



ENVIRONMENTAL SUSTAINABILITY COMMITTEE

THURSDAY, NOVEMBER 09, 2023 AT 6:00 p.m.
Langley City Hall
20399 Douglas Crescent, Langley, BC

A G E N D A

1) **LAND ACKNOWLEDGEMENT**

2) **AGENDA**

Adoption of the November 09, 2023 agenda.

3) **MINUTES**

Adoption of the minutes of the Environmental Sustainability Committee meeting held October 12, 2023.

4) **DISCUSSION**

1. Definition of Environmental Sustainability
2. Urban Forest Management Strategy – Next steps (staff update)
3. Design Criteria Manual – landscaping and trees
4. ESC Terms of Reference
5. 2024 Committee Members (staff update)

5) **STANDING ITEMS**

- a) 2023 ESC Work Plan
- b) Poster / Flyer: Determine Future Poster Topic Ideas
- c) New Initiatives and Emerging Trends

6) **ROUND TABLE**

ADJOURNMENT

FUTURE MEETING DATES

- December 14, 2023
- January 11, 2024

Please notify David Pollock at dpollock@langleycity.ca of your **confirmed attendance** to be able to meet the quorum requirements to hold the meetings.



MINUTES OF THE ENVIRONMENTAL SUSTAINABILITY COMMITTEE

Langley City Hall – CKF Room
20399 Douglas Crescent, Langley, BC

THURSDAY, OCTOBER 12, 2023 AT 6:00 P.M.

Present: Councillor Paul Albrecht, Chair
Councillor Rosemary Wallace, Vice Chair
Amika Watari, Post Secondary Institution Rep
Lisa Dreves, Langley Field Naturalists
Marcela Ferreira, Member at Large
Zana Gordon, Member at Large

Staff: Francis Cheung, Chief Administrative Officer

Absent: Nichole Marples, Langley Environmental Partners Society, with regrets
Ellen Hall, Member at Large
Stafford Richter, Member at Large

The Chair acknowledged that the land on which we gather is the traditional unceded territory of the Katzie, Kwantlen, Matsqui and Semiahmoo First Nations.

1) **AGENDA**

It was MOVED and SECONDED

THAT the October 12, 2023 Agenda for the Environmental Sustainability Committee be adopted.

CARRIED

2) **MINUTES**

It was MOVED and SECONDED

THAT the July 13, 2023 Minutes of the Environmental Sustainability Committee meeting be adopted.

CARRIED

3) PRESENTATION

- a) Invite Metro Vancouver staff to a future Environmental Sustainability Committee to make a presentation on textile recycling and Demolition Tool Kit.
- b) March 2024 ESC Meeting - Invite the Provincial Coordinator of the Bat Friendly Communities Program, who is also a member of the Langley Field Naturalists to present the Bat Friendly Communities Program.
- c) April 2024 ESC Meeting - Site visit Set at residence of Mr. Wally Martin at his sustainable house.

4) STANDING ITEMS

- a) Poster / Flyer – Determine Future Topic Ideas:
 - Nil.
- b) New Initiatives and Emerging Trends:
 - Nil.

5) ROUND TABLE

- a) Committee member interested in action items related to the Urban Forest Management Strategy from the July 13, 2023 Environmental Sustainability Committee meeting.
- b) Committee members seeking the ESC Terms of Reference for the Environmental Sustainability Committee.
- c) Discussion on various advertising options, including asking schools to send out emails to the parents and students, to encourage more youth to attend City's events such as the Neighbourhood Meetings, Earth Day, Community Day, etc.
- d) Interest to consider inviting staff from Parks (e.g. Arborist, Horticulture, etc.) to attend future Environmental Sustainability Committee meetings.
- e) Invite Metro Van to Earth Day to set up a booth to promote and educate circular economy, textile recycling, Up Cycle, Repair Café, etc.
- f) The November Sustainability Committee meeting will focus on defining what is environmental sustainability.
- g) MOTION –

It was MOVED and SECONDED

THAT the committee hold an additional meeting on December 14, 2023.

CARRIED

- h) The December Sustainability Committee meeting will focus on Earth Day, circular economy, up scale challenge.
- i) Recycling BC had previously noted that they no longer attend community events to promote and educate people on recycling. However, a member noted that Recycling BC had a booth at the Latino Festival in Vancouver in the Summer. Interest in asking Recycling BC to see if they are willing to have a booth at the Earth Day event.
- j) A member noted that she had purchased a light stand at a local hardware store and she was concerned with the off-gassing from the materials and the amount of packaging.
- k) A member noted that LEPS is planting a 100 square metres Food Forest at Derek Doubleday Arboretum. LEPS is interested in planting a Food Forest in the City as well. Linwood Park was suggested as a potential site. \
- l) A member noted that she provided the contact information for the Boy Scout leader to the Recording Secretary at the May 2023 Committee meeting to invite them to the Earth Day event.
- m) It was MOVED and SECONDED

THAT the meeting adjourn at 7:35 pm.

