

Task Force on Urban Tree Planting Best Practices

Minutes

Tuesday January 27th, 2025, – 10:00pm

Via Zoom Platform & In Person

[Recording of Meeting can be obtained by sending request to Joe Rainey JRainey@coj.net]

Commissioners:

Nina Sickler, Director of Public Works
Susan Fraser, Chair (Council Appointee; 2022-0063-A)
William Burke (Mayor Appointee; 2023-0695-A)

Non-Member attendees:

Jeff Lucovsky, PDDS
Jonathan Johnston, Parks
Guy Parola, DIA
Nancy Powell, Scenic Jax
Lisa Grubba, Greenscape
Valerie Feinberg, Fuse Fellow, UFMP

Advisors:

Jonathan Colburn – Urban Forestry Manager
Justin Gearhart – City Arborist
Shannon MacGillis – Office of General Counsel

Staff: Joe Rainey – Executive Assistant Mowing and Landscape

1. Call to Order

Conducted by Chair

2. Roll Call and Verification of Quorum

Conducted by Chair

Commissioners present:

Susan Fraser – Chair
Nina Sickler
William Burke

Quorum present (4, in person): yes

3. Call for Public Speakers (online & card): Speakers request to defer to respond within context of action items.

Action Items:

4. Submittal of speaker cards

5. Prior Meeting Minutes.

Issue: The minutes from November 8, 2024, APPROVED

Motion: Approve, as presented.

Moved by: Nina Sickler

Second: William Burke

Vote: November minutes approved, unanimous.

Presentations:

6. Existing Standards Review presentations

a. FDOT 2025 Design Manual Standards/ Details - Susan Fraser

Presentation detailing FDOT tree planting and maintenance standards in urban environments. Discussion regarding FDOT and City standards (*see Item 6a, pgs. 1-3 of supplement*)

b. SSPAC's proposed revisions to the Land Development Procedures Manual - Bill Burke

Overview of Subdivision Standards and Policy Administration Committee, SSPAC, subcommittee review regarding the Land Development Procedures Manual in relation to Tree Commission objectives. Discussion of developer and city standards and requirements per manual. (*see Item 6b, pgs. 3-8 of supplement*)

c. COJ Public Works planting standards - Jonathan Colburn

Packet submitted to be reviewed as standard for city tree planting. Discussion of details in planting standards packet (*see Item 6c, pgs. 8-9 of supplement*)

d. DIA planting standards - Susan Fraser

Overview of 656 for Public Realm Standards and Private Realm Standards. Discussion of DIA projects and feedback regarding issues and/or effectiveness of application standards. (*see Item 6d, pgs. 9-18 of supplement*)

e. Approved Tree Planting List Notes - Justin Gearhart

Discussion of approved species list and their application throughout the city

Issue:

Discussion: Fraser:

7. Resource Library Available

Discussion of library becoming available and how to expand.

- 8. Development of Constrained Planting Environment Standards framework:** Discussion of prohibitive install locations related to current infrastructure and established tree well locations in urban environment. Discussed throughout presentations. James Urban article suggested homework.

NEW BUSINESS:

9. Discussion of Vertical Constraints - Jonathan Colburn

Vertical constraint issues discussed throughout the meeting in relation to presentations. Diagrams and details provided by Jonathan Colburn to support discussion regarding proper application of tree install/maintenance for success and related liability/risks.

10. Approved Tree Planting List: Benefit Expectations

Potential Species Characteristics to be Identified:

Discussion of approved species list and their best application throughout the city. Establish matrix for trees and their installation, maintenance and constraints.

11. Urban Forest Management Plan Coordination - Valerie Feinberg

Discussion of solutions to long term tree installations.

Potential Technical Sub-Committee

12. Meeting Dates for February - May 2025

OLD BUSINESS:

- 13. The Good, the Bad and the Ugly - Photo Gallery postponed**
until next meeting

OLD BUSINESS:

- a. **Tree Commission Approval of Revised Charge Memo** Amended definition of "Urban" in Charge Memo
- b. Extension of Task Force to May 31, 2025

14. ADJOURNMENT

END OF MEETING 3:24PM

APPROVED

APPROVED

Under Item 6, the Chair pulls Item 8a. for introduction:

SF Item 8a is a paper by James Urban that was presented at the annual ISA conference in August 1991 and published in the Journal of Arboriculture in March 1992. It presents an approach to mitigation of constraints/ urban environments that may be the framework we find appropriate for the standards applicable to Tree Commission projects. Also provided is a summary in a less dense format; reading from the summary Mr. Urban concludes that “many urban sites are so severe that no species will reliably work.”, concluding that mitigation of extreme environments will be required for *any* tree to be successful.

