE CONTROL DEVICES SUCH AS TEMPORARY DIVERSION DRAINS ARE TO BE IMPLEMENTED DURING CONSTRUCTION TO MINIMISE THE EFFECTS OF WEATHER.
- UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDANT ALL FILL SHALL BE PLACED AT BETWEEN +2% & -2% OF OPTIMUM MOISTURE CONTENT.



- IN CONSTRUCTION AREAS, THE CLEARED AND STRIPPED GROUND SURFACE SHOULD BE PROOF ROLLED TO DETECT ANY SOFT OR LOOSE MATERIAL. LOOSE SOILS, SHOULD BE COMPACTED TO THE APPROPRIATE REQUIREMENTS. SOFT, WET CLAYS SHOULD PREFERABLY BE REMOVED. IN AREAS OF CUT, PROOF ROLLING MAY BE DEFERRED UNTIL AFTER THE CUT OPERATION. TEST ROLLING SHALL BE DONE WITH A SMOOTH DRUM ROLLER WITH MINIMUM STATIC WEIGHT OF 12 TONNE. THE TYPED NATURAL FOUNDATION SOIL SHALL BE COMPACTED TO A MINIMUM DENSITY INDEX OF 65% (SANDS) OR MINIMUM DENSITY RATIO OF 75% STANDARD (CLAYS).
- ANY IMPORTED FILL, IF NEEDED TO MAKE UP EARTHWORK DEFICIENCIES, SHOULD BE OF FAIR TO GOOD QUALITY PLACED IN 200 THICK MAXIMUM LOOSE LAYERS AND CONFORM TO THE FOLLOWING GENERAL SPECIFICATION :

SOAKED CBR	MINIMUM 10%
LIQUID LIMIT	MAXIMUM 40%
MAXIMUM AGGREGATE SIZE	75mm
SHRINK/SWELL INDEX	MAXIMUM OF 1.0%
- GUIDELINES FOR MINIMUM RELATIVE COMPACTION VALUES FOR INSITU SOILS AND IMPORTED FILL FOR THE BUILDING AND PAVEMENTS ARE PRESENTED IN THE FOLLOWING TABLE :

MINIMUM RELATIVE COMPACTION	
LOCATION	MINIMUM DRY DENSITY RATIO (%)
BUILDING AREA	98
PAVEMENT AREA:	
BASE COURSE	98
SUB BASE COURSE	98
a) >0.3m BELOW PAVEMENT SUBGRADE	95
b) <0.3m BELOW PAVEMENT SUBGRADE	100

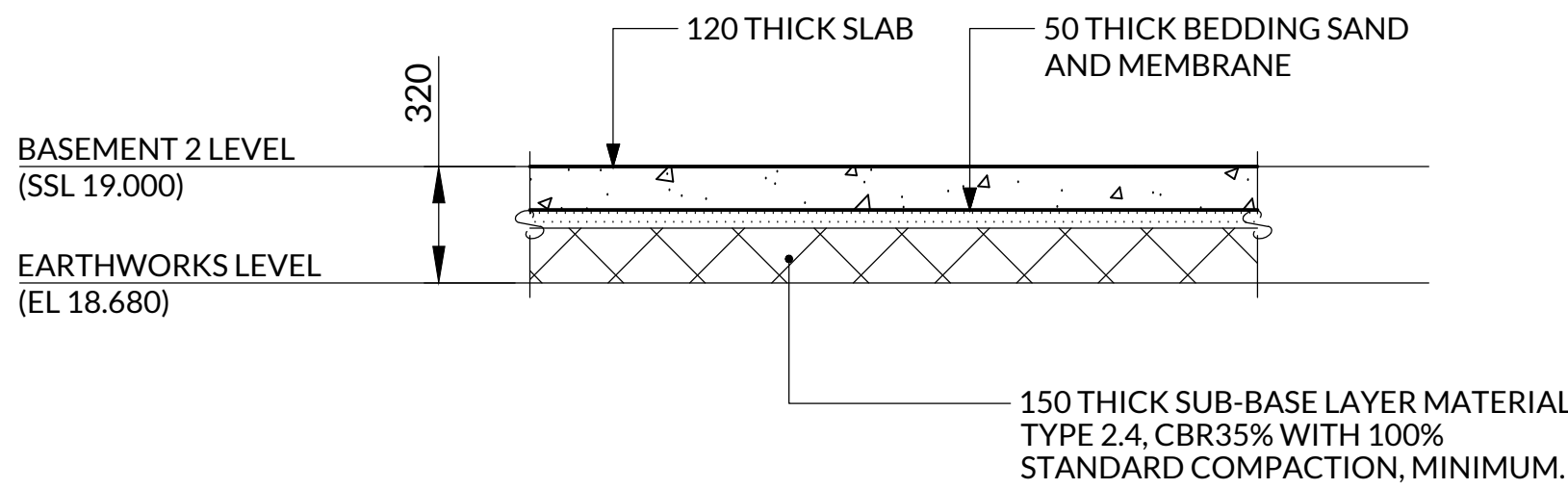
NOTES:

- THE RECOMMENDED COMPACTIONS ARE PERCENTAGES OF THE MAXIMUM DRY DENSITY DETERMINED BY AS 1289 5.1.1, (STANDARD COMPACTION).
- FOR PROCESSED PAVEMENT GRAVELS, MINIMUM DENSITY REQUIREMENTS SHOULD BE A PERCENTAGE OF MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1, (MODIFIED COMPACTION).
- PRIOR TO THE USE OF ANY IMPORTED ENGINEERED FILL MATERIAL, THE CONTRACTOR SHALL NOMINATE SOURCE MATERIALS TO BE USED & PROVIDE TEST RESULTS OF ITS PROPERTIES FOR ITEMS SUCH AS PARTICLE SIZE DISTRIBUTION GRADINGS, LIQUID LIMIT, PLASTICITY INDEX etc. WHICH WOULD NORMALLY BE PERFORMED BY AN AUTHORIZED TESTING LABORATORY IN SATISFYING THIS REQUIREMENT. RESULTS SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO COMMENCING ANY WORKS.
- STOCKPILED TOPSOIL IS TO BE RESPREAD TO AN EVEN 100mm THICKNESS OVER ALL BATTERS AND SURROUNDING EXPOSED AREAS. ANY EXCESS TOPSOIL IS TO BE DISPOSED OF BY THE CONTRACTOR OFF SITE (IF DIRECTED BY THE SUPERINTENDANT).
- ANY EXCESS SPOIL MATERIAL GENERATED DURING CONSTRUCTION IS TO BE DISPOSED OF AS DIRECTED BY THE SUPERINTENDENT.

BULK EARTHWORKS NOTES

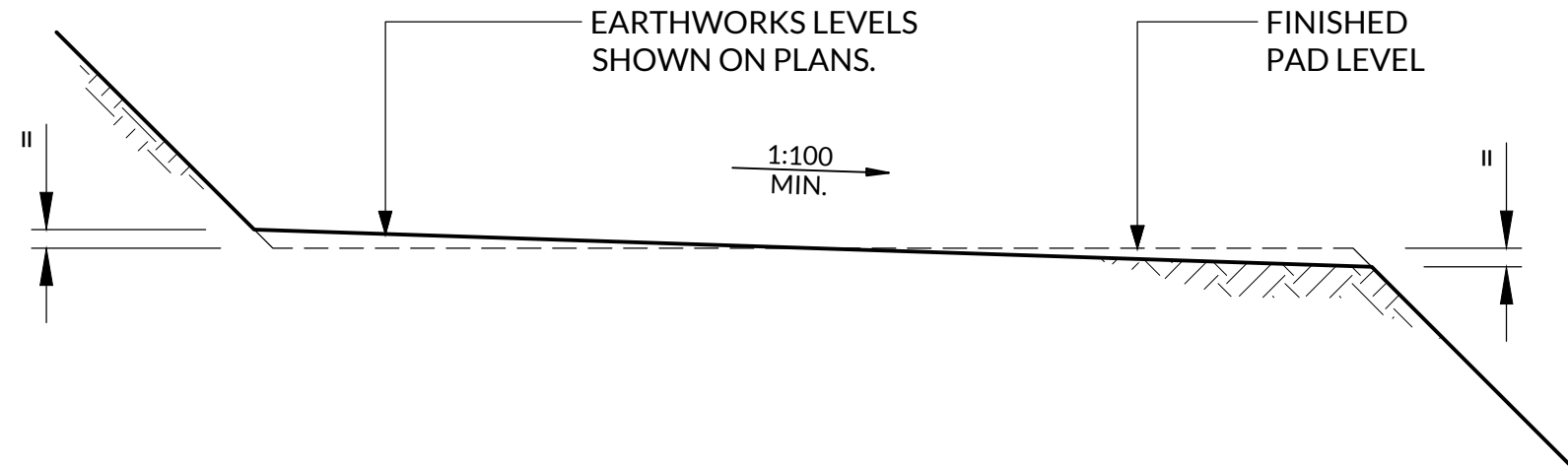
(CONT.)

- THE MOVEMENT OF MATERIAL TO AND FROM THE SITE SHALL BE IN ACCORDANCE WITH THE RELEVANT EPA GUIDELINES AND BIO-SECURITY REQUIREMENTS.
- FOR FURTHER SITE INFORMATION REFER TO THE PROJECT GEOTECHNICAL CONSULTANT.
- ALTERNATIVE METHODS OF CONSTRUCTION OTHER THAN THAT DESCRIBED ABOVE SHALL ONLY BE ALLOWED IF APPROVAL IS GIVEN BY THE SUPERINTENDENT.
- DESIGN LEVELS PROVIDED ARE FINISHED SURFACE LEVELS (U.N.O)
- ALL EARTHWORKS SHALL BE PERFORMED UNDER THE SUPERVISION OF A RECOGNIZED GEOTECHNICAL CONSULTANT TO LEVEL 1 STANDARDS SPECIFIED IN AS 3798 UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT. ALL WORKS SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER. THE MINIMUM CERTIFICATION TO BE PROVIDED BY THE CONTRACTOR TO THE SUPERVISING ENGINEER SHALL BE:
 - CERTIFICATION THAT ALL GENERAL EARTHWORKS OPERATIONS - (i.e. STRIPPING, PROOF ROLLING OF SUBGRADE, ETC.) HAVE BEEN CARRIED OUT IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION.
 - CERTIFICATION THAT FILL HAS BEEN PLACED AND COMPACTED TO REQUIRED MINIMUM DENSITY IN ACCORDANCE WITH THE EARTHWORKS SPECIFICATION.
 - CERTIFICATION THAT THE CONTROLLED FILL IS SUITABLE FOR SUPPORT OF CONVENTIONAL HIGH LEVEL FOOTINGS AND HAS A MINIMUM BEARING CAPACITY OF 150kPa.
 - CERTIFICATION THAT THE QUALITY OF ANY IMPORTED FILL COMPLIES WITH THE EARTHWORKS SPECIFICATION REQUIREMENTS.
- FIELD DENSITY TESTING SHOULD BE CARRIED OUT TO CHECK THE STANDARD COMPACTION ACHIEVED AND THE PLACEMENT MOISTURE CONTENT. THE FREQUENCY AND EXTENT OF TESTING SHOULD BE AS PER GUIDELINES IN AS 3798
- DEPRESSIONS FORMED BY THE REMOVAL OF VEGETATION, UNDERGROUND ELEMENTS ETC. SHOULD HAVE ALL DISTURBED WEAKENED SOIL CLEANED OUT AND BE BACKFILLED WITH COMPACTED SELECT MATERIAL.
- ALL NEW WORKS TO MATCH NEATLY WITH EXISTING. THE CONTRACTOR IS TO CONFIRM THE LOCATION OF ALL EXISTING SERVICES AND PROTECT THESE SERVICES DURING CONSTRUCTION. DAMAGED SERVICES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE.



TYPICAL BASEMENT SECTION

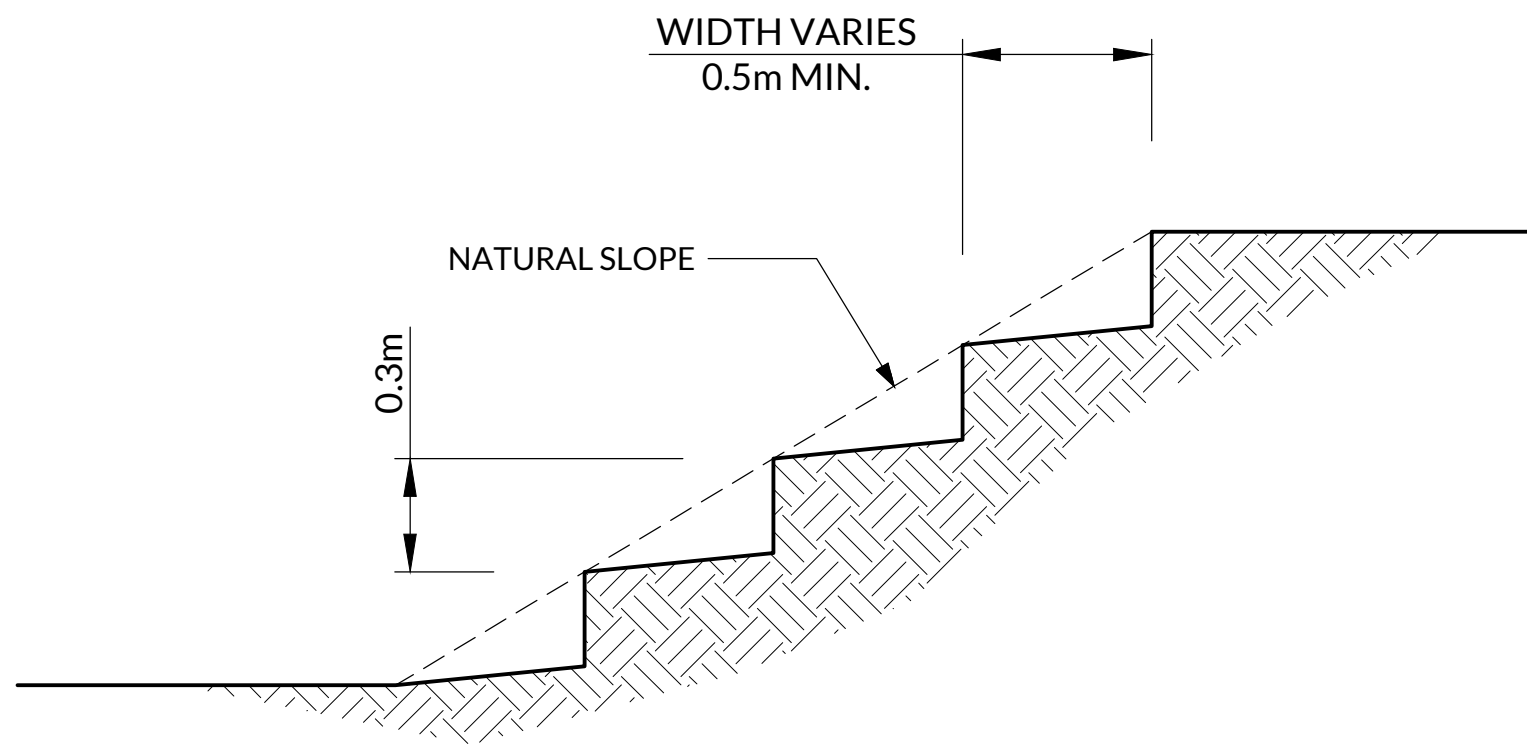
SCALE N.T.S.



TYPICAL BULK EARTHWORKS PAD CONSTRUCTION DETAIL

SCALE N.T.S.

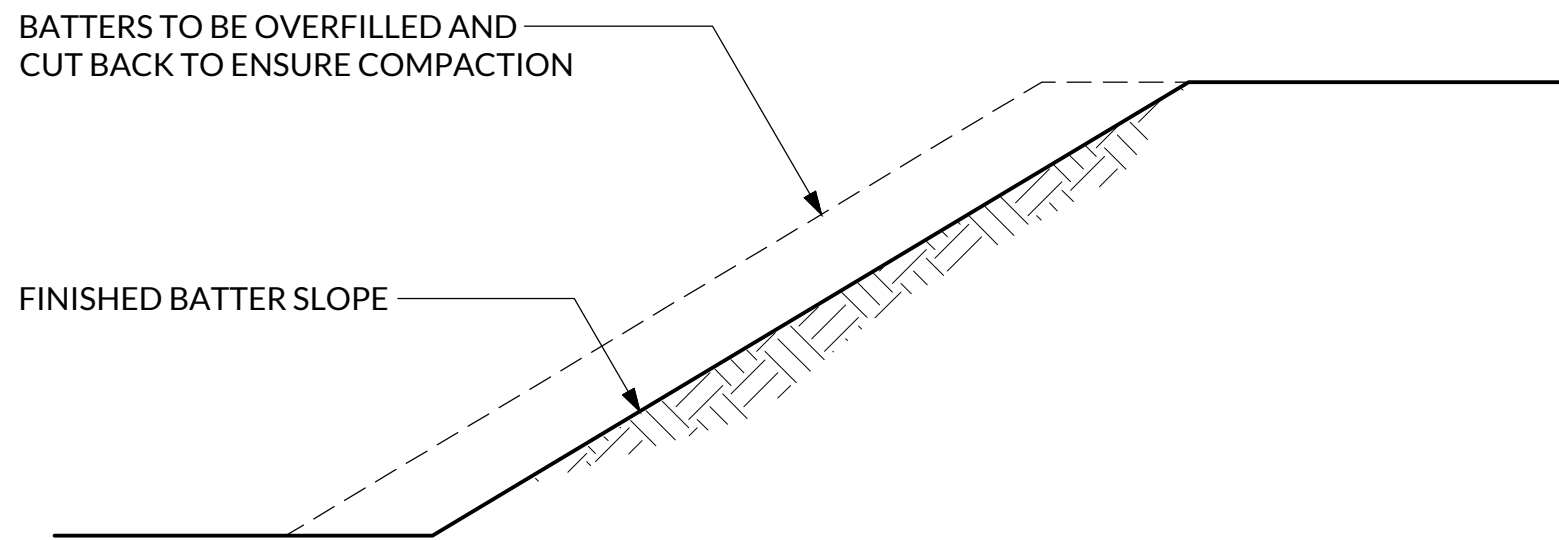
NOTE : EARTHWORKS PLATFORMS ARE TO BE FORMED WITH MIN. 1:100 FALL ACROSS PAD DURING THE BULK EARTHWORKS PHASE. PLATFORMS TO BE TRIMMED TO FINISHED PAD LEVELS DURING DETAILED EARTHWORKS.



COMPACTION ON SLOPES DETAIL

SCALE N.T.S.

