**Building Green Cities**

Note: This is a discussion GUIDE. Questions will not be read verbatim and at times may be asked out of order based on the flow of conversation.

**Developer Interviews Discussion Guide**

## Note to Advisory Committee: The information learned during these developer interviews will be used to inform the final deliverable (guidance to help municipalities develop incentives to encourage developers to use more LID).

Thank you for agreeing to speak (or meet) with me. As you know, today we will be talking about stormwater management and LID site design, specifically related to buildings your company is developing in urban areas and city centers around Puget Sound.

Note: Timing provided is meant to be a best guess.

# Decision Making Process – Managing Stormwater (10 minutes)

## Questions Goal: Set the stage understand how they think about and approach stormwater management in general (later questions focus on LID).

* Tell me about the process you go through when deciding how to manage stormwater (rainwater) at your sites…
  + At what point in the development process do you first consider stormwater management? *(prior to purchase, while evaluating site feasibility, just prior to submitting for permits, later in the process)*
  + How do you involve your team members *(engineers, architects, consultants)* in decisions about stormwater management?
    - When does that happen in the process?
    - What, if anything, would you change about this process if you could?
  + There are many different options for managing stormwater. How do you decide which option to use?
    - What factors do you consider? Which is the most important factor?

*We will listen for factors such as:*

Note: Any text in light grey is background information for the moderator and will not be read to or shared with respondents.

* + - * *Regulatory requirements?*
      * *Site constraints [location, project size, building type, land type]?*
      * *Costs? Does LID cost you more or less?*
      * *Permit review periods? Does LID increase or decrease permit review periods?*
      * *Incentives? What incentives motivate you to use LID?*
      * *Market demand? How many and what type of customers are asking for LID?*
      * *My team’s familiarity with management methods/options*
      * *Proven methods to avoid concerns around long-term performance risks (e.g., permeable pavement)*
      * *Other?*
  + Which stormwater management options do you typically use? What causes you to use those options more often?
  + Do you think about stormwater integrated with other water management systems (e.g., irrigation, drinking water) on your site?
    - IF SO, in what way?
    - IF NOT, why is that?

## Questions Goal: Begin to explore how they think about and approach LID as part of stormwater management

* **PROVIDE HANDOUT**: I’d like you to think specifically about LID for stormwater management. Some local jurisdictions use the term Green Stormwater Infrastructure (or GSI) which is synonymous with LID. I have a handout to share with you regarding LID for stormwater management.
  + *If additional explanation is needed: LID incorporates managing stormwater on site, cleaning and reducing the amount of water that overflows into storm drain systems and streams.*

Note: Text in ALL CAPS is instructions for the moderator.

*To provide background and ensure we are on the same page about LID practices during the interview, we will share with the participant a handout with different LID options grouped into three categories (LID principles, LID BMPs required to be evaluated, and optional LID BMPs).*

* At what point in the project design process do you consider LID for stormwater management?
  + Looking at the handout, which LID options for stormwater management do you use that you haven’t already mentioned?
    - IF DIFFERENT FROM STORMWATER MANAGEMENT PREVIOUSLY MENTIONED AS BEING USED MOST FREQUENTLY, ASK: What is it about that option that you don’t use it more often?
    - IF LID FOR STORMWATER MANAGEMENT HAS NOT BEEN MENTIONED UP TO THIS POINT THEN ASK WHICH THEY USE AND WHAT MAKES THEM CHOOSE THOSE.

*In their response, we will listen for them to talk about LID principles and BMPs such as:*

***LID Principles:***

* + - * *Optimize development envelope*
      * *Reduce impervious surfaces as part of the road layout design*
      * *Reduce impervious surfaces for buildings by clustering and reducing footprints*
      * *Preserve open space and native vegetation (BMP T5.40)*

***LID BMPs required*** *by Washington State for evaluation include (NOTE: some local governments such as Seattle and King County have stricter requirements):*

* + - * *Amended Soils (BMP T5.13)*
      * *Dispersion (BMP T5.10B, BMP T5.11 BMP T5.12) (Note: Full dispersion (BMP T5.30) is most likely not feasible in the urban and suburban areas that are included in this study)*
      * *Rain Gardens (BMP T5.14A)*
      * *Bioretention (BMP T5.14B, BMP T7.30) (Note:* Planters don’t count towards MR5, but could be used to provide water quality treatment)
      * *Permeable Pavement (BMP T5.15)*
      * *Perforated stub-out connections (BMP T5.10C)*

