Managing expectations for large construction projects



Mike Kelly, PE, Darcy Nuffer, RLA City of Austin Watershed Protection Department



Watershed Protection Department

- Protect and enhance water quality
- Protect property from creek erosion
- Protect lives and property from flooding

Stream Restoration

Ecological Function

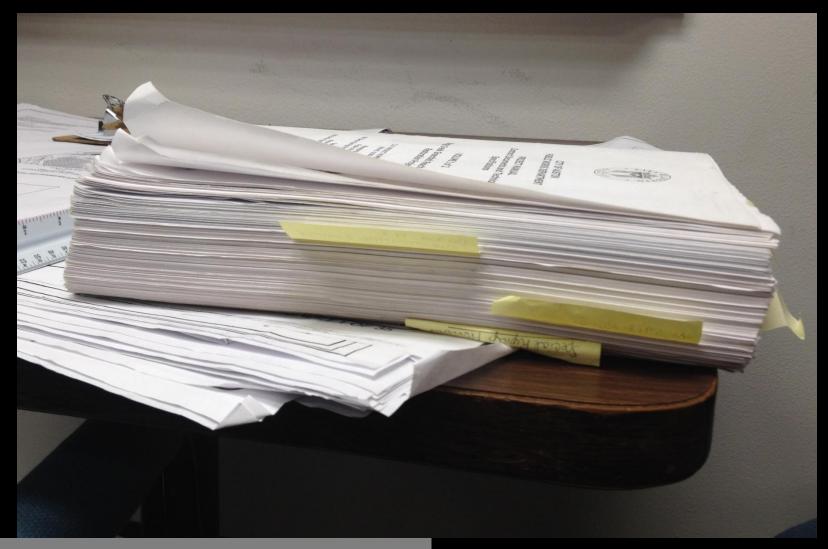
What can we realistically expect?

Photo courtesy of Matt Brown, Texas Water Resources Institute

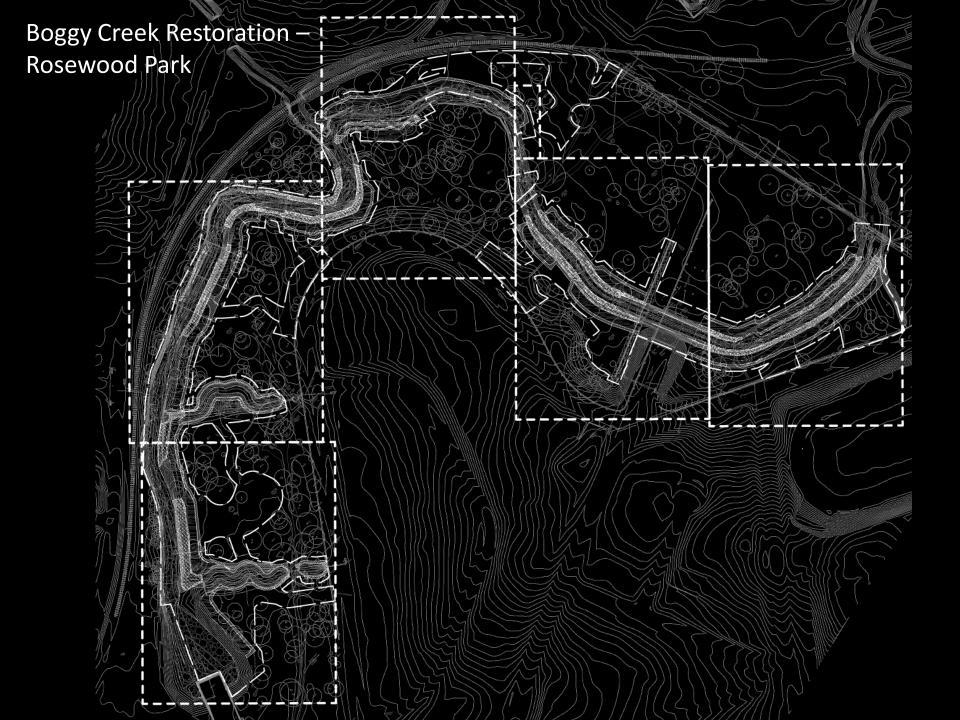




Seeding



Contract



Phase 2 - Channel

Phase 6 - water quality swales

Managing expectations to build a better project

Design: What things should a professional services contract cover? (More than the primary thinks)

Contracts: Create effective Contract Documents to meet the needs of your project

Implementation: Get good soil preparation, seed, plants and existing tree and plant preservation



Questions/Comments?

Design - Consultant Scope

Add time to scope to review on site:

Tree survey

- Are all the trees on the survey?
- Are they in good health?

Erosion and sedimentation control plans

- Does the tree protection plan make sense for the access required?
- Are the Critical Root Zones protected?



Hydro mulch Process Each tank covers approx. 10,000 SF

- 1. Fill tank up with 1000 gallons of water.
- 2. Add nine 50lb bags of 100% wood mulch = 450lbs
- 3. Engage agitation inside machine.

Noxious:

(none)

- Add 32lbs of seed for seed mix #1 to each tank, that is weighed and calculated with Taylor 50lb capacity scale model #TS50
- Add 9lbs of seed for seed mix #2 to each tank, that is weighed and calculated with Taylor 50lb capacity scale model #TS50
- Add 16lbs of seed for seed mix #3 to each tank, that is weighed and calculated with Taylor 50lb capacity scale model #TS50
- Add 16lbs of seed for seed mix #4 to each tank, that is weighed and calculated with Taylor 50lb capacity scale model #TS50
- 8. Optional Add 1.25 gallons of Bio Green per tank
- 9. Optional Add 50lbs of Accelerator 16-45-7 per tank
- 10. Optional Add 100lbs of American Plant food Multi Pels 15-15-15 per tank.

BUFFALOG	RASS TO	OPGUN PRIMED I	NO	
Lot Code: 21024TA		Test Date: 1/17/2002		
PURE:		GERMINATION		Origin: TX
INERT: OTHER:		DORMANT GERM + DORM	0.00%	
WEED:		ourun · oorun	04.0070	

TREATED WITH KNO3

Design - Consultant Scope

Add time to scope for:

- Submittal review
 - Is the information you need really there?
 - Are you getting what you ask for?



Design - Consultant Scope

Add time to scope for:

- Submittal review
- Construction observation
 - Project needs multiple eyes
 - No one knows your contract specs as well as you
 - No one else is thinking about landscape processes



Design - Consultant Scope

Add time to scope for:

- Submittal review
- Construction observation
- Maintenance observation
 - Landscape is seasonal different tasks at different times of year
 - Can reduce maintenance by pointing problems out early

Contracts

- General conditions
- Specifications
 - Submittals
 - Measurement
 - Subsidiary?
 - Separate pay items?
 - Pay on installation, or after performance?





- Soil
 - Amendment



- Soil
 - Scarification



- Soil
 - Planting
 - Inspection





- Soil
- Planting
 - Technique



- Soil
- Planting
- Seeding - Technique



- Soil
- Planting
- Seeding
 - Timing



- Soil
- Planting
- Seeding
- Construction scheduling



- Soil
- Planting
- Seeding
- Construction scheduling

Discussion:

How can we better manage expectations?

Thank you!

darcy.nuffer@austintexas.gov