LID Code Integration Process Description

Per Section S5.C.5.b of the permit, Seattle reviewed, revised and made effective development-related codes, rules and standards, or other enforceable documents to incorporate and require Low Impact Development (LID) Principles and LID Best Management Practices (BMPs). The intent of the revisions was to make LID the preferred and commonly-used approach to site development. The revisions minimize impervious surfaces, native vegetation loss, and stormwater runoff of development situations.

Overall Approach

The City of Seattle began its LID Code Integration process in May 2013 with an orientation meeting for NPDES Coordinators and supervisors in all relevant departments. At that initial kick-off meeting, the permit requirement was outlined, and an official workgroup was chartered to carry out the review-revise-make-effective process for City of Seattle development-related Codes and Standards. Basic elements of the workgroup chartering included:

- Establishing accountability at the Department level to carry out the permit requirement
- Establishing clear roles and responsibilities. Each Department, led by its NPDES Coordinator,
 was to have decision-making authority over policy decisions affected their Code(s) and was to
 be responsible/accountable for meeting all regulatory deadlines. If legislative action were to
 be required, each Department would manage its own outreach and legislative process.
- Law was available to advise on legal questions. The Office of Sustainability was established as the coordinator and facilitator of necessary inter-departmental policy discussions and decision-making.
- A consistent approach (evaluation/reporting form) would be adopted, to ensure both a similar level of inquiry/analysis across departments and a similar approach to reporting.
- The workgroup would meet quarterly for one year and as needed beyond that time. As the process evolved, Department-specific meetings became more useful than large group check-ins, so this approach became the norm.

In September of 2013, this 'bottom-up' approach was further supported with a 'top-down' letter from the Director of Seattle Public Utilities to all relevant department heads, underscoring the seriousness of the Permit requirement, the need for staff to be assigned and given adequate time to work on the integration process, and the risk of penalties associated with failure to meet compliance deadlines. A senior-level policy advisor, with a dual appointment in Seattle Public Utilities and the Office of Sustainability and Environment, was assigned to coordinate the City-wide process. And a senior staff

attorney in the Law Department was assigned to support staff in all relevant departments.

Departments completed their revision processes on time, including passing legislation, where required, by January 15, 2016, the alternative date established in accordance with S5.C.5.a.iii of the permit. Training to support relevant staff's effort to implement revisions will continue throughout 2016.

Following are the review analyses for the documents reviewed. The review considered the LID categories: site planning; soils; landscaping, native vegetation, street landscaping; hard and impervious surfaces; bulk and dimensional considerations; clearing and grading; streets and roads; parking; design guidelines and standards; stormwater management and maintenance; zoning requirements; and critical areas and shoreline management. For each of the categories, a symbol indicates minimization of impervious surface, native vegetation loss, and stormwater runoff.



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Each analysis includes a description, if applicable, of how the requirement was changed to make LID the preferred and commonly-used approach to site development. The review also identified areas that Seattle had already incorporated LID principles into the development requirements.

The following review summaries are identified with the corresponding numbers identified in the header of the document:

- 1 Stormwater Code and Manual
- 2 Side Sewer Code
- 3 Standard Plans
- 4 SPU Internal Design Standards and Guidance
- 5 Right-of-Way Improvements Manual
- 6 Old Street Tree Manual
- 7 Shoreline Street Ends
- 8 Street Tree Ordinance
- 9 Title 15 Street and Sidewalk Use
- 10 Complete Streets

- 11 Landscaping Director's Rule
- 12 Seattle Building Code
- 13 Comprehensive Plan
- 14 Environmentally Critical Areas Regulations
- 15 Seattle Grading Code
- 16 Land Use Code
- 17 Shoreline Master Program
- 18 Tree Protection Code
- 19 Seattle Parks and Recreation (SPR) Design Standards
 - 19a Temporary Tree, Vegetation & Soil Protection
 - 19b Water Feature Design
 - 19c Earthwork
 - 19d Pathway and Pavement Edging
 - 19e Play Area Design
 - 19f Trail Construction and Restoration
 - 19g Irrigation Systems
 - 19h Soil Preparation
 - 19i Landscape Planting Design
 - 19j Site Restoration of Natural Areas
 - 19k P-Patch Water Systems Design
 - 19I Storm Sewer System Design
- 25 Seattle Fire Code

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Stormwater Code & Manual

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Sherell Ehlers	Strategic Advisor	Stormwater Policy Advisor	Seattle Public Utilities
Susie Larson	Civil Engineer	Drainage Plan Reviewer	Seattle Public Utilities
Michelle Lange	Strategy Lead	Strategic Planner	Seattle Public Utilities
Ede Courtenay	Site Review Supervisor	Supervisor	Seattle Department of
			Construction &
			Inspections

	Step 2			Step 3		Step 4	Step 5
WH	HAT topics did you r	eview?	W	HERE are	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers / developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Manual, Volume 1, Chapter 7	2009 Stormwater Manual included site planning, but added language to re clustering buildings.	X Yes, Vol. 1, pg. 7-4 No If yes, include language: Before designing the site and stormwater infrastructure, consider the following: Impervious and Pervious Surfaces: Fit development to the terrain to minimize land disturbance For sites with varied soil types, locate impervious areas over less permeable soil (e.g., till). Minimize development over more porous soils. Use porous soils by locating bioretention and permeable pavement over them. Cluster buildings together Minimize impervious surfaces (e.g., buildings, sidewalks) Minimize pollution-generating hard surfaces (PGHS) (e.g., areas subject to vehicular use such as driveways and parking strips) Minimize pollution-generating pervious surfaces (PGPS)	Yes X No If yes, list document title(s):
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Manual, Volume 1, Chapter 7	From 2009 SW Manual: For sites with varied soil types, locate impervious areas over less permeable soil (e.g., till). Minimize development over more porous soils.	X Yes No If yes, include language: For sites with varied soil types, locate impervious areas over less permeable soil (e.g., till). Minimize development over more porous soils. Use porous soils by locating bioretention and permeable pavement over them.	Yes X No If yes, list document title(s):
	Stormwater management facility locations	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Manual,	2009 Stormwater Manual included language re placement of stormwater	X Yes No If yes, include language: Added language to Manual	Yes No If yes, list document title(s):

Can/does document require designers / developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?			Volume 1, Chapter 7	facilities, but additional language added.	Stormwater: o Identify the approved point of discharge and conveyance system flow path, both pipe and topographically o Manage stormwater runoff (quantity and quality) as close to the point of origin as possible o Minimize the quantity of stormwater collection and conveyance systems required o Use simple, nonstructural methods for stormwater management o Use dispersion, infiltration, rainwater harvesting, and alternative surface BMPs where feasible	
Requiring On-site Stormwater Management Do On-site thresholds apply to most development projects in the City of Seattle	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Code, SMC 22.805.030.B & 22.805.050.B	Seattle's 2009 Code & Ecology's Manual that required 2,000 sf threshold for On-site (MR#5) allowed a level of projects that were previously one lot to not be required to provide on-site stormwater management. Therefore, Seattle adopted a 750 sf threshold for Single-Family & Parcel-based projects created after January 1, 2016.	X Yes No If yes, include language: Added language to Code: 22.805.030 MINIMUM REQUIREMENTS FOR SINGLE-FAMILY RESIDENTIAL PROJECTS B. On-site Stormwater Management. Single-family residential projects shall meet the Minimum Requirements for Onsite Stormwater Management contained in Section 22.805.070, to the extent allowed by law, if: 1. For a project on a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016, and where that document either created the lot or reduced the size of the lot, either the total new plus replaced hard surface is 750 square feet or more or land disturbing activity is 7,000 square feet or more; 22.805.050 MINIMUM REQUIREMENTS FOR PARCEL-BASED PROJECTS B. On-site Stormwater Management. Parcel-based projects shall meet the Minimum Requirements for On-site Stormwater Management contained in Section 22.805.070, to the extent allowed by law, if: 1. For a project on a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016,	

					and where that document either created the lot or reduced the size of the lot, either the total new plus replaced hard surface is 750 square feet or more or land disturbing activity is 7,000 square feet or more;	
Requiring On-site Stormwater Management Do On-site thresholds apply to most development projects in the City of Seattle	□ No	No See existing requirement	2016 Stormwater Code, SMC 22.805.030.B & 22.805.050.B	Seattle's 2009 Code & Ecology's Manual that required 2,000 sf threshold for On-site (MR#5) allowed a level of projects to not have to provide any on-site stormwater management. Therefore, Seattle adopted a 1,500 sf threshold for Single-Family & Parcel-based projects.	more; X Yes No If yes, include language: Added language to Code: 22.805.030 MINIMUM REQUIREMENTS FOR SINGLE-FAMILY RESIDENTIAL PROJECTS B. On-site Stormwater Management. Single-family residential projects shall meet the Minimum Requirements for On-site Stormwater Management contained in Section 22.805.070, to the extent allowed by law, if: 1. For a project on a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016, and where that document either created the lot or reduced the size of the lot, either the total new plus replaced hard surface is 750 square feet or more or land disturbing activity is 7,000 square feet or more; or 2. For any other project, either the total new plus replaced hard surface is 1,500 square feet or the land disturbing activity is 7,000 square feet or more. 22.805.050 MINIMUM REQUIREMENTS FOR PARCEL- BASED PROJECTS B. On-site Stormwater Management. Parcel-based projects shall meet the Minimum Requirements for On-site Stormwater Management contained in Section 22.805.070, to the extent allowed by law, if: 1. For a project on a lot most recently created, adjusted, altered, or otherwise amended by a plat or other lawful document recorded with the King County Recorder on or after January 1, 2016, and where that document either created the lot or reduced the size of the lot,	
					either the total new plus replaced hard surface is 750 square feet or more or land	

Use of On-site BMPs to	X Yes	X Yes	2016	Changed 2009 Code so that	disturbing activity is 7,000 square feet or more; or 2. For any other project, either the total new plus replaced hard surface is 1,500 square feet or more or the land disturbing activity is 7,000 square feet or more. X Yes	Yes
the maximum extent feasible when other requirements apply	No Does not apply	No See existing requirement	Stormwater Code, SMC 22.805.080.B & 22.805.090.B	GSI no longer referenced and On-site BMPs must be used to Maximum extent feasible to meet Flow Control and Water Quality Treatment requirements	No If yes, include language: 22.805.080 MINIMUM REQUIREMENTS FOR FLOW CONTROL B. Requirements. Flow control facilities shall be installed to the extent allowed by law and maintained pursuant to rules promulgated by the Director to receive flows from that portion of the site being developed. Post-development discharge determination must include flows from dewatering activities. All projects shall use on-site BMPs identified in Section 22.805.070.D to the maximum extent feasible to meet the minimum requirements. 22.805.090 MINIMUM REQUIREMENTS FOR TREATMENT B. Requirements. Water quality treatment facilities shall be installed to the extent allowed by law and maintained pursuant to rules promulgated by the Director to treat flows from the pollution-generating pervious and impervious surfaces on the site being developed. When stormwater flows from other areas, including non- pollution generating surfaces (e.g., roofs), dewatering activities, and off-site areas, cannot be separated or bypassed, treatment BMPs shall be designed for the entire area draining to the treatment facility. All projects shall use on-site BMPs identified in Section 22.805.070.D to the maximum extent feasible to meet the minimum requirements.	No If yes, list document title(s):
Use of BMPs beyond Ecology requirements for MR#5	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Code, SMC 22.805.070	Changed 2009 Code from GSI BMP terminology to "On- site BMP" and continued to require evaluation of additional BMPs (e.g. vegetated roofs, bioretention planters, rainwater harvesting).	X Yes No If yes, include language: Parcel-Based Project On-site BMPs included: Full Dispersion Infiltration Trenches Dry Wells Rain Gardens Infiltrating Bioretention	Yes No If yes, list document title(s):

					Rainwater Harvesting Permeable Pavement Facilities Permeable Pavement Surfaces Sheet Flow Dispersion Concentrated Flow Dispersion Splashblock Downspout Dispersion Trench Downspout Dispersion Non-infiltrating Bioretention Vegetated Roofs Perforated Stub-out Connections Newly Planted Trees	
Soils						
Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Code, SMC 22.805.020.D .2 2016 Stormwater Manual, Volume 3, Chapter 5	Existing Requirement: 2. Retain Top Layer. Within the boundaries of the project site, the duff layer, topsoil, and native vegetation, if there is any, shall be retained in an undisturbed state to the maximum extent feasible. If it is not feasible to retain the top layer in place, it should be stockpiled on-site, covered to prevent erosion, and replaced immediately upon completion of the land disturbing activities to the maximum extent feasible.	X Yes No If yes, include language: Added requirements for Soil Amendment to each project type: A. Soil Amendment. Retain and protect undisturbed soil in areas not being developed, and prior to completion of the project, amend all new, replaced, and disturbed topsoil (including construction laydown areas) with organic matter to the extent required by and in compliance with the rules promulgated by the Director.	☐ Yes☐ No If yes, list document title(s):
Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit, BMP T5- 13?	X Yes No Does not apply	Yes X No See existing requirement	2016 Stormwater Manual, Volume 3, Chapter 5	2009 Stormwater Manual included language for compost amending soil that is equivalent to BMP T5-13 that was incorporated into 2016 Stormwater Manual.		
Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	X Yes No Does not apply	X Yes No See existing requirement	Stormwater Code, SMC 22.805.020.D .19.b Stormwater Manual, Volume 1, Chapter 7	2009 Stormwater Code had some language regarding limiting compaction, but added language to 2016 Stormwater Code	X Yes No If yes, include language: Added Code language: b. Prevent compacting on-site BMPs by excluding construction equipment and foot traffic. Protect completed lawn and landscaped areas from compaction due to construction equipment. e. Keep all heavy equipment off existing soils under on-site BMPs that have been	Yes No If yes, list document title(s):

						excavated to final grade, to retain the infiltration rate of the soils. Added Manual language: Minimize or prevent compaction and protect soils	1 – Stormwater Code	and Manua
A	Landscaping, Nati	ive Vegetation,	Street Landscap	oing				
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Manual, Volume 1	2009 Stormwater Manual included some language regarding protecting and planting trees.	X Yes No If yes, include language: Added language to 2016 Stormwater Manual: Efforts should be made, as required and encouraged by local development codes, to conserve natural areas, retain native vegetation, reduce impervious surfaces, and integrate stormwater controls into the existing site layout to the maximum extent feasible. • Landscaping: • Maintain and use natural drainage patterns • Preserve and use natural features and resources, including trees • Create a multifunctional landscape using the natural site hydrology as a framework for site design • Confine and phase construction activities to minimize disturbed areas, and minimize impacts to environmentally critical areas and their associated buffers • Plant new trees in proximity to ground level impervious surfaces for on-site stormwater management and/or flow control credit • Minimize or prevent compaction and protect soils	Yes No If yes, list document title(s):	
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No X Does not apply						
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping	Yes No X Does not apply			7			

requirements for street frontages?						
Hard and Impervio	ous Surfaces					
Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering? Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No X Does not apply Yes No X Does not apply					
Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No X Does not apply					
Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	X Yes No Does not apply	☐ No Co	ormwater ode, SMC 805.070.D	2009 Stormwater Code required GSI/LID to the maximum extent feasible	X Yes No If yes, include language: Permeable Pavement was added as a Category 2 BMP to the On-site List and is required above many of the other On-site BMPs	Yes No If yes, list document title(s):
Two-track driveway design Or the use of a two-track driveway design?	Yes No X Does not apply					
 Bulk and Dimension		tions of facilitate minimizing the d	levelopment	footprint?		
Building setbacks Can flexibility be added to setback requirements to allow designers/developers to	Yes No X Does not apply					

minimize site disturbance? Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance? Maximum square footage Likewise, can flexibility be added to max. square footage requirements? Clustering Can document remove any barriers or add any incentives to cluster	Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply					
impervious area to min. site disturbance?						
Clearing and Grad	ding					
Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction?	X Yes No Does not apply	☐ Yes X No ☐ See existing requirement	2016 Stormwater Manual, Volume 1, Chapter 7	Impervious and Pervious Surfaces: Fit development to the terrain to minimize land disturbance For sites with varied soil types, locate impervious areas over less permeable soil (e.g., till). Minimize development over more porous soils. Use porous soils by locating bioretention and permeable pavement over them. Cluster buildings together Minimize impervious surfaces (e.g., buildings, sidewalks) Minimize pollution-generating hard surfaces (PGHS) (e.g., areas subject to vehicular use such as driveways and parking strips) Minimize pollution-generating pervious surfaces (PGPS)	☐ Yes☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
Conserving native vegetation/soils	X Yes No Does not apply	X Yes	2016 Stormwater Manual,	2009 Stormwater Manual included some language	X Yes No If yes, include language:	☐ Yes☐ No☐ If yes, list document title(s):

Can/does document include provisions aimed at conserving native vegetation?	See existing requirement	Volume 1, Chapter 7	regarding protecting and planting trees.	Added language to 2016 Stormwater Manual: Efforts should be made, as required and encouraged by local development codes, to conserve natural areas, retain native vegetation, reduce impervious surfaces, and integrate stormwater controls into the existing site layout to the maximum extent feasible. • Landscaping: • Maintain and use natural drainage patterns • Preserve and use natural features and resources, including trees • Create a multifunctional landscape using the natural site hydrology as a framework for site design • Confine and phase construction activities to minimize disturbed areas, and minimize impacts to environmentally critical areas and their associated buffers • Plant new trees in proximity to ground level impervious surfaces for on-site stormwater management and/or flow control credit • Minimize or prevent compaction and	
Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	X Yes	2016 Stormwater Manual, Volume 2, Chapter 2	2009 Stormwater Manual had existing language regarding sequencing	X Yes No If yes, include language: Additional language added to Chapter 2, Volume 2 of 2016 Stormwater Manual: The Construction Stormwater and Erosion Control Plan applies BMPs that fall within the 19 elements of water quality, air quality, and downstream resource protection and are required by the Stormwater Code (SMC, Chapter 22.805.020.D). These 19 elements (refer to Volume 1) cover general water and air quality protection strategies, including: • Limiting project site impacts • Protecting the public drainage system, combined and sanitary sewers, and downstream receiving waters • Preventing erosion and sedimentation • Managing activities and sources Project designers must review the applicable elements of SMC 22.805.020.D and ensure the specific requirements under each of the 19 elements in the code are fully addressed by the project site stormwater pollution prevention controls.	Yes No If yes, list document title(s):

	Street and Roads						
	Travel lane widths	Yes					
	Are there opportunities	No					
	to decrease minimum	X Does not apply					
	travel lane width						
	requirements,						
	particularly for low-						
	volume, low-traffic						
_	contexts?						
	Right-of-way widths &	Yes No					
	Drive way widths Can required drive-way	X Does not apply					
	widths or curb radius	A Does not apply					
	requirements be						
	adjusted to reduce EIA?						
	Use of permeable	X Yes	X Yes	2016	Requirement missing in	X Yes	Yes
	pavement for streets	No	No	Stormwater	2009 Stormwater Code	No	□ No
	and roads	Does not apply	See existing	Code, SMC		If yes, include language :	If yes, list document title(s):
	Can the applications in	Восо ное арргу	requirement	22.805.070.D		Added requirement to evaluate permeable	in yes, not accument there(s).
	which permeable		- Squirement	.5		pavement roadways (non-arterial/non-	
	pavement is allowable,					collector) and alleys for:	
	encouraged or required					Projects Discharging to a Receiving Water	
	be expanded?					Not Designated by Section 22.801.050, or its	
	·					Basin	
	Placement of utilities	Yes					
	under paved areas in the	No					
	ROW	X Does not apply					
	Can/does document						
	include direction to place						
	utilities under paved						
	areas in ROW to preserve						
	potential space for						
_	infiltration of runoff? Required turn around	Yes					
	areas(e.g., Fire, USPS)	☐ Yes					
	_	☐ NO X Does not apply					
	areas be reduced or can	v noes not abbis					
	these areas be paved						
	with permeable						
	pavement?						
	Sidewalk widths	Yes					
	Are there opportunities	☐ No					
		X Does not apply					
	sidewalk width						
	requirements,						
	particularly for land use						
	zones with low						

pedestrian volumes (industrial, etc.)?						
Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Code, SMC 22.805.070.D .1	In 2009 Stormwater Code, dispersion not required.	X Yes No If yes, include language: Various dispersion BMPs added to 2016 Stormwater Code as requirement to mitigate hard surfaces, including sidewalks.	Yes No If yes, list document title(s):
Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No X Does not apply					
Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No X Does not apply					
Parking						
Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No X Does not apply					
Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	X Yes No Does not apply	X Yes No See existing requirement	2016 Stormwater Code, SMC 22.805.D.1	2009 Stormwater Code required GSI/LID to the maximum extent feasible	X Yes No If yes, include language: Permeable Pavement was added as a Category 2 BMP to the On-site List and is required above many of the other On-site BMPs	Yes No If yes, list document title(s):
Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No X Does not apply					

	Driving aisle dimensions	Yes					
	Are there opportunities	No					
	to adjust the required	X Does not apply					
	dimensions of driving						
	aisles for surface off-						
	street parking to						
	minimize impervious						
	area and runoff?						
	Off-street parking	Yes					
	regulations	No					
	Are there opportunities	X Does not apply					
	to adjust design	A Does not apply					
	standards for off-street						
	parking to better						
	accommodate (or						
	require) the integration						
	of LID BMP's like filter						
	strips and bioretention?						
~							
	Design Guidelines	s and Standards					
11/2	Trees and bioretention	X Yes	X Yes	2016	In 2009 Stormwater Manual,	X Yes	Yes
	Are there opportunities	No		Stormwater	compatible trees were not	No No	No
	to improve the	Does not apply	1 == 1	Manual,	identified	Lifyes, include language :	If yes, list document title(s):
	compatibility of			Appendix E	laentinea	Compatible trees added to 2016 Stormwater	in yes, list document title(s).
	approved street trees		requirement	Appendix E		Manual, Appendix E	
	and bioretention?					Manual, Appendix E	
	Continuous curb	Yes					
	requirements	No No					
	Are there opportunities						
	to remove requirements	X Does not apply					
	in order to facilitate on-						
	site bioretention or						
	dispersion?	D.V.					
	Curb radii	Yes					
	Are there opportunities	□ No					
	to reduce impervious	X Does not apply					
	surface by reducing						
~	required radii?						
	Stormwater Manag	gement and Mai	ntenance				
	Training	Yes		2016	Some language in 2009	X Yes	Yes No
	Is there an opportunity	☐ No	☐ No	Stormwater	Stormwater Code	□ No	│
	to improve or require	X Does not apply	See existing	Code, SMC		If yes, include language :	If yes, list document title(s):
	training in LID design and		requirement	22.803.030.F		F. Provide Oversight and Training for Staff.	
	maintenance for staff					((Train at least)) For businesses and public	
	involved in project					entities, annually train all employees	
	review & enforcement?					responsible for the operation, maintenance,	
						or inspection of BMPs, assign oversight	
		1				responsibilities, and maintain records.	

	Maintenance and	X Yes	X Yes	2016	Some language in 2009	X Yes	Yes
	Enforcement	No	No	Stormwater	Stormwater Manual	No	No
	Is there an opportunity	Does not apply	See existing	Manual,	To the state of th	If yes, include language :	If yes, list document title(s):
	to improve/update LID		requirement	Appendix G		Additional/revised language for LID BMPs in	in yes, hat document title(s).
	facility maintenance and		requirement	дрреник О		2016 Stormwater Manual.	
						2010 Stofffiwater Maridai.	
	protection specs? Enforcement						
	procedures? Inspection						
	protocols?						
	Education	Yes					
	Are there opportunities	☐ No					
	to standardize or require	X Does not apply					
	the education of adjacent						
	property owners and/or						
	the general public about						
	proper LID maintenance?						
	Zoning requireme	nts					
	Individual open space	Yes					
	requirements	☐ No					
	Can these requirements	X Does not apply					
	be revised to minimize						
	conflicts with or						
	obstacles to LID siting?						
	Passive vs. active open	Yes					
	space requirements	│					
	Can document be revised	X Does not apply					
	so that bioretention						
	areas, dispersion areas,						
	and other conserved						
	open space be counted						
	toward passive open						
	space requirements?						
	Opportunities for	Yes					
	Performance Based	No No					
	Designs (PUDs)	X Does not apply					
	What opportunities exist	A Does not apply					
	to remove barriers to LID						
	facility siting within						
<u>~</u>	PUDs?						
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs	Yes					
	in critical areas /	│					
	shorelines when	X Does not apply					
	compatible						
	Are there opportunities						
	to revise critical areas						
		1	i	i	1	1	1

ordinance(s) to permit		
specific LID BMP's where		
appropriate?		

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: SMC 21.16 Side Sewers

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
George Sidles	Strategic Advisor	Policy Analyst	Seattle Public Utilities
Cris Horbelt	Strategic Advisor	Policy Analyst	Seattle Public Utilities
Sherell Ehlers	Strategic Advisor	Policy Analyst	Seattle Public Utilities

	Step 2			Step	3	Step 4	Step 5
	WHAT topics did you review?		WH	HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Site Planning						
+	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No X Does not apply					
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No X Does not apply					
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No X Does not apply					
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No X Does not apply					
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit, BMP T5-13?	Yes No X Does not apply					
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	X Yes No Does not apply	Yes No See existing requirement	SMC 21.16.260	Could add language to minimize compaction when backfilling trenches.	Yes X No If yes, include language: If no, explain why: Defer to 2016 Stormwater Code & Manual requirements regarding prevention of soil compaction.	X Yes No If yes, list document title(s): 22.805.020

	Step 2			Step	3	Step 4	Step 5
	WHAT topics did you review?			HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Landscaping, Native Vegetation,	Street Landsca	ping				
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No X Does not apply However, code does require restoration per specifications of SDOT.					
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No X Does not apply					

	Step 2			Step	3	Step 4	Step 5
	WHAT topics did you review?		WH	IERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
_	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No X Does not apply					
	Hard and Impervious Surfaces						
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering? Shared driveways Can/does document include provisions that require or allow shared driveways? Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply					
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways? Two-track driveway design Or the use of a two-track driveway design?	Yes No X Does not apply Yes No X Does not apply					
	Land disturbing activities Other Should On-site BMPs apply to utility projects?	X Yes No Does not apply	Yes X No See existing requirement	SMC 21.16.260 SMC 22.800.040. A.2.Exempti ons	Language to require on- site BMPs associated with utility projects such as side sewer construction no included.	Yes X No If no, explain why: Defer to 2016 Stormwater Code that exempts utility work and is consistent with Ecology requirements. Utility work needs to be protected and match utility requirements.	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
	WHAT topics did you review?		WH	HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
Categories	Drainage of Hard Surfaces	X Yes No Does not apply	X Yes No See existing requirement	SMC 21.16.220	Could add language to encourage or require onsite BMPS for drainage of hard-surface or graded areas. 21.16.220 - Drainage of hard-surfaced or graded areas. Hard-surfaced or graded areas. Hard-surfaced or graded areas. Hard-surfaced or graded areas such as parking lots, service station yards and storage yards shall be drained in such manner as will protect adjacent public and private property from damage and such drainage shall enter the public sewer system or other outlet approved by the Director of Seattle Public Utilities and as required by Chapters 22.800 through 22.808 of the Seattle Municipal Code. Such stormwater shall not be conveyed to or enter a sanitary sewer.	Yes X No If no, explain why: On list to update when Side Sewer Code is updated.	Yes No If yes, list document title(s):
	Bulk and Dimensional Considera Can additional flexibility or incentives be added,		g the development	footprint?			
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No X Does not apply					
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No X Does not apply					
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No X Does not apply					

Step 2			Step	3	Step 4	Step 5	
	WHAT topics did you review?		WH	HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions Clustering	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	No X Does not apply					
	Clearing and Grading						
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?) Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation? Construction sequencing Can/does document include direction to	Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply Yes No					
	sequence construction in a way that minimizes site disturbance?	X Does not apply					
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low-volume, low-traffic contexts?	Yes No X Does not apply					
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No X Does not apply					
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No X Does not apply					
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No X Does not apply					
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No X Does not apply					

	Step 2			Step	3	Step 4	Step 5
	WHAT topics did you review?		WI	HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)? Sidewalk slope	Yes No X Does not apply			·		
	Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	No X Does not apply					
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No X Does not apply					
	Alternatives to cul-de-sacs Is there an opportunity to provide incentives for alternatives?	Yes No X Does not apply					
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No X Does not apply					
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No X Does not apply					
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No X Does not apply					
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface offstreet parking to minimize impervious area and runoff?	Yes No X Does not apply					

Step 2				Step	3	Step 4	Step 5
	WHAT topics did you review?		WH	HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No X Does not apply					
	Design Guidelines and Standards	S					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No X Does not apply (Perhaps by reference if SDOT standards are revised.					
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on-site bioretention or dispersion?	Yes No X Does not apply					
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No X Does not apply					
	Stormwater Management and Ma	intenance					
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement? Maintenance and Enforcement	Yes No X Does not apply					
	Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	No X Does not apply					
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No X Does not apply					
	Zoning requirements						
``	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No X Does not apply					

	Step 2			Step	3	Step 4	Step 5
	WHAT topics did you review?			HERE are	the gaps?	What steps have you taken to	IDENTIFY any
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/G ap	FILL THE GAPS?	other City documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	☐ Yes ☐ No X Does not apply					
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No X Does not apply					
	Critical Areas and Shoreline Mar	nagement					
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No X Does not apply					

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: City of Seattle Standard Plans

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Wan-Yee Kuo	Supervising Civil	Lead	Seattle Public Utilities
	Engineer, CIP Design		(SPU)
Erich Ellis	Program Manager,	Review/redline/	Seattle Dept. of
(and delegates)	Engineering/Design	concurrence	Transportation (SDOT)
Mary Rutherford	Executive Liaison	Process facilitation	Seattle Public Utilities
	between SPU &		
	SDOT		
Randy Earlywine	Citywide Standards	Review/Concurrence	Seattle Public Utilties
	Program Manager	Coordinator with Citywide	
		Standard Plans & Specs.	
		Team	

Step 2 – WHAT topics did you review?

City Standard Plans were reviewed to identify opportunities to minimize impervious surface and vegetation loss. Given that on-site stormwater management best management practices such as bioretention are an effective strategy for minimizing stormwater runoff, City Standard Plans were also reviewed with the intent of updating or adding plans to facilitate and standardize the use of these approaches where feasible/indicated.

Step 3 – WHERE are the gaps?

See reporting form that follows.

Step 4 – What steps did you take to FILL THE GAPS?

See attached set of redlined Standard Plans that were added or modified in this process. The new/updated plans are also available online here:

www.seattle.gov/util/cs/groups/public/@spu/@engineering/documents/webcontent/1_048312.pdf These updates will be included in the next published (paper) version of City of Seattle Standard Plans. In the interim, the online amendments are final and applicable.

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document	☐ Yes ☐ No	Yes No			Yes No	Yes No
	require	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why:	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that						
	buildings and other						
	impervious surfaces) are sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Parking area locations	Yes	Yes			Yes	Yes
	Can/does document	No	☐ Yes ☐ No			Yes No	No
	require	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that parking						
	lots (impervious) are sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Stormwater	Yes	Yes			Yes	Yes
	management facility	☐ No	No			□ No	No
	locations	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	Can/does document		requirement			If no, explain why :	
	require						
	designers/developers to						
	locate stormwater						
	facilities in a way that minimizes stormwater						
	runoff, impervious						
	surface, and native						
	vegetation loss?						

Step 2		Step	3	Step 4	Step 5					
WH	IAT topics did you re	eview?	WHERE are	the gaps?	What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps Section identified? Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Other									
	Soils									
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction) Compost amendments Can/does document include provisions to	Yes No X Does not apply Yes No X Does not apply	Yes No See existing requirement Yes No See existing		Yes No If yes, include language: If no, explain why: Yes No If yes, include language:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):				
	bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13? See Seattle-specific Directors	or's Rules: www.seattle	requirement .gov/dpd/codes/dr/DR2009-17.pdf	PDF Pages: 112-116 // Docume	If no, explain why: ent Pages: Section 4.4.1 (4-37 – 4-41)					
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No X Does not apply	Yes No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other									
	Landscaping, Native Vegetation, Street Landscaping									

	Step 2		Step 3			Step 4	Step 5
W	WHAT topics did you review?			IERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	X Yes No Does not apply	Yes No X See existing requirement City of Seattle Standard Plans already includes street tree planting plans and details. See: www.seattle.gov/uti l/cs/groups/public/ @spu/@engineerin g/documents/webc ontent/01 029211. pdf			☐ Yes☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
	<u> </u>			Document		FILL THE GAPS?	documents that may be
Catanania	Examples of Topics &	Was topic reviewed	Were gaps	Section	Summary of Existing		affected
Categories	Key Questions Use of permeable	for this document? Yes	identified? Yes	Reference	Requirement/Conflict/Gap	Voc	Voc
	pavement for driveways	No	No			Yes No	Yes No
	Can/does document	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	include provisions that	,	requirement			If not, explain why :	
	allow or require the use						
	of a permeable materials						
	for driveways?						
	Two-track driveway design	Yes No	Yes No			Yes No	Yes No
	Or the use of a two-	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	track driveway design?	A Does not apply	requirement			If no, explain why:	in yes, hat document tractal.
			- 4-			,	
	OTHER:	Yes	Yes			X Yes	
		No	No			□No	
		X Does not apply	See existing				
			requirement				
	Bulk and Dimension				f		
	Can additional flexibility or			ne development	footprint?		
	Building setbacks	Yes	Yes			X Yes	Yes No
	Can flexibility be added	No	No			□ No	
	to setback requirements to allow	X Does not apply	See existing requirement			If yes, include language: If no, explain why:	If yes, list document title(s):
	designers/developers to		requirement				
	minimize site						
	disturbance?						
	Height limits	Yes	Yes			Yes	Yes
	Can flexibility be added	☐ No	No			□ No	No
	to height limits to allow	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to min. site distrubance?		requirement			If no, explain why :	
	Maximum square	Yes	Yes			Yes	
	footage	No No	No			□ No	Yes No
	Likewise, can flexibility	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	be added to max. square		requirement			If no, explain why :	
	footage requirements?						
	Clustering	Yes	Yes			Yes	Yes
	Can document remove any barriers or add any	No X Does not apply	☐ No☐ See existing			☐ No If yes, include language :	☐ No If yes, list document title(s):
	incentives to cluster	A Does not apply	requirement			If no, explain why :	ii yes, iist document title(s).
	impervious area to min.		. equil ement				
	site disturbance?						

