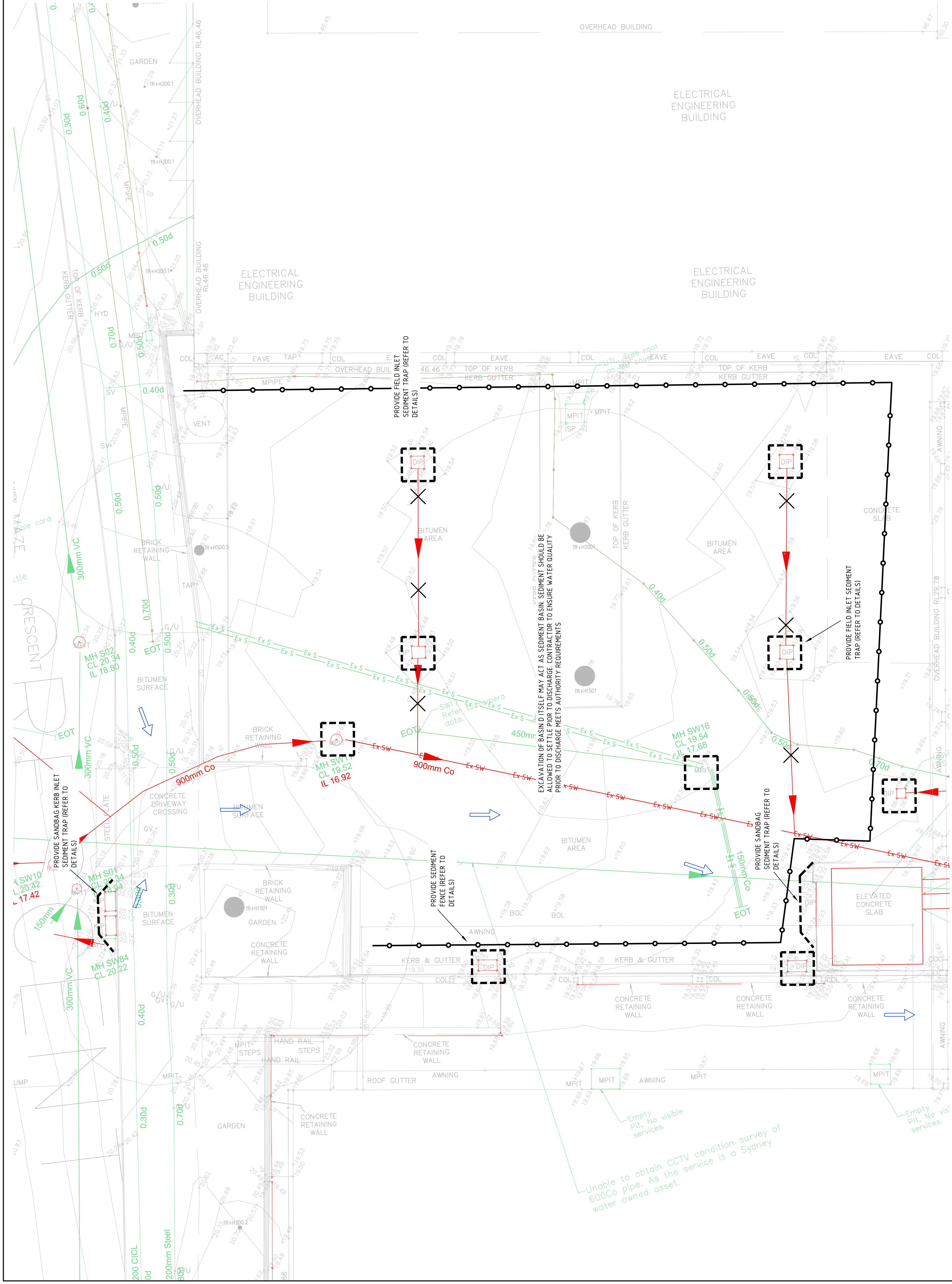
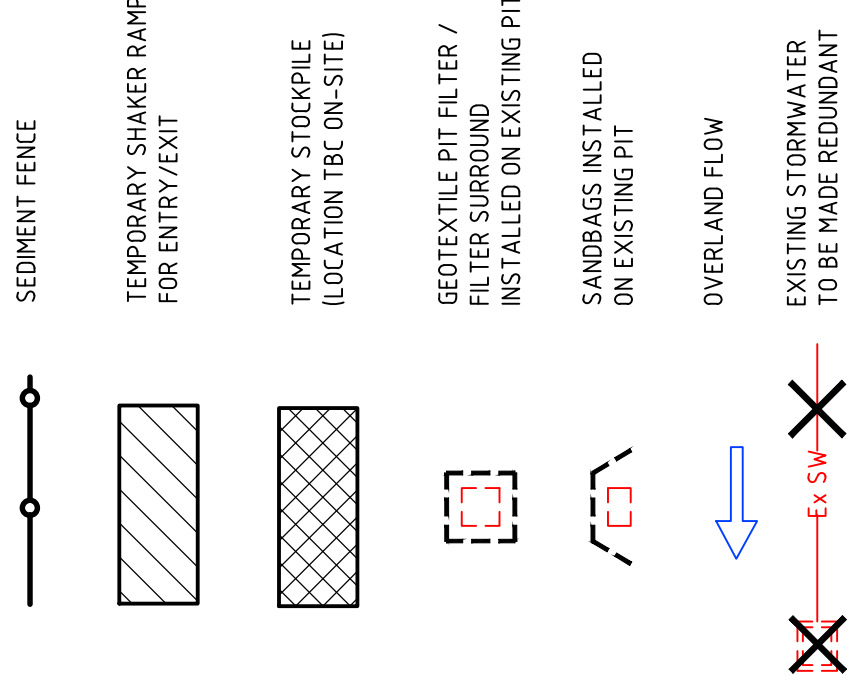


