DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT MEASURE OFF DRAWINGS AS PRINT SIZES MAY VARY.

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
SMEATON GRANGE ROAD
NARELLAN NSW 2567

PURPOSE OF ISSUE	BY	DATE	ISSUE NO.
Internal Review		31.06.2019	1
Client Review	PG	15.08.2019	2
Consultants Issue, dwg,pdf		06.09.19	3
Adjusted to Consultant input	BLC	06.11.19	4
Prelim DA to Consultants	BLC	18.11.19	5
DA ISSUE	BLC	11.12.19	6

MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	BLC
CHECKED:	PG
VERIFIED:	Approver
SHEET SIZE:	A1
SCALE:	1 : 1000

DESIGN DEVELOPMENT

SITE PLAN

SHEET

19111 PROJECT NO.

DA001 SHEET NO.

6 ISSUE

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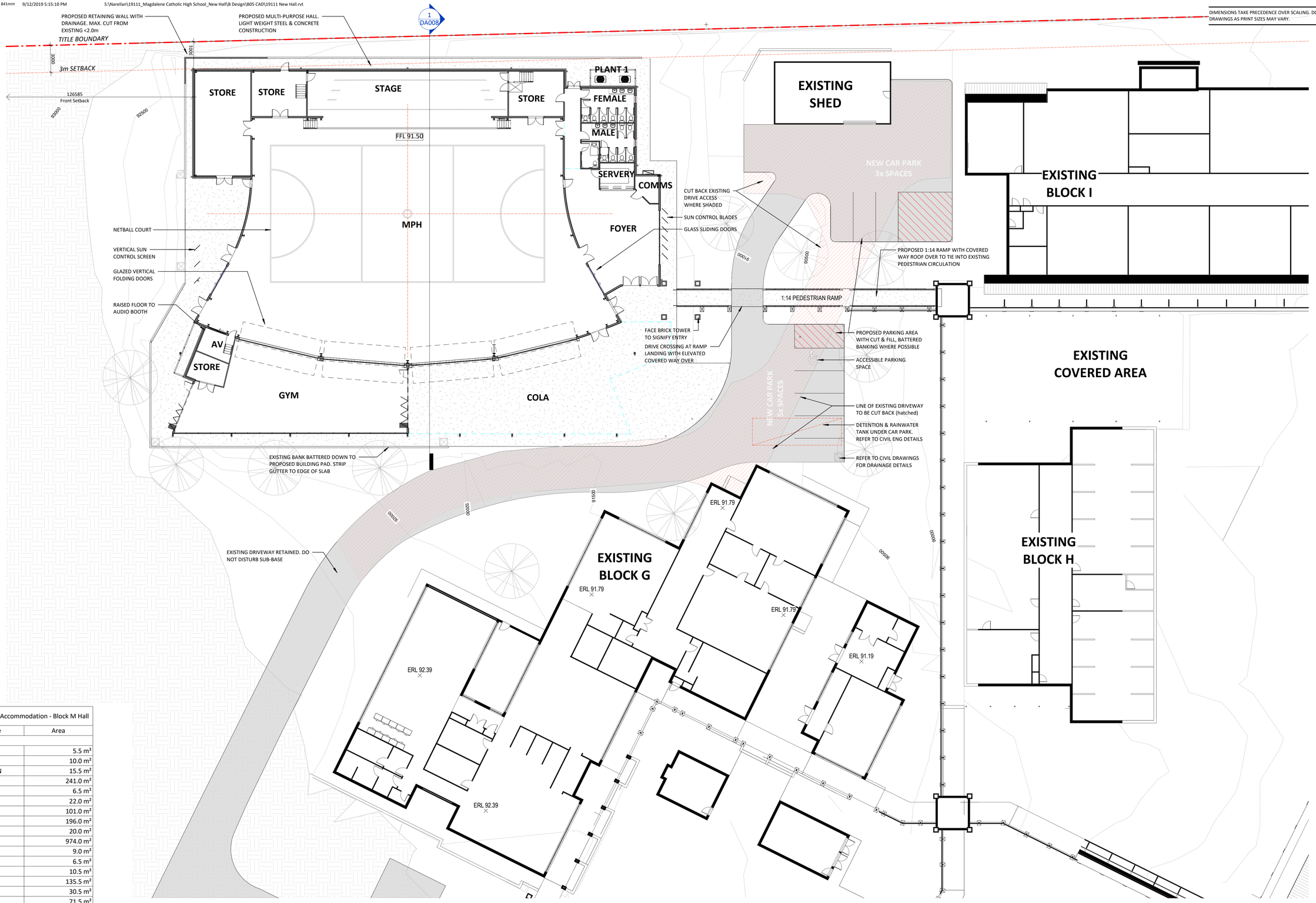
DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT MEASURE OFF DRAWINGS AS PRINT SIZES MAY VARY.



Schedule of Accommodation - Block M Hall	
Name	Area
AC WC	5.5 m²
AV	10.0 m²
CIRCULATION	15.5 m²
COLA	241.0 m²
COMMS	6.5 m²
FEMALE	22.0 m²
FOYER	101.0 m²
GYM	196.0 m²
MALE	20.0 m²
MPH	974.0 m²
PLANT 1	9.0 m²
PLANT 2	6.5 m²
SERVERY	10.5 m²
STAGE	135.5 m²
STORE	30.5 m²
STORE	71.5 m²
STORE	11.5 m²
STORE	30.5 m²
Total Area (Block M)	1897.5 m²

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
SMEATON GRANGE ROAD
NARELLAN NSW 2567

PURPOSE OF ISSUE	BY	DATE	ISSUE No.
Design Development		28.08.19	3
Consultants Issue, dwg,pdf		06.09.19	4
Building adjusted generally	BLC	25.09.19	5
Car park adjusted	BLC	15.10.19	6
Adjusted to Consultant input	BLC	06.11.19	7
Prelim DA to Consultants	BLC	18.11.19	8
DA ISSUE	BLC	11.12.19	9

MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	EJ
CHECKED:	PG
VERIFIED:	PG
SHEET SIZE:	A1
SCALE:	1 : 200

DESIGN DEVELOPMENT

PART SITE PLAN

19111 PROJECT NO.

DA003 SHEET NO.

9 ISSUE

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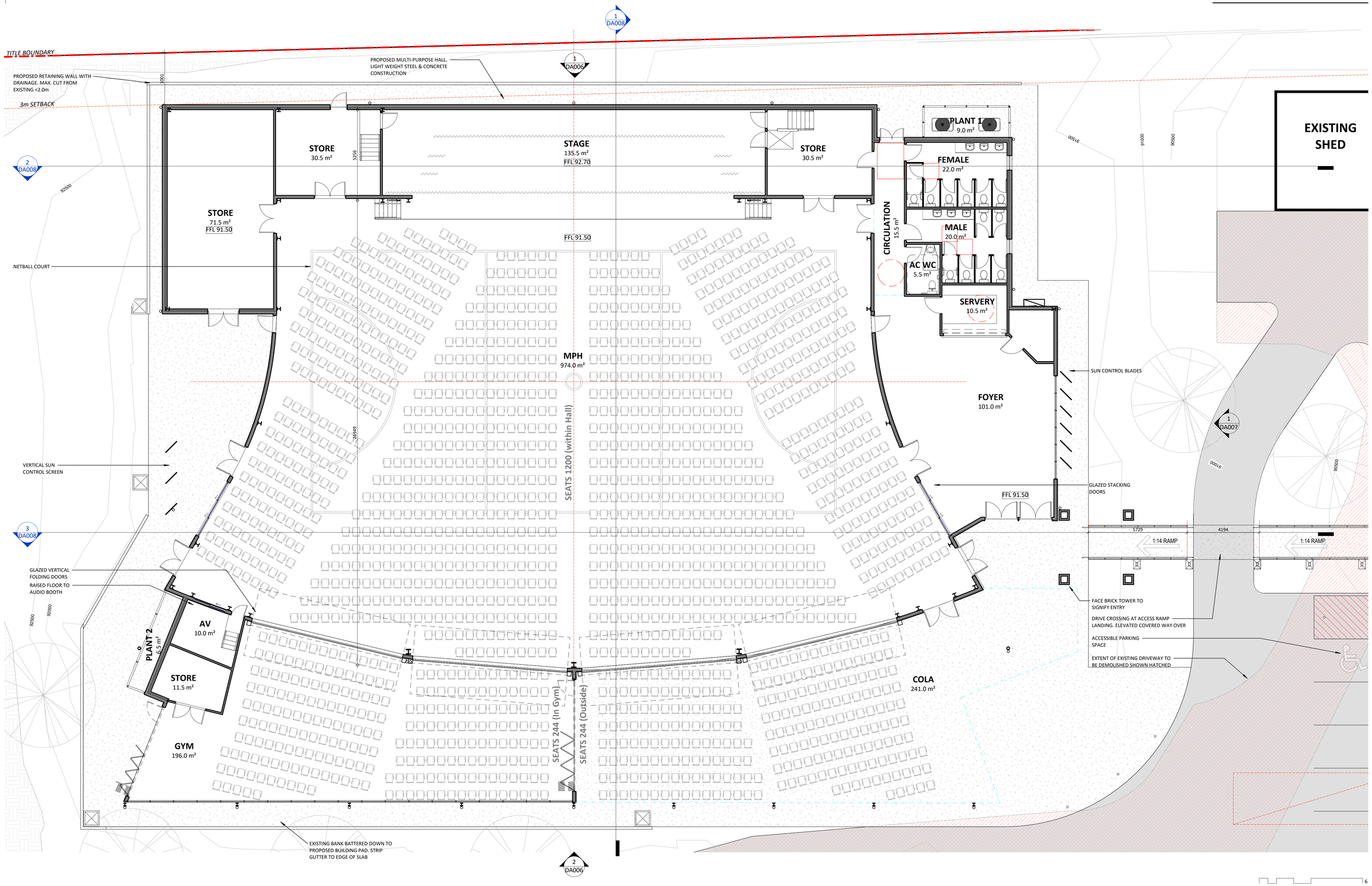

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
SMEATON GRANGE ROAD
NARELLAN NSW 2567

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DA ISSUE	BLC	11.12.19	7

MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	EJ
CHECKED:	PG
VERIFIED:	PG
SHEET SIZE:	A1
SCALE:	1 : 100

DESIGN DEVELOPMENT

FLOOR PLAN

SHEET

19111 PROJECT NO.

DA004 SHEET NO.

7 ISSUE

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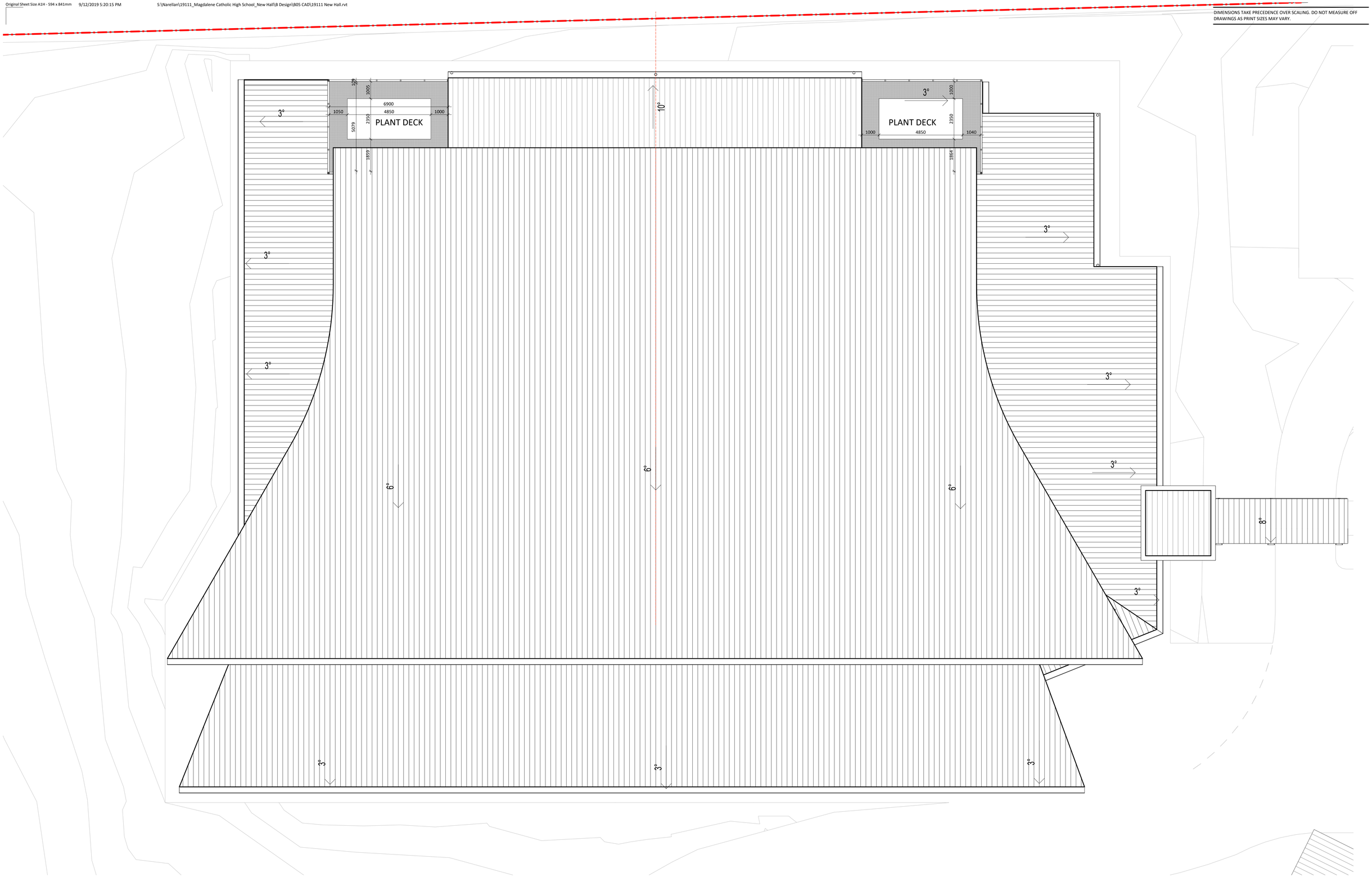
DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT MEASURE OFF DRAWINGS AS PRINT SIZES MAY VARY.



ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
SMEATON GRANGE ROAD
NARELLAN NSW 2567

PURPOSE OF ISSUE	BY	DATE	ISSUE No.
Client Review	PG	15.08.2019	2
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MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	EJ
CHECKED:	PG
VERIFIED:	PG
SHEET SIZE:	A1
SCALE:	1 : 100

DESIGN DEVELOPMENT

ROOF PLAN

SHEET

19111
PROJECT NO.

DA005
SHEET NO.

