SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be removed
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Predevelopment contours at 500mm interval

GLENELG HIGHWAY
HENTY HIGHWAY
WEST BOUNDARY ROAD
COLERAINE ROAD
NORTH BOUNDARY ROAD
Donehues Leisure Hamilton
New BP Service Centre
Refer to drawing above for continuation
Refer to drawing below for continuation
Refer to Dwg. No. 1853-COL-S2-D02 top for continuation
Remove Ironbark in medium-term (5-10 years)
Hamilton Entry Sign

COLERAINE ROAD (between Young St + Henty Hwy) Existing Vegetation Plan

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

EXISTING VEGETATION SCHEDULE

SYMBOL	DESCRIPTION
1	Corymbia maculata / Spotted Gum
8	Eucalyptus leucoxylon `Rosea` / Red Flowering Yellow Gum
13	Eucalyptus nicholii / Willow Peppermint
17	Acacia floribunda / Gossamer Wattle
18	Eucalyptus sideroxylon / Red Ironbark
19	Melaleuca linariifolia / Snow-in-summer
24	Eucalyptus sp. / Gum - unidentified
25	Allocasuarina verticillata / Drooping She-oak
32	Eucalyptus camaldulensis / River Red Gum
37	Bursaria spinosa / Sweet Bursaria
38	Kunzea sp. / Kunzea

0 5m 12.5m 25m 50m

SCALE: 1: 500

COLERAINE ROAD (between Young St + Henty Hwy) Existing Vegetation Plan

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D01

VEGETATION ASSESSMENT PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

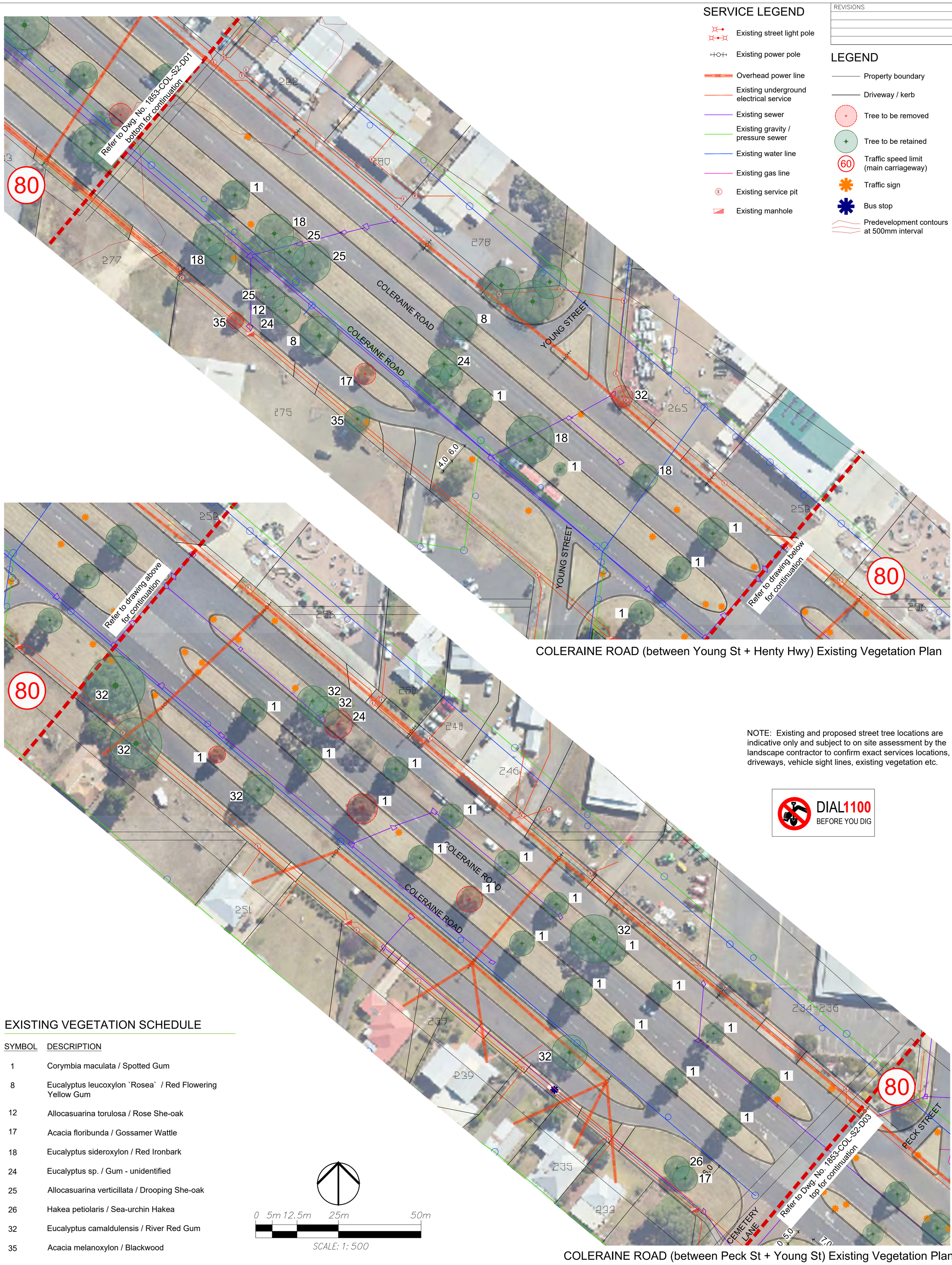
SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be removed
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Predevelopment contours at 500mm interval



COLERAINE ROAD (between Young St + Henty Hwy) Existing Vegetation Plan

COLERAINE ROAD (between Peck St + Young St) Existing Vegetation Plan

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

EXISTING VEGETATION SCHEDULE

SYMBOL	DESCRIPTION
1	Corymbia maculata / Spotted Gum
8	Eucalyptus leucoxylon `Rosea` / Red Flowering Yellow Gum
12	Allocasuarina torulosa / Rose She-oak
17	Acacia floribunda / Gossamer Wattle
18	Eucalyptus sideroxylon / Red Ironbark
24	Eucalyptus sp. / Gum - unidentified
25	Allocasuarina verticillata / Drooping She-oak
26	Hakea petiolaris / Sea-urchin Hakea
32	Eucalyptus camaldulensis / River Red Gum
35	Acacia melanoxylon / Blackwood

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D02

VEGETATION ASSESSMENT PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be removed
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Predevelopment contours at 500mm interval

Refer to Dwg. No. 1853-COL-S2-D02 bottom for continuation

Refer to drawing above for continuation

Refer to Dwg. No. 1853-COL-S2-D04 top for continuation

Refer to drawing below for continuation

Remove Ironbark in medium-term (5-10 years).

Remove Red Gum in medium-term (5-10 years)

COLERAINE ROAD (between Hammond St + Peck St) Existing Vegetation Plan

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

COLERAINE ROAD (between Lewis St + Hammond St) Existing Vegetation Plan

REFERENCE NOTES SCHEDULE D03

SYMBOL	DESCRIPTION
1	Corymbia maculata / Spotted Gum
7	Melaleuca armillaris / Bracelet Honey Myrtle
8	Eucalyptus leucoxylon `Rosea` / Red Flowering Yellow Gum
10	Callistemon sp. / Bottlebush
18	Eucalyptus sideroxylon / Red Ironbark
22	Quercus robur / English Oak
24	Eucalyptus sp. / Gum - unidentified
25	Allocasuarina verticillata / Drooping She-oak
27	Pinus radiata / Monterey Pine
28	Photinia robusta / Red Leaf Photinia
29	Eucalyptus lehmannii / Bushy Yate
30	Acacia howittii / Sticky Wattle
31	Acacia baileyana / Cootamundra Wattle
32	Eucalyptus camaldulensis / River Red Gum
33	Melaleuca nesophila / Showy Honey-myrtle
34	Acacia iteaphylla / Winter Wattle
37	Bursaria spinosa / Sweet Bursaria
38	Mixed planting: Eucalyptus cladocalyx / Sugar Gum, Eucalyptus camaldulensis / River Red Gum
41	Eucalyptus cladocalyx / Sugar Gum

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D03

VEGETATION ASSESSMENT PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be removed
- Tree to be retained
- 60 Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Predevelopment contours at 500mm interval

Refer to Dwg. No. 1853-COL-S2-D03 bottom for continuation

Refer to drawing above for continuation

Refer to drawing below for continuation

Refer to Dwg. No. 1853-COL-S2-D05 top for continuation

Remove Honey Myrtle in medium-term (5-10 years).

