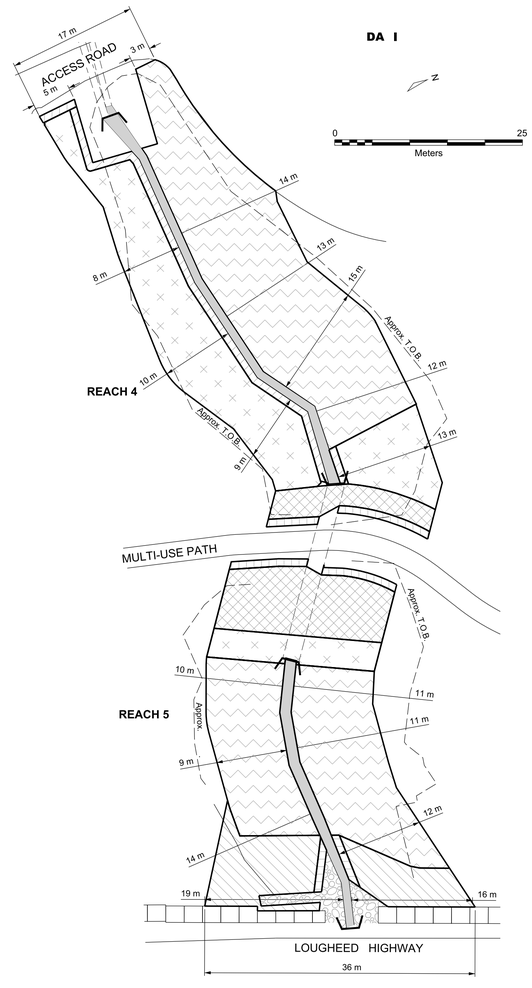

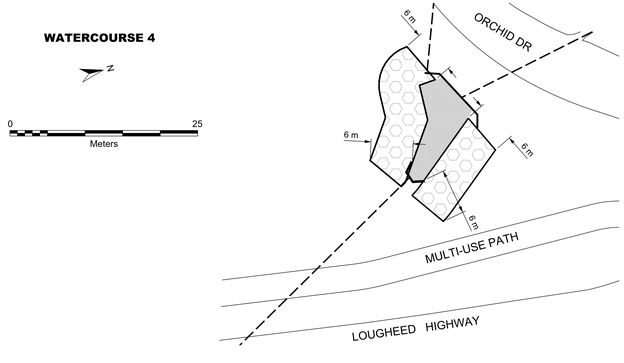

PHASE 1

Planting Zone 1 - Slightly Disturbed SPEA (Estimated Area = 1,188m^2; Density = ~0.5 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Abies grandis	grand fir	#1 pots	60	- spread evenly throughout
Mahonia nervosa	dull Oregon grape	#1 pots	90	- plant in clusters of 3; spread clusters evenly throughout
Polystichum munitum	sword fern	10cm pots	240	- spread evenly throughout
Pseudtosuga menziesii	Douglas-fir	#1 pots	120	- spread evenly throughout
Vaccinium parvifolium	red huckleberry	#1 pots	90	- plant in clusters of 3; spread clusters evenly throughout

Planting Zone 2 - Moderately Disturbed SPEA (Estimated Area = 588m^2; Density = ~1 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Abies grandis	grand fir	#1 pots	60	- spread evenly throughout
Mahonia nervosa	dull Oregon grape	#1 pots	90	- plant in clusters of 3; spread clusters evenly throughout
Polystichum munitum	sword fern	10cm pots	235	- plant in clusters of 3; spread clusters evenly throughout
Pseudtosuga menziesii	Douglas-fir	#1 pots	120	- spread evenly throughout
Vaccinium parvifolium	red huckleberry	#1 pots	90	- plant in clusters of 3; spread clusters evenly throughout

Planting Zone 3 - Disturbed SPEA (Estimated Area = 217m^2; Planting Density = ~3 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Alnus rubra	red alder	#1 pots	130	- spread evenly throughout
Cornus stolonifera	red-osier dogwood	#1 pots	100	- spread evenly throughout
Salix scouleriana	Scouler's willow	live-stakes	260	- spead evenly throughout
Symphoricarpos albus	common snowberry	#1 pots	165	- plant in strip within 1m from top of wall adjacent to highway

Planting Zone 4 - Disturbed WC4 SPEA (Estimated Area = 157m^2; Density = ~3 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Populus balsamifera	black cottonwood	live-stakes	140	- spread evenly throughout
Salix scouleriana	Scouler's willow	live-stakes	235	- spread evenly throughout
Salix hookeriana	Hooker's willow	live-stakes	95	- plant in and around the high-water mark at 45º angles out over water

Planting Zone 5 - Edge of Davidson Creek (Estimated Area = 71m^2; Density = ~2 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Oemleria cerasiformis	Indian-plum	#1 pots	30	- spread evenly throughout
Polystichum munitum	sword fern	10cm pots	75	- spread evenly throughout
Rubus spectabilis	salmonberry	#1 pots	45	- spread evenly throughout