CARRIED

CHAIR

Certified Correct:

CAO

SECTION 11.0 – Specifications and Standards for Landscaping

11.1 General

- 11.1.1 All projects within the *City* shall follow the requirements set in the *City's* Subdivision and Development Servicing Bylaw 2020, No.3126 to protect trees during construction.
- 11.1.2 *Applicants* for *Subdivision/Development* shall submit a plan, clearly showing all existing landscape features, property lines and municipal infrastructure in the vicinity of their off-site (on *City* property) *Landscaping* plan.
- 11.1.3 Landscape plans shall comply with the latest editions of the Canadian Landscape Standard, and this Design Criteria Manual. A Consulting *Landscape Architect* or other *City Engineer* approved professional shall prepare drawings and planting specifications for street trees, *Boulevards*, median *Plantings* and any other landscape plans required by the *City*. All landscape plans must be approved by the *City Engineer* prior to any work being undertaken on the site.
- 11.1.4 When the landscape design includes plants, they shall be low growing, low maintenance, and drought tolerant perennials and grasses that are well suited for BC Climate. Final selection and arrangement of species shall be based on criteria including size, texture, colour, shade tolerance, drought tolerance, disease resistance and seasonal interest. The use of native plant materials is encouraged where appropriate.
- 11.1.5 No individual soil pits will be accepted. Soil beds and trenches shall be consistent and continuous and achieve soil volume target as outlined in this Design Criteria Manual.
- 11.1.6 Unless otherwise approved by the *City Engineer*, artificial turf shall not be used for *Landscaping Boulevards*.

11.2 Boulevard Tree, Shrub, and Groundcover Grass Planting

- 11.2.1 *Boulevard* trees, shrubs, and groundcovers are required, unless approved otherwise by the *City Engineer*.
- 11.2.2 A preliminary planting plan shall be submitted along with the engineering plans for *Works and Services* to assess potential conflicts with designs for *Works and Services*. Prior to any planting of shrubs/trees, a final planting plan shall be submitted by the *Landscape Architect*. This plan shall account for As-Built locations of installed *Municipal Works and Services* as well as driveways.

11.3 Median Tree, Shrub, and Groundcover Planting

- 11.3.1 Unless otherwise approved by the *City Engineer*, medians wider than 1.5 m between back of the curbs and longer than 6 m shall be filled with growing medium, leveled and planted with trees, shrubs, perennials, grasses, and groundcovers.
- 11.3.2 Landscape medians shall have a 450 mm wide splash strip adjacent to the curb and automatic irrigation in accordance with Section 15.4 - Supplementary Specifications and Drawings.

11.4 Boulevard and Median Planting Specifications

- 11.4.1 Design of *Boulevard* and median tree planting shall be prepared by a *Landscape Architect* registered with the BC Society of Landscape Architects.

- 11.4.2 In general, the *City* aims to select trees suitable for the site while considering the existing overhead utility/power lines, balancing constraints for available space for soil, traffic site lines/visibility, underground utilities, or other relevant considerations.
- 11.4.3 Planting shall consist of street trees, grass, and shrubs.
- 11.4.4 A minimum 6.0 cm caliper "street" tree (measured 30 cm above grade) shall be required. The species, spacing and location, shall be as per the specifications included in this Design Criteria Manual.
- 11.4.5 Underground service locations must be determined prior to planting (BC One Call).
- 11.4.6 All perennials, grasses, and shrubs shall be of a maximum mature height of 1 m to ensure clear view lines for traffic and pedestrian safety. Final selection, supply and installation of all *Landscaping* designs shall be to the satisfaction of the *City Engineer*.
- 11.4.7 In selecting the species of trees to be used on a given street the *Landscape Architect* shall give due consideration to mixing varieties for the purpose of controlling the spread of disease.
- 11.4.8 All Trees must meet the plant condition and structure requirements set out in the latest edition of the Canadian Landscape Standard and the "Canadian Standards for Nursery Stock" (CNTA) to be considered acceptable by the *City Engineer*.
- 11.4.9 All planting materials must be planted and maintained in accordance with the requirements set out in the latest edition of the Canadian Landscape Standard.
- 11.4.10 *Boulevard* and median *Plantings* shall be designed to fill in as a mass planting with no exposed soil within three growing seasons.
- 11.4.11 Replacement Trees shall:
- Have a single dominate leader, full and symmetrical.
 - Be balled and burlapped, and/or in wire cages (container trees or bare root tree stocks will be rejected).
 - Have the nursery tag displaying genus and species left on the tree after planting,
 - Be free of any girdling roots.
 - Be installed with a tree trunk protector, unless the tree is installed in a tree grate.
 - Be planted according to International Society of Arboriculture (ISA) best management practices.
- 11.4.12 Plant Spacing
- All trees shall be planted within reasonable distance to respect the mature canopy sizes of the trees, including neighbouring site trees, and recognize the impact of their own mature canopy size on adjacent site features.
 - Typically, *Boulevard* trees shall be spaced approximately 9 to 12 meters apart depending on the species used in the design.
 - Locations shall be staked out by the *Consulting Engineer* in accordance with the accepted plans and verified on site by the *City Engineer* prior to planting. If underground obstructions are uncovered, they shall be reported to the *City Engineer* for resolution.

11.4.13 Root Barriers

- Install root barrier adjacent to underground utilities and hard surfaces vulnerable to root heave.

11.4.14 Hard Surfaced Front Boulevards

- Unless otherwise approved by the *City Engineer*, hard surfaced front boulevards shall only be used in the *City's PPA*. See the related drawing in Section 15.4 for the For PPA boundaries.

11.5 Minimum Soil Requirements for Shrub and Tree Planting

11.5.1 Unless otherwise required by the *City Engineer*, a minimum 0.5 m depth for shrubs is required.

11.5.2 A minimum 0.8 m depth shall be used for trees in *Boulevard* strip locations between curb and *Sidewalk* as well as traffic medians.

11.5.3 Tree planting trenches shall be:

- Filled with a *City* approved growing medium; and
- Continuous except at driveway crossings, streetlights, transformers and other utility structures.