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other				-		
	Clearing and Grad		_				
	Infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?) Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation? Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply Yes No X Does not apply	Yes No See existing requirement Yes No See existing requirement Yes No See existing requirement Yes No See existing requirement			☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No ☐ Yes☐ No ☐ Yes☐ No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No ☐ Yes ☐ No If yes, list document title(s):
	Other						
	Street and Roads						
114.	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	X Yes No Does not apply	X Yes No See existing requirement	Standard Plans 403 and 425; Also, 003f and 003g	There was not an existing Plan for the use of Pervious Pavement in Alleys. Notes clarifying pervious pavement can be used for walkways were lacking.	X Yes No If yes, include language: See attached redlined drawings and notes	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated	Yes No X Does not apply	Yes No See existing requirement	Reference	Requirementy connects dap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	planting strip) Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

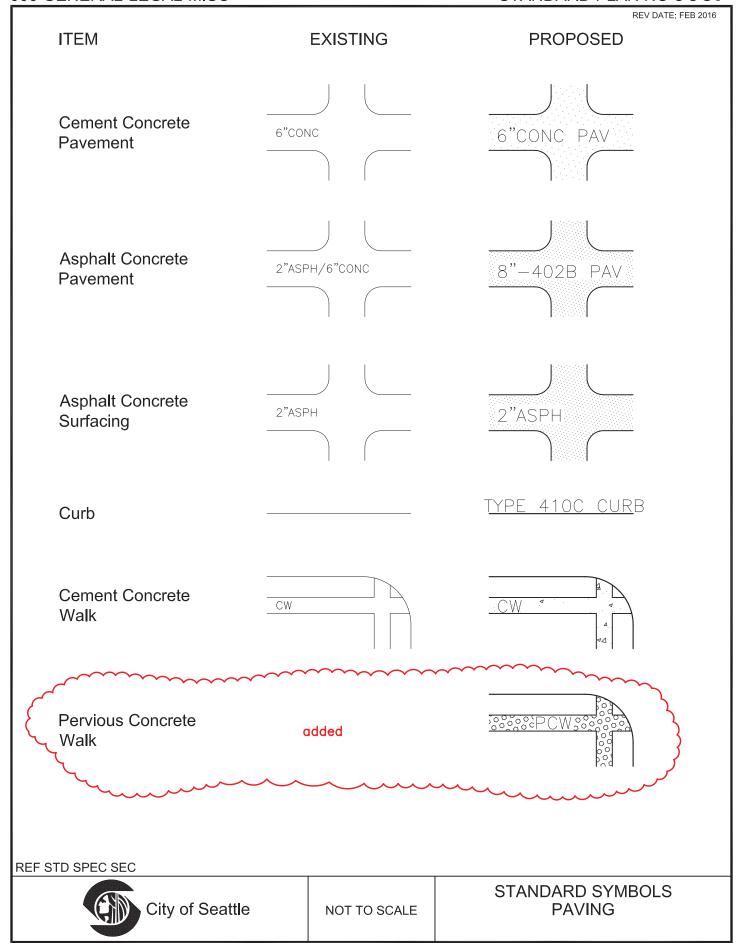
Step 2		Step 3			Step 4	Step 5
WHAT topics did you re	eview?	WH	ERE are the	he gaps?	What steps have you taken to	IDENTIFY any other City
Examples of Topics & Categories Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Design Guidelines	and Standards					

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you r	review?	WI	HERE are t	he gaps?	What steps have you taken to FILL THE GAPS?	IDENTIFY any other City documents that may be affected
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap		
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No X Does not apply	Yes X No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	X Yes No If yes, list document title(s): SPU Design Standards and Guidelines was updated to include SPU's GSI Design Manual (for Utility-led capital green stormwater infrastructure pojects). The GSI Design Manual includes an appendix that gives designers guidance for integrating street trees and bioretention in roadside bioretention capital projects as well as detailed bioretention design guidance. See: https://seattlegov.sharepoint.com/sites/SPU-T1/DSG/DSG%20Working%20Files/VollI_I_GSI_Design_withAppendices.pdf
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate onsite bioretention or dispersion?	X Yes No Does not apply Standard Plans does not define requirements but can provide design/construction guidance for standard curb cuts	X Yes No See existing requirement	Standard Plans, Sewer- Drainage Appurtenanc es section (200 series)	Lacking standard details for bioretention curb cuts in Sewer-Drainage Appurtenances section (200 series)	X Yes No If yes, include language: See attached redlined drawings 295a-295d	☐ Yes☐ No☐ If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	OTHER: Bioretention Design/Construction	X Yes No Does not apply	X Yes No See existing requirement	Standard Plans, Sewer- Drainage Appurtenanc es section (200 series)	Lacking standard details for bioretention in Sewer- Drainage Appurtenances section (200 series)	X Yes No If yes, include language: See attached redlined drawings 292, 293a-b, 294	Yes No If yes, list document title(s):

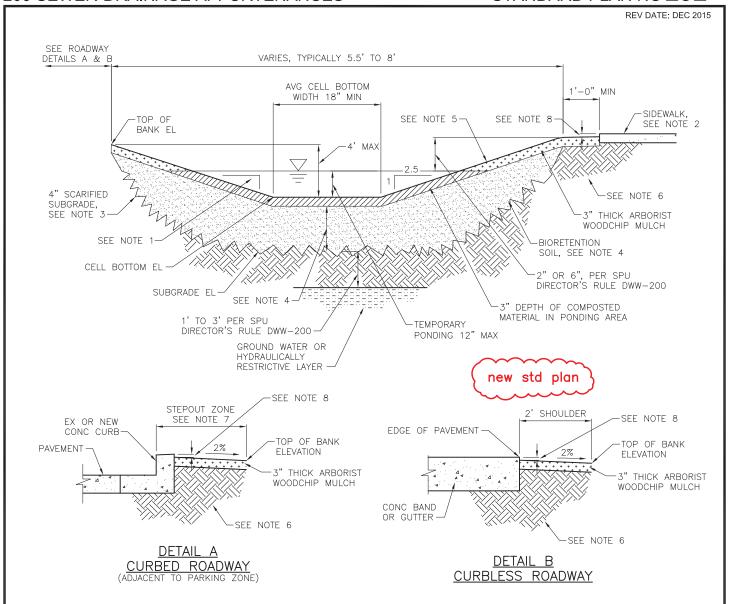
	Step 2		Step 3			Step 4	Step 5
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
<u> </u>	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting? Passive vs. active open space requirements Can document be revised	Yes No X Does not apply Yes No X Does not apply	Yes No See existing requirement Yes No See existing			Yes No If yes, include language: If no, explain why: Yes No If yes, include language:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?		requirement			If no, explain why :	

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
Categories	Opportunities for	Yes	Yes	Kererence	Requirement/ Connect/ Gap	Yes	Yes
	Performance Based	☐ No	No			Yes No	Yes No
	Designs (PUDs)	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	What opportunities exist to remove barriers to LID		requirement			If no, explain why :	
	facility siting within						
	PUDs?						
	Other						
<u> </u>							
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs	Yes	Yes			Yes No	Yes No
	in critical	No	No				
	areas/shorelines when	X Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	compatible Are there opportunities		requirement			If no, explain why :	
	to revise critical areas						
	ordinance(s) to permit						
	specific LID BMP's where						
	appropriate?						
	Other						

Additional Notes:



ITEM		EXISTING	PROPOSED
Curb Ramp			
Conc Dwy			
Pervious Concrete Surface	0	ıdded	00000 PC 000000000000000000000000000000
Cement Concrete Bike Way	3"CBW		, 3°4CBW 4 4 4
Asphalt Concrete Bike Way	3"AB'	W	3"ABW
Grading	GRADI	ED	TO BE GRADED
REF STD SPEC SEC			
City of Seattle		NOT TO SCALE	STANDARD SYMBOLS PAVING



NOTES:

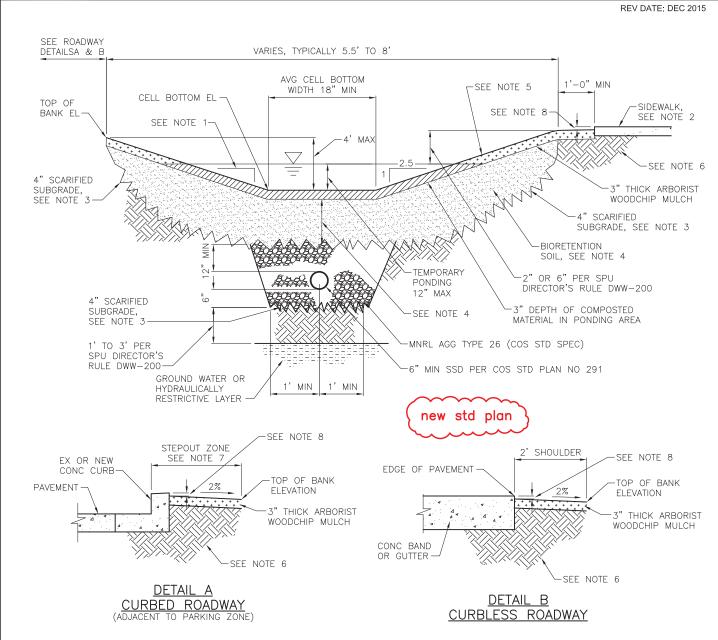
- TYPICAL MAXIMUM SLOPE ALLOWED IS 2.5H=1V, 3H=1V MAX WHEN WITHIN 50-FEET OF
- INTERSECTIONS OR CURBLESS ROADWAY.
 BIORETENTION OVERFLOW ELEVATIONS MUST BE SET BELOW SIDEWALK ELEVATION.
 SCARIFY SUBGRADE 4" MIN IN THE AREA SUBJECT TO TEMPORARY PONDING BEFORE
 BIORETENTION SOIL INSTALLATION.
 PROVIDE 1.5' MIN BIORETENTION SOIL FOR WATER QUALITY TREATMENT PER STORMWATER
- CODE REQUIREMENT.
- CELL SHALL BE PLANTED PER APPROVED LANDSCAPE PLAN.
- SOIL AT THE EDGE SHALL BE UNDISTURBED NATIVE SOIL OR APPROVED SOIL COMPACTED TO 95% DENSITY.
- FACE OF CURB TO TOP OF SLOPE SHALL BE MIN 2'-0" FOR NON-MAJOR ARTERIAL STREET, MIN 4'-0" FOR MAJOR ARTERIAL STREET.
 PROVIDE MIN ONE INCH GAP BETWEEN TOP OF WALKS, CURBS, PAVEMENTS AND DRIVEWAYS AND TOP OF ARBORIST WOODCHIP MULCH.

REF STD SPEC SEC 7-21



NOT TO SCALE

INFILTRATING BIORETENTION WITH SLOPED SIDES



NOTES:

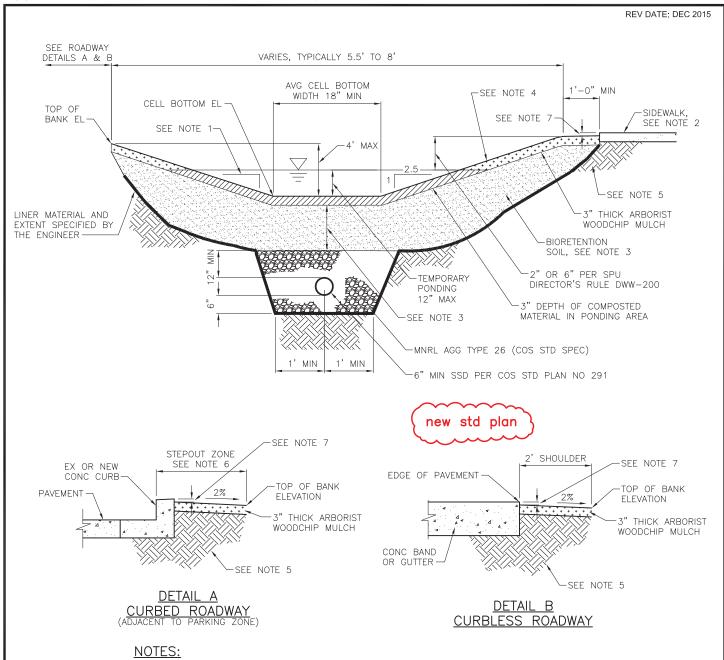
- TYPICAL MAXIMUM SLOPE ALLOWED IS 2.5H=1V. 3H=1V MAX WHEN WITHIN 50-FEET OF INTERSECTIONS OR CURBLESS ROADWAY.
- 2. BIORETENTION OVERFLOW ELEVATIONS MUST BE SET BELOW SIDEWALK ELEVATION.
- SCARIFY SUBGRADE 4" MIN IN THE AREA SUBJECT TO TEMPORARY PONDING BEFORE BIORETENTION SOIL INSTALLATION.
 PROVIDE 1.5' MIN BIORETENTION SOIL FOR WATER QUALITY TREATMENT PER STORMWATER
- CODE REQUIREMENT.
- CELL SHALL BE PLANTED PER APPROVED LANDSCAPE PLAN.
- SOIL AT THE EDGE SHALL BE UNDISTURBED NATIVE SOIL OR APPROVED SOIL COMPACTED TO 95% DENSITY
- FACE OF CURB TO TOP OF SLOPE SHALL BE MIN 2'-0" FOR NON-MAJOR ARTERIAL STREET, MIN 4'-0" FOR MAJOR ARTERIAL STREET.
- PROVIDE MIN ONE INCH GAP BETWEEN TOP OF WALKS, CURBS, PAVEMENTS AND DRIVEWAYS AND TOP OF ARBORIST WOODCHIP MULCH.

REF STD SPEC SEC 7-21



NOT TO SCALE

INFILTRATING BIORETENTION WITH SLOPED SIDES **& UNDER DRAIN**



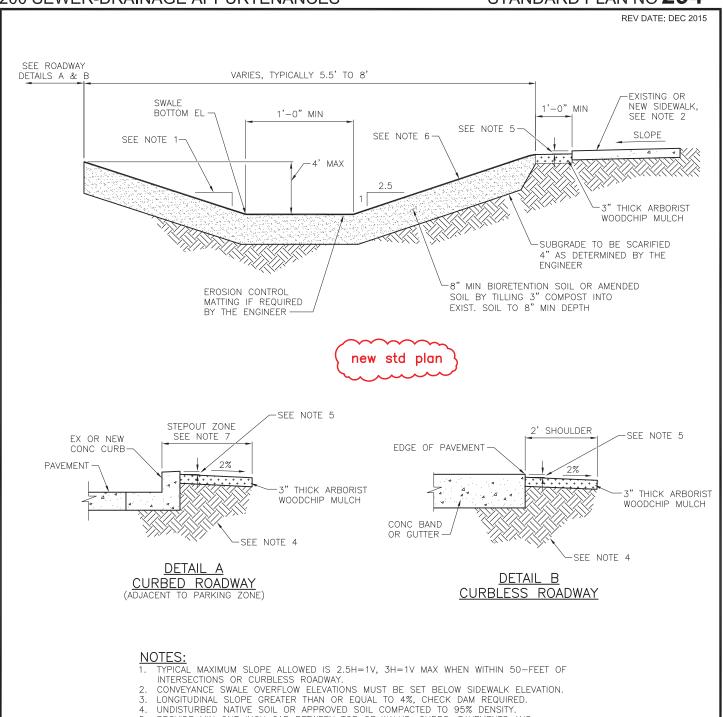
- TYPICAL MAXIMUM SLOPE ALLOWED IS 2.5H=1V, 3H=1V MAX WHEN WITHIN 50-FEET OF INTERSECTIONS OR CURBLESS ROADWAY.
- BIORETENTION OVERFLOW ELEVATIONS MUST BE SET BELOW SIDEWALK ELEVATION.
 PROVIDE 1.5' MIN BIORETENTION SOIL FOR WATER QUALITY TREATMENT PER STORMWATER CODE REQUIREMENT.
- CELL SHALL BE PLANTED PER APPROVED LANDSCAPE PLAN.
 SOIL AT THE EDGE SHALL BE UNDISTURBED NATIVE SOIL OR APPROVED SOIL COMPACTED TO 95% DENSITY.
- FACE OF CURB TO TOP OF SLOPE SHALL BE MIN 2'-0" FOR NON-MAJOR ARTERIAL STREET, MIN 4'-0" FOR MAJOR ARTERIAL STREET.
 PROVIDE MIN ONE INCH GAP BETWEEN TOP OF WALKS, CURBS, PAVEMENTS AND
- DRIVEWAYS AND TOP OF ARBORIST WOODCHIP MULCH.

REF STD SPEC SEC 7-21



NOT TO SCALE

NON-INFILTRATING BIORETENTION WITH SLOPED SLIDES & UNDER DRAIN



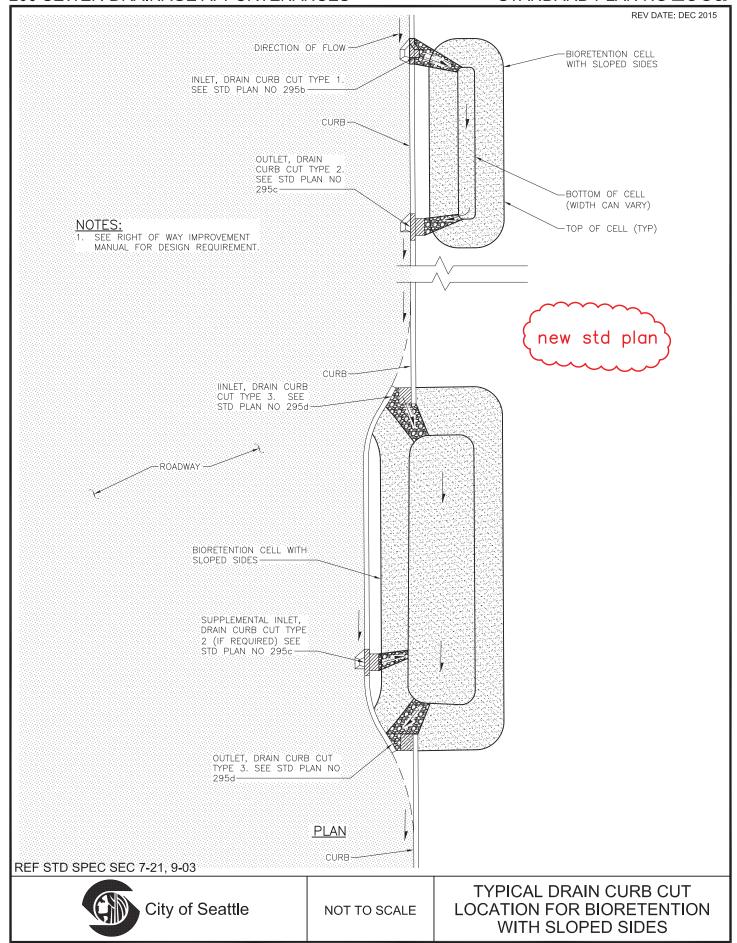
- PROVIDE MIN ONE INCH GAP BETWEEN TOP OF WALKS, CURBS, PAVEMENTS AND DRIVEWAYS AND TOP OF TREATMENT LAYER.
- 6. PLANTING PER APPROVED LANDSCAPE PLAN.
- 7. FACE OF CURB TO TOP OF SLOPE SHALL BE MIN 2'-0" FOR NON-MAJOR ARTERIAL STREETS, MIN 4'-0" FOR MAJOR ARTERIAL STREETS.

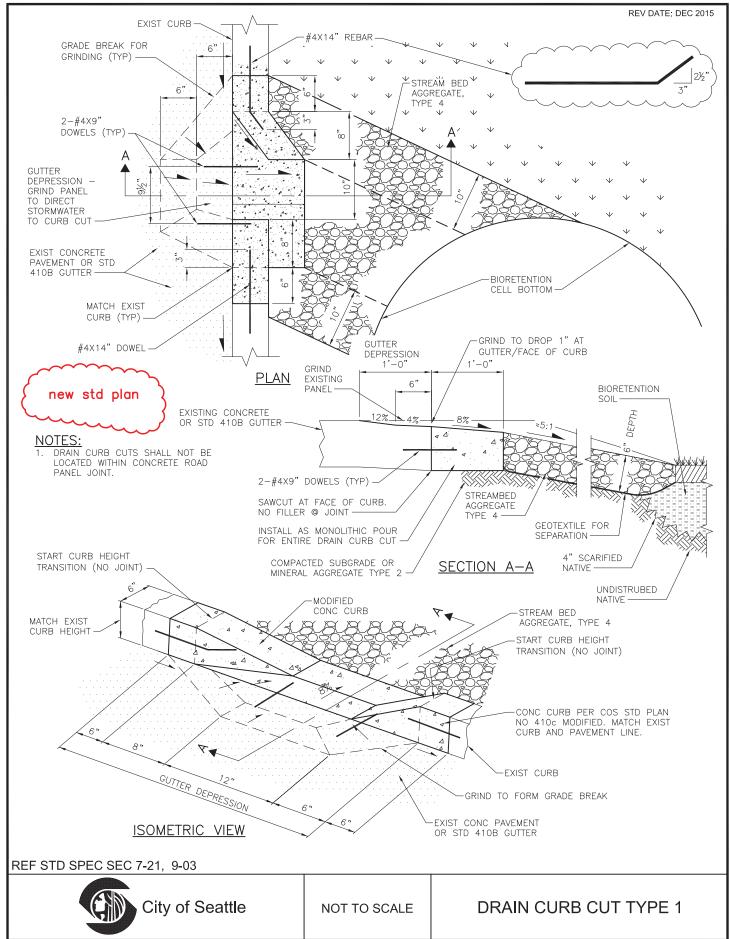
REF STD SPEC SEC 7-21

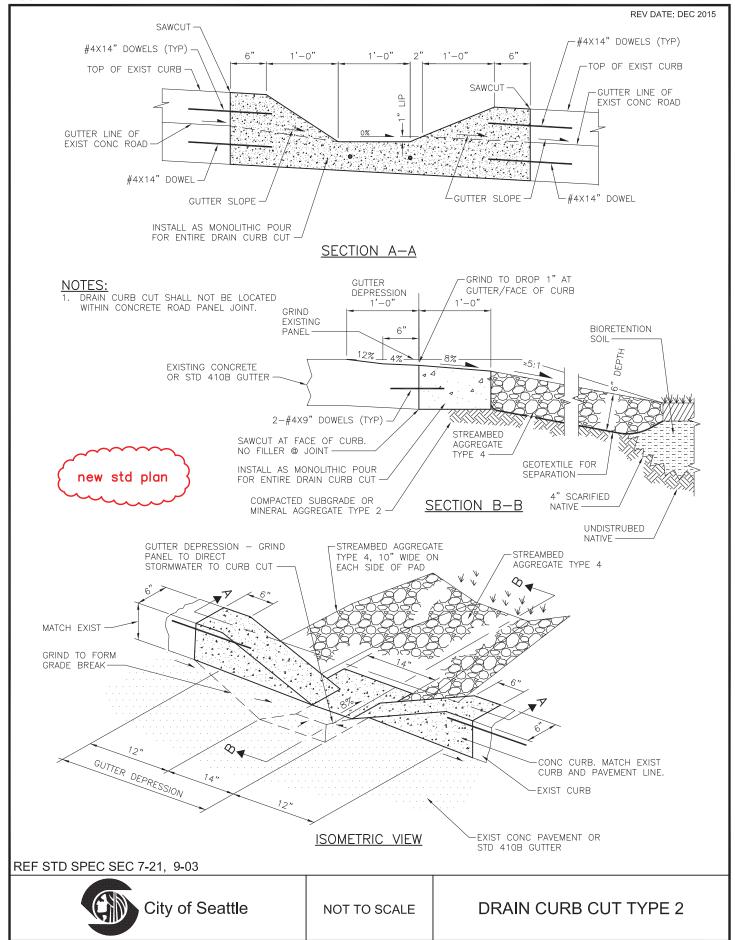


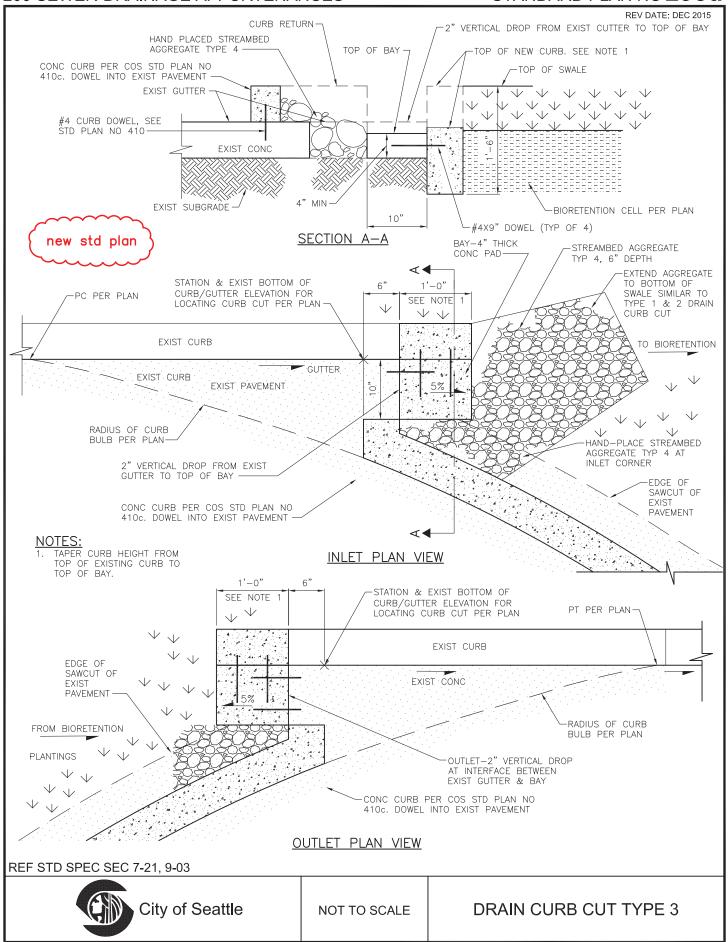
NOT TO SCALE

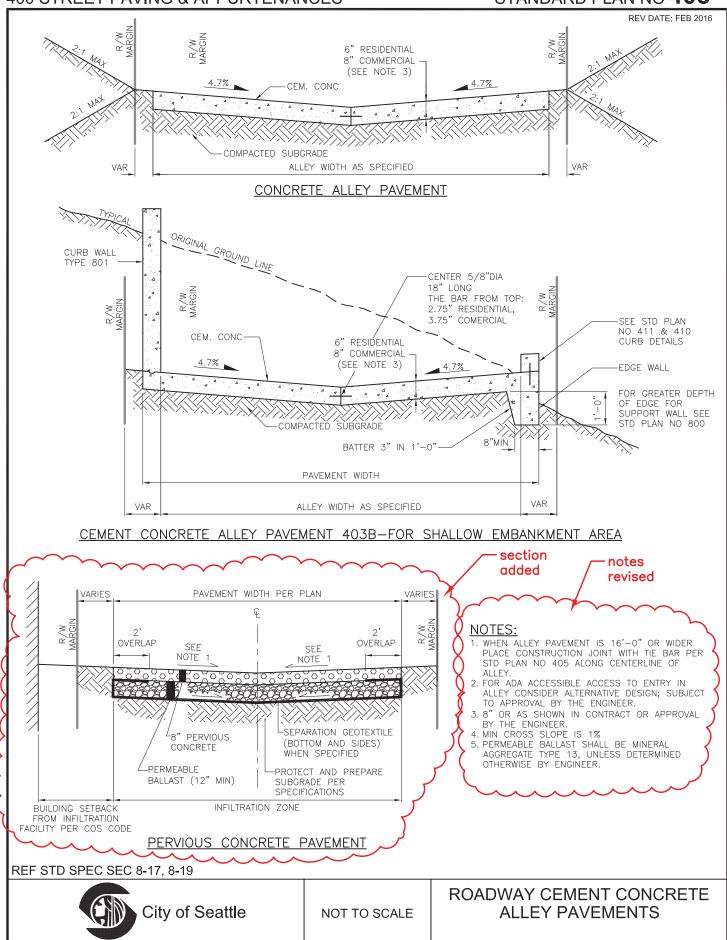
VEGETATED CONVEYANCE SWALE (NOT FOR WATER QUALITY TREATMENT)

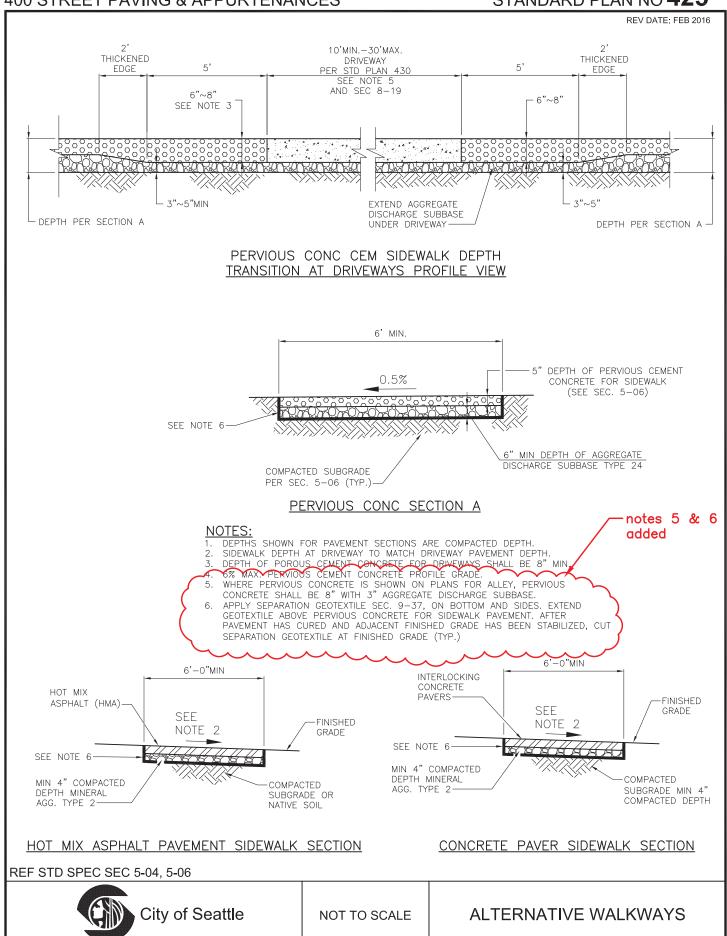


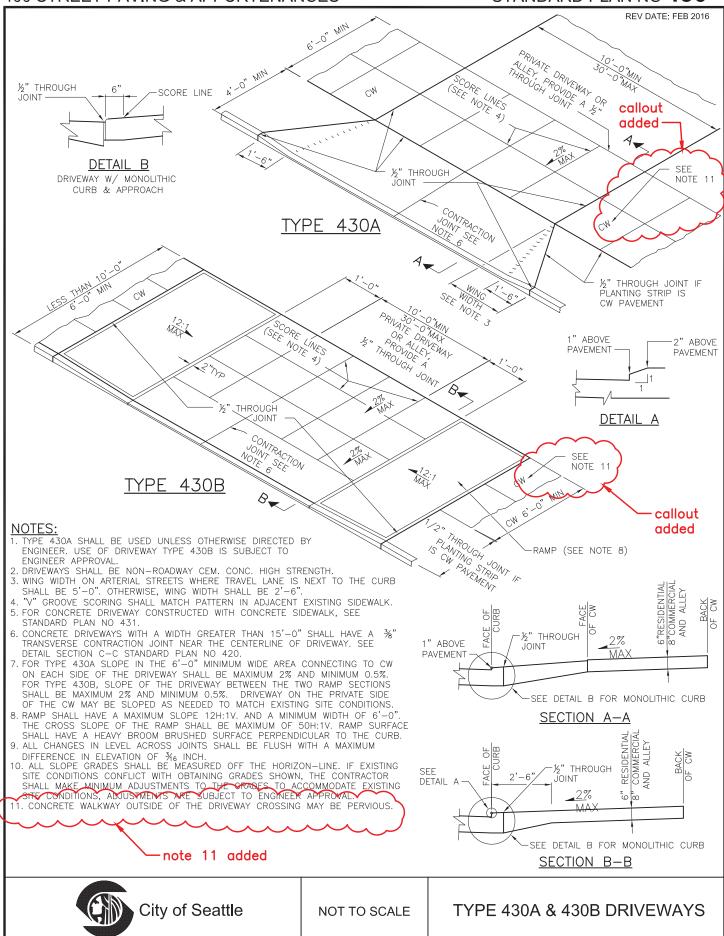












City of Seattle Report Form

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed:

Seattle Public Utilities; Internal Design Standards and Guidance (DS & G)

This document provides internal design guidance to Seattle Public Utilities engineers for capital improvement projects undertaken by the Utility.

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Glen Hasegawa	Supervising Civil Engineer, CIP Design Section	Chapter 1 lead	Seattle Public Utilities
Wan-Yee Kuo	Supervising Civil Engineer, CIP Design	Chapter 8 lead	Seattle Public Utilities
Dean Huber	Program Manager, Engineering Records and Strategic Support	Project Coordinator (update process)	Seattle Public Utilities
Mike Brennan	Manager of Engineering & Systems Support	Project Manager (update process)	Seattle Public Utiilties
Tracy Tackett	Green Stormwater Infrastructure Program Manager (then); Capital Portfolio Manager for Drainage & Wastewater (now)	Program Manager for development of Green Stormwater Infrastructure Manuals/Appendices (Options Analysis; Design; Operations & Maintenance)	Seattle Public Utilities

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you r	eview?	V	VHERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	X Yes No Does not apply	X Yes No See existing requirement	Chapter 1 – SPU Design Process 1.5.1.2	Evaluation of opportunities to prevent runoff, minimize impervious surfaces, and preserve native vegetation was not explicitly recommended or required NOTE: The design process changes listed here apply broadly, not only to building locations but also to parking, soils, landscaping, and hard surfaces. The changes detailed here are referenced with "See 'building locations' changes" where applicable.	X Yes No If yes, include language: New content added in section that defines guidance for project scoping: At minimum, project scoping should include documenting potential to minimize impervious surface, minimize stormwater runoff, and preserve native material. New content was added to the section listing the content of the Preliminary Engineering Report or Technical Memo, developed for project options analysis: Alternatives description/conceptual design including analysis and documentation of how low impact development principles were considered are incorporated. The three catagories of LID principals are: measures to minimize surfaces, measures to minimize loss of native vegetation, and other measures to minimize stormwater runoff. Documentation of analysis for applying LID principles and what will be included in the design New content was added to the section that details what should be included in an the alternatives description completed as part of Options Analysis: Documentation of analysis for applying LID principles and what will be included in the design	Yes X No If yes, list document title(s): N/A
				1.6.2			

Can/doe	area locations es document	X Yes No Does not apply	X Yes No See existing	Chapter 1 SPU Design Process	Evaluation of opportunities to prevent runoff, minimize impervious surfaces, and	New content was added to the section that details what should be included in the Basis of Design report and why: The basis-of-design documentation communicates design intent primarily to staff and future users of a constructed facility. By documenting the basis of design and archiving it with the project folder, future staff has access to design decisions. Options Analysis should have identified any special conditions that should be included in design including what LID principles will be applied to this project. This document should identify how the LID principles will be applied. The basis-of –design document should be completed in the 30% design phase. This document is required to be included in the material needed for Stage Gate 3 approval and should be reviewed and modified for any changes that have occurred during design. X Yes No If yes, include language:	☐ Yes ☐ No If yes, list document title(s):
incorpor understa hydrolog demons lots (imp sited to total imp native v	rs/developers to rate an anding of site gy and strate that parking pervious) are minimize runoff, pervious and regetation loss?	☐ Does not apply	See existing requirement	Process	impervious surfaces, and preserve native vegetation was not explicitly recommended or required	If yes, include language: See 'building locations' changes	If yes, list document title(s):
Stormw		X Yes	X Yes	Chapter 8	Specific options analysis and	X Yes	Yes
location Can/doc require designed locate st facilities minimiz	es document	☐ No☐ Does not apply	No See existing requirement	Drainage & Wastewater Infrastruct. Design	design guidance for LID best management practices (especially green stormwater infrastructure) was lacking.	No If yes, include language: Two Green Stormwater Infrastructure (GSI)- specific appendices (GSI Options Analysis and GSI Design) were added to Chapter 8 to give SPU design engineers more specific guidance on how to approach options analysis and design when GSI is indicated.	☐ No If yes, list document title(s):

	<u>, </u>		
surface, and native			
vegetation loss?		The CSI Ontion	s Analysis appendix includes
vegetation 1033.			
			cal guidance (i.e.: guidance
		for geotechnica	al analysis on GSI capital
		projects); guida	ince for integrated project
			e.: integrating bioretention
			sfully with trees, at-grade or
		underground ut	tilities, and other project
		design element	s); and guidance for
			gagement during options
		analysis;	agement daming options
		analysis,	
		The GSI Design	appendix includes guidance
		concepts and de	etails for BMP design (i.e.:
			nd permeable pavement);
			to guide hydrologic
			dardized planting palettes
		and guidance fo	or trees and other vegetation;
			designing GSI for long term
			nd asset management; and
		public engagem	nent guidelines.
		While these ma	nuals are not available
		externally. pdf's	s can be made available to
			at of Ecology as needed, if
		these links do n	not work for non CoS users:
		DS&G	
		https://seattle	egov.sharepoint.com/sites/
			SitePages/Home.aspx
		<u>31 0 11/030/3</u>	oner ages/ nome.aspx
		2015	
		GSI Design	
		Manual: https://	//seattlegov.sharepoint.com/
		sites/SPU-	
			20Working%20Files/VolIII GSI
		Design withA	
		Design_withA	pperiuices.pui
		GSI Options Ana	
		Manual: https:/	//seattlegov.sharepoint.com/
		sites/SPU-	
			20Working%20Files/VolII%20
		·	
		<u>Options_Analys</u>	sis withAppendices.pdf
			internal DS&G table of
		contents showi	ng addition of the
l	1 1		

					appendices: Supplementations Part Section Part Par	
Soils						
Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No X Does not apply to this document	Yes X No			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	☐ Yes☐ No X Does not apply to this document	Yes X No X This is addressed via Stormwater Code			☐ Yes☐ No☐ If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
Compaction	Yes	Yes			∏ Vos	Yes
Can/does document include adequate provisions to prevent soil compaction, especially during construction?	No X Does not apply to this document	X No See existing requirement			Yes No If yes, include language: If no, explain why:	No If yes, list document title(s):
 Other						
Landscaping, Nat	ive Vegetation,	Street Landscapi	ing			
Tree preservation Can/does document include provisions to	Yes X No Does not apply	Yes X No		The GSI Design appendix to Chapter 8 (referenced above) offers specific	Yes No If yes, include language:	Yes No If yes, list document title(s):

retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?		X The GSI Design appendix to Chapter 8 (referenced above) offers specific guidance for tree preservation in/around other GSI BMP's as well as design guidance for integrating GSI BMP's with new or existing trees	guidance for tree preservation in/around other GSI BMP's as well as design guidance for integrating GSI BMP's with new or existing trees	If no, explain why :	
Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No X Does not apply to this document	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No X Does not apply to this document	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Other					
Hard and Impervio	ous Surfaces				
Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No X Does not apply to this document	Yes X No See existing requirement		Yes No If yes, include language:	Yes No If yes, list document title(s):
Shared driveways Can/does document include provisions that	Yes No	Yes X No		☐ Yes☐ No☐ If yes, include language:	Yes No If yes, list document title(s):

require or allow shared	X Does not apply to	See existing		If no, explain why:	
driveways?	this document	requirement			
Minimum driveway	Yes	Yes		Yes	Yes
width	│	X No		│	No
Are there existing	X Does not apply to	See existing		If yes, include language :	If yes, list document title(s):
minimum driveway width	this document	requirement		If no, explain why:	,,
document provisions that				They explain they	
can be adjusted to					
decrease impervious					
surface?					
Use of permeable	Yes	Yes		Yes	Yes
pavement for driveways	☐ No	X No		No	□ No
Can/does document	X Does not apply to	See existing		If yes, include language :	If yes, list document title(s):
1	this document				ii yes, list document title(s).
include provisions that allow or require the use	tills document	requirement		If not, explain why:	
of a permeable materials					
for driveways?					
•	Yes	Yes		□ Vos	Yes
Two-track driveway	No			Yes No	No
design	_	X No			
Or the use of a two-	X Does not apply to	See existing		If yes, include language:	If yes, list document title(s):
track driveway design?	this document	requirement		If no, explain why:	
Other					
Other					
 Bulk and Dimensi	onal Considerat	tions			
Can additional flexibility or			he development footprint?		
,			те истеноритент гоограние.		
Building setbacks	Yes	Yes		Yes	Yes
Can flexibility be added	□ No	X No		No	No
to setback requirements	X Does not apply to	See existing		If yes, include language:	If yes, list document title(s):
to allow	this document	requirement		If no, explain why :	
designers/developers to					
minimize site					
disturbance?					
Height limits	Yes No	Yes		Yes	Yes
Can flexibility be added	□ No	X No		□ No	No
to height limits to allow	X Does not apply to	See existing		If yes, include language:	If yes, list document title(s):
designers/developers to	this document	requirement		If no, explain why:	
min. site distrubance?					
Maximum square	Yes	Yes		Yes	Yes
footage	□ No	X No		☐ No	☐ No
Likewise, can flexibility	X Does not apply to	See existing		If yes, include language :	If yes, list document title(s):
be added to max. square	this document	requirement		If no, explain why :	, ,
footage requirements?		·		,	
Clustering	Yes	Yes		Yes	Yes
Can document remove	No No	X No		No	No
any barriers or add any				If yes, include language :	If yes, list document title(s):
,	1	I .	1	,,	,,

	incentives to cluster impervious area to min. site disturbance?	X Does not apply to this document	requirement		If no, explain why :	
	Other					
	Clearing and Grad	ding	1			,
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes X No Does not apply	X Yes No See existing requirement	Evaluation of opportunities to prevent runoff, minimize impervious surfaces, and preserve native vegetation was not explicitly recommended or required	X Yes No If yes, include language: See 'building locations' changes above	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	☐ Yes X No ☐ Does not apply	X Yes No See existing requirement	Evaluation of opportunities to prevent runoff, minimize impervious surfaces, and preserve native vegetation was not explicitly recommended or required	X Yes No If yes, include language: See 'building locations' changes above	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes X No Does not apply	Yes X No See existing requirement	Evaluation of opportunities to prevent runoff, minimize impervious surfaces, and preserve native vegetation was not explicitly recommended or required	X Yes No If yes, include language: See 'building locations' changes above	Yes No If yes, list document title(s):
	Other					
	Street and Roads					
""4	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No X Does not apply	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No X Does not apply	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Use of permeable	Yes	Yes	Yes	Yes
pavement for streets	No	X No	│	No
and roads	X Does not apply	See existing	If yes, include language :	If yes, list document title(s):
Can the applications in which permeable pavement is allowable, encouraged or required be expanded?		requirement	If no, explain why :	
Placement of utilities	Yes	Yes	Yes	Yes
under paved areas in the	☐ No	X No	□ No	No
ROW Can/does document include direction to place utilities under paved	X Does not apply	See existing requirement	If yes, include language : If no, explain why :	If yes, list document title(s):
areas in ROW to preserve potential space for infiltration of runoff?				
Required turn around	Yes	Yes	Yes	Yes
areas(e.g., Fire, USPS)	☐ No	X No	No	☐ No
Can required turn around areas be reduced or can these areas be paved with permeable pavement?	X Does not apply	See existing requirement	If yes, include language : If no, explain why :	If yes, list document title(s):
Sidewalk widths	Yes	Yes	Yes	Yes
Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No X Does not apply	X No See existing requirement	No If yes, include language: If no, explain why:	No If yes, list document title(s):
Sidewalk slope	Yes	Yes	Yes	Yes
Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	☐ No X Does not apply	X No See existing requirement	No If yes, include language: If no, explain why:	No If yes, list document title(s):
Minimum cul-de-sac	Yes	Yes	Yes	Yes
radius	□ No	X No	□ No	No
Is there an opportunity to reduce the min. radius to min. imp. Surface?	X Does not apply	See existing requirement	If yes, include language : If no, explain why :	If yes, list document title(s):
Alternatives to cul-de-	Yes	Yes	Yes	Yes
sacs	No	X No	│	│
Is there an opportunity	X Does not apply		If yes, include language:	If yes list document title(s):

to provide incentives for alternatives?		See existing requirement	If no, explain why:		
Other		requirement			
Other					
Parking					
Minimum/maximum	Yes	Yes	Yes No	Yes	
parking ratios	☐ No	X No	□ No	☐ No	
Are there opportunities	X Does not apply	See existing	If yes, include language:	If yes, list document title(s):	
to adjust minimum		requirement	If no, explain why:		
parking ratios to reduce					
impervious surface and					
runoff? Are there					
opportunities to institute					
maximum parking ratios?					
Permeable paving use	Yes	Yes	Yes	Yes	
Are there opportunities	☐ No	X No	□ No	☐ No	
to allow, encourage or	X Does not apply	See existing	If yes, include language:	If yes, list document title(s):	
require permeable		requirement	If no, explain why:		
paving be used in ROW					
parking lanes or in public					
or private surface parking					
not in the ROW.					
Parking stall dimensions	Yes	Yes	Yes	Yes	
Are there opportunities	□ No	X No	□ No	☐ No	
to adjust parking stall	X Does not apply	See existing	If yes, include language:	If yes, list document title(s):	
dimensions (length and		requirement	If no, explain why:		
or width) or the ratio of					
compact to standard size					
spaces allowed or					
required in surface					
parking lots?					
Driving aisle dimensions	Yes	∐ Yes	Yes No	Yes	
Are there opportunities	No	X No		No	
to adjust the required	X Does not apply	See existing	If yes, include language:	If yes, list document title(s):	
dimensions of driving		requirement	If no, explain why:		
aisles for surface off-					
street parking to					
minimize impervious area and runoff?					
	□ Vos	Voc	□ Vos	Voc	
Off-street parking regulations	Yes No	Yes X No	Yes No	Yes No	
Are there opportunities	X Does not apply	See existing		If yes, list document title(s):	
to adjust design	A poes not apply	requirement	If yes, include language : If no, explain why :	ii yes, iist document title(s).	
standards for off-street		requirement	ii iio, expidiii wiiy .		
parking to better					
accommodate (or					
require) the integration					
T TEURITET LIE HITERIAHUN	1	1	I	1	

of LID BMP's like filter strips and bioretention?					
Other					
Design Guidelines	and Standards	6			
Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	X Yes No Does not apply	X Yes No See existing requirement	The GSI Design appendix to Chapter 8 (referenced above) offers specific guidance for tree preservation in/around other GSI BMP's as well as design guidance for integrating GSI BMP's (like bioretention) with new or existing street trees	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No X Does not apply	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No X Does not apply	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Other					
Stormwater Manag	gement and Ma	intenance	1		
Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	X Yes No Does not apply	Yes X No See existing requirement	Internal LID design experts serve as the go-to resource for other engineering staff on both site planning BMP design. On-going "skills and knowledge transfer" continuing education courses (internal) include green infrastructure design and Stormwater Code implmenetation (which includes on-site management requirements, etc.)	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Maintenance and	☐ Yes	Yes	Seattle Public Utilities has	Yes	<u></u> Yes
	Enforcement	X No	No	existing maintenance	No	☐ No
	Is there an opportunity	Does not apply	X See existing	protocols, standards,	If yes, include language:	If yes, list document title(s):
	to improve/update LID		requirement	procedures and policies for	If no, explain why:	
	facility maintenance and			its GSI facilities/assets.		
	protection specs?			These are documented in its		
	Enforcement			GSI Operations and		
	procedures? Inspection			Maintenance Manual.		
	protocols?			While this manual is not		
	protocols:			available externally, a pdf		
				can be made available to		
				WA Department of Ecology		
				,		
	EL			as needed, upon request.		
	Education	Yes	Yes	SPU has existing	Yes	Yes
	Are there opportunities	No	X No	communications materials	□ No	□ No
	to standardize or require	X Does not apply	X See existing	and protocols for advising	If yes, include language:	If yes, list document title(s):
	the education of adjacent		requirement	adjacent property owners	If no, explain why :	
	property owners and/or			re: how to contribute extra		
	the general public about			aesthetic maintenance for		
	proper LID maintenance?			GSI facilities in the public		
				realm. SPU, however,		
				maintains all its own GSI		
				assets for stormwater		
				function and basic		
				aesthetics.		
	Other					
	Zoning requireme	nts				
ditte						
	Individual open space	Yes	Yes		Yes	Yes
	requirements	☐ No	X No		No	No
	Can these requirements	X Does not apply	See existing		If yes, include language :	If yes, list document title(s):
	be revised to minimize		requirement		If no, explain why :	
	conflicts with or					
	obstacles to LID siting?					
	Passive vs. active open	Yes	Yes		Yes	Yes
	space requirements	☐ No	X No		No	☐ No
	Can document be revised	X Does not apply	See existing		If yes, include language :	If yes, list document title(s):
	so that bioretention		requirement		If no, explain why:	
	areas, dispersion areas,		·			
	and other conserved					
	open space be counted					
	toward passive open					
	space requirements?					
	Opportunities for	Yes	Yes		Yes	Yes
	Performance Based	☐ No	X No		∏ No	☐ No
	Designs (PUDs)	X Does not apply	See existing		If yes, include language :	If yes, list document title(s):
	What opportunities exist	A DOES HOL apply	requirement		If no explain why:	ii yes, iist document title(s).
	T ANTIAL CHILICIT FIRMING PAICE	1	i reconnecti '	1	I II III PXIIIAIII WIIV	

to remove barriers to LID facility siting within PUDs?					
Other					
Critical Areas and	 Shoreline Mana	agement			
Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No X Does not apply	Yes X No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
Other					