NOTE : COMPACTION ON SLOPES GREATER THAN 1 IN 10 TO BE KEYED AS SHOWN UNLESS DIRECTED OTHERWISE BY THE GEOTECHNICAL ENGINEER.



BATTER CUTBACK DETAIL

SCALE N.T.S.

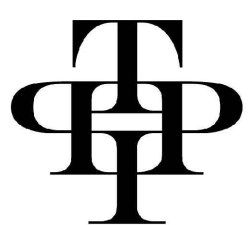
NOTE :

NO WORKS TO BE UNDERTAKEN OUTSIDE THE DESIGNATED SITE BOUNDARY UNLESS DIRECTED OTHERWISE BY THE MANAGING CONTRACTOR.

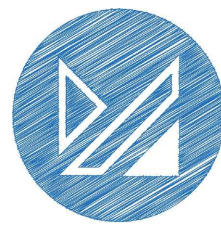
No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.

RP DESCRIPTION :

CLIENT :



TRADERS IN PURPLE



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MRC
CONSULTING ENGINEERS

PROJECT :

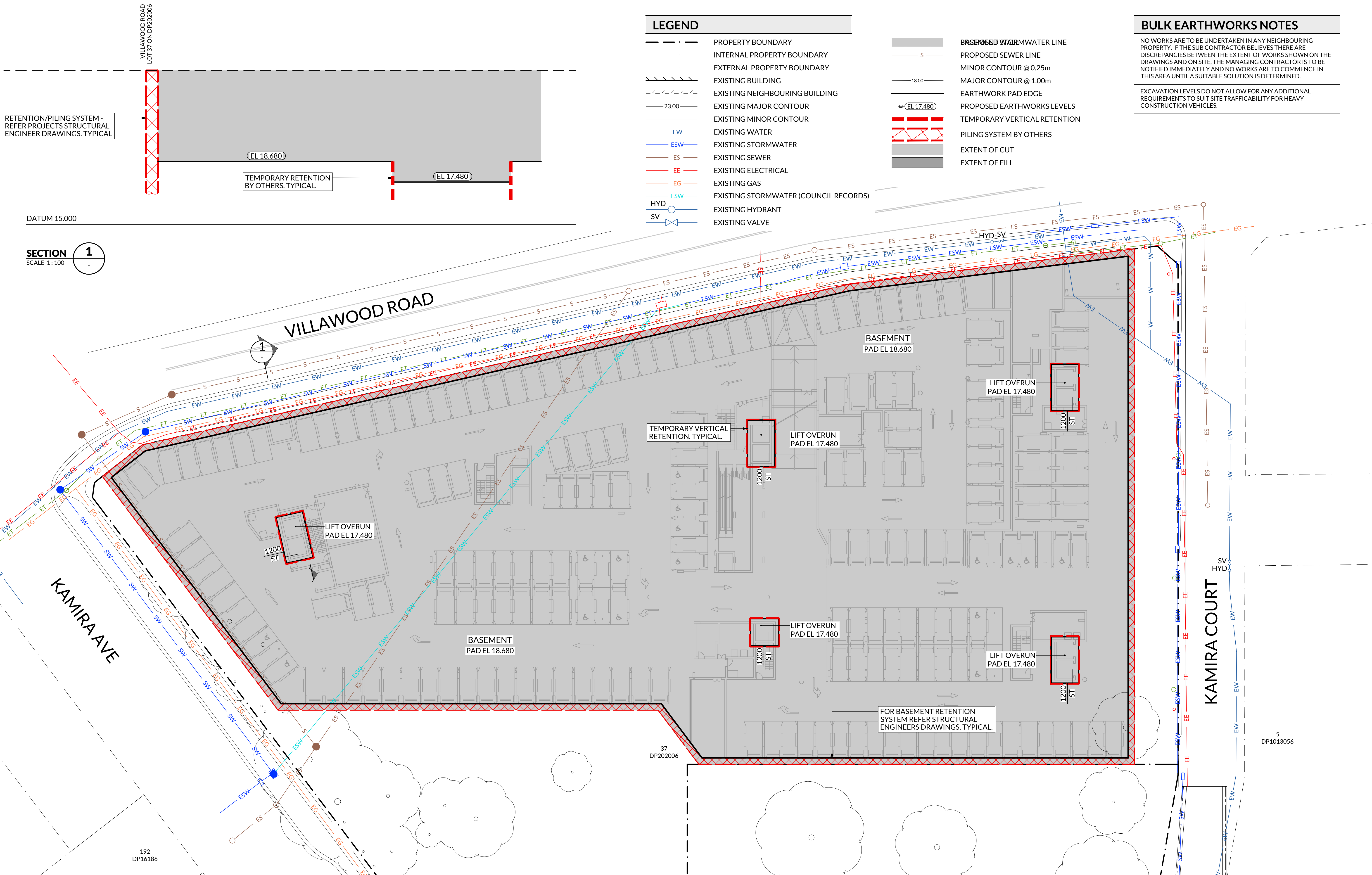
LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163

Drawn : C.R.P. Date : AUG 2021
Designed : M.H. Checked : R.A.
Approved : M.H.

Status : **FOR APPROVAL**

DRAWING TITLE :
BULK EARTHWORKS
NOTES AND DETAILS SHEET

Project No. **J21166** Drawing No. **C-1.01** Revision **B**



LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EG EXISTING GAS
- ESW EXISTING STORMWATER (COUNCIL RECORDS)
- HYD EXISTING HYDRANT
- SV EXISTING VALVE

- BROKEN STORMWATER LINE
- S PROPOSED SEWER LINE
- MINOR CONTOUR @ 0.25m
- MAJOR CONTOUR @ 1.00m
- EL 17.480 PROPOSED EARTHWORKS LEVELS
- TEMPORARY VERTICAL RETENTION
- PILING SYSTEM BY OTHERS
- EXTENT OF CUT
- EXTENT OF FILL

BULK EARTHWORKS NOTES

NO WORKS ARE TO BE UNDERTAKEN IN ANY NEIGHBOURING PROPERTY. IF THE SUB CONTRACTOR BELIEVES THERE ARE DISCREPANCIES BETWEEN THE EXTENT OF WORKS SHOWN ON THE DRAWINGS AND ON SITE, THE MANAGING CONTRACTOR IS TO BE NOTIFIED IMMEDIATELY AND NO WORKS ARE TO COMMENCE IN THIS AREA UNTIL A SUITABLE SOLUTION IS DETERMINED.

EXCAVATION LEVELS DO NOT ALLOW FOR ANY ADDITIONAL REQUIREMENTS TO SUIT SITE TRAFFICABILITY FOR HEAVY CONSTRUCTION VEHICLES.

RETENTION/PILING SYSTEM - REFER PROJECTS STRUCTURAL ENGINEER DRAWINGS. TYPICAL.

TEMPORARY RETENTION BY OTHERS. TYPICAL.

TEMPORARY VERTICAL RETENTION. TYPICAL.

BASEMENT PAD EL 18.680

LIFT OVERUN PAD EL 17.480

LIFT OVERUN PAD EL 17.480

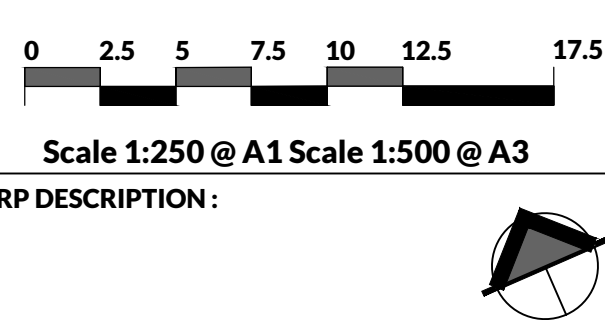
BASEMENT PAD EL 18.680

LIFT OVERUN PAD EL 17.480

LIFT OVERUN PAD EL 17.480

FOR BASEMENT RETENTION SYSTEM REFER STRUCTURAL ENGINEERS DRAWINGS. TYPICAL.

No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
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CLIENT:

TRADERS IN PURPLE

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PROJECT:

LAHC VILLAWOOD (BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163

Drawn:	C.R.P.	Date:	AUG 2021
Designed:	M.H.	Checked:	R.A.
Approved:	M.H.		
Status:	FOR APPROVAL		

DRAWING TITLE:			
BULK EARTHWORKS LAYOUT PLAN			
Project No.	Drawing No.	Revision	
J21166	C-1.10	B	

EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL WORKS TO BE IN ACCORDANCE WITH DETAILS AS SHOWN ON PLAN, & TO THE SATISFACTION OF THE SUPERINTENDENT.
- 2. CLEARING FOR EARTHWORKS OPERATIONS ARE TO BE MANAGED SUCH THAT AREAS NOT REQUIRED FOR IMMEDIATE WORKS ARE LEFT UNDISTURBED WHERE POSSIBLE.
- 3. CONTROL DESIGN MEASURE SHALL BE INSTALLED IMMEDIATELY WHEN THE PROGRAM OF WORKS ON SITE PERMITS THE INSTALLATION.
- 4. THE CONTRACTOR SHALL REGULARLY CLEAN & MAINTAIN CONTROL MEASURES FOR THE DURATION OF WORKS & SHALL MONITOR THE EFFECTIVENESS OF THE EROSION & SEDIMENT CONTROL PLAN. ADEQUATE MEASURES SHALL BE TAKEN TO RECTIFY ANY FAILURE IN THE PROPOSED CONTROL SYSTEM WHERE SITE WORKS NECESSITATE THE PROVISION OF ADDITIONAL CONTROLS &/OR VARIATIONS TO EXISTING CONTROLS.
- 5. ALL SEDIMENT CONTROL STRUCTURES TO BE INSPECTED AFTER EACH RAINFALL EVENT FOR STRUCTURAL DAMAGE & ALL TRAPPED SEDIMENT TO BE REMOVED TO THE NOMINATED STOCKPILE SITE.
- 6. TEMPORARY CUT AND FILL BATTERS TO BE A GRADIENT OF 1V:2H MINIMUM.
- 7. TOPSOIL FROM DISTURBED AREAS TO BE STRIPPED & STOCKPILED ON SITE.
- 8. AN ON-SITE REGISTER LOGGING RAINFALL DATES, WATER QUALITY ANALYSIS RESULTS, AND DATES OF RELEASE OF STORMWATER FROM THE SITE IS TO BE MAINTAINED. THIS REGISTER IS TO BE AVAILABLE ON-SITE FOR INSPECTION BY LOCAL AUTHORITY OFFICERS UPON REQUEST.

SHAKEDOWN & WASHDOWN AREA NOTES

- 1. SITE ACCESS MUST BE RESTRICTED TO THE MINIMUM PRACTICAL NUMBER OF LOCATIONS.
- 2. SITE EXIT POINTS MUST BE APPROPRIATELY MANAGED TO MINIMISE THE RISK OF SEDIMENT BEING TRACKED ONTO SEALED, PUBLIC ROADWAYS.
- 3. SHAKE DOWN AREA TO BE 6.0M WIDE X 15M LONG MINIMUM CONSTRUCTED FROM 50-75mm NOMINAL SIZE, NON-FRIABLE/ERODIBLE ROCK, 200mm THICK UNDERLAID WITH "BIDIM A14" GEOFABRIC OR APPROVED EQUIVALENT
- 4. ANY SEDIMENT LADEN VEHICLE EXITING THE SITE AS A RESULT OF WET WEATHER OR THE LIKE SHALL BE WASHED DOWN, CLEANED AND TREATED FIRST TO PREVENT SEDIMENT BEING DEPOSITED ONTO THE STREET. ANY SILT OR SEDIMENT TRACKED ONTO ROAD SHALL BE SWEEPED UP AND COLLECTED. NO WASHING OF MATERIAL INTO COUNCIL DRAIN AREAS IS PERMITTED.
- 5. STORMWATER RUNOFF FROM ACCESS ROADS AND STABILISED ENTRY/EXIT POINTS MUST DRAIN TO AN APPROPRIATE SEDIMENT CONTROL DEVICE.
- 6. ACCEPTABLE VARIATIONS TO THE ABOVE SPECIFICATION INCLUDE METAL "CATTLE" GRIDS OR SPACED TIMBER SLEEPERS AT LEAST 3.5M LONG WHICH IF USED MUST BE TO THE SATISFACTION OF THE SUPERINTENDENT.

EROSION RISK ASSESSMENT

AN EROSION RISK ASSESSMENT WILL BE CONDUCTED USING THE REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE) DURING THE DETAILED DESIGN PHASE.

SEDIMENT CONTROL MEASURES

DEMOLITION WORKS

DURING DEMOLITION WORKS ALL EFFORT SHOULD BE TAKEN TO MINIMISE DISTURBANCE TO THE EXISTING UNDERLYING SOILS.

PRIOR TO COMMENCING WORKS KERB INLET TRAPS SHOULD BE PLACED WITHIN STORMWATER INLETS ALONG BOTH STREET FRONTAGES. A STABILISED CONSTRUCTION ENTRY/EXIT POINT SHOULD ALSO BE ESTABLISHED.

BASEMENT WORKS

GIVEN THE NATURE OF WORKS FOR THE CONSTRUCTION OF THE BASEMENT AREA, IT IS EXPECTED THE MAJORITY OF THE SITE WILL DRAIN TO AND EFFECTIVELY ACT AS ONE LARGE SEDIMENT CAPTURE AREA (DURING BELOW GROUND WORKS).

PRIOR TO ANY PROPOSED PUMP-OUT OF RAINWATER FROM SITE, STORED WATER SHALL BE ASSESSED FOR QUALITY BEFORE DISCHARGING OFF SITE.

DEWATERING OF THE STORMWATER RUNOFF CAPTURED SHALL BE IN ACCORDANCE WITH THE DISCHARGE CRITERIA NOMINATED BELOW:

- TOTAL SUSPENDED SOLIDS (TSS) <50 MG/L
- PH 6.5 - 8.5
- 0.3MG/L MAXIMUM TOTAL IRON CONCENTRATION
- 0.2MG/L MAXIMUM TOTAL ALUMINIUM CONCENTRATION
- NO VISIBLE PLUME AT EITHER THE POINT OF RELEASE FROM THE SITE OR WITHIN A WATERWAY

SUSPENDED SEDIMENT IN CAPTURED RUNOFF MAY BE ALLOWED TO SETTLE IN-SITU WITHIN THE EXCAVATION UNTIL REACHING THE NOMINATED CRITERIA, OR IF TREATMENT IS REQUIRED, THIS CAN OCCUR IN-SITU OF BE TRANSPORTED OFFSITE FOR TREATMENT AND DISPOSAL BY A QUALIFIED CONTRACTOR.

ABOVE GROUND WORKS

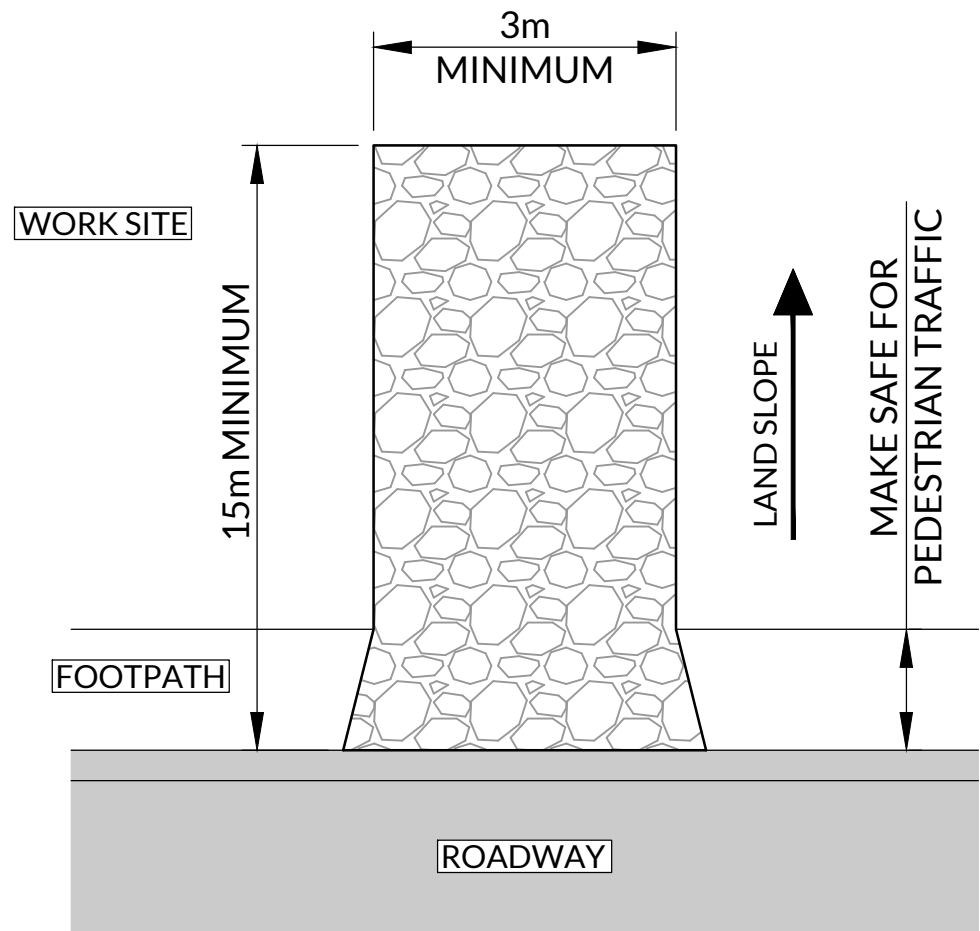
A STABILISED CONSTRUCTION ENTRY/EXIT SHOULD BE INSTALLED (IF NOT PRIOR) AT ACCESS POINT/S AND APPROPRIATELY MAINTAINED. INLET PROTECTION FOR STORMWATER PITS/GULLYS WITHIN THE SITE AND WITHIN BOTH STREET FRONTAGES SHOULD BE INSTALLED AND APPROPRIATELY MAINTAINED. SEDIMENT FENCE SHOULD BE INSTALLED AT THE LIMIT OF GROUND DISTURBANCE DURING ABOVE GROUND WORKS UNLESS ALL EXPOSED SURFACES ARE TREATED USING TEMPORARY EROSION CONTROL OR VIA PERMANENT SURFACE TREATMENTS (LANDSCAPING, OR HARD ENGINEERING).

