FLOOD PLAIN PERMIT COMMITTEE MEETING
201 West Gray, Building A, Conference Room D

Tuesday, October 3, 2016
3:30 p.m.

Minutes

PRESENT:	Shawn O'Leary, Director of Public Works Scott Sturtz, City Engineer Susan Connors, Director of Planning/Community Development Ken Danner, Subdivision Development Manager Jane Hudson, Principal Planner Neil Suneson, Citizen Member Sherri Stansel, Citizen Member
OTHERS PRESENT:	Todd McLellan, Development Engineer Rachel Warila, Staff Charlie Thomas, Capital Projects Engineer Jeff Bryant, City Attorney Leah Messner, Assistant City Attorney II John Curtis, Sherwood Construction Kyle Conaway, Sherwood Construction Randy Beeson, Superior Environmental Bruce Valley, Applicant Joy Hampton, Norman Transcript Justin Terrell, Citizen Lyntha Wesner, Citizen Charles Wesner, Citizen Karen Chapman, Citizen Casey Holcomb, Citizen Donna Johnson, Citizen

The meeting was called to order by O'Leary at 3:30.

Item No. 1, Approval of Minutes:

O'Leary requested a roll call for the committee. Seven members of the committee were present and a quorum was established. O'Leary called for a motion to approve the minutes

from the meeting of September 6, 2016. Motion to approve minutes by Scott Sturtz. Seconded by Susan Connors. Approved 7-0.

Item No. 2, Flood Plain Permit Application No. 576:

O'Leary stated this application was for a new roof and 2 proposed additions to a single story house at 1006 McNamee Street, which is located in the Imhoff Creek Special Flood Hazard Area (SFHA). The applicant's engineer Lucas Reed was not present. O'Leary introduced Todd McLellan, Development Engineer, who reviewed the Staff Report.

McLellan introduced the applicant Bruce Valley and said that the existing house is located on the south side of McNamee Street just west of Pickard Avenue and Berry Road in the Delong Addition and is single story, approximately 1,544 square ft. with a combination of footing/stem wall and slab on grade construction built in 1932.

McLellan said that on April 18, 2016, Floodplain Permit Application #569 for a proposed new roof and 3 building additions to the referenced property came before the Floodplain Permit Committee and the application was postponed at that time to allow the applicant more time to reconfigure the proposed north addition so that it did not encroach into the floodway. The applicant later decided to withdraw the application. McLellan added that on May 2, 2016, Floodplain Permit Application #569A for a new roof only came before the committee and was approved with a 6-0 vote. He said that the work was never done and the applicant had decided to submit a new Floodplain Permit Application for a new roof and 2 building additions and

has since dropped the proposed driveway and house addition that was going to encroach into the floodway.

McLellan showed a map of the property and explained that two (2) additions to the existing house are planned including an east addition (Area #1) that will be approximately 16' by 22.5' including a bedroom and sitting room and a south addition (Area #2) which will be approximately 15.4' by 9.5' and used as a day room. McLellan said that both additions will match the finished floor elevation of the existing house, which is approximately 1.2' above the base flood elevation (BFE) and the new additions will consist of concrete, footings, floor joists, wood framing, insulation, rafters, roofing, ceilings, floors, windows, siding and trim. He added that the roof on the existing structure will also be replaced, as part of the construction.

McLellan showed some drawings of what the house would look like after completion and some pictures of what the house currently looks like. According to the floodplain ordinance, McLellan stated that if the total cost of the work exceeds 50% or more of the market value of the original structure, then the entire structure must be upgraded to meet current floodplain ordinance standards. He added that the applicant has estimated material and labor costs of the additions and new roof over the existing structure at $33,838.80 and the market value of the existing house is approximately $132,600. He said that this amount was determined by subtracting the value of the land ($30,000) from the appraised value ($162,600); according to the appraisal performed by Chris Hardwick in April, 2016. McLellan stated that since the

value of the improvements is 25.5% of the value of the existing structure, this work does not meet the 50% substantial improvement threshold of the ordinance.

McLellan confirmed that according to the latest FIRM, the site of the proposed addition is located in Zone AE and at the proposed addition locations, the BFE is 1150.0', which is 0.6' above the approximate ground elevation of 1149.4' at the lowest point in the area of the proposed additions based on GIS 1' contours. He explained that the existing and proposed finished floor elevation of 1151.2' is 1.2' above the BFE and that there is no minimum freeboard requirement, since the value of the proposed work is below the 50% substantial improvement threshold requirement.

Applicable ordinance sections were noted to include:

2(fff) Substantial Improvement – McLellan noted that any reconstruction, rehabilitation, addition, or other improvement of the structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement, must meet the current floodplain ordinance requirements. He added that based upon the information submitted the improvements do not meet the Substantial Improvement threshold.

