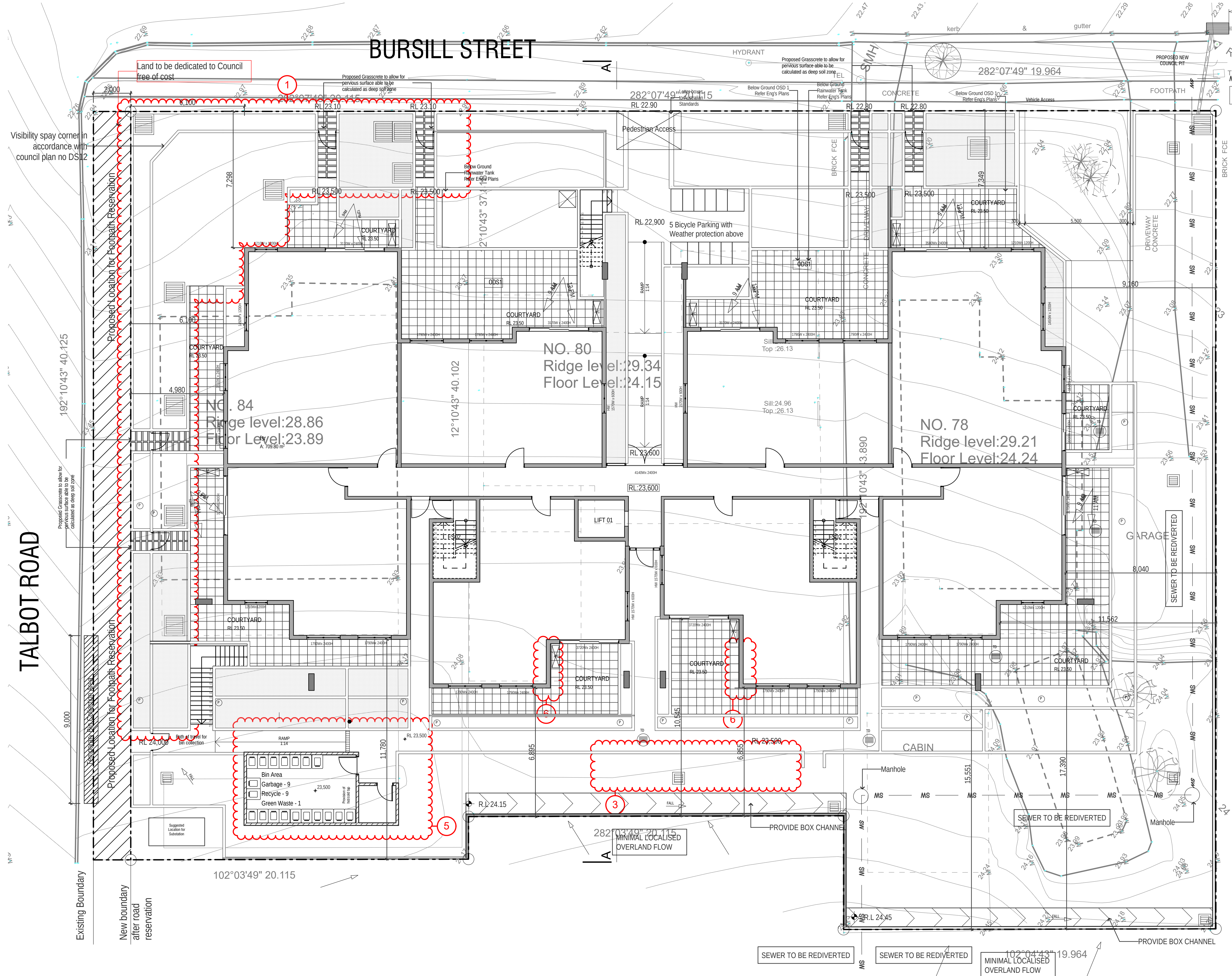

AMENDMENTS:

BASEMENT:

1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:

5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:

7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

SECOND; THIRD:

8. - CONSOLIDATE WINDOWS INTO ONE WINDOW;

BASIX Commitments

Water Commitments

Fixtures

- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater

Must install gas instantenous 5 star system for each unit

Cooling/Heating System

Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.

Ventilation

Must install exhaust systems in: Bathrooms, for all units: individual fan, ducted to facade or roof; Operation control: Manual switch on/off. Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23, 24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/

Other

Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.

Lighting

Must provide dedicated artificiatl lighting for kitchens, bathrooms, laundry and hallways for all units and 1 bedroom for units: 18,19,20,27,28. 2 bedrooms for units: 2,3,5,6,7,8,10,11,13,14,15,16,17,21,22,23,24,25,26,29,30,31,33. 3 bedrooms for units; 1,4,9,12.

Common Areas

Energy Commitments

Ventilation

Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.

Lighting

-Must install Lighting in; all carpark areas; Efficiency measure: Daylight sensor.

-Must install lighting in; All lobbies; Fluorescent; Efficiency measure; Manual on/timer off. Must install lighting in: Lift car: Fluorescent; Efficiency measure; Connected to lift call button.

Water Commitments

Fixtures

- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

Note:

Wall Construction

All External Walls Hebal Construction

All Internal Walls Platerboard on studs

Floor Construction

Floor Slabs in concreye

Roof Constrction

Metal Clad

MACKENZIE ARCHITECTS INTERNATIONAL
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Nominated Architect No.6033
ABN 76 091 107 201
ACN 091107201

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LEGEND

DO NOT SCALE DRAWINGS

VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

CLIENT:
PRIME CONSTRUCTION GROUP
PO Box 360, Ermington NSW 1700
M: 0404 222 333 | E: sam@primecg.com.au

REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T.	15/08/2018

PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Site Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.1	A

BURSILL STREET

Land to be dedicated to Council free of cost

Proposed Location for Footpath Reservation

BUILDING OVER

HYDRANT PUMP ROOM

COMMS

MSR

FS04

FS03

SHARED ZONE

SMALL CAR SPACE

LIFT 01

Ramp 20.5%

Ramp 12.5%

SEWER TO BE REDIVERTED

Manhole

Existing Boundary

New boundary after road reservation

AMENDMENTS:
BASEMENT:
1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;
5. - SMALL CAR SPACE REPLACED WITH STANDARD DIMENSION CAR SPACE; STRUCTURAL COLUMNS IN SHARED ZONES NOW CYLINDRICAL TO ALLOW ACCESS UNLOADING;

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LEGEND
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CLIENT:
PRIME CONSTRUCTION GROUP
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REV.	DETAILS	INT	DATE
B	Basement amendments due to Council's R.F.I.	J.T.	12/12/2018
A	Section 4.56 Modification Application	J.T.	15/08/2018

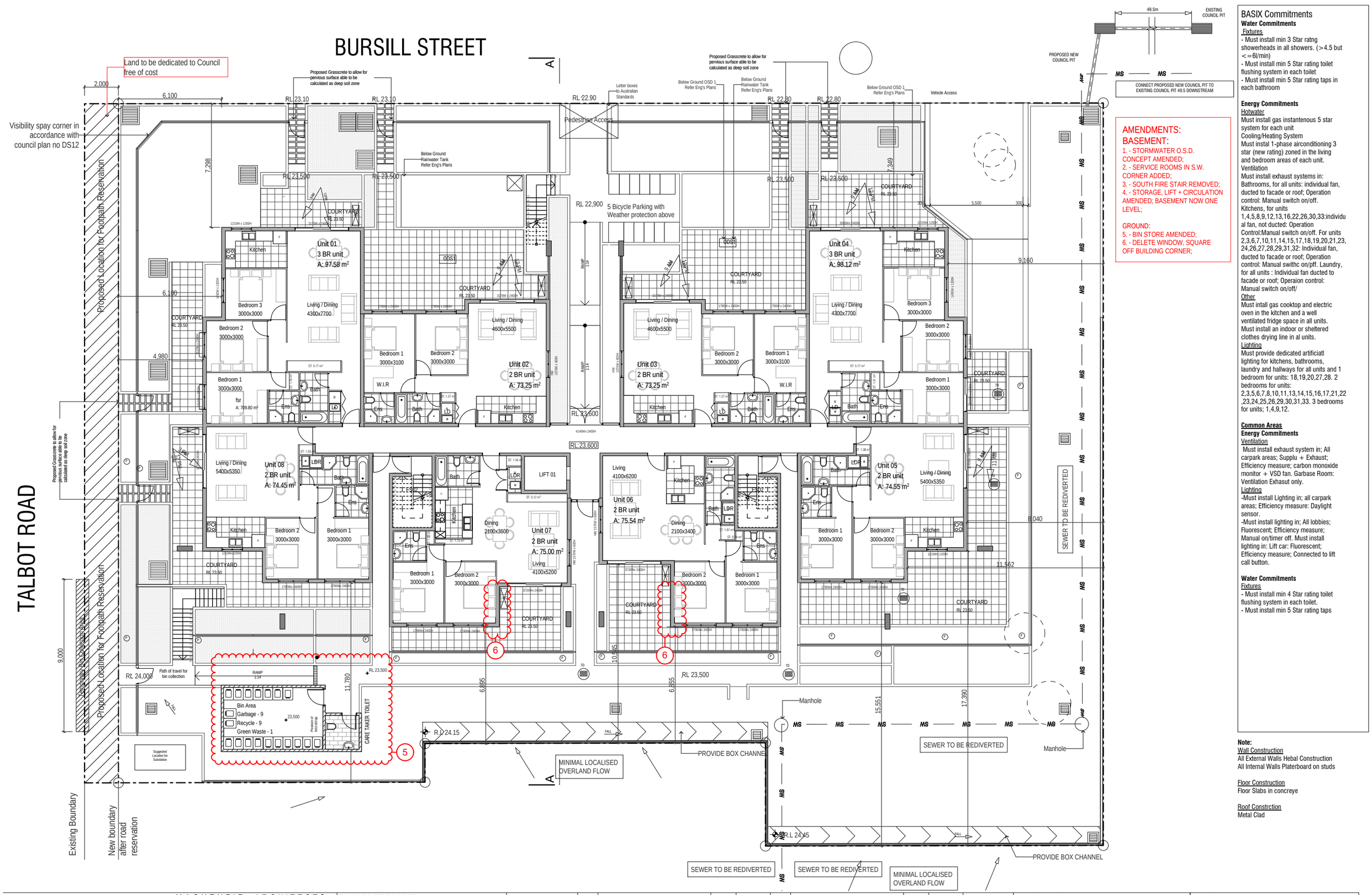
PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St, Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Basement Floor Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.2	B



BASIX Commitments

Water Commitments

Fixtures

- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater

Must install gas instantenous 5 star system for each unit

Cooling/Heating System

Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.

Ventilation

Must install exhaust systems in: Bathrooms, for all units: individual fan, ducted to facade or roof; Operation control: Manual switch on/off. Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23, 24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/

Other

Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.

Lighting

Must provide dedicated artificiatl lighting for kitchens, bathrooms, laundry and hallways for all units and 1 bedroom for units: 18,19,20,27,28. 2 bedrooms for units: 2,3,5,6,7,8,10,11,13,14,15,16,17,21,22 ,23,24,25,26,29,30,31,33. 3 bedrooms for units; 1,4,9,12.

Common Areas

Energy Commitments

Ventilation

Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.

Lighting

-Must install Lighting in; all carpark areas; Efficiency measure: Daylight sensor.

-Must install lighting in; All lobbies; Fluorescent; Efficiency measure; Manual on/timer off. Must install lighting in: Lift car: Fluorescent; Efficiency measure; Connected to lift call button.

Water Commitments

Fixtures

- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

Note:

Wall Construction

All External Walls Hebal Construction

All Internal Walls Platerboard on studs

Floor Construction

Floor Slabs in concreye

Roof Constrction

Metal Clad

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LEGEND

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REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T. INT	15/08/2018 DATE

PROJECT NORTH

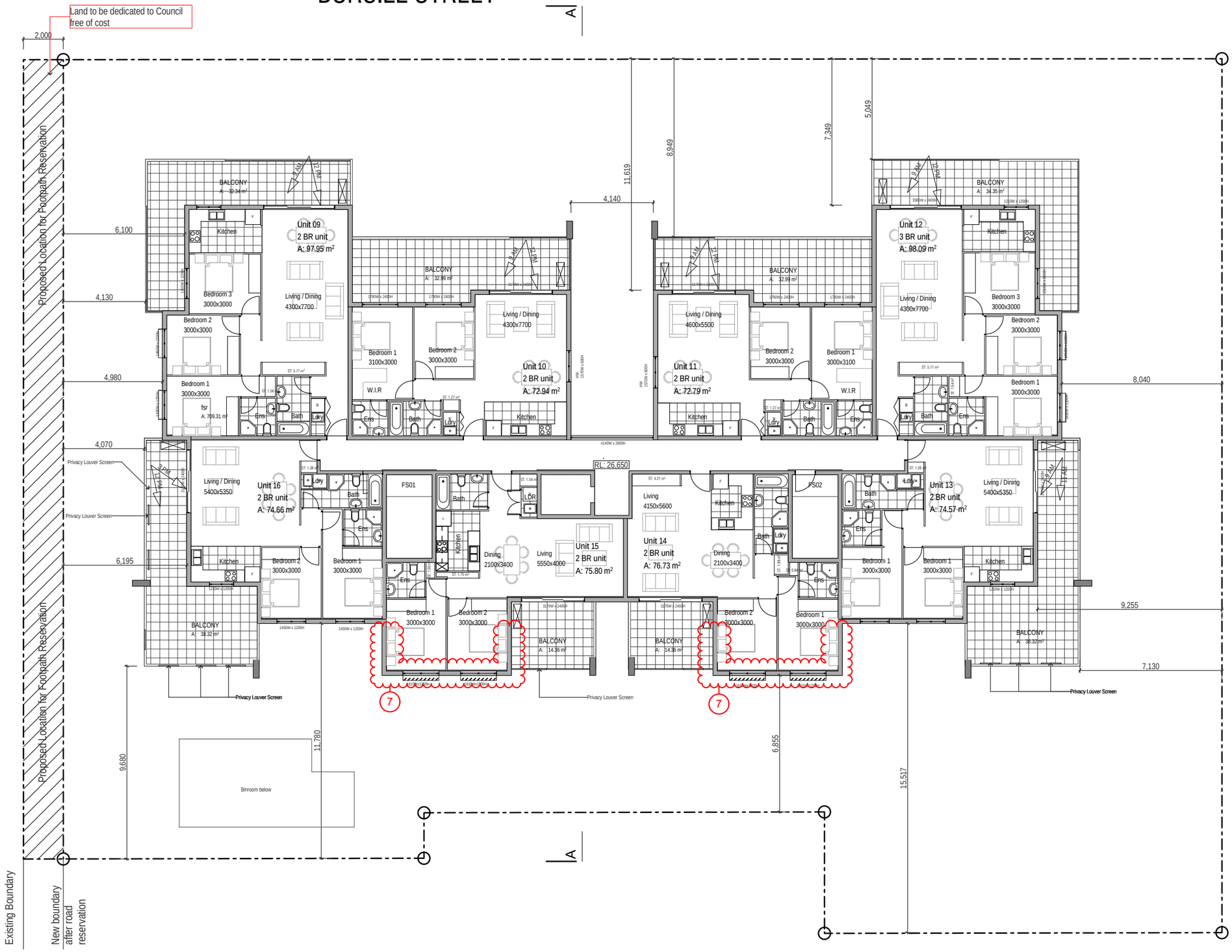
PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Ground Floor Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.3	A

BURSILL STREET



AMENDMENTS:
BASEMENT:
1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:
5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:
7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

BASIX Commitments

Water Commitments

Fixtures
- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater
Must install gas instantenous 5 star system for each unit
Cooling/Heating System
Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.
Ventilation
Must install exhaust systems in: Bathrooms, for all units: individual fan, ducted to facade or roof; Operation control: Manual switch on/off.
Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23, 24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/
Other
Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.
Lighting
Must provide dedicated artificiatl lighting for kitchens, bathrooms, laundry and hallways for all units and 1 bedroom for units: 18,19,20,27,28. 2 bedrooms for units: 2,3,5,6,7,8,10,11,13,14,15,16,17,21,22 ,23,24,25,26,29,30,31,33. 3 bedrooms for units; 1,4,9,12.

Common Areas

Energy Commitments

Ventilation
Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.
Lighting
-Must install Lighting in; all carpark areas; Efficiency measure: Daylight sensor.
-Must install lighting in; All lobbies; Fluorescent; Efficiency measure; Manual on/timer off. Must install lighting in: Lift car: Fluorescent; Efficiency measure; Connected to lift call button.

Water Commitments

Fixtures
- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

Note:

Wall Construction
All External Walls Hebal Construction
All Internal Walls Platerboard on studs

Floor Construction
Floor Slabs in concreye

Roof Constrction
Metal Clad

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ACN 091107201

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LEGEND
DO NOT SCALE DRAWINGS
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

CLIENT:
PRIME CONSTRUCTION GROUP
PO Box 360, Ermington NSW 1700
M: 0404 222 333 | E: sam@primecg.com.au

REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T.	15/08/2018

PROJECT NORTH

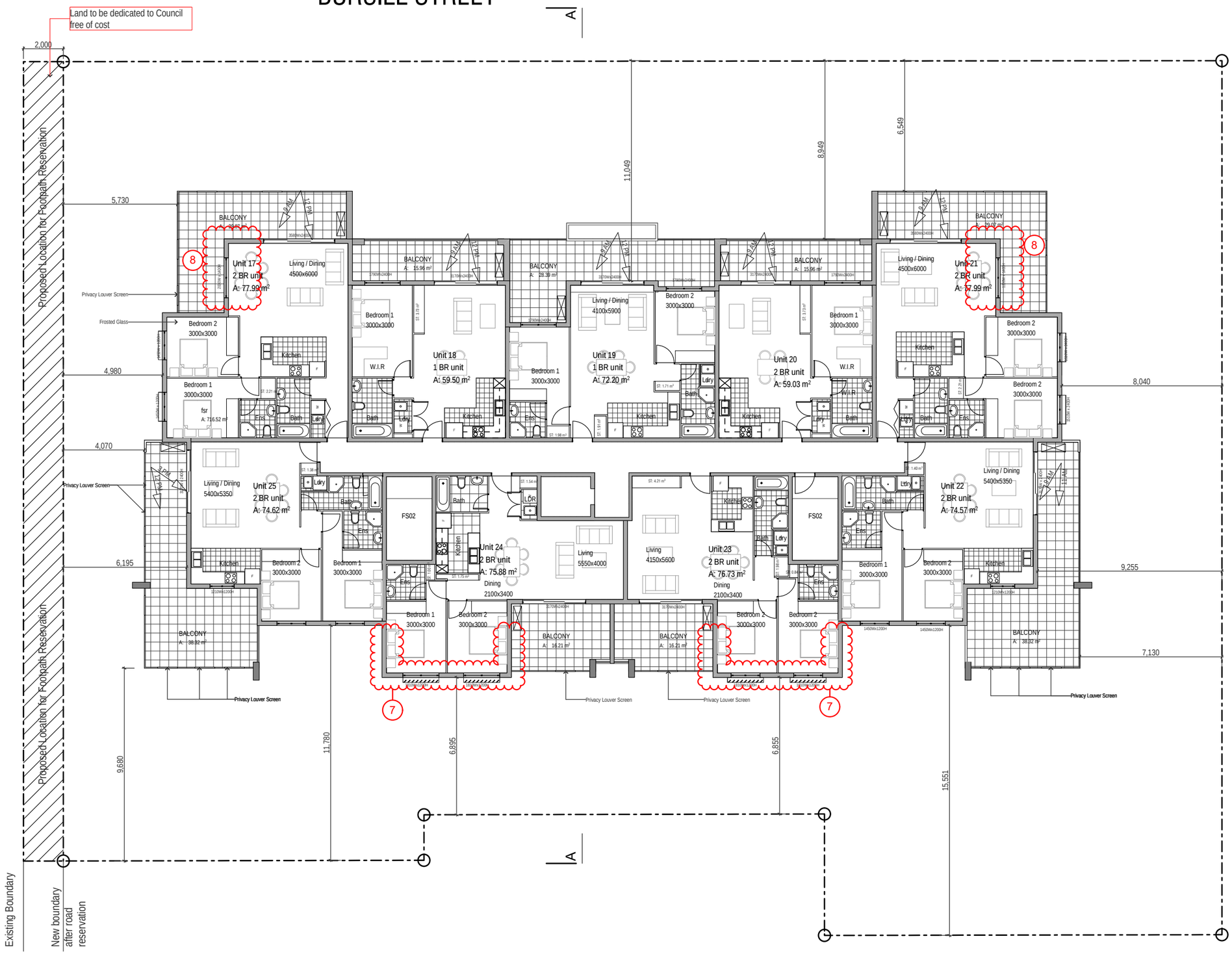
PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
First Floor Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.4	A

BURSILL STREET



AMENDMENTS: BASEMENT:

1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:

5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:

7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

SECOND; THIRD:

8. - CONSOLIDATE WINDOWS INTO ONE WINDOW;

BASIX Commitments

Water Commitments

Fixtures

- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater

Must install gas instantenous 5 star system for each unit

Cooling/Heating System

Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.