Mr. Urban’s paper identifies specific constraints: site soil, site drainage and planting area. In addition to these three, the Task Force identified vertical constraints that are encountered when buildings are adjacent to the planting area, as is typical downtown. The Task Force had identified in November that horizontal constraints included overhead utilities, impervious area, underground utilities and heat / reflectivity.

Ms. Fraser suggested that the standards to be discussed under Item 6 would fit into this framework, and perhaps, since it was 30 years old, provide other standards since found to be more appropriate today.

The discussion returns to the agenda.

Item 6a.

SF FDOT has developed standards for planting trees in the urban environment and revises its standards repeatedly to incorporate experience and technical changes. They are us, working to provide suitable, successful environments for trees in rights of way and other constrained urban environments. FDOT makes capital landscape improvements but almost always requires maintenance to be provided under agreement with the applicable local government.

FDOT provided their specifications, cross sections and details; these are available in full in the library. The agenda includes highlights of the FDOT Standards. Ms. Fraser discussed:

- FDOT Section 274.1.4 identifies that root pruning occurs at the drip line of the tree.
- FDOT requires a report be prepared for selective clearing and grubbing to identify the care and maintenance of retained trees. This summary includes an intent statement- why are the trees being preserved – to guide the actions of the maintenance entity. FDOT requires maintenance by the local government so the selective clearing plan might state that the purpose is to screen adjacent homes from noise, direction the maintenance of the area to require that the canopy not be pruned to negate the intent.
- FDOT provides for the development of a Landscape Opportunity Plan, requiring coordination with its ‘client’ the local government. Whenever a planting plan is

developed, this plan is prepared prior to any design work so that agreement between the parties can be reached early in the process. Noted that this approach might assist the Tree Commission with larger project development by requiring such a plan.

- FDOT has specific standards for soil enhancements; it has determined that certain environments like medians, always require testing and soil analysis. Section 270.3 applies to medians and embankments. For us, this need might not apply, but for our most constrained environments, this may be applicable.
- FDOT requires soil analysis to include pH, soil fertility and perc tests and advanced soil analysis can be required.
- FDOT prepares, in coordination with its maintenance partner, a very detailed maintenance guide, including all required component for perpetual maintenance, including irrigation, fertilizer, mulch. This guide includes a cost estimate prepared by the FDOT for the local government so that all the parties know what they are signing up for , it is the basis for the maintenance agreement.

FDOT recognizes that trees are a long term investment and establishes expectations. For each project, the maintenance plan includes an intent statement – purpose of the planting investment to guide maintenance. If the intent is a buffer, the local government can't limb up or prune to reduce that buffer; if shade is the goal, they can't top or prune to change the shade provided.

Noted that this approach might help the Tree Commission and in Public Works, to ID the maintenance obligation associated with each project. To have an understanding of the incurred obligation for success; that you can't have one without the other.

Stated that staff will look closely at the FDOT cross sections and specifications to incorporate into our review.

N. Powell I understand there are specific agreements between FDOT and the City for certain roads. Should they be looked at?

N. Sickler Yes, there are many and they are all individually executed. The City is looking to combine them and have uniform standards. This should be completed in the next few months. Then if there are opportunities in the future, we'd look to maintain them under this unified agreement.

B. Burke Old approach resulted in different standards.

NS Yes, different edging, pruning....so contractors didn't have uniform goals.

BB Had to look at each one. Uniformity is smart.

JC The small differences were there. The agreement between FDOT and Mowing & Landscape is under review as well. Standardization is coming, collaboration exists.

NP Does the City pay for the maintenance?

NS FDOT does pay for a portion.

SLF We are at our time to call for speaker cards, it is 10:30.

BB I'd like to keep it informal, and have speakers contribute as we proceed.

Item 6b.

BB Subdivision Standards and Policy Administration Committee , SSPAC, has a subcommittee to review the Land Development Procedures Manual. I sat in for about a year. Looking at the LDPM , also looking at standard details and specs. The LPDM is what the developer is going to abide by....and the City has to abide by that too.

A summary of a few items to note:

- LPDM Section 5 is changed to add transplant guidelines.
- The LPDM is amended to allow for automatic update to the Tree Commission tree list.

SLF Our tree list has been found to include notes at the end, so incorporation of the list will incorporate those notes.

