

CITY OF NORMAN, OK FLOODPLAIN PERMIT COMMITTEE MEETING

Development Center, Room B, 225 N. Webster Ave., Norman, OK 73069 Tuesday, September 03, 2024 at 3:30 PM

AGENDA

Amended

It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, relation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please contact the ADA Technician at 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.

ROLL CALL

MINUTES

1. Approval of minutes from the August 19, 2024 meeting.

ACTION ITEMS

- 2. Floodplain Permit Application No. 699 This permit application is for the proposed creation of a borrow area in the Little River floodplain for development of Flint Hills Section 2.
- 3. Floodplain Permit Application No. 700 This permit application is for the proposed installation of a stormwater drain outlet for the proposed construction of a medical office building at 2361 36th Ave. NW in the Brookhaven Creek floodplain.
- 4. Floodplain Permit Application No. 701 This permit application is for the construction of a fence and patio slab at 3124 Meadow Ave. in the Canadian River floodplain.

MISCELLANEOUS COMMENTS

ADJOURNMENT

CITY OF NORMAN, OK FLOODPLAIN PERMIT COMMITTEE MEETING

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Development Center, Conference Room B, 225 N. Webster Avenue, Norman, OK 73069
Monday, August 19, 2024 at 3:30 PM

MINUTES

The Floodplain Permit Committee of the City of Norman, Cleveland County, State of Oklahoma, met in Regular Session in Conference Room B at the Development Center, on the 19th day of August, 2024, at 3:30 p.m., and notice of the agenda of the meeting was posted at the Norman Municipal Building at 201 West Gray, Development Center at 225 N. Webster and on the City website at least 24 hours prior to the beginning of the meeting.

ROLL CALL

The meeting was called to order by Mr. Sturtz at 3:30 p.m. Roll was called and all members were present. Others in attendance included, Jason Murphy, Stormwater Program Manager; Kim Freeman, Staff; Joey Wishnuk, Windstone Construction; Derek Harris, Cedar Creek Consulting; Jason Vincent, Resident.

MINUTES

1. Approval of minutes from the August 5, 2024 meeting

Mr. Sturtz asked for any comments on the minutes from the meeting of August 5, 2024. Mr. Sturtz asked for a motion from the committee to approve the minutes from the meeting of August 5, 2024. Ms. Stansel said she was absent from the August 5, 2024 meeting and was abstaining from voting on the minutes. The motion was made by Mr. Scanlon and seconded by Mr. Danner. The minutes were approved 6-0.

ACTION ITEMS

2. Floodplain Permit No. 698

Mr. Sturtz said the Application for Permit 698 is for the proposed construction of a residence at 2702 Golden Valley Road in the 10 Mile Flat Creek Floodplain. Mr. Sturtz asked Mr. Murphy to present the staff report. Mr. Murphy said the Applicant is Jake Aldridge, Builder is Windstone Construction and the Engineer is Jon Doyle, P.E. The applicant owns a 20 acre lot in the Golden Valley Ranch subdivision located north of W. Rock Creek Road between 48th and 60th Ave. NW in the Ten Mile Flat Creek Floodplain. They are proposing the construction of an approximately 8,400 square foot house in the middle of the lot. In addition to the residence, an aerobic septic system, water well and driveway connecting to Golden Valley Road is proposed. The applicant has indicated that a 22" x 13" arch RCP will be installed at the end of the drive to connect to Golden Valley Road. Compensatory storage will be provided to elevate the residence and driveway from a proposed 88,000 square foot pond on the same lot.

Mr. Murphy reviewed plans and aerial maps of the project location provided to members in their packets.

Item 1.

Mr. Murphy confirmed all ordinance requirements have been met and said staff recommends Floodplain Permit Application No. 698 be approved with the following conditions:

- 1. Elevation Certificate provided for the residential structure prior to final acceptance. Additionally, elevation of concrete pad for the residential structure should be submitted to and confirmed by City Staff prior to vertical construction. Elevation of electrical, heating, ventilation, plumbing and AC units should be at least 2 feet above the BFE as well
- 2. As-built surveys should be provided for the drive and compensatory storage area (pond) prior to final acceptance.

Mr. Sturtz asked for any comments from the Applicant. Joey Wishnuk, Windstone Construction, said they are fine with the air conditioner pads being set.

Mr. Sturtz called for any questions from the committee. Mr. Scanlon asked what the remedy is if the survey prior to final acceptance, doesn't meet the standard for recommendation 2. Mr. Murphy said they would have to expand the footprint of the pond. Ms. Stansel asked if anyone knew the situation in the area during the heavy rain a week ago. Mr. Sturtz asked for confirmation on the road south of the location. Mr. Murphy said Rock Creek Road. Mr. Sturtz said I was out there, I didn't go out on the property so I can't say what the property looked like, but I can tell you to the north of the property on Tecumseh, we were seeing flooding. On the west side of 60th, I didn't really see anything going over the top of the road. There was quite a bit of water overtopping Tecumseh between 60th and 72nd. I did not see any water overtopping the road on Rock Creek during that storm event. I also was out there when everything was receding, it could have already stopped, but I didn't see any clear debris lines. Mr. Murphy said I do know the other repetitive loss areas we have out in 10 Mile Flat, the houses were essentially sitting on islands, but there didn't appear to be any debris lines on any of the structures. Mr. Danner asked if the weir had been designed. Derek Harris, Cedar Creek Consulting, said it has an overflow route based on volume that goes to the bar ditch. Mr. Danner said I don't know what your intent was in relation to the pond. Mr. Harris said we're using it for volume to build up the pad under the house but we're also using it to store floodwater. Mr. Sturtz asked for the elevation of spillway. Mr. Harris said 1127.72. Mr. Murphy said the BFE is 1129. Mr. Sturtz asked for any other questions or comments from the committee.

Mr. Sturtz called for any questions or comments from the public. Jason Vincent, Resident, said he is a neighbor at the southwest corner. I was just wanting to make sure the flow of water wasn't impeded. Obviously, that would affect my property. I don't really see anything, he's to the northeast of me. Mr. Vincent pointed out his property on the map included in the committee's packet. I just really wanted to come and see where that house was going to be built. I was out there after the rain, surprisingly it was pretty good. Don't get me wrong that lot is completely under water in the event of 3-5 inches of rain. Mr. Vincent said all that water goes from west to east. The 60th bar ditch has hardly any water in it. You think it would all go down to Rock Creek and spill out but really the road is graded and bar ditches are high and all that water shoots across this property. It's flat, it will drain, but it's so flat out there it just takes time. The pond helps, but that pond will be full when it rains for sure. The road will funnel that water southeast as opposed to east. The bar ditch on Rock Creek is slow moving water. I wish water was flowing down that thing and going down into the creek. I just wanted to see where the house was and see if it was going to be down on the west side, southwest corner and affect me in any way shape or form. It's going to be pretty irrelevant I think to the whole area. Mr. Wishnuk said that's really why the owner wanted it in the middle. When we first started

Item 1.

discussions with engineering firms, could we place it in the middle and have the most amount of flexibility. The drive ended up diagonal and whatever the pond shape needed to look like to be the most functional. If we could put the house in the middle, let's do it. Mr. Sturtz asked if the drive would be elevated. Mr. Wishnuk said yes. Mr. Murphy said the house will be 2.5 feet but the drive is at least above the BFE. That was a discussion we had after they submitted the plans. I highly recommended they raise it. Ms. Hoggatt said on the driveway profile it looks like it's under the BFE. Mr. Murphy reviewed the map in his presentation. Ms. Hoggatt said the in the committee's packet map is different. Mr. Murphy said the original map was mistakenly included in the packet. Mr. Scanlon said just to be clear when we vote, we're voting on the map presented during the meeting and not what's in the packet. Mr. Murphy said yes.

Mr. Sturtz asked for any comments, questions or a motion from the committee. Ms. Hudson made a motion to approve Permit 698. Mr. Scanlon seconded the motion. The committee voted to approve the application 7-0.

MISCELLANEOUS COMMENTS

Mr. Sturtz asked for any miscellaneous comments. Mr. Murphy said the next meeting is September 3, 2024 and we have 3 applications.

ADJOURNMENT

Mr. Sturtz called for a motion to adjourn. Mr. Scan seconded the motion. The meeting adjourned at 3:54 p.		to adjourn.	Ms.	Hoggati
Passed and approved this day of	_, 2024			
City of Norman Floodplain Administrator, Scott Sturtz				

STAFF REPORT 09/03/2024 **PERMIT No. 699**

ITEM: Floodplain Permit application for the proposed excavation of material from the Little River floodplain for the development of Flint Hills Section 2.

