The City of
OKLAHOMA CITY

March 26, 2021

DRAINAGE ORDINANCE

RESPONSE TO QUESTIONS

Drainage Ordinance

Public Comment No. 1: Local Floodplain Administrator Sec 16-2.2b Page 1
Floodprone areas within 200 feet

The process of determining the flood prone areas by the City Engineer should be made available to Developers/Engineers to evaluate the mitigation measures and to allow planned development of these flood prone areas as a part of site development.

Response: Floodprone areas are determined from FEMA Flood Insurance Rate Maps, USGS Oklahoma City Urbanized Study, and/or any individual study of an unnamed tributary by an Oklahoma Professional Engineer. If the subject development is adjacent to an un-studied tributary, an engineer needs to provide analysis to determine the 100-year water surface elevation to set minimum finished floor elevation of the building based on flood conditions.

Public Comment No. 2: Local Floodplain Administrator Sec 16-2.4 Page 3 Penalty
Is there a due process by the City to notify the person to take corrective action prior to penalizing.

Response: The City will work with the person to give warning, and provide an opportunity to correct. However, the severity of the violation or failure to correct may cause a notice of violation to be issues.

Public Comment No. 3: Definitions Sec 16-4 Page 3
Define that the Bridge is a hydraulic structure with clear span larger than 20 feet.

Response: This is not necessary for the Drainage Ordinance. For purposes of the Ordinance, a bridge is a clear span of any length, and a culvert is a pipe or box culvert of any size.

Public Comment No. 4 and 5: Definitions Sec 16-4 Page 7
Highest adjacent grade should be post-construction, not "prior to grading or construction."

Response: The definition used is from FEMA 44CFR59.1.

Public Comment No. 6: Definitions Sec 16-4 Page 8
1% or greater chance of flooding each year - This should be struck. Should just be 1% chance not or greater chance.

Response: The definition used is from FEMA 44CFR59.1.

Public Comment No. 7, 8: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities
Plumbing Inspectors in accordance with the applicable Plumbing Code. Plumbing Code is intended for building storm sewer systems and does not have the applicable criteria for hydrology, hydraulic, pipe materials, structures, etc. for large diameter storm sewer systems outside of the building. Even if private storm sewer systems are reviewed by Development Services, I recommend using public storm sewer criteria for the hydrology and hydraulic calculations. Pipe material, structures, backfill requirements, and plan presentation wouldn't necessarily be dictated like they are for public storm sewer system. We need to have clear review criteria for private storm sewer systems.

Response: Development Services is in the process of amending the Plumbing Code. If the developer has a set of plans designed according to the approved and adopted Drainage Criteria Manual and the Drainage Ordinance, signed and sealed by a Professional Engineer, the inspector will use the plans for inspection in lieu of the code requirements.

Public Comment No. 9: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities
On private storm sewer systems, we suggest that the plumbing department only inspect lines that are less than 12" in diameter, and that those that are 12" and larger be inspected by the engineer of record.

Response: Development Services inspections are equally qualified to inspect storm sewer systems as previously inspected by the Public Works Department. Separating inspection by pipe size would likely create a conflict and possible confusion during inspections.

Public Comment No. 10: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities
The existing revisions indicate that a licensed plumber would be required to install a private storm sewer. We suggest that the private systems be installed by either a licensed plumber or a pre-qualified Class A storm sewer contractor.

Response: Development Services is in process of amending the Plumbing Code to allow installation by a licensed plumber or a prequalified storm sewer contractor.

Public Comment No. 11: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

This section regarding private storm sewers needs a lot of clarification. For instance, if 6 acres drains onto a large scale residential project, is just the storm sewer system that collects the 6 acres required to be public or does it disqualify the entire development? How will and by what criteria will Development Services review and inspect?

Response: If the development project receives flow from an area more than 6 acres then the system conveying the incoming flow, traversing through the development project, shall be public. If public streets are to be constructed, then the drainage system shall be public as well.

Public Comment No. 12: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

Would Detention Pond be considered as a private stormwater facility for the development, if no upstream offsite drainage area is present.

Response: The detention pond would be considered a private facility. However, detention pond plans and calculation will be submitted to Public Works for review and approval for both public and private detention ponds. Detention pond inspections will be performed by Public Works.