11.5.4 Soft Surface Tree Planting:

The following lists recommended soil volumes for different tree size categories. These recommended numbers shall be used as guidance only and site specific requirements shall be confirmed with the *City Engineer* prior to preparing the *Landscaping Plan* and Tree Planting drawing:

Tree Size category	Minimum Soil Volume Per Tree
Large (greater than 10 m canopy spread)	30 m ³ (20 m ³ if soil shared by 2 or more trees)
Medium (approximately 10 m canopy spread)	20 m ³ (15 m ³ if shared by 2 or more trees)
Small (less than 6 m canopy spread)	10 m ³

11.5.5 Tree Planting Surrounded by Hard Surface:

- Hard surface *Boulevards*, *Sidewalks*, and parking areas shall use Deep Root Silva Cell structural frame, or *City* approved equivalent, to meet soil volume requirements for trees while providing the required structural support for adjacent hard surface.
 - A minimum 0.6 m depth shall be used.
 - To calculate the minimum soil volume required per tree using a soil cell system, the area of the canopy at maturity shall be multiplied by 0.6 m. The *Landscape Architect* shall submit a signed and sealed calculation sheet that clearly outlines all the assumptions, including but not limited to, the mature tree canopy size.

For example, if a tree has a mature canopy radius of 2 m, then 12.56 m² is the approximate canopy area (i.e., the area of a circle = πr^2). To calculate the required soil volume for this tree using a soil cell system, multiply soil depth (e.g., 0.6 m) by the calculated canopy area, i.e., 12.56 x 0.6 = 7.54 m³ of soil will be required.

- Upon approval of the *City Engineer*, *Structural Soil* may be used when:

- There is a utility crossing, or
- The area can accommodate the required space for *Structural Soil* to achieve the volume of required growing medium(soil).

Note: The minimum required *Structural Soil* volume is 50 m³ (as only 20% of the *Structural Soil* is growing medium). A reduced structural soil volume of 40 m³ could be used only if tree roots have access to softscape beyond the structural soil area.

11.6 Minimum Tree Planting Clearances

11.6.1 Unless otherwise approved by the *City Engineer*, the following minimum distance from street feature or furniture shall be maintained:

Street Feature/Furniture	Minimum Separation to <i>Boulevard Tree</i> ¹	
	Canopy (m)	Trunk (m)
Lamp Standards	6.0	
Steel/Wooden Poles, Posts & Bollards		2.0
Hydrants		4.0
Catch Basins	2.0	
Manholes, Valve Boxes, Service Boxes		2.5
Water, Storm & Sanitary Sewer Service and Connection locations		3.0
Driveways		<ul style="list-style-type: none"> • Upstream 2.0 • Downstream 1.5
Sidewalk	0.6	
Curb Face	0.75	
Utility Boxes, Transformers, etc.		3.0
Community Mailboxes		2.0
Intersection Corners	In line with 8 m sight triangle as per Section 15.4 - Tree Planting Supplemental Specification Drawings	
SkyTrain Structure ²	5.0 m	
Foundation Wall, Façade, or Second Floor Balcony		
<ul style="list-style-type: none"> • Very Small/Small Trees and/or Large Shrubs 	2.0	
<ul style="list-style-type: none"> • Medium Trees 	3.0	
<ul style="list-style-type: none"> • Large Trees 	4.0	
Other Furniture		2.0

Notes: (1) All measurements shall be based on the estimated mature trunk/canopy diameter when setting the minimum required separation.

(2) Ensure TransLink is aware of your work at the planning phase and prior to commencement of work.

11.6.2 Tree canopies shall be maximum 3 m high within transmission line buffer zones.

11.6.3 No *Retaining Walls*, footings, fire access, furniture, play equipment, decks, patios, etc. may be

placed inside the Tree Protection Zone (TPZ) of protected trees.

- 11.6.4 Underground service locations (i.e., Gas, Hydro, Telephone, Water, Sewer, etc.) to be determined prior to planting; tree locations shall avoid underground services and utilities and provide the minimum distance as shown in the table above. Damage to utilities will be the *Contractor's* sole responsibility.

11.7 Species Selection

Unless otherwise approved by the *City Engineer*.

- 11.7.1 *Landscaping* design shall blend with existing *Plantings* and surrounding landscape. Changes, if necessary, should occur at intersections.
- 11.7.2 Tree species shall differ from one street to the next.

11.8 Accepted Street Trees

- 11.8.1 New *Boulevards* greater than 200 m in length shall have more than one tree species.
- 11.8.2 Tree species selection shall be made in consultation with and to the satisfaction of the *City Engineer*.
- 11.8.3 Appendix A in this Section provides the list of acceptable street trees for planting on *City* streets.

11.9 Plants not Accepted for Use in Public Landscape Areas

- 11.9.1 Poisonous plants including, but not limited to, plants listed in Children's Play spaces and Equipment CAN/CSA-Z614-98, shall not be permitted.
- 11.9.2 Appendix A in this Section provides the list of invasive species and plants that are not accepted for planting in the *City's* public landscape areas.

11.10 Drainage

- 11.10.1 Surface and sub-surface *Drainage Systems* shall be provided, as appropriate, for the collection and disposal of storm drainage and subsurface water. Any such *Drainage System* shall be connected to the municipal *Storm Sewer System*. A *Drainage System* shall be provided under soft and hard surfaced street tree planting area. See Section 15.4 – Tree Planting Supplemental Specification Drawings. Drainage works shall comply with the specifications as set out in the BC Landscape Standards.

11.11 Irrigation:

11.11.1 Soft Surface Tree Planting:

- Tree watering bags (Treegator or a *City Engineer* approved equivalent) during dry season is required where an irrigation system is not provided; and
- Watering bags shall be filled twice a week during the growing season.

