

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, SEPTEMBER 7, 1988

The Tippecanoe County Drainage Board met Wednesday, September 7, 1988 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Bruce V. Osborn called the meeting to order with the following being present: Eugene R. Moore, Boardmember; J. Frederick Hoffman, Attorney; Michael J. Spencer, Surveyor; and Maralyn D. Turner, Executive Secretary; others present are on file.

ORCHARD PARK

ORCHARD
PARK

Robert Grove engineer, representing Deluxe Home Developer requested preliminary approval of storm water reconstruction for Orchard Park located on the Northeast corner of Union Street and Creasey Lane. Deluxe Homes is wanting to develop the area. There is an existing storm water problem in the area of Kensington Drive. There is a considerable amount of offsite water that is piped around put into the system, Mr. Grove has approached it with a new design, looking at a new pipe sized to handle everything, including the offsite water and the pre-developed flow, this came out to be a 36" pipe, with a meter flow and 10 year storm event from the streets, put larger inlets and leave existing inlets in, tying into the 36" pipe having four inlets at the low spot. Discussion of the problems in the area was presented by Mr. Grove. There is a manhole to the ravine with an 18" pipe coming out of the existing manhole into the ravine. Very obvious that there are real constrictions in the system. Discussion of putting in new manhole.

Eugene R. Moore had concern for Dave Dilling property owner. Discussion of the pipe and ravine around Mr. Dilling's property. Pipe goes behind Dilling property into the ravine down into the Wildcat creek.

Mr. Hoffman asked if the ravine would carry the water? Yes.

Mr. Dilling stated water has never backed up. There has been two major storms, which is probably called the 10 year storm event. Water does come up over the surface.

Mr. Grove stated they are not talking about the detention at this time, they are trying to correct the problems.

Discussion of the 30" pipe and 36" pipe. They are going to have to have a reasonable place to outlet. It's not going to do any good in outletting into a system that isn't working. They want to clean it out and make it work. This requires cooperation with the private landowners.

Bruce asked Mr. Dilling and John Scheumann what their opinion was on the project. Mr. Dilling stated: his initial reaction as a homeowner living there is positive, he is encouraged that things are moving in the right direction. His concern would be more water into the ravine along the way even though it is metered, the volume has to be greater and all along the ravine there is considerable erosion. One thing that isn't an immediate concern of his, but should be of the Board is the edge of Creasey Lane, as part of the erosion is a continual problem.

Mr. Grove stated they are also proposing 10' down from the outlet and putting in 2' - 3' chunks of large rip-rap. Basically this will slow down the water, they don't want to come right off the pipe. This discussion in regards to the ravine.

Mr. Dilling stated he would be interested to know in the construction how they vision how disruptive it will be to the two houses, very narrow space to get back there.

Mr. Scheumann stated the yards will get torn up, this can be replaced, he doesn't think it's going to cause too much problem. Mr. Dilling stated he isn't too concerned with some of the trees as they are locus and they grow rapid.

Joe Bumbleburg attorney was present as he represents Mr. Schuemann.

Mr. Hoffman asked how wide of strip was it going to be? Mr. Grove stated if they can work from the south to the north, probably be able to minimize, but will be devastate 10', the pipe is shallow.

Mr. Hoffman asked if there was an easement they are going through or do they have to get an easement from the property owners that they are going through? Mr. Grove stated they are not sure, this will have to be worked out with them. Michael Spencer stated he wasn't sure either, however he would guess there is. Mr. Dilling stated he believes there is a five foot easement on each side making a total of 10' going back, but the existing pipe doesn't appear to be coming up that direction, it angles off and comes up through Struether's yard.

Bruce V. Osborn asked who was going to maintain it? Mr. Grove stated it will be maintained by whoever is maintaining it now. Part of it would be the County (the part in the right-of-way).

Discussion of County and City. The subdivision is in the County. Kensington Drive is County. It is a Baumgartner sewer. Michael stated that about every outlet pipe from the streets that goes into the ravine have been worked on by a private individual as the outlets were way to high on the banks and they have washed out and fallen down. Eugene R. Moore stated this isn't a legal drain therefore nothing can be done. Michael stated the first people the property owners call is the county, the county's position was that they would participate the county's share.

Mr. Hoffman asked who owns the ravine? It is part of lots.

Mr. Bumbleburg asked: Is the back line that runs in the ravine a part of utility easement or any other type of easement? Mr. Grove stated he did not know.

Mr. Dilling stated the whole back 55' of his lot to the house is an easement. An easement yielded to the public for the creation of maintenance of storm drain. House does not set on the easement.

Again Mr. Grove stated they are trying to offer the Board an opportunity to relieve a problem as long as things can be worked out with private landowners.

Mr. Grove stated they have to detain on site and can not discharge any more than a 10 year storm event flow.

Eugene R. Moore asked if there was a way of getting that a legal drain? The usual answer, the only way is that a petition be presented. Michael stated if you do it for one outlet your going to have to set up the drainage areas just like it has been done in this project, there's a number of them that goes into the ravine, alot of little watershed areas. Discussion.

Bruce asked if there was alot of undeveloped area that would drain into this system? Answer NO.

Discussion of the Southwest corner. This is Park land. It would probably go to the Britt Drain. Joe Bumbleburg attorney held discussion.

Bruce stated erosion downstream bothers him, it isn't an ideal situation to correct it. Mr. Osborn asked Michael if he had any problems with the presentation.

Michael stated no, the only thing he asked is that he get the landowners permission to get on their property, the Highway department for this plan as he will be working in the right-of-way, needs George Schulte's approval. Mr. Hoffman asked about the outlet. Need to know about the rip-rap. Michael stated yes, the Board will need a profile which Robert Grove will be getting to the Board, this is just a preliminary. Robert Grove stated the rip-rap will have to be worked around what is there now. Michael stated the concept was fine.

Eugene R. Moore moved to give approval to the Preliminary Outlet Plans for Orchard Park as submitted subject to the approval of Michael Spencer and George Schulte, unanimous approval.

HERITAGE BANK AND TRUST

Robert Grove representing Heritage Bank and Trust requested Preliminary approval for proposed Heritage Bank and Trust Branch on the Northeast corner of Creasey Lane and Union Street. Property of John Scheumann's. Branch Building will be setting right off the edge of the easement of the Power Lines. (PSI) A filing has been made with PSI for an encroachment, this would cover the parking lot area and the drainage facilities. Mr. Hoffman asked if the cars were going to be parked under the power lines? Yes. There are no towers, just lines running across the area.

Mr. Grove stated everything would be graded to the south and to the west into basin into the same ditch that goes into the 24" pipe. Mr. Hoffman asked if the detention was going to be underneath the power lines? Yes.

Bruce asked if the Board could amend that? Mr. Hoffman and Eugene Moore expressed that they did.

Bruce asked who was going to maintain this? This will be the banks responsibility, per Robert Grove. Discussion of Maintenance continued.

Mr. Hoffman asked if there was any way the detention area would not be under the power lines? Not really. PSI has not indicated they have a problem with this plan. The Drainage Board's problem is permitting it. Mr. Hoffman stated the Drainage Ordinance says NO.

Much discussion in regards to the Power Lines and the Liability of violating the Drainage Ordinance.

Mr. Osborn stated a Special meeting can be scheduled at a later date. He requested Mr. Hoffman to get in touch with the attorney of the developer and come back with report at a Special meeting. Mr. Grove is to approach the bank to contact Mr. Hoffman.

Michael's personal opinion is if the County is going to maintain it and they want to make it a legal drain he agrees 100% that the board does not want them underneath the power lines. If they are privately maintained they are accepting 100% of the responsibility and the Power Company is to for letting them put it there. Again he expressed he doesn't want the exposure of the liability of having it under the County's jurisdiction. Michael stated this is contrary to Mr. Hoffman's belief, but it is how he feels. Just his personal opinion. Discussion continued.

Eugene R. Moore moved to continue the Heritage Bank and Trust Preliminary Plans request be held in advance until J. Frederick Hoffman attorney; can talk with the future owners, seconded by Bruce osborn, Unanimous approval.

STATE ROAD 38 FROM US 52 to ELLIOTT DITCH.

Craig & McKneight, Inc. requested a continuance till the next Drainage Board meeting. Michael Spencer stated that Craig & McKneight, Inc. represents the State Highway. he told them if they want a Special meeting they would need to make the request in writing. Canceled indefinitely

No Special meeting was scheduled and no offical adjournment was given for September 7, 1988 meeting.

HERITAGE
BANK &
TRUST

STATE ROAD
38/52
ELLIOTT
DITCH

Tippecanoe County Drainage Board
Wednesday, April 5, 1989

The Tippecanoe County Drainage Board met at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Chairman Eugene R. Moore calling the meeting to order.

Those present were: Bruce V. Osborn, Boardmember; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; and Maralyn D. Turner, Executive Secretary; others present are on file.

Woodberry Phase IV

Robert Gross land surveyor, and Jeff Kessler developer presented drainage study for Woodberry Planned Development Phase IV which consists of 13.089 acres. The majority of the area is heavily wooded with the remainder being pasture area which was a small farm field in the past. The runoff currently flows from the high plateau to the low ground by two ravines which eventually connect within the property. Approximately 100 feet downstream from the confluence it flows into an un-named stream. This un-named stream flows into the South Fork of Wildcat Creek at a point approximately 500 feet downstream from this site.

There is about 5.7 acres of the development which the runoff goes directly into the un-named stream. This runoff begins top edge of the large ravine, located along the Southeasterly portion of the site, and flows down it's slope into the stream. This area has not been considered as a part of the drainage design. This is due to it being such a large portion of the development area that it would be excessively prohibitive on the remainder of the drainage system design, and since it is not to be changed from it's current condition. The estimated 10 year pre-developed peak runoff rate is 13.5 cfs. The post-developed peak runoff is 25.0 cfs.; therefore detention storage is required by the County Drainage Ordinance. Mr. Gross asked that the detention storage requirements be waved. Reasons were: increase in runoff from pre to post development is very small; there is only about 500 feet along the un-named stream from the site to the South Fork of the Wildcat Creek, the peak flow rate would not effect the creek; and the maintenance problem of detention pond that is in a woods, and the outlet being down a steep ravine.

Bruce V. Osborn asked if there were curb and gutters? Yes, in the main development, which would be maintained by the Woodberry Homeowners Association. The private drive would never be dedicated. Mr. Kessler state he and his wife have put \$5,000.00 in a trust account to start maintaining, then there will be an assessment annually.

Bruce asked where were they going with there curb and drains from the curb area? Discussion of curbs and rip-rap.

Drains from the house should drain toward the street. Discussion.

Bruce asked who was going to maintain the road and the rip-rap? Jeff stated he would like to change the covenant that says the Homeowners Association with assessment will maintain it, he feels as the developer 15 years down the line he shouldn't have to maintain it. Michael stated he felt the Homeowner Association would be the way to handle it, that they maintain the drainage structures. Drainage easements are platted and shown on the plans.

Basement drainage was discussed. Robert Gross suggested this be discussed with the Builders before they start building.

Michael asked Jeff as a developer was he going to approve the building plans? Homeowners Association does. They have already voted to approve them. This should be brought to there attention in regards to the outside drainage, possibly be put into the covenants, the perimeter drains and downspouts. Robert Gross stated in the design he had taken in consideration that all that would go to the streets. Discussion continued.

Bruce V. Osborn made motion to grant a variance for no holding areas due to size and location near a natural waterway of Woodberry Phase IV, seconded by Eugene R. Moore, unanimous approval.

Bruce V. Osborn moved to accept the final drainage plans for Woodberry Phase IV as presented, seconded by Eugene R. Moore, unanimous approval.

SHONEY'S BUDGETEL INN

John Fisher land surveyor presented drainage plans for Budgetel Inn. The development is located in the Britt Drain Watershed, adjacent to and West of the existing Shoney's Restaurant. Site contains approximately 2.45 acres of which 1.81 acres are the site where the Inn (motel) is being located and the remaining area, 0.64 acres, is located behind the Shoney's Restaurant and will be improved for motel parking. The storm drain system will utilize catch basins and underground drains with part of the norther area utilizing overland flow to get drainage to the detention basin. Britt Drain Watershed has a detention basin that was constructed to serve the watershed area for after developed conditions. Runoff is less than Britt Drain curve numbers, therefore they are recommending that the plans presented be approved as the original Shoney's Motel was.

Michael stated any development in the Britt Watershed area they have been looking at the curve numbers to make sure they don't exceed design, the curve numbers are the runoff values placed on a piece of property based on the land use and hard surface area. If they are kept at or below the original design of the Britt Drain System is adequate to handle them.

Bruce V. Osborn moved to give final drainage plan approval to Shoney's Lot # 2 Budgetel Inn, seconded by Eugene R. Moore, unanimous approval.

John Fisher stated he had information for the Board. A meeting will be held in the next week or so for the legal drain at Old Romney Heights.

NORTHRIDGE SUBDIVISION

Robert Grove engineer representing developer David Kovich for Northridge asked for final drainage plan approval.

Michael stated he needs new cover sheet on his set of plans and he would like to see lot grading plan shown on the plan like he did for Valley Forge, as the lot grading plans need to be approved for each lot as they are being done. When the developer comes in to get permit he should bring a sketch in showing the lot number, the pad grades, slopes, and drainage easements, no dirt, no building materials are to be placed in these easements. Michael asked David on the septic systems if he found out anything on the perimeter drains? This was discussed at one of the board meetings as to whether the developer was going to run the tile out of catch basin. Discussion continued.

Robert Grove stated on the revised plans the pipe sizes and calculations had been changed making more capacity, using plastic pipes. Michael stressed using manufactured couplings.

Michael's biggest concern is the lot grades and if they had gotten approval from George Schulte with the inlet and gutter spread.

Mr. Hoffman stated he had approved the covenants, but Mr. Kovich's has to fill in the blanks with amount of charge. Covenants has to be recorded. Mr. Hoffman suggested the Drainage Board or Area Plan hold the covenants until such time, he stressed this would have to be recorded before the project is completed. Michael asked as they collect the fee up to January 1991, then what happens after that. Mr. Kovich stated it would go to the Association. After 1991 there will be no limitation on the amount to be paid, this is put on for the construction period.

Michael recommended final approval subject to the covenants being completed (blank filled in), County Highway approval, and the note on the cover sheet in regards to lot grading plan with each building permit.

Bruce V. Osborn moved to give Northridge Subdivision final drainage approval with the conditions that the covenants be completed (stating amount in the blank), County Highway approval, and the note on the cover sheet in regards to lot grading plan with each building permit, seconded by Eugene R. Moore, unanimous approval.

Michael is to keep the original covenants.

ORCHARD PARK

Robert Grove stated he realized he was not on the agenda for Orchard Park, but wanted to discuss the development and drainage. Discussion was held. James Strother, property owner was present and stated his concerns. Michael Spencer is to set a meeting date with Don Sooby, assistant engineer City of Lafayette; the board; property owner; and the developer to study the area and come up with a recommendation.

There being no further business the meeting adjourned at 10:00 A.M.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Boardmember

ATTEST:

Maralyn D. Turner

Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, MAY 3, 1989

The Tippecanoe County Drainage Board met Wednesday, May 3, 1989 in the Community Meeting Room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Eugene R. Moore called the meeting to order at 9:00 A.M. with the following being present: Bruce V. Osborn and Sue W. Scholer, Boardmembers; Michael J. Spencer, County Surveyor; J. Frederick Hoffman, Drainage Attorney; and Maralyn D. Turner Executive Secretary; others present are on file.

SHERWOOD FOREST III

Robert Grove engineer for Sherwood Forest Part III requested final drainage approval. Michael Spencer stated that previous questions were in regards to downstream channel, since that time Mr. Sherwood has purchased that piece of property from the adjoining neighbor.

Mr. Hoffman had looked at Mr. Sherwood's restrictive covenants and they are OK. Mr. Hoffman asked if they had been recorded or will they be recorded with the plat?

Michael stated they have not been recorded as they can't be recorded until the final plat is recorded.

Bruce V. Osborn moved to give final drainage approval to Sherwood Forest Part III subject to the recording of the covenants, seconded by Sue W. Scholer, unanimous approval.

WILLOWOOD PART III SECTION I

Jeff Tyrie property owner of Lot 27 in Willowood Subdivision Part III, Section I requested reduction in easement at back of his lot as he is putting in a swimming pool.

Michael stated there had been an easement recorded along existing creek which was called the Crist Fassnacht ditch easement. Michael looked at the legal description and finds that it does not come down that far, but since the easement was platted and recorded Michael asked Mr. Tyrie to come before the board.

Mr. Hoffman asked if this was something that we would need in the future? Would the ditch come down that far? Michael stated the pool would be 50 feet away, so he is asking to reduce the easement from 75 feet to 50 feet. Michael has looked at the lot. Michael stated he feels it would be sufficient for establishing the ditch. There is farm fields on the other side and the area they are talking about is all rear yards. Mr. Tyrie's property is on the west side of the ditch. Discussion.

Sue W. Scholer moved to grant reduction of easement to 50' for Lot 27 in Willowood Part III Section I, seconded by Bruce V. Osborn, unanimous approval.

Michael stated he will send a letter to Area Plan that this has been granted.

ORCHARD PARK

Robert Grove representing the developer requested final drainage approval and to discuss the off-site proposed work. The off-site work involved, at the present time there are two existing in-lets in the street then a 15 inch pipe that makes a right angle into a man hole, a 24 inch comes from the south and ties into the whole system putting the system under pressure this causes water to build up in the street; flows across into a property causing damage to foundation. They are proposing to re-route downstream on the west side of the Dilling home. They will rip-rap, but will have to get permission from property owner to extend rip-rap. DeLuxe Homes did not create the problem. Opposition is due to the increase of flow; however they are not going to allow it to pond up into the street or flow over the property owners lawn, it is delayed some before it gets into the ditch.

Erosion will be stopped behind the homeowners property.
Much discussion.

Michael stated that David Dilling and James Stroethers are supportive of the proposal. Mr. Dible downstream is not supportive. Discussion.

Mr. David Dilling has signed agreement to grant easement.

Michael again stressed his only problem is the uncontrolled run-off. They are over detaining, to meet the ordinance to make up for the uncontrolled run-off.

Developer has agreed to rip-rap beyond the curve until the channel straightens out.

Sue W. Scholer moved to give final drainage plan approval for Orchard Park Subdivision, seconded by Bruce V. Osborn, unanimous approval.

DRAINAGE STUDY WILSON BRANCH/S.W. ELLIOTT DITCH

Michael Spencer introduced Christopher B. Burke of Christopher B. Engineering, LTD who did the drainage study for the county on the flood control facilities along the Elliott Ditch and the Wilson Branch.

Chris stated that they had submitted on April 23, 1989 a final draft copy of the Results of Flood Control Feasibility Study. the purpose of the study was to determine the effectiveness of two proposed flood control reservoirs within the watershed. This is a

follow up of a study done January 1988 on the master plan for controlling flood flows in the watershed area. At that time they studied the entire Elliott Ditch watershed area. This consists of three watershed areas, the Kirkpatrick ditch which is fairly independent, the Elliott Ditch itself, and the Wilson Branch.

They investigated how much water was getting into the various ditches and waterways and how high the water got with the channel, and mapped out the 100 year flood plan on the Elliott Ditch. The goal in the 1988 study was to identify the location and size of flood control facilities which would be required to reduce current flooding down stream and determine what will be the impact in the short range and long term future of the watershed. The County recognized that there will be a lot of development in the watershed area and realize that something is going to have to be done to control the flooding.

They looked at two scenarios +5 year and +40 year development scenario and to determine what it would take to provide regional detention storage. They provided some recommendations in the study and identified the optional location for flood control facilities. They looked at upstream and down stream storage availability and determined that the only effective way was to provide some facility. A question may be asked why not the Kirkpatrick? The Kirkpatrick ditch comes in at a very steep grade in, no benefits to provide regional storage within the Kirkpatrick ditch. They then focused on what kind of storage, size of storage, and how the storage facilities should be operated.

Branch 13 is being re-routed out of the Wilson Branch watershed into the Elliott ditch watershed. Land use and the area had to be separated out from the files that they developed from the original study.

A lot of area is now going into the Elliott ditch that didn't go into the Wilson branch what is the impact on that. What does that do to the flows and water surface elevation? This is another study they under took.

They wanted to focus in on some property that was identified by Maple Point Enterprises. They were hired by Maple Point Enterprises in 1988 to focus on the effectiveness of one flood control facility in reducing and accommodating detention and compensatory storage.

Later the County asked them to do a study of a piece of property adjacent to the Elliott ditch upstream of Ross Road. They realized that both these facilities could be designed to provide flood control benefits.

First facility is an 18 acre triangular parcel located on the Wilson Branch. The site is bordered on the southeast by the proposed Creasy Lane extension right-of way and Hobby ditch along the north side, US 52 on the west. They did topographic survey, soil boring, they then focused on determining how this could be configured. Compensatory storage required and detention storage required. Example was given; if Wilson Branch comes in and exits under Highway 52 what happens if they would just allow that water when it gets high to fill in the reservoir and pass on through. They determined that the site had little potential. Big pond, water comes in, water goes out. What doesn't go out fills up the pond simple approach. That approach would provide all the detention in compensatory storage necessary for the developments, but would not provide any flood control benefits. The next thing they identified was to determine how they would have to figure the reservoir so it would provide flood control benefits. There will be a berm along the side of Wilson branch and a structure placed upstream of the 52 crossing. Doing this they can provide flood control benefits down stream. Flood control benefits mean that they reduce water surface elevations down stream. Detention storage means that storage required for off setting impacts from developments. Compensatory storage is within the flood plan it has a given amount of natural storage, if that area is filled that storage is displaced and must be compensated for. Detention storage and compensatory storage which are a County and DNR requirement, and a flood control storage which is a focus of their original study of what are flood control benefits. Benefits, there is existing elevation now, reducing the elevation and assigned some benefits to that reduction of water surface elevation.

A part of their analysis is a channel that goes upstream to Ross Road that is to be widened, and cleaned out so that they can get the water efficiently into the reservoir. Their recommended plan for the Wilson branch is; they are recommending the configuration of the reservoir and the widening of the channel from the north side of the reservoir to Ross Road. That would be a 4 to 5 foot wide channel at the bottom with 4-1 side slopes on either side.

The Wilson Branch will be relieved of over 200 acres, Branch 13 will be re routed to Elliott ditch. Refer to Page 3 in report.

They looked at +5 - +40 years. In the future this site can be used for regional detention. There is adequate storage for the future. Wilson branch reservoir holds some promise if it is coupled with the Elliott ditch reservoir.

George Schulte asked if what he was saying the Wilson Branch reservoir is adequate for 40 year growth rate without any detention being required up stream of that basin. Correct.

As long as the drainage systems etc. are large enough to get the water to the reservoir.

In the 1988 study there were two choices. One, you can require on site storage as you are. Two, people can buy into regional facility, and the regional facility would require that all channels and sewers in and a long the Wilson ditch be big enough to get the water to the reservoir.

The other flood control facility is the Elliott ditch, directly upstream from Ross Road. Border on the south by Elliott ditch. The facility is currently a farm field, they propose a wet bottom or lake type reservoir. Explanation of hydrologic continued. There are several options. One would be to drop the lake subject to the soil conditions.

Making it a wetland this would eliminate traditional type maintenance and could possibly become a university biology class project. The focused in on the twin 66-inch diameter concrete diversion pipes along the eastern side of Ross Road from the Point East Mobile Home Park in the existing Wilson sub-watershed to Elliott Ditch just upstream of Ross Road. When fully constructed this project will redirect 0.43 square miles (275) acres of drainage area from the Wilson sub-watershed to the Elliott Ditch watershed. Details are in the report.

If two flood control reservoirs on line one on Wilson and one on Elliott what does it do for today's conditions is summarized in the report, it has up to two feet of reduction of water surface elevation downstream, less frequent cover road ways, reductions of flood damages downstream.

Summary is that the two flood control proposals will comply and provide benefits with the original recommended plan.

Sue W. Scholer asked if he had stated the Wilson Branch would take care of the 5-40 year, but that is assuming if the other flood control reservoir was apart of the system? Answer no, it would if it stood alone just for the Wilson sub area. Doesn't have benefits downstream. It does have regional benefits. Two reasons -1. would diverse water out. 2-A lot of the area is developed. This they could do without raising elevations too high.

Sue asked how much additional capacity is needed on the other reservoir? Have 325-acre-foot + 40 year land use, and 36 acre feet + 5 year detention. This assuming that they can get the water through the ditch. They haven't looked into detail behind some of the structures. Downstream where they are really concerned they have looked at the ponding behind the structures and what will happen. Upstream they are assuming to replace any undersized bridge and make the channels big enough. Chris pointed out that there are two ways to get that additional 36 for the 325 acres feet two ways, either go out or go down. Michael Spencer stated or to have another pond somewhere else.

Mr. Hoffman asked if they go down they can't have the swamp? Chris answered yes, it would be that the swamp would be under water, just have to do more pumping.

Robert McGinn asked how many bridges are you talking about? They only studied the area which have bridges with a lot of traffic. Michael stated the area Bob had asked about doesn't have many bridges. The crossing at 38 and upstream from there is underground field tile system. In development these would have to be replaced with sufficient channel capacity.

Bill Long stated assuming upstream structures remain relatively the same, and the development of 5-40 year assumes constant structures, what is the capacity of the reservoir? Basically if people provide detention storage upstream then by virtue the county ordinance you can't increase flow rate off your site. Therefore, the reservoir is adequate. Further explanation.

Gordon Kingma stated the original study indicated a certain amount of storage to resolve the problem Elliott ditch for 40-100 year system with the construction of these two facilities for clarification what percentage of that flow of the original flow would be resolved by these two structures?

Chris stated there are two answers. At the time of the original study they were only able to determine what storage was needed to have for the different scenarios. To compare what they had before to what they now are providing he can't do that and doesn't want to because the effectiveness of those facilities was not investigated and in the interim period from when they make a recommendation today they have DNR coming in with recommendations. Chris had recommended approximately 400 acre feet of storage. The volume is not as important as how the reservoirs operate. Continued explanation.

Roger Maickel had questions in regards to the Plus 5 and Plus 40. Discussion and explanation continued.

George Schulte stated on the Wilson Branch watershed you are talking +40 years in +40 years that watershed will probably be predominately developed. Basically if you look at it that way that will efficiently serve that area up to its full developed potentials. Chris answered yes, two reasons to get this channel big enough. 1. Approaching the flood plan. 2. Make sure have adequate capacity. This they have developed.

George stated the county will have to improve up off the Treece drain across from McCarty Lane, across Creasy Lane.

Mr. Hoffman stated that does that only if you take out Branch 13 and put it directly into Elliott ditch. Correct. Discussion.

Case I is existing, Case II is with Branch 13 eliminate, Case III with the flood control facility in place.

Joe Gerrety asked if the most benefit would be downstream? Yes, flood control is downstream.

MAY 3, 1989 Drainage Board Meeting Continued.

Chris pointed out that the County wanted a policy decision process. Do we continue to require the person to do what you are doing right now, provide detention according to the Drainage Ordinance ,put it on site and be done with it. Second option would be to be more restrictive. Third option would be the regional facilities to provide not only the flood control benefit, but also some of the detention storage. Recapturing money is another option. Discussion continued.

Larry O'Connell; the configuration shown today of the Wilson Branch that upstream detention is not going to be required, in addition what is already in place would remain, but future detention on future development would not be required. Correct. Larry stated going to the triangular piece in there is also a figure that would take away for assignments or Maple Point Enterprises from them having to do on site detention storage. Question is that 23 acre feet? There is a regulatory or statutory for storage. Discussion.

Larry stated his questions, if this takes place in the triangular that would take the burden off Maple Point Enterprises and work with other developers.

Bill Long asked question of land upstream that has a straight shot you are not going to have County ordinance in effect with the detention storage? Answer to Bill's question is that would be a policy decision. Discussion.

Sue Scholar stated if these two facilities were in place we would be looking at the fact for the Wilson Branch for future developments rather than the existing ordinance we would be needing to change guarantee that there was access to the facility and some sort of funding mechanism rather than the on site detention that is now required. There will be some over all policy decisions and ordinance changes to be made. On the other Elliott ditch structure of the watershed we would still be looking at on site detention for future development and solving some existing problems. Correct, unless another site was found for another regional basin. Discussion continued.

Francis Albrechts had question in regards to the natural storage ponds that hold water 2-3 days? Michael stated they were talking about the farm fields that have catch basins that hold the water for that length of time. Chris stated they looked at those areas. For the future they put a sewer system or ditch that will get it there allot faster, plus it is no longer agricultural, its residential. Discussion continued.

Michael asked with the Wilson Branch with this pond in place on the Wilson you can discount all natural storage or that needs to be retained? Chris stated at Caterpillar the storage has to be there. Chris thinks all the natural storage was eliminated. In Elliott ditch you can't get rid of the Smith pond.

Mr. Hoffman stated the farmers are still going to have the same drainage problems. Correct.

Steve Norfleet asked about the ponds on Maple Point Enterprises and the proposed development what the capacity is? 23 acre feet approximately 10% Discussion continued.