LEWIS STREET

MASON COURT

MCPHEE STREET

COLERAINE ROAD

North Hamilton Kindergarten

1,0m footpath
0,5m from boundary
1,5m naturestrip
2,0m naturestrip

COLERAINE ROAD (between Mcphee St + Lewis St)
Existing Vegetation Plan

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

EXISTING VEGETATION SCHEDULE

SYMBOL	DESCRIPTION
1	Corymbia maculata / Spotted Gum
2	Eucalyptus sp. / Gum
3	Eucalyptus sp. / Gum (unidentified - coppice grouth)
4	Mixed native planting: Allocasuarina torulosa / Rose She-oak Callistemon sp. / Bottlebrush Eucalyptus sp. / Gum Melaleuca styphelioides / Prickly Paperbark Leptospermum laevigatum / Coastal Tea Tree
5	Crataegus sp. / Hawthorn
6	Eucalyptus viminalis / Manna Gum
7	Melaleuca armillaris / Bracelet Honey Myrtle
8	Eucalyptus leucoxylon `Rosea` / Red Flowering Yellow Gum
9	Corymbia citriodora / Lemon-scented Gum
10	Callistemon sp. / Bottlebush
11	Eucalyptus polybractea / Blue-leaved Mallee
12	Allocasuarina torulosa / Rose She-oak
13	Eucalyptus nicholii / Willow Peppermint

SYMBOL	DESCRIPTION
14	Corymbia ficifolia / Red Flowering Gum
18	Eucalyptus sideroxylon / Red Ironbark
21	Melaleuca sp. / Myrtle
24	Eucalyptus sp. / Gum - unidentified
26	Hakea petiolaris / Sea-urchin Hakea
41	Eucalyptus cladocalyx / Sugar Gum

COLERAINE ROAD (between Mcphee St + Mt Baimbridge Rd) Existing Vegetation Plan

0 5m 12.5m 25m 50m
SCALE: 1: 500

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D04

VEGETATION ASSESSMENT PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

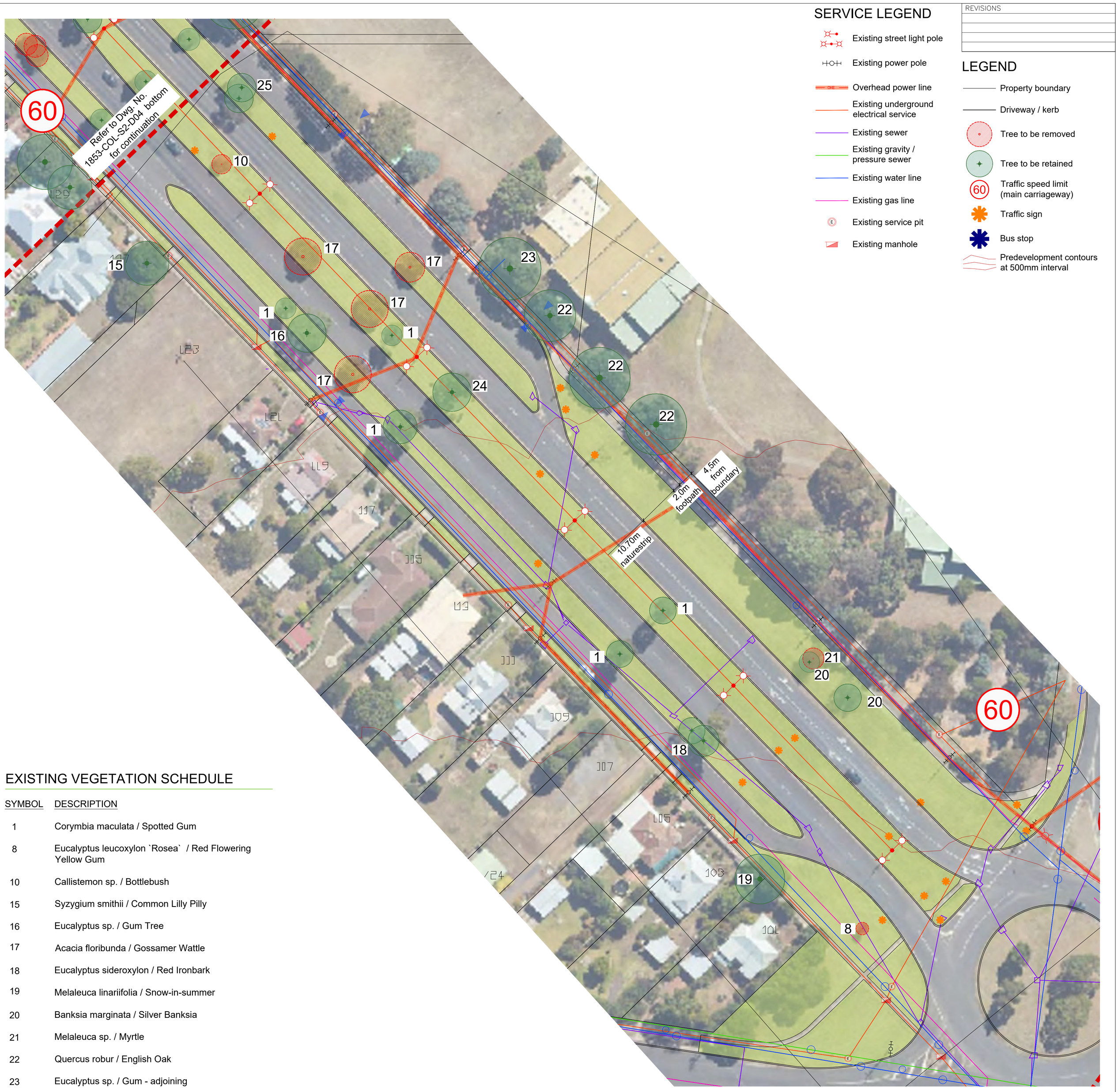
SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be removed
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Predevelopment contours at 500mm interval



EXISTING VEGETATION SCHEDULE

SYMBOL	DESCRIPTION
1	Corymbia maculata / Spotted Gum
8	Eucalyptus leucoxylon `Rosea` / Red Flowering Yellow Gum
10	Callistemon sp. / Bottlebush
15	Syzygium smithii / Common Lilly Pilly
16	Eucalyptus sp. / Gum Tree
17	Acacia floribunda / Gossamer Wattle
18	Eucalyptus sideroxylon / Red Ironbark
19	Melaleuca linariifolia / Snow-in-summer
20	Banksia marginata / Silver Banksia
21	Melaleuca sp. / Myrtle
22	Quercus robur / English Oak
23	Eucalyptus sp. / Gum - adjoining
24	Eucalyptus sp. / Gum - unidentified
25	Allocasuarina verticillata / Drooping She-oak

COLERAINE ROAD (between Mcphee St + Mt Baimbridge Rd) Existing Vegetation Plan

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D05

VEGETATION ASSESSMENT PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Contours at 500mm interval
- *Corymbia maculata* / Spotted Gum
- *Eucalyptus camaldulensis* / Red River Gum
- *Corymbia ficifolia* 'Wildfire' / Flowering Gum ctv.

GLENELG HIGHWAY
HENTY HIGHWAY
COLERAINE ROAD
WEST BOUNDARY ROAD
NORTH BOUNDARY ROAD
Donehues Leisure Hamilton
New BP Service Centre
Ec 10
Cm 5
Ec 2
Cm 31
CfW 12
7.0
15.5
17,5
8,0
OHE
Refer to drawing above for continuation
Refer to drawing below for continuation
Refer to Dwg. No. 1853-COL-S2-D07 top for continuation
80
60
299
297
295
293
291
294
292
290
288
286
284
282
279

COLERAINE ROAD (between Young St + Henty Hwy) Streetscape Proposal

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

PLANT SCHEDULE D06

TREES	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	NOMINAL SPACING	QTY
CfW	Corymbia ficifolia `Wildfire` / Flowering Gum ctv.	6 x 4m	45L, min.1.8m high, 30mm cal.	8 - 10m cts.	12
Cm	Corymbia maculata / Spotted Gum	25 x 13m	300mm pot, 1.5m high, 25mm cal.	12 - 16m cts.	36
Ec	Eucalyptus camaldulensis / Red River Gum *	30 x 15m	45L, 1.8m high, 30mm cal.	7 - 15m cts.	12

* Note: Where practical grow from local provenance seed source.

