Clonburris SDZ, Reg ref: SDZ22A0010

Ronan Mac Diarmada & Associates



Dublin 22

Landscape Architects & Consultants

COMPLIANCE CONDITION RESPONSE 24 & 25

NOV 2023





Compliance Condition Request24 & 25 – As Set Out by SDCC's Letter on the 4th Jan 2023 – Reg. Ref.: SDZ22A/0010

Condition Request 24

Green Infrastructure

Prior to the commencement of development, the applicant shall agree and submit redesigned proposals with the Planning Authority that demonstrate unless otherwise agreed:

- (i) A Strategic Green Corridor along the northern boundary of the site adjacent to the Dublin-Cork Railway including natural SUDs and planting along length of boundary (planting options might include Miyawaki style).
- (ii) A Local Green Corridor approximately N-S along the eastern boundary incorporating nature based SuDS and planting along length of boundary.
- (iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street incorporating nature based SuDS: such as bioretention raingardens and additional planting
- (iv) A Local Green Corridor approximately N-S through the centre of the development increasing the tree planting and providing above ground SUDS.
- (v) Retention of trees and hedgerow along southern boundary as shown in SDZ. Where hedgerow was removed this is to be replaced with fast growing planting, such as Miyawaki-style planting. No tree works/removals or pruning to take place prior to a site meeting with Public Realm to agree extent of works. No works to take place withing the root protection zone/drip line of trees. An area of Public Open Space is required between the hedgerow and the development to allow proper setback for residential amenity and to allow for the Taking in Charge and maintenance of the trees and hedgerow in the future (space for tractor and flail required-minimum space required 6m from base of hedgerow). This should involve either changing the house/dwelling-unit type or omitting House Nos. 01, 25, 26 and 46. The ESB substation adjacent to the southern hedgerow shall be moved elsewhere in the scheme.

Condition Request 25

Street Trees

Prior to the commencement of any works on site, the applicant, owner or developer shall have lodged with the Planning Authority for written agreement, landscape proposals that demonstrate the following or as otherwise agreed in writing with the Planning Authority:

- (a) Street trees required at the following locations: Outside house numbers: 192, 194, 196, 200, 202, 203, 190, 191, 189, 188, 187, 185, 183, 181, 179, 177, 175, 174, 172, 125, 126, 127, 129, 131, 133, 135, 137, 139, 140, 142, 107, 109, 111, 113, 115, 117, 119, 121, 122, 124, 123, 92, 90, 89, 87, 85, 83, 82, To enable the tree to be in the street the footpath should be moved to the inside, (i.e. car parking and tree on the street edge).
- (b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Condition Request 24 (i)

Green Infrastructure

Prior to the commencement of development, the applicant shall agree and submit redesigned proposals with the Planning Authority that demonstrate unless otherwise agreed:

(i) A Strategic Green Corridor along the northern boundary of the site adjacent to the Dublin-Cork Railway including natural SUDs and planting along length of boundary (planting options might include Miyawaki style).

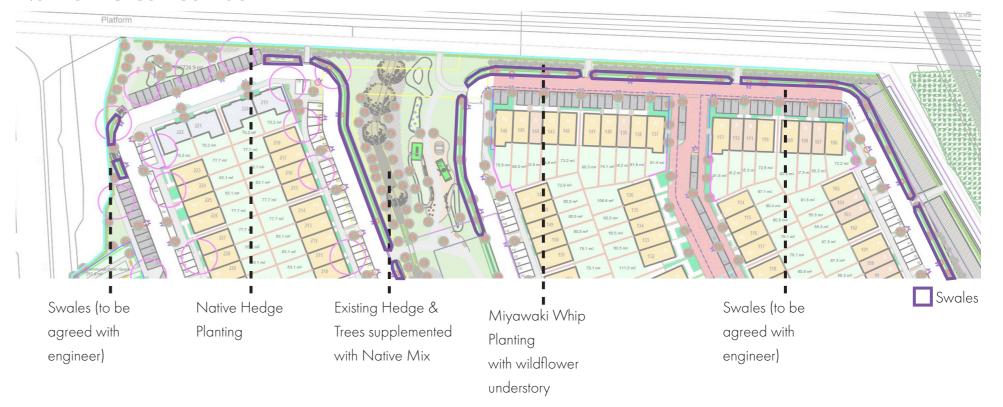
Response

(i) A Strategic Green Corridor has been provided along the northern boundary of the site adjacent to the Dublin-Cork Railway. Whip planting using the Miyawaki style and swales have been provided along this space.

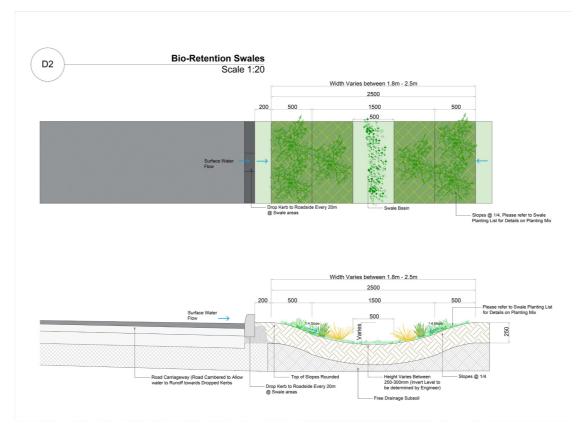
Additional wildflower planting and a native hedge will be planted in this space to further enhance the green corridor.