BACKGROUND:

APPLICANT: IH Development

ENGINEER: SMC Consulting Engineers, P.C.

The applicant is constructing Section 2 of the Flint Hills Addition located approximately at Tecumseh Rd. and 12th Ave. NW. The location of the development is entirely outside of the regulatory floodplain, but they are requesting to excavate approximately 14,880 CY of material from the floodplain adjacent, as shown on attached plans, for fill to use for the adjacent development. The plans indicate that the area will be graded with an approximate 5' wide ditch being left to facilitate drainage from the area towards the Little River to prevent ponding.

ST	'A	FF	A	NA	I	Y	S	S	•

Site located in Little River Basin or its Tributaries? yes ✓ no

According to the DFIRM, excavation area will be entirely in the Little River floodplain Zone AE. The BFE at the planned residential location is approximately 1124.0'.

Applicable Ordinance Sections:	Subject Area:
36-533 (e)2(a)	Fill Restrictions in the Floodplain
(e)2(e)	Compensatory storage
(f)3(a)8	No Rise Considerations

(e)2(a) and (e)2(e) - Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill in the floodplain is restricted. However, the placement of fill is allowed to elevate structures if compensatory storage is provided.

The applicant's engineer has indicated that approximately 14,880 CY of material will be removed from the floodplain. There is no proposed development or fill being brought into the floodplain.

5(a)(viii) No Rise Considerations – 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 must be provided. For proposed development within a regulatory floodway, certification of no increase in the BFE is required.

The engineer has certified that the project will not cause a rise of more than 0.05 feet to the BFE which meets this ordinance requirement.

RECOMMENDATION:	Staff	recommends	that	Floodplain	Permit	Application	#699	be
approved.								

ACTION TAKEN:	



City of Norman

Floodplain Permit Application

Floodplain Permit No	. 699
Building Permit No	
Date 08/07/2024	

FLOODPLAIN PERMIT APPLICATION

(\$100.00 Application Fee Required)

SECTION 1: GENERAL PROVISIONS (APPLICANT to read and sign):

- 1. No work may start until a permit is issued.
- 2. The permit may be revoked if any false statements are made herein.
- 3. If revoked, all work must cease until permit is re-issued.
- 4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
- 5. The permit will expire if no work is commenced within 2 years of issuance.
- 6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
- 7. Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
- 8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) 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.
- 9. All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
- 10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.)

APPLICANT: IH Development	ADDRESS: 1237-01er, Nima Portier, Norman, OK 73071
TELEPHONE: (405) 364-1152	SIGNATURE: They
BUILDER:	ADDRESS:
TELEPHONE:	SIGNATURE:
SMC Consulting ENGINEER: Engineers, P.C.	ADDRESS: 815 W. Main, OKC, OK 73106
TELEPHONE: (405) 232-7715	SIGNATURE: RILL XIL

PROJECT LOCATION

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful. Tecumseh Road & 12th Avenue NW				
Center of site: 35°16'06"N/ 97°27'43"W				
DESCRIPTION OF WORK (Check all applicable boxes): A. STRUCTURAL DEVELOPMENT				
ACTIVITY STRUCTURE TYPE				
☑ New Structure ☑ Residential (1-4 Family)				
☐ Addition ☐ Residential (More than 4 Family)				
☐ Alteration ☐ Non-Residential (Flood proofing? ☐ Yes)				
☐ Relocation ☐ Combined Use (Residential & Commercial)				
☐ Demolition ☐ Manufactured (Mobile) Home				
☐ Replacement ☐ In Manufactured Home Park? ☐ Yes				
ESTIMATED COST OF PROJECT \$_TBD Work that involves substantial damage/substantial improved.	ement			
B. OTHER DEVELOPMENT ACTIVITIES:				
☐ Fill ☐ Mining ☐ Drilling ☑ Grading				
☐ Excavation (Beyond the minimum for Structural Development)				
☐ Watercourse Alteration (Including Dredging and Channel Modifications)				
☐ Drainage Improvements (Including Culvert Work) ☐ Road, Street or Bridge Construction				
☑ Subdivision (New or Expansion) ☐ Individual Water or Sewer System				
In addition to items A. and B. provide a complete and detailed description of proposed work (failure to provide the	is item			
will be cause for the application to be rejected by staff). Attach additional sheets if necessary.	.25 110111			

Construction of a housing development

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above to the location of the channel, floodway, and the regulatory flood-protection elevation.
B. A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water

ē	info	ormation.
	Ø	Not Applicable:
C.	acre	division or other development plans (If the subdivision or other developments exceeds 50 lots or 5 es, whichever is the lesser, the applicant <u>must</u> provide 100-year flood elevations if they are not erwise available).
		Not Applicable:
D.	elev loca	ns (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage vations; size, location, and spatial arrangement of all proposed and existing structures on the site; ation and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and etation upstream and downstream, soil types and other pertinent information.
		Not Applicable:
E.	_	rofile showing the slope of the bottom of the channel or flow line of the stream. Not Applicable:
F.	Flex	vation (in relation to mean sea level) of the lowest floor (including basement) of all new and
1.	sub	stantially improved structures. Not Applicable:
G.		cription of the extent to which any watercourse or natural drainage will be altered or relocated as a ult of proposed development.
	4	Not Applicable:

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
- I. A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.
- J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
The proposed development is located on FIRM Panel No.: 0190 k, Dated: 115(202)
The Proposed Development:
☐ Is NOT located in a Special Flood Hazard Area (Notify the applicant that the application review is complete and NO FLOODPLAIN PERMIT IS REQUIRED).
Is located in a Special Flood Hazard Area.
☐ The proposed development is located in a floodway.
100-Year flood elevation at the site is 11248 Ft. NGVD (MSL) Unavailable
See Section 4 for additional instructions.
SIGNED: DATE: 8/26/24

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The a	applicant must also submit the documents checked below	v before the ap	oplication can be processed.
	Flood proofing protection level (non-residential only structures applicant must attach certification from reg		
Ø	Certification from a registered engineer that the projincrease in the height of the 100-year flood (Base Fl supporting this finding must also be submitted.		
I	Certification from a registered engineer that the propincrease of no more than 0.05 feet in the height of the and calculations supporting this finding must also be	e 100-year floo	
7	All other applicable federal, state, and local permits h	nave been obta	ined.
	Other:		
c	SECTION 5: PERMIT DETERMINATION (To be c	ompleted by	Floodplain Chairman)
7	The proposed activity: (A) \square Is; (B) \square Is Not in conformal Section 429.1. The permit is issued subject to the condition	mance with pr	ovisions of Norman's City Code Chapter 22,
S	SIGNED:	DATE:	
	If BOX A is checked, the Floodplain committee chairma		×
n	If BOX B is checked, the Floodplain committee chairman may revise and resubmit an application to the Floodplain Adjustment.		
APP	EALS: Appealed to Board of Adjustment: Hearing date:	☐ Yes	□No
	Board of Adjustment Decision - Approved:	☐ Yes	□ No
Cond	ditions:		
-			
_			
-			A STATE OF THE STA

<u>SECTION 6: AS-BUILT ELEVATIONS</u> (To be submitted by APPLICANT before Certificate of Occupancy is issued.)

- 1. FEMA Elevation Certificate and/or
- 2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.



Consulting Engineers, P.C. 815 West Main Oklahoma City, OK 73106 405-232-7715 FAX 405-232-7859 www.smcokc.com

Civil Engineering Land Development Storm Water Management

Terence L. Haynes Christopher D. Anderson Muhammad A. Khan August 8, 2024

Mr. Scott Sturtz, P.E., CFM Floodplain Administrator City of Norman

E: No Rise Certification for Flint Hills Addition Section 2 Norman, Oklahoma SMC #6342.02

Dear Mr. Sturtz,

The development of Flint Hills Addition Section 2 will provide improvements associated with a new residential subdivision while utilizing the existing detention ponds constructed as part of Flint Hills Addition Section 1. Please refer to the Drainage Impact Analysis for Flint Hills Addition Section 1 for additional information on said existing detention ponds being utilized to keep the fully developed runoff rates lower than the historical rates to the downstream systems.

The development of Flint Hills Addition Section 2 will require earthwork operations within the FEMA Effective Floodplain; however, these operations will only consist of cutting a borrow pit area below grade in order to acquire additional fill material required for the development. Therefore, no rise in the base flood elevation (BFE) or adverse impact will occur on the property or any adjacent properties, upstream or downstream.

Sincerely, SMC Consulting Engineers, P.C.