4(b)(1)(a) and 4(b)(5) Fill Restrictions in the Flood Plain and Compensatory Storage – McLellan said that fill is restricted because storage capacity is removed from floodplains, natural drainage patterns are adversely altered and erosion problems can develop. He stated that compensatory storage must be provided within the general location of any storage that is

displaced by fill or other development activity and must serve the equivalent hydrologic function, as the portion which is displaced with respect to the area and elevation of the floodplain. McLellan explained that according to the engineer's calculations, approximately 7 cubic yards of soil will need to be removed from the floodplain to fulfill the compensatory storage requirement.

5(a)(viii) No Rise Considerations – McLellan said that for proposed development within any flood hazard area (except those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property, as a result of the proposed work is required. He mentioned that the project engineer has provided calculations stating that the proposed additions will not cause a rise in the BFE of more than 0.05', which meets the ordinance requirement.

Based upon the information provided, staff recommended Floodplain Permit application #576 be approved. O'Leary then turned the floor over to the applicant, asking Mr. Valley if he had any additional information to provide to the committee. Valley stated that he had done some further calculations as far as the impact of the project and the original calculations for the compensatory storage dealt with a worst case scenario but he has revised the calculations and if these would not be approved, then he would go with the previous calculations that he had submitted in the past. O'Leary asked Valley if this was 7 cubic yards and Valley confirmed that this was accurate.

O'Leary opened up the discussion to the committee at that time. Sturtz asked if As Built's would be submitted for the compensatory storage. McLellan said that they would, because they were required as part of the flood plain permit application.

O'Leary then opened the discussion up for public comment. There were no comments from the public.

Danner then made a motion to approve the application. Sturtz then seconded the motion. O'Leary asked if there was any further discussion on the motion. There was none.

Motion for application #576 was approved 7-0.

Item No. 3, Flood Plain Permit Application No. 577

O'Leary stated this application was for a bank stabilization project of Imhoff Creek at a sanitary sewer interceptor crossing just east of The Trails golf course. The applicant's engineer Mark Daniels, with the Norman Utility Authority (NUA), was not in attendance but Capital Projects Engineer Charlie Thomas represented the NUA. O'Leary turned it over to Todd McLellan, Development Engineer, who explained the Staff Report.

McLellan explained that over the past few years, heavy rains and debris have caused the eastern bank of Imhoff Creek to erode in the area where the existing 42" sanitary sewer interceptor line crosses the creek between Highway 9 and the Canadian River just east of The

Trails golf course and west of the Canadian Trails subdivision. He stated that the pipe had become exposed in the eroded area, which is approximately 50' wide and 100' long and 10 to 15' deep.

He presented a photo of the existing sanitary sewer line and explained that it was constructed in December, 2007 and was encased in concrete and steel sheeting. McLellan said that because the sanitary sewer line was in danger of collapsing due to the bank erosion, the NUA commenced an emergency bank repair with approximately 2500 cubic yards of rip rap materials placed to stabilize the bank and help protect the sanitary sewer line from future erosion.

Applicable ordinance sections were noted to include:

4(b)(1)(c) Fill Restrictions – McLellan said that the use of fill is restricted in the floodplain; however the use of fill may be used for river or stream bank stabilization or reinforcement projects. He stated that approximately 2500 cubic yards of rip rap material have been placed in the eroded area to replace only the amount that was lost to erosion. He said this ordinance section is met and no compensatory storage is required.

4(b)(17)(iii) City Council Approval – McLellan explained that any modifications of the stream banks or flow line within the area that would be regulatory floodway, whether or not that channel has a regulatory floodplain, unless the work is being done by the City of Norman staff as part of a routine maintenance activity require City Council approval. He said that this emergency repair was performed as routine maintenance by the Norman Utilities Authority

and not considered a modification of the stream banks or flow line; therefore City Council approval is not required.

5(a)(viii) No Rise Considerations – McLellan stated that for proposed development within any flood hazard area (except those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property, as a result of the proposed work. He added that the NUA has certified that the project will not cause a rise in the BFE, which meets the ordinance requirement for work in the floodway.

11 Emergency Authority – McLellan mentioned that the Floodplain Administrator shall have the emergency authority during times of flooding to approve any temporary measure that he or she, in his or her sole professional judgment, determines is necessary to protect life, property and/or the community from the eminent threat of any associated flood hazards. Upon cessation of the flooding event and at the earliest possible time, any approved temporary measure meeting the definition of floodplain development and subject to this ordinance shall be removed, or shall be subject to review by the Floodplain Permit Committee under the requirement of this ordinance for approval or disapproval as a permanent floodplain permit. He said that the NUA first discovered the problem in August, 2016, at which time they contacted the Floodplain Administrator to seek approval of the emergency repair, which has since been completed.

