A SITE PLAN FOR

21 CAMBRIDGE COURT

A TRACT OF LAND BEING LOT 11 OF
CAIMBRIDGE COURT, P.B. 36, PG. 23
TOWNSHIP 45 NORTH, RANGE 6 EAST,
ST. LOUIS COUNTY, MISSOURI

SHEET INDEX

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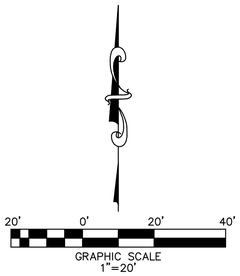
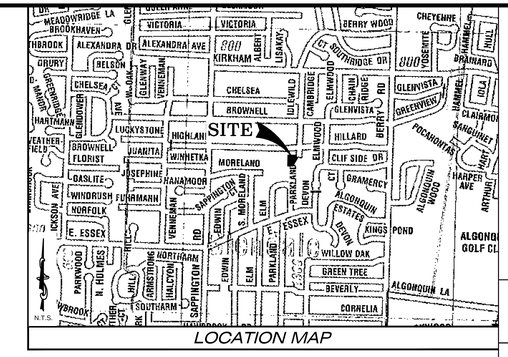
