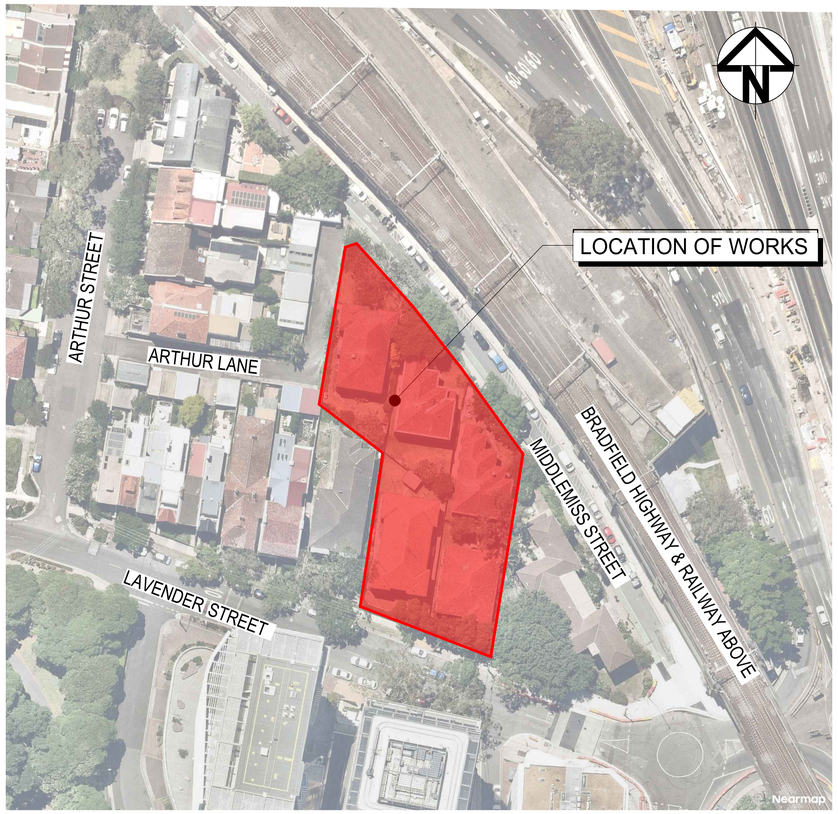
CENTRAL ELEMENT

3-7 MIDDLEMISST ST

64-66 LAVENDER BAY CIVIL WORKS

SSD-86797708



LOCALITY PLAN

NOT TO SCALE

DRAWING NO.	DRAWING TITLE
25-1385-C1000	COVER SHEET, LOCALITY PLAN & DRAWING LIST
25-1385-C1001	NOTE SHEET
25-1385-C1005	GENERAL ARRANGMENT PLAN
SITEWORKS	
25-1385-C1010	SITEWORKS AND STORMWATER DRAINAGE PLAN
25-1385-C1015	SITEWORKS AND STORMWATER DRAINAGE DETAILS SHEET 1
25-1385-C1016	SITEWORKS AND STORMWATER DRAINAGE DETAILS SHEET 2
PAVEMENT	
25-1385-C1030	PAVEMENT PLAN
STORMWATER DRAINAGE	
25-1385-C1050	STORMWATER DRAINAGE MUSIC CATCHMENT PLAN
25-1385-C1051	STORMWATER DRAINAGE MUSIC MODEL AND RESULTS
25-1385-C1052	STORMWATER DRAINAGE PRE-DEVELOPMENT CATCHMENT PLAN
25-1385-C1053	STORMWATER DRAINAGE POST-DEVELOPMENT CATCHMENT PLAN
25-1385-C1060	STORMWATER DRAINAGE OSD PLAN
25-1385-C1061	STORMWATER DRAINAGE OSD SECTIONS AND DETAILS
COMBINED SERVICES	
25-1385-C1080	COMBINED SERVICES PLAN
EROSION AND SEDIMENT CONTROL	
25-1385-C1090	EROSION AND SEDIMENT CONTROL PLAN
25-1385-C1095	EROSION AND SEDIMENT CONTROL DETAILS

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

Client

Central Element

Scales

Grid GDA20 MGA56

Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project

3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title

COVER SHEET, LOCALITY PLAN & DRAWING LIST

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Status

FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.

25-1385-C1000

Issue

A

100mm on Original

F:\25-1385 Lavender Bay\6.0 Drgs\Civil\Final\SSDA\25-1385-C1000.dwg

SITEWORKS NOTES

1. ORIGIN OF LEVELS:- REFER SURVEY NOTES
2. ALL WORKS TO BE CONSTRUCTED IN ACCORDANCE WITH THE LOCAL GOVERNMENT AUTHORITIES ENGINEERING CONSTRUCTION SPECIFICATION FOR CIVIL WORKS.
3. PRIOR TO THE COMMENCEMENT OF THE WORKS THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO AT&L.
4. PRIOR TO THE COMMENCEMENT OF THE WORKS, THE CONTRACTOR IS TO VERIFY THE ALIGNMENT AND LEVELS OF ALL EXISTING SERVICES AT ALL LOCATIONS WHERE THE PROPOSED SERVICES ARE TO CROSS, CONNECT TO OR ARE LOCATED IN CLOSE PROXIMITY TO THE EXISTING SERVICES. ANY DISCREPANCIES TO BE REPORTED TO AT&L.
5. CONTRACTOR MUST MAKE SMOOTH CONNECTION WITH ALL EXISTING WORKS.
6. ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
7. ALL SERVICE TRENCHES UNDER VEHICULAR PAVEMENTS SHALL BE BACKFILLED 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% MODIFIED MAXIMUM DRY DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289.5.2.1 (OR A DENSITY INDEX OF NOT LESS THAN 75).
8. PROVIDE 10mm WIDE ISOLATION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
9. ASPHALTIC CONCRETE SHALL CONFORM TO THE CURRENT TfNSW SPECIFICATION TS 03283.1 (R116) HEAVY DUTY DENSE GRADED ASPHALT.
10. ALL BASECOURSE AND SUB-BASE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH THE CURRENT TfNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH THE CURRENT AS 1289 5.2.1.
    FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN
    1 TEST PER 25m^2 OF BASECOURSE MATERIAL PLACED
    1 TEST PER 50m^2 OF SUB-BASE COURSE MATERIAL PLACED
    OR
    1 TEST PER 50 LINEAL METRES OF ROAD PER PAVEMENT LAYER WITH A MINIMUM OF 2 TESTS ON ANY ONE ROAD.
    OR
    1 TEST PER 500m^2 PER PAVEMENT LAYER WITH A MINIMUM OF 2 TESTS ON ANY ONE ROAD.
    OR
    AS STATED UNDER THE NORTH SYDNEY COUNCIL SPECIFICATIONS UNLESS OTHERWISED APPROVED BY AT&L.
11. AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL (IN NOTE 10) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH THE CURRENT TfNSW SPECIFICATION TS 03315.1 (3051) GRANULAR BASE AND SUBBASE MATERIALS FOR SURFACED ROAD PAVEMENTS WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF AT&L.
12. SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THE CONTRACTOR IS TO SEEK ACCEPTANCE OF THE PRODUCT FROM AT&L. THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
13. 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.
14. ALL WORKS CARRIED OUT ADJACENT TO AND WITHIN SERVICE EASEMENTS ARE TO COMPLY WITH THE RELEVANT SERVICE AUTHORITIES GUIDELINES AND REQUIREMENTS.

EXISTING UNDERGROUND SERVICES NOTES

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. AT&L 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.

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.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600(2018) CURRENT EDITION WITH AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.
2. CONCRETE QUALITY ALL REQUIREMENTS OF THE CURRENT ACSE CONCRETE SPECIFICATION DOCUMENT 1 SHALL APPLY TO THE FORMWORK, REINFORCEMENT AND CONCRETE UNLESS NOTED OTHERWISE.

ELEMENT	AS 3600 F'c MPa AT 28 DAYS	SPECIFIED SLUMP	NOMINAL AGG. SIZE
VEHICULAR BASE	32	60	20
KERBS, PATHS, AND PITS	25	80	20

- CEMENT TYPE SHALL BE (ACSE SPECIFICATION) TYPE SL
- PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379.

3. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING BY AT&L.
4. CLEAR CONCRETE COVER TO ALL REINFORCEMENT FOR DURABILITY SHALL BE 40mm TOP AND 70mm FOR EXTERNAL EDGES UNLESS NOTED OTHERWISE.
5. ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1m CENTRES BOTH WAYS. BARS SHALL BE TIED AT ALTERNATE INTERSECTIONS.
6. THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK, THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED AND CURED IN ACCORDANCE WITH R.M.S. SPECIFICATION R83.
7. REINFORCEMENT SYMBOLS:
    N DENOTES GRADE 450 N BARS TO AS/NZS 4671 GRADE N
    R DENOTES 230 R HOT ROLLED PLAIN BARS TO AS/NZS 4671
    SL DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS/NZS 4671

NUMBER OF BARS IN GROUP — BAR GRADE AND TYPE
17 N 20 250
NOMINAL BAR SIZE IN mm — SPACING IN mm

THE FIGURE FOLLOWING THE FABRIC SYMBOL SL IS THE REFERENCE NUMBER FOR FABRIC TO AS/NZS 4671.

8. FABRIC SHALL BE LAPPED IN ACCORDANCE WITH THE FOLLOWING DETAIL:

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.

OTHER MATTERS

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:
    (A) PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
    (B) ENSURING THAT NOTHING IS NAILED TO THEM
    (C) PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS.
    (I) 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.