Planting Zone 6 - Edge of Davidson Creek @ Lougheed Hwy (Estimated Area = 13m^2; Density = ~3 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Salix scouleriana	Scouler's willow	live-stakes	25	- spread evenly throughout
Salix hookeriana	Hooker's willow	live-stakes	15	- plant in and around the high-water mark at 45º angles out over water

Planting Zone 7 - Barrier Planting (Estimated Area = 45m^2; Density = ~3 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Ribes lacustre	black gooseberry	#1 pots	25	- plant in dense strip, mixed with other Rosa sp.
Rosa acicularis	prickly rose	#1 pots	40	- plant in dense strip
Rose nutkana	Nootka rose	#1 pots	70	- plant in dense strip

Planting Zone 8 - Edge of MUP (Estimated Area = 260m^2; Density = ~2 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Cornus stolonifera	red-osier dogwood	#1 pots	160	- spread evenly throughout
Rubus parviflorus	thimbleberry	#1 pots	210	- plant in clusters of 3; spread clusters evenly throughout
Rose nutkana	Nootka rose	#1 pots	160	- spread evenly throughout

PHASE 2

Planting Zones 3, 4, and 8 (Estimated Area = 550m^2; Density = ~0.5 plants/m^2)

Scientific Name	Common Name	Pot Size	# of Plants	Comments
Abies grandis	grand fir	#1 pots	30	- spread evenly throughout
Gaultheria shallon	salal	#1 pots	55	- plant in clusters of 2-3; spread clusters evenly throughout
Polystichum munitum	sword fern	#1 pots	70	- spread evenly throughout
Pseudtosuga menziesii	Douglas-fir	#1 pots	70	- spread evenly throughout
Vaccinium parvifolium	red huckleberry	#1 pots	55	- plant in clusters of 3; spread clusters evenly throughout

RESTORATION AND REVEGETATION SPECIFICATIONS:

1. All contractors must obtain, be familiar with, and adequately implement all relevant project specifications and management plans, including the Construction Environmental Management Plan (CEMP) and Erosion and Sediment Control Plan (ESC).
2. The Restoration Contractor must locate and verify the existence of all utilities prior to the commencement of work.
3. All planting and growing medium is to meet British Columbia Society of Landscape Architects/British Columbia Landscape & Nursery Association (BCSLA/BCLNA) standards, latest edition, unless noted otherwise.
4. PGL must be notified of the proposed planting schedule at least two weeks prior to commencement of vegetation works.
5. Planting is to occur during the first optimal planting season after completion of project works and/or invasive plant treatment.
6. Native riparian vegetation must be retained wherever feasible to do so.
7. Trees should be planted wherever possible to minimize erosion, maintain water quality, and improve shade effects on watercourses.
8. For specified areas, as directed by the QEP, a soil assessment may be required prior to planting to determine suitability for revegetation. If deemed necessary, planting medium (topsoil) will be imported and applied where needed, as per current BCSLA/BCLNA standards.
9. Imported topsoil must be clean, seed free, and free of invasive plants and plant parts.
10. If required, imported topsoil must be placed at a minimum depth of 30 to 40cm and must be free of seeds, invasive species, leaves, etc.
11. The Restoration Contractor must submit a representative samples of the proposed topsoil for testing to Pacific Soil Analysis (or approved alternative laboratory). The Restoration Contractor is responsible for arranging and payment of soil analysis and any required amendments to growing medium. Lab results and a summary plan of any proposed amendment/fertilizer use must be submitted to PGL prior to commencement of work.
12. The Restoration Contractor is to supply all plant material shown on this plan. Sizes of plants listed are considered a minimum.
13. Any proposed material substitutions must be reviewed by PGL prior to use.
14. Nursery stock root balls, containers, and soil must be free of noxious weeds and/or invasive plants and plant parts (e.g., seeds, stems, roots, etc.).
15. All plant material must be provided by a certified, disease/virus free nursery within the Lower Mainland and/or Fraser Valley of BC - proof of certification required. Removal and replacement of disease/virus-affected plant material will be done so at the Restoration Contractor's expense.
16. Planting prescriptions shown are guidelines and can be "field-fit" based on actual field conditions under consultation/direction of PGL.
17. Plant spacing is to achieve densities noted in plant list tables. Both plant and cluster spacing to be measured off centre.
18. Individual plants within a cluster must have a minimal spacing of 300mm off centre for #1 pots.
19. All live-stakes must:
    a. Measure between 600 and 750mm in length;
    b. Be a **minimum of 30mm in width** measured at the base of the stake;
    c. Planted 0.25 -0.5 meters apart and perpendicular to slope;
    d. Be free of foliage/branching;
    e. Be soaked (fully submerged) in freshwater for a **minimum of 5 days prior to installation**;
    f. Be planted between November and March;
    g. Be installed so that a **minimum of 2/3's of the total length is buried in the soil**; and
    h. If suitable depth can not be achieved, then live-stakes should be pruned to minimize the amount of stake exposed above ground (i.e., to 1/3).
20. Guide holes for live-stake planting must first be created using a tool (e.g., rebar, pole, etc.) prior to installing live-stakes. Guide holes must be smaller than the width of the base of the live-stakes.
    a. Live-stakes must not be used to create guide holes and/or inserted directly into the soil without a guide hole.
21. Wildlife trees and coarse woody debris will be preserved in the SPEA, as directed by PGL. Available coarse woody debris must be spread throughout the planting area, where feasible, to provide a substrate for macroinvertebrates, microclimates, shade, improved connectivity and minimize erosion/sedimentation beneficial for fish and/or Pacific water shrew habitat.
22. All planting waste materials (e.g., wraps, containers, labels, etc.) must be removed immediately from the site by the Restoration Contractor.
23. Conducting all instream work under dry conditions and under the supervision of a QEP.
24. Once restoration work is complete, remove any non-biodegradable erosion and sediment control measures such as silt fencing.
25. The Restoration Contractor is to install an appropriate temporary irrigation system throughout SPEA at Davidson Creek Reach 5 for use during the first five growing seasons.
    a. The irrigation system must conform to current BCSLA/BCLNA standards and is intended to supplement natural rainfall during the dry season so that soil moisture content is maintained between 50% and 100% field capacity.
    b. The Restoration Contractor will be responsible for removing the temporary irrigation system in the first fall/winter season following the end of the fifth growing season.
    c. Frequency and duration of irrigation must be gradually decreased in years four and five to gradually ween plants off irrigation dependence.
26. The Restoration Contractor must complete annual maintenance tasks including replacement of failed plant material in the next appropriate planting season for the duration of the monitoring program, as directed by PGL.
    a. Annual invasive plant management will be completed by others.
27. Restoration success will be monitored annually by PGL for a period of five years and will begin the first growing season after planting completion. Success of the habitat restoration will be based on the following criteria:
    a. Support by a pre- and post-restoration site assessment conducted by a QEP;
    b. During Phase 2, visual counts of dead planted stock trees will be recorded and replaced within one year of the monitoring event to maintain a minimum 80% survival rate.
    c. Measurable improvement in the ecological condition of the restored area;
    d. Indication that the restored ecosystem is self-sustaining; and
    e. No further harm is inflicted on the site.
28. The Restoration Contractor will be responsible for replacing any significant mortality in nursery stock (i.e., planted areas with a density significantly less than roughly one plant per square metre) identified within the five-year success monitoring program, as directed by PGL.
29. All monitoring data, observations, and photo-point monitoring collected by PGL and subsequent maintenance recommendations will be summarized in an annual monitoring report prepared by PGL and provided to all interested parties (e.g., BC Housing, City of Coquitlam, Ministry of Forests, Lands and Natural Resources and Rural Development).
    a. A Site Instruction will be prepared by PGL and provided to the Restoration Contractor to direct annual maintenance works.