COLERAINE ROAD (between Young St + Henty Hwy) Streetscape Proposal

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D06

STREETSCAPE PLANTING PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Contours at 500mm interval
- *Corymbia maculata* / Spotted Gum
- *Quercus palustris* 'Freefall'/ Pin Oak
- *Corymbia ficifolia* 'Wildfire' / Flowering Gum ctv.
- Selected feature trees

COLERAINE ROAD (between Young St + Henty Hwy) Streetscape Proposal

COLERAINE ROAD (between Peck St + Young St) Streetscape Proposal

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

PLANT SCHEDULE D07

TREES	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
AnS	Acer negundo `Sensation` / Sensation Box Elder Maple	9 x 6m	45L, min.1.8m high, 30mm cal.	10 - 12m cts	11
CfW	Corymbia ficifolia `Wildfire` / Flowering Gum ctv.	6 x 4m	45L, min.1.8m high, 30mm cal.	8 - 10m cts.	57
Cm	Corymbia maculata / Spotted Gum	25 x 13m	300mm pot, 1.5m high, 25mm cal.	12 - 16m cts.	41
QpF	Quercus palustris `Freefall` / Pin Oak	15 x 8m	45L, min.1.8m high, 30mm cal.	14m cts.	2

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D07

STREETSCAPE PLANTING PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Contours at 500mm interval
- *Corymbia maculata* / Spotted Gum
- *Quercus palustris* 'Freefall'/ Pin Oak
- *Corymbia ficifolia* 'Wildfire' / Flowering Gum ctv.

Refer to Dwg. No. 1853-COL-S2-D07 bottom for continuation

PECK STREET

CEMETERY LANE

80

6.0

5.0

5.0

7.0

QpF 34

CfW 17

Cm 14

14.0

COLERAINE ROAD

COLERAINE ROAD

COLERAINE ROAD

Refer to drawing above for continuation

HAMMOND STREET

HAMMOND STREET

Cm 4

Cm 4

QpF 28

KING STREET

KING STREET

Cm 2

Cm 2

Cm 1

Cm 1

Cm 2

Refer to drawing below for continuation

Refer to Dwg. No. 1853-COL-S2-D09 top for continuation

LEWIS STREET

5.0

5.0

5.0

14.0

7.0

80

80

COLERAINE ROAD (between Hammond St + Peck St)
Streetscape Proposal

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

COLERAINE ROAD (between Lewis St + Hammond St)
Streetscape Proposal

PLANT SCHEDULE D08

TREES	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	NOMINAL SPACING	QTY
CfW	Corymbia ficifolia `Wildfire` / Flowering Gum ctv.	6 x 4m	45L, min.1.8m high, 30mm cal.	8 - 10m cts.	17
Cm	Corymbia maculata / Spotted Gum	25 x 13m	300mm pot, 1.5m high, 25mm cal.	12 - 16m cts.	30
QpF	Quercus palustris `Freefall` / Pin Oak	15 x 8m	45L, min.1.8m high, 30mm cal.	14m cts.	62

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D08

STREETSCAPE PLANTING PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Contours at 500mm interval
- *Corymbia maculata* / Spotted Gum
- *Quercus palustris* 'Freefall'/ Pin Oak
- Lagerstroemia indica 'Tuscarora' / Crepe Myrtle
- Selected feature trees

LiT 19 | Cm 3 | QpF 6 | Cm 19 | LiT 5 | LiT 1 | AnS 10 | Cm 4 | AnS 7 | LiT 1

Refer to Dwg. No. 1853-COL-S2-D08 bottom for continuation

Refer to drawing above for continuation

Refer to drawing below for continuation

Refer to Dwg. No. 1853-COL-S2-D10 top for continuation

LEWIS STREET | MASON COURT | COLERAINE ROAD | MCPHEE STREET

North Hamilton Kindergarten

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

0 5m 12.5m 25m 50m

SCALE: 1: 500

COLERAINE ROAD (between Mcphee St + Lewis St) Streetscape Proposal

COLERAINE ROAD (between Mcphee St + Mt Baimbridge Rd) Streetscape Proposal

PLANT SCHEDULE D09

TREES	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
AnS	Acer negundo `Sensation` / Sensation Box Elder Maple	9 x 6m	45L, min.1.8m high, 30mm cal.	10 - 12m cts	17
Cm	Corymbia maculata / Spotted Gum	25 x 13m	300mm pot, 1.5m high, 25mm cal.	12 - 16m cts.	33
LiT	Lagerstroemia indica `Tuscarora` / Tuscarora Crepe Myrtle	5 x 4m	45L, min.1.8m high, 30mm cal.	min. 8m cts.	26
QpF	Quercus palustris `Freefall` / Pin Oak	15 x 8m	45L, min.1.8m high, 30mm cal.	14m cts.	6

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853–COL–S2–D09

STREETSCAPE PLANTING PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

SERVICE LEGEND

- Existing street light pole
- Existing power pole
- Overhead power line
- Existing underground electrical service
- Existing sewer
- Existing gravity / pressure sewer
- Existing water line
- Existing gas line
- Existing service pit
- Existing manhole

REVISIONS

LEGEND

- Property boundary
- Driveway / kerb
- Tree to be retained
- Traffic speed limit (main carriageway)
- Traffic sign
- Bus stop
- Contours at 500mm interval
- *Corymbia maculata* / Spotted Gum
- Proposed mixed native trees planting
- Selected feature trees
- *Westringia fruticosa* 'Mundi' / Coast Rosemary
- Proposed bladed plant ie. *Lomandra longifolia* `Tanika`
- Proposed groundcover ie. *Myoporum parvifolium*

60

Refer to Dwg. No. 1853-COL-S2-D09 bottom for continuation

Cm 32

5,5

SELECTED MIXED NATIVE TREES (9)
6 Allocasuarina verticillata
3 Banksia marginata

Garden Bed Understorey Planting:
6 *Westringia fruticosa* `Mundi`
175 *Dianella revoluta*
18 *Casuarina glauca* `Cousin It`

SELECTED MIXED NATIVE TREES (7)
5 Allocasuarina verticillata
2 Banksia marginata

Garden Bed Understorey Planting
8 *Westringia fruticosa* `Mundi`
141 *Lomandra longifolia* `Tanika`
16 *Myoporum parvifolium*

SELECTED MIXED NATIVE TREES (9)
6 Allocasuarina verticillata
3 Banksia marginata

Garden Bed Understorey Planting
6 *Westringia fruticosa* `Mundi`
175 *Dianella revoluta*
18 *Casuarina glauca* `Cousin It`

SELECTED MIXED NATIVE TREES (6)
4 Allocasuarina verticillata
2 Banksia marginata

Garden Bed Understorey Planting
6 *Westringia fruticosa* `Mundi`
141 *Lomandra longifolia* `Tanika`
16 *Myoporum parvifolium*

SELECTED MIXED NATIVE TREES (9)
6 Allocasuarina verticillata
3 Banksia marginata

Garden Bed Understorey Planting
6 *Westringia fruticosa* `Mundi`
175 *Dianella revoluta*
18 *Casuarina glauca* `Cousin It`

SELECTED MIXED NATIVE TREES (9)
6 *Allocasuarina verticillata*
3 *Banksia marginata*

Garden Bed Understorey Planting
6 *Westringia fruticosa* `Mundi`
175 *Dianella revoluta*
18 *Casuarina glauca* `Cousin It`

COLERAINE ROAD

9,0 18,0 4,0 5,0 2,0

AnS 10

LiT 3

AnS 1

60

MT BAIMBRIDGE ROAD

L29 L27 L23 L21 L19 117 115 113 111 109 107 105 103 101

NOTE: Existing and proposed street tree locations are indicative only and subject to on site assessment by the landscape contractor to confirm exact services locations, driveways, vehicle sight lines, existing vegetation etc.