Additional Notes:

City of Seattle Report Form

LID/GSI - Review & Revise Local Codes

Document/ Code/ Rule/ Standard Reviewed:

Right-of-Way Improvements Manual (ROWIM)

- Chapter 1 Introduction
- Chapter 2 Procedures, Permitting Process and Approvals for Right-of-Way Improvements
- Chapter 3 Right-of-Way Improvement Requirements
- Chapter 4 Design Criteria
 For design criteria changes most relevant to LID, see:
 www.seattle.gov/transportation/rowmanual/manual/4 17.asp
- Chapter 5 Construction and Maintenance
- Chapter 6 Streetscape Design Guidelines (LID design information moved from Chapter 6 (Guidelines) to Chapter 4 (Criteria)

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Laeth Al-Rashid	Supervisor of civil engineering in Project Development	Review updates and make recommendations for changes to the ROWIM.	SDOT
Elizabeth Anderson	Sr. Civil Engineer	Reviewed new chapter 4 and CAM 2215 to see what might be needed in ROWIM when we withdrew the CAM	SPU
Michael Brennan	Manager, Engineering & Systems Support	Manager for Engineering Reviews	SPU
William Bou	Supervisor shoring and SIP inspection	Reviewed ROWIM for consitency with street use permit requirements	SDOT
John Buswell	Roadways Structures Manager	Review ROWIM for consitence with City Specifications and constructability	SDOT
Bill Bryant	Transit Programs	Review ROWIM updates for consistency with Transit needs.	SDOT
Reiner Blanco	Civil engineering supervisor	Review and make recommendations on changes to the ROWIM impacts to the ROW	SDOT
Sue Byers	Pavement and Engineering Manager	Reviewed ROWIM changes for impacts to pavements in the City and recommended options.	SDOT
Shanti Colwell	GSI Senior Engineer	Reviewed for Green Stormwater Infrastructure (GSI)	SPU
Shane Dewald	Urban Forestry	Reviewed and make recommendations for Tree protection and preservation in the ROWIM	SDOT
Ahmed Durrat	Manager Signal Design and Field Operations	Reviewed ROWIM for consistency with transportation operations structures and maintenance.	SDOT

5 - Right-of-Way Improvements Manual

Pam Emerson	Office of Sustainability and Environment	City project manger for LID integration activities.	SPU
Randy Earlywine	Value Management	Reviewed for value management	SPU
Adiam Emery	Signal Operations	Reviewed ROWIM for impacts to traffic signals and visual clearance	SDOT
Erich Ellis	SDOT Capital Projects Engineering Services Manager	Reviewed proposed revisions, distribute revisions to subject matter experts in group for review, and provide technical guidance from an engineering standpoint.	SDOT
Sherell Ehlers	Stormwater Policy Advisor	Subject Matter Expert for Stormwater Code compliance and concurrency	SPU
Barbara Gray	Deputy Director Plannin g& Project Development	Reviews and approves changes to ROWIM. Oversees Street Use and Policy and Planning, the groups updating and enforcing the ROWIM	SDOT
Luke Korpi	Maintenance Opperations	Early reviewer, no longer with the City	SDOT
Cristofer Horbelt	Waste Water Policy Advisor/Strategic Advisor II	Drainage and Waste Water (DWW) Line of Business representative to ROWIM team to ensure revisions are consistent with LOB objectives.	SPU
Diana Holloway	Project Manager in Street Use	Early Project Manager for ROWIM updates.	SDOT
Greg Izzo	Past acting Director of Street USE	Reviewed early documents before leaving the City.	SDOT
Wan-Yee Kuo	Sr. Civil Engineer	Engineering review	SPU
Tracy Krawczyk	Policy and Planning Division Director	Generally oversee major policy and plan development activities; supervise the project manager leading the ROWIM update.	SDOT
Dave LaClerque	DPD Planning and Development	Review document for consisstency with land use regulations and policies.	DPD
Susan McLaughlin	Urban Designer	Project Manager for the ROWIM update.	SDOT
Maureen Meehan	NPDES Stormwater Program Manager	Responsible for advising SDOT of all permit and WQ requirements, tracking activities and reporting for NPDES	SDOT
John Marek	Traffic Operations and Analysis	Reviewed ROWIM and make recommendations	SDOT
Darren Morgan	Urban Forestry Manager	Review ROWIM for consistency with Urabn Forestry policies and ordinances	SDOT
Kevin O'Neill	Planning Manager in Policy and Planning	Review ROWIM changes and make recommendations.	SDOT
Charles Oppelt	Sr. Mechanical Engineer	Reviewed for water main infrastructure implications	SPU
Trevor Partap	Traffic Operations and Analystes	Review ROWIM and make recommendations	SDOT
Kate Rhoads	Strategic Advisor	SPU NPDES Coordinator; Coordinated reviews for permit compliance	SPU
Mary Rutherford	SPU/SDOT Interdepartmental Coordination Lead	Assured that SPU has adequate input and opportunity to comment on the update of the ROWIM as it relates to compliance with their standards, codes and regulatory responsibilities.	SPU
Kristen Simpson	Division Director of Project Development	Reviewed elements of the ROWIM for impacts to SDOT projects.	SDOT
Angela Steel	Interim manager ROW systems and public space management	Reviewed ROWIM for conflicts with policy and Title 15 Street Use code	SDOT

Elizabeth Sheldon	Manager street use operations	Reviewed ROWIM and recommend changes	SDOT
Peg Staeheli	Consultant	Consultant updating the ROWIM	Consultant
Tracy Tackett	Green Stormwater Infrastructure Program Manager	Lead critical programs and projects involving Low Impact Development (LID) and Green Stormwater Infrastructure (GSI) integrated management practices	SPU
Michael Terrell	Director of CPRS	Responsible for overseeing and directing all activities of the Capital Projects and Roadway Structure Division in SDOT	SDOT
Tanya Treat	CIP Design Manager	Manager for CIP reviews	SPU
Jennifer Wieland	Street Use	Early work on ROWIM updates.	SDOT
Herman Wong	Sr. Civil Engineer	Engineering review	SPU
Ingrid Wertz	Planning, Policy and Regulatory Compliance Manager	Advised on review	SPU
Theresa Wagner	Stormwater Lawyer	Reviewed documents and provided legal adviseM	LAW

Process for Reviewing and Revising the Right-of-Way Improvement Manual (ROWIM)

Background

The City of Seattle under the leadership of Seattle Public Utilities is a recognized leader in stormwater management and implementation of Green Stormwater Infrastructure. Beginning in 1979 the City of Seattle began requiring flow control on all projects with more than 2,000 square feet of developed area. Beginning in 2009 Seattle required Green Stormwater Infrastructure (GSI) to the maximum extent feasible (MEF) on projects with more than 2,000 square feet of new plus replaced impervious surface.

The Right of Way Improvement Manual was developed by Seattle Department of Transportation (SDOT) to provide a resource to help property owners, developers, contractors and engineers and architects with permits and design and construction of improvements in the right-of-way. The ROWIM added a section to the manual on GSI in 2009 to provide guidance for incorporating GSI into right-of-way improvements to make it easier to include these elements in design.

The modifications to the document that are included in the summary table are intended to address new guidance and requirements that have been incorporated into the 2016 Stormwater Code that will go into effect on January 1, 2016 and to accomplish the goals of the Washington State Department of Ecology to minimize impervious surface, preserve native vegetation and minimize stormwater runoff when construction and new development occur.

How SDOT Conducted the Review

SDOT retained Herrera Consultants to perform an independent review of the ROWIM for compliance with the 2016 Stormwater Code and Ecology's goals. They created a roadmap for assessing compliance by identifying general categories and specific topics within the categories pertaining to stormwater management.

5 - Right-of-Way Improvements Manual

A topic could follow one of three paths. Some of the topics, while applicable to stormwater management in general, do not pertain to development and construction in the right-of-way and would not be applicable for inclusion in the ROWIM. Under the heading of "Topic Reviewed" these topics were classified as "does not apply". The rest of the topics identified by Herrera were classified "yes" under the heading "Topic Reviewed". If the section pertaining to the topic reviewed was in compliance with the updated code and Ecology requirements the box for "Gap Identified" was checked "no" and no further action was required. All remaining topics were classified as "yes" under "Gap Identified".

SPU and the Office of Sustainability & Environment (OSE) also reviewed the table and manual and provided comments. SDOT reviewed the table and comments by Herrera, SPU and OSE and SDOT completed Steps 4. When SDOT answered the question in Step 4 "have you taken any steps to fill the gaps" with a "yes" or "no". Where SDOT responded "no"; they provided an explanation for their response. Where SDOT responded "yes" that they had taken measures to fill the gap they provided a description of what has been changed in the manual to fill the gap.

Step 2				Ste	-	Step 4	Step 5
VV	WHAT topics did you review?			WHERE are the gaps?		Have you taken any steps	Are you aware of any other
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	to FILL THE GAPS?	City codes/ documents that may be affected?
	Site Planning						
_	Building locations	Does not apply	Does not apply			Does not apply	□ Does not apply
	Parking area locations	Does not apply	□ Does not apply			☐ Does not apply	☐ Does not apply
	Stormwater management facility locations	⊠ Yes	⊠ No	ROWIM, Section 4.17.3 – Stormwater Collection	This section describes the spacing requirements for catch basins based on stormwater flow path lengths. It states that arterial streets with a grade flatter than 1% shall have drainage pickups (catch basins and/or inlets) at least every 350 feet. Considered making exceptions in locations	⊠ No	⊠ No
		∀es	⊠ Yes	ROWIM, Section 4.21.2 – Design Criteria (Clearances)	where infiltrating GSI facilities will be installed. This section lists standard clearances for a number of items including sidewalks, stop signs, curbs, etc.	No SDOT followed up and reviewed the minimum lateral clearances. Minimum lateral clearances identified in this section have been determined based on public safety considerations. Reductions in these minimums may be considered on a project specific basis through a deviation process where the applicant has the opportunity to explain how a reduction in the clearance does not significantly impact public safety. The deviation process is outlined in Section 2.11.	No No
		⊠ Yes	Yes	ROWIM, Section 5.8 – Construction Stormwater Control	This section summarizes construction stormwater control requirements for small projects and large projects. Considered adding a summary of stormwater requirements for project types that require GSI to MEF (On-site Stormwater Management that are included in the new Seattle Stormwater Manual).	No SDOT refers to code sections in the ROWIM wherever possible rather than repeating information included in these regulations. This is because 1) these documents are not updated simultaneously so the information could be out of date and 2) sometimes condensing the information leads to unintended interpretations. The user is always getting current accurate information on requirements, standards and options when links are provided to the current governing documents.	No No

Step 2 WHAT topics did you review?		Step 3 WHERE are the gaps?			Step 4	Step 5	
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	Have you taken any steps to FILL THE GAPS?	Are you aware of any other City codes/ documents that may be affected?
		∑ Yes	∑ Yes	ROWIM, Formerly Section 6.4.1a – GSI as part of Partial Street Improvements	This section describes GSI recommendations for partial street improvements. Recommendations include bioretention in the planting strip area and permeable pavement sidewalks. Review and considered adding to the list of GSI facilities recommended for partial street improvements.	Yes New language in Section 4.17: Green stormwater infrastructure elements are encouraged for partial street improvements. Options are included in the Green Stormwater Infrastructure Design Manual (include link).	No .
		∑ Yes	∑ Yes	ROWIM, Formerly Section 6.4.1b – GSI as part of Full Right-of-Way Reconstruction	This section describes implementation of large scale GSI techniques as part of full ROW reconstruction for aesthetic benefits in combination with the stormwater function and traffic calming. These types of projects are most applicable in areas that have: Low volume streets Sufficient ROW width (at least 56 feet) Single family or LR1 adjacent land use Locations with existing informal drainage Review and revise to link to GSI Design Manual	Yes New language in Section 4.17: Green stormwater infrastructure elements are encouraged for full street improvements on these types of streets. Options are included in the Green Stormwater Infrastructure Design Manual (include link).	⊠ No
	Soils						
	Protecting and restoring healthy soil	□ Does not apply	□ Does not apply			Does not apply	Does not apply
	Compost amendments	Xes Yes	No No	ROWIM, Section 4.17.2- Stormwater Code Compliance	This section describes the Amended Soil requirement (minimum requirement for all projects). Section 6.4.4 – Compost/Amended Soils also refers to this section.	Does not apply: New language: All language removed and references Stormwater code to avoid confusion.	□ Does not apply
	Compaction	∑ Yes	∑ Yes	ROWIM, Section 5.9 – Demolition and Grading During Construction	This section describes requirements for demolition, grubbing, and/or grading. Considered revising language to include measures to avoid compaction of soil where GSI facilities are planned on site.	Yes Language revised to add the following sentence at the end of the section: Additionally measures must be taken to avoid compaction of soil where GSI facilities are planned on site.	No No

	Step 2			Ste	p 3	Step 4	Step 5
V	/HAT topics did you	review?		WHERE are	e the gaps?	Have you taken any steps	Are you aware of any other
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	to FILL THE GAPS?	City codes/ documents that may be affected?
		Yes	No No	ROWIM, Section 4.17.2- Stormwater Code Compliance	This section describes the Amended Soil requirement (minimum requirement for all projects). The section provides the following guidance due to concerns that compostamended soils may compact irregularly: • Seattle City Light (SCL) and Puget Sound Energy (PSE) require a 3-foot setback around all utility infrastructures • SPU also recommends a 3-foot setback from water meters Soils should be compacted within 1 foot of a curb or sidewalk	Does not apply New language: All language removed and refers to the Stormwater code to avoid confusion.	☐ Does not apply
	Landscaping, Nat						
T	Tree preservation	∑ Yes	⊠ No	ROWIM, Section 4.14.2- Design Criteria (for Street Trees)	This section requires a permit for Street Tree Removal.	□ Does not apply	□ Does not apply
	Screening	□ Does not apply	☐ Does not apply			□ Does not apply	□ Does not apply
	Landscaping requirements for street frontages	⊠ Yes	⊠ Yes	ROWIM, Section 4.2.1a through h– Street Classifications and Street Types	This section describes the requirements for street trees and landscaping on the different street types. Considered requiring Silva cell type systems to promote healthy tree growth.	No SDOT works with applicants on a project and site specific basis to select designs that promote healthy trees. Silva cells are not considered the best alternative in all instances for healthy tree growth.	⊠ No

	Yes	Yes	ROWIM, Section 4.14- Street Trees and Landscape Architectural Standards	This section includes information and design criteria for street trees. Considered revising to include other landscaping between the sidewalk and the street, and allowing planted area within LID facilities to count towards open space or landscaping requirements.	Yes Planting strip treatments: Plants in planting strips vary greatly in their potential to provide optimum pedestrian and environmental benefits. Though SDOT allows the installation of grass the department encourages the installation of raingardens, bioretention, permeable pavement, low (24-30 inches) shrubs, perennial or groundcover plantings that provide a superior degree of environmental benefit and separation between the sidewalk and street at reduced maintenance costs. Under some conditions, a combination of the plantings and grass or plantings and pavers may be appropriate depending on the street classification and need to accommodate parking in the curb lane. Refer to the Stormwater Manual Volume 3 – Project Stormwater Control Chapter 5 – BMP Design for guidance on integrating bioretention, rain gardens, permeable pavement or stormwater conveyance and treatment into the planting strip plan. Planting strips—grading: The final grade of soil surfaces in planting strips must accommodate runoff from sidewalk surfaces cross-sloped to drain toward the street. In cases where a mounded planting strip is proposed to provide a more effective separation between the sidewalk and street, a centerline height of 6" above the adjacent sidewalk grade is typical and gaps between mounded areas must be provided so that backup of runoff and ponding does not occur on the paved sidewalk. Planting strip paving: Up to 40% of the area in planting strips may be paved if the following conditions are met: Paving is done in combination with street trees; Related landscape architectural features pose no public safety concern; and The combination of paving and trees provides an equal or better balance of functional and environmental benefits than a fully planted condition. Paved area is not used for parking. Pervious pavement materials are encouraged to allow for the infiltration of runoff from the sidewalk before it enters the street to maximize the water quality entering the planting strip. Paving materials and installation deta	No No
--	-----	-----	---	---	--	-------

W	Step 2 /HAT topics did you r	review?		Ste WHERE are	-	Step 4 Have you taken any steps	Step 5 Are you aware of any other
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	to FILL THE GAPS?	City codes/ documents that may be affected?
	Landscaping requirements for street frontages (cont.)	Yes	∑ Yes	ROWIM, Section 6.5.10 – Landscaping for Traffic Calming Devices	This section describes the responsibilities for planting and maintenance of traffic calming devices after they are built. Residents are responsible for the maintenance of traffic circle plantings. Considered some flexibility for maintenance responsibilities if a traffic calming device (traffic circle or curb bulb) is also used for a GSI installation. This section also states that If a volunteer signs up to maintain plantings, soil and plants will be supplied; otherwise, the device will be covered in asphalt. Considered relaxing this requirement to allow some support from SDOT in providing and	Roads are crowned in the center so that drainage is directed to the edges where it is either picked up in a piped system or with GSI. Placing GSI in the middle of an intersection would create a risk of flooding at the low point created.	No No
	Hard and Impervio	ous Surfaces			maintaining vegetation in traffic calming devices.		
	Maximum impervious surface allowances	Does not apply	□ Does not apply			□ Does not apply	Does not apply
	Shared driveways	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Minimum driveway width	∑ Yes	⊠Yes	ROWIM, Section 4.9.1 – Links to Standard Plans and Specifications	This section provides a link to Standard Plan 430: Type 430 Driveway.	⊠ No	⊠ No
	Use of permeable pavement for driveways	∑ Yes	⊠ Yes	ROWIM, Section 4.9.1– Links to Standard Plans and Specifications	This section provides a link to Standard Plan 431: Concrete Driveway Placed with Sidewalk Construction.	⊠ No	⊠ No
	Two-track driveway design	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Bulk and Dimensi	onal Considera	tions				
_	Building setbacks	∑ Yes	⊠ No	ROWIM, Section 4.21.2 – Design Criteria (Clearances)	This section lists standard clearances for a number of items including minimum vertical clearances from building and structures. Since the building setback is for overhead power and is a vertical clearance, it is not an issue for GSI installations.	□ Does not apply	□ Does not apply
	Height limits	□ Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Maximum square footage	Does not apply	□ Does not apply			□ Does not apply	Does not apply
	Clustering	□ Does not apply	Does not apply			□ Does not apply	Does not apply

Protecting existing			ROWIM, Section	See description of this section under	⊠ Yes	⊠ No
infiltration			5.9 – Demolition	"Compaction".	The language was revised to state	
			and Grading During Construction	Considered revising language to include	that measures must be taken to	
			Construction	measures to take to avoid compaction of soil and	avoid compaction of soil where GSI	
				protect existing infiltration rate where GSI	facilities are planned on site.	
	<u> </u>		ROWIM, Section	facilities are planned on site. See description of this section under	-	
Conserving native			5.9– Demolition	"Compaction".	∑ Yes	⊠ No
vegetation/soils			and Grading During	compaction .	The language was revised to state	
			Construction	Considered revising language to include	that measures must be taken to	
				measures to take to preserve existing	avoid compaction of soil where GSI	
				vegetation, soils, and minimize site disturbance where GSI facilities are planned on site, and to	facilities are planned on site.	
				preserve natural topography of site (part of LID	·	
				site planning).	S-2	5-2
			ROWIM 5.13 –	This section describes a 1-year surety bond for		⊠ No
			Acceptance/ Warranty	project functionality.	All surety bonds for street right-of-way	
			Procedures for	Considered revising language to add a required	improvements including landscaping and GSI elements are kept for a year to ensure that all	
			Improvement	landscape bond to ensure plant survival within 1	improvements retain functionality during that	
			Projects	year of planting.	period. After one year, the SDOT Inspector	
					returns to the project site to inspect for vegetation distress and any apparent	
					workmanship shortcomings that qualify as a	
					safety hazard to pedestrian and vehicle	
					traffic. If the area is safe for public use, then the bond is released and the project	
					considered closed.	
Construction sequencing			ROWIM, Section 2.5 – Right-of-Way	This section involves obtaining a Street Use permit for temporary use of the ROW for	⊠ No	⊠ No
			Use Permits	equipment and material storage, staging or	Legislation must be passed to levy	
				other activities during construction on private	fees for environmental damages.	
				property.	Language was included in SMC Title	
				Considered revising language to include fees for	15.	
				environmental damages that may occur from use		
				of the ROW including impacts to existing or		
	N vaa	N _V	ROWIM, Section	planned GSI facilities. The Street Use Inspector will coordinate all		N/ v
	⊠ Yes		5.3 – Construction	inspections required by other City Inspectors	Yes The owner of the project, owner's	
			Inspection and	such as electrical, landscaping, structural	representative, and/or General Contractor is	
			Testing Procedures	components, etc.	responsible for scheduling all required	
				Considered revising language under other City	inspections for their work and the work of their sub-contractors. Street Use Inspector will	
				Inspectors to specifically include SPU Inspectors	coordinate all inspections required by other	
				that would be in responsible for GSI/ Stormwater	City Inspectors such as electrical, drainage,	
				Facility inspections during construction.	water, landscaping, structural components, etc.	
			DOWNA Castian	Con description of this section and an		
			ROWIM, Section 5.9– Demolition	See description of this section under "Compaction".	⊠ Yes	⊠ No
			and Grading During		Revised language to add the	
			Construction	Considered revising language to include	following sentence at the end of the	
				construction sequencing considerations to avoid	section:	
				compaction where GSI facilities are planned on site.	Additionally measures must be taken	
					to avoid compaction of soil where	
					GSI facilities are planned on site.	

		1 5 2	T = =	T	1 5-2	
Travel lane widths	∑ Yes	⊠ Yes	ROWIM, Section 4.6.2 – Design Criteria (Roadway Width)	In this section, minimum lane widths are defined for various lane types. Review widths and considered reducing where feasible since these may restrict GSI implementation in the ROW.	No SDOT is a leader in making streets in an urban environment safe for all users. One of the strategies used is to keep lane widths to a minimum depending on the roadway function and emergency vehicle access. The standard widths in the ROWIM reflect minimums that are required by the Local Agency Government (LAG) Manual.	⊠ No
	⊠ Yes	⊠ Yes	ROW IM, Section 4.13.2- Bicycle Facilities	This section lists the minimum widths required for bicycle lanes. Considered encouraging shared lanes/climbing lanes when safety permits or directing bicycle traffic to less trafficked streets to keep lanes narrower and provide more room for LID implementation.	No Current best practice for bicycle facility design does not include sharrows. This change has been made to make biking more attractive to a broader range of riders to increase ridership. SDOT has identified parallel routes on many corridors.	⊠ No
Right-of-way widths	∑ Yes	⊠ Yes	ROWIM, Section 3.1.2 – Coordination with SDOT Street Use	This section states "When new street improvements are required and the existing street right-of-way width does not meet the established width, additional street right-of-way shall be dedicated." Considered revising to exempt GSI facilities.	No Implementation of GSI facilities benefit from a widened right of way that results from a dedication so this does not negatively impact implementation of GSI. Further, dedication requirements are established in the Land Use Code. The ROWIM lets the applicant know that this may be a requirement under certain conditions.	No No
	⊠ Yes	⊠ Yes	ROWIM, Section 4.6.2 – Design Criteria (Roadway Width)	In this section, minimum roadway widths are defined for various land use zones. Review widths and considered reducing where feasible since these may restrict GSI implementation in the ROW.	The lane widths in the tables are compliant with State Standards for City and County road design standards (LAG Manual). SDOT has a deviation process for projects to propose reduced lane widths. It is explained in Section 2.11. SDOT and SPU agree that the optimal locations for implementing GSI to manage roadway runoff are non-arterial streets where there is adequate right of way to accommodate GSI for infiltration and flow control.	No No

	⊠ Yes	∑ Yes	ROWIM, Chapter 4 Figures	Figures 4-2, 4-3, 4-5, 4-6, 4-8, 4-9, and 4-10 reference ROW and road dimensions. Review and considered reducing minimum requirements to provide additional space for GSI facilities.	No The figures show the use of space from curb to curb and from the curb to the right of way limit and do not include dimensions. The figures are intended to show the different functions that various street types serve.	⊠ No
Right-of-way widths (cont.)	⊠ Yes	∑ Yes	ROWMIM, Figures 6-2, 6-3, and 6-4	These figures depict a Street Design Concept Plan Template with a 66' ROW width. Review and considered allowing for more design flexibility for GSI implementation.	No The figure is a concept plan template and does not reflect requirements. It is intended to show an applicant the type of information to provide when proposing a street design concept.	⊠ No
	⊠ Yes	∑ Yes	ROWIM, Figure 6- 10	This figure provides a flow chart for evaluating Natural Drainage System (NDS) full street concept as a part of full street improvements. It lists the ROW minimum width as 56 feet. If the ROW width is less than the minimum, the applicant is encouraged to considered GSI for sidewalk drainage only.	Yes The figure will be revised to include use of permeable pavement as an alternative for sidewalk drainage.	⊠ No
Use of permeable pavement for streets and roads	⊠ Yes	⊠ No	ROWIM, Section 2.10.11 – Coordination Activities	This section states "In general, there is a three-year moratorium on opening new pavement. It shall not be permitted within the three-year period following its installation, except in the following circumstances" Considered adding use of permeable pavement to this circumstance list in order to promote GSI.	No The Pavement Opening and Restoration Rule already requires pavement be replaced in-kind. See note at the end of Title 15 reporting form.	⊠ No
Use of permeable pavement for streets and roads (cont.)	⊠ Yes	⊠ Yes	ROWIM, Section 4.2.1 – Street Types	In this section, "Street Design Features" are listed for different classifications of streets. Considered adding "Permeable Pavement" or "GSI" as a street design feature or Priority Design Feature.	Priority Design Features • Wide sidewalks and planting strip buffer walking area from moving traffic • Street trees, landscaping and GSI • Bus shelters at transit zones • Signed and/or striped bicycle lanes on designated bicycle routes	⊠ No
	⊠ Yes	⊠ No	ROWIM, Section 4.4.2 – Design Criteria (Grading)	This section currently includes Maximum/ Minimum Roadway Grades for asphalt and concrete. (Deleted from the sections – no reference found) Considered adding grade requirements for permeable concrete and porous asphalt.	No The tables with grade requirements are for road classifications, not for pavement or surface types. Pavement types were removed to avoid confusion.	⊠ No
	⊠ Yes	⊠ No	ROWIM, Section 4.7 – Roadway Pavement	This section includes design criteria and provides standard plan and specification references for Portland cement concrete and asphalt concrete.	⊠ No	⊠ No

⊠ Yes	⊠ Yes	ROWIM, Section 4.11.2 – Design Criteria (Sidewalks)	Section "4.11.2 Design Criteria" (Standard Construction of Sidewalks) lists Portland cement concrete as the standard material. Considered adding other materials (such as permeable pavement).	Standard construction of sidewalks: A standard sidewalk is constructed of Portland cement concrete or permeable pavement and is located at least 5½ feet from the face of the curb and 2 feet from the property line. The sidewalk may be located closer to the property line when necessary to attain the minimum 5 foot planting strip width and 6 foot sidewalk.	⊠ No
⊠ Yes	⊠ Yes	ROWIM, Chapter 4 Figures	Figures 4-5, 4-6, 4-8, 4-9, 4-10, 4-11, 4-12, 4-18, and 4-19 reference asphalt/concrete as the pavement type. Considered adding permeable pavement as an option.	No These sections do not include references to pavement type. The sections are intended to be very schematic and depict travel lanes, parking and streetscape which can consist of pedestrian facilities, landscaping, GSI, street furniture, etc.	No No
∀es	⊠ Yes	ROWIM, Section 5.12 – Street and Sidewalk Pavement Opening Restoration Rule	This section refers to the Street and Sidewalk PORR for requirements that applicants, contractors, and city crews should meet when restoring openings within the street right-of-way. Considered revising this section, and the PORR, to include requirements for restoring openings on permeable pavement surfaces and facilities.	SDOT refers to code sections in the ROWIM wherever possible rather than repeating information included in these regulations. This is because 1) these documents are not updated simultaneously so the information could be out of date and 2) sometimes condensing the information leads to unintended interpretations. The user is always getting current accurate information on requirements, standards and options when links are provided to the current governing documents.	No No

Use of permeable pavement for streets and roads (cont.)	∀es	Yes	ROWIM, Section 6.4.3 – Permeable Pavements as part of Partial or Full Street Improvements	This section describes the use of permeable pavement in the ROW. The section states "At this time, permeable pavements are limited to non-street surfaces, such as sidewalks, and planting strips." Considered allowing permeable pavement use for street surfaces in residential areas, alleys, and driveways. This section also lists permeable cement concrete as the only acceptable permeable pavement in the ROW for sidewalks. Considered allowing other types of permeable pavement for sidewalks. This section also lists the following types of permeable pavement that can be used in the planting strip: Permeable asphalt concrete Permeable cement concrete Interlocking concrete pavers Open-celled paving grids with vegetation Open-celled paving grids with gravel	All GSI elements were removed from chapter 6 and placed in the Chapter 4, which is a Directors Rule. The new language in 4.17.4 is: 4.17.4 Permeable Pavements Permeable pavement is a paving system which allows rainfall to percolate into an underlying soil or aggregate storage reservoir, where stormwater is stored and infiltrated to underlying subgrade, or removed by an overflow drainage system. Permeable pavement systems can be designed to provide differing degrees of flow control. Two categories of permeable pavement systems are included in the stormwater manual: permeable pavement facilities and permeable pavement surfaces. Design information is provided in the Section 5.4.6 and 5.6.2 of Volume 3: Project Stormwater Control, Stormwater Manual, DPD DR 21-2015/SPU DR DWW-200, Standard Plan 425 in Standard Plans 400 Series: Street Paving & Appurtenance (2014), Standard and Specifications Division 5: Surface Treatments and Pavements(2014). In addition to the standard non-proprietary permeable pavers may be allowed to be installed in the right-of-way at the discretion of the City. See table of Allowable Proprietary Permeable Pavement Materials for Stormwater Credit in Seattle and King County.	No No
	⊠ Yes	⊠ No	ROWIM, Section 4.14.2 – Design Criteria (for street trees)	This section encourages use of pervious pavements in planting strips to allow for the infiltration of runoff from the sidewalk before it entering the street.	□ Does not apply	□ Does not apply
Placement of utilities under paved areas in the ROW	∑ Yes	⊠ Yes	ROWIM, Section 1.5 – Departmental Roles and Responsibilities	This section describes roles and responsibilities for various City departments. Considered revising language to more clearly define departmental responsibilities related to GSI.	No The ROWIM is a document to provide guidance to applicants regarding requirements for right of way improvement design and construction. Interdepartmental responsibilities for maintenance of joint use or joint purpose facilities are addressed in interdepartmental memorandums of agreement.	No No
	⊠ Yes	⊠ No	ROWIM, Section 2.2 – SDOT Street Right-of-Way Permits	This section describes five basic types of SDOT permits for work in or use of a street right-of-way. Considered revising language in the "Utility Permits" subsection to specifically include GSI facilities.	No GSI is not a permit type. The language here is not comprehensive and is not an appropriate locations for detail of one particular sub-type of one of the multiple permits listed.	⊠ No

	⊠ Yes		ROWIM, Section 4.15.1 – Design Criteria (Introduction to Utilities Design Criteria)	This section describes utility easements for lighting, drainage, water, and fire protection in the ROW. Sewer and storm drains within the same easement require a minimum of 7 feet of separation between the sewer and the storm drain. Review easement widths and separation distances and considered reducing where feasible since these may restrict GSI implementation in the ROW.	No The utility easements described in this section are easements for utilities on private property. These do not affect implementation of GSI in the right of way.	
Placement of utilities under paved areas in the ROW (cont.)	∑ Yes	⊠ Yes	ROWIM, Section 4.27 – Access Easements – Design Criteria	This section describes vehicle access easements serving one or two dwelling units. It includes a requirement for 3 inches of asphalt over 6 inches of crushed rock and a 2' wide shoulder on each side. Review design criteria and considered adding flexibility to select a different pavement type (such as permeable pavement) and/or a narrower shoulder width.	Yes Shoulder width is a structural requirement therefore the language for the shoulder width will not be changed.	⊠ No
Required turn around area (e.g., Fire, USPS)	∑ Yes	⊠ Yes	ROWIM, Figure 4- 26	This figure illustrates the minimum dimensions for alley and easement turnarounds. Review and considered reducing turn around area if feasible.	No The minimum dimension for a turnaround is based on turning movements for emergency vehicles. This will remain the same.	⊠ No
Sidewalk widths	⊠ Yes	⊠ Yes	ROWIM, Section 4.6.1 – Standard Plan and Specification References (Roadway Width)	This section provides a link to Standard Plan 400: Half Section Grading and Standard Plan 430: Type 430 Driveway which include sidewalk widths.	No Changes to standard plans and specifications are addressed in the review of those documents. The ROWIM will link to the revised document.	⊠ No
	⊠ Yes	⊠ Yes	ROWIM, Section 4.9.1 – Standard Plan and Specification References (Driveways)	This section provides a link to Standard Plan 430: Type 430 Driveway and Standard Plan 431: Concrete Driveway Placed with Sidewalk Construction which include sidewalk widths.	No Changes to standard plans and specifications are addressed in the review of those documents. The ROWIM will link to the revised document.	⊠ No
	∑ Yes	⊠ Yes	ROWIM, Section 4.2.1a through h– Street Classifications and Street Types	This section states that sidewalk widths shall be as wide as possible to accommodate pedestrians once vehicle needs are addressed. Considered including LID BMPs as a need before the maximization of sidewalk width. Considered reducing sidewalk width, do not encourage to be as wide as possible, or require permeable pavement	Yes As wide as needed to accommodate pedestrians in balance with vehicle access needs. Additional sidewalk width is encouraged in the vicinity of transit zones.	No No
	⊠ Yes	⊠ Yes	ROWIM, Section 4.11 – Sidewalks	Section 4.11 (Sidewalks), 4.11.2 (Design Criteria), Figure 4-18, and Figure 4-19 lists the minimum pedestrian zone requirements for different street zones. Section 6.3.1 (Neighborhood Plan Updates) also refers to Section 4.11.2 for sidewalk width requirements in the vicinity of transit stations. Review and considered reducing minimum widths if feasible to allow for GSI facility installation.	No The width requirements in the vicinity of transit stations are set based on expected pedestrian volumes. This is an important priority in the vicinity of a transit station.	No No