Sue asked Chris to address Branch 13 and how it works into the whole scenario.

Chris stated that Exhibit Six in the report identifies the area. The exhibit shows the area that is being diverted out Wilson Branch and into the Elliott ditch watershed. The twin 66" pipes version was remodeled and simulated what kind of flows would be coming through there. If the 66" pipe has something else that can be done to it they will address it.

Mr. Hoffman asked where are you going to put it when you get it over in the other watershed? At present it exits downstream from the pond, fills up the bridge backs up the water which allows the water to spill into the reservoir. Michael stated the bridge at Ross Road is the controlling structure for those 66" pipes. Discussion continued.

Jim Shook had question in regards to size of Wilson Branch.

Steve Norfleet asked about impact fee on upstream development. Discussion on recapture fee continued.

Discussion continued report is on file in the Surveyor's office.

There being no further business the meeting adjourned at 10:45 A.M.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Boardmember

Sue W. Scholar

Sue W. Scholar, Boardmember

ATTEST:

Maralyn D. Turner

Maralyn D. Turner, Executive Secretary

July 5, 1989 Drainage Board

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, JULY 5, 1989

The Tippecanoe County Drainage Board met Wednesday, July 5, 1989 in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Eugene R. Moore Chairman calling the meeting to order at 9:00 A.M.

Those present were Bruce V. Osborn and Sue W. Scholer, Boardmembers; Tom Bush, Acting Drainage Board Attorney; Maralyn D. Turner, Executive Secretary; others present are on file.

✓ DEMPSEY BAKER DITCH

Dan Pusey representing Purdue Research Foundation presented a petition and requested to vacate the upper portion of the Dempsey-Baker drain in Section I, Township 23 N., Range 4 W. This portion is in the City limits of West Lafayette, Indiana. Area is South of Kalberer Road 350 North. Purdue Research Foundation owns 50 acres in the area and are planning to do some additional development, in order to do this they need to vacate the ditch so it can be re-located as a more urban drainage conduit. This all ties into the Hadley Lake project. The portion north of 350 North goes into the detention pond which is under construction and is a part of the Whirlpool project which interfaces with the project. The ditch will be re-built in the project of 350N road or Kalberer Road which has been constructed to a four lane over to approximately 300 feet west of Yeager Road. That project is a part of a City project or re alignment of reconstruction of 350N on over to Salisbury (50 West), then South to the North edge which will be a Subdivision. In doing the design work on 350 North set some perimeters which had not been set for the reconstruction, which affects the 50 acres from the development stand point which they put the same constraints on it as they put upon the Purdue Industrial Research Part Phase II which will be added to the covenants of this particular piece of land when it is developed or sold of run off factor. An on site detention storage area has always been planned for the area. It presently is zoned IR.

Bruce V. Osborn asked if the area they were wanting to vacate was pipe? It presently is a pipe in varying conditions. A problem occurred when Yeager Road was improved by the City. The design did not allow them to bring all the additional storm water generated by the widening around in a pipe. There is a low area that handles a portion of the basin that comes down the street that was dumped out into PRF ground, they found that over a period of time there was a wet area. Maintenance funds were used from the Dempsey Baker ditch to repair an area about 150 feet long that had been dug up and stumps and fence post were buried and the tile had been broken, this was replaced making it more of an urban drain area because of the reconstruction of the portion of the road over the ditch making a trench drain over the tile run quite nicely. Takes care of both surface and sub drain.

Bruce asked how they were going to accommodate that if they abandoned it. They will make provisions with a letter to redirect or reconstruct in a manner of which it will not cut off any drainage from the area up stream.

Bruce asked if the complexes drain into it? Just the drive way area that comes out into the street. Mr. Pusey explained further to answer the question.

Sue W. Scholer asked; you don't anticipate changing of what is there now until they are replacing it with something. Answer-Correct.

Tom Bush acting Drainage Board Attorney read in the absence of Michael J. Spencer, Surveyor letter date June 29, 1989.

Dear Drainage Board Members:

Purdue Research Foundation has petitioned to vacate the upper portion of the Dempsey-Baker drain in Section 1, Township 23 N., Range 4 W. This portion of the drain is in the City limits of West Lafayette, Indiana.

I have no objection to this vacation as long as Purdue Research Foundation shows proof that the drainage from upstream land owners will not be affected.

This can be done by requiring Drainage Board approval prior to any land use change in this area where the drain is located.

Very truly yours,
Michael J. Spencer
Surveyor

Mike Lovejoy of 981 Devon Street, West Lafayette, asked if it drained any ditch East of Yeager? Dan Pusey answered that Dempsey Baker takes only a small portion west of the telephone switch station. A small area comes out over the curb. The high point is at the intersection.

Bruce V. Osborn moved to accept the petition of request and recommendation presented to the Drainage Board to vacate the portion of Dempsey Baker ditch as presented, seconded by Sue W. Scholer, unanimous approval.

✓ PLAZA PARK

Robert Grove engineer representing Plaza Park requested final approval for Plaza Park. Two items of which Michael Spencer had requested the developer to provide him with 1. Calculations for the off site run off from the development which includes the entire

watershed area. 2. Letter from City of West Lafayette saying that they would give permission and maintain any off site detention areas.

Mr. Grove stated that one thing needs to be pointed out that the two pipes located in Cumberland at this point and time will not handle the 10 year storm on the entire basin. They have looked at several options, one detaining on site and looking at some other on site provisions by giving up lots or back yard storage, no one wanted that. Mr. Grove continued to make his presentation. 350 can pass the 10 year storm, but does back up in the low area. 100 year storm the pipe would not handle it, and was never designed to handle it, water would back up and run over the road. They are increasing the flow, but there intent is not to dump the 100 year on the system- capacity of the 10(?). They are looking at the 10 year storm, there is going to be storage as 350 North is designed for a 10 year storm. This had been a question of Michael's in regards to the storage.

Sue W. Scholer asked if work had been done in the area to create a detention. Answer- No. Mr. Grove stated if the City did have complete control of the area they could re-work it in the future to make a basin or make it into a lake. At the present time there is no need to do anything as it is a natural low area. Discussion and presentation continued.

In the absence of Michael Spencer the Board did not take action at this meeting and also Michael did not have the calculations in time to make any recommendations to the Board to make any decision. Michael had asked for a letter from the City of West Lafayette and Purdue Research Foundation in regards to the storage on PRF's ground.

Sue W. Scholer stated that the request was for final approval, if no action is taken a special meeting could be held or acted upon at the next regular Drainage Board meeting August 2, 1989; depending on the surveyor receiving the material he has requested. A letter is in file from City of West Lafayette, but we do not have a letter that indicate that landowners permission has been granted on some of the ground.

Later; at the time of recessing the meeting for Orchard Park the Board stated Plaza Park could be recessed to be heard July 19, 1989 providing Michael Spencer, surveyor received the letters and information needed to be approved by the Board.

✓ ORCHARD PARK

Robert Grove engineer for Orchard Park developer requested approval for a revision to the final drainage plan which had been given approval. Revision pertains to the off site drainage. Mr. Grove again explained to the Board and presented plans. The off site that they would be in letting has some serious problems. Water backs up into the street and in some occasions flows up over the curb down through and around a property owners home causing some erosion problems which the property owners has tried to alleviate that. The major problem that they see is that there was a 24 inch pipe that was allowed to come in several years ago and ties into a 15 inch pipe and this assures that pipe is constantly over loaded in a large storm. The intent in the final plan was to take everything north of that 24 inch and increase its size and get the water out of the street and on into the ravine, that required them to have an easement to go through private property it is obvious that they are not going to get that easement; therefore they can not complete the previous plans as proposed. There has been some objections from the people downstream that the flow was being increased. Theoretically at the present time the street is acting as a detention basin by opening up that system the flow would be increased as the water would not be allowed to back up into the street. The alternative to that is to do nothing with the downstream system and look at options to make sure they are not increasing or over loading that system any more. The detention basin shown in plans was to store the on site facilities. The developer has now agreed to take the remainder of Lot 28 and give it up as a detention basin. This would bring the existing 24 inch pipe into the basin and would restrict the out flow from the basin down to 16 3/4 this in essences give around 8 cfs decrease downstream which would mean a 100 year storm the down stream facilities would still be under a pressure head which would be much lower wouldn't be to the point that it would have to back up into the street to force the water through. as far as the off site water they are taking the 24 cfs and reducing that 16.82, if you take the 24 cfs coming through the 24 inch plus 100 year storm is 32.83 cfs which is being reduced to the 16.82. This assures them up to the 100 year storm. They can't get any more water that could come through a 16 3/4 inch orifice plate and they are feeding the orifice basin with the 24inch in their own off site storm water. Again he stated they are improving the downstream system, over detaining; definitely decreasing flow to them, since they can not go off site to make improvements they felt on site improvements over detention. This is about all they can do. This is the revision, again they do have approved drainage plans, they can not do the off site at this time; therefore they are requesting approval of the revision presented so the developer can proceed. Robert Grove stated he has gone through the plans and calculations with Michael, Michael likes the other solution better and many of them do, others oppose it. It is obvious they are going to have to get permission from private property owners. Mr. Grove stated he wasn't sure it was the developers obligation to do the offsite, he volunteered to do it and now can't so he is still saying he will do something on site. There is no requirement for him to go and replace it all. Presentation continued.

Sue W. Scholer stated Michael is going to have to review the revised plans and action will have to be taken at another time. Bruce recommended no action be taken. Board was in agreement to this.

Mary Lou Murphy 20 Woodmere Court, Lafayette, Indiana has a question. In the revision; were they going to do a redesign to the Intersection of Kensington and Woodmere Drive? They are not going to do anything to the off site that would be anything within the right of way of Kensington. That's all out. At one time they were going to all those things and increase the pipe sizes to get rid of the puddles and all the back ups in the

street. They are not proposing to do that because they have no ability to do it any more. It would have required off site private property type easements which they are not going to get; therefore they are not going to do it, it was a nice idea, but the people objected to it. Its a situation that you can't proceed.

Len Dible 40 Woodmere Court, Lafayette, Indiana stated what Ms. Murphy was asking about is that the print shows that it can be done by others, not by the you, it was a taxpayers expense. Mr. Grove stated that was correct, Discussion continued.

Phillip J. Scaletta attorney, representing Ed Becker land owner which abuts the ravine which is the off site drainage area. Mr. Scaletta asked that the board postpone any final action on the revision to give the people in the area and his client time to look into this matter to see what the problems might be. Mr. Becker has 100 year old oak tree on his property that they are concerned about. Mr. Scaletta feels there is going to be alot more water coming in a 15 inch pipe and will cause alot more erosion than there is now. Mr. Scaletta feels there should be rip-rap installed, and this should be done by the person who is causing the increase flow. More presentation continued.

Sue W. Scholer stated in answer to Mr. Scaletta's request the board had already decided to not give any final approval until the revision had been studied further. She stated a real solution to the problem would be to make a legal drain, as the board does not have the ability to deal with the problem as long as it is not a legal drain.

Lenoard Dible stated he had talked with Commissioner Osborn previously and in the discussion a legal drain was mentioned. He feels that procedure should be started now. Mr. Dible doesn't like the idea of putting all these things in place and then go to a legal drain. Bruce and Sue explained to the property owners the steps in petitioning to make the area a legal drain. Bruce stressed once again it is the property owners who petition for a legal drain not the Drainage Board. Mr. Dible asked if the board was counting on the area becoming a legal drain? Answer- No, this is up to the property owners. Ben Mays property owner of 3910 Penbrook Lane asked who decides the watershed area? Discussion of deciding and petitioning for legal drain continued.

Mary Lou Murphy asked who was the best resource in County Government? The surveyor will assist, but the property owners will have to have a private land surveyor

Jim Murphy 20 Woodmere Court, Lafayette, Indiana asked who provides consultation to the Drainage Board on water flow? Answer, the County Highway Engineer. Mr. Murphy asked if they had been concerned about the water flow on Creasey Lane?. Mr. Osborn answered they have alot of concern, not only where we're discussing now, but further upstream. Discussion and answer to this continued. Bruce stated with engineers and legal drain it is going to be a tough job.

Ron Hancock stated he is really concerned about loading the ravine system and the time the water will run in the ravine. He feels he will be getting more water with the revision. Discussion continued.

Robert Grove addressed some of the concerns of the property owners and again went through his presentation. All this is on file in the surveyors office, calculation and plans.

Robert Grove stated the developer was giving up Lot 28 to make it a detention basin for only one reason that is to decrease the flow, not increase the flow. They are plugging the 24 inch diverting into the pond then tie into 16 3/4 inch pipe that is all that can get out up to the 100 year storm. Explanation continued by Mr. Grove.

Mr. Dible asked where the water from Woodmere Drive was going. Mr. Grove answered right back into Woodmere Drive. Presentation continued.

Ron Hancock again stressed his concern of the flow from Woodmere to his problem, Mr. Grove stated they had made provisions for that, the small increase they are talking about in the proposed plan does not make any difference to Mr. Hancock's problem, the water flows to the street, it can come down and turn the corner, there are inlets there to handle it. Presentation-discussion continued.

Sue Scholer explained there was not an ordinance 20 years ago and the same type of Drainage Board approvals were not in place at that date and time. Its hard to go back and correct that.

Mr. Dible stated he doesn't understand how they have an approved drainage plan when the easement they claimed was not existent. The Board explained this is why Mr. Grove is here with his amended proposal.

Mr. Grove stated they had a letter of intent, but that turned around and this is the reason for being here today.

Sue Scholer explained that if the plans submitted meet the Ordinance requirements and the Board is convinced of that, the Board has no legal ground for holding it up. Mr. Grove stated when it was presented and approved regardless of the easement, they met the Ordinance on site, the off site was requested by the neighbors and the Drainage Board was interested in seeing that also. The off site was entirely different from the on site approval. On site meets approval. Discussion continued.

The meeting for Orchard Park recessed until Wednesday, July 19, 1989 at 9:00 A.M. Drawings are on file in the Surveyors office.

Meeting recessed at 10:00 A.M. until Wednesday July 19, 1989
Three Board Members were present for the July 5, 1989 meeting.

RECESSED DRAINAGE BOARD MEETING OF JULY 5, 1989 RECONVENED WEDNESDAY, JULY 19, 1989 AT 9:00 A.M. Chairman Eugene R. Moore called the meeting to order with the following being present: Bruce V. Osborn, Board member; Michael J. Spencer, Surveyor; and Maralyn D. Turner, Executive Secretary, others present are on file.

Larry O'Connell, County Attorney presented Memorandum of Understanding that has been worked out between the City of Lafayette, Ivy Tech Foundation, Simon and Associates, Maple Point Enterprises, Inc., prior to the Commissioners considering this Memorandum of Understanding the Drainage Board has to approve as they are signatory to it. One of the items left undone was in regards to the Twin 66" pipes.

Michael Spencer stated he and Tom Brock had met. Michael stated for the Chris Burke study Chris needed all the information concerning the flows going to the Twin 66" pipes. Chris has all the information and Michael has called him and requested his report so that Tom and Michael can get together and study it. Larry asked if Michael was satisfied, his answer was yes.

Bruce V. Osborn moved to approve the Memorandum of Understanding as submitted with the understanding between the entities, seconded by Eugene R. Moore, motion carried.

MEMORANDUM OF UNDERSTANDING

PARTIES:

DATE: June 16, 1989

City of Lafayette (City)
Board of Commissioners of Tippecanoe County ("County")
Indiana Vocational Technical College ("Ivy Tech")
Ivy Tech Foundation ("Foundation")
Maple Point Enterprises, Inc. ("MPE")
KM Simon, Inc. ("KMI")
Tippecanoe County Drainage Board ("TDB")

The following represents the discussions of a proposed outline for the development of certain real estate in Tippecanoe County, which real estate is depicted on the attached Exhibit "A". The following proposal was discussed and tentatively agreed upon by the above parties:

KMI and its affiliates are the owners of property adjacent to the real estate depicted on Exhibit "A", and is presently pursuing the implementation of Tax Increment Financing ("TIF") through the City of Lafayette, to be utilized for certain development purposes associated with the real estate depicted on Exhibit "A", KMI and its affiliates' property, and other real property in manner and with priorities as are mutually acceptable to the parties. Parcel "A" and Parcel "B", which are presently owned by the County, shall remain under County ownership, subject to MPE and KMI having the right to use Parcel "A" and "B" for retention pond. The TIF fund shall construct a retention pond of a minimum of 180 acre/feet storage (the "Retention Pond") on Parcel "A" and "B", which Retention Pond shall serve KMI and MPE as well as the Wilson Branch of the Elliott Ditch based on a forty (40) year level. The TIF fund shall additionally construct ditch improvements from Stater Road 38 to the Retention Pond. The construction plans for the Retention Pond shall be subject to approval by the TDB, KMI and MPE. Any fill dirt removed from Parcels "A" and "B" shall first be estimated and then certified by the City, MPE, KMI, and Ivy Tech as to their construction usage requirements. The City, MPE, KMI and Ivy Tech agree that fill removed and certified will be for their individual and respective use and will not be sold to each other or a third party. Any excess fill dirt after final certification by the parties shall be placed, at the cost of the TIF fund, on County property west of U.S. 52, directly across from Parcel "B". The TDB agrees to enter into an agreement with KMI and MPE whereby the TDB shall be responsible for the maintenance of the Retention Pond. The cost of such maintenance shall be paid by KMI and MPE until the easement for the Retention Pond is purchased by the Elliott Ditch Legal Drain and becomes part of the legal drainage system; however, KMI and/or MPE may, at their election, perform such maintenance of the Retention Pond on behalf of the TDB in which case no maintenance costs will be paid by KMI or MPE to the TDB. TDB must approve any and all maintenance performed.

In addition to the above items, the TIF fund shall be used for the following (without regard to order): soil remediation, if any, mall entrances and signalization, construction of Maple Point Drive, relocation of Branch 13 of the Elliott Ditch and Creasy Lane extension from its point of present terminus to its connection point along Brady Lane including bridge with approaches over Elliott Ditch and necessary appurtenances.

MPE shall receive an additional \$140,000.00 worth of improvements from the TIF Fund. MPE is presently fee owner of Parcel "F"; in consideration for such \$140,000.00 worth of improvements, MPE shall donate Parcel "F" to Ivy Tech, or, at Ivy Tech's election, to the Foundation. MPE additionally agrees to convey to Ivy Tech or the Foundation Parcels "G" and "H" for a purchase price to be mutually agreed upon between MPE and Ivy Tech.

Upon Ivy Tech's or the Foundation's receipt of conveyance of Parcel "F", as the case may be, Ivy Tech or the Foundation agrees to appoint an escrow agent as agreed to by the County to allow third parties to enter the property for a period of three (3) years, to buy and remove the fill dirt from Parcel "F". The fill dirt from Parcel "F" shall be sold and removed in quantities of not less than 100,000 cubic yards per sale, and the proceeds from such sale shall be given to the County. Permission for less than 100,000 cubic yards would require the written consent of the City. Specifications for excavation of the fill dirt, including completed operations, shall be subject to the approval of the City, Ivy Tech, Foundation and the TDB. The County must consent in

Reconvened Meeting of July 5, 1989-July 19, 1989 Continued

writing to any sale price for fill dirt which is below \$1.00 per cubic yard. Ivy Tech agrees that the proceeds obtained from the sale of the fill dirt of Parcel "F" is partial consideration for the County's conveyance of Parcel "E" to the Indiana Vocational Technical College.

MPE and the City also agree that the City and MPE will effect land transfers whereby the City will transfer to MPE certain lands under the title "Maple Point Enterprises" on Exhibit "B" for land under the title "City on Exhibit "B".

Ivy Tech presently is the Tenant under a lease for land and improvements with the County as Landlord, for certain real estate which is depicted on the Exhibit as Parcels "B", "C", and "E". Ivy Tech shall release its leasehold interest with regard to Parcels "B", "C" and "E" upon the expiration of a one (1) year period. Ivy Tech or the Foundation, as the case may be, shall then exchange with the County Parcel "E" for Parcel "F". The deed from Ivy Tech (as grantor) to the County (as grantee) for Parcel "F" shall provide that Ivy Tech shall have a reversionary interest in Parcel "F" if Parcel "F" shall not be used for retention purposes. The deed from the County (as grantor) to Ivy Tech, or at Ivy Tech's election, the Foundation (as grantee) for Parcel "E" shall provide that the County shall have a reversionary interest in Parcel "E" if Parcel "E" shall not be used for educational purposes.

The TDB agrees to use its best efforts to construct a regional detention pond on Parcel "F" serving the Elliott Ditch within 3 - 5 years. The County shall continue to develop its long-range plan for a forty (40) year level as part of a master plan for the entire Elliott Ditch watershed, but the County agrees that such long range plan level shall not exceed the land configuration shown in the original plan with respect to Ivy Tech real estate (E.G.H). Ivy Tech, or the Foundation, as the case may be, additionally agrees to provide the TDB and/or County an easement acceptable to Ivy Tech, the Foundation and the TDB/County across a portion of Parcel "G" to serve or be part of the regional detention pond located on Parcel "F" as shown in the Chris Burke study.

As consideration for the County forfeiting the fill dirt from Parcels "A" and "B", and as further consideration for the County releasing the right of way to Parcel "C", the TIF fund agrees to pay for the construction of a bridge in the space shown as Parcel "D" on Exhibit "A". Said bridge shall be designed and constructed pursuant to and with the advice of the County Highway Department. The County shall also be reimbursed from the TIF fund for costs of relocating the fence at the County Highway Garage.

Parcel "C" shall be dedicated by the County (with the consent of Ivy Tech) to the City under the inter-local agreement, for use as the Creasy Lane Road extension.

The TDB shall entertain a petition to vacate Branch 13 when the reconstruction of Branch 13 (which shall be paid for by the TIF) is complete.

The County, City, TDB and Ivy Tech shall enter into a written agreement setting out the conditions as agreed herein.

The above outline represents the proposal as discussed today by the parties. It is understood that this proposal is not intended to be legally binding on any or all of the parties listed above, but merely represents a summation of the basic understanding of the negotiations in this proposed transaction. All parties agree to use their best efforts to implement this Memorandum of Understanding and the Governmental Agency parties agree to cooperate with KMI, MPE and Ivy Tech in their proposed developments. KMI, MPE, Ivy Tech in their proposed developments. KMI, MPE, Ivy Tech and the Foundation agree to reciprocally cooperate with the Governmental Agency parties.

CITY OF LAFAYETTE/MAPLE POINT ENTERPRISES
PROPERTY DISTRIBUTION

CITY

	FEE	EASEMENT
MPE I (West)		0.60 Ac Easement - Utility
MPE II (Central)a		0.19 Ac Easement - Utility
MPE II (Central)b	1.24 Ac	Fee - ROW
MPE II (Central)c		0.87 Ac Easement - Drainage Utility
MPE III (East)		0.41 AC Easement - Utility
MPE (Dunford)a		0.05 Ac Easement - Utility
MPE (Dunford)b		0.35 Ac Easement - Utility
MPE (Fruits)		0.09 Ac Easement - Utility
MPE (Point East)a		0.18 Ac Easement - Utility
MPE (Point East)b		0.16 Ac Easement - Utility
MPE (Point East)c	_____	0.28 Ac Easement - Utility
	3.24	3.18 Ac

MAPLE POINT ENTERPRISES

Dunford 0.49 Ac - Fee
 Fruits 0.85 Ac - Fee
 Point East 3.97 Ac - Fee
 5.31 Ac - Fee

EXHIBIT "B"

MEMO OF UNDERSTANDING

"City"

"County"

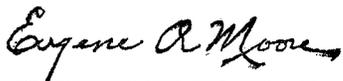
Ivy Tech"

"Foundation"

"MPE"

"KMI"

"TDB"

DRAINAGE BOARD OF
TIPPECANOE COUNTY

Eugene R. Moore, Chairman



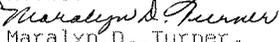
Bruce V. Osborn

ABSENT

Sue W. Scholer

Michael J. Spencer, Tippecanoe
County Surveyor

ATTEST:


 Maralyn D. Turner
 Executive Secretary for
 Tippecanoe County
 Drainage Board

✓ ORCHARD PARK

Michael J. Spencer surveyor, reported based on the last submittal which was presented at the July 5, 1989 at 9:00 A.M. same day as the Drainage Board meeting, the revision plan for the Orchard Park. Michael has contacted the Chris Burke Engineering Firm in Chicago, Illinois. He has presented them with the plans, taken them to the area and given all information, they have talked with Robert Grove. At this time they are not prepared to give a recommendations as they have not had all the information in time to review the materials. Michael recommended that the Board postpone any decision until the surveyor and board hears from the Chris Burke Engineering Firm. Bruce V. Osborn moved to postpone Orchard Park, and not be heard at this time, seconded by Eugene R. Moore, motion carried.

✓ PLAZA PARK

Robert Grove engineer stated he had met with Michael Spencer surveyor, and Rex Bowman of Purdue University, City of West Lafayette City Engineer and Assistant City Engineer and the West Lafayette City Attorney. Discussion at that meeting was to come up with an agreement between the City of West Lafayette and Purdue University to allow for the water to be stored. The way it was left if the City did not exercise their option on PRF land that they would write a letter agreeing to store the water on their own property; this is where they are now. Mr Grove had talked with Rex Bowman on the 18th of July, they submitted a letter to Mr. Bowman which Mr. Bowman wanted some quantities spelled out, the letter was acceptable, but did not say how much detention the City was going to provide. Michael asked if they had the letter? Rex Bowman stated they would store the water on their property and what they would store would be the difference in a capacity of the existing culvert and the new culvert which has 24 cfs water flow, the difference would be stored on City property. Michael asked if another letter was in the process of being presented? Answer-yes.

July 19, 1989 Drainage Board Meeting Continued

Michael stated that at the meeting last week with the discussion and agreement it satisfied him, his only request was that the letters be presented. Mr. Bowman stated the letter has been made, but not signed and has been approved by Mayor Sonya Margerum

Michael recommended the Board give approval based on the letters being presented and the approval of the City of West Lafayette, which has been given.

Bruce V. Osborn moved to give Plaza Park Drainage Plans, ^{approved} as submitted providing the two letters with signature be submitted to be approved, seconded by Eugene R. Moore, motion carried. The letters were received later in the day (July 19, 1989) by Michael Spencer, surveyor and are on file. The letters read as follow:

July 19, 1989

Re: Drainage from Cumberland through Soccer fields north

TO WHOM IT MAY CONCERN:

This letter will clarify the intentions of the City of West Lafayette concerning the real estate between Cumberland Avenue and Kalberer Road adjoining Salisbury Street and running westward to the line of the Friendship House property. The City of West Lafayette intends to acquire all of the real estate north of the soccer fields on Cumberland Avenue to Kalberer Road. Regardless of whether this acquisition is completed, it is the intention of the City to construct suitable detention storage facilities for storm water commensurate with any development of its property in this area and for storage of an additional 24 cfs.

Sincerely,
Mayor Sonya Margerum

July 19, 1989

TO WHOM IT MAY CONCERN:

Re: Plaza Park Drainage

Purdue Research Foundation has no objection to the proposed Plaza Park drainage solution presented to the Tippecanoe County Drainage Board as long as the additional water flow under Cumberland Avenue, i.e. the difference in capacity of the existing culverts and the proposed new culvert as estimated by Robert Grove, P.E. to be 24 cfs of water flow, is to be detained on land owned or controlled by the City of West Lafayette. They have agreed to do this in their letter of July 19, 1989. If the acquisition of the balance of the park land should not be completed, the City has agreed to store the 24 cfs of water flow on land they already own.

Sincerely,
Jeffrey H. Wilson
Vice president and Treasurer
JHW:ja
cc: Rex Bowman
Bob Bauman

George Schulte Highway Engineer, and Charles Drysdale Highway Supervisor, presented a suggested change to Drainage Ordinance Section 14 (S). George stated they are experiencing maintenance problems in residential subdivisions. At the present time some of this maintenance is off the County Highway right-of-ways. They have been trying to work with Michael, and they as a Highway Department are experiencing problems of spending their dollars to maintain anything off the road right-of-way. They have been involved in some of the maintenance situations. George gave an example of the Highway getting a call from one of the newer subdivision concerning an inlet casting that was broken in. This was between houses, they continued to discuss some of the areas they have had problems.

The suggested change to the Drainage Ordinance reads:

Section 14 (S)

S. Detention Systems Shall Be Regulated Drains:

All storm water detention systems which include the detention/retention basins, conveyance systems, structures and appurtenance located outside of road right-of-way, shall be incorporated into a regulated drain under the jurisdiction of the Tippecanoe County Drainage Board. The developer shall petition to establish such regulated drain pursuant to the provisions of I.C. -36-9-27-54 and the drainage plan shall not be approved until such petition is submitted in a form approved by the Surveyor to the Drainage Board.

Basically what is suggested in the change is that there is a maintenance fund set up for each subdivision. This does not include the right-of-way. Discussion continued.

Regulated drain was discussed in per say to the Highway Department and Subdivision was discussed. George stated they are just trying to get something started. Discussion of the Homeowners covenants. George stated the biggest problem with those is going out and have the people pull from that maintenance, enforcing it is a problem.