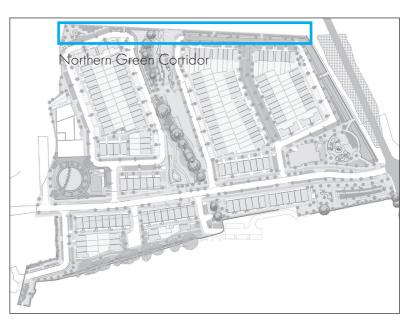
Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Northern Green Corridor



Swale Detail (Refer to Pg. 10 for larger image)







Compliance Condition Request 24

Condition Request 24(ii)

Green Infrastructure

(ii) A Local Green Corridor approximately N-S along the eastern boundary incorporating nature based SuDS and planting along the length of the boundary.

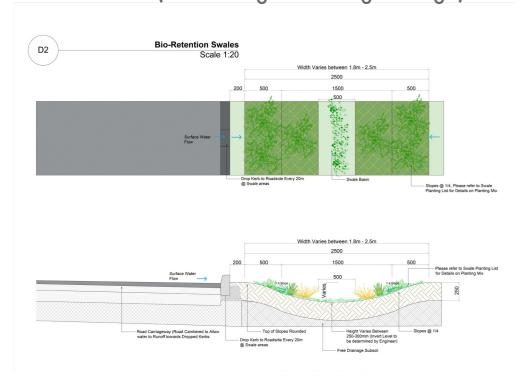
Response

(ii) A Local Green Corridor N-S along the eastern boundary has been provided with the use of Wildflower meadow planting and swales along the roadside. Street tree planting will also line the open space.

Please find green infrastructure along Eastern Boundary. The underground attenuation tanks agreed with drainage precludes planting of trees. It is proposed to use swales with dropped kerbs to allow water to run off from the road to be cleaned and infiltrate into the ground.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Swale Detail (Refer to Pg.10 for larger image)



Eastern Green Corridor

Swales







Condition Request 24(iii)

Green Infrastructure

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street incorporating nature based SuDS: such as bioretention raingardens and additional planting

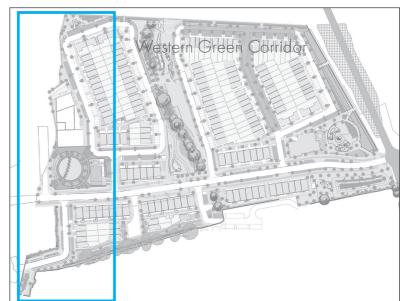
Response

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street has been provided with the use of Wildflower meadow planting, native hedge planting and swales along the roadside.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.



Green Corridor





Green Infrastructure

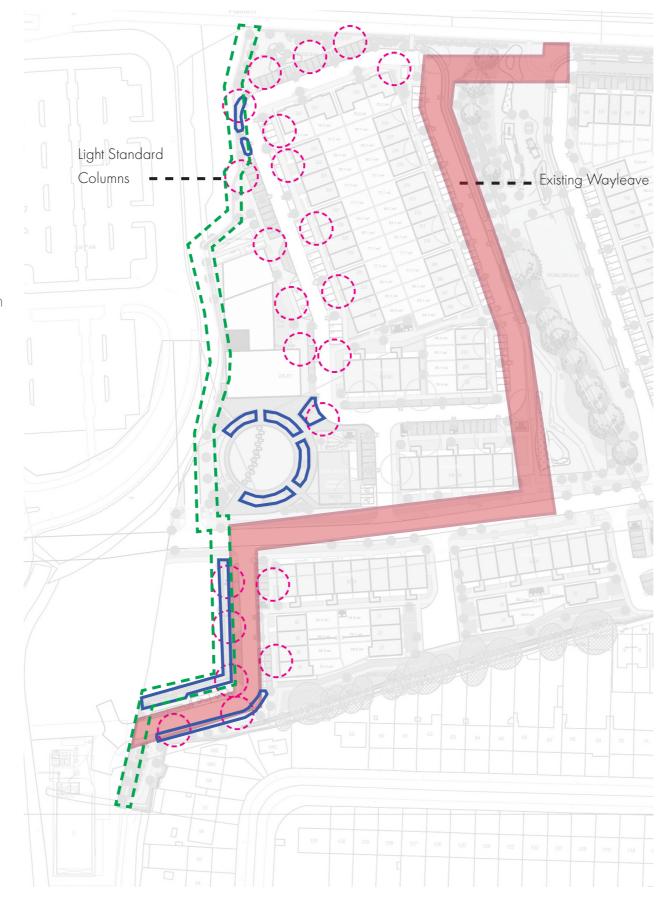
(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street incorporating nature based SuDS: such as bioretention raingardens and additional planting

Response

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street has been provided with the use of Wildflower meadow planting, native hedge planting and swales along the roadside.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Western Green Corridor - Constraints



Light Standard (5m Tree Exclusion zone , low level planting underneath)

Existing Wayleave

Suds Feature (Swale to Open Spaces & Raingardens to Plaza and green corridor)





Green Infrastructure

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street incorporating nature based SuDS: such as bioretention raingardens and additional planting