DIAL1100 BEFORE YOU DIG

STREET TREES - MINIMUM OFFSET DISTANCES TO SERVICES
The contractor shall ensure the following distances are complied with in relation to street trees and underground services / streetscape assets:

Pedestrian Pathways: 1.2 metre minimum clearance
Pedestrian Pathways in Reserves: 2.0 metre minimum clearance
Driveways: 3.0 metre minimum clearance
Street Light / Power Poles: 4.0 metre minimum clearance
Service Assets (including junction boxes / pits etc.): 2 metre minimum clearance
Electrical joint: 2.5 metre minimum clearance
Service Conduit Crossing: 2 metre minimum clearance
Fire Plug: 3 metre minimum clearance
Domestic service tapping point: 2 metre minimum clearance
Stormwater Outlet: 2 metre minimum clearance
Paralleling Pillar : 2.5 metre minimum clearance
NBN pit: 2 metre minimum clearance

Where these distances are not attainable, root barriers may be appropriate in some instances and on the advice of the City of Ballarat arborist.

NOTE: It is the contractors responsibility to locate and identify all services infrastructure on site and position the trees accordingly.

UNDERGROUND ELECTRICAL SERVICES
The tree zone is a 5m Ø area of roadside with a depth of 600mm.
All underground electrical cables should be placed outside the tree zone where practical. Underground cable installed at a burial depth of 600mm in close proximity to the tree zone (either beside or below), shall be within conduits or cover slabs to provide a higher level of infrastructure protection.

For underground cable installed at a burial depth of 750mm, consideration should be given to installation within conduits to provide a higher level of infrastructure protection. Refer to PowerCor standard GA211 for further detail.

COLERAINE ROAD (between McPhee St + Mt Baimbridge Rd) Streetscape Proposal

PLANT SCHEDULE D10

TREES	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
AnS	Acer negundo `Sensation` / Sensation Box Elder Maple	9 x 6m	40cm, 1.2-1.5m high, 25mm cal.	10 - 12m cts	24
Av	Allocasuarina verticillata / Drooping She-oak	7 x 6m	300mm pot, 1.5m high, 25mm cal.	As shown	33
Bm	Banksia marginata / Silver Banksia	5 x 4m	300mm pot, 1.5m high, 25mm cal.	As shown	16
Cm	Corymbia maculata / Spotted Gum	25 x 13m	300mm pot, 1.5m high, 25mm cal.	12 - 16m cts.	32
LiT	Lagerstroemia indica `Tuscarora` / Tuscarora Crepe Myrtle	5 x 4m	40cm, 1.2-1.5m high, 25mm cal.	min. 8m cts.	3

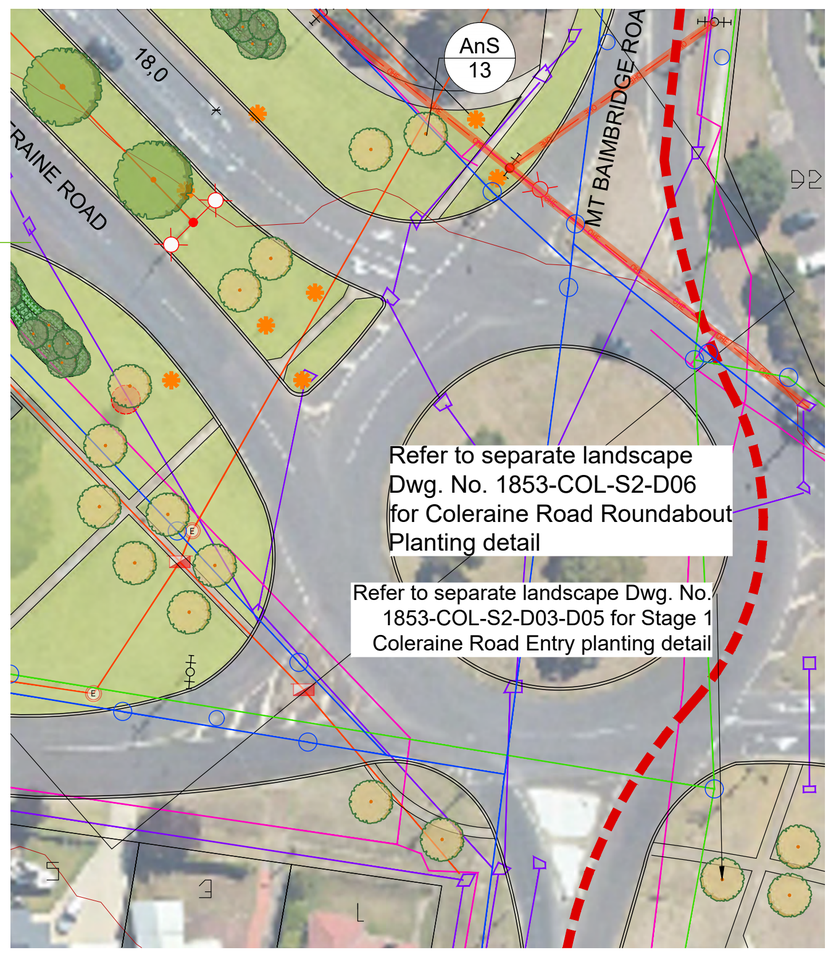
SHRUBS	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
WfM	Westringia fruticosa `Mundi` / Low Coast Rosemary	0.5 x 1.5m	140mm container	0.75m cts.	38

BLADED PLANTS	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
Dr	Dianella revoluta / Flax Lily	1 x 1m	140mm container	0.45m cts.	700
LIT	Lomandra longifolia `Tanika` / Lomandra ctv.	0.6 x 0.6m	140mm container	0.5m cts.	282

GROUND COVERS	BOTANICAL / COMMON NAME	MATURE SIZE	INSTALLATION SIZE	DENSITY	QTY
Cgc	Casuarina glauca `Cousin It` / Cousin It Casuarina	0.2 x 1.5m	140mm container	1.0m cts.	72
Myp	Myoporum parvifolium Fine Leaf White / Fine Leaf Creeping Boobialla	0.2 x 1.5m	140mm container	1.0m cts.	32

0 5m 12.5m 25m 50m

SCALE: 1: 500



COLERAINE ROAD ROUNDABOUT - NATURESTRIP PLANTING

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : 1:500 @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D10

STREETSCAPE PLANTING PLAN

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

REVISIONS

Typical Section of Naturestrip + Median Tree Planting
Scale 1:100 @A1

Acer negundo 'Sensation'

Banksia marginata

Allocasuarina verticillata

Corymbia maculata

Eucalyptus camaldulensis

Lagerstroemia indica x fauriei 'Tuscarora'

Corymbia ficifolia 'Wildfire'

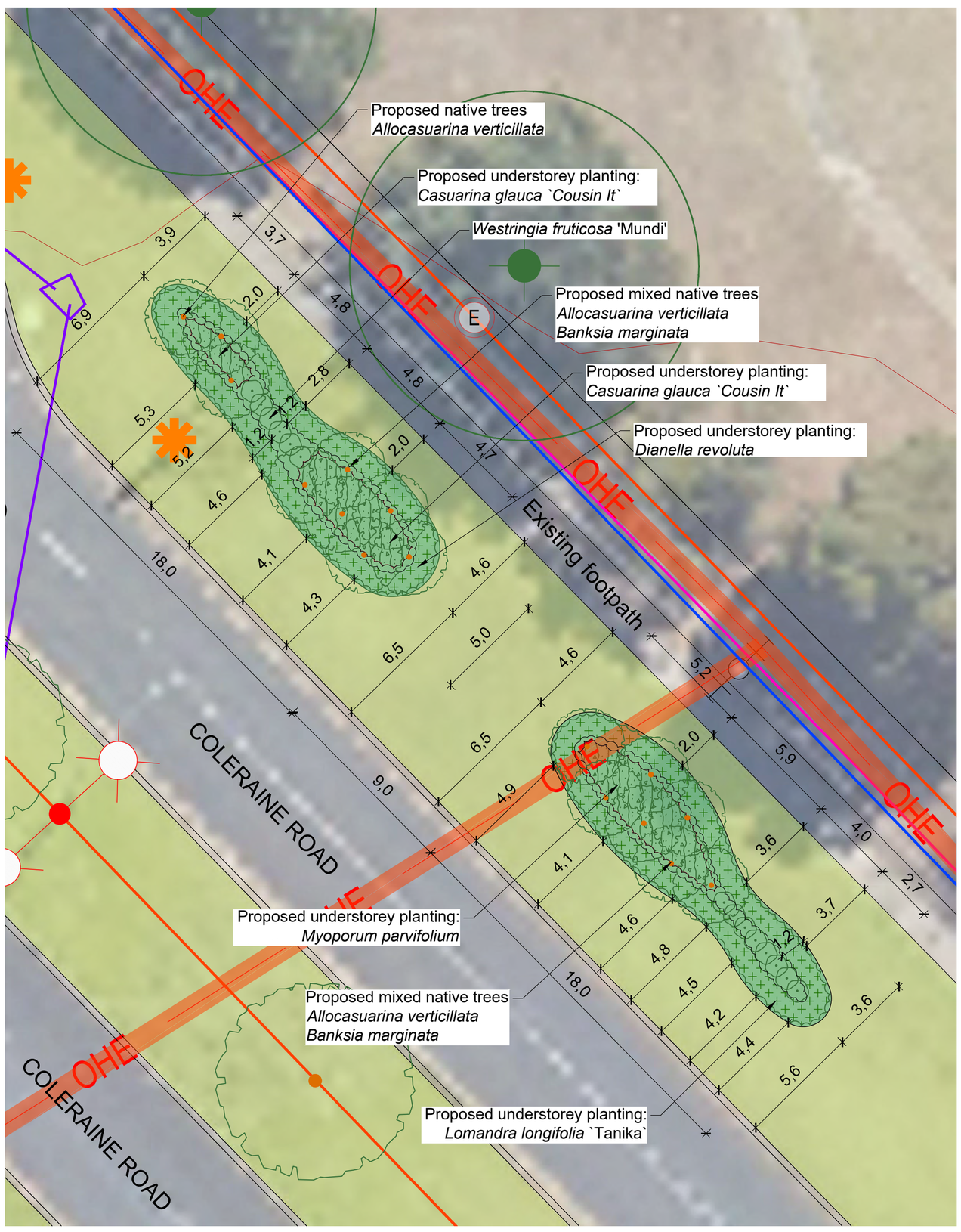
Westringia fruticosa 'Mundi'

