

MINUTES OF THE STORMWATER MANAGEMENT COMMITTEE

Meeting of: Wednesday, May 27, 2015
Leawood City Hall, Main Conference Room

COMMITTEE MEMBERS PRESENT:

Jim Rawlings, CHAIR and Councilmember Ward 2
Julie Cain, VICE CHAIR, Councilmember Ward 4
Debra Filla, Councilmember Ward 1
Chuck Sipple, Councilmember Ward 3
Pat Dunn
John Kahl
Curt Talcott

COMMITTEE MEMBERS ABSENT:

Skip Johnson
Carole Lechevin

STAFF PRESENT:

Joe Johnson, P.E., Director of Public Works
David Ley, P.E., City Engineer
Brian Anderson, Superintendent of Parks
Julie Stasi, Admin. Services Manager, Public Works Department

GUESTS:

John Jenson, 8508 Lee Boulevard, Leawood, KS 66206
Gloria Klug, 9721 Lee Boulevard, Leawood, KS 66206

- Chair Rawlings called the meeting to order at 7:30 AM. Chair Rawlings began introductions and mentioned it had been a year since the group last met. The Mayor has made new May appointments for the year and Welcome to everyone.
- The first item was to approve Minutes of the last Stormwater Meeting, held last July. Deb Filla- had a few minor typo changes and Motioned to approve the Minutes (as revised) of the meeting held July 30, 2014. Julie Cain- seconded the Motion; all attending members in favor. Motion passed.
- **New Business: Discuss Best Management Practices Cost share Program-How to publicize it.** Joe Johnson described the current program and background. Through the Johnson County, Stormwater Management Program (SMAC) there is a provision for funding where the City's can participate in an amount up to \$10,000. The City's have to set up a web site with information and for those cities participating, residents of those cities can submit an application for funding for rain gardens, rain barrels and now we have trees. Water quality BMP's can be submitted for. On water quality BMP's there is a a match up to \$1,000. So if a property owner spent \$4,000 the maximum reimbursement would be \$1,000. The County would then reimburse back to the City. Rain Barrels-you can get two rain barrels for \$75. Trees-you can get a maximum of \$100.00 for trees. Joe did not think there was a limit on the trees, but said next year we will limit it in the application. The way the application reads is that the trees are for fall planting. The web site also has a list of preferred trees. The trees can be

planted anywhere in your yard (front/back) however the planter needs to speak with the Homes Associations when planting as well. There are also some trees for the right-of-way areas. You are not limited to a specific area though.

Julie Cain-Some of us own our street trees, the HOA does not own the trees in the southern part of Leawood. It is all on the property owner if we have to plant a street tree.

Joe Johnson-some HOA's will have a list that property owners choose from and they may be able to get a list from the City that we have; as far as the trees that are appropriate for right-of-way planting.

Gloria Klug-Asked why would we limit the number of trees that you can buy for that \$100?

Joe Johnson-Said because there are 15,000 properties and we do not want someone coming in and buying 50 trees. We are only limited to \$10,000. So we are trying to spread it around to many.

Gloria Klug-Understood that limitation to \$100, but why would it limit it to the number of trees? Some trees cost \$30.00 and some are \$15.00.

Debra Filla-Said that in other parts of the country, other cities have the applications in the garden centers.

John Kahl-Said that if the program was set up to where the applicant chooses what they want to do and where they want to install them, maybe the nurseries would be able to have the information advertised. That could help put sales their way; in that if you purchase a tree, you might qualify for a reimbursement/by taking the application. Kind of sponsor and help them out a little bit. Maybe that would be an avenue to spread the word.

Gloria Klug-asked where do the rain barrels come from?

Staff advised-most have been purchased over the Internet. Barrels also have to have a criteria met by the Planning Department color and placement. We do not know that there is a local supplier. The barrels are 55 gallons in size.

Debra Filla-Just learned that installation and design is included. So you could get a turn-key rain garden for \$2,000. If you put in \$1,000 and the City put in \$1,000.

Julie Cain-Sounds like Joe said you'd almost have to spend \$4,000 to get the \$1,000 back.

Joe Johnson-Advised you could spend as much as you want. The maximum reimbursement is \$1,000. If you spend \$2,000 you would get \$1,000 back. If you spend \$4,000 you get \$1,000 of it back.

John Kahl-Also mentioned there is kind of a nuisance factor to apply. So if the reimbursement is substantial enough to make it worth the hassle of applying in advance and doing this and getting it all lined up. If you are spending \$5,000 and only get \$1,000 back, it is probably still worth while. But if you are spending \$400 or \$500, the extra hassle for the couple hundred bucks –might not be worth some people's time.

Gloria Klug-But if you went to Suburban and you talked to them. And had those people sell it. You may not go to Suburban weekly like I do. I used to work there, it is a great group. Bill Stueck is huge into civic responsibility and he would probably give you a "Leawood Day" where you could come in and just set it up. He does it for ten (10) charities on Fridays and 10% of everything they sell that day goes to the charity. They service wine and cheese and it's a lovely event. I'm certain they would do something. They even have music. If they would carry

the rain barrel, more people would use them.

Chair Rawlings-Okay, In summary we have suggestions (*besides where we currently post on web and in Parks Guide*) to:

- a. Send information to area nurseries-such as Suburban Lawn & Garden
- b. Maybe have Program information on hand at storesites.
- c. Maybe a "Leawood" day could be held at Suburban.
- d. Publicize in Gardening Magazines/Publications.

Anyone else have any further questions?

DISCUSSION AT THIS POINT (PAGE 3 TO PAGE 18)

Deb Filla-Can we share what really kind of got us here is John's email and the terms of the problems he has in his yard. Would something like this program work for him or help him in anyway?

Chair Rawlings-Not sure what the issue is in John Jenson's yard. Drove by it and saw the property.