BB

- The changes incorporate JEA standards instead of City standards for landscaping around utilities such as pump stations, transformers and equipment.

City Standard Spec 601 is Landscaping. It clearly calls out 'trunk flare' in the definitions and requires visible trunk flares at inspection before installation.

There is an emphasis on inspection for root bounds materials in containers and visible trunk flares. They modified a lot of details. We would be interested in the change to the rootball anchoring system and palm staking.

SLF I see the new rootball anchoring approach in the park projects. Is that what we use outside parks?

Justin Gearhart Yes.

SLF Are these standards in our specs?

JG Yes.

BB Palm tree staking in tree wells is a detail of interest to us. These changes are approved and effective January 17, 2025.

SLF Are there any standards for soil volume, soil quality?

BB No. City Standard specs touch on those things but not in an urban environment. Do touch on pH, soil makeup, drainage, percolation, but not in an urban environment.

SLF If in the City specs, does this info come in with the plan sets for review? Maybe I'm asking the Plans Review people....

BB The specs and details I referenced are for City projects. City is hiring a consultant for its projects. Maybe I am wrong...plans for private development are reviewed for compliance with the code but not given means and methods to accomplish compliance. They have their own specs; could be client-driven, the Landscape Architect could have off the shelf details.

SLF If the Tree Commission were to adopt standards, more than we do now, we would do inspections at the time of planting, at installation, at end of warranty period? Is there this level of inspection on projects now?

Jeff Lucovsky There is an inspection for tree barricades and final landscape inspection. We are not inspecting for means and methods- what soil, how was it installed- we only check that the tree specified is provided to meet code.

SLF If we adopt standards we are considering, do we need to identify inspection points? If all we inspect is the tree post installation, a lot of the specs won't be visible.

BB Yes, I know of projects in the pastwhere a turn lane has been turned into a median. As we know, this is how many inches of asphalt, limerock, compacted sub-base....not conducive to tree growth. We would spec that all this was to be dug out, replaced with yard sand, topsoil, that would be conducive to tree growth. If you are not out there when digging is happening, you can almost bet it will not be done properly. Because it is expensive. It is important to oversee sub-surface work.

SLF So in the maintenance report, there is an inspection schedule? If the site is constrained and mitigation is required to get closer to a good planting environment, each might have an inspection required if it can't be seen after the dirt goes in the hole.

BB No different than a house. You have a sheathing inspection to check the number of nails before you put on the plywood. Same thing- we want to see what is going on sub-surface before you install the tree and cover it up.

SLF Current projects – streetscape – contract is let, trees arrive on site. Jonathan, Justin, you see it when?

JG Typically we don't see the trees until they are in the ground. Then at the end of the maintenance periods. If they do soil, we don't see that. We don't see root balls, as they remove burlap, putting them in the ground, any underground work. We can dig around, but projects like Goldstar where there are 1200 trees, you are only doing spot checks.

JC We have a 2 year warranty so we should start to see the effects afterwards.

Mike Zaffaroni I might be able to add a little color. We do work for other entities and one, FDOT, has a Supervising Engineer that is onsite daily. There are there when we are not there. They inspect every trench, every irrigation pipe connection, trees coming off the truck. They literally stand over our shoulder. We'd not had that level of supervision before, which is fine as we have to meet the specs. It seems like now this committee, the City, is inspecting for the results and not for the method.

My input would be that this is pretty project specific. If the project is \$100,000, might be too expensive, but if it is \$1 million, then it might be worth \$100,000 or \$200,000 to the City to hire one to make sure it is done right. But it is also site specific. If planting in an urban area it might be worth having an engineer looking over your shoulder every time, but if you are planting at Goldstar, or in a park, it might not be worth the additional cost. We talk about cost per tree a lot; adding these licensed professionals will drive that cost up a lot.

NS On a City CIP project, we have a dedicated CEI consultant. For RiversEdge we have that. On a smaller project, not a CIP project, there is no CEI. This maybe where there is a discussion about what is done and is there a gap.

SLF We do some projects where there is no 'construction' project, we just drop in the trees so we get what Justin is saying – only at the end, it looks good.

And under a contract with no constraint mitigation, maybe that is fine. If we have sites with mitigation requirements, does it require us to step up our game, only on those?

Valerie Feinberg So if there were mitigation measures, the cost would be on the person asking for the project or built into the cost of the entire tree?

NS RiversEdge already has a CEI hired, so we don't necessarily have to add a person.

BB But that's because this is not just a tree project.