Based upon the information provided, Staff recommended Floodplain Permit application #577 be approved. O'Leary then turned the floor over to Charlie Thomas who said he did not have a lot of personal knowledge about the project because he was filling in for Mark Daniels but

that he would be glad to answer any questions. There were no questions. O'Leary asked for a motion from the committee. Sturtz then made a motion to approve the application. Suneson then seconded the motion. O'Leary asked if there was any further discussion on the motion. There was none.

Motion for application #577 was approved 7-0.

Item No. 4, Flood Plain Permit Application No. 578

O'Leary stated this application was for a water line bore under Imhoff Creek as part of the Main Street water line replacement project. The applicant's engineer (NUA) Mark Daniels was not in attendance but Capital Projects Engineer Charlie Thomas represented him. O'Leary turned it over to Todd McLellan, Development Engineer, to discuss the Staff Report.

McLellan explained that this project involves replacement of a deteriorated 12" water line with a new 16" water line on the south side of Main Street, between Flood Avenue and Park Street. He stated that a portion of the project will cross the Imhoff Creek floodplain/floodway and is projected to start in the 4th quarter of 2016.

He said that approximately 740' of the new water line improvements will be in the floodway/floodplain of Imhoff Creek and approximately 30' of new water line will be installed under the Imhoff Creek reinforced concrete box (RCB) just west of Lahoma Avenue

via boring and encasement. He stated that the remainder of the new water line will be installed by the open cut method and any excess spoils will be removed and disposed of outside the floodplain.

McLellan displayed maps showing the new water line that is planned to be installed below the southern most eastbound lane of Main Street, in conjunction with a concrete panel replacement project being performed by the Streets Division of the Department of Public Works. He said that the applicant desires that the concrete panel replacement project be included with this application. He added that new paving will be installed at the same grade as the existing paving and the demolished panels will be removed and disposed of outside the floodplain.

Applicable Ordinance Sections were noted to include:

4(b)(1)(b) Fill Restrictions in the Flood Plain – McLellan noted that no fill will be brought into the floodplain as part of this project and therefore, this project meets the requirements of this ordinance section.

4(b)(10) McLellan said that all new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding. He mentioned that all public utilities and facilities shall be constructed to minimize flood damage and that

the water line pipe joints have gaskets making the system watertight. He also mentioned that the entire system will be leak tested prior to going into service.

4(b)(11) McLellan stated that all new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. He added that the pipe joints have gaskets making the system watertight and the entire system is leak tested prior to going into service.

5(a)(viii) No Rise Considerations – McLellan said that for proposed developments within any flood hazard area (except those designated as regulatory floodways), certification that a rise of no more than 0.05 ft. will occur in the BFE on any adjacent property, as a result of the proposed work. He mentioned that the applicant's engineer has certified that the project will not cause a rise in the BFE, which meets the ordinance requirements.

Based upon the information provided, staff recommended Floodplain Permit application #578 be approved. O'Leary then turned the floor over to Charlie Thomas. Thomas said that they were replacing the line and not disturbing the surface at all, other than pavement replacement. O'Leary then clarified to the committee that if they choose to move forward and approve this application that they are approving the water line and the paving over the water line.

Danner then made a motion to approve the application. Stansel then seconded the motion. O'Leary asked if there was any further discussion on that motion. There was none.

Motion for application #578 was approved 7-0.

Item No. 5, Flood Plain Permit Application No. 574

O'Leary stated this application was for the filling of an existing borrow pit just east of I-35 in the Canadian River floodplain. John Curtis and Kyle Conaway from Sherwood Construction representing the applicant were present, along with their Environmental Consultant Randy Beeson from Superior Environmental. O'Leary introduced Todd McLellan, Development Engineer, to summarize the Staff Report.

McLellan explained that this application came before the Floodplain Permit Committee (FPC) on June 20, 2016 when it was denied by a 5-2 vote. He explained two critical reasons for the denial: the original floodplain permit application issued in 2013 did not include placing fill debris in the borrow pit and the pit was later filled without a floodplain permit. He said that the FPC determined that the current application was deficient due to the types of materials placed in the pit (mainly concrete with small amounts of asphalt and steel), that proof was not provided that the surface elevation on the top of the fill matched the original surface contours prior to the pit excavation in 2013, and the ground surface of the fill is mostly barren and has not been revegetated according to the requirement of the State Stormwater Permit OKR10.

He stated that Chapter 22, Section 429.1(5) of the Zoning Ordinance allows the applicant to appeal the FPC denial of the application to the Board of Adjustment (BOA). McLellan said that the applicant brought forward an appeal to the BOA on August 24, 2016 and requested the BOA reverse the decision of the FPC and grant Floodplain Permit #574 to fill the borrow

pit. He said the BOA voted 4-0 to send the permit application back to the FPC and directed the applicant to provide a groundwater monitoring program, a borrow pit closure plan, and other documentation or plans required by the FPC for their reconsideration of the permit application.