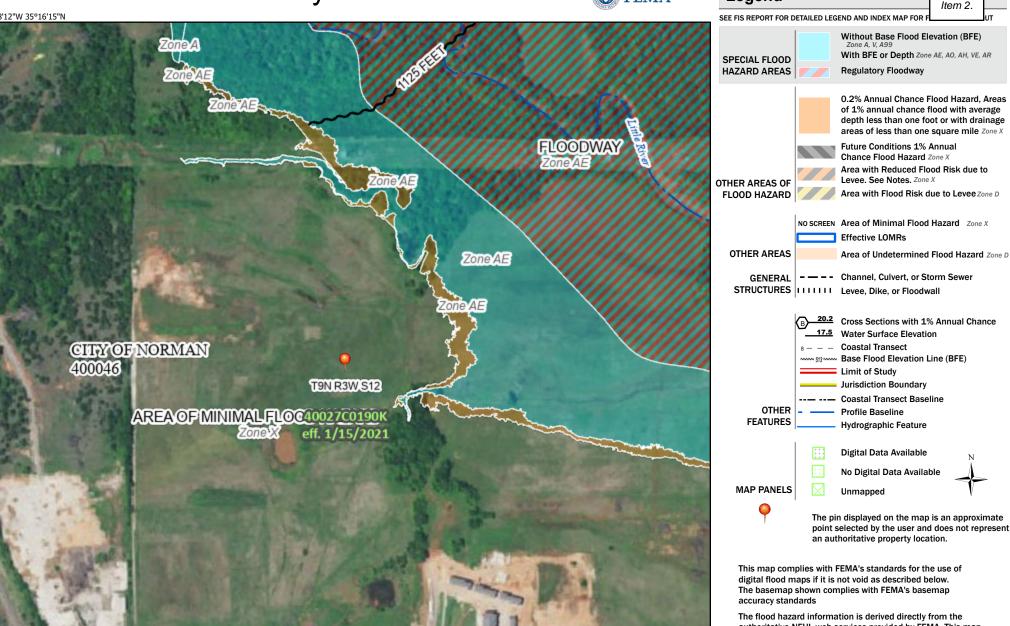
Preston Caldwell, P.E.



National Flood Hazard Layer FIRMette



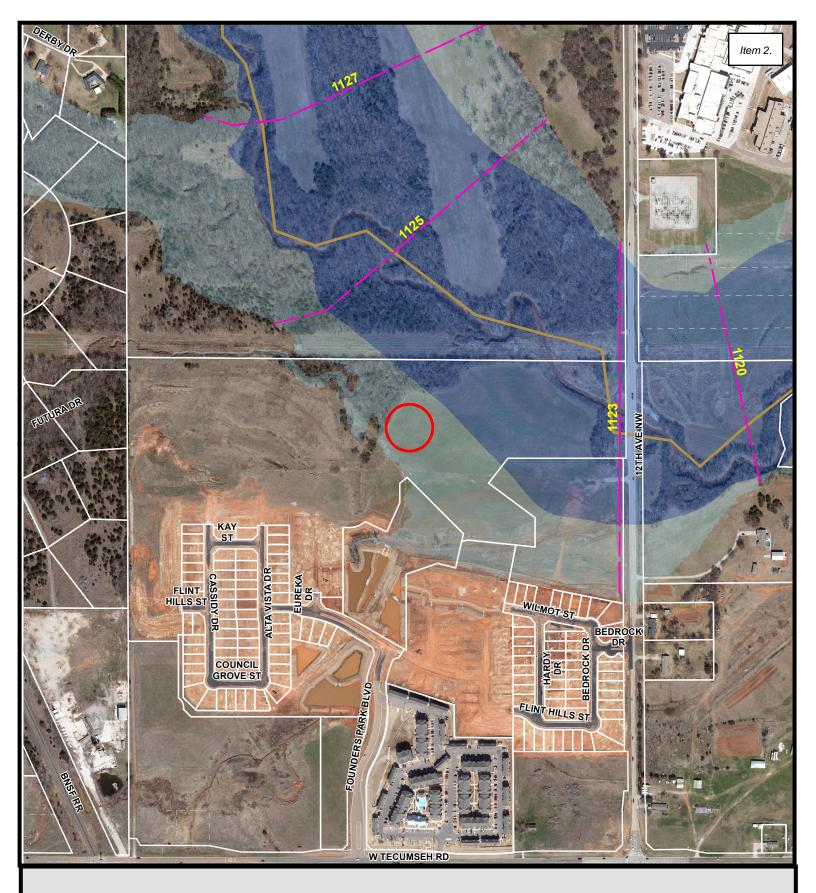
Legend



authoritative NFHL web services provided by FEMA. This map was exported on 8/26/2024 at 11:59 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community idea FIRM panel number, and FIRM effective date. Map in unmapped and unmodernized areas cannot be used regulatory purposes.

1:6,000



Flints Hills Section 2 Borrow Pit



The City of Norman assumes no responsibility for errors or omissions in the information presented.