NS Yes.

VF But if it is just a tree project, let's say.

BB Well I think that's up to us, isn't it? If we wanted to make sure...if we wanted a project downtown and we wanted to insure it was done correctly, we want oversight.

NS But who are we paying?

BB That's the question.

NS Yes.

BB And who would pay, whether we'd require the recipient....I think that is a project by project basis.

NS Level 2 recipient is the Councilmember....there really is no recipient.

JC I think it is included in the Level 3 contract.

JG It is included in Level 3. In Level 2, we, the City, are the inspector. Level 3, once it was reworked, requires that the Applicant, the non-profit, has to have a Landscape Architect or Arborist on staff at that time. Whether that is an advisory role, I can't say off the top of my head.

SLF I am suggesting that if your project has soil amendment, soil is a required mitigation, that that has to have a specific inspection point – at the time of excavation, soil sample, etc. – when you get the assignment of mitigation. As you bring in different strategies for mitigation on a specific project, it steps up the inspections.

BB Who pays for that inspection? Is that something we pick up and it is wrapped up in the cost of the tree or is it something we give them? Do we ask them to pick up the bill?

SLF I think we say that it – the inspection – is necessary to create what we think we are getting – a product that meets the specs. Then when we get to the end, a big discussion is going to be who pays for what. And if our goal, from the last meeting, is a natural planting environment and you are a new development on a greenfield site and you build in all these constraints, then you pay for all this stuff. If you are in a constrained site to start, then it becomes a condition of the existing site, and it becomes a project cost.

So we can begin to incentivize designs that create less mitigation requirement....you choose another design, you pay for it.

VF As Bill mentioned, if you are a redevelopment project and layers and layers of asphalt, and we want redevelopment, would one of the incentives be that you can get trees from the Tree Commission but could you help with the subsurface costs? Or does that come from someplace else?

NS I think maybe we are jumping to enforcement when we are trying to identify the standards. We might focus our energy on getting the conditions correct.

Based on what is presented from the LDPM, looking at this Section 3.8, talks about excavation of existing soil and plant beds. It identifies the depth as equal to the root ball less 2 inches and 24 inches larger than the root ball for parking islands. Do you feel like that provides guidance about what is required for a tree to thrive in a median or parking lot island?

BB I think that could, combined with the entire spec, like pH. Section 1 that talks about materials, what is a soil mix, pH.

NS I am envisioning a very small hole, big enough to fit the root ball and get in your backhoe, but it doesn't necessarily talk about the fact where your root ball ends, where you need areas without limerock.

SLF I think within the planting spec, the excavated hole is this and it has to have good soil, but that is not the end. The hole is too small for all the roots.

BB Or you might be digging it out and be stuck with limerock.

JC I am noticing that detail does not identify soil volume.

NS Exactly. So I think there is additional work, additional details that would make this clearer.

JC And DIA sets out soil volumes, but not the LDPM, so we have precedent within the City.

NS Looking for consistency, bringing them over into the LDPM.

SLF I think our plan is to match all these details, already adopted sections to whether they speak to soil volume, soil quality, and find where they all say the same thing – there is the standard- and where do we have gaps or inconsistencies. Then reaching out professionally to fill those gaps.

Joe Anderson In reaching out, I'd like to make reference to ANSI A300 Standards. Part 5 is Trees and Shrubs and Other Woody Plant standards. Management during site construction. We could reference these. They are updated over time.

JC The LDPM does reference these boilerplate.

JA It does make reference to oversight by Landscape Architects and Arborists.

SLF My goal is to collect all we can find and assemble so we can read and discuss and set expectations. We'll pull out those sections of those standards that are different or we might want to consider adding and put them on the table.

JC Add to the resource library?

Discussion of copyright and availability ensued. Staff to work with S. MacGillis to identify limitations.

BB Look at City specs 3.8, 3.9, 3.10 in conjunction with 2.3, 2.4, 2.5 and 2.6. Look at those together. The method in Section 3 references back to what is topsoil, what is soil conditioner. Is that adequate for an urban environment where we would require soil replacement or amendments? Start there. These are the applicable specs if I am a consultant working for the City on a City project.

NS It doesn't address soil volume?

BB Not that I have seen.

Susan Caven What happens after the year, trees at a subdivision or place of business, who does maintenance?

Discussion followed related to responsibilities for maintenance by private landowners/developers. Noted there are no post installation inspections. HOA maintains in a subdivision. Discussion of complaint driven code enforcement generally.

Item 6c.