Public Comment No. 13: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

Currently, we are submitting Private Paving Plans for our private residential communities under a PV set and the public storm sewer under DD set. How will these submittals be reviewed with the new code?

How should the review and approval for private drainage flumes conveying runoffs from less than 6 acres of offsite upstream areas be reviewed; when, these flume tie into the Public Stormwater facilities? Should the private stormwater facility items be submitted as “private” pay items on PD cover sheet?

Response: For any proposed development that has private streets, the storm sewer will also be private. Public Works will review plans for any connection to public storm sewer systems in the right of way.

Public Comment No. 14: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

Private stormwater facilities and systems may be utilized when the entire development generates all the stormwater drainage on the site, and there is not any offsite or pass-through stormwater runoff or discharge - This does not mandate private storm sewer for all drainage created on-site. It says may be used and at the discretion of the City Engineer. Summary of Changes issued by the City states that Private Storm Sewer will be required. Which is it?

Response: Systems that fall into this category may be either public or private. If the streets are public, the storm sewer must be public. If the streets are private, the storm must be private. Off-site and pass-through storm sewer systems will be public.

Public Comment No. 15: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

The design, construction, operation and maintenance of private stormwater facilities and systems will not be reviewed or inspected by Public Works Engineering or City Engineer personnel - This needs to make reference to the Detention Section 16-10 because otherwise detention is a private stormwater facility located within a Private D/E and/or CA and therefore would not be reviewed and/or inspected by Public Works Engineering.

Response: Detention ponds are considered private facilities. However, detention pond plans and calculation will be submitted to Public Works for review and approval. Detention pond inspections will be performed by Public Works.

Public Comment No. 16: Responsibility for improvements Sec 16-5.2a Page 10 Private Storm Sewer Facilities

If it is private why is paved flume or underground pipe mentioned in this statement. Also why is the statement either of which made when stating it will be private. Either of should be deleted.

Response: Storm sewer systems may be either public or private. If public, the design must meet all design requirements for public systems. We will add language to this paragraph after clarification.

Public Comment No. 17: Primary drainage channel requirements Sec 16-6 Page 11

Primary drainage channel requirements for OKC Q50 (not Q100) please clarify? All primary drainage channels which are located within, or immediately adjacent to, an improvement, construction area, development or subdivision shall be protected and improved by the developer as follows:

(1) all land having an elevation below the 50-year maximum flood elevation for the final improved channel shall be dedicated for the purpose of providing drainage, for public park, or drainage and utility easement use.

(2) the existing channel lying within or immediately adjacent to the subdivision or parcel of land proposed for development or redevelopment shall be cleaned to provide for the free flow of water, and the channel shall be straightened, widened, and improved to the extent required to prevent overflow, resulting from a 50-year frequency rainfall, beyond the limits of the dedicated drainage easement provided for in Subparagraph (1) above.

Response: This comment was made referring to the current Drainage Ordinance, not the posted final draft of Ordinance on the website.

Public Comment No. 18: Primary drainage channel requirements Sec 16-6 Page 11

1. All land within a development having an elevation below the 100-year frequency flood elevation of the primary drainage channel must be left unimproved as a common area with a private stormwater dedication or as a private drainage easement. If that land is not within a FEMA designated floodway, the area can be filled and improved. The developer must obtain and comply with all applicable permits and requirements prior to commencing any grading, excavation, or fill.

The floodplain acts as a natural detention pond and flows are attenuate as they go downstream.

If there is a lot of floodplain storage, the flow rates will generally increase only because of the increased drainage areas added. However, if the floodplain is filled to the limit of the floodway, the metering effect of the storage will cause the flow rates to increase. Floodplain 101. Are you going to allow the rise in water surface that will occur if the floodplain is filled? And account for the larger flow rates that will occur if the floodplain storage is reduced? If so the statement that "All land within a development having an elevation below the 100-year frequency flood elevation of the primary drainage channel must be left unimproved" is impossible. I would strongly recommend requiring compensatory storage up to the 40-acre drainage basin level. Flow rates will continue to rise because of the loss of the stormwater detention effect of floodplain storage, in addition to the rise in flow rates that is inevitable. A stormwater detention pond can equal pre-existing flow rates but those flow rates will rise to that rate earlier and stay up for longer time periods, impacting downstream areas. Plus, there is more impervious area which means the volumes of runoff have to increase.

