

LONGUEVILLE AGED CARE DEVELOPMENT

16 NORTHWOOD ROAD, NORTHWOOD

CIVIL ENGINEERING DA PACKAGE

DRAWING INDEX	
DRAWING No.	DESCRIPTION
DAC1.01	COVER SHEET AND DRAWING INDEX
DAC1.02	NOTES, LEGEND, AND TYPICAL DETAILS
DAC2.01	GENERAL ARRANGEMENT PLAN 1
DAC2.02	GENERAL ARRANGEMENT PLAN 2
DAC2.03	GENERAL ARRANGEMENT PLAN 3
DAC2.11	CATCHMENT PLAN
DAC2.21	OSD SECTION AND DETAILS
DAC5.01	STORMWATER LONGITUDINAL SECTION
DAC7.01	SOIL EROSION AND SEDIMENT CONTROL PLAN
DAC7.11	SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
DAC8.01	SEDIMENT BASIN CALCULATIONS



**DIAL BEFORE
YOU DIG**
www.1100.com.au

IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.

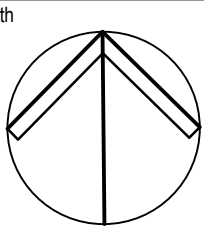


LOCALITY PLAN
NOT TO SCALE

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

G	ISSUE FOR DA	22.02.21	AL	TF
F	ISSUE FOR DA	02.02.21	AL	TF
E	ISSUE FOR DA	21.01.20	IK	TF
D	ISSUE FOR DA	20.01.20	IK	TF
Issue	Description	Date	Drawn	Approved



Client
PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098



Project
LONGUEVILLE AGED CARE DEVELOPMENT

4 -18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title
COVER SHEET AND DRAWING INDEX

Drawn DV	Date AUG 20	Scale NTS	A1	Q.A. Check	Date
Designed DV	Project No. NSW200613	Dwg. No. DAC1.01		Issue G	

DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

S:\2020\200613\Longueville Aged Care\200613_LDAC1.01.dwg
22/08/2021 1:53 PM

GENERAL NOTES			
1.	ALL WORK TO BE IN ACCORDANCE WITH BLACKTOWN CITY COUNCIL STANDARD DRAWINGS AND SPECIFICATIONS, AND TO THE REQUIREMENTS OF COUNCIL ENGINEERS.		
2.	A SURVEY OF THE SITE HAS BEEN UNDERTAKEN BY LAND PARTNERS BUILT ENVIRONMENTAL CONSULTANTS AS RECEIVED BY ACOR CONSULTANTS PTY LTD' ON 20.04.2020. ALL LEVELS TO A.H.D. DRAWINGS SHOW DETAILS AT THE TIME OF SURVEY		
3.	ALL RUBBISH, DEBRIS, UNDERGROWTH, FENCES & TREES NOTED ON THE PLAN WITHIN THE LIMIT OF WORKS ARE TO BE REMOVED FROM SITE AREA TO THE SATISFACTION OF COUNCIL OR THE SUPERINTENDENT		
4.	NO DISTURBANCE TO THE SITE SHALL BE PERMITTED OTHER THAN IN THE IMMEDIATE AREA OF THE WORKS AND NO MATERIAL SHALL BE REMOVED FROM SITE WITHOUT COUNCIL APPROVAL		
5.	NO WORK WITHIN ADJOINING PROPERTIES TO BE UNDERTAKEN WITHOUT WRITTEN PERMISSION FROM THE OWNERS OR RESPONSIBLE AUTHORITY		
6.	THE CONTRACTOR SHALL OBTAIN LEVELS FROM ESTABLISHED BENCHMARKS ONLY		
7.	THE LOCATION OF RECOVERY MARKS AND BENCH MARKS SHOULD BE VERIFIED AND CONFIRMED BY THE CONTRACTOR AND ANY DISCREPANCIES SHOULD BE CLARIFIED IN WRITING WITH THE SURVEYOR PRIOR TO THE COMMENCEMENT OF WORK		
8.	THE CONTRACTOR SHALL ERECT A POLLUTION WARNING SIGN AT THE ENTRANCE TO THE SUBDIVISION OR PROPOSED DEVELOPMENT		
9.	SERVICE CONDUITS SHALL BE PLACED AS DIRECTED BY ENDEAVOUR ENERGY, NBN / TELSTRA, AND AS REQUIRED BY THE RELEVANT SERVICE AUTHORITY AND AS PER SERVICE AUTHORITY APPROVED PLANS		
10.	STREET SIGNS REQUIRED WHERE SHOWN. STREET SIGNS TO COUNCIL STANDARD SHALL BE INSTALLED BY THE CONTRACTOR.		
11.	SIGNPOSTING AND LINEMARKING TO CONFORM WITH AS1742.2 & AS1743. RAISED RETRO-REFLECTIVE PAVEMENT MARKERS TO CONFORM WITH AS1906 & AS1743.		
12.	KERB RAMP CROSSINGS TO BE PROVIDED WHERE SHOWN ON PLAN AND CONSTRUCTED AS DETAILED AND TO COUNCIL STANDARDS		
13.	NO TREES ARE TO BE REMOVED OR LOPPED OTHER THAN THOSE SHOWN AND THOSE IN ROAD RESERVES, WITHOUT COUNCILS WRITTEN PERMISSION. A TREE INSPECTION WITH COUNCIL SHALL BE ARRANGED ONCE LOTS HAVE BEEN PEGGED.		
14.	ALL NEW WORKS ARE TO MAKE SMOOTH JUNCTIONS WITH ALL EXISTING CONDITIONS. AC JOINTS TO BE SAW CUT AT CONNECTION TO EXISTING PAVEMENT. THE CONTRACTOR IS TO MAKE ALL DUE ALLOWANCES FOR WORKS DURING CONSTRUCTION.		
15.	SUBSOIL DRAINAGE TO BE PROVIDED BEHIND KERBING AS PER APPROVED PLANS AND AS DIRECTED BY COUNCIL OR THE CERTIFIER DURING CONSTRUCTION.		
16.	THE THICKNESS OF ROAD PAVEMENTS SHALL BE CONFIRMED BY THE CONTRACTOR UPON COMPLETION OF SUBGRADE TESTING UNDERTAKEN BY THE CONTRACTOR.		
17.	SERVICES TO EXISTING DEVELOPMENTS ARE TO BE MAINTAINED AT ALL TIMES.		
18.	PROPOSED SERVICES CROSSING EXISTING ROADS SHALL BE THRUST BORED UNDER THE ROAD SO AS NOT TO DAMAGE EXISTING SURFACES.		
19.	CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING SERVICES WITH EACH RELEVANT AUTHORITY PRIOR TO COMMENCEMENT OF CONSTRUCTION. ANY DAMAGE TO SERVICES SHALL BE REPAIRED BY THE CONTRACTOR OR THE RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY. ANY UTILITIES ADJUSTMENTS REQUIRED TO BE AT THE CONTRACTORS EXPENSE.		
20.	ENSURE ADEQUATE TRENCH FOUNDATION AND BEDDING COMPACTION SPECIFICALLY ADJACENT TO DRAINAGE STRUCTURES AND PROTECTION TO PIPES FROM CONSTRUCTION TRAFFIC. CRACKED STORMWATER PIPES WILL NOT BE ACCEPTED.		
21.	PROVIDE GALVANISED STEEL KERB OUTLETS PLACED IN KERB ON LOW SIDE OF LOTS, 500mm FROM BOUNDARY OR WHERE SHOWN. PROVIDE SUITABLE ADAPTOR TO ALLOW CONNECTION OF 90mm DIA. S.W.PIPE IN ACCORDANCE WITH COUNCIL STANDARDS		
22.	NO MATERIALS TO BE STOCKPILED ON FUTURE ALLOTMENTS WITHOUT APPROVAL IN WRITING FROM THE CLIENTS REPRESENTATIVE.		
23.	MINIMUM SITE DISTURBANCE AND MAXIMUM VEGETATION AND TREE PRESERVATION TO BE MAINTAINED AT ALL TIMES.		
24.	EROSION AND SILT PROTECTION MEASURES ARE TO BE MAINTAINED AT ALL TIMES AND THE LENGTH OF TRENCH OPENINGS MINIMISED.		
25.	THE CONTRACTORS ITP SHALL ALLOW FOR A HOLD POINT TO ALLOW CHECK LEVELS AND PROOF ROLL PRIOR TO PLACEMENT OF - SUB BASE COURSE - BASE COURSE MATERIAL - WEARING COURSE MATERIAL, PRIME COAT TWO WEEKS PRIOR TO AC SEAL, THICKNESS OF AC SEAL AS SPECIFIED		
26.	ALL PIPES TO BE SOCKET/SPIGOT RUBBER RING JOINT FRC PIPES CLASS '3' OR REINFORCED CONCRETE CLASS '3'. UNLESS NOTED OTHERWISE.		
27.	GRATES TO COMPLY WITH COUNCIL STANDARDS, ALL GRATES TO BE CYCLE FRIENDLY GALVANISED BOLT DOWN TYPE.		
28.	STEP IRONS REQUIRED IN PITS GREATER THAN 1.0m DEPTHS.		
29.	THE CONTRACTOR WILL BE RESPONSIBLE FOR THE FULL QA DOCUMENTATION OF THE PROJECT TO ENSURE WORKS MEET THE RELEVANT SECTIONS OF THE CC FOR ROADS AND DRAINAGE WORKS. A COMPLETE ITP PLAN SHALL BE SUBMITTED TO THE SUPERINTENDENT FOR APPROVAL PRIOR TO WORKS COMMENCING ON SITE, COVERING ALL ASPECTS OF THE CONTRACT.		

GENERAL NOTES			
30.	ALL WORKS ARE TO BE SETOUT BY A REGISTERED SURVEYOR.		
31.	THE CLIENT WILL PREPARE WAE DRAWINGS AT COMPLETION TO ENSURE THE WORKS MEET THE REQUIREMENTS OF THE DESIGN.		
32.	A TRAFFIC CONTROL PLAN IS TO BE SUBMITTED TO COUNCIL BY THE CONTRACTOR FOR APPROVAL PRIOR TO WORKS COMMENCING.		
33.	CONTRACTOR IS TO PROVIDE A 3m LONG LENGTH OF 1000 SUBSOIL DRAINAGE LINE ON THE UPSTREAM SIDE OF DRAINAGE PITS, INCLUDING GEOFABRIC SOCK AND NOM. 20mm GRAVEL		
34.	ALL DRAINAGE TRENCHES WITHIN THE ROAD RESERVE ARE TO BE BACKFILLED WITH CLEAN SHARP SAND.		
35.	SUB-BASE AND BASE MATERIALS FOR ROADS MUST COMPLY WITH RMS SPECIFICATION 3051 OR THE COUNCIL'S SPECIFICATION. ALL OTHER ROAD PAVEMENT MATERIALS MUST COMPLY WITH THE RELEVANT RMS SPECIFICATION OR THE COUNCIL'S SPECIFICATION.		
36.	ALL ROADS SHALL BE SURFACED WITH AN INITIAL COURSE OF 25mm THICKNESS AC10. FINAL WEARING COURSE OF 25mm THICKNESS OF AC10 WILL BE LAID BY COUNCIL AT A LATER DATE AND PAID FOR BY THE APPLICANT AS A MONETARY PAYMENT.		
37.	POWER & LIGHT POLES TO HAVE A 1m X 1m ISOLATION ZONE REGARDLESS OF LOCATION.		
38.	ALL INTER-ALLOTMENT PIPELINES TO HAVING RODDING EYES IMMEDIATELY DOWNSTREAM OF ALL SLOPE JUNCTIONS.		
39.	CONCRETE PATHS, DRIVEWAYS, & BATTLE-AXE HANDLES TO BE BONDED PENDING COMPLETION OF SERVICES IN ACCORDANCE WITH COUNCIL REQUIREMENTS AND AS DIRECTED BY THE PRINCIPAL		
40.	ALL MAJOR & NON-STANDARD STRUCTURES TO HAVE ENGINEERING CERTIFICATION.		
41.	HIGH EROSION AREAS, INCLUDING BATTERS TO BE STABILISED WITHIN 7 DAYS OF COMPLETION OF WORKS AND EARLIER IF DIRECTED BY THE SUPERINTENDENT.		
42.	ALL STABILISED WORKS ARE TO BE MAINTAINED UNTIL EXPIRY OF MAINTENANCE PERIOD.		
43.	ALL STRABILISED WORKS ARE TO BE MAINTAINED UNTIL EXPIRY OF MAINTENANCE PERIOD. OVERFLOW PATHS TO BE FORMED AT THE TIME OF CONSTRUCTION TO SUIT DESIGN ARI		
44.	VARIATIONS NEED TO BE APPROVED PRIOR TO COMMENCEMENT OF WORK. IF IN DOUBT, CONTACT ACOR CONSULTANTS		