JC Public Works Planting Standards in the packet are not adopted; these are what I use and would like to see the City apply.

Reads the opening paragraph to set the intent. First item is a graph of soil volume from the James Urban article. Includes a formula to identify the volume so you can calculate backwards based on the volume you have available in order to identify trees that are appropriate.

SLF We might apply the standard to our tree list, doing the math for everyone, including that information then on the oriented list.

JC The planting entity can say how large they want the tree to be and calculate the soil volume from that.

SLF I think we are here to tell people what we want....tree health to maturity and this is the requirement for that mature size and if you can't achieve it, by design or mitigation, please chose another tree.

JC There is a range....

SLF My goal is to take out as much ambiguity as possible and we can decide the level of specificity we want to adopt or apply.

JC The second point is a surface cut out that is adequate. It is from IFAS. Need enough space for the tree not to get girdled by the cut out.

Number 3 talks about soils: soil retention, amendment and replacement. Lot of technical details but I think it is useful to think of soil as something you want to preserve first by cordoning it off so heavy equipment can't run over it and compact it. Soil is something that takes about one to two decades to establish the structure of and so preserving it at all costs can be very useful. If you can't do that, you get into amendment and replacement solutions covered in James Urban's article.

Number 4 provides an irrigation approach. The chart is included to show soil types and on the Y axis is inches of water per soil depth. You want available water to be between the lines, the tree has enough available to draw it up into the leaves- not enough leads to desiccation. If there is too much water, then the tree can't access oxygen in the soil. This is a standard Arborist chart.

Number 5 is from James Urban. How covered is your area? The urbanization index exists on a continuum.

Number 6 : Note the location of utilities.

Number 7: Note distance to adjacent buildings. Vertical constraints after a tree has been planted, choose a tree with appropriate structures.

Continues to read numbered items on the handout, calling out a few:

Number 11: Describe a maintenance plan for pre and post warranty feasibility. To me that's really important to have post warranty information written into the plan, so everyone is on the same page about what happens after you plant it. That you don't just leave it to be left alone.

SLF These are the state of our review today....part of what I would like to see us do is make it more readily apparent what we mean by some of these assessments. Like the Level 2 checklist , the Level 3 checklist and your number 10 state "The tree should have characteristics compatible with the planting site."

JC This is purposefully broad because there is an infinity of those characteristics.

SLF And I would like to identify the critical characteristics that are not arbitrarily applied, not that you are arbitrary in your application, but people walking in the door should say "If I am planting an oak, this is the standard: soil volume is this, you can't be here (vertical), you can't be that." Start to narrow. These are our goals but they are not measurable. This is absolutely where we want to start; now we are trying to hang the details on that start.

In addition to the outlined standards, you have lengthy specs. Do we need to just review them and confirm we like them? Do we have standards for soil volume, irrigation required, or are those something we don't have?

JC Some are included; similar to a lot of City docs there is info in different places. There is not a single unified place. Could be better, but not horrible.

Item 6d.

SLF Guy is here from DIA. I am going to quickly go through the standards in 656 and Guy might give us some insights into what works and what doesn't.

The City has adopted standards under 656 for Public Realm Standards and Private Realm Standards. These are applicable to land under the DIA's jurisdiction.

We are dealing with the Public Realm when we consider use of Tree Mitigation Resources. But I would offer that when the property has a public component to it we start into the private realm standards. I would offer that when the property has a public component to it we start to walk into the private realm standards. There is a permeable barrier between the public realm and private realm standards.

Public Realm Standards are very articulate in their purpose statement about beauty and livability of the City depending on the design of the streets.

The regs define the Pedestrian Zone in a cross section and with descriptions. The Ped Clear Area is 5' wide, minimum, and adjacent, there is an Amenity Area where the trees go. The Amenity Area is 4' in width from the back of the curb.

The description of the Amenity Area continues, supporting the use of permeable paving, in the four foot zone you can also locate street furniture, trash cans, kiosks, light poles, parking meters, signs and other vertical obstructions. This 4 foot area is carrying a lot of water for our downtown streets.

The code says areas are typically distinguished by a change in materials from hard materials to greenery, though in areas of high pedestrian traffic, the Amenity Area may have less planting and more paving.

