

ISSUE STATEMENT: PUBLIC HEARING AND POSSIBLE VOTE CONCERNING A PROPOSAL TO

PAY A FEE IN LIEU OF STORMWATER DETENTION FOR IMPROVEMENTS AT THE SOUTHEAST CORNER OF SOUTH MAIN STREET AND EAST MILLS

ROAD.

**DATE**: MARCH 6, 2023

SUBMITTED BY: DAVE BODEEN, PE

PRESENTED BY: PLANNING AND DEVELOPMENT DEPARTMENT

## Background

The City of Nixa's adopted Technical Specifications Manual contains regulations pertaining to stormwater management on private property. Generally, the manual requires that stormwater runoff from development that adds impervious surface be detained for a period prior to being released. This detention of stormwater runoff helps to prevent downstream flooding by simulating the same rate of runoff that would have occurred otherwise.

However, in some cases, detaining stormwater runoff may not be practical nor the best solution for managing stormwater. When conditions exist that prove that stormwater detention would not be helpful or practical, the manual provides for an alternative solution in which the developer may pay the City an amount of money in lieu of constructing detention facilities. These funds are then held by the City until spent within the same drainage basin on stormwater improvements.

Bewley Construction has submitted development plans for a new subdivision named Cardinal's Gate in Nixa, in doing so, will add impervious surface to the site. The overall site is 5.03 acres, and the general topography is sloped to the south with FEMA Floodplain located along the south and east property lines. The development plans involve an increase of approximately 0.47 acres of impervious surface. The applicant has requested to provide a payment in lieu of constructing a detention facility.

### Analysis

The additional runoff from this proposed development does not pose a threat to downstream properties as it flows directly into a FEMA Floodplain. The City's 3<sup>rd</sup> party stormwater engineer has advised the City not to require detention next to a FEMA Floodplain as it could create dual peaks in the flood water, or a prolonged peak in the flood water in the FEMA Floodplain. Instead, Bewley Construction will pay the city \$3,348.48 that will be held until expended on stormwater improvements in this same drainage basin.

### Recommendation

Staff recommends approval of this request.



February 7, 2023

Mr. Scott Godby Director of Planning and Development City of Nixa Nixa, MO

## RE: CARDINALS GATE - FEE IN LIEU OF DETENTION

Dear Mr. Godby:

Please find the following calculations to determine the applicable fee in lieu of detention for the proposed Cardinals Gate Subdivision in Nixa, Missouri.

-No. of Lots: 6

-Impervious Area Per Lot: 2,400 s.f. for each building

1,000 s.f. for each building driveway (assumed 25' long x 40' wide)

Total: 3,400 s.f.

-Fee = K x Ia = 7150 x (6 lots x 3,400 s.f. / 43,560 s.f. / acre) = \$3348.48

Sincerely,

Pinnacle Design Consultants, L.L.C.

David Bodeen

David Bodeen, PE

Principal



February 7, 2023

## GRID NORTH

NOTE: ALL BEARINGS ARE BASED ON GPS OBSERVATIONS IN THIS PROJECT MO CENTRAL ZONE

LEGEND

 $\Delta$  = CALCULATED POINT

= FOUND EXISTING IRON PIN OR PIPE.  $\bigcirc$  = SET IRON PIN (PLS-2007017965 CAP)

 $\emptyset$  = POWER POLE m = SEWER MANHOLE U.E. = UTILITY EASEMENT BSL = BUILDING SETBACK  $\longrightarrow$  G  $\longrightarrow$  = GAS LINE  $\longrightarrow$  W  $\longrightarrow$  = WATER LINE — E — = OVERHEAD ELECTRIC SERVICE LINE --- SS --- = SANITARY SEWER LINE

