Australian Government Solicitor

NCA Reference: T:

LICENCE

LICENCE TO OCCUPY PART OF LAKE BURLEY GRIFFIN AS PART OF THE CITY TO LAKE PROJECT (STAGE 1 POINT PARK)

Commonwealth of Australia represented by the **National Capital Authority**
ABN 75 149 374 427

Australian Capital Territory represented by the **Land Development Agency**
ABN 20 419 925 579

File reference: 16005544

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LICENCE

LICENCE TO OCCUPY PART OF LAKE BURLEY GRIFFIN AS PART OF THE CITY TO LAKE PROJECT (STAGE 1 POINT PARK)

Date

This Licence is dated 2016.

Parties

1. **Commonwealth of Australia** represented by the **National Capital Authority** (ABN 75 149 374 427) of Treasury Building, Newlands Street, Parkes ACT 2600

   (Commonwealth)

2. **The Australian Capital Territory** represented by the **Land Development Agency** (ABN 20 419 925 579) established by section 31 of the *Planning and Development Act* 2007 (ACT) of TransACT House, 470 Northbourne Avenue, Dickson ACT 2602

   (LDA)

Context

A. The NCA administers the Lake on behalf of the Commonwealth and is the consent authority for the carrying out of the Improvements and the Lake Wall Works.

B. The LDA wishes to occupy the Licensed Area to carry out the Improvements and Lake Wall Works in accordance with the Works Approval to complete Stage 1 of the *City to Lake Project* – an initiative of the ACT Government.

C. The Commonwealth agrees to give the LDA a Licence to occupy and use the Licensed Area to undertake the Improvements and the Lake Wall Works on the terms set out in this Licence.

D. This Licence only deals with the carrying out of the works as specified in the Purpose. Any future adjustment of land boundary will be dealt with through an Inter-Government agreement separate to this Licence.

Operative provisions

1. Interpretation

1.1. Definitions

Asset Acceptance Procedures	means the procedures described in Schedule 3.
Commencement Date	means the first date of the Term set out in the Schedule.
GST	has the meaning given to it in *A New Tax System (Goods & Services Tax) Act 1999* (Cth).
Licence	means this Licence and the Schedules.
Improvements	means the scope of works set out in the schedule of construction in accordance with the Works Approval, any subsequent amendments to the Works Approval, or any additional works approvals to achieve the Purpose.
Lake	means Lake Burley Griffin within the meaning of the *Lakes Ordinance 1976* (Cth).
Lake Wall Works	means the works to: remove the existing Lake wall in the Licensed Area; reclaim part of the Lake in the Licensed Area; and construct a new Lake wall in the Licensed Area.
Licence Fee	means the amount set out in Item 4 of Schedule 1
Licensed Area	means the area described in Item 1 of Schedule 1
Minister	means the Commonwealth Minister for the time being administering the *National Land Ordinance 1989* (Cth) or any statute or ordinance substituted therefor.
National Land	has the meaning given to that term by the *Australian Capital Territory (Planning and Land Management) Act 1988* (Cth).
Outgoings	means all costs associated with the use and occupation of the Licensed Area including but not limited to rates, charges and taxes and other statutory outgoings assessed levied or payable in respect of the Licensed Area, insurance of the Improvements, electricity, lighting, cleaning, security and maintenance and repair costs.
Purpose	to construct the Improvements and the Lake Wall Works in accordance with the Works Approval.

Practical Completion	means the date upon which the LDA accepts the Improvements and the Lake Wall Works for their intended use.
Schedule	means a Schedule to this Licence.
Term	means the period of this Licence set out in Item 2 of Schedule 1.
Territory Land	has the meaning given to that term by the *Australian Capital Territory (Planning and Land Management)* Act 1988 (Cth).
Works Approval	means NCA Works Approval No. 20108 issued by the Commonwealth to the LDA.

1.2. Interpretation

1.2.1. In this Licence, unless the contrary intention appears:

a. words importing a gender include any other gender;

b. words in the singular include the plural and words in the plural include the singular;

c. clause headings are for convenient reference only and have no effect in limiting or extending the language of provisions to which they refer;

d. words importing a person include a partnership and a body whether corporate or otherwise;

e. a reference to dollars is a reference to Australian dollars;

f. a reference to an agency having administrative responsibility for this Licence means, if that agency is abolished or restructured, the agency which from time to time has administrative responsibility for this Licence;

g. a reference to any legislation or legislative provision includes any statutory modification, substitution or re-enactment of that legislation or legislative provision;

h. if any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

i. a reference to an Item is a reference to an Item in Schedule 1;

j. the Schedules form part of this Licence;

k. if any conflict arises between the terms and conditions contained in the clauses of this Licence and any part of the Schedule, the terms and conditions of the clauses prevail; and

l. a reference to writing is a reference to any representation of words, figures or symbols, whether or not in a visible form.

1.3. Guidance on construction of Licence

1.3.1. This Licence records the entire agreement between the parties in relation to its subject matter.

1.3.2. As far as possible, all provisions of this Licence will be construed so as not to be void or otherwise unenforceable.

1.3.3. If anything in this Licence is void or otherwise unenforceable, it will be severed and the rest of the Licence remains in force.

1.3.4. A provision of this Licence will not be construed to the disadvantage of a party solely on the basis that it proposed that provision.

2. Grant of Licence for the Term

2.1.1. The LDA, together with its agents and contractors, may occupy and use the Licensed Area for the Purpose during the Term.

2.1.2. The Improvements which the LDA carries out on the Licensed Area will be owned by the LDA who will be responsible for their maintenance, repair and capital replacement.

2.1.3. The Lake Wall Works will, upon final acceptance by the Commonwealth in accordance with the Asset Acceptance Procedures, be owned by the Commonwealth who will be responsible for their maintenance, repair and capital replacement.

2.1.4. The Commonwealth is entitled access to the Licensed Area during the Licence term upon giving reasonable notice.

2.1.5. The Commonwealth makes no warranty that the Licensed Area may be used or is fit for any particular purpose or the LDA's intended use of the Licensed Area and the LDA acknowledges it has made and relied on its own inquiries.

3. Permitted use only

3.1.1. The LDA shall not use or permit the Licensed Area to be used:

a. for anything other than the Purpose;

b. for any illegal activity;

c. in such a way or manner as may annoy or become a nuisance or a danger to persons in the vicinity of the Licensed Area;

d. in such a way or manner as may have the effect of vitiating or prejudicing any policy of insurance in respect of the Licensed Area; or

e. in such a way that will cause any loss to the Commonwealth.

4. Term

4.1.1. The Licence which the Commonwealth grants is for the Term.

4.1.2. Any variation to the Term will be undertaken in accordance with the requirements of clause 28 of this Licence.

5. GST

5.1.1. If any supply made under this Licence is subject to GST, the LDA must pay to the Commonwealth an additional amount to ensure the Commonwealth retains, after payment of that GST, the amount the Commonwealth would have received if GST had not been payable.

5.1.2. The LDA must pay the additional amount on the date for payment of the amount for the supply.

5.1.3. The Commonwealth must give the LDA a tax invoice.

6. General LDA obligations

6.1.1. The LDA must:

a. pay the Licence Fee and all other money payable under this Licence to the Commonwealth when demanded;

b. pay on time for any services used by the LDA in the Licensed Area;

c. comply with the terms of this Licence;

d. comply with all laws that govern the LDA's use and occupation of the Licensed Area including, but not limited to:

i. the Lakes Ordinance 1976 (Cth);

ii. the Environment Protection Act 1997 (ACT);

iii. all obligations that the LDA has as the proponent in relation to the Improvements and the Lake Wall Works under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth); and

iv. laws regulating safety and public health;

e. keep the Licensed Area, clean and safe and ensure that rubbish, debris or materials are stored safely within the Licensed Area;

f. ensure that every stormwater drain within the Licensed Area is kept clear of obstruction at all times;

g. ensure that no waste or hazardous substance is discharged into the Lake;

h. ensure as far as practicable that all footpaths and roadways in the vicinity of the Licensed Area are kept free from obstruction at all times;

i. ensure as far as practicable, that any vehicle delivering or removing materials, debris, rubbish or any other substance or thing to or from the Licensed Area is loaded and unloaded within the boundaries of the Licensed Area; and

j. ensure that each of the LDA's officers, employees, agents, contractors, invitees and customers, does not commit any breach of the terms of this Licence.

7. Construction of Improvements and Lake Wall Works

7.1.1. The LDA will, at its own expense, construct the Improvements and Lake Wall Works.

7.1.2. The LDA agrees that it will not either before or during the Term undertake any Improvements in the Licensed Area other than in accordance with the Works Approval and any subsequent variations to the Works Approval, or any additional works approvals required to complete the Purpose.

7.1.3. Any Improvements or Lake Wall Works that require or notionally require development or building approval under ACT legislation must be certified as meeting the required approvals and standards by an ACT Building Certifier or other appropriate body. A copy of the certification must be provided to the Commonwealth.

7.1.4. The transfer of the Lake Wall Works must be undertaken in accordance with the Commonwealth Asset Acceptance Procedures.

8. Access

8.1.1. The LDA will at all times allow or arrange for, at its own cost, access as required by the Commonwealth to any public facility, utility or fire services situated in the vicinity of the Licensed Area.

9. Repair and maintenance of the Licensed Area and Improvements

9.1.1. The LDA must, having regard to the condition of the Licensed Area at the Commencement Date and the condition of the Improvements following construction:

a. keep and maintain the Licensed Area, including the Improvements in good repair and condition;

b. immediately notify the Commonwealth of any damage to or defect in the Licensed Area, the Improvements, the Lake Wall Works or any services as soon as the LDA becomes aware of them; and

c. immediately repair any damage caused to the Licensed Area, the Improvements, the Lake Wall Works or any public property therein caused otherwise than by the negligent act or omission of the Commonwealth.

9.1.2. If the Lake wall is damaged by LDA improvements or use, the LDA will be responsible for the repair of the damage at their expense.

10. Provision of Approval

10.1.1. On completion of the Lake Wall Works, the parties agree to carry out the following steps as expeditiously as possible:

a. the LDA will, either upon the date of Practical Completion or upon a date thereafter agreed between the parties, and at no cost to the Commonwealth, provide to the Commonwealth all relevant approvals, 'Works as Executed Drawings' and a final survey;

b. arrange for the transfer of the Lake Wall Works to the Commonwealth in accordance with the Asset Acceptance Procedures; and

c. enter into discussions to adjust land boundaries. Adjustment of land boundaries (National Land and Territory Land) will be dealt with through an Inter-Government agreement separate to this Licence.

11. Environmental and disaster management plan

11.1.1. The LDA must, within 28 days of the date of this Licence, prepare and submit to the Commonwealth an environmental and disaster management plan prepared in accordance with current best practice in respect of the use of the Licensed Area for the purpose of constructing the Improvements and the Lake Wall Works.

12. Commonwealth WHS legislation

12.1.1. The LDA will comply with all applicable WHS legislation and has appointed a Principal Contractor for that purpose.

13. Advertisement

13.1.1. The LDA shall not display or permit to be displayed on the Licensed Area any advertisement, sign or hoarding without the previous consent in writing of the Commonwealth.

14. Fire

14.1.1. The LDA will at all times take all reasonable precautions against the outbreak or spread of fire in the Licensed Area.

15. Outgoings

15.1.1. The LDA is responsible for all Outgoings in respect of the Licensed Area during the Term.

16. What the Commonwealth may do

16.1.1. The Commonwealth may, at any time after giving reasonable notice during the Term (except in case of emergency when no notice is required), enter the Licensed Area to inspect the Works.

16.1.2. The Commonwealth may (but is not obliged to) do anything which the LDA has failed to do under this Licence, or remedy any default by the LDA under this Licence, and recover all reasonable costs incurred in doing so from the LDA.

17. Insurance

17.1.1. Throughout the Term, the LDA must maintain the following insurance policies:

a. insurance against the loss of, or damage to, the Improvements and the Lake Wall Works for their full reinstatement value with a reputable insurer approved by the Commonwealth; and

b. a public liability insurance policy for a sum insured of not less than $20 million in respect of any one event with a reputable insurer approved by the Commonwealth.

18. Indemnity

18.1.1. The LDA indemnifies the Commonwealth from and against all actions, claims, demands, losses and expenses for which the Commonwealth becomes liable which arise out of or in connection with the construction of the Improvements and the Lake Wall Works and the LDA's use of the Licensed Area during the Term

except in relation to any action, claim, demand, loss or expense which arises from a criminal or negligent act by the Commonwealth.

19. Default, Termination and Remedies

19.1. Events of Default

19.1.1. The LDA commits an event of default under this Licence if the LDA:

a. fails to pay any money due to the Commonwealth within 7 days of the due date for payment (whether demanded or not); or

b. repudiates its obligations under this Licence; or

c. does not comply with any obligation under the Licence and, in the Commonwealth's reasonable opinion:

i. the non-compliance can be remedied but the LDA does not remedy it within a reasonable time after the Commonwealth gives the LDA notice to remedy it;

ii. the non-compliance cannot be remedied or compensated for; or

iii. the non-compliance cannot be remedied but the Commonwealth can be compensated and the LDA does not pay the Commonwealth compensation for the breach within a reasonable time after the Commonwealth gives the LDA notice to pay it.

20. Termination

20.1.1. If the LDA commits an event of default, the Commonwealth may by notice immediately terminate this Licence and the LDA must immediately vacate the Licensed Area and remove all of its property and each of its officers, employees, agents, contractors, invitees and customers from the Licensed Area.

20.2. Damages

20.2.1. The LDA must compensate the Commonwealth for any loss or damage incurred or payable by the Commonwealth because of a breach of this Licence by the LDA. The Commonwealth's entitlement to damages:

a. is in addition to any other remedy, including termination of this Licence;

b. includes recovery of damages against the LDA for the loss suffered by the Commonwealth at any time, including the periods before and after termination of this Licence; and

c. is not affected or limited if:

i. if the LDA abandons or vacates the Licensed Area;

ii. the Commonwealth elects to re-enter or to terminate the Licence;

iii. the Commonwealth accepts the LDA's repudiation; or

iv. the parties conduct constitutes a surrender by operation of law.

20.2.2. Termination of this Licence does not affect any rights or remedies which the Commonwealth has which arise either before or after the termination of the

Licence and which are referable to any breach of the LDA's obligations under the Licence.

20.3. Remedies are a last resort

20.3.1. Notwithstanding the provisions above the parties warrant that neither will seek recourse to their legal remedies (and cause embarrassment to their respective governments) without first escalating any dispute in relation to this Licence to their respective CEO or Director General.

21. Costs and duty

21.1.1. Each party must pay its own costs of preparing, negotiating, completing and executing this Licence.

21.1.2. The LDA must pay the Commonwealth's reasonable costs and expenses incidental to considering any request for consent or approval and in enforcing the Licence for breach by the LDA.

22. Notices

22.1.1. A party notifying or giving notice under this Licence must do so:

a. in writing;

b. signed by that party, or its solicitor, attorney or authorised officer;

c. addressed to the address of the recipient specified in this Licence or as altered by notice given in accordance with this clause; or

d. hand delivered or sent by prepaid post to that address.

22.1.2. A notice given in accordance with this clause will be deemed to be received:

a. if hand delivered, on the date of delivery; and

b. if sent by prepaid post, two business days after the date of posting.

23. Waiver

23.1.1. A failure or delay to exercise or enforce any right, remedy, power or privilege under this Licence by the Commonwealth will not operate as a waiver unless and until expressly communicated in writing by the Commonwealth to the LDA.

24. Assignment and sublicences

24.1.1. The rights conferred on the LDA by this Licence are personal (but may be exercised by the LDA's servants, agents and contractors) and may not be assigned or sublicensed without the NCA's prior written consent.

24.1.2. The LDA acknowledges that even though it, with the Commonwealth's prior written consent, assigns or sublicenses its rights and obligations under this Licence from time to time, it will remain responsible for the performance of its obligations under this Licence.

25. Subcontractors

25.1.1. The LDA must ensure that any contractor it engages is aware of the obligations of the LDA under this Licence.

26. Reporting

26.1.1. The LDA agrees to keep the Commonwealth informed about any matter which it is aware or ought to be aware which affects the safety of the works or the Licensed Area and to inform the Commonwealth of the steps it is taking to rectify any matter in the area which makes it unsafe or any other matter which under this Licence should properly be brought to the attention of the Commonwealth.

27. Governing law and jurisdiction

27.1.1. This Licence is governed by the laws applicable in the Australian Capital Territory.

28. Variation

28.1.1. This Licence may only be varied by the parties expressed in writing and signed by the parties in one or more counterparts.

SCHEDULE 1 - PARTICULARS

1. Licensed Area

The Licensed Area as specified in Schedule 2.

2. Term

The Term of this Licence is for three (3) years unless:

a. the Improvements are completed and final acceptance of the Lake Wall Works by the Commonwealth is achieved within that time frame, in which case the Term will end on final acceptance of the Lake Wall Works; or

b. the term is otherwise extended in accordance with clause 28.

3. Licence Fee

$1 if demanded

SCHEDULE 2 – LICENSED AREA

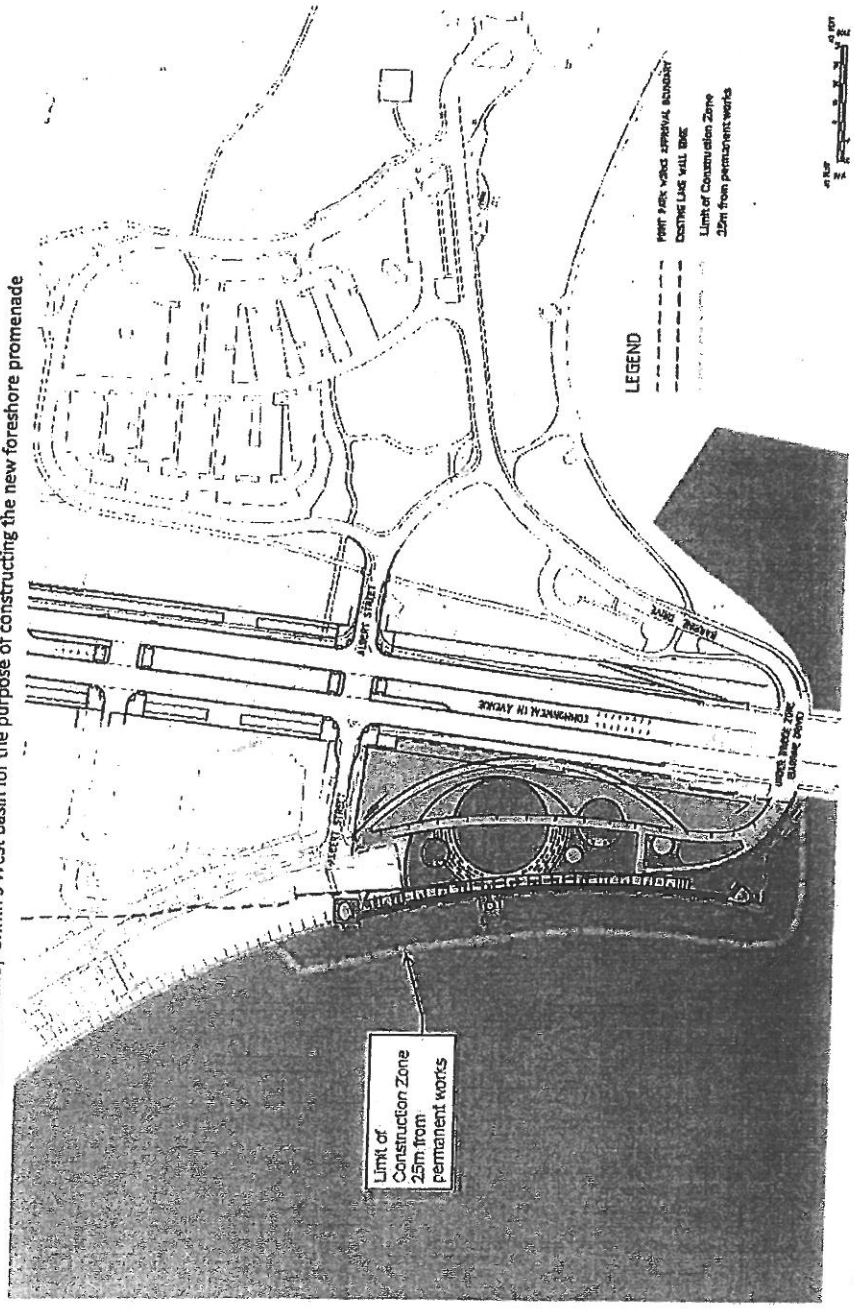


Figure 1: License over Part of Lake Burley Griffin's West Basin for the purpose of constructing the new foreshore promenade