Lomandra longifolia 'Tanika'

Dianella revoluta

Casuarina glauca 'Cousin It'

Myoporum parvifolium



Typical Detail - Mixed Native Tree + Understorey Planting
Scale 1:150 @ A1

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : As shown @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D11

LANDSCAPE DETAILS

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

REVISIONS

LANDSCAPE SPECIFICATION

SERVICES IDENTIFICATION
It is the contractors responsibility to obtain services plans from Dial Before you Dig (https://www.1100.com.au/) prior to commencement of any onground works.

It is the contractors responsibility to undertake onsite services identification as required throughout the entire area of the planting project to accurately locate all services and services depths. Where there may be a potential conflict between existing services and proposed landscape works, the contractor is to notify the nominated Southern Grampians Shire Council representative immediately for direction.

TRAFFIC MANAGEMENT PLAN
It is the contractors responsibility to prepare a traffic management plan to the satisfaction of the Southern Grampians Shire and VicRoads. The traffic management plan should take into account both the construction stage and the maintenance stages of the project.

No onsite works are to commence until the traffic management plan has been submitted and approved.

HERBICIDE APPLICATION (GRASS)
At least two weeks prior to the commencement of landscape works spray all grass and undesirable plants within the proposed garden bed / planting areas with an approved systemic herbicide (e.g active ingredient glyphosate). Herbicide shall be applied in accordance with the manufacturers instructions.

PREPARATION
Remove all weed growth from proposed planting beds and grass areas. Ensure all foliage, fruit and root matter is removed from the prepared topsoil. Cultivate all proposed planting beds to 250mm min. depth (subject to services), remove all building / constructiion rubble and other debris. Incorporate gypsum (by cultivation) at the rate of 2,000 grams per sq. metre to prepared sub base.

NATURESTRIP REMEDIATION
Following tree planting garden bed preparation / edging, the naturestrips and central median are to be repaired / reshaped as required to match adjoining ground surface levels to the satisfaction of the Responsible Authority. Where naturestrips are to be remediated, cultivate to 150 mm depth and topdress with nom. 50mm min. of topsoil. Evenly spread an approved Starter Fertiliser (recommended N.P.K. ratio 10:4:6 + Trace Elements) at the recommended rate.

Where grass is to be re-sown within the remediated areas the contractor shall allow to seed with 'Anco' Allrounder Blend (or similar approved commercially prepared blend) with a species composition as listed below with a minimum seed content of 98% and a minimum germination rate of 80%:
- Kentucky Bluegass (15%)
- Chewings Fescue (25%)
- Chewings Red Fescue (25%)
- Fine Rye Grass (35%)

Watering
Water seeded area immediately after sowing until the topsoil is moistened to its full depth. Continue watering to maintain moisture to this depth. Maintain the germinating grass in a healthy condition with correct applications of water, fertiliser etc. to sustain a healthy, vigorous growing grass sward.

Mowing
During the maintenance period mow to maintain the grass height within the 50 - 100mm height range. Remove all grass clippings from the site after each mowing.

Maintenance
Maintain the seeded grass areas until the attainment of a dense continuous sward of healthy and evenly green grass over the entire area. Where required, topdress failed seed and re-seed with fresh seed of the same blend. Cultivate and re-seed areas of seeded lawn where germination / survival is poor.

Top Dressing
Top dress subsided areas as required and re-sow. Ensure the junction between footpaths / garden edges and grass areas is finished to form a firm, flush, even, uniform and safe joint.

Protection
The Contractor shall protect the newly grassed areas against trespass and traffic for minimum period of 6 weeks - particularly during wet conditions, or as long as required to ensure the proper establishment of the grass which will not be damaged by normal / day to day activities.

MULCH / MULCH MAT
Where specified spread native (Eucalypt / Acacia) chippings / mulch (maximum particle size 30mm) at a minimum depth of 75mm throughout all planting areas, including around the base of each individual tree.

The contractor shall ensure the mulch is free of soil, weeds, vermin, deleterious material and toxins. Mulch shall be placed to a minimum depth of 75mm and maximum depth of 100mm on planting bed areas and around individual specimen trees. Mulch shall extend at least 500mm beyond plant centres at the outer edges of planting beds. Mulch shall be kept clear of plant stems to avoid collar rot.

Following garden bed ground preparation (as specified) and prior to mulching with organic wood mulch, all planting areas shall be covered with MaxJute 'Thick' soil stabilisation and mulching mat (750-800 gsm) and fixed with non galvanised steel pines (3 pins / m2). Maxjute soil stabilisation and mulch mat to be installed and pinned in accordance with the manufacturers installation instructions. Maxjute soil stabilisation and mulching mat is available from:

Landplan
97 Abbott Road,
HALLAM VIC 3803
Telephone: (03) 8786 4907
Facsimile: (03) 9796 4311

NOTE: Maxjute soil stabilisation and mulching mat is available with pre-cut slits at nominated centres. Refer to Landplan.
A representative sample of mulching, not less than 100m2 in area, shall be made available for review by the Landscape Architect at not less than 24 hours notice prior to the commencement of the balance of the relevant work. The accepted mulching shall be used as a reference standard for the remaining work to be completed under the Contract.

PLANTS / FERTILISING
All plants are to be true to species, healthy and free from pests, disease and stress. SAt the time of planting, fertilise advanced trees (250mm dia. + pots) with 100 grams of 'Total All Purpose Osmocote + Trace Elements' slow release fertiliser (NPK : 19.4 : 1.6 : 5). For plants in 140mm dia. pots fertilise with 20gms of 'Osmocote' slow release fertiliser, as above. Staking as required for advanced trees only (refer planting detail).

PLANT STOCK
- Plant stock is to be purchased and supplied by the Southern Grampians Shire Council.
- It is the contractors responsibility to inspect the plant stock at the time of delivery to site and confirm acceptance of the plant stock. The contractor has the right to reject any plant material that they believe will not perform to the required standards. Rejection of plant material can only be made at the time of delivery.
- At the time of delivery, plants shall show healthy growth, be undamaged, free of disease, have a size in proportion to their pot size and species, not be pot bound and shall generally have roots penetrating to the edge of the pot.
- The contractor shall check the condition of plants before taking delivery. All plants accepted by the contractor shall be healthy, vigorous, well established and have normal habits and proportions of growth typical of their species. Plants shall be free from insects, eggs, larvae, disease, weeds and other defects. All plants shall be suitably hardened off in the nursery prior to delivery to the site.
- All stock shall be labelled with the correct botanical name and shall be checked and approved by the contractor before acceptance on the site.