Michael stated there is away of doing it from the Homeowners, but the proposal presented is alot cleaner. Discussion continued. The Board wants Mr. Hoffman to take this suggested change to study and put it on the Agenda for the August 2, 1989 regular

Drainage Board meeting. This would be a proposal for a regulated drain for all new subdivisions being developed. Discussion as an example for Orchard Park make it a regulated drain for the new development, it would be fair for the developer and have him make it a regulated drain in his subdivision when he has to accommodate water from all over. Michael stated he feels there are others outside his subdivision that live in the watershed area that would be willing to sign such a petition. Michael asked where to you stop; the outlet drain or do you go all the way down to the ravine system. Discussion continued.

George stated that Fred thinks it should be a regulated drain all the way to some major channel. Discussion continued.

Michael Spencer stated he has no problems; it needs to be put on the agenda and get it out to the developers and engineering companies stating there is a revision to the Drainage Ordinance being considered.

George stated this can be real clean as a new development is being formed they can put it in writing that a legal drain is being developed.

Michael Spencer asked George Schulte to take a look at the Corner of Beck Lane and State Road 25 going west across the street from DeHail Industrial there is an Auto Dealership in there, they have paved the whole lot all the way out to the County Road on Beck Lane back 300' to the edge of the pavement causing land to drain right out to Beck Lane. No side ditch, pipes, nothing. Michael thinks it is Meyers Auto Sales.

Ben May of 3910 Penbrook Lane, asked the Board if the Orchard Park approval had been postponed? Michael stated it had been postponed until the surveyor receives the report from the County's Engineering firm looking at the Drainage Plan as submitted. No set time, the board isn't sure the report will be back in time for the August 2, 1989 Drainage meeting.

There being no further business the meeting adjourned at 9:35 A.M.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Boardmember

ATTEST: *Maralyn D. Turner*

Maralyn D. Turner, Executive Secretary

Present for July 5, Meeting - Not Present For July 19, 1989 Meeting
Sue W. Scholer, Boardmember

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, AUGUST 2, 1989

The Tippecanoe County met in the Community Meeting room of the Tippecanoe County Office Building 20, North Third Street, Lafayette, Indiana, at 9:00 A.M.

Chairman Eugene R. Moore called the meeting to order with the following being present Bruce V. Osborn, and Sue W. Scholer, Board members; Michael J. Spencer, Surveyor; Tom Bush, Acting Drainage Attorney; George Schulte, County Highway Engineer; and Maralyn D. Turner, Executive Secretary; others present are on file.

CONCORD CORNER INDUSTRIAL SUBDIVISION

CONCORD
CORNER
INDUSTRIAL
SUBDIVISION

Robert Gross, Registered Land Surveyor representing Concord Corner Industrial Subdivision presented Preliminary Storm Drainage and requested Conceptual approval of his presentation. Location of property is at the N.E. Quadrant of the CR 350 S and Concord Road intersection consisting of approximately 25 acres, and at the present time the land use is agricultural. The site is located in the James Kirkpatrick Drain watershed which is a water shed of the Elliott Ditch. The area is basically a self contained site that does not have a positive overland outlet. Drainage from this site and Sub-basin III, shown in Figure A of Plans is through an 8 inch agricultural field tile that drains in a southwest direction into the Kirkpatrick drain tile. They had to look for an alternative storm water outlet from the site. When General Foods developed their site, they installed a 36 inch RCP drain from their detention basin to the Elliott Ditch. This drain parallels the railroad track from Concord Road to the Elliott Ditch. General Foods was contacted concerning use of this drain to provide a positive outlet for the Concord Corner site and they tentatively agreed with final approval after reviewing the calculations and plans.

General Foods had two representative present. Roland Winger General Foods, Site Engineer stated they are waiting for a definite answer from New York, but they have given a tentative approval based on what they have seen the study. Much of it is around the uncertainty of the site at this time, not so much the effectiveness of the study done.

Presentation and discussion continued.

Michael Spencer asked if they were going to petition or vacate that portion of Kirkpatrick ditch. Bob stated they were going to ask today to get permission to either vacate or re-locate the 8 inch field tile. They want to put it along their lot line, then connect it back in.

Sue W. Scholer ask if he had talked with George in regards to the entrances. He has and it has all been approved. 2-3 entrances.

They want to bring the easement down to a 40 foot easement and re-route the drain.

George Schulte and board discussed the intersection of Concord and 350 South. The intersection was built up when General Foods developed. The water use to flow across the intersection. What has happened the intersection blocked the surface drainage water going across down to the Kirkpatrick drain. Robert Gross the tile is now draining surface water, it has a catch basin on it. They are asking for two entrance off of Concord and one on 350 South. George stated they have had a preliminary review with Area Plan and there is no problem with it. They are not sure what the right-of-way requirements are, but they are aware that the county is going to be asking for right-of-way on 350 South.

Sue asked if the proposal of relocating the legal drain easement had been taken into consideration. The problem is they don't know what is going to be in the right-of-way as it is in a preliminary phase. George stated the grade view plan should go in next week. May have a tentative approximate right-of-way requirement along there, he will check into it. Robert Gross asked if George thought 80 feet was far enough off from the existing center line? George stated he is guessing they will need about 60 feet, unless there are some special side ditches and that would be 120 foot right-of-way. They are proposing to put it in the middle on a 40 foot easement on top of that. George asked how big the tile was in there. Possibly 2 feet. George stated they may pick it up in the side ditches. Michael stated it is shallow as they have had a lot of trouble with it.

Bruce was concerned about entrances. George stated they are going to be looking at distances apart 500-1000 feet. Michael stated he felt there were some type of field entrances there now and wasn't sure if there was a piped entrance, but any where along there a person could drive into the field as the side ditches are not very deep. Length from the Railroad tracks to Concord Road is about 1800 feet. Discussion continued.

Michael stated the only two questions he had was the relocation of the branch of James Kirkpatrick ditch, and the approval letter from General Foods.

Robert Gross again stated his request for preliminary approval on the design presented. There are two details that need to be looked at. According to the Chris Burke study of the Elliott ditch after they put in the ponds that is suppose to lower the high water elevations by two feet. Could they use that lower elevation for their design? The high water elevation at the 36" outlet is now 640. According to the study it will be 638 after both ponds are built. This has not been finalized at this time. Bruce asked how this was going to affect this project? Two more feet that they will have to fill to stay above. Discussion continued.

Bruce asked if they wanted conceptual approval today? One item is the high water. The other is the re-location of the drain and the 40 foot easement instead of the 75 foot each side along the road right-of-way for an 8" tile. For an 8 inch tile Michael stated he did not have a problem with the 40 feet, but he thinks there is a section in the drainage code that says the easements are a minimum of 25 feet. He needs to check if that is each side or total. He feels this is something they could work out. Robert Gross asked if they went with an open ditch as shallow as it is would that make a difference. Michael stated they would have to look at the side slopes of the proposal and make sure there would be a way of maintaining it.

Bruce asked where the water come from (relocation of branch), the upstream part of it? Michael stated the tile comes from underneath the railroad tracks and back through General Foods property and again crosses 350 South then down to about the General Foods entrance. At the present time it goes through the concrete pipe that is under the railroad swings out on the south side, there is a catch basin in the side ditch right across from the entrance, this is not a legal part of the drain, just a branch.

Sue asked Michael if he had problems with relocating the legal drain, he does not as long as it enters and leaves at the same place.

There is 150 foot easement through the middle of the legal drain. Branch is called the Cochran and Holmes branch. Easement footage has to be checked out with the Indiana Drainage Code.

Eugene Moore asked what the board was going to do with the two foot drop? The board felt they would be running a risk to do that at this point. Discussion continued.

Michael stated that Robert Gross and he should get with Chris Burke in regards to the two foot elevation difference.

Bruce V. Osborn moved to give approval to the conceptual design for Concord Corner Industrial Subdivision as presented, seconded by Sue W. Scholer, unanimous approval.

SEC 14 (S) - DRAINAGE ORDINANCE

Section 14 (S) now reads in the Drainage Ordinance.

Section 14 (S)

S. Detention Systems Shall Be Regulated Drains:

All storm water detention systems shall be incorporated into a regulated drain under the jurisdiction of the Tippecanoe Drainage Board; and, if no regulated drain exists in the area, the Developer shall petition to establish such regulated drain

August 2, 1989 Drainage Board

pursuant to the provisions of I.C. -36-9-27-54, and the drainage plans shall not be approved until such petition is submitted in a form approved by the Surveyor to the Drainage Board.

Tom Busche acting drainage attorney read the proposed amendment to Section 14 (S) with change recommendations made by J. Frederick Hoffman drainage attorney after being presented and read in the July 5, 1989 drainage meeting.

Section 14 (S)

S. Detention Systems Shall Be Regulated Drains:

All storm water detention systems which include detention or retention basins, conveyance systems, structures and appurtenance located outside of road right-of-way, shall be incorporated into a regulated drain under the jurisdiction of the Tippecanoe County Drainage Board. The developer shall petition to establish such regulated drain pursuant to the provisions of I.C. -36-9-27-54 and the drainage plan shall not be approved until such petition is submitted in a form approved by the Surveyor and the Drainage Board.

Bruce W. Osborn moved to accept the amendment proposal change to Sec 14 (S) as read, and add to the last sentence, as amended August 2, 1989 to the section, seconded by Sue W. Scholer, unanimous approval.

Melvin Simon and Associates, Inc. had requested to be on the agenda, but no one appeared.

FARMINGTON LAKE

This project has been setting on hold for some time. Harold Palmer from Ft. Wayne was present and he would like to proceed with the project.

One problem has been the high cost of the lake system and the community water system. The developer is proposing to abandon the central water system and develop no more than twenty lots at one time. Also he is proposing to replace the lake areas in the center of the development with easement areas reserved for recreational areas and detention basins.

The volume originally proposed for the project was 15.5 acre feet which would have reduced the 100-year runoff from 72.84 to 3.6 cfs. The actual volume used for this reduction was 9.65 acre feet. Maintaining lake #3 as a retention facility and replacing the center lakes with detention basins will provide a total of 5.77 acre feet of storage or 60 percent of that originally approved. The proposed basins would take up the entire area originally platted for the center lakes.

The allowable discharge from this site is 35.73 cfs. They are proposing to over detain the runoff for the entire watershed, but not to the degree originally proposed. The 60 percent level of storage would reduce the 100-year runoff from the watershed to an estimated 20 cfs as compared to 3.60 cfs.

The developer has agreed to the proposed over detention to the 60 percent level and to keep the lake easement areas as shown on the preliminary plan. The easement areas will be for detention and recreational use. The proposal will exceed the ordinance requirements and provide storm water relief for the down stream area.

It is felt that the project will never be built as proposed originally. A re-plat of the area could end in a project which meets the ordinance with substantially less detention and hardly any relief for the downstream area. The proposal would not have the effectiveness at runoff reduction, but would provide significant improvements in the watershed and is a reasonable compromise between minimum detention and the lakes originally proposed.

They are asking support of the board in conceptual changing the plan and hopefully they can do this without re-platting.

Question was asked if this is what would run down on Willowood? Answer yes, underneath the culvert at Willowood.

Michael asked if they were going to use one of the residential lots for the club house in the area? Yes.

Outlet will be in ditch that goes across Willowood (surface water). Water would continue down the east side. Discussion continued.

This is a compromise between the previous developers dream and what the ordinance would allow. Bruce stated this should help Willowood.

In the originally they had ditch all along the west line where they had pick up points to run the water in through the detention, and they could still do that, which might bring it down to 3.2 cfs.

Michael stated he did not have any problem with the concept, just need to work out all details and get the calculations. The board is requiring a petition for legal drain.

FARMINGTON
Lake

August 2, 1989 Drainage Board Meeting Continued---SPECIAL MEETING AUGUST 16, 1989

Mr. Palmer stated it would be a Community Association owned area, all the community area would be responsible of the homeowners for the maintenance. They are not sure at this time if it will take a full lot to giving access to the easement.

Discussion of Maintenance if it becomes a legal drain. The outlets etc is the responsibility of the drainage board, but the recreation area maintenance should come under the Community Association. Discussion continued.

ORCHARD PARK

Orchard
PARK

Michael reported on the Orchard Park drainage review by Chris Burke, it is underway. A report should be received soon.

Michael stated David Dilling was present and he is entertaining a petition to make the outlet pipe on his property to become a legal drain.

There being no further business the meeting recessed at 9:45 a.m. as Orchard Park reports may get back and a special meeting could be called.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

Sue W. Scholer

Sue W. Scholer, Board Member

ATTEST: *Maralyn D. Turner*
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, SEPTEMBER 6, 1989

Tippecanoe County Drainage Board met in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Wednesday, September 6, 1989 with Eugene R. Moore, Chairman calling the meeting to order at 9:00 A.M.

Those present were Bruce V. Osborn and Sue W. Scholer, Board members; Michael J. Spencer, Surveyor; J. Frederick Hoffman Drainage Attorney; Todd Frauhiger Drainage Consultant; and Maralyn D. Turner Executive Secretary, others present are on file.

KIRKPATRICK ONE DITCH BIDS

KIRKPATRICK
ONE DITCH

J. Frederick Hoffman attorney, opened the following bids and Bruce V. Osborn read Contractors and their submitted bid amount.

Douglas Ridenour and Sons Cleaning and Ditching-\$53,450.75; Bob Hodgen Construction-\$60,571.75; Merkel Excavating-\$79,446.25; Jim Dwenger-\$54,300.00; and Fauber's Construction Company, Inc.-\$74,152.50. Estimated cost for project \$60,465.73.

Eugene R. Moore stated if the bidders would like to meet with Todd Butler, Office and Field Technician for the surveyor in the Commissioners Meeting room and ask any questions in regards to the bids they could. Bids will be taken under advisement.

ELLIOTT DITCH

ELLIOTT

Roger Blevins, Engineer Manager of Alcoa Lafayette Works; presented a review of tentative plans for a volunteer clean up of a section of Elliott Ditch to the Drainage Board. He has worked with Michael Spencer with some of the preliminary works and they have walked the ditch. They are working with the Indiana Department of Environmental Management. Basically the scope of the clean up would be sediment removal in the bottom of the ditch from a place slightly up stream of Alcoa's discharge not yet determined to a point at the 18th Street bridge. This is essentially the section they are working with. The work would involve removal of the sediment, hauling and disposal in an environmentally sound disposal site. He has been in initial contact with the Railroad Companies that have bridges across the ditch asking some questions and working closely with Michael asking him the aspects he would be interested in from long term management of the ditch and leaving it in a better place than what they have found it. Aspects would be they would do a Plan and Profile survey of the ditch, they don't have good accurate information on the ditch at this time for the kind of sediment clean up they would be looking at. They would then look at removing brush along the maintenance easement of the ditch in that section, primarily on the South side of the ditch. They would survey before sediment removal and after sediment removal to establish a good profile for future reference. They would do final sampling to classify the sediment at sections predetermined along the ditch to determine disposal distribution methods preferred and then the clean up itself building series of coffer dams, maybe 5-6 coffer dams along the ditch pumping water around that section clean the section without water running through to keep it from reentering the water. This would be a final effort in the PCB problem that Alcoa has had. They have been working and analyzing at the source back in the plant at there internal sewer systems for quite some time. Identifying and cleaning the PCB's at the source and disposing them in the proper way. The time is right to go ahead and clean up that portion of the ditch.

Primarily they are talking about removing all loose sediment and 2-3 inches of hard pan underneath, they would essentially re-establish the profile of the ditch as it has been by removing sediment as most of the sediment has been freezing and thawing off the banks and worked itself down in to the ditch from the sides and some carry down through the ditch from up stream. This would be with approval of the Drainage Board and the Indiana Department of Environmental Management. The Railroad owners that they would be working with and whoever else the Drainage Board might deem necessary that they communicate with. Alcoa wants to be honest and open with all communications around the situation and the people who live along the ditch they want to make special effort to have good communication with them. Essentially they would see that section of ditch being in better shape than what is it today as far as functioning as a drainage ditch there would be a good solid survey information for plan and profile for future as the City and County develops in that area for future references.

Bruce V. Osborn asked what depth are they going? Answer-6 inches to 2 Feet. It appears that the sediment arranges from 6 inches to 2 feet in places built up and in some areas there is very little sediment build up. Bruce asked if they were stopping at 18th Street? Answer-Yes.

The contamination is higher level at their discharge for about 600-700 feet drops to a lower level from that point down to the first bridge, then it elevates between the two bridges, then drops off dramatically after the second bridge. They have been monitoring that for quite some time and they feel that range as it moves the sediment down the ditch built up behind the second railroad bridge, the first railroad bridge has two conduits in it and the second has one conduit, the water slowed down and they have dispositional area between the two bridges. This is the range of the Clean Up.

Eugene R. Moore asked Michael to make statement in regards to what Mr. Blevin's has done on this project.

Michael stated he and Roger has walked the ditch twice, middle of the winter years ago and more recently in the summer. Michael has been meeting with Roger quite frequently over the last couple of months and they have talked on how they are going to clear it and one of the things they still need to do is meet with the property owners along that section and give them explanation as there is only an easement, just have to make sure

there are no un-answered questions before the clean out starts and the Indiana Department of Environmental permits and approvals. This is needed for the Drainage Board protection later on.

Roger stated trucks would move along the South bank and essentially they would be working with in the 75 foot maintenance easement with no problem with the exception of the truck turn around as the tractor trailers pull in and turn around and a load coming out they would have swing around down near the railroad tracks on both sides and then bring the trucks back along the ditch and load out at the side of the ditch.

Bruce V. Osborn asked where are you going with the contaminated sediment? The are doing the final classification of the sediment with the Indiana Department of Environmental Management. The majority of the sediment is non-toxic as far as the EPA is concerned. It is regulated as a special waste in Indiana. Proper procedures are being done. The highly contaminated waste between the railroad tracks and south of the discharge is an EPA regulated waste material, it would go to a Chemically secure land fill yet to be fully determined.

The final sampling to be done will determine which type of land fill the waste will go. These will be the size of the coffer dams.

Bruce Asked if Alcoa was doing this themselves? Alcoa has basically three-four ways of doing the testing. The cost estimate for the clean up is a very difficult thing to do, they will have to get a plan survey, remove the brush, develop a profile then do some additional sampling in order to develop how much sediment is to be removed and where it is to go. They will use waste haulers that they deal with on a regular basis preferably on sediment hauling and disposal, they are all first class companies to deal with. Then they would look at the final phase of coffer dam construction and sediment removal. Bruce asked if they would have any trouble with access?

Michael stated they do as they can only come in off 18th Street or Concord Road on the south side, then they have the railroad tracks blocking them about half way down.

Sue W. Scholer stated the Board appreciates the cooperation with Michael and the effort that has been put into the project. Sue stated the Drainage Board does need to be involved. She feels as Michael that it is critical to get the property owners together so that they know what is happening. Alcoa most certainly wants the property owners to be well informed.

Bruce stated he assumed Alcoa has the adequate Liability for this process. The answer - YES- Environmental clean ups major situations as far as Liability is concerned and in a situation like this the corporation is backing the project.

Fred Hoffman asked what kind of determination had been made below 18th Street. Has testing been done there? Answer- they have done monitoring of the that entire section of Elliott ditch from Alcoa discharge down to Wea Creek for a number of years. As they have been cleaning up at the job site and the long term process of cleaning up the source. The interesting thing in 82-84-86, and 88 they have had two year picture of the sediment. There has been very little movement of sediment down the ditch as far as contamination has basically stayed the same. When you get below 18th Street it is a very low level of contamination. They will be doing the honest thing in communicating in whatever environmental regulations that would apply to that area of clean up and work with the Drainage Board in whatever plans they may have and make sure it is dealt with in an environmental responsive manner.

Bruce asked if they had done this in other locations? Roger stated corporately he can not speak to that. Specifically they have done clean ups and constantly trying to present a better environment, but as far as something like this project as complex as it is with people living along the ditch and on the corner of the City this is new to Alcoa. A lot of new things they are discovering along the way. It really involves alot of communication. Everything from checking what might be running underneath the ditch as far as utilities are concerned. There are some pine trees planted on the South side of the ditch near Concord Road. They want to make sure those don't get cut down as some one has put them there for a screen some distance back from the ditch. They want to be sensitive to those type of things.

Fred Hoffman asked Michael if the trees were on the right of way? Michael stated they had been planted there as requirements of Area Plan Commission when the land was re-zoned for the LCL Trucking Company, this was done years back. Michael stated also the City of Lafayette has a major sanitary sewer that runs along the ditch easement.

Eugene R. Moore too expressed the Boards appreciation and stated the Board would cooperate with Alcoa as much as they can.

Roger thanked the Board for their remarks and interest as good drainage is a critical concern for all of us. They want to maintain it in the best manner possible and do the environmental right thing.

ORCHARD PARK

Robert Grove representing the developer asked for final approval of his revised plans, which has been reviewed. Mr. Grove asked Michael if he had received the data back and if he has had all his questions answered? Michael stated he had not had all of his questions answered as of today. They are being answered at this time. One thing Michael has not seen yet is their petition for a legal drain for the subdivision site. Michael still has questions on the outlet pipe size that he has on his drawing, therefore he has no recommendation at this time.

Robert Grove stated he wanted to clarify one thing, he was under the understanding that the people down stream were petitioning or had submitted a preliminary petition for a legal drain. Michael stated he has a preliminary petition, but it is not in final form. Robert asked if they were to submit a petition? Answer - yes, one for the subdivision to become a legal drain.

Eugene R. Moore asked if Michael was asking for the Subdivision. Michael stated yes for Orchard Park Subdivision, if other property owners want to join on that petition that would be fine. Gene asked about the people South of the Subdivision? They don't have to, but if they want they can. Michael stated their (the people South) comes around in a separate pipe; the only thing they do share an is outlet.

Robert Grove stated that it might be of interest of what he did the last time in his revision. In trying to solve problems down stream of the development they have tried to slow down the off site water, there were some problems with that, now they are back to where they originally started. They did leave the basin larger, but they had brought the off site water through the subdivision. They are discharging into the existing pipe which was shown as a 24 inch pipe, but it is actually a 15 inch pipe. Their water is regulated before it gets into that system. This is what they are asking final approval of those construction plans. Robert stated he wasn't sure on the legal drain. He asked how far are they required to go from Kensington north? Michael stated the legal drain would be for the boundaries of the Subdivision. Robert stated which would include the storm pipe and the basin.

Fred Hoffman asked if it had a discharge into another legal drain? Michael stated hopefully it would become a part of the legal drain. It is on another persons property, there is talk of all of them joining together to make a legal drain out of the whole thing. The subdivision is in the middle, which is unfortunate. Michael does believe that down stream property owner is receptive to make a legal drain. Michael stated we could get the petition it could be added on below or above as he feels there is interest both ways joining on to a legal drain.

Mr.Hoffman stated that below would bother him as we do not want a legal drain going into a non-legal drain. Discussion continued.

Bruce asked Fred if he wanted some one to drain to the Wildcat, his answer was he wanted some one to do it. Bruce stated, just make Robert with his project. Discussion. Michael stated that Robert Grove and the property owner to the north should get together and submit a common petition or at least both parties sign it.

Robert asked if this was going to be a requirement for final approval of construction plans? Michael stated before they build on the property they will have to have a legal drain, Michael won't hold it to the construction plans, but will before they can build structure on the site. Build, he means homes. Construction work to the south can continue? Michael stated the Board has to decide.

Bruce asked if he had temporary facilities to hold run off during site preparation? Answer-No, as part of his site preparation he will be constructing his detention basin and outlet.

Robert Grove stated that possibly the first thing done will be the basin as they need dirt to build the rest of the site.

Michael stated he would like to see the comments from the Boards consultant on the review before final approval is given, if he takes an adjournment for two days or so to get the comments rather than to jump into request at this time.

Meeting recessed until Wednesday, September 13, 1989 until the technical part of the project has been reviewed and the developer can do some checking on their outlet pipes sizes and start the petition process.

Sue W. Scholer asked if Michael had in hand answers to his questions on the outlet? Answer-No. Michael stated he knows it is a 15 inch pipe and they keep showing it as a 24 inch pipe, their drawings need to be submitted with the correct size.

Sue also feels the petitions should be in hand before final approval is given. Mr. Hoffman stated this is the only safe way.

Bruce asked if Fred would deal with the Liability from the outlet of this project. He feels this is beyond the Boards capability.

Robert Grove stated he had some information for Blackbird and would like to submit it today. Board agreed to hear this later.

BROOKFIELD HEIGHTS SUBDIVISION

**BROOKFIELD
HEIGHTS**

Dale Koons of CML Engineering Services representing Brookfield Heights asked for final approval for drainage.

Michael stated the Board is not ready to give final approval to Brookfield Heights Subdivision.

Todd Frauhiger stated he has done a very preliminary review of the Subdivision, and the Board should recess until Wednesday, September 13, 1989 at 9:00 A.M., plans can be reviewed and completed with recommendations to the Board at that time.

Michael stated they are putting together a legal drain system within the subdivision, a petition would be needed and signed up. No hearing is needed, just the petition presented at this time so that hearings can be scheduled. Michael stated Dale could do this with Roy Prock and Mr. Curtis. Mr. Koons stated they are going to the Wildcat Creek with their legal drain.

Brookfield Heights recessed until Wednesday, September 13, 1989.

PSLAND P S LAND

Robert Grove representing P S Land stated he is not sure where they stand with PSI, there is more work to be done by the developer. At one time the Master Plan shows that the street going in on under the power lines with the lake next to it was a concern with PSI. PSI wanted the developer to stay east of the center line of the easement, the easement is 200 feet wide and 60 feet from any tower which the developer did. Now PSI has some other problems a meeting has been scheduled to meet in the next week. Michael stated he was to meet with Bill Crane this afternoon in regards to the project. Changes will have to be made.

Michael stated the board has looked at it from the technical end, the whole thing (PS Land drainage system) was approved back in the early 1980's. Michael stated they have some questions about the high water elevations. Bob has submitted some new data. Michael feels technically the plans may be OK, its just the final thing with PSI that is holding it up with the configuration of the lake, the outlet is Treece Meadows ditch and the outlet pipe that was approved in the early 80's is still going to be there and they are meeting their reduced release rate that was set at that time, the review is to make sure it does meet with the prior approvals.

Robert Grove stated one thing that has to be done is some modifications to adjust to the revised Drainage Ordinance, need to check the durations storms.

Michael asked that this be recessed until Wednesday, September 13, 1989 at 9:00 A.M.

Twyckeham TWYCKENHAM PHASE II SECTION II
PHASE II
SEC II

Mark Smith representing Smith Enterprises developer of Twyckeham Phase II Section II. September 30, 1987 Smith Enterprises came before the drainage board and requested that a conditional vacation of Ortman Legal drain be granted so that the developer could substitute a storm sewer system that will drain a 200 acre, 400 lot subdivision that they were proposing to build in the Twyckeham area. At that time the Board approved a conditional vacation of the first area of the drain that they were building and that area has been developed, the storm sewer is completed and accepted by the City of Lafayette, the drain has been vacated up to this point. They are now proposing to vacate the legal drain for Phase II Part II, Section II and IV. They are asking to use the same formula as they did in the first Phase. The vacation of the legal drain for the requested area is subject to five conditions. These conditions are:

1. The new drainage system be installed, approved, and functioning properly.
2. That all field tiles from offsite be properly connected to the new system. Reason for that is that Margaret Purdy and other land owners have tiles that flow into Ortman Legal Drain. Mr. Smith stated he believed that Ms. Purdy was satisfied with the vacation of the drain was done properly and not causing her any problems.
3. Certified As-Built drawings be submitted.
4. A letter be received from the City indicating approval and acceptance for maintenance. City has accepted and approved the construction drawings for the next area for the storm sewer that they are proposing to develop and Michael has seen them and approved them.
5. That the drain will be completed and approved before the Final Plat can be Recorded and Building Permits issued.

Mark stated they are progressing right along and they would like to have approval to go ahead.

Joe Bumbleburg attorney representing Margaret Purdy stated they are familiar with the previous conditions that the Drainage Board set on the developer in this project. Ms. Purdy's concerns exist today the same as they did in the beginning, that the tiles that comes from her field are not disrupted and the flow of drainage continue. Ms. Purdy had indicated to Mr. Bumbleburg that she has not experienced any problems with the development so far. It appears at this point that the conditions are working and if the conditions are continued it would be appropriate.

Question was asked if there was any one else involved?
Judge Thompson would be affected, he is north of Ms. Purdy. The landowners have tried to let the Smith Enterprises know where their tiles are.

Fred Hoffman asked if any one had talked to Judge Thompson?
All property owners were notified of the hearing. Judge Thompson was at the 1987 meeting, he will not be affected by this new phase of development.

Don Sobby, City Engineer stated one difference on this Phase is that the City will not be accepting the detention ponds for maintenance, the developer reportedly has set up a

special Homeowners Association that will have the Maintenance responsibilities on the detention ponds.

Mr. Sooby stated that the City has seen draft copies of articles for the corporations covenants as far as Mr. Sooby knows these have not been recorded as they do not have copies showing recording.