McLellan explained that Staff received additional documentation from the applicant on September 19, 2016, as requested by the BOA. He said that the information received includes a groundwater monitoring plan with 2 monitoring wells up gradient and 3 monitoring wells down gradient of the pit. He stated that the work will be performed by a third party consultant and the first set of samples will be taken in 2016, followed by annual monitoring for the next two years. McLellan said that a pit closure plan was included where the applicant will place topsoil and final grade areas of the pit that have already been filled and seed with rye grass to provide vegetation by Spring of 2017.

McLellan added that the fill will consist of mostly earthen and concrete materials, any protruding rebar will be cut off flush with the concrete and the new fill material will be topped with topsoil and fine graded. He said that Bermuda grass seed, rye grass and vegetated mulch will be placed when the soil temperature is consistently above 65 degrees and will be watered and fertilized, as needed to meet ODOT's permanent vegetation requirements and close out Sherwood's general OKR10 permit with the Oklahoma Department of Environmental Quality (ODEQ). He said there is also a pit surface original elevation verification that includes a topographical map of the borrow area depicting proposed finished grade contours before the

pit was excavated. He explained that an As-Built topographical survey based on GPS data will be provided by Sherwood to the City of Norman upon completion of the pit.

McLellan said that Staff recommends the FPC consider one of the following options: 1.) determine that the additional information provided by the applicant meets the BOA conditions and approve Floodplain Permit Application #574, 2.) determine that the additional information provided by the applicant does not meet the BOA conditions and deny Floodplain Permit Application #574 giving the applicant the option to remove the fill material from the borrow pit or appeal the FPC decision back to the BOA, or 3.) to require and attach additional conditions to Floodplain Permit Application #574 and approve the permit. McLellan then showed some photos of the debris located at the project site showing parts of rebar protruding from slabs of concrete, and also minor amounts of asphalt bonded onto the concrete slabs. He then concluded the Staff Report and presentation.

O'Leary then turned the floor over to the applicant's representative, Kyle Conaway, who thanked the committee and presented the committee with some extra slides to clarify the scope of the project. He asked Randy Beeson to speak on behalf of the groundwater monitoring plan they are proposing. Beeson stated that they were proposing two monitoring wells up gradient; shown on the map as blue monitoring wells, and three down gradient of the pit with an anticipated ground water flow across the property and into the South Canadian River. He then showed a diagram of a typical water well that they install and said it would be installed by drilling to 10 feet below the bottom of the pit, with schedule 40 PVC slotted pipe.

He explained that they would install it as a permanent monitoring well, operate it for a 3 year period and at the end of that time the monitoring wells would be closed by a certified water well driller. Beeson added that they would take water samples in late 2016 and annual samples would be taken in late 2017 and 2018. He said that third party consultants would submit those groundwater samples and initial soil samples to a qualified laboratory for analysis of volatile organic carbons (VOCs), any compounds such as semi-volatile organic compounds, metals, pH, and temperature. Beeson said that within 30 days of receiving data back from the laboratory, they would submit a report back to the City of Norman.

Conaway said the next item they would be addressing is the pit closure plan and he showed a diagram with a quick outline of their time schedule, which would begin in late 2016. He said that they would move ahead with grading the topsoil on the completed area and put rye grass on top of the soil to establish cover at 30 pounds per acre. He explained that from now until Spring of 2017 they would finish filling the remainder of the pit and then in early Summer, when the temperature is high enough to place the Bermuda seed and fertilize and water as needed. He said that rebar is being cut off slabs before it is placed in the pit and that photos previously shown by McLellan that showed slabs with protruding rebar were taken last year and that they had already cut off the protruding rebar. Conaway explained that they would be putting 20 pounds per acre of Bermuda grass and vegetative mulch to get cover on the topsoil and after this is done they would file their Notice of Termination (NOT) with the ODEQ, who will come out and inspect the site before they close it.

Conaway then explained that the final step is the surface elevation plan and he presented the map illustration that McLellan had showed earlier, showing they had 399 points that were surveyed at the pit site with the GPS. He added that when the survey was done they would do an As-Built survey to show that it has been graded to the original elevations and submit it to the City of Norman.

O'Leary brought the discussion back to the committee for questions and comments. Sherri Stansel asked how the committee was able to do a re-vote on this application because the application was voted on and denied and when she and Neil Suneson had voted on a previous application for University House, they were told the decision was final. Assistant City Attorney Leah Messner responded that the University House case and this case are slightly different because University House was an approval from the committee, whereas the Sherwood case was an appeal to the Board of Adjustment (BOA). She added that the BOA heard that application and asked for additional information to send the application back to the FPC and see if the information supplied by the applicant affects the FPC's decision.