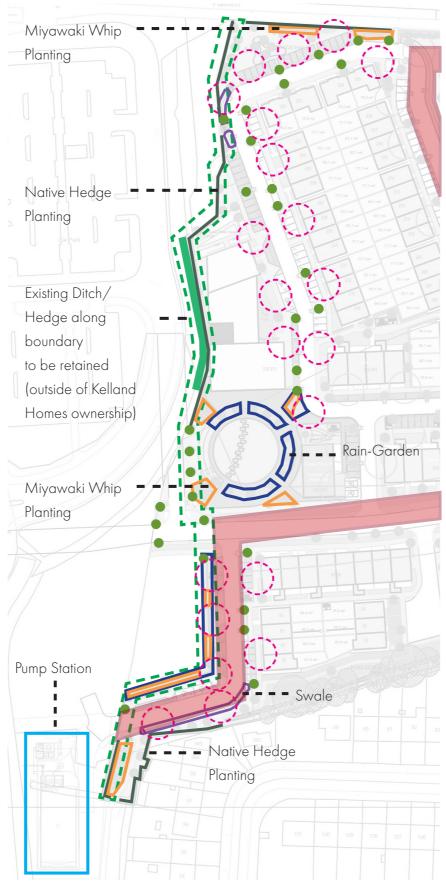
Response

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street has been provided with the use of Wildflower meadow planting, native hedge planting and swales along the roadside.

As per diagram shown, there are several constraints on the western side of the site. We have provided street trees and planting where possible in order to maintain a green link running approximately N-S and E-W along the westernmost local street south of Clonburris Link Street

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Western Green Corridor - Planting & Suds Features



Existing Ditch/Hedge Retained(outside of Kelland Homes ownership) Pump Station Wayleave Light Standard (5m Tree Exclusion zone, low level planting underneath)

Street Tree

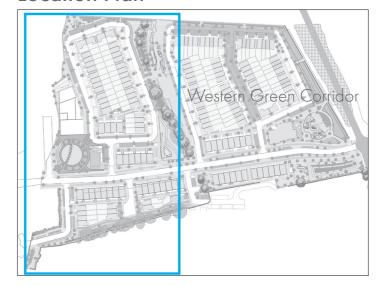
Green Corridor

Rain-gardens

Whip Planting

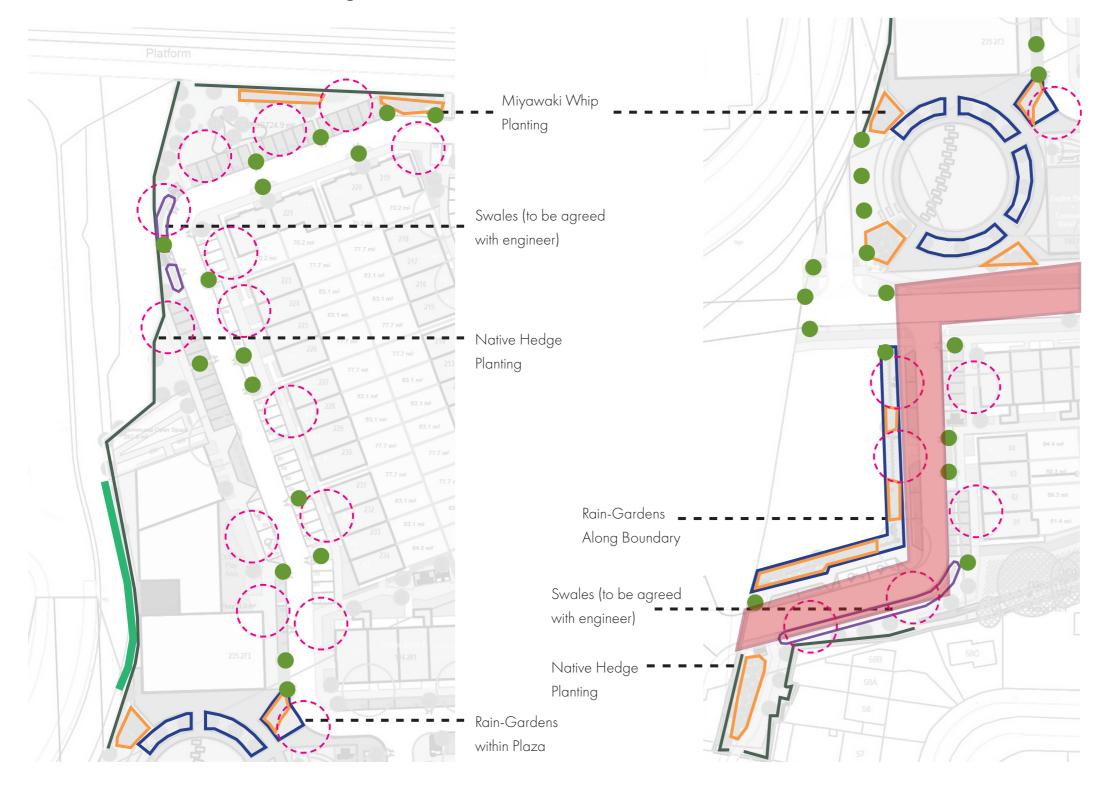
— Native Hedge Planting

Swales





Western Green Corridor - Planting & Suds Features









Green Infrastructure

(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street incorporating nature based SuDS: such as bioretention raingardens and additional planting