PLANTING SCOPE

Planting is to be undertaken to the various areas nominated in the Landscape Plans and in accordance with this specification. The scope of planting works is to include:
- Semi advanced specimen trees - 45 litre air pruned pots and 30cm pot size.
- Shrubs - 140mm pot diameter
- 12 month maintenance period, or as required by Council.

Due to the extensive presence of services, all tree planting holes to be installed using a hydro-excavation technique.

PLANTING PROGRAM
The contractor shall prepare a planting program to plant all planting zones as indicated on the Landscape Drawings and this Specification. The planting program should incorporate the pre-planting ground preparation program.
Where possible, all planting is to be programmed to be undertaken during optimum planting seasons to maximise the optimum plant establishment period prior to the commencement of the forthcoming summer season.
The contractor shall submit programs for the following tasks at the commencement of the contract:
- a pre-planting ground preparation and weed control program
- a planting program
- a post planting maintenance program.

PLANTING SET-OUT
The Contractor shall set out the location and shape of planting beds and / or the location of individual plants in accordance with the Drawings by:
- referring to drawing dimensions
- by reference to existing features as shown on the drawings
- by complying with plant number and density requirements as shown in the plant schedules / drawings.

Ongoing on-site liaison with the nominated Council representative and / or landscape architect will be required to ensure that the planting intent is achieved.

Allow for a flexible planting program to suit weed control timing, site and seasonal conditions.

The Contractor shall arrange for the landscape architect, or a nominated representative, to be on site for plant set-out and sign-off on the set-out prior to planting commencing.

ADVANCED TREE PLANTING + INCLUSION OF HYDROCELL FLAKES TO PREPARED SOIL

The planting soil should be prepared in accordance with the Tree Planting Detail and this specification.

Excavate (by hydro-excavation) to an equivalent depth of the new tree rootball and a width as shown on the Detail Drawing. The installer shall determine the rootball depth of each tree to determine the individual planting hole depth. Trim the base of the planting hole to required level.

Remove stones exceeding 40mm diameter and any rubbish or deleterious material uncovered during excavation.

Prune or slice away the outer 10-25mm of the external rootball using only secateurs or a sharp and clean spade. Avoid excess disturbance to the remaining rootball during this trimming and discontinue if excessive rootball soil begins to fall away. Do not leave the rootball exposed for an extended period. Cover the rootball with moist hessian if backfilling cannot occur immediately.

When the planting hole is excavated and the hole is the correct size, place the rootball in its final position. Ensure the tree is centred and plumb and the top of the rootball is level with the finished surrounding surface. Ensure the trunk is set vertically and aligned with other new trees Do not use the trunk of the tree as a lever in positioning or moving the tree in the planting hole.

Supply and incorporate Hydrocell flakes into the planting hole / entire volume of planting soil in accordance with Fytogreen Hydrocell Tree Planting Guide. Refer to:

Web:
http://fytogreen.com.au/wp-content/uploads/2016/11/Hydrocell-2016-email.pdf
Telephone: 1300 182 341.

Use the Hydrocell volume table in the Tree Planting Guide to determine the exact quantity of Hydrocell flakes for each tree pot size - typically between 4.0 litres for a 20cm pot to 45 litres for a 40cm pot.

Backfill with the excavated material and in accordance with the Detail Drawing. Lightly compact the soil to ensure all voids around the rootball are filled and no air pockets are retained. Ensure that the backfill soil is not placed over the top of the potted rootball. The top of the rootball and plant stem must be kept level with the top of the backfill.

NOTE: There may be a layer of asphalt and / or road base in places within the median strip. The contractor to make an allowance to excavate and remove the asphalt / road base back to natural ground level for the extent of the planting hole and backfill with approved topsoil. Subject to services, the sub base is to be de-compacted.

Prevent the rootball from drying out during the planting phase. Thoroughly water the tree rootball before planting and then immediately after planting. Apply water so as to not disturb the soil. Under no circumstances shall any plant be planted into a dry planting hole (soil moisture at wilting point or drier). If the soil is dry, the planting hole shall be saturated with water prior to planting.

Advanced Tree Fertilising During the Maintenance Period

The Contractor shall fertilise advanced trees as required during the maintenance period with a slow release fertiliser (N18: P2.1: K2) in accordance with the manufacturer's recommendations. The fertiliser shall be in brill or tablet form and have a minimum life of 6 months.

TREE SUPPLY SPECIFICATION

General Conditions and Quality

All trees provided by the Southern Grampians Shire Council are to conform to the NATSPEC guide "Specifying Trees: A Guide to Assessment of Tree Quality" by Ross Clark 2003 and AS 2303:2015 “Tree Stock for Landscape Use”. The following specification details the general requirements for the supply and transportation of trees to the site.

Definitions
Definitions for the terms used within this specification shall be in accordance with the AS2303:2015 “Tree Stock for Landscape Use”.

Batch: Quantity of tree stock of the same species, container size, type, age from the same origin.

Caliper: Trunk diameter measured at 300mm above the root crown, or 50% of the overall height, whichever is the lower height, expressed in millimetres.

Central Leader: Clearly defined single, relatively straight, trunk.

Clean Stem Height: Distance between the uppermost surface of the root ball and the first order branches of the trunk that is free from branches.

Self-Supporting: Tree stock supporting its above ground parts in an upright position without movement of ≤30º from vertical, stem breakage, injury or loosening of roots in the growing media.

Size Index: Numerical expression of the size of the tree above ground. It is the product of the height of the tree (in metres) and the caliper (in mm). (i.e. height x caliper)

Destructive Root ball Inspection: The washing away or removal of all soil from a root ball to allow for detailed inspection and assessment of root development.

Partial Investigative Root ball Inspection: A method of exposing a section of a root system to enable inspection of root development by washing away a wedge-shaped section from the stem to the extremity of the root ball. This soil can be gently replaced so the tree is not significantly damaged.

Labelling of Stock

Clearly label individual trees and batches with the species name and cultivar / variety / provenance where appropriate. The label is to withstand transit without erasure or misplacement. NOTE: labels to be removed from all plants at the time of planting.

True to Type

The trees supplied and planted shall be the species, and variety or cultivar that the Municipality has specified.

Health and Vigour

The trees supplied shall be healthy and vigorous at the time of delivery and planting. Supply trees with foliage size, texture and colour at the time of delivery consistent with the size, texture and colour shown in healthy specimens of the nominated species. Supply trees with extension growth consistent with that exhibited by vigorous specimens of the nominated species.

Crown Symmetry

The symmetry of the crown is an important aspect of the presentation and appearance of the tree in the landscape. Difference in crown distribution on opposite sides of the stem axis must not exceed 20%.

Injury

Supply only trees free from injury and wounds, except properly made pruning cuts made in accordance with AS4373: Pruning of Amenity Trees.

Stem Taper and Structure

Supply trees where the calliper at any given point on the stem is greater than the calliper at any point higher on the stem, excluding species with atypical stem tapers. (e.g. *Brachychiton rupestris*).

Species with an apical dominant (excurrent) form: Supply trees with a defined central leader and the apical bud intact. Trees that have had their leaders cut or damaged will not be accepted. Supply trees with a single stem roughly in the centre of the tree with any deviation from vertical ≤15o.

Species with branch dominant (decurrent) form: Terminal buds shall be intact. Supply trees where the central stem is not divided at any point lower than the nominated clean stem height, and that the stem junction at the point of division is sound.

All species: Ensure that branch diameters are less than or equal to one-half of the caliper immediately above the branch junction.

Self-Supporting

Supply only trees that are self-supporting.

Formative Pruning

All formative pruning shall be a clean-cut at the branch collar that complies with AS4373: Pruning of Amenity Trees. The diameter of any wound shall not exceed 50% of the calliper immediately above the point of pruning. No lopping or topping of trees is to be carried out.

Trees shall be typically supplied with a clean stem height of 35-40% of the total tree height. For example a 5m tree is to be pruned to a 2m maximum (clean stem height must not exceed 40% of total tree height).

Trees are not to be pruned into shape just prior to dispatch. Restrict any fresh cuts (i.e. recent, non-calloused wounds) to ≤20% of the total tree height.

Included Bark

Supply trees where the branch/stem bark ridges at junctions between stems and branches and between co-dominant stems are convex, except for species prone to include bark that are known to remain strong (as approved by the Southern Grampians Shire Council).

Trunk Position

Trunks shall typically be located in the centre of the container. The distance from the centre of the trunk to any extremity of the root ball shall not vary by >10%. This may be varied if the tree is grown in an irregular shaped container, as approved, or specifically directed by the Southern Grampians Shire Council.