8
ISSUE

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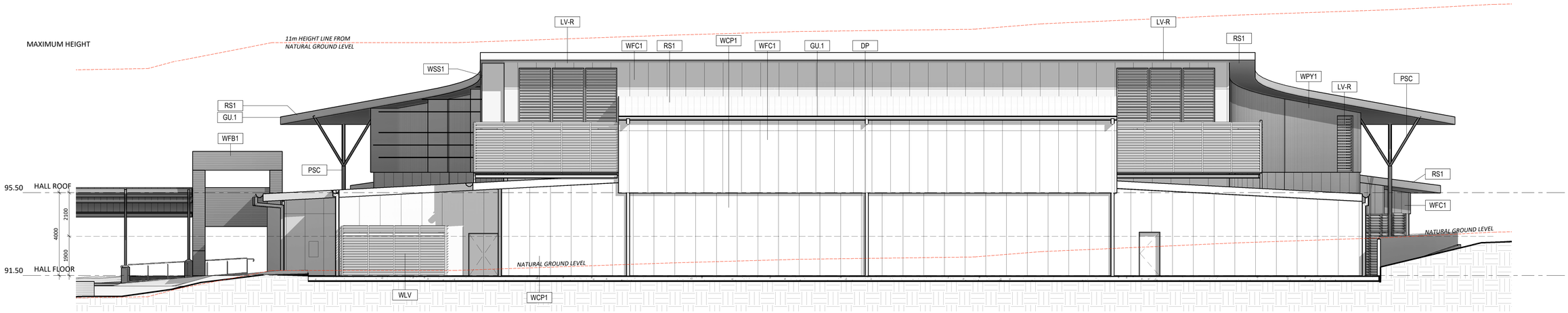
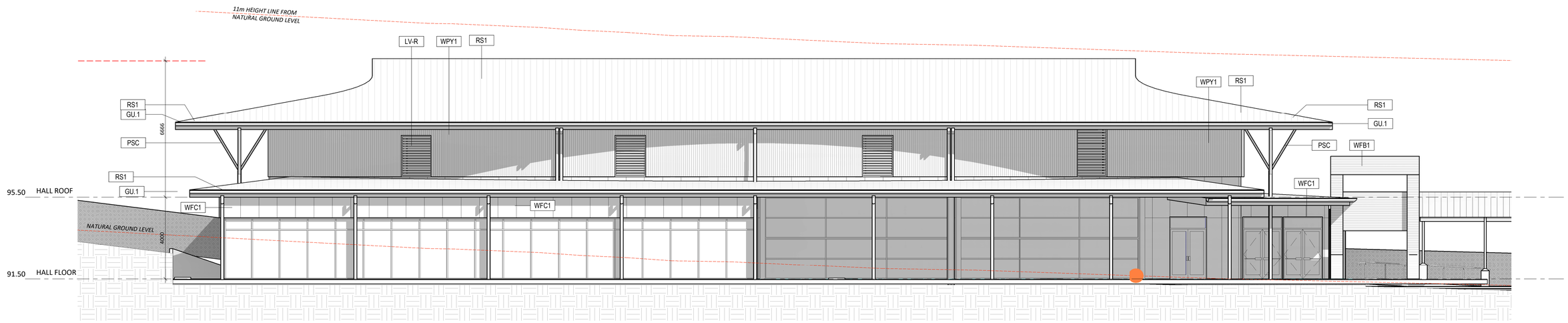
DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT MEASURE OFF DRAWINGS AS PRINT SIZES MAY VARY.

MATERIALS LEGEND

CODE	MATERIAL
DP	Downpipe
GU.1	Roof gutter Type 1
LV-R	Remote operable glass louvre window
PSC	Painted steel column
RS1	Roof sheeting - Type 1
WCP1	Painted concrete wall - Type 1
WFB1	Face brickwork - Type 1
WFC1	Painted fibre cement - Type 1
WLV	Louvred wall panel
WPY1	Polycarbonate wall cladding - Type 1
WSS1	Window Sun Screen - Type 1



1 DA004 NORTH ELEVATION
1 : 100



2 DA004 SOUTH ELEVATION
1 : 100

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
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MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	EJ
CHECKED:	PG
VERIFIED:	PG
SHEET SIZE:	A1
SCALE:	1 : 100

6

DESIGN DEVELOPMENT

ELEVATIONS

SHEET

19111 PROJECT NO.

DA006 SHEET NO.

7 ISSUE

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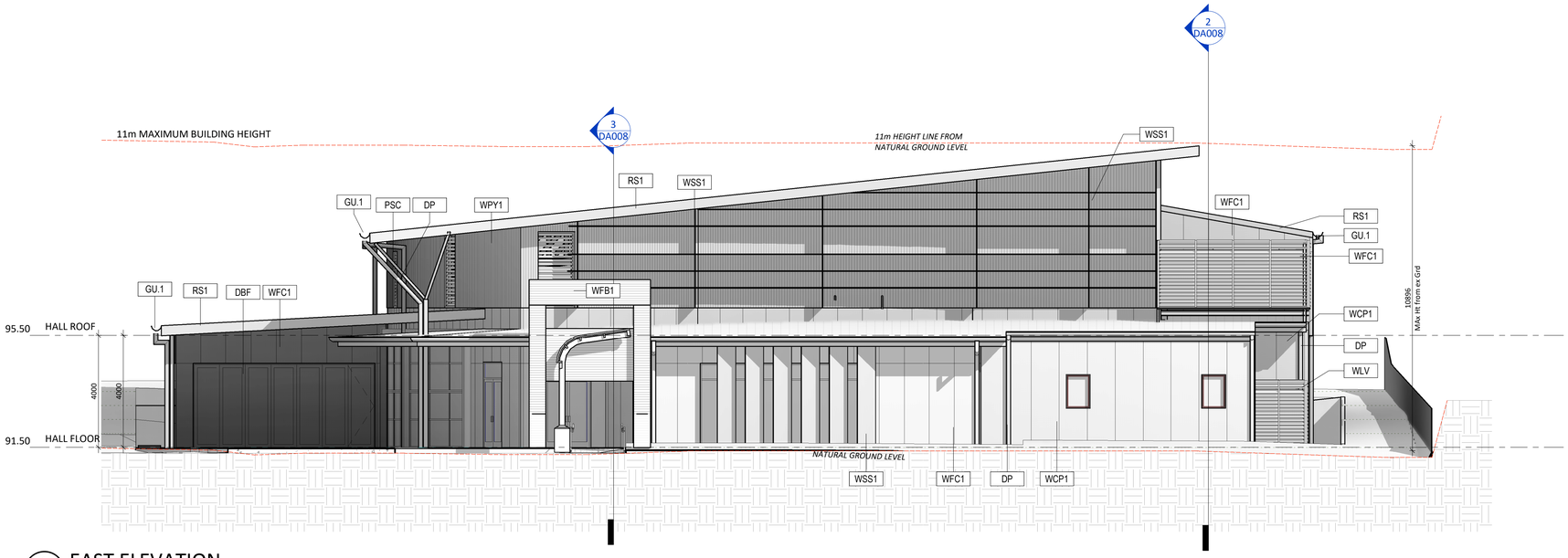
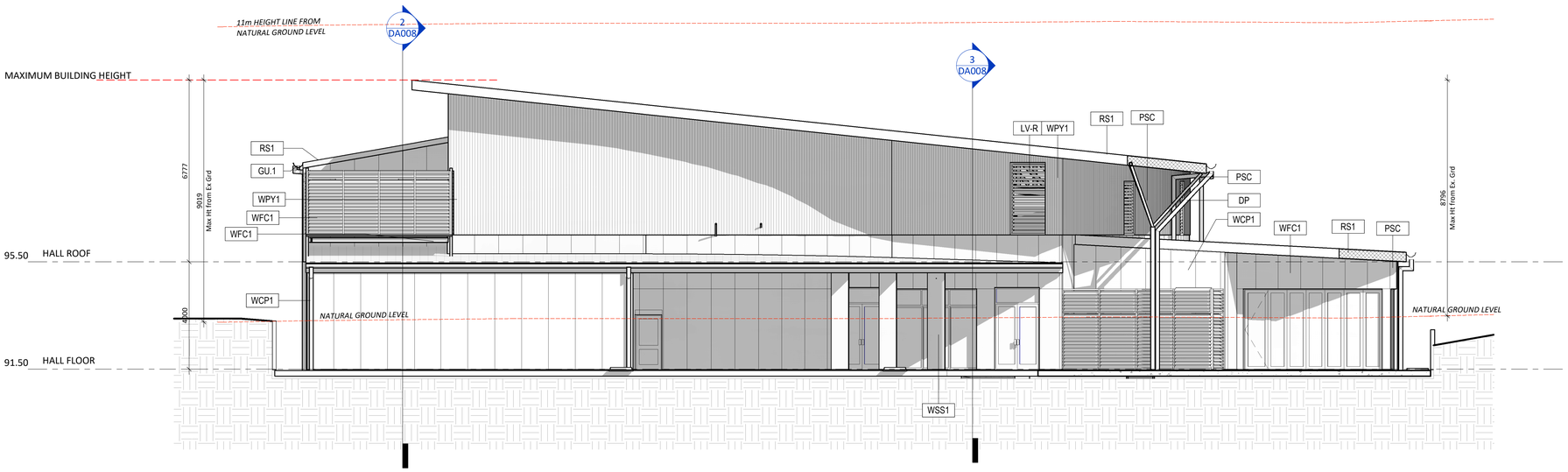
DIMENSIONS TAKE PRECEDENCE OVER SCALING. DO NOT MEASURE OFF DRAWINGS AS PRINT SIZES MAY VARY.

MATERIALS LEGEND	
CODE	MATERIAL
DBF	Bi-Folding Door
DP	Downpipe
GU.1	Roof gutter Type 1
LV-R	Remote operable glass louvre window
PSC	Painted steel column
RS1	Roof sheeting - Type 1
WCP1	Painted concrete wall - Type 1
WFB1	Face brickwork - Type 1
WFC1	Painted fibre cement - Type 1
WLV	Louvred wall panel
WPY1	Polycarbonate wall cladding - Type 1
WSS1	Window Sun Screen - Type 1



1 DA004 EAST ELEVATION
1 : 100



2 WEST ELEVATION
1 : 100

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
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New Multi-Purpose Hall

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MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	EJ
CHECKED:	PG
VERIFIED:	PG
SHEET SIZE:	A1
SCALE:	1 : 100

6

DESIGN DEVELOPMENT

ELEVATIONS

SHEET

19111 PROJECT NO.

DA007 SHEET NO.

7 ISSUE

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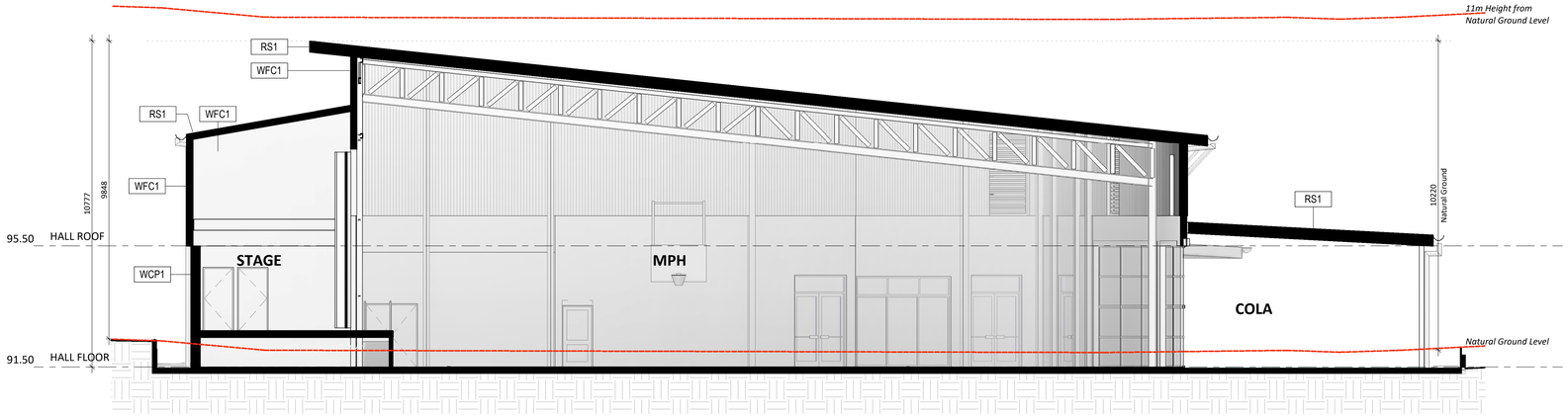
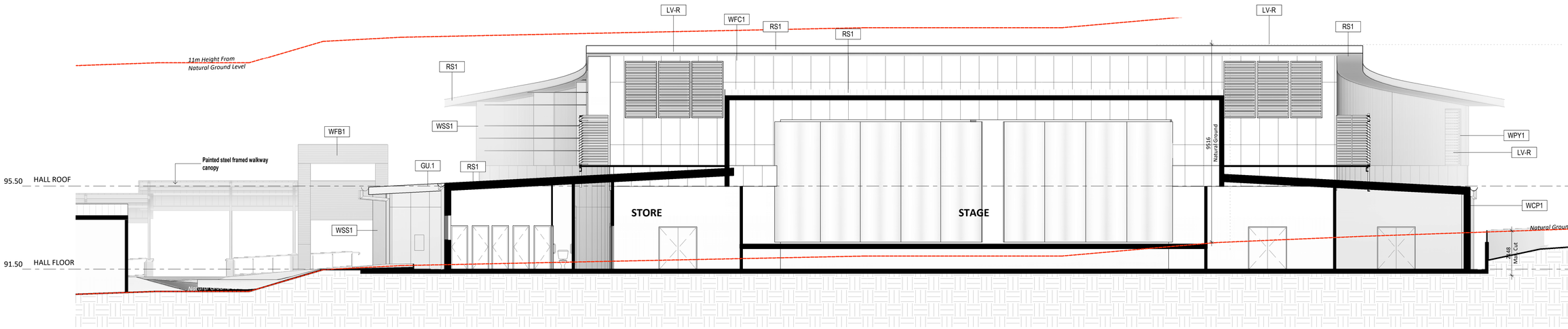


1 HALL SECTION 1
1 : 100



2 HALL SECTION 2
1 : 100

3 HALL SECTION 3
1 : 100

MATERIALS LEGEND

CODE	MATERIAL
DP	Downpipe
GU.1	Roof gutter Type 1
LV-R	Remote operable glass louvre window
PSC	Painted steel column
RS1	Roof sheeting - Type 1
WCP1	Painted concrete wall - Type 1
WFB1	Face brickwork - Type 1
WFC1	Painted fibre cement - Type 1
WPY1	Polycarbonate wall cladding - Type 1
WSS1	Window Sun Screen - Type 1

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

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MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	BLC
CHECKED:	PG
VERIFIED:	Approver
SHEET SIZE:	A1
SCALE:	1 : 100

DESIGN DEVELOPMENT

SECTIONS

19111 PROJECT NO.

DA008 SHEET NO.