Response

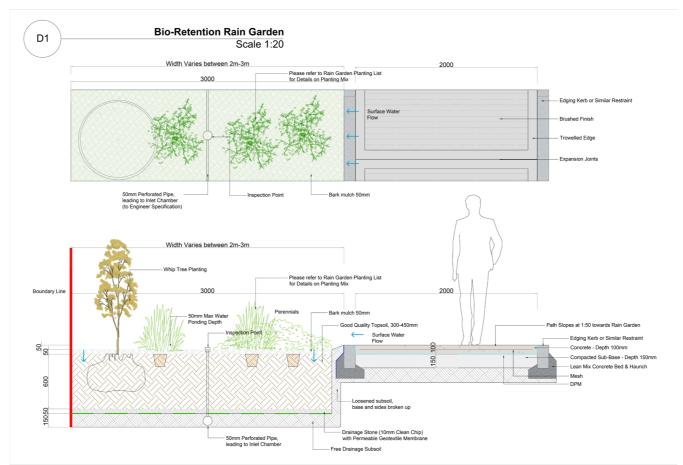
(iii) A Local Green Corridor approximately N-S and E-W along the westernmost local street south of Clonburris Link Street has been provided with the use of Wildflower meadow planting, native hedge planting and swales along the roadside.

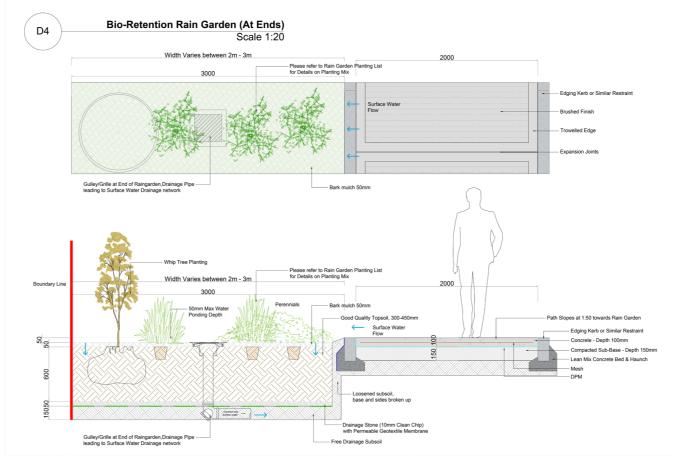
Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Location Plan



Rain Garden Details







Compliance Condition Request 24

Condition Request 24(iv)

Green Infrastructure

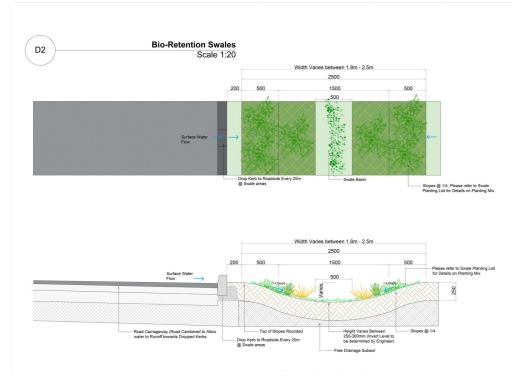
(iv) A Local Green Corridor approximately N-S through the centre of the development increasing the tree planting and providing above ground SUDS.

Response

(iv) A Local Green Corridor approximately N-S through the centre of the development has been provided with the use of Wildflower meadow planting and swales along the roadside. We have supplemented the existing hedge by planting semi mature native tree species and native hedge mix were necessary. Swales are also located within the open space.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Swale Detail (Refer to Pg. 10 for larger image)



Central Green Corridor

Swales



where neccessary

Condition Request 24 (i,ii,iv)

Green Infrastructure

Prior to the commencement of development, the applicant shall agree and submit redesigned proposals with the Planning Authority that demonstrate unless otherwise agreed:

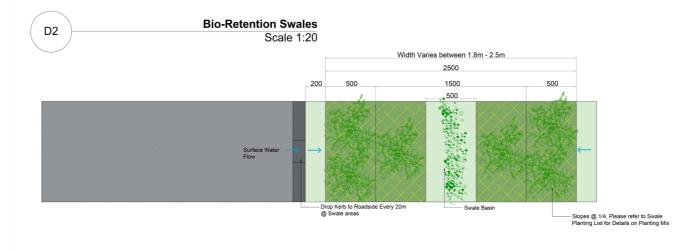
- (i) A Strategic Green Corridor along the northern boundary of the site adjacent to the Dublin-Cork Railway including natural SUDs and planting along length of boundary (planting options might include Miyawaki style).
- (ii) A Local Green Corridor approximately N-S along the eastern boundary incorporating nature based SuDS and planting along the length of the boundary.
- (iv) A Local Green Corridor approximately N-S through the centre of the development increasing the tree planting and providing above ground SUDS.

