The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT

Billy Harless, Community Development Director

ENGINEERING DIVISION
Patrick Menefee, City Engineer
CURRENT PLANNING DIVISION
Kellie Gilles, Planning Manager
COMPREHENSIVE PLANNING
Comprehensive Planner
BUILDING INSPECTION DIVISION
Christine Brakefield, Building Official
GIS DIVISION
Greg Hakman, GIS Coordinator

ANY PERSON REQUIRING SPECIAL ASSISTANCE OR OTHER REASONABLE ACCOMODATION TO ATTEND AND/OR FULLY PARTICIPATE IN ANY MEETING MUST CONTACT LORA GWARTNEY VIA EMAIL AT LGWARTNEY@MIDWESTCITYOK.ORG OR PHONE AT 739-1220 AT LEAST TWENTY-FOUR (24) HOURS IN ADVANCE OF THE MEETING. DURING A PUBLIC MEETING, CALL 739-1388 FOR ASSISTANCE.

AGENDA FOR THE REGULAR MEETING OF THE
MIDWEST CITY
PLANNING COMMISSION
January 2, 2019 – 7:00 p.m.
City Council Chambers
City Hall
100 North Midwest Boulevard

A. **CALL TO ORDER**
B. **MINUTES**
   1. Discussion and consideration of approving the Minutes of the regular meeting November 6, 2018.
C. **NEW MATTERS**
   1. (PC – 1976) Discussion and consideration of approval of the Preliminary Plat of Florence Estates for the property described as a part of the NE/4 of Section 1, T-11-N, R-1-W, located in the 400 block of S. Post Road. This item was continued from the October 2, 2018 and November 6, 2018 Planning Commission meetings and the October 23, 2018 and November 27, 2018 Council meetings.
   2. (MP-13) Discussion and consideration of approval of the Nash's Addition Minor Plat located in the SE/4 of Section 12, T-11-N, R-2-W of the Indian Meridian, Oklahoma County, Oklahoma.
   3. (PC –1983) Public hearing with discussion and consideration of approval of an ordinance redistricting from R-6, Single Family Detached Residential to a Planned Unit Development (PUD) governed by the R-6, Single Family Detached Residential District, for the property described as a part of the NE/4 of Section 1, T-11-N, R-2-W, located in the 500 block of St. Paul Avenue.

D. COMMISSION DISCUSSION
E. PUBLIC DISCUSSION
F. FURTHER INFORMATION
G. ADJOURN

Notice of regular Midwest City Planning Commission meetings in 2018 was filed for the calendar year with the Midwest City Clerk prior to December 15, 2017 and copies of the agenda for this meeting were posted at City Hall at least 24 hours in advance of the meeting.

MINUTES OF MIDWEST CITY PLANNING COMMISSION MEETING

November 6, 2018 - 7:00 p.m.

This regular meeting of the Midwest City Planning Commission was held in the Council Chambers, 100 North Midwest Boulevard, Midwest City, Oklahoma County, Oklahoma, on November 6, 2018 at 7:00 p.m., with the following members present:

Commissioners present:	Stan Greil –Chairman Dee Collins Jess Huskey Russell Smith Dean Hinton Jim Campbell
Commissioner absent:	Jim Smith
Staff present:	Kellie Gilles, Planning Manager Patrick Menefee, City Engineer

The meeting was called to order by Chairman Greil at 7:02 p.m.

A. MINUTES:

1. Motion was made by Huskey, seconded by Collins, to approve the minutes of the October 3, 2018 Planning Commission meeting as presented. Voting aye: Collins, Campbell, R.Smith, Greil, Hinton and Huskey. Nay: none. Abstain: Collins. Motion carried.

B. NEW MATTERS:

1. **(PC-1976) Discussion and consideration of approval of the Preliminary Plat of Florence Estates for the property described as a part of the NE/4 of Section 1, T-11-N, R-1-W, located in the 400 block of S. Post Road. This item was continued from the October 2, 2018 Planning Commission meeting and the October 23, 2018 Council meeting.**

Staff presented a brief overview of this item. A motion was made by Collins, seconded by Campbell to recommend to table this item to the January Planning Commission meeting. Voting aye: Collins, Huskey, Campbell, R. Smith, Hinton and Greil. Motion carried.

2 **(PC – 1981) Public hearing with discussion and consideration of approval of an ordinance to rezone from R-6, Single Family Detached Residential to C-3, Community Commercial District for the property described as a part of the SW/4 of Section 30, T-12-N, R-1-W of the Indian Meridian, Oklahoma County, Oklahoma, addressed as 10001 NE 10th Street.**

Staff presented a brief overview of this item. The applicant, Kashif Murtaza of 10001 NE 10th Street was present. There was general discussion about this item. A motion was made by Huskey, seconded by Hinton, to recommend approval of this item subject to staff comments. Voting aye: Hinton, Campbell, R. Smith, Collins, Greil and Huskey. Nay: none. Motion carried.

3 **(PC-1982) Discussion and consideration of approval of the Midtown Office Park Section II Preliminary Plat for the property described as a tract of land lying in the NE/4 of Section 11, T-11-N, R-2-W, of the Indian Meridian, City of Midwest City, Oklahoma County, Oklahoma.**

Staff presented a brief overview of this item. The applicants representative, Bo Schlotzhauer of 1613 N. Broadway, OKC, was present. There was general discussion about this item. A motion was made by R. Smith, seconded by Collins to recommend approval of this item subject to staff comments. Voting aye: Hinton, Campbell, R. Smith, Collins, Greil and Huskey. Nay: none. Motion carried.

C. COMMISSION DISCUSSION: There was general discussion. Staff explained that as there will not be a quorum for the regularly scheduled December 4, 2018 meeting and that no complete applications were submitted for that agenda, the Planning Commission will not meet in December. As the first Tuesday in January is January 1, the Planning Commission will meet on Wednesday, January 2, 2019.

D. PUBLIC DISCUSSION: None.

E. FURTHER INFORMATION: None

There being no further matters before the Commission, motion to adjourn was made by R. Smith seconded by Huskey. Voting aye: Hinton, Campbell, R. Smith, Collins, Greil and Huskey. Nay: none. Motion carried.

The meeting adjourned at 7:15 p.m.

_____

Stan Greil, Chairman
(KG)

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT

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To: Chairman and Planning Commission

From: Billy Harless, Community Development Director

Date: January 2, 2019

Subject: (MP-13) Discussion and consideration of approval of the Nash's Addition Minor Plat located in the SE/4 of Section 12, T-11-N, R-2-W of the Indian Meridian, Oklahoma County, Oklahoma.

Executive Summary: This minor plat is being requested to combine an existing subdivided lot with an unplatted lot located directly behind. The applicant would like to combine the two to create a larger backyard to have a large accessory building. Combining the two parcels would alleviate the issue of a land-locked parcel. This request conforms to the requirements for minor platting and staff recommends approval.

Dates of Hearing: Planning Commission – January 2, 2019
City Council – January 8, 2019

Ward: Ward 6, Councilmember Jeff Moore

Owner/Applicant: Lowell & Marcella Nash

Land Use: Single-family detached residential

Size:
The area of request has frontage along Rail Road of approximately 39.44 feet and a depth of approximately 200 feet, containing an area of approximately 0.85 acres, more or less.

Zoning Districts:
Area of Request – R-6, Single-Family Detached Residential
North, South, East and West – R-6, Single-Family Detached Residential

Municipal Code Citation:
Subdivision Regulations
Sec. 38-20.1. Purpose
The purpose of a minor plat is to provide a limited means for simple land division under certain circumstances, which result in minimal lot creation.

In circumstances where adequate infrastructure, easements, and right-of-way already exist and the extension of any City facilities to serve any lot within the subdivision is not required, then a minor plat may be suitable as an instrument to subdivide one lot into three or fewer lots.

In agreement with the intent of this subdivision ordinance, minor plats are intended to ensure that public facilities are available and will have sufficient capacity to serve the proposed subdivision. Additionally, minor plats are intended to ensure the future growth and development of the entire city by ensuring new development does not hinder the provision of public facilities and services to neighborhood and nearby properties.

History:
1. The parcel on the east was subdivided as part of the Santa Fe Crossing Section Two Addition in 1984.
2. This area has been zoned residential since the adoption of the 1985 zoning map.

Engineer's Comments:
This application is a request to create two lots in an unplatted commercial development. It does meet current engineering requirements. No new engineering improvements are required with this application.

Water Supply and Distribution
A six (6) inch public water main is located on the east side of Spur Drive in the street right-of-way adjacent to the east side of the area of request.

Extension of the water supply to serve this property is not required as outlined in Municipal Code 43-32.

Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for any new building applications.

Refer to the Fire Department memo for additional comments related to water lines and fire protection.

Sanitary Sewerage Collection and Disposal
An eight (8) inch public sewer main is located on the west side of Spur Drive in the street right-of-way adjacent to the west side of the area of request.

Public sanitary sewer line improvements are not required with this application.

Connection to the public sanitary sewer system for service is a building permit requirement per Municipal Code 43-109 for any new building applications.

Streets and Sidewalks
Access to the area of request is available from Spur Drive, exclusively.

Spur Drive is classified as a local street in the 2008 Comprehensive Plan. Spur Drive is a two (2) lane, 26-foot wide asphalt concrete roadway. Current code requires a total street right-of-way width of fifty feet (50) adjacent to the area of request and presently, Spur

Drive has fifty (50) feet of right-of-way adjacent to and parallel to the east side of the area of request.

Right of way grants are not required with this application.

Street improvements are not required with this application.

Sidewalk is not required with this application.

Drainage and Flood Control, Wetlands, and Sediment Control

Drainage across the area of request is via surface flow from the north to the south. Currently, the area of request is developed with a residential development. None of the area of request is affected by flood zone AE (the 100-year floodplain) as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 12, 2009.

Drainage improvements are not required with this application.

Detention improvements are not required with this application.

No identified wetlands are located on or abutting the area of request as shown on the Choctaw quadrangle of the 1989 National Wetlands Inventory map as prepared by the United States Department of the Interior Fish and Wildlife Service.

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

Easements and Right-of-Way

All proposed side lot and rear lot utility easements, as well as previously dedicated utility and drainage easements are required to be illustrated on the minor plat.

All easements and right of way dedications are to comply with Code Sections 38-41 and 38-44.

Fire Marshal's Comments:

The fire department has reviewed the application for MP-13. The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15.

Staff Comments:

The applicant is requesting to combine an existing subdivided lot with an unplatted lot located directly behind. The applicant would like to combine the two to create a larger backyard to have a large accessory building.

Although the parcel would be an irregular shape, combining the two parcels would alleviate the issue the western parcel being landlocked. The parcel will still meet the street frontage requirement of 50' at the front building line.

Code requires a 17' perimeter easement in new subdivisions. Because the lot abutting the west property line already has a 15' easement, staff recommends approval of a 10' perimeter easement along the west property line of Nash's Addition.

This request conforms to the requirements for minor platting and staff recommends approval subject to the comments within the MP-13 file.

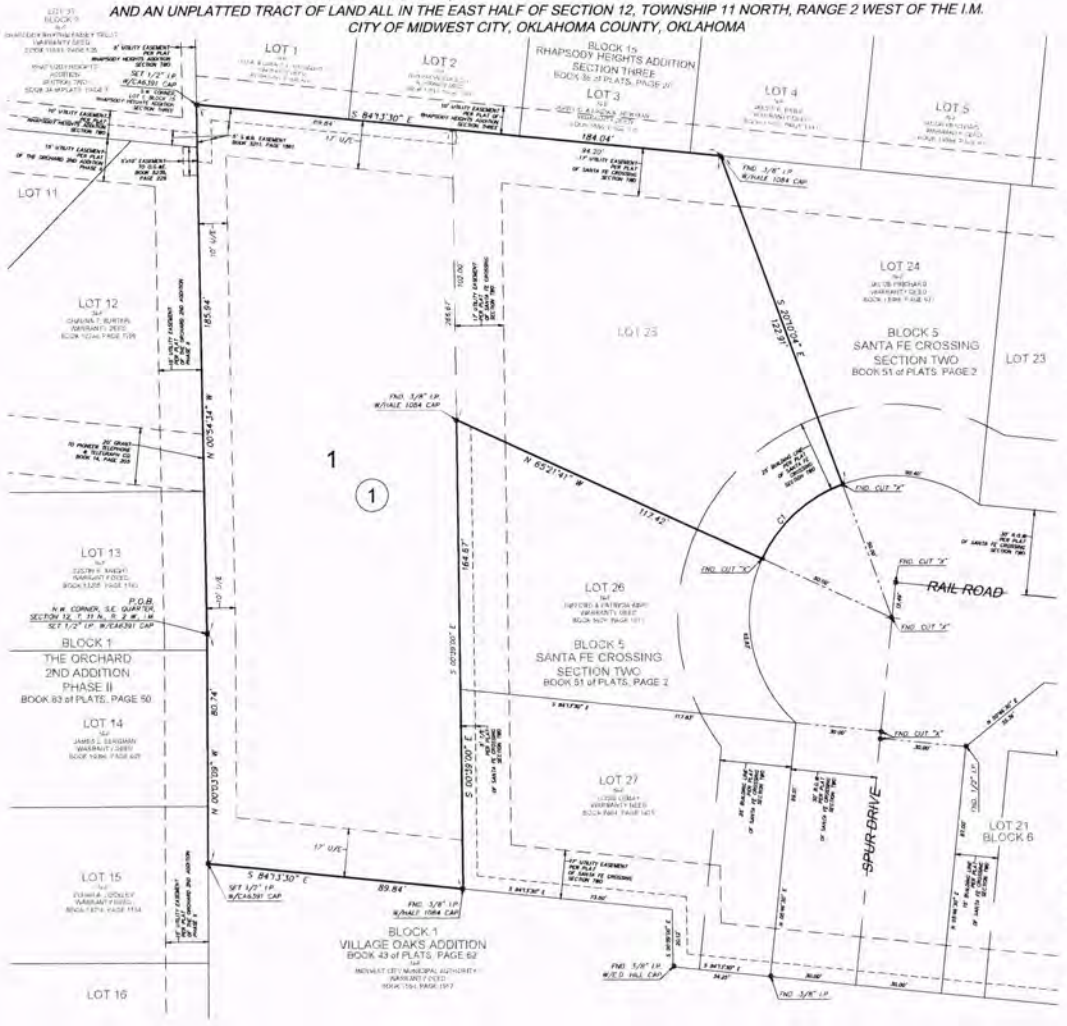
Action Required: Approve or reject the Nash's Addition Minor Plat for the property located as noted herein, subject to the staff comments and found in the January 2, 2019 agenda packet and made a part of MP-13 file.

Billy Harless, AICP
Community Development Director

LG

MINOR PLAT
NASH'S ADDITION

A REPLAT OF LOT 25, BLOCK 5 IN SANTA FE CROSSING SECTION TWO
AND AN UNPLATTED TRACT OF LAND ALL IN THE EAST HALF OF SECTION 12, TOWNSHIP 11 NORTH, RANGE 2 WEST OF THE I.M.
CITY OF MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA



SECTION 12
LOCATION MAP
1" = 2000'

LEGAL DESCRIPTION

Lot Twenty-Five (25), in Block Five (5), of Santa Fe Crossing Section Two to Midwest City, Oklahoma County, Oklahoma according to the plat recorded in Book 51 of Plats, Page 2

AND

A tract of land lying in the East Half (E/2) of Section Twelve (12), Township Eleven (11) North, Range Two (2) West of the Indian Meridian, Oklahoma County, Oklahoma being more particularly described as follows:

BEGINNING at the northwest corner of the Southeast Quarter (SE/4) of said Section 12;

THENCE North 00°54'34" West, along the east line of Block 1, THE ORCHARD 2ND ADDITION PHASE II recorded in Book 63 of Plats, Page 50 and the west line of the Northeast Quarter (NE/4) of said Section 12, a distance of 185.84 feet to the southwest corner of Lot 1, in Block 15, of RHAPSODY HEIGHTS ADDITION SECTION 3 according to the plat recorded in Book 36 of Plats, Page 26;

THENCE South 84°13'30" East, along the south line of said Block 15, a distance of 89.84 feet to the northwest corner of Lot 25, in Block 5 of SANTA FE CROSSING, SECTION TWO recorded in Book 51 of Plats, Page 2;

THENCE South 00°39'00" East, along the west line of said Block 15, a distance of 268.67 feet to the southwest corner of Lot 27 in said Block 5, said point also being a point on the north line of Block 1, VILLAGE OAKS ADDITION recorded in Book 43 of Plats, Page 62;

THENCE North 84°13'30" West, along north line of said Block 1, a distance of 89.84 feet to a point on the east line of Block 1, THE ORCHARD 2ND ADDITION PHASE II recorded in Book 63 of Plats, Page 50;

THENCE North 00°53'09" West, along the east line of said Block 1, a distance of 80.74 feet to the POINT OF BEGINNING.

Said described tract of land contains an area of 37,754 square feet or 0.8667 acres, more or less

OWNER'S CERTIFICATE AND DEDICATION

Know All Men By These Presents:

That the undersigned, Lowell Mark Nash and Marcela Nash, Trustees of the Nash Revocable Trust dated August 22, 2006, hereby certify they are the owners of, and the only persons having any right, title or interest in, and to the land shown on the annexed plat of NASH'S ADDITION and have caused the same to be surveyed and platted, and does hereby dedicate all the streets and easements shown hereon to the public for streets, utilities and drainage, for themselves, their heirs, executors, administrators, successors and assigns forever and have caused the same to be released from all encumbrances so that title is clear, except telephone, cable, and gas lines, any duplicate lines, including transformers and pedestals, must be installed completely underground.

In witness whereof, the undersigned having caused this instrument to be executed this _____ day of _____, 20____.

Nash Revocable Trust dated August 27, 2006:

_____
Lowell Mark Nash, Trustee

_____
Marcela Nash, Trustee

STATE OF OKLAHOMA)
) SS
COUNTY OF _____)

Before me, the undersigned, a notary public in and for said County and State on this _____ day of _____, 20____ personally appeared _____ and _____, Trustees of the Nash Revocable Trust dated August 27, 2006 to me known to be the identical person who executed the within and foregoing instrument and duly acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth. Given under my hand and seal the day and year last above written.

_____
My Commission Expires

_____
Notary Public

CERTIFICATE OF CITY CLERK

I, _____, City Clerk of the City of the City of Midwest City, Oklahoma, hereby certify that I have examined the records of said City and find that all delinquent payments on unmatured installments have been paid in full and that there are no special assessment procedures now pending against the land on the annexed plat of NASH'S ADDITION, to the City of Midwest City, Oklahoma.

Signed by the City Clerk this _____ day of _____, 20____.

_____
City Clerk

CERTIFICATE OF PLANNING COMMISSION

I, _____, Chair of the City Planning Commission, of the City of Midwest City, Oklahoma, hereby certify that the said Planning Commission duly approved the Minor Plat of NASH'S ADDITION, an addition to the City of Midwest City, Oklahoma.

Signed this _____ day of _____, 20____.

_____
Chairman

NOTES

1. Easements shown hereon by specific recording information are shown hereon for information purposes only and are not dedicated as a part of this plat.
2. The bearing of South 00°39'00" East along the west line of Block 5 in SANTA FE CROSSING SECTION 2 according to the plat recorded in Book 51 of Plats, Page 2 and as shown hereon was used as the basis of bearings for this survey.

LEGEND

P.O.B. – POINT OF BEGINNING
U/E – UTILITY EASEMENT

Curve Table						
Curve #	Radius	Length	Delta	Tangent	Chord Bearing	Chord Length
C1	50.00'	38.44'	45°41'41"	20.81'	S 47°54'51" W	37.43'

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

COUNTY TREASURER'S CERTIFICATE

I, _____, do hereby certify that I am the duly qualified and acting County Treasurer of Oklahoma County, Oklahoma, that the tax records of said county show all taxes are paid for the year 20____ and prior years on the land shown on the annexed plat of NASH'S ADDITION to the City of Midwest City, Oklahoma, that the required statutory security has been deposited in the offices of the County Treasurer guaranteeing payment of the current year's taxes,

In witness whereof said County Treasurer has caused this instrument to be executed this _____ day of _____, 20____.

_____
County Treasurer

ACCEPTANCE OF DEDICATION BY CITY COUNCIL

Be it resolved by the Council of the City of Midwest City, Oklahoma, that the dedications shown on the annexed plat of NASH'S ADDITION to the City of Midwest City, Oklahoma are hereby accepted.

Adopted by the Council of the City of Midwest City, Oklahoma, this _____ day of _____, 20____.

_____
City Clerk

_____
Mayor

BONDED ABSTRACTOR'S CERTIFICATE

The undersigned, a duly qualified and lawfully bonded abstractor of titles in and for Oklahoma County, State of Oklahoma, hereby certify that the records of said county show that the Title to the land shown on the annexed plat of NASH'S ADDITION to the City of Midwest City, Oklahoma is vested in Lowell Mark Nash and Marcela Nash, Trustees of the Nash Revocable Trust dated August 22, 2006, on this _____ day of _____, 20____, and that there are no actions pending or judgments of any nature in any court or lien filed with the clerk of any court in said county and state against said land or owners thereof, that the taxes are paid for the year of 20____ and prior years, that there are no outstanding tax sales certificates against said land and no tax deeds are issued to any person, that there are no liens, or other encumbrances of any kind against the land included in the Minor Plat, except, mortgages, rights-of-way, easements, and mineral conveyances of record.

In witness whereof, said Bonded Abstractor has caused this instrument to be executed one _____ day of _____, 20____.

First American Title Insurance Company

_____
Authorized Officer

LICENSED PROFESSIONAL LAND SURVEYOR'S CERTIFICATE

I, Christopher L. Tripp, do hereby certify that I am a Licensed Professional Land Surveyor in the State of Oklahoma, and that the Minor Plat of NASH'S ADDITION to the City of Midwest City, Oklahoma, Oklahoma, consisting of one (1) sheet, represents a careful survey made under my supervision on the _____ day of _____, 20____, and that monuments shown thereon exist and their positions are correctly shown, that this survey meets the Oklahoma Minimum Standards for the Practice of Land Surveyors as adopted by the Oklahoma State Board of Registration for Professional Engineers and Land Surveyors.

_____
Christopher L. Tripp, PLS 1685

STATE OF OKLAHOMA)
) SS
COUNTY OF _____)

Before me, the undersigned, a notary public in and for said county and state on the _____ day of _____, 20____, personally appeared _____ to me known to be the identical person who executed the foregoing instrument, and duly acknowledged to me that he executed the same as his free and voluntary act and deed for the uses and purposes therein set forth. Given under my hand and seal the day and year last above written.

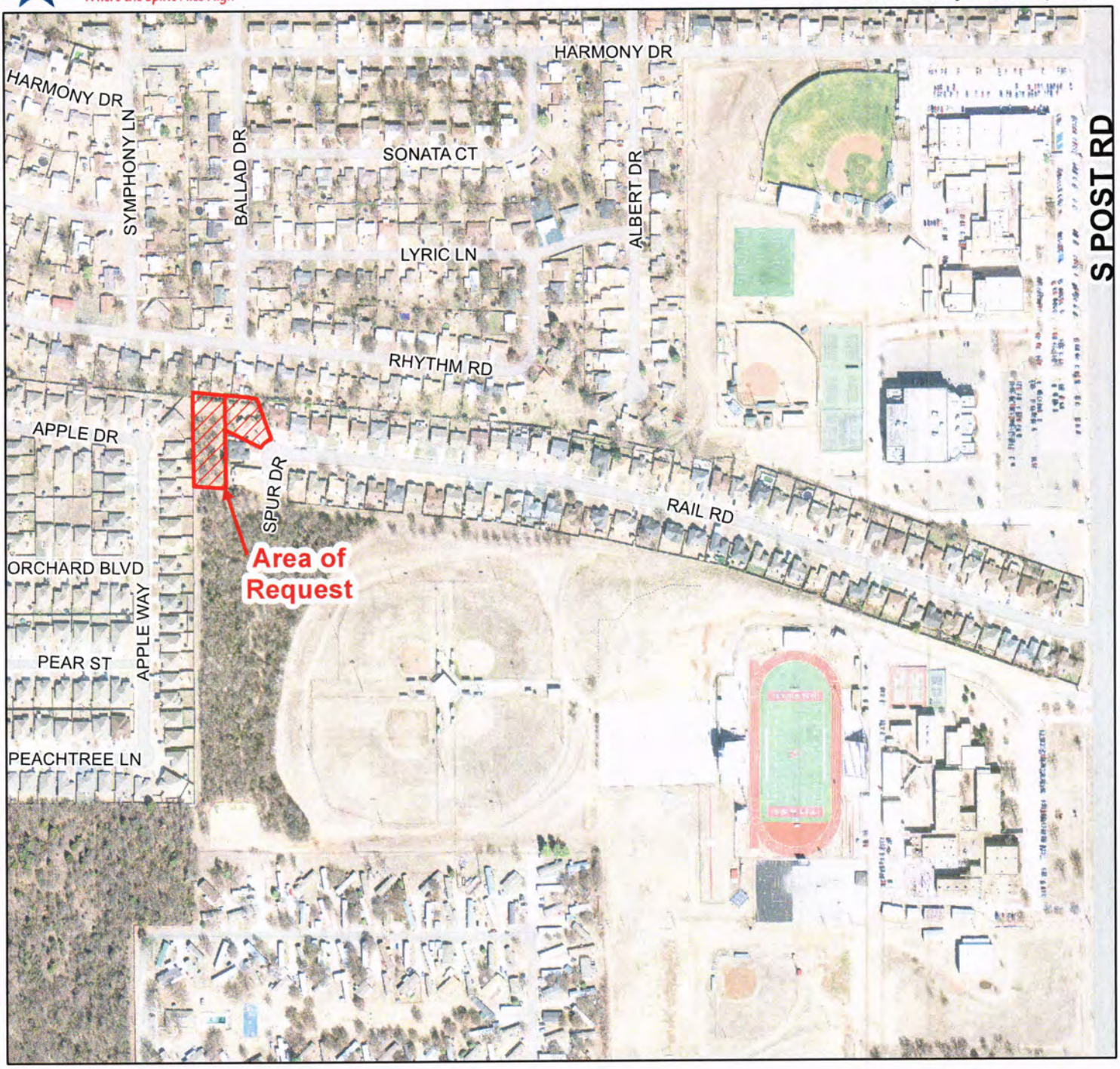
_____
My Commission Expires

_____
Notary Public

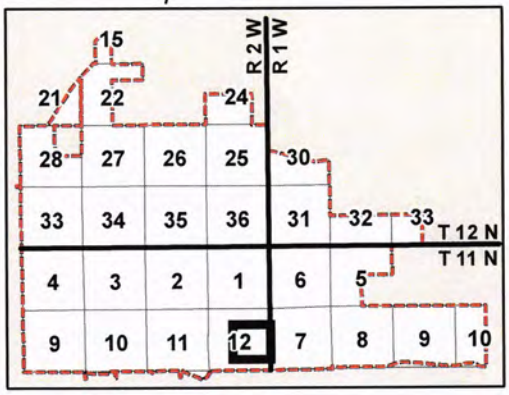
DODSON - THOMPSON - MANSFIELD, PLLC
20 NE 30th Street Phone: 405-607-7402
Oklahoma City, OK 73105 Fax: 405-607-7421
Surveying - Engineering - Earthwork
CERTIFICATE OF AUTHORIZATION NO. 8391 EXPIRES JUNE 30, 2020

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



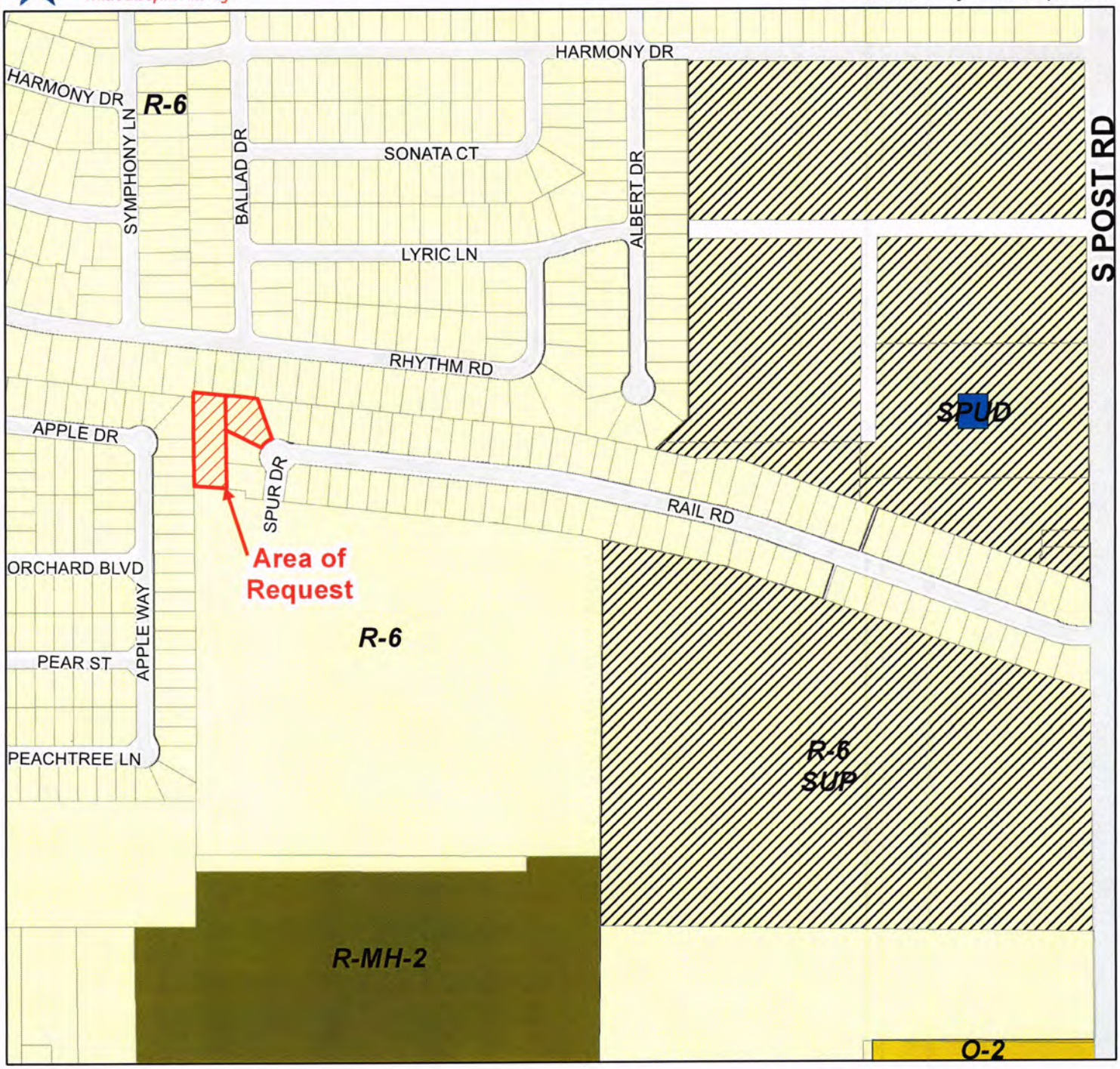
2017 DOP (AERIAL) VIEW FOR MP-13 (E/2, Sec. 12, T11N, R2W)

0 400 800 Feet

1 inch = 400 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



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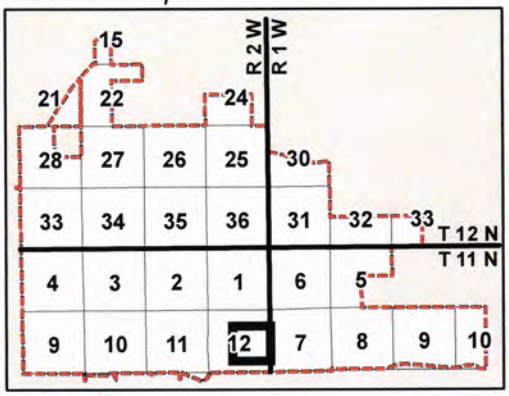

Current Zoning Legend

A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS
		HOS SUP

ZONING MAP FOR MP-13 (E/2, Sec. 12, T11N, R2W)

0 400 800 Feet

1 inch = 400 feet

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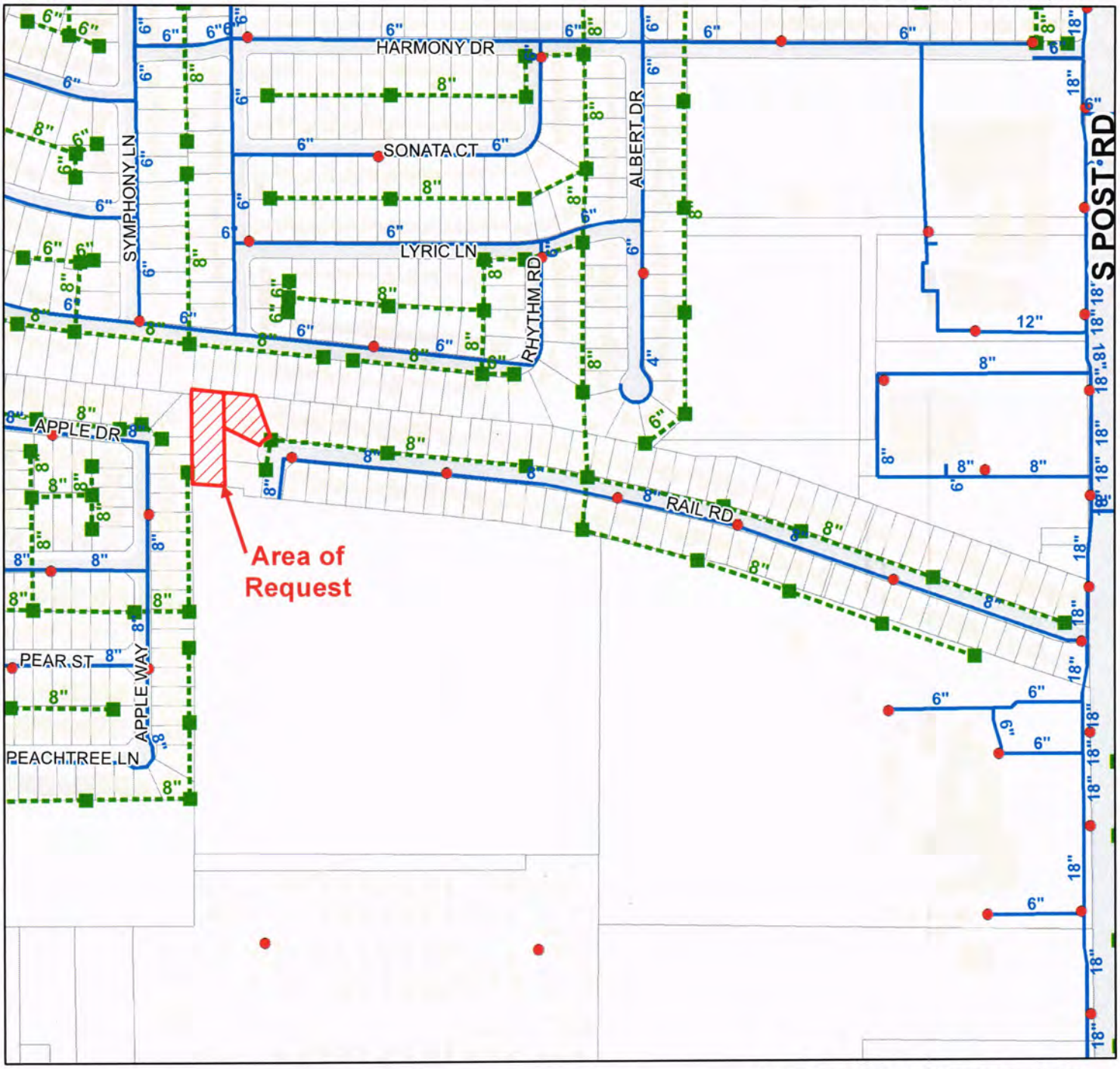
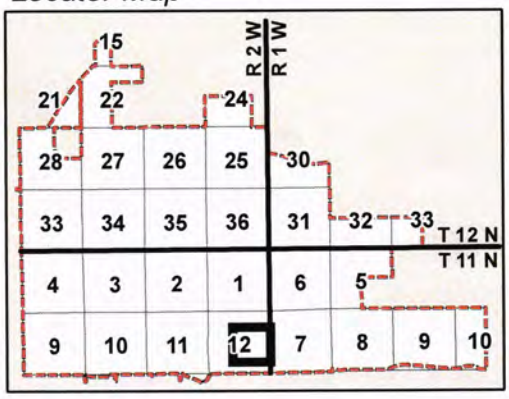
Community Development



Locator Map



Water/Sewer Legend

- Fire Hydrants

Water Lines

- Distribution
- Well
- OKC Cross Country
- Sooner Utilities
- Thunderbird
- Unknown

- Sewer Manholes
- Sewer Lines

WATER/SEWER LINE LOCATION MAP FOR MP-13 (E/2, Sec. 12, T11N, R2W)

0 400 800 Feet

1 inch = 400 feet

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To: Chairman and Planning Commission

From: Billy Harless, Community Development Director

Date: January 2, 2019

Subject: (PC – 1983) Public hearing with discussion and consideration of approval of an ordinance redistricting from R-6, Single Family Detached Residential to a Planned Unit Development (PUD) governed by the R-6, Single Family Detached Residential District, for the property described as a part of the NE/4 of Section 1, T-11-N, R-2-W, located in the 500 block of St. Paul Avenue.

Executive Summary: This PUD is being requested in order to create a single family residential subdivision. The PUD is governed by the R-6, Single Family Detached Residential zoning district. The applicant and engineer brought a preliminary plat before the Planning Commission and City Council in the Fall of 2018, however, that application was withdrawn by the applicant due to concerns regarding drainage, water quality, density and the street length. This PUD shows thirty-five (35) single family residential lots. The original plat submitted in 2018 included thirty-eight (38) lots. While the Zoning Ordinance does not place restrictions on the lengths of residential cul-de-sac streets, the Subdivision Ordinance requires that any cul-de-sacs over 1,000 feet in length be zoned as a PUD. The applicant is not requesting any variances to any of the requirements of the Zoning Ordinance. Due to concerns brought up during the preliminary plat hearing in 2018, the applicant has submitted information regarding drainage and environmental concerns that were brought up with the preliminary plat hearing. That information is highlighted in the engineering portion of the staff report. Staff recommends approval of the request to rezone to a PUD.

Dates of Hearing: Planning Commission – January 2, 2019
City Council – January 8, 2019

Council Ward: Ward 2, Councilmember Pat Byrne

Owner: Walter and Sara Ballew

Applicant: Frank McLendon, MLB Homes

Engineer: Derek Jackson

Proposed Use: 35 single family residential lots

Size:
The area of request has a frontage along Saint Paul Avenue of approximately 100 ft. and contains an area of approximately 8.25 acres.

Development Proposed by Comprehensive Plan:
Area of Request – LDR, Low Density Residential
North, South, East and West – LDR, Low Density Residential

Zoning Districts:
Area of Request – R-6, Single Family Detached Residential
North, South, East and West – R-6, Single Family Detached Residential

Land Use:
Area of Request – vacant
North, South and East – single family residences

Comprehensive Plan Citation:
Single-Family Detached (SFD) Land Use
This use is representative of traditional, single-family detached dwelling units. Of the residential categories, it is recommended that single-family detached land use continues to account for the largest percentage. The areas designated for single-family detached residential land use are generally not adjacent to incompatible land uses, and are in proximity to existing single-family residential land use. The City should strive for a range of lot sizes to develop, and should reinforce this by providing a choice of several single-family zoning districts with various lot sizes in the Zoning Ordinance.

Municipal Code Citation:
2.25 *PUD, Planned Unit Development*
2.25.1 General Provisions
The planned unit development, herein referred to as PUD, is a special zoning district category that provides an alternate approach to conventional land use controls to produce unique, creative, progressive, or quality land developments.
The PUD may be used for particular tracts or parcels of land that are under common ownership and are to be developed as one unit according to a master development plan. The PUD is subject to special review procedures within the PUD application and review and once approved by the City Council it becomes a special zoning classification for the property it represents.

2.25.2 Intent and Purpose
The intent and purpose of the PUD provisions are as follows:

(A) Innovative land development
Encourage innovative land development while maintaining appropriate limitations on the character and intensity of use, assuring compatibility with adjoining and proximate properties, and following the guidelines of the comprehensive plan.

(B) Flexibility within developments
Permit flexibility within the development to maximize the unique physical features of the particular site.

(C) Efficient use of land
Encourage efficient use of land, facilitate economic arrangements of buildings and circulation
systems, and encourage diversified living environments and land uses.

(D) Function, design and diversity
Achieve a continuity of function and design within the development and encourage diversified living environments and land uses.

(E) Modifications to development requirements
Provide a vehicle for negotiating modifications in standard development requirements in order to both encourage innovative development and protect the health, safety and welfare of the community.

History:

1. This property has been zoned residentially since the adoption of the 1985 Zoning Map and has never been platted.
2. (PC-1960) A preliminary plat for the area of request was withdrawn at the September 11, 2018 City Council meeting.

Staff Comments:

Engineer's Report:

Water Supply and Distribution

A six (6) inch public water main is located on the west side of Saint Paul Avenue in the street right-of-way extending along the east side of the area of request.

The applicant proposes to construct a public water line extension along the north side of the area of request in the proposed S.E. 5th Street right of way.

Improvement plans for the water line extension must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Extension of the water supply to serve this property is required as outlined in Municipal Code 43-32.

Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for all new buildings.

Sanitary Sewer Collection and Disposal

Section 38-18 in the Subdivision Regulations requires all existing and proposed public sanitary sewer mains be reflected on the preliminary plat.

An eight (8) inch public sewer main is located in a dedicated utility easement along the west side of the area of request.

The applicant proposes to construct a public sewer line extension along the south side of the area of request in the proposed S.E. 5th Street right of way.

Improvement plans for the sewer line extension must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Connection to the public sanitary sewer system for domestic service is a building permit requirement per Municipal Code Chapter 43-109 for all lots.

Streets and Sidewalks
Section 38-18 in the Subdivision Regulations requires all existing and proposed public streets and sidewalks be reflected on the preliminary plat.

Access to the area of request is available from Saint Paul Avenue. Saint Paul Avenue is classified as a collector street in the 2008 Comprehensive Plan. Saint Paul Avenue is a two (2) lane, 32-foot wide, curbed, asphalt concrete roadways. Current code requires a total street right-of-way width of sixty (60) feet for collector roads and presently, Saint Paul Avenue has sixty (60) feet of right-of-way adjacent to and parallel to the east side of the area of request.

The applicant proposes to construct a public local street, S.E. 5th Street, with sidewalks to service the area of request. The proposed street will include at least two roundabouts that will serve as traffic calming features as well as landscaping improvements for the roadway.

Improvement plans for the street and sidewalks must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Drainage and Flood Control, Wetlands, ODEQ Water Sampling, and Sediment Control
Drainage across the area of request is from the east to the west to the south via overland flow. Currently, the area of request is undeveloped. Drainage from the site continues west, joining an unimproved channel that drains southwest, eventually draining into Soldier Creek, Tributary 6.

The applicant proposes multiple on-site detention ponds to service the area of request. The applicant, in lieu of building just one pond at the bottom of the hill serving the whole subdivision, is proposing multiple drainage features that will slow water throughout the site, slowing water flow down along the cul de sac east to the west. The proposed roundabouts will have detention built into them, serving as both traffic calming devices and water collection systems.

The drainage proposal will not cause backwater onto the properties uphill from the area and it will not increase water discharge downhill from the area.

The initial drainage report is attached to this packet and has been reviewed by both the City's third party consultant and the city engineer. This initial submittal meets with the city's current code requirements for detention.

Improvement plans for the detention ponds and any accompanying drainage structures must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

As noted, during the previous meeting concerning the area of request, an identified wetland is located on the area of request as shown on the Choctaw quadrangle of the National Wetlands Inventory map as prepared by the United States Department of the Interior Fish and Wildlife Service. The pond is a provisional wetland, therefore when it

is holding water, it is identified on the accompanying map. The applicant was tasked with getting clearance from the Oklahoma Department of Wildlife Conservation to eliminate the pond and providing that documentation to city staff prior to the issuance of any permits. The accompanying report shows that this review has been completed and the demolition of the pond is allowed as per the U.S. Army Corps of Engineers and Department of Wildlife Conservation statutes.

Also noted during the previous Planning Commission meeting, residents adjacent to the area of request voiced concerns about the cleanliness of the pond water, asking for it to be tested for toxicity. The water was tested for pathogens. O.D.E.Q., who has jurisdiction over testing this type of body of water, issued no pond reclamation orders mandating any treatments to the pond.

The area of request is not affected by flood zone AE (the 100-year floodplain) as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 12, 2009.

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

Easements and Right-of-Way.
The required easements and existing and proposed right of way for the area of request must be illustrated on the preliminary plat and will be dedicated to the city when the final plat is filed.

All easements and right of way dedications are to comply with Code Sections 38-41 and 38-44.

Fire Marshal's Report:
The Fire Department has reviewed this request. The property is required to meet and maintain the requirements of Midwest City Ordinances, Section 15. The cul-de-sac for this development shall be a minimum of 96'-0" diameter with a street clear width minimum of 26'-0".

Plan Review Comments:
The intention of the proposed Windsor Meadows PUD is to create a thirty-four (34) home, single family residential subdivision. There is one (1) additional lot intended for detention.

The proposed PUD is governed by the R-6, Single Family Detached Residential Zoning District. No other uses are proposed within this request.

The Master Development Plan shows one proposed access point from St. Paul Avenue.

No variances to the Zoning Ordinance are requested within this PUD. If approved, the applicant plans to submit an application for a preliminary plat. The Subdivision

Regulations do require that cul-de-sacs that are proposed to exceed 1,000' in length shall only be approved in subdivisions zoned as a PUD. The proposed cul-de-sac as shown on the Master Development Plan is 1,186.13'.

The length of the cul-de-sac is the reason that this PUD is being requested. The PUD Design Statement states that at least one (1) traffic calming island will be constructed within the right-of-way. The Subdivision Regulations require at least one island for every 500' of street length. Staff will require a minimum of two (2) traffic calming islands to be constructed in the right-of-way of the proposed street.

Regarding the street length, staff has studied the abutting subdivisions, Kanaly's Homeland 2nd Addition (SE 4th Street) and Homeland Addition (SE 6th Street). SE 4th Street is approximately 1,318' in length and serves 34 lots. SE 6th Street is approximately 1,320' in length and serves 32 lots. The proposed street of SE 5th in this PUD is shorter than SE 4th and SE 6th and provides an adequate turn-around at the end of the cul-de-sac. Due to the current configuration of this lot, a reasonable way to subdivide and develop the lot is with a cul-de-sac street running down the center.

As no variances are being requested, development must meet all requirements of the Zoning Ordinance including but not limited to 85% masonry materials, 25' front setback, 7' side setbacks, 20' rear setbacks, 40% maximum coverage, 2 trees in each front yard and J-Drives or setback garages for 70% of the lots. The proposed lots have a width between 56' and 60' and a depth between 123' and 153'. The proposed lot sizes exceed the minimum requirement for the R-6, Single Family Zoning District.

During pre-application meetings between staff and the applicant prior to the initial preliminary plat hearing in 2018, there were many discussions about how to proceed with the 33' strip of land that abuts Saint Paul Ave. on the far north side of the area of request. The lot was created many years ago and is non-conforming to current codes due to it being a flag shape. Section 38-48.5(A) of the Subdivision Regulations requires that lots be shaped regularly and prohibits flag shaped lots. Prior to submission of the withdrawn preliminary plat application, the applicant met with the property owner abutting the 33' strip to the south. The applicant and property owner have agreed to deed the 33' strip of land to the abutting property owner contingent upon approval of this preliminary plat. They submitted a letter signed by both parties detailing the agreement. If this zoning is approved and a new preliminary plat application is submitted, this agreement must be renewed and submitted as part of the application. Staff met with an Escrow Assistant at American Eagle Title on June 20, 2018 and confirmed that the transfer of property would be allowed by quit claim deed.

Due to concerns from the surrounding neighbors when the initial preliminary plat was heard by the Planning Commission and City Council, staff recommended that the applicant meet with the neighbors prior to the hearings for this PUD.

Staff recommends approval of the request.

Action Required: Approve or reject the ordinance to redistrict to Planned Unit Development for the property as noted herein, subject to the staff comments and recommendations as found in the January 2, 2019 agenda packet and made a part of PC-1983 file.

Billy Harless, AICP
Community Development Director

KG

THE CITY OF MIDWEST CITY

PLANNED UNIT DEVELOPMENT

PUD- _____

DESIGN STATEMENT FOR WINDSOR MEADOWS

PREPARED BY:

* Frank McLendon
* *1723 W. Britton Road*
* Oklahoma City, OK 73120
* *(405) 657-7909/286-1949*
* *mclendon.frank@yahoo.com*

TABLE OF CONTENTS

SECTION 1.0 INTRODUCTION

The Planned Unit Development (PUD) of Windsor Meadows, consisting of 8.25 acres is located within the NE/4 of Section 1, Township 11N, Range 2W, of the Indian Meridian, Midwest City, Oklahoma County, Oklahoma. The subject property is generally located in the 500 block of St. Paul Avenue.

SECTION 2.0 LEGAL DESCRIPTION

A part of the N/2 of the N/2 of the SW/4 of the NE/4 of Section 1. Township 11 North Range 2 West of the Indian Meridian more particularly described as follows; Commencing at the Southeast Corner of said N/2 thence N89°27'29"W and along the South line of said N/2 a distance of 30.00 feet: thence due North and parallel to the East line of said N/2 a distance of 328.64 to the Point of Beginning; thence N89°34'27"W a distance of and parallel with the South line of said SW/4 a distance of 1,289.25; thence S0°01'30"E a distance of 326.03 feet; thence S89°27'29"E along the North line of the SE/4 of said SW/4 a distance of 1,049.13 feet; thence due north and parallel to said East Line a distance of 122.85 feet: thence S89°27'29"E a distance of 215.00 feet:; thence S44°43'45"E a distance of 35.52 feet; thence due North and parallel to the East line of said N/2 a distance of 100.00 feet; thence S45°16'15"W a distance of 35.19 feet; thence N89°27'29"W a distance of 215 feet ; thence due North and parallel to the East line of said N/2 a distance of 122.30 feet; thence S89°34'27"E a distance of 240.00 feet; thence due North and parallel to the East line of said N/2 a distance of 33.00 feet to the Point of Beginning and containing 8.25 Acres More or Less.

SECTION 3.0 OWNER/DEVELOPER

The owner of this property described in Section 2.0 is Walter and Sara Ballew Legacy Wealth Trust. The developer of the property is Frank McLendon with Windsor Development, LLC.

SECTION 4.0 SITE AND SURROUNDING AREA

The subject property is presently undeveloped. Surrounding properties are zoned and used for:

North: R-6 District and used for Single Family Residential*.
East: R-6 District and used for Single Family Residential*.
South: R-6 District and used for Single Family Residential
West: R-6 District and used for Single Family Residential*

SECTION 5.0 PHYSICAL CHARACTERISTICS

The elevation of the subject property is 1,247' to 1,269' MSE and the slope analysis reveals the stormwater runoff drains from the northeast to the southwest. The subject property has mostly sandy loam soils characteristics and the tree cover on the property is approximately 46%. This property is in the Soldier Creek drainage basin and there are 8.25 acres in the drainage area. None of the property is in the FEMA 100 year flood plain.

SECTION 6.0 CONCEPT

The concept for this PUD is R-6 Single Family Residential. The subdivision will be marketed to residents 55 years of age and older with a minimum house size of 1,400 s.f.

SECTION 6.1 DEVELOPMENT AND SUBDIVISION VARIATIONS

The following represents variations to the R-6 single Family Residential base zoning district or other sections of the Midwest City Zoning Ordinance:

Maximum Street Length: 1,000 feet
Requested Street Length: 1,180 feet

SECTION 7.0 SERVICE AVAILABILITY

7.1 STREETS

The nearest street to the north is SE 4th Street which has a right-of-way width of 30 feet and is not paved to city standards. The nearest street to the east is St. Paul Avenue which has a right-of-way width of 50' and is paved to local street standards. The nearest street to the south is SE 6th Street which has a right-of-way width of 50 feet and is paved to local street standards.

Proposed streets in this Planned Unit Development shall be public and shall have right-of-way widths of fifty feet (50') and at least one traffic calming island constructed within the street right-of-way.

7.2 SANITARY SEWER

Sanitary sewer facilities for this property are available. An eight inch sanitary sewer main is located along the east right-of-way of St. Paul Avenue and along the west property line.

7.3 WATER

Water facilities for this property are available. An eight inch (8") water main is located along the west right-of-way of St Paul Avenue. Extension of the waterline to serve all of the proposed lots within the subdivision

7.4 FIRE PROTECTION

The nearest fire station to this property is located at 7316 SE 15th Street approximately 2.0 miles to the southwest.

7.5 GAS SERVICE, ELECTRICAL SERVICE, AND TELEPHONE SERVICE

Proper coordination with the various utility companies will be made in conjunction with this development.

7.6 DRAINAGE

The property within this Planned Unit Development is not within a FEMA 100 year flood plain and the location of the FEMA 100 year flood plain is delineated on the Preliminary Plat. A detention pond to manage stormwater runoff is proposed.

9.0 USE AND DEVELOPMENT REGULATIONS

The use and development regulations of the **R-6 Single Family Residential District** shall govern this PUD, except as herein modified, including accessory uses subject to their appropriate conditions and review procedures for public hearings where applicable, unless otherwise noted herein.

9.1 FAÇADE REGULATIONS

Exterior building wall finish on all structures, exclusive of windows and doors, shall consist of a minimum **85%** brick veneer, rock or stone masonry.

9.2 LANDSCAPING REGULATIONS

The subject parcel shall meet all requirements of the City of Midwest City's Landscaping Ordinance in place at the time of development.

9.3 PLATTING REGULATIONS

All land within this PUD shall be contained within a final plat and any plat dedications shall be approved by the City Council prior to any occupancy permits being issued in the PUD.

9.4 DRAINAGE REGULATIONS

Development of this parcel will comply with the Midwest City Municipal Code.

9.5 ACCESS REGULATIONS

There shall be one access point from S. St Paul Avenue in this PUD.

Streets or driveways on adjacent property within 200 feet of this Planned Unit Development shall be shown on the Master Development Plan.

Sidewalks shall be constructed within the subdivision at the time of home building activity in order to avoid damage to the sidewalk during home building.

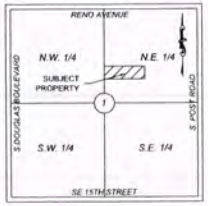
9.6 SETBACK REGULATIONS

Unless modified herein, side yard requirements in this PUD shall be **seven feet (7') as required by the subdivision regulations**.

9.8 COMMON AREAS

Maintenance of all common areas in the development and maintenance of all amenities located within the common areas shall be the responsibility of the homeowner association (HOMA). No structures, storage of material, grading, fill, or other obstructions, including fences, either temporary or permanent, that shall cause a blockage of flow or an adverse effect on the functioning of the storm water facility, shall be placed within the common areas intended for the use of conveyance of storm water, and/or drainage easements shown. Certain amenities such as, but not limited to, walks, benches, piers, and docks, shall be permitted if installed in a manner to meet the requirements specified above.

