# ST. FRANCIS CATHOLIC COLLEGE



# 130-160 JARDINE DRIVE, EDMONDSON PARK NSW INTERNAL CIVIL ENGINEERING WORKS DA - LANDSCAPING WORKS

#### **GENERAL NOTES:**

- ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH LIVERPOOL CITY COUNCIL'S SPECIFICATION. CONTRACTOR TO OBTAIN AND RETAIN A COPY ON SITE DURING THE
- ALL NEW WORKS ARE TO MAKE A SMOOTH JUNCTION WITH EXISTING CONDITIONS AND
- GUARANTEE THE INFORMATION SHOWN NOR ACCEPT ANY RESPONSIBILITY FOR
- ADJUST EXISTING SERVICE COVERS TO SUIT NEW FINISHED LEVELS TO RELEVANT AUTHORITY REQUIREMENTS WHERE NECESSARY.
- REINSTATE AND STABILISE ALL DISTURBED LANDSCAPED AREAS
- ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES ARE TO BE CONSTRUCTED PLACED AND MAINTAINED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS, REQUIREMENTS WHERE APPLICABLE.
- 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 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 AS SUCH THEIR ACCURACY CANNOT BE GUARANTEED. 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
- 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.

#### SUBGRADE PREPARATION

- ORGANIC LAYERS TO EXPOSE THE NATURAL CLAY. THE TOPSOIL MAY

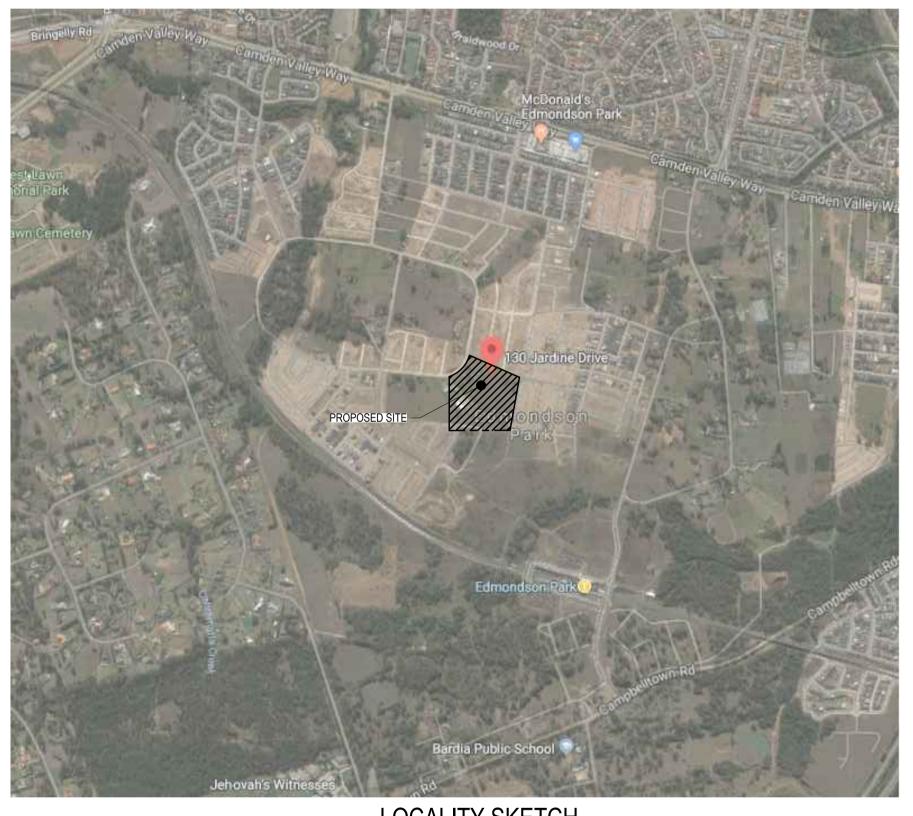
- IMPORTED FILL SHOULD BE OF GOOD QUALITY MATERIAL SUCH AS
- EARTHWORKS SHOULD BE CLOSELY MONITORED BY A GEOTECHNICAL CONSULTANT AND SHOULD INCLUDE FIELD DENSITY TESTING OF A FILL AT AN APPROPRIATE FREQUENCY AND LEVEL OF SUPERVISION AS DETAILED IN AS3798 - 2007 (REFERENCED 9). FILL PLACED AND COMPACTED IN ACCORDANCE WITH AS3798 MAY BE CLASSIFIED AS "CONTROLLED" FILL.

#### **SURVEY NOTES**

THE EXISTING SITE CONDITIONS SHOWN ON THE FOLLOWING DRAWINGS HAVE BEEN INVESTIGATED BY THE SURVEYOR SPECIFIED IN THE TITLE

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.



LOCALITY SKETCH

	DRAWING SCHEDULE					
18E34_D3_C000	COVER SHEET, DRAWING SCHEDULE, NOTES AND LOCALITY SKETCH					
18E34_D3_C100	OVERALL SITE PLAN					
18E34_D3_C101	SITE DETAIL PLAN - SHEET 1 OF 2					
18E34_D3_C102	SITE DETAIL PLAN - SHEET 2 OF 2					
18E34_D3_C200	STORMWATER MISCELLANEOUS DETAILS AND PIT LID SCHEDULE					
18E34_D3_C201	OSD PLAN AND SECTIONS					
18E34_D3_C202	OSD SECTIONS AND DETAILS					
18E34_D3_C203	OSD CALCULATIONS AND MUSIC MODELLING RESULTS					
18E34_D3_C250	STORMWATER CATCHMENT PLAN					
18E34_D3_SE01	SEDIMENT AND EROSION CONTROL PLAN					
18E34_D3_SE02	SEDIMENT AND EROSION CONTROL DETAILS					

#### SUBSOIL DRAINAGE NOTES

- GENERAL PROVIDE SUBSOIL DRAINS TO INTERCEPT GROUNDWATER SEEPAGE AND PREVENT WATER BUILD-UP BEHIND WALLS AND UNDER FLOORS AND DRAINAGE SYSTEM AS APPLICABLE.
- PROVIDE THE FOLLOWING MINIMUM CLEAR DEPTH, MEASURED TO THE CROWN
- 100mm BELOW FORMATION LEVEL OF THE PAVEMENT, KERB OR CHANNEL
- AT JUNCTIONS OF SUBSOIL PIPES PROVIDE TEES, COUPLINGS OR
- 4. TRENCH WIDTH MINIMUM 300mm

- FLANGES FROM BEARING ON THE TRENCH BOTTOM OR UNDERLAY
- 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.
- FILTER SOCKS PROVIDE POLYESTER PERMEABLE SOCKS CAPABLE OF RETAINING PARTICLES OF 0.25mm SIZES. SECURELY FIT OF JOIN THE SOCK AT EACH JOINT.

#### SITEWORKS NOTES

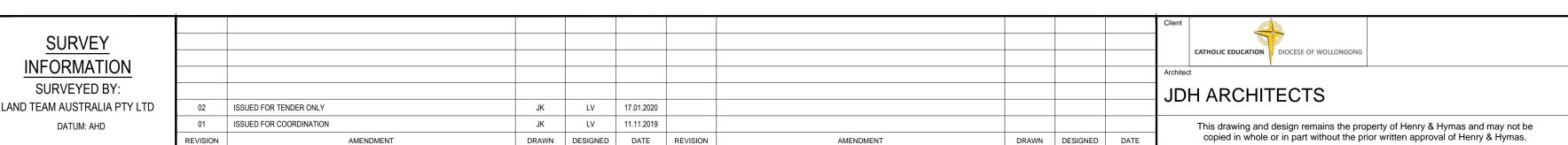
- ORIGIN OF LEVELS: REFER TO BENCH OR STATE SURVEY MARKS WHERE
- CONTRACTOR MUST VERIFY ALL DIMENSIONS AND EXISTING LEVELS ON SITE PRIOR TO THE COMMENCEMENT OF WORK.
- ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE DETAILS SHOWN

- THE CONTRACTOR SHALL ARRANGE ALL SURVEY SETOUT TO BE CARRIED OUT
- CONTRACTOR TO OBTAIN AUTHORITY APPROVALS WHERE APPLICABLE.
- MAKE SMOOTH TRANSITION TO EXISTING SURFACES AND MAKE GOOD.