EARTHWORKS NOTES			
1.	EARTHWORKS TO BE CARRIED OUT TO THE SATISFACTION OF COUNCIL'S AND RELEVANT AUSTRALIAN STANDARD AND GEOTECHNICAL ENGINEER. UNSOUND MATERIALS ARE TO BE REMOVED FROM ROADS AND LOTS AND TESTED PRIOR TO FILLING. THE CONTRACTOR IS TO PROVIDE PLANS OF TEST LOCATIONS AND TEST CERTIFICATES AS PER THE SPECIFICATION WHERE REQUIRED. THE CONTRACTOR MUST ENSURE COUNCIL APPROVAL OF MATERIALS, PRIOR TO DELIVERY TO SITE.		
2.	TOPSOIL FROM SITE FILLING AND REGRADING AREAS TO BE STRIPPED, STOCKPILED AND RESPREAD AS SHOWN ON PLAN. EXCESS MATERIAL TO BE CARTED OFFSITE TO APPROVED LOCATION. ALL SITE FILLING TO BE COMPACTED IN ACCORDANCE WITH AS3798 TO A MIN. OF 98% SMD AT ±2% OF O.M.C. A GEOTECHNICAL CERTIFICATE FROM A N.A.T.A REGISTERED LABORATORY IS TO BE SUPPLIED BY CONTRACTOR.		
3.	WHERE THE SLOPE OF THE NATURAL SURFACE EXCEEDS ONE IN FOUR (1:4) BENCHES ARE TO BE CUT TO PREVENT SLIPPING OF THE PLACED FILL MATERIAL AS REQUIRED BY THE DEVELOPER'S GEOTECHNICAL ENGINEER TO STANDARD PRACTICE.		
4.	ALL BATTERS ARE TO SCARIFIED TO ASSIST WITH ADHESION OF TOP SOIL TO BATTER FACE.		
5.	PROVIDE MIN. 50mm - 75mm TOPSOIL WITH COUCH GRASS TURF ON ALL FOOTPATHS. ALL BARE AREAS OTHER THAN FOOTPATHS TO BE SOWN WITH SEED, FERTILISED AND HAY MULCHED TO COUNCIL'S SPECIFICATION. GRASS / TURF TO BE MAINTAINED BY CONTRACTOR AT ALL TIMES INCLUDING PERIODS OF INSUFFICIENT RAIN.		
6.	THE CONTROL TESTING OF EARTHWORKS SHALL BE IN ACCORDANCE WITH THE GUIDELINES IN AUSTRALIAN STANDARD 3798-1990. WHERE IT IS PROPOSED TO USED TEST METHOD AS1289 EB.1 OR AS1289 EB2 TO DETERMINE THE FIELD DENSITY, A SAND REPLACEMENT METHOD SHALL BE USED TO CONFIRM THE RESULTS AS DIRECTED BY COUNCIL.		
7.	THE CONTRACTOR SHALL CONTROL SEDIMENTATION, EROSION AND POLLUTION DURING CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF COUNCIL AND APPROVED PLANS.		
8.	A 1.2 METER WIDE, CONTINUOUS STRIP OF COUCH GRASS SHALL BE PLACED BEHIND THE BACK OF ALL KERBS AND PERIMETER OF ALL INLET PITS IMMEDIATELY AFTER THE COMPLETION OF THE FOOTPATH GRADING AND CONSTRUCTION OF PITS RESPECTIVELY, MAINTAINED AND REPLACED AS REQUIRED DURING THE MAINTENANCE PERIOD. TURFING / LANDSCAPE GRASS SHALL ALSO BE PLACED TO THE FULL WIDTH OF ROAD SWALE DRAINS UPON COMPLETION.		
9.	SOIL AND SEDIMENT PROTECTION TO BE PROVIDED AND THOROUGHLY MAINTAINED AROUND DRAINAGE SYSTEM FOR THE DURATION OF WORKS. DIVERSION OF WATER AND THE PROTECTION OF WORKS IS THE CONTRACTORS RESPONSIBILITY.		
10.	LOTS REQUIRING FILL SHALL BE CONSTRUCTED TO LEVEL 1 SUPERVISION WITH TESTING AND DOCUMENTATION SUITABLE TO DETERMINE FUTURE LOT CLASSIFICATION.		
11.	CONTROLLED EARTHWORKS SHALL BE CERTIFIED BY A N.A.T.A REGISTERED LABORATORY. ALL TEST CERTIFICATION AND PLANS LOCATION TO BE SUBMITTED TO THE PRINCIPAL AND SHALL BE TO COUNCILS SATISFACTION		

SITEWORKS NOTES			
1.	ORIGIN OF LEVELS :- AUSTRALIAN HEIGHT DATUM (A.H.D.)		
2.	CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK.		
3.	ALL WORK IS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS, THE SPECIFICATIONS AND THE DIRECTIONS OF THE PRINCIPAL'S REPRESENTATIVE.		
4.	EXISTING SERVICES HAVE BEEN PLOTTED FROM SUPPLIED DATA AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE PRINCIPAL'S REPRESENTATIVE. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.		
5.	WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS OBTAINED.		
6.	THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.		
7.	CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATIONS ARE TO BE UNDERTAKEN OVER COMMUNICATIONS OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.		
8.	ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED WITH AN APPROVED NON-NATURAL GRANULAR MATERIAL AND COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS.1289.5.1.1.		
9.	ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.		
10.	ON COMPLETION OF PIPE INSTALLATION ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL, INCLUDING KERBS, FOOTPATHS, CONCRETE AREAS, GRAVEL AND GRASSED AREAS AND ROAD PAVEMENTS.		
11.	PROVIDE 12mm WIDE EXPANDING CORK JOINTS BETWEEN CONCRETE PAVEMENTS AND ALL BUILDINGS, WALLS, FOOTINGS, COLUMNS, KERBS, DISH DRAINS, GRATED DRAINS, BOLLARD FOOTINGS ETC		
12.	CONTRACTOR TO OBTAIN ALL AUTHORITY APPROVALS.		
13.	ALL BATTERS TO BE GRASSED LINED WITH MINIMUM 100 TOPSOIL AND APPROVED COUCH LAID AS TURF.		
14.	MAKE SMOOTH TRANSITION TO EXISTING SERVICES AND MAKE GOOD.		
15.	THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY DIVERSION DRAINS AND MOUNDS TO ENSURE THAT AT ALL TIMES EXPOSED SURFACES ARE FREE DRAINING AND WHERE NECESSARY EXCAVATE SUMPS AND PROVIDE PUMPING EQUIPMENT TO DRAIN EXPOSED AREAS.		
16.	THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND ELECTRICAL DRAWINGS AND SPECIFICATIONS.		
17.	TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MIN 50mm IN BITUMINOUS PAVING.		
18.	ON COMPLETION OF WORKS ALL DISTURBED AREAS MUST BE RESTORED TO ORIGINAL INCLUDING, BUT NOT LIMITED TO, KERBS, FOOTPATHS, CONCRETE AREAS, GRASS AND LANDSCAPED AREAS.		

STORMWATER NOTES			
1.	MINIMUM GRADE TO STORMWATER LINES TO BE 1% (J.N.O.)		
2.	CONTRACTOR TO SUPPLY AND INSTALL ALL FITTINGS AND SPECIALS INCLUDING VARIOUS PIPE ADAPTORS TO ENSURE PROPER CONNECTION BETWEEN DISSIMILAR PIPEWORK.		
3.	ALL CONNECTIONS TO EXISTING DRAINAGE PITS SHALL BE MADE IN A TRADESMAN-LIKE MANNER AND THE INTERNAL WALL OF THE PIT AT THE POINT OF ENTRY SHALL BE CEMENT RENDERED TO ENSURE A SMOOTH FINISH.		
4.	PRECAST PITS SHALL NOT BE USED UNLESS WRITTEN APPROVAL IS OBTAINED FROM THE SUPERINTENDENT.		
5.	WHERE TRENCHES ARE IN ROCK, THE PIPE SHALL BE BEDDED ON A MIN. 50MM CONCRETE BED (OR 75MM THICK BED OF 12MM BLUE METAL) UNDER THE BARREL OF THE PIPE. THE PIPE COLLAR AT NO POINT SHALL BEAR ON THE ROCK. IN OTHER THAN ROCK, PIPES SHALL BE LAID ON A 75MM THICK SAND BED. IN ALL CASES BACKFILL THE TRENCH WITH SAND TO 200MM ABOVE THE PIPE. WHERE THE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH WITH SAND OR APPROVED GRANULAR BACKFILL COMPACTED IN 150MM LAYERS TO 98% STANDARD MAX. DRY DENSITY.		
6.	BEDDING SHALL BE (J.N.O.) TYPE H1, IN ACCORDANCE WITH CURRENT RELEVANT AUSTRALIAN STANDARDS.		
7.	WHERE SUBSOIL DRAINAGE LINES PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS UNSLOTTED UPVC SEWER GRADE PIPE SHALL BE USED.		
8.	WHERE PVC PIPES ARE WITHIN THE STRUCTURAL ZONE OF INFLUENCE FROM FOOTINGS / FOUNDATIONS, PIPES TO BE CONCRETE ENCASED WITH MIN 50mm THICK 25MPa CONCRETE.		

COMPACTION NOTES

1. STRIP TOPSOIL TO EXPOSE NATURALLY OCCURRING MATERIAL AND STOCKPILE ON SITE FOR SELECTIVE RE-USE OR DISPOSE OFF-SITE AS DIRECTED BY THE SUPERINTENDENT.
2. WHERE FILLING IS REQUIRED TO ACHIEVE DESIGN SUBGRADE PROOF ROLL EXPOSED NATURAL SURFACE WITH A MINIMUM OF TEN PASSES OF A VIBRATING ROLLER (MINIMUM STATIC WEIGHT OF 10 TONNES) IN THE PRESENCE OF THE SUPERINTENDENT. REFER TO SPECIFICATION FOR DETAILS.
3. ALL SOFT, WET OR UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE SUPERINTENDENT AND REPLACED WITH APPROVED MATERIAL SATISFYING THE REQUIREMENTS LISTED BELOW.
4. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING:
 - a. FREE FROM ORGANIC, PERISHABLE AND CONTAMINATED MATTER
 - b. MAXIMUM PARTICLE SIZE 75MM
 - c. PLASTICITY INDEX BETWEEN 2% AND 15%
5. 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 AS 1289 E3.1 OF NOT LESS THAN THE FOLLOWING STANDARD MINIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 E1.1 :

LOCATION	STANDARD DRY DENSITY
UNDER BUILDING SLABS	98%
AREAS OF SERVICE TRENCHES	98%
EXTERNAL PAVED AREAS, ROADS AND CARPARKS	98%
LANDSCAPED AREAS	90%
6. 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 BY THE CONTRACTOR AT THEIR COST.
7. TESTING OF THE SUBGRADE SHALL BE CARRIED OUT BY AN APPROVED NATA REGISTERED LABORATORY AT THE CONTRACTORS EXPENSE.

CIVIL LEGEND PROPOSED			
	.....	STORMWATER OVERLAND FLOW PATH	
	.....	RETAINING WALL	
	.....	STORMWATER DRAINAGE HEADWALL	
	.....	STORMWATER DRAINAGE STRUCTURE WITH NUMBER	
	.....	STORMWATER DRAINAGE LINE AND SIZE	
	.....	DESIGN LEVEL	
	.....	PROPOSED SEWER LINE	
	.....	EXISTING SEWER LINE	
	.....	GROSS POLLUTANT TRAP	
	.....	SEWER MANHOLE	
	.....	PROPOSED GRATED TRENCH DRAIN	

DIAL BEFORE YOU DIG			
	DIAL BEFORE YOU DIG www.1100.com.au	IMPORTANT: THE CONTRACTOR IS TO MAINTAIN A CURRENT SET OF "DIAL BEFORE YOU DIG" DRAWINGS ON SITE AT ALL TIMES.	