MASTER DEVELOPMENT PLAN
OF
WINDSOR MEADOWS
A PART OF THE NORTHEAST QUARTER OF SECTION 1, T11N, R2W, I.M.
MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA



Vicinity Map
Section 1, Township 11N, Range 2W
Not To Scale

OWNER'S CERTIFICATE AND DEDICATION

KNOW ALL MEN BY THESE PRESENTS:

THAT MLB HOMES ARE THE OWNERS OF ALL THE PROPERTY CONTAINED AND INCLUDED IN THE ANNEXED PLAT OF WINDSOR MEADOWS, AN ADDITION TO THE CITY OF MIDWEST CITY, OKLAHOMA BEING A PART OF THE NORTHEAST QUARTER OF SECTION 1, TOWNSHIP 11 NORTH, RANGE 2 WEST OF THE INDIAN MERIDIAN, IN OKLAHOMA COUNTY, OKLAHOMA AND HAS CAUSED THE SAID PREMISES TO BE SURVEYED AND PLATTED INTO LOTS, BLOCKS, STREETS AND EASEMENTS AS SHOWN ON SAID ANNEXED PLAT, WHICH SAID PLAT REPRESENTS A CARETUL SURVEY OF ALL PROPERTY CONTAINED AND INCLUDED THEREIN AND IS HEREBY ADOPTED AS THE PLAT OF SAID LAND UNDER THE NAME OF WINDSOR MEADOWS, AN ADDITION TO THE CITY OF MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA.

THE UNDERSIGNED DOES HEREBY FURTHER CERTIFY THAT IT IS THE OWNER OF THE LAND AND THE ONLY COMPANY, CORPORATION, PARTNERSHIP, PERSON OR ENTITY HAVING ANY RIGHT, TITLE OR INTEREST IN AND TO THE LAND INCLUDED IN SAID ANNEXED PLAT, EXCEPT AS SET FORTH IN THE BONDED ABSTRACTOR'S CERTIFICATE, AND DOES HEREBY DEDICATE ALL STREETS AND UTILITY EASEMENTS SHOWN HEREON TO THE PUBLIC FOR USE AS PUBLIC STREETS AND UTILITY EASEMENT FOR THEIR HEIRS, EXECUTORS, ADMINISTRATORS, SUCCESSORS AND ASSIGNS FOREVER AND SHALL CAUSE THE SAME TO BE RELEASED FROM ALL ENCUMBRANCES SO THAT TITLE IS CLEAR.

DAY OF _____, 20__.

WINDSOR DEVELOPMENT, LLC
1723 W. BRITTON ROAD
OKC, OK 73120

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) SS

HEREIN SET FORTH.

MY COMMISSION EXPIRES:

_____
NOTARY PUBLIC

BONDED ABSTRACTER'S CERTIFICATE

THE UNDERSIGNED DULY QUALIFIED AND LAWFULLY BONDED ABSTRACTOR OF TITLES IN AND FOR THE COUNTY OF OKLAHOMA, STATE OF OKLAHOMA, HEREBY CERTIFIES THAT THE RECORDS OF SAID COUNTY AND STATE SHOW THAT TITLE TO THE LAND SHOWN ON THE ANNEXED PLAT OF WINDSOR MEADOWS, AN ADDITION TO THE CITY OF MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA, APPEARS TO BE VESTED IN WINDSOR DEVELOPMENT, LLC, ON THIS _____ DAY OF _____, 20__, THERE WERE NO ACTIONS PENDING OR JUDGMENTS OF ANY NATURE IN ANY COURT OR ON FILE WITH ANY CLERK OF ANY COURT IN SAID COUNTY AND STATE AGAINST SAID LAND OR THE OWNERS THEREOF, AND THAT THE TAXES ARE PAID FOR 20__ AND PRIOR YEARS, AND THAT THERE ARE NO OUTSTANDING TAX SALES CERTIFICATES, TAX DEEDS OUTSIDE THE CHAIN OF TITLE RELIED ON AND IS SUBJECT TO MORTGAGES, EASEMENTS, RIGHTS-OF-WAY, OIL AND GAS LEASES AND MINERAL CONVEYANCES OF RECORD.

ATTEST: FIRST AMERICAN TITLE COMPANY

_____ _____
SECRETARY PRESIDENT

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) SS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE WITHIN AND FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED FOR THE USES AND PURPOSES THEREIN SET FORTH ON THE ___ DAY OF _____, 20__.

MY COMMISSION EXPIRES:

_____
NOTARY PUBLIC

CERTIFICATE OF SURVEYOR

I, TROY DEE, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN AND FOR THE STATE OF OKLAHOMA, AND THAT THE FINAL PLAT OF WINDSOR MEADOWS, AN ADDITION TO MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA, CONSISTING OF ONE SHEET, REPRESENTS A SURVEY MADE UNDER MY SUPERVISION ON THE ___ DAY OF _____, 20__, AND THAT ALL MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN; THAT THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYORS AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS, AND THAT SAID FINAL PLAT COMPLIES WITH THE REQUIREMENTS OF TITLE 11 SECTION 41-108 OF THE OKLAHOMA STATE STATUTES.

_____
TROY DEE, REGISTERED LAND SURVEYOR #1745

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) SS

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED TROY DEE TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED ON THE _____ DAY OF _____, 20__.

MY COMMISSION EXPIRES:

_____
NOTARY PUBLIC

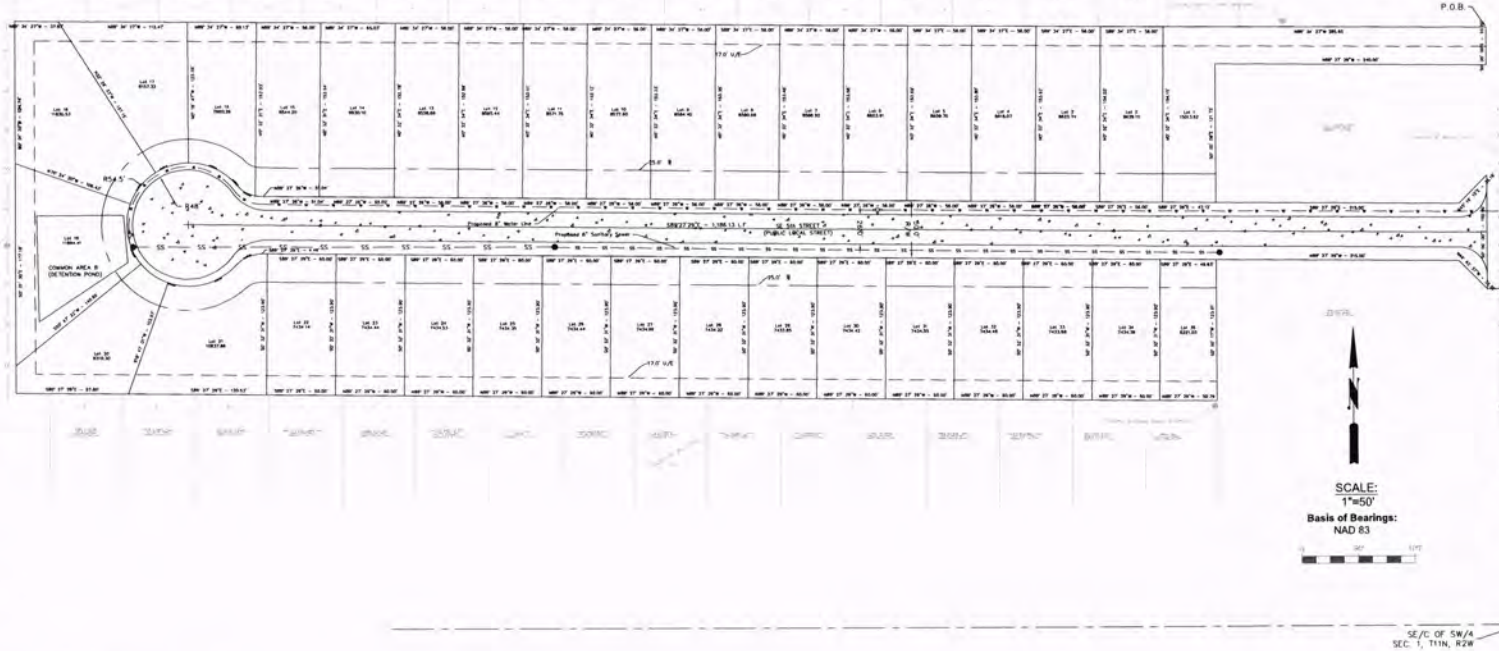
ACCEPTANCE OF DEDICATION BY THE CITY COUNCIL

BE IT RESOLVED BY THE COUNCIL OF MIDWEST CITY, OKLAHOMA, THAT THE DEDICATIONS SHOWN ON THE ANNEXED PLAT OF WINDSOR MEADOWS, ARE HEREBY ACCEPTED.

ADOPTED BY THE CITY COUNCIL OF MIDWEST CITY, OKLAHOMA, THIS ___ DAY OF _____, 20__.

ATTEST:

_____ _____
CITY CLERK MAYOR



SCALE:
1"=50'
Basis of Bearings:
NAD 83

0 50' 100'

DENSITY:

35 LOTS/8.25 ACRES = 4.243 LOTS/ACRE

LEGAL DESCRIPTION:

A PART OF THE N/2 OF THE N/2 OF THE SW/4 OF THE NE/4 OF SECTION 1, TOWNSHIP 11 NORTH RANGE 2 WEST OF THE INDIAN MERIDIAN MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHEAST CORNER OF SAID N/2; THENCE N89°37'28"W AND ALONG THE SOUTH LINE OF SAID N/2, A DISTANCE OF 30.00 FEET; THENCE DUE NORTH AND PARALLEL TO THE EAST LINE OF SAID N/2 A DISTANCE OF 538.64 TO THE POINT OF BEGINNING; THENCE N89°37'28"W A DISTANCE OF AND PARALLEL WITH THE SOUTH LINE OF SAID SW/4 A DISTANCE OF 1,299.25 FEET; THENCE N09°30'07"E A DISTANCE OF 336.05 FEET; THENCE S89°37'28"E ALONG THE NORTH LINE OF THE SE/4 OF SAID SW/4 A DISTANCE OF 1,049.13 FEET; THENCE DUE NORTH AND PARALLEL TO SAID EAST LINE A DISTANCE OF 123.85 FEET; THENCE S89°23'34"E A DISTANCE OF 215.00 FEET; THENCE S14°43'45"E A DISTANCE OF 35.52 FEET; THENCE DUE NORTH AND PARALLEL TO THE EAST LINE OF SAID N/2 A DISTANCE OF 100.00 FEET; THENCE S45°06'15"W A DISTANCE OF 35.10 FEET; THENCE N89°37'28"W A DISTANCE OF 215 FEET; THENCE DUE NORTH AND PARALLEL TO THE EAST LINE OF SAID N/2 A DISTANCE OF 192.76 FEET; THENCE S89°36'27"E A DISTANCE OF 340.00 FEET; THENCE DUE NORTH AND PARALLEL TO THE EAST LINE OF SAID N/2 A DISTANCE OF 53.00 FEET TO THE POINT OF BEGINNING AND CONTAINING 8.25 ACRES MORE OR LESS.

CERTIFICATE OF COUNTY TREASURER

I, _____, HEREBY CERTIFY THAT I AM THE DULY ELECTED, QUALIFIED AND ACTING COUNTY TREASURER OF OKLAHOMA COUNTY, STATE OF OKLAHOMA, THAT THE TAX RECORDS OF SAID COUNTY SHOW ALL TAXES PAID FOR THE YEAR 20__ AND ALL PRIOR YEARS ON THE LAND SHOWN ON THE ANNEXED PLAT OF WINDSOR MEADOWS, AN ADDITION TO MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA.

IN WITNESS WHEREOF, SAID COUNTY TREASURER HAS CAUSED THIS INSTRUMENT TO BE EXECUTED THIS _____ DAY OF _____, 20__.

BY: _____
COUNTY TREASURER CHIEF DEPUTY

CITY PLANNING COMMISSION APPROVAL

I, _____, SECRETARY OF THE PLANNING COMMISSION OF THE CITY OF MIDWEST CITY, OKLAHOMA, DO HEREBY CERTIFY THAT THE SAID PLANNING COMMISSION DULY APPROVED THE ANNEXED PLAT OF WINDSOR MEADOWS, AN ADDITION TO MIDWEST CITY, OKLAHOMA, AT A MEETING HELD ON THE _____ DAY OF _____, 20__.

_____
SECRETARY

CERTIFICATE OF CITY CLERK

I, _____, CITY CLERK OF THE CITY OF MIDWEST CITY, OKLAHOMA, HEREBY CERTIFY THAT I HAVE EXAMINED THE RECORDS OF SAID CITY AND FIND ALL DEFERRED PAYMENTS OR UNMATURED INSTALLMENTS UPON SPECIAL ASSESSMENTS HAVE BEEN PAID IN FULL AND THAT THERE IS NO SPECIAL ASSESSMENT PROCEEDING NOW PENDING AGAINST THE LAND SHOWN ON THE ANNEXED PLAT OF WINDSOR MEADOWS.

THIS _____ DAY OF _____, 20__.

LEGEND:

B/L – BUILDING LIMIT LINE
U/E – UTILITY EASEMENT
D/E – DRAINAGE EASEMENT
D&U/E – DRAINAGE AND UTILITITY EASEMENT
LNA – LIMITS OF NO ACCESS
RAD – RADIUS
R/W – RIGHT OF WAY

MASTER DEVELOPMENT PLAN: WINDSOR MEADOWS

JACKSON & JACKSON ENGINEERING
5350 S. WESTERN AVENUE, SUITE 222
OKLAHOMA CITY, OK 73109
PHONE: (405) 225-1978; FAX: (844) 278-2997
CERT. AUTH. #3770; EXPIRES JUNE 30, 2019

PC-1983

ORDINANCE NO. _____

AN ORDINANCE RECLASSIFYING THE ZONING DISTRICT OF THE PROPERTY DESCRIBED IN THIS ORDINANCE TO PUD, PLANNED UNIT DEVELOPMENT, AND DIRECTING AMENDMENT OF THE OFFICIAL ZONING DISTRICT MAP TO REFLECT THE RECLASSIFICATION OF THE PROPERTY'S ZONING DISTRICT; AND PROVIDING FOR REPEALER AND SEVERABILITY

BE IT ORDAINED BY THE COUNCIL OF THE CITY OF MIDWEST CITY, OKLAHOMA:

ORDINANCE

SECTION 1. That the zoning district of the following described property is hereby reclassified to PUD, Planned Unit Development, subject to the conditions contained in the PC-1983 file, and that the official Zoning District Map shall be amended to reflect the reclassification of the property's zoning district as specified in this ordinance:

A part of the N/2 of the N/2 of the SW/4 of the NE/4 of Section 1, Township 11 North Range 2 West of the Indian Meridian more particularly described as follows:
Commencing at the Southeast Corner of said N/2 thence N89°27'29"W and along the South line of said N/2 a distance of 30.00 feet: thence due North and parallel to the East line of said N/2 a distance of 328.64 to the Point of Beginning;
Thence N89°34'27"W a distance of and parallel with the South line of said SW/4 a distance of 1,289.25;
Thence S0°01'30"E a distance of 326.03 feet;
Thence S89°27'29"E along the North line of the SE/4 of said SW/4 a distance of 1,049.13 feet;
Thence due north and parallel to said East line a distance of 122.85 feet;
Thence S89°27'29"E a distance of 215.00 feet;
Thence S44°43'45"E a distance of 35.52 feet;
Thence due North and parallel to the East line of said N/2 a distance of 100.00 feet;
Thence S45°16'15"W a distance of 35.19 feet;
Thence N89°27'29"W a distance of 215 feet;
Thence due North and parallel to the East line of said N/2 a distance of 122.30 feet;
Thence S89°34'27"E a distance of 240 feet;
Thence due North and parallel to the East line of said N/2 a distance of 33 feet to the Point of Beginning and containing 8.25 acres more or less.

SECTION 2. REPEALER. All ordinances or parts of ordinances in conflict herewith are hereby repealed.

SECTION 3. SEVERABILITY. If any section, sentence, clause or portion of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of the ordinance.

PASSED AND APPROVED by the Mayor and Council of the City of Midwest City, Oklahoma, on the _____ day of _____, 2018.

THE CITY OF MIDWEST CITY, OKLAHOMA

_____
MATTHEW D. DUKES II, Mayor

ATTEST:

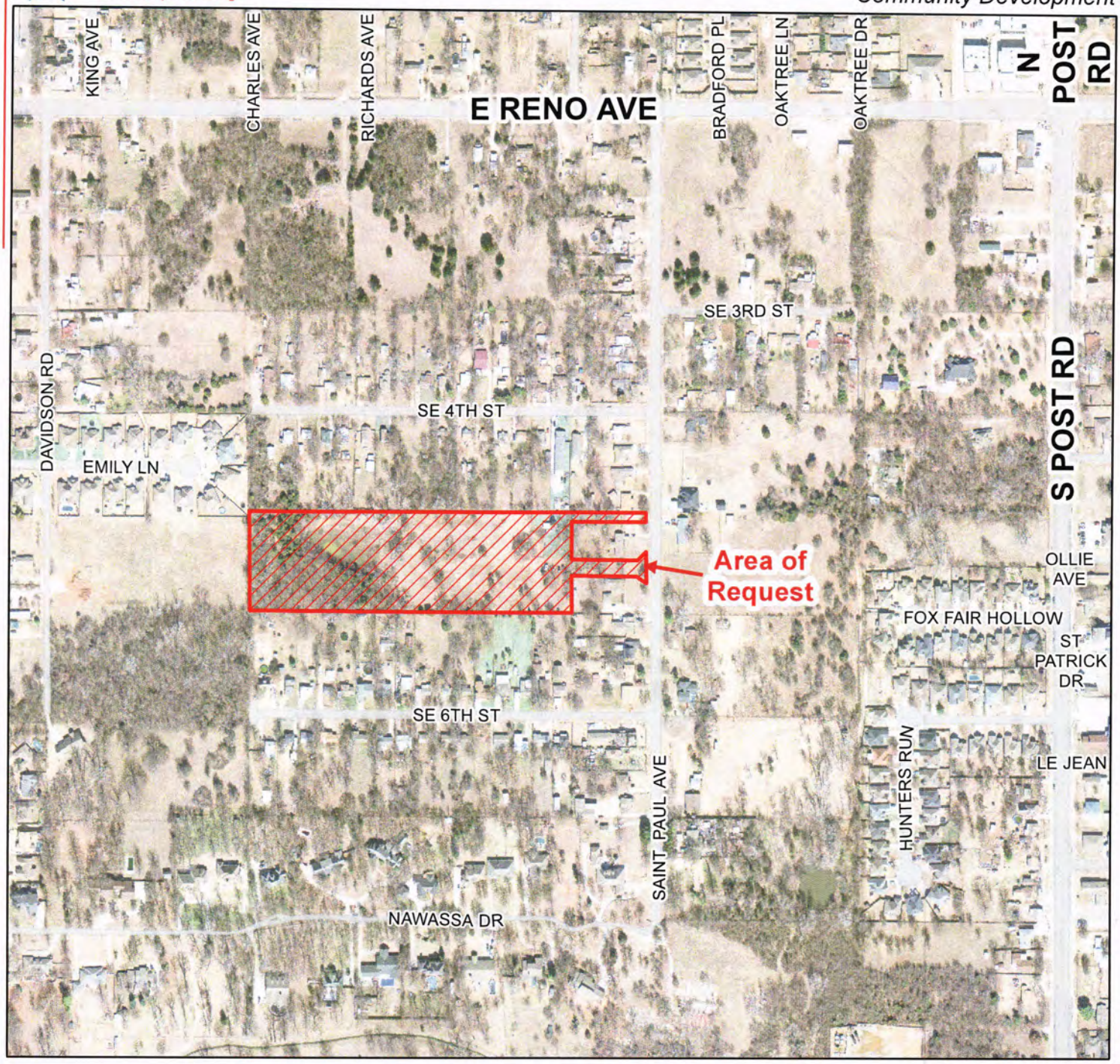
_____
SARA HANCOCK, City Clerk

APPROVED as to form and legality this _____ day of _____, 2018.

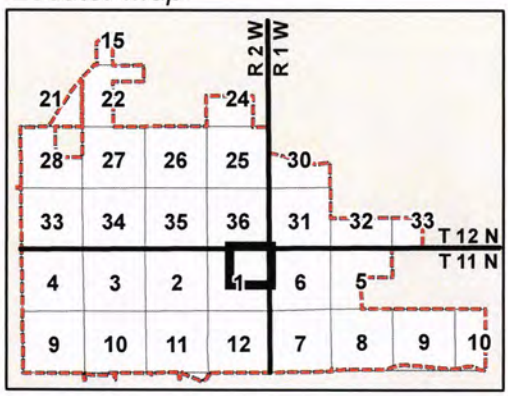
_____
HEATHER POOLE, City Attorney

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



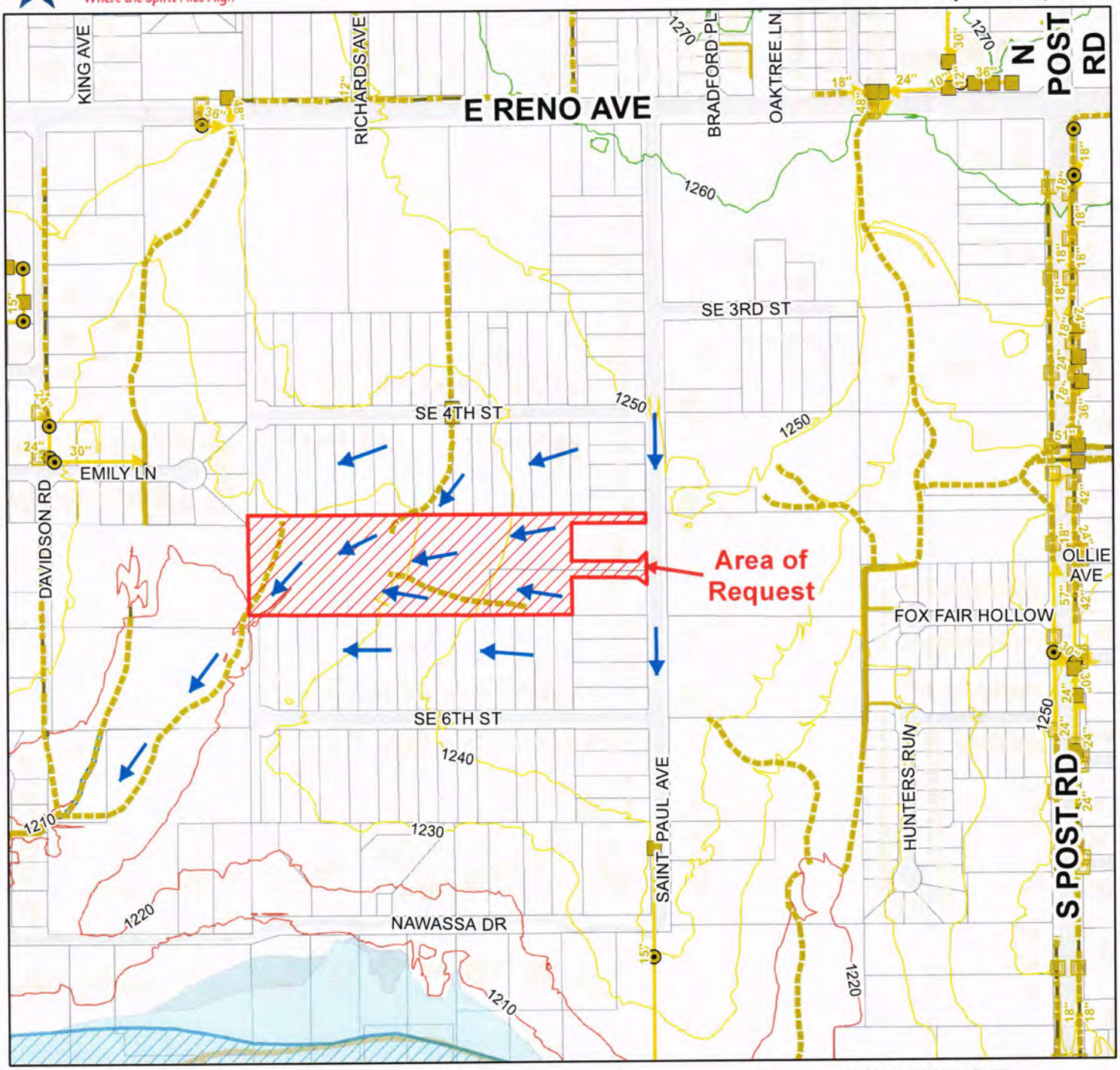
2017 DOP (AERIAL) VIEW FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



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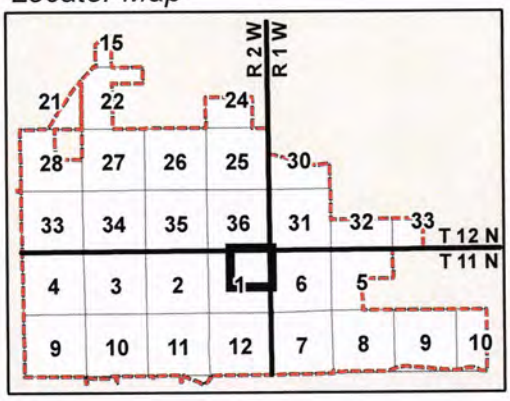

Drainage Legend

Curb Inlets
- Curb Inlets
- Inlets
- Junction Box
- Culverts
- Flumes
- Developed Channels
- Trickle Channels
- Undeveloped Channels
- Storm Lines
- Creeks

ELEVATION
- 1166-1204 ft
- 1204-1228 ft
- 1228-1250 ft
- 1250-1278 ft
- 1278-1324 ft

2009 FEMA Floodplains
- 500-yr floodplain
- 100-yr floodplain

2009 FEMA Floodway
- FLOODWAY

DRAINAGE LOCATION MAP FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

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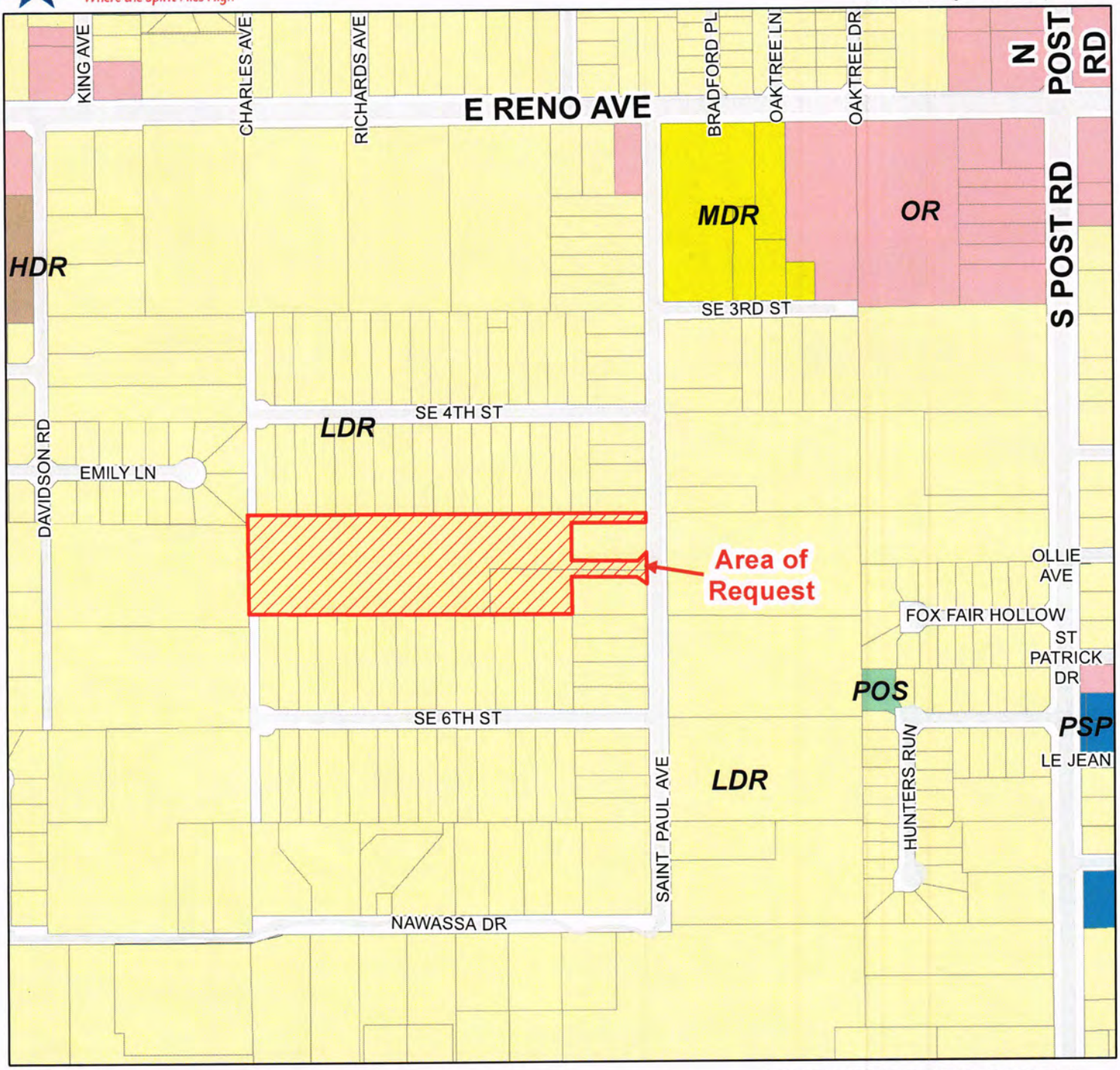

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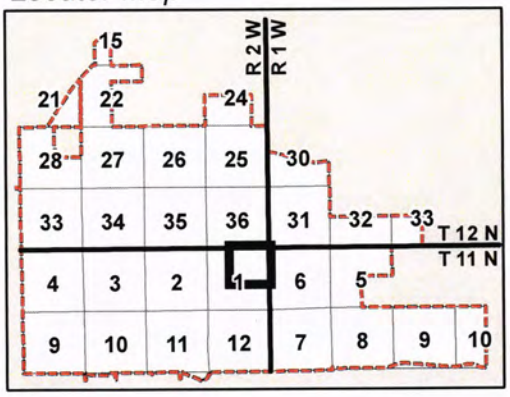


Future Land Use Legend

- Single-Family Detached Residential
- Medium Density Residential
- High Density Residential
- Manufactured Home
- Public/Semi-Public
- Parks/Open Space
- Office/Retail
- Commercial
- Industrial
- Town Center

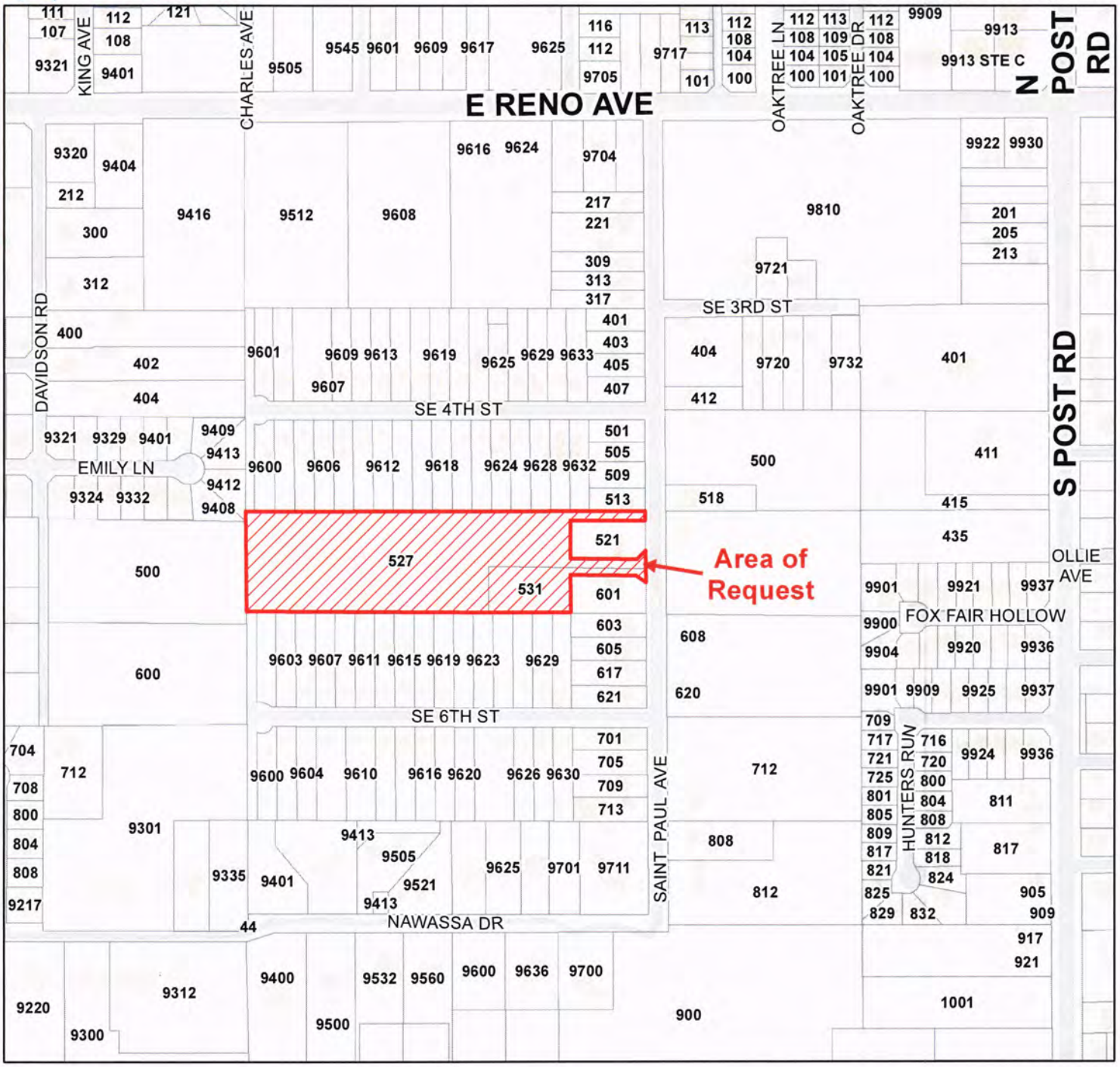
FUTURE LAND USE MAP FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



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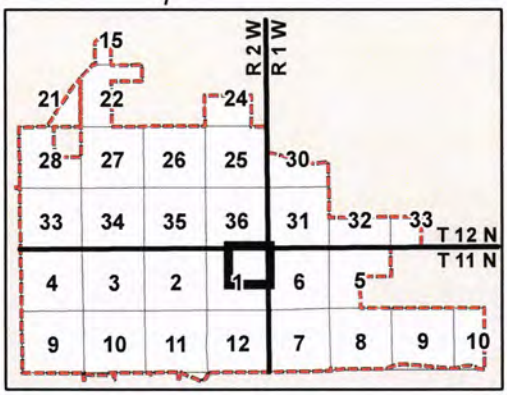

General Map Legend

- Area of Request
- Parcels with Addresses
- Buildings
- Edge of Pavement
- MWC City Limits

GENERAL MAP FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

MIDWEST CITY
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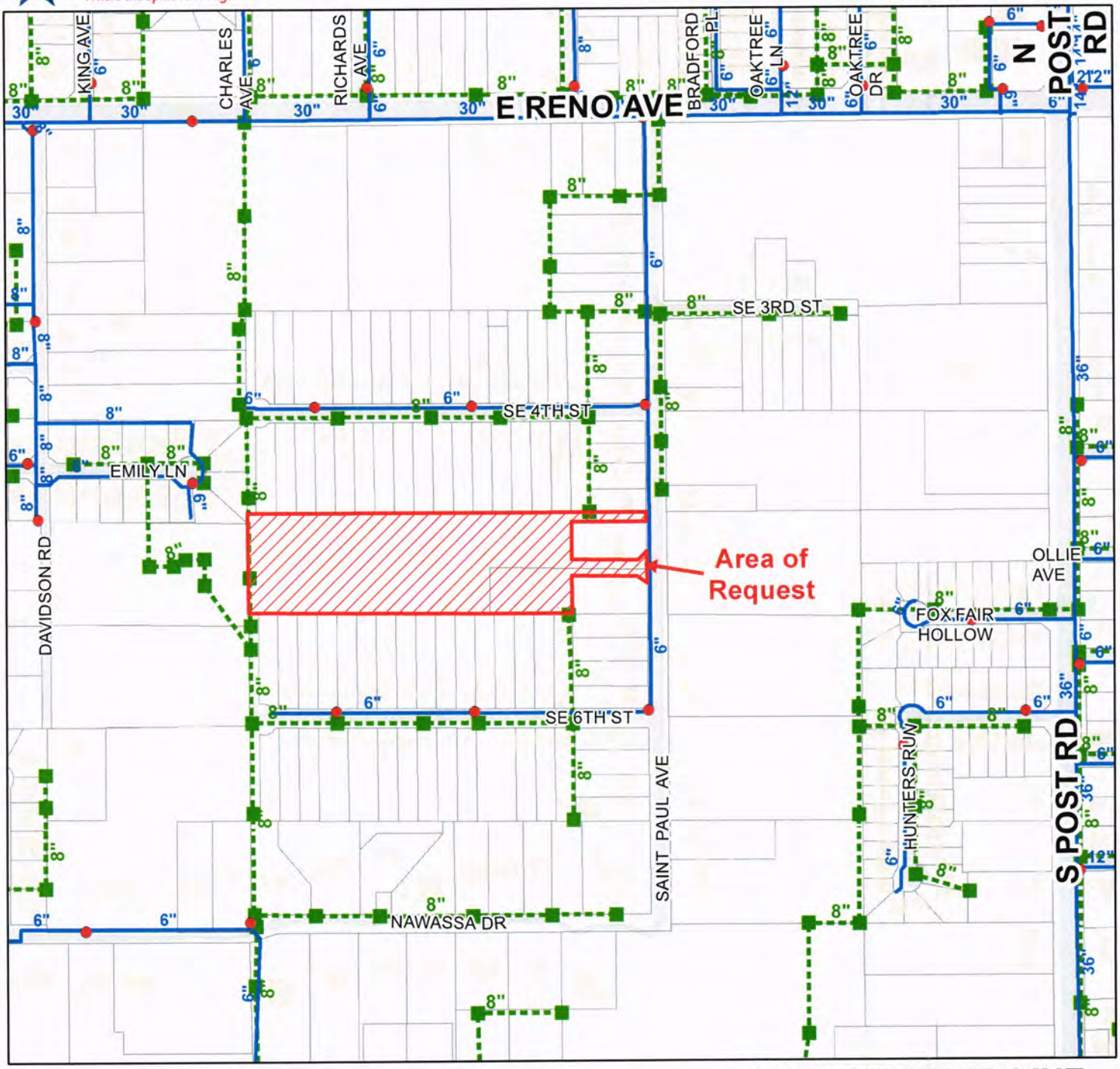
Community Development



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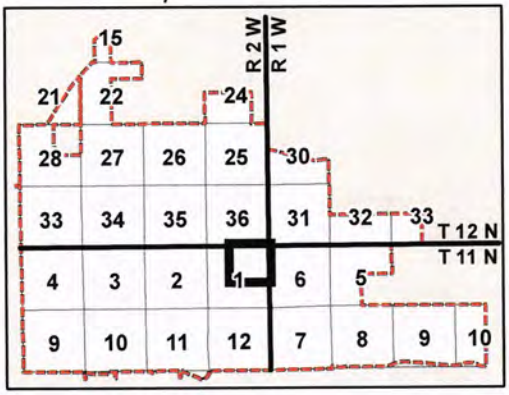

Water/Sewer Legend

- Fire Hydrants

Water Lines

- Distribution
- Well
- OKC Cross Country
- Sooner Utilities
- Thunderbird
- Unknown
- Sewer Manholes
- Sewer Lines

WATER/SEWER LINE LOCATION MAP FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

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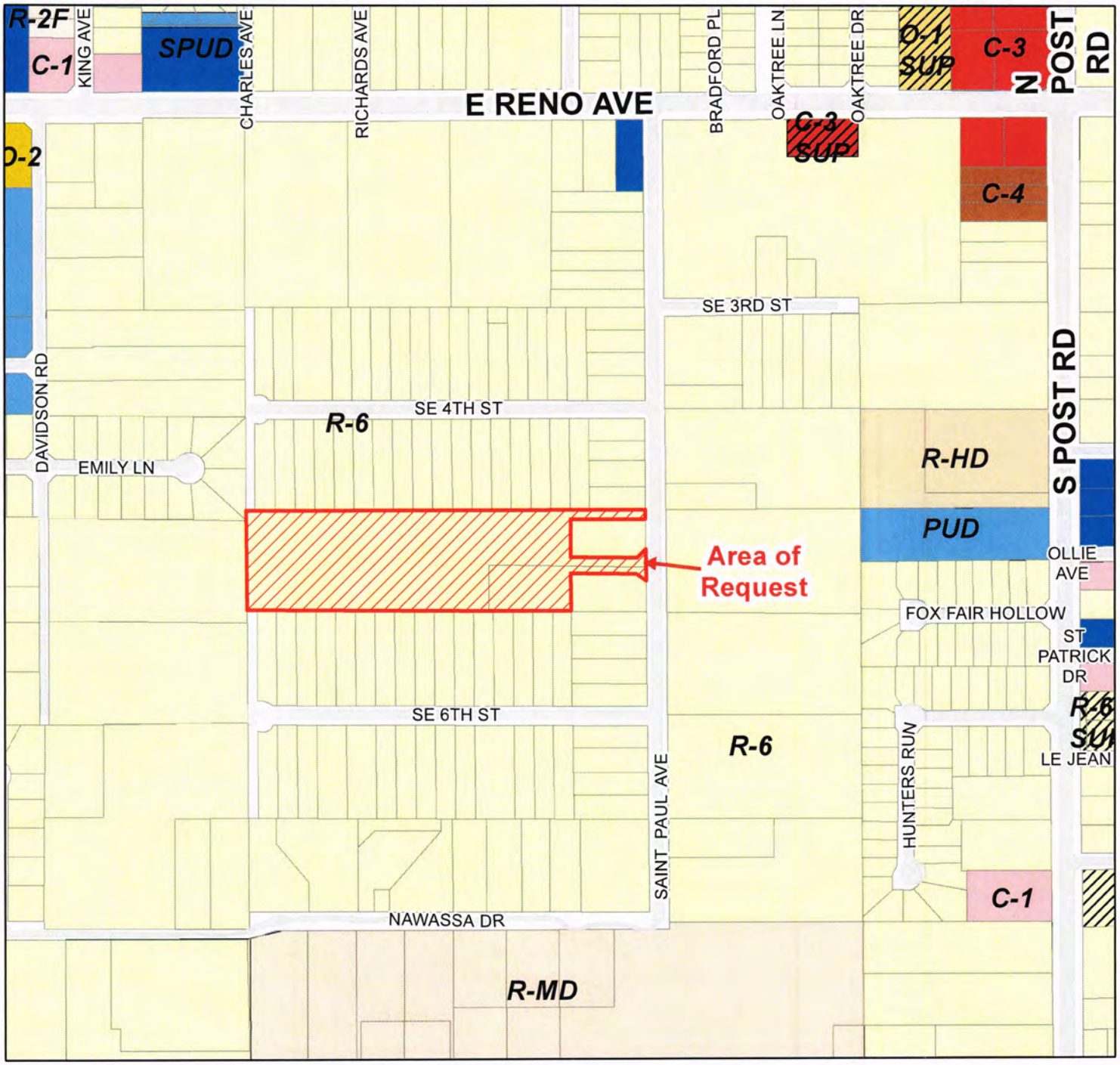
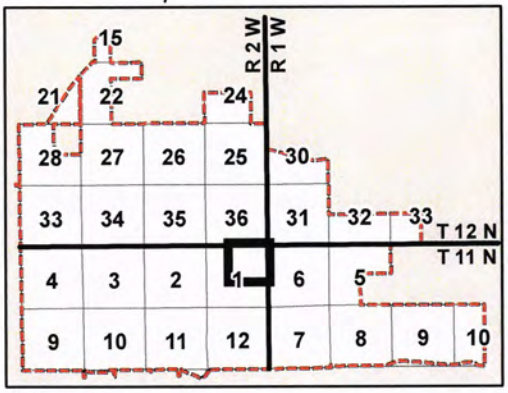


Locator Map



Current Zoning Legend

A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS
		HOS SUP

ZONING MAP FOR PC-1983 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

Jackson & Jackson Engineering

5350 S. Western Avenue, Suite 222
Oklahoma City, OK 73109
(405) 225-1978

December 17, 2018

City of Midwest City
Attn: Patrick Menefee, P.E., City Engineer
100 N. Midwest Boulevard
Midwest City, OK 73110

Re: Wetland Delineation in Windsor Meadows

In determining whether an area is a jurisdictional wetland, a consultant is retained to investigate the site in question and look for evidence that meets established criteria of whether an area is a jurisdictional wetland and a Section 404 permit is required. The U.S. Army Corps of Engineers lists several consultants who they identify as having the experience and knowledge in preparing a report for their review and concurrence. Once the report is submitted to the Corps by the consultant, the Corps will make issue the final and official determination as far as the designation of any area as a wetland and the required permit and mitigation if necessary.

As a requirement for submitting the PUD application for the proposed Windsor Meadows Addition, a wetland delineation was performed by Enercon Services Inc as part of the process in determining if a wetland is present on the site and if the it will be regulated by a Section 404 of the Clean Water Act. Based on the summary of the report, a wetland is present on the site but it is Enercon's opinion that it will not be regulated by Section 404, therefore the developer would be allowed to fill-in the area in question. The report will be submitted to the Corps by the developer and he is aware that if the Corps' official determination is different from Enercon's conclusions, he will be required to comply with the Corps' requirements for mitigation in order to develop the site as submitted to the City of Midwest City.

If you have any questions please call me at 225-1978.

Sincerely,

John D. Jackson, P.E.
President

Attachemnts

ENERCON

October 16, 2018

St. Charles Development
ATTN: Mr. Frank McLendon
1723 East Britton Road
Oklahoma City, OK 73120

RE: Threatened and Endangered Species - Windsor Meadows Development
Section 1, T11N, R2W
Oklahoma County, Oklahoma

Dear Mr. McLendon:

Enercon Services, Inc. (ENERCON) evaluated the proposed Windsor Meadows Development. On September 25, 2018, biologist Bradley W. Barnes assessed the proposed project area for potential threatened and endangered species habitat. The proposed project area is comprised of mixed grass pasture and urban upland forest.

The U.S. Fish and Wildlife Service (USFWS) threatened and endangered species list was reviewed prior to the site walk. The following are listed as threatened and endangered species by the USFWS in Oklahoma County, Oklahoma: interior least tern (Endangered), piping plover (Threatened), red knot (Threatened), whooping crane (Endangered), and Arkansas River shiner (ARS) (Threatened). None of the listed species were observed during site reconnaissance. Suitable habitat for interior least terns, piping plovers, red knots, or ARS is not present within the proposed pipeline ROW.

An emergent wetland within the proposed project area may provide suitable foraging habitat for migrating whooping cranes; however, the proposed project will not affect suitable nesting or roosting habitat. The whooping crane is a bi-annual migrant through Oklahoma, migrating in the fall and spring each year. The fall migration usually begins mid-September and lasts through mid-November. The spring migration usually begins by the end of March and lasts through the end of May. The mobility of avian species and urban location of the site should remove much of the risk for direct impacts to the whooping crane. The proposed project is unlikely to affect whooping cranes.

The bald eagle receives protection under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). These acts do not provide the same level of protection as the Endangered Species Act (ESA), but protect eagles from take of their offspring, eggs, parts, or nests. These acts also protect the bald eagle from direct harm. The MBTA and BGEPA are enforced by the USFWS. No bald eagles or eagle nests were observed within the proposed project area. Large rivers or reservoirs do not occur within 1-mile of the project area; therefore, nesting eagles are unlikely to utilize large trees within the project area.

1601 Northwest Expressway Suite 1000 Oklahoma City, OK 73118 phone 405.722.7693 fax 405.722.7694 enercon.com

Should you have any questions, or require any additional information, please do not hesitate to contact us at 405-722-7693.

Sincerely,
Enercon Services, Inc.

Bradley W. Barnes
Biologist

Reviewed By:

Andrew Ward
Biologist/Project Manager
OKC NEPA/Ecological Services Lead

SECTION 404 DELINEATION

WINDSOR MEADOWS DEVELOPMENT
OKLAHOMA COUNTY, OKLAHOMA

ENERCON PROJECT NUMBER: STCHARLES~00001

Prepared For:

St. Charles Development
1723 East Britton Road
Oklahoma City, Oklahoma 73120

Prepared By:

Bradley W. Barnes
Biologist

Reviewed By:

Andrew Ward
Biologist/Project Manager

Enercon Services, Inc.
1601 Northwest Expressway; Suite 1000
Oklahoma City, Oklahoma 73118

Field Investigation Conducted By: Bradley W. Barnes
Field Investigation Date: September 25, 2018

October 2018

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ATTACHMENTS

INTRODUCTION

St. Charles Development (the client) contracted with Enercon Services, Inc. (ENERCON) of Oklahoma City, Oklahoma to delineate Section 404 wetlands and other potentially jurisdictional waters of the United States (US) within the project study area of the proposed Windsor Meadows Residential Development property. Please be advised that the US Army Corps of Engineers (Corps) allows consultants to prepare Section 404 delineations, but they are considered preliminary until approved by the Corps. To verify the jurisdictional status of the delineated wetlands, ENERCON recommends sending this delineation report to the Corps for approval.

Project Location

The property is approximately 8 acres in size and located approximately 335 feet south of SE 4th Street on St. Paul Avenue in the City of Midwest City, Oklahoma County, Oklahoma (Figure 1). The study area is mapped on US Geological Survey (USGS) topographic quadrangle Choctaw, OK (7.5-minute series) (Figure 2). Coordinates for the approximate center of the project area are 35.4600 x -97.3601 (NAD 83). Legal description of the site is Part of the NE/4 of Section 1, Township 11 North, Range 2 West. This part of Oklahoma County is comprised of commercial and residential urban development and few undeveloped lots and wooded riparian corridors (Figure 3). This site is located in the Lower North Canadian Watershed (HUC #11100302).

Ecological Setting

The property is located in the Northern Cross Timbers subset of the Cross Timbers ecoregion of Oklahoma (29a). The Central Great Plains ecoregion contains a mix of savanna, woodland, and prairie and separates the forests of eastern ecoregions from the prairies of the drier western ecoregions. Eastern redcedar (*Juniperus virginiana*) has recently invaded many areas that have had fire suppression. The Northern Cross Timbers consists of hills, cuestas, and ridges covered by oak savanna, scrub oak forest, eastern redcedar, and tall grass prairie. Livestock farming is the main land use (Woods et al., 2005).

General Site Description

The majority of the property consists of mixed grass pasture and urban upland forest. The property appears to have been historically used for urban livestock while being maintained near the entrance on the eastern portion of the property. One (1) emergent wetland in the remnant of what appears to have historically been an agricultural pond was observed within the area of delineation.

Vegetation and Community Types

The project study area was comprised of the following community types:

Maintained Lawn: Dominant vegetation in this community type included bermuda grass (*Cynodon dactylon*) (Photograph 1).

Mixed Grass Pasture: Dominant vegetation in this community type included bermuda grass, giant ragweed (*Ambrosia trifida*), foxtail (*Setaria spp.*), annual ragweed (Ambrosia artemisiifolia), horseweed (*Erigeron canadensis*), and windmill grass (*Chloris spp.*) (Photograph 2).

Urban Upland Forest: Dominant vegetation in this community type included hackberry (*Celtis occidentalis*), elm (*Ulmus spp.*), eastern redcedar, pecan (Carya illinoinensis), cottonwood (*Populus deltoides*), and greenbriar (*Smilax spp.*) (Photograph 3).

Emergent Wetland: Dominant vegetation in this community type was smartweed (*Persicaria hydropiperoides*) and black willow (*Salix nigra*) (Photograph 4).

Project Area Soils

The following soil map units are listed for the project study area: Harrah fine sandy loam, Littleaxe-Urban land complex, Stephenville-Darsil complex, and Water (Figure 4). Spatial data and other information regarding soils were obtained via Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS) for Oklahoma County (NRCS, 2018). None of the listed map units represent a mapped hydric soil or a soil with the potential for hydric inclusions (NRCS, 2018). Soil map units for the project study area are discussed in Table 1.

Table 1: Soils Table

SERIES NAME (SYMBOL)	% SLOPES	DRAINAGE CLASS	HYDRIC RATING	DESCRIPTION
Harrah fine sandy loam (HarC)	3 – 5	Well Drained	No	Found on footslopes, Moderate Available Water Storage
Littleaxe-Urban land complex (LtUC)	1 – 5	Well Drained	No	Found on summits, Moderate Available Water Storage
Stephenville-Darsil complex (StDC)	1 – 5	Well Drained	No	Found on summits and backslopes, Moderate Available Water Storage
Water	NA	NA	NA	NA

POTENTIAL JURISDICTIONAL WATERS AND WETLANDS EVALUATION

Materials and Methods

ENERCON conducted a level 3, routine wetland delineation as described in *US Army Corps of Engineers (Corps) Wetlands Delineation Manual* (USACE, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)* (USACE, 2010). Field investigations for the delineation were conducted on September 25, 2018 by Bradley W. Barnes. ENERCON evaluated the project study area for the presence of wetlands and other potentially jurisdictional waters of the US.

Sampling point locations were selected to evaluate those low-lying areas and other areas appearing to have at least some potential for Corps regulation under Section 404 of the Clean Water Act (CWA). Two (2) sampling point locations were established and data were collected on vegetation, hydrology, and soils at each of those locations (Figures 2 and 3).

R. J. Tyrl's *Field Guide to Oklahoma Plants* (2008) and Carl Hunter's *Wildflowers of Arkansas* (1984) were used to confirm certain plant identifications and the *2016 National Wetland Plant List* (Lichvar, 2016) was used to determine the wetland indicator status for the dominant species. Soil pits were dug with a sharpshooter shovel to a depth of approximately 18 to 20 inches, where possible, and soil colors were determined with the aid of Munsell color charts. Soil survey data from Oklahoma County (NRCS WSS) was used to determine map units for the area (Figure 4). Also, the NRCS WSS was used to assist in the selection of sampling points appearing to have a potential for the occurrence of hydric soils.

Attachment 1 provides representative photographs of onsite features. Attachment 2 of this document provides completed Corps field data forms specific to a total of 2 sampling point locations.

Findings and Results

Wetlands

One (1) emergent wetland (approximately 0.505 acres in size) was delineated within the project study area. The sampling point established within this wetland met technical criteria for Section 404 wetlands as described in the *1987 Corps Manual* and the *Great Plains Regional Supplement*. Positive indicators for all three wetland criteria were observed at Sampling Point 1 (Attachment 2). Table 2 provides a summary of the feature. The Cowardin classification is provided for the feature (Cowardin, 1979). Figure 5 shows the National Wetlands Inventory (NWI) map for the project area. Feature W1 is mapped by NWI as Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Diked/Impounded (PUBFh).

Table 2: Summary of Wetlands in the Project Study Area

FEATURE NAME	GENERAL TYPE	COWARDIN CLASSIFICATION	PREDICTED JURISDICTIONAL STATUS*	AREA (ACRES) WITHIN STUDY AREA
W1	Emergent Wetland	PUBFh	No	0.505
POTENTIALLY JURISDICTIONAL WETLANDS TOTAL: 0 ACRES				

**Jurisdictional status is subject to Corps approval.*

Wetland 1 (W1) – 0.505 Acres (Sampling Point 1; Photograph 4)

Cowardin Class

Palustrine, Unconsolidated Bottom, Semipermanently Flooded, Diked/Impounded (PUBFh)

Wetland Vegetation

Dominant vegetation observed in Wetland 1 was smartweed and black willow. One hundred percent (100%) of the dominant vegetation was comprised of obligate (OBL) or facultative wet (FACW) wetland plants (Attachment 2).

Wetland Hydrology

Wetland 1 occurs within a mapped pond. Sources of wetland hydrology are run-off from upland areas and precipitation. The primary hydrology indicator observed was inundation visible on aerial imagery (B7). Secondary hydrology indicators observed were geomorphic position (D2) and FAC-Neutral Test (D5) (Attachment 2).

