

August 8, 2022

Ms. Blanca Ibarra
President, Winfield HOA
1705 E. Del Mar Blvd., Suite 116
Laredo, Texas 78041

**Re: Winfield Subdivision Phase 9
Updated Review of Drainage Report and Construction Plans
Prepared by Oscar Castillo, P.E. including Updated Report**

Dear Ms. Ibarra,

We have conducted an updated review of construction plans and drainage report for Winfield Subdivision, Phase 9 prepared by Oscar Castillo, P.E. of PEUA, and approved by the City of Laredo. This report summarizes our initial findings and coordination with Mr. Daniel Zuñiga and Mr. Castillo to address our review comments. Report also provides responses to specific questions raised by Winfield HOA Board during our kickoff meeting.

We are of the opinion that the detention pond was designed according to the City of Laredo Land Development Code, but recommend that downstream receiving channel should be analyzed by Peua to ensure proper performance and compliance to City standards for open channels. Additional recommendations are provided within the context of our report.

Please advise if you have any questions regarding this report.

Sincerely,

CRANE ENGINEERING CORP.
Firm # F-3353


Edward D. Garza, P.E., CFM
Principal Engineer



Enclosures

**UPDATED REVIEW OF CONSTRUCTION PLANS
AND
DRAINAGE REPORT PREPARED BY
OSCAR CASTILLO, P.E., PEUA
FOR
WINFIELD SUBDIVISION – PHASE 9**

Submitted By:



Firm # F-3353
1310 Junction Drive, Ste. B
Laredo, Texas 78041



08.08.22

August 8, 2022



EXECUTIVE SUMMARY

I. BACKGROUND

Winfield HOA retained Crane Engineering to conduct a review of construction plans and drainage report for Winfield Subdivision phase 9 prepared by Oscar Castillo, P.E. of Peua. These plans and report were approved by the City of Laredo One Stop Shop (OSS) plat review process which includes review and approval from Engineering, Fire, Utility, Environmental, and Traffic Departments. Planning and Zoning Commission (P&Z) also approved the final plat and model subdivision plat. At the time of this review, construction of Phase 9 was approximately 90% complete.

Initial meeting with Winfield HOA Board indicated several issues and/or questions that the HOA had regarding this development including:

- Did this Phase 9 follow current masterplan?
- Is this phase going to join HOA? Will they petition to join HOA?
- Will the greenbelt be developed?
- Was the detention pond designed correctly?
- Are private utilities being installed along rear of lots? Front of lots?
- Will Phase 9 have deed restrictions? Will they follow current restrictions from previous phases?

Additionally, during the kickoff meeting it was mentioned that water ponded in a residential lot during construction of Phase 9.

II. INFORMATION PROVIDED FOR REVIEW

Peua Consulting through Oscar Castillo, P.E. provided copy of City approved construction plans and drainage report. This included copy of plat and storm drain site layout and hydraulic calculations.

Winfield HOA provided copy of By-laws of Winfield Community Association for Phase 1, Covenants, Conditions, and Restrictions (CCR) for Winfield Subdivision Phase 8, Agreement with City of Laredo for Earthen Channel, and Masterplans prepared by Harry Jewett Associates dated 10/5/2000; Howland Engineering & Surveying dated 3/4/15; and Seca engineering dated 7/22/20.

III. REVIEW OF WINFIELD MASTERPLANS

1. The purpose of a masterplan is to develop an overall land use plan for a tract of land and provide a comprehensive view of how a development will ultimately look when fully developed. Masterplans are used to identify locations of lots, streets, utilities, schools, parks, and stormwater management.

Masterplans serve as land development guides and are typically submitted as part of a plat submittal to the City for review and approval. Masterplans can be revised but any



revision must be reviewed and approved by the City. An approved masterplan becomes the masterplan of record until it is updated and an updated masterplan that is approved by the City replaces previously approved masterplans.

For this review, we were provided with three (3) masterplans, as follows:

- ① Winfield Development Masterplan
Prepared by Harry Jewett Associates
Dated October 5, 2020
Total 460 acres
- ② Winfield Development Masterplan
Prepared by Howland Engineering & Surveying
Dated March 4, 2015
Total 315.8 acres
- ③ Winfield Development Masterplan
Prepared by Seca Engineering
Dated July 20, 2020
Total 308.66 acres

2. Review of Winfield Development Masterplan prepared by Harry Jewett Associates.

- 2.1 Masterplan shows 7 residential phases with a total of 1,075 lots on 390.60 acres;
- 2.2 Masterplan shows 3 commercial, office, multi-family phases with 10 lots on 69.4 acres;
- 2.3 Masterplan shows 100-year flood hazard zone with flood zone overlapping over multiple lots;
- 2.4 Park is shown in platted phases which are Phases 1-4; Park is part of Phase 1;
- 2.5 Detailed lot layout is shown for Phases 1-6 and Estates of Winfield. No other lot layout detail is provided;

It is assumed that this masterplan was approved by the City and served as the official masterplan used to plat Phases 1-6 and Estates of Winfield. A detailed lot layout for Phase 9 is not shown on this masterplan which indicates that Phase 9 was developed following a revised masterplan.

Masterplan does not indicate any greenbelt but it does show park platted with Phase 1. Refer to Exhibit #1 for Harry Jewett Associates masterplan.



3. Review of Winfield Development Masterplan prepared by Howland Engineering & Surveying dated 3/4/2015.

The review of Howland's masterplan indicates that Harry Jewett Associates masterplan was approved 11/4/2003 and 1/6/2005. It is assumed that the City of Laredo issued this approval.

- 3.1 Masterplan is based on approved masterplan by Harry Jewett Associates dated 11/4/2003 and 1/6/2005;
- 3.2 Masterplan shows 8 residential phases with a total of 628 lots and 270.40 acres;
- 3.3 Masterplan shows park as part of phases 1-4; Phase boundary lines on map indicate park developed with Phase 1;
- 3.4 Masterplan shows 5 commercial, office, multi-family phases with 5 lots on 30.4 acres;
- 3.5 Masterplan shows fully develop boundary of 100-year flood hazard zone;
- 3.6 Masterplan shows 1 phase as a detention pond / school site for 1 lot on 15.0 acres

4. Observations

- 4.1 It is unknown if this masterplan was submitted and approved by the City of Laredo Planning and Zoning Commission;
- 4.2 Park was platted with Phase 1;
- 4.3 The lot layout for Phase 9 is different than PEUA's plat:
 - 4.3.1 Single family lots appear to backup to the Estates of Winfield PUD;
 - 4.3.2 There appears to be a gap between Phase 9 and the Estates of Winfield but it is not clear what this gap is for;
 - 4.3.3 There appears to be utilities running along the west side of Phase 9 which would address why there is a limited tract callout on Seca Engineering masterplan. A utility easement is typically used to reserve land for utilities.
 - 4.3.4 There appears to be a detention pond on Phase 9, but it's not called out.

It is recommended that the HOA reach out to City Planning Department to confirm if Howland masterplan was approved by the City. It is also recommended to reach out to Howland engineering to confirm what the gap between Phase 9 and the Estates of Winfield is for as well as confirming if the L shaped lot in Phase 9 masterplan is a detention pond site. If Seca masterplan was approved by the City, then we withdraw these recommendations as the Seca masterplan would replace the Howland masterplan.

Masterplan does not indicate any greenbelt but it does show park platted with Phase 1 similar to Harry Jewett Associates masterplan. Refer to Exhibit #2 for Howland Engineering masterplan.