6 ISSUE

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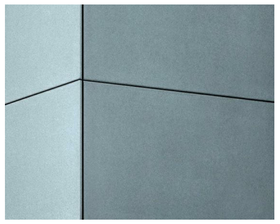


WFC1: PRE-FINISHED EXPRESS JOINTED FC CLADDING

CLADDING COLOUR No.1

WCP1: CONCRETE PANEL

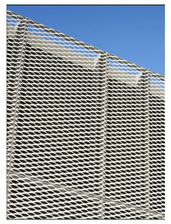
NATURAL COLOUR, CLEAR FINISH

WFB01: FACE BRICK

AS ABOVE

WPY: TRANSLUCENT POLYCARBONATE SHEET

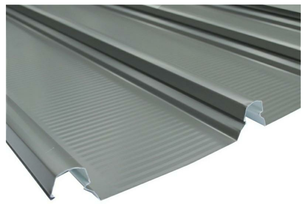
WHITE (MOST OPAQUE)



WSS: EXPANDED METAL SUNSCREEN

W.##: POWDERCOATED ALUMINIUM SUITE

BLACK



RS1: COLORBOND ROOF SHEETING

SURFMIST

GU1: COLORBOND GUTTER

BLACK

6

ARCHITECT
ALLEANZA ARCHITECTURE

CLIENT
TRUSTEES OF THE ROMAN CATHOLIC CHURCH - DIOCESE OF WOLLONGONG

PROJECT
MAGDALENE CATHOLIC HIGH
New Multi-Purpose Hall

ADDRESS
SMEATON GRANGE ROAD
NARELLAN NSW 2567

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MAGDALENE CATHOLIC HIGH SCHOOL

NORTH

DRAWN:	BLC
CHECKED:	PG
VERIFIED:	Approver
SHEET SIZE:	A1
SCALE:	

DESIGN DEVELOPMENT

MATERIALS SCHEDULE

SHEET

19111 PROJECT NO. | DA010 SHEET NO. | 6 ISSUE

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PROPOSED MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW
CIVIL ENGINEERING WORKS

GENERAL NOTES:

1. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH CAMDEN COUNCIL SPECIFICATION. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE COURSE OF THE WORKS.
2. ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS AND MARRY IN A 'WORKMANLIKE' MANNER.
3. THE CONTRACTOR IS TO VERIFY THE LOCATION OF ALL SERVICES WITH EACH RELEVANT AUTHORITY. ANY DAMAGE TO SERVICES SHALL BE RECTIFIED BY THE CONTRACTOR OR THE RELEVANT AUTHORITY AT THE CONTRACTOR'S EXPENSE. SERVICES SHOWN ON THESE PLANS ARE ONLY THOSE EVIDENT AT THE TIME OF SURVEY OR AS DETERMINED FROM SERVICE DIAGRAMS. H & H CONSULTING ENGINEERS PTY. LTD. CANNOT GUARANTEE THE INFORMATION SHOWN NOR ACCEPT ANY RESPONSIBILITY FOR INACCURACIES OR INCOMPLETE DATA. ALL SURVEY INFORMATION IS BASED IN TRUE NORTH SURVEYORS (JOB REF:8168 - DRAWING No.8168DU-SERVICES).
4. SERVICES & ACCESSES TO THE EXISTING PROPERTIES ARE TO BE MAINTAINED IN WORKING ORDER AT ALL TIMES DURING CONSTRUCTION.
5. ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
6. REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS.
7. MINIMUM GRADE OF SUBSOIL SHALL BE 0.5% (1:200) FALL TO OUTLETS.
8. ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, EROSION AND SEDIMENTATION CONTROL PLAN AND CAMDEN COUNCIL REQUIREMENTS WHERE APPLICABLE.
9. CONTRACTOR TO CHECK AND CONFIRM SITE DRAINAGE CONNECTIONS ACROSS THE VERGE PRIOR TO COMMENCEMENT OF SITE DRAINAGE WORKS.
10. PROPERTIES AFFECTED BY THE WORKS ARE TO BE NOTIFIED IN ADVANCE WHERE DISRUPTION TO EXISTING ACCESS IS LIKELY.

EXISTING SERVICES & FEATURES

- THE CONTRACTOR SHALL ALLOW FOR THE CAPPING OFF, EXCAVATION AND REMOVAL (IF REQUIRED) OF ALL EXISTING SERVICES IN AREAS AFFECTED BY WORKS WITHIN THE CONTRACT AREA OR AS SHOWN ON THE DRAWINGS UNLESS DIRECTED OTHERWISE BY THE SUPERINTENDENT.
- THE CONTRACTOR SHALL ENSURE THAT AT ALL TIMES SERVICES TO ALL BUILDINGS NOT AFFECTED BY THE WORKS ARE NOT DISRUPTED.
- PRIOR TO COMMENCEMENT OF ANY WORKS THE CONTRACTOR SHALL GAIN APPROVAL OF HIS PROGRAM FOR THE RELOCATION/ CONSTRUCTION OF TEMPORARY SERVICES.
- CONTRACTOR SHALL CONSTRUCT TEMPORARY SERVICES TO MAINTAIN SUPPLY TO EXISTING BUILDING REMAINING IN OPERATION DURING WORKS TO THE SATISFACTION AND APPROVAL OF THE SUPERINTENDENT. ONCE DIVERSION IS COMPLETE AND COMMISSIONED, THE CONTRACTOR SHALL REMOVE ALL SUCH TEMPORARY SERVICES AND MAKE GOOD TO THE SATISFACTION OF THE SUPERINTENDENT.
- INTERRUPTION TO SUPPLY OF EXISTING SERVICES SHALL BE DONE SO AS NOT TO CAUSE ANY INCONVENIENCE TO THE PRINCIPAL. CONTRACTOR TO GAIN APPROVAL FROM THE SUPERINTENDENT FOR TIME OF INTERRUPTION.
- EXISTING SERVICES, BUILDINGS, EXTERNAL STRUCTURES AND TREES SHOWN ON THESE DRAWINGS ARE EXISTING FEATURES PRIOR TO ANY DEMOLITION WORKS.
- EXISTING SERVICES UNLESS SHOWN ON SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND ELECTRONIC LOCATING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMPLETE A 'DIAL BEFORE YOU DIG' SEARCH AND TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.

LOCALITY SKETCH

SCALE: NTS

DRAWING SCHEDULE	
19989_DA_C000	COVER SHEET, DRAWING SCHEDULE, NOTES & LOCALITY SKETCH
19989_DA_C100	GENERAL ARRANGEMENT PLAN
19989_DA_C200	STORMWATER MISCELLANEOUS DETAILS & PIT LID SCHEDULE
19989_DA_C201	OSD TANK PLAN AND SECTION, SHEET 1 OF 2
19989_DA_C202	OSD TANK DETAILS, SHEET 2 OF 2
19989_DA_C210	MUSIC MODELING RESULTS
19989_DA_SE01	SEDIMENT & EROSION CONTROL PLAN
19989_DA_SE02	SEDIMENT & EROSION CONTROL TYPICAL SECTIONS & DETAILS

SITEWORKS NOTES

- DATUM : A.H.D.
- ORIGIN OF LEVELS : REFER TO BENCH OR STATE SURVEY MARKS WHERE SHOWN ON PLAN.
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN ON THE DRAWINGS & THE DIRECTIONS OF THE SUPERINTENDENT.
- EXISTING SERVICES UNLESS SHOWN ON THE SURVEY PLAN HAVE BEEN PLOTTED FROM SERVICES SEARCH PLANS AND AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH THE LOCATION AND LEVEL OF ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY WORK. ANY DISCREPANCIES SHALL BE REPORTED TO THE SUPERINTENDENT. CLEARANCES SHALL BE OBTAINED FROM THE RELEVANT SERVICE AUTHORITY.
- WHERE NEW WORKS ABUT EXISTING THE CONTRACTOR SHALL ENSURE THAT A SMOOTH EVEN PROFILE, FREE FROM ABRUPT CHANGES IS ACHIEVED.
- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT BY A REGISTERED SURVEYOR.
- CARE IS TO BE TAKEN WHEN EXCAVATING NEAR EXISTING SERVICES. NO MECHANICAL EXCAVATION IS TO BE UNDERTAKEN OVER TELSTRA OR ELECTRICAL SERVICES. HAND EXCAVATE IN THESE AREAS.
- CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
- MAKE SMOOTH TRANSITION TO EXISTING SURFACES AND MAKE GOOD.
- THESE PLANS SHALL BE READ IN CONJUNCTION WITH APPROVED LANDSCAPE, ARCHITECTURAL, STRUCTURAL, HYDRAULIC AND MECHANICAL DRAWINGS AND SPECIFICATIONS
  OR WRITTEN INSTRUCTIONS THAT MAY BE ISSUED RELATING TO DEVELOPMENT AT THE SITE.
- TRENCHES THROUGH EXISTING ROAD AND CONCRETE PAVEMENTS SHALL BE SAWCUT TO FULL DEPTH OF CONCRETE AND A MINIMUM OF 50mm IN BITUMINOUS PAVING.
- ALL BRANCH GAS AND WATER SERVICES UNDER DRIVEWAYS AND BRICK PAVING SHALL BE LOCATED IN Ø80 uPVC SEWER GRADE CONDUITS EXTENDING A MINIMUM OF 500mm BEYOND EDGE OF PAVING.
- GRADES TO PAVEMENTS TO BE AS IMPLIED BY RL'S ON PLAN . GRADE EVENLY BETWEEN NOMINATED RL'S. AREAS EXHIBITING PONDING GREATER THAN 5mm DEPTH WILL NOT BE ACCEPTED UNLESS IN A DESIGNATED SAG POINT.
- ALL COVERS AND GRATES ETC TO EXISTING SERVICE UTILITIES ARE TO BE ADJUSTED TO SUIT NEW FINISHED SURFACE LEVELS WHERE APPLICABLE.

SURVEY NOTES

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY THE SURVEYOR SPECIFIED IN THE TITLE BLOCK.
THE INFORMATION IS SHOWN TO PROVIDE A BASIS FOR DESIGN. HENRY AND HYMAS PTY. LTD. 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 HENRY AND HYMAS PTY. LTD. THE FOLLOWING NOTES HAVE BEEN TAKEN DIRECTLY FROM ORIGINAL SURVEY DOCUMENTS.
SURVEYED BY LAND TEAM

SUBGRADE PREPARATION - SITEWORKS.

1. THE EXISTING SURFACE IS TO BE STRIPPED OF ANY PAVEMENTS, TOPSOIL OR OBVIOUS UNSUITABLE MATERIAL.
2. EXCAVATE TO ACHIEVE SUBGRADE LEVELS WHERE NECESSARY.
3. THE EXPOSED SUBGRADE AFTER STRIPPING AND/ OR EXCAVATION IS TO BE PROOF ROLLED USING NOT FEWER THAN 5 PASSES OF A MINIMUM 8 TONNE DEAD WEIGHT STEEL SMOOTH-DRUM ROLLER UNDER THE SUPERVISION OF AN EXPERIENCED GEOTECHNICAL ENGINEER OR AN EXPERIENCED CIVIL ENGINEER. ANY AREAS ON THE SUBGRADE EXHIBITING EXCESSIVE DEFLECTION / MOVEMENT UNDER ROLLER TO BE EXCAVATED TO A MIN. DEPTH OF 0.5m AND REPLACED WITH APPROVED GRANULAR MATERIAL COMPACTED IN 250mm LOOSE LAYERS OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
4. ENGINEERED FILL FOR REPLACEMENT OF SOFT OR HEAVING AREAS OR FOR BULK FILLING TO COMPRISE ESSENTIALLY OF GRANULAR MATERIALS (EG. EXCAVATED SHALE), WITH A PARTICLE SIZE NOT GREATER THAN 75mm DIAMETER. ENGINEERED FILL TO BE PLACED IN LAYERS NOT EXCEEDING 250mm LOOSE THICKNESS AND COMPACTED TO BETWEEN 98% AND 102% OF STANDARD MAXIMUM DRY DENSITY (SMDD) WITHIN ± 2% OF OPTIMUM MOISTURE CONTENT (OMC).
5. IMPORTED FILLING (IF REQUIRED) IS TO BE TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER. THE CONTRACTOR IS TO NOMINATE THE SOURCE AND PROVIDE A SAMPLE FOR APPROVAL PRIOR TO IMPORTATION AND PLACEMENT ON SITE.
6. ALL FILL MATERIAL SHALL BE FROM A SOURCE APPROVED BY THE SUPERINTENDENT AND SHALL COMPLY WITH THE FOLLOWING.
   FREE FORM ORGANIC AND PERISHABLE MATTER
   MAXIMUM PARTICLE SIZE = 75mm
   MAXIMUM PLASTICITY INDEX = 15%

SUBSOIL DRAINAGE NOTES

1. GENERALY PROVIDE SUBSOIL DRAINS TO INTERCEPT GROUNDWATER SEEPAGE AND PREVENT WATER BUILD-UP BEHIND WALLS AND UNDER FLOORS AND PAVEMENTS. CONNECT SUBSOIL TO SURFACE DRAINS OR TO THE STORMWATER DRAINAGE SYSTEM AS APPLICABLE.
2. PIPE DEPTH:
   PROVIDE THE FOLLOWING MINIMUM CLEAR DEPTH, MEASURED TO THE CROWN OF THE PIPE, WHERE THE PIPE PASSES BELOW THE FOLLOWING ELEMENTS:
   - 100mm BELOW FORMATION LEVEL OF THE PAVEMENT, KERB OR CHANNEL.
   - 100mm BELOW THE AVERAGE GRADIENT OF THE BOTTOM OF FOOTINGS.
3. JOINTING:
   AT JUNCTIONS OF SUBSOIL PIPES PROVIDE TEES, COUPLINGS OR ADAPTORS TO AS2439.1.
4. TRENCH WIDTH MINIMUM 300mm.
5. PIPE UNDERLAY
   GENERAL: GRADE THE TRENCH FLOOR EVENLY TO THE GRADIENT OF THE PIPELINE. IF THE TRENCH FLOOR IS ROCK, CORRECT ANY IRREGULARITIES WITH COMPACTED BEDDING MATERIAL. BED PIPING ON A CONTINUOUS UNDERLAY OF BEDDING MATERIAL, AT LEAST 75mm THICK AFTER COMPACTION. LAY THE PIPE WITH ONE LINE OF PERFORATIONS AT THE BOTTOM.

   CHASES: IF NECESSARY TO PREVENT PROJECTIONS SUCH AS SOCKETS AND FLANGES FROM BEARING ON THE TRENCH BOTTOM OR UNDERLAY.
6. PIPE SURROUNDS:
   GENERAL: PLACE THE MATERIAL IN THE PIPE SURROUND IN LAYERS SMALLER THAN OR EQUAL TO 200mm LOOSE THICKNESS, AND COMPACT WITHOUT DAMAGING OR DISPLACING PIPING.
   DEPTH OF OVERLAY: TO THE UNDERSIDE OF THE BASE OF OVERLYING STRUCTURES SUCH AS PAVEMENTS, SLABS AND CHANNELS TO WITHIN 150mm OF THE FINISHED SURFACE OF UNPAVED OR LANDSCAPED AREAS.
7. FILTER SOCKS:
   PROVIDE POLYESTER PERMEABLE SOCKS CAPABLE OF RETAINING PARTICLES OF 0.25mm SIZES. SECURELY FIT OR JOIN THE SOCK AT EACH JOINT.

