



**SITE DIAGRAM**  
SCALE 1:10000 (A1) 1:20000 (A3)

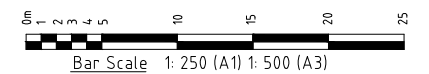
**LEGEND**

—	MAJOR CONTOUR
—	MINOR CONTOUR
60—E	UNDERGROUND ELECTRICITY AND DEPTH (cm) (UNKNOWN VOLTAGE)
40—F	UNDERGROUND COMMUNICATIONS AND DEPTH (cm)
40—FO	UNDERGROUND OPTIC FIBRE AND DEPTH (cm)
90—W	UNDERGROUND WATER SERVICES AND DEPTH (cm)
70—S	UNDERGROUND SEWER SERVICES AND DEPTH (cm)
70—G	UNDERGROUND GAS AND DEPTH (cm)
—	UNDERGROUND DRAINAGE PIPE
—E	UNDERGROUND ELECTRICITY (UNKNOWN VOLTAGE) (ASSUMED LOCATION)
—W	UNDERGROUND WATER SERVICES (ASSUMED LOCATION)
—S	UNDERGROUND SEWER SERVICES (ASSUMED LOCATION)
—	FENCE LINE
—	TOE OF BANK
—	TOP OF BANK
●	SEWER MAN HOLE
○	S.I.P. SEWER INSPECTION PIT
☀	POWER POLE
M	WATER METER
○	DENOTES TREE
Sk/D/10	spread radius/trunk diameter/approx height

**NOTES:**

1. FEATURES SHOWN TO SCALE ACCURACY.
2. THIS PLAN IS SUITABLE FOR DETAILED PLANNING AND DESIGN AT THE SCALE/S STATED. THE PLAN MAY NOT BE SUITABLE FOR ANY OTHER PURPOSE OR FOR USE AT ANY OTHER SCALE/S.
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5. CONTOUR INTERVAL - 0.2m
6. DURING THE COURSE OF THIS SURVEY NO INVESTIGATION HAS BEEN UNDERTAKEN TO DETERMINE THE EXISTENCE OF ANY POSSIBLE SUBTERRANEAN ENCROACHMENTS.
7. SERVICE LOCATIONS BY ADVANCED GROUND LOCATIONS. ALL SERVICES HAVE BEEN LOCATED BY ELECTRONIC DETECTION.
8. LEVELS & POSITION TO UNIVERSITY SPECIFICATION ACCURACY.

Mark	Easting	Northing	RL
821	365113.200	1358961.994	28.629
824	365118.834	1359008.276	23.948
825	365091.098	1358976.121	26.351
DWC1000	365070.963	1358978.492	25.900
DWC2000	365050.401	1358984.987	23.615
DWC3000	365044.211	1359018.386	19.626
DWC4000	365066.100	1359018.092	21.211
DWC5000	365087.631	1359018.123	22.581



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ABN 23 104 067 405

TITLE  
**DETAIL SURVEY**  
**OVER GLASSHOUSES AT NEWCASTLE UNIVERSITY**

H		
G		
F		
E		
D		
C		
B	03.10.2017	
A	22.09.2017	PRELIMINARY ISSUE
Ed.	Date	Amendment

JOB ADDRESS: NEWCASTLE UNIVERSITY, CALLAGHAN		PLAN No	JOB REF:
CLIENT: UNIVERSITY of NEWCASTLE		001	7782
SCALE: 1:250 (A1) 1:500 (A3)	ORIGIN OF LEVELS	DRAWN JG	SHEET No
SURVEY DATE: AUGUST 2017	.....	SURVEYOR NB / CP	1/5
PLAN DATE: 03.10.2017		CHECKED CP	
DATUM: AHD		APPROVED CP	
CAD REF:	DRAWING REF: 7782-DET-03.10.2017		