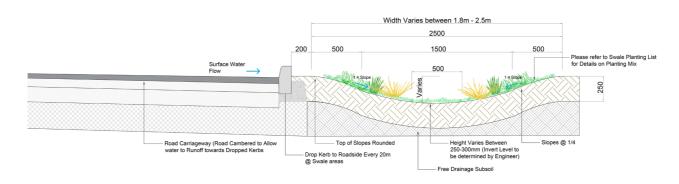
Response

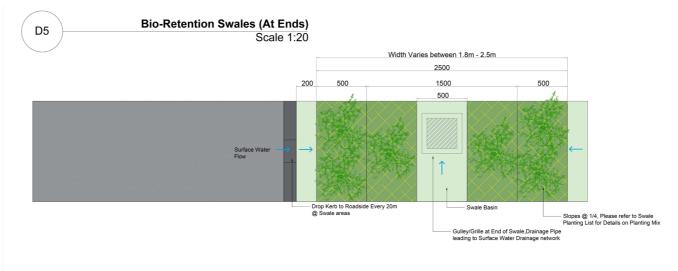
(i,ii,iv) Please see details on swales to open spaces.

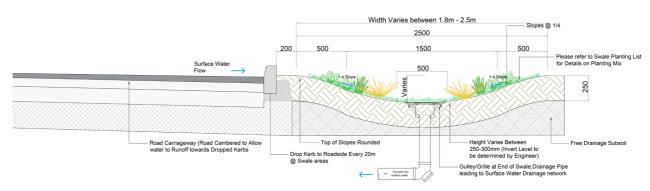
Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Swale Detail











Condition Request 24(v)

Green Infrastructure

(v) Retention of trees and hedgerow along southern boundary as shown in SDZ. Where hedgerow was removed this is to be replaced with fast growing planting, such as Miyawaki-style planting. No tree works/removals or pruning to take place prior to a site meeting with Public Realm to agree extent of works. No works to take place withing the root protection zone/drip line of trees. An area of Public Open Space is required between the hedgerow and the development to allow proper setback for residential amenity and to allow for the Taking in Charge and maintenance of the trees and hedgerow in the future (space for tractor and flail required-minimum space required 6m from base of hedgerow). This should involve either changing the house/dwelling-unit type or omitting House Nos. 01, 25, 26 and 46. The ESB substation adjacent to the southern hedgerow shall be moved elsewhere in the scheme.

Response

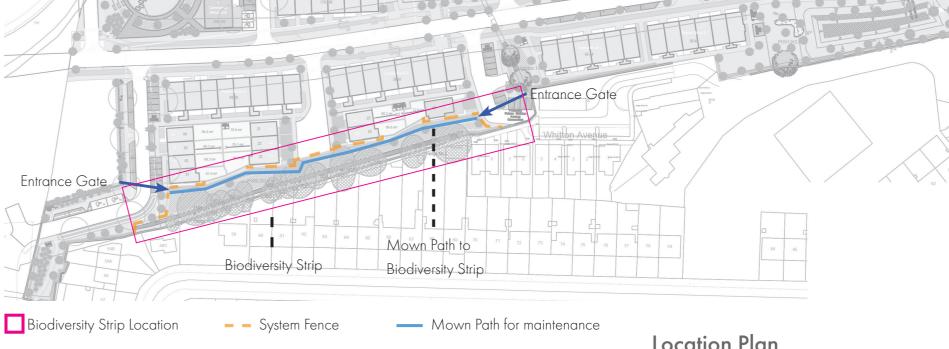
(v) The southern boundary hedgerow and existing trees has been retained in its majority as agreed with SDCC. Native Hedge & Tree species will be used to mitigate any loss occured in this space. Following an Arborist Survey, a root protection zone and fencing will be erected to protect the existing trees before any works are done. The residential layout to the southern boundary has been revised to allow a setback for residential amenity and to allow for the Taking In Charge and maintenance of the trees and hedgerow in the future. The ESB substation location has also been revised to reduce impact on central hedge.

As Per Agreement with SDCC, the Southern Boundary is to be retained and fenced off as a Biodiversity strip. A system fence will be implemented wih gated access on either sides, with a mown path through this space for maintenance purposes. The retained hedge and trees will be supplemented with native species where neccessary. Please refer to pg 12. for detail on system fence.

Current Compliance Layout



Current Compliance Layout







Condition Request 24(v)