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY LAND TEAM
DATUM:AHD
ORIGIN OF LEVELS: RL 96.545, SSM 18294

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA	MC	LV	04.12.2019					
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client
DIOCESE OF WOLLONGONG

Architect
ALLEANZA ARCHITECTURE

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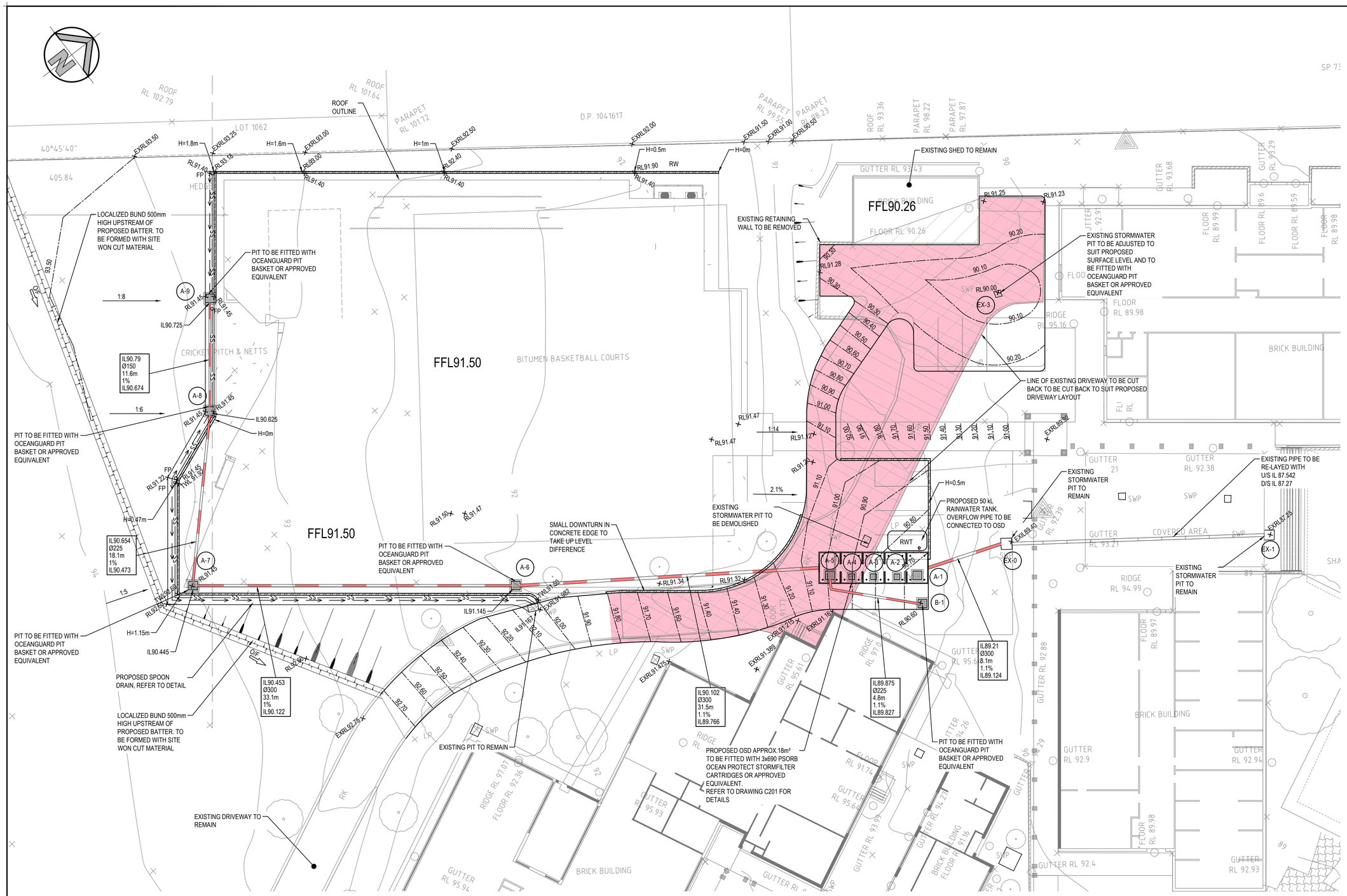
Project
MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

Title
COVER SHEET, DRAWING SCHEDULE
NOTES & LOCALITY SKETCH

Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	NTS

Drawing number: 19989_DA_C000
Revision: 02

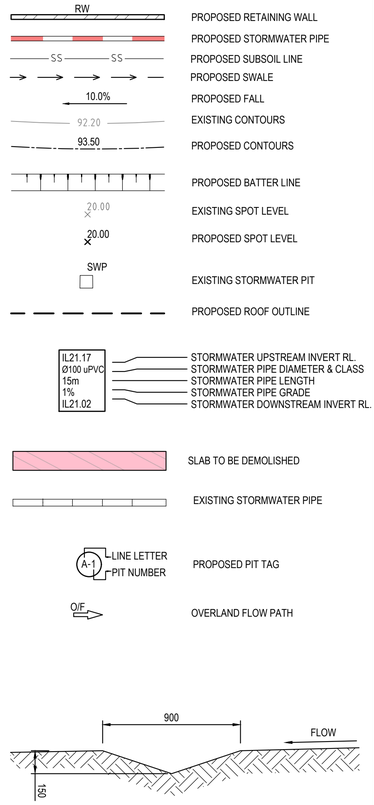


GENERAL ARRANGEMENT PLAN

SCALE 1:200

LEGEND

- EXISTING BOUNDARY
- PROPOSED JUNCTION PITS
- PROPOSED SURFACE INLET PITS
- RW — PROPOSED RETAINING WALL
- PROPOSED STORMWATER PIPE
- SS — PROPOSED SUBSOIL LINE
- PROPOSED SWALE
- 10.0% — PROPOSED FALL
- 92.20 — EXISTING CONTOURS
- 93.50 — PROPOSED CONTOURS
- PROPOSED BATTER LINE
- 20.00 — EXISTING SPOT LEVEL
- 20.00 — PROPOSED SPOT LEVEL
- SWP — EXISTING STORMWATER PIT
- PROPOSED ROOF OUTLINE
- IL21.17 / Ø100 uPVC / 15m / 1% / IL21.02 — STORMWATER UPSTREAM INVERT RL / STORMWATER PIPE DIAMETER & CLASS / STORMWATER PIPE LENGTH / STORMWATER PIPE GRADE / STORMWATER DOWNSTREAM INVERT RL.
- SLAB TO BE DEMOLISHED
- EXISTING STORMWATER PIPE
- A-1 — LINE LETTER / PIT NUMBER — PROPOSED PIT TAG
- O/F — OVERLAND FLOW PATH



CATCH DRAIN DETAIL

SCALE 1:20

NOTE:

- CONTRACTOR TO INVESTIGATE PRESENCE OF EXISTING UTILITIES, SIZE AND DEPTH OF ALL IN-GROUND UTILITIES, PRIOR TO CONSTRUCTION. SERVICES SHOWN ON THIS DRAWING DEPICTED FROM SERVICES SEARCH PLANS AND CANNOT BE GUARANTEED.
- INVERT LEVEL TO EXISTING STORMWATER DRAINAGE LINES TO BE CHECKED AND CONFIRMED PRIOR TO COMMENCEMENT OF WORK.
- SERVICES SHOWN ON THIS DRAWING ARE DEPICTED FROM SERVICES SEARCH PLANS AND CAN NOT BE GUARANTEED. THE EXACT DEPTH AND LOCATION OF ALL IN-GROUND UTILITIES TO BE DETERMINED BY POT HOLING OR CABLE SEARCH.

0 400 800 1200 1600 2000mm
400 200
SCALE 1:20

0 4 8 12 16 20m
4 3 2 1
SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY LAND TEAM
DATUM:AHD
ORIGIN OF LEVELS: RL 96.545, SSM 18294

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
02	ISSUED FOR DA	MC	LV	04.12.2019					
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client: DIOCESE OF WOLLONGONG

Architect: ALLEANZA ARCHITECTURE

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Project: MAGDALENE CATHOLIC HIGH SCHOOL SMEATON GRANGE ROAD, NARELLAN, NSW

Title: GENERAL ARRANGEMENT PLAN

Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	AS NOTED

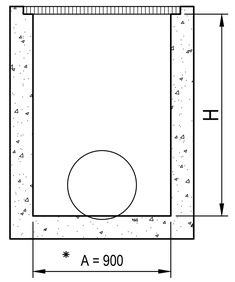
Drawing number: 19989_DA_C100

Revision: 02

TYPICAL PIT CHAMBER SIZES

IT IS THE CONTRACTORS RESPONSIBILITY TO SELECT PIT CHAMBER SIZE WITH REGARDS TO PIPE SIZE, DEPTH TO INVERT AND SKEW ANGLE. REFER SKETCHES BELOW.

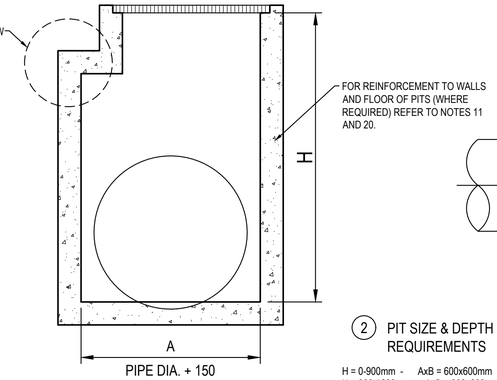
1. SELECT PIT CHAMBER USING THE STEPS BELOW:
2. SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS.
3. CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS.
   CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE.



SECTION
NTS

*A = 600 FOR PIPES UP TO 375 DIA.

1 PIT CHAMBER DIMENSIONS FOR PIPES UP TO 600 DIA.



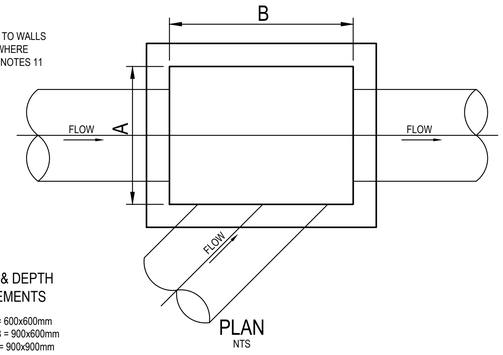
SECTION
NTS

1 PIT CHAMBER FOR PIPES GREATER THAN 600 DIA.

FOR B = 600mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 225mm
FOR B = 900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 375mm
FOR B = 1200mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 600mm
FOR B = 1500mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 825mm
FOR B = 1900mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 1050mm

2 PIT SIZE & DEPTH REQUIREMENTS

H = 0-900mm - AxB = 600x600mm
H = 900-1200mm - AxB = 900x600mm
H = >1200mm - AxB = 900x900mm



PLAN
NTS

3 PIT CHAMBER FOR SIDE ENTRY ON SKEW

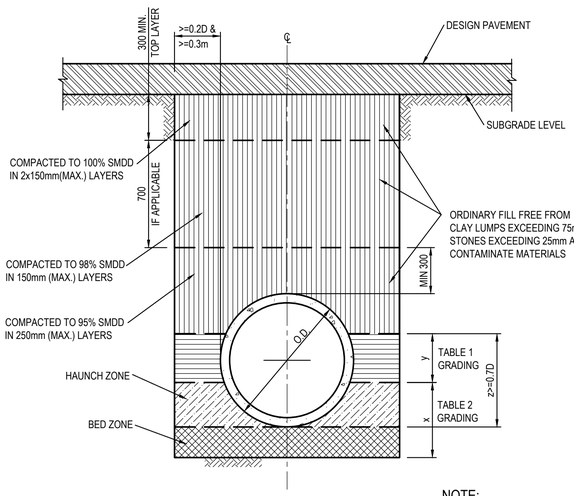
TABLE 1	
SIEVE SIZE (MM)	WEIGHT PASISNG (%)
75.0	100
9.5	100 TO 50
2.36	100 TO 30
0.60	50 TO 15
0.075	25 TO 0

TABLE 2	
SIEVE SIZE (MM)	WEIGHT PASISNG (%)
19.0	100
2.36	100 TO 50
0.60	90 TO 20
0.30	60 TO 10
0.15	25 TO 0
0.075	10 TO 0

TABLE 3				
SUPPORT TYPE	BED ZONE X	HAUNCH ZONE Y	BED AND HAUNCH ZONES COMPACTION	MAX BEDDING FACTOR
HS1	100 IF D<=1500, OR 150 IF D>=1500	0.1D	50	2.0
HS2		0.3D	60	2.5
HS3		0.3D	70	4.0

PIT LID SCHEDULE

PIT/STRUCTURE NUMBER	DESCRIPTION
EX-1 EX-2 EX-3	EXISTING STORMWATER PIT TO REMAIN
A-1 A-5	SURFACE INLET PIT WITH HINGED 900x900 HEAVY DUTY GRATED LID CLASS 'D' IN ACCORDANCE WITH LOCAL COUNCIL'S REQUIREMENTS.
A-2 A-3 A-4 B-1	SURFACE INLET PIT WITH HINGED 600x600 HEAVY DUTY GRATED LID CLASS 'D' IN ACCORDANCE WITH LOCAL COUNCIL'S REQUIREMENTS.
A-6 A-7 A-8 A-9	SURFACE INLET PIT WITH HINGED 600x600 LIGHT DUTY GRATED LID CLASS 'B' IN ACCORDANCE WITH LOCAL COUNCIL'S REQUIREMENTS.

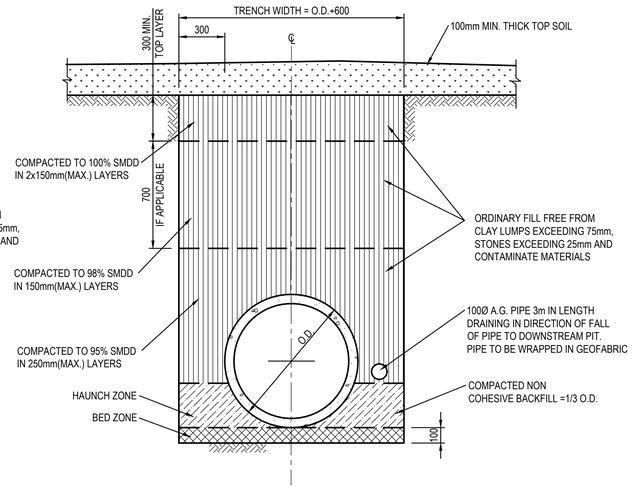


PIPE TRENCH INSTALLATION BENEATH PAVEMENT

(HS SUPPORT TO BE USED UNDER ROADWAY)

SCALE 1:20

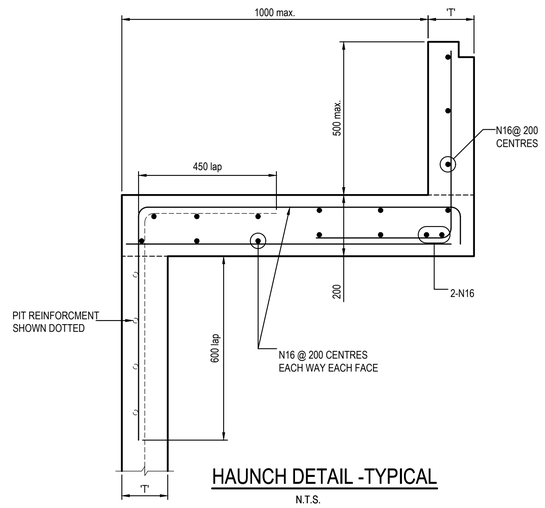
NOTE:
TYPE HS2 TO BE USED AS A TYPICAL SUPPORT FOR TRENCHES UNDER ROADWAY UNLESS SPECIFIED SEPERATELY



PIPE TRENCH INSTALLATION IN LANDSCAPE AREAS

(H1 & H2 SUPPORT)

SCALE 1:20



HAUNCH DETAIL -TYPICAL

N.T.S.