Hydric Soils

Sampling Point 1 is located in a Water map unit. This unit is precluded from the *National Hydric Soils List*. The sampling point soil profile featured redox concentrations in approximately 10% of the soil matrix. The hydric soil indicator observed was depleted matrix (F3).

Predicted Jurisdictional Status

Wetland 1 (W1) occurs within the remnant of a silted in agricultural pond constructed on uplands and does not feature an observable nexus to a likely jurisdictional channel. Therefore, Wetland 1 is hydrologically isolated and will potentially, but not likely, be regulated by the Corps under Section 404.

Streams and Drainages

No mapped or unmapped streams or drainages were identified within the project study area.

LITERATURE CITED

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. *Classification of Wetlands and Deepwater Habitats of the United States*. FWS/OBS-79/31, United States Fish and Wildlife Service, Washington, DC. 103pp.

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United States Department of the Army, Corps of Engineers (USACE). March 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Great Plains Region (Version 2.0)*. Wetlands Regulatory Assistance Program. ERDC/EL TR-10-1.

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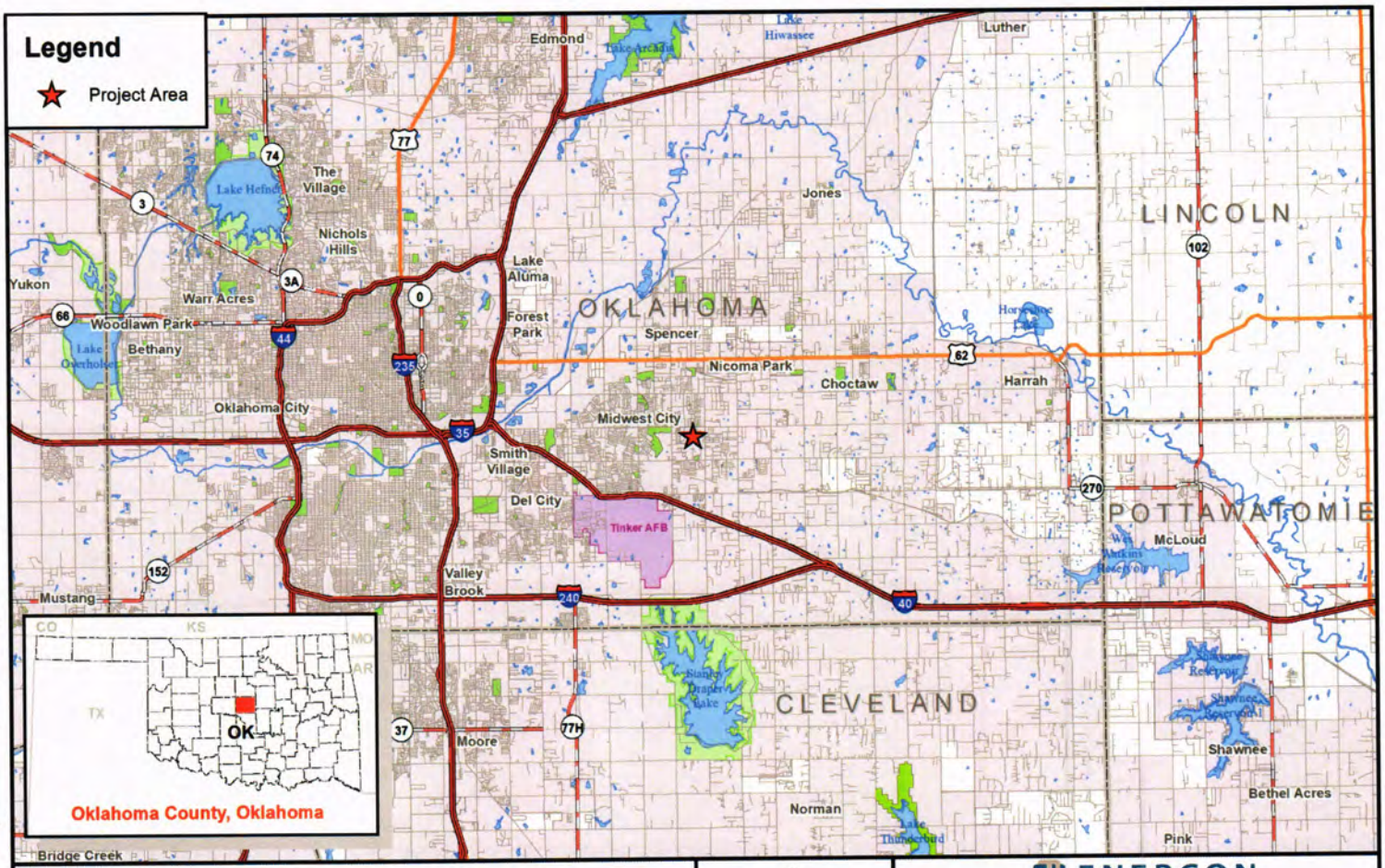
Woods, A.J., J. M. Omernik, D.R. Butler, J.G. Ford, J.E. Henley, B.W. Hoagland, D.S. Arndt, and B.C. Moran. 2005. *Ecoregions of Oklahoma*. Reston, Virginia: U.S. Geological Survey.

LIST OF PREPARERS

Bradley W. Barnes, Biologist / Project Manager; Enercon Services, Inc., Oklahoma City, Oklahoma. Mr. Barnes holds a B.S. degree in Zoology and has 10 years of experience in regulatory compliance, environmental assessments, ecological field studies, wetland evaluations, and endangered species issues.

Andrew Ward, Biologist / Project Manager; Enercon Services, Inc., Oklahoma City, Oklahoma. Mr. Ward holds a B.S. degree in Biology and has 11 years of experience in regulatory compliance, environmental assessments, ecological field studies, wetland evaluations, and endangered species issues.



Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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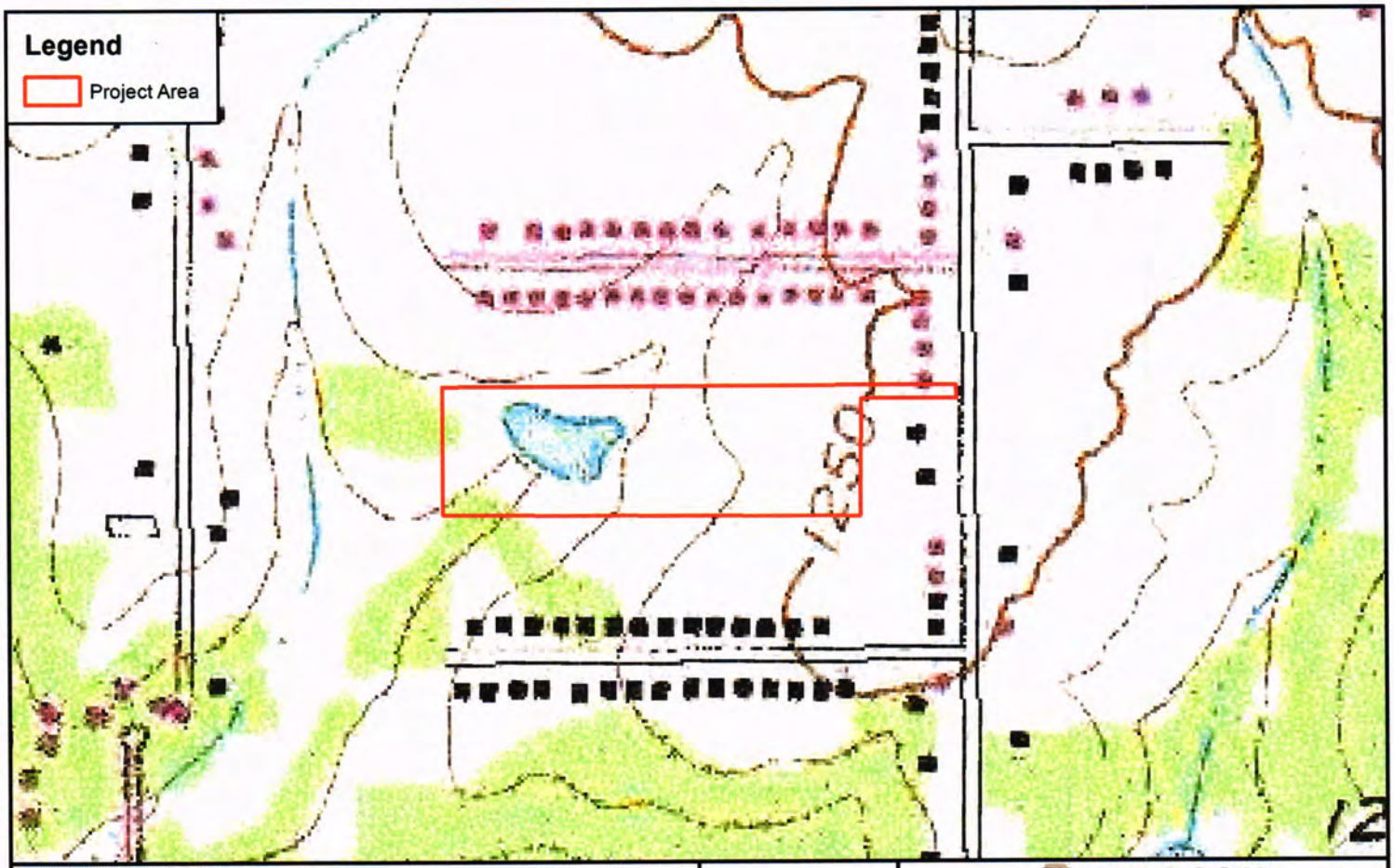
ENERCON

Figure 1: Vicinity Map
Source: University of Oklahoma
Center for Spatial Analysis
Prepared by: F. Woolridge; October 1, 2018

0 2.5 5 10 Miles



Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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ENERCON

Figure 2: Topographic Map
Source: USGS 7.5 Minute Series
Choctaw, OK Quadrangle
Prepared by: F. Woolridge; September 26, 2018

0 200 400 800 Feet

Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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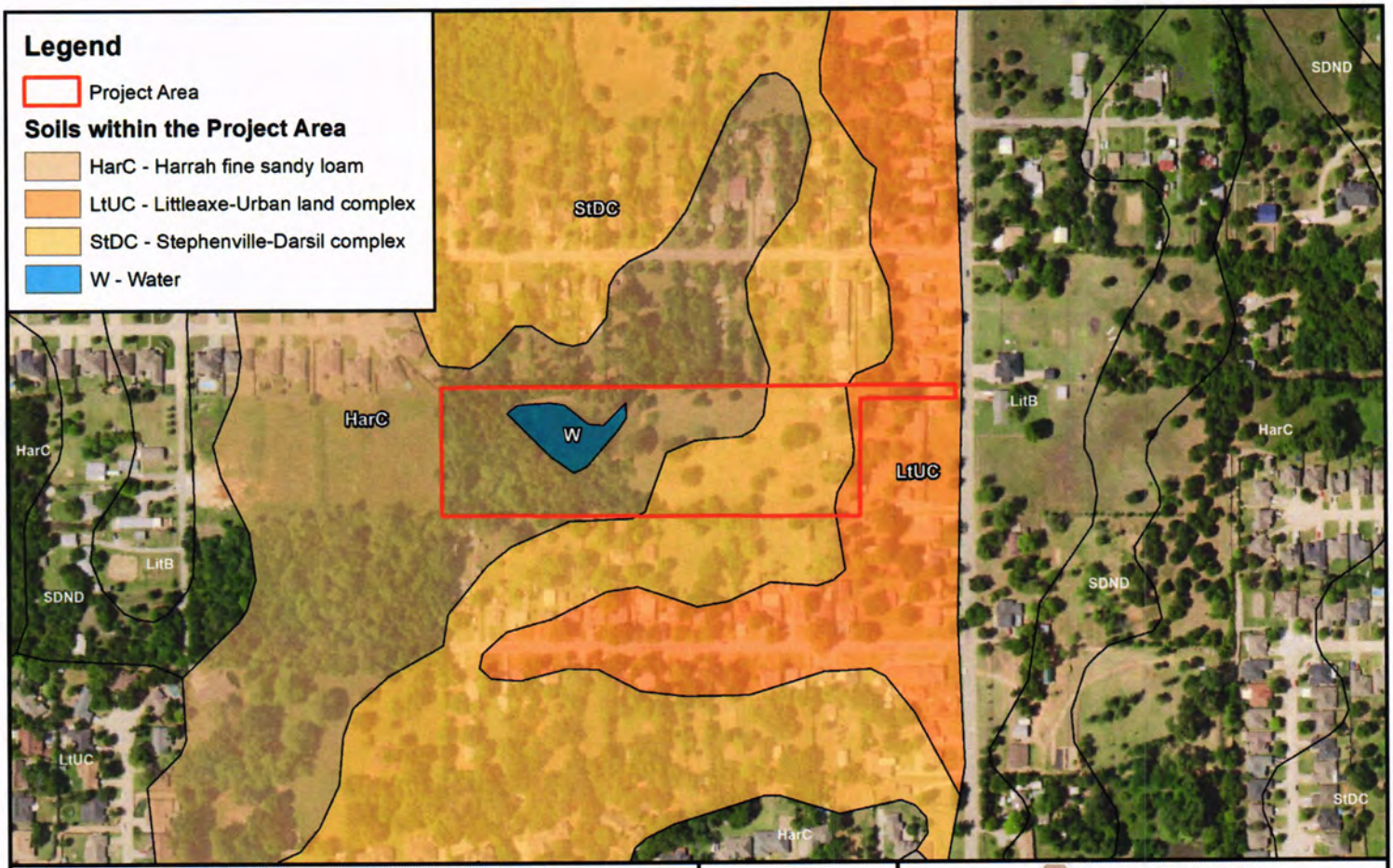
ENERCON

Figure 3: Aerial Photography
Source: 2017 USDA NAIP
Oklahoma County, Oklahoma
Prepared by: F. Wooldridge; September 26, 2018

0 200 400 800 Feet



Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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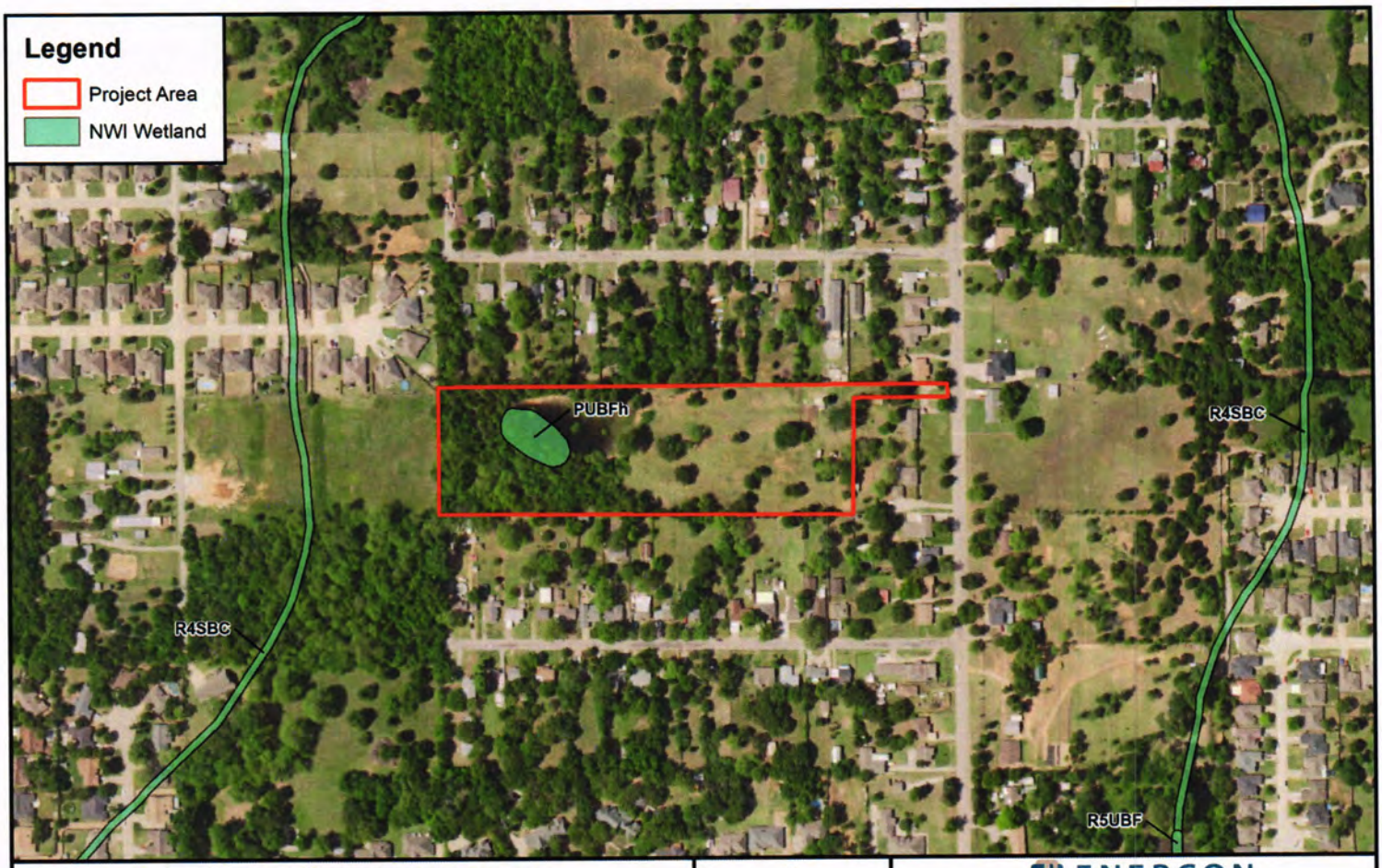
ENERCON

Figure 4: Soil Survey Map
Source: USDA NRCS Soil Survey Geographic Database
Oklahoma County, Oklahoma; 2017 USDA NAIP
Prepared by: F. Woolridge; September 26, 2018

0 200 400 800 Feet



Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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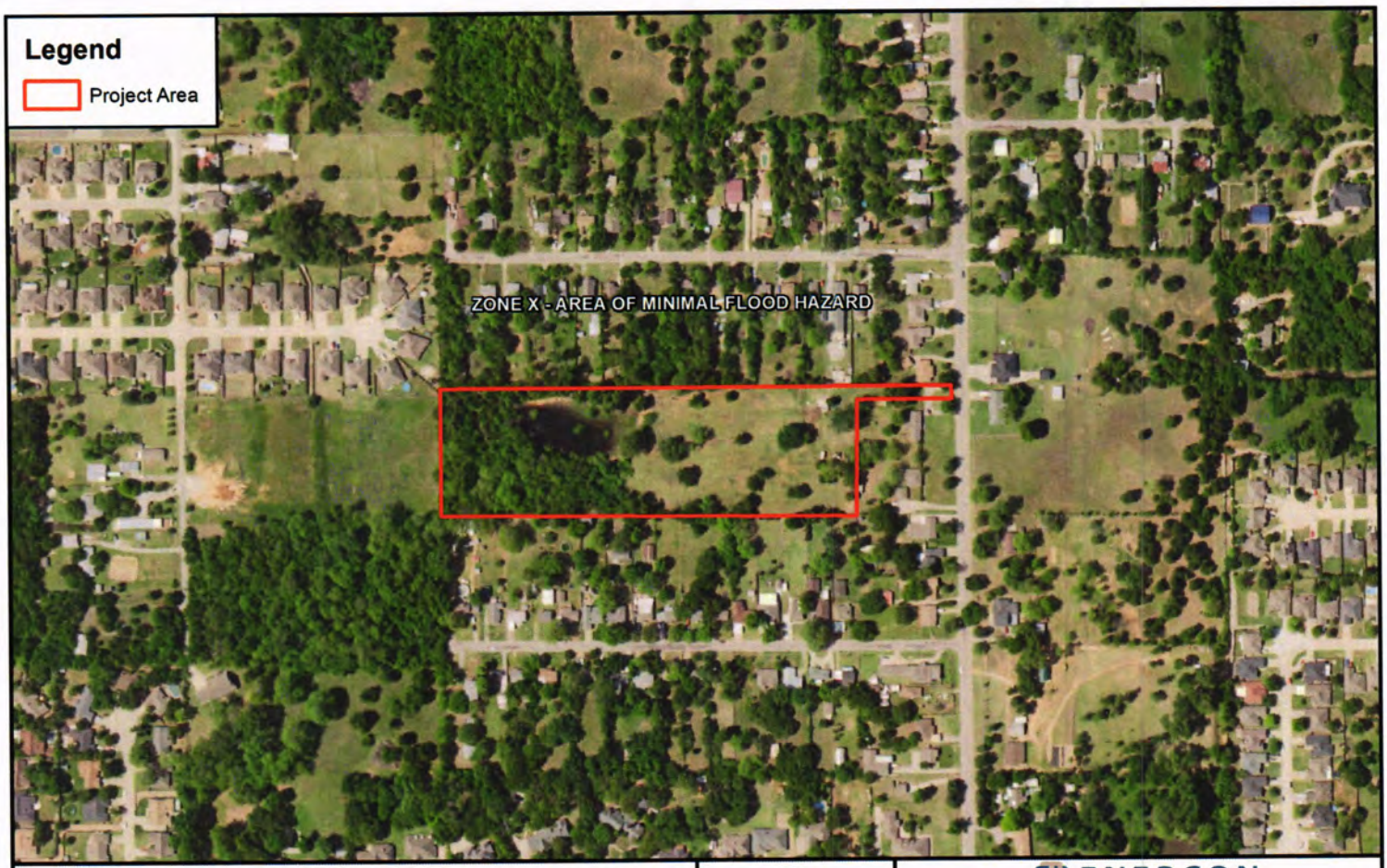
ENERCON

Figure 5: NWI Map
Source: US Fish and Wildlife Service - NWI
Choctaw, OK Quadrangle; 2017 USDA NAIP - Oklahoma County, Oklahoma
Prepared by: F. Woolridge; September 28, 2018

0 200 400 800 Feet



Prepared for: St Charles Development

Subject Property:
Windsor Meadows Development
Section 1, T11N R2W
Oklahoma County, Oklahoma

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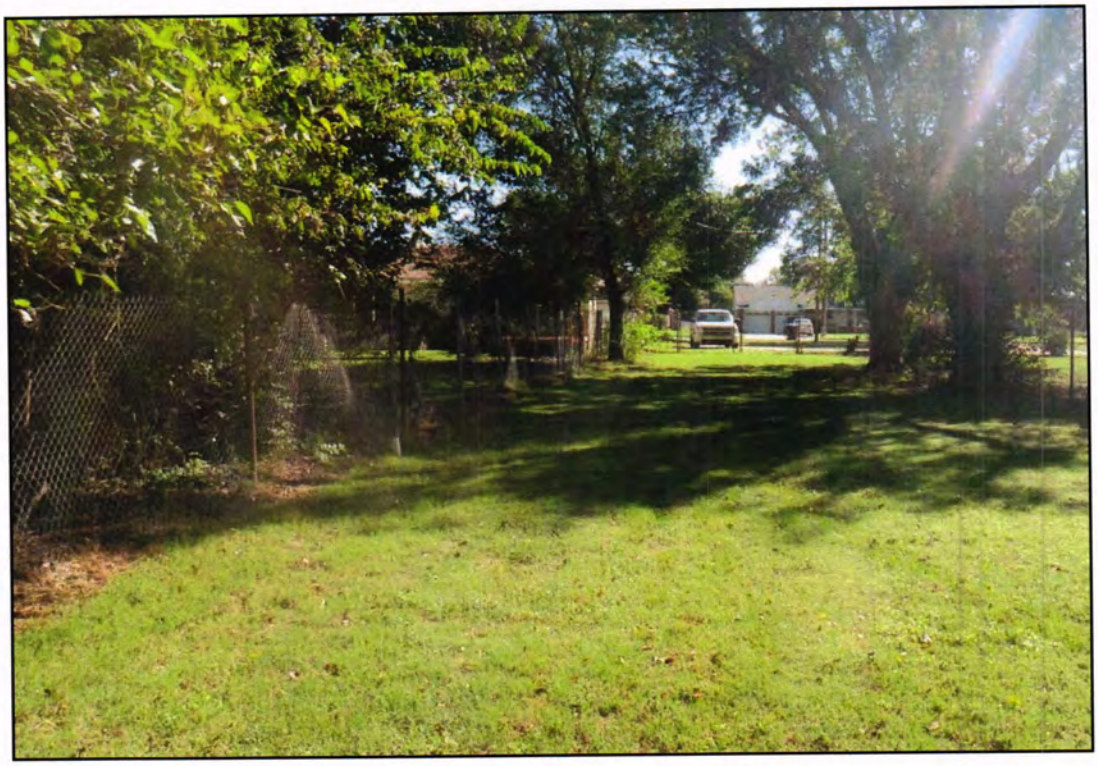
ENERCON

Figure 6: Flood Insurance Rate Map
Source: Federal Emergency Management Agency
Map #40109C0330H - December 18, 2009; 2017 USDA NAIP
Oklahoma County, Oklahoma
Prepared by: F. Woolridge; September 28, 2018

0 200 400 800 Feet

REPRESENTATIVE SITE PHOTOGRAPHS



Photograph 1: Maintained Lawn

Photograph 2: Mixed Grass Pasture

REPRESENTATIVE SITE PHOTOGRAPHS

Photograph 3: Urban Upland Forest

Photograph 4: Emergent Wetland

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Windsor Meadows Development City/County: Oklahoma County Sampling Date: 9/25/2018

Applicant/Owner: St. Charles Development State: OK Sampling Point: 1

Investigator(s): Bradley W. Barnes Section, Township, Range: Section 1, Township 11 North, Range 2 West

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): LRR H Lat: 35.46013 Long: -97.36070 Datum: NAD83

Soil Map Unit Name: Water NWI classification: PUBFh

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes [X] No [ ]

Hydric Soil Present? Yes [X] No [ ]

Wetland Hydrology Present? Yes [X] No [ ]

Is the Sampled Area within a Wetland? Yes [X] No [ ]

Remarks:

Indicators for all three wetland criteria were observed.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Salix nigra*	5	[X]	FACW
2.		[ ]	
3.		[ ]	
4.		[ ]	
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15' radius)			
1.		[ ]	
2.		[ ]	
3.		[ ]	
4.		[ ]	
5.		[ ]	
	= Total Cover		
Herb Stratum (Plot size: 5' radius)			
1. *Persicaria hydropiperoides*	100	[X]	OBL
2.		[ ]	
3.		[ ]	
4.		[ ]	
5.		[ ]	
6.		[ ]	
7.		[ ]	
8.		[ ]	
9.		[ ]	
10.		[ ]	
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30' radius)			
1.		[ ]	
2.		[ ]	
	= Total Cover		

% Bare Ground in Herb Stratum 0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC−): 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals:	(A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [X] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes [X] No [ ]

Remarks:

Indicators of hydrophytic vegetation were observed.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-1	10YR 2/1	100					Organic	
1-18	7.5YR 5/8	90	5YR 5/8	10	C	M	SCL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☒ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☒ No ☐

Remarks:

Indicators of hydric soil were observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☒ Geomorphic Position (D2)
- ☒ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present?	Yes ☐	No ☒	Depth (inches): NA
Water Table Present?	Yes ☐	No ☒	Depth (inches): NA
Saturation Present? (includes capillary fringe)	Yes ☐	No ☒	Depth (inches): NA

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

One primary indicator and two secondary indicators of wetland hydrology were observed.

WETLAND DETERMINATION DATA FORM – Great Plains Region

Project/Site: Windsor Meadows Development City/County: Oklahoma County Sampling Date: 9/25/2018

Applicant/Owner: St. Charles Development State: OK Sampling Point: 2

Investigator(s): Bradley W. Barnes Section, Township, Range: Section 1, Township 11 North, Range 2 West

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None Slope (%): 1-3

Subregion (LRR): LRR H Lat: 35.46009 Long: -97.36051 Datum: NAD83

Soil Map Unit Name: Harrah fine sandy loam NWI classification: NA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes [X] No [ ] (If no, explain in Remarks.)

Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes [X] No [ ]

Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes [ ]	No [X]	**Is the Sampled Area within a Wetland?** Yes [ ] No [X]
Hydric Soil Present?	Yes [ ]	No [X]	
Wetland Hydrology Present?	Yes [ ]	No [X]	

Remarks:

Indicators were not observed for any of the three wetland criteria

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30' radius)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Populus deltoides*	30	[X]	FAC
2.		[ ]	
3.		[ ]	
4.		[ ]	
	30	= Total Cover	

Sapling/Shrub Stratum (Plot size: 15' radius)			
1.		[ ]	
2.		[ ]	
3.		[ ]	
4.		[ ]	
5.		[ ]	
	= Total Cover		

Herb Stratum (Plot size: 5' radius)			
1. *Ambrosia artemisiifolia*	75	[X]	FACU
2. *Setaria spp.*	5	[ ]	---
3. *Festuca spp.*	5	[ ]	---
4.		[ ]	
5.		[ ]	
6.		[ ]	
7.		[ ]	
8.		[ ]	
9.		[ ]	
10.		[ ]	
	85	= Total Cover	

Woody Vine Stratum (Plot size: 30' radius)			
1.		[ ]	
2.		[ ]	
	= Total Cover		

% Bare Ground in Herb Stratum 15%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC (excluding FAC-): 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species	30	x 3 =	90
FACU species	75	x 4 =	300
UPL species		x 5 =	
Column Totals:	105 (A)		390 (B)

Prevalence Index = B/A = 3.71

Hydrophytic Vegetation Indicators:

- [ ] 1 - Rapid Test for Hydrophytic Vegetation
- [ ] 2 - Dominance Test is >50%
- [ ] 3 - Prevalence Index is ≤3.0[1]
- [ ] 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes [ ] No [X]

Remarks:

Indicators of hydrophytic vegetation were not observed.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-2	10YR 3/3	100					SL	
1-18	7.5YR 4/6	100					CL	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5) (**LRR F**)
- ☐ 1 cm Muck (A9) (**LRR F, G, H**)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ 2.5 cm Mucky Peat or Peat (S2) (**LRR G, H**)
- ☐ 5 cm Mucky Peat or Peat (S3) (**LRR F**)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
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- ☐ Depleted Matrix (F3)
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- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ High Plains Depressions (F16) (**MLRA 72 & 73 of LRR H**)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1 cm Muck (A9) (**LRR I, J**)
- ☐ Coast Prairie Redox (A16) (**LRR F, G, H**)
- ☐ Dark Surface (S7) (**LRR G**)
- ☐ High Plains Depressions (F16) (**LRR H outside of MLRA 72 & 73**)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☐ Very Shallow Dark Surface (TF12)
- ☐ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ☐ No ☒

Remarks:

Indicators of hydric soil were not observed.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Dry-Season Water Table (C2)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where not tilled**)
- ☐ Presence of Reduced Iron (C4)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Drainage Patterns (B10)
- ☐ Oxidized Rhizospheres on Living Roots (C3) (**where tilled**)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Geomorphic Position (D2)
- ☐ FAC-Neutral Test (D5)
- ☐ Frost-Heave Hummocks (D7) (**LRR F**)

Field Observations:

Surface Water Present? Yes ☐ No ☒ Depth (inches): NA

Water Table Present? Yes ☐ No ☒ Depth (inches): NA

Saturation Present? (includes capillary fringe) Yes ☐ No ☒ Depth (inches): NA

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Indicators of hydrology were not observed.

PRELIMINARY DRAINAGE & DETENTION REPORT

FOR

WINDSOR MEADOWS - RESIDENTIAL SUBDIVISION
MIDWEST CITY, OKLAHOMA

PREPARED BY:
JOHN DEREK JACKSON, P.E.
5350 S. WESTERN AVENUE, SUITE 222
OKLAHOMA CITY, OK 73109
(405) 225-1978

DECEMBER 10, 2018

Drainage & Detention Report – Windsor Meadows in Midwest City, Oklahoma

DETENTION POND ANALYSIS

The proposed site is located in the Northeast Quarter of Section 1, Township 11 North, Range 2 West, and eventually drains into Tributary 6 of Soldier Creek in Oklahoma County, Oklahoma. The existing site consists of 8.25 acres of land that drains from east to southwest.

A drainage analysis was performed using the Rationale Method and the IDF curves as outlined in the Oklahoma City Drainage Manual. A weighted runoff coefficient of 0.75 is used for the developed site.

Surface runoff from the developed site will flow into a detention pond located in a common area at the end of the proposed cul-de-sac. The total runoff from the detention pond does not exceed the historic runoff from the site

	Historic Condition:	**Developed Condition**	**Detention Pond Release**
2-yr	7.763 cfs	28.93 cfs	5.483 cfs
5-yr	9.056	32.88	6.424
10-yr	10.31	37.44	7.662
25-yr	11.95	43.38	8.952
50-yr	13.58	49.31	10.05
100-yr	15.09	54.79	10.96

Hydraflow Table of Contents

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	------	-------	7.763	-------	9.056	10.31	11.95	13.58	15.09	Existing Conditions
2	Rational	------	-------	28.93	-------	32.88	37.44	43.38	49.31	54.79	Developed Conditions
3	Reservoir	2	-------	5.483	-------	6.424	7.662	8.952	10.05	10.96	Detention Pond

Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

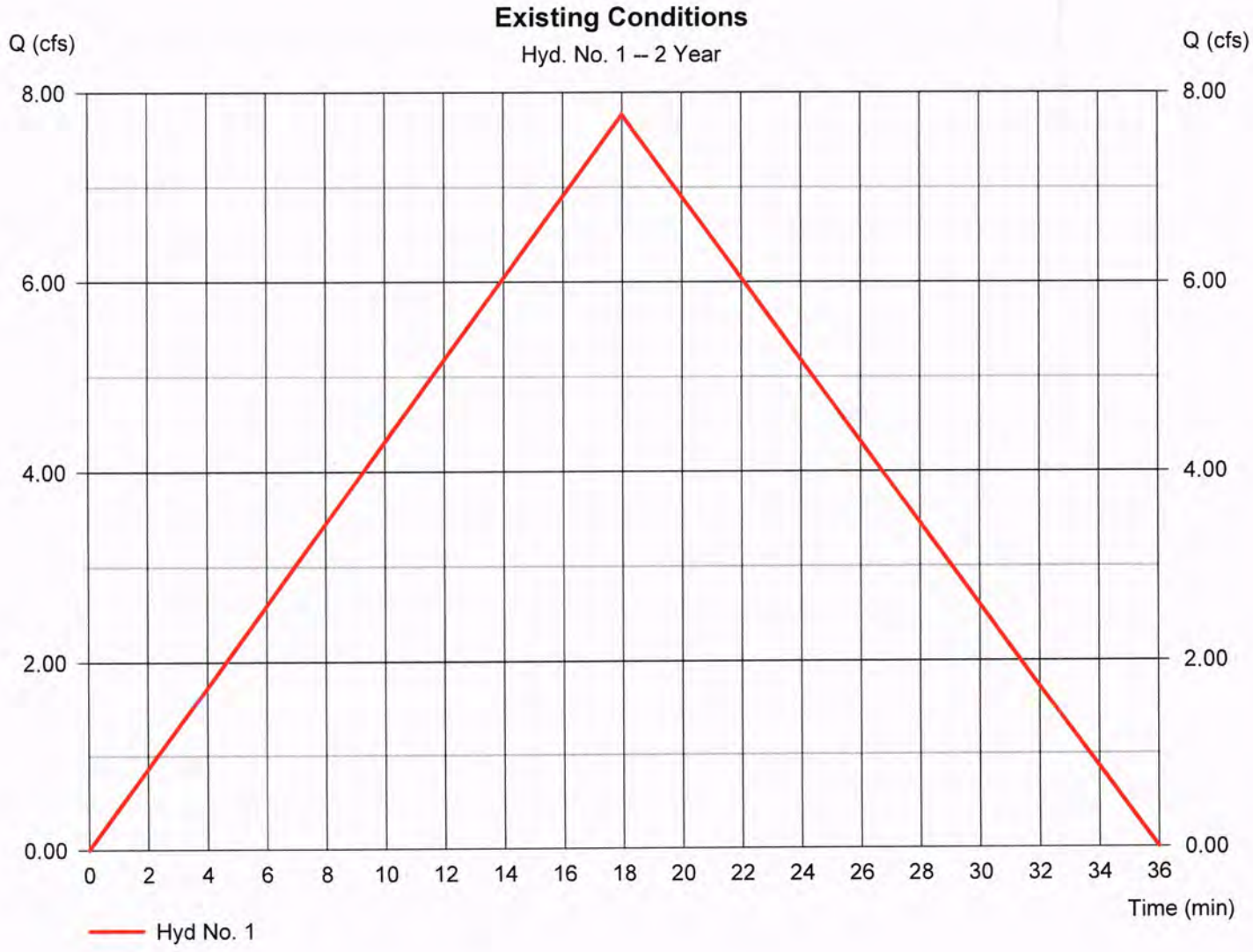
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	7.763	1	18	8,384	------	------	------	Existing Conditions
2	Rational	28.93	1	11	19,091	------	------	------	Developed Conditions
3	Reservoir	5.483	1	20	19,036	2	1221.94	15,517	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 7.763 cfs
Storm frequency	= 2 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 8,384 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 3.764 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 28.93 cfs
Storm frequency	= 2 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 19,091 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 4.675 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

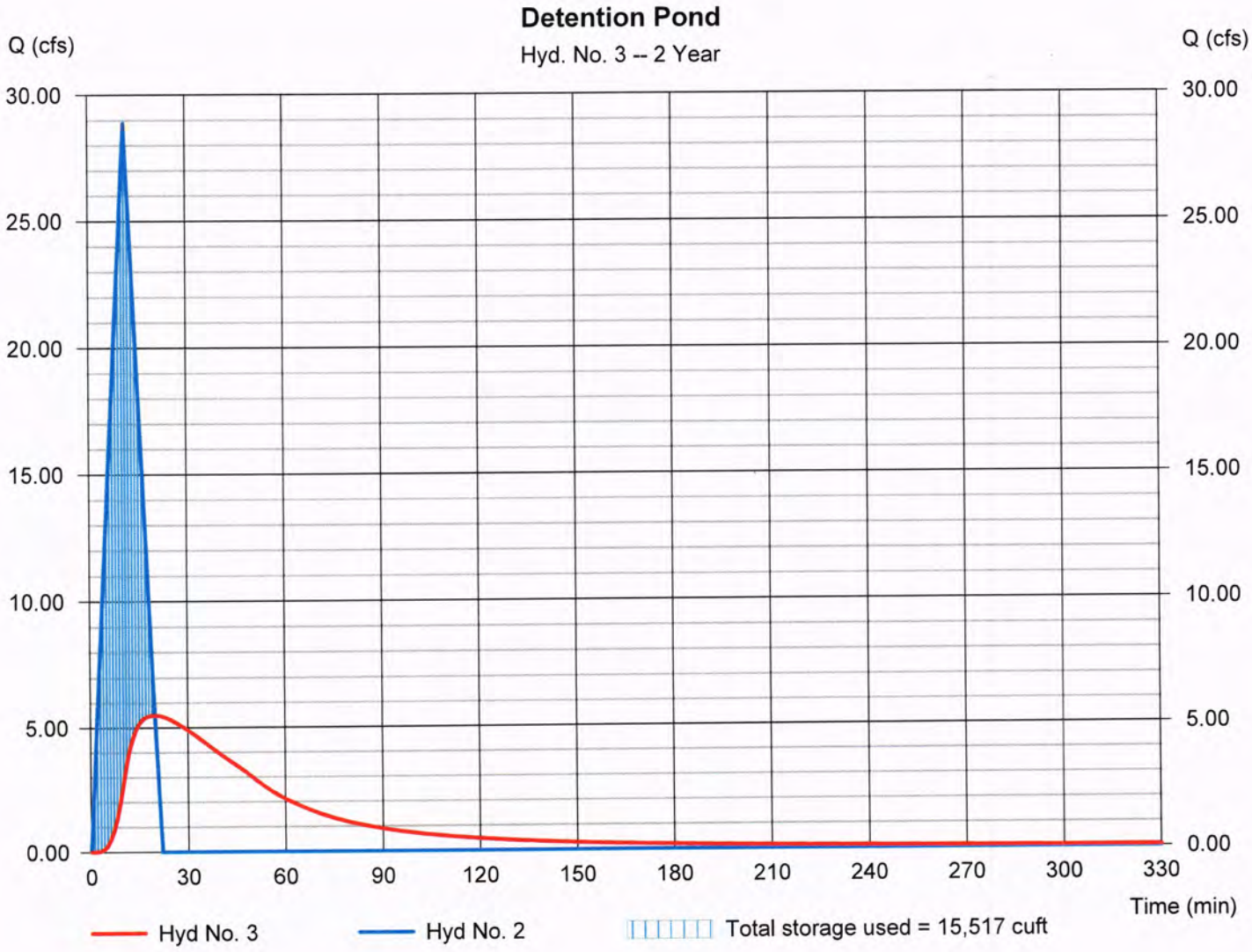
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 5.483 cfs
Storm frequency	= 2 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 19,036 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1221.94 ft
Reservoir name	= <New Pond>	Max. Storage	= 15,517 cuft

Storage Indication method used.



Pond Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12 — Monday, 12 / 10 / 2018

Pond No. 1 - <New Pond>

Pond Data

Trapezoid -Bottom L x W = 110.0 x 60.0 ft, Side slope = 4.00:1, Bottom elev. = 1220.00 ft, Depth = 4.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1220.00	6,600	0	0
0.40	1220.40	7,154	2,750	2,750
0.80	1220.80	7,729	2,976	5,726
1.20	1221.20	8,324	3,210	8,936
1.60	1221.60	8,940	3,452	12,388
2.00	1222.00	9,576	3,702	16,091
2.40	1222.40	10,233	3,961	20,052
2.80	1222.80	10,910	4,228	24,279
3.20	1223.20	11,607	4,503	28,782
3.60	1223.60	12,325	4,786	33,568
4.00	1224.00	13,064	5,077	38,645

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 24.00	0.00	0.00	0.00
Span (in)	= 24.00	0.00	0.00	0.00
No. Barrels	= 1	0	0	0
Invert El. (ft)	= 1220.00	0.00	0.00	0.00
Length (ft)	= 30.00	0.00	0.00	0.00
Slope (%)	= 1.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

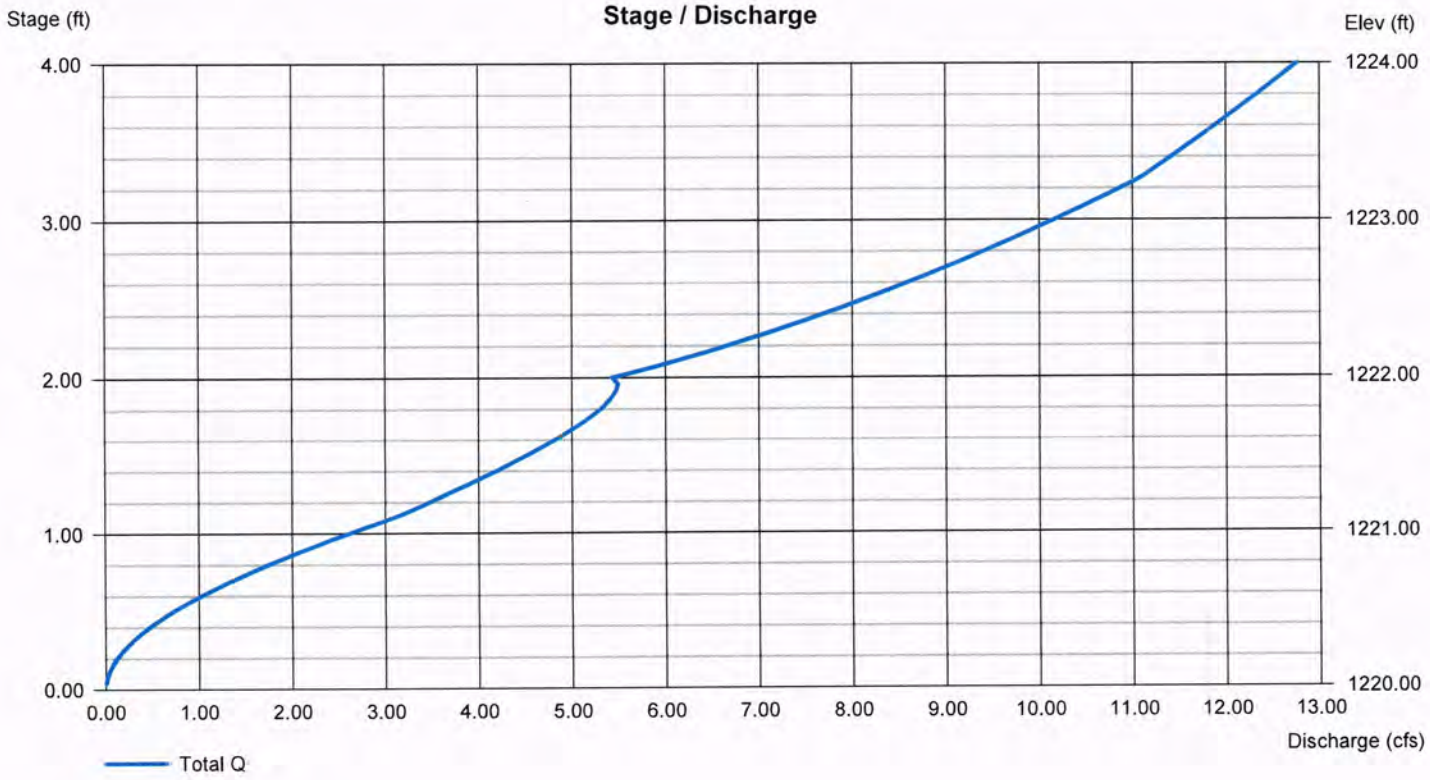
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 5.00	0.00	0.00	0.00
Crest El. (ft)	= 1222.50	0.00	0.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	---	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

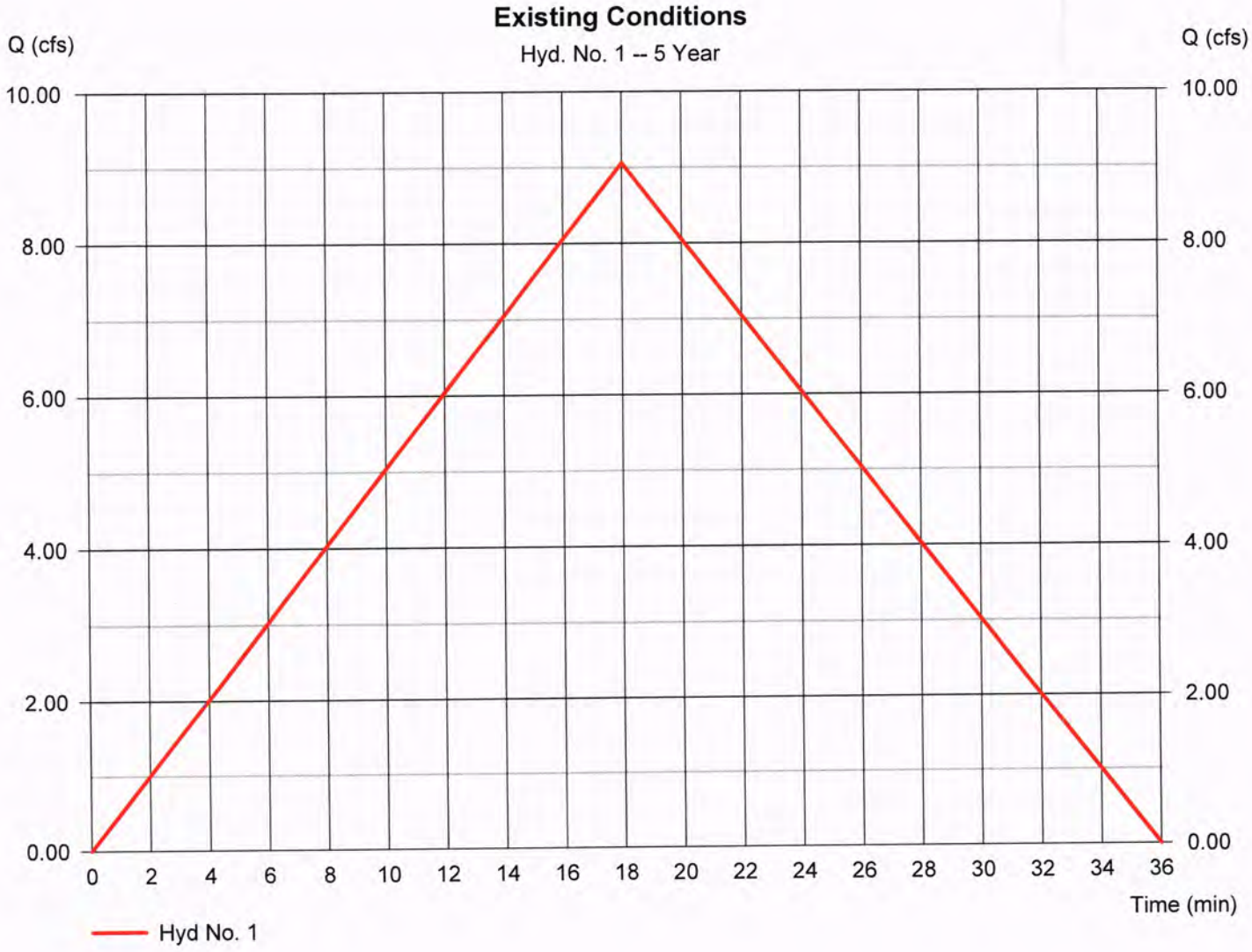
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	9.056	1	18	9,780	------	------	------	Existing Conditions
2	Rational	32.88	1	11	21,698	------	------	------	Developed Conditions
3	Reservoir	6.424	1	20	21,643	2	1222.16	17,662	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 9.056 cfs
Storm frequency	= 5 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 9,780 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 4.391 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

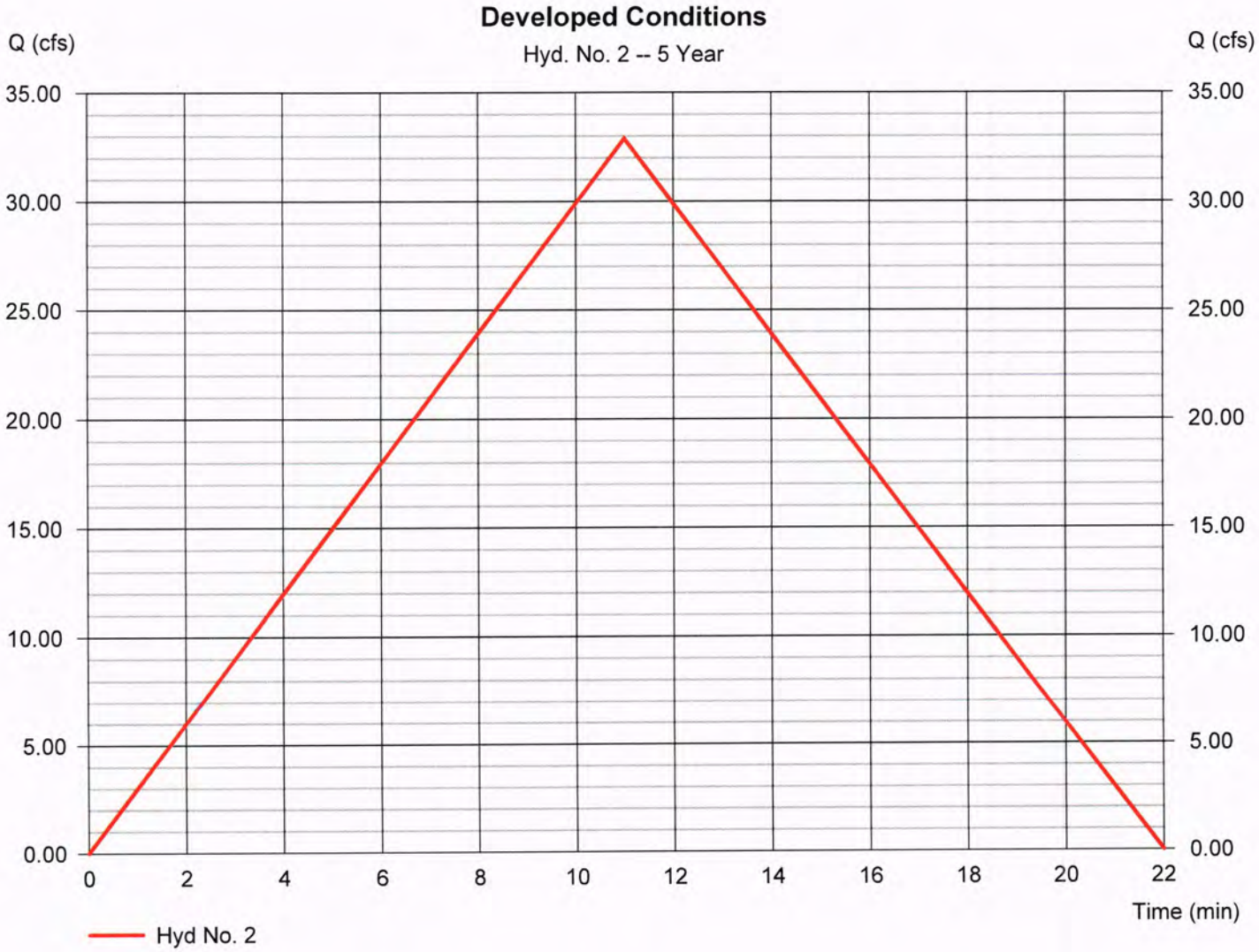


Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 32.88 cfs
Storm frequency	= 5 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 21,698 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 5.313 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1



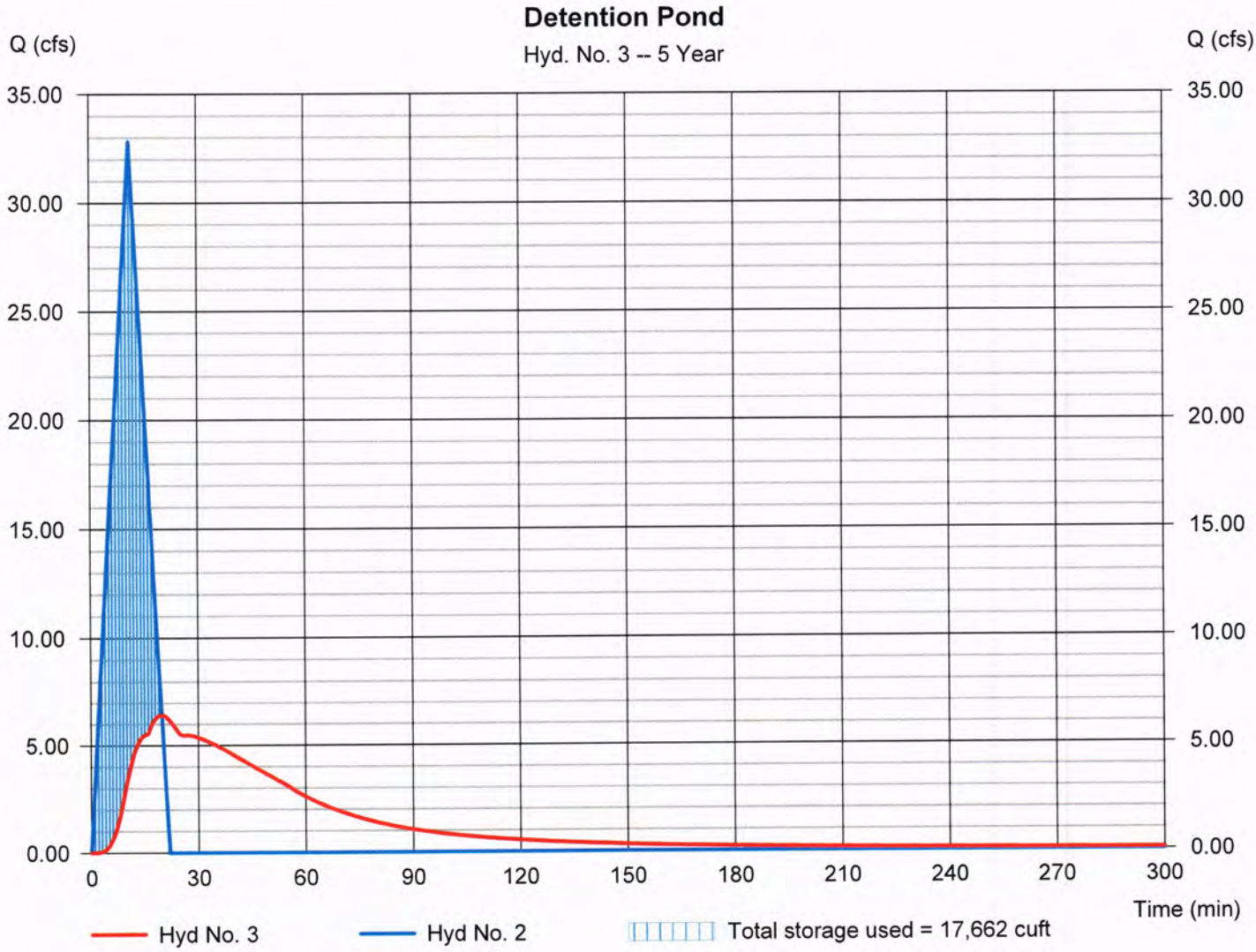
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 6.424 cfs
Storm frequency	= 5 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 21,643 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1222.16 ft
Reservoir name	= <New Pond>	Max. Storage	= 17,662 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

