



ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES

5 / 45-55 Epsom Road
Rosebery NSW 2018

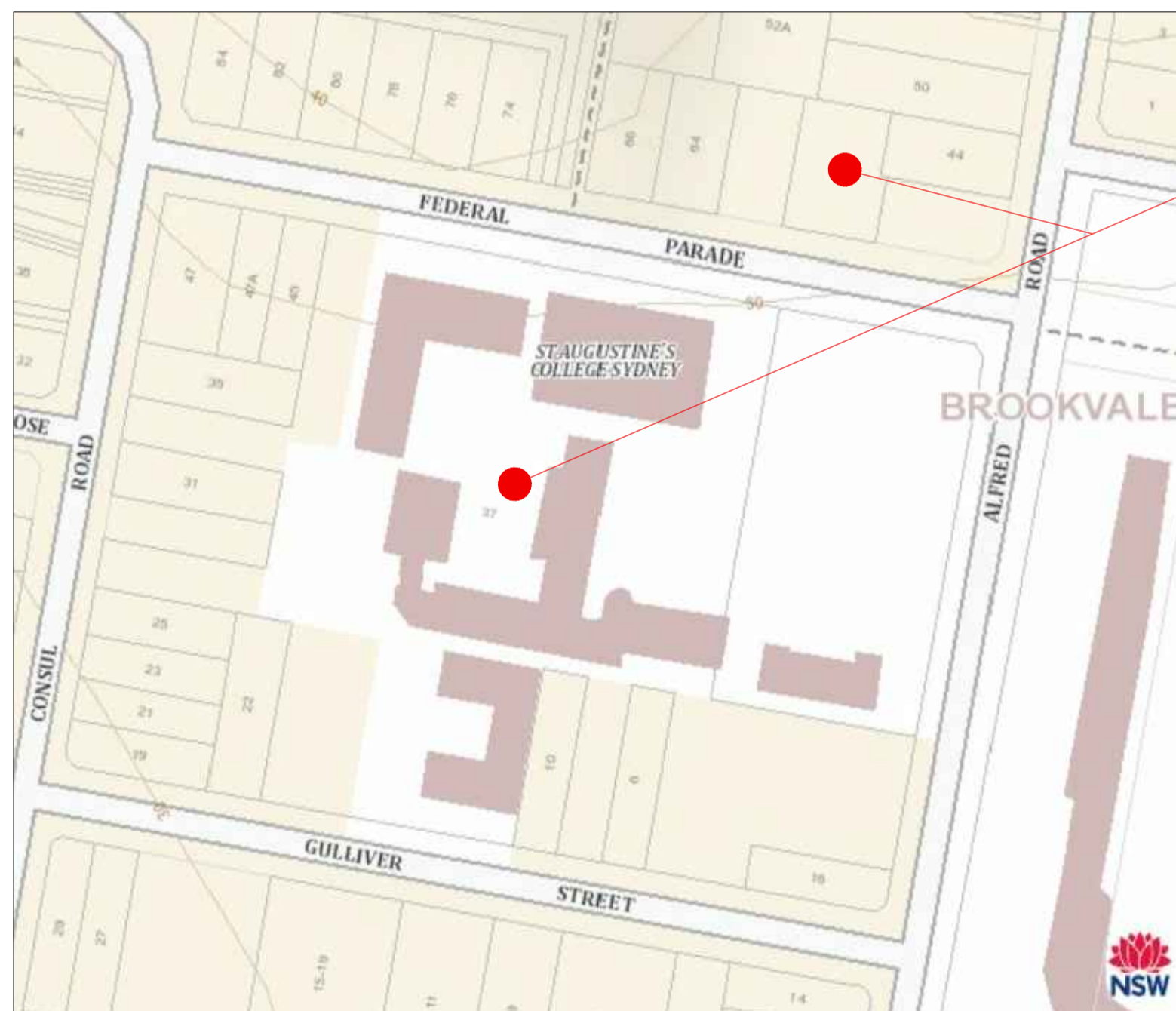
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PROJECT ADDRESS:
PROPOSED CARPARK AT
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DRAWING INDEX & COVER SHEET: **CIVIL & STORMWATER**

| PROJECT No. | DWG No. | DWG TITLES | REVISION |
|-------------|---------|---|----------|
| CPC 2760 | C000 | COVER SHEET & DRAWING INDEX | 04 |
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SITE LAYOUT (SOURCE: SIX MAPS)

ST AUGUSTINE'S
COLLEGE
FEDERAL PARADE,
BROOKVALE NSW



SATELLITE MAP (SOURCE: SIX MAPS)

ISSUE FOR DA

| ISSUE | DATE | AMENDMENT | CLIENT / BUILDER / ARCHITECT | CIVIL | NORTH: | SCALE: | VERIFIED: | DRAWING TITLE: | DATE: | SCALE: | | |
|-------|------------|----------------------|------------------------------|---|--------|--------|-----------|-----------------------------|--|----------|------------------------|------|
| 00 | 08.10.2021 | ISSUE FOR DISCUSSION | | ELECTRICAL • FIRE • HYDRAULIC • MECHANICAL • STRUCTURAL • CIVIL • FACADES | | NTS | AC | COVER SHEET & DRAWING INDEX | 29/07/2022 | N.T.S | | |
| 01 | 15.10.2021 | ISSUE FOR DISCUSSION | | | | | HR | PROJECT: | PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW | CPC 2760 | REVISION: 05 | |
| 02 | 29.10.2021 | ISSUE FOR DA | | | | | RQ | DRAWING: | | | | C000 |
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| 04 | 06.12.2021 | ISSUE FOR DA | | | | | | | | | | |
| 05 | 29.07.2022 | ISSUE FOR DA | | | | | | | | | | |

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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. CARDNO 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.

COMMUNICATIONS - DUTY OF CARE NOTE

COMMUNICATIONS AND DATA PROVIDER PLANS SHOW ONLY THE PRESENCE OF CABLES AND PLANT. THEY ONLY SHOW THEIR POSITION RELATIVE TO ROAD BOUNDARIES, PROPERTY FENCES ETC. AT THE TIME OF INSTALLATION AND EACH PROVIDER DOES NOT WARRANT OR HOLD OUT THAT SUCH PLANS ARE ACCURATE THEREAFTER DUE TO CHANGES THAT MAY OCCUR OVER TIME. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY. THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR COMMUNICATIONS AND DATA CABLES AND PLANT.

BEFORE USING MACHINE EXCAVATORS COMMUNICATIONS PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY ITS LOCATION, PROVIDERS WILL SEEK COMPENSATION FOR DAMAGES CAUSED TO ITS PROPERTY AND LOSSES CAUSED TO THE PROVIDERS AND ITS CUSTOMERS.

TELSTRA - DUTY OF CARE NOTE

TELSTRA'S PLANS SHOW ONLY THE PRESENCE OF CABLES AND PLANT. THEY ONLY SHOW THEIR POSITION RELATIVE TO ROAD BOUNDARIES, PROPERTY FENCES ETC. AT THE TIME OF INSTALLATION AND TELSTRA DOES NOT WARRANT OR HOLD OUT THAT SUCH PLANS ARE ACCURATE THEREAFTER DUE TO CHANGES THAT MAY OCCUR OVER TIME. DO NOT ASSUME DEPTH OR ALIGNMENT OF CABLES OR PLANT AS THESE VARY SIGNIFICANTLY. THE CONTRACTOR HAS A DUTY OF CARE WHEN EXCAVATING NEAR TELSTRA CABLES AND PLANT.

BEFORE USING MACHINE EXCAVATORS TELSTRA PLANT MUST FIRST BE PHYSICALLY EXPOSED BY SOFT DIG POTHOLING TO IDENTIFY ITS LOCATION TELSTRA WILL SEEK COMPENSATION FOR DAMAGES CAUSED TO ITS PROPERTY AND LOSSES CAUSED TO TELSTRA AND ITS CUSTOMERS.

BULK EARTHWORKS NOTES

- STRIP ALL TOPSOIL/ORGANIC MATERIAL FROM CONSTRUCTION AREA AND REMOVE FROM SITE OR STOCK PILE AS DIRECTED BY SUPERINTENDENT.
- EXCAVATED MATERIAL TO BE USED AS STRUCTURAL FILL PROVIDED THE PLACEMENT MOISTURE CONTENT OF THE MATERIAL IS +/- 2% OF THE OPTIMUM MOISTURE CONTENT.
- COMPACT FILL AREAS AND SUBGRADE TO NOT LESS THAN:

| LOCATION | STANDARD DRY DENSITY (AS 1289 E 5.1.1.) |
|---|---|
| UNDER BUILDING SLABS ON GROUND | 98% |
| UNDER ROADS AND CARPARKS | 98% |
| LANDSCAPED AREAS UNLESS NOTED OTHERWISE | 98% |
- FOR NON COHESIVE MATERIAL, COMPACT TO 75% DENSITY INDEX.
- BEFORE PLACING FILL, PROOF ROLL EXPOSED SUBGRADE WITH AN 8 TONNE (MIN) DEADWEIGHT SMOOTH DRUM VIBRATORY ROLLER TO DETECT THEN REMOVE SOFT SPOTS (AREAS WITH MORE THAN 2mm MOVEMENT UNDER ROLLER).
- FREQUENCY OF COMPACTION TESTING SHALL BE NOT LESS THAN -
(A) 1 TEST PER 200m² OF FILL PLACED PER 300 LAYER OF FILL.
(B) 3 TESTS PER VISIT
(C) 1 TEST PER 1000m² OF EXPOSED SUBGRADE "LEVEL 1" TESTING SHALL BE TESTING IN ACCORDANCE WITH AS 3798 (1996).
- FILLING TO BE PLACED IN MAXIMUM 150mm - LOOSE LAYERS AND COMPACTED AS SPECIFIED
- NO FILLING SHALL TAKE PLACE TO EXPOSED SUBGRADE UNTIL THE AREA HAS BEEN PROOF ROLLED IN THE PRESENCE OF CARDNO AND APPROVAL GIVEN IN WRITING THAT FILLING CAN PROCEED.

EROSION AND SEDIMENT CONTROL NOTES

GENERAL INSTRUCTIONS

- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONTROL OF EROSION AND SEDIMENTATION TO THE SATISFACTION OF COUNCIL, NSW OFFICE OF WATER, OFFICE OF ENVIRONMENT AND HERITAGE, THE EROSION AND SEDIMENTATION CONTROLS SHOWN ON THE DRAWINGS SHALL ONLY BE USED AS A GUIDE BY THE CONTRACTOR, AND SHALL REPRESENT THE MINIMUM REQUIREMENT ONLY.
- THE CONTRACTOR SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS DOCUMENTED OR AS OTHERWISE DIRECTED BY THE SUPERINTENDENT. ALL WORK SHALL BE GENERALLY CARRIED OUT IN ACCORDANCE WITH
 - LOCAL AUTHORITY REQUIREMENTS
 - EPA REQUIREMENTS
 - NSW DEPARTMENT OF HOUSING MANUAL "MANAGING URBAN STORMWATER, SOILS AND CONSTRUCTION", 4th EDITION, MARCH 2004.
- 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:
 - INSTALL A SEDIMENT FENCE ALONG THE BOUNDARIES AS SHOWN ON PLAN. REFER DETAIL.
 - CONSTRUCT STABILISED CONSTRUCTION ENTRANCE TO LOCATION AS DETERMINED BY SUPERINTENDENT/ENGINEER. REFER DETAIL.
 - INSTALL SEDIMENT BASIN AS SHOWN ON PLAN (D) INSTALL SEDIMENT TRAPS AS SHOWN ON PLAN.
 - 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.

LAND DISTURBANCE

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

EROSION CONTROL

- DURING WINDY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- FINAL SITE LANDSCAPING WILL BE UNDERTAKEN AS SOON AS POSSIBLE AND WITHIN 20 WORKING DAYS FROM COMPLETION OF CONSTRUCTION ACTIVITIES.
- SEDIMENT CONTROL
 - STOCKPILES WILL NOT BE LOCATED WITHIN 2 METRES OF HAZARDOUS 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.
 - 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.
 - 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 LIKELY SEDIMENT HAS BEEN FILTERED THROUGH AN APPROVED STRUCTURE.
 - TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES WILL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE REHABILITATED.
 - ACCEPTABLE RECEPTORS WILL BE PROVIDED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
 - ANY EXISTING TREES WHICH FORM PART OF THE FINAL LANDSCAPING PLAN WILL BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY:
 - PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
 - ENSURING THAT NOTHING IS NAILED TO THEM
 - PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:
 - 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, WHICHEVER IS THE GREATER
 - A DRAINAGE SYSTEM THAT ALLOWS AIR AND WATER TO CIRCULATE THROUGH THE ROOT ZONE (E.G. A GRAVEL BED) IS PLACED UNDER ALL FILL LAYERS OF MORE THAN 300 MILLIMETRES DEPTH
 - CARE IS TAKEN NOT TO CUT ROOTS UNNECESSARILY NOR TO COMPACT THE SOIL AROUND THEM.

OTHER MATTERS

- PROTECTING THEM WITH BARRIER FENCING OR SIMILAR MATERIALS INSTALLED OUTSIDE THE DRIP LINE
- ENSURING THAT NOTHING IS NAILED TO THEM
- PROHIBITING PAVING, GRADING, SEDIMENT WASH OR PLACING OF STOCKPILES WITHIN THE DRIP LINE EXCEPT UNDER THE FOLLOWING CONDITIONS:
 - ENCROACHMENT ONLY OCCURS ON ONE SIDE AND NO CLOSER TO THE TRUNK THAN EITHER 1.5 METRES OR HALF THE DISTANCE BETWEEN THE OUTER EDGE OF THE DRIP LINE AND THE TRUNK, WHICHEVER IS THE GREATER
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STORMWATER DRAINAGE NOTES

- STORMWATER DESIGN CRITERIA:
(A) AVERAGE RECURRENCE INTERVAL:

| | |
|--------------|--|
| 100 YEAR ARI | ROOFED AREAS TO SURCHARGE PIT PAVEMENTS (MINOR SYSTEM) |
| 10 YEAR ARI | OVERLAND FLOW PATHS (MAJOR SYSTEM) |
- RAINFALL INTENSITIES: TIME OF CONCENTRATION:

| | |
|--------------|----------|
| 5 MINUTES | |
| 100 YEAR ARI | 193mm/hr |
| 10 YEAR ARI | 286mm/hr |
- PIPES 375 DIA. AND LARGER TO BE REINFORCED CONCRETE CLASS '2' APPROVED SPIGOT AND SOCKET WITH RUBBER RING JOINTS. U.N.O.
- PIPES 300 DIA AND LESS SHALL BE DRW GRADE (CLASS SN8) uPVC WITH SOLVENT WELDED JOINTS.
- ALL PIPES ARE TO BE UNIFORMLY SUPPORTED ALONG THE LENGTH OF THE BARREL BY SUITABLE FILL MATERIAL. REFER TO BEDDING SUPPORT TYPE.
- PIPES WITH SOCKETS SHALL BE LAID IN BEDDING WHERE SUITABLE RECESSES HAVE BEEN PROVIDED TO ENSURE PIPES DO NOT BEAR ON THEIR SOCKETS.
- 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.
- PIPES TO BE INSTALLED TO TYPE HS1 SUPPORT IN ACCORDANCE WITH AS 3725 (2007) IN ALL CASES BACKFILL TRENCH WITH SAND TO 300mm ABOVE PIPE, WHERE PIPE IS UNDER PAVEMENTS BACKFILL REMAINDER OF TRENCH TO UNDERSIDE OF PAVEMENT WITH SAND OR APPROVED GRANULAR MATERIAL COMPACTED IN 150mm LAYERS TO MINIMUM 98% STANDARD MAXIMUM DRY DENSITY IN ACCORDANCE WITH AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75).
- REFER TO AS/NZS 3725:2007 TABLE B1 FOR REQUIRED FILL DEPTHS ABOVE PIPE BARREL. PRIOR TO USE OF COMPACTION MACHINERY OR TRAVERSING OF PIPES BY GENERAL SITE EQUIPMENT.
- WHERE WORKING METHODS REQUIRE HIGHER CLASS PIPE, THE CONTRACTOR SHALL REFER TO AS 3725 (2007) TO DETERMINE THE APPROPRIATE PIPE CLASS. PROPOSED PIPE CLASS SHALL BE REVIEWED BY CORE PRIOR TO INSTALLATION.
- ALL INTERNAL WORKS WITHIN PROPERTY BOUNDARIES ARE TO COMPLY WITH THE REQUIREMENTS OF AS 3500 3.1 (2003) AND AS/NZS 3500 3.2 (2003).
- PRECAST PITS MAY BE USED EXTERNAL TO THE BUILDING SUBJECT TO APPROVAL BY CORE.
- ENLARGERS, CONNECTIONS AND JUNCTIONS TO BE PREFABRICATED FITTINGS WHERE PIPES ARE LESS THAN 300 DIA.
- WHERE SUBSOIL DRAINS PASS UNDER FLOOR SLABS AND VEHICULAR PAVEMENTS, UNSLOTTED uPVC SEWER GRADE PIPE IS TO BE USED.
- CARE IS TO BE TAKEN WITH LEVELS OF STORMWATER LINES. GRADES SHOWN ARE NOT TO BE REDUCED WITHOUT APPROVAL.
- GRATES AND COVERS SHALL CONFORM TO AS 3996.
- ALL BOX CULVERTS SHALL BE STRUCTURALLY DESIGNED BY THE MANUFACTURER AND DELIVERED TO SITE AS FIT FOR PURPOSE.
- AT ALL TIMES DURING CONSTRUCTION OF STORMWATER PITS, ADEQUATE SAFETY PROCEDURES SHALL BE TAKEN TO ENSURE AGAINST THE POSSIBILITY OF PERSONNEL FALLING DOWN PITS.
- 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.

SITWORKS NOTES

- ORIGIN OF LEVELS:- REFER SURVEY DRAWING AND SETOUT PLAN.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES TO BE REPORTED TO CORE.
- MAKE SMOOTH CONNECTION WITH EXISTING WORKS.
- ALL TRENCH BACKFILL MATERIAL SHALL BE COMPACTED TO THE SAME DENSITY AS THE ADJACENT MATERIAL.
- 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 AS 1289 5.2.1. (OR A DENSITY INDEX OF NOT LESS THAN 75)
- PROVIDE 10mm WIDE EXPANSION JOINTS BETWEEN BUILDINGS AND ALL CONCRETE OR UNIT PAVEMENTS.
- ASPHALTIC CONCRETE SHALL CONFORM TO R.M.S. SPECIFICATION R116.
- ALL BASECOURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, COMPACTED TO MINIMUM 98% MODIFIED DENSITY IN ACCORDANCE WITH AS 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF BASECOURSE MATERIAL PLACED.
- ALL SUB-BASE COURSE MATERIAL SHALL BE IGNEOUS ROCK QUARRIED MATERIAL TO COMPLY WITH R.M.S. FORM 3051, AND COMPACTED TO MINIMUM 95% MODIFIED DENSITY IN ACCORDANCE WITH A.S 1289 5.2.1 FREQUENCY OF COMPACTION TESTING SHALL NOT BE LESS THAN 1 TEST PER 50m² OF SUB-BASE COURSE MATERIAL PLACED.
- AS AN ALTERNATIVE TO THE USE OF IGNEOUS ROCK AS A SUB-BASE MATERIAL IN (9) A CERTIFIED RECYCLED CONCRETE MATERIAL COMPLYING WITH R.M.S. FORM 3051 WILL BE CONSIDERED. SUBJECT TO MATERIAL SAMPLES AND APPROPRIATE CERTIFICATIONS BEING PROVIDED TO THE SATISFACTION OF CARDNO.
- SHOULD THE CONTRACTOR WISH TO USE A RECYCLED PRODUCT THIS SHALL BE CLEARLY INDICATED IN THEIR TENDER AND THE PRICE DIFFERENCE BETWEEN AN IGNEOUS PRODUCT AND A RECYCLED PRODUCT SHALL BE CLEARLY INDICATED.
- 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.



ISSUE FOR DA

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| | | | | | | | | PROJECT : | REVISION : | |
| | | | | | | | | PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW | 04 | |
| | | | | | | | | DRAWING No : | C001 | |

PROPOSED CARPARK
AREA AT 60 FEDERAL
PARADE

PROPOSED CARPARK
AREA AT JUNCTION OF
ALFRED ROAD & GULLIVER
STREET

SITE PLAN
SCALE - 1:500

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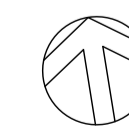


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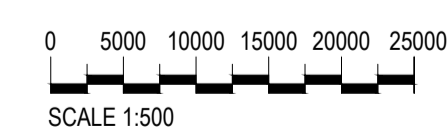
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HR

DRAWN:

RQ

DRAWING TITLE:

SITE PLAN

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

SCALE:

1:500

PROJECT No:

CPC 2760

REVISION:

04

DRAWING No:

C002



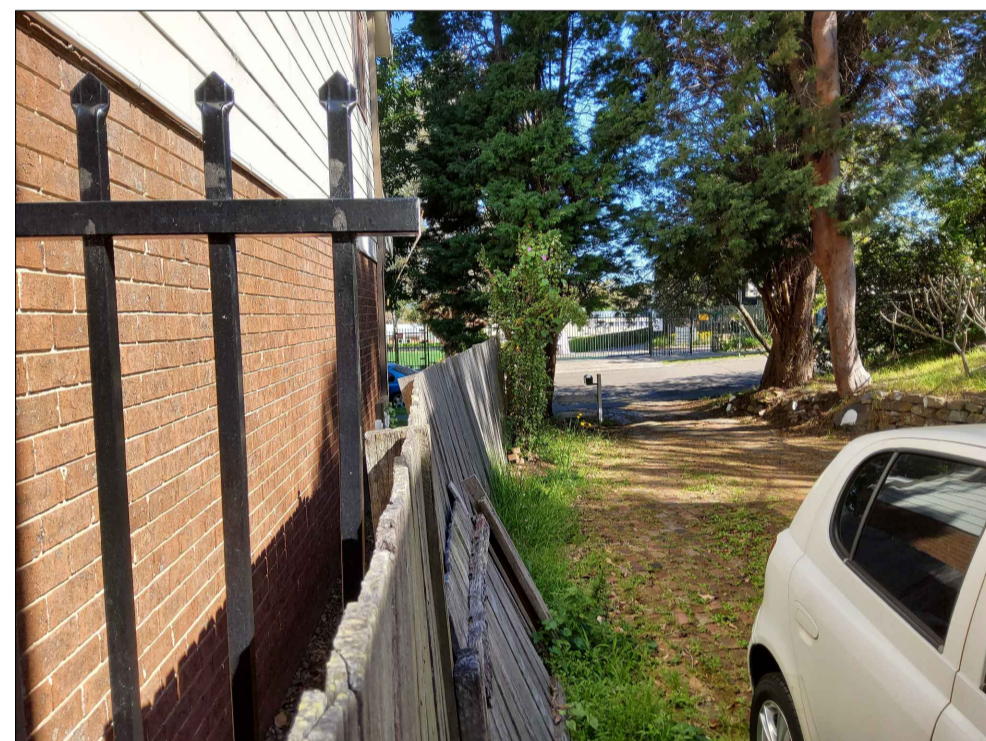
NORTHERN BOUNDARY NEAR COUNCIL DRAINAGE ASSET. MASONRY WALL TO BE RETAINED AND REPAIRED