APPENDIX A – 70 % DETAILED DESIGN ISSUE CIVIL DRAWINGS



SOIL AND WATER MANAGEMENT LEGEND



SOIL AND WATER MANAGEMENT NOTES

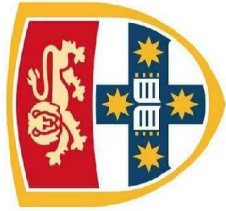
1. IT HAS BEEN ASSUMED THAT SEDIMENT FENCING WILL BE PROVIDED TO THE STAGION SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE (EXCEPT IN THE CASE OF EXTREME CONDITIONS WHERE TEMPORARY SEDIMENT FENCING MAY BE REQUIRED). THIS ASSUMPTION IS NOT VALID FOR THE CASE OF SEDIMENT FENCING TO LOCATIONS DETAIL BELOW. IN THIS CASE, PROVIDE SEDIMENT FENCING TO PREVENT SEDIMENT RUNOFF TO SEDIMENT BASIN.
2. ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDSCAPING URBAN STORMWATER BLUE BOOK...
3. MINIMISE CLEARING OUTSIDE BASEMENT EXTERNT

SEDIMENT CONTROL CONDITIONS

1. SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSER SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
2. SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS IS CANNOT OCCUR.
3. STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 50M OF HAZARDOUS AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
4. DRAINAGE WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT DRAINAGE SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
5. TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
6. CONTRACTOR TO DESIGN/SELECT TEMPORARY SEDIMENT BASIN. WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES' REQUIREMENTS PRIOR TO DISCHARGE. ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

REFER TO DRAWING 00007 FOR CONTINUATION

Rev	Description	Date	By	App
P1	ISSUED FOR INFORMATION	15.11.17	JH	
P2	ISSUED FOR DEVELOPMENT APPLICATION	21.08.18	PA	
P3	ISSUED FOR 30% SCHEMATIC DESIGN	22.08.18	PA	
B	ISSUED FOR THIS DESIGN DEVELOPMENT	24.09.18	JH	
C	ISSUED FOR THIS DETAILED DESIGN	10.10.18	PA	

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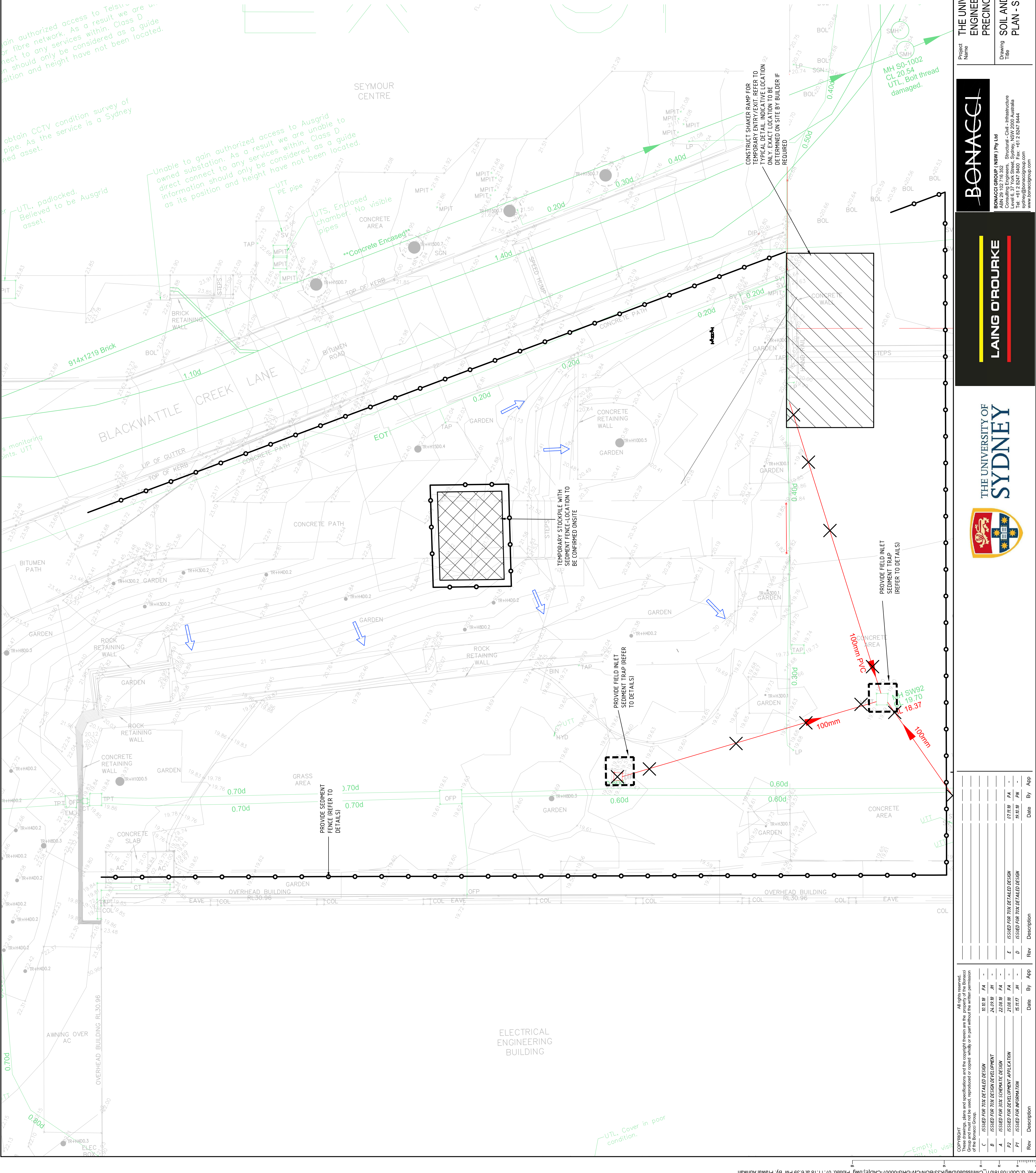