DRAINAGE NOTES:

1. ALL STORMWATER WORK TO COMPLY WITH AS 3500 PART 3.

2. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE MINIMUM COVER OF 600mm ON ALL PIPES.

3. PROTECTION OF PIPES DUE TO LOADS EXCEEDING W7 WHEEL LOAD SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

4. BEDDING TYPE SHALL BE TYPE H2 FOR RCP. WHERE NECESSARY THE OVERLAY ZONE SHALL BE REDUCED TO ACCOMMODATE PAVEMENT REQUIREMENTS. REFER TO THIS DRAWING FOR DETAILS.

5. MINIMUM COVER OVER EXISTING PIPES FOR PROTECTION DURING CONSTRUCTION SHALL BE 800mm.

6. NO CONSTRUCTION LOADS SHALL BE APPLIED TO PLASTIC PIPES.

7. FINISHED SURFACE LEVELS SHOWN ON LAYOUT PLAN DRGS TAKE PRECEDENCE OVER DESIGN DRAINAGE SURFACE LEVELS.

8. ALL PIPES UP TO AND INCLUDING 300 DIA. SHALL BE SOLVENT OR RUBBER RING JOINTED PVC CLASS SH PIPE TO AS1260. ALL OTHER PIPES TO BE RCP USING CLASS 2 RUBBER RING JOINTED PIPE. HARDIES FRC PIPE MAY BE USED IN LIEU OF RCP IF DESIRED IN GROUND. ALL AERIAL PIPES TO BE PVC CLASS SH.

9. ALL PITS IN NON TRAFFICABLE AREAS TO BE PREFABRICATED POLYESTER CONCRETE "POLYCRETE" WITH "LIGHT DUTY" CLASS B GALV. MILD STEEL GRATING AND FRAME.
ALL PITS IN TRAFFICABLE AREAS (CLASS "D" LOADING MAX) TO HAVE 150mm THICK CONCRETE WALLS AND BASE CAST IN-SITU f'c=32 MPa, REINFORCED WITH N12-200 BOTH LOADING WAYS CENTRALLY PLACE .U.N.O. ON SEPARATE DESIGN DRAWINGS IN THIS SET. GALV.MILD STEEL GRATING AND FRAME TO SUIT DESIGN LOADING. PRECAST PITS, RECTANGULAR OR CIRCULAR IN SHAPE, MAY BE USED IN LIEU AND SHALL COMPLY WITH RELEVANT AUSTRALIAN STANDARDS.

10. ALL PITS, GRATINGS AND FRAMES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATION AND TO BE IN ACCORDANCE WITH AS3500.3 AND AS3996.

11. PIT CHAMBER DIMENSIONS ARE TO BE SELECTED TO SATISFY THE FOLLOWING:
- PIPE SIZE
- DEPTH TO INVERT
- SKEW ANGLE
  REFER TYPICAL PIT CHAMBER DETAILS BELOW
IF PIT LID SIZE IS SMALLER THAN THE PIT CHAMBER SIZE THEN THE PIT LID IS TO BE CONSTRUCTED ON THE CORNER OF THE PIT CHAMBER WITH THE STEP IRONS DIRECTLY BELOW. ALTERNATIVELY THE PIT LID TO BE USED, IS TO BE THE SAME SIZE AS THE PIT CHAMBER.

12. FOR PIPE SIZES GREATER THAN Ø300mm, PIT FLOOR IS TO BE BENCHED TO FACILITATE FLOW.

13. GALVANISED STEP IRONS SHALL BE PROVIDED AT 300 CTS FOR PITS HAVING A DEPTH EXCEEDING 1200mm. SUBSOIL DRAINAGE PIPE SHALL BE PROVIDED IN PIPE TRENCHES ADJACENT TO INLET PIPES. (MINIMUM LENGTH 3m).

14. ALL SUBSOIL PIPES SHALL BE 100mm SLOTTED PVC IN A FILTER SOCK, UNO, WITH 3m INSTALLED UPSTREAM OF ALL PITS.

15. ALL PIPEWORK SHALL HAVE MINIMUM DIAMETER 100.

16. MINIMUM GRADE FOR ROOFWATER DRAINAGE LINES SHALL BE 1%.

17. ALL PIPE JUNCTIONS AND TAPER UP TO AND INCLUDING 300 DIA. SHALL BE VIA PURPOSE MADE FITTINGS.

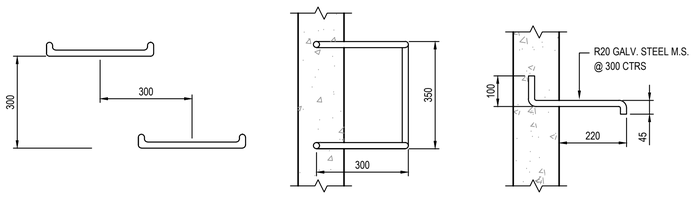
18. ALL ROOF DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH AS3500, PART 3. TESTING TO BE UNDERTAKEN AND REPORTS PROVIDED TO THE SUPERINTENDENT.

19. LOCATION OF THE DIRECT DOWN PIPE CONNECTIONS MAY VARY ON SITE TO SUIT SITE CONDITIONS, WHERE CONNECTION SHOWN ON LONG SECTIONS CHAINAGES ARE INDICATIVE ONLY.

20. PITS IN EXCESS OF 1.5 m DEEP TO HAVE WALL AND FLOOR THICKNESS INCREASED TO 200mm. REINFORCED WITH N12@200 CTS CENTRALLY PLACED BOTH WAYS THROUGHOUT U.N.O.ON SEPARATE DESIGN DRAWINGS IN THIS SET. IF DEPTH EXCEEDS 5m CONTACT ENGINEER.

21. SUBSOIL DRAINAGE LINES FOR LANDSCAPE AREA NOT SHOWN ON THESE DRAWINGS. REFER TO LANDSCAPING PLANS FOR DETAILS.

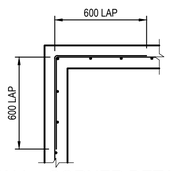
22. ALL STORMWATER PITS TO HAVE Ø100 uPVC SLOTTED SUBSOIL PIPES CONNECTED TO THEM. THESE SUBSOILS TO EXTEND 3m UPSTREAM OF THE PIT AT A MINIMUM GRADE.



ELEVATION PLAN SECTION

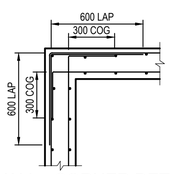
TYPICAL STEP IRON DETAIL

SCALE 1:10



150 WALL - CORNER DETAIL

SCALE 1:20



200 WALL - CORNER DETAIL

SCALE 1:20

0 200 400 600 800 1000mm
200 100
SCALE 1:10

0 400 800 1200 1600 2000mm
400 200
SCALE 1:20

FOR DA ONLY

SURVEY INFORMATION
SURVEYED BY LAND TEAM
DATUM:AHD
ORIGIN OF LEVELS: RL 96.545, SSM 18294

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client
DIOCESE OF WOLLONGONG

Architect
ALLEANZA ARCHITECTURE

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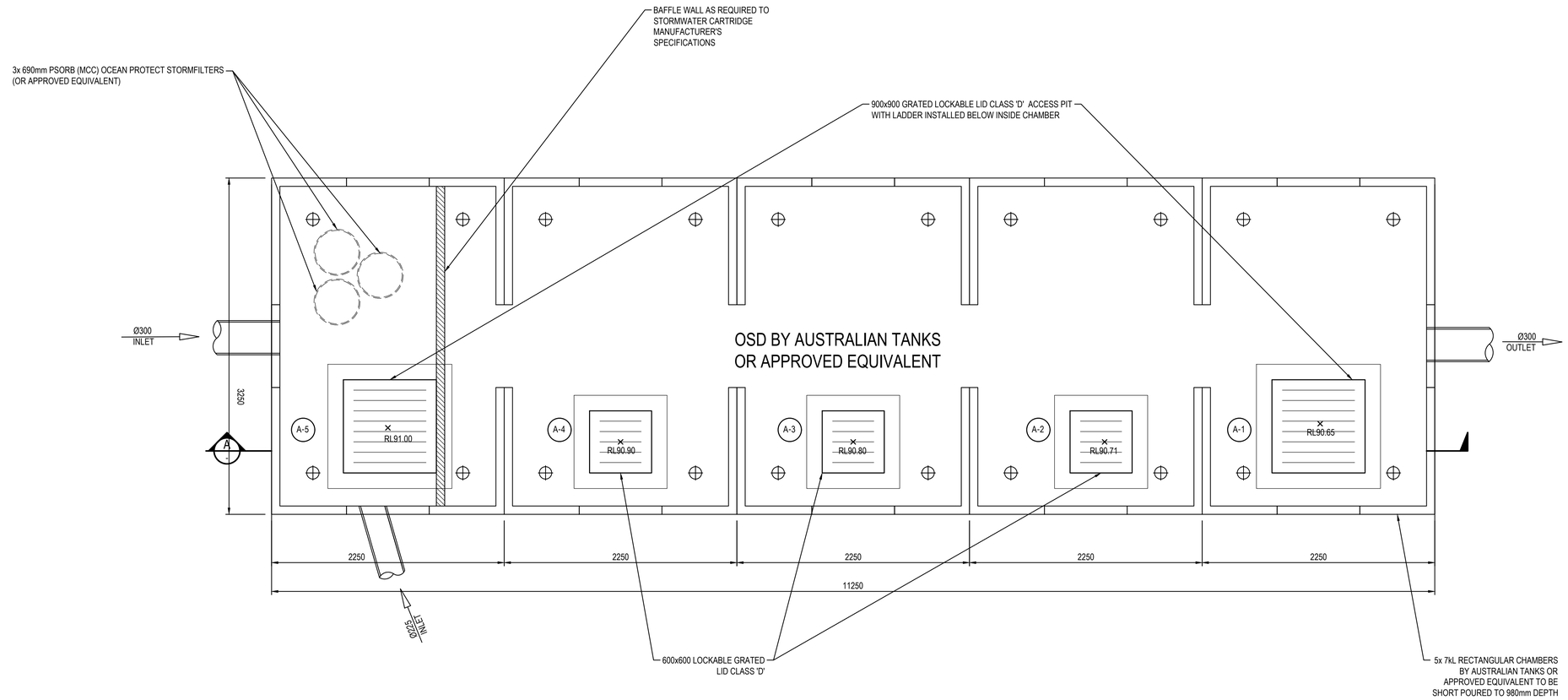
Project
MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

Title
STORMWATER MISCELLANEOUS DETAILS & PIT LID SCHEDULE

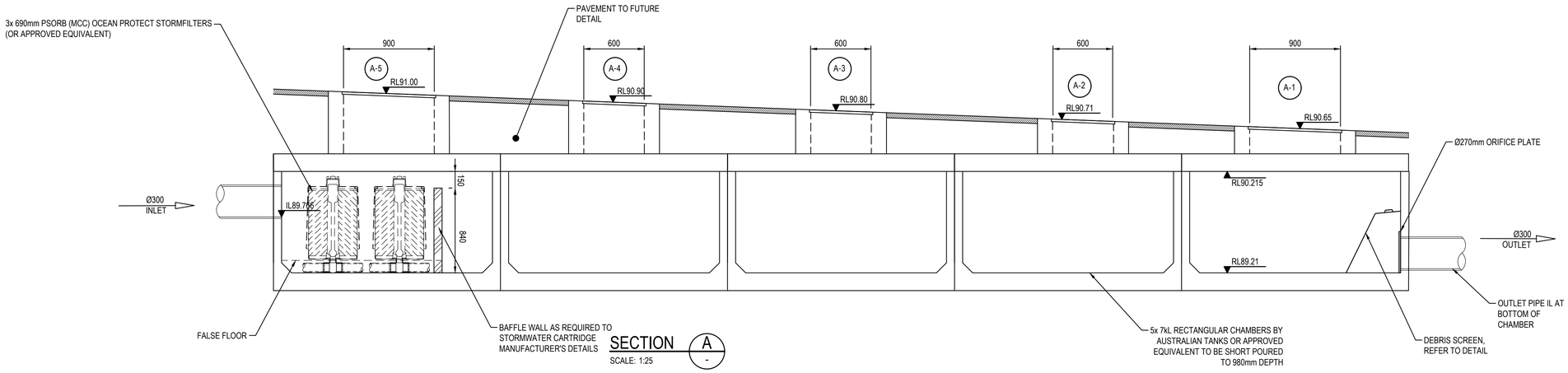
Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	AS NOTED

Drawing number 19989_DA_C200

Revision 01



OSD PLAN
SCALE 1:25



SECTION A
SCALE: 1:25

0 500 1000 1500 2000 2500mm
500 300 100
SCALE 1:25

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

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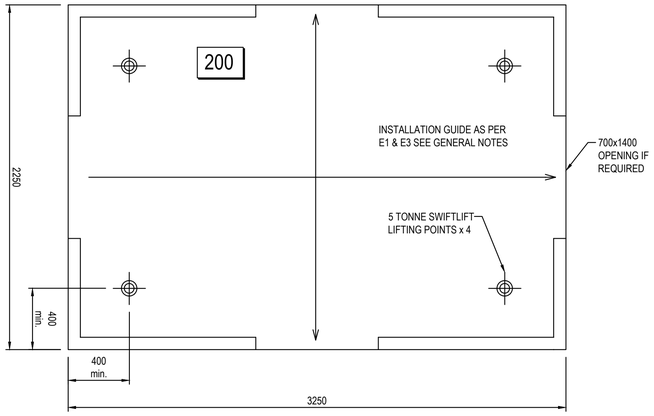
Project
MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

Title
OSD TANK PLAN AND SECTION
SHEET 1 OF 2

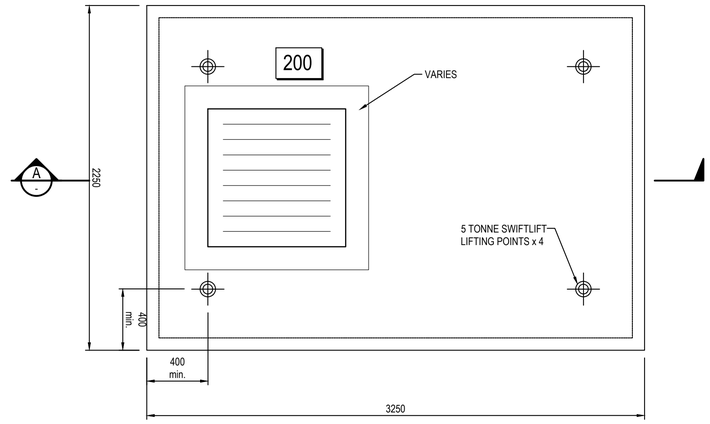
Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	1:25

