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SITE INVESTIGATION REPORT

Kimbrough and Ray Tracts – Walnut Creek and Debbie Lane

August 30, 2016

A. *Executive Summary*

The purpose of this document is to provide a site investigation report for the possible development of the Kimbrough and Ray Tracts in Mansfield, Texas.

This site is located at the northwest corner of Debbie Lane and Walnut Creek Drive in Tarrant County. The site consist of two tracts of land and includes a 9.495 acre tract (Site 1), being the remainder of IRA T. Kimbrough and Andrea E. Kimbrough, as recorded in Volume 6296, Page 991, Deed Records, Tarrant County, Texas and a 3.603 acre tract (Site 2), being the remainder of Robert D. Ray, as recorded in Volume 11235, Page 964, D.R.T.C.T. The site is currently undeveloped with each tract having direct access to public street Right-of-way. Due to topography and existing flood plain it is estimated that Site 1 has 6.82 acres open for development improvements with 1.25 acres in floodplain and 1.425 acres inaccessible for development due to the floodplain location and orientation. Site 2 is found to have an estimated 0.97 acres open for development improvements with 1.13 acres in floodplain and 1.5 acres cut off by floodplain which would require a large culvert or bridge structure in order to access the area for development.

I. *Existing Topography*

On Site 1 the property is an average of 5' below the street paving along Walnut Creek Drive. The property drops off quickly from Walnut Creek Drive and then flattens out into a more gently sloping area. Along Debbie Lane the property slopes away from the road more gently and then falls slightly into a drainage way running from East to West. The North and West property lines have a significant drainage channel running along them with flood plain that are not considered developable. On Site 2 the topography is generally sloping from the West and East into a drainage channel with flood plain that leads to a series of box culverts under Debbie Lane. The topography along with the flood plain on Site 2 is challenging for development improvements and may be best served as the detention area and open space/park for the development improvements on Site 1.

II. *Floodplain Requirements*

The two properties have a Zone X (0.2% chance or 500-year flood) floodplain delineated by FEMA. FEMA has chosen not to delineate a Zone A or AE (1% chance or 100-year flood) floodplain. Since the time that the Zone X was delineated, grading has occurred on both properties in the channel and in the floodplain. As a result, the Zone X floodplain does not reflect today's conditions. The city of Mansfield will require a flood study to determine the 100-year floodplain location and minimum finished floor elevations. Mansfield will not require a FEMA submittal since a Zone A or AE is not impacted. A flood study will include the modeling of the watershed to determine storm discharges and stream modeling to determine base flood elevations. This flood study will be required information by a lending institution to determine if flood insurance is required. Once the ground work is final it is not required but an option to submit an as-built flood study to FEMA to change the 500-year floodplain location. This requires survey to verify the final grading that would modify the floodplain as compared to the existing ground and updating the stream model.

III. *Site Utilities*

A 16” water main exists along the north side of Debbie Lane, a 12” water line exists along the east side of Walnut Creek Drive, as well as an 8” water line along the east side of Bent Trail. A water loop will need to be made, connecting to both the 16” main.

An existing 12” sanitary sewer line is located within Debbie Lane to the south. This sanitary sewer line provides an existing 8” S.S. stub across Debbie Lane to the subject tract. An existing 10” sanitary sewer line is located along Walnut Creek Drive. Based on the depth of the exiting sewer line, no issues are expected with serving the proposed development.

Existing franchise utilities are available near the proposed development.

Oncor Electric Delivery is the provider for electric service. A “will serve” letter is available, but the letter has not been requested at this time.

Atmos Energy is the provider for gas service. A “will serve” letter is available, but the letter has not been requested at this time.

There are several phone, cable and internet providers in the area. Time Warner, Verizon, and AT&T appear to be the major providers for these services. Typically, there are no fees associated with new development other than the cable/phone company’s requirement for conduit placed in the ground, of which the cost is typically borne by the developer.

Currently, all indications identify that capacity exists for dry utilities.

IV. *Traffic Impact Analysis*

The possible need for a traffic impact analysis has not been determined for the property until such time as a proposed development plan is established.

V. *Onsite / Offsite Construction*

It is not anticipated that the subject property will require offsite water or offsite sanitary sewer in order to provide wet utility services for the proposed development.

The onsite construction will be inclusive of grading, retaining walls (if needed), detention pond, perimeter fencing, paving, curb and gutter, walkways, wet and dry utilities, storm drains, and buildings.

VI. *Survey*

A topographic survey has been prepared for the site. Preliminary and final platting will be necessary.