Response: Any fill within a FEMA designated Zone AE will require a flood study of the proposed changes within the flood plain to determine any increase in 100-year water surface elevation or flow rates. Allowable rise must comply with FEMA regulations.

Public Comment No. 19, 20, and 21: Primary drainage channel requirements Sec 16-6.1 Page 11

1. Land within a development having an elevation below the FEMA Effective 100-year frequency flood elevation of the primary drainage channel shall be allowed to improve, if the necessary procedures are followed in accordance with NFIP for FEMA Effective Map Revisions.
2. We interpret this to mean that there can no longer be any fill in the FEMA floodplain. Why is this the case if FEMA allows it?
3. This says you can't fill in the floodplain on your property. This would do away with FEMA revisions and no-rise studies. This should be modified to require no rise study or FEMA revision if fill in floodplain.

Response: Fill is allowed to be placed within a FEMA mapped floodplain. A flood study will be required to demonstrate the impact of the placement of the

proposed fill. This flood study must show no negative impact to adjacent property owners and allowable rise must comply with FEMA regulations.

Public Comment No. 22 and 24: Primary drainage channel requirements Sec 16-6.2 Page 11

1. Channels immediately adjacent to a subdivision implies that it is not on the development property and therefore the developer does not have any rights to enter or clean the adjacent property.
2. This can't be required if the property owner doesn't own the land. "Must" be cleaned. Why is the City requiring the developer to clean the channel. This should be left to the discretion of the developer.

Response: This sentence will be revised to eliminate the word "adjacent". There should not be a case where the developer needs to access adjacent property to clean and improve.

Public Comment No. 23: Primary drainage channel requirements Sec 16-6.2 Page 11

Whose responsibility is to keep the existing channel clean for free flow of stormwater runoffs, if it is lying within or immediately adjacent to a subdivision or a parcel of land proposed for development or redevelopment and it is the Waters of the United States or considered jurisdictional by the COE.

Response: Maintenance responsibility for all unimproved open channels will remain with the property owner or homeowner's association.

Public Comment No. 25 and 26: Primary drainage channel requirements Sec 16-6.3b Page 12

1. Including utility and sanitary facilities - This should be clarified to above ground structures. Not feasible if they are underground.
2. Sanitary sewer lines are and will be below the 100yr floodplain. This needs to be revised to be more specific…..manholes, lift stations, etc….not "facilities".

Response: This paragraph states that the sanitary facilities will be required to be floodproofed to 1-foot above the 100-year water surface elevation. If the sanitary sewer manholes are elevated to that level, the sanitary lines and/or facilities comply with the requirement.

Public Comment No. 27: Primary drainage channel requirements Sec 16-6.3e Page 12

This needs to be better clarified to primary drainage channels. Detention should not be required to follow this requirement if downstream of historic condition or developed condition with existing detention pond.

Response: This section is referring to storm sewer pipe design, not detention pond design. A detention pond located downstream of an existing detention pond will be designed for the historic conditions.

Public Comment No. 28: Primary drainage channel requirements Sec 16-6.5 Page 12

Provided, however, the acceptance only of an easement is not an acceptance of the drainage improvement, which requires separate formal action of the City Council - The acceptance of the easement is not acceptance of the drainage improvement? Requires going to CC twice? You either bond improvements or they are installed and inspected and accepted. In either instance you should not have to go to CC twice.

Response: This is not a requirement for two hearings before City Council. However, drainage infrastructure must be specifically dedicated and accepted by City Council before the City can accept the ownership and maintenance responsibilities. This dedication can be accomplished by placing a statement in the Owner's Dedication Certificate on the Final Plat that expressly dedicates the storm sewer infrastructure.

Public Comment No. 29: Secondary drainage channels Sec 16-7.2 Page 13

Drainage areas less than 40 acres shall have an improved closed storm sewer system unless written approval has been given by the City Engineer for construction of a concrete lined channel - Needs to be some provision in here for intercepting off-site sheet flow.

Response: The paragraph has been revised to clarify the use of open concrete channel and closed storm sewer with different drainage area basins.

Public Comment No. 30: Secondary drainage channels Sec 16-7.2 Page 13

In all cases above, the developer may develop the land without making channel improvements for areas non-jurisdictional, only if the landowner or developer has dedicated 100% of the land inundated by the 100-year frequency storm as a common area or private drainage easement dedicated to stormwater drainage - Conditions? Can I fill in any of this area without requiring improvements so long as we dedicate as private D/E or CA?

