## FLOOD PLAIN PERMIT COMMITTEE MEETING

201 West Gray, Building A, Conference Room D

Monday, January 4th, 2016 3:30 p.m.

#### Minutes

PRESENT: Shawn O'Leary, Director of Public Works

Susan Connors, Director of Planning/Community Development

Scott Sturtz, City Engineer

Ken Danner, Subdivision Development Manager

Jane Hudson, Principal Planner Sherri Stansel, Citizen Member Neil Suneson, Citizen Member

OTHERS PRESENT: Todd McLellan, Development Engineer

Rachel Warila, Staff

Anthony Wijtenburg, Applicant Gary Keen, Keen Engineering

Todd Martin, Plains Pipeline (Landman)

Scott Williams, Muirfield Homes

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

## **Item No. 1, Approval of Minutes:**

O'Leary called for a motion to approve the minutes from the meeting of November 2nd, 2015.

A motion was made to approve minutes by Scott Sturtz, and seconded by Sherri Stansel.

Approved 6-0 (Susan Connors was not present during vote). It was noted that six members of

the committee were present and a quorum was established. Connors then joined the meeting.

O'Leary then announced that the second application of the day for the Lindsey Street bridge

and Imhoff Creek channel project was incomplete and was only discovered a week prior to

this meeting during the holidays and that it would be postponed indefinitely to give staff time

to collaborate and then bring the application back to the committee in its complete form. He then introduced John Clink who is the project manager for Lindsey Street and then asked McLellan for any comments on this application. McLellan stated that as he was going through the application materials there was information that was lacking that needed to be more defined so it would be best to request a postponement. Clink then commented that they were missing maps and other items for the application that would need to be gathered before it could be brought back to the committee. Sturtz then made a motion to postpone Floodplain Permit Application #558 indefinitely and it was seconded by Danner. Approved 7-0.

# <u>Item No. 2, Flood Plain Permit Application No. 564:</u>

McLellan introduced the applicant's engineer Gary Keen for the project located at 310 S. Lahoma Avenue and presented the staff report for Flood Plain Permit Application No. 564. Applicant Anthony Witjenburg submitted this application for a new residence to be built at this location after the original house was substantially damaged by fire in April 2015. The residence was later demolished and removed from the site.

The original house was constructed in 1922 on Lot 9, Block 2 of Eagleton Addition, which is located on the west side of South Lahoma Avenue. Imhoff Creek flows through the old WPA channel on the west side of this property. The entire property is within the floodplain/floodway of Imhoff Creek. The lot drains from east to west, that is from the front to the back and the grade falls approximately one foot in 50 feet across the building site. Several easements run across this lot. A drainage easement runs across the west portion of this lot, in a north-south direction. The west line of the lot lies within the confines of the Imhoff

Creek channel. A utility easement runs across the back side of the property in a north-south direction and there is a sanitary sewer main (and possibly other utilities) in this easement. A second utility easement runs across the south side of the lot in an east-west direction and there is a sanitary sewer main in this area as well. The survey indicated that the sanitary sewer is located under the existing driveway and possibly out of the easement. The contractor will take precautions to avoid damage to the sanitary sewer main.

The structure was substantially damaged by a fire in April 2015. Subsequent to the fire, the owner at that time had the house demolished and removed from the site. The property was later sold to Anthony Witjenburg, the applicant, who desires to construct a new residence on the property. Because the new house is replacing a substantially damaged structure, it will have to meet current floodplain ordinance requirements. According to public records, the original one-story residence included 1,420 square feet of living area and 222 square feet of porch area. Two porches were present, with an enclosed rear porch having an area of 98 square feet and the balance being an open front porch. The total enclosed space was 1,518 square feet, and the total footprint was 1,642 square feet.

The proposed structure is a two-story residence. The primary focus of concern for the committee is the footprint of the lowest floor, which directly impacts the floodplain. The proposed total area of the first floor of the structure is 1,626 square feet, which includes an open and elevated front porch having an area of 269 square feet and an elevated deck on the rear of the house having an area of 52 square feet. The space beneath the front porch and the space beneath the rear deck will remain open to allow floodwaters to flow freely in these

areas. The front porch and rear deck will be supported by concrete or steel columns. Wooden supports will not be used to insure that all materials located within the floodplain are water resistant. The enclosed area of the lowest floor of the proposed structure is 1,305 square feet, which is 213 square feet less than the original structure. Although the contractor may construct a metal stairway, the owner's preference is a concrete stairway, considering aesthetics and maintenance issues. An area of 56 square feet is included for concrete steps, which is greater than the footprint of an open steel stairway. The rear deck will be served by a metal stairway having an open configuration which will have a minimal impact on the floodplain.