Stansel stated that she felt like something important was left out of the committee members floodplain packets, which was the Staff Report from the BOA meeting that she made copies of to pass around to other members. She said that she believed that the BOA had one option, which was to either approve or disapprove the FPC ruling and not to send it back to the committee. O'Leary said that this was the first appeal of an FPC decision that he could remember in the 10 years that he has served as the Floodplain Administrator and certainly since the new ordinance had been adopted. Messner responded that it was certainly within the

BOA's purview to send this back for additional fact finding and it is also in the purview of the FPC to deny the application again today.

Suneson said that he would like to read a section of the Floodplain Ordinance that stated the Board of Adjustment should consider the appeal at a regular or special meeting as soon as practical and make its decision to the suitability of the proposed use in relation to a flood hazard. He said that he did not feel like that language gave the BOA the option to send it back to the FPC for additional consideration and if the FPC concurs with another denial vote that Sherwood does not re-appeal and send the application back to the BOA. Messner responded that she thinks the BOA is stating that they cannot make a determination without this additional information and if the committee denies the application again then the BOA will review the application with the additional information subsequently. Suneson replied that he did not see in the floodplain ordinance where the BOA had that option. Messner responded that if he still felt uncomfortable with her advice that he was free to deny the application a second time.

Stansel stated that O'Leary's letter to Sherwood addressing the 3 items requested from the floodplain committee was dated August 1st and that they had three weeks to respond and failed to do so. Conaway explained it was because they had a deadline prior to that date when they had to turn in their information to the BOA. Stansel asked Conaway and John Curtis when was the last time they had visited the site. Conaway responded they had been out there last week. Stansel asked what size the original pit ended up being and Conaway said almost 5 acres. O'Leary confirmed that the permit issued in 2013 was for slightly less than 5 acres.

Stansel said that in addition she had sent an e-mail to O'Leary and the FPC regarding the application that Sherwood filled out and under the section regarding fill material it states "fill material will consist of excavated material from nearby construction projects (soil and concrete, steel and asphaltic materials will not be used)" and she explained that someone could go out to the pit and see that this is what is entirely in the pit. She added that on the application it states that the "permit may be revoked if any false statements are made". Stansel stated that she still supports her thinking that there were definitely false statements made in the application. O'Leary remarked that soil and concrete are generally allowed; steel and asphalt are not. Stansel argued that Sherwood stated in the application that these materials would not be placed in the pit. Suneson said that he was going to accept that soil and concrete were acceptable materials but he felt that it was a very poorly worded sentence. Stansel said that in the previous meeting floodplain minutes Conaway is stated as saying "they were not aware that they would have this much waste to dispose of" and that the "majority of the material to dispose of is earthen material" and she did not think that the concrete and asphalt material placed into the pit was earthen material. Conaway remarked that he still stands by that statement because the majority of the material placed into the pit is soil.

Suneson said that in addition to the 3 stipulations, there were two additional concerns from the floodplain committee, which were included in the floodplain minutes but that Sherwood failed to address. He asked Sherwood who is liable for potential damages if something happens downstream in regard to stream erosion in a flood event if the floodplain is modified. Conaway asked Suneson if he was referring to compensatory storage at the pit or a floodplain

event. Suneson said he was referring to a flood event resulting in bank erosion downstream from the project. Conaway responded that the pit was full of water so it would not act as an additional storage. Suneson replied that he just wanted to know who was liable if damage occurred downstream due to filling of the pit. He added that the South Canadian River is a braided prairie stream and that the channel can migrate all over the place, so he has a concern that material placed in the pit can be exposed in a flood event.

City Attorney Jeff Bryant said that the FPC and the City of Norman would not be liable based on the decision to approve the floodplain permit application. He added that he believes the applicant is proposing to fill the pit and put it back into the condition that it was when they started. Suneson stated that Sherwood is replacing what used to be in the pit which was sandy clay material with concrete, soil, some rebar and asphalt and some of this material is very difficult to remove. He explained that if there was a flood event and the stream bed begins to migrate towards the northeast towards the now filled pit, it is going to encounter that very coarse debris and that it would not be able to erode this material as it would have been able to erode the original sand and clay. Suneson said this event could cause the stream to go to the southwest instead of the northeast and this is a liability concern for people who live on the other side of the South Canadian River that could be impacted due to the presence of a concrete blockage or immoveable barrier type dam within the South Canadian River floodplain. Curtis responded that they could possibly go back and get some history about how likely an occurrence like that could happen and how the bank could migrate towards the north in a flood event; and if it was determined that was a likelihood then he would agree that Suneson has a point. Conaway responded that he would like consideration where there is a lot

of development and which way they would rather the river go. He said that he thinks the committee is getting into a lot of areas of discussion that were not applicable to the 3 additional items requested for the permit. Suneson commented that if he was a landowner in McClain County downstream from the site that he would be at the meeting. Stansel stated that she has seen what happens when concrete goes into the river and further west of this site there is an example of what it has done. Suneson added that in addition, it is not easy to predict.