EROSION CONTROL MEASURES

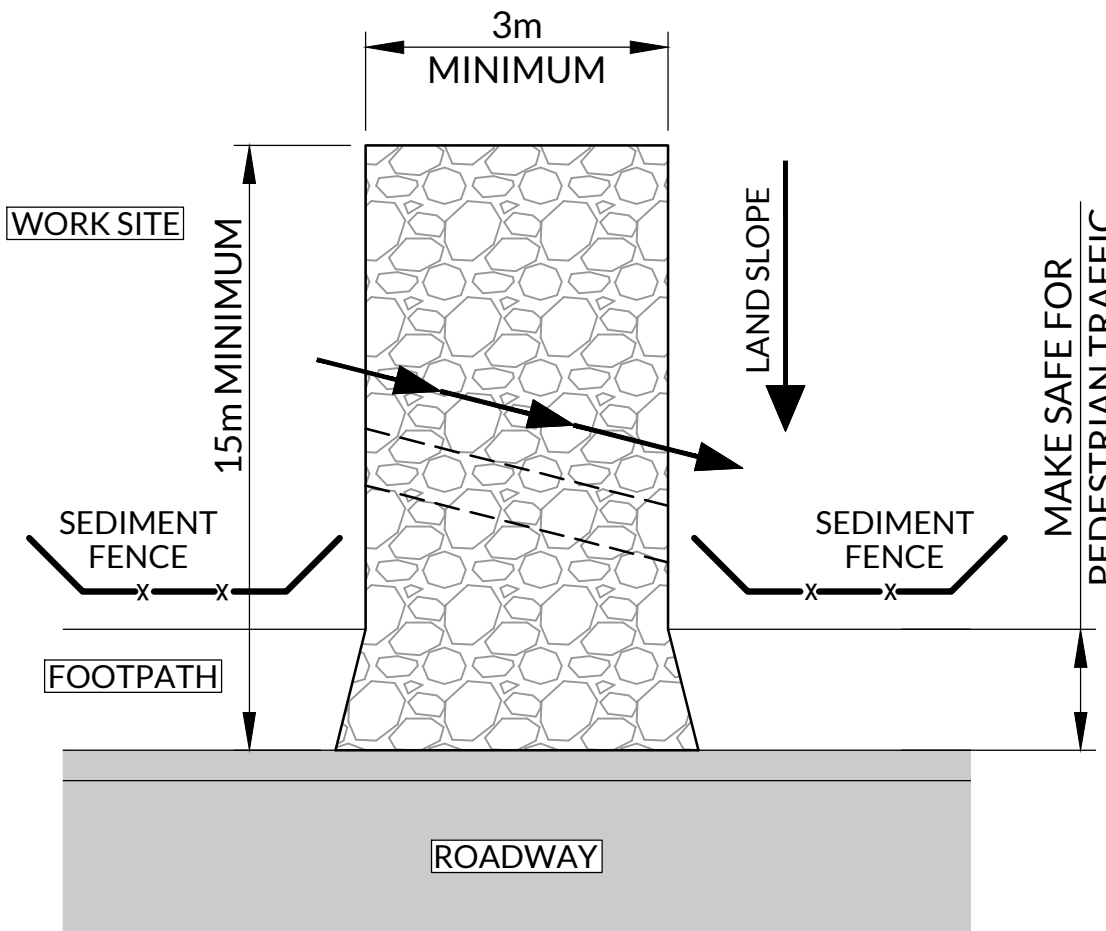
AS THE MAJORITY OF THE PROPOSED CONSTRUCTION ACTIVITIES INVOLVE THE USE OF HARD ENGINEERING MATERIALS, THIS GREATLY MINIMISES THE NEED FOR TEMPORARY EROSION CONTROL (DURING CONSTRUCTION PHASES) AND REHABILITATION (POST CONSTRUCTION). THE RELIANCE ON THESE STRUCTURAL MATERIALS AS THE DOMINANT MEASURE TO MINIMISE EROSION AND SEDIMENT DISCHARGE FROM SITE IS APPROPRIATE FOR THE WORKS.

IF TEMPORARY EROSION CONTROL IS REQUIRED IN THE INTERIM (I.E. DUE TO WORK DELAYS), THE USE OF EROSION CONTROL BLANKETS (I.E. GEOFABRIC) OR SOIL BINDER/POLYMER SHOULD BE APPLIED TO EXPOSED SURFACES.

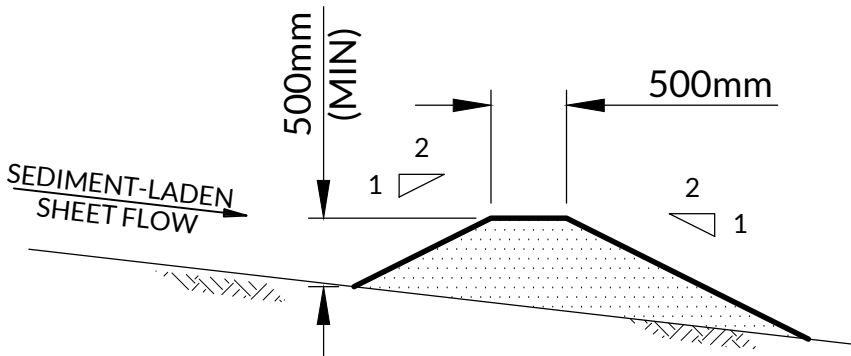
STOCKPILES FORMED AND RETAINED ONSITE SHOULD BE LOCATED AWAY FROM STORMWATER INLETS. STOCKPILES OF EROSIIVE MATERIALS SHALL BE COVERED PRIOR TO ANY FORECAST RAINFALL OR IF THEY WILL REMAIN ONSITE FOR GREATER THAN 5 DAYS.



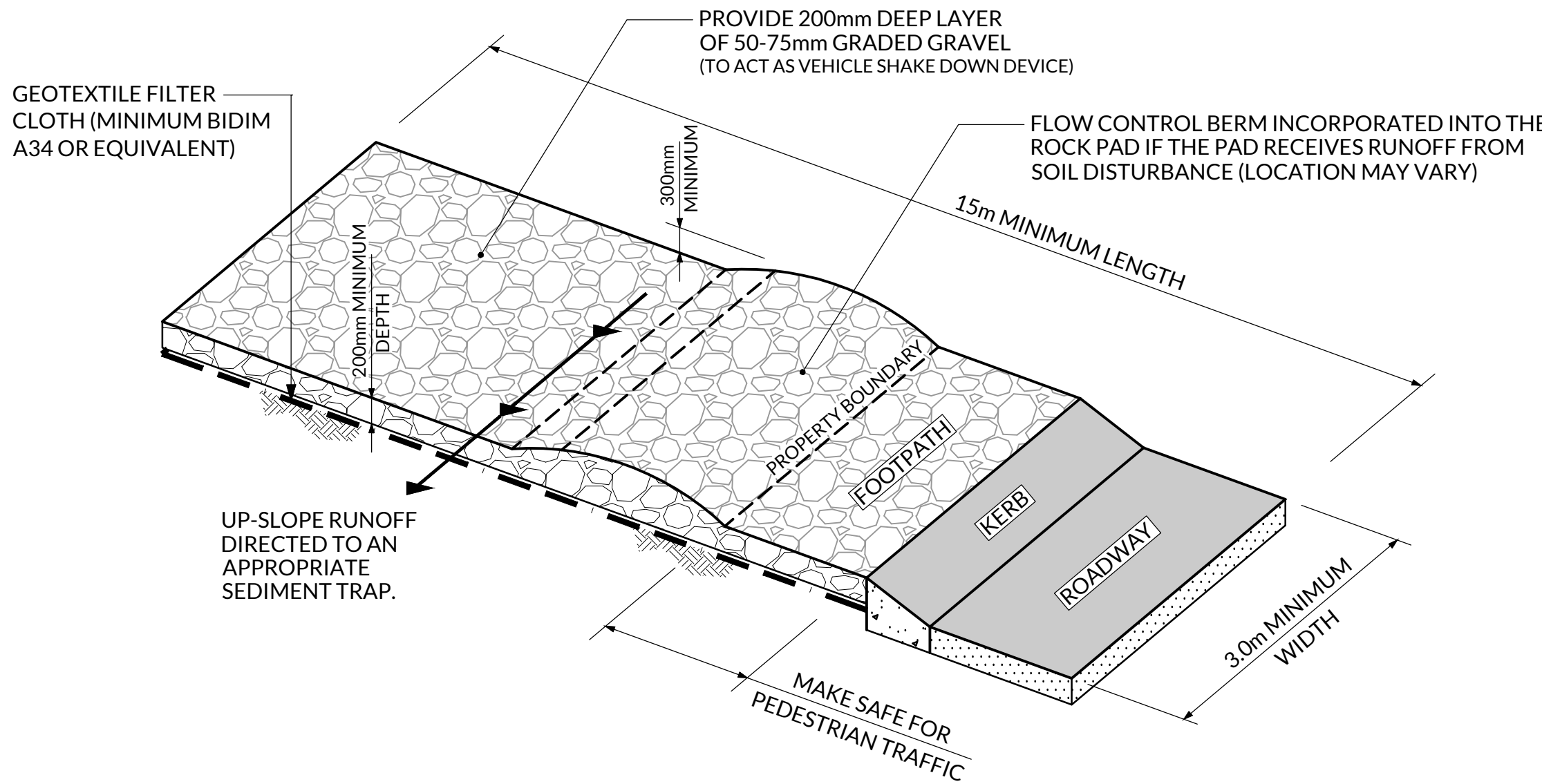
PLAN : ROCK PAD SLOPING AWAY FROM ROAD
SCALE NTS



ROCK PAD SLOPING TOWARDS THE ROAD
SCALE NTS

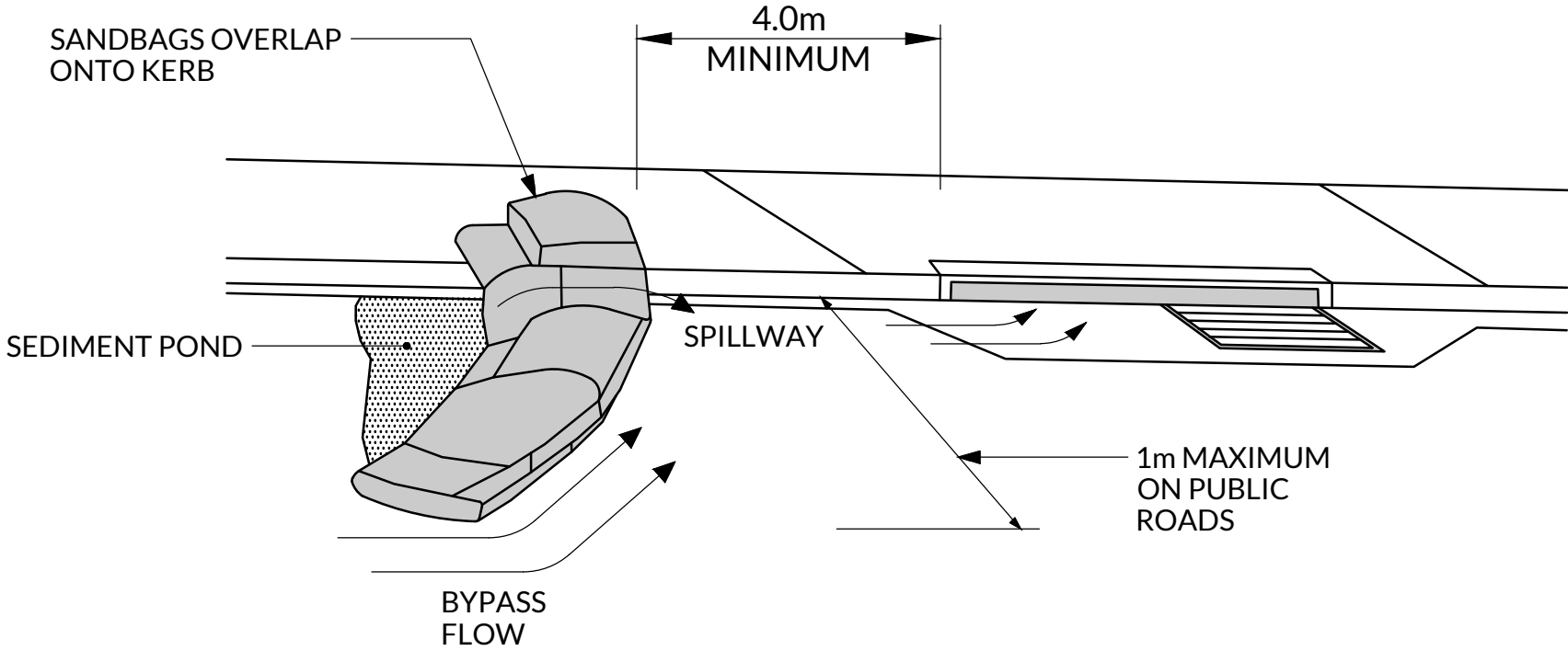


TYPICAL MULCH BERM
SCALE NTS



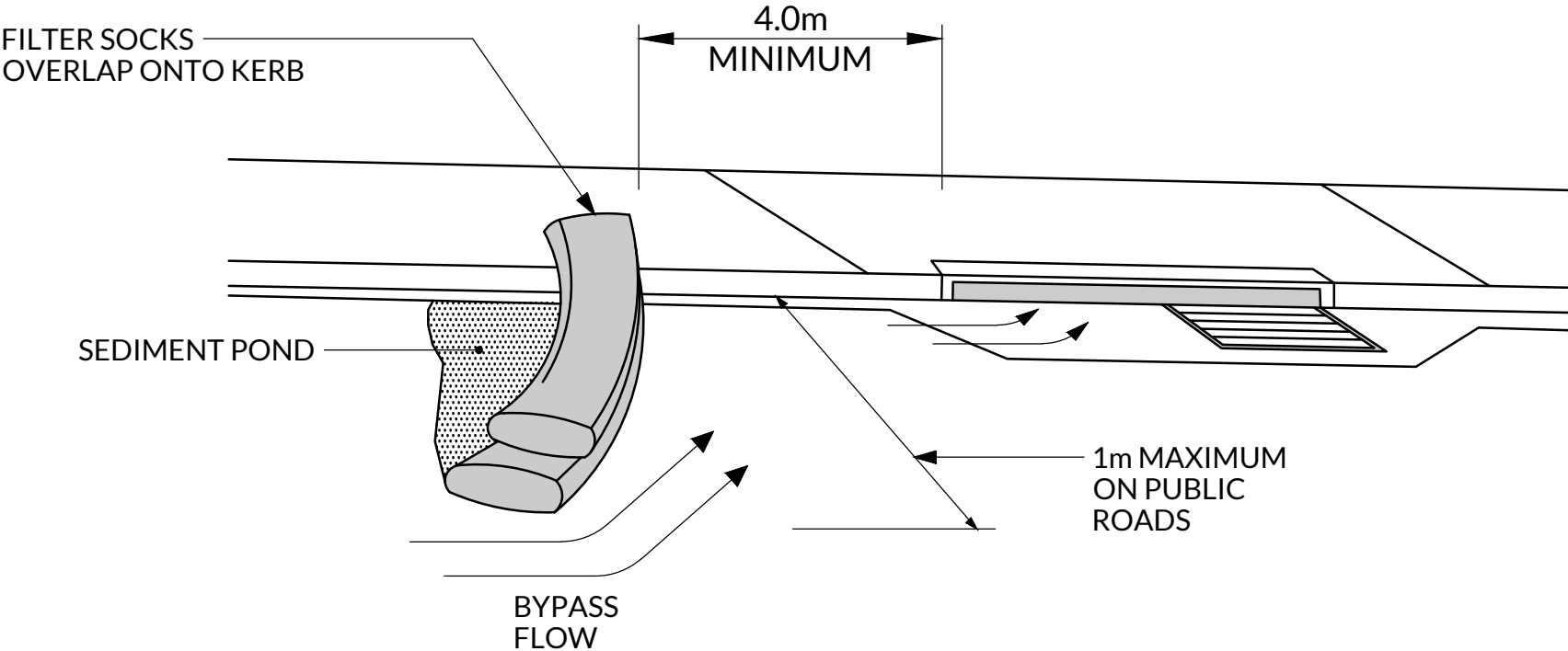
TEMPORARY ROCK PAD ENTRY/EXIT
PAD FOR CONSTRUCTION SITES

SCALE NTS



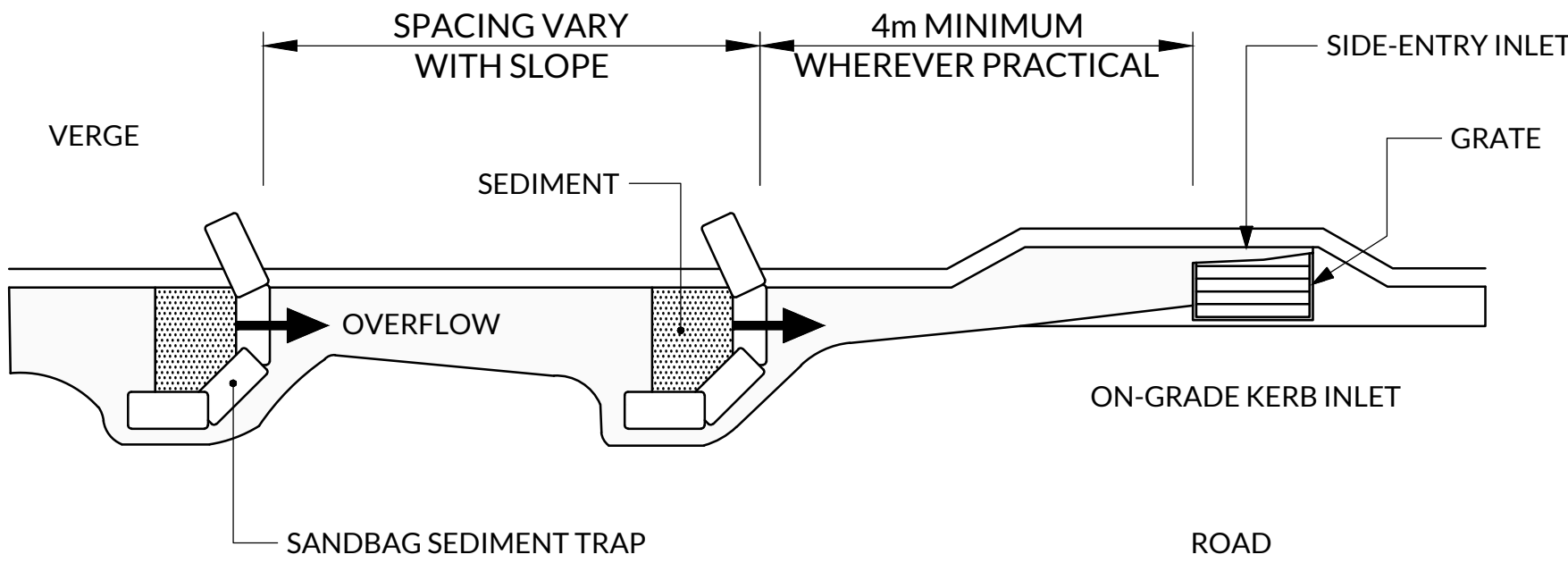
ON-GRADE KERB INLET SEDIMENT
COLLECTION DAM DETAIL