McLellan then noted that the previous house was closer to the channel than the proposed house and that it would be located further east so that there was more compensatory storage provided for flood waters. Construction materials utilized below the base flood elevation (BFE) including the crawl space must be materials that cannot be damaged by floodwaters, therefore wooden timbers would be unacceptable in those areas. Utility lines can be exposed in the crawlspace if constructed of materials that cannot be damaged by floodwaters and appliances such as heaters, furnances and such accessories cannot be placed in the crawlspace. The driveway and parking areas that served the original home still exist at the site. This application calls for leaving the concrete in place. New concrete is proposed to be placed on the property to allow the driveway to be straightened and to make it parallel to the property line. The applicant also wishes to apply additional concrete in the rear to square up the parking space and provide room for additional parking, making three parking spaces in total. Also, the original sidewalk leading to the public sidewalk from the house has been removed

and the applicant wants to construct a new sidewalk leading to the public sidewalk. The total

area of new concrete is approximately 767 square feet and this application calls for the new

concrete to be placed no higher than the existing ground at any point. Soil will be excavated

from the site to create space for the concrete and any excess material will be disposed of off

site of the floodplain. Since this new residence will replace a substantially damaged house that

was located in the floodway, the current floodplain regulations must be met. McLellan then

noted that the structure is going to be 2.5 feet above the BFE to allow for construction error.

McLellan then discussed the Applicable Ordinance Sections which are:

2(eee) Substantial Damage – Damage of any origin sustained by a structure whereby the cost

of restoring the structure to it's before damaged condition would equal or exceed 50 percent

of the market value of the structure before the damage occurred. McLellan explained how the

proposed house replaces the original house; therefore the new structure will meet current

floodplain ordinance requirements.

4(b)(1)(a) and 4(b)(5) Fill Restrictions in the Flood Plain and Compensatory Storage -

McLellan explained how the use of fill is restricted in the floodway. The original house had a

basement that was demolished along with the rest of the house. Fill material was placed in

the hole to bring the ground up to original grade but did not exceed the volume of the original

basement. No additional earth fill will be placed on the property. The footprint of the

proposed house is less than the footprint of the original house resulting in more floodplain storage capacity of the property; therefore no compensatory storage will be required.

4(c)(1) Structures in A, AE, AH, and AO Zones – McLellan stated that structures including both "site-built" and "manufactured homes", shall be constructed on fill so that the lowest floor (including basement) is at least two (2) feet above the base flood elevation. The fill shall be at a level no lower than one (1) foot above the base flood elevation for the particular area and shall extend at such elevation at least fifteen (15) feet beyond the limits of any structure or building erected thereon including any attendant utility and sanitary facilities. Because this house is located in the floodway and the use of fill is restricted, the applicant plans to elevate the lowest floor a minimum of 2 ft. above the BFE by using a pier and stem wall foundation system.

McLellan also explained that the floodplain ordinance requires that the minimum finished floor elevation be at an elevation 2 feet higher than the BFE, which would require the floor to be at an elevation of 1154.5 ft. The proposed house is planned to have the lowest floor placed at an elevation of 1155.0 ft., which is 0.5 ft. higher than the ordinance requirement. This additional 0.5 ft. is proposed to allow for construction tolerances. The applicant's surveyor will check the elevation of the top of the foundation upon completion and prior to commencement of the construction of the lowest floor of the structure to insure that the minimum finished floor elevation requirement is met. The surveyor will provide an initial Elevation Certificate to the City and the contractor will provide a sketch showing construction

detail from the top of the foundation to the top of the lowest floor. This requirement is appropriate to insure that the finished floor is constructed at the required elevation. This information will be provided to the City prior to advancement of construction beyond this point. Prior to the issuance of a Certificate of Occupancy, a final Elevation Certificate will be provided to the City.

4(c)(5) Enclosures – McLellan discussed that because the applicant will be constructing a pier and stem wall foundation system, the applicant will be required to flood proof the structure by installing vents that are designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of flood waters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:

- (i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;
- (ii) The bottoms of all openings shall be no higher than one foot above grade;
- (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

Based on the proposed area of the enclosed space, the vents will have a minimum net opening of 1305 square inches on each side of at least two sides of the structure. The vents do not have to be on opposite sides of the structure, so these vents can placed on adjacent sides if desirable. Any number or size of vents can be used as the requirement is based on the net

opening. Vents should incorporate screens to keep out undesirable visitors and must be constructed of materials that will not be damaged by floodwaters. Flood vents may be installed in an access door. The top of the flood vent must be beneath the base flood elevation and the bottom of the vent opening must be within 12 inches of the adjacent grade. McLellan stated that it is Staff's recommendation that Floodplain Permit Application #564 be approved.