Debra Filla-Shows the pictures of the packet of Mr.Jenson's yard/ditch. Debra asked Mr. Jenson to tell the Committee about his situation.

John Jenson-Before and After a rain (didn't check his exact dates). Roughly a one inch rain pushes debris to the stormdrain; which as a general rule will clog. And then any other rain after that, once it plugs, then we get the benefit of what is spread out in that ditch. If it rains less than an inch, usually it is okay. If it rains over an inch in July is also usually okay because most of the debris is out of the ditches and things like that, that flows to this spot. It's just not taking it and so what happens is you get silt, leaves, and everything.

Debra Filla-Some could ask why don't you just rake your leaves? The problem is these aren't your leaves right?

John Jenson-Yea. I did that for the first four or five years. I've been at this property longer than I've been married. And my wife says that is an eternity. After awhile you get tired of being everybody's lawn keep. This is all pin oaks leaves. I have an Elm and an Ash tree sitting by that ditch. This is what is coming down from other yards. I try to mulch it up as best I can but that also encourages this development of what is basically, the ditch is higher than the culvert.

Chuck Sipple-What is the solution? A bigger inlet there?

Debra Filla-For me that is the question. Is there a possibility to use this application? If we look at Resident Gloria Klug's pictures and see what has been done in her ditch?

Chuck Sipple-How many times a year do you have to clean that drain out to allow the next big rain to work correctly?

John Jenson-If it were to be cleaned out in order to allow that it would probably be five It depends on how many one-inch rains we get. In the fall, early winter and then in early spring.

Deb Filla-Shows the comparison of Gloria's location/ditch. Joe had mentioned how Gloria had worked with her swale area. There are some differences in the two yards.

Jim Rawlings-is that a swale or a pipe underneath there?

Gloria Klug-No, no pipe. She does not have that much of a dip though compared to Mr. Jenson's location. She does have an inlet under her driveway where they connect to the south end. We did the circle drive. There had been only a north entrance to the drive, but we added a circle drive when we moved in. We had to put that in under because the neighbor to the south has the collection and he is very good about keeping it clean. And since I'm good about keeping it clean, it helps a lot. But I still have a lot of debris from the road and the neighbor and everything else. There is a weeping bald cypress tree there and it is pretty huge. It will send outwards to six feet of roots. The only problem with the bald cypress trees is that they send out knuckles. The knuckles can be very damaging if you have an irrigation system and it is annoying because you hit them with your mower.

Brian Anderson-Thinks the Bald Cypress is on the list. Bald Cypress is interesting because it will take flood conditions and it will also take drought. You do get the knees/knuckles. If it is in constant moisture it will send up the roots for oxygen. So that is why they are doing that.

Gloria Klug-And they will come up to twenty feet away.

Brian Anderson-We have them all around our ponds if you go and look at them on the Parkway.

Chuck Sipple-Is the ditch at the Klug Property as deep as the ditch at 8508?

Gloria Klug-No, not even close.

Debra Filla-So the difference up north is that you have more steepness and more runoff from the yard going to the street. So you have two elevations contributing to that down hill slope correct?

Gloria Klug. And Mr. Jenson has the sidewalk.

John Jenson-The sidewalk contributes to the steepness of the ditch itself. And so my neighbors to the north who are up (that's the flow) they have a very steep kind of a ditch and separate issue. But it is hard for them to maintain it. It is a bit of a hazard. Anyway, the water flows down and then the collection-we are at a spot where it tends to level out on the north side of our property line and on down a couple of other houses, and then we get more..

Debra Filla-more of a steepness to bring it down but not keep it going/flowing.

John Jenson-Yes, thank you. The pictures are looking to the south.

Debra Filla-Looks at the Pilot Project on Belinder, which seems to be working and is not washing the plants away. Not sure how often it has to be cleaned.

Brian Anderson-The seed load.

Joe Johnson-The issue with these and Brian will tell you, the pilot project type structure is a lot of maintenance. In this case, Debra and her neighbor took them on. If the City puts them in, the maintenance is agreed to by the property owner. The City does not send maintenance crews in.

Debra Filla-Should we lift up that grate and go in there and clean it out?

Joe Johnson-The water should flush that out.

Brian Anderson-What happens over time is that soil that is in there, all of the organics and silt. The water is coming in and it slows the water down. Anything in the water settles. So that cleans the water but over time that will build up in there. So eventually the soil will have to; you over time will have to replant. You couldn't just leave that there for ten years. It depends on what is in the water and how much cleaning it is doing. But at some point you will have to peel soil out of there, there will be a pile up.

Curt Talcott-You basically will get a crust on top and it will not be permeable.

Joe Johnson-Just like anything else eventually it will fill up with solids and you are going to have to remove all or part of that soil put in and replant and start new.

John Kahl-I do not see this kind of a concept as a solution for Mr. Jenson's problem. He has a lot of leaves piling up in there. Other than cleaning out the leaves more, I honestly do not know what the solution would be.

Debra Filla-Wanted to look at the different pictures/applications.

Brian Anderson-In looking at the BMPs at the Justice Center. Ideally all of them were going to have a filter in them. What happened is there was an elevation problem and everything didn't flow right, so what we did to make something work. We are capturing the runoff of the parking lot islands. It goes through the rock; which over time that will silt up too. Then it goes to an inlet, then it moves over into a sediment pond. That will surge with the rain flow and then drain back down.

Joe Johnson-A lot of this is for the first 1.2 inches of rain/ for the first flush. So when you are having the first rain with all the dirt, grit and oil, that's what these applications are trying to do. It's not a flood control device at all. These are strictly water quality.

Curt Talcott- Lee Boulevard would be awful difficult on the steep slopes of that Boulevard to do any kind of water quality though because of the velocity that you have and the amount of runoff there. And you have to be able to slow water down. For water quality applications, you almost have to be off systems so to speak; like on Lee Boulevard, they can't be part of the main system.

