

REGULAR DRAINAGE BOARD MEETING:

May 16, 2016

President, Clarence Hensley, called the meeting to order. Present at the meeting were the following:

Clarence Hensley, President
John Landers, Vice President
Charles Whitehair, Member
Phil Taylor, County Surveyor
Stan Willis, Deputy Surveyor
Brandon Murphy, Board Attorney
Cindy Harty, Recording Secretary

Mr. Hensley opened the meeting by welcoming the audience and inviting them to participate in the pledge of allegiance.

APPROVAL OF MINUTES:

Mr. Hensley entertained a motion for the approval of the April 18, 2016 Drainage Board Minutes. Mr. Murphy stated that only two members are present that were here on that date. Mr. Murphy recommended the approval of the Minutes be tabled and be addressed at the June meeting. Mr. Landers moved to table the approval of the April Minutes until the next meeting. Mr. Whitehair seconded the motion. **Motion passed 3-0.**

OLD BUSINESS:

Mr. Hensley called for a representative from the Schneider Corporation.

Michael Moorefield, of Schneider Corporation, 8901 Otis Avenue, Indianapolis, Indiana, approached and stated that they have been working with Kyle on some watershed development. Mr. Moorefield stated he would like to run through a couple of things and be able to go through that process including what was proposed and presented to Kyle. Mr. Moorefield's presentation is as follows:

Mr. Moorefield stated that one of the main things that they end up looking at is watershed development. They use a process that creates an automatically generated watershed. He stated that the reason for some of those is to upgrade older watershed maps, simply because either the maps are drawn inaccurately or they have not been maintained over time. Mr. Moorefield stated once the system is upgraded it will essentially provide true and fair assessments. Furthermore, Mr. Moorefield stated they also take information that is currently available from a digital environment, using their software giving true analysis on those, which might also provide some legal drain maintenance. He stated that what they typically see, working with different communities, situations where the original maps were drawn on elevation models that have changed over time. Mr. Moorefield stated what they really want to be able to do is look at ways to be able to improve those watersheds and truly create true and accurate assessments in those where someone is not having to continue to maintain paper maps, ultimately that leads back to fair and true assessments. He stated they break down and generate the watersheds from a digital elevation model, use the calculations for those, and then have an elevation model that essentially looks like a picture or an aerial photography of the county.

Mr. Moorefield showed a video presentation and stated you might have watersheds out there that are square, two parcels, which we definitely run across in numerous situations, where the parcel is encompassed in the watershed, so it is simply going around those. We would have situations where you may have your drain line which would tie directly on top of those, but what that ends up doing over time is, be drawn off contours and an elevation model that was different. Therefore, what we end up doing is taking the contours or the higher level of that elevation model, using your digital streams, and what it does is it looks at that process and says, "Based on the digital elevation model, the water is flowing this way". The software would take into account ridgelines and stuff like that, and literally, it would be going through that process through an automated routine, and it would say, "Hey the water has to be flowing this way". Mr. Moorefield stated that one of the things that they end up doing through that process is one, water runs down hill and we all know that, we also have some obstacles to overcome, the sinks or the peaks where we have the ridges, those are typically a take-off from the elevation model, but the big one is culverts. Culverts, private drains, or private laterals for example. What happens is if we just simply run that off the data, it does not know there is a lateral, and it does not know that a culvert is underneath the road. He stated it takes that info and it does the best job that it can to interpret it, so what it does is allows someone to truly be able to go in and modify that as time goes on, so it is not a one-time snapshot.

Mr. Moorefield stated what you really start with is with an elevation model, you have your stream information, what it then does is a process called "burning in that stream". He stated if you imagine looking at a big aerial photo and what it does it takes that stream and says, "Water is flowing right here, it's got to flow this way". So it is taking and making the system a lot smarter to say, "I know my water is flowing this way", and what it ends up generating is something that we call "catch man's," or simply "watersheds". These happen to be watershed polygons for a particular county and they are in the

neighborhood of about 500. Typically when we generate those, we generate about 5,000 small polygons, and we try to make those about an acre, then the software looks at that and says, "Hey I'm going to draw that at about acre", and based on that acre polygon, which are all different sizes and shapes, and on that elevation model, you've got to flow this way or that way. What ends up happening is even if you had a situation where a lateral or private line runs through a field, you will get a true assessment of where that water is flowing simply because it has been put in from that prospective, and might be plus or minus fifty feet. The system draws it in that way. As time goes on you start getting these huge polygons and what we end up seeing is multiple levels on top of those with sub-watersheds. He stated what happens you see the red and the green ones, the nice benefit of that is they are all coincidental, so you are starting to really utilize the GIS, and utilize information that is published. He stated from the elevation models you are able to start to utilize information to generate that and your existing maps would be used as a backup. He stated they typically find that they are close to the mapping, so they give you an idea what this data is.