Michael asked about the pipe system, is the City going to accept maintenance of those systems or is it all going to be private. Mr. Sooby answered that he doesn't think that has been addressed at this time. The City is primarily concerned with the detention ponds making sure those are properly maintained. They will work out the details of the pipe systems themselves. Michael asked if that is included in the existing section that is already built or is that starting from this section for Phase II Section II & IV? Mr. Sooby answered that does not include the existing facilities.

Mr. Hoffman asked if the restrictions for the Subdivision will have this provision about the maintenance that the homeowners will maintain. Mr. Smith stated under the direction of the City they are forming a Homeowners Association that will cover the remaining undeveloped area of the subdivision, those people will pay dues and take the responsibility for the retention basins. Mr. Hoffman stated the Drainage Board should have their wording in the covenants that the County has the right to make an assessment. Mr. Hoffman and Don Sooby will meet and make sure the proper wording is included in the Covenants.

Michael stated he has no problem with the vacation of the legal drain as they petitioned as long as the same conditions apply that did before along with this one exception that Mr. Sooby speaks of.

Mr. Hoffman stated that another condition should be added that the restrictions provide that if the Homeowners don't provide maintenance that either the City or the Drainage Board has the right to do an assessment to the Homeowners as this has to be done. Discussion continued. Michael stated if this is going to be done and the drainage board is involved he would like to see a legal drain again. Michael stated he doesn't know what has to be done to get that in the City. Michael stated he had been under the understanding that the City had accepted the maintenance, he did not know about it till today.

Sue W. Scholer stated that the cities position is that it is going to have to run to the County Drainage because the City is not wanting to get involved in that maintenance. Sue stated this needs to be clarified. She asked if the City was requiring this to be done prior to the Cities approval?

Answer-yes. Mr. Sooby stated that when they give an approval for construction drawings, the city has indicated that they will not accept the ponds for maintenance.

After much discussion it was decided that Michael Spencer and Fred Hoffman meet with the City as the Board feels this is not going to be a first nor the last subdivision development involving both the City and the County Drainage Board.

Mark Smith stated the restrictive covenants of the Homeowners Association have to be recorded in conjunction with the final phase plat. Discussion of Conditions 4 & 5 in regards to the detention and the pipe systems. He was going to post maintenance bonds to the city just as any other storm sewer system that they develop. Michael asked Mark to get the language that they have written up to Fred and have him look at it and if the Drainage Board has some language that needs to be inserted they can.

Mr. Sooby stated if they are considering a legal drain for that area the City would certainly encourage the legal drain to cover the existing area as that would resolve alot of the problems. Michael stated he would go along with that as there has been a philosophy change in the City as far as drainage. This subdivision is really coming to the attention of the City and the County Drainage Board. The first section was approved by the City and the City said they would maintain it. With the change of philosophy Michael stated this isn't that all bad, but it is a hard place to make a legal drain, however there has to be someone maintaining it. If the County is going to maintaining, Michael wants it to be a legal drain, this would affect this vacation that is before the Board today.

Mark Smith stated from practical stand point the detention basins that will be built from now on will be much smaller and will be grass and low areas in yards, water will stand until it can run off. It isn't going to be as large of an area as in Part I.

Joe Bumbleburg stated in order that Ms. Purdy does not have to keep coming back to these meetings because of the technical matter which really isn't impacted upon her like the other covenants, he asked could Ms. Purdy be assured that the restrictions that the Board has are going to be in place that she can stop coming to the meetings.

Sue W. Scholer stated the Board is talking about adding the sixth condition and this would assure Ms. Purdy.

Twyckeham Phase II Sec II recessed until Wednesday, September 13, 1989.

Eugene R. Moore chairman, asked if there was anything else to come before the Board.

WILSON BRANCH OF ELLIOTT DITCH

Michael stated it was not on the agenda for today, but Mr. Mossbaum from Melvin Simon & Association are here to discuss the proposal to re-route a portion of the Wilson Branch of the Elliott ditch.

Myles Minton of Melvin Simon & Associates presented reports from Chris Burke to Michael. Mr. Minton stated they are working on developing a Community Center adjacent to the existing Tippecanoe Mall. He presented an Exhibit of the development. A new road proposed Maple Point Drive. The Community Center site is basically South of the Mall site, because of the expansion of the Mall in realignment of Maple Point Drive it had been approved a year or so ago, now it is necessary to realign the road. This makes the Community Center site to move further to the South. They have acquired additional property from Maple Point Enterprises. With the new expanded site plan for the Mall the Community would sit ventrally over the existing ditch. They have commissioned Chris Burke and Associates who had handle the other regional detention facility to design the concept to study a re-route of Wilson Branch. Basically the realignment entailed would be digging a new trench. The new ditch would be improved over what is already there. As the ditch there now is in irregular shape, varies in depth, slope and height on bank. This would be a gradual lay back bank design on a 3-1 slope with grassy banks. Section along Ross Road it would be more of rectangular shape with gabions. The realignment of the ditch as proposed to be on a common boundary line between the Community Center and property that is still owned by Maple Point Enterprises. They have consulted with them, they have concurred with the realignment, the Maple Point Enterprises property would drain in there as well. Mr. Minton stated why they are here today is to just let the Board know what their ideas are and if possible to get some response back whether it is feasible. Chris Burke's study of conclusions states that the re-alignment of the Wilson Branch of Elliott Ditch as proposed by Melvin Simon & Associates does not have a negative impact on the water surface profile as compared to their previous alignment which stayed along the existing channel center line or as compared to existing conditions. These results are based on the inclusion of the proposed Wilson Branch Reservoir. The re-alignment would be an improvement. They plan to take safety pre-cautions along Ross Road with guard rails on both sides. They would access for maintenance on both sides, and he stated he was sure Maple Point would likewise.

Mr. Hoffman asked what were they going to do about the sharp curve where the new ditch starts? This is addressed in the reports about the gabion walls. The gabions start at the under pass. Explanation continued.

They are only doing work on in the west side of Ross Road then it will hook into the regional detention facility to be built. This is critical for their project. Once this would be installed and improved they could go back in with appropriate fill material so they could place buildings and parking lots. The plan presented is not their final site plan.

Fred Hoffman asked if some one else owned the land across making it so they can not go straight across without making that right angle? Answer there are three to four separate owners.

Michael stated he has met with them and his biggest concern was that they move with the hydraulically and hydrologically is it going to do for the watershed area since they are putting bends in it. If they were not sharper bends than before. It was Michael's recommendation that they get an engineering firm on their own to look and give the Board a recommendation. They chose Chris Burke and Michael feels it was a wise decision since Chris is so familiar with the Elliott ditch projects. Based on the conclusions in the report and receiving the drawings and the final report, the board will have to make study.

Mr. Hoffman had concern in regards to 2 feet of water on State Road 38 in a 100 year storm. Michael stated that is with the existing bridge there now. In the report it is considerably less than the current condition there now. It is as good or better than what was indicated in Chris Burke study with leaving the channel where it is.

Mr. Hoffman asked if there was still going to be flooding over the highway? It will be alleviated by the new approach. Discussion and explanation continued on this subject.

Michael stated the new channel has more capacity than what the existing channel, but Fred stated it doesn't have enough capacity to prevent flooding. Michael stated the reason for the flooding is the State Highway bridge structure, not the channel. The old interurban abutments are on the north side of the bridge that more than half restrict the opening of the bridge. Hopefully this will be corrected when the new road is put in place. Discussion of whether fixing the bridge would eliminate the flooding continued. Mr. Hoffman stated he feels this is something that needs to be known. When a lot of money is being spent to fix something it should be so the highway would not be flooded.

Bob Mossbaum stated their firm would be happy to pass the concern on to Chris Burke to see if he can get the information out from the State, as this is something that needs to be resolved.

Sue W. Scholer stated her question along that line is: Milton Simons & Associates project is not causing that problem, but she would certainly want to know that what they are proposing would handle the change if that is corrected.

They asked that this be considered a preliminary report and ask Chris Burke to get an answer to the question on the bridge over State Road 38, and have those in his conclusions in his computer models.

Michael stated the Board has no control over this only as long as they are doing what they are suppose to. Mr. Hoffman stated if the problem could be resolved then the Board would have an obligation to try to prevent flooding Highways.

Bruce Osborn stated someone else should review what has been submitted today. This will be discussed.

SEPTEMBER 6, 1989 Drainage Board - Orchard Park

Sue W. Scholer asked what easements were being proposed? The drainage easements proposed in Chris Burke's regional detention report was a 75 foot easement from center line of the ditch. The easement is larger as it is 75 feet from top of bank, so what they would propose would be similar 75 feet from the center line a total of 150 feet in one area and what ever would be required for access for maintenance.

Michael asked since it is entering property and leaving property does the Board need to notify all the up stream property owners? Answer - NO. Discussion continued.

Michael asked them to give the Board a of couple of cross sections at various location to see what easements they will want to reduce to, and showing section of what they are going to construct so they can make some determination on what top opening that the Drainage Board is going to maintain. They presented a preliminary one today and will get a final one.

Bruce V. Osborn had concern in regards to mutual tile. The mutual tiles that come into that project, he feels these property owners should be notified and asked if they can show the developer where these tiles are, the developer should hook them on to their facilities. Discussion continued as to who would be responsible for that? County or the Developer? Michael asked them if they were going to be building themselves? They will be hiring a contractor for the job. They stated they would have a supervisor on the job, and assured the board that they would include the concerns of the mutual drain tie in. Bruce felt it would be best if the County had their own supervisor. Michael stated he would agree if they were County regulated ditches, but that area is developed all around this project except across Ross Road. Question is what else would it be draining as the existing Mall is there now. Discussion.

BLACKBIRD FARMS

**BLACKBIRD
FARMS**

Robert Grove appeared before the Board stating he was not on the Agenda. He stated he has additional data to present to Michael, but he wanted to point out to the Commissioners and Michael that he owes Mr. Leitner an apology. Mr. Leitner was correct in regards to the 35 acres that the water does come on to Blackbird Pond, cuts across the corner and gets in Blackbird Pond. What they are proposing to do is place an open ditch take the water on their side of the levy, not dumping it on his side, taking it to their pond.

Calculations have been run and have changed, the levy has been changed making it look more like an island, will have trees. Michael asked if they were making the pond smaller again? They will be deleting two islands. They have added another spillway to make it look good. The spillway will affect the detention structure. Flowing less depth since they have more spillway area. By adding the 35 acres they are adding to their side, the only outlet up to foot and half is a 15 inch pipe. The existing pipe is 24 inches, placed a dam holding the water on the development, doing everything they can to do make the situations down stream better. The 1 hour 100 year storm event of the 35 acres doesn't bother at all, it doesn't even come into the spillway. Getting into higher duration storm 6 hour their would be approximately 6 inches of water in each spillway, and at that point would be flowing across McCormick Road. Basically 6 hour 100 year the pond is pretty much full, basically see the additional 35 acres going right through the system even though they are reducing it some.

Sue W. Scholer asked if he has apologized to Mr. Leitner? Not at this time, but he is aware.

Mr. Hoffman asked how much work had to be done on Mr. Leitner's property? They are picking up at their property line, they will pick up any tiles from Mr. Leitner that they would be cutting and tie into their system. Mr. Leitner will have to show them.

Sue asked where we were on this project in regards to giving final approval. Michael stated the board needs this information presented here today. Reason for Robert Grove presenting this today was that it had been brought up in a public meeting and he wanted the board to aware of his error and that he did owe Mr. Leitner the apology as Mr. Leitner was correct. Robert asked if they could be heard next Wednesday, September 13, 1989. He has one thought do they have to have approval from City of West Lafayette. The city is reviewing it with their own consultant. At this point Robert stated he has alittle problem jurisdictionally who does what. Is the County approving? Michael asked what are their conditions? They haven't reported back. Discussion continued.

There being no further business the meeting recessed at 10:30 A.M., and will reconvene at 9:00 A.M. Wednesday, September 13, 1989.

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, OCTOBER 4, 1989

The Tippecanoe County Drainage Board met in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Eugene R. Moore called the meeting to order at 9:00 A.M. with the following being present: Bruce V. Osborn and Sue W. Scholer, Board Members; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; Todd Frauhiger, Drainage Consultant; Maralyn D. Turner, Executive Secretary; and Don Sooby, Lafayette City Engineer; others present are on file.

GREEN MEADOWS

✓
GREEN
MEADOWS

John Fisher representing developer of Green Meadows asked for final approval subject to conditions. Presentation was made. Project is located at 26 West and Klondike Road. They are proposing to make subdivision a legal drain and incorporate it into the Vanderkleed legal drain as well as the detention basin and offsite open channel across the property.

Bruce V. Osborn asked if he meant assessment to a legal drain? Answer - YES as it is in the watershed area and is tributary to it.

Michael stated that most of Vanderkleed ditch is tile.

Mr. Fisher stated it has an open channel, west of 400 west has a good size open channel. Discussion of channel continued. Michael Spencer stated it is a confined channel. They are making a new route for it to go. It is not a defined channel, it is a swale type, there isn't water all the time.

Bruce Osborn asked if it was separate from Vanderkleed drain? Yes.

Sue Scholer asked what the purpose of the emergency routing, is it a legal drain? The whole subdivision will be a legal drain. Sue asked if the easements would be defined? Yes.

Michael Spencer had two questions.

1. Erosion Control Plan
2. Legal Drain and Petition
3. How to hook the Subdivision in with the Vanderkleed ditch.

Michael stated this would probably be something that would have to be worked out with the developer.

John Fisher stated he had talked with Bob Swain; he will have to get an OK on the two acres.

Eugene Moore stated if they would give approval as presented they would be giving an approval without and outlet for the improvement.

Todd Frauhiger drainage consultant stated he had been in contact with John they are going to study two other durations storm, they had only studied a 24 hour duration, they are in the process of getting the information to Todd. What has been submitted is substantial, he does not see anything wrong with it. He stated giving approval with the conditions mentioned and getting the land connected to the ditch he has no problems.

Bruce V. Osborn asked if the waterway be a legal water way. John Fisher stated it would be a part of the regulated drain with the easements.

Bruce V. Osborn moved to give Green Meadows final approval subject to the following conditions; erosion control plan, legal drain and petition, how to hook in with the Vanderkleed legal drain, and different storm duration study, seconded by Sue W. Scholer, unanimous approval.

SIMON AND ASSOCIATES - WILSON BRANCH

✓
WILSON
BRANCH

Dick Boehning representing Simon and Associates, Inc. introduced Myles Minton Vice-President of Simon and Associates, Inc. and Bob Mossbaum, engineer with the organization. Mr. Boehning presented three copies of Petition for Consent to Relocate Portions of a Legal Drain and to vacate easement. This presentation is a follow up on many months of discussion of the twelve draft agreement. First request is to get consent for relocation upon completion of the relocated drain pursuant to such plan attached here to as Exhibit "B", the Petitioner will grant to the Drainage an easement for such legal drain, as shown in such plan and as legally described in the attached Exhibit "C". Exhibit "C" was not attached it will be presented after this meeting with the proper legal description and easements. The easements will be 75 feet from center of the ditch on either side. Mr. Hoffman stressed that any easement they were going to have was to be based from the top of bank of the ditch. Discussion of easement.

Once approval is given and the ditch is re-located, the easement described in Exhibit "B" be vacated. Discussion.

Myles Minton stated that they have received drainage study from Chris Burke Engineering, they had tested they hydraulics of the realignment which were favorable for the flood levels. He had investigated the bridge at State Road 38; the State does have in their

plans to improve the bridge by increasing the width of the structure, Mr. Burke is plugging those in his final report which will decrease the flood levels at the State Road 38 bridge. A final report will be presented in the next few days.

Agricultural Tiles:

- a. In the construction contract they agree to put a stipulation that if any tiles are found they will be incorporated in their new channel. Previous to construction they will have a consultant walk through.
- b. If the contractor finds any during construction he is to take appropriate procedure to make sure the drainage is hooked up.

Myles stated they will need formal consent on the new easement from Judith Hammon owner of Maple Point Enterprises. The new easement will be in conformity of Chris Burkes study, and they will provide access on both for maintenance.

Michael stated he will have to look at the cross section to get the building dimensions down so they will know what the top width of the easement is going to be. Mr. Hoffman stated it can only be reduced down to 30 feet per side. Discussion continued.

Questions and answers continued on the re-location.

Sue asked if this was showing the whole width of improvement to Ross Road. Yes.

Dick Boehning stated that on #3 where they are asking that the old easement be vacated, it would not be done until construction has been completed and a report of completion is filed with the board, and a new grant of easement with the description that the board would be approved be properly executed by the parties of interest at the time.

Exhibit "C" will be prepared and presented in the next few days so Michael can look it over.

Bruce Osborn asked what footage are you talking about on the easement. It is a total of 150 feet about 80 - 90 feet wide at top to top of bank.

Discussion of the size of equipment to be used and over head obstacles to clean the channel. Michael Spencer and George Schulte are to meet with the developers, Michael in regards to the easement, and George in regards to the variances in the road.

Michael asked if the Petition asked for reduction on Judith Hammons side also? Dick Boehning stated the petition asked that the board give approval to the easement as described in Exhibit "C", again he stated there is no Exhibit "C" yet. They are uncertain as to what the new easement should be. He stated he would like to have the board approve the petition subject to Michael approving the new easement in Exhibit "C". Michael stated he can not reduce the easement the drainage board has to.

Bruce suggested they get all things together and get with Michael. Mr. Boehning stated they will file Exhibit "C" with Michael to make sure they have his approval before it is officially filed, then when it is filed it will be a clean legal description. Agreement to this.

WYCKENHAM WYCKENHAM

Mark Smith had called Michael and requested to postpone presentation today and schedule it for the next drainage board meeting November 7, 1989.

FARMINGTON LAKES FARMINGTON LAKES

Robert Grove representing developer requested final approval for Farmington Lakes drainage plan. Mr. Palmer asked Mr. Grove to go with two large dry basins in the interior providing 60% of the detention. This was approved, from that point they went into final construction plans and have provided two large basins internally and one lake in the North west corner where it was located before. They have increased the size of the basins because the drainage board is requiring them to look at a longer durations of storms. They are taking the entire water shed area through the development for a 100 year one hour storm which maybe in a 70 cfs uncontrolled, when they are done they will be looking at a 3 cfs, with the 100 year 24 hour storm would be 8 cfs controlled.

Todd Frauhiger asked about the pipe size underneath the entrance. He feels it is a little small. At a 50 year storm he finds it going over the entrance. The rest of the model looked OK. Some of the inputs the curve number and the time consecrations looked reasonable in the model, however he did not see any calculations backing them up. Possibly go with a twin culvert. Discussion continued.

Mr. Grove possibly George Schulte should be in on this as there may be a problem downstream at the subdivision entrance. George stated this is a concern.

Todd, Michael, and George need to get together to make study of plans.

Mr. Hoffman stated final should not be given until all information is presented.

Todd stated he can have the study done in the next few days. George stated he would like to get with Robert Grove and go over the street drainage.

NORTHFOLK AND SOUTHERN AGREEMENT - SIA CONTINUED

Michael Spencer presented an agreement sent to the Drainage Board from Norfolk-Southern Railroad, agreement is for structure underneath the main track.

Mr. Hoffman stated he had gone over the agreement it meets his approval, the only question he had was the cost of labor. Michael has checked that out. Increase of cost is due to the Unions benefits. The original estimate was \$80,300.00 and the actual cost was \$74,579.00 which half is the county's expense. Cost of pipe was also concern, but Michael assured Mr. Hoffman that it was in line. \$444.00 per foot for pipe. The county will pay in five installments with no interest-\$7,457.90 each installment.

Bruce V. Osborn moved to give approval to the agreement between Norfolk and Southern Railroad and the County, seconded by Sue W. Scholer, unanimous approval.

ORCHARD PARK

ORCHARD
PARK

David Dilling and Len Dible property owners, Mr. Dilling stated at the last meeting he was very pleased with the Chris Burke Engineering studies of the erosion control and the downstream conditions. To his dismay of the final motion the downstreams conditions were omitted.

Sue stated letters have been received from Mr. Dilling and Mr. Dible and two pictures taken by Mr. Dible October 3, 1989, and a letter of reply from Mr. Hoffman. She asked if they should be made a part of the records? Mr. Hoffman stated they should be made a part of the records. Michael stated he has other letters in the files.

For the records the following letters have been received by the Surveyor. These letters expressed Mr. Dilling and Mr. Dibles concerns stated at the meeting today.

Leonard F. Dible
40 Woodmere Court
Lafayette, IN 47905

September 19, 1989

Mr. Michael Spencer
Surveyor of Tippecanoe County
20 North 3rd Street
Lafayette, IN 47901

Re: Orchard Park Drainage Plans

Dear Mr. Spencer:

Thank you for meeting with David Dilling and me today to review the status of the latest drainage plans for the captioned in general and the outflow from the detention pond in particular. I believe the design we reviewed violates established law and additionally fails other tests as well.

In my November 30, 1988 letter to the Drainage Board, I pointed out restrictions to the Common Enemy Doctrine applicable to the layout of Orchard Park. There have been some revisions but the basic violations are still present. The drainage plan we reviewed today has a design which collects and directs runoff water to a point or points and employs new channels to accomplish outflow from the site. I protest the gathering of surface water and conducting it by new channels.

We discussed drainage jargon vs definitions of record in our meeting. The terms legal drain and regulated drain were examined. The drain petition for Orchard Park uses legal drain which seems to be more of a colloquialism than a definition recognized by law. On the other hand, regulated drain is on the list of drainage terms but its definition does not square with the meanings you ascribe to it.

In the context of our discussion this afternoon the drain covered by Mr. Dilling's petition fits the official definition of a regulated drain and is therefore, within the meaning and intent of 36-9-27-17 (d). The proposed Orchard Park drain is a private drain at this time.

Even if the subject drain in Mr. Dilling's petition is thought to be a proposed regulated drain 36-9-27-29 brings it into the province of the county surveyor. It is an assault on accountability and reason to contend that the county surveyor should intervene when a connection to an overloaded regulated drain is contemplated; and ignore the same overload situation and its attendant damage when the drain is the subject of a petition filed asking for input from the county surveyor for the purpose of reconstructing to a regulated drain. Mr. Dilling's petition preceded the Orchard Park petition.

My November 30, 1989 letter of protest to the Drainage Board received no response. Mr. Dilling wrote to Board asking for a statement of position on the points I raised in my 11/30/89 letter. I expected a response and I believe Mr. Dilling did too. The issues have not changed significantly. The internal drainage plan has changed somewhat but the developer continues to push for detention outflows which employ new channels and destructively add to a system that is already unquestionably overloaded.

The developer has moved drain pipe on the site and has begun construction grading work. This is the second time the developer has performed construction work without a permit. Work has halted the first time by intervention by your office. I ask that you or the County Commissioners use your authorities to prohibit construction work.

ORCHARD PARK CONTINUED

In summary, I protest the present drainage plan for Orchard Park because it violates existing state law, connects to an outflow system which you know has inadequate capacity to an acute degree. The increased water volume due to Orchard Park will accelerate the already excessive erosion in the ravine receiving its flows. (Mr. Dilling reported today that the catch basins in front of his home filled up in about 15 minutes after it began raining during the Purdue vs. Miami of Ohio football game.) Contrary to the claim of the developers petition for a "legal drain" the drain system fails the tests of 36-9-27-55, in my opinion. I predict the detention system will be a mosquito pit and increased flooding of Kensington Drive will result during sustained rains.

I request that the developer's request for approval of his drainage plan covered by his petition filed September 12, 1989 be denied until the issues described above are resolved and the "affected property owners" have a full opportunity to express their opinions on the developer's drainage plan. No construction should be authorized or allowed until all issues are decided by the proper authorities which may extend to judicial review.

Very truly yours,
Leonard F. Dible

September 22, 1989

Leonard F. Dible
40 Woodmere Ct.
Lafayette, In 47905

Dear Mr. Dible:

I have received a copy of your letter of September 19th addressed to Michael Spencer, Surveyor of Tippecanoe County, concerning the Orchard Park Drainage plans.

At the present time we have before the Tippecanoe County Drainage Board, a petition for the establishment of a regulated drain colloquially called "legal drain" as well as reconstruction of the present regulated drain. When these petitions come up for hearing, after notice to all affected land owners, then the board will have to address the matters raised in your letter of September 19th. In other words, in order to establish the drain we have to determine not only that is needed but the benefits it will serve and to whom and to what extent people are damaged.

Very truly yours,
J. Frederick Hoffman
cc: Michael Spencer
Tippecanoe County Drainage Board

September 23, 1989

David R. Dilling
3872 Kensington Dr.
Lafayette, Indiana

Re: Reconvened Drainage Board meeting of 9/6/89, meeting on Wednesday 9/13/89

The Tippecanoe County Drainage Board
County Commissioner's Offices
20 North 3rd Street
Lafayette, Indiana 47901

Dear Friends:

It is said that the citizens of Tippecanoe may be categorized as (1) those who make things happen; (2) those who watch things happening; and (3) those who have no idea what happened. With reference to the cited meeting, I, to my great dismay, find myself in the third category, and I write to plead with you to clarify things for me.

In accordance with your instructions I met with Mr. Spencer on Tuesday, September 19, to discuss (1) what actually happened at the September 13 meeting, (2) to enlist Mr. Spencer's assistance in planning a reconstruction petition for the proposed regulated drain on my property, and (3) to determine what was next expected of me with reference to the whole situation. For whatever reasons, during the meeting with Mr. Spencer, Mr. Spencer himself claimed to be perplexed not only about what transpired in the September 13th Board Meeting, but even about what he himself said and/or intended by his statements in that meeting. Examination of the official minutes of the September 13th meeting have failed to clarify things for either of us.

Specifically, I need your help with the following:

ITEMS; The minutes stated that Chris Burke Engineering recommended to the board that conditional approval be granted to the Orchard Park project--the conditions being:

1. That downstream conditions are addressed.
2. That proper erosion controls are incorporated during construction.

The minutes also state that "Bruce Osborn moved to give final approval to Orchard Park Subdivision with one stipulation, that proper erosion control methods be incorporated during construction."

ORCHARD PARK CONTINUED

What is not clear here is whether the Board intended to ignore the Burke report and proceed on a course which violates Burke's first condition (viz., "that downstream conditions be addressed") or whether the Board assumed that they had somehow met the first condition as a result of Mr. Spencer's recommendation that my property be included in the "legal drain" petition for Orchard Park and that the existing, inadequate drain on my property be reconstructed.

As a reasonably attentive attendee at the September 13th meeting I would argue that there was no public indication that the Board intended to ignore the Burke report by acting in contradistinction to its number one condition. This being the case I respectfully request that Mr. Osborns' motion be worded in the official documents to reflect this intent.

Item: The minutes state that "Michael recommends that downstream be included in the legal drain petition and concurrently with the petition being filed for reconstruction for the downstream portion of the drain." Now admittedly this is garbled language bordering on the classic "'twas brillig and slithy tove did mire and gimble in the wabe." Clearly, Mr. Spencer didn't mean everything downstream from Orchard Park. That would take us to New Orleans and the Gulf of Mexico. What is not clear is what Mr. Spencer did intend and what the Board thought was to happen as a result.

ITEM: The matter of the inclusion of my property (Potter Hollow, Lot 76) in the Orchard Park "legal drain" proposal is also muddled and requires extensive interpretation. Mr. Spencer (on September 19) pleaded ignorance on this point and indicated that he would appeal to Mr. Frederick Hoffman for interpretations. Frankly, in the September 19th meeting, Mr. Spencer conceded that it was his understanding that if I joined in the Orchard Park petition, as presumably suggested by the Board, not only would the "reconstruction" not be a part of the Orchard Park development, but that I would actually be required to help pay for Mr. Scheumann's project! This interpretation of the Board's intent is so shocking as to defy belief. If this is actually the intent of the Board, we have come so far in the whole sordid Orchard Park fiasco that an analogy to a rape victim's being incarcerated and required to pay a reward to her attacker would be altogether appropriate. I am sure that Mr. Spencer must be mistaken in his interpretation of the Board's intent; but if he is not, there will no end to the outcry of injustice--at least from this source.

Earlier this year Mr. Scheumann presented the Board a plan in which he proposed himself to reconstruct the existing faulty drain into which he proposes to drain Orchard Park. Presumably, he needed only my signature on an easement and had reported to the Board (correctly, in fact) that he had a tentative agreement from me to sign such an easement and thus to give my blessing to his proposal. I did, in fact, have every intention of signing such a document and thought it was entirely appropriate to ask Scheumann to reconstruct the faulty drain into which he planned to enter. As you may recall from my letter to Mr. Scheumann, dated June 23, 1989, I asked only that I be provided a guarantee from Scheumann that his construction work (that is, function as designed) and that it be in accord with Indiana State Law. Mr. Scheumann's eloquent silence with reference to my request has left no doubt in my mind and should leave no doubt in yours that he never intended to do the work in a satisfactory manner unless there was significant pressure brought to bear to force him to so. Furthermore, in my letter to this Board on June 27, 1989, I asked for clarification of the legal matters raised by Mr. Leonard Dible, and to this date I have had no response from the Board to this letter. I trust that this clarifies for you my analogy to the rape. We began with a proposal by Scheumann to reconstruct a faulty drain on my property at his expense. Now I am being asked to pay for both the reconstruction and also Orchard Park's internal drain!.