Debra Filla-So the thought being is that you can't (from my perspective I understand you can't just fix a yard). This is the question to me and it was discussed at a MARC Meeting, where you consciously go out and you take whole address swatch and go up and down and (for example Lee Boulevard) because you are trying to do a system and asking all the owners to participate. What you bring to the table for them is the design and the sourcing and the installation if they want to participate. I don't know-I'm just throwing out ideas. The idea I got in MARC was one of the things that Tom Jacobs did at an incarnation was, they would go out and actively pick a stretch of stream and they would contact all those homeowners so they collectively are doing something. In terms of John's property, you have to work with people that are upstream; because everybody needs to slow down the water on every single yard for it to have any collective good. If you just put in one application (you are right) it would just get flooded out. So the question is I think, Do we as a subcommittee want to get more active in helping residents and not making it a staff thing? Because the Sustainability Advisory Board, is a very active board. We are the ones contacting the owners when we have a meeting etc. I do not know if there is any more support we can provide or if this is just a/we don't know why Johnson County is doing this cause it never works. I feel like every time we talk about this, it never works. I don't know why we do the matching program because it's never applicable.

Joe Johnson-Like Curt was describing, we can't address this in a roadside ditch. Because that is where all the water is going to go. You don't address it in the stream. I think what MARC is talking about is they were looking at drainage as it would go to the channel. So they were not down in the channel doing the improvements. So you are trying to capture water between the house and the ditch as there is not any room. You are somewhat limited because it sheet-flows from the house and the lot is 80 feet wide. It is difficult to put in something that is 80 feet

long that will try to capture that sheet-flow. You can't do it in the bottom of a ditch because that is where all the flow is at.

Debra Filla-That's why I brought up a retaining wall for that pilot. If you would want to catch it back up before the sidewalk, is that an area to start working on as part of the solution?

Joe Johnson-Those are expensive solutions. The small pilot we did was almost \$29,000.00. They are not an inexpensive system to install.

Debra Filla-I know.

Pat Dunn-John, I used to live at 84th & Lee Boulevard. We had a ditch in front. I threw wild flower seeds out every year to try and help. I decided I wasn't going to deal with it.

John Jenson-Mine get washed out. I've done that.

Pat Dunn-All I was going to say is that I know our stormwater system is not designed to carry great clumps of leaves off and that is what creates the problem is the leaves. And I don't think anyone here is prepared to outlaw or banning pin oaks in Leawood but it is the leaves.

John Jenson-Right, the drain won't take the leaves. They pile up, it gets backed up and what you are seeing is the build-up since we put that in. Originally the ditch actually flowed downstream. Now it is up above the street level because of the silt.

John Kahl-Does the ditch need to be graded? It looks like there is a high spot between the outlet and the inlet because of all the leaves. The inlet looks plenty big to suck up all those leaves; so there is a problem getting the leaves to the inlet?

Joe Johnson-The bigger issue is that at one time the City was going to curb Lee Boulevard. The residents said No, they didn't want curbs. They wanted it left the way it was. The City said "fine", and we did what we have. And the property owners, just like on a residential street, you maintain all the way to the street. So what happens is not any different than in back yards. Where they have an area inlet in the back yard, they don't take care of the leaves. They get a heavy rain, the leaves clog the inlet and then we go wading through the water to clear the leaves. No different.

John Jenson-I take exception to that. First off, that drain needs to be cleaned every time it rains in the fall and in the spring. I've got to call and often multiple times to get anybody there. I mean if it has a little bit in it. Secondly, if that debris builds up then-John, that's your issue. Well you know this is a point of frustration.

Debra Filla-The difference is in the back yard it is your tree, in the front you are talking about an area where it is not your trees.

John Kahl-I mow my neighbors leaves all the time.

Julie Cain-My husband complains about this all the time. It isn't always our leaves, it may be coming from a neighbors leaves. With all due respect, you are not isolated here. We can't possibly as a City go around and clean every single inlet. It's impossible to do everything and like you said -you can't control what is happening up stream. As a city it just happens to be the way it is unless we can change the grading or if there is something we can do then we should address it. But we can't stop the leaves.

John Kahl-I'm hearing John say that it is holding water after it rains, so it looks to me like that

ditch may not...well if it was properly constructed initially but over time for whatever reason there has been a build up there in the ditch and it's raising the flow-line of the ditch. Have we looked at the grades on that ditch? And is it a matter of, would it drain from the outlet of this pipe to that inlet then we wouldn't have a build -p of water. Then maybe not have the gross accumulation of leaves so they would flow into the inlet and more uniformly over time rather than one big plug?

Debra Filla-What about putting stones and rocks and stuff like that like Gloria has done, in terms of making a hardscape attractive?

Gloria Klug-With the steepness it will just send your rocks down the hill. And if you go right across the street from us you can see where the neighbor decided he was going to raise it himself. He threw a bunch of construction debris from his house into the ditch and I'm sure you probably know where that ditch is. It is literally the two ditches across the street from my house. They have an extremely steep ditch. He has a riding lawn mower and decided to level it himself. What happened is, the collection inlet is in one place and he has it to where it is only accepting a bit of water and then as you go down-hill, it goes over the road and driveways and then we have one of the big collection squares and it has so many leaves that it has now formed a filter. It is completely packed. I really do not think it is the City's responsibility, I think people and owners that did that need to address it.

Debra Filla-The question people need to ask is when do your actions on your stream impact the person downstream. And do we have to do all this? Maybe the bigger question that Joe raises is, should we come back and ask the bigger question. In ten years from now do we want to put in the CIP to re-curb and do Lee Boulevard?

