

PRELIMINARY PLANS
for
Fireside Addition
City of Denton, Denton County, Texas



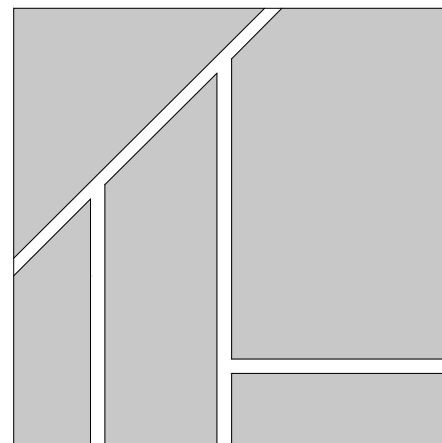
LOCATION MAP
N.T.S.

SHEET INDEX

SHEET NO.	DESCRIPTION
00	COVER SHEET
01	PRELIMINARY PLAT
02	PRELIMINARY PLAT
03	PRELIMINARY DRAINAGE AREA MAPS
04	PRELIMINARY STORM PLAN
05	PRELIMINARY WATER & SEWER PLAN
06	PRELIMINARY PAVING PLAN

Applicant:
SURVIVOR'S TRUST
1039 TAHOE DRIVE
BELMONT, CA 94002
650.430.8010
CONTACT: PETER E. PULIS

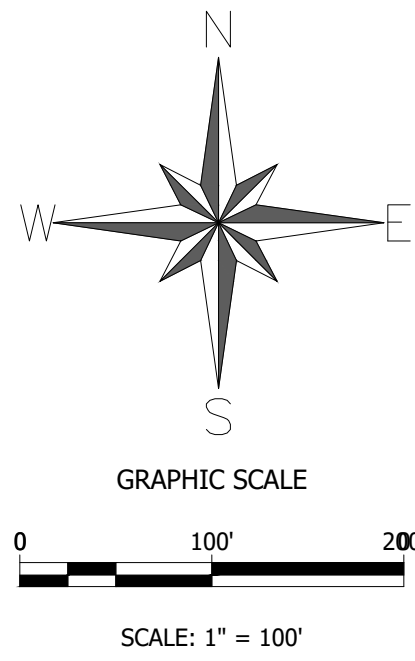
Engineer:



CCM Engineering

2570 FM 407, Suite 209
Highland Village, Texas 75077
Ph: 972.691.6633
Fax: 972.691.6628
TBPE FIRM #605

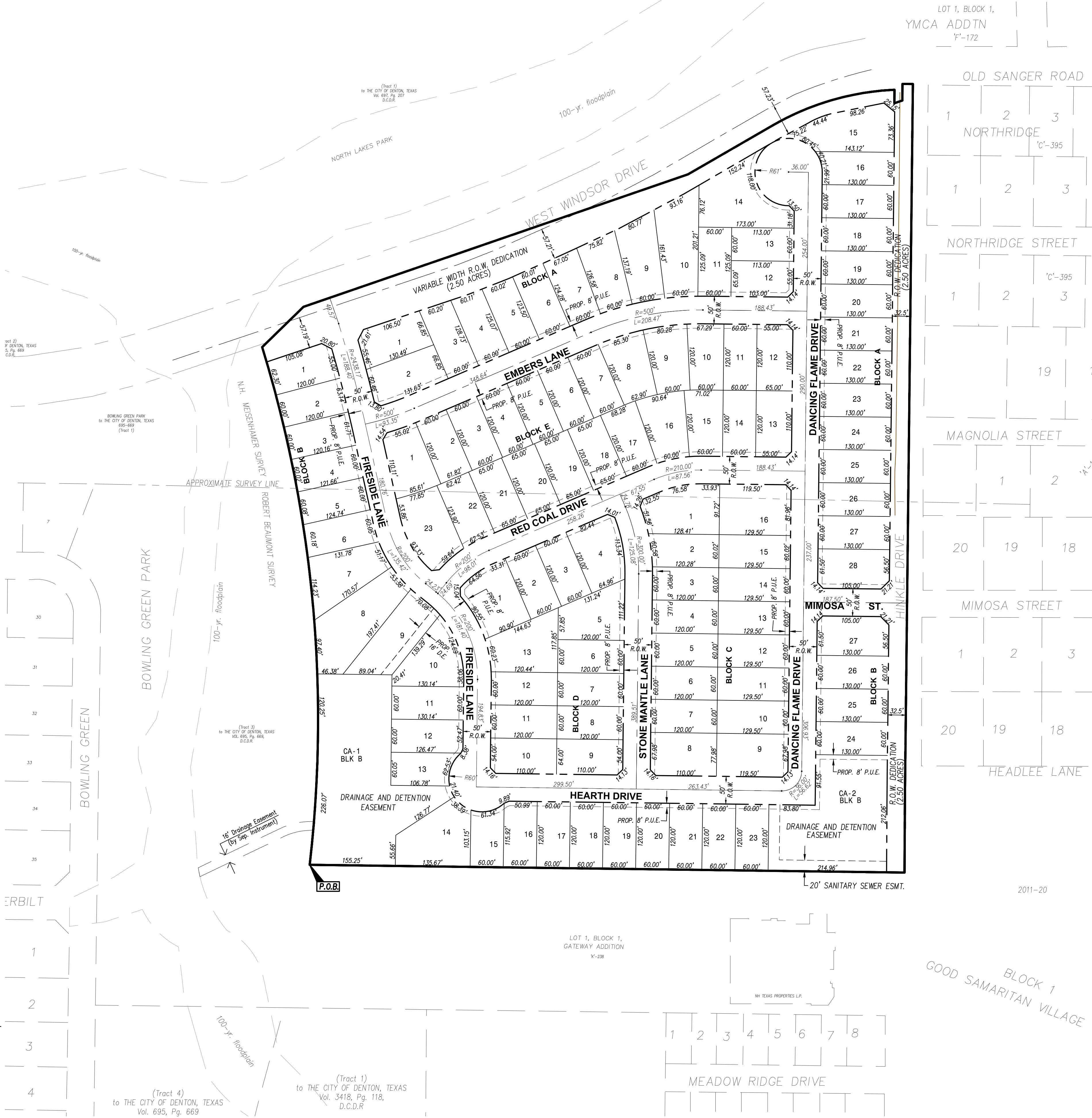
February 2018



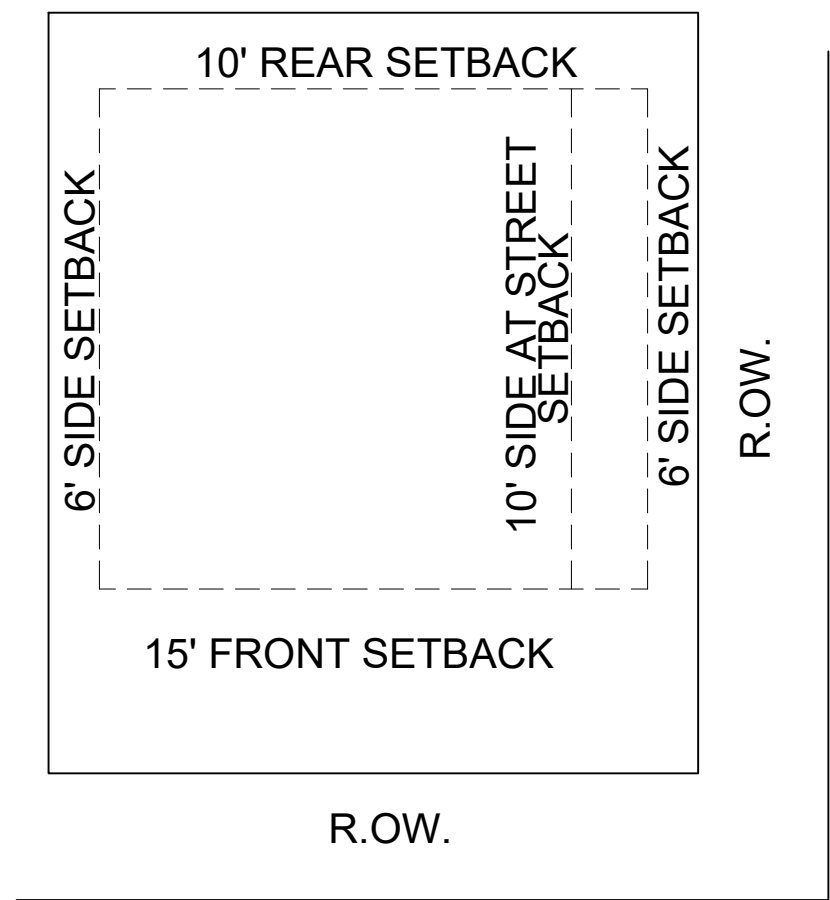
LEGEND:
CA- COMMON AREA
P.U.E. - PUBLIC UTILITY EASEMENT
D.E. - PUBLIC DRAINAGE EASEMENT
P.O.B. - POINT OF BEGINNING
R.O.W. - RIGHT-OF-WAY

IMPORTANT NOTICE:

THE CITY OF DENTON HAS ADOPTED THE NATIONAL ELECTRICAL SAFETY CODE (THE "CODE"). THE CODE GENERALLY PROHIBITS STRUCTURES WITHIN 17.5 FEET ON EITHER SIDE OF THE CENTER LINE OF OVERHEAD DISTRIBUTION LINES AND WITHIN 37.5 FEET ON EITHER SIDE OF THE CENTERLINE OF OVERHEAD TRANSMISSION LINES. IN SOME INSTANCES THE CODE REQUIRES GREATER CLEARANCES. BUILDING PERMITS WILL NOT BE ISSUED FOR STRUCTURES WITHIN THESE CLEARANCE AREAS. CONTACT THE BUILDING OFFICIAL WITH SPECIFIC QUESTIONS.



VICINITY MAP
Scale: n.t.s.



TYPICAL LOT BUILDING SETBACK LAYOUT
N.T.S.

PLAN SUMMARY TABLE	
TOTAL ACREAGE:	30.7039 AC
NUMBER OF LOTS:	107
NUMBER OF COMMON AREAS:	2

107 LOTS
PRELIMINARY PLAT
FIRESIDE ADDITION

BEING 30.7039 ACRES OUT OF THE
17.0753 ACRE ROBERT BEAUMONT SURVEY, ABST. NO.31 &
THE 13.6286 ACRE N.H. MEISENHAMER SURVEY, ABST. NO.810
CITY OF DENTON, DENTON COUNTY, TEXAS

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Engineer:
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Highland Village, Texas 75077
Contact: Jeff Crannell, P.E.
972.691.6633
TBPE Firm #605
DECEMBER 28, 2017

Project Number: PP17-0028

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Fireside Addition
Denton, Texas

City of Denton - Denton County, Texas

Preliminary Plat

FOR PRELIMINARY
REVIEW ONLY

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THE PURPOSE
OF INTERIM REVIEW UNDER THE
AUTHORITY OF
JEFF D. CRANNELL, PE#50800
ON 12-22-17

IT IS NOT TO BE USED FOR
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REVISIONS

DESIGN:	CCM
DRAWN:	CCM
DATE:	12-22-17
SCALE:	
NOTES:	
FILE:	

DESCRIPTION OF PROPERTY SURVEYED

SITUATED in the city of Denton, Denton County Texas, being a tract of land in the N. H. MEISENHAMER SURVEY, Abstract No. 810 and the ROBERT BEAUMONT SURVEY, Abstract No. 31 and being a portion of that certain tract conveyed to Rayzor Investments Ltd., as Tract One in Section 5, in deed recorded in Volume 1796, Page 601 of the Real Property Records of Denton County, and said tract being more fully described as follows:

BEGINNING at the northwest corner of Lot 1, Block 1, Gateway Addition, as shown on plat thereof recorded in Cabinet K, Slide 238, of the Plat Records of Denton County for the southwest corner of a remainder of said Rayzor Investments Tract One in the east line of that certain Tract II conveyed to the City of Denton by deed recorded in Volume 695, Page 669, of said Real Property Records, said point being on a curve whose center bears North 82 degrees, 44 minutes, 43 seconds West, 2293.00 feet, and from said point a 1/2" iron rod found in place bears North 88 degrees, 36 minutes, 20 seconds West, 0.30 foot;

THENCE northerly with said curve and with said east line of City of Denton Tract III for the west line of said Rayzor tract remainder, passing the northeast corner of said City Tract II and the southeast corner of that certain Tract I conveyed to the City of Denton by said deed recorded in Volume 695, Page 669, and continuing with the east line of said Tract I and said curve, in at a distance of 948.72 feet to a "RPLS 1640" capped 5/8" iron rod found in place for the northwest corner of said Rayzor tract remainder, in the southeasterly line of that certain tract conveyed to the City of Denton as Tract I by deed recorded in Volume 697, Page 207 of said Real Property Records;

THENCE North 44 degrees, 19 minutes, 50 seconds East, with the northerly line of said Rayzor tract remainder and said southeasterly line of City Tract I in Volume 697, Page 207, crossing the existing pavement of Windsor Drive, a publicly maintained roadway, and continuing in at 104.66 feet;

THENCE North 71 degrees, 38 minutes, 30 seconds East with the common line of said Rayzor tract remainder and said City Tract I in Volume 697, Page 207, again crossing said Windsor Drive pavement, in at 737.20 feet to an "RPLS 1640" capped 5/8" iron rod set for the west corner of that certain tract conveyed to Rayzor Investments by correction instrument recorded in Volume 3441, Page 883, of said Real Property Records;

THENCE with the northerly and east lines of said Rayzor Investments tract for the southerly and west lines of a remainder of said City Tract I recorded in Volume 697, Page 207, the following courses and distances:

North 60 degrees, 38 minutes, 10 seconds East, 177.67 feet to an "RPLS 1640" capped 5/8" iron rod set for the beginning of a curve whose center bears South 29 degrees, 21 minutes, 50 seconds East, 484.52 feet;

easterly with said curve 231.94 feet to an "RPLS 1640" capped 5/8" iron rod found in place for the end of said curve at the northeast corner of said Rayzor tract described in Volume 3441, Page 883; and,

South 0 degrees, 53 minutes, 45 seconds West, 24.43 feet to the southeast corner of said Rayzor tract described in Volume 3441, Page 883, in the southerly line of said City Tract I in Volume 697, Page 207;

THENCE North 71 degrees, 38 minutes, 30 seconds East with said southerly line of City Tract I recorded in Volume 697, Page 207, 15.37 feet to a southeast corner of said City Tract I in the existing pavement of Hinkle Drive, a publicly-maintained roadway;

THENCE North 0 degrees, 53 minutes, 45 seconds East with the east line of said City Tract I in said Hinkle Drive pavement, 29.97 feet to the southwest corner of that certain tract of land conveyed to the City of Denton as Tract 1 in deed recorded in Volume 1163, Page 216, of said Real Property Records;

THENCE South 89 degrees, 00 minutes, 30 seconds East, 18.82 feet to the southeast corner of said City Tract 1 recorded in Volume 1163, Page 216, in the east line of said Rayzor Investments tract and in the occupied center of said Hinkle Drive;

THENCE with the said east line of Rayzor Investments tract and said occupied center of Hinkle Drive, South 1 degrees, 17 minutes, 30 seconds West, 1282.43 feet, and South 0 degrees, 55 minutes, 25 seconds West, 146.72 feet to the southeast corner of said Rayzor Investments tract, from which point a "H&N" capped 1/2" iron rod bears North 88 degrees, 36 minutes, 20 seconds West, 32.77 feet;

THENCE North 88 degrees, 36 minutes, 20 seconds West with the south line of said Rayzor Investments tract remainder, at 30 feet passing the northeast corner of said Lot 1, Block 1, Gateway Addition and continuing with the north line of said Lot 1, 1078.45 feet to the PLACE OF BEGINNING, and containing 30.7039 acres (1,337,461.884 square feet).

- NOTES:
1. ACCEPTANCE OF THE DRAINAGE FEATURES IDENTIFIED ON THE PRELIMINARY PLAT ARE SUBJECT TO CHANGE DURING THE FINAL PLAT PROCESS AND DO NOT CONSTITUTE SUBSEQUENT APPROVAL OF SAME. THE CITY RESERVES THE RIGHT TO REQUIRE ADDITIONAL DATA OR STUDIES TO ENSURE COMPLIANCE WITH CITY OF DENTON SUBDIVISION AND LAND REGULATIONS, DRAINAGE DESIGN CRITERIA AND COMPREHENSIVE MASTER DRAINAGE PLAN.
 2. DISCHARGE FROM ANY DETENTION POND OUTFALL OR STORM DRAIN OUTFALL MAY REQUIRE AN OFFSITE DRAINAGE EASEMENT TO ACCOMMODATE THE FLOW. IF AN OFFSITE DRAINAGE EASEMENT IS REQUIRED, A STUDY SHALL BE MADE OF THE OFF-SITE PROPERTY TO DETERMINE THE SIZE OF THE DRAINAGE EASEMENT TO ACCOMMODATE THE FLOW.
 3. ALL COMMON AREAS WILL BE OWNED AND MAINTAINED BY THE HOA.

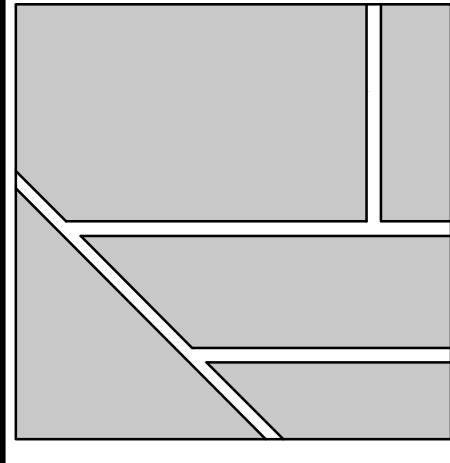
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FIRESIDE ADDITION
Denton, Texas
City of Denton - Denton County, Texas

Preliminary Plat

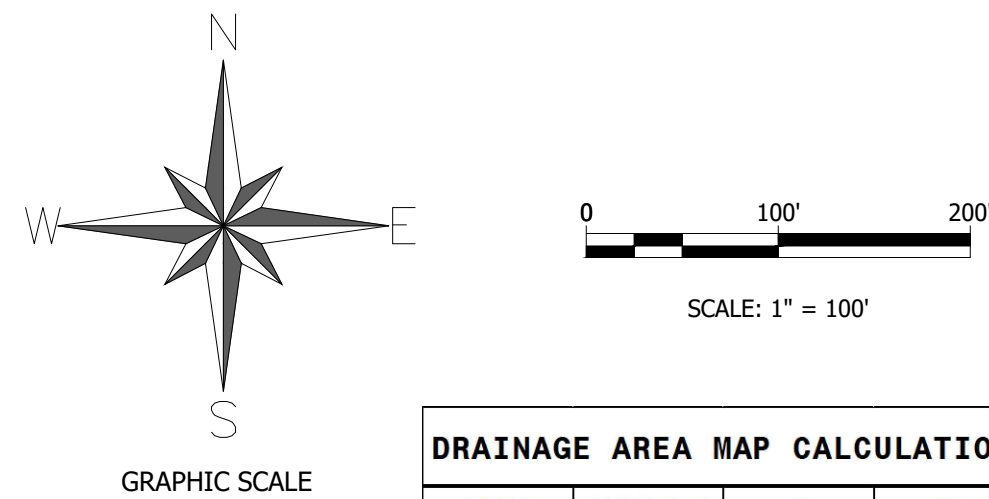
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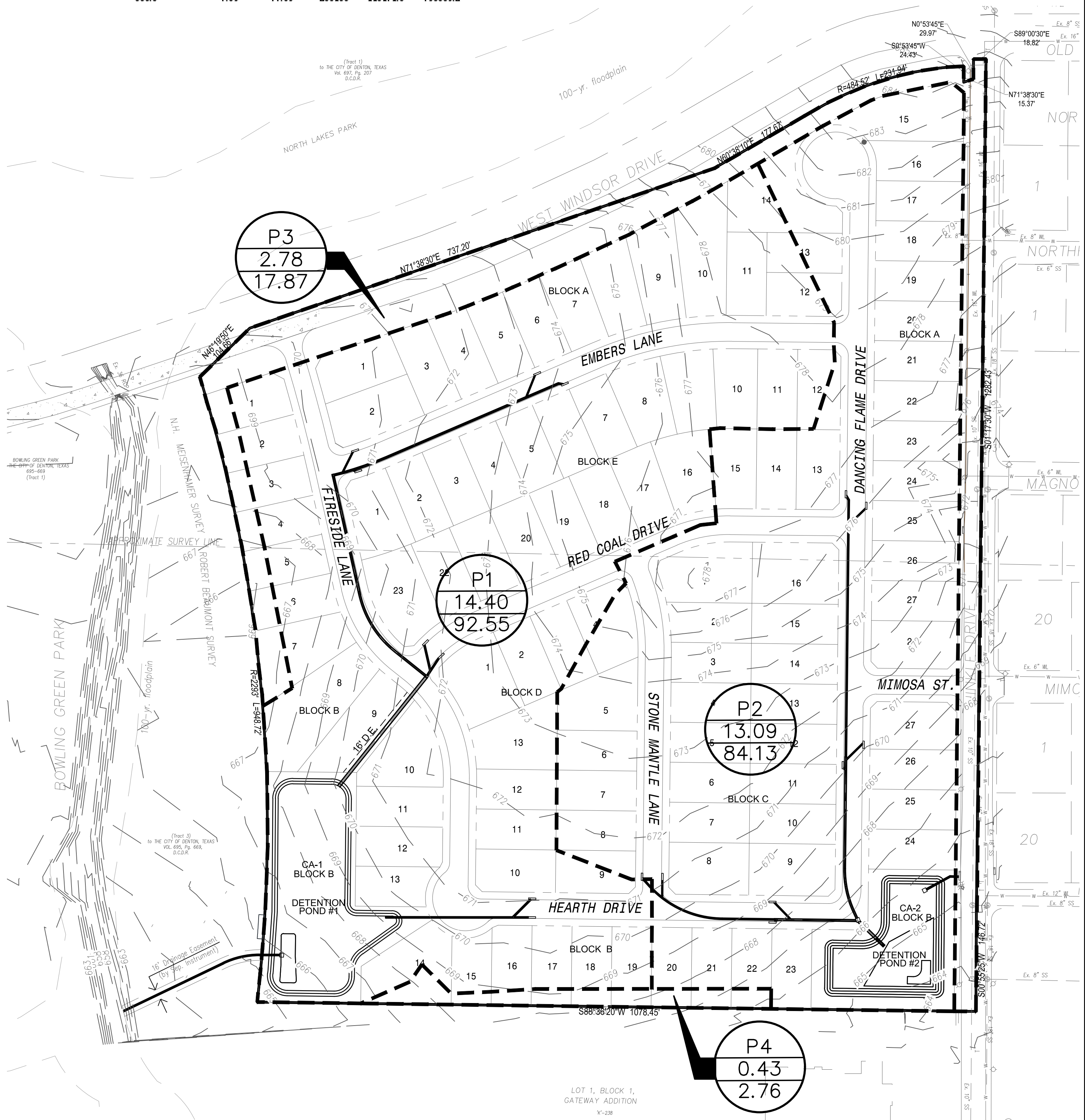
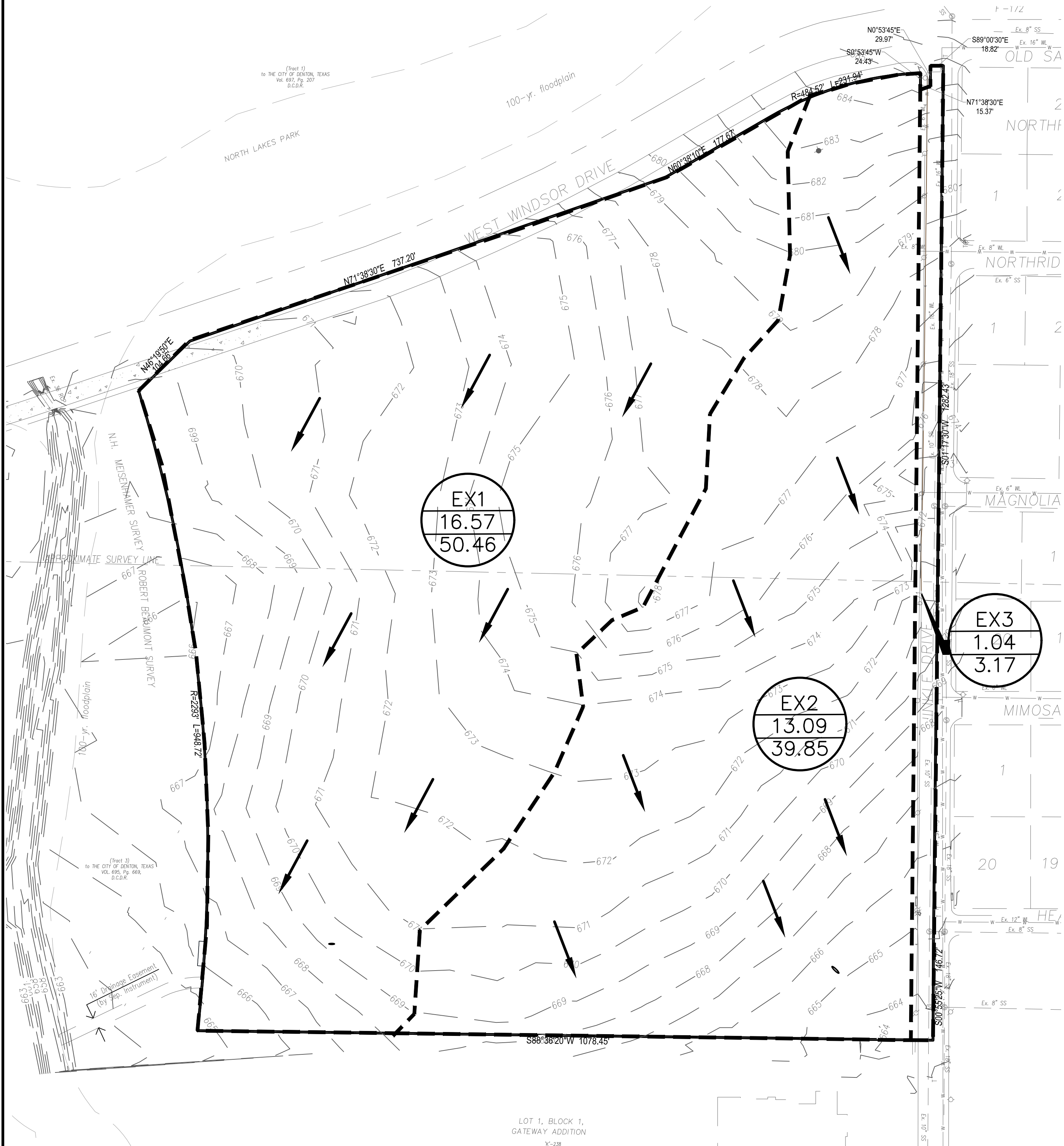
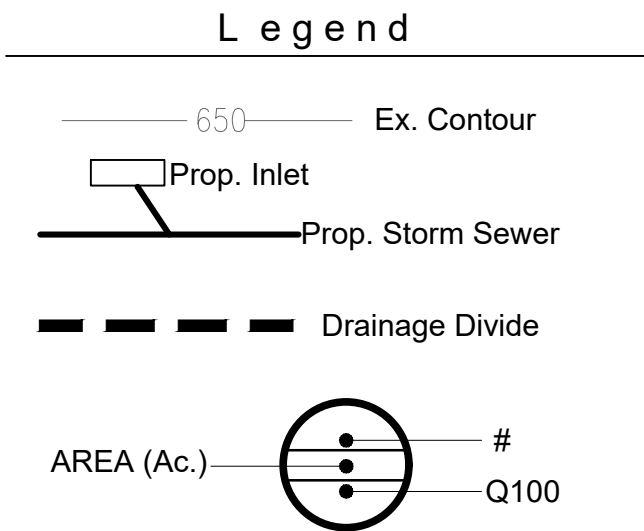


DRAINAGE AREA MAP CALCULATIONS (UNDEVELOPED)						
AREA	AREA (ac)	C	Cf	Tc(100) MIN	I ₁₀₀ IN/HR	Q ₁₀₀ C.F.S.
EX1	16.57	0.35	1.25	20	6.96	50.46
EX2	13.09	0.35	1.25	20	6.96	39.85
EX3	1.04	0.35	1.25	20	6.96	3.17

DRAINAGE AREA MAP CALCULATIONS (DEVELOPED)						
AREA	(ac)	C	Cf	Tc(100) MIN	I ₁₀₀ IN/HR	Q ₁₀₀ C.F.S.
P1	14.40	0.65	1.25	15	7.91	92.55
P2	13.09	0.65	1.25	15	7.91	84.13
P3	2.78	0.65	1.25	15	7.91	17.87
P4	0.43	0.65	1.25	15	7.91	2.76

Detention Basin #1 Design					
Ex. Drainage Area (ac.):	16.57	Prop. Drainage Area (ac.):		14.40	
Design Storm (yrs):	100	Design Storm (yrs):		100	
Existing Conditions (100 YR.)			Proposed Conditions (100 YR.)		
C=	0.35		C=	0.65	
T c(min.)=	20.0		T c(min.)=	15.0	
I(in/hr)=	6.96		I(in/hr)=	7.91	
Cf=	1.25		Cf=	1.25	
Q (cfs)=	50.46		Q(cfs)=	92.55	
Storm Duration	I (in/hr)	Q (cfs)	Inflow (cu.ft.)	Outflow (cu.ft.)	Storage (cu.ft.)
10.0	9.24	108.11	64855	37841.7	27023.1
15.0	7.91	92.55	83292	45410.1	37882.2
20.0	6.96	81.43	97718	52978.4	44740.0
30.0	5.66	66.22	119200	68115.1	51084.5
40.0	4.82	56.39	135346	83251.8	52093.8
50.0	4.22	49.37	148122	98388.5	49733.5
60.0	3.77	44.11	158792	113525.2	45267.2
120.0	2.38	27.85	200491	204345.4	-3854.2
180.0	1.79	20.94	226184	295165.6	-68981.2
360.0	1.09	12.75	275465	567626.1	-292161.3

Detention Basin #2 Design					
Ex. Drainage Area (ac.):	13.09	Prop. Drainage Area (ac.):	13.09		
Design Storm (yrs):	100	Design Storm (yrs):	100		
Existing Conditions (100 YR.)			Proposed Conditions (100 YR.)		
C=	0.35	C=	0.65		
T c(min.)=	20.0	T c(min.)=	15.0		
I(in/hr)=	6.96	I(in/hr)=	7.91		
Cf=	1.25	Cf=	1.25		
Q (cfs)=	39.86	Q(cfs)=	84.13		
Storm Duration	I (in/hr)	Q (cfs)	Inflow (cu.ft.)	Outflow (cu.ft.)	Storage (cu.ft.)
10.0	9.24	98.27	58964	29894.3	29069.6
15.0	7.91	84.13	75715	35873.1	39841.9
20.0	6.96	74.02	88829	41852.0	46976.7
30.0	5.66	60.20	108356	53809.7	54546.0
40.0	4.82	51.26	123033	65767.4	57265.5
50.0	4.22	44.88	134647	77725.1	56321.9
60.0	3.77	40.10	144347	89682.9	54663.8
120.0	2.38	25.31	182252	161429.2	20822.9
180.0	1.79	19.04	205608	233175.4	-27567.5
360.0	1.09	11.59	250405	448414.3	-198009.2



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Fireside Addition
Denton, Texas
City of Denton - Denton County, Texas

PRELIMINARY
DRAINAGE
AREA MAPS

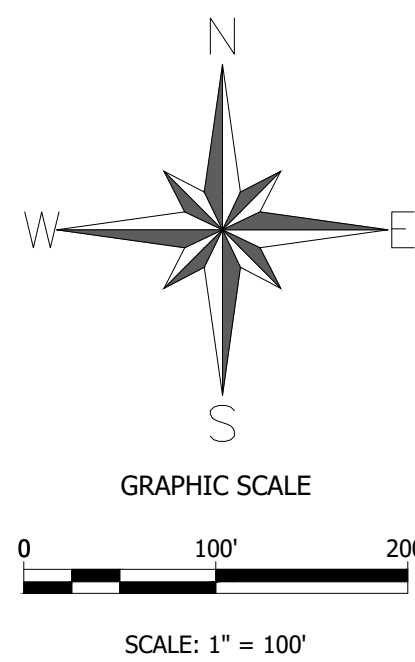
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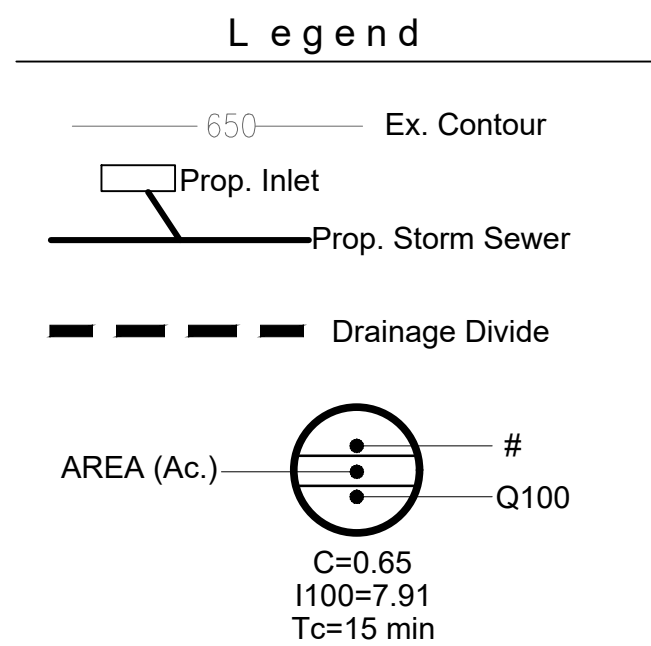
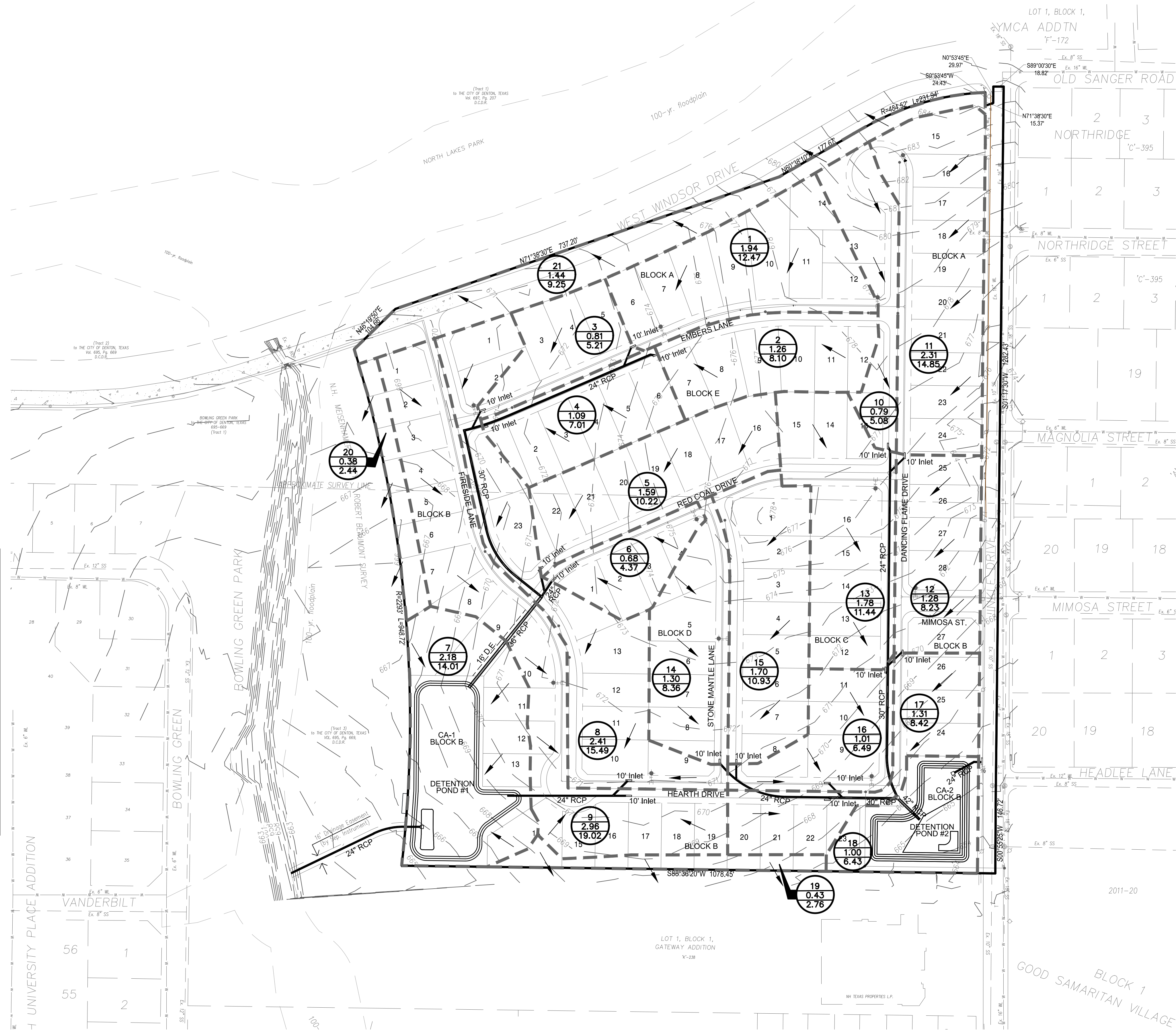
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Sheet 3 of 6



DRAINAGE AREA MAP CALCULATIONS (DEVELOPED)						
AREA	AREA (ac)	C	Cr	Tc(100) MIN	I ₁₀₀ IN/HR	Q ₁₀₀ C.F.S.
1	1.94	0.65	1.25	15.00	7.91	12.47
2	1.26	0.65	1.25	15.00	7.91	8.10
3	0.81	0.65	1.25	15.00	7.91	5.21
4	1.09	0.65	1.25	15.00	7.91	7.01
5	1.59	0.65	1.25	15.00	7.91	10.22
6	0.68	0.65	1.25	15.00	7.91	4.37
7	2.18	0.65	1.25	15.00	7.91	14.01
8	2.41	0.65	1.25	15.00	7.91	15.49
9	2.96	0.65	1.25	15.00	7.91	19.02
10	0.79	0.65	1.25	15.00	7.91	5.08
11	2.31	0.65	1.25	15.00	7.91	14.85
12	1.28	0.65	1.25	15.00	7.91	8.23
13	1.78	0.65	1.25	15.00	7.91	11.44
14	1.30	0.65	1.25	15.00	7.91	8.36
15	1.70	0.65	1.25	15.00	7.91	10.93
16	1.01	0.65	1.25	15.00	7.91	6.49
17	1.31	0.65	1.25	15.00	7.91	8.42
18	1.00	0.65	1.25	15.00	7.91	6.43
19	0.43	0.65	1.25	15.00	7.91	2.76
20	0.38	0.65	1.25	15.00	7.91	2.44
21	1.44	0.65	1.25	15.00	7.91	9.25



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City of Denton - Denton County, Texas

PRELIMINARY
STORM PLAN

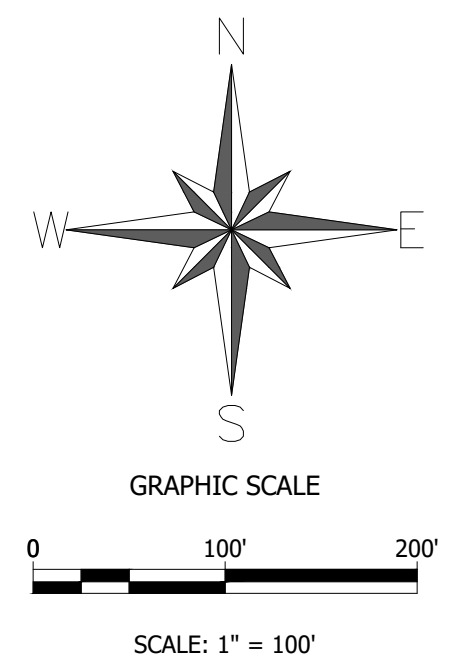
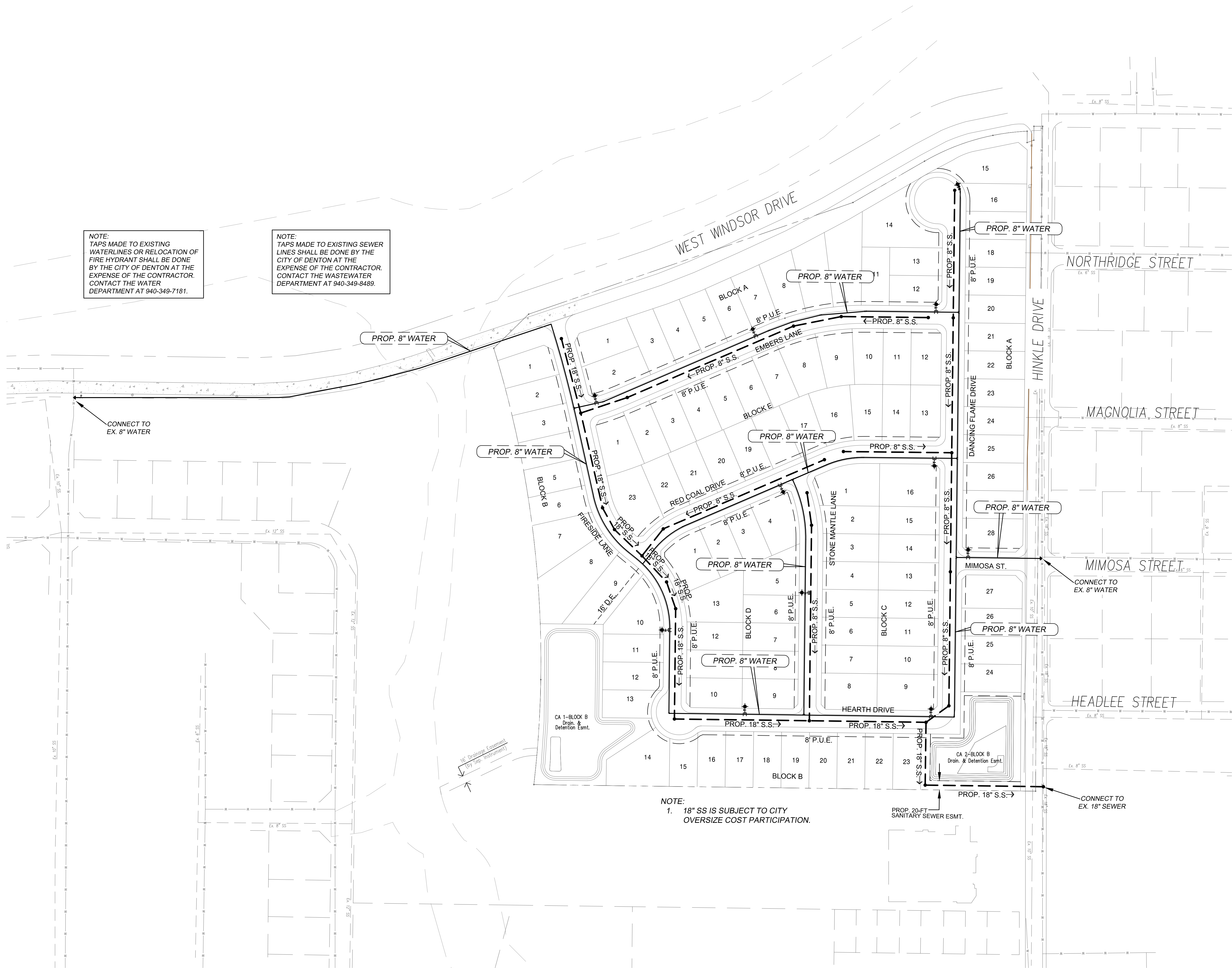
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Sheet 4 of 6



- Legend**
- DIRECTION OF SEWER FLOW
 - PROP. SANITARY SEWER
 - PROP. SAN. SEWER M.H.
 - PROP. WATER LINE
 - PROP. F.H.

ESTIMATED WATER DEMAND LOAD
1,000 G.P.M. (FIRE PROTECTION)

Projected Sanitary Sewer Flow

Projected Flow

107 x 3.2 ppl/lots x 100 gpd/person = 0.034 MGD
Peaking Factor

0.034 MGD x 4 = 0.136 MGD

CAUTION!!!
Existing underground/overhead utilities. Contractor to call for locations and field verify the location, depth and sizes of all existing utilities prior to excavation.

CAUTION
UNDERGROUND UTILITIES

EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT THE RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

NOTE:
TAPS MADE TO EXISTING WATERLINES OR RELOCATION OF FIRE HYDRANT SHALL BE DONE BY THE CITY OF DENTON AT THE EXPENSE OF THE CONTRACTOR. CONTACT THE WATER DEPARTMENT AT 940-349-7181.

NOTE:
TAPS MADE TO EXISTING SEWER LINES SHALL BE DONE BY THE CITY OF DENTON AT THE EXPENSE OF THE CONTRACTOR. CONTACT THE WASTEWATER DEPARTMENT AT 940-349-8489.

NOTE:
1. 18" SS IS SUBJECT TO CITY OVERSIZE COST PARTICIPATION.

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Preliminary
Water & Sewer
Plan

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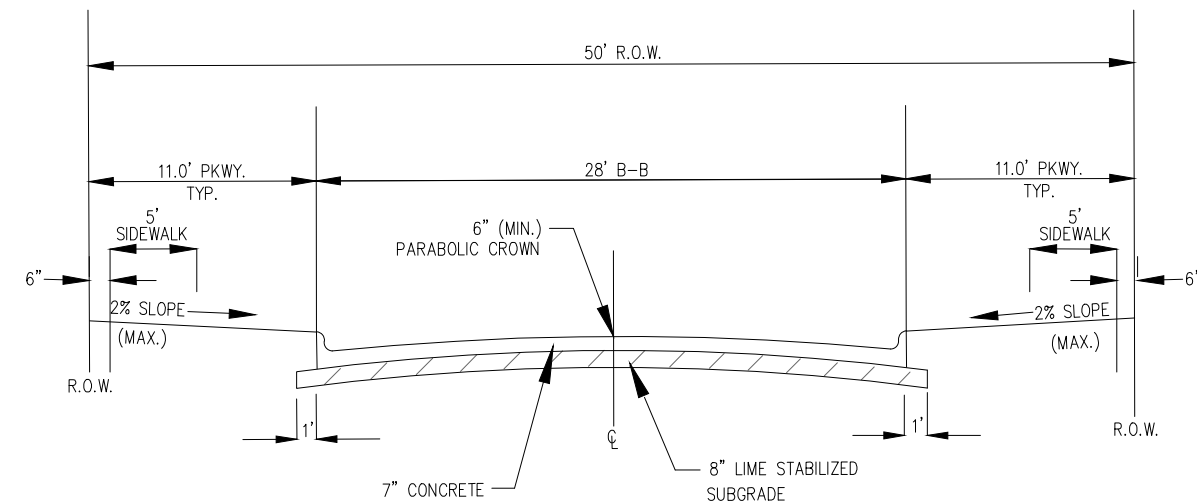
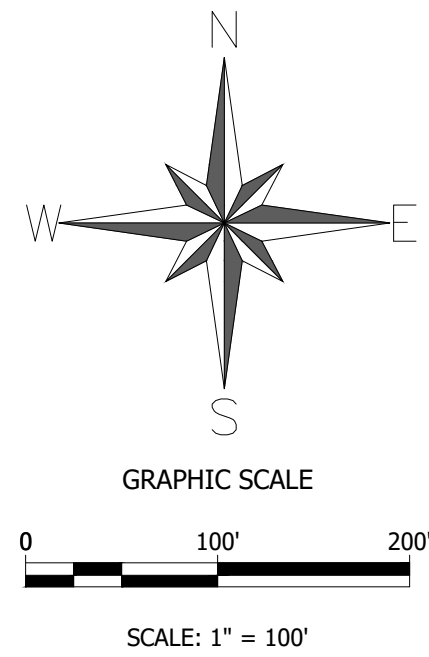
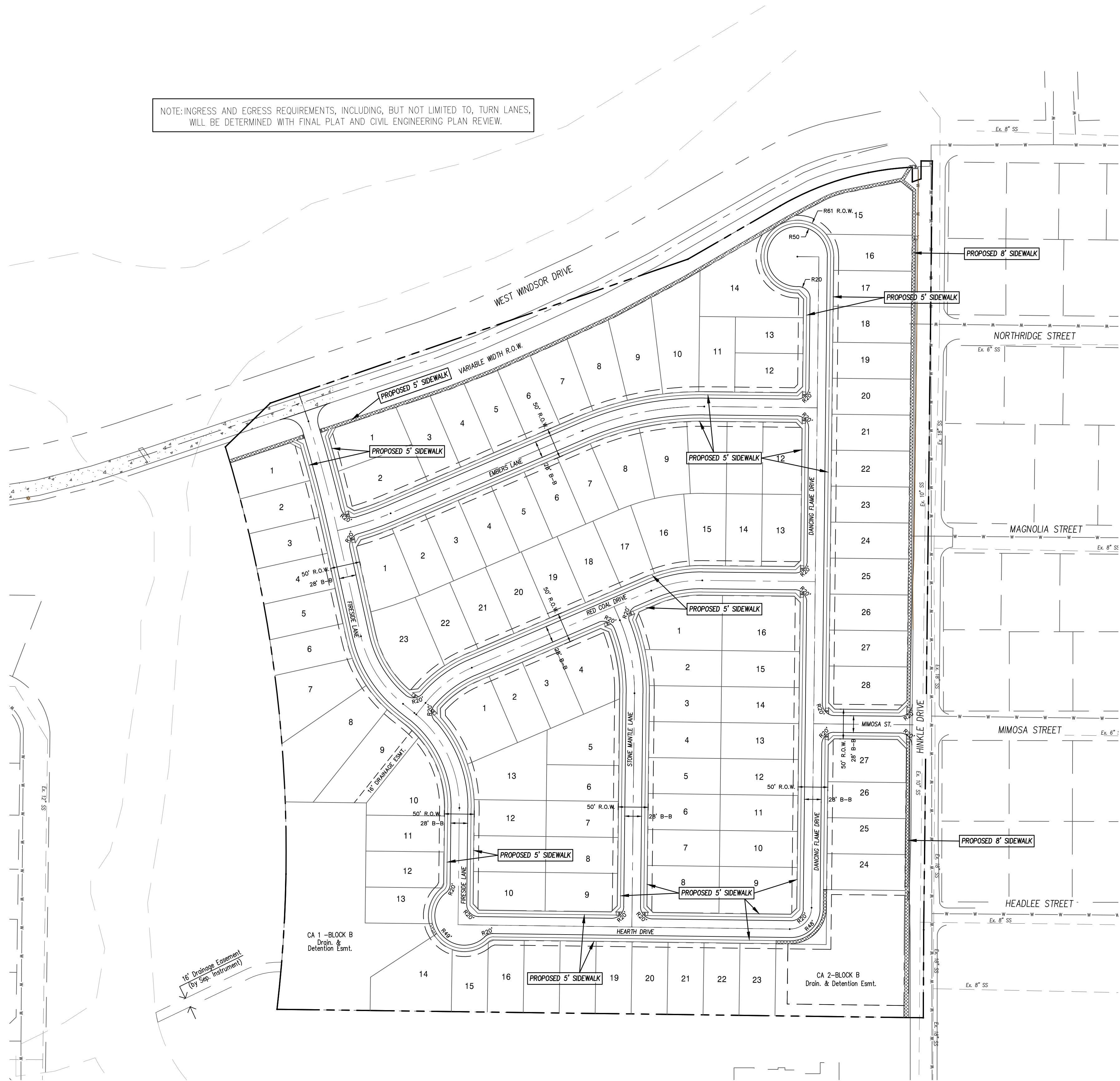
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Sheet 5 of 6



RESIDENTIAL STREET SECTION

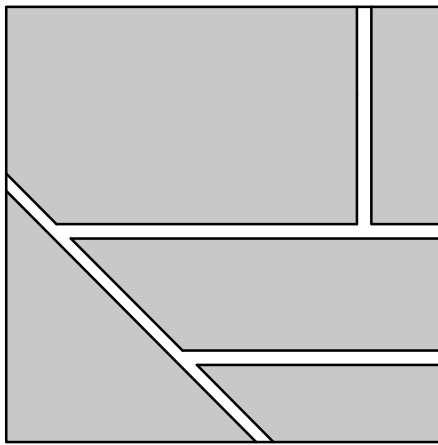
NOTE: ALL BARRIER FREE RAMPS AT STREET INTERSECTIONS SHALL BE CONSTRUCTED BY DEVELOPER.

LEGEND
[Cross-hatched box] SIDEWALK TO BE CONSTRUCTED BY DEVELOPER

TRIP GENERATION TABLE						
USE	ITE CODE	# OF DWELLING UNITS	TRIPS PER DAY/D.U.	PEAK PM TRIP /D.U.	TOTAL TRIPS PER DAY	TOTAL PEAK PM TRIP
SINGLE-FAMILY RESIDENTIAL DETACHED	210	107	10/DWELLING UNIT	1/DWELLING UNIT	1070	107

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Preliminary Paving Plan

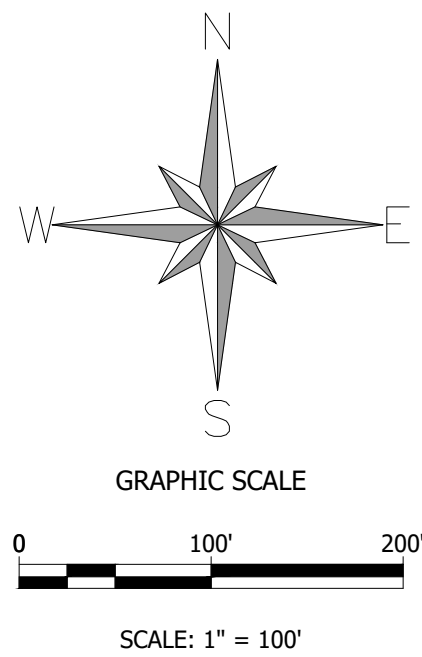
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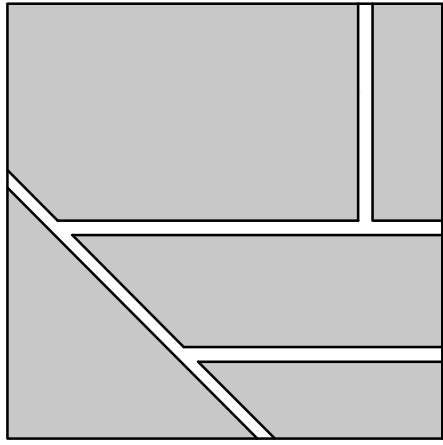
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CCM Engineering

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TBPE FIRM #605



Fireside Addition
Denton, Texas
City of Denton - Denton County, Texas

Tree Inventory

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