TO DEVELOPMENT AT THE SITE.

- 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
- 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.

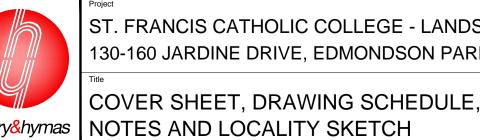
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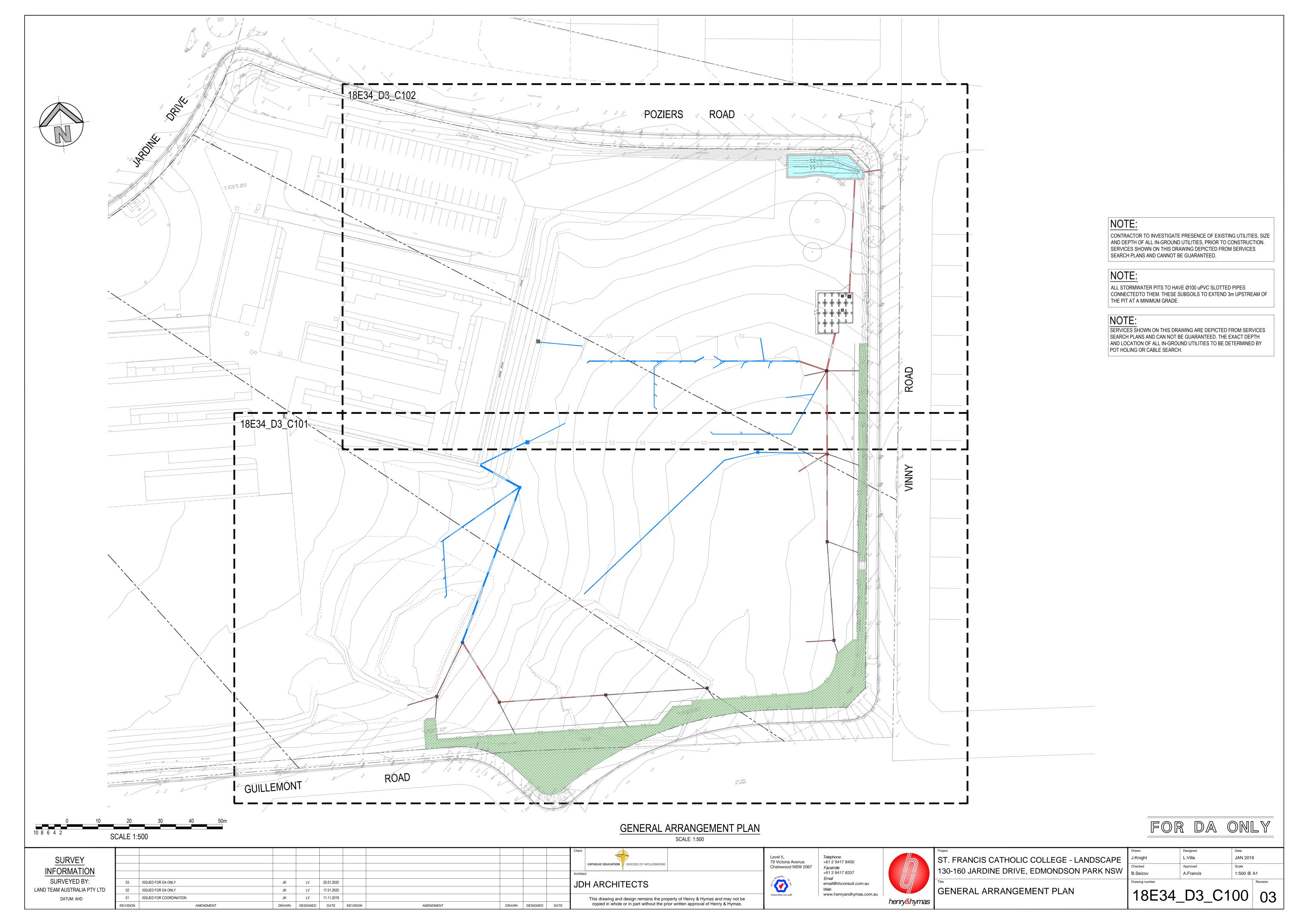