Chair Rawlings-That is another meeting. We're off of the subject. We're trying to redesign Lee Boulevard now. We've spent a lot of time on this and that is fine, but we have not stayed on the Agenda. We need to talk about the issue here and Lee Blvd is another meeting.

Debra Filla-That maybe another option for another meeting to discuss it. I'm trying to come up with a solution here. My question is if we cannot do this application at John's address, than what can be done?

Joe Johnson-We will run into the same issue that we did last time. The majority of people on Lee Boulevard wanted it ditched just like it is. Left alone.

Debra Filla-So would it be alright to do a town hall meeting and invite everybody up and down Lee Boulevard and talk about this program and what can be done. And how they can help their neighbor? I think I am not the only person in the crowd that doesn't seem to understand about water flow and that might not be a good idea to toss things in the ditch. And the fact that one doesn't take care of their leaves might be impacting the neighbor downstream. People don't get stormwater.

Joe Johnson-I don't think people really care about stormwater until it impacts them personally.

Debra Filla-Exactly. And they don't understand how it impacts their neighbor.

Joe Johnson-But that is the common theme.

Debra Filla-If we say they are ignorant and we do not give them an education at the town hall, then isn't that one of the solutions?

Julie Cain-Doesn't your HOA have a newsletter?

Debra Filla-Twice a year and there are 1500 homes.

Julie Cain-Well then there is at least an avenue where perhaps we can put some information in that newsletter and that is a place to start.

Debra Filla-It's 1500 homes. Imagine the mailing for 1500 homes. That is why you need a targeted area if you are going to try this. The question is: Can we collectively with neighbors with this program and with our initiative, can we educate, touch and come up with something creative? Not just that "it's not a City problem", and it's not "just yours" as a neighbor. But could we collaborate on a solution? Is that just the wildest thing we've ever heard about?

Julie Cain-No, of course. That is exactly what this body does and what Public Works does is we have to think about the big picture and we have to focus on priorities. That is what we do at every single meeting. We look at these issues. I have one here in Bradford Place. The City can't do everything and you know how queued out even this group is. So again. You have to use the avenues you've got and one of them is that newsletter. Start there. It's kind of like your street committee. We have to start. We can't jump in and all of a sudden be redesigning Lee Boulevard when we're queued up ten years out on the projects we have already identified-our major projects.

Debra Filla-We suggested action in our last minutes to follow up. If you look at the last meeting that was one of the action items from the last talk. Was to go in and work with education and HOA and I don't know that we took any action on that. Right? Who is going to do the education? Who is going to do the Newsletter? When we did the Brook Beatty Raingarden that was a grant from Johnson County through the Blue River Watershed Association. They came out and educated everybody on what is a watershed and what is a rain garden. How it was planted and what the purpose was. If we are going to do that kind of education which is pretty low dollars and it doesn't have to be done by staff if you have a couple of hundred to put the class on. How do we do that?

Julie Cain-Then it circles all the way back to how do we advertise this cost share? We're putting it on the web site, we're announcing it at the HOA. If your HOA as a group of 1500 homes (you said it yourself). And I don't disagree that it's a problem, I'm not disagreeing with you. But that to me is the place to start. If we are talking about education and we're talking about disseminating information. And we have Johnson County Stormwater as a County, they have oodles of information out there. Is it not? Basically this is a dissemination problem. And how are you going to get some coordination? I see that is the place to start. The City is doing things. We are already doing things. If your HOA is not doing things then you know what I mean. It can't always be the City.

Joe Johnson-The biggest problem is while we have all of the information, for 90% of the people that is not a concern of theirs. You can talk about this but unless you have somewhat of a passion to do something-people have 900 other things to do. While the information is there, I do not know that the silver bullet that will make people decide they want to be involved with it and do something about it. I do not know how to get this to be a priority with people where this is what they want to do.

Gloria Klug-Suggested starting with people that are passionate about it like the Gardeners. Go to the Suburban Lawn and Garden Stores and get them to sponsor it. The gardening clubs, the gardeners associations and get those people. Talk to Dennis Patton who is the big horticulture person in town. I have a garden and people stop at my house all the time and ask me how I do this and what I do. Gardeners talk to each other and it would get started.

Chair Rawlings-Asked to get back on the Agenda topic. I have driven up Lee Boulevard many times to see the area described in the picture. To address John Jenson's location. John, the leaves were not raked after the rain -so you have left them there so we can see them?

John Jenson-The leaves in the picture got mulched up, that were in the ditch. If you drove by yesterday that was from the more recent rains that have floated down.

Chair Rawlings-I'm just asking because I've driven up Lee Boulevard many times and your piece of property is the only one that has a lot of leaves on it. About 99% of the other properties have been taken care of. That was why I asked the question. Did you leave the leaves in there so we could see them? Or are you maintaining that property, the ditch during the dry season cutting and mowing? Like everybody else?

John Jenson-I run a lawnmower over it. And I would tell you, you are not looking if you are saying that is the only property that has any leaves in it.

Chair Rawlings- I drove it yesterday 98% are raked. Okay. Also, you are saying there is an elevation issue. Is that correct?

Brian Anderson-One Comment. What you see here is when these leaves pile up. I'm not blaming property maintenance or anything. They build up really fast in the fall. All it takes is a couple of rains or something. That dams up the water that is coming down, then over time and it happens fast. It is subtle but it happens overnight. I see this all the time on our trail system. If you go in a trail after a rain, you will see standing puddles of water. It is because we go through and we have to push the silt off the trail. Where does the silt go? We kick it off to the side. So over time you build it up. That is what happens in ditches. I think over time if there is anything that stops the water from moving through that pipe, it will build up soil slowly. It could take years. But then you see an elevation change. And when that happens you start having these water spots that hold up. The other things you see sometimes is soil settle around pipes and then there is a low point and water backs up. I do not know if that is the case here but there may be something. Who does the maintenance of the ditch? At some point in time that is happening over a long period of time. Our ball fields are dragged. We drag the skin surface of a ball field over time and we have the wind blowing the soil we are working up and it gets right on the edge of the grass where all we do is mow there. Eventually you have this damn that forms where we have to go in and re-sod. It is a similar thing. Something is blocking the water. Leaves that stay there too long, can contribute to it.