EXISTING CONDITION OF COUNCIL DRAINAGE ASSET TO BE RETAINED



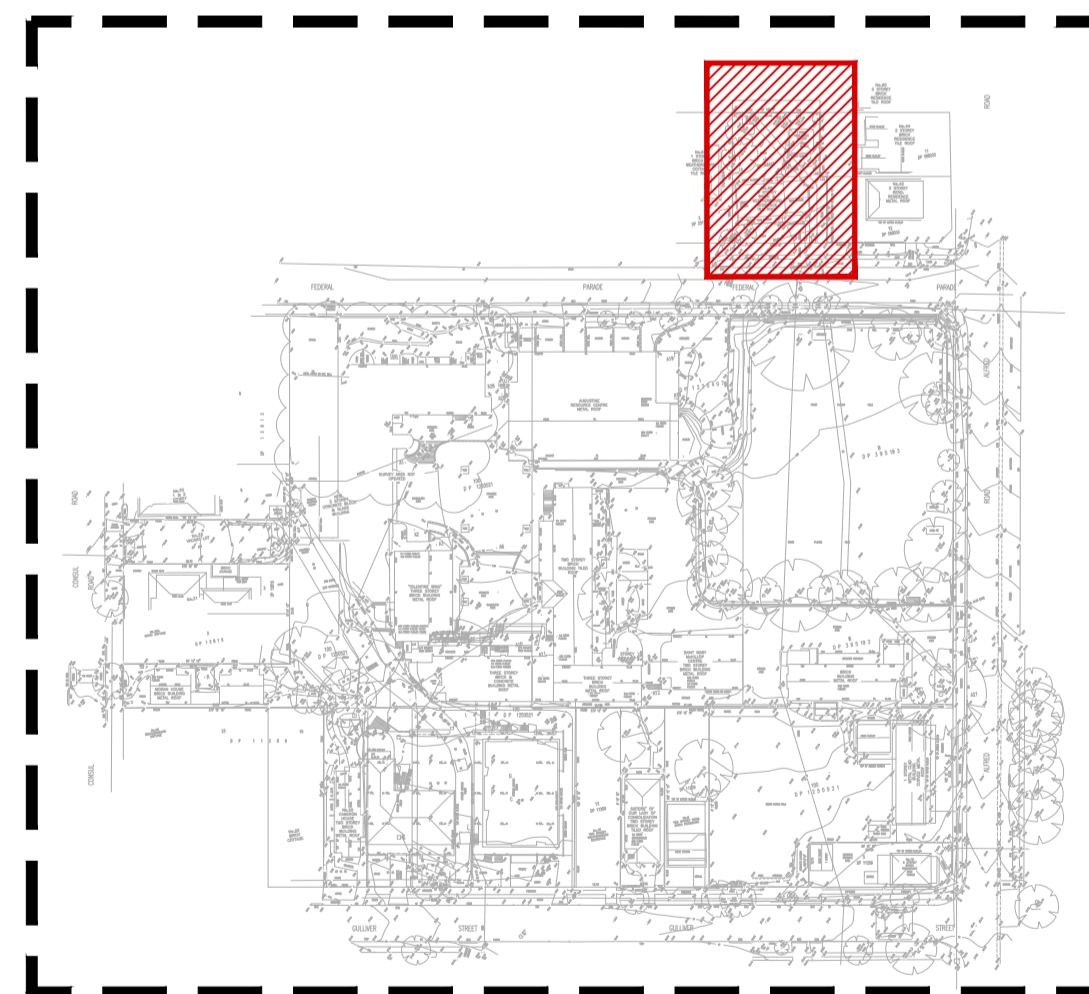
EXISTING BRICK MASONRY ALONG EASTERN BOUNDARY TO BE RETAINED AND REPAIRED FOR REUSE



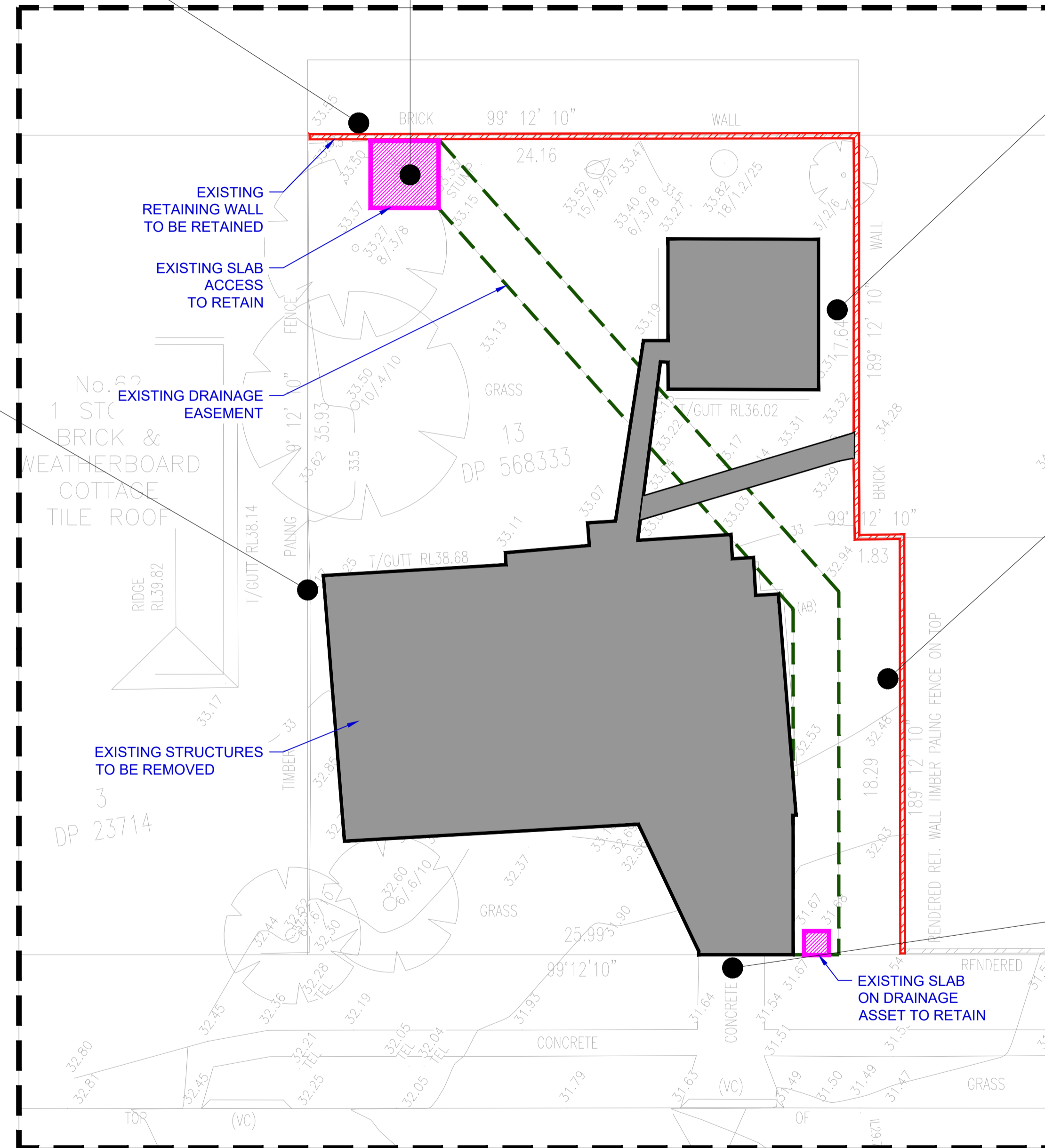
REPLACE EXISTING FENCE, WITH 1.8M HIGH ACOUSTIC BARRIER



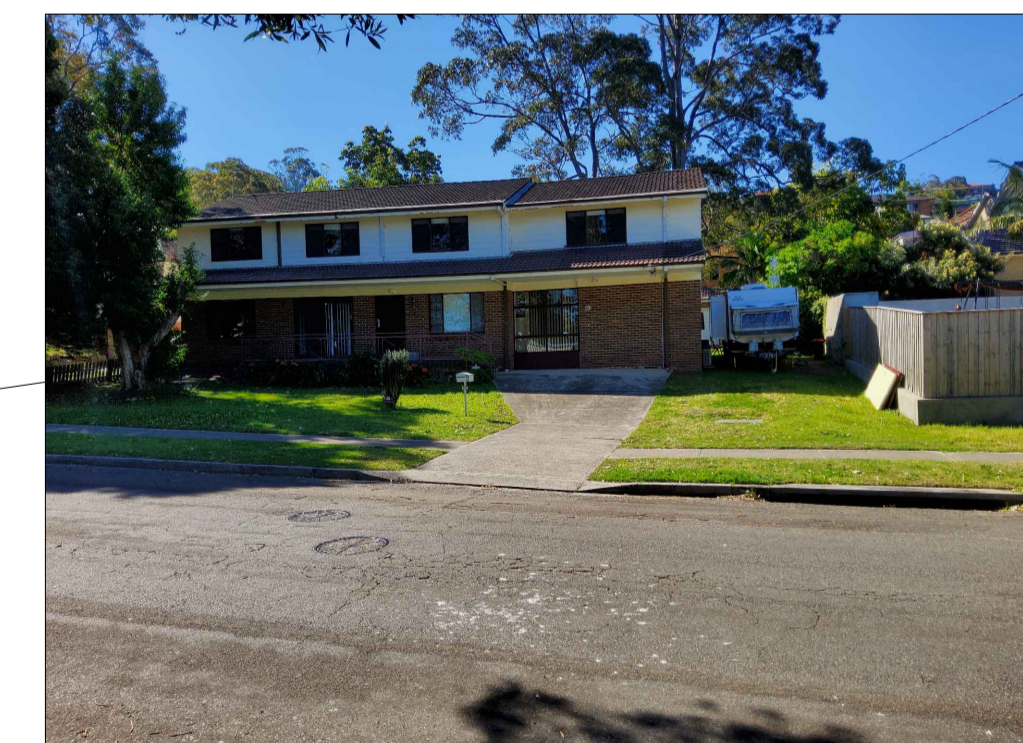
EXISTING BRICK MASONRY ALONG EASTERN BOUNDARY TO BE RETAINED AND REPAIRED FOR REUSE



KEY PLAN
SCALE - 1:2000



DEMOLITION & SITE MANAGEMENT PLAN
SCALE - 1:150



EXISTING DRIVEWAY AND EXISTING BUILDING, TO BE DEMOLISHED FOR PROPOSED DRIVEWAY AND HARDSTAND AREA

ISSUE FOR DA

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CORE PROJECT CONSULTING

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SCALE 1:150

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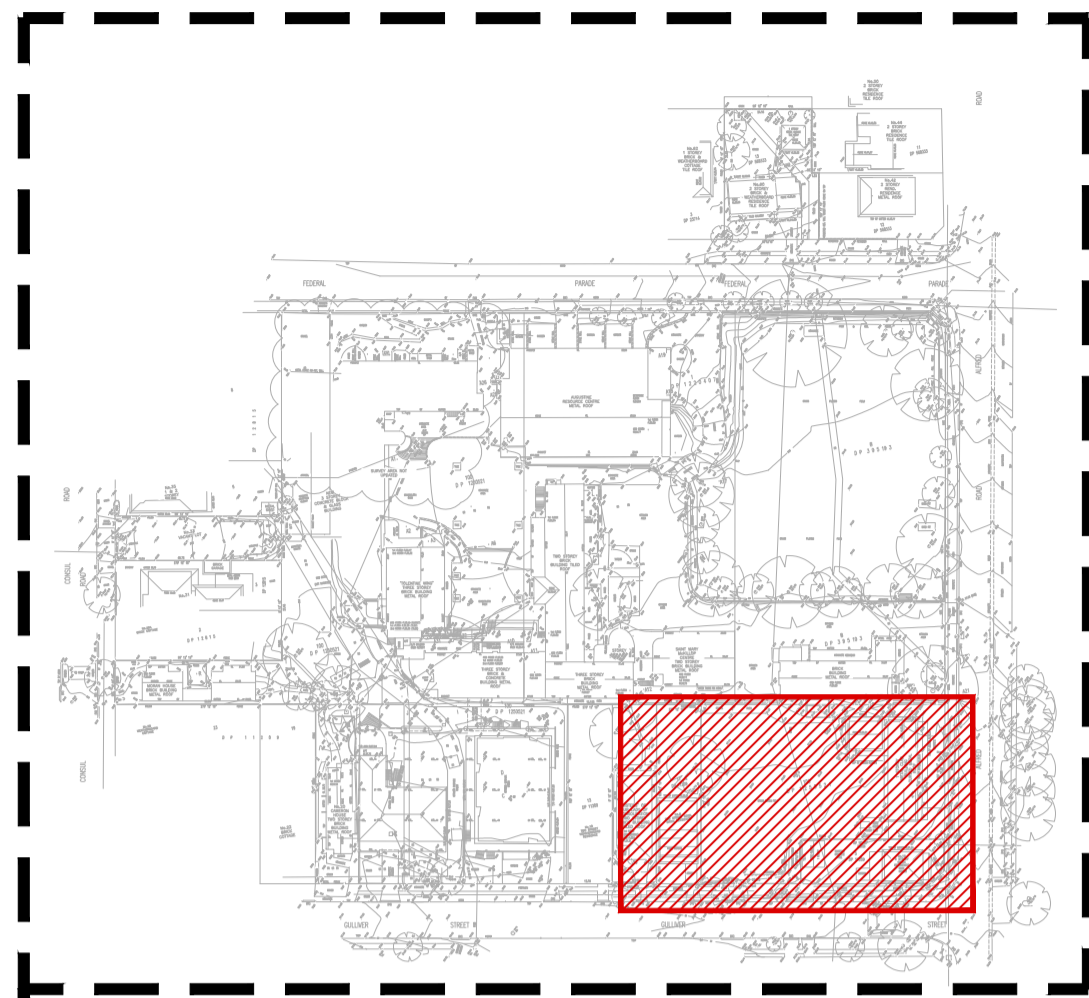
DESIGNED: HR

DRAWN: RQ

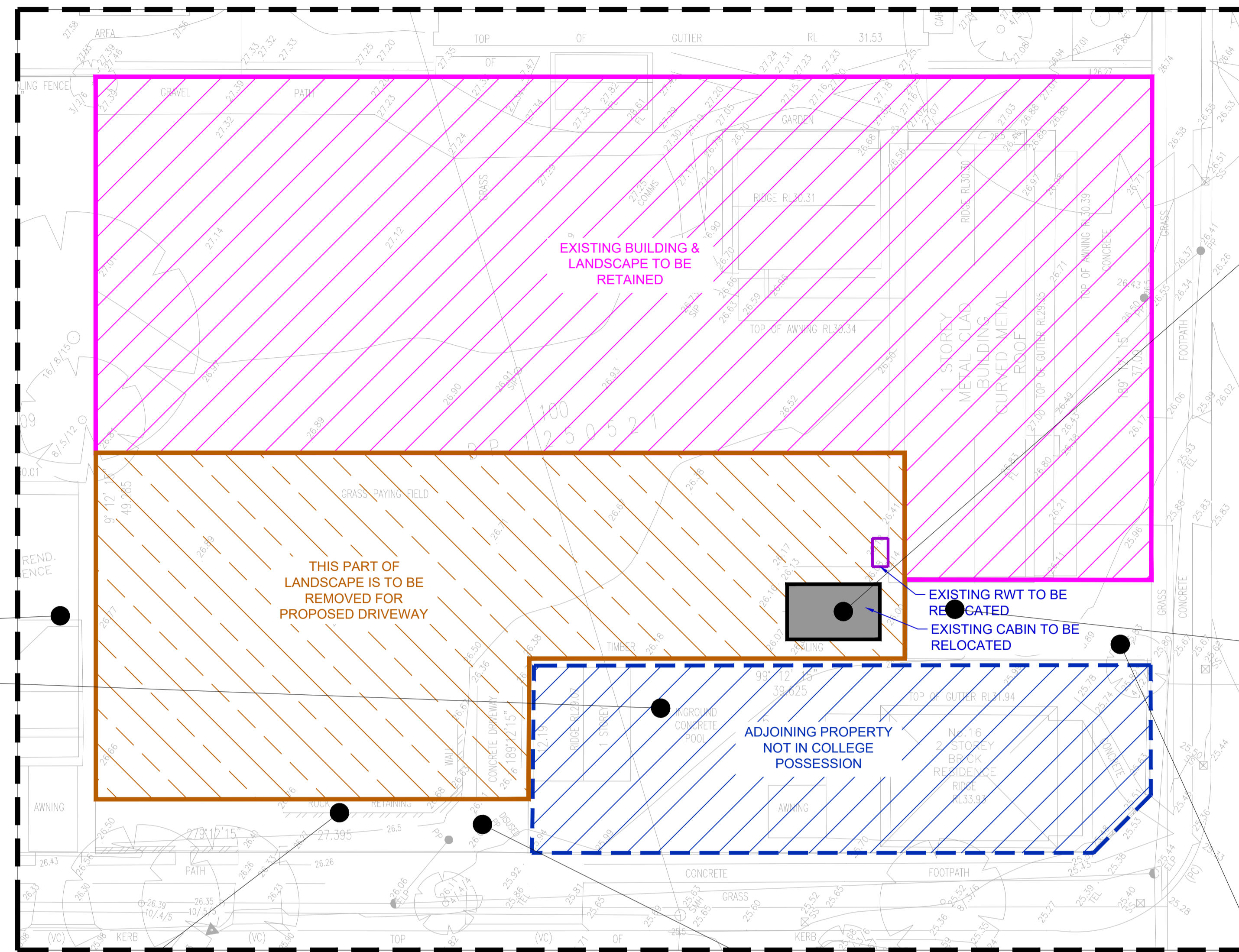
DRAWING TITLE: DEMOLITION & SITE MANAGEMENT PLAN 60 FEDERAL PARADE

PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW

| DATE: | SCALE: |
|-------------|-----------|
| 06/12/2021 | 1:150 |
| PROJECT No: | REVISION: |
| CPC 2760 | 04 |
| DRAWING No: | C100 |



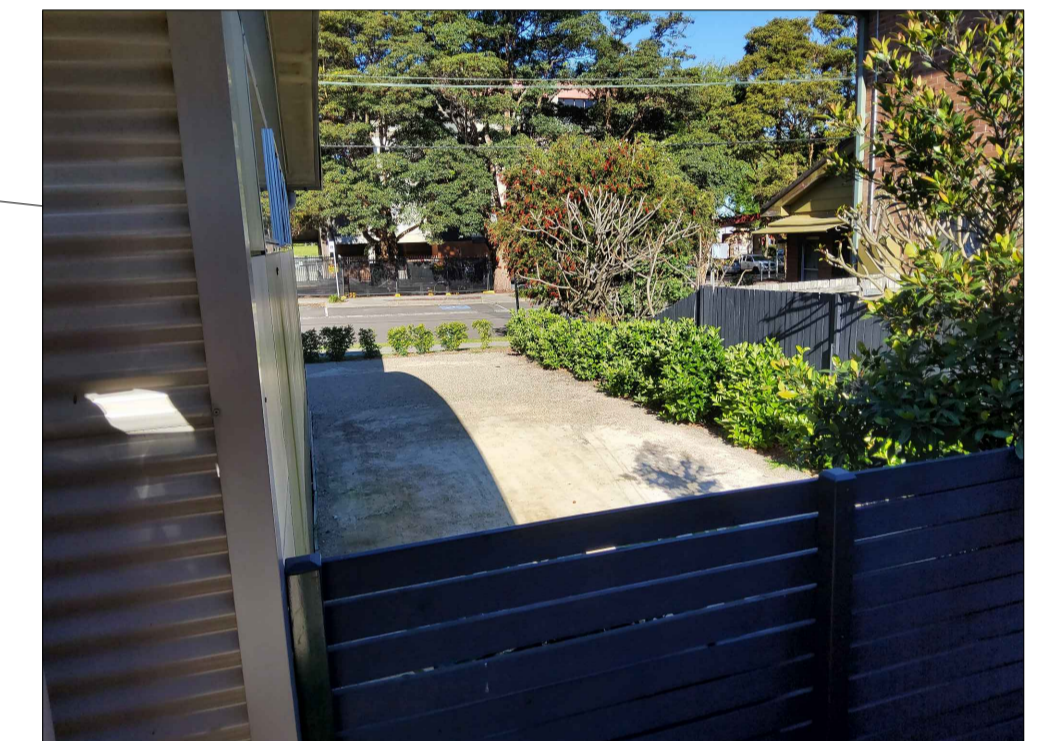
KEY PLAN
SCALE - 1:2000



DEMOLITION & SITE MANAGEMENT PLAN
SCALE - 1:200



EXISTING STRUCTURE TO BE RELOCATED



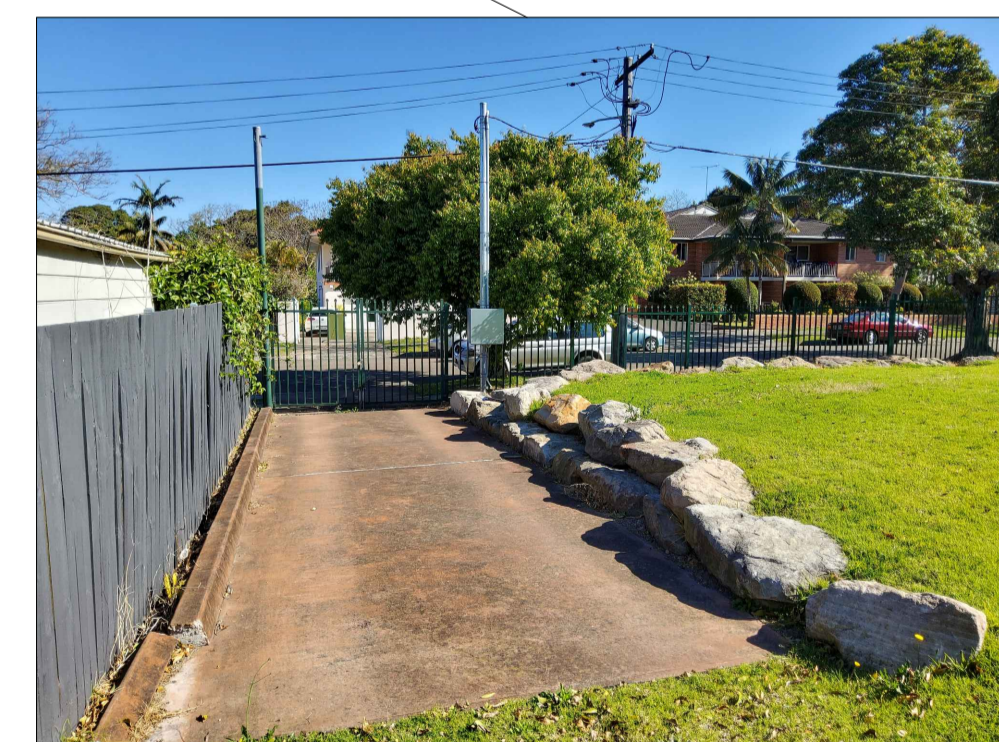
VIEW OF THE PASSAGE AND FENCE ALONG THE EASTERN BOUNDARY FROM INSIDE



EXISTING FENCE ON WESTERN SIDE



EXISTING ROCK RETAINING WALL ALONG SOUTHERN BOUNDARY TO BE REMOVED, FENCE TO BE RETAINED



EXISTING HARDSTAND ALONG NEIGHBOURING PROPERTY TO BE DEMOLISHED AND GATE TO BE RELOCATED TO THE NEW EGRESS



EXISTING SITE PASSAGE TO THE SOUTH OF COLLEGE BUILDING, LANDSCAPE TO BE REMOVED AND REPLANTED AS PER LANDSCAPE PLAN

ISSUE FOR DA

| ISSUE | DATE | AMENDMENT |
|-------|------------|----------------------|
| 00 | 08.10.2021 | ISSUE FOR DISCUSSION |
| 01 | 15.10.2021 | ISSUE FOR DISCUSSION |
| 02 | 29.10.2021 | ISSUE FOR DA |
| 03 | 29.11.2021 | ISSUE FOR DA |
| 04 | 06.12.2021 | ISSUE FOR DA |

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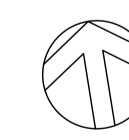


CIVIL

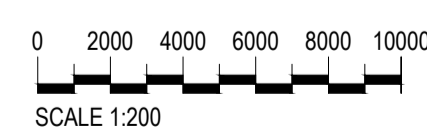


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VERIFIED:

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DESIGNED:

HR

DRAWN:

RQ

DRAWING TITLE:

DEMOLITION & SITE MANAGEMENT PLAN ALFRED ROAD

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

SCALE:

1:200

PROJECT No:

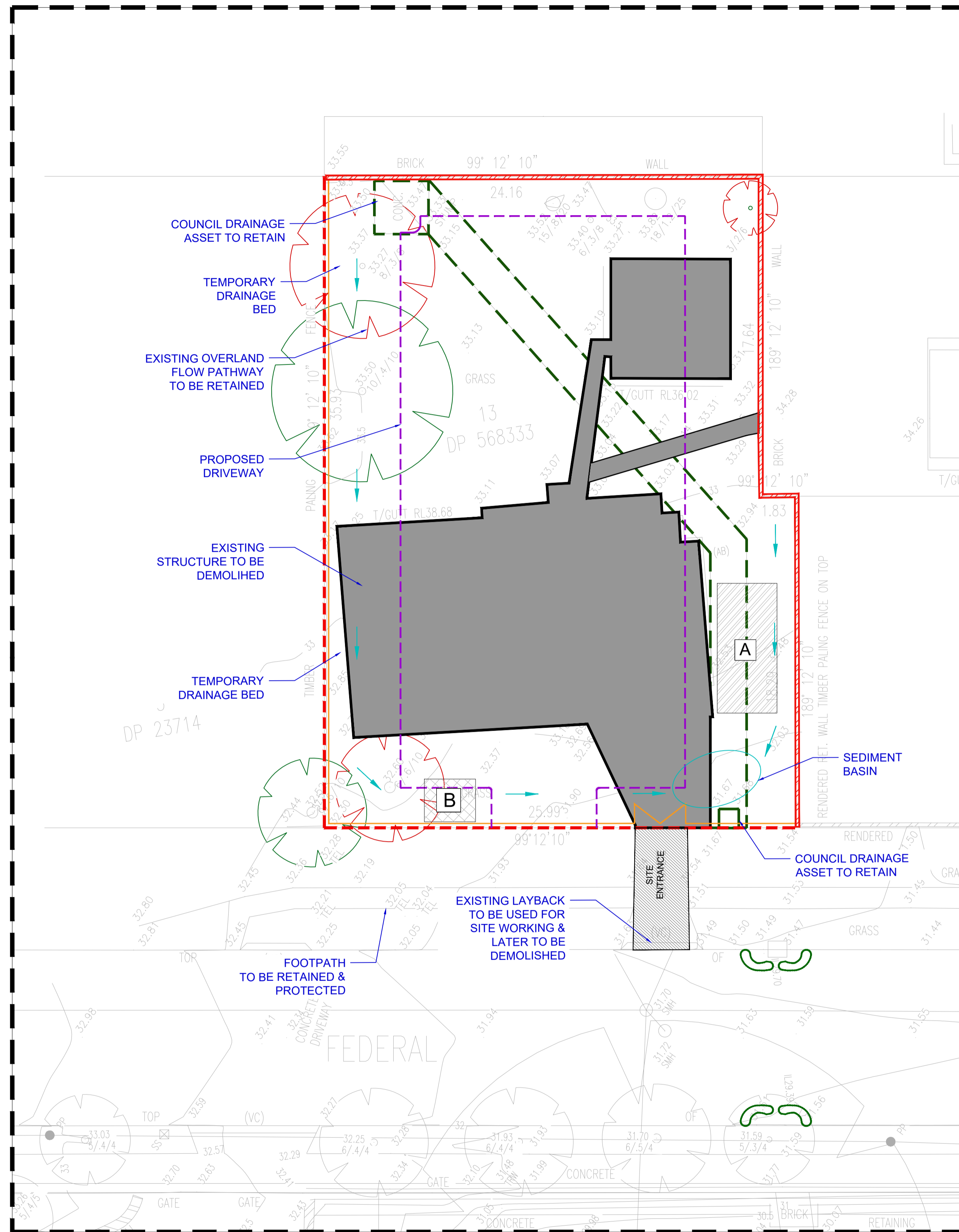
CPC 2760

REVISION:














04

DRAWING No:

C101



LEGEND

-  SITE ENTRANCE
-  SEDIMENT FENCE
-  BARRIER FENCE
-  PROPOSED DEVELOPMENT
-  EXISTING STRUCTURES TO BE DEMOLISHED
-  MATERIAL STORAGE
-  TOILET FACILITY
-  SANDBAGS
-  TREE TO BE RETAINED
-  TREE TO BE REMOVED
-  TEMPORARY DRAINAGE
-  ASSET TO RETAIN
-  EXISTING WALL TO BE RETAINED

SEDIMENTATION & EROSION CONTROL PLAN
SCALE - 1:150

ISSUE FOR DA

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| 03 | 29.11.2021 | ISSUE FOR DA |
| 04 | 06.12.2021 | ISSUE FOR DA |

CLIENT / BUILDER / ARCHITECT

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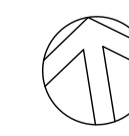
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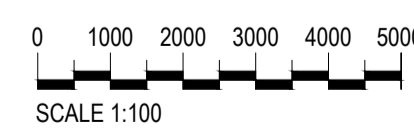
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VERIFIED:

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DESIGNED:

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DRAWN:

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DRAWING TITLE:

SEC PLAN & DETAILS
60 FEDERAL PARADE

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

PROJECT No:

CPC 2760

DRAWING No:

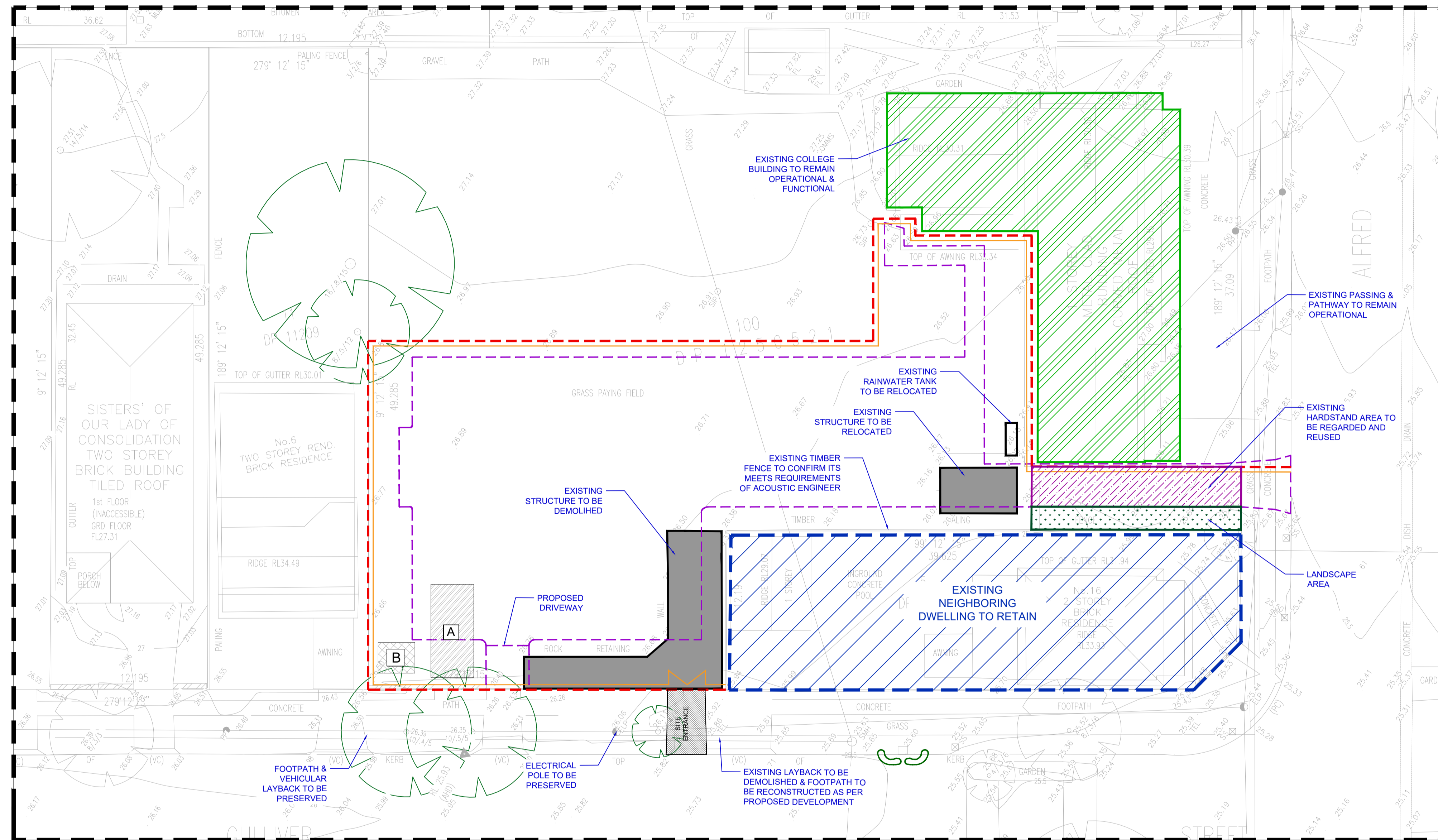
C200

SCALE:




1:100

REVISION:

04




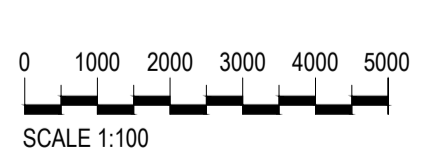


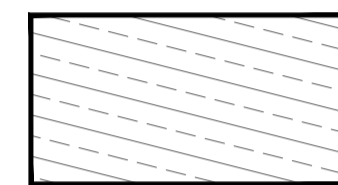
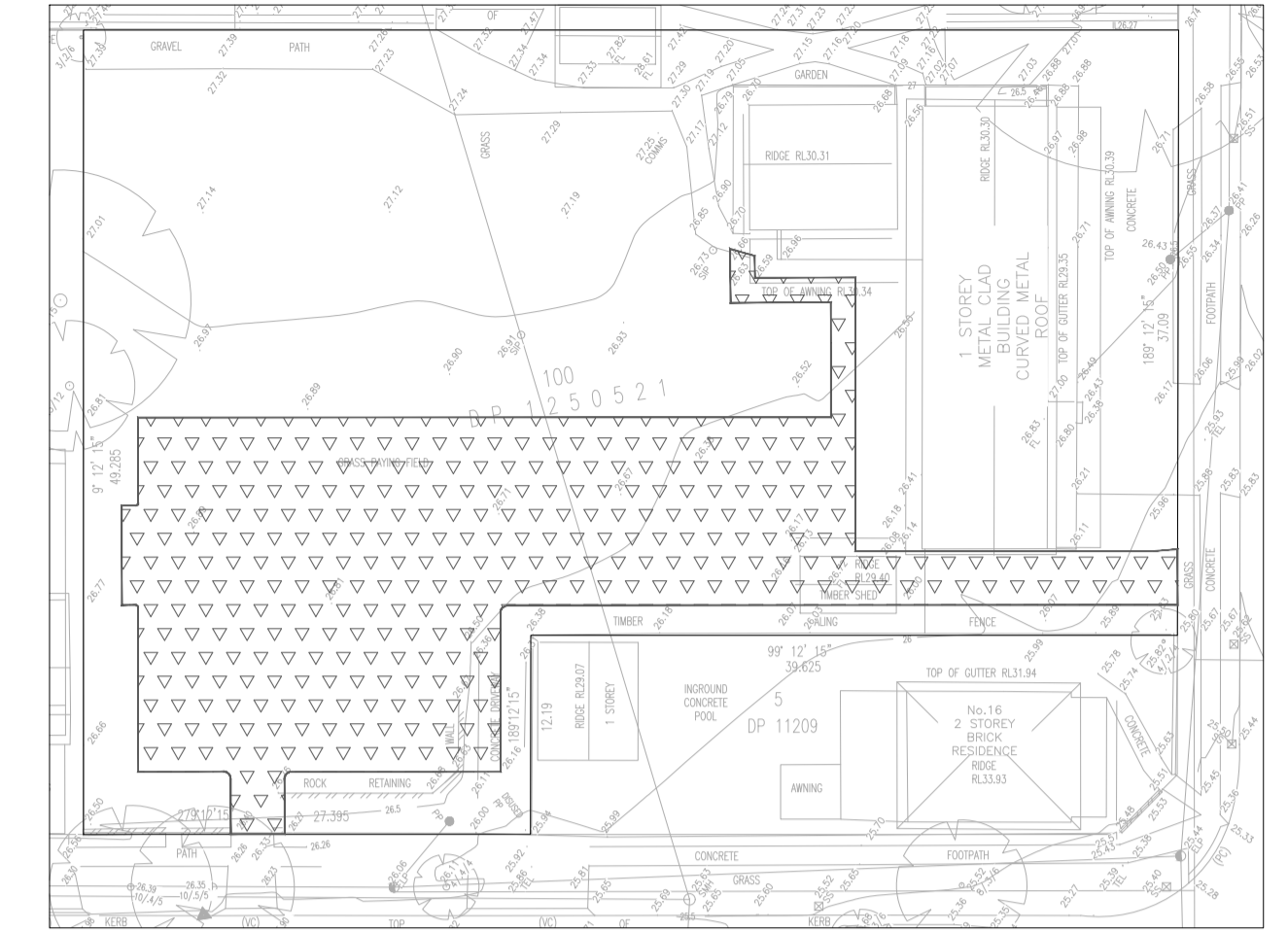
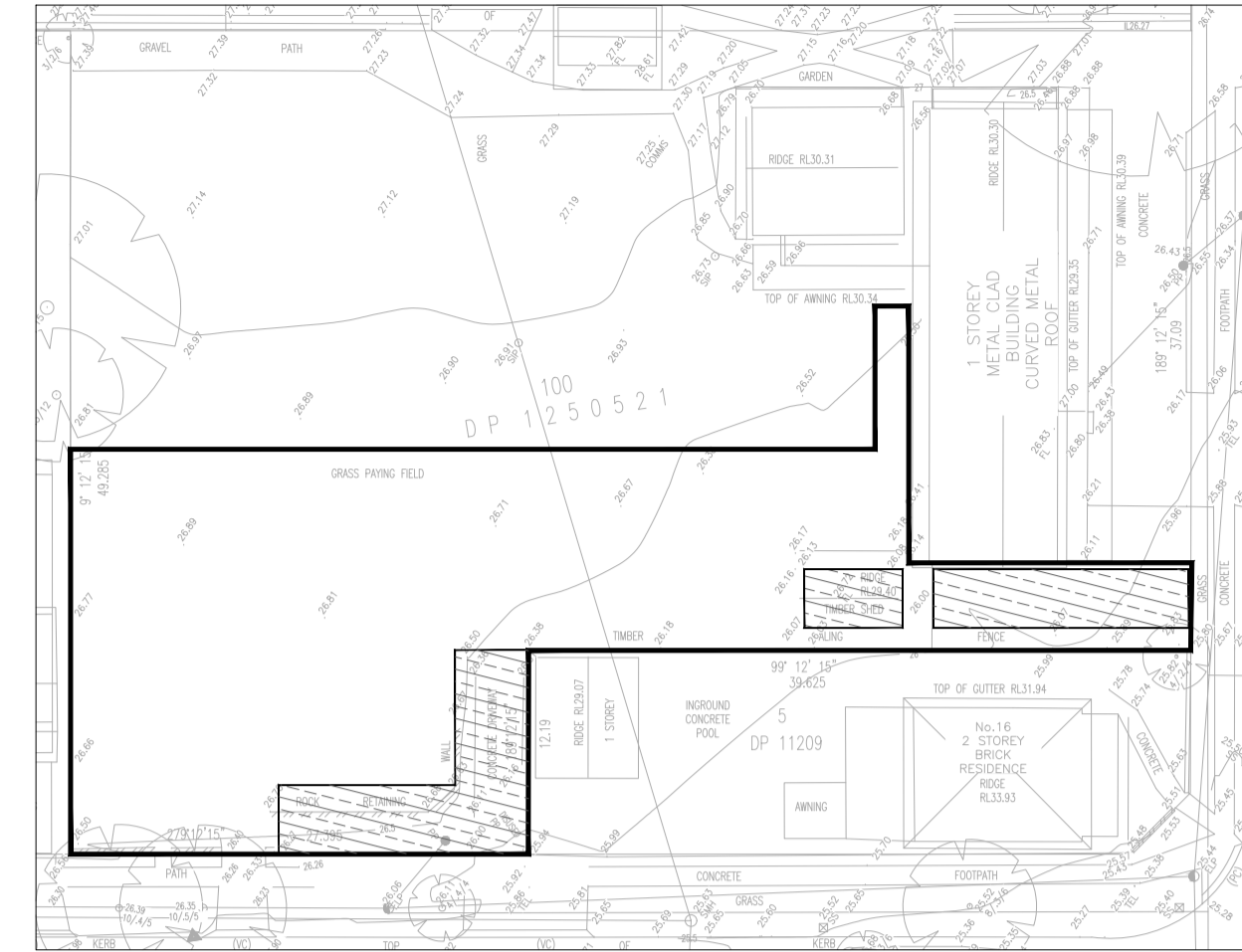
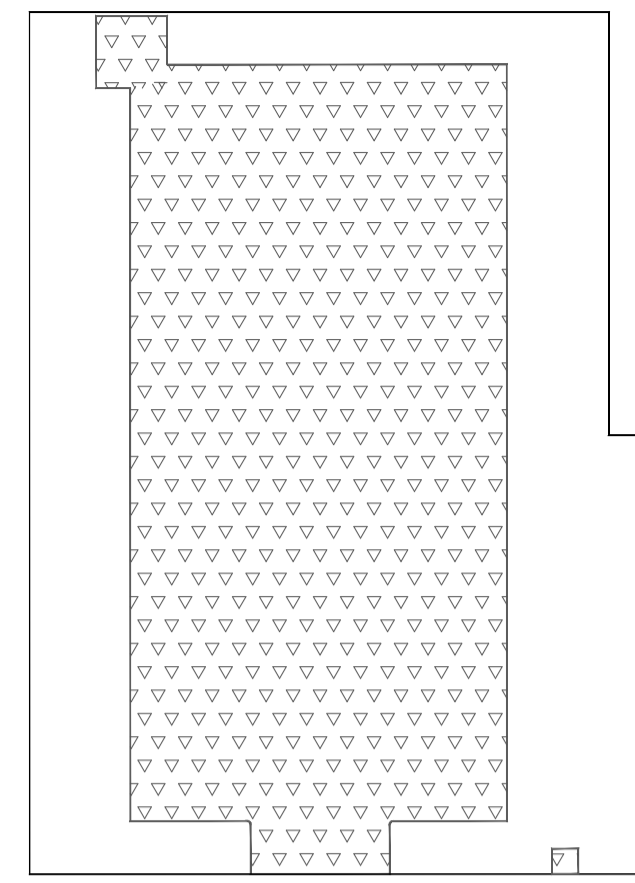
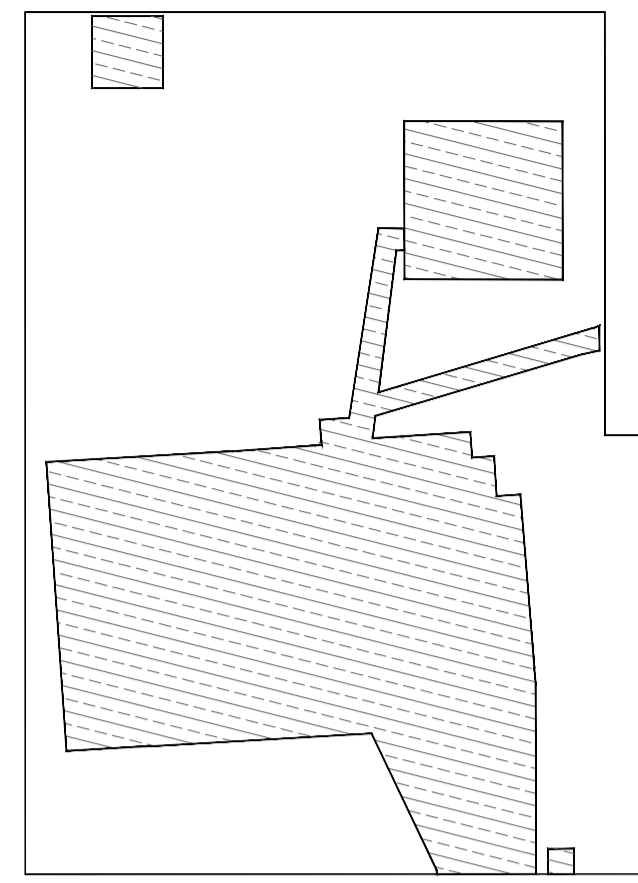
LEGEND

-  SITE ENTRANCE
-  SEDIMENT FENCE
-  BARRIER FENCE
-  PROPOSED DEVELOPMENT
-  EXISTING BUILDING TO BE DEMOLISHED
-  MATERIAL STORAGE
-  TOILET FACILITY
-  SANDBAGS
-  TREE TO BE RETAINED
-  TREE TO BE REMOVED

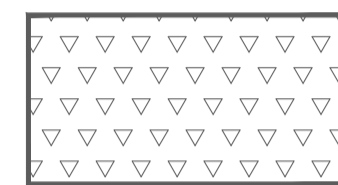
SEDIMENTATION & EROSION CONTROL PLAN
SCALE - 1:200

ISSUE FOR DA

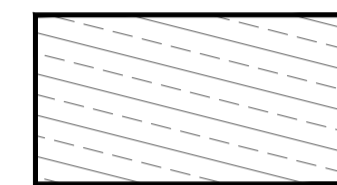
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| 01 | 15.10.2021 | ISSUE FOR DISCUSSION | | | | | HR | | PROJECT: | CPC 2760 | REVISION: | 04 |
| 02 | 29.10.2021 | ISSUE FOR DA | | | | | RQ | | PROPOSED CARPARK DESIGN | | | |
| 03 | 29.11.2021 | ISSUE FOR DA | | | | | | | ST AUGUSTINE'S COLLEGE | | | |
| 04 | 06.12.2021 | ISSUE FOR DA | | | | | | | FEDERAL PARADE, BROOKVALE NSW | | | |
| | | | | | | | | DRAWING No: | C201 | | | |



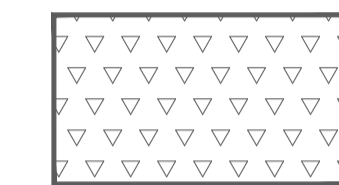
PRE DEVELOPMENT PAVED AREA



POST DEVELOPMENT PAVED AREA



PRE DEVELOPMENT PAVED AREA



POST DEVELOPMENT PAVED AREA

| | |
|-----------------|------------------------------------|
| SITE AREA | 901.53 m ² (AS PER CAD) |
| IMPERVIOUS AREA | 342.52 m ² (37.99%) |
| PERVIOUS AREA | 559.01 m ² (62.01%) |

| | |
|-----------------|------------------------------------|
| SITE AREA | 901.53 m ² (AS PER CAD) |
| IMPERVIOUS AREA | 515.18m ² (57.14%) |
| PERVIOUS AREA | 386.35 m ² (42.86%) |

| | |
|-----------------|------------------------------------|
| SITE AREA | 926.69 m ² (AS PER CAD) |
| IMPERVIOUS AREA | 171.04 m ² (18.45%) |
| PERVIOUS AREA | 755.65 m ² (81.55%) |

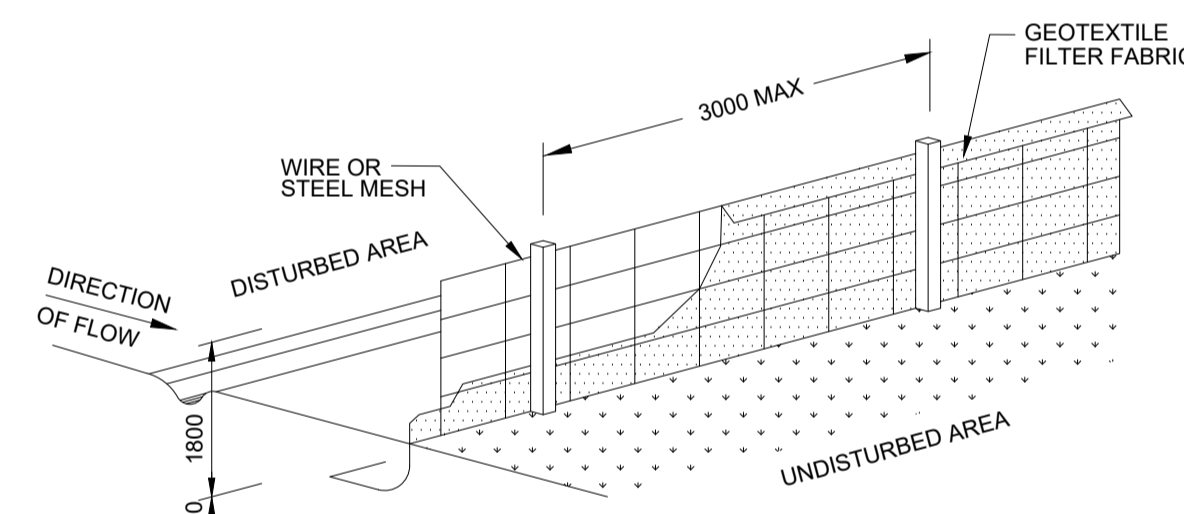
| | |
|-----------------|------------------------------------|
| SITE AREA | 926.96 m ² (AS PER CAD) |
| IMPERVIOUS AREA | 841.02m ² (90.73%) |
| PERVIOUS AREA | 85.94 m ² (9.27%) |

CATCHMENTS ANALYSIS

AS PER CATCHMENT ANALYSIS OF PRE AND POST DEVELOPMENT IT IS EVALUATED THAT THERE IS 19.15% INCREASE IN THE IMPERVIOUS AREA. THE SITE HAS A EXISTING DWELLING WITH AN OUTBUILDING WHICH WILL BE DEMOLISHED. DUE TO THIS INCREASE IN IMPERVIOUS AREA STORMWATER MANAGEMENT IS PROPOSED IN ACCORDANCE WITH COUNCIL DCP.