B. Site Summary Items

I. Zoning Requirements

The entire subject property is zoned C-2, Community Commercial District Regulations

General Purpose and Description: To establish and preserve general commercial area consisting of shopping facilities where customers reach individual business establishments primarily by automobile, and to provide for other kinds of uses compatible circumstances.

Permitted Uses: Uses permitted in a C-2, Community Business District are set forth in Section 4400 of the zoning ordinance.

Area and Height Regulations: Area and height regulations in a C-2 Community Business District are set forth in Section 4500 of the zoning ordinance. Refer to Section 4500B table for non-residential districts.

Minimum Setbacks: Abutting Street right-of-way: 25', Abutting other property lines: 0'

Maximum Height: 50', Maximum Floor Area Ratio: 2.0, Minimum Masonry Content: 70%.

II. Subdivision Requirements

The intention of the developer is to improve the lot which will require a Preliminary and Final Plat. The subdivision approval process is relatively straight forward:

Preliminary Plat Approval Process:

1. **Pre-Application Conference / Concept plan:** An applicant may request a pre-application conference or meeting with the Director of Planning, Director of Parks and Recreation, or City Engineer for the purpose to identify requirements that are applicable to the proposed plat and /or to present a plan for development or plat that describes the property, the proposed uses for the property, and their proposed location on the property and the permit which is sought. If the request for the meeting is to ascertain platting requirements, the request shall be made in writing on a form prepared by the responsible official and shall state that any proposed development concept discussed at the pre-application conference is not intended as a plan for development or application for plat approval. It is strongly recommended that the owner or sub-divider request a pre-submittal meeting with city staff as appropriate.

2. **Preliminary Plat Submittal:**
   Approval of a preliminary plat is required for any proposed subdivision of five (5) or more lots or proposing any public infrastructure improvements unless the Director of

Planning and City Engineer approve a waiver of the preliminary plat requirement

When subdividing an unplatted tract into four (4) or fewer lots, the developer may submit a preliminary plat for processing and approval before approval of a final plat. The developer may elect to subdivide an unplatted tract into four or fewer lots without a preliminary plat and may submit an application for approval of a final plat or minor plat as authorized by the subdivision ordinance.

The following plans shall be required with a preliminary plat submittal:
(1) Preliminary Drainage Study
(2) Preliminary Utility Plan
(3) Tree Preservation plan
(4) Preliminary Access Plan and Preliminary Traffic Impact Analysis

3. Final Plat Approval and Process:

A. A final plat application may only be filed with the Planning Department if the final plat substantially conforms to the approved preliminary plat and any and all conditions of approval. A final plat may include all or only a portion of the area of the approved preliminary plat.

B. When a final plat deviates substantially from the approved preliminary plat, a revised preliminary plat must be approved prior to submission of the final plat.

C. The following plans shall be required with a final plat submittal:

(1) Final Drainage Analysis
(2) Final Construction Documents
(3) Final Access Plan and Final Traffic Impact Analysis
(4) Tree Preservation Plan

D. Approval of a final plat or re-plat shall expire one (1) year from the date of the Planning and Zoning Commission action if the conditions of approval have not been satisfied. The Development Review Committee may extend its validation up to one (1) year, upon application and payment of additional fees.

4. Minor Plat Approval and Process:

When a tract of land has not been previously platted and field of record, the developer may elect to submit a minor plat if the proposed subdivision:

(1) is to be subdivided into four (4) or fewer lots;
(2) Fronts on an existing street;
(3) Does not require the creation of any new street or the extension of municipal facilities; and
(4) Does not require that a public hearing be held in accordance with Chapter 212 of the Texas Local Government Code, as amended.