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

C	ISSUE FOR DA	12.08.20	KBM	TF	
B	ISSUE FOR DA	10.08.20	DV	TF	
A	ISSUE FOR DA	07.08.20	DV	-	
Issue	Description	Date	Drawn	Approved	

Client
PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5666



ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098

Project
LONGUEVILLE AGED CARE DEVELOPMENT

4 -18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title
NOTES, LEGENDS, DETAILS

Drawn DV	Date AUG 20	Scale NTS	A1	Q.A. Check	Date
Designed DV	Project No. NSW200613	Dwg. No. DAC1.02	Issue C		

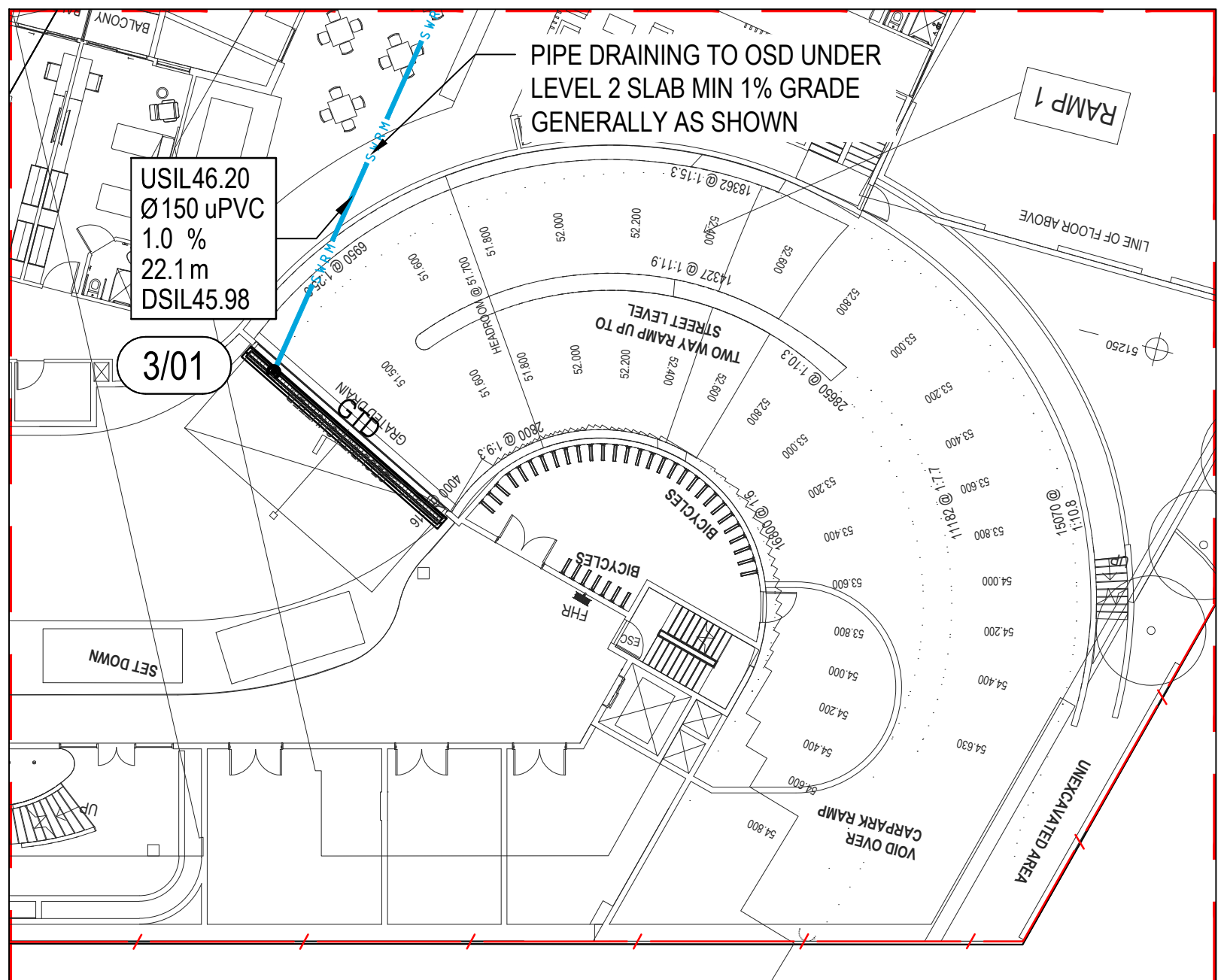
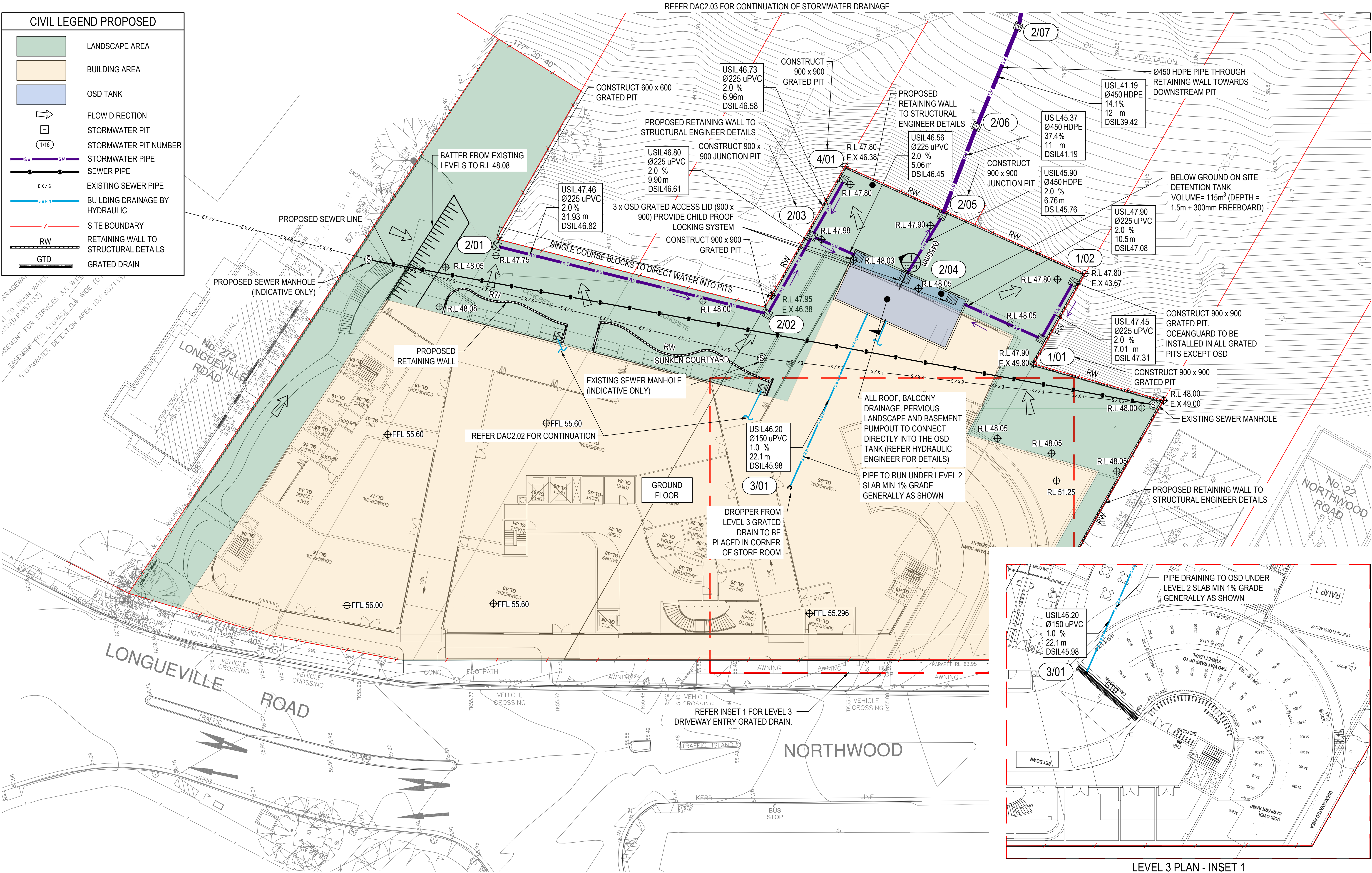
DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

S:\2020\mwa\001\Drawings - cad\DWG\mwa\201\NSW200613.DWG 12 Aug 2024 1:53 PM

CIVIL LEGEND PROPOSED

- LANDSCAPE AREA
- BUILDING AREA
- OSD TANK
- FLOW DIRECTION
- STORMWATER PIT
- STORMWATER PIT NUMBER
- STORMWATER PIPE
- SEWER PIPE
- EXISTING SEWER PIPE
- BUILDING DRAINAGE BY HYDRAULIC
- SITE BOUNDARY
- RETAINING WALL TO STRUCTURAL DETAILS
- GTD
- GRATED DRAIN



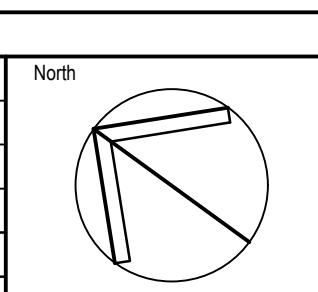
PLAN - LEVEL 1 - GROUND FLOOR

LEVEL 3 PLAN - INSET 1

DRAWING UNDER REVISION NOT FOR CONSTRUCTION

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:				
J	ISSUE FOR DA	22.02.21	AL	TF
I	ISSUE FOR DA	02.02.21	AL	TF
H	ISSUE FOR DA	21.01.21	IK	TF
G	ISSUE FOR DA	20.01.21	IK	TF
Issue	Description	Date	Drawn	Approved



Client
PATHWAYS PROPERTY GROUP
40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS
302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098
4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Project
LONGUEVILLE AGED CARE DEVELOPMENT
4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title GENERAL ARRANGEMENT PLAN 1 LEVEL 4 GROUND FLOOR				
Drawn DV	Date JAN 2021	Scale 1:200	A1	Q.A. Check Date
Designed DV	Project No. NSW200613	Dwg. No. DAC2.01	Issue J	

CIVIL LEGEND PROPOSED

LANDSCAPE AREA

BUILDING AREA

OSD TANK

FLOW DIRECTION

STORMWATER PIT

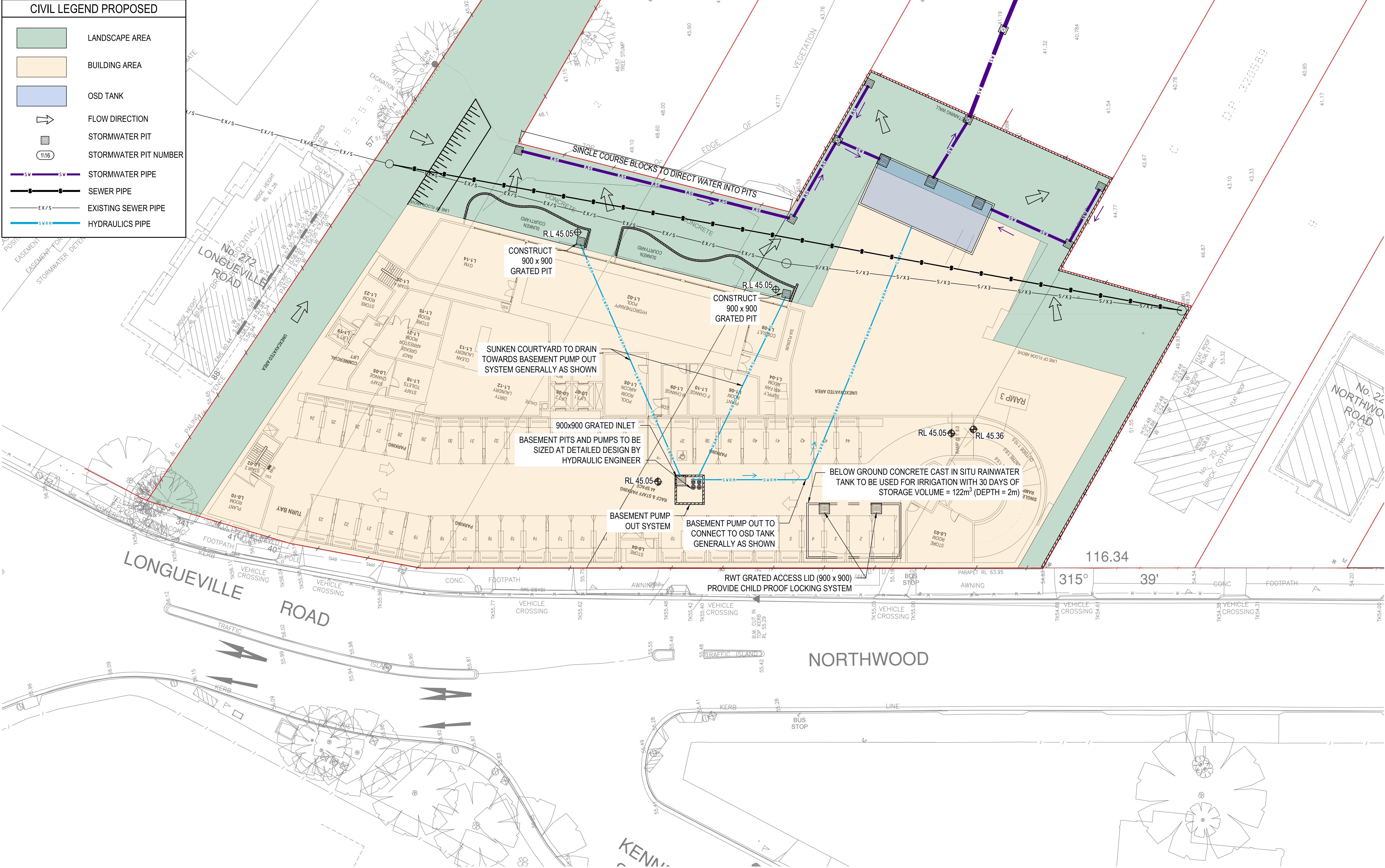
STORMWATER PIT NUMBER

STORMWATER PIPE

SEWER PIPE

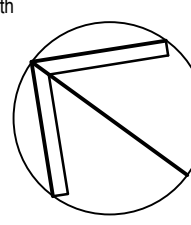
EXISTING SEWER PIPE

HYDRAULICS PIPE



© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:			
D	ISSUE FOR DA	22.02.21	AL TF
C	ISSUE FOR DA	02.02.21	IK TF
B	ISSUE FOR DA	21.01.21	IK TF
A	ISSUE FOR DA	20.01.21	IK TF
Issue	Description	Date	Drawn Approved



Client
PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098

Project
LONGUEVILLE AGED CARE DEVELOPMENT

4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title GENERAL ARRANGEMENT PLAN 2 LEVEL 1 BASEMENT CARPARK AND RAIN WATER TANK			
Drawn IK	Date JAN 2021	Scale 1:200	A1
Designed IK	Project No. NSW200613	Q.A. Check DAC2.02	Date D