Ventilation

Must install exhaust systems in: Bathrooms, for all units: individual fan, ducted to facade or roof; Operation control: Manual switch on/off. Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23, 24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/

Other

Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.

Lighting

Must provide dedicated artificiatl lighting for kitchens, bathrooms, laundry and hallways for all units and 1 bedroom for units: 18,19,20,27,28. 2 bedrooms for units: 2,3,5,6,7,8,10,11,13,14,15,16,17,21,22 ,23,24,25,26,29,30,31,33. 3 bedrooms for units; 1,4,9,12.

Common Areas

Energy Commitments

Ventilation

Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.

Lighting

-Must install Lighting in; all carpark areas; Efficiency measure: Daylight sensor.

-Must install lighting in; All lobbies; Fluorescent; Efficiency measure; Manual on/timer off. Must install lighting in: Lift car: Fluorescent; Efficiency measure; Connected to lift call button.

Water Commitments

Fixtures

- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

Note:

Wall Construction

All External Walls Hebal Construction

All Internal Walls Platerboard on studs

Floor Construction

Floor Slabs in concreye

Roof Constrction

Metal Clad

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LEGEND
DO NOT SCALE DRAWINGS
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

CLIENT:
PRIME CONSTRUCTION GROUP
PO Box 360, Enmington NSW 2700
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REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T. INT	15/08/2018 DATE

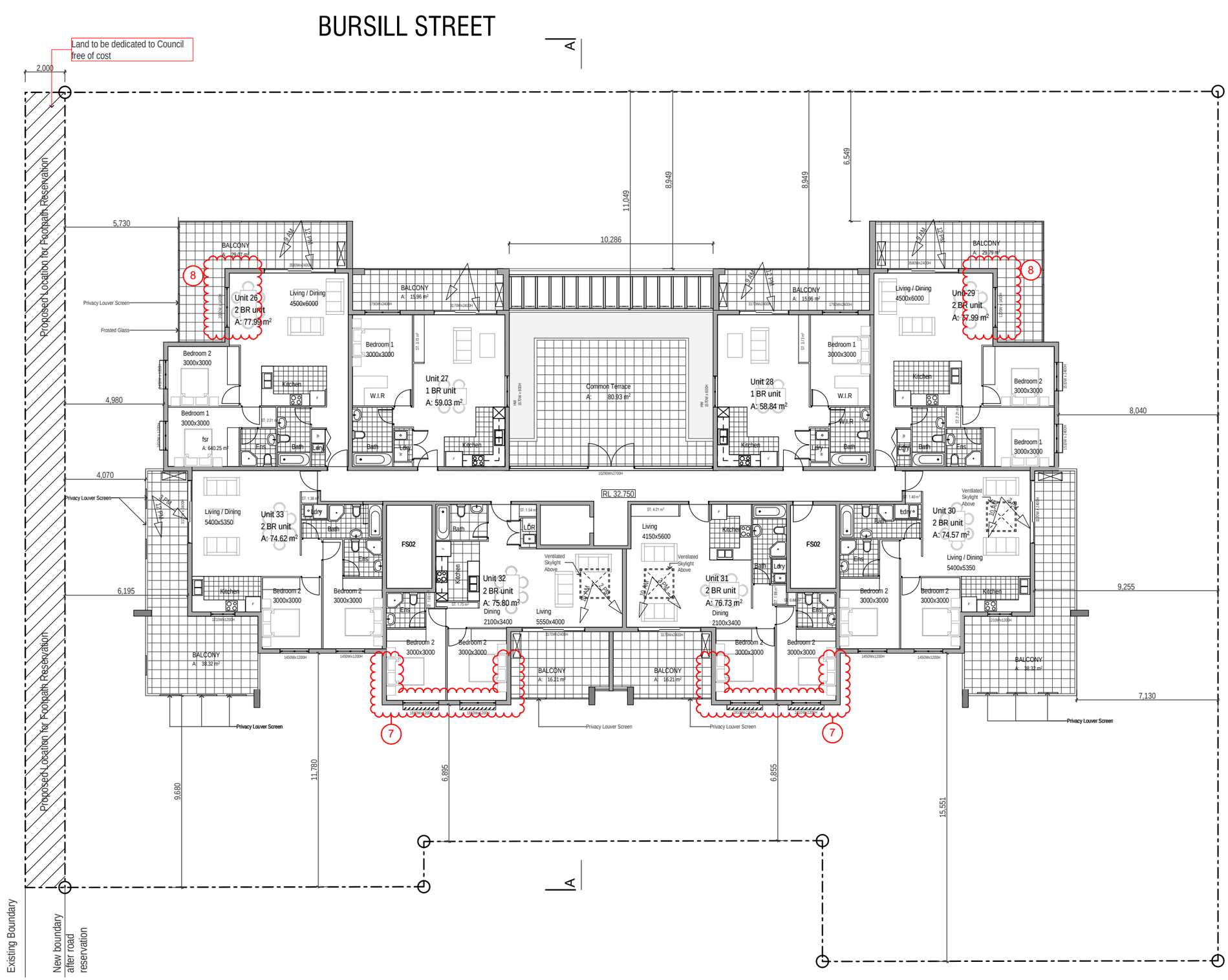
PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO. 17/14 | STATUS S.96 | DRAWN BY | CHECKED BY

DRAWING:
Second Floor Plan

SCALE: 1:100@A1, 1:200@A3
DRAWING NO.: A2.5
ISSUE: A



AMENDMENTS: BASEMENT:

1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:

5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:

7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

SECOND; THIRD:

8. - CONSOLIDATE WINDOWS INTO ONE WINDOW;

BASIX Commitments

Water Commitments

Fixtures

- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater

Must install gas instantenous 5 star system for each unit

Cooling/Heating System

Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.

Ventilation

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Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23, 24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/

Other

Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.

Lighting

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Common Areas

Energy Commitments

Ventilation

Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.

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Water Commitments

Fixtures

- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

Note:

Wall Construction

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All Internal Walls Platerboard on studs

Floor Construction

Floor Slabs in concreye

Roof Constrction

Metal Clad

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LEGEND
DO NOT SCALE DRAWINGS
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

CLIENT:
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REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T. INT	15/08/2018 DATE

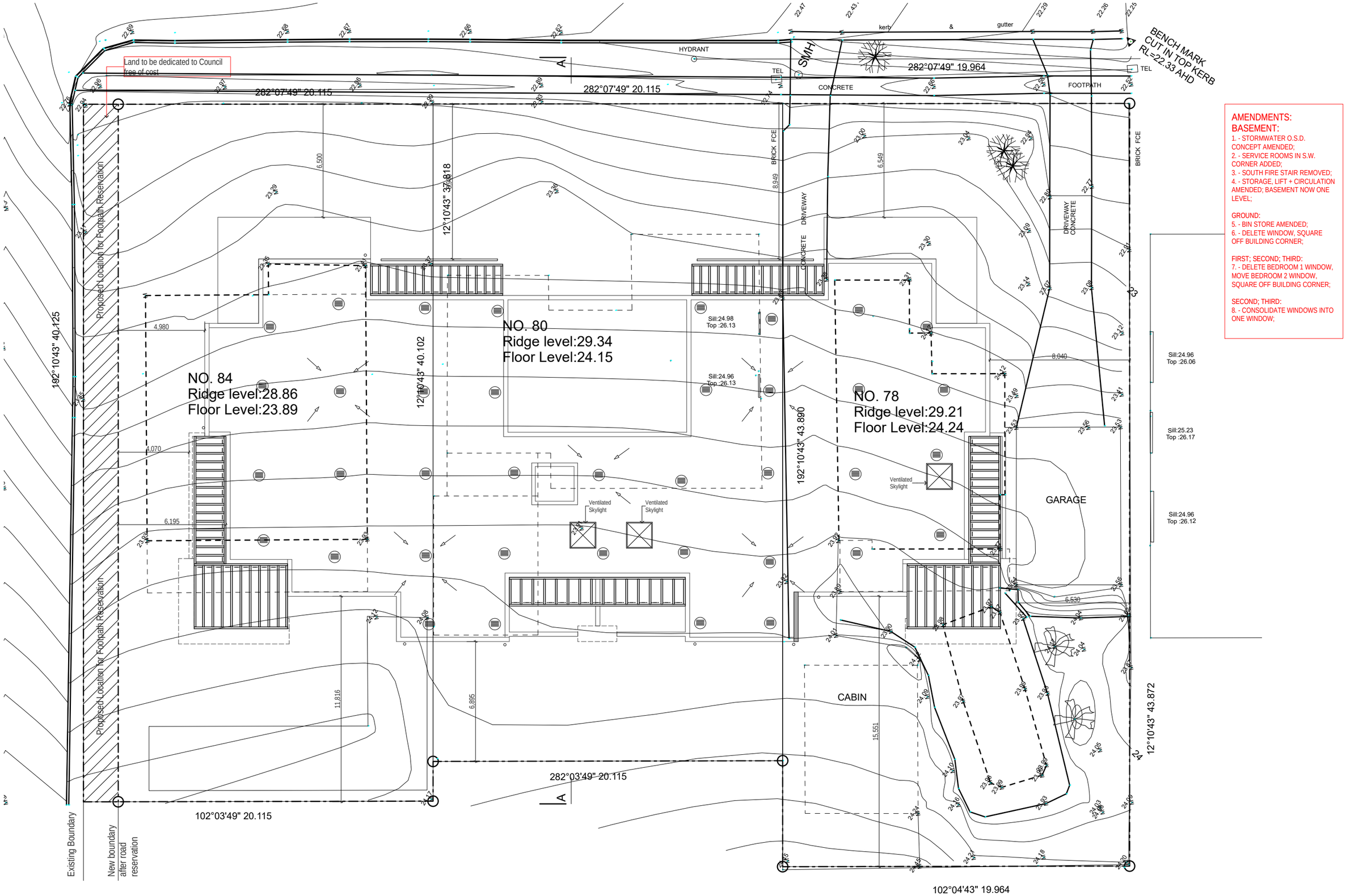
PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Third Floor Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.6	A



AMENDMENTS:
BASEMENT:
1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:
5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:
7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

SECOND; THIRD:
8. - CONSOLIDATE WINDOWS INTO ONE WINDOW;

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REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T.	15/08/2018

PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Roof Plan

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A2.7	A

BASIX Commitments

Water Commitments

Fixtures

- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
- Must install min 5 Star rating toilet flushing system in each toilet
- Must install min 5 Star rating taps in each bathroom

Energy Commitments

Hotwater

Must install gas instantenous 5 star system for each unit

Cooling/Heating System

Must instal 1-phase airconditioning 3 star (new rating) zoned in the living and bedroom areas of each unit.

Ventilation

Must install exhaust systems in: Bathrooms, for all units: individual fan, ducted to facade or roof; Operation control: Manual switch on/off. Kitchens, for units 1,4,5,8,9,12,13,16,22,26,30,33:individual fan, not ducted: Operation Control:Manual switch on/off. For units 2,3,6,7,10,11,14,15,17,18,19,20,21,23,24,26,27,28,29,31,32: Individual fan, ducted to facade or roof; Operation control: Manual swithc on/pff. Laundry, for all units : Individual fan ducted to facade or roof; Operaion control: Manual switch on/off/

Other

Must intall gas cooktop and electric oven in the kitchen and a well ventilated fridge space in all units. Must install an indoor or sheltered clothes drying line in al units.

Lighting

Must provide dedicated artificiatl lighting for kitchens, bathrooms, laundry and hallways for all units and 1 bedroom for units: 18,19,20,27,28. 2 bedrooms for units: 2,3,5,6,7,8,10,11,13,14,15,16,17,21,22,23,24,25,26,29,30,31,33. 3 bedrooms for units; 1,4,9,12.

Common Areas

Energy Commitments

Ventilation

Must install exhaust system in; All carpark areas; Supplu + Exhaust; Efficiency measure; carbon monoxide monitor + VSD fan. Garbase Room: Ventilation Exhasut only.

Lighting

-Must install Lighting in; all carpark areas; Efficiency measure: Daylight sensor.
-Must install lighting in; All lobbies; Fluorescent; Efficiency measure; Manual on/timer off. Must install lighting in: Lift car: Fluorescent; Efficiency measure; Connected to lift call button.

Water Commitments

Fixtures

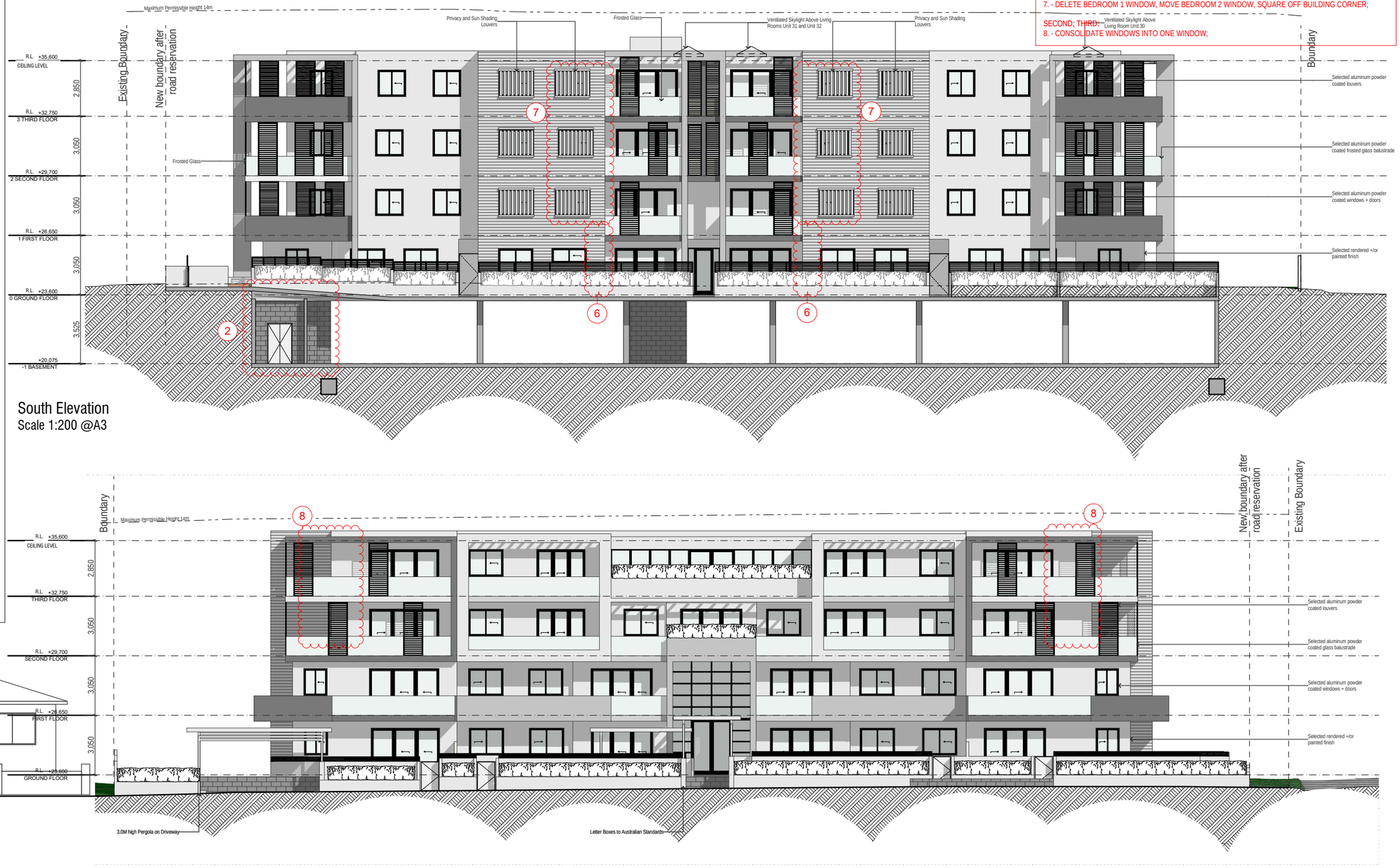
- Must install min 4 Star rating toilet flushing system in each toilet.
- Must install min 5 Star rating taps

AMENDMENTS:
BASEMENT:
1. - STORMWATER O.S.D. CONCEPT AMENDED;
2. - SERVICE ROOMS IN S.W. CORNER ADDED;
3. - SOUTH FIRE STAIR REMOVED;
4. - STORAGE, LIFT + CIRCULATION AMENDED; BASEMENT NOW ONE LEVEL;

GROUND:
5. - BIN STORE AMENDED;
6. - DELETE WINDOW, SQUARE OFF BUILDING CORNER;

FIRST; SECOND; THIRD:
7. - DELETE BEDROOM 1 WINDOW, MOVE BEDROOM 2 WINDOW, SQUARE OFF BUILDING CORNER;

~~SECOND; THIRD:~~
8. - CONSOLIDATE WINDOWS INTO ONE WINDOW;



South Elevation
Scale 1:200 @A3

North Elevation
Scale 1:200 @ A3

MACKENZIE ARCHITECTS INTERNATIONAL
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www.mainternational.com.au
info@mainternational.com.au
Nominated Architect No.6033
ABN 76 091 107 201
ACN 091107201

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LEGEND
DO NOT SCALE DRAWINGS
VERIFY ALL DIMENSIONS ON SITE BEFORE COMMENCING WORK

CLIENT:
PRIME CONSTRUCTION GROUP
PO Box 360, Ermington NSW 1700
M: 0404 222 333 | E: sam@primecg.com.au