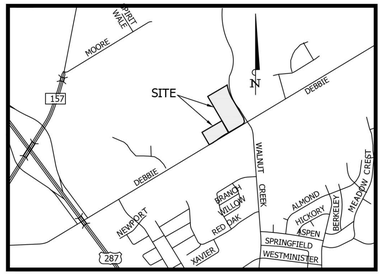
III. Fire Department Requirements

The City of Mansfield has adopted the Amendments to the International Fire Code, 2006 Edition, North Central Texas Council of Governments. For land use districts relating to multiple-family dwelling, retail, commercial, central business or industrial structures, fire hydrants shall be located at a maximum spacing of three hundred (300) feet as measured along the length of the roadway, and no part of any structure will be farther than five hundred (500) feet from the fire hydrants as measured by the route that a fire hose is laid according to the fire chief or his designee. All fire hydrants located along public streets shall be located not more than six (6) feet from the curb and shall face the street. Fire hydrants located on private property shall be accessible to the fire department at all times. Fire lanes shall be required adjacent to and around any building when any portion of an exterior wall of the first story is located more than one hundred fifty (150) feet from fire department vehicle access, or when necessary for proper ingress or egress of emergency vehicles. In the event that a single red fire lane line is located within twenty-four (24) feet of a building, the area between that red fire lane line and the building shall also be considered to be part of the fire lane unless that area has been specifically designated for parking by the fire chief. Fire lanes shall not be less than twenty-four (24) feet of unobstructed width. Fire apparatus access roads shall provide an unobstructed minimum vertical clearance of fourteen (14) feet. Dead-end fire lanes in excess of one hundred fifty (150) feet in length shall be provided with a turnaround radius of fifty (50) feet minimum. The minimum fire lane turning radius for all turns shall be 28 feet inside turning radius and 52 feet outside turning radius.

C. Due Diligence and Conclusion

BELLC contacted various members of city staff, reviewed information on their website, and coordinated with other entities to confirm and clarify the information contained in this report.

This site investigation report has been prepared based in part on information provided by others (architect, client, city staff, city web site). Additional issues may arise during detailed design and development that could deviate from the information in this report causing potential alterations in project scope, schedule, and cost.



VICINITY MAP
NOT TO SCALE
MANSFIELD, TEXAS

GENERAL NOTES:

1. The tract shown herein and described above was not abstracted by the surveyor. Additional easements or other encumbrances, whether of record or not may affect the subject tract.

2. According to surveyor's interpretation of information shown on the National Flood Insurance Program (NFIP) "Flood Insurance Rate Map" (FIRM), Community Panel No. 48439C0460K, dated September 25, 2009. The property appears to lie within Zone "X" and the entire property lies within a "Areas determined to be outside the 0.2% annual chance floodplain" zone as defined by the U.S. Department of Housing and Urban Development, Federal Insurance Administration, or the Federal Emergency Management Agency.

3. The above referenced "FIRM" map is for use in administering the "NFIP"; it does not necessarily show all areas subject to flooding, particularly from local sources of small size, which could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. There may be other streams, creeks, low areas, drainage systems or other surface or subsurface conditions existing on or near the subject property which are not studied or addressed as a part of the "NFIP".

4. The surveyor has made no attempt to locate or define hazardous waste areas, habitats, endangered species or any other environmentally sensitive areas on the tract of land shown hereon; nor does this survey make any representations of being an environmental assessment of the tract of land shown hereon.

5. The surveyor has made no attempt to locate or define archeological sites, historical sites or undocumented cemeteries on the tract of land shown hereon: nor does this survey make any representation of being an archeological or historical survey of the tract of land shown hereon.

6. The surveyor has made no attempt to locate abandoned or plugged oil and gas wells, or any other wells on the tract of land shown hereon; nor has the surveyor made any attempt to research same with the Railroad Commission of Texas or any other State agency: nor has the surveyor investigated any mineral or royalty interests in the tract of land shown hereon.

7. Existing utilities shown hereon are from above ground visible features coupled together with maps and plans provided to the surveyor. The surveyor does not make any representation of being a Quality Level A or B sub-surface utility survey of the tract of land shown hereon.