Drawing number: 19989_DA_C201
Revision: 01



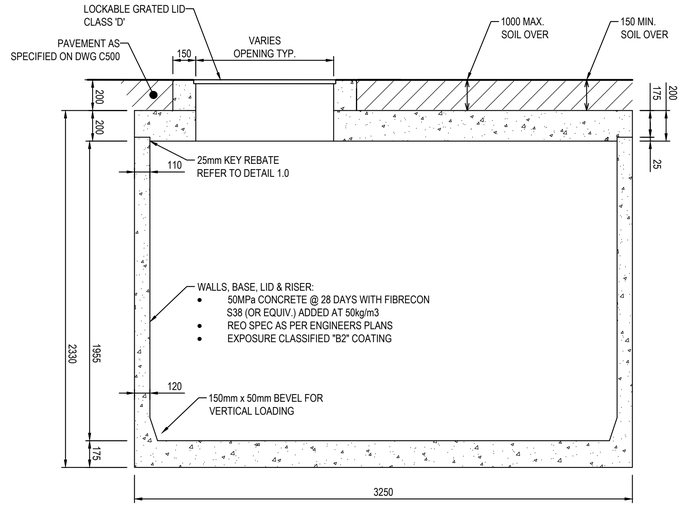
PROPOSED TANK BASE PLAN

SCALE: 1:20



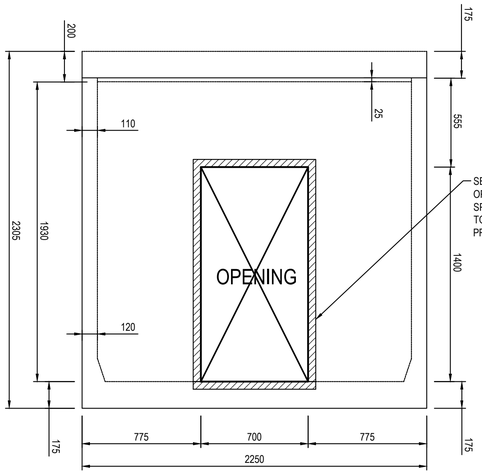
PROPOSED TANK LID PLAN

SCALE: 1:20



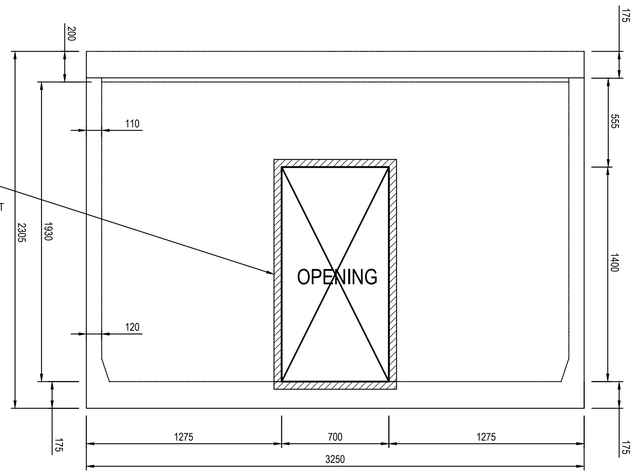
SECTION A

SCALE: 1:20



PROPOSED TANK WALL OPENING "1"

SCALE: 1:20



PROPOSED TANK WALL OPENING "2"

SCALE: 1:20

INSTALLATION NOTES

THE BUILDING CONTRACTOR MUST ENSURE TANK BASE IS TO BEAR IN STABLE NATURAL GROUND WITH A SAFE BEARING CAPACITY OF AT LEAST 150kPa.

PROVIDE A 100m THICK LEVELING LAYER OF COMPACTED SAND / ROADBASE / CRUSHED ROCK AT THE BASE OF EXCAVATION. THIS LAYER MAY BE OMITTED SHOULD THE EXISTING FOUNDING MATERIAL BE DEEMED BY THE ENGINEER A SOUND PLATFORM FOR THE INSTALLATION OF THE TANK.

THE BASESLAB IS NOT TO BE FOUNDD ON A CUT / FILL PLATFORM. BASE SLAB IS TO BE WHOLLY FOUNDED IN EITHER CUT OR FILL.

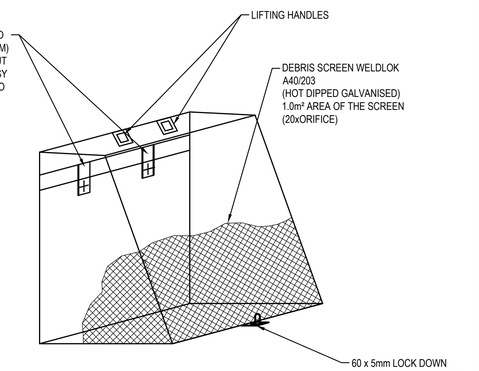
BACKFILLING AROUND AND ADJACENT TO WALLS SHALL BE WITH APPROVED SELECTED MATERIAL. THE MATERIAL SHALL BE COMPACTED IN LAYERS NOT MORE THAN 250mm THICK, EACH LAYER SHALL BE COMPACTED TO AT LEAST 99% OF THE MAXIMUM DRY DENSITY AS DEFINED BY THE STANDAR COMPACTING TEST AS 1289.

NO MORE THAN 500mm INBACKFILLING HEIGHT VARIATION BETWEEN OPPOSITE SIDES OF BACKFILL.

100 x 16 MOUNTING BAR WITH BRACKETS, SCREEN TO BE ATTACHED (GENERALLY ON A SLIDING MECHANISM) TO THE WALL, BUT SHOULD BE REMOVABLE (WITHOUT THE USE OF TOOLS) TO PERMIT CLEANSING AND EASY INSPECTION OF THE OUTLET CONTROL. ALL STEEL TO BE HOT DIPPED GALVANISED.

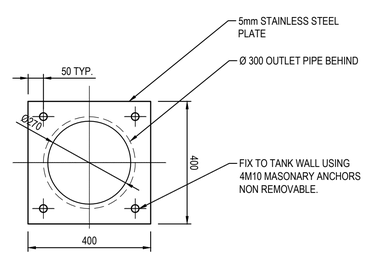
SCREEN TYPE WELDLOK A40/203 IS RECOMENDED FOR ORIFICES LARGER THAN 150mm AND SCREEN AREA 20 x THE ORIFICE AREA FOR THAT TYPE OF SCREEN - REFER UPRCT SECTION 4-13

MAXIMESH RH3030 IS RECOMMENDED FOR ORIFICES LESS THAN 150mm IN DIAMETER AND SCREEN AREA 50xTHE ORIFICE AREA REFER BURWOOD COUNCIL AND UPPER PARRAMATTA RIVER CATCHMENT TRUST HANDBOOK.



DEBRIS SCREEN DETAIL

NOT TO SCALE
ALL STEEL TO BE HOT DIPPED GALVANISED



ORIFICE PLATE DETAIL

SCALE 1:10

0 400 800 1200 1600 2000mm
400 200
SCALE 1:20

0 200 400 600 800 1000mm
200 100
SCALE 1:10

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client
DIOCESE OF WOLLONGONG

Architect
ALLEANZA ARCHITECTURE

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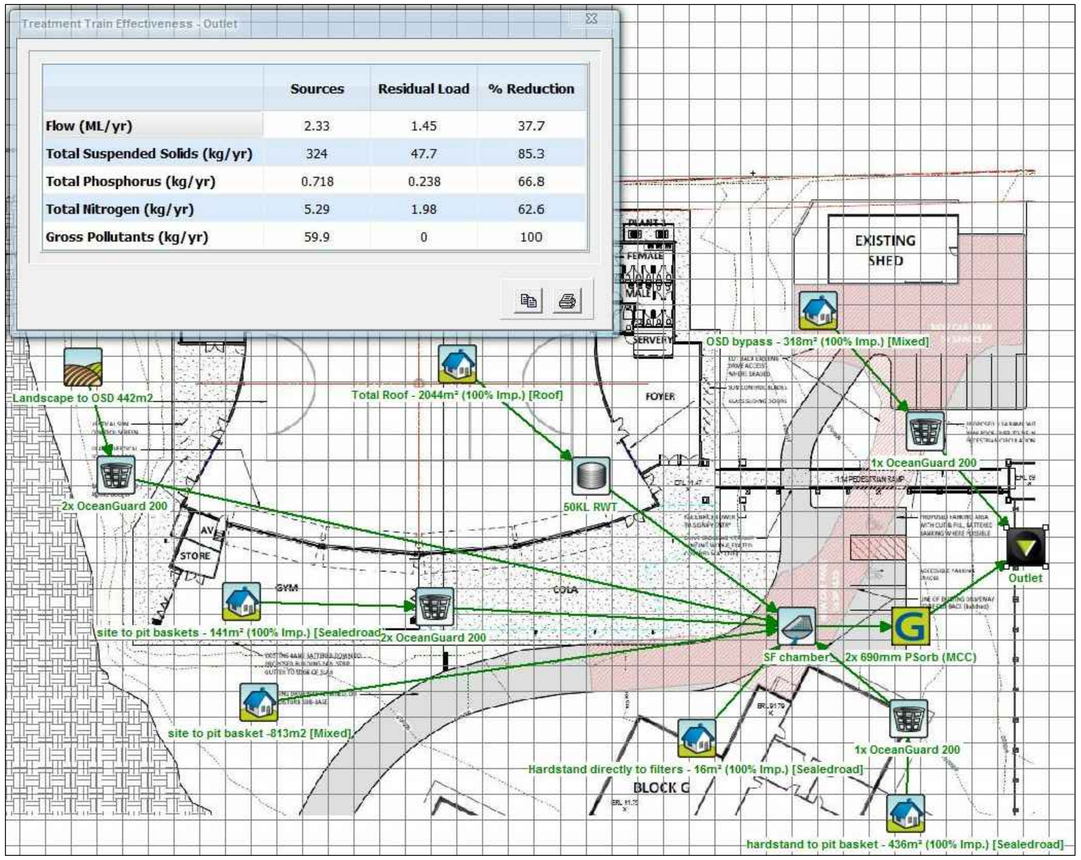
Project
MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

Title
OSD TANK DETAILS
SHEET 2 OF 2

Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	AS NOTED

Drawing number: 19989_DA_C202

Revision: 01



	Sources	Residual Load	% Reduction
Flow (ML/yr)	2.33	1.45	37.7
Total Suspended Solids (kg/yr)	324	47.7	85.3
Total Phosphorus (kg/yr)	0.718	0.238	66.8
Total Nitrogen (kg/yr)	5.29	1.98	62.6
Gross Pollutants (kg/yr)	59.9	0	100

STORMWATER DESIGN SUMMARY

TOTAL SITE AREA: 4182 m²

ROOF STORMWATER DIRECTED TO 50KL RAINWATER TANK FOR RE-USE PURPOSES.

HIGH LEVEL OVERFLOW DIRECTED TO CLOSEST PROPOSED STORMWATER PIT. SITE DISCHARGE DIRECTED VIA GRAVITY IN ACCORDANCE WITH COUNCIL REQUIREMENTS

ON-SITE DETENTION DESIGN SUMMARY

A DRAINS MODEL HAS BEEN PREPARED TO DETERMINE THE PRE-DEVELOPMENT AD POST-DEVELOPMENT STORMWATER RUNOFF. REFER TO SUMMARY TABLE.

YR	PRE-DEVELOPMENT (L/S)	POST-DEVELOPMENT (L/S)
5	101	101
10	122	113
100	186	182

ON -SITE DETENTION VOLUME PROVIDED: 24.5m³

OUTLET CONTROL: Ø270mm ORIFICE

MUSIC SECTION

WATER SENSITIVE URBAN DESIGN SUMMARY

A STORMWATER MANAGEMENT PLAN HAS BEEN PREPARED TO LIMIT AND ELIMINATE ANY ADVERSE EFFECT ON THE ADJACENT ECOSYSTEM RESULTING FROM THE PROPOSED DEVELOPMENT. A MUSIC MODEL HAS BEEN PREPARED TO DETERMINE THE EFFECTIVENESS OF THE WATER QUALITY TREATMENT DEVICES AT REACHING THE RATE REMOVAL RATES TARGETS SET BY CAMDEN COUNCIL.

PROPOSED TREATMENT DEVICES:

- 100 kL RAINWATER TANK
- 6x OCEANGUARD PIT BASKETS
- 3x 690 STORMFILTER

REFER TO RESULT SUMMARY AND SCREENSHOT BELOW:

POLLUTANT	SOURCES	RESIDUAL LOAD	% REDUCTION	TARGET
TOTAL SUSPENDED SOLIDS	325	47	85.5	85
TOTAL PHOSPHORUS	0.715	0.229	68	65
TOTAL NITROGEN	5.3	1.84	65.2	45
GROSS POLLUTANTS	59.9	0	100	90

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client: DIOCESE OF WOLLONGONG