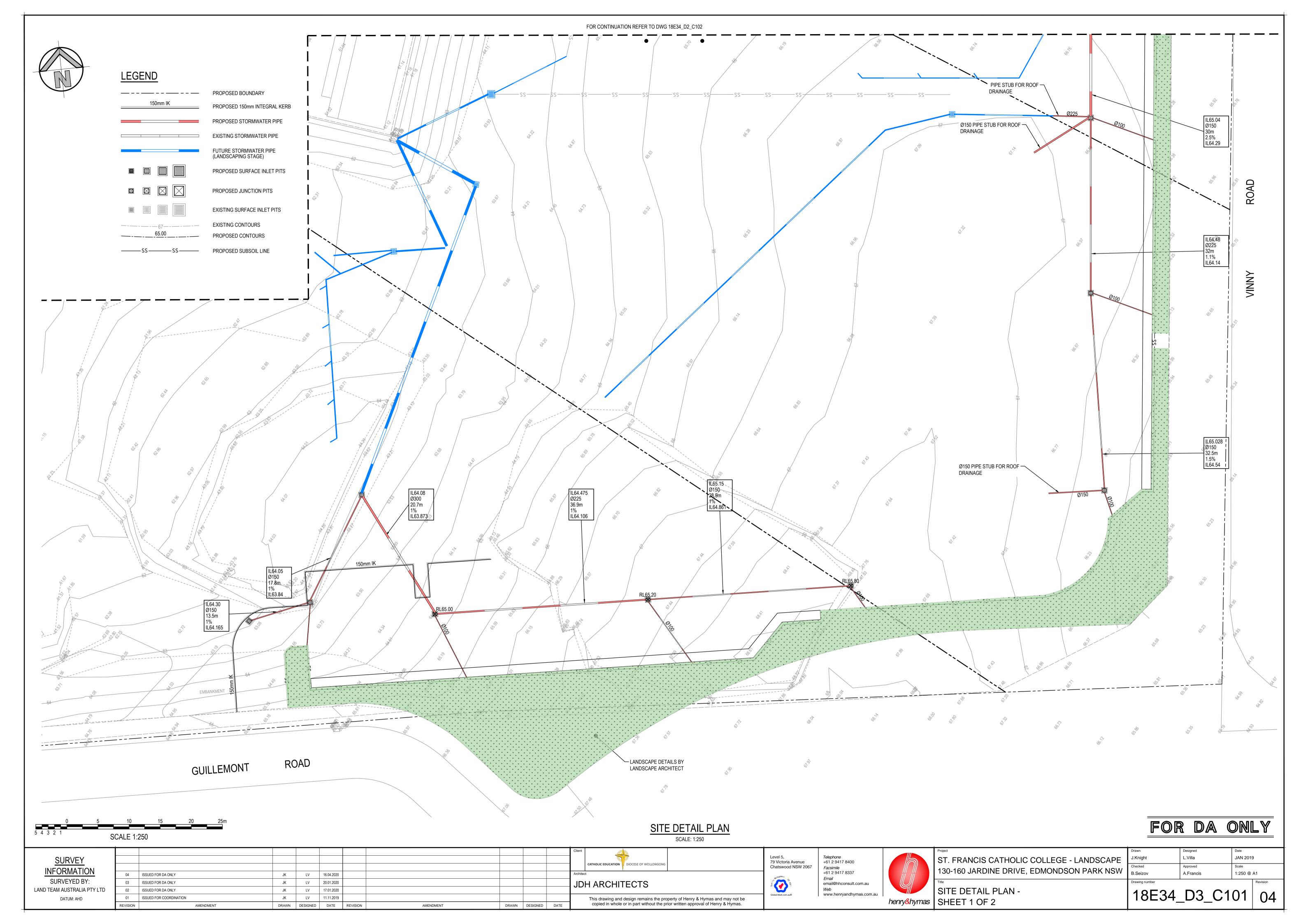


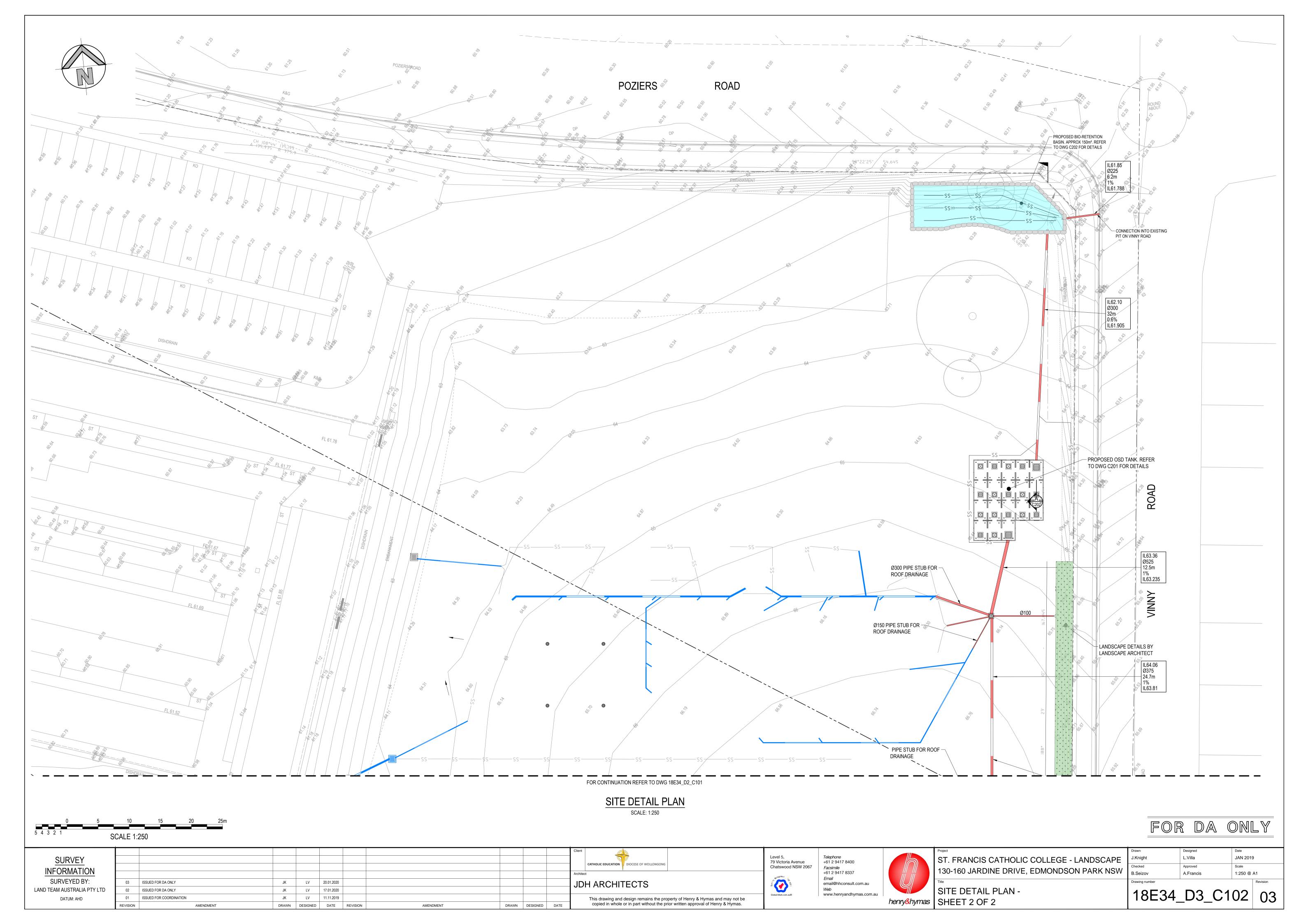
ST. FRANCIS CATHOLIC COLLEGE - LANDSCAPE 130-160 JARDINE DRIVE, EDMONDSON PARK NSW

L.Villa JAN 2019 A.Francis NTS

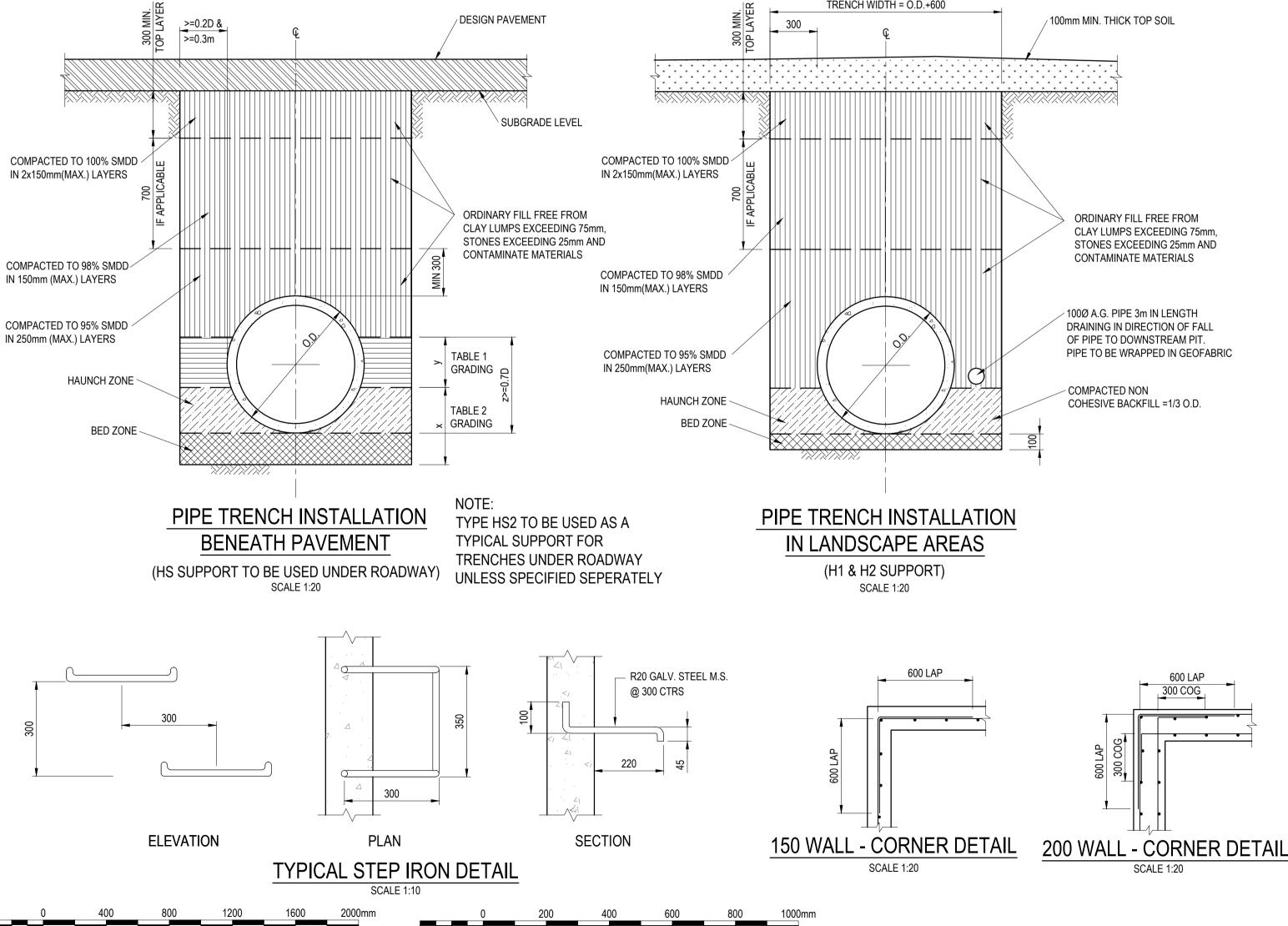
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#### TYPICAL PIT CHAMBER SIZES IT IS THE CONTRACTORS RESPONSIBILITY TO SELECT PIT CHAMBER SIZE WITH REGARDS TO PIPE SIZE, DEPTH TO INVERT AND SKEW ANGLE. REFER SKETCHES BELOW. 1 SELECT PIT CHAMBER USING THE STEPS BELOW: SELECT PIT CHAMBER SIZE DEPENDING ON THE PIPE DIAMETERS. CHECK PIT CHAMBER SIZE TO SATISFY DEPTH TO INVERT REQUIREMENTS. FOR B = 600mm - MAX. SIDE ENTRY PIPE AT 45° SKEW = 225mm CHECK PIT CHAMBER DIMENSIONS TO SATISFY THE SKEW ANGLE IN THE TABLE. 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 FOR REINFORCEMENT TO HAUNCH SEE BELOW FOR REINFORCEMENT TO WALLS AND FLOOR OF PITS (WHERE REQUIRED) REFER TO NOTES 10 AND 21. FLOW (2) PIT SIZE & DEPTH \* A = 900 REQUIREMENTS **PIPE DIA. + 150** H = 0-900 mm - AxB = $600 \times 600 \text{mm}$ SECTION H = 900-1200mm - AxB = 900x600mm $H = >1200 \text{mm} - \text{AxB} = 900 \times 900 \text{mm}$ \*A = 600 FOR PIPES UP TO 375 DIA. (3) PIT CHAMBER FOR (1) PIT CHAMBER FOR PIPES (1) PIT CHAMBER DIMENSIONS GREATER THAN 600 DIA. SIDE ENTRY ON SKEW FOR PIPES UP TO 600 DIA. TRENCH WIDTH = O.D.+600 300 MIN. OP LAYE DESIGN PAVEMENT 100mm MIN. THICK TOP SOIL >=0.2D & >=0.3m 300