Joe Johnson-Anything you leave natural-ditches, channels. They are on-going maintenance.

Julie Cain-A proactive thing I could do on this Agenda. I know Bull Stueck and I know his secretary Kathy Roberts. I will take with Joe or Julie-whoever gives me the packet. I will email them this information and ask them to make it available to their patrons. So to that agenda

item, I will personally take it upon myself to distribute that information. I do not disagree with what you are saying. It is obviously a problem. The bottom line is we only have so much staff that only has so much time. We have had a cap on all of our employees for years and years. We have miles of trails and miles of roads. And as a City, the City can only do so much. These fine men are all volunteers, as is the City Council. As a body, we can only do so much. We run into this problem all the time in all the various committee. We can't be everything and do everything for everybody. It is physically impossible. Deb does the best job of being our Mother Nature and she serves an important process. The bottom line is we can't. We don't have the money or resources. Getting Jim back on his agenda, that is what I will do to help with this little piece of the agenda.

Joe Johnson-If we can get the link for the magazine, we will try to get in contact with them to at least put in what we have in our packet. The application form and the write-up.

Gloria Klug-The Master Gardner Program always needs to do things. They have to serve 40 hours to keep their license up, so they would probably be a great source of help.

Debra Filla-I can contact the Leawood Association and I bet because Jim is on the Board with Leawood Estates we could talk him into getting with them about getting it in their newsletter.

Chair Rawlings-Sure.

Debra Filla-If the residents on Lee Boulevard wanted have a meeting, is that something that could be done?

Joe Johnson-That is not for me to say. That would be up to the Council to say as a direction to staff.

John Kahl-What is the responsibility along that ditch of Lee Boulevard?

Joe Johnson-It is the property owner's responsibility. We have right-of-way. The ditches are in the right-of-way. The stormsewer we maintain.

John Kahl-The pipes under the driveways-are those the City's or the home owners?

Joe Johnson-The property owners. The stormsewer in the picture is a city stormsewer.

Chuck Sipple-We have two different issues it seems with the different applications between the Justice Center and the ditches.

Joe Johnson-All of it has to do with slope. It is hard to capture water and slow water down when you are on a street with a steep slope. You want to get to where you have a flat area. I think the leaves get stuck in the driveway pipes and finally get enough water to blow it out of there. If the neighbors up stream let the leaves that fall in the ditch stay in the ditch. Then the rain blows them out.

Pat Dunn-What I hear Joe saying diplomatically is: A ditch is a ditch is a ditch. You can't make a ditch not be a ditch. If you want ditches for water-flow they are going to act like ditches. Everything is going to flow into them. And Mr. Jenson happens to be in the unlucky spot where it is all getting backed up. It will accumulate somewhere because that is what ditches are for.

John Jenson-I was there before we put that in.

Pat Dunn-And it didn't pile up on you then. It may have on others at that time.

John Jenson-I didn't notice it then. But I have it now.

Pat Dunn-Yes and I lived there years ago and know there were areas where it accumulated

because it's a ditch. Maybe it's time for Leawood to consider that, but as you say we can't even afford to put it on the ten year agenda at this point.

Debra Filla-There is a gray area. Natural landscaping, these creeks, and our ditches are part of our stormwater.

Pat Dunn-And if someone wants to put something in as a project, I have no doubt we could spend that \$10,000 during one weekend at Suburban Lawn & Garden. Really. If I went in to a store and they said get 50% back for planting a tree, all you have to do is apply to Leawood. Absolutely I'm going to do it. You send me some vague thing telling me you have a program, I'll look at it, and say, "that's nice, see you later". That doesn't apply to me. Talk to Suburban, we'll spend the money like that. And we'll see what happens.

Chair Rawlings-The Director of Public Works has said this is not the City's responsibility.

Joe Johnson-This was the issue brought up at the Council. At that time, the maintenance of property along Lee Boulevard is that of the abutting property owner. That was discussed at the Council. What was recommended was the BMP Program and are there other avenues for us to advertise it? It sounds like we have two that's we can do. We have the Homes Associations to target throughout the year. We can get out the message in the Leawood Program Guide that Parks Department puts out in August. We can give them the information for the one magazine article and then distribute to Suburban Lawn & Garden. Deb and Jim can talk to their Homes Associations (Leawood and Leawood Estates) for their newsletters.

Joe Johnson-The pictures presented at the meeting today were illustrations of maybe how the funds could be used to help improve drainage and things; whether it is along Lee Boulevard or any other place. The bottom line with all of these applications is once they are put in, there is constant maintenance. You cannot just put them in and turn and walk away. Parks is out maintaining ours. These improvements are good. They can be very effective. But unlike a curb and gutter street and a concrete pipe. Once you put these in, the fun just begins. You need to be passionate about what you want to do and it takes constant care every week to make these things function like they are supposed to. That is the issue we have on the commercial side. When you put these in and we're under the creek so to say on commercial developments by the EPA. While putting these things in, they look really pretty. The maintenance side of it is expensive. Developers and owners are trying to figure out what to do. You can put in an underground storm sewer system to capture water and hold the water and meter it out. You may spend more money up front but basically you can turn and walk away from those applications. Landscaping is much prettier and is a benefit to everybody but the maintenance side is costly.

Chair Rawlings-John, is your ditch right now, is it clogged?

John Jenson-It is partially clogged.

Chair Rawlings-Can I recommend that we go ahead and clean it?

