



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX F – PRELIMINARY ELECTRICITY SERVICING LAYOUT PLAN 23

APPENDIX G – PRELIMINARY TELECOMMUNICATIONS SERVICING LAYOUT PLAN ... 24

APPENDIX H – CONCEPT EROSION AND SEDIMENT CONTROL PLANS 25



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural

- It is expected that other service providers will also be consulted leading into the future phases of development.

Concept Erosion and Sediment Control Plans

- Northrop has prepared Concept Erosion and Sediment Control Plans with reference to the NSW Department of Housing 'Managing Urban Stormwater – Soils and Construction' ('Blue Book'). This is in direct response to the Director-General's Requirements. Refer to Appendix H.



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

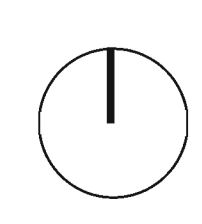
APPENDIX A – SITE MASTER PLAN



Land uses:

Residential	
Hillside residential/large lots	
Landscape improvements	
Employment - neighbourhood centre	
Employment - enterprise/business	
Employment - industry/business	
Retirement living (possible use)	
Primary school (possible use)	
Tourism	

TRUenergy - Tallawarra lands

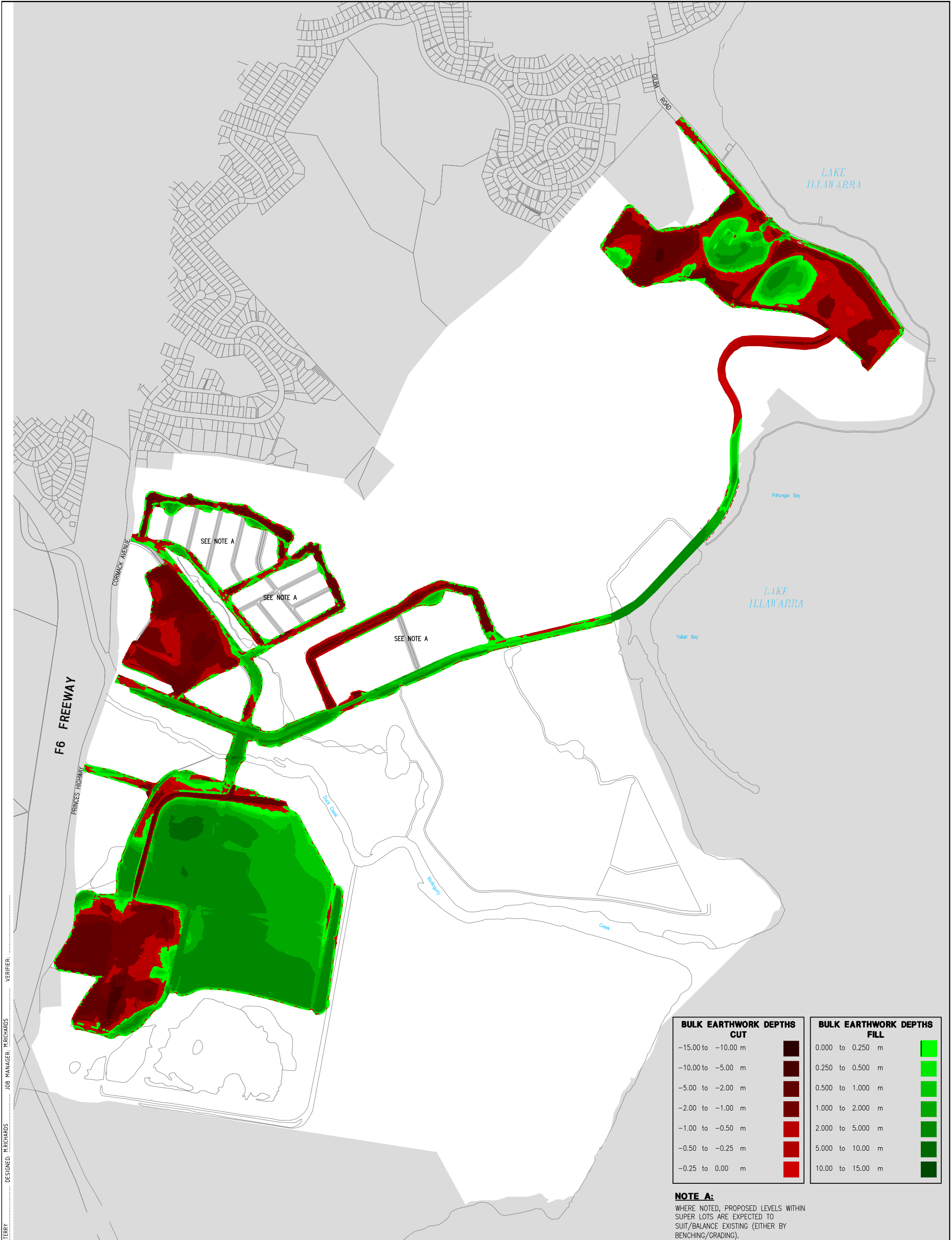


concept plan
December 2010



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX B – PRELIMINARY SITE EARTHWORKS PLAN

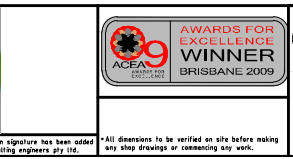
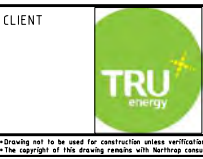


BULK EARTHWORK DEPTHS CUT		BULK EARTHWORK DEPTHS FILL	
-15.00 to -10.00 m		0.000 to 0.250 m	
-10.00 to -5.00 m		0.250 to 0.500 m	
-5.00 to -2.00 m		0.500 to 1.000 m	
-2.00 to -1.00 m		1.000 to 2.000 m	
-1.00 to -0.50 m		2.000 to 5.000 m	
-0.50 to -0.25 m		5.000 to 10.00 m	
-0.25 to 0.00 m		10.000 to 15.000 m	

NOTE A:
WHERE NOTED, PROPOSED LEVELS WITHIN SUPER LOTS ARE EXPECTED TO SUIT/BALANCE EXISTING (EITHER BY BENCHING/GRADING).

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R	22.12.10	



NORTHROP
Bringing people, ideas & engineering together
Sydney

The Grallon Bond Store
69 Hickson Road,
Sydney, N.S.W. 2000

Ph (02) 9241 4188 P.O. Box H171
Fax (02) 9241 4324 Australia Square, N.S.W. 1215
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE
PRELIMINARY BULK EARTHWORKS PLAN

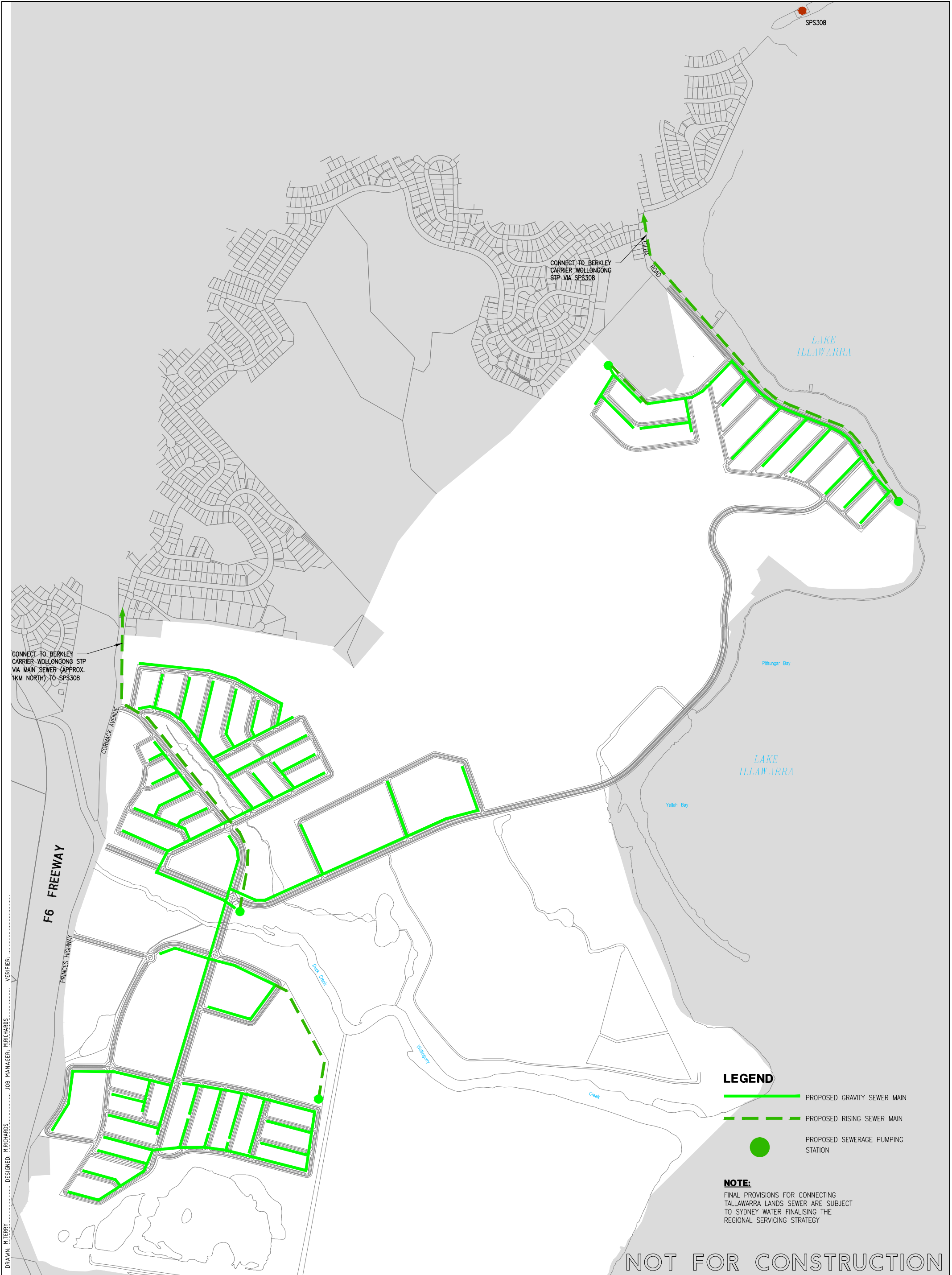
JOB NUMBER 10359	REVISION
DRAWING NUMBER 3A-BE1	2
DRAWING SHEET SIZE = A1	

DRAWN: M. TERRY
 DESIGNED: M. RICHARDS
 JOB MANAGER: M. RICHARDS
 VERIFIER:



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX C – PRELIMINARY SEWER SERVICING LAYOUT PLAN



LEGEND

- PROPOSED GRAVITY SEWER MAIN
- - - - - PROPOSED RISING SEWER MAIN
- PROPOSED SEWERAGE PUMPING STATION

NOTE:
 FINAL PROVISIONS FOR CONNECTING TALLAWARRA LANDS SEWER ARE SUBJECT TO SYDNEY WATER FINALISING THE REGIONAL SERVICING STRATEGY

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	



NORTHROP
 Bringing people, ideas & engineering together
 Sydney

The Grallon Bond Store
 69 Hickson Road,
 Sydney, N.S.W. 2000

Ph (02) 9241 4188 P.O. Box H171
 Fax (02) 9241 4324 Australia Square, N.S.W. 1215
 Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
TALLAWARRA LANDS, YALLAH
PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE
PRELIMINARY SEWER SERVICING SCHEME

JOB NUMBER
10359

DRAWING NUMBER	REVISION
3A-S1	2

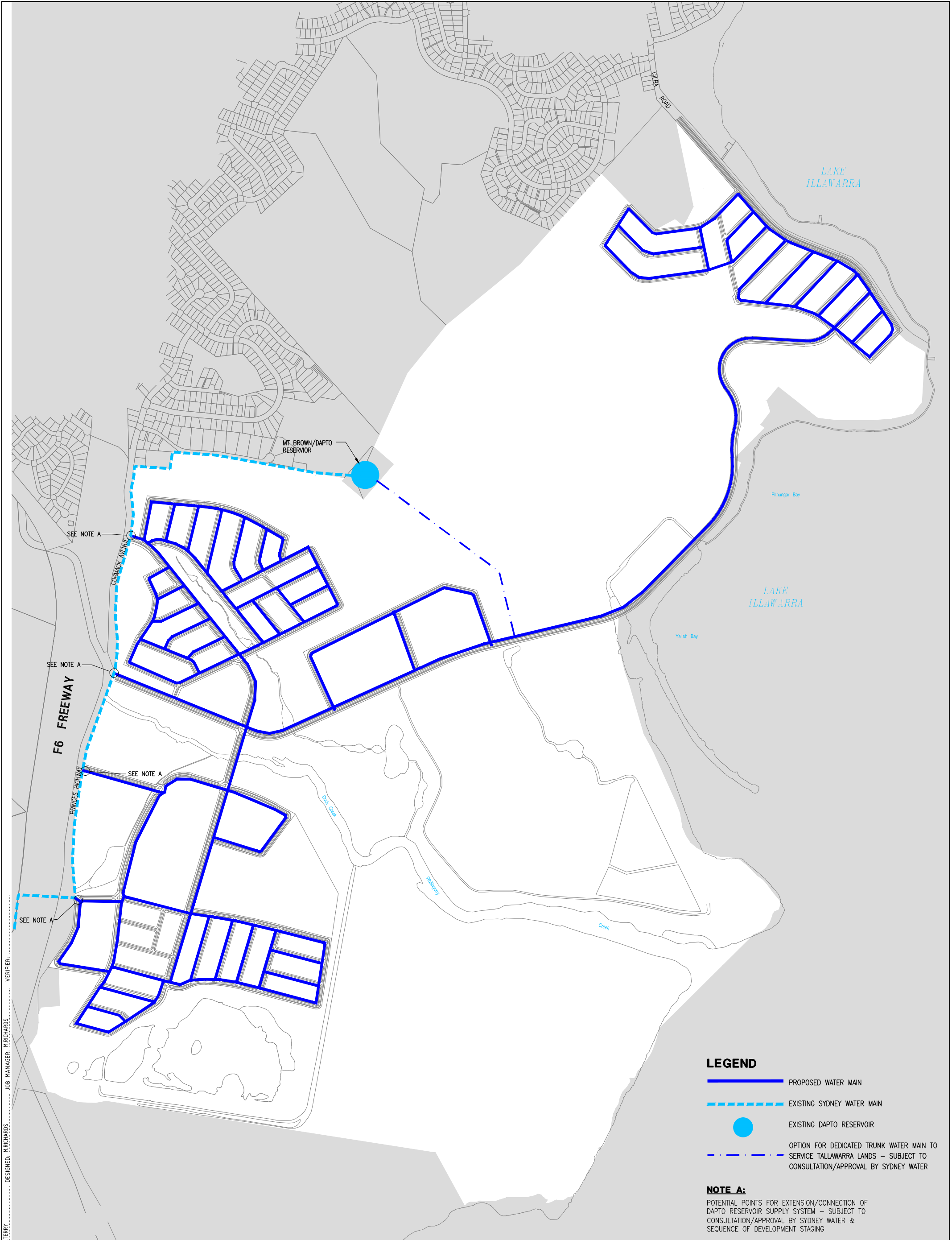
DRAWING SHEET SIZE = A1

DRAWN: M TERRY
 DESIGNED: M RICHARDS
 JOB MANAGER: M RICHARDS
 VERIFIER:



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX D – PRELIMINARY WATER SERVICING LAYOUT PLAN



LEGEND

- PROPOSED WATER MAIN
- - - - - EXISTING SYDNEY WATER MAIN
- EXISTING DAPTO RESERVOIR
- · - · - OPTION FOR DEDICATED TRUNK WATER MAIN TO SERVICE TALLAWARRA LANDS – SUBJECT TO CONSULTATION/APPROVAL BY SYDNEY WATER

NOTE A:

POTENTIAL POINTS FOR EXTENSION/CONNECTION OF DAPTO RESERVOIR SUPPLY SYSTEM – SUBJECT TO CONSULTATION/APPROVAL BY SYDNEY WATER & SEQUENCE OF DEVELOPMENT STAGING

DRAWN: M. TERRY
 DESIGNED: M. RICHARDS
 JOB MANAGER: M. RICHARDS
 VERIFIER:

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	



NORTHROP

Bringing people, ideas & engineering together
Sydney

The Grallon Bond Store Ph (02) 9241 4188 P.O. Box H171
 69 Hickson Road, Fax (02) 9241 4324 Australde Square, N.S.W. 1215
 Sydney, N.S.W. 2000 Email: sydney@northrop.com.au ABN 81 094 433 100

PROJECT
TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE
PRELIMINARY WATER SERVICING SCHEME

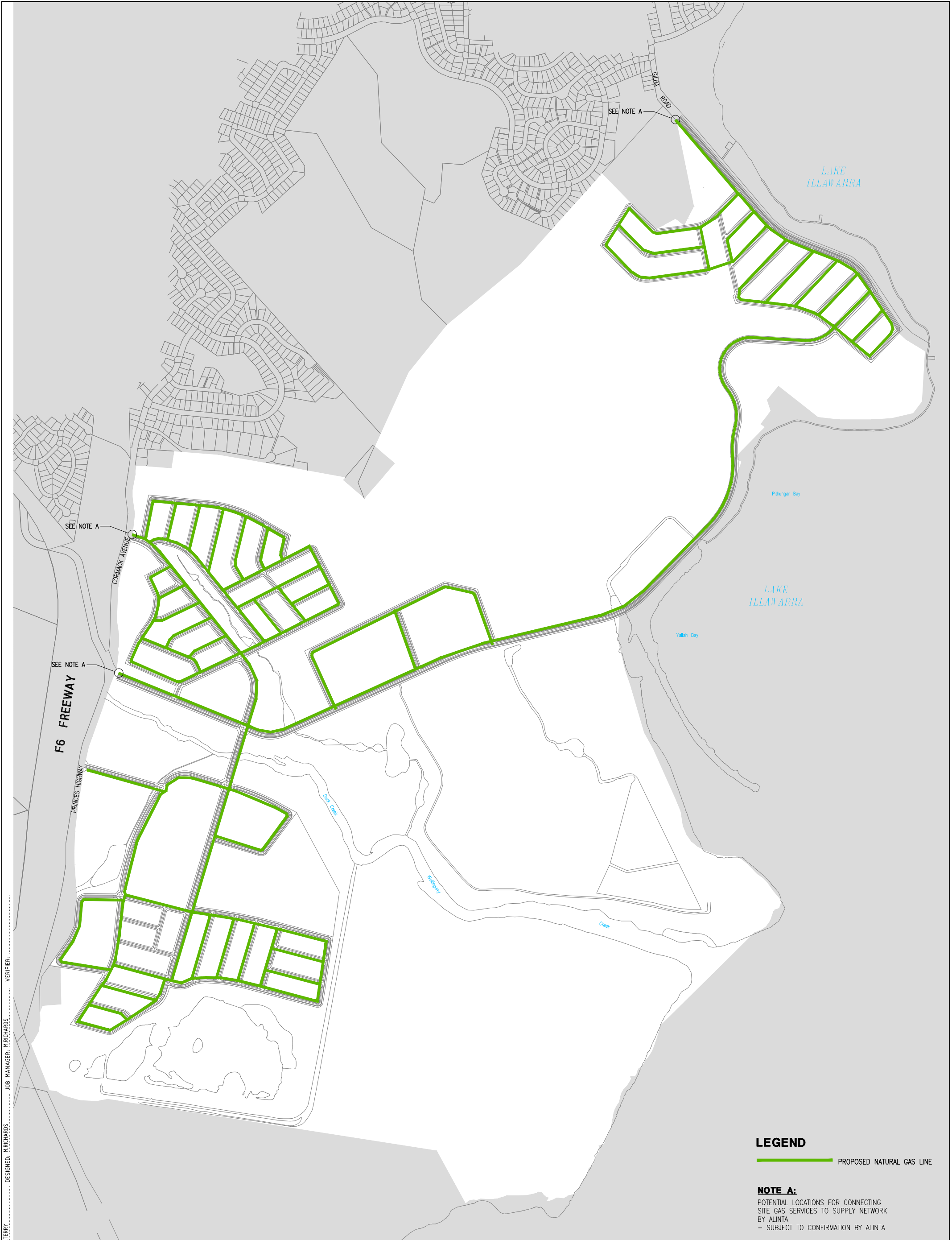
JOB NUMBER	10359	
DRAWING NUMBER	3A-W1	REVISION
		2
DRAWING SHEET SIZE = A1		

*Drawing not to be used for construction unless verification signature has been added.
 The copyright of this drawing remains with Northrop consulting engineers Pty Ltd.
 *All dimensions to be verified on site before making any site drawings or commencing any work.



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX E – PRELIMINARY NATURAL GAS SERVICING LAYOUT PLAN



LEGEND

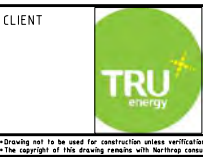
PROPOSED NATURAL GAS LINE

NOTE A:

POTENTIAL LOCATIONS FOR CONNECTING SITE GAS SERVICES TO SUPPLY NETWORK BY ALINTA
 - SUBJECT TO CONFIRMATION BY ALINTA

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R	22.12.10	



NORTHROP

Bringing people, ideas & engineering together
Sydney

The Grallon Bond Store
69 Hickson Road,
Sydney, N.S.W. 2000

Ph (02) 9241 4188 P.O. Box H171
Fax (02) 9241 4324 Australia Square, N.S.W. 1215
Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
**TALLAWARRA
 LANDS, YALLAH
 PROPOSED MIXED-USE
 LAND DEVELOPMENT**

DRAWING TITLE
**PRELIMINARY NATURAL GAS
 SERVICING SCHEME**

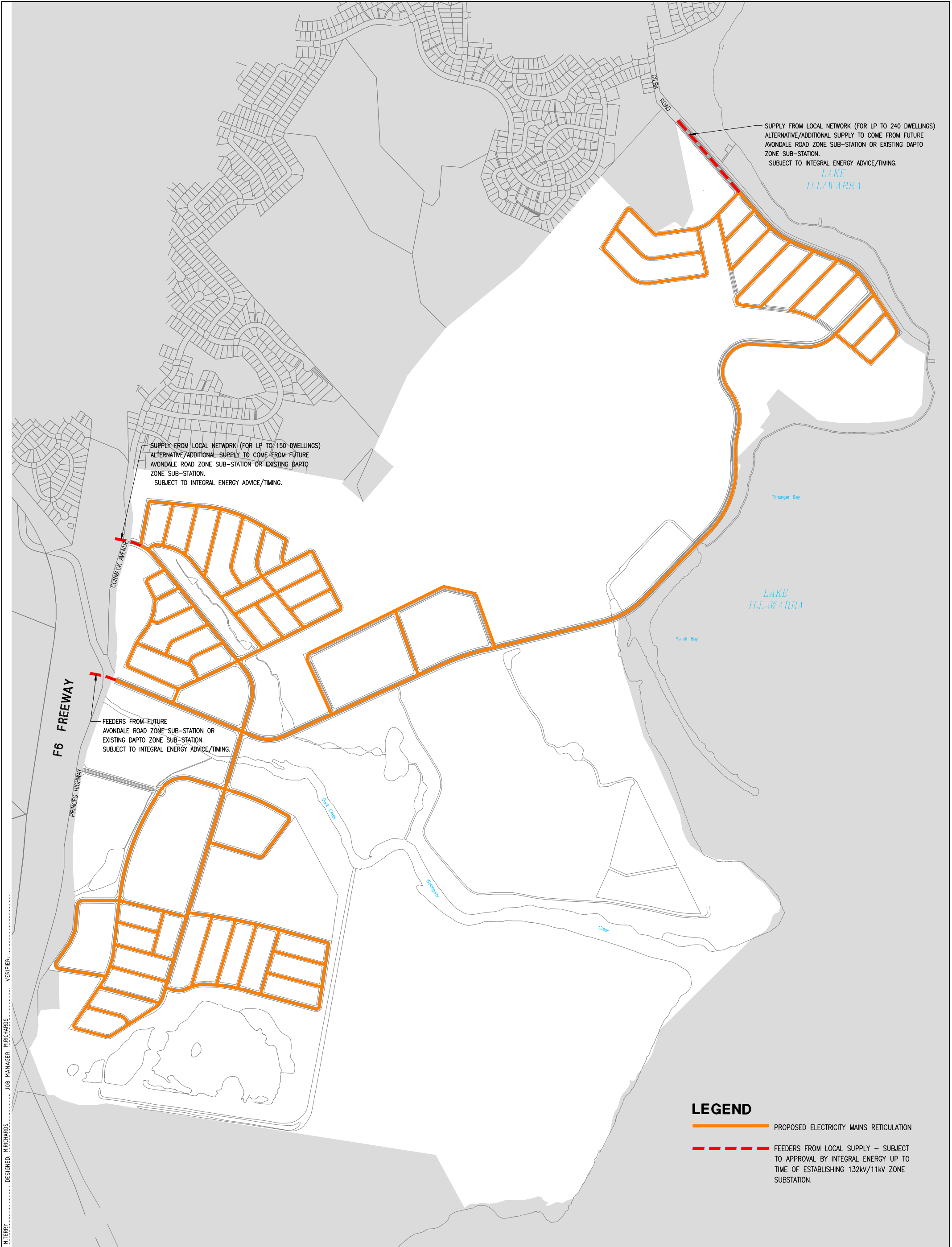
JOB NUMBER 10359	DRAWING NUMBER 3A-G1	REVISION 2
DRAWING SHEET SIZE = A1		

DRAWN: M TERRY
 DESIGNED: M RICHARDS
 JOB MANAGER: M RICHARDS
 VERIFIER:



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic


APPENDIX F – PRELIMINARY ELECTRICITY SERVICING LAYOUT PLAN

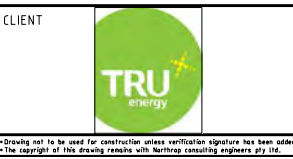


LEGEND

- PROPOSED ELECTRICITY MAINS RETICULATION
- - - - - FEEDERS FROM LOCAL SUPPLY – SUBJECT TO APPROVAL BY INTEGRAL ENERGY UP TO TIME OF ESTABLISHING 132kV/11kV ZONE SUBSTATION.

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R	22.12.10	



NORTHROP

Bringing people, ideas & engineering together
Sydney

The Grattan Bond Store Ph (02) 9241 4188 P.O. Box H171
69 Hickson Road, Fax (02) 9241 4324 Australis Square, N.S.W. 1215
Sydney, N.S.W. 2000 Email: sydney@northrop.com.au ABN 81 094 433 100

PROJECT

TALLAWARRA
LANDS, YALLAH
PROPOSED MIXED-USE
LAND DEVELOPMENT

DRAWING TITLE

PRELIMINARY ELECTRICITY
SERVICING SCHEME

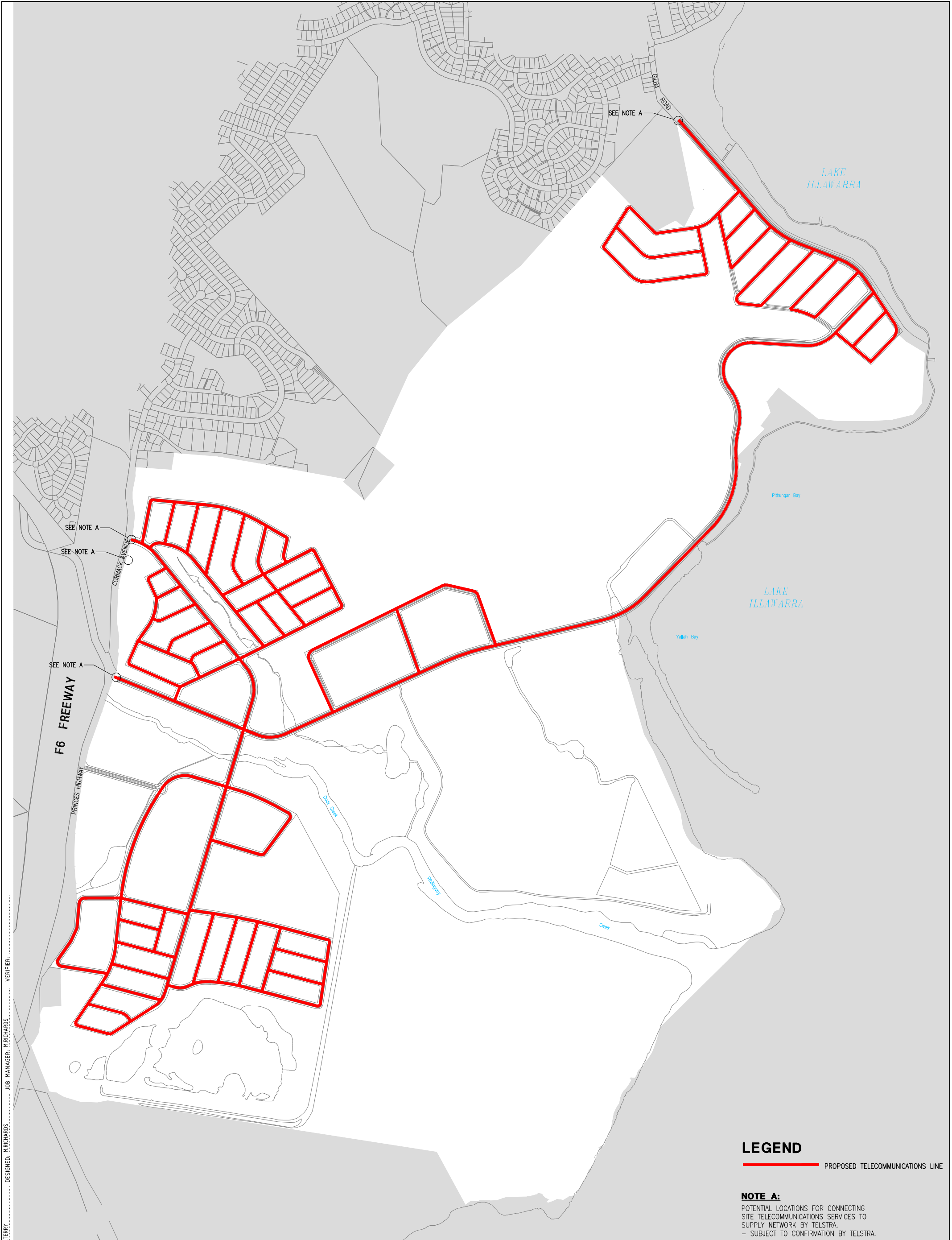
JOB NUMBER	10359	
DRAWING NUMBER	REVISION	
3A-E1	2	
DRAWING SHEET SIZE = A1		

*Drawing not to be used for construction unless verification signature has been added. The copyright of this drawing remains with Northrop consulting engineers Pty Ltd. *All dimensions to be verified on site before making any site drawings or commencing any work.



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

APPENDIX G – PRELIMINARY TELECOMMUNICATIONS SERVICING LAYOUT PLAN



LEGEND

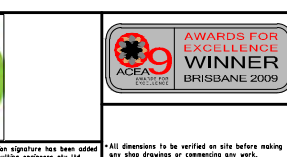
PROPOSED TELECOMMUNICATIONS LINE

NOTE A:

POTENTIAL LOCATIONS FOR CONNECTING SITE TELECOMMUNICATIONS SERVICES TO SUPPLY NETWORK BY TELSTRA. - SUBJECT TO CONFIRMATION BY TELSTRA.

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R	22.12.10	



NORTHROP
 Bringing people, ideas & engineering together
 Sydney

The Grallon Bond Store
 69 Hickson Road,
 Sydney, N.S.W. 2000

Ph (02) 9241 4188 P.O. Box H171
 Fax (02) 9241 4324 Australia Square, N.S.W. 1215
 Email sydney@northrop.com.au ABN 81 094 433 100

PROJECT
TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE
PRELIMINARY TELECOMMUNICATIONS SERVICING SCHEME

JOB NUMBER
10359

DRAWING NUMBER	REVISION
3A-T1	2

DRAWING SHEET SIZE = A1

DRAWN: M. TERRY
 DESIGNED: M. RICHARDS
 JOB MANAGER: M. RICHARDS
 VERIFIER:



Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural
Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental
Structural Mechanical Structural Electrical Environmental Civil Hydraulic Mechanical Structural Electrical Environmental Civil Hydraulic

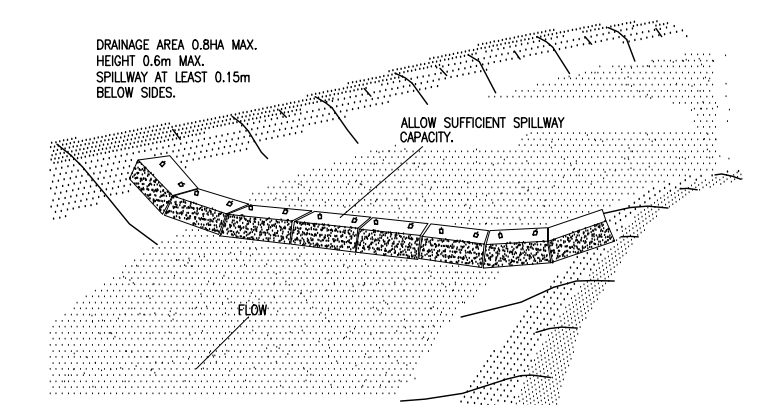
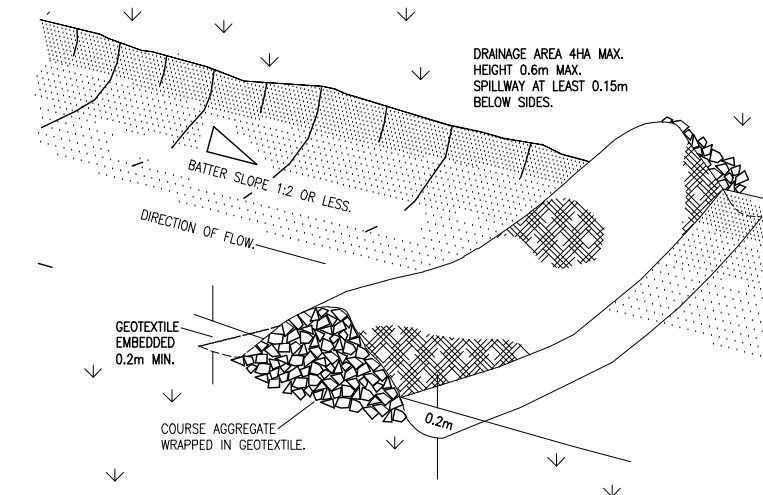
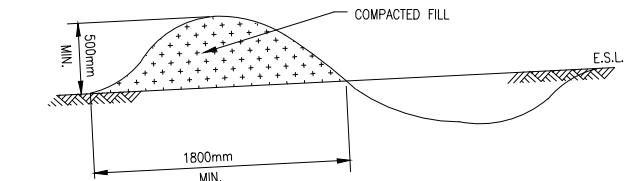
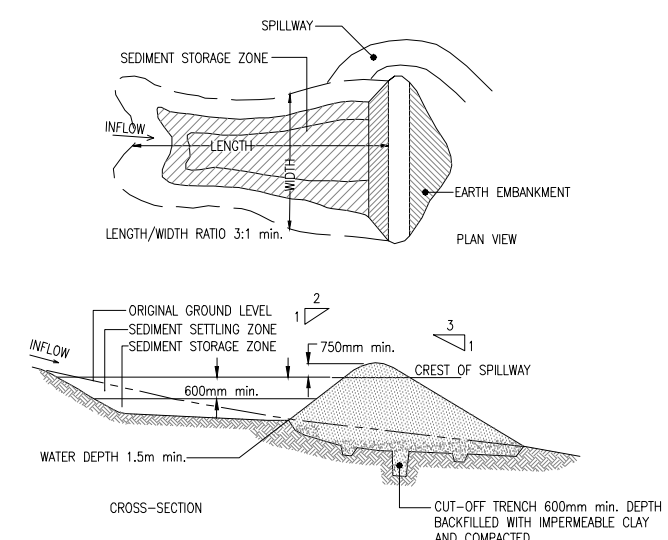
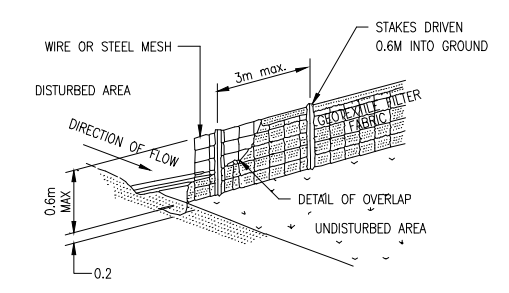
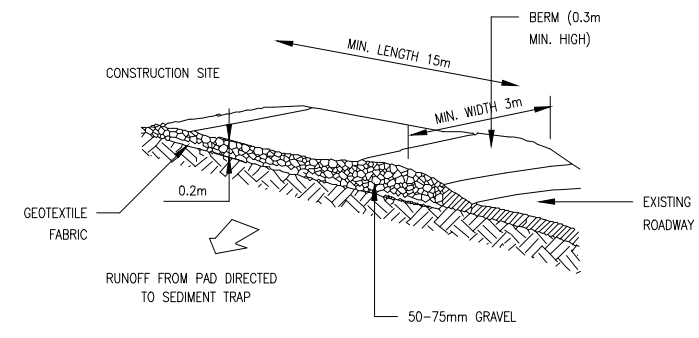
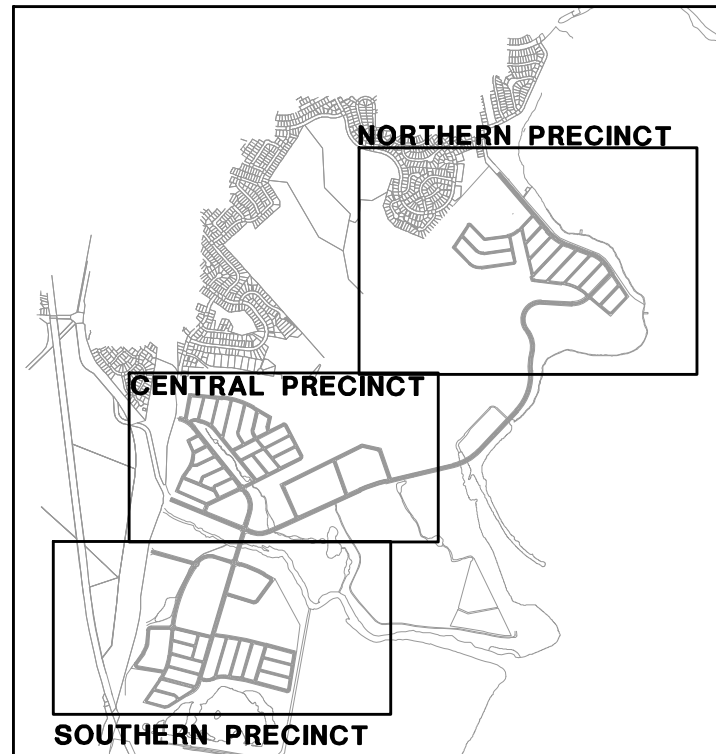
APPENDIX H – CONCEPT EROSION AND SEDIMENT CONTROL PLANS

TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

PART 3A CONCEPT PLAN: CONCEPT EROSION & SEDIMENT CONTROL PLANS

SEDIMENT & EROSION

- THE CONTRACTOR SHALL INSTIGATE ALL SEDIMENT AND EROSION CONTROL MEASURES IN ACCORDANCE WITH STATUTORY REQUIREMENTS AND IN PARTICULAR THE "BLUE BOOK" (MANAGING URBAN STORMWATER SOILS AND CONSTRUCTION, PRODUCED BY THE DEPARTMENT OF HOUSING). THESE MEASURES ARE TO BE REGULARLY INSPECTED AND MAINTAINED.
- THE SITE SUPERINTENDENT SHALL ENSURE THAT ALL SOIL AND WATER MANAGEMENT WORKS ARE LOCATED AS INSTRUCTED IN THE FINAL APPROVED DRAWINGS.
- ALL CONTRACTORS ARE TO BE INFORMED OF THEIR RESPONSIBILITIES IN MINIMISING THE POTENTIAL FOR SOIL EROSION AND POLLUTION TO DOWNSLOPE LANDS AND WATERWAYS.
- THESE SEDIMENT & EROSION CONTROL PLAN PRESENTS CONCEPTS ONLY, THE CONTRACTOR SHALL AT ALL TIMES BE RESPONSIBLE FOR THE ESTABLISHMENT & MANAGEMENT OF A DETAILED SCHEME MEETING COUNCIL'S DESIGN, AND ALL OTHER REGULATORY AUTHORITY REQUIREMENTS. PAY ALL FEES.
- WHERE PRACTICAL, THE SOIL EROSION HAZARD ON THE SITE SHALL BE KEPT AS LOW AS POSSIBLE. TO THIS END, WORKS SHOULD BE UNDERTAKEN IN THE FOLLOWING SEQUENCE:
 - INSTALL ALL TEMPORARY SEDIMENT FENCES AND BARRIER FENCES. WHERE FENCES ARE ADJACENT TO EACH OTHER THE SEDIMENT FENCE CAN BE INCORPORATED INTO THE BARRIER FENCE.
 - CONSTRUCT TEMPORARY STABILISED SITE ACCESS, INCLUDING SHAKEDOWN AND WASH PAD.
 - INSTALL SEDIMENT CONTROL MEASURES AS OUTLINED ON THE APPROVED PLANS.
- UNDERTAKE SITE DEVELOPMENT WORKS SO THAT LAND DISTURBANCE IS CONFINED TO AREAS OF MINIMUM WORKABLE SIZE.
- MAINTAIN AND MANAGE ENVIRONMENTAL PROTECTION MEASURES THROUGHOUT CONTRACT.
- AT ALL TIMES AND IN PARTICULAR DURING WINDY AND DRY WEATHER, LARGE, UNPROTECTED AREAS WILL BE KEPT MOIST (NOT WET) BY SPRINKLING WITH WATER TO KEEP DUST UNDER CONTROL.
- WATER SHALL BE PREVENTED FROM ENTERING THE PERMANENT DRAINAGE SYSTEM UNLESS THE CATCHMENT AREA HAS BEEN STABILISED AND/OR ANY LIKELY SEDIMENT HAS BEEN FILTERED OUT.
- TEMPORARY SOIL AND WATER MANAGEMENT STRUCTURES SHALL BE REMOVED ONLY AFTER THE LANDS THEY ARE PROTECTING ARE STABILISED / REHABILITATED.
- ALLOW FOR GRASS STABILISATION OF EXPOSED AREAS, OPEN CHANNELS AND ROCK BATTERS.
- ALLOW FOR THE ESTABLISHMENT OF ALL NECESSARY EROSION PROTECTION MEASURES.
- EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED TO ENSURE THAT THEY OPERATE EFFECTIVELY. REPAIRS AND/OR MAINTENANCE SHALL BE UNDERTAKEN REGULARLY AND AS REQUIRED, PARTICULARLY FOLLOWING STORM EVENTS.
- ACCEPTABLE RECEPTORS SHALL BE USED FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER.
- RECEPTORS FOR CONCRETE AND MORTAR SLURRIES, PAINTS, ACID WASHINGS, LIGHT-WEIGHT WASTE MATERIALS AND LITTER SHALL BE DISPOSED OF IN ACCORDANCE WITH REGULATORY AUTHORITY REQUIREMENTS. PAY ALL FEES AND PROVIDE EVIDENCE OF SAFE DISPOSAL.



NOT FOR CONSTRUCTION

DRAWN: M.TERRY, DESIGNED: M.RICHARDS, JOB MANAGER: M.RICHARDS, VERIFIER:

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	

ARCHITECT

AWARDS FOR EXCELLENCE WINNER BRISBANE 2009

NORTHROP
Bringing people, ideas & engineering together
Sydney

The Grafton Bond Store
60 Hickson Road,
Sydney, N.S.W. 2000

Ph (02) 9241 4188
Fax (02) 9241 4324
Email: sydney@northrop.com.au

P.O. Box H171
Australia Square, N.S.W. 1215
ABN 61 094 433 100

PROJECT

TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE

CONCEPT EROSION & SEDIMENT CONTROL, SPECIFICATION NOTES AND SAMPLE DETAILS

JOB NUMBER

10359

DRAWING NUMBER

3A-ES1

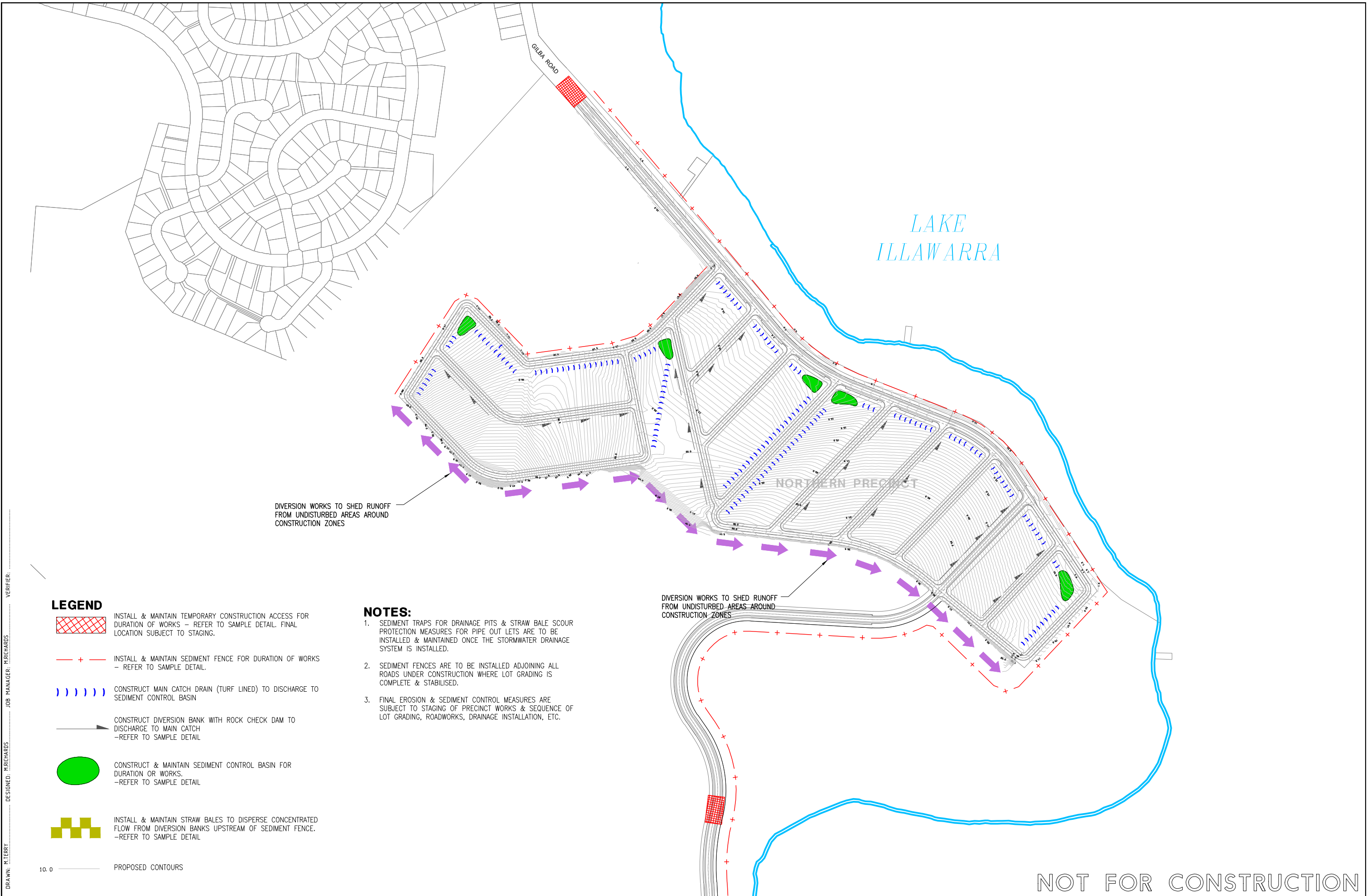
REVISION

2

DRAWING SHEET SIZE = A1

*Drawing not to be used for construction unless verification signature has been added
The copyright of this drawing remains with Northrop Consulting Engineers Pty Ltd.


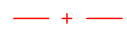





All dimensions to be verified on site before making any shop drawings or commencing any work.



DIVERSION WORKS TO SHED RUNOFF FROM UNDISTURBED AREAS AROUND CONSTRUCTION ZONES

DIVERSION WORKS TO SHED RUNOFF FROM UNDISTURBED AREAS AROUND CONSTRUCTION ZONES


LEGEND

-  INSTALL & MAINTAIN TEMPORARY CONSTRUCTION ACCESS FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL. FINAL LOCATION SUBJECT TO STAGING.
-  INSTALL & MAINTAIN SEDIMENT FENCE FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL.
-  CONSTRUCT MAIN CATCH DRAIN (TURF LINED) TO DISCHARGE TO SEDIMENT CONTROL BASIN
-  CONSTRUCT DIVERSION BANK WITH ROCK CHECK DAM TO DISCHARGE TO MAIN CATCH –REFER TO SAMPLE DETAIL
-  CONSTRUCT & MAINTAIN SEDIMENT CONTROL BASIN FOR DURATION OF WORKS. –REFER TO SAMPLE DETAIL
-  INSTALL & MAINTAIN STRAW BALES TO DISPERSE CONCENTRATED FLOW FROM DIVERSION BANKS UPSTREAM OF SEDIMENT FENCE. –REFER TO SAMPLE DETAIL
-  10.0 PROPOSED CONTOURS

NOTES:

1. SEDIMENT TRAPS FOR DRAINAGE PITS & STRAW BALE SCOUR PROTECTION MEASURES FOR PIPE OUT LETS ARE TO BE INSTALLED & MAINTAINED ONCE THE STORMWATER DRAINAGE SYSTEM IS INSTALLED.
2. SEDIMENT FENCES ARE TO BE INSTALLED ADJOINING ALL ROADS UNDER CONSTRUCTION WHERE LOT GRADING IS COMPLETE & STABILISED.
3. FINAL EROSION & SEDIMENT CONTROL MEASURES ARE SUBJECT TO STAGING OF PRECINCT WORKS & SEQUENCE OF LOT GRADING, ROADWORKS, DRAINAGE INSTALLATION, ETC.

NOT FOR CONSTRUCTION


ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	

ARCHITECT



*Drawing not to be used for construction unless verification signature has been added
*The copyright of this drawing remains with Northrop consulting engineers Pty Ltd