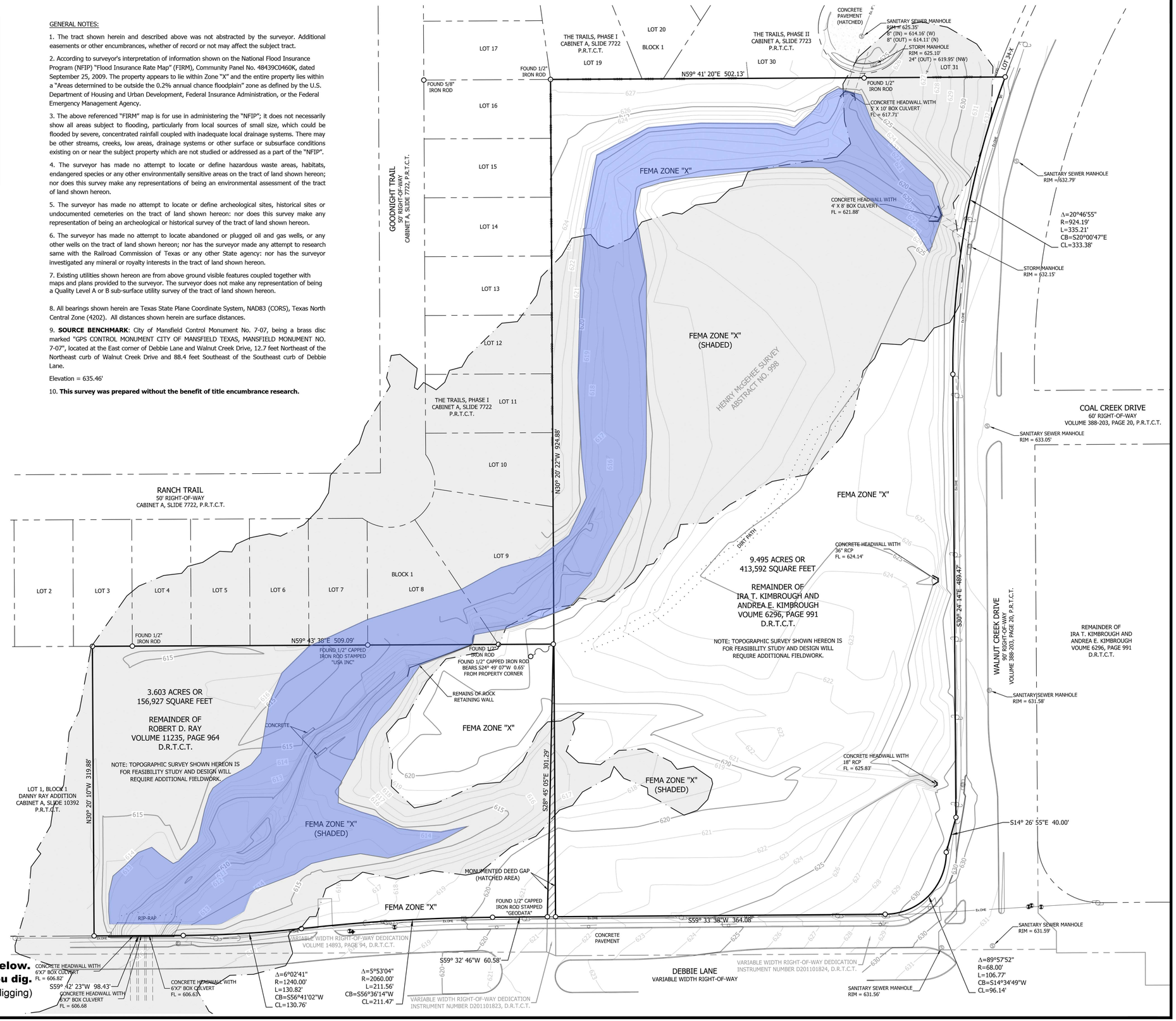
8. All bearings shown herein are Texas State Plane Coordinate System, NAD83 (CORS), Texas North Central Zone (4202). All distances shown herein are surface distances.

9. **SOURCE BENCHMARK**: City of Mansfield Control Monument No. 7-07, being a brass disc marked "GPS CONTROL MONUMENT CITY OF MANSFIELD TEXAS, MANSFIELD MONUMENT NO. 7-07", located at the East corner of Debbie Lane and Walnut Creek Drive, 12.7 feet Northeast of the Northeast curb of Walnut Creek Drive and 88.4 feet Southeast of the Southeast curb of Debbie Lane.

Elevation = 635.46'

10. **This survey was prepared without the benefit of title encumbrance research.**

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.



LEGEND

D.R.T.C.T.
DEED RECORDS
TARRANT COUNTY, TEXAS

P.R.T.C.T.
PLAT RECORDS
TARRANT COUNTY, TEXAS

- UTILITY PIN FLAG
- GAS MANHOLE
- GAS MARKER
- GAS METER
- TRANSFORMER
- ELECTRIC METER
- TELEPHONE RISER
- MAIL BOX
- SIGN
- POWER POLE
- LIGHT
- SANITARY SEWER MANHOLE
- CLEAN-OUT
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- WATER MANHOLE
- FIRE WATER CONNECTION
- IRRIGATION CONTROL VALVE
- TRAFFIC SIGNAL
- BOLLARD
- GRATE INLET
- STORM MANHOLE
- N NORTH/NORTHING
- S SOUTH
- E EAST/EASTING
- W WEST
- ° DEGREES
- ' MINUTES/FEET
- " SECONDS/INCHES
- (#) TITLE COMMITMENT ITEM
- -GAS- GAS LINE
- -Ex._WL- WATER LINE
- -Ex._SS- SEWER LINE
- -Ex._SD- STORM DRAIN LINE
- -OH- OVERHEAD UTILITY
- -UGT- UNDERGROUND TELEPHONE
- -GDRL- GUARD RAIL
- -CHLK- CHAIN LINK FENCE
- -WIRE -WIRE FENCE
- -WOOD- WOOD FENCE
- -METAL- METAL FENCE
- -IRON- IRON FENCE
- -SILT- SILT FENCE