Response: Fill is allowed to be placed within a FEMA mapped floodplain. A flood study will be required to demonstrate the impact of the placement of the proposed fill. This flood study must show no negative impact to adjacent property owners and allowable rise must comply with FEMA regulations.

Public Comment No. 31 and 32: Rural subdivisions Sec 16-9.1 Page 14
A provision needs to be made for Roadway ditches (bar ditches) on one-half acre lots. It should read " with 1/2-acre or larger lots"

1-acre or larger lots, must be carried out in such a manner that surface water and runoff from each lot will flow to a roadway side ditch - More and more developments have been using a rural section on 0.5 acre developments as permitted by PUD. I would recommend making this 0.5 acre minimum and shouldn't be "must" flow into roadway side ditch. Should be "permitted to". Developer should be able to use a curb and gutter section when desired.

Response: The 1 acre or larger lots will remain. This is to comply with the AA and RA Rural Residential District provision set forth in the Planning and Zoning Code.

Public Comment No. 33 and 34: Detention Sec 16-10.4d Page 16

1. This should exclude single lot residential.
2. It appears that detention would be required for construction of residence of a 5+ acre tract. That does not seem reasonable.

Response: Language will be added in the Drainage Ordinance that will specifically exclude single residential lots from the detention requirement.

Public Comment No. 35, 36 and 37: Detention Sec 16-10.4d Page 16

1. "Flooding" needs to be defined. In this context only flooding of structures should be considered. It should also reflect record of "downstream" flooding.
2. Flooding needs to be defined and also does this mean upstream also? Needs clarification.
3. Word ‘any flooding’ requires some clarification; since, the nature of ‘any flooding’ may be localized and may not be related to the development activity taking place upstream of the area; where, ‘any flooding’ may have been observed.

Response: Flooding is defined in Sec 16-4. Flood or Flooding means a general and temporary condition of partial or complete inundation of normally dry land areas from: (1) the overflow of inland water; or (2) the unusual and rapid accumulation, flow, or runoff of surface waters from any source. This definition is also aligned with 44CFR59.1. It should also include flooding of downstream public infrastructure.

Public Comment No. 38: Detention Sec 16-10.4a (iii) Page 16
Request that the detention waiver be considered for small increases in impervious areas that discharge onto adjacent property instead of a public or private street or storm sewer system. An example of this could be a very small parking lot addition (5 spaces)

on an existing site. It currently sheet flows across a grassed area and then discharges onto an adjacent property. It doesn't seem reasonable to require detention for this very small increase in runoff.

Response: Analysis needs to be submitted to show proposed development has caused no negative impact to adjacent property owners. It depends on the nature of downstream for a relatively small upstream site. If the downstream property is already experiencing flooding issue, a "small" area of impervious area would increase burden of the flooding issue downstream. "Unless approved by the City Engineer" will be added to the paragraph.

Public Comment No. 39: Responsibility of improvements Sec. 16-5 Page 10
Public storm sewer system: (a) What is the reasoning behind private storm sewer systems not being reviewed by public works, particularly if there is stipulation that private systems may become public in the future with further downstream development? (b) Must make sure in-line stream detention areas are not handed over to the city because maintenance of these facilities (dredging) is huge cost.

Response: It states in the International Plumbing code that private storm sewer shall be inspected by Plumbing department. Onsite detention pond is within private D/E, which is the responsibility of the property owner for maintenance. Private storm sewer systems cannot be dedicated to the City in the future.

Public Comment No. 40: Bridges and culverts Sec. 16-12 Page 17
Bridge design criteria do not distinguish between new bridges (new alignment) vs replacing existing bridges/ rehabbing pavement. When an existing bridge allows overtopping 100-year storm, forcing the new bridge to pass the 100-year with no overtopping causes other issues: (a) Reduced roadway embankment detention effects (increased peak flow downstream), (b) Increased velocities through the bridge opening due to no "fuse-plug" overtopping in the overbank.

Response: Drainage Criteria Manual and Drainage Ordinance shall be used in all bridge designs.

Public Comment No. 41: Closed storm sewer Sec 16-13.1 Page 17
This should not even be in the Drainage Ordinance. This should be white book requirement. If the City is going to require wrapping of joints and gravel backfill to 1' over pipe, then HDPE should be permitted.