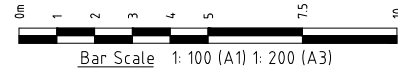
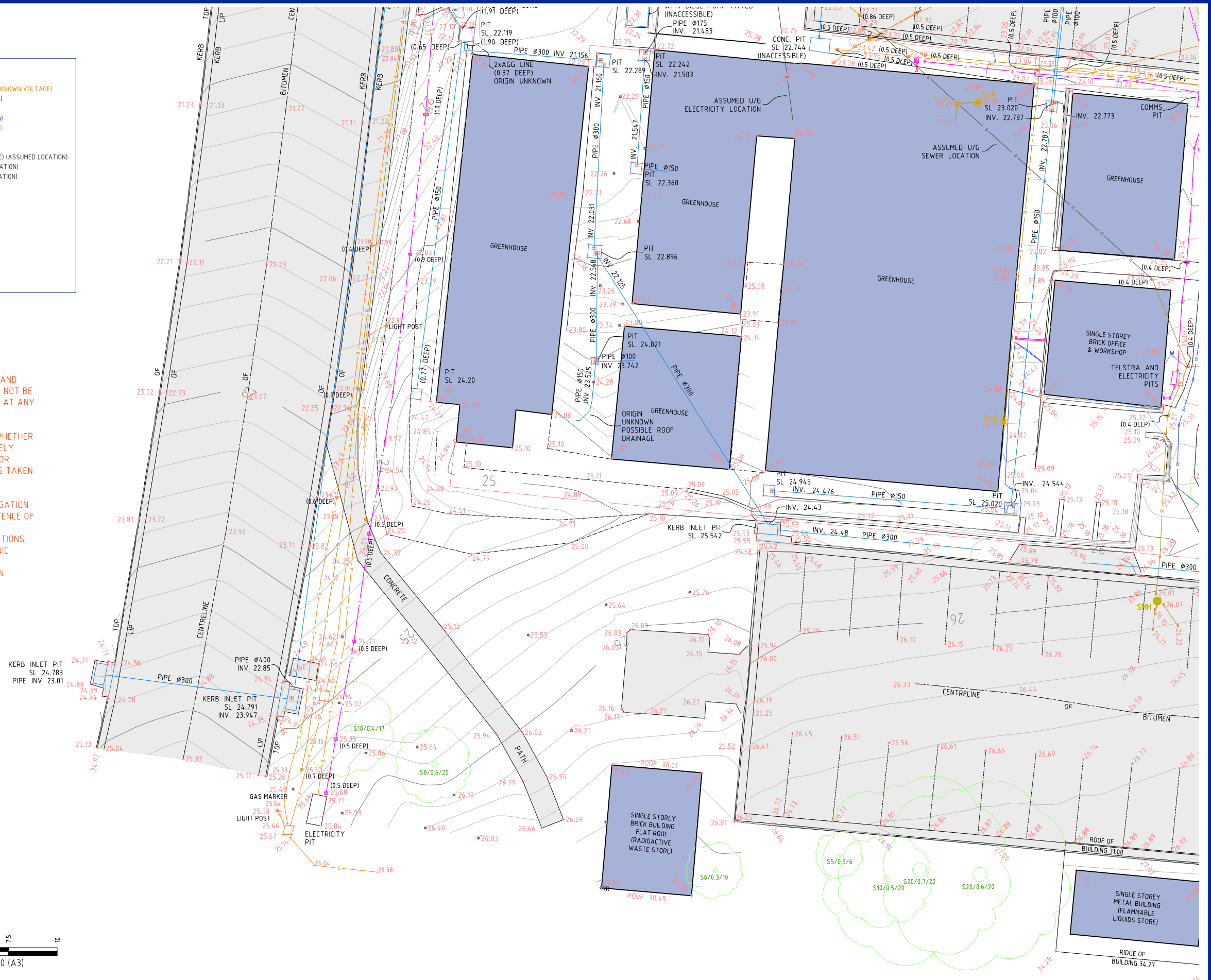