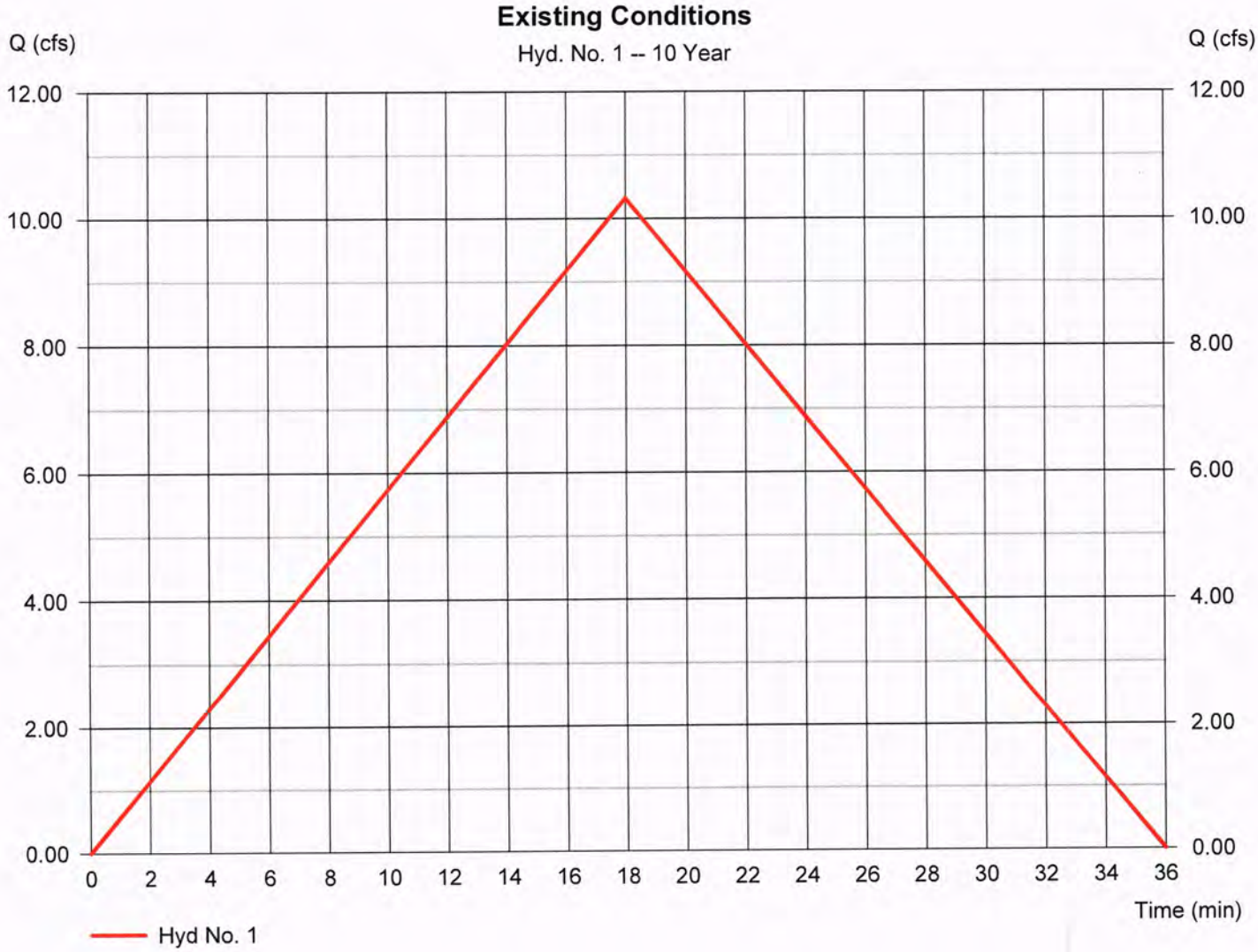
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	10.31	1	18	11,138	------	------	------	Existing Conditions
2	Rational	37.44	1	11	24,711	------	------	------	Developed Conditions
3	Reservoir	7.662	1	20	24,656	2	1222.40	20,001	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 10.31 cfs
Storm frequency	= 10 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 11,138 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 5.000 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

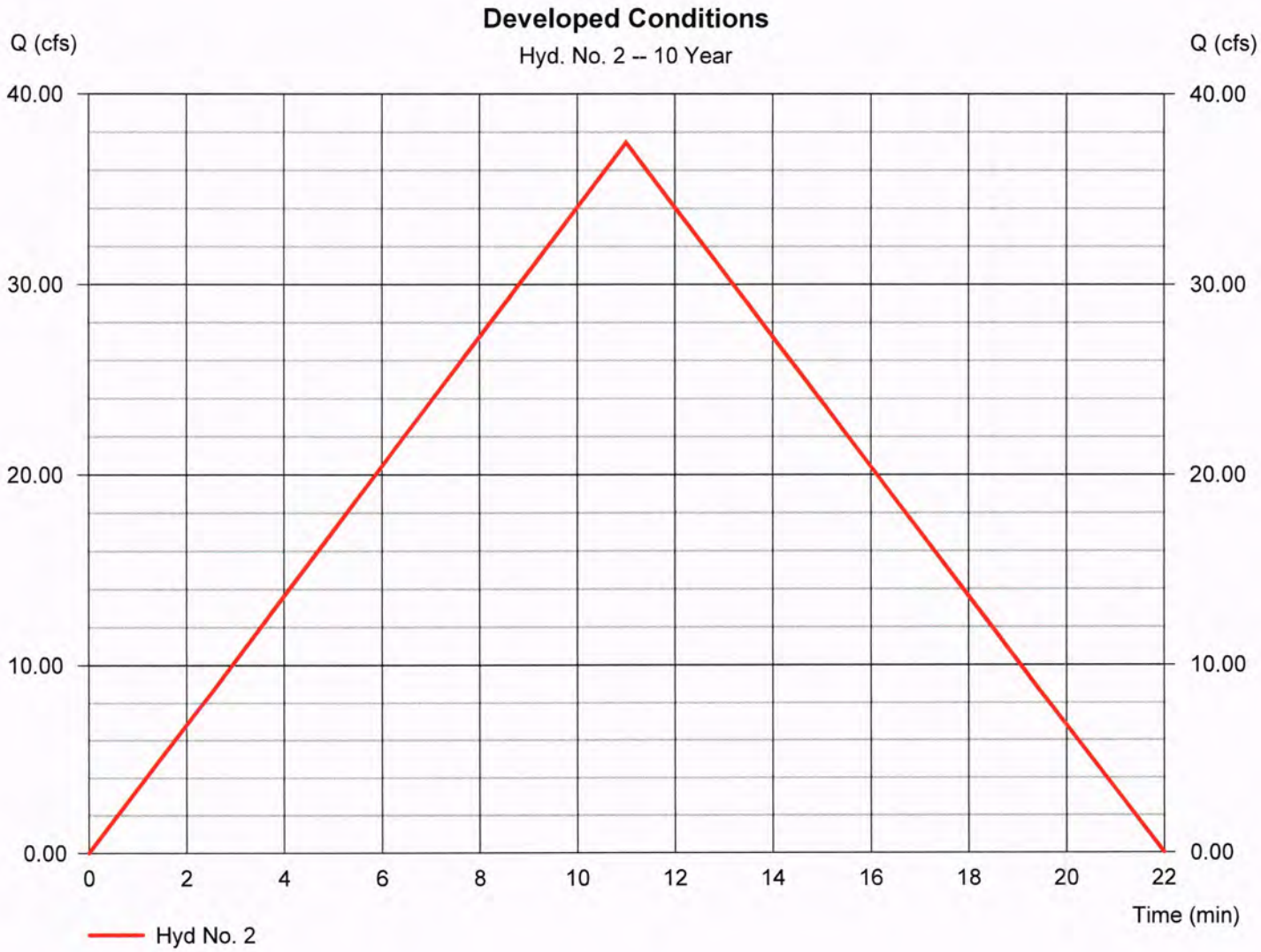


Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 37.44 cfs
Storm frequency	= 10 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 24,711 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 6.051 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1



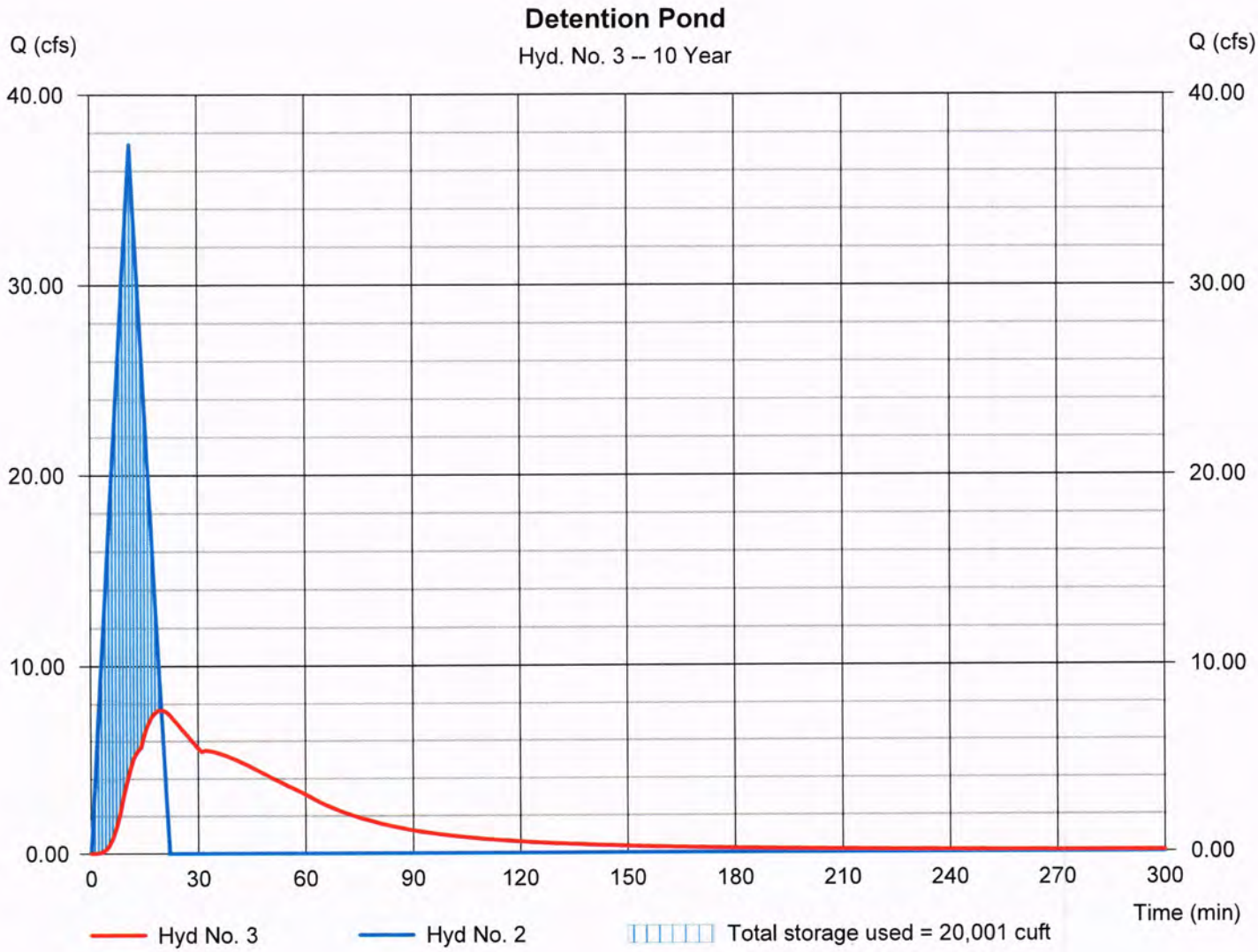
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 7.662 cfs
Storm frequency	= 10 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 24,656 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1222.40 ft
Reservoir name	= <New Pond>	Max. Storage	= 20,001 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

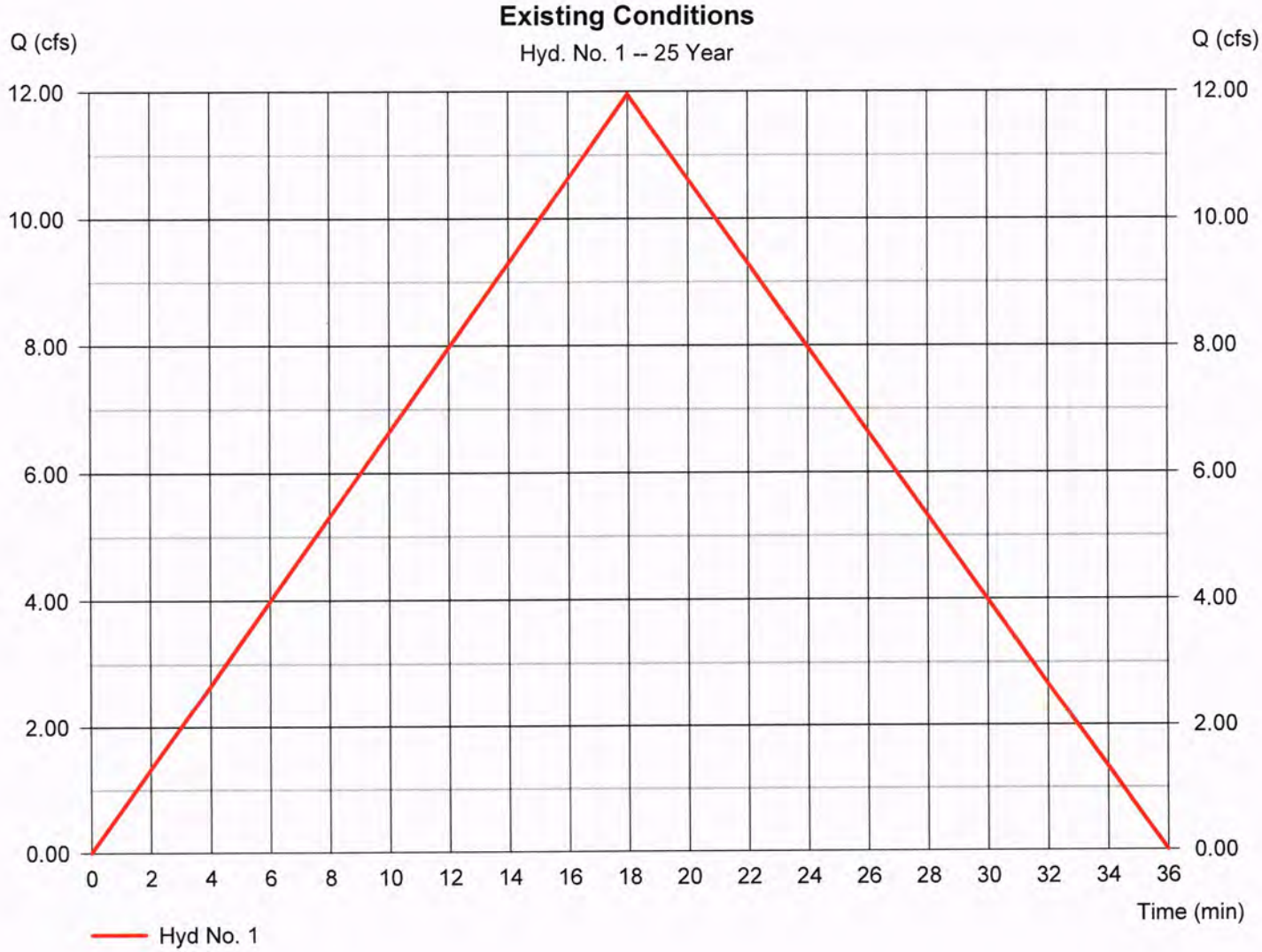
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	11.95	1	18	12,904	------	------	------	Existing Conditions
2	Rational	43.38	1	11	28,629	------	------	------	Developed Conditions
3	Reservoir	8.952	1	20	28,574	2	1222.69	23,062	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 11.95 cfs
Storm frequency	= 25 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 12,904 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 5.793 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 43.38 cfs
Storm frequency	= 25 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 28,629 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 7.010 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

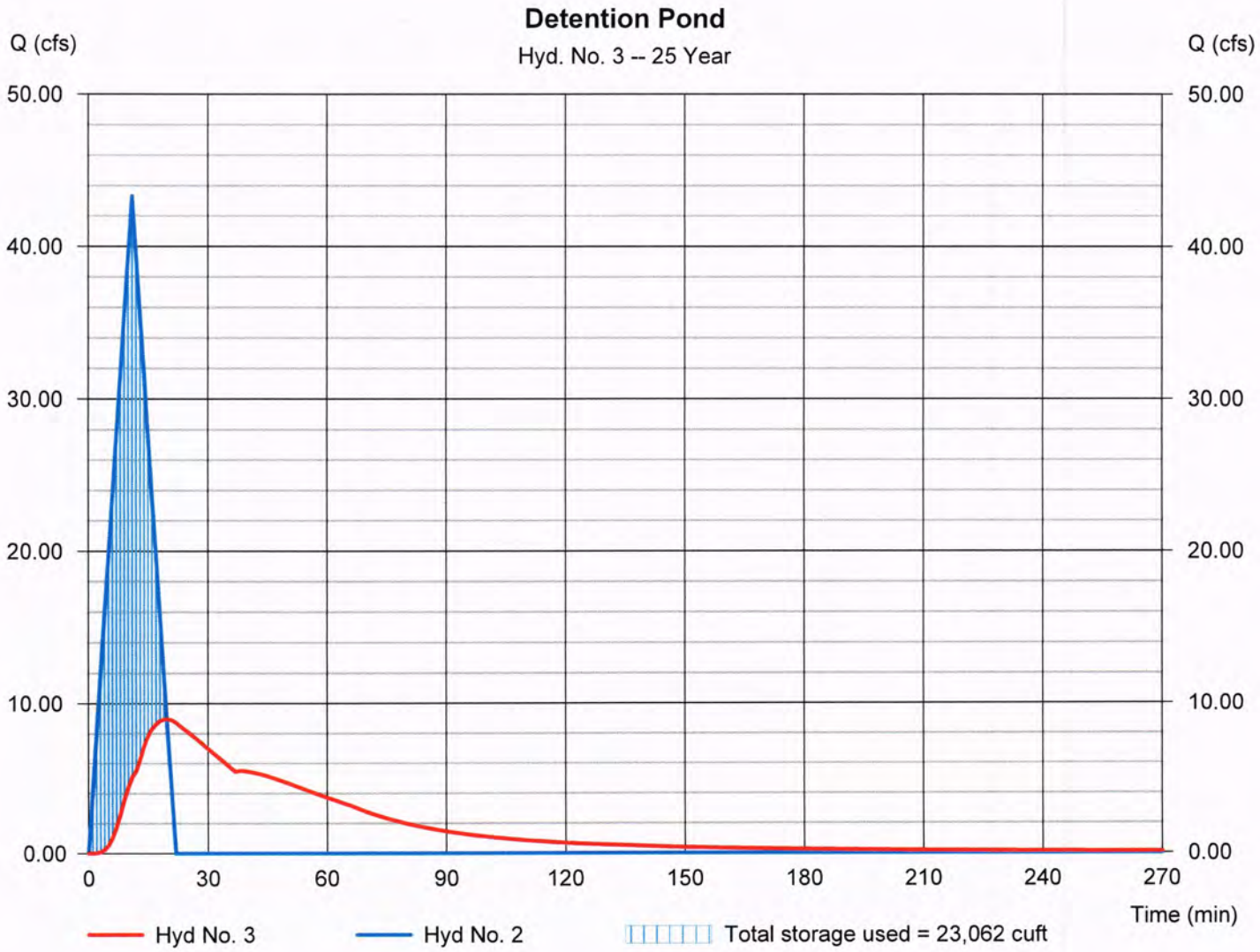
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 8.952 cfs
Storm frequency	= 25 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 28,574 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1222.69 ft
Reservoir name	= <New Pond>	Max. Storage	= 23,062 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

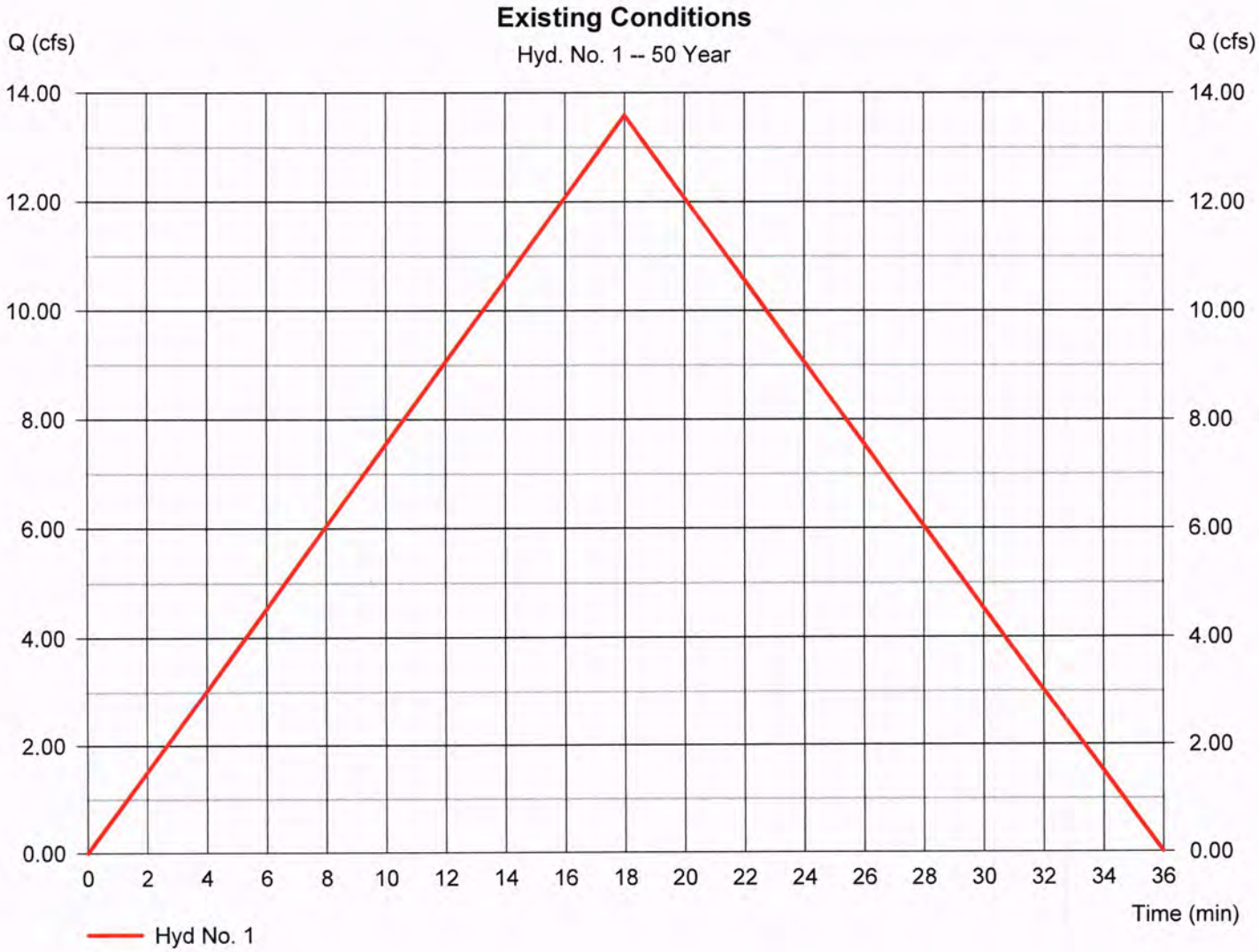
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	13.58	1	18	14,670	------	------	------	Existing Conditions
2	Rational	49.31	1	11	32,546	------	------	------	Developed Conditions
3	Reservoir	10.05	1	20	32,492	2	1222.97	26,177	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 13.58 cfs
Storm frequency	= 50 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 14,670 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 6.586 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

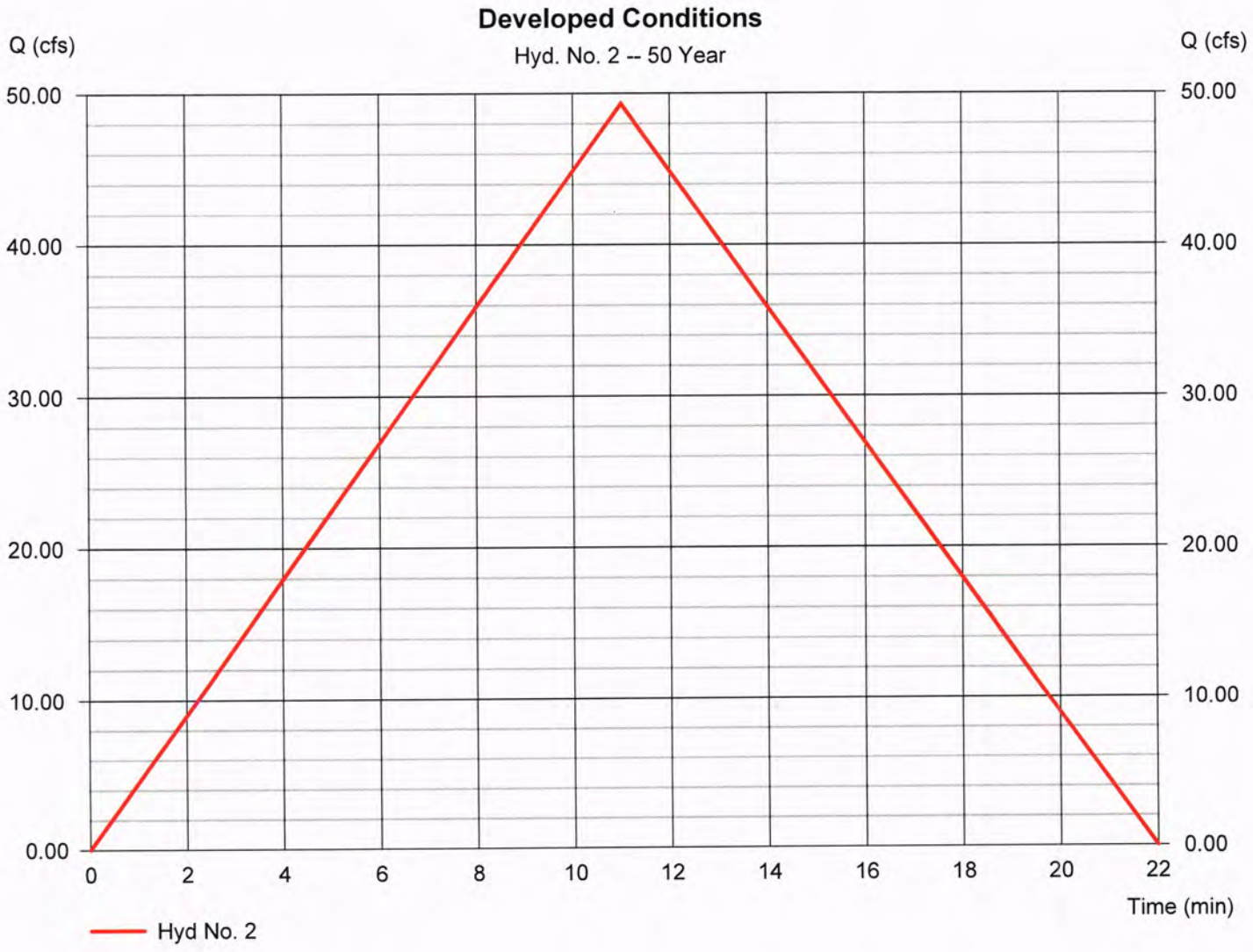


Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 49.31 cfs
Storm frequency	= 50 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 32,546 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 7.970 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1



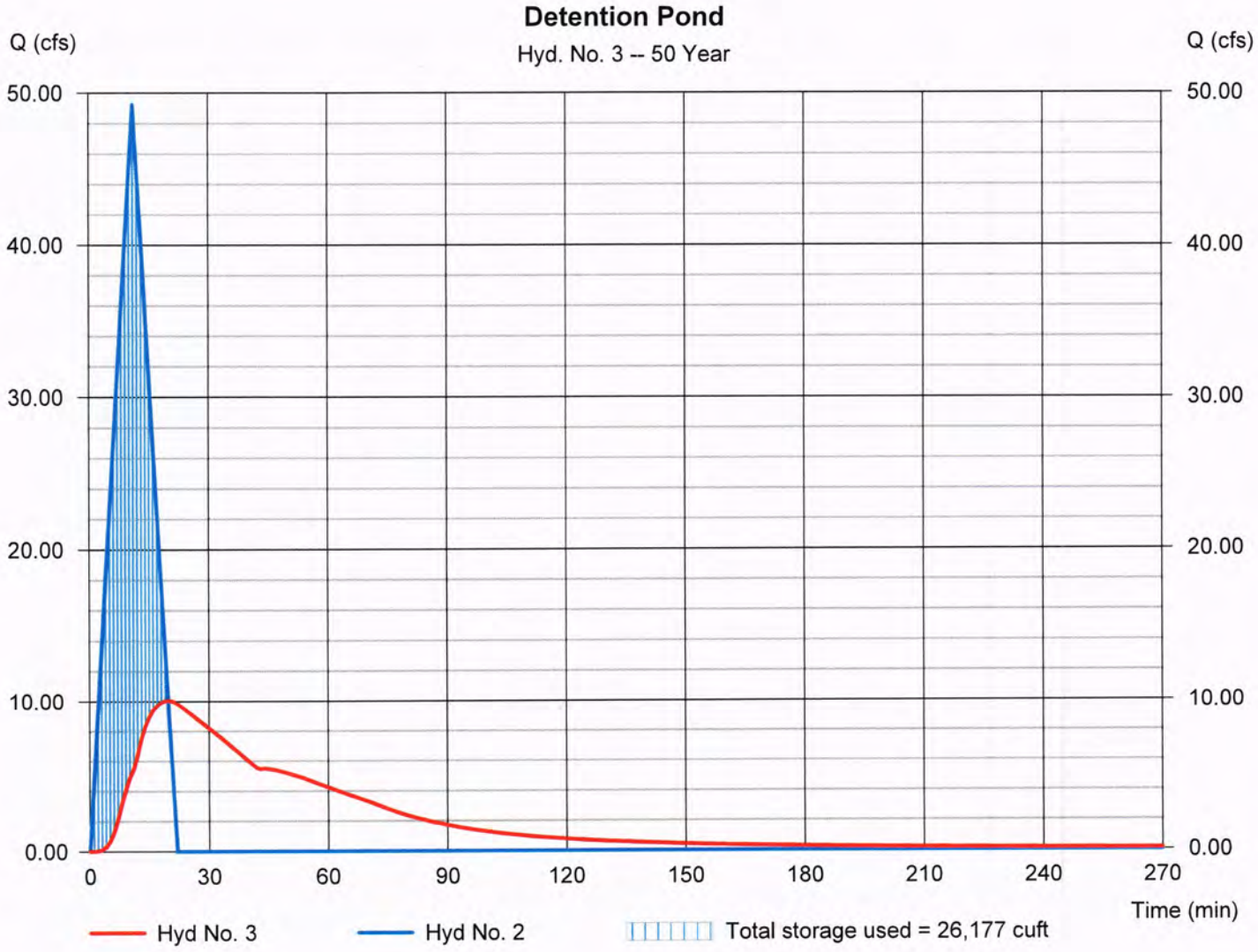
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 10.05 cfs
Storm frequency	= 50 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 32,492 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1222.97 ft
Reservoir name	= <New Pond>	Max. Storage	= 26,177 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for AutoCAD® Civil 3D® 2018 by Autodesk, Inc. v12

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	15.09	1	18	16,300	------	------	------	Existing Conditions
2	Rational	54.79	1	11	36,163	------	------	------	Developed Conditions
3	Reservoir	10.96	1	20	36,108	2	1223.23	29,108	Detention Pond

Hydrograph Report

Hyd. No. 1

Existing Conditions

Hydrograph type	= Rational	Peak discharge	= 15.09 cfs
Storm frequency	= 100 yrs	Time to peak	= 18 min
Time interval	= 1 min	Hyd. volume	= 16,300 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.25
Intensity	= 7.318 in/hr	Tc by User	= 18.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

Hydrograph Report

Hyd. No. 2

Developed Conditions

Hydrograph type	= Rational	Peak discharge	= 54.79 cfs
Storm frequency	= 100 yrs	Time to peak	= 11 min
Time interval	= 1 min	Hyd. volume	= 36,163 cuft
Drainage area	= 8.250 ac	Runoff coeff.	= 0.75
Intensity	= 8.855 in/hr	Tc by User	= 11.00 min
IDF Curve	= ODOT IDF Coefficients.IDF	Asc/Rec limb fact	= 1/1

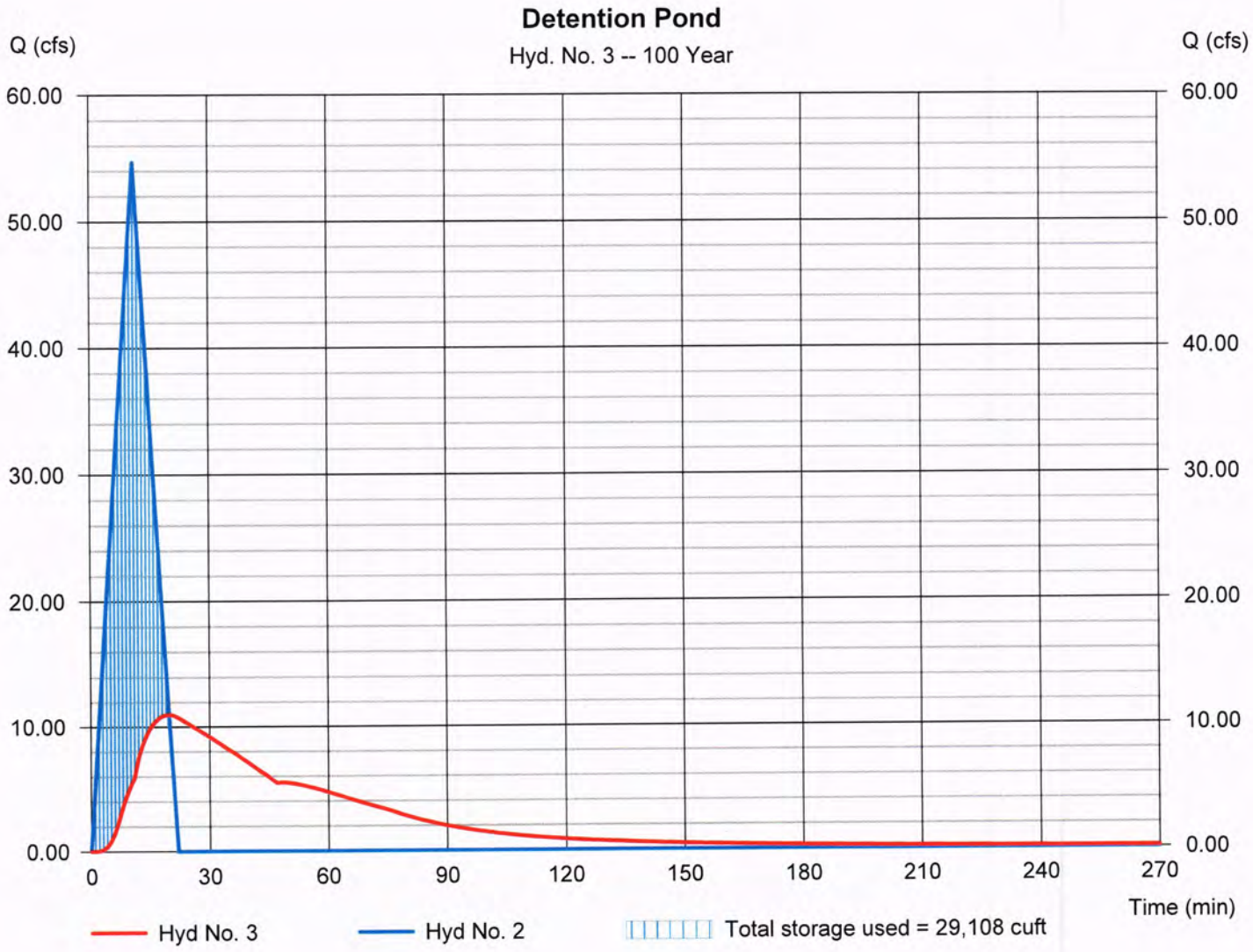
Hydrograph Report

Hyd. No. 3

Detention Pond

Hydrograph type	= Reservoir	Peak discharge	= 10.96 cfs
Storm frequency	= 100 yrs	Time to peak	= 20 min
Time interval	= 1 min	Hyd. volume	= 36,108 cuft
Inflow hyd. No.	= 2 - Developed Conditions	Max. Elevation	= 1223.23 ft
Reservoir name	= <New Pond>	Max. Storage	= 29,108 cuft

Storage Indication method used.



DRAINAGE BASIN PEAK RUNOFF CALCULATION SPREADSHEET

PROJECT NAME: **Windsor Meadows** DATE: **12/10/18**
OFFICE PROJECT NUMBER: DESIGN ENGINEER: **JACKSON**
SUB-BASIN NUMBER: **Existing** SPREADSHEET FILE NAME:
OKLAHOMA CLIMATE ZONE: **2** (Refer to the OKC Drainage Manual for climatic zones)
TOTAL DRAINAGE BASIN (ac) : ***8.250*** (As determined by survey, USGS mapping, aerial survey, ect.)

In order to determine an accurate runoff coefficient, a weighted average of the drainage basin will be made.

Land use:	Sub-Area (Acres)	*Runoff Coefficient	Partial CA Product
Residential:	**0.000**	**0.50**	**0.00**
Cultivated:	**8.250**	**0.25**	**2.06**
Light Industrial:	**0.000**	**0.80**	**0.00**
Commercial:	**0.000**	**0.90**	**0.00**
Landscaped:	**0.000**	**0.50**	**0.00**
Paved:	**0.000**	**0.95**	**0.00**
Total Area:	**8.250**	Sum CA:	**2.06**

* Estimated Runoff Coefficients may be found in the OKC DRAINAGE ORDINANCES. The following runoff coefficients are commonly used.

To calculate the Weighted "C" Coefficient, divide the Sum of Coefficient Products by the total Drainage Basin.

WEIGHTED "C" : ***0.25***

Land Use	*Coefficient*	*Land Use*	*Coefficient*
Rural Single Family	0.60	Apartments	0.85
Single Family Residential	0.70	Commercial	0.90
Light Industrial	0.80	Shopping Center	0.95
Paved	0.95	Industrial	0.80

To determine the time of concentration, both overland and channel flows must be computed.

A. Overland Flow:

Length of overland flow, L_o in feet : **335.82** (As determined by survey, USGS mapping, aerial survey, ect.)
Overland average slope, S_o in feet : **0.0298** (As determined by survey, USGS mapping, aerial survey, ect.)

If the overland flow path crosses different types of ground cover a weighted "k" factor must be calculated.

Ground Cover	Incremental Length (ft)	K Factor	Partial Length & K Factor Product
Pavement:	**0**	0.372	**0**
Commercial:	**0**	0.445	**0**
Residential:	**0**	0.511	**0**
Rocky, Bare Soil:	**0**	0.604	**0**
Cultivated:	**0**	0.775	**0**
Timber, Thin Grass:	**0**	0.942	**0**
Average Pasture:	**335.82**	1.04	**349.2528**
Tall Grass:	**0**	1.113	**0**
Total Overland Length:	**336**	Sum of "K" Factor Products:	**349.2528**

WEIGHTED OVERLAND "K" : **1.0400**

$T_o = (L_o)^{0.37} / S_o^{0.20}$ $T_o =$ 18.07 minutes

B. Channel Flow:

Length of channel flow, L_f in feet: **0.0** (As determined by survey, USGS mapping, aerial survey, ect.)
Channel average slope, S_f in feet: **0.0000** (As determined by survey, USGS mapping, aerial survey, ect.)
Channel Velocity, V_f in fps: **0.0**

$T_f =$ Lf / V_f $T_f =$ 0 minutes

The total time of concentration is the sum of the overland time (T_o) and channel time (T_f) ; $T_c = T_o + T_f$
The total time of concentration must exceed 10 minutes. (ODOT drainage manual)

TOTAL TIME OF CONCENTRATION, Tc = **18.07** minutes

The formula for the average historical rainfall intensity as defined in the ODOT DRAINAGE MANUAL is as follows:

$$I = A / (B+TC)^E$$

	2 year	5 year	10 year	25 year	50 year	100 year
A =	**104.333**	**79.655**	**87.535**	**101.482**	**98.925**	**102.769**
B =	**17.298**	**14.828**	**15.882**	**16.774**	**15.865**	**15.860**
E =	**0.935**	**0.825**	**0.811**	**0.806**	**0.775**	**0.760**

Rainfall Intensity Formula Nomenclature as per OKC DRAINAGE MANUAL for the Climatic Zone chosen :

The rational method will be used to calculate the peak runoff. (Not extremely accurate for large drainage basins)

Q = CIA

C - Runoff coefficient of the drainage basin
I - Average historical rainfall intensity in units of inches/hour
A - Area in units of acres

	2 year	5 year	10 year	25 year	50 year	100 year
Intensity (*I*)	***3.72***	***4.46***	***5.01***	***5.80***	***6.44***	***7.05***
Runoff (*Q*)	***7.676***	***9.200***	***10.341***	***11.969***	***13.273***	***14.537***

DRAINAGE BASIN PEAK RUNOFF CALCULATION SPREADSHEET

PROJECT NAME: **Windsor Meadows**
OFFICE PROJECT NUMBER:
SUB-BASIN NUMBER: **Proposed**
OKLAHOMA CLIMATE ZONE: **2**
TOTAL DRAINAGE BASIN (ac) ***8.25***

DATE: **12/10/18**
DESIGN ENGINEER: **JACKSON**
SPREADSHEET FILE NAME:
(Refer to the OKC Drainage Manual for climatic zones)
(As determined by survey, USGS mapping, aerial survey, ect.)

In order to determine an accurate runoff coefficient, a weighted average of the drainage basin will be made.

Land use:	Sub-Area (Acres)	*Runoff Coefficient	Partial CA Product
Residential:	**8.25**	**0.75**	**6.19**
Cultivated:	**0.00**	**0.40**	**0.00**
Light Industrial:	**0.00**	**0.80**	**0.00**
Commercial:	**0.00**	**0.90**	**0.00**
Landscaped:	**0.00**	**0.50**	**0.00**
Paved:	**0.00**	**0.95**	**0.00**
Total Area:	**8.25**	Sum CA:	**6.19**

* Estimated Runoff Coefficients may be found in the OKC DRAINAGE ORDINANCES. The following runoff coefficients are commonly used.

To calculate the Weighted "C" Coefficient, divide the Sum of Coefficient Products by the total Drainage Basin.

WEIGHTED "C" : ***0.75***

Land Use	*Coefficient*	*Land Use*	*Coefficient*
Rural Single Family	0.60	Apartments	0.85
Single Family Residential	0.70	Commercial	0.90
Light Industrial	0.80	Shopping Center	0.95
Paved	0.95	Industrial	0.80

To determine the time of concentration, both overland and channel flows must be computed.

A. Overland Flow:

Length of overland flow, L_o in feet : **1179.13** (As determined by survey, USGS mapping, aerial survey, ect.)
Overland average slope, S_o in feet: **0.0254** (As determined by survey, USGS mapping, aerial survey, ect.)

If the overland flow path crosses different types of ground cover a weighted "k" factor must be calculated.

Ground Cover	Incremental Length (ft)	K Factor	Partial Length & K Factor Product
Pavement:	**1179.13**	0.372	**438.6364**
Commercial:	**0**	0.445	**0**
Residential:	**0**	0.511	**0**
Rocky, Bare Soil:	**0**	0.604	**0**
Cultivated:	**0**	0.775	**0**
Timber, Thin Grass:	**0**	0.942	**0**
Average Pasture:	**0**	1.04	**0**
Tall Grass:	**0**	1.113	**0**
Total Overland Length:	**1179**	Sum of "K" Factor Products:	**438.6364**

WEIGHTED OVERLAND "K" : **0.3720**

$$T_o = (L_o)^{0.37} / S_o^{0.20}$$

$T_o =$ 10.62 minutes

B. Channel Flow:

Length of channel flow, L_f in feet: **0.0** (As determined by survey, USGS mapping, aerial survey, ect.)
Channel average slope, S_f in feet: **0.0000** (As determined by survey, USGS mapping, aerial survey, ect.)
Channel Velocity, V_f in fps: **0.0**

$T_f =$ Lf / V_f $T_f =$ 0 minutes

The total time of concentration is the sum of the overland time (T_o) and channel time (T_f) ; $T_c = T_o + T_f$
The total time of concentration must exceed 10 minutes. (ODOT drainage manual)

TOTAL TIME OF CONCENTRATION, Tc = **10.62** minutes

The formula for the average historical rainfall intensity as defined in the ODOT DRAINAGE MANUAL is as follows:

$$I = A / (B+TC)^E$$

	2 year	5 year	10 year	25 year	50 year	100 year
A =	**104.333**	**79.655**	**87.535**	**101.482**	**98.925**	**102.769**
B =	**17.298**	**14.828**	**15.882**	**16.774**	**15.865**	**15.860**
E =	**0.935**	**0.825**	**0.811**	**0.806**	**0.775**	**0.760**

Rainfall Intensity Formula Nomenclature as per OKC DRAINAGE MANUAL for the Climatic Zone chosen :

The rational method will be used to calculate the peak runoff. (Not extremely accurate for large drainage basins)

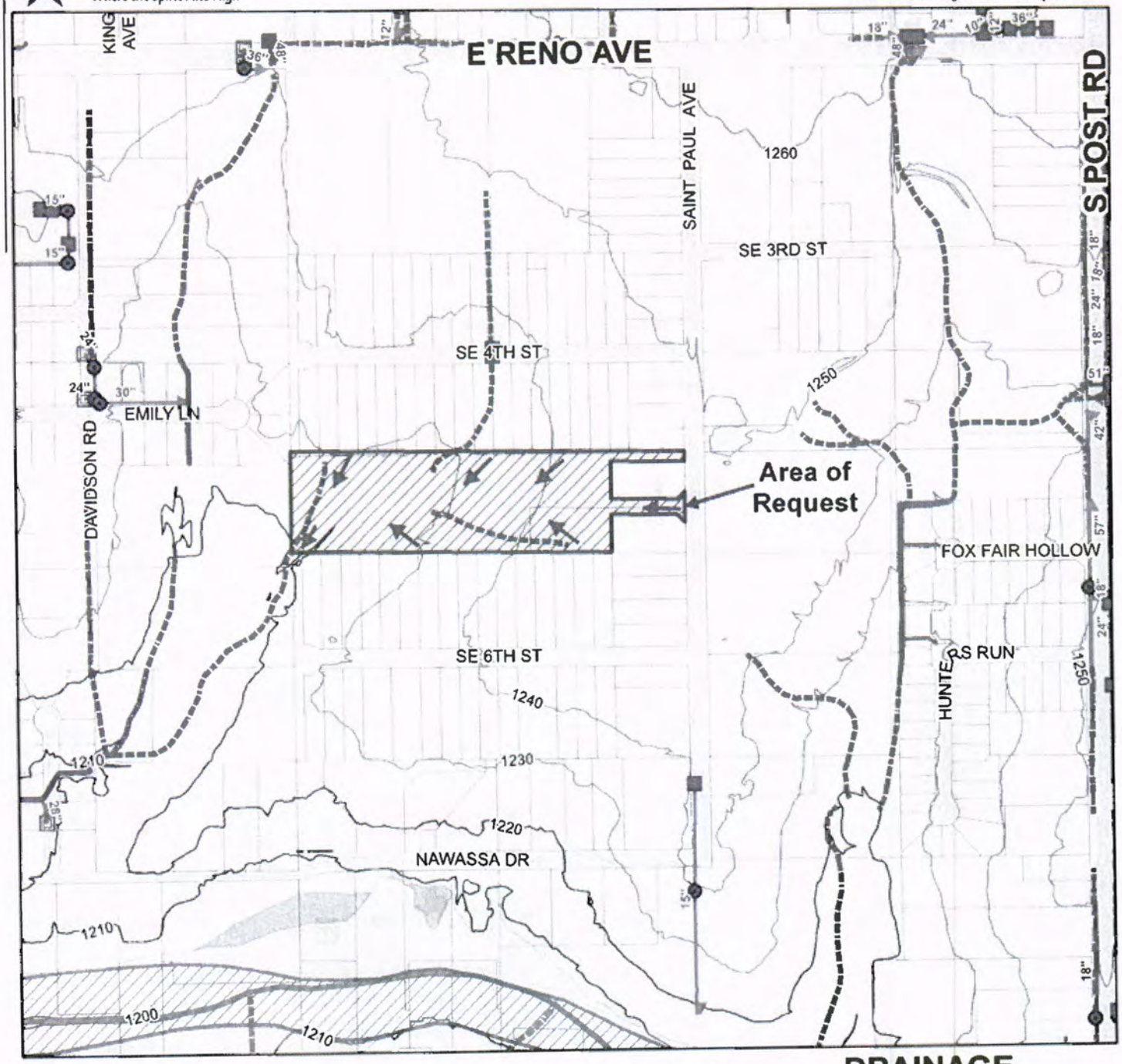
Q = CIA

C - Runoff coefficient of the drainage basin
I - Average historical rainfall intensity in units of inches/hour
A - Area in units of acres

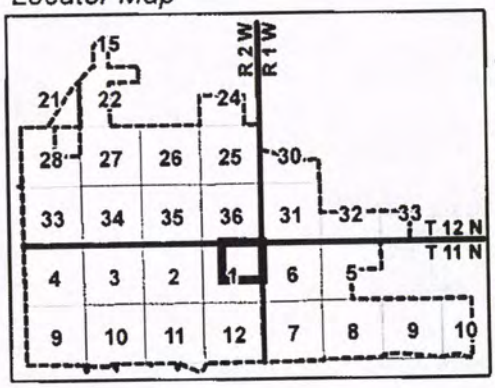
	2 year	5 year	10 year	25 year	50 year	100 year
Intensity (*I*)	***4.64***	***5.51***	***6.13***	***7.04***	***7.80***	***8.51***
Runoff (*Q*)	***28.725***	***34.113***	***37.927***	***43.586***	***48.252***	***52.656***

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



Drainage Legend

Curb Inlets
- Curb Inlets
- Inlets
- Junction Box
- Culverts
- Flumes
- Developed Channels
- Trickle Channels
- Undeveloped Channels
- Storm Lines
- Creeks

ELEVATION
- 1166-1204 ft
- 1204-1228 ft
- 1228-1250 ft
- 1250-1278 ft
- 1278-1324 ft

2009 FEMA Floodplains
- 500-yr floodplain
- 100-yr floodplain

2009 FEMA Floodway
- FLOODWAY

DRAINAGE LOCATION MAP FOR PC-1960 (NE/4, Sec. 1, T11N, R2W)

0 450 900 Feet

1 inch = 450 feet

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT

Billy Harless, Community Development Director

ENGINEERING DIVISION
Patrick Menefee, City Engineer
CURRENT PLANNING DIVISION
Kellie Gilles, Manager
COMPREHENSIVE PLANNING
Julie Shannon, Comprehensive Planner
BUILDING INSPECTION DIVISION
Christine Brakefield, Building Official
GIS DIVISION
Greg Hakman, GIS Coordinator

To: Chairman and Planning Commission

From: Billy Harless, Community Development Director

Date: January 2, 2019

Subject: (PC – 1976) Discussion and consideration of approval of the Preliminary Plat of Florence Estates for the property described as a part of the NE/4 of Section 1, T-11-N, R-1-W, located in the 400 block of S. Post Road.

Executive Summary: A PUD and Preliminary Plat for the area of request were denied in November and December of 2017 due to concerns about drainage. Since that time, the applicant and his engineer have provided additional information to staff to review and brought forth a new PUD application to the Planning Commission and City Council in July of 2018. The new application reduces the density by one (1) lot – going from eight (8) proposed lots to seven (7) with an additional area designated for detention. The PUD was approved in 2018, allowing the applicant to move forward and submit a preliminary plat application and a preliminary drainage report. As detailed further in the engineering notes of this report, the proposed drainage and detention plan still does not meet current code requirements. The City Engineer states that this Preliminary Plat application does not meet the requirements of the Subdivision Regulations. Staff recommends denial.

Council Ward: Ward 2 – Pat Byrne

Dates of Hearing: Planning Commission – October 2, 2018, November 6, 2018, January 2, 2019
City Council – October 23, 2018, November 27, 2018, January 22, 2019

Owner/Applicant: David Lloyd

Engineer: Derek Jackson

Proposed Use: 7 single family residential lots

Size:
The area of request has a frontage along S. Post Rd. of approximately 165 ft and a depth of approximately 609 ft, containing an area of approximately 100,456.07 square feet, more or less.

Land Use:
Area of Request –vacant
North, South, East and West – single family residences

Municipal Code Citation:
38-3. Purpose
38-3.1 Protection of Public and Private Interest
The development and subdivision of land, as they affect a City's quality of life, are activities for which regulation is a valid function of City government. The regulations contained within this Subdivision Ordinance are intended to protect the interest of the public and of private parties by granting certain rights and privileges.

38-18.1. Purpose
The purpose of a Preliminary Plat shall be to determine the general layout of the subdivision, the adequacy of public facilities needed to serve the intended development, and the overall compliance of the land division with applicable requirements of the Subdivision Ordinance.

History:
1. PC-1920 - An application for a PUD was denied by the Council in November 2017.
2. PC-1924 – An application for a preliminary plat of this area was denied by the Council in December 2017.
3. PC-1959 – The area of request was rezoned to a PUD in July 2018.
4. The area has never been platted.
5. This item was tabled by the Planning Commission and City Council in October and November 2018 to allow the applicant to address drainage concerns.

Staff Comments:
Engineering Comments:

<u>Water Supply and Distribution</u>
Section 38-18 in the Subdivision Regulations requires all existing and proposed utility lines be reflected on the preliminary plat and submitted on a preliminary utility site plan.

A thirty six (36) inch public water main is located on the east side of Post Road in the street right-of-way extending along the east side of the area of request.

The applicant proposes to construct a public water line extension along the south side of the proposed cul-de-sac right of way.

Improvement plans for the water line extension must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Extension of the water supply to serve this property is required as outlined in Municipal Code 43-32.

Connection to the public water supply system for domestic service is a building permit requirement per Municipal Code 43-32 for all new buildings.