Response: HDPE will not be allowed on any public storm sewer systems. Developers/Engineers can use HDPE on private storm sewer systems if desired.

Public Comment No. 42: Closed storm sewer Sec 16-13.2 Page 18
It states the Q50 WSEL of the existing closed system shall be used to establish a tailwater elevation for the HGL analysis. How much of the existing system needs to be studied to determine the Q50 WSEL? Is it as simple as calculating the capacity/ depth of runoff in the pipe?

Response: There is no specified min or max length of the existing system to be studied. Looking simply at a Manning's calculation for capacity and depth will not be sufficient. At a minimum, a Manning's capacity calculation and inlet control calculation would be needed. The engineer must use discretion and engineering judgement to ensure an accurate calculation of the Hydraulic Grade Line (HGL) in the existing system.

Public Comment No. 43: Closed storm sewer Sec 16-13.2 Page 18
It seems more appropriate to have this paragraph in the DCM not in the ordinance.

If closed stormwater facility or system discharges to an existing storm sewer system Q50 WSEL of the existing stormwater facility or system shall be used to establish the tailwater elevation for Q50 HGL analysis - This differs from 3.7.1 of the DCM. Should be removed from DO and only specified in DCM.

Since bollards are placed in front of the flume openings, can this be increased?

Response: This paragraph will be revised and technical drainage requirements are moved to DCM.

Public Comment No. 46: Closed storm sewer Sec 16-13.3 Page 18
For a curb opening to flume greater than 6 feet; would it be required to deduct diameter of the bollard(s) from curb opening length; when, performing capacity calculations for weir flow. 4 to 5 feet of clear space would prevent the entry of vehicles into curb opening, too.

Response: 5 feet spacing will be revised to 4 feet spacing for bollard placement. This item will be moved to the Drainage Criteria Manual.

Public Comment No. 47: Open paved storm drainage Sec 16-14 Page 18
If fences have to be at least one 1' from the paved channel, this will create a maintenance strip issue.

Response: From the Drainage Ordinance "At least 1' from the paved channel" will be revised to "adjacent to the channel but not drilled onto the concrete channel".

Public Comment No. 48: Areas outside subdivisions Sec 16-15 Page 18
This seems too open-ended. There needs to be more specificity here.

Response: No changes are planned for this section.

Public Comment No. 49: Floodplain Activity Permit requirements Sec 16-16.1f Page 19

It reads like it means a flood study will be required or does this mean erosion control plans?

Response: This refers to the grading plan, erosion control plan, and other plan documents that are submitted with the Floodplain Activity Permit.

Public Comment No. 50: Floodplain Activity Permit requirements Sec 16-16.1l Page 20

Under l, it states existing nonconforming uses in the floodway may not be expanded, but a floodway may be modified… I think it should have said. "but a structure may be modified."

Response: This section will be modified.

Public Comment No. 51: Floodplain Activity Permit requirements Sec 16-16.1c Page 19

Why is a profile of the flow line for 300 feet necessary?

Response: This paragraph will be revised to require 300 feet for hydraulic analysis and models only.

Public Comment No. 52: Floodplain Activity Permit requirements Sec 16-16.1c Page 19

Profile 300' upstream and downstream of the property limits? This is excessive.

Response: This paragraph will be revised to require 300 feet for hydraulic analysis and models only.

Public Comment No. 53: Floodplain Activity Permit requirements Sec 16-16.1i Page 19

I appreciate that we are only requiring a surveyor's certificate here but why within 200' of FEMA floodplain boundary. Why not immediately adjacent to?

Response: 200' has been on the current Ordinance and was reviewed by FEMA Community Rating System (CRS) team. Changes are not advised due to the risk in reducing the CRS rating. This is also a good review to include area inundated by OKC urbanized but not FEMA floodplain, as most of the OKC Urbanized has higher discharges and 100-year water surface elevation, causing wider floodplain than FEMA Flood Insurance Study (FIS).

Public Comment No. 54: General

What aspects of this updated drainage ordinance will improve OKC's FEMA/ National Flood Insurance program (NFIP) Community Rating (CRS)? OKC is currently an 8, whereas other cities around the metro and the state have higher ratings. E.g. 1-ft of freeboard over BFE for residential structures is minimally meeting NFIP requirements. Additional freeboard requirements would improve community rating.