Cidewells widths	⊠ Yes	∑ Yes	ROWIM, Chapter 4 Figures ROWIM, Section	Figures 4-9, 4-10, 4-11, 4-12, 4-18, 4-19 illustrate the minimum width requirements for sidewalks as 6 feet. Review and considered reducing minimum width if feasible to allow for GSI facility installation. This section discusses minimum sidewalk widths.	No Encouraging walking is an important priority for promoting transportation alternatives that provide healthy choices to reduce driving.	No No
Sidewalk widths	⊠ Yes	⊠ No	6.1.7b – Minimum Sidewalk Width, Areas Free of Obstructions	ADA requires a minimum of 5 feet clear sidewalk space for two wheelchair users to pass one another. SDOT prefers six feet of unobstructed, linear sidewalk space that is free of street furniture, street trees, planters, and other vertical elements. Considered revisiting the six foot preference to	No Section was removed from the manual in entirety. All GSI information is in Chapter 4.	⊠ No
Sidewalk slope		Yes	ROWIM, Section 4.11.2 – Design Criteria (Sidewalks) and Chapter 4 Figures	allow room for GSI facility installation. Section 4.11.2 and Figures 4-9, 4-10, 4-11, 4-12, 4-18, and 4-19 define the minimum sidewalk slope as 0.5% and the maximum sidewalk slope as 2%. Figures depict sidewalks draining towards the planting strip. Considered adding language encouraging sidewalks to slope into LID BMPs vs. the street.	No GSI is typically placed on the street side of a sidewalk which is why the figures show the sidewalk draining toward the planting strip. The city cannot direct runoff from the right of way onto private property. If on occasion GSI is placed between the sidewalk and the property/right of way line the sidewalk may be sloped toward the GSI facility.	No No
	∑ Yes	∑ Yes	ROWIM, Figures 6- 23, 6-24, 6-25	These figures depict a permeable pavement sidewalk and a permeable pavement sidewalk adjacent to a swale or ditch with a 2% sidewalk slope. They also list a maximum longitudinal slope of 5%. Considered revisiting the maximum longitudinal slope requirement if the Seattle Stormwater Manual updates or removes this maximum slope.	No The maximum slope is based on SPU design standards. The facility would not be functional at steeper slopes.	⊠ No
Minimum cul-de-sac radius	∑ Yes	∑ Yes	ROWIM, Figure 4- 25	This figure illustrates the minimum cul-de-sac radii dimensions. Review and considered reducing radii dimensions if feasible.	No The minimum dimension for a turnaround is based on turning movements for emergency vehicles.	⊠ No
Alternatives to cul-desacs	∑ Yes	No			□ Does not apply	□ Does not apply
Parking						
Minimum/maximum parking ratios	Does not apply	□ Does not apply			Does not apply	□ Does not apply
Permeable paving use	⊠ Yes	No	ROWIM, Section 4.2.1 – Street Types	See "Use of permeable pavement for streets and roads"	Yes No references to pavement type in this section. This section describes street types by volume of vehicles.	⊠ No
Parking stall dimensions	Does not apply	□ Does not apply			□ Does not apply	□ Does not apply

	Off-street parking regulations			ROWIM, Section 4.10.2 – Design Criteria (Curbs) ROWIM, Section 4.13.2 – Design Criteria (Bicycle Facilities)	This section refers to Figure 4-17 for parking curb setback requirements. Considered revising minimum setbacks for parking curbs in order to reduce impervious surfacing. Private, off-street bicycle parking requirements are specified in the Land Use Code (SMC 23.49 and 23.54). DPD will be reviewing the Land Use Code.	NoThe requirements for curb setbacks are established in SMC 15.06.050.✓ Does not apply	No No Does not apply
	Trees and bioretention	s and Standards	⊠ Yes	ROWIM, Section 4.2.1 – Street Types	In this section, "Street Design Features" are listed for different classifications of streets. Considered applying "Drainage" section to additional types of streets (currently only under Green Streets). Considered adding "Bioretention" or "GSI" as a street design feature or Priority Design Feature.	 ✓ Yes Priority Design Features Wide sidewalks and planting strip buffer walking area from moving traffic Street trees, landscaping and GSI Bus shelters at transit zones Signed and/or striped bicycle lanes 	No No
		∀es	∑ Yes	ROWIM, Section 4.11 - Sidewalks	This section lists proper uses of the landscape/furniture zone. Considered including bioretention and other GSI facilities on this list.	on designated bicycle routes Yes: The Landscape/Furniture Zone (including the curb) is defined as the area between the roadway curb face and the front edge of the walkway. The minimum width of this zone is 5½ ft feet except in locations adjacent to high and intermediate capacity transit stations. Objects in the landscape/furniture zone must be setback a minimum of 3' from the face of the street curb. This zone buffers pedestrians from the adjacent roadway and is the appropriate location for GSI, street furniture, art and landscaping. It is also the preferred location for street trees, and other elements such as pedestrian lighting, hydrants and below grade utility hatch covers. Transit Zones are also located in the landscape/furniture zone and are designated for transit customer waiting, loading and alighting and may include transit signage, shelters, benches, litter receptacles, and pedestrian scaled lighting. GSI, landscaping or other objects proposed for this zone must comply with City of Seattle permitting requirements and design criteria.	No No

		∑ Yes	∑ Yes	ROWIM, Section 4.17.6 – Additional Information	This section provides additional design criteria for drainage systems including ditch modification requirements.	No ROWIM is guidance and references	No
					Considered adding bioretention ditch retrofits to this section.	other documents. To avoid confusion here all the language was deleted except for the following: Public storm drains : A new public storm drain may be required when	
						 there is no available public storm drain and there is no acceptable discharge point; and to achieve adequate capacity; 	
						New public storm drains shall be sized to handle all upstream tributary area from the drainage basin in which they are located. They shall be designed to be continuous with existing and future storm drain pipes that are or will be part of the storm drainage system. The engineer shall provide the hydraulic calculations used in the pipe design for review by SPU. Additional information is included in SPU CAM 1180 Design Guidelines for Public Storm Drain Facilities (2012).	
		⊠Yes	⊠ Yes	ROWIM, Section 6.4.2 – Bioretention Design Guidance	This section provides design guidance for bioretention in the ROW. The longitudinal slope specified is flat or gradual (< 2%). Considered allowing steeper slopes with the incorporation of design elements such as check dams and weirs.	Yes All GSI information has been moved to chapter 4. References to GSI were deleted from chapter 6 to avoid confusion.	⊠ No
		⊠ Yes	⊠ Yes	ROWIM, Section 6.5.10 – Landscaping for Traffic Calming Devices	This section describes the responsibilities for planting and maintenance of traffic calming devices after they are built. It states that a traffic circle must be at least 14 feet in diameter to qualify for a tree. Review and considered reducing these	No Tree species are limited to large scale trees to avoid sight distance issues or interference with vehicles.	⊠ No
					requirements for smaller tree species and/or GSI installations.		
		⊠ Yes	⊠ No	ROWIM, Figure 6- 10	This figure provides a flow chart for evaluating Natural Drainage System (NDS) full street concept as a part of full street improvements. If the ROW width is less than the minimum (56-foot width), the applicant is encouraged to considered GSI for sidewalk drainage only. Partial street improvements such as bioretention in the planting strip area should also be encouraged.	No The existing figure indicates a location for GSI and the language encourages the placement of GSI.	⊠ No
		⊠ Yes	⊠ Yes	ROWIM, Figures 6- 15, 6-16, and 6-17	These figures provide details for bioretention, biofiltration cells and a conveyance swale. The figure specifies that the side slopes must be 4:1 max when within 50 feet of intersections. Considered relaxing this requirement to 3:1 side slopes or 2.5:1 side slopes.	No The side slopes are reduced in the vicinity of the intersection for vehicle safety.	⊠ No
		⊠ Yes	⊠ No	ROWIM, Section 4.14 – Street Trees and Landscape Architectural Standards	This section lists clearances from street trees- at grade and below grade, planting strip dimensions and clearances, and minimum setbacks required for street trees planted in planting strips.	□ Does not apply	□ Does not apply;
Trees a (cont.)	nd bioretention	X Yes	⊠ No	ROWIM, Figure 6- 22	This figure provides guidance for tree planting within a bioretention swale.	□ Does not apply	□ Does not apply;

Continuous curb requirements	⊠ Yes	⊠ Yes	ROWIM, Figure 4-1	The current design cross section includes a 6" curb. Considered promoting curb cuts and no curbs when feasible to promote infiltrating GSI facilities.	No Curb cuts are already included in bioretention details.	⊠ No
	⊠ Yes	⊠ No	ROWIM, Figure 6- 18 and 6-19	These figures include details for curb drain cut openings for swales and concrete inlets, channels, and grates.	□ Does not apply	□ Does not apply
Curb radii	⊠ Yes	∑ Yes	ROWIM , Section 4.8.2 – Design Criteria (Intersections)	This section lists the standard curb radii for street intersections. Review and considered modifying where feasible since these may restrict GSI implementation in the ROW.	No These radii are based on vehicle turning radii.	⊠ No
	⊠ Yes	⊠ Yes	ROWIM, Section 4.10.2 – Design Criteria (Curbs)	This section lists the curb radii to be used for pedestrian bulbs. Review and considered modifying where feasible since these may restrict GSI implementation in the ROW.	No These radii are based on vehicle turning radii.	⊠ No
Stormwater Mana	agement and Ma	intenance				
Training	□ Does not apply	Does not apply			Does not apply	□ Does not apply
Enforcement	⊠ Yes	⊠ No	ROWIM, Section 5.15 – Annual Permits and Maintenance Responsibilities	This section states that the City is responsible for the area between the curbs, while the property owner is responsible for the area between the curb and the property line. Considered revising language to clarify City and property owner maintenance responsibilities for GSI facilities. Considered adding GSI incentives if maintenance is performed by property owners.	No Laws governing responsibilities are outside of the scope of the ROWIM.	No
Enforcement (cont.)	∑ Yes	∑ Yes	ROWIM, Section 6.4.6c – Restoring Damages to GSI from Construction or Vehicular Damage	This section describes the actions that must be taken if a bioretention or permeable pavement is impacted negatively by the following activities: Construction activities Utility cuts Vehicular accidents Damage from oil spills, fertilizers, or other harmful substances Restoration of bioretention usually includes plant removal, bioretention soil excavation and replacement to original depth, mulch replacement, and replacement of landscaping to equal or better than the original design. This section does not currently include a reference to a code section to make this enforceable with escalating enforcement actions and/or fines.	No It was not intended to provide an explanation of escalating enforcement methods. This gap was addressed via changes to Seattle Municipal Code Title 15.	No No
	⊠ Yes	⊠ No	ROWIM, Section 6.2f – Maintenance	This section states that it is the responsibility of abutting property owners to maintain green streets with their consent unless a written agreement is established with SDOT.	⊠ Does not apply	□ Does not apply
	⊠ Yes	⊠ No	ROWIM, Section 6.4.6 – Maintenance Responsibilities	This section describes maintenance responsibilities for GSI. It states that adjacent property owners are responsible for maintaining sidewalks, driveways, and parking pads as well as landscaping in the street ROW.	□ Does not apply	□ Does not apply

	⊠ Yes	⊠ No	ROWIM, Section 6.4.6a – Maintenance for Bioretention	This section describes maintenance responsibilities specific to bioretention. The applicant is solely responsible for the first year of plant establishment. SPU will supplement the maintenance after the first year of plant establishment for facilities installed for stormwater code compliance (minimum size of 500 square feet).	☑ Does not apply	□ Does not apply
		⊠ No	ROWIM, Section 6.4.6b – Maintenance for All Permeable Pavements	This section describes maintenance responsibilities specific to permeable pavement. SDOT will accept all maintenance responsibilities for permeable pavement installed for stormwater code compliance in the ROW.	□ Does not apply	□ Does not apply
Education	⊠ Yes	⊠ No	ROWIM, Section 6.5 – Traffic Calming	Education is discussed in this section as an option (along with enforcement and other routine traffic management solutions) to slow speeds and improve neighborhood livability.	□ Does not apply	□ Does not apply
Zoning requireme	ents					
Individual open space requirements	⊠ Yes	⊠ No	ROWIM, Section 6.2.5 – Designating New Green Street and Neighborhood Green Streets	This section lists siting criteria for designating new green streets and new neighborhood green streets. Criteria related to open spaces include: • Streets in medium and high-density areas where residents generally do not have access to private yards, existing open space is very limited, and land is not available for future open space development. • Undeveloped streets within designated open spaces where it is desirable to retain the undeveloped conditions of the surroundings.	☑ Does not apply	□ Does not apply
Passive vs. active open space requirements	□ Does not apply	Does not apply			□ Does not apply	□ Does not apply
Opportunities for Performance Based Designs (PUDs)	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
Critical Areas and	d Shoreline Man	agement				
Allowance of LID/GSI BMPs in critical areas/shorelines when compatible	⊠ Yes	⊠ No	ROWIM, Section 6.2.5 – Designating New Green Street and Neighborhood Green Streets	This section lists siting criteria for designating new green streets and new neighborhood green streets. One criterion related to shorelines is "Streets that have a special character that is of interest to pedestrians, including streets providing shoreline access, streets with special views, and streets located in areas of unique historic or architectural interest."	☑ Does not apply	□ Does not apply

Additional Notes:

The ROWIM referred to the following sections of SMC Title 23- Land Use Code.

Land Use Code Section	Topics
SMC 23.44 – Residential, Single-Family	Single Family parking location and access
SMC 23.45 – Multi-Family	Lowrise parking and access
	Midrise parking and access
	 Street tree and landscaping requirements
SMC 23.49 – Downtown Zoning	Downtown parking quantity requirements
SMC 23.53 – Requirements for Streets, Alleys, and Easements	Zone category
	ROW widths
	Full and reduced improvement requirements

Land Use Code Section	Topics
	Pedestrian access and easements
	Dedication requirement
	No Protest Agreement
	Paving requirement
	Alley width
	Required improvements
	Easement standards
	Access easement standards
SMC 23.54 – Quantity and Design Standards for Access, Off-	Curb cut width requirements
Street Parking, and Solid Waste	Driveway slope requirements
	Parking space standards
	Bicycle parking
	Required parking
	Major institutions parking and transportation
	Parking quantity exceptions

21

5 - Right-of-Way Improvements Manual

The ROWIM referred to the following Standard Plans and Specifications.

ROWIM Section	Standard Plans and Specifications Referenced
4.5.1 Design Cross Section	Standard Plans: 030, 400, 401, 402, 403
4.6.1 Roadway Width	Standard Plans: 400, 401, 402, 405, 410, 411
4.7.1 Roadway Pavement References	• Standard Plan: 401, 402, 403, 405
	Standard Specification: 2-09
4.8.1 Intersections References	Standard Plans: 422a, 422b, 422c
4.9.1 Driveways References	Standard Plans: 430, 431
4.10.1 Curbs References	Standard Plans: 401, 402, 410, 411, 412, 413a, 413b
4.11.1 Sidewalks References	Standard Plans: 420, 421, 422, 430, 431
4.12.1 Crosswalks References	Standard Plans: 712
4.13.1 Bicycle Facilities References	Standard Plans: 265, 722, 724
4.14.1 Street Trees and Landscape Architectural Standards	• Standard Plans: 030, 100, 424a, 424b
	• Standard Specifications: 1-07.16(2), 8-01.3(2)B, 8-02, 8-14
4.16.1 Street Lighting References	Standard Plans: 500
	Standard Specifications: 8-30, 9-31
4.17.1 Street Drainage, Storm Drains and Sewers References	Standard Plans: 200 series
	Standard Specifications: Divisions 7 & 9
4.18.1 Water Mains References	• Standard Plans: 030, 300, 286a, 286b, 330a, 330b
	• Standard Specifications: 1-07, 7-10.3(5)C, 7-11, 9-30
4.19.1 Fire Protection References	• Standard Plans: 310a, 310b, 311a, 311b, 312, 313, 314
	Standard Specifications: 7-14
4.21.1 Clearances References	Standard Plan: 030
4.22.1 Structures Within the Right-of-Way References	Standard Plans: 141, 440a, 440b, 441, 442, 443a, 443b, 800, 801
4.25.1 Transit Zones References	Standard Plans: 423, 630
5.4 Creating an Accessible and Safe Work Site	Standard Specifications 1-07.1 (2), 1-07.16, 1-07.23, 1-07.28, and 1-10

The ROWIM also referred to the following:

- CAM 242: Tree Protection Regulations
- CAM 331: Environmentally Critical Areas: Tree and Vegetation Overview
- CAM 1180: Design Guidelines for Public Storm Drain Facilities
- CAM 2111: Checklist for Traffic Control Plan Submittal
- CAM 2112: Traffic Control Vendors
- CAM 2216: SDOT Street Improvement Permitting (SIP) Pre-Construction Process
- DPD CAM 507: Side Sewer Permits for Build-over Agreements
- DPD DR 3-2006/SPU DR 02-06 Requirements for Design and Construction of Service Drains (Drainage Water Discharges)
- DPD DR 2-2006/SPU DR 01-06 Requirements for Design and Construction of Side Sewers (Wastewater Discharges)
- SPU Core Tap Procedures
- Traffic Control Manual for In-Street Work
- Traffic Control Manual website

City of Seattle Report Form

LID/GSI - Review & Revise Local Codes

Document/ Code/ Rule/ Standard Reviewed:

Street Tree Manual, including the following sections:

- Street Tree Manual Table of Contents
- Introduction
- Section 1 Definitions
- Section 2 Protection of Trees During Construction
- Section 3 Removal, Replacement and Planting of Trees
- Section 4 Evaluating Tree Risk Exposure
- Section 5 Tree Maintenance Guidelines
- Section 6 Tree Reports

www.seattle.gov/transportation/docs/Street%20Tree%20Manual%20WEB.pdf

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Maureen Meehan	NPDES Stormwater Program Manager	NPDES compliance for SDOT	SDOT
Susan Paine	Strategic Advisor	Regulatory updates	SDOT/now SCL
Angela Steel	Public Space Management Implementation	Updates Street Use regulations and policies. Supervises inpsections and reviewers of Street uses.	SDOT
Shane Dewald	Landscape Architect	Urban Forestry & Landscape Architectural design and review of projects, planting plans and enforcement of tree protection.	SDOT
Nolan Rundquist	City Arborist	Supervises Arborculturist group	SDOT
Darren Morgan	Urban Forestry Manager	Manage the care of City owned Trees.	SDOT

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps? Please fill out the following table for any section of the Document/ Code/ Rule/ Standard that may potentially conflict with implementation of LID/GSI BMPs based on the topics outlined in Step 2.

Step 4 – Have you taken any steps to **FILL THE GAPS**? Has alternative language been drafted to address the conflict/gap?

Step 5 – Are you aware of any other City codes/documents that may be affected by the proposed revisions in Step 4?

	Step 2			Step 3	3	Step 4	Step 5
W	HAT topics did you r	eview?	V	VHERE are th		Have you taken any steps to	Are you aware of any other City codes/ docume
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
	Site Planning						
	Building locations	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Parking area locations	☐ Yes ☐ No ☑ Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Stormwater management facility locations	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Soils						
	Protecting and restoring healthy soil	Yes No Does not apply	Yes No Does not apply	Section 2.00 Protection of Trees During Construction	Soil disturbance is prohibited within the tree protection zone (TPZ) unless approved by the City. If soil damage occurs, contractors must provide mitigation and restoration in accordance with Compaction and Grade Change, Section 2 20 A&B and Soil Improvement, Section 5.50.	 Yes No The 2014 Street Tree Manual (STM) includes the following revisions to address the identified gaps: Prohibited Acts and Penalties The following list of terms describes actions that are subject to penalties. In addition to performing any of these actions, failure to obtain a permit or failure to follow the conditions of a permit, this manual or the Seattle City Ordinance may also lead to penalties. ■ Placing or storing materials, including but not limited to, stones, bricks, concrete, asphalt, fill soil, plastic sheeting, or construction materials, within the dripline of a <i>street tree</i> or other vegetation in public places. 	Yes No If yes, list code/ document title(s): • Compaction and Grade Change, Section 2 20 A&B • Soil Improvement, Section 5.50

	Step 2			Step 3	3	Step 4	Step 5
W	WHAT topics did you re	review?	V	WHERE are th	.he gaps?	Have you taken any steps to	Are you aware of any other City codes/ document
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
	Compost amendments	Yes No Does not apply	Yes No Does not apply	Property Owners: Tree Placement and Planting Recommendations	Soil amendment (compost) is recommended to improve poor soil structure that is typically associated with newly constructed planting strips and construction sites. This section does not require soil amendments in existing planting strips with well-developed soil and appropriate site and soil properties for drainage. Consider making soil amendment a requirement instead of a recommendation in areas with poor soil quality. Also consider adding a minimum depth of restoration for healthy soil quality (8" to 10" is the recommended depth for healthy root development in trees).	Yes No If yes, include language: New construction sites are required to amend soils under the stormwater code. No need to address here.	 Yes No If yes, list code/ document title(s): City of Seattle Standard Plans and Specifications for Municiple Construction
	Compaction	Yes No Does not apply	Yes No Does not apply	Property Owners: Street Tree Installation	See comments above under "Protecting and restoring healthy soil"	Yes No If yes, include language :	☐ Yes ☐ No
	Compaction (cont.)	Yes No Does not apply	Yes No Does not apply	Non Tree Service Contractor: Activities During Construction and Demolition	If compaction of soil occurs, it must be mitigated according to SDOT Urban Forestry for optimum compatibility with the tree species, soil, and site conditions. Consider adding introductory language to this section that states "Steps should be taken to avoid compaction; however, if compaction of the soil occurs	Yes No If yes, include language:. This page states, "Work within the dripline of a street tree requires that specific actions be taken to ensure the treeand soil are protected from construction damage"	☐ Yes ☑ No
	Landscaping, Nati	tive Vegetation,	Street Landsca	aping			

	Step 2			Step	3	Step 4 Step		Step 5	
W	HAT topics did you	review?	V	VHERE are t		Have you	taken any steps to	Are you a	aware of any other City codes/ docume
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILI	L THE GAPS?		may be affected?
	Tree preservation	Yes No Does not apply	No Does not apply □ Does not apply	Introduction Section 1.00 Definitions	A permit is required prior to commencing any work within the drip line of any 'street tree.' Permits are required for tree removal of regulated trees. Manual clarifies that it is the City policy to retain trees.	On April 29, 2013, (SMC 15.43), the Tordinance (the Street of Transportation's preserve trees in preserve trees in Chapter includes public right whether or not op boulevards, drives,	Tree and Vegetation Management Public Places 1. Makes it illegal to damage of destroy a street tree. 2. Prohibits topping, spurring, an attaching signs or other objects to trees. 3. Prohibits placement or storage construction materials adjacentrees. 1. Requires a permit to plant, perform major pruning, or na street tree. 2. Describes the permit application process. 3. Defines the criteria for grandenying a permit application 4. Requires a replacement tree a removal permit is granted 1. Defines responsibilities for stree maintenance. 2. Gives city authority to perform tree and trees on abutting propersonal trees are received providers. 1. Requires tree service providers. 2. Documents insurance requires for tree service providers. 3. Permits a property owner to perform work on street tree right of way as long as the verified or destroying street trees, verified arborist trees.	le Municipal Code in Public Places eattle Department ect, maintain, and if this manual, as en 'public places' eneath its surface, in avenues, ways, g strips, squares, d. The following nent in or d e of int to remove ation hting or in. e when d. street orm et trees erty. tree uisance. ders trees to tional A) rements of es in the work maging which enalties	 Right of Way Improvements Manual, Section City of Seattle Standard Plans and Specifical Municipal Construction, Standard Plan 030

	Step 2			Step	3	Step 4		Step 5
W	HAT topics did you	review?	V	VHERE are th	ne gaps?	Have you taken any steps to	Are you a	ware of any other City codes/ documer
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?		may be affected?
	Tree preservation (Continued)	Yes No Does not apply	Yes No Does not apply	Section 2.00 Protection of Trees During Construction	Section 2.0 identifies negative impact on tree health from construction. Methods for protecting trees (fencing and signs) are listed. The dimensions of the TPZ are identified in the definitions as 10 x diameter at breast height (DBH). Updated best practice requires calculating and protecting the Critical Root Zone (CRZ) and the drip line of a tree for tree protection. Limited information on tree pruning requirements is provided under the following categories: Minimum Pruning (crown cleaning only); Maximum Pruning (used in rare circumstances with no more than 25% of the functioning leaf stem removed); and Tree Workers (limited to qualified tree care specialists and certified tree workers). Further guidance on proper tree pruning timing, techniques, and certification standards should be provided. Methods for protecting trees during construction are provided for the following activities: soil compaction, grading, trenching or excavation, tunneling and directional drilling. Mitigation strategies for different types of construction disturbance are also provided.	Tree Protection Information for Other Contractors Tree Protection and Preservation - Introduction Tree Protection and Preservation - Introduction Street trees shall be retained and provements Manual, Cf describes the City's regulations for the public place. The engineering standards required to follow these plans and specifithere is work in the City's rights-of-way. To prevent injury to street trees, no work may occu tree's critical root zone (CRZ or 'Zone A') without specifion damage. Each street tree within a work zone that is not approved be fenced, including all unpaved areas of the manual. zone must be shown on all site plans for the plans of paper and the region of the region of the manual. Tree Protection Information for Other Contractors Tree Protection and Preservation - Introduction Street trees shall be retained and protected from in injury, and damage by permitted or unpermitted consistance in the right-of-way. The following requirements of Seattle's Right-of-Way Improvements Manual, Cf describes the City's regulations for the installation of a into the public place. The engineering standards co Seattle Standard Plans and Specifications for Municipal permitees are required to follow these plans and specifithere is work in the City's rights-of-way. To prevent injury to street trees, no work may occu tree's critical root zone (CRZ or 'Zone A') without specific more specifical to the specific actions be taken to ensure roots, and the soil are protected from construction dam activities in these zones affect both the tree's canoproots, and adequate protection measures are required trees from damage. Each street tree within a work zone that is not approved be fenced, including all unpaved areas of the critical prevent compaction, grading or other disturbance. See Fencing detail at the end of this section of the manual. zone must be shown on all site plans for the pelliprovements or activities such as removal of paw pavement, new paving, utili	cidental impacts, cruction or use of construction or use of construction. All ications whenever within a street that the tree, its age. Construction one B') of a street that the tree, its age. Construction or use of construction or use of construction. All ications whenever within a street cific authorization one B') of a street that the tree, its age. Construction on the tree's to protect street. I for removal shall cal root zone to be Tree Protection. The critical root ching and other oot zone, unless 33 drawing below	

	Step 2			Step	3	Step 4	Step 5	
W	HAT topics did you i	review?	V	VHERE are th	ne gaps?	Have you taken any steps to	Are you a	aware of any other City codes/ docume
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?		may be affected?
Categories	Tree preservation (Continued)	Yes No Does not apply	Yes No Does not apply	Section 3.00 Removal, Replacement and Planting of Trees	Section 3.0 requires a written permit to remove a regulated tree and a description of tree replacement requirements, conditions, and installation procedures.	Street Tree Removal and Replacement A street tree must be protected and preserved unless Street Use Permit authorizing the removal and replacer Street trees that are removed must be replaced with the another species that provides comparable or greater camaturity, providing that the planting site has sufficient the replacement tree. Removal of a street tree with without replacing the tree is a violation of City ordinance penalty. A street tree may not be removed unless SDOT determine The street tree is a hazardous tree and cannot be releazardous condition through actions other than rem The street tree poses a public safety hazard. In otherwise healthy tree may have grown in such not compatible with the safe operation of the system. A native tree, germinating naturally at the clearance zone required at an arterial interexample; The street tree is in such a condition of poor his vigor that removal is justified; or The street tree cannot be successfully retained or private construction or development confliction must be confirmed and removal approved by Strorestry. In all cases, a tree removal permit application requires City review and approval, unless specifically waived Forestry: Completed SDOT Street Use General Permit Application 2. Completed SDOT Urban Forestry Permit Application 3. Payment of any fees associated with administration occupation or use of the right-of-way 4. Verification of neighborhood notification or tree post Arborist report, if needed to document the existence All street trees that have been assessed and approvemoval, including emergency removals, are subject to 1 Standards (below). With the exception of emergency rethe permit must be on site during the removal process Emergency Removal Conditions for more information conditions. The removal permit must be on site during the removal process Emergency Removal Conditions for more information conditions.	e same species, or anopy coverage at space to support nout a permit or ce and subject to the stat: lieved of its noval; an some cases, an a way that it is transportation and growing into rsection is one ealth or poor d, due to public ts. The conflict DOT Urban the following for by SDOT Urban tion of the permit, sting. The conflict poor delay of the permit, sting. The section on about emergency all process. Street to mobility within	

TA TA	Step 2 /HAT topics did yo	u review?	V	Step : VHERE are the		Step 4 Have you taken any steps to	Step 5 Are you aware of any other City codes/ docume
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
Cutchonics	Tree preservation (Continued)	Yes No Does not apply	Yes No Does not apply	Section 4.00 Evaluating Tree Risk Exposure	Section 4.0 describes required conditions and protocols for emergency tree removal and hazard tree assessment. A tree evaluation checklist is provided for property owners to facilitate tree hazard assessment.	The 2014 STM includes the following revisions to address the entering these important features of our "Emereducing stormwater runoff from impervious surfaces need for additional impervious surfaces. The tree evaluation form to determine the health of whether or not a tree qualifies as a tree hazard is fealone form to be completed and submitted by a tree SDOT Urban Forestry may require an Arborist Report support of a street tree removal permit application. The must be prepared by an ISA Qualified Tree Risk Assessore the following: A completed ISA Tree Evaluation Form – see Apper A brief letter that includes: Arborist's name and certification number Site address and date of inspection Description of inspection methods used to ide Description of inspection methods used to ide Description of alternative risk reduction optic lieu of removal Up to 6 photographs that clearly depict the defects condition SDOT Urban Forestry retains discretionary right to approximate the risk, short of tree removal. For more information regarding the Tree Risk Assess Appendix D Emergency Removal Conditions When a street tree is in a condition that poses an immit public place, and no other risk abatement options exist removed without prior City review or approval. In contact SDOT's 24-hour Emergency Dispatch at (2 notify SDOT of the intended action. In emergency removal cases, the property owner professional must substantiate conditions for removal Sufficient documentation includes photographs, information, or other relevant information and complet permit application for tree removal and replacement. It is the preferred format. This information is to be sub Arborist within 24 hours, or next business day of the er All other authorizations are subject to the standard pro Tree Removal. Tree replacement is required for all tree removals, waived by SDOT Urban Forestry.	erald City", we are ce and reducing the of street tree and prmatted as a stand- per professional. It be submitted in the Arborist Report r and shall include the stand professional and the tree's risk per considered in the arborist report r and shall include the stand provided in the stand process, see the stand provided in the standard pro
	Screening	☐ Yes☐ No☐ Does not apply	Yes No Does not apply				

Step 2			Step 3			Step 4	Step 5
W	HAT topics did you r	review?	WHERE are the gaps?		ne gaps?	Have you taken any steps to Are you aware of any other City codes/ docu	
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
	Landscaping requirements for street frontages	Yes No Does not apply	Yes No Does not apply	Section 5.00 Tree Maintenance Guidelines	Section 5.0 describes prohibited maintenance acts, pruning standards for regulated trees, watering schedules for regulated trees, soil improvement techniques, insect and disease control practices, and tips for selecting an arborist or tree care professional.	Yes No The 2014 STM includes the following revisions to address the identified gaps • The contents of Section 5.0 were updated and expanded upon to provide more detail regarding pruning standards, soil improveme techniques, and insect and disease control. See language above for Tree and vegetation manageme in public places.	City of Seattle Standard Plans and Specifical Municipal Construction, Standard Plan 030
	Landscaping requirements for street frontages (Continued)	Yes No Does not apply	Yes No Does not apply	Section 3.00 Removal, Replacement and Planting of Trees	Section 3.30 Tree and Shrub Planting Specifications: describes the requirements for trees and shrubs planted as replacements for a Regulated Tree, initial plantings of regulated trees, or a planting as part of landscape plan subject to non-residential development approval.	 Yes No Requirements for planting on street frontages in regulated by DPI under the land use code. The street tree manual is specific to maintaining existing trees and requiring tree replacement when damaged or removed. 	Yes No If yes, list code/ document title(s): • Right of Way Improvements Manual, Chap • City of Seattle Standard Plans and Specification Municipal Construction, Standard Plan 030
	Landscaping requirements for street frontages (Continued)	Yes No Does not apply	Yes No Does not apply	Section 3.00 Removal, Replacement and Planting of Trees	Section 3.55 Planting Strip landscaping: specifies the planting strip requirement for various planting strip widths and the type of acceptable vegetation planting for each planting strip type. A street use permit is required for all ROW improvements, plantings, or paving.	 Does not apply Requirements for planting on street frontages in regulated by DPI under the land use code. The street tree manual is specific to maintaining existing trees and requiring tree replacement when damaged or removed. 	Does not apply
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances	Yes No Does not apply	Yes No Does not apply			□ Does not apply □ Does	not apply
	Shared driveways	Yes No Does not apply	Yes No Does not apply			□ Does not apply □ Does	not apply
	Minimum driveway width	Yes No Does not apply	Yes No Does not apply				not apply
	Use of permeable pavement for driveways	Yes No Does not apply	Yes No Does not apply				not apply
	Two-track driveway design	☐ Yes ☐ No ☑ Does not apply	Yes No Does not apply			□ Does not apply □ Does	not apply
	Bulk and Dimensi						

Step 2		Step 3			Step 4	Step 5	
W	HAT topics did you r	review?	WHERE are the gaps?			Have you taken any steps to	Are you aware of any other City codes/ docume
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
	Building setbacks	Yes	Yes		7 - 7 - 7	□ Does not apply	□ Does not apply
		No	☐ No				
		Does not apply	Does not apply	1			
	Height limits	Yes	Yes			Does not apply	□ Does not apply
		No	No				
	Maximum square	Does not apply Yes	∑ Does not apply Yes			Does not apply	Does not apply
	footage	No	No			Does not apply	Does not apply
	Tootage	Does not apply	Does not apply				
	Clustering	Yes	Yes			Does not apply	□ Does not apply
	Ciusternig	No No	No No				2005 not apply
		Does not apply	Does not apply				
	Clearing and Grad						
- Whi	Protecting existing	Yes	Yes			□ Does not apply	□ Does not apply
	infiltration	☐ No	☐ No				
		Does not apply	Does not apply				
	Conserving native	Yes	Yes	Section 2.00 Protection of Trees	See description of this section under "Tree Preservation."	Yes	Yes
	vegetation/soils	No		During Construction		□ No	No
		Does not apply	Does not apply	•		If yes, include language :	If yes, list code/ document title(s):
							Seattle Municipal Code, Title 15. Plight of May Improvements Manual Section 4.31.3.
							Right of Way Improvements Manual, Section 4.21.2 City of Scottle Standard Plans and Specifications for Municipal
							 City of Seattle Standard Plans and Specifications for Municipal Construction, Standard Plan 030
	Construction sequencing		Yes	Under each main	Permits are required for any work to be	Does not apply	Does not apply
	construction sequencing	No	No	user section:	performed on street tree. A Tree,		2005 not apply
		Does not apply	Does not apply	Property Owners, Tree Service	Vegetation and Soil Protection Plan (TVSPP) plan is also required prior to		
				Providers, and Non	any other construction activity that		
				Tree Service Contractor	occurs near or within the CRZ of any street tree.		
	Street and Roads						
	Travel lane widths	Yes No	Yes			□ Does not apply	Does not apply
		∐ No	☐ No				
		Does not apply	Does not apply			5-7	
	Right-of-way widths	Yes	Yes			Does not apply	□ Does not apply
		□ No □ Does not apply	No				
	lice of nermonable		Does not apply			N Doos not on the	M Deac not apply
	Use of permeable pavement for streets and	Yes No	Yes No			Does not apply	Does not apply
	roads	Does not apply	Does not apply				

Step 2			Step 3			Step 4	Step 5			
W	THAT topics did you r	review?	W	HERE are t	he gaps?	FILL THE GAPS?	Are you aware of any other City codes/ docume may be affected?			
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap					
	Placement of utilities	Yes	Yes			□ Does not apply	□ Does not apply			
	under paved areas in the	☐ No	No							
	ROW	Does not apply	Does not apply							
	Required turn around	Yes	Yes			□ Does not apply	Does not apply			
	area (e.g., Fire, USPS)	No	No							
	C. I. II III.	Does not apply	Does not apply			N	N 2			
	Sidewalk widths	Yes	Yes			□ Does not apply	Does not apply			
		☐ No ☐ Does not apply	☐ No ☑ Does not apply							
	Sidewalk slope	Yes	Yes							
	Sidewalk slope	No	No No			Does not apply	Does not apply			
		Does not apply	Does not apply							
	Minimum cul-de-sac	Yes	Yes			□ Does not apply	□ Does not apply			
	radius	I ☐ No	No			<u></u>				
		Does not apply	Does not apply							
	Alternatives to cul-de-	Yes	Yes			□ Does not apply	□ Does not apply			
	sacs	☐ No	☐ No							
		Does not apply	Does not apply							
	Parking									
,	Minimum/maximum	Yes	Yes			□ Does not apply	Does not apply			
	parking ratios	No	☐ No							
		Does not apply	Does not apply							
	Permeable paving use	Yes	Yes			□ Does not apply	Does not apply			
		No	No							
	5 11 !! !!	Does not apply	Does not apply			N	N 2			
	Parking stall dimensions	Yes	Yes			Does not apply	Does not apply			
		☐ No ☐ Does not apply	☐ No☑ Does not apply							
	Driving aisle dimensions	Yes	Yes Yes			□ Does not apply				
	Driving asse differsions	☐ No	No No			Does not apply	Does not apply			
		☐ No ☑ Does not apply	Does not apply							
	Off-street parking	Yes	Yes			Does not apply	□ Does not apply			
	regulations	│	No							
		Does not apply	Does not apply							
	Design Guidelines and Standards									

Step 2		Step 3			Step 4	Step 5	
W	HAT topics did you r	eview?	WHERE are the gaps?		Have you taken any steps to	Are you aware of any other City codes/ docume	
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?
	Trees and bioretention	Yes No Does not apply	Yes No Does not apply	Throughout manual	No mention of trees within bioretention areas is made. Suggest referencing stormwater manual specifications for tree care within bioretention facilities.	Yes No If yes, include language: GSI sites are addressed elsewhere and be the predominant feature of the site with trees secondary. People would not be referring to a Street Tree Manual for information on a GSI system. In addition, the scope of this Director's rule is limited to interpret specific Ordinance which does not include bioretention facilities.	□ Does not apply
	Continuous curb requirements	☐ Yes ☐ No ☑ Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Curb radii	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Stormwater Manag	gement and Mai	intenance				
	Training	∑ Yes ☐ No ☐ Does not apply	Yes No Does not apply	Section 2.00 Protection of Trees During Construction Section 5.00 Tree Maintenance Guidelines	Tree workers must be a qualified tree care specialist or certified tree worker with the following credentials: • ISA Certified Arborist or ISA Certified Tree Worker • Commercial General Liability Insurance (CGL) • Seattle business license	☐ Yes ☑ No If yes, include language :	
	Enforcement	∑ Yes ☐ No ☐ Does not apply	Yes No Does not apply	Section 2.00 Protection of Trees During Construction	In the event that a street tree or its roots are damaged, the contractor or property owner is subject to a penalty rate of \$100.00 per inch of damage (measurement is calculated by the width of the wound measured across the grain at the widest point).	Yes No The 2014 STM includes the following revisions to address the identified gaps: • Added the language "Damage for incremental damage to structural limbs and/or roots may be assessed as a percentage of appraised value of the tree as calculated by the current edition of the Council of Tree and Landscape Appraisers 'Guide for Plant Appraisal'. If more than 50% of the roots, limbs, or circumference of trunk cambium is damaged or destroyed, the tree will be considered a total loss."	
	Enforcement (continued)		Yes No Does not apply	Section 6.00 Tree Reports	This section describes the requirements of a tree removal permit, its contents, associated fees, and submittal procedures.	☐ Yes ☑ No If yes, include language :	

Step 2		Step 3			Step 4	Step 5		
WHAT topics did you review?			WHERE are the gaps?			Have you taken any steps to	Are you aware of any other City codes/ docume	
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	may be affected?	
	Education	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply	
	Zoning requireme	ents						
	Individual open space requirements	Yes No Does not apply	Yes No Does not apply			Does not apply	□ Does not apply	
	Passive vs. active open space requirements	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply	
	Opportunities for Performance Based Designs (PUDs)	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply	
	Critical Areas and							
	Allowance of LID/GSI BMPs in critical areas/shorelines when compatible	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply	

Additional Notes:

The Street Tree Manual also referred to the following (See also, Appendices that follow):

- Standard Specifications, Section 1-07.16(2) Tree, Vegetation, and Soil Protection
- Standard Plan 100a Deciduous Tree Planting in Planting Strip
- Standard Plan 132a Tree Protection During Construction
- Standard Plan 132b Reusable Temporary Tree & Landscape Protection Fence
- Standard Plan 133 Tree Protection During Trenching, Tunneling, or Excavation
- ISA Tree Risk Assessment Form and Guide

Appendix A

Pruning Requirements

Abutting property owners are required to prune *street trees* to achieve compliance with existing vertical clearance standards as shown in the Tree Selection and Spacing portion of the <u>Street Tree Planting</u> section of this manual. Pruning to meet ROW clearance standards shall also include work to minimize obstructions with other transportation infrastructure (streetlights, traffic signals, signs, etc.) while ensuring the health and natural growth habit of the *street tree*. Abutting property owners are required to obtain a permit if the pruning constitutes major pruning. No permit is required for minor pruning.