DRAWING UNDER REVISION **NOT FOR CONSTRUCTION**

CIVIL LEGEND PROPOSED

LANDSCAPE AREA

BUILDING AREA

OSD TANK

FLOW DIRECTION

STORMWATER PIT

1116

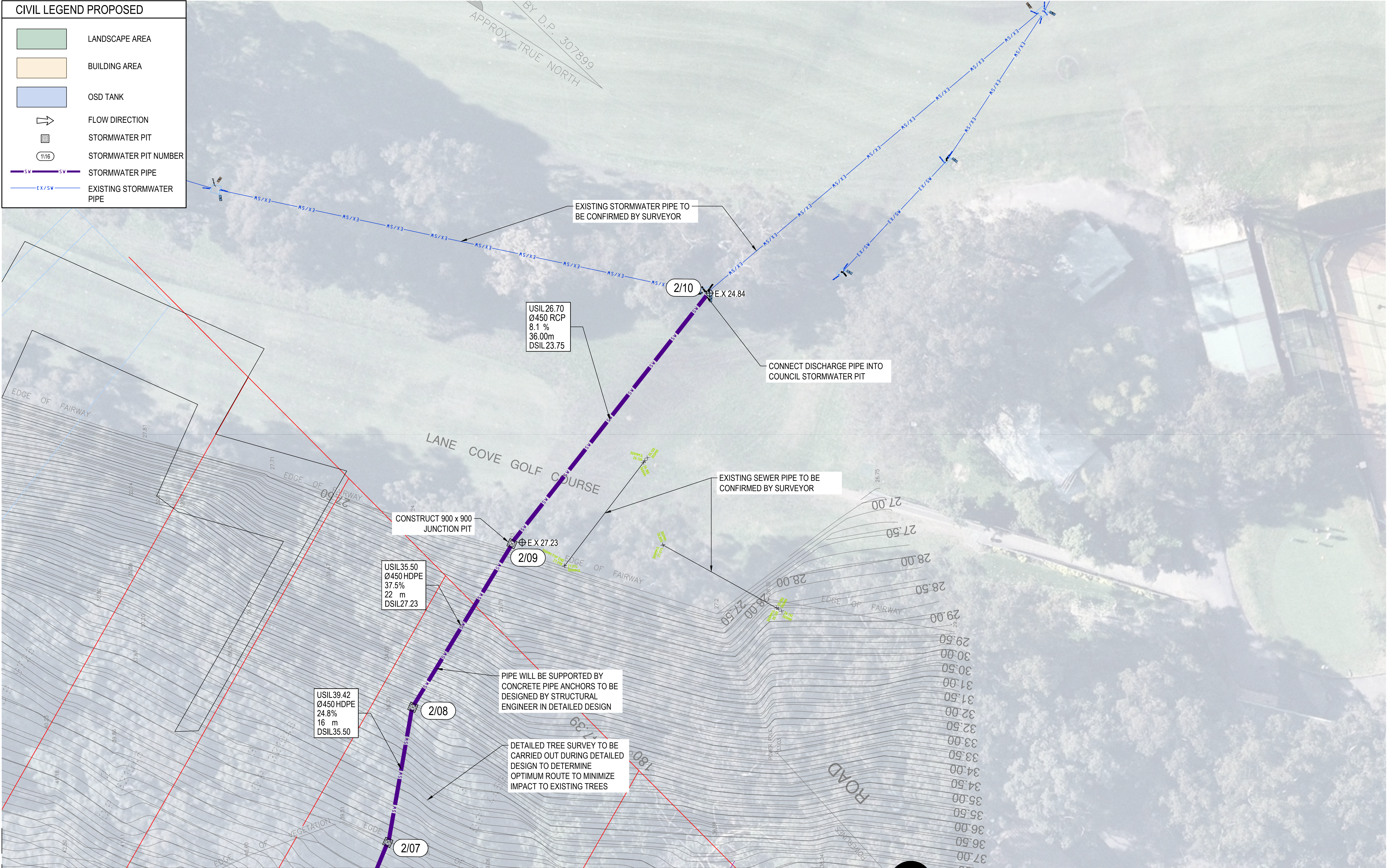
STORMWATER PIT NUMBER

SW

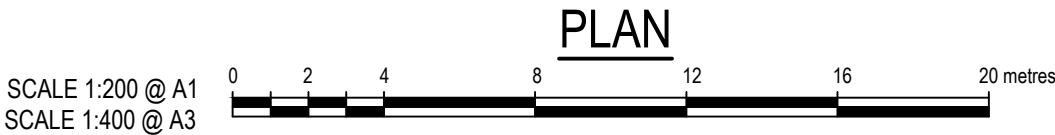
STORMWATER PIPE

EX/SW

EXISTING STORMWATER PIPE



REFER DAC2.01 FOR CONTINUATION OF STORMWATER DRAINAGE



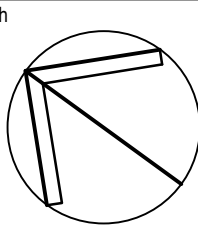
DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

D	ISSUE FOR DA	22.02.21	AL	TF
C	ISSUE FOR DA	02.02.21	IK	TF
B	ISSUE FOR DA	21.01.21	IK	TF
A	ISSUE FOR DA	20.01.21	IK	TF
Issue	Description	Date	Drawn	Approved



Client
PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098



Project
LONGUEVILLE AGED CARE DEVELOPMENT

4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

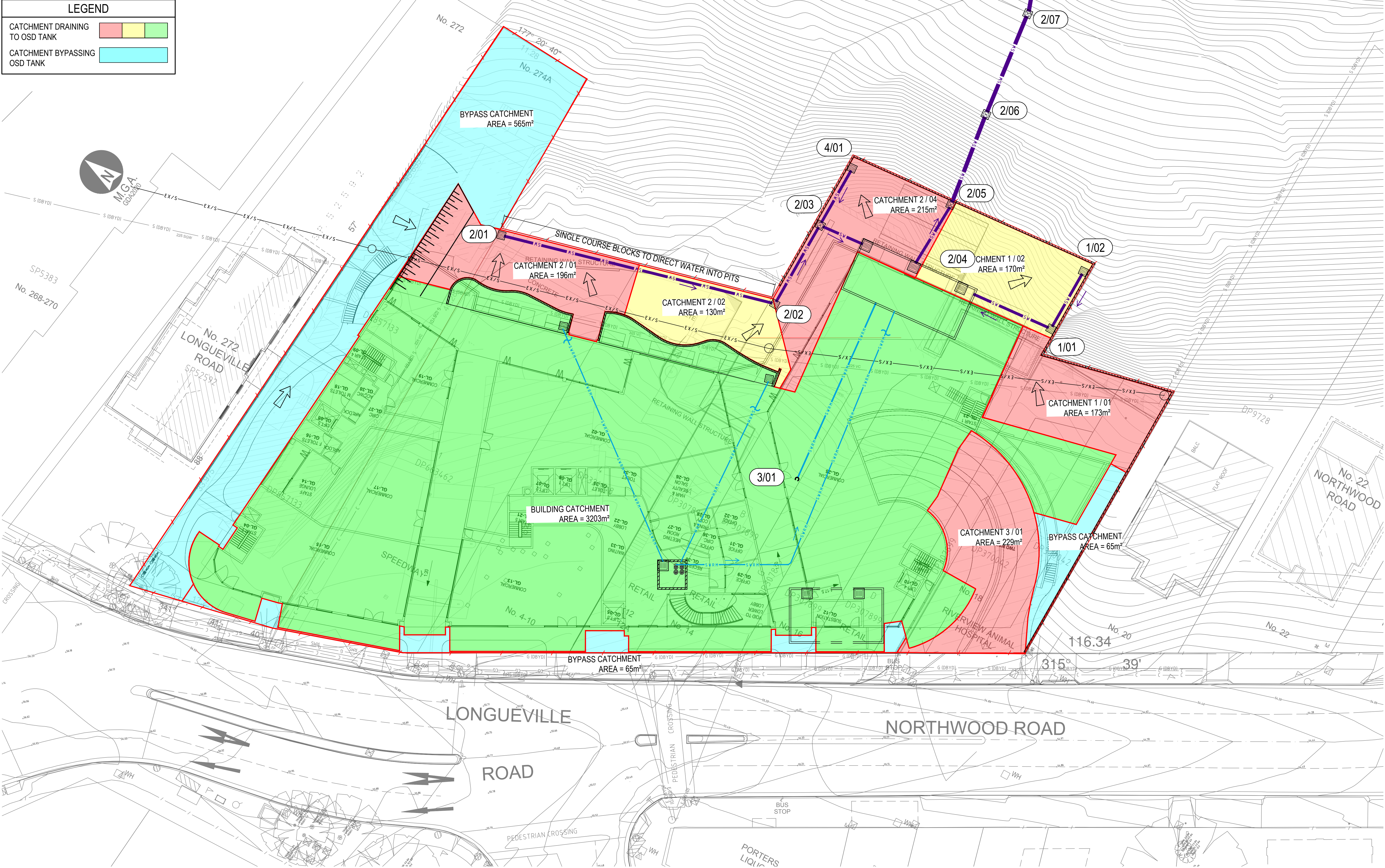
Drawing Title
GENERAL ARRANGEMENT PLAN 3

Drawn IK	Date JAN 2021	Scale 1:200	A1	Q.A. Check	Date
Designed IK	Project No. NSW200613	Dwg. No. DAC2.03		Issue D	

LEGEND

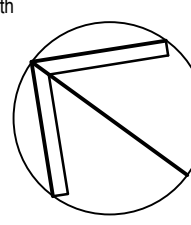
CATCHMENT DRAINING TO OSD TANK

CATCHMENT BYPASSING OSD TANK



© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:					
G	ISSUE FOR DA	02.02.21	IK	TF	
F	ISSUE FOR DA	21.01.21	IK	TF	
E	ISSUE FOR DA	20.01.21	IK	TF	
D	ISSUE FOR DA	30.09.20	KBM	TF	
Issue	Description	Date	Drawn	Approved	



Client
PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

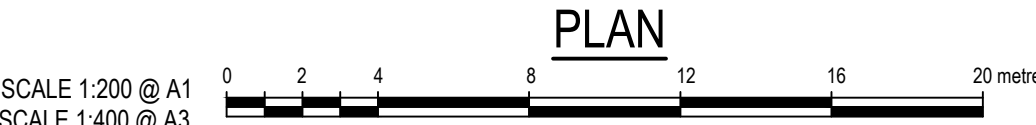
ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098

Project
LONGUEVILLE AGED CARE DEVELOPMENT

4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title
CATCHMENT PLAN

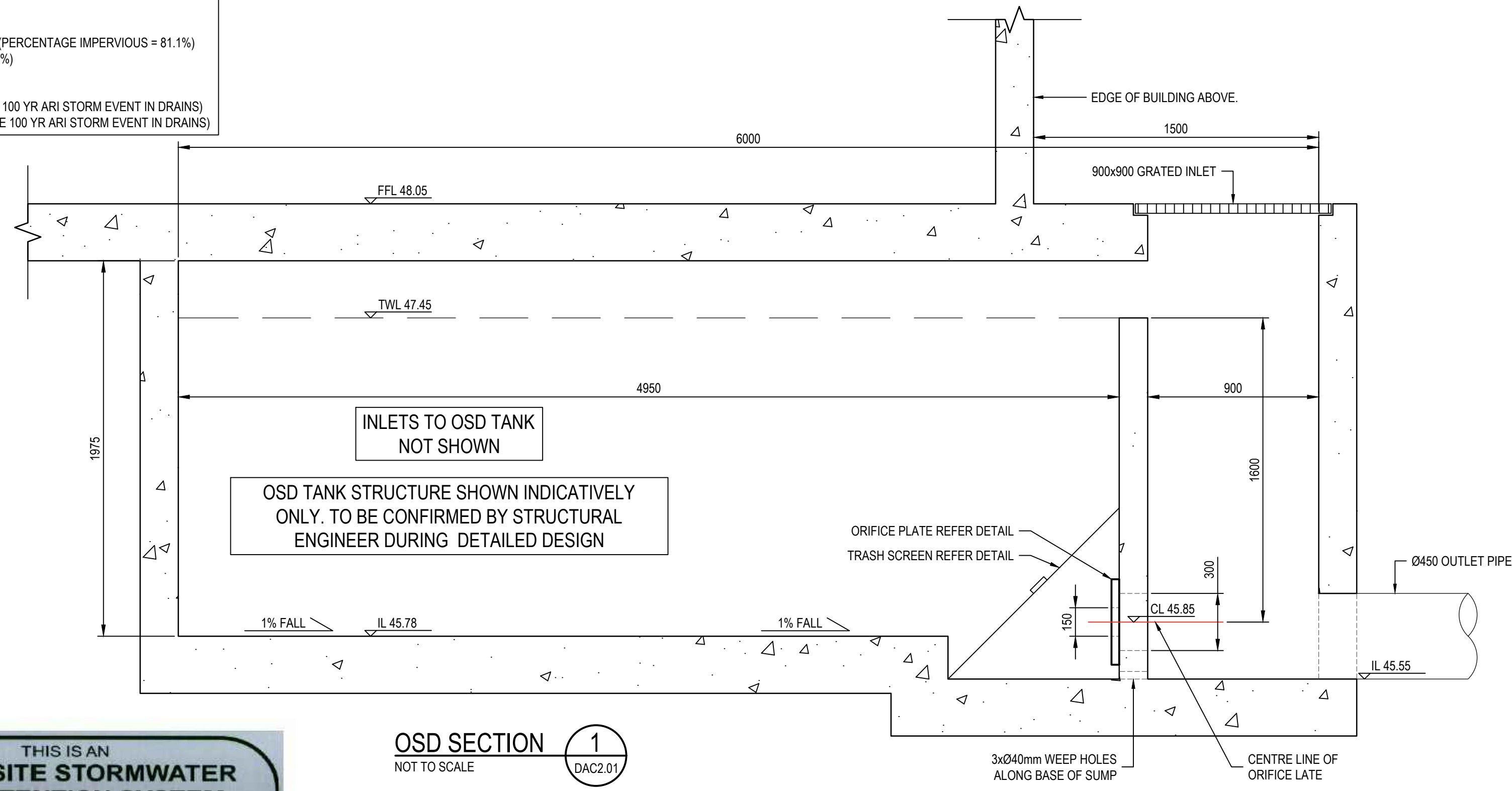
Drawn	Date	Scale	A1	Q.A. Check	Date
DV	AUG 20	1:200			
Designed	Project No.	Dwg. No.	Issue		
DV	NSW200613	DAC2.11	G		