SCHEDULE 3 – ASSET ACCEPTANCE PROCEDURES

Signed, sealed and delivered for and on behalf of the **Australian Capital Territory** by the **Land Development Agency** by its authorised signatory:

NICHOLAS HOLT

Name of signatory

Signature

In the presence of:

Name of witness

Signature of witness

Executed as a deed

Signatures

Signed, sealed and delivered for and on behalf of **Commonwealth of Australia** represented by the **National Capital Authority** by its authorised signatory:

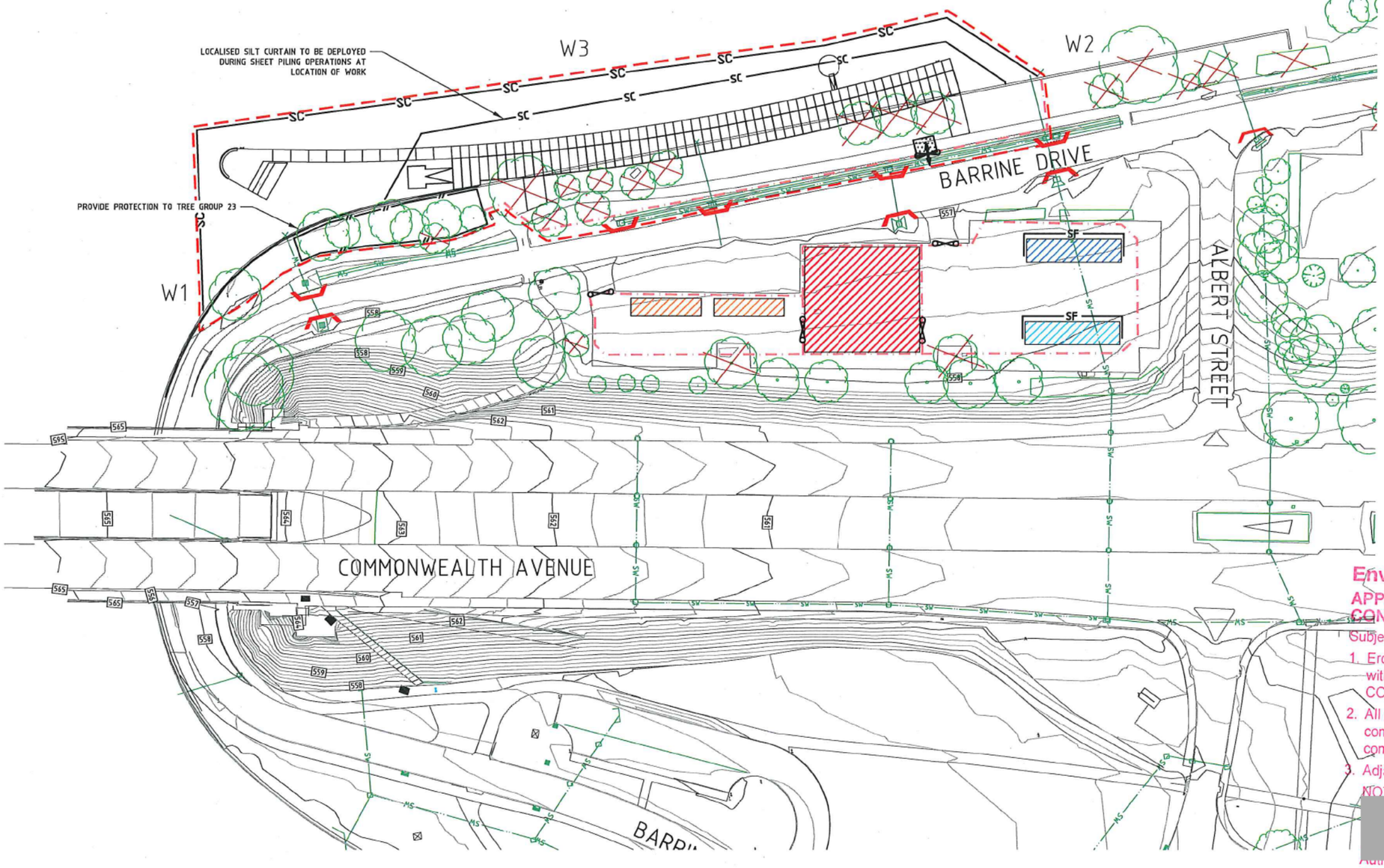
Name of signatory

Signature

In the presence of:

Name of witness

Signature of witness



LEGEND

- SITE SHEDS & AMENITIES
- CONTRACTOR CARPARKING AREA
- WASTE MANAGEMENT AREA
- STOCKPILE STORAGE AREA
- TREE PROTECTION FENCE
- SC — SILT CURTAIN
- SF — SILT FENCE
- 1.8m HIGH SITE FENCE TO BE MAINTAINED IN GOOD CONDITION FOR DURATION OF CONSTRUCTION
- SITE ACCESS (STABILISED ENTRANCE)
- GATE
- SUMP INLET PROTECTION
- WORKS BOUNDARY
- SW — EXISTING STORMWATER
- EXISTING TREE
- EXISTING TREE TO BE REMOVED
- W1 — WATER SAMPLING LOCATIONS

Environment Protection Authority
APPROVAL FOR EROSION & SEDIMENT CONTROL PLAN

Subject to the following conditions:

1. Erosion & Sediment Control measures shall be in accordance with the "ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT."
2. All control measures shown in the plan shall be in place prior to commencing works and shall be maintained until development completion.
3. Adjacent roads shall be kept swept clean at all times.

NOTE: This approval applies to pollution controls only.

[redacted]

26/5/16

Authorised Officer under the Environment Protection Act 1997 — Date of Approval

A1 PLOT 0 5 10 15 20 25 — A3 PLOT 0 5 10

No.	AMENDMENT	APPROVED	DATE	AMENDED BY
A	FOR DESIGN APPROVAL	AG	25.05.2016	MG

CLIENT: CITY TO THE LAKE — ACT Government — Land Development Agency — CANBERRA FIRST

CONSULTANT: INDESCO — CONSULT AUSTRALIA — AS/NZS ISO 9001 Consultant

PRINCIPAL CONTRACTOR: chincivil pty ltd — CIVIL ENGINEERING CONTRACTORS

APPROVED	[redacted]	DATE 25.05.2016
CHECKED		DATE 25.05.2016
DESIGNED BY		
DRAWN BY		
CAD FILE		
SCALE	AS SHOWN	SHEET No.

PROJECT: **WEST BASIN REDEVELOPMENT POINT PARK PHASE 1**

DRAWING TITLE: **CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN**

PROJECT No.	DRAWING No.	AMDT
5750-10	C361	A

GENERAL NOTES

1. ALL WORK TO COMPLY WITH ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT 2011.
2. WASTE ENCLOSURES WILL BE USED FOR ALL RUBBISH ON SITE AND RUBBISH REMOVED FROM ENCLOSURE(S) WHEN REQUIRED OR FULL
3. CHINCIVIL WILL MAINTAIN AN ENVIRONMENT PROTECTION AGREEMENT WITH THE ENVIRONMENT PROTECTION AUTHORITY (EPA) FOR THE DURATION OF THE PROJECT.
4. CHINCIVIL WILL ENSURE ALL APPROVALS ARE OBTAINED PRIOR TO COMMENCEMENT OF CONSTRUCTION INCLUDING A WATERWAYS WORKS LICENCE AND AN EXTRACTION LICENCE.

DUST MANAGEMENT

WHERE CONSTRUCTION WORK GENERATES DUST, ALL REASONABLE AND PRACTICABLE MEASURES WILL BE TAKEN TO MINIMISE THAT DUST INCLUDING:

1. STRIPPING AREAS PROGRESSIVELY AND ONLY WHERE IT IS NECESSARY FOR WORKS TO OCCUR.
2. REGRASSING AREAS AS SOON AS WORKS ARE COMPLETE
3. DAMPENING THE GROUND WITH A LIGHT WATER SPRAY FROM A WATER CART OR SUFFICIENT WATER SPRAYS SHALL BE MADE AVAILABLE AT ALL TIMES.
4. IN ADVERSE CONDITIONS WHEN DUST CANNOT BE ADEQUATELY CONTROLLED WHEN WORKS AREA BEING UNDERTAKEN, WORKS WILL CEASE IN THESE AREAS UNTIL CONDITIONS IMPROVE
5. COVERING STOCKPILES AND LOCATING THEM WHERE THEY ARE PROTECTED FROM THE WIND.
6. RESTRICTING VEHICLE MOVEMENTS.
7. ALL LOADS TO BE COVERED WHEN TRANSPORTING MATERIAL OFF SITE
8. ALL WORK WILL STOP IF DUST CONTINUES TO LEAVE SITE WHEN ALL ABOVE METHODS HAVE BEEN UNDERTAKEN

NOISE

ENSURE ALL BUILDING WORK THAT GENERATES NOISE IS CONDUCTED WITHIN THE TIME PERIODS DETAILED FOR A CITY CENTRE LOCATIO IN SCHEDULE 2 OF THE ENVIRONMENT PROTECTION REGULATIONS 2005. RESTRICTIONS ON NOISE GENERATING WORKS ARE:

MONDAY TO SATURDAY	6AM TO 8PM
SUNDAY & PUBLIC HOLIDAYS	6AM TO 8PM

IN ADDITION WHERE POSSIBLE:

1. NOISY ACTIVITIES WILL BE SCHEDULED FOR THE LEAST SENSITIVE TIMES OF THE DAY SUCH AS MID-MORNING OR MID-AFTERNOON.
2. SELECT MACHINERY THAT PRODUCES LESS NOISE; AND
3. ENSURE MACHINERY IS WELL MAINTAINED.

DISPOSAL OF SPOIL

BEFORE DISPOSAL OF SPOIL OFF SITE, THE FOLLOWING INFORMATION WILL BE PROVIDED TO ENVIRONMENT ACT IF THE SPOIL IS NOT GOING TO AN APPROVED LANDFILL SITE:

1. WHERE WILL ORIGINATE FROM
2. WHO IS DISPOSING OF THE SPOIL
3. WHERE THE SPOIL WILL BE TAKEN
4. THE AMOUNT OF SPOIL TO BE TAKEN AWAY
5. DESCRIPTION OF THE TYPE OF SPOIL TAKEN AWAY
6. DETAILS OF HOW RECORDS WILL BE KEPT; AND
7. TIME FRAME TO COMPLETE WORKS TO THE SATISFACTION OF ENVIRONMENT ACT.

CHINCIVIL WILL ENSURE THE ACCEPTOR OF THE SPOIL IS AWARE OF THE REQUIREMENTS SETOUT IN SECTION 8.2 OF THE ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT.

FIRE

NO FIRE WILL BE LIT ON SITE

SEDIMENT CONTROL NOTES

1. SEDIMENT AND EROSION CONTROL DEVICES TO BE INSTALLED AND FULLY OPERATIONAL PRIOR TO STRIPPING OF SITE TOPSOIL.
2. STOCK PILE/S TO BE LOCATED AWAY FROM DRAINAGE LINES AND SURFACE FLOW PATHS, SILT FENCES WILL BE PROVIDE AT THE BASE OF EACH STOCKPILE.
3. STABILISED CONSTRUCTION ENTRANCE TO BE CONSTRUCTED PRIOR TO ACCESS TO SITE BY CONSTRUCTION VEHICLES. AGGREGATE TO BE TURNED WHEN SEDIMENT BUILDS UP AND RENEWED WHEN REQUIRED.
4. SUMP FILTERS WILL BE PROVIDED TO EXISTING STORMWATER SUMPS ALONG BARRINE DRIVE IN THE LOCATION OF THE WORKS.
5. SEDIMENT AND EROSION CONTROLS TO BE INSPECTED WEEKLY AND AFTER EACH RAINFALL EVENT.
6. SILT CURTAIN WEIGHTED TO 4M DEEP / LAKE BED TO BE INSTALLED PRIOR TO ANY STRIPPING WORKS ON LAKE EDGE OR WORKS WITHIN THE LAKE.
7. ACCESS TO SITE WILL BE LIMITED DURING AND IMMEDIATELY AFTER WET WEATHER.
8. ANY SOIL FROM ROADS ADJACENT TO THE SITE WILL BE REMOVED AT THE END OF EACH DAY.
9. STORAGE OF CONSTRUCTION MATERIALS, PARKING OF VEHICLES AND EQUIPMENT WILL BE WITHIN THE DESIGNATED SITE COMPOUND AND PARKING AREAS.
10, ALL SERVICE TRENCHES TO BE BACKFILLED WITHIN 24 HOURS OF INSPECTION.
11. CHINCIVIL WILL CONTACT ENVIRONMENT PROTECTION AUTHORITY (132281) TO ARRANGE A SITE INSPECTION AND ENDORSEMENT OF SEDIMENT AND EROSION CONTROL MEASURES PRIOR TO WORKS COMMENCING.
12. CHINCIVIL WILL TO CONTACT ENVIRONMENT PROTECTION AUTHORITY (132281) AND SUBMIT REVISED SEDIMENT EROSION PLANS PRIOR TO ANY MAJOR CHANGES TO SEDIMENT AND EROSION CONTROLS ON SITE PRIOR TO IMPLEMENTING THE CHANGES.
13. DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONDITION AS SOON AS PRACTICABLE.
14. CHINCIVIL WILL LIMIT VEHICLES AND PLANT MOVEMENT TO PARKING AREAS AND ACCESS ROUTES AS APPROVED OR ONLY IN AREAS WHERE WORK IS PROCEEDING.
15. CHINCIVIL WILL RETAIN A COPY OF THE APPROVED "EROSION AND SEDIMENT CONTROL PLAN" DURING LAND DEVELOPMENT IN THE SITE OFFICE.
16. SWEEP AND REMOVE DIRT AND ANY OTHER BUILDING MATERIAL FROM GUTTERS, FOOTPATHS OR ROADWAYS ADJACENT TO THE SITE BY CLOSE OF BUSINESS AND PRIOR TO RAIN AND WHEN REQUIRED.

WATER QUALITY MONITORING LAKE BURLEY GRIFFIN

1. WATER TESTING LOCATIONS WILL BE ESTABLISHED ALONG THE BARRIER NOTED AS W1, W2 AND W3 ON THE PLAN.
2. TWICE DAILY WATER IS TO BE TESTED AT THESE LOCATIONS. ONE SAMPLE INSIDE THE BARRIER BY LESS THAN 1M AND ON SAMPLE OUTSIDE OF THE BARRIER BY LESS THAN 4M. TURBIDITY OF THE WATER SAMPLES TO BE RECORDED.
3. IF THE DIFFERENCE IN TURBIDITY BETWEEN THE 2 RESULTS IS GREATER THAN 10 NTU'S THEN WORKS TO HALT UNTIL WATER INSIDE BARRIER IS REDUCED TO 30NTU'S OR THE LEVEL OF THE NTU OF THE LAKE WATER OUTSIDE THE BARRIER WHICH EVER IS GREATER.
4. LOCALISED SILT CURTAIN TO BE DEPLOYED TO CONTAIN TUBIDITY DURING SHEET PILING OPERATIONS. IN SITUATION WHERE 2 SILT CURTAINS DEPLOYED THEN WORKS WILL BE CONTINUE WHILE TURBIDITY OF WATER IN INTERMEDIATE ZONE IS TREATED TO REDUCE TO 30 NTU'S OR THE LAKE LEVEL.

MAINTENANCE SCHEDULE

WEEKLY:

1. TURN OVER STABILISED CONSTRUCTION ENTRY MATERIAL AND RENEW WHEN REQUIRED.
2. CHECK AND REINSTATE SILT CONTROL FENCES

DAILY:

3. SWEEP AND REMOVE DIRT AND ANY OTHER BUILDING MATERIAL FROM GUTTERS, FOOTPATHS OR ROADWAYS ADJACENT TO THE SITE BY CLOSE OF BUSINESS AND PRIOR TO RAIN AND WHEN REQUIRED. ALL NECESSARY STEPS SHOULD BE TAKEN THAT ARE PRACTICAL AND REASONABLE TO MINIMISE DUST POLLUTION ON LAND DEVELOPMENT AND CONSTRUCTION SITE.

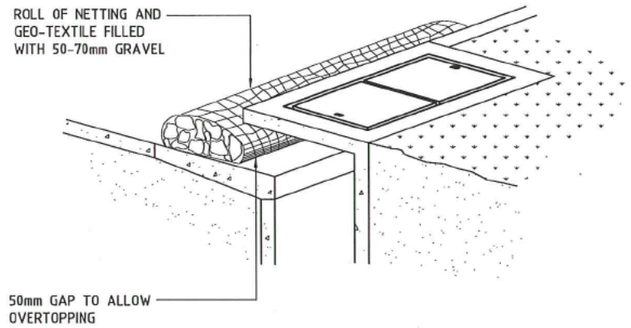
DURING/AFTER WET WEATHER:

4. LIMIT CONSTRUCTION VEHICLE ACCESS TO SITE DURING AND IMMEDIATELY FOLLOWING WET WEATHER.

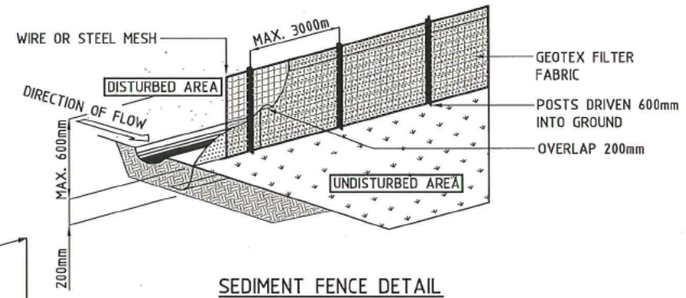
Environment Protection Authority
APPROVAL FOR EROSION & SEDIMENT CONTROL PLAN
Subject to the following conditions:
1. Erosion & Sediment Control measures shall be in accordance with the "ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT IN THE ACT."
2. All control measures shown in the plan shall be in place prior to commencing works and shall be maintained until development completion.
3. Adjacent roads shall be kept swept clean at all times.
NOTE: This approval applies to pollution controls only.
[redacted] 26.5.16
Authorised Officer under the Environment Protection Act 1997
Date of Approval

SITE CONTACT	PERSON	MOBILE
SITE FOREMAN	MICHAEL VECERA	0419529425
SITE ENGINEER CHINCIVIL	KESH PRAHBU	0419529425

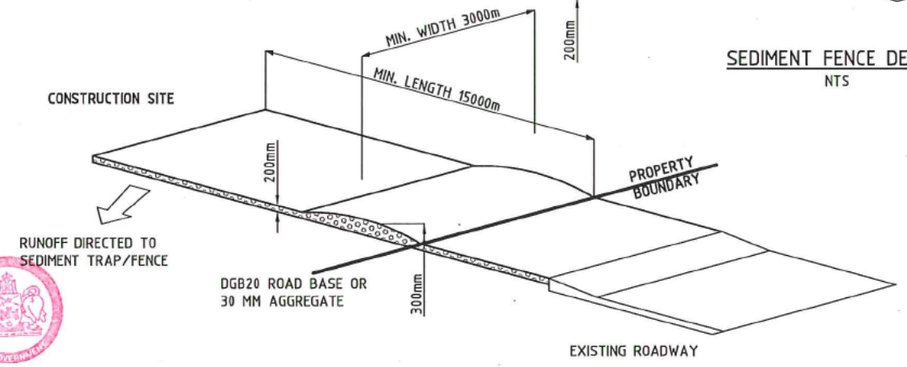
- SITE AREA: 9,300m□
- VOLUME OF MATERIAL TO BE REMOVED FROM SITE: 250m□
- VOLUME OF MATERIAL TO BE TRANSPORTED TO SITE: 1,000m□



KERB INLET CONTROL DETAIL
NTS



SEDIMENT FENCE DETAIL
NTS



SITE ACCESS DETAIL
NTS

CONSTRUCTION NOTES

1. STRIP TOPSOIL AND LEVEL SITE.
2. COMPACT SUB-GRADE.
3. COVER AREA WITH NEEDLE PUNCHED GEO-TEXTILE.
4. CONSTRUCT 200MM THICK PAD OVER GEO-TEXTILE USING ROAD BASE OR 30MM AGGREGATE. MINIMUM LENGTH 15 METRES OR TO BUILDING ALIGNMENT. MINIMUM WIDTH 3 METRES.
5. CONSTRUCT HUMP IMMEDIATELY WITHIN BOUNDARY TO DIVERT WATER TO A SEDIMENT FENCE OR OTHER SEDIMENT TRAP.