11.11.2 Tree Planting Surrounded by Hard Surface:

- Subsurface drip Irrigation for all median and hard surface tree Plantings is required. The drip irrigation system shall be designed by an Irrigation Designer certified by the Irrigation Industry Association of British Columbia. The system shall be:
 - Provided by RainBird supplier or a *City Engineer* approved equivalent; and
 - Activated automatically through a timed control system.
- An electronic copy, plus a hard copy of the completed irrigation system Record Drawings and the irrigation system Operations & Maintenance Manual shall be submitted to the *City Engineer*.
- The *City Engineer* may require an additional and/or separate landscape irrigation system for shrubs, groundcovers, etc.

11.12 Landscape Lighting

- 11.12.1 At the discretion of the *City Engineer*, conduit from the nearest *City's* electrical outlet to each tree pit shall be provided for all trees planted in hard surfaced street tree planting areas. Lighting systems acceptable to the *City Engineer* may be required. Lighting will not typically be required but may be requested in specific high profile and areas with high pedestrian traffic.

11.13 Tree Grates

- 11.13.1 Tree grates, where required, shall be Dobney Foundry model LPT -36 cat or LPT -48 cat or *City Engineer* approved equivalent.

11.14 Entry Features

- 11.14.1 Requests to install entry features including lighting, decorative fencing, *Landscaping*, etc. will require approval from the *City* and be assessed based on drawings prepared by a *Landscape Architect*. The *City* will review these requests and may require additional clauses in the agreement to cover off *Subdivision/Development* costs as well as ongoing maintenance costs.

11.15 Noxious Weed Control

- 11.15.1 Property *Owners* in the *City* shall manage their lands for *Noxious Weeds* and invasive plants as set out in the British Columbia Weed Control Act (BC. Reg. 66/85); as per information supplied by the Invasive Species Councils of British Columbia and Metro Vancouver; British Columbia Ministry of Agriculture's Invasive Plant Alert; and the requirements outlined in this Design Criteria Manual.
- 11.15.2 Any imported growing media or *Structural Soils* being used for *Boulevard*, median, and/or *Trail* planting shall be free of *Noxious Weeds* (see *City's* Subdivision and Development Servicing Bylaw 2020, NO. 3126 for the list of *Noxious Weeds*).
- 11.15.3 If any *Noxious Weed* species become evident during the landscape *Maintenance Period*, they shall be eliminated at the earliest opportunity at the *Applicant's* cost and by their *Landscape Architect* or arborist.

11.16 Time of Plant and Grass Installation

- 11.16.1 *Buildings* must be completed prior to planting.
- 11.16.2 Installation of grass sod in the *Boulevard* shall be undertaken prior to the issuance of an occupancy permit of a *Building* on the adjacent property.










- 11.16.3 Topsoil and grass in *Boulevards* may be required by the *City Engineer*, where in their opinion, the adjacent land shall not be developed in the near future.












11.17 Tree and Shrub Maintenance

- 11.17.1 Plants shall be CPTED (Crime Prevention Through Environmental Design) compliant, which means:
- Trees are to be pruned up to 1.8 m.
 - Shrubs are to be pruned down to 1.0 m.

Appendix A: Accepted Street Trees & Not Accepted Plants

Table A.1: Accepted Small Trees

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Acer buergerianum	Trident Maple	15-18		Moderate	Open	-	Red Orange	10	Consider for residential compact and rowhouse lots
Acer campestre 'Evelyn'	Queen Elizabeth Maple	8		Moderate	Moderate	-	Yellow	10	Consider for residential compact and rowhouse lots
Acer davidii	Snake Bark Maple	10		Moderate	Dense	-	Yellow Purple	10 - 12	Consider for residential compact and rowhouse lots
Acer griseum	Paperbark Maple	6		Moderate	Open	-	Red	9 - 10	Consider for residential compact and rowhouse lots
Acer negundo	Box Elder	10		Fast	Open	-	Yellow-green	9 - 10	Consider for residential compact and rowhouse lots
Acer palmatum	Japanese Maple	6		Moderate	Open	-	Depends on variety	9 - 10	Consider for residential compact and rowhouse lots
Acer platanoides 'Columnar'	Columnar Maple	13		Moderate	Moderate	-	Dark green	9 - 10	Stiff parallel branches
Acer platanoides 'Globosum'	Globe Norway Maple	14		Fairly Rapid	Dense	Yellow	Yellow	10 - 12	Consider for residential compact and rowhouse lots
Amelanchier canadensis	Shadblow Serviceberry	4		Slow	Open	White	Yellow Red	9 - 10	Consider for residential compact and rowhouse lots