Architect: ALLEANZA ARCHITECTURE

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henry&hymas

Project: MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

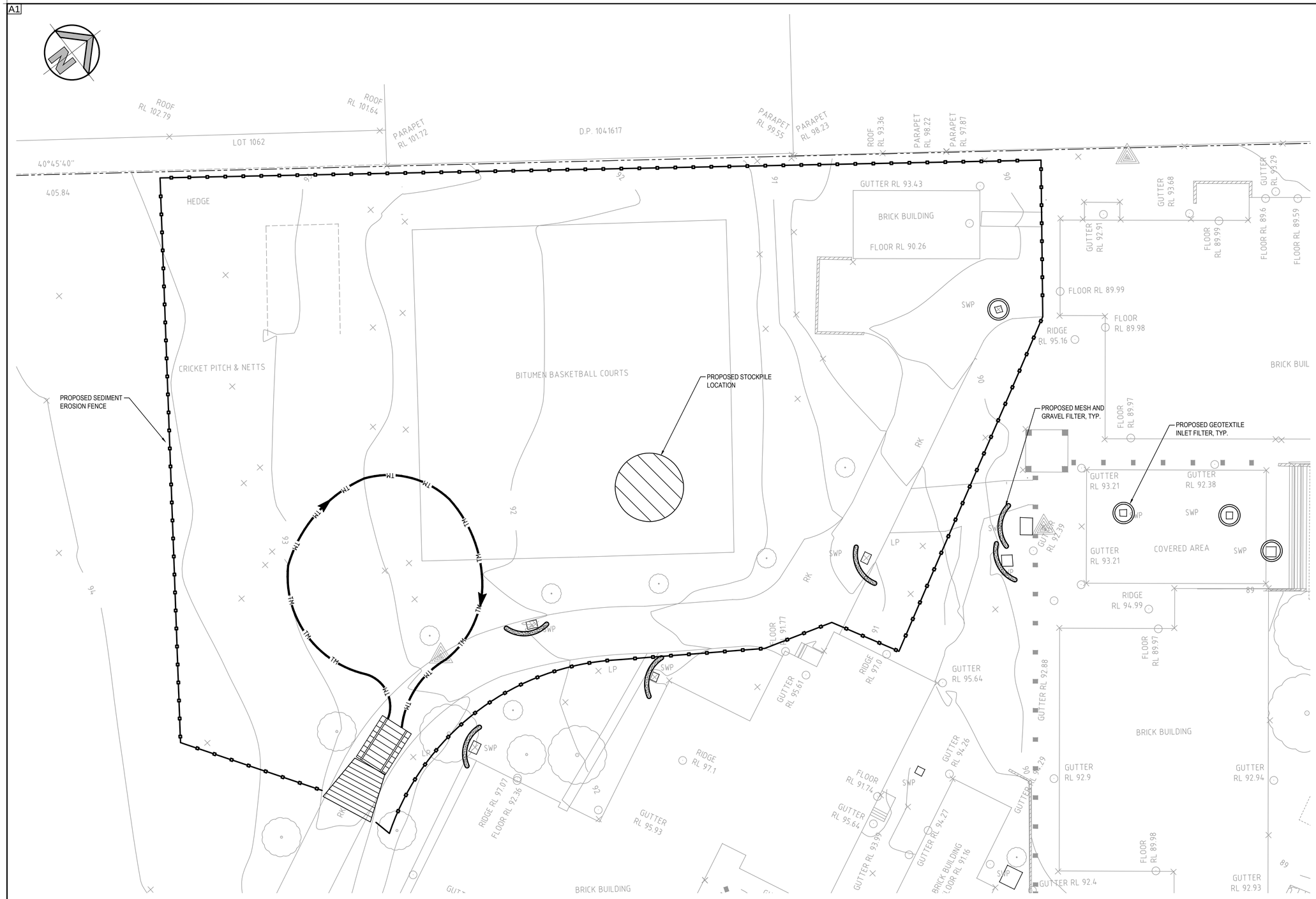
Title: MUSIC MODELING RESULTS

Drawn	Designed	Date
M.Cerna	L.Villa	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	NTS

Drawing number: 19989_DA_C210

Revision: 01

A1



SEDIMENT & EROSION CONTROL PLAN

SCALE 1:200

LEGEND

- PROPOSED BOUNDARY
- PROPOSED SEDIMENTATION FENCE
- TRAFFIC MANOEUVRING
- PROPOSED VEHICLE SHAKER GRID
- PROPOSED STABILISED SITE ACCESS
- PROPOSED MESH & GRAVEL INLET FILTER
- GEOTEXTILE INLET FILTER
- PROPOSED STOCKPILE LOCATION

SEDIMENT & EROSION CONTROL NOTES

- ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED, PLACED AND MAINTAINED IN ACCORDANCE WITH RESPECTIVE COUNCIL SPECIFICATIONS AND LANDCOM'S "SOIL AND CONSTRUCTION" MANUAL.
- ALL PERIMETER & SILTATION CONTROL MEASURES ARE TO BE PLACED PRIOR TO, OR AS THE FIRST STEP IN EARTH WORKS AND/OR CLEARING.
- THE SEDIMENT & EROSION CONTROL PLAN MAY REQUIRE FUTURE ADJUSTMENT TO REFLECT CONSTRUCTION STAGING. IT IS ALSO THE CONTRACTORS RESPONSIBILTY TO PREPARE THEIR OWN SEDIMENT AND EROSION CONTROL PLAN WHICH SUITS THE DESIGNED CONSTRUCTION STAGING.
- FILTRATION BUFFER ZONES ARE TO BE FENCED OFF AND ACCESS PROHIBITED TO ALL PLANT AND MACHINERY.
- ALL TEMPORARY EARTH BERMS, DIVERSIONS & SILT DAM EMBANKMENTS ARE TO BE MACHINE COMPACTED, SEEDED & MULCHED FOR TEMPORARY VEGETATION COVER AS SOON AS THEY HAVE BEEN FORMED.
- ALL SEDIMENT TRAPPING STRUCTURES AND DEVICES ARE TO BE INSPECTED AFTER STORMS FOR STRUCTURAL DAMAGE OR CLOGGING. TRAPPED MATERIAL IS TO BE REMOVED TO A SAFE LOCATION.
- ALL TOPSOIL IS TO BE STOCKPILED ON SITE FOR REUSE (AWAY FROM TREES AND DRAINAGE LINES). MEASURES SHALL BE APPLIED TO PREVENT EROSION OF THE STOCKPILES.
- ALL EARTHWORK AREAS SHALL BE ROLLED EACH EVENING TO SEAL THE EARTHWORKS.
- ALL FILLS ARE TO BE LEFT WITH A LIP AT THE TOP OF THE SLOPE AT THE END. ALL CUT AND FILL SLOPES ARE TO BE SEEDED AND STRAW MULCHED WITHIN 14 DAYS OF COMPLETION OF FORMATION U.N.O. BY LANDSCAPE ARCHITECTS.
- UPON COMPLETION OF ALL EARTHWORKS OR AS DIRECTED BY COUNCIL SOIL CONSERVATION TREATMENTS SHALL BE APPLIED SO AS TO RENDER AREAS THAT HAVE BEEN DISTURBED, EROSION PROOF WITHIN 14 DAYS.
- EROSION AND SILT PROTECTION MEASURES ARE TO BE MAINTAINED AT ALL TIMES.
- EXCAVATION PLANT TO BE CRANED INTO SITE ONCE SITE ACCESS RAMP IS IMPRACTICAL
- ALL EXISTING STORMWATER PITS WITHIN THE EXISTING CARPARK TO BE PROTECTED WITH MESH AND GRAVEL INLET FILTERS.

0 4 8 12 16 20m

4 3 2 1

SCALE 1:200

FOR DA ONLY

SURVEY INFORMATION

SURVEYED BY LAND TEAM

DATUM:AHD

ORIGIN OF LEVELS: RL 96.545, SSM 18294

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client: DIOCESE OF WOLLONGONG

Architect: ALLEANZA ARCHITECTURE

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henry&hymas

Project: MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

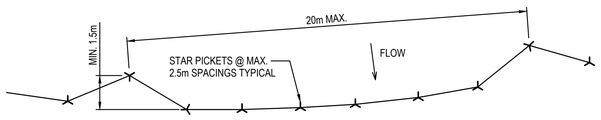
Title: SEDIMENT& EROSION CONTROL PLAN

Drawn	Designed	Date
M.Cerna	T.Rozehnal	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	1:200

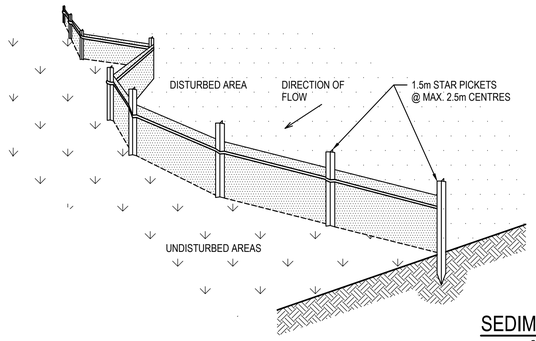
Drawing number: 19989_DA_SE01

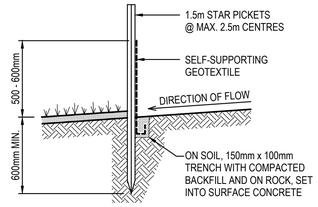
Revision: 01

A1



PLAN





SECTION DETAIL

SEDIMENT FENCE

SCALE N.T.S.

SEDIMENT FENCE CONSTRUCTION NOTES:

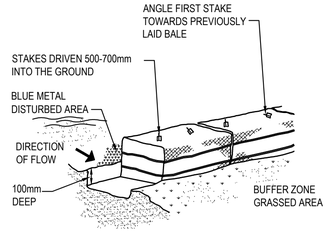
1. CONSTRUCT SEDIMENT FENCES AS CLOSE AS POSSIBLE TO BEING PARALLEL TO THE CONTOURS OF THE SITE, BUT WITH SMALL RETURNS AS SHOWN IN THE DRAWING TO LIMIT THE CATCHMENT AREA OF ANY ONE SECTION. THE CATCHMENT AREA SHOULD BE SMALL ENOUGH TO LIMIT WATER FLOW IF CONCENTRATED AT ONE POINT TO 50 LITRES PER SECOND IN THE DESIGN STORM EVENT, USUALLY THE 10-YEAR EVENT.

2. CUT A 150mm DEEP TRENCH ALONG THE UPSLOPE LINE OF THE FENCE FOR THE BOTTOM OF THE FABRIC TO BE ENTRENCHED.

3. 3. DRIVE 1.5m LONG STAR PICKETS INTO GROUND @ 2.5m INTERVALS (MAX.) AT THE DOWNSLOPE EDGE OF THE TRENCH. ENSURE ANY STAR PICKETS ARE FITTED WITH SAFETY CAPS.

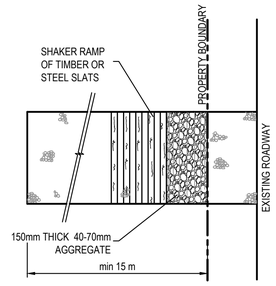
4. 4. FIX SELF-SUPPORTING GEOTEXTILE TO THE UPSLOPE SIDE OF THE POSTS ENSURING IT GOES TO THE BASE OF THE TRENCH. FIX THE GEOTEXTILE WITH WIRE TIES OR AS RECOMMENDED BY THE MANUFACTURER. ONLY USE GEOTEXTILE SPECIFICALLY PRODUCED FOR SEDIMENT FENCING. THE USE OF SHADE CLOTH FOR THIS PURPOSE IS NOT SATISFACTORY.

5. 5. JOIN SECTIONS OF FABRIC AT A SUPPORT POST WITH A 150mm OVERLAP. 6. BACKFILL THE TRENCH OVER THE BASE OF THE FABRIC AND COMPACT IT THOROUGHLY OVER THE GEOTEXTILE.



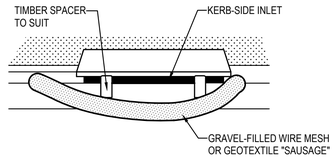
HAYBALE BARRIERS

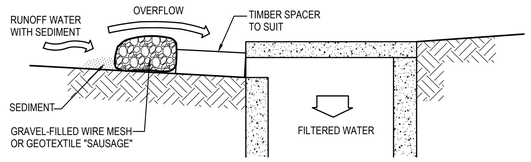
N.T.S.



PLAN
STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.



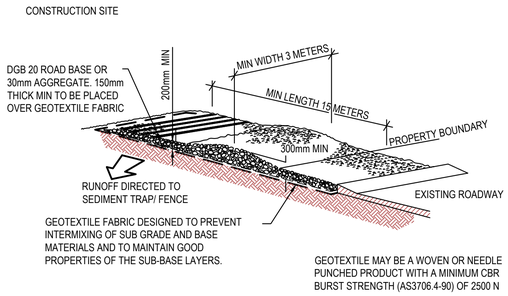


MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:

1. FABRICATE A SLEEVE MADE FROM GEOTEXTILE OR WIRE MESH LONGER THAN THE LENGTH OF THE INLET PIT AND FILL IT WITH 25mm TO 50mm GRAVEL.
2. FORM AN ELLIPTICAL CROSS-SECTION ABOUT 150mm HIGH x 400mm WIDE.
3. PLACE THE FILTER AT THE OPENING LEAVING AT LEAST A 100mm SPACE BETWEEN IT AND THE KERB INLET. MAINTAIN THE OPENING WITH SPACER BLOCKS.
4. FORM A SEAL WITH THE KERB TO PREVENT SEDIMENT BYPASSING THE FILTER.
5. SANDBAGS FILLED WITH GRAVEL CAN SUBSTITUTE FOR THE MESH OR GEOTEXTILE PROVIDING THEY ARE PLACED SO THAT THEY CAN FIRMLY ABUT EACH OTHER AND SEDIMENT / LADEN WATERS CANNOT PASS BETWEEN.

MESH & GRAVEL INLET FILTER

SCALE N.T.S.

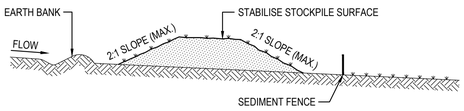


STABILISED SITE ACCESS WITH SHAKER RAMP

N.T.S.

NOTES:

1. THIS DEVICE IS TO BE LOCATED AT ALL EXITS FROM CONSTRUCTION SITE.
2. THIS DEVICE IS TO BE REGULARLY CLEANED OF DEPOSITED MATERIAL SO AS TO MAINTAIN A 50mm DEEP SPACE BETWEEN PLANKS.
3. ANY UNSEALED ROAD BETWEEN THIS DEVICE AND NEAREST ROADWAY IS TO BE TOPPED WITH 100mm THICK 40-70mm SIZE AGGREGATE.
4. ALTERNATIVELY, THREE(3) PRECAST CONCRETE CATTLE GRIDS (AS MANUFACTURED BY "HUMES CONCRETE MAY BE USED. 1, 2 & 3 ABOVE ALSO APPLY.



STOCKPILE CONSTRUCTION NOTES:

1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION, CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS.
2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.
3. WHERE THERE IS SUFFICIENT AREA, TOPSOIL STOCKPILES SHALL BE LESS THAN 2 METRES IN HEIGHT.
4. WHERE THEY ARE TO BE PLACED FOR MORE THAN 10 DAYS, STABILISE FOLLOWING THE APPROVED E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10.
5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

STOCKPILES

SCALE N.T.S.

