



Clark County Environmental Services

2013-2018 NPDES Stormwater Permit TECHINICAL ADVISORY COMMITTEE #3

October 10, 2013

2:30 – 4:30 p.m.

Elections Building, Conference Room, 1408 Franklin St.

Attendees:	Don Benton , Ron Wierenga, Rod Swanson, Jane Tesner Kleiner, Fereidoon Safdari, Chris Clifford	Clark County - DES
	Ali Safayi, John Davis	Clark County – Public Works
	Gordy Euler	Clark County - Planning
	Jan Bazala, Jim Muir, Bryan Mattson	Clark County – Comm. Dev.
	Eric Golemo	SGA Engineering
	Andrew Gunther	PLS Engineering
	Nancy Olmsted	Clean Water Comm.
	John Meier	AKS Engineering
	Peter Tuck	Olson Engineering
	Jon Girod	Quail Homes
	Troy Johns	Urban NW Homes
	Lance Lehto	Columbia West
	Alex Zimmerman	Creative Courses
	Robin Krause	CRWD
	Annette Griffy	City of Vancouver
	Tim Kraft (consultant for LID Barrier Review Analysis)	OTAK
	<i>Guests: Kelly Uhacz (City of Battle Ground)</i>	
<i>Trista Kobluskie (Otak)</i>		
<i>Sean Darcy (Contech)</i>		

Agenda Topics:

2:30	1. Welcome	Clark County staff
2:35	2. Feedback from last meeting – any follow-up	All
2:50	3. LID Barrier Review Project – code language update	Tim Kraft and all
3:05	4. Design Manual Update Project <ul style="list-style-type: none"> • Overview of Design Manual Update - Table of Contents • Minimum Requirements & Thresholds – what are the big changes that will affect your projects? • Feasibility / Infeasibility Criteria • Chapters 1 updates (submittal process) 	Ron, Tim and all
4:25	5. Next steps	Jane Tesner Kleiner

MEETING SUMMARY

Welcome

Feedback from Group

- *Maintenance language in the code....what should we be looking for?* It is a big issue to be considered. We will be updating our maintenance manual that will include language.
- *What are our goals, related to LID (treatment, flood control, protect watershed, etc.)* - Will vary if just water quality vs. flow control. Additional language on the County's interpretation of LID requirements.
- *Dispersion over pasture* – not included in the current language but needs to be included.
- *When in the process do folks need to complete geotechnical reports with the new rules?* At what phase? Perhaps conceptual vs. preliminary so that there can be a clear analysis (before folks have closed on a property). There may be a stronger need to provide a conceptual look at soils classifications (i.e. gravel/sand soils).
- *Infiltration testing (following ASCE white paper).....is included in the DOE 2012 manual.*

LID Barrier Review project – UPDATE (Tim K.) – Overview of the report work to date. Any feedback?

We'll send information to the TAC for final review and information. Our report is due 2016 therefore we have time to continue to review and update the findings. This will help guide our code and manual updates over the next year.

Design Manual Update Project –

- *Vision for the manual update* – create a “one-stop shop” for the manual instead of using multiple documents. What do you (a TAC member) want for a manual? We want it to work for you.
- *There is a lot of material in the document but also a lot of materials missing from the DOE manual.* The County manual should be able to supplement the DOE manual with County appropriate level of detail. There are some redundancies and gaps in the information necessary for a complete design.
- *Items that are “recommended” or “should”.....does that information need to be in our manual or related to a reference document?*
- *Should we merge DOE and CC Manual or make it a supplemental?* Make it supplemental...make it easier if feasible
- *Make the code simplified and take out the technical language.*
- *“Flexibility vs. certainty”* - How much information to put in the manual as the CC manual is generic and needs interpretation from County?
- *In 2018, the new permit may make it difficult to update* when the new DOE manual comes out. What is the best way to streamline the process to meet requirements and have guidance language?
- *Create a manual that keeps minimizes risks.*
- *If there are new consultants using the County's development process,* the County manual is the easier document to read and understand how to design a project and get it approved.
- *What level of detail should be in the CC manual* – Just the “shoulds” and “must” vs. the guidance manual that includes the “preferred,” “recommended” and “could?” You need to be able to find the information that you need. The more “black and white” it could be the better. Eliminate the “fluff” and redundancies to streamline and get the point of how to get through the process.
- *Preferable to have one complete manual as opposed the multiple resources.* When designing you just need 3 or so of the DOE volumes, plus the CC Manual. It takes a lot of time to go through the multiple documents. Make sure the document is complete and you won't need to go to the other documents to wade through. You need to look at the absolute minimums definitely.....if there is a basic “must” or “shall” you can reference

the DOE manual if they are interested in the “could” sections. We are taking out the “should” and “may” language. The DOE manual probably has a large chunk of information that is unnecessary for design.

- We'll need to confirm with DOE that if we take out the “should” or “preferred” will it still be approved. That will take out many of the geotech section that is guidance.