**LEGEND**

	MAJOR CONTOUR
	MINOR CONTOUR
	UNDERGROUND ELECTRICITY AND DEPTH (cm) (UNKNOWN VOLTAGE)
	UNDERGROUND COMMUNICATIONS AND DEPTH (cm)
	UNDERGROUND OPTIC FIBRE AND DEPTH (cm)
	UNDERGROUND WATER SERVICES AND DEPTH (cm)
	UNDERGROUND SEWER SERVICES AND DEPTH (cm)
	UNDERGROUND GAS AND DEPTH (cm)
	UNDERGROUND DRAINAGE PIPE
	UNDERGROUND ELECTRICITY (UNKNOWN VOLTAGE) (ASSUMED LOCATION)
	UNDERGROUND WATER SERVICES (ASSUMED LOCATION)
	UNDERGROUND SEWER SERVICES (ASSUMED LOCATION)
	FENCE LINE
	TOE OF BANK
	TOP OF BANK
	SEWER MAN HOLE
	SEWER INSPECTION PIT
	POWER POLE
	WATER METER
	DENOTES TREE
	spread radius/trunk diameter/approx height

**NOTES:**

1. FEATURES SHOWN TO SCALE ACCURACY.
2. THIS PLAN IS SUITABLE FOR DETAILED PLANNING AND DESIGN AT THE SCALE/S STATED. THE PLAN MAY NOT BE SUITABLE FOR ANY OTHER PURPOSE OR FOR USE AT ANY OTHER SCALE/S.
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5. CONTOUR INTERVAL - 0.2m
6. DURING THE COURSE OF THIS SURVEY NO INVESTIGATION HAS BEEN UNDERTAKEN TO DETERMINE THE EXISTENCE OF ANY POSSIBLE SUBTERRANEAN ENCROACHMENTS.
7. SERVICE LOCATIONS BY ADVANCED GROUND LOCATIONS. ALL SERVICES HAVE BEEN LOCATED BY ELECTRONIC DETECTION.
8. LEVELS & POSITION TO UNIVERSITY SPECIFICATION ACCURACY.



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TITLE  
**DETAIL SURVEY**  
**OVER GLASSHOUSES AT NEWCASTLE UNIVERSITY**

Ed.	Date	Amendment
H		
G		
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D		
C		
B	03.10.2017	FIRST ISSUE
A	22.09.2017	PRELIMINARY ISSUE

JOB ADDRESS: NEWCASTLE UNIVERSITY, CALLAGHAN	
CLIENT: UNIVERSITY OF NEWCASTLE	
SCALE: 1:100 (A1) 1:200 (A3)	ORIGIN OF LEVELS
SURVEY DATE: AUGUST 2017	DRAWN JG
PLAN DATE: 03.10.2017	CHECKED CP
DATUM: AHD	APPROVED CP
CAD REF:	DRAWING REF: 7782-DET-03.10.2017