**SCALE 1:10** 

AMENDMENT

LV 17.01.2020

LV 11.11.2019

DRAWN DESIGNED DATE REVISION

SCALE 1:20

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ISSUED FOR COORDINATION

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								
WEIGHT PASISNG (%)								
100								
100 TO 50								
90 TO 20								
60 TO 10								
25 TO 0								
10 TO 0								

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

#### **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 fc=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.

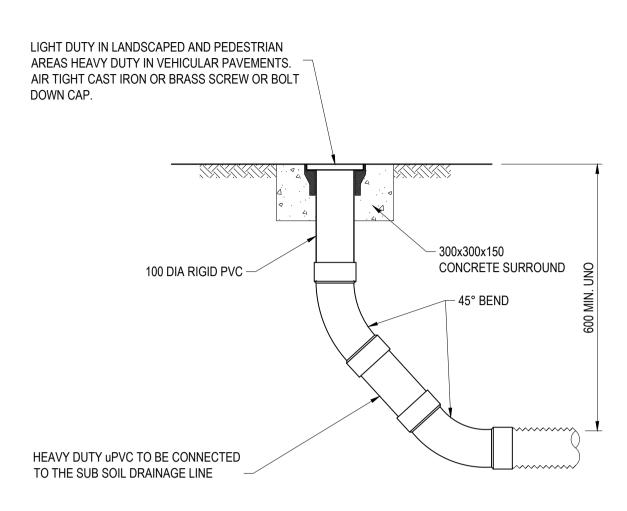
18. ALL ROOF DRAINAGE TO BE INSTALLED IN ACCORDANCE WITH AS3500, PART 3. TESTING TO BE UNDERTAKEN AND REPORTS PROVIDED TO THE SUPERINTENDENT.

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.

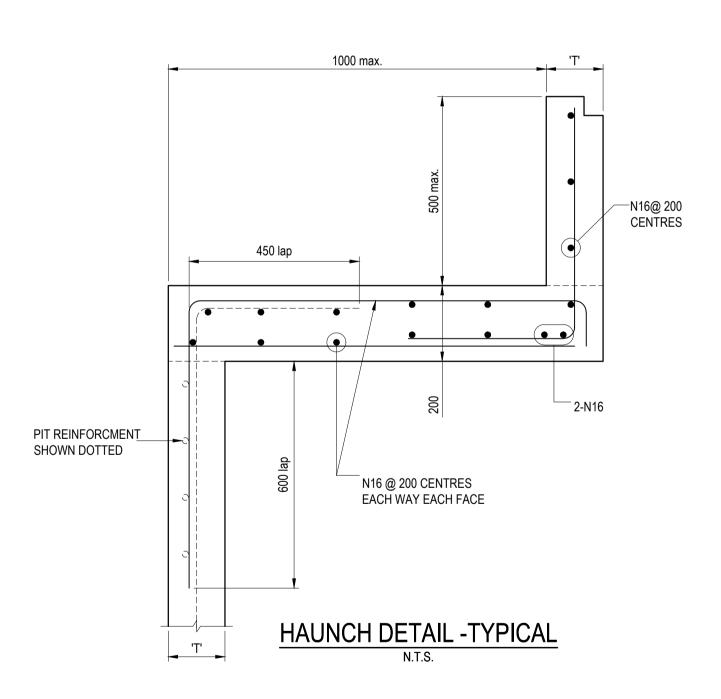
21. SUBSOIL DRAINAGE LINES FOR LANDSCAPE AREA NOT SHOWN ON THESE DRAWINGS. REFER TO LANDSCAPING PLANS FOR DETAILS.

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.