GENERAL NOTES

1. ALL CIVIL WORKS TO BE UNDERTAKEN AS PER NORTH SYDNEY COUNCIL ENGINEERING & CONSTRUCTION GUIDELINES.

STORMWATER DRAINAGE NOTES

GENERAL NOTES

1. STORMWATER DESIGN CRITERIA:
    ANNUAL EXCEEDANCE PROBABILITY:
    MINOR STORM: 5% AEP
    MAJOR STORM: 1% AEP
2. PIPES LESS THAN 300 DIA SHALL BE SEWER GRADE uPVC WITH SOLVENT WELDED JOINTS.
3. ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN DN300.
4. ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT AS 3500 3.1 AND AS/NZS 3500 3.2.
5. ALL STORMWATER DRAINAGE LINES UNDER PROPOSED BUILDING SLABS TO BE uPVC PRESSURE PIPE GRADE 6. ENSURE ALL VERTICALS AND DOWNPIPES ARE uPVC PRESSURE PIPE, GRADE 6 FOR A MIN OF 3.0m IN HEIGHT.
6. ALL STORMWATER DRAINAGE LINES TO BE INSTALLED WITHIN EXISTING ROADS ARE TO BE BACKFILLED WITH 3% CEMENT STABILISED SAND.
7. ALL DRAINAGE LINES TO PROVIDE A 3.0M LENGTH OF DN100 SUBSOIL DRAINAGE PIPE WRAPPED IN FABRIC SOCK, ON THE UPSTREAM SIDE OF EACH PIT. ALLOW FOR SECONDARY SUBSOIL FOR PIPES FOR PIPE GRATER THAN DN825.
8. SUBSOIL DRAIN WRAPPED IN APPROVED FILTER SOCK SHALL BE PROVIDED BENEATH ALL KERB LINES WHERE NO DRAINAGE LINES ARE SHOWN ON THE DRAWINGS AND SHALL DISCHARGE INTO DOWNSTREAM PITS.
9. WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPES ARE TO BE USED.
10. CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL FROM AT&L.
11. GRATES AND COVERS SHALL CONFORM TO THE CURRENT AS 3996. CLASS D COVER (MINIMUM) SHALL BE PROVIDED IN TRAFFICKED PAVEMENTS WITH CLASS B (MINIMUM) BEING PROVIDED IN NON-TRAFFICKED AREAS.
12. AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFETY PROCEDURES TO PREVENT THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
13. ALL PITS AND PIPES TO BE FOUNDED ON SUITABLE MATERIAL WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT ONCE EXCAVATED. A CONCRETE BLINDING LAYER (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED) MAY BE PROVIDED. CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION.
14. 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.
15. ALL STORMWATER PITS ARE TO BE CAST IN-SITU IN ACCORDANCE WITH THE STORMWATER DETAILS AND SPECIFICATIONS.
16. ALL PITS MUST BE BENCHED AND STREAMLINED TO DIRECT WATER FROM THE INLET PIPE TO THE OUTLET PIPE.
17. PITS DEEPER THAN 600mm MUST BE FITTED WITH DOUBLE STEP-IRONS IN ACCORDANCE WITH THE CURRENT AS1657. PLASTIC ENCAPSULATED MAY BE USED. STEP-IRONS TO BE PROVIDED ON A SINGLE FACE WHERE POSSIBLE. SHOULD STEP-IRONS REQUIRE TO CHANGE FACE THEN 3 OVERLAPPING STEP IRONS ARE TO BE LOCATED ON EACH FACE.
18. FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN 1 TEST PER 2 LAYERS PER 40 LINEAR METERS.

RIGID & SEMI-RIGID PIPE NOTES

19. PIPES 300 DIA. AND LARGER TO BE STEEL REINFORCED CONCRETE CLASS '3' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O. ALL ROAD CROSSINGS TO BE CLASS '4' U.N.O.
    EQUIVALENT STRENGTH FIBRE REINFORCED CONCRETE PIPES MAY BE USED SUBJECT TO APPROVAL BY AT&L OR THE LOCAL GOVERNMENT AUTHORITY.
20. REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT AS/NZS 4058.
    FIBRE REINFORCED CONCRETE PIPES TO COMPLY WITH THE CURRENT AS 4139.
    PIPES TO BE INSTALLED WITH TYPE HS3 (ROAD) AND HS2 (LOTS) SUPPORT IN ACCORDANCE WITH THE CURRENT AS/NZS 3725. IN ALL CASES BACKFILL EMBEDMENT ZONE WITH SELECT FILL (MINIMUM CBR 15%) 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 THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).

FLEXIBLE PIPE NOTES

21. FLEXIBLE PIPES TO COMPLY WITH THE CURRENT AS/NZS 2566.1.
    PIPES TO BE INSTALLED IN ACCORDANCE WITH THE CURRENT AS/NZS 2566.2. IN ALL CASES BACKFILL EMBEDMENT ZONE WITH GRAVEL OR 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 THE CURRENT AS 1289.5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)

PRECAST CONCRETE PIT NOTES

22. PRECAST PIT MAY BE USED WITH THE APPROVAL OF AT&L THE SUPERINTENDENT AND THE LOCAL GOVERNMENT AUTHORITY AND SHALL BE INSTALLED TO THE MANUFACTURERS RECOMENDATIONS.
23. ALL PRE-CAST PITS ARE TO BE STRUCTURALLY CERTIFIED TO MEET RELEVANT REQUIREMENTS OF THE CURRENT AS3600 AND AS3996 (2019).
24. PRE-CAST STORMWATER PITS ARE TO BE APPROVED FOR TFNSW CONSTRUCTION (R11) AND ARE TO ARE TO BE DESIGNED AND CUSTOM MADE WITH OPENINGS UP TO A MAXIMUM +50mm OD OF THE STORMWATER PIPES. PITS ARE ALSO TO INCLUDE PENETRATIONS FOR SUBSOIL CONNECTIONS AND DOUBLE STEP-IRONS INSTALLED FOR PITS >0.6m DEEP. DEMOLITION SAWS MAY BE USED PROVIDING A NEAT FULL DEPTH CUT IS APPLIED AND ANY ADDITIONAL PENETRATIONS REQUIRED ARE TO BE CORE DRILLED.
25. SHOP DRAWINGS ARE TO BE PROVIDED FOR REVIEW AND ACCEPTANCE. IT SHOULD BE NOTED THAT THE CONTRACTOR IS TO ENSURE THAT THE STRUCTURAL COMPONENTS OF THE PITS ARE NOT COMPROMISED AND ONLY THE PIPE KNOCKOUTS ARE TO BE REMOVED FOR THE PIPE PENETRATIONS.

STORMWATER DRAINAGE NOTES (CONTINUED)

26. ALL PRECAST PITS TO BE FOUNDED ON CONCRETE BLINDING LAYER (100mm ON AN EARTH FOUNDATION OR 150mm ON A ROCK FORMATION) WITH A MINIMUM ALLOWABLE BEARING CAPACITY OF 100KPa UP TO 3.0m DEPTH TO INVERT AND 150KPa FROM 3.0m TO 6.0m DEPTH TO INVERT (MINIMUM 100mm THICK 25MPa OR DEEPER TO ENSURE MINIMUM SPECIFIED BEARING CAPACITY IS ACHIEVED). CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO PROVIDE WRITTEN CONFIRMATION.
27. ALL PRE-CAST PIT PENETRATIONS SHALL BE CUT SO THAT IT IS FLUSH WITH THE INTERNAL WALL.
28. ALL PIPE JOINTING, SPARGING, RENDERING, FILLING OF GAPS TO BE FILLED WITH A HIGH STRENGTH NON-SHRINK GROUT WITH A MINIMUM 40MPa COMPRESSIVE STRENGTH AT 28 DAYS. (LANKO DURABED 702 OR SIMILAR).
29. SINGLE UNITS PREFERRED BUT IF REQUIRED MINIMUM RISER DEPTH 600mm PIT INSTALLATION AND JOINTING BETWEEN UNITS SHALL BE UNDERTAKEN IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
30. ANY DAMAGE TO THE STRUCTURAL INTEGRITY OF THE PRE-CAST PIT WILL BE REPAIRED AND STRUCTURALLY CERTIFIED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE AT&L, SUPERINTENDENT / LOCAL GOVERNMENT AUTHORITY.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

1. THE SITE SUPERINTENDENT/ENGINEER WILL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED.
2. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
    a. LOCAL AUTHORITY REQUIREMENT
    b. EPA REQUIREMENTS
    c. LANDCOM MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
3. MAINTAIN THE EROSION CONTROL DEVICES TO THE SATISFACTION OF THE SUPERINTENDENT AND THE LOCAL AUTHORITY.
4. WHEN STORMWATER PITS ARE CONSTRUCTED, PREVENT SITE RUNOFF ENTERING UNLESS SEDIMENT FENCES ARE ERECTED AROUND PITS.
5. 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.

LAND DISTURBANCE

6. 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 WIND FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
    (B) INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
    (C) CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
    (D) INSTALL SEDIMENT BASIN AS SHOWN ON PLAN
    (E) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
    (F) 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

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

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY GEOSURV, BEING REGISTERED SURVEYORS. THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. AT & L 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 AT&L.

THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM THE ORIGINAL SURVEY DOCUMENTS.

DISCLAIMER:
GREYSCALE DETAIL & LEVEL SURVEY IS REFERENCED FROM DRAWING ASP212126-DT-[C].DWG,
SURVEYED ON 11.08.21, AND IS PROVIDED FOR REFERENCE PURPOSES ONLY.

ACCURACY
- ALL AS-BUILT DELIVERABLES, INCLUDING PLANS, MODELS, AND POINT CLOUD DATA, ARE BASED ON 3D LASER SCANNING WITH A STATED SURVEY ACCURACY OF ±20MM. DESPITE BEST EFFORTS, MINOR DISCREPANCIES MAY OCCUR DUE TO FACTORS SUCH AS SURFACE REFLECTIVITY, SCANNING RESOLUTION, OBSTRUCTIONS, ENVIRONMENTAL CONDITIONS, AND SOFTWARE LIMITATIONS.
- SCAN RELIABILITY CAN BE IMPACTED BY SURFACE CHARACTERISTICS SUCH AS REFLECTIVE, TRANSPARENT, DARK, OR WET MATERIALS.

SURVEY COVERAGE
- SURVEY DATA IS LIMITED TO WHAT WAS VISIBLE AND ACCESSIBLE FROM SCAN POSITIONS ON-SITE. OBSTRUCTED OR INACCESSIBLE AREAS WILL RESULT IN INCOMPLETE OR MISSING DATA WITHIN THE POINT CLOUD, PLANS, AND MODELS. THE SURVEY MUST BE USED IN CONJUNCTION WITH THE ACCOMPANYING POINT CLOUD DATA FOR CONTEXT AND VERIFICATION.