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Project Name
The UNIVERSITY OF SYDNEY
ENGINEERING AND TECHNOLOGY
PRECINCT (ETP) - STAGE 1

Drawing Title
SOIL AND WATER MANAGEMENT
PLAN - SHEET 1

70% DETAILED DESIGN	Project Director Approved	Date	North
AV	JH		
100	Project Ref	Drawing No	Rev
V 17			
A1	K33-BON-CIV-DRG-00005 E		



SOIL AND WATER MANAGEMENT LEGEND

- SEDIMENT FENCE
- TEMPORARY SHAKER RAMP FOR ENTRY/EXIT
- TEMPORARY STOCKPILE (LOCATION TBC ON-SITE)
- GEOTEXTILE PIT FILTER / FILTER SURROUND INSTALLED ON EXISTING PIT
- SANDBAGS INSTALLED ON EXISTING PIT
- OVERLAND FLOW
- EXISTING STORMWATER TO BE MADE REDUNDANT

SOIL AND WATER MANAGEMENT NOTES

- IT HAS BEEN ASSUMED THAT SEDIMENT FENCING WILL BE PROVIDED TO THE STAGE BOUNDARY SUFFICIENT TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SUFFICIENT CONSTRUCTION ENTRY/EXIT (SEE NOTE 1) TO PREVENT SEDIMENT FROM LEAVING THE CASE. PROVIDE SEDIMENT FENCE TO STANDARD DETAIL BELOW AS REQUIRED TO PREVENT SEDIMENT FROM LEAVING SITE. DIRECT RUNOFF TO SEDIMENT BASIN.
 - ALL SEDIMENT CONTROL MEASURES TO BE INSTALLED IN ACCORDANCE WITH LANDCOM MANAGING URBAN STORMWATER 'BLUE BOOK'.
 - MINIMISE CLEARING OUTSIDE BASEMENT EXTENT.
 - SEDIMENT CONTROL FOR LANDSCAPED WORKS DOWNSTREAM OF THE BUILDING TO INCLUDE A SILTENCE AND SANDBAGS AS REQUIRED TO BE MANAGED AT A RATE OF 50L/S BY THE CONTRACTOR ON SITE. INSTALL MATCH DRAIN TO DIVERT UPSTREAM CATCHMENT AWAY FROM DISTURBED SOIL AREA.
- SEDIMENT CONTROL CONDITIONS**
- SEDIMENT FENCES WILL BE INSTALLED AS SHOWN AND ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER TO CONTAIN COARSE SEDIMENT FRACTIONS INCLUDING AGGREGATED FINES) AS NEAR AS POSSIBLE TO THEIR SOURCE.
 - SEDIMENT REMOVED FROM ANY TRAPPING DEVICE WILL BE RELOCATED WHERE FURTHER POLLUTION TO DOWNSLOPE LANDS & WATERWAYS CANNOT OCCUR.
 - STOCKPILES WILL BE PLACED WHERE SHOWN ON DRAWING OR ELSEWHERE AT THE DISCRETION OF THE SITE MANAGER AND NOT WITHIN 5m OF HAZARDOUS AREAS INCLUDING LIKELY AREAS OF HIGH VELOCITY FLOWS SUCH AS WATERWAYS, PAVED AREAS & DRIVEWAYS.
 - WATER WILL BE PREVENTED FROM DIRECTLY ENTERING THE PERMANENT WORKS SYSTEM WITH INLET FILTERS (SEE DETAILS) UNLESS IT IS SEDIMENT FREE.
 - TEMPORARY SEDIMENT TRAPS WILL BE RETAINED UNTIL AFTER THE LANDS THEY ARE PROTECTING ARE COMPLETELY REHABILITATED.
 - CONTRACTOR TO DESIGN/CONSTRUCT TEMPORARY SEDIMENT BASIN. WATER SHOULD BE ALLOWED TO SETTLE BEFORE DISCHARGE. CONTRACTOR MUST VERIFY THAT WATER QUALITY MEETS AUTHORITIES REQUIREMENTS PRIOR TO DISCHARGE. ACCUMULATED SEDIMENT SHOULD THEN BE REMOVED & DISPOSED OF IN ACCORDANCE WITH ENVIRONMENTAL MANAGEMENT PROCEDURES.