Any person intending to perform major pruning of a street tree must obtain an SDOT Street Use permit prior to performing the work. Major pruning is defined as:

Removal of branches two inches in diameter or greater; removal of roots two inches in diameter or greater; or removal of branches constituting more than 15 percent of a tree's foliage bearing area.

Applications for an SDOT Street Use permit to perform major pruning must include a pruning plan and be submitted with the Street Use permit application. The plan must be approved by SDOT. The pruning plan must comply with the minimum Right of Way clearance standards and the following major pruning standards:

<u>Maximum Pruning Allowed</u>: SDOT Urban Forestry will evaluate maximum pruning on an individual tree basis. No more than ¼ (25 percent) of the functioning leaf and stem area may be removed within one calendar year on any street tree. Foliage pruning may not remove branches or limbs to a degree that would cause the tree to be physically or aesthetically unbalanced. Trees are individual in form and structure, and pruning needs may not always fit strict rules. The permit applicant shall assume all responsibility for special pruning practices that vary from the standards outlined in this manual. A pruning plan submitted at the time of permit application shall demonstrate that the proposed work conforms to the maximum pruning guidelines described here:

Types of Pruning: There are six types of pruning that may be performed on mature Street trees. Prior to performing major pruning, the tree worker is required to be familiar with these types of pruning as defined and described in ANSI A300 (Part 1): Standard Practices for Tree, Shrub, and Other Woody Plant Management. The pruning plan submitted at the time of permit application shall use these terms to describe the proposed work

Crown Cleaning	The removal of dead, dying, diseased, crowded, weakly attached, low-vigor branches, and water sprouts from a tree crown.							
Crown Thinning	The selective removal of branches to increase light penetration and air movement, and to reduce weight.							
Crown Raising	The removal of the lower branches of a tree in order to provide clearance.							
Crown Restoration	Crown restoration pruning should improve the structure, form, and appearance of trees that have been severely headed, vandalized, or storm damaged.							
Crown Reduction	The reduction of the top, sides, or individual limbs by the means of removal of a leader or longest portion of a limb to a lateral no less than one-third of the total diameter of the original limb removing no more than one-fourth of the leaf surface.							
Utility Pruning	The removals of branches to prevent the loss of utility service, prevent damage to equipment, avoid impairment, and uphold the intended usage of the utility space. Only a qualified line clearance tree trimmer or qualified line clearance tree trimmer trainee should perform this work.							

Pruning Guidance

Distressed trees require as much leaf area as possible to overcome stressed conditions.

To avoid additional *injury*, the following measures may be followed for these trees:

- **Injury or Disturbance:** If a tree has been damaged by *injury* or *disturbance*, delay pruning until deadwood becomes evident (typically 1 to 3 years after *injury*). Crown cleaning is recommended in these cases.
- **Neglect:** Trees that have received little or no care or maintenance may need moderate crown thinning, reduction of end weights or entire crown restoration.

Hazardous trees of any species may be pruned any time of the year for risk abatement reasons.

6- Street Tree Manual

Pruning Young trees

The average life expectancy for trees growing in harsh urban conditions is much shorter than if the tree is growing in ideal conditions. Pruning trees early will improve life expectancy and is a proven, cost-effective measure to prevent costly intervention in the future. Well-timed and careful pruning results in safer trees with fewer branch failures.

- Should be pruned during the second or third year after planting to improve their structure, and only minor crown cleaning every 3-7 years thereafter. Refer to ISA Tree Pruning Guidelines for more detailed information: http://www.treesaregood.com/treecare/pruning_young.aspx
- Do not top the main leader.
- Select permanent branching and allow temporary low branching on the lowest part of the trunk to remain. Main branches should eventually be spaced at least 18-inches apart to alleviate a tight grouping of branches.

Timing of Pruning

To reduce the probability of insect infestation, disease or infection:

Pine (Pinus spp.) or Elm (Ulmus spp.): Do not prune May-October to reduce possible exposure to bark beetle (pine) or Dutch Elm Disease (elm)

Other considerations:

Avoid pruning during the flush of spring shoot growth and during fall, prior to dormancy

Trees with thin bark: Do not prune in summer when sun scald *injury* may be a factor Deciduous trees (leafless in winter): Best pruned November-February, but can be pruned any time throughout the year for safety-related issues.

6- Street Tree Manual

City of Seattle Report Form LID/GSI - Review & Revise Local Codes

Document/ Code/ Rule/ Standard Reviewed:

SeaTran DR 00-1 Shoreline Street Ends

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Jennifer Wieland	Strategic Advisor II	Manages PSM	SDOT,
Angela Steel	Public Space Management Implementation	Updates Street Use regulations and policies. Supervises inpsections and reviewers of Street uses.	SDOT
Amy Gray	Term Permit Specialist	Assists coordinating and drafting code amendment legislation and public space program policies	SDOT
Diane Walsh	P + D Specialist II	Coordinates Shoreline Street End Program	SDOT
Shannon Glass	P + D Specialist II	Coordinates PSM programs	SDOT
Maureen Meehan	Stormwater Program Manager	Stormwater compliance for SDOT	SDOT,
Pam Emerson	Project Manager	Green Infrastructure Planning	OSE/SPU

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps? Please fill out the following table for any section of the Document/ Code/ Rule/ Standard that may potentially conflict with implementation of LID/GSI BMPs based on the topics outlined in Step 2.

Step 4 – Have you taken any steps to **FILL THE GAPS**? Has alternative language been drafted to address the conflict/gap?

Step 5 – Are you aware of any other City codes/documents that may be affected by the proposed revisions in Step 4?

Step 2		Step 3			Step 4	Step 5	
W	HAT topics did you r	review?	W	HERE are th	ne gaps?	Have you taken any steps to	Are you aware of any other
				Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap Identified	Reference	Requirement/Conflict/Gap		may be affected?
	Site Planning						
	Building locations	Does not apply	Does not apply			Does not apply	Does not apply
	Parking area locations		Yes No Does not apply	Section 4.12 – Permit Application Requirements	All proposed plans should provide either physical or visual access to the water and parking in compliance with the Americans with Disabilities Act (ADA).	□ Does not apply	□ Does not apply
				Section 7.0 – SEATRAN Review of Application	SEATRAN will ensure that physical or visual access to the water and parking for persons with disabilities are included in plans where the topography is suitable and that ADA standards met.	Yes: New language (Now section 9.2) SDOT will require that physical or visual access to the water and parking for persons with disabilities are included in plans where the topography is suitable, and that ADA standards be met. Where the topography allows, SDOT will require that space be allocated for appropriate low-impact development and green stormwater infrastructure improvements.	□ Does not apply
	Stormwater management facility locations	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Soils						
	Protecting and restoring healthy soil	Does not apply	Does not apply			□ Does not apply	Does not apply
	Compost amendments	Does not apply	Does not apply			Does not apply	Does not apply
	Compaction	Does not apply	Does not apply			Does not apply	Does not apply
	Landscaping, Nat			oing			
T	Tree preservation	Does not apply	Does not apply			Does not apply	Does not apply
	Screening	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Landscaping requirements for street frontages		∑ Yes ☐ No ☐ Does not apply	Section 5.32 – Community Street End Development	This section encourages the installation of low maintenance, drought-resistant landscaping. Considered revising language to encourage native low maintenance landscaping. Drought resistant plants that do well in the NW tend to be native. This requirement ensures vegetation survival, which provides stability to soils, reducing erosion and run off.	No New language: The installation of low maintenance, drought-resistant, native landscaping is encouraged.	☐ Yes ☑ No
	Hard and Impervio						
""	Maximum impervious surface allowances	Does not apply	Does not apply			□ Does not apply	□ Does not apply

Step 2			Step 3			Step 4	Step 5
W	HAT topics did you re	eview?	WHERE are the gaps?			Have you taken any steps to	Are you aware of any other
				Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap Identified	Reference	Requirement/Conflict/Gap		may be affected?
	Shared driveways	Yes	Yes	Section 6.0 – Permitted Private	If improvements are made to improve access for a private owner, such as a	□ Does not apply	□ Does not apply
		No	No	Uses	driveway or walkway, it must also be		
		Does not apply	Does not apply		available for and not limit public access and use along the shoreline street end.		
	Minimum driveway width	Does not apply	□ Does not apply		3	Does not apply	□ Does not apply
	Use of permeable	Does not apply				Does not apply	Does not apply
	pavement for driveways		Does not apply			S-2	
	Two-track driveway	Does not apply	□ Does not apply			Does not apply	□ Does not apply
	design						
	Bulk and Dimension	onal Considerat	tions				
	Building setbacks	Does not apply	Does not apply			Does not apply	□ Does not apply
	Height limits		Yes	Section 4.12 – Permit Application	All proposed plans should provide either physical or visual access to the	Does not apply	□ Does not apply
		No	No	Requirements	water and parking in compliance with		
		Does not apply	Does not apply		the Americans with Disabilities Act (ADA).		
	Maximum square	Does not apply	□ Does not apply		,	Does not apply	□ Does not apply
	footage					S-2	
	Clustering	Does not apply	Does not apply			Does not apply	Does not apply
	Clearing and Grad	ling					
	Protecting existing	Does not apply	Does not apply			Does not apply	□ Does not apply
	infiltration						
	Conserving native	Does not apply	Does not apply			Does not apply	□ Does not apply
	vegetation/soils	N Dana makamaka	N Dana wat awali			M De constanti	N Dana ant analy
	Construction sequencing	Does not apply	Does not apply			Does not apply	Does not apply
	Street and Roads						
					T		
	Travel lane widths	Does not apply	Does not apply			Does not apply	Does not apply
	Right-of-way widths Use of permeable	Does not apply Does not apply	✓ Does not apply✓ Does not apply			✓ Does not apply✓ Does not apply	✓ Does not apply✓ Does not apply
	pavement for streets and	Does not apply	Does not apply			Does not apply	Does not apply
	roads						
	Placement of utilities	Does not apply	□ Does not apply			Does not apply	□ Does not apply
	under paved areas in the						
	ROW						
	Required turn around area (e.g., Fire, USPS)	Does not apply	Does not apply			Does not apply	Does not apply
	Sidewalk widths	Does not apply	Does not apply			Does not apply	□ Does not apply
	Sidewalk slope	Does not apply	Does not apply			Does not apply	Does not apply
	Minimum cul-de-sac	Does not apply	Does not apply			Does not apply	☐ Does not apply
	radius						

	Step 2			Step 3	3	Step 4	Step 5
W	HAT topics did you r	eview?	W	HERE are th		Have you taken any steps to	Are you aware of any other
				Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap Identified	Reference	Requirement/Conflict/Gap		may be affected?
	Alternatives to cul-de-	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	sacs						
	Minimum/maximum	Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	parking ratios						
	Permeable paving use	Does not apply	Does not apply			Does not apply	Does not apply
	Parking stall dimensions	Does not apply	Does not apply			Does not apply	Does not apply
	Driving aisle dimensions	Does not apply	Does not apply			Does not apply	Does not apply
	Off-street parking	Does not apply	Does not apply			Does not apply	Does not apply
	regulations						
	Design Guidelines	and Standards					
	Trees and bioretention	Does not apply	Does not apply			Does not apply	□ Does not apply
	Continuous curb	Does not apply	Does not apply			Does not apply	□ Does not apply
	requirements						5-7
	Curb radii	Does not apply	Does not apply			Does not apply	Does not apply
	Stormwater Management and Ma		intenance				
7	Training	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Enforcement	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Education	Does not apply	Does not apply			Does not apply	Does not apply
	Zoning requireme	nts					
	Individual open space requirements	Does not apply	Does not apply			□ Does not apply	□ Does not apply
	Passive vs. active open space requirements	Yes No Does not apply	Yes No Does not apply	Section 2.0 - Definitions Section 5.0 - Community Street End Development Section 6.0 - Permitted Private Uses	"Shoreline street end" means the land portion of a street segment that provides the public with visual or physical access to a body of water and its shoreline, or could provide such access if improved. All shoreline street ends which are accessible to the public will be signed. Maritime industrial land uses that show an important operational/business need for an adjacent shoreline street that would be incompatible with both the business operation and safe access by the public will be considered to be a higher priority use of the street end than public access.	■ Does not apply	□ Does not apply
	Opportunities for Performance Based Designs (PUDs)	☑ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply

W	Step 2 YHAT topics did you i	review?	W	Step : HERE are th		Step 4 Have you taken any steps to	Step 5 Are you aware of any other	
Categories	Topics	Topic Reviewed	Gap Identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	City codes/ documents that may be affected?	
	Allowance of LID/GSI BMPs in critical areas/shorelines when compatible	∑ Yes	∑ Yes	4.1 Permit Application Requirements	Considered adding language to minimize impervious surface, minimize stormwater runoff, and preserve native vegetation.	New language: An adjacent property owner, a community organization, individual volunteers, or another group of neighborhood sponsors may apply for a permit to improve a shoreline street end for public access or views on an application form obtained from SDOT. Whenever possible, plans should minimize impervious surface, minimize stormwater runoff, and preserve native vegetation. All applications must provide the following standard information as an attachment to the application form or request:	□ Does not apply	
		∑ Yes	∑ Yes	4.1.2	Add language for GSI	Yes New language: A plan drawing or schematic plan of all improvements proposed for the street end. Improvements to be shown include, but are not limited to, the following: any structure of any kind; any new vegetation or rearrangement of existing vegetation; green stormwater infrastructure (e.g., swales, rain gardens); grading; any new surface material including gravel; and proposed signs.	□ Does not apply	

The Shoreline Street Ends DR did not contain any significant barriers to LID/GSI implementation. Language was updated to include explicit reference to/encouragement of LID best practices.

Also reviewed the language in this DR to ensure consistency with Shoreline/Critical Areas regulations.

LID - Review & Revise Local Codes

Document/ Code/ Rule/ Standard Reviewed: Seattle Municipal Code (SMC) 15.43 - Tree and

Vegetation Management in Public Places

15.43.010 Authorizing official

15.43.020 Tree preservation and protection

15.43.030 Street Use permit required

15.43.040 Maintenance of trees

15.43.050 Tree Service Provider requirements

15.43.060 Director's review

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Maureen Meehan	NPDES Stormwater Program Manager	NPDES compliance for SDOT	SDOT
Susan Paine	Strategic Advisor	Regulatory updates	SDOT/now SCL
Angela Steel	Public Space Management Implementation	Updates Street Use regulations and policies. Supervises inpsections and reviewers of Street uses.	SDOT
Shane Dewald	Landscape Architect	Urban Forestry & Landscape Architectural design and review of projects, planting plans and enforcement of tree protection.	SDOT
Nolan Rundquist	City Arborist	Supervises Arborculturist group	SDOT
Darren Morgan	Urban Forestry Manager	Manage the care of City owned Trees.	SDOT

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



1

Measures to minimize loss of native vegetation

Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps? Please fill out the following table for any section of the Document/ Code/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – Have you taken any steps to **FILL THE GAPS**? Has alternative language been drafted to address the conflict/gap?

Step 5 – Are you aware of any other City codes/documents that may be affected by the proposed revisions in Step 4?

	Step 2			Ste	ep 3	Step 4	Step 5
WHAT	Γ topics did you	review?		WHERE ar	re the gaps?	Have you taken any steps to	Are you aware of any other
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	City codes/ documents that may be affected?
	Site Planning	•					
	Building locations	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Parking area locations	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Stormwater management facility locations	Yes No Does not apply	Yes No Does not apply			☑ Does not apply	□ Does not apply
	Soils						
	Protecting and restoring healthy soil	Yes No Does not apply	Yes No Does not apply	NA	There is no discussion of protecting and restoring healthy soil for long term tree and vegetation health.	☐ Yes ☐ No Language is included within the updated Street Tree Manual.	Yes No If yes, list code/ document title(s): Chapter 15.43 Street Tree Manual.
	Compost amendments	Yes No Does not apply	Yes No Does not apply	NA	Add compost amendments/ top dressing to support soil and vegetation health.	☐ Yes ☐ No Language is included within the updated Street Tree Manual.	✓ Yes☐ NoIf yes, list code/ document title(s):Chapter 15.43 Street Tree Manual.

	Step 2			Ste	ep 3	Step 4	Step 5
WHAT	topics did you	review?			e the gaps?	Have you taken any steps to	Are you aware of any other
				Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap identified	Reference	Requirement/Conflict/Gap		may be affected?
categories	Compaction	Yes No Does not apply	Yes No Does not apply	NA NA	There is not a specific mention of soil compaction within the dripline or critical root zone (CRZ) of trees. Add language specifically prohibiting compaction of soils during construction and maintenance activities (already have language prohibiting the stockpiling of materials in Section 15.43.020).	☐ Yes ☐ No Language is included within the updated Street Tree Manual.	Yes No If yes, list code/ document title(s): Chapter 15.43 Street Tree Manual.
	Landscaping	, Native Vegeta	ation, Street La	andscaping	l		
	Tree preservation	Yes No Does not apply	Yes No Does not apply	Tree Preservation and Protection 15.43.020 Street Use Permits required 15.43.030	No person shall destroy, kill, injure, mutilate, or deface a street tree or vegetation in a public place by any means. The code restricts the placing or storing of construction and landscaping materials within the dripline of trees. Consider adding protection for soil and roots within the Critical Root Zone (CRZ), when possible, and not just the dripline. City policy is to retain and preserve street trees whenever possible. Removed street trees shall be replaced with a tree species from the approved by the Director.	Yes No If yes, include language: Language is included within the updated Street Tree Manual.	☐ Yes ☐ No If yes, list code/ document title(s): Chapter 15.43 Street Tree Manual.

	Step 2			Ste	ep 3	Step 4	Step 5
WHAT	Γ topics did you	review?		WHERE are	e the gaps?	Have you taken any steps to	Are you aware of any other
		T		Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap identified	Reference	Requirement/Conflict/Gap	N Doos not apply	may be affected? Does not apply
	Screening	Yes No Does not apply	Yes No Does not apply			□ Does not apply	Does not apply
	Landscaping requirements for street frontages	Yes No Does not apply	Yes No Does not apply	Street Use permits required 15.43.030 Tree Service Provider requirements 15.43.050	Only tree species identified in the DOT approved tree list or trees approved by the Director may be planted in public spaces. Any major pruning, removal, or treatment of street trees by a Tree Service Provider shall be supervised by an International Society of Arboriculture (ISA) certified arborist or an ISA certified tree worker and shall comply with the Street Tree Manual rules governing trees in public spaces. Consider adding additional information regarding the protection of and management of non-tree vegetation. Text included under 15.43.020 is only location where non-tree vegetation is covered. Suggest adding reference to Section 8-01.3(2)B Tree, Vegetation and Soil Protection Plan (TVSPP) of SWM.	Yes No If yes, include language: Ordinances do not reference specs or codes for added requirement. Specs are developed separately and referred to by Directors rules. References to the TVSPP are made in the Street Tree Manual, the companion Director's Rule for this Ordinance. Additionally, there is now language about managing non-tree vegetation in a new chapter in the Street Tree Manual.	Yes No If yes, list code/ document title(s): Chapter 15.43 Street Tree Manual.
	Hard and Imp	ervious Surfa	ces				
	Maximum impervious surface allowances	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Shared driveways	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Minimum driveway width	Yes No Does not apply	Yes No			□ Does not apply	□ Does not apply
	Use of permeable pavement for driveways	Yes No Does not apply	Yes No			□ Does not apply	□ Does not apply

	Step 2		Step 3			Step 4	Step 5
WHAT	Γ topics did you	review?		WHERE are	the gaps?	Have you taken any steps to	Are you aware of any other
		T		Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap identified	Reference	Requirement/Conflict/Gap	N Deep not apply	may be affected?
	Two-track driveway design	Yes No	Yes No			Does not apply	Does not apply
	diffeway design		Does not apply				
	Bulk and Dim	ensional Cons					
	Building setbacks	Yes	Yes			Does not apply	□ Does not apply
		☐ No	No Does not apply				
		Does not apply				5_2	
	Height limits	Yes	Yes			□ Does not apply	Does not apply
		No	No No No not anni.				
	Maximum square	Does not apply Yes	Does not apply Yes				Does not apply
	footage	No	☐ Yes ☐ No			Does not apply	Does not apply
	Tootage	Does not apply					
	Clustering	Yes	Yes			□ Does not apply	□ Does not apply
		No	No				
		Does not apply	Does not apply				
	Clearing and						
. Aller	Protecting existing		Yes			Does not apply	Does not apply
	infiltration	□ No	No Does not apply				
	Consorving native	Does not apply				M Doos not apply	N Deec not apply
	Conserving native vegetation/soils	Yes No	Yes No			Does not apply	Does not apply
	vegetation/30ii3	Does not apply					
	Construction	Yes	Yes			□ Does not apply	□ Does not apply
	sequencing	No	No				,
		Does not apply	Does not apply				
	Street and Ro	pads					
	Travel lane widths	Yes	Yes			□ Does not apply	Does not apply
			No				
	Dight of way	Does not apply				M Doos not apply	N Doos not apply
	Right-of-way widths	Yes No	Yes No			Does not apply	Does not apply
	Widths	Does not apply					
	Use of permeable	Yes	Yes			□ Does not apply	□ Does not apply
	pavement for	No	□ No				
	streets and roads	Does not apply	Does not apply				
	Placement of	Yes	Yes			□ Does not apply	□ Does not apply
	utilities under	No	□ No				
	paved areas in the	Does not apply	Does not apply				
	ROW						

	Step 2			Ste	p 3	Step 4	Step 5
WHAT	T topics did you	review?		WHERE are	e the gaps?	Have you taken any steps to	Are you aware of any other
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	City codes/ documents that may be affected?
	Required turn	Yes	Yes			□ Does not apply	□ Does not apply
	around area (e.g.,	No	No No				
	Fire, USPS) Sidewalk widths	Does not apply	Does not apply			N Dear not apply	N Dans not apply
	Sidewalk widths	Yes No	Yes No			□ Does not apply	Does not apply
		Does not apply	Does not apply				
	Sidewalk slope	Yes	Yes			□ Does not apply	□ Does not apply
		□ No	□ No				
	NA::::::::::::::::::::::::::::::::::::	Does not apply	Does not apply			N Dana wat a wali	M. Danas and analysis
	Minimum cul-de- sac radius	Yes No	Yes No			Does not apply	Does not apply
	3de radius	Does not apply	Does not apply				
	Alternatives to	Yes	Yes			□ Does not apply	□ Does not apply
	cul-de-sacs	□ No	□ No				
			Does not apply				
	Parking						
	Minimum/maxim	Yes	Yes			Does not apply	Does not apply
	um parking ratios	No Does not apply	No Does not apply				
	Permeable paving	Yes	Yes			Does not apply	Does not apply
	use	No	No			23 2 0 0 0 1 0 C 0 pp. 1	
		Does not apply	Does not apply				_
	Parking stall	Yes	Yes			Does not apply	Does not apply
	dimensions	No Does not apply	☐ No ☐ Does not apply				
	Driving aisle	Yes	Yes			Does not apply	Does not apply
	dimensions					<u></u>	
			No Does not apply				5-2
	Off-street parking	Yes	Yes			Does not apply	Does not apply
	regulations	No No Does not apply	☐ No ☐ Does not apply				
	Design Guide	elines and Star	· · · · · ·				
	Trees and	Yes	Yes			Does not apply	□ Does not apply
	bioretention	No No	No l				
	Continuous such		Does not apply			N Doos not apply	Door not apply
	Continuous curb requirements	Yes No	Yes No			Does not apply	Does not apply
		Does not apply	Does not apply				
	Curb radii	Yes	Yes			Does not apply	□ Does not apply
		No	No No				
		Does not apply	Does not apply				

	Step 2			Ste	ep 3	Step 4	Step 5
WHAT	T topics did you	review?			e the gaps?	Have you taken any steps to	Are you aware of any other
				Section	Summary of Existing	FILL THE GAPS?	City codes/ documents that
Categories	Topics	Topic Reviewed	Gap identified	Reference	Requirement/Conflict/Gap		may be affected?
	Stormwater I	Management ar	nd Maintenanc	е			
	Training	Yes No Does not apply	Yes No Does not apply	15.43.050 Tree Service Provider requirements	All tree service providers working on street trees must be registered by DOT. Any major pruning, removal, or treatment of street trees by a Tree Service Provider shall be supervised by an ISA certified arborist or an ISA certified tree worker. Tree workers must have current Tree Service Provider registration card and applicable Street Use permits.	□ Does not apply	□ Does not apply
	Enforcement	Yes No Does not apply	Yes No Does not apply	15.43.030 Street Use Permits Required	No person shall plant, remove, or perform major pruning on any street tree without first obtaining a Street Use Permit from the DOT, for street trees under the jurisdiction of the Department of Transportation.	Yes No If yes, include language:	Yes No If yes, list code/ document title(s):
	Education	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Zoning requi	rements					
	Individual open space requirements	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Passive vs. active open space requirements	Yes No	Yes No Does not apply			□ Does not apply	□ Does not apply
	Opportunities for Performance Based Designs (PUDs)	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Critical Areas	s and Shoreline	e Management				
	Allowance of LID BMPs in critical areas/shorelines when compatible	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply

Ord. 124166, Section 7, 2013. Section 15.43.010 Authorizing official

8 - Street Tree Ordinance

Section 15.04.020 Tree preservation and protection Section 15.04.025 Form of application Section 15.04.035. Street Use Permit Section 15.43.050. Tree Service Provider Registration Chapter 15.43 Street Tree Manual.

LID/GSI - Review & Revise Local Codes

Document/ Code/ Rule/ Standard Reviewed:

Seattle Municipal Code (SMC) Title 15 – Street and Sidewalk Use

- SMC 15.02 General Provisions
- SMC 15.04 Use and Occupations Permits
- SMC 15.06 Driveways and Curb Setbacks
- SMC 15.08 Areaways, Vents, And Elevators
- SMC 15.10 Marquees, Awnings, and Decorative Elements
- SMC 15.12 Signs, Banners and Street Clocks
- SMC 15.14 Newsstands
- SMC 15.16 Sidewalk Cafes
- SMC 15.17 Vending
- SMC 15.18 Dangerous Structures on Adjoining Property
- SMC 15.20 Building, Cleaning or Painting
- SMC 15.22 Building Construction/ Demolition
- SMC 15.24 Scaffolds
- SMC 15.26 Backfilling
- SMC 15.28 Building and Equipment Moving
- SMC 15.32 Franchise and Public Utility Permits and Regulations
- SMC 15.35 Filming
- SMC 15.36 Lifting Heavy Equipment
- SMC 15.38 Impounding
- SMC 15.40 Warning Lights and Barricades
- SMC 15.43 Tree and Vegetation Management in Public Places
- SMC 15.44 Excavation and Fills
- SMC 15.46 Debris in Public Places
- SMC 15.48 Miscellaneous Acts
- SMC 15.52 Crowd Control Events
- SMC 15.54 Monorail Guideways
- SMC 15.62 Vacation of Streets, Alleys, and Public Places
- SMC 15.64 Skybridge Term Permits
- SMC 15.65 Significant Structure Term Permits
- SMC 15.70 Sidewalk Construction
- SMC 15.72 Sidewalk Maintenance
- SMC 15.76 Inspection of Certain Structures in Public Places
- SMC 15.90 Enforcement
- SMC 15.91 Citations

- SMC, Title 15, Appendix 1
- SMC, Title 15, Appendix 2

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Maureen Meehan	NPDES Stormwater Program Manager	NPDES compliance manager for SDOT	SDOT
Angela Steel	Acting ROW manager	Coordinating and drafting code amendment legislation and public space management program.	SDOT
Amy Gray	Term Permit Specialist	Assists coordinating and drafting code amendment legislation and public space program policies	SDOT
Liz Sheldon	Street Use Operations Manager	Manager of Street improvement permit, utility major permits, inspectors	SDOT
Mary Rutherford	SPU/SDOT Interdepartmental Coordination Lead	Cross Departmental coordination SPU & SDOT	Seattle Public Utilities
Brian DePlace	Street Use Director	Directs Street Use programs,	SDOT
Heather Marx	Project and Utility Coordination Manager	Manages utility and project cordination	SDOT
Cheryl Swab	Council Liaison	SDOT's council liaison	SDOT
Patrick Downs	Assistant City Attorney	Right of Way councel	Seattle Law Dept.
Theresa Wagner	Attorney, Environmental Protection Section	Stormwater Councel	Seattle Law Dept.
Darren Morgan	Urban Forestry Manager	Manager of Tree maintenance in ROW and minor vegetation management	SDOT

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps? Please fill out the following table for any section of the Document/ Code/ Rule/ Standard that may potentially conflict with implementation of LID/GSI BMPs based on the topics outlined in Step 2.

Step 4 – Have you taken any steps to **FILL THE GAPS**? Has alternative language been drafted to address the conflict/gap?

Step 5 – Are you aware of any other City codes/documents that may be affected by the proposed revisions in Step 4?

\//	Step 2 HAT topics did you r	roviow?		WHED	Step 3 E are the gaps?	Step 4 Have you taken any steps to	Step 5 Are you aware
•	HAT topics did you i	eview :		WIILK	L are the gaps:	FILL THE GAPS?	of any other City codes/ documents that
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap		may be affected?
	Site Planning						
	Building locations Parking area locations Stormwater management facility locations	✓ Does not apply✓ Does not apply✓ Yes✓ No✓ Does not apply	 ☑ Does not apply ☑ Does not apply ☐ Yes ☑ No ☐ Does not apply 	SMC 15.62.070	This section describes easements for utilities and services. Considered adding stormwater BMPs to the provision retaining or requiring conveyance of easements for construction, repair and maintenance of existing and future public utilities and services. This section of the code deals with street vacations that are governed by RCW 35.79. cannot amend without a change to state law	Does not apply Does not apply Yes No If yes, include language: This section of the code deals with street vacations that are governed by RCW 35.79. cannot amend without a change to state law. GSI is a function of the utility and therefore covered. The City already has the authority to require maintenance, preservation or replacement as	☑ Does not apply☑ Does not apply☐ Yes☑ No
	Temporary Street Restoration	⊠ Yes	⊠ Yes	15.32.160 Street restoration requirements	A. Anyone issued a permit for construction or other activity under ((this chapter)) Chapter 15.32 shall temporarily restore the street, alley, stormwater conveyance system, green stormwater infrastructure, or other public place in a manner approved by the Director of Transportation, or as to park drives and boulevards, the Superintendent of Parks and Recreation, within ((twenty four (24))) 24 hours after ((completion of)) completing the permitted work	determined best for the City. Yes If yes, include language: See tracked changes at left.	No
	Permanent Street Restoration	∑ Yes	∑ Yes	15.32.160 3.E, & G Street restoration requirements	∀es No Does not apply	E. Permanent restoration of other types of approved paving surfaces or treatments, other than concrete or asphalt, on a street, alley, or other public place shall be completed in a manner acceptable to the Director of Transportation. In the case of any permeable paving surface or treatment, the permanent restoration shall include the restoration of the stormwater drainage function ((F))G. In those cases where the Director of Transportation, or as to park drives and boulevards, the Superintendent of Parks and Recreation, has determined that the permittee has not restored the street, alley, stormwater conveyance system, green stormwater infrastructure, or other public place to its condition prior to the commencement of activity under the permit((;)); the permittee shall pay to the Director of Transportation, or as to park drives and boulevards, the Superintendent of Parks and Recreation((;)); a standard charge from a schedule adopted by ordinance reflecting the Director of Transportation's estimate of the loss in useful life of the street, alley, stormwater conveyance system, green stormwater infrastructure, or other public placeDirector of Transportation. All funds collected from this charge shall be deposited and used only for pavement, stormwater conveyance, or green stormwater infrastructure replacement, repair, and maintenance, and ((not)) for ((not)) no other purpose.	Yes No Does not apply

	Step 2				Step 3	Step 4	Step 5
W	HAT topics did you re	eview?		WHER	E are the gaps?	Have you taken any steps to	Are you aware
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	of any other City codes/ documents that may be affected?
Categories	Topics	Topic Neviewed	- Cap identified	Reference	Summary of Existing Requirement, commet, dap		
	Soils						
	Protecting and restoring healthy soil	Yes No Does not apply	Yes No Does not apply	SMC 15.36.010.A	Permits may be granted to occupy public places to raise and/or lower safes, machinery or any other heavy articles into and from buildings. Current text does not include precautions for lifting heavy equipment in areas with soil exposure to ensure they do not become contaminated by leaking equipment.	No A. The Director of Transportation, or as to park drives and boulevards((,)) the Superintendent of Parks and Recreation, may grant permits ((to raise and/or lower safes,)) for construction equipment, including but not limited to cranes, lifts, or booms; for purposes including but not limited to raising or lowering machinery or any other heavy articles ((into and from buildings and to occupy in so doing such)) over or on a portion of the public place ((as the authorizing official may deem)) Upon completing the permitted activity, the permittee shall restore the public place to the condition that existed prior to use occurring in the public place. The Director of Transportation, or as to park drives and boulevards the Superintendent of Parks and Recreation, may restrict heavy equipment on pervious surfaces and other non-paved public place areas.	☐ Yes ☑ No
				SMC 15.46.020	This section concerns spilled loads in public places. Considered modifying text to specify removal of any contaminated soils and replanting landscaping when applicable.	Yes No The owner or operator of any vehicle ((which)), orabutting property owner that has spilled, dropped, dumped, or in any manner deposited, or caused to be deposited, any matter upon a public place shall ((cause the public place to be cleaned)) restore the public place, including but not limited to cleaning municipal stormwater facilities and green stormwater infrastructure, replacing trees and vegetation, and remediating any contaminated soil, trees, and groundwater when notified so to do by the Director of Transportation, or as to park drives and boulevards((7)) by the Superintendent of Parks and Recreation.	☐ Yes ☑ No
	Compost amendments	Yes No Does not apply	Yes No Does not apply			□ Does not apply	□ Does not apply
	Compaction	Yes No Does not apply	Yes No Does not apply	SMC 15.36.010	See description of this code section under "Protecting and restoring healthy soil". Considered adding language regarding soil compaction prevention.	No The permittee shall ensure that the permitted activity minimizes soil compaction and protects the public place, including but not limited to pervious pavement, green stormwater infrastructure, and street trees; as necessary for and subject to ((such)) the conditions and regulations ((as may be)) prescribed for the safety and convenience of the	☐ Yes ⊠ No

	Step 2				Step 3	Step 4	Step 5
WI	HAT topics did you re	eview?		WHER	E are the gaps?	Have you taken any steps to	Are you aware
						FILL THE GAPS?	of any other City codes/ documents that
				Section			may be
Categories	Topics	Topic Reviewed	Gap identified	Reference	Summary of Existing Requirement/Conflict/Gap		affected?
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			
T	Tree preservation	Yes No Does not apply		SMC 15.36	See description of this code section under "Protecting and restoring healthy soil". Considered clarifying that trees shall not be removed to clear space for equipment lifting.	B. Street trees shall not be removed to clear space or accommodate lifting heavy equipment unless the Director of Transportation, or as to park drives and boulevards the Superintendent of Parks and Recreation, determines that no other physically feasible option exists to accommodate the lifting of heavy equipment.	Yes No
				SMC 15.44.030.A.2.a	This section explains that the cost of repair and restoration of a public place due to earth movement damages incurred during excavation shall include, but is not limited to, grading, resurfacing and drainage. Considered adding tree preservation and replanting vegetation to the list of examples.	Yesa. ((An applicant)) The permittee for ((the permit)) excavation and fill permits as required by Sections 15.44.003 or 15.44.020 shall post or cause ((the owner or contractor to post)) to be posted security with the City in an amount determined by the authorizing official to be sufficient to cover the following: 1. All charges and payments due under this ((title)) Title 15; 2. When it can be anticipated that ((an)) earth movement might occur, the ((reasonable)) costs of the following: a. ((The cost of repair)) Repair and restoration of any adjacent public place, including but not limited to grading, resurfacing, and drainage((r)) facilities, including green stormwater infrastructure; b. ((The cost of repair)) Repair and restoration of all sewers, storm drains, green stormwater infrastructure, water((r)) and power lines, and other utilities in the adjacent public place ((rand)); c. Tree or landscape mitigation, including but not limited to the replacement, lost value, and damage due to excavation and restoration; and d. ((The expense of safety)) Safety precautions and emergency measures to protect the public, ((street)) utilities, and any adjacent public place, including but not limited to the expense of placing signs, barricades, fences, and traffic detours; and	☐ Yes ☑ No
	Screening	Does not apply	Does not apply			□ Does not apply	Does not apply
	Landscaping requirements for street frontages	Yes No Does not apply	Yes No Does not apply	SMC 15.06.050	Curb setbacks are allowed as long as "space for tree planting is reserved, min. 11.5 ft. from new curb location to property line." Considered modifying to include shrubs, grasses, etc. that would be part of a GSI BMP.	Yes Curb setbacks may be allowed by the ((Director of Planning and Development after consulting with the)) Director of Transportation, or the Superintendent as to park drives or boulevards, on the basis of demonstrated need by the applicant upon the following terms and conditions: A. Space for tree planting or green stormwater infrastructure shall be reserved, with a minimum of 11.5 feet from the new curb location to the property line, unless existing trees ((in the area supply the need)) or existing green stormwater infrastructure provide for the required green stormwater infrastructure. B. Curb setbacks are not permitted on streets where parking is allowed in the existing curb lane.	Yes No