Quite frankly, my friends, I cannot afford the legal machinery that would presumably be needed to protect myself, my family, and my property from the rape which you seem to be proposing for me. It was my sincere expectation that by involving the Board in the reconstruction of an admittedly bad situation, I would be protected from the outrage of an unscrupulous developer. That is to say, we certainly didn't want to be subjected to more of what we received from the Potter Hollow developers. I trust that you will prove me right in this expectation.

You should also be aware that despite the lack of clarity on the part of the Board, despite the lack of appropriate permits and clearances, Mr. Scheumann continues with the construction at Orchard Park just as if everything were resolved. I urge you to do whatever is in your power to stop this construction until we are agreed on the final plan.

Sincerely,
David R. Dilling

September 27, 1989
The Tippecanoe County Drainage Board
Mr. Eugene R. Moore, Chairman
County Commissioners Offices
20 North 3rd Street
Lafayette, Indiana 47901 Re: Orchard Park Drainage Plans and Petition

Dear Mr. Moore:

On September 19, 1989 I wrote to Mike Spencer regarding the captioned and I request that letter be included in this letter by reference. I noticed Bruce Osborn had a copy of my 9/19/89 letter on his desk so I believe the Drainage Board is already aware of aware of its content which is now directed to the Board. Mr. J. Frederick Hoffman responded to my 9/19/89 letter. I thank him for his comments.

ORCHARD PARK CONTINUED

Mr. Hoffman's letter brought a mixed reaction. In the meeting David Dilling and I had with Mike Spencer on September 19, 1989, he advised that he was ready to approve construction permits and indicated he would do so soon. I pointed out that the affected property owners should have their say but Mike seemed to feel that the drainage plans were now acceptable and construction could begin. I was pleased Mr. Hoffman agreed that the people who have lived here and have paid taxes for close to twenty years are at least entitled to a hearing.

At the same time, I was disappointed that the developers petition is not rejected because of the reasons I inventoried in my letter of 9/19/89 to Mr. Spencer. I continue to believe there are components and conditions in the developers drainage plan and its outflow that preclude further consideration of his drainage plan and petition. I again ask that the developer's petition be dismissed because an overload exists in the outflow employed and he is delivering collected water through a new and unlawful channel to a point which results in capricious dumping of water in a body in a single outflow drain which emptys on the property of a neighbor.

In contrast to my outlook, the developer again behaved like he has a lock on the drainage approval process. He brought in drainage pipe, and numerous pieces of large grading and excavation equipment. He proceeded to rough out his detention pond, deep enough to bury a pickup truck, and establish his street complete with compaction by as big a roller as I have seen anywhere. All this drainage oriented construction work was done with no official permits.

Our protests got the work stopped after several days and most of the heavy equipment has been removed now but obviously the developer know something we do not. We now believe the developer was given at least tacit approval-"...go ahead we will not stop you unless we get vigorous complaints."

In my opinion, for the developer to believe he had sufficient approval to start executing his drainage plan, somebody on the Drainage Board or close to it had to give some kind of go signal. At the County offices, we did not encounter any degree of outrage about this unlawful construction or an urgency in getting it stopped.

This untimely construction calls into application Section 36-9-27-59(b). This section provides that if a member of the Drainage Board "has an interest" in the land described by the petition, that member(s) should be disqualified. It does not say "owns" an interest. It seems to me that anyone who by action, word, or inaction supported the developer's proceeding with construction, now has an "interest" sufficiently biased to justify disqualification. I ask that each Drainage Board member be asked about any "green light" signals they have made to the developer. According to my record, Commissioner Scholer has consistently voted for whatever this developer wanted to do and I expect she would be comfortable with ignoring unauthorized construction work if it is in line with her sentiments. I ask that each Board member and the County Surveyor sign a statement that they did not express or imply that the remaining steps in the drainage plan/petition approval process were just formalities and/or they would consider the most recent construction activity reasonable and acceptable behavior.

On a totally different point, one of the Burke reports stated that the County Engineer had changed the soil classification of the developer's site. Apparently this change had a remarkable effect on the drainage calculations. Section 36-9-27-29 names the County Surveyor as the technical authority on drainage matters and the classification of the soil mechanics used in drainage engineering should be his. The County Engineer is not mentioned. The report suggest that Mike Spencer was not aware of the change in classification even though drainage for Orchard Park has been continually contentious. I request that the drainage engineering be reevaluated by the Burke consultant with the land classified as it was in the County Surveyor's records on the day the developer first filed for rezoning. The developer's petition should be considered defective on this point.

I protest that the minutes of the last Drainage Board meeting on the captioned do not definitively record the essential meaning of what was said. I also protest that those who spoke the words are confused about what was said and intended. In line with David Dilling's anguish, I remember Mike Spencer advising when Mr. Dilling filed his petition, that Dilling's request for reconstruction of the 15" drain on his property would have to go to completion before the developer's plans could be approved. Mr. Spencer said that the developer would not be permitted to connect to a drainage system that is already overloaded. I asked Mr. Spencer what he thought would happen next and he said he believed the Developer would ask for immediate reconstruction of the drain covered by Mr. Dilling's petition. Mr. Dillings petition requesting the County Surveyor's input toward formulating a mutually agreeable reconstruction plan was filed and accepted weeks before the Orchard Park petition was filed. This is another example of an existing property owner getting preempted by commercial clout.

In this connection, in the meeting Mr. Dilling and I had with Mr. Spencer on September 19, 1989. We asked Mr. Spencer if he believed that the developer's drainage plan/petition was sound and met the value test. Mr. Spencer said that the calculations indicated that it would perform acceptably. We asked if he believed the developer's outflow drain to the existing collector manhole would increase flooding in that area of Kensington Drive drive. Mr. Spencer said that he could not promise that the developer's drainage plan would not result in increased flooding problems.

Thus the developer's drainage plan has a greater potential for an adverse affect on a public street than it does to improve it or cause no change. It will not improve the public health either, its potential as mosquito producer is clearer than any health benefits one can imagine. The affects of this development on property values and total tax revenues in the future will be adverse and not serve the public good.

ORCHARD PARK CONTINUED

It is a struggle to believe that this developer has an interest in the good of the community unless it can be done at no cost. I took some photographs of the illegal construction and noticed the developer has left a trench for his surface water to drain toward Kensington Drive in the direction of the catch basins near Mr. Dilling's property.

I request my protests be recorded against the developer's drainage plan and/or petition and I request further action by the Drainage Board be denied because the developer's proposals stands in violation of the drainage code of Tippecanoe County and/or Indiana law. Should the Drainage Board decide to proceed with a hearing on the developer's plan/petition, I ask that the protests described here be applied to those proceedings.

Very truly yours,
Leonard F. Dible cc: Michael Spencer
J. Frederick Hoffman

October 2, 1989

Honorable Eugene R. Moore, Chmn.
The Tippecanoe County Drainage Board
20 North 3rd Street
Lafayette, Indiana 47901

Dear Mr. Moore:

As a result of the actions of the Board on September 13, 1989, which meeting your were, unfortunately, unable to attend, there is considerable confusion and uncertainty.

I was asked to meet with Mr. Spencer following this meeting to determine what exactly was done and intended at that meeting, and to be advised as to how to proceed on my own commitment to the Board and also with respect to my proposed regulated drain petition which was presented, through Mr. Spencer, to the Board, on about August 15, 1989.

The result of my meeting with Mr. Spencer was that Mr. Spencer appealed to ignorance. That is, he claimed that he did not recall either what he said in the Board Meeting of September 13, 1989, or what he intended by it. Instead, he appealed to the official minutes of that meeting which he produced in writing for me. I am now in possession of copy of these minutes.

I would like to report to you, on the basis of more than 15 years of professional service in the evaluation of written documents at the university level, that the official minutes of your Board meeting--which are appealed to as the final arbiter of what actually transpired at the meeting, together with the official interpretation thereof--are largely unintelligible, and to the extent that they intelligible, self-contradictory.

I have partially documented these allegations in a letter which was presented to you on September 23, 1989.

For this reason, I am appealing to you to include the matter of the Orchard Park Drain problem on the agenda of the Board meeting for October 4, 1989.

Specifically, I would like to have considered by the Board at the meeting, the following:

1. The question of whether or not the Board intended to reject the Burke report and why.
2. The question of why the Board is willing to encourage an obviously unscrupulous developer to proceed with a plan of action which clearly violates the recommendations of a qualified consultant which the Board used public monies to employ.
3. The question of why the Board continues to permit the continued construction work of the developer in the absence of either construction permits or a resolution of the "downstream conditions."
4. The question of exactly what I was asked by the Board, in their September 6 meeting, to do.
5. The question of why my petition to the Board for a regulated drain crossing my property is not given priority to the petition of Mr. Scheumann which came to the Board more than a month later.

I respectfully appeal to your good graces to lead the Board to do what is right. Nothing could be clearer that the continual suffering of multitudes in our county as the result of past instances of the sort of quick-profit, poorly planned, short-sighted, development of Mr. Scheumann's is another example. Our community deserves to be protected from self-serving developers. For this task we have elected you to help us. Please do your duty in this regard.

Thank you for your consideration.

Cordially,
David R. Dilling

Per Mr. Dilling's letter of September 23, 1989 states his concerns plus his great concerns in regards to joining the Petition of Mr. Scheumann's , his Lot 76 Potters Hollow Subdivision. Maintenance concern of the regulated drain proposed for Orchard

ORCHARD PARK CONTINUED

Park Subdivision. He would rather have the Board work on the regulated drain further downstream than to have the developer doing that.

1. He wondered whether or not the Burke report was intentionally ignored or whether the board intended the matter downstream conditions being addressed be included.

Michael Spencer stated he had met with Mr. Dilling and what he has stated in regards to the Burke report are true. The Burke report does say that downstream conditions. Even though the minutes does not reflect downstream conditions he does not believe it was intended to neglect the downstream conditions; but be addressed in its motion.

Todd Frauhiger stated: Downstream means as far as it needs to be. The private drain right now is overload with the water that is going into it now. This is why it was one of the first things in the report to be addressed. Todd had thought the conditional approval given was that the downstream conditions be addressed, he remembered those words coming out of the meeting, he is not sure why it was not reflected in the minutes. Whether it be a legal drain or what, something has to be done downstream. It is a 15 inch pipe and is trying to handle watershed area than what a 15 inch pipe can handle. There is a ravine that is affected, there is a roadway (Creasey Lane), go off the shoulder tumble down to 1 1/2 side slope right in the ravine and looks like it is eroding more every year, there are many things that need to be addressed. The upstream developer Orchard Park to hold up approval because of downstream conditions did not really seem right. It seemed that they were doing what they had to do by the ordinance, they were retaining their water, discharging the water, if there is a problem it is not just caused by Orchard Park Subdivision, it is caused by everything upstream. This is the reason in the Burke Report they recommended conditional approval based that someone study the downstream conditions and come up with a solution. Talking with Michael Spencer it was thought at that time that a petition would be made, this drain would become a legal county drain, some additional study would be done to figure out what would correct the situation.

Sue W. Scholer stated this was her understanding, if it ended up being omitted from the motion it was because the downstream needed to be addressed by some separate actions. Todd Frauhiger stated this was correct.

Len Dible stated he has a dictionary at home called a dictionary of Wizzle Words, in it is the word Address, what it means is that really no one really knows what that means for sure. Look it up in Webster it isn't very clear either of what it means. He would like for us to be more definitive when we say, "Addressed". What does that really mean in terms of action? Does it mean talk about it?

Sue W. Scholer asked what can we do at this point?

Mr. Hoffman stated the board can't do anything until we have some petitions. It was his understanding that there was a petition about Orchard Park Subdivision, then there was going to be another petition by Mr. Dilling and things were going to be done jointly, because a new drain is going to have to be established to get to the outlet, then try to make improvements downstream which necessitated the petition that Mr. Dilling was going to present which he has a form of petition which he just received this morning.

Mr. Dilling stated if that were to proceed concurrently that would in his judgement be acceptable, but this is not happening, what is happening is that the development upstream is proceeding prior to the matter that was listed as the condition for granting the approval upstream development.

Bruce Osborn asked; you are saying that nothing should have been done until the petition was submitted.

Mr. Dilling stated we are back to what the word "addressed" means. He feels this is a legitimate point to raise. His interest would be that the downstream problem should be resolved - solved either prior to or at least; the very least concurrently with the development of new inlet from upstream, and there is no question regardless of the regulation of the flow from the new development that there will be increased water. He doesn't think anybody has challenged that, he means to be sure there is a matter of regulating the flow but there's no question that will be increased total volume being put into a admittedly over taxed system.

Mr. Hoffman asked if the petition he received had been filed or is it just a form. Answer, form. Mr. Dilling stated it was submitted to Mr. Spencer and accepted, possibly a month or month and a half ago with a request that further input be made because as a non engineer he had no idea as to what specifics to include in it at that time together with at least an informal request for input from the board and Mr. Spencer as to how that regulated drain should be constructed and what need to be done as far as securing petition from affected neighbors etc, he is still prepared to do that.

Mr. Hoffman stated so in other words it has not be presented except the unsigned form.

Sue W. Scholer asked if the board had the ability to hold up the construction of the Orchard Park Subdivision based on doing something downstream.

Mr. Hoffman stated not if it complies with the Drainage Ordinance. If it complies with the ordinance is not his jurisdiction. Sue asked if they understood that?

Len Dible read the fine print of State Laws history of judgments, private drain may be connected on a petitioners own land with a public one providing the utility of the latter is not destroyed. He stated there are several other cases that are matters of prior law that may not be specifically in the ordinance, but the ordinance also says that Mr. Spencer (surveyor) is the technical authority on purposed regulated drains and

ORCHARD PARK CONTINUED

regulated drains. His understanding is that you (board) accepted this petition as a purposed regulated drain. Is this so?

Michael stated he accepted Mr. Dillings petition and Mr Dilling said he was considering filing it with the board, and Michael took it at that.

Mr. Hoffman stated there is no petition before the board until it has a signature. This is just a form. Mr. Hoffman stated he just received this morning. The board has to have something signed before any action can be taken.

Mr. Dible stated his understanding was that they were going to sit down with Michael and he was going to bring the engineering specifics in that would meet his reasonable test, then it would be signed.

Mr. Dilling stated exactly, the form was presented on the bases that they needed the input of the board and the surveyor with the respect of what needed to be included in it. They are awaiting that and in the mean time there is a matter of distress over the fact that the conditional approval which was suggested to the board apparently was not followed through with because the builder continues with the development without that condition being met.

Robert Grove spoke on behalf of the developer. He believes the developer submitted a petition to establish a legal drain for the entire development which was also addressing the downstream. At one time they did have a plan approved by the board to completely replace everything down to Mr. Dillings property. At that time easements had to be included on private property, Mr. Dilling was not willing to give the easements so they had to step back to the plans that they now have which meets the Drainage Board Ordinance and does not increase the flow to the system. He has submitted a petition to the board to bring everything he controls in the water shed into the legal drain.

Len Dible stated to Robert Grove the plan that your talking about was a 36 inch drain to the ravine and the easement you asked for was an increase to 15 feet and also included a right of way without Mr. Dilling or anybodies participation. It was done unilaterally. Now you have a plan where your orifice from your detention pond is 6 and 3/8 inches, there is a lot of difference between the capacity and the end result of 6 3/8 orifice and a 36 inch drain. Defective engineering is what it is.

Mr. Grove stated correct, they have tried three times to help solve the problem downstream, they started out by just meeting the Drainage Board Ordinance on site, the Drainage Board was aware of the problem downstream, the developer agreed to a program to replace that \$40,000.00 plus, he also gave up one of his residential lots and increased the availability of storage on site to store off site water on development that was not acceptably so they went back strictly taking care of the developments own situation which met they had to cut things back to the 6 and some odd inches orifice plate, which he thinks has been accepted. All he is saying is that one of the requirements that they had is to be included in a legal drain and petitioned to do so. Now it is up to some other people to join into that petition.

Len Dible stated he had called Commissioner Moore about the continued construction. He stated some one wants to characterized it as someone just moving dirt around. He presented the two pictures at this time. The drain they are challenging is being constructed right now that is not just moving dirt around, they are constructing the drain.

Michael stated he had gone by October 3rd also, they were digging a basin. They have no building permits at this time. Michael has not signed off on the Construction Plans.

Michael stated in response to Mr. Dilling he asked the Board to get with them if they see fit and get some engineering started to see what is going to be needed on that downstream condition, it has to be done sooner or later.

Mr. Hoffman stated there is going to have to be a petition from somebody to do it. He does not see anything wrong with the petition they have, it is acceptably, if it was signed we could go ahead.

Mr. Dible stated they had an hour meeting with Michael on that petition.

Eugene R. Moore asked if they would not cooperate with the petition?

Mr. Grove stated no the developer has already agreed to go with a legal drain petition which has been presented, what ever the legal drain ends up being he is willing to be in cost, the developer is just a part of the water shed.

Mr. Dilling asked if he could add that part of his problem was that at the last meeting he was asked to join in the developers petition and indicated he would be willing to do so given to what he understood at that time. It was not clear to him what was being asked of him. In pursuing that it appeared as to what was being asked of him was to have his Lot 76 Potters Hollow in the description of Orchard Park which would mean that he would be responsible at least not for the construction but at least for a share of the maintenance of the regulated drain in Orchard Park. He regards that as being unreasonable, there would be no reason for him to join them under that condition. The thing has turned around 180 degrees, as Mr. Grove suggested at one point the developer had offered to participate in the reconstruction of the thing we are talking about now, he indicated he would give the appropriate easements for that and at that time he was willing to do that and has been willing all along. With only the stipulations that there be some guarantee that it would actually be a workable system and that it be legal. There was never response given to that; in fact at that point the developer simply took a different tact instead of offering any guarantee that his system would

ORCHARD PARK CONTINUED

work. His pleasure as to working with the Board as opposed to a private developer was that there was some guarantee down the road there would be re course for repairs and reconstruction which there would certainly not be if a private developer would do it and simply maintained it as a private drain. This is the only reason for the delay in the signing of the easement and to date there has never been any response given to that matter of a guarantee from the developer that his system would actually function properly.

Robert Grove stated as he understands Mr. Dilling was asked to join in the same petition for the legal drain for which any one in that legal drain area is going to have some in put into the maintenance and the cost of reconstruction, not just Mr. Dilling or Orchard Park, but people as far over as Potters Hollow. Its got to be decided exactly what is going to be done.

Len Dible stated there is no petition from Orchard Park or Orchard Heights.

Robert Grove stated there is for Orchard Park.

Mr. Dible stated Orchard Heights petition is down the road some where.

Robert Grove stated first all the water shed has to be defined. Orchard Park has petitioned a portion of the legal drain, the legal drain description has not been defined at this point, it will definitely go south of Union pick up a portion of Orchard Heights and a lot area downstream it is going to be a large watershed.

Mr. Dilling stated when he raised that issue with Mr. Spencer two weeks ago, the point was made that Orchard Park regulated was completely internal to Orchard Park and everything up stream of Orchard Park by passed the regulated drain involved in Orchard Park. That is correct. Mr. Dilling stated this is why there was no reason for Lot 76 to join. Why join Lot 76 which includes a much large water shed with the internal mechanism of Orchard Park, this simply did not make sense to him on reflection and he offers that explanation because at the last meeting that he tentatively agreed to join the petition, but he wanted to make it clear why to this point he has not. He needs to know exactly what he is being asked to do.

Robert Grove stated as he understands it on Mr. Dillings part it is a good faith effort just like it is on Orchard Parks part. If the whole mechanism starts a petition for the whole water shed area all of sudden when find out that Mr. Dilling is not going to have anything to do with it and Mr. Dilling is setting right in the main stream of things and a very important part of the drain.

Mr. Dible wanted to make sure that the board understands what this out flow is. He explained about 12 feet from the curb on the other side of street from Mr. Dillings property there is a collectors manhole into that man hole at this time was an 18 inch drain that connects with the 15 inch drain that comes down along Creasey Lane and turns east and comes into the manhole(18") it has a 12 inch drain that picks up the two catch basins in the street in front of Mr. Dilling, a 15 inch drain picks up the two catch basins in front of the building that use to belong to Indiana Gas, it has a 15 inch out flow that goes over through Mr. Dillings property. All that is going in and now the proposal is to add this to it. It has been an effective drain for some time. Again he stressed the flooding in September. He has been getting a lot of inquires. This is an additional in put into this man hole. Is it considered a new channel or not? He considers it a new channel.

Mr. Hoffman stated as he understands according to the plan presented they are not going to run any more water off this land than they are now, if they do then they are not complying with the Drainage Ordinance.

Mr. Dible stated what they are saying there was zero percolation before.

Mr. Hoffman stated that could be as he assumes the calculations show what the run off was before and after because they are to show no more after than they do before. It is obvious there is a problem, the problem has to be solved and the only way the board has any power of solving it is to have a legal drain for the whole thing as he has suggested originally and he did not get much encourage is to go all the way to the Wildcat Creek because it is no good to have a legal drain go into something that is not a legal drain, this thing of putting a legal drain into gullies and valleys behind houses just does not work. Again he stressed a PETITION is needed.

Len Dible asked Mr. Hoffman if he is satisfied and you believe the flooding conditions they have been experiencing will not be worsened by the addition of Orchard Park? Todd Frauhiger answered-correct because that water will be detained in a pond, the water got there whether it goes through the 15 inch- or Collector Man hole where it goes across the road and goes through the side yard, by the Ordinance it states by the 100 year develop flow must be collected and detained and discharged at the rate of the 10 year undeveloped flow. In the calculations they took the existing land as it is now, they calculated what the flow is now coming off that land and then they developed their land of which they are putting development on, they put 100 year storm on to that subdivision collect it in the pond and discharge at the 10 year undeveloped rate and what you get from a 10 year storm from the existing land right now.

Mr. Dible stated now it over flows to curb and erosion damage is a direct function of how much water there is to overflows to curb or how long. Mr. Dible used the storm in September again as example. Todd stated he can believe that.

Mr. Dible stated if that would happen and the detention ponds are not empty its going to wash Mr. Dillings house away.

ORCHARD PARK CONTINUED

Todd stated what they did they took Mr. Dibles comment that the water was actually coming out of the inlets and they used the inlet elevations to tell on the pipe print out of pond, so anything in the pond below the elevation of the street grates they would not let them consider. They figured why they would be there going to be backing up through the system and fill the pond up to that level. Storage had to be obtained above that level of the inlet of the streets. Mr. Grove stated Mr. Frauhiger was correct and another thing to keep in mind that water does build up in the streets.

Mr. Dible asked if the collector manhole he described where it now sits. What do you classify it as Mr. Hoffman, what kind of a drain?

Mr. Hoffman stated it is not a legal drain at this time. Mr. Hoffman asked if it was in the right of way? Yes. Mr. Hoffman stated he did not know who put it there. Mr. Hoffman stated he had not been out there.

Mr. Dible invited him out and he would take him on his special tour.

Eugene R. Moore stated the area was put in years ago and there are many problems.

Mr. Dilling asked about assessments and definitions of water shed of legal drains, explanation was given.

The board explained to Mr. Dilling his position of Lot 76 being in the legal drain. He stated he was objecting to being asked to join the legal description of Orchard Park which was asked of him last week. Mr. Hoffman stated he did not think that was it. Explanation continued to clarify Mr. Dillings concerns.

Michael stated he had understood David's concern if he joined the petition that he would be a part of them. Discussion continued.

Michael asked if Mr. Dilling would sign this petition that he has prepared, could the board start the wheel in motion to look at that engineering down stream? Answer - yes.

Mr. Hoffman stated it could be paid out of General Drain to be paid back when assessments are made

Mr. Dible stated he had talked to Mr. Baumgardt who was the original developer in regards to the Collector Man hole, Mr. Baumgardt stated he turned that over to the county, the county said he may have thought he turned it over, but we did not take it so that makes it a public drain, is that right?

Mr. Hoffman stated it is probably a mutual drain. Mr. Dible says it fails to test to be a mutual drain, it was not constructed with the expressed mutual consent of property owners, therefore it must be a public drain. Mr. Hoffman stated he didn't think it could be a public drain unless it would be under the jurisdiction of the court there hasn't been any proceedings.

Mr. Dible stated it is important how it is classified as you have several sets of procedures, he would like to know what it is.

It is probably still a private drain if Mr. Baumgardt put it in and didn't have any approval from other land owners. Discussion.

Discussion of having Michael enter into a study of the watershed area as was done with Elliott ditch and pay from General Drain, cost will be paid back at the time of assessment. Michael stated the watershed area needs to be defined, and the board needs to decide where point A is. Discussion continued.

Discussion of the September 13 minutes were discussed again.

Wildcat south be defined in the watershed.

Discussion of whether the drainage board has the authority to hold up the construction of Mr. Scheumanns based on something downstream as long as they comply with the ordinance.

Mr. Dilling stated at this point we need explanation as to their meaning of conditions downstream.

Todd stated the addressed meant that basically it be studied and solution be generated, whether it be a private solution, a county solution.

Discussion of Orchard Park continuing with out meeting that condition.

Mr. Dible discussed with the board definitions of legal drain and regulated drain and jurisdiction over regulated drains.

Mr. Dible challenged a new channel, a letter is on file.

Discussion. Mr. Dible also challenged Orchard Park petition because it does not specify which section it is written under. He wants some one to tell him what they believe the legal classification of the collector man hole is. He stated there is no procedures for public drain. Sue Scholer told him to talk to his legislator.

Mr. Dilling signed petition presented.

Mr. Dible and Mr. Dilling volunteered to carry petitions.

RECOMMENDATION REQUIREMENTS FOR HYDRAULIC PERMIT APPLICATIONS

Michael presented memo of recommendations from Todd Frauhiger-CBBEL Indianapolis on what has to be submitted with drainage calculations when submitted to the board for review, he requested the board to review and he requested it be adopted. Need to get it into the proper language and put in the drainage ordinance.

Memorandum reads as follows:

TO: Mike spencer, Tippecanoe County surveyor, Project Files
 FROM: Todd Frauhiger - CBBEL Indianapolis
 SUBJECT: Requirements for Hydraulic Permit Applications

It is the recommendation of CBBEL that the following minimum standards be adopted by the County Drainage Board for hydraulic permit applications. If these standards are adopted, permit review will proceed in more expedient, efficient manner. At the present time many permit reviews are delayed while waiting for additional information from the design engineer.

It is our recommendation that the following be submitted with all applications in addition to the requirements of the Tippecanoe County Drainage Ordinance:

1. A hydraulic Report detailing existing and proposed drainage patterns on the subject site. The report should include a description of the present land use as well as proposed land use. Any off-site drainage entering the site should also be addressed. This report should be comprehensive and detail all the design steps which the design engineer took during the design.
2. All hydrologic and hydraulic computations should be included in the submittal. These calculations should include but not be limited to: runoff curve numbers or runoff coefficients; runoff calculations; stage-discharge relationship; times-of-concentration; and storage volume.
3. Copies of all computer runs. These computer runs should include both the input and the outputs. A floppy diskette with input files will expedite the review process.
4. A set of plan drawings stamped by a Registered Professional Engineer or Registered Land Surveyor showing all proposed detention areas, storm sewers, inlets, outfall structures, open ditches, culverts and bridges.
5. A set of exhibits should be included showing the drainage subareas and a schematic detailing how any computer model inputs were set up.
6. A conclusion report summarizing the hydraulic design and detailing how this design satisfies the Tippecanoe County Drainage Ordinance.

We feel that if these minimum standards are adopted, the review process will benefit greatly. Costly delays will be reduced, and the overall quality of the engineering will improve.

Sue W. Scholer moved to instruct Mr. Hoffman to re-draft the Ordinance to incorporate the items in the October 3, 1989 memorandum presented, seconded by Bruce V. Osborn, unanimous approval.

BROOKFIELD HEIGHTS

BROOK
FIELD
HEIGHTS

John Fisher reported that construction line grades are being set at this time and the legal drain in the Subdivision goes to the Wildcat Creek. Construction will start this afternoon.

There being no further business the meeting adjourned at 11:00 A.M.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

ATTEST:

Maralyn D. Turner

Maralyn D. Turner, Executive Secretary

Sue W. Scholer

Sue W. Scholer, Board Member

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, NOVEMBER 1, 1989

The Tippecanoe County Drainage Board met Wednesday, November 1, 1989 with Eugene R. Moore Chairman calling the meeting to order at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Those present were: Bruce V. Osborn and Sue W. Scholer Board Members; J. Frederick Hoffman, Drainage Attorney; Michael J. Spencer, Surveyor; Todd Frauhiger, Drainage Consultant; Maralyn D. Turner, Executive Secretary; and Don Sooby, City Engineer, others present are on file.