Mr. Moorefield stated we have this generated from the digital elevation model, but what happens is, obviously we need to get names out there and stuff like that, so what we are able to then do is take current data off the maps and basically search and associate names to the watersheds and fill those up to where we get subs. The purpose of doing that is solely for better accuracy, that's really the driving force there to try to be able basically make sure you can assess properly, but also from a maintenance standpoint. He stated because it is like anything with GIS, the first time you go in you are always going to get more and more information, so by going through and running this and then you get a watershed. He stated maybe a new watershed project comes in or one is potentially out there, it would furnish whomever the tools that are in place to be able to go through and run that assessment process. He stated he would like to open this up for any questions concerning his presentation.

Mr. Taylor stated that it was his understanding that we had asked for a cost proposal for adding the county's scanned maps for buried tile only.

Mr. Moorefield stated they certainly could be scanned and geo-referenced, as well. He stated that geo-referencing is essentially taking that scanned map and putting that in at the approximate location, at a township level, putting those pieces in and digitizing that line work where approximate lines of private or a public ditches are located. Furthermore, he stated, we would digitize those and it creates that line work underneath it so you can start to get those.

Mr. Taylor stated that from what he has read, it all looks good. Mr. Taylor stated the system is needed, but the biggest factor is the cost of the process, and whether the county could afford it or not. Mr. Taylor asked Mr. Moorefield what the price of the process is.

Mr. Moorefield stated he did not have a copy of the cost estimates, and asked Kyle

Johnson if he had a copy. Mr. Johnson stated the cost would be \$38,000.00, which includes polygon data, **(Mr. Johnson is speaking from audience and cannot be heard)**.

Mr. Taylor asked if there would be an annual maintenance fee on this. Mr. Moorefield stated that from the watershed portion itself, there would not be because that would typically be a layer itself. Mr. Moorefield stated once that layer is generated along with some training, folks could continue to maintain it. Mr. Moorefield stated the layer itself does not have continual maintenance or anything outside the original costs. Mr. Taylor questioned Mr. Moorefield again about an annual maintenance fee. Mr. Moorefield stated no and once that layer is created, there would not be an annual fee. Mr. Taylor stated that the county started talking about this process three or four years ago, and the original cost was \$10,000.00 with a \$2,000.00 annual maintenance fee. Mr. Taylor asked why the cost is so much more now than it was back when they first started discussing the process. Mr. Moorefield stated actually what it sounds like is the \$10,000.00 with a \$2,000.00 annual maintenance fee must be strictly for the drain-calc software, which is a drainage assessment software. He stated that the \$38,000.00 is strictly for the creation of the layer itself, which would create true watersheds. Mr. Taylor asked Kyle Johnson if this was to come about, where would the money come from. Mr. Johnson stated that is a great question.

Sherry Riggin, County Commissioner, approached and stated that she is speaking on behalf of herself as a public servant, a County Commissioner, and on behalf of the public. Commissioner Riggin stated that she did appreciate Mr. Moorefield appearing again since he appeared here a month ago. Commissioner Riggin stated that Mr. Taylor is right about this subject being on the books for a few years, and it is time that they took it off the books and get it implemented. She stated that she has been talking with Stormwater, and she feels Stormwater can finance the whole program. Furthermore, Commissioner Riggin stated what she is hearing from Kyle is that they will need some staff once this is implemented. Ms. Riggin stated Kyle could get the staff, but it might not be a typical nine to five or eight-thirty to four p.m. person, but a possible contract where the county could pay someone \$25.00 or \$30.00, with the logistics being Kyle's problem. Commissioner Riggin stated if they could get someone to work with the county that is where the Stormwater budget comes in, because there is money in there that we might as well be spending for something that would save everybody a lot of trouble. Commissioner Riggin asked Mr. Moorefield how long it would take to be implemented.

Mr. Moorefield stated it would be approximately four months or so before the program would be implemented and most work would consist of map collections in that time period.

Commissioner Riggin stated the logistics of it would be under Kyle's responsibility, but he is so busy now that he would need some help. Commissioner Riggin stated that Kyle could hire whomever he wanted, but she knew they would not want to run it through county general because there is no money available there. Commissioner Riggin stated that they could probably get someone full-time with benefits if that is what Kyle would like, and they would have to work out the logistics of reimbursing his budget from the Stormwater budget. Commissioner Riggin stated that she has been talking to quite a few people and the money is available, and the

program is much needed. Furthermore, she stated that she felt she could get one of the other Commissioners to agree. Commissioner Riggin also stated the Stormwater Board will be having a meeting in the next week or two since the budget has to be turned in by July 1st. Ms. Riggin stated, “We are going to back the Stormwater budget that disappeared for unknown reasons. The money will be there, but how we do it is up to you guys, and I am not trying to pressure anybody to vote for it.” She stated that she felt it is needed, and it can be done with the extra work that Kyle will be doing.