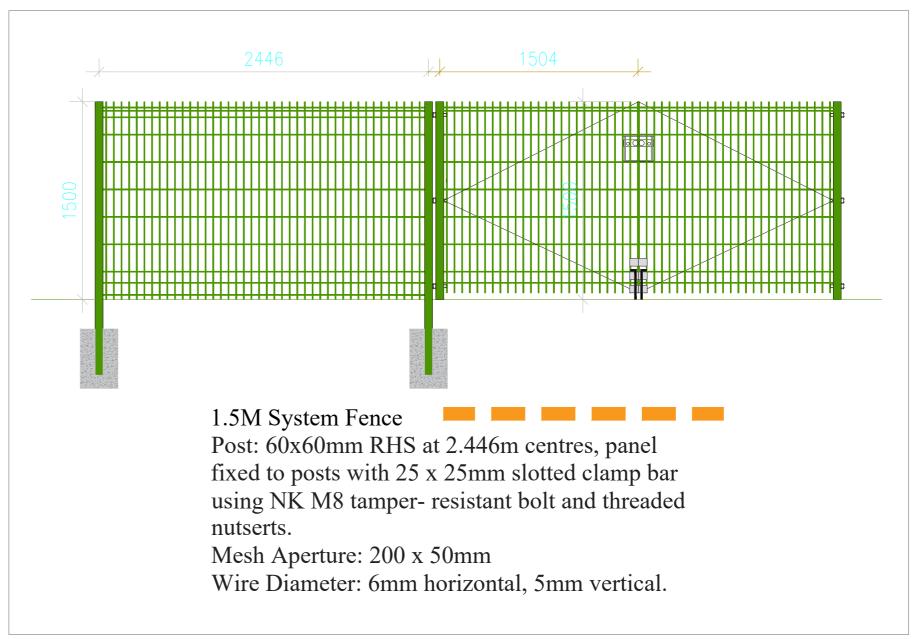
Green Infrastructure

(v) Retention of trees and hedgerow along southern boundary as shown in SDZ. Where hedgerow was removed this is to be replaced with fast growing planting, such as Miyawaki-style planting. No tree works/removals or pruning to take place prior to a site meeting with Public Realm to agree extent of works. No works to take place withing the root protection zone/drip line of trees. An area of Public Open Space is required between the hedgerow and the development to allow proper setback for residential amenity and to allow for the Taking in Charge and maintenance of the trees and hedgerow in the future (space for tractor and flail required-minimum space required 6m from base of hedgerow). This should involve either changing the house/dwelling-unit type or omitting House Nos. 01, 25, 26 and 46. The ESB substation adjacent to the southern hedgerow shall be moved elsewhere in the scheme.

Response

(v) As Per Agreement with SDCC, the Southern Boundary is to be retained and fenced off as a Biodiversity strip. A system fence will be implemented wih gated access on either sides, with a mown path through this space for maintenance purposes. The retained hedge and trees will be supplemented with native species where neccessary. Please refer to detail on system fence as shown. Detail of fence can be also be referred to on Dwg.02 Boundary Plan.

System Fence Detail





Condition Request 25 (a)

Street Trees

Prior to the commencement of any works on site, the applicant, owner or developer shall have lodged with the Planning Authority for written agreement, landscape proposals that demonstrate the following or as otherwise agreed in writing with the Planning Authority:

(a) Street trees required at the following locations: Outside house numbers: 192, 194, 196, 200, 202, 203, 190, 191, 189, 188, 187, 185, 183, 181, 179, 177, 175, 174, 172, 125, 126, 127, 129, 131, 133, 135, 137, 139, 140, 142, 107, 109, 111, 113, 115, 117, 119, 121, 122, 124, 123, 92, 90, 89, 87, 85, 83, 82, To enable the tree to be in the street the footpath should be moved to the inside, (i.e. car parking and tree on the street edge).

(b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Response

(a) Street trees have been provided where possible outside the house numbers mentioned above in the item. With agreement with SDCC, street trees will be provided in tree pits, approximately every 20m along the roads. Please refer to section of tree pit, with buildout to roads.

Subject to agreement with SDCC Roads, SDCC Public Realm - Note: we have provided for on street tree planting with location subject to agreement.



Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.



Condition Request 25 (a)

Street Trees

Prior to the commencement of any works on site, the applicant, owner or developer shall have lodged with the Planning Authority for written agreement, landscape proposals that demonstrate the following or as otherwise agreed in writing with the Planning Authority:

(a) Street trees required at the following locations: Outside house numbers: 192, 194, 196, 200, 202, 203, 190, 191, 189, 188, 187, 185, 183, 181, 179, 177, 175, 174, 172, 125, 126, 127, 129, 131, 133, 135, 137, 139, 140, 142, 107, 109, 111, 113, 115, 117, 119, 121, 122, 124, 123, 92, 90, 89, 87, 85, 83, 82, To enable the tree to be in the street the footpath should be moved to the inside, (i.e. car parking and tree on the street edge).

(b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

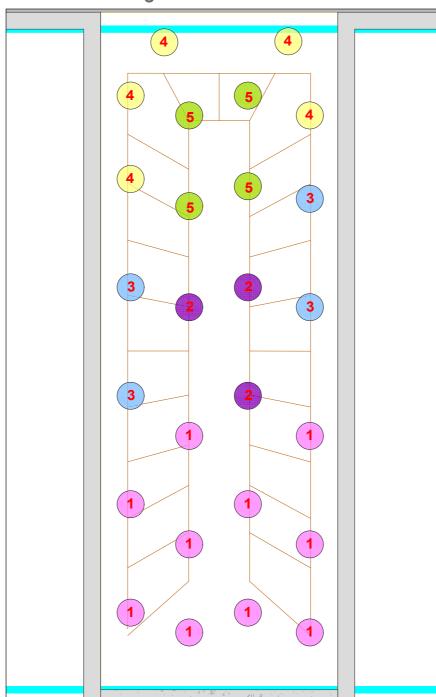
Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Response