GEO-TEXTILE FABRIC DESIGNED TO PREVENT INTERMIXING OF SUB-GRADE AND BASE MATERIALS AND TO MAINTAIN GOOD PROPERTIES OF THE SUB-BASE LAYERS

GEO-TEXTILE MAY BE WOVEN OR NEEDLE PUNCHED PRODUCT WITH A MINIMUM CBR BURST STRENGTH (AS3706.4-90) OF 2500N

No.	AMENDMENT	APPROVED	DATE	MADE BY
A	FOR DESIGN APPROVAL	AG	25.05.2016	MG

CLIENT: CITY TO THE LAKE; ACT Government; Land Development Agency CANBERRA FIRST

CONSULTANT: INDESCO; CONSULT AUSTRALIA

PRINCIPAL CONTRACTOR: chincivil pty ltd CIVIL ENGINEERING CONTRACTORS

APPROVED	[redacted]	DATE 25.05.2016
CHECKED		DATE 25.05.2016
DESIGNED BY		
DRAWN BY	[redacted]	
CAD FILE		
SCALE	AS SHOWN	SHEET No.

PROJECT: WEST BASIN REDEVELOPMENT POINT PARK PHASE 1

DRAWING TITLE: CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN NOTES

PROJECT No.	DRAWING No.	AMDT
5750-10	C360	A

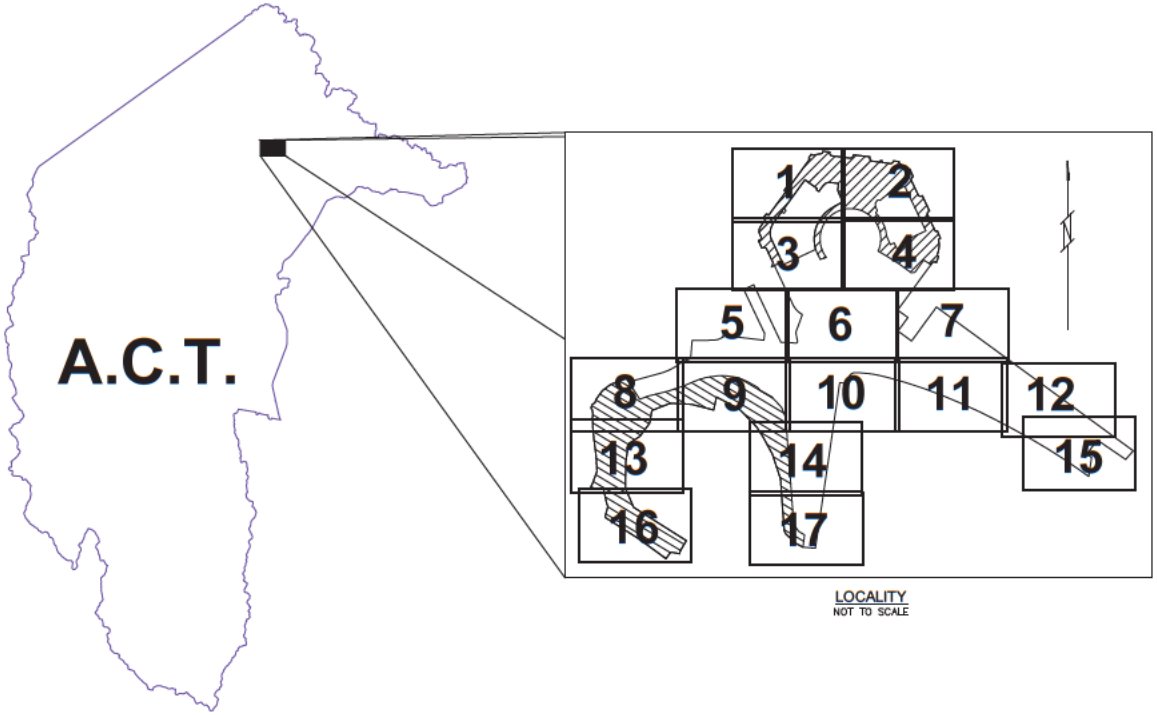
CITY TO LAKE

ENGINEERING DETAIL SURVEY

CANBERRA CITY

PREPARED FOR:

LAND DEVELOPMENT AGENCY



LOCALITY
NOT TO SCALE

LEGEND

- COMMUNICATION–MANHOLE–PMG
- COMMUNICATION_PILLAR
- COMMUNICATION–PIT
- ELECTRICITY–GROUND LIGHT
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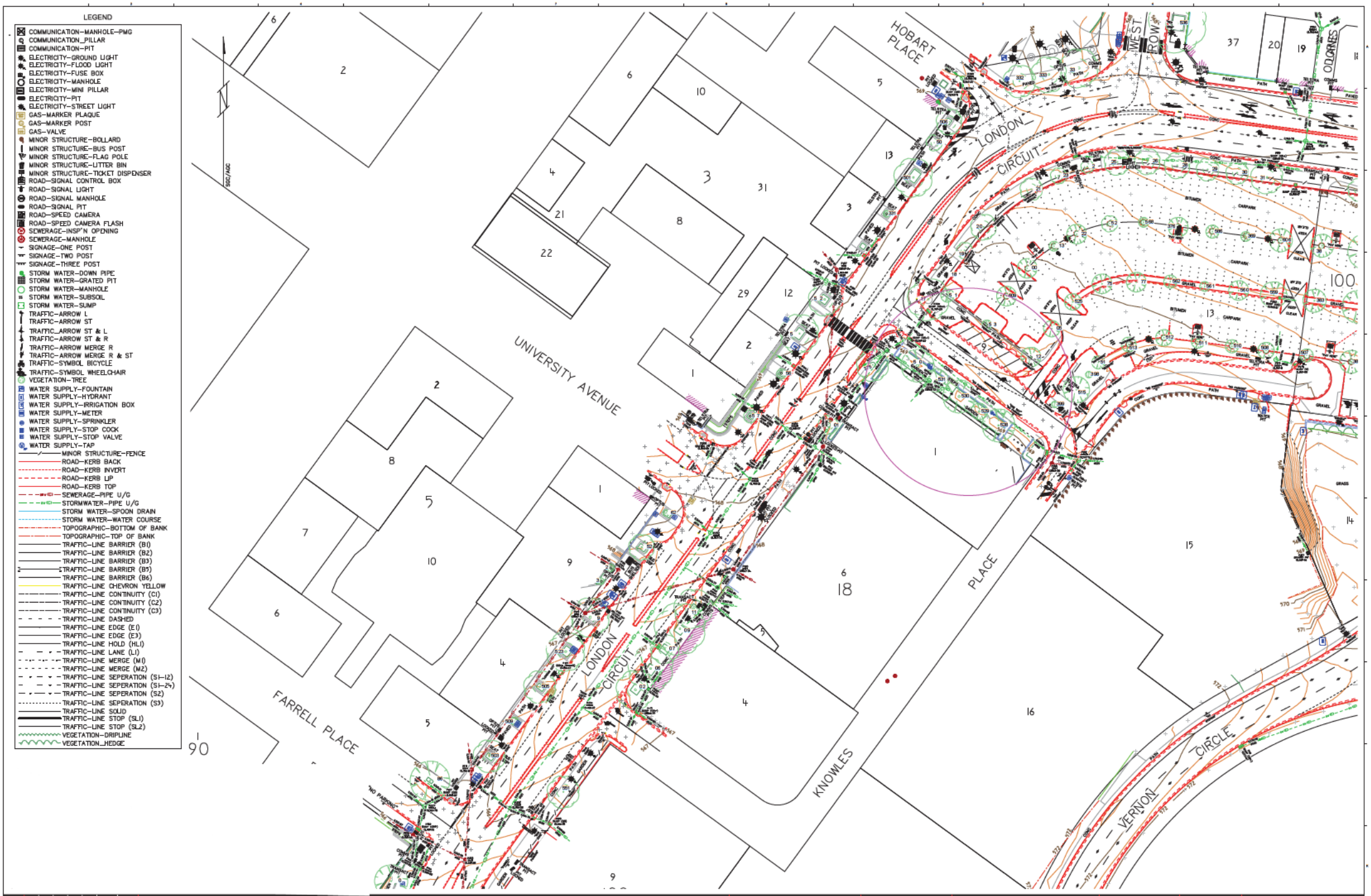
TREE TABLE

Tree No.	Girth (m)	Trunk Dia (m)	Canopy Dia (m)	Type	Height	No. Trunks
1	0.90	0.29	5.0	EUCALYPTUS	12.0	1
2	1.29	0.41	8.0	EUCALYPTUS	17.0	1
3	0.90	0.29	4.0	EUCALYPTUS	12.0	1
4	0.90	0.29	4.0	EUCALYPTUS	12.0	1
5	0.94	0.30	4.0	EUCALYPTUS	12.0	1
6	0.94	0.30	4.0	EUCALYPTUS	12.0	1
7	0.90	0.29	4.0	EUCALYPTUS	12.0	1
8	0.90	0.29	4.0	EUCALYPTUS	12.0	1
9	0.94	0.30	4.0	EUCALYPTUS	12.0	1
10	0.97	0.31	4.0	EUCALYPTUS	12.0	1
11	0.97	0.31	4.0	EUCALYPTUS	12.0	1
12	0.90	0.29	4.0	EUCALYPTUS	12.0	1
13	0.90	0.29	4.0	EUCALYPTUS	12.0	1
14	0.90	0.29	4.0	EUCALYPTUS	12.0	1



	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	DATE
A						20 09/1	09/10/1
A						16 1/11	2/1/11
						19 01/15	30/01/15
						11 02/15	27/02/15

AMENDMENTS

Notes:

UNDERLYING TOPOGRAPHIC SURVEY SUPPLY BY OTHERS.
REVA - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
REVB - STAGE 2 DETAIL INCLUDED AND PRELIMINARY PIT HYDRAULICS ADDED.
REVC - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

Surveyor Registered Under the ACT Surveyors Act 2007

LEGEND:

Prepared by:
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Client:
Land Development Agency
LEVEL 6 TRANSACT HOUSE
70 NORTHBOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 0 2.5 5 10 15
Sheet: 1 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg

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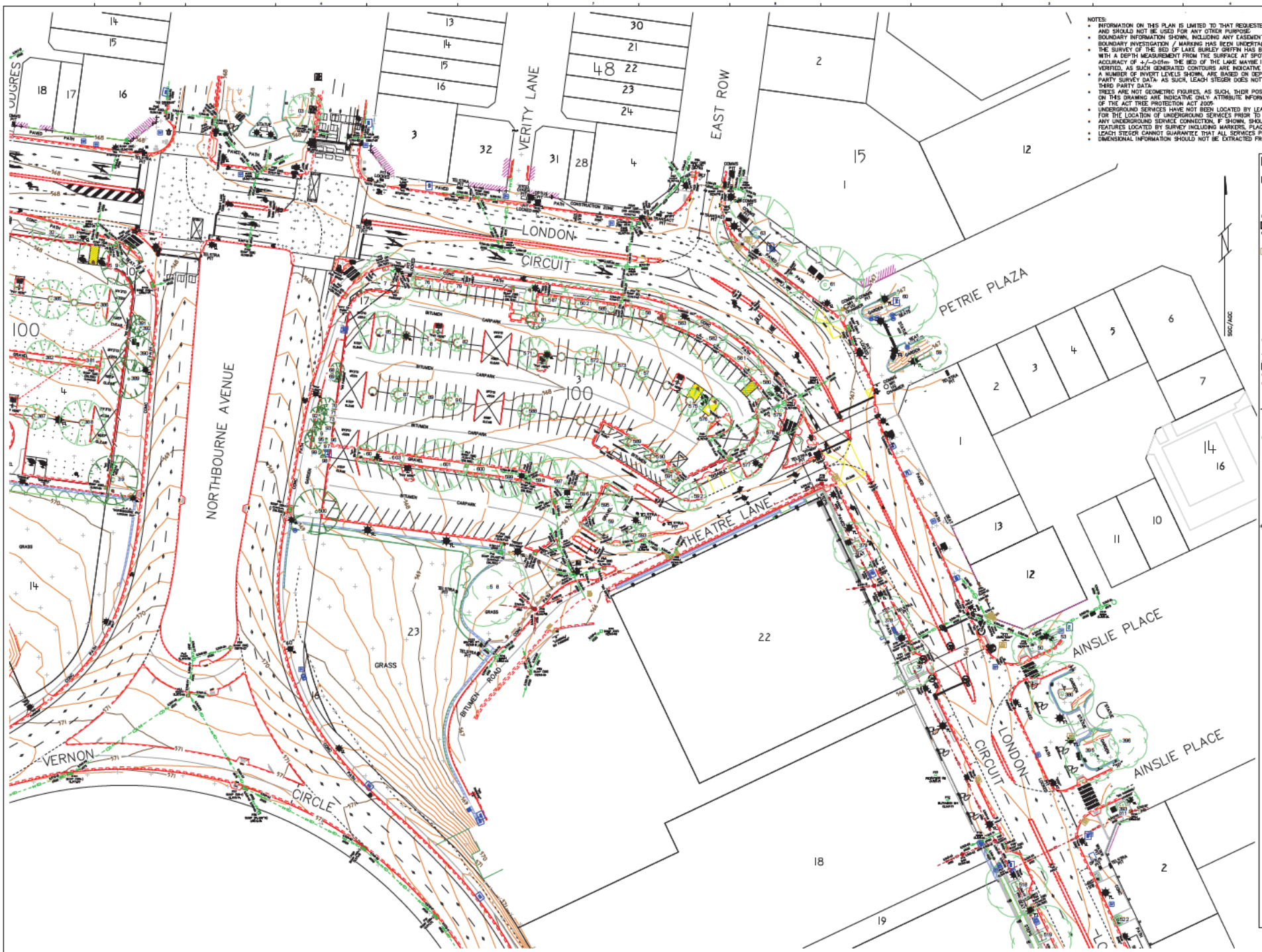

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AMENDMENTS		SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	DATE
	A						20 091	09/10/1
	A						16 191	2/11/1
							19 01/15	30/01/15
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Notes:

UNDERLYING TOPOGRAPHIC SURVEY SUPPLY BY OTHERS.
REV A - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
REV B - STAGE 2 DETAIL INCLUDED AND PRELIMINARY PIT HYDRAULICS ADDED.
REV C - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

[redacted]

Surveyor Registered Under the ACT Surveyors Act 2007

LEGEND:

Prepared by:

LEACH·STEGER
REGISTERED LAND SURVEYORS

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F - (02) 6296 090 W - www.leachsteger.com.au

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Land Development Agency

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CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
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Job: 1 059
Scale (metric): 1:500 (0 2.5 5 10 15)
Sheet: 2 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg

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AMENDMENTS

	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
A	[redacted]					20 091	09/101
A						16 191	2/111
						190115	300115
						110215	270215

Notes:

UNDERLYING TOPOGRAPHIC SURVEY SUPPLY BY OTHERS.
REV A - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
REV B - STAGE 2 DETAIL INCLUDED AND PRELIM NARY PIT HYDRAULICS ADDED.
REV C - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

[redacted]
Surveyor Registered Under the ACT Surveyors Act 2007

LEGEND:

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Land Development Agency
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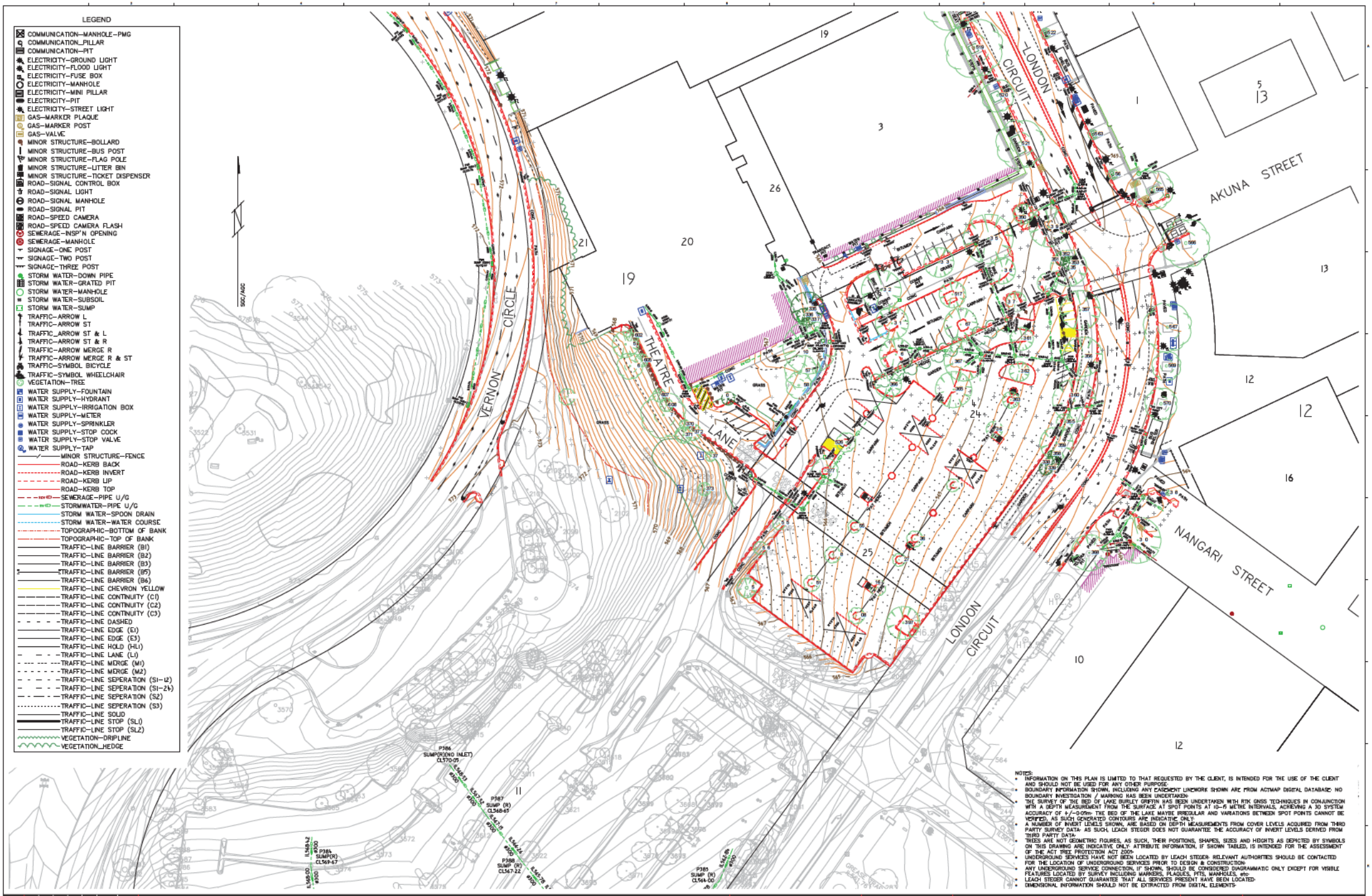
70 NORTHBOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 — 0 2.5 5 10 15
Sheet: 3 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg



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	A	[redacted]					20 09/1	09/10/1
	A						16 1/1	21/11/1
							19 01/15	30/01/15
							11 02/15	27/02/15

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Job: 1 059
Scale (metres): 1:500 0 2.5 5 10 15
Sheet: of 17
Size: A1
Drawing: 1 059_001_REVC.dwg