REV.	DETAILS	INT	DATE
A	Section 4.56 Modification Application	J.T.	15/08/2018

PROJECT NORTH

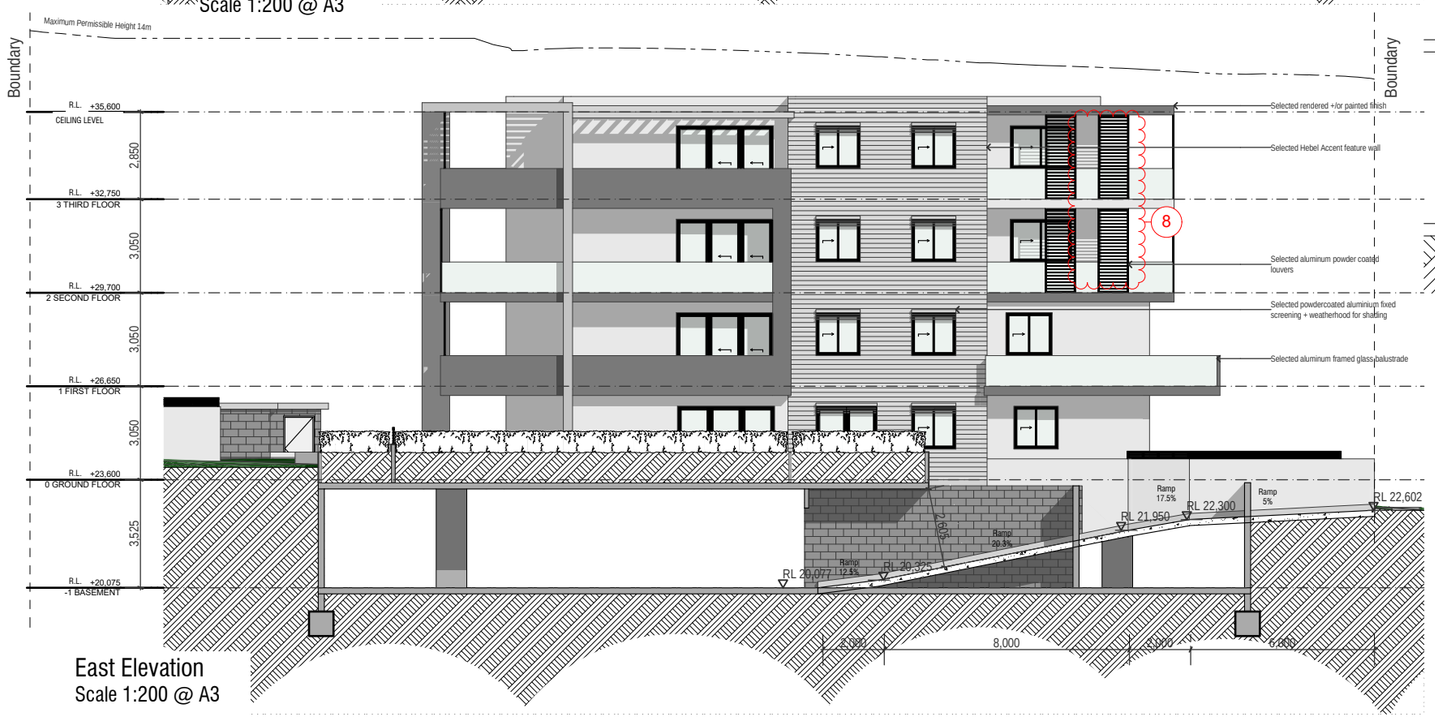
PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

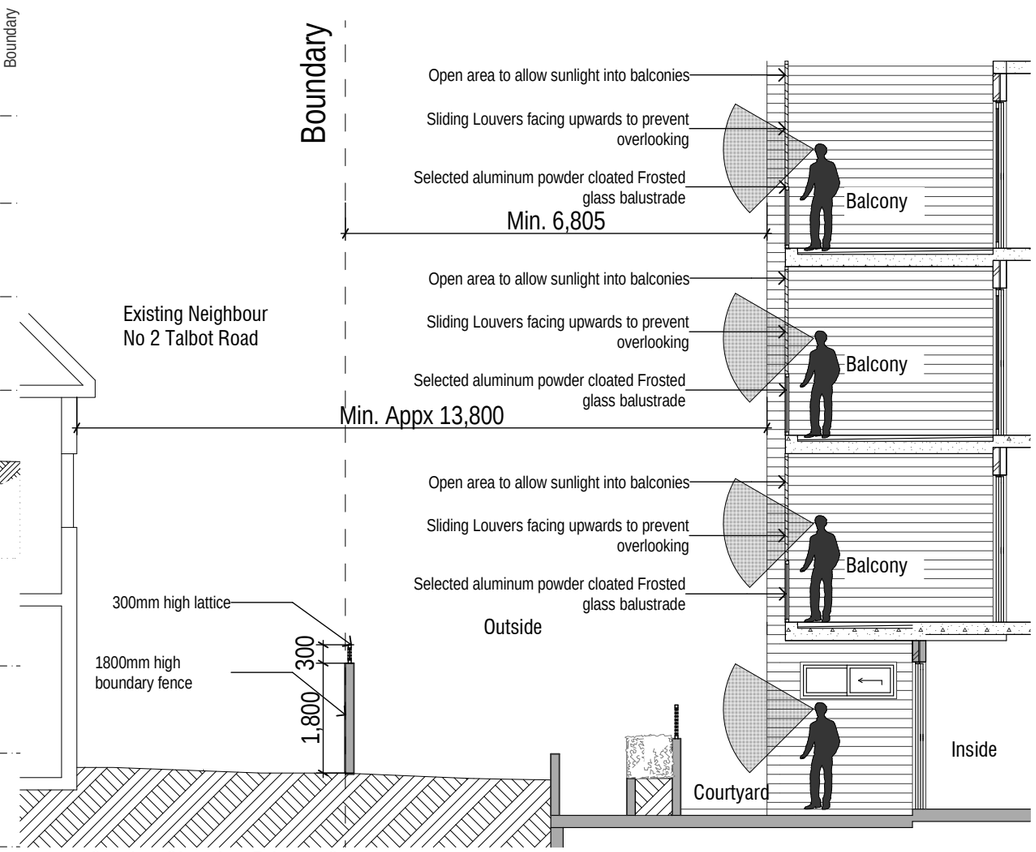
DRAWING:
North and South Elevations

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A3.1	A

West Elevation
Scale 1:200 @ A3



East Elevation
Scale 1:200 @ A3



Section Showing Privacy Screens
Scale 1:100 @ A3

AMENDMENTS:
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2. - SERVICE ROOMS IN S.W. CORNER ADDED;
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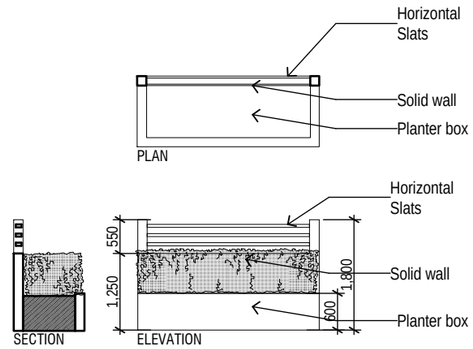
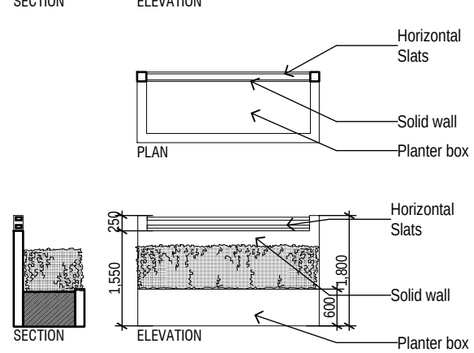
Front Fence
along Talbot St
Scale 1:100 @ A3



Front Fence
along Bursill St
Scale 1:100 @ A3



BASIX Commitments

Water Commitments

Fixtures
- Must install min 3 Star ratng showerheads in all showers. (>4.5 but <=6l/min)
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- Must install min 5 Star rating taps in each bathroom

Energy Commitments

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- Must install min 4 Star rating toilet flushing system in each toilet.
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Note:
Wall Construction
All External Walls Hebal Construction
All Internal Walls Platerboard on studs

Floor Construction
Floor Slabs in concreye

Roof Constrction
Metal Clad

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LEGEND
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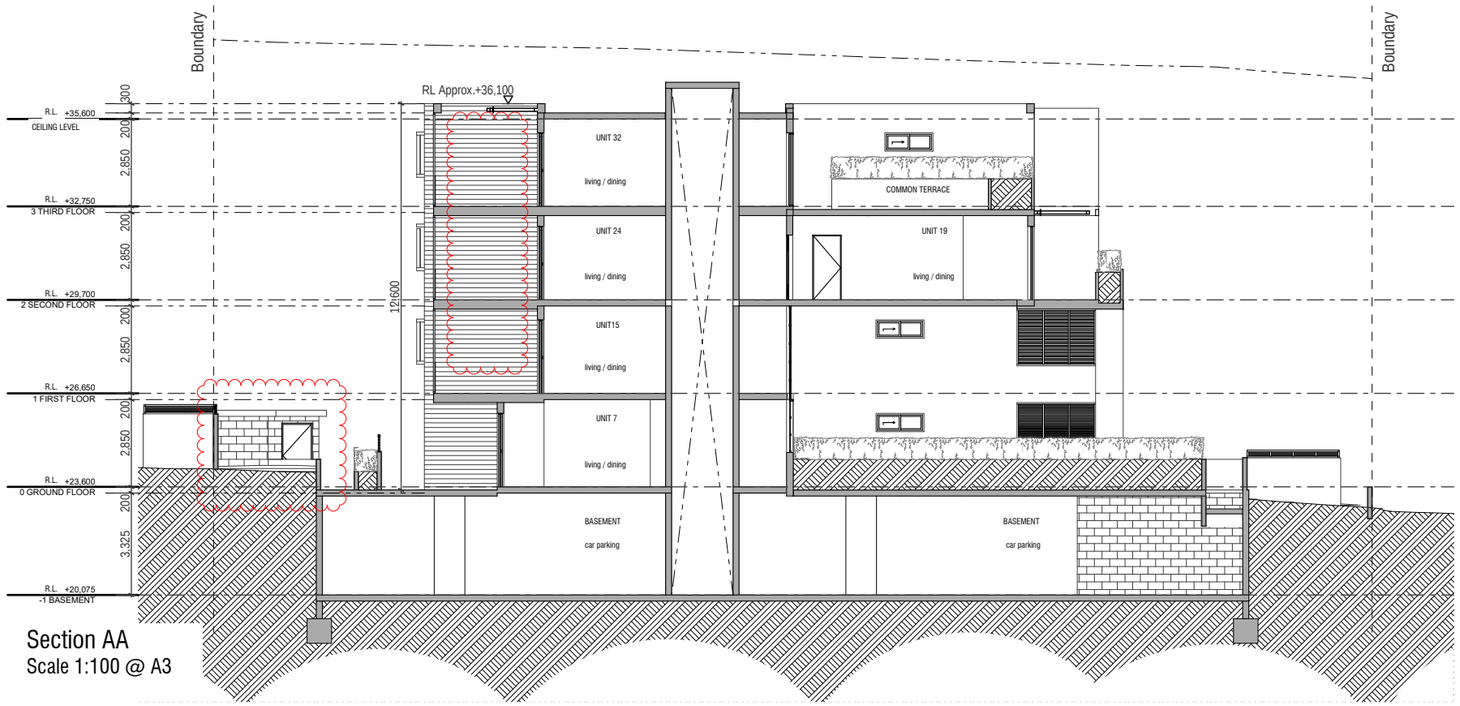
PROJECT NORTH

PROJECT ADDRESS
78, 80 & 84 Bursill St,
Guildford, NSW, 2161

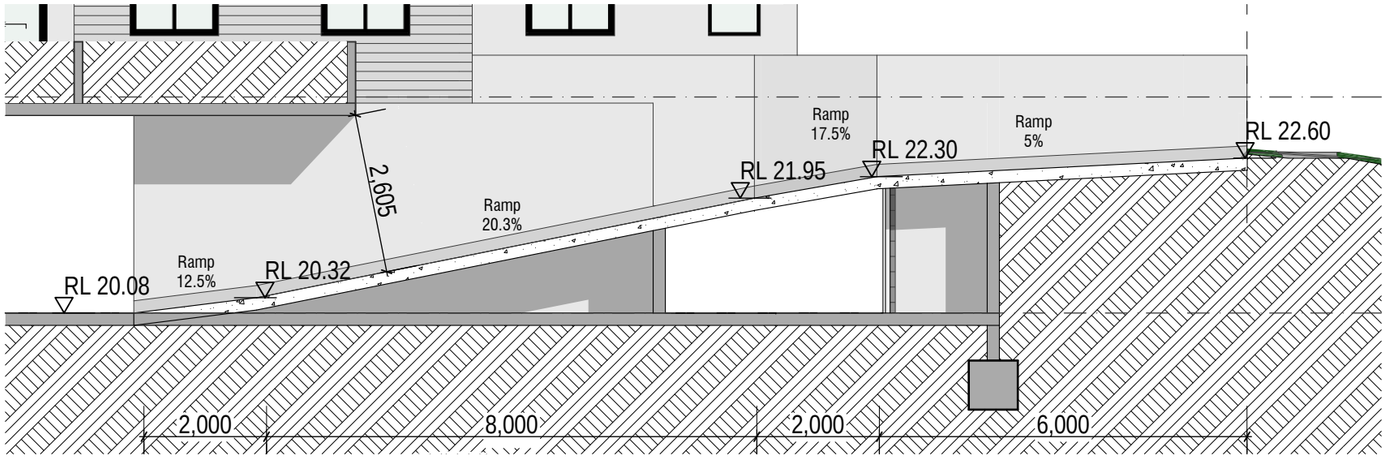
PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
East and West Elevations

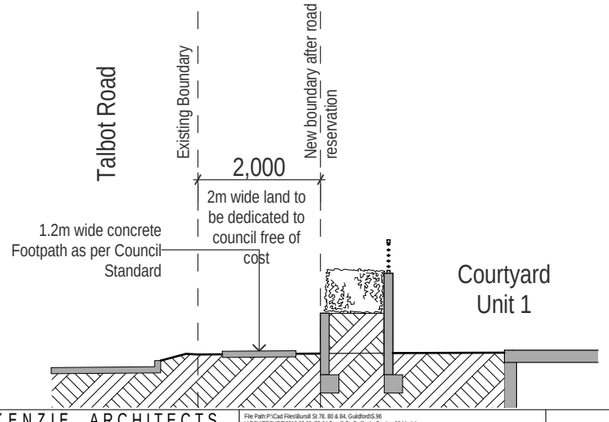
SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A3.2	A



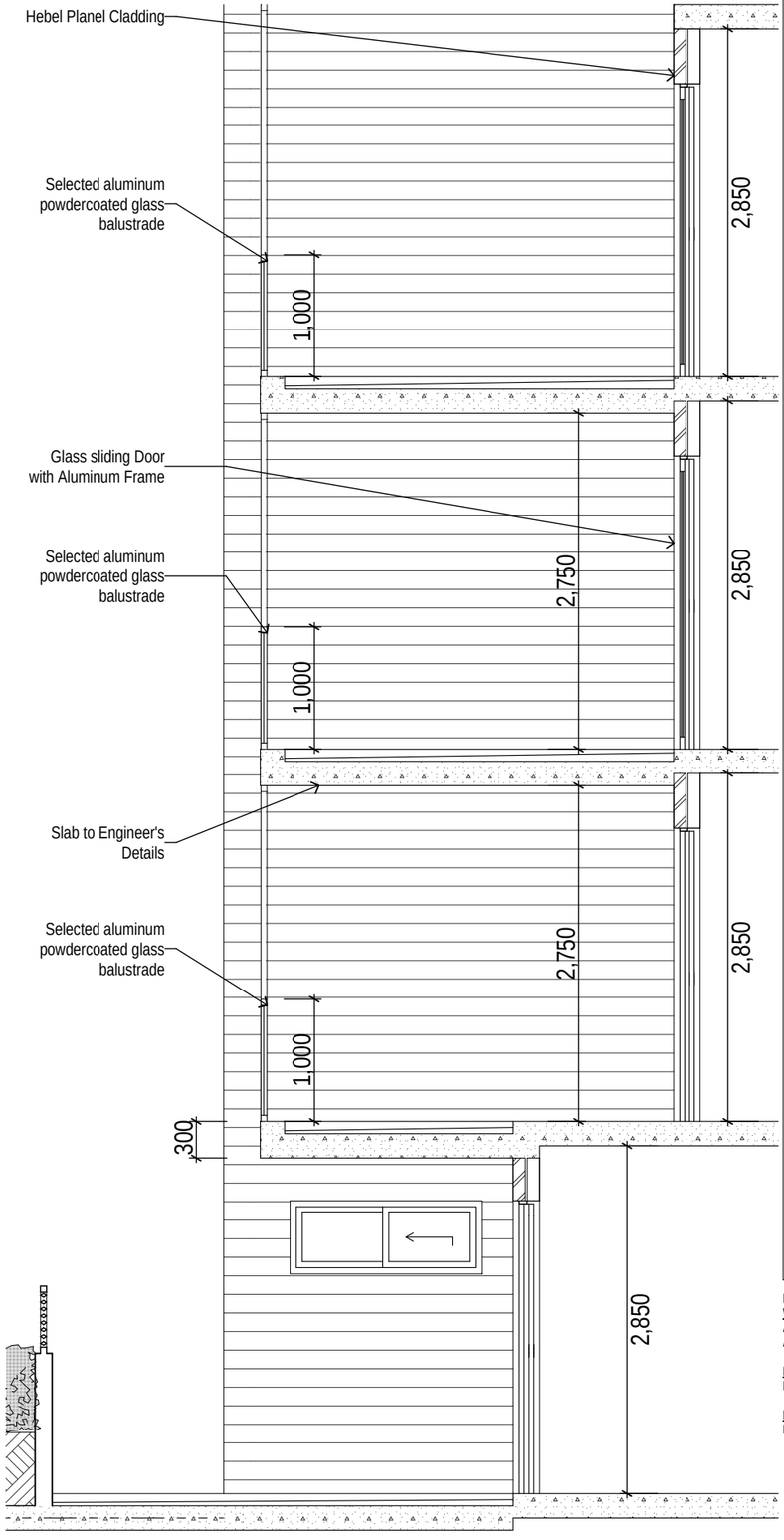
Section AA
Scale 1:100 @ A3



Driveway Section
Scale 1:100 @ A3



Section Across Footpath of Talbot Road
Scale 1:100 @ A3



Profile Section
Scale 1:50 @ A3

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PROJECT ADDRESS
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Guildford, NSW, 2161

PROJECT NO.	STATUS	DRAWN BY	CHECKED BY
17/14	S.96		

DRAWING:
Section A

SCALE:	DRAWING NO.:	ISSUE:
1:100@A1 1:200@A3	A4.1	A

TYPICAL PLANT SELECTION CRITERIA - AS2303-2015
'TREE STOCK FOR LANDSCAPE USE' FOR FULL SPEC.