PLANS AND MODELS
- AS-BUILT DRAWINGS AND REVIT MODELS ARE INTERPRETATIONS OF THE CAPTURED POINT CLOUD AND REPRESENT OBSERVED CONDITIONS AT THE TIME OF SCANNING. THEY DO NOT REPRESENT DESIGN INTENT AND MUST NOT BE USED FOR FABRICATION OR CONSTRUCTION WITHOUT INDEPENDENT ON-SITE VERIFICATION.
- MODELLED ELEMENTS MAY DEVIATE WITHIN SCAN TOLERANCE AND SHOULD BE USED AS GENERAL REFERENCE ONLY.

VERIFICATION AND USE
- ALL CRITICAL DIMENSIONS MUST BE INDEPENDENTLY VERIFIED ON-SITE PRIOR TO DESIGN, CONSTRUCTION, OR FABRICATION.
- CONSTRUCTION MUST BE BASED ON A VERIFIED PHYSICAL BENCHMARK (BM), NOT THE REDUCED
- LEVELS (RLS) SHOWN IN THE DELIVERABLES.
- DELIVERABLES ARE NOT SUITABLE FOR USE WHERE MILLIMETRE-LEVEL PRECISION IS REQUIRED WITHOUT FIELD VERIFICATION.

LIABILITY
- THESE DOCUMENTS ARE PROVIDED FOR THE CLIENT'S USE ONLY. GEOSURV ASSUMES NO RESPONSIBILITY FOR USE OR INTERPRETATION BY THIRD PARTIES.
- GEOSURV ACCEPTS NO LIABILITY FOR ANY LOSS OR DAMAGE ARISING FROM USE BEYOND THE DELIVERABLES' INTENDED REFERENCE PURPOSE.

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CONTRACTOR SHALL OBTAIN ALL CURRENT SERVICE AUTHORITY PLANS PRIOR TO COMMENCEMENT OF WORK

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

100mm on Original

Client: Central Element

Scales
Grid GDA20 MGA56
Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: NOTE SHEET

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A1

Project - Drawing No.: 25-1385-C1001

Issue: A

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LEGEND

- EXISTING BOUNDARY
- EXISTING EASEMENT
- PROPOSED BOUNDARY
- EXISTING BOUNDARY TO BE REMOVED

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

0 5 10 15 20 25m

1 : 250 @ A1 1 : 500 @ A3

Client

Central Element

Scales 1:250

Grid GDA20 MGA56

Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project

3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title

GENERAL ARRANGMENT PLAN

Civil Engineers and Project Managers

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Status FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No. 25-1385-C1005

Issue A

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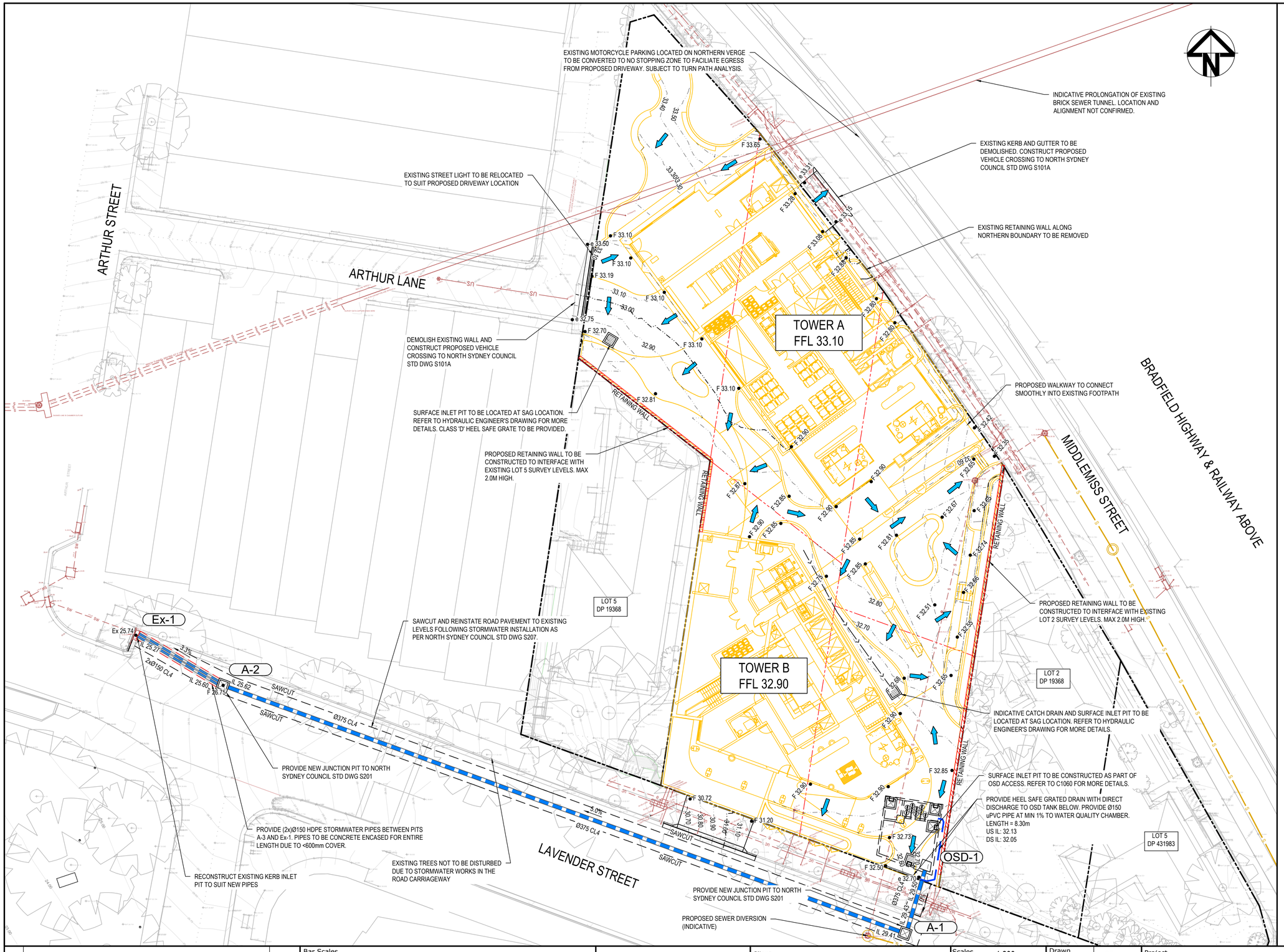

LEGEND

- PROPOSED BOUNDRY
- EXISTING EASEMENT
- EXISTING BOUNDARY
- EXISTING BOUNDARY TO BE REMOVED
- 10.00 EXISTING CONTOUR (MAJOR)
- 10.00 PROPOSED CONTOUR (MAJOR)
- PROPOSED CONTOUR (MINOR)
- F 44.45 FINISHED SURFACE LEVEL
- e 44.45 EXISTING SURFACE LEVEL
- LOBBY FFL 44.45 PROPOSED ARCHITECTURAL LEVEL. REFER TO ARCHITECTURAL DRAWINGS FOR MORE DETAIL
- GRATED DRAIN
- A-1 STORMWATER PIT REFERENCE NUMBER
- STORMWATER PIT - REFER TO PLAN FOR SIZE AND TYPE
- STORMWATER PIPE
- RETAINING WALL
- OVERLAND FLOW DIRECTION
- PROPOSED SEWER LINE DEVIATION (INDICATIVE)

SERVICES LEGEND

	PROPOSED	EXISTING
HV ELECTRICITY	HV	hv
ELECTRICITY	E	e
COMMS SERVICE	UC	uc
SEWER SERVICE	S	s
WATER SERVICE	W	w
GAS SERVICE		g
UNKNOWN SERVICE	?	?
DISUSED SERVICE	X	x
STORMWATER		sw
WATER HYDRANT		
WATER STOP VALVE		
SEWER MANHOLE		
SEWER TERMINAL MAINTENANCE SHAFT	TMS	TMS
PRIVATE CONNECTION SEWER	P.C.S	
ELECTRICITY PIT/SUBSTATION		
TELSTRA PIT		

NOTE: GROUND FLOOR DRAINAGE AND ALL DRAINAGE WITHIN BASEMENT FOOTPRINT IS TO BE DOCUMENTED BY THE PROJECT HYDRAULIC ENGINEER. HYDRAULIC DRAINAGE CONNECTION TO OSD TO BE CONFIRMED.

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client: Central Element

Scales 1:200

Grid GDA20 MGA56

Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: SITEWORKS AND STORMWATER DRAINAGE PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1010

Issue: A

100mm on Original

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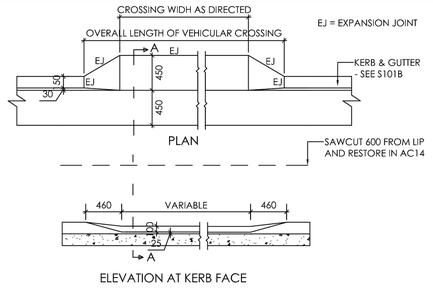
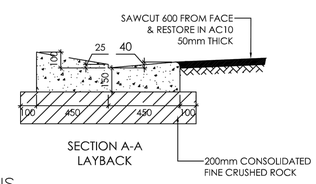


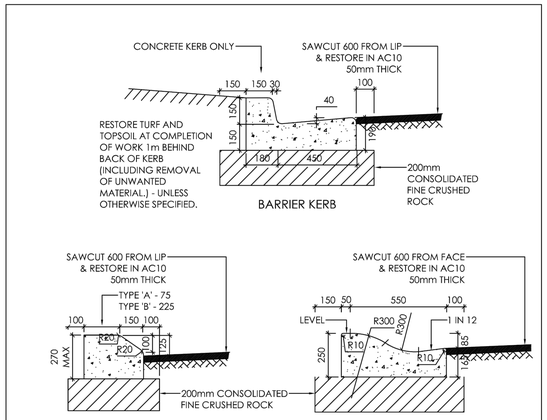
THIS DRAWING IS TO READ IN CONJUNCTION WITH S101B



SPECIFICATIONS.