LEGEND

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- COMMUNICATION–PIT
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- ELECTRICITY–PIT
- ELECTRICITY–STREET LIGHT
- GAS–MARKER PLAQUE
- GAS–MARKER POST
- GAS–VALVE
- MINOR STRUCTURE–BOLLARD
- MINOR STRUCTURE–BUS POST
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- MINOR STRUCTURE–LITTER BIN
- MINOR STRUCTURE–TICKET DISPENSER
- ROAD–SIGNAL CONTROL BOX
- ROAD–SIGNAL LIGHT
- ROAD–SIGNAL MANHOLE
- ROAD–SIGNAL PIT
- ROAD–SPEED CAMERA
- ROAD–SPEED CAMERA FLASH
- SEWERAGE–INSP'N OPENING
- SEWERAGE–MANHOLE
- SIGNAGE–ONE POST
- SIGNAGE–TWO POST
- SIGNAGE–THREE POST
- STORM WATER–DOWN PIPE
- STORM WATER–GRATED PIT
- STORM WATER–MANHOLE
- STORM WATER–SUBSOIL
- STORM WATER–SUMP
- TRAFFIC–ARROW L
- TRAFFIC–ARROW ST
- TRAFFIC_ARROW ST & L
- TRAFFIC–ARROW ST & R
- TRAFFIC–ARROW MERGE R
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- WATER SUPPLY–HYDRANT
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- TRAFFIC–LINE BARRIER (B1)
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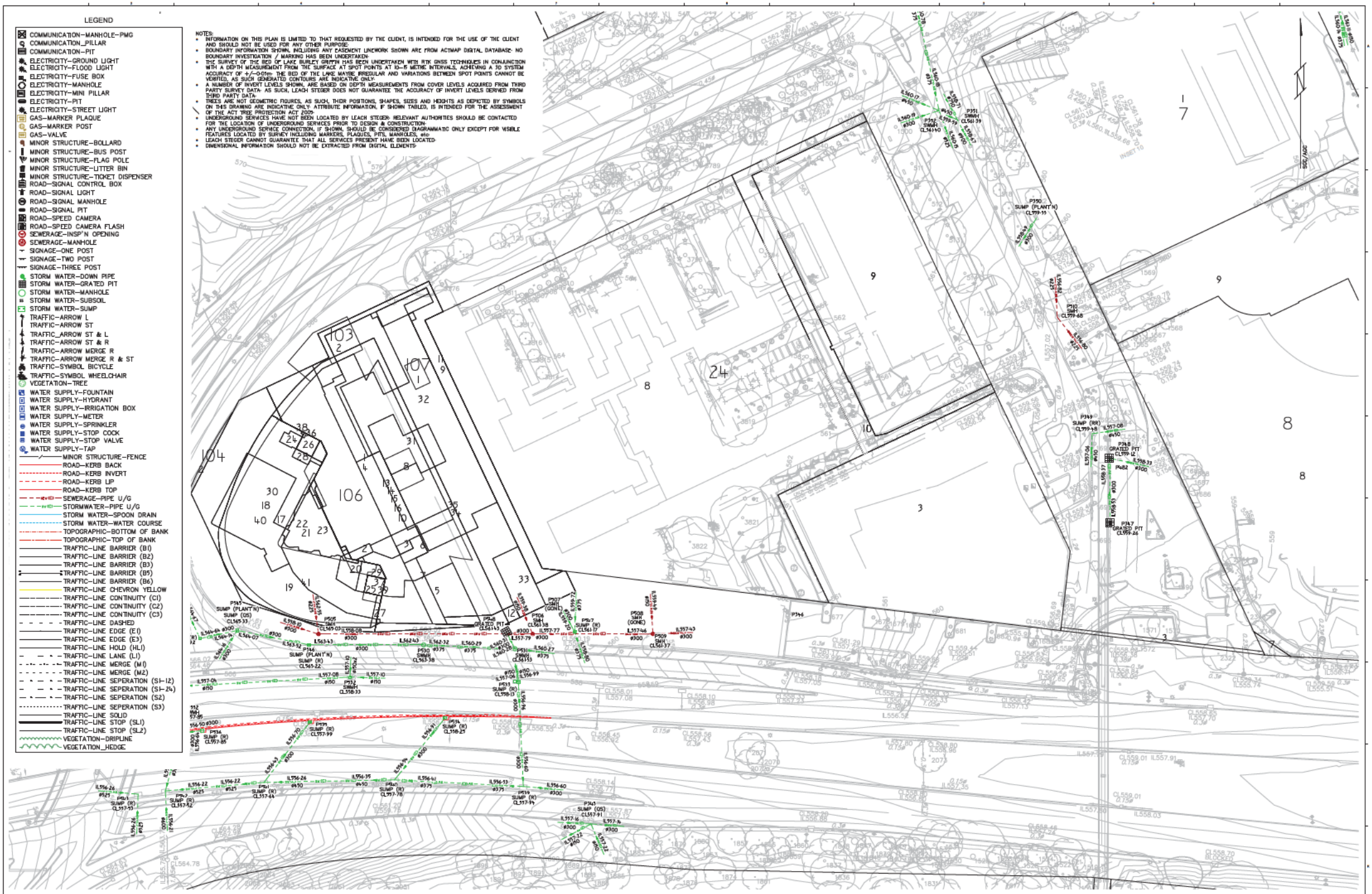

AMENDMENTS	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
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MARK: SR10 8
LEVEL: RL557.200
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Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DISTRICT: CANBERRA CENTRAL

Job: 1 059
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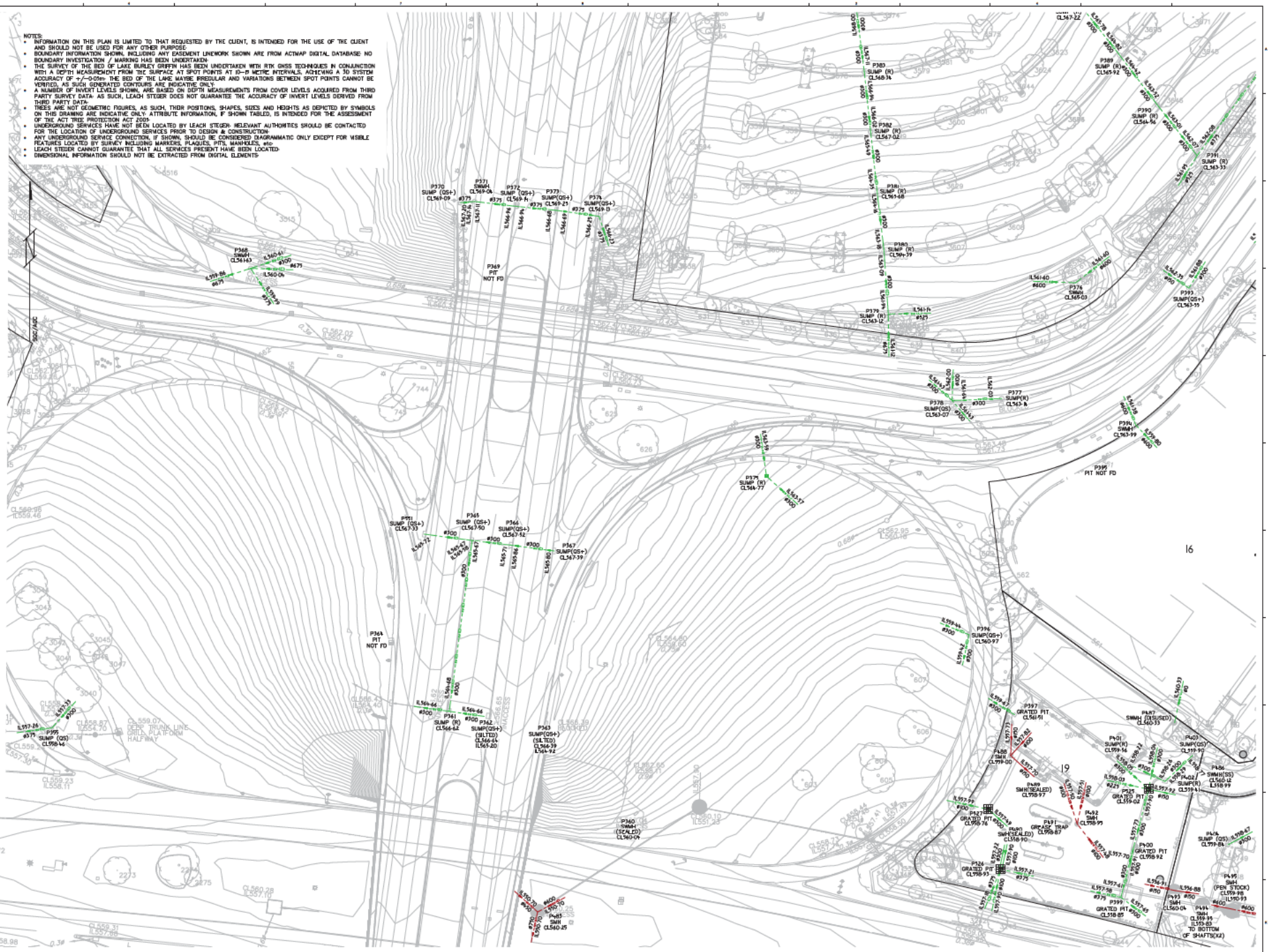
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P371 SWMH CL569-06
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P369 PIT NOT FD
P348 SWMH CL561-43
P383 SUMP (R) CL566-34
P382 SUMP (R) CL567-02
P381 SUMP (R) CL565-68
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P376 SWMH CL565-03
P377 SUMP(R) CL563-14
P378 SUMP(QS) CL563-07
P389 SUMP (R) CL565-92
P390 SUMP (R) CL564-56
P391 SUMP (R) CL563-33
P392 SUMP(QS+) CL563-55
P394 SWMH CL563-99
P395 PIT NOT FD
P371 SUMP (R) CL564-77
P351 SUMP (QS+) CL567-33
P365 SUMP (QS+) CL567-50
P366 SUMP(QS+) CL567-52
P367 SUMP(QS+) CL567-39
P364 PIT NOT FD
P361 SUMP (R) CL566-62
P362 SUMP(QS+) (SILTED) CL566-64 IL565-20
P363 SUMP(QS+) (SILTED) CL566-39 IL564-92
P360 SWMH (SEALED) CL560-04
P396 SUMP(QS+) CL560-97
P397 GRATED PIT CL561-91
P398 SWH CL559-00
P399 SUMP (QS) CL558-46
P512 SWH CL559-42
P483 SWH CL560-25
P401 SUMP(R) CL559-56
P402 SUMP(QS) CL559-90
P403 SUMP(QS) CL559-41
P404 SWMH(DS) CL560-12 IL558-99
P405 SUMP (QS) CL559-84
P495 SWH (PEN STOCK) CL559-16 IL550-93
P496 SWH CL559-35 IL553-83 TO BOTTOM OF SHAFTS(X2)
P525 GRATED PIT CL559-02
P526 GRATED PIT CL558-93
P527 GRATED PIT CL558-76
P492 SWH CL558-99
P491 GRATED TRAP CL558-87
P490 SWH(SEALED) CL558-90
P489 SWH(SEALED) CL558-97
P488 SWH CL559-00
P499 GRATED PIT CL558-92
P498 GRATED PIT CL558-85
P493 SWH CL560-04
CL559.50 IL556.63
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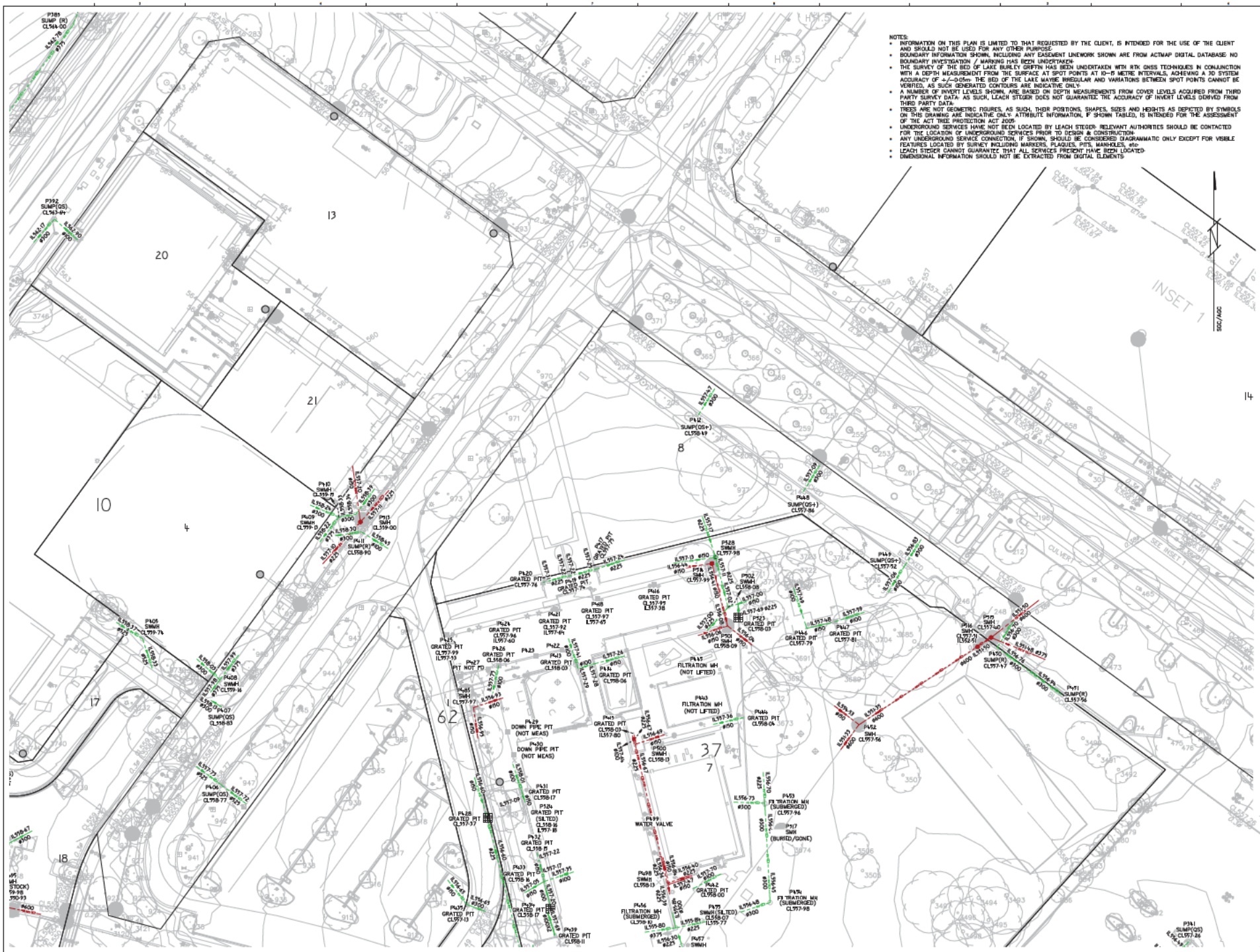

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- ROAD–SIGNAL MANHOLE
- ROAD–SIGNAL PIT
- ROAD–SPEED CAMERA
- ROAD–SPEED CAMERA FLASH
- SEWERAGE–INSP'N OPENING
- SEWERAGE–MANHOLE
- SIGNAGE–ONE POST
- SIGNAGE–TWO POST
- SIGNAGE–THREE POST
- STORM WATER–DOWN PIPE
- STORM WATER–GRATED PIT
- STORM WATER–MANHOLE
- STORM WATER–SUBSOIL
- STORM WATER–SUMP
- TRAFFIC–ARROW L
- TRAFFIC–ARROW ST
- TRAFFIC_ARROW ST & L
- TRAFFIC–ARROW ST & R
- TRAFFIC–ARROW MERGE R
- TRAFFIC–ARROW MERGE R & ST
- TRAFFIC–SYMBOL BICYCLE
- TRAFFIC–SYMBOL WHEELCHAIR
- VEGETATION–TREE
- WATER SUPPLY–FOUNTAIN
- WATER SUPPLY–HYDRANT
- WATER SUPPLY–IRRIGATION BOX
- WATER SUPPLY–METER
- WATER SUPPLY–SPRINKLER
- WATER SUPPLY–STOP COCK
- WATER SUPPLY–STOP VALVE
- WATER SUPPLY–TAP
- MINOR STRUCTURE–FENCE
- ROAD–KERB BACK
- ROAD–KERB INVERT
- ROAD–KERB LIP
- ROAD–KERB TOP
- SEWERAGE–PIPE U/G
- STORMWATER–PIPE U/G
- STORM WATER–SPOON DRAIN
- STORM WATER–WATER COURSE
- TOPOGRAPHIC–BOTTOM OF BANK
- TOPOGRAPHIC–TOP OF BANK
- TRAFFIC–LINE BARRIER (B1)
- TRAFFIC–LINE BARRIER (B2)
- TRAFFIC–LINE BARRIER (B3)
- TRAFFIC–LINE BARRIER (B5)
- TRAFFIC–LINE BARRIER (B6)
- TRAFFIC–LINE CHEVRON YELLOW
- TRAFFIC–LINE CONTINUITY (C1)
- TRAFFIC–LINE CONTINUITY (C2)
- TRAFFIC–LINE CONTINUITY (C3)
- TRAFFIC–LINE DASHED
- TRAFFIC–LINE EDGE (E1)
- TRAFFIC–LINE EDGE (E3)
- TRAFFIC–LINE HOLD (HL1)
- TRAFFIC–LINE LANE (L1)
- TRAFFIC–LINE MERGE (M1)
- TRAFFIC–LINE MERGE (M2)
- TRAFFIC–LINE SEPERATION (S1–12)
- TRAFFIC–LINE SEPERATION (S1–24)
- TRAFFIC–LINE SEPERATION (S2)
- TRAFFIC–LINE SEPERATION (S3)
- TRAFFIC–LINE SOLID
- TRAFFIC–LINE STOP (SL1)
- TRAFFIC–LINE STOP (SL2)
- VEGETATION–DRIPLINE
- VEGETATION_HEDGE

	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
A						20 09/1	09/10/1
A						16 1/11	2/1/11
						19/01/15	30/01/15
						11/02/15	27/02/15

AMENDMENTS

Notes:

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REV A - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
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REV C - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