Norfolk and Western Railway Company-SIA

Norfolk
Western
SIA

Michael J. Spencer wanted it to be put on record that the agreement between Norfolk and Western Railway Company and Tippecanoe County Drainage Board, concerning the cost sharing of the installation of multi-plate pipe-arch in Lafayette, Indiana: M.P. SP-251.57, Station 13283+10 has been fully executed and first installment is due on December 15, 1989 and a bill will be sent.

SIMON AND ASSOCIATES-WILSON BRANCH

WILSON
BRANCH
SIMON/
Associates

Richard Boehning representing Simon and Associates along with Myles Minton of Simon and Associates and Bob Mossbaum engineer with Simon organization.

On October 4, 1989 a petition was filed with Board requesting several things:

1. Allowing Simon and Associates to re-locate a portion of the Branch 13 Wilson Branch of the Elliott Ditch.
2. Have the new easement approved and also to provide for the vacation of the old easement upon the new drain being reconstructed and the new grant of easement being submitted to the Board.

At that time Mr. Hoffman wanted to review the legal description of the new easement and wanted to make sure that it was described in a fashion which met his approval that being so many feet from the edge of the top of the bank. They have revised the legal description and submitted to Mr. Hoffman. There was an open question that Michael Spencer had on how wide the easement should be from the top of the bank, he wanted to make sure there would be sufficient room for maintenance. A new Exhibit "C" was presented to go with the petition submitted. They asked approval of the petition. It reads:

DESCRIPTION
EXHIBIT C
PROPOSED WILSON BRANCH OF ELLIOTT DITCH

Describing a portion of the Wilson Branch of the Elliott Ditch lying principally through the real estate commonly known as K. M. Simon, Inc.

That area described being one half of the proposed open channel of the Wilson Branch of the Elliott Ditch plus 30 feet from the top edge of the bank on each side of such open channel along the following described line:

Commencing at the northwest corner of the Northwest Quarter of Section 2, Township 22 North, Range 4 West, Wea Township, Tippecanoe County, Indiana; thence South 00 degrees 29 minutes 20 seconds East, 761.40 feet; thence Southeasterly on a curve to the left have a central angle of 00 degrees 52 minutes 24 seconds, a radius of 17,188.91 feet, an arc length of 262.01 feet; thence South 88 degrees 47 minutes 19 seconds East, 361.51 feet, to a point in the centerline of the Wilson Branch of the Elliott Ditch as now exists, and the Point of Beginning of this description; thence North 15 degrees 04 minutes 32 seconds East, 230.00 feet; thence North 47 degrees 47 minutes 53 seconds East 551.37 feet; thence North 12 degrees 47 minutes 53 seconds East, crossing into the Southwest Quarter of Section 35, 22 North, 4 west, Fairfield Township, 578.65 feet; thence North 22 degrees 51 minutes 30 seconds west, 328.04 feet; thence north 22 degrees 08 minutes 30 seconds East, 47.71 feet; thence North 62 degrees 27 minutes 30 seconds East, 22.82 feet to the centerline of Ross Road, as now exists, and to the Point of Terminus of this description. The side lines of the open channel and easement are extended to the property lines without gaps or overlaps.

Mr. Hoffman stated as far as the legal description it was satisfactory to him provided that it is satisfactory to Michael in regards to the 30 foot easement, this was the only question he had open on the description.

Michael stated he had spoken to two contractors who have the equipment that would reach this particular channel with the width it is a different situation; and they felt they could operate their drag line in the 30 foot easement as long as it was known there was no over head structure or any thing else that would be in that 30 foot easement as it will take a large piece of equipment which has a lot of swing to clean the ditch.

Mr. Hoffman asked Simon Associates what they have adjacent to the easement? The easement will be from the edge of the top of the bank, there will be a building outside the 30 foot easement their will be no permanent structures, there will be incidental cars and semi-truck trailer on delivery.

Mr. Hoffman asked how close would the building be? As stated previously it will be outside the 30 foot easement. There will be no over hangs. Michael again stated his main concern was over head utility lines. Their intent is to go under ground with utilities.

Bruce V. Osborn asked if they would be black topping on the easement? Answer- Concrete or Black top, it will probably be extra strength black top. Bruce stated there should be an agreement should the black top be destroyed or impaired that it will be up to Simon and Associates to fix it, not the contractor. Myles Minton stated it would not be a problem, they would agree to maintain the easement.

Sue W. Scholer asked if that was currently covered with the Ordinances and requirements on easements? Discussion. Mr. Hoffman stated it should be clear that the Association would be responsible and the contractor is not responsible if he damages the surface when he is doing work. Myles Minton stated they will be taking that into consideration in their design for the easement up front.

Bruce Osborn asked what about one of their buildings? Then that would be a problem.

Sue W. Scholer asked if there would be utilities in the easement? There could be a possibility, they do not have it laid out at this time. Plans are to be underground however they will come up and surface the building in the back. Discussion.

Bruce V. Osborn as about the Description of Exhibit "C" in the second paragraph the phrase, (one half of) plus the 30 feet. Bruce stated that the open channel goes with it automatically. Discussion.

After much discussion in the phrasing of paragraph two Mr. Hoffman stated a change could be made to read: That area described being the proposed open channel Wilson Branch of the Elliott Ditch plus 30 feet from the top edge of the bank on each side of such open channel along the following described line: Myles asked if the described line meant the entire channel? Answer-yes. Discussion.

Bruce V. Osborn moved to accept Exhibit "C" of the Wilson Branch re-location with the changes as read, second by Sue W. Scholer, unanimous approval.

Richard Boehning stated they are also asking for the petition to be approved as they are asking to re-locate the drain. Discussion of vacating at this time. Vacating will not take place until the reconstruction of re-location is installed. Richard Boehning stated that once the board approves the petition then when they re-locate the drain he will file before the drainage board a grant of easement using the revised legal description, report to the board that the drain has been reconstructed have Michael J. Spencer check it out after he approves it will automatically be deemed vacated. Their current petition covers that.

Sue W. Scholer moved to accept the petition for consent to relocate portions of a legal drain Branch #13 of the Wilson Branch and to vacate the easement described in Exhibit "D", seconded by Bruce V. Osborn, unanimous approval.

ORDINANCE NO. 89-37 CM

Bruce V. Osborn moved that the Tippecanoe County Drainage Board give approval of Ordinance No. 89-37 CM as read in the Special meeting of The Tippecanoe County Board of Commissioners, November 1, 1989, and that they be implemented in the Drainage minutes, seconded by Sue W. Scholer, unanimous approval.

ORDINANCE NO.89-37 CM

WHEREAS, the members of the Board of Commissioners of the County of Tippecanoe, in the State of Indiana are also members of the Tippecanoe County Drainage Board, and

WHEREAS, the members of the Board of Commissioners of the County of Tippecanoe, State of Indiana, did on the 7th days of November, 1988 adopt Ordinance No. 88-40 CM which established "Tippecanoe County, Indiana, A General Ordinance Establishing Storm Drainage and Sediment Control," commonly known as the "Tippecanoe County Drainage Code," and

WHEREAS, such ordinance was adopted and approved by the Tippecanoe County Drainage Board on the 7th day of November, 1988; and

WHEREAS, problems have arisen which have delayed the permit review process proved for by said Tippecanoe County Drainage Code because of additional information being required from the design engineer for the project which information has not been furnished at the time the application has been filed with the Tippecanoe County Drainage Board; and

WHEREAS, the Engineer, employed by the Tippecanoe County Drainage Board, has recommended that certain additional minimum standards be adopted by such Drainage Board for hydraulic permit applications; and

WHEREAS, it is the opinion of the Tippecanoe County Surveyor and The Tippecanoe County Drainage Board that the adoption of additional requirements to those now required by the Tippecanoe County Drainage Board will expedite the review process and provide for more rapid approval of applications filed with the Tippecanoe County Drainage Board.

NOW, THEREFORE, BE IT ORDAINED AND ENACTED by the Board of Commissioners of the County of Tippecanoe, State of Indiana and the Tippecanoe County Drainage Board that:

- A. The following additional documents be submitted with all applications filed for approval with the Tippecanoe County Drainage Board:

1. A hydraulic Report detailing existing and proposed drainage patterns on the subject site. The report should include a description of the present land use as well as proposed land use. any off-site drainage entering the site should also be addressed. This report should be comprehensive and detail all the design steps which the design engineer took during the design.
2. All hydrologic and hydraulic computations should be included in the submittal. These calculations should include, but not be limited to: runoff curve numbers of runoff coefficients; runoff calculation; stage-discharge relationship; times-of-concentration; and storage volume.
3. Copies of all computer runs. These computer runs should include both the input and the outputs. A floppy diskette with input files will expedite the review process.
4. A set of plan drawings stamped by a Registered Professional Engineer or Registered Land Surveyor showing all proposed detention areas, storm sewers, inlets, outfall strictures, open ditches, culverts and bridges.
5. A set of exhibits should be included showing the drainage subareas and a schematic detailing of how any computer model inputs were set up.
6. A conclusion report summarizing the hydraulic design and detailing how this design satisfies the Tippecanoe County Drainage Ordinance.

B. The requirements set forth herein in Section A above, are in addition to the requirements of Section 6 of Ordinance 88-40 CM.

C. No application shall be considered by the Tippecanoe County Drainage Board or the Surveyor of Tippecanoe County until each of the items listed in Section A above of this Ordinance are submitted to the Tippecanoe County Drainage Board.

D. This Ordinance shall become effective after its final passage, approval and publication as required by law.

Enacted at Lafayette, Indiana on this 1st day of November, 1989.

BOARD OF COMMISSIONERS
OF THE COUNTY OF TIPPECANOE,
STATE OF INDIANA,

Bruce V. Osborn, President

Eugene R. Moore

Sue W. Scholer

ATTEST: Sarah S. Brown, Auditor

Adopted and Approved by the Tippecanoe County Drainage Board at Lafayette, Indiana on this 1st day of November, 1989.

TIPPECANOE COUNTY DRAINAGE BOARD,

Eugene R. Moore, President

Bruce V. Osborn

Sue W. Scholer

ATTEST: Maralyn D. Turner, Secretary

1203H

TWYCKENHAM

TWYCKENHAM

G. Mark Smith developer asked to be heard, but since he was not on the agenda the Board could not give any approval; however the Board had discussion. The city has accepted one of the ponds there are two ponds the city will not accept, therefore, the developer is going to set up a Homeowners Association. Mark stated that Michael and Fred have reviewed the Homeowners covenants. Mr. Hoffman stated he wants a letter from the city. Discussion of construction plans and the two basins and the letter of October 24, 1989. Don Sooby stated upon approval by the Drainage Board it would be helpful to the City if they could have the additional conditions mentioned in the letter. Discussion on making a legal drain. Michael's opinion on it was if it was going to be a legal drain it would all have to be a legal drain; not just a section, it should start across the road. Michael pointed out that the city has asked on the original section they have asked for some additional things to be done. Michael stated he had felt comfortable before. Again Fred stressed that a new letter should be received from the City as to what bases

they want done. Michael stated this was the one that only had the city listed and if the County was going to be involved in any way the County should be listed.

Mr. Hoffman stated he does not recall getting any revised covenants. Discussion of vacation.

Mark stated they want it conditionally vacated. Bruce asked with no illusion to a legal drain. They want it vacated, they continue to vacate until they are done. Each time they will come in to say they will substitute their new system, and when the new system is finished and acceptable by the City, then the drain will be vacated as they can not sell the lots.

The additional conditions being requested by the City of Lafayette are as follows:

1. Add concrete headwalls w/appropriate cut-off walls to each drainage pipe entering or leaving both of the detention ponds. Wingwalls should have slopes no steeper than 2:1 with sideslopes of ponds warped in to meet this slope.
2. Add protective fences around end of each drainage pipe entering or leaving both of the detention ponds.
3. Add structurally-designed child/animal guards over the end of each drainage pipe entering or leaving both of the detention ponds.
4. Establish grass cover over bottom and side slopes of both detention ponds using soil amendments and/or topsoil as necessary to get grass established in the sandy soil.
5. Add sod along both sides of concrete gutters in flowline of both detention ponds. Review width of concrete gutters for adequacy in light of what is to be done in the existing detention pond.
6. Provide inlet capacity of at least 150% of calculated quantity of run-off to be picked up by catch basins in the streets and at least 200% for field inlets. This will allow for partial blockage of inlets by debris which always seems to be present in and around construction sites.
7. Emergency routing swales between lots, if any, should be identified on the construction plans and AS-BUILTS for future monitoring purposes.
8. Provide drawings and calculations for the drainage system showing details of detention ponds, basis for pipe sizes, capacity of detention ponds, etc.

Sue asked Mr. Sooby if the City would like to see it a legal drain? Answer that has some merit, as the Homeowners Association is not going to have the same interest in maintaining. Mark stated The Homeowners Association allows the City to come in and assess the Homeowners if they do not perform their functions. Michael asked if they set out a yearly fee? A maximum fee of \$50.00.

Mr. Hoffman stated this will have to be put on the Agenda for December 6, 1989 meeting, plus a letter from the City including the County conditions. Michael asked Mark to send revised covenants to him and Mr. Hoffman another.

FARMINGTON LAKES

FARMINGTON LAKES

Robert Grove asked for final approval on revised plans.

They agreed to the double the culvert and all items have been addressed. The Board asked if George Schulte had given approval. George had a concern with the double culverts which they revised the plans to put it in. George and Michael have a full set of plans, but have not had the time to review them. Michael asked if adding that seconded set of inlets changed the pipe size? NO. It was just a restriction at one inlet. Michael asked if it was going to handle the 100 year storm event now. Correct. George's concern was the single inlets would be by-passed and some of that water would go on ???

Sue W. Scholer asked George Schulte if he had any concerns that the Drainage Board should be aware of?

Robert Grove stated everything on the revised plans have been addressed.

George stated that the only thing that he can think of is on the Storm drainage design where the inlets were doubled do the pipes have the capacity to carry the Q100? Robert stated he did not think it was a problem. George asked to have time to set down and study the revision.

Farmington Lakes was recessed to Friday, November 3, 1989 at 9:00 A.M.

ORHCARD PARK

ORCHARD PARK

Todd Frauhiger Drainage Consultant presented a report of Orchard Park legal Drain Design, report is on file.

1. The watershed has been delineated and is shown on Exhibit 1.
2. For purposes of our study only, two on-site field reconnaissances have taken place to access the existing condition of the ravine system and to aid in the final drainage area delineation.

3. A TR-20 model was developed to determine the peak flows for the defined drainage area. These flows are calculated to the mouth of the ravine and should be adjusted as detailed later to the mouth of the ravine and should be adjusted as detailed later in this report for design flows further upstream.

Todd stated that he and Michael had worked with the City Engineers office and walked the ravine from Kensington Drive all the way down to the Wildcat creek. Drainage area was determined to be 235 acres to the mouth of the ravine.

Todd reported in conclusion that CBBEL'S recommendation that an overall master plan be developed as the next step in the design process. This master plan would determine the location and type of corrective work (i.e. erosion control, channel straightening, etc.), a priority ranking for corrective work based on an evaluation of severity for each location and an opinion of probable construction cost for the corrective measures.

If this was done the Board would have design flows, and basically what would need to be done to bring the channel up to County standards.

Bruce Osborn asked where the outlet was. Outlet is at the Wildcat creek.

Page 3 of the letter the design flows of years 10,25,50, and 100 are at the mouth of the ravine (at the Wildcat). These flows need to be adjusted for upstream design flows. In the report equations are shown on how the adjustments will be accomplished.

Majority of the work will have to be done on the upstream portion of the ravine up close to Kensington Drive and along Creasey Lane.

Michael stated the next step would be to have a hearing or an informative hearing, possibly have a petition there for the property owners to sign. Michael would not be able to answer any questions in regards of money unless the Board would have Todd do further study and then there may be a chance of having some guess estimate of cost and cost per lot.

Todd stated they were going to come up with a master plan and talk to some of the local contractors and contractors in Indianapolis, show them what they have and what they are doing and generate the cost.

Michael stated the next step would be to have the Board give approval to the report and proceed on with the next step.

Sue W. Scholer moved to accept the report as presented and authorize the next step as outlined in the conclusion of the report,seconded by Bruce V. Osborn, unanimous approval.

Meeting recessed for Kirkpatrick One Ditch.

KIRKPATRICK ONE DITCH

Doug Ridenour of Doug Ridenour and Sons, Clearing and Ditching presented a Cashier Check in the amount of \$50,000.00 plus a Personal Check in the amount of \$650.75, on September 18, 1989 Mr. Ridenour had presented a check for \$2,800.00. for the bid making a total of \$53,450.75 100% of his bid.

Bruce V. Osborn moved to accept the bid received from Doug Ridenour and Sons, Clearing and Ditching in the amount of \$53,450.75 and execute the contract to Doug Ridenour and Sons, Clearing and Ditching, seconded by Sue W. Scholer, unanimous approval.

The meeting recessed at 10:30 A.M. until 9:00 A.M., Friday, November 3, 1989

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, DECEMBER 6, 1989

The Tippecanoe County Drainage Board met Wednesday, December 6, 1989 at 9:00 A.M. in the Tippecanoe County Office Building 20 North Third Street, Lafayette, Indiana with Eugene R. Moore Chairman calling the meeting to order.

Those present were Bruce V. Osborn and Sue W. Scholer Board Member; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; Todd Frauhiger, Drainage Consultant; and Maralyn D. Turner, Executive Secretary; and Don Sooby, Lafayette City Engineer. Others present are on file.

WAL-MART

Cliff Norton engineer for the Wal-Mart development presented drainage plans and asked for final drainage approval. Wal-Mart has 80 acres and in the plans presented 52 acres will be developed. The city has the same plans in their office. Mr. Norton stated the plans meet the discharge criteria. Calculations have been presented and on file. Run-off presented in plans would be 80 cfs.

Michael stated that since it was tributary to the Treece Meadows drain they restricted their release rate to the same as others that are tapped into the drain to the .11 cfs per acre after development, it will drastically reduce the amount of water that gets there. The problem is emergency routing. Water will be going through Treece Meadows, this is a problem. This will be a benefit up to the 100 year storm event, anything greater than 100 year storm event will be a problem.

After presentation questions and discussion continued.

What is going to be done with the 100 year storm? Michael stated he has Burke Engineering looking into the Wilson Branch from Simon's where the channel is sized for the 100 year storm event all the way to the end of Treece Meadows on a typical cross section of what channel size will be needed. Getting this plan will be taking some time to get the water down to the regional detention pond this is what they are building it for.

Fred Hoffman asked, at this time with these plans would the 100 year storm event be worse than it is now? No. With 150 year storm it would be worse.

Don Sooby stated it would be debatable as to whether it would make it worse or not, presumably after the ground gets saturated all the water that hits it is going to run off whether it is farmland or paved surface.

Plans presented complies with the Ordinance.

Bill Long land owner to the South of the property in Treece Meadows and to the South of McCarty Lane stated they have had major flooding problems within Treece Meadows under the current plan, also problems with water getting into houses. He stated they are anxious to have Wal-Mart come to the community.

Two areas that Mr. Long has great concerns is: Emergency Routing and Correction, either directly or contributing to the Wilson Branch solutions. He feels this has not been addressed in the plans presented. The project immediately south of McCarty Lane the emergency routing was required to go around the project. He asked that that standard be applied for Treece Meadows. The question of will we be worse off with this plan or won't be worse off? Mr. Long stated that he maintains we will be worse off as what has not been addressed is that we have the 100 year storm because of the impervious nature in the amount of water put in. He stated he is not an engineer, but the effect of the 100 year storm is going to be over a greater length of time. Mr. Long asked that this be tabled until emergency routing around Treece Meadows can be addressed, and two addressing the ultimate solution to the Wilson Branch problem that exist from the GTE south till they get into the Wilson Branch that they have all worked collectively on in the past.

Mr. Long stated that he and his engineer Paul Coutts commend the on site storage and the development plans presented, they are quite adequate, but are immense in the emergency routing.

Bruce V. Osborn asked Don Sooby if he agreed or disagreed.

Mr. Sooby stated they continue to get complaints about drainage in Treece Meadows. He agrees with Mr. Long there are problems. Treece Meadows was approved in the 1970's Discussion of the problem continued.

Mr. Long stated that they proposed to take their emergency routing for Burberry through the development and that was dis-allowed they had to dig a ditch around Burberry, he is asking that that standard be applied to around Treece Meadows for this water.

Mr. Norton stated that they had felt they had complied with the Drainage Ordinance and was not aware of emergency routing in the Ordinance.

Todd Frauhiger stated in the Ordinance it states that there should be emergency routing over flow for the detention pond, in this particular case the problem comes back to the overflow. Todd did a study of the 100 year 24 hour storm, his calculations concurred very closely with the calculations submitted, shows roughly 5 cfs discharge with the 100 year storm, that is compared to the 10 year undeveloped discharge current coming from

the 80 some acres with a little over 80 cfs. Comment was made that it would be a longer duration, this is correct but to say that 200 cfs with 100 year storm over an hour is worse than 5 cfs with 100 year storm over 20 hours.

Paul Coutts had a question for Michael, back when the analysis was done for Treece Meadows, he doesn't think it could pass for a 100 year storm again. Michael stated no, it was only designed for a 10 year storm event.

Paul stated that two things could happen, one is if there is a bad storm and the detention pond is already full from previous storm and turn around with another 100 year storm, where does the emergency routing go. Comes south on to Moore property on to Creasey Lane. There are serious problems.

Mr. Hoffman asked if there was emergency routing what would be done with the water? Water would be put down farther and no place for it to go. Discussion.

Paul Coutts stated there needs to be a solution found and a contribution made in the solution of how to get emergency routing around Treece Meadows and the land around that area.

Mr. Hoffman asked that in his statement he means when a solution is found that they should contribute to it. This is correct.

Sue W. Scholer asked how close are we to having some work done? Michael stated they could have something back from Chris Burke by the first of the year, he would check with Chris.

Eugene Moore asked how are they going to bring water from Treece Meadows into the Wilson Branch. Gene thinks this is a problem. Michael stated there are possibly two ways to do it, it will depend on how and the best way they want to do it. At Creasey Lane a bridge would be needed. It has to get from Creasey Lane east then north at the east side of Treece Meadows. Bill Long stated that Treece Meadows by itself is its own constriction. His concerns are not only as a landowner of Treece Meadows, but the residents of Treece Meadows. Another concern is Duration Construction Phase. Discussion of the emergency routing continued.

Michael again stated that Chris Burke is studying what cross section will have to be put in there to take care of the storm event. Discussion continued.

Sue W. Scholer stated we are basically looking at the need of reconstruction of the Wilson Branch.

Michael stated that Wal-Mart has met the requirements.

Todd Frauhiger stated in conjunction with the assumption that Wilson Branch will be sized large enough to take the 100 year storms someone will have to look at feasible ways to get the water down to the Wilson Branch. This seems to be the only alternative.

Michael asked Mr. Sooby what his thoughts were. He stated that something has to be done, but he is not sure what way. He feels they are faced with the problems today without the Wal-Mart development. Regardless of what storm event there is Treece Meadows is faced with a problem of flooding. With the facility it reduces the flow up to the 100 year event beyond that it is a problem again.

Bruce V. Osborn stated that this project and any other proposals in this watershed area should be held up until there is way to get a positive outlet to the Wilson Branch. All due respects to all engineers and statements made today things get worse as something goes up in the area, therefore we need to hold up development. Discussion.

Mr. Long stated he felt there should be some kind of time table put in to come up with emergency routing.

Sue W. Scholer stated it looks as if the board has no choice but to look at reconstruction and moving it as quickly as they possibly can for the whole area.

Michael asked Mr. Norton if he was in a position to speak for Wal-Mart in regards to reconstruction of the Wilson Branch if Wal-Mart would or would not oppose. Mr. Norton stated he did not think Wal-Mart would oppose to reconstruction. He felt they would have no reason to oppose it.

Mr. Hoffman asked if they would contribute their share of the cost for reconstruction? Mr. Norton stated they would have no reason and would comply with whatever assessment would go along with the project.

Mr. Norton's concern was the waiting time. This would put Wal-Mart in a bind.

After much discussion the Board tabled any action for the Wal-Mart Drainage Plans presented until January 3, 1990. Hopefully Mr. Burke can have information to us by January 3, 1990, whether it would be preliminary or final.

The Wal-Mart acreage will be annexed into the City January 2, 1990.

Discussion of both City Drainage Ordinance effective date. After they are approved by the respective cities the city attorney's are to sit down with Mr. Hoffman and go over the respective Drainage Ordinance. City of Lafayette was to be established Thursday, December 14, 1989.

Mr. Sooby stated that the presence or absence of the City Drainage Ordinance is not going to affect Drainage Board since it is tributary to the Treece Meadows, Wilson Branch and the Elliott Ditch. Ultimately the Drainage Board is going to have to act on it. Maybe they will be able to explore some of the things that might be satisfactory to the Drainage Board, reason for them to approve the Drainage Plan. He feels to have Wal-Mart wait until the Wilson Branch is reconstructed is probably not going to be a satisfactory answer. One point brought up of the back to back storms, this would certainly aggravate conditions downstream. If a supplementary detention basin were constructed to cover the event of back to back storm, would this be a reason for the Drainage Board to go ahead and give approval.

Sue W. Scholer stated that the issue that has been brought up today is whether the Board needs to look at additional emergency routing. Discussion continued.

Mr. Sooby wondered if the concept of a Supplementary Detention basin in lieu of an alternate for emergency routing. Again would this be an acceptable answer?

Again this refers back to the study of Mr. Burke's.

The Board postponed approval to January 2, 1990. Michael is to find out when Chris Burke can get study back.

Mr. Norton thanked the board and said he would be waiting to hear from them.

Mr. Long stated that Paul Coats engineer and his attorney Tom McCulley will be here, as he will not be able to be here for the January 2, 1990 meeting.

✓ TWYCKENHAM

Mark Smith developer presented his plan again in regards to vacating Ortman Drain and asked if his restrictive covenants was OK? The covenants has to be changed. Insertion of Drainage Board had been left out, the page needs to be re-typed. Mr. Hoffman has some new language that needs to be inserted as soon as that change is made it can be approved. This will be recorded at the time they record the plat.

Before they had 5 continuances:

1. The installation of the new drainage system had to be in before the vacation would occur.
2. Have to connect any field tile that may run across. Mrs. Purdy's concern.
3. Have to submit Certified As-Built drawings to Don Sooby, City Engineer and Michael J. Spencer, Surveyor.
4. Storm system has to be accepted by the City of Lafayette for maintenance.
5. That no building permits can be issued within the section until such conditions are met or satisfied.

Construction Plans have been approved by the City of Lafayette. Storm drainage system has to be accepted before any vacation occurs. Mr. Smith stated they are in agreement with the 8 conditionals, therefore why does the Drainage Board become involved.

Mr. Sooby stated since they are now a part of the approved Construction Plans the City would be more comfortable that the Drainage Board list those conditions. Mr. Hoffman asked that the Letter of October 24, 1989 from the City of Lafayette to the Drainage Board be made a part of the minutes.

October 24, 1989

Mr. John E. Smith
smith enterprises
2500 Glick Street
Lafayette, Indiana 47905

Dear John:

In order that a repeat of the recent Twyckenham drainage problems can be avoided, request is respectfully made for the following changes to the construction plans for Twyckenham Estates, Phase one, Section 4 & 5 and Phase two, Section 2 & 4:

1. Add concrete headwalls w/appropriate cut-off walls to each drainage pipe entering or leaving both of the detention ponds. Wingwalls should have slopes no steeper than 2:1 with sideslopes of ponds warped in to meet this slope.
2. Add protective fences around end of each drainage pipe entering or leaving both of the detention ponds.
3. Add structurally-designed child/animal guards over the end of each drainage pipe entering or leaving both of the detention ponds.
4. Establish grass cover over bottom and side slopes of both detention ponds using soil amendments and/or topsoil as necessary to get grass established in the sandy soil.
5. Add sod along both sides of concrete gutters in flowline of both detention ponds. Review width of concrete gutters for adequacy in light of what is to be done in the existing detention pond.

6. Provide inlet capacity of at least 150% of calculated quantity of run-off to be picked up by catch basins in the streets and at least 200% for field inlets. This will allow for partial blockage of inlets by debris which always seems to be present in and around construction sites.
7. Emergency routing swales between lots, if any, should be identified on the construction plans and AS-BUILTS for future monitoring purposes.
8. Provide drawings and calculations for the drainage system showing details of detention ponds, basis for pipe sizes, capacity of detention ponds, etc.

Additionally, please advise me concerning the status of the establishment of the Homeowners' Association which is to be responsible for the maintenance of these detention ponds after your responsibility ends when all the areas tributary to the ponds have been built out. I will need a copy of the recorded legal documents for the Homeowners' Association and of the covenants of the Twyckenham Estates units that will be members of the Associations.