Mr. Taylor agreed and stated that it was badly needed and overdue. Mr. Taylor laughed and stated, “Could it be taken out of Kyle’s salary since he makes so much?” Ms. Riggin stated she did not believe they could do that, but suggested that they add something to his salary for the extra work that he would have to do. Mr. Taylor stated that he has no problem with that and if the money is there in the Stormwater budget for that, it would be a good idea to use it for that.

Ms. Riggin stated that she was unaware that the county might be readjusting the drainage assessments. Mr. Taylor stated that we are thinking about it, and if anything happens, it will not happen until next year. Mr. Taylor stated that they have only spoken briefly about that and the ditch assessments have not been raised for 40 or 50 years. Ms. Riggin stated, “She heard that is coming and it will hurt us.” Mr. Taylor stated that we have been talking about it because to maintain the path we have been going, we need more than a \$1.00 per acre to maintain our ditches, whether we are here or whoever is in these positions. Mr. Taylor said that is a must and it is coming, but does not know how soon it will be. Ms. Riggin stated, “What she was going by is the land values are going down and their tax rate is going to be . . . we are losing a lot of assessments.” Mr. Taylor stated that he understands, and they are not trying to hurt anybody, we are just trying to maintain our ditches. Mr. Taylor stated that he feels they have a good thing going and we are getting some things done, but to do that the money is going to have to be available to continue. Ms. Riggin stated she had just heard a horror story today, and stated, “That there was no ditch there and water was just running down the neighborhood, but they would not be pointed out on this would they . . .” .

Mr. Moorefield stated, “A lot of times what we typically find once you start going through and digitizing those is, in some cases, there is some dramatic shifts.” Mr. Moorefield stated if there is a neighboring county, which has a joint drain, what they always try to do is make sure to incorporate their information/elevation model as well to show where they are flowing correctly. He stated that they ran into a case one time where the county thought the drain was flowing to the west in this huge watershed, but once we incorporated that, we discovered that actually it was flowing into a different watershed simply because they had stopped at the county’s edge, thinking that is where it was. Mr. Moorefield stated it does give it the capability to look at that more broadly.

Commissioner Riggin asked if we are getting to the culverts, and are they on the GIS now, different sizes and such. Mr. Johnson answered that the older culverts have been added, and he and Angie Moyer are working on the others. Commissioner Riggin stated that they are getting behind on that because she has seen some culverts that need to be replaced. She stated that is all

that she has unless there are some questions. Commissioner Riggin stated she hoped the Board would vote in favor of this and the money is there, and she stated, “trust me”, it is just getting the council to approve the budget also. Thank you very much.

Mr. Taylor stated he does not know how anyone else feels, but he feels all the Board members need to be here to vote on this matter. Mr. Taylor stated he feels this program is good, and if Stormwater has the money then it should be done because it is badly needed.

Mr. Whitehair questioned Mr. Moorefield as to what other counties have used this or bought this program. Mr. Moorefield stated that Sherry in the Wabash area has, and she is probably the one that uses it on a regular basis. He stated that they have established some of those and initially built them in DeKalb County, actually under the former Surveyor, Mike. Mr. Moorefield stated those are the two main ones, although his firm has worked with a couple of other counties as well, at least getting the process in place. He stated, “We are starting to work on that with Don Shockley in Carroll County as well.”

Mr. Taylor asked for the Board’s opinion on this matter, and questioned whether they needed to get Schneider to return when they had a full Board to discuss it further. There was no further discussion on the matter.

Mr. Hensley entertains a motion. Mr. Whitehair moved to not act on this matter until the full Board is present. Mr. Murphy advised the Board to table the matter. Mr. Landers seconded. **Motion passes 3-0.**

NEW BUSINESS:

No new business is presented.

MAINTENANCE CLAIMS:

Mr. Hensley entertained a motion for the approval of the maintenance claims as presented. Mr. Landers so moved. Mr. Whitehair seconded. **Motion passed 3-0.**

ADJOURNMENT:

The meeting adjourned at 2:49 p.m.

Clarence Hensley, President

John Landers, Vice President

Charles Whitehair, Member

Cindy Harty, Recording Secretary