***Optional LID BMPs:***

* + - * *Trees (retained and newly planted) (BMP T5.16) (Note that Tree protection during construction is covered in the construction volume of the SWMMWW)*
      * *Vegetated/Green Roofs (BMP T5.17) Note: green roofs may not be as effective as other measures in the Puget Sound climate.*
      * *Minimal Excavation Foundations (BMP T5.19) Note: sometimes called “pin” foundations.*
      * *Reverse Slope Sidewalks (BMP T5.18)*
      * *Rainwater Harvesting / Re-use (BMP T5.20) Note: the Hirst decision may limit harvesting, and double-plumbing for reuse adds substantial costs.*
* Do you regularly build LEED or other green-certified buildings?
  + - * Yes/No Answer needed

# Current LID Regulations and Practices (10 minutes)

## Questions Goal: Assess whether they understand the baseline regarding regulations to be able ask about voluntarily going above and beyond. Understand whether the regulations made any difference on the ground.

* I understand that you may rely on team members, including your architect or project engineer, to help keep track of local codes and regulations. In your role, how familiar are you with state and local stormwater code requirements related to using LID in urban and suburban areas of Puget Sound?
  + In what way does using LID to manage stormwater affect your projects?

*We will listen for comments such as:*

Note: If a developer starts to complain at length about the current codes, they will be politely redirected and told that the ultimate goal of the today’s discussion is to learn what suggestions they have for incentives.

* + - * *Length of design process (including timing of infiltration testing—must be performed in rainy season)*
      * *Design costs*
      * *Construction costs*
      * *Permit review time*
      * *Market/client demand*
      * *Project profitability*
  + Do local stormwater code requirements affect where you decide to build? In which cities/jurisdictions you build?
  + How, if at all, have local stormwater code requirements changed which stormwater management options you choose?

## Questions Goal: Understand how often and begin to understand the consideration factors that motivate or demotivate them to implement additional LID principles or BMPs.

* On what percentage of projects do you use LID principles or BMPs that are not required as part of the local stormwater code requirements?
* Tell me about those projects where you used LID that was not required as part of the local stormwater code requirements. What caused you to do that?

We will listen for project factors such as:

* + *Target customer (luxury/high end, market rate, affordable/subsidized, government) wants LID*
  + *Financing or future ownership type (investor- vs. self-financed, build-and-sell versus build-and-own) support LID*
  + *LID actually costs less*
  + *Shorter permit review periods*
  + *Incentives*
  + *Market demand (how many and what type of customers asking for LID?)*
  + *Building types (commercial, multifamily, mixed use, schools) better for LID*
  + *Project size*
  + *Land type (new vs. redevelopment)*
  + *Green certification included LID*
* I’m assuming there are costs associated with using more LID than by the local stormwater code requirements. What business case were you able to come up with that helped to make that worthwhile?
* What about the situations where you met just the local stormwater code requirements, what was in the way of you using more LID in those situations? IF SAYS THEY ALWAYS IMPLEMENT LID ABOVE AND BEYOND CODE: What about a situation where you couldn’t use as much LID as you normally do or as much as you wanted to?

We will listen for responses such as:

* + *Site not suitable for LID (steep slopes, poor infiltration capacity of soils, proximity to drinking water wells, shallow ground water)*
  + *Cost is prohibitive (how much more?)*
  + *Customers not willing to pay more*
  + *Permit inspection issues/risks*
  + *Local stormwater code requirements were already stricter than state requirements*
  + How often are you doing a project where you determine all or most LID options are infeasible?
    - What would it take to make them feasible? (Note: Question is being asked to determine if developers perceive there is wiggle room, rather than to have a list of reasons are infeasible and what changes need to be made to fix the issue.)
  + Are there any LID options for stormwater management that are more challenging to use than others? Which options, and what makes them more challenging?