5. Review of Winfield Development Masterplan prepared by Seca Engineering dated 7/22/2020.

- 5.1 Masterplan shows 9 residential phases with a total of 628 lots on 279.43 acres; Phase 9 lot layout is shown on this masterplan with 108 lots on 30.33 acres. Lot layout has been revised with this masterplan.
- 5.2 Masterplan shows 5 commercial, office, multi-family phases with 5 lots on 29.23 acres;
- 5.3 Masterplan shows 100-year Flood Zone "A" with flood zone overlapping over multiple lots;
- 5.4 Masterplan also shows location of plan, multiple detention basins, one with detention / open are in Phase 9, and one elementary school. Also shown is a 1.5-acre limited tract;
- 5.5 Park is shown as part of phases 1-4;
- 5.6 The density of Phase 9 is higher that Phase 8, 6 & 5;

6. Observations

- 6.1 It is unknown if this masterplan was submitted and approved by the City of Laredo Planning & Zoning Commission;
- 6.2 Park was platted with Phase 1;
- 6.3 Phase 9 does not have a park component, but it does show detention pond / open area. Need to determine what open area means in this development;
- 6.4 Phase 9 lot layout on masterplan resembles plat prepared by Peua;

7. Masterplan Review Conclusions

The Seca masterplan resembles the Phase 9 plat prepared by Peua. It is unknown if this masterplan was approved by the City of Laredo. The open area term on the masterplan for Phase 9 needs to be defined and explained what was the intent of this term as developers have used the term "open space" to mean park or greenbelt. It is not clear what is the intention of this masterplan and requires further investigation and clarification with the City and engineers who planned and designed this phase. Refer to Exhibit #3 for Seca Engineering masterplan and Exhibit #4 for Winfield Phase 9 Plat prepared by Peua.



IV. EVALUATION OF PHASE 9 DRAINAGE REPORT AND CONSTRUCTION PLANS

The Laredo Land Development Code provides requirements for stormwater management for drainage for the development of land within City limits. These requirements allow for the engineer to perform hydraulic calculations utilizing multiple methods.

Initial review of Winfield Phase 9 drainage report indicate that the rational method was utilized by Peua Engineering. This is an acceptable method recognized by the City.

Detailed review of drainage report indicated missing drainage calculations and detailed discussion on how final conclusions were arrived. It did indicate a conservative approach when developing detention pond calculations.

Detailed listing of drainage report engineering review comments are listed below:

1. For the pre and post development calculation, the time of concentration determination is not described. Report should include some form of calculation and description to support numbers utilized;
2. Under the detention table, maximum volume required is determined by changing the rainfall intensity and time of concentration. The volume to detain should be taken from the change in pre and post development flows. Standard practice of computing detention time is by using the time of concentration as this is one method of computing detention time which can result in a more conservative pond design; however, the development of a hydraulic model is another method and often provides a more accurate detention pond design.
3. There is not enough information as to how the 100-year water surface elevation was calculated. There is a report on sheet 13 for the 3 RCP outlet pipes that shows where the 100-year water surface elevation was obtained.
4. It appears that the total acreage used to determine the pre and post development rates are incorrect. The watersheds are delineated incorrectly. They are also not including post flow from Drainage area A1 shown in Sherfey's drainage area map which drains to the existing system at the end of Winburn Drive. Report does not account for existing runoff within their new development. They also have multiple drainage areas delineated of their own, but summarize only one drainage area which is unclear.
5. Within the street capacity and inlet equations section, there is inconsistent assignment of drainage coefficients "C". The hydrologic soil types within the development vary, according to the soil map within this report, which justify a variation in "C", but the variations presented in this section of the report do not appear to coincide with the soils map. What is the justification for use of different "C" in street capacity and inlet equations?
6. At the intersection of Sun Valley and Tahoe, there is a ponding problem on the north side of the intersection with no solution to move the gathered runoff. On a related



note, we do not agree with the being utilized for street capacity. We do not see a reference to the equation and do not see that equation used in any drainage manual that we have come across.

Construction plans and final plat were also reviewed with the following comments provided to Winfield HOA & Peua:

1. The purpose of a M&M agreement is to identify the entity who is responsible for maintenance of detention ponds and channels. Developer is typically required to file this with the City. It is recommended to review a copy of this agreement to determine if it impacts Winfield HOA;
2. Sheet 1.1; Lot 18, Blk 2 is a drainage easement lot. It is recommended to confirm who will remain owner of this lot after development is completed;
3. Sheet 1.1; There is an island within cul-de-sac of Tahoe Drive. (Tahoe Drive cul-de-sac should've been a 60' radius as its length exceeds 150'). It is recommended to confirm who will maintain this island;
4. Sheet 3.10; This sheet includes retaining wall design. It is recommended to confirm with the City if retaining wall calculations were submitted and approved by the City;
5. Sheet 4.01; Watershed map does not incorporate all watershed boundary. Refer to comments to drainage study;
6. Sheet 4.20; HGL/EGL not shown on drainage profiles;

Drainage, plat and construction plan review comments were provided to Winfield HOA and Peua by email to allow Peua to address them and provide updated information.

Upon completion of this initial review, it could not be determined if the detention pond design for this subdivision was in compliance to City of Laredo requirements. As a result, our review comments were provided to Daniel Zuniga of Winfield HOA and Oscar Castillo, P.E. of Peua to allow Mr. Castillo an opportunity to address our comments. It should be noted that the City of Laredo approved this drainage report as presented.

V. COORDINATION WITH HOA & PEUA / PEUA SUBMITTAL TO ADDRESS REVIEW COMMENTS

A meeting was held between Peua, Winfield HOA and Crane to discuss our drainage and construction plan review comments. Peua provided project background and answered specific questions provided by Winfield HOA. Mr. Castillo agreed to address review comments and provide an update to his drainage report. Answers to HOA specific questions are provided as Exhibit #5 at the end of this report.



Review of Peua's updated drainage report addressed our review comments 1-5, and updated the watershed map to coincide with the drainage masterplan of this area. The detention pond for Phase 9 was designed for the 100-year storm event following the modified rational method and pond volume storage was design for 565,000 ft³ with calculated storage required at 366,000 ft³. Based on this submittal, the detention pond exceeds the minimum required capacity.

The outlet structure for this pond is comprised of 3 – 36" RCP pipes and an emergency spillway. The outlet structure was designed for a flow of 206.7 CFS which represents the 100-year pre-development flow rate. One concern is if the existing earthen channel downstream of this outlet can manage flow of 206.7 CFS through it.

City of Laredo Land Development codes require earthen channels to be designed for the 25-year flow unless they lie within the 100-year floodplain. Reviewing Peua's report indicates a 25-year flow of 171 CFS or 36 CFS less than the flow used by Peua for outlet design. We recommend for Peua to confirm the existing earthen channel capacity downstream from Phase 9 to ensure it can manage the design flow with required one-foot freeboard.

The street capacity calculations shown on sheet 4.03 of Peua's report provide the formula and calculated flow capacities expected within the street. The formula utilized appears to be a derivative of the manning's equation but we are not familiar with the equation shown on this sheet. We recommend for Peua to provide a reference material or diagram on how this equation is derived for street capacity. This pertains to comment #6 in our initial review.

Lastly, Peua is proposing a retaining wall along the south side of the detention pond adjacent to Estates of Winfield lots. According to Peua, the purpose of this retaining wall is to meet the required freeboard elevation for the detention pond. Peua submitted retaining wall calculations with his drainage report update submittal to address our initial review comments. Review indicates that retaining wall design complies with standard engineering practice and is certified by Gilberto Gonzalez, P.E. We recommend that Peua submit these calculations to the City Engineer for his review and approval.

It is not clear if this retaining wall will have any impact on the existing CMU wall along Estates boundary. It is recommended that a study be completed to determine if the proposed retaining wall will have an impact on the stability of the existing CMU wall.

VI. CONCLUSIONS AND RECOMMENDATIONS

A. Masterplan

The development of Winfield Subdivision Phase 9 prepared by Peua Engineering followed Seca Engineering masterplan. This masterplan does not include a park within Phase 9, but it does include a detention pond / open space callout.

City of Laredo Park Ordinance 2008-O-058 uses the term open space to indicate potential park use. See sheet 9 of ordinance. No definition is given but it is implied to refer to park use. Peua plat does not address this as indicated on Seca masterplan.



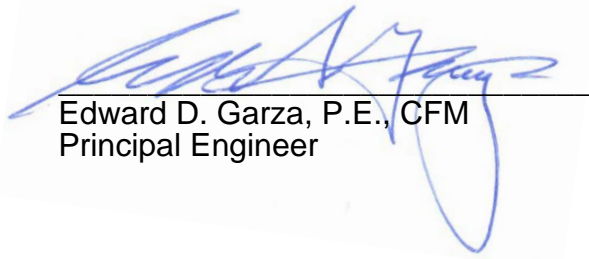
We recommend to discuss this with the City Engineer and Planning Director to determine if Peua's plat is in compliance to the masterplan.

B. Winfield Phase 9 Detention Pond

Review of Peua's original drainage report and construction plans did not provide enough information for us to determine if the detention pond was designed correctly. It did indicate that the pond design was analyzed using the rational method which is a conservative approach when designing detention ponds. An updated report was submitted by Peua to address our initial review comments and based on this updated review we are of the opinion that the detention pond was designed correctly subject to the following conditions:

- 1) Peua needs to provide engineering calculations that confirm downstream channel has the capacity to manage 206.7 CFS with 1' freeboard;
- 2) Peua needs to provide additional information on street capacity formula utilized to derive final street capacity values;

Once this information is provided, a final determination can be confirmed.



Edward D. Garza, P.E., CFM
Principal Engineer

Date: August 8, 2022

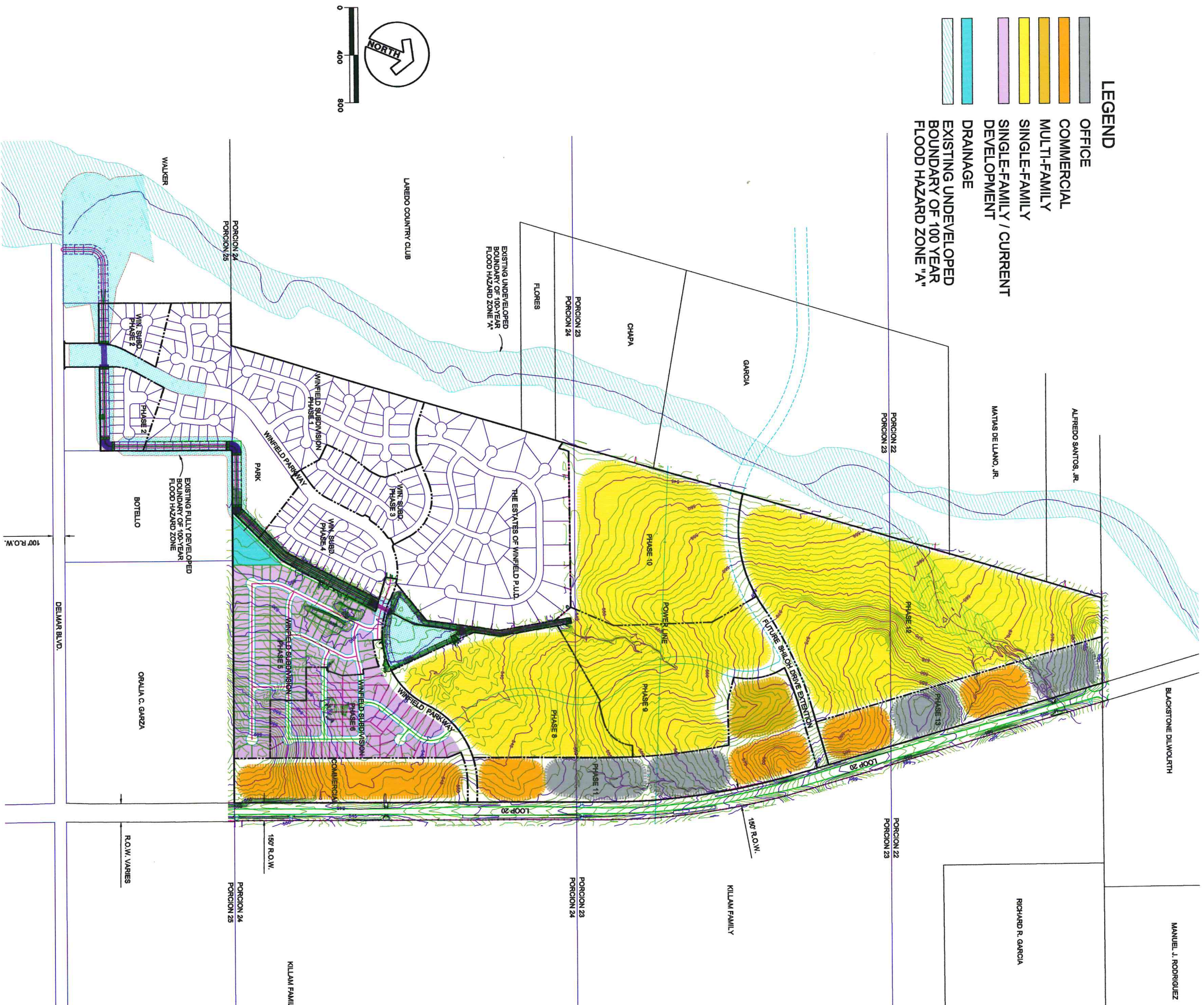


EXHIBIT LIST

1. Harry Jewett Associates Masterplan
2. Howland Engineering Masterplan
3. Seca Engineering Masterplan
4. Winfield Subdivision Phase 9 Plat by Peua Engineering
5. Winfield POA Questions with Answers provided by Peua



- LEGEND**
- OFFICE
 - COMMERCIAL
 - MULTI-FAMILY
 - SINGLE-FAMILY
 - SINGLE-FAMILY / CURRENT DEVELOPMENT
 - DRAINAGE
 - EXISTING UNDEVELOPED BOUNDARY OF 100-YEAR FLOOD HAZARD ZONE "A"



PHASE	USE	ACREAGE	LOT
PLATTED PHASES	RESIDENTIAL, PARK, DRAIN CHANNEL	150	273
PHASE 5	RESIDENTIAL	31.5	101
PHASE 6	RESIDENTIAL	23.0	70
PHASE 7	COMMERCIAL	16.9	1
PHASE 8	RESIDENTIAL	32.7	111
PHASE 9	RESIDENTIAL	37.7	128
PHASE 10	RESIDENTIAL	42.5	144
PHASE 11	COMMERCIAL, OFFICE, MULTIFAMILY	31.3	5
PHASE 12	RESIDENTIAL	73.2	248
PHASE 13	COMMERCIAL, OFFICE	21.2	4
TOTAL	ALL USES	490	1088

TOTAL UNDEVELOPED	MIXED USE	812
TOTAL DEVELOPED	RESIDENTIAL, PARK, DRAIN CHANNEL	190.0
TOTAL ACREAGE	MIXED USE	460.0
		1088

WINFIELD

development master plan

Winfield, Ltd.
12555 Milnes Road Laredo, Texas 78041

OCT. 05, 2000

EXHIBIT #1

HARRY JEWETT ASSOCIATES

Engineers & Planners
188 Del Cant
Laredo, Texas 78041-2276
(956) 791-3155

Con 19

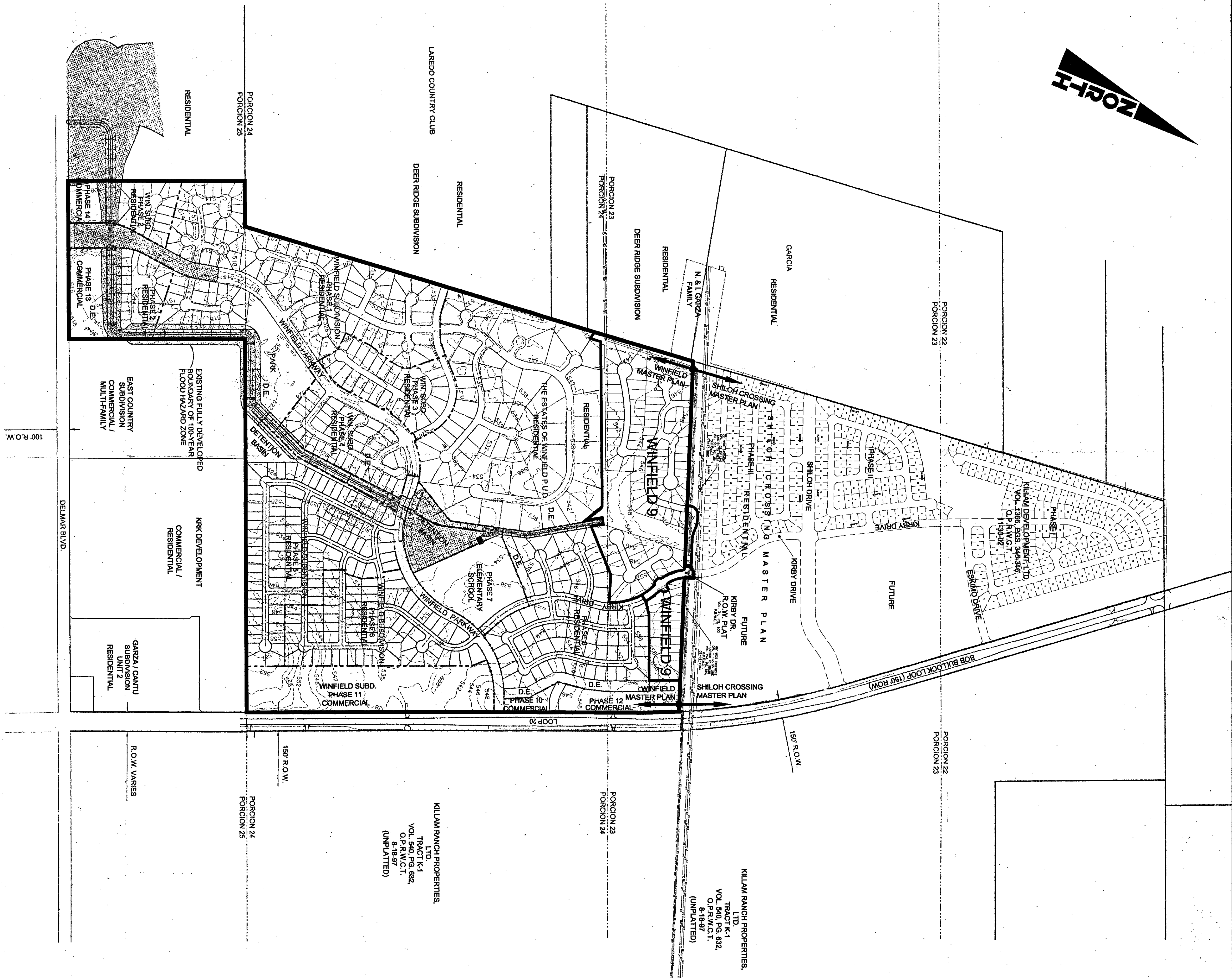
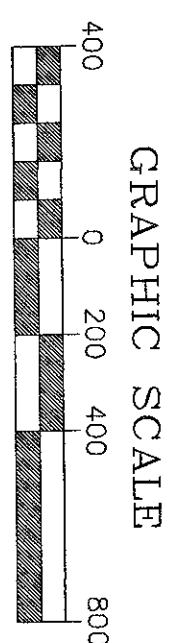


EXHIBIT #2

PHASE	USE	ACREAGE	LOTS	DENSITY
PHASES 1 - 4	RESIDENTIAL, PARK DRAIN CHANNEL	150	273	-
PHASE 5 (PLATTED)	RESIDENTIAL	31.5	101	3.21'
PHASE 6 (PLATTED)	RESIDENTIAL	23.0	70	3.04
PHASE 7 (PLATTED)	DETENTION POND / SCHOOL SITE	15.0	1	-
PHASE 8 (PLATTED)	RESIDENTIAL	29.6	75	2.53
PHASE 9	RESIDENTIAL	36.3	109	2.98
PHASE 10	COMMERCIAL	1.6	1	-
PHASE 11	COMMERCIAL OFFICE MULTIFAMILY	4.5	1	-
PHASE 12	COMMERCIAL	7.3	2	-
PHASE 13 & 14	COMMERCIAL	7.3	2	-
TOTAL	ALL USES	315.8	634	-

TOTAL UNDEVELOPED	MIXED USE	ACREAGE	LOTS	DENSITY
TOTAL UNDEVELOPED	RESIDENTIAL PARK DRAIN CHANNEL	270.4	607	-
TOTAL ACREAGE		315.8	633	-

NOTE:
THIS MASTER PLAN IS BASED ON THE MAPS AND RECORDS OF THE CITY OF LAREDO, TEXAS, DATED 11/04/2003 AND 01/06/2005.



WINFIELD DEVELOPMENT MASTER PLAN

CITY OF LAREDO, WEBB COUNTY, TEXAS

SCALE: (24"x36") SHEET	HOR: 1"=400' VER: N/A
SCALE: (11"x17") SHEET	HOR: 1"=800' VER: N/A
SHEET 1 OF 1 TOTAL	

DRAWN BY: M.R.G.	CHECKED BY: O.J.S.
DRAWN DATE: 03.04.2015	PLOTTED DATE: 03.04.2015
JOB NO. 23212-14	FILE NAME: WINFIELD 9
STATUS: PRELIMINARY	AS-BUILT: N/A
REVISED DATE:	

KILLAM

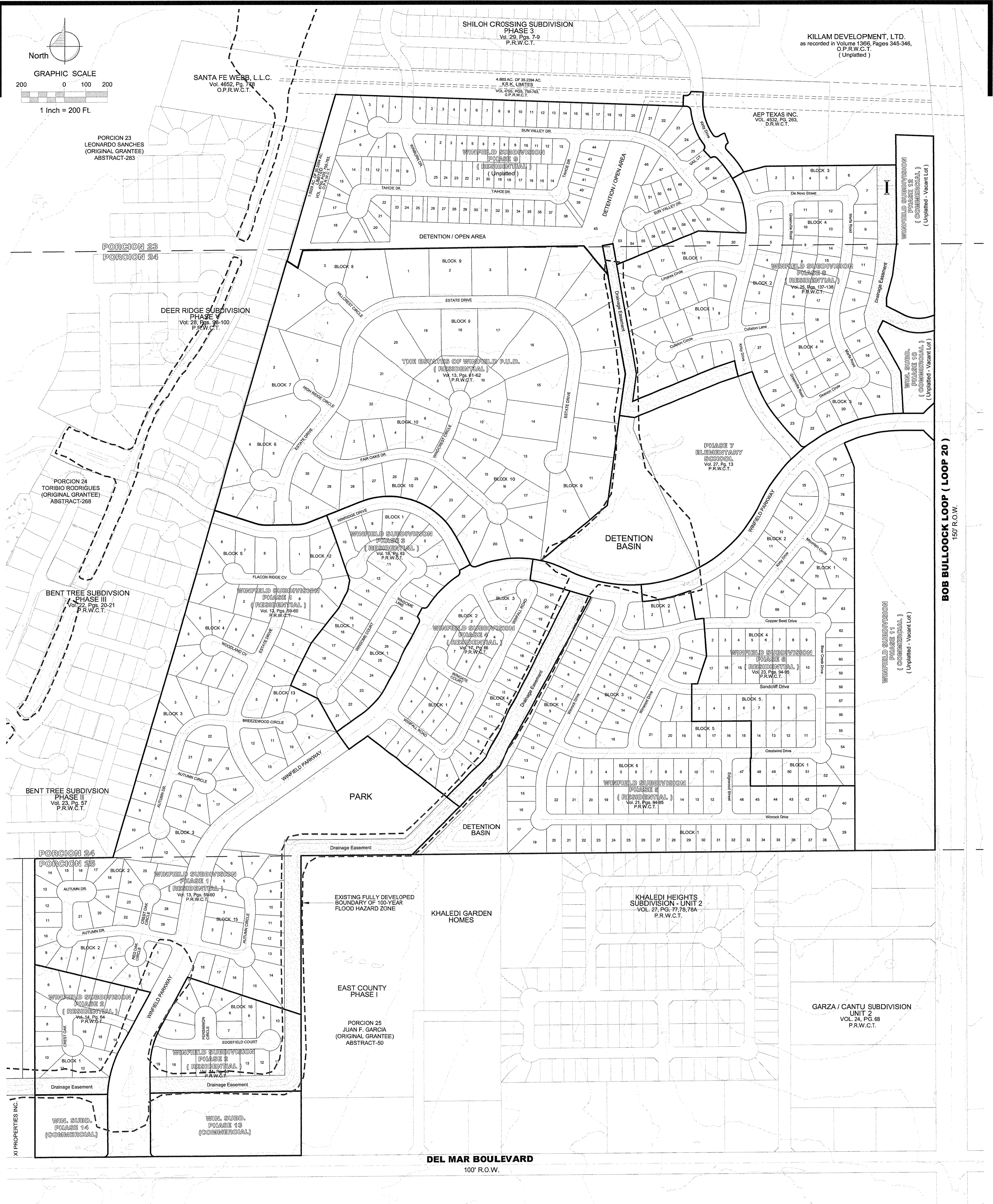
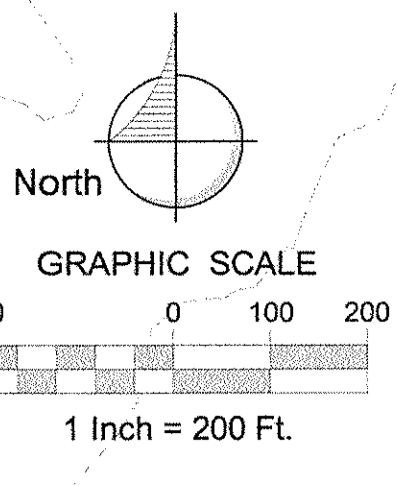
TRBE Firm Registration No. F-4097 / TRBS Firm Registration No. 100645-00
 7915 N. Bardell Avenue / P.O. Box 45128 (78045) Laredo, TX 78041
 P. 956.722.4411 / F. 956.722.5414
 www.killamcompanies.com

HOWLAND

ENGINEERING AND SURVEYING CO.
 7915 N. Bardell Avenue / P.O. Box 45128 (78045) Laredo, TX 78041
 P. 956.722.4411 / F. 956.722.5414
 www.howlandcompanies.com

KILLAM RANCH PROPERTIES, LTD.
 TRACT K-1
 VOL. 540, PG. 632
 O.P.R.W.C.T.
 8-18-97
 (UNPLATTED)

KILLAM RANCH PROPERTIES, LTD.
 TRACT K-1
 VOL. 540, PG. 632
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 8-18-97
 (UNPLATTED)



PHASE DEVELOPED (RESIDENTIAL)				
PHASE	USE	ACRES	LOTS	DENSITY
1) - 4)	RESIDENTIAL, PAR, DRAIN, CHANNEL	150.0	273	-
5)	RESIDENTIAL	31.5	101	3.21
6)	RESIDENTIAL	23.0	70	3.04
7)	DETENTION POND / SCHOOL SITE	15.0	1	-
8)	RESIDENTIAL	29.6	75	2.53
9)	RESIDENTIAL	30.33	108	3.56
TOTAL	ALL USES	279.43	628	-

TOTAL DEVELOPMENT = 279.43 ACRES

PHASE UNDEVELOPED (COMMERCIAL)				
PHASE	USE	LOTS	ACRES	DENSITY
10)	COMMERCIAL	1	1.61	-
11)	COMMERCIAL	1	16.93	-
12)	COMMERCIAL, OFFICE, MULTIFAMILY	1	3.58	-
13)	COMMERCIAL	1	4.85	-
14)	COMMERCIAL	1	2.26	-
TOTAL	ALL USES	5	29.23	-

TOTAL UNDEVELOPMENT = 29.23 ACRES

LEGEND	
	EXISTING TOPOGRAPHICAL CONTOUR LINE
	EXISTING PROPERTY BOUNDARY
	EXISTING RIGHT-OF-WAY CENTER LINE
	EXISTING PROPERTY LOT LINE
	LIMITS OF 100 YEAR FLOOD ZONE "A"

1 OF 1

11 X 17

DATE: 07-22-2020

SCALE: 1" = 200'

REVISION DATE

SHEET NAME: MASTER PLAN

KILLAM

WINFIELD DEVELOPMENT
MASTER PLAN
CITY OF LAREDO, WEBB COUNTY, TEXAS

SECA
ENGINEERING, L.L.C.
CIVIL ENGINEERS • LAND SURVEYORS
1701 JACAMAN ROAD, STE. 11 - LAREDO, TEXAS 78041
CELL: (956) 235-1594
TXPE FIRM REGISTRATION NO. F-10071
TBLPS FIRM REGISTRATION NO. 100118-00

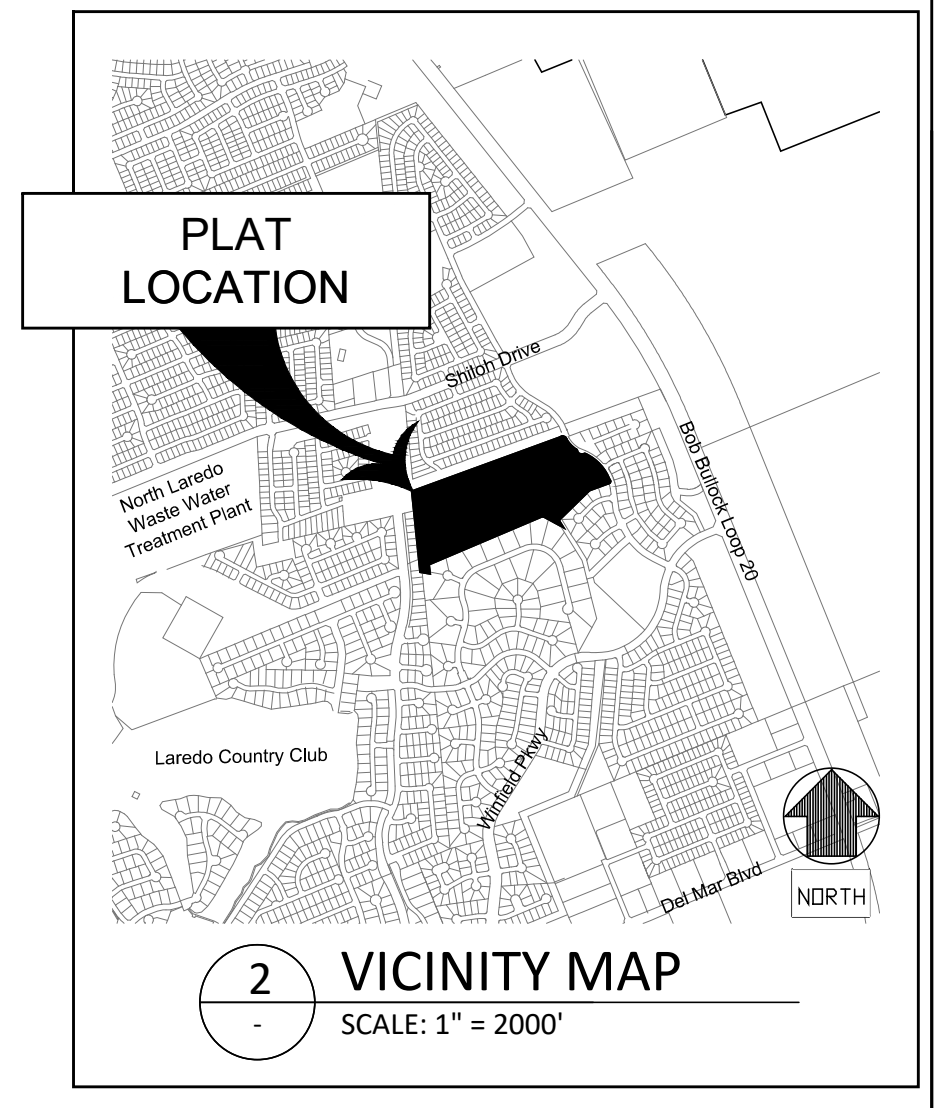
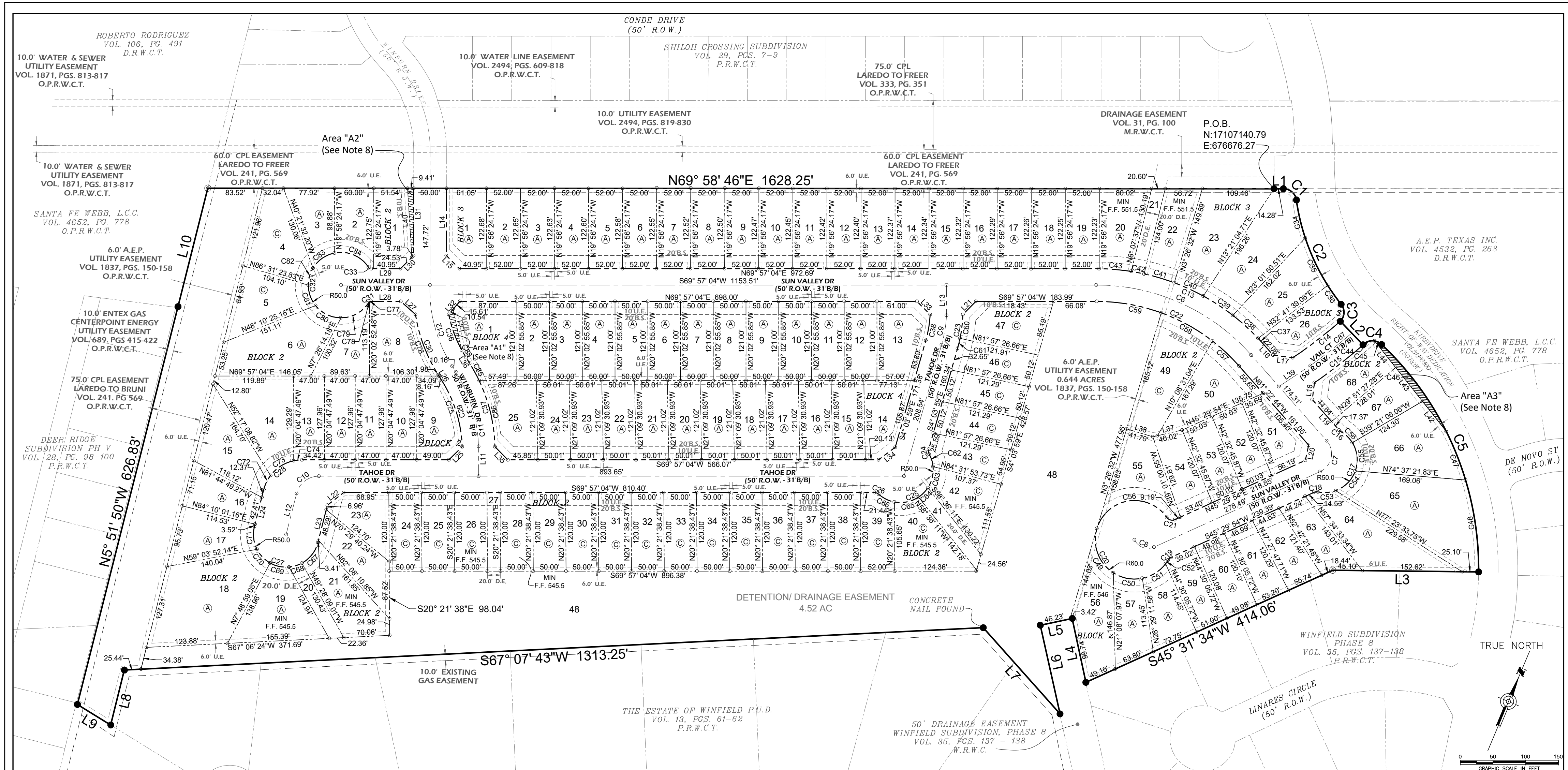
The seal appearing on this document was authorized by HUGO SECA

Hugo Seca

Date: 07/22/2020



EXHIBIT #3



- LEGEND**
- FOUND 1/2" IRON ROD
 - ⊙ SET 1/2" IRON ROD
 - EXISTING PROPERTY BOUNDARY
 - - - EXISTING RIGHT-OF-WAY LINE
 - - - EXISTING RIGHT-OF-WAY CENTER LINE
 - - - EXISTING PROPERTY LOT LINE
 - - - EXISTING BUILDING SETBACK LINE
 - - - EXISTING UTILITY EASEMENT LINE
 - - - EXISTING DRAINAGE EASEMENT LINE
 - - - PROPOSED PROPERTY BOUNDARY
 - - - PROPOSED RIGHT-OF-WAY LINE
 - - - PROPOSED RIGHT-OF-WAY CENTERLINE
 - - - PROPOSED UTILITY EASEMENT LINE
 - - - PROPOSED PROPERTY LOT LINE
 - - - PROPOSED DRAINAGE EASEMENT LINE
 - - - PROPOSED BUILDING SETBACK LINE
 - - - UTILITY DRAINAGE EASEMENT DESIGNATION
 - - - UTILITY EASEMENT DESIGNATION
 - - - BUILDING SETBACK DESIGNATION
 - P.O.B. POINT OF BEGINNING
 - Ⓐ LOT GRADING TYPE 'A' TO THE FRONT
 - Ⓑ LOT GRADING TYPE 'A' TO THE BACK

NOTES:
1. DRIVEWAYS, SIDEWALK, AND TREES WILL BE INSTALLED AT THE TIME OF ISSUANCE OF BUILDING PERMITS IN ACCORDANCE WITH THE LAREDO LAND DEVELOPMENT CODE.
2. ALL CURB CUTS SHALL COMPLY WITH THE TRANSPORTATION ELEMENT OF THE CITY OF LAREDO COMPREHENSIVE PLAN.
3. THE SETBACK SHALL BE DETERMINED BASED ON THE CURRENT ZONING IN ACCORDANCE TO SECTION 24.77.1 OF THE LAREDO LAND DEVELOPMENT CODE.
4. POINT OF BEGINNING FOR DESCRIPTION OF WINFIELD SUBDIVISION PHASE 9 IS A 1/2" IRON ROD SET AT THE NORTHEAST CORNER OF LOT 1, BLOCK 1, OF SANTA FE WEBB, L.C.C. VOL. 4652, PG. 778, OFFICIAL MAP RECORDS, WEBB COUNTY, TEXAS.
5. LOTS 4, 5, 24-47, 46 & 52. BLOCK 2 WILL DRAIN TOWARDS THE BACK OF THE LOT. OWNER SHALL NOT CHANGE THE GRADES OR CONSTRUCT FLOW RESTRICTING FENCES, BUILDINGS, STRUCTURES OR OTHER IMPROVEMENTS IN SUCH MANNER THAT IMPEDES THE ESTABLISHED DRAINAGE FLOW. FENCE/WALL WHICH HAS THE POTENTIAL TO BLOCK DRAINAGE RUNOFF MUST BE CONSTRUCTED WITH ADEQUATE NUMBER AND SIZE OF OPENINGS TO PERMIT SURFACE WATER RUNOFF TO CONTINUE TO FLOW.
6. ACCESS TO KIRBY DR. IS PROHIBITED TO LOTS 24-26, BLOCK 3, AND LOTS 65-68, BLOCK 2.
7. LOT 48 - BLOCK 2 IS A DRAINAGE EASEMENT THAT IS SUBJECT TO A MAINTENANCE AND MONITORING AGREEMENT DATED BETWEEN THE CITY OF LAREDO AND WINFIELD SUBDIVISION PHASE 9 SAID AGREEMENT AS RECORDED IN VOLUME _____ PAGES _____, OFFICIAL PUBLIC RECORDS OF WEBB COUNTY TEXAS.
8. FOR ADDITIONAL RIGHT-OF-WAY DEDICATION ALONG KIRBY DRIVE & WINBURN DRIVE, LIMITED CONSTRUCTION AND LANDSCAPING ZONE. STRUCTURES SHALL NOT EXCEED 3.5 FEET IN HEIGHT AND LANDSCAPING IN THIS AREA SHALL BE LIMITED TO SHRUBS OR PLANTS THAT DO NOT EXCEED 3.5 FEET IN HEIGHT. MEASURED FROM THE CENTER LINE OR ADJACENT ROADWAY, AS PER LAND DEVELOPMENT CODE 24.83.1(5)(a) AREA "A1" - 350.03 FT² ADDITIONAL R.O.W. DEDICATION AREA "A2" - 632.87 FT² ADDITIONAL R.O.W. DEDICATION AREA "A3" - 1271.54 FT² ADDITIONAL R.O.W. DEDICATION
9. BLOCK 2 - LOTS 20, 27, 41, 48 & BLOCK 3 - LOT 21, ARE UNINHABITABLE.
10. BLOCK 2 - LOTS 19, 21, 26, 28, 40, & 42, SHALL HAVE A MINIMUM FINISH FLOOR ELEVATION OF 545.50'. BLOCK 2 - LOT 56 SHALL HAVE A MINIMUM FINISH FLOOR ELEVATION OF 546.00'. BLOCK 3 - LOTS 20 & 22 SHALL HAVE A MINIMUM FINISH FLOOR ELEVATION OF 551.50'.

1 PLAT
SCALE: 1" = 100'

WINFIELD SUBDIVISION PHASE 9
LOT AREA TABLE

LOT AREA TABLE BLOCK 2		LOT AREA TABLE BLOCK 2		LOT AREA TABLE BLOCK 3		LOT AREA TABLE BLOCK 4		
LOT	SQ.FT.	AC	LOT	SQ.FT.	AC	LOT	SQ.FT.	
1	6648.24	0.1526	35	6000.09	0.1377	1	10049.51	0.2307
2	6348.32	0.1457	36	6000.09	0.1377	2	6378.62	0.1464
3	6248.98	0.1435	37	6000.09	0.1377	3	6377.28	0.1464
4	9699.50	0.2227	38	6000.09	0.1377	4	6375.95	0.1464
5	8708.08	0.1999	39	6002.15	0.1378	5	6374.61	0.1463
6	13141.25	0.3017	40	9001.44	0.2066	6	6373.28	0.1463
7	6231.19	0.1430	41 D.E.	2710.15	0.0622	7	6371.94	0.1463
8	9131.33	0.2096	42	7643.46	0.1755	8	6370.61	0.1462
9	7382.57	0.1695	43	6163.54	0.1415	9	6369.27	0.1462
10	6014.01	0.1381	44	6064.60	0.1392	10	6367.94	0.1462
11	6014.04	0.1381	45	6064.60	0.1392	11	6366.60	0.1462
12	6014.08	0.1381	46	6067.98	0.1393	12	6365.27	0.1461
13	6019.68	0.1382	47	8476.60	0.1946	13	6363.93	0.1461
14	12032.58	0.2762	48 D.E.	251330.32	5.7698	14	6362.60	0.1461
15	9249.16	0.2123	49	11713.95	0.2689	15	6361.26	0.1460
16	6500.57	0.1492	50	10169.39	0.2335	16	6359.92	0.1460
17	8050.77	0.1848	51	6756.69	0.1551	17	6358.59	0.1460
18	18684.99	0.4289	52	6029.94	0.1384	18	6357.23	0.1459
19	10616.10	0.2437	53	6050.00	0.1389	19	6356.39	0.1459
20 D.E.	2539.22	0.0583	54	6152.74	0.1412	20	8017.70	0.1841
21	9035.57	0.2074	55	6533.27	0.1500	21 D.E.	2639.939	0.0606
22	7439.84	0.1708	56	6622.57	0.1520	22	7265.51	0.1668
23	6019.22	0.1382	57	7047.54	0.1618	23	12555.07	0.2882
24	6000.09	0.1377	58	7668.16	0.1760	24	13257.14	0.3043
25	6000.09	0.1377	59	6084.76	0.1397	25	9304.89	0.2136
26	6000.09	0.1377	60	6226.96	0.1430	26	7020.29	0.1612
27 D.E.	2400.036	0.055097	61	6105.08	0.1402			
28	6000.09	0.1377	62	6195.26	0.1422			
29	6000.09	0.1377	63	6268.57	0.1439			
30	6000.09	0.1377	64	11239.03	0.2580			
31	6000.09	0.1377	65	21067.66	0.4836			
32	6000.09	0.1377	66	12748.86	0.2927			
33	6000.09	0.1377	67	6939.80	0.1593			
34	6000.09	0.1377	68	7543.18	0.1732			

LEGAL DESCRIPTION WINFIELD SUBDIVISION PHASE 9
Being a 30.34 acre tract of land, out of a tract of land conveyed to Killam Development, Ltd., as described in deed recorded in Volume 1366, Pages 345-346, Official Public Records, Webb County, Texas, situated in the Porcion 23, Leonardo Sanchez, Abstract 283, and Porcion 24, Toribio Rodriguez, Abstract 286, Webb County, Texas, and being more particularly described by metes and bounds as follows, to wit:

Beginning at a 1/2" iron rod found at the southerly line of a 60 foot wide CPL easement, as described in deed recorded in Volume 241, Page 569, Official Public Records, Webb County, Texas, near the southwesterly Right of Way line of Kirby Drive, for a point of deflection corner hereof;

Thence, with the southerly line of CPL easement, **North 69 degrees 58 minutes 43 seconds East, 14.35 feet**, to a 1/2" iron rod found at the beginning of a curve to the right with a radius of 20.00 feet, for a point of curvature hereof;

Thence, with said curve to the right, a distance of 28.70 feet (Chord bearing **South 69 degrees 15 minutes 26 seconds East, 26.30 feet**) to a 1/2" iron rod found at the southwesterly Right of Way line of aforementioned Kirby Drive, on a curve to the left with a radius of 330.00 feet, for a point of curvature hereof;

Thence, with the southwesterly Right of Way line of said Kirby Drive, and said curve to the left, a distance of 175.29 feet (**South 43 degrees 14 minutes 45 seconds East, 173.24 feet**) to a 1/2" iron rod found at the beginning of a curve to the right with a radius of 20.00 feet, for a point of reverse curvature hereof;

Thence, with said curve to the right, a distance of 28.33 feet (Chord bearing **South 17 degrees 37 minutes 28 seconds East, 26.02 feet**) to a 1/2" iron rod found, for an interior corner hereof;

Thence, **South 63 degrees 55 minutes 21 seconds East, 49.82** to a 1/2" iron rod found at the beginning of a curve to the right with a radius of 20.00 feet, for a point of curvature hereof;

Thence, with said curve to the right, a distance of 31.67 feet (Chord bearing **North 69 degrees 00 minutes 55 seconds East, 28.46 feet**) to a 1/2" iron rod found at the southwesterly Right of Way line of aforementioned Kirby Drive, at the beginning of a curve to the right with a radius of 476.00 feet, for a point of compound curvature hereof;

Thence, with said curve to the right, a distance of 388.67 feet (Chord bearing **South 43 degrees 08 minutes 44 seconds East, 377.69 feet**) to a 1/2" iron rod found at the northeast corner of Winfield Subdivision Phase 8, recorded in Volume 25, Pages 137-138, Plat Records, Webb County, Texas, for the southeast corner hereof;

Thence, with the northerly line of said Winfield Subdivision, Phase 8, **South 70 degrees 36 minutes 49 seconds West, 222.81 feet**, to a 1/2" iron rod found, for an interior corner hereof;

Thence, with the northwesterly line of said Winfield Subdivision Phase 8, **South 45 degrees 31 minutes 34 seconds West, 414.06 feet**, to a 1/2" iron rod found at an easterly line of said Winfield Subdivision, Phase 8, for an exterior corner hereof;

Thence, with an easterly line of said Winfield Subdivision, Phase 8, **North 32 degrees 14 minutes 17 seconds West, 99.74** to a 1/2" iron rod found, for an interior corner hereof;

Thence, with a northerly line of said Winfield Subdivision, Phase 8, **South 57 degrees 59 minutes 30 seconds West, 49.65** to a 1/2" iron rod found, for an interior corner hereof;

Thence, with a westerly line of said Winfield Subdivision, Phase 8, **South 32 degrees 36 minutes 05 seconds East, 138.72** to a 1/2" iron rod found at a northeasterly corner of The Estates of Winfield, recorded in Volume 13, Pages 61-62, Plat Records, Webb County, Texas, for an exterior corner hereof;

Thence, with a northeasterly line of said The Estates of Winfield, **North 61 degrees 45 minutes 11 seconds West, 176.32** to a concrete nail found, for an interior corner hereof;

Thence, with a northwesterly line of said The Estates of Winfield, **South 67 degrees 07 minutes 43 seconds West, 1313.25** to a PK nail found on block wall, for an interior corner hereof;

Thence, with a westerly line of said The Estates of Winfield, **South 06 degrees 06 minutes 16 seconds East, 86.45** to a PK nail found on block wall, for an exterior corner hereof;

Thence, with a northerly line of said The Estates of Winfield, **North 78 degrees 27 minutes 14 seconds West, 59.77** to a PK nail found on block wall at the easterly line of Deer Ridge Subdivision, Phase V, recorded in Volume 26, Pages 98-100, Plat Records, Webb County, Texas, for the southwest corner hereof;

Thence, with the easterly line of said Deer Ridge Subdivision, Phase V, **North 05 degrees 51 minutes 50 seconds West, 626.83** to a 1/2" iron rod found at the southeast corner of a tract of land conveyed to Santa Fe Webb, L.L.C., as described in deed recorded in Volume 4652, Page 778, Deed Records, Webb County, Texas, for a point of deflection hereof;

Thence, with the easterly line of said Santa Fe Webb, L.L.C. tract, **North 05 degrees 53 minutes 41 seconds West, 186.49** to a 1/2" iron rod set at the southerly line of aforementioned CPL easement, for the northwest corner hereof;

Thence, with the southerly line of said CPL easement, **North 69 degrees 58 minutes 46 seconds East, 1628.25 feet**, to the Point of Beginning and containing 30.34 acres of land, more or less.

Basis of Bearings:
A concrete nail found at the most northerly corner of The Estates of Winfield, recorded in Volume 13, Pages 61-62, Plat Records, Webb County, Texas, and a PK nail found at the most northerly northwest corner of said The Estates of Winfield.
Called to be: South 67 degrees 07 minutes 45 seconds West, 1313.25 feet.
Measured: South 67 degrees 07 minutes 45 seconds West, 1313.25 feet.

DESIGN BY: J. Centeno
DRAWN BY: J. Centeno
CHECKED BY: O. Castillo

ISSUED:

#	DATE	DESCRIPTION
1	03/18/2020	FOR PRELIMINARY PLAT
2	07/14/2020	FOR ONE STOP SHOP
3	08/11/2020	FOR ONE STOP SHOP
4	09/10/2020	FOR ONE STOP SHOP
5	10/01/2020	FOR ONE STOP SHOP
6	11/25/2020	FOR FINAL PLAT
7	12/02/2020	FOR CONSTRUCTION
8	12/17/2020	FOR CONSTRUCTION

peuda consulting llc
Registration Number F-14954
3910 E. Del Mar Blvd, Ste 105-I
Laredo, Texas 78045
Tel: (956) 433-2205

Winfield Subdivision Phase 9
A 30.34 acre tract of land out of a 35.2394 acre tract of land conveyed to K.R.K. Limited, situated in Porcion 23, Leonardo Sanchez, Abstract 283, and Porcion 24, Toribio Rodriguez, Abstract 286, as recorded in Volume 4756, Pages 759-763,

A. Specific Questions requested by Winfield HOA

A.1 Did this phase follow masterplan?

Oscar mentioned that this phase did follow updated masterplan; Recommend to confirm this with City Planner and City Engineer. Refer to conclusions and recommendations in this report.

A.2 Is this phase going to join HOA?

Attorneys for both parties currently working on developing language for HOA to consider adding Phase 9 to HOA; Discussion held on Edg and Daniel to provide HOA attorney with considerations to add to the agreement. This includes adding language for developer to maintain detention pond for 2 years after City of Laredo formally accepts this phase as per City of Laredo land development code. Winfield HOA will then work with City after 2 years lapse to address who will perform maintenance;

A.3 Will greenbelt be developed?

No; Harry Jewett's and updated masterplans do not indicate a greenbelt; Refer to conclusions and recommendations on open space discussion.

A.4 Was detention pond designed correctly?

Based on review of drainage report and plans, pond was designed in accordance to the City of Laredo Land Development Code; Refer to conclusions and recommendations for comments on additional work needed by Peua.

A.5 Are private utilities being installed along rear or front of lots?

Front installation is ongoing. Utility trenches are complete and AEP has installed their cable. AEP has advised Oscar that transformers are on backorder and will take about 4 months to come in due to transformer shortage. Discussion held on adding a vegetative screen in front of these utilities to keep from view. Oscar mentioned this screen is required as part of Winfield development covenants. We need to confirm this or add this language to agreement with Phase 9 developer;

A.6 Will Phase 9 have restrictions?

Attorneys working on this to follow current Winfield restrictions;