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
<i>Amelanchier laevis</i>	Allegany Serviceberry	5-8		Fairly rapid	Moderate	White	Yellow Red	9 - 10	Consider for residential compact and rowhouse lots
<i>Carpinus japonica</i>	Japanese Hornbeam	6-10		Moderate	Dense	-	Bronze	9 - 10	Consider for residential compact and rowhouse lots
<i>Chionanthus virginicus</i>	Fringe Tree	3-6		Slow	Moderate	Showy, fragrant white	Yellow	9	All areas but medians
<i>Cornus florida</i>	Flowering Dogwood	6		Moderate	Dense	White	Scarlet	9 - 10	Consider for residential compact and rowhouse lots
<i>Cornus kousa</i> 'Satomi'	Satomi Dogwood	5-10		Moderate	Open	-	-	9 - 10	Consider for residential compact and rowhouse lots
<i>Cornus nuttallii</i> 'Eddie's White Wonder'	Pacific Flowering Dogwood	6		Moderate	Open	White	Red	9 - 10	Consider for residential compact and rowhouse lots
<i>Cornus rutgan</i>	Stellar Pink Dogwood	9		Moderate	Open	Light pink	Bright Red	9 - 10	Consider for residential compact and rowhouse lots
<i>Koelreuteria paniculata</i>	Golden Rain Tree	4.5-7		Slow-moderate	Open	Showy sulphur yellow	Yellow	9	All areas but medians
<i>Magnolia</i> 'Galaxy'	Galaxy Magnolia	6		Moderate	Moderate	Red-purple	Reddish	9 - 10	Consider for residential compact and rowhouse lots
<i>Magnolia kobus</i>	Kobus Magnolia	9		Rapid	Moderate	White	Yellow	10 - 12	Consider for residential compact and rowhouse lots
<i>Magnolia sieboldii</i>	Oyama Magnolia	9-12		Moderate	Moderate	White	Yellow	9 - 10	Consider for residential compact and rowhouse lots



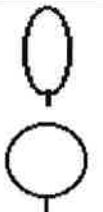
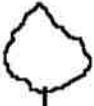




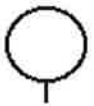



























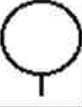





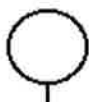
Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Magnolia x soulangiana	Saucer Magnolia	9		Moderate	Open	White	Yellow	9 - 10	Consider for residential compact and rowhouse lots
Magnolia stellata	Stellar Pink Magnolia	7		Moderate	Moderate	Pink	Yellow	9 - 10	Consider for residential compact and rowhouse lots
Ostrya virginiana	American Hop Hornbeam	7-12		Slow	Moderate	-	Yellow	9	Seed pods have winter interest, all areas
Parrotia persica	Persian Ironwood	4-8		Slow	Moderate	-	Yellow Orange Red	9 - 10	Only higher branching smaller cultivars to be used as street trees
Prunus serrulata 'Akebono'	Japanese Flowering Cherry	7		Moderate	Moderate	Light pink	Red	10 - 12	Consider for residential compact and rowhouse lots
Stewartia pseudocamellia	Japanese Stewartia	5-8		Slow	Open	White	Orange-red to purple-red	9 - 10	Consider for residential compact and rowhouse lots
Styrax japonicus	Snowdrop Tree	8		Slow to moderate	Open	White	Yellow	9 - 10	Consider for residential compact and rowhouse lots
Styrax obassia	Fragrant Snowbell	7		Moderate	Dense	White	Yellow	9 - 10	Consider for residential compact and rowhouse lots
Syringa reticulata	Ivory Silk Tree	7		Moderate	Moderate	Cream	-	9 - 10	Consider for residential compact and rowhouse lots

Table A.2: Accepted Medium Trees

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Acer x freemanii	Scarlet Sentinel Maple	13		Moderate	Moderate	-		9 - 10	-
Acer platanoides 'Crimson King'	Crimson King Maple	15-25		Moderate	Dense	-	Red Brown	10 - 12	-
Acer platanoides 'Crimson Sentry'	Crimson Sentry Maple	12		Moderate	Moderate	-	Deep purple	9 - 10	-
Acer platanoides 'Deborah'	Deborah Maple	13		Moderate	Moderate	-	Bronze	9 - 10	Early reddish leaves, turn bronze-green
Acer platanoides 'Drummondii'	Variegated Maple	10		Moderate	Moderate	-	Yellow	9 - 10	-
Acer platanoides 'Emerald Queen'	Emerald Queen Maple	10		Moderate	Moderate	-	Yellow	9 - 10	-
Acer platanoides 'Fairview'	Fairview Maple	15		Moderate	Moderate	-	Yellow	9 - 10	Reddish new growth, bronze-green mature growth
Acer platanoides 'Princeton Gold'	Princeton Gold Maple	13		Moderate	Moderate	-	Yellow	9 - 10	-
Acer platanoides 'Summershade'	Summershade Maples	11		Moderate	Moderate	-	Yellow	12	Light green
Acer pseudoplatanus	Sycamore Maple	12		Moderate	Dense	-	Yellow	10 - 12	-
Acer pseudoplatanus 'Atropurpureum'	Spaethii Maple	12		Moderate	Dense	-	Yellow	10 - 12	Purple underside of green leaf

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Acer rubrum	Red Maple	13		Fairly Rapid	Dense	-	Red	10 - 12	-
Acer rubrum 'Autumn Flame'	Autumn Flame Maple	12		Moderate	Moderate	-	Red	9 - 10	-
Acer rubrum 'Bowhall'	Bowhall Maple	13		Moderate	Moderate	-	Yellow orange reddish orange	9 - 10	-
Acer rubrum 'Karpick'	Karpick Maple	15		Moderate	Moderate	-	Yellow to orange	9 - 10	-
Acer rubrum 'Morgan'	Morgan Maple	14		Moderate	Dense	-	Orange-red	10 - 12	-
Acer rubrum 'October Glory'	October Glory Maple	6 - 16		Moderate	Moderate	-	Deep red	9 - 10	-
Acer rubrum 'Red Sunset'	Red Sunset Maple	11		Moderate	Moderate	-	Red	9 - 10	-
Acer truncatum 'Norwegian Sunset'	Norwegian Sunset Maple	14		Moderate	Moderate	-	Red	9 - 10	-
Acer truncatum 'Pacific Sunset'	Pacific Sunset Maple	10		Moderate	Moderate	-	Red	9 - 10	-
Acer x freemanii 'Jeffersred'	Autumn Blaze Maple	10		Moderate	Moderate	-	Orange-red	9 - 10	-
Carpinus betulus	European Hornbeam	13		Moderate	Dense	-	Yellow	9 - 10	-