Sturtz explained that he had some technical questions that he would like address, such as how the duration and sampling frequency were determined, and also how were the contaminants selected that were to be tested for. Beeson responded that the groundwater monitoring would be done for 3 years and that as closely spaced as he has placed the downgradient monitoring wells and given the sandy character of the soil, anything that is in that pit is going to leach out into the groundwater and show up in the wells during that time period. Sturtz asked how the elevation for the slotted section of the monitoring wells will be chosen. Beeson responded that he is going to allow the 3rd party consultant to make that decision, based upon their field experience.

Sturtz asked for a clarification if they drill 10 feet below the bottom of the pit, what would happen if there are floatables and the well is slotted 5 feet below the natural groundwater elevation. He said if this occurred then they are not going to catch any floatable contaminants. Beeson said that the length of the slotted screen is going to depend on what they determine to be as the water table elevation when they drill the borings and the first thing to be done when the boring is completed is to install an automatic water level meter to determine what the

water level is. He said they would base the slotted screen length on that information. Sturtz responded that there was a concern about which materials where placed there in the past and he thinks that if this were to be done in reverse order, which was requested initially with the permit, he thought there would have been some clear parameters and close monitoring about what was going to be placed back into this pit. He said because it was now being done in a reverse order, now the committee is trying to fix this and make the situation right. He added that a lot of the concerns that the committee is receiving from the public is the makeup of materials in the pit and currently all that the committee has heard from the applicant is a verbal response rather than a factual response.

Sturtz then asked the applicant if they would be averse to setting up 3 test pits at the location of the committee's selection, so they can verify what type of material is going into the final site location. Curtis responded that they would not be averse to doing this. Sturtz explained that this would allow the committee to pick the test pits randomly and they would be able to relieve some of the concerns. He asked the applicant how often someone would be going to the site to monitor for erosion to comply with the Notice of Intent from the ODEQ. Conaway explained that they would be monitoring at least monthly and after every rain event, they do a report and the ODEQ will come to inspect the site and check the log book, in which they will provide monitoring information. He added that since the site is fairly flat there will not be a lot of runoff, so the ODEQ will mainly be checking for seed coverage.

Stansel asked if the ODEQ was aware of this site and the situation and O'Leary responded that they did and they have been involved since 2012, when they issued the initial stormwater

permit. Sturtz added that there was a stormwater permit included in the packet from the ODEQ and said that they did periodic inspections of the site.

Stansel asked if the U.S. Army Corps of Engineers were going to be concerned about the rebar being put into the pit, if they have been notified and if the committee has all of the necessary permits to even vote on this application. O'Leary responded that the U.S. Army Corps of Engineers was notified and involved in another site upstream from this site in the South Canadian River watershed, that the committee has been working on for years with a property owner who has failed multiple times to remove material from the site. He said that when the U.S. Army Corps of Engineers met with the City of Norman at this site in July of 2016 they took the opportunity to discuss both sites and determined that their primary focus was not to have exposed steel. McLellan added that the Army Corps of Engineers was okay with having concrete in the pit but that they did not like exposed steel and asphalt. O'Leary responded that they had put the other property owner on notice and that they had inspected the site.

Suneson asked the applicant if he believes that there are any contaminants in the water from the current materials placed in pit and may determine this information from the first testing analysis, or in the second or third. Beeson replied that he moved the downgradient borings closer to the pit and he will be testing those borings, as well as the upgradient borings. Suneson said that he would maintain that there was a significant flow parallel to the southeast leading to the river and that he thought if there was any contaminants to show up during the analyses that they would show up to the southeast or southwest of the pit and that he would

strongly recommend more monitoring wells. He said that he had a concern with a long lasting material such as asphalt leaching into the ground water. Beeson responded that heavy metals would be tied up into the soil matrix and that this is one of the characteristics of heavy metals and that when the pH is high, the heavy metals are tied up and this is one of the reasons that we will be doing toxicity leaching procedures on the soil samples that are taken from the borings. Suneson asked what the pH level of the river was and Beeson replied that he did not know because he had not tested it. Suneson said he was concerned with the direction of the groundwater, because if you go upstream from the site, much of the embankment is composed of limestone; which can raise the pH level of the water. Curtis responded that everything in the pit is earthen material and concrete, except for a minor amount of asphalt and that he did not think there would be a difference in any of the well readings.

Suneson said as he was reading through the material, the word asphalt has been left out relatively routinely. Conaway responded that at the last floodplain meeting it was included in the minutes that he had said there was a trace amount of asphalt bonded to the concrete and that when the concrete was taken out, they had removed what asphalt they were able to. However, anything that was bonded to the concrete remained. Suneson asked Conaway what is the evidence to claim that there are only trace amounts and if they could define trace amounts by volume and not weight. Curtis responded that he would be making up a number because they did not know, but a trace amount to them was the amount of asphalt that they could not remove from the concrete. Suneson presented a piece of solid asphalt to the audience that Stansel had picked up from the site. Suneson mentioned that some of the photos shown in the Staff Report also showed some rather sizeable chunks of asphalt in the pit. He

asked if the analyses detect hydrocarbons and heavy metal contaminant levels above what is seen in the upgradient wells, what will the plan be? Beeson remarked that if there is contamination, then the landowner is legally obligated to contact the ODEQ and that they can work with them independently. Conaway said that it would be out of the hands of the FPC and that a remediation plan would go into effect between ODEQ and the landowner.