About 10 pages long, I would draw your attention to:

- The DIA has discretion when working with a developer adjacent to the public realm to, when there is extra land, once the sidewalk reaches 8 feet, there is discretion on where to allocate the additional space. Perhaps we set some priority for allocation to tree friendly space instead of making the pedestrian environment bigger. While there are minimums established, there is discretion above them.
- Under paving, the code states that pervious paving may be allowed to accommodate tree growth and health.
- There are specific standards for trees: 1) trees will be from the Tree Commission List; 2) Minimum caliper is 4 inches; 3) required soil volume is established:
 - Large Tree is 1800 cubic feet. For a 4x 4 opening, that third dimension is 112 feet. These volumes are consistent with what Mr. Urban is saying.
 - Medium Tree , at 1200 cubic feet, this is 4 x 4 x 75 feet.

NS How likely is that? For your tree roots to actually extend 75 feet?

BB But they say in the first sentence, that is generally based on a 3 foot depth.

NS Will they go down 75 feet?

MZ Yes, they will grow where there is soil.

JC The thing I notice is that tree roots don't always go where we think, but I agree with Mike.

NS I want to make sure this is reasonable. Is it achievable?

VF As Bill was saying before, in an urban area, the cost to go 75 feet down.....

NS I think it has to be linear.

BB I think the idea of soil amendments more than 3 feet deep is not realistic.

SLF I think what we see – this is the FDOT cross section – the roots are really wide, shallow but wide, out to the canopy (draws on the whiteboard).

JC Just remember that it is typical that the roots go out 2-3 times the dripline in a natural environment.

SLF So in a cross section, if this is the curb and this the 4 x 4 cut out, the only way to go is down.

But this is only true when you compact all around the tree. If it is adjacent to a sidewalk, 4 inches thick, the roots go under and around the sidewalk – the health of the tree isn't only dependent on here (points to the cut out).

JC And that depends on permeability of the sidewalk and what's on the other side of the sidewalk and how permeable that is.

SLF The math is that if everything is compacted and paved, your have a 4 x 4 square that has to be 100 feet deep. But the roots are under the sidewalk otherwise. But if you have a road out here, 2 inches of asphalt, inches of limerock, compacted, the roots are not there (points to the road area on the drawing).

JC Roots have a hard time traveling in compacted soils.

NS Jonathan, I think that's where your cut out size come in, to allow water to reach the roots.

JC For me it's just for the trunk to not get cut off. The permeability of the hardscape or lack of hardscape is where water and for gas exchange to come up and down.

NS Your cut out was just to get the trunks through....

JC Yeah.

NS Do your notes consider permeability of the area above the root zone?

JC Roughly permeability is first addressed by what percentage of the horizontal area is covered with hardscape and then, to what extent is the hardscape permeable?

SLF So when you see a tree in a suburban environment, the tree might be between the curb and the sidewalk but then there's a big lawn on the other side of the sidewalk and tree roots are not constrained, the trunk isn't constrained and the roots are all the way to your house, getting air and water from all this area.

But as we move to downtown, increased urbanization, you have a building or a parking garage, sidewalk, and utilities- all of a sudden that availability is starting to be reduced. And that is what a silvacell does. A structural support where, if you don't use it, then you compact the heck out of the site, you have nothing.

Discussion of root depth versus silvacell depth ensues.

JC Root depth for a small tree is 2 feet and for large trees, it is 3 feet.

SLF Reverse math would be 1800 divided by 3.

BB Exactly. If you assume a 3 foot depth, the 300 feet for a small tree would be a 10 x 10 area that it would need. Medium, 20 x 20 and large, just under 25 x 25. Is that a square cut out? Is it rectangular? Is it a combination of a cut out and something below the surface that enables you to get to that volume? So you could have a 4 x 20 cut out, and then where are going to make up the rest?

JC Some way, somehow you want to get to that volume.

JG We are headed on a good track ...I want to point out a tree well that is problematic for multiple reasons. Right out here on Hogan at Adams Street, headed toward the river. There are 3 or 4 tree wells with little brick walls with holes in them. The sidewalk slopes to a drain. It is very problematic.

NS It is on the Skyway side?

JG Yes.

BB There are no trees there? There were hollies, but....

JG There are no trees, now. The rain doesn't come though, the sun doesn't come through, there is no water source. Even with rain and sun, it is surrounded completely by non- permeable, probably very compacted surfaces.

BB Right, and bricks are diverting the water away and the slope's not letting it intercept it. Ill conceived.

SLF So what we see is that there are answers, structural answers to get to these volumes, once we identify in the standards what we want. A lot of creative ways.

SC In front of the Federal Building, the beds are raised and that looks good. So you can get volume going up.

SLF There are some pictures in the good, bad and ugly PowerPoint of raised planters at the FIS garage.