Table of Contents – Review of handout from Otak. Goal is to have an equivalent manual to DOE that meets the needs of Clark County.

Comments on overall TOC:

- *Concentrated flow guidelines on a rural lot* – Example of Dispersion feasibility – quantity control
- *Builders need guidelines* of how to build dispersion
- *Steep slopes and wetlands* also have challenges.
- *Does dispersion need to be an engineered plan* or can you use a plot plan with contours that provide the information needed?
- *Three tiers of information required:* a. homeowner; b. technician ability; and c. registered engineer who can navigate the shades of gray when it comes to requirements.
- *Provide guidance of what information is required at various steps.* Homeowner can prepare MR1-5, but 1-10 requires an engineer.
- *How to lower the fees for full review* when you can actually meet a lower threshold (i.e. just a letter of compliance).
- *King County has a complicated small project manual....*Mason County has a pretty good small project manual, as does Portland and Lake Oswego.
- *Clark County is the only Phase 1 that does not have its own stormwater manual.* King County is the leader in creating independent manual.

Review of the TOC – outline (refer to handout) Comments from group on chapters

Chapter 1 – Status of flow control standard for Mill and Curtin Creek – in process (Rod). What happens if you are in a basin that does not discharge to a fish bearing stream....the DOE manual does not really address?

Or difference between discharges to MS4. Water that discharges to an off-site infiltration system, therefore do you need flow control standards (i.e. regional infiltration systems in the City of Vancouver). What is the point of compliance (where the water leaves your site)? (i.e. Battle Ground that discharges to a closed system and not a stream). There are benefits to flow control but to what level would this be required. Need to establish equivalency.

Chapter 2 – (good information in Snohomish Co.) – (We'll send out to TAC for review and comment)

Chapter 3 – Moved items in here from Volume 5

Chapter 4 – Revised County's source control manual

Chapter 5 – Similar to Volume 5 and related to runoff treatment (We'll send out to TAC for review and comment). We'll pull out maintenance related info and put in Chapter 8

Chapters 6 and 7–Straight forward and clean up from other sections.

Chapter 8 – Updated Clark County operation and maintenance standards (including info from Chapter 5)

Appendices – Up to 12, will include everything you need to design your project. Figures and diagrams included throughout and we'll keep them in the text as opposed to put them in the standard details. Need to ensure consistency. The manual language with text is more “cartoon-ish” as opposed to having the consistent detail in the standard detail section. DOE encourages mixing and matching your facilities but the BMPs conflict. Need to clarify and create consistency. (i.e. detention basin that allows for infiltration, but conflicting / circular references).

Feasibility / Infeasibility Criteria – (refer to matrix handout) DOE is encouraging infiltration via LID

- *Clark County has flexibility to adjust infeasibility criteria* – soils, slopes, vegetation, unstable channels, etc. will be reviewed by Otak. We need to provide supporting justification for any proposed changes.
- *Will the criteria consider life cycle costs?*
- *Rain gardens* – “lack of usable space” may be a factor on feasibility
- *There are only a few sections*, such as bioretention and pervious pavements, which have a list of items.
- *Take info and generate maps with overlays* to start to determine areas for infeasibility.
- *“Competing Needs”* is a section to review.
- *If there is a map, does it provide a blanket approval for meeting infeasible?* Probably not. It would be “presumed infeasible.” Similar to what the city of Vancouver did for “prairie” areas.
- *The map is intended to provide some of the background work* to assist the customer, but may require the customer to do additional research and studies. But if Ecology won’t accept the map proving infeasibility, then the customer will still have to do all of the work. (i.e. Prune Hill in Camas).
- *What if there are areas with mixed soils and may have a feasible element*, then go to the performance standard.
- *How to level the priorities of the LID in the manual* (they should be more equal).
- *Is there minimum setback for utilities* to minimize opportunities for water to get into your trench rock that would then compromise the installation of the utilities? There are challenges, such as permeable roadways that have the utilities under the roadways. How is the water going to flow? (concerns include washing out the fines from the utility lines). Can include check dams or does it make it infeasible?

Chapter 1 updates – Submittal Requirements

- *Quick overview* - checklist approach in TIR is helpful.
- *Do you like it, does it work, revise it?* There is a lot of redundancy and old information left over from previous requirements. These sections will be cleaned up and focus on articulate and consistent language.
- *Depth of information required.* Several members of the TAC have used the guidelines for so long that it is “habit” for them. Newer engineers to County processes may have lots of questions about why some of the requirements? Seattle has just three or so pages. Shorten the list. Have a TIR that follows the preliminary review steps.

Next steps –

- *Number of meetings* – discussions on topics of priority items.
- *Clark County will email sections for review.*
- *Plan for meetings in min-November, January and March.* With one meeting in May.
- *We’ll send out the LID Barrier Review report* for review and comments with TAC meeting summary.

End of summary