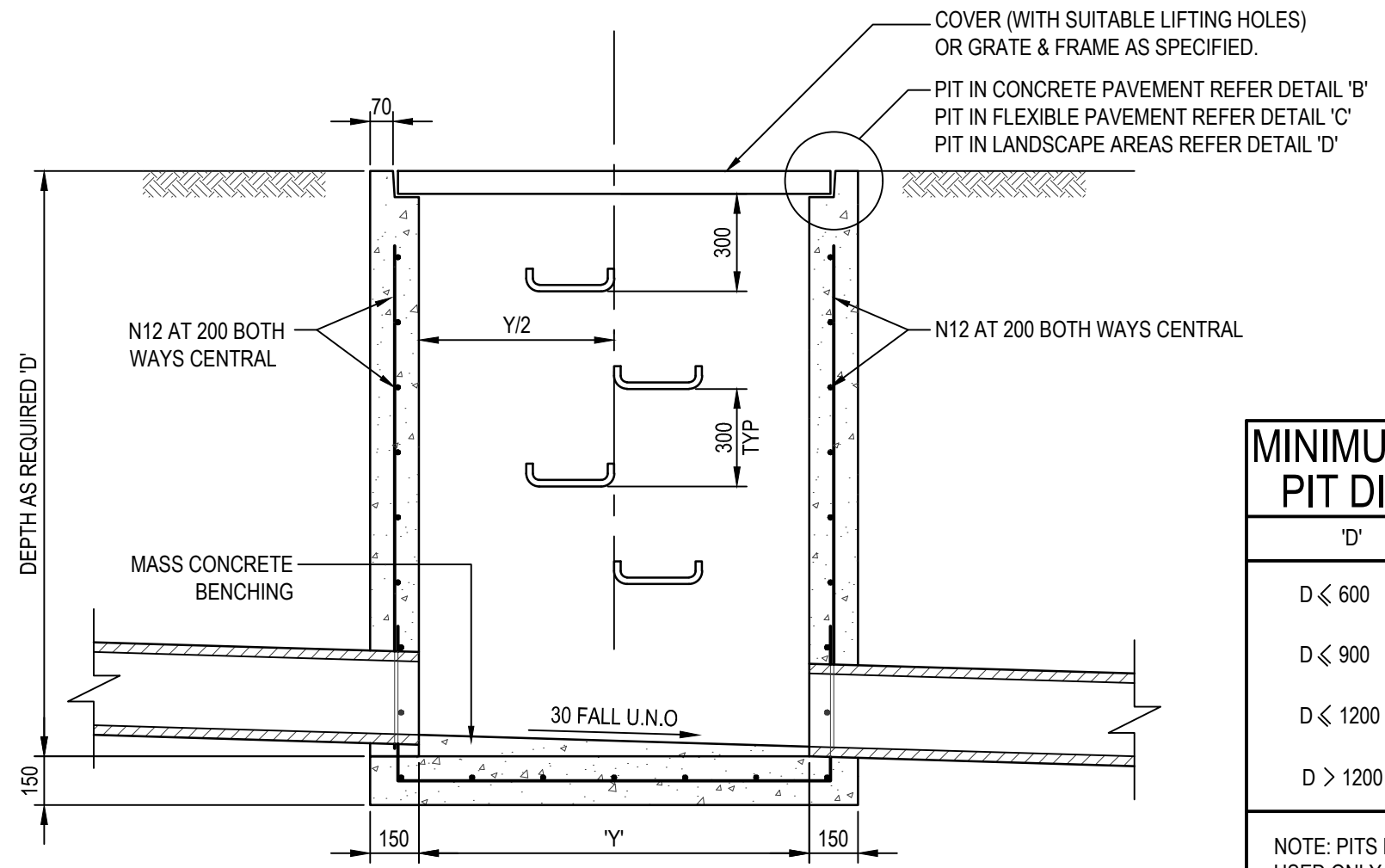
DRAWING UNDER REVISION **NOT FOR CONSTRUCTION**

OSD SIZING CALCULATION

LGA - LANE COVE COUNCIL
SITE STORAGE REQUIREMENT (SSR) = 0.025m³/m²
TOTAL SITE AREA = 5003m²
CATCHMENT AREA DRAINING TOWARDS OSD = 4492 m² (PERCENTAGE IMPERVIOUS = 81.1%)
BYPASS AREA = 511m² (PERCENTAGE IMPERVIOUS = 0.0%)
OSD VOLUME BELOW GROUND: 4492 x 0.025 = 112.3m³
PROVIDED OSD VOLUME: 115M³
PRE SITE DISCHARGE: 341 L/S (CALCULATED FROM THE 100 YR ARI STORM EVENT IN DRAINS)
POST SITE DISCHARGE: 178 L/S (CALCULATED FROM THE 100 YR ARI STORM EVENT IN DRAINS)



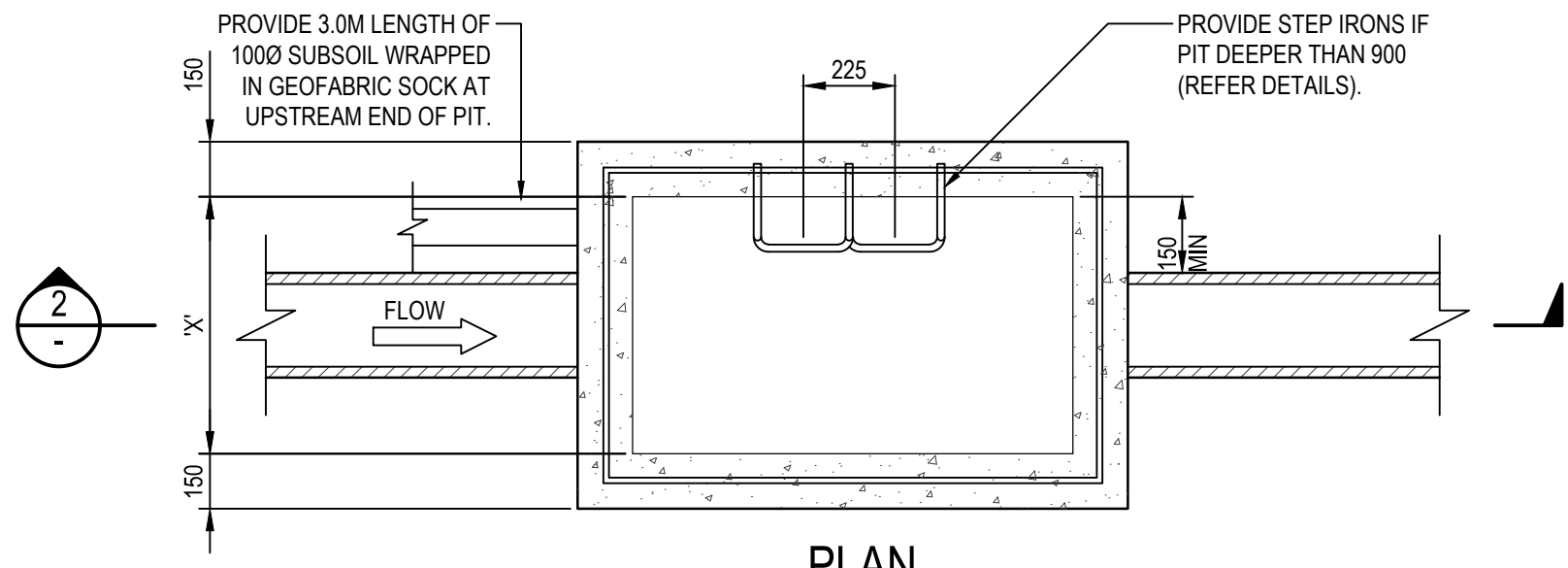
OSD SECTION 1
NOT TO SCALE



PIT SECTION 2
SCALE 1:20

MINIMUM INTERNAL PIT DIMENSIONS		
'D'	'X'	'Y'
D ≤ 600	450	450*
D ≤ 900	600	600*
D ≤ 1200	600	900
D > 1200	900	900

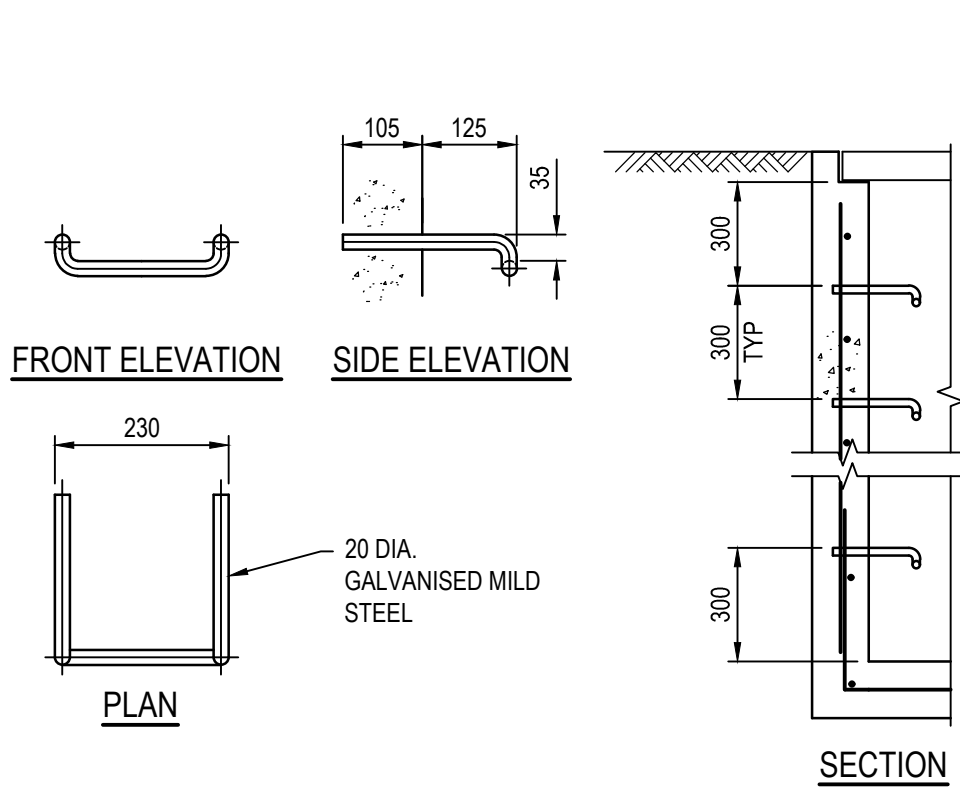
NOTE: PITS DENOTED * SHALL BE USED ONLY WHERE SPECIFIED IN DRAINAGE SCHEDULE OR ON PLAN.