	Step 2				Step 3	Step 4	Step 5
WI	HAT topics did you re	eview?		WHER	E are the gaps?	Have you taken any steps to	Are you aware
						FILL THE GAPS?	of any other City codes/ documents that
				Section			may be
Categories	Topics	Topic Reviewed	Gap identified	Reference	Summary of Existing Requirement/Conflict/Gap		affected?
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances	□ Does not apply	Does not apply			□ Does not apply	Does not apply
	Shared driveways	Does not apply	Does not apply			□ Does not apply	Does not apply
	Minimum driveway width	Yes No Does not apply	Yes No Does not apply	SMC 15.06.040	The minimum width of driveways shall conform to the requirements of Section 23.54.030 of the Land Use Code.	□ Does not apply	□ Does not apply
	Use of permeable pavement for driveways	Yes No Does not apply	Yes No Does not apply	SMC 15.22.100	This section states that a permit is needed whenever a construction vehicle or heavy equipment is to be moved across a sidewalk or curb. Considered revising language to include measures for protection of permeable pavement sidewalks and curbs.	Whenever construction vehicles or heavy equipment are to be moved across a public sidewalk or curb or a portion ((thereof)) of a public place not set aside as a driveway, including but not limited to pervious pavement and other green stormwater infrastructure or within the dripline of a street tree; the owner, agent, or contractor shall secure a permit to drive over the walk ((and/or)) or curb; and shall deposit cash, a surety bond, or both, or establish an escrow account as directed by the authorizing official.	☐ Yes ⊠ No
				SMC 15.22.110	This section describes proper protection of sidewalk and pavement during construction. Considered adding measures for protection of permeable pavement sidewalks and pavement during construction.	In using a public place or driving over walks and curbs, including but not limited to pervious pavement and other green stormwater infrastructure or within the dripline of a street tree, the ((contractor)) permittee shall keep ((such walk and pavement)) the public place ((reasonably), including but not limited to pervious pavement and other green stormwater infrastructure or within the dripline of a street tree; clean, properly protected ((during working hours)), and safe for public travel at all times; upon failure to do so the authorizing official may place ((such)) protective covering and ((cause such clean up to be made, and the cost thereof plus fifteen percent (15%))) restore the public place. The City may bill the costs and damages to the permittee plus 15 percent to cover administrative expenses ((shall be charged to the contractor)). Any charges ((so)) made by the City may be deducted from the ((contractor's deposits)) permittee's deposit on file or may be charged against ((his or her)) the bond.	☐ Yes ☑ No
				SMC 15.32.160	This section describes street restoration requirements due to construction. Considered allowing permeable pavement for permanent restoration of disturbed concrete or asphalt surfaces, providing partial offset of costs, or stormwater management credit. Amendment to this section would require a prior amendment to the PORR	Yes No This section is specific to utility cuts, where a pipe is being set in the opening. Installing permeable pavement within a non-permeable road especially with a pipe directly under the permeable pavement will undermine the surrounding road and will not be permitted.	☐ Yes ☑ No
	Two-track driveway	Noes not apply	Does not apply			Does not apply	Does not apply

W	Step 2 HAT topics did you r	review?		WHER	Step 3 RE are the gaps?	Step 4 Have you taken any steps to	Step 5 Are you aware
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	of any other City codes/ documents that may be affected?
	design						
	Bulk and Dimensi	onal Considera	tions				
	Building setbacks Height limits	✓ Does not apply✓ Does not apply	Does not apply Does not apply				✓ Does not apply✓ Does not apply
	Maximum square footage	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Clustering	Does not apply	Does not apply			□ Does not apply	Does not apply
	Clearing and Grad	ding					
Alla.	Protecting existing infiltration	Xes No Does not apply	Yes No Does not apply	SMC 15.36.010	See description of this code section under "Protecting and restoring healthy soil". Considered adding language regarding soil compaction prevention (which can inhibit infiltration).	The permittee shall ensure that the permitted activity minimizes soil compaction and protects the public place, including but not limited to pervious pavement, green stormwater infrastructure, and street trees; as necessary for and subject to ((such)) the conditions and regulations ((as may be)) prescribed for the safety and convenience of the public.	☐ Yes ☑ No
	Conserving native vegetation/soils	Yes No Does not apply	Yes No Does not apply	SMC 15.43.030	This section describes when street use permits are required for planting, removing, or performing major pruning on any street tree. The City's policy is to retain and preserve street trees whenever possible. Removed street trees shall be replaced with a species of tree from the approved tree list.	Does not apply This section encourages the preservation of street trees.	□ Does not apply
	Construction sequencing	X Yes No Does not apply	Yes No Does not apply	SMC 15.22.060	This section describes requirements for removal of earth and debris during construction. Considered revising language to include provisions to avoid dust or debris settlement in GSI facilities.	A. Earth taken from excavations and rubbish from buildings or abutting property shall not be stored in a public place, but shall be removed as rapidly as produced. B. Materials that are dry and apt to produce dust when handled shall be kept sufficiently moist or covered to prevent the wind blowing them about. Building rubbish accumulating on upper floors and all rubbish, plaster, and other loose materials ((,7)); produced while wrecking, altering, or repairing a building((, must)) or development site shall be lowered by elevators in closed receptacles or by closed chutes connecting to vehicles removing the ((same)) debris. When likely to produce dust, the chutes must be provided with means of wetting waste to prevent the wind from blowing it about. Best management practices shall be used to prevent contaminate, silt, dust, or other debris settlement in abutting public places, including green stormwater infrastructure and other municipal drainage outlets.	If yes, list code/ document title(s):
🥋	Street and Roads						
- Allen	Travel lane widths	⊠ Yes	⊠Yes	SMC 15.06.050	Curb setbacks shall be able to provide for a minimum of a 12-ft	Yes	Yes

	Step 2				Step 3	Step 4	Step 5
W	HAT topics did you r	review?		WHER	E are the gaps?	Have you taken any steps to	Are you aware
						FILL THE GAPS?	of any other City
							codes/
							documents that
				Continu			may be
Categories	Topics	Topic Reviewed	Gap identified	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected?
	ТОРГО	No	No	1101010100	determine if an 8-ft parking lane is necessary or if just the 12-ft	⊠ No	No
		Does not apply	Does not apply		driving lane is sufficient to allow for flexibility with GSI installations. Amendment to this section would also require a Land	If yes, include language: This language is embedded	If yes, list code/
					Use code amendment	in additional language that adds context. The curb setback is to allow an area of curbside parking and is only permitted on	document title(s):
						a street that doesn't have curbside parking at the existing curb.	
	Right-of-way widths	Does not apply	Does not apply			Does not apply	Does not apply
	Use of permeable	Yes	Yes	SMC 15.36	See description of this code section under "Protecting and restoring healthy soil". Considered adding language regarding	∑ Yes	Yes
	pavement for streets, roads, and sidewalks	No Does not apply	No Does not apply		restrictions for areas with permeable pavement, since they may not be able to support heavy machinery loads.	A. The Director of Transportation, or as to park drives and boulevards((,)) the Superintendent of Parks and Recreation,	☐ No If yes, list code/
	Todas, and sidewarks				not be able to support neavy machinery loads.	may grant permits ((to raise and/or lower safes,)) for construction equipment, including but not limited to cranes,	document title(s):
						lifts, or booms; for purposes including but not limited to raising or lowering machinery or any other heavy articles	, ,
						((into and from buildings and to occupy in so doing such))	
						over or on a portion of the public place ((as the authorizing official may deem)) The permittee shall ensure that the	
						permitted activity minimizes soil compaction and protects the public place, including but not limited to pervious	
						pavement, green stormwater infrastructure, and street trees;	
						as necessary <u>for</u> and subject to ((such)) <u>the</u> conditions and regulations ((as may be)) prescribed for the safety and	
						convenience of the public. <u>Upon completing the permitted</u> activity, the permittee shall restore the public place to the	
						condition that existed prior to use occurring in the public place. The Director of Transportation, or as to park drives and	
						boulevards the Superintendent of Parks and Recreation, may	
						restrict heavy equipment on pervious surfaces and other non-paved public place areas.	
				SMC 15.70.020	"Payment of Construction or Reconstruction Costs" states that if any portion of sidewalk, not exceeding one block in length, is	No Can't offer incentives, governed by RCW.	Yes No
					deemed unsafe and needed, it shall devolve upon the property owner of the abutting property to pay for reconstruction/	currentees, governed by New.	If yes, list code/
					construction costs. Considered offering incentives for installing		document title(s):
					permeable pavement to replace/construct the sidewalk. Can't offer incentives, governed by RCW.		
				SMC 15.72.010	"Sidewalk Maintenance" requires that property owners clean and clear their sidewalks when directed. Considered offering incentives	No	Yes
					for cleaning permeable pavements. Can't offer incentives, governed by RCW.	Can't offer incentives, governed by RCW.	☐ No If yes, list code/
					governed by NCW.		document title(s):
	Placement of utilities	Does not apply	Does not apply			□ Does not apply	Does not apply
	under paved areas in the ROW						
	Required turn around	Does not apply	Does not apply			Does not apply	Does not apply
	area (e.g., Fire, USPS)						
	Sidewalk widths	Does not apply	Does not apply			□ Does not apply	Does not apply

Step 2 WHAT topics did you review?			WHER	Step 3 RE are the gaps?	Step 4 Have you taken any steps to	Step 5 Are you aware	
Categories	Topics Sidewalk slope	Topic Reviewed Does not apply	Gap identified ☑ Does not apply	Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS? Does not apply	of any other City codes/ documents that may be affected?
	Minimum cul-de-sac	Does not apply Does not apply	Does not apply Does not apply			Does not apply Does not apply	Does not apply Does not apply
	radius						
	Alternatives to cul-de- sacs	Does not apply	Does not apply			☑ Does not apply	Does not apply
	Parking						
	Minimum/maximum parking ratios	Does not apply	Does not apply			□ Does not apply □	Does not apply
	Permeable paving use	Does not apply	Does not apply			Does not apply	Does not apply
	Parking stall dimensions	Does not apply	Does not apply			Does not apply	Does not apply
	Driving aisle dimensions	Does not apply	Does not apply	CNAC 45 06 050		Does not apply	Does not apply
	Off-street and street parking regulations			SMC 15.06.050	Curb setbacks are not permitted on streets where parking is allowed in the existing curb lane. Considered modifying this statement to allow curb bulb GSI features. amendment to this section would require a prior land use code amendment See also "Travel lane widths".	Does not apply Setbacks widen the road. Curb setbacks by design widen the roadway driving surface. Setbacks are incompatible with curb bulbs.	Yes No If yes, list code/ document title(s):
	Design Guideline	s and Standards	S				
	Trees and bioretention		Yes No Does not apply	SMC 15.16.040	This section concerns permits and placement for sidewalk cafes, including required setbacks from street and buildings. Sidewalk cafes are allowed to be located flush with buildings to allow GSI between the cafe and the street.	Does not apply These permits are temporary and revocable should the City determine space is needed for GSI. Sidewalk cafes would only be permitted in existing sidewalk space. Vending carts	□ Does not apply
				SMC 15.17.100	This section concerns permits and placement of vending carts on sidewalks, including required setbacks from street and buildings. Vending carts are allowed to be located flush with buildings, to allow GSI between the vending cart and the street.	are mobile from day to day and would only be permitted to use the existing sidewalk.	
				SMC 15.65.010	This section establishes the procedures and criteria for the administration and approval of applications for permission to construct, maintain and operate existing significant structures. Although not explicitly included in the examples in this section, GSI in the ROW is included on the significant structures list.		
	Continuous curb requirements and setbacks	Yes No Does not apply	Yes No Does not apply	SMC 15.06.050	See "Landscaping Requirements for Street Frontages", "Travel Lane Widths", and "Off-street and Street Parking Regulations". amendment to this section would require a prior land use code amendment	NO The changes needed are in other codes, but would not need a change in this language to be implemented. Title 15 refers to Title 23 here to avoid duplication of requirements.	Yes City's Standard Plans and Specifications for driveway and curb construction and design requirements
							Land Use Code, Section 23.54.030 (Driveway Widths) for minimum width of driveways and

						curb cuts
Curb radii	Does not apply	Does not apply			Does not apply	Does not apply
Stormwater Mana					, , ,	11 /
Training	Yes No Does not apply	☐ Yes ☐ No ☑ Does not apply			□ Does not apply	Does not apply
Enforcement	Yes No Does not apply	Yes No Does not apply	SMC 15.90	This section contains enforcement actions for Title 15 – Street and Sidewalk Use for the benefit of the health, safety and welfare of the general public.	□ Does not apply	□ Does not apply
Education	Does not apply	Does not apply			Does not apply	□ Does not apply
Zoning requirem	ents					
Individual open space requirements	Yes No Does not apply	Yes No Does not apply	SMC 15.04.035	Considerations for permit application include the environment, drainage (surface and underground), springs and water courses, soil stability, and where applicable, City land use, transportation, open space, shoreline, and beautification policies (among others). Considered adding GSI to this list of permit application considerations.	C. Factors for consideration in evaluating an application for a permit include, but are not limited to, the applicant's constitutional rights and the abutter's property rights; the site and its terrain; the public and private benefits of the proposed use; and the impact of the proposed use on the following: 1. The paramount purpose of streets for travel and transportation; 2. Utilities; authorized secondary street uses; and any use being made by the public of the site; 3. Fire access and public safety; 4. Uses under permit; street trees; and other proposed or past uses of the site; 5. (({{Reserved.}} { { { {6-}}}})) Rights of light, air, and access and lateral support of abutting properties and on access or easements of properties dependent upon the public place for access; ((7))6. The environment, including but not limited to efforts to minimize impervious surface, loss of native vegetation, and stormwater runoff; ((8))7. Drainage, surface and underground; springs and watercourses; and the stability of soils; and ((9))8. Where applicable, City land use, transportation, open space, shoreline, and beautification policies and approved neighborhood land use plans.	Yes No
Passive vs. active open space requirements	Does not apply	□ Does not apply			□ Does not apply	Does not apply
Opportunities for Performance Based Designs (PUDs)	□ Does not apply	Does not apply			□ Does not apply	Does not apply
Critical Areas and	d Shoreline Man	agement				
Allowance of LID/GSI BMPs in critical areas/shorelines when compatible	Yes No Does not apply	Yes No Does not apply	SMC 15.62.080	Considered adding construction of GSI facilities, especially those designed to protect critical areas and shorelines, to the list of authorized reasons the City can vacate a street, alley, or public place that abuts a body of salt or fresh water.	No	
				This section of the code deals with street vacations that are governed by RCW 35.79. cannot amend without a change to state law		

Title 15 referred to the following:

- City's Standard Plans and Specifications
- Land Use Code, Section 23.54.030 (Driveway Widths)

The Pavement Opening and Restoration Rule (PORR) 5-2009 is also associated with Title 15 of the SMC. In tandem with the above-described changes to Title 15, a memorandum of clarification has also been issued to users of the PORR as follows:

"The current version of the SDOT Street and Sidewalk Pavement Opening and Restoration Director's Rule (PORR) requires pervious (porous) pavements be restored to their original design and specifications. In order to remain in compliance with the Department of Ecology requirements relating to the City of Seattle's Municipal Stormwater Permit, the PORR is revised to include restoration of porous sidewalk segments as well as street segments. The relevant PORR sections are:

3.7.13 Pervious (porous) pavements: Certain street segments may be designed and constructed as pervious pavements. As of the date of this Rule (2004), the only block of pervious pavement that has been designed is 32nd Ave SW between SW Juneau St and SW Raymond St; however, other blocks of pervious pavement may be constructed in the future. Pervious pavements are to be restored to their original design and specifications, to the extent practicable. Restoration plans shall be reviewed for approval by SPU Engineering Services, (206) 684-5950, prior to the start of any excavation or removal.

Application of Rule to Pavement and Sidewalk Restoration

Streets and sidewalks may be designed and constructed as porous or permeable pavements. The most common surfacing material used in this application is porous concrete, identifiable by its open graded appearance. It is anticipated that other porous materials such as interlocking pavers will be used in the future. This porous material is considered green stormwater infrastructure (GSI).

Porous pavements are to be restored to their original design and specifications, to the extent practicable. Restoration plans shall be reviewed for approval by SPU Engineering Services, (206) 684-5950, prior to the start of any excavation or removal. Porous pavements are drainage structures and must be restored so that their infiltration characteristics are preserved. During construction, dirt and sediment must be contained to protect the surrounding surface from clogging."

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Complete Streets Checklist

www.seattle.gov/transportation/docs/CompleteStreetsChecklist.pdf (See sections: F & G)

This document is used during 0-10% Right-of-way project development. The document prompts the designer to consider what is appropriate to include and consider during ROW project design, but it doesn't set standards or requirements. It is used at a very high level, before project design.

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Michelle Marx	Strategic Advisor	Complete Streets coordinator	SDOT
Maureen Meehan	Stormwater Program Manager	NPDES compliance manager for SDOT	SDOT

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you r	review?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
	Examples of Topics &	Was topic reviewed	Were gaps	Section	Summary of Existing		affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		anected
	Site Planning						
	Building locations	Does not apply	Does not apply			Yes	Yes
	Can/does document					□ No	No
	require					If yes, include language :	If yes, list document title(s):
	designers/developers to					If no, explain why :	
	incorporate an understanding of site						
	hydrology and						
	demonstrate that						
	buildings and other						
	impervious surfaces) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Parking area locations	Does not apply	Does not apply			Yes	Yes
	Can/does document					No	No
	require designers/developers to					If yes, include language : If no, explain why :	If yes, list document title(s):
	incorporate an					in no, explain why .	
	understanding of site						
	hydrology and						
	demonstrate that parking						
	lots (impervious) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Stormwater	Yes	Yes	Green	1. Does the project fall	☐ Yes	Yes No
	management facility locations	No	☐ No ☐ See existing	Stormwater Infrastructur	under the 2009 updated stormwater	No	☐ No If yes, list document title(s):
	Can/does document	Does not apply	requirement	e (GSI)	code?	If yes, include language : This checklist is used for developing a	ii yes, iist document title(s):
	require		requirement	section g.	2. If "Yes" describe any	project from 0-10%. The questions prompt	
	designers/developers to				GSI elements or	the designer to consider all features listed in	
	locate stormwater				techniques included	the complete streets document.	
	facilities in a way that				in this project:	Sentence one was updated from	
	minimizes stormwater				3. Is this project in an	2009 to 2016.	
	runoff, impervious				area identified as	2. "Including permeable pavement"	
	surface, and native				potentially suitable	was added to sentence 2 & 3 after	
	vegetation loss?				for infiltrating GSI	(GSI) to encourage the use of all	
					approaches?	infiltrating LID techniques.	

Step 2 WHAT topics did you review?		W	Step 3 HERE are t		Step 4 What steps have you taken to	Step 5 IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	□ Does not apply	☑ Does not apply			□ Does not apply	□ Does not apply
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit, BMP T5-13?	⊠ Does not apply	⊠ Does not apply			□ Does not apply	☑ Does not apply
	See Seattle-specific Directo	or's Rules: www.seattle	e.gov/dpd/codes/dr/DR	2009-17.pdf I	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	□ Does not apply	□ Does not apply			□ Does not apply	☑ Does not apply
	Other						

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement	Urban Forestry section f	Are there opportunities to add canopy coverage and /or better protect the health of existing trees with this project?	⊠ No If no, explain why : No gap	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	☑ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	☑ Does not apply	□ Does not apply			□ Does not apply	☑ Does not apply
	Other						
	Hard and Impervio	ous Surfaces					

	Step 2			Step 3	3	Step 4	Step 5	
Wi	HAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	∑ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply	
	Shared driveways Can/does document include provisions that require or allow shared driveways?	□ Does not apply	□ Does not apply			☑ Does not apply	□ Does not apply	
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	☑ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply	
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	☑ Does not apply	□ Does not apply			□ Does not apply	☑ Does not apply	
	Two-track driveway design Or the use of a two- track driveway design?	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply	
	Other	⊠ Yes	No See existing requirement	Green Stormwater Infrastructur e Section g	Is there an opportunity to remove impervious surface as part of this project in accordance with the 2013 Executive Order which urges all City departments to incorporate natural drainage features into capital projects?			

	Step 2			Step 3		Step 4	Step 5
W	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Bulk and Dimensi Can additional flexibility or			he development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	☑ Does not apply	☑ Does not apply			□ Does not apply	☑ Does not apply
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	□ Does not apply	□ Does not apply			☑ Does not apply	□ Does not apply
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance? Other	□ Does not apply	□ Does not apply			□ Does not apply	□ Does not apply
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	∑ Yes □ No	∑ Yes □ No	Green Stormwater Infrastructur e Section g	No language in current checklist	Yes No If yes, include language: Are there existing GSI facilities within or near the project limits that must be protected from compaction and sedimentation.	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	□ Does not apply	□ Does not apply			Yes No If no, explain why: SDOT projects are limited to existing streets and urban vegetation.	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Other						
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No If yes, include language: If no, explain why: SDOT is a leader in making streets in an urban environment safe for all users. One of the strategies used is to keep lane widths to a minimum depending on the roadway function and emergency vehicle access. The standard widths used by SDOT reflect minimums that are required by the Local Agency Government (LAG) Manual. SDOT has a deviation process for projects to propose reduced lane widths within the ROWIM.	☐ Yes☐ No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WHAT topics did you review?			WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?		∑ Yes No See existing requirement		 If "Yes" describe any GSI elements or techniques included in this project: Is this project in an area identified as potentially suitable for infiltrating GSI approaches? 	Yes No If yes, include language: 1. Sentence 1 was updated from 2009 to 2016. 2. "Including permeable pavement" was added to sentence 2 & 3 after (GSI) to encourage the use of all infiltrating LID techniques.	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	☑ Does not apply	□ Does not apply			Does not apply	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	□ Does not apply	□ Does not apply			☑ Does not apply	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No It is unlikely that SDOT would build a sidewalk for low volumes pedestrian zones. Project details such as this are addressed in other documents such as the (LAG), Land Use code and the ROWIM. The ROWIM is updating sidewalk width descriptions to read "This language will be changed to say as wide as needed to accommodate pedestrian volumes. ".	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	☑ Does not apply	Does not apply		Togan chicky common cap	☑ Does not apply	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	⊠ Does not apply	⊠ Does not apply			☑ Does not apply	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	∑ Yes ☐ No ☐ Does not apply	∑ Yes No See existing requirement		 Does the project fall under the 2009 updated stormwater code? If "Yes" describe any GSI elements or techniques included in this project: 	Yes No If yes, include language: Does the project falls under the 2016 updated stormwater code? If "Yes" describe any GSI elements or techniques included in this project, including permeable pavement.	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
W	WHAT topics did you review?			HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	⊠ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Other						
	Design Guidelines						
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	⊠ Yes □ No	Yes No See existing requirement	Urban Forestry Section f	Are there opportunities to add canopy coverage and/or better protect the health of existing trees with this project?	NoIf no, explain why:Existing language encourages the protection and improvement of tree health.	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	☑ Does not apply	□ Does not apply			☑ Does not apply	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Stormwater Manag						
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	⊠ Does not apply	⊠ Does not apply			□ Does not apply	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	□ Does not apply	□ Does not apply			☑ Does not apply	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	□ Does not apply	□ Does not apply			☑ Does not apply	Yes No If yes, list document title(s):
	Other						

Step 2 WHAT topics did you review?			Step 3 WHERE are the gaps?			Step 4 What steps have you taken to	Step 5 IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	⊠ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):				
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):				
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	□ Does not apply	□ Does not apply			□ Does not apply	Yes No If yes, list document title(s):				
	Other										
	Critical Areas and	Shoreline Mana	ngement								
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	⊠ Does not apply	☑ Does not apply			□ Does not apply	Yes No If yes, list document title(s):				

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: DR 10-2011 (Landscaping Director's Rule). Document interprets Land Use Code requirements for landscaping in new development. http://web6.seattle.gov/DPD/DirRulesViewer/Rule.aspx?id=30-2015

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Dave LaClergue	Area Planning	Policy for landscaping,	DPD
	Manager	urban design, and	
		neighborhood planning	
Lisa Rutzick	Design Review	Manages the Design	DPD
	Manager	Review Program	
Art Peterson	Land Use Planner	Project Review	DPD
Sherell Ehlers	Stormwater Code	Strategic Advisor –	SPU
	Manager	Drainage Policy + Planning	
Brennon Staley	Senior Planner	Policy and regulation	DPD
		development related to	
		land use policy	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

ep 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	W	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No
	Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	□ No □ Does not apply	No See existing requirement			No If yes, include language: If no, explain why:	If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WF	WHAT topics did you review?		W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement	A.1	The rule gives protection measures for preserving trees during construction, but not other vegetation.	∑ Yes ☐ No If yes, include language : Applied requirements for fencing and signage for any preserved vegetation – not just trees. If no, explain why :	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement	A.1	Requires soil amendment for any new landscape areas. References old (2009) code – update to new	Yes No If yes, include language: Updated to refer to soil amendment standards in the new Stormwater Manual. If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/D	R2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?		Yes No See existing requirement		Rule requires protecting against compaction around preserved trees, could be extended to other vegetated areas.	Yes No If yes, include language: Applied requirements for fencing and signage for any preserved vegetation – not just trees. If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Landscaping, Nati	ive Vegetation, S	Street Landsca	ping			

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	count toward landscap preserving trees will of When an applicant princlude specific protect ensure compliance duadequately protected. "Trees preserved und construction. A tree each preserved tree, preserved	reserving trees rving existing he ping requiremen ount for more cr proposes to pre ction notes and/ ring construction " Her city regulation protection area pursuant to City hall be identified material or end	ealthy vegetation on a site will ots. In the case of Green Factor, redit than newly planted trees. eserve vegetation, they must for details on contract plans to not make sure those plants are ons shall be protected during must be established around of Seattle Stormwater Control		☐ Yes☐ No If yes, list document title(s):
	Screening	Yes	Yes	A.9	Rule already allows	Yes	Yes
	Can/does document	No	□ No		flexibility with screening	No	No
	include provisions that allow LID or GSI facility	Does not apply	See existing requirement		features – can be LID or any other vegetation meeting	If yes, include language : If no, explain why :	If yes, list document title(s):
	plantings to be counted		requirement		the height requirements.	ii iio, expiairi wiiy .	
	toward site, parking or				the height requirements.		
	perimeter screening						
	requirements?						

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement		Right-of-way eligibility determined by zoning, not by this rule – some designations allow it and others don't.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language:☐ If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimensi Can additional flexibility or			he development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Clearing and Grad	ding					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	✓ Yes✓ No✓ See existing requirement	A.5	Document calls out requirements for protection around preserved trees, but not around other preserved vegetation – broaden.	Yes No If yes, include language: Applied requirements for fencing and signage for any preserved vegetation – not just trees. If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement	A.5	Document calls out requirements for protection around preserved trees, but not around other preserved vegetation – broaden.	Yes No If yes, include language: Applied requirements for fencing and signage for any preserved vegetation – not just trees. If no, explain why:	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Street and Roads						
11/2	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
Wi	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement		Already gives credit for permeable paving on any surface allowed by other codes/standards.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement		Already gives credit for permeable paving on any surface allowed by other codes/standards.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines						
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement		Existing rule did not give direction on trees in bioretention. Add guidance/preferred approach.	Yes No If yes, include language: Added reference to the new direction on trees and bioretention in the Stormwater Manual. If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3	}	Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement	Reference	кеципененту сонністу чар	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Manag	gement and Mai	ntonanco				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement		C.4 clarify who is qualified to sign off on the final installed landscape – "landscape professional" of record.	Yes No If yes, include language: If no, explain why: Language in the rule is adequate for seeing that landscapes and LID facilities are designed and installed correctly. Verification of installation and enforcement of Green Factor standards over time could use improvement through trainings, etc.	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you r	eview?	W	HERE are t		What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap	TILL THE GAPO:	documents that may be affected
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	No Does not apply	Yes No See existing requirement			☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

WH	Step 2 HAT topics did you r	review?	w	Step 3 HERE are t		Step 4 What steps have you taken to	Step 5 IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Other							

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Seattle Building Code

http://www.seattle.gov/dpd/codesrules/codes/building/

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Maureen Traxler	Strategic Advisor	Code Development	DPD

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
_	Building locations Can/does document	Yes No	Yes No			Yes No	Yes No
	require	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why:	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that						
	buildings and other						
	impervious surfaces) are						
	sited to minimize runoff,						
	total impervious and native vegetation loss?						
	Parking area locations	Yes	Yes			Yes	Yes
	Can/does document	No	No			No	No
	require	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	,,
	incorporate an					,	
	understanding of site						
	hydrology and						
	demonstrate that parking						
	lots (impervious) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Stormwater management facility	Yes No	Yes No			☐ Yes ☐ No	Yes No
	locations	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	Can/does document	Does not apply	requirement			If no, explain why :	in yes, list document title(s).
	require		requirement			in no, explain why .	
	designers/developers to						
	locate stormwater						
	facilities in a way that						
	minimizes stormwater						
	runoff, impervious						
	surface, and native						
	vegetation loss?						

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping, Nati	 ive Vegetation, \$	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap	□ Voc	
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages? Other – The	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Comprehensive Plan contains multiple policies about trees and landscaping.						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other – The Comprehensive Plan contains a policy about encouraging permeable materials.						
	Bulk and Dimension			he development	t footprint?		

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other – The Comprehensive Plan contains numerous policies regarding bulk and dimensional considerations, including the importance of allowing flexibility to accommodate specific site conditions.						
	Clearing and Grad	ling					

	Step 2		Step 3			Step 4	Step 5
WHAT topics did you review?		Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Use of permeable	Yes	Yes	Keierence	Requirement/Connict/Gap	Yes	Yes
	pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required	☐ No ☐ Does not apply	No See existing requirement			No If yes, include language: If no, explain why:	☐ No If yes, list document title(s):
	be expanded? Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Design Guidelines	s and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Stormwater Manag	gement and Mai	ntenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements? Opportunities for Performance Based	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No			☐ Yes ☐ No If yes, include language: If no, explain why: ☐ Yes ☐ No If yes, include language:	Yes No If yes, list document title(s): Yes No
	Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	⊠ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes:

The Building Code does not address siting of structures. The existing regulations provide minimum requirements for design, construction, and alterations to protect life safety. It does not limit the ability to do LID.

City of Seattle Report Form

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Comprehensive Plan

http://www.seattle.gov/dpd/cityplanning/completeprojectslist/comprehensiveplan/documents/default.

Changes to Environment Section:

http://www.seattle.gov/dpd/cs/groups/pan/@pan/documents/web_informational/p2385343.pdf

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Brennon Staley	Senior Planner	Policy and regulation development related to	DPD
		land use policy	

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	IERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

WI	Step 2 WHAT topics did you review?		W	Step 3 HERE are t		Step 4 What steps have you taken to	Step 5 IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	No □ See existing requirement			No If yes, include language: The Comprehensive Plan was amended in 2015 to include clearer and stronger language about preserving vegetation and trees and reducing impervious surface to minimize runoff. Policy E8.1 now says: Use trees, vegetation, amended soil, bioretention, and other green stormwater infrastructure, where feasible, to manage stormwater runoff and reduce the impacts of development. Policy E10 now says: Strive to increase the amount of permeable surface and remove unnecessary impervious surfaces.	☐ Yes☐ No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: The Comprehensive Plan was amended in 2015 to include clearer and stronger language about preserving vegetation and trees and reducing impervious surface to minimize runoff. Policy E8.1 now says: Use trees, vegetation, amended soil, bioretention, and other green stormwater infrastructure, where feasible, to manage stormwater runoff and reduce the impacts of development. Policy E10 now says: Strive to increase the amount of permeable surface and remove unnecessary impervious surfaces. If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Cther Landscaping, Nation	∣ ive Vegetation, S	Street Landscap	ing			

	Step 2			Step 3	3	Step 4	Step 5
W	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: The Comprehensive Plan was amended in 2015 to include clearer and stronger language about preserving vegetation and trees and reducing impervious surface to minimize runoff. Policy E8.1 now says: Use trees, vegetation, amended soil, bioretention, and other green stormwater infrastructure, where feasible, to manage stormwater runoff and reduce the impacts of development. Policy E10 now says: Strive to increase the amount of permeable surface and remove unnecessary impervious surfaces. If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			☐ Yes ☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5	
W	HAT topics did you r	review?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Other – The Comprehensive Plan contains multiple policies about trees and landscaping.							
	Hard and Impervio	ous Surfaces						
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: The Comprehensive Plan was amended in 2015 to include clearer and stronger language about preserving vegetation and trees and reducing impervious surface to minimize runoff. Policy E8.1 now says: Use trees, vegetation, amended soil, bioretention, and other green stormwater infrastructure, where feasible, to manage stormwater runoff and reduce the impacts of development. Policy E10 now says: Strive to increase the amount of permeable surface and remove unnecessary impervious surfaces. If no, explain why:	Yes No If yes, list document title(s):	
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other – The Comprehensive Plan contains a policy about encouraging permeable materials.						
	Bulk and Dimension			ne development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements? Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance? Other – The Comprehensive Plan contains numerous policies regarding bulk and dimensional considerations, including the importance of allowing flexibility to accommodate specific	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	site conditions.	lina					
	Clearing and Grace Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?) Conserving native	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	☐ No ☑ Does not apply	No See existing requirement			No If yes, include language: If no, explain why:	No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Street and Roads							
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	

	Step 2			Step 3	}	Step 4	Step 5
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						

	Step 2	Step 2				Step 4	Step 5
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
<u> </u>	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	s and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Manag	gement and Mai	ntenance	L		<u>I</u>	<u> </u>

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Training	for this document? Yes	identified? Yes	Reference	Requirement/Conflict/Gap	Yes	Yes
	Is there an opportunity to improve or require training in LID design and maintenance for staff	☐ No ☐ Does not apply	No See existing requirement			☐ No If yes, include language : If no, explain why :	☐ No If yes, list document title(s):
	involved in project review & enforcement?						
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
~	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

The existing Comprehensive Plan does not mention Low Impact Development as a concept, but contains numerous policies about the importance of LID techniques including trees, vegetation, green stormwater infrastructure, permeable surfaces, green roofs, and other elements. We are currently in the process of updating the Comprehensive Plan and are using this update as an opportunity to elevate and clarify the importance of LID.

City of Seattle Report Form

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Environmentally Critical Areas Regulations

(Chapter 25.09 of Seattle Municipal Code)

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Dave LaClergue	Area Planning	Policy for landscaping,	DPD
	Manager	urban design, and	
		neighborhood planning	
Maggie Glowacki	Senior Land Use	Policy and legislation for	DPD
	Planner	environmental regulations	
Nick Welch	Senior Planner	Land Use Policy	DPD
Dennis Meier	Senior Land Use	Land Use Policy and	DPD
	Planner	Code Development	
Bradley Wilburn	Land Use Planner	Zoning and Land Use	DPD
		Review	
Maureen Traxler	Strategic Advisor	Code Development	DPD
Brennon Staley	Senior Urban	Policy and legislation	DPD
	Planner	update on land use issues	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	25.09.160 25.09.320	In the Environmentally Critical Areas (ECA) regulations, the requirements for development on a parcel containing a wetland include an analysis of hydrology for building siting. Native vegetation is protected the ECA regulations in riparian corridors and wetlands and wetland buffers.	Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss? Stormwater	Yes No Does not apply	Yes No See existing requirement	25.09.060	No mitigation sequencing in	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	No Does not apply	No See existing requirement	25.09.320	current ECA regulations. Added in update: Mitigation sequencing that results in no net loss of ecological function is required. Existing native vegetation is required to be protected	No If yes, include language: New section 25.09.325 of ECA regulations includes requirements for mitigation sequencing to minimize impact, disturbance, and runoff and preserve native vegetation. If no, explain why:	No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5						
WH	IAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City						
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected						
	Other DPD Note: See open space pg. 11												
	Soils												
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	25.09.060	Currently, the ECA regulations do not require this prior to development.	Yes No If yes, include language: In the proposed ECA update, 25.09.060.H requires: preserving top soil for infiltration as appropriate. If no, explain why:	Yes No If yes, list document title(s):						
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	25.09.060.E	Not required prior to development in the ECA	Yes No If yes, include language: In ECA update 25.09.060.E requires: ", amends the soils, if necessary to improve water infiltration and plant survival, in the areas to be replanted," If no, explain why:	☐ Yes ☐ No If yes, list document title(s):						
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)							
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):						
	Other												
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing									

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement	25.09.320	Native vegetation including trees are required to be preserved.	Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Other DPD Added Native Vegetation			25.09.320 23.60A.156, 23.60A.167, 23.60A.190	These code sections protect more than trees they protect native vegetation.	Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	W	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?		Yes No See existing requirement	25.09.060.B	Directs development to avoid impacts on environmentally critical areas by not developing them and to minimize disturbance,	Yes No If yes, include language: If no, explain why: ECA is not where maximum impervious surface is regulated. The code does instruct development to minimize disturbance and impervious surface in many critical areas.	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?		Yes No See existing requirement	25.09.060.C	Directs use of shared driveways to minimize impacts	Yes No If yes, include language: If no, explain why: Existing regulations comply with the requirement	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?		Yes No See existing requirement	See shared driveway section; 25.09.060.C	See shared driveway section	Yes No If yes, include language: If no, explain why: See shared driveway section	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement		Permeable pavement is allowed	Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two- track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			the development	t footprint?		