SCALE NTS



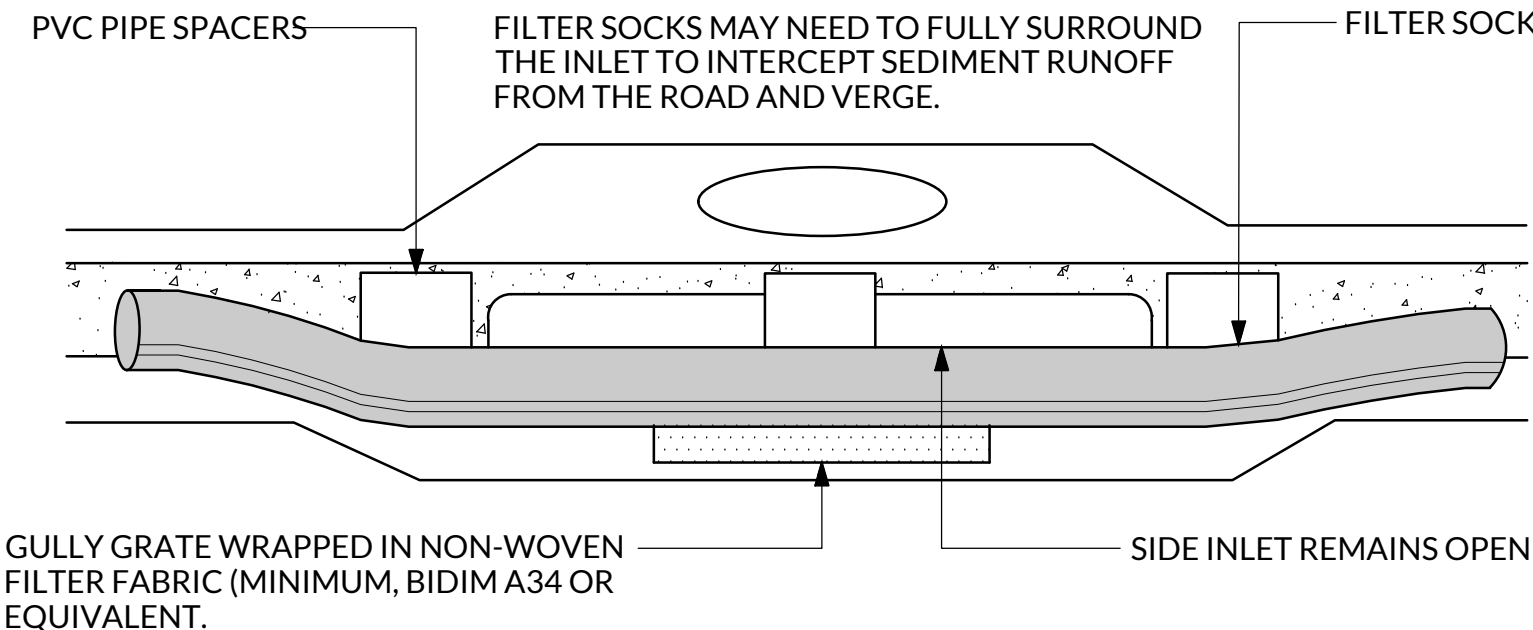
ON-GRADE KERB INLET SEDIMENT
TRAP DETAIL

SCALE NTS



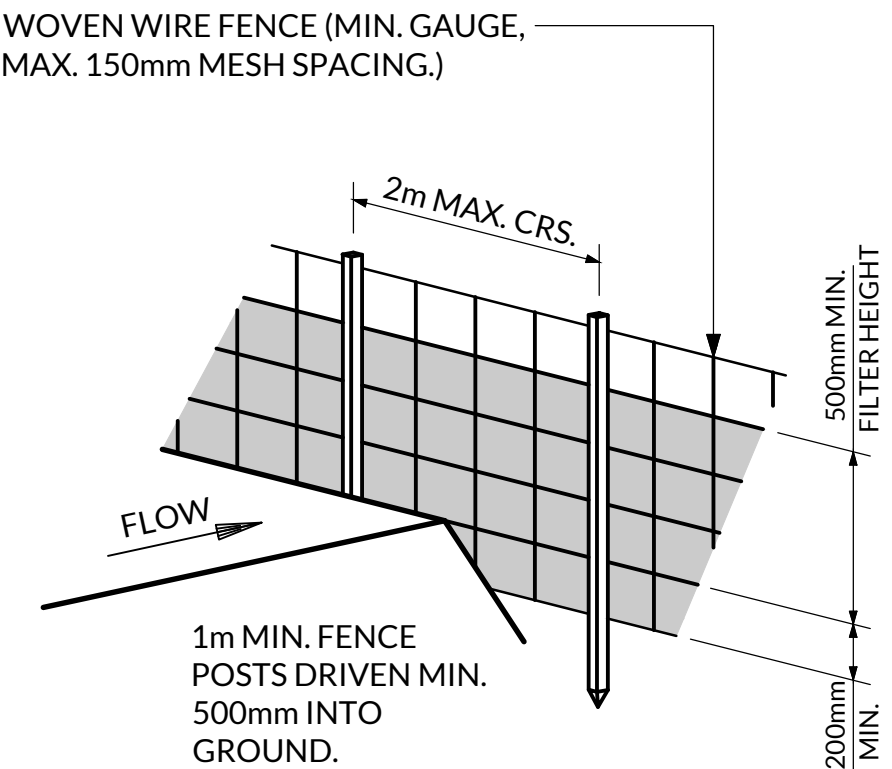
ON-GRADE INLET SEDIMENT
TRAPS DETAIL

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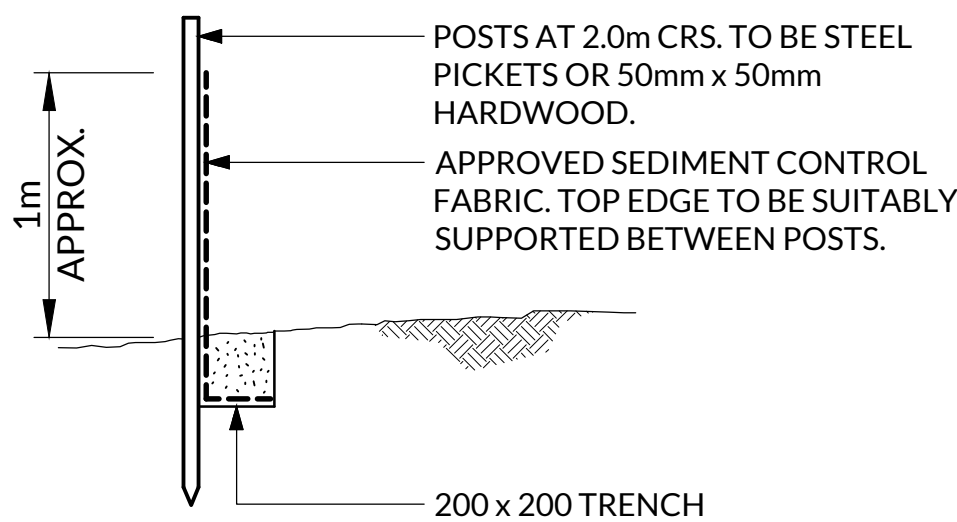
SAG INLET SEDIMENT TRAP DETAIL

SCALE NTS



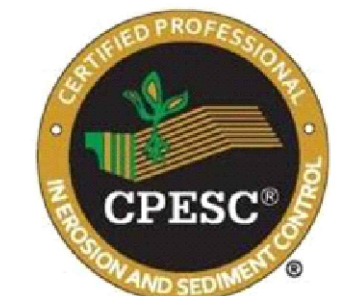
SEDIMENT FENCE
PERSPECTIVE VIEW

SCALE NTS



SEDIMENT
FENCE DETAIL

SCALE NTS



MARK HARRISON
CPESC : 8798

No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.

RP DESCRIPTION :

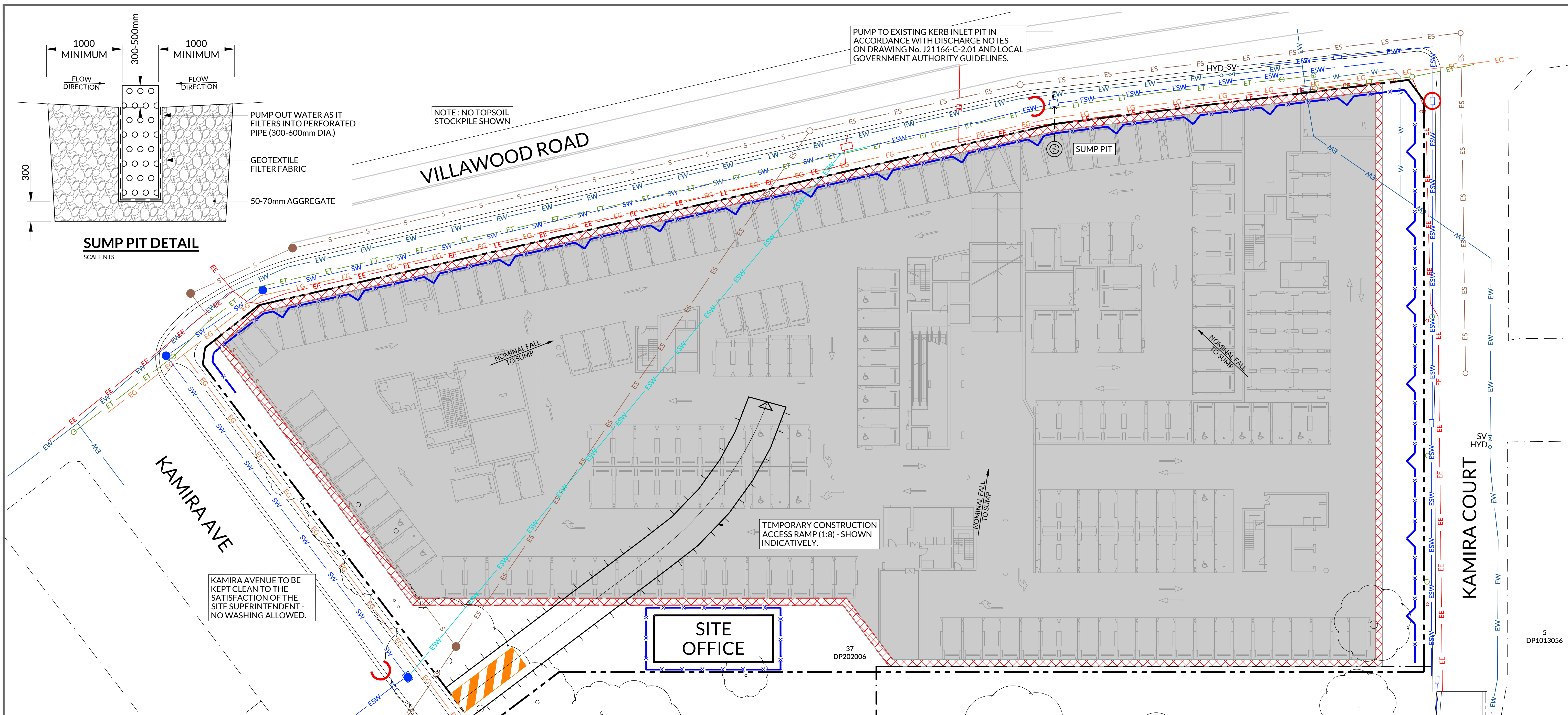
CLIENT :
TRADERS IN PURPLE

MRC CONSULTING ENGINEERS
MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrcceng.com.au, www.mrcceng.com.au

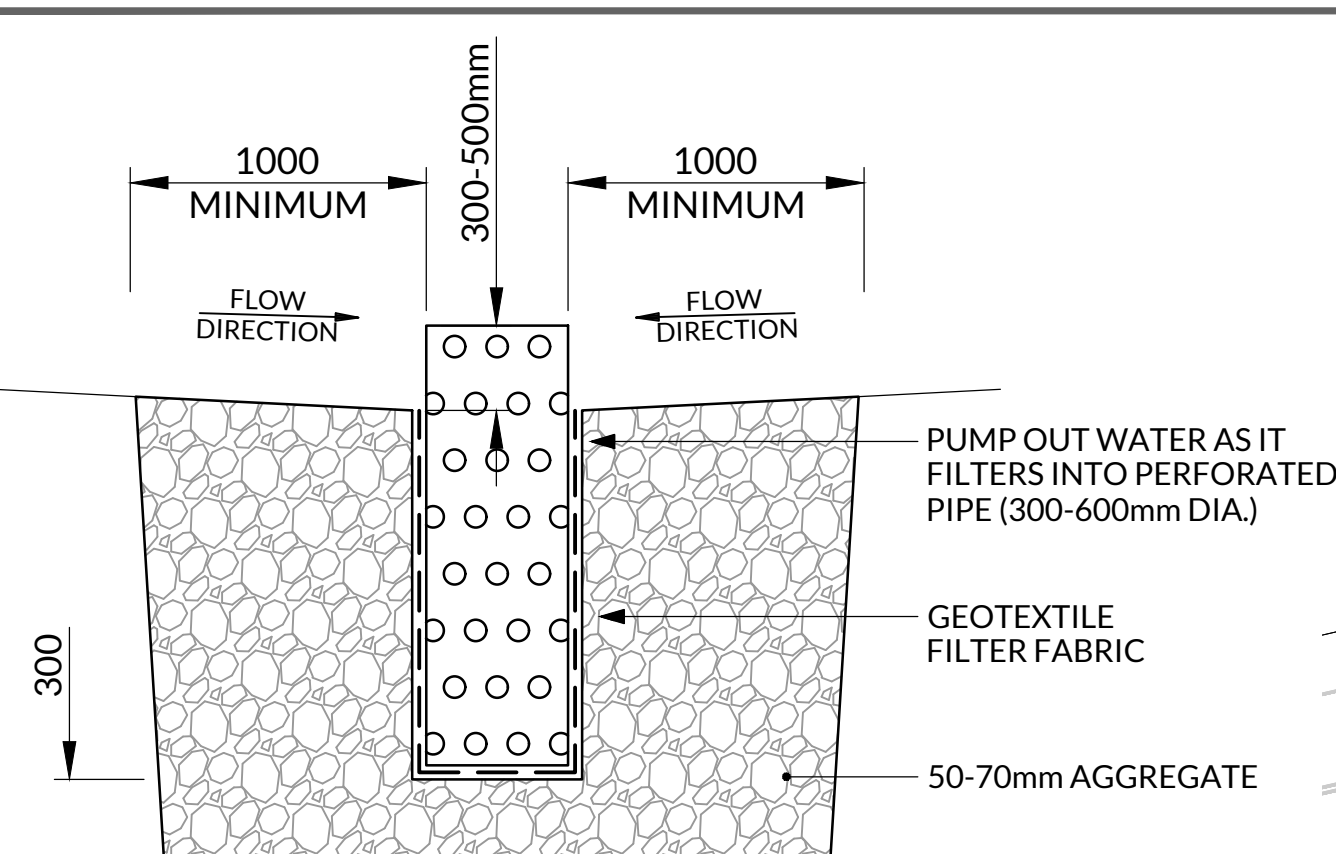
PROJECT :
LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163

Drawn : C.R.P.	Date : AUG 2021
Designed : M.H.	Checked : R.A.
Approved : M.H.	
Status : FOR APPROVAL	

DRAWING TITLE :		
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS SHEET		
Project No. J21166	Drawing No. C-2.01	Revision B



SUMP PIT DETAIL
SCALENTS



NOTE: NO TOPSOIL STOCKPILE SHOWN

PUMP TO EXISTING KERB INLET PIT IN ACCORDANCE WITH DISCHARGE NOTES ON DRAWING No. J21166-C-2.01 AND LOCAL GOVERNMENT AUTHORITY GUIDELINES.

TEMPORARY CONSTRUCTION ACCESS RAMP (1:8) - SHOWN INDICATIVELY.

LEGEND

- | | | | |
|-----------|---------------------------------------|----------|--------------------------------|
| — — — — — | PROPERTY BOUNDARY | — ES — | EXISTING SEWER |
| — — — — — | INTERNAL PROPERTY BOUNDARY | — EE — | EXISTING ELECTRICAL |
| — — — — — | EXTERNAL PROPERTY BOUNDARY | — EG — | EXISTING GAS |
| — — — — — | EXISTING BUILDING | — S — | PROPOSED SEWER LINE |
| — — — — — | EXISTING NEIGHBOURING BUILDING | — W — | PROPOSED WATER LINE |
| — — — — — | EXISTING MAJOR CONTOUR | — SW — | PROPOSED STORMWATER LINE |
| — — — — — | EXISTING MINOR CONTOUR | [Symbol] | FABRIC DROP INLET PROTECTION |
| — 23.00 — | EXISTING BUILDING | [Symbol] | KERB INLET SEDIMENT TRAP (SAG) |
| — — — — — | EXISTING NEIGHBOURING BUILDING | [Symbol] | KERB INLET SEDIMENT TRAP |
| — — — — — | EXISTING MAJOR CONTOUR | — X — | SEDIMENT FENCE |
| — — — — — | EXISTING MINOR CONTOUR | | |
| — EW — | EXISTING WATER | | |
| — ESW — | EXISTING STORMWATER | | |
| — ESW — | EXISTING STORMWATER (COUNCIL RECORDS) | | |
| — HYD — | EXISTING HYDRANT | | |
| — SV — | EXISTING VALVE | | |

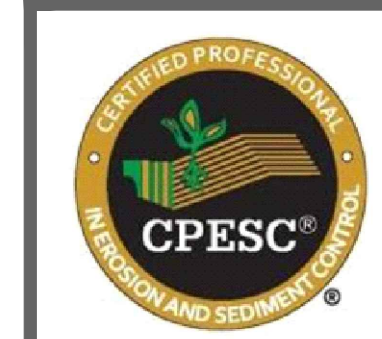
- | | |
|----------|---|
| [Symbol] | 1800 HIGH TEMPORARY FENCING WITH DUST CONTROL LINING |
| [Symbol] | DENOTES EARTHWORKS LEVEL |
| [Symbol] | EXTENT OF CUT |
| [Symbol] | EXTENT OF FILL |
| [Symbol] | TEMPORARY SITE ACCESS/ EGRESS SHAKEDOWN. |
| [Symbol] | DIRECTION OF SURFACE FLOW |
| [Symbol] | EXCAVATED SEDIMENT TRAP (FINAL VOLUME TO BE CONFIRMED AT DETAILED DESIGN PHASE) |
| [Symbol] | DIVERSION BUND (MULCH) |
| [Symbol] | UNDISTURBED AREA |

SEQUENCE OF WORKS TO BE PERFORMED BY CONTRACTOR

1. SITE POSSESSION	<ul style="list-style-type: none">Establishment of access/egress including shakedown area.Construct perimeter fence adjacent to undisturbed zones as directed by superintendent.Sediment fence to be installed as shown on the design plans.
2. CONSTRUCTION	(A) BUILDING WORKS <ul style="list-style-type: none">Clear site to the minimum building platform extent required. Remove existing trees & vegetation etc. straight from site.Prepare the establishment of sediment control devices.Construct general building infrastructure.At the completion of each work day and/or prior to anticipated rainfall, establish sediment fence at the toe of any disturbed work areas having the potential to direct sediment laden stormwater runoff off the site.Ensure all site works, including the storing of plant and materials is contained within the extent of disturbed zones.
3. MAINTENANCE	<ul style="list-style-type: none">Regularly check the capacity of erosion control devices.Refer general notes for any additional specifications.
4. MISCELLANEOUS	<ul style="list-style-type: none">This drawing shall be read in conjunction with; Drawing plans J21166-C-1.01 C-1.10 (Bulk Earthworks Plans) prepared by MRC Consulting Engineers.Additional control devices may be required by the superintendent.Any alternative designs shall be approved by the superintendent prior to construction.