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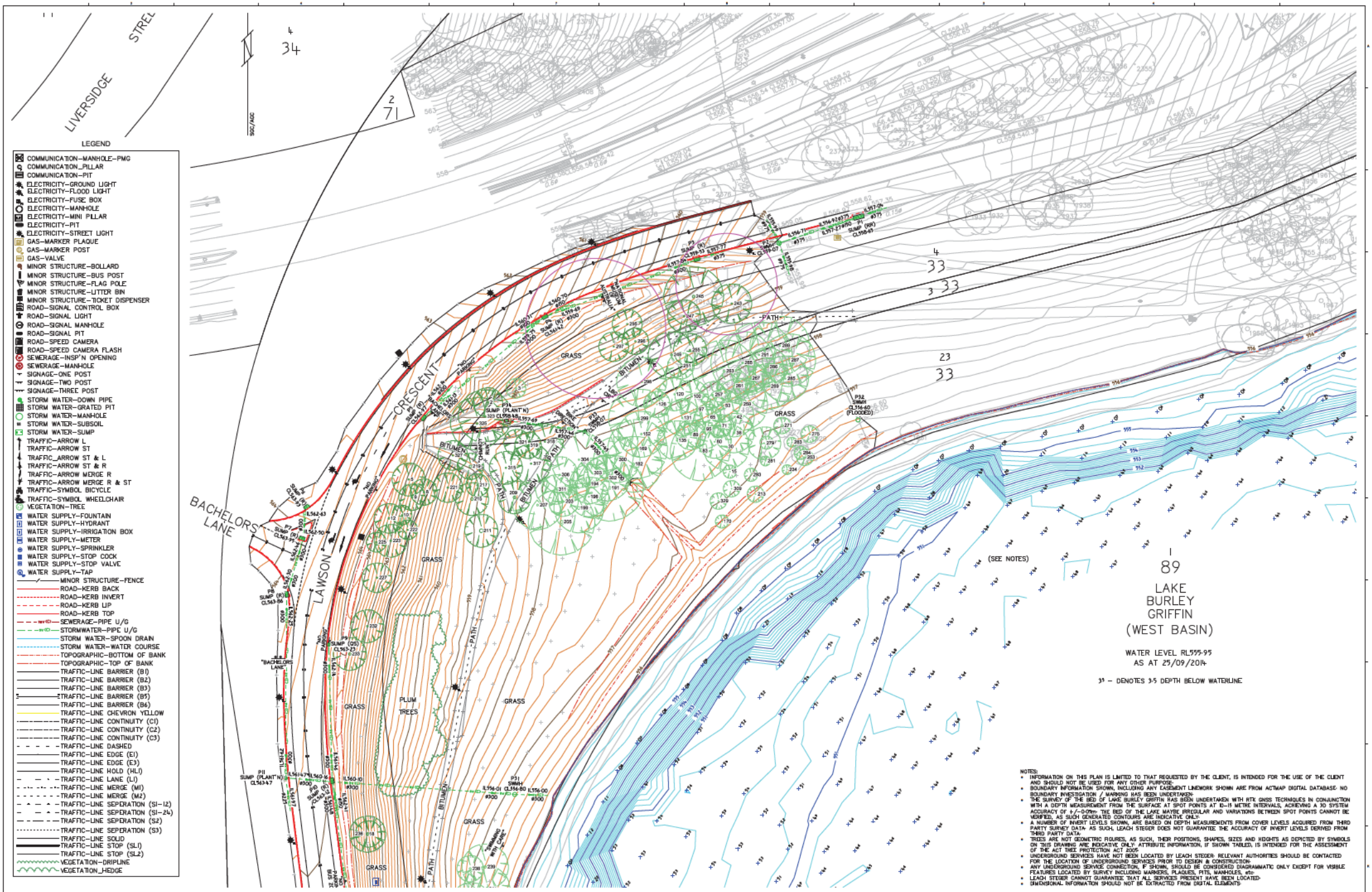
70 NORTH BOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 0 25 5 10 15
Sheet: 7 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg



LEGEND

- COMMUNICATION–MANHOLE–PMG
- COMMUNICATION_PILLAR
- COMMUNICATION–PIT
- ELECTRICITY–GROUND LIGHT
- ELECTRICITY–FLOOD LIGHT
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	SURVEY	DRAWN	CHECK	APPROVE	ZONE	SURVEY	ISSUE
A	[redacted]					20 09/1	09/10/1
A						16 1/1	21/11/1
						19 01/15	30/01/15
						11 02/15	27/02/15

AMENDMENTS

Notes:

UNDERLYING TOPOGRAPHIC SURVEY SUPPLY BY OTHERS.
REV A - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
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REV C - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

[redacted]
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Client:
Land Development Agency
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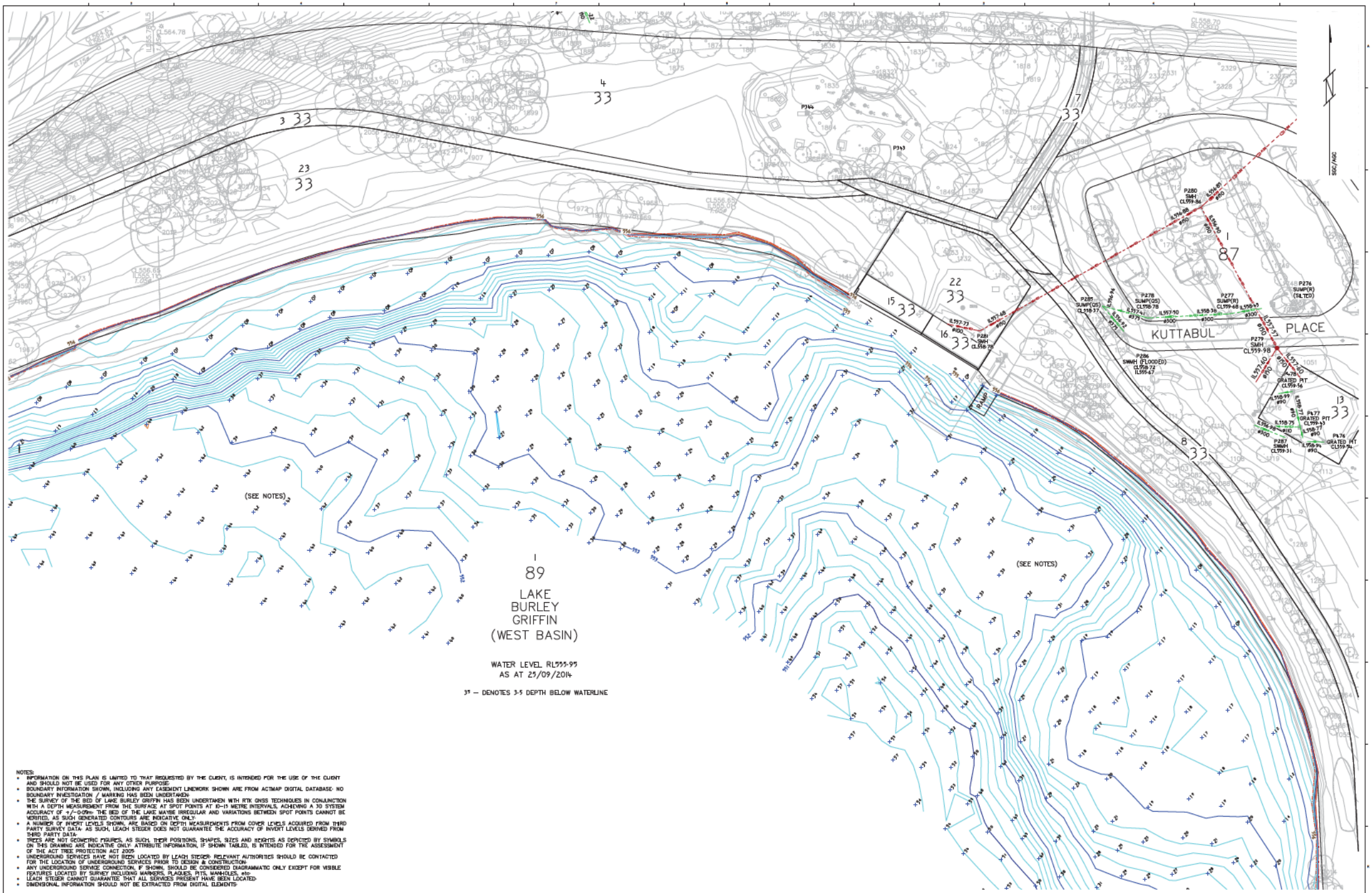
70 NORTH BOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title:
DETAIL SURVEY
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 — 0 2.5 5 10 15
Sheet: 8 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg



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AMENDMENTS

	SURVEY	DWN	CKED	APPROVED	ZONE	SURVEY	ISSUE
A						20 09/1	01/10/1
A						18 11/1	21/11/1
						19/01/15	30/01/15
						11/02/15	27/02/15

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27/02/2015

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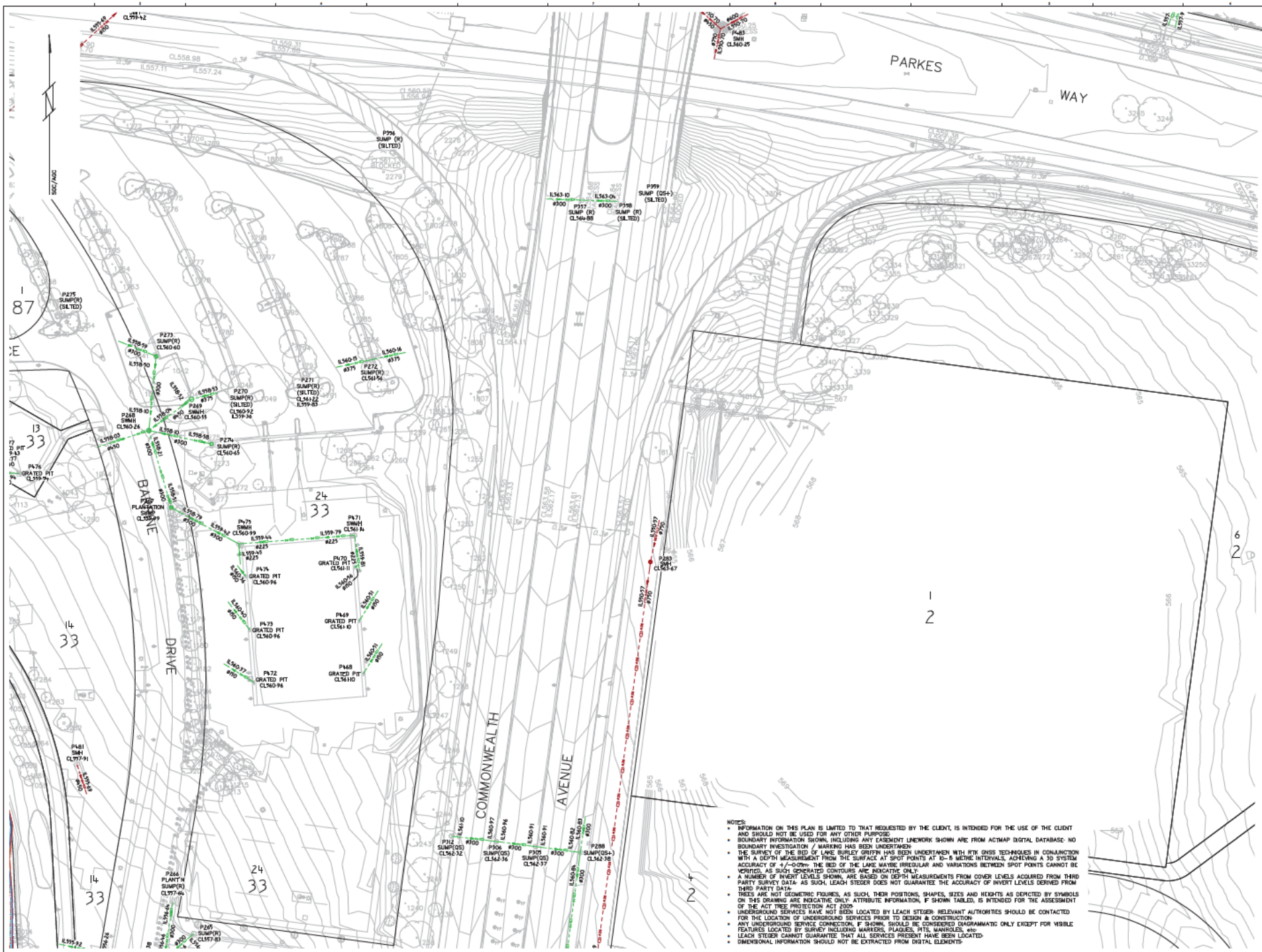
Client:
Land Development Agency
LEVEL 6 TRANSACT HOUSE
70 NORTHBOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
D S RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 — 0 2.5 5 10 15
Sheet: 9 of 17
Size: A1
Drawing: 1 059_001_REV C.dwg



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AMENDMENTS		SURVEY	DRAWN	CHECK	APPROVD	ZONE	SURVEY	RULE
A							20 09/1	09/1/01
A							16 1/11	2/1/11
							19/01/15	30/01/15
							11/02/15	27/02/15

Notes:

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REVB - STAGE 2 DETAIL INCLUDED AND PRELIMINARY PIT HYDRAULICS ADDED.
REVC - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

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Horizontal Datum: SGC/AGC
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MARK: SR10 8
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SYSTEM: AHD 71
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Title: **DETAIL SURVEY**
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 0 2.5 5 10 15
Sheet: 10 of 17
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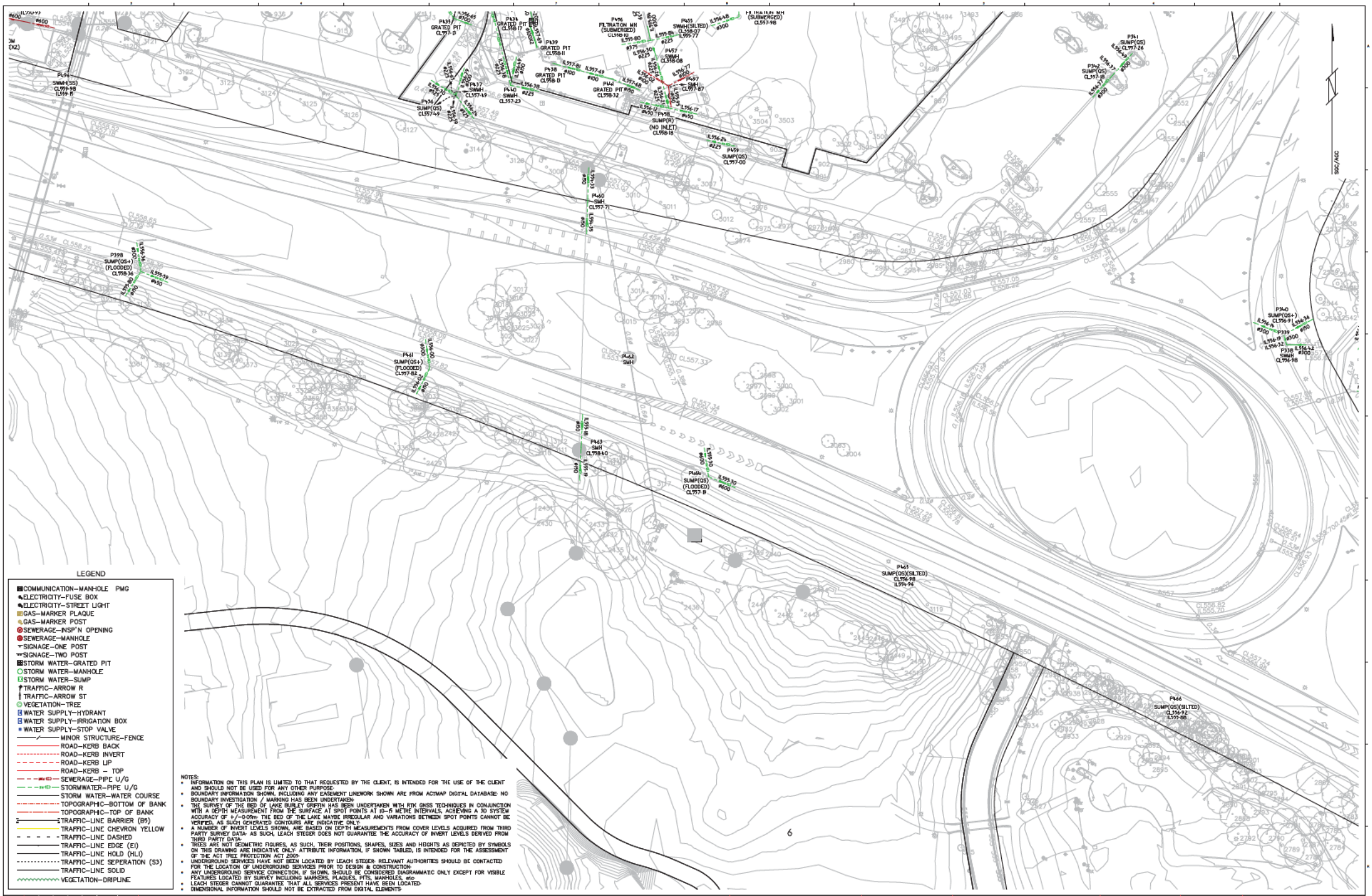

AMENDMENTS	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	ISSUE
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SGC/AGC

LEGEND

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- TRAFFIC–LINE CONTINUITY (C2)
- TRAFFIC–LINE CONTINUITY (C3)
- TRAFFIC–LINE DASHED
- TRAFFIC–LINE EDGE (E1)
- TRAFFIC–LINE EDGE (E3)
- TRAFFIC–LINE HOLD (HL1)
- TRAFFIC–LINE LANE (L1)
- TRAFFIC–LINE MERGE (M1)
- TRAFFIC–LINE MERGE (M2)
- TRAFFIC–LINE SEPERATION (S1–12)
- TRAFFIC–LINE SEPERATION (S1–24)
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- TRAFFIC–LINE SEPERATION (S3)
- TRAFFIC–LINE SOLID
- TRAFFIC–LINE STOP (SL1)
- TRAFFIC–LINE STOP (SL2)
- VEGETATION–DRIPLINE
- VEGETATION_HEDGE

A						28 09/1	01/10/1	
A						16 1/1	21/11/1	
						19/01/15	30/01/15	
						11/02/15	27/02/15	

AMENDMENTS

Notes:

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REV A - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
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LEGEND:

Prepared by:
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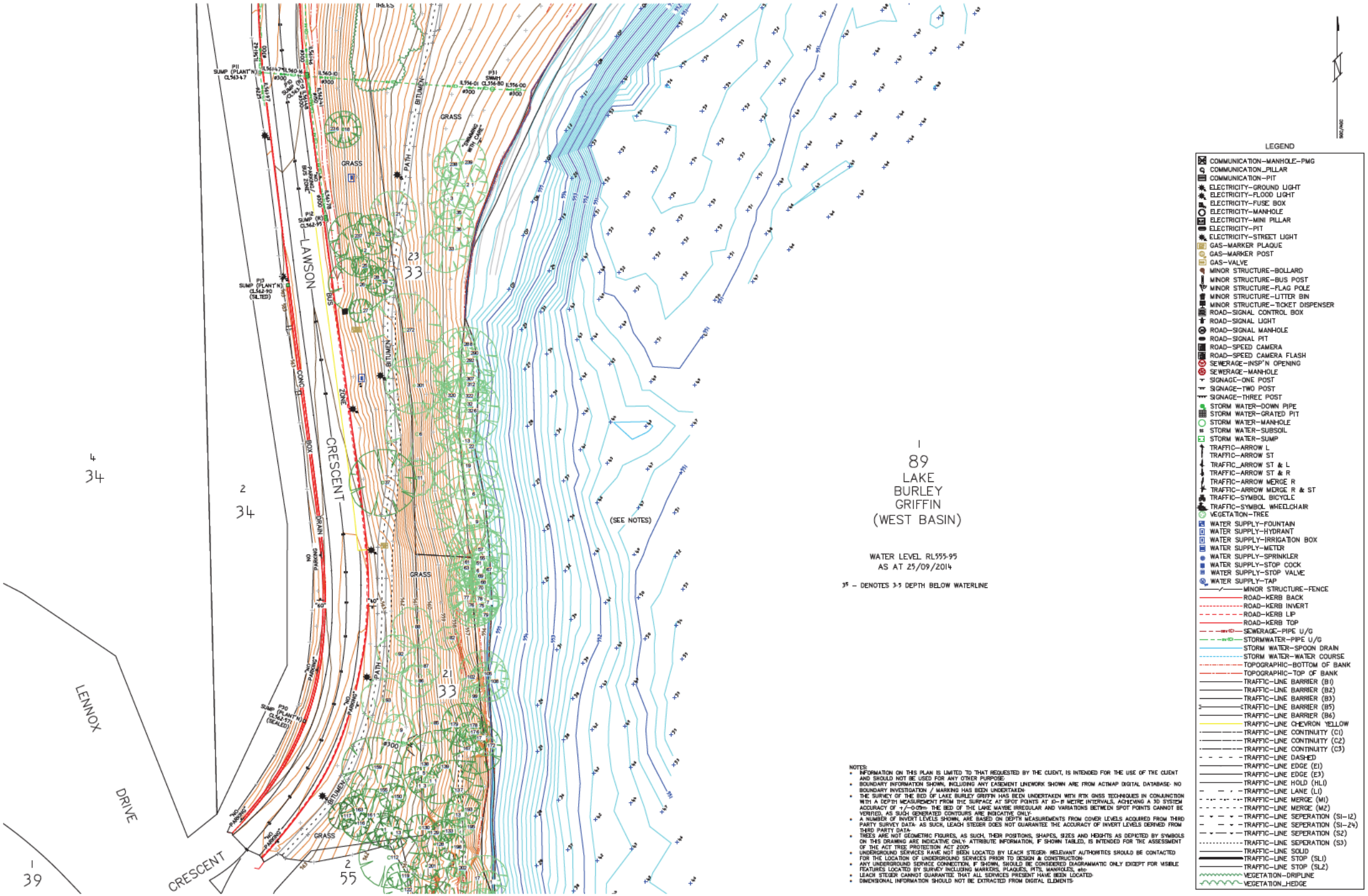
F - (02) 6296 090 W - www.leachsteger.com.au