ENSURE GOOD HEALTH AND VIGOUR. ENSURE FREEDOM FROM PESTS, DISEASES AND INJURY.

SPECIMENS SHOULD BE SELF SUPPORTING AT TIME OF PLANTING - STAKING ONLY TO BE USED WHEN NECESSARY- 1 GROWING SEASON MAX.

ENSURE EVIDENCE OF STEM TAPER - (INCREASE IN CALIPER DOWN THE STEM).

PRUNING:-
*ENSURE CLEAN STEM HEIGHT DOES NOT EXCEED 40% OF PLANT HEIGHT.
*ENSURE CUTS ARE AT BRANCH COLLAR ARE CLEAN WITH NO TEARS.

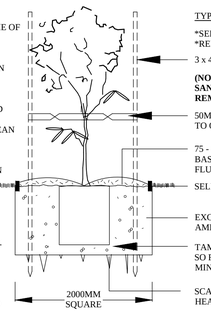
ENSURE APICAL DOMINANCE FOR TREES WITH TYPICAL EXCURRENT FORM - LEADER DEVIATION <15%.

ENSURE GOOD CROWN SYMMETRY AND SOUND STEM JUNCTIONS - NO INCLUDED BARK.

ENSURE SPECIMENS / BATCHES ARE CLEARLY LABELED - NOTING SPECIES CULTIVAR / VARIETY.

ENSURE SPECIMENS ARE FREE OF GIRDLING AND SUCKERING ROOTS.

ENSURE TRUNK POSITION IS WITHIN 10% OF POT CENTRE. IF TREE IS GRAFTED ENSURE SCION AND ROOTSTOCK ARE SOUND.



TYPICAL PLANTING CRITERIA

*SEEK ADVICE BEFORE SUBSTITUTING SPECIES
*REPLACEMENTS TO BE MADE WITHIN 12 MONTHS

3 x 40MM HARDWOOD STAKES AS REQUIRED. DON'T PIERCE ROOT BALL

(NOTE:- ONLY REQUIRED IN WINDY ENVIRONMENTS, VERY SANDY SOIL AND VERY WET CLAY - IF STAKING REQUIRED - REMOVE AS SOON AS PRACTICALLY POSSIBLE).

50MM WIDE JUTE WEBBING - TWIST ONCE AND GAL. STAPLE TO OUTSIDE OF STAKE. ENSURE TREE HAS AMPLE MOVEMENT

75 - 100MM SELECTED MULCH - DISH AROUND BASE OF TRUNK. TOP OF ROOT BALL TO FINISH FLUSH WITH TOP OF SOIL

SELECTED EDGING - REFER TO DETAIL

EXCAVATE HOLE AND INCORPORATE SOIL AMENDMENTS TO 30% MAX. IF REQUIRED.

TAMP SOIL GENTLY AROUND AND BENEATH ROOT BALL SO ROOT BALL DOES NOT MOVE - WATER WEEKLY FOR MINIMUM 4 WEEKS TO ESTABLISH.

SCARIFY SUB SOIL AND SIDES TO 100MM MINIMUM IN HEAVY CLAY SOILS. MAY BE REQUIRED TO MOUND PLANT.

45-75LTR TYPICAL PLANTING
(NTS)

STREET TREES AND TURF TO BE PROTECTED DURING CONSTRUCTION (NOT SHOWN ON CONTOUR PLANS PROVIDED). ANY DAMAGE TO TURF AND STREET TREE TO BE RECTIFIED AS PART OF THE LANDSCAPE WORKS. THE METHODS OF TREE PROTECTION SHALL COMPLY WITH AUSTRALIAN STANDARD 4970-2009 – 'PROTECTION OF TREES ON DEVELOPMENT SITES'.

REFER TO HYDRAULICS ENGINEERS PLAN FOR OSD / DWARF WALL DETAILS - MULCH OSD WITH NON FLOATABLE DECORATIVE GRAVEL.
ALL FINISHED GROUND LEVELS AS PER HYDRAULICS ENGINEERS DETAILS.

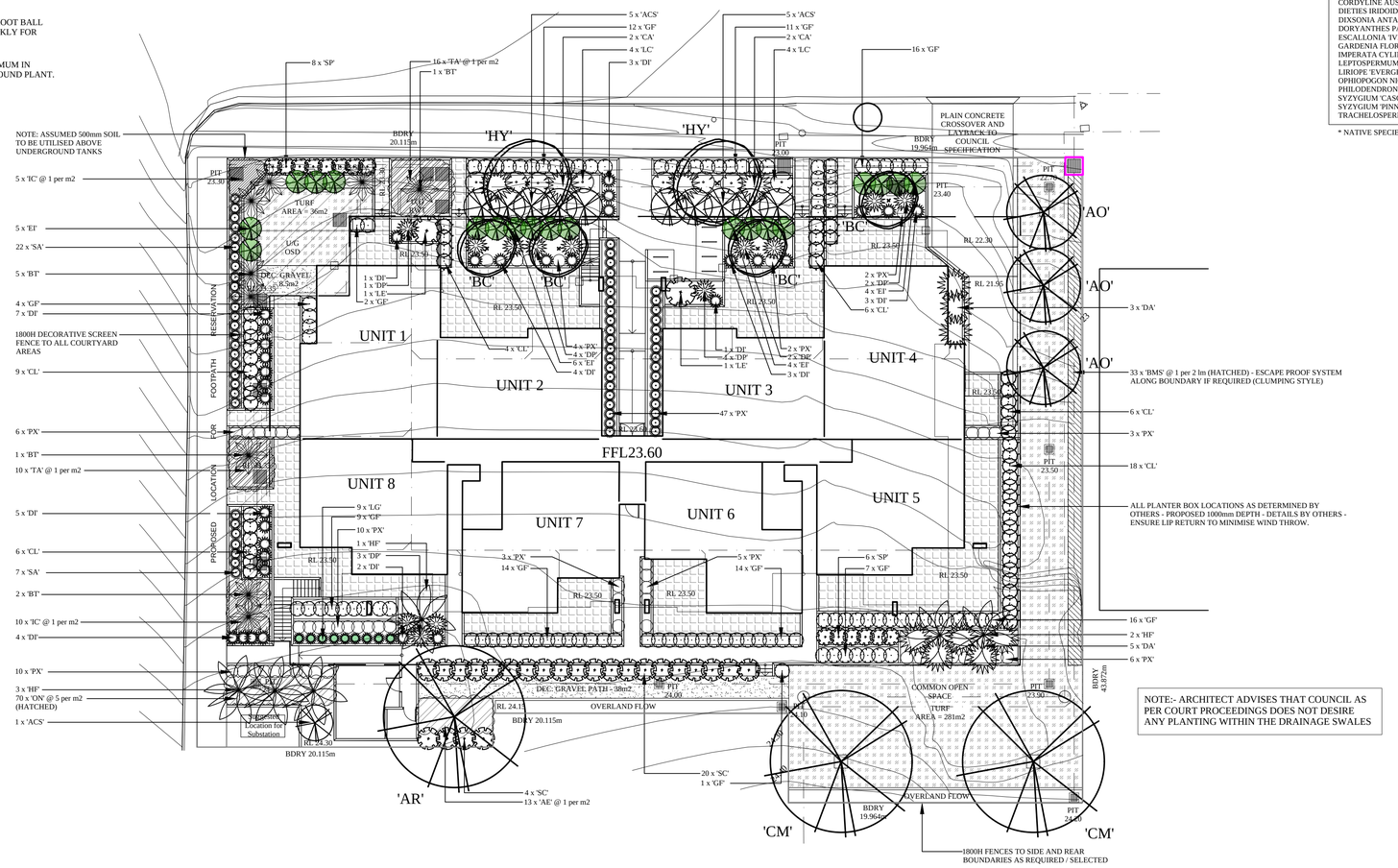
GENERAL NOTES:-

* LANDSCAPE CONTRACTOR TO CHECK DA CONDITIONS AND STAMPED LANDSCAPE PLAN BEFORE COMMENCING WORKS TO ENSURE NO ADDITIONS / AMENDMENTS TO PLAN.
* GARDEN BEDS IN OSD BASIN TO CONSIST OF NON FLOATABLE DECORATIVE GRAVEL.
* REFER TO HYDRAULICS ENGINEERS PLAN FOR OSD DETAILS / FINAL LEVELS.
* MULCHED PLANTING BEDS TO BE A MINIMUM DEPTH OF 75MM AS SELECTED.
* CONTRACTORS RESPONSIBILITY TO CHECK AND ADJUST SOIL pH AS REQUIRED.
* PROVIDE TIMBER EDGE AS A MINIMUM BENEATH FENCING / GATES TO DEFINE TURF AND GARDEN BEDS / PATHWAYS. EDGING TO BE PROVIDED TO ALL AREAS WHERE DIFFERING MATERIALS MEET, ie TURF / GARDEN, TURF / GRAVEL PATH ETC.
* WEED MAT BENEATH GRAVEL PATHWAYS REQUIRED TO LIMIT MUD TRACKING.
* PREMIUM ORGANIC GARDEN MIX TO BE USED.
* ALL PLANTS TO BE HEALTHY AND VIGOROUS.
* CONTRACTOR TO MAKE GOOD TURF ON NATURE STRIP POST CONSTRUCTION.
* DO NOT SCALE ARCHITECTURAL SETOUT FROM LANDSCAPE DRAWING.
* EXISTING TREE SPREAD APPROXIMATE ONLY. REFER TO TREE REPORT WHEN APPLICABLE.
* SITE SURVEY PROVIDED BY OTHERS.
* BUFFALO TURF PREFERRED OVER KIKUYU.

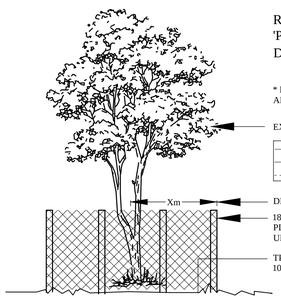
ALL PLANTER BOX DETAILS BY OTHERS
ALL FINISHED GROUND LEVELS BY OTHERS

BURSILL STREET

TALBOT ROAD



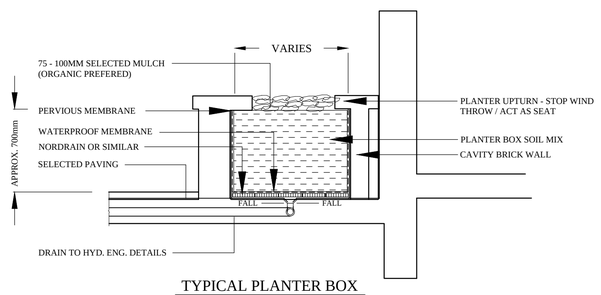
NOTE:- ARCHITECT ADVISES THAT COUNCIL AS PER COURT PROCEEDINGS DOES NOT DESIRE ANY PLANTING WITHIN THE DRAINAGE SWALES



REFER TO AS 4970-2009 - 'PROTECTION OF TREES ON DEVELOPMENT SITES'

* IRRIGATION WITHIN TPZ AT ARBORIST OR COUNCIL DISCRETION

TYPICAL TREE PROTECTION
DETAIL - (NTS)
(IF NO ARBORIST REPORT REQUIRED)



TYPICAL PLANTER BOX
DETAIL - (NTS)
(REFER TO HYDRAULICS ENGINEERS DETAILS)

PLANT SCHEDULE

BOTANIC NAME	KEY	QTY	POT SIZE	HT (M)
TREES				
ACER 'OCTOBER GLORY' (MAPLE)	AO	3	75L	10+
AGATHUS ROBUSTA (KAURI)*	AR	1	45L	15+
BACKHOUSIA CITRIODORA (LEMON MYRTLE)*	BC	4	300MM	5-10
CORYMBIA MACULATA (SPOTTED GUM)*	CM	2	45L	15+
HOWEA FOSTERIANA (KENTIA PALM)*	HF	6	45L	10-15
HYMENOSPORUM FLAVUUM (NATIVE FRANGIPANI)*	HY	2	45L	5-10
SHRUBS				
ACMENA 'CHERRY SURPRISE' (LILLY PILLY)*	ACS	11	200MM	3-5
SYZYGIUM 'AUSSIE BOOMER' (LILLY PILLY)*	SA	29	200MM	1.5
ASPIDISTRA ELATIOR (CAST IRON PLANT)	AE	13	140MM	1
BAMBUSA MULTIPLEX 'STRIPESTEM'	BMS	33	200MM	3-8
BAMBUSA TEXTILIS 'GRACILLUS' (CLUMPING BAMBOO)	BT	9	300MM	5
CAMELLIA 'LITTLE LIANE'	CL	49	200MM	1-2
CITRUS 'LEMON'	LE	2	25L	3
CORDYLINE AUSTRALIS (CABBAGE TREE)*	CA	4	200MM	2
DIETIES IRIDOIDES (WILD IRIS)	DI	33	140MM	1
DIXSONIA ANTARTICA (TREE FERN)*	DA	8	200MM	3
DORYANTHES PALMERII (GYMEA LILLY)*	DP	13	200MM	1.5
ESCALLONIA 'IVEYI' (ESCALLONIA)	EI	19	200MM	2
GARDENIA FLORIDA	GF	106	200MM	1
IMPERATA CYLINDRICA (BLADY GRASS)*	IC	15	140MM	1
LEPTOSPERMUM 'CARDWELL' (TEA TREE)*	LC	8	200MM	3
LIRIOPE 'EVERGREEN GIANT' (LIRIOPE)	LG	9	150MM	0.6
OPHIOPOGON NIGRA (BLACK MONDO)	ON	70	100MM	0.2
PHILODENDRON 'XANADU'	PX	51	200MM	1
SYZYGIUM 'CASCADE' (POWDER PUFF LILLY PILLY)*	SC	24	200MM	2
SYZYGIUM 'PINNACLE' (LILLY PILLY)*	SP	14	200MM	TRIM
TRACHELOSPERMUM ASIATICUM	TA	26	140MM	GC

* NATIVE SPECIES

07 AUG 18 - REDRAW PLAN
31 JAN 17 - ADD TURF SWALE
30 JAN 17 - REDRAW BIN ROOM AND TURF SWALE
27 SEP 16 - REDRAW ARCHITECTURALS AND STORMWATER
09 MAR 16 - MOVE 'AR' BEHIND FENCE
24 FEB 16 - REDRAW PLANS

MONACO
DESIGNS PL
14 York Street, Glenbrook NSW, 2773
ph & fax: 0247395136 mb: 0409123200
email: paul@monaco.net.au

PROJECT:
PROPOSED DEVELOPMENT

ADDRESS:
78-84 BURSILL STREET,
GUILDFORD

CLIENT:
DESIGN CUBICLE - JOE REFFALO

TITLE: DA
LANDSCAPE PLAN

DATE:	SCALE:	SHEET No:
27 FEB 2015	1 : 200 - A1	1 OF 1
JOB No.	DRAWN:	
4007	P MONACO	

TREE REPORTS
LANDSCAPE PLANS
VEGETATION MANAGEMENT PLANS

NOTE:- MONACO DESIGNS PL RESERVES THE RIGHT NOT TO UNDERTAKE NOR SUPPLY CERTIFICATION FOR OCCUPATION CERTIFICATE.
NOTE:- TO AID COMPLIANCE WITH BASIX LEGISLATION, PLANTS (WHERE APPLICABLE) HAVE BEEN SELECTED FROM THE LOCAL CITY COUNCIL / SHIRE PLANT LISTS.
NOTE:- LOCATION OF SEWER MAINS / LINES, WATER PIPES, UNDERGROUND ELECTRICITY AND OTHER SERVICES MUST BE OBTAINED PRIOR TO COMMENCEMENT OF ANY WORK ON SITE. DIAL BEFORE YOU DIG 1100.

CONTRACTORS NOTE:- CALCULATED AREAS DETERMINED BY CAD AND HAVE BEEN ROUNDED UP FOR USE AS A GUIDE ONLY. ALLOW STANDARD PERCENTAGES FOR CUTTING AND WASTAGE. CONFIRM DIMENSIONS AND NUMBERS PRIOR TO QUOTING / ORDERING.

DIAL 1100 BEFORE YOU DIG

78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLANS

LEGEND

- PROPOSED STORMWATER
- PROPOSED STORMWATER BYPASSING OSD
- PROPOSED STORMWATER DRAINING TO RWT
- PROPOSED STORMWATER DRAINING TO OSD
- PIPE OVERCROSSING MINIMUM 150mm CLEARANCE
- PROPOSED PIPE MOUNTED TO GROUND FLOOR UNDER SLAB
- SS — SS — SUBSOIL DRAINAGE
- EXISTING STORMWATER
- S — EXISTING SEWER MAIN (FROM RECORDS)
- OP — EXISTING OPTIC FIBER MAIN (FROM RECORDS)
- W — EXISTING WATER (FROM RECORDS)
- E — EXISTING POWER (FROM RECORDS)
- G — EXISTING GAS (FROM RECORDS)
- T — EXISTING TELSTRA (FROM RECORDS)
- DP — GUTTER DOWNPIPE
- DP — DOWNPIPE WITH VERTICAL BEND
- DP1 100 — DOWNPIPE NUMBER AND SIZE
- HP — ROOF GUTTER HIGH POINT
- ROOF SLOPE
- PG — PLANTER GRATE
- FG — FLOOR GRATE
- RWO — RAINWATER OUTLET
- BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW
- CE — Ø300 CLEANING EYE
- RWT — x,xxxL RAINWATER TANK
- SURFACE FLOW ARROWS
- RL 47.00 — DESIGN SURFACE LEVEL
- NS 26.45 — EXISTING SURFACE LEVEL
- IL 47.00 — INVERT LEVEL OF PIPE JUNCTION
- FENCE WITH 50mm GAP BENEATH FOR OVERLAND FLOWS
- CLOSED STYLE FENCING
- POOL TYPE SAFETY FENCE

LOCALITY PLAN
N.T.S

PIPES NOTE:

Ø65 PVC @ MIN 1.0%
Ø90 PVC @ MIN 1.0%
Ø100 PVC @ MIN 1.0%
Ø150 PVC @ MIN 1.0%
Ø225 PVC @ MIN 0.5%
Ø300 PVC @ MIN 0.4%
UNLESS NOTED OTHERWISE