SC I think that looks fabulous.

SLF So it is a solution

BB to get to that volume.

Discussion expands to the beds on Hogan to be removed by the Emerald Trail construction:

BB These started with Laurel Oaks in 5 x 5 , that tapered down. They got to a certain size and they died. Replaced with hollies, got to a size, they died. Then, age old crape myrtle....

NS Look good though.

BB Yes, they finally figured it out. Hey, let's try a large tree, nope, that's too big, it didn't work. Let's try a medium, nope, then finally crape myrtle. The root requirements were roughly what was there.

SLF I think our goal is to cut through the trial and error. If you don't have the volume let's not start with the big tree. And that's what this whole "right tree, right place" is about: we are saying that if you can't do it, fess up to it.

JC And plant a slightly smaller tree.

BB However let's not just plant crape myrtles and palms downtown because that's what the 4 x 4 will allow.

JL Remember there are two major constraints: one, that is the parallel parking along the ped ways and maybe there is something every so often that we can do to push out and be able to plant a tree farther from the building and two, the utilities running under the sidewalks.

BB It's true. Finding the soil volume with utilities and adjacent buildings is a tall order.

SLF The DIA Section of 656 specifically says you can put trees in the adjacent parking, that you can create a bulb out mid-block. This is a tool in our tool box, so under the requirements for the Amenity Area is the right to satisfy the required trees in adjacent parking.

Guy Parola I want to offer a lens as to how our code came into being in 2001 , 2002. The reason the technical requirements are in our code is we had an LA on staff at that time and we hired GAI. We have a tree palette for each District of downtown for branding purposes.

What would be wonderful for us from this committee would be the technical side. It would perhaps not be a helpful conversation to us and a lot of people if we assumed taking parking spaces out was a great idea. I get that option is in there.

We have a lot of competition on our sidewalks: restaurants want seating, benches, you have AT&T wanting to come in.....

More of the technical thing would be wonderful.

Would it be helpful if I solidified all of this into a White Paper that I could share with the group? By the end of the week?

SLF Sure, we are here to create the environment where we can be successful. We'd love to know what your challenges are.

GP We are really good at the 'why' we do things and not so good at the technical.

MZ I can look at cities around. The cities use a lot of rectangular beds. The roads don't move, the buildings don't get smaller.... So I have seen in Chicago, many rectangular beds. Many have curbing of granite or even low fencing. What I see is the use of more pervious pavers, structural soils and silvacells. If these are in your code, you'll get the best practices.

SLF 656 Standards show inspections at 6 months and they can be cited as declining then,. Guy, are you able to proactively go out at 6 months and say the tree is declining or are you, like Jeff, waiting for a complaint?

GP We don't have the capacity to do that. It is somewhat proactive through Nina's staff, Noel.

SLF Are we backing you up with the 2 year warranty if planted with tree mitigation funds?

JG Correct.

NS Can I ask Guy, is this tree volume in your standards new?

GP It is maybe 4, 4 and a half years old.

BB First I have seen them in a City Standards. Good. What do you think about the volumes?

JC It is exactly the same as James Urban's volumes. They are kinda industry standards.

SLF Other things in these standards....

At the top of the page with awnings, there is a maintenance agreement. "Property Owners constructing streetscapes are required to execute a maintenance agreement...." This is kinda the FDOT deal "....in a form acceptable to the City." The requirement is here, but it might not be well enforced.

And then near and dear to our heart "Ped protection from the elements...." This is the sun and the rain. Says "Shade shall be provided for the 40 % of the public realm." That speaks to tree spacing, to almost a spacng requirement.

I don't know...when you look at plans that come in, do you do a calculation of the canopy of the tree and then a calculationis that 40% met?

GP These calculations are provided as part of 10 set. If they can't make by tree, they can also make it by awning, by shade structure. Our concern in that 40% is that we shade.

SLF Okay. So have you been successful in getting it? Do people come up with a way to do it?

GP Yes. That is what we excel at but we are not seeing the same thing on other parts though.

NS So a pretty specific question to Hogan Street. The couple of developments that have been approved on Hogan Street, do you know if there was a shade requirement? Or because there are existing buildings, they were not....

GP So on Hogan Street, every single one of the engineering plans that have come through has recognized that we are tearing the whole thing up through the Emerald Trail Project so it wouldn't make a lot of sense to....

NS To require? It would be great to require awning or such over Hogan, now that we are putting it on the developers.

GP We would be happy to do it. We can reach out to them.