Chuck Sipple-Is that an HOA expense? Or is that the City's?

Joe Johnson-Honestly? It is the property owners. Not only do we see it here. But we have it in back yards and creeks. Generally what happens is everybody waits until we get the rain. Then it clogs it up. Generally what we do is we go out there with rakes and troft through the water and rake it out. Generally we do not haul the debris off. We rake it out so the inlet is open and we walk away. Just like a yard where you mow it and keep it clean. I do not live in

an area with 60-70 year old trees. The trees in my area are very tiny.

Brian Anderson-The long term if you look at it. The grass will start growing up slowly and it is building up. If it builds up a half inch or an inch. Over time you have a blockage.

Joe Johnson-This improvement was put in in 1991-1992. Twenty years plus ago.

Debra Filla-Do you want the home owners to re-ditch it? Do you want them to dig it out? And haul away? OR is that that City's gray area of responsibility as far as an inlet?

That is the gray area. Whose job is it to make it flow to the inlet? It obviously was put there because it was needed. So when it doesn't work anymore, is that the homeowners?

Joe Johnson-Stormwater wise, it works. Water gets to it and it gets into the stormsewer system. Now you have a high spot where water may sit three or four inches. What I can say based on past experience is that the City has not gone in and regraded roadside ditches. That's not to say that that can't be a recommendation to the Council on this particular area. But that is not something that we've done.

John Kahl-do we have any roadside ditches anywhere else except along Lee?

Joe Johnson-Every unimproved thoroughfare, until we improve them; (151st, 143rd, 96th Street). Lee would have been curbed 20 years ago.

Debra Filla-Is Lee the only one with homes on both sides?

Joe Johnson-No, 143rd, Mission Road, 151st others have homes. Lee is somewhat different. That was the concession that the City did. The residents voiced that they did not want curbs and the City said okay we will leave it with no curbs and the residents can maintain it.

Julie Cain-To wrap this up so the residents understand. We are queued up five to ten years in the future. We have homeowners who have been flooded and have rain coming in their homes and we have sat here and had conversations where people are having a foot of water in their homes and they are still queued up to have these massive projects and roads covered. In the scheme of the big picture and the scheme of this body-I'm not denying this is a problem and I'm not denying that we shouldn't do something. But in the scheme of this body, you have to be a low priority with the funds and the timing. We have people who will get water in their basements during these times who have been waiting for a remedy. There is only so much money and so much time. I think we've talked about this and now need to move on.

Joe Johnson-One last comment. In the approximate year 2020 to 2021 the City is improving Lee Boulevard. We are overlaying it and we are making it wider to accommodate bike lanes. When we do that project we will be regrading most of the roadside ditches to accommodate that.

Gloria Klug-Asking a question. If or can the City issue a statement saying as a reminder (hear me out before you jump now). On letterhead or something that looks official, can you remind residents that it is their responsibility to clean their properties to the streets and that the ditch is their responsibility to clean out? Please make sure during storms and rainy seasons that the inlets are clear. I would personally walk it to every house on Lee Boulevard and do that. It is very disgusting to take a walk on Lee Boulevard and see all of the ditches as nasty as they are. Can we do that?

John Kahl-It only takes one unfortunately. Out of one-hundred (100) people along Lee, ninety-nine (99) of them could do a perfect job and one (1) person doesn't do what they are supposed to do and you get leaves and whatever. But that one (1) person may not be bad, they may be elderly or maybe someone was out of town and didn't know what was going on. Or maybe it is a person that is just generally apathetic about their yard and they are not going to do anything no matter how many letters you write. That is the real challenge. We are all in this together. There is no means of enforcement to make them go do something. I commented earlier about the neighbor across the street and I've been mowing their leaves all winter long. Everyone around them was spotless. Then a windy day comes around and it's not spotless anymore. I do my own leaves but a lot of my neighbors pay people to do their leaves. But because this neighbor is not doing a very good job, these neighbors have to spend extra hundreds of dollars to pay people to come in and clean their yard because the one neighbor is not doing the right thing.

Deb Filla-I think some people go right into their garage and into their home and stay there until they leave again. Some we never see.

Pat Dunn-Well I take care of my leaves, but I got one of those yards that if there is leaves on it and it's a windy day, they all go to my neighbors (laughter). I'm happy. I take care of my leaves. You know if someone gave me a letter and said you gotta get busy and take care of your leaves, I'd say mind your own business. I do take care of them. I do. I am with John on this. I have nothing against informing people but there is a different story for everybody and I do not know what kind of impact that would have. That's all.

John Jenson-to Chair Rawlings, the bottom line: My initial call was about getting something done with this ditch because it has silted up the point that it is 24" above. And then there has been a lot of dialog about possibilities. But at the end of the day what I'm being told is not only is that not going to happen so John get out there with a spade and dig a ditch over a gas line and a water line because that is what we are asking for. You can see those marks as you drive by because they have it all flagged out right now. And what is more, the City that installed this stormwater drain that isn't able to take the leaves. That's uh "too bad for you too" or for my neighbor to the south because it is actually their property. But basically is that? I want to make sure I understand the answer.

Chair Rawlings-It is your responsibility to take the leaves out of the ditch. Like any other property owner in the City of Leawood. And Joe Johnson, our Director will look at the inlet to see and make sure that drain is open.

Debra Filla-I think his question was to re-level the ditch is his responsibility as well. So those 24" of silt-Is he the one that will need to dig it out and not the City?

Joe Johnson-Yes. Unless the Committee wants to make a recommendation. We have not gone in and maintained roadside ditches along Lee Boulevard. So if the Committee wants to make that recommendation to the Governing Body and they approve it, then we will go in and re-ditch it where the high point is at. But you know we have not taken crews and gone in and maintained the roadside ditches.