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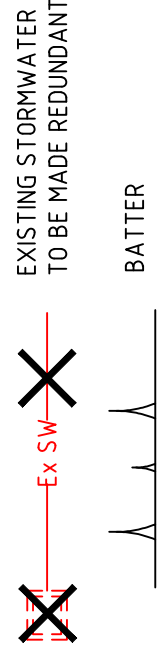
THE UNIVERSITY OF SYDNEY
ENGINEERING AND TECHNOLOGY
PRECINCT (ETP) - STAGE 1
SOIL AND WATER MANAGEMENT
PLAN - SHEET 2

Rev	Description	Date	By	App
1	ISSUED FOR 70% DESIGN DEVELOPMENT	18.10.18	PA	-
2	ISSUED FOR 70% DESIGN DEVELOPMENT	24.09.18	JH	-
3	ISSUED FOR 70% DESIGN DEVELOPMENT	22.08.18	PA	-
4	ISSUED FOR 70% DESIGN DEVELOPMENT	21.08.18	PA	-
5	ISSUED FOR 70% DESIGN DEVELOPMENT	15.11.17	JH	-

Rev	Description	Date	By	App
1	ISSUED FOR 70% DESIGN DEVELOPMENT	18.10.18	PA	-
2	ISSUED FOR 70% DESIGN DEVELOPMENT	24.09.18	JH	-
3	ISSUED FOR 70% DESIGN DEVELOPMENT	22.08.18	PA	-
4	ISSUED FOR 70% DESIGN DEVELOPMENT	21.08.18	PA	-
5	ISSUED FOR 70% DESIGN DEVELOPMENT	15.11.17	JH	-

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SITEWORKS LEGEND



BULK EARTHWORKS LEGEND		
Number	Color	Minimum Depth (m)
1		-5.000
2		-5.874
3		-4.000
4		-3.000
5		-2.000
6		-1.000
7		0.000

NOTE

- VOLUMES ARE APPROXIMATE ONLY, WHICH ARE IN PLACE AND DO NOT INCORPORATE BULKING FACTORS AND OVER EXCAVATION
- GROUND WATER SEEPAGE MAY OCCUR IN EXCAVATED AREAS. DE-WATERING MAY BE REQUIRED IN THIS INSTANCE.
- VOLUMES INCLUDE DANGEROUS GOODS SETDOWN, STAIRCASE FOOTING BUND SETDOWN, LIFT CORE, SLAB ON GROUND AND EXCLUDES ALL OTHER FOOTINGS, RAMPS AND LANDSCAPING.