1. SLAB THICKNESS AND REINFORCEMENT
   RESIDENTIAL: SINGLE DWELLING – 130MM SL72 REO MESH
   MULTIPLE DWELLING – 180MM SL72 REO MESH.
   COMMERCIAL: 180MM SL92 REO MESH. (TO BE LOCATED WITH 40MM COVER FROM BOTTOM OF SLAB).
   ALL CONCRETE F'c32 MPA.
2. BASE COURSE
   CONSOLIDATED FINE CRUSHED ROCK TO COUNCILS SPECIFICATION
3. CONCRETE FINISH
   A. ALL EDGES SHALL BE TOOL FINISHED WITH 12MM RAD 50MM WIDE EDGING TOOL.
   B. GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL.
   C. DRIVEWAY SLAB TO BE FINISHED WITH A WOOD FLOAT.
4. EXPANSION JOINTS
   EXPANSION JOINTS SHALL BE PLACED AT 6M INTERVALS AND AT OUTSIDE ENDS OF WINGS
5. CONTRACTORS SHALL CONFORM TO COUNCILS STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSING/CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL
6. SITE OF WORK:
   DURING AND ON COMPLETION OF WORK, ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
7. ALL PLAN DIMENSIONS ARE IN MILLIMETRES. UNLESS OTHERWISE NOTED.
8. AC10MM ADJUSTMENT:
   PROVIDE 600mm WIDE AC10 CORRECTION COURSE LAYER 50MM THICK AS SHOWN.

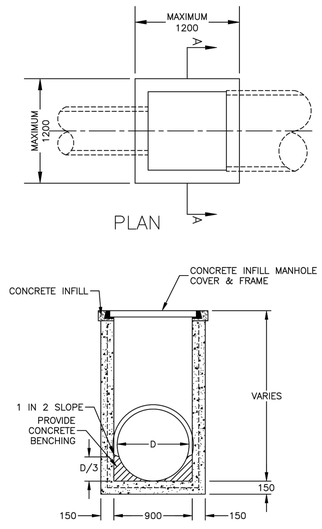
APPROVED:		NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER		STANDARD VEHICULAR CROSSING AND LAYBACK DETAIL	NOT TO SCALE
DATE: 01/04/06			DRAWING NO. S101A



SPECIFICATIONS.

1. BASE COURSE
   CONSOLIDATED FINE CRUSHED ROCK TO COUNCILS SPECIFICATION
2. CONCRETE FINISH
   A. ALL EDGES SHALL BE TOOL FINISHED WITH 12mm RAD 50mm WIDE EDGING TOOL.
   B. GUTTER & LAYBACK SHALL BE FINISHED WITH A STEEL TROWEL.
   C. DRIVEWAY SLAB TO BE FINISHED WITH WOOD FLOAT.
3. EXPANSION JOINTS
   EXPANSION JOINTS SHALL BE PLACED AT 6m INTERVALS
4. CONTRACTORS SHALL CONFORM TO COUNCILS STANDARD CONDITIONS OF APPROVAL FOR CONSTRUCTION OF VEHICULAR CROSSING/CONCRETE FOOTPATHS AND TO LINE LEVEL AND GRADE FIXED BY COUNCIL
5. SITE OF WORK:
   DURING AND ON COMPLETION OF WORK, ALL EXCAVATED MATERIAL FROM THE SITE SHALL BE REMOVED AND THE SITE KEPT IN A CLEAN, SAFE AND TIDY CONDITION TO THE SATISFACTION OF COUNCIL'S ENGINEER.
6. ALL PLAN DIMENSIONS ARE IN MILLIMETRES. UNLESS OTHERWISE NOTED.
7. AC10mm ADJUSTMENT:
   PROVIDE 600mm WIDE AC10 CORRECTION COURSE LAYER 50mm THICK AS SHOWN.
8. RESTORATION OF TURF
   RESTORE TURF & TOPSOIL AT COMPLETION OF WORK UP TO 1M BEHIND BACK OF KERB (REMOVE UNWANTED MATERIAL).

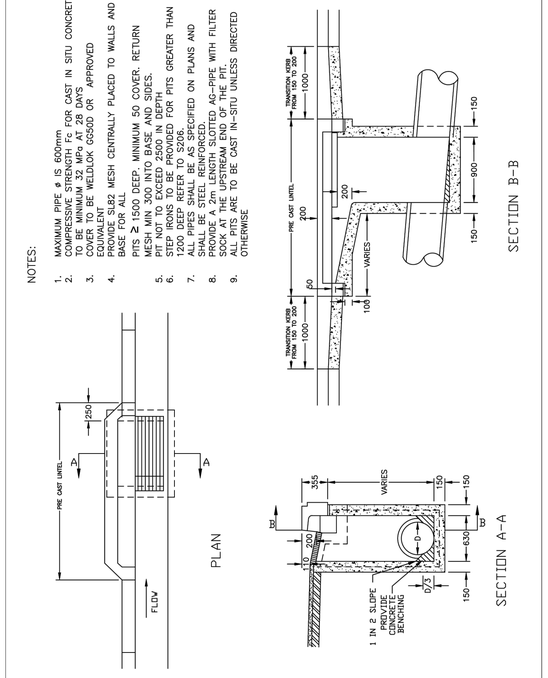
APPROVED:		NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER		STANDARD KERB AND GUTTER DETAIL	NOT TO SCALE
DATE: 01/04/06			DRAWING NO. S101B



NOTES:

1. MAXIMUM PIPE ϕ IS 825mm
2. COMPRESSIVE STRENGTH Fc FOR CAST IN SITU CONCRETE TO BE MINIMUM 32 MPa AT 28 DAYS
3. COVER TO BE WELDLOK 4250D OR APPROVED EQUIVALENT
4. PROVIDE SL82 MESH CENTRALLY PLACED TO WALLS AND BASE FOR ALL
   PITS ≥ 1500 DEEP. MINIMUM 50 COVER. RETURN MESH MIN 300 INTO BASE AND SIDES.
5. PIT NOT TO EXCEED 2500 IN DEPTH
6. STEP IRONS TO BE PROVIDED FOR PITS GREATER THAN 1200 DEEP REFER TO S206.
7. ALL PIPES SHALL BE AS SPECIFIED ON PLANS AND SHALL BE STEEL REINFORCED.
8. PROVIDE A 2m LENGTH SLOTTED AG–PIPE WITH FILTER SOCK AT THE UPSTREAM END OF THE PIT.
9. ALL PITS ARE TO BE CAST IN–SITU UNLESS DIRECTED OTHERWISE

APPROVED:		NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER		STANDARD JUNCTION PIT	N.T.S
DATE: 17/03/20			DRAWING NO. S201



APPROVED:		NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER		STANDARD GRATED GULLY PIT WTIH PRE–CAST EKI	N.T.S
DATE: 17/03/20			DRAWING NO. S203

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

100mm on Original

Client: Central Element

Scales	1:200
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: SITEWORKS AND STORMWATER DRAINAGE DETAILS SHEET 1

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1015

Issue: A

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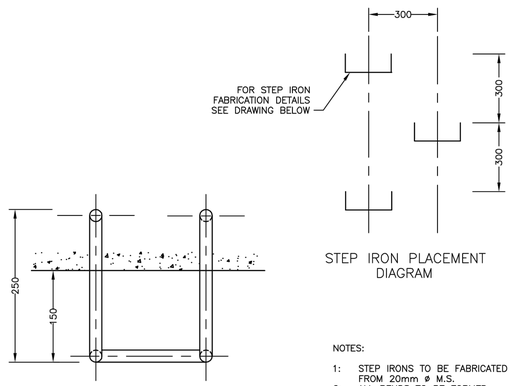
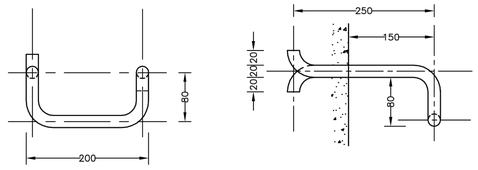


STEP IRON PLACEMENT DIAGRAM

PLAN

NOTES:

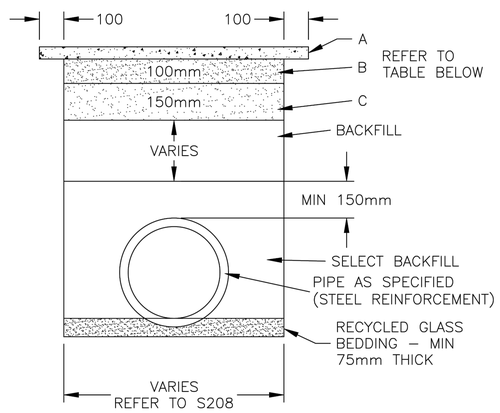
1: STEP IRONS TO BE FABRICATED FROM 20mm ø M.S.
2: ALL BENDS TO BE FORMED AROUND 12mm diameter PIN
3: STEP IRONS TO BE PROVIDED IN PITS DEEPER THAN 1.2m
4: STEP IRONS TO BE HOT-DIPPED GALVANISED
5: STEP IRONS TO BE LOCATED DIRECTLY UNDER PIT ACCESS



FRONT ELEVATION

SIDE ELEVATION

APPROVED:	NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER	STANDARD STEP IRON DETAIL	N.T.S
DATE: 01/05/04		DRAWING NO. S206



REFER TO TABLE BELOW

	A	B	C
ROAD WAY	AC10 – 50mm THICK	DGB20	DGB40
FOOTPATH	CONCRETE – 75mm THICK	DGB20	–
PARK/GRASS VERGE	TURF	TOP SOIL	TURF UNDERLAY

NOTES:

1: COMPACTION: REFER TO COUNCIL SPECIFICATION
2: TRENCH WIDTH REFER TO DRAWING NUMBER S208

APPROVED:	NORTH SYDNEY COUNCIL	SCALE
COUNCIL ENGINEER	TYPICAL BACK FILL CROSS SECTION	N.T.S
DATE: 17/03/20		DRAWING NO. S207

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P2	ISSUED FOR DRAFT	27-02-27

Bar Scales

100mm on Original

Client: Central Element

Scales 1:201
Grid GDA20 MGA57
Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: SITEWORKS AND STORMWATER DRAINAGE DETAILS SHEET 2

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No. 25-1385-C1016

Issue A

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Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client: Central Element

Scales 1:200

Grid GDA20 MGA56

Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: PAVEMENT PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1030

Issue: A

100mm on Original

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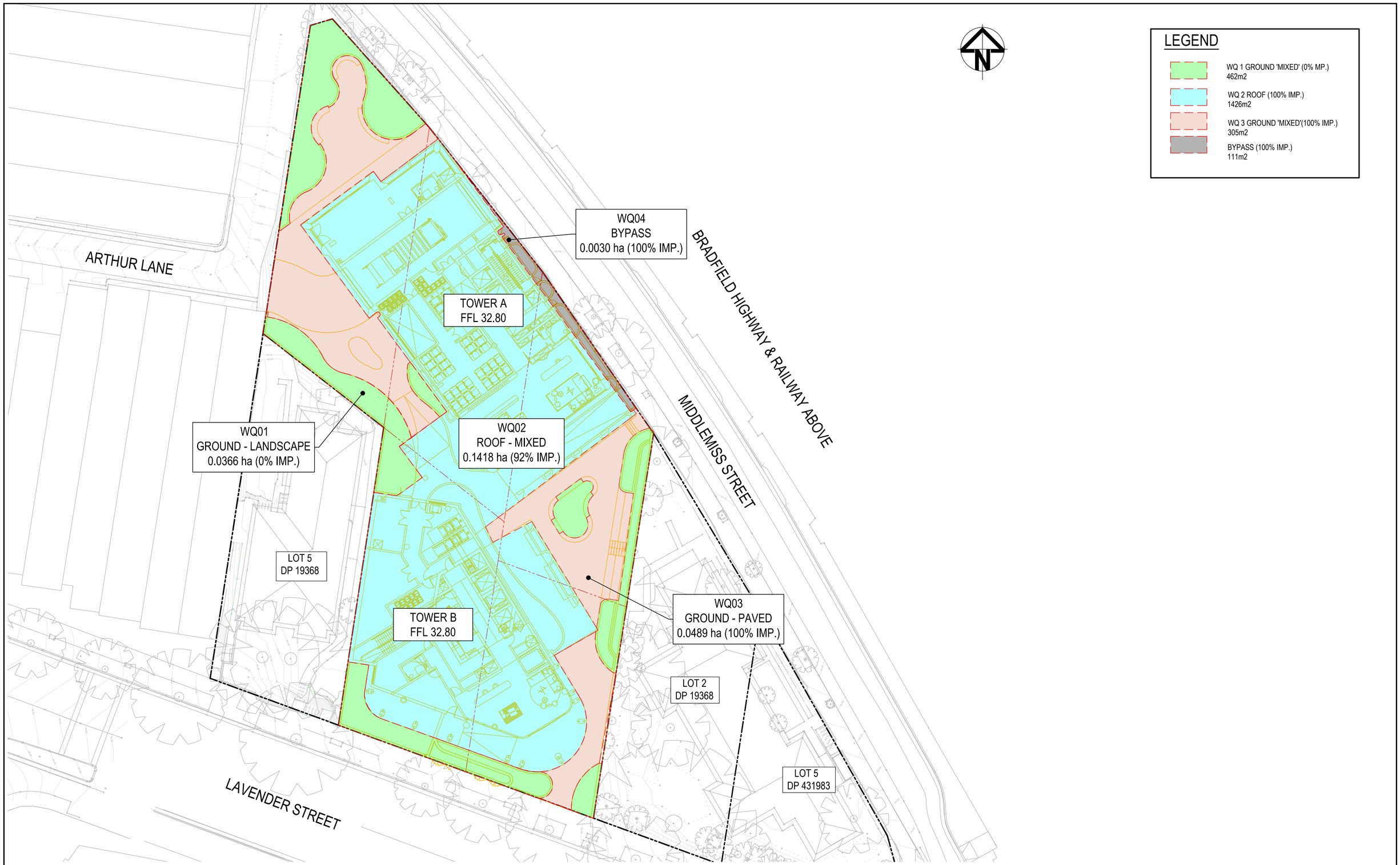

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client: Central Element

Scales	1:200
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: STORMWATER DRAINAGE
MUSIC
CATCHMENT PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1050

Issue: A

100mm on Original

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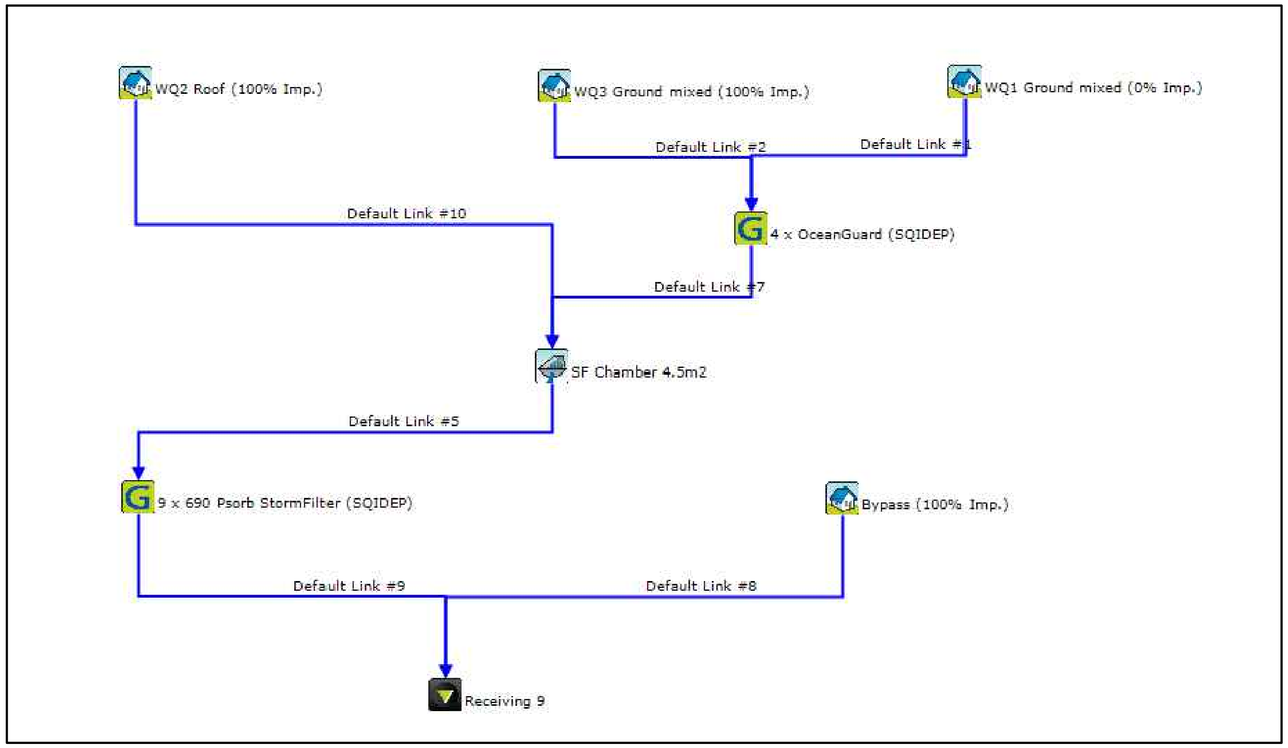

MUSIC MODEL LAYOUT
NTS

Latest Run : Treatment Train Effectiveness : Receiving 9

	Sources	Residual Load	% Reduction
Flow (ML/yr)	2.239	2.239	0.001826
Total Suspended Solids (kg/yr)	390.9	74.37	80.98
Total Phosphorus (kg/yr)	0.6556	0.1791	72.69
Total Nitrogen (kg/yr)	4.803	2.114	56
Gross Pollutants (kg/yr)	49.95	2.918	94.16

MUSIC MODEL RESULTS
NTS

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

Client: Central Element

Scales: Grid GDA20 MGA56; Height Datum AHD

Drawn SG; Designed PS; Checked SM; Approved AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: STORMWATER DRAINAGE
MUSIC
MODEL AND RESULTS

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1051

Issue: A

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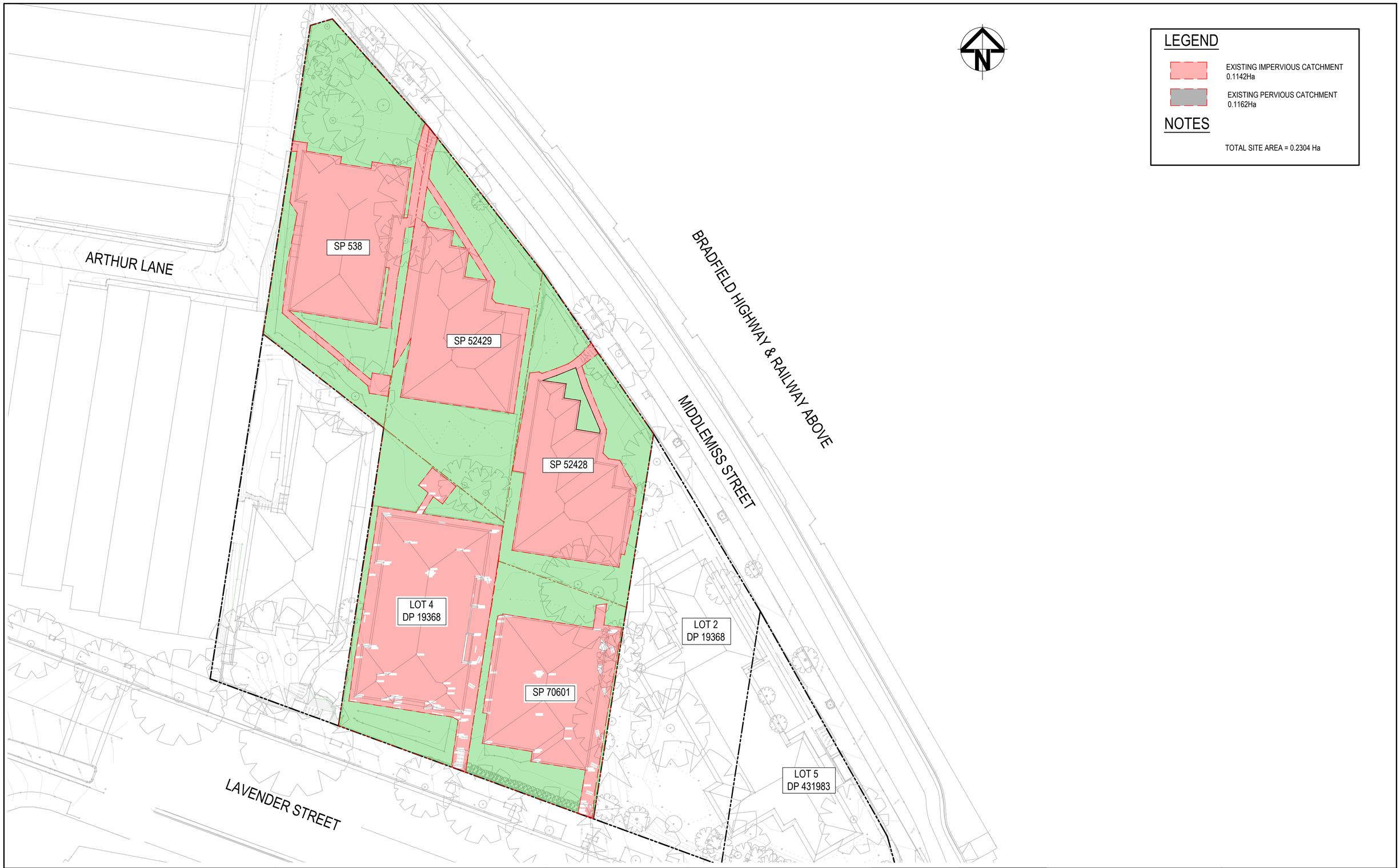