NS Okay.

GP Caveat. They are going to be putting holes in a historic building.

NS So there might be concerns about that. Okay.

JC Guy, can you comment on what proportion of the shade is achieved through awning, non-tree versus tree?

GP I have no idea.

JC Any impression?

GP Honestly, most are going to be trees.

JL And that is based on the mature size, certainly not at planting.

SLF Well this (Sec 656) says the 40% is within 5 years of issuance of CO. So there is a measurement date. But again, if you are looking at a live oak, its canopy at 5 years will be X, less than at maturity. This code very much speaks to expectations.

JG You mentioned needing shade from the elements, and it is mostly trees at an expected 5 years span. Does that take into account deciduous trees?

Discussion related to the length of time a deciduous tree is without leaves in North Florida continued.

GP If you read the section of the code, we read shade trees and there are not a lot of them.

SLF And they are large.

GP And the rest are accent trees.

NS Do we know if trees that lose their leaves count as shade trees?

BB If they are on their list....if the leaves are on the trees when we need them.

SLF Trees are not without leaves for a long timethen deciduous are actually evergreen.

JG I just wanted to clarify. I've heard comments on projects through Tree Commission . I prefer deciduous, particularly in urban environments as they are more able to tolerate the pollution.

JA Many of our deciduous trees are semi-deciduous.

SLF That is the summary of the standards that apply to the DIA. If you can help us understand how you apply them, issues you've had with them.

GP I think that is part of it but not all of it. We do have design guidelines with tree standards that area just as much adopted by Council as are those standards there so I do think DIA owes it to the Board, to all of you, to present them. I think we are all saying the same thing; the City was part of the GIA thing from the git go.

SLF Yes, that will help us. Our next meeting we will have silvacell details. We have the design from the park Street BRT; that is all silvacell construction. We may get Prosser to talk about State Street. We are looking to identify some costs. We are looking at what Guy provides us for the most urban environment.

Justin, you have the last item under standards.

JG Mine is regarding the approved species list. We have small, medium and large trees. There are, on page 5, a bunch of notes. I did not change anything; some are guidance as to when to use a tree. Given this effort I would hold off on any changes.

We have a lot of species on the list. Some we use very frequently and some we do not.

SLF Yes, the notes seem to be up for discussion. Should the 'notes' stay on the list or be relocated?

And we are spec'ing 4 inch trees. Area all of these available in that size?

JG No.

JC Availability is haphazard. It s important that we broaden our options.

SLF I just see many I have never seen in a project and I assume that is because they are not available at our specifications.

JG It is a combination of things; some you may not see at sizes we normally spec. You haven't seen 7 gallon trees, but some may be available in 7 gallon, which will grow into a full grown tree.

There are niche trees, some for wetter soils that we don't often encounter.

And for example, Redbud, they are difficult to procure but also there hasn't been much success other than certain areas of the City with shade and very rich soils. So some absence is about a lack of success. Dogwood too, not a lot of success.

BB An understory tree.

SLF These are the standards we have collected, have we missed anything? Help us assemble the information.

How do we move from a summary of all the materials to a recommendation?

VF You can help us understand what you like in what you are seeing. The UFMP will take what you discuss and recommend and they will bring more to the table. Help us, as you move forward, to track your work and sources.

There is discussion and consensus to continue as the entire Task Force to identify appropriate standards versus establish a sub-committee to develop the recommendations.

MZ It seems the goal is to funnel the developer to our desired approach.

NS Reminds me of the situation we find- we want to encourage them to come in early. Is that at 60%...or 30%....

BB For a project like that, it is their site plan level....before even.

NS I am thinking a goal is to let them (the developer) know what the expectation is.

BB And just having standards will help that.

MZ I just don't want to have standards that are ideal, and we can't meet them so we get no tree. Can't set a standard that is unachievable.

SLF I think we want to have that reality check. If not achievable for an oak tree, is it achievable for a holly, not a holly, then a....

Part of it is that an investment in a tree that can't be successful, what did James Urban say ...some of these environments are so bad that nothing will live.... Then that's not an investment at all. We are trying to find that balance.

MZ Is it intended that if you can't meet the standard, there is no option?

SLF No, the first goal is to meet the standard but if you can't, you can always come to the Tree Commission early and say you can't meet a, but you can meet b, and the Tree Commission can accept that as an equal.

GP Is it intended that the Tree Commission give regulatory review?

NS Only for projects that seek mitigation funds.

Ended at 2:16:40