Client:
Land Development Agency
LEVEL 6 TRANSACT HOUSE
70 NORTH BOURNE AVENUE
DICKSON
ACT 2611

Horizontal Datum: SGC/AGC
Vertical Datum:
MARK: SR10 8
LEVEL: RL557.200
SYSTEM: AHD 71
Contour Interval: 0.20m

Title:
DETAIL SURVEY
CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DIS RIC : CANBERRA CENTRAL

Job: 1 059
Scale (metres): 1:500 0 2.5 5 10 15
Sheet: 12 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg



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AMENDMENTS		SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	DATE
	A	[redacted]					20 091	09/10/1
	A						16 191	2/11/1
							19/01/15	30/01/15
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DIS RIC : CANBERRA CENTRAL

Job: 1 059
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Sheet: 13 of 17
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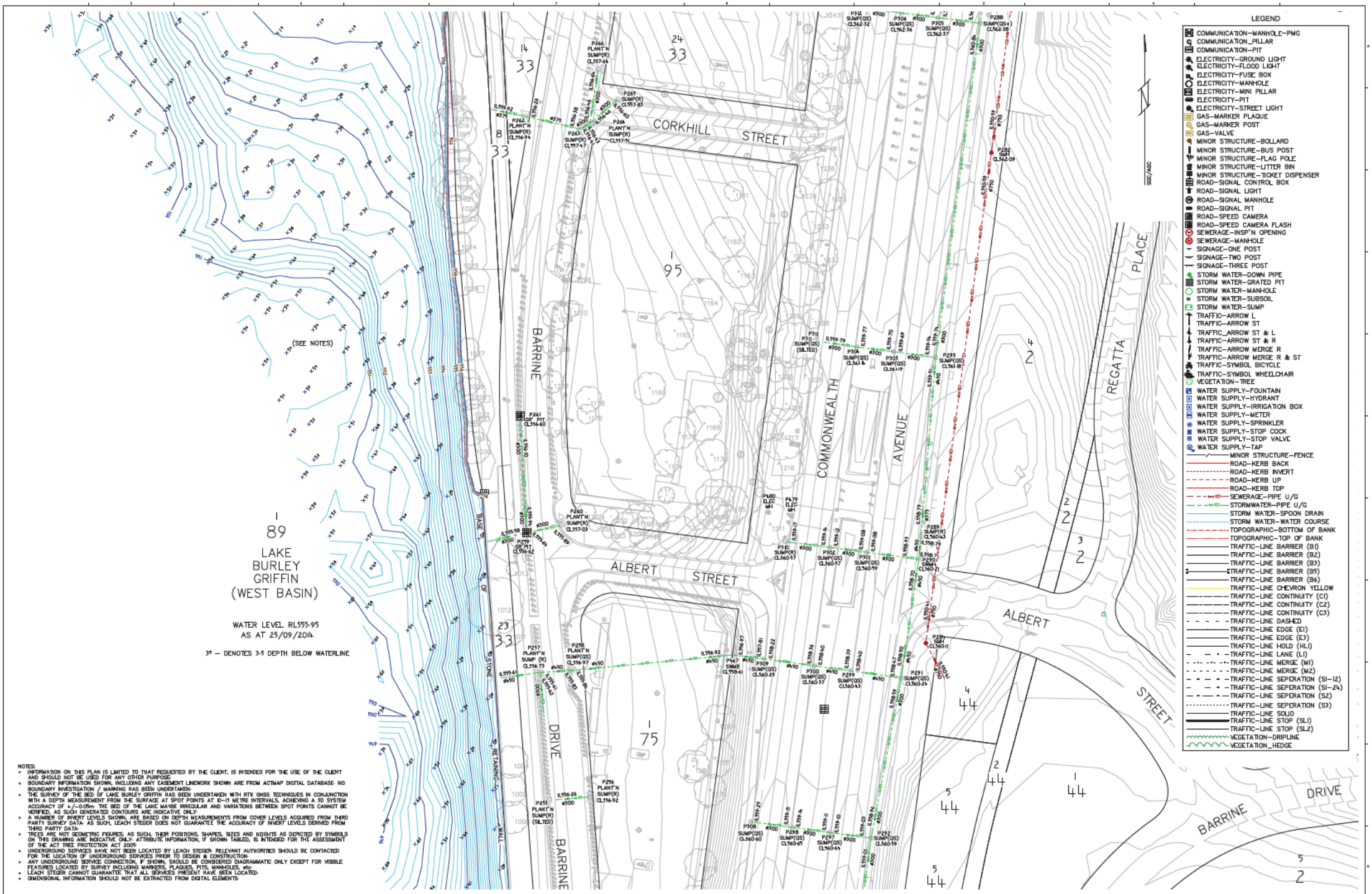

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A	[redacted]					20 09/1	09/10/1
A						18 11/1	25/11/1
						19 01/15	30/01/15
						11 02/15	27/02/15

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SYSTEM: AHD 71
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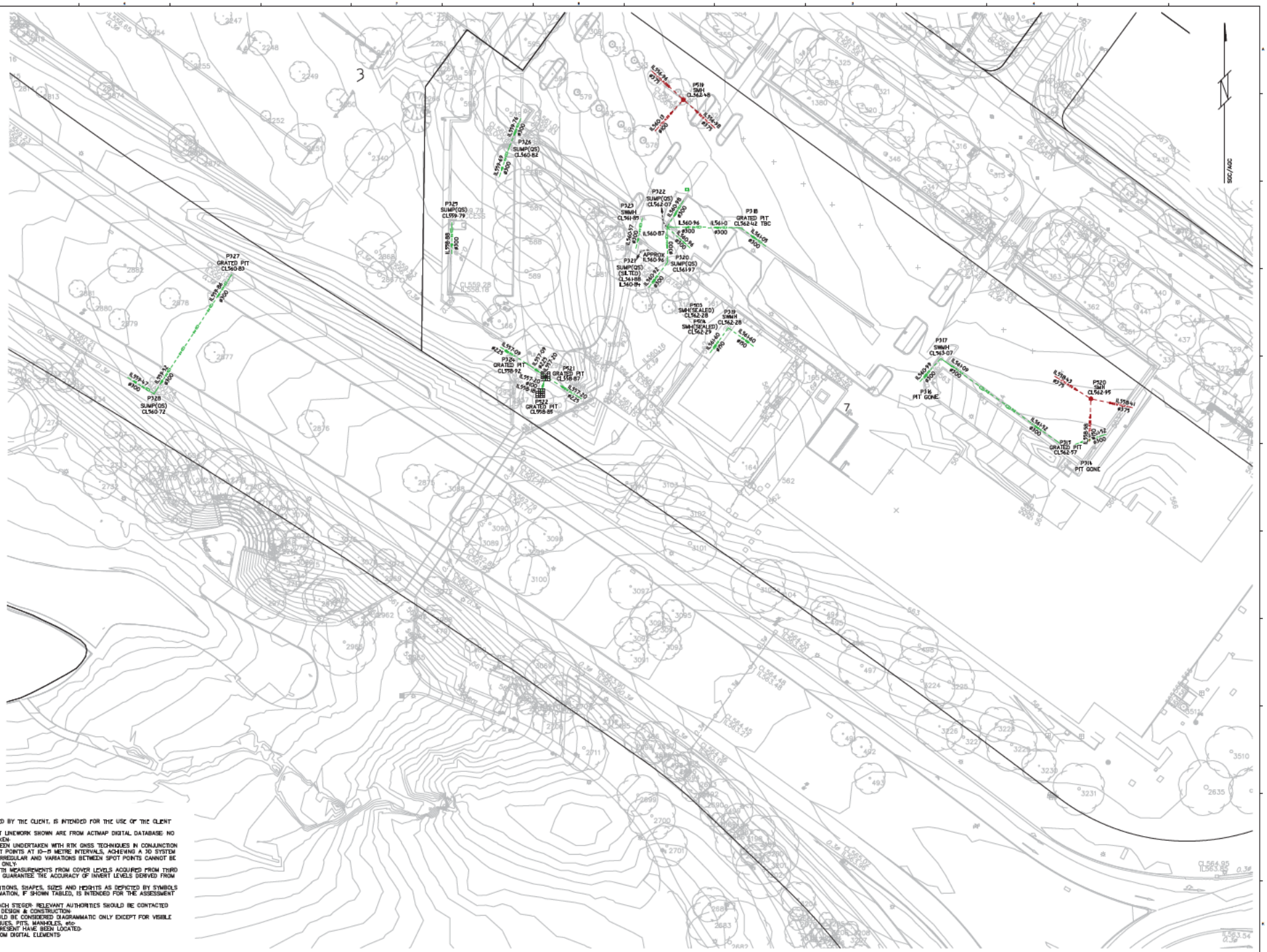
CITY TO LAKE
DIVISION : CITY, ACTON AND PARKES
D S RIC : CANBERRA CENTRAL

Job: 1 059 Scale (metres): 1:500 0 25 5 10 15
Sheet: 1 of 17 Size: A1 Drawing: 1 059_001_REV C.dwg



LEGEND

- COMMUNICATION–MANHOLE–PMG
- COMMUNICATION_PILLAR
- COMMUNICATION–PIT
- ELECTRICITY–GROUND LIGHT
- ELECTRICITY–FLOOD LIGHT
- ELECTRICITY–FUSE BOX
- ELECTRICITY–MANHOLE
- ELECTRICITY–MINI PILLAR
- ELECTRICITY–PIT
- ELECTRICITY–STREET LIGHT
- GAS–MARKER PLAQUE
- GAS–MARKER POST
- GAS–VALVE
- MINOR STRUCTURE–BOLLARD
- MINOR STRUCTURE–BUS POST
- MINOR STRUCTURE–FLAG POLE
- MINOR STRUCTURE–LITTER BIN
- MINOR STRUCTURE–TICKET DISPENSER
- ROAD–SIGNAL CONTROL BOX
- ROAD–SIGNAL LIGHT
- ROAD–SIGNAL MANHOLE
- ROAD–SIGNAL PIT
- ROAD–SPEED CAMERA
- ROAD–SPEED CAMERA FLASH
- SEWERAGE–INSP'N OPENING
- SEWERAGE–MANHOLE
- SIGNAGE–ONE POST
- SIGNAGE–TWO POST
- SIGNAGE–THREE POST
- STORM WATER–DOWN PIPE
- STORM WATER–GRATED PIT
- STORM WATER–MANHOLE
- STORM WATER–SUBSOIL
- STORM WATER–SUMP
- TRAFFIC–ARROW L
- TRAFFIC–ARROW ST
- TRAFFIC_ARROW ST & L
- TRAFFIC–ARROW ST & R
- TRAFFIC–ARROW MERGE R
- TRAFFIC–ARROW MERGE R & ST
- TRAFFIC–SYMBOL BICYCLE
- TRAFFIC–SYMBOL WHEELCHAIR
- VEGETATION–TREE
- WATER SUPPLY–FOUNTAIN
- WATER SUPPLY–HYDRANT
- WATER SUPPLY–IRRIGATION BOX
- WATER SUPPLY–METER
- WATER SUPPLY–SPRINKLER
- WATER SUPPLY–STOP COCK
- WATER SUPPLY–STOP VALVE
- WATER SUPPLY–TAP
- MINOR STRUCTURE–FENCE
- ROAD–KERB BACK
- ROAD–KERB INVERT
- ROAD–KERB LIP
- ROAD–KERB TOP
- SEWERAGE–PIPE U/G
- STORMWATER–PIPE U/G
- STORM WATER–SPOON DRAIN
- STORM WATER–WATER COURSE
- TOPOGRAPHIC–BOTTOM OF BANK
- TOPOGRAPHIC–TOP OF BANK
- TRAFFIC–LINE BARRIER (B1)
- TRAFFIC–LINE BARRIER (B2)
- TRAFFIC–LINE BARRIER (B3)
- TRAFFIC–LINE BARRIER (B5)
- TRAFFIC–LINE BARRIER (B6)
- TRAFFIC–LINE CHEVRON YELLOW
- TRAFFIC–LINE CONTINUITY (C1)
- TRAFFIC–LINE CONTINUITY (C2)
- TRAFFIC–LINE CONTINUITY (C3)
- TRAFFIC–LINE DASHED
- TRAFFIC–LINE EDGE (E1)
- TRAFFIC–LINE EDGE (E3)
- TRAFFIC–LINE HOLD (HL1)
- TRAFFIC–LINE LANE (L1)
- TRAFFIC–LINE MERGE (M1)
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- TRAFFIC–LINE SEPERATION (S1–12)
- TRAFFIC–LINE SEPERATION (S1–24)
- TRAFFIC–LINE SEPERATION (S2)
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	SURVEY	DRAWN	CHECK	APPROVED	ZONE	SURVEY	DRAWN
A						20 09/1	09/10/1
A						16 1/1	21/11/1
						19/01/15	30/01/15
						11/02/15	27/02/15

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REVA - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
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Horizontal Datum: SGC/AGC
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CITY TO LAKE
DIVISION: CITY, ACTON AND PARKES
DISTRICT: CANBERRA CENTRAL

Job: 1 059
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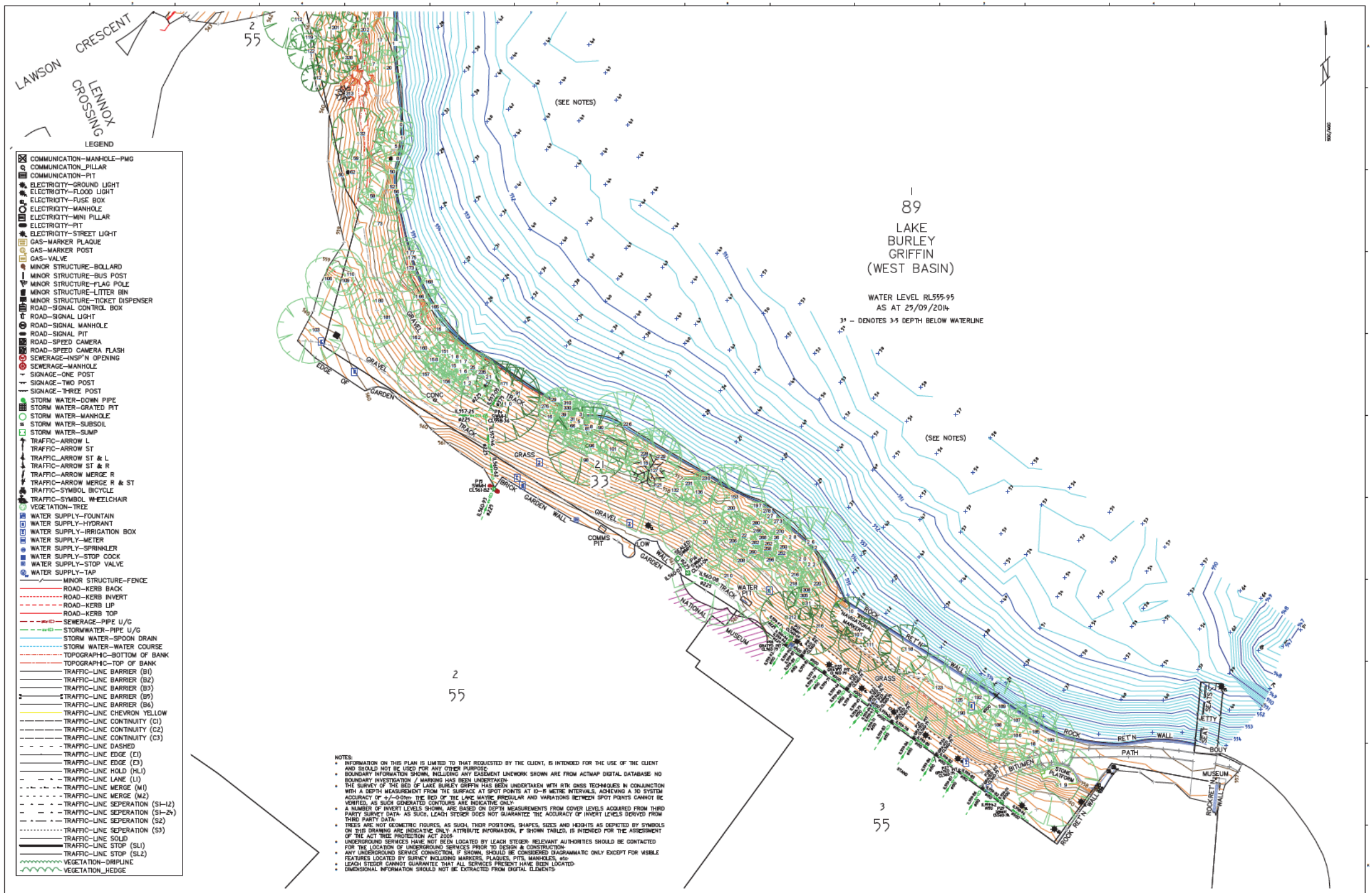
Sheet: 15 of 17
Size: A1
Drawing: 1 059_001_REVC.dwg



AMENDMENTS		SURVEY	DRAWN	CHECK	APPROVE	ZONE	SURVEY	RULE
	A						20 09/1	09/10/1
	A						16 1/11	2/1/11
							19/01/15	30/01/15
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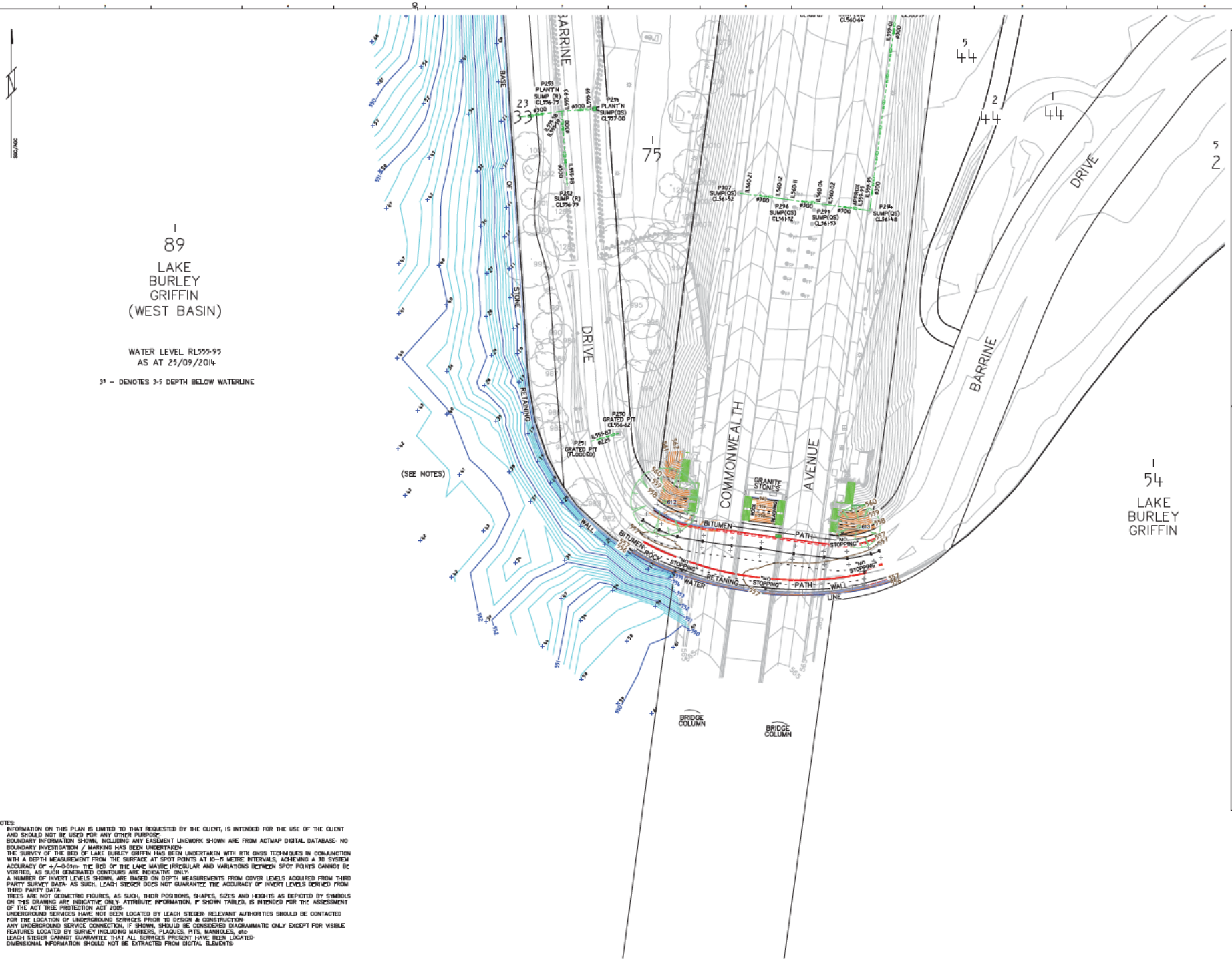

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	A						16 191	2/111	REVA - STAGE 1 DETAIL INCLUDED AND PIT INFORMATION ADDED.
							190115	300115	REVB - STAGE 2 DETAIL INCLUDED AND PRELIMINARY PIT HYDRAULICS ADDED.
							110215	270215	REVC - INCLUDED EXTRA SURVEY ON PAGE 17 AND STAGE 2 HYDRAULICS.