DRAWING INDEX

GENERAL NOTES

1. ALL THE CLEANING EYES (OR INSPECTION EYES) FOR THE UNDERGROUND PIPES HAVE TO BE TAKEN UP TO THE FINISHED GROUND LEVEL FOR EASY IDENTIFICATION AND MAINTENANCE PURPOSES
2. ALL LEVELS SHALL RELATE TO THE ESTABLISHED BENCH MARK.
3. THE BUILDER SHALL ENSURE THAT THE STORMWATER ENGINEERS DRAWINGS CORRESPOND TO THE ARCHITECTURAL, STRUCTURAL AND LANDSCAPING DRAWINGS. IF THERE EXISTS AND DISCREPANCIES BETWEEN THE DRAWINGS, THE BUILDER SHALL REPORT THE DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCEMENT OF ANY WORKS
4. ALL MULCHING TO BE USED WITHIN THE AREA DESIGNATED AS ONS-SITE DETENTION STORAGE SHALL BE OF A NON-FLOTABLE MATERIAL SUCH AS DECORATIVE RIVER GRAVEL. PINE BARK MULCHING SHALL NOT BE USED WITHIN THE DETENTION STORAGE AREA.
5. ALL RETAINING WALLS SHALL BE CONSTRUCTED COMPLETELY WITHIN THE PROPERTY BOUNDARY LIMITS TO DETAILS PREPARED BY THE STRUCTURAL ENGINEER. WALLS FORMING THE ON-SITE DETENTION SYSTEM SHALL BE OF MASONARY/BRICK CONSTRUCTION AND WATER TIGHT.
6. ALL SUB-SOIL DRAINAGE SHALL BE A MINIMUM OF 65MM DIA AND SHALL BE PROVIDED WITH A FILTER SOCK. THE SUBSOIL DRAINAGE SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS TO BE PROVIDED BY THE LANDSCAPE ARCHITECT.
7. PRIOR TO COMMENCING ANY WORKS, THE BUILDER SHALL ENSURE THAT THE INVERT LEVELS OF WHERE THE SITE STORMWATER SYSTEM CONNECTS INTO THE COUNCILS KERB/DRAINAGE SYSTEM MATCHED THE DESIGN LEVELS. ANY DISCREPANCIES SHALL BE REPORTED TO THE DESIGN ENGINEER IMMEDIATELY.
8. ALL LINES ARE TO BE Ø90 uPVC 1.0% GRADE UNLESS NOTED OTHERWISE. CHARGED LINES TO BE SEWERGRADE & SEALED.
9. EXISTING SERVICES LOCATIONS SHOWN INDICATIVE ONLY.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE & LEVEL ALL EXISTING SERVICES PRIOR TO THE COMMENCEMENT OF ANY EARTHWORKS.
11. ALL PIPES TO HAVE MIN 150mm COVER IF LOCATED WITHIN PROPERTY.
12. ALL PITS IN DRIVEWAYS TO BE 450x450 CONCRETE AND ALL PITS IN LANDSCAPED AREAS TO BE 450x450PLASTIC.
13. PITS LESS THAN 450 DEEP MAY BE BRICK, PRECAST OR CONCRETE.
14. ALL BALCONIES AND ROOFS TO BE DRAINED AND TO HAVE SAFETY OVERFLOWS IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS.
15. ALL EXTERNAL SLABS TO BE WATERPROOFED.
16. ALL GRATES TO HAVE CHILD PROOF LOCKS.
17. ALL DRAINAGE WORKS TO AVOID TREE ROOTS.
18. ALL DP'S TO HAVE LEAF GUARDS.
19. ALL EXISTING LEVELS TO BE CONFIRMED BY BUILDER PRIOR TO CONSTRUCTION.
20. ALL WORK WITHIN COUNCIL RESERVE TO BE INSPECTED BY COUNCIL PRIOR TO CONSTRUCTION.
21. COUNCIL'S ISSUED FOOTWAY DESIGN LEVELS TO BE INCORPORATED INTO THE FINISHED LEVELS ONCE ISSUED BY COUNCIL.
22. ALL WORK SHALL BE IN ACCORDANCE WITH B.C.A. AND A.S.3500.3.
23. REFER TO LANDSCAPE ARCHITECT'S DRAWINGS FOR LANDSCAPING.
24. ALL WALLS FORMING THE DETENTION BASINS SHALL BE CONSTRUCTED WHOLLY WITHIN THE PROPERTY BOUNDARIES OF THE SITE BEING DEVELOPED.
25. OSD WARNING SIGN AND SAFETY FENCING SHALL BE PROVIDED TO ABOVE GROUND OSD STORAGE AREA IN ACCORDANCE WITH COUNCIL'S REQUIREMENTS.
26. ENSURE THAT NON FLOATABLE MULCH IS USED IN DETENTION BASINS, ie, USE DECORATIVE ROCK MULCH OR EQUIVALENT.
28. ALL PIPES IN BALCONIES TO BE Ø65 uPVC IN CONCRETE SLAB. CONTRACTOR TO PROVIDE A BREAK / OPEN VOID IN RAIL / BALLUSTRADE FOR STORMWATER EMERGENCY OVERFLOW. ALL ENCLOSED AREAS / PLANTER BOXES TO BE FITTED WITH FLOOR WASTES & DRAINED TO OSD. DOWNPIPES TO BE CHECKED BY ARCHITECT & PLUMBER PRIOR TO CONSTRUCTION.
29. THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

0 1cm at full size 10cm 20cm

Certification By:

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Council
Cumberland Council

Scale

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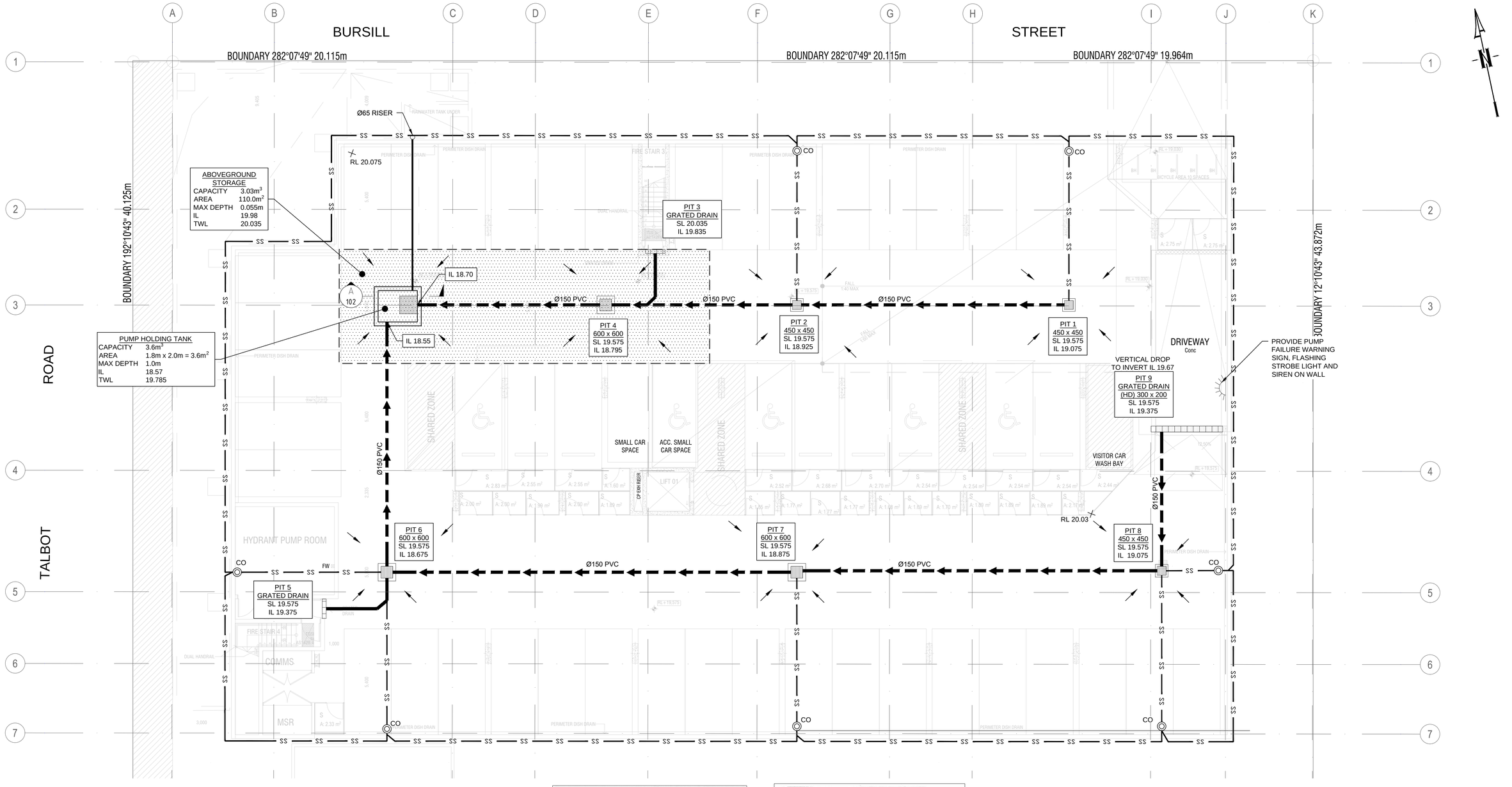
Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
COVER SHEET PLAN

Scale	A1	Project No.	Dwg. No.	Issue
N.T.S.		171716	000	C



LEGEND

- PROPOSED STORMWATER
- SURFACE FLOW ARROWS
- SS SUBSOIL DRAINAGE
- CLEANING EYE (OR INSPECTION EYE)
- PROPOSED STORAGE AREA
- + RL 27.56 FINISHED SURFACE LEVEL
- GRATED DRAIN

STANDARD PUMP OUT DESIGN NOTES

THE PUMP OUT SYSTEM SHALL BE DESIGN TO BE OPERATED IN THE FOLLOWING MANNER:

1 - THE PUMP SHALL BE PROGRAMMED TO WORK ALTERNATELY TO ALLOW BOTH PUMPS TO HAVE AN EQUAL OPERATION LOAD AND PUMP LIFE.

2 - A FLOAT SHALL BE PROVIDED TO ENSURE OF THE MINIMUM REQUIRED WATER LEVEL IS MAINTAINED WITHIN THE SUMP AREA OF THE BELOW GROUND TANK. IN THIS REGARD THIS FLOAT WILL FUNCTION AS AN OFF SWITCH FOR THE PUMPS AT THE MINIMUM WATER LEVEL. THE SAME FLOAT SHALL BE SET TO TURN ONE OF THE PUMPS ON UPON THE WATER LEVEL IN THE TANK RISING TO APPROXIMATELY 300mm ABOVE THE MINIMUM WATER LEVEL. THE PUMP SHALL OPERATE UNTIL THE TANK IS DRAINED TO THE MINIMUM WATER LEVEL.

3 - A SECOND FLOAT SHALL BE PROVIDE AT A HIGH LEVEL, WHICH IS APPROXIMATELY THE ROOF LEVEL OF THE BELOW GROUND TANK. THIS FLOAT SHALL START THE OTHER PUMP THAT IS NOT OPERATING AND ACTIVATE THE ALARM.

4 - AN ALARM SYSTEM SHALL BE PROVIDE WITH A FLASHING STROBE LIGHT AND A PUMP FAILURE WARNING SIGN WHICH ARE TO BE LOCATED AT THE DRIVEWAY ENTRANCE TO THE BASEMENT LEVEL THE ALARM SYSTEM SHALL BE PROVIDED WITH A BATTERY BACK-UP IN CASE OF POWER FAILURE.

5 - A CONFINED SPACE DANGER SIGN SHALL BE PROVIDED AT ALL ACCESS POINT TO THE PUMP-OUT STORAGE TANK IN ACCORDANCE WITH THE UPPER PARRAMATA RIVER CATCHMENT TRUST OSD HANDBOOK.

DANGER

WHEN EXCAVATING WITHIN ANY SITE, FOOTPATH AND ROADWAY, ALL SERVICES SHALL BE LOCATED PRIOR TO COMMENCEMENT OF THE EXCAVATION WORKS.

CONTACT "DIAL BEFORE YOU DIG" ON PHONE No. 1100 OR GO TO THE WEB SITE

"www.1100.com.au"

WARNING

PUMP OUT SYSTEM FAILURE IN BASEMENT WHEN LIGHT IS FLASHING AND SIREN SOUNDING

BASEMENT PUMP OUT FAILURE WARNING SIGN

SIGN SHALL BE PLACED IN A CLEAR AND VISIBLE LOCATION WHERE VEHICLES ENTER THE BASEMENT

COLOURS:
"WARNING" = RED
BORDER AND OTHER LETTERING = BLACK

DANGER

CONFINED SPACE
NO ENTRY WITHOUT CONFINED SPACE TRAINING

CONFINED SPACE DANGER SIGN

A) A CONFINED SPACE DANGER SIGN SHALL BE POSITIONED IN A LOCATION AT ALL ACCESS POINTS, SUCH THAT IT IS CLEARLY VISIBLE TO PERSONS PROPOSING TO ENTER THE BELOW GROUND TANK/S CONFINED SPACE.

B) MINIMUM DIMENSIONS OF THE SIGN - 300mm x 450mm (LARGE ENTRIES, SUCH AS DOORS) -250mm x 180mm (SMALL ENTRIES SUCH AS GRATES & MANHOLES)

C) THE SIGN SHALL BE MANUFACTURED FROM COLOUR BONDED ALUMINUM OR POLYPROPYLENE

D) SIGN SHALL BE AFFIXED USING SCREWS AT EACH CORNER OF THE SIGN

COLOURS:
"DANGER" & BACKGROUND = WHITE
ELLIPTICAL AREA = RED
RECTANGLE CONTAINING ELLIPSE = BLACK
BORDER AND OTHER LETTERING = BLACK

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

1cm at full size 0 10cm 20cm

Certification By:

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Council
Cumberland Council

Scale
0 2 4 6 m
SCALE 1:100 @ A1

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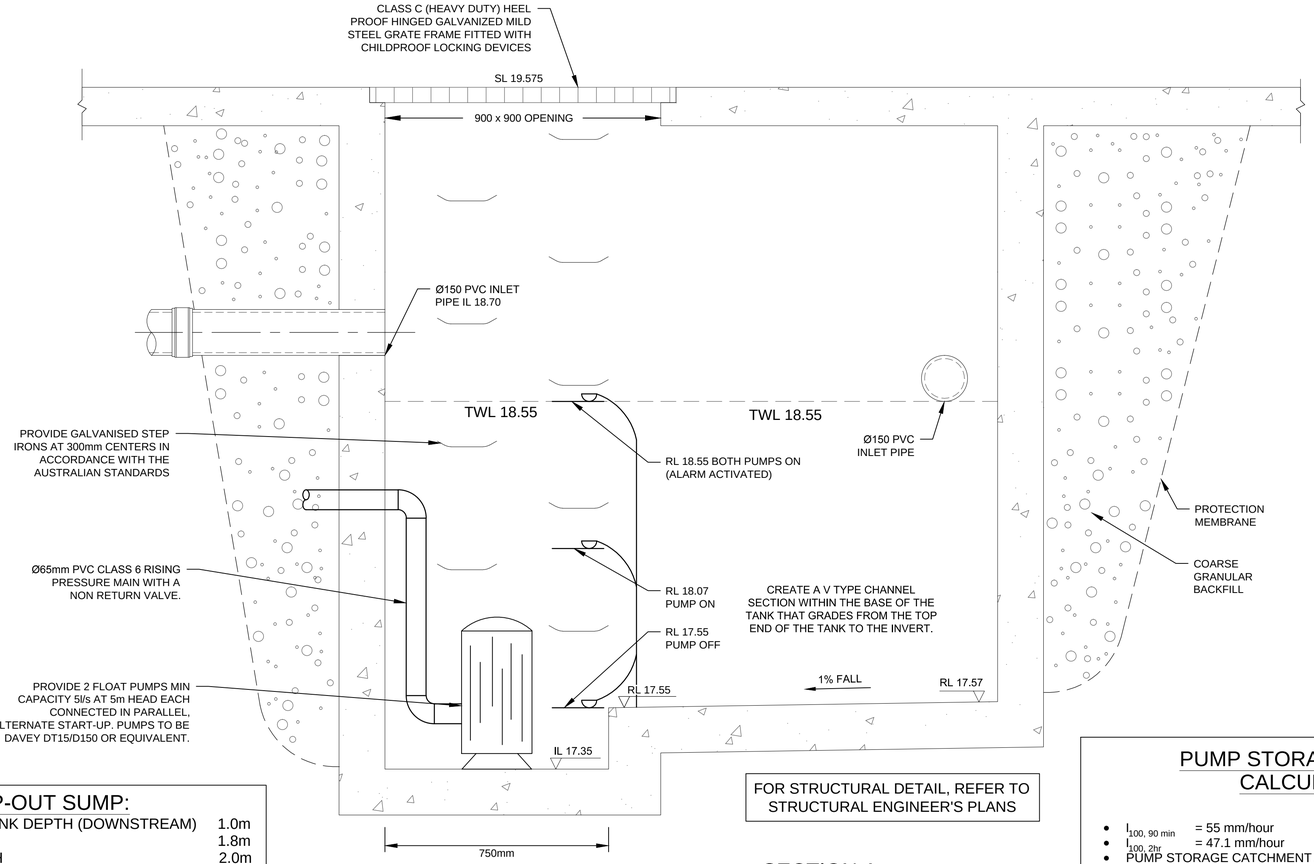
Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
STORMWATER LAYOUT PLAN
BASEMENT LEVEL
SHEET 1 OF 2

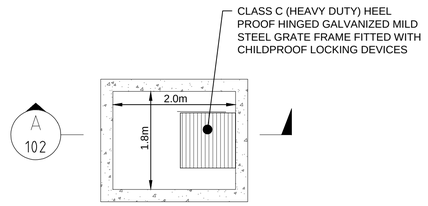
Scale	A1	Project No.	Dwg. No.	Issue
1:100		171716	101	C



PUMP-OUT SUMP:	
MAX TANK DEPTH (DOWNSTREAM)	1.0m
WIDTH	1.8m
LENGTH	2.0m
VOLUME PROVIDED	3.6m^3

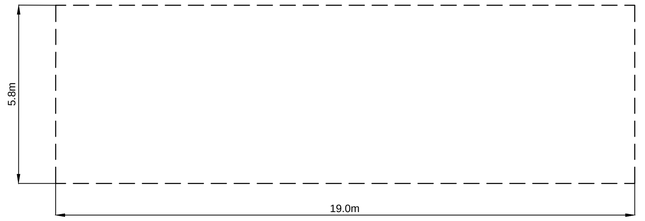
FOR STRUCTURAL DETAIL, REFER TO STRUCTURAL ENGINEER'S PLANS

SECTION A
STORMWATER PUMP-OUT SUMP
SCALE 1:10



NOTE:
1- FOR ALL THE STRUCTURAL DETAILS, REFER TO STRUCTURAL ENGINEER'S PLAN.
2- ALL THE AG LINES BEHIND BASEMENT WALLS TO BE CONNECTED TO PUMP-OUT SUMP.