PLAN No	JOB REF:
<b>001</b>	<b>7782</b>
SHEET No	
<b>2/5</b>	

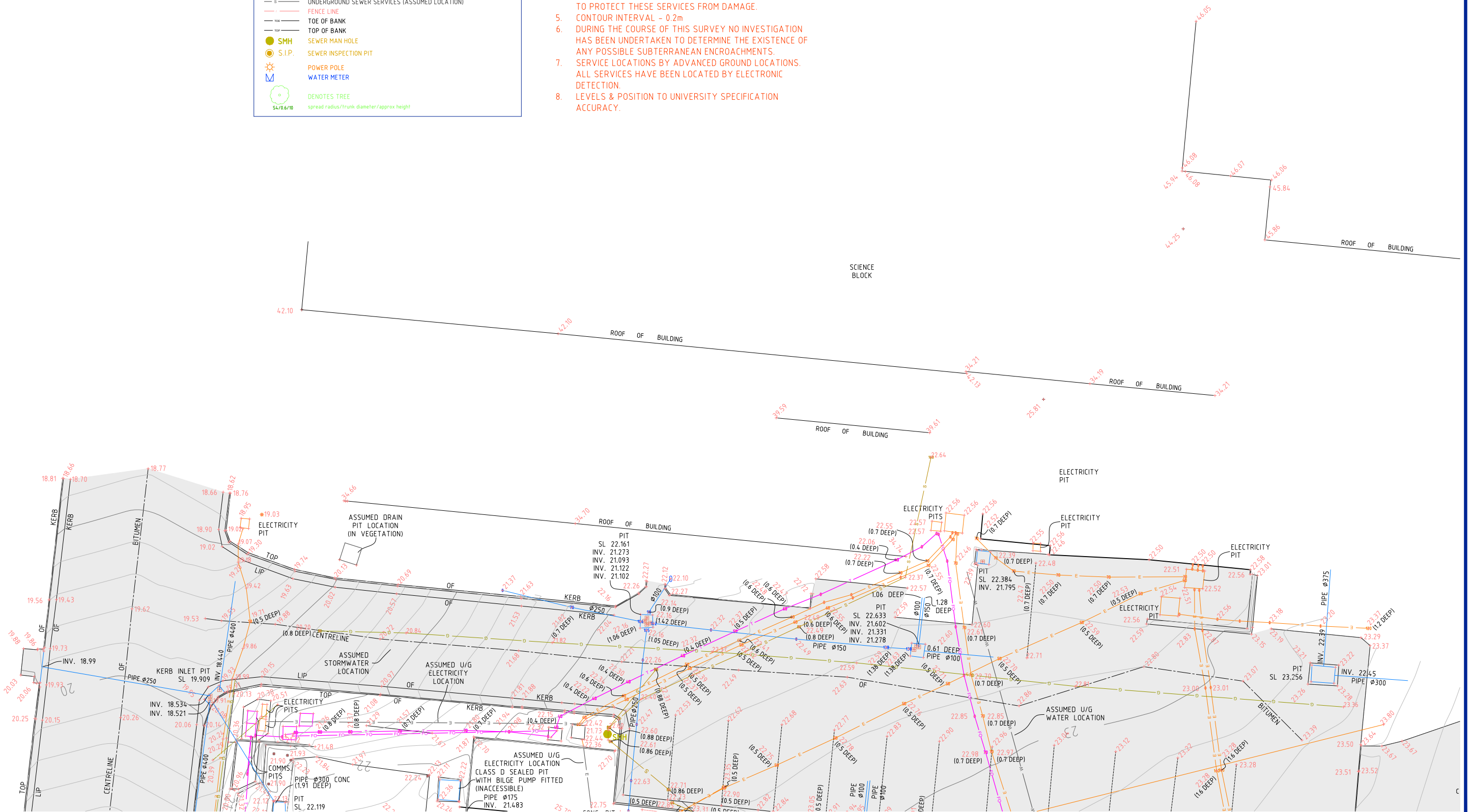
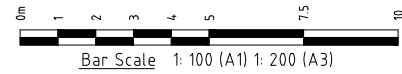


### LEGEND

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—	MINOR CONTOUR
60—E	UNDERGROUND ELECTRICITY AND DEPTH (cm) (UNKNOWN VOLTAGE)
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—S	UNDERGROUND SEWER SERVICES (ASSUMED LOCATION)
—	FENCE LINE
—	TOE OF BANK
—	TOP OF BANK
●	SMH SEWER MAN HOLE
○	S.I.P. SEWER INSPECTION PIT
☀	POWER POLE
Ⓜ	WATER METER
○	DENOTES TREE
○	spread radius/trunk diameter/approx height