Suneson then asked the applicant if they had any information about how asphalt degrades when buried 10 to 15 feet below the groundwater level in a sandy environment. There was no response.

O'Leary mentioned that the BOA voted 4-0 to send this floodplain application back to the FPC and directed the applicant to provide a groundwater monitoring program which he believes they have done, a borrow pit closure plan which they also have done, and other documentation or plans requested by the FPC for their reconsideration of the floodplain application. He said that he believes the committee has raised some other questions or concerns and that he thinks they have four options at this point 1.) to agree that the information provided today is sufficient and approve the floodplain application, 2.) determine that the additional information does not meet the BOA conditions and deny the application. If the application is denied, the applicant can re-appeal to the BOA. 3.) The committee can require and attach additional conditions and recommend approval with those additional conditions, or 4.) the application can be postponed with a request to provide additional information.

Suneson stated that if analyses are done it is written that Sherwood would receive the raw data and then provide the City of Norman with a report of the findings but he would like to request that the raw data is also received by the City at the same time that Sherwood receives it from the laboratory. Beeson responded that the City will get the entire lab package as it is received by him. Sturtz responded that this is typically how we receive the data that includes an analysis of the data, and a summary of it with the raw data included.

O'Leary then opened up the meeting for public comments.

Hampton explained that she did not think Suneson's question about how concrete and rebar would affect this unique floodplain was answered properly and she wanted more clarification regarding this if it is in the floodplain committees' purview to recognize the different types of floodplains because this is a unique floodplain habitat area. She also wanted to know how this will affect the TMDL which is in effect in the South Canadian River basin, and also is the floodplain committee treating this big company differently than they are treating the residents of Norman by allowing them to violate their floodplain permit and to dump in the floodplain. She added that she was concerned about the natural environment and the downstream flow and where the water would go after hitting the concrete barrier. Curtis responded that if that was a concern then why would rip rap be placed on one side of a river? Hampton said that this is a braided prairie river, not just any river. Conaway mentioned that there was rip rap and concrete all up and down this particular river. Curtis said to answer her other question that is the purpose of the wells, to determine if what they have done has affected the groundwater.

O'Leary stated that to answer the question regarding unique floodplains that the committee is here weekly managing various floodplains in the City of Norman and they have one floodplain ordinance to apply to all floodplain cases. He said he felt that the Staff Report given by McLellan explained how they are addressing this particular floodplain area and trying to understand what is happening to the South Canadian River, as a result.

Sturtz answered the third question regarding the TMDL and stated that it is actually for the lower Canadian River, and that oddly enough that is the name of a geologic area that is not on the Canadian River but instead for the Little River watershed so it basically overlays the exact same area as the current Lake Thunderbird TMDL, which is a bacteriological TMDL, so both of our TMDL's are north of the South Canadian River.

O'Leary answered her last question about a big company allowed privileges that others may not receive, that he would use an example of a single property owner and Norman citizen that lives upstream from the site location that Staff has been dealing with for about 10 years and that the FPC has applied the same standards to him as well. He said this citizen has not been as compliant as Sherwood Construction and the U.S. Army Corps of Engineers is now taking action against that individual. Hampton responded that if Sherwood violated the original agreement then how they can be trusted to do what they are stating they will do. O'Leary said that Staff tries to first work with the owner and remedy the problem, the goal is to get the floodplain back into as good of a condition as possible, not to turn it into a legal issue.

Hampton asked if non-native Bermuda grass was acceptable vegetation for that habitat. O'Leary stated that he would leave that question up to the committee to address. Cynthia Rogers asked that since the FPC allowed Sherwood to violate the permit, how might that affect other companies or citizens who violate the floodplain ordinance. Rogers also asked that since the pit was filled illegally and not monitored, that the company's word was taken about what material was placed there and that she felt uncomfortable taking their word, until it is certain what materials are in the pit.

O'Leary asked Messner to speak on behalf of Rogers' question regarding how violating a floodplain permit might affect other companies or citizens from doing the same, or from establishing a precedent setting action. Messner responded that different cases have distinguishing circumstances that can allow for different decisions and the FPC will look at these circumstances and make the best informed decision to their ability.

Suneson asked in regard to the test wells, what is the best way to determine what material is in the pit. He added that if one of those test wells hits rebar then it will stop immediately. Sturtz responded that he was suggesting that three test pits be evacuated with a backhoe to determine what material is actually in the pit.