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Carpinus betulus 'Fastigiata'	Pyramidal European Hornbeam	11		Moderate	-	-	Yellow	9 - 10	-
Carpinus betulus 'Fastigiata'	Fastigate Hornbeam	10		Moderate	Dense	-	Yellow	9 - 10	-
Carpinus betulus 'Frans Fontaine'	Frans Fontaine Hornbeam	15		Moderate	Moderate	-	Yellow	9 - 10	-
Catalpa bignoides	Catalpa/Indian Bean Tree	8-12		Moderate-fast	Moderate	Orchid shaped white	Yellow	9	Smaller than speciose, greenways parks
Catalpa bignoides 'Aurea'	Golden Catalpa/Golden Indian Bean Tree	8-12		Moderate-fast	Moderate	Orchid shaped white	Yellow, reddish tinge in spring	9	Smaller than speciose, greenways parks
Cercis canadensis	Eastern Redbud	12		Fairly rapid	Open	Purple pink	Yellow	10 - 12	Some horizontal branching in age
Cladrastis kentukea'	Yellowwood	8-12		Moderate	Moderate	White	Yellow	9	All areas but medians
Cladrastis kentukea Perkins Pink'	Perkin's Pink Yellowwood	8-12		Moderate	Moderate	Pink	Yellow	9	All areas but medians
Fagus sylvatica	Golden Fastigate Beech	10		Slow	moderate	-	Yellow	9 - 10	-
Fagus sylvatica 'Fastigiata'	Dawyck Beech	12		Moderate	Moderate	-	Purple	9 - 10	-
Ginkgo biloba 'Princeton Sentry'	Princeton Sentry Maidenhair	14		Moderate	Open	-	Bright yellow	10 - 12	-



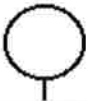



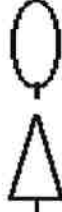


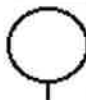





















Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
<i>Gleditsia triacanthos</i> 'Halka'	Halka Honey Locust	15		Moderate	Open	-	Yellow	10 - 12	-
<i>Halesia monticola</i>	Mountain Silver Bell	13		Moderate	Open	White	Yellow	10 - 12	-
<i>Liquidambar styraciflua</i>	American Sweet Gum	12-18		Moderate	Dense	-	Scarlet	10 - 12	Bark deeply furrowed
<i>Liquidambar styraciflua</i> 'Worplesdon'	Worplesdon Sweetgum	10-20		Moderate	Moderate	-	Orange Purple	10 - 12	-
<i>Nyssa sylvatica</i>	Black Gum	13		Slow	Moderate	-	Hot coppery red	10	-
<i>Oxydendrum arboreum</i>	Sourwood	7-12		Very slow	Moderate-Dense	White	Red	9	Stunning fall colour, all areas but medians
<i>Quercus palustris</i> 'Pringreen'	Green Pillar Pin Oak	12-18		Moderate	Moderate	-	-	9	Showy fall colour, all areas
<i>Quercus shumardii</i>	Shumard Oak	10		Moderate	Open	-	Scarlet	10 - 12	For median use only
<i>Zelkova serrata</i> 'Green Vase'	Green Vase Zelkova	25		Fairly rapid	Dense	-	Yellow - orange	10 - 12	Finer textured

Table A.3: Accepted Large Trees

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
<i>Acer rubrum</i> 'Autumn Flame'	Autumn Fantasy Maple	15		Fast	Moderate	-	Bright red	10 - 12	-
<i>Acer rubrum</i> x <i>freemanii</i> 'Jeffersred'	Autumn Blaze Maple	15		Moderate	Moderate	-	Orange-red	10 - 12	-
<i>Acer saccharum</i>	Sugar Maple	20		Moderate	Dense	-	Yellow Red	10 - 12	Stronger & slower than Norway Maple
<i>Cercidiphyllum japonica</i>	Katsura Tree	15-20		Slow	Open	-	Scarlet	9 - 10	Protect from hot sun and dry wind
<i>Davidia involucrata</i>	Dove Tree	10-20		Moderate	Moderate	White	-	10 - 12	Large brown fruit hangs on over winter
<i>Fagus sylvatica</i>	European Beech	10-20		Slow	Dense	-	Bronze	12	Leaves purple or copper
<i>Fagus sylvatica</i> 'Dawcyk Purple'	Dawcyk Purple Beech	20		Slow	Moderate	-	Dark purple	9 - 10	-
<i>Fagus sylvatica</i> 'Purpurea'	Purple European Beech	10-20		Slow	Dense	-	Bronze	12	Leaves purple or copper
<i>Fagus sylvatica</i> 'Riversii'	Rivers Purple Beech	10-20		Slow	Dense	-	Purple-bronze	12	Purple foliage
<i>Ginkgo biloba</i>	Maidenhair Tree	12-18		Slow	Open	-	Yellow	12	-
<i>Gleditsia triacanthos inermis</i> 'Shademaster'	Honey Locust	10-18		Fairly rapid	Open	-	Yellow	10 - 12	Upright
<i>Gleditsia triacanthos inermis</i> 'Skyline'	Skyline	20		Fairly rapid	Open	-	Yellow	10 - 12	Dark green leaves