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance? Height limits Can flexibility be added to height limits to allow	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing	25.09.280	ECA allows this	☐ Yes ☐ No If yes, include language: If no, explain why: No gaps to fill ☐ Yes ☐ No If yes, include language:	☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No If yes, list document title(s):
	designers/developers to min. site distrubance? Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	requirement Yes No See existing requirement Yes	25.09.240	ECA allows smaller lot sizes	If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s).
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance? Other	Yes No Does not apply	No See existing requirement	25.09.240	which acts as a surrogate to clustering to minimize disturbance of critical areas	Yes No If yes, include language: If no, explain why: No gaps to fill	No If yes, list document title(s):
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement	25.09.060.E	ECA 25.09.060.E says "All site clearing on the lot that may impact environmentally critical areas or buffers shall be carried out in stages just prior to construction, and cleared areas shall be kept to the minimum for construction."	Yes No If yes, include language: If no, explain why: Existing language meets requirement. No gaps to fill	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
W	WHAT topics did you review?			HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement	25.09.320	This section of ECA requires preserving native vegetation: "Any action detrimental to habitat, vegetation or trees, including but not limited to clearing or removal, is prohibited, except as provided below, within the following areas: landslide-prone critical areas, (including steep slopes), steep slope buffers, riparian corridors, wetlands, and wetland buffers." The exceptions allow reasonable maintenance or removal of vegetation only as part of an approved tree and revegetation plan.	☐ Yes ☐ No If yes, include language: If no, explain why: No gaps to fill	☐ Yes ☐ No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
0.1	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	identified? Yes No See existing requirement	Reference 25.09.060.F	Requirement/Conflict/Gap Construction schedules required to minimize impacts: "Construction activity on the lot that may impact environmentally critical areas or buffers shall adhere to a prepared schedule and mitigation plan approved by the Director prior to the start of construction. This schedule and mitigation plan shall include, but not be limited to, a schedule for compliance with project conditions, limits of construction and work activities, equipment to be used, start and duration of each phase, work sequencing, and shall include the design, implementation, maintenance, and monitoring of mitigation requirements to prevent erosion, siltation, and destruction of vegetation."	Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
W	HAT topics did you r	review?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement	25.09.060.C	Driveways and utility corridors that may impact environmentally critical areas or buffers must be kept to a minimum through the use of common access drives and corridors where feasible. Roads, walkways, and parking areas should be designed parallel to topographic contours with consideration given to maintaining consolidated areas of natural topography and vegetation. Access shall be located in a way that keeps impacts to environmentally critical areas and buffers to a minimum.	Yes No If yes, include language: If no, explain why: No gap to fill. Existing regulations meet this requirement.	☐ Yes ☐ No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	☐ Yes ☐ No ☑Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2				Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement? Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	pedestrian volumes (industrial, etc.)? Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface? Alternatives to cul-de- sacs Is there an opportunity to provide incentives for	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Other Parking						

Step 2				Step 3	}	Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	s and Standards	3				
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	☐ Yes ☐ No ☐ See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	☐ Yes☐ No☐ See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Manag	gement and Ma	intenance				

Step 2				Step 3	3	Step 4	Step 5
WH	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	review & enforcement? Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement	25.09.045	There are no exceptions to ECA regulations for LID BMPs.		☐ Yes ☐ No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Seattle Grading Code

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Maureen Traxler	Code Development	Responsible for	DPD
	Manager	developing and	
		maintaining technical	
		construction-related	
		codes and related	
		material	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss? Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious	Yes No Does not apply Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement Yes No See existing requirement requirement			☐ Yes ☐ No If yes, include language : If no, explain why : ☐ Yes ☐ No If yes, include language : If no, explain why : ☐ Yes ☐ No If yes, include language : If no, explain why :	Yes No If yes, list document title(s): Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	locations Can/does document require designers/developers to locate stormwater facilities in a way that	∑ Does not apply	See existing			If yes, include language :	

	Step 2			Step 3	3	Step 4	Step 5	
WH	HAT topics did you r	review?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Other							
	Soils							
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement	22.170.190.I	Prohibits use of topsoil as fill	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement	22.170.020, 22.170.030	Soil quality isn't within scope of Grading Code.	☐ Yes☐ No☐ If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):	
	See Seattle-specific Directo	or's Rules: www.seattle.	gov/dpd/codes/dr/DI	R2009-17.pdf I	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)		

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement		22.170.190 includes requirements that are generally applicable to grading projects. It doesn't restrict compaction. Compaction is sometimes necessary to support foundation but could be prohibited in other situations.	No If yes, include language: If no, explain why: Revised language in 22.170.190: G. Surface ((P))preparation. ((The ground surface))Areas that will receive fill shall be prepared ((to receive fill))by removing vegetation, non-approved materials, topsoil, and other unsuitable materials, including, but not limited to, mud, peat, and other materials with insufficient strength to satisfy the design, as determined by the Director. H. Native topsoil shall be retained in an undisturbed state to the maximum extent feasible, as defined in Chapter 22.801 of the Stormwater Code. Topsoil from areas that will be graded shall be reapplied to the site, where feasible. Topsoil that will be reused on-site shall be stockpiled on-site in a designated, controlled area, not adjacent to critical areas. I. Areas that have been cleared, graded, or compacted and that have not been covered by impervious surface, incorporated into a drainage facility, or engineered as structural fill or slope shall be amended with organic matter prior to final inspection.	☐ Yes☐ No If yes, list document title(s):
	Landscaping, Nati	ive Vegetation	Street Landscan	oina			
	Landscaping, Nati	ve vegetation, e	Ja cot Landscap	,,,,g			

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2				Step 3		Step 4	Step 5
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Maximum impervious	Was topic reviewed for this document?	Were gaps identified? Yes	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	☐ No ☑ Does not apply	No See existing requirement			No If yes, include language : If no, explain why :	No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two- track driveway design? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Bulk and Dimension			ne development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance? Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance? Maximum square footage Likewise, can flexibility be added to max. square footage requirements? Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance? Other	Yes No Does not apply Yes Does not apply	Yes No See existing requirement requirement			☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s): Yes No If yes, list document title(s): Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Clearing and Grace Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement	22.170.190.1	Prohibits use of topsoil as fill	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Director's Rule 10-2009, Small Diameter Pipe Piles (Pin Piles)

Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement	22.170.190	Currently, the phrase "the ground surface" does not provide specificity and can result in removal of vegetation over a greater portion of the site than necessary.	No If yes, include language: In 22.170.190.G, more specific language clarifies that the areas prepared for grading are those areas that will receive fill. A new subsection 22.170.190.H now requires applicants to retain native topsoil in an undisturbed state to the maximum extent feasible. Applicants are also required to store and subsequently reapply or reuse topsoil on site. Also, a new subsection 22.170.190.I requires areas that have been cleared, graded, or compacted but not covered with impervious surfaces to be amended with organic soil prior to final inspection.	☐ Yes☐ No If yes, list document title(s):
	Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement	22.170.070.C .2.b	Requires a time schedule of operations that includes implementation of sections 22.805.010 & 22.807.020 of Stormwater Code, clearing, minimization of grading of unprotected soils, restoration of topsoil & vegetative cover & construction of improvements	☐ Yes☐ No☐ If yes, include language: If no, explain why: Existing requirement is sufficient	Yes No If yes, list document title(s):
	Street and Roads						

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	☐ Yes☐ No☐ See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)? Sidewalk slope Are there opportunities	Yes No Does not apply Yes No	Yes No See existing requirement Yes No	Reference	Requirement, connect dap	Yes No If yes, include language: If no, explain why: Yes No	Yes No If yes, list document title(s): Yes No
	to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	⊠ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Design Guidelines	s and Standards					

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	review?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Mana	gement and Mai	ntenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Critical Areas and	Shoreline Mana	agement				

	Step 2		Step 3			Step 4	Step 5
WH	WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Land Use Code (SMC Title 23)

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Dave LaClergue	Area Planning Manager	Policy for landscaping, urban design, and neighborhood planning	DPD
Nick Welch	Senior Planner	Land Use Policy	DPD
Dennis Meier	Senior Planner	Land Use Policy and Code Development	DPD
Bradley Wilburn	Land Use Planner	Zoning and Land Use Review	DPD

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the revisions in Step 4.

1

	Step 2			Step 3		Step 4	Step 5
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	⊠ Yes □ No □ Does not apply	Yes No See existing requirement	23.44.024	Currently, the Director may modify or increase yards and spacing of structures of a cluster housing planned developments (CHPD) for certain reasons, but promoting GSI is not listed.	Yes No If yes, include language: The amendments expand the list of reasons to include promoting green stormwater infrastructure and other measures to reduce stormwater runoff. If no, explain why: code also already maintains an appropriate balance between protecting trees and allowing design flexibility	Yes No If yes, list document title(s):
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement		The Stormwater Code contain regulations for mitigating stormwater runoff caused by impervious surfaces.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle.	gov/dpd/codes/dr/DR2	2009-17.pdf PDI	F Pages: 112-116 // Document F	Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
A .	Other						
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

	Step 2		Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	⊠ Yes □ No □ Does not apply	Yes No See existing requirement	23.45.536.D	Current regulations do not clearly allow LID to count towards screening requirements.	Yes No If yes, include language: In 23.45.536.D, the amendments allow landscaped areas, including level plantings, berms, or bioretention areas, for screening provided the vegetation is at least 3 feet tall. This is similar to existing provisions elsewhere in the Land Use Code (e.g., 23.47A.016) that allow landscaped berms for screening. If no, explain why:	Yes No If yes, list document title(s):
		Yes No Does not apply	Yes No See existing requirement	23.47A.016.C	Current regulations do not clearly allow LID to count towards screening requirements.	Yes No If yes, include language: In 23.47A.016.C, the amendments allow landscaped areas for parking screening, similar to the change described above in 23.45.536. The amendments also specify that the required landscaping in surface parking areas can be met with bioretention facilities. If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you	review?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
J		Yes No Does not apply	Yes No See existing requirement	23.49.019	Current regulations do not clearly allow LID to count towards screening requirements.	Yes No In 23.49.019.I.1, the amendments modify the screening requirements of 23.49.019 so that landscaped areas, including bioretention facilities, can provide screening as long as the vegetation is 3 feet high. If no, explain why:	Yes No If yes, list document title(s):
		Yes No Does not apply	Yes No See existing requirement	23.50.034	Current regulations do not clearly allow LID to count towards screening requirements.	Yes No Currently, in industrial zones, screening may be a fence, wall, hedge, or landscaped berm. Similar to the changes in 23.47A.016.C and 23.49.019.I.1, the amendments add landscaped areas to this list, including but not limited to bioretention facilities, provided that vegetation in the landscaped area is 3 feet above the surrounding grade. If no, explain why:	Yes No If yes, list document title(s):
		Yes No Does not apply	Yes No See existing requirement	23.57.008.C	Current regulations do not clearly allow LID to count towards screening requirements.	Yes No This section specifies requirements for major communications utilities. In subsection 23.57.008.C, which includes requirements for setbacks and landscaping, the amendments stipulates that bioretention facilities can fulfill the landscaping requirement if it screens and mitigates the visual impacts as required. If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WI	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other	Yes No Does not apply	Yes No See existing requirement	23.440.022	Institutions in single-family zones do not have to meet Seattle Green Factor requirements for landscaping.	The legislation changes landscaping provisions in subsection 23.44.022.I of the regulations for institutional uses in single-family zones. Institutions in single-family zones must achieve a Green Factor score of 0.3 or greater. Green Factor is a score-based code requirement for the quantity and quality of landscaping. Institutions must include features such as green roofs, permeable paving, rain gardens, trees, and shrubs to meet the Green Factor score. Many Green Factor features are also low impact development strategies and help reduce stormwater runoff.	☐ Yes☐ No If yes, list document title(s):
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	∑ Yes ☐ No ☐ Does not apply	✓ Yes✓ No✓ See existing requirement	23.44.024	Currently, landscaping requirements for cluster housing planned developments (CHPD) are intended to minimize the impact of the CHPD on adjacent uses, but minimizing runoff and impervious surfaces and preventing erosion are not stated as goals.	Yes No If yes, include language: The CHPD regulations include landscaping requirements in subsection 23.44.024.F. The amendments restructure this subsection. The new structure states that the Director may require retention of existing mature landscaping or require new landscaping in order to minimize the impacts of the CHPD on adjacent uses; reduce stormwater runoff, potential erosion, and area of impervious surfaces; and screen parking. If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
WI	HAT topics did you r	eview?	V	VHERE are t	the gaps?	What steps have you taken to FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
		Yes No Does not apply	Yes No See existing requirement	23.44.010	In single family zones, the lot coverage limit restricts the amount of a lot that can be developed.	Yes No If yes, include language: If no, explain why: Existing lot coverage limits meet this requirement in single family zones. In non-single-family zones, there are open space requirements; some zones do not have setback requirements because they are areas where the City wants to encourage higher-density development, for several reasons including environmental goals and policies.	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement	23.45.536.C	Existing driveway requirement for multifamily projects does not require shared driveways.	Yes No If yes, include language: In 23.45.536.C, the amendments reduce impervious surface in multi-family residential projects by stipulating that driveways providing access from the street shall either be paved with permeable materials or be shared driveways providing access to multiple garages. If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?		Yes No See existing requirement	23.54.030	Driveway width minimums are already reduced to minimize impervious surface, and maximum widths limit this further.	Yes No If yes, include language: If no, explain why: Existing regulations are sufficient.	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways? Two-track driveway		Yes No See existing requirement	23.45.536.C	Existing driveway requirement for multifamily projects does not permeable pavement for driveways.		Yes No If yes, list document title(s):
	design Or the use of a two-track driveway design?	No Does not apply	No See existing requirement			No If yes, include language: If no, explain why: Two-track driveway design is allowed.	☐ No If yes, list document title(s):
	Other						
	Bulk and Dimensi Can additional flexibility or			he development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?		Yes No See existing requirement		In the land use code, front and rear yards may be reduced to protect an environmentally critical area.	Yes No If yes, include language: If no, explain why: Existing requirements balance flexibility to preserve critical areas or trees (see 25.11) with the need to provide separation between structures.	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?		Yes No See existing requirement		Allowing additional height would be in opposition to City goal of ensuring development is compatible with neighborhood.	Yes No If yes, include language: If no, explain why: flexibility already exists and achieved appropriate balance between minimizing site disturbance and ensuring development compatible with neighborhood	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
W	WHAT topics did you review?		W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	∑ Yes ☐ No ☐ Does not apply	☐ Yes☐ No☐ See existing requirement	23.44.010	In single family zones, the lot coverage limit restricts the amount of a lot that can be developed.	Yes No If yes, include language: If no, explain why: Existing lot coverage limits meet this requirement in single family zones. In non-single-family zones, there are open space requirements; some zones do not have setback requirements because they are areas where the City wants to encourage higher-density development, for several reasons including environmental goals and policies.	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement	23.43.012 23.44.024	Cottage housing is allowed pursuant to 23.43.012. Requirements for setbacks, yards, and separations between structures are reduced. Clustered housing is allowed on large sites pursuant to 23.44.024. This section limits the size of structures and allows smaller separation between structures.	Yes No If yes, include language: If no, explain why: Provision already exists.	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
Categories	Other	Yes No Does not apply	Yes No See existing requirement	23.43.008 23.43.010 23.43.012 23.44.014 23.44.024 23.45.518 23.47A.009 23.47A.014 23.75.140	Currently, there are several sections of the Land Use Code that establish requirements for yards, setbacks, and separation areas. These requirements apply in various zones and generally prohibit any structure being constructed in yards, setbacks, or separation areas. There are several exceptions for yard and setback requirements that allow porches, steps, and certain features of a structure. The exception also allows some flexibility for yard and setback requirements to preserve exceptional trees. There is also already an existing exception to allow cisterns that collect and store rainwater in yards in single-family residential zones (Section 23.44.014).	Yes No If yes, include language: The amendments modify development standards in several sections so that above-grade green stormwater infrastructure, such as cisterns and bioretention facilities, are allowed in yards, setbacks, and separation areas. Where an exception already exists to allow cisterns, the amendments expands the flexibility to include above-grade green stormwater infrastructure. If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?) Conserving native vegetation/soils Can/does document include provisions aimed	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	at conserving native vegetation?					-,	

Step 2		Step 3			Step 4	Step 5	
WH	WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):

Step 2			Step 3		Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

	Step 2			Step 3	3	Step 4	Step 5
WH	WHAT topics did you review?			HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?		Yes No See existing requirement	23.54.015	Parking minimums are already very low. There is no required parking for development in urban villages served by frequent transit. There are also parking maximums in certain zones that limit the number of parking spaces that can be provided as surface parking.	Yes No If yes, include language: If no, explain why: further reducing parking requirements would have deleterious spillover effects on congestion and the availability of on-street parking.	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?		Yes No See existing requirement	23.54.030	Parking space standards in Seattle are already reduced to minimize impervious surface. Tandem parking is allowed in certain instances.	Yes No If yes, include language: If no, explain why: Existing regulations are sufficient.	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement	23.54.030	Parking aisle dimensions are already reduced to minimize impervious surface.	Yes No If yes, include language: If no, explain why: Existing regulations are sufficient.	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement	23.47A.016.D	Currently, the Code requires that each landscaped area be "enclosed by permanent curbs or structure barriers" in order to keep vehicles out. As a result, it is unlikely an applicant could direct stormwater from the parking surface into the landscaped area for infiltration.	The amendment modifies that language to require that landscaped areas be only "protected by" a curb or barrier, so that water can be channeled into the vegetated area and increase stormwater infiltration.	
	Other	∑ Yes ☐ No ☐ Does not apply	∑ Yes ☐ No ☐ See existing requirement	23.49.019	Currently, the Code requires that each landscaped area be "enclosed by permanent curbs or structure barriers" in order to keep vehicles out. As a result, it is unlikely an applicant could direct stormwater from the parking surface into the landscaped area for infiltration.	Yes No If yes, include language: Like 23.47A.016.D, the amendments also make the same small change to the requirement that landscaping in surface parking areas in the Downtown zones need only be protected, not enclosed, by a curb or barrier in order to increase stormwater infiltration. If no, explain why:	Yes No If yes, list document title(s):
	Design Guidelines	s and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	⊠ Yes □ No □ Does not apply	Yes No See existing requirement		See above for changes to off-street parking regulations	Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Stormwater Manag	gement and Mai	ntenance				
	Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement? Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			│ Yes │ No If yes, include language : DPD continually trains reviewers on LID BMPs. If no, explain why : │ Yes │ No If yes, include language : If no, explain why :	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WI	WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other		Yes No See existing requirement	23.41.018	For projects that are required to go through the streamlined administrative design review (SDR) process, the current regulations allow the Director to modify certain development standards, such as setback and separation requirements, amenity areas, and landscaping and screening requirements, if the development meets certain criteria. One of those criteria is a development that provides a better response to environmental and/or site conditions.	No If yes, include language: Currently the Code lists topography, the location of trees, and adjacent uses and structures as examples of environmental and site conditions to which a development can be responsive. The amendments add stormwater management to the list of environmental and site condition examples. As a result, development proposals that include low impact development solutions to managing stormwater are eligible for flexibility on certain development standards as part of the SDR process. If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Zoning requireme	nts					

	Step 2			Step 3	3	Step 4	Step 5
W	WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement	23.84A.028 23.45.516	There are currently various places in the Land Use Code where landscaped areas are either required or allowed to satisfy amenity area requirements. The particular language varies in each section, but generally LID and GSI are not explicitly listed as options to meet that requirement.	No If yes, include language: According to the current definition of "open space, landscaped," these areas are predominantly used for the planting of trees, shrubs, ground cover, and other natural vegetation. The amendments to 23.84A.028 add bioretention facilities to this list. As a result of this change, strategies like bioretention that support low impact development are considered landscaped open space. Landscaped open space satisfies various amenity area requirements. Those requirements are found in 23.45.516, 23.45.522, and 23.47A.024. By amending the definition for "open space, landscaped" applicants can include bioretention to fulfill their amenity area and/or open space requirements. If no, explain why:	☐ Yes☐ No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WI	WHAT topics did you review?			HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement	23.84A.028 23.45.516	There are currently various places in the Land Use Code where landscaped areas are either required or allowed to satisfy amenity area requirements. The particular language varies in each section, but generally LID and GSI are not explicitly listed as options to meet that requirement.	No If yes, include language: According to the current definition of "open space, landscaped," these areas are predominantly used for the planting of trees, shrubs, ground cover, and other natural vegetation. The amendments to 23.84A.028 add bioretention facilities to this list. As a result of this change, strategies like bioretention that support low impact development are considered landscaped open space. Landscaped open space satisfies various amenity area requirements. Those requirements are found in 23.45.516, 23.45.522, and 23.47A.024. By amending the definition for "open space, landscaped" applicants can include bioretention to fulfill their amenity area and/or open space requirements. If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
W	HAT topics did you	review?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other	Yes No Does not apply	Yes No See existing requirement	23.44.034	In 23.44.034.C, the current regulations specify the number of dwelling units permitted in a planned residential development (PRD). An increase of up to 20 percent may be permitted if the PRD provides public benefits such as low-income housing or child care. The listed public benefits do not address LID or stormwater management.	No If yes, include language: The amendments add green stormwater infrastructure to the list of public benefits. A development needs to include green stormwater infrastructure beyond what is otherwise required by the City's Stormwater Code (Chapters 22.800 through 22.808). In 23.44.034.E.7, the amendments expand the list of reasons that the Director may modify setback and spacing requirements to include green stormwater infrastructure and other measures to reduce stormwater runoff. This allows greater flexibility to accommodate low impact development strategies to manage stormwater. The amendments also modify the landscaping requirements of 23.44.034.F. The change is similar to the aforementioned amendments to 23.44.024. The amendments allow the Director to require retention of existing mature landscaping or require new landscaping in order to minimize the impacts of the PRD on adjacent uses; reduce stormwater runoff, potential erosion, and area of impervious surfaces; and screen parking. If no, explain why:	☐ Yes☐ No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other	Yes No Does not apply	Yes No See existing requirement	23.49.036	Similar to the requirements for PRDs, section 23.49.036 describes how a planned community development (PCD) shall be evaluated. Subsection 23.49.036.F.1 lists several public benefits three of which a PCD must include. The listed public benefits do not address LID or stormwater management.	Yes No If yes, include language: The amendments add to the list to include green stormwater infrastructure beyond the requirements of the Stormwater Code. If no, explain why:	Yes No If yes, list document title(s):
	Other	Yes No Does not apply	Yes No See existing requirement	23.49.041	combined lot development is permitted only when allowing more chargeable floor area than would otherwise be allowed on a lot results in significant public benefit. Subsection 23.049.041.D lists the public benefits that a combined lot development can provide to fulfill this requirement. The listed public benefits do not address LID or stormwater management.	 ✓ Yes No If yes, include language: Similar to the PRD and PCD changes, the amendments add to this list green stormwater infrastructure beyond the requirements of the Stormwater Code. If no, explain why: 	Yes No If yes, list document title(s):
	Other	Yes No Does not apply	Yes No See existing requirement	23.84A.014	There currently is no definition in the Land Use Code for "green stormwater infrastructure."	Yes No If yes, include language: Because the amendments add references to green stormwater infrastructure (GSI) in multiple sections, the amendments also add the definition used for green stormwater infrastructure in the Stormwater Code into the definitions included in the Land Use Code. If no, explain why:	Yes No If yes, list document title(s):
	Critical Areas and	Shoreline Mana	ngement				

Step 2				Step 3	}	Step 4	Step 5
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Shoreline Master Program

(Chapter 23.60A of Seattle Municipal Code)

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Dave LaClergue	Area Planning	Policy for landscaping,	DPD
	Manager	urban design, and	
		neighborhood planning	
Maggie Glowacki	Senior Land Use	Policy and legislation for	DPD
	Planner	environmental regulations	
Nick Welch	Senior Planner	Land Use Policy	DPD
Dennis Meier	Senior Land Use	Land Use Policy and	DPD
	Planner	Code Development	
Bradley Wilburn	Land Use Planner	Zoning and Land Use	DPD
		Review	
Maureen Traxler	Strategic Advisor	Code Development	DPD
Brennon Staley	Senior Urban	Policy and legislation	DPD
	Planner	update on land use issues	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

100	Step 2		20/1	Step 3		Step 4	Step 5
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
DPD Codes that need	Site Planning						
reviewing:	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	23.60A.152 23.60A.190	The Shoreline Master Program (SMP) regulations require development to be sited to preserve native vegetation and minimize impervious surface.	Yes No If yes, include language: If no, explain why: No gaps to fill, See Existing Req. description at left	Yes No If yes, list document title(s):
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	native vegetation loss? Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	23.60A.152 23.60A.172 23.60A.158 23.60A.156	Siting of structure needs to meet general development standards location, deign construction and management of all shoreline development shall protect the quality and quantity of surface water" Mitigation sequencing that results in no net loss of ecological function is required. Existing native vegetation is required to be protected	Yes No If yes, include language: If no, explain why: Existing regulations meet the requirements. See summary at left.	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other DPD Note: See open space pg. 11						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	∑ Yes ☐ No ☐ See existing requirement	23.60A.152 23.60A.158	SMP complies through existing development standards and through mitigation sequencing.	Yes No If yes, include language: If no, explain why: SMP complies	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement	23.60A.152. 23.60A.158	In SMP 23.60A.152 (General Development Standards) and 23.60A.158 (Standards for mitigation sequencing) meet this requirement. See specific language at right.	Yes No If yes, include language: If no, explain why: SMP complies. "All shoreline developments, shoreline modifications, and uses shall be located, designed, constructed and managed to achieve no net loss of ecological functions. No net loss of ecological functions shall be achieved by applying the standards set out in this Chapter 23.60A, including applying mitigation sequencing pursuant to Section 23.60A.158." "Regulations set out in this Chapter 23.60A are minimum requirements that shall be supplemented by mitigation sequencing in this Section 23.60A.158 when needed to achieve no net loss of ecological functions"	☐ Yes ☐ No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DF	R2009-17.pdf	PDF Pages: 112-116 // Docum	ent Pages: Section 4.4.1 (4-37 – 4-41)	

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WI	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	23.60A.156, 23.60A.167, 23.60A.190	Native vegetation including trees are required to be preserved.	Yes No If yes, include language: If no, explain why: No gap to fill, see explanation at left.	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	AT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
			Document			FILL THE GAPS?	documents that may be
	Examples of Topics &	Was topic reviewed	Were gaps	Section	Summary of Existing		
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		affected
	Other			23.60A.156,	These code sections protect		
	DPD Added			23.60A.167,	more than trees; they		
	Native Vegetation			23.60A.190	protect native vegetation.		
	Hard and Impervio	ous Surfaces					
	Maximum impervious	∑ Yes	Yes	23.60A.152	The SMP includes lot	Yes	Yes
	surface allowances	No	No	23.60A.190	coverage requirements for	☐ Yes ☐ No	No
	Can/does document	Does not apply	See existing		less intensive developed	If yes, include language :	If yes, list document title(s):
	include provisions that		requirement		areas: Conservancy	If no, explain why: Existing regulations	
	set maximum allowances				Management, Conservancy	comply with the requirement. See	
	for impervious surface,				Presentation, Conservancy	summary of existing requirements at left.	
	effective impervious area, or site/lot				Recreation, Urban Residential, and Urban		
	coverage? Clustering?				Commercial Environments.		
	Shared driveways	Yes	Yes		Commercial Environments.	Yes	Yes
	Can/does document	No	No			□ No	No
	include provisions that	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	require or allow shared		requirement			If no, explain why :	
	driveways?						
	Minimum driveway	Yes	Yes			Yes	Yes
	width	No	☐ No			□ No	No
	Are there existing minimum driveway width	□ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	document provisions that		requirement			in no, explain wity .	
	can be adjusted to						
	decrease impervious						
	surface?						
	Use of permeable	Yes	Yes	23.60A.190	Increase in impervious	Yes	Yes
	pavement for driveways	No	No		surface is required to be	No No	No
	Can/does document include provisions that	Does not apply	See existing		mitigated to offset impacts caused by an increase in	If yes, include language : If not, explain why :	If yes, list document title(s):
	allow or require the use		requirement		stormwater runoff. One way	Existing regulations comply with the	
	of a permeable materials				to mitigate this impact is to	requirement. See summary at left.	
	for driveways?				use permeable material.	Tagan and a control of the control o	
	Two-track driveway	Yes	Yes		,	Yes	Yes
	design	☐ No	No			☐ No	No
	Or the use of a two-	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	track driveway design?		requirement			If no, explain why:	

Step 2				Step 3	3	Step 4	Step 5				
WH	IAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Other										
	Bulk and Dimensional Considerations Can additional flexibility or incentives be added, to facilitate minimizing the development footprint?										
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	23.60A.167	Section 23.60A.167 of the new SMP allows setback flexibility to minimize disturbance and stormwater runoff.	Yes No If yes, include language: If no, explain why: No gaps to fill	Yes No If yes, list document title(s):				
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Clearing and Grad	ding									

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	∑ Yes ☐ No ☐ Does not apply	∑ Yes No See existing requirement	23.60A.152.F and 23.60A.190	23.60A.152.G States "Disturbance areas and land clearing shall be limited to the minimum necessary for development. Any surface disturbed or cleared of vegetation and not to be used for development shall be planted with native vegetation," All of section 190 requires minimizing disturbance and mitigating the loss of pervious surface.	☐ Yes ☐ No If yes, include language: If no, explain why: No gaps to fill. See existing language at left.	☐ Yes ☐ No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	XesNoDoes not apply	Yes No See existing requirement	23.60A.156, 23.60A.167, 23.60A.190	Current regulations in the SMP require preservation of native vegetation and allow flexibility from certain development standards to achieve that.	Yes No If yes, include language: If no, explain why: Existing requirements meet this goal. See summary at left.	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement	25.09.060.C		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			☐ Yes ☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	✓ Yes☐ No☐ See existing requirement	23.60A.152 and 23.60A.190	Any increase in impervious surface is an impact that needs to be mitigated. One way to mitigate this impact is to use permeable paving.	Yes No If yes, include language: If no, explain why: Mitigating increases in impervious surface are regulated by Stormwater Code.	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Otilei						
	Design Guidelines						
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Continuous curb requirements Are there opportunities to remove requirements in order to facilitate onsite bioretention or dispersion? Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement	Reference	Requirement/Conflict/Gap	Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Other						
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement? Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols? Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply Yes No Does not apply Yes No Does not apply	requirement Yes No See existing requirement Yes No See existing requirement Yes No See existing requirement			☐ Yes ☐ No If yes, include language: If no, explain why: ☐ Yes ☐ No If yes, include language: If no, explain why: ☐ Yes ☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Other						

Step 2		Step 3			Step 4	Step 5					
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Zoning requirements										
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting? Passive vs. active open	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	No∑ Does not apply	☐ No☐ See existing requirement			No If yes, include language: If no, explain why:	No If yes, list document title(s):				
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other										
	Critical Areas and	Shoreline Mana	gement								
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement	23.60A.152 23.60A.167	Height exceptions in all shoreline environments allow for extra height for green roofs.	Yes No If yes, include language: If no, explain why: Current requirements already allow LID BMPs in the shoreline environments where appropriate.	☐ Yes ☑ No If yes, list document title(s):				
	Other										

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Tree Protection Code, SMC 25.11

Step 1 – WHO was part of your Project Team?

Name	Name Job title		Department
Brennon Staley	Senior Urban	Policy and legislation	Planning &
	Planner	update on land use issues	Development

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing	SMC Chapter 25.11	Tree Protection code requires protection of individual trees during and outside of development. City can require re-design of buildings to protect trees	Yes No If yes, include language: If no, explain why: code already maintains an appropriate balance between protecting trees and allowing design flexibility Yes No If yes, include language:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?		requirement			If no, explain why :	
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf P	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement	SMC Chapter 25.11	Tree Protection code prohibits compaction in root zone around protected trees	Yes No If yes, include language: If no, explain why: code is already strict about compaction related to trees; other codes deal with compaction more generally	Yes No If yes, list document title(s):
	Other						
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5				
WHAT topics did you review?			WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City			
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected			
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement	SMC Chapter 25.11	Tree Protection code requires protection of individual trees during and outside of development.	Yes No If yes, include language: If no, explain why: Code already has very strict requirements for tree preservation.	Yes No If yes, list document title(s): Land Use code has standards for tree planting. Standard Plans contains details for tree planting.			
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Other									
	Hard and Impervious Surfaces									

Step 2			Step 3	}	Step 4	Step 5	
WH	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	☐ Yes☐ No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			l he development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
categories	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	SMC Chapter 25.11	Applicants can receive flexibility on setbacks and height to preserve a tree	Yes No If yes, include language: If no, explain why: flexibility already exists and achieved appropriate balance between preserving trees and ensuring development compatible with neighborhood	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement	SMC Chapter 25.11	Applicants can receive flexibility on setbacks and height to preserve a tree	Yes No If yes, include language: If no, explain why: flexibility already exists and achieved appropriate balance between preserving trees and ensuring development compatible with neighborhood	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	SMC Chapter 25.11	Tree Protection code requires protection of individual trees during and outside of development.	Yes No If yes, include language: If no, explain why: Code already contains requirement and incentives for protecting trees with preference for natives	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Catanavia	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Placement of utilities	for this document? Yes	identified? Yes	Reference	Requirement/Conflict/Gap	Yes	Yes
	under paved areas in the	No	No			□ No	□ No
	ROW	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	Can/does document	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	requirement			If no, explain why:	
	include direction to place		'				
	utilities under paved						
	areas in ROW to preserve						
	potential space for						
	infiltration of runoff?		— ,,				
	Required turn around	Yes No	☐ Yes ☐ No			Yes No	Yes No
	areas(e.g., Fire, USPS) Can required turn around	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	areas be reduced or can	Does not apply	requirement			If no, explain why:	ii yes, list document title(s).
	these areas be paved		requirement			in no, explain may	
	with permeable						
	pavement?						
	Sidewalk widths	Yes	Yes			Yes	Yes
	Are there opportunities	No	No			No	No
	to reduce minimum	□ Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	sidewalk width		requirement			If no, explain why :	
	requirements, particularly for land use						
	zones with low						
	pedestrian volumes						
	(industrial, etc.)?						
	Sidewalk slope	Yes	Yes			Yes	Yes
	Are there opportunities	☐ No☑ Does not apply	□ No			□ No	No
			See existing			If yes, include language :	If yes, list document title(s):
	slopes be graded to		requirement			If no, explain why :	
	direct runoff to adjacent pervious surface when						
	possible (ie: vegetated						
	planting strip)						
	Minimum cul-de-sac	Yes	Yes			Yes	Yes
	radius	☐ No	No			No	No
	Is there an opportunity	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	to reduce the min. radius		requirement			If no, explain why:	
	to min. imp. Surface?		□ v _a a				
	Alternatives to cul-de-	Yes No	Yes			Yes No	Yes No
	sacs Is there an opportunity	Does not apply	☐ No☐ See existing			□ NO If yes, include language :	☐ NO If yes, list document title(s):
	to provide incentives for	M Does not apply	requirement			If no, explain why:	in yes, list document title(s).
	alternatives?		. oqun ciriciit			,	

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Cana						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WI	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Mana	gement and Mai	intenance				

Step 2			Step 3	}	Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Training	for this document? Yes	identified? Yes	Reference	Requirement/Conflict/Gap	Yes	Yes
	Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project	☐ No ☐ Does not apply	No See existing requirement			☐ No If yes, include language : If no, explain why :	No If yes, list document title(s):
	review & enforcement?						
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	protocols? Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
~	Other						
	Critical Areas and	Shoreline Mana	gement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

City of Seattle Report Form

Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 01 56 39 Temporary Tree, Vegetation, & Soil Protection

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WF	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			☐ Yes☐ No If yes, include language: If no, explain why: ☐ Yes☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	sited to minimize runoff, total impervious and native vegetation loss? Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	Note to Consultants	No direct instructions to incorporate GSI or LID	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step	3	Step 4	Step 5					
WH	IAT topics did you re	eview?	WHERE are	the gaps?	What steps have you taken to	IDENTIFY any other City					
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps Section identified? Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected					
	Other										
	Soils										
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction) Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement requirement		Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):					
	the MS4 Permit , BMP T5-13? See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2009-17.pdf	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)						
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement		Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):					
	Other										
	Landscaping, Nati	ive Vegetation, S	Street Landscaping								

	Step 2			Step 3	}	Step 4	Step 5
W	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			ne development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Other							
	Clearing and Grad	ling						
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	
	Other							
	Street and Roads							
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	

	Step 2		Step 3			Step 4	Step 5
WH	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots? Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff? Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply Yes No Does not apply Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement Yes No See existing requirement requirement			☐ Yes ☐ No If yes, include language: If no, explain why: ☐ Yes ☐ No If yes, include language: If no, explain why: ☐ Yes ☐ No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No If yes, list document title(s):
	Design Guidelines	and Standards					
11/6.	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3	3	Step 4	Step 5	
W	HAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Are there opportunities to harvest stormwater?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Mana	gement and Mai	intenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting? Passive vs. active open space requirements	Yes No Does not apply Yes No	Yes No See existing requirement Yes No			Yes No If yes, include language: If no, explain why: Yes No	Yes No If yes, list document title(s): Yes No
	Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	□ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

WH	Step 2 WHAT topics did you review?			Step 3 HERE are t		Step 4 What steps have you taken to	Step 5 IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps Section Summary of Existing identified? Reference Requirement/Conflict/Gap		FILL THE GAPS?	documents that may be affected	
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Parks Standard 13 14 26 For Water Feature Design

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Park Engineer	Engineering manager	Parks & Recreation

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss? Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	Various	Generally requires connection to sanitary sewer system throughout, requires recirculation in most applications, but does not emphasize dispersion methods.	Yes No If yes, include language: Modified throughout to encourage use of pervious paving, gray water storage, and minimize drainage to sanitary sewer. No direct drainage to stormwater systems allowed. If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo		e.gov/apa/codes/ar/DR.	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Landscaping, Nati	ive Vegetation,	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you r	eview?	W	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two- track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			he development	footprint?		

Step 2			Step 3	3	Step 4	Step 5	
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ding					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	these areas be paved with permeable pavement?		·				
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking						

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
Categories	Minimum/maximum	Yes	Yes	Reference	Requirement/ connect/ Gap	Yes	Yes
	parking ratios	No No	No No			□ No	□ No
	Are there opportunities	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	to adjust minimum	Does not apply	requirement			If no, explain why:	in yes, not document title(s).
	parking ratios to reduce		requirement			in no, explain why i	
	impervious surface and						
	runoff? Are there						
	opportunities to institute						
	maximum parking ratios?						
	Permeable paving use	Yes	Yes			Yes No	Yes
	Are there opportunities	☐ No	☐ No			│	□ No
	to allow, encourage or	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	require permeable		requirement			If no, explain why :	
	paving be used in ROW						
	parking lanes or in public						
	or private surface parking						
	not in the ROW.						
	Parking stall dimensions	Yes	Yes			Yes No	Yes
	Are there opportunities	∏ No	│				No
	to adjust parking stall	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	dimensions (length and		requirement			If no, explain why:	
	or width) or the ratio of						
	compact to standard size						
	spaces allowed or						
	required in surface parking lots?						
	Driving aisle dimensions	Yes	Yes			Vos	Yes
	Are there opportunities	□ res □ No	No			Yes No	□ No
	to adjust the required	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	dimensions of driving	Does not apply	requirement			If no, explain why :	ii yes, iist document title(s).
	aisles for surface off-		requirement			in no, explain willy .	
	street parking to						
	minimize impervious						
	area and runoff?						