TOTAL PLANT COUNTS

Scientific Name	Common Name	Pot Size	# of Plants
Phase 1 Planting			
Abies grandis	grand fir	#1 pots	120
Alnus rubra	red alder	#1 pots	130
Cornus stolonifera	red-osier dogwood	#1 pots	260
Mahonia nervosa	dull Oregon grape	#1 pots	180
Oemleria cerasiformis	Indian-plum	#1 pots	30
Polystichum munitum	sword fern	10cm pots	550
Populus balsamifera	black cottonwood	live-stakes	140
Pseudtosuga menziesii	Douglas-fir	#1 pots	240
Ribes lacustre	black gooseberry	#1 pots	25
Rosa acicularis	prickly rose	#1 pots	40
Rose nutkana	Nootka rose	#1 pots	230
Rubus parviflorus	thimbleberry	#1 pots	210
Rubus spectabilis	salmonberry	#1 pots	45
Salix hookeriana	Hooker's willow	live-stakes	110
Salix scouleriana	Scouler's willow	live-stakes	520
Symphoricarpos albus	common snowberry	#1 pots	165
Vaccinium parvifolium	red huckleberry	#1 pots	180
		Phase 1 Total Plants	**3,175**
Phase 2 Planting			
Abies grandis	grand fir	#1 pots	30
Gaultheria shallon	salal	#1 pots	55
Polystichum munitum	sword fern	#1 pots	70
Pseudtosuga menziesii	Douglas-fir	#1 pots	70
Vaccinium parvifolium	red huckleberry	#1 pots	55
		Phase 2 Total Plants	**280**

SEAL

DATE	BY	CHK	REVISION N .	DESCRIPTION
OCTOBER 19, 2018	IRB	KMG	001	ISSUED FOR REVIEW
DECEMBER 12, 2018	IRB	KMG	002	ISSUED FOR CONSTRUCTIO : CONFIRMED WITH A - ILT DRAWINGS
MAY 13, 2019	IRB	KMG	003	ISSUED FOR TENDER
NOV 12, 2019	IRB	KMG	003	ISSUED FOR CONSTRUCTION

HA **I**

PGL ENVIRONMENTAL CONSULTANTS

ile N .: .	Map I : .

to be plotted on 24" x 36"

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