CATCHMENTS ANALYSIS

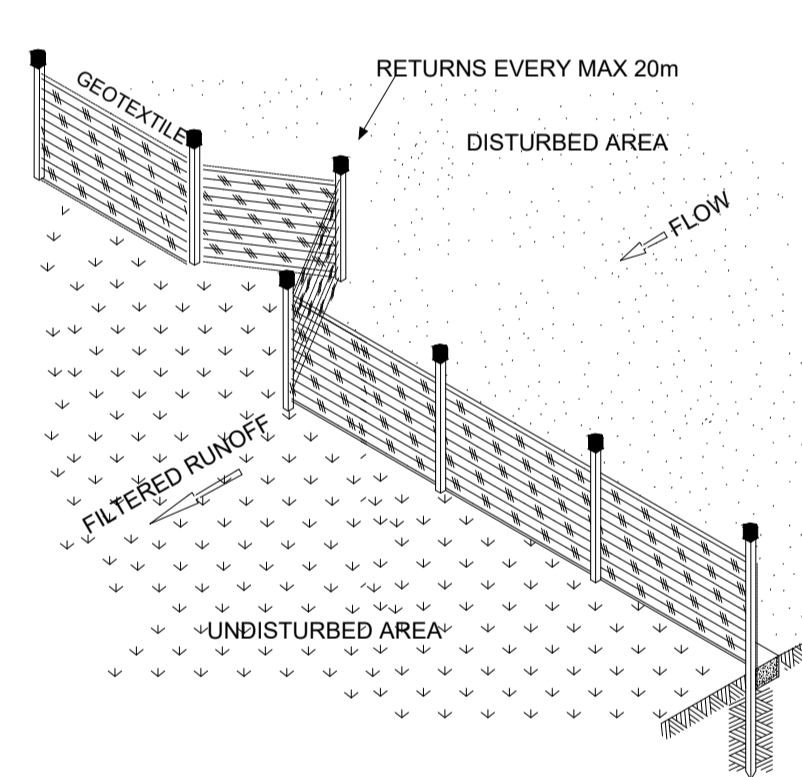
AS PER CATCHMENT ANALYSIS OF PRE AND POST DEVELOPMENT IT IS EVALUATED THAT THERE IS 72.28% INCREASE IN THE IMPERVIOUS AREA. BEFORE DEVELOPMENT THE MAJORITY OF THE AREA WAS A PART OF LANDSCAPE AREA. DUE TO THIS INCREASE IN IMPERVIOUS AREA STORMWATER MANAGEMENT IS PROPOSED IN ACCORDANCE WITH COUNCIL DCP.



SEDIMENT FENCE

- TO BE USED AS A TEMPORARY BARRIER TO INTERCEPT SEDIMENT LADEN RUN-OFF FROM SMALL DRAINAGE AREAS
- MAXIMUM DRAINAGE AREA FOR OVERLAND FLOW TO A SILT FENCE SHALL NOT EXCEED 0.6ha PER LINE OF FENCE
- DO NOT USE IF CONCENTRATED FLOW IS DIRECTED TO SILT FENCE
- MAXIMUM ALLOWABLE DISTANCE BETWEEN SILT FENCE FOR VARIOUS GRADES LISTED BELOW:

| SLOPE V:H | MAX. SLOPE LENGTH (m) |
|------------------|-----------------------|
| 1:2 | 15 |
| 1:3 | 25 |
| 1:4 | 40 |
| 1:5 | 50 |
| FLATTER THAN 1:5 | 60 |



SEDIMENT FENCE ISOMETRIC

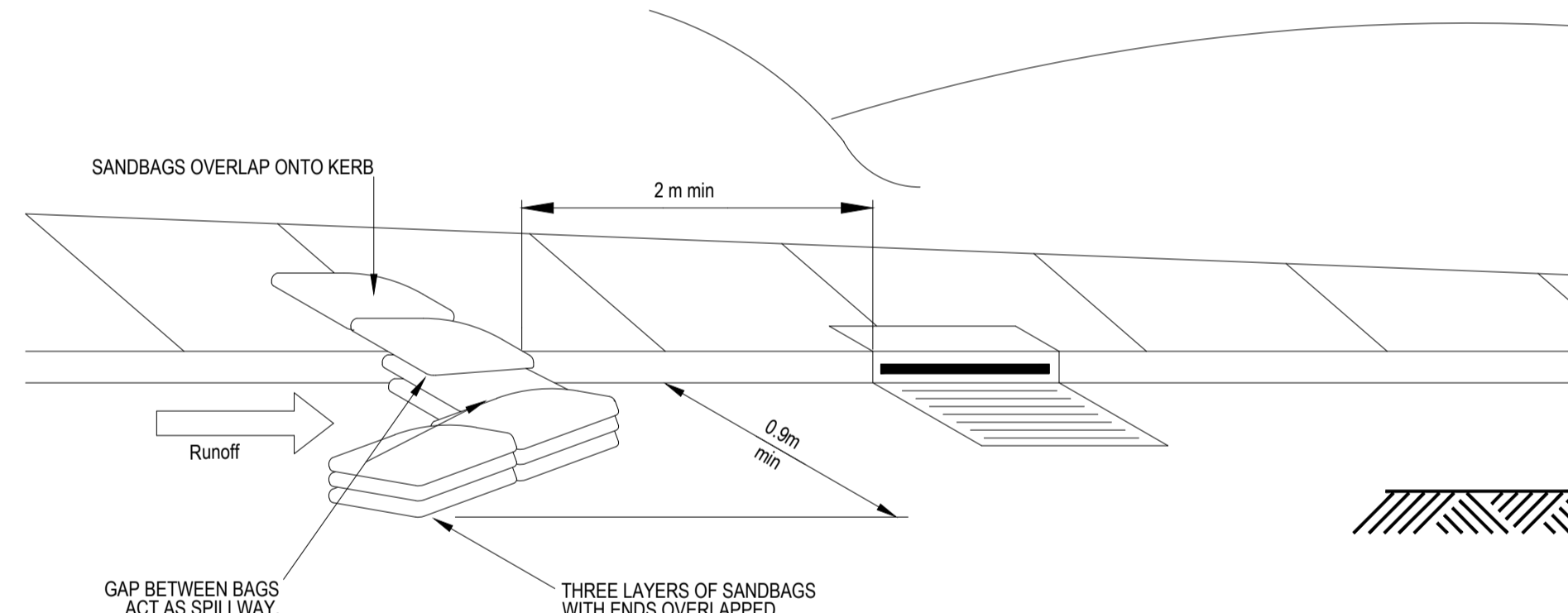
NOT TO SCALE

SEDIMENT CONTROL DEVICES

- IF SILT FENCE IS NOT USED HAY BALES CAN BE USED FOR SURFACE INLET PIT PROTECTION
- ALL HAY BALES SHALL BE BOUND WITH WIRE. HAY BALES SHALL BE PLACED END TO END IN A SINGLE ROW AND EMBEDDED INTO THE SOIL TO A DEPTH OF 100mm. EACH BALES SHALL BE SECURELY ANCHORED WITH TWO STEEL STAKES DRIVEN 600mm INTO THE GROUND AND LOCATED ON THE BALE CENTERLINE.
- FILTER FENCE SHALL BE CONSTRUCTED BY STRETCHING A FILTER FABRIC (PROPEX OR SIMILAR) BETWEEN POSTS AT 3m CENTERS MAXIMUM. FABRIC SHALL BE BURIED INTO THE GROUND 200mm ALONG ITS LOWER EDGE.

TEMPORARY SITE CONTROL FOR ENTRY / EXIT AREAS

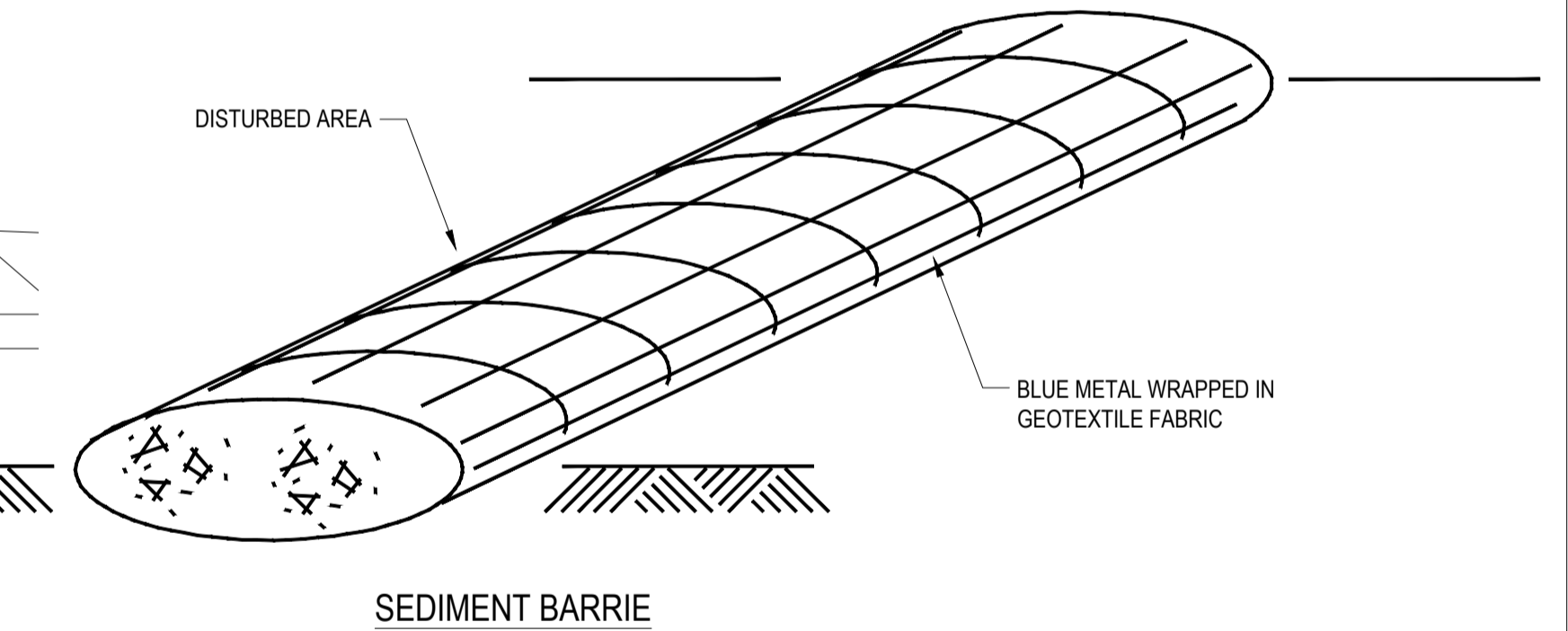
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC ROADS
- PERIODIC TOP DRESSINGS WITH ADDITIONAL AGGREGATE MAY BE REQUIRED TO KEEP THE SITE CONTROL IN A 'USEABLE STATE'
- ALL SEDIMENT SPILLED, DROPPED OR WASHED ONTO PUBLIC ROADS MUST BE REMOVED IMMEDIATELY AND CHECKED DAILY.
- REMOVAL AND CLEANING OF PUBLIC ROADS BY BROOMS AND SHOVELS ETC. WASHING DOWN ROADS IS NOT PERMITTED.



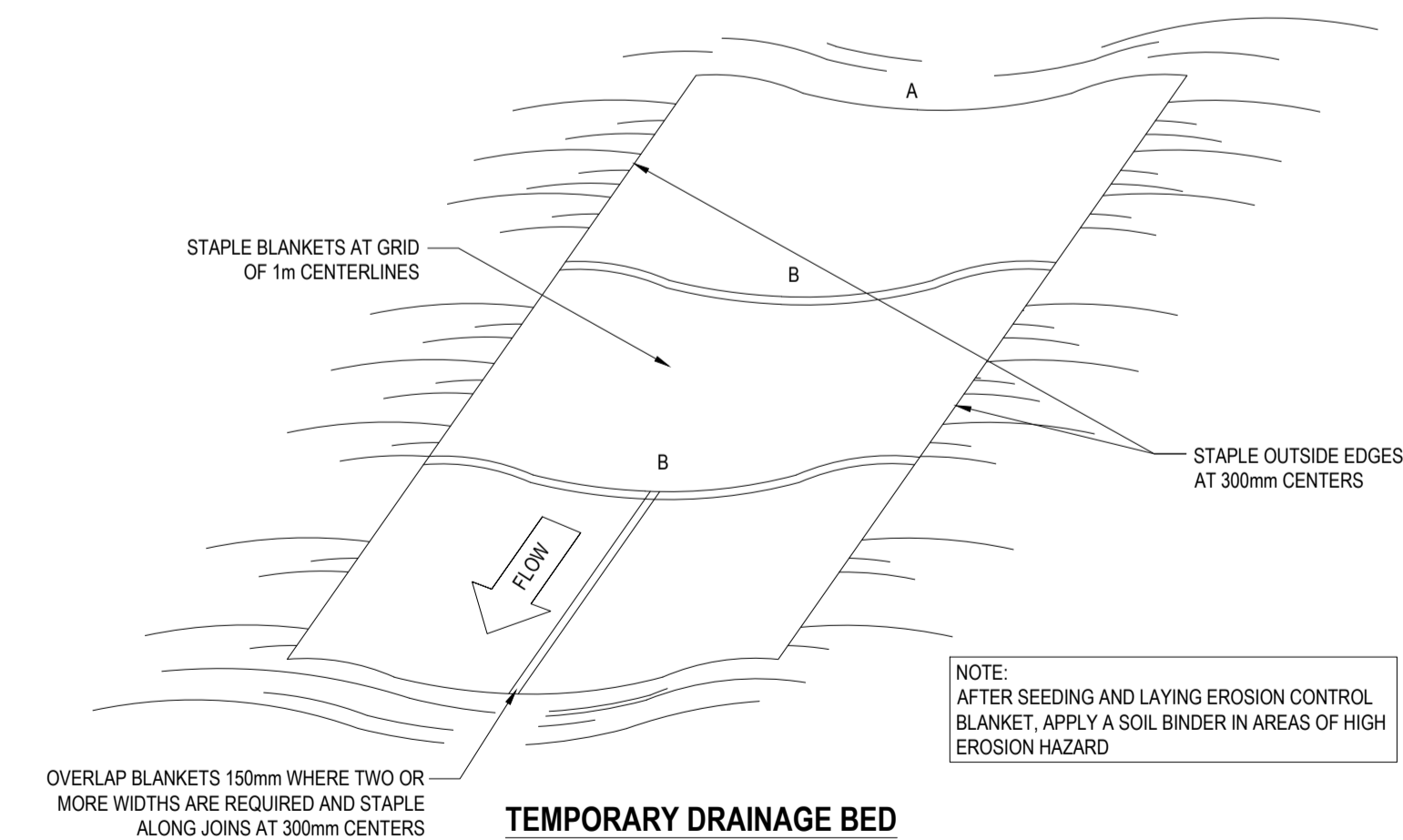
SANDBAG KERB INLET SEDIMENT TRAP

EARTH WET BASIN (EARTH BANK)

- REMOVE ALL VEGETATION AND TOPSOIL FROM UNDER THE DAM WALL AND FROM WITHIN THE STORAGE AREA.
- CONSTRUCT A CUT-OFF TRENCH 500mm DEEP AND 1200mm WIDE ALONG THE CENTERLINE OF THE EMBANKMENT EXTENDING TO A POINT ON THE GULLY WALL LEVEL WITH THE RISER CREST.
- MAINTAIN THE TRENCH FREE WATER AND RE-COMPACT THE MATERIALS WITH EQUIPMENT AS SPECIFIED IN THE SWMP TO 95% STANDARD PROCTOR DENSITY.
- SELECT FILL FOLLOWING THE SWMP THAT IS FREE ROOTS, WOOD, ROCK, LARGE STONE OR FOREIGN MATERIAL.
- PREPARE THE SITE UNDER THE EMBANKMENT BY RIPPING TO AT LEAST 100mm TO HELP BOND COMPACTED FILL TO EXISTING SUBSTRATE.
- SPREAD THE FILL IN 100mm TO 150mm LAYERS AND COMPACT IT AT OPTIMUM MOISTURE CONTENT FOLLOWING THE SWMP.
- CONSTRUCT THE EMERGENCY SPILLWAY.
- REHABILITATE THE STRUCTURE FOLLOWING THE SWMP.



SEDIMENT BARRIER



TEMPORARY DRAINAGE BED

NOTE: AFTER SEEDING AND LAYING EROSION CONTROL BLANKET, APPLY A SOIL BINDER IN AREAS OF HIGH EROSION HAZARD

EROSION CONTROL MEASURES.

- ALL EROSION AND SEDIMENT CONTROL MEASURES, (INCLUDING RE-VEGETATION AND STORAGE OF SOIL AND TOP SOIL) SHALL BE IMPLEMENTED TO THE DEPARTMENT OF CONSERVATION OF NEW SOUTH WALES STANDARDS
- TOPSOIL FROM ALL AREAS TO BE DISTURBED, SHALL BE STOCK PILED AND LATER RESPREAD TO AID VEGETATION AS SHOWN IN C102
- ALL DRAINAGE WORKS SHALL BE CONSTRUCTED AND STABILIZED AS EARLY AS POSSIBLE DURING DEVELOPMENT.
- SEDIMENT TRAPS SHALL BE CONSTRUCTED AROUND ALL PITS.
- DISTURBANCE TO VEGETATION SHALL BE LIMITED TO FILL AREAS, ROADWAYS AND DRAINAGE LINES. AREAS OTHER THAN SPECIFIED SHALL BE DISTURBED ONLY WITH PRIOR APPROVAL FROM THE COUNCIL ENGINEER.
- ALL DISTURBED AREAS SHALL BE REVEGETATED AS SOON AS THE RELEVANT WORKS ARE COMPLETED
- ALL SEDIMENT BASINS AND TRAPS SHALL BE CLEANED WHEN THE STRUCTURES ARE A MAXIMUM OF 60% FULL OF SOLID MATERIALS, INCLUDING DURING MAINTENANCE PERIOD.
- A STRIP OF TURF BEHIND AND FOR TOTAL LENGTH OF ALL THE KERBS SHALL BE PROVIDED.
- PIT GUARDS SHALL BE INSTALLED AROUND DRAINAGE PITS AT THE COMPLETION OF ROAD WORKS.

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| 02 | 29.10.2021 | ISSUE FOR DA | |
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VERIFIED: AC

DESIGNED: HR

DRAWN: RQ

DRAWING TITLE: AREA ANALYSIS & SEC DETAILS

PROJECT: PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE: 06/12/2021

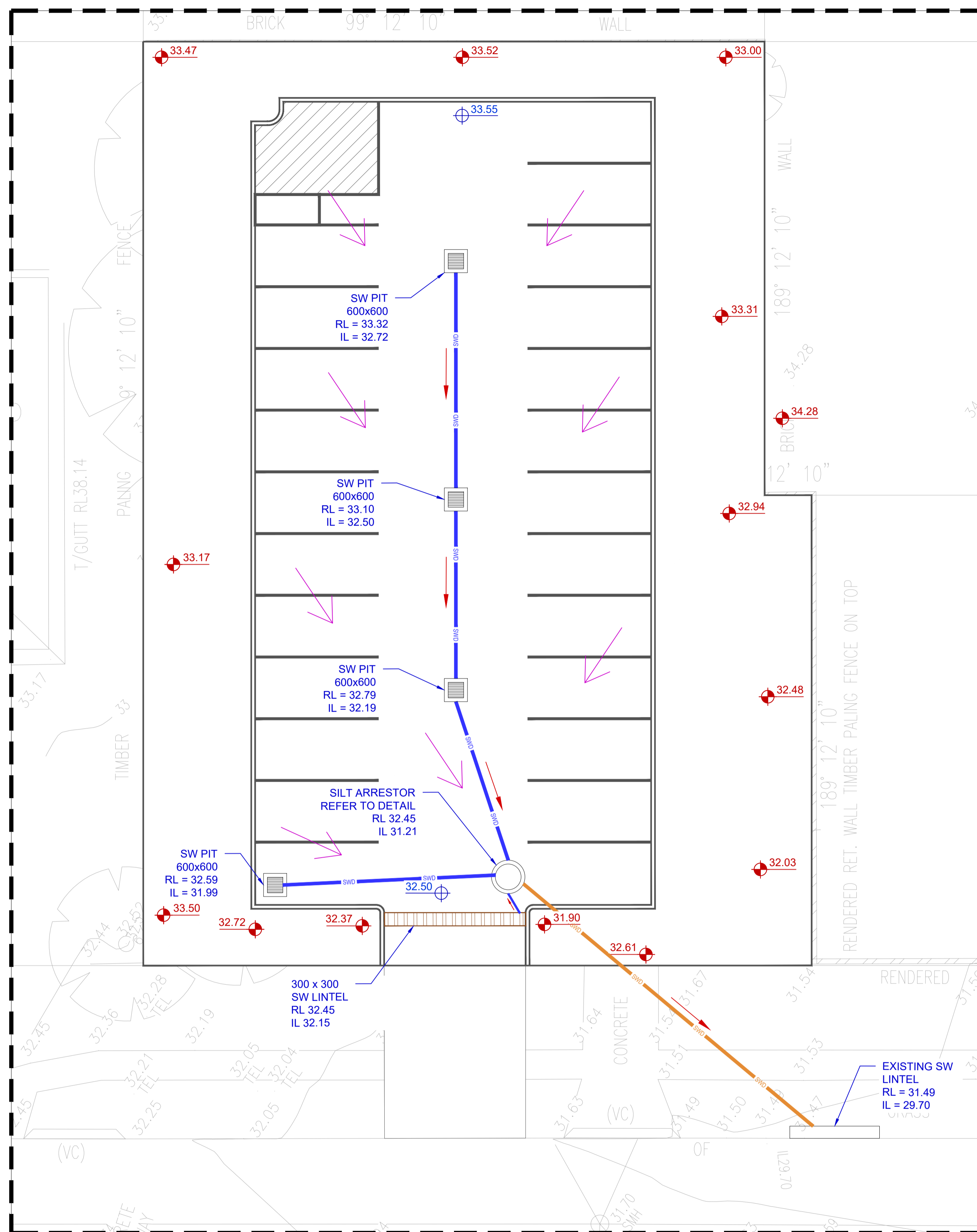
SCALE: 1:100

PROJECT No: CPC 2760

REVISION: 04

DRAWING No: C202

ISSUE FOR DA



LEGENDS

- SWD STORM WATER DRAIN LINE (Ø150)
- SWD Ø 225 UPVC PIPE
- FLOW DIRECTION
- SILT ARRESTOR
- SW PITS
- 32.03 EXISTING LEVELS
- 32.79 PROPOSED LEVELS
- OVERLAND FLOW

NOTE:

THE LANDSCAPE LEVELS ARE TO BE PROPOSED BY LANDSCAPE CONSULTANT.

STORMWATER MANAGEMENT PLAN

SCALE - 1:100

ISSUE FOR DA

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|-------|------------|----------------------|
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| 01 | 15.10.2021 | ISSUE FOR DISCUSSION |
| 02 | 29.10.2021 | ISSUE FOR DA |
| 03 | 29.11.2021 | ISSUE FOR DA |
| 04 | 06.12.2021 | ISSUE FOR DA |
| 05 | 29.07.2022 | ISSUE FOR DA |

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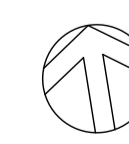


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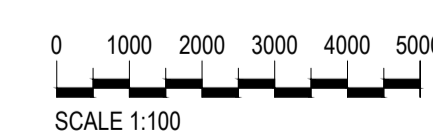
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DESIGNED:

HR

DRAWN:

RQ

DRAWING TITLE:

STORMWATER MANAGEMENT PLAN
60 FEDERAL PARADE

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

29/07/2022

SCALE:

1:100

PROJECT No:

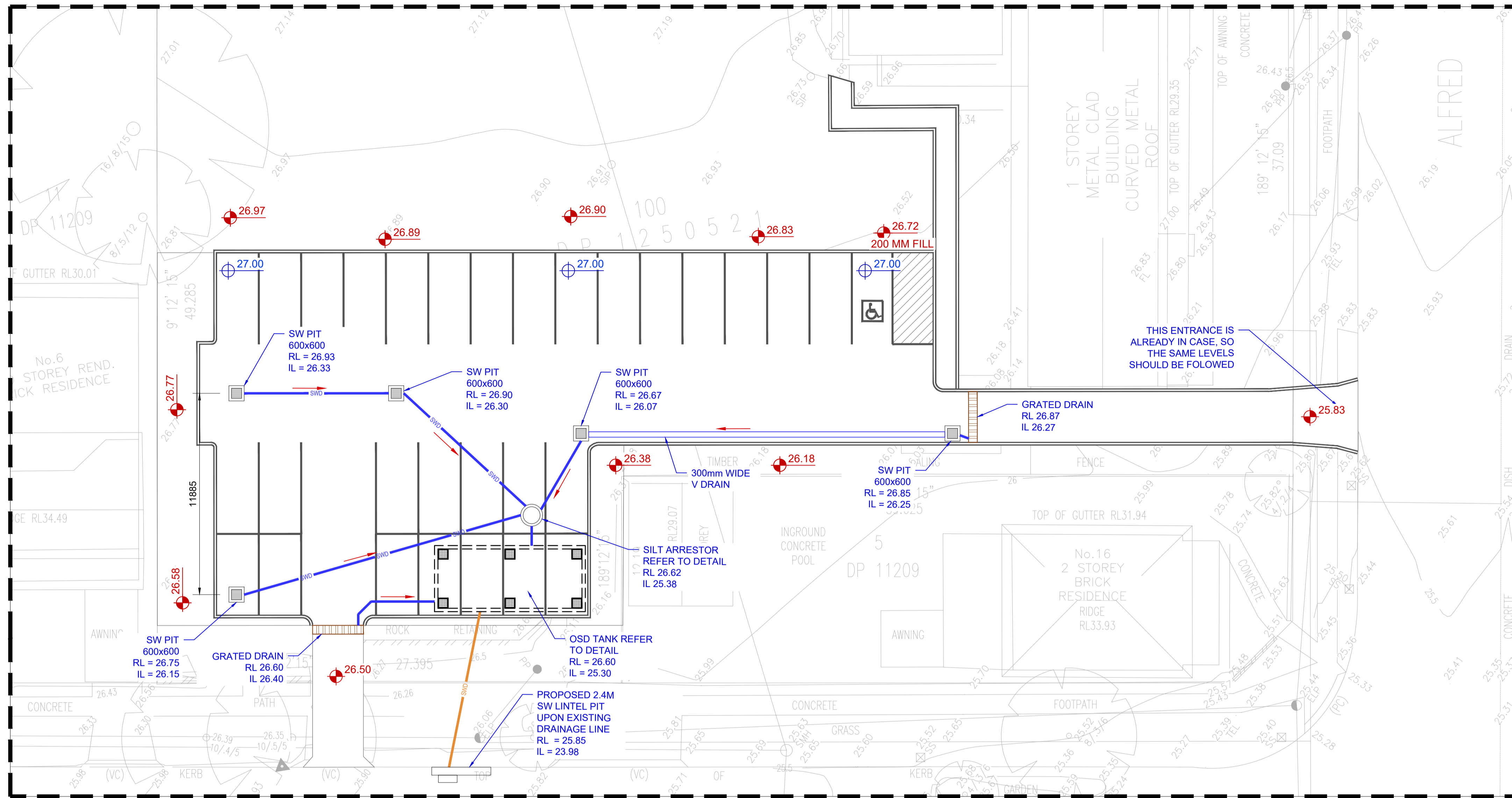
CPC 2760

REVISION:

05

DRAWING No:

C300



STORMWATER MANAGEMENT PLAN
SCALE - 1:150



HUMECEPTOR STC 2 (INLET) MODEL
PROPOSED SILT ARRESTOR

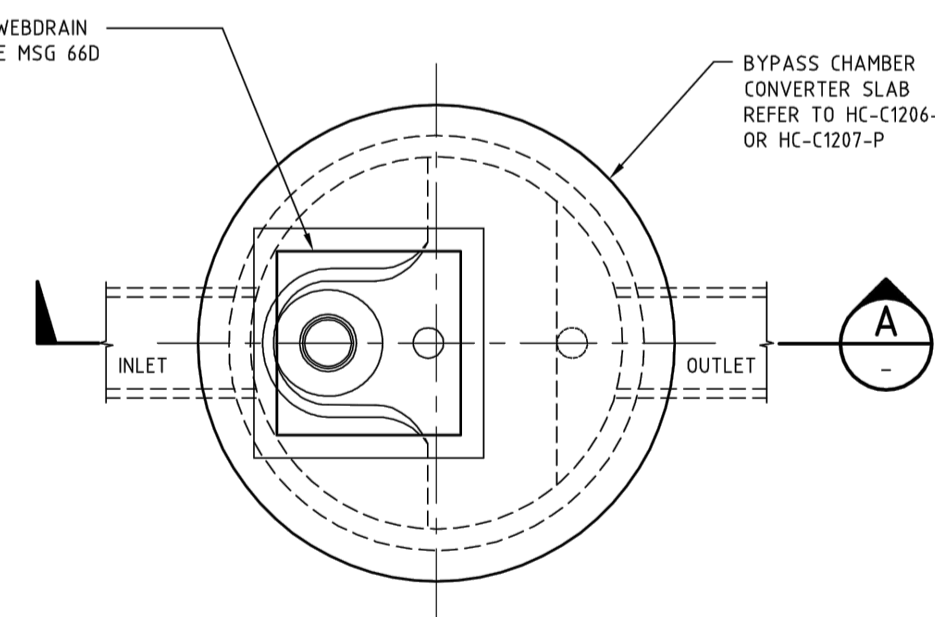
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CONCEPT PROVIDED FOR ILLUSTRATION
DETAIL DECOMENTATION.

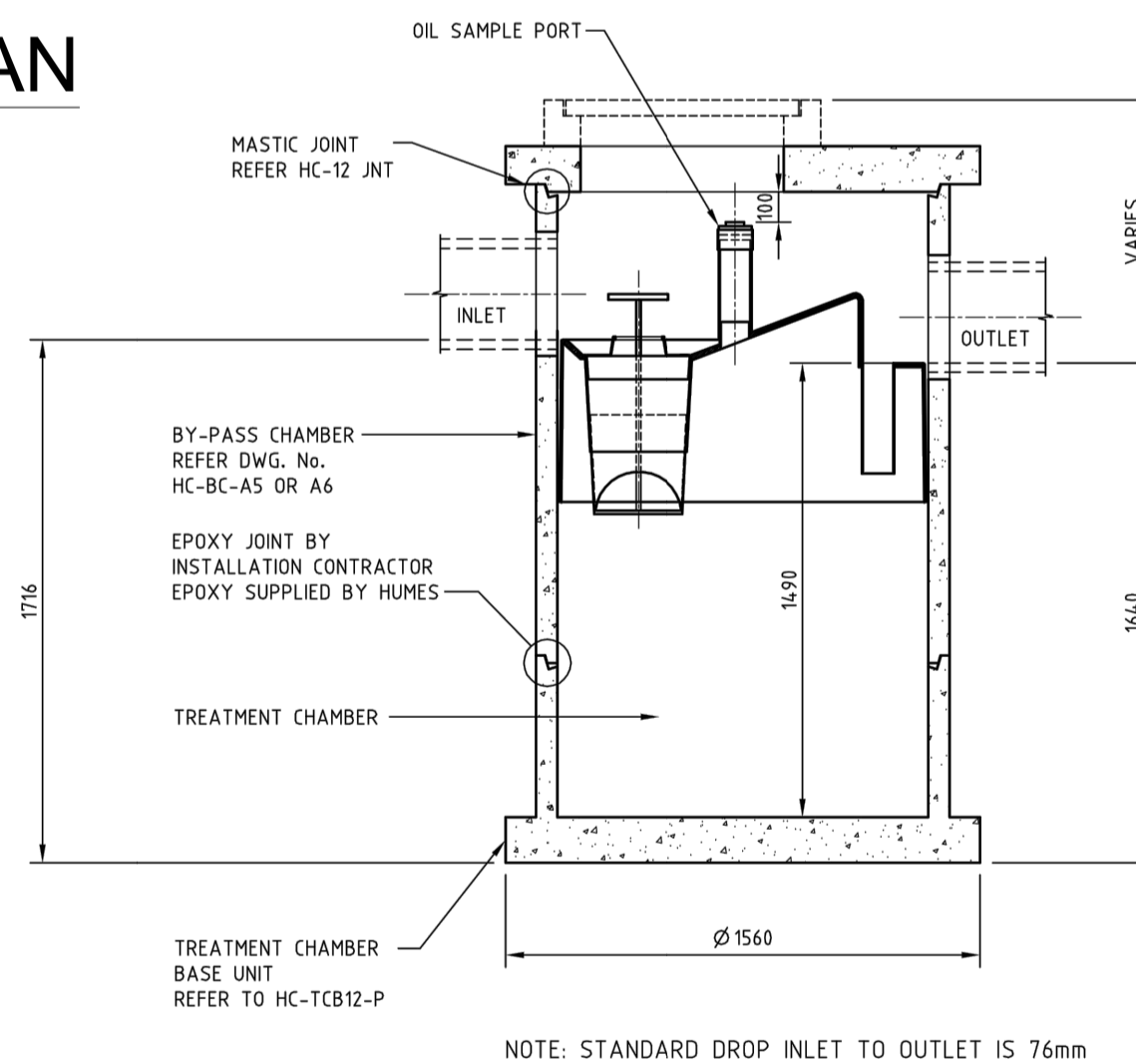
NOTE:

THE PRODUCT SPECIFICATIONS ARE AS PER MANUFACTURER / PROVIDER INFORMATION

CLIENT / BUILDER / ARCHITECT



PLAN - SQUARE OPENING
SCALE 1:20 (PREFERRED)



NOTE: STANDARD DROP INLET TO OUTLET IS 76mm

SECTION A
SCALE 1:20

LEGENDS

- SWD — STORM WATER DRAIN LINE (Ø150)
- SWD — Ø 225 UPVC PIPE
- FLOW DIRECTION
- SILT ARRESTOR
- SW PITS
- 32.03 LAWN / LANDSCAPE
- 32.79 PROPOSED LEVELS

NOTE:

- TO AVOID EXCESSIVE CUT & FILL EXISTING LANDSCAPE LEVEL ARE NOT DISTURBED AND PROPOSED TO BE REMAINED AS IT IS. REFER TO LANDSCAPE LEVELS TO BE CONFIRMED BY LANDSCAPE CONSULTANT.
- THE ENTRANCE ARE FROM ALFRED AREA NEEDS TO HAVE A RAISED RAMP OF 5% GRADE. LANDSCAPE LEVEL ALONG THE ENTRY RAMP CAN BE RAISED TO SUIT THE PROPOSED RAMP. FURTHER RETAINING WALL CAN ALSO BE PROPOSED IF DEPTH IS MORE THAT 250MM.

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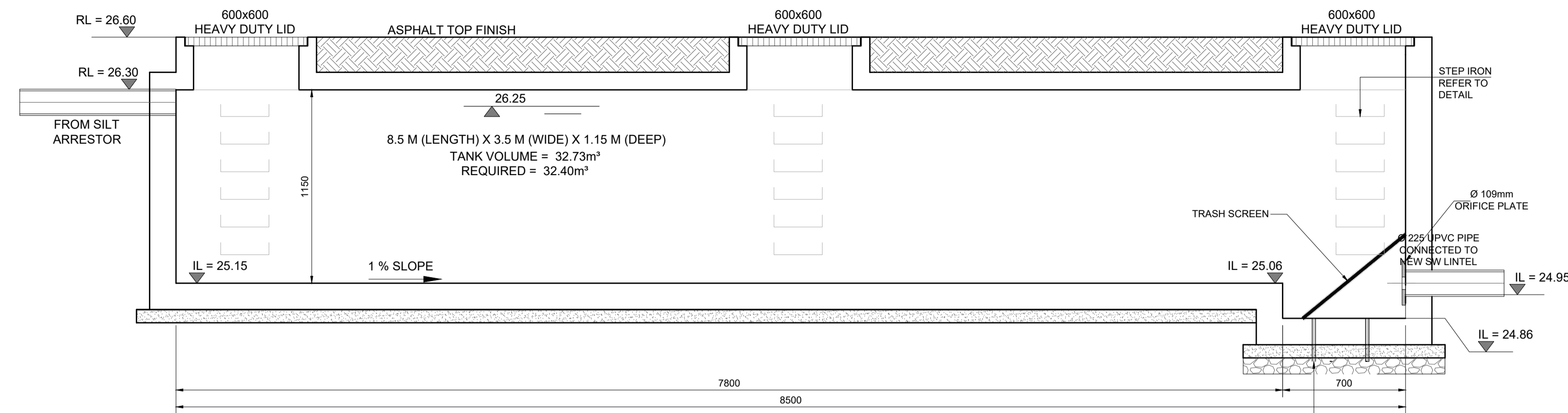
DESIGNED: HR

DRAWN: RQ

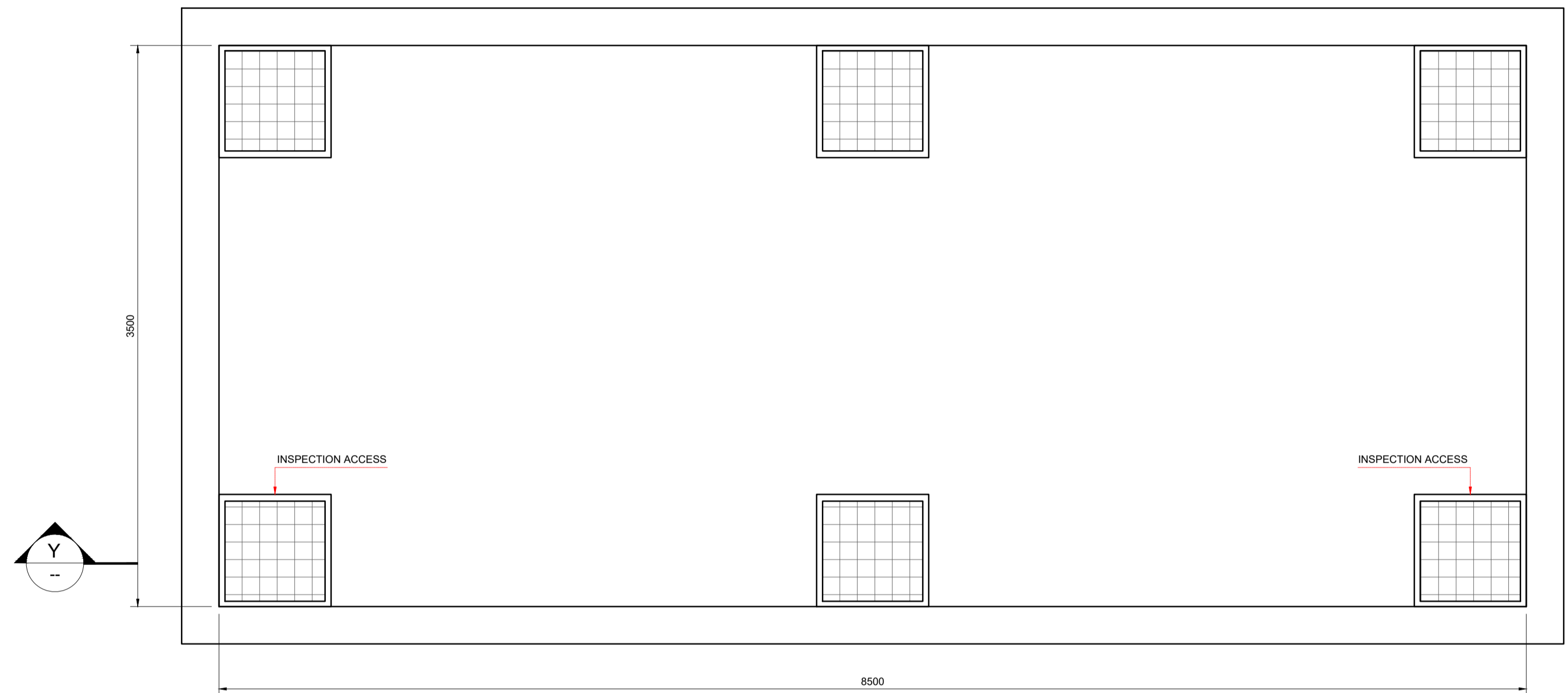
DRAWING TITLE: STORMWATER MANAGEMENT PLAN ALFRED ROAD

PROJECT: PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW

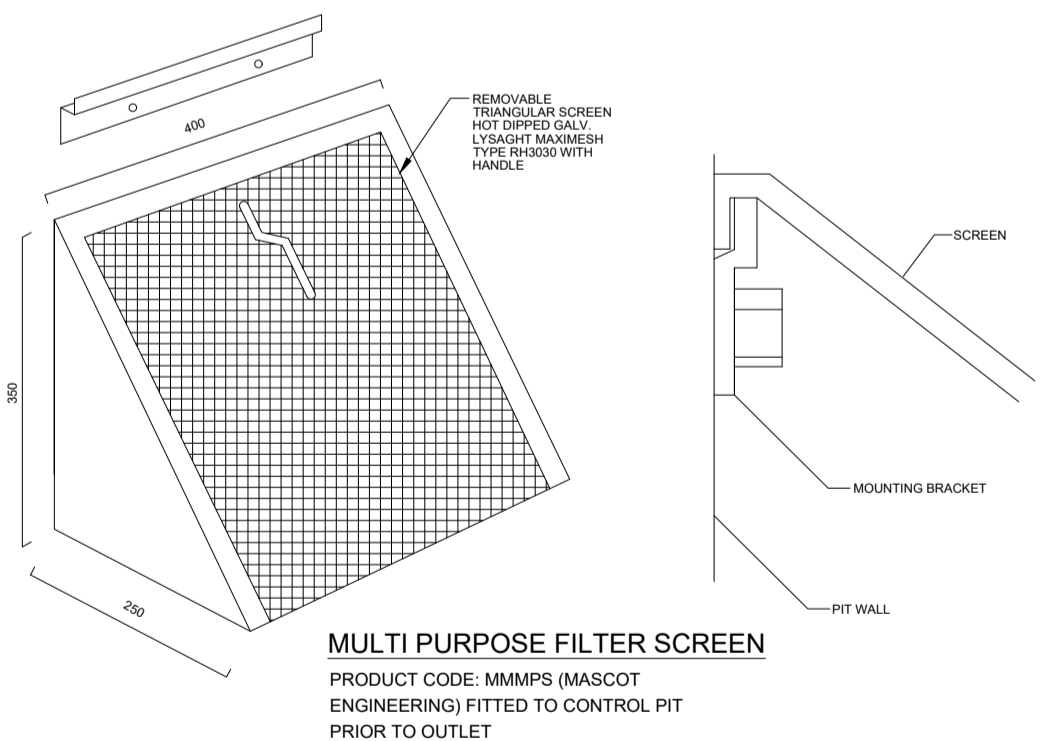
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| PROJECT No: | REVISION: |
| CPC 2760 | 04 |
| DRAWING No: | C301 |



SECTION Y-Y
OSD TANK SECTION DETAIL
SCALE= 1:20



OSD TANK
SCALE= 1:20



TRASH SCREEN NOTES:

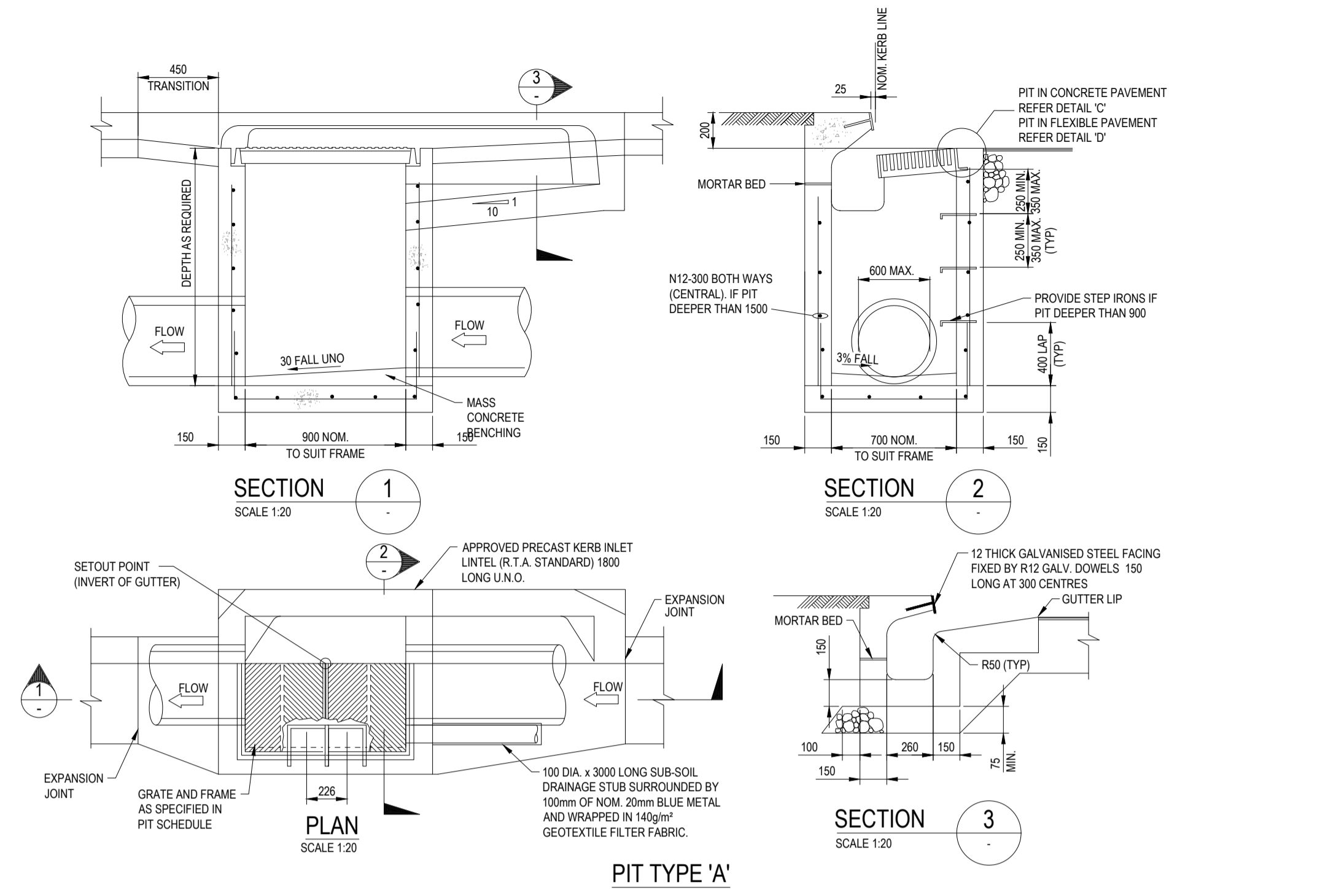
1. MAXIMUM SCREENS MUST BE PLACED SUCH THAT THE LONG AXIS OF THE OVAL SHAPED HOLES ARE ORIENTATED HORIZONTALLY WITH THE PROTRUDING LIP ANGLED UPWARDS AND FACING TOWARDS THE OUTLET.
2. THE SCREEN IS TO BE FORMED BY WELDING TWO TRIANGULAR MAXIMESH (OR EQUIVALENT) PANELS TO A RECTANGULAR FRONT MAXIMESH PANEL (OR EQUIVALENT)

ON SITE DETENTION NOTE:

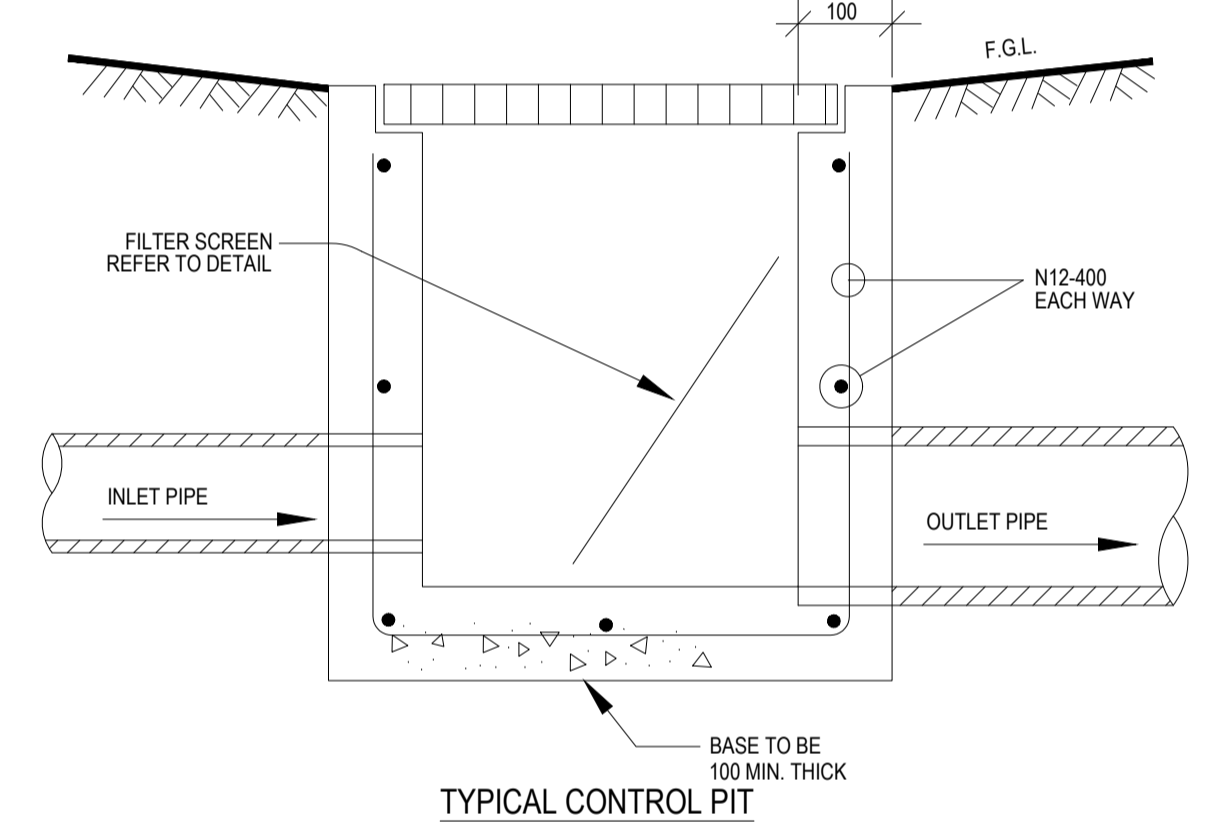
1. AS PER COUNCIL DCP & WATER MANAGEMENT POLICY.
2. THE SIYE LIES IN ZONE REGION 2. AND THE LOT AREA IS GREATER THAN 450 sqm.
3. AS SITE IMPERVIOUS AREA IS MORE THAN 60% SO OSD IS REQUIRED.
4. AS PER TABLE 2B OF ONSITE STORMWATER TECHNICAL SPECIFICATION FOR A 950 sqm (ACTUAL 926.69 sqm) SITE WE REQUIRED. 32.4 m³ OSD Q5 (EXISTING) 26 l/s Q100 (EXISTING) 53 l/s
5. FROM TABLE 3, FOR 26 l/sec 109mm ORIFICE PLATE IS REQUIRED WITH 1.15 M DEEP OSD.

ORIFICE PLATE NOTES

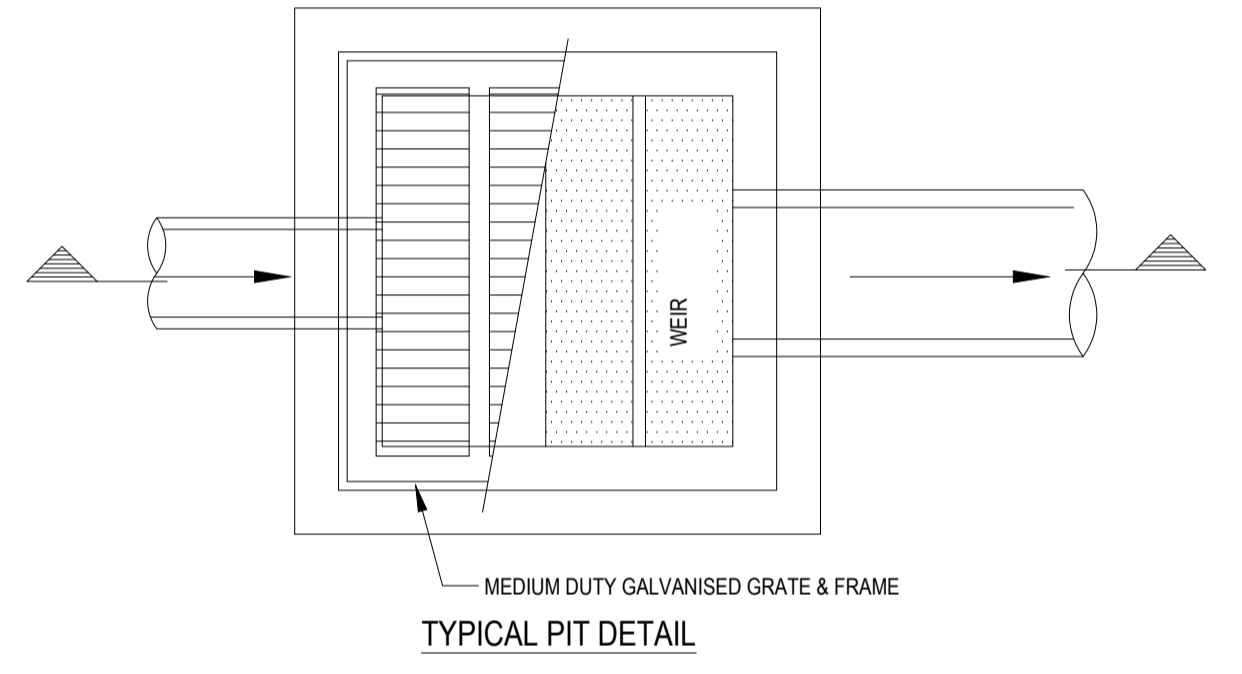
1. HOLE IN ORIFICE PLATE TO BE PRECISION CUT WITH SHARP EDGES TO THE SPECIFIED DIAMETER.
2. ORIFICE PLATE TO BE PLACED CENTRALLY OVER THE OUTLET PIPE.
3. ORIFICE PLATE TO BE MADE FROM STAINLESS STEEL HOT DIPPED GALVANIZED OR OTHERS NOT ACCEPTABLE.
4. OUTLET PIPE TO BE CAST INTO THE WALL OF THE PIT. HOLE IN THE PLATE TO BE CENTRALLY PLACED.



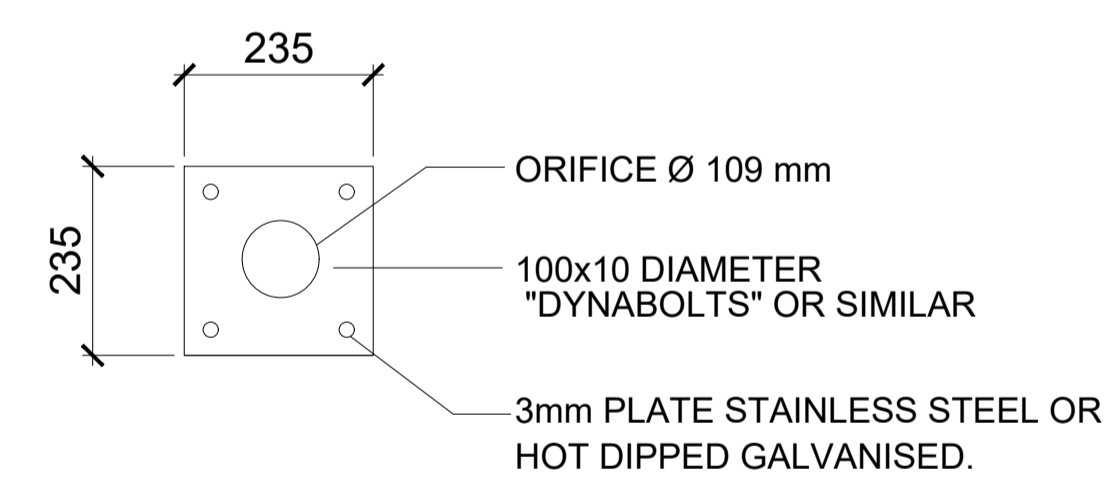
PIT TYPE 'A'



TYPICAL CONTROL PIT



TYPICAL PIT DETAIL



ORIFICE PLATE DETAIL
NTS



CONFINED SPACE WARNING SIGN

IMPORTANT NOTE:

INTERMEDIATE ACCESS IS PROVIDED BECAUSE THE LENGTH OF OSD IS GREATER THAN 3M.

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| 04 | 06.12.2021 | ISSUE FOR DA |

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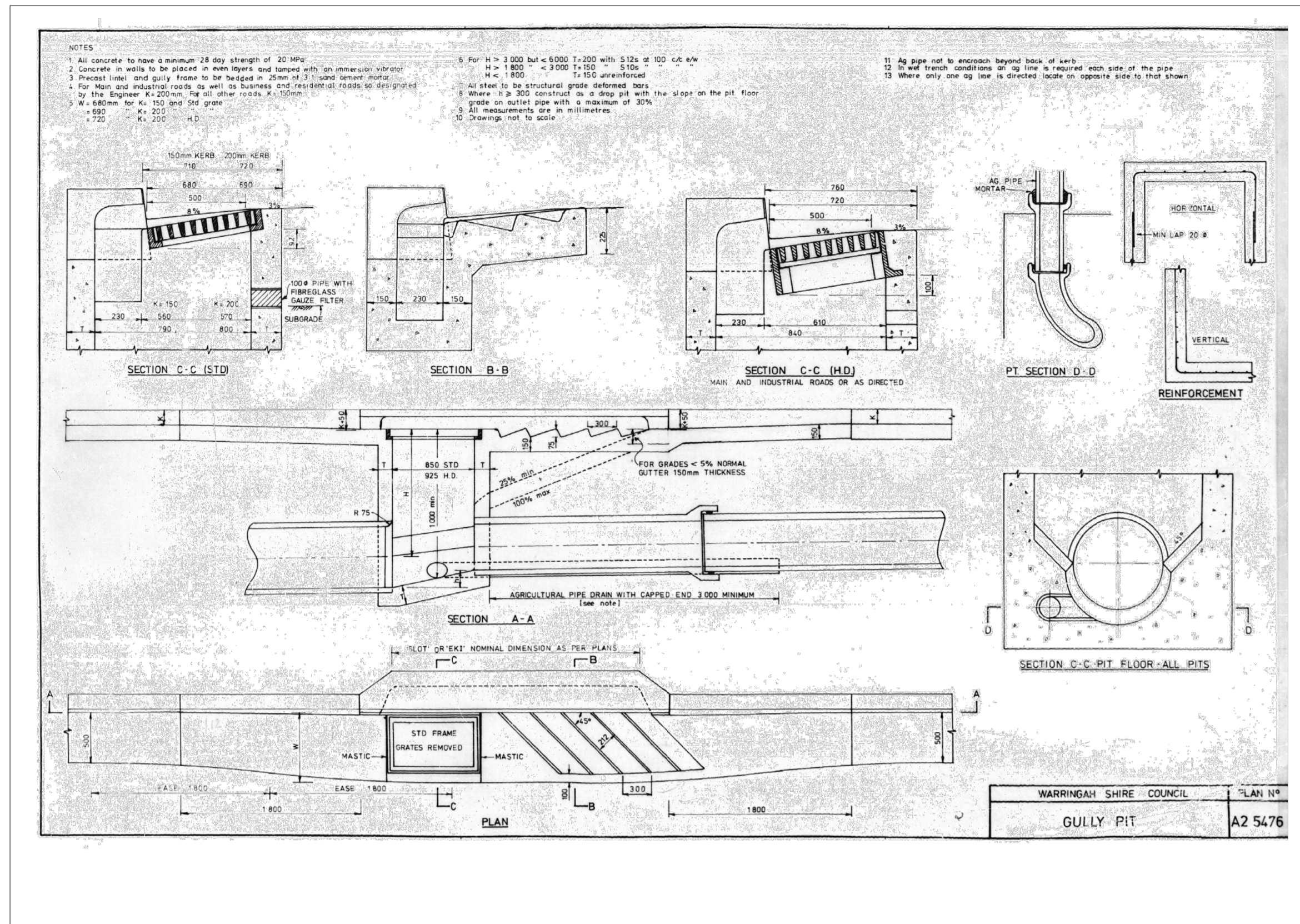
DESIGNED: **HR**

DRAWN: **RQ**

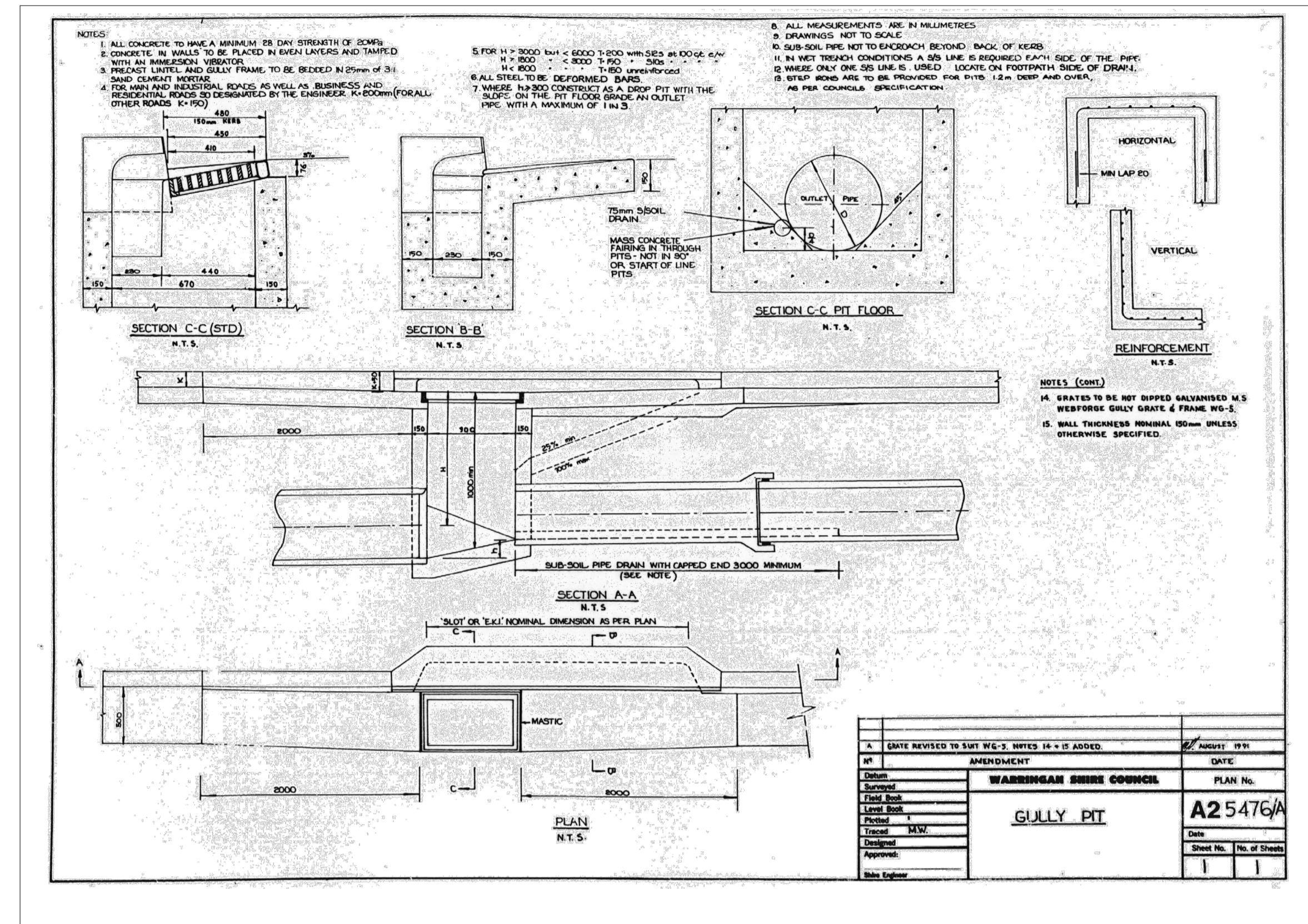
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PROJECT: **PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW**

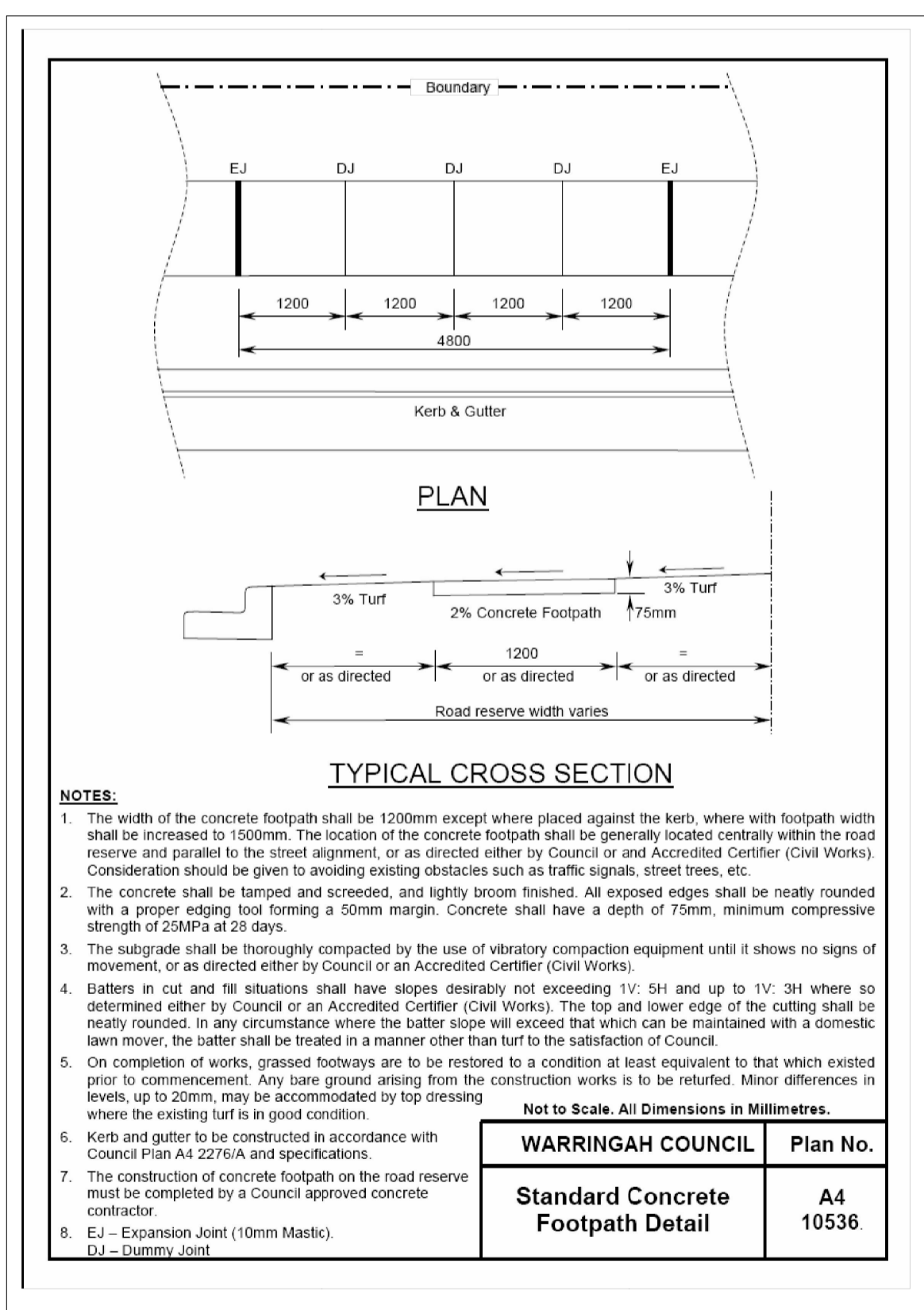
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| PROJECT No: | REVISION: |
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| DRAWING No: | C302 |



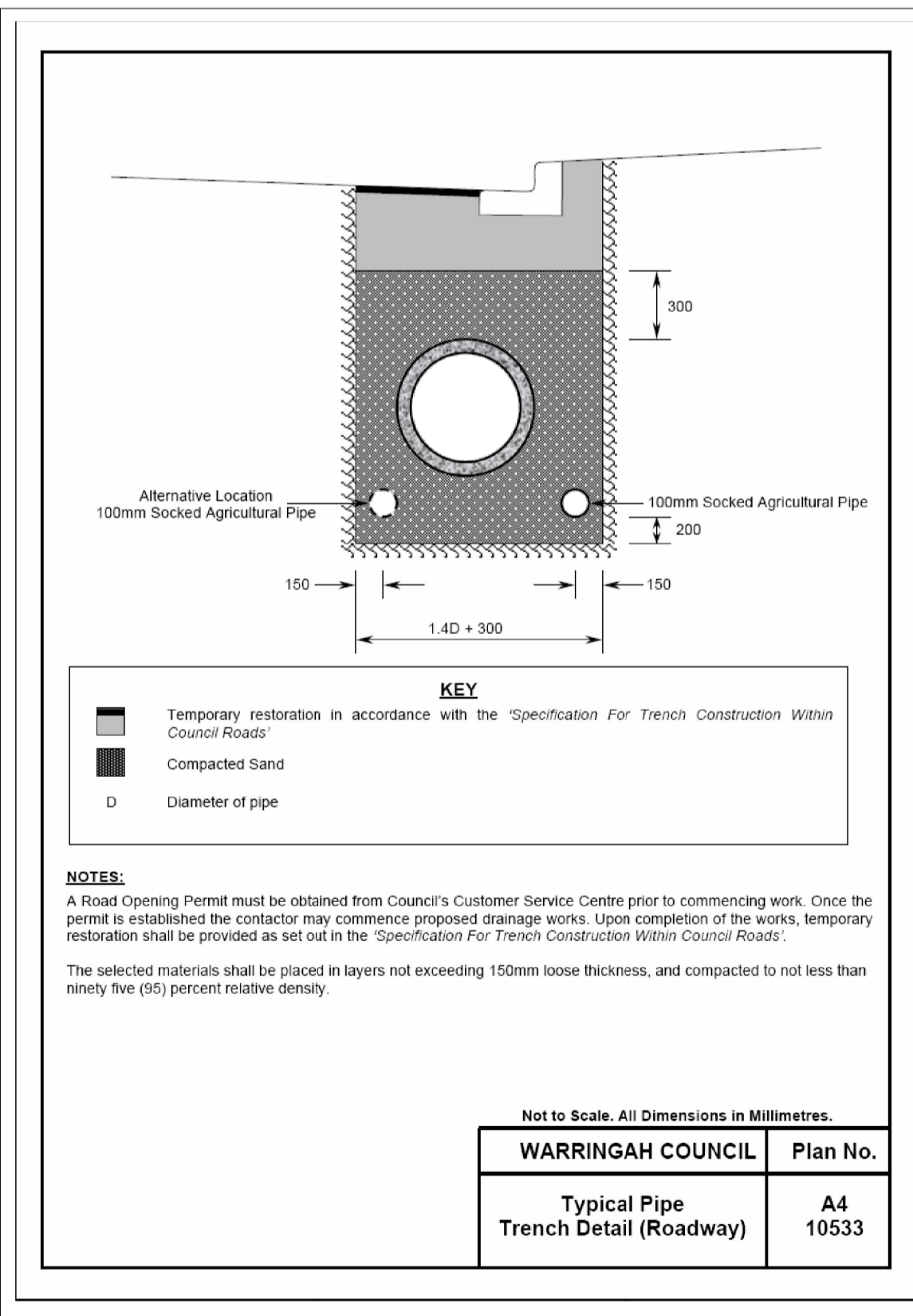
WARRINGAH SHIRE COUNCIL GULLY PIT



WARRINGAH SHIRE COUNCIL GULLY PIT



STANDARD CONCRETE FOOTPATH DETAIL



TYPICAL PIPE TRENCH DETAIL (ROAD WAY)

NOTES:
 THESE DETAILS ARE TAKEN FROM COUNCIL WEBSITE & SNIPPED FOR REFERENCE & COPYRIGHT ISSUE.

