DESIGN TO MAINTENANCE REALITY

A Partnership, Case Study and Work In Progress

The changing face of landscape design

Green Factor, Built Green, LEED

Sustainability & Environmental Functions

A different aesthetic
Case Studies:

- Veterans Administration
- King County Housing Authority Sites
Clients and owners not yet adapted to new concepts

Accustomed to old habits of “mow & blow”

Landscape and plant knowledge lacking

Limited resources
Working Toward a Better Outcome
The Results can be Disastrous

- A new ‘sustainable’ building project at American Lake.
- A great LEED project.
- Completely dismantled.
People Grow Attachments to Their Landscapes:
Study Synopsis:

**Veterans Administration**
- Lack of knowledge relating to sustainable landscapes.
- Resulting in failure and drastic measures.
- Desire to have maintenance input at design phase.
- Strong design for low maintenance.

**King County Housing Authority Sites**
- High use sites.
- Staff organization and old maintenance habits.
- Desire for getting answers for correct landscape maintenance.

Is there a magic formula?
Meeting the Needs of the Client:

Goes beyond design, plant selection, and sustainable design principles.

Biggest Challenges:

Getting everyone on the same page.

Getting the word to everyone who counts.

Getting correct implementation of BMP’s.

On-going staff training.

Old habits die hard.
Developing a landscape maintenance manual and program to

- Protect the owners investment.
- Optimize results utilizing limited resources.
- Make sense of what to do when.
- Avoid costly mistakes.

Interdisciplinary approach between landscape architecture and arboriculture.

The power of collaboration for creative solutions to effective landscape management.
Protecting the investment in retained trees & new plantings.

Site specific information where general standards won’t do:

Worksheets.
   Easy to use in the field.
   Match office spreadsheets.

Tool lists.

Plant identification: type and care requirements.

Maintenance techniques for site specific features:
   Mitigation areas, rain gardens, Filterras, cisterns.
How to tell which are weeds?

Canary reed grass invading rain garden.

7 Simple Ways to Promote Successful Sustainable Landscapes

... and Protect Your Landscape from Ruin
1  **Use Wood Chip Mulch**

Schedule mowing to match how fast grass is growing and cut no more than 1/3 of the grass height at a time.

It will:
- Reduce weeds.
- Keep moisture in.
- Protect and condition the soil.
- Improve plant health.
- Make pulling weeds easier.

4  **Water deeper and less often**

Give the ground a slow deep soaking and let it dry slightly before watering again.

It will:
- Promote deeper roots on all plants.
- Improve soil condition as it shrinks and swells.
- Use less water in the long run.
5  **Prune trees and shrubs to natural form.**

How:
Prune shrubs and trees to match their **natural shape**.

*This means no rounding over, topping, or shearing.*

It will:
- Maintain good appearance.
- Keep plants healthy.
- Take less work in the long run.

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**Client education on common pitfalls:**

- **Natural form**
  - Die back after repeated rounding over.
- **Rounded over**
  - Lower branches die out.
- **Point of No Return!**
Timing is everything!

Workers have clear information to guide their efforts.

The Program Manual and Best Management Practices pages inform staff of:

- What to do.
- How to do it.
- When to do it.

How to trouble-shoot and solve common problems. Where to get more information.
Administrative Benefits

Ready to use spreadsheets & task lists.

Organized information for budget planning.

Info for cost-benefit analysis.

Management Benefits

More efficient scheduling of staff time.

Decrease time in reactive mode.

Established standards for informed inspections.

Standards for KCHA staff and contracted maintenance.
Huge results with effective preventive maintenance:

- Planted 2010
- 2011 – weekly weedeater & irrigation
- 2013 - exceptional plant establishment and inspection results

Keeping staff trained and informed.
MAY 2012 –
Overwatering and rapid turf decline.

MAY 2012 –
Field instruction for BMP’s to correct & maintain

- De-thatch
- Core aerate
- Over seed
- Correct mowing height
- Adjust & monitor irrigation
OCTOBER 2013 –
HEALTHY, USABLE PLAY FIELD
Staff turned this field around by using best practices for turf care & irrigation.

Adjusting owner’s expectations to meet sustainable design intents:

Brown is the new Green for turf. But don’t let the trees wilt!
Old habits die hard?

**JULY 2013 –**
Plants in the ground after 6 months, natural form and full bloom.

Next year – looking to see shrubs in solid mass.
FEBRUARY 2014 – Pruning Debacle

Severe pruning reduced plants to less than their specified planting sizes.

Effective design and plant selection effectively undone by one day’s misguided pruning.

Green industry professionals need to collaborate and work hard to cultivate a culture of effective maintenance for truly sustainable landscapes.

100% PREVENTABLE!
What are your thoughts, ideas, and experiences?

Thank you!

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