Response: The improvement of the OKC CRS rating was not a primary consideration of the proposed revisions/updates to the ordinance. The revisions/updates are intended to help reduce the flooding potential due to development within the City.

Public Comment No. 55: General

Were any firms that a not involved with land development engineering involved in the drafting of this ordinance?

Response: Johnson & Assoc. (J&A) and Smith, Roberts and Baldischwiler (SRB) were hired by the City to help draft the Drainage Criteria Manual and Drainage Ordinance revision.

Public Comment No. 56: General

I had a few other questions that I didn't think were appropriate for the public forum, with developers whining about the increased requirements and all. I do think that consideration of NFIP community rating system requirements checklists would be a good thing to consider at this time. First of all, many of the CRS standards would align with the goals of the City in improving this drainage ordinance (reducing risk to flood prone areas though increased drainage standards). Secondly it would give the City a fall back when developers whine, to say "we are improving design standards in order to lower flood insurance costs for citizens city-wide through meeting specific CRS standards to improve the City's CRS rating." I would be happy to have a call between the OKC PW drainage team and the Garver Central OK Municipal team (which now includes Cabbiness Engineering) to discuss some of these concerns. I think our input would be uniquely helpful due to our focus on being the City's trusted advisor, and not being involved with land development engineering.

Response: Discussion can be arranged in the future. Thank you for your comment.

Public Comment No. 57: General

Mike Smith made the following comment after the meeting today: What is being gained by allowing buildings to lie within 200' of the FEMA mapped floodplain without requiring an Elevation Certificate? Is in not placing structures in possible peril being so near "changing" flood conditions and unreliable FEMA 100-yr Flood Maps? (noting specifically SW OKC). Sorry I could not find the pages for this in the manual.

Response: FEMA Elevation Certificate is not required by FEMA for any building outside of FEMA Floodplain. This revised requirement is in conjunction with FEMA National Flood Insurance Program (NFIP) requirements. However, a Surveyor Certificate is required for buildings within 200 feet from the boundary of the FEMA floodplain. This is to ensure that the finished floor elevation required for the buildings are determined based on the Urbanized 100-year water surface elevation.

Public Comment No. 58: General
I would recommend 2 feet of freeboard if you are not mapping fully urbanized discharges since they will tend to increase in the future, or one foot above the fully urbanized discharges.

Response: Fully urbanized discharges are being used to establish the minimum finished floor elevation for structures.

Public Comment No. 59: General
CRS gives lots of credit for "No Adverse Impact" stormwater criteria which is another incentive if you would like to improve your score.

Response: The City has used "No Negative Impact" in DCM and Drainage Ordinance and it is one of the goals of these revisions.

Public Comment No. 59: General Eric Questions
CRS gives lots of credit for "No Adverse Impact" stormwater criteria which is another incentive if you would like to improve your score.

Response: "No Adverse Impact" is one of the goals of these revisions.

Public Comment No. 60: General

I would recommend that no more than 2 lots or 1/2 acre be allowed to drain onto another lot. Oklahoma City has a lot of overland flow. Some simple grading changes can save residents some misery in the future.

Response: The 4 lot requirement is proposed to remain.

Public Comment No. 61: General
Are there provisions for dam safety requirements? If it is an embankment structure, I would recommend that it be designed as a high hazard dam because people will move in downstream, making it a high hazard in the future, no matter what the height of volume contained.

Response: City of Oklahoma City follows Oklahoma Water Resources Board (OWRB) requirements.

Public Comment No. 62: General

Floodplain Activity Permit. FEMA Elevation Certificates will no longer be required for buildings/ structures that lie within 200 feet of a FEMA mapped floodplain. Revised ordinance will clarify that FEMA Elevation Certificates are required when a building or structure is within the limits of the FEMA mapped floodplain. Question: Several homes within fairly new developments reside within the Mustang Creek FEMA outlined (1% 100 year) boundaries. Were these folks required to have FEMA Elevation Certificates prior to building homes on the lot(s)? Prior to a Final Plat presented to the City? If these Elevation Certificates were "required", were they required to make them of record as part of the Final Plat or Individual lot records when purchases?

Response: In general, any recently constructed homes constructed within a FEMA floodplain should have been required to have the FEMA Elevation Certificate. The FEMA Elevation Certificate is not required prior to building the home. The FEMA Elevation Certificate is prepared on the finished structure.