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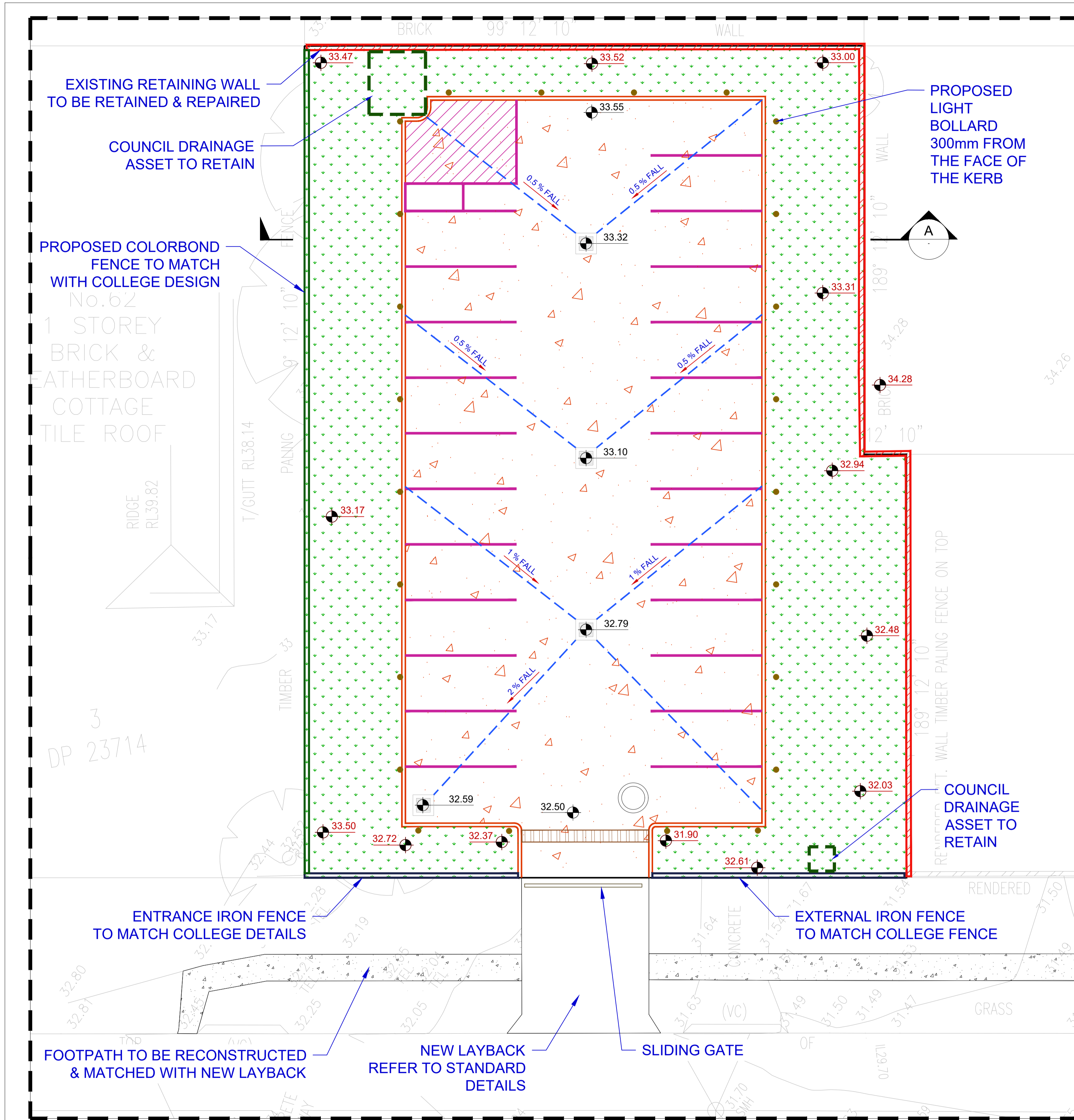
DESIGNED: **HR**

DRAWN: **RQ**

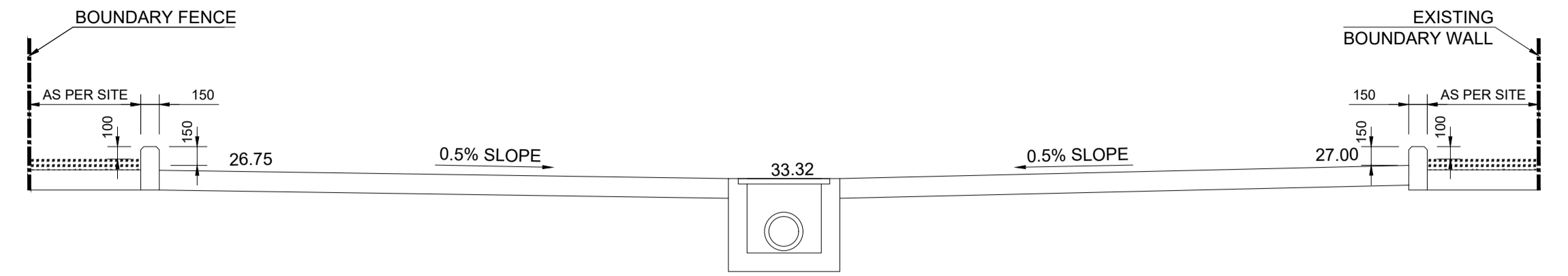
DRAWING TITLE: **FOOTPATH & SW PIT DETAIL**

PROJECT: **PROPOSED CARPARK DESIGN ST AUGUSTINE'S COLLEGE FEDERAL PARADE, BROOKVALE NSW**

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| DRAWING No: | C303 |



CARPARK LAYOUT PLAN
SCALE - 1:100



SECTION A-A
SCALE - 1:40

LEGEND

- PROPOSED HARDSTAND AREA
- INDICATIVE LANDSCAPE AREA REFER TO LANDSCAPE PLAN

NOTE:

THIS CAR PARK IS PROPOSED AS PER ADVISE OF THE TRAFFIC CONSULTANT. REFER TO TRAFFIC ENGINEER REPORT & EVALUATION.

PAVEMENT DESIGN NOTES & SPECIFICATION

AS PER MY SITE EVALUATION & GEOTECHNICAL INITIAL ADVISE I HAVE ANTICIPATED THE SUBGRADE IN MEDIUM CATEGORY, SUBGRADE IS COMPOSED OF MAINLY CLAYEY GRAVELS, FIRM SAND WITH SOME CLAY, SANDY CLAY, SILTY CLAY. THIS MATERIAL IS OBSERVED TO MAKE A POOR UNSEALED ROAD WHEN EXCESSIVELY WET OR DRY. THIS TYPE OF SUBGRADE NORMALLY HAVE CBR VALUE BETWEEN 5 TO 10.

SPECIFICATION OF THE PAVEMENT:
30mm ASPHALT WEARING COURSE
10mm SINGLE COAT PRIME SEAL.
175mm THICK BASE COURSE (DGB20) OR
220mm THICK SUB BASE DGB40. ON
COMPACTED SUB GRADE MIN CBR 5%.

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| 05 | 29.07.2022 | ISSUE FOR DA |

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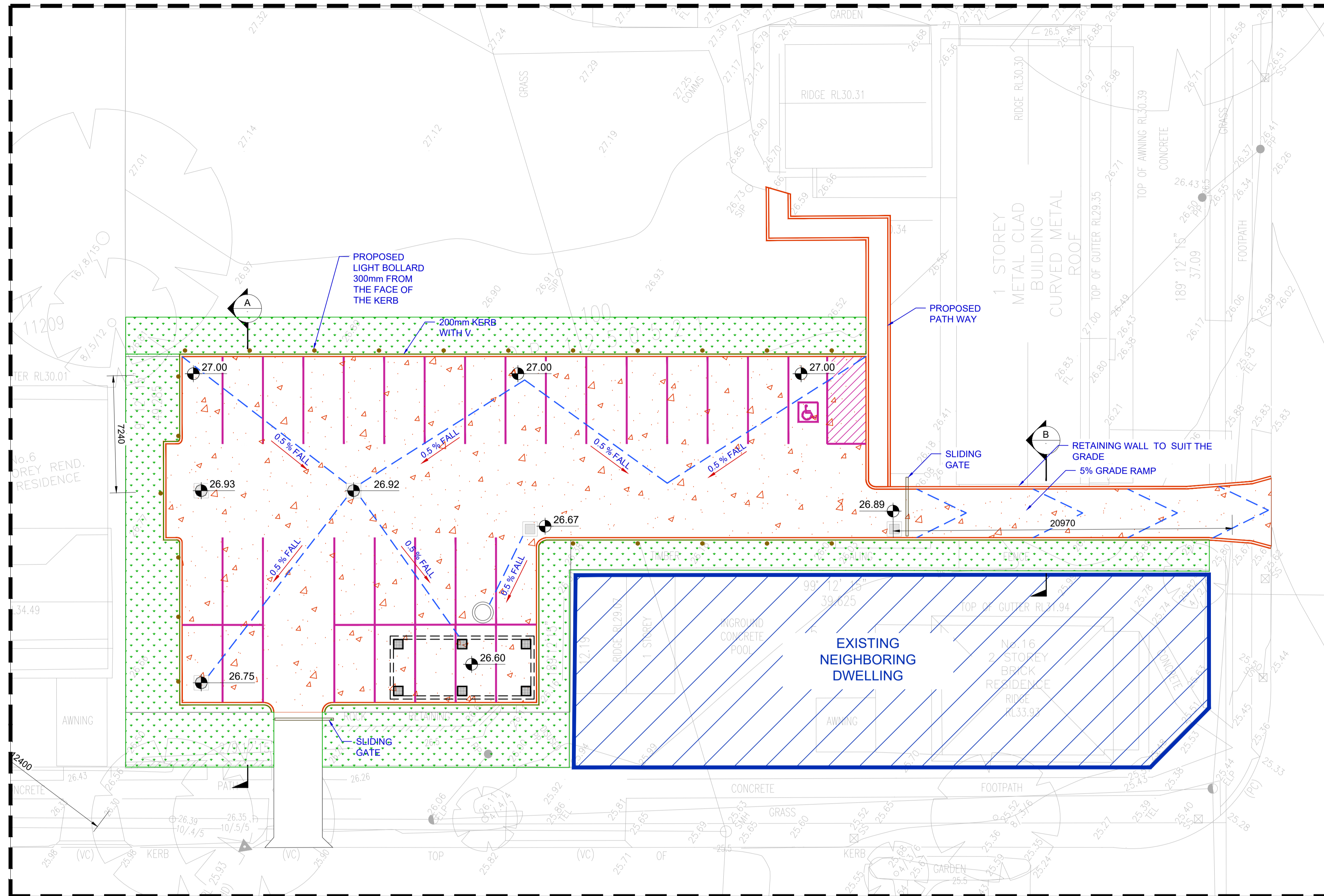
DESIGNED: HR

DRAWN: RQ

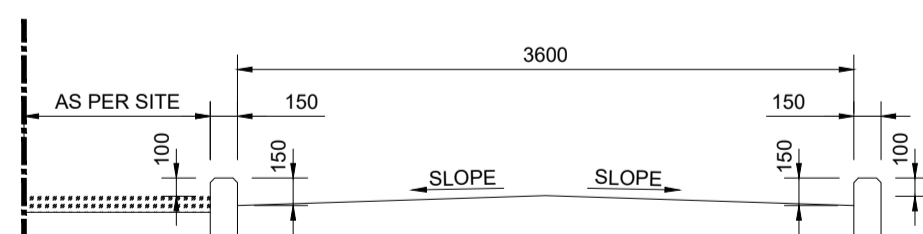
DRAWING TITLE: **CAR PARK LAYOUT**
60 FEDERAL PARADE

PROJECT: **PROPOSED CARPARK DESIGN**
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

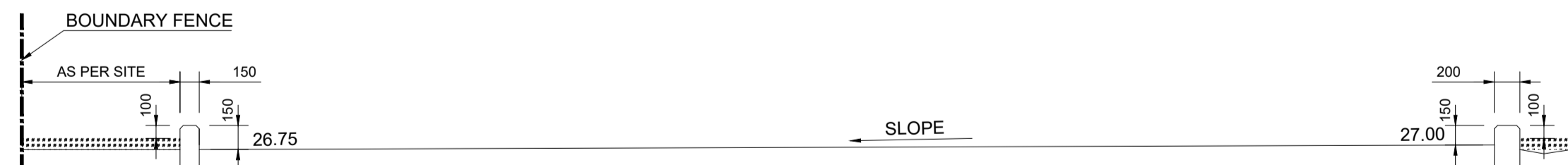
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| PROJECT No: | REVISION: |
| CPC 2760 | 05 |
| DRAWING No: | C400 |



CARPARK LAYOUT PLAN
SCALE - 1:150



SECTION B-B
SCALE - 1:40



SECTION A-A
SCALE - 1:40

LEGEND



PROPOSED HARDSTAND AREA



INDICATIVE LANDSCAPE AREA REFER TO LANDSCAPE PLAN

NOTE:

THIS CAR PARK IS PROPOSED AS PER ADVISE OF THE TRAFFIC CONSULTANT. REFER TO TRAFFIC ENGINEER REPORT & EVALUATION.

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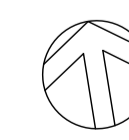
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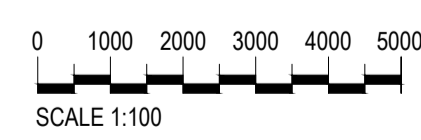
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Plotted by: Admin

VERIFIED:

AC

DESIGNED:

HR

DRAWN:

RQ

DRAWING TITLE:

CAR PARK LAYOUT
ALFRED ROAD

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

SCALE:

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PROJECT No:

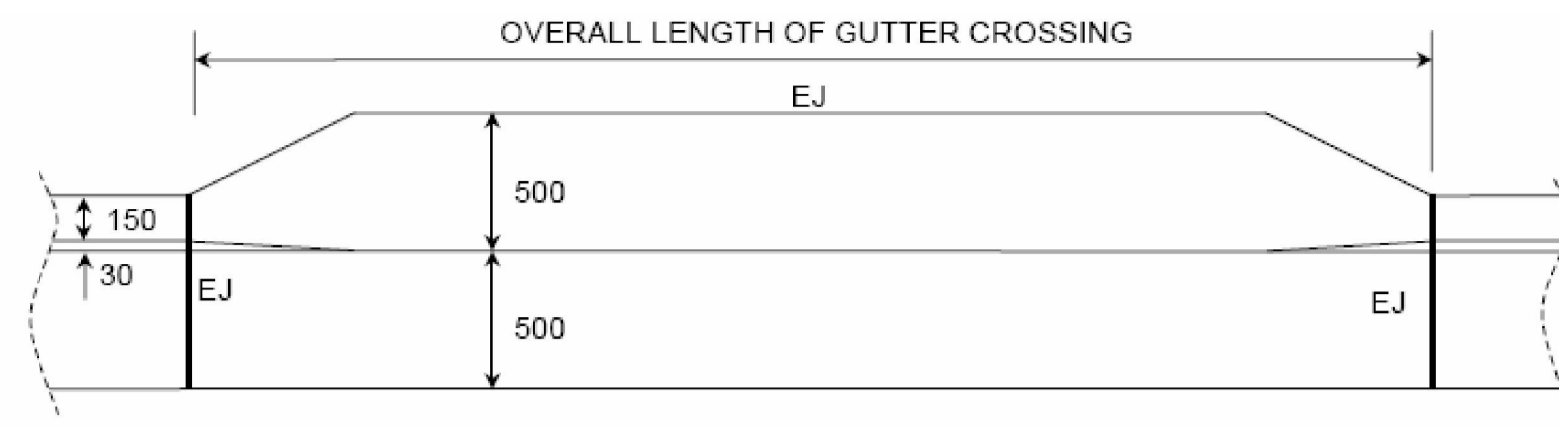
CPC 2760

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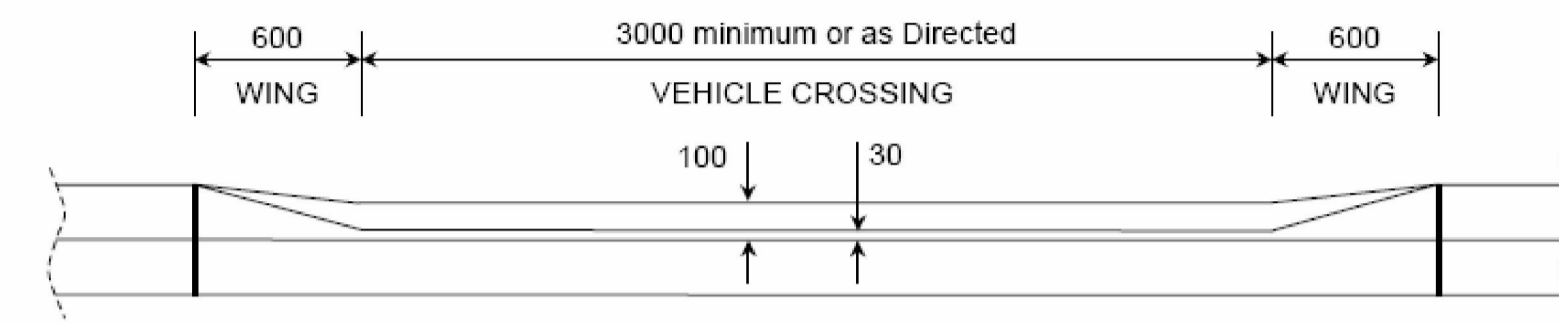
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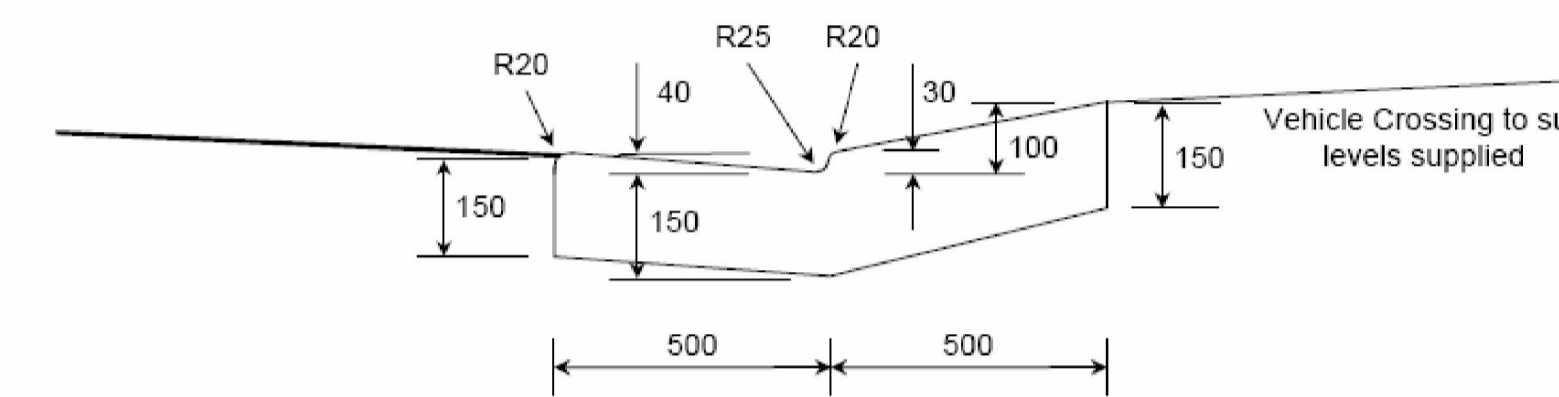
C401



PLAN



FRONT ELEVATION



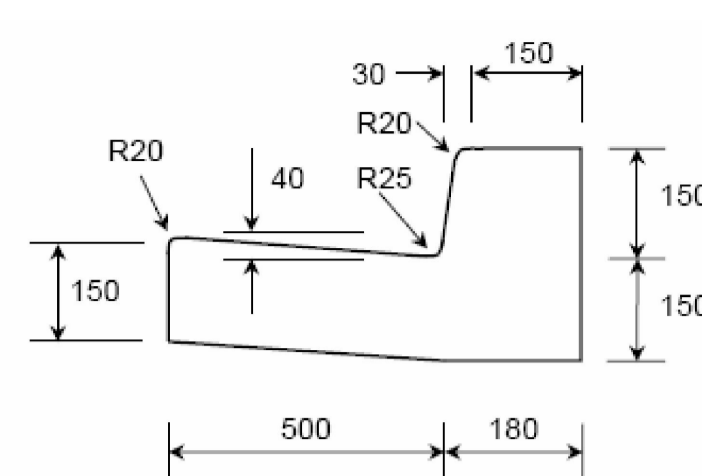
TYPICAL CROSS SECTION

NOTES:

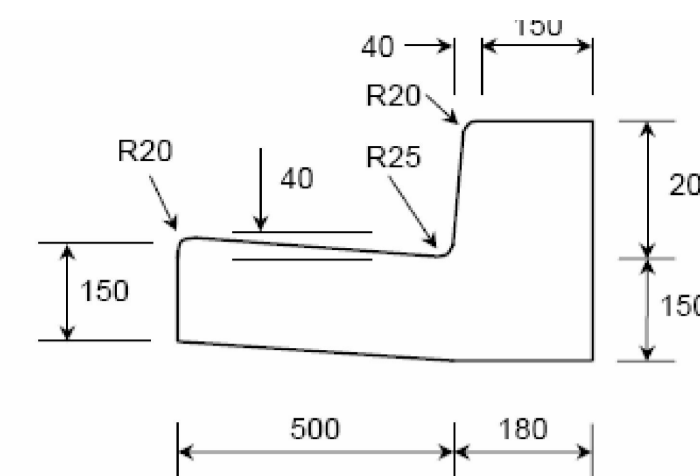
- Layback and gutter shall be poured in **PLAIN CONCRETE** and finished with a steel trowel. Minimum compressive strength of concrete shall be 25MPa at 28 days. Industrial/commercial properties shall increase the depth of concrete to 180mm and provide SL82 mesh with 30mm top cover.
- The subgrade shall be thoroughly compacted by the use of vibratory compaction equipment until it shows no signs of movement, or as directed by Council.
- Vehicle crossing to be constructed in accordance with levels and specifications issued by Council.
- Kerbing to be constructed in accordance with Council Plan A4 2276/A and specifications.
- Where Council or an Accredited Certifier (Civil Woks) directs that the gutter be retained, the contractor shall place a 75mm deep saw cut in the gutter invert and remove kerb and/or layback.
- Where Council or an Accredited Certifier (Civil Woks) directs that the gutter be removed, a Road Opening Permit must be obtained from Council's Customer Service Centre prior to commencing work. Once the permit is established the contractor may commence vehicle crossing works. Upon completion of the works, temporary restoration shall be provided as set out in the 'Specification For Trench Construction Within Council Roads'.
- The construction of all vehicle crossings and associated works on the road reserve must be completed by a Council approved concrete contractor.
- EJ – Expansion Joint – 10mm Mastic.
R – Radius

Not to Scale. All Dimensions in Millimetres.

THIS DRAWING & DETAILS ARE TAKEN FROM COUNCIL DRAWING No. A4 2276/B



150mm KERB & GUTTER

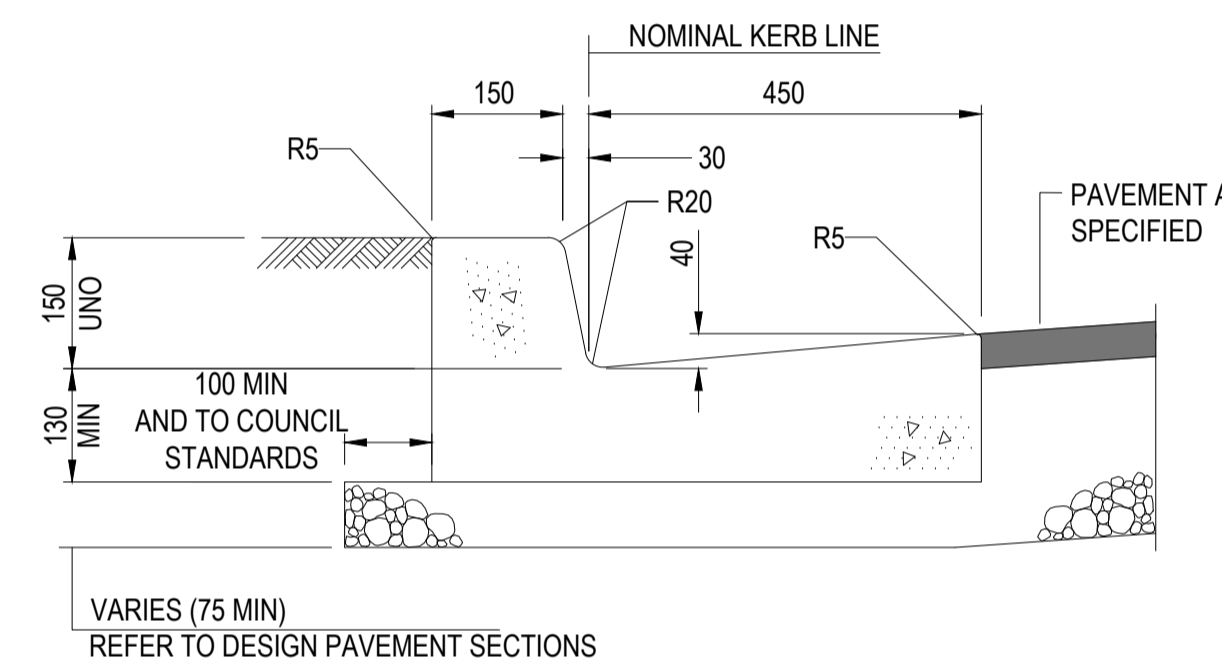


200mm KERB & GUTTER

NOTES:

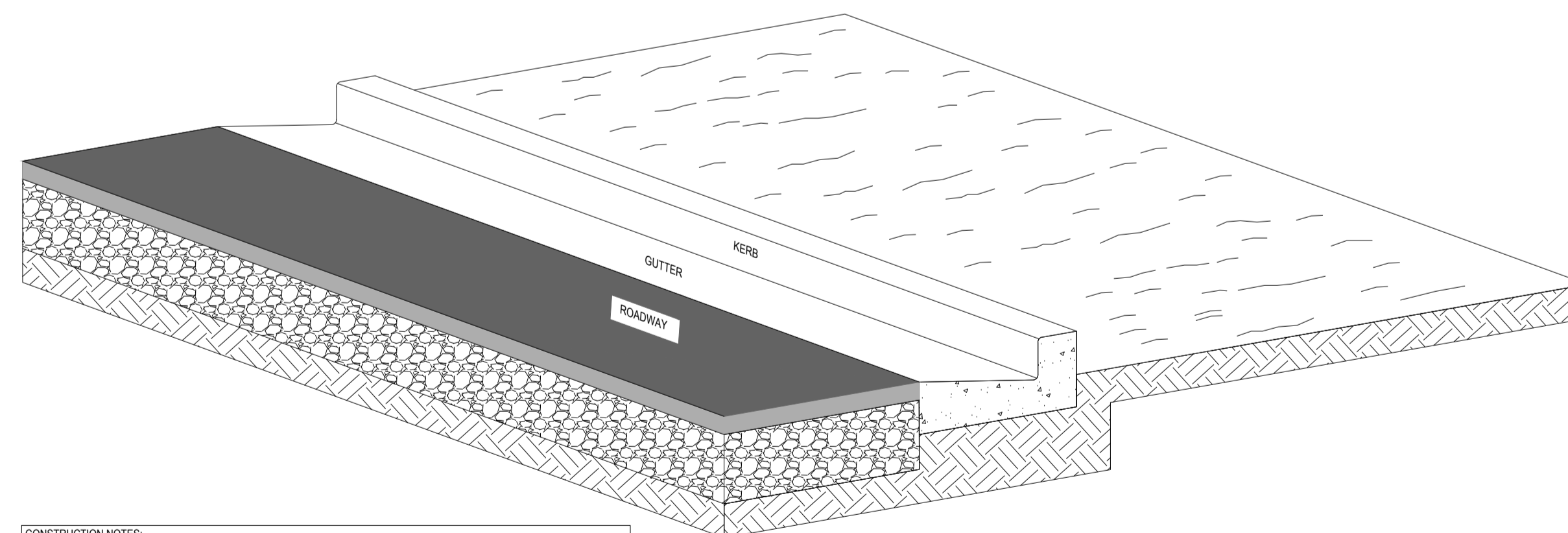
- Kerb and gutter shall be poured in **PLAIN CONCRETE** and finished with a steel trowel. Minimum compressive strength of concrete shall be 25MPa at 28 days.
- The subgrade shall be thoroughly compacted by the use of vibratory compaction equipment until it shows no signs of movement, or as directed by Council.
- Where Council or an Accredited Certifier (Civil Woks) directs that the gutter be retained, the contractor shall place a 75mm deep saw cut in the gutter invert and remove kerb and/or layback.
- Where Council or an Accredited Certifier (Civil Woks) directs that the gutter be removed, a Road Opening Permit must be obtained from Council's Customer Service Centre prior to commencing work. Once the permit is established the contractor may commence vehicle crossing works. Upon completion of the works, temporary restoration shall be provided as set out in the 'Specification For Trench Construction Within Council Roads'.
- The construction of all vehicle crossings and associated works on the road reserve must be completed by a Council approved concrete contractor.

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KERB & GUTTER (KG)

NTS



KERBSIDE TURF STRIP

NOT TO SCALE

TYPICAL DETAIL FOR ILLUSTRATION

- CONSTRUCTION NOTES:**
- INSTALL A 400mm MINIMUM WIDE ROLL OF TURF ON THE FOOTPATH NEXT TO THE KERB AND AT THE SAME LEVEL AS THE TOP OF THE KERB
 - LAY 1.4m LONG TURF STRIPS NORMAL TO THE KERB EVERY 10m
 - REHABILITATE DISTURBED SOIL BEHIND THE KERB

FORMWORK

THE FORMS SHALL BE ALIGNED TRUE TO GRADE AND WITH OUT IRREGULARITIES. THE TOLERANCE SHALL BE ±15mm PROVIDED THAT VARIATIONS IN LEVELS ARE NOT LOCAL AND ORE OVER LENGTH OF 3 METERS OR MORE.

FORMS SHALL BE CONSTRUCTED SO THAT THEY CAN BE REMOVED WITHOUT DAMAGING THE CONCRETE AND SHALL BE ADEQUATELY BRACED. THE INNER SURFACE OF FORMS SHALL BE ADEQUATELY OILED TO ENSURE THE NON-ADHESION OF THE CONCRETE. THE MATERIAL USED FOR FORMS FOR THE EXPOSED SURFACES SHALL BE DRESSED SOFT WOOF TIMBER.

TIMBER PEGS OF 50mm x 50mm-DIMENSION MINIMUM MUST BE PROVIDED FOR THE SUPPORT OF ALL FORMWORK. THE USE OF STEEL PEGS FOR THE SUPPORT OF FORMWORK IS PROHIBITED.

MATERIALS

READY MIXED CONCRETE SHALL CONFORM TO THE PROVISIONS OF AS 1379 - 2007 " READY MIXED CONCRETE"

THE MINIMUM COMPRESSIVE STRENGTH F_c OF THE CONCRETE SHALL BE 25 MPa AT 28 DAYS IN ACCORDANCE WITH AS 3600 - 2009 " CONCRETE STRUCTURES"

JOINTS

FOR HAND PLACED KERB AND GUTTER EXPANSION JOINT 10mm THICK FOR THE FULL DEPTH OF THE KERB AND GUTTER SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 6m.

FOR MACHINE PLACED KERB AND GUTTER, EXPANSION JOINTS 6mm THICK SHALL BE PROVIDED AT INTERVALS OF 6m AND CONSTRUCTION JOINTS SHALL BE FORMED EVERY 3m FOR THE FULL DEPTH OF THE KERB AND GUTTER.

JOINTS ARE ALSO REQUIRED WHERE THE GUTTER ABUTS GULLY PITS AND GUTTER CROSSINGS. EXPANSION JOINTS SHALL CONSIST OF PERFORMED JOINTING MATERIAL BITUMINOUS FIBERBOARD.

TOLERANCE

TOLERANCE ON THE LEVEL OF KERB AND GUTTER CONSTRUCTION BOTH HORIZONTAL AND VERTICAL SHALL BE PLUS OR MINUS 10mm.

KERB AND GUTTER

THE CONSTRUCTION OF CONCRETE KERB AND GUTTER IS TO BE IN ACCORDANCE WITH AS 2876 - 2000 " CONCRETE KERBS AND CHANNELS (GUTTERS) - MANUALLY OR MACHINE PLACED " UNLESS OTHERWISE INDICATED BELOW.

KERB AND GUTTER DETAIL
KERB AND GUTTER SHALL BE IN ACCORDANCE WITH COUNCIL DRAWING NUMBER A4 2267/A/

LEVELS

- DESIGN PLAN ARE TO BE PREPARED BY THE APPLICANT AND APPROVED BY THE COUNCIL PRIOR TO CONSTRUCTION. GENERALLY THE FOLLOWING CRITERIA SHOULD MET PREPARING A DESIGN OF KERB AND GUTTER.
- A MINIMUM LONGITUDINAL GRADE OF 1% IS REQUIRED.
 - THE CROSS FALL FROM THE EDGE OF THE EXISTING PAVEMENT SHOULD GENERALLY BE 3%.
 - RECONSTRUCTION OF EXISTING KERB AND GUTTER MAY BE REQUIRED TO ENSURE THAT A SATISFACTORY CONNECTION IS PROVIDED.

PLACING CONCRETE

THE CONCRETE SHALL BE PLACED SO AS TO AVOID SEGREGATION AND SHALL BE ADEQUATELY COMPACTED. CARE SHALL BE TAKEN TO FILL EVERY PART OF THE FORMS AND TO WORK TO COARSER AGGREGATE BACK FROM THE FACE. EXPOSED SURFACES SHALL BE FINISHED WITH A STEEL FLOAT, AND CORNERS AND EDGES SHALL BE NEATLY ROUNDED WITH A NOISING TOOL. CONCRETE SHALL NOT BE DISTURBED AFTER IT HAS BEEN IN THE FORMS FOR TWENTY (20) MINUTES.

FINISH

AFTER REMOVAL OF THE FORMS, MINOR OR POROUS SECTIONS OR HOLES SHALL BE REPAIRED WITH A 3 TO 1 SAND AND CEMENT MORTAR MIX. THE EXPOSED SURFACES SHALL THEN BE RUBBED WITH A WOODEN FLOAT AND CLEAN WATER TO LEAVE THE SURFACES SMOOTH AND UNIFORM IN COLOR AND APPEARANCE.

BACKFILLING

AFTER REMOVAL OF FORMWORK THE FOOTWAY BEHIND THE KERB SHALL BE NEATLY TRIMMED, FILLED AND OR TURFED TO MAKE A SMOOTH CONNECTION TO THE UNDISTURBED NATURE STRIP.

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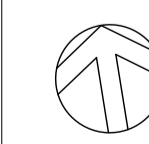


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DESIGNED:

HR

DRAWN:

RQ

DRAWING TITLE:

STANDARD DETAIL CAR PARK

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

SCALE:

1:100

PROJECT No:

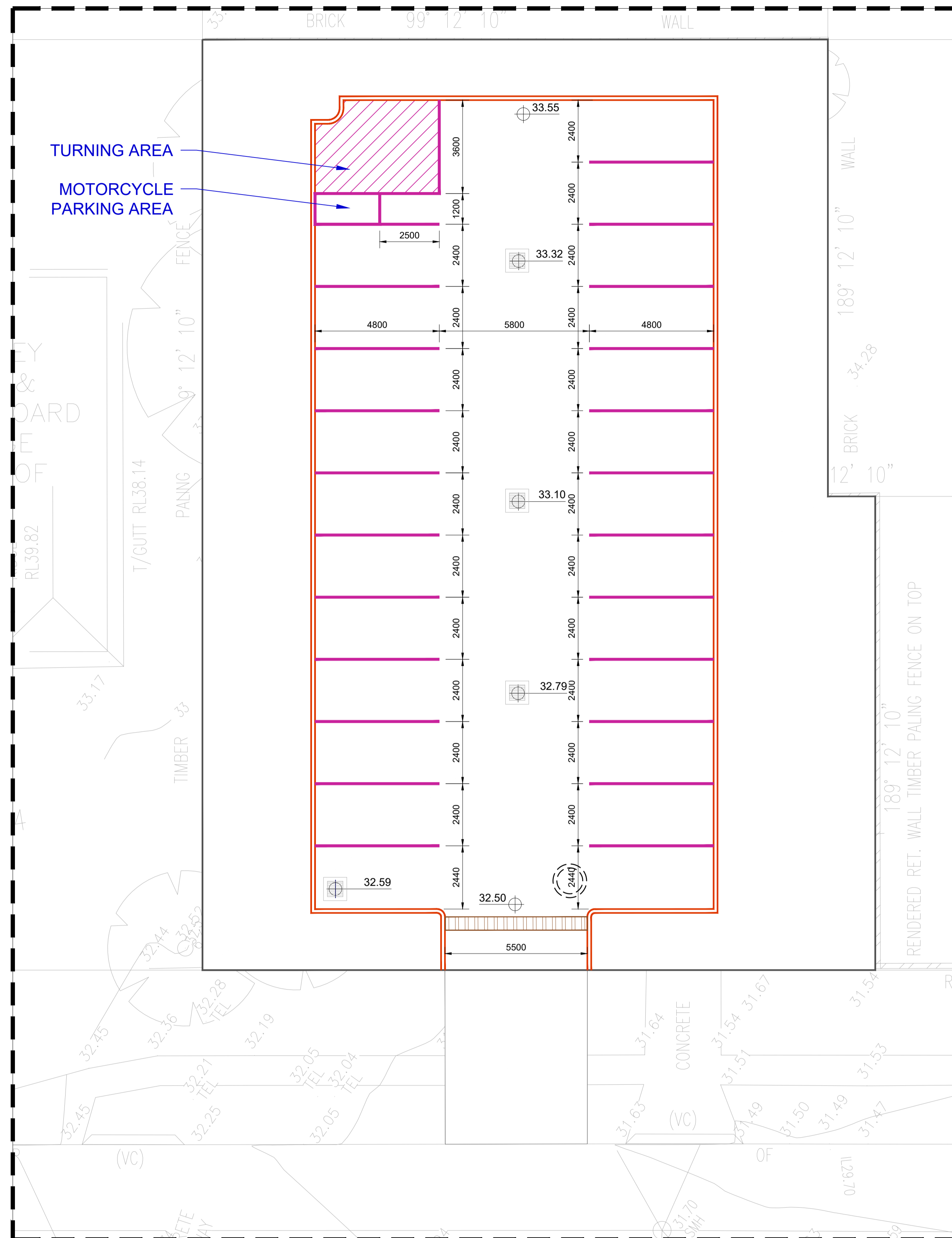
CPC 2760

REVISION:

04

DRAWING No:

C402



- ### LINEMARKING NOTES
- LM1 ALL LINEMARKING WORKS TO BE IN ACCORDANCE WITH EITHER THE CURRENT AUSTRALIAN STANDARD AS1742.2-2009-MANUAL UNIFORM TRAFFIC CONTROL DEVICES, OR AS SHOWN ON THE PLANS OR AS DIRECTED BY THE SUPERINTENDENT.
 - LM2 THE SCOPE OF WORK SHALL INCLUDE ALL PAVEMENT MARKINGS TO ROADS AND CARPARKS.
 - LM3 THE WORK CARRIED OUT AND TESTING PERFORMED SHALL COMPLY WITH THE CURRENT, RELEVANT AUSTRALIAN STANDARDS AND RTA STANDARDS WHERE NECESSARY.
 - LM4 ALL MARKINGS SHALL BE SPOTTED OUT AND APPROVED BY THE SUPERINTENDENT PRIOR TO APPLICATION.
 - LM5 PAINT SHALL BE APPLIED AT A WET THICKNESS OF BETWEEN 0.35mm - 0.45mm.
 - LM6 PAINT SHALL ONLY BE APPLIED TO CLEAN AND DRY SURFACES.
 - LM7 ALL LONGITUDINAL LINES SHALL BE APPLIED BY A SELF-PROPELLED MACHINE.
 - LM8 LINEMARKING REMOVAL SHALL BE CARRIED OUT BY GRINDING OR SANDBLASTING. REMOVAL BY BURNING WILL NOT BE PERMITTED.
 - LM9 THE EXTENT OF LINEMARKING TO BE ERADICATED SHALL BE CONFIRMED ON SITE PRIOR TO REMOVAL. ANY MARKINGS INCORRECTLY REMOVED SHALL BE REINSTATED AT THE CONTRACTOR'S EXPENSE.
 - LM10 ALL MARKINGS SHALL BE COMPLETED IN A WORKMANLIKE MANNER AND BE STRAIGHT, SMOOTH AND WITH EVEN CURVES. ANY NON-CONFORMING WORK, SHALL BE REMOVED AND REINSTATED AT THE DIRECTION OF THE SUPERINTENDENT AT THE CONTRACTOR'S EXPENSE.

DELINEATION & LINE MARKING
SCALE - 1:100

ISSUE FOR DA

| ISSUE | DATE | AMENDMENT |
|-------|------------|----------------------|
| 00 | 08.10.2021 | ISSUE FOR DISCUSSION |
| 01 | 15.10.2021 | ISSUE FOR DISCUSSION |
| 02 | 29.10.2021 | ISSUE FOR DA |
| 03 | 29.11.2021 | ISSUE FOR DA |
| 04 | 06.12.2021 | ISSUE FOR DA |
| 05 | 29.07.2022 | ISSUE FOR DA |

CLIENT / BUILDER / ARCHITECT



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VERIFIED: **AC**

DESIGNED: **HR**

DRAWN: **RQ**

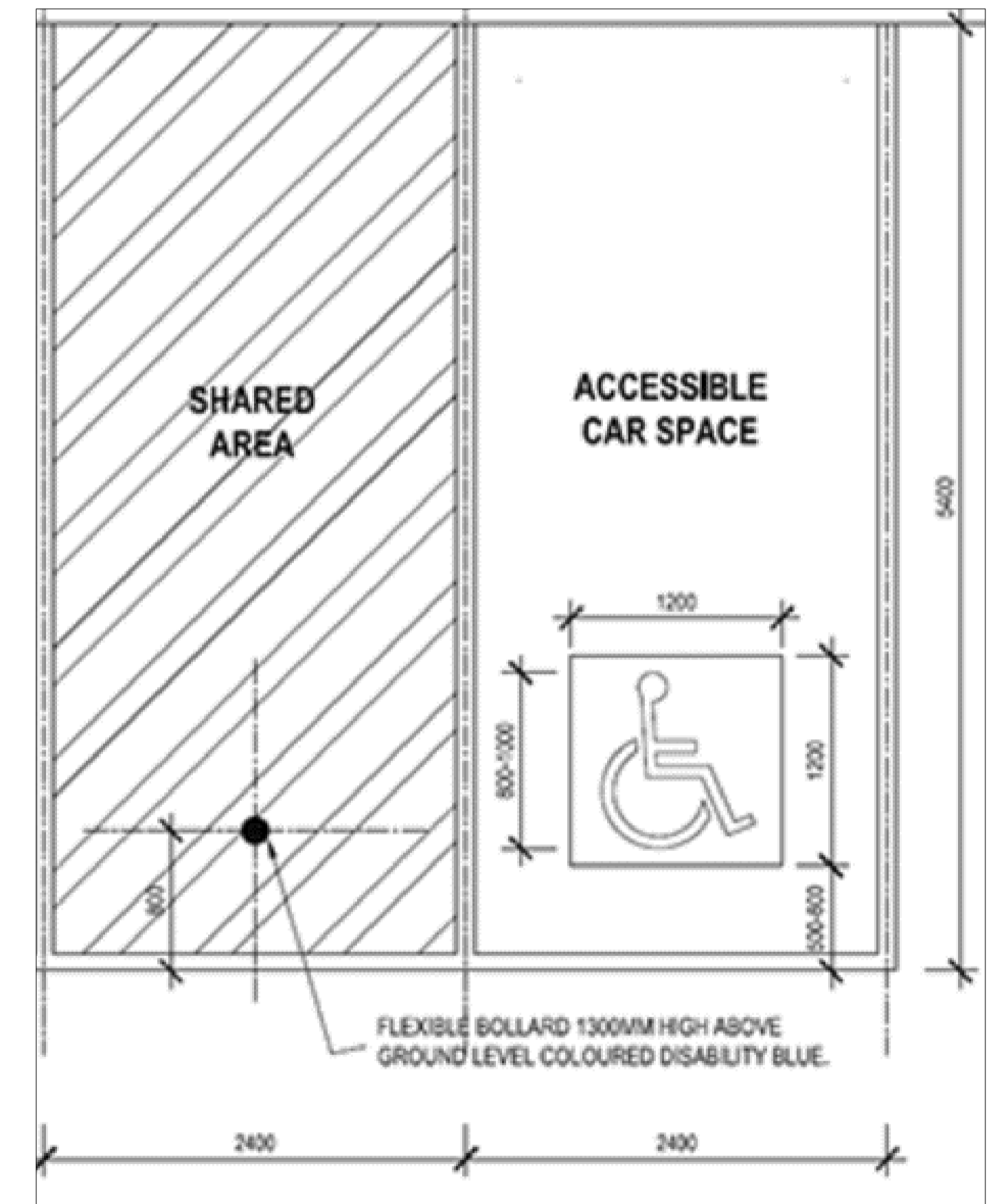
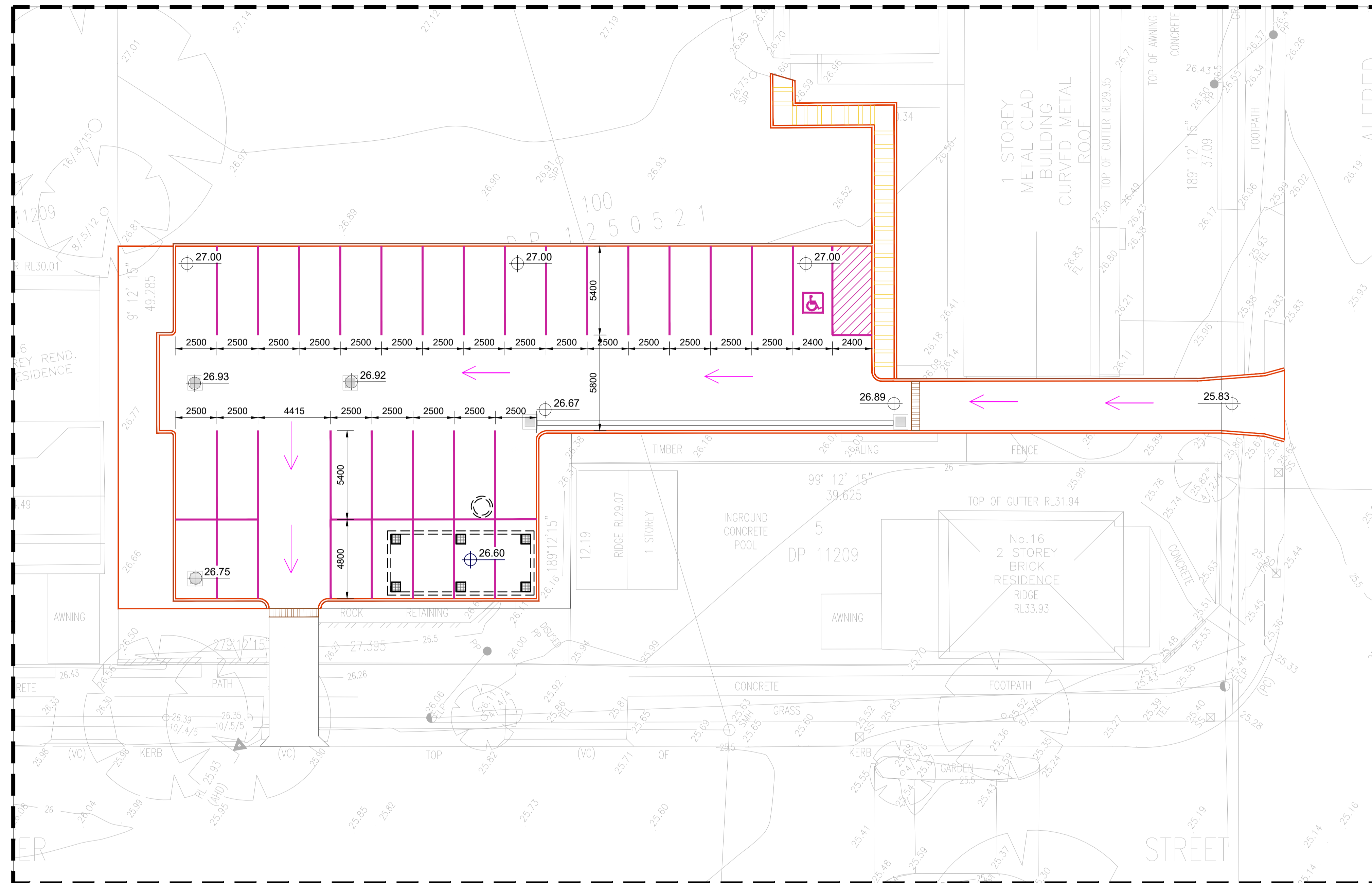
DRAWING TITLE: **DELINEATION & LINE MARKING
60 FEDERAL PARADE**

PROJECT: **PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW**

| DATE: | SCALE: |
|-------------|-------------|
| 29/07/2022 | 1:100 |
| PROJECT No: | REVISION: |
| CPC 2760 | 05 |
| DRAWING No: | C500 |

LINEMARKING NOTES

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DELINEATION & LINE MARKING

SCALE - 1:150

SINGLE-DISABLED-CAR-PARK

ISSUE FOR DA

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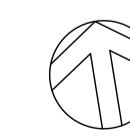


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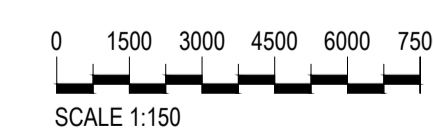
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Plotted by: Admin

VERIFIED:

AC

DESIGNED:

HR

DRAWN:

RQ

DRAWING TITLE:

DELINEATION & LINE MARKING
ALFRED ROAD

PROJECT:

PROPOSED CARPARK DESIGN
ST AUGUSTINE'S COLLEGE
FEDERAL PARADE, BROOKVALE NSW

DATE:

06/12/2021

PROJECT No:

CPC 2760

DRAWING No:

C501

SCALE:

1:100

REVISION:

04