Botanical Name	Common Name	Height m	Tree Form	Growth Rate	Shade	Flower	Autumn Colour	Spacing m	Comments
Gleditsia triacanthos 'Suncole'	Sunburst Honey Locust	10-18		Fairly rapid	Open	-	Yellow	10 - 12	Yellow
Magnolia grandiflora	Evergreen Magnolia	20-40		Slow	Moderate	Large creamy	-	9 - 10	-
Phellodendron amurense	Cork Tree	9-14		Moderate	Open	Yellow-green	Yellow	9 - 12	Fragrant leaf, interesting bark
Quercus coccinea	Scarlet Oak	10-22		Moderate	Moderate	-	Scarlet	10 - 12	For median use only
Quercus garryana	Oregon White Oak	6-15		Moderate	Moderate	-	-	10 - 12	Roots non-aggressive, deep ¹
Quercus phellos	Willow Oak	6-20		Fairly rapid	Moderate	-	Yellow	10 - 12	Fine texture foliage ¹
Quercus shumardii	Shumard Oak	15		Moderate	Moderate	-	Red	10 - 12	Dark green foliage ¹
Catalpa speciosa (Medium to Large)	Northern Catalpa	12+		Moderate - fast	Moderate	Orchid shaped white	Yellow	9	Greenways parks
Prunus serrulata 'Amanogawa' (Medium to Large)	Amanogawa Cherry	10-22		Moderate	Moderate	Pale pink	Red	10 - 12	Bronze foliage

1- For median use only

Table A4: Plants Not Accepted for Planting in Public Landscape Areas

SHRUBS	COMMON NAME
Buddleia Davidii	Butterfly Bush
Cytisus Scoparius	Scotch Broom
Daphne Laureola	Spurge Laurel
Fallopia Japonica	Japanese knotweed
Heracleum Mantegazzianum	Giant Hogweed
Ilex Aquifolium	English Holly
Pinus Mugo	Mugo Pine
Viburnum Opulus	Snowball Bush
Viburnum Tinus	Laurustina Viburnum
Viburnum Davidii	David Viburnum
Bamboos including but not limited to Arundinaria spp.; Bambusa spp. and Phyllostachys spp.	All Bamboo Plants
PERENNIALS	COMMON NAME
Clematis Vitalba	Old man's beard
Foeniculum Vulgare	Common fennel
Impatiens Gladuifera	Policeman's Helmet / Himalayan Balsam
Iris Pseudoacorus	Yellow Flag Iris
Lysimachia Vulgaris	Garden Loosestrife
Lythrium Salicaria	Purple Loosestrife
Nymphaea Odorata	Fragrant Water Lily
Phalaris Arundinacea	Reed Canary Grass/Ribbon Grass
Polygonum Albertii	Silver lace Vine
Senecia Jacobea	Tansy Ragwort
Verbena Honariensis	Purple Verbena
GROUNDCOVERS	COMMON NAME
Arctostaphylos Uva Ursa	Kinnickinnick
Festuca Glauca	Blue Fescue Grass
Hedera Helix	English Ivy
Erica spp.	Heaths
Lamium Galeobdolon	Lamium / Yellow Archangel
Rubus Discolor	Himalayan Blackberry
Vinca spp.	Periwinkle



Terms of Reference Environmental Sustainability Committee

1.0 Background:

The purpose of the Environmental Sustainability Committee is to provide advice to City Council on environmental sustainability issues and trends while promoting environmental awareness, education, and best practices throughout the City of Langley. Council approved the formation of this committee in 2022.

2.0 Mandate:

The overall mandate of the Environmental Sustainability Committee is to provide advice to Council with respect to environmental sustainability issues which is consistent with the City of Langley's Strategic Plan. Specific responsibilities of the Committee include, but are not limited to, the following:

- To provide advice to Council on a wide range of existing and emerging environmental sustainability issues and trends including strategic planning initiatives, bylaws, and policy development;
- To provide a local perspective on the environment while giving due consideration to the balance between social, environmental and economic aspects;
- To identify and review opportunities for environmental protection and enhancement within the City and advise Council of the same;
- To advise Council on issues of environmental importance to stakeholder groups and to the community at large; and
- To identify and advise on ways to build local environmental awareness and promote environmental stewardship within the City.

The Environmental Sustainability Committee mandate aligns with Council's current Strategic Plan which states that the City of Langley will "recommit to the environment: This includes budget provision to complete a streetscape waste audit (2022) and an Urban Forest Management Strategy (2023)".

3.0 Composition:

3.1 Membership will strive to reflect the diversity of the community, with experience, knowledge, and expertise applicable the Group's mandate taken into consideration.

3.2 Membership:

Document Number: 181052

- Two non-voting members of City Council to be appointed by Council who will act as Chair and Co-Chair of the Environmental Sustainability Committee
- Two members representing local environmental organizations such as Langley Environmental Partners Society and Langley Field Naturalists
- A representative from a Post Secondary Institution
- A representative of local First Nations
- Youth Representative
- Four members at large

3.3 Chair Responsibilities:

- Facilitating meetings in accordance with rules of procedure outlined in the current Council Procedure Bylaw;
- Ensuring the Environmental Sustainability Committee does not deviate from the agenda for the meeting;
- Maintaining decorum and respectful discussion;
- Encouraging participation in discussion topics and questions;
- Being open-minded and allowing for a variety of opinions to be heard;
- Calling for votes and/or seeking consensus as applicable;
- Working alongside the Staff Liaison to guide the Environmental Sustainability Committee towards fulfilling tasks/projects identified in the Annual Work Plan and presenting reports to Council, as applicable;
- Acting as spokesperson for the Group to Council.