1 inch = 500 feet

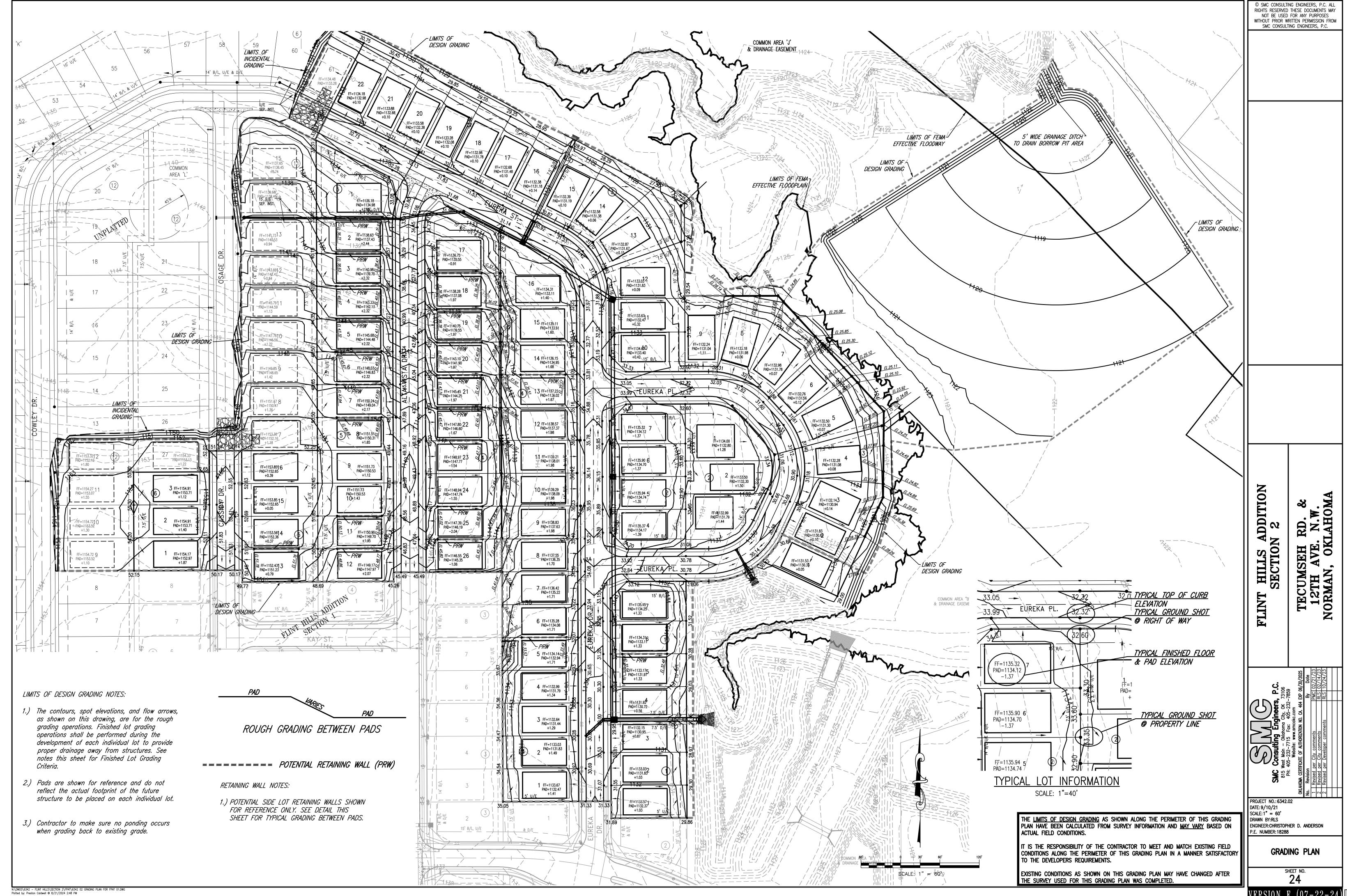
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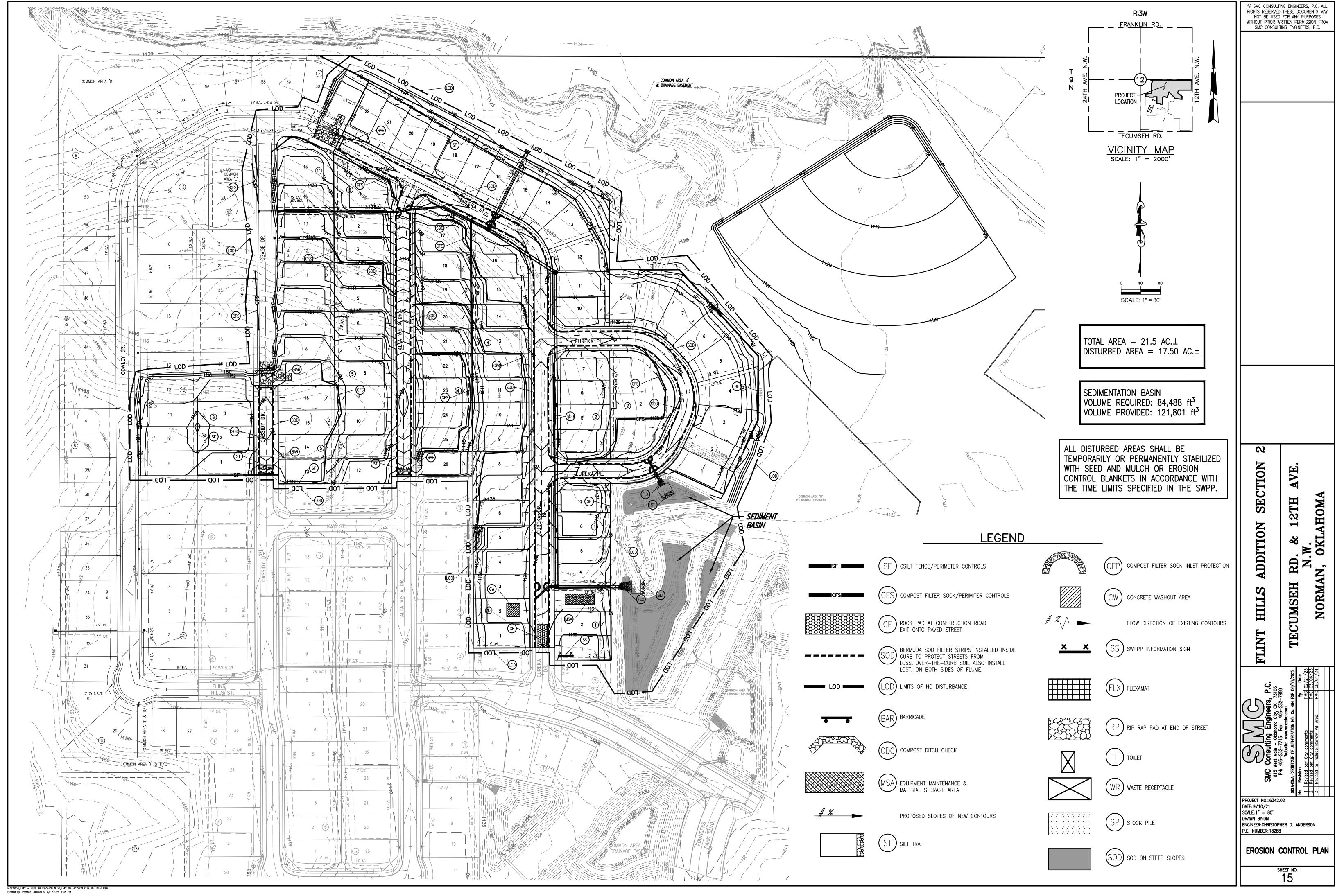
BFE 2021

1% Chance Floodplain

Floodway

14





Item 3.

STAFF REPORT 09/03/2024 **PERMIT No. 700**

ITEM: Floodplain Permit application for the proposed medical office building at 2361 36th Ave NW in the Brookhaven Creek floodplain.

BACKGROUND:

APPLICANT: Terri McMahon

ENGINEER: CEC/Lindsay Fisher P.E.

The applicant is constructing a medical office building at the 2361 36th Ave. NW. The office building and parking lots will be located out of the regulatory floodplain, but reconstruction of storm sewer outlet into Brookhaven Creek will be necessary. As shown in the plans (C-402), the existing drive along the creek on the eastern side of the lot will be cut and a 15" HDPE storm sewer line will be installed and integrated into the existing drain outlet. A 15" HDPE end section will be installed and rip rap placed to stabilize the outlet structure and creek bank. There is an existing concrete culvert that drains from a curb cut at this section as well as rip rap used to stabilize creek bank.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? Yes __ no ✓

According to the DFIRM, the stormwater culvert will be installed the floodplain/floodway of Brookhaven Creek. The BFE at the planned location is approximately 1165.65'.

Applicable Ordinance Sections:	Subject Area:
36-533 (e)2(a)	Fill Restrictions in the Floodplain
(e)2(e)	Compensatory storage
(f)3(a)8	No Rise Considerations

(e)2(a) and (e)2(e) - Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill in the floodplain is restricted. However, the placement of fill is allowed to elevate structures if compensatory storage is provided.

The applicant's engineer has indicated that no fill is expected to be brought into the floodplain as a result of the work.

5(a)(viii) No Rise Considerations – 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 must be provided. For proposed development within a regulatory floodway, certification of no increase in the BFE is required.

The engineer has certified that the project will not cause a rise of more than 0.05 feet to the BFE which meets this ordinance requirement.

RECOMMENDATION: Staff recommends that Floodplain Permit Application #700 be approved.

ACTION TAKEN:		
ACTION TAILEN.		



City of Norman

Floodplain Permit Application

Floodplain Permit No.	700
•	
Building Permit No	PRNR202403171
<i>c</i> –	
Date 08.1	4.2024

FLOODPLAIN PERMIT APPLICATION

(\$100.00 Application Fee Required)

SECTION 1: GENERAL PROVISIONS (APPLICANT to read and sign):

- 1. No work may start until a permit is issued.
- 2. The permit may be revoked if any false statements are made herein.
- 3. If revoked, all work must cease until permit is re-issued.
- 4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
- 5. The permit will expire if no work is commenced within 2 years of issuance.
- 6. Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
- 7. Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
- 8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) 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.
- 9. All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
- 10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.)

APPLICANT: Terri McMahon	ADDRESS: 3001 Quail Springs Parkway Oklahoma City, OK 73134
TELEPHONE: 405.306.6879	SIGNATURE: Teni mande
BUILDER:	ADDRESS:
TELEPHONE:	_ SIGNATURE:
ENGINEER: CEC Lindsay Flesher P.E.	ADDRESS: 4555 W. Memorial Road, Oklahoma City, Oklahoma 73142
TELEPHONE: 405.753.4200	SIGNATURE: When the state of th

PROJECT LOCATION

Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the listance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful.		
Please see the attached filed lo	t line adjustment documentation for reference.	
DESCRIPTION OF WORK A. STRUCTURAL	(Check all applicable boxes): DEVELOPMENT	
<u>ACTIVITY</u>	STRUCTURE TYPE	
☑ New Structure	☐ Residential (1-4 Family)	
☐ Addition	☐ Residential (More than 4 Family)	
☐ Alteration	☑ Non-Residential (Flood proofing? ☐ Yes)	
☐ Relocation	☐ Combined Use (Residential & Commercial)	
☐ Demolition	☐ Manufactured (Mobile) Home	
☐ Replacement	☐ In Manufactured Home Park? ☐ Yes	
	OJECT \$ Work that involves substantial damage/substantial improvement es and an appraisal of the structure that is being improved.	
B. OTHER DEVEL	OPMENT ACTIVITIES:	
☐ Fill ☐ Mining	□ Drilling □ Grading	
☐ Excavation (Beyond the	e minimum for Structural Development)	
☐ Watercourse Alteration	(Including Dredging and Channel Modifications)	
☐ Drainage Improvements	s (Including Culvert Work) Road, Street or Bridge Construction	
☐ Subdivision (New or Ex	pansion) ☐ Individual Water or Sewer System	
	. provide a complete and detailed description of proposed work (failure to provide this item ion to be rejected by staff). Attach additional sheets if necessary.	
The project consists of a new medical office building wi	th associated site improvements. All site grading and new constructed improvements will be installed west of the existing channel and adjacent roadway. A new drainage culvert	
vill be installed under the drive, termin	nating in the channel. No grading improvements (cut or fill) will be made within the existing the existing channel / floodplain.	