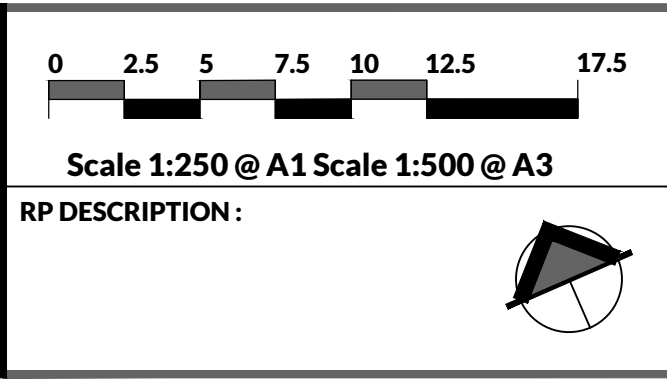
NOTES

- REFER DRAWING No. J21166-C-2.01 FOR EROSION AND SEDIMENT CONTROL NOTES AND DETAILS SHEET
- NOTE:**
ONCE BASEMENT EXCAVATION WORKS COMMENCE SITE IS TO BE SUFFICIENTLY HOARDED AND SIGNED "DEEP EXCAVATION"
- WARNING:** OVERHEAD POWERLINES IN THE VICINITY OF WORKS.



MARK HARRISON
CPESC : 8798

No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.



CLIENT:

TRADERS IN PURPLE

MRC
CONSULTING ENGINEERS

MRC Consulting Engineers
PO Box 778, Ashgrove West, Brisbane, QLD 4060
e: admin@mrcceng.com.au, www.mrcceng.com.au

PROJECT:

**LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163**

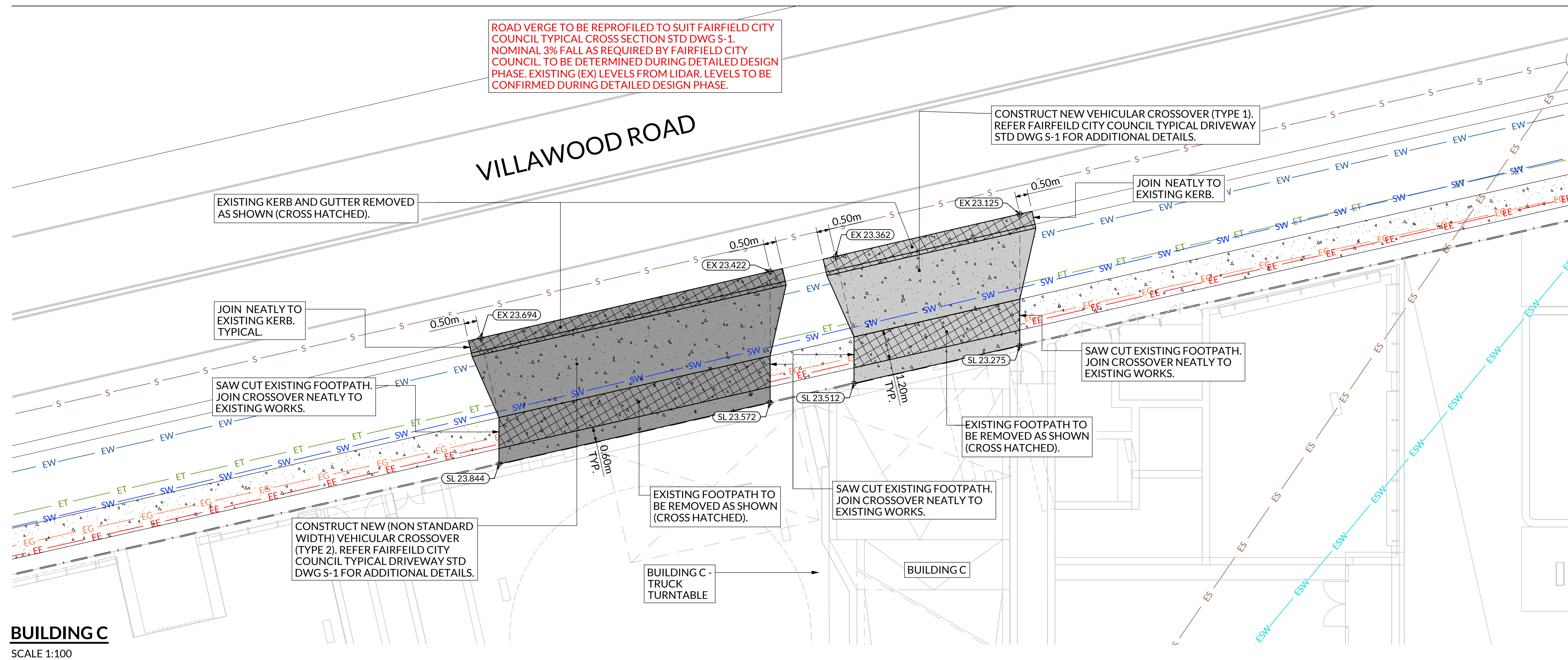
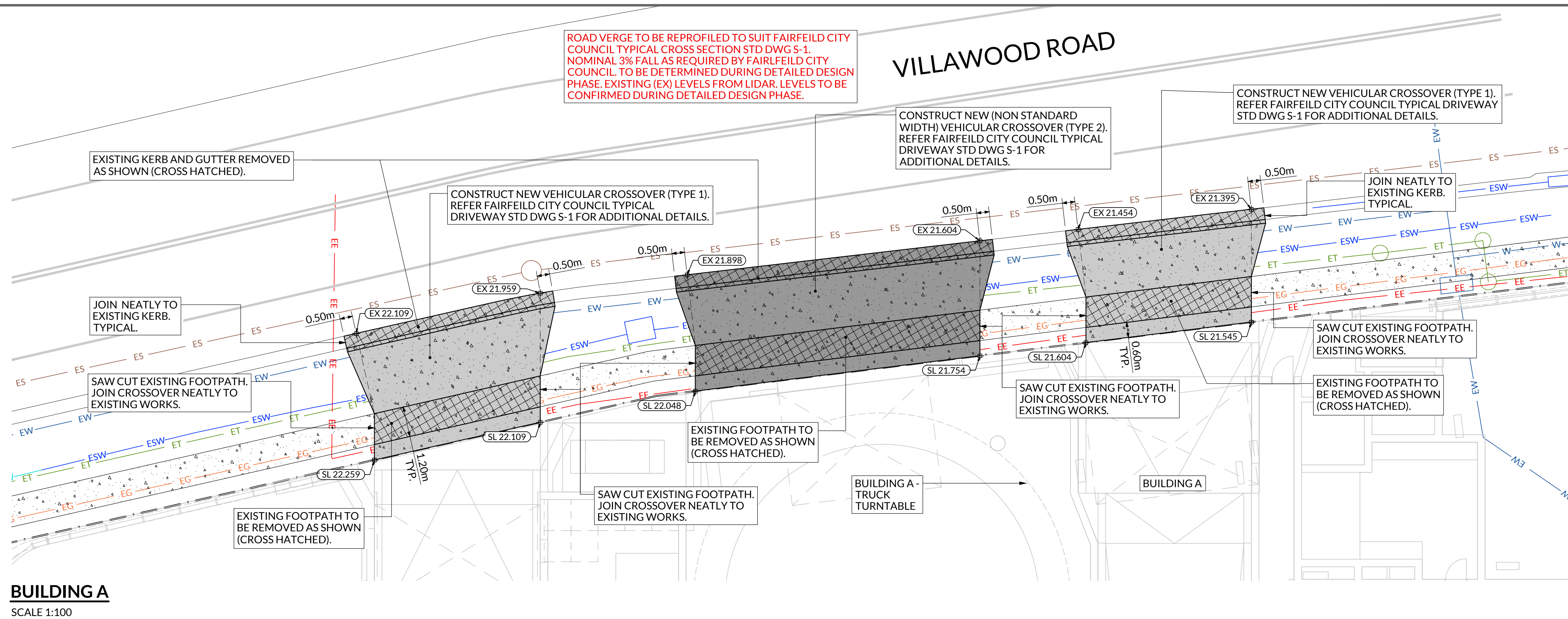
Drawn:	C.R.P.	Date:	AUG 2021
Designed:	M.H.	Checked:	R.A.
Approved:	M.H.		
Status:	FOR APPROVAL		

DRAWING TITLE: PHASE 2 EROSION AND SEDIMENT CONTROL PLAN			
Project No. J21166	Drawing No. C-2.10	Revision B	

	PROPERTY BOUNDARY
	INTERNAL PROPERTY BOUNDARY
	EXTERNAL PROPERTY BOUNDARY
	EXISTING BUILDING
	EXISTING NEIGHBOURING BUILDING
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING WATER
	EXISTING STORMWATER
	EXISTING STORMWATER (COUNCIL RECORDS)
	EXISTING HYDRANT
	EXISTING VALVE
	EXISTING SEWER
	EXISTING ELECTRICAL
	EXISTING GAS
	PROPOSED STORMWATER LINE
	PROPOSED WATER LINE
	PROPOSED SEWER LINE
	150 THICK CONCRETE VEHICLE CROSSOVER (D (REFER FAIRFIELD CITY COUNCIL STD DWG TYPICAL DR
	200 THICK CONCRETE VEHICLE CROSSOVER (D (REFER FAIRFIELD CITY COUNCIL STD DWG TYPICAL DR
	EXISTING WORKS TO BE REMOVED

- 150mm THICK CONCRETE SLAB
- CONCRETE STRENGTH $f_c = 32$ MPa
- REINFORCE WITH 1 LAYER OF S182 SLAB TOP MESH, 40 COVER.
- SUB-BASE - 100mm THICK LAYER OF 20mm D.G.B. WHICH IS TO BE COMPACTED USING VIBRATING PLATE OR OTHER APPROVED COMPACTION METHODS PRIOR TO PLACEMENT OF CONCRETE.

- 200mm THICK CONCRETE SLAB
- CONCRETE STRENGTH $f_c = 32$ MPa
- REINFORCE WITH 1 LAYER OF SL82 SLAB TOP MESH, 40 COVER.
- SUB-BASE - 150mm THICK LAYER OF 20mm D.G.B. WHICH IS TO BE COMPACTED USING VIBRATING PLATE OR OTHER APPROVED COMPACTION METHODS PRIOR TO PLACEMENT OF CONCRETE.



No.	DATE	AMENDMENT	BY
A	24.11.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.

0

1

2

3

4

5

7.5

Scale 1:100 @ A1 Scale 1:200 @ A3

RP DESCRIPTION :

CLIENT :

TRADERS IN PURPLE

MRC

CONSULTING ENGINEERS

MRC Consulting Engineers
PO Box 778, Ashgrove West, Brisbane, QLD 4060
e : admin@mrceng.com.au, www.mrceng.com.au























PROJECT :

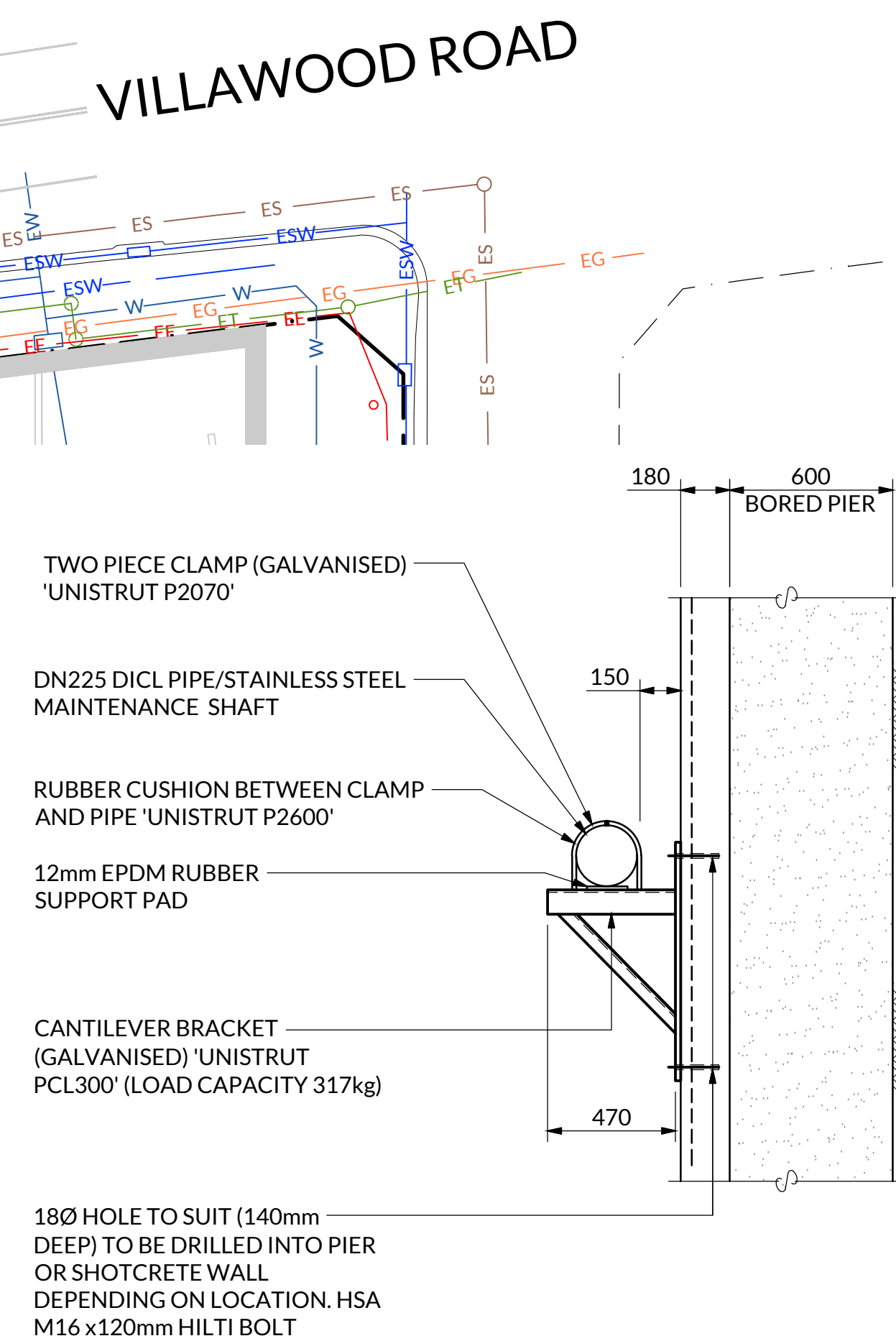
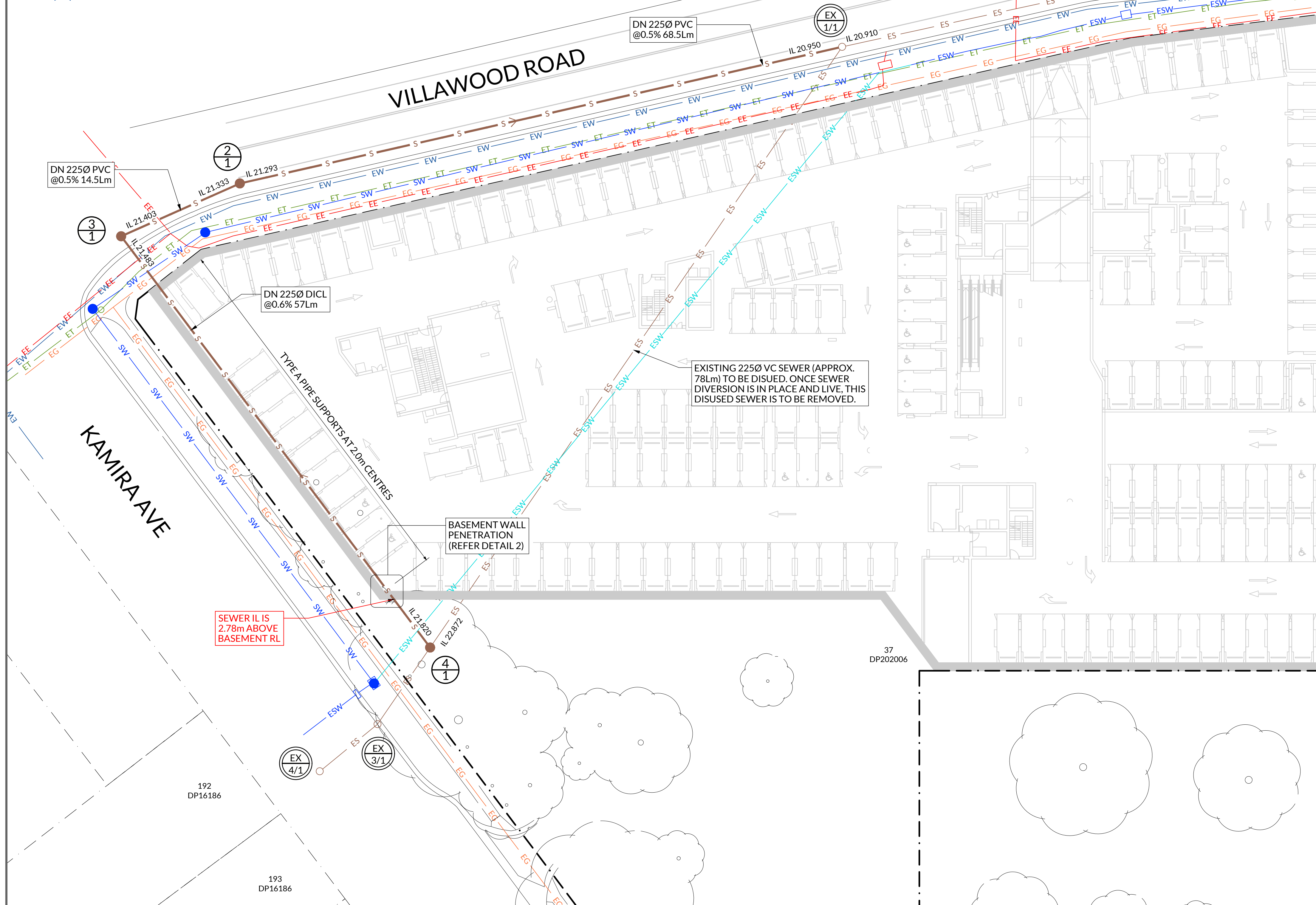
LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163