#### FLUSHING POINT (FP)

NOTE: SLOTTED RIGID PVC PIPE AND FITTINGS MAY BE USED



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DIOCESE OF WOLLONGON

JDH ARCHITECTS

DRAWN DESIGNED

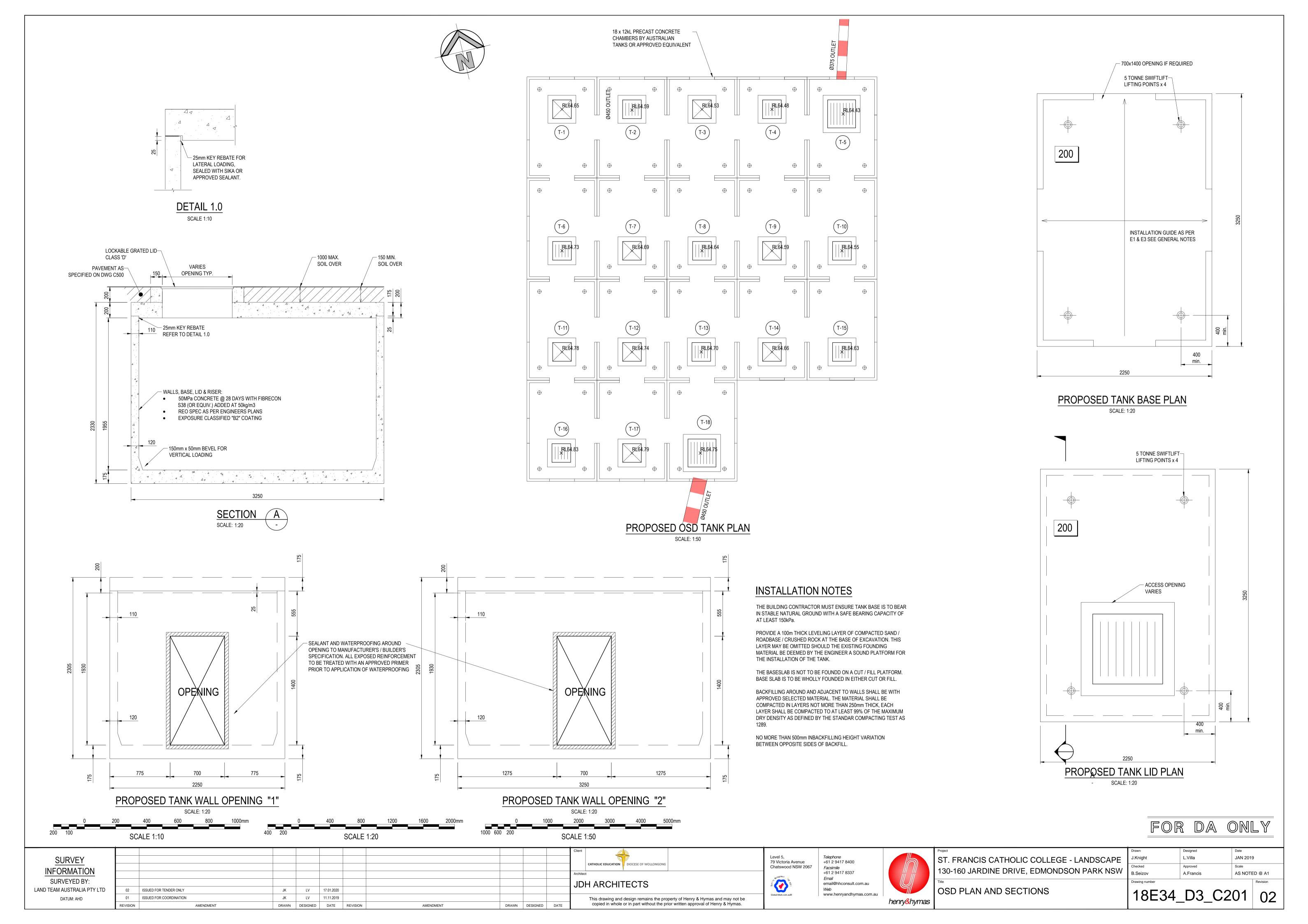
+61 2 9417 8400 +61 2 9417 8337 email@hhconsult.com.au www.henryandhymas.com.au henry&hymas

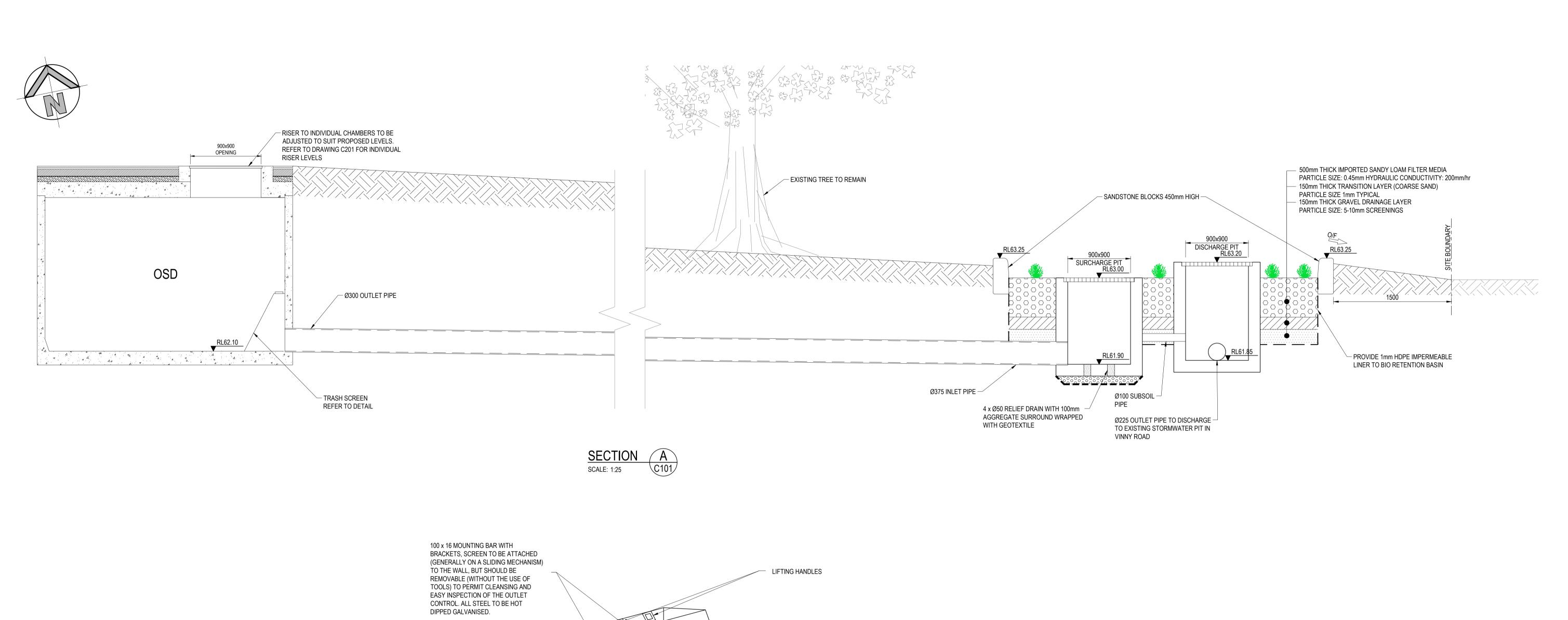
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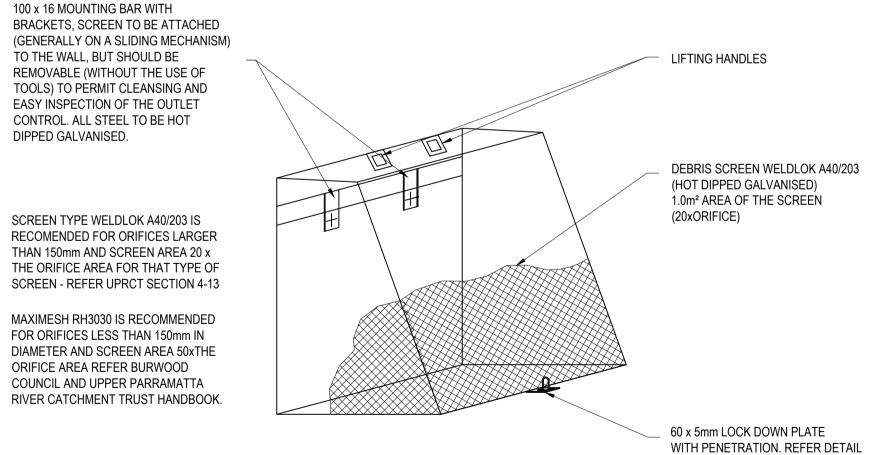
STORMWATER MISCELLANEOUS DETAILS

L.Villa JAN 2019 A.Francis AS NOTED @ A1

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DEBRIS SCREEN DETAIL NOT TO SCALE

ALL STEEL TO BE HOT DIPPED GALVANISED

# SCALE 1:10

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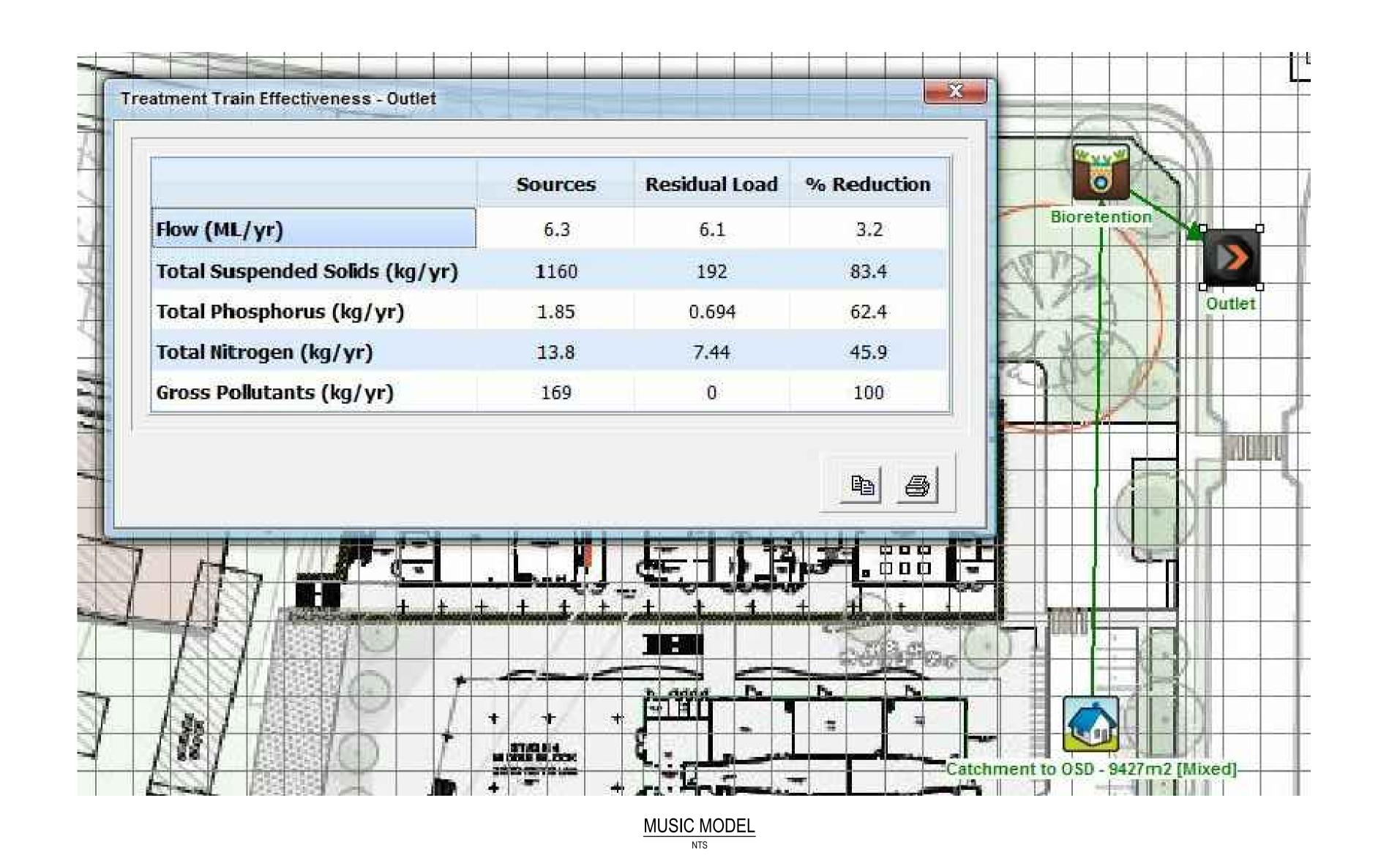
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OSD SECTIONS AND DETAILS henry&hymas

ST. FRANCIS CATHOLIC COLLEGE - LANDSCAPE 130-160 JARDINE DRIVE, EDMONDSON PARK NSW

L.Villa JAN 2019 B.Seizov A.Francis AS NOTED @ A1 18E34\_D3\_C202 02



### **DESIGN SUMMARY**

THE STORMWATER MANAGEMENT MEASURES HAVE BEEN DESIGNED IN ACCORDANCE WITH LIVERPOOL CITY COUNCIL'S DEVELOPMENT CONTROL PLAN, ON-SITE STORMWATER DETENTION POLICY AND, ON-SITE STORMWATER DETENTION TECHNICAL MANUAL.

A DRAINS MODEL HAS BEEN PREPARED TO DETERMINE THE PRE-DEVELOPMENT AD POST-DEVELOPMENT STORMWATER RUNOFF. THE PRE-DEVELOPMENT FLOW HAS BEEN LIMITED TO THE PRE-DEVELOPMENT FLOW PRODUCED BY THE CATCHMENT DRAINING TO VINNY ROAD REFER TO SUMMARY TABLE.

PRE-DEVELOPED VINNY ROAD CATCHMENT: 5239 m² (ASSUMED 100% PERVIOUS - 0% IMPERVIOUS) POST-DEVELOPMENT OSD CATCHMENT: 8684 m² (ASSUMED 10% PERVIOUS - 90% IMPERVIOUS)

#### OSD CALCULATIONS

YR	PRE-DEVELOPMENT (L/S)	POST-DEVELOPMENT (L/S)
100	191	179
20	133	106
10	108	94
5	80	78

TOTAL OSD STORAGE PROVIDED = 204m<sup>3</sup>

OSD OUTLET CONTROL: Ø250mm ORIFICE SITE DISCHARGE CONTROL: Ø200mm PIPE FROM BIO-RETENTION BASIN CONNECTING INTO EXISTING PIT ON

#### STORMWATER QUALITY

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 LIVERPOOL CITY COUNCIL. REFER TO RESULT SUMMARY TABLE BELOW AND SCREENSHOT.

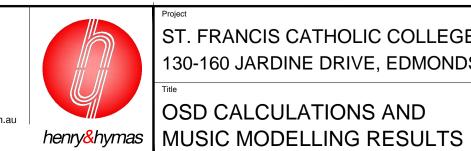
WATER QUALITY TREATMENT								
POLLUTANT	REDUCTION TARGETS (%)	ACHIEVED REDUCTION (%)						
GROSS POLLUTANT	90	100						
TOTAL SUSPENDED SOLIDS	80	83.4						
TOTAL PHOSPHORUS	45	62.4						
TOTAL NITROGEN	45	45.9						