Public Comment No. 63: General

As I stated in the meeting on 2-26-21, I request a cost comparison of current ordinance vs. proposed ordinance associated with these changes. This needs to be on a large 160-acre residential development, a 10-15 acre commercial and a 1-2 acre commercial. I do request that the comparison be done by independent consultants with an agenda that is neutral. Not grandfathering of existing developments puts a huge burden on these developments. As most of mine a multi-decade projects and very large in scope, this is very unfair.

Response: The City is working on a cost comparison, it should be available on the website by April 2, 2021.

Public Comment No. 64: General

Why get rid of Fee-in-lieu-of (FILO)? We have a site that has been impervious for decades and we are contemplating redeveloping it. It will have landscape and thus it will cause less water run off than before when there was no landscaping or previous ground cover. Why require an expensive and time-consuming study when the situation will be better than before? OKC sells itself on being development friendly - this is the complete opposite.

Response: The Fee-in-lieu of (FILO) has been replaced with a waiver of the detention requirement if it can be demonstrated that the development without detention will not cause any negative impact on downstream areas. Any areas that are being redeveloped will be given credit for previous impervious areas when the detention requirement is being reviewed.

Public Comment No. 65: General

Having storm sewer designed to the minimum 25-year event versus 10-year event is overkill. This is way too GENERAL and should be SITE SPECIFIC. If a specific area of town is prone to flooding, then do it for this area only. Please don't apply a tourniquet when a band-aid will do. With this logic, you would require single family homes to be built with steel because it is required for multi-story buildings. This also applies for Open Drainage Channel to be sized for 100-year event and not 50-year event. This will create unsightly channels and unsightly weirs. You want us to develop nice inviting projects with green scape etc. but how can we when we are required to have more unsightly concrete?

Response: The intent of the updates/revisions is to help reduce the flooding potential due to continued development in the City of OKC. Response: The City is working on a cost comparison, it should be available on the website by April 2, 2021.

Public Comment No. 66: General

Why would you require detention on every site when you know it's not required? This creates more government red tape and slows down progress. If a site meets the no detention criteria, it should not be required to go through a certification process which cost professional fee and wastes time.

Response: Every development that proposes additional impervious area will cause impact to adjacent property owners. The impact is unknown until an analysis is performed by the engineer to show no negative impacts. Detention pond requirements apply to commercial and residential developments but not to individual residential lots.

Public Comment No. 67: General

Just want to say thanks to everybody's hard work on this going back to when Adhir started this 10 years ago and I was the first editor. Good job.

Response: Thank you for your kind words and comments.

Public Comment No. 68: General

Timing: The current schedule for City Council hearing / approval needs to be extended to allow for more review, comment and appropriate revisions. The development community should have adequate time to review a revised document (once comments are considered) prior to City Council consideration of the ordinance change.

Response: This may be considered if needed.

Public Comment No. 69: General
Implementation: It should be acknowledged that there are numerous multi-phase developments that have a comprehensive design and at least one phase constructed. Since the entirety of the project was designed with the first phase utilizing the current ordinance and standards, it is likely that many of these projects cannot be completed under the updated standards.

Response: If a specific phase will be seriously impacted by the new requirements, that can be discussed prior to the submittal of the final plat and plans. However, an entire multi-phase development cannot be "grandfathered" if the Preliminary Plat was submitted several years ago.

Public Comment No. 70: General
As we go forward, there should be a date set after the ordinance approval that new projects would be using the revised ordinances to do their projects so it will be properly budgeted.

Response: It is the intent that the drainage design for all projects, either publicly or privately funded, will be based on the Drainage Ordinance and design requirements that are in effect at the time of the design. The revised Drainage Criteria Manual and Drainage Ordinance will be effective 30 days after approval of City Council.

Public Comment No. 71: General
by Rick Moore (Oklahoma Municipal Contractor Assoc.)

This ordinance revision would cause a substantial increase to storm sewer cost based on changes to design requirements and construction installation requirements.

Response: The City is working on a cost comparison, it should be available on the website by April 2, 2021.

Public Comment No. 72: General
This ordinance revision adds a new detention requirement requiring detention in all locations which will increase the cost of development.

Response: The City is working on a cost comparison, it should be available on the website by April 2, 2021.