# Barriers to Using LID (5 minutes)

## Questions Goal: Dig deeper into the barriers that keep them from using more LID.

* Tell me about what you consider to be the biggest **barriers** to using more LID for stormwater management than you do now on your projects. (PROBE FOR MORE)

We will listen for barriers such as:

* + - *Site constraints (existing soils, existing utilities, size, lot coverage)* ***PROBE FOR MORE BEYOND THIS BARRIER***
    - *Timing of infiltration testing (must be done in wet season)*
    - *Lack of time/takes more time*
    - *Costs to develop*
    - *Lender not familiar with LID, financing limits LID*
    - *Additional design time/effort*
    - *Concerns about flood hazard or liability (site is in a flood hazard zone)*
    - *LID increases permit review time/complexity*
    - *Inspection takes longer*
    - *Local stormwater plan review staff require conventional stormwater structures and pipes as backup*
    - *Local stormwater plan review staff don’t understand proposed LID*
    - *Local stormwater code requirements do not allow the proposed LID*
    - *Client won’t pay more and doesn’t want LID*
    - *Client doesn’t want to deal with LID maintenance*
    - *Client doesn’t understand or value LID/benefits of LID*
    - *Lack of industry standards*
    - *Lack of familiarity with LID methods/options and which are most effective*
    - *Lack of information regarding what’s possible on the site*
* Do certain projects have barriers that others don’t? Tell me more about that?
* What specifically would help you overcome these barriers?
* What about retrofit projects or redevelopment, what barriers are there to adding LID when doing those types of projects?
* Are there any information gaps or tools that could help you to add more LID to your projects?

# Incentives/Programs/Funding (5 minutes)

## Questions Goal: Learn about any existing incentives/programs/funding that developers like and how they can be improved. Begin to elicit ideas for other types of incentives or programs that might motivate using more LID.

* What stormwater development incentives/programs/funding are you aware of to increase the use of LID?
  + Which city/county/entity offers this incentive?
  + Can you describe the incentive?
  + Have you used this specific incentive/program/funding?
    - IF YES:
      * What worked well?
      * What needs to be improved?
    - IF NO:
      * What about it do you find appealing?
* What other types of stormwater development incentives/programs/funding could be offered to encourage you to use more LID? (PROBE)

*We will listen for incentives such as:*

* + - * *Direct financial incentives (reduced fees charged during development, tax credits or rebates, grants or cost-share)*
      * *Reduced fees charged after development (e.g., ongoing annual stormwater fees)*
      * *Expedited permitting/reduced review periods*
      * *Project design changes (ability to build more units, add height)*
      * *Ability to stage in right-of-way*
      * *Ability to cluster development in one area*
      * *Ability to modify parking*
      * *Adjusting street landscaping standards and setbacks*
      * *Ability to pay into fund to install LID off-site (e.g., credit trading, fee-in-lieu)*
      * *Technical assistance*
      * *Funding source for maintenance*
      * *Better soil and geology maps and information*
      * *Provide standard LID designs*
      * *Performance-based design*
      * *Incentives from non-government entities (e.g., Salmon Safe, 2030 District)*
      * *Public recognition/awards*
      * *Grants for demonstration projects*
      * *Public-private partnerships (e.g., Seattle Dept of Transportation/Parks) to integrate LID with street improvements or park development*
      * *Training*
      * *Training for financers and insurance companies*
* What about that incentive/program do you find appealing?
* IF NEEDED: If you had to choose the top three incentives/programs/funding what would they be?

# Motivators for Using More LID (10 minutes)

## Questions Goal: Dig deeper into the motivators and incentives/programs/funding that would encourage them to use more LID.

* Which LID options do you find give the most value to the property? (If needed: benefit for the cost spent). For whom? What makes you say that?
  + Which do you feel provide the best features for the building?
  + Which create the best “place” for people to gather, interact, work and play?
  + How do appraisers value LID?
* What would motivate you to use more LID than you do now?
* Would the motivation vary by the type of project? *(If needed: In other words, would the project size, location, type, or new vs. retrofit have a role in what incentive would work?)*
* Which of the incentives/programs/funding or motivators you mentioned are most attractive to you?
  + Being specific as possible, what would you suggest for a program that would incorporate incentives/programs/funding to encourage you to manage all, or almost all, of your stormwater using LID?
  + What else would encourage your organization to use more LID to manage stormwater?