FOR DA ONLY

	J.											
SURVEY											Client DIOCESE OF WOLLONGONG	Level 79 Vio
INFORMATION											Architect	Chats
SURVEYED BY: LAND TEAM AUSTRALIA PTY LTD	02	ISSUED FOR TENDER ONLY	JK	LV	17.01.2020						JDH ARCHITECTS	Global-Ma
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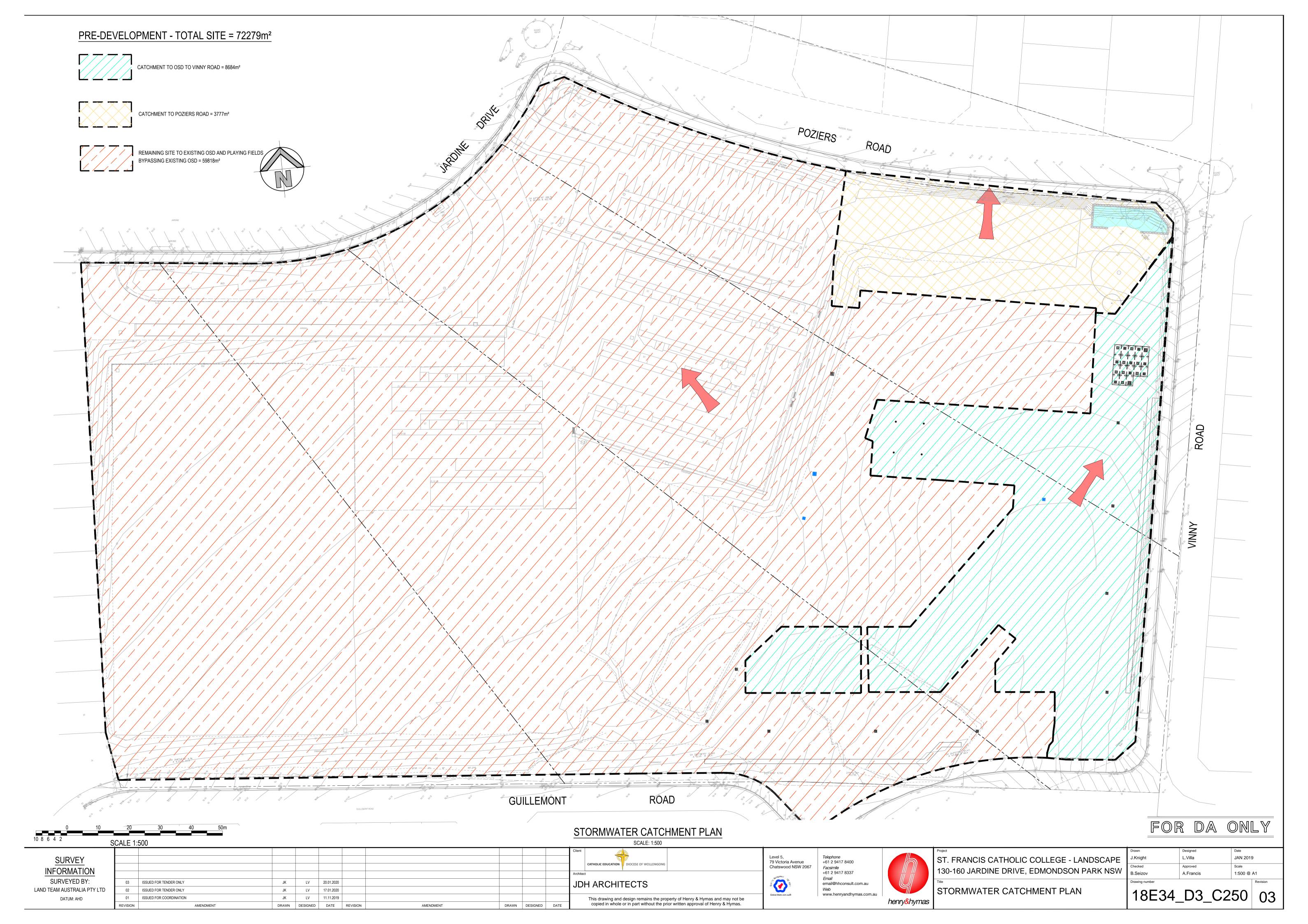