PUMP-OUT SUMP DETAIL
PLAN VIEW
SCALE 1:50

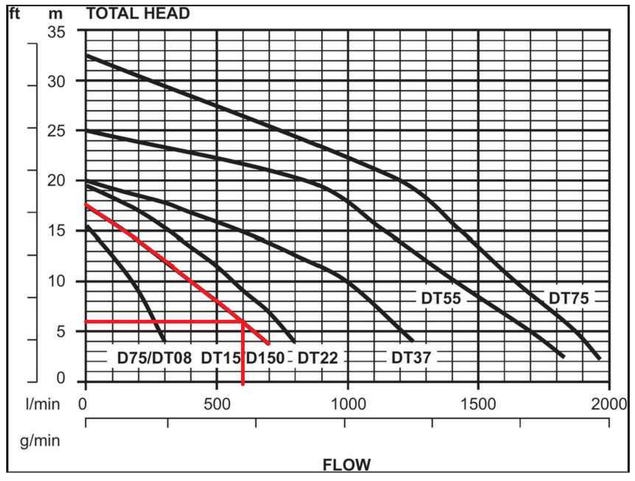


ABOVEGROUND STORAGE DIMENSIONS
SCALE 1:100

PUMP STORAGE VOLUME CALCULATION

- $I_{100,\ 90\ min}$ = 55 mm/hour
- $I_{100,\ 2hr}$ = 47.1 mm/hour
- PUMP STORAGE CATCHMENT AREA: A = 62.0 m^2 = 0.0062 ha
- Q = C x I x A / 360 WHERE C = 1.0 (REFER TO AS3500.3.5.4.6 (a))
  = 1.0 x 55 x 0.0062 / 360
  = 0.000947 m^3/s
  = 0.947 L/s
- THEREFORE, THE PUMP HOLDING TANK VOLUME IS:
  V = 0.947 x 3600
  = 3.409 m^3
- ABOVE GROUND STORAGE VOLUME:
  Q = 1.0 x 47.1 x 0.0062 / 360
  = 0.811 L/s
  V = 0.811 x 3600
  = 2.92 m^3

Volume Calculations				Pump Selection
Pump Tank				Pumps
Length	Width	Depth	Volume (cu.m)	**2 Of Davey DT15/D150**
2	1.8	1	3.6	
Above Ground				Rising Main 65mm Diameter Class 12 PVC pipe
R.L.	Area	Volume (cu.m)		PUMP Storage Summary
19.98	0.00			Storage / Required (cu.m) / Provide (cu.m)
20.04	110.00	3.03		Pump Tank 3.41 3.60
Total = 6.63 (cu.m)				Above Ground 2.92 3.03
				Total 6.33 6.63



PUMP CALCULATIONS	
Project Address:	78-84 Bursill Street, Guildford

HL=(3.35x10e6xQ/(d^2.63xC))^1.852	h1=kv^2/2g
HL(m/100m), Q(L/s(, d(mm)	k(cum), v(m/s), g=9.8(m

H(total head)=Hf+h1+Elevation Head(static head)

d(mm)= 65

v(m/s)= 0.00
Bend Losses, Kb= 3.06
Valve Losses, Kv= 2.13
Entry/Exit Losses, Ke= 5.00
Cum Losses, K= 10.19

Elevation Head(m)= 5

Pipe Length(m)= 8

Hazen - Williams C= 145	Hazen-Williams Constant
	125-140 Commercial steel pipe
	135-140 Bitumen Lined Cast iron pipe
	140-145 Copper Tube
	145-150 PVC

Start Flow=	0
Increment=	1

Q(L/s)		0	1	2	3	4	5	6	7	8	9	10
HL(m/100m)		0.00	0.18	0.64	1.36	2.32	3.51	4.92	6.55	8.39	10.44	12.68
Hf(m)	HL x pipe Length/100	0.00	0.01	0.05	0.11	0.19	0.28	0.39	0.52	0.67	0.83	1.01
v(m/s)	Q(L/s) / area of pipe crossing section	0.00	0.30	0.60	0.90	1.21	1.51	1.81	2.11	2.41	2.71	3.01
h1(m)	k(cum) x v(m/s)^2/2xg	0.00	0.05	0.19	0.42	0.76	1.18	1.70	2.31	3.02	3.82	4.72
H(m)	=Hf+H1+Elevation Head	5.00	5.06	5.24	5.53	5.94	6.46	7.09	7.84	8.69	9.66	10.74

UNDERGROUND PUMP - OUT SUMP STAGED STORAGE CALCULATIONS

DEPTH (mm)	AREA (m^2)	CUMULATIVE VOLUME (m^3)
0	3.6	0
100	3.6	0.36
200	3.6	0.72
300	3.6	1.08
400	3.6	1.44
500	3.6	1.80
600	3.6	2.16
700	3.6	2.52
800	3.6	2.88
900	3.6	3.24
1000	3.6	3.60

0 2 4 6 m
SCALE 1:100 @ A1

Issue	Description	Date	Design	Engineer
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B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

0 1cm at full size 10cm 20cm

Certification By:

Architect
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Council
Cumberland Council

Scale
0 200 400 600mm
SCALE 1:10 @ A1
0 1 2 3 m
SCALE 1:50 @ A1

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Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
STORMWATER CONCEPT PLAN
BASEMENT LEVEL
SHEET 2 OF 2

Scale	Project No.	Dwg. No.	Issue
A1 As Shown	171716	102	C

BURSILL STREET

PROPOSED DRIVEWAY CROSSOVER SIZE AND LAYOUT TO COMPLY WITH COUNCIL VEHICULAR CROSSING POLICY

BENCH MARK
CUT IN TOP KERB
RL=22.33 AHD

STOMFILTER CHAMBER
AREA 7.0m²

HATCH DENOTES AREA BY-PASSING OSD

OUTGOING IL Ø300mm AT IL 21.65

INCOMING PIPE INVERT IL 21.85

BASEMENT OUTLINE

UNDERGROUND OSD TANK

CAPACITY	110m³
TANK AREA	130m²
DEPTH TO ORIFICE	1.115m
ORIFICE CL	21.735
TWL	22.85

RAINWATER TANK

CAPACITY REQUIRED	5.0m³
CAPACITY PROVIDED	6.10m³
TANK AREA	4.35m²
TWL	22.95

PIT 1
PROPOSED NEW
1.8m LINTEL
GULLY PIT
SL 22.25
IL 21.41

PIT 2
900 x 900
SL 22.55
IL 21.45

PIT 9
450 x 450 FITTED WITH ENVIROPOD (TO CAPTURE UPSTREAM SURFACE FLOW)
SL 22.70
IL 22.10

PIT 10
900 x 900
SL 23.40
IL 22.00

PIT 11
900 x 900
SL 23.00
IL 21.54

PIT 8
450 x 450
FITTED WITH
ENVIROPOD
SL 23.50
IL 22.75

PIT 7
450 x 450
SL 23.90
IL 23.45

PIT 6
450 x 450
SL 24.00
IL 23.55

PIT 5
450 x 450
SL 24.20
IL 23.85

PIT 4
450 x 450
SL 24.10
IL 23.65

PIT 3
450 x 450
SL 24.20
IL 23.75

Ø375 RCP

Ø300 PVC

Ø225 PVC @ 0.5%

Ø150 PVC

225mm

150mm

RL 22.80

RL 22.60

RL 22.90

RL 23.10

RL 23.30

RL 23.35

RL 23.40

RL 24.30

RL 24.15

RL 24.45

UNIT 1 FFL 23.60

UNIT 2 FFL 23.60

UNIT 3 FFL 23.60

UNIT 4 FFL 23.60

UNIT 5 FFL 23.60

UNIT 6 FFL 23.60

UNIT 7 FFL 23.60

UNIT 8 FFL 23.60

LINE OF BUILDING ABOVE

PIPE TO BE MOUNTED TO BASEMENT SOFFIT AND DISCHARGED INTO RAINWATER TANK

DRIVEWAY CATCHMENT TO BE COLLECTED BY THE BASEMENT DRAINAGE SYSTEM AND PUMPED OUT. AREA = 62.0m²

1m WIDE OVERLAND FLOWPATH WITH 150mm RAISED CONCRETE EDGE

DIVERT STORMWATER TO COMPLY WITH DEVELOPMENT CONSENT # 50

ROAD RESERVATION FOR TALBOT FOOTPATH LOCATION PROPOSED

CONTINUES ON SHEET 104

GROUND FLOOR PLAN

SCALE 1:200

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
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10cm at full size

Certification By:

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Council
Cumberland Council

Scale
0 2 4 6 m
SCALE 1:100 @ A1

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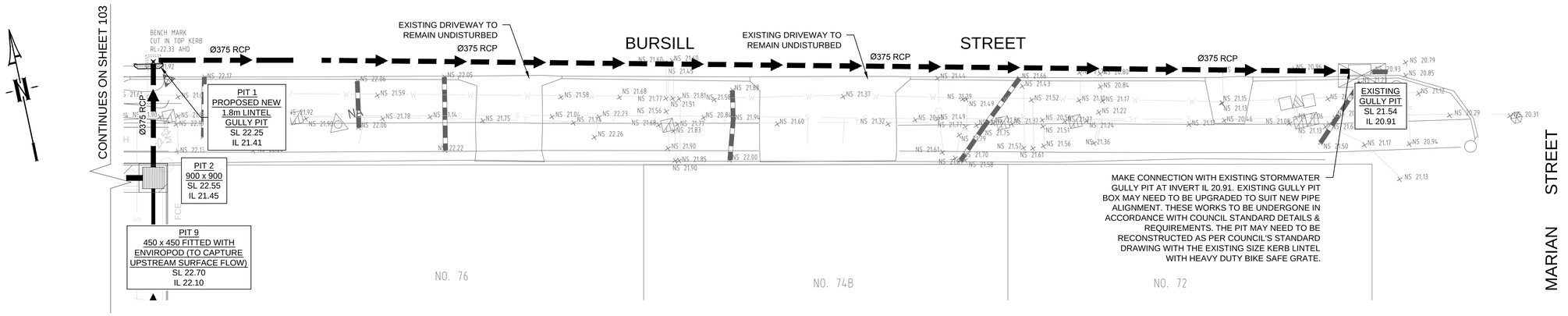
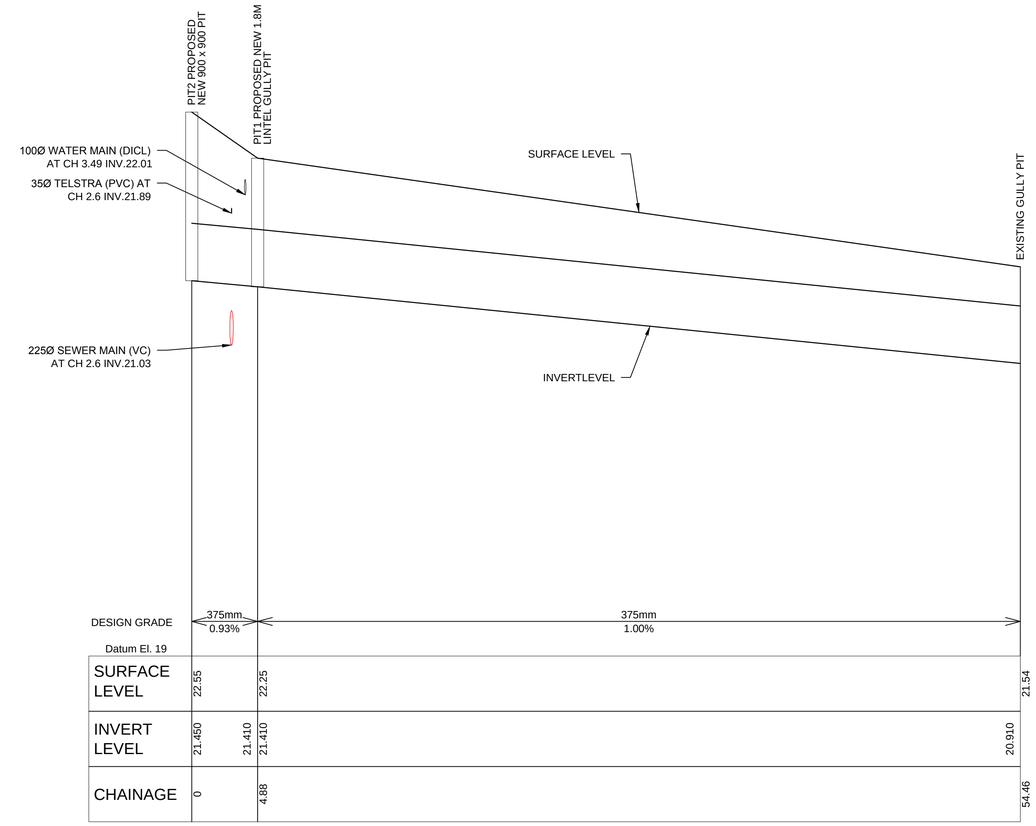
Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
STORMWATER MANAGEMENT PLAN GROUND LEVEL SHEET 1 OF 2

Scale A1	Project No.	Dwg. No.	Issue
1:100	171716	103	C





STORMWATER LONGITUDINAL SECTION

SCALE (H) 1:250
(V) 1:100

LONGITUDINAL SECTION NOTE:

AS PER UTILITY PLAN PRODUCED BY "DURKIN: DATED 16-14-2018 FOR THE SUBJECT SITE. THE TWO UTILITIES (SEWER MAIN & WATER MAIN) WHICH ARE CROSSING THE STORMWATER OUTLET PIPE HAVE BEEN SHOWN WITH QUALITY LEVEL B (AS PER A5 5488-2013) WHICH HAS -/+300mm HORIZONTAL TOLERANCE & -/+500 VERTICAL TOLERANCE.
CONTRACTOR, MUST POTHOLE THE UTILITIES (WITH NON DESTRUCTIVE DIGGING METHOD) AND CONFIRM THAT THESE UTILITIES DON'T CLASH WITH THE PROPOSED OUTLET PIPE. IF ANY CLASHES FOUND, SERVICES PROVIDES TO BE INFORMED FOR SERVICES RELOCATION BEFORE ANY CONSTRUCTION WORKS.

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

0 1cm at full size 10cm 20cm

Certification By:

Architect
PRIME
Construction Group
PO Box 360 Ermington
NSW 1700
PHONE : 0404 222 333
EMAIL : sam@primecg.com.au

Council
Cumberland
Council

Scale
0 2 4 6 m
SCALE 1:100 @ A1

AUSTRALIAN CONSULTING ENGINEERS.
AUSTRALIAN CONSULTING ENGINEERS.
PTY LTD - A.C.N. 084 059 941
SHOP 2-141 CONCORD RD NORTH STRATHFIELD NSW 2137
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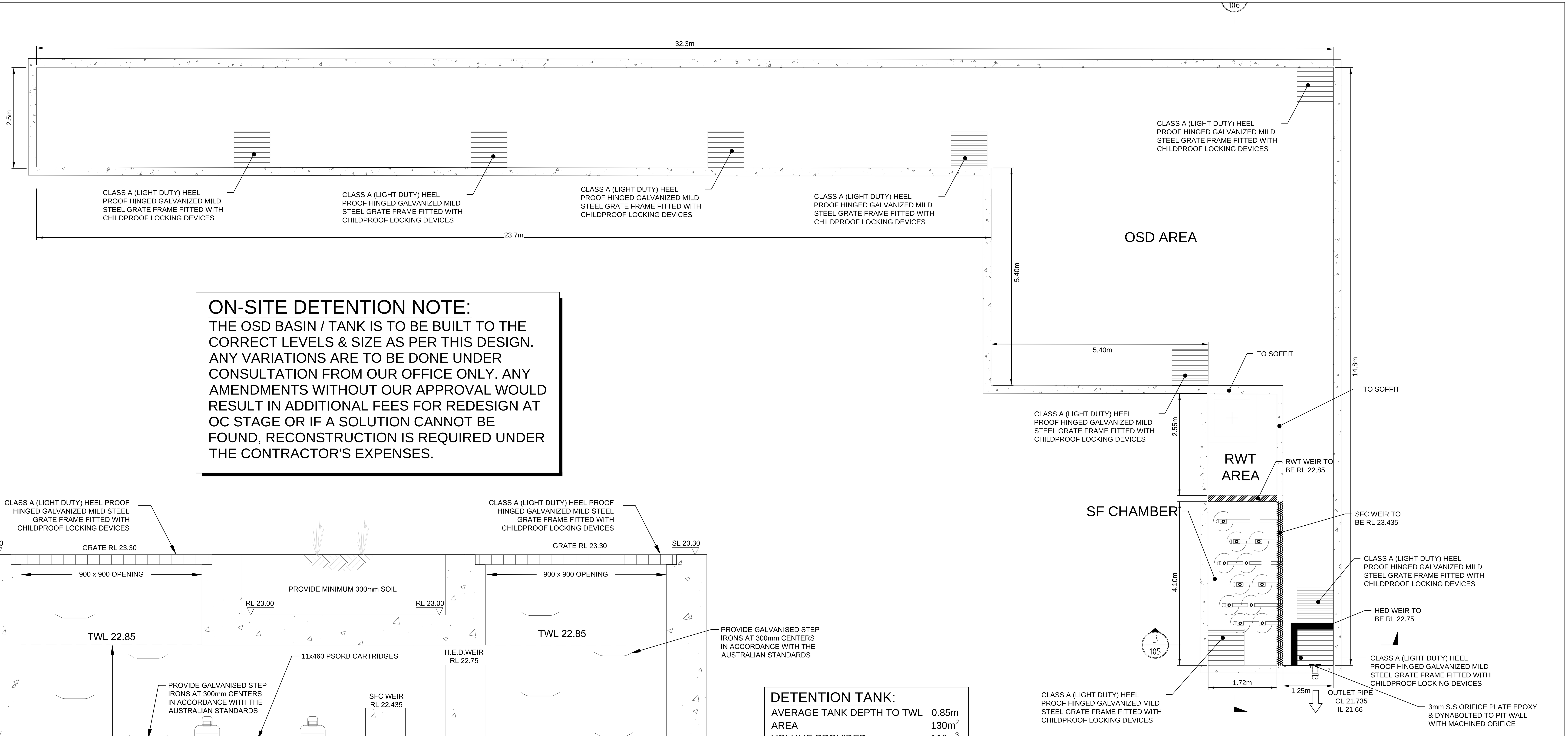
EMAIL: info@aceeng.com.au

Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

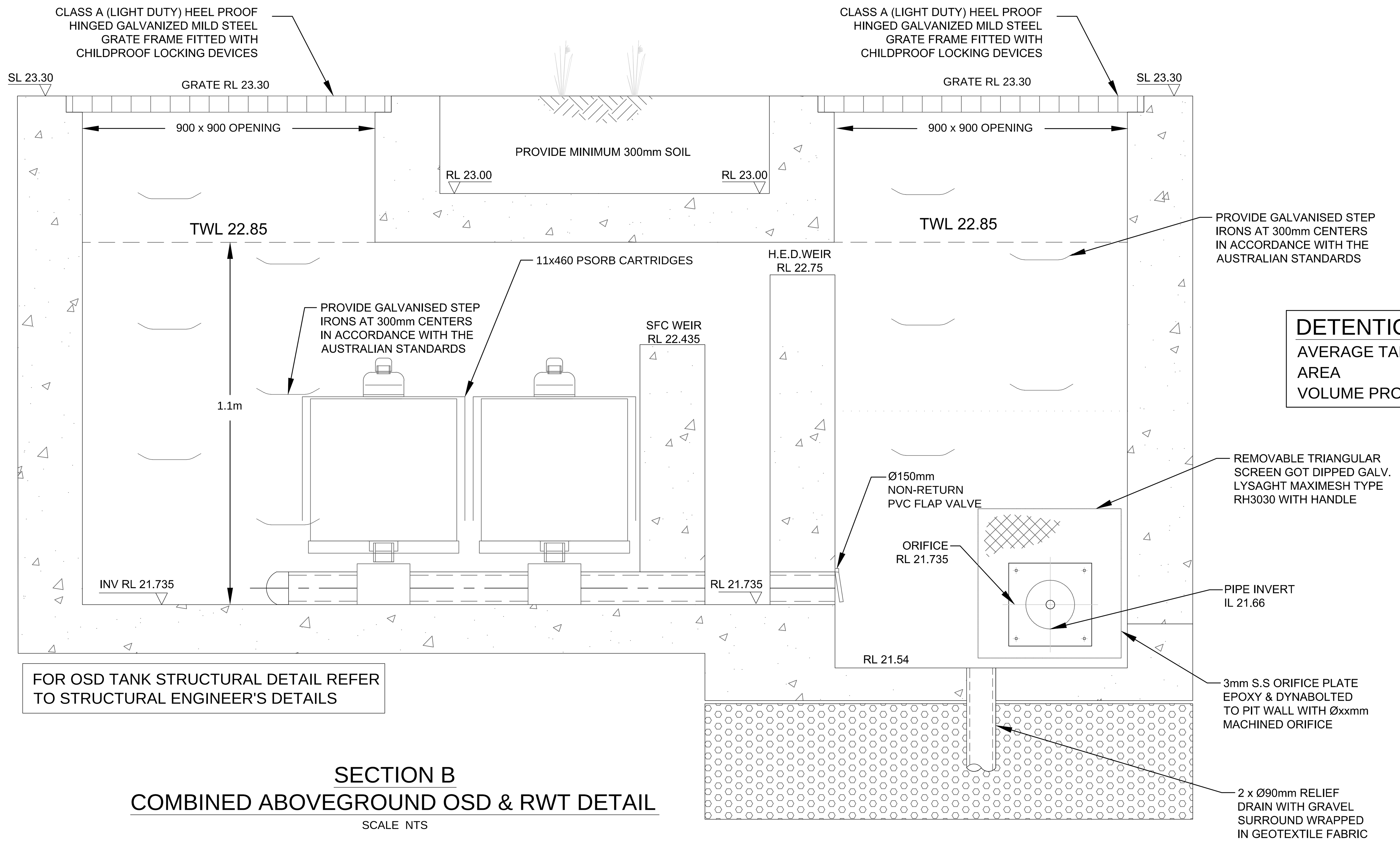
Drawing Title
STORMWATER MANAGEMENT
PLAN GROUND LEVEL
SHEET 2 OF 2

Scale	A1	Project No.	Dwg. No.	Issue
1:100		171716	104	C



ON-SITE DETENTION NOTE:

THE OSD BASIN / TANK IS TO BE BUILT TO THE CORRECT LEVELS & SIZE AS PER THIS DESIGN. ANY VARIATIONS ARE TO BE DONE UNDER CONSULTATION FROM OUR OFFICE ONLY. ANY AMENDMENTS WITHOUT OUR APPROVAL WOULD RESULT IN ADDITIONAL FEES FOR REDESIGN AT OC STAGE OR IF A SOLUTION CANNOT BE FOUND, RECONSTRUCTION IS REQUIRED UNDER THE CONTRACTOR'S EXPENSES.