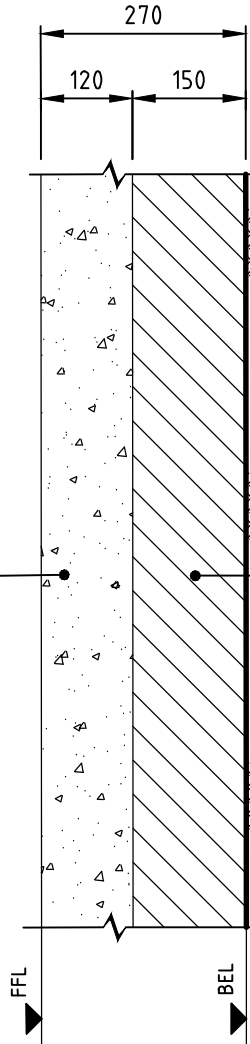
EARTHWORKS QUANTITIES

TOTAL CUT VOLUME = 5.025m³

TOTAL FILL VOLUME = 0m³

EXCESS CUT OVER FILL = 5.025m³

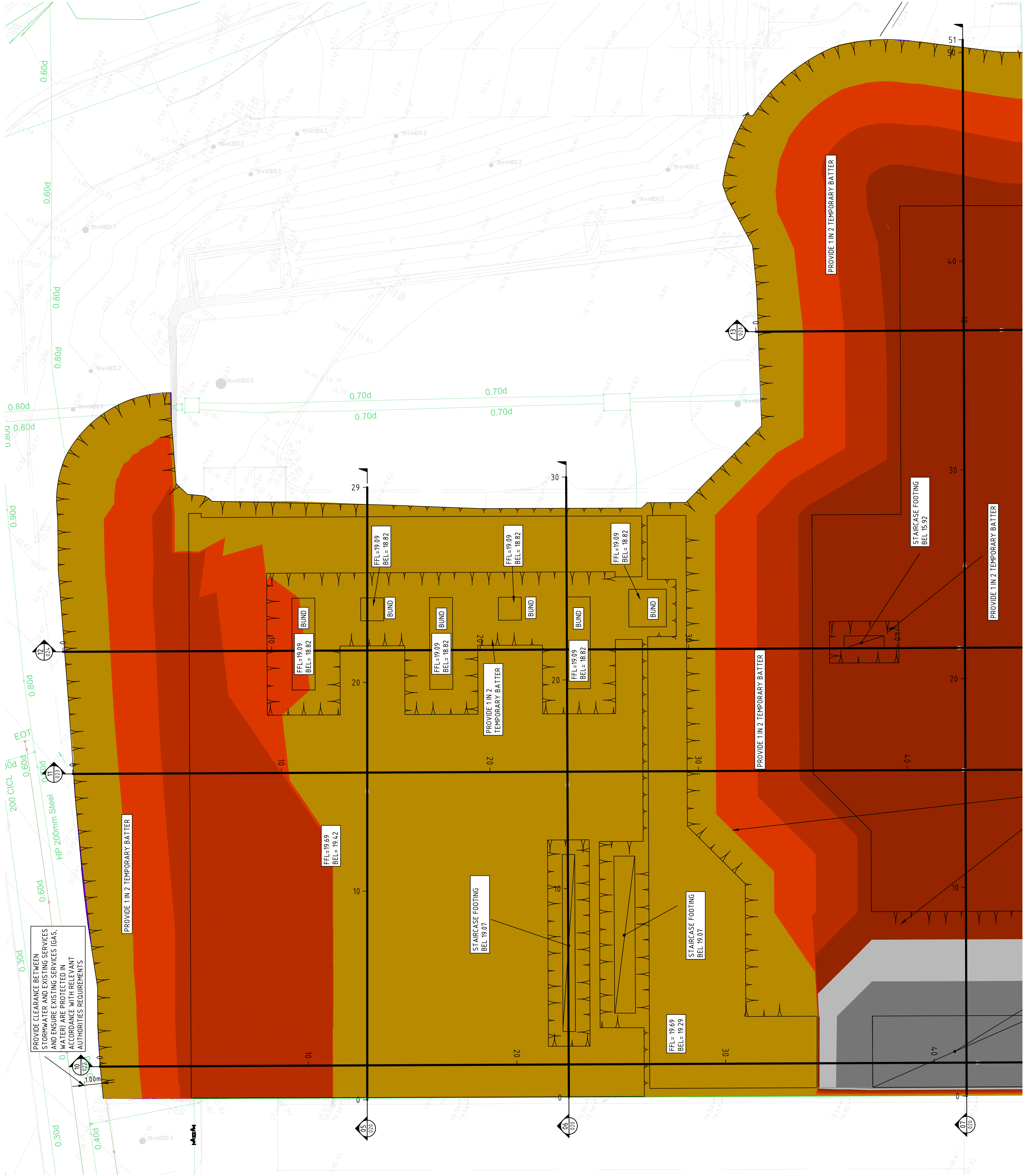
SLAB ON GROUND IN ACCORDANCE WITH STRUCTURAL DRAWINGS



FREE DRAINING LAYER WITH AG LINES TO HYDRAULIC ENGINEERS DETAIL S. PROVIDE A MINIMUM OF 150mm.

SLAB ON GROUND BULK EXCAVATION DETAIL

SCALE 1:10



Rev	Description	Date	By	App
01	ISSUE FOR 70% DETAILED DESIGN	07.11.18	PA	-
02	ISSUE FOR 70% DETAILED DESIGN	19.10.18	PA	-
03	ISSUE FOR 70% DETAILED DESIGN	24.09.18	PA	-
04	ISSUE FOR 70% DETAILED DESIGN	14.09.18	PA	-

Rev	Description	Date	By	App
01	ISSUE FOR 70% DETAILED DESIGN	07.11.18	PA	-
02	ISSUE FOR 70% DETAILED DESIGN	19.10.18	PA	-
03	ISSUE FOR 70% DETAILED DESIGN	24.09.18	PA	-
04	ISSUE FOR 70% DETAILED DESIGN	14.09.18	PA	-