Compatibility of Graft Unions

When purchasing named cultivars propagated by grafting, it is critical that the graft union is sound and that the scion and root stock are compatible. The union between the scion and the root stock must be sound for the entire perimeter of the graft. The diameter of the scion immediately above the graft must be within +/-20% of the diameter of the rootstock immediately below the graft, excluding bark and cleft grafts.

Indication of North

Trees supplied in containers ≥100 litres shall indicate the northerly aspect during growth in the nursery and ensure it is marked so as to withstand transit without erasure or misplacement.

Pest and Disease

Trees shall not be diseased or show evidence of pest attack that could affect the long term health of the tree or adjoining plantings. Supply trees with foliage and soil free from attack by pests and diseases. For Australian native trees with a history of attack by native pests (e.g. *Ficus macrophylla* & Eucalypts), evidence of previous attack must be restricted to less than 15% of the foliage and there must be no actively feeding insects or evidence of fungal infections.

Root Ball Diameter

Trees grown in containers ≥45L and ex-ground trees shall have a diameter greater than or equal to their depth. The nominal root ball diameters expected for different tree sizes are shown in the table in AS 2303-2015 Appendix D Trees for Landscape Use - Tree Stock Height and Calliper.

Bare-rooted tree stock with a size index ≤57 shall have an intact root mass diameter ≥10 x their caliper.

Root Ball Depth

Root ball depth for containerised trees shall not exceed 660mm.

Ex-ground trees with a size index ≤1144 shall have root ball depths ≤850mm. Ex-ground trees with size index larger than 1144 shall have root ball depths that not exceed 1200mm.

Height of Root Crown

Ensure that the trees root crown is at the upper-most surface of the root ball.

Non-Suckering Rootstock

At the time of dispatch there shall be no evidence of suckers or water shoots. Grafted cultivars and varieties shall be grafted onto non-suckering species of rootstock.

Weeds

At the time of dispatch there shall be no weeds evident that may compromise the health of the tree stock or pose and unacceptable burden for on-going landscape maintenance in the trees planted position.

Root Ball Occupancy

On removal and shaking or handling of the unsupported root ball at least 90% of the soil volume shall remain intact in or around the root ball.

Project : Hamilton Gateway – Coleraine Road Entry
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Date : May 29, 2020
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Drawing No : 1853-COL-S2-D12

LANDSCAPE SPECIFICATION

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

THOMSON HAY
LANDSCAPE ARCHITECTS
130 Howards Rd, Wattle Flat VIC 3352
T 03 5334 5321 W www.thomsonhay.com

REVISIONS

LANDSCAPE SPECIFICATION

Root Direction

Circling roots shall not be present. Girdled roots, kinked roots or j-roots shall not be present. Woody circling roots shall not be present at the extremity of the root ball. Root systems should be inspected for non-conforming roots at each stage of production. Only roots less than 10mm diameter shall be pruned. Trees with non-conforming roots greater than this diameter shall be rejected.

For all container grown trees, ensure that all roots, from the point of initiation, generally grow in outwards (radial) and downwards direction, and that any deviation from the established direction is less than 45o.

Root Division

Trees in containers ≤45 litre primary division of roots is to have occurred at least once within the root ball.

Trees in containers >45 litre shall have undergone primary division of roots and is to have occurred at multiple intervals within the outer 50% of the root ball and at <100mm intervals.

Tree Stock Quality Assessment and Compliance

The contractor must submit suitable documentation to demonstrate compliance with the requirements of this specification and AS2303:2015 Tree Stock for Landscape Use. Documentation for each differing batch and different species shall be issued to the Southern Grampians Shire Council at 3 monthly intervals and at least 7 days prior to their dispatch.

As a minimum, the tree stock inspection forms are to be in accordance with the 'Example A' form contained in Appendix C of AS2303:2015. The required compliance testing that is referenced in that form shall be performed in accordance with the scope and protocols outlined in Appendix A and B of the standard, with the exception of the sampling size, which shall be amended as per the table below. The sample size shall be equal for both above and below ground assessments.

No. of Trees in Batch	Minimum No. to be Sampled
1-4	all trees in batch
5-20	4
21-50	6
51-100	10
>100	10 + 2% of number to be supplied in excess of 100

All documentation shall be retained by the supplier for a minimum of 3 years from the date of supply.

Delivery, Transport and Unloading

Carefully load, transport and unload, at the nominated site, the specified trees. All trees are to be delivered in such a way to prevent in transit wind damage. All trees shall be watered prior to loading for delivery. Plants shall not be contained within delivery vehicles for a period longer than 24hrs.

Trees shall be carefully unloaded using methods appropriate to the size and weight of the trees. Damage to trees sustained during transport or unloading will result in those plants being rejected. Plants shall conform to the requirements at the time of delivery to the planting site. Transpiration shall be minimised during transport to prevent subsequent wilting or unseasonal defoliation. Plants that have been allowed to wilt or dry out during transport shall be rejected, irrespective of any previous acceptance.

The soil mass of the root ball shall be securely contained and supported during transport. Root balls that have been unreasonably fractured, deformed or slumped during transit or unloading shall not be accepted.

Rejection of Non-conforming Specimens

Any tree not conforming to the requirements and standards contained within this specification shall be rejected and suitable replacements provided. If non-conforming trees are provided, the Southern Grampians Shire Council requires new complying stock to be supplied and planted, or alternatively the Southern Grampians Shire Council may supply replacement specimens.

SUPPLY AND APPLICATION OF HERBICIDES AND INSECTICIDES

Only herbicides and insecticides registered for use in Victoria for the specific purpose may be used. All herbicides / insecticides shall be applied in accordance with manufacturers recommendations and at the rates recommended by the manufacturer for the control of the specific plant / insect.

MAINTENANCE AFTER PRACTICAL COMPLETION

Scope of Maintenance

The Contractor shall maintain the whole of the landscape work performed under this Contract until the completion of the 12 month Maintenance Period. The Maintenance Period shall commence from the Date of Practical Completion for 12 months. Maintenance of the landscape work shall include:

i replanting / replacement of dead trees and shrubs
ii maintenance of timber tree stakes and ties for advanced trees
iii weed control
iv watering
v topdressing / re-seeding of failed seeded exotic grass areas adjoining planting areas
vi pest and disease control
vii re-mulching to maintain specified mulch depths / diameters
viii pruning
ix maintaining the site in a neat and tidy condition
x maintenance of steel edging (where applicable).

Joint Inspections

Joint inspections shall be undertaken by the Contractor and Council representative and / or landscape architect at three monthly intervals after commencement of the maintenance period. Any remedial work shall be performed within two weeks of the date of inspection or during the following planting season following written documentation of the defect.

Replacement Materials

All replacement materials used shall be in accordance with the requirements of this specification, the drawings and plant schedules.

Replanting / Resowing

All plants (including any replacement plants) are required to clearly indicate healthy growth at the completion of the maintenance period by demonstrating growth through consecutive growing seasons.

Plants which die or do not show satisfactory growth within the maintenance period shall be replaced and resown / replanted by the Contractor at the Contractor's expense. The Contractor shall program and allow for the supply and propagation of plants whether by seed or cutting as required for any replanting during the current or next available planting season.

Weed Control

All planting and grassed areas shall be maintained in a 100% noxious weed free state and in a minimum 95% weed free state.

Watering

Plants to be thoroughly watered the day before planting to ensure the rootball is saturated.

Plants to be thoroughly water at the time of planting.

Ongoing watering to be provided to all plants during the maintenance period as required to ensure continued healthy and vigorous growth.

Reseeding of Exotic Seeded Grass Areas (by civil contractor)

Areas with less than 95% grass cover after three months growth shall be resown by the Contractor at the Contractor's expense. The Contractor shall ensure that a minimum of 95% cover is maintained throughout the duration of the maintenance period.

Pest and Disease Control

All plants are to be maintained free of insect infestation and plant disease.

Re-mulching

Areas mulched with chipped wood mulch shall be maintained at a minimum consolidated depth of 75mm and maximum depth of 100mm for the entire maintenance period.

Pruning

The Contractor shall prune trees and shrubs to remove damaged limbs / branches etc. Tree branches likely to form a dominant “U” or “V” shaped crotch leading to double leaders shall be removed.

Maintaining the Site in a Neat and Tidy Condition

The Contractor shall keep the the site in a neat, tidy and safe condition.