If you have any questions or comments on this matter, please contact me at your convenience. By copy of this letter I am advising the Tippecanoe County Drainage Board of our efforts to avoid a repeat of the problems that have been so much in the news lately,

Very truly yours,

Donald G. Sooby, P.E.
City Engineer

DGS:gc

cc: James F. Riehle, Mayor
Richard T. Heide, City Attorney
Dave Hawkins, Hawkins Environmental
Drainage Board
Mike Spencer
File

Mr. Sooby stated in his letter of November 13, 1989 he wanted to emphasize that the City is not accepting maintenance for the two additional detention ponds. This is being covered in the covenant. The letter of November 13, 1989 reads:

November 13, 1989

Tippecanoe County Drainage Board
20 N. 3rd Street
Lafayette, Indiana 47901

Dear Drainage Board:

I need your help to try to prevent the reoccurrence of problems we've experienced with a detention pond in Twyckenham Estates. These problems became apparent subsequent to my approval of the construction plans for Twyckenham Estates, Phase one, Sections 4 & 5 and Phase two, Sections 2 & 4.

By letter dated October 24, 1989, to John E. Smith of Smith Enterprises, I requested eight changes to the approvals already given by my office on the above-described construction plans. Enclosed is another copy of this letter for your information. You may recall at your Drainage Board meeting of November 1, Mr. Mark Smith indicated that they (Smith Enterprises) had agreed to similar changes on the existing detention pond and would have no objection to making these changes on the new ponds. To help assure that the changes are implemented, I am asking the Drainage Board to add these eight items to their list of requirements in conjunction with further vacation of portions of Ortman Legal Drain.

At your meeting of November 1, I advised you that the City of Lafayette will not be accepting for maintenance the two new detention ponds proposed by the developer of Twyckenham Estates, Phase one, Sections 4 & 5 and Phase two, Section 2 & 4. The developer proposes to establish a Homeowners' Association to provide required maintenance on these ponds. The proposed Declaration of Covenants, Conditions and Restrictions for the Homeowner's Association provides for the Drainage Board to provide maintenance in the event the Homeowners' Association fails to do so and to collect the cost for such maintenance from the Association. This would appear to provide reasonable assurance that the facilities will receive required maintenance.

In summary, request is hereby made that the Drainage Board add eight conditions, shown in letter to John Smith dated October 24, to the conditions of approval for vacation of portions of Ortman legal Drain.

If you have any questions on this matter, please contact me at your convenience.

Very truly yours,

Donald G. Sooby, P.E.
City Engineer

DGS:gc

enclosure

cc: James F. Riehle, Mayor
Richard T. Heide, City Attorney
Mike Spencer

DECEMBER 6, 1989 Continued

Fred Hoffman
Mark Smith
File

Bruce V. Osborn moved to vacate the drain as shown in Mr. Smith's request upon Mr. Smith complying with the 8 conditions set forth in the letter of Mr. Don Sooby, City Engineer of the City of Lafayette, Indiana to John E. Smith dated October 24, 1989 and the correction of the restrictions as discussed at this meeting and the recording of the restrictions as so corrected, the installation of the c drainage, the furnishing of As-Builts to the City Engineering department and the County Surveyor and the connection of all drainage tile in the area to the new substitute drain, and the City accepting the revised drainage and substitute drainage for maintenance exclusive of the ponds, with an understanding that no Building Permits will be issued until all conditions are satisfied by the owner of the Subdivision, seconded by Sue W. Scholer, unanimous approval.

✓ ORCHARD PARK

Todd Frauhiger stated for the legal drain being proposed for the Orchard Park area he has contacted two firms for survey proposals. John Fisher Land Surveyor and MTA Consulting Engineers from Indianapolis. There was a wide range in the cost for the project, as they both looked at a different scope. Discussion has been to do some revising in the proposals. After doing this they will contact two other local firms in getting cost and present them back at the next Drainage Board meeting. At this time the two figures are \$5700.00 and \$16000.00 as stated previously these were looking at two different scopes of work. It is recommended that the survey be done in air. Time is an element, now is the time while the leaves are off and when there is no snow. Watershed area is between 270-280 Acres.

Todd recommendation is to get started on it as soon as possible. This would be a new established legal drain. Discussion of having meeting for landowners. An informal meeting should be held, and then a formal hearing. Michael and Todd will make presentation at the January 3, 1990 meeting.

Sue asked if an informal discussion is held at the regular meeting in January what does the time table look like at that point. Michael stated it would possibly call for a Special Meeting as 30 day notice has to be sent.

John Fisher is to let Michael know in regards to when a flight survey can be made at the January 3 meeting.

Todd asked if a survey could be approved without a hearing?
Mr. Hoffman stated the only question would be how to pay for it. Discussion continued in regards to hearings.

✓ TRANSFER STATION

Bruce asked if the Board was going to be involved with the Transfer Station. Michael stated Drainage Board approval has to be given. John Fisher has drawings and he stated that he had informed the IDEM that there will be approval by the Tippecanoe County Drainage Board. John Fisher definitely wants the Boards approval.

Red Strange Realtor has some concern of Flood Plan in Hawthorne Ridge that is coming out from Hadley Lake reconstruction. Mr. Strange stated he had talked with City of West Lafayette and they are only planning to go to Road 500 North. Mr. Strange's concern is more water flowing down before it hits Burnett's Creek. Michael thought the study went all the way to the County Farm Road. Cole Associates are making the study. Discussion continued.

Bruce asked Fred to get a letter from Paul Coutts stating what the plans are.

Bruce moved to adjourn the meeting, seconded by Sue W. Scholer. Meeting adjourned at 10:20 A.M.

Eugene R. Moore

Eugene R. Moore, Chairman

Bruce V. Osborn

Bruce V. Osborn, Board Member

Sue W. Scholer

Sue W. Scholer, Board Member

ATTEST:

Maralyn D. Turner
Maralyn D. Turner, Executive Secretary

Sue W. Scholer called the January 3, 1990 meeting back in order.

Those present were: Sue W. Scholer, President; Bruce V. Osborn and Eugene R. Moore, Board Members; Michael J. Spencer, Surveyor; Todd Frauhiger, Drainage Consultant; Mr..

JANUARY 17, 1990 DRAINAGE BOARD MEETING CONTINUED

Hoffman was unable to set in the meeting as he had a conflict of meetings, and Maralyn D. Turner, Executive Secretary. Others present are on file.

WAL-MART

WAL-MART

Michael Spencer presented a letter of recommendation to the Board and Sue W. Scholer read the following letter.

January 16, 1990

TO: TIPPECANOE COUNTY DRAINAGE BOARD

RECOMMENDATION
URBAN

I have reviewed the Wilson Branch of the S.W. Elliott Ditch and based upon my inspection I request that it be designated as an Urban drain because a substantial part of the watershed has been converted to Urban land and an addition part is being converted from Rural land to Urban land.

DRAIN

I also request that it be classified as in need of reconstruction as an Urban drain.

WILSON

I also request that the long range plan be amended to give priority to the reconstruction of the S.W. Elliott Legal Drain including the Wilson Branch.

BRANCH

Michael J. Spencer
Surveyor

Tom McCully attorney representing Long Tree Limited asked what Urban drain is to be developed to include the Treece Drain. Michael stated the Treece Drain has been combined into the Elliott ditch. Discussion

Bruce V. Osborn moved to accept the recommendation as read from the County Surveyor Michael J. Spencer, seconded by Eugene R. Moore, unanimous approval.

George Davidson stated he had given his copies of the agreement to the County Drainage Attorney for him to review.

Michael stated Mr. Hoffman has looked at the agreement and asked that the following wording be inserted Paragraph 2 at the end in regards to PERFORMANCE. Mr. Davidson stated that the agreement had not been executed by Wal-Mart, he has presented it to Wal-Mart attorneys and they have approved the contents, Mr. Davidson had suggested to them that it be presented to the TIPPECANOE County Drainage Board to get approval of all language and then have Wal-Mart execute it and send it to Mr. Davidson and he in turn will see that Michael J. Spencer gets the agreement for the boards signature. Discussion of the agreement, agreement is on file.

The only question that the Board has at this time is the emergency routing and this problem is being worked on.

Michael stated that he had meetings with property owners downstream mainly Park East developers and Mr. Long that possibly will be affected by temporary drainage channel. Many questions were asked and some Michael could not answer as they got into widths of easements and depths of channels, none of the landowners downstream rejected the idea of the temporary channel, allot of questions in regards to temporary channels becoming permanent channels. This is why he wanted to get the recommendation of making an Urban drain so they can move onto an ultimate solution. Michael feels the temporary solution can be done and will relieve some of the pressure allot of engineering and field work needs to be done. Michael asked the Board to give him permission to go ahead and see if some of the engineering can get started. Funding would come out of General Drain Fund and be reimbursed at the time of completion of reconstruction. Discussion continued.

Tom McCully asked what temporary work is the Board talking about? Is it the same type of thing of Chris Burke's as the last time we met? Michael answered no, Burke's report has to do with the final solution for the whole watershed area, 100 year channel size, slope, and width. He is recommending a channel width of 40' bottom width of 2-1 side slope to carry the 100 year storm event from the upper region of the watershed down to the regional detention basin. Temporary solution is where the Treece Meadows ditch comes south along the east side of the subdivision and turns west through the subdivision continue on south crossing McCarty Lane bringing it back west to the existing channel that goes around Burberry picking it up at that outlet structure running a channel west to Creasey Lane down Creasey Lane to the 4'X 8' concrete inlet and into the pipe that runs parallel to Creasey Lane. Tom stated he had great concern about the cost of how and who was paying for the emergency routing. Michael stated the Board had voted to pay from the General Fund Elliott ditch for reimbursement for the engineering. Construction was not mentioned. Reimbursement would be on the watershed bases. He feels that it is throwing the burden of cost on the landowners who are not creating a problem. Michael again stressed his request was the engineering, not the reconstruction. Much Discussion continued.

Bill Long stressed he has concerns of the implementation of the emergency routing. He stated Wal-Mart should put their emergency routing in while they are doing their construction, the timing should be based upon the need. He feels that the engineering should be done by Wal-Mart, the emergency routing is a part of their construction plan. He continued his concerns that he had previously stated in the January 3, 1990 meeting.

Mr. Davidson stated that the proposal to look at the situation here and to develop the emergency routing should be implemented immediately. Until the Board's consultant can do that Mr. Davidson isn't sure what is being talked about in away of a solution.

DRAINAGE BOARD MEETING - JANUARY 17, 1990

Michael stated the only other solution is to not allow anything go into the watershed area until the final is done.

Mr. Davidson asked what kind of time element are they talking about that the Board has on the table? A guess 30 days. Discussion on time element, cost, easements, etc. continued.

Michael stated that the principal property owners and Wal-Mart should meet together. Michael will make arrangements for this meeting. Property owners involved GTE, Park 65, Richard Moore, and William H. Long. This would possibly take a week.

Eugene R. Moore stated he may have to with draw from voting on the matter.

After all this discussion, the Board agreed to table the motion made.

Wal-Mart will be scheduled for February 7, 1990 regular meeting.

There being no further business Eugene R. Moore moved to adjourn the meeting at 9:50 A.M., seconded by Sue W. Scholer, motion carried.



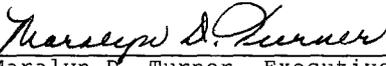
Sue W. Scholer, Chairman



Bruce V. Osborn, Board Member



Eugene R. Moore, Board Member

ATTEST: 
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
 WEDNESDAY, FEBRUARY 7, 1990
 REGULAR MEETING

The Tippecanoe County Drainage Board met in the Community room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Sue W. Scholer, Chairman called the meeting to order at 9:00 A.M. with the following being present. Bruce V. Osborn, Board member; Michael J. Spencer, Surveyor; Todd Frauhiger, Drainage Consultant; David Luhman, Acting Drainage Attorney; and Maralyn D. Turner Executive Secretary, others present are on file.

BROOKVIEW AND COUNTRY CHARM Section 8 SUBDIVISION

BROOKVIEW
 COUNTRY
 CHARM SECS

Dale Koon, P. E.. President of Civil Engineering Service, Inc representing Brookview and Country Charm Section 8 subdivisions requested final approval of drainage plans presented.

Michael J. Spencer stated that the Brookview Subdivision plans presented were in order, he recommended that proper erosion control techniques be incorporated during construction, and letter from P.S.I. approving construction easement. That the petition for the subdivision to be made a regulated drain for future maintenance.

Bruce V. Osborn moved to give final Drainage approval for Brookview Subdivision as submitted subject to including proper erosion control techniques during construction, and letter from P.S.I. approving construction in the easement, that the petition for the Subdivision be made a regulated drain for future maintenance, and final Drainage approval for Country Charm Section 8 as submitted subject to including proper erosion control techniques during construction, seconded by Sue W. Scholer, unanimous approval.

WATKINS GLEN SOUTH PART 3

WATKINS
 GLEN
 SOUTH PT3

Robert Gross R.L.S. representing Watkins Glen South Part 3 presented plans and asked for final drainage approval. There are 11 lots in this phase, but they want to build a detention pond that will provide storage for more lots and future development. Plans are on file. Discussion of presentation continued.

Sue W. Scholer asked if this was a part of a legal drain system. Answer - NO.

Michael Spencer stated there is one question, what kind of maintenance are they going to have are they going to include the whole subdivision or just this section. Discussion.

Michael recommended that proper erosion control techniques be incorporated during construction also address maintenance. Discussion of maintenance and legal drain issue continued.

Bruce asked where the outlet was. Michael answered the ultimate outlet is along the railroad tracks.

Bruce V. Osborn moved to give final drainage approval to Watkin Glens Subdivision subject to erosion control and clearance through the attorney of wording for maintenance and addressing the legal drain, seconded by Sue W. Scholer, unanimous approval.

WAL-MART

WAL-MART

David Luhman, Acting Attorney read letter from Horne Properties, Inc. the letter reads.

February 6, 1990

Commissioner Sue Scholer
 President
 Tippecanoe County Drainage Board
 20 North Third Street
 Lafayette, Indiana 47901

Dear Commissioner Scholer:

This letter will serve as the commitment from Wal-mart Stores, Inc. to modify surface drainage in the Wilson Ditch watershed through the construction of a by-pass ditch around Treece Meadows subdivision and replacement of a 24" downstream storm sewer through the installation of additional ditching.

Mike Spencer and your consulting engineers have indicated that approximately 2600 linear feet of open channel (of 10' bottom width and 3:1 side slopes) would be required. Wal-mart has authorized me to commit to this work in order to be allowed to proceed with their plans for development of the Korty tract.

There are several details concerning the project that should be resolved over the next several days. I greatly appreciate your, Commissioner Osborn, Commissioner Moore, and Mike Spencer's efforts in our behalf to expedite resolution of our scheduling problem. It is my understanding that this letter along with our executed Drainage Agreement will allow you to approve our drainage plan on February 7, enabling us to proceed with the next phase of our development.

We look forward to a spring ground breaking and will keep you appraised of our schedule. Thanks again for your efforts in our behalf.

Sincerely,
George R. Davidson, Jr.
Vice President
GRD/ad

Attached to the letter is a Drainage Agreement which has been reviewed and is submitted to the board for approval and has been signed by Patrick E. Peery, Assistant Secretary on behalf of Wal-Mart Properties, Inc and Curtis H. Barlow Vice President of Real Estate.

Sue asked if the drainage agreement referred to maintenance on the drainage facilities in the drainage plan.

George Davidson, Jr. Vice President of Horne Properties, Inc. stated that since last meeting he had met with other property owners within the water shed from whom they would have to arrange some easement agreement, with the help of Michael Spencer meetings have been held with these property owners, some plans have been worked out verbally in arrangements to obtain easements for construction of the ditch, this is for off site. The drainage easements that have been presented and executed by Curtis Barlow in behalf of Wal-Mart Stores refers to maintenance of on site facilities. The commitment letter is the letter the Board requested from Horne Properties, Inc. reviewed the proposed modifications to the drainage scheme in the Wilson Branch watershed with Wal-Mart's people. They have authorized Mr. Davidson to commit them to do the work that has been discussed. Mr. Davidson has reconfirmed with Michael Spencer since the last meeting that the drainage plan for site water is in compliance with the Drainage Ordinance. With the information in front of the Board Mr. Davidson requested approval of Wal-mart Drainage Plan so they may proceed with their project.

Bruce Osborn asked who the easements went to? Mr. Davidson's answer was that it was his understanding that the easements would be granted to the County. The facilities that would be built would be County, public facilities that would allow any adjacent land owner to discharge into them subject to County Drainage Board. Sue stated that in other words it would become a part of the legal drain system. Mr. Davidson stated this was the desire of the land owners.

David Luhman stated there were 5 main points that needed to be addressed they are:

1. Wal-Mart would put in temporary open ditch as per Mike's plan. This will be approximately 2600'. The width of the easement will be 80'.
2. Wal-Mart construct ditch pursuant to plans approved by the County Surveyor Michael Spencer.
3. Wal-Mart will petition for it to be a legal drain.
4. Gipe, Long, Moore, Telephone company and the other affected landowners will have to give the right-of-way easement for this drain, and each of them when they grant this easement will consent in writing for it to be a legal drain.
5. Wal-Mart can move dirt and put in the foundation for the building, but no occupancy permit be issued until ditch is installed and no paving done until 100 year flood retention pond is completed.

Mr. Davidson stated they would request relative to the 5th item. There is quite a difference in timing schedule in putting pavement in and request for occupancy permit. They asked that the 5th item be modified to allow them go forward with pavement subject to weather, they will have the ditch in before they request occupancy permit.

Bruce V. Osborn asked who was going to secure the petition for a legal drain? Mr. Davidson suggested that he continue to work with Michael Spencer in regards to getting the petition signed.

Michael stated he thought the intent of the adjacent land owners was that it become a legal drain so that maintenance is assured. There is enough land for a petition for a legal drain. Wal-Mart will petition for a legal drain.

The Board asked if there were any questions from any of the landowners present.

Richard Moore asked if that included the pond for retaining water? Also, Mr. Moore had concerns in regards to the under the road, this would include opening up under Creasey Lane, the junction box, branch tile. Mr. Moore is not interested in going ahead unless that is cleared up as well. This is something the County will have to address, but to answer Mr. Moore's question the answer is yes.

Paul Coutts stated that it is critical that the pond be the very first thing done. This is the intent.

Mr. Davidson stated that the proposal submitted is not going to completely eliminate the flooding in the Subdivision, but hopefully it will give to by pass to take some of the water around the Subdivision at least that is the intent.

Sue stated that hopefully it is not further impacted in a negative fashion in the Subdivision.

Tom McCully, attorney for Wm. H. Long stated there was one comment he wanted to make sure of that the 5 items read be made a condition to the approval given today. Another concern is the timing of Construction of the ditch and timing of the Development as Treece Meadows is going to be at risk when the sides are scraped and water starts to run off in an unconstructed manner. Paving may not make that much difference from just scraped dirt. The people in Treece Meadows need to be assured that the ditch is going to proceed in an orderly fashion so that is not going to be a period of time during the development process when the Subdivision is at risk. It seems to Mr. McCully that when

Regular Drainage Board meeting February 7, 1990 -Wal-Mart Continued

they have the equipment out there for their development that would be the time they would want to be out there working on the ditch too to avoid having to have equipment back later. There are some obstacles in getting the ditch dug. Gas mains that have to be relocated etc. These may have to be modified in order to accomplish all these items. Again he stressed they don't want to put Treece Meadows at High Risk from the time development starts and until the ditch is functioning.

Michael stated all he could say today is that it is the intent to get the project started and that it will be a simultaneous construction and the pond be put in first.

Sue stated that Don Sooby City Engineer and the City of Lafayette need to be included. Permits restriction would actually be implemented by the City.

Mr. Davidson stated they will work closely with Mr. Sooby's office as well as with Michael's office. Mr. Sooby stated that the City is comfortable.

Norman Childress of N.W.I.D.C.-L.U.#215 had concern with item #5 as read. He felt it would put the houses in Treece Meadows in a position of the 100 year storm run off being under water. He asked if it was the intent of the Drainage Board to grant that variance as a part of partial of the Drainage permit?

Michael stated again that the pond is going to be one of the first things installed in the grading operations. With their commitment to go ahead and strive to accomplish the downstream improvements at the same time that their dirt equipment is there. He feels they are giving a full out effort to have every thing accomplished.

Mr. Davidson stated they need to know what they are working toward. There will be a retention basin built as one of the first construction items, it will retain up to the 100 year storm. It is a very sly probability that we will get that storm, but they will be able to retain the 100 year storm. Discussion continued.

Bruce asked Mr. Childress if he had his question answered? Mr. Childress stated he had miss understood what Mr. Davidson was asking for. Mr. Childress thought he was asking not to complete the ditch until after the paving process. Discussion continued.

Sam Copeland N.W. I.D.C. L.U.#215 stated that this also brought a point to his mind there was reference to an occupancy permit being issued. Will the drain be completed before an occupancy permit is issued?

Sue stated the request they made was only a waiver on the paving, a part of the process, that they not have a problem with the occupancy permit.

Don Sooby stated the discussion here was that Mr. Davidson's concern was not to be restricted to allow paving, it was not his intent to wait till after paving is completed to do the ditch work, but Mr. Davidson does not want that constrained. The City will not issue a occupancy permit until the drain is in and functioning.

Mr. Davidson stated the last phase of the ditch construction will be seeding and mulching. He hedges on the final completion of the ditch as they don't want to do the seeding and mulching until the fall (September). The grading will be done in April and May. Discussion.

Sue asked Mr. Davidson if he would be agreeable to changing the last condition to say that they would not be doing paving until the pond was installed, no occupancy until the ditch is completed. Mr. Davidson agreed.

Sue asked with these 5 conditions, the letter of agreement on maintenance, and the letter of commitment on construction if there was any of the landowners not comfortable with the proposal?

Bruce asked David if the Board had to have something stating that it would be Wal-Mart's responsibility to start the proceedings for a legal drain? David stated that was one of the conditions. This is Item #3. David stated it is not in the letter, it would be one of the conditions with approval subject to.

Bruce V. Osborn moved to give approval to Wal-Mart as submitted to the memorandum of understanding relative to temporary drainage with the conditions, seconded by Sue W. Scholer, unanimous approval.

Mr. Davidson will get the original agreement to the Board.

Sue asked Mr. Luhman to formally type up the conditions to attach to the agreement.

THEATRE ACRES

THEATRE
ACRES

Don Sooby City Engineer stated he had sent a letter to the Drainage Board in regards to an adopted Ordinance No. 88-39 which deals with shade trees it reads as follows:

February 2, 1990

Tippecanoe County Drainage Board
20 North Third Street
Lafayette, Indiana 47901

Dear Drainage Board:

Early in 1989 the Lafayette City Council adopted Ordinance No. 88-39 which deals with shade trees in the City. This Ordinance, among other things, requires developers to plant trees in and around new parking lots to offset the negative effects produced by large expanses of paving.

Theatre Acres Subdivision is a new commercial subdivision on S.R. 26 just east of the main post office. The lots on the west side of this subdivision contain the relocated and reconstructed 12" PVC Coleman tile in it. This easement, for the most part, is being utilized for parking areas as developments occur on the lots. In order for the

February 7, 1990 Drainage Board Meeting Continued--Theatre Acres--John Hoffman Ditch Orchard Park

developers to comply with the requirements of the City's shade tree ordinance it appears desirable to plant some trees within this 40 ft. Coleman Ditch easement.

Request is hereby respectfully made for the Drainage Board to allow the planting of shade trees in the 40 ft. Coleman Ditch easement in the Theatre Acres Subdivision under controlled conditions, perhaps keeping the trees a minimum of ten feet away from the new Coleman tile. I feel that in the urban environment that will be developed in this area that the encroachment of trees into this Coleman Ditch easement would not be detrimental to its primary use. Additionally, the pipe material and methods of construction used for this drain tile should pretty well preclude the problem of root intrusion into the drain tile. Your favorable consideration of this request will be greatly appreciated.

Very truly yours,
Donald G. Sooby, P.E.
City Engineer

DGS:gc
enclosure
cc: James F. Riehle, Mayor
Richard T. Heide, City Attorney
Don Staley
Johanna Downie
File

After much discussion Bruce V. Osborn moved to give approval to the request submitted by the City Engineer, Don Sooby City of Lafayette relative to the Coleman Drain in planting trees within the easements and the letter be made a part of the Drainage minutes, seconded by Sue W. Scholer, unanimous approval.

JOHN HOFFMAN DITCH

Michael Spencer stated he had received a petition to establish a maintenance fund for the John Hoffman ditch out east on the north side of 26 East. A meeting had been held previously in a hearing for reconstruction and the cost was out rages, it was rejected, so the property owners now want to establish a Maintenance Fund. Michael requested that this be put in the records of petition being received, and he will have to walk the ditch and come up with recommendations for the amount of Maintenance then call a hearing as soon as possible with the property owners. The plan is to start out with a high assessment rate for two years and then work down to a lower rate to get allot of the maintenance done up front early, instead of a dribble of funds and then waiting to get enough to continue on with another section. Main idea is to get the bulk of the work done up front. The petition was signed by over 80% of the property owners. The idea is to keep the ditch functioning and keep it from deteriorating.

ORCHARD PARK

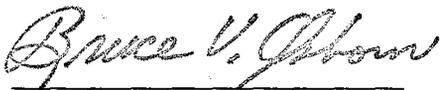
Michael stated that he had requested quotes from four engineering firms for survey services to establish watershed boundaries and existing pipe structures topo maps, grade lines established down through the ravine to the Wildcat. Of the four Michael would like to recommend that the Board accept the proposal from John E. Fisher Company, Inc. Land Surveyor and Engineers in the amount of \$22,372.00. This will be paid out of General Drain and added on at the Reconstruction stage.

Bruce V. Osborn moved to accept the proposal of John E. Fisher Company, Inc. Land Surveyor and Engineers in the amount of \$22,372.00 to establish the watershed area, seconded by Sue W. Scholer, unanimous approval.

There being no further business to come before the Board, the meeting adjourned at 9:50 A.M.



Sue W. Scholer, Chairman



Bruce V. Osborn, Board Member

ATTEST: 

Maralyn D. Turner, Executive Secretary

NOT PRESENT

Eugene R. Moore, Board Member

TIPPECANOE COUNTY DRAINAGE BOARD
REGULAR MEETING
Wednesday, March 7, 1990

Tippecanoe County Drainage Board met in regular session Wednesday, March 7, 1990 at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Sue W. Scholer chairman called the meeting to order with the following being present: Bruce V. Osborn and Eugene R. Moore Board Members; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; and Todd Frauhiger, Drainage Consultant, and Maralyn D. Turner Executive Secretary. Others present are on file

WOODRIDGE SOUTH

WOODRIDGE
SOUTH

George Schulte of Ticen, Schulte, & Associates P C presented Stormwater Drainage Design Calculations and requested final approval. Subdivision is located adjacent to Elliott Ditch in the Southeast Quarter Section 4 and the Southwest Quarter of Section 3 in Wea Township. The proposed development contains 8.92 acres which presently is in grass and weeds. There is approximately 0.75 acres of offsite for a total drainage area of 9.67 acres. The offsite drainage comes from a part of the developed Woodridge. Runoff from the site drains overland and into the Elliott Ditch.

Mr. Schulte stated this had been submitted to the Department of Natural Resources because of the area that the Subdivision is in. They have received a response from DNR concerning the high water elevation. They will have to submit to DNR for a permit to work in the flood way. As soon as the Drainage Board gives approval they will go ahead with the Construction plans, and then proceed with the submittal to DNR for there approval.

Mr. Hoffman asked if they were destroying wet land? Discussion. The back yard area of the lots will have to be graded out to show their detention storage area, it will be one to one half feet deep. Roadway has been cut.

Michael J. Spencer stated that he was requesting DNR approval and that they have the proper erosion control techniques incorporated during construction. For this small size pond Todd Frauhiger stated that the erosion control was important.

Mr. Hoffman asked if this was attached to a legal drain? Discussion. Michael stated this subdivision is already in the Elliott Ditch watershed area and that the lots would go into the Elliott, they will pay the maintenance assessments. Michael pointed out that a covenant should be presented and Mr. Hoffman check the language. The outlet pipe goes to the Elliott ditch. It is on the Elliott Ditch as previously stated, right on the easement line. Michael stated the county would still have access and he sees no problem. The only problem per Mr. Schulte is that there is some offsite coming in from the existing development, he has discussed this with Michael. Mr. Hoffman stated if there was no channel there would be no problem. Sue asked then if the Board would not be in consistent with legal drain request in a subdivision, answer no.

Bruce V. Osborn moved to give final approval for Woodridge South Subdivision Stormwater Design Calculations as presented, seconded by Eugene R. Moore, unanimous approval.

STOP & RUSH CONVENIENCE STORE

STOP/RUSH
CONVENIENCE

Pat Cunningham of Vesters and Associates, Inc. presented drainage study for Stop and Rush Convenience Store, he is representing Dean Bunch property owner. The Proposed site consists of a 2.1 acre tract of ground. Tract lies within a 5.5 acre watershed area of which 1.1 is currently being developed. The property currently consists of mostly sandy-clay soil, flat terrain and cropland. Site drains overland to an 18 inch culvert pipe under Old Romney Road as shown on plan presented. The total watershed area for the 18 inch culvert is approximately 8 acres. The 18 inch culvert outlets onto property owned by Mr. Bunch and from there drains into an 18 inch storm pipe, as show on the drainage plan, and overland across the property and the St Mary cemetery. The 18 inch pipe outlets at the north boundary of the cemetery and at that point all flows are overland to the Wabash River. Todd Frauhiger has stated that Mr. Cunningham has over designed the pond for storing on the 100 year storm event for the total 4.65 acres watershed. Todd feels he can reduce the pond just for the 1.1 acre-site.