Sanitary Sewer Collection and Disposal

An eight (8) inch public sewer main is located on the east side of Post Road in the street right-of-way extending along the east side of the area of request.

An eight (8) inch public sewer main is located in a dedicated utility easement approximately fifty (50) feet south from the southwest corner of the area of request.

The applicant proposes to construct a public sewer line extension along the south side of the area of request in a proposed dedicated utility easement.

Improvement plans for the sewer line extension must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Connection to the public sanitary sewer system for domestic service is a building permit requirement per Municipal Code Chapter 43-109 for all lots.

Streets and Sidewalks

Access to the area of request is available from Post Road. Post Road is a five (5) lane, 65-foot wide, curbed, asphalt concrete roadway. Current code requires a total street right-of-way width of one hundred (100) feet for secondary arterials and presently, Post Road has one hundred (100) feet of right-of-way adjacent to and parallel to the east side of the area of request.

The applicant proposes to construct a public local street with sidewalks to service the area of request.

Improvement plans for the street and sidewalks must be prepared by a registered professional engineer and be submitted to staff for plan review and approval.

Drainage and Flood Control, Wetlands, and Sediment Control

Drainage across the area of request is mainly from the east to the west via overland flow. Currently, the area of request is undeveloped. The area of request is not affected by flood zone AE (the 100-year floodplain) as shown on the effective Flood Insurance Rate Map (FIRM) number 40109C0330H, dated December 12, 2009.

The applicant proposes to construct underground drainage improvements and detention facilities to service the area of request.

The history, in emails, concerning the drainage for this property is attached to the packet. The summary email chain shows this development was first proposed in January 2016. During the zoning proposals presented over the following 18 months, drainage was noted as a critical component that would have to be addressed after the zoning was approved. After the zoning case was processed, a drainage plan was created to go with the preliminary plat application. At that time, Johnson and Associates was retained to do an

evaluation of the drainage proposal. A second email summary list and the copied text of these evaluation emails are attached, beginning in June 2018. Over the past six months, the proposed design was discussed and altered by the design engineer and the reviewing engineer. The consultant engineer's latest conclusions are attached.

The city engineer has been encouraging and facilitating communication between the applicant's design engineer and staff's consultant engineer for the past several months. Throughout all this time, an acceptable design has never been agreed upon between all of the parties. The two engineering firms couldn't present a suitable plan to the city engineer for his review. As explained below, with the current limited information presented to my office, the City Engineer recommends denial of this application.

This particular preliminary plat application was continued from the September and October meetings because of specific questions about the drainage design. The focus was on the backwater issues on the adjacent north property, and increased runoff onto the adjacent southern property. The applicant is proposing several drainage pipes to cross under the cul de sac and the construction of detention ponds north and south of this structure. There is a unique design feature with this proposed layout that does not meet current code requirements. Water, in big storm events, will collect on the road at a depth of less than a foot. This will eliminate the backwater issues upstream from the development and will eliminate the increase to the downstream release of water. The applicant is keeping this water onsite in the roadway, in lieu of impacting adjacent properties. **Keeping back water and detention in the public roadway does not meet code and the city engineer recommends denial of the variance to the detention and denial of this preliminary plat application.**

No identified wetlands are located on or abutting the area of request as shown on the Choctaw quadrangle of the 1989 National Wetlands Inventory map as prepared by the United States Department of the Interior Fish and Wildlife Service.

All future development on the proposed tracts must conform to the applicable requirements of Municipal Code Chapter 13, "Drainage and Flood Control."

Resolution 84-20 requires that developers install and maintain sediment and/or erosion controls in conjunction with their construction activities. Any proposed development must conform to the applicable requirements of Municipal Code Chapter 43, "Erosion Control." Sediment control plans must be submitted to and approved by the city before any land disturbance is done on-site. The developer is responsible for the cleanup of sediment and other debris from drainage pipes, ditches, streets and abutting properties as a result of his activities.

Easements and Right-of-Way

The required easements and existing and proposed right of way for the area of request are illustrated on the preliminary plat and will be dedicated to the city when the final plat is filed.

All easements and right of way dedications are to comply with Code Sections 38-41 and 38-44.

Fire Marshal's Comments:
The Fire Marshal has reviewed this request for the preliminary plat of Florence Estates. The property is required to meet and maintain the requirements of Midwest City Ordinances Section 15. Fire hydrant spacing shall be in accordance with the Midwest City Ordinance Section 15-22. The dead end turn around shall be approved by the Fire Department prior to installation.

Planning Comments:
The purpose of this preliminary plat is to create seven (7) single family residential lots. This plat is associated with the PUD that was approved in July 2018.

One new curb-cut along S. Post Road will provide access to the area of request.

The Park Land Review Committee met on September 20, 2018 to review the proposed park land/open space. According to the calculations provided in the 2012 Subdivision Regulations, the applicant is required to provide .03 acres of parks and open space. The applicant is proposing an area of park and open space containing a total of .45 acres of

private park and open space to be maintained by the Homeowners Association. The HOA covenants must be provided to staff with the Final Plat application and provisions for care and maintenance of the park land/open space must be included.

A portion of the proposed park land will also serve as detention for the development and must therefore meet the requirements of Section 38-49.4(D) of the Subdivision Regulations.

This section requires that the park land must adhere to the following considerations:

- Be located between a building and street or completely bound by streets
- Be viewable from public space
- Any slope of the pond area may not exceed 33%
- Accessible by patrons
- Contain a seating area, public area or fountain
- One tree or planter at least 16 square feet for every 200 square feet of open space and be located within or adjacent to the open space.

Regarding lighting, plans show light poles on the east and west sides of the subdivision. A light pole will also be required for the park land/detention area.

Thoroughfare screening is required as the subdivision is located off of S. Post Road. The applicant proposes an 8' cedar capped fence. The screening fence must observe the right-of-way and the building line along S. Post. A subdivision identification sign is also proposed. A sight triangle is shown on the plat. The sign must observe the right-of-way and the sight triangle.

Section 38-48-12(B)(1) states that "when a block exceeds six hundred (600) feet in length, the Planning Commission may require a dedicated easement not less than fifteen (15) feet in width and a paved crosswalk not less than four (4) feet in width to provide pedestrian access across the block." The street is 609.50 feet in length so the Planning

Commission must include whether or not a crosswalk is required in their recommendation.

A Tree Preservation/Mitigation Plan is not required as this subdivision is less than five (5) acres in area.

As this preliminary plat does not conform to the Subdivision Regulations, staff recommends denial.

In the recommendation, the Planning Commission must note if they will require a crosswalk as the block exceeds 600' in length. The proposed block is 609.50'

Action Required: Approve or reject the Preliminary Plat of Florence Estates for the property located as noted herein, subject to the staff comments and recommendations as found in the January 2, 2019, agenda packet, and as noted in PC-1976 file.

Billy Harless, AICP
Community Development Director

KG

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

Applicant: FLORENCE ESTATES
Phone Number:_____
Address:_____

Preliminary Plat Requirements/Checklist - Engineering

The preliminary plat shall be accompanied by a statement signed by the registered engineer preparing the plat that he has, to the best of his ability, designed the subdivision in accordance with the latest subdivision regulations and in accordance with the ordinances and regulations governing the subdivision of land.

38-18	**Preliminary Plat:**	
Administrative	North arrow, scale, date, and site location map	✓
Administrative	The total number of lots	✓
Administrative	The total area of development	✓
Administrative	The location of proposed lots, areas in Acres and Square Feet, and dimensions.	✓
Administrative 38-42.3(b)(3)	The location of property lines, existing easements, buildings, fences, cemeteries or burial grounds, and other existing features within the area to be subdivided and similar facts regarding existing conditions on immediately adjacent property.	✓
Administrative 38-42.3(b)(3)	The location of any natural features such as water courses, water bodies, flood hazard areas, tree masses, steep slopes, or rock outcroppings within the area to be subdivided and similar facts regarding existing conditions on immediately adjacent property.	✓
Administrative 38-42.3(b)(3)	The location, width, and name of all existing or platted streets or other public ways (i.e. railroad and state-owned) within or immediately adjacent to the tract.	✓
Administrative	The location of all existing or abandoned oil or gas wells, oil or gas pipelines and other appurtenances associated with the extraction, production and distribution of petroleum products and all related easements on the site or on immediately adjacent property.	✓
13-18.2(c)	The applicant shall furnish with the application to the city a current title commitment issued by a title insurance company authorized to do business in Oklahoma, a title opinion letter from an attorney licensed to practice in Oklahoma, or some other acceptable proof of ownership, identifying all persons having an ownership interest in the property subject to the preliminary plat.	✓
Administrative	The legal metes and bounds of the property being developed.	✓
13-69.7(1)	The area of the preliminary drainage plan in acres shown at points where storm water enters and leaves the proposed subdivision, and where drainage channels intersect roadways and at junction points.	✓
13-69.7(3)	The location, size, and type of existing and proposed storm water control facilities including storm sewers, inlets, culverts, swales, channels and retention or detention ponds and areas. The approximate area in acres served by said facilities shall be shown.	✓

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

13-69.7(4)	Special structures such as dams, spillways, dikes or levees.	✓
Administrative	Location of Floodplain if adjacent or within development	✓
Administrative	Location of Wetlands if adjacent or within development. If so, the developer is required to notify the Army Corp of Engineers.	✓
Administrative 38-43.3(a)(1)	Show the location and size of water mains.	✓
Administrative 38-43.3(a)(1)	Show the location and size of wastewater mains.	✓
Administrative 38-43.3(a)(2)	Show the location and specifications for fire hydrant systems.	✓
Administrative	Finish floor elevations for all pad sites	✓
Administrative 13-69.7(2)	Drainage arrows on all lots showing the final grading and where the water will drain	✓
Administrative 38-54.3(c)(1) 38-54.3(d)(1) 38-54.4	Required retaining walls and retaining wall easements	✓
Administrative	Existing contours with intervals not to exceed two (2) feet referenced to a United State Geological Survey or Geodetic Survey bench mark or monument.	✓
Administrative	Show the proposed street layout and right of ways.	✓
38-45.4(c)	All existing arterial streets and such collector and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress.	✓
38-45.4(d)	All access points to existing roadways and be of the required number.	✓
38-45.4(e)	The development shall have two (2) connections to adjacent properties.	✓
38-45.4(n)	The names of all new proposed streets.	✓
38-45.4(o)	The development shall not have any proposed cul-de-sacs longer than five hundred (500) feet in length	✓
38-47	The location and size of all proposed pedestrian crosswalks, bike trails, horse trails, or other supplementary movement systems.	✓
38-18.2(a)(1) 38-44.3(a)(2)	**Preliminary stormwater management plan (SWMP)**	✓
38-44.3(e)(1)	A digital copy of the preliminary SWMP shall be submitted along with the preliminary plat.	
38-44.3(e)(2)	The preliminary SWMP shall be labeled as "Preliminary"	
38-44.3(e)(3)	The preliminary SWMP shall be signed, sealed, and dated by the professional engineer (P.E.) or shall contain a statement showing the professional engineer's name and license number and affirming the preliminary SWMP was prepared under the direction of the engineer and that the plan is preliminary	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

38-44.3(b)(3)	If no preliminary drainage plan is required [only upon city engineer's approval, see 38-44.44 (b)(3)]: show existing drainage patterns, runoff coefficients, and the proposed changes to these items (before and after development)	
38-44.3(c)	The preliminary SWMP must comply with the Engineering Standards Manual and construction details and the Midwest City Code of Ordinances (e.g. chapters 13 and 43), including control/sediment plans	
38-18.2(a)(2) 38-44.4(a)(2)	**Preliminary drainage plan**	✓
13-69.7(1)	The area of the preliminary drainage plan in acres shown at points where storm water enters and leaves the proposed subdivision, and where drainage channels intersect roadways and at junction points.	
13-69.7(3)	The location, size, and type of existing and proposed storm water control facilities including storm sewers, inlets, culverts, swales, channels and retention or detention ponds and areas. The approximate area in acres served by said facilities shall be shown.	
13-69.7(4)	Special structures such as dams, spillways, dikes or levees.	
38-44.4(c)(1)	The preliminary drainage plan shall show the watershed affecting the development and how the runoff from the fully-developed watershed will be conveyed to, through, and from the development.	
38-44.4(c)(2)	The preliminary drainage plan must comply with the Engineering Standards Manual and construction details and the Midwest City Code of Ordinances (e.g. chapters 13 and 43)	
38-44.4(d)(1)	Three (3) paper copies of the preliminary drainage plan	
38-44.4(d)(2)	The preliminary drainage plan shall be labeled as "Preliminary"	
38-44.4(d)(3)	The preliminary drainage plan shall be stamped by and dated by the engineer, professional	
38-44.5	**If the development proposed is adjacent to or within the 100-year floodplain the following are required:**	N/A
38-44.5(a)	No Development within a floodway.	
38-44.5(b)	All 100-year floodplains shall be maintained in an open natural condition	
38-44.5(b)(3)(a)	The 100-year floodplain shall be dedicated on the final plat to the city as a single lot or may be owned and maintained by an HOA	
38-44.5(b)(3)(b)	No portion of a single-family or two-family residential lot shall exist within the 100-year floodplain	
38-44.5(b)(3)(c)	A fifteen-foot wide maintenance easement adjacent to the floodway	
38-44.5(b)(3)(e)	All streets adjacent to a 100-year floodplain shall have a minimum ROW width of fifty (50) feet.	
38-44.5(b)(3)(f)(2)	All streets adjacent to a 100-year floodplain shall have a minimum sixty (60) percent of the linear frontage	
38-44.5(b)(3)(f)(3)(a)	Not more than one (1) cul-de-sac in a row adjacent to 100-year floodplain	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

38-44.5(b)(3)(f)(2)(b)(1)	A minimum fifty (50) percent of an adjacent cul-de-sac bulb shall be open to the 100-year floodplain and no residential lot shall encroach within the area between this line and the major creek.	
38-44.5(b)(3)(f)(2)(b)(2)	An entry monument(s) or feature(s) as well as landscaping shall be provided at the end of the cul-de-sac and a pathway of a minimum twelve (12) feet in width shall be provided to the major creek	
38-18.2(a)(3) 38-43.3	**Preliminary utility plan**	✓
Administrative	The preliminary utility plan shall show the location and width of all adjacent utility easements	
38-38.43.2(2)	Width of all proposed utility easements	
38-43.3(a)(1)	The preliminary utility plan shall show the location and size of water mains.	
38-43.3(a)(1)	The preliminary utility plan shall show the location and size of wastewater mains.	
38-43.3(a)(2)	The preliminary utility plan shall include plans and specifications for fire hydrant systems.	
38-43.4(b)	All water and wastewater utilities including connections within the ROW or easements shall be vested to the city.	
38-43.4(d)	No utility or service lines shall cross another lot.	
38-43.4(e)	Any utility adjacent to non-city government roads shall be constructed outside that ROW and in a separate easement unless agreed upon by non-city owner and Midwest City	
38-18.2(a)(5)	**Preliminary site development plan**	✓
Administrative	Finish floor elevations for all pad sites	
Administrative 13-69.7(2)	Drainage arrows on all lots showing the final grading and where the water will drain (not to drain over more than adjacent lot)	
Administrative 38-54.3(c)(1) 38-54.3(d)(1) 38-54.4	Required retaining walls and retaining wall easements	
Administrative	Existing contours with intervals not to exceed two (2) feet referenced to a United State Geological Survey or Geodetic Survey bench mark or monument.	
38-18.2(a)(6)	**Street layout plan**	✓
Administrative	The classification of every street within or adjacent to the development.	
38-45.4(b)	The streets within the development shall conform to the city's comprehensive plan.	
38-45.4(c)	The proposed street system shall extend all existing arterial streets and such collector and local streets as may be necessary for convenience of traffic circulation and emergency ingress and egress.	
38-45.4(d)	The street layout plan shall show all access points to existing roadways and be of the required number.	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

38-45.4(e)	The street layout plan shall have two (2) connections to adjacent properties.	
38-45.4(n)	The street layout plan will have the names of all new proposed streets.	
38-45.4(o)	The street layout plan shall not have any proposed cul-de-sacs longer than five hundred (500) feet in length	
38-47	The location, size, and easements of all proposed pedestrian crosswalks, bike trails, horse trails, or other supplementary movement systems.	
38-18.2 (a) (7)	**Street signage and striping plan**	✓
Administrative	Proposed signage of development	
Administrative	Proposed striping if required	
38-18.2 (a) (9)	**Other plans**	
Engineering Comments and Recommendations:		
Associated Departments (Fire, Stormwater, and Utilities) Comments and Recommendations:		

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

Applicant: Florence Estates
Phone Number:_____
Address:_____

Preliminary Plat Requirements/Checklist – Planning

☒ Lot to be subdivided is less than 5 acres
☒ Lot to be subdivided has an area of more than 10,000 square feet ~~10,000~~ 100,173

38-48.2	**Zoning Compliance**	
38-48.2	All lots shall conform to zoning district compliance.	X - PUD
38-48.4	**Lot Shape**	
38-48.4 (A) (B)	Lots shall generally be rectangular in shape. Flag lots are prohibited. Irregular lots shall meet all width, frontage and setback requirements as required by the zoning ordinance.	X
38-48.5	**Lot Lines**	
38-48.5 (A) (1)	Side lot lines shall be at ninety degree angles or radial to street Right-of-Way lines to the greatest extent possible.	X
38-48.5 (B) (1)	All lot lines shall align along County, school district and other jurisdictional boundary lines.	X
38-48.6	**Lot Orientation Restrictions**	
38-48.6 (A)	No single-family, two-family or townhome lot shall front onto or have a driveway onto any Arterial Street.	X
38-48.6 (B)	Lots are prohibited from backing to local streets.	X
38-48.7	**Limits-of-No-Access – shown on preliminary plat**	
38-48.7 (A)(1)	Low Density lots shall not derive access from an Arterial Street.	X
38-48.7 (A)(2)	Lots facing Collector Streets should be minimized to the fullest extent.	NA
38-48.8	**Lot Frontages**	
38-48.8 (A)(1)	Each lot shall have adequate access to a street by having frontage on a street that is not less than 35' at the street Right-of-Way line. This also applies to lots fronting onto an eyebrow or bulb portion of a cul-de-sac.	X
38-48.8(B)(1)(a)	For single-family, two-family and townhomes, double frontage lots are prohibited from backing or having the side facing onto an Arterial Street without appropriate screening.	X
38-48.8(B)(1)(b)	Where lots back or side onto an Arterial Street, no driveway access is allowed onto the Arterial Street.	NA
38-48.8(B)(2)	For multifamily and nonresidential lots, if lots have frontage on more than one street, a front building line must be established for each street.	NA
38-48.8(B)(3)	Residential lots should face the front of a similar lot, park or open space.	X
38-48.10	**Lot and Block Numbering**	
38-48.10(A)	All lots within each phase of a development are to be numbered consecutively	X

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

	within each block. Each block shall have alpha or numeric designations.	X
38-48.11	**Building Lines**	
	Building lines along all streets shall be shown on the Preliminary Plats and shall conform with the minimum setbacks for front, side and rear yards as required by the zoning district.	X
38-48.12	**Block Requirements**	
38-48.12(B)(1)	Blocks for residential uses shall not be longer than 1,800 feet measured along the center line of the block.	X
38-48.12(B)(2)	When a block exceeds 600 feet in length, the Planning Commission may require a dedicated easement not less than 15 feet wide and a paved crosswalk not less than 4 feet wide to provide pedestrian access across the block.	Note in Report
38-48.12(C)(1)	Blocks used for residential purposes should be of sufficient width to allow for two tiers of lots of appropriate depth.	X
38-48.12(C)(2)	Exceptions to the prescribed block width shall be permitted for blocks adjacent to major streets, railroads or waterways.	NA
38-48.12(C)(3)	Blocks intended for business and industrial use should be of a width suitable for the intended use, with due allowance for off-street parking and loading facilities.	NA
38-48.14	**Subdivision Name Requirement**	
38-48.14(A)(1)	New subdivisions shall be named so as to prevent conflict or "sound-alike" confusion with names of other subdivisions.	X
38-48.14(A)(2)	Subdivisions with similar names shall be located in proximity to each other.	X
38-49.3	**Subdivision Amenities – Where amenities are proposed in conjunction with a development, such amenities shall be reviewed and approved in accordance with the following:**	
38-49.3(A)	Preliminary plans and illustrations, along with a written statement of such concepts, shall be submitted for review and approval with the Preliminary Plat.	X Screening, benches, sign
38-49.3(B)	Plans for amenities shall then be incorporated into the screening plan and/or landscape plan for submittal as part of the construction plans.	-will be due w/ const. plans
38-49.3(C)	Lighting plans for all outdoor amenities	none req.
38-49.3(D)	Plans for structural elements shall be sealed by a licensed Professional Engineer and shall be considered for approval by the City.	na
38-49.4	**Design of Amenities**	
38-49.4(A)(1)(a)	Entry features shall be constructed entirely on privately owned property and shall not suspend over a public Right-of-Way.	design proposed
38-49.4(A)(1)(b)	Minor elements of an entry feature may be placed within an entry street median upon Plat approval, provided that such street median is platted as a non-buildable lot and dedicated to a HOA for private ownership and maintenance.	NA
38-49.4(A)(1)(c)	An entry feature having a water pond, fountain or other water feature shall only be allowed if approved by the Planning Commission and City Council during the plat review process.	None proposed
38-	No entry feature, other than screening walls or extensions of screening walls,	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

49.4(A)(1)(d)	may be constructed on any portion of a single-family, two-family or townhome	
38-49.4(A)(1)(e)	All such features shall be constructed on lots that are platted as "non-buildable" lots and dedicated to a HOA for private ownership and maintenance.	X
38-49.4(A)(2)	Entry features shall not encroach into the visibility triangle or otherwise impair pedestrian or vehicular visibility.	X
38-49.4(A)(3)	The maximum height for entry features and structures shall be the maximum height of the governing zoning district as measured from the nearest street or sidewalk grade.	X
38-49.4(B)	If private recreation facilities are provided, they shall be centrally located within the overall development to the greatest extent possible.	NA
38-49.4(C)	All outdoor amenities shall provide appropriate lighting.	two light poles proposed one on either end of street
38-49.4(D)	A detention or retention pond shall be considered an amenity if it meets the following design considerations:	X
38-49.4(D)(1)	Located between the building and street or completely bounded by streets	X
38-49.4(D)(2)	Viewable from public space	X Engineer has agreed to also add a light pole in the center by detention/ park land
38-49.4(D)(4)	Accessible by patrons	X
38-49.4(D)(5)	Seating area, public art or fountain	X - benches proposed
38-49.4(D)(6)	One tree or planter at least 16 square feet for every 200 square feet of open space, and be located within or adjacent to the open space.	X - existing trees that are not removed will count
38-50.2	**Homeowners' Association (HOA) Applicability**	
38-50.2(A)	Any one or more of the following elements created as part of a development shall require formation of a HOA prior to recordation of a final plat in order to maintain the amenity or facilitly:	Will be required
38-50.2(A)(1)	Amenity	X
38-50.2(A)(2)	100-year Floodplain	NA
38-50.2(A)(3)	Private streets	NA
38-50.2(A)(4)	Thoroughfare screening	X
38-50.2(A)(5)	Detention or retention ponds	X
38-50.2(A)(6)	Private park	X
38-51.2	**Applicability of Parks and Open Space Dedication**	
	This shall apply to all residential subdivision plats having a dwelling unit density of greater than one unit per net acre	X
38-51.5(A)	The acreage to be contributed concurrent with the final approval by the City Council of any residential subdivision plat shall be determined by the following formula:	→ next page

Two acres	X (multiplied by)	Each 1,000 persons projected to occupy the fully developed subdivision	=	Amount of land to be contributed
		Which is		

.33333

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

.002 x 2.38 x 7 = .03 acre

	.002 acres	X (multiplied by)	Number of person per dwelling unit	X (multiplied by)	# of dwelling units projected for subdivision	=	Amount of land to be contributed	
38-51.6	**Suitability of land**							.03 acre
38-51.6(A)(1)	The dedicated land should form a single parcel or tract of land at least 3 acres in size unless the Parkland Review Committee determines that a smaller tract would be in the public interest.							entire subdivision is < 3 acres
38-52.3	**Design requirements for parks and open space**							
38-52.3(A)	Parks and open spaces shall be bounded by a street or by other public uses.							X
38-52.3(B)(1)	Single-family and two-family residential lots shall be oriented such that they front or side onto parks and open spaces but do not back to them.							X
38-52.3(B)(2)	Residential lots shall only be allowed to back onto a park or open space when:							NA
38-52.3(B)(2)(a)	A trail is provided within the related park or open space.							NA
38-52.3(B)(2)(b)	The sites physical character does not reasonably accommodate an alternative design or the layout of the subdivision complements the use of the use of park or open space (e.g., lots backing to a golf course.)							NA
38-52.3(C)(1)	A proposed development adjacent to a park of open space shall not be designed to restrict public visibility or reasonable access from other area developments.							X
38-52.3(C)(2)	Street connections to existing or future adjoining subdivisions shall be required to provide reasonable access to parks and open space areas.							NA
38-52.3(D)(1)	Where a non-residential use must directly abut a park or open space area, the use shall be oriented such that it sides, and does not back onto the park or open space area if at all possible							NA
38-52.3(D)(2)	Nonresidential uses shall be separated from the park or open space by a minimum 6 foot tall decorative metal fence with an irrigated living screen.							NA
38-52.3(E)	Alleys should not be designed to encourage their use as a means of vehicular, bike or pedestrian travel to the park.							NA
38-52.3(F)(1)	Public access into parks and open spaces shall not be less than 50' in width at the public Right-of-Way line, at the street curb, and at any other public access point.							X
38-52.3(F)(2)	Such access shall not be part of a residential lot or other private property.							X
38-52.8	**Hike-and-Bike Trail Requirements**							NA - No trails designated in this area
38-52.8(B)	Hike-and-Bike trails, especially those providing access too and along 100-year Floodplains and other open spaces, shall be in accordance with the following design criteria:							
38-52.8(B)(1)	A minimum 30' wide level ground surface shall be provided for a 10' wide public hike-and-bike trail. The 30' wide level ground surface (compliant with ADA) may be provided within and/or outside of the 100-year floodplain.							
38-52.8(B)(2)	The Right-of-Way of a public street may count towards the 30' wide, ADA compliant level ground surface upon approval from the Director of Community Services.							

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

38-52.8(B)(4)	The hike-and-bike trail shall be designed to minimize visibility blind spots from public streets for public safety purposes.	
38-52.8(C)(1)	The Director of Community Services shall have the authority to determine the placement of a public hike-and-bike trail at the time of the preliminary plat review and approval.	
38-52.8(C)(2)	The location of such trails shall be safe and economical.	
38-52.8(C)(3)	No development shall interrupt future trail routes or otherwise hinder efficient public access to or from an existing or future planned trail.	
38-52.8(D)(1)	The location of trails within developments adjacent to or within a 100-year Floodplain recognized on the Trails Master Plan shall be coordinated with the Director of Community Services and shall be staked in the field by the developer and approved by the Director of Community Services prior to the submittal of a preliminary plat.	
38-52.8(D)(2)	The location of the trail shall be specified on the preliminary plat as the approved location for the hike-and-bike trail, and an easement for such shall be shown on the preliminary plat and final plat for any portions of the trail that traverse private property.	
38-52.8(E)	When development is adjacent to an undeveloped property, a pedestrian access stub-out in conjunction with a street connection to the edge of the development shall be required to allow for future access between developments as indicated on the Trails Master Plan.	
38-53.4	**Tree Canopy Management Plan**	NA < 5 acres
38-53.4	A Tree Canopy Management Plan shall be required as part of the preliminary plat. **This only applies to sites five acres or larger.**	
38-53.5(B)(1)	The applicant shall prepare a Tree Canopy Management Plan and shall submit the plan as part of the preliminary plat application.	
38-53.5(B)(2)	Within the Tree Canopy Management Plan, the applicant shall provide the following information:	
38-53.5(B)(2)(a)	Pre-development tree canopy coverage (as determined by the City)	
38-53.5(B)(2)(b)	Post-development tree canopy coverage (as determined by the applicant)	
38-53.5(B)(2)(c)	Visual identification of tree canopy to be removed.	
38-53.5(C)(1)	Tree Canopy Management Plan shall be reviewed by the Director of Community Development for compliance with all standards.	
38-53.5(C)(2)	After reviewing the Tree Canopy Management Plan, the Director of Community Development shall make a recommendation to the Planning Commission and City Council. The Director must act within 30 days of the official filing date of the preliminary plat application.	
38-53.6	**Tree Preservation Requirements**	
38-53.6(A)	Option A (Standard Option) – Only trees in the following areas may be removed:	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

38-53.6(A)(1)	The Tree Canopy or any tree located within any street Right-of-Way may be removed.	NA
38-53.6(A)(2)	The Tree Canopy or any tree located within any area dedicated for water, wastewater, drainage and other similar infrastructure needs may be removed.	
38-53.6(A)(3)	The Tree Canopy or any tree located within any area required by the subdivision ordinance for a site feature, such as a screening wall, may be removed.	
38-53.6(B)	Option B (Alternative Compliance)	
38-53.6(B)(1)	The applicant may elect to develop a site using the Residential Cluster Development option.	
38-53.6(B)(2)	In the design of the Tree Canopy Management Plan, if a Residential Cluster Development Option is used, only the Tree Canopy or trees within the designated open space areas shall be preserved.	
38-53.7	**Tree Mitigation Plan – Required if trees are removed prior to approval of a Tree Canopy Management Plan**	
38-53.7(B)(2)	Tree Mitigation Requirements:	
38-53.7(B)(2)(a)	The applicant shall calculate the area of Tree Canopy that should have been preserved under Option A or Option B.	
38-53.7(B)(2)(b)	The resulting calculation shall be the amount of Tree Canopy that shall be restored.	
38-53.7(B)(2)(c)	Replacement trees shall be required to cover an area equal to the calculated restoration area.	
38-53.7(B)(2)(d)	The applicant shall calculate the number of replacement trees needed to cover the calculated restoration area.	
38-53.7(B)(2)(e)	In calculating the area for replacement trees, the mature size of replacement trees shall be used.	
38-53.7(B)(2)(f)	In calculating the area for replacement trees, only large trees shall be used.	
38-53.7(B)(2)(g)	Tree Canopy coverage at maturity is to be obtained through the planting of 2.5 inch caliper trees at spacing that will meet the calculated restoration area.	
38-53.7(B)(2)(h)	Replacement trees shall be a minimum 2.5 inch caliper trees.	
38-53.7(B)(2)((i)	Replacement trees shall be planted at spacing that will meet the calculated restoration area.	
38-53.7(B)(2)(j)	The Tree Canopy Management Plan shall show graphically the location of each replacement tree.	
38-53.7(B)(2)(k)	The number of replacement trees shall be shown in a tabular format and indicated the tree species and area of coverage assumptions for each tree species at maturity.	
38-53.7(B)(2)(l)	Replacement trees shall be planted prior to the approval of a final plat.	
38-53.7(B)(3)	Alternative Tree Mitigation Requirements	

The City of
MIDWEST CITY
COMMUNITY DEVELOPMENT DEPARTMENT
CURRENT PLANNING DIVISION

	Administrative	
	One digital copy of the preliminary plat	X
	Three 24x36 copies of the preliminary plat to scale	X
	Name of subdivision centered at the top of the preliminary plat.	X
	Name of city, county, state, section, township and range centered and printed at the top of the preliminary plat.	X
	Name and address of the owner of record, the subdivider, the owners engineer and the registered surveyor preparing the plat.	X
	Legal description of the property to be subdivided, including the acreage and number of proposed lots in the subdivision.	X
	Key map showing the location of the property to be subdivided referenced to existing or proposed arterial streets or highways.	X

Preliminary Plat Requirements/Checklist - Zoning

5.14.1	**Lot Variety Required (required for areas 5 acres or larger)**	NA < 5 acres
5.14.1(A)	Applicability – This section only applies to single-family residential developments of 5 acres or larger.	
5.14.1(B)(1)	15% of lots within a development shall be larger than the minimum lot size. Lots shall be increased at least 20% of the minimum lot size.	
5.14.1(B)(2)	15% of lots within a development may be smaller than the minimum lot size. Lot sizes shall not be reduced greater than 20% of the minimum lot size.	
5.14.1(C)	Single-family lots shall not be smaller than 6,000 square feet.	
5.14.1(D)	Lots of various sizes shall be evenly distributed throughout a development.	

Additional Notes:

From: Devin McCoy <DMcCoy@hglconstruction.com>
To: Kellie Gilles <kgilles@MidwestCityOK.org>
Date: 9/25/2018 9:52 AM
Subject: RE: Florence Estates

Kelli,

I do not have any images of the actual fencing, but we will be going with an 8' Cedar Capped fence. The screening and fence will be on that S Post entry, the opposite side will have a brick column and the 8' Cedar Capped fence as well. Let me know if any additional information is needed.

Devin

-----Original Message-----
From: Kellie Gilles [mailto:kgilles@MidwestCityOK.org]
Sent: Tuesday, September 25, 2018 8:43 AM
To: Devin McCoy <DMcCoy@hglconstruction.com>
Subject: Re: Florence Estates

Thank you Devin. Do you have a picture of the actual fencing that you will use for the screening? Or can you send me a description (height, materials, etc.) of the fencing that will attach to the sign and screen the development from S. Post? One last question... will the fencing be on both sides of the new road associated with the development?

Thank you again for getting me this information.

Kellie Gilles
Current Planning Manager
City of Midwest City
405-739-1223

>>> Devin McCoy <DMcCoy@hglconstruction.com> 9/25/2018 8:10 AM >>>
Kelli,

I have attached the required information.

Regards,

Devin McCoy |Cane Creek Homes|
P (405) 737-7588 | M (405) 423-5889
dmccoy@hglconstruction.com<mailto:dmccoy@hglconstruction.com>

Kellie,

I have attached an image that depicts the thoroughfare screening that we intend to use at Florence Estates. Magnolia Ridge is an existing neighborhood in Midwest City and we intend to model our screening after theirs.

In regard to the amenities slated for the detention area, we plan on having roughly 4-5 park benches for seating.

Devin

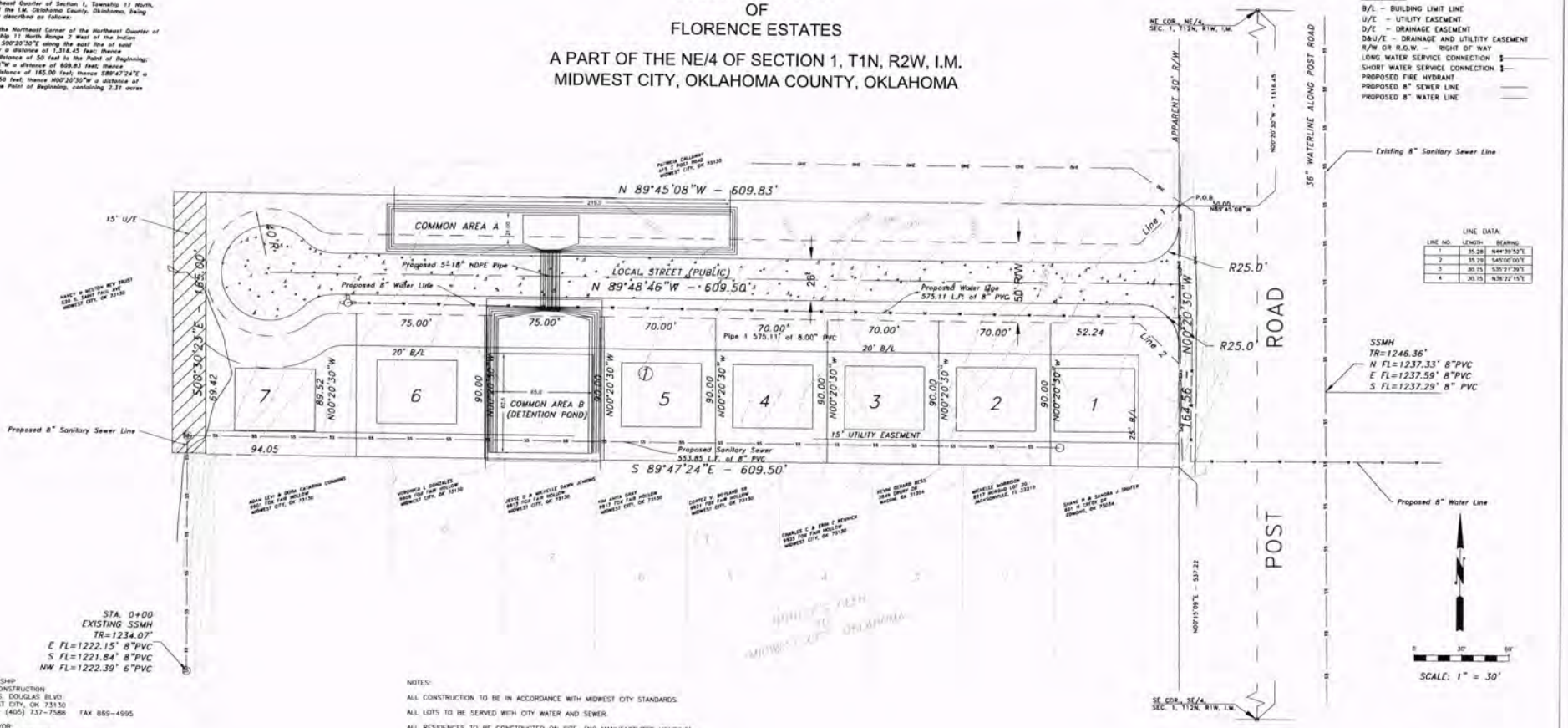
PRELIMINARY PLAT
OF
FLORENCE ESTATES

A PART OF THE NE/4 OF SECTION 1, T1N, R2W, I.M.
MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA

LEGAL DESCRIPTION:

Part of the Northeast Quarter of Section 1, Township 11 North, Range 2 West of the I.M. Oklahoma County, Oklahoma, being more particularly described as follows:

Commencing at the Northeast Corner of the Northeast Quarter of Section 1, Township 11 North Range 2 West of the Indian Meridian, thence S00°20'30"E along the east line of said Northeast Quarter a distance of 1,316.45 feet; thence N89°45'08"W a distance of 50 feet to the Point of Beginning; thence N89°45'08"W a distance of 609.83 feet; thence S00°30'23"E a distance of 165.00 feet; thence S89°47'24"E a distance of 609.50 feet; thence N00°20'30"W a distance of 164.56 feet to the Point of Beginning, containing 2.31 acres more or less.



LEGEND:

- B/L – BUILDING LIMIT LINE
- U/E – UTILITY EASEMENT
- D/E – DRAINAGE EASEMENT
- DAU/E – DRAINAGE AND UTILITY EASEMENT
- R/W OR R.O.W. – RIGHT OF WAY
- LONG WATER SERVICE CONNECTION
- SHORT WATER SERVICE CONNECTION
- PROPOSED FIRE HYDRANT
- PROPOSED 8" SEWER LINE
- PROPOSED 8" WATER LINE

LINE DATA:

LINE NO.	LENGTH	BEARING
1	35.28	N44°39'53"E
2	35.29	S45°00'00"E
3	30.75	S35°21'39"E
4	30.75	N38°22'15"E

0 30' 60'

SCALE: 1" = 30'

OWNERSHIP
HGL CONSTRUCTION
2000 S. DOUGLAS BLVD.
MIDWEST CITY, OK 73130
PHONE (405) 737-7588 FAX 869-4995

SURVEYOR:
JIVIDEN AND COMPANY
13501 EASTERN AVENUE
OKLAHOMA CITY, OK 73131
CA #4151 – EXPIRE JUNE 30, 2019

DENSITY:
7 SINGLE FAMILY RESIDENCIES ON 2.31 ACRES = 2.021 RES PER ACRE

PAVING:
APPROX. 610 LF OF PC CONCRETE PAVING

RECREATIONAL AREAS:
COMMON AREA A IS FOR STORM WATER DETENTION AS WELL AS A POSSIBLE RECREATIONAL AREA. (APPROXIMATELY 0.45 ACRES)

SCHOOL DISTRICT:
CHOCTAW–NICOMA PARK

NOTES:

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH MIDWEST CITY STANDARDS.

ALL LOTS TO BE SERVED WITH CITY WATER AND SEWER.

ALL RESIDENCES TO BE CONSTRUCTED ON SITE. (NO MANUFACTURED HOUSING)

HOMES TO HAVE A MINIMUM OF 1700 SQUARE FEET PLUS 2 CAR (MIN) GARAGES.

WATER AND SANITARY SEWER MAINS WITHIN THE SUBDIVISION TO BE 8 INCH.

CERTIFICATE OF SURVEYOR

I, TRACY JIVIDEN, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN AND FOR THE STATE OF OKLAHOMA, AND THAT THE FINAL PLAT OF FLORENCE ESTATES, AN ADDITION TO MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA, CONSISTING OF ONE SHEET, REPRESENTS A SURVEY MADE UNDER MY SUPERVISION ON THE _____ DAY OF _____, 2013, AND THAT ALL MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN, THAT THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYORS AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS; AND THAT SAID FINAL PLAT COMPLIES WITH THE REQUIREMENTS OF TITLE 11 SECTION 41-108 OF THE OKLAHOMA STATE STATUTES.

_____
TRACY JIVIDEN, REGISTERED LAND SURVEYOR #_____

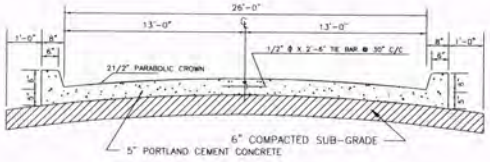
STATE OF OKLAHOMA
COUNTY OF OKLAHOMA S.S.

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED TRACY JIVIDEN TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE ABOVE INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED ON THE

_____ DAY OF _____, 2013.

MY COMMISSION EXPIRES: _____

_____
NOTARY PUBLIC



TYPICAL SECTION 5" P.C. CONC. PAVING

LOCATION MAP
NOT TO SCALE

PRELIMINARY PLAT: FLORENCE ESTATES
Jackson & Jackson Engineering, Inc
5350 S. Western Ave, Suite 222
Oklahoma City, Ok 73109
Certificate Of Authorization # 3770
Expires June 30, 2019
Phone: (405) 225-1978
Fax: (844) 274-2997

7-31-2018

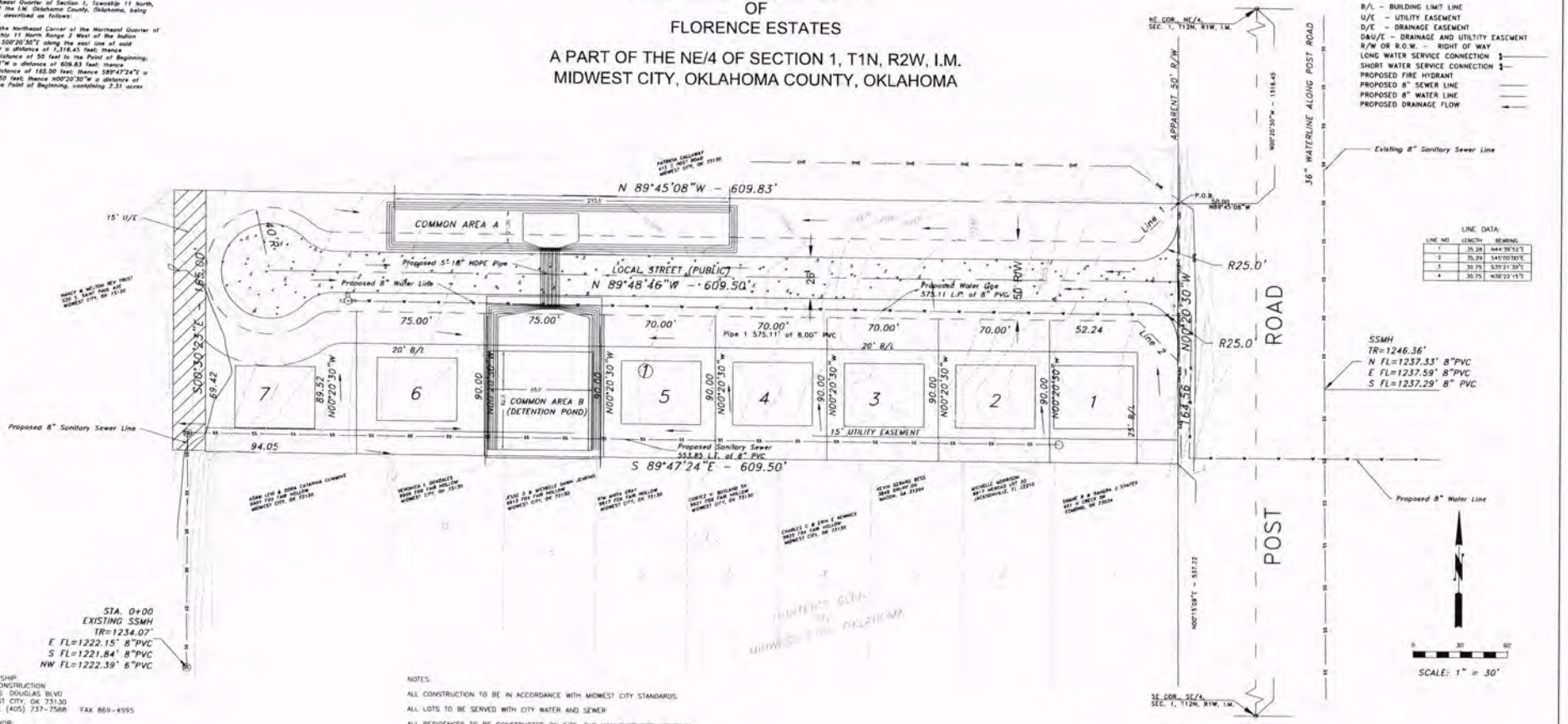
PRELIMINARY DRAINAGE MAP
OF
FLORENCE ESTATES

A PART OF THE NE/4 OF SECTION 1, T1N, R2W, I.M.
MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA

LEGAL DESCRIPTION:

Part of the Northeast Quarter of Section 1, Township 11 North, Range 2 West of the I.M. Oklahoma County, Oklahoma, being more particularly described as follows:

Commencing at the Northeast Corner of the Northeast Quarter of Section 1, Township 11 North Range 2 West of the Indian Meridian, thence S00°20'30"E along the east line of said Northeast Quarter a distance of 1,318.45 feet; thence N89°45'08"W a distance of 50 feet to the Point of Beginning; thence N89°45'08"W a distance of 609.83 feet; thence S00°30'23"E a distance of 165.00 feet; thence S89°47'24"E a distance of 609.50 feet; thence N00°20'30"W a distance of 164.58 feet to the Point of Beginning, containing 2.31 acres more or less.



LEGEND:

- B/L – BUILDING LIMIT LINE
- U/E – UTILITY EASEMENT
- D/E – DRAINAGE EASEMENT
- D&U/E – DRAINAGE AND UTILITY EASEMENT
- R/W OR R.O.W. – RIGHT OF WAY
- LONG WATER SERVICE CONNECTION
- SHORT WATER SERVICE CONNECTION
- PROPOSED FIRE HYDRANT
- PROPOSED 8" SEWER LINE
- PROPOSED 8" WATER LINE
- PROPOSED DRAINAGE FLOW

LINE DATA:

LINE NO.	LENGTH	BEARING
1	35.28	N44°39'52"E
2	35.29	S45°00'00"E
3	30.75	S35°21'30"E
4	30.75	N35°22'15"E

OWNERSHIP:
HGL CONSTRUCTION
2000 S. DOUGLAS BLVD.
MIDWEST CITY, OK. 73130
PHONE: (405) 737-7588 FAX 869-4995

SURVEYOR:
JIVIDEN AND COMPANY
13501 EASTERN AVENUE
OKLAHOMA CITY, OK. 73131
CA #4151 – EXPIRE JUNE 30, 2018

DENSITY:
8 SINGLE FAMILY RESIDENCIES ON 2.31 ACRES = 3.463 RES PER ACRE

PAVING:
APPROX. 610 LF OF PC CONCRETE PAVING

RECREATIONAL AREAS:
COMMON AREA A IS FOR STORM WATER DETENTION AS WELL AS A POSSIBLE RECREATIONAL AREA (APPROXIMATELY 0.52 ACRES)

SCHOOL DISTRICT:
CHOCTAW-NICOMA PARK

NOTES:

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH MIDWEST CITY STANDARDS.

ALL LOTS TO BE SERVED WITH CITY WATER AND SEWER.

ALL RESIDENCES TO BE CONSTRUCTED ON SITE. (NO MANUFACTURED HOUSING)

HOMES TO HAVE A MINIMUM OF 1700 SQUARE FEET PLUS 2 CAR (MIN) GARAGES.

WATER AND SANITARY SEWER MAINS WITHIN THE SUBDIVISION TO BE 8 INCH.

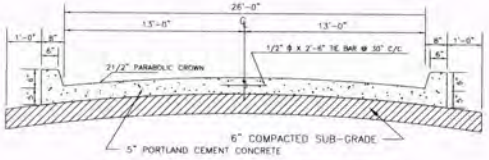
DRAINAGE NOTES:

1. *ALL LOTS WILL DRAIN TO THE STREET EXCEPT LOTS 5 AND 6. LOTS 5 AND 6 WILL DRAIN DIRECTLEY INTO THE DETENTION AREA.*
2. *THE DEVELOPMENT WILL BE GRADED IN SUCH A MANNER AS TO NOT TO IMPEDE THE RUNOFF FROM THE ADJACENT NORTH PROPERTIES.*
3. *THE DEVELOPMENT WILL NOT INCREASE THE EXISTING RUNOFF FROM THE SITE IN ORDER NOT TO INCREASE THE RISK OF FLOODING THE EXISTING ADJACENT SUBDIVISION SOUTH OF THIS DEVELOPMENT.*
4. *A DRAINAGE REPORT BY DR. ELLEN STEVENS, P.E. WAS SUBMITTED WITH THE PRELIMINARY PLAT.*

CERTIFICATE OF SURVEYOR

I, TRACY JIVIDEN, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN AND FOR THE STATE OF OKLAHOMA, AND THAT THE FINAL PLAT OF FLORENCE ESTATES, AN ADDITION TO MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA, CONSISTING OF ONE SHEET, REPRESENTS A SURVEY MADE UNDER MY SUPERVISION ON THE _____ DAY OF _____, 2018, AND THAT ALL MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN, THAT THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYORS AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS; AND THAT SAID FINAL PLAT COMPLIES WITH THE REQUIREMENTS OF TITLE 11 SECTION 41-108 OF THE OKLAHOMA STATE STATUTES.

_____
TRACY JIVIDEN, REGISTERED LAND SURVEYOR #_____



TYPICAL SECTION 5" P.C. CONC. PAVING

LOCATION MAP
NOT TO SCALE

SCALE: 1" = 30'

PRELIMINARY PLAT, FLORENCE ESTATES

Jackson & Jackson Engineering, Inc
5350 S. Western Ave., Suite 222
Oklahoma City, Ok 73109
Certificate Of Authorization # 3770
Expires June 30, 2019
Phone: (405) 225-1978
Fax: (844) 274-2997

7-31-2018

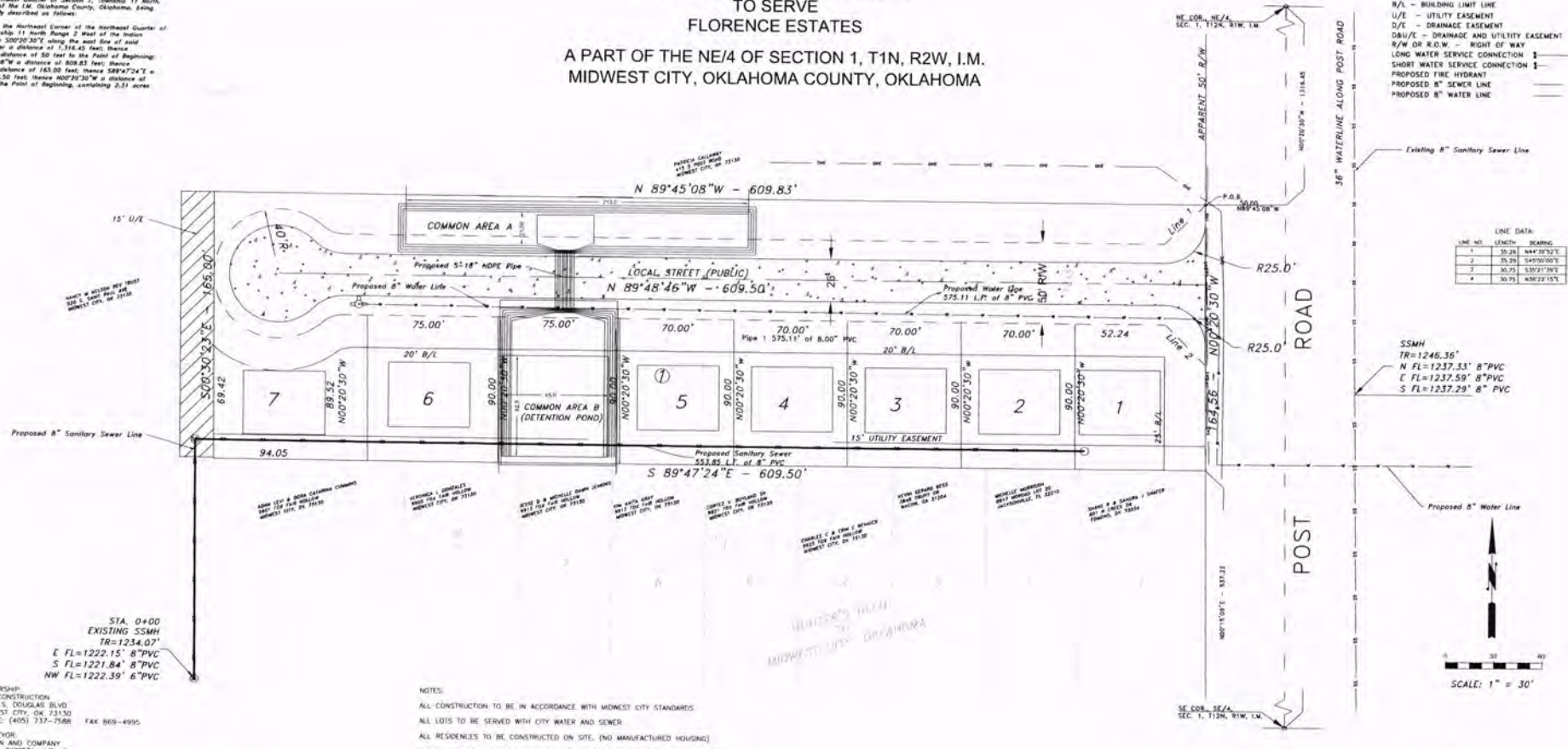
PRELIMINARY SEWER LINE PLANS
TO SERVE
FLORENCE ESTATES

A PART OF THE NE/4 OF SECTION 1, T1N, R2W, I.M.
MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA

LEGAL DESCRIPTION:

Part of the Northeast Quarter of Section 1, Township 11 North, Range 2 West of the I.M. Oklahoma County, Oklahoma, being more particularly described as follows:

Commencing at the Northeast Corner of the Northeast Quarter of Section 1, Township 11 North Range 2 West of the Indian Meridian, thence S00°20'30"E along the east line of said Northeast Quarter a distance of 1,316.45 feet; thence N89°45'08"W a distance of 50 feet to the Point of Beginning; thence N89°45'08"W a distance of 808.83 feet; thence S00°30'23"E a distance of 165.00 feet; thence S89°47'24"E a distance of 609.50 feet; thence N00°20'30"W a distance of 164.56 feet to the Point of Beginning, containing 2.31 acres more or less.