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Sheet: 17 of 17
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ACT Government
Environment and Sustainable Development

Agreement No: LD 2013-037
Agreement expires on: 26/ 08/16

ENVIRONMENTAL PROTECTION AGREEMENT

Between

Chincivil Pty Ltd
ABN No: 47 008 628 091
ACN No: 008 628 091

at **105-107 High Street**
Queanbeyan NSW 2620

And

the ENVIRONMENT PROTECTION AUTHORITY

PURPOSE OF THE ENVIRONMENTAL PROTECTION AGREEMENT

This Environmental Protection Agreement ("Agreement") is an agreement between **Chincivil Pty Ltd** and the Environment Protection Authority (EPA) concerning:

major land development or construction activities, being-

(i) land development, or the construction of a commercial building, on a site of 0.3 hectares or more and including the construction of associated public infrastructure; or
(ii) the construction of public infrastructure on a site of 0.3 hectares or more.

The aim of this agreement is to ensure that the land development sites achieve a consistently high level of environmental management.

TIME PERIOD COVERED

This Agreement is current for a period of three (3) years from the date of signing or until one month after written notice is provided by one party to the other party that it wishes to withdraw from the Agreement.

Any significant changes in the nature, location or ownership of the company during that period must be notified to the EPA.

RECORDS

Chincivil Pty Ltd shall keep a record of all complaints received by its employees or its agents, in relation to pollution from the activity. Records are to be kept for a period of three (3) years and provided, on request, to the EPA**.**

RELATIONSHIP OF THE AGREEMENT TO LEGISLATIVE REQUIREMENTS

The *Environment Protection Act 1997* (the Act) provides for the protection of the environment and includes a provision in section 38 for the EPA to enter into an Environment Protection Agreement.

TERMINATION OF AGREEMENT

The EPA will terminate the agreement for consistent non-compliance with the conditions of the agreement or the legislation one month after written notice is provided by the EPA to the other party.

The EPA will terminate the agreement immediately upon the other party being convicted of an offence causing serious or material environmental harm under the Act.

ENVIRONMENTAL MANAGEMENT

Preamble

Land development and construction often involves two stages: the design stage and the construction stage. Because these stages are closely linked and may be carried out by the same or different organisations, this agreement includes the elements of both stages.

In this agreement the following definitions will apply:

- **Developer** – the organisation that is primarily responsible for a land development or construction project; and
- **Construction Manager –** the organisation that is primarily responsible for the construction of a land development or construction project.

Chincivil Pty Ltd agrees to be responsible for the relevant sections of Schedules 1 to 4 depending whether **Chincivil Pty Ltd** undertakes the **Developer** or **Construction Manage**r functions. **Chincivil Pty Ltd** agrees to implement an awareness program for their staff members to ensure that the relevant practices referred to in Schedules 1 to 4 is implemented on their sites.

<u>SCHEDULE 1 - WATER</u>

1.1 EROSION AND SEDIMENT CONTROL PLANS 0.3 TO 1 HECTARE

1.1.1 Design

For sites of 0.3 to 1 hectares, the **Developer** agrees to arrange the provision of an erosion and sediment control plan to be approved by the EPA prior to the commencement of construction. This may be undertaken by the **Construction Manager** but is the responsibility of the **Developer**.

Content of plans:

- proposed activities;
- existing topography including contour lines and catchment boundaries, catchment areas, adjacent areas including creeks and buildings;
- location of permanent stormwater inlets, pipes, outlets, and other permanent drainage facilities;
- vegetative buffer areas to be protected by fencing;
- details of proposed erosion and sediment control measures appropriate for the site in accordance with the **"Environment Protection Guidelines for Construction and Land Development in the ACT"** (the **Guidelines**);
- proposed timetable for construction activity and installation of erosion and sediment controls; and surface stabilisation measures; and
- the developer agrees to arrange the provision of a water plan to be provided to the EPA prior to the commencement of construction; and content of water plans will include:
    - Water source (where water is to be sourced from a waterway, approval is required from the EPA, contact 13 22 81);
    - Length of time water source is required;
    - Recycling of water;
    - Usage of storage dams on site;
    - Other methods used to minimise water use (i.e. an alternative for dust suppression may be to minimise the disturbed area during construction through staging of works).

1.1.2 Construction

The **Construction Manager** agrees to minimise suspended solids in site run-off to protect the quality of water entering the stormwater system, stream rivers and lakes by:

- minimising the area of disturbance to retain the maximum area of natural vegetation cover;
- installing erosion control devices including silt fences, stormwater inlet sediment traps and stormwater retention structures in accordance with the erosion and sediment control plan, prior to commencement of works;
- diverting clean water away from areas of disturbance as necessary;
- restricting traffic to a stabilised entry/exit point;
- chemically dosing turbid water to settle out suspended solids as necessary to achieve <60 mg/L suspended solids prior to discharging wastewater from its sites;

- maintaining adjacent gutters and road surfaces free of soil and building materials;
- inspecting and managing any sediment and erosion controls on a weekly basis.

1.2 EROSION AND SEDIMENT CONTROL PLANS > 1 HECTARE

1.2.1 Design of Land Development

For sites over 1 hectare the **Developer** agrees to arrange for the provision of an erosion and sediment control plan to the EPA at the design stage for approval prior to tenders being called in order to allow contractors to incorporate the cost of sediment and erosion control measures.

Content of plans:

- proposed activities;
- existing topography including contour lines and catchment boundaries, catchment areas, adjacent areas including creeks and buildings;
- existing and final drainage patterns;
- proposed shaping;
- staging of the development;
- limits of clearing and grading, including vegetative buffer areas to be fenced off;
- details and specifications of proposed erosion and sediment control measures including retention ponds, spillways outlet pipes, diversion channels, and sediment traps;
- location of permanent stormwater inlets, pipes, outlets, and other permanent drainage facilities;
- proposed timetable for construction activities and installation of erosion and sediment controls;
- surface stabilisation measures including seeding and mulching rates; and
- the developer agrees to arrange the provision of a water plan to be provided to the EPA prior to the commencement of construction; and content of water plans will include:
    - Water source (where water is to be sourced from a waterway, approval is required from the EPA, contact 13 22 81);
    - Length of time water source is required;
    - Recycling of water;
    - Usage of storage dams on site;
    - Other methods used to minimise water use (i.e. an alternative for dust suppression may be to minimise the disturbed area during construction through staging of works).

Considerations at the design stage

Plan the development to fit the site by:

- assessing the physical characteristics of the site to determine how it can be developed with the smallest risk of environmental damage;
- minimising land reshaping by using the existing topography wherever possible.

Determine limits of land clearing and shaping by:

- deciding exactly which areas must be disturbed to accommodate the proposed construction, and which areas can remain untouched;

- paying special attention to critical areas (for example, steep slopes, highly erodible soils, surface water borders, wetlands and the like); and
- considering staged clearing and construction as an alternative to mass clearing and construction.

Divide the site into natural drainage areas by:
- determining how run-off will drain from the site;
- considering how erosion and sedimentation can be controlled in each small drainage area or sub-catchment before looking at the entire site, sediment retention ponds or sediment traps;
- remembering that it is more advantageous to control erosion at the source and prevent problems than to design perimeter controls to trap sediment; and
- identifying stable and preferred water disposal areas.

Select erosion and sediment control practices by:
- determining sediment control measures appropriate for the site in accordance with the **Guidelines;**
- including key dimensions and specifications in construction details;
- liasing as necessary with an authorised officer and obtain agreement to the adequacy of the proposed measures; and
- constructing and maintaining structural measures in accordance with standards and specifications set out the **Guidelines** .

Stormwater system
The stormwater system can control run-off during earthwork construction in the following ways:
- stormwater which can arise from higher up the catchment, above the area being worked, can be effectively controlled;
- diversions, catch drains and drains can be terminated at silt traps located near access holes which can in turn be used as entry points to the stormwater system;
- both underground stormwater and residual surface run-off can be discharged from the site via a sediment retention pond where practical; if new stormwater trunk mains are needed to carry sediment-laden flows they should not be connected directly to the existing downstream drainage network. In the interim, it should be made clear in the erosion and sediment control plan that they should be connected to an off-stream sediment retention pond.

1.2.2 Construction stage

The **Construction Manager** agrees to:

(a) seek approval by the EPA for any changes to the approved erosion and sediment control plan prior to the commencement of construction;

(b) advise the EPA of commencement of works; and

(c) minimise suspended solids in site run-off to protect the quality of water entering the stormwater system, streams, rivers and lakes by:
- minimising the area of disturbance to retain the maximum area of natural vegetation cover;

- diverting clean water away from areas of disturbance;
- restricting traffic to a stabilised entry/exit point;
- installing erosion control devices including silt fences, stormwater inlet sediment traps and stormwater retention structures in accordance with the erosion and sediment control plan prior to commencement of associated works;
- diverting sediment-laden water to stormwater retention structures (if new stormwater trunk mains are needed to carry sediment-laden flows they should not be connected directly to the existing downstream drainage network. They should be connected to a stormwater sediment retention pond until the site is stabilised.);
- maintaining adjacent gutters and road surfaces free of soil and building materials;
- inspecting and managing any sediment and erosion controls on a weekly basis, and notifying the EPA of waste water discharge procedures and modifications to controls; and
- chemically dosing turbid water to settle out suspended solids as necessary to achieve <60 mg/L suspended solids prior to discharging wastewater from its sites.

SCHEDULE 2 - SOIL

2.1 Removal of Soil

As part of a submitted sediment and erosion control plan the **Construction Manager** must provide the following details regarding the removal of soil from the proposed work area. Details required are:

- The quantity of soil to be removed,
- Destination of the removed soil, (if delivering to more than one site all site are to be identified),
- Description of soil i.e. virgin excavated natural material (VENM). If not refer to note below for more information,
- The contractor transporting soil.

Note: To remove soil that is not VENM the Construction Manager must seek written approval from Environment Protection prior to the soil being removed from site. Advice can be obtained by contacting the EPA on 13 22 81.

VENM: virgin excavated natural material (e.g. clay, gravel, sand and rock) that is not mixed with any other waste and that:

A) has been excavated from areas that are not contaminated, as a result of industrial, commercial, mining or agricultural activities, with manufactured chemicals and that does not contain sulphuric ores or soils, or
B) consists of excavated natural materials that meet such criteria as may be approved by the Environment Protection Authority.

SCHEDULE 3 - AIR

All steps should be taken that are practical and reasonable to minimise dust pollution on land development and construction sites.

Open Air Fires

Burning of materials is not permitted on construction sites.

SCHEDULE 4 - NOISE

Noise generating construction activity is permitted during the following hours:

	Zones A and B Area	**Residential Any other area < 2 weeks**	**Residential Any other area > 2 weeks**
Monday to Saturday	6am to 8pm	7am to 8pm	7am to 6pm
Sunday or Public Holidays	6am to 8pm	8am to 8pm	None

Note: Zones A & B: Industrial (as per Territory Plan)
City Centre (as per Territory Plan)
Town Centre (as per Territory Plan)
Central National Area (City) (as per National Capital Plan)

Any relevant noise reduction measures specified in, AS 2436 must be implemented.

GUIDELINE

Environment Protection Guidelines for Construction and Land Development in the ACT located at:
www.environment.act.gov.au/environment/environment_protection_authority/business_and_industry/environment_protection_guidelines

ENVIRONMENTAL PROTECTION AGREEMENT

Between

Chincivil Pty Ltd **at** **105-107 High Street**
Queanbeyan NSW 2620

And

the ENVIRONMENT PROTECTION AUTHORITY

This agreement has been signed for and on behalf of the parties on the _____ day of _____ 2013.

Signed for and **on behalf**
Chincivil Pty Ltd
105-107 High Street
Queanbeyan NSW 2620

Sign: ----------

Print full name: ----------

Title: ----------

In the presence of

Sign: ----------

Print full name: ----------

Signed by the
Environment Protection Authority,
Environment and Sustainable Development Directorate

Sign: ----------

Print full Name: Rodney Dix
Title:(Delegate) **Environment Protection Authority**

In the presence of **Sign:** ----------

Print full name: ----------

ACT Government

Chief Minister, Treasury and Economic Development

Authorisation No. 1086

AUSTRALIAN CAPITAL TERRITORY

ENVIRONMENTAL AUTHORISATION UNDER THE ENVIRONMENT PROTECTION ACT 1997

The Environment Protection Authority (the Authority), pursuant to section 49(1)(a) of the *Environment Protection Act 1997* (the Act), hereby authorises:

Name:	**Chincivil**
ACN:	**008 628 091**
ABN:	**47 008 628 091**
Street:	**105-107 High Street**
Suburb:	**Queanbeyan, NSW**
Postcode:	**2620**

to conduct the following activity/activities:

- **the extraction of more than 100m^3 of material (other than water) from a waterway**
- **the acceptance of more than 100m^3 of soil for placement on land by a lessee (or for land under a land sublease, the sublessee) or occupier of the land if the land is in—**
  - **(a) an area identified in the territory plan as land in any of the following zones: Broadacre; Rural; Hills, Ridges and Buffer Areas; River Corridors; Mountains and Bushlands; or**
  - **(b) an area identified on a precinct map in the territory plan as an area where plantation forestry is permitted subject to development assessment; or**
  - **(c) an area identified in the national capital plan as any of the following: Broadacre Areas; Rural Areas; Hills, Ridges and Buffer Spaces; River Corridors; Mountains and Bushland**

for the purpose of: **activities associated with the construction of a boardwalk at Lake Burley Griffin**

on:

Block:	**23**
Section:	**33**
Division:	**Acton**
District:	**Canberra Central**

and:	Block:	**1**
	Section:	**89**
	Division:	**Acton**
	District:	**Canberra Central**

and:	Block:	**1**
	Section:	**75**
	Division:	**Acton**
	District:	**Canberra Central**

subject to the conditions set out in **Schedules 1 and 2,** attached, for three years, or until earlier surrendered by Chincivil Pty Ltd or cancelled or suspended by the Authority.

This is a **standard** environmental authorisation. This authorisation will be reviewed.

[redacted].....

Delegate for the Environment Protection Authority

Dated this 9th day of June 2016

SCHEDULE 1: GENERAL CONDITIONS

Definitions

Controlled Waste: as defined in the *National Environment Protection Measure (Movement of Controlled Waste between States and Territories) Measure*.

Plant and Equipment: includes drainage systems, infrastructure and pollution control equipment associated with the delivery, storage and dispensing of petroleum products.

Regulated Waste: as defined in Schedule 1, Section 1.1A of the *Environment Protection Act 1997.*

Site: Block 23, Section 33, Acton, Canberra Central; Block 1, Section 89 Acton, Canberra Central; and Block 1, Section 75, Acton, Canberra Central.

Virgin Excavated Natural Material (VENM): means excavated natural material (e.g. clay, gravel, sand, soil and rock) that is not mixed with any other waste and that;

(a) has been excavated from areas that are not contaminated, as a result of industrial, commercial, mining or agricultural activities, with manufactured chemicals and that does not contain sulphidic ores or soils; or

(b) consist of excavated natural materials that may be approved by the Authority.

Waterway: means—

(1) (a) a river, creek, stream or other natural channel in which water flows (whether continuously or intermittently); or

(b) the stormwater system or any other channel formed (whether completely or partly) by altering or relocating a waterway mentioned in paragraph (a); or

(c) a lake, pond, lagoon or marsh (whether formed by geomorphic processes or by works) in which water collects (whether continuously or intermittently).

(2) ***Waterway*** includes—

(a) the bed that the water in the waterway normally flows over or is covered by; and

(b) the banks that the water in the waterway normally flows between or is contained by.

Working day: a day other than a Saturday, or Sunday, a public holiday or a day that is a holiday for public servants.

1 Compliance with Environmental Authorisation

1.1 The Authorisation holder shall:

a) comply with any Authorisation condition immediately where no time for compliance is stated;

b) notify the Authority in writing within 2 working days of becoming aware of:

i. any event that causes, or is likely to cause, any Authorisation condition to be exceeded; or

ii. any monitoring data that show that a condition of the Authorisation has been exceeded.

2 Activities must be carried out to protect the environment

2.1 All activities carried out on the site must be carried out in such a manner that adverse impact on the environment is minimised.

3 Maintenance of plant and equipment

3.1 All plant and equipment installed or used in or on the site must be maintained in a safe and good condition and in accordance with manufacturer's recommendations.

3.2 Records of all maintenance and repairs performed on pollution control equipment including drainage systems, interceptors, separators and infrastructure must be kept for a period of two (2) years and made available to the Authority on request.

4 Environmental Practices

4.1 The Authorisation holder must minimise emissions to the environment by adopting the practises set out in Schedule 1 and 2 of this authorisation.

5 Compliance with Australian Standards, Industry Codes of Practice and Policies

5.1 The Authorisation holder must comply with the provisions of the following Australian Standards, Guidelines, Industry Codes of Practice and policies provided such provisions are not in conflict with the conditions in this Authorisation, and the provisions of any policies made by the Authority.

- ACT Environmental Guidelines for Service Stations and Hydrocarbon Storage.
- AS 1940 - The Storage and Handling of Flammable and Combustible Liquids, Standards Association of Australia.
- AS 2520 – Petroleum Measurement Tables.
- AS 4282-1997 Control of the obtrusive effects of outdoor lighting
- AS/NZS 5667.1-1998 Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples.
- Environment Protection Guidelines for Construction and Land Development in the ACT, March 2011.
- Environment Protection Policies prepared under the *Environment Protection Act 1997*.

6 Petroleum Product Storage

6.1 Where there are petroleum product storage tanks on the site the Authorisation holder must ensure the tanks and associated pipe work are maintained in good condition. The proposed method of demonstrating the integrity of the tanks and associated pipe should be incorporated into the Authorisation holders Environment Management Plan required under section 17 of this Schedule.

6.2 Further to the provisions of clause 6.1, special requirements are applied to the abandonment of any aboveground or underground tanks and should the need arise, the Authorisation holder agrees to contact the Authority and:

Access Canberra
Environment and Dangerous Substances Licensing
Telephone: 13 22 81
Email: dangeroussubstances@act.gov.au
Dame Pattie Menzies House
16 Challis Street
DICKSON ACT 2602
(GPO Box 158, CANBERRA ACT 2601)

7 Reporting of environmental harm

7.1 In the event that an incident has caused, is causing or is likely to cause material or serious environmental harm, whether the harm occurs on or off the site, the Authorisation holder, their employee or agent must report the incident to the Authority immediately after it becomes known to the Authorisation holder or to their employee or agent in accordance with clause 7.2.

7.2 The incident must be reported to the Authority by telephoning Access Canberra on 13 22 81 during and outside business hours.