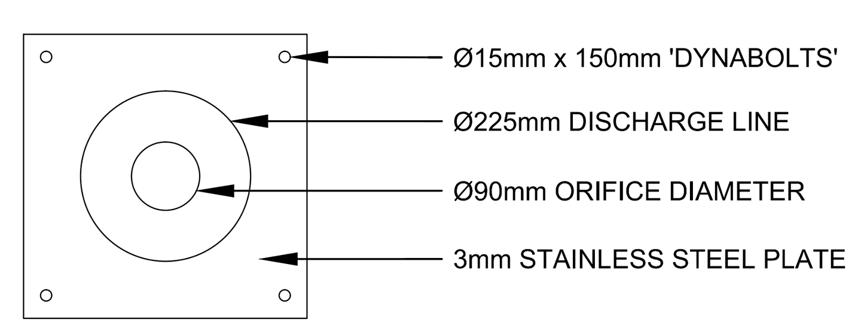


FOR OSD TANK STRUCTURAL DETAIL REFER TO STRUCTURAL ENGINEER'S DETAILS

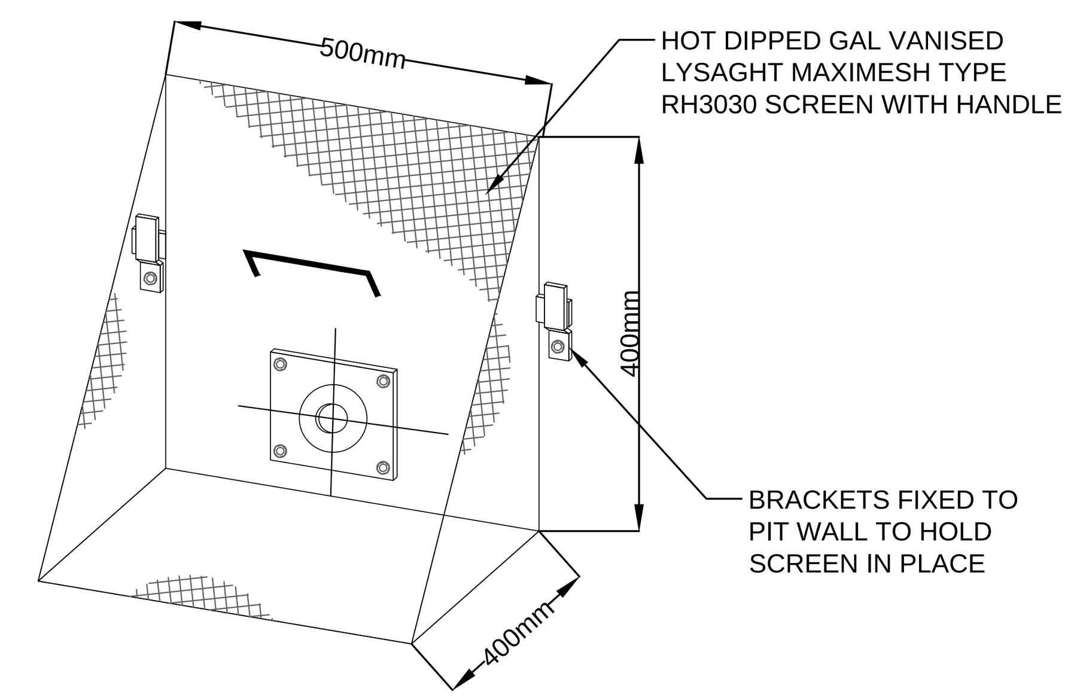
SECTION B
COMBINED ABOVEGROUND OSD & RWT DETAIL
SCALE NTS

DETENTION TANK:

AVERAGE TANK DEPTH TO TWL	0.85m
AREA	130m^2
VOLUME PROVIDED	110m^3



ORIFICE PLATE DETAIL
SCALE 1:10



TRASH SCREEN DETAIL
N.T.S.

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
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A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

Certification By:

Architect: PRIME Construction Group, PO Box 360 Ermington NSW 1700, PHONE : 0404 222 333, EMAIL : sam@primecg.com.au

Council: Cumberland Council

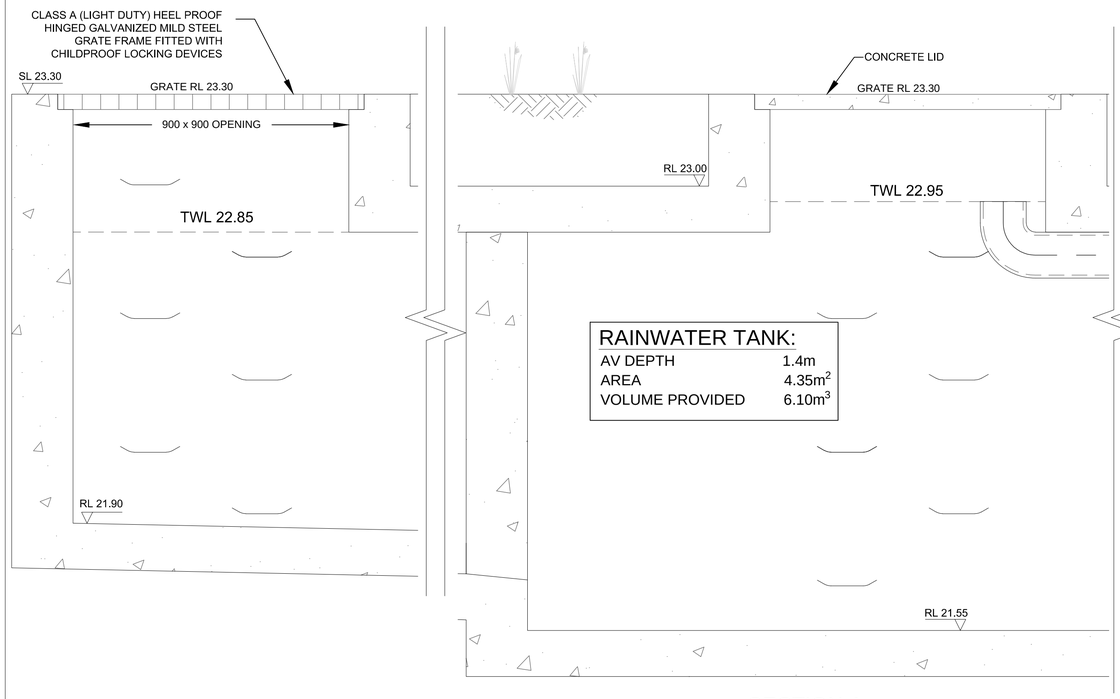
Scale: 0 200 400 600mm SCALE 1:10 @ A1; 0 1 2 3 m SCALE 1:50 @ A1

AUSTRALIAN CONSULTING ENGINEERS. PTY LTD - A.C.N. 084 059 941, SHOP 2-141 CONCORD RD NORTH STRATHFIELD NSW 2137, PH: (02) 9763 1500 FX: (02) 9763 1515, EMAIL: info@aceeng.com.au

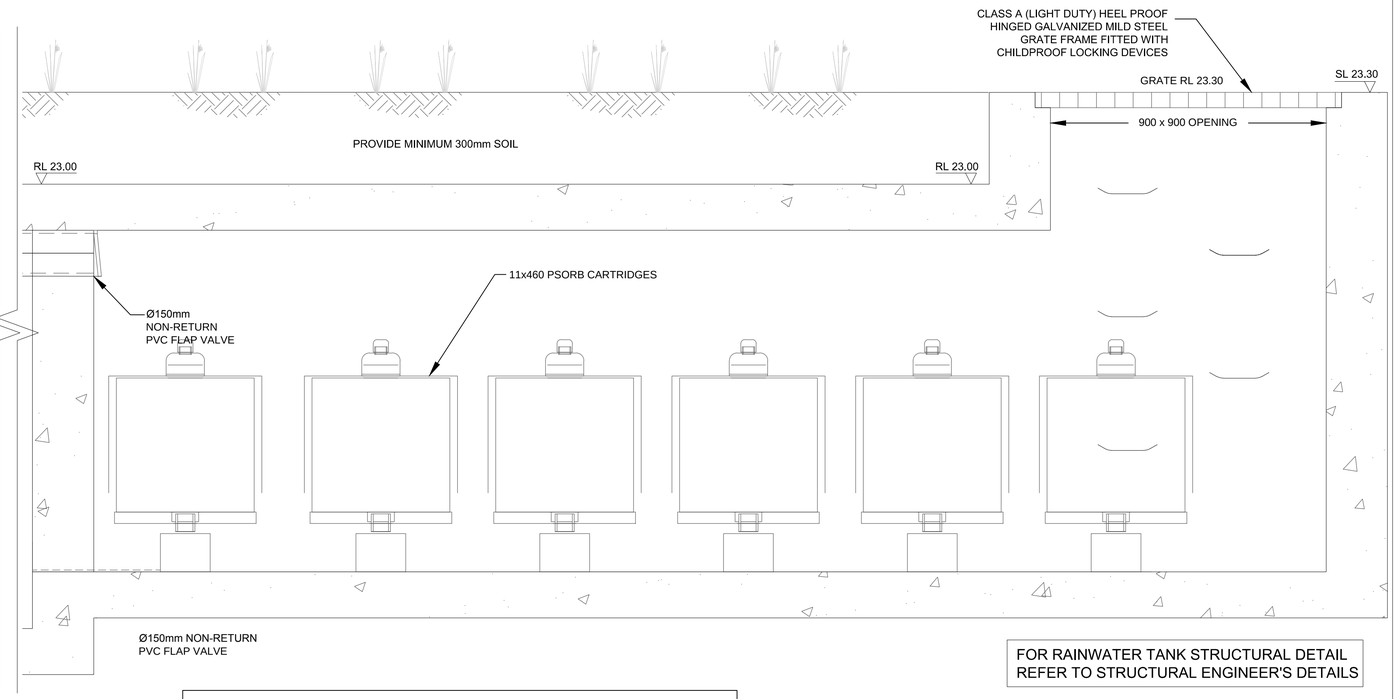
Project: 78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title: COMBINED OSD/RWT TANK DETAILS SHEET 1 OF 2

Scale A1	Project No.	Dwg. No.	Issue
As Shown	171716	105	C



SECTION A
COMBINED ABOVEGROUND OSD & RWT DETAIL
SCALE 1:10



FOR RAINWATER TANK STRUCTURAL DETAIL REFER TO STRUCTURAL ENGINEER'S DETAILS

ON-SITE DETENTION NOTE:

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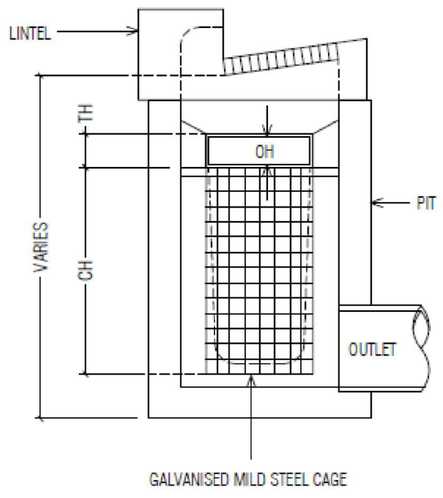
DRAINAGE DESIGN SUMMARY

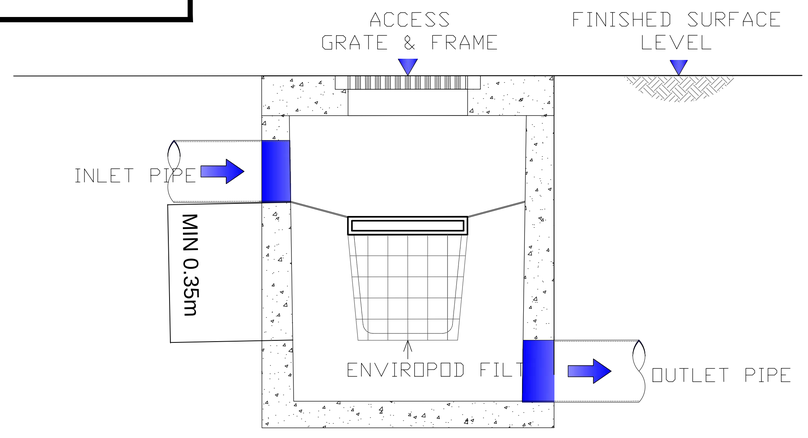
PROJECT: Residential Development (OSD Tank)
DESIGNED BY:DR. ANTHONY HASHAM

LOCATION: 78-84 Bursill Street GUILDFORD
COMPANY:AUSTRALIAN CONSULTING ENGINEERS
PHONE:(02)9763 1500

Area (Ha) =	0.2354	[A]	excluding footpath reservation
Storage Figure =	470.000		
Volume Figure =	*0.08*		
Basic Volume (m^3) =	111	[B]	storage figure x [A]
Basic Discharge (m^3/sec) =	0.019	[C]	volume figure x [A]
Area Drained to Storage (Ha) at least 85%	0.230	[D]	
Percentage Area Drained to Storage [D]/[A]	0.98	[E]	
Storage per ha. of Contributing Area [B]/[D]	481.03	[F]	
Enter Volume/PSD. Adjustment chart (Fig. 5.1) using [F], and read new PSD in L/s/ha	78.19	[G]	[F]= $74.66xPSD^{-0.731}$
Determine PSD (l/s) = [G] X [D]	17.98	[H]	
Weir flow to storage H(Weir) m		[I]	Q = CLH1.5
Maximum Head to Orifice Centre (m) =	0.92	[K]	Head includes HED
Select Orifice Diameter (m) =	0.09	[J]	Use Final discharge PSD [H]
Maximum Discharge (m^3) =	17.98	[L]	
Head for High Farly Discharge	0.99	[M]	$Q_2 = CLH^{1.5}$, Q_2 = (CIA/360 - Final PSD [H]), A= Area directed to storage by pits, $H= Q_2/1.6x0.9xH^{2/3}$
High Early Disharge [L] x ([M]/[K])$^{0.5}$	18.66	[N]	
Approximate Mean Discharge	18.32	[P]	
Average Discharge/ha = [P]/[D]	79.65	[Q]	
Enter Volume/PSD. Adjustment Chart (Fig. 5.1) using [F], and read new PSD in L/s	474.57	[R]	
Determine Final SSR = [R]x[D]	**109.15**	[S]	
Primary storage proportion m3		[T]	[S]x %
Secondary storage proportion m3		[U]	[S]x %
Tertiary storage proportion m3		[V]	[S]x %
Check [T] + [U] + [V] = [S] m3	25.42		



OFFLINE PIT



DROP PIPE ENVIROPOD CONFIGURATION SECTION

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

0 1cm at full size 10cm 20cm

Certification By:

Architect
PRIME Construction Group
PO Box 360 Ermington
NSW 1700
PHONE : 0404 222 333
EMAIL : sam@primecg.com.au

Council
Cumberland Council

Scale
0 400 800 1200 mm
SCALE 1:20 @ A1

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PTY LTD - A.C.N. 084 059 941
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Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
COMBINED OSD/RWT TANK DETAILS SHEET 2 OF 2

Scale	Project No.	Dwg. No.	Issue
As Shown A1	171716	106	C

BURSILL STREET

ROAD

TALBOT

PROPOSED SILT FENCE

1.8 HIGH CONSTRUCTION BARRIER FENCING SHOWN OUTSIDE BDY FOR CLARITY

TEMPORARY SITE TOILET

TEMPORARY SITE OFFICE

TEMPORARY STABILISED SITE ACCESS

BE RAMP

BE PAD

PROPOSED SILT FENCE

PROPOSED SILT FENCE

1.8 HIGH CONSTRUCTION BARRIER FENCING SHOWN OUTSIDE BDY FOR CLARITY

STOCK PILE AREA DURING CONSTRUCTION

STOCK PILE AREA FOR SOIL RE-USE

1.8 HIGH CONSTRUCTION BARRIER FENCING SHOWN OUTSIDE BDY FOR CLARITY

1.8 HIGH CONSTRUCTION BARRIER FENCING SHOWN OUTSIDE BDY FOR CLARITY

BRICK AND OTHER NON-WEATHER AFFECTED MATERIAL STORAGE AREA

SITE RECYCLING BIN

BENCH MARK CUT IN TOP KERB RL=22.33 AHD

LEGEND

- EXISTING SEWER MAIN (FROM RECORDS)
- EXISTING TELSTRA (FROM RECORDS)
- EXISTING CONTOUR
- EXISTING SURFACE LEVEL
- EARTHWORKS LEVEL (X EL: 47.00)
- DESIGN SURFACE LEVEL (X RL 47.00)
- SILT FENCE
- FILL AREA
- STABILISED SITE ACCESS
- 1.8 HIGH CONSTRUCTION BARRIER FENCING
- TREES TO BE RETAINED
- TREES TO BE REMOVED
- INLET PROTECTION