Keen then commented that he had just learned from the City of Norman's Utility Department that they recommended that the wall of the home be located at least 5 feet away from the sewer line, because they felt that it was a serious concern to have the sewer line closer than 5 feet from the house. He explained that it was only found after the property survey was completed and that there was a replacement line installed by the Utility Department 8-10 years prior to the survey. The recommendation from the Utility Department is to re-design the home to move it 5 feet away to keep from damaging the sewer line and it is currently shown about 1½ feet from the sewer line. Keen then stated that the foundation design engineer felt like he could deal with the sewer line being that close to the wall of the home by installing the pier in close proximity to but not damaging the sewer line. O'Leary then responded that the committee could take action on the current floor plan if the applicant would like and that the utility issue is irrelevant to the floodplain, so they could ask for action and if that changes they may need to return with a different floodplain application for a different structure.

Ken Danner then asked if it was known where the sewer line would be in proportion to the wall and Keen commented that the center line was approximated 2½ feet from the house and

that is an 8-inch line, so that the new wall will have just over one foot of separation with the sewer but that it was very close. Keen commented that part of the problem is that the soil is sandy loam and if they trench down beside it and the sewer line decides to move sideways then it could result in a big problem. Danner then asked if the original basement affected the sewer line and Keen said that there was no evidence that it did.

O'Leary then asked Keen what he thought and Keen suggested that they go ahead with the application as it is. Sturtz made a motion for approval and it was seconded by Danner.

Approved 7-0.

# Item No. 3, Flood Plain Permit Application No. 565:

O'Leary then announced the submittal of Application No. 565 for the excavation of a steel crude oil pipeline located southwest of the intersection of 12<sup>th</sup> Avenue S.E. and East Franklin Road which was a possible emergency repair project. He then asked McLellan to deliver the Staff Report.

McLellan then introduced Todd Martin who represented the applicant Plains Pipeline, L.P. During a routine internal inspection of the pipeline, an anomaly was detected that indicated a possible decrease in pipe wall thickness most likely caused by corrosion. To reduce the risk of pipeline failure, the applicant wanted to proceed as quickly as possible with a visual inspection and possible repair. The applicant notified the City Floodplain Administrator (FPA) for permission to proceed with the inspection and possible emergency repair. The FPA

indicated to the applicant that they could proceed with the understanding that a Floodplain

Permit Application would be submitted to the committee at the next available meeting.

The pipeline was excavated and visually inspected on December 11, 2015. The inspection

indicated possible corrosion of the pipeline so an "armor" coating was applied and the

pipeline reburied and the backfill compacted to original grade. The work was started and

completed on the same day. McLellan then discussed the Applicable Ordinance Sections

which are:

4(b)(1) Fill Restrictions – McLellan stated that the use of fill is restricted in the floodplain.

No fill was brought into the floodplain as part of this project. The material excavated was

used as pipeline backfill and compacted to grade.

5(a)(viii) No Rise Considerations – McLellan discussed that for proposed development within

any flood hazard area (except for 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. The project engineer has certified that the project will not cause a rise in the

BFE, which meets this ordinance requirement.

11 Emergency Authority – McLellan stated 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

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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 the 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

development.

O'Leary then asked if there were any questions or comments and Ken Danner made a motion

to approve the application which was seconded by Neil Suneson. Approved 7-0.

Item No. 4, Miscellaneous Discussion

O'Leary then brought up the discussion of illegal dumping in the Canadian River floodplain.

McLellan then stated that there was some illegal dumping going on in late December that

Sherri Stansel had noticed and after an investigation staff determined that Lonnie Hodges was

dumping chunks of concrete and debris in the floodplain. After an investigation the property

owner was sent a Notice of Violation. The Oklahoma Department of Environmental Quality

and the Corps of Engineers were also contacted and are also investigating this matter. At this

time, no material has been removed from the floodplain. Mr. Hodges was given until

December 31<sup>st</sup> to remove the material and it has not been done yet.

The next discussion involved changes to the floodplain application that was discussed by Neil

Suneson and Todd McLellan. The possible changes or alterations to the applications were

noted. O'Leary then noted that there would not be any applications for the next Floodplain

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Permit Committee Meeting on January 19<sup>th</sup> but the filing deadline is still open for the February 1<sup>st</sup> meeting. A motion was then made to adjourn the meeting by Stansel which was seconded by Suneson. Approved 7-0.