7.3 The Authorisation holder must notify the Authority in accordance with clause 7.2 immediately after becoming aware that land is contaminated in such a way as to present, or to be likely to present –

a) a significant risk of harm to human health; or

b) a risk of material environmental harm or serious environmental harm.

7.4 The Authorisation holder, their employee or agent shall also report an incident referred to in clause 7.1 and/or clause 7.3 in writing to the Authority witin 2 working days of the incident occurring or becoming aware of contamination of land. The report must include:

(a) incident or activity that has caused contamination or environmental harm;

(b) nature of contamination and chemicals of concern;

(c) area affected (on or off site);

(d) aspects of the environment affected; and

(e) any other relevant information.

The report may be provided by email to environment.protection@act.gov.au

7.5 The Authorisation holder must keep a record of all other matters in relation to pollution from, or on, the site. These records are to be provided, on request, to the Authority.

8 Record of pollution complaints

8.1 The Authorisation holder must keep a record of all complaints received by its employees or its agents, in relation to pollution from, or on, the site.

9 Record of activity levels

9.1 The Authorisation holder shall maintain the following records for a period of two (2) years, to allow for fee determination:

a) amount of material extracted from a waterway (other than water); and

b) the amount of soil accepted for placement on land.

10 Records to be maintained

10.1 The following records will be maintained and kept by the Authorisation holder for a period of five years:

a) All incidents which has affected, is affecting or could affect the integrity of the hydrocarbon storage system;

b) field sampling record sheets and chain-of-custody forms;

c) results of water quality monitoring in Lake Burley Griffin (see Schedule 2, Table 2, Condition 4);

d) details of all discharges from the coffer dam (see Schedule 2, Table 3, Condition 1);

e) reconciliation records for all fuels, oils and hazardous materials and wastes utilised and stored on site; and

f) waste disposal certificates for any hazardous wastes disposed off-site.

10.2 The following records will be maintained and kept by the Authorisation holder for a period of one (1) year:

a) waste disposal certificates for any regulated or controlled wastes disposed off-site.

10.3 The Authorisation holder must provide any records required to be maintained under this Authorisation to the Authority upon request.

11 Responsible employees

11.1 The Authorisation holder must authorise at least two senior employees or agents:

a) to speak on behalf of the Authorisation holder; and

b) to provide any information or document required under this Authorisation.

11.2 The Authorisation holder must inform the Authority of the names and telephone numbers (including after hours numbers) of those persons within five (5) working days of this Authorisation coming into force. The details may be provided by email to environment.protection@act.gov.au.

11.3 The Authorisation holder must inform the Authority of any change in the information provided under clause 11.2 within five (5) working days of the change. The details may be provided by email to environment.protection@act.gov.au.

11.4 Any person nominated by the Authorisation holder to meet the requirements of clause 11.2 must be readily contactable on the person's nominated telephone numbers.

12 Authorisation must be kept on site

12.1 A copy of this Authorisation must be kept at the site and must be available for inspection by any employee or agent of the Authorisation holder working at the site.

13 Waste

13.1 No waste material is to be incinerated on site.

13.2 The Authorisation holder shall use licensed waste transporters to transport controlled and regulated wastes. Information on Controlled Waste handling and transport can be obtained from the Authority on 13 22 81.

14 Hazardous Materials

14.1 The Authorisation holder must store and manage hazardous materials in a manner that prevents adverse impacts on the environment. The handling and storage of hazardous materials should be addressed in the Environment Management Plan required under section 17 of this Schedule.

15 Discharge of stormwater

15.1 The Authorisation holder shall ensure that appropriate infrastructure is in place and maintained in good operating conditions to ensure that stormwater is not contaminated as a result of the authorised activity.

15.2 The Authorisation holder shall not discharge any contaminants, directly or in-directly to land or surface waters as a result of the authorised activity unless in accordance with Schedule 2, Table 2, Condition 2 and Schedule 2, Table 3, Conditions 4 and 5.

16 New designs and innovations

16.1 The provisions of this Authorisation are not intended to limit the appropriate use of alternative materials, equipment, designs, or methods because they are not included.

17 Environment Management Plan

17.1 The Authorisation holder shall prepare and submit Environment Management Plans (EMP's) acceptable to the Authority prior to works commencing on site.

17.2 The EMP should identify all activities that may have an adverse impact on the environment or the potential to cause environmental harm, and detail the mechanisms employed to prevent or minimise the impact of these activities.

17.3 The EMP's, once accepted by the Authority are to be implemented. They will also form the basis for future authorisation conditions and environmental improvements.

17.4 A copy of the EMP must be kept on the site.

17.5 Where a variation to the mechanisms employed to prevent or minimise the adverse environmental impacts of the activity or the way in which the activity is carried out as detailed in the endorsed EMP's is proposed, the Authorisation holder must seek endorsement from the Authority for the variation. A revised EMP acceptable to the Authority must be submitted within three (3) months of the endorsement of the variation.

18 Monitoring requirements

18.1 Surface Water Monitoring

a) Water quality shall be monitored in accordance with Schedule 2, Table 2, Condition 4.

19 Water quality standards

19.1 Water quality between the coffer dam and the first silt curtain shall be managed with the object of being within the limits of the parameters listed at Schedule 4, Table 3, Condition 5.

20 Reporting requirements

20.1 A monthly report, or other period agreed by the Authority, on compliance with all conditions of the Authorisation is to be provided to the Authority on the Monday of the following week. The report will include but is not limited to:

a) Water monitoring results; and

b) Weekly field inspection results of all controls used in the management of pollutants to the environment.

21 Sampling requirements

21.1 Clauses 21.2 and 21.3 do not apply to the sampling and analysis of noise.

21.2 All sample collection, analysis and associated paperwork under this Authorisation must be conducted in accordance with Australian Standard/New Zealand Standard 5667.1:1998, "*Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*", and with the American Public Health Association, American Water Works Association, and the Water Pollution Control Federation *Standard Methods for the Examination of Water and Wastewater,* 18th Edition, 1989, or other standards and methods agreed to by the Authority.

21.3 The sample collection must be undertaken and documented by a suitably qualified person in accordance with Section 21.1. All required documentation must be countersigned by a person authorised under Section 11.1 and must be made available for inspection by the Authority. Sample analysis of parameters must be conducted by a person employed as an analyst in any of the following organisations:

(a) a Government laboratory;
(b) an Australian university;
(c) a laboratory where Authorisation parameters are accredited by the National Association of Testing Authorities; or
(d) a laboratory approved by the Authority.

21.4 Clause 21.3 does not apply to the analysis of pH and turbidity.

22 Commencement of works

22.1 The Authorisation holder is required to hold the following approvals or endorsements prior to the undertaking of the authorised activity:

(a) National Capital Authority (NCA) Works Approval;

(b) Endorsement or approvals as required for works from Parks, Conservation and Lands (PC&L) and the Heritage Unit, Chief Ministers Department;

(c) Endorsed EMP and approved Erosion and Sediment Control Plan; and

(d) Waterways work licence issued under the *Water Resource Act 2007* where works occur in a waterway.

Copies of the approvals or endorsements from NCA and TaMS must be provided to the Authority prior to the commencement of works.

23 Provision of records

23.1 The Authorisation holder must provide any records required to be maintained under this Authorisation to the Authority upon request.

SCHEDULE 2

TABLE 1: AIR POLLUTION

	Requirement
1	The Authorisation holder must manage the air emission on the site in accordance with an approved Environmental Management Plan (EMP).
2	A water cart or alternative methods as approved by the Authority must be used on site to suppress dust.
3	Water or alternative methods as approved by the Authority must be applied to stock piles, work areas and unsealed roads.
4	Water application rates must be aligned with the prevailing climatic conditions, particularly temperature, rainfall and wind speed/direction.
5	Disturbed areas must be stabilised and revegetated as soon as possible to minimise exposure times of bare earth.
6	All sealed roads must be swept of dust at regular intervals, including public roads where there is evidence of material deposition related to the works.
7	Working in extremely dry windy conditions must be avoided. Where wind speed is >10m/s over a 10 minute period, dust generating activities are to cease.
8	Visual monitoring of dust and exhausts must be undertaken at all times.
9	The transportation of all materials and substances used to carry out the activity must be covered during movements to and from the site.

TABLE 2: WATER POLLUTION

	Requirement
1	The Authorisation holder must manage the water catchments on the site so that pollutants and sediments are detained on site in accordance with an approved Environmental Management Plan (EMP).
2	The Authorisation holder must ensure that all water on the site is retained within the coffer dam for treatment and discharge in accordance with Schedule 2, Table 3, Conditions 4 and 5.
3	The Authorisation holder must ensure all sediment and erosion controls, including the silt curtains, are installed prior to the commencement of any clearing or grubbing works within the catchment area of those sediment and erosion controls.

4	Water quality must be monitored in accordance with the following documents, or any subsequent version(s) of the document(s) approved by the Authority in writing: a) "Construction Environmental Management Plan", project no. 5750-10, drawing no. C361, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16; and b) "Construction Environmental Management Plan Notes", project no. 5750-10, drawing no. C360, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16.
5	In relation to Condition 4, the licence holder must notify the Authority immediately when there is a deviation of 10 Nephelometric Turbidity Units (NTU) or more between water quality results at any of the water quality monitoring points, in accordance with Schedule 1, Section 7.
6	The Authorisation holder must ensure no fuels or oils are kept within 50 metres of Lake Burley Griffin.
7	The Authorisation holder must ensure no machinery is serviced or refuelled within 50 metres of Lake Burley Griffin.
8	The Authorisation holder must manage the water catchments on the site so that pollutants and sediments are detained on site in accordance with an approved Environmental Management Plan (EMP).
9	Appropriate spill kits must be kept on site and be readily accessible.

TABLE 3: CONTROLLED DISCHARGES

	Requirement
1	The Authorisation holder must record all discharges from the coffer dam, including the following details: a) Date of discharge; b) Time of discharge; c) pH; d) Turbidity or suspended solids; and e) Where the water is discharged to.
2	The Authorisation holder must ensure that no discharge from the site causes erosion of the banks of Lake Burley Griffin.
3	Gypsum or alternative flocculants approved by the Authority shall be used where required.
4	Water collected within the coffer dam must be treated as per the Environment

	Protection Guidelines for Construction and Land Development in the ACT (March 2011). Water within the coffer dam must meet the water quality standards in Condition 5 below prior to discharge. Water within the coffer dam must only be discharged into the area between the coffer dam and the first silt curtain.
5	**Water Quality Standards** **Parameter** — **Criteria** pH — 6.5 – 8.5 Suspended solids — <60mg/L Turbidity — <50 NTU

TABLE 4: NOISE POLLUTION

	Requirement
1	Operations at the site should be managed to ensure that building work is conducted between the hours of 7am – 6 pm, Monday to Saturday. Any work which is done outside of these hours must not exceed the noise zone standards of the area, which are listed below: Mon – Saturday 6:00pm to 10:00pm 55dB(A) 10:00pm to 7:00am 45dB(A) Sunday and Public Holidays 8am to 10pm 55dB(A) 10pm to 8am 45dB(A)

TABLE 5: SOIL PLACEMENT

	Requirement
1	All material used is to be Virgin Excavated Natural Material (VENM) or other material approved by the Authority.
2	If signs of contamination are detected in the VENM the Authorisation holder must cease accepting the VENM immediately and notify the Authority on 13 22 81.
3	The supplier of imported material is to provide written certification that the material is VENM or has been approved for placement on the site by the Authority, prior to acceptance by the Authorisation holder.

4	Records of all fill obtained must be kept by the Authorisation holder for a period of two (2) years and made available to the Authority on request. These records are to include: a) Source of material b) Type of material c) Quantity of material d) Who delivered the material; e) Certification of the material; f) EPA approval number where applicable.
5	For other material approved by the Authority, the Authorisation holder must ensure that the conditions of the approval are met.

TABLE 6: MOVEMENT OF SOIL

	Requirement
1	No spoil from identified areas of concern or areas of unexpected finds identified for contamination shall be removed from the site or re-used within the site without approval from the Authority.
2	All excavated material must not contain any free liquid and is to be disposed of within the active leachate control cell at the Mugga Lane Resource Management Centre. The material must be assessed in accordance with the Authority's Information Sheet 4 and prior approval obtained from the Authority if the material is to be reused at any other site within the ACT. Appropriately ACT licensed contractors who are able to perform the full range of licensable duties in the ACT must be engaged for the removal, transport and disposal of all hazardous materials, if any found on the site.

TABLE 7: REMEDIATION

	Requirement
1	The Authorisation holder must restore any disturbed areas by re-vegetating as soon as practicable.
2	Sediment and erosion control measures shall remain in place until 100% of the disturbed area is stabilised.

AUSTRALIAN CAPITAL TERRITORY

Waterway Work Licence

Issued under Division 5.4 of the Water Resources Act 2007

Licence No: WC1413 **Expiry:** 31/05/2017

Details of Licence Holder

Name: Chincivil Pty Ltd

ABN: 47008628091 **ACN:** 008628091

Address: PO Box 155
Fyshwick ACT 2609

Details of Work

Easting: 693354 **Northing:** 6092688

Capacity of water retention structure: N/A

Works details: Waterway work associated with Point Park Stage 1, Phase 1, Acton.

Details of Property

Water Management Area: Central Molonglo

Property Address: Barrine Drive **Suburb:** ACTON

Property Name: Point Park, Acton

District: CANBERRA CENTRAL	**Division:** ACTON	**Block:** 23	**Section:** 33
District: CANBERRA CENTRAL	**Division:** ACTON	**Block:** 1	**Section:** 75
District: CANBERRA CENTRAL	**Division:** ACTON	**Block:** 1	**Section:** 89

Licence Conditions

1 A copy of the following documents must be kept at the site and must be available for inspection by an Environment Protection Officer or any employee or agent of the licence holder working at the site:
a) this licence, WC1413;
b) Environmental Authorisation no. 1086; and
c) the most recent Pollution Control Plans approved by the Environment Protection Authority.

2 Pollution control must be undertaken in accordance with the following documents, or any subsequent version(s) of the document/plan(s) approved by the Environment Protection Authority in writing:
a) "Construction Environmental Management Plan", project no. 5750-10, drawing no. C361, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16; and
b) "Construction Environmental Management Plan Notes", project no. 5750-10, drawing no. C360, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16.

3 Work must be undertaken in accordance with the following documents, or any subsequent version(s) of the document/plans(s) approved by the Environment Protection Authority in writing:
a) Environmental Authorisation number 1086;
b) "Detail Plan Sheet 1 of 2", project no. 5750-10, drawing no. C011, AMDT A, dated 25/05/2016; and
c) "Detail Plan Sheet 2 of 2", project no. 5750-10, drawing no. C012, AMDT A, dated 25/05/2016.

4 Two silt curtains must be installed. The water within the workspace must be managed so that pollutants and sediments are contained within the silt curtains.

5 Water quality of Lake Burley Griffin must be monitored in accordance with the following Pollution Control Plans, or any subsequent version(s) of the plans approved by the Environment Protection Authority in writing:
a) "Construction Environmental Management Plan", project no. 5750-10, drawing no. C361, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16; and
b) "Construction Environmental Management Plan Notes", project no. 5750-10, drawing no. C360, AMDT A, dated 25/05/2016 and approved by the Environment Protection Authority on 26/05/16.

6 The licence holder must notify the Environment Protection Authority immediately when there is a deviation of 10 Nephelometric Turbidity Units (NTU) or more between water quality results at any of the water quality monitoring points (phone 132281).

7 Dewatering of the area inside the coffer dam must be undertaken in accordance with the advice from Conservation and Research at Attachment A.

8 The supplier of material imported to the site is to provide written certification that the material is VENM or has been approved for placement on the site by the Authority, prior to acceptance by the Licence holder.

9 All excavated material must not contain any free liquid and is to be disposed of within the active leachate control cell at the Mugga Lane Resource Management Centre. The material must be assessed in accordance with the Authority's Information Sheet 4 and prior approval obtained from Environment Protection Authority if the material is to be reused at any other site within the ACT.

10 Appropriately ACT licensed contractors who are able to perform the full range of licensable duties in the ACT must be engaged for the removal, transport and disposal of all hazardous materials, if any found on the site.

11 The outer silt curtain must not be removed without prior approval from the Environment Protection Authority.

[redacted]

Delegate, Environment Protection Authority

Dated this 9th day of June 2016

Notes:

1. *The issue of a Waterway Work Licence does not negate other relevant planning controls and guidelines that may apply to the property. Nor does it negate other Commonwealth or ACT legislative requirements such as those that may be necessary under the Environment Protection Act 1997.*
2. *The issue of a Waterway Work Licence on lands under a rural lease may require a Development Application for the work associated with the Waterway Work Licence.*
3. *For more information contact , Environment and Dangerous Substances Licensing via Access Canberra on 13 2281, email evironment.protection@act.gov.au or visit Dame Pattie Menzies House, 16 Challis Street, Dickson.*

Advice from the Conservation and Research Section Concerning How to Manage Aquatic Fauna During a Dewatering Activity.

Ponds or sections of lakes in the ACT may require dewatering for maintenance or development activities. Most of these water bodies will probably contain carp and other alien fish species such as Weatherloach and Gambusia. Some of the water bodies may also contain native fish such as Murray cod or golden perch, yabbies and perhaps long-necked turtles hence care needs to be taken when removing the water to prevent stranding and death of native species.

Species you may find.

To ensure that any fish encountered are identified correctly a suitably qualified ecologist or person with expertise in fish needs to be on site to relocate native fish during the final stages of the drawdown and to euthanize alien species. Alien fish species likely to be present include: carp, redfin, gambusia (mosquito fish) and weatherloach (please see http://www.environment.act.gov.au/cpr/fish/fisheries_management/fish_information_sheets/introduced_fish for further information). Native fish present may include: Murray cod, golden perch (both large bodied) and Western carp gudgeon (small) (please see http://www.environment.act.gov.au/cpr/fish/fisheries_management/native_fish for further information). Murray cod are listed as endangered under the Commonwealth EPBC Act. Yabbies may also be present.

In terms of vertebrates that may be found in ACT water bodies, turtles are the most common. The species that you are most likely to find is the long-necked turtle. **Red eared slider turtles** have also been found twice in the ACT. Red eared slider turtles are an invasive pest species from America. They have become established elsewhere in Australia. If you find one of these turtles **do not put them back into any waterway**, contain the turtle and contact Conservation and Research Section (or Canberra Connect 132281) and someone will come to collect the turtle. You can identify the turtles likely to be found in the ACT using the guide at http://www.tams.act.gov.au/parks-recreation/plants_and_animals/invasive_species/vertebrate_pest_management/pest_animals/animals/redearedsliderturtle.

You may encounter a **water rat**. Do not try to capture it as water rats are capable of moving to suitable nearby habitat themselves.

Platypus are also known in Lake Burley Griffin. If you encounter a platypus, do not touch it or try to capture it. A suitably qualified professional must be engaged for platypus relocation.

What to do with aquatic animals you find

Native fauna should be released into a nearby approved water body immediately (fish, turtles, crustaceans). The release water body should be in close proximity to the works. Conservation and Research Section would like a tally and fate of all fauna relocated as part of the works as a report on the draw downs.

Particular attention should be paid to macrophyte beds as these can trap fish as the collapse during the drawdown.

Pest fish such as redfin or carp should not be returned to a nearby water body where practical. Pest fish must be killed humanely and disposed of appropriately. Guidance on the euthanasia method used can be obtained from http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0008/134387/Resource-ACEC-Guide-Report.pdf.

If a fish kill happens during the dewatering (due to drop in water quality) or during the relocation please retain the carcass of Murray cod and golden perch for further investigation.

What to do with the water

Water in a water body may contain new aquatic pest species or their eggs. For this reason in most situations water should not be discharged into another water body as it may allow new pest species to spread. Water from an independent water body (i.e. separate pond or dam) should be treated or released onto a dry field, for example, where is unlikely to flow into another water body. You should get advice from the Environment and Dangerous Substances Licensing Unit to determine whether you require a Licence to Take Water. Please contact them via Access Canberra on 13 22 81.

What to do about sediment

Ensure that a sediment and erosion control plan approved by the Environment Protection Authority is in place.

Contact and further information

If you have any questions, or for more information, please contact Conservation and Research via Access Canberra on 13 22 81.