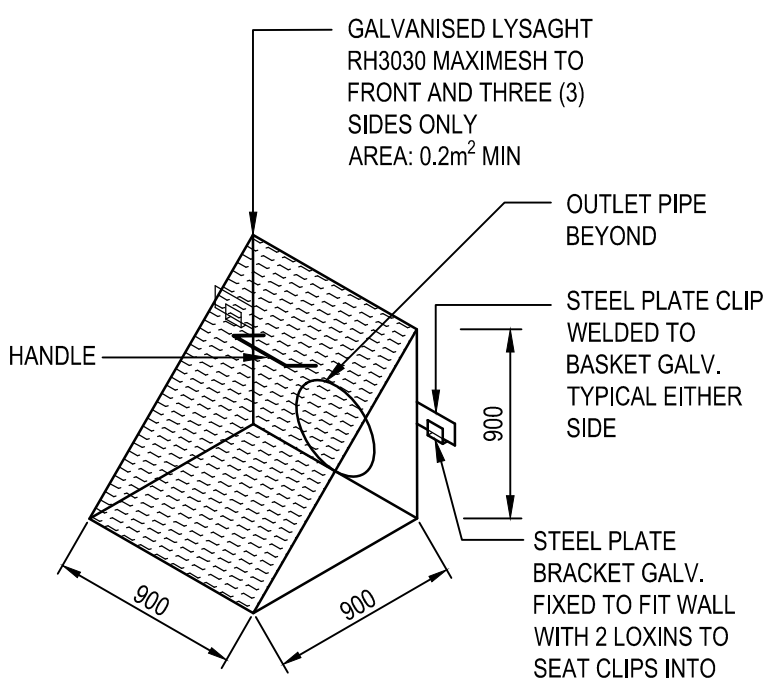
JUNCTION PIT
PIT TYPE 'A' TYPICAL
SCALE 1:20



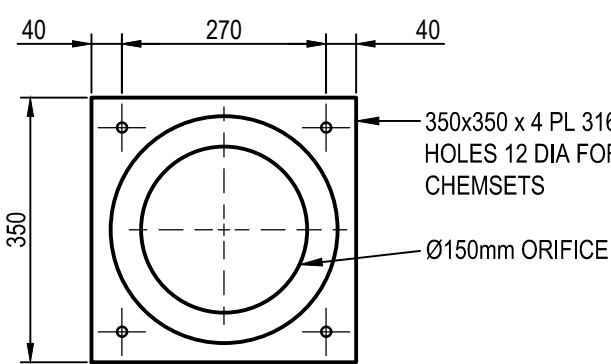
OSD MARKER PLATE
OSD MARKER PLATE TO BE INSTALLED TO COUNCIL STANDARDS
NOT TO SCALE



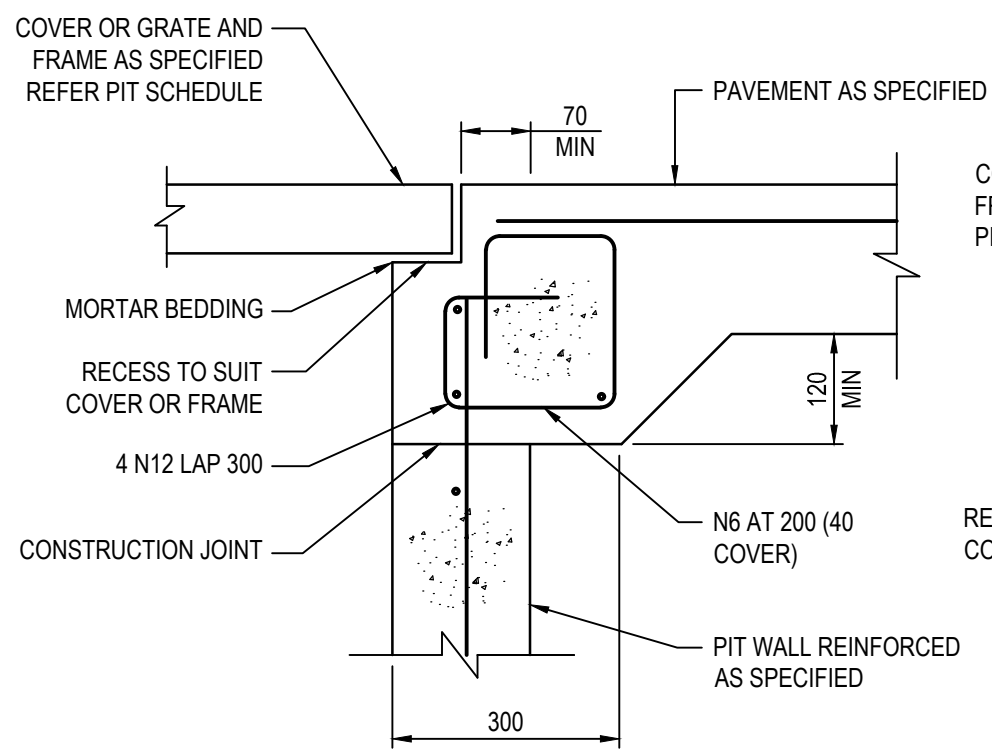
STEP IRON DETAIL
N.T.S.



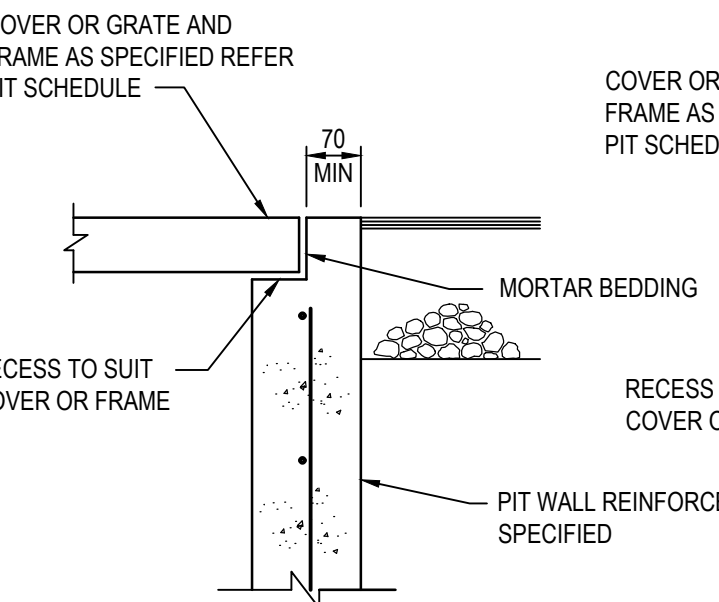
TRASH SCREEN DETAIL
NOT TO SCALE



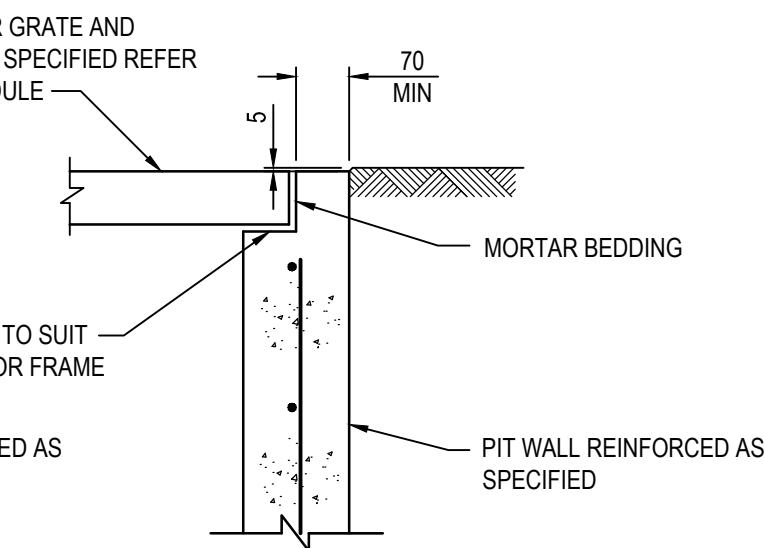
OSD ORIFICE PLATE
SCALE 1:10



PIT EDGE DETAIL "B"
SCALE 1:10



PIT EDGE DETAIL "C"
SCALE 1:10



PIT EDGE DETAIL "D"
SCALE 1:10

DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

Issue	Description	Date	Drawn	Approved
E	ISSUE FOR DA	22.02.21	AL	TF
D	ISSUE FOR DA	20.01.21	IK	TF
C	ISSUE FOR DA	12.08.20	KBM	TF
B	ISSUE FOR DA	10.08.20	KBM	TF

Client
PATHWAYS PROPERTY GROUP
40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS
302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098

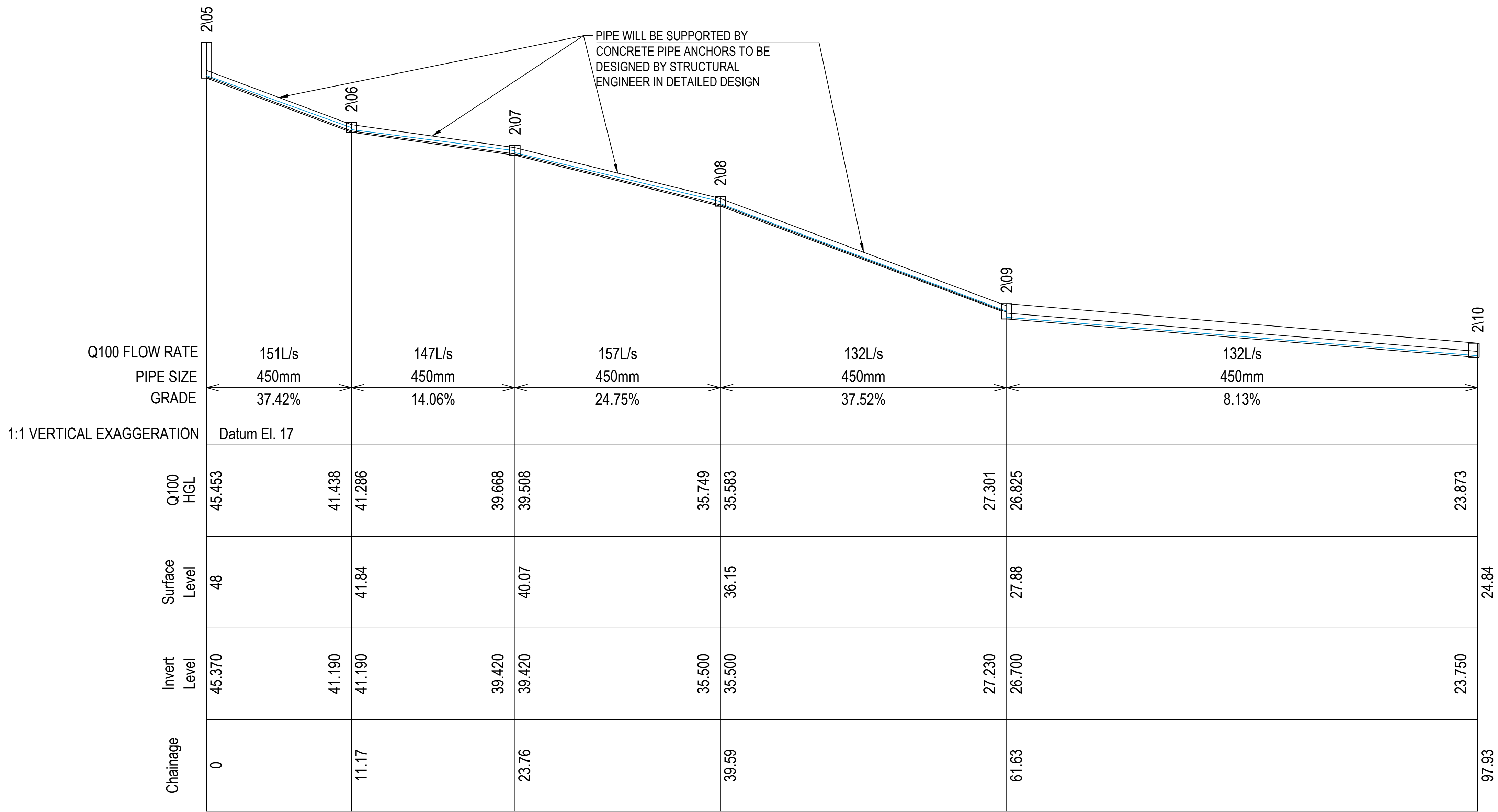


Project
LONGUEVILLE AGED CARE DEVELOPMENT
4 -18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title
OSD SECTION AND DETAILS

Drawn	Date	Scale	A1	Q.A. Check	Date
KBM	JAN 2021	AS SHOWN			
Designed	Project No.	Dwg. No.	Issue		
KBM	NSW200613	DAC2.21	E		

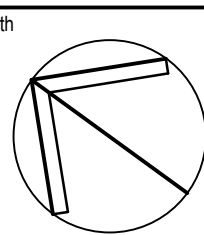
S:\2020\200613\Longueville\200613_LDC2.21.dwg
22/02/2021 15:33:00



© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

B	ISSUE FOR DA	22.02.21	AL	TBF	
A	ISSUE FOR DA	02.02.21	AL	TBF	
Issue	Description	Date	Drawn	Approved	



Client
PATHWAYS PROPERTY GROUP
40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS
302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098



Project
LONGUEVILLE AGED CARE DEVELOPMENT
4 -18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title
STORMWATER LONGITUDINAL SECTION

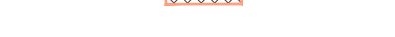
Drawn AL	Date JAN 2021	Scale NOT TO SCALE	A1	Q.A. Check	Date
Designed IK	Project No. NSW200613	Dwg. No. DAC5.01		Issue B	

DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

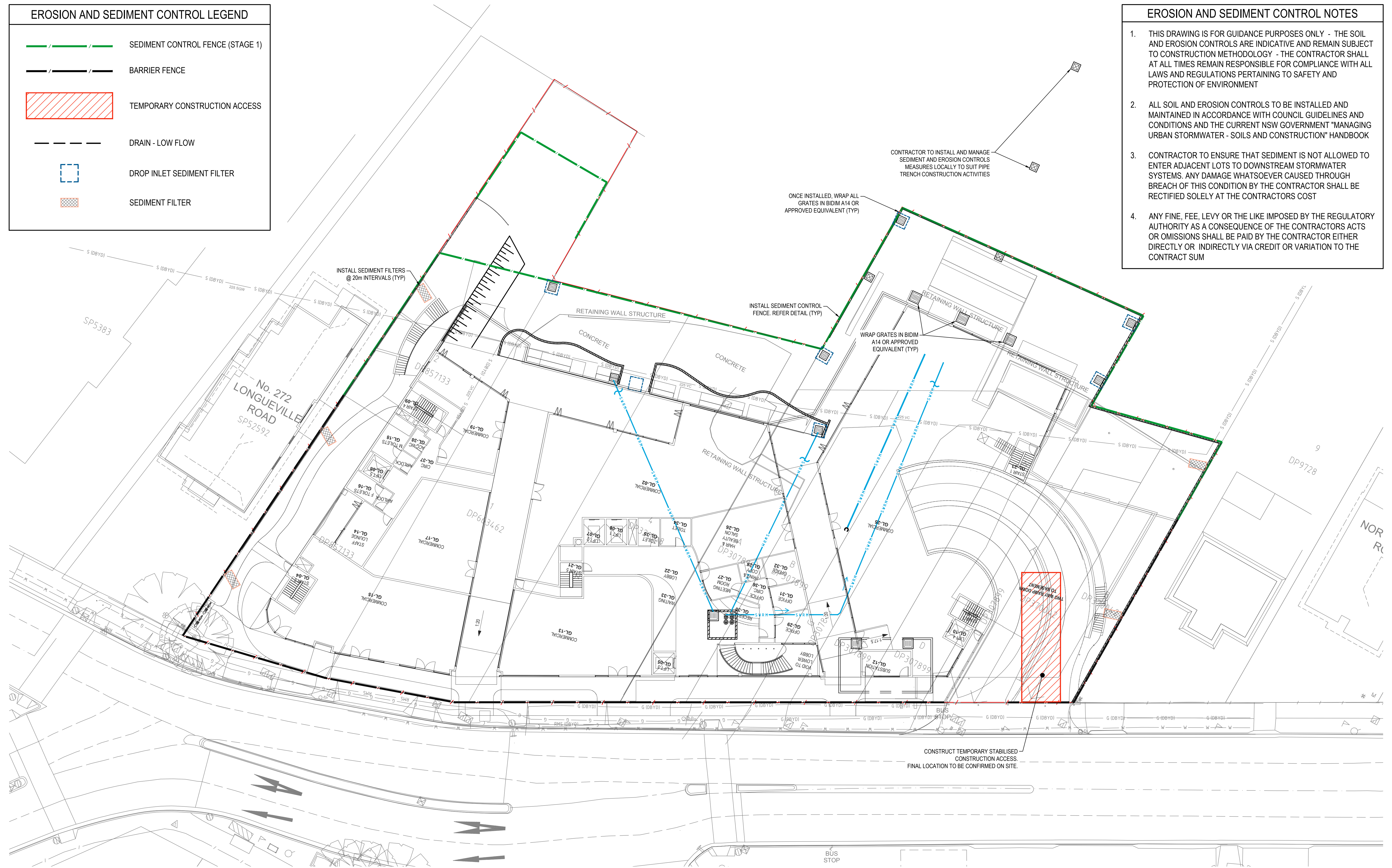
S:\2020\200613\Longueville\200613_LDW05.dwg
22/02/2021 11:53:09pm

EROSION AND SEDIMENT CONTROL LEGEND

-  SEDIMENT CONTROL FENCE (STAGE 1)
-  BARRIER FENCE
-  TEMPORARY CONSTRUCTION ACCESS
-  DRAIN - LOW FLOW
-  DROP INLET SEDIMENT FILTER
-  SEDIMENT FILTER

EROSION AND SEDIMENT CONTROL NOTES

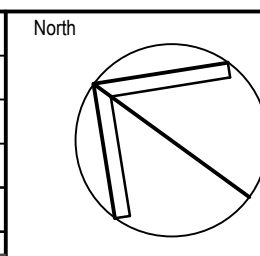
- THIS DRAWING IS FOR GUIDANCE PURPOSES ONLY - THE SOIL AND EROSION CONTROLS ARE INDICATIVE AND REMAIN SUBJECT TO CONSTRUCTION METHODOLOGY - THE CONTRACTOR SHALL AT ALL TIMES REMAIN RESPONSIBLE FOR COMPLIANCE WITH ALL LAWS AND REGULATIONS PERTAINING TO SAFETY AND PROTECTION OF ENVIRONMENT
- ALL SOIL AND EROSION CONTROLS TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH COUNCIL GUIDELINES AND CONDITIONS AND THE CURRENT NSW GOVERNMENT "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION" HANDBOOK
- CONTRACTOR TO ENSURE THAT SEDIMENT IS NOT ALLOWED TO ENTER ADJACENT LOTS TO DOWNSTREAM STORMWATER SYSTEMS. ANY DAMAGE WHATSOEVER CAUSED THROUGH BREACH OF THIS CONDITION BY THE CONTRACTOR SHALL BE RECTIFIED SOLELY AT THE CONTRACTORS COST
- ANY FINE, FEE, LEVY OR THE LIKE IMPOSED BY THE REGULATORY AUTHORITY AS A CONSEQUENCE OF THE CONTRACTORS ACTS OR OMISSIONS SHALL BE PAID BY THE CONTRACTOR EITHER DIRECTLY OR INDIRECTLY VIA CREDIT OR VARIATION TO THE CONTRACT SUM



© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd. ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

Issue	Description	Date	Drawn	Approved
F	ISSUE FOR DA	21.01.20	IK	TF
E	ISSUE FOR DA	20.01.20	IK	TF
D	ISSUE FOR DA	28.08.20	KBM	TF
C	ISSUE FOR DA	12.08.20	KBM	TF



Client
PATHWAYS PROPERTY GROUP
40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect
MORRISON DESIGN PARTNERSHIP ARCHITECTS
302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ACOR Consultants Pty Ltd
Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098
4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Project
LONGUEVILLE AGED CARE DEVELOPMENT
4-18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawn	Date	Scale	A1	Q.A. Check	Date
KBM	JAN 2021	1:200			
Designed	Project No.	Dwg. No.	Issue		
IK	NSW200613	DAC7.01	F		

DRAWING UNDER REVISION

NOT FOR CONSTRUCTION

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THIS SOIL AND WATER MANAGEMENT PLAN IS TO BE READ IN CONJUNCTION WITH OTHER ENGINEERING PLANS RELATING TO THIS DEVELOPMENT.
2. CONTRACTORS WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE UNDERTAKEN AS INSTRUCTED IN THIS SPECIFICATION AND CONSTRUCTED FOLLOWING THE GUIDELINES OF "MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION", DEPT OF HOUSING, 1998 (BLUE BOOK).
3. ALL SUBCONTRACTORS WILL BE INFORMED OF THEIR RESPONSIBILITIES IN REDUCING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE AREAS.

LAND DISTURBANCE INSTRUCTIONS

1. DISTURBANCE WILL BE NO FURTHER THAN 5 (PREFERABLY 2) METRES FROM THE EDGE OF ANY ESSENTIAL ENGINEERING ACTIVITY AS SHOWN ON APPROVED PLANS. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE ZONES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
2. ACCESS AREAS ARE TO BE LIMITED TO A MAXIMUM WIDTH OF 10 METRES THE SITE MANAGER WILL DETERMINE AND MARK THE LOCATION OF THESE ZONES ON-SITE. ALL SITE WORKERS WILL CLEARLY RECOGNISE THESE BOUNDARIES THAT, WHERE APPROPRIATE, ARE IDENTIFIED WITH BARRIER FENCING (UPSLOPE) AND SEDIMENT FENCING (DOWNSLOPE) OR SIMILAR MATERIALS.
3. ENTRY TO LANDS NOT REQUIRED FOR CONSTRUCTION OR ACCESS IS PROHIBITED EXCEPT FOR ESSENTIAL THINNING OF PLANT GROWTH.
4. WORKS ARE TO PROCEED IN THE FOLLOWING SEQUENCE:
 - a. INSTALL ALL BARRIER AND SEDIMENT FENCING WHERE SHOWN ON THE PLAN.
 - b. CONSTRUCT THE STABILISED SITE ACCESS.
 - c. CONSTRUCT DIVERSION DRAINS AS REQUIRED.
 - d. INSTALL MESH AND GRAVEL INLETS FOR ANY ADJACENT KERB INLETS.
 - e. INSTALL GEOTEXTILE INLET FILTERS AROUND ANY ON-SITE DROP INLET PITS.
 - f. CLEAR SITE AND STRIP AND STOCKPILE TOPSOIL IN LOCATIONS SHOWN ON THE PLAN.
 - g. UNDERTAKE ALL ESSENTIAL CONSTRUCTION WORKS ENSURING THAT ROOF AND/OR PAVED AREA STORMWATER SYSTEMS ARE CONNECTED TO PERMANENT DRAINAGE AS SHOWN AS PRACTICABLE.
 - h. GRADE LOT AREAS TO FINAL GRADES AND APPLY PERMANENT STABILISATION (LANDSCAPING) WITHIN 20 DAYS OF COMPLETION OF CONSTRUCTION WORKS.
 - i. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER THE PERMANENT LANDSCAPING HAS BEEN COMPLETED.
5. ENSURE THAT SLOPE LENGTHS DO NOT EXCEED 80 METRES WHERE PRACTICABLE. SLOPE LENGTHS ARE DETERMINED BY SILTATION FENCING AND CATCH DRAIN SPACING. 6. ON COMPLETION OF MAJOR WORKS LEAVE DISTURBED LANDS WITH A SCARIFIED SURFACE TO ENCOURAGE WATER INFILTRATION AND ASSIST WITH KEYING TOPSOIL LATER.
6. CONTRACTOR TO MANAGE THE ALIGNMENT OF CATCH DRAINS ON SITE AND TO ENSURE THAT CATCH DRAINS INTERCEPT THE SITE SURFACE RUNOFF AND DIRECT THE RUNOFF TOWARDS THE SEDIMENTATION BASINS.

SITE INSPECTION AND MAINTENANCE INSTRUCTIONS

1. THE SITE SUPERINTENDENT WILL INSPECT THE SITE AT LEAST WEEKLY AND AT THE CONCLUSION OF EVERY STORM EVENT TO:
 - a. ENSURE THAT DRAINS OPERATE PROPERLY AND TO EFFECT ANY NECESSARY REPAIRS.
 - b. REMOVE SPILLED SAND OR OTHER MATERIALS FROM HAZARD AREAS, INCLUDING LANDS CLOSER THAN 5 METRES FROM AREAS OF LIKELY CONCENTRATED OR HIGH VELOCITY FLOWS ESPECIALLY WATERWAYS AND PAVED AREAS.
 - c. REMOVE TRAPPED SEDIMENT WHENEVER THE DESIGN CAPACITY OF THAT STRUCTURE HAS BEEN EXCEEDED.
 - d. ENSURE REHABILITATED LANDS HAVE EFFECTIVELY REDUCED THE EROSION HAZARD AND TO INITIATE UPGRADING OR REPAIR AS NECESSARY.
 - e. CONSTRUCT ADDITIONAL EROSION AND/OR SEDIMENT CONTROL WORKS AS MIGHT BECOME NECESSARY TO ENSURE THE DESIRED PROTECTION IS GIVEN TO DOWNSLOPE LANDS AND WATERWAYS. MAKE ONGOING CHANGES TO THE PLAN WHERE IT PROVES INADEQUATE IN PRACTICE OR IS SUBJECT TO CHANGES IN CONDITIONS ON THE WORK-SITE OR ELSEWHERE IN THE CATCHMENT.
 - f. MAINTAIN EROSION AND SEDIMENT CONTROL STRUCTURES IN A FULLY FUNCTIONING CONDITION UNTIL ALL EARTHWORK ACTIVITIES ARE COMPLETED AND THE SITE IS REHABILITATED.
2. THE SITE SUPERINTENDENT WILL KEEP A LOGBOOK MAKING ENTRIES AT LEAST WEEKLY, IMMEDIATELY BEFORE FORECAST RAIN AND AFTER RAINFALL. ENTRIES WILL INCLUDE:
 - a. THE VOLUME AND INTENSITY OF ANY RAINFALL EVENTS.
 - b. THE CONDITION OF ANY SOIL AND WATER MANAGEMENT WORKS.
 - c. THE CONDITION OF VEGETATION AND ANY NEED TO IRRIGATE.
 - d. THE NEED FOR DUST PREVENTION STRATEGIES.
 - e. ANY REMEDIAL WORKS TO BE UNDERTAKEN. THE LOGBOOK WILL BE KEPT ON-SITE AND MADE AVAILABLE TO ANY AUTHORISED PERSON UPON REQUEST. IT WILL BE GIVEN TO THE PROJECT MANAGER AT THE CONCLUSION OF THE WORKS.

EROSION AND SEDIMENT CONTROL NOTES

SEDIMENT CONTROL INSTRUCTIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN ON THE PLAN AND ELSEWHERE AT THE DISCRETION OF THE SITE SUPERINTENDENT TO CONTAIN SOIL AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT FENCES WILL NOT HAVE CATCHMENT AREAS EXCEEDING 900 SQUARE METRES AND HAVE A STORAGE DEPTH OF AT LEAST 0.6 METRES.
3. SEDIMENT REMOVED FROM ANY TRAPPING DEVICES WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS CANNOT OCCUR.
4. STOCKPILES ARE NOT TO BE LOCATED WITHIN 5 METRES OF HAZARD AREAS INCLUDING AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS AND DRIVEWAYS.
5. WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN PERMANENTLY LANDSCAPED AND/OR WATER HAS BEEN TREATED BY AN APPROVED DEVICE. 6. TEMPORARY SEDIMENT TRAPS WILL REMAIN IN PLACE UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. ACCESS TO SITES SHOULD BE STABILISED TO REDUCE THE LIKELIHOOD OF VEHICLES TRACKING SOIL MATERIALS ONTO PUBLIC ROADS AND ENSURE ALL-WEATHER ENTRY/EXIT.