Debra Filla-I will leave that up to you Pat. You have been on the Stormwater Committee longer

than any of us.

Pat Dunn-Well I think it's appropriate that we maintain our system. But I haven't been out there and I haven't looked at this particular one. I know from experience with Lee Boulevard that all you ever do is move the problem. So I'm not sure it is appropriate to do that. I don't know.

Joe Johnson-In the past when we get calls when someone ruts the ditch and drives off, that unfortunately is the responsibility of the property owner.

Deb Filla-So is the better recommendation to take a comprehensive look from Somerset to the end of the slope on Lee Boulevard and access what maintenance if any needs to be done or any long term planning be considered? That's probably bigger than a bread box and doesn't help John.

Joe Johnson-Well the improvements we are doing to Lee Boulevard for the bike trail is \$4 million dollars. That's in 2020 and that is why it's over two years.

Debra Filla-What is the cost of drudging 24" out of that ditch?

Joe Johnson-The cost? Not much. But once you do it there then every other property owner along Lee Boulevard will be calling us saying we told them it was their responsibility. So that is the issue. That becomes a big issue. I do not have crews to go and do that. I can go out there and spend a day. Take this out and walk away. But then when I get the next call and the next call and the next call-we don't have crews to do that.

Brian Anderson-And I may say too if you go in and you just grade out the ditch, but you don't put anything back like sod or something, then you are going to be contributing silt down further too. So there would be expense with the grass and everything else too.

Joe Johnson-No it's not just to grade it out. We grade it out and sod it.

Curt Talcott-Grade it, stake the sod, maintain it, and make sure it took.

Joe Johnson-If we did that, we'd grade it, we'd stake the sod, and we'd walk away. Property owner would water it. The City is not going to come out and water it. So everybody is on the same page. Like I said the City has not maintained roadside ditches since they were put in.

Deb Filla-How long has it been since we put the sidewalks in?

David Ley-1991.

John Jenson-From my experience at least with the sodding on those ditches particularly on the steep side it doesn't work. It catches a lot of hard morning sun in the summer and to get any water to soak on that, you have another stormwater issue because most of it is running down the ditch.

Pat Dunn-It either gets washed away or burned out.

John Jenson-You've got to have something that is hard.

Joe Johnson-That is why the City has not got into it. The City's concession was if you take away the curbs, you all maintain the ditch. That is how it was in the beginning and that is the reason the City proposed to put curbs; trying to do away with this issue. The majority of the people felt that it was worth the maintenance to keep Lee Boulevard with that country feel and maintain the ditches.

John Jenson-I don't think your curbs will solve the stormwater because most of it is coming

from the other side of the street.

Joe Johnson-Well the curbing and storm sewers would eliminate all the roadside ditches and issues that everybody has with roadside ditches. That is what the curb would do. It would be just like driving any curbed street in the residential areas. It all slopes to the curb. In 2020 we are not doing curbs; we are overlaying and widening the street to accommodate bike lanes.

David Ley-Just widening it a little bit. A foot or two to get the bike area.

Joe Johnson-To do that, we will have to re-grade most of these ditches when we do that.

David Ley-We are also going to extend some pipes in some areas because where the slopes are already steep, if we widen the roadway we do not want to make those any steeper. So we will be working on stormsewers underneath there. There will still be a smaller swale above it but there will be a pipe underneath the swale at the roadside ditch.

Joe Johnson-Eventually we will be up there and we will take care of a lot of the regrading of the roadside ditches.

Chuck Sipple-But you still could have the same problem reoccur.

Joe Johnson-Yes. You always will. It is a natural swale. It is Mother Nature. Unless you are going to curb it and capture the concrete pipe. That is the only time you can turn and walk away from it.

Deb Filla- A question: You mentioned \$4 million dollars and you can turn and walk away...

Joe Johnson-With curbing, you would probably spend \$10 million dollars to curb Lee.

Deb Filla-What is the break-even point of doing natural landscaping with maintenance planned in? That is probably the biggest thing that we do not budget for. The maintenance on these.

Joe Johnson-We don't have crews.

David Ley-It's difficult because they carry too much water.

Debra Filla-If we budgeted for them you would have crews. If you did two projects over fifty years. One is natural with maintenance and this one is a hardscape; what is the bottom line? Maybe if we budgeted the maintenance and included it in the plan and it cost \$10 million and the hardscaping cost \$20 million. Or would it be vice versa- and cost \$20 million to maintain the soft landscape with annual maintenance verses the hard landscape and then you don't mess with it for 20 years. Has anybody ever done that cost comparison?

Joe Johnson-No. Most Cities do not want to accept that annual on-going expense.

Deb Filla-I know they don't. But if the question is if it costs less over time and you have cleaner water. That's the problem if we're not funding the maintenance.

Joe Johnson-I don't know that anybody could estimate that. Curt or John Kahl? I don't know that anyone would have those cost estimates.

Curt Talcott-I do not know how you would value cleaner water on something like this. I would argue is minimal at best. Because we get caught into this water quality verses stormwater conveyance. This ditch out here is stormwater conveyance. It is not water quality. And yes there obviously is some silt, but you are obviously getting more erosion too by having a natural open ditch. So from the water quality aspect it is fairly limited. It's conveyance.

John Kahl-To clarify; when we do water quality design we are not designing it to treat the same volumes of water that we have to deal with when we are doing conveyance design. In fact the stormwater quality design is a small fraction of what we have to design for then when we have to design a conveyance system. We know when you design a stormwater conveyance system

typically you design a stormwater system for a 10 year storm. But then you have to accommodate for what happens during a 100 year storm and make sure no one floods and streets don't go underwater too deep and all of those things. When you are talking about a 100 year flood on a relatively small watershed you are talking about like a 5 inch rainfall event. When you are dealing with a water quality type feature and the BMP's where you are trying to treat water quality you are only dealing with the first half and three quarters of that rainfall. And the next four to four and a half inches-you don't design the treatment system for that because the treatment system would have to be too huge. What I am getting at is it is difficult to design a water treatment system that is also a conveyance system.