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client

Central Element

Scales	1:200	Drawn	SG
		Designed	PS
Grid	GDA20 MGA56	Checked	SM
Height Datum	AHD	Approved	AT

Project

3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title

STORMWATER DRAINAGE
PRE-DEVELOPMENT
CATCHMENT PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1052

Issue: A

100mm on Original

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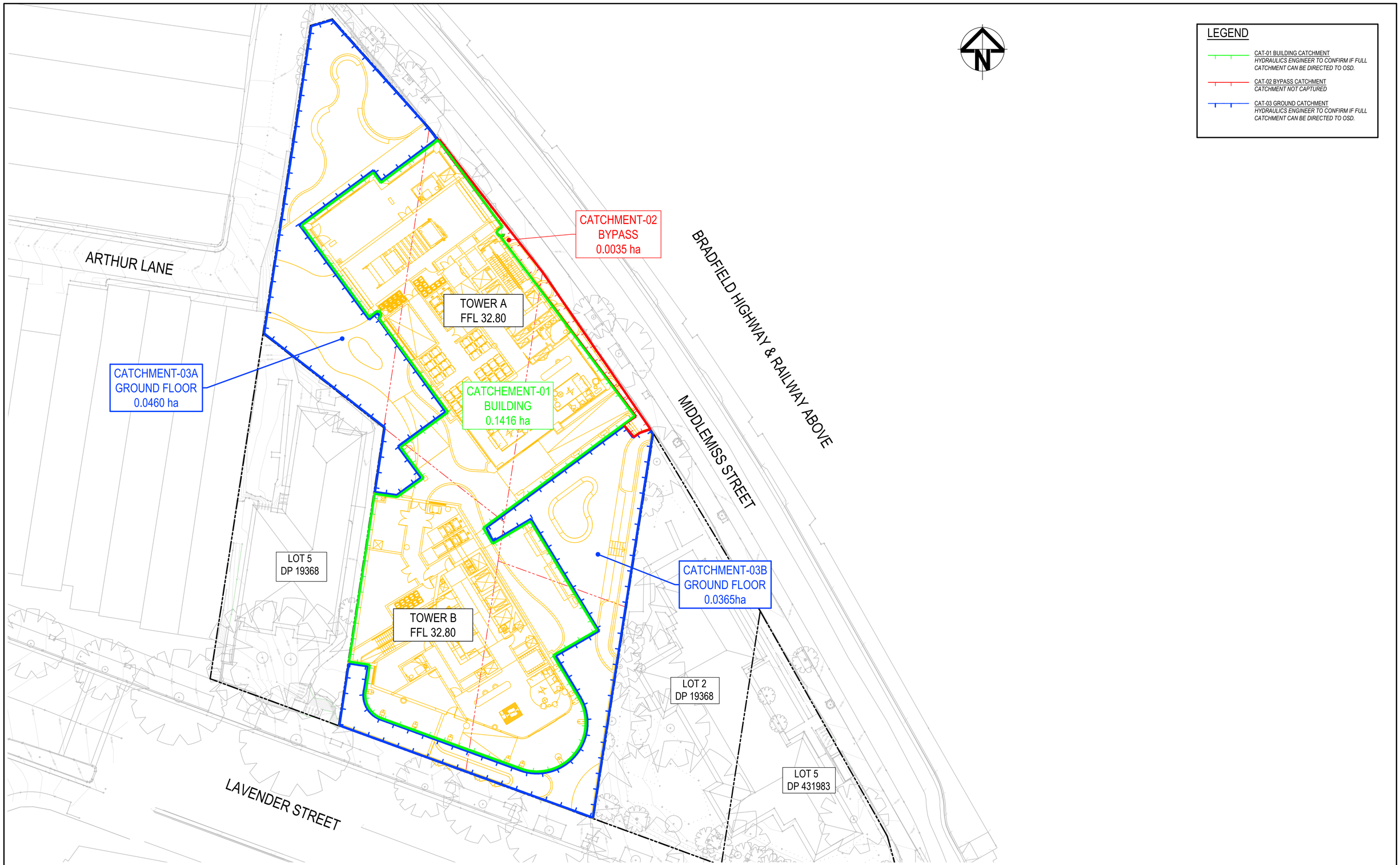

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26

100mm on Original

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client

Central Element

Scales	1:200
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project

3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title

STORMWATER DRAINAGE
POST-DEVELOPMENT
CATCHMENT PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1053

Issue: A

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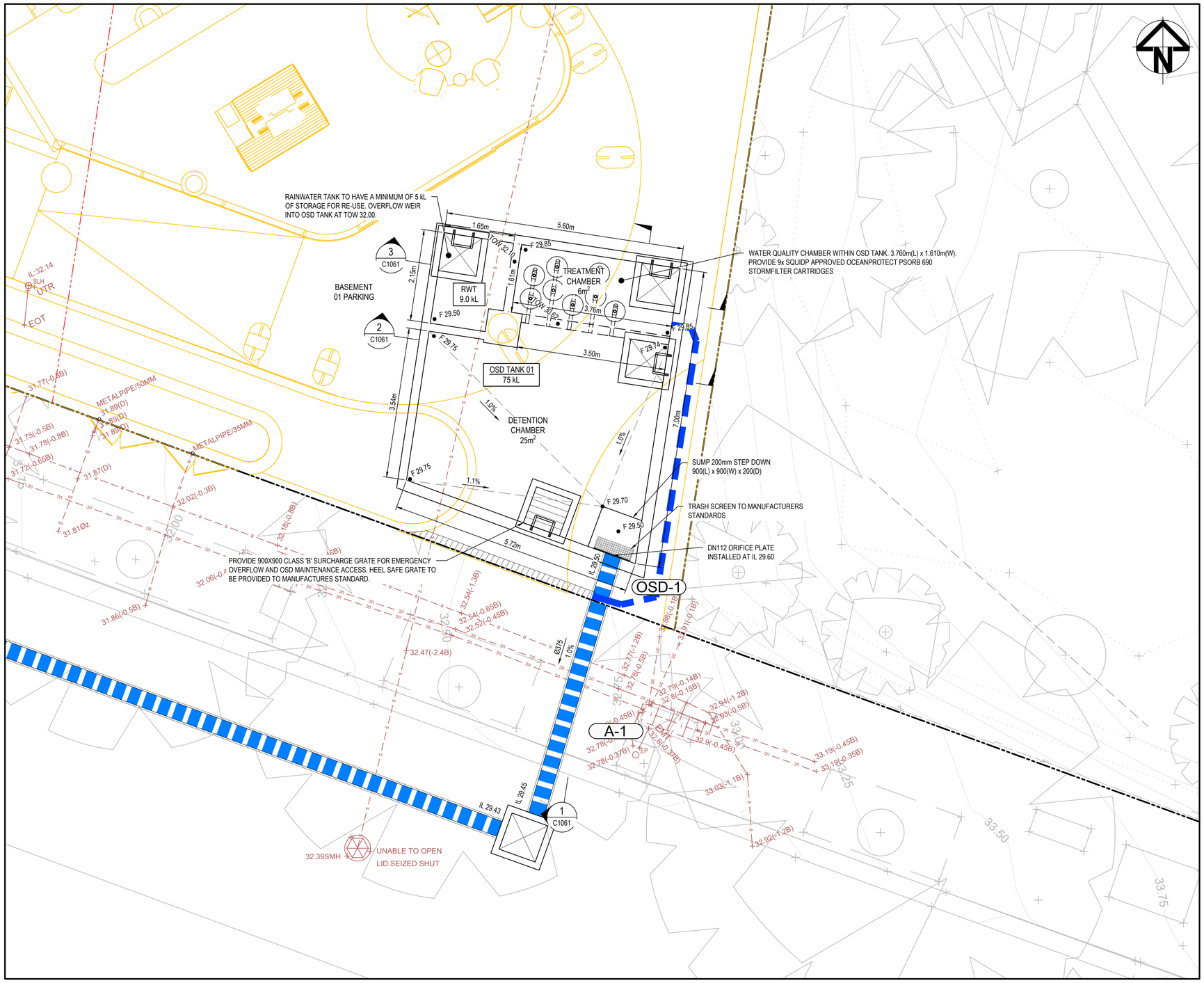

OSD 1 PLAN
1 : 50

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

0 1 2 3 4 5m

1 : 50 @ A1 1 : 100 @ A3

Client

Central Element

Scales	1:50
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project
3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title
STORMWATER DRAINAGE
OSD
PLAN