811
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BANISTER ENGINEERING
240 North Mitchell Road | Mansfield, TX 76063 | 817.842.2094 | 817.842.2095 Fax
TBPLS REGISTRATION NO. 10193823

PROJECT:
Being 3.603 acres or (156,927 square feet) and
9.495 acres or (413,592 square feet)
out of the
Henry McGehee Survey, Abstract No. 998
City of Mansfield, Tarrant County, Texas

TOPOGRAPHIC SURVEY

PROJECT NO.: 999-16-33	
SCALE: 1" = 50'	
DRAWN BY: sa	
CKD BY: md2	
SHEET NUMBER	1 OF 1

BANNISTER ENGINEERING

999-16-33/34

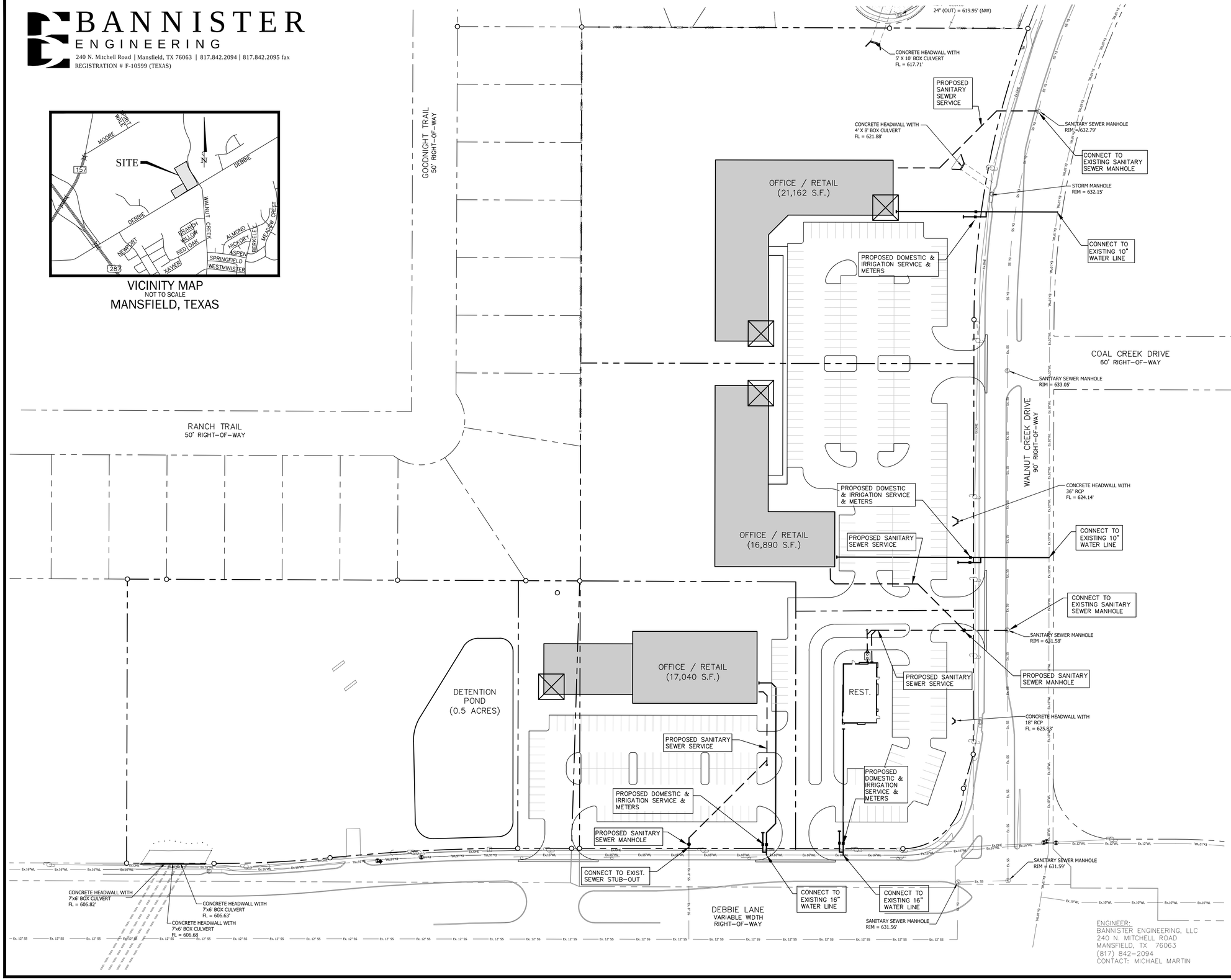
CONCEPTUAL SITE PLAN FOR 3.603 ACRE RAY TRACT & 9.495 ACRE KIMBROUGH TRACT