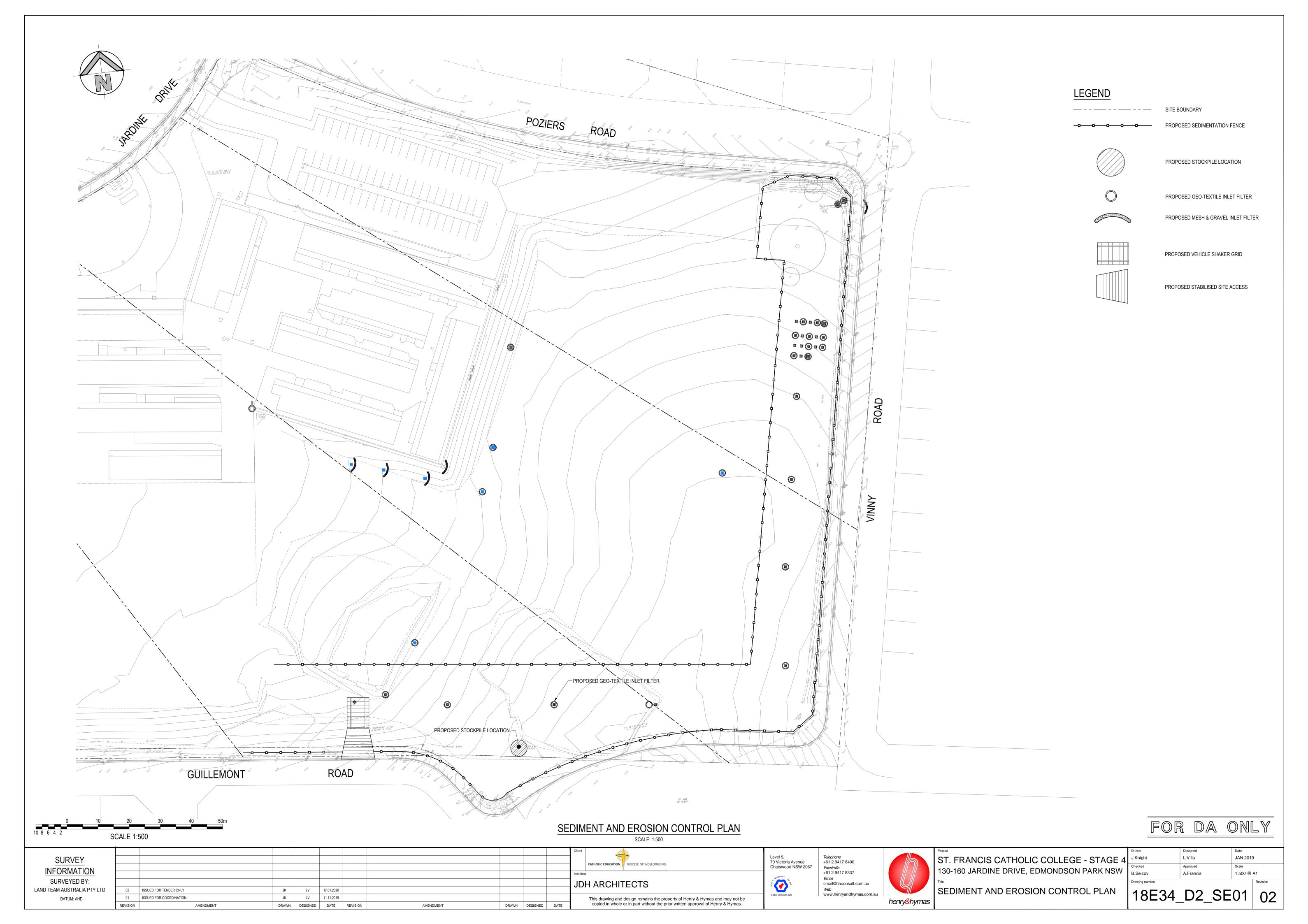


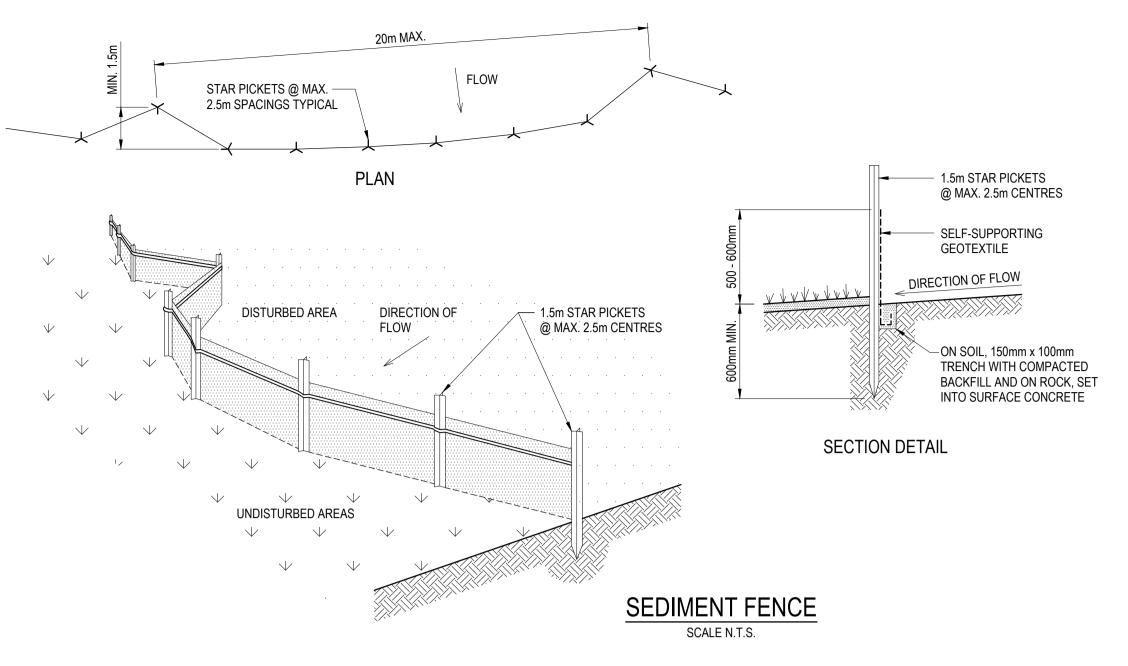


ST. FRANCIS CATHOLIC COLLEGE - LANDS 130-160 JARDINE DRIVE, EDMONDSON PAR

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	Checked	Approved	Scale		
SCAPE	J.Knight	L.Villa	JAN 2019		
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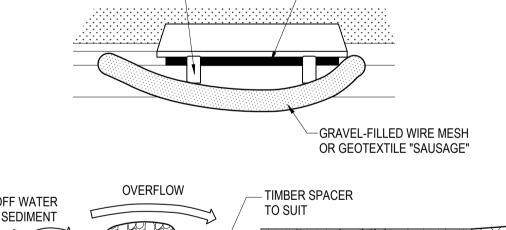




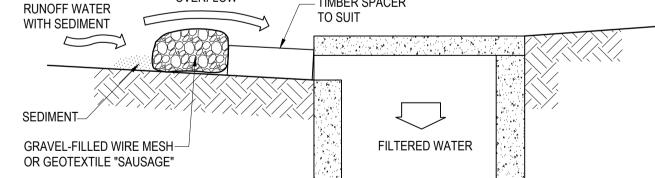


#### SEDIMENT FENCE CONSTRUCTION NOTES:

- 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. 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. 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.



-KERB-SIDE INLET



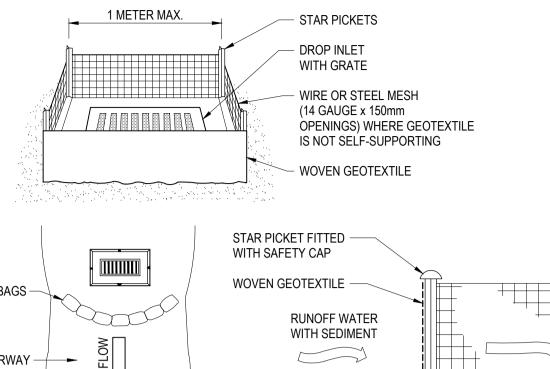
#### MESH & GRAVEL INLET FILTER CONSTRUCTION NOTES:

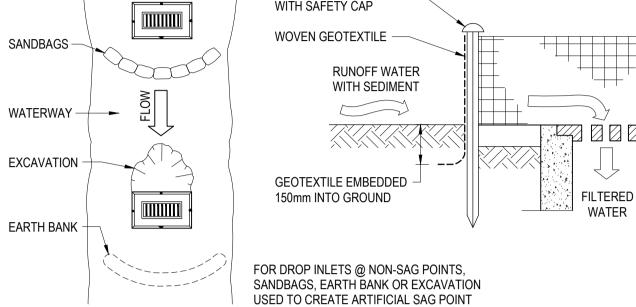
TIMBER SPACER-

TO SUIT

- 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

MESH & GRAVEL INLET FILTER





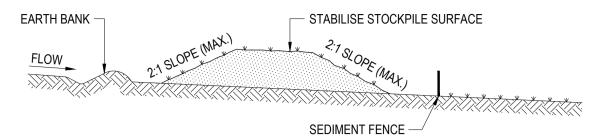
#### GEOTEXTILE INLET FILTER CONSTRUCTION NOTES:

- 1. FABRICATE A SEDIMENT BARRIER MADE FROM GEOTEXTILE. 2. PICKET SPACING TO BE MAXIMUM 1.0m.
- 3. IN WATERWAYS, ARTIFICIAL SAG POINTS CAN BE CREATED WITH SANDBAGS OR EARTH BANKS AS
- 4. DO NOT COVER THE INLET WITH GEOTEXTILES UNLESS THE DESIGN IS ADEQUATE TO ALLOW FOR
- ALL WATERS TO BYPASS IT.



#### 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.



#### STOCKPILE CONSTRUCTION NOTES:

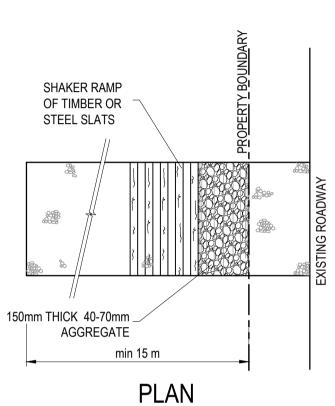
1. PLACE STOCKPILES MORE THAN 2 (PREFERABLY 5) METRES FROM EXISTING VEGETATION,

CONCENTRATED WATER FLOW, ROADS AND HAZARD AREAS. 2. CONSTRUCT ON THE CONTOUR AS LOW, FLAT, ELONGATED MOUNDS.

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

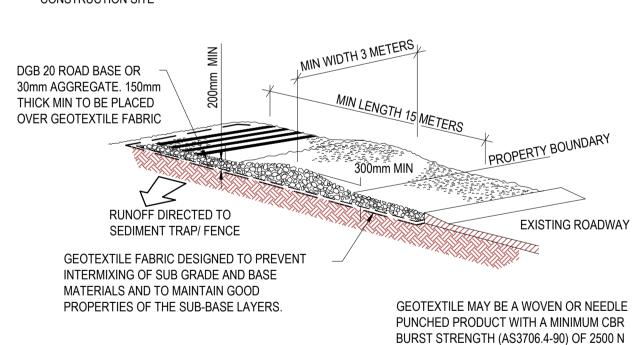
E.S.C.P. OR S.W.M.P. TO REDUCE THE C-FACTOR TO LESS THAN 0.10. 5. CONSTRUCT EARTH BANKS ON THE UPSLOPE SIDE TO DIVERT WATER AROUND STOCKPILES AND SEDIMENT FENCES 1 TO 2 METRES DOWNSLOPE.

## **STOCKPILES**



STABILISED SITE ACCESS WITH SHAKER RAMP

#### CONSTRUCTION SITE



#### STABILISED SITE ACCESS WITH SHAKER RAMP

#### 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.

# FOR DA ONLY

L.Villa JAN 2019 ST. FRANCIS CATHOLIC COLLEGE - STAGE 4 SURVEY 79 Victoria Avenue +61 2 9417 8400 CATHOLIC EDUCATION | DIOCESE OF WOLLONGON Chatswood NSW 2067 Facsimile 130-160 JARDINE DRIVE, EDMONDSON PARK NSW **INFORMATION** +61 2 9417 8337 A.Francis NTS SURVEYED BY: JDH ARCHITECTS email@hhconsult.com.au SEDIMENT AND EROSION CONTROL DETAILS 18E34\_D2\_SE02 02 LAND TEAM AUSTRALIA PTY LTD LV 17.01.2020 ISSUED FOR TENDER ONLY www.henryandhymas.com.au 01 ISSUED FOR COORDINATION JK LV 11.11.2019 This drawing and design remains the property of Henry & Hymas and may not be henry&hymas copied in whole or in part without the prior written approval of Henry & Hymas. DRAWN DESIGNED DATE REVISION AMENDMENT DRAWN DESIGNED DATE