FOR DA ONLY

REVISION	AMENDMENT	DRAWN	DESIGNED	DATE	REVISION	AMENDMENT	DRAWN	DESIGNED	DATE
01	ISSUED FOR DA	MC	LV	31.10.2019					

Client
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Architect
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Project
MAGDALENE CATHOLIC HIGH SCHOOL
SMEATON GRANGE ROAD, NARELLAN, NSW

Title
SEDIMENT & EROSION CONTROL TYPICAL SECTIONS & DETAILS

Drawn	Designed	Date
M.Cerna	T.Rozehnal	SEP 19
Checked	Approved	Scale @A1
T.Rozehnal	A.Francis	NTS

Drawing number: 19989_DA_SE02

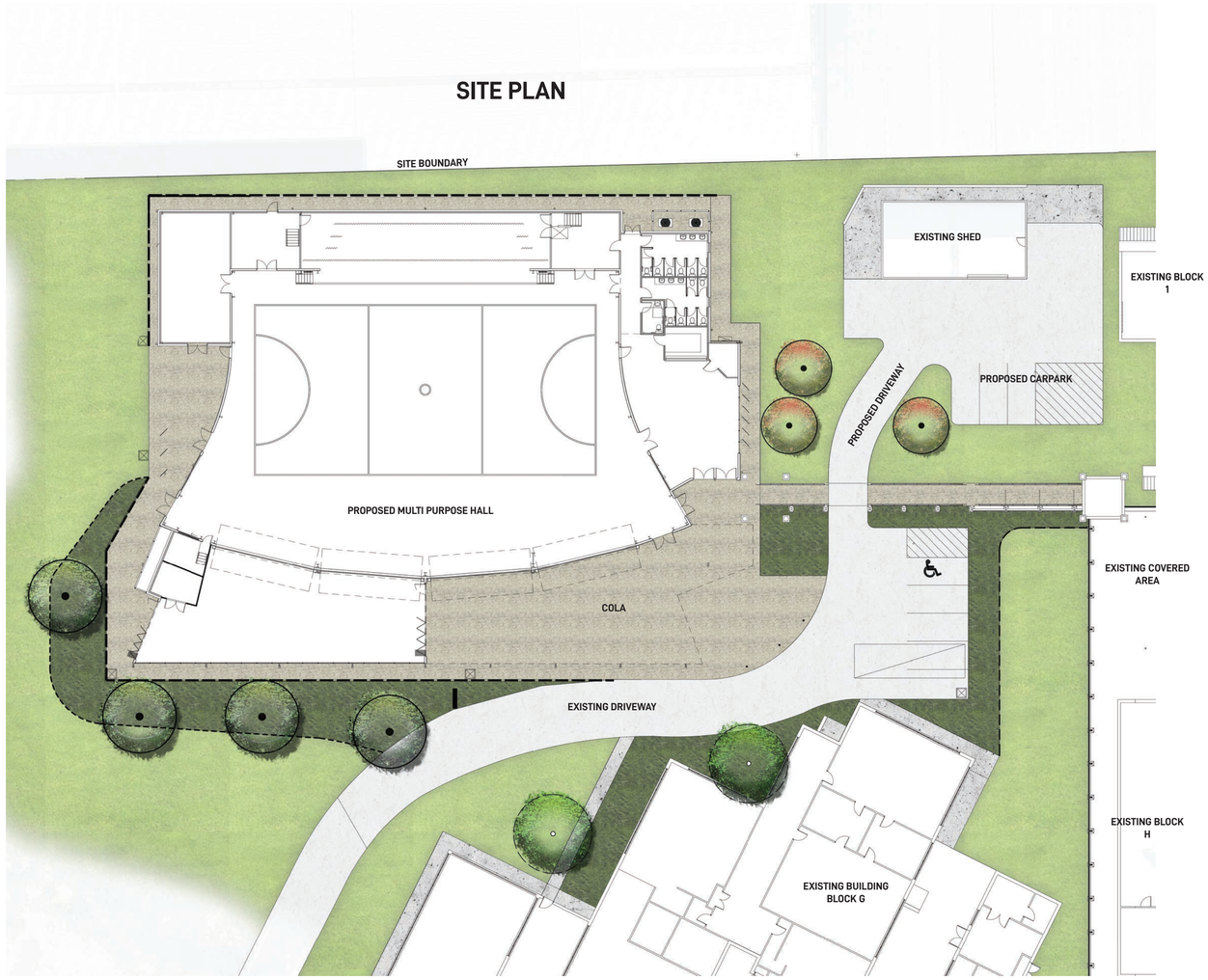
Revision: 01

MAGDALENE CATHOLIC SCHOOL MULTI-PURPOSE HALL

Narellan NSW 2567

LANDSCAPE DOCUMENTATION FOR DA

SITE PLAN



DOCUMENT REGISTER

DRAWING NUMBER	DRAWING NAME	SCALE / DRAWING SIZE
LDD-00	LANDSCAPE COVER SHEET & PLANT SCHEDULE	NOT TO SCALE
LDA-01	DA LANDSCAPE PLAN	1:200 / A1
LDA-02	LANDSCAPE DETAILS	AS SHOWN

INDICATIVE PLANT SCHEDULE

CODE	BOTANICAL NAME	COMMON NAME	NATIVE	EXPECTED MATURE HEIGHT	QUANTITY	INSTALL SIZE
TREES						
LOP-CON	*Lophostemon confertus*	Brushbox	✓	15m	4	100L
GLO-FER	*Glochidion ferdinandi*	*Cheese Tree*	✓	8m	3	100L
SHRUBS						
CAL-SLI	*Callistemon 'Slim'*	-	✓	3m	TBC	300mm
SYZ-HOB	*Syzygium 'Hobbit'*	-	✓	1.5m	TBC	300mm
LEU-BRO	*Leucophyta brownii*	Cushion Bush	✓	1m	TBC	200mm
WES-FRU	*Westringia 'Blue Gem'*	Coastal Rosemary	✓	1m	TBC	200mm
GRASSES & GROUNDCOVERS						
DIA-CAE	*Dianella 'Breeze'*	Blue Flax Lily	✓	0.6m	TBC	150mm
DIA-TAS	*Dianella 'Tasmanica'*	-	✓	0.35m	TBC	150mm
LOM-KAT	*Lomandra 'Savanna Blue'*	Mat Rush	✓	0.4m	TBC	150mm
MYO-YAR	*Myoporum 'Yareena'*	-	✓	0.3m	TBC	150mm

GROUND iNK
LANDSCAPE ARCHITECTS
Suite 201, 75 Archer St, Chatswood NSW 2067 Ph. (02) 9411 3279 ABN 55 163 025 456
www.groundink.com.au Registered Landscape Architect: Rob Loughman # 7813

LANDSCAPE COVER SHEET & PLANT SCHEDULE

Issue	Date	Description	Drawn	Checked
A	28.11.19	For Review	MC	RL

Magdalene Catholic School

Narellan, NSW, 2567

LDA-00

NOT TO SCALE REV A | 28-Nov-19

LEGEND

- **TW** TOP OF WALL LEVEL
- **EX** EXISTING SPOT LEVEL
- **RL** PROPOSED SPOT LEVEL
- **FFL** FINISHED FLOOR LEVEL
- RETAINING WALL TO ENGINEER'S DETAILS
- LINE OF BUILDING ABOVE
- FORMED CONCRETE GARDEN EDGE TO ENGINEER'S DETAILS
- TURF
- PROPOSED GARDEN BED WITH MIXED NATIVE PLANTING
- PROPOSED PAVING SUBJECT TO FUTURE DETAILS
- EXISTING DRIVEWAY
- EXISTING PAVING
- EXISTING TREE TO BE RETAINED AND PROTECTED
- PROPOSED NATIVE TREE'S REFER TO LDA-00 INDICATIVE PLANT SCHEDULE
- **1** PROPOSED RAMP
- **2** PROPOSED SIGNAGE
- **3** VERTICAL SUN CONTROL SCREEN TO ARCHITECT'S DETAILS
- **4** EXISTING FOOTPATH

INDICATIVE PLANTING PALETTE (Refer to Drawing LDA-00 for Indicative Plant Schedule)

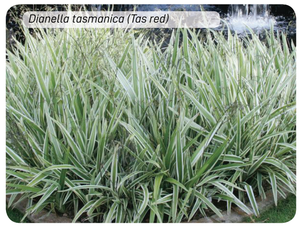
Lophostemon confertus (Brush Box)

Glochidion ferdinandi (Cheese Tree)

Callistemon 'Slim'

Myoporum 'Yareena' (Creeping Boobialla)

Leucophyta brownii (Cushion Bush)


Dianella tasmanica (Tas red)

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DA LANDSCAPE PLAN

Issue	Date	Description	Drawn	Checked
A	28.11.19	For Review	MC	RL

Magdalene Catholic School
Narellan, NSW, 2567

1:200 / A1
0 2 4 6m

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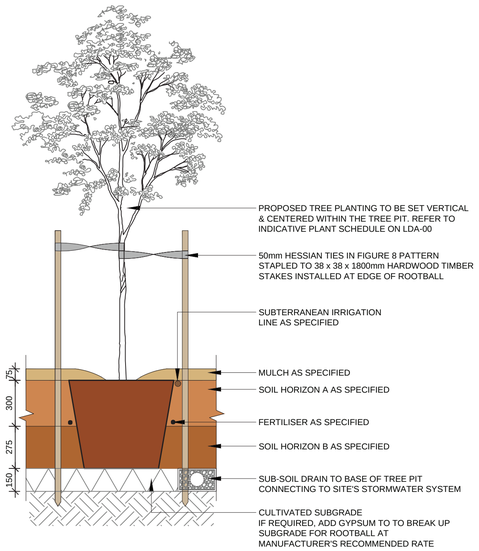
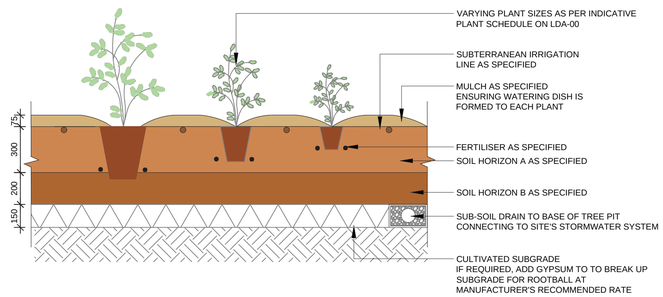


1 PLANTING - TREES

TYPICAL SECTION 1:20 @ A1



2 PLANTING - 300mm, 200 & 150mm POT SIZES

TYPICAL SECTION 1:20 @ A1

OUTLINE LANDSCAPE SPECIFICATION

General
Maintenance shall mean the care and maintenance of the landscape works by accepted horticultural practice as rectifying any defects that become apparent in the landscape works under normal use. The landscape contractor shall attend the site on a weekly basis to maintain the landscape works for the full term approved at CC stage of the maintenance period (commencing from practical completion).

Rubbish Removal
During the term of the maintenance period the Landscape Contractor shall undertake rubbish removal from the site on a weekly basis to ensure the site remains in tidy condition.

Weed Eradication
Weed growth that may occur in, planted or mulched areas is to be removed using environmentally acceptable methods i.e. non-residual glyphosate herbicide, (e.g. 'Roundup', applied in accordance with the manufacturer's directions) or hand weeding.

Tree Replacement
Trees shall show signs of healthy vigorous growth and be free from disease and not exhibit signs of stress prior to handover to the client. Any trees or plant that die or fail to thrive, or are damaged or stolen will be replaced. Replacement material shall have the maintenance period extended in accordance with the landscape contract conditions. Trees and plant materials shall be equal to the minimum requirements of species specified and approved material delivered to site. Should the condition decline from the approved sample the Superintendent reserves the right to reject the tree / plants.
Frequency: as required.

Pruning
Selective pruning may be required during the establishment period to promote a balanced canopy structure. These activities shall be carried out to the best horticultural and industry practice. All pruned material is to be removed from site.

Irrigation
A low volume drip irrigation system may be installed at the discretion of the Client. Position of control box, solenoids and irrigation conduits to be designed by qualified irrigation engineer at CC stage
Controllers shall be mounted on a stable wall, power rack, or formed and constructed concrete based pedestal mount. Performance specification to be provided by landscape architect, nominally 25mm delivered to plant areas each week during establishment (depending on weather conditions). After establishment, irrigation rates can be decreased in certain areas of the landscape depending on the species.

Watering
Implement an appropriate hand watering regime in areas not irrigated in association with current watering programme to maintain plant health and vigour. The program shall reflect seasonal conditions and plant species.
Frequency: Weekly or as required.

Drainage
All landscape areas are to have positive drainage to SW systems. If areas of poor drainage are identified on site then this should be brought to the site superintendents attention. Install agg lines if required.

Soils
Horizon A - Garden beds on natural ground
A sandy loam to clay loam topsoil mix designed for general purpose, on-grade landscape garden bed planting of grasses, woody and herbaceous annuals and perennials that have high nutrient requirement for sustained optimum growth, and are not subject to compaction by pedestrian and other foot traffic. Heavier textured soils in this specification may require engineered solutions where excessive wetness is anticipated. Note that organic soil variant should not be chosen for low P plantings and should not be used below 300mm. Planting methods include direct seeding, tube and potted specimens up to 45L.

Horizon B - Garden beds on slab
This specification describes the formulation of an open granular well drained growing media with a saturated density of less than 2400 kg/m3 (2.4kg/L) for use in on-slab applications, including green roofs with an expectation of longevity. It is a topsoil formulation to be used in the surface 300mm of all on-slab installations including planter boxes, containers and garden beds. In order to maintain structure and porosity over extended periods, and to avoid slumping and volume loss over time, the formulation must employ low density mineral components such as ash, perlite, scoria, pumice and diatomaceous earth, or artificial components such as urea formaldehyde and styrofoam. Physically the media properties of a potting media and is assessed using the methodology of AS 3743.

Cultivation
All garden beds to be cultivated to a min depth of 150mm and tree pits to the depth of the root ball only. If additives such as gypsum are required conduct this after cultivation into the top 100mm of soil.

Planting
All planting to be grown to NATSPEC specifications. Contractor to prepare site for planting including watering, handling, setting out and excavation. Excavate a hole for each plant large enough to provide not less than 100mm all around the root system of the plant. For tree planting each hole shall be dug with a shovel, backhoe or similar tool. Individual holes shall be excavated to allow root system to sit flat on the excavated hole and 400mm to each side of the root system. Backfill planting holes with existing site soil and topsoil as described in section 'Soil', plant / Tree shall be set plumb, with the root ball set slightly below the final soil level.

Mulching
The Landscape Contractor shall supply and install 10mm Pine Bark Mulch to all garden beds shown on the landscape plans, to a minimum depth of 75mm. All mulch is to be free of deleterious matter such as soil, weeds and sticks. Mulched surfaces are to be kept clean and tidy and free of any deleterious material and foreign matter. Reinstate depths to a uniform level of 75mm with mulch as specified, mulch to be free of any wood material impregnated with CCA or similar toxic treatment. Maintain watering rings around trees. Top up mulch levels prior to handover to client.

Turfing
The landscape contractor shall supply and install Sapphire Buffalo turf in stretcher pattern to all turf areas shown on the landscape plans and is to finish flush with adjacent surfaces. Turf to be a min thickness of 50mm with a 40mm mowing height. Contractor to allow for fertilising, laying, tamping, watering, top dressing, maintenance and mowing. The landscape contractor shall supply and install turf underlay under all turf areas, consisting of 100mm thick layer of screened top soil.

Pest and Disease Control
The Landscape Contractor shall spray for pests and disease infestations when the pest and fungal attack has been positively identified and when their populations have increased to a point that will become detrimental to plant growth. Apply all pesticides to manufacturer's directions.
Frequency: weekly inspection

Fertilising
Pellets shall be in the form intended to uniformly release plant food elements for a period of approximately nine months equal to Shirleys KOKEI pellets, analysis 6.3:1.8:2.9 or similar approved. KOKEI pellets shall be placed at the time of planting to the base of the plant, 50mm minimum from the root ball at a rate of two pellets per 300mm of top growth to a maximum of 8 pellets per tree. Generally check for signs of nutrient deficiencies (yellowing of leaves, failure to thrive), and adapt fertiliser regime to suit. Fertiliser should be applied at the beginning and the end of the (summer) growing season.

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LANDSCAPE DETAILS

Issue	Date	Description	Drawn	Checked
A	28.11.19	For Review	MC	RL

Magdalene Catholic School
Narellan, NSW, 2567

LDA-02

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