DEBBIE LANE & WALNUT CREEK DRIVE - MANSFIELD, TEXAS

AUGUST 30, 2016

BANNISTER
ENGINEERING
240 N. Mitchell Road | Mansfield, TX 76063 | 817.842.2094 | 817.842.2095 fax
REGISTRATION # F-10599 (TEXAS)

VICINITY MAP
NOT TO SCALE
MANSFIELD, TEXAS



GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

LEGEND

Ex.8"WL	EXISTING WATER LINE
	PROPOSED WATER LINE
	PROPOSED SANITARY SEWER
SS	EXISTING SANITARY SEWER

PRELIMINARY WATER & SEWER EXHIBIT

for

Debbie Lane & Walnut Creek Drive

Being 13.098 Acres of land located in the City of Mansfield Tarrant County, Texas

Cut/Fill Report: Scenario 1

Generated: 2016-08-30 15:18:04

By user: Dennis

Drawing: B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\xgrade 2.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Even	full	1.000	1.000	320994.16	153.18	72844.84	72691.66<Fill>

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	320994.16	153.18	72844.84	72691.66<Fill>

* Value adjusted by cut or fill factor other than 1.0

This scenario shows filling a 320,994 sf area even with Walnut Creek Dr. This scenario will require 72,691 cubic yards of fill. Depending on the type of fill dirt and the size of the delivery truck fill dirt estimates have ranged from 7.25/CY to 13.50/CY. For estimating purposes we have put the cost between the two at $10.50 per cubic yard. At $10.50 per cubic yard for fill this comes to $763,255 to fill 320,994 sf. These are estimates only and actual contractor quotes should be used in order to make sound financial commitments.

Cut/Fill Report: Scenario 2

Generated: 2016-08-30 15:00:14

By user: Dennis

Drawing: B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\xgrade 1.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
2 Feet Below	full	1.000	1.000	320994.16	387.98	53838.53	53450.55<Fill>

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	320994.16	387.98	53838.53	53450.55<Fill>

* Value adjusted by cut or fill factor other than 1.0

This scenario shows filling a 320,994 sf area 2 feet below Walnut Creek Dr. This scenario will require 53,450 cubic yards of fill. Depending on the type of fill dirt and the size of the delivery truck fill dirt estimates have ranged from 7.25/CY to 13.50/CY. For estimating purposes we have put the cost between the two at $10.50 per cubic yard. At $10.50 per cubic yard for fill this comes to $561,225 to fill 320,994 sf. These are estimates only and actual contractor quotes should be used in order to make sound financial commitments.

Cut/Fill Report: Scenario 3

Generated: 2016-08-30 15:34:36

By user: Dennis

Drawing: B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\B:\Clients\999 (Misc Projects)\999-16-33 (Walnut Creek 3.7 Acres)\Civil\Exhibits\xgrade 3.dwg

Volume Summary

Name	Type	Cut Factor	Fill Factor	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Minus 3 Feet	full	1.000	1.000	320994.16	709.30	44276.73	43567.43<Fill>

Totals

	2d Area (Sq. Ft.)	Cut (Cu. Yd.)	Fill (Cu. Yd.)	Net (Cu. Yd.)
Total	320994.16	709.30	44276.73	43567.43<Fill>

* Value adjusted by cut or fill factor other than 1.0

This scenario shows filling a 320,994 sf area 3 feet below Walnut Creek Dr. This scenario will require 43,567 cubic yards of fill. Depending on the type of fill dirt and the size of the delivery truck fill dirt estimates have ranged from 7.25/CY to 13.50/CY. For estimating purposes we have put the cost between the two at $10.50 per cubic yard. At $10.50 per cubic yard for fill this comes to $457,453 to fill 320,994 sf. These are estimates only and actual contractor quotes should be used in order to make sound financial commitments.