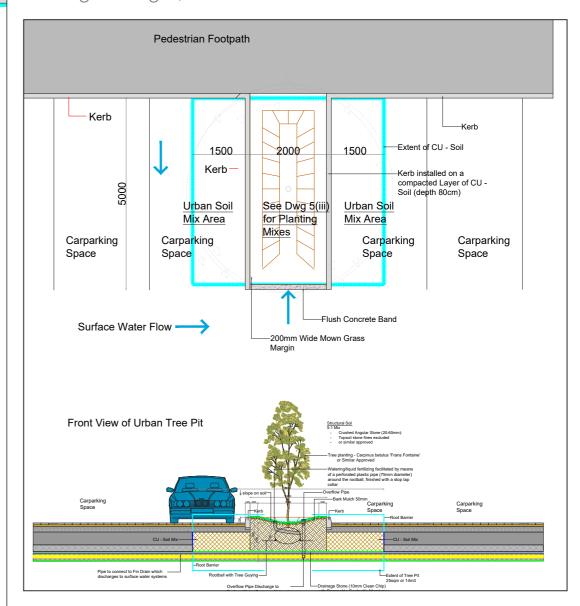
(a) Street trees have been provided where possible outside the house numbers mentioned above in the item. With agreement with SDCC, street trees will be provided in tree pits, approximately every 20m along the roads. Please refer to section of tree pit, with buildout to roads.

Subject to agreement with SDCC Roads, SDCC Public Realm - Note: we have provided for on street tree planting with location subject to agreement.

Tree Pit Planting Detail sc 1:10 @ A3



Tree Pit Plan and Elevation (Please Refer to Pg.14 for Larger Image)



Planting Mix Detail (subject to availability)

Vo.	Name	Size	%	Qty:
1	Persicaria affine	1Ltr.	40%	10
2	Astible (False spirea)	2Ltr.	10%	3
3	Iris siberica (Siberian Flag)	2Ltr.	15%	4
1	Helleborus (Lenten rose)	2Ltr.	20%	5
5	Carex pendula (Weeping Sedge)	1Ltr.	15%	4

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.



Condition Request 25 (a)

Street Trees

Prior to the commencement of any works on site, the applicant, owner or developer shall have lodged with the Planning Authority for written agreement, landscape proposals that demonstrate the following or as otherwise agreed in writing with the Planning Authority:

(a) Street trees required at the following locations: Outside house numbers: 192, 194, 196, 200, 202, 203, 190, 191, 189, 188, 187, 185, 183, 181, 179, 177, 175, 174, 172, 125, 126, 127, 129, 131, 133, 135, 137, 139, 140, 142, 107, 109, 111, 113, 115, 117, 119, 121, 122, 124, 123, 92, 90, 89, 87, 85, 83, 82, To enable the tree to be in the street the footpath should be moved to the inside, (i.e. car parking and tree on the street edge).

(b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

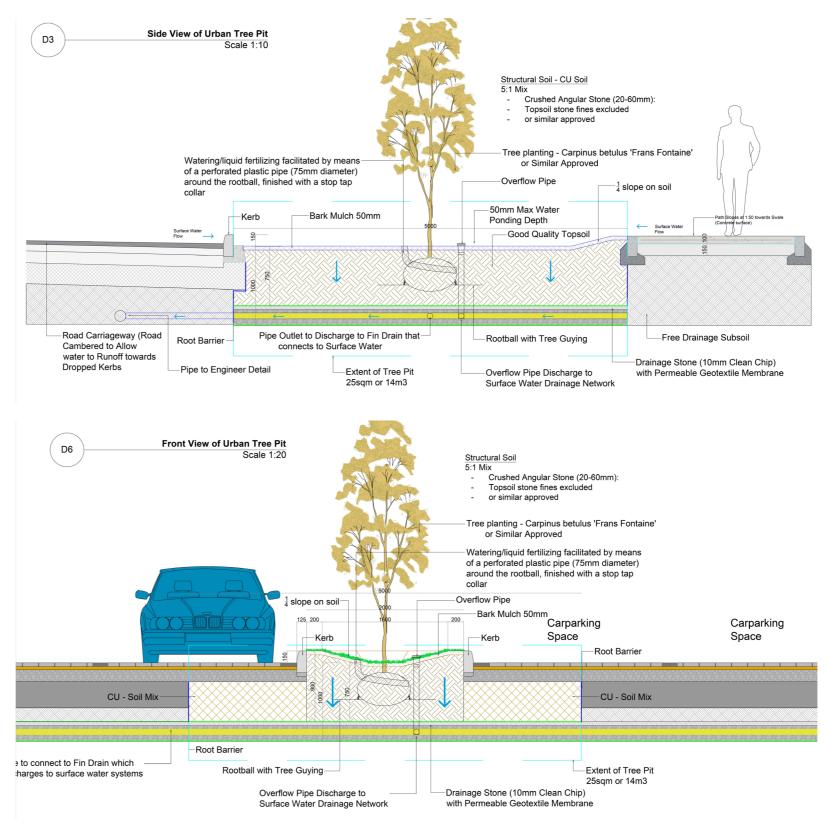
Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Response

(a) Street trees have been provided where possible outside the house numbers mentioned above in the item. With agreement with SDCC, street trees will be provided in tree pits, approximately every 20m along the roads. Please refer to section of tree pit, with buildout to roads.

Subject to agreement with SDCC Roads, SDCC Public Realm - Note: we have provided for on street tree planting with location subject to agreement.

Tree Pit Plan and Elevation







Condition Request 25 (b)

Street Trees

(b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Response

(b) Street trees have been provided along the Local Green Corridor, connecting the canal to the urban plaza with the use of wildflower meadow planting and and native tree & hedge species.