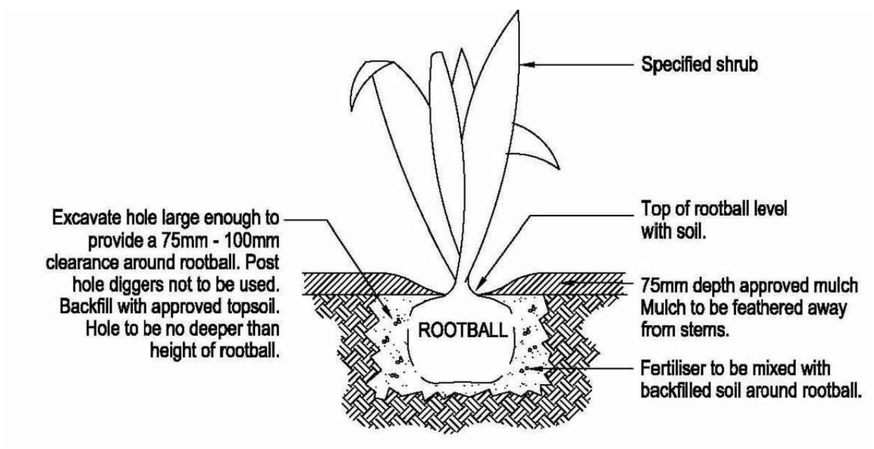
LEVELS / DRAINAGE / SET-OUT

No detailed levels information has been shown on this plan. Ground levels within all landscape areas should freely drain towards drains, pits, kerbs etc. - with no opportunity for water ponding.

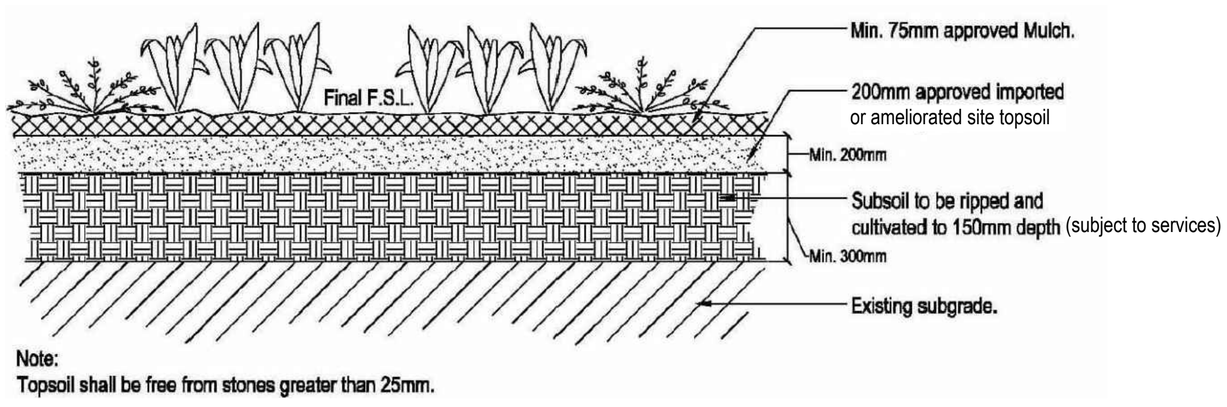
All dimensions and set-out details are to be verified on site prior to construction commencing. Any discrepancies are to be immediately reported to the Landscape Architect for further instruction.

GENERAL NOTES

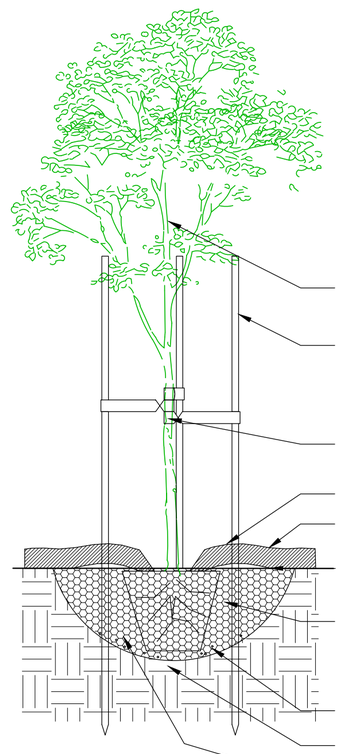
1. The following notes relate to the streetscape works within Coleraine Road, Hamilton and all associated plans and details (Dwg. No's. 1853-COL-S2-D01-D13).
2. The Contractor shall ensure that the extent of physical disturbance is contained to the defined works area only. Modifications to vegetation, slopes, hydrology etc. should only be made where directed by the drawings, specifications or site communications.
3. The Contractor shall be responsible for the protection of all existing public and privately owned infrastructure including services, signage, kerbs and road surfaces, adjoining vegetation to be retained, fencing etc. The contractor shall be responsible for the repair of any damage caused by their own works.
4. Where separate works contracts meet, the Contractor should allow for an interface with the adjoining works to create a seamless transition between works / stages.
5. All works shall be carried out by suitably experienced tradespersons using approved materials and methods. The landscape areas of the site shall be maintained in a clean, tidy and safe condition during the entire works contract and at the completion of works.
6. All waste generated from the site during the course of the contract (including general rubbish, excess soil, rock etc.) is the responsibility of the contractor and is to be removed from the site and deposited in approved location(s).
7. Works shall not be carried out during periods of dangerous climatic conditions, including periods of total fire ban, intense heat, flooding, or during other periods as directed by the Superintendent or the Council representative.
8. The Contractor shall allow to maintain the site in a safe condition throughout the period of the contract. Suitable safety barriers and / or signs should be erected where required during the course of the contract to ensure visitors to the estate are protected from works / machinery with public access prohibited from all works areas. Adequate public safety signage / standards are to be maintained throughout the site at all times.
9. All works to be undertaken in accordance with the approved traffic management plan.



GARDEN BED PLANTING DETAIL
Scale as Shown



GARDEN BED PREPARATION & MULCHING DETAIL
Scale as Shown



Tree watering (1): Immediately after planting, tree shall be watered thoroughly regardless of weather conditions. Quantity of water will be adequate to saturate the root ball to it's core.

Tree watering (2): post planting, provide a minimum of 30 litres of water (for tree in a 45 litre pot) to the newly planted tree per 7 days. Water at a rate slow enough so as not to displace mulch. For trees in a pot size larger than 45 litres, provide quantity of water one third of that pot size.

All trees to be healthy specimens free of pests and diseases. Trees to be well watered a maximum of 24 hours prior to planting.

3 no. 38 x 38 x 2400 hardwood or recycled plastic stakes set vertically and clear of rootball and a minimum 600mm into ground. Stakes are to be offset from the nearest underground services a minimum of 200mm to ensure no damage is caused to underground services.

3 no. 50mm wide hessian ties wrapped around trunk and stapled / nailed to stake allowing for some trunk movement. Ties to be located at 1/3 of tree height. Provide additional ties as required to support taller trees.

Create dish to keep mulch clear of tree trunk.

150mm depth of approved mulch shall be spread a minimum of 600mm radius from centre of tree and beyond the edge of the planting hole, overlapping undisturbed soil.

75mm high berm to form a watering basin.

Excavate a shallow planting hole with sloping sides 3 times the width of the root ball and break up sides and base. Refirm base (see notes below). Top of rootball must be at the same height as surrounding level. Backfill with 50 / 50 blend imported topsoil/site topsoil broken up to friable texture, firming progressively. Gently tease rootball to loosen roots and allow roots to grow radially from the trunk. Ensure top of root ball is not exposed above ground level.

Slow release fertiliser.

Lightly compact soil under rootball to prevent settling.

Hydrocell flake water-retaining product to be mixed into backfilled soil as per manufacturers specifications.

TREE PLANTING DETAIL
(NOT TO SCALE)

Note: It is the responsibility of the contractor to confirm the location of all underground services prior to commencement of any excavation or staking works.

Project : Hamilton Gateway – Coleraine Road Entry
Prepared for : Southern Grampians Shire Council
Date : May 29, 2020
Scale : As shown @ A1 sheet size
Drawn : YL
Check : DH
Drawing No : 1853-COL-S2-D13

LANDSCAPE SPECIFICATION AND DETAILS

COLERAINE ROAD, HAMILTON (Mt Baimbridge Rd to Henty Hwy Intersection)

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