3.4 Member Responsibilities:

- Attending and actively participating in meetings as scheduled;
- Being prepared for meetings (reading agenda material prior to meetings)
- Engaging in collaborative, respectful discussions relating to topics on the agenda, including sharing thoughts, opinions, and recommendations;
- Maintaining an open mind and allowing for a variety of opinions to be heard;
- Voting on motions that are put forward by committee members;
- Notifying the Staff Liaison in a timely manner if they are unable to attend a scheduled meeting.

3.5 In addition to chairing meetings in the absence of the Chair, the role of the Chair may be assigned to the Co-Chair when deemed appropriate by the Chair.

3.6 Representatives from the affiliated agencies/organizations will be requested to provide expert advice when deemed appropriate to assist the Environmental Sustainability Committee to fulfill its mandate.

4.0 Administration:

4.1 A Staff Liaison will be assigned by the Chief Administrative Officer to provide advice as necessary and assist the Environmental Sustainability Committee in carrying out its mandate.

Staff Liaison Responsibilities:

- Arranging and/or providing annual orientation for the Environmental Sustainability Committee members;
- Coordinating preparation of the Environmental Sustainability Committee's Annual Work Plan for approval by Council in January of each year;
- ensuring Work Plans are in alignment with goals identified in Council's current Strategic Plan;
- Working with the Environmental Sustainability Committee to set timelines for deliverables identified in the Annual Work Plan;
- Scheduling the Environmental Sustainability Committee's meetings;
- Working with the Chair to determine agenda items for each meeting and relaying to the Committee Clerk for agenda production purposes;
- Attending meetings to providing technical advice and assistance to the Environmental Sustainability Committee;
- Preparing reports in coordination with the Chair to bring forward recommendations of the Environmental Sustainability Committee to Council for consideration.

4.2 A Committee Clerk will be assigned by the Staff Liaison to provide administrative support to the Environmental Sustainability Committee.

Committee Clerk Responsibilities:

- Coordinating and producing all meeting agendas in compliance with requirements of the current Council Procedure Bylaw as they relate to City Committees;
- Attending meetings to take minutes and providing procedural advice to the Chair when requested;
- Producing and circulating minutes of meetings in compliance with requirements of the Current Council Procedure Bylaw as they relate to City Committees;
- Maintaining the official files of the Group including minutes, agendas, policies, terms of reference, correspondence and other file information, in accordance with the City's records management practices.

4.3 Additional staff and/or consultants may be invited to provide technical advice and assistance.

5.0 Meeting Procedures

Meetings will be conducted in accordance with the City's current Council Procedure Bylaw

6.0 Reporting Structure:

The Environmental Sustainability Committee will report to City Council through distribution of its minutes and by making recommendations to City Council.

7.0 Accountability:

- 7.1 The Environmental Sustainability Committee is accountable to City Council.
- 7.2 In accordance with Council Policy CO-79 Advisory Bodies, the Environmental Sustainability Committee shall, in January of each year, prepare and submit to Council for approval, an annual Work Plan outlining the task(s) to be accomplished by the committee during the year. Any updates to the Work Plan shall be submitted to Council for approval.
- 7.3 The Environmental Sustainability Committee does not have the authority to give direction to staff or to commit to expenditures of funds. Action recommended by the committee must be done by resolution to City Council and with their approval prior to implementation.
- 7.4 The Environmental Sustainability Committee may undertake multiple initiatives; however, if staff resources are required, only one initiative at a time is undertaken.

8.0 Meetings:

The Environmental Sustainability Committee will meet monthly with exception of August and January and by exception at the call of the Chair.

9.0 Quorum:

9.1 A quorum shall be a majority of the filled voting membership.

9.2 In the event that a member or members leave(s) the Environmental Sustainability Committee, during the period of time between when the position(s) is/are vacant and the position(s) is/are filled, quorum will be determined based on the total number of remaining voting members.

10.0 Terms:

10.1 The committee's membership is ongoing and will be reviewed as required to fill vacancies and ensure effectiveness of the Committee.



COMMITTEE REPORT

To: **Mayor and Councillors**

Subject **Environmental Sustainability Committee
2023 Work Plan**

File #: 5210.00

Doc #:

From: Councillor Paul Albrecht, Chair

Date: May 1, 2023

COMMITTEE RECOMMENDATION:

THAT Council approve the Environmental Sustainability Committee 2023 work plan.

SUMMARY:

The Environmental Sustainability Committee discussed the 2023 work plan at its April 13, 2023 meeting and the following list was approved for submission to Council.

1. Annual Earth Day Event, planning 2023
2. Tree Preservation/Urban Forest Management Plan:
 - Review and provide input to Urban Forest Management Plan when ready and being prepared by Diamondhead Consulting.
3. Nicomekl River Clean Up Event
 - Investigate the amount of debris in the river and assess if this is something that can be addressed using volunteers
4. Discuss Environmental Recognition program(s)
 - in the business community
5. Raise "Point of Pride" profile
 - Recruit new members.
 - Contest: 'street of the year'.

6. Investigate the feasibility of 'Self-serve bicycle repair kiosk' located at City Hall
7. Host a Repair-It Cafe Event
8. Educational Sustainability Posters
9. Host a Recycling Event:
 - Target items difficult to recycle, ie. Textiles, Tires, etc.
10. Implement Edible Planters

The committee discussed all of the selections and it was noted that they request that all 10 items be identified on the 2023 Annual Work Plan and that the top 5 would be the priority and the remaining done if time permits.

It was MOVED and SECONDED THAT the Committee request Council approve all 10 items on the 2023 Annual Work Plan.

Respectfully Submitted,



Councillor Paul Albrecht, Chair