Charles Wessner mentioned that he was very disturbed to hear of the test wells because he felt like this material has no business being in the floodplain at all. He said that he has been down to the site and has seen that there is more than a trace of asphalt bonded onto the concrete and also more than a trace of rebar. He added that some of it is sticking out of the concrete and

some of it has been cut off. Wessner thought test pits would help determine what material is in the pit but he knows it is more than a trace of asphalt and rebar and it probably as much at ten percent or more. He stated that he thinks this violates the floodplain ordinance and the FPC shouldn't even be discussing or reconsidering the application. He stated that the City has made a big deal about protecting the South Canadian River when promoting the Storm Water Utility and staff is going to lose voter confidence if citizens have to to pay a fee to protect the water of the South Canadian River, and meanwhile allow Sherwood to dump contaminated materials into the floodplain. He said this is not going to sit well with them that the City is essentially violating their own ordinance.

Karen Chapman said that she believed any monitoring should go past 2018 and that she believes citizens should also be able to access the results of the groundwater monitoring tests. O'Leary said that would be a function of the FPC to specify this as a condition of their motion.

Lyntha Wessner asked if there was anywhere in the state that is not near rivers, that is an appropriate dumping site for these kinds of materials. O'Leary stated that there are limited numbers of construction demolition dumping sites in the state and they would be required to be located outside of the floodplain. Wessner asked if there was a local plant that could recycle the asphalt. Conaway responded that most of the asphalt they were able to mill off of the surface of the concrete was sent to the recycler but in some cases, it was bonded onto the concrete and was unable to be easily removed. She suggested someone from Staff go down to the site with a camera and view large chunks of asphalt not bonded to concrete that have not

been covered up and that they should get down there fast before they are moved. Conaway asked Wessner to please not make comments like that because they are not trying to hide anything. Wessner responded that she has hiked all up and down this area and that she was appalled that as much as we know about rivers and how they move that in this day and age, we are still allowing dumping of construction materials along the river. She added that this pit is already in the alluvium and that material is being dumped on top of it and people in Norman and all the way down to Eufaula drink out of the South Canadian River. She explained that there is a man that has a well downstream from the site that is bottling water and selling it and she asked how he is supposed to get rid of all of the heavy metals in the water.

Hampton said she wanted to make a comment about Dr. Rogers question in which Conaway directed people to go along both sides of the South Canadian River to see signs of dumping. Donna Johnson asked the committee if they wanted their children and their grandchildren to drink this water.

O'Leary asked if there were any more comments or questions from the public. There were none. He then brought the discussion back to the committee. Sturtz said that he thought most of the discussion was about contaminants and contaminant sources and having done environmental investigations he believes there are legitimate concerns. He said the problem he has is that he does not know what this waste material is composed of and that if they go out there and excavate test pits then they may be able to alleviate concerns that there is an excessive amount of asphalt in there. He added that he does not think concrete will cause

much of a problem because it is typically an inert material but he would move to postpone the meeting to have a visual inspection of three test pits in random locations, so the committee and the citizens might feel more comfortable with what has occurred in this pit. Connors seconded the motion. Suneson asked if the committee was going to set any numbers, prior to going to do the inspection. Sturtz responded that he thinks they should do a characterization of the three pits, come back with the results and then discuss it as a committee before they come to a decision. Suneson requested to add to this motion to ask Sherwood Construction to examine the liability issue as to what the potential effects would be downstream on both sides of the river if there was a flooding event which encounters this concrete blockage. He added that he felt like it would clearly affect the hydraulics of the river and erosion on both sides, so he would like to request a study be done to address this issue. He said he would also like to see a report about what would happen if there was a flood and the concrete material became exposed on the riverbank.

O'Leary said he would work with the City Attorney's office in regard to the question about liability and coordinate with the U.S. Army Corps of Engineers relative to the questions about the material. He added that he believes they could help because of similar situations in other cities that have experience dealing with these same issues and that the City of Norman has some of the most stringent floodplain ordinance regulations in the State of Oklahoma and he does believe this type of filling is happening in many other cities and floodplains across the country. He stated that the motion on the floor was to postpone Floodplain Application #574 to November 7th, 2016 and in the interim there will be a visual inspection of three random test pits with City of Norman Staff, ODOT Staff, Sherwood Construction, and FPC members.

O'Leary asked if there was any further discussion on that motion. There was none.

Motion was approved to postpone application #574 7-0 to November 7th, 2016.

Item No. 6, Miscellaneous Discussion:

1. There was one pending application for the November 7, 2016 meeting.

2. The filing deadline for the November 21st, 2016 meeting is November 2nd, 2016.

O'Leary asked if there was anything else from the committee and there was not, O'Leary called for a motion to adjourn. Sturtz motioned to adjourn, seconded by Hudson. Motion was approved 7-0. Meeting adjourned at 5:30 p.m.