Pat stated that the drainage consultant had not had time to go over the plans as presented. Pat asked that the Board allow the drainage consultant and Michael to make final approval after they have made review and study of plans.

Pat stated that they do not have an easement at this time, they will be seeking an easement after they receive approval of the plans.

Mr. Hoffman asked if St. Mary's Cemetery had been informed? Answer-No. Mr. Hoffman stated they should be notified as they will be having drainage into the ravines on their property. This would cause erosion problems. It was pointed out that it is currently draining there now. They are not changing anything from that stand point as that is the direction the watershed goes.

Sue asked if the structure on the road would be new? Answer-No.

Sue asked Michael if they had reviewed the plans. He stated they had reviewed it in January. At that time they had 5-6 items that they discussed with Mr. Cunningham; therefore his most recent submittal is the out come of that meeting. Todd Frauhiger stated that by end of the week they should be able to finish their study on this proposed project. Pat stated that most of the comment in January pertained to the

March 7, 1990 Drainage Board Continued

Drainage Ordinance revisions of November 1989 of which he was unaware of when he made his first submittal.

Discussion of easement and notification to St. Mary's Cemetery, City of Lafayette, and Railroad Company continued.

There will be no increase of flow across the road after development. Discussion.

Discussion - Positive outlet is the proposed 12 inch pipe into the 18 inch pipe.

Discussion of a format letter should be composed for situations like this.

Michael is more concerned about the easement they need to get across the next neighbor, that is definitely needed. He requested they finish their review and get back with Mr. Cunningham and if they need anything it gets completed before coming back before the board. The Board requested that the easement be for pre-condition.

Before the Board takes action after much discussion it was decided to reconvene this meeting for the Stop & Rush Convenience Store. The Board agreed that notification be sent to the property owners affected and get the necessary easement. The Board will need to post the reconvened meeting 48 hours prior to the time and date.

ORCHARD
PARK

ORCHARD PARK

Michael stated that he and John Fisher had met with Mid-States Engineering and got a copy of their topo maps showing where the flight lines will be and where they want the targets set, everything is moving along; hopefully this will be started this week.

CUPPY
MCCLURE

CUPPY MCCLURE

Sue W. Scholer stated that a notice had been received from City of West Lafayette of an information meeting on Monday, March 12, 1990 at 1:30 P.M.

WATKINS
GLENS

WATKIN GLENS

Mr. Hoffman stated that Jerry Withered had gotten restrictions to Fred and he has not had the time to go over the language yet. This is in regards to the Sondegarth property next to Watkin Glens.

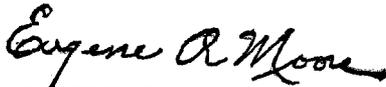
Michael suggested that when there are projects surrounding the City Limits and County, the Boards should have some type of joint review.

Meeting recessed at 9:30 A.M. until meeting is scheduled to reconvene.

April 4, 1990 the Drainage Board met and Eugene R. Moore moved to adjourn the March 7, 1990 meeting, seconded by Bruce V. Osborn, unanimous.



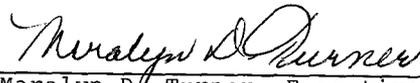
Sue W. Scholer, Chairman



Eugene R. Moore, Board Member



Bruce V. Osborn, Board member

SS: 
Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, June 6, 1990

The Tippecanoe County Drainage Board met at 9:00 A.M. in the Community Meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana with Sue W. Scholer Chairman, calling the meeting to order. Those present were: Eugene R. Moore, Board member; Michael J. Spencer, Surveyor; J. Frederick Hoffman, Drainage Attorney; and Maralyn D. Turner, Executive Secretary; others present are on file.

✓ CROXTON WOODS

Michael Spencer surveyor, presented a Petition from Croxton Woods Subdivision Homeowners Association, Inc. signed by its President and Secretary and property owners requesting that the certain drainage basin, being designated as Lot #13 in Croxton Woods Subdivision, and the drain leading therefrom as approved by the Area Plan Commission and as approved by the City Engineer after construction shall become a regulated drainage system pursuant to the provisions of I. C. 36-9-27-16 et seq. and be turned over to administration by the Drainage Board dated April 30, 1990.

Petition is on file.

Michael stated the board needs more than what has been presented by the Homeowners Association.

J. Frederick Hoffman attorney stated that he has looked at it and he feels they need more names as Lot #11 doesn't belong to the person who signed the petition and he asked Michael to check all signatures on the petition to be sure they are the legal property owner.

Michael asked Mr. Hoffman if Suzanne Klinghammer had talked with him. Mr. Hoffman stated she had not discussed the subject with him.

Michael is under the impression that there is a suit going on in the area in regards to the water/drainage with the Flower Shop. Water runs under the Flower Shop. Michael has walked the area and knows where the water outlets at.

Mr. Hoffman stated if there is a suit the board doesn't want to be a part of it until it is settled.

Discussion continued.

✓ ORCHARD PARK

John Fisher stated he had received first drafts of all the mapping north of Potters Hollow to the Wildcat Creek. He stated the job is done very well. He and Michael will meet Friday, June 8, 1990 to review the presentation. Eugene Moore wants to go to the area. Discussion continued.

✓ KIRKPATRICK ONE

Michael stated that for the records the reconstruction work of the Kirkpatrick One ditch is being completed today and he will inspect. Discussion of assessment, maintenance is being collected and as soon as the reconstruction is completed the assessment will be figured and sent.

✓ OTTERBEIN DITCH/TOWN OF OTTERBEIN

Mr. Hoffman stated that Joe Bumbleburg had talked with him in regards to the Otterbein ditch and/or Otterbein ditch a property owner has filled in on a waterway in Otterbein. Mr. Hoffman stated he will wait to have something in writing, but it will have to be determined which County it is in. The board will wait to hear from Mr. Hoffman and Mr. Bumbleburg.

✓ MCCARTY LANE

Michael stated that Don Sooby Lafayette City Engineer, had asked to be on the July meeting with presentation of McCarty Lane. Don and Michael will meet soon to review and presentation will be at next meeting.

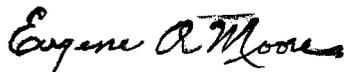
There being no further business the meeting adjourned at 9:20 A. M. Next meeting July 11, 1990.



Sue W. Scholer, Chairman

Not Present

Bruce V. Osborn, Board Member



Eugene R. Moore, Board Member

ATTEST:


Maralyn D. Turner, Executive Secretary

TIPPECANOE COUNTY DRAINAGE BOARD
WEDNESDAY, July 11, 1990

The Tippecanoe County Drainage Board met Wednesday, July 11, 1990 in the Community meeting room of the Tippecanoe County Office Building, 20 North Third Street, Lafayette, Indiana.

Chairman Sue W. Scholer called the meeting to order at 9:00 A.M. with the following being present: Bruce V. Osborn and Eugene R. Moore, Board members; Michael J. Spencer, Surveyor; David Luhman, Acting Drainage Attorney; Ilene Dailey Consultant Engineer; and Maralyn D. Turner, Executive Secretary; others are of file.

L.U.R.

L.U.R.
MCCARTY LANE

Stu Kline of Stewart Kline and Associates representing the City of Lafayette presented Drainage Plan for Regional Detention Basin in conjunction with the McCarty Lane Reconstruction requesting Drainage Board approval of the Conceptual Drainage Plan. Road reconstruction begins at from Creasey Lane west to US 52. Presentation is on file. There is problems with flooding in several locations. The Regional Detention basin is proposed to be built in three phases, this is in the Kepner and Layden watershed area.

Phase I: The portion to be built by the City in conjunction with the McCarty Lane project. Accommodates 100 year runoff from the new roadway, areas tributary to the new roadway, and areas tributary to the basin. Phase I provides 18.75 ac-ft of storage capacity. This Phase would basically take care of the flooding problem in the area.

Phase II: The portion to be built by L.U.R. in accordance with the Regional Detention Basin plan. Phase II provides 15.0 ac-ft of storage capacity. This by passes the east and west leg of the Kepner tile. This brings the Layden into the Kepner, at this time there is no positive outlet, the existing Layden tile is old and not functional and quite a bit of overland flow resulting in flooding of the industrial plots. This would benefit the City ponds by allowing a higher release rate by combining the two watersheds. The release was based upon on the allowable flow through the remaining 48" tile, it is well less than a q-10. This still being a restricted structure. This Phase would take care of the existing problem. L. U. R. pond would still be providing on site detention connecting them together.

Phase III: The portion to be built by Caterpillar, Inc., in accordance with the Regional Detention Basin plan. Phase III provides 26.25 ac-ft of storage capacity. In the future Caterpillar, Inc. will be turning the 15 acre site over to the City for maintenance. They would extend this pond to take care of the future development.

All three sub-basins will continue to drain to the Wilson Ditch. The Layden ditch sub-basin, except for about 37 acres adjacent to Creasey Lane, will be re-route to drain through the Regional Basin, out letting just downstream of the head of the Wilson, and the portion of the Treece Meadows legal Drain sub-basin lying west of Creasey Lane (Caterpillar Property) will be re-routed to drain through the Regional Basin, out letting as described.

Bruce V. Osborn asked the size of the Layden. There's 53 acres and the size of the underground tile is 18". Under the road construction they would be putting a new structure, and L. U. R. would provide a ditch and additional detention as required to make the whole new system work. Eventually when Caterpillar, Inc. comes in to do their development of 157 acres, they will reanalysis.

Eugene R. Moore stated that some of the Layden ditch is vacated. This is true, but water still continues to flow in the ditch.

Sue W. Scholer asked if all would become a part of a legal drainage system.. Mr. Kline's answer was that all the area would be deeded to the City.

Don Sooby stated that the proposal designates City of Lafayette as the owner of the Regional Detention Basin. Maintenance and Liability will be assigned to the City.

Maintenance and Liability was a question and concern of Mr. Osborn.

Sue W. Scholer asked what point and time would this occur?

Mr. Kline stated Caterpillar, Inc. and L. U. R. would have to deed the ground over to the city either during or prior to the right-away acquisition process for the road, hopefully prior.

Michael asked if it was going to be part of the right-away acquisition? Answer-the simplest way would be for the firms to donate prior to the acquisition.

Sue W. Scholer stated that she assumes there is concurrence from the two parties involved.

Mr. Kline stated that Larry Coles is Caterpillars Inc.. representative and Robert Grove representative L. U. R..

Mr. Grove requested Conceptual approval for the L.U.R. part of the Plan. He stated that this has been before the board previously. He stated that they have agreed to accept 30 cfs from the Layden ditch. It is controlled by a grade they have put in, L.U.R. has proposed to put in an orifice to control and route it to the west and to the south and detain as they go through, the detention basins or swales will be L.U.R.'s not a part of the regional pond. Sue asked if they would be adjacent to the east. This is correct, they would be on the other side of the line from the big pond. Some of L. U. R.'s water would be in there. The goal is to reduce the 30 cfs plus whatever water they have directed running into the basins down to 9 cfs. They are looking at discharging 100 cfs to the big pond. Their water will get into the system and out long before some of Caterpillars water enters the detention system. By staggering the peaks and looking at the whole regional pond together this is the reason for getting their water in and out. The water will be delayed and enter in, and add to the over all peak.

Mr. Grove stated what they are proposing to do is: The city does have the finalized specifications, include the fencing, the flow line, the cross section of the basin, they intend to build the basin to the city specifications and have their final acceptance; at that point it would be deeded over and become a part of the city. When the road construction is done the city would build their own basin. He stated they would like to build, if possible, this summer to get Phase II pond constructed.

Eugene Moore asked where does the water go now? Michael stated it goes east to the 48" pipe, then south into the Wilson.

Sue asked Michael if he had this in hand long enough to review? He stated this project has been going on for quite some time and there has been alot of discussion. They are only asking for Conceptual approval at this time.

Michael stated that he and Don Sooby have been in numerous meeting in regards to this project, he and Don like the idea of their regional detention basin storage, giving it a three Phase project. L.U.R. wants to build Phase II first, and as long as it all ties together conceptually I have no problem, timing may be a problem.

Sue asked for any questions.

Don Sooby stated that one of the major advantages of the regional basin is that it does have a leveling affect that allows more drainage to go through and be safely discharged into the Wilson branch, if the parties were to approach this independently it would be a situation where the hole is greater than some of the pipes because of the different times of water getting into the basin and if the Drainage Board were to just portion the allowable among the interest parties it would be a burden situation on all three of the major contributors. They would not be able to take advantage of the staggered peaks. This is highly advantageous to all the contributory to the drainage in that basin. Hopefully we can get the Drainage Board approval.

Sue stated that they all had felt all along that there was a solution to this major project, just a matter of everybody getting together to get something worked out.

Larry Cole Caterpillar representative, stated they have a conceptual agreement, they have not looked at it in legal details at this time, but they are working on it. They do agree with the conceptual plans, they have not given the land at this time.

Bruce V. Osborn moved to give conceptual approval to McCarty Lane Drainage Plan and L.U.R. as presented for the over all regional detention plans, seconded by Eugene R. Moore, unanimous approval.

HADLEY LAKE

HADLEY LAKE

Robert Bauman attorney, for the City of West Lafayette presented Petitions. 1. Establish Legal Drain, the outlet channel from Hadley Lake and, 2. A Petition to Reconstruct Legal Drain, the Dempsey Baker ditch.

Dan Kuester of Cole and Associates engineering presented Project Overview and Project Design of Hadley Lake. A study was done in the year 1986 and at that time it was recommended and as the plan presented today does propose to have a positive outlet constructed on the Northeast end of Hadley Lake under Moorehouse Road and to tie into Yeager ditch and eventually into Cole ditch. Yeager ditch would have some improvements done at the channel up to Cole Ditch and from that point and time the drainage goes on to Burnett's Creek then to the Wabash river.

Second part of the proposal is for the reconstruction of the Dempsey Baker ditch which is presently a legal drain, it is an old agricultural tile that is in need of maintenance. The project would reconstruct that; possibly making a new route from Moorehouse road east.

Bruce V. Osborn asked who owns the property? East of Moorehouse road is Purdue Research and the Hadley Lake is Martin Galema. Bruce asked if those property owners were present? Purdue Research had representative present, but Martin Galema was not in attendance. This was a concern of Bruce. He felt that Martin should be in attendance and should be given notice of meetings. Martin and his grandson have been in attendance in other meeting, after much discussion it was decided to precede with the presentation.

Bruce asked if other property owners had been notified of this meeting? It was pointed out that they had not on this particular meeting.

Paul Coutts stated the reason for us here today was that discussion had been held with the surveyor and they felt that before a petition was filed for a formal hearing that a presentation should be made before the board, in no way are they trying to circumvene the owners. Discussion with a number of property owners has been held. This meeting is to just get the Drainage Board up to date on what has been happening and will be presented, this is a preliminary overview.

Sue stated that everything given today will have to be repeated.

Bruce stressed to have all owners notified and kept up to speed of what is happening in the Hadley Lake area.

Dan Pusey assured the board that Martin Galema has been kept a breast of what is happening and at the June 15, 1990 meeting held in regards to this project Martin and his grandson were in attendance, at that time they were made aware of the presentation that was going to be made today as an informational presentation at the same time the petitions were going to be filed. They assumed that Martin and the grandson knew of the date and time of presentation.

Presentation continued and is on file.

The design of the project has been based upon a 100 year storm event during the process of design he has reviewed 6 different durations from 4-24 hour storm event making sure they were looking at the most critical peaks. A portion of Indian Creek is in this

HADLEY LAKE CONTINUED

project reason being there is a back up in which Indian Creek water backs up into Hadley Lake this will continue to occur under the present conditions and after the construction of this project. The design is to minimize any affects of downstream landowners on Cole ditch (project results.) This will be accomplished through the increase in the peak storm condition of Cole Ditch by 0.05 ft. in stage and 37 cfs in terms of discharge. Construction with the floodplain of Cole Ditch requires a permit be granted by the Indiana Department of Natural Resources. Permit has already been granted, a copy of which is included in the report.

They are proposing to cross the road with reinforced concrete pipe, that they intend to coordinate with the County Highway engineer and there is a potential of using corrugated metal pipe arches. This would be only to the approval and agreement with the Highway engineer, and only if it is a cheaper alternative.

Bruce asked Steve how long of a pipe was that going to be? Steve answered that he had no idea as he had not had any contact in regards to this project.

Dan Kuester answered that the pipes arrange from 60-80 feet, the pipe coming out of the Lake itself are 2 - 36 inch pipes which are 500 feet long, this is to allow construction within the proposed easements.

Michael summarized that many meetings have been held in regards to the Hadley Lake project. The ongoing engineering and permitting process through the DNR, working with Paul Coutts, West Lafayette City Engineer and Mr. Bauman with the legal process of petitions, they have been in contact with Mr. Hoffman. Their form has been presented in the petition. Michael stated in his opinion the project was not affecting Mr. Galema's lake adversely, he is aware of it, Michael has met with him, set elevations at his request, the level of the lake will remain, it will provide an outlet for the lake so the flooding problems should be relaxed it will ultimately be the outlet of the Cuppy-McClure ditch having their own storage, but having a place for the water to drain to and away of getting the water out of the lake, instead of continuing dumping water in there with no outlet.

Bruce V. Osborn stated upon hearing this presentation and Michael's summary procedures should follow for a Public Hearing. Bruce stated that this area has had problems for many years and this will take care of those major problems.

David Luhman stated it should be made record that two petitions were received, one to establish Hadley Lake as a legal drain, one to petition to reconstruct legal drain. Then start the process of setting a hearing date. Petitions were presented to Michael.

Bob Bauman stated it is hoped that getting all things in order that this could be started this fall for construction.

RAINEYBROOK
ESTATES
PART VIII

RAINEYBROOK ESTATES PART VIII

Tom Borck representing the property owners of Raineybrook Estates Part VIII. Location of project is in Section 18, Township 22 North, Range 4 West, Wea Township. It is bounded by County Road 500 South, to the South, Raineybrook Estates Parts V and VII to the west and north, and farmland to its east. The proposed development consists of 13 lots on 10.49 acres of land. The site is located in the Little Wea Creek watershed and is currently covered with a small grain crop. Off site drainage contributed by approximately 6.84 acres enters the site from the northwest. Runoff from the area drains overland in a southeasterly direction to an existing culvert under County Road 500 South and eventually discharges into the Little Wea Creek. Easement has been received from Mr. Lux along the west side of Mr. Lux's property. Detention basin has been sized to accommodate the parcel as well as part of the Lux property. The project will consist of 13 lots. They have met with Michael and are requesting preliminary and final approval of the drainage plans.

Michael stated that it has been reviewed and the only comment was that erosion control be incorporated into the plans, there is a sheet in the plans that set out the erosion, it is the recommendation that preliminary and final approval be given and the easement be recorded.

Eugene R. Moore moved to give preliminary and final approval on the 10.49 acres on the Southeast corner of Raineybrook Subdivision for the Raineybrook Estates Part VIII, and the easement be recorded, seconded by Sue W. Scholer, unanimous approval.

~~OMITTED FROM MINUTES SHOULD BE INSERTED ON PAGE 560, HADLEY LAKE PROJECT.~~

PROJECT RESULTS: The planned project will not result in lowering of the peak water elevation of Haldey Lake during a 100 yr. storm event. What it will result in is the return to a pool elevation of 648.0 in a time period of 3 or 4 days rather than the existing periods measured in terms of weeks.

FARMINGTON
LAKE
SUBDIVISION

FARMINGTON LAKE SUBDIVISION

Robert Grove engineer, representing Farmington Lake Subdivision requested final approval for drainage. The project has been before the board previously. The presentation present is a variation of the drawings presented before. In the past there were central lakes and basins. Location is located east of County Road 400 East just north of County Road 200 North. The development is bordered on the north by Willow Wood Subdivision, on the East by farm land, on the South by woods and a single family residence, and on the west by County Road 400 East and Watkins Glen Subdivision. Watershed consists of approximately 115 acres which drains to the Northwest around and through the side and is picked up and directed North by the existing side ditch along the East side of County Road 400 East. This water continues to the North to the existing ditch along the South side of the railroad then Northeast to an existing culvert under the tracks where it then flows to the Northwest to the Wabash River. The existing side ditches along 400 East and the railroad have been improved and handle the existing runoff.

The entrance has been moved and they did away with any detention within the central area. They are now proposing a large basin to the Northwest corner. There was a question about the existing pond. Mr. Grove doesn't believe that pond was ever met to be a detention facility, there are some problems with it. The area is owned by Dr. Greise (west of the pond). The owner of Farmington Lake Subdivision has met with Dr. Greise, they have come to an agreement that the Farmington owner will provide a 12 foot wide spillway, rip-rap it bringing it into the Farmington drainage system. They are proposing to make a separation along the South line, berm it up keeping Farmington water in the ditch at this point, the berm would drop off to allow any water that came from the South into the ditch switch the berm on the other side to take Farmington water into their detention facility.

FARMINGTON LAKES CONTINUED

At this time Mr. Grove doesn't know what kind of pipe outlet there is. Michael stated it has one, but he doesn't know what design it was built to. He is presuming it was a Soil Conservation project years ago, it comes from down behind the Clegg property. It fills up and spills right over the bank right back into Dr. Greise's swimming pool. Dr. Greise stated it use to be spring fed. Pershing built the pond. Discussion. Michael asked Dr. Greise if he was satisfied with the presentation? They will put the pipe 6-8 inches below where it over flows now. They will be reconstructing the ditch along the south property line and the entire ditch along 400 East. Side ditch will be moved clear back to the right-of-way along with their project. It will be with the Phase I.

Sue W. Scholar asked if Steve Murray County Highway Engineer had been contacted? They have be in contact with the County Highway, they have incorporated the comments in the plans. Robert presented pages 27 and 28 to be inserted in the Plans.

Michael stated the main concerns he had with Robert's submittal was the overflow structure from the existing lake, some other concerns that Dr. Greise had and that is the north end of his property with his existing septic system. This has been satisfactorily addressed. Dr. Greise stated he was happy to be working with Mr. Palmer and Robert Grove. The plan actually resolves the existing pond as the pond does overflow. He stated the pond does not hold water well in its old age. The water comes from Peters Mill landing overflows at Dr. Mark's home comes across his driveway into the pond. Discussion.

Michael stated the only other comments he has is on the County Highway approval and the maintenance of the system.

Robert Grove stated there will be a Homeowners Association and some landscaping that will go in. Michael asked the developer to get with Mr. Hoffman for the proper language in the covenant.

Bruce V. Osborn asked Steve Murray if he had seen the plans? Steve stated they have been in the process of reviewing the construction plans.

Bruce V. Osborn moved to give final approval as presented to the Farmington Lake Subdivision drainage plans with the condition of having the approval from the County Highway Engineer and Supervisor, and the maintenance covenant and restrictions, seconded by Eugene R. Moore, unanimous approval.

ILGENFRITZ-ALVIN PILOTTE

Ilgenfritz
Alvin
Pilotte

Alvin Pilotte, property owner in Sheffield Township, now a resident of Winter Haven, Florida. Mr. Pilotte stated he has a complaint on drainage on his property which the Ilgenfritz drains. His complaint is that the top of the Ilgenfritz tile was torn out, therefore there is no drainage pipe working. He has a dam on his property, discussion of this dam of who put it there and maintenance of it. Lengthy presentation and discussion continued. Sue W. Scholer stated after hearing Mr. Pilotte's story the board will look at his problem. Eugene Moore asked Mr. Pilotte to call him when it would be convenient for him to come out. Michael told Mr. Pilotte that the dam is in there; you better leave it as it was put there for a reason. Berm on the north side of the ditch all the way through Mr. Pilotte's farm, a berm all the way along. Much discussion. Mr. Pilotte stated the ditch was not put in there by the County and not paid for by the tenants. The waterway over the Ilgenfritz tile is north of ditch that Michael is talking about and is still there. Mr. Pilotte is insistent that the map of the Ilgenfritz has been changed. South end of the Elliott ditch which shows the Ilgenfritz ditch. Sue stated this has been a problem that has been hanging fire that started several years ago and the only thing the board can do at this time is take your comments try to do some research, and meet with you. Wyndotte Road and South. Petition was signed when ditch was extended from Mr. Pilotte's road all the way down to the headwall on Jim Phillips. 9910 feet. This was February 6, 1974. Mr. Pilotte stated it was after that the dam was put it. It was after 1975 that Michael saw the dam. Mr. Pilotte feels this turned the water into his farm ditch, who has the right to change the water capacity and take over a private ditch? Michael has never put a dam in where he says a dam was put in or sand bags, fill dirt or anything. Sue stated appreciate his coming.

WILDCAT VALLEY ESTATES SUBDIVISION

Wildcat
Valley
Estates

Robert Grove representing Wildcat Valley Estates Subdivision presented Preliminary Drainage Plan asking for Conceptual approval to waive the detention on the project. Steve Baumgartner is the developer. The project site is located East of Lafayette on County Road 50 North just North of Foxwoods Subdivision, East of Interstate 65, and South of the Wildcat Creek. The project consist of 128 acres only 40 acres will be used for residential development at this time, the remaining 88 acres is either in the flood plane or steep area which is not buildable except for single dwelling on large areas. The proposal has been presented to the Urban Review Committee. At the meeting with the Urban Review committee they requested the committees support for proposal to waive detention requirements for this project. The Urban Review committee did support the waiving of detention, therefore today they are asking for Conceptual approval so they can proceed with the project. The lower portion of this project is right on the Wildcat creek, there is 120 foot elevation difference between Foxwood Subdivision and the Wildcat creek. When Interstate 65 was built they ended up constructing a pond. The Subdivision would like to keep that pond as part of the overall development, if needed they can use it for detention, they are so close to the outlet which is the Wildcat creek, at 100 year flood there is 28,000 cfs, it would take a while to get there. The water from the subdivision will be out within and hour to an hour an half, try to get it into the creek and get it out of the way before the peak from the Wildcat does occur. Timing wise it may be a day later. They are not trying to discharge and add to it. Discussion of the 28,000 cfs.

Michael's comments were: that Mr. Grove has met with the Urban Review committee (volunteer committee that gets together and review some of the projects that are around the urbanized area around the city) the majority, including Mr. Hoffman did support the waiving of detention. Michael pointed out that in a few places the theory that the outlet is handy, the peaks are so different, it is going to take Drainage Board action at a hearing to waive the storage condition. The developer understands this.

SUBDIVISION CONTINUED

Sue W. Scholer asked if DNR has any input when dealing with a natural stream? Mr. Grove stated they do have a permit from DNR to cut the bank back flat using some of the material to fill their lots, they are aware of what is being done in the area and approve of it, the detention they are not really concerned with one way or another, the feeling is that they feel the same as the developer get it out of the stream before the Wildcat peaks. Part of the process there is an erosion problem that the stream comes through, it is cutting into the land, the bank is 8 foot straight up and down.

Sue asked Michael if he agreed, yes, his recommendation is to give Conceptual approval. Eugene R. Moore asked, is the Board creating a problem by waiving detention? Mr. Moore used a similar project (McCutcheon Heights) as an example. Michael stated the problem there was that it was on the Little Wea it was such a long way to the outlet where it meets the river. In this project the Wildcat is relatively a short distance away and is full length of the area to the north. Mr. Moore just wanted to protect the Board in future projects.

Eugene R. Moore moved to give conceptual drainage approval to Wildcat Valley Subdivision, seconded by Bruce V. Osborn, unanimous approval.

ORCHARD
PARK

ORCHARD PARK

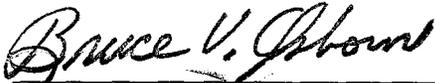
Michael presented two billings from John E. Fisher for the Orchard Park project, one is for the aerial photo work, and the other for man hours for the project per his contract to do the work, he asked for the boards approval. This will be paid out of General Drain and billed back later to repay General Drain. Consent of the board to pay the bills.

Sue stated that she and Michael need to meet with Mr. Hoffman to go over the Contract and Legal Fees, and asked Michael to set the meeting. Mr. Hoffman will be back the week of July 16, 1990.

There being no further business to come before the board, Eugene R. Moore moved to adjourn at 10:40 A.M., seconded by Bruce V. Osborn, unanimous approval.



Sue W. Scholer, Chairman

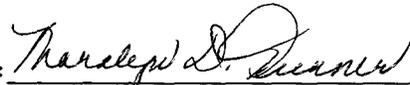


Bruce V. Osborn, Board Member



Eugene R. Moore, Board Member

ATTEST:



Maralyn D. Turner, Executive Secretary

~~OMITTED~~ FROM MINUTES SHOULD BE INSERTEED ON PAGE 560, HADLEY LAKE PROJECT.

PROJECT RESULTS: The planned project will not result in lowering of the peak water elevation of Haldey Lake during a 100 yr. storm event. What it will result in is the return to a pool elevation of 648.0 in a time period of 3 or 4 days rather than the existing periods measured in terms of weeks.