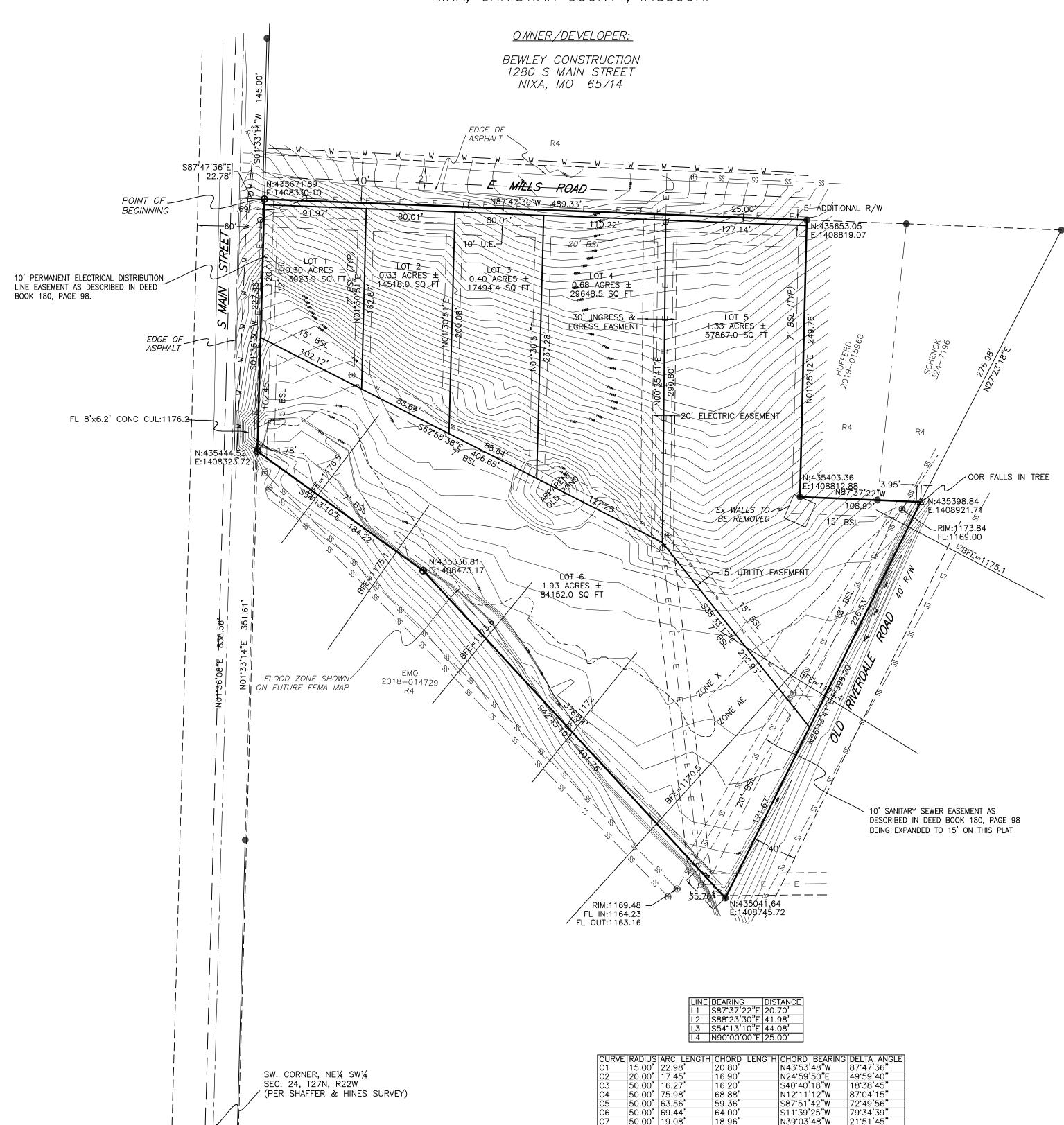
VICINITY MAP SEC. 24, T27N, R22W-SCALE: 1" = 2000 E SOUTH RU E OLD BITTERSWEET ST

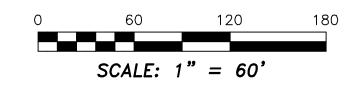
## NOTES:

- ZONING: R−4
- 2. R-4 BUILDING SETBACKS, UNLESS NOTES OTHERWISE, ARE AS FOLLOWS: FRONT SETBACK: 20' SIDE SETBACK: 7' REAR SETBACK: 15'
- SIDE SETBACK WITH STREET FRONTAGE: 12'
- 3. OWNER/DEVELOPER: BEWLEY CONSTRUCTION, LLC 4. TOTAL ACREAGE: 219,152 SQ.FT. (5.03 ACRES±)
- 5. A PORTION OF THE PROPERTY SHOWN HEREON <u>DOES</u> LIE IN A F.E.M.A. IDENTIFIED FLOOD PLAIN ACCORDING TO COMMUNITY PANEL NO.: 29043C0070C, EFFECTIVE 12/17/2010
- 6. RECORD SOURCE DEED: BK 2022, PG 013305
- 7. SMALLEST LOT: LOT 1 (13023.9 SQ.FT.) LARGEST LOT: LOT 6 (84152 SQ.FT.)
- 8. EXISTING ELECTRIC LINE EASEMENT AND SANITARY SEWER EASEMENT AS SHOWN IN DEED BOOK 180, PAGE 98.
- 9. FENCES SHALL NOT BE PERMITTED WITHIN THE SEWER EASEMENTS
- 10. THERE SHALL BE NO DIRECT VEHICULAR ACCESS ONTO OLD RIVERDALE ROAD FROM LOTS 1

# PRELIMINARY PLAT OF CARDINAL'S GATE

A SUBDIVISION BEING A PART OF THE NE¼ OF THE SW¼ SECTION 24, T27N, R22W, NIXA, CHRISTIAN COUNTY, MISSOURI





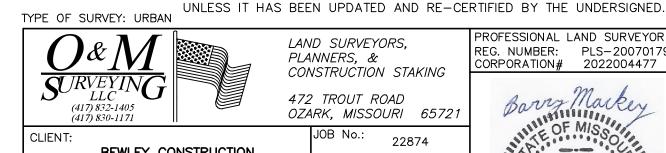
## PROPERTY DESCRIPTION:

A PARCEL OF LAND BEING A PART OF THE NORTHEAST QUARTER (NE1/4) OF THE SOUTHWEST QUARTER (SW1/4) OF SECTION 24, TOWNSHIP 27 NORTH, RANGE 22 WEST OF THE 5TH P.M. IN THE CITY OF NIXA, CHRISTIAN COUNTY, MISSOURI, THE BOUNDARY BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING FROM THE SOUTHWEST CORNER OF SAID NE¼ OF THE SW¼, THENCE NO1°36'08"E, ALONG THE WEST LINE OF SAID NE¼ OF THE SW¼, 838.56 FEET; THENCE S87'47'36"E, 22.78 FEET TO AN IRON PIN SET ON THE EAST LINE OF MAIN STREET; THENCE S01°36'30"W, ALONG SAID EAST LINE OF MAIN STREET, 227.46 FEET TO AN IRON PIN; THENCE S54°13'10"E, 184.22 FEET TO AN IRON PIN; THENCE S42'43'10"E, 401.76 FEET TO AN IRON PIN; THENCE N26'13'41"E, ALONG THE WEST BANK OF A GULLY, 398.20 FEET; THENCE N87°37'22"W, 108.92 FEET TO AN IRON PIN; THENCE N01°25'12"E, 249.76 FEET TO AN IRON PIN; THENCE N87°47'36"W, 489.33 FEET TO THE POINT OF BEGINNING. SUBJECT TO THAT PART TAKEN, DEEDED OR USED FOR ROAD PURPOSES ACROSS THE NORTH AND WEST SIDE THEREOF. ALSO, SUBJECT TO ANY AND ALL EASEMENTS, RESTRICTIONS, RESERVATIONS AND COVENANTS OF RECORD. BEARINGS ARE BASED ON THE MISSOURI COORDINATE SYSTEM OF 1983, CENTRAL ZONE.

## DECLARATION BY SURVEYOR

I HEREBY DECLARE TO BEWLEY CONSTRUCTION, THAT THE INFORMATION CONTAINED HEREON IS BASED UPON AN ACTUAL SURVEY OF THE LAND DESCRIBED HEREIN, WHICH WAS PERFORMED TO THE BEST OF MY KNOWLEDGE AND BELIEF, IN ACCORDANCE WITH THE JOINT STANDARDS FOR PROPERTY SURVEYS AS PUBLISHED BY THE MISSOURI DEPARTMENT OF AGRICULTURE AND THE MISSOURI BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS AND LAND SURVEYORS DATED JUNE 30, 2017 AND BASED ON INFORMATION PROVIDED BY THE CLIENT. MONUMENTS AND PINS SHOWN AS SET WERE PLACED UNDER MY REVIEW AND SUPERVISION.

PHYSICAL EVIDENCE OF IMPROVEMENTS IS SHOWN FROM INFORMATION TAKEN BY VISUAL INSPECTION OF THE PREMISES. EASEMENTS SHOWN ARE THOSE WRITTEN, PROVIDED, OR DISCOVERED AND MAY NOT BE ALL INCLUSIVE. APPARENT OWNERSHIPS AS SHOWN ARE BASED UPON INFORMATION PROVIDED BY OTHERS AND DO NOT REPRESENT AN OPINION AS TO TITLE. THIS PLAT OF SURVEY IS AN INSTRUMENT OF SERVICE AND IS NOT TO BE USED BY ANYONE OTHER THAN THOSE TO WHOM IT HAS BEEN CERTIFIED



LAND SURVEYORS, PLANNERS, & CONSTRUCTION STAKING *472 TROUT ROAD* OZARK, MISSOURI 65721

DRAWN BY: JES

CHECKED BY: BDM

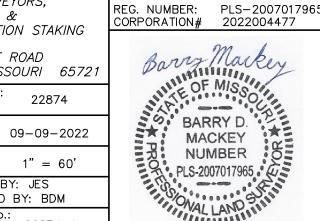
22874

1" = 60'

22874-1

BEWLEY CONSTRUCTION DESCRIPTION: BOUNDARY/TOPO SURVEY

SW¼, SEC. 24, T27N, R22W NIXA, CHRISTIAN COUNTY, MO ORDERED BY: DUSTY BEWLEY



PROFESSIONAL LAND SURVEYOR

ADJOINING LAND OWNERS AND THEIR DEED BOOK AND PAGES WERE BASED ON INFORMATION OBTAINED FROM THE CHRISTIAN COUNTY ON-LINE WEBSITE SERVICES. (PROVIDED BY OTHERS)