Issue	Description	Date	Design	Engineer
C	ISSUE FOR S.455 MODIFICATION	09/12/2018	E.Y.	O.C.
B	ISSUE FOR SECTION 96 APPROVAL	27/08/2018	A.S.	J.B
A	ISSUE FOR CONSTRUCTION CERTIFICATE	28/05/2018	A.S.	J.B

0 1cm at full size 10cm 20cm

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Council
Cumberland Council

Scale
0 2 4 6 m
SCALE 1:100 @ A1

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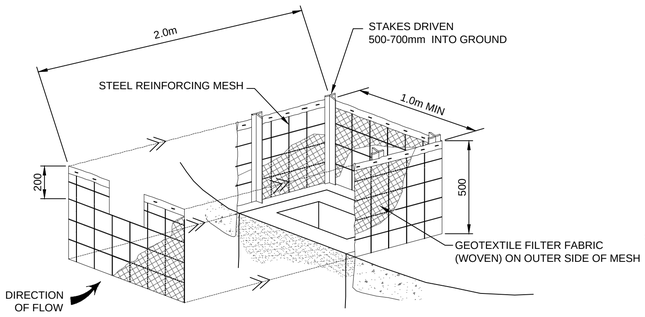
Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
SEDIMENT AND EROSION CONTROL PLAN

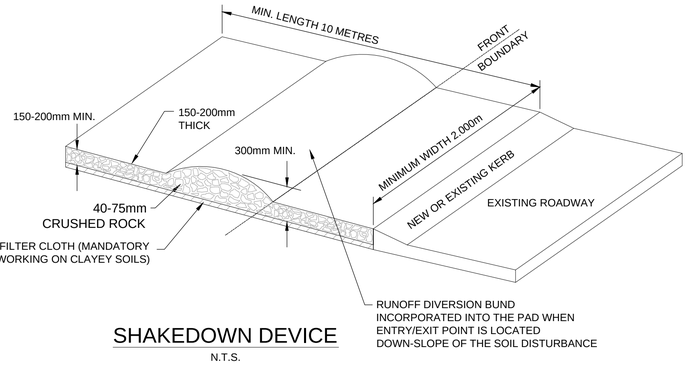
Scale	A1	Project No.	Dwg. No.	Issue
1:100		171716	107	C

SEDIMENT & EROSION NOTES

1. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO NOMINATE THE LOCATIONS AND TYPES OF SEDIMENT AND EROSION CONTROL MEASURES TO BE ADOPTED. THESE MEASURES SHALL BE IMPLEMENTED PRIOR TO ANY CLEARING OR EARTHWORKS AND MAINTAINED UNTIL THE WORKS ARE COMPLETED AND NO LONGER POSE AN EROSION HAZARD, UNLESS OTHERWISE APPROVED BY THE SUPERINTENDENT.
2. IMMEDIATELY FOLLOWING SETTING OUT OF THE WORKS, BUT PRIOR TO COMMENCEMENT OF ANY CLEARING OR EARTHWORKS, THE CONTRACTOR AND SUPERINTENDENT SHALL WALK THE SITE TO IDENTIFY AND MARK TREES WHICH ARE TO BE PRESERVED. NOTWITHSTANDING THE ABOVE,THE CONTRACTOR SHALL TAKE ALL REASONABLE PRECAUTIONS TO MINIMISE DISTURBANCE TO EXISTING VEGETATION AND GROUND COVER OUTSIDE THE MINIMUM AREAS REQUIRED TO COMPLETE THE WORKS AND SHALL BE RESPONSIBLE FOR RECTIFICATION, AT ITS OWN COST, OF ANY DISTURBANCE BEYOND THOSE AREAS.
3. PROVIDE GULLY GRATE INLET SEDIMENT TRAPS AT ALL GULLY PITS.
4. PROVIDE SILT FENCING ALONG PROPERTY LINE AS DIRECTED BY SUPERINTENDENT.
5. ADDITIONAL CONTROL DEVICES TO BE PLACED WHERE DIRECTED BY THE PRINCIPLE.
6. ALTERNATIVE DESIGNS TO BE APPROVED BY SUPERINTENDENT PRIOR TO CONSTRUCTION.
7. WASH DOWN/RUMBLE AREA TO BE CONSTRUCTED WITH PROVISIONS RESTRICTING ALL SILT AND TRAFFICKED DEBRIS FROM ENTERING THE STORMWATER SYSTEM.
8. NO WORK OR STOCKPILING OF MATERIALS TO BE PLACED OUTSIDE OF SITE WORK BOUNDARY.
9. APPROPRIATE EROSION AND SEDIMENT CONTROLS TO BE USED TO PROTECT STOCKPILES AND MAINTAINED THROUGH OUT CONSTRUCTION.
10. IT IS THE CONTRACTORS RESPONSIBILITY TO TAKE DUE CARE OF NATURAL VEGETATION. NO CLEARING IS TO BE UNDERTAKEN WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT.
11. TO AVOID DISTURBANCE TO EXISTING TREES, EARTHWORKS WILL BE MODIFIED AS DIRECTED ON-SITE BY THE SUPERINTENDENT.
12. THE LOCATION OF EROSION AND SEDIMENTATION CONTROLS WILL BE DETERMINED ON SITE BY THE SUPERINTENDENT.
13. ACCESS TRACKS THROUGH THE SITE WILL BE LIMITED TO THOSE DETERMINED BY THE SUPERINTENDENT AND THE CONTRACTOR PRIOR TO ANY WORK COMMENCING.
14. ALL SETTING OUT IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO WORKS COMMENCING ON SITE. THE SUPERINTENDENT'S SURVEYOR SHALL PEG ALL ALLOTMENT BOUNDARIES, PROVIDE COORDINATE INFORMATION TO THESE PEGS AND PLACE BENCH MARKS. THE CONTRACTOR SHALL SET OUT THE WORKS FROM AND MAINTAIN THESE PEGS.
15. PLANS ARE MINIMUM REQUIREMENTS AND ARE TO BE USED AS A GUIDE ONLY. EXACT MEASURES USED SHALL BE DETERMINED ON SITE IN CONJUNCTION WITH PROGRAM OF CONTRACTORS WORKS etc.



FIELD INLET SEDIMENT TRAP
N.T.S.



SHAKEDOWN DEVICE
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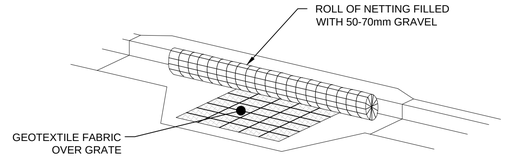

KERB INLET PROTECTION SAG GULLIES
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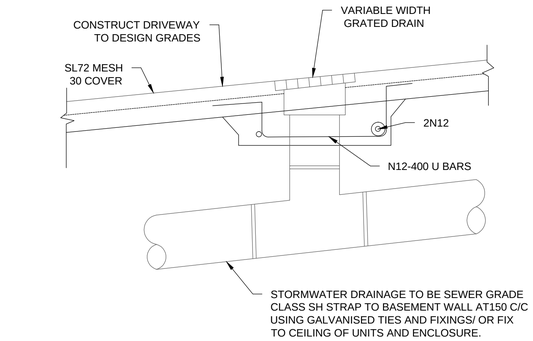
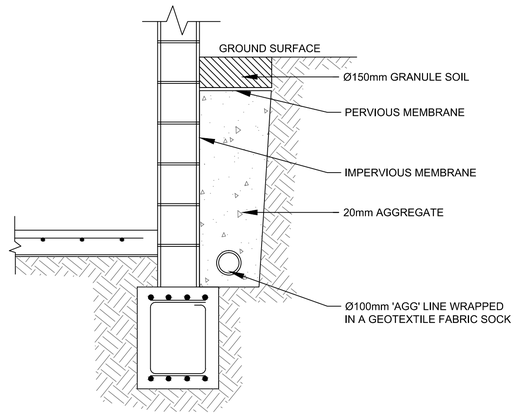
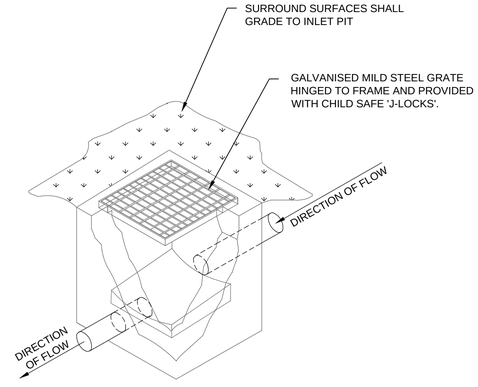


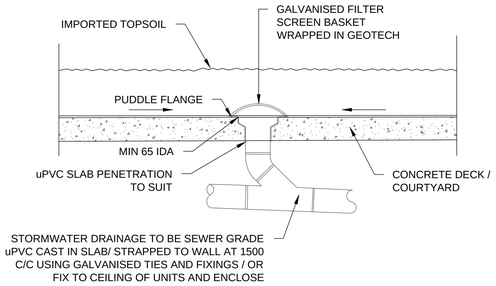
GRATED DRAIN DETAIL
N.T.S.



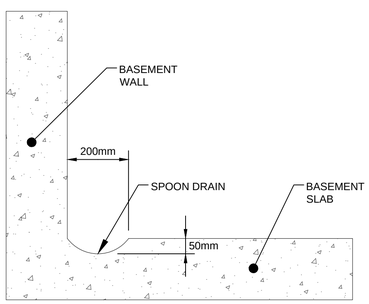
TYPICAL SUBSOIL DRAIN
N.T.S



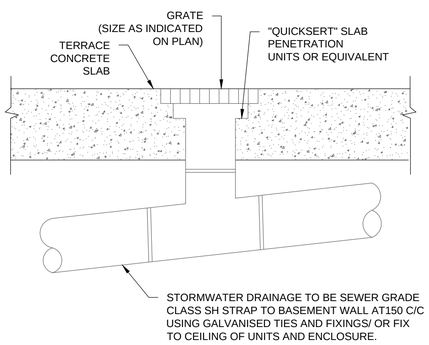
TYPICAL GRATED INLET PIT DETAIL
N.T.S.



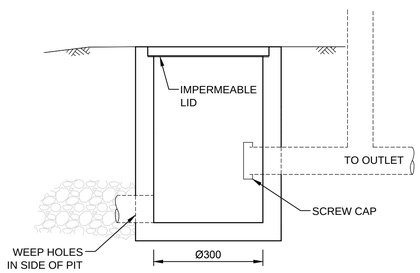
PLANTER GRATE DETAIL
N.T.S.



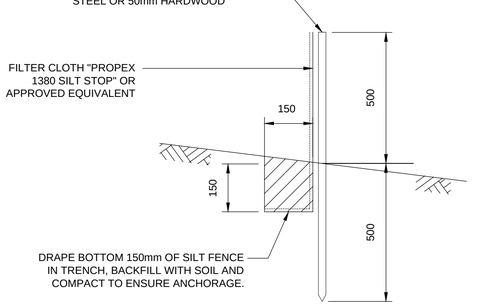
SPOON DRAIN SECTION DETAIL
SCALE 1:10



RAINWATER OUTLET DETAIL
N.T.S.



CLEANING EYE DETAIL
N.T.S.



SILT FENCE DETAIL
N.T.S

SILT FENCE NOTES:

1. FILTER CLOTH TO BE FASTENED SECURELY TO POSTS WITH GALVANISED WIRE TIES, STAPLES OR ATTACHMENT BELTS.
2. POSTS SHOULD NOT BE SPACED MORE THAN 3.0m APART.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 150mm AND FOLDED.
4. FOR EXTRA STRENGTH TO SILT FENCE, WOVEN WIRE (14mm GAUGE, 150mm MESH SPACING) TO BE FASTENED SECURELY BETWEEN FILTER CLOTH AND POSTS BY WIRE TIES OR STAPLES
5. INSPECTIONS SHALL BE PROVIDED ON A REGULAR BASIS, ESPECIALLY AFTER RAINFALL AND EXCESSIVE SILT DEPOSITS REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE
6. SEDIMENT FENCES SHALL BE CONSTRUCTED WITH SEDIMENT TRAPS AND EMERGENCY SPILLWAYS AT SPACINGS NO GREATER THAN 40m ON FLAT TERRAIN DECREASING TO 20m SPACINGS ON STEEP TERRAIN.

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Scale
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SCALE 1:10 @ A1

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Project
78 - 84 BURSILL STREET, GUILDFORD
PROPOSED RESIDENTIAL UNITS DEVELOPMENT
STORMWATER MANAGEMENT PLAN
CONSTRUCTION CERTIFICATE

Drawing Title
MISCELLANEOUS
DETAILS SHEET

Scale A1	Project No.	Dwg. No.	Issue
As Shown	171716	108	C

WSUD Treatment Proposal

78-84 Bursill St, Guildford, Australia

1st March 2019

Stormwater360 Australia

Stormwater360
AUSTRALIA

WATER SENSITIVE URBAN DESIGN TREATMENT PROPOSAL

WWW.STORMWATER360.COM.AU

This document was created by Stormwater360 Australia and outlines the methodology used to produce the accompanying MUSIC model which specifies the proposed treatment devices.

Job Reference: 05349 - 78-84 Bursill St, Guildford

Prepared For: Osman Chowdhury (Australian Consulting Engineers Pty Ltd)

1st March 2019

Contents

1. Site Overview & Requirements

1.1 Site Location

Figure 1.1: locality of site for the proposed WSUD treatment

1.2 Design Considerations

The following information has been assumed and adopted based on the information provided:

- Assumed sufficient physical and hydraulic depth for Standard (460) PSorb cartridges to be placed within the OSD tank.
- Pit-baskets are able to pre-treat the run-off from the driveway and some of the landscape.

1.3 Water Quality Objectives

The proposed system has been sized to meet the current NSW Best Management Practice water quality objectives. The water quality objectives require a the following removal targets to be met;

- 85% of Total Suspended Solids
- 65% of Total Phosphorus
- 45% of Total Nitrogen
- 90% of Gross Pollutants

1.4 Location Based MUSIC Parameters

The site falls within the Local Government Authority of Cumberland. As a result the following MUSIC Parameteres have been selected to adhere to any council and state requirements and recommendations

1.4.1 Rainfall Station

Rainfall Station 67035 Liverpool(Whitlam), 6 Minute Time Step From 1967 To 1976 Modified Specifically For Blacktown City Council

1.4.2 Source Nodes

Rainfall Runoff Parameters

In accordance with the recommendations of 'Sydney Catchment Management Authority (CMA)' the rainfaill runoff parameters shown in Table 1.1 have been used.

Pollutant Export Parameters

Table 1.2 shows the pollutant export parameters used for each surface.

Parameter	Surface Type		
	Roof	Road	Ground
Rainfall Threshold (*mm*)	0.3	1.5	1
Soil Storage Capacity (*mm*)	120	120	120
Initial Storage (% Capacity)	30	30	30
Field Capacity (*mm*)	80	80	80
Infiltration Capacity co- efficient a	200	200	200
Infiltration Capacity co- efficient b	1	1	1
Initial depth (*mm*)	10	10	10
Daily recharge rate (%)	25	25	25
Daily base flow rate (%)	5	5	5
Daily deep seepage rate (%)	0	0	0

Table 1.1: Rainfall Run-off Parameters for 'Sydney CMA' Source Nodes

Flow Type	Surface Type	TSS Log_{10} Values		TP Log_{10} Values		TN Log_{10} Values	
		Mean	St. Dev	Mean	St. Dev	Mean	St. Dev
Baseflow	Roof	0.000	0.000	0.000	0.000	0.000	0.000
	Road	1.200	0.170	-0.850	0.190	0.110	0.120
	Ground	1.200	0.170	-0.850	0.190	0.110	0.120
Stormflow	Roof	1.300	0.320	-0.890	0.250	0.300	0.190
	Road	2.430	0.320	-0.300	0.250	0.340	0.190
	Ground	2.150	0.320	-0.600	0.250	0.300	0.190

Table 1.2: Pollutant Export Parameters for 'Sydney CMA' Source Nodes

2. Design Methodology

2.1 Catchment Breakup

In order to model a site correctly within the MUSIC software, a catchment breakup is required. The 'catchment breakup' separates catchment areas into groups based on the treatment devices they will drain to. These catchments are further split into sub-catchments based on the pollutant loading concentrations relative to that surface type. Typically *Roof*, *Road*, and *Ground* (Impervious & Pervious) areas are separated based on the pollutants they produce.

Table 2.1 summarises the site area breakup used by Stormwater360 for the design of the proposed treatment devices within MUSIC.

Description	Pollutant Type	Impervous %	Area (m^2)
Roof	Roof	100	1070
Driveway	Road	100	78
Footpath	Ground	100	110
Landscape	Ground	0	403
Paved	Ground	100	238
Paved	Ground	100	6
Landscape to C	Ground	0	28
Landscape	Ground	0	20
Landscape	Ground	0	137
Landscape Bypass	Ground	0	104
Landscape Bypass	Ground	0	124

Table 2.1: MUSIC Model Site Area Breakup

2.2 MUSIC Model Results

Description	Pollutant Removals (%)			
	TSS	TP	TN	GP
Required Targets	85.0	65.0	45.0	90.0
Proposed System	85.0	78.2	55.8	100.0

Table 2.2: MUSIC Model Receiving Node Results

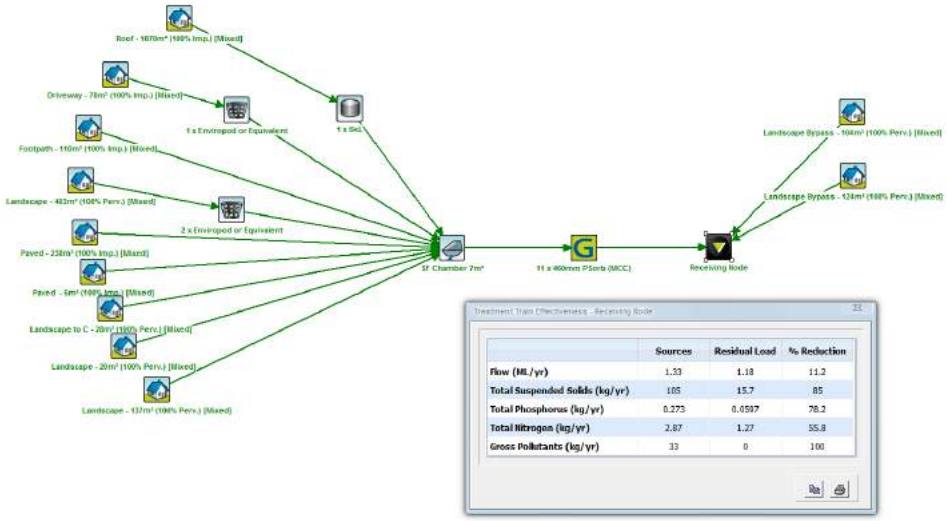

Figure 2.1: Screenshot of MUSIC Model Results

3. Proposed WSUD Treatment

3.1 Summary of Proposed Systems

As per the MUSIC design the following Stormwater360 products are required for the project. These are;

- A 11xStandard(460) PSorb cartridge StormFilter system within a 7m^2 StormFilter chamber, inside the OSD tank
- 3 EnviroPod Series 200 Filter Baskets or Equivalent by Stormwater360