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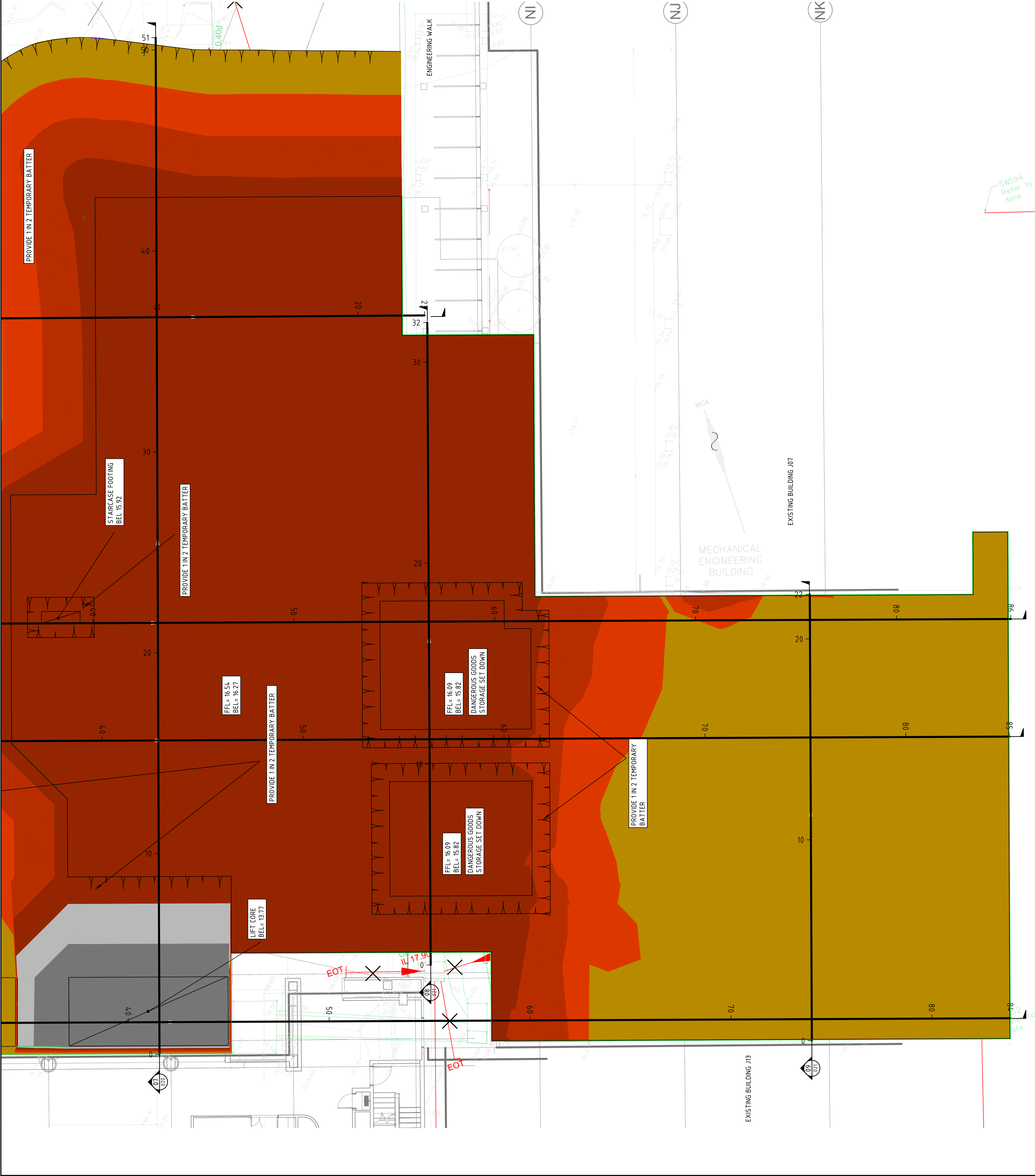
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ENGINEERING AND TECHNOLOGY
PRECINCT (ETP) - STAGE 1

OVERALL BULK EARTHWORKS
PLAN - SHEET 1

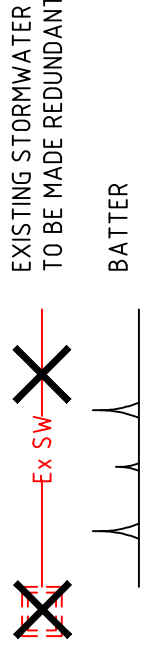
70% DETAILED DESIGN

Designed	PA	Project Director Approved	Date	North
Drawn	PA			
Scale	1:100			
Date	NOV 17			
Sheet	A1			

Drawing No
NOV 17
K33-BON-CIV-DRG-00010 D



SITeworks LEGEND



BULK EARTHWORKS LEGEND		
Number	Color	Minimum Depth (m)
1	Grey	-5.000
2	Light Grey	-4.000
3	Dark Grey	-3.000
4	Orange	-2.000
5	Red	-1.000
6	Yellow	0.000
7	Blue	1.000

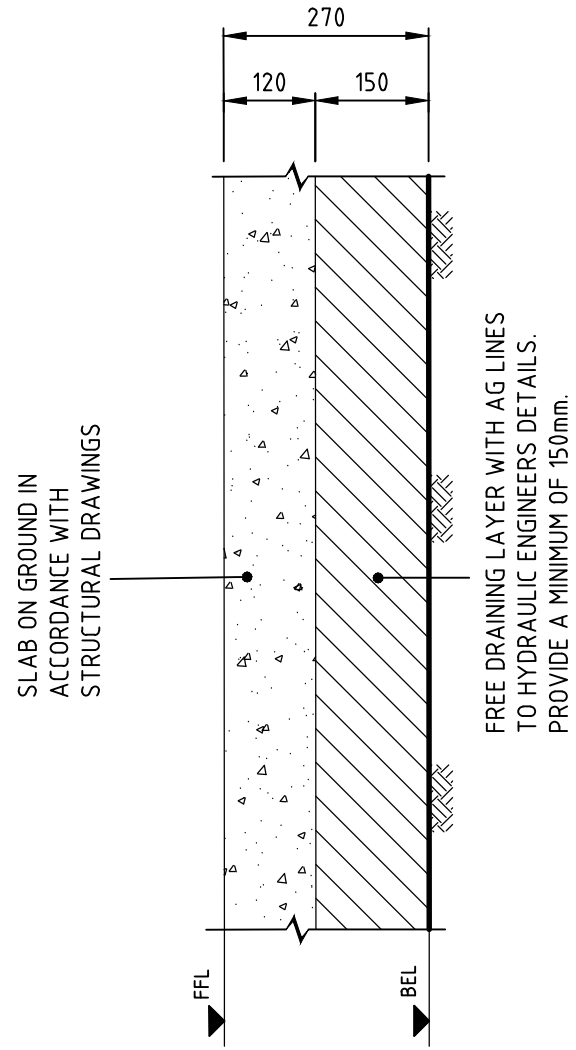
- NOTE
- VOLUMES ARE APPROXIMATE ONLY, WHICH ARE IN PLACE AND DO NOT INCORPORATE BULKING FACTORS AND OVER EXCAVATION
 - GROUND WATER SEEPAGE MAY OCCUR IN EXCAVATED AREAS. DE-WATERING MAY BE REQUIRED IN THIS INSTANCE.
 - VOLUMES INCLUDE DANGEROUS GOODS SETDOWN, STAIRCASE FOOTING BUND SETDOWN, LIFT CORE, SLAB ON GROUND AND EXCLUDES ALL OTHER FOOTINGS, RAMPS AND LANDSCAPING.