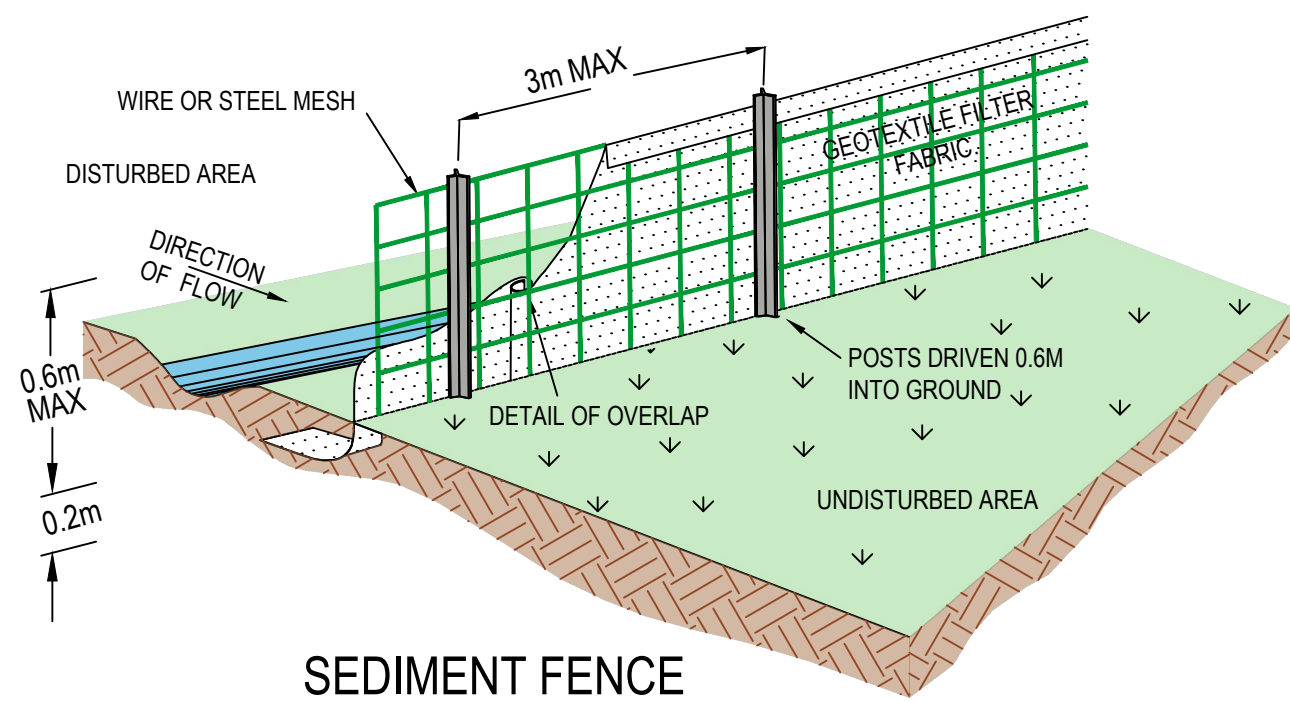
SOIL EROSION CONTROL INSTRUCTIONS

1. EARTH BATTERS WILL BE CONSTRUCTED WITH AS LOW A GRADIENT AS PRACTICABLE BUT NO STEEPER, UNLESS OTHERWISE NOTED, THAN:
 - a. 2(H):1(V) WHERE SLOPE LENGTH LESS THAN 12 METRES
 - b. 2.5(H):1(V) WHERE SLOPE LENGTH BETWEEN 12 AND 16 METRES.
 - c. 3(H):1(V) WHERE SLOPE LENGTH BETWEEN 16 AND 20 METRES.
 - d. 4(H):1(V) WHERE SLOPE LENGTH GREATER THAN 20 METRES.
2. ALL WATERWAYS, DRAINS, SPILLWAYS AND THEIR OUTLETS WILL BE CONSTRUCTED TO BE STABLE IN AT LEAST THE 1:20 YEAR ARI, TIME OF CONCENTRATION STORM EVENT.
3. WATERWAYS AND OTHER AREAS SUBJECT TO CONCENTRATED FLOWS AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C-FACTOR OF 0.05 (70% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION. FLOW VELOCITIES ARE TO BE LIMITED TO THOSE SHOWN IN TABLE 5-1 OF "MANAGING URBAN STORMWATER - SOILS AND CONSTRUCTION", DEPT OF HOUSING 1998 (BLUE BOOK). FOOT AND VEHICULAR TRAFFIC WILL BE PROHIBITED IN THESE AREAS.
4. STOCKPILES AFTER CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C-FACTOR OF 0.1 (60% GROUND COVER) WITHIN 10 WORKING DAYS FROM COMPLETION OF FORMATION.
5. ALL LANDS, INCLUDING WATERWAYS AND STOCKPILES, DURING CONSTRUCTION ARE TO HAVE A MAXIMUM GROUND COVER C-FACTOR OF 0.15 (50% GROUND COVER) WITHIN 20 WORKING DAYS FROM INACTIVITY EVEN THOUGH WORKS MAY CONTINUE LATER.
6. FOR AREAS OF SHEET FLOW USE THE FOLLOWING GROUND COVER PLANT SPECIES FOR TEMPORARY COVER: JAPANESE MILLET 20 KG/HA AND OATS 20 KG/HA.
7. PERMANENT REHABILITATION OF LANDS AFTER CONSTRUCTION WILL ACHIEVE A GROUND COVER C-FACTOR OF LESS THAN 0.1 AND LESS THAN 0.05 WITHIN 60 DAYS. NEWLY PLANTED LANDS WILL BE WATERED REGULARLY UNTIL AN EFFECTIVE COVER IS ESTABLISHED AND PLANTS ARE GROWING VIGOROUSLY. FOLLOW-UP SEED AND FERTILISER WILL BE APPLIED AS NECESSARY.
8. RE-VEGETATION SHOULD BE AIMED AT RE-ESTABLISHING NATURAL SPECIES. NATURAL SURFACE SOILS SHOULD BE REPLACED AND NON-PERSISTANT ANNUAL COVER CROPS SHOULD BE USED.

WASTE CONTROL INSTRUCTIONS

1. ACCEPTABLE BINS WILL BE PROVIDED FOR ANY CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHING, LIGHTWEIGHT WASTE MATERIALS AND LITTER. CLEARANCE SERVICES WILL BE PROVIDED AT LEAST WEEKLY. DISPOSAL OF WASTE WILL BE IN A MANNER APPROVED BY THE SITE SUPERINTENDENT.
2. ALL POSSIBLE POLLUTANT MATERIALS ARE TO BE STORED WELL CLEAR OF ANY POORLY DRAINED AREAS, FLOOD PRONE AREAS, STREAMBANKS, CHANNELS AND STORMWATER DRAINAGE AREAS. STORE SUCH MATERIALS IN A DESIGNATED AREA UNDER COVER WHERE POSSIBLE AND WITHIN CONTAINMENT BUNDS.
3. ALL SITE STAFF AND SUB-CONTACTORS ARE TO BE INFORMED OF THEIR OBLIGATION TO USE WASTE CONTROL FACILITIES PROVIDED.
4. 4. ANY DE-WATERING ACTIVITIES ARE TO BE CLOSELY MONITORED TO ENSURE THAT WATER IS NOT POLLUTED BY SEDIMENT, TOXIC MATERIALS OR PETROLEUM PRODUCTS.
5. PROVIDE DESIGNATED VEHICULAR WASHDOWN AND MAINTENANCE AREAS WHICH ARE TO HAVE CONTAINMENT BUNDS.

EROSION AND SEDIMENT CONTROL NOTES	
IMPORTANT NOTES: - THIS DRAWING IS FOR GUIDANCE PURPOSES ONLY - THE SOIL AND EROSION CONTROLS ARE INDICATIVE AND REMAIN SUBJECT TO CONSTRUCTION PROGRAMME METHODOLOGY - THE CONTRACTOR SHALL AT ALL TIMES REMAIN RESPONSIBLE FOR COMPLIANCE WITH ALL LAWS AND REGULATIONS PERTAINING TO SAFETY AND PROTECTION OF ENVIRONMENT - ALL SOIL AND EROSION CONTROLS TO BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH COUNCIL GUIDELINES AND CONDITIONS AND ENVIRONMENTAL CODES STANDARDS AND REGULATIONS - CONTRACTOR TO ENSURE THAT SEDIMENT IS NOT ALLOWED TO ENTER ADJACENT LOTS OR TO DOWNSTREAM STORMWATER SYSTEMS. - ANY DAMAGE, FINES, NOTICES ETC. RELATED TO ANY BREACH OF THESE CONDITIONS BY ANY ACT OR OMISSION OF THE CONTRACTOR OR HIS AGENTS SHALL BE RECTIFIED OR OTHERWISE ADDRESSED SOLELY AT THE CONTRACTOR'S COST INCLUDING ANY RELATED COSTS INCURRED BY THE SUPERINTENDENT OR PRINCIPAL	



Note: These "Detailed Calculation" spreadsheets relate only to high erosion hazard lands as identified in figure 4.6 or where the designer chooses to use the RUSLE to size sediment basins. The "Standard Calculation" spreadsheets should be used on low er

1. Site Data Sheet

Site Name:	NSW200613
Site Location:	16 NORTHWOOD ROAD, LANE COVE, NSW 2066
Precinct:	N/A
Description of Site:	Brown site, development area greater than 2500 m2, SWMP required. Soil loss < 150 m3/year hence, sediment basin not required.

Site area	Site						Remarks
	CAT 1						
Total catchment area (ha)	0.5						
Disturbed catchment area (ha)	0.5						

Soil analysis

% sand (fraction 0.02 to 2.00 mm)	50					Soil texture should be assessed through mechanical dispersion only. Dispersing agents (e.g. Calgon) should not be used
% silt (fraction 0.002 to 0.02 mm)	10					
% clay (fraction finer than 0.002 mm)	40					
Dispersion percentage	10.0					
% of whole soil dispersible	4.5					
Soil Texture Group	C					See Section 6.3.3(c), (d) and (e)

Rainfall data

Design rainfall depth (days)	5					See Sections 6.3.4 (d) and (e)
Design rainfall depth (percentile)	85					See Sections 6.3.4 (f) and (g)
x-day, y-percentile rainfall event	41					See Section 6.3.4 (h)
Rainfall intensity : 2-year, 6-hour storm	13					See IFD chart for the site

RUSLE Factors

Rainfall erosivity (<i>R</i> -factor)	3660							Automatic calculation from above data
Soil erodibility (<i>K</i> -factor)	0.019							RUSLE data can be obtained from Appendixes A, B and C
Slope length (m)	55							
Slope gradient (%)	3							
Length/gradient (<i>LS</i> -factor)	0.55							
Erosion control practice (<i>P</i> -factor)	1.3							
Ground cover (<i>C</i> -factor)	1							

Calculations

Soil loss (t/ha/yr)	50					
Soil Loss Class	1					See Section 4.4.2(b)
Soil loss (m ³ /ha/yr)	38					
Sediment basin storage volume, m ³	3					See Sections 6.3.4(i) and 6.3.5 (e)

© COPYRIGHT of this design and plan is the property of ACOR Consultants Pty Ltd, ACN 079 306 246 ABN 40 079 306 246, all rights reserved. It must not be used, modified, reproduced or copied wholly or in part without written permission from ACOR Consultants Pty Ltd.

This drawing has been assigned an electronic code that signifies the drawing has been checked and approved by:

C	ISSUE FOR DA	12.08.20	AA	TF
B	ISSUE FOR DA	10.08.20	AA	TF
A	ISSUE FOR DA	07.08.20	AA	TF
Issue	Description	Date	Drawn	Approved
0	10m at full size	100m		200m

Client	
--------	--

PATHWAYS PROPERTY GROUP

40 CHANDOS STREET
ST LEONARDS, NSW, 2065
PHONE : 1800 825 586

Architect

MORRISON DESIGN
PARTNERSHIP ARCHITECTS

302/69 CHRISSTIE STREET
ST LEONARDS, NSW, 2065
PHONE : 9966 5566



ENGINEERS | MANAGERS | INFRASTRUCTURE PLANNERS | DEVELOPMENT CONSULTANTS

ACOR Consultants Pty Ltd

Suite 2, Level 1, 33 Herbert Street
St Leonards NSW 2065
T +61 2 9438 5098



	Project
--	---------

LONGUEVILLE AGED CARE DEVELOPMENT

4 -18 NORTHWOOD ROAD,
274 & 274A LONGUEVILLE ROAD
LANE COVE, NSW, 2066

Drawing Title

SEDIMENT BASIN CALCULATIONS

Drawn AA	Date AUG 20	Scale NTS	A1	Q.A. Check Q.A.	Date Q.A. DATE
Designed AA	Project No. NSW200613			Dwg. No. DAC8.01	Issue C