ARCHITECT

 AWARDS FOR EXCELLENCE WINNER BRISBANE 2009

 **NORTHROP**
Bringing people, ideas & engineering together
Sydney

The Grafton Bond Store
60 Hickson Road,
Sydney, N.S.W. 2000

Ph (02) 9241 4188
Fax (02) 9241 4324
Email: sydney@northrop.com.au

P.O. Box H171
Australia Square, N.S.W. 1215
ABN 61 094 433 100

PROJECT

TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE

CONCEPT EROSION & SEDIMENT CONTROL PLAN - NORTHERN PRECINCT

JOB NUMBER

10359

DRAWING NUMBER

3A-ES2

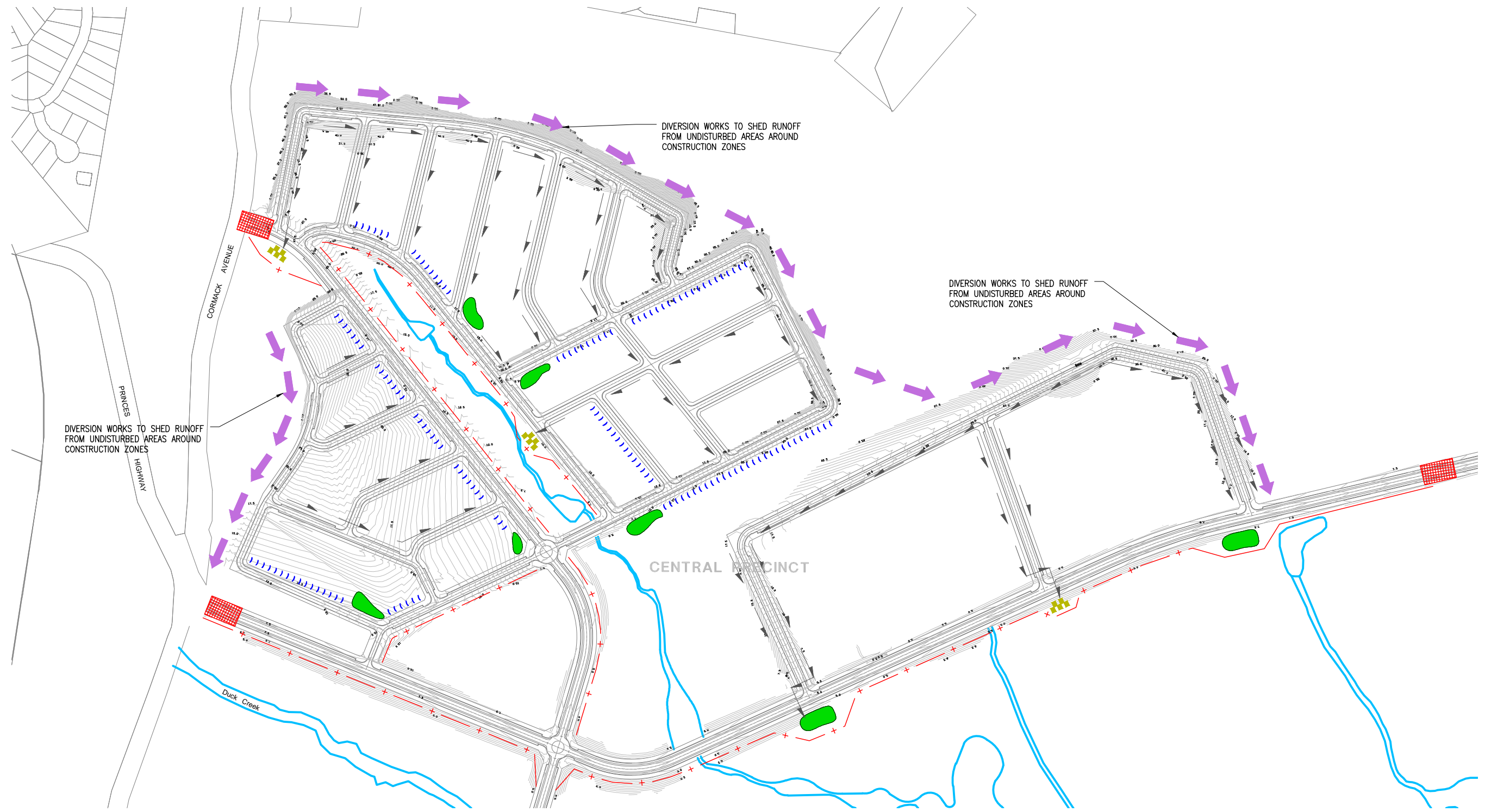
REVISION

2

DRAWING SHEET SIZE = A1

DRAWN: M.TERRY
DESIGNED: M.RICHARDS
JOB MANAGER: M.RICHARDS
VERIFIER:

DRAWN: M. TERRY; DESIGNED: M. RICHARDS; JOB MANAGER: M. RICHARDS; VERIFIER:



LEGEND

- INSTALL & MAINTAIN TEMPORARY CONSTRUCTION ACCESS FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL. FINAL LOCATION SUBJECT TO STAGING.
- INSTALL & MAINTAIN SEDIMENT FENCE FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL.
- CONSTRUCT MAIN CATCH DRAIN (TURF LINED) TO DISCHARGE TO SEDIMENT CONTROL BASIN
- CONSTRUCT DIVERSION BANK WITH ROCK CHECK DAM TO DISCHARGE TO MAIN CATCH –REFER TO SAMPLE DETAIL
- CONSTRUCT & MAINTAIN SEDIMENT CONTROL BASIN FOR DURATION OF WORKS. –REFER TO SAMPLE DETAIL
- INSTALL & MAINTAIN STRAW BALES TO DISPERSE CONCENTRATED FLOW FROM DIVERSION BANKS UPSTREAM OF SEDIMENT FENCE. –REFER TO SAMPLE DETAIL
- 10.0 PROPOSED CONTOURS

NOTES:

1. SEDIMENT TRAPS FOR DRAINAGE PITS & STRAW BALE SCOUR PROTECTION MEASURES FOR PIPE OUT LETS ARE TO BE INSTALLED & MAINTAINED ONCE THE STORMWATER DRAINAGE SYSTEM IS INSTALLED.
2. SEDIMENT FENCES ARE TO BE INSTALLED ADJOINING ALL ROADS UNDER CONSTRUCTION WHERE LOT GRADING IS COMPLETE & STABILISED.
3. FINAL EROSION & SEDIMENT CONTROL MEASURES ARE SUBJECT TO STAGING OF PRECINCT WORKS & SEQUENCE OF LOT GRADING, ROADWORKS, DRAINAGE INSTALLATION, ETC.

NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	

Drawing not to be used for construction unless verification signature has been added.
The copyright of this drawing remains with Northrop consulting engineers pty ltd.

ARCHITECT

AWARDS FOR EXCELLENCE WINNER
 BRISBANE 2009
 Bringing people, ideas & engineering together
 Sydney
 The Grafton Bond Store 60 Hickson Road, Sydney, N.S.W. 2000
 Ph (02) 9241 4188 Fax (02) 9241 4324
 P.O. Box H171 Australia Square, N.S.W. 1215
 Email: sydney@northrop.com.au ABN 61 094 433 100

NORTHROP
 Bringing people, ideas & engineering together
 Sydney

PROJECT
TALLAWARRA LANDS, YALLAH PROPOSED MIXED-USE LAND DEVELOPMENT

DRAWING TITLE
CONCEPT EROSION & SEDIMENT CONTROL PLAN CENTRAL PRECINCT

JOB NUMBER
10359
 DRAWING NUMBER
3A-ES3
 REVISION
2
 DRAWING SHEET SIZE = A1



DRAWN: M. TERRY
 DESIGNED: M. RICHARDS
 JOB MANAGER: M. RICHARDS
 VERIFIER: Verifier

LEGEND

- INSTALL & MAINTAIN TEMPORARY CONSTRUCTION ACCESS FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL. FINAL LOCATION SUBJECT TO STAGING.
- INSTALL & MAINTAIN SEDIMENT FENCE FOR DURATION OF WORKS – REFER TO SAMPLE DETAIL.
- CONSTRUCT MAIN CATCH DRAIN (TURF LINED) TO DISCHARGE TO SEDIMENT CONTROL BASIN
- CONSTRUCT DIVERSION BANK WITH ROCK CHECK DAM TO DISCHARGE TO MAIN CATCH –REFER TO SAMPLE DETAIL
- CONSTRUCT & MAINTAIN SEDIMENT CONTROL BASIN FOR DURATION OF WORKS. –REFER TO SAMPLE DETAIL
- INSTALL & MAINTAIN STRAW BALES TO DISPERSE CONCENTRATED FLOW FROM DIVERSION BANKS UPSTREAM OF SEDIMENT FENCE. –REFER TO SAMPLE DETAIL
- 10.0 PROPOSED CONTOURS

NOTES:

1. SEDIMENT TRAPS FOR DRAINAGE PITS & STRAW BALE SCOUR PROTECTION MEASURES FOR PIPE OUT LETS ARE TO BE INSTALLED & MAINTAINED ONCE THE STORMWATER DRAINAGE SYSTEM IS INSTALLED.
2. SEDIMENT FENCES ARE TO BE INSTALLED ADJOINING ALL ROADS UNDER CONSTRUCTION WHERE LOT GRADING IS COMPLETE & STABILISED.
3. FINAL EROSION & SEDIMENT CONTROL MEASURES ARE SUBJECT TO STAGING OF PRECINCT WORKS & SEQUENCE OF LOT GRADING, ROADWORKS, DRAINAGE INSTALLATION, ETC.

NOT
NOT FOR CONSTRUCTION

ISSUE	AMENDMENT	VERIFIED	APPROVED	DATE	CLIENT
1	ISSUED FOR PART 3A SUBMISSION		M.R.	07.10.10	
2	RE-ISSUED FOR PART 3A SUBMISSION		M.R.	22.12.10	

Drawing not to be used for construction unless verification signature has been added.
 The copyright of this drawing remains with Northrop consulting engineers pty ltd.

ARCHITECT

AWARDS FOR EXCELLENCE WINNER
 BRISBANE 2009

0 25 50 75 100 125m SCALE 1:2500 @ A1
 0 25 50 75 100 125m SCALE 1:5000 @ A3
All dimensions to be verified on site before making any stop drawings or commencing any work.

NORTHROP

Bringing people, ideas & engineering together
Sydney

The Grafton Bond Store
 60 Hickson Road,
 Sydney, N.S.W. 2000

Ph (02) 9241 4188
 Fax (02) 9241 4324
 Email sydney@northrop.com.au

P.O. Box H171
 Australia Square, N.S.W. 1215
 ABN 61 094 433 100

PROJECT

**TALLAWARRA
 LANDS, YALLAH
 PROPOSED MIXED-USE
 LAND DEVELOPMENT**

DRAWING TITLE

**CONCEPT EROSION &
 SEDIMENT CONTROL PLAN
 SOUTHERN PRECINCT**

JOB NUMBER

10359

DRAWING NUMBER	REVISION
3A-ES4	2

DRAWING SHEET SIZE = A1