### NOTES:

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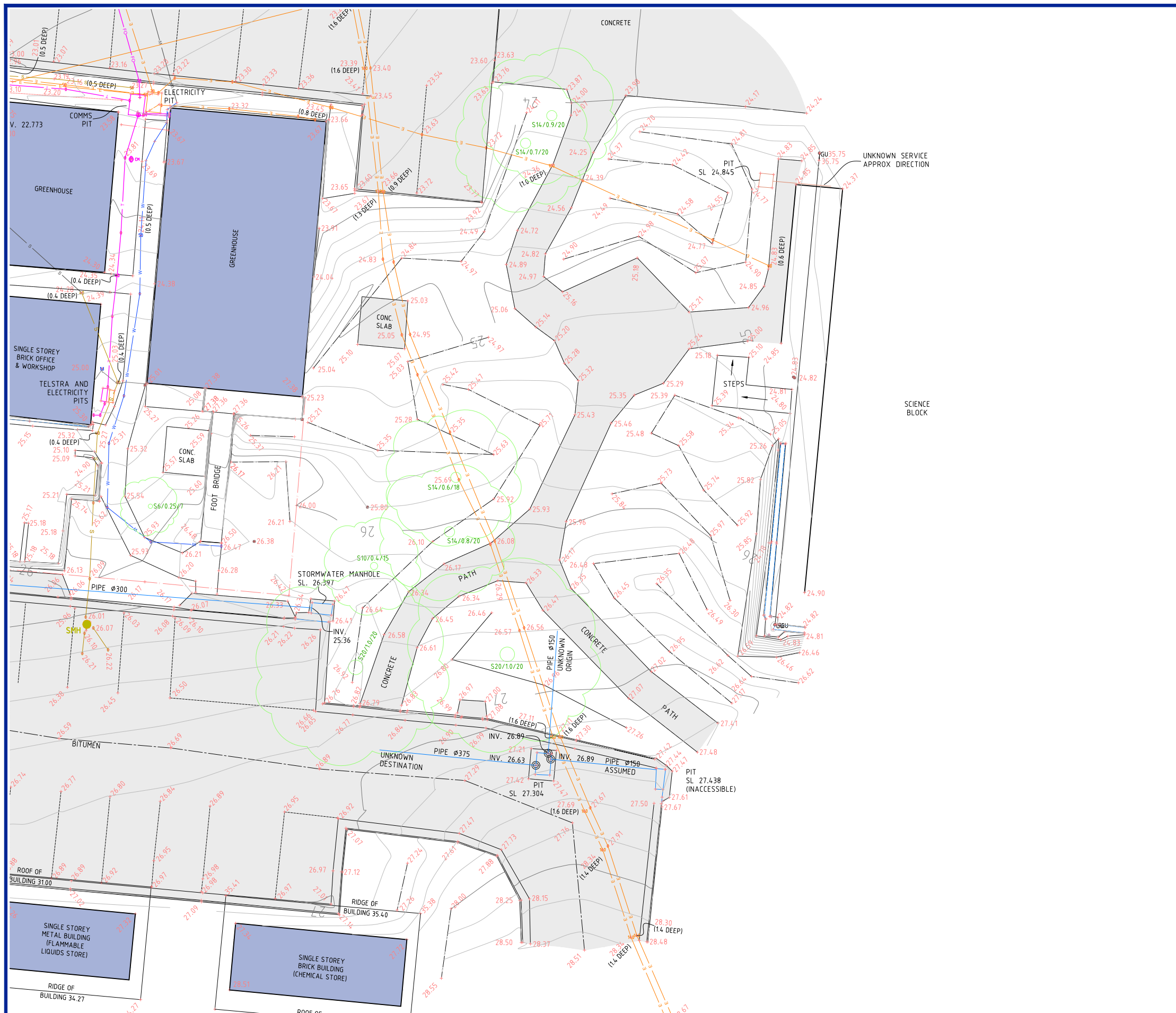
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TITLE	DETAIL SURVEY
	OVER GLASSHOUSES AT NEWCASTLE UNIVERSITY

H	
G	
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D	
C	
B	03.10.2017 FIRST ISSUE
A	22.09.2017 PRELIMINARY ISSUE
Ed.	Date Amendment

JOB ADDRESS:	NEWCASTLE UNIVERSITY, CALLAGHAN	PLAN No	001	JOB REF:	7782
CLIENT:	UNIVERSITY of NEWCASTLE	SCALE:	1:100 (A1) 1:200 (A3)	ORIGIN OF LEVELS	.....
		SURVEY DATE:	AUGUST 2017	DRAWN	JG
		PLAN DATE:	03.10.2017	CHECKED	CP
		DATUM:	AHD	APPROVED	CP
		CAD REF:		DRAWING REF:	7782-DET-03.10.2017
				SHEET No	3/5

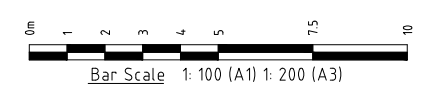




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**LEGEND**

	MAJOR CONTOUR
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	POWER POLE
	WATER METER
	DENOTES TREE
	S4/0.6/18 spread radius/trunk diameter/approx height