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ABN 96 130 882 405

Status
FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.
25-1385-C1060

Issue
A

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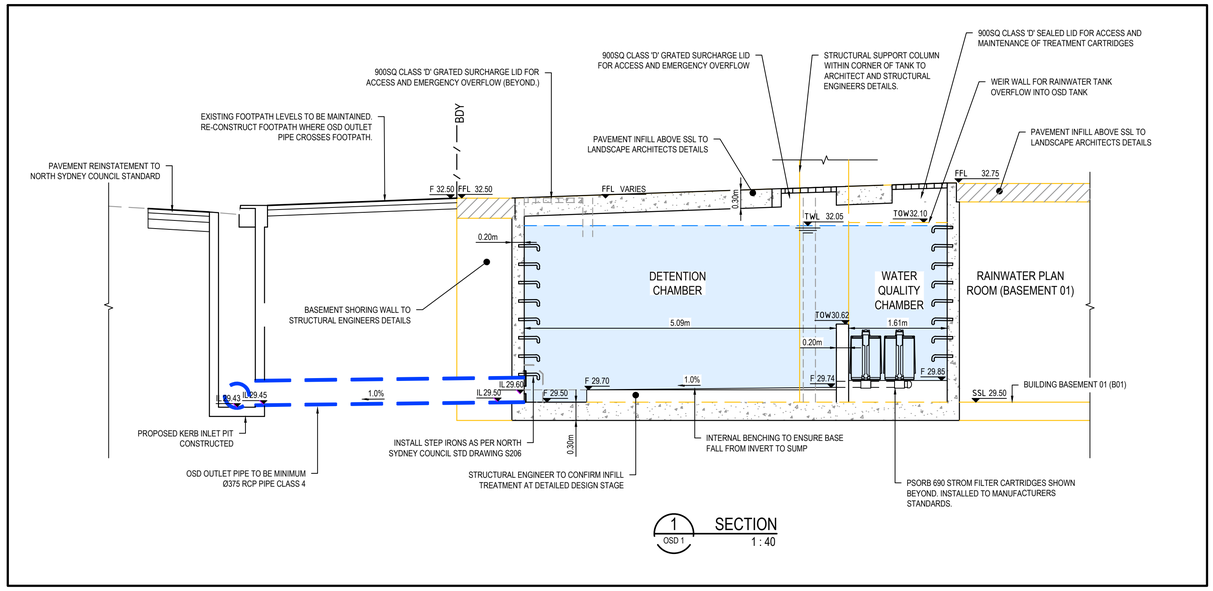
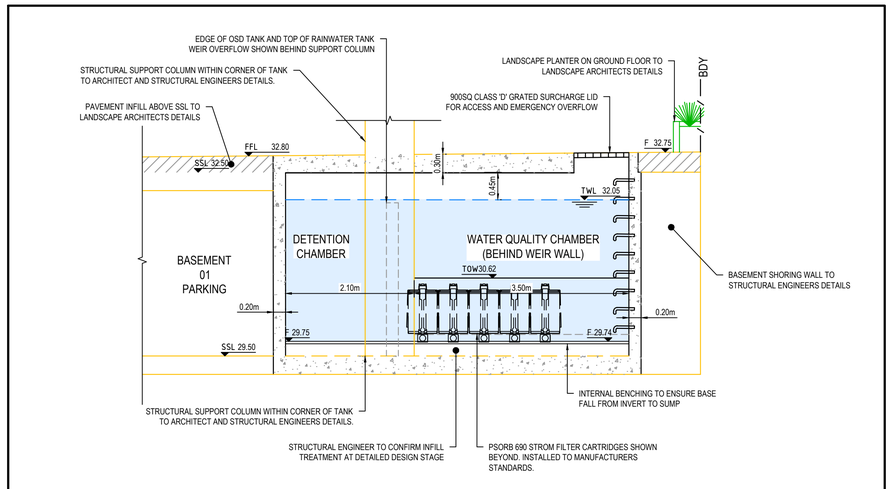
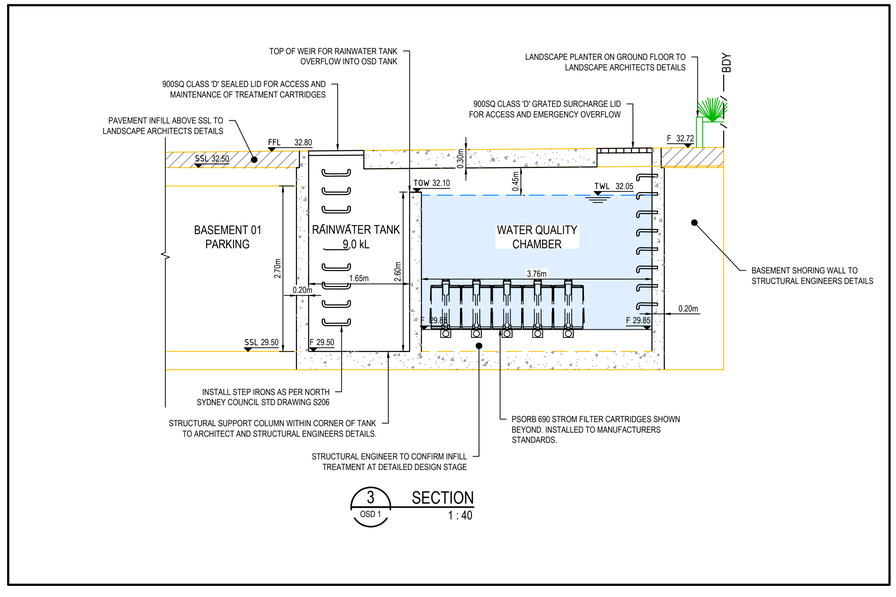


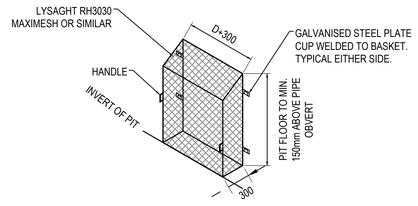
1 OSD 1 SECTION
1 : 40



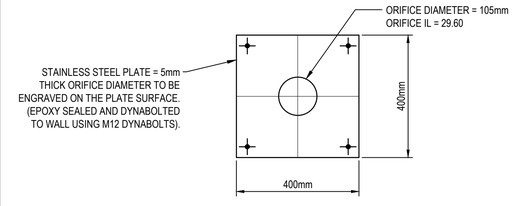
2 OSD 1 SECTION
1 : 40



3 OSD 1 SECTION
1 : 40



SCREEN MESH DETAILS
NTS



ORIFICE PLATE DETAIL - OSD 1
1:10

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

0 1 2 3 4m

1 : 40 @ A1

Client: Central Element

Scales 1:40
Grid GDA20 MGA56
Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: STORMWATER DRAINAGE
OSD
SECTIONS AND DETAILS

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1061

Issue: A

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SERVICES LEGEND

	PROPOSED	EXISTING
HV ELECTRICITY	HV	hv
ELECTRICITY	E	e
COMMS SERVICE	UC	uc
SEWER SERVICE	S	s
WATER SERVICE	W	w
GAS SERVICE		g
UNKNOWN SERVICE	?	?
DISUSED SERVICE	– X · X –	x
STORMWATER		sw
WATER HYDRANT		
WATER STOP VALVE		
SEWER MANHOLE		
SEWER TERMINAL MAINTENANCE SHAFT	TMS	TMS
PRIVATE CONNECTION SEWER	P.C.S	
ELECTRICITY PIT/SUBSTATION		
TELSTRA PIT		

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client: Central Element

Scales	1:200
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title: COMBINED SERVICES PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1080

Issue: A

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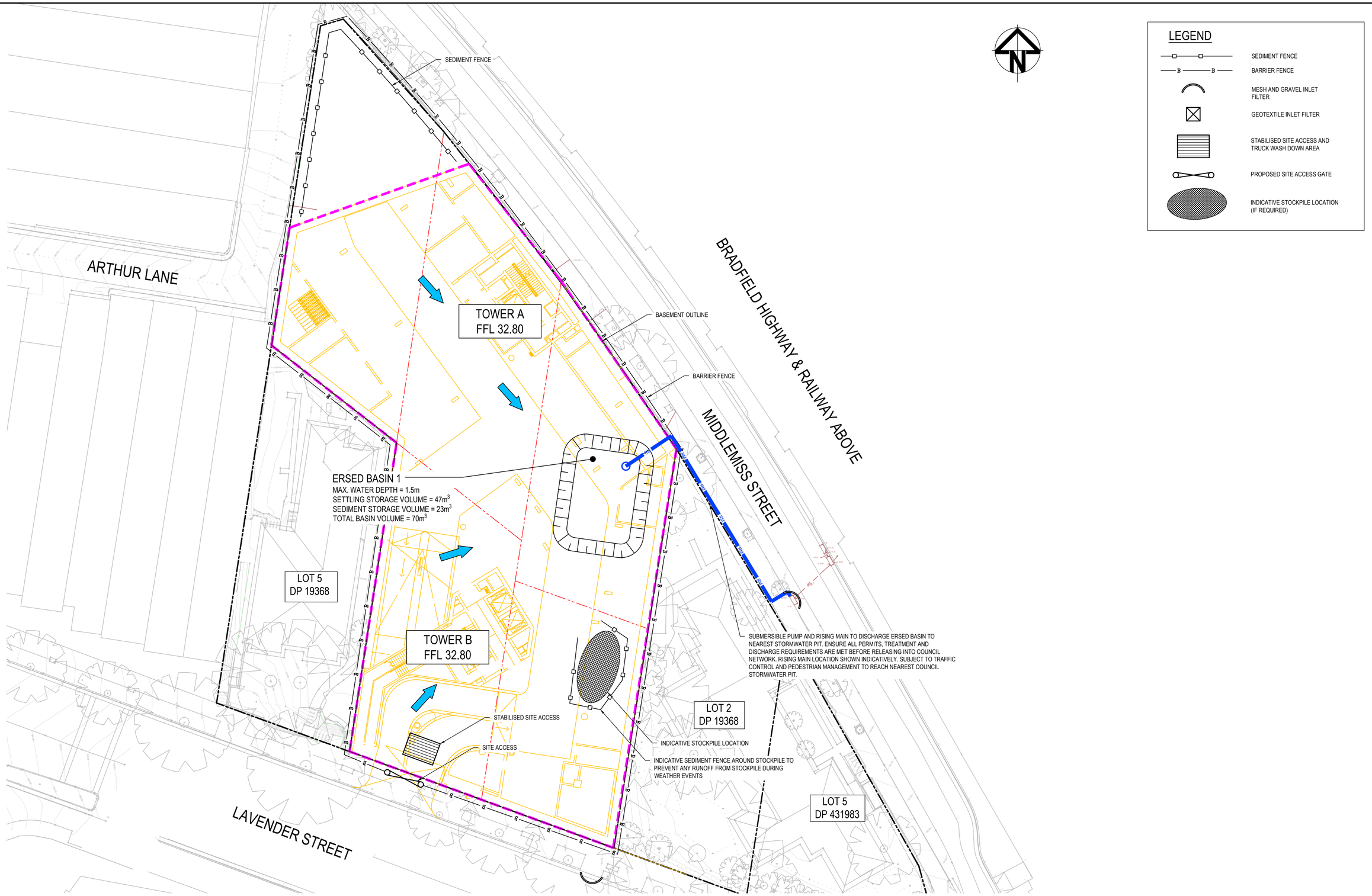