All street trees that are planted within the public realm will have a tree pit ,incorporating SuDS features. Please refer to tree pit detail shown on pg.15.

Street trees will be 18-20cm on the local streets, & 16-18cm on intimate local roads, ie. homezones.

The revised landscape plan incorporates the revised street lighting, ensuring the tree planting proposals are realistic. **A 5m exclusion zone has been provided** to mitigate any potential clashes with the tree planting plan and the public lighting plan.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Local Green Corridor



Condition Request 25 (b)

Street Trees

(b) Additional street trees required to address the gap in street tree provision along the Local Green Corridor connecting the canal to the urban plaza. Enhanced planting shall be provided by additional street trees, planted swales or small scale SuDS as appropriate to create a Local Green Corridor along this street. The applicant is referred to the Clonburris SDZ Planning Scheme 2019, Clonburris SDZ Parks and Landscape Strategy and DMURS (2019) for guidance on street tree provision and appropriate design layouts for local streets and homezones.

All Street Trees planted within the Public Realm shall have suitable tree pits that incorporates SuDS features including sufficient growing medium. Street Trees to be planted at: • Minimum 18-20m girth along local streets • Minimum 16-18cm girth on intimate local roads, i.e. homezones.

Landscape masterplan/planting plan to clearly delineate street lighting to ensure street tree proposals are realistic. If this is not currently the case, proposals to be revised to ensure street tree delivery.

Response

(b) Street trees have been provided along the Local Green Corridor, connecting the canal to the urban plaza with the use of wildflower meadow planting and and native tree & hedge species.

All street trees that are planted within the public realm will have a tree pit ,incorporating SuDS features. Please refer to tree pit detail shown. Street trees will be 18-20cm on the local streets, & 16-18cm on intimate local roads, ie. homezones.

The revised landscape plan incorporates the revised street lighting, ensuring the tree planting proposals are realistic. **A 5m exclusion zone has been provided** to mitigate any potential clashes with the tree planting plan and the public lighting plan. The existing wayleave also constrains the location of tree planting to the west of the site.

Also, please refer to SUDS Strategy Document included for details on Tree Pits, Swales and Raingardens.

Local green Corridor: Street Trees - Constraints

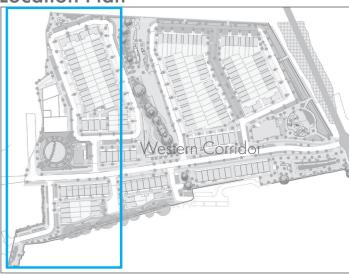




Light Standard (5m Tree
Exclusion zone , low level
planting underneath)

Existing Wayleave

Suds Feature (Swale to Open Spaces & Raingardens to Plaza and green corridor)

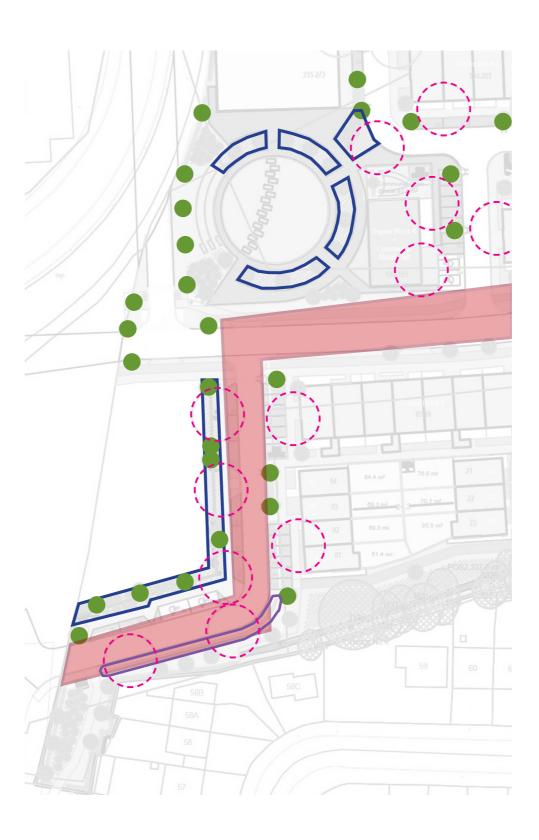




Condition Request 25 (b) Cont.

Local green Corridor: Street Trees - Constraints





Location Plan





Light Standard (5m Tree Exclusion zone , low level planting underneath)



Woodland Whip Planting List - Miyawaki Method









Alnus glutinosa

Fagus sylvatica

Prunus avium

Pinus sylvestris





Euonymus europaeus



Corylus avellana



Betula pendula



Crataegus monogyna



Rosa canina



Viburnum opulus



Hedera helix

Location Plan



The Miyawaki Method achieves a rich and dense ecosystem at a greater rate compared to tradition method of whip planting.

At least 30no. native species of saplings between 60-80cm height consisting of 4 layer of planting; canopy, sub-canopy, small understory trees, and shrubs; to be planted on 100 square meter mounds.

To prepare the area;

Remove weeds, rocks, and other material.

Dig the soil to depth of 1 meter and put half the loose soil back into the ground.

Mulch the other half of soil with compost made from organic material such as fallen leaves.

Plant 4no. trees within every square meter and mulch evenly surrounding the trees (15cm deep). Trees will require regular watering and additional mulch when needed.