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	s and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Manag	gement and Mai	ntenance	l			

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
categories	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement	Reference	requirement connect cup	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
_	- Canci						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 31 00 00 Earthwork

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	Wi	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native	Yes No Does not apply	Yes No See existing requirement	Note to Consultants	No direct instructions to incorporate GSI or LID	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3	3	Step 4	Step 5	
WH	HAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other	ivo Vogototion 1	Stroot Landaca	oina.			
	Landscaping, Nati	ive vegetation, S	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			he development	footprint?		

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you r	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ling					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement	3.02 B & C	Protection of existing GSI infrastructure not specifically addressed.	Yes No If yes, include language: Added sentence to Section 3.02.B "Such interfering utilities may include Green Stormwater Infrastructure (GSI) measures such as bioswales, dry wells, etc." Added new Section 3.02.C "Green Stormwater Infrastructure: Drawings of existing conditions will generally identify the presence of existing GSI measures such as bioswales, cisterns, rain gardens, dry wells, permeable paving, etc. The Contractor shall confirm the location of all such features and shall protect them from disturbance during construction if they are not part of the Work. If potential GSI features not shown on the existing conditions are discovered during construction, the Contractor shall notify the Owner to receive further instruction." If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Street and Roads	1	1	1			

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		Wi	HERE are t		What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
categories	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement	Reference	neganement, commet, cap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			☐ Yes ☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	s and Standards					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	dispersion? Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Are there opportunities to harvest stormwater?	Yes No Does not apply	Yes No See existing requirement			☐ Yes ☐ No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Mana	gement and Mai	intenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Zoning requireme	nts					
· ·	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	agement				

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where	Was topic reviewed for this document? Yes No Does not apply	Were gaps identified? Yes No See existing requirement	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS? Yes No If yes, include language: If no, explain why:	documents that may be affected Yes No If yes, list document title(s):
	appropriate? Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 17 00 Pathway and Pavement Edging

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering	Engineering oversight	Parks
	Manager	and supervision	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WH	IERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	□ No □ Does not apply	☐ No☐ See existing requirement			No If yes, include language: If no, explain why:	☐ No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3	}	Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
		ivo Voqetation (Stroot Landocan	ing			
	Landscaping, Nati	ive vegetation, S	street Landscap	oing			

Step 2			Step 3	}	Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Ü	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimensio Can additional flexibility or			ne development	footprint?		

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad						
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Parking						
	Faikilly						

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Manag	gement and Mai	ntenance	l			

	Step 2		Step 3			Step 4	Step 5			
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City			
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected			
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Other Existing standard silent on GSI nexus	Yes No Does not apply	Yes No See existing requirement	Paragraphs 1 & 5	Silent on GSI nexus.	 ✓ Yes No If yes, include language: Directs utilization of pervious paving and path edging to allow dispersion when impervious. If no, explain why: 				
	Zoning requirements									
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			

	Step 2			Step 3	}	Step 4	Step 5
WI	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement		These areas are not irrigated.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 20 00 Play Area Design

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering	Engineering oversight	Parks
	Manager	and supervision	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
-	Building locations	Yes	Yes			Yes	Yes
	Can/does document	No	☐ No			No	□No
	require	Does not apply	See existing			If yes, include language:	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that buildings and other						
	impervious surfaces) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Parking area locations	Yes	Yes			Yes	Yes
	Can/does document	No	No			No	No
	require	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that parking						
	lots (impervious) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?	N		101100	C'L		
	Stormwater	Yes	Yes	I.G.1, I.G.3,	Silent on LID issues	⊠ Yes	Yes No
	management facility locations	☐ No☐ Does not apply	│	II.A.7, III.H, III.J		No If yes, include language : Added language to	If yes, list document title(s):
	Can/does document		requirement	111.3		proactively consider LID options for drainage	in yes, list document title(s).
	require		requirement			and use of plantings. See markup	
	designers/developers to					If no, explain why:	
	locate stormwater					,,	
	facilities in a way that						
	minimizes stormwater						
	runoff, impervious						
	surface, and native						
	vegetation loss?						

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	∑ Yes ☐ No ☐ Does not apply	✓ Yes✓ No✓ See existing requirement	III.H	Silent on use of native vegetation	Yes No If yes, include language: Recommended native plants when feasible in plantings around play areas. See attached markup. If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Maximum impervious surface allowances Can/does document include provisions that set maximum allowances	Was topic reviewed for this document? Yes No Does not apply	Were gaps identified? Yes No See existing requirement	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	Yes No If yes, include language: If no, explain why:	documents that may be affected Yes No If yes, list document title(s):
	for impervious surface, effective impervious area, or site/lot coverage? Clustering? Shared driveways	Yes	Yes			Yes	Yes
	Can/does document include provisions that require or allow shared driveways?	☐ No ☑ Does not apply	No See existing requirement			☐ No If yes, include language : If no, explain why :	☐ No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other				Not addressed	Added language to strengthen use of pervious paving for pathways and encourage dispersion methods.	
	Bulk and Dimension			ne development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	disturbance? Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ding					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	AT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement	III.J	Silent on use of pervious paving on pathways	∑ Yes ☐ No If yes, include language : Recommended pervious paving when feasible, see markup If no, explain why :	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Required turn around	Yes	Yes			Yes	Yes
	areas(e.g., Fire, USPS)	□ No	No			No	No
	Can required turn around	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	areas be reduced or can		requirement			If no, explain why:	
	these areas be paved						
	with permeable						
	pavement? Sidewalk widths	□ Vos	Yes			Yes	□ Voc
	Are there opportunities	Yes No	No			□ No	Yes No
	to reduce minimum	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	sidewalk width	Does not apply	requirement			If no, explain why:	ii yes, iist document title(s).
	requirements,		requirement			in no, explain why .	
	particularly for land use						
	zones with low						
	pedestrian volumes						
	(industrial, etc.)?						
	Sidewalk slope			III.J	Standard silent about	Yes No	Yes No
	Are there opportunities	☐ No	No		dispersion		
	to require sidewalk cross	Does not apply	See existing			If yes, include language : Revised to	If yes, list document title(s):
	slopes be graded to		requirement			encourage dispersion, see markup	
	direct runoff to adjacent					If no, explain why :	
	pervious surface when						
	possible (ie: vegetated planting strip)						
	Minimum cul-de-sac	Yes	Yes			Yes	Yes
	radius	No	No No			□ No	□ No
	Is there an opportunity	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	to reduce the min. radius		requirement			If no, explain why :	
	to min. imp. Surface?						
	Alternatives to cul-de-	Yes	Yes			Yes	Yes
	sacs	☐ No	No			□No	No
	Is there an opportunity	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	to provide incentives for		requirement			If no, explain why :	
	alternatives?						
	Other						
	Parking	<u> </u>					
	raining						

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5					
WH	IAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other										
	Design Guidelines	and Standards									
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other										
	Stormwater Management and Maintenance										

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Existing standard silent on GSI nexus			Paragraphs 1 & 5	Silent on GSI nexus.	Yes No If yes, include language: Directs utilization of pervious paving and path edging to allow dispersion when impervious. If no, explain why:	
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements? Opportunities for	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs? Other	No No Does not apply	No See existing requirement			No If yes, include language: If no, explain why:	No If yes, list document title(s):
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement		These areas are not irrigated.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 60 00 Trail Construction and Restoration

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you re	eview?	Wi	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native	Yes No Does not apply	Yes No See existing requirement	Note to Consultants	No direct instructions to incorporate GSI or LID	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			ne development	footprint?		'

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Catagories	Examples of Topics &	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	кетегепсе	Requirement/Conflict/Gap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2				Step 3	3	Step 4	Step 5
WH	IAT topics did you re	eview?	Wi	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Required turn around areas(e.g., Fire, USPS)	Yes No	Yes No			Yes No	Yes No
	Can required turn around areas be reduced or can these areas be paved with permeable pavement?	□ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	pedestrian volumes (industrial, etc.)? Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	possible (ie: vegetated planting strip) Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	No Does not apply	No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
3	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	s and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Are there opportunities to harvest stormwater?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Manag	gement and Mai	ntenance				

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Catagories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Training Is there an opportunity	Yes No	Yes No	Reference	Requirement/Conflict/Gap	Yes No	Yes No
	to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	☑ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Zoning requireme	nts					
Mr.	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3		Step 4	Step 5
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
Categories	Opportunities for	Yes	Yes	Reference	Requirement/Connict/Gap	Yes	Yes
	Performance Based	No	No			No	No
	Designs (PUDs)	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	What opportunities exist to remove barriers to LID		requirement			If no, explain why:	
	facility siting within						
	PUDs?						
	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs	Yes	Yes			Yes	Yes
	in critical areas/shorelines when	│	No See existing			☐ No If yes, include language :	No If yes, list document title(s):
	compatible	Does not apply	requirement			If no, explain why :	if yes, list document title(s).
	Are there opportunities		- 4			,	
	to revise critical areas						
	ordinance(s) to permit specific LID BMP's where						
	· ·						
	Other						
	appropriate? Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 80 00 Irrigation Systems

Step 1 - WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering	Engineering oversight	Parks
	Manager	and supervision	

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

01 0		Cian 2				<u> </u>	
	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss? Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Other							
	Soils							
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)		Yes No See existing requirement	Various	Healthy soil is retained and used as backfill for trenches.	☐ Yes ☐ No If yes, include language: If no, explain why: Existing language sufficient.	Yes No If yes, list document title(s):	
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?		Yes No See existing requirement	Various	All trench backfill is to Parks standards for plantings in irrigated area, which meets or exceeds this standard.	Yes No If yes, include language: If no, explain why: Existing language sufficient.	Yes No If yes, list document title(s):	
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)		
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	Various	Specifies sand or native soil backfill around irrigation equipment; soil disruption minimized.	Yes No If yes, include language: If no, explain why: Existing language sufficient.	Yes No If yes, list document title(s):	
	Other							
	Landscaping, Nati	ive Vegetation,	Street Landscap	oing				

Step 2			Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?		Yes No See existing requirement	Various	Tree roots are protected while irrigation trenches are being constructed	☐ Yes ☐ No If yes, include language: If no, explain why: Existing language sufficient.	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	☐ Yes☐ No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			ne development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance? Height limits Can flexibility be added to height limits to allow	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing			Yes No If yes, include language: If no, explain why: Yes No If yes, include language:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	designers/developers to min. site distrubance? Maximum square footage Likewise, can flexibility be added to max. square footage requirements? Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply Yes No Does not apply	requirement Yes No See existing requirement Yes No See existing requirement requirement			If no, explain why: Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Other						
	Clearing and Grace Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement	1.06.B.2	Allows for multiple irrigation pipes in common trenches, with appropriate limitation.	Yes No If yes, include language: If no, explain why: Existing language sufficient.	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?		Yes No See existing requirement	Instructions to Consultant, Point H	Intent was in original document, but not specifically expressed in terms of native vegetation. Added Point H to reinforce.		Yes No If yes, list document title(s):
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Street and Roads		L				
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Catagorias	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions Placement of utilities	for this document? Yes	identified? Yes	Reference	Requirement/Conflict/Gap	Yes	Yes
	under paved areas in the	No	No			□ No	No
	ROW	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	Can/does document	2 2 ccs not apply	requirement			If no, explain why:	in yes, not assument title(s).
	include direction to place		- 1			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	utilities under paved						
	areas in ROW to preserve						
	potential space for						
	infiltration of runoff?						
	Required turn around	Yes	Yes			Yes No	Yes No
	areas(e.g., Fire, USPS) Can required turn around	☐ No ☐ Does not apply	☐ No☐ See existing			NO If yes, include language :	□ NO If yes, list document title(s):
	areas be reduced or can	Does not apply	requirement			If no, explain why :	ii yes, list document title(s).
	these areas be paved		requirement			in no, explain why .	
	with permeable						
	pavement?						
	Sidewalk widths	Yes	Yes			Yes	Yes
	Are there opportunities	│	No			No	□ No
	to reduce minimum	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	sidewalk width		requirement			If no, explain why :	
	requirements,						
	particularly for land use zones with low						
	pedestrian volumes						
	(industrial, etc.)?						
	Sidewalk slope	Yes	Yes			Yes	Yes
		☐ No ☐ Does not apply	No			│	No
	to require sidewalk cross	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	slopes be graded to		requirement			If no, explain why :	
	direct runoff to adjacent						
	pervious surface when						
	possible (ie: vegetated planting strip)						
	Minimum cul-de-sac	Yes	Yes			Yes	Yes
	radius	No	No			□ No	□ No
	Is there an opportunity	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	to reduce the min. radius		requirement			If no, explain why :	
	to min. imp. Surface?						
	Alternatives to cul-de-	Yes	Yes			Yes	Yes
	sacs	No	∐ No			□ No	No
	Is there an opportunity	Does not apply	See existing			If yes, include language:	If yes, list document title(s):
	to provide incentives for alternatives?		requirement			If no, explain why :	
	arcernatives:						

Step 2			Step 3		Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Stormwater Manag	gement and Mai	ntenance				

Step 2			Step 3	3	Step 4	Step 5	
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement? Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Sprinkler heads are designed to prevent irrigation water from significant contact with pervious surfaces, thus reducing potential for unwanted, wasteful drainage into stormwater systems.	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	1.06.B.2	Section reinforces contract requirement to align sprinkler heads per design.	Yes No If yes, include language: If no, explain why: Existing language sufficient.	
	Zoning requireme	nts					
,	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement	Various		Yes No If yes, include language: If no, explain why: Existing language triggers "Maxicom" irrigation controls, which automatically will reduce or eliminate automatic irrigation during wet conditions, thus leaving the irrigated area suitable for dispersion.	Yes No If yes, list document title(s):
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement		These areas are not irrigated.	☐ Yes☐ No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 91 13 Soil Preparation

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

Step 2			Step 3	}	Step 4	Step 5	
WH	IAT topics did you re	eview?	Wi	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement	Note to Consultants	No direct instructions to incorporate GSI or LID	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement		This section is intended to address requirements for imported soil and amendments; it does not address soil removal at all - that is addressed in a separate section (31 00 00).	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?		Yes No See existing requirement		Parks specs meet or exceed T5-13 standards.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR	2009-17.pdf I	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
A	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two- track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			he development	footprint?		

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	Reference	кеципенентусонністувар	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?		Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2	Step 2		Step 3	3	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	. ,			Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around	Yes No Does not apply	Yes No See existing			Yes No If yes, include language:	Yes No If yes, list document title(s):
	areas be reduced or can these areas be paved with permeable pavement?	Z sees not apply	requirement			If no, explain why :	in yes, iist doedinent title(s).
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2				Step 3	3	Step 4	Step 5
WI	HAT topics did you r	review?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Ossislation	a and Otam days					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Are there opportunities to harvest stormwater?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Mana	gement and Mai	intenance				

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement	No.	rioquirioniony common cap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	- Canel						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	ngement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 93 00 Landscape Planting Design

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No Does not apply Yes No Does not apply	Yes No See existing requirement Yes No See existing requirement			Yes No If yes, include language: If no, explain why: Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):

	Step 2		Step 3			Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
		ivo Voqetation (Stroot Landocan	ing			
	Landscaping, Nati	ive vegetation, S	street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?		∑ Yes No See existing requirement		LID-related goals were already incorporated in existing document, but updates needed to point more directly to SPU's revised stormwater code, TIP's, & definitions.	Yes No If yes, include language: See marked up document If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5					
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):				
	Two-track driveway design Or the use of a two- track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other										
	Bulk and Dimensional Considerations Can additional flexibility or incentives be added, to facilitate minimizing the development footprint?										

Step 2			Step 3			Step 4	Step 5
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad	ding					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
<u>~</u>							
	Stormwater Manag	gement and Mai	ntenance				

Step 2				Step 3	}	Step 4	Step 5
WH	HAT topics did you r	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance? Other	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	_			Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist	Yes No Does not apply	Yes No See existing requirement		Toquire on the same of the sam	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	to remove barriers to LID facility siting within PUDs?						
	Other						
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 32 93 13 Site Restoration of Natural Areas

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3		Step 4	Step 5
WH	IAT topics did you re	eview?	WH	IERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document	Yes No Does not apply Yes No	Yes No See existing requirement Yes No No			Yes No If yes, include language: If no, explain why: Yes No	Yes No If yes, list document title(s): Yes No
	require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	☑ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)		Yes No See existing requirement		Already employs BMPs as appropriate to maintain or restore healthy soil.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement		Already employs Parks BMPs for compost amendment which meet or exceed the standard.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement		Already employs BMP's to promote healthy soil for establishment & growth of natural vegetation.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
A	Other			_			
	Landscaping, Nati	ive Vegetation, S	Street Landscap	ing			

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement		Standard is already written to protect existing trees and plant native varieties where applicable.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	preservation? Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement		Standard already describes an allowed method of GSI, inasmuch as it specifically addresses requirements for restoration of natural areas.	∑ Yes ☐ No If yes, include language : See marked up document If no, explain why :	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	∑ Yes ☐ No ☐ Does not apply	Yes No See existing requirement		To the extent that natural areas may abut street ROW, existing standard already describes an allowed method of GSI inasmuch as it specifically addresses requirements for restoration of natural areas.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces	1				

Step 2			Step 3	3	Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			he development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Section Reference	Summary of Existing Requirement/Conflict/Gap		affected
categories	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	Reference	Requirement, commet, dup	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad						
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement		Existing standard already seeks to restore or establish soil for healthy plantings in natural areas.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?		Yes No See existing requirement		Existing standard already seeks to restore or establish healthy native plantings in natural areas.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	IERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
J	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?		☐ Yes ☐ No ☐ See existing requirement		To the extent the property in question abuts street ROW, standard is already written to protect existing trees and plant native varieties where applicable.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Mana	gement and Mai	intenance				

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
ducagonics	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project	Yes No Does not apply	Yes No See existing requirement	Neterence	nequirement connect cup	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	review & enforcement? Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?		Yes No See existing requirement		Existing standard already creates natural areas that count toward passive open space requirements.	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WI	HAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 33 10 00 P-Patch Water Systems Design

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
				Document		FILL THE GAPS?	documents that may be
Cotogorios	Examples of Topics &	Was topic reviewed	Were gaps identified?	Section	Summary of Existing		affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		
	Site Planning						
	Building locations	Yes	Yes			Yes	Yes
	Can/does document	∏ No	No			□No	No
	require	Does not apply	See existing			If yes, include language:	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	
	incorporate an						
	understanding of site						
	hydrology and						
	demonstrate that						
	buildings and other impervious surfaces) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Parking area locations	Yes	Yes			Yes	Yes
	Can/does document	No	No			□ No	No
	require	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	designers/developers to		requirement			If no, explain why :	, , , , , , , , , , , , , , , , , , , ,
	incorporate an		•				
	understanding of site						
	hydrology and						
	demonstrate that parking						
	lots (impervious) are						
	sited to minimize runoff,						
	total impervious and						
	native vegetation loss?						
	Stormwater	Yes	Yes			Yes	Yes
	management facility	No	No			No	□ No
	locations	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	Can/does document		requirement			If no, explain why :	
	require designers/developers to						
	locate stormwater						
	facilities in a way that						
	minimizes stormwater						
	runoff, impervious						
	surface, and native						
	vegetation loss?						

	Step 2			Step 3	3	Step 4	Step 5
WH	IAT topics did you r	eview?	W	HERE are t	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	construction) Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction?	Yes No Does not apply	gov/dpd/codes/dr/DR Yes No See existing requirement	32009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41) Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Landscaping, Nati	ive Vegetation, S	Street Landscap	ping			

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			 ✓ Yes No If yes, include language : See marked up document If no, explain why : 	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					

Step 2		Step 3			Step 4	Step 5					
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City				
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected				
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):				
	Two-track driveway design Or the use of a two- track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):				
	Other										
	Bulk and Dimensional Considerations Can additional flexibility or incentives be added, to facilitate minimizing the development footprint?										

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	IERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grad						
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	☐ Yes ☐ No ☑ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Design Guidelines		·	I		I	
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other Are there opportunities to harvest stormwater?	Yes No Does not apply	Yes No See existing requirement	Pg 1	Original standard would have discouraged rainwater harvesting due to potable water issue.	Yes No If yes, include language: When space and conditions permit, it is acceptable to install a supplemental system that will capture rainwater and surface flows in cisterns for P-Patch use. Such systems shall be built in accordance with the Seattle Stormwater Manual, Volume 3, Section 5.5.1 "Rainwater Harvesting". All spigots and other discharge points from such systems must be clearly and permanently marked as non-potable water, and child-protective devices/locks must be installed to prevent inadvertent misuse of non-potable water. If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Manag	gement and Mai	ntenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you r	eview?	WI	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
<u> </u>	Other				, , ,		
	Zoning requireme	nts					
	Individual open space	Yes	Yes			Yes	Yes
	requirements	☐ No	☐ No			No	No
	Can these requirements	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	be revised to minimize		requirement			If no, explain why:	
	conflicts with or		·			,	
	obstacles to LID siting?						
	Passive vs. active open	Yes	Yes			Yes	Yes
	space requirements	No	No			No	No
	Can document be revised	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	so that bioretention		requirement			If no, explain why :	
	areas, dispersion areas,		•			, ,	
	and other conserved						
	open space be counted						
	toward passive open						
	space requirements?						
	Opportunities for	Yes	Yes			Yes	Yes
	Performance Based	No	No			Yes No	No
	Designs (PUDs)	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	What opportunities exist		requirement			If no, explain why :	
	to remove barriers to LID		·			,	
	facility siting within						
	PUDs?						
	Other						
	Critical Areas and	Shoreline Mana	gement				
	Allowance of LID BMPs	Yes	Yes			Yes	Yes
	in critical	No	No			No	No
	areas/shorelines when	Does not apply	See existing			If yes, include language :	If yes, list document title(s):
	compatible		requirement			If no, explain why :	, , ,
	Are there opportunities		1				
	to revise critical areas						
	ordinance(s) to permit						
	specific LID BMP's where						
	appropriate?						

W	Step 2 WHAT topics did you review?			Step 3 HERE are t	Step 4 What steps have you taken to FILL THE GAPS?	Step 5 IDENTIFY any other City documents that may be affected
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Document Were gaps Section Summary of Existing identified? Reference Requirement/Conflict/Gap			
	Other					

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: 33 34 00 Storm Sewer Systems Design

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rebecca Rufin	Engineering Manager	Engineering services related to planning, design, construction, & O&M	Parks

Step 2 - WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 - WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WH	HERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Site Planning						
-	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss? Parking area locations Can/does document	Yes No Does not apply Yes No No	Yes No See existing requirement Yes No			Yes No If yes, include language: If no, explain why: Yes No	☐ Yes ☐ No If yes, list document title(s): ☐ Yes ☐ No ☐ No
	require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	□ Does not apply	See existing requirement			If yes, include language : If no, explain why :	If yes, list document title(s):
	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native yegetation loss?	Yes No Does not apply	Yes No See existing requirement	Note to Consultants	No direct instructions to incorporate GSI or LID	Yes No If yes, include language: Added the following guideline: "Where practicable, incorporate Green Stormwater Infrastructure and Low Impact Development strategies. Such measures may include bioretention, rain gardens, cisterns, dry wells, infiltration trenches, and dispersion." If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions Other	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Soils						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	See Seattle-specific Directo	or's Rules: www.seattle	.gov/dpd/codes/dr/DR2	2009-17.pdf F	PDF Pages: 112-116 // Docume	ent Pages: Section 4.4.1 (4-37 – 4-41)	
	Compaction Can/does document include adequate provisions to prevent soil compaction, especially during construction? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
<u> </u>		ive Venetation 1	Ctuoot I cools as	i na			
	Landscaping, Nati	ive Vegetation, S	Street Landscap	oing			

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No Does not apply	Yes No See existing requirement			☐ Yes☐ No☐ If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: See marked up document If no, explain why:	Yes No If yes, list document title(s):
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Hard and Impervio	ous Surfaces					
- Why							

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you re	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If not, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			ne development	footprint?		

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
categories	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No Does not apply	Yes No See existing requirement	Reference	Requirement, connect, dap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes ☐ No If yes, list document title(s):
	Other						
	Clearing and Grad	ling					
	Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Construction sequencing Can/does document include direction to sequence construction in a way that minimizes site disturbance? Other	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Street and Roads						
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WI	HAT topics did you r	eview?	WH	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No Does not apply	☐ Yes ☐ No ☐ See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						

	Step 2			Step 3	}	Step 4	Step 5
WH	IAT topics did you re	eview?	WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	maximum parking ratios? Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3		Step 4	Step 5	
WH	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Design Guidelines	and Standards					
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	☐ Yes☐ No☐ Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other Are there opportunities to harvest stormwater?	X YesNoDoes not apply	Yes No See existing requirement	Instructions to designer	Original standard did not specifically address opportunity to utilize this technique.	∑ Yes ☐ No If yes, include language: "The Consultant shall consider opportunities to harvest rainwater for irrigation and other appropriate usage, and incorporate into the design as practicable." If no, explain why:	☐ Yes ☐ No If yes, list document title(s):

Step 2			Step 3		Step 4	Step 5	
WH	HAT topics did you r	eview?	WH	IERE are t		What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Stormwater Manag	gement and Mai	ntenance				
	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Zoning requireme	nts					
	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

	Step 2			Step 3	}	Step 4	Step 5
WI	HAT topics did you r	eview?	Wi	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Passive vs. active open space requirements Can document be revised so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements? Opportunities for	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs? Other	No Does not apply	No See existing requirement			No If yes, include language: If no, explain why:	☐ No If yes, list document title(s):
	Critical Areas and	Shoreline Mana	agement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes:

City of Seattle Report Form Low Impact Development (LID) Integration

Code/Document/ Rule/ Standard Reviewed: Seattle Fire Code

Step 1 – WHO was part of your Project Team?

Name	Job title	Job description	Department
Rich Richardson	Technical Code Dir.	Code Development	Fire

Step 2 – WHAT topics did you review?

The topics below belong to one or more of the following categories:



Measures to minimize impervious surfaces



Measures to minimize loss of native vegetation



Other measures to minimize stormwater runoff

Step 3 – WHERE are the gaps?

Fill out the following table for any section of the Document/ Document/ Rule/ Standard that may potentially conflict with implementation of LID BMPs based on the topics outlined in Step 2.

Step 4 – What steps did you take to FILL THE GAPS?

What alternative language has been drafted and adopted to address the conflict/gap?

Step 5 — **IDENTIFY** any other City documents/documents that may be affected by the proposed revisions in Step 4.

	Step 2			Step 3	3	Step 4	Step 5	
WI	HAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected	
	Site Planning							
	Building locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that buildings and other impervious surfaces) are sited to minimize runoff, total impervious and native vegetation loss?	X Yes No Does not apply	X Yes No See existing requirement	2012 Seattle Fire Code Section 503 and Appendix D	Requires access roads of a certain width when buildings are too far from public streets	X Yes X No If yes, include language: A new Point of Information will be added to Section 503 of the next fire code advising readers that permeable pavement may be considered to meet this requirement. If no, explain why: We have reviewed the distance triggers requiring fire apparatus access roads and the width details required for fire apparatus access roads, and have concluded that these numbers are necessary to ensure a reasonable emergency response time. The widths are necessary for maneuvering fire apparatus. It is worth noting that the Seattle Fire Code Section 503.2.1 has a provision that allows fire apparatus access roads serving no more than 2 single family dwellings to be 8 ft. narrower than what is required by the Washington State Fire Code and the International Fire Code.	Yes X No If yes, list document title(s):	
	Parking area locations Can/does document require designers/developers to incorporate an understanding of site hydrology and demonstrate that parking lots (impervious) are sited to minimize runoff, total impervious and native vegetation loss?	Yes No x Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):	

Step 2			Step 3	}	Step 4	Step 5	
WH	HAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
categories	Stormwater management facility locations Can/does document require designers/developers to locate stormwater facilities in a way that minimizes stormwater runoff, impervious surface, and native vegetation loss?	Yes No x Does not apply	Yes No See existing requirement	Reference	Requirement connect dap	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Protecting and restoring healthy soil Can/does document include provisions to prevent the removal of healthy soil? (i.e.: stockpiling topsoil on site and replacing after construction) Compost amendments Can/does document include provisions to bring site soils up to the standard articulated in the MS4 Permit , BMP T5-13? See Seattle-specific Director Compaction Can/does document include adequate	X Yes No Does not apply Yes No X Does not apply or's Rules: www.seattle Yes No X Does not apply	Yes No See existing	2012 Seattle Fire Code Section 5704.2.13	Requires flammable and combustible liquid tanks that have been out of service for more than 1 year to be to either be removed or left in place with suction, inlet, gauge, and vapor pipes disconnected. PDF Pages: 112-116 // Docume	Yes X No If yes, include language: If no, explain why: Though dis-allowing removal of underground tanks would reduce the removal of healthy soil, the removal option is often needed to develop a site. Yes No If yes, include language: If no, explain why: Pres No If yes, include language: If no, explain why:	☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s): ☐ Yes☐ No If yes, list document title(s):
	Can/does document	☐ No	No				

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	W	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Other						
	Landscaping, Native Vegetation, Street Landscaping						
	Tree preservation Can/does document include provisions to retain or protect trees? Plant trees? Are there tree planting restrictions that can be reviewed/revised? Are there new technologies or construction approaches that can/should be applied to facilitate tree preservation?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Screening Can/does document include provisions that allow LID or GSI facility plantings to be counted toward site, parking or perimeter screening	Yes No x Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Landscaping requirements for street frontages Can/does document include provisions that allow LID or GSI facility plantings to be counted toward landscaping requirements for street frontages?	Yes No x Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Hard and Impervio	ous Surfaces					
	Maximum impervious surface allowances Can/does document include provisions that set maximum allowances for impervious surface, effective impervious area, or site/lot coverage? Clustering?	X Yes No Does not apply	X Yes No See existing requirement	2012 Seattle Fire Code Section 503 and Appendix D	A majority of driveways are not required fire apparatus access roads. For those situations where a driveway is a required fire apparatus access road, due to distance from a public street, the provisions discussed above in the Site Planning, Building Locations section apply.	X Yes X No If yes, include language: A new Point of Information will be added to Section 503 of the next fire code advising readers that permeable pavement may be considered. If no, explain why: We have reviewed the distance triggers requiring fire apparatus access roads and the width details required for fire apparatus access roads, and have concluded that these numbers are necessary to ensure a reasonable emergency response time. The widths are necessary for maneuvering fire apparatus. It is worth noting that the Seattle Fire Code Section 503.2.1 has a provision that allows fire apparatus access roads serving no more than 2 single family dwellings to be 8 ft. narrower than what is required by the Washington State Fire Code and the International Fire Code.	Yes X No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
	Examples of Topics &	Was topic reviewed	Were gaps	Document Section	Summary of Existing	FILL THE GAPS?	documents that may be affected
Categories	Key Questions	for this document?	identified?	Reference	Requirement/Conflict/Gap	□ Vos	
	Shared driveways Can/does document include provisions that require or allow shared driveways?	Yes X No Does not apply	Yes X No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum driveway width Are there existing minimum driveway width document provisions that can be adjusted to decrease impervious surface?	Yes X No Does not apply	Yes X No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Use of permeable pavement for driveways Can/does document include provisions that allow or require the use of a permeable materials for driveways?	Yes X No Does not apply	Yes X No See existing requirement			Yes No If yes, include language: If not, explain why:	Yes No If yes, list document title(s):
	Two-track driveway design Or the use of a two-track driveway design?	Yes X No Does not apply	Yes X No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Bulk and Dimension			he development	footprint?		
	Building setbacks Can flexibility be added to setback requirements to allow designers/developers to minimize site disturbance?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Height limits Can flexibility be added to height limits to allow designers/developers to min. site distrubance?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5	
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Maximum square footage Likewise, can flexibility be added to max. square footage requirements?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Clustering Can document remove any barriers or add any incentives to cluster impervious area to min. site disturbance?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Clearing and Grace Protecting existing infiltration Can/does document include provisions aimed at minimizing site disturbance and soil compaction? (Are pin foundations allowed?)	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Conserving native vegetation/soils Can/does document include provisions aimed at conserving native vegetation?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Can/does document include direction to sequence construction in a way that minimizes site disturbance?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	☐ Yes☐ No☐ If yes, list document title(s):
	Other						
	Street and Roads						

Step 2				Step 3	3	Step 4	Step 5
WH	WHAT topics did you review?			HERE are	the gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Travel lane widths Are there opportunities to decrease minimum travel lane width requirements, particularly for low- volume, low-traffic contexts?	X Yes No Does not apply	X Yes No See existing requirement	2012 Seattle Fire Code Section 503 and Appendix D	When the distance between a building and the public street exceeds a certain length a private fire apparatus access road in accordance with Section 503 and Appendix D is required.	Yes X No If yes, include language: If no, explain why: We have reviewed the distance triggers requiring fire apparatus access roads and the width details required for fire apparatus access roads, and have concluded that these numbers are necessary to ensure a reasonable emergency response time. The widths are necessary for maneuvering fire apparatus. It is worth noting that the Seattle Fire Code Section 503.2.1 has a provision that allows fire apparatus access roads serving no more than 2 single family dwellings to be 8 ft. narrower than what is required by the Washington State Fire Code and the International Fire Code.	Yes X No If yes, list document title(s):
	Right-of-way widths & Drive way widths Can required drive-way widths or curb radius requirements be adjusted to reduce EIA?	X Yes No Does not apply	X Yes No See existing requirement	2012 Seattle Fire Code Section 503 and Appendix D	When the distance between a building and the public street exceeds a certain length a private fire apparatus access road in accordance with Section 503 and Appendix D is required.	Yes No If yes, include language: If no, explain why: We have reviewed the distance triggers requiring fire apparatus access roads and the width details required for fire apparatus access roads, and have concluded that these numbers are necessary to ensure a reasonable emergency response time. The widths are necessary for maneuvering fire apparatus. It is worth noting that the Seattle Fire Code Section 503.2.1 has a provision that allows fire apparatus access roads serving no more than 2 single family dwellings to be 8 ft. narrower than what is required by the Washington State Fire Code and the International Fire Code.	Yes X No If yes, list document title(s):

Step 2			Step 3	}	Step 4	Step 5	
WH	HAT topics did you re	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
Categories	Use of permeable pavement for streets and roads Can the applications in which permeable pavement is allowable, encouraged or required be expanded?	X Yes No Does not apply	Yes X No See existing requirement	2012 Seattle Fire Code section 503.2.3	Section 503.2.3 of the Seattle Fire Code specifies that required fire apparatus access roads be designed and maintained to support the imposed loads of fire apparatus and shall be surfaced so as to provide all- weather driving capabilities. No further details are provided, but in practice the Fire Department does not approve grass-crete, but would approve permeable asphalt if it can meet the loading requirements.	X Yes No If yes, include language: A new Point of Information will be added to Section 503 of the next fire code advising readers that permeable pavement may be considered. If no, explain why:	Yes No If yes, list document title(s):
	Placement of utilities under paved areas in the ROW Can/does document include direction to place utilities under paved areas in ROW to preserve potential space for infiltration of runoff?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Required turn around areas(e.g., Fire, USPS) Can required turn around areas be reduced or can these areas be paved with permeable pavement?	X Yes No Does not apply	Yes X No See existing requirement	2012 Seattle Fire Code Section 503 and Appendix D	The fire code has several prescriptive options for turnarounds on dead end required fire apparatus access roads such as hammerheads, cul-de-sacs and a Y configuration, each with specific dimensions and turn radii.	Yes X No If yes, include language: If no, explain why: The fire code requirements for turn-arounds on dead-end required fire apparatus access roads are needed to facilitate maneuvering of the largest fire apparatus.	Yes X No If yes, list document title(s):
	Sidewalk widths Are there opportunities to reduce minimum sidewalk width requirements, particularly for land use zones with low pedestrian volumes (industrial, etc.)?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2			Step 3			Step 4	Step 5
WHAT topics did you review?			WI	HERE are t	he gaps?	What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Sidewalk slope Are there opportunities to require sidewalk cross slopes be graded to direct runoff to adjacent pervious surface when possible (ie: vegetated planting strip)	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Minimum cul-de-sac radius Is there an opportunity to reduce the min. radius to min. imp. Surface?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Alternatives to cul-desacs Is there an opportunity to provide incentives for alternatives?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Parking						
	Minimum/maximum parking ratios Are there opportunities to adjust minimum parking ratios to reduce impervious surface and runoff? Are there opportunities to institute maximum parking ratios?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Permeable paving use Are there opportunities to allow, encourage or require permeable paving be used in ROW parking lanes or in public or private surface parking not in the ROW.	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):

Step 2		Step 3			Step 4	Step 5				
WH	IAT topics did you r	eview?	WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City			
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected			
	Parking stall dimensions Are there opportunities to adjust parking stall dimensions (length and or width) or the ratio of compact to standard size spaces allowed or required in surface parking lots?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Driving aisle dimensions Are there opportunities to adjust the required dimensions of driving aisles for surface off- street parking to minimize impervious area and runoff?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	off-street parking regulations Are there opportunities to adjust design standards for off-street parking to better accommodate (or require) the integration of LID BMP's like filter strips and bioretention?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			
	Other									
	Trees and bioretention Are there opportunities to improve the compatibility of approved street trees and bioretention?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):			

Step 2		Step 3			Step 4	Step 5	
WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City	
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Continuous curb requirements Are there opportunities to remove requirements in order to facilitate on- site bioretention or dispersion?	Yes No X Does not apply	Yes No See existing requirement		requirement, comment, cup	Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Curb radii Are there opportunities to reduce impervious surface by reducing required radii? Other	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Stormwater Manag	gement and Mai	ntenance				
11/4	Training Is there an opportunity to improve or require training in LID design and maintenance for staff involved in project review & enforcement?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Maintenance and Enforcement Is there an opportunity to improve/update LID facility maintenance and protection specs? Enforcement procedures? Inspection protocols?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Education Are there opportunities to standardize or require the education of adjacent property owners and/or the general public about proper LID maintenance?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Step 2			Step 3	}	Step 4	Step 5	
WH	WHAT topics did you review?		WHERE are the gaps?			What steps have you taken to	IDENTIFY any other City
Categories	Examples of Topics & Key Questions	Was topic reviewed for this document?	Were gaps identified?	Document Section Reference	Summary of Existing Requirement/Conflict/Gap	FILL THE GAPS?	documents that may be affected
	Zoning requireme	nts			, , , , , , , , , , , , , , , , , , ,		
44.	Individual open space requirements Can these requirements be revised to minimize conflicts with or obstacles to LID siting? Passive vs. active open space requirements Can document be revised	Yes No X Does not apply Yes No X Does not apply	Yes No See existing requirement Yes No See existing			Yes No If yes, include language: If no, explain why: Yes No If yes, include language:	Yes No If yes, list document title(s): Yes No If yes, list document title(s):
	so that bioretention areas, dispersion areas, and other conserved open space be counted toward passive open space requirements?		requirement			If no, explain why :	
	Opportunities for Performance Based Designs (PUDs) What opportunities exist to remove barriers to LID facility siting within PUDs?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						
	Critical Areas and	Shoreline Mana	gement				
	Allowance of LID BMPs in critical areas/shorelines when compatible Are there opportunities to revise critical areas ordinance(s) to permit specific LID BMP's where appropriate?	Yes No X Does not apply	Yes No See existing requirement			Yes No If yes, include language: If no, explain why:	Yes No If yes, list document title(s):
	Other						

Additional Notes: