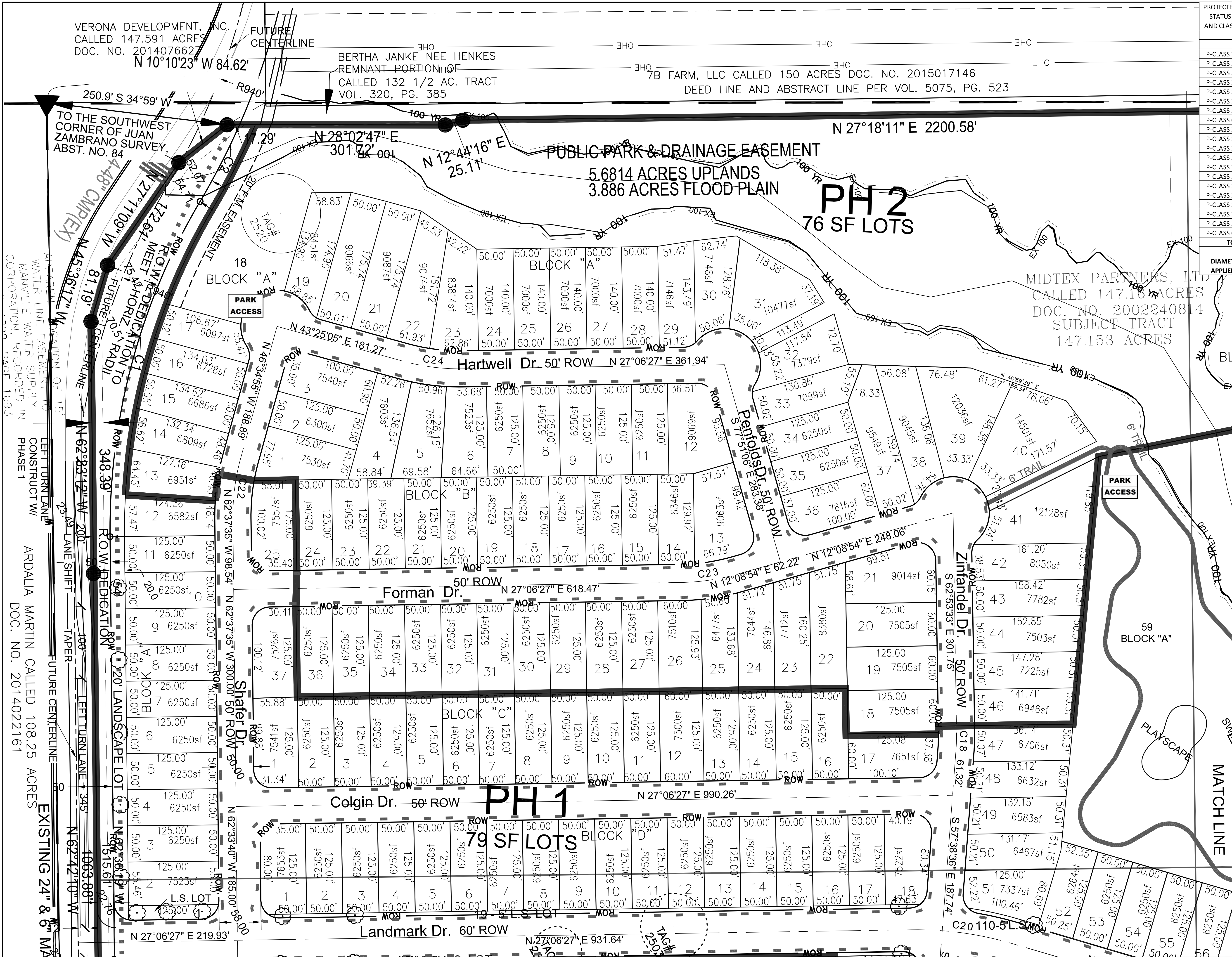




PROTECTED STATUS AND CLASS	PROPOSED REMOVAL "X" OR CREDIT "C"	TREE #	SIZE (IN)-SPECIES	MITIGATION	
				RATIO	INCHES REQUIRED
P-CLASS 2	X	2501	8" - MESQUITE	1:1	8
P-CLASS 2	X	2502	12" - MESQUITE	1:1	12
P-CLASS 5	X	2503	23" - MESQUITE	3:1	69
P-CLASS 2	X	2504	17" - MESQUITE	1:1	17
P-CLASS 2	X	2505	14" - MESQUITE	1:1	14
P-CLASS 2	X	2506	10" - MESQUITE		
P-CLASS 2	C	2507	12" - MESQUITE		
P-CLASS 6	C	2508	27" - MESQUITE		
P-CLASS 2	C	2509	11" - MESQUITE		
P-CLASS 2	C	2510	9" - MESQUITE		
P-CLASS 2	C	2511	9" - MESQUITE		
P-CLASS 5	C	2512	18" - MESQUITE		
P-CLASS 2	C	2513	12" - MESQUITE		
P-CLASS 2	X	2514	9" - MESQUITE	1:1	9
P-CLASS 2	X	2515	10" - MESQUITE	1:1	10
P-CLASS 2	C	2516	12" - MESQUITE		
P-CLASS 2	C	2517	11" - MESQUITE		
P-CLASS 2	C	2518	10" - MESQUITE		
P-CLASS 2	C	2519	8" - MESQUITE		
P-CLASS 6	C	2520	28" - HAWTHORN		
TOTAL INCHES MITIGATION AND CREDIT				139	139
MITIGATION = DIAMETER INCHES PROPOSED FOR MITIGATION OR APPLIED TOWARDS LANDSCAPING REQUIREMENTS				47 x 3" DIAMETER	

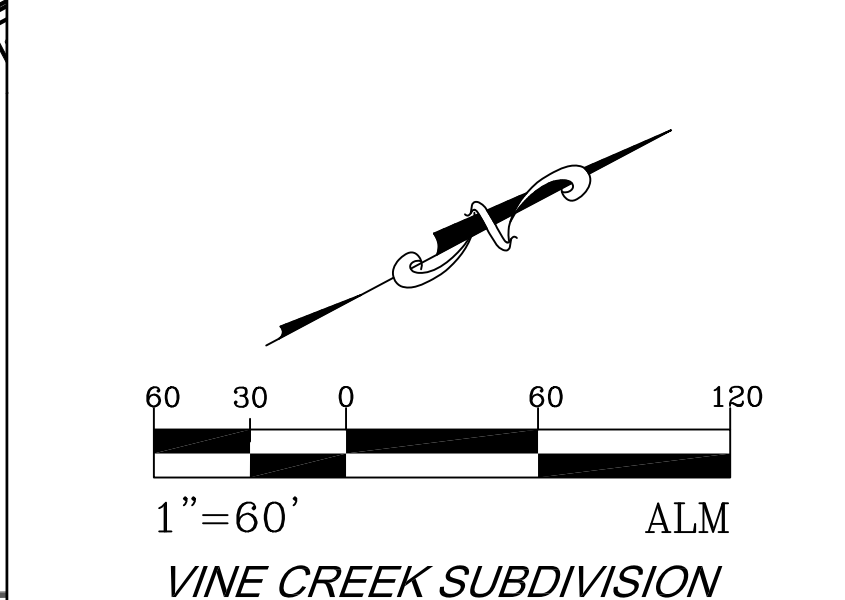
DATE	REVISION	#
10/28/2016		

DATE	JOB	SITE	DRAWN BY	CHECKED BY
10/28/2016	1001	MM	MM	MM

CHORD #	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	N 46°58'06" W	890.00	485.79	479.78
C2	N 34°46'50" W	990.00	119.19	119.12
C3	S 53°26'28" E	465.00	143.56	142.99
C4	S 39°54'54" E	465.00	75.99	75.91
C5	S 28°56'34" E	850.00	186.64	186.26
C6	S 18°07'40" E	850.00	134.25	134.11
C7	S 07°46'02" E	465.00	94.73	94.56
C8	S 02°39'36" E	465.00	11.83	11.83
C9	S 26°06'22" E	465.00	368.74	359.15
C10	S 55°48'58" E	465.00	113.50	113.22
C11	N 43°26'33" E	300.00	118.59	117.82
C12	N 61°03'26" E	300.00	65.87	65.74
C13	S 24°25'05" E	300.00	113.25	112.58
C14	S 07°46'02" E	300.00	61.11	61.01
C15	S 59°21'54" E	300.00	30.37	30.36
C16	S 87°20'24" W	300.00	7.63	7.63
C17	N 74°54'23" W	300.00	178.28	175.67
C18	S 60°16'05" E	300.00	27.48	27.48
C19	S 60°16'05" E	300.00	27.48	27.48
C20	N 35°45'51" E	465.00	140.51	139.98
C21	S 47°06'25" E	890.00	490.09	483.93
C22	N 42°47'55" E	465.00	26.33	26.33
C23	N 54°35'37" W	300.00	83.90	83.62
C24	N 19°37'40" E	300.00	78.33	78.10

CHORD #	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
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C24	N 19°37'40" E	300.00	78.33	78.10

LEFT TURN LANE FOR CELE ROAD AT LANDMARK DRIVE WILL BE CONSTRUCTED WITH PHASE 1 AS SPECIFIED BY THE T.I.A.



NOT FOR RECORDATION
PFLUGERVILLE, TRAVIS COUNTY, TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

PRELIMINARY PLAN EXHIBIT W

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

DATE

10/28/2016

JOB

1001

SITE

MM

DRAWN BY

MM

CHECKED BY

MM

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

F-3565

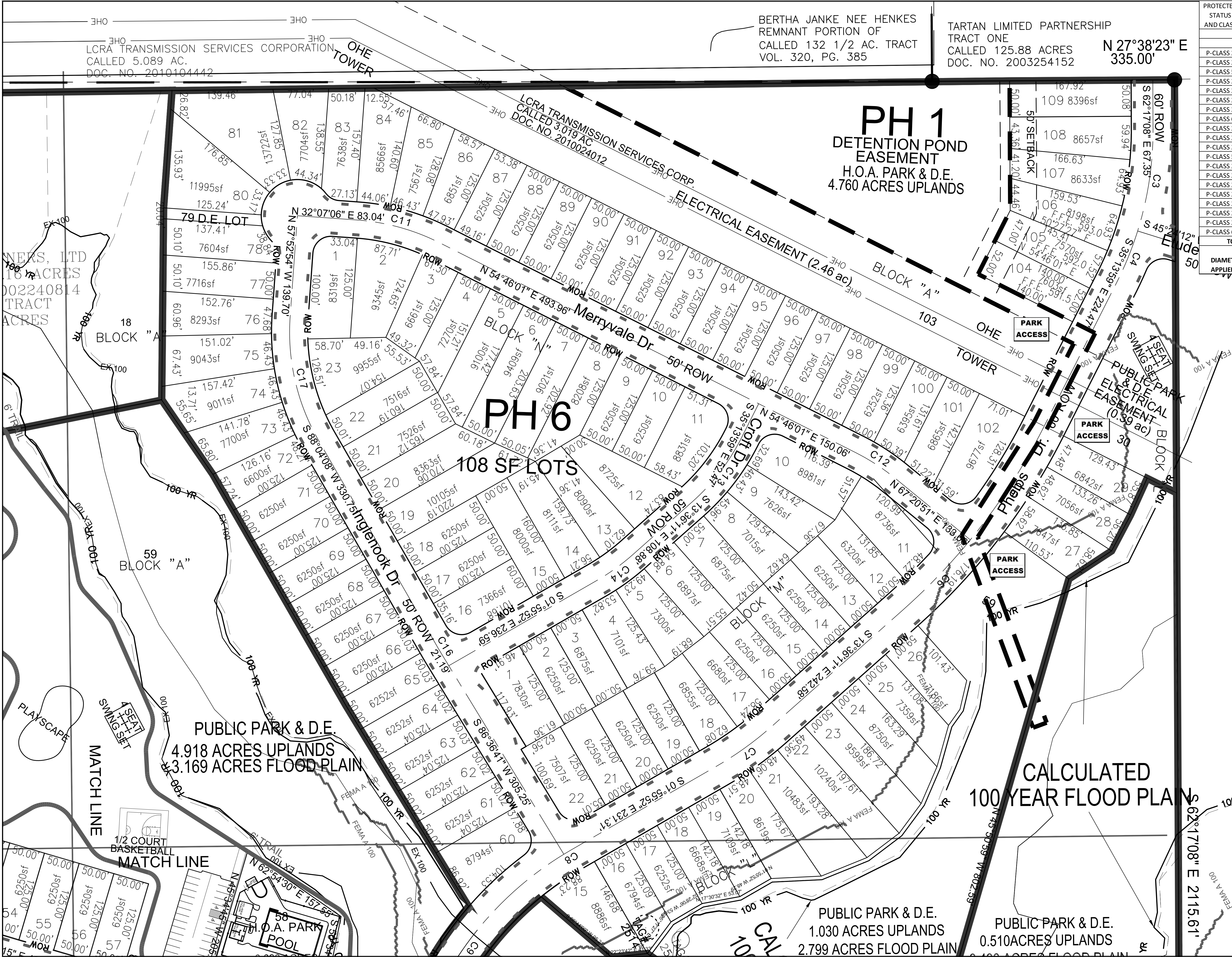
1705 S Capital of TX Hwy, Ste. 150

Austin, Texas, 78746.

(512)431-9600 * alming@sbcbglobal.net

SHEET

2 OF 24



PROTECTED STATUS AND CLASS	PROPOSED REMOVAL "X" OR CREDIT "C"	TREE #	SIZE (IN)-SPECIES	MITIGATION	
				RATIO	INCHES REQUIRED
P-CLASS 2	X	2501	8 " - MESQUITE	1:1	8
P-CLASS 2	X	2502	12 " - MESQUITE	1:1	12
P-CLASS 5	X	2503	23 " - MESQUITE	3:1	69
P-CLASS 2	X	2504	17 " - MESQUITE	1:1	17
P-CLASS 2	X	2505	14 " - MESQUITE	1:1	14
P-CLASS 2	X	2506	10 " - MESQUITE		
P-CLASS 2	C	2507	12 " - MESQUITE		
P-CLASS 6	C	2508	27 " - MESQUITE		
P-CLASS 2	C	2509	11 " - MESQUITE		
P-CLASS 2	C	2510	9 " - MESQUITE		
P-CLASS 2	C	2511	9 " - MESQUITE		
P-CLASS 5	C	2512	18 " - MESQUITE		
P-CLASS 2	C	2513	12 " - MESQUITE		
P-CLASS 2	X	2514	9 " - MESQUITE	1:1	9
P-CLASS 2	X	2515	10 " - MESQUITE	1:1	10
P-CLASS 2	C	2516	12 " - MESQUITE		
P-CLASS 2	C	2517	11 " - MESQUITE		
P-CLASS 2	C	2518	10 " - MESQUITE		
P-CLASS 2	C	2519	8 " - MESQUITE		
P-CLASS 6	C	2520	28 " - HAWTHORN		
TOTAL INCHES MITIGATION AND CREDIT				139-	139
MITIGATION = DIAMETER INCHES PROPOSED FOR MITIGATION OR APPLIED TOWARDS LANDSCAPING REQUIREMENTS				47 x 3" DIAMETER	

LEGEND

LOT LINES
R.O.W. LINES
CENTERLINE
EASEMENTS
6" TRAIL
4" SIDEWALK
6" SIDEWALK
FEMA A 100

DEVELOPED 100 YR F.P.
PHASE LINE

3"Ø REPLACEMENT TREES

ROW

FEMA A 100

100 YR

#	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
C1	N 46°58'06" W	890.00	485.79	479.78
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C24	N 19°37'40" E	300.00	78.33	78.10

60 30 0 60 120

1"=60'

ALM

VINE CREEK SUBDIVISION

NOT FOR RECORDATION

PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS

ALM ENGINEERING, INC.

CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

DATE

REVISION

#

SCALE: 1"=100'

DATE: 9/21/2016

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

PRELIMINARY PLAN EXHIBIT N

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

Sheet 3 OF 24

ALM ENGINEERING, INC.

CONSULTING ENGINEERS
F-3565
1705 S Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.
(512)431-9600 * almengr@sbcglobal.net

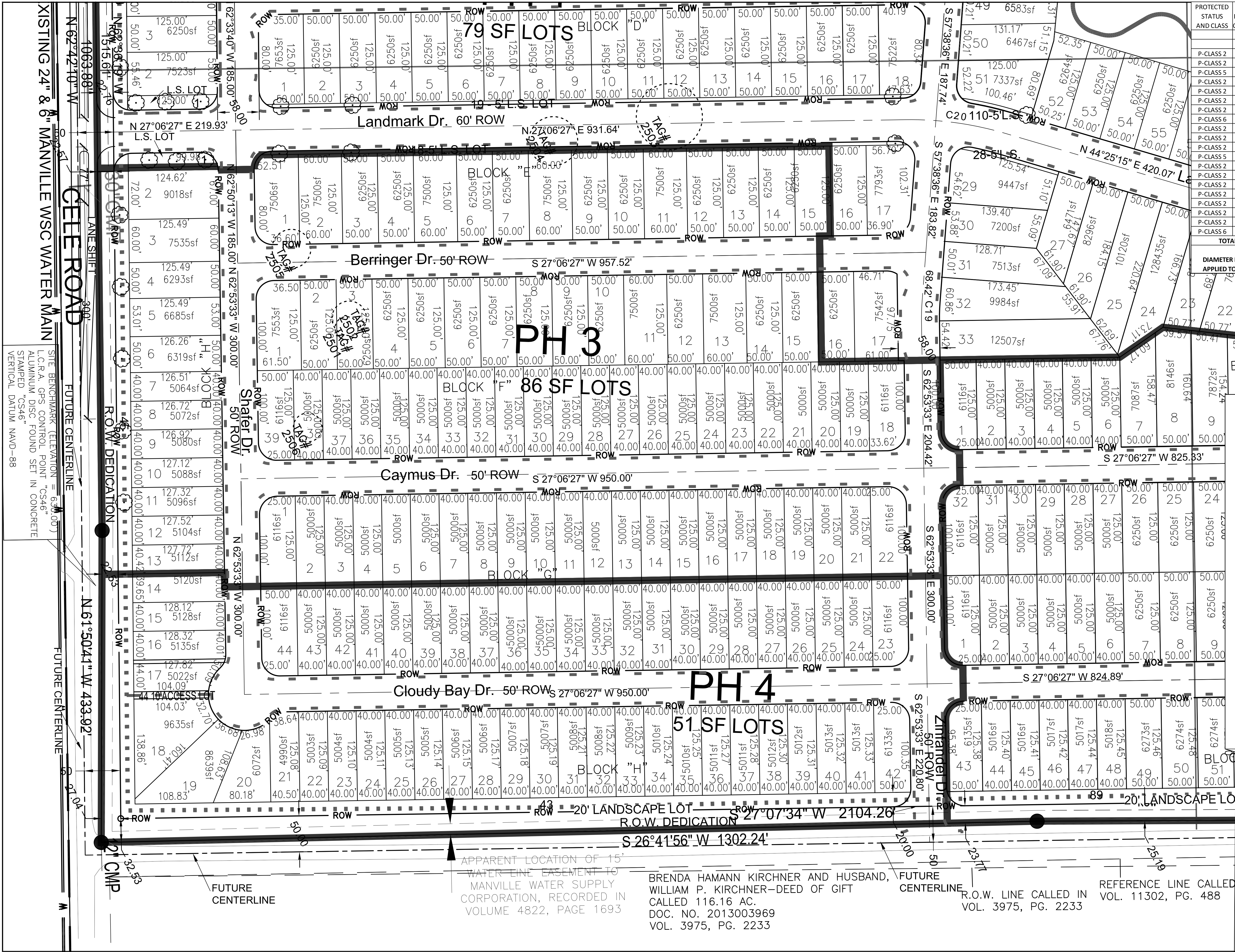
STATE OF TEXAS

MATTHEW MITCHELL

83335

REGISTERED PROFESSIONAL ENGINEER

9-21-2016



PROTECTED STATUS AND CLASS	PROPOSED REMOVAL "X" OR CREDIT "C"	TREE #	SIZE (IN)-SPECIES	MITIGATION	
				RATIO	INCHES REQUIRED
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P-CLASS 2	X	2506	10" - MESQUITE		
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P-CLASS 2	C	2509	11" - MESQUITE		
P-CLASS 2	C	2510	9" - MESQUITE		
P-CLASS 2	C	2511	9" - MESQUITE		
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P-CLASS 2	C	2513	12" - MESQUITE		
P-CLASS 2	X	2514	9" - MESQUITE	1:1	9
P-CLASS 2	X	2515	10" - MESQUITE		
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P-CLASS 2	C	2517	11" - MESQUITE		
P-CLASS 2	C	2518	10" - MESQUITE		
P-CLASS 2	C	2519	8" - MESQUITE		
P-CLASS 6	C	2520	28" - HAWTHORN		
TOTAL INCHES MITIGATION AND CREDIT				139	139

MITIGATION = 139"

DIAMETER INCHES PROPOSED FOR MITIGATION OR APPLIED TOWARDS LANDSCAPING REQUIREMENTS

47 x 3" DIAMETER

LEGEND

LOT LINES
R.O.W. LINES
CENTERLINE
EASEMENTS
4" TRAIL
4' SIDEWALK
6' SIDEWALK
FEMA ZONE "A"

DEVELOPED 100 YR F.P.
PHASE LINE

3"Ø REPLACEMENT TREES

#	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
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C23	N 54°35'37" W	300.00	83.90	83.62
C24	N 19°37'40" E	300.00	78.33	78.10

NOT FOR RECORDATION

PFLUGERVILLE, TEXAS

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

1705 S. Capital of TX Hwy, Ste. 150

Austin, Texas, 78746.

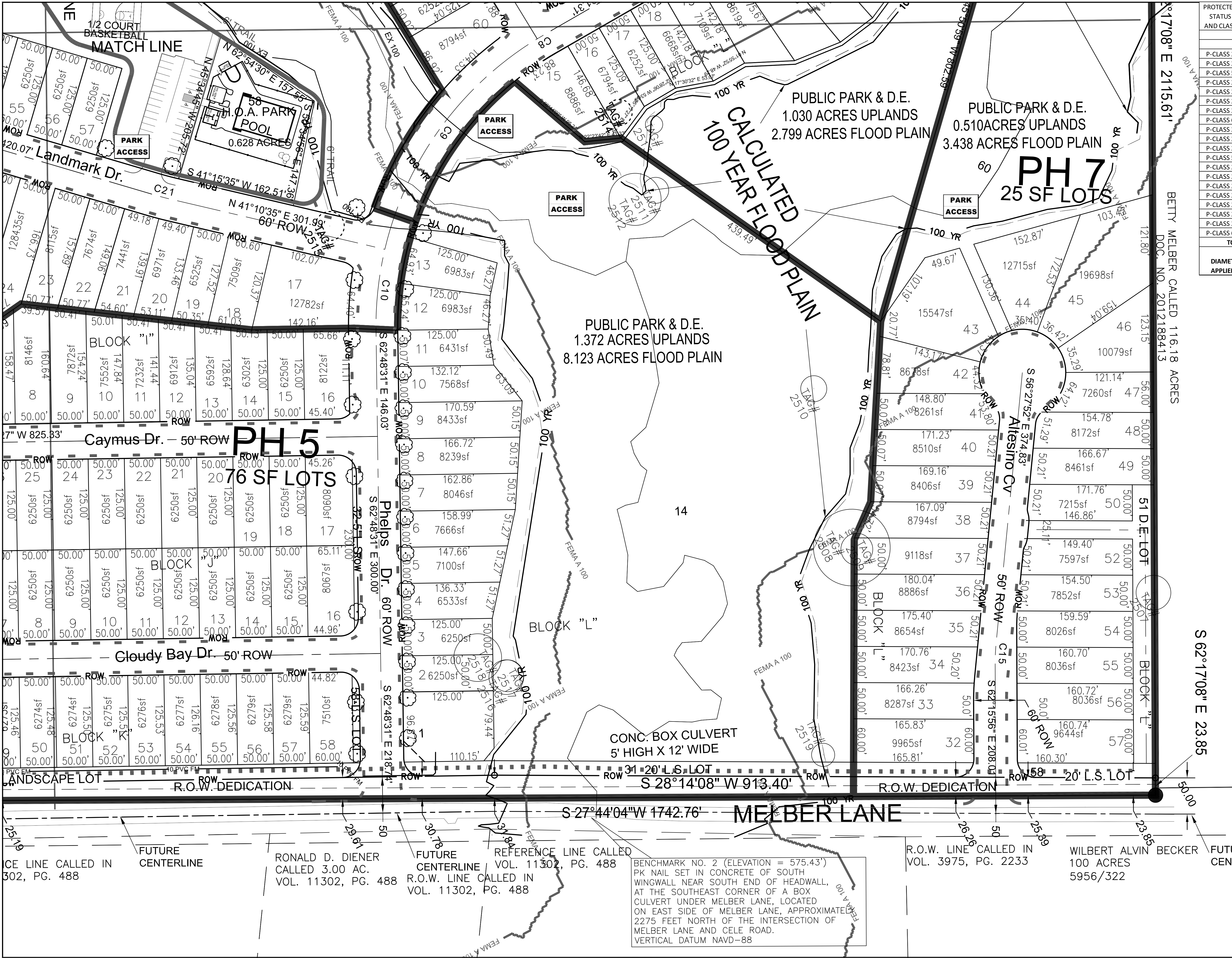
10-28-2016

PRELIMINARY PLAN EXHIBIT S

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

Sheet 4 OF 24



PROTECTED STATUS AND CLASS	PROPOSED REMOVAL "X" OR CREDIT "C"	TREE #	SIZE (IN)-SPECIES	MITIGATION	
				RATIO	INCHES REQUIRED
P-CLASS 2	X	2501	8 " - MESQUITE	1:1	8
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P-CLASS 5	X	2503	23 " - MESQUITE	3:1	69
P-CLASS 2	X	2504	17 " - MESQUITE	1:1	17
P-CLASS 2	X	2505	14 " - MESQUITE	1:1	14
P-CLASS 2	X	2506	10 " - MESQUITE		
P-CLASS 2	C	2507	12 " - MESQUITE		
P-CLASS 6	C	2508	27 " - MESQUITE		
P-CLASS 2	C	2509	11 " - MESQUITE		
P-CLASS 2	C	2510	9 " - MESQUITE		
P-CLASS 2	C	2511	9 " - MESQUITE		
P-CLASS 5	C	2512	18 " - MESQUITE		
P-CLASS 2	C	2513	12 " - MESQUITE		
P-CLASS 2	X	2514	9 " - MESQUITE	1:1	9
P-CLASS 2	X	2515	10 " - MESQUITE	1:1	10
P-CLASS 2	C	2516	12 " - MESQUITE		
P-CLASS 2	C	2517	11 " - MESQUITE		
P-CLASS 2	C	2518	10 " - MESQUITE		
P-CLASS 2	C	2519	8 " - MESQUITE		
P-CLASS 6	C	2520	28 " - HAWTHORN		
TOTAL INCHES MITIGATION AND CREDIT				139=	139
MITIGATION =				47 x 3" DIAMETER	
DIAMETER INCHES PROPOSED FOR MITIGATION OR APPLIED TOWARDS LANDSCAPING REQUIREMENTS					

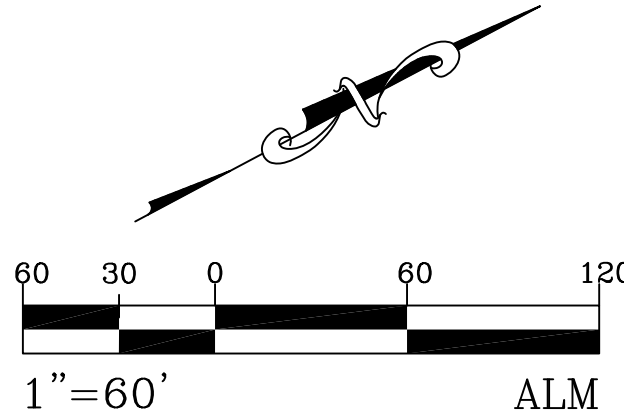
LEGEND

LOT LINES
R.O.W. LINES
CENTERLINE
EASEMENTS
6" TRAIL
4" SIDEWALK
6" SIDEWALK
FEMA "A" ZONE

DEVELOPED 100 YR F.P.
PHASE LINE

3"Ø REPLACEMENT TREES

#	CHORD DIRECTION	RADIUS	ARC LENGTH	CHORD LENGTH
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C24	N 19°37'40" E	300.00	78.33	78.10



VINE CREEK SUBDIVISION
NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

DATE: 9/21/2016

REVISION: #

SCALE: 1"=100'

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

PRELIMINARY PLAN EXHIBIT E

VINE CREEK SUBDIVISION

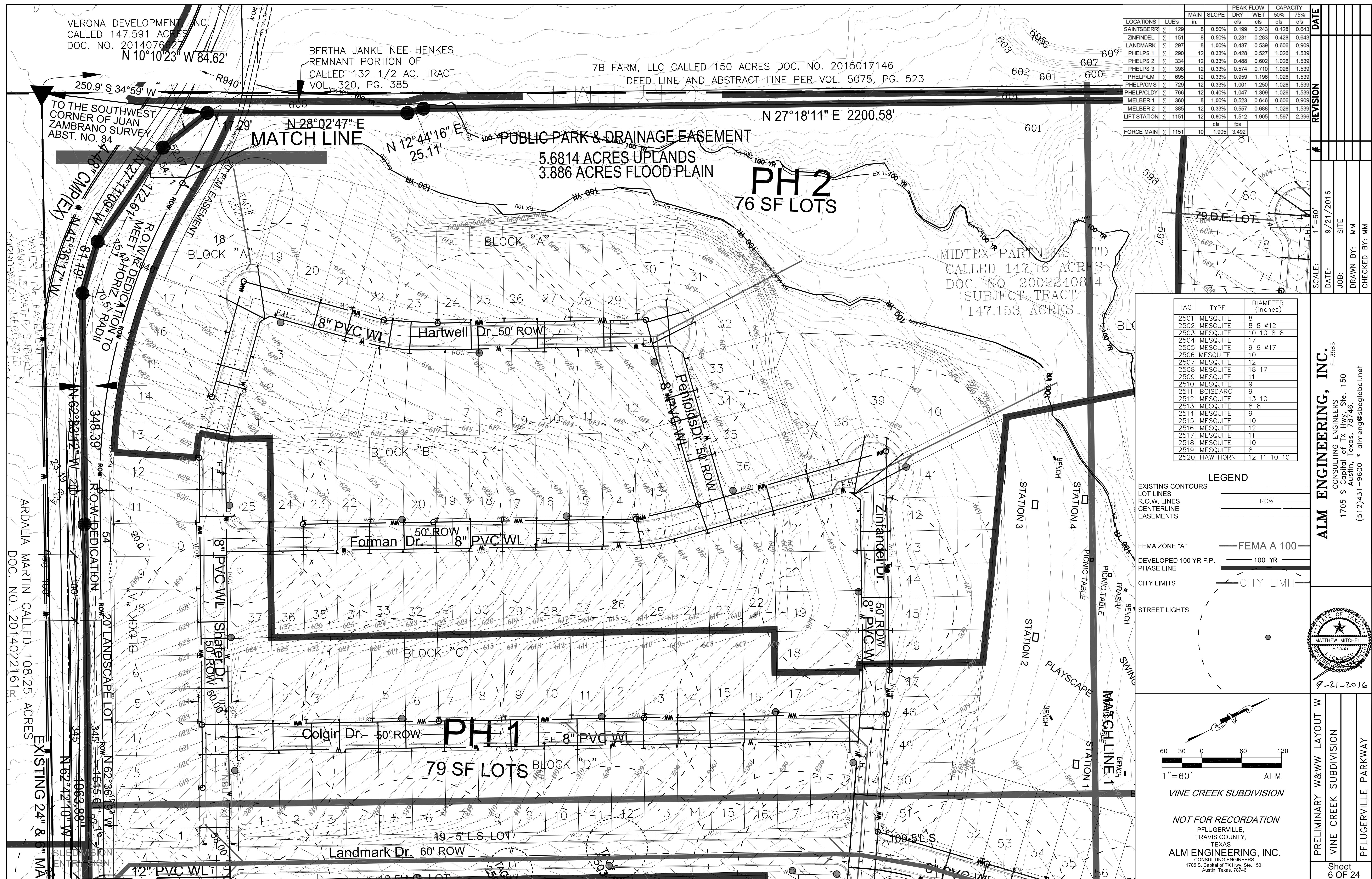
PFLUGERVILLE PARKWAY

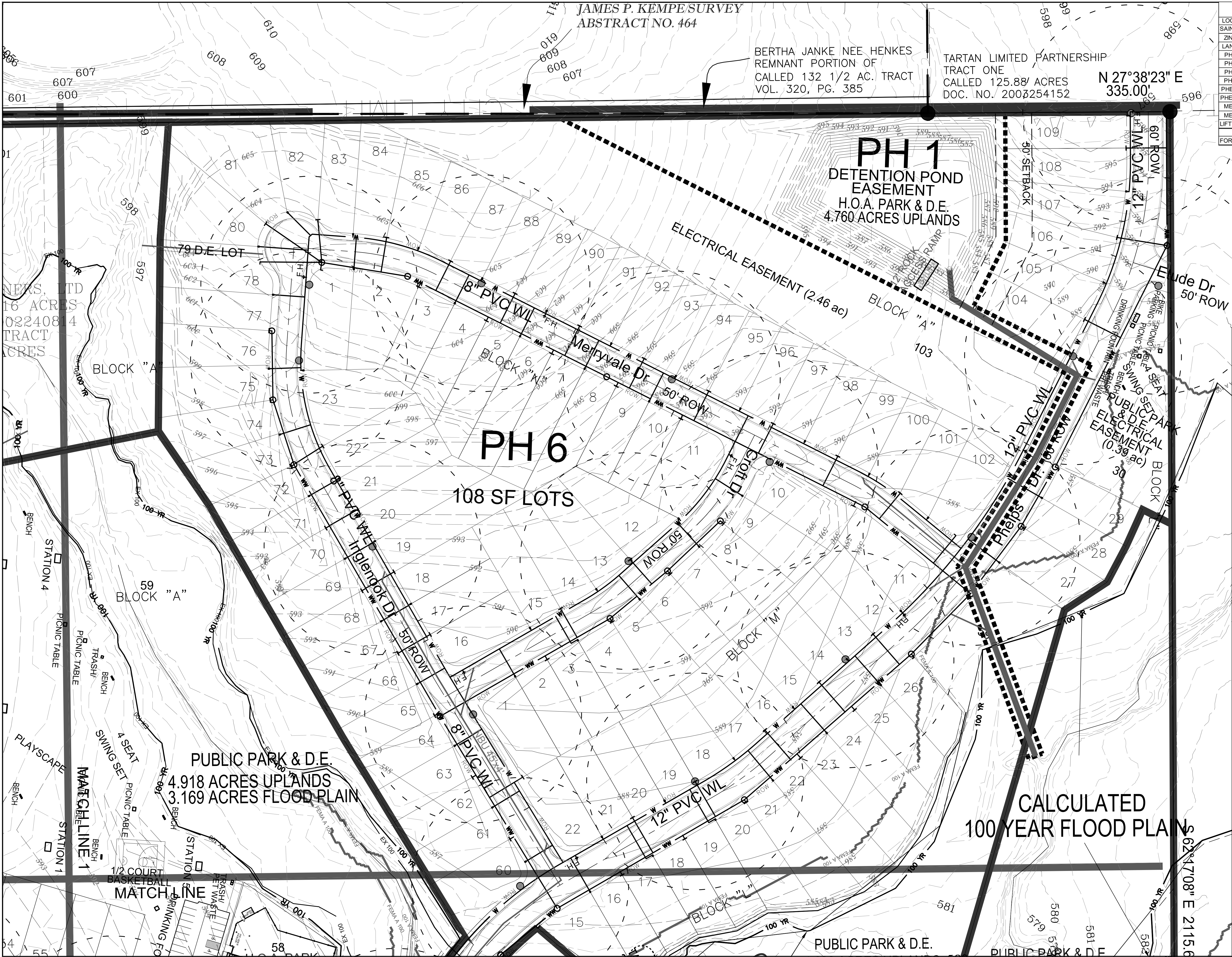
9-21-2016

Sheet 5 OF 24

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
F-3565
1705 S Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.
(512)431-9600 * almeng@sbglobal.net







LOCATIONS	LUE's	MAIN	SLOPE	PEAK FLOW		CAPACITY	
				DRY	WET	50%	75%
SAINTSBERRY	129	8	0.50%	0.199	0.243	0.428	0.643
ZINFIDEL	151	8	0.50%	0.231	0.283	0.428	0.643
LANDMARK	297	8	1.00%	0.437	0.539	0.606	0.909
PHELPS 1	290	12	0.33%	0.428	0.527	1.026	1.539
PHELPS 2	334	12	0.33%	0.488	0.602	1.026	1.539
PHELPS 3	398	12	0.33%	0.574	0.710	1.026	1.539
PHELPS/ML	695	12	0.33%	0.959	1.196	1.026	1.539
PHELPS/CMS	729	12	0.33%	1.001	1.250	1.026	1.539
PHELPS/CLDY	766	12	0.40%	1.047	1.309	1.026	1.539
MELBER 1	360	8	1.00%	0.523	0.646	0.606	0.909
MELBER 2	385	12	0.33%	0.557	0.688	1.026	1.539
LIFT STATION	1151	12	0.80%	1.512	1.905	1.597	2.396
FORCE MAIN	1151	10		1.905	3.492		

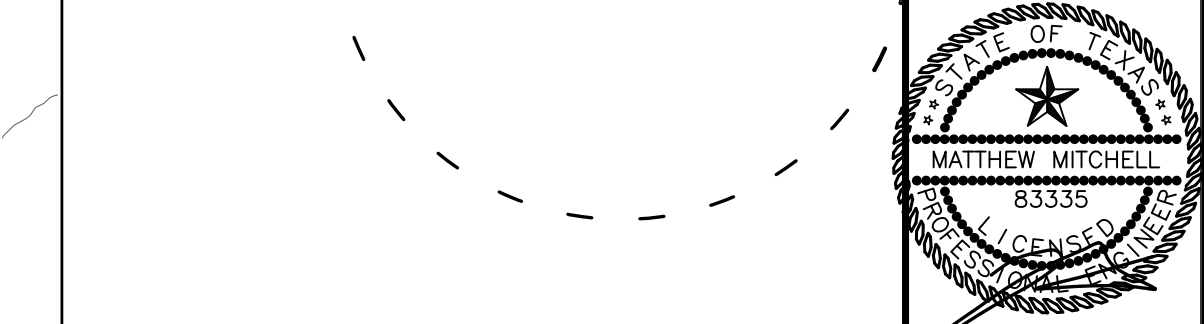
TAG	TYPE	DIAMETER (inches)
2501	MESQUITE	8
2502	MESQUITE	8 8 #12
2503	MESQUITE	10 10 8 8
2504	MESQUITE	17
2505	MESQUITE	9 9 #17
2506	MESQUITE	10
2507	MESQUITE	12
2508	MESQUITE	18 17
2509	MESQUITE	11
2510	MESQUITE	9
2511	BOISDARC	9
2512	MESQUITE	13 10
2513	MESQUITE	8 8
2514	MESQUITE	9
2515	MESQUITE	10
2516	MESQUITE	12
2517	MESQUITE	11
2518	MESQUITE	10
2519	MESQUITE	8
2520	HAWTHORN	12 11 10 10

LEGEND

EXISTING CONTOURS
LOT LINES
R.O.W. LINES
CENTERLINE
EASEMENTS

FEMA ZONE "A"
DEVELOPED 100 YR F.P.
PHASE LINE
CITY LIMITS
STREET LIGHTS

— FEMA A 100 —
— 100 YR —
— CITY LIMIT —



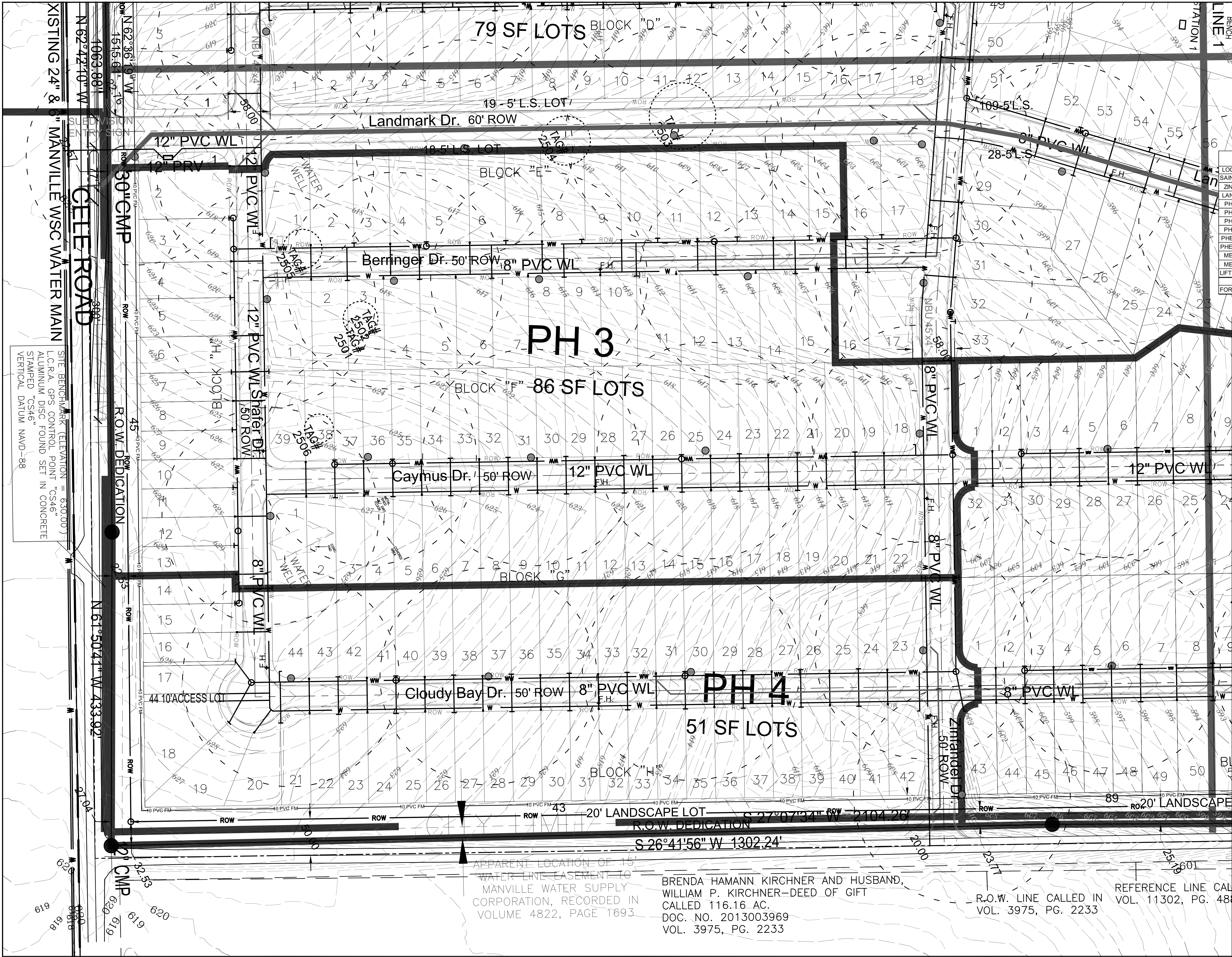
NOT FOR RECORDATION

PFLUGERVILLE, TRAVIS COUNTY, TEXAS

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

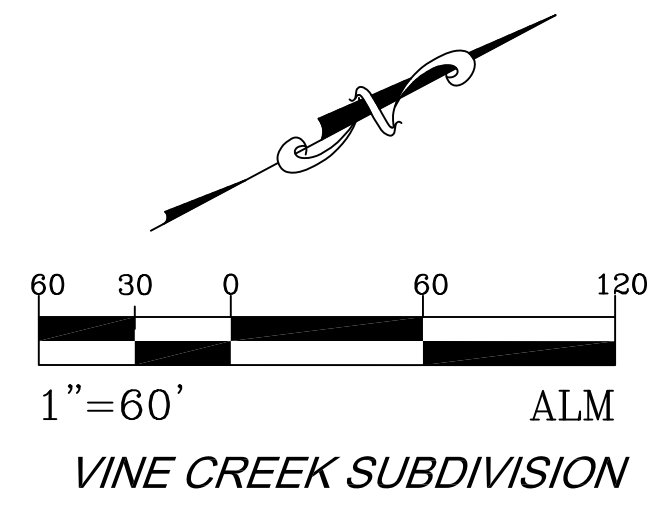
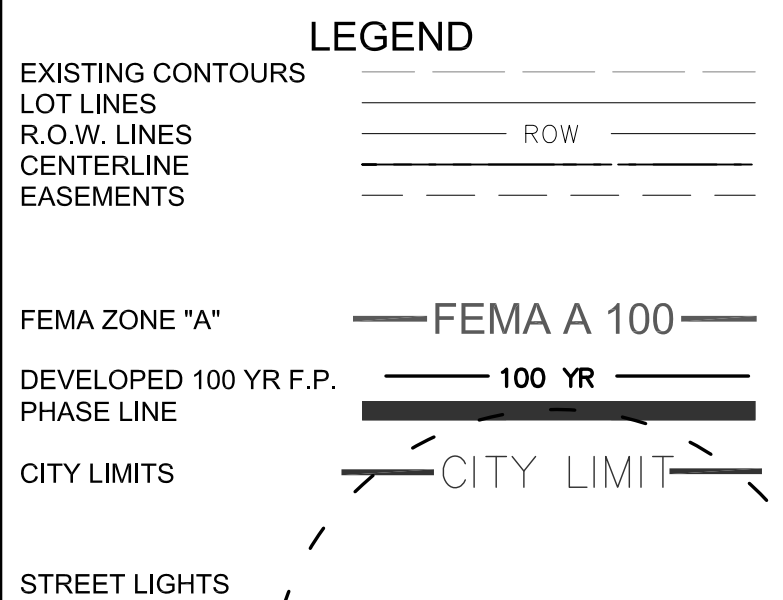
PRELIMINARY W&WW LAYOUT N
VINE CREEK SUBDIVISION
PFLUGERVILLE PARKWAY

Sheet 7 OF 24



LOCATIONS	LUE's	MAIN	SLOPE	PEAK FLOW		CAPACITY	
				DRY	WET	50%	75%
SAINTSBERRY	129	8	0.50%	0.199	0.243	0.428	0.643
ZINFINDEL	151	8	0.50%	0.231	0.283	0.428	0.643
LANDMARK	297	8	1.00%	0.437	0.539	0.606	0.909
PHELPS 1	290	12	0.33%	0.428	0.527	1.026	1.539
PHELPS 2	334	12	0.33%	0.488	0.602	1.026	1.539
PHELPS 3	398	12	0.33%	0.574	0.710	1.026	1.539
PHELP/LM	695	12	0.33%	0.959	1.196	1.026	1.539
PHELP/CMS	729	12	0.33%	1.001	1.250	1.026	1.539
PHELP/CLDY	766	12	0.40%	1.047	1.309	1.026	1.539
MELBER 1	360	8	1.00%	0.523	0.646	0.606	0.909
MELBER 2	385	12	0.33%	0.557	0.688	1.026	1.539
LIFT STATION	1151	12	0.80%	1.512	1.905	1.597	2.996
FORCE MAIN		1151	10	1.905	3.492		

TAG	TYPE	DIAMETER (inches)
2501	MESQUITE	8
2502	MESQUITE	8 8 #12
2503	MESQUITE	10 10 8 8
2504	MESQUITE	17
2505	MESQUITE	9 9 #17
2506	MESQUITE	10
2507	MESQUITE	12
2508	MESQUITE	18 17
2509	MESQUITE	11
2510	MESQUITE	9
2511	BOISDARC	9
2512	MESQUITE	13 10
2513	MESQUITE	8 8
2514	MESQUITE	9
2515	MESQUITE	10
2516	MESQUITE	12
2517	MESQUITE	11
2518	MESQUITE	10
2519	MESQUITE	8
2520	HAWTHORN	12 11 10 10



NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

DATE: 9/21/2016

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

PRELIMINARY W&WW LAYOUT S

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

Sheet 8 OF 24

ALM ENGINEERING, INC.

CONSULTING ENGINEERS F-3565

1705 S Capital of TX Hwy, Ste. 150

Austin, Texas, 78746.

(512)431-9600 * almengr@bcglobal.net

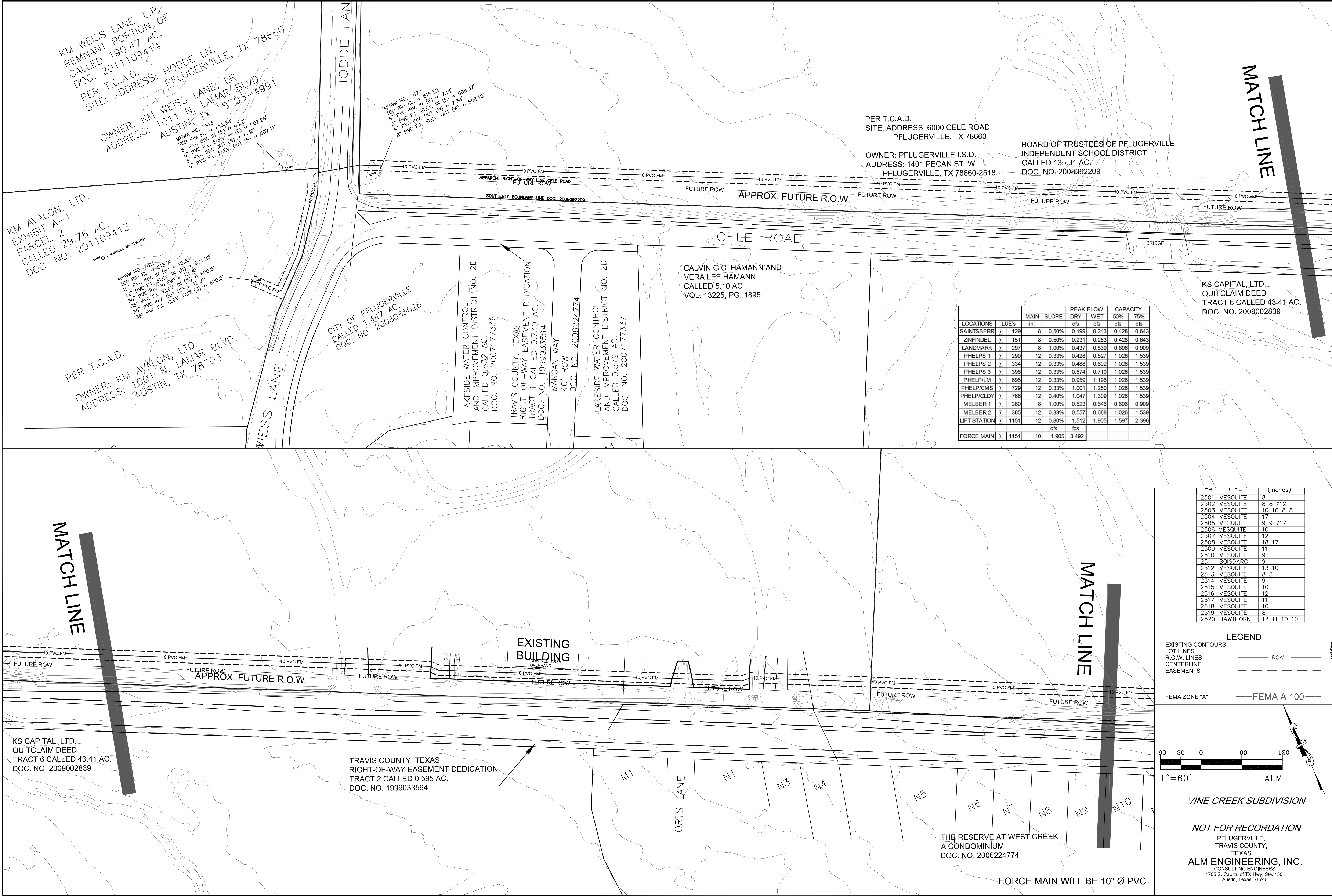
STATE OF TEXAS

MATTHEW MITCHELL

83335

REGISTERED PROFESSIONAL ENGINEER

9-21-2016



LOCATIONS	LUE's	MAIN	SLOPE	PEAK FLOW		CAPACITY	
				DRY	WET	50%	75%
SAINTSBERRY	129	8	0.50%	0.199	0.243	0.428	0.643
ZINFINDEL	151	8	0.50%	0.231	0.283	0.428	0.643
LANDMARK	297	8	1.00%	0.437	0.539	0.606	0.909
PHELPS 1	290	12	0.33%	0.428	0.527	1.026	1.539
PHELPS 2	334	12	0.33%	0.488	0.602	1.026	1.539
PHELPS 3	388	12	0.33%	0.574	0.710	1.026	1.539
PHELP/ILM	695	12	0.33%	0.959	1.196	1.026	1.539
PHELP/CMS	729	12	0.33%	1.001	1.250	1.026	1.539
PHELP/OLDY	766	12	0.40%	1.047	1.309	1.026	1.539
MELBER 1	360	8	1.00%	0.523	0.646	0.606	0.909
MELBER 2	385	12	0.33%	0.557	0.688	1.026	1.539
LIFT STATION	1151	12	0.80%	1.512	1.905	1.597	2.396
FORCE MAIN	1151	10		cfs	fps		
				1.905	3.492		

NO	TYPE	(inches)
2501	MESQUITE	8
2502	MESQUITE	8 8 ø12
2503	MESQUITE	10 10 8 8
2504	MESQUITE	17
2505	MESQUITE	9 9 ø17
2506	MESQUITE	10
2507	MESQUITE	12
2508	MESQUITE	18 17
2509	MESQUITE	11
2510	MESQUITE	9
2511	BOISDARC	9
2512	MESQUITE	13 10
2513	MESQUITE	8 8
2514	MESQUITE	9
2515	MESQUITE	10
2516	MESQUITE	12
2517	MESQUITE	11
2518	MESQUITE	10
2519	MESQUITE	8
2520	HAWTHORN	12 11 10 10

LEGEND

EXISTING CONTOURS _____

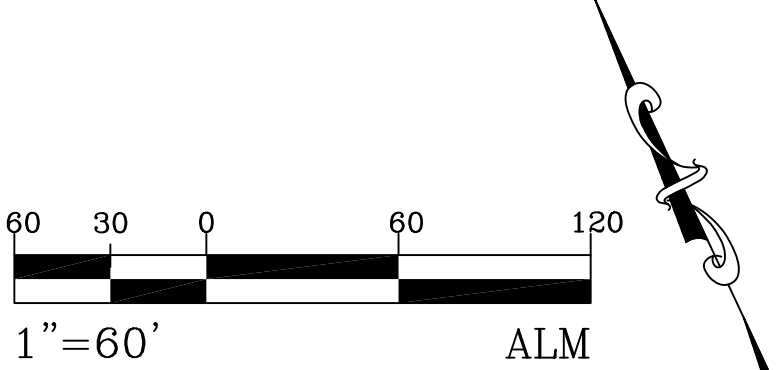
LOT LINES _____

R.O.W. LINES _____ ROW

CENTERLINE _____

EASEMENTS _____

FEMA ZONE "A" _____ FEMA A 100 _____



VINE CREEK SUBDIVISION

NOT FOR RECORDATION

PFLUGERVILLE, TRAVIS COUNTY, TEXAS

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

1705 S. Capital of TX Hwy, Ste. 150 Austin, Texas, 78746.

DATE: 8/22/2016

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

REVISION

#

1"=100'

SCALE:

DATE

8/22/2016

JOB

SITE

DRAWN BY

MM

CHECKED BY

MM

CONCEPT FORCE MAIN EASE.

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

F-3565

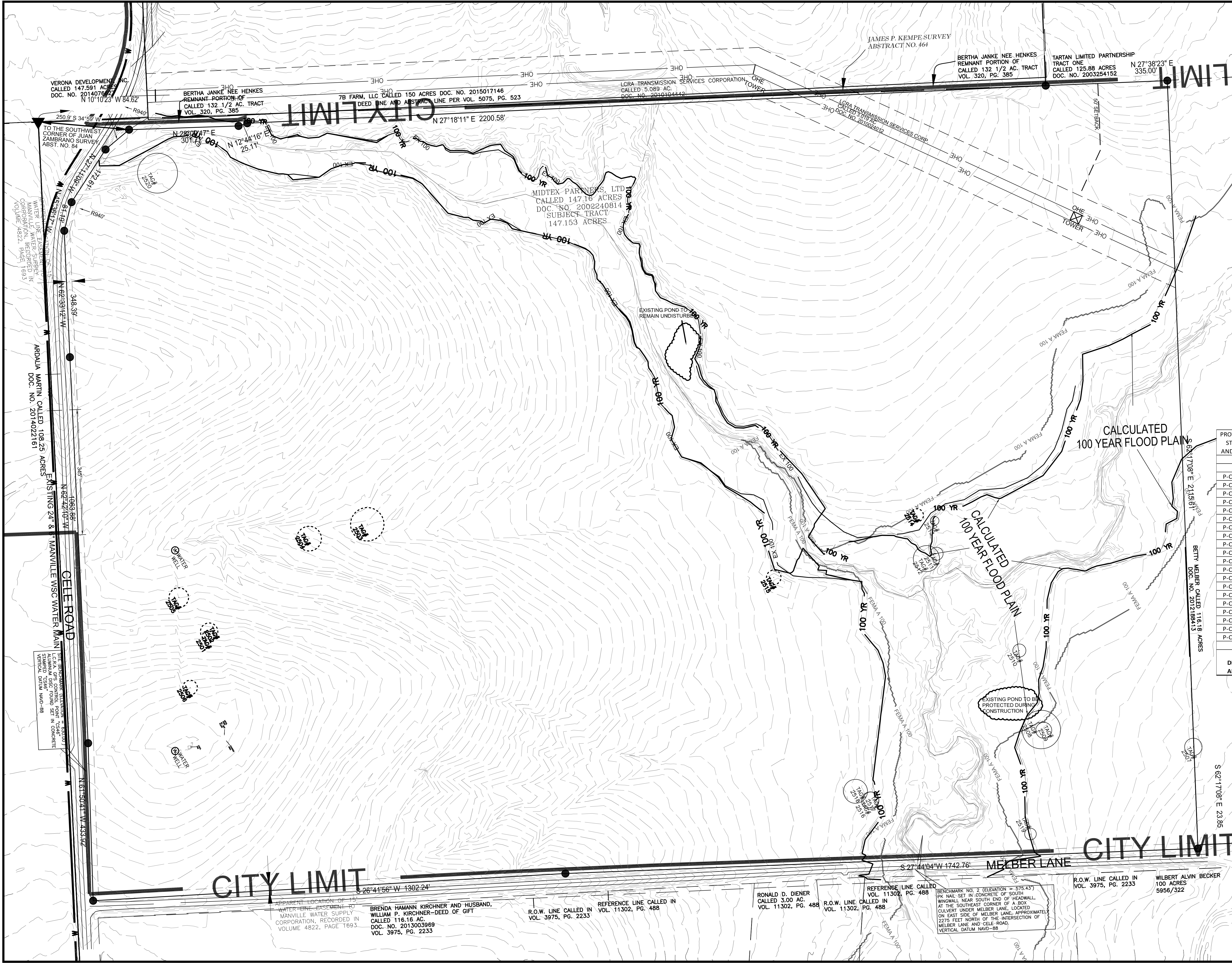
1705 S Capital of TX Hwy, Ste. 150

Austin, Texas, 78746.

(512)431-9600 * almeng@sbglobal.net

Sheet

10 OF 24



LEGEND

EXISTING CONTOURS

EASEMENTS

FEMA ZONE "A"

DEVELOPED 100 YR F.P.

EXISTING WATER WELL CITY LIMITS

TREES PRESERVED

TREES REMOVED

WATER WELLS WILL BE CAPPED IN COMPLIANCE WITH T.C.E.Q. REQUIREMENTS TO ALLOW FOR CONSTRUCTION OVER THE LOCATIONS

THE TWO EXISTING POND AREAS MUST REMAIN UNDISTURBED AT ALL TIMES AND MUST BE FENCED OFF AS SENSITIVE AREAS DURING NEARBY CONSTRUCTION.

DATE

REVISION

#

SCALE: 1"=120'

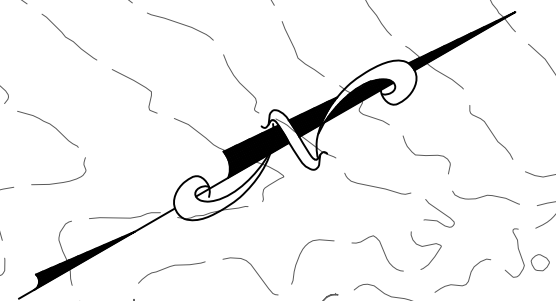
DATE: 8/22/2016

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

PROTECTED STATUS AND CLASS	PROPOSED REMOVAL "X" OR CREDIT "C"	TREE #	SIZE (IN)-SPECIES	MITIGATION
				RATIO INCHES
P-CLASS 2	X	2501	8" - MESQUITE	1:1 8
P-CLASS 2	X	2502	12" - MESQUITE	1:1 12
P-CLASS 5	X	2503	23" - MESQUITE	3:1 69
P-CLASS 2	X	2504	17" - MESQUITE	1:1 17
P-CLASS 2	X	2505	14" - MESQUITE	1:1 14
P-CLASS 2	X	2506	10" - MESQUITE	
P-CLASS 2	C	2507	12" - MESQUITE	
P-CLASS 6	C	2508	27" - MESQUITE	
P-CLASS 2	C	2509	11" - MESQUITE	
P-CLASS 2	C	2510	9" - MESQUITE	
P-CLASS 2	C	2511	9" - MESQUITE	
P-CLASS 5	C	2512	18" - MESQUITE	
P-CLASS 2	C	2513	12" - MESQUITE	
P-CLASS 2	X	2514	9" - MESQUITE	1:1 9
P-CLASS 2	X	2515	10" - MESQUITE	1:1 10
P-CLASS 2	C	2516	12" - MESQUITE	
P-CLASS 2	C	2517	11" - MESQUITE	
P-CLASS 2	C	2518	10" - MESQUITE	
P-CLASS 2	C	2519	8" - MESQUITE	
P-CLASS 6	C	2520	28" - HAWTHORN	
TOTAL INCHES MITIGATION AND CREDIT				139
MITIGATION =				139=
DIAMETER INCHES PROPOSED FOR MITIGATION OR APPLIED TOWARDS LANDSCAPING REQUIREMENTS				47 x 3" DIAMETER



VINE CREEK SUBDIVISION

NOT FOR RECORDATION

PFLUGERVILLE, TRAVIS COUNTY, TEXAS

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

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Austin, Texas, 78746.

EXISTING CONDITIONS

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

1705 S Capital of TX Hwy, Ste. 150

Austin, Texas, 78746.

(512)431-9600 * almeng@sbcglobal.net

STATE OF TEXAS

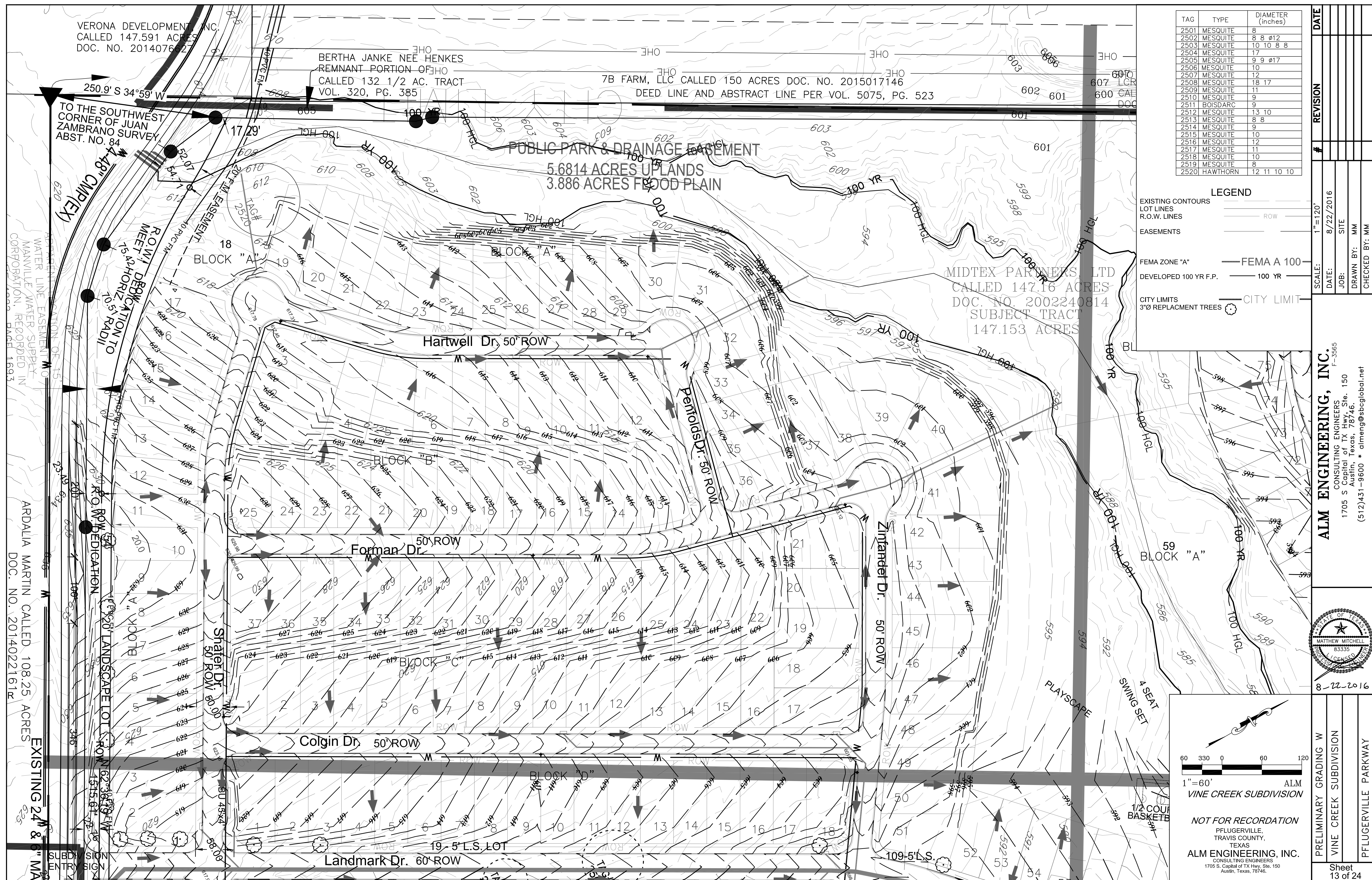
MATTHEW MITCHELL

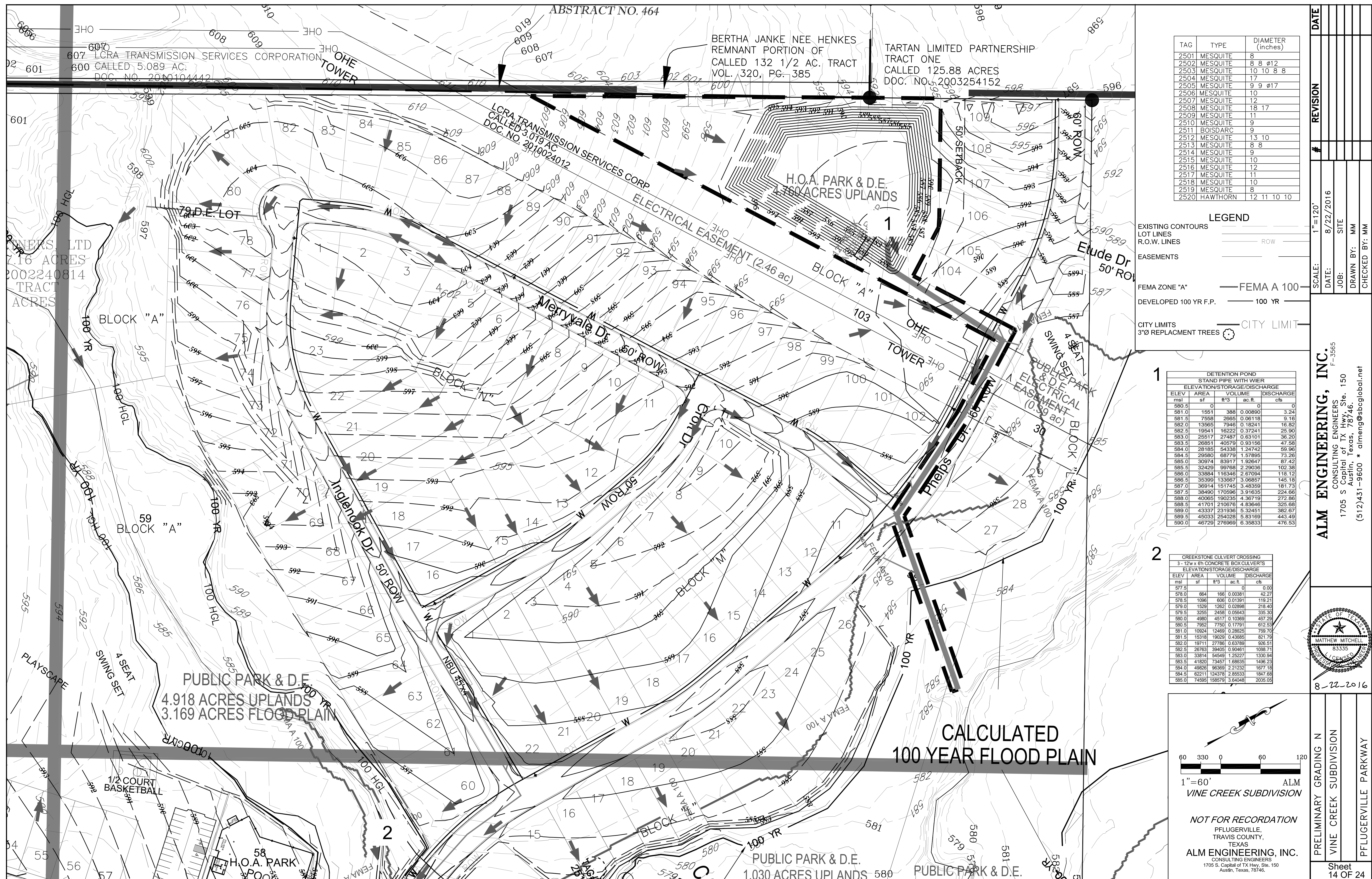
83335

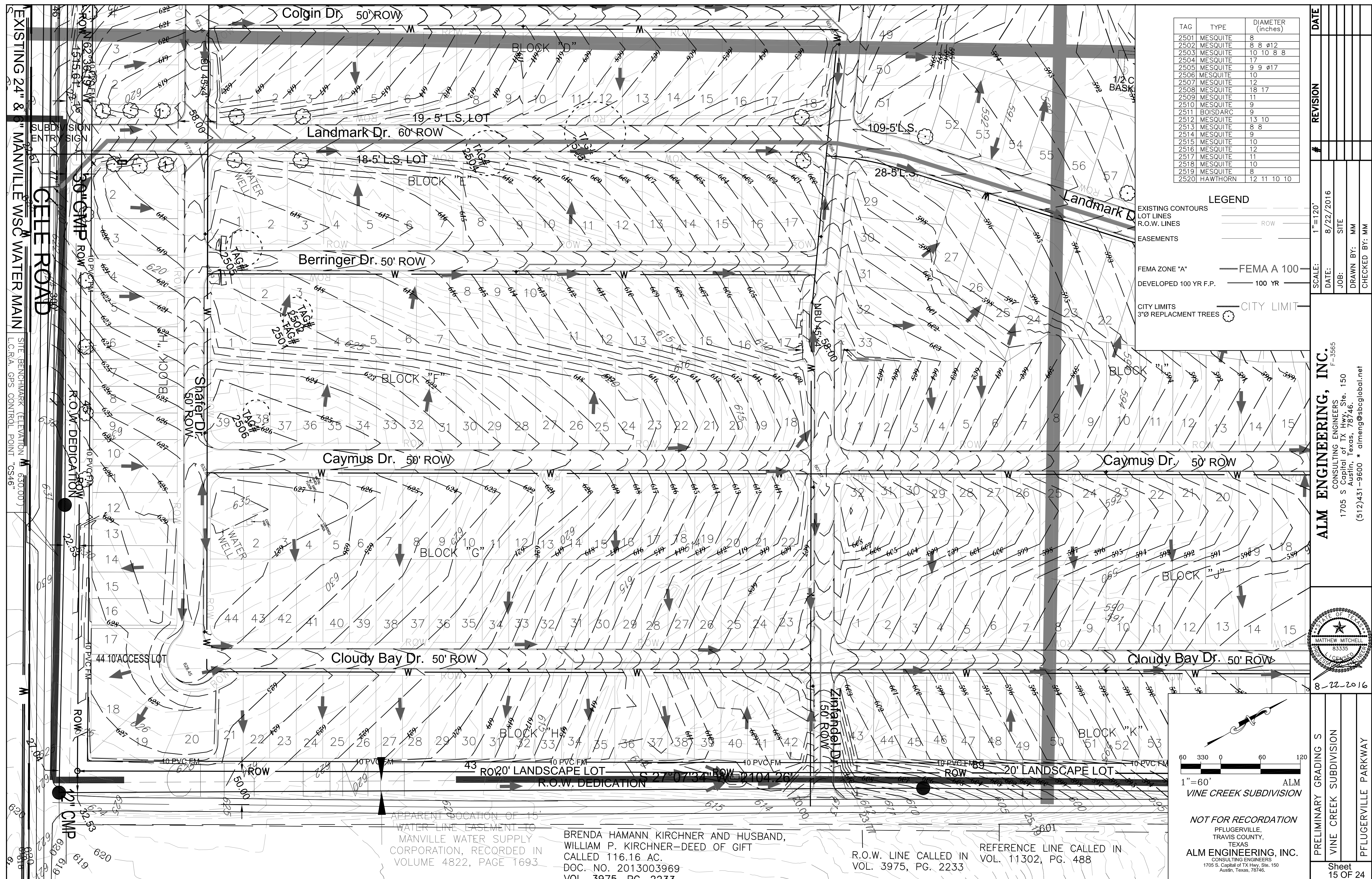
LICENSED SURVEYOR

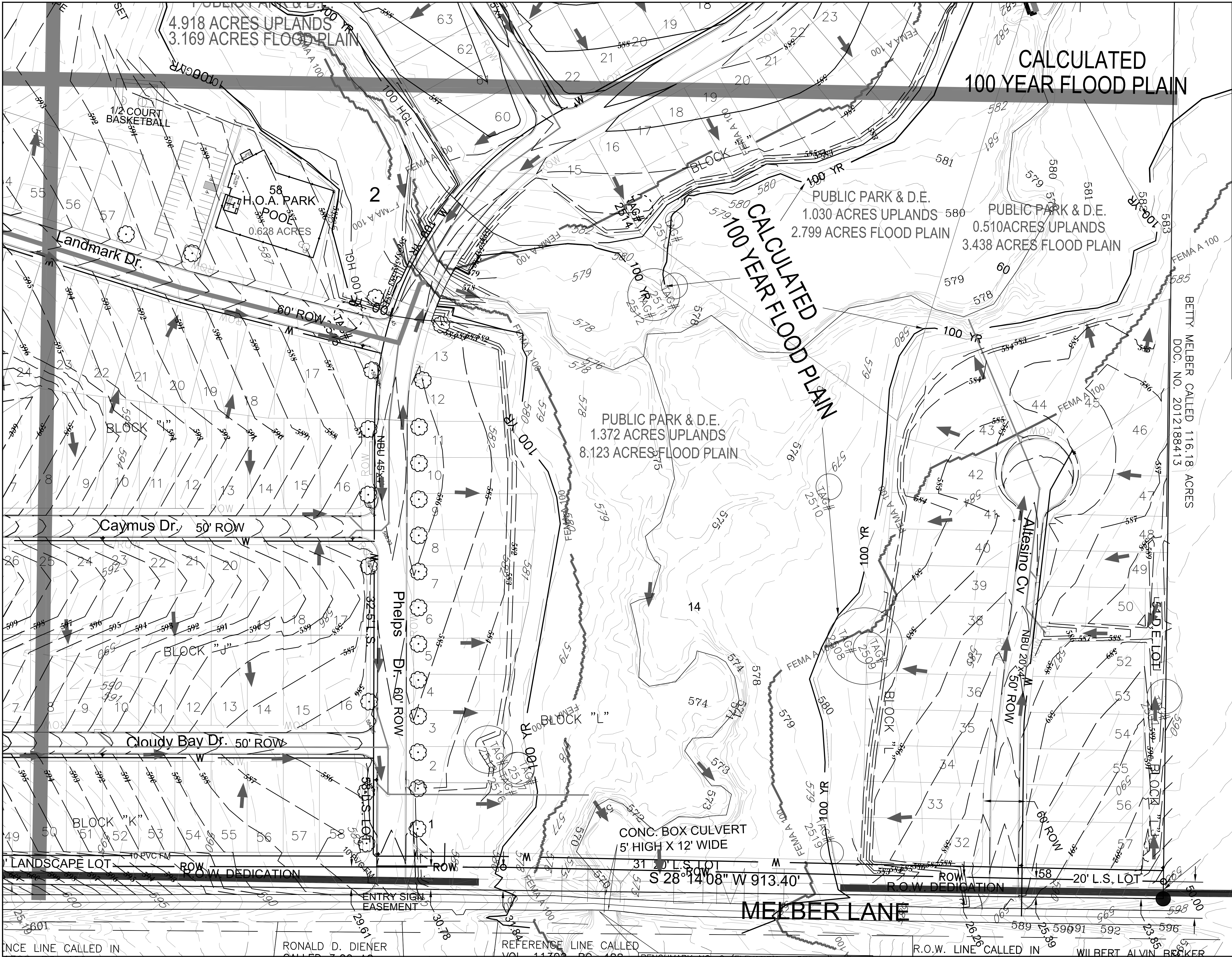
8-22-2016

Sheet 12 OF 24









TAG	TYPE	DIAMETER (inches)
2501	MESQUITE	8
2502	MESQUITE	8 8 Ø12
2503	MESQUITE	10 10 8 8
2504	MESQUITE	17
2505	MESQUITE	9 9 Ø17
2506	MESQUITE	10
2507	MESQUITE	12
2508	MESQUITE	18 17
2509	MESQUITE	11
2510	MESQUITE	9
2511	BOISDARC	9
2512	MESQUITE	13 10
2513	MESQUITE	8 8
2514	MESQUITE	9
2515	MESQUITE	10
2516	MESQUITE	12
2517	MESQUITE	11
2518	MESQUITE	10
2519	MESQUITE	8
2520	HAWTHORN	12 11 10 10

LEGEND

EXISTING CONTOURS
LOT LINES
R.O.W. LINES
EASEMENTS

FEMA ZONE "A" — FEMA A 100
DEVELOPED 100 YR F.P. — 100 YR

CITY LIMITS
3"Ø REPLACEMENT TREES

2

ELEV	AREA	VOLUME	DISCHARGE
msl	sf	ft ³	cfs
577.5		0	0.00
578.0	664	166	0.00381
578.5	1096	606	0.01391
579.0	1529	1262	0.02998
579.5	3255	2458	0.06443
580.0	4980	4517	0.10369
580.5	7952	7750	0.17791
581.0	10924	12469	0.28625
581.5	15318	19029	0.43685
582.0	19711	27786	0.63789
582.5	26763	39405	0.90461
583.0	33814	54549	1.25227
583.5	41820	73457	1.68635
584.0	49826	96369	2.21232
584.5	62211	124378	2.85533
585.0	74985	158579	3.64048

3 - 12w x 6h CONCRETE BOX CULVERTS
ELEVATION/STORAGE/DISCHARGE

1"=60' ALM
VINE CREEK SUBDIVISION

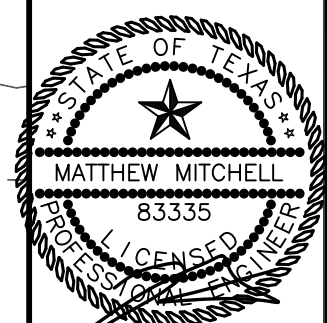
NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

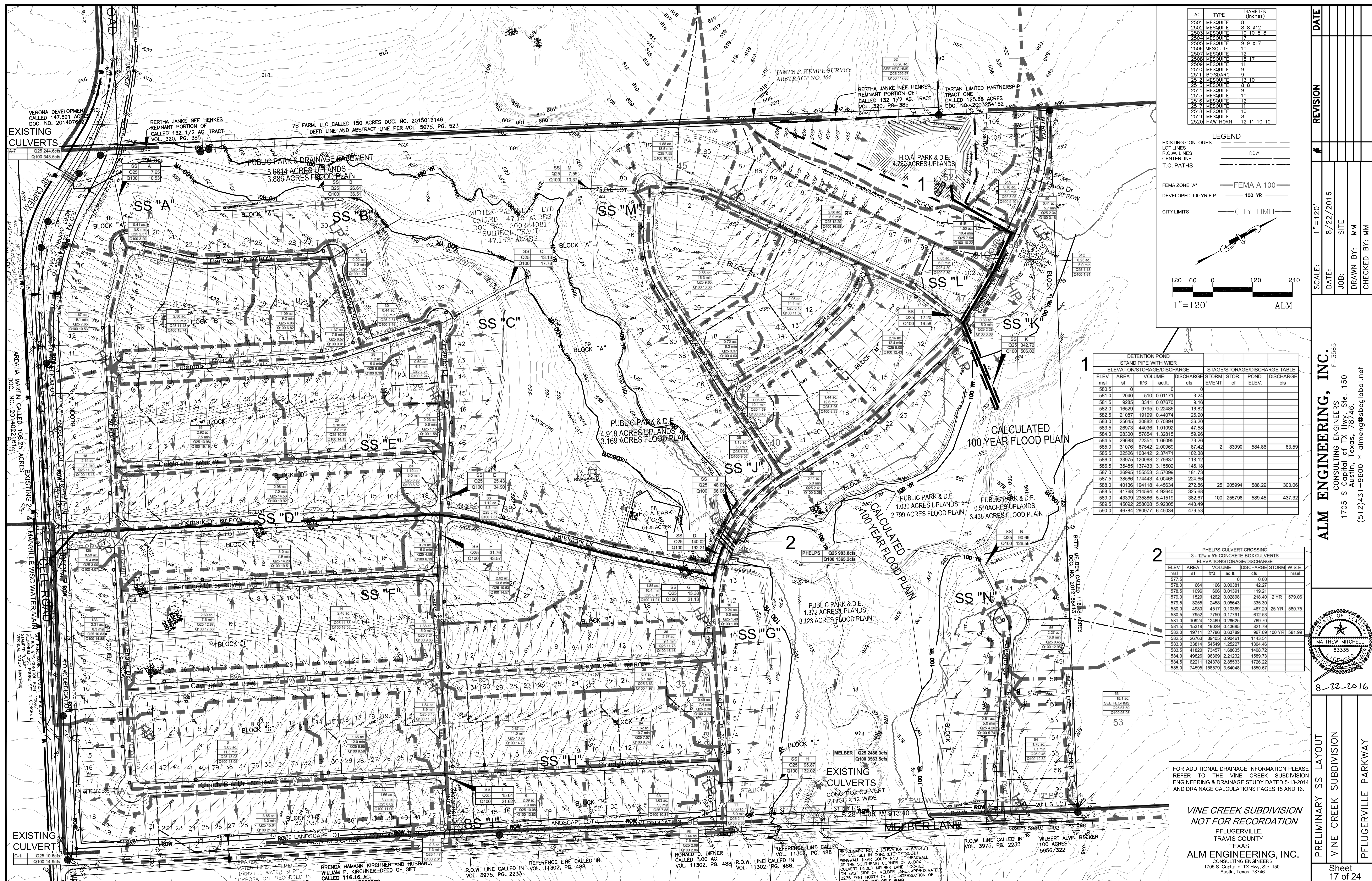
DATE: 8/22/2016
JOB: SITE
DRAWN BY: MM
CHECKED BY: MM

SCALE: 1"=120'

PRELIMINARY GRADING E
VINE CREEK SUBDIVISION
PFLUGERVILLE PARKWAY

Sheet 16 OF 24





TAG	TYPE	DIAMETER (inches)
2501	MESQUITE	8
2502	MESQUITE	8 8 #12
2503	MESQUITE	10 10 8 8
2504	MESQUITE	17
2505	MESQUITE	9 9 #17
2506	MESQUITE	10
2507	MESQUITE	12
2508	MESQUITE	16 17
2509	MESQUITE	11
2510	MESQUITE	9
2511	BOISDARC	9
2512	MESQUITE	13 10
2513	MESQUITE	8 8
2514	MESQUITE	9
2515	MESQUITE	10
2516	MESQUITE	12
2517	MESQUITE	11
2518	MESQUITE	10
2519	MESQUITE	8
2520	HAWTHORN	12 11 10 10

LEGEND

EXISTING CONTOURS _____

LOT LINES _____

R.O.W. LINES _____ ROW _____

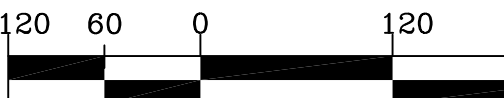
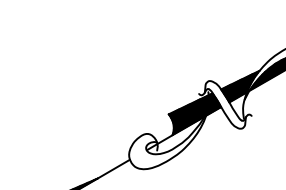
CENTERLINE _____

T.C. PATHS _____

FEMA ZONE "A" _____ FEMA A 100 _____

DEVELOPED 100 YR F.P. _____ 100 YR _____

CITY LIMITS _____ CITY LIMIT _____



120 60 0 60 120

1"=120'

ALM

DETENTION POND							
STAND POND WITH WIER				STAGE/STORAGE/DISCHARGE TABLE			
ELEV.	AREA	VOLUME	DISCHARGE	STORM	STOR.	POND	DISCHARGE
mst	sq ft	ft ³	ac ft	EVENT	cf	ELEV.	cfs
580.5							
581.0	2040	510	0.01171			3.24	
581.5	5285	3341	0.06770			9.16	
582.0	16539	9795	0.22485			16.82	
582.5	21087	19199	0.40744			25.90	
583.0	25645	30882	0.70894			36.20	
583.5	26973	44036	1.01092			47.58	
584.0	28300	57854	1.31515			59.96	
584.5	29689	72311	1.64005			73.68	
585.0	31076	87542	2.00869	67	2	83090	584.86
585.5	32526	103442	2.37471			102.38	
586.0	33975	120666	2.76637			118.12	
586.5	35485	137433	3.16502			145.18	
587.0	36959	155553	3.57079			173.68	
587.5	38466	174443	4.00465			224.66	
588.0	40136	194116	4.45644		25	205994	588.29
588.5	41768	214594	4.92620			325.68	303.06
589.0	43399	236079	5.40719			447.97	
589.5	45092	258008	5.92305	100	255796	589.45	437.32
590.0	46784	280977	6.45304			476.53	

PHELPS CULVERT CROSSING						
3 - 12'w x 5'h CONCRETE BOX CULVERTS						
ELEVATION/STATION/DISCHARGE						
ELEV msl	AREA sf	VOLUME ft ³	DISCHARGE ac ft.	STORM cfs	W.S.	
577.5				0.00		
578.0	64	66.0	0.0381	4.27		
578.5	1096	606.0	0.1391	119.21		
579.0	1529	1262.0	0.2898	218.40	2 YR	579.06
579.5	3285	2458.0	0.6451	336.30		
580.0	4950	4517.0	1.0369	467.29	25 YR	580.75
580.5	6525	7758.0	1.3781	612.53		
581.0	10924	12429.0	2.2862	769.70		
581.5	15318	19069.0	4.3685	821.79		
582.0	19711	27860.0	6.3789	967.00	1 YR	581.99
582.5	26763	37405.0	9.0461	1143.54		
583.0	34160	54549.0	12.5227	1394.48		
583.5	41624	74454.0	16.6835	1648.72		
584.0	48048	96389.0	21.2132	1980.78		
584.5	62211	124378.0	28.5533	1726.22		
585.0	74509	158579.0	36.4048	1850.67		

FOR ADDITIONAL DRAINAGE INFORMATION PLEASE
REFER TO THE VINE CREEK SUBDIVISION
ENGINEERING & DRAINAGE STUDY DATED 5-13-2014
AND DRAINAGE CALCULATIONS PAGES 15 AND 16.

VINE CREEK SUBDIVISION
NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

Sheet 17 of 24	PRELIMINARY SS LAYOUT		ALM ENGINEERING, INC. CONSULTING ENGINEERS F-3565 1705 S Capital of TX Hwy, Ste. 150 Austin, Texas, 78746. (512)431-9600 * almmeng@sbcglobal.net	SCALE: 1"=120' DATE: 8/22/2016 JOB: SITE DRAWN BY: MM CHECKED BY: MM	#	REVISION	DATE
VINE CREEK SUBDIVISION							
PFLUGERVILLE PARKWAY							

HEC-HMS DRAINAGE AREA INPUT

EXISTING								
	AREA(ac)	SM	IMP	VEG	Tc	LAG	CN	Q100
A1	27.06	0.0423	0.452	26.606	13.38	8.028	84	196.6
A2	43.33	0.0677	0.215	43.112	16.62	9.972	84	295.58
A3	36.54	0.0571	0.280	36.258	16.44	9.864	83	247.48
A4	20.00	0.0312	0.000	19.999	13.14	7.884	84	145.77
A5	22.87	0.0357	0.081	22.794	15.9	9.540	84	158.16
A6	47.80	0.0747	0.556	47.246	23.94	14.364	85	289.02
A7	49.35	0.0771	4.375	44.970	15.54	9.324	84	343.54
A8	13.91	0.0217	0.280	13.626	16.14	9.684	84	96.55
B1	105.96	0.1656	0.481	105.482	30.36	18.216	84	574.28
B2	85.66	0.1338	0.000	85.656	28.56	17.136	84	476.35
B3	362.24	0.5660	0.054	362.181	49.02	29.412	83	1545.61
C1	2.05	0.0032	0.150	1.901	6.42	3.852	86	17.16

DEVELOPED									
	AREA(ac)	SM	IMP	VEG	Tc	LAG	CN	Q100	
SB 1	25.27	0.0395	2.289	22.983	12.96	7.776	81	178.96	
SB 2A	4.40	0.0069	1.515	2.886	19.26	11.556	86	29.26	
SB 2B	15.14	0.0237	0.297	14.842	21.24	12.744	84	96.05	
SB 3	21.53	0.0336	9.638	11.988	12.96	7.776	86	183.61	
SB 4	34.89	0.0542	14.968	19.722	11.76	7.056	88	270.01	
SB 5	9.66	0.0151	3.887	5.775	13.92	8.352	87	71.47	
SB 6	5.94	0.0093	2.584	3.354	13.98	8.388	88	44.35	
SB 7	8.77	0.0137	3.872	4.897	18.36	11.016	88	60.14	
SB 8	2.89	0.0045	0.701	2.185	20.22	12.132	84	18.36	
A5	47.61	0.0744	2.962	44.651	15.9	9.540	84	329.02	
A6	49.94	0.0640	1.288	39.048	23.94	14.364	84	245.03	
A7	49.35	0.0771	4.375	44.970	15.54	9.324	84	343.54	
A8	13.91	0.0217	0.036	13.870	16.14	9.684	84	95.67	
B1	90.00	0.1406	0.481	89.516	30.36	18.216	84	487.58	
B2	85.26	0.1332	0.149	85.116	28.56	17.136	84	474.21	
B3	359.62	0.5619	0.054	359.567	49.02	29.412	84	1554.61	
C1	1.80	0.0028	0.443	1.358	6.42	3.852	84	14.87	

DETENTION POND									
STAND PIPE WITH WIER					STAGE/STORAGE/DISCHARGE TABLE				
ELEV	AREA	VOLUME	DISCHARGE	STORM	STORAGE	POND	DISCHARGE		
msl	sf	ft³	ac.ft.	EVENT	cf	ELEV	cfs		
580.5	0	0	0	cfs	0				
581.0	1551	388	0.00890		3.24				
581.5	7558	2665	0.06118		9.16				
582.0	13565	7946	0.18241		16.82				
582.5	19541	16222	0.37241		25.90				
583.0	25517	27487	0.63101		36.20				
583.5	26851	40579	0.93156		47.58				
584.0	28185	54338	1.24742		59.96				
584.5	29580	68779	1.57895		73.26				
585.0	30974	83917	1.92647		87.42	2	80113	584.88	83.92
585.5	32429	99768	2.29036		102.38				
586.0	33884	116346	2.67094		118.12				
586.5	35399	133667	3.06857		145.18				
587.0	36914	151745	3.48359		181.73				
587.5	38490	170598	3.91635		224.66				
588.0	40065	190235	4.36719		272.86	25	201682	588.28	302.76
588.5	41701	210676	4.83646		325.88				
589.0	43337	231936	5.32451		382.67	100	251377	589.44	436.77
589.5	45033	254028	5.83169		443.49				
590.0	46729	276969	6.35833		476.53				

PHELPS CULVERT CROSSING									
3 - 12'w x 6'h CONCRETE BOX CULVERTS									
ELEVATION/STORAGE/DISCHARGE									
ELEV	AREA	VOLUME	DISCHARGE	STORM	W.S.E.				
msl	sf	ft³	ac.ft.	cfs					
577.5				0	0.00				
578.0	664	166	0.00381	42.27					
578.5	1096	606	0.01391	119.21					
579.0	1529	1262	0.02898	218.40	2 YR 579.1				
579.5	3255	2458	0.05643	335.30					
580.0	4980	4517	0.10369	467.29	25 YR 580.7				
580.5	7952	7750	0.17791	612.53					
581.0	10924	12469	0.28625	769.70					
581.5	15318	19029	0.43685	821.79					
582.0	19711	27766	0.63789	926.51	100 YR 582.1				
582.5	26783	39405	0.90461	1088.71					
583.0	33814	54549	1.25227	1300.94					
583.5	41820	73457	1.68635	1496.23					
584.0	49826	96369	2.21232	1677.18					
584.5	62211	124378	2.85533	1847.68					
585.0	74595	158579	3.64048	2005.05					

HEC-HMS EXISTING VS DEVELOPED

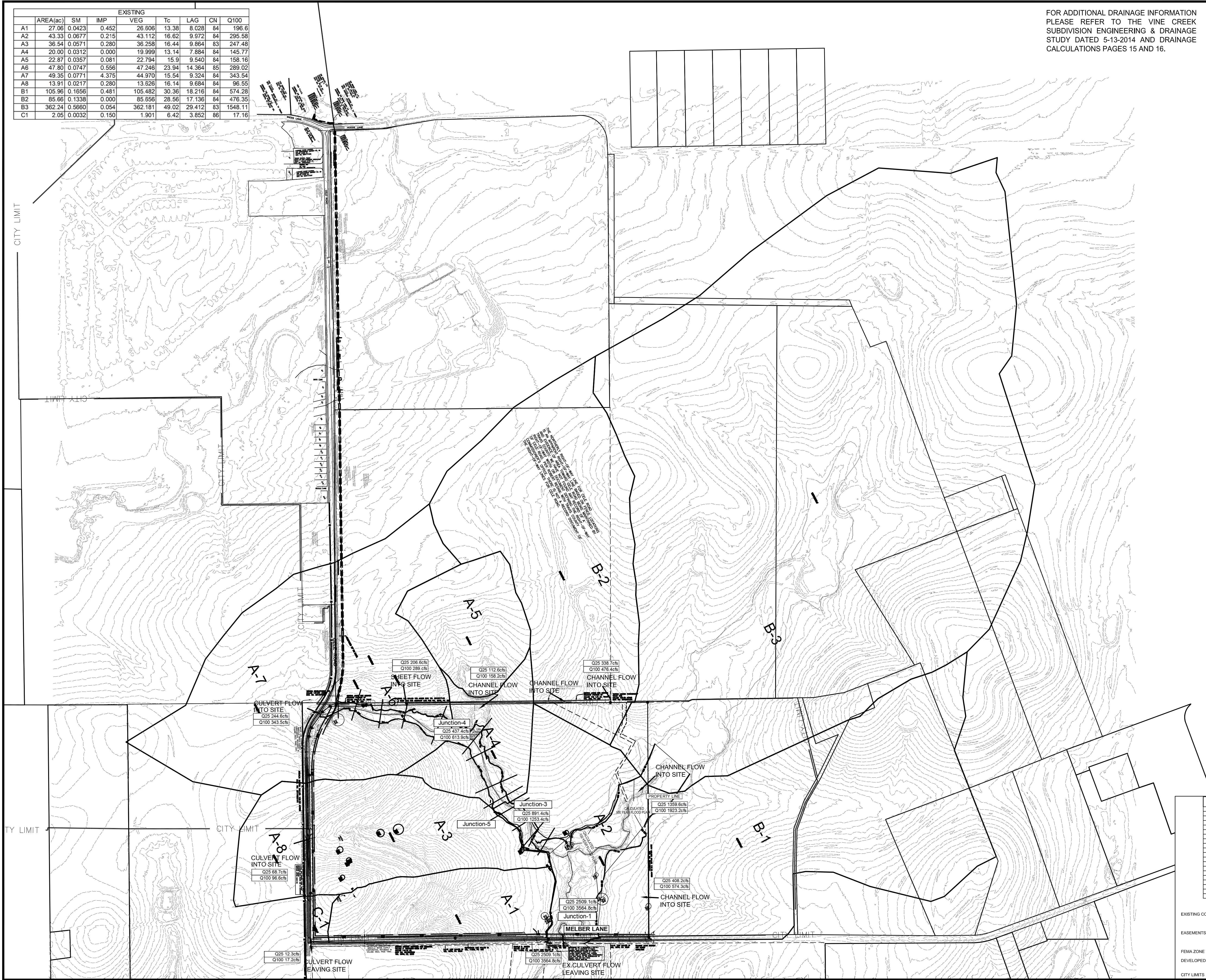
2 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW	AREA	FLOW	
	sq mi	cfs	sq mi	cfs	
A-1	0.0423	47.24	A-5	0.0744	78.89
A-2	0.0677	70.77	A-6	0.0640	58.41
A-3	0.0571	57.41	A-7	0.0771	82.38
A-4	0.0312	35	A-8	0.0217	22.88
A-5	0.0357	37.86	B-1	0.1406	116.15
A-6	0.0747	71.04	B-2	0.1332	112.99
A-7	0.0771	82.38	B-3	0.5619	369.36
A-8	0.0219	23.09	CHANNEL	1.2398	800.44
B-1	0.1656	136.8	CULV INFLOW	0.2306	232.86
B-2	0.1338	113.5	C-1	0.0028	3.59
B-3	0.5660	356.45	Junction-1	1.2398	800.44
CHANNEL	1.1631	771.61	Junction-2	1.1697	753.44
C-1	0.0032	4.27	Junction-4	0.1562	154.19
Junction-1	1.2731	845.22	MELBER LANE	1.2734	713.73
Junction-2	1.1631	771.61	PHELPS	0.3202	340.05
Junction-3	0.2977	299.87	POND 1	0.1332	83.92
Junction-4	0.1518	148.62	PROPERTY LINE	0.7089	459.58
Junction-5	0.0790	80.51	SB 1	0.0395	39.04
MELBER LANE	1.2731	716.79	SB 2A	0.0069	7.43
PROPERTY LINE	0.6996	444.69	SB 2B	0.0237	22.68
TOTAL	1.2763	717.48	SB 3	0.0336	44.14
	0	0.0000	SB 4	0.0542	72.99
	0	0.0000	SB 5	0.0151	18.78
	0	0.0000	SB 6	0.0093	11.98
	0	0.0000	SB 7	0.0137	16.18
	0	0.0000	SB 8	0.0045	4.39
			SS 2	0.0306	30.04
			SS 4	0.0759	94.96
			TOTAL	1.2762	714.29

25 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW	AREA	FLOW	
	sq mi	cfs	sq mi	cfs	
A-1	0.0423	139.91	A-5	0.0744	234.64
A-2	0.0677	210.27	A-6	0.0640	174.26
A-3	0.0571	175.14	A-7	0.0771	244.63
A-4	0.0312	103.76	A-8	0.0217	68.08
A-5	0.0357	112.59	B-1	0.1406	346.58
A-6	0.0747	206.62	B-2	0.1332	337.15
A-7	0.0771	244.63	B-3	0.5619	1104.13
A-8	0.0219	68.71	CHANNEL	1.2398	2461.51
B-1	0.1656	408.2	CULV INFLOW	0.2306	589.28
B-2	0.1338	338.67	C-1	0.0028	10.6
B-3	0.5660	1093.57	Junction-1	1.2398	2461.51
CHANNEL	1.1631	2339.9	Junction-2	1.1697	2313.48
C-1	0.0032	12.29	Junction-4	0.1562	456.44
Junction-1	1.2731	2565.12	MELBER LANE	1.2734	2483.93
Junction-2	1.1631	2339.9	PHELPS	0.3202	982.62
Junction-3	0.2977	891.36	POND 1	0.1332	302.76
Junction-4	0.1518	437.43	PROPERTY LINE	0.7089	1412.69
Junction-5	0.0790	243.85	SB 1	0.0395	125.34
MELBER LANE	1.2731	2509.13	SB 2A	0.0069	21.03
PROPERTY LINE	0.6996	1359.6	SB 2B	0.0237	67.59
TOTAL	1.2763	2512.81	SB 3	0.0336	118.76
			SB 4	0.0542	195.97
			SB 5	0.0151	51.66
			SB 6	0.0093	32.2
			SB 7	0.0137	43.62
			SB 8	0.0045	13.06
			SS 2	0.0306	89.5
			SS 4	0.0759	261.85
			TOTAL	1.2762	2486.91

100 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	196.6	A-5	0.0744	329.62
A-2	0.0677	295.58	A-6	0.0640	245.03
A-3	0.0571	247.48	A-7	0.0771	343.54
A-4	0.0312	145.77	A-8	0.0217	95.67
A-5	0.0357	158.16	B-1	0.1406	487.58
A-6	0.0747	289.02	B-2	0.1332	474.21
A-7	0.0771	343.54	B-3	0.5619	1554.61
A-8	0.0219	96.55	CHANNEL	1.2398	3528.61
B-1	0.1656	574.28	CULV INFLOW	0.2306	960.83
B-2	0.1338	476.35	C-1	0.0028	14.67
B-3	0.5660	1548.11	Junction-1	1.2398	3528.61
CHANNEL	1.1631	3304.12	Junction-2	1.1697	3319.94
C-1	0.0032	17.16	Junction-4	0.1562	840.76
Junction-1	1.2731	3623.72	MELBER LANE	1.2734	3564.25
Junction-2	1.1631	3304.12	PHELPS	0.3202	1357.42
Junction-3	0.2977	1253.44	PROPERTY 1	0.1332	436.77
Junction-4	0.1518	613.9	PROPERTY LINE	0.7089	995.19
Junction-5	0.0790	344.02	SB 1	0.0395	78.96
MELBER LANE	1.2731	3564.76	SB 2A	0.0069	29.28
PROPERTY LINE	0.6998	1923.24	SB 2B	0.0237	95.05
TOTAL	1.2763	3570.15	SB 3	0.0336	163.61
			SB 4	0.0542	270.01
			SB 5	0.0151	71.47
			SB 6	0.0093	44.35
			SB 7	0.0137	60.14
			SB 8	0.0045	18.36
			SS 2	0.0306	124.11
			SS 4	0.0759	362.58
			TOTAL	1.2762	3568.93

RATIONAL DRAINAGE CALCULATIONS

AREA	ACR	IC	L(300)	L(>300)	n	n2	S(300)	S(>300)	tc	I 25	I 100	C 25	C 100	Q 25	Q 100	STR SLP	Qo25	Yo	Yo	SPREAD	Qo100	Yo	Yo	SPREAD	
1A	1.658	7.3	100	35	0.30	0.30	0.015	0.015	7.26	9.12	11.1	0.53	0.60	8.02	11.00	0.0208	8.02	0.43	5.18	10.87	11.00	0.49	5.82	13.66	
1B	0.303	7.3	100	35	0.30	0.30	0.015	0.015	7.26	9.12	11.1	0.53	0.60	1.47	2.01	0.0109	1.47	0.27	3.29	4.47	2.01	0.31	3.72	5.69	
2	3.846	13.3	100	212	0.30	0.30	0.015	0.020	13.33	7.87	9.4	0.53	0.60	15.84	21.62	0.0325	15.84	0.50	6.00	14.50	21.62	0.56	6.74	14.50	
3	3.052	11.3	100	135	0.30	0.30	0.015	0.015	11.34	8.09	9.9	0.53	0.60	13.08	18.05	0.0246	13.08	0.49	5.93	14.15	18.05	0.55	6.65	14.50	
4	1.650	12.0	100	151	0.30	0.30	0.015	0.015	12.00	7.94	9.7	0.53	0.60	6.95	9.59	0.0064	6.95	0.50	6.00	14.50	9.59	0.56	6.74	14.50	
5	1.840	8.9	100	124	0.30	0.30	0.015	0.040	8.92	8.67	10.5	0.53	0.60	8.45	11.62	0.0095	8.45	0.50	6.00	14.50	11.62	0.56	6.73	14.50	
6	2.086	7.3	100	35	0.30	0.30	0.015	0.015	7.26	9.12	11.1	0.53	0.60	10.68	13.83	0.0134	10.68	0.50	6.01	14.53	13.83	0.56	6.73	14.50	
7	2.674	14.0	100	200	0.30	0.30	0.015	0.015	14.00	7.54	9.2	0.53	0.60	10.69	14.79	0.0152	10.69	0.50	6.00	14.50	14.79	0.56	6.74	14.50	
8A	1.621	10.7	100	120	0.30	0.30	0.015	0.015	10.73	8.22	10.0	0.53	0.60	7.07	9.74	0.0090	7.07	0.48	5.71	13.14	9.74	0.53	6.41	14.50	
8B	0.490	7.4	100	39	0.30	0.30	0.015	0.015	7.42	9.07	11.0	0.53	0.60	2.36	3.24	0.0050	2.36	0.36	4.38	7.81	3.24	0.41	4.93	9.86	
9A	1.629	7.3	100	35	0.30	0.30	0.015	0.015	7.26	9.12	11.1	0.53	0.60	7.88	10.81	0.0090	7.88	0.49	5.92	14.10	10.81	0.55	6.63	14.50	
9B	0.439	7.9	100	50	0.30	0.30	0.015	0.015	7.87	8.95	10.9	0.53	0.60	2.08	2.86	0.0050	2.08	0.35	4.20	7.20	2.86	0.39	4.74	9.11	
10	0.241	5.0	10	446	0.30	0.30	0.020	0.020	0.004	5.00	9.84	11.9	0.59	0.66	1.40	1.89	0.0050	1.40	0.31	3.89	5.58	1.89	0.35	4.14	7.01
11	0.363	5.0	10	426	0.30	0.30	0.020	0.020	0.004	5.00	9.84	11.9	0.59	0.66	2.11	2.85	0.0062	2.11	0.34	4.07	6.78	2.85	0.38	4.57	8.49
12A	2.313	8.3	100	60	0.30	0.30	0.015	0.015	8.28	8.84	10.7	0.53	0.60	10.83	14.88	0.0156	10.83	0.50	6.00	14.50	14.88	0.56	6.73	14.50	
12B	0.594	9.4	100	144	0.30	0.30	0.020	0.028	9.37	8.55	10.4	0.59	0.66	3.00	4.07	0.0246	3.00	0.30	3.64	5.45	4.07	0.34	4.10	6.88	
13	2.688	7.6	75	160	0.30	0.30	0.015	0.063	7.57	9.03	11.0	0.53	0.60	12.87	17.66	0.0220	12.87	0.50	6.00	14.51	17.66	0.56	6.73	14.50	
14	2.480	8.1	75	164	0.30	0.30	0.015	0.049	8.09	8.89	10.8	0.53	0.60	11.68	16.05	0.0181	11.68	0.50	6.00	14.52	16.05	0.56	6.73	14.50	
15	1.383	5.0	35	1140	0.30	0.30	0.020	0.025	5.00	9.84	11.9	0.53	0.60	7.21	9.86	0.0069	7.21	0.50	6.01	14.53	9.86	0.56	6.72	14.50	
16	0.790	5.0	10	1015	0.30	0.30	0.020	0.021	5.00	9.84	11.9	0.59	0.66	4.58	6.19	0.0062	4.58	0.44	5.26	11.20	6.19	0.49	5.89	13.93	
17	2.995	7.9	100	50	0.30	0.30	0.015	0.015	7.87	8.95	10.9	0.53	0.60	14.20	19.51	0.0266	14.20	0.50	6.01	14.55	19.51	0.56	6.74	14.50	
18	2.338	8.1	100	55	0.30	0.30	0.015	0.015	8.08	8.89	10.8	0.53	0.60	11.02	15.13	0.0161	11.02	0.50	6.00	14.51	15.13	0.56	6.73	14.50	
19	2.916	7.5	75	153	0.30	0.30	0.015	0.059	7.53	9.04	11.0	0.53	0.60	13.98	19.19	0.0259	13.98	0.50	6.00	14.52	19.19	0.56	6.73	14.50	
20	2.175	8.0	75	153	0.30	0.30	0.015	0.046	7.95	8.93	10.8	0.53	0.60	10.29	14.13	0.0140	10.29	0.50	6.01	14.55	14.13	0.56	6.74	14.50	
21	0.227	5.8	90	109	0.30	0.30	0.020	0.015	5.76	9.58	11.6	0.53	0.60	1.15	1.58	0.0050	1.15	0.29	3.46	4.92	1.58	0.33	3.91	6.25	
22	2.977	7.0	100	59	0.30	0.30	0.015	0.068	6.97	9.21	11.2	0.53	0.60	14.53	19.92	0.0293	14.53	0.50	5.96	14.31	19.92	0.56	6.68	14.50	
23	1.195	5.0	76	43	0.30	0.30	0.020	0.015	5.00	9.84	11.9	0.53	0.60	6.23	8.52	0.0050	6.23	0.50	6.03	14.66	8.52	0.56	6.75	14.50	
24	1.673	9.1	100	79	0.30	0.30	0.015	0.015	9.06	8.63	10.5	0.53	0.60	7.65	10.53	0.0078	7.65	0.50	6.00	14.50	10.53	0.56	6.73	14.50	
25	2.562	9.9	100	175	0.30	0.30	0.015	0.046	9.92	8.41	10.2	0.53	0.60	11.43	15.74	0.0173	11.43	0.50	6.00	14.51	15.74	0.56	6.74	14.50	
26	1.090	9.2	100	141	0.30	0.30	0.015	0.043	9.25	8.58	10.4	0.53	0.60	4.96	6.82	0.0050	4.96	0.47	5.60	12.64	6.82	0.52	6.28	14.50	
27	1.372	7.6	100	79	0.30	0.30	0.015	0.051	7.59	9.03	10.9	0.53	0.60	6.57	9.01	0.0057	6.57	0.50	6.00	14.50	9.01	0.56	6.73	14.50	
28	1.197	5.0	35	853	0.30	0.30	0.020	0.030	5.00	9.84	11.9	0.59	0.66	6.95	9.39	0.0064	6.95	0.50	6.00	14.50	9.39	0.56	6.69	14.50	
29	0.693	6.1	100	86	0.30	0.30	0.035	0.035	6.13	9.47	11.5	0.59	0.66	3.87	5.24	0.0050	3.87	0.43	5.16	10.76	5.24	0.48	5.77	13.41	
30	0.443	5.0	35	281	0.30	0.30	0.020	0.015	0.039	5.00	9.84	11.9	0.53	0.60	2.31	3.16	0.0050	2.31	0.36	4.35	7.70	3.16	0.41	4.89	9.71
31	0.408	5.0	10	586	0.30	0.30	0.020	0.030	0.015	5.00	9.84	11.9	0.59	0.66	2.37	3.20	0.0050	2.37	0.37	4.38	7.83	3.20	0.41	4.91	9.79
32	0.221	5.0	10	314	0.30	0.30	0.020	0.020	0.010	5.00	9.84	11.9	0.59	0.66	1.29	1.74	0.0050	1.29	0.30	3.58	5.28	1.74	0.34	4.03	6.64
33	1.116	5.3	61	766	0.30	0.30	0.020	0.015	0.012	5.32	9.73	11.8	0.53	0.60	5.76	7.87	0.0050	5.76	0.49	5.88	13.92	7.87	0.55	6.58	14.50
34	2.620	13.8	100	303	0.30	0.30	0.015	0.036	13.78	7.58	9.3	0.53	0.60	10.53	14.57	0.0148	10.53	0.50	6.00	14.50	14.57	0.56	6.74	14.50	
35	0.700	5.1	85	85	0.30	0.30	0.020	0.015	0.024	5.14	9.79	11.8	0.53	0.60	3.63	4.97	0.0050	3.63	0.42	5.05	10.32	4.97	0.47	5.67	12.96
36	2.575	9.1	100	81	0.30	0.30	0.015	0.015	9.14	8.61	10.5	0.53	0.60	11.75	16.16	0.0182	11.75	0.50	6.01	14.54	16.16	0.56	6.74	14.50	
37	1.851	10.4	100	113	0.30	0.30	0.015	0.015	10.45	8.29	10.1	0.53	0.60	8.13	11.21	0.0088	8.13	0.50	6.00	14.52	11.21	0.56	6.74	14.50	
38	1.150	5.0	10	1121	0.30	0.30	0.020	0.020	0.015	5.00	9.84	11.9	0.59	0.66	6.68	9.02	0.0050	6.68	0.51	6.17	15.33	9.02	0.57	6.88	14.50
39	0.415	5.0	10	533	0.30	0.30	0.020	0.020	0.005	5.00	9.84	11.9	0.59	0.66	2.41	3.25	0.0050	2.41	0.37	4.41	7.91	3.25	0.41	4.94	9.89
40	1.056	10.1	100	104	0.30	0.30	0.015	0.015	10.08	8.38	10.2	0.53	0.60	4.69	6.46	0.0070	4.69	0.43	5.20	10.93	6.46	0.49	5.84	13.77	
41	1.437	12.6	100	166	0.30	0.30	0.015	0.015	12.61	7.82	9.5	0.53	0.60	5.96	8.23	0.0070	5.96	0.47	5.62	12.76	8.23	0.53	6.32	14.50	
42	0.720	8.3	100	90	0.30	0.30	0.015	0.033	8.30	8.83	10.7	0.53	0.60	3.37	4.63	0.0050	3.37	0.41	4.93	9.84	4.63	0.46	5.54	12.39	
43	2.054	14.1	100	255	0.30	0.30	0.015	0.024	14.14	7.52	9.2	0.53	0.60	8.18	11.32	0.0095	8.18	0.49	5.94	14.20	11.32	0.56	6.67	14.50	
44	2.549	16.3	100	279	0.30	0.30	0.015	0.018	16.25	7.14	8.9	0.53	0.60	9.65	13.36	0.0258	9.65	0.44	5.32	11.43	13.36	0.50	5.99	14.46	
45	1.885	18.5	100	430	0.30	0.30	0.020	0.026	18.49	6.79	8.3	0.59	0.66	7.55	10.37	0.0095	7.55	0.48	5.79	13.50	10.37	0.54	6.49	14.50	
46	0.392	5.0	10	283	0.30	0.30	0.020	0.020	0.005	5.00	9.84	11.9	0.59	0.66	2.28	3.08	0.0050	2.28	0.36	4.33	7.63	3.08	0.40	4.85	9.55
47	0.853	6.0	100	46	0.30	0.30	0.020	0.015	0.015	5.96	9.52	11.5	0.53	0.60	4.30	5.89	0.0050	4.30	0.44	5.34	11.52	5.89	0.50	5.99	14.45
48	2.161	12.4	100	161	0.30	0.30	0.015	0.015	12.40	7.86	9.6	0.53	0.60	9.00	12.43	0.0123	9.00	0.49	5.87	13.89	12.43				



FOR ADDITIONAL DRAINAGE INFORMATION
PLEASE REFER TO THE VINE CREEK
SUBDIVISION ENGINEERING & DRAINAGE
STUDY DATED 5-13-2014 AND DRAINAGE
CALCULATIONS PAGES 15 AND 16.

EXISTING								
	AREA(ac)	SM	IMP	VEG	Tc	LAG	CN	Q100
A1	27.06	0.0423	0.452	26.606	13.38	8.028	84	196.6
A2	43.33	0.0677	0.215	43.112	16.62	9.972	84	295.58
A3	36.54	0.0571	0.280	36.258	16.44	9.864	83	247.48
A4	20.00	0.0312	0.000	19.999	13.14	7.884	84	145.77
A5	22.87	0.0357	0.081	22.794	15.9	9.540	84	158.16
A6	47.80	0.0747	0.556	47.246	23.94	14.364	85	289.02
A7	49.35	0.0771	4.375	44.970	15.54	9.324	84	343.54
A8	13.91	0.0217	0.280	13.626	16.14	9.684	84	96.55
B1	105.96	0.1656	0.481	105.482	30.36	18.216	84	574.28
B2	85.66	0.1338	0.000	85.656	28.56	17.136	84	476.35
B3	362.24	0.5660	0.054	362.181	49.02	29.412	83	1548.11
C1	2.05	0.0032	0.150	1.901	6.42	3.852	86	17.16

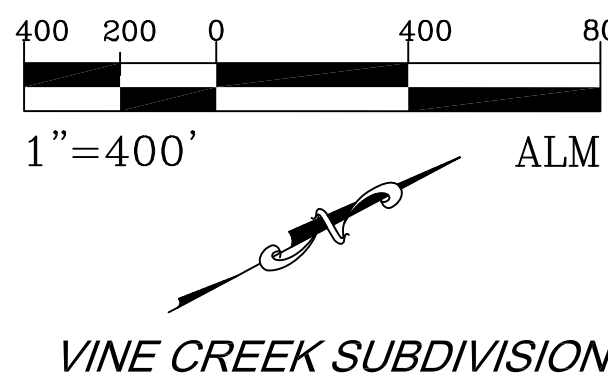
2 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	47.24	A-5	0.0744	78.96
A-2	0.0677	70.77	A-6	0.0640	58.52
A-3	0.0571	57.41	A-7	0.0771	82.49
A-4	0.0312	35	A-8	0.0217	22.91
A-5	0.0357	37.86	B-1	0.1406	116.37
A-6	0.0747	71.04	B-2	0.1332	113.19
A-7	0.0771	82.38	B-3	0.0519	370.14
A-8	0.0219	23.09	CHANNEL	1.2398	800.66
B-1	0.1656	136.8	CULV INFLOW	0.2306	233.15
B-2	0.1338	113.5	C-1	0.0028	3.59
B-3	0.5660	356.45	Junction-1	1.2398	800.66
CHANNEL	1.1631	771.61	Junction-2	1.1697	753.77
C-1	0.0032	4.27	Junction-4	0.1562	154.42
Junction-1	1.2731	845.22	MELBER LANE	1.2734	713.74
Junction-2	1.1631	771.61	PHELPS	0.3202	340.46
Junction-3	0.2977	299.87	POND 1	0.1332	83.59
Junction-4	0.1518	148.62	PROPERTY LINE	0.7089	460.04
Junction-5	0.0750	80.51	SB 1	0.0395	39.09
MELBER LANE	1.2731	716.79	SB 2A	0.0069	7.44
PROPERTY LINE	0.6968	444.69	SB 2B	0.0237	22.73
TOTAL	1.2763	717.48	SB 3	0.0336	44.2
			SB 4	0.0542	73.08
			SB 5	0.0151	16.8
			SB 6	0.0093	12
			SB 7	0.0137	16.21
			SB 8	0.0045	4.4
			SS 2	0.0306	30.1
			SS 4	0.0759	95.07
			TOTAL	1.2762	714.31

25 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	139.91	A-5	0.0744	234.82
A-2	0.0677	210.27	A-6	0.0640	174.59
A-3	0.0571	175.14	A-7	0.0771	244.92
A-4	0.0312	103.76	A-8	0.0217	68.17
A-5	0.0357	112.59	B-1	0.1406	347.25
A-6	0.0747	206.62	B-2	0.1332	337.78
A-7	0.0771	244.63	B-3	0.0519	1106.47
A-8	0.0219	58.71	CHANNEL	1.2398	2464.08
B-1	0.1656	408.2	CULV INFLOW	0.2306	690.09
B-2	0.1338	338.67	C-1	0.0028	10.6
B-3	0.5660	1093.57	Junction-1	1.2398	2464.08
CHANNEL	1.1631	2339.9	Junction-2	1.1697	2316.29
C-1	0.0032	12.29	Junction-4	0.1562	457.07
Junction-1	1.2731	2555.12	MELBER LANE	1.2734	2486.34
Junction-2	1.1631	2339.9	PHELPS	0.3202	983.76
Junction-3	0.2977	891.36	POND 1	0.1332	303.06
Junction-4	0.1518	437.43	PROPERTY LINE	0.7089	1415.39
Junction-5	0.0750	243.85	SB 1	0.0395	125.5
MELBER LANE	1.2731	2509.13	SB 2A	0.0069	21.07
PROPERTY LINE	0.6968	1359.6	SB 2B	0.0237	67.72
TOTAL	1.2763	2512.81	SB 3	0.0336	118.92
			SB 4	0.0542	196.2
			SB 5	0.0151	51.73
			SB 6	0.0093	32.24
			SB 7	0.0137	43.7
			SB 8	0.0045	13.08
			SS 2	0.0306	88.66
			SS 4	0.0759	262.15
			TOTAL	1.2762	2489.32

100 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	196.6	A-5	0.0744	329.87
A-2	0.0677	295.58	A-6	0.0640	245.48
A-3	0.0571	247.48	A-7	0.0771	343.94
A-4	0.0312	145.77	A-8	0.0217	95.79
A-5	0.0357	158.16	B-1	0.1406	488.52
A-6	0.0747	289.02	B-2	0.1332	475.08
A-7	0.0771	343.54	B-3	0.0519	1557.86
A-8	0.0219	96.55	CHANNEL	1.2398	3528.46
B-1	0.1656	574.28	CULV INFLOW	0.2306	963.98
B-2	0.1338	476.35	C-1	0.0028	14.87
B-3	0.5660	1548.11	Junction-1	1.2398	3528.46
CHANNEL	1.1631	3304.12	Junction-2	1.1697	3321.6
C-1	0.0032	17.16	Junction-4	0.1562	641.63
Junction-1	1.2731	3623.72	MELBER LANE	1.2734	3563.53
Junction-2	1.1631	3304.12	PHELPS	0.3202	1365.22
Junction-3	0.2977	1253.44	POND 1	0.1332	437.32
Junction-4	0.1518	613.9	PROPERTY LINE	0.7089	1996.92
Junction-5	0.0750	344.02	SB 1	0.0395	179.2
MELBER LANE	1.2731	3564.76	SB 2A	0.0069	29.31
PROPERTY LINE	0.6968	1923.24	SB 2B	0.0237	95.22
TOTAL	1.2763	3570.15	SB 3	0.0336	163.83
			SB 4	0.0542	270.32
			SB 5	0.0151	71.56
			SB 6	0.0093	44.4
			SB 7	0.0137	60.25
			SB 8	0.0045	18.39
			SS 2	0.0306	124.33
			SS 4	0.0759	363
			TOTAL	1.2762	3568.21

TAG	TYPE	DIAMETER (inches)
2501	MESQUITE	8 8 812
2502	MESQUITE	8 8 812
2503	MESQUITE	10 10 8 8
2504	MESQUITE	10 10 8 8
2505	MESQUITE	9 9 617
2506	MESQUITE	10 10 8 8
2507	MESQUITE	12 12 17
2508	MESQUITE	12 12 17
2509	MESQUITE	11 11 17
2510	MESQUITE	9 9 17
2511	BOSQWAD	9 9 17
2512	MESQUITE	13 13 10
2513	MESQUITE	8 8 8
2514	MESQUITE	9 9 17
2515	MESQUITE	12 12 17
2516	MESQUITE	12 12 17
2517	MESQUITE	11 11 17
2518	MESQUITE	10 10 17
2519	MESQUITE	12 12 17
2520	HAWTHORN	12 12 11 10 10

LEGEND
EXISTING CONTOURS
EASEMENTS
FEMA ZONE "A"
DEVELOPED 100 YR F.P.
CITY LIMITS



NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS
ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.

DATE: 8/22/2016

REVISION: #

SCALE: 1"=400'

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

ALM ENGINEERING, INC.

CONSULTING ENGINEERS

F-3565

1705 S Capital of TX Hwy, Ste. 150

Austin, Texas, 78746

(512)431-9600 * aimeng@sbcbglobal.net

PRELIMINARY HEC-HMS EXIST.

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

8-19-2016

Sheet 20 OF 24

DEVELOPED									
	AREA(ac)	SM	IMP	VEG	Tc	LAG	CN	Q100	
SB 1	25.27	0.0395	2.289	22.983	12.96	7.776	81	178.96	
SB 2A	4.40	0.0069	1.515	2.886	19.26	11.556	86	29.26	
SB 2B	15.14	0.0237	0.297	14.842	21.24	12.744	84	95.05	
SB 3	21.53	0.0336	9.638	11.888	12.96	7.776	88	163.61	
SB 4	34.69	0.0542	14.968	19.722	11.76	7.056	88	270.01	
SB 5	9.66	0.0151	3.887	5.775	13.92	8.352	87	71.47	
SB 6	5.94	0.0093	2.584	3.354	13.98	8.388	88	44.35	
SB 7	8.77	0.0137	3.872	4.697	18.36	11.016	88	60.14	
SB 8	2.89	0.0045	0.701	2.185	20.22	12.132	84	18.36	
A5	47.61	0.0744	2.962	44.651	15.9	9.540	84	329.62	
A6	40.94	0.0640	1.288	39.648	23.94	14.364	84	245.03	
A7	49.35	0.0771	4.375	44.970	15.54	9.324	84	343.54	
A8	13.91	0.0217	0.036	13.870	16.14	9.684	84	95.67	
B1	90.00	0.1406	0.481	89.516	30.36	18.216	84	487.58	
B2	85.26	0.1332	0.149	85.116	28.56	17.136	84	474.21	
B3	359.62	0.5619	0.054	359.567	49.02	29.412	84	1554.61	
C1	1.80	0.0028	0.443	1.358	6.42	3.852	84	14.87	

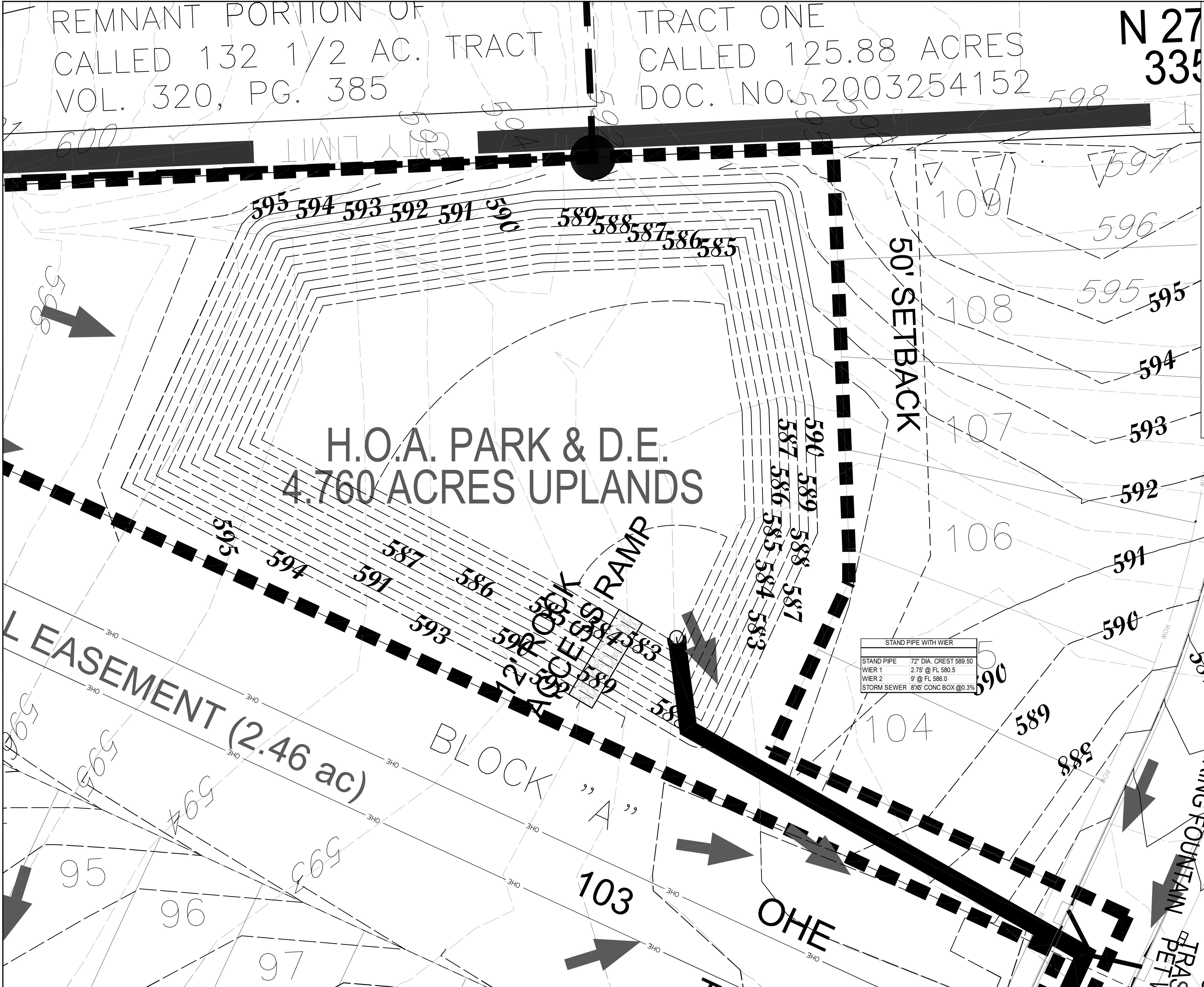
FOR ADDITIONAL DRAINAGE INFORMATION PLEASE
REFER TO THE VINE CREEK SUBDIVISION
ENGINEERING & DRAINAGE STUDY DATED 5-13-2014
AND DRAINAGE CALCULATIONS PAGES 15 AND 16.

2 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	47.24	A-5	0.0744	78.96
A-2	0.0677	70.77	A-6	0.0640	58.52
A-3	0.0571	57.41	A-7	0.0771	82.49
A-4	0.0312	35	A-8	0.0217	22.91
A-5	0.0357	37.86	B-1	0.1408	116.37
A-6	0.0747	71.04	B-2	0.1332	113.19
A-7	0.0771	82.38	B-3	0.5619	370.14
A-8	0.0219	23.09	CHANNEL	1.2398	800.66
B-1	0.1656	136.8	CULV INFLOW	0.2308	233.15
B-2	0.1338	113.5	C-1	0.0028	3.59
B-3	0.5660	356.45	Junction-1	1.2398	800.66
CHANNEL	1.1631	771.61	Junction-2	1.1697	753.77
C-1	0.0032	4.27	Junction-4	0.1562	154.42
Junction-1	1.2731	845.22	MELBER LANE	1.2734	713.74
Junction-2	1.1631	771.61	PHELPS	0.3202	340.46
Junction-3	0.2977	299.87	POND 1	0.1332	83.59
Junction-4	0.1518	148.62	PROPERTY LINE	0.7089	460.04
Junction-5	0.0790	80.51	SB 1	0.0395	39.09
MELBER LANE	1.2731	716.79	SB 2A	0.0069	7.44
PROPERTY LINE	0.6998	444.69	SB 2B	0.0237	22.73
TOTAL	1.2763	717.48	SB 3	0.0338	44.2
			SB 4	0.0542	73.08
			SB 5	0.0151	18.8
			SB 6	0.0093	12
			SB 7	0.0137	16.21
			SB 8	0.0045	4.4
			SS 2	0.0308	30.1
			SS 4	0.0759	95.07
			TOTAL	1.2762	714.31

25 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	139.91	A-5	0.0744	234.82
A-2	0.0677	210.27	A-6	0.0640	174.59
A-3	0.0571	175.14	A-7	0.0771	244.92
A-4	0.0312	103.76	A-8	0.0217	68.17
A-5	0.0357	112.59	B-1	0.1408	347.25
A-6	0.0747	206.62	B-2	0.1332	337.78
A-7	0.0771	244.63	B-3	0.5619	1106.47
A-8	0.0219	68.71	CHANNEL	1.2398	2464.08
B-1	0.1656	408.2	CULV INFLOW	0.2308	690.09
B-2	0.1338	336.67	C-1	0.0028	10.6
B-3	0.5660	1093.57	Junction-1	1.2398	2464.08
CHANNEL	1.1631	2339.9	Junction-2	1.1697	2316.29
C-1	0.0032	12.29	Junction-4	0.1562	457.07
Junction-1	1.2731	2565.12	MELBER LANE	1.2734	2486.34
Junction-2	1.1631	2339.9	PHELPS	0.3202	983.76
Junction-3	0.2977	891.36	POND 1	0.1332	303.06
Junction-4	0.1518	437.43	PROPERTY LINE	0.7089	1415.39
Junction-5	0.0790	243.85	SB 1	0.0395	125.5
MELBER LANE	1.2731	2509.13	SB 2A	0.0069	21.07
PROPERTY LINE	0.6998	1359.6	SB 2B	0.0237	67.72
TOTAL	1.2763	2512.81	SB 3	0.0338	118.92
			SB 4	0.0542	196.2
			SB 5	0.0151	51.73
			SB 6	0.0093	32.24
			SB 7	0.0137	43.7
			SB 8	0.0045	13.08
			SS 2	0.0308	88.86
			SS 4	0.0759	262.15
			TOTAL	1.2762	2489.32

100 YEAR					
EXISTING			DEVELOPED		
	AREA	FLOW		AREA	FLOW
	sq mi	cfs		sq mi	cfs
A-1	0.0423	196.6	A-5	0.0744	329.87
A-2	0.0677	295.58	A-6	0.0640	245.48
A-3	0.0571	247.48	A-7	0.0771	343.94
A-4	0.0312	145.77	A-8	0.0217	95.79
A-5	0.0357	158.16	B-1	0.1408	488.52
A-6	0.0747	289.02	B-2	0.1332	475.08
A-7	0.0771	343.54	B-3	0.5619	1557.86
A-8	0.0219	96.55	CHANNEL	1.2398	3528.46
B-1	0.1656	574.28	CULV INFLOW	0.2308	963.98
B-2	0.1338	476.35	C-1	0.0028	14.87
B-3	0.5660	1548.11	Junction-1	1.2398	3528.46
CHANNEL	1.1631	3304.12	Junction-2	1.1697	3321.6
C-1	0.0032	17.16	Junction-4	0.1562	641.63
Junction-1	1.2731	3623.72	MELBER LANE	1.2734	3563.93
Junction-2	1.1631	3304.12	PHELPS	0.3202	1365.22
Junction-3	0.2977	1253.44	POND 1	0.1332	437.32
Junction-4	0.1518	613.9	PROPERTY LINE	0.7089	1996.92
Junction-5	0.0790	344.02	SB 1	0.0395	179.2
MELBER LANE	1.2731	3564.76	SB 2A	0.0069	29.31
PROPERTY LINE	0.6998	1923.24	SB 2B	0.0237	95.22
TOTAL	1.2763	3570.15	SB 3	0.0338	163.83
			SB 4	0.0542	270.32
			SB 5	0.0151	71.56
			SB 6	0.0093	44.4
			SB 7	0.0137	60.25
			SB 8	0.0045	18.39
			SS 2	0.0308	124.33
			SS 4	0.0759	363
			TOTAL	1.2762	3568.21

TAG	TYPE	DIAMETER (inches)
501	MESQUITE	8
502	MESQUITE	8 8 ø12
503	MESQUITE	10 10 8 8
504	MESQUITE	17
505	MESQUITE	9 ø17
506	MESQUITE	10
507	MESQUITE	12
508	MESQUITE	18 17
509	MESQUITE	11
510	MESQUITE	9
511	BOISDARC	9
512	MESQUITE	13 10
513	MESQUITE	8 8
514	MESQUITE	9
515	MESQUITE	10
516	MESQUITE	12
517	MESQUITE	11
518	MESQUITE	10
519	MESQUITE	8
520	HAWTHORN	12 11 10 10



LEGEND

EXISTING CONTOURS
LOT LINES
R.O.W. LINES
EASEMENTS

DEVELOPED 100 YR F.P. 100 YR
CITY LIMITS CITY LIMIT

20 10 0 20 40
1"=20' ALM

DETENTION POND									
STAND PIPE WITH WIER					STAGE/STORAGE/DISCHARGE TABLE				
ELEVATION/STORAGE/DISCHARGE					STORM/STOR/ POND/ DISCHARGE				
ELEV	AREA	VOLUME	DISCHARGE		EVENT	cf	ELEV.	cf	
msl	sf	ft³	ac.ft.	cfs					
580.5	0	0	0	0					
581.0	2040	510	0.01171	3.24					
581.5	9285	3341	0.07670	9.16					
582.0	16529	9795	0.22485	16.82					
582.5	21087	19199	0.44074	25.90					
583.0	25645	30882	0.70894	36.20					
583.5	28973	44036	1.01092	47.58					
584.0	28300	57854	1.32815	59.96					
584.5	29688	72351	1.66095	73.26					
585.0	31076	87542	2.00669	87.42	2	83090	584.86	83.59	
585.5	32526	103442	2.37471	102.38					
586.0	33975	120068	2.75637	118.12					
586.5	35485	137433	3.15502	145.18					
587.0	36995	155553	3.57099	181.73					
587.5	38566	174443	4.00465	224.66					
588.0	40136	194118	4.45634	272.86	25	205994	588.29	303.06	
588.5	41768	214594	4.92640	325.68					
589.0	43399	235886	5.41519	382.67	100	255796	589.45	437.32	
589.5	45092	258008	5.92305	443.49					
590.0	46784	280977	6.45034	476.53					

STAND PIPE WITH WIER			
STAND PIPE	72" DIA. CREST 589.50		
WIER 1	2.75' @ FL 580.5		
WIER 2	9' @ FL 586.0		
STORM SEWER	8"x5' CONC BOX @0.3%		

DATE	REVISION	#	SCALE	1"=20'
8/19/2016				
JOB:				
SITE				
DRAWN BY:				
CHECKED BY:				

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
F-3565
1705 S Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.
(512)431-9600 * almeng@sbcglobal.net

8-19-2016

DETENTION POND
VINE CREEK SUBDIVISION
PFLUGERVILLE PARKWAY

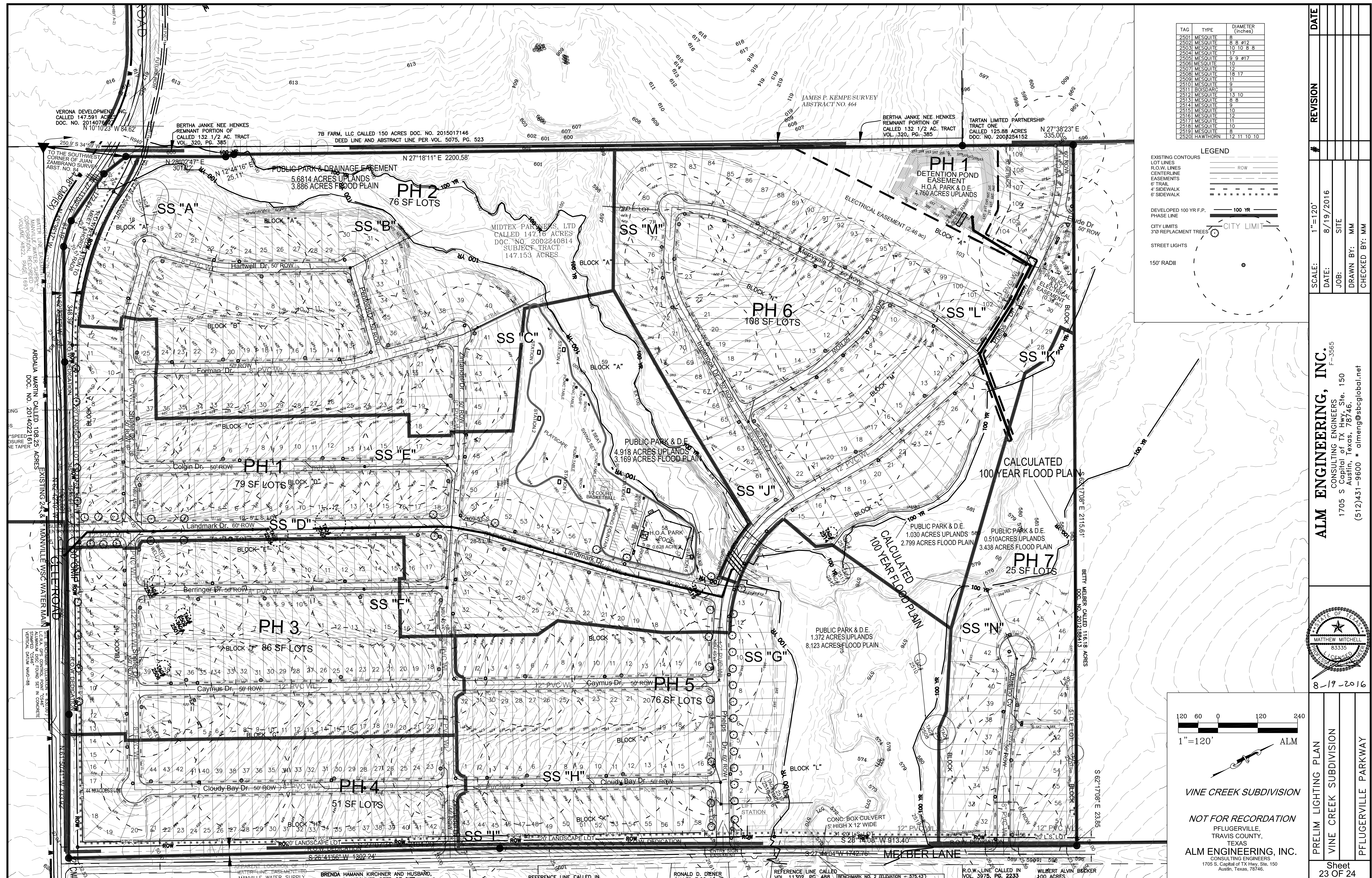
Sheet 22 Of 24

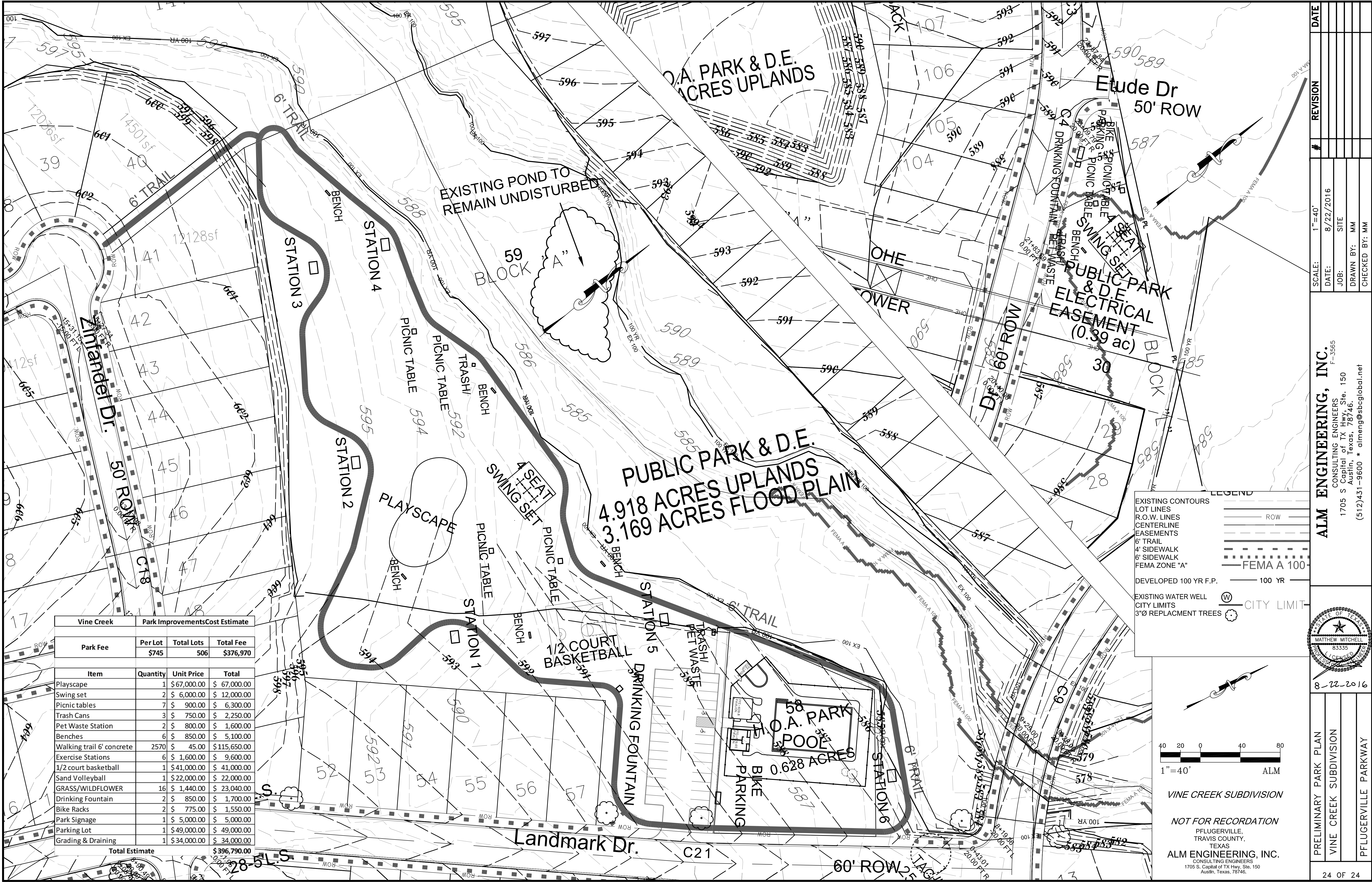
FOR ADDITIONAL DRAINAGE INFORMATION
PLEASE REFER TO THE VINE CREEK
SUBDIVISION ENGINEERING & DRAINAGE
STUDY DATED 5-13-2014 AND DRAINAGE
CALCULATIONS PAGES 15 AND 16.

VINE CREEK SUBDIVISION

NOT FOR RECORDATION
PFLUGERVILLE,
TRAVIS COUNTY,
TEXAS

ALM ENGINEERING, INC.
CONSULTING ENGINEERS
1705 S. Capital of TX Hwy, Ste. 150
Austin, Texas, 78746.





Vine Creek		Park Improvements Cost Estimate		
Park Fee	Per Lot	Total Lots	Total Fee	
	\$745	506	\$376,970	
Item	Quantity	Unit Price	Total	
Playscape	1	\$ 67,000.00	\$ 67,000.00	
Swing set	2	\$ 6,000.00	\$ 12,000.00	
Picnic tables	7	\$ 900.00	\$ 6,300.00	
Trash Cans	3	\$ 750.00	\$ 2,250.00	
Pet Waste Station	2	\$ 800.00	\$ 1,600.00	
Benches	6	\$ 850.00	\$ 5,100.00	
Walking trail 6' concrete	2570	\$ 45.00	\$115,650.00	
Exercise Stations	6	\$ 1,600.00	\$ 9,600.00	
1/2 court basketball	1	\$41,000.00	\$ 41,000.00	
Sand Volleyball	1	\$22,000.00	\$ 22,000.00	
GRASS/WILDFLOWER	16	\$ 1,440.00	\$ 23,040.00	
Drinking Fountain	2	\$ 850.00	\$ 1,700.00	
Bike Racks	2	\$ 775.00	\$ 1,550.00	
Park Signage	1	\$ 5,000.00	\$ 5,000.00	
Parking Lot	1	\$49,000.00	\$ 49,000.00	
Grading & Draining	1	\$34,000.00	\$ 34,000.00	
Total Estimate			\$396,790.00	

EXISTING CONTOURS
LOT LINES
R.O.W. LINES
CENTERLINE
EASEMENTS
6' TRAIL
4' SIDEWALK
6' SIDEWALK
FEMA ZONE "A"

DEVELOPED 100 YR F.P.

EXISTING WATER WELL
CITY LIMITS
3"Ø REPLACEMENT TREES

LEGEND

ROW
FEMA A 100
100 YR
CITY LIMIT

40 20 0 40 80
1"=40'
ALM

VINE CREEK SUBDIVISION

NOT FOR RECORDATION

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(512)431-9600 * alming@sbcglobal.net

PRELIMINARY PARK PLAN

VINE CREEK SUBDIVISION

PFLUGERVILLE PARKWAY

8-22-2016

24 OF 24

SCALE: 1"=40'

DATE: 8/22/2016

JOB: SITE

DRAWN BY: MM

CHECKED BY: MM

#

REVISION

DATE