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above

	the location of the channel, floodway, and the regulatory flood-protection elevation.	
В.	A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information.	
	Not Applicable: There are no grading improvements being made to the existing channel. There is an existing roadway adjacent to the channel that is remainded.	ining.
C.	Subdivision or other development plans (If the subdivision or other developments exceeds 50 lots or 5 acres, whichever is the lesser, the applicant <u>must</u> provide 100-year flood elevations if they are not otherwise available).	
	Not Applicable: Please see attached grading plan and storm utility plan for reference.	
D.	Plans (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; ocation and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses regetation upstream and downstream, soil types and other pertinent information.	and
	Not Applicable: Please see attached grading plan and storm utility plan for reference.	
E.	A profile showing the slope of the bottom of the channel or flow line of the stream.	
	Not Applicable: There are no grading improvements being made to the existing channel. There is an existing roadway adjacent to the channel that is remainded.	ining.
F.	Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures.	
	Not Applicable: Finished Floor Elevation 1172.75	
G.	Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.	
	Not Applicable: There are no grading improvements being made to the existing channel. There is an existing roadway adjacent to the channel that is remainded.	ining.

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
- I. A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.

1/15/2021

J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

SIGNED:	:Jason Murphy	DATE:	08.14.2024
Se	ee Section 4 for additional instructions.		
0	100-Year flood elevation at the site is 1165.63	_ Ft. NGVD (MSI	L) Unavailable
	The proposed development is located in a floodway	7.	
	Is located in a Special Flood Hazard Area.		
	Is NOT located in a Special Flood Hazard Area Notify the applicant that the application review is cor	mplete and NO FL	OODPLAIN PERMIT IS REQUIRED).
The Pro	pposed Development:		
The pro	posed development is located on FIRM Panel No.:_		Jaled:

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The applicant must also submit the documents checked below before the application can be processed. Flood proofing protection level (non-residential only) ______ Ft. NGVD (MSL). For flood proofed structures applicant must attach certification from registered engineer. Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted. Certification from a registered engineer that the proposed activity in a regulatory flood plain will result in an increase of no more than 0.05 feet in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted. All other applicable federal, state, and local permits have been obtained. Other: _____ **SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Chairman.)** The proposed activity: (A) \square Is; (B) \square Is Not in conformance with provisions of Norman's City Code Chapter 22, Section 429.1. The permit is issued subject to the conditions attached to and made part of this permit. SIGNED: Jason Murphy DATE: If **BOX** A is checked, the Floodplain committee chairman may issue a Floodplain Permit. If **BOX B** is checked, the Floodplain committee chairman will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Floodplain committee or may request a hearing from the Board of Adjustment. APPEALS: Appealed to Board of Adjustment: □ Yes □ No Hearing date: Board of Adjustment Decision - Approved: □ Yes □ No Conditions:

<u>SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Occupancy is issued.)</u>

- 1. FEMA Elevation Certificate and/or
- 2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.

National Flood Hazard Layer FIRMette

250

500

1,000

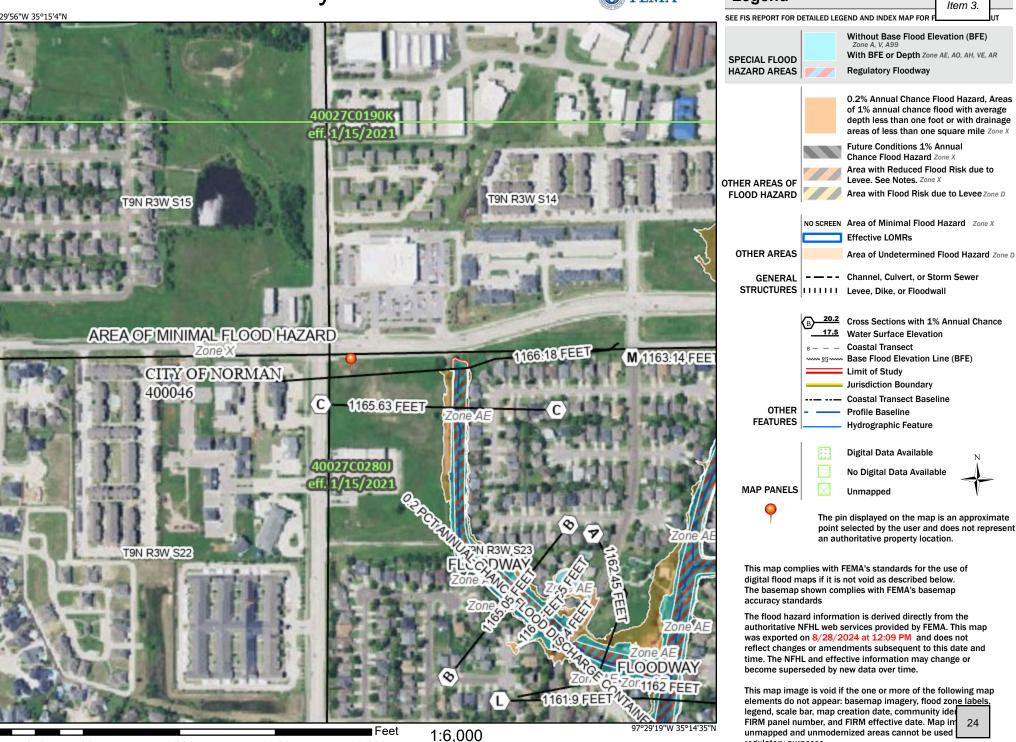
1.500

2,000



Legend

regulatory purposes.



Basemap Imagery Source: USGS National Map 2023



August 14, 2024

Jason Murphy, CFM Stormwater Program Manager City of Norman 225 N. Webster Norman, Oklahoma 73069

RE: No Rise Certification for Integris Norman Primary Care Clinic

2361 36th Avenue NW, Norman, Oklahoma 73072

Dear Mr. Murphy,

The proposed development of Integris Norman Primary Care Clinic involves the installation of a small diameter storm culvert draining into Brookhaven Creek.

There is no fill anticipated in the floodplain within the construction limits; therefore, no rise in the base flood elevation (BFE) is expected to occur on the property or adjacent properties.

Sincerely,

Lindsay M. Flesher, P.E. Senior Civil Engineer

CEC®









The City of Norman assumes no

 $W \bigotimes_{S}^{N} E$

1 inch = 300 feet

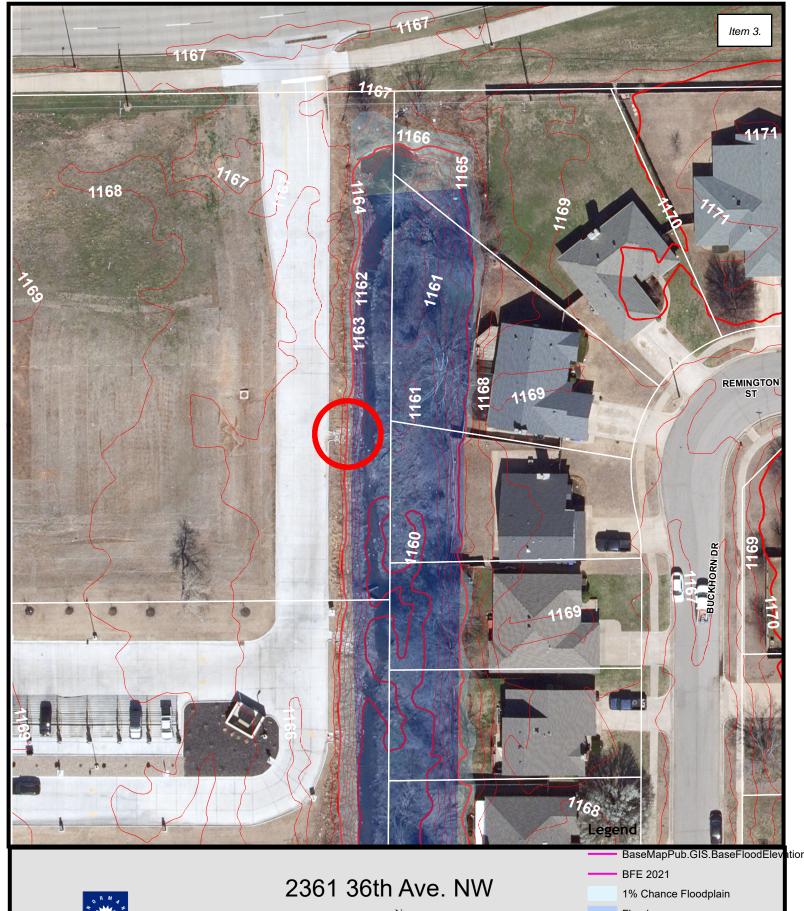
Legend

BFE 2021

1% Chance Floodplain

Floodway

26





The City of Norman assumes no



1 inch = 48 feet

Floodway

Contours Urban 1 foot (2015)

Layer

---- Index

- Intermediate

27

ARCHITECTURE PLANNING INTERIORS



ARCHITECTURE PLANNING INTERIORS

<u>STAFF REPORT</u> 09/03/2024 <u>PERMIT No. 701</u>

ITEM: Floodplain Permit application for the construction of a patio and replacement of a fence at 3124 Meadow Ave. in the Canadian River floodplain.

BACKGROUND:

APPLICANT: Holly Hawk ENGINEER: Gary Keen, P.E.

The applicant owns a condo that is one of four units in the same structure on the fringe of the Canadian River floodplain. Ms. Hawk replaced the masonry blocks that composed her patio with a pour-cast concrete pad and replaced a wooden fence. This work was completed without a floodplain permit as the applicant wasn't aware that one was needed. There is a FEMA approved LOMA on the structure but it does not cover the backyard. Staff has reviewed the engineer's report that was provided by the applicant's engineer and agree with the findings he provided based on the evidence Mr. Keen and Ms. Hawk provided. The replacement fence is constructed with wood slats and has approximately an inch of clearance from the ground to bottom of the panels. Based on images provided, the concrete porch slab was poured at grade so no new fill was added as a result of this project.

STAFF ANALYSIS:

Site located in Little River Basin or its Tributaries? Yes __ no ✓

According to the DFIRM, the patio and fence were installed on the fringe of the Canadian River floodplain. The BFE at the planned location is approximately 1100.0'.

Applicable Ordinance Sections:	Subject Area:
36-533 (e)2(a)	Fill Restrictions in the Floodplain
(e)2(e)	Compensatory storage
(e)(3)(j)	Fencing in the floodplain
(f)3(a)8	No Rise Considerations

(e)2(a) and (e)2(e) - Fill Restrictions in the Floodplain and Compensatory Storage – The use of fill in the floodplain is restricted. However, the placement of fill is allowed to elevate structures if compensatory storage is provided.

The applicant's engineer has indicated that no fill was brought into the floodplain as a result of the work.

(e)(3)(j) Fencing in the Floodplain – All new fences or replacement of existing fences in the SFHA require a floodplain permit. Approved fences shall be designed and installed to be breakaway or in some other manner so that flows will not be impeded.

While the fence is not a breakaway style fence, there is about a one inch gap under most areas of the fence that would allow water to flow freely. As the applicant's engineer indicates, this is also on the very fringe of 2400 foot wide floodplain, so flooding in this area would be expected to be from backwater effects and not direct flow. In addition, the fence is technically above the BFE along several sections according to the survey information provided by the applicant's engineer. With all of this information taken into account, staff agrees with the applicant's engineer's assertion that this fence should cause no negative impacts on adjacent areas of the floodplain.

5(a)(viii) No Rise Considerations – 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 must be provided. For proposed development within a regulatory floodway, certification of no increase in the BFE is required.

The engineer has certified that the project will not cause a rise of more than 0.05 feet to the BFE which meets this ordinance requirement.

RECOMMENDATION:	Staff	recommends	that	Flood plain	Permit	Application	#701	be
approved.								
ACTION TAKEN:								



City of Norman

Floodplain Permit Application

Floodplain Permit No.	
Building Permit No.	
Date	

FLOODPLAIN PERMIT APPLICATION

(\$100.00 Application Fee Required)

DECTION I: GENERAL TRUVIDIDID (ALL LICELLE COLUMN DICHE

- No work may start until a permit is issued.
- 2. The permit may be revoked if any false statements are made herein.
- 3. If revoked, all work must cease until permit is re-issued.
- 4. Development shall not be used or occupied until a Certificate of Occupancy is issued.
- 5. The permit will expire if no work is commenced within 2 years of issuance.
- Applicant is hereby informed that other permits may be required to fulfill local, state and federal regulatory requirements and must be included with this floodplain permit application.
- Applicant hereby gives consent to the City of Norman or his/her representative to access the property to make reasonable inspections required to verify compliance.
- 8. The following floodplain modifications require approval by the City Council:
 - (a) A modification of the floodplain that results in a change of ten percent (10%) or more in the width of the floodplain.
 - (b) The construction of a pond with a water surface area of 5 acres or more.
 - (c) 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.
- All supporting documentation required by this application is required along with the permit fee by the submittal deadline. Late or incomplete applications will not be accepted.
- 10. I, THE APPLICANT, CERTIFY THAT ALL STATEMENTS HEREIN AND IN ATTACHMENTS TO THIS APPLICATION ARE, TO THE BEST OF MY KNOWLEDGE, TRUE AND ACCURATE.

SECTION 2: PROPOSED DEVELOPMENT (To be completed by APPLICANT.;

APPLICANT: HOLLY HAWK	ADDRESS: 3124 MEADOW AVE, NORMAN, OK
TELEPHONE: 214-493-1529	SIGNATURE: Holl Face
BUILDER: HOLLY HAWK	ADDRESS: 3124 MEADOW AVEL, NORMAN, OK
TELEPHONE: 214-493-1529	SIGNATURE: Holley Hank
ENGINEER: EARL GARY KEEN, PE	ADDRESS: PO BOX 897200, OKLACITY, OK Z3189
TELEPHONE: 405-823-8240	SIGNATURE: Earl Sary Flew

PROJECT LOCATION

To avoid delay in processing the application, please provide enough information to easily identify the project location. Provide the street address, subdivision addition, lot number or legal description (attach) and, outside urban areas, the distance to the nearest intersecting road or well known landmark. A sketch attached to this application showing the project location would be helpful.

PROJECT LOCATION IS 3124 MEADOW AVE, NORMAN, OK. LEGAL DESCRIPTION IS SMOKING OAKS SOUTH 3 LT 1 AND 2 BLK 3 UNIT 3124 SUNSET TRAILS DEVELOPMENT ASSOCIATION

DIRECTIONS TO SITE: BEGIN AT INTESECT OF STATE HWY 9 AND S BERRY ROAD, GO SOUTH ON BERRY ROAD TO MEADOW AVEL, GO RIGHT TO SITE ON THE LEFT.

THIS RESIDENCE IS PART OF A FOUR-OLEX (CONDO) AND ABUTS THE TRAILS GOLF COURSE. THIS APPLICATION IS IN REGARD TO ONLY THE SINGLE UNIT, ADDRESSED AS 3124 MEADOW AVE.

DESCRIPTION OF WORK (Check all applicable boxes):

A. STRUCTURAL DEVELO	PMENT
----------------------	-------

<u>ACTIVITY</u>	STRUCTURE TYPE
☐ New Structure	☐ Residential (1-4 Family)
☐ Addition	☐ Residential (More than 4 Family)
☐ Alteration	☐ Non-Residential (Flood proofing? ☐ Yes)
☐ Relocation	☐ Combined Use (Residential & Commercial)
☐ Demolition	☐ Manufactured (Mobile) Home
☐ Replacement	☐ In Manufactured Home Park? ☐ Yes
B. OTHER DEVEL	os and an appraisal of the structure that is being improved. □ Drilling □ Grading
Č	
` •	minimum for Structural Development)
☐ Watercourse Alteration (Including Dredging and Channel Modifications)
☐ Drainage Improvements	(Including Culvert Work) Road, Street or Bridge Construction
☐ Subdivision (New or Ex	pansion) ☐ Individual Water or Sewer System
	provide a complete and detailed description of proposed work (failure to provide this item
**	on to be rejected by staff). Attach additional sheets if necessary.
WORK WAS COMPLETED BEFORE OWNER I	(NEW FP PERMIT WAS REQUIRED. WORK INCLUDED CONSTRUCTING A NEW FENCE AROUND BACK YARD. REMOVING TREES. BRUSI

SOME SOIL AND PATIO BLOCKS. NEW FENCE WAS CONSTRUCTED AND POUR-CAST CONCRETE WAS INSTALLED TO CREATE A NEW PATIO SLAB TO REPLACE AND ENLARGE THE

PATIO AREA COVERED BY THE ORIGINAL PATIO BLOCKS.

C. ATTACHMENTS WHICH ARE REQUIRED WITH EVERY APPLICATION:

A. Plans drawn to scale showing the nature, location, dimensions, and elevation of the lot, existing or

The applicant must submit the documents listed below before the application can be processed. If the requested document is not relevant to the project scope, please check the Not Applicable box and provide explanation.

	proposed structures, fill, storage of materials, flood proofing measures, and the relationship of the above to the location of the channel, floodway, and the regulatory flood-protection elevation.
В.	A typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information.
	Not Applicable: THE FLOODPLAIN IS MORE THAN 1/2 MILE WIDE AND THIS SITE IS LOCATED AT THE VERY EDGE OF THE FP, WHERE THE 100-YEAR FLOOD WATERS WILL BE VERY SHALLOW.
C.	Subdivision or other development plans (If the subdivision or other developments exceeds 50 lots or 5 acres, whichever is the lesser, the applicant <u>must</u> provide 100-year flood elevations if they are not otherwise available).
	Not Applicable: NOT A NEW SUBDIVISION. FLOOD ELEVATIONS ARE AVAILABLE AND ARE SHOWN ON PLANS
D.	Plans (surface view) showing elevations or contours of the ground; pertinent structure, fill, or storage elevations; size, location, and spatial arrangement of all proposed and existing structures on the site; location and elevations of streets, water supply, sanitary facilities; photographs showing existing land uses and vegetation upstream and downstream, soil types and other pertinent information.
	Not Applicable: SURVEY ELEVATIONS WERE TAKEN BY PLS ON THE SITE. COUNTOURS FROM CITY GIS ARE PROVIDED. MANY PHOTOS IN THE EXHIBITS. ALL OF THE WORK COVERED BY THIS APPLICATION ARE OUTSIDE THE STRUCTURE. THE STRUCTURE WAS REMOVED FROM FP BY LOMA.
Е.	A profile showing the slope of the bottom of the channel or flow line of the stream.
	Not Applicable: PROFILE INCLUDED IN EXHIBITS.
F.	Elevation (in relation to mean sea level) of the lowest floor (including basement) of all new and substantially improved structures.
	Not Applicable: ELEVATION OF LOWEST FLOOR OF HOUSE WAS DETERMINED AND IS SHOW IN THE PLANS. THE LOWEST FLOOR IS ABOVE THE 100-YEAR BFE, BUT IS LESS THAN THE 2.0' NORMALLY REQUIRED BY THE CITY OF NORMAN.
G.	Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
	□ Not Applicable:

THE WATERCOURSE WILL NOT BE ALTERED. THE FP ELEVATION INCREASE WILL BE SMALL TO MEASURE. CERTAINLY < 0.05 FEET.

- H. For proposed development within any flood hazard area (except for those areas designated as regulatory floodways), certification that a rise of no more than five hundredths of a foot (0.05') will occur on any adjacent property in the base flood elevation as a result of the proposed work. For proposed development within a designated regulatory floodway, certification of no increase in flood levels within the community during the occurrence of the base flood discharge as a result of the proposed work. All certifications shall be signed and sealed by a Registered Professional Engineer licensed to practice in the State of Oklahoma.
- A certified list of names and addresses of all record property owners within a three hundred fifty (350) foot radius of the exterior boundary of the subject property not to exceed 100 feet laterally from the Special Flood Hazard Area. The radius to be extended by increments of one hundred (100) linear feet until the list of property owners includes not less than fifteen (15) individual property owners of separate parcels or until a maximum radius of one thousand (1,000) feet has been reached.
- J. A copy of all other applicable local, state, and federal permits (i.e. U.S. Army Corps of Engineers 404 permit, etc).

After completing SECTION 2, APPLICANT should submit form to Permit Staff for review.

SECTION 3: FLOODPLAIN DETERMINATION (To be completed by Permit Staff.)

SIGNI	ED: Jason Murphy	DATE:	8/28	/2024
	See Section 4 for additional instructions.			
	☐ 100-Year flood elevation at the site is 1100.0	_ Ft. NGVD (N	MSL)	☐ Unavailable
	☐ The proposed development is located in a floodway	·.		
	☐ Is located in a Special Flood Hazard Area.			
	☐ Is NOT located in a Special Flood Hazard Area (Notify the applicant that the application review is con	nplete and NO	FLOODP	LAIN PERMIT IS REQUIRED).
The Proposed Development:				
The j	proposed development is located on FIRM Panel No.:_	0290H	_, Dated: _	09/26/2008

SECTION 4: ADDITIONAL INFORMATION REQUIRED (To be completed by Permit Staff.)

The applicant must also submit the documents checked below before the application can be processed. Flood proofing protection level (non-residential only) ______ Ft. NGVD (MSL). For flood proofed structures applicant must attach certification from registered engineer. Certification from a registered engineer that the proposed activity in a regulatory floodway will not result in any increase in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted. Certification from a registered engineer that the proposed activity in a regulatory flood plain will result in an increase of no more than 0.05 feet in the height of the 100-year flood (Base Flood Elevation). A copy of all data and calculations supporting this finding must also be submitted. All other applicable federal, state, and local permits have been obtained. Other: _____ **SECTION 5: PERMIT DETERMINATION (To be completed by Floodplain Chairman.)** The proposed activity: (A) \square Is; (B) \square Is Not in conformance with provisions of Norman's City Code Chapter 22, Section 429.1. The permit is issued subject to the conditions attached to and made part of this permit. SIGNED: Jason Murphy DATE: If **BOX** A is checked, the Floodplain committee chairman may issue a Floodplain Permit. If **BOX B** is checked, the Floodplain committee chairman will provide a written summary of deficiencies. Applicant may revise and resubmit an application to the Floodplain committee or may request a hearing from the Board of Adjustment. APPEALS: Appealed to Board of Adjustment: □ Yes □ No Hearing date: Board of Adjustment Decision - Approved: □ Yes □ No Conditions:

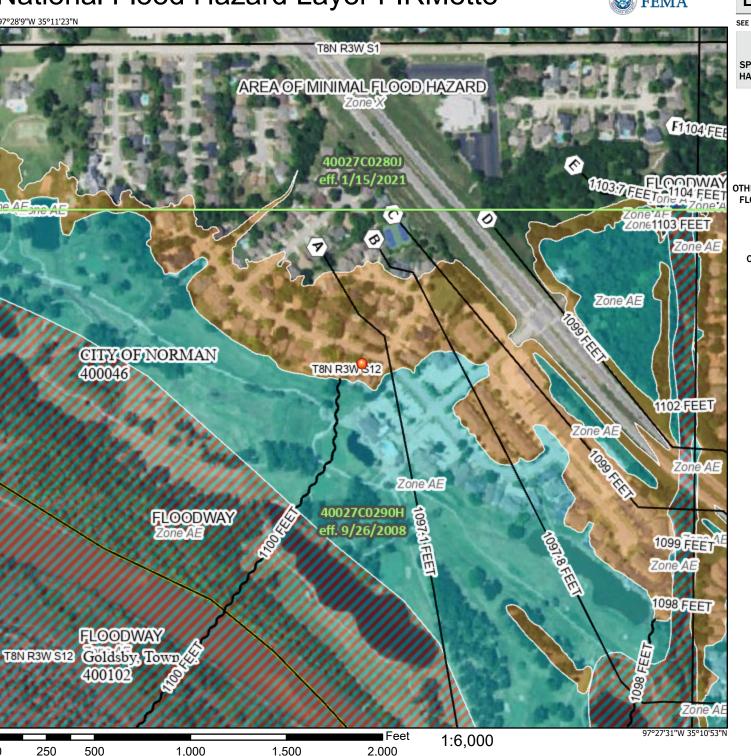
<u>SECTION 6: AS-BUILT ELEVATIONS (To be submitted by APPLICANT before Certificate of Occupancy is issued.)</u>

- 1. FEMA Elevation Certificate and/or
- 2. FEMA Floodproofing Certificate

NOTE: The completed certificate will be reviewed by staff for completeness and accuracy. If any deficiencies are found it will be returned to the applicant for revision. A Certificate of Occupancy for the structure will not be issued until an Elevation and /or Floodproofing Certificate has been accepted by the City.

National Flood Hazard Layer FIRMette





Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR F

Without Base Flood Elevation (BFE)
Zone A, V, A99
With BFE or Depth Zone AE, AO, AH, VE, AR
HAZARD AREAS
Regulatory Floodway

of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X

Future Conditions 1% Annual Chance Flood Hazard Zone X

Area with Reduced Flood Risk due to

NO SCREEN Area of Minimal Flood Hazard Zone X

0.2% Annual Chance Flood Hazard, Areas

Item 4.

OTHER AREAS OF FLOOD HAZARD

Area with Reduced Flood Risk due to Levee. See Notes. Zone X

Area with Flood Risk due to Levee Zone D

GENERAL
STRUCTURES

Effective LOMRs

Area of Undetermined Flood Hazard Zone D

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

B 20.2 Cross Sections with 1% Annual Chance

17.5 Water Surface Elevation

8 - - - Coastal Transect
Base Flood Elevation Line (BFE)
Limit of Study
Jurisdiction Boundary
Coastal Transect Baseline

OTHER
FEATURES

Hydrographic Feature

Digital Data Available

No Digital Data Available

MAP PANELS

Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 8/28/2024 at 12:19 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels. legend, scale bar, map creation date, community ide FIRM panel number, and FIRM effective date. Map im unmapped and unmodernized areas cannot be used regulatory purposes.

EARL GARY KEEN, PE PO BOX 891200 OKLAHOMA CITY, OK 73189 (405) 823-8240 EMAIL: garykeen47@att.net July 28, 2024

ENGINEERING REPORT 3124 MEADOW AVE., NORMAN, OK APPLICATION FOR FLOODPLAIN PERMIT

The residence at 3124 Meadow Avenue, is a condo that is one unit of a structure containing a total of four units. As with most condos, these condos share common walls.

The floodplain permit at 3124 Meadow Avenue is for landscaping work in the back yard (aka patio), replacing the masonry blocks in a patio area with pour-cast concrete, and replacing an old wooden fence with a new wooden fence.

This work has already been completed. The owner explained that she did not know that a floodplain permit was required for this work, and that she relied upon her contractor to get all required permits. She understood that her condo building had been removed from the floodplain via a LOMA approved by FEMA and she was surprised to learn that your back yard is still in the floodplain.

The owner provided a few photographs of her property that were taken prior to the construction that are helpful in determining the impact the recently constructed improvements have on the floodplain. I have examined these photographs carefully along with the existing site. I have identified several points within the back yard where I used the photographs to compare the elevations of the per-construction conditions to the post-construction elevations at the same points. I used identifiable undisturbed objects to determine whether soil and paving elevations were increased during the recent construction. Reference objects included brick or block lines in the walls of the house, a cover for a utility box, a post with a horizontal board, and the ground on both sides of the fence that surrounds the back ;yard. It appears to me that the ground and the paved patio pad elevations have not change a significant amount as a result of the construction.

It appears that soil was removed from the site prior to the placement of the concrete pad to compensate for added volume of concrete. The old blocks were approximately two inches thick and the new concrete pad is four inches thick. The elevation of the finished surface of the concrete is the same as the elevation of the old concrete blocks, according to all three reference points studies in regard to the concrete pad.

A concrete manhole exists in the back of the back yard, adjacent to the back fence. This manhole is surrounded with bricks, which are probably a part of the manhole. Prior to the improvements, these bricks were surrounded with soil and woody plants, shrubs and small trees. All of that (except the bricks) were removed during the recent construction. Also, there was a brick flower bed adjacent to the back fence, which has remained in place. I cannot determine a volume of the soil removed at this specific location, but it is my opinion that soil has been removed from this property at this location, rather than being added. Therefore it is my opinion that the requirement for compensatory storage has been met.

The back yard of this property is located in the floodplain of the Canadian River. The profile included in the Cleveland County FIS was used to determine that the base flood elevation (BFE) at this property is 1100.0 feet NAVD '88. The floor of the residence is at an elevation 1100.40 feet, and the elevation of the surface of the concrete pad and other areas of the back yard range from a lot of 1099.32 feet to a high of 1099.92 feet. The top of the manhole is at an elevation of 1100.89 feet.

Therefore, the greatest floodplain depth in this yard is 0.68 feet (approximately eight inches. The greater length of the side yard for this property is approximately 42 feet. The size of the portion of the floodplain of the Canadian River is much greater, being 2400 feet +/- from this yard to the boundary of the City of Norman, and the floodplain of this river extends a significant distance into the Town of Goldsby. Consequently, this work will have no measurable effect on the floodplain of the Canadian River at any point in this community. Certainly, the BFE will not increase more than 0.05 feet as required by applicable regulations.

Floodwater entering this property will create a situation know as back-water, which has no significant velocity. Therefore the flow of water across this property will be insignificant. Water will enter this property as the flood water rises and will flow outward as the floodwater decreases. The manhole that exists adjacent to the back fence and the area around it is at an elevation that will block flow across the back fence line for a distance of about 70 percent of the width of the property. There are openings when water can flow under the rear gate and from or to adjacent yards by flowing under the fence.

The floodwater from the river would likely be slow to rise and fall due to the large drainage basin being drained by the river. Likely, the time of concentration for flow from the headwaters of this river to this specific location will be measured in days and not minutes, as is commonly experienced within this city. Consequently, the storage volume provided by this yard will be slow to fill or to empty; therefore, flow rates into and out of this yard will be low, and even a small opening under the fences will be adequate. This discussion is provided to show that the storage volume provided by this yard will still be effective.

Several photographs and exhibits are attached hereto, and a list of these is found on the following page. Please contact me for questions or to request additional information.

I am thanking the Staff and Floodplain Committee for considering this application, and it is my recommendation that this application be approved.

Engineer's Certification

The site where this work is located is within the fringe area of the floodplain of the Canadian River, and the site is located outside the regulatory floodway.

I Earl (Gary) Keen, PE, a professional licensed as such in the State of Oklahoma, PE 11438, do hereby certify that the work proposed in this floodplain permit application will not result in an increase in the BFE of the impacting stream greater than 0.05 feet at this work site or at any location in the community.

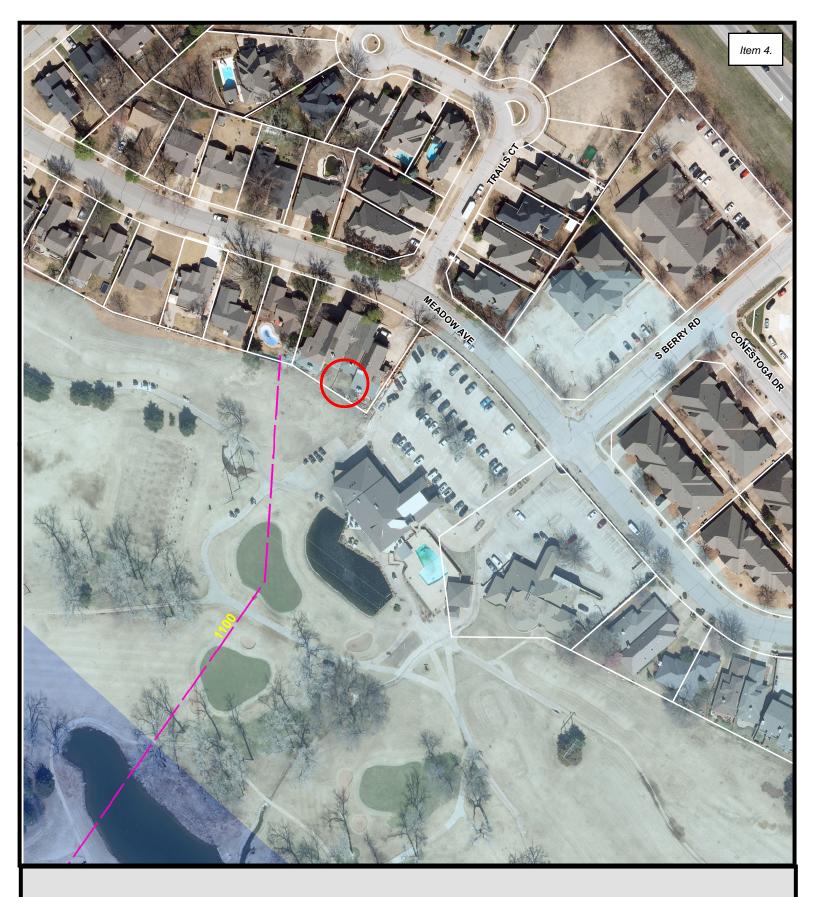
The work proposed in this application has already been completed, and it is my professional opinion that this work has not resulted in any reduction in the storage capacity of the floodplain that exists at that site.

Signed and Sealed on this 14th day of August, 2024

Earl (Gary) Keen, PE 11438 PO Box 891200 Oklahoma City, OK 73189

Cell: (405) 823-8240

Email: garykeen47@att.net





3124 Meadow Ave.



BFE 2021

Legend

BFE 2021

1% Chance Floodplain

Floodway

The City of Norman assumes no

1 inch = 137 feet





The City of Norman assumes no responsibility for errors or omissions in the information presented.

3124 Meadow Ave.



1 inch = 26 feet

Legend

BFE 2021
1% Chance Floodplain

Floodway