Drawn : C.R.P.	Date : AUG 2021
Designed : M.H.	Checked : R.A.
Approved : M.H.	
Status : FOR APPROVAL	

DRAWING TITLE : VERGE VEHICULAR CROSSOVER PLANS		
Project No. J21166	Drawing No. C-4.10	Revision B

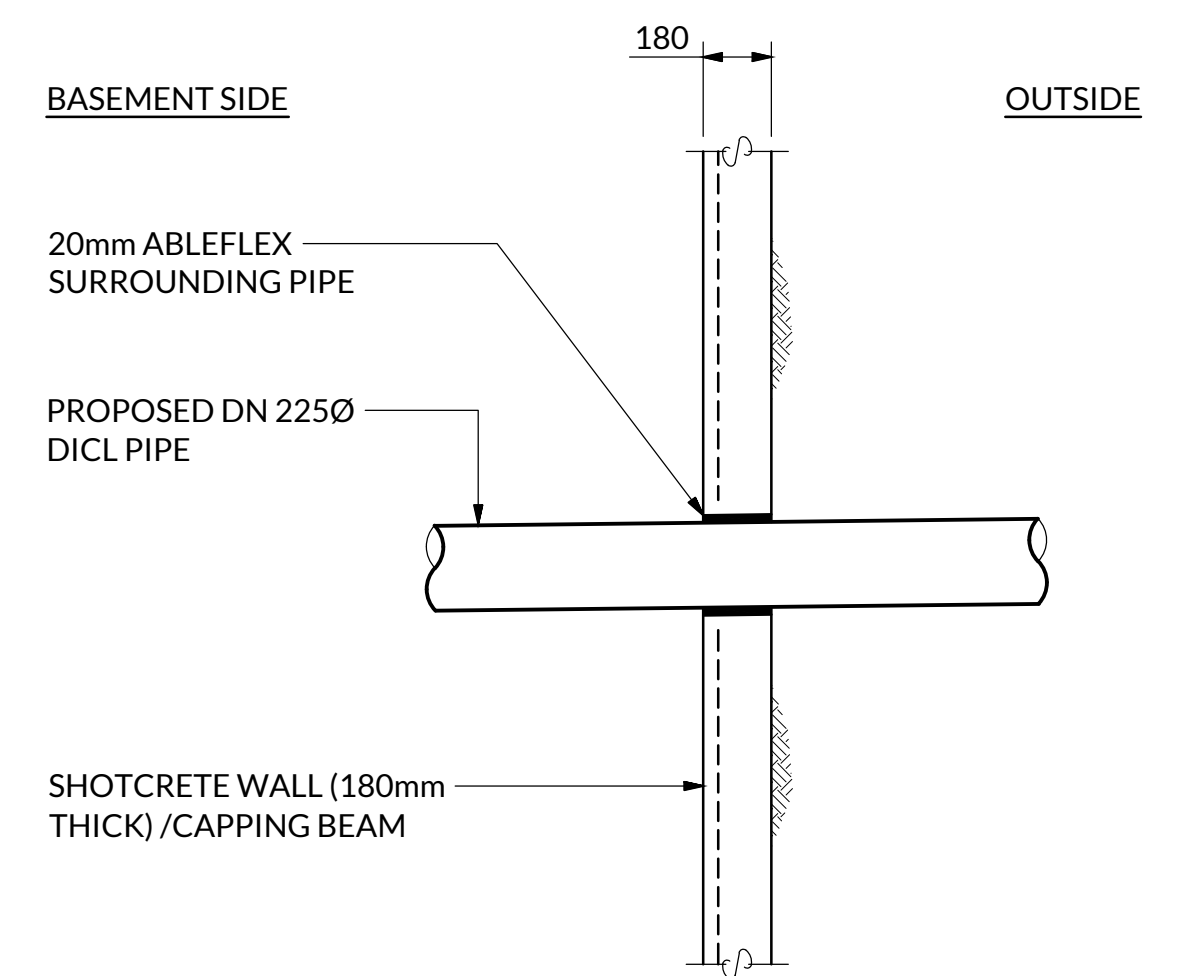
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- | | | | |
|--|---------------------------------------|---|---------------------------------|
|  | PROPERTY BOUNDARY |  | BASEMENT WALL |
|  | INTERNAL PROPERTY BOUNDARY |  | EXISTING SEWER |
|  | EXTERNAL PROPERTY BOUNDARY |  | EXISTING ELECTRICAL |
|  | EXISTING BUILDING |  | EXISTING GAS |
|  | EXISTING NEIGHBOURING BUILDING |  | PROPOSED STORMWATER LINE |
|  | EXISTING MAJOR CONTOUR |  | PROPOSED WATER LINE |
|  | EXISTING MINOR CONTOUR |  | PROPOSED SEWER LINE |
|  | EXISTING WATER |  | PROPOSED SEWER FLOW DIRECTION |
|  | EXISTING STORMWATER |  | PROPOSED SEWER MAINTENANCE HOLE |
|  | EXISTING STORMWATER (COUNCIL RECORDS) |  | EXISTING SEWER MAINTENANCE HOLE |
|  | EXISTING HYDRANT | | |
|  | EXISTING VALVE | | |



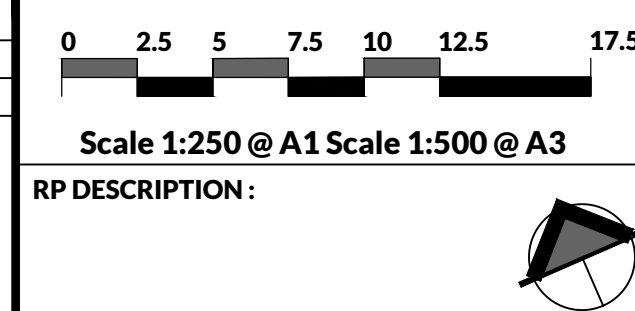
CANTILEVER PIPE SUPPORT - DETAIL A

SCALE 1:20

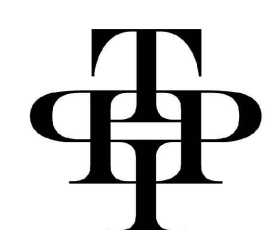


BASEMENT WALL PENETRATION - DETAIL 2

No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.



CLIENT:



TRADERS IN PURPLE



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MRC
CONSULTING ENGINEERS

PROJECT:

**LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163**

Drawn: C.R.P.

Designed: M H

Approved: M.H.

Status :

FOR APPROVAL

Date: **AUG 2021**

Checked: R A

DRAWING TITLE:

SEWER DIVERSION PLAN

Project No.

J21166





















Drawing No.

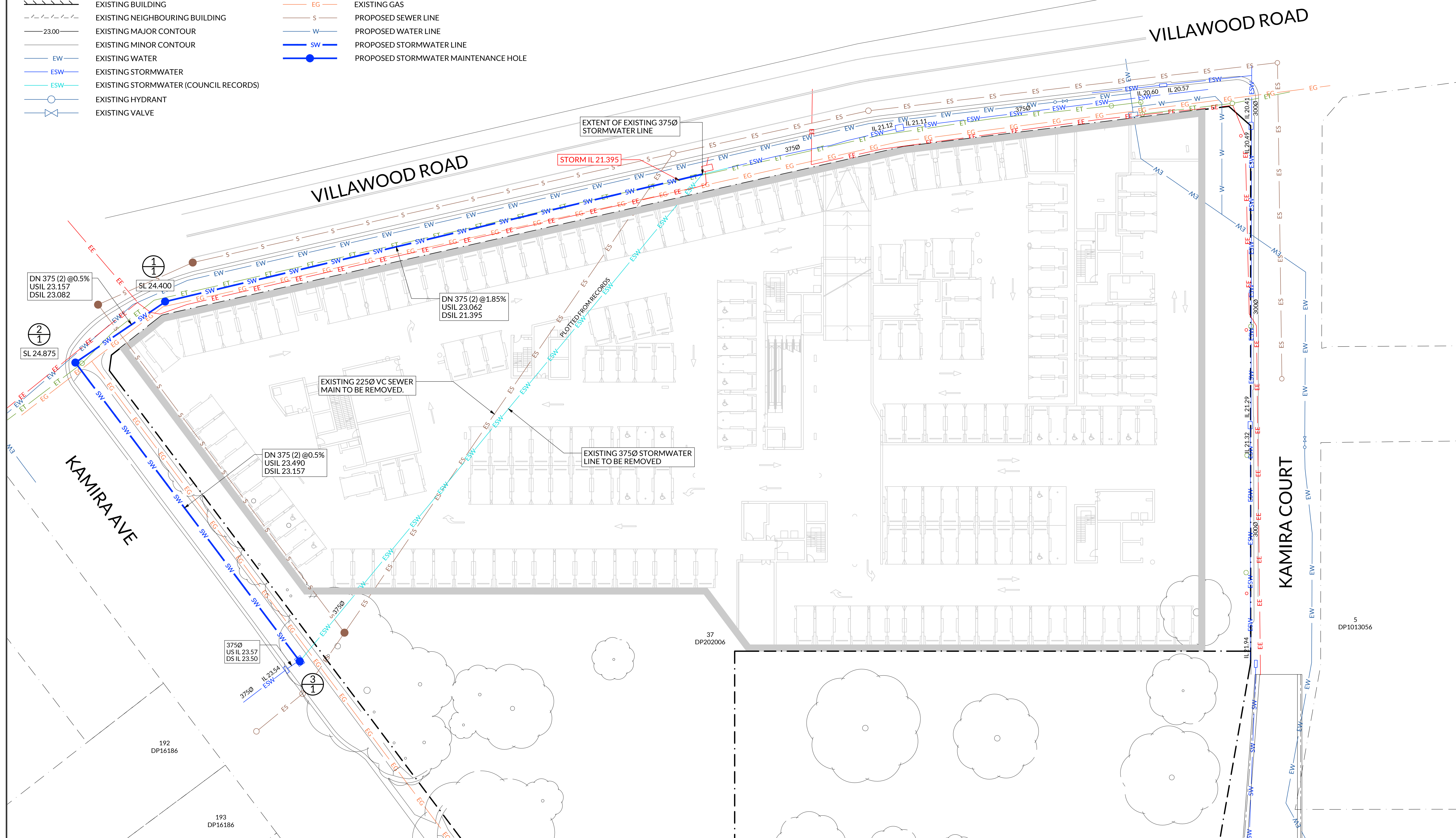
C-5.10

Revision

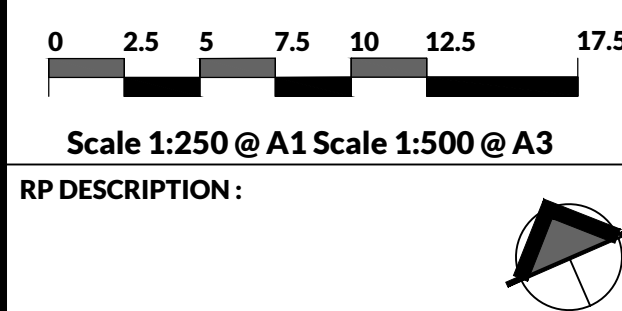
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LEGEND

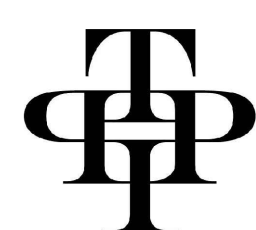
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|--|---------------------------------------|---|--------------------------------------|
|  | PROPERTY BOUNDARY |  | BASEMENT WALL |
|  | INTERNAL PROPERTY BOUNDARY |  | EXISTING SEWER |
|  | EXTERNAL PROPERTY BOUNDARY |  | EXISTING ELECTRICAL |
|  | EXISTING BUILDING |  | EXISTING GAS |
|  | EXISTING NEIGHBOURING BUILDING |  | PROPOSED SEWER LINE |
|  | EXISTING MAJOR CONTOUR |  | PROPOSED WATER LINE |
|  | EXISTING MINOR CONTOUR |  | PROPOSED STORMWATER LINE |
|  | EXISTING WATER |  | PROPOSED STORMWATER MAINTENANCE HOLE |
|  | EXISTING STORMWATER | | |
|  | EXISTING STORMWATER (COUNCIL RECORDS) | | |
|  | EXISTING HYDRANT | | |
|  | EXISTING VALVE | | |



No.	DATE	AMENDMENT	BY
A	29.09.21	PRELIMINARY ISSUE	C.R.P.
B	17.12.21	DA ISSUE	C.R.P.



CLIENT:



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CONSULTING ENGINEERS

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PROJECT:

**LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163**

Drawn :	C.R.P.
Designed :	M.H.
Approved :	M.H.

Date:	AUG 2021
Checked:	R.A.

DRAWING TITLE:

STORMWATER DIVERSION PLAN

Status : **FOR APPROVAL**

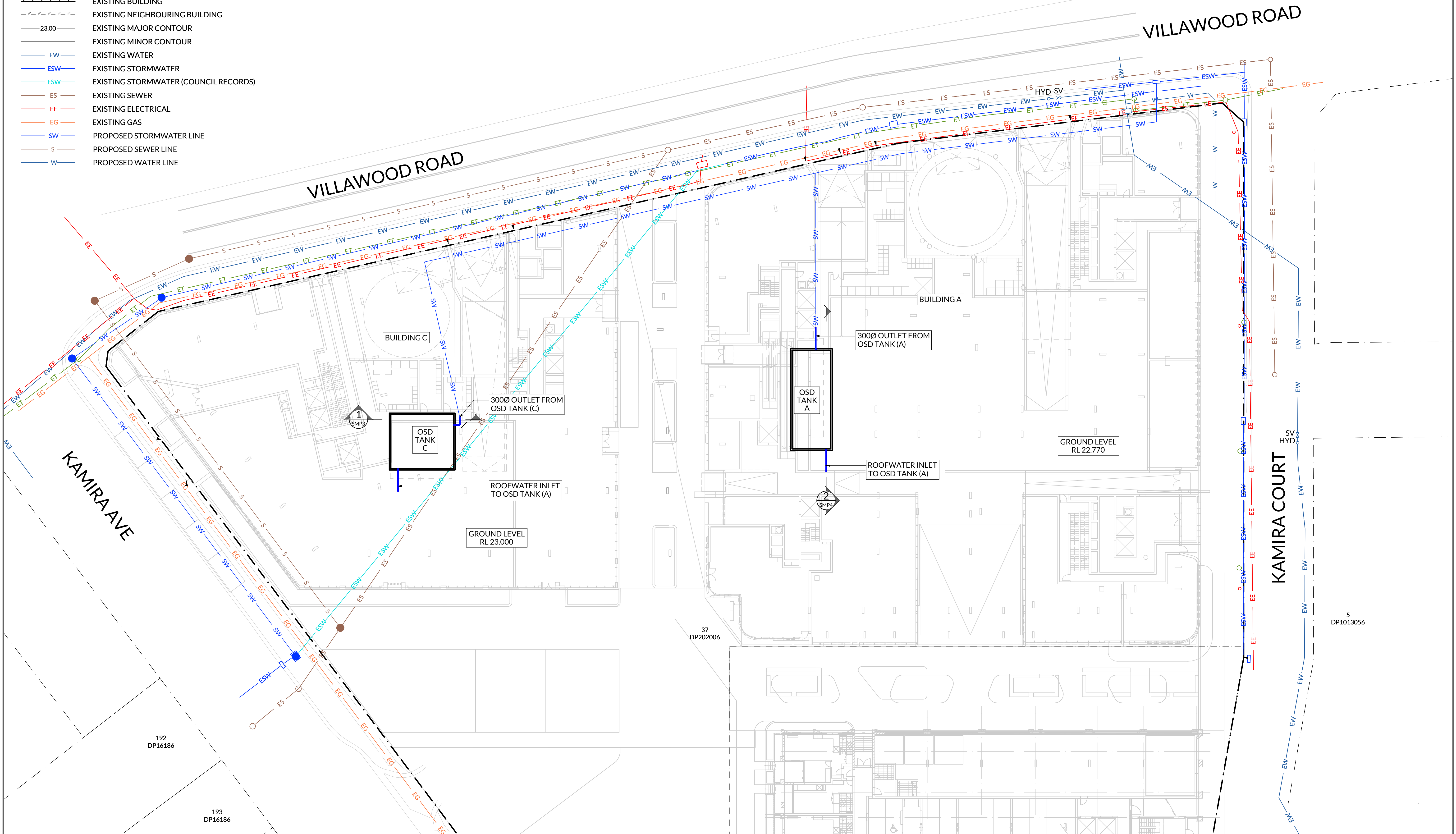
Project No.
J21166

Drawing No.
C-7.10

	Revision B
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LEGEND

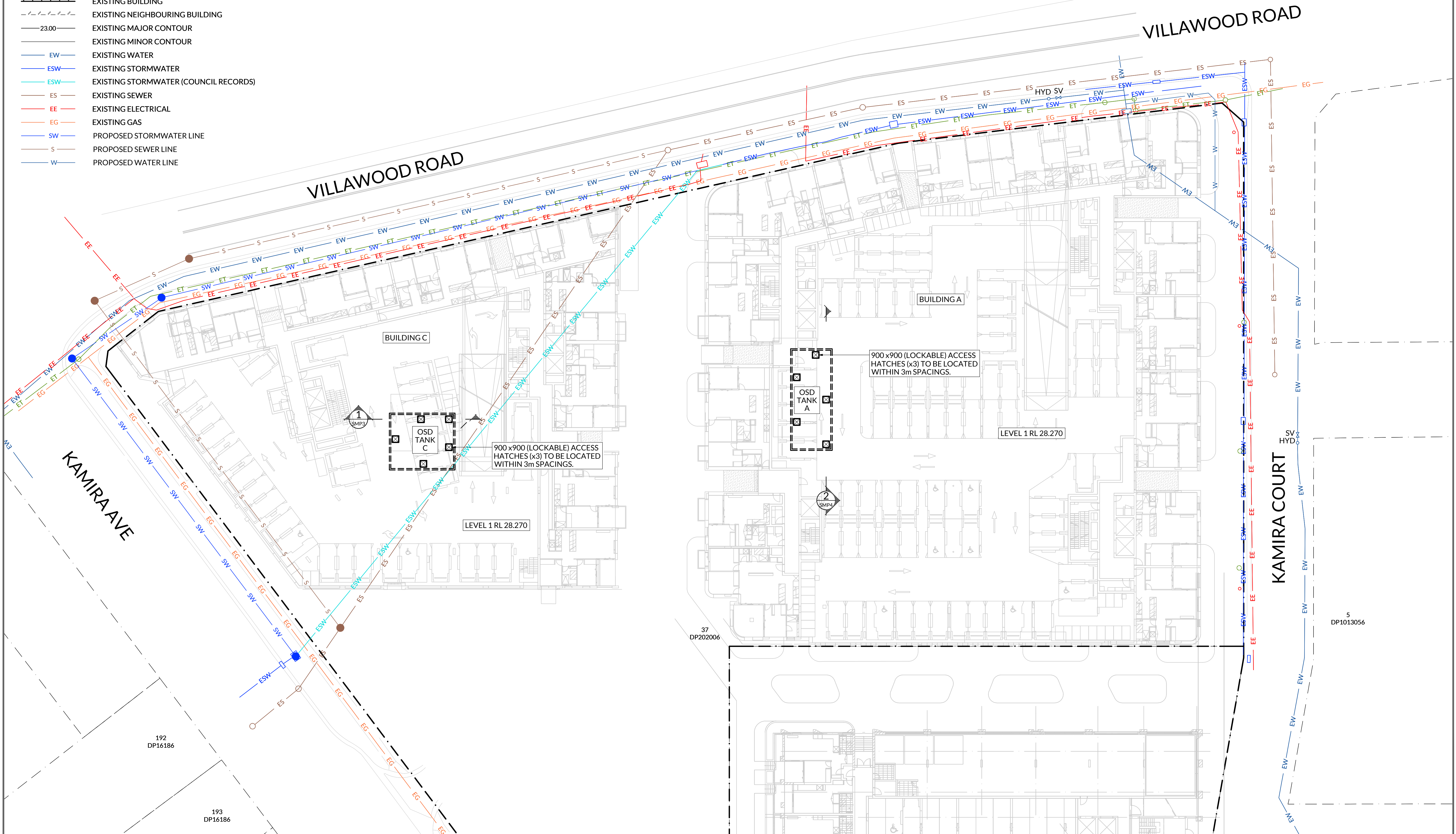
- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ESW EXISTING STORMWATER (COUNCIL RECORDS)
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EG EXISTING GAS
- SW PROPOSED STORMWATER LINE
- S PROPOSED SEWER LINE
- W PROPOSED WATER LINE



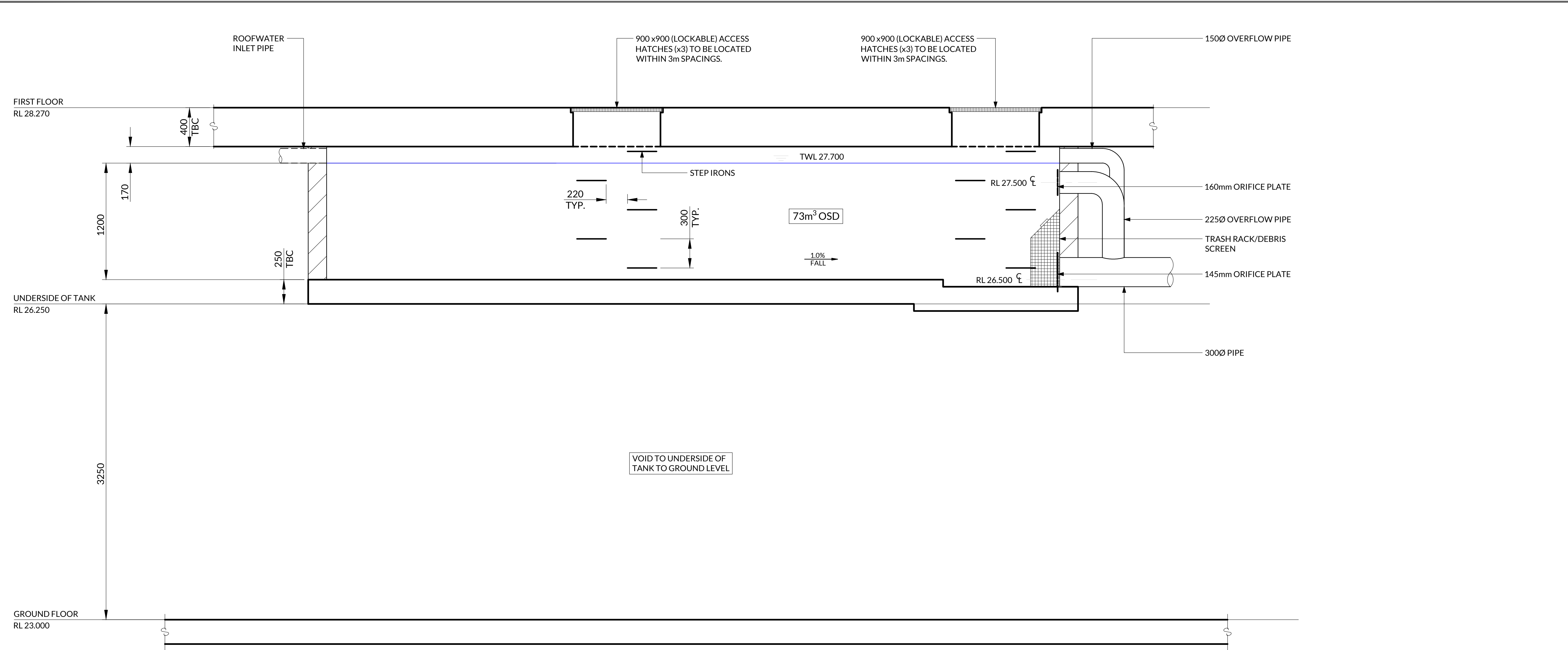
No.	DATE	AMENDMENT	BY	0		2.5		5		7.5		10		12.5		17.5		CLIENT :			MRC CONSULTING ENGINEERS	PROJECT :	LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163	Drawn :	C.R.P.	Date :	AUG 2021	DRAWING TITLE : GROUND FLOOR OSD TANK LAYOUT PLAN		
A	17.12.21	DA ISSUE	C.R.P.	Scale 1:250 @ A1 Scale 1:500 @ A3												RP DESCRIPTION :	Designed :	M.H.						Checked :	R.A.	Approved :	M.H.			

LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ESW EXISTING STORMWATER (COUNCIL RECORDS)
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EG EXISTING GAS
- SW PROPOSED STORMWATER LINE
- S PROPOSED SEWER LINE
- W PROPOSED WATER LINE



No.	DATE	AMENDMENT	BY	 Scale 1:250 @ A1 Scale 1:500 @ A3	CLIENT :  TRADERS IN PURPLE	 MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT : LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163	Drawn : C.R.P.	Date : AUG 2021	DRAWING TITLE : LEVEL 1 OSD TANK ACCESS PLAN		
A	17.12.21	DA ISSUE	C.R.P.					Designed : M.H.	Checked : R.A.			
				RP DESCRIPTION : 								

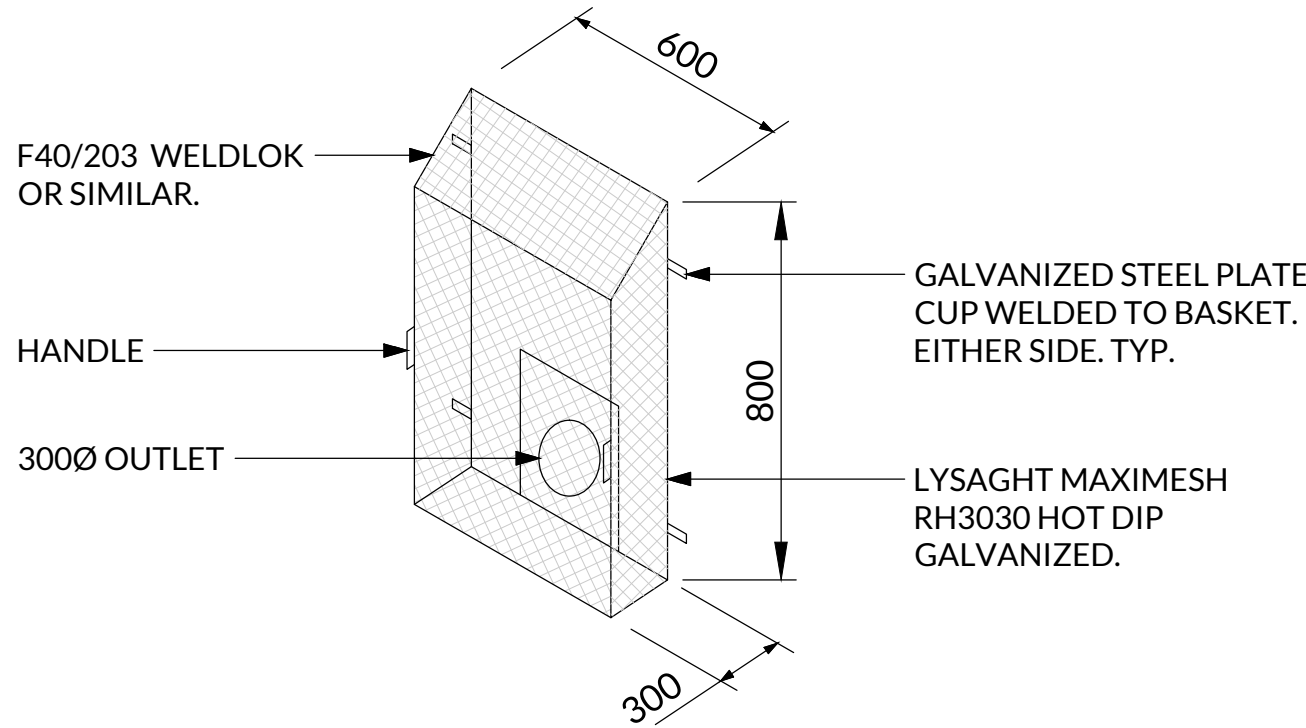


SECTION 1 1 1
SCALE 1:20 SMP1 SMP2 SMP7 BUILDING C - OSD C

THIS IS AN ON-SITE DETENTION STRUCTURE.
DO NOT TAMPER WITH.
CONTACT FAIRFIELD CITY COUNCIL PRIOR
TO ANY PROPOSED WORKS IN THIS AREA.

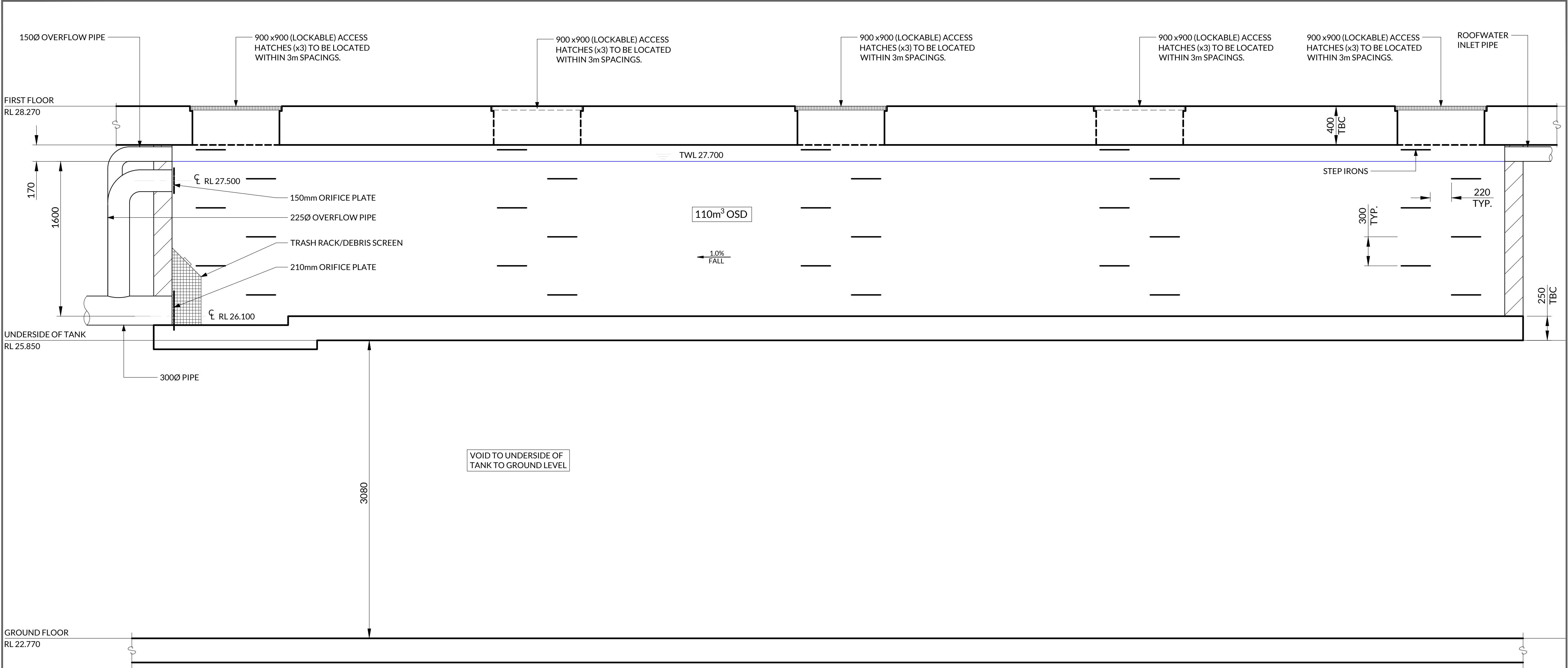
MINIMUM SIZE: 150mm x 60mm
MATERIAL: NON-CORROSIVE METAL
OR 4mm THICK LAMINATED PLASTIC
WORDING SIZE: MINIMUM 5mm HEIGHT
LOCATION: SCREWED TO THE NEAREST CONCRETE OR PERMANENT SURFACE
TO THE OSD SYSTEM AND ABOVE THE WATER SURFACE LEVEL IN THE BASIN.

OSD PLATE DETAIL
SCALE NTS



TRASH SCREEN DETAIL
SCALE NTS

No.	DATE	AMENDMENT	BY	 Scale 1:20 @ A1 Scale 1:40 @ A3 RP DESCRIPTION :		 TRADERS IN PURPLE	 MRC CONSULTING ENGINEERS MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au	PROJECT : LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163	Drawn :	C.R.P.	Date :	AUG 2021	DRAWING TITLE : STORMWATER MANAGEMENT DETAILS SHEET No. 1				
A	17.12.21	DA ISSUE	C.R.P.						Designed :	M.H.	Checked :	R.A.				Approved :	M.H.
												Project No.	J21166	Drawing No.	C-SMP3	Revision	A

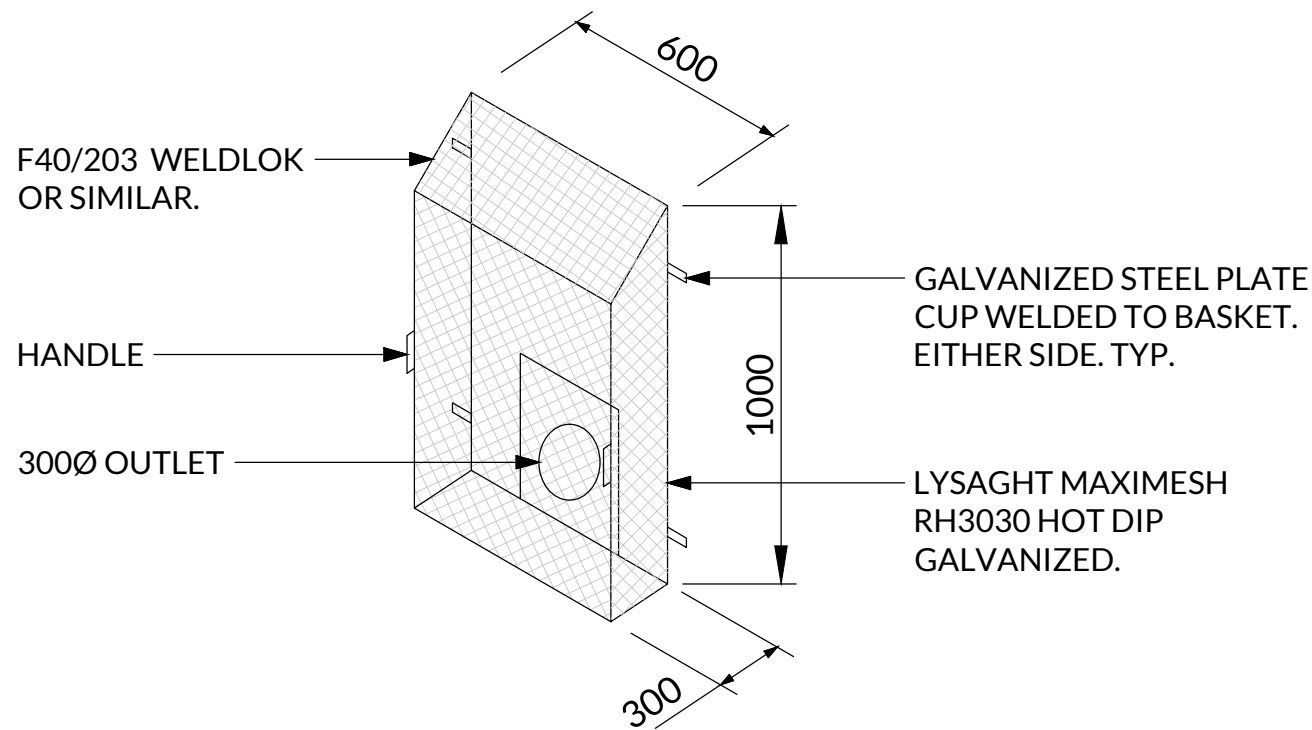


SECTION 2 2 2
SCALE 1:20 SMP1 SMP2 SMP7 **BUILDING A - OSD A**

THIS IS AN ON-SITE DETENTION STRUCTURE.
DO NOT TAMPER WITH.
CONTACT FAIRFIELD CITY COUNCIL PRIOR
TO ANY PROPOSED WORKS IN THIS AREA.