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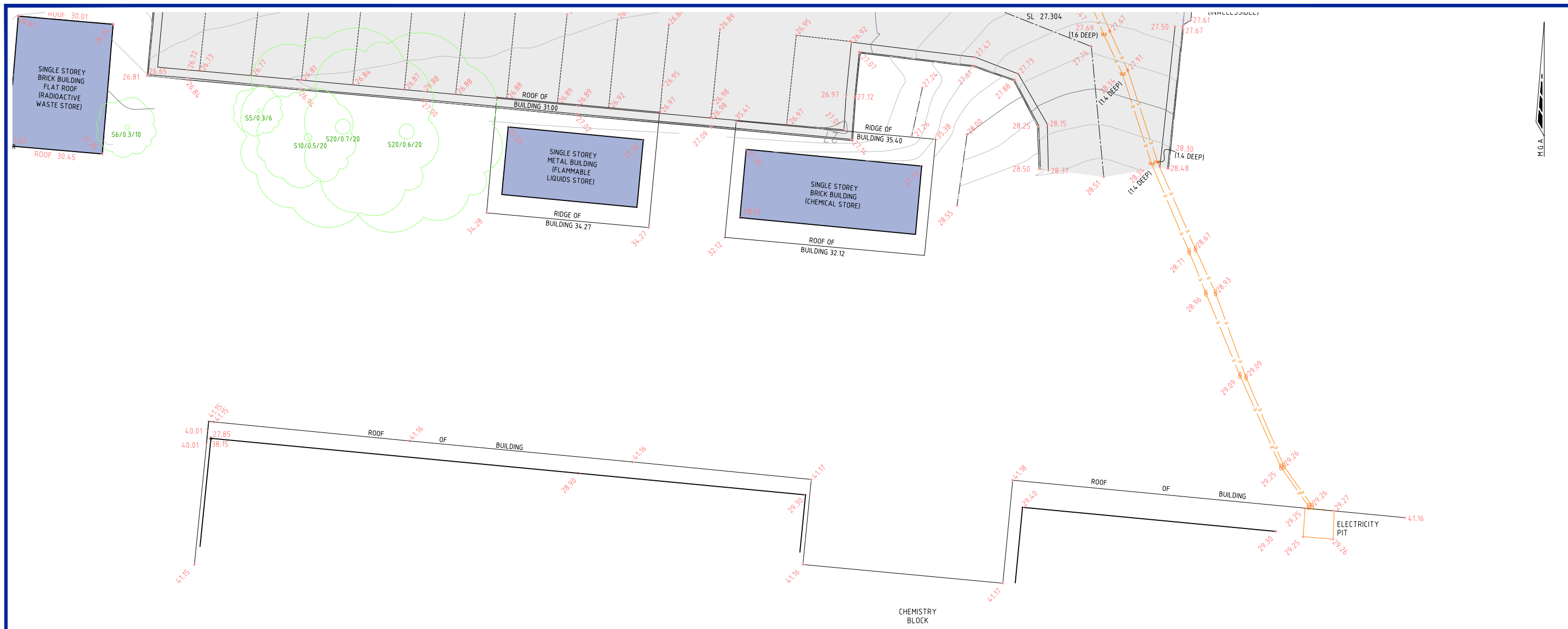
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TITLE		JOB ADDRESS: NEWCASTLE UNIVERSITY, CALLAGHAN	
DETAIL SURVEY		CLIENT: UNIVERSITY of NEWCASTLE	
OVER GLASSHOUSES AT NEWCASTLE UNIVERSITY		SCALE: 1:100 (A1) 1:200 (A3)	ORIGIN OF LEVELS
H		SURVEY DATE: AUGUST 2017	DRAWN JG
G		PLAN DATE: 03.10.2017	CHECKED CP
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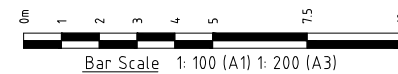


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**LEGEND**

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S4/0.6/10	spread radius/trunk diameter/approx height



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