EARTHWORKS QUANTITIES

TOTAL CUT VOLUME = 5.025m³

TOTAL FILL VOLUME = 0m³

EXCESS CUT OVER FILL = 5.025m³



SLAB ON GROUND BULK EXCAVATION DETAIL

SCALE 1:10

SW59A
Refer to
data.

Rev	Description	Date	By	App	Rev	Description	Date	By	App
C	ISSUE FOR 75% DETAILED DESIGN	19.10.18	PA	-					
B	ISSUE FOR 75% DETAILED DESIGN	18.10.18	PA	-					
A	ISSUE FOR 75% DETAILED DESIGN	24.09.18	PA	-					
P1	ISSUE FOR 30% SCHEMATIC DESIGN	14.09.18	PA	-					

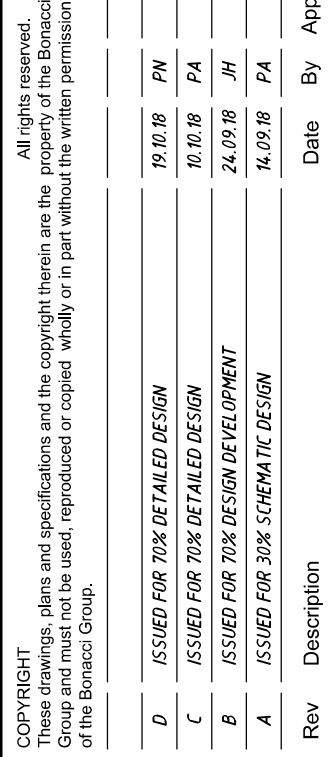
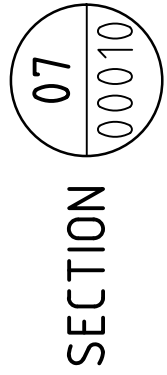
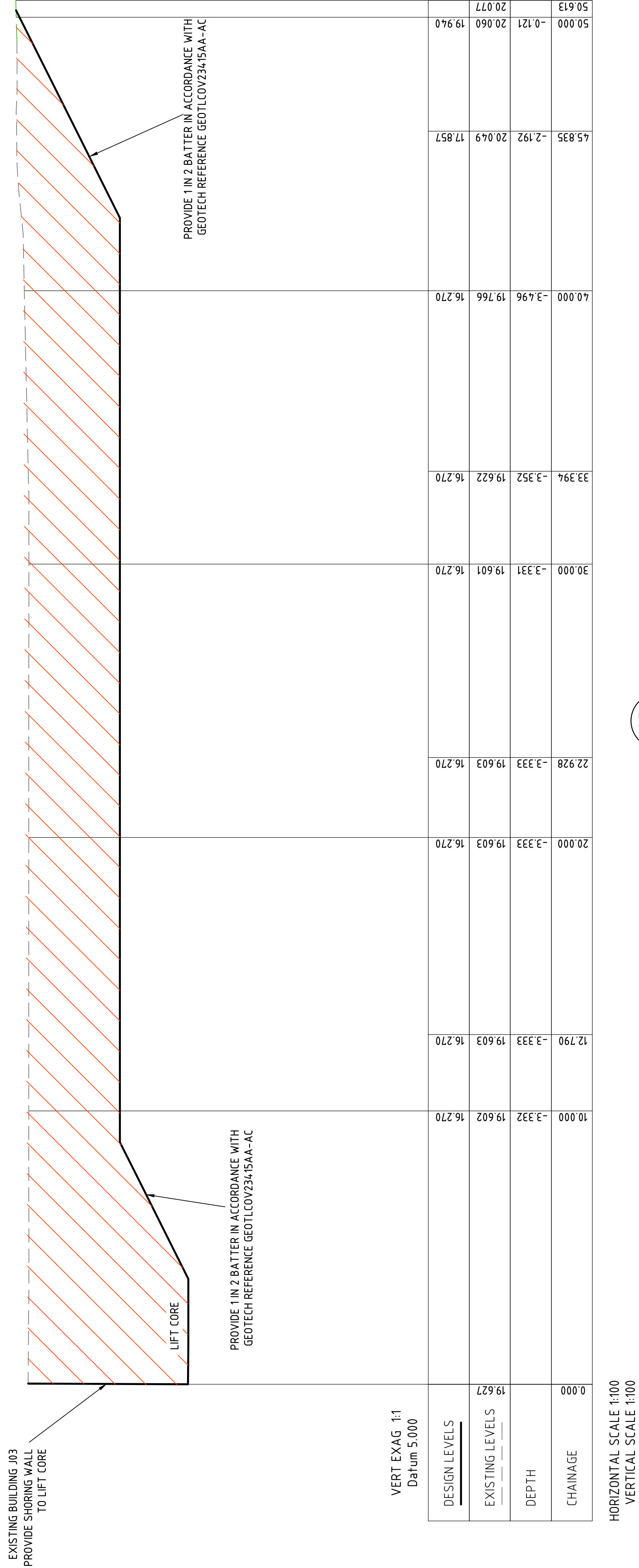
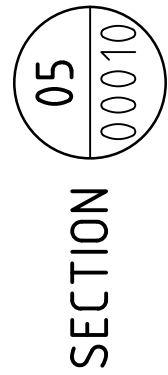
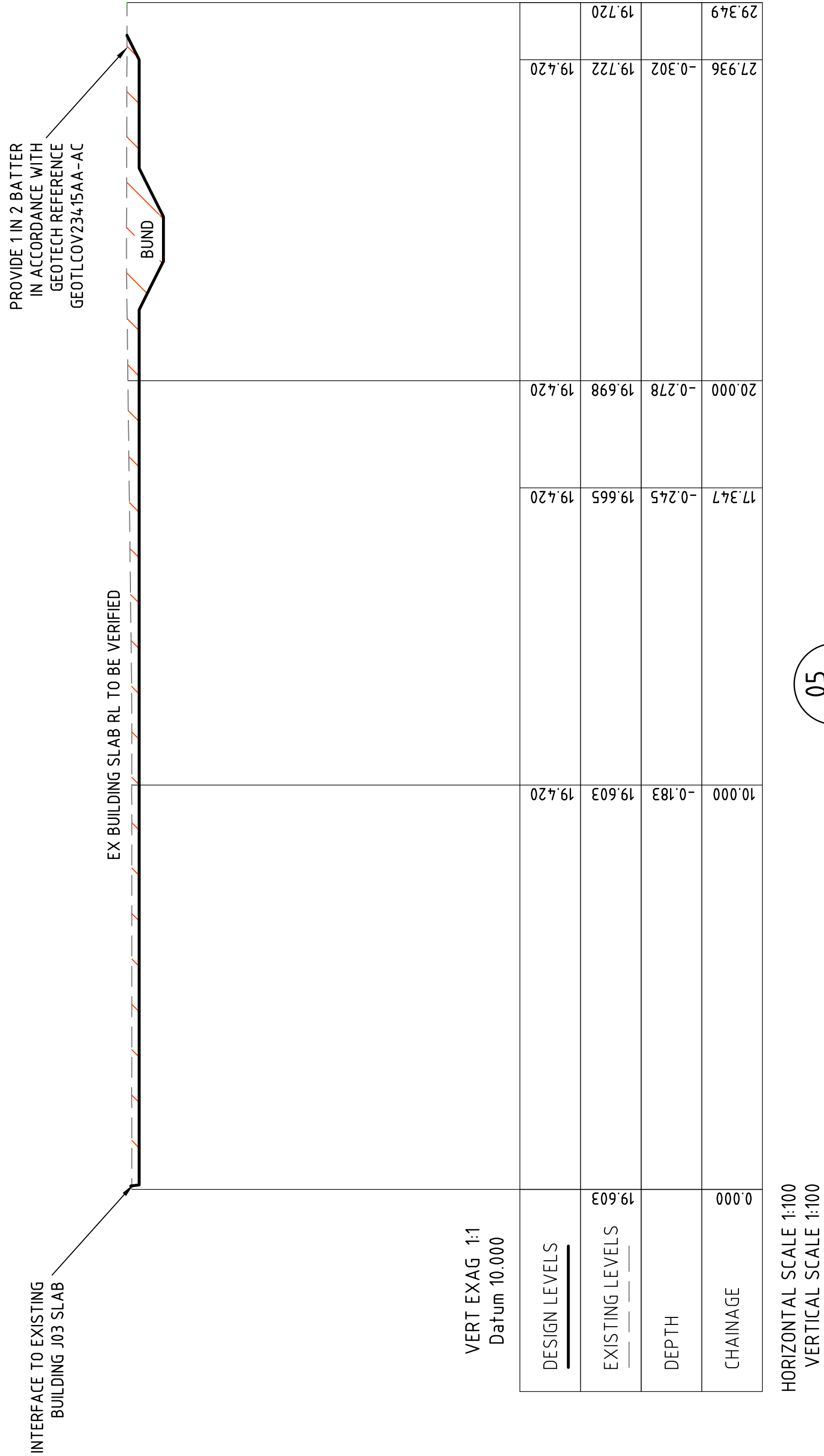
Rev	Description	Date	By	App



THE UNIVERSITY OF SYDNEY ENGINEERING AND TECHNOLOGY PRECINCT (ETP) - STAGE 1	
Project Name	OVERALL BULK EARTHWORKS PLAN - SHEET 2

70% DETAILED DESIGN	
Designed	PA
Drawn	PA
Scale	1:100
Date	NOV 17
Sheet	A1

K33-BON-CIV-DRG-00011 C	
Project Ref	NOV 17
Drawing No	NOV 17
Rev	C



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Project Name

Drawing
Title

**BULK EARTHWORKS
LONGITUDINAL SECTIONS
SHEET 1**

70% DETAILED DESIGN

Designed	PA	Project Director Approved	Date	North
Drawn	PA			
Scale	1:100	Project Ref	Drawing No	Rev
Date	APRIL 2018		K33-BON-CIV-DRG-00020	D
Sheet	A1			