MINIMUM SIZE: 150mm x 60mm
MATERIAL: NON-CORROSIVE METAL
OR 4mm THICK LAMINATED PLASTIC
WORDING SIZE: MINIMUM 5mm HEIGHT
LOCATION: SCREWED TO THE NEAREST CONCRETE OR PERMANENT SURFACE
TO THE OSD SYSTEM AND ABOVE THE WATER SURFACE LEVEL IN THE BASIN.

OSD PLATE DETAIL
SCALE NTS



TRASH SCREEN DETAIL
SCALE NTS

No.	DATE	AMENDMENT	BY
A	17.12.21	DA ISSUE	C.R.P.

Scale 1:20 @ A1 Scale 1:40 @ A3
RP DESCRIPTION :

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PO Box 778, Ashgrove West, Brisbane, QLD 4060
e : admin@mrceng.com.au, www.mrceng.com.au

PROJECT :

**LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163**

Drawn : C.R.P.	Date : AUG 2021
Designed : M.H.	Checked : R.A.
Approved : M.H.	
Status : FOR APPROVAL	

DRAWING TITLE : STORMWATER MANAGEMENT DETAILS SHEET No. 2		
Project No. J21166	Drawing No. C-SMP4	Revision A

LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ESW EXISTING STORMWATER (COUNCIL RECORDS)
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EG EXISTING GAS

EX1
0.3474ha

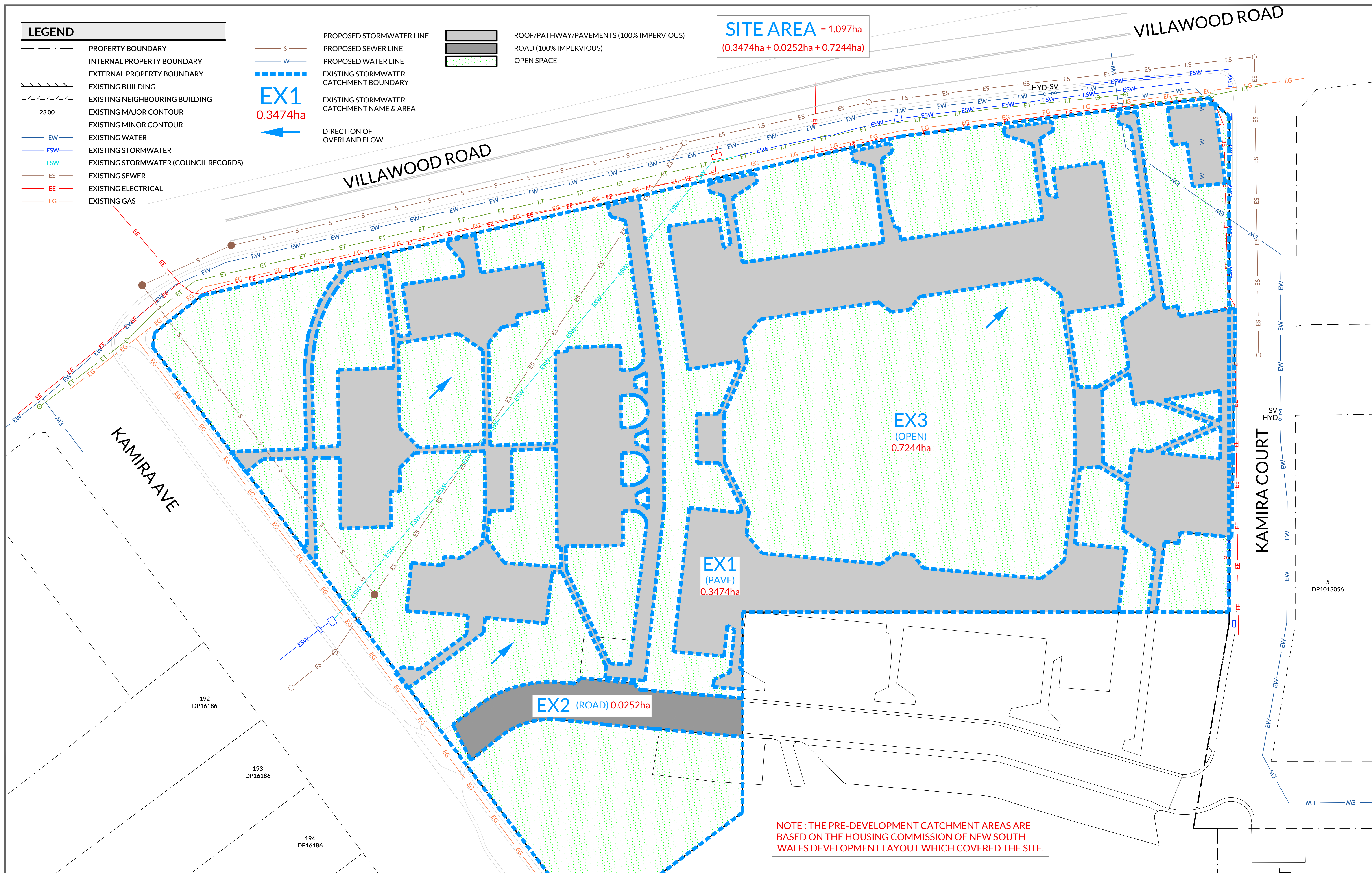


- PROPOSED STORMWATER LINE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- EXISTING STORMWATER CATCHMENT BOUNDARY
- EXISTING STORMWATER CATCHMENT NAME & AREA
- DIRECTION OF OVERLAND FLOW



- ROOF/PATHWAY/PAVEMENTS (100% IMPERVIOUS)
- ROAD (100% IMPERVIOUS)
- OPEN SPACE

SITE AREA = 1.097ha
(0.3474ha + 0.0252ha + 0.7244ha)



NOTE: THE PRE-DEVELOPMENT CATCHMENT AREAS ARE BASED ON THE HOUSING COMMISSION OF NEW SOUTH WALES DEVELOPMENT LAYOUT WHICH COVERED THE SITE.

No.	DATE	AMENDMENT	BY	<div><div></div><div>02.557.51012.517.5</div><div>Scale 1:250 @ A1 Scale 1:500 @ A3</div></div>	CLIENT :	<div><div><div></div></div><div>TRADERS IN PURPLE</div></div>	<div><div><div></div></div><div>MRC CONSULTING ENGINEERS</div><div>MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au</div></div>	PROJECT :	<div><div>LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163</div></div>	Drawn : C.R.P.	Date : AUG 2021	DRAWING TITLE : PRE-DEVELOPMENT (EXISTING) CATCHMENT PLAN
	Designed : M.H.	Checked : R.A.										
Approved : M.H.		Status : FOR APPROVAL		Project No. J21166	Drawing No. C-SMP5	Revision A						
A		17.12.21	DA ISSUE	C.R.P.								

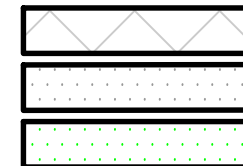
LEGEND

- PROPERTY BOUNDARY
- INTERNAL PROPERTY BOUNDARY
- EXTERNAL PROPERTY BOUNDARY
- EXISTING BUILDING
- EXISTING NEIGHBOURING BUILDING
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EW EXISTING WATER
- ESW EXISTING STORMWATER
- ESW EXISTING STORMWATER (COUNCIL RECORDS)
- ES EXISTING SEWER
- EE EXISTING ELECTRICAL
- EG EXISTING GAS

R1
0.155ha



- PROPOSED STORMWATER LINE
- PROPOSED SEWER LINE
- PROPOSED WATER LINE
- STORMWATER CATCHMENT BOUNDARY
- STORMWATER CATCHMENT NAME & AREA
- DIRECTION OF OVERLAND FLOW



- ROOF (100% IMPERVIOUS)
- PAVEMENT (100% IMPERVIOUS)
- OPEN SPACE

SITE AREA = 1.097ha
(0.155ha + 0.286ha + 0.386ha + 0.270ha)

VILLAWOOD ROAD

KAMIRA COURT

KAMIRA AVE

R1
(ROOF)
0.155ha

R2
(ROOF)
0.286ha

G1
(PAVED)
0.386ha

G2
(OPEN)
0.270ha

192
DP16186

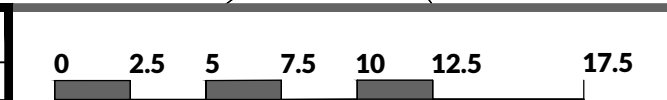
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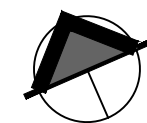
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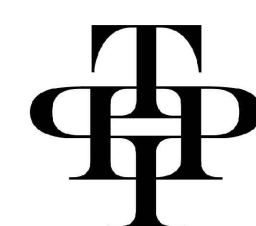
No.	DATE	AMENDMENT	BY
A	17.12.21	DA ISSUE	C.R.P.



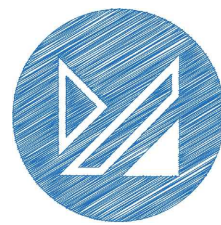
Scale 1:250 @ A1 Scale 1:500 @ A3
RP DESCRIPTION:



CLIENT:



TRADERS IN PURPLE



MRC
CONSULTING ENGINEERS

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e: admin@mrcceng.com.au, www.mrcceng.com.au

PROJECT:

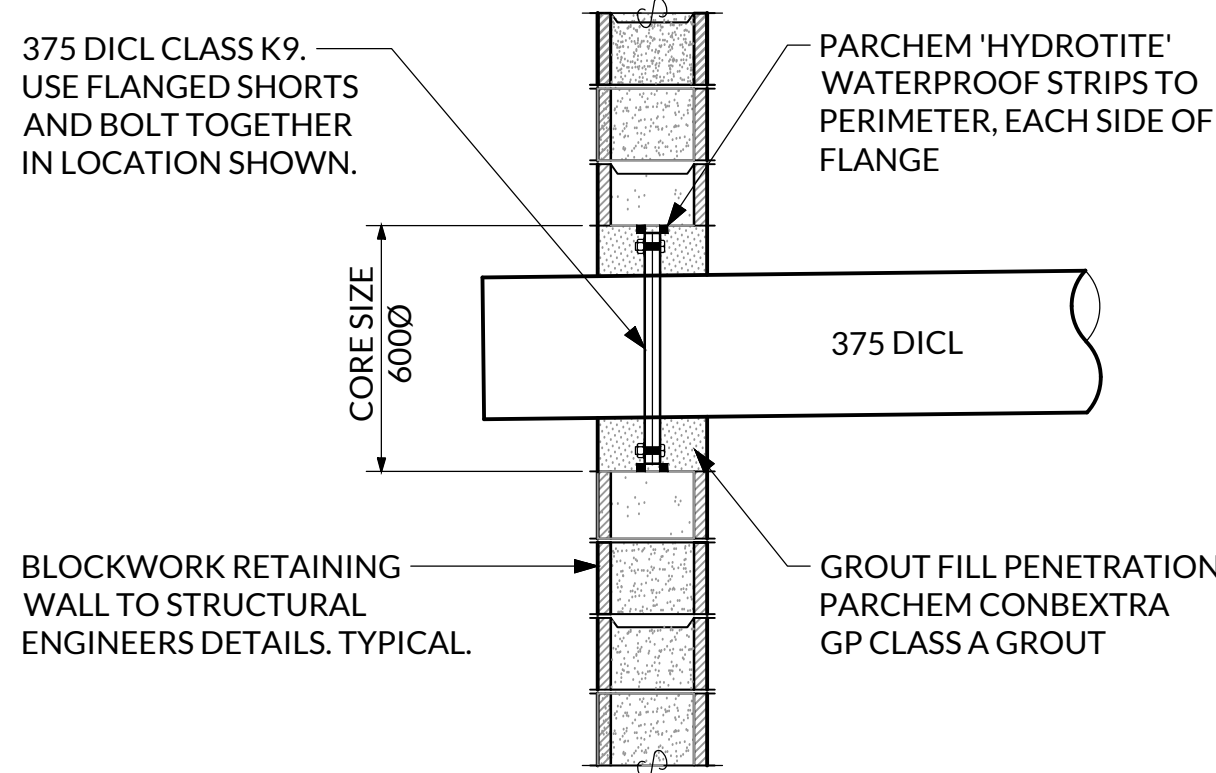
**LAHC VILLAWOOD
(BUILDINGS A & C)
KAMIRA AVENUE
VILLAWOOD, NSW 2163**

Drawn: C.R.P.	Date: AUG 2021
Designed: M.H.	Checked: R.A.
Approved: M.H.	

Status: **FOR APPROVAL**

DRAWING TITLE:
**POST-DEVELOPMENT
CATCHMENT PLAN**

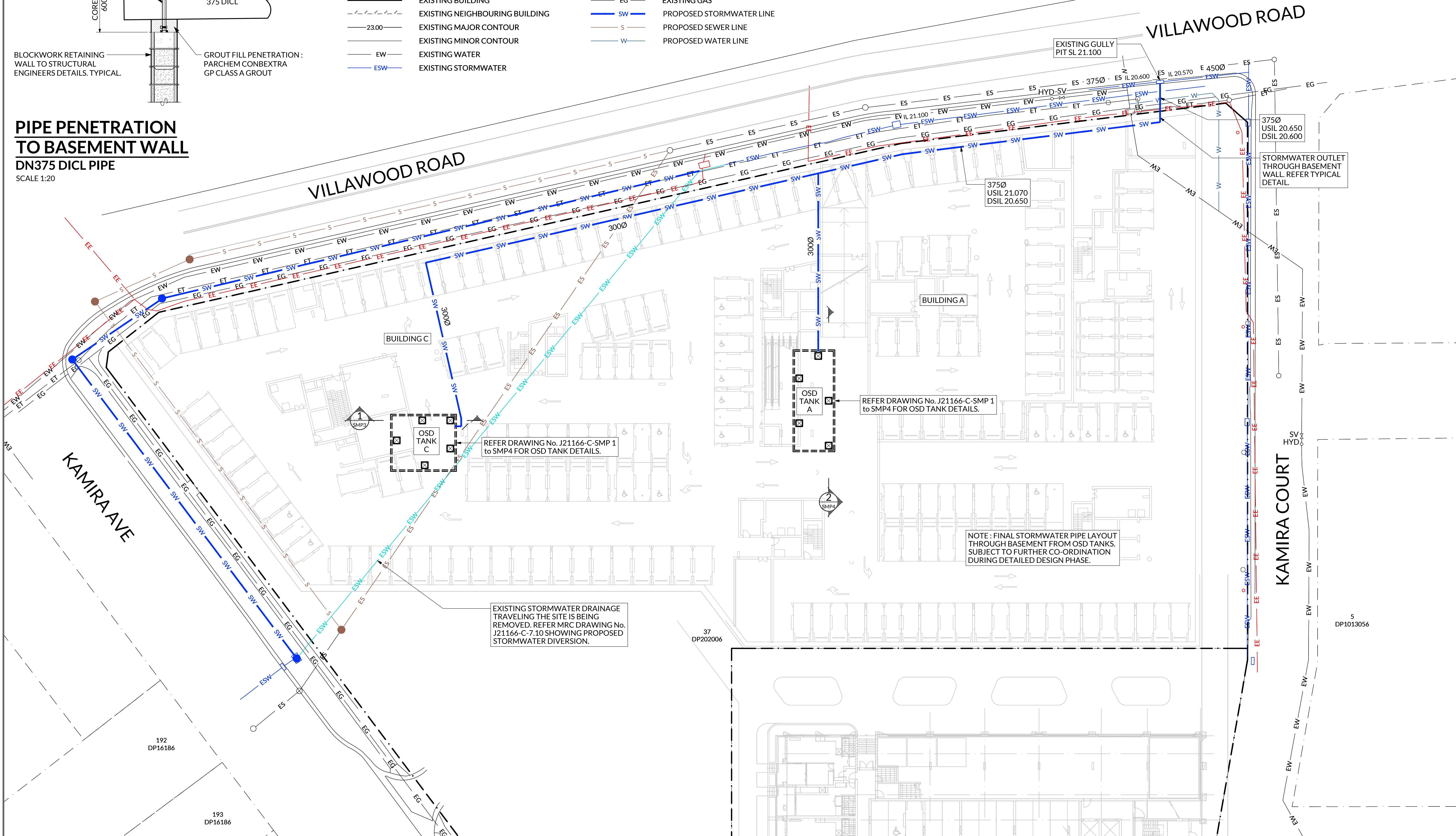
Project No.	Drawing No.	Revision
J21166	C-SMP6	A



**PIPE PENETRATION
TO BASEMENT WALL**
DN375 DICL PIPE
SCALE 1:20

LEGEND

- | | | | |
|--|--------------------------------|--|---------------------------------------|
| | PROPERTY BOUNDARY | | EXISTING STORMWATER (COUNCIL RECORDS) |
| | INTERNAL PROPERTY BOUNDARY | | EXISTING SEWER |
| | EXTERNAL PROPERTY BOUNDARY | | EXISTING ELECTRICAL |
| | EXISTING BUILDING | | EXISTING GAS |
| | EXISTING NEIGHBOURING BUILDING | | PROPOSED STORMWATER LINE |
| | EXISTING MAJOR CONTOUR | | PROPOSED SEWER LINE |
| | EXISTING MINOR CONTOUR | | PROPOSED WATER LINE |
| | EXISTING WATER | | |
| | EXISTING STORMWATER | | |



No.		DATE	AMENDMENT	BY
A		17.12.21	DA ISSUE	C.R.P.
0 2.5 5 7.5 10 12.5 17.5				
Scale 1:250 @ A1 Scale 1:500 @ A3				
RP DESCRIPTION :				
				
CLIENT :				
				
MRC CONSULTING ENGINEERS				
MRC Consulting Engineers PO Box 778, Ashgrove West, Brisbane, QLD 4060 e : admin@mrceng.com.au, www.mrceng.com.au				
PROJECT :				
LAHC VILLAWOOD (BUILDINGS A & C) KAMIRA AVENUE VILLAWOOD, NSW 2163				
Drawn :		C.R.P.		Date :
Designed :		M.H.		Checked :
Approved :		M.H.		
Status : PRELIMINARY				
Project No.		J21166		Drawing No.
				C-SMP7
Revision				A