John Kahl-You typically have to separate them so you want to do the treatment system before it gets to the conveyance system because the conveyance system can't be bogged down by the limitations of the treatment system and still function effectively. There are a little bit mutually exclusive.

Debra Filla-Isn't that the whole point of soft structures, trying to get all of the water in everybody's yard to stay in their yard? So you put the trees and the rain gardens. And I understand.

Curt Talcott-That is a myth though. You are never going to get the water to all stay in somebody's yard. In a water quality storm? That is where you get the water to stay in a yard. In a ten year storm-you can go look at a natural prairie and the water is all running off in a 100 year storm there just isn't the volume.

Debra Filla-How much of the water comes in? You always talk about the worst case , but isn't 90% not the worst case? And most of the rain is not the worst case?

Curt Talcott-Correct.

John Kahl-you have to have a system that can handle the worst case too.

Debra Filla-I'm just asking the bigger question. To come back and look at Lee Boulevard what is the total solution in the long run.

Joe Johnson-You have to remember the ditches along Lee Boulevard are for the worst case. You do not want to put your BMP's in the ditch because that is your conveyance. You can put a round pipe in the bottom of it. It's the same thing. That is water is going and conveying in the storm. You are not getting water quality out of the roadside ditch. Water quality has to be somewhere else other than the roadside ditch. That ditch is your conveyance system. That is taking the five, the ten, the one hundred; whatever water gets into it that is what it is taking. So if you build a BMP for water quality in the ditch the first time you get a heavy rain your water quality just got shot out the door and you waste a lot of money.

Debra Filla-Then the cost I was asking if you continue with this thought and it is water conveyance and you look at the ongoing maintenance you would have in the budget for verses do you go ahead and curb it and put everything under ground? That is the cost comparison I would like to say that I think we need to look at.

Curt Talcott-There isn't enough data. I'll tell you this because we haven't been doing it for fifty years. It is a complete unknown on the maintenance for fifty years with that type of item.

John Kahl-It is kind of like snow removal. If we have a really bad winter, your snow removal budget goes through the ceiling. If we have a really mild winter you have money left over at the

end of the year and with the soft systems you are at the mercy of the environment.

Debra Filla-We have had those ditches along Lee Boulevard since we've been here. That then is a question. So that says how much effort is that to maintenance them that we haven't had this. Maybe that is the question we need to look at. What is the best water conveyance system to have along Lee Boulevard?

Curt Talcott-But we haven't been maintaining them.

John Kahl-I think the City (or someone like Joe) would say the best system is curb and gutter.

Joe Johnson-Yes and some people like this and I get calls from people that want curbs.

Debra Filla-I'm talking about the cost aspect of it, not the preference of it. If we're not worried about water quality and just the curbs are one way and you put it in for x amount of dollars and you leave it alone for fifty years. Or you come along and you put in x amount of dollars to take care of the ditches when they get out of slope and silt it over fifty years. What's the difference between those two costs?

Pat Dunn-I'd like to say this City spends more time concerned about water quality than most I know. We are concerned about water quality what I'm hearing is you can't really at the point of the lawn install a water quality system for the conveyance system.

Debra Filla-I get that. Now that we are talking about water conveyance and the ditch is part of our stormwater system, it's a conveyance. My question is when does that gray area-we put a CIP plan in and we put all the hardscape in and we spend for what takes fifty years. We haven't spent that much money for fifty years for Lee Boulevard. So it doesn't seem to me it's a great cost. What *would* it be if you put in an annual budget to have at your call maybe sub out to someone when you want to make sure you have a downward slope on that conveyance system? And you can come in and do what you need to do to maintain it. That is the problem to me. If you are going to do it naturally and you do not want to do the maintenance because you do not have the budget for it; if you had the budget for it, would it be okay? It would be just one more thing you manage.

Joe Johnson-Right. And that is fine you can look at it that way.

Debra Filla-My motion would be that we look at incorporating a budget for the maintenance of our conveyance system for stormwater in ditches; which is missing from what we put in our budget.

Joe Johnson-That is big because we have swales in back yards and side yards that are conveyance for the one hundred year event. When you open this thing up, it is not just Lee Boulevard. In all of subdivisions or most of them we have swales that carry a ten year design and a swale that carries the rest of it. I have swales that are five feet deep of water and a one hundred year event. So when you say that, that opens up the entire City. Back yards, side yards, roadside ditches. Even the street is a conveyance system. On a curbed street once the storm sewer gets full the water stays in the street and it conveys down to the bottom of the hill.

Debra Filla-I get it. We'll just keep saying it's not our problem and hopefully that will be okay.

Julie Cain-No, that is not a fair statement Deb. You are always using the analogy 80/20 to wrap this up so we can move on. For the most part, the system is working in the City. We are sorry that individual people have issues but again we have queued up the major, major

problems. So is every square inch of the system that we have in place going to work perfectly? To use your analogy is 80% of it working and doing its job? Yes. We have addressed this item. We need to move on. We have these people that need to get to work.

END OF DISCUSSION

- Chair Rawlings-It is now 9:00 AM. Since we have run out of time we will defer the rest of the items until we can meet again. The next meeting can address the third item of business which was an update for the Committee of three (3) Stormwater Preliminary Engineering Studies, Leawood Heritage Stormwater Project and the Tomahawk Creek Wastewater Treatment Facility

Chair Rawlings directed staff to POLL the Committee for either a June or July Meeting to complete the days Agenda.

Chair Rawlings adjourned the meeting at 9:04 AM.

Minutes transcribed by: Julie Stasi, Leawood Public Works Department