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

100mm on Original

Bar Scales

0 5 10 15 20m

1 : 200 @ A1 1 : 400 @ A3

Client

Central Element

Scales	1:200
Grid	GDA20 MGA56
Height Datum	AHD
Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project

3-7 MIDDLEMISS ST
64-66 LAVENDER ST
LAVENDER BAY
SSDA

Title

EROSION AND SEDIMENT CONTROL PLAN

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Status: FOR APPROVAL
NOT FOR CONSTRUCTION

A1

Project - Drawing No.: 25-1385-C1090

Issue: A

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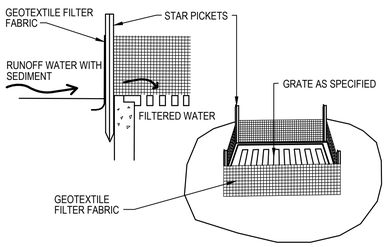
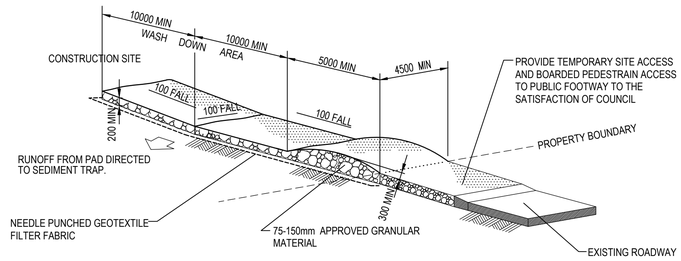


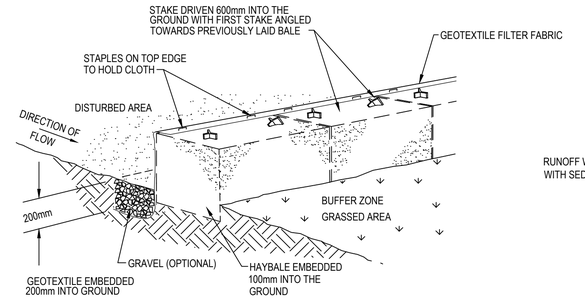
GEOTEXTILE FILTER PIT SURROUND

NTS



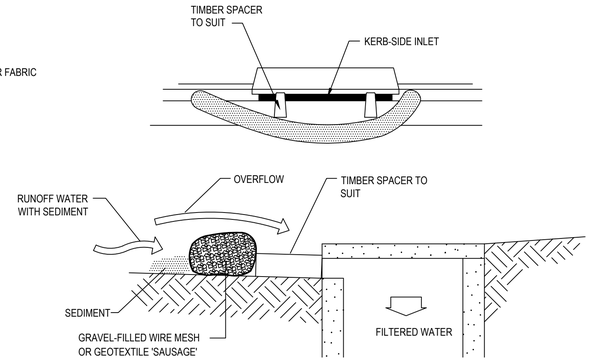
STABILISED SITE ACCESS AND TRUCK WASH DOWN AREA

NTS



HAYBALE AND GEOTEXTILE SEDIMENT FILTER

NTS



MESH AND GRAVEL INLET FILTER

NTS

SWMP Commentary, Standard Calculation

Note: These "Standard Calculation" spreadsheets relate only to low erosion hazard lands as identified in figure 4.6 where the designer chooses to not use the RUSLE to size sediment basins. The more "Detailed Calculation" spreadsheets should be used on high erosion hazard lands as identified by figure 4.6 or where the designer chooses to run the RUSLE in calculations.

1. Site Data Sheet

Site name: Lavender Bay

Site location: Lavender Bay

Precinct: -

Description of site: SSDA Proposal for two (2x) residential towers (shared basement) and associated public areas on ground floor

Site area	Site						Remarks
	B1						
Total catchment area (ha)	0.233						
Disturbed catchment area (ha)	0.233						

Soil analysis

Soil landscape	fg						DIPNR mapping (if relevant)
Soil Texture Group	D						Sections 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	40						See Section 6.3.4 (h)
Rainfall intensity: 2-year, 6-hour storm	10.5						See IFD chart for the site
Rainfall erosivity (R-factor)	2420						Automatic calculation from above data

Comments:

SWMP Commentary, Standard Calculation

2. Storm Flow Calculations

Peak flow is given by the Rational Formula:

$$Qy = 0.00278 \times C_{10} \times F_Y \times I_{y,\,tc} \times A$$

where:
- Q_y is peak flow rate (m^3/sec) of average recurrence interval (ARI) of "Y" years
- C_{10} is the runoff coefficient (dimensionless) for ARI of 10 years. Rural runoff coefficients are given in Volume 2, figure 5 of Pilgrim (1998), while urban runoff coefficients are given in Volume 1, Book VIII, figure 1.13 of Pilgrim (1998) and construction runoff coefficients are given in Appendix F
- F_y is a frequency factor for "Y" years. Rural values are given in Volume 1, Book IV, Table 1.1 of Pilgrim (1998) while urban coefficients are given in Volume 1, Book VIII, Table 1.6 of Pilgrim (1998)
- A is the catchment area in hectares (ha)
- $I_{y,\,tc}$ is the average rainfall intensity (mm/hr) for an ARI of "Y" years and a design duration of "tc" (minutes or hours)

Time of concentration (t_c) = 0.76 x $(A/100)^{0.38}$ hrs (Volume 1, Book IV of Pilgrim, 1998)

Note: For urban catchments the time of concentration should be determined by more precise calculations or reduced by a factor of 50 per cent.

Peak flow calculations, 1

Site	A (ha)	tc (mins)	Rainfall intensity, I, mm/hr						C_{10}
			$1_{yr,tc}$	$5_{yr,tc}$	$10_{yr,tc}$	$20_{yr,tc}$	$50_{yr,tc}$	$100_{yr,tc}$	
B1	0.233	5	100	150	176	202	237	265	0.5

Peak flow calculations, 2

ARI yrs	Frequency factor (F_y)	Peak flows						Comment
		B1						
		(m^3/s)	(m^3/s)	(m^3/s)	(m^3/s)	(m^3/s)	(m3/s)	
$1_{yr,tc}$	0.9	0.029						
$5_{yr,tc}$	0.95	0.046						
$10_{yr,tc}$	1	0.057						
$20_{yr,tc}$	1.05	0.069						
$50_{yr,tc}$	1.15	0.088						
$100_{yr,tc}$	1.2	0.103						

SWMP Commentary, Standard Calculation

4. Volume of Sediment Basins, *Type D* and *Type F* Soils

Basin volume = settling zone volume + sediment storage zone volume

Settling Zone Volume

The settling zone volume for *Type F* and *Type D* soils is calculated to provide capacity to contain all runoff expected from up to the y-percentile rainfall event. The volume of the basin's settling zone (V) can be determined as a function of the basin's surface area and depth to allow for particles to settle and can be determined by the following equation:

$$V = 10 \times C_v \times A \times R_{y\text{-}\%ile,\ x\text{-}day}\ (m^3)$$

where:

10 = a unit conversion factor

C_v = the volumetric runoff coefficient defined as that portion of rainfall that runs off as stormwater over the x-day period

R = is the x-day total rainfall depth (mm) that is not exceeded in y percent of rainfall events. (See Sections 6.3.4(d), (e), (f), (g) and (h)).

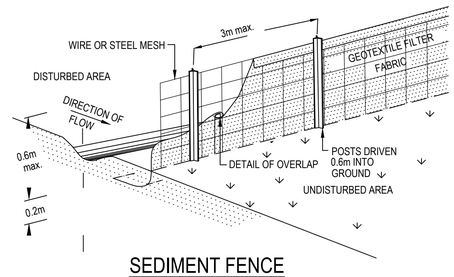
A = total catchment area (ha)

Sediment Storage Zone Volume

In the standard calculation, the sediment storage zone is 50 percent of the setting zone. However, designers can work to capture the 2-month soil loss as calculated by the RUSLE (Section 6.3.4(i)(ii)), in which case the "Detailed Calculation" spreadsheets should be used.

Total Basin Volume

Site	C_v	R x-day y-%ile	Total catchment area (ha)	Settling zone volume (m^3)	Sediment storage volume (m^3)	Total basin volume (m^3)
B1	0.50	40	0.233	46.6	23	69.9



SEDIMENT FENCE

NTS

Issue	Description	Date
A	ISSUED FOR APPROVAL	10-03-26
P1	ISSUED FOR DRAFT	27-02-26

Bar Scales

100mm on Original

Client: Central Element

Scales

Grid GDA20 MGA56

Height Datum AHD

Drawn	SG
Designed	PS
Checked	SM
Approved	AT

Project: 3-7 MIDDLEMISS ST 64-66 LAVENDER ST LAVENDER BAY SSDA

Title: EROSION AND SEDIMENT CONTROL DETAILS

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Status: FOR APPROVAL NOT FOR CONSTRUCTION

A1

Project - Drawing No. 25-1385-C1095

Issue A

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