LEGEND:

- R/L – BUILDING LIMIT LINE
- U/E – UTILITY EASEMENT
- D/E – DRAINAGE EASEMENT
- D&U/E – DRAINAGE AND UTILITY EASEMENT
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- LONG WATER SERVICE CONNECTION
- SHORT WATER SERVICE CONNECTION
- PROPOSED FIRE HYDRANT
- PROPOSED 8" SEWER LINE
- PROPOSED 8" WATER LINE

LINE DATA:

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3	30.75	S35°21'39"E
4	30.75	N36°22'15"E

SCALE: 1" = 30'

OWNERSHIP:
HGL CONSTRUCTION
2000 S. DOUGLAS BLVD.
MIDWEST CITY, OK. 73130
PHONE: (405) 737-7588 FAX: 869-4995

SURVEYOR:
JIVIDEN AND COMPANY
13501 EASTERN AVENUE
OKLAHOMA CITY, OK 73131
CA #4151 – EXPIRE JUNE 30, 2018

DENSITY:
8 SINGLE FAMILY RESIDENCIES ON 2.31 ACRES = 3.463 RES PER ACRE

PAVING:
APPROX. 610 LF OF PC CONCRETE PAVING

RECREATIONAL AREAS:
COMMON AREA A IS FOR STORM WATER DETENTION AS WELL AS A POSSIBLE RECREATIONAL AREA [APPROXIMATELY 0.52 ACRES]

SCHOOL DISTRICT:
CHOCTAW-NICOMA PARK

NOTES:
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ALL LOTS TO BE SERVED WITH CITY WATER AND SEWER
ALL RESIDENCES TO BE CONSTRUCTED ON SITE. (NO MANUFACTURED HOUSING)
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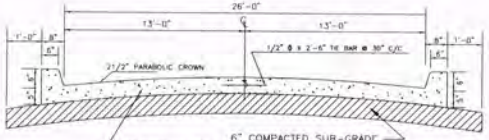
WATER AND SANITARY SEWER MAINS WITHIN THE SUBDIVISION TO BE 8 INCH



TYPICAL SECTION 5" P.C. CONC. PAVING

LOCATION MAP
NOT TO SCALE

CERTIFICATE OF SURVEYOR

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_____
TRACY JIVIDEN, REGISTERED LAND SURVEYOR #_____

STATE OF OKLAHOMA S.S.
COUNTY OF OKLAHOMA

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED TRACY JIVIDEN TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE ABOVE INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED ON THE

_____ DAY OF _____, 2013.

MY COMMISSION EXPIRES: _____

_____
NOTARY PUBLIC

PRELIMINARY PLAT, FLORENCE ESTATES

Jackson & Jackson Engineering, Inc
5350 S. Western Ave., Suite 222
Oklahoma City, Ok 73109
Certificate Of Authorization # 3770
Expires June 30, 2019
Phone: (405) 225-1978
Fax: (844) 274-2997

7-31-2018

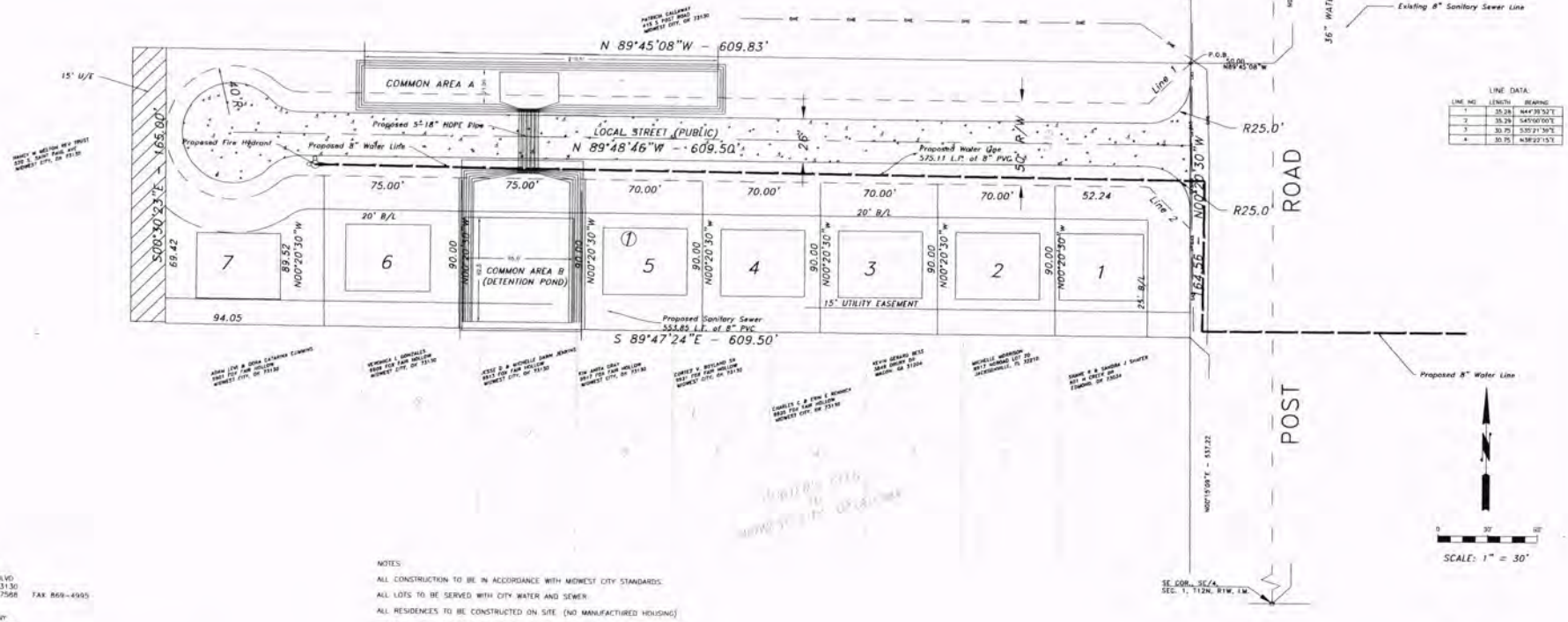
PRELIMINARY WATER LINE PLANS
TO SERVE
FLORENCE ESTATES

A PART OF THE NE/4 OF SECTION 1, T1N, R2W, I.M.
MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA

LEGAL DESCRIPTION:

Part of the Northeast Quarter of Section 1, Township 11 North, Range 2 West of the I.M. Oklahoma County, Oklahoma, being more particularly described as follows:

Commencing at the Northeast Corner of the Northeast Quarter of Section 1, Township 11 North Range 2 West of the Indian Meridian, thence S00°20'30"E along the east line of said Northeast Quarter a distance of 1,316.45 feet; thence N89°45'08"W a distance of 50 feet to the Point of Beginning; thence N89°45'08"W a distance of 609.83 feet; thence S00°30'23"E a distance of 165.00 feet; thence S89°47'24"E a distance of 609.50 feet; thence N00°20'30"W a distance of 164.56 feet to the Point of Beginning, containing 2.31 acres more or less.



LEGEND:

- B/L – BUILDING LIMIT LINE
- U/E – UTILITY EASEMENT
- D/E – DRAINAGE EASEMENT
- D&U/E – DRAINAGE AND UTILITY EASEMENT
- R/W OR R.O.W. – RIGHT OF WAY
- LONG WATER SERVICE CONNECTION
- SHORT WATER SERVICE CONNECTION
- PROPOSED FIRE HYDRANT
- PROPOSED 8" SEWER LINE
- PROPOSED 8" WATER LINE

LINE DATA:

LINE NO.	LENGTH	BEARING
1	35.28	N44°39'52"E
2	35.29	S45°00'00"E
3	30.75	S35°21'36"E
4	30.75	N38°22'15"E

SCALE: 1" = 30'

OWNERSHIP:
HGL CONSTRUCTION
2000 S. DOUGLAS BLVD
MIDWEST CITY, OK 73130
PHONE: (405) 737-7568 FAX 869-4995

SURVEYOR:
JIVIDEN AND COMPANY
13501 EASTERN AVENUE
OKLAHOMA CITY, OK 73131
CA #4151 – EXPIRE JUNE 30, 2018

DENSITY:
8 SINGLE FAMILY RESIDENCIES ON 2.31 ACRES = 3.463 RES PER ACRE

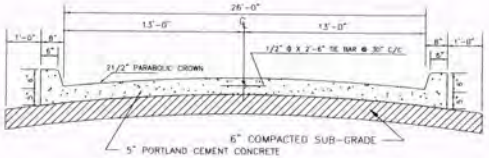
PAVING:
APPROX. 610 LF OF PC CONCRETE PAVING

RECREATIONAL AREAS:
COMMON AREA A & C FOR STORM WATER DETENTION AS WELL AS A POSSIBLE RECREATIONAL AREA. (APPROXIMATELY 0.52 ACRES)

SCHOOL DISTRICT:
CHOCTAW-NICOMA PARK

NOTES:

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH MIDWEST CITY STANDARDS.
ALL LOTS TO BE SERVED WITH CITY WATER AND SEWER.
ALL RESIDENCES TO BE CONSTRUCTED ON SITE. (NO MANUFACTURED HOUSING)
HOMES TO HAVE A MINIMUM OF 1700 SQUARE FEET PLUS 2 CAR (MIN) GARAGES.
WATER AND SANITARY SEWER MAINS WITHIN THE SUBDIVISION TO BE 8 INCH.



TYPICAL SECTION 5" P.C. CONC. PAVING

LOCATION MAP
NOT TO SCALE

CERTIFICATE OF SURVEYOR

I, TRACY JIVIDEN, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR IN AND FOR THE STATE OF OKLAHOMA, AND THAT THE FINAL PLAT OF FLORENCE ESTATES, AN ADDITION TO MIDWEST CITY, OKLAHOMA COUNTY, OKLAHOMA, CONSISTING OF ONE SHEET, REPRESENTS A SURVEY MADE UNDER MY SUPERVISION ON THE _____ DAY OF _____, 2013, AND THAT ALL MONUMENTS SHOWN THEREON ACTUALLY EXIST AND THEIR POSITIONS ARE CORRECTLY SHOWN, THAT THIS SURVEY MEETS THE OKLAHOMA MINIMUM STANDARDS FOR THE PRACTICE OF LAND SURVEYORS AS ADOPTED BY THE OKLAHOMA STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND SURVEYORS; AND THAT SAID FINAL PLAT COMPLIES WITH THE REQUIREMENTS OF TITLE 11 SECTION 41-108 OF THE OKLAHOMA STATE STATUTES.

_____
TRACY JIVIDEN, REGISTERED LAND SURVEYOR #_____

STATE OF OKLAHOMA)
COUNTY OF OKLAHOMA) S.S.

BEFORE ME, THE UNDERSIGNED, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED TRACY JIVIDEN TO ME KNOWN TO BE THE IDENTICAL PERSON WHO EXECUTED THE ABOVE INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME AS HIS FREE AND VOLUNTARY ACT AND DEED ON THE

_____ DAY OF _____, 2013.

MY COMMISSION EXPIRES: _____

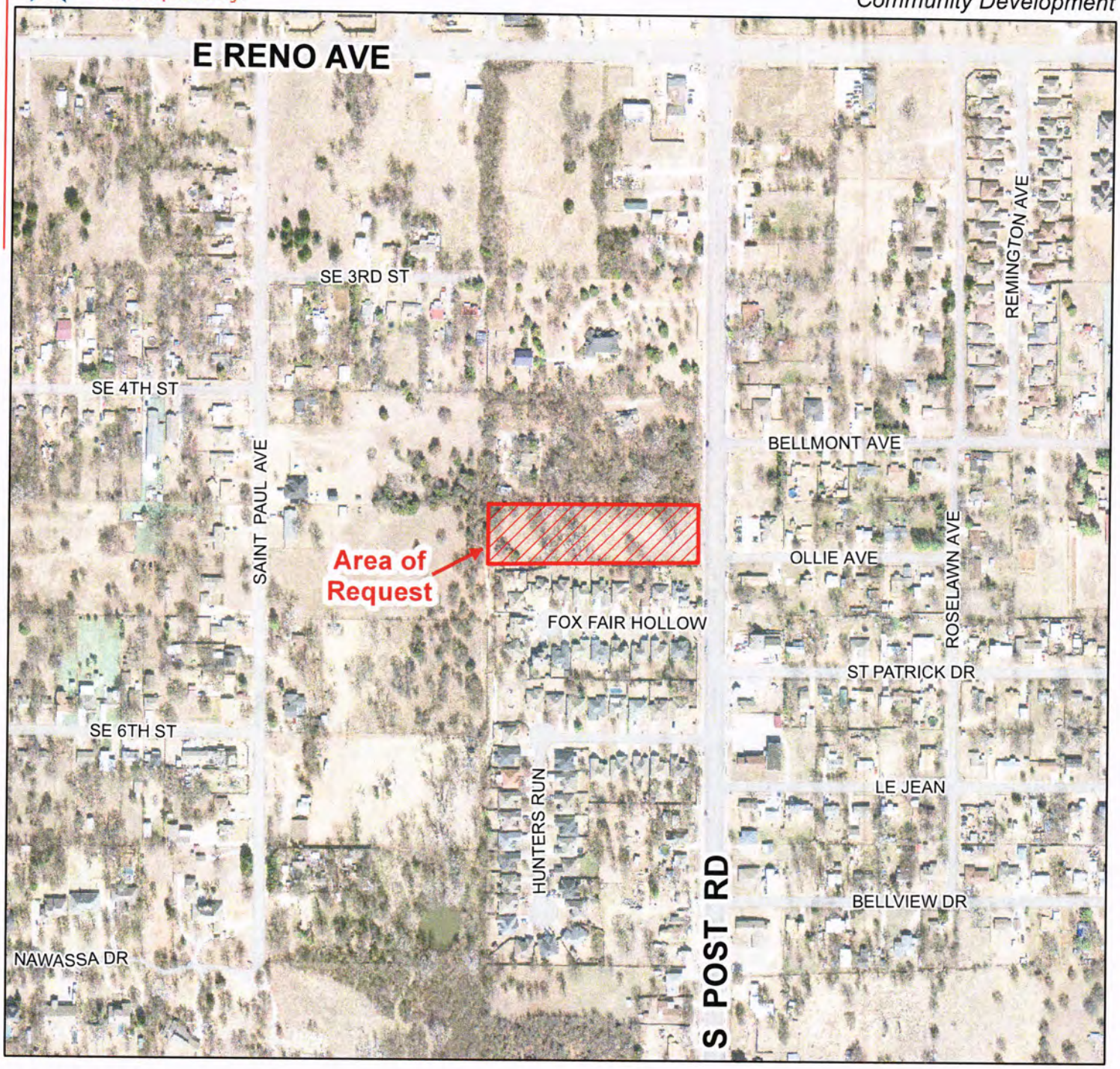
_____
NOTARY PUBLIC

PRELIMINARY PLAT: FLORENCE ESTATES
Jackson & Jackson Engineering, Inc
5350 S. Western Ave, Suite 222
Oklahoma City, Ok 73109
Certificate Of Authorization # 3770
Expires June 30, 2019
Phone: (405) 225-1978
Fax: (844) 274-2997

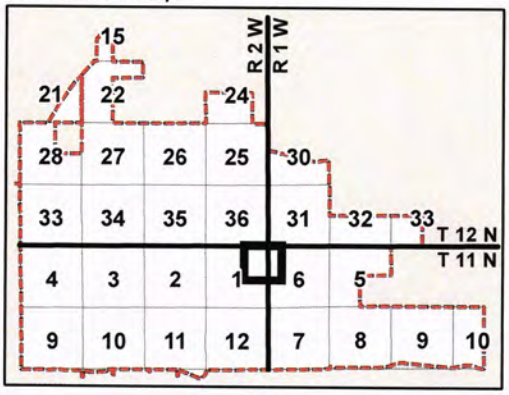
7-31-2018

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



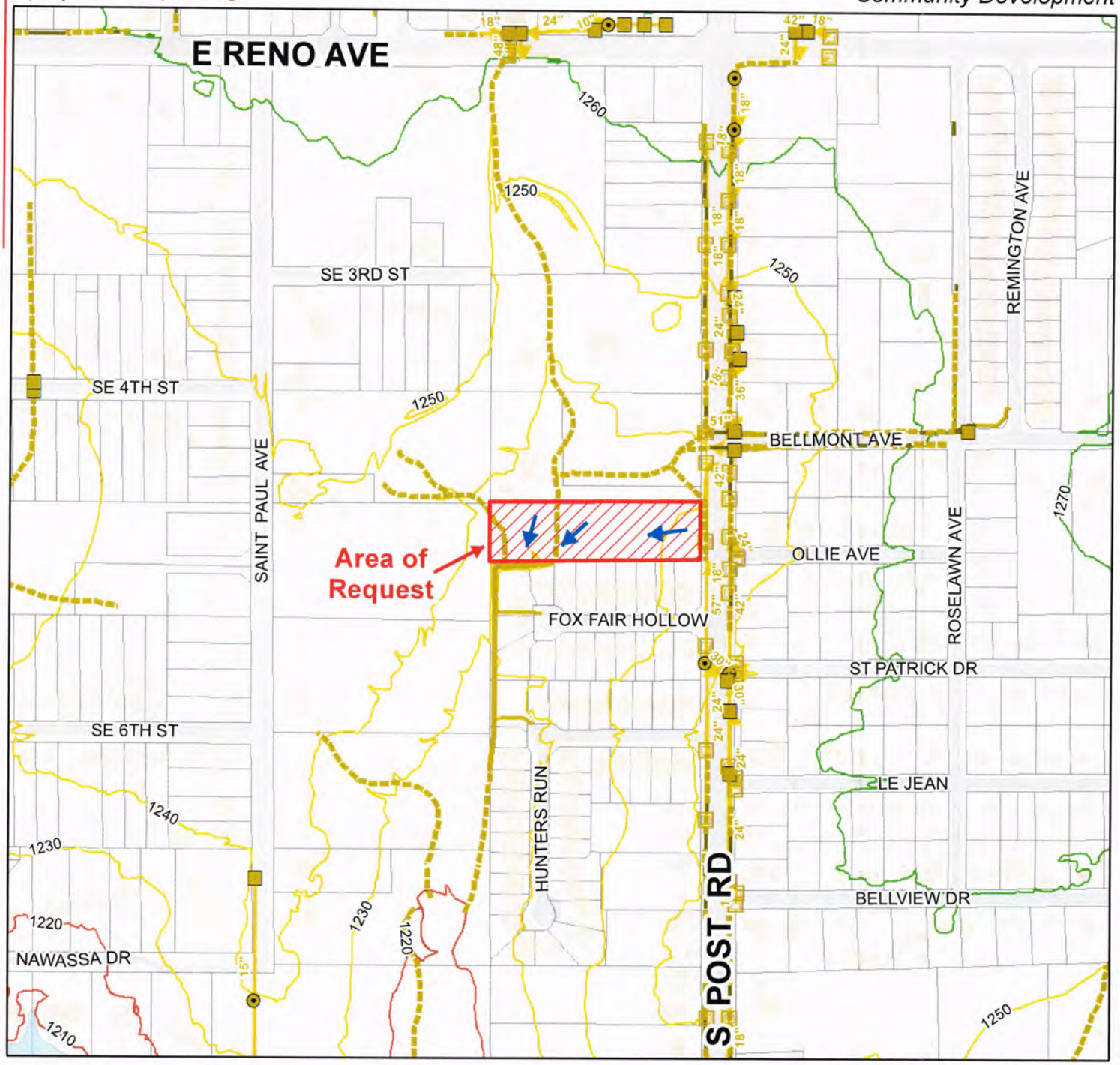
2017 DOP (AERIAL) VIEW FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

0 400 800 Feet

1 inch = 400 feet

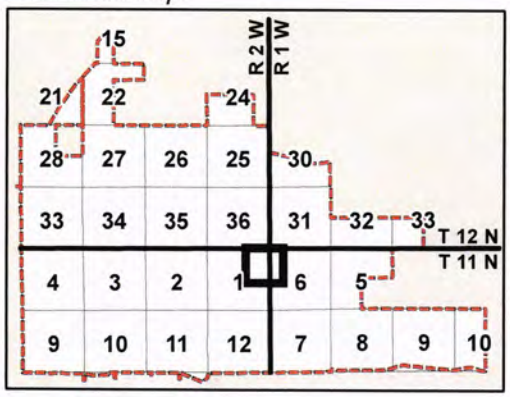
MIDWEST CITY
Where the Spirit Flies High

Community Development



DRAINAGE LOCATION MAP FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

Locator Map



Drainage Legend

Curb Inlets
- Curb Inlets
- Inlets
- Junction Box
- Culverts
- Flumes
- Developed Channels
- Trickle Channels
- Undeveloped Channels
- Storm Lines
- Creeks

ELEVATION
- 1166-1204 ft
- 1204-1228 ft
- 1228-1250 ft
- 1250-1278 ft
- 1278-1324 ft

2009 FEMA Floodplains
- 500-yr floodplain
- 100-yr floodplain

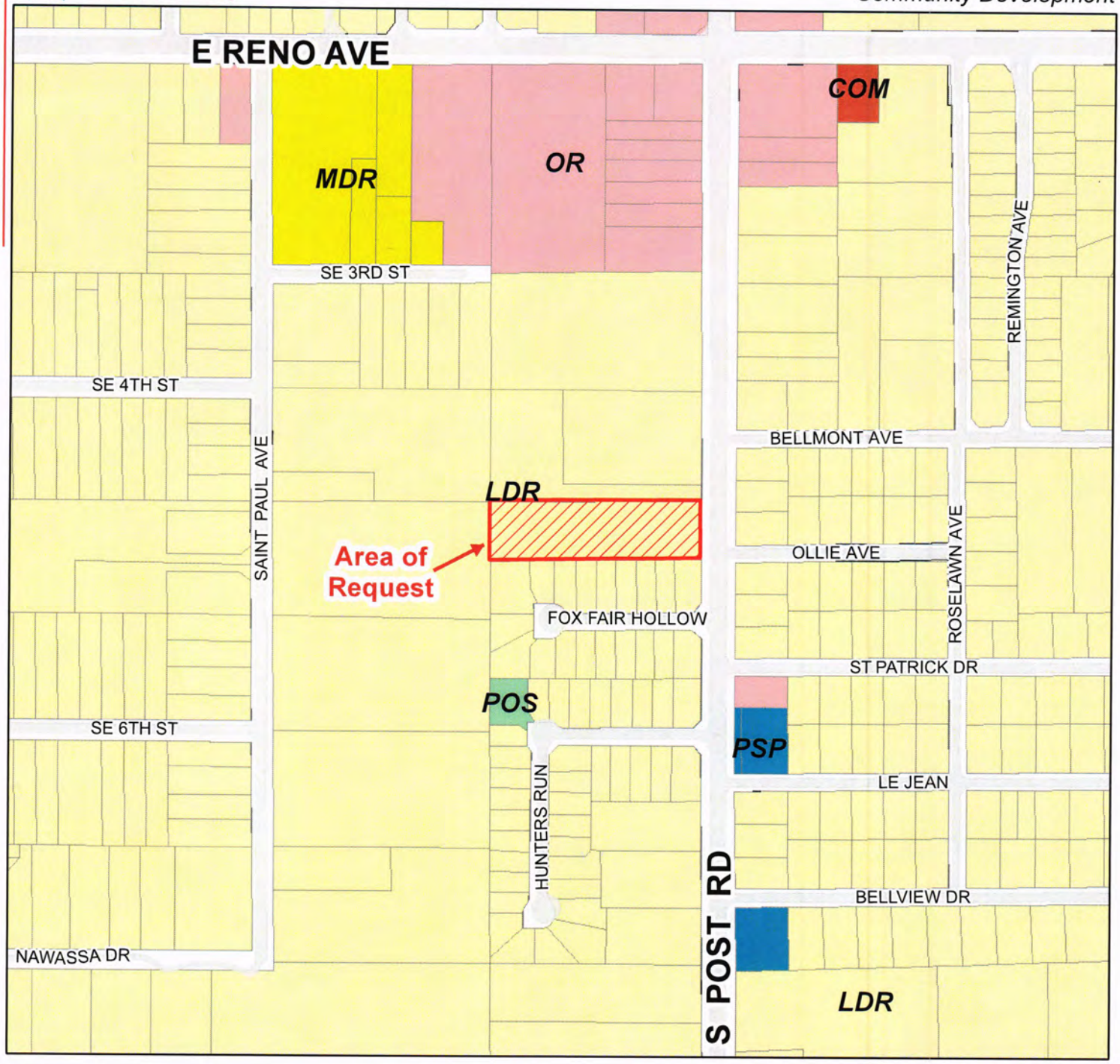
2009 FEMA Floodway
- FLOODWAY

0 400 800 Feet

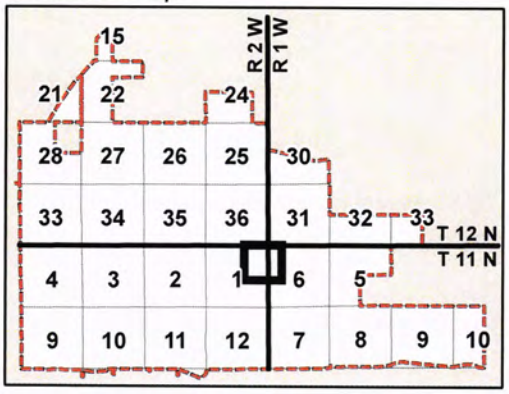
1 inch = 400 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



Future Land Use Legend

- Single-Family Detached Residential
- Medium Density Residential
- High Density Residential
- Manufactured Home
- Public/Semi-Public
- Parks/Open Space
- Office/Retail
- Commercial
- Industrial
- Town Center

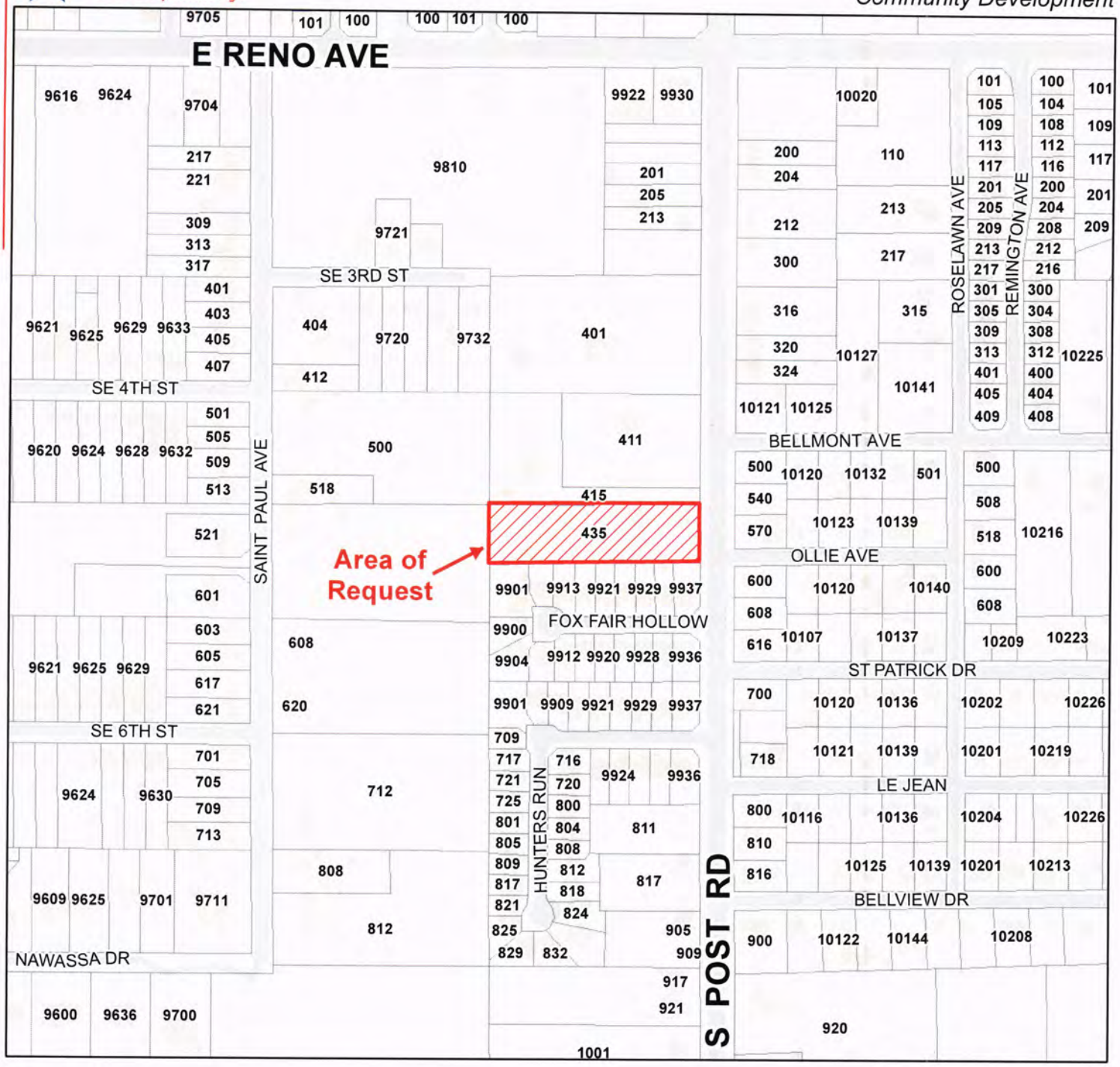
FUTURE LAND USE MAP FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

0 400 800 Feet

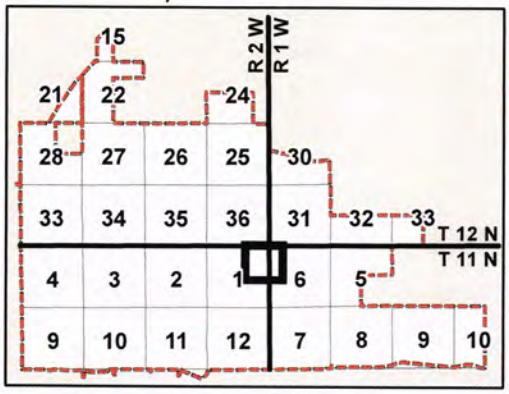
1 inch = 400 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



General Map Legend

- Area of Request
- Parcels with Addresses
- Buildings
- Edge of Pavement
- MWC City Limits

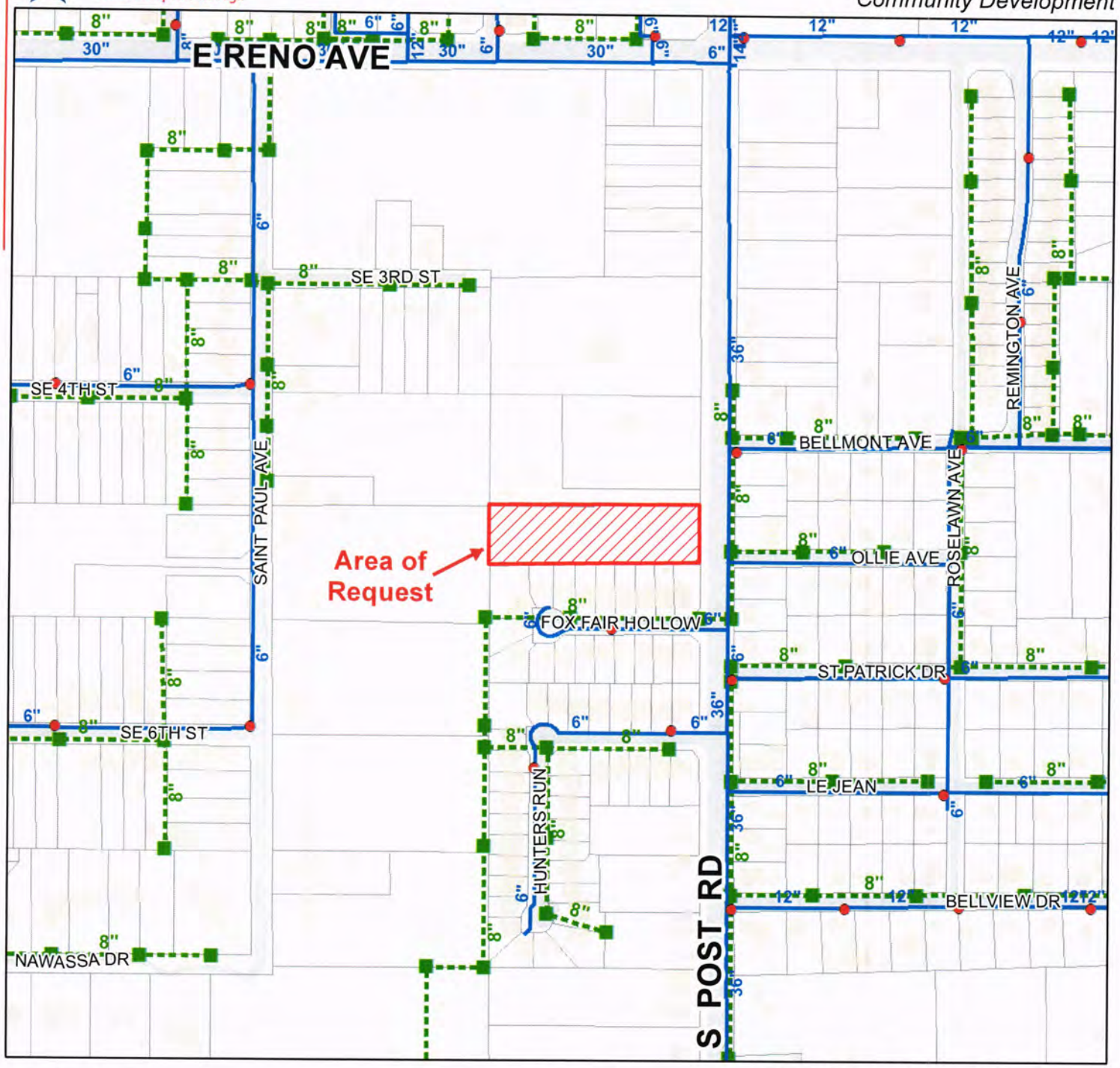
GENERAL MAP FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

0 400 800 Feet

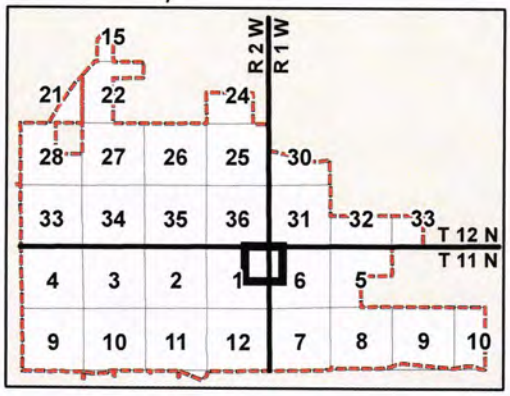
1 inch = 400 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



Water/Sewer Legend

- Fire Hydrants

Water Lines

- Distribution
- Well
- OKC Cross Country
- Sooner Utilities
- Thunderbird
- Unknown
- Sewer Manholes
- Sewer Lines

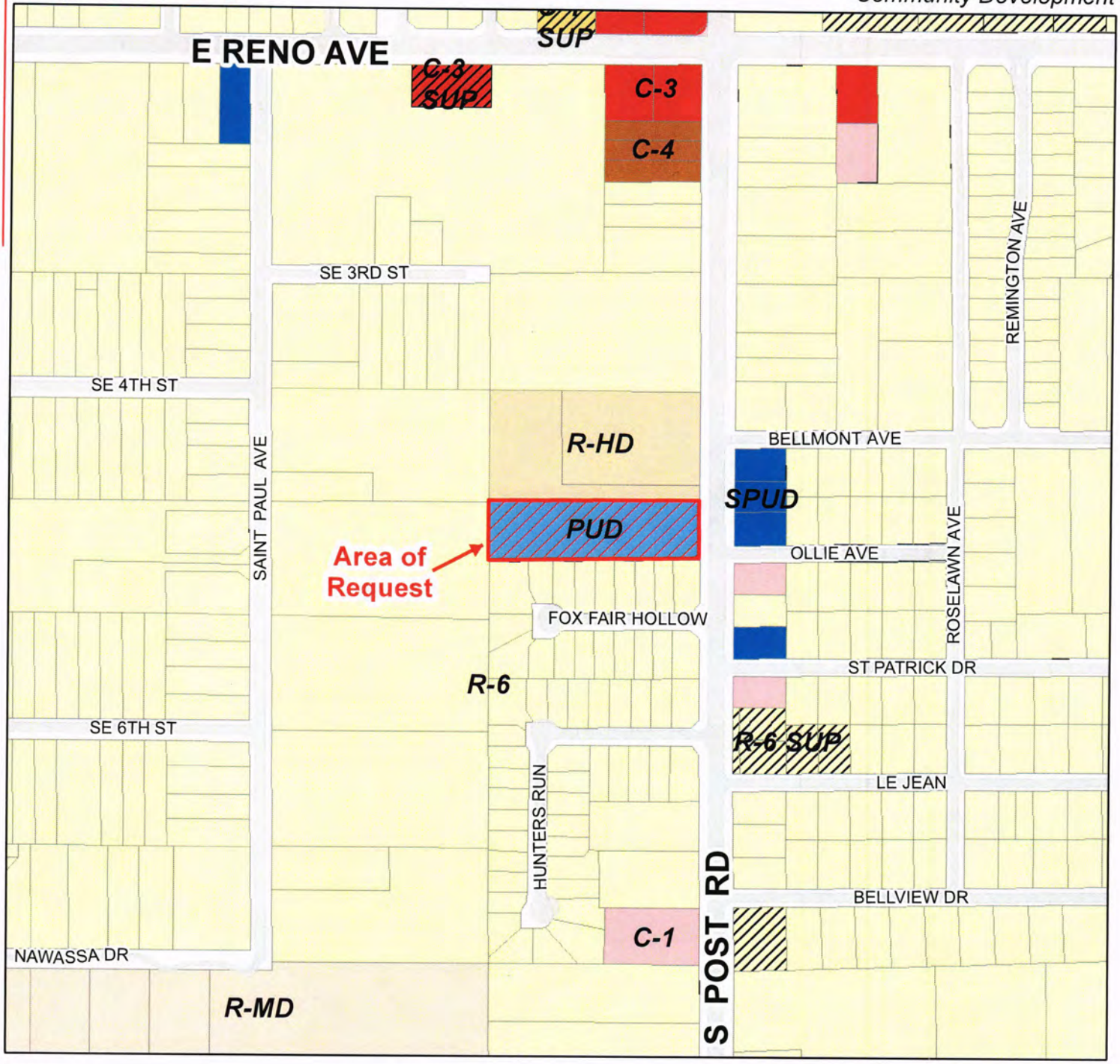
WATER/SEWER LINE LOCATION MAP FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

0 400 800 Feet

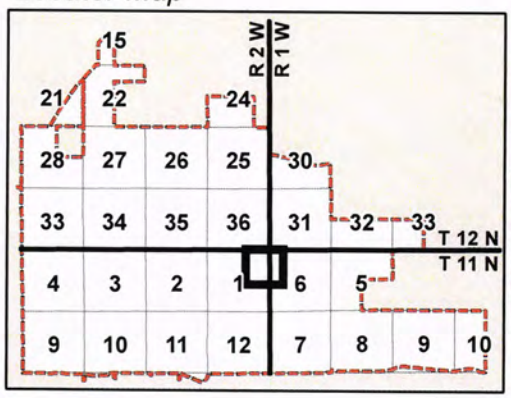
1 inch = 400 feet

MIDWEST CITY
Where the Spirit Flies High

Community Development



Locator Map



Current Zoning Legend

A-1	I-2 SUP	R-35
A-1 SUP	I-3	R-2F
C-1	O-1	R-MD
C-1 SUP	O-1 SUP	R-MD SUP
C-2	O-2	R-HD
C-3	O-2 SUP	R-HD SUP
C-3 SUP	R-6	R-MH-1
C-4	R-6 SUP	R-MH-2
C-4 SUP	R-8	PUD
I-1	R-10	SPUD
I-2	R-22	HOS
		HOS SUP

ZONING MAP FOR PC-1976 (NE/4, Sec. 1, T11N, R2W)

0 400 800 Feet

1 inch = 400 feet

Drainage Report
Florence Estates
Midwest City, Oklahoma

Prepared For

Derek Jackson, P.E.
Jackson & Jackson Engineering, Inc.
5350 S. Western Ave., Suite 222
OKC, OK 73109
Phone: (405)225-1978

Prepared by

Ellen Weber Stevens, Ph.D., P.E.
1134 NW 33rd Street
Oklahoma City, OK 73118
405-747-6598
ellen@ellenphdpe.com
CA No. 5645

Ellen W. Stevens, Ph.D., P.E.

August 26, 2018

Drainage Report
Florence Estates
Midwest City, Oklahoma

Introduction

It is proposed to construct a residential subdivision on a 2.3-acre lot located on the west side of Post Road, approximately ¼ mile south of Reno Avenue. The subdivision will have a single street, extending west from Post Road, with seven homes on the south side of the street. The site is located in Section 1, T11N, R2W.

The site is not located in or near a FEMA floodplain, as shown on the firmette in Appendix A. The site drains to an unnamed tributary of Soldier Creek, shown on the USGS Choctaw quadrangle map. A portion of the map showing the site is in Appendix A. The tributary is shown as a blue line creek through the site. It will be necessary to place fill for the roadway in the blue line creek. However, the extent of fill will be less than 0.1 acres, so a preconstruction notification to the Corps of Engineers should not be needed.

The purpose of the study is to determine if development of the site will increase the peak discharge in the tributary and to verify that the roadway crossing will provide adequate drainage.

Existing Conditions Discharge

The watershed draining to the site has 127 acres and was divided into five subwatersheds. A 10-meter DEM obtained from the NRCS Data Gateway and a storm sewer map obtained from the city were used to delineate the drainage area boundaries and a map is included in Appendix A. Land uses present including commercial and residential, with average ¼-acre lots. An aerial photo of the watershed is included with the drainage area map. There is some open land in the watershed, however, the open land was calculated as 1/4-acre residential to account for future development. For existing conditions, the site is considered open land.

Given the size of the watershed, the varied land uses, and the fact that the timing of runoff from the watershed as a whole and from the site may be an issue, NRCS methods were chosen to calculate the discharge.

Curve numbers were obtained from NRCS references and the curve number for open space in fair condition was used pre-development site. A weighted curve number was obtained based on the land use and hydrologic soil group (HSG). Soil information was obtained from the Web Soil Survey and the output is included in Appendix B. The NRCS TR-55 program was used to calculate the weighted curve numbers and a tabulation of the output is in Appendix B.

The TR-55 method was also used to find the time of concentration through the watershed. The first 100 feet was modeled as overland sheet flow over grass and the remainder was shallow concentrated flow over unpaved surfaces. The watershed to the east of Post Road has some gutter flow, which was included in the calculation. For the NRCS method, the lag time was computed as 0.6 times the time of concentration. A tabulation of the times of concentration is in Appendix B. The lag times for the routing reaches were calculated as shallow concentrated flow over unpaved surfaces

The HEC-HMS model was used to make the calculations. Rainfall depths for were obtained from the Oklahoma City drainage manual and were input into the HEC-HMS model as frequency storms. The HEC-HMS input and output for existing conditions are in Appendix B.

Proposed Conditions Discharge

For proposed conditions, the portion of the site to be developed was changed to ¼-acre homes and the areas and weighted curve numbers were re-computed. The travel path for time of concentration is mostly outside of the site and the portion in the side is mostly upaved, so time of concentration is unchanged. The revised curve number tabulation is in Appendix B.

HEC-HMS input and output for proposed conditions are in Appendix B. The only watershed properties that changed were the curve numbers, so the revised curve number table is the only input provided.

Roadway Crossing Analysis

The roadway crossing is sized to minimize the backwater upstream (north) of the property and pass as much water under the roadway as possible. The need to maintain the backwater limits the amount that the road may be raised above natural ground. To reduce the water elevation upstream, it is proposed to excavate a detention facility in the open space north of the road. The lot south of the roadway crossing will be kept open to provide a drainage easement. Between having the detention and using the lot to allow the discharge to spread out and slow down, the discharge to the properties to the south should be unchanged.

The EPA SWMM model was used to calculate the roadway crossing hydraulics. The upstream detention is modeled as a storage junction with elevation – area properties determined from the grading plan. Pipe data consist of the diameter, length, and flowline elevations, obtained from the roadway plan. Flow over the road was modeled as an open channel, using the roadway profile as the channel section.

The model was run in dynamic wave mode to compute the flow split between through the pipes and over the road. Inflow hydrographs were obtained from the HEC-HMS model output. Since the flow from the watershed W of Site flows over the road, the Total Site outflow hydrograph was used.

The EPA SWMM input and output data are in Appendix C. Note that the schematics are all identical, so the 2-year schematic was the only one printed.

Conclusions

The following table compares the peak discharges for existing and proposed conditions. The S of Reno subwatershed was the only subwatershed wherein the development parameters change over existing conditions. Therefore, the table shows the comparison for that subwatershed and for the site as a whole.

Existing and Proposed Peak Discharge Results (cfs)

Event, years	S of Reno		Total Site	
	Existing	Proposed	Existing	Proposed
2	31.1	32.8	144.6	146.2
10	71.8	73.9	325.9	327.8
25	91.9	94.0	414.9	416.8
50	106.4	108.6	479.4	481.4
100	121.8	124.0	547.2	549.2

The model results indicate the development of the site does not significantly increase the peak discharge in the tributary. Therefore, no adverse impacts to the downstream properties are anticipated.

The following table shows the water surface in the detention and the depth over the road.

Water Elevations at Roadway Structure

Event	Water Elevation in Detention, ft	Depth Over Road, ft	Water Elevation at Road, ft
2	1233.79	0.28	1233.78
10	1234.08	0.58	1234.08
25	1234.18	0.67	1234.17
50	1234.24	0.73	1234.23
100	1234.29	0.78	1234.28

The 100-year peak water elevation in the detention extends about 40 feet into the site to the north, not close to the home. Under existing conditions, there is a wide swale at the property line that carries the discharge and the estimated depth in the swale is about 0.87 feet (see Appendix B for swale depth), for a water elevation of about 1233.87 feet at the property line. Therefore, the increase in water elevation to the north is only 0.41 feet and no adverse impacts are expected.

Most vehicles should be able to safely pass through the water depth over the road. Raising the road to reduce the depth is not feasible, as there is not enough depth or cover to install larger pipes and pass more discharge under the road.

Appendix A – Maps

National Flood Hazard Layer FIRMette

FEMA

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

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

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas 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 Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN — Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 / 17.5 — Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

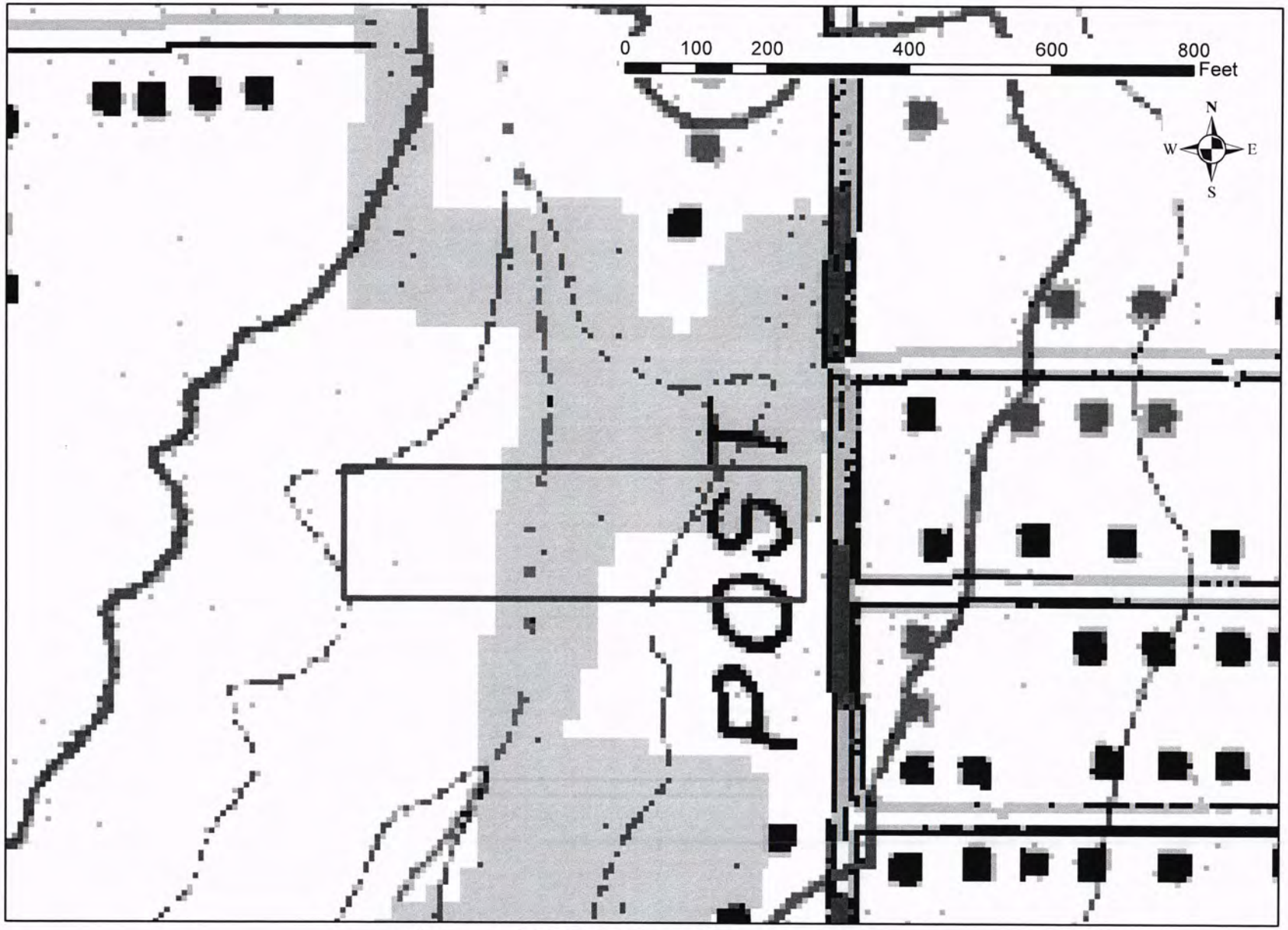
N

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 8/26/2018 at 5:15:56 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 identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



Site on USGS Quadrangle Map


0 200 400 800 1,200 1,600
Feet
N
W
E
S
N of Reno
S of Reno
W ofSite
Northeast
Southeast
Legend
Soil Types
HSG
B
C
D
Drainage Area Map
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Appendix B – Hydrology Data

Hydrologic Soil Group—Oklahoma County, Oklahoma
(WatershedOutline)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Oklahoma County, Oklahoma
Survey Area Data: Version 18, Sep 25, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 18, 2014—May 15, 2014

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
HarC	Harrah fine sandy loam, 3 to 5 percent slopes	B	16.6	12.5%
HaUC	Harrah-Urban land complex, 3 to 5 percent slopes	B	2.3	1.8%
LitB	Littleaxe fine sandy loam, 1 to 3 percent slopes	B	46.2	35.0%
LtUC	Littleaxe-Urban land complex, 1 to 5 percent slopes	B	27.9	21.1%
NewB	Newalla fine sandy loam, 1 to 5 percent slopes	D	8.5	6.4%
NewC2	Newalla fine sandy loam, 3 to 5 percent slopes, eroded	D	1.0	0.7%
SDND	Stephenville-Darsil-Newalla complex, 3 to 8 percent slopes	D	13.1	9.9%
StDC	Stephenville-Darsil complex, 1 to 5 percent slopes	C	10.8	8.1%
SUND	Stephenville-Urban land-Newalla complex, 1 to 8 percent slopes	D	5.9	4.4%
Totals for Area of Interest			**132.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Oklahoma County, Oklahoma

Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
N of Reno	Commercial & business	B	2.64	92
	Commercial & business	D	.91	95
	Residential districts (1/4 acre)	B	14.24	75
	Residential districts (1/4 acre)	C	3.73	83
	Residential districts (1/4 acre)	D	9.51	87
	Total Area / Weighted Curve Number		31.03	82
Northeast	Residential districts (1/4 acre)	B	22.08	75
	Residential districts (1/4 acre)	C	6.06	83
	Residential districts (1/4 acre)	D	2.09	87
	Total Area / Weighted Curve Number		30.23	77
Southeast	Residential districts (1/4 acre)	B	22.77	75
	Residential districts (1/4 acre)	D	5.5	87
	Total Area / Weighted Curve Number		28.27	77
S of Reno	Open space; grass cover 50% to 75% (fair)	B	1.81	69
	Residential districts (1/4 acre)	B	18.29	75
	Residential districts (1/4 acre)	D	8.31	87
	Total Area / Weighted Curve Number		28.41	78
W of Site	Open space; grass cover 50% to 75% (fair)	B	.53	69
	Residential districts (1/4 acre)	B	5.15	75
	Residential districts (1/4 acre)	D	3.07	87
	Total Area / Weighted Curve Number		8.75	79

Oklahoma County, Oklahoma

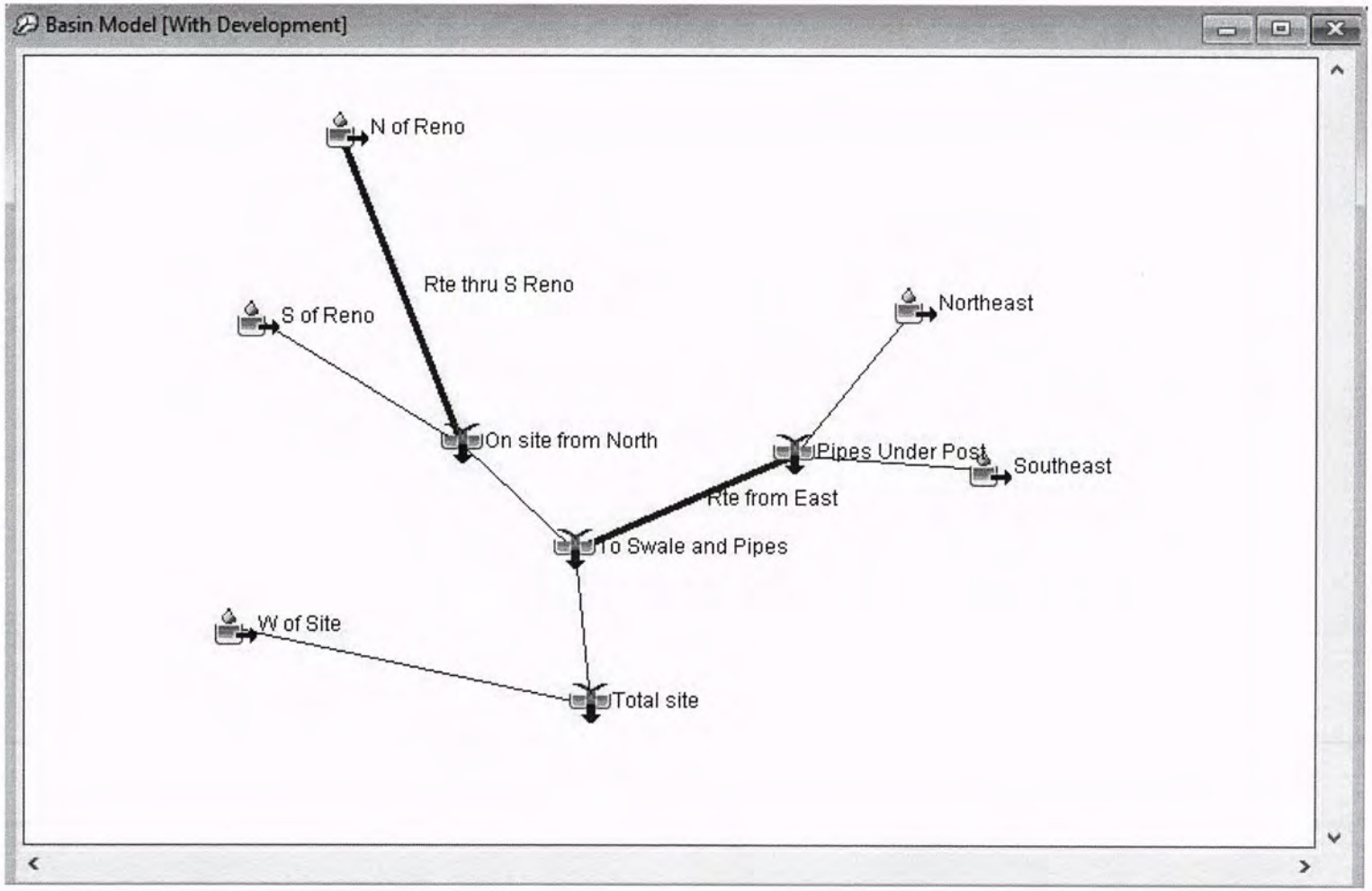
Sub-Area Time of Concentration Details

Sub-Area Identifier/	Flow Length (ft)	Slope (ft/ft)	Mannings's n	End Area (sq ft)	Wetted Perimeter (ft)	Velocity (ft/sec)	Travel Time (hr)
N of Reno							
SHEET	100	0.0250	0.410				0.310
SHALLOW	1162	0.0250	0.050				0.127
					Time of Concentration		.437
Northeast							
SHEET	100	0.0180	0.410				0.354
SHALLOW	1205	0.0180	0.050				0.155
					Time of Concentration		.509
Southeast							
SHEET	100	0.0120	0.410				0.416
SHALLOW	872	0.0120	0.050				0.137
SHALLOW	1243	0.0120	0.025				0.155
					Time of Concentration		.708
S of Reno							
SHEET	100	0.0170	0.410				0.362
SHALLOW	1588	0.0170	0.050				0.210
					Time of Concentration		.572
W of Site							
SHEET	100	0.0130	0.410				0.403
SHALLOW	952	0.0130	0.050				0.144
					Time of Concentration		.547

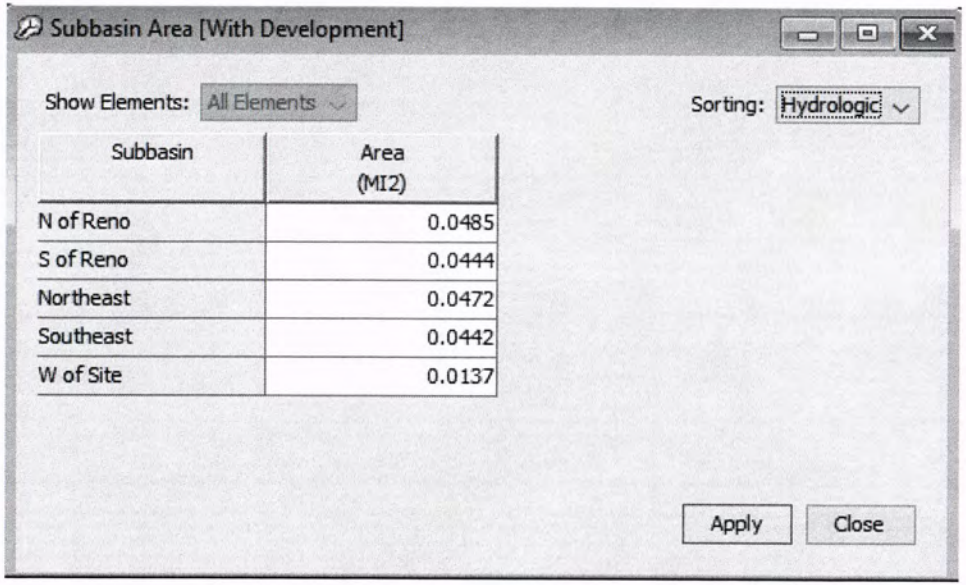
Oklahoma County, Oklahoma

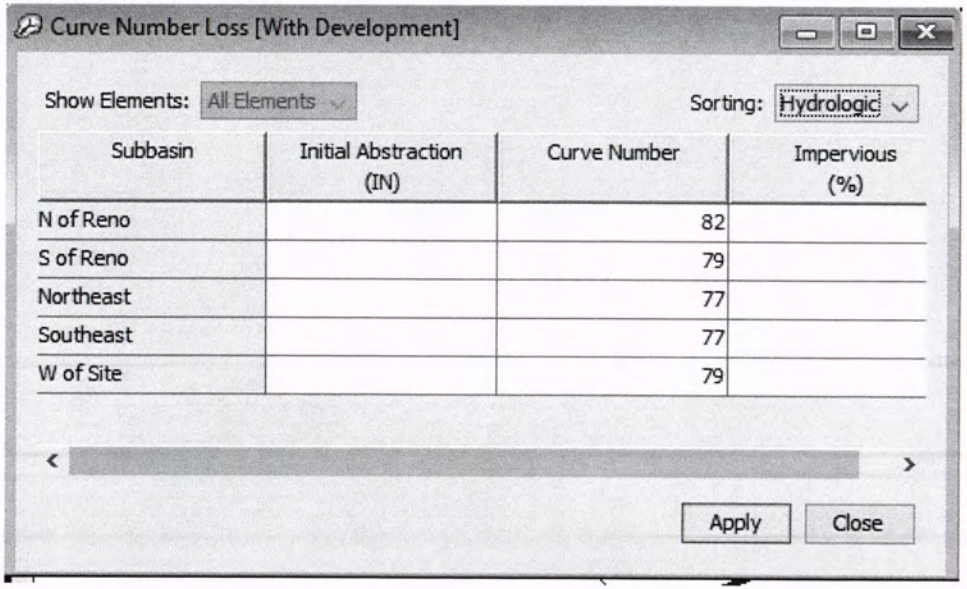
Sub-Area Land Use and Curve Number Details

Sub-Area Identifier	Land Use	Hydrologic Soil Group	Sub-Area Area (ac)	Curve Number
N of Reno	Commercial & business	B	2.64	92
	Commercial & business	D	.91	95
	Residential districts (1/4 acre)	B	14.24	75
	Residential districts (1/4 acre)	C	3.73	83
	Residential districts (1/4 acre)	D	9.51	87
	Total Area / Weighted Curve Number		31.03	82
Northeast	Residential districts (1/4 acre)	B	22.08	75
	Residential districts (1/4 acre)	C	6.06	83
	Residential districts (1/4 acre)	D	2.09	87
	Total Area / Weighted Curve Number		30.23	77
Southeast	Residential districts (1/4 acre)	B	22.77	75
	Residential districts (1/4 acre)	D	5.5	87
	Total Area / Weighted Curve Number		28.27	77
S of Reno	Residential districts (1/4 acre)	B	20.09	75
	Residential districts (1/4 acre)	D	8.31	87
	Total Area / Weighted Curve Number		28.4	79
W of Site	Residential districts (1/4 acre)	B	5.68	75
	Residential districts (1/4 acre)	D	3.07	87
	Total Area / Weighted Curve Number		8.75	79

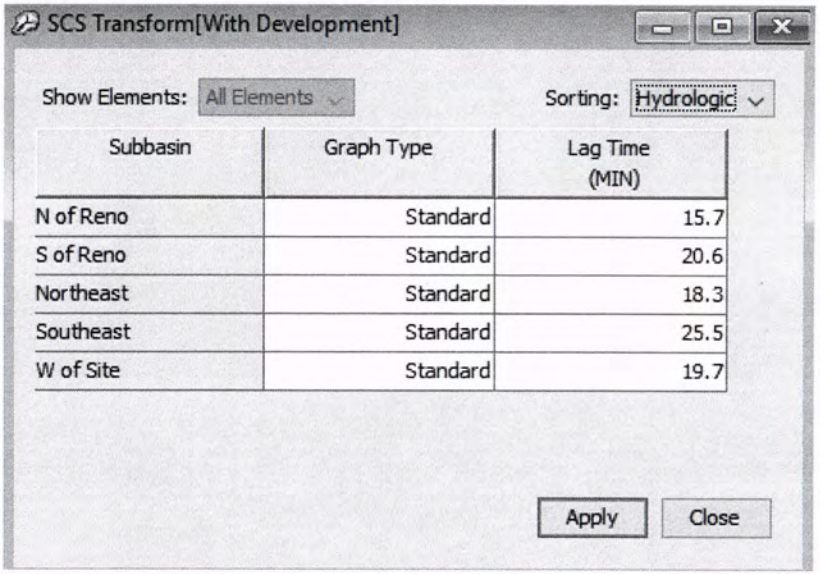


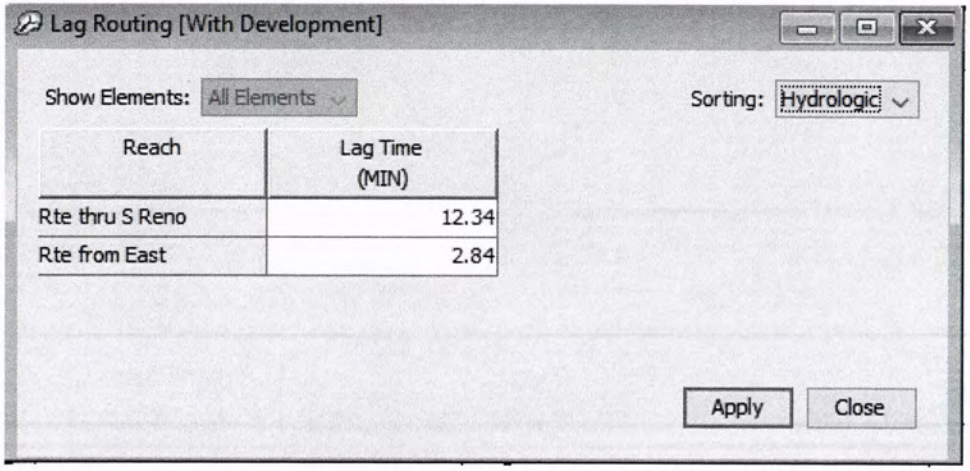
HEC-HMS Basin Schematic



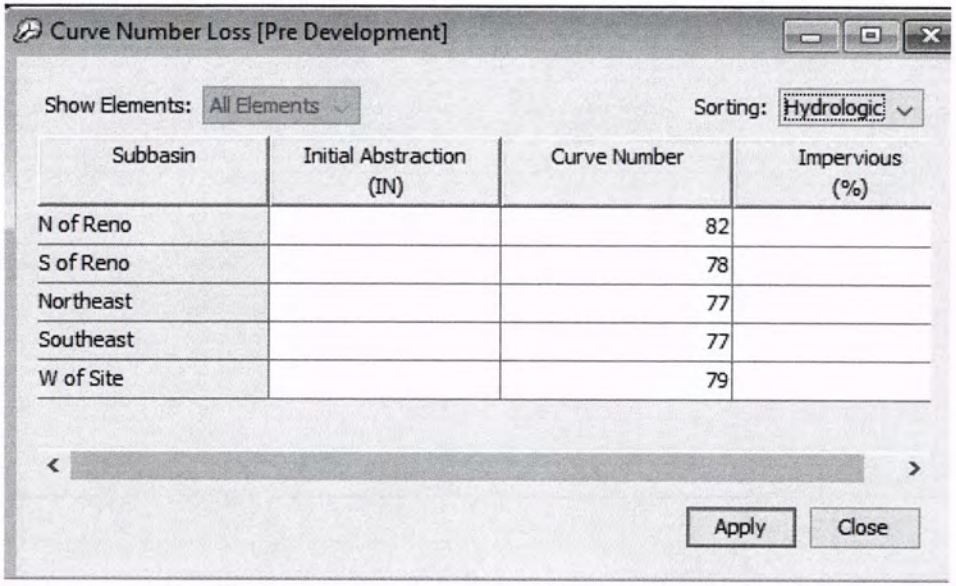


Developed Conditions HEC-HMS Watershed Input Parameters





Developed Conditions HEC-HMS Watershed Input Parameters



Pre-developed Conditions HEC-HMS Watershed Curve Numbers

Project: Derek_MWC Simulation Run: 2-year Developed

Start of Run: 11Nov2017, 00:00 Basin Model: With Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 2-year Event
Compute Time: 26Aug2018, 13:37:32 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	48.2350	11Nov2017, 12:18	1.611
Rte thru S Reno	0.0485	48.2350	11Nov2017, 12:30	1.606
S of Reno	0.0444	32.8305	11Nov2017, 12:24	1.402
On site from North	0.0929	79.2308	11Nov2017, 12:29	1.509
Northeast	0.0472	33.5006	11Nov2017, 12:22	1.275
Southeast	0.0442	25.8915	11Nov2017, 12:30	1.272
Pipes Under Post	0.0914	57.3877	11Nov2017, 12:25	1.274
Rte from East	0.0914	57.3877	11Nov2017, 12:27	1.273
To Swale and Pipes	0.1843	136.3019	11Nov2017, 12:28	1.392
W of Site	0.0137	10.3923	11Nov2017, 12:23	1.403
Total site	0.1980	146.1775	11Nov2017, 12:28	1.392

Project: Derek_MWC Simulation Run: 2-year Existing

Start of Run: 11Nov2017, 00:00 Basin Model: Pre Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 2-year Event
Compute Time: 26Aug2018, 14:52:25 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	48.2350	11Nov2017, 12:18	1.611
Rte thru S Reno	0.0485	48.2350	11Nov2017, 12:30	1.606
S of Reno	0.0444	31.1313	11Nov2017, 12:24	1.337
On site from North	0.0929	77.7102	11Nov2017, 12:29	1.478
Northeast	0.0472	33.5006	11Nov2017, 12:22	1.275
Southeast	0.0442	25.8915	11Nov2017, 12:30	1.272
Pipes Under Post	0.0914	57.3877	11Nov2017, 12:25	1.274
Rte from East	0.0914	57.3877	11Nov2017, 12:27	1.273
To Swale and Pipes	0.1843	134.7357	11Nov2017, 12:28	1.376
W of Site	0.0137	10.3923	11Nov2017, 12:23	1.403
Total site	0.1980	144.6113	11Nov2017, 12:28	1.378

Project: Derek_MWC Simulation Run: 10-year Developed

Start of Run: 11Nov2017, 00:00 Basin Model: With Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 10-year Event
Compute Time: 26Aug2018, 13:37:26 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	99.7256	11Nov2017, 12:18	3.808
Rte thru S Reno	0.0485	99.7256	11Nov2017, 12:30	3.798
S of Reno	0.0444	73.9046	11Nov2017, 12:23	3.501
On site from North	0.0929	169.5076	11Nov2017, 12:28	3.656
Northeast	0.0472	78.7654	11Nov2017, 12:21	3.306
Southeast	0.0442	62.0584	11Nov2017, 12:29	3.299
Pipes Under Post	0.0914	136.8232	11Nov2017, 12:24	3.303
Rte from East	0.0914	136.8232	11Nov2017, 12:26	3.302
To Swale and Pipes	0.1843	305.4794	11Nov2017, 12:27	3.480
W of Site	0.0137	23.3311	11Nov2017, 12:22	3.502
Total site	0.1980	327.8005	11Nov2017, 12:27	3.482

Project: Derek_MWC Simulation Run: 10-year Existing

Start of Run: 11Nov2017, 00:00 Basin Model: Pre Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 10-year Event
Compute Time: 26Aug2018, 14:52:18 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	99.7256	11Nov2017, 12:18	3.808
Rte thru S Reno	0.0485	99.7256	11Nov2017, 12:30	3.798
S of Reno	0.0444	71.8412	11Nov2017, 12:23	3.402
On site from North	0.0929	167.6502	11Nov2017, 12:28	3.609
Northeast	0.0472	78.7654	11Nov2017, 12:21	3.306
Southeast	0.0442	62.0584	11Nov2017, 12:29	3.299
Pipes Under Post	0.0914	136.8232	11Nov2017, 12:24	3.303
Rte from East	0.0914	136.8232	11Nov2017, 12:26	3.302
To Swale and Pipes	0.1843	303.5694	11Nov2017, 12:27	3.456
W of Site	0.0137	23.3311	11Nov2017, 12:22	3.502
Total site	0.1980	325.8905	11Nov2017, 12:27	3.460

Project: Derek_MWC Simulation Run: 25-year Developed

Start of Run: 11Nov2017, 00:00 Basin Model: With Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 25-year Event
Compute Time: 26Aug2018, 13:37:37 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	124.3524	11Nov2017, 12:18	4.896
Rte thru S Reno	0.0485	124.3524	11Nov2017, 12:30	4.883
S of Reno	0.0444	94.0127	11Nov2017, 12:23	4.558
On site from North	0.0929	213.2555	11Nov2017, 12:28	4.728
Northeast	0.0472	101.0843	11Nov2017, 12:21	4.343
Southeast	0.0442	80.0434	11Nov2017, 12:29	4.334
Pipes Under Post	0.0914	176.1778	11Nov2017, 12:24	4.338
Rte from East	0.0914	176.1778	11Nov2017, 12:26	4.336
To Swale and Pipes	0.1843	388.4866	11Nov2017, 12:27	4.534
W of Site	0.0137	29.6593	11Nov2017, 12:22	4.560
Total site	0.1980	416.8159	11Nov2017, 12:27	4.535

Project: Derek_MWC Simulation Run: 25-year Existing

Start of Run: 11Nov2017, 00:00 Basin Model: Pre Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 25-year Event
Compute Time: 26Aug2018, 14:52:29 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	124.3524	11Nov2017, 12:18	4.896
Rte thru S Reno	0.0485	124.3524	11Nov2017, 12:30	4.883
S of Reno	0.0444	91.8899	11Nov2017, 12:23	4.449
On site from North	0.0929	211.3525	11Nov2017, 12:28	4.676
Northeast	0.0472	101.0843	11Nov2017, 12:21	4.343
Southeast	0.0442	80.0434	11Nov2017, 12:29	4.334
Pipes Under Post	0.0914	176.1778	11Nov2017, 12:24	4.338
Rte from East	0.0914	176.1778	11Nov2017, 12:26	4.336
To Swale and Pipes	0.1843	386.5287	11Nov2017, 12:27	4.507
W of Site	0.0137	29.6593	11Nov2017, 12:22	4.560
Total site	0.1980	414.8580	11Nov2017, 12:27	4.511

Project: Derek_MWC Simulation Run: 50-year Developed

Start of Run: 11Nov2017, 00:00 Basin Model: With Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 50-year Event
Compute Time: 26Aug2018, 13:37:42 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	142.1250	11Nov2017, 12:18	5.629
Rte thru S Reno	0.0485	142.1250	11Nov2017, 12:30	5.616
S of Reno	0.0444	108.6136	11Nov2017, 12:23	5.275
On site from North	0.0929	244.9077	11Nov2017, 12:28	5.453
Northeast	0.0472	117.2399	11Nov2017, 12:21	5.048
Southeast	0.0442	93.1743	11Nov2017, 12:29	5.038
Pipes Under Post	0.0914	204.8286	11Nov2017, 12:24	5.043
Rte from East	0.0914	204.8286	11Nov2017, 12:26	5.041
To Swale and Pipes	0.1843	448.7140	11Nov2017, 12:27	5.249
W of Site	0.0137	34.2485	11Nov2017, 12:22	5.277
Total site	0.1980	481.4106	11Nov2017, 12:27	5.251

Project: Derek_MWC Simulation Run: 50-year Existing

Start of Run: 11Nov2017, 00:00 Basin Model: Pre Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 50-year Event
Compute Time: 26Aug2018, 14:52:33 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	142.1250	11Nov2017, 12:18	5.629
Rte thru S Reno	0.0485	142.1250	11Nov2017, 12:30	5.616
S of Reno	0.0444	106.4451	11Nov2017, 12:23	5.160
On site from North	0.0929	242.9703	11Nov2017, 12:28	5.398
Northeast	0.0472	117.2399	11Nov2017, 12:21	5.048
Southeast	0.0442	93.1743	11Nov2017, 12:29	5.038
Pipes Under Post	0.0914	204.8286	11Nov2017, 12:24	5.043
Rte from East	0.0914	204.8286	11Nov2017, 12:26	5.041
To Swale and Pipes	0.1843	446.7197	11Nov2017, 12:27	5.221
W of Site	0.0137	34.2485	11Nov2017, 12:22	5.277
Total site	0.1980	479.4163	11Nov2017, 12:27	5.225

Project: Derek_MWC Simulation Run: 100-year Developed

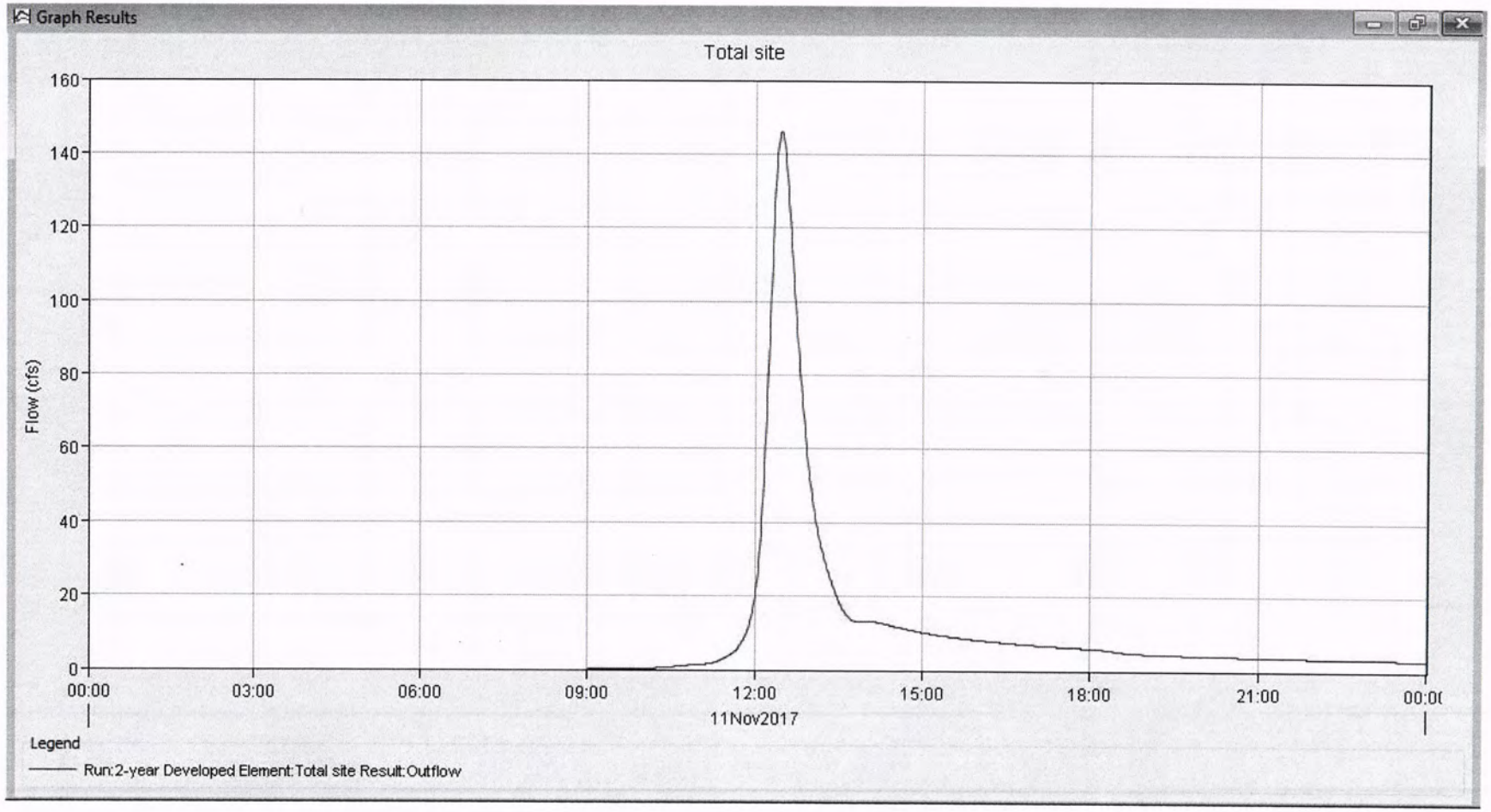
Start of Run: 11Nov2017, 00:00 Basin Model: With Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 100-year Event
Compute Time: 26Aug2018, 13:35:41 Control Specifications: 24-hour Event

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	160.5624	11Nov2017, 12:18	6.550
Rte thru S Reno	0.0485	160.5624	11Nov2017, 12:30	6.534
S of Reno	0.0444	123.9582	11Nov2017, 12:23	6.177
On site from North	0.0929	277.8537	11Nov2017, 12:28	6.364
Northeast	0.0472	134.3628	11Nov2017, 12:21	5.938
Southeast	0.0442	107.1269	11Nov2017, 12:28	5.927
Pipes Under Post	0.0914	235.2565	11Nov2017, 12:23	5.933
Rte from East	0.0914	235.2565	11Nov2017, 12:25	5.930
To Swale and Pipes	0.1843	511.9530	11Nov2017, 12:27	6.149
W of Site	0.0137	39.0723	11Nov2017, 12:22	6.179
Total site	0.1980	549.1918	11Nov2017, 12:27	6.151

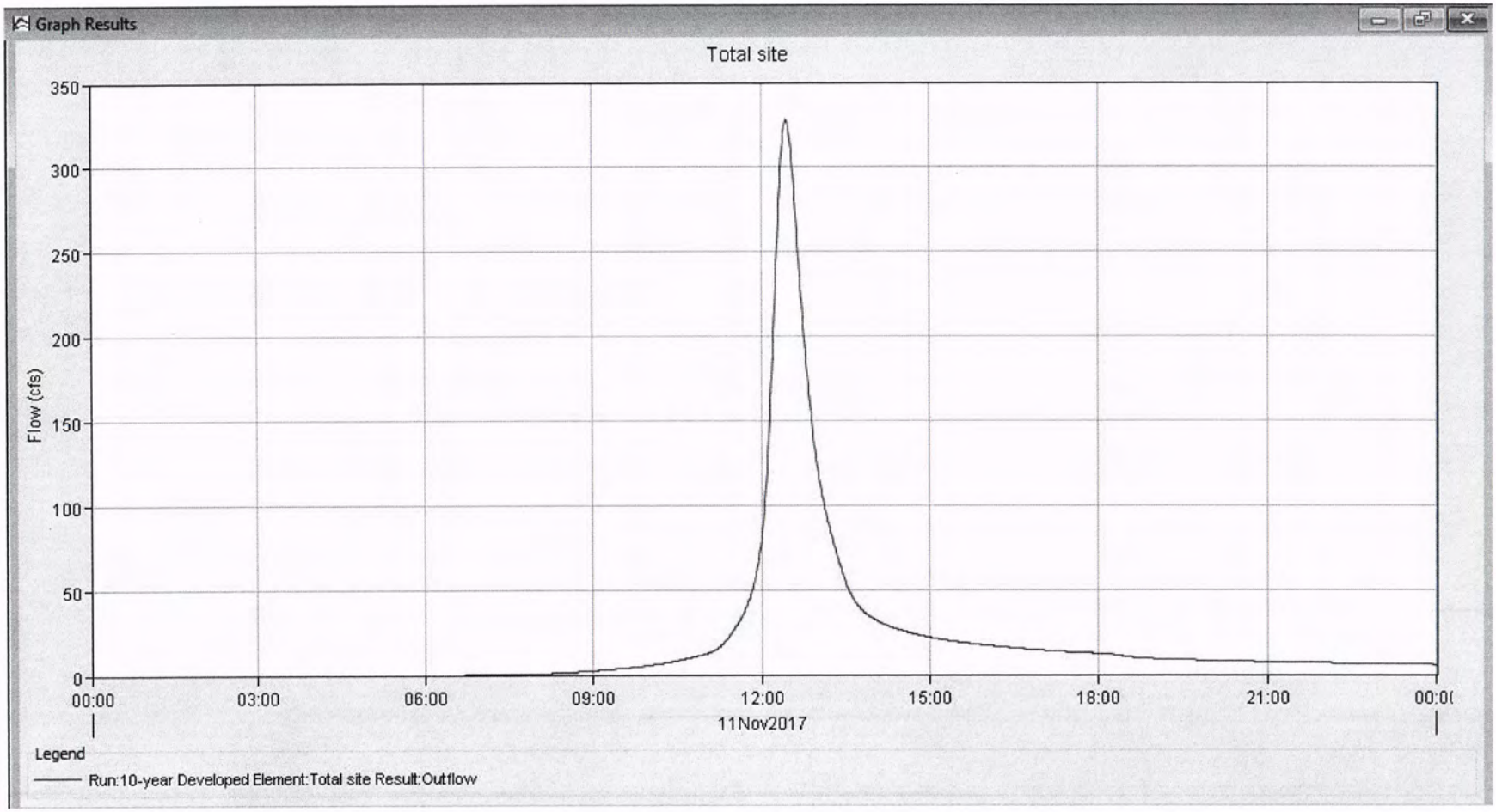
Project: Derek_MWC Simulation Run: 100-year Existing

Start of Run: 11Nov2017, 00:00 Basin Model: Pre Development
End of Run: 12Nov2017, 00:01 Meteorologic Model: 100-year Event
Compute Time: 26Aug2018, 14:52:22 Control Specifications: 24-hour Event

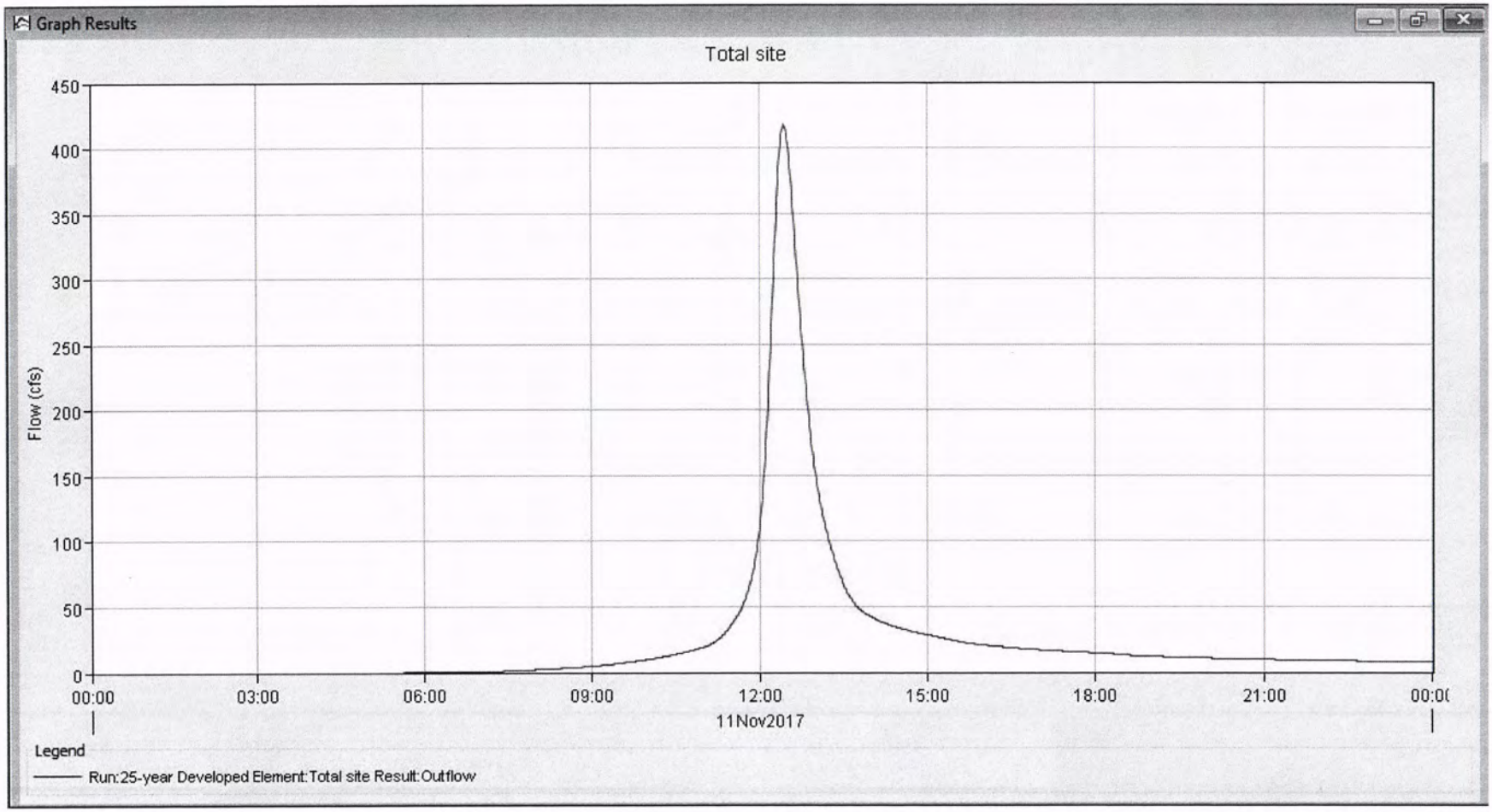
Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
N of Reno	0.0485	160.5624	11Nov2017, 12:18	6.550
Rte thru S Reno	0.0485	160.5624	11Nov2017, 12:30	6.534
S of Reno	0.0444	121.8131	11Nov2017, 12:23	6.056
On site from North	0.0929	275.9427	11Nov2017, 12:28	6.306
Northeast	0.0472	134.3628	11Nov2017, 12:21	5.938
Southeast	0.0442	107.1269	11Nov2017, 12:28	5.927
Pipes Under Post	0.0914	235.2565	11Nov2017, 12:23	5.933
Rte from East	0.0914	235.2565	11Nov2017, 12:25	5.930
To Swale and Pipes	0.1843	509.9850	11Nov2017, 12:27	6.119
W of Site	0.0137	39.0723	11Nov2017, 12:22	6.179
Total site	0.1980	547.2238	11Nov2017, 12:27	6.124



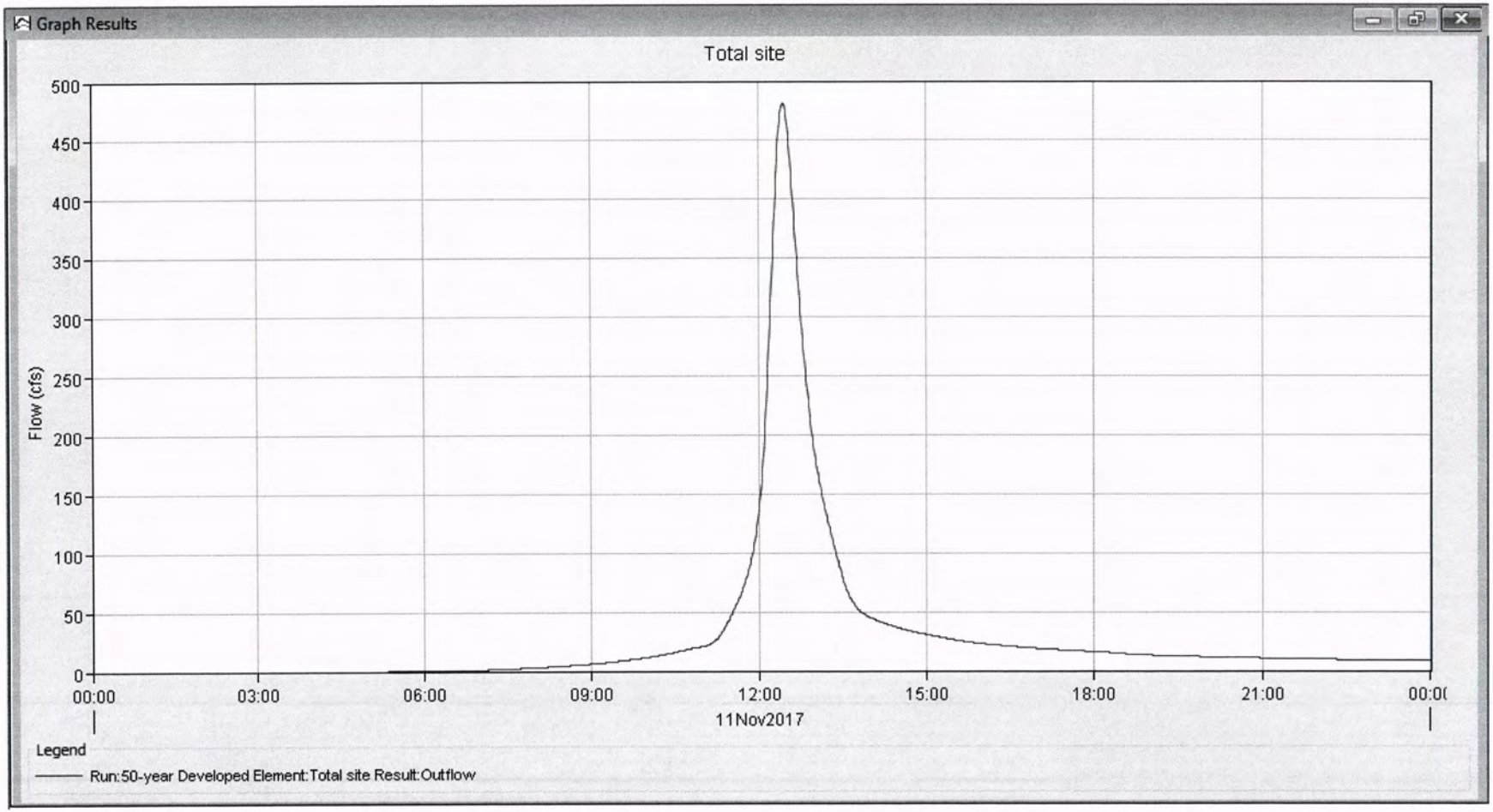
2-year Outflow Hydrograph



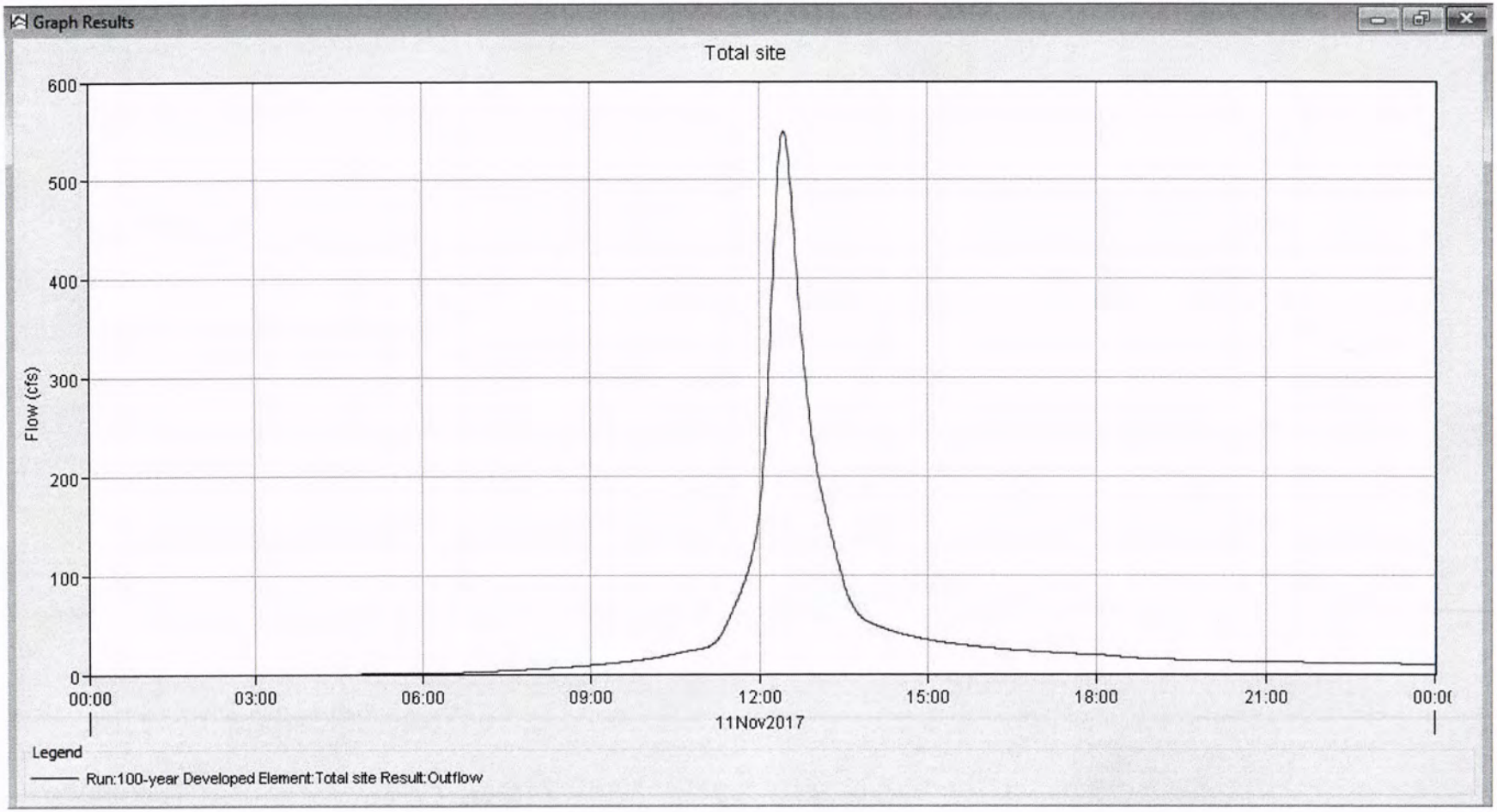
10-year Outflow Hydrograph



25-year Outflow Hydrograph



50-year Outflow Hydrograph



100-year Outflow Hydrograph

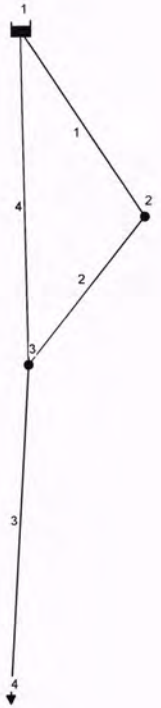
Swale Depth Calculation

Depth, ft	0.87
Width, ft	85
Side slope	74
Area, sft	129.01
Wetted perimeter, ft	213.11
Hydraulic Radius, ft	0.61
n	0.045
S	0.032
Q, cfs	549
Velocity, fps	4.26

Appendix C – EPA-SWMM Data

2-year Event

11/18/2017 00:15:00



```
[TITLE]
;;Project Title/Notes
2-year Event

[OPTIONS]
;;Option             Value
FLOW_UNITS           CFS
INFILTRATION         CURVE_NUMBER
FLOW_ROUTING         DYNWAVE
LINK_OFFSETS         DEPTH
MIN_SLOPE            0
ALLOW_PONDING        NO
SKIP_STEADY_STATE    NO

START_DATE           11/18/2017
START_TIME           00:00:00
REPORT_START_DATE    11/18/2017
REPORT_START_TIME    00:00:00
END_DATE             11/19/2017
END_TIME             00:00:00
SWEEP_START          01/01
SWEEP_END            12/31
DRY_DAYS             0
REPORT_STEP          00:15:00
WET_STEP             00:05:00
DRY_STEP             01:00:00
ROUTING_STEP         0:00:30

INERTIAL_DAMPING     PARTIAL
NORMAL_FLOW_LIMITED  BOTH
FORCE_MAIN_EQUATION  H-W
VARIABLE_STEP        0.75
LENGTHENING_STEP     0
MIN_SURFAREA         12.557
MAX_TRIALS           8
HEAD_TOLERANCE       0.005
SYS_FLOW_TOL         5
LAT_FLOW_TOL         5
MINIMUM_STEP         0.5
THREADS              1
```

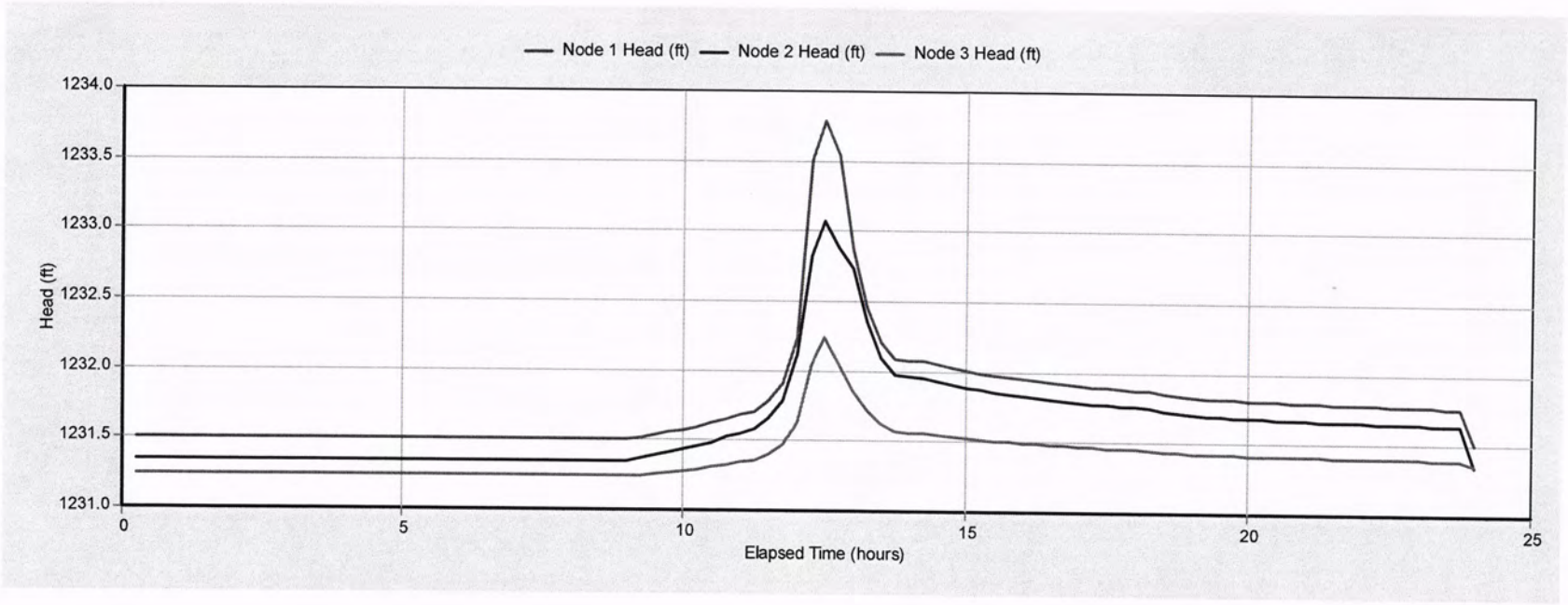
Note: The input files for the other storm events are identical to this one, with the exception of the name of the hydrograph file.

```
[EVAPORATION]
;;Data Source    Parameters
;;-------------- ----------
CONSTANT         0.0
DRY_ONLY         NO

[JUNCTIONS]
;;Name           Elevation  MaxDepth   InitDepth  SurDepth   Aponded
;;-------------- ---------- ---------- ---------- ---------- ----------
2                1231.35    4.65       0          0          0
3                1231.25    4.75       0          0          0

[OUTFALLS]
;;Name           Elevation  Type       Stage Data       Gated    Route To
;;-------------- ---------- ---------- ---------------- -------- ----------------
4                1231       FREE                        NO

[STORAGE]
;;Name           Elev.    MaxDepth   InitDepth  Shape      Curve Name/Params            N/A      Fevap    Psi      Ksat
IMD
;;-------------- -------- ---------- ---------- ---------- ---------------------------- -------- --------          ----
---- --------
1                1231.5   4.5        0          TABULAR    Swale                        0        0

[CONDUITS]
;;Name           From Node        To Node          Length     Roughness  InOffset   OutOffset  InitFlow   MaxFlow
;;-------------- ---------------- ---------------- ---------- ---------- ---------- ---------- ---------- ----------
1                1                2                19         0.013      0          0          0          0
2                2                3                19.7       0.013      0          0          0          0
3                3                4                85         0.035      0          0          0          0
4                1                3                39         0.013      2          2          0          0

[XSECTIONS]
;;Link           Shape        Geom1            Geom2      Geom3      Geom4      Barrels    Culvert
;;-------------- ------------ ---------------- ---------- ---------- ---------- ---------- ----------
1                CIRCULAR     1.5              0          0          0          5
2                CIRCULAR     1.5              0          0          0          5
3                TRAPEZOIDAL  2                58         3          3          1
4                IRREGULAR    RoadCrossing     0          0          0          1

[TRANSECTS]
```

```
;;Transect Data in HEC-2 format
;
NC 0.013    0.013    .013
X1 RoadCrossing      10       0.0      600      0.0      0.0      0.0      0.0      0.0
GR 1235.00  0        1233.60  164.23   1233.50  189.23   1233.60  214.23   1233.90  239.23
GR 1234.40  264.23   1241.37  525      1241.87  550      1242.17  575      1242.27  600

[INFLOWS]
;;Node           Constituent      Time Series      Type     Mfactor  Sfactor  Baseline Pattern
;;-------------- ---------------- ---------------- -------- -------- -------- -------- --------
1                FLOW             2-yearEvent      FLOW     1.0      1.0

[CURVES]
;;Name           Type       X-Value    Y-Value
;;-------------- ---------- ---------- ----------
Swale            Storage    1231.5     717
Swale                       1232       4463
Swale                       1232.5     5148
Swale                       1233       5846
Swale                       1233.5     6561
Swale                       1236       6561

[TIMESERIES]
;;Name           Date       Time       Value
;;-------------- ---------- ---------- ----------
2-yearEvent      FILE "2-yearEvent.dat"

[REPORT]
;;Reporting Options
INPUT      NO
CONTROLS   NO
SUBCATCHMENTS ALL
NODES ALL
LINKS ALL

[TAGS]

[MAP]
DIMENSIONS 0.000 0.000 10000.000 10000.000
Units      None
```

```
[COORDINATES]
;;Node           X-Coord           Y-Coord
;;-------------- ----------------- -----------------
2                3468.468          7207.207
3                2891.892          6468.468
4                2801.802          4810.811
1                2855.856          8126.126

[VERTICES]
;;Link           X-Coord           Y-Coord
;;-------------- ----------------- -----------------


[PROFILES]
;;Name           Links
;;-------------- ----------
"Pipes Profile   " 1 2 3
```

2-year Event


Node 1 Head (ft)
Node 2 Head (ft)
Node 3 Head (ft)
1234.0
1233.5
1233.0
1232.5
1232.0
1231.5
1231.0
Head (ft)
0
5
10
15
20
25
Elapsed Time (hours)

2-year Event

Node Depth Summary

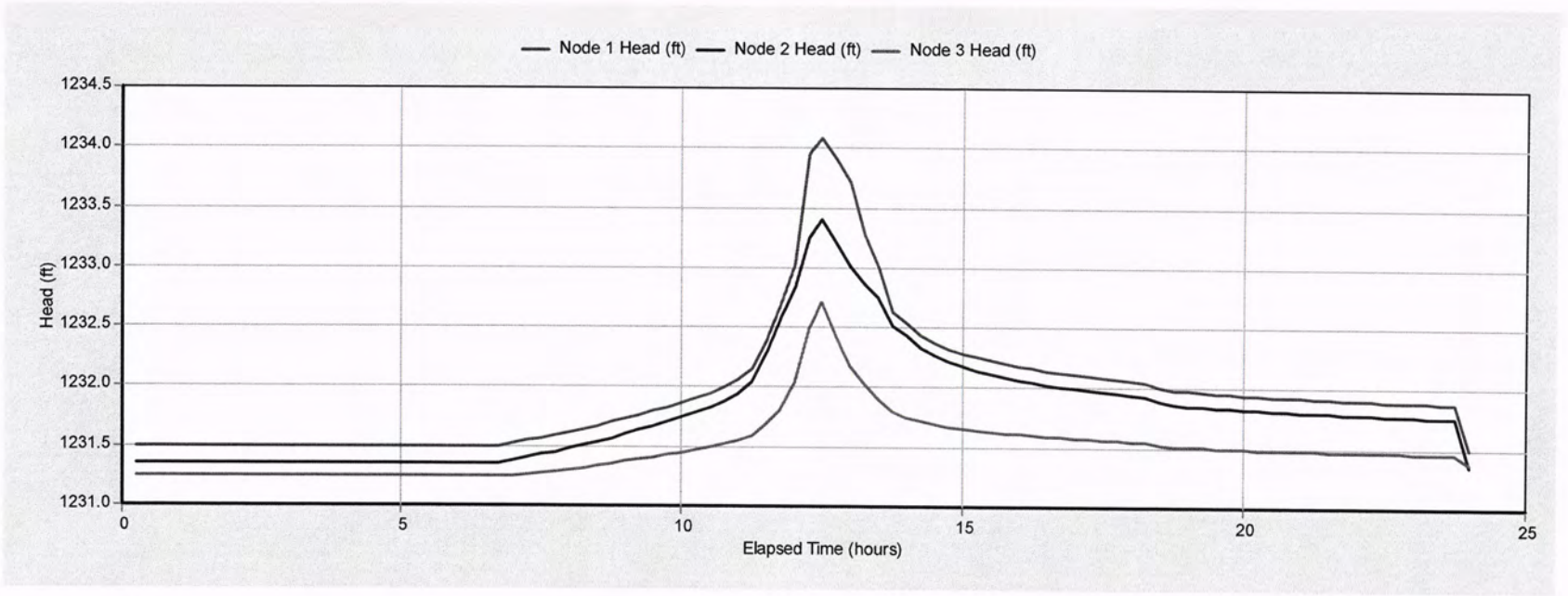
Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
2	JUNCTION	0.63	2.72	1234.07	0	12:48	1.72
3	JUNCTION	0.32	1.00	1232.25	0	12:28	1.00
4	OUTFALL	0.14	0.58	1231.58	0	12:28	0.57
1	STORAGE	0.67	2.29	1233.79	0	12:28	2.28

2-year Event

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
1	CONDUIT	101.60	0	12:27	11.50	2.18	1.00
2	CONDUIT	101.59	0	12:27	13.50	2.71	0.83
3	CONDUIT	146.15	0	12:28	3.07	0.33	0.39
4	CHANNEL	44.56	0	12:28	2.91	0.00	0.03

10-year Event



10-year Event

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth
2	JUNCTION	0.87	2.74	1234.09	0
3	JUNCTION	0.47	1.47	1232.72	0
4	OUTFALL	0.23	0.98	1231.98	0
1	STORAGE	0.94	2.58	1234.08	0

10-year Event

Node Depth Summary

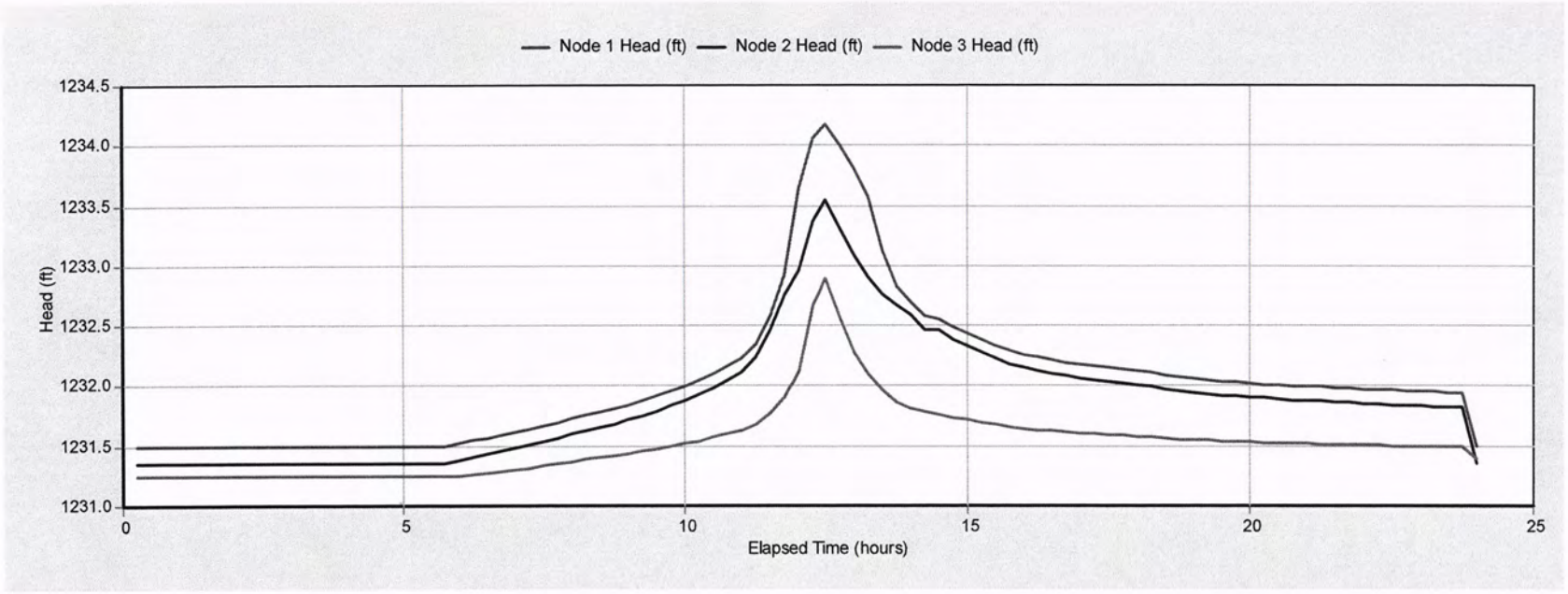
Node	Hour of Maximum Depth	Maximum Reported Depth Feet
2	13:15	2.05
3	12:27	1.46
4	12:26	0.97
1	12:27	2.58

10-year Event

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
1	CONDUIT	101.94	0	12:10	11.54	2.18	1.00
2	CONDUIT	101.93	0	12:10	13.54	2.72	0.99
3	CONDUIT	327.79	0	12:27	4.33	0.75	0.61
4	CHANNEL	228.79	0	12:27	4.55	0.00	0.07

25-year Event



25-year Event

Node Depth Summary

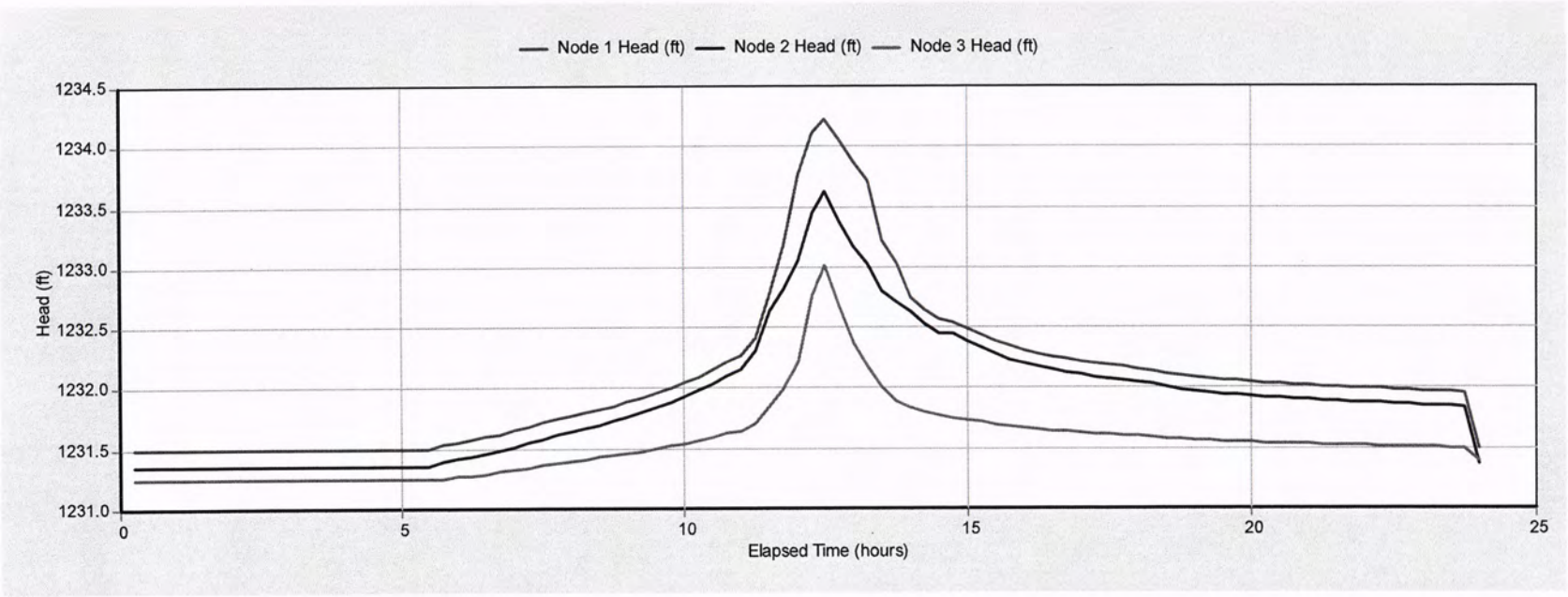
Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
2	JUNCTION	0.89	2.58	1233.93	0	11:54	2.19
3	JUNCTION	0.47	1.66	1232.91	0	12:27	1.64
4	OUTFALL	0.22	1.15	1232.15	0	12:27	1.13
1	STORAGE	0.95	2.68	1234.18	0	12:27	2.67

25-year Event

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
1	CONDUIT	101.93	0	12:06	11.54	2.18	1.00
2	CONDUIT	101.93	0	12:06	13.55	2.72	1.00
3	CONDUIT	416.79	0	12:27	4.78	0.95	0.70
4	CHANNEL	321.50	0	12:27	5.01	0.00	0.08

50-year Event



50-year Event

Node Depth Summary

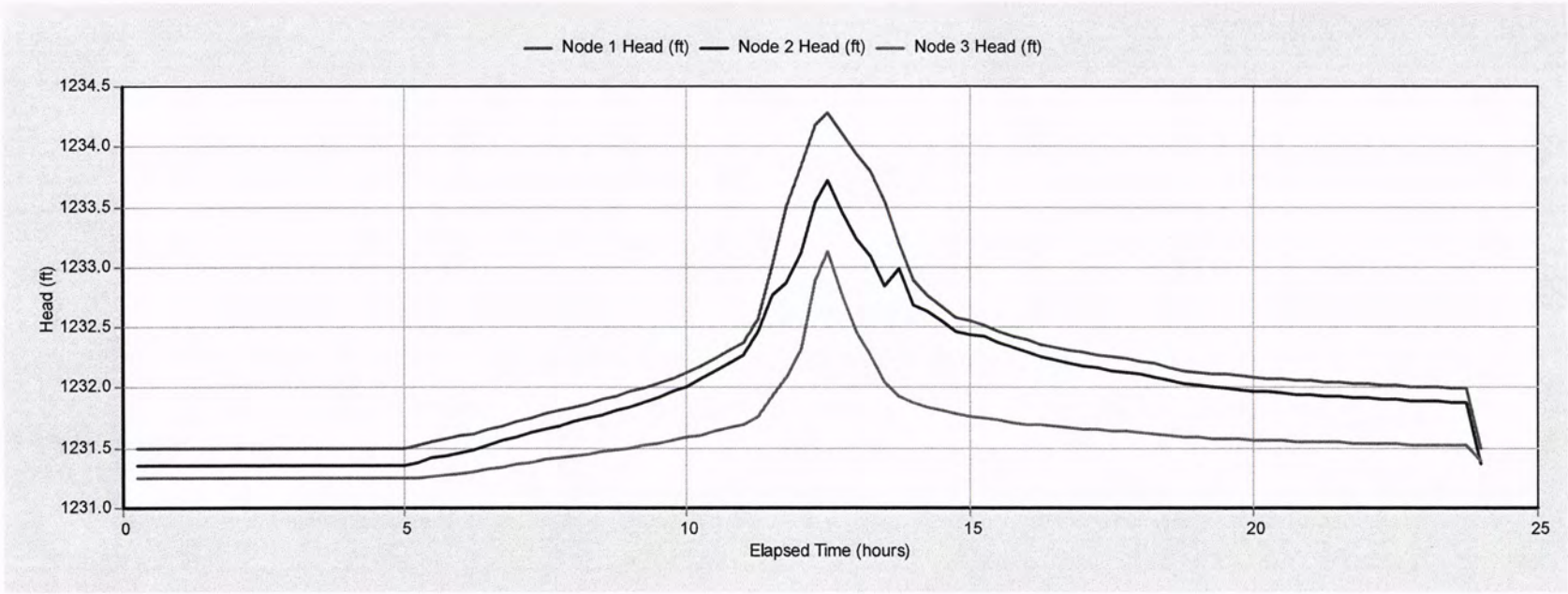
Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
2	JUNCTION	0.91	2.64	1233.99	0	11:46	2.28
3	JUNCTION	0.48	1.78	1233.03	0	12:27	1.76
4	OUTFALL	0.23	1.26	1232.26	0	12:27	1.24
1	STORAGE	0.98	2.74	1234.24	0	12:27	2.73

50-year Event

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
1	CONDUIT	101.92	0	12:04	11.53	2.18	1.00
2	CONDUIT	101.91	0	12:04	13.51	2.72	1.00
3	CONDUIT	481.39	0	12:27	5.06	1.10	0.76
4	CHANNEL	388.56	0	12:27	5.27	0.00	0.08

100-year Event



100-year Event

Node Depth Summary

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Day of Maximum Depth	Hour of Maximum Depth	Maximum Reported Depth Feet
2	JUNCTION	0.95	2.68	1234.03	0	13:31	2.37
3	JUNCTION	0.50	1.90	1233.15	0	12:26	1.88
4	OUTFALL	0.24	1.37	1232.37	0	12:26	1.35
1	STORAGE	1.02	2.79	1234.29	0	12:26	2.78

100-year Event

Link Flow Summary

Link	Type	Maximum |Flow| CFS	Day of Maximum Flow	Hour of Maximum Flow	Maximum |Velocity| ft/sec	Max / Full Flow	Max / Full Depth
1	CONDUIT	101.89	0	12:01	11.53	2.18	1.00
2	CONDUIT	101.89	0	12:01	13.51	2.72	1.00
3	CONDUIT	549.26	0	12:26	5.34	1.25	0.82
4	CHANNEL	458.95	0	12:26	5.51	0.00	0.09

JOHNSON & ASSOCIATES

1 EAST SHERIDAN, SUITE 200
OKLAHOMA CITY, OK 73104
(405) 235-8075
FAX (405) 235-8078

December 27, 2018

City of Midwest City
100 N. Midwest Blvd.
Midwest City, OK 73110

Attention: Mr. Patrick Menefee

RE: Florence Estates

On November 19, 2018, Johnson & Associates staff met with Ellen Stevens and Derek Jackson to discuss the items in their proposal that did not meet the drainage ordinance requirements. They understood that they would have to request a variance. Following our meeting, they were going to redesign the project, and then send us the revised report and an actual set of paving plans, as we never saw any complete set of plans. However, we have never seen any revised plans or report to review. Ms. Stevens and Mr. Jackson were still going to discuss some "waivers" or "variances" with the City, but my understanding is that would require Council Approval.

Since our meeting, I have talked to Ms. Stevens on another project but have not heard from Mr. Jackson. All is still in limbo from our viewpoint. We do not see how the City can advance any planning decisions recommendations without our review and comments of pending revisions. Also, our opinion is that additional easements are required and will need to be on the plat.

If you have any questions or wish to discuss this further, please contact our office.

Respectfully submitted,

Timothy W. Johnson, P.E.
JOHNSON & ASSOCIATES, INC.

TWJ/rw
cc: [Project #4001-000/C]

P:\4001\COR\Florence Estates 181227.docx

Name	Subject	Date	Actions
joyfuljacksons@sbcglobal.net	Florence Estates	1/6/2016 7:09 PM	
Marianna Sikkar	FYI Florence Estates Prelim	8/4/2017 2:32 PM	
Kellie Gilles	PC-1924	9/1/2017 2:01 PM	
John Jackson <jj_engineering@att.net>	[EXTERNAL] Drainage north of Florence Estates	9/7/2017 5:01 PM	
Jackson & Jackson <jj_engineering@att.net>	Re: [EXTERNAL] Drainage north of Florence Estates	9/13/2017 8:36 AM	
Brandon Bundy	Re: Fwd: [EXTERNAL] Drainage north of Florence Estates	9/13/2017 3:21 PM	
Bob Toney	Re: PC-1924	9/14/2017 1:59 PM	
Bob Toney	Re: PC-1924	9/15/2017 3:23 PM	
Kellie Gilles	Fwd: Re: PC-1924	9/15/2017 3:24 PM	
John Jackson <joyfuljacksons@sbcglobal.net>	[EXTERNAL] Re: Florence Estates	10/3/2017 10:47 AM	
John Jackson <joyfuljacksons@sbcglobal.net>	Re: [EXTERNAL] Re: Florence Estates	10/3/2017 4:20 PM	
Brandon Bundy	Fwd: Re: [EXTERNAL] Re: Florence Estates	10/3/2017 4:35 PM	
Brandon Bundy	Fwd: Re: [EXTERNAL] Re: Florence Estates	10/4/2017 4:31 PM	
John Jackson <joyfuljacksons@sbcglobal.net>	[EXTERNAL] Re: Florence Estates	10/17/2017 9:49 AM	
Kellie Gilles	Re: Fwd: [EXTERNAL] Re: Florence Estates	10/17/2017 11:14 AM	
Kellie Gilles	Re: Fwd: [EXTERNAL] Re: Florence Estates	10/17/2017 11:17 AM	
Kellie Gilles	Florence Estates	10/31/2017 8:43 AM	
Kellie Gilles	Florence Estates	11/3/2017 8:46 AM	
Kellie Gilles	Correct Staff Report	11/3/2017 12:40 PM	
John Jackson <jj_engineering@att.net>	Florence Estates Drainage	11/3/2017 1:48 PM	
Kellie Gilles	Re: Fwd: Florence Estates Drainage	11/3/2017 2:25 PM	
John Jackson <jj_engineering@att.net>	Florence Estates Drainage Letter	11/3/2017 3:51 PM	
John Jackson <jj_engineering@att.net>	Florence Estates	11/6/2017 11:08 AM	
derek jackson <joyfuljacksons@sbcglobal.net>	[EXTERNAL] Re: Florence Estates	11/14/2017 4:19 PM	
derek jackson <joyfuljacksons@sbcglobal.net>	Re: [EXTERNAL] Re: Florence Estates	11/14/2017 4:55 PM	
Billy Harless	Re: Capital projects meeting	12/20/2017 10:58 AM	
Vaughn Sullivan <vsullivan@midwestcityok.org>	Re: Capital projects meeting	12/20/2017 11:24 AM	
Brandon Bundy	Timberland Water Tower - Hydraulic Report	5/1/2018 1:44 PM	
Peter Singleton	Midwest City 2012 Hydraulic Analysis and Engineering Report	5/14/2018 5:04 PM	
Tim Johnson <tim@jaokc.com>	RE: Drainage Evaluation Letter - Florence Estates	6/12/2018 6:03 PM	
Tim Johnson <tim@jaokc.com>	RE: Drainage Evaluation Letter - Florence Estates	6/12/2018 6:04 PM	
Kellie Gilles	Florence Estates PC 1920	6/22/2018 1:55 PM	
Tim Johnson <tim@jaokc.com>	RE: Letter of evaluation	7/2/2018 10:10 AM	
Kellie Gilles	Fwd: RE: Florence Estates PUD - Drainage Review	7/2/2018 10:14 AM	

	Tim Johnson <tim@jaokc.com>	RE: Letter of evaluation	7/2/2018 10:34 AM
	Kellie Gilles	RE: Florence Estates PUD - Drainage Review	7/2/2018 10:38 AM
	Tim Johnson <tim@jaokc.com>	reports for Windsor and Florence	7/2/2018 4:21 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: florence and windsor	8/1/2018 3:44 PM
	Kellie Gilles	Florence Estates	8/20/2018 9:38 AM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	8/20/2018 12:40 PM
	Jackson & Jackson <jj_engineering@att.net>	Fwd: Report for Florence Estates	8/27/2018 5:05 PM
	Jackson & Jackson <jj_engineering@att.net>	Re: Report for Florence Estates	8/28/2018 4:03 PM
	Kellie Gilles	Re: Fwd: Report for Florence Estates	8/29/2018 9:31 AM
	John Jackson <jj_engineering@att.net>	Florence Estates	8/31/2018 2:25 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	8/31/2018 6:04 PM
	Tim Johnson <tim@jaokc.com>	RE: Report for Florence Estates	9/4/2018 11:56 AM
	Tim Johnson <tim@jaokc.com>	RE: Report for Florence Estates	9/4/2018 12:05 PM
	Kellie Gilles	PC-1976	9/7/2018 9:28 AM
	Kellie Gilles	Florence Estates Preliminary Plat	9/24/2018 9:40 AM
	Billy Harless	Fwd: Florence Estates Preliminary Plat	9/24/2018 11:21 AM
	David Heringer <dheringer@jaokc.com>	FW: Florence Estates	9/24/2018 2:05 PM
	David Heringer <dheringer@jaokc.com>	RE: Report for Florence Estates	9/24/2018 3:37 PM
	Kellie Gilles	Florence Estates	9/25/2018 8:33 AM
	Kellie Gilles	Re: Florence Estates	9/25/2018 9:06 AM
	Kellie Gilles	Re: Florence Estates	9/25/2018 9:18 AM
	John Jackson <jj_engineering@att.net>	Florence Estates	9/25/2018 12:42 PM
	David Heringer <dheringer@jaokc.com>	RE: Florence Estates	9/25/2018 4:01 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	9/25/2018 7:43 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	9/25/2018 8:40 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	9/26/2018 11:54 AM
	Kellie Gilles	Florence Estates	9/27/2018 8:21 AM
	Kellie Gilles	Re: Florence Estates	9/27/2018 9:50 AM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	9/27/2018 10:15 AM
	David Heringer <dheringer@jaokc.com>	RE: RE: Florence Estates	10/3/2018 1:21 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/3/2018 2:08 PM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/3/2018 6:14 PM
	Tim Johnson <tim@jaokc.com>	Re: Florence Estates	10/4/2018 5:13 AM
	David Heringer <dheringer@jaokc.com>	Re: Florence Estates	10/4/2018 3:33 PM

	David Heringer <dheringer@jaokc.com>	Re: Florence Estates	10/4/2018 3:33 PM
	JACKSON JOHN <joyfuljacksons@sbcglobal.net>	Laest Report and P&P Sheet for Florence Estates	10/4/2018 6:52 PM
	David Heringer <dheringer@jaokc.com>	Fwd: Laest Report and P&P Sheet for Florence Estates	10/4/2018 9:04 PM
	David Heringer <dheringer@jaokc.com>	FW: Laest Report and P&P Sheet for Florence Estates	10/4/2018 10:25 PM
	David Heringer <dheringer@jaokc.com>	Re: Laest Report and P&P Sheet for Florence Estates	10/8/2018 9:09 AM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/8/2018 9:12 AM
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/8/2018 9:35 AM
	Kellie Gilles	Florence Estates	10/15/2018 9:39 AM
	Kellie Gilles	Re: Florence Estates	10/15/2018 2:42 PM
	Jill Donaldson	Re: October 23, 2018 City Council/Authority Meeting Agendas	10/19/2018 1:30 PM
	Kellie Gilles	Florence Estates	10/29/2018 9:28 AM
	Jackson & Jackson <jj_engineering@att.net>	Re: Florence Estates	10/29/2018 10:07 AM
	Kellie Gilles	Florence Estates	10/30/2018 4:56 PM
	Kellie Gilles	Fwd: Re: Florence Estates	10/31/2018 8:18 AM
	Kellie Gilles	Fwd: Re: Florence Estates	11/1/2018 8:05 AM
	Tim Johnson <tim@jaokc.com>	RE: Re: Florence Estates Drainage Submittal	11/1/2018 3:18 PM
	Jill Donaldson	11-13-18 packet for review	11/8/2018 3:13 PM
	Jill Donaldson	11-27-18 City Council/Authority Meetings Packet	11/20/2018 12:38 PM
	Jill Donaldson	November 27, 2018 City Council/Authority Meeting packet and short form	11/20/2018 3:54 PM
	Kellie Gilles	Re: Florence Estates and Private Drive Question	11/26/2018 10:57 AM
	John Jackson <joyfuljacksons@sbcglobal.net>	Florence Estates	11/29/2018 4:39 PM
	Kellie Gilles	Re: Florence Estates	11/29/2018 4:58 PM
	Kellie Gilles	Florence Estates and Windsor Meadows	12/4/2018 10:28 AM
	John Jackson <jj_engineering@att.net>	Re: Florence Estates and Windsor Meadows	12/4/2018 11:22 AM
	Jill Donaldson	Draft of the 12-11-18 City Council/Authority Meetings	12/6/2018 3:05 PM
	John Jackson <jj_engineering@att.net>	Florence Estates	12/10/2018 4:24 PM
	Kellie Gilles	Fwd: Florence Estates	12/11/2018 8:03 AM
	Tim Johnson <tim@jaokc.com>	RE: Florence Estates	12/12/2018 10:03 AM
	Billy Harless	Re: Fwd: Florence Estates	12/12/2018 1:39 PM
	Kellie Gilles	Windsor Meadows/Florence Estates	12/19/2018 9:32 AM
	Kellie Gilles	staff reports	12/19/2018 9:49 AM
	Kellie Gilles	Re: Windsor Meadows/Florence Estates	12/20/2018 10:21 AM
	Kellie Gilles	Re: Windsor Meadows/Florence Estates	12/20/2018 11:34 AM

	Name	Subject	Date	Actions
	Tim Johnson <tim@jaokc.com>	RE: Drainage Evaluation Letter - Florence Estates	6/12/2018 6:03 PM	
	Tim Johnson <tim@jaokc.com>	RE: Drainage Evaluation Letter - Florence Estates	6/12/2018 6:04 PM	
	Tim Johnson <tim@jaokc.com>	RE: Letter of evaluation	7/2/2018 10:10 AM	
	Kellie Gilles	Fwd: RE: Florence Estates PUD - Drainage Review	7/2/2018 10:14 AM	
	Tim Johnson <tim@jaokc.com>	RE: Letter of evaluation	7/2/2018 10:34 AM	
	Kellie Gilles	RE: Florence Estates PUD - Drainage Review	7/2/2018 10:38 AM	
	Tim Johnson <tim@jaokc.com>	RE: Report for Florence Estates	9/4/2018 11:56 AM	
	Tim Johnson <tim@jaokc.com>	RE: Report for Florence Estates	9/4/2018 12:05 PM	
	David Heringer <dheringer@jaokc.com>	FW: Florence Estates	9/24/2018 2:05 PM	
	David Heringer <dheringer@jaokc.com>	RE: Report for Florence Estates	9/24/2018 3:37 PM	
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	9/25/2018 7:43 PM	
	David Heringer <dheringer@jaokc.com>	RE: RE: Florence Estates	10/3/2018 1:21 PM	
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/3/2018 2:08 PM	
	John Jackson <joyfuljacksons@sbcglobal.net>	Re: Florence Estates	10/3/2018 6:14 PM	
	Tim Johnson <tim@jaokc.com>	Re: Florence Estates	10/4/2018 5:13 AM	
	David Heringer <dheringer@jaokc.com>	Re: Florence Estates	10/4/2018 3:33 PM	
	David Heringer <dheringer@jaokc.com>	Re: Florence Estates	10/4/2018 3:33 PM	
	David Heringer <dheringer@jaokc.com>	Fwd: Laest Report and P&P Sheet for Florence Estates	10/4/2018 9:04 PM	
	David Heringer <dheringer@jaokc.com>	FW: Laest Report and P&P Sheet for Florence Estates	10/4/2018 10:25 PM	
	David Heringer <dheringer@jaokc.com>	Re: Laest Report and P&P Sheet for Florence Estates	10/8/2018 9:09 AM	
	Tim Johnson <tim@jaokc.com>	RE: Re: Florence Estates Drainage Submittal	11/1/2018 3:18 PM	
	Jill Donaldson	11-27-18 City Council/Authority Meetings Packet	11/20/2018 12:38 PM	
	Kellie Gilles	Re: Florence Estates and Private Drive Question	11/26/2018 10:57 AM	
	Jill Donaldson	Draft of the 12-11-18 City Council/Authority Meetings	12/6/2018 3:05 PM	
	Tim Johnson <tim@jaokc.com>	RE: Florence Estates	12/12/2018 10:03 AM	

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 6/12/2018 6:03 PM
Subject: RE: Drainage Evaluation Letter - Florence Estates

Yes I will review, I wish I had seen this earlier today, I had Ellen in my office today over another project.

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fjaokc.com&c=E,1,OL_eYs7epprvMSQ9_v_7uXeLBtVFo-6JFxCLe60etZyIAOQ0WLIIDEnB72OHvY24ZYroajsbM8zzDY8kz7z2rvMkK7YFaHR5RfSszBdCOD7dX-nEBID7LA,,&typo=1

-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Tuesday, June 12, 2018 10:38 AM
To: Tim Johnson <tim@jaokc.com>
Subject: Drainage Evaluation Letter - Florence Estates

Tim, can you take a look at the accompanying letter and respond with your own letter? thanks.

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
CC: Billy Harless <BHarless@MidwestCityOK.org>, Kellie Gilles <kgilles@Midwe...
Date: 7/2/2018 10:10 AM
Subject: RE: Letter of evaluation

Patrick,

We had asked for additional information to review, since there has not been any we will send a letter requesting that the engineer submit proper information to review and meet your ordinance.

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fjaokc.com&c=E,1,bMOrpPjS1peOSEjpADZ5xlc2JoaRtPWd2kCUCokpQ-lwYdQL84XeYVlrSgH-nfIWTefbQNBfRgIp7jQI3iFEHLaXWu0q2gRDo7Se-SUUd0cOV8HV2dVTi5k,&typo=1

-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Monday, July 2, 2018 9:54 AM
To: Tim Johnson <tim@jaokc.com>
Cc: Billy Harless <BHarless@MidwestCityOK.org>; Kellie Gilles <kgilles@MidwestCityOK.org>
Subject: Letter of evaluation

Good morning Tim. I know staff sent over the Florence Estates drainage summary again from Dr. Ellen Stephens and Mr. Jackson last week. Will you please send a letter back to me so I can make sure its part of the staff briefing for tomorrow night's Planning Commission? The sooner the better. I'd appreciate it.

From: Kellie Gilles
To: Menefee, Patrick
Date: 7/2/2018 10:14 AM
Subject: Fwd: RE: Florence Estates PUD - Drainage Review

I'm not sure what other additional info is necessary? Maybe we should call him?

>>> Tim Johnson <tim@jaokc.com> 7/2/2018 10:07 AM >>>
Hey Kellie,

Any more drainage information? If not we will send a note recommending that you return it to the engineer and request proper submittal information .

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fjaokc.com&c=E,1,LddJEf2GzqetbhAcWVrYzsKRwB6DRct4jA0yZ4P5mIkEzskQ3w6Pqy1_sezVJ-tt29M2gwo4MMNdSMKesmyVbdfoxqXOHVi2ZRZB1bKa5-OsMPwI5A59IpE,&typo=1

-----Original Message-----
From: Kellie Gilles <kgilles@MidwestCityOK.org>
Sent: Thursday, June 28, 2018 3:12 PM
To: Tim Johnson <tim@jaokc.com>
Subject: RE: Florence Estates PUD - Drainage Review

Yes, please. Patrick is out of the office and I don't know what he has regarding drainage maps but I've attached the drainage map that the City generated for the agenda item.

Thank you again for the help.

>>> Tim Johnson <tim@jaokc.com> 6/28/2018 2:54 PM >>>
Kellie,

Do you want us to review the PUD as well? I didn't see that attached. We will need his drainage maps to follow what he has in the culvert calculations.

Thank you,

Timothy W Johnson, PE
President / Principal, Johnson & Associates
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-----Original Message-----
From: Kellie Gilles <kgilles@MidwestCityOK.org>
Sent: Thursday, June 28, 2018 12:15 PM
To: Tim Johnson <tim@jaokc.com>
Cc: Billy Harless <BHarless@MidwestCityOK.org>
Subject: Florence Estates PUD - Drainage Review

Hi Tim,

Thank you so much for taking the time to review this.

A little background... this PUD was denied last Fall due to drainage concerns from the surrounding property owners. The applicant waited the required 6 months and has now reapplied for the PUD. I've attached the drainage report provided by the applicant's engineer as well as the Master Development Plan for the PUD. I will be in the office in case you have any questions.

I've also attached the preliminary plat of Windsor Meadows a new proposed subdivision near the proposed Florence Estates site. We would like for you to review it as well. Patrick is out of the office and I'm not sure where the preliminary drainage plan is but we can get that to you asap.

Thank you again for your help.

Sincerely,

Kellie Gilles
Planning Manager
Community Development
City of Midwest City
405-739-1223

Kellie Gilles
Planning Manager
Community Development
City of Midwest City
405-739-1223

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
CC: David Heringer <dheringer@jaokc.com>, Billy Harless <BHarless@MidwestCit...
Date: 7/2/2018 10:34 AM
Subject: RE: Letter of evaluation

Understand,

Big concern about the structure shown...

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fjaokc.com&c=E,1,SPTuB8NcZnxwQMPKQZgwmFSYtrjygm62TwQmlNMWn6z9DA7uAsLSGf-KHSCO1tY6OZFPO7Xwz4TYK398Lk4bCYVB2CIH-XRFyRbt_tET1nUPEVuXaA,,&typo=1

-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Monday, July 2, 2018 10:25 AM
To: Tim Johnson <tim@jaokc.com>
Cc: David Heringer <dheringer@jaokc.com>; Billy Harless <BHarless@MidwestCityOK.org>; Kellie Gilles <kgilles@MidwestCityOK.org>
Subject: RE: Letter of evaluation

This is for the preliminary plat and not a complete design. So this is a preliminary evaluation on the feasibility of the design. After the preliminary plat is voted on by the Planning Commission and City Council and when the full drainage design is complete, I'll make sure you'll see the drainage report and accompanying construction plans so you can provide additional insight and a full evaluation. I've attached their initial correspondence. This is just the starting point, we want your involvement on record.

>>> Tim Johnson <tim@jaokc.com> 7/2/2018 10:08 AM >>>
Patrick,

We had asked for additional information to review, since there has not been any we will send a letter requesting that the engineer submit proper information to review and meet your ordinance.

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President / Principal, Johnson & Associates
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-----Original Message-----
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To: Tim Johnson <tim@jaokc.com>
Cc: Billy Harless <BHarless@MidwestCityOK.org>; Kellie Gilles <kgilles@MidwestCityOK.org>
Subject: Letter of evaluation

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From: Kellie Gilles
To: Johnson, Tim
CC: Harless, Billy; Menefee, Patrick
Date: 7/2/2018 10:38 AM
Subject: RE: Florence Estates PUD - Drainage Review

Yes, it is.

>>> Tim Johnson <tim@jaokc.com> 7/2/2018 10:33 AM >>>
Kellie

Is the Windsor Meadows on for tomorrow too????

Timothy W Johnson, PE
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Sent: Thursday, June 28, 2018 12:15 PM
To: Tim Johnson <tim@jaokc.com>
Cc: Billy Harless <BHarless@MidwestCityOK.org>
Subject: Florence Estates PUD - Drainage Review

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Sincerely,

Kellie Gilles
Planning Manager
Community Development
City of Midwest City
405-739-1223

Kellie Gilles

Planning Manager
Community Development
City of Midwest City
405-739-1223

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 9/4/2018 11:56 AM
Subject: RE: Report for Florence Estates

Thanks, when do you need it back?

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
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-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Tuesday, September 4, 2018 11:45 AM
To: Tim Johnson <tim@jaokc.com>
Subject: Fwd: Report for Florence Estates

Wanted to get this report to you for your comments.

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 9/4/2018 12:05 PM
Subject: RE: Report for Florence Estates

Has there been any revisions to the plat/plans, this is just the report.

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President / Principal, Johnson & Associates
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-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Tuesday, September 4, 2018 11:45 AM
To: Tim Johnson <tim@jaokc.com>
Subject: Fwd: Report for Florence Estates

Wanted to get this report to you for your comments.

From: David Heringer <dheringer@jaokc.com>
To: "pmenefee@midwestcityok.org" <pmenefee@midwestcityok.org>
CC: Tim Johnson <tim@jaokc.com>, David Heringer <dheringer@jaokc.com>
Date: 9/24/2018 2:05 PM
Subject: FW: Florence Estates
Attachments: florence report.pdf

Tim asked that I forward you this again.
What has been submitted is not acceptable.

[cid:image001.png@01D4540F.91E45550]

Dave Heringer, PE, CFM
Senior Engineer, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
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From: David Heringer
Sent: Tuesday, September 4, 2018 7:51 PM
To: Tim Johnson
Cc: David Heringer
Subject: RE: Florence Estates

hy8 report.
send him this and tell him we cannot review further without real plans and report.
2 year overflows street. culvert should pass 100 yr.

From: Tim Johnson
Sent: Tuesday, September 4, 2018 7:08 PM
To: David Heringer
Subject: Re: Florence Estates
Apparently they have not submitted. So I will ping him tomorrow and tell him we cannot complete the review without the design plans
Thanks,
Tim Johnson

On Sep 4, 2018, at 5:42 PM, David Heringer <dheringer@jaokc.com<mailto:dheringer@jaokc.com>> wrote:
These are plats. Can we get the P&P sheet?

Get Outlook for iOS<https://linkprotect.cudasvc.com/url?a=https%3a%2f%2faka.ms%2fo0ukef&c=E,1,uvbV_QIF5IZUp9Giw2bNFysuoMYt2Joq5D5k3rY9IKJyaVGW9cDi6-JsITlubD3an-dzeHjGBnSkMOVe6qjEqZgiQvteTD9NjO-bodLNiPoj9w,,&typo=1>

From: Tim Johnson <tim@jaokc.com<mailto:tim@jaokc.com>>
Sent: Tuesday, September 4, 2018 5:35 PM
To: David Heringer

Subject: FW: Florence Estates

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
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-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org<mailto:pmenefee@MidwestCityOK.org>>
Sent: Tuesday, September 4, 2018 3:32 PM
To: Tim Johnson <tim@jaokc.com<mailto:tim@jaokc.com>>
Subject: Fwd: Florence Estates

here are some preliminary submittals. I think they're the same layout.

From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
CC: Tim Johnson <tim@jaokc.com>, derek jackson <joyfuljacksons@sbcglobal.net...
Date: 9/24/2018 3:37 PM
Subject: RE: Report for Florence Estates

YES

Dave Heringer, PE, CFM
Senior Engineer, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
https://linkprotect.cudasvc.com/url?a=https%3a%2f%2fjaokc.com&c=E,1,RZgFEX1U88Pazm1_nPZ7L_y
SfaMOmMBupeu79sP_ucb07v8D98F4D_t8YxSN8t-j2nR0p1bUbbQfAWVp1O9rAEgsQk1PCq-MMGp4cc
2ZOkKLhijj_ZRwxA1p_v8,&typo=1

-----Original Message-----
From: Patrick Menefee [mailto:pmenefee@MidwestCityOK.org]
Sent: Monday, September 24, 2018 3:12 PM
To: David Heringer
Cc: Tim Johnson; derek jackson
Subject: Fwd: Report for Florence Estates

Have you seen this part of the report

From: John Jackson <joyfuljacksons@sbcglobal.net>
To: Tim Johnson <tim@jaokc.com>
CC: David Heringer <dheringer@jaokc.com>, <PMenefee@MidwestCityOK.org>, <ell...
Date: 9/25/2018 7:43 PM
Subject: Re: Florence Estates

Hey Tim nice talking to you.

I'll have Ellen give you a call. Our major objective is to not dam up the overland sheet flow from the north and we think this design achieves that objective. We might have to ask the city for relief from the culvert standard or consider using the 10yr event for a local road as the standard and see if that works.

Sent from my iPhone

> On Sep 25, 2018, at 6:21 PM, Tim Johnson <tim@jaokc.com> wrote:
>
> Hi Derek, Long time no talk to!
>
> You can have Ellen reach out to either myself or David Heringer in my office, if you would like. we are not trying to slow you up, but based on what we have reviewed it is clear that the proposal for the multiple pipes does not meet the 100 year frequency per the ordinance for road crossings.
>
> And, without more detailed plans we cannot give a full review.
>
> Thanks
>
>
>
> Timothy W Johnson, PE
> President / Principal, Johnson & Associates
> 1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
> (405) 235-8075
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>
>
> -----Original Message-----
> From: Patrick Menefee <pmenefee@MidwestCityOK.org>
> Sent: Tuesday, September 25, 2018 5:26 PM
> To:
> Cc: David Heringer <dheringer@jaokc.com>; Tim Johnson <tim@jaokc.com>; Billy Harless <BHarless@MidwestCityOK.org>; Kellie Gilles <kgilles@MidwestCityOK.org>
> Subject: Fwd: RE: Florence Estates
>
> Derek, I'd suggest postponing bringing the preliminary plat to planning commission. As per the attached e-mail, Johnson and Associates still has not reached a consensus with your drainage analyst and her report. Unless there's an agreement between the two that can be presented to the commission, this should wait.
>
>
> <mime-attachment>
> <FlorenceEstates-082718.pdf>

From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>, derek jackson <joyfuljacks...
CC: Tim Johnson <tim@jaokc.com>, Billy Harless <BHarless@MidwestCityOK.org>,...
Date: 10/3/2018 1:21 PM
Subject: RE: RE: Florence Estates

Patrick,
Tim has talked to ellen and it is evident we have not seen the latest plan and hydraulic models to review. What I had sent you before indicates the system does not meet ordinance and will increase flood elevations upstream.
She said that with the revised design with detention ponds it has satisfied the request for no impact up or downstream.
Please send us the latest plans plat and hydraulic report with the pond/system analyses. Whatever is the latest design.
Thanks
Dave

Dave Heringer, PE, CFM
Senior Engineer, Johnson & Associates
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-----Original Message-----
From: Patrick Menefee [mailto:pmenefee@MidwestCityOK.org]
Sent: Tuesday, September 25, 2018 5:26 PM
To: derek jackson
Cc: David Heringer; Tim Johnson; Billy Harless; Kellie Gilles
Subject: Fwd: RE: Florence Estates

Derek, I'd suggest postponing bringing the preliminary plat to planning commission. As per the attached e-mail, Johnson and Associates still has not reached a consensus with your drainage analyst and her report. Unless there's an agreement between the two that can be presented to the commission, this should wait.

From: John Jackson <joyfuljacksons@sbcglobal.net>
To: David Heringer <dheringer@jaokc.com>
CC: Patrick Menefee <pmenefee@MidwestCityOK.org>, Tim Johnson <tim@jaokc.com...
Date: 10/3/2018 2:08 PM
Subject: Re: Florence Estates

I talked to Ellen and she says all of the hydraulic data that you are requesting is in the latest report and she is under the impression that the only remaining hydraulic issue is the water overtopping the proposed roadway, which doesn't meet the city's ordinance.
The last P&P sheet I submitted has the size of the detention areas, the size and number of culverts, and final profile grade based on Ellen's report. If there are additional plan details you need for your evaluation we will be happy to supply them to you.

Sent from my iPhone

> On Oct 3, 2018, at 1:20 PM, David Heringer <dheringer@jaokc.com> wrote:
>
> Patrick,
> Tim has talked to ellen and it is evident we have not seen the latest plan and hydraulic models to review.
> What I had sent you before indicates the system does not meet ordinance and will increase flood elevations upstream.
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> Thanks
> Dave
>
>
>
> Dave Heringer, PE, CFM
> Senior Engineer, Johnson & Associates
> 1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
> (405) 235-8075
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>
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> Sent: Tuesday, September 25, 2018 5:26 PM
> To: derek jackson
> Cc: David Heringer; Tim Johnson; Billy Harless; Kellie Gilles
> Subject: Fwd: RE: Florence Estates
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>
>

From: John Jackson <joyfuljacksons@sbcglobal.net>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
CC: David Heringer <dheringer@jaokc.com>, <ellen@ellenphdpe.com>, Tim Johnso...
Date: 10/3/2018 6:14 PM
Subject: Re: Florence Estates

Ok thanks

Sent from my iPhone

> On Oct 3, 2018, at 4:09 PM, Patrick Menefee <pmenefee@MidwestCityOK.org> wrote:
>
> I have forwarded everything I've received to Johnson and Asso. Derek,
> you may send the information out again just to be sure everyone has the
> latest version of the study and the exhibits.
>
>
>>>> John Jackson <joyfuljacksons@sbcglobal.net> 10/3/2018 2:08 PM >>>
> I talked to Ellen and she says all of the hydraulic data that you are
> requesting is in the latest report and she is under the impression that
> the only remaining hydraulic issue is the water overtopping the proposed
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>>
>>
>> Dave Heringer, PE, CFM
>> Senior Engineer, Johnson & Associates
>> 1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
>> (405) 235-8075
>
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>
>>

>>
>> -----Original Message-----
>> From: Patrick Menefee [mailto:pmenefee@MidwestCityOK.org]
>> Sent: Tuesday, September 25, 2018 5:26 PM
>> To: derek jackson
>> Cc: David Heringer; Tim Johnson; Billy Harless; Kellie Gilles
>> Subject: Fwd: RE: Florence Estates
>>
>> Derek, I'd suggest postponing bringing the preliminary plat to
> planning commission. As per the attached e-mail, Johnson and Associates
> still has not reached a consensus with your drainage analyst and her
> report. Unless there's an agreement between the two that can be
> presented to the commission, this should wait.
>>
>>
>

From: Tim Johnson <tim@jaokc.com>
To: John Jackson <joyfuljacksons@sbcglobal.net>
CC: Patrick Menefee <pmenefee@MidwestCityOK.org>, David Heringer <dheringer@...
Date: 10/4/2018 5:13 AM
Subject: Re: Florence Estates

Thanks, that would insure that we have the latest. Based on what she described to me, verses what we've seen, I think something is missing.

Thanks,
Tim Johnson

> On Oct 3, 2018, at 6:13 PM, John Jackson <joyfuljacksons@sbcglobal.net> wrote:
>
> Ok thanks
>
> Sent from my iPhone
>
>> On Oct 3, 2018, at 4:09 PM, Patrick Menefee <pmenefee@MidwestCityOK.org> wrote:
>>
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>>
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>>>>>> John Jackson <joyfuljacksons@sbcglobal.net> 10/3/2018 2:08 PM >>>
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>> the only remaining hydraulic issue is the water overtopping the proposed
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>> ordinance and will increase flood elevations upstream.
>>> She said that with the revised design with detention ponds it has
>> satisfied the request for no impact up or downstream.
>>> Please send us the latest plans plat and hydraulic report with the
>> pond/system analyses. Whatever is the latest design.
>>> Thanks
>>> Dave
>>>
>>>
>>>
>>> Dave Heringer, PE, CFM
>>> Senior Engineer, Johnson & Associates

>>> 1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
>>> (405) 235-8075
>>
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>>
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>>> From: Patrick Menefee [mailto:pmenefee@MidwestCityOK.org]
>>> Sent: Tuesday, September 25, 2018 5:26 PM
>>> To: derek jackson
>>> Cc: David Heringer; Tim Johnson; Billy Harless; Kellie Gilles
>>> Subject: Fwd: RE: Florence Estates
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From: David Heringer <dheringer@jaokc.com>
To: John Jackson <joyfuljacksons@sbcglobal.net>
CC: Patrick Menefee <pmenefee@midwestcityok.org>, Tim Johnson <tim@jaokc.com...
Date: 10/4/2018 3:33 PM
Subject: Re: Florence Estates

I need to see all the latest data.
Plans with drainage area map.
Plat
Complete hydraulic report and analysis of all storm sewer and pond routing.

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From: John Jackson <joyfuljacksons@sbcglobal.net>
Sent: Wednesday, October 3, 2018 2:08 PM
To: David Heringer
Cc: Patrick Menefee; Tim Johnson; Billy Harless; Kellie Gilles; ellen@ellenphdpe.com
Subject: Re: Florence Estates

I talked to Ellen and she says all of the hydraulic data that you are requesting is in the latest report and she is under the impression that the only remaining hydraulic issue is the water overtopping the proposed roadway, which doesn't meet the city's ordinance.
The last P&P sheet I submitted has the size of the detention areas, the size and number of culverts, and final profile grade based on Ellen's report. If there are additional plan details you need for your evaluation we will be happy to supply them to you.

Sent from my iPhone

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> Thanks
> Dave
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> Dave Heringer, PE, CFM
> Senior Engineer, Johnson & Associates
> 1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
> (405) 235-8075
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M5GuJujSmqBQ,,&typo=1
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>
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From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@midwestcityok.org>, derek jackson <joyfuljacks...
CC: "ellen@ellenphdpe.com" <ellen@ellenphdpe.com>, Tim Johnson <tim@jaokc.co...
Date: 10/4/2018 3:33 PM
Subject: Re: Florence Estates

If easier, send PDFs of all data to my email.
dheringer@jaokc.com
dah150@cox.net

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From: Patrick Menefee <pmenefee@midwestcityok.org>
Sent: Wednesday, October 3, 2018 4:09 PM
To: David Heringer; derek jackson
Cc: ellen@ellenphdpe.com; Tim Johnson; Billy Harless; Kellie Gilles
Subject: Re: Florence Estates

I have forwarded everything I've received to Johnson and Asso. Derek, you may send the information out again just to be sure everyone has the latest version of the study and the exhibits.

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> Dave Heringer, PE, CFM

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>
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> -----Original Message-----
> From: Patrick Menefee [mailto:pmenefee@MidwestCityOK.org]
> Sent: Tuesday, September 25, 2018 5:26 PM
> To: derek jackson
> Cc: David Heringer; Tim Johnson; Billy Harless; Kellie Gilles
> Subject: Fwd: RE: Florence Estates
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> Derek, I'd suggest postponing bringing the preliminary plat to planning commission. As per the attached e-mail, Johnson and Associates still has not reached a consensus with your drainage analyst and her report. Unless there's an agreement between the two that can be presented to the commission, this should wait.
>
>

From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 10/4/2018 9:04 PM
Subject: Fwd: Laest Report and P&P Sheet for Florence Estates
Attachments: Florence Estates Drainage Report 08-27-2018.pdf; Florence Estates Plan and Profile Sheet 3 09-25-2018.pdf

This states that the 2 year storm overflows the road and does not meet code.
Your ordinance requires culverts to pass 100 yr storm with 1' max hdwtr above soffit.

What the hell?? Are you even considering approval of this with their stated inadequacy?

I have not reviewed this but i see no routing of any detention ponds.
I see no existing condition flood study that would establish flood elevations to match.
I see no developed flood study condition to compare developed flood elevations with the existing elevations.
All i see is some peak flow hydrographs.
I will have to delve into this closer.
Your decision whether to approve or not.

I will have to do some calcs to show proper answers and will take quite some time.

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From: JACKSON JOHN <joyfuljacksons@sbcglobal.net>
Sent: Thursday, October 4, 2018 6:52 PM
To: Tim Johnson; David Heringer; dah150@cox.net
Cc: Ellen Stevens; Patrick Menefee
Subject: Laest Report and P&P Sheet for Florence Estates

Attached are the last items I have submitted to Patrick for your review. The outcome I hope to achieve is there is enough data/documentation submitted for an analysis to determine if the design we are proposing doesn't impede the flow of water or cause it to back up on the property owners to the north but not increase or cause flooding to the property owners to the south. We believe our design achieves both of those goals, however we are aware that the ovetopping of the roadway at the two-year storm event does not meet code. If additional information is needed we will be happy to provide whatever is necessary.

From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 10/4/2018 10:25 PM
Subject: FW: Laest Report and P&P Sheet for Florence Estates
Attachments: Florence Estates Drainage Report 08-27-2018.pdf; Florence Estates Plan and Profile Sheet 3 09-25-2018.pdf

patrick,
im not wasting time and money on this unless you tell me to.
the report states the detention pond is on the north side of the road. the plan notes the detention pond on the south side of the road.
there is no inflow/outflow hydrograph of any detention facility.

the report indicates this does not meet your ordinance.
i dont understand this being considered for approval at all.

i dont see any sense in my trying to prove or disprove the correctness of this analysis for something that is not to code.

tell me what yo want me to do.

From: JACKSON JOHN
Sent: Thursday, October 4, 2018 6:51 PM
To: Tim Johnson; David Heringer; dah150@cox.net
Cc: Ellen Stevens; Patrick Menefee
Subject: Laest Report and P&P Sheet for Florence Estates

Attached are the last items I have submitted to Patrick for your review. The outcome I hope to achieve is there is enough data/documentation submitted for an analysis to determine if the design we are proposing doesn't impede the flow of water or cause it to back up on the property owners to the north but not increase or cause flooding to the property owners to the south. We believe our design achieves both of those goals, however we are aware that the ovetopping of the roadway at the two-year storm event does not meet code. If additional information is needed we will be happy to provide whatever is necessary.

From: David Heringer <dheringer@jaokc.com>
To: Patrick Menefee <pmenefee@midwestcityok.org>
CC: Tim Johnson <tim@jaokc.com>
Date: 10/8/2018 9:09 AM
Subject: Re: Laest Report and P&P Sheet for Florence Estates

Ok. We will wait for your direction.
Thanks.

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From: Patrick Menefee <pmenefee@midwestcityok.org>
Sent: Monday, October 8, 2018 9:07 AM
To: David Heringer
Subject: Re: FW: Laest Report and P&P Sheet for Florence Estates

Thanks for the update. I told them to start from scratch. I don't know where the disconnect is as far as following the city design code. I sent him that part of the code book, don't do anything further until it's resubmitted.

>>> David Heringer <dheringer@jaokc.com> 10/4/2018 10:23 PM >>>
patrick,
im not wasting time and money on this unless you tell me to.
the report states the detention pond is on the north side of the road. the plan notes the detention pond on the south side of the road.
there is no inflow/outflow hydrograph of any detention facility.

the report indicates this does not meet your ordinance.
i dont understand this being considered for approval at all.

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tell me what yo want me to do.

From: JACKSON JOHN
Sent: Thursday, October 4, 2018 6:51 PM
To: Tim Johnson; David Heringer; dah150@cox.net
Cc: Ellen Stevens; Patrick Menefee
Subject: Laest Report and P&P Sheet for Florence Estates

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From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <pmenefee@MidwestCityOK.org>
Date: 11/1/2018 3:18 PM
Subject: RE: Re: Florence Estates Drainage Submittal

Yes we will get something set with them

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
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-----Original Message-----
From: Patrick Menefee <pmenefee@MidwestCityOK.org>
Sent: Thursday, November 1, 2018 3:04 PM
To: Tim Johnson <tim@jaokc.com>
Subject: Fwd: Re: Florence Estates Drainage Submittal

Tim, would you or David like to meet with Derek and Ellen next week to see if you can direct them on their deficient drainage proposal for Florence Estates?

From: Jill Donaldson
To: Sara Hancock; Heather Poole; Dohna Ebersole; Guy Henson; Tim Lyon; ...
Date: 11/20/2018 12:38 PM
Subject: 11-27-18 City Council/Authority Meetings Packet
Attachments: 11-27-18 Packet.pdf

Hi all,

Please check your agenda items in this draft packet before it goes public.

Thank you,

Jill Donaldson, Executive Assistant
Midwest City
City Manager/Council
100 N. Midwest Boulevard,
Midwest City, OK 73110
Office: 405.739.1204
jdonaldson@midwestcityok.org
www.midwestcityok.org

"Integrity is doing the right thing. Even when no one is watching [or listening]." C.S. Lewis

From: Kellie Gilles
To: Jackson & Jackson
CC: Menefee, Patrick
Date: 11/26/2018 10:57 AM
Subject: Re: Florence Estates and Private Drive Question

Good, I'm glad you all had a chance to meet and discuss everything. Please get us any new information as quickly as possible so we can prepare our staff report for the January 2 Planning Commission meeting.

Thank you,
Kellie Gilles, AICP
Current Planning Manager
City of Midwest City
405-739-1223

>>> Jackson & Jackson <jj_engineering@att.net> 11/26/2018 10:07 AM >>>
We met last Monday and tim understood that we were just asking for a letter from him confirming that he agreed with our numbers/design and then we can decide if we need to request a waiver use the ODOT criteria for culverts for a local street. We're providing them some additional information tomorrow.

Sent from my iPhone

> On Nov 26, 2018, at 9:52 AM, Kellie Gilles <KGilles@MidwestCityOK.org> wrote:
>
> Hi Derek,
>
> I got your message and confirmed with Patrick that a private drive would just need to be shown as an access easement.
>
> Regarding Florence Estates, were you able to meet with Tim to discuss the drainage? Would you like for me to set something up here at City Hall so we can all discuss the concerns?
>
> Thank you,
> Kellie Gilles, AICP
> Current Planning Manager
> City of Midwest City
> 405-739-1223
>
>

From: Jill Donaldson
To: Tim Lyon; Guy Henson; Sara Hancock; Heather Poole; Christy Barron; ...
Date: 12/6/2018 3:05 PM
Subject: Draft of the 12-11-18 City Council/Authority Meetings
Attachments: 12-11-18 Packet.pdf

Hi all,

Please check you items in the packet before it goes to the council and public.

Thank you,

Jill Donaldson, Executive Assistant
Midwest City
City Manager/Council
100 N. Midwest Boulevard,
Midwest City, OK 73110
Office: 405.739.1204
jdonaldson@midwestcityok.org
www.midwestcityok.org

"Integrity is doing the right thing. Even when no one is watching [or listening]." C.S. Lewis

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <PMenefee@MidwestCityOK.org>
Date: 12/12/2018 10:03 AM
Subject: RE: Florence Estates

Hi Patrick,

We met with them several weeks ago and I thought we were going to get something right away. we will look at what they have provided and get it back to you as soon as we can.

Timothy W Johnson, PE
President / Principal, Johnson & Associates
1 E Sheridan Ave, Suite 200, Oklahoma City, OK 73104
(405) 235-8075
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-----Original Message-----
From: Patrick Menefee <PMenefee@MidwestCityOK.org>
Sent: Wednesday, December 12, 2018 9:35 AM
To: Tim Johnson <tim@jaokc.com>; Billy Harless <BHarless@MidwestCityOK.org>; Kellie Gilles <KGilles@MidwestCityOK.org>
Subject: Fwd: Florence Estates

This is being evaluated by Johnson and Associates. I doubt they'll be able to provide an analysis of the report by Friday. I'll include Tim in this response so he can proceed with a review of the proposal.

From: Tim Johnson <tim@jaokc.com>
To: Patrick Menefee <PMenefee@MidwestCityOK.org>
Date: 12/27/2018 11:21 AM
Subject: RE: Florence Estates

Hi Patrick;

We had a meeting to discuss the items in the proposal that did not meet the drainage ordinance requirements. They understood that and we discussed that they would have to request a variance.

They were going to go back and redesign the project, send us revised report and an actual set of paving plans. (We never saw any complete set of plans).

We have never seen any revised plans or report to review.

They were still going to discuss some "waivers" or "variances" with the city, but that would require Council Approval, would be my understanding.

All still in limbo from our viewpoint.

We don't see how the City can advance any planning decisions recommendations without our review and comments of pending revisions.

Also, we think additional easements are required and will need to be on the plat.

Although I have talked to Ellen on another project but have not heard from Mr. Jackson, since our meeting.

Timothy W Johnson, PE
President / Principal, Johnson & Associates
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"Today in the town of David, a Savior has been born to you; he is the Messiah, the Lord" Luke 2:11

-----Original Message-----
From: Patrick Menefee <PMenefee@MidwestCityOK.org>
Sent: Thursday, December 27, 2018 10:34 AM
To: Tim Johnson <tim@jaokc.com>
Subject: Florence Estates

Good morning Tim, can you provide an executive summary bringing everyone up date concerning your and Dave's discussions and what conclusions you've reached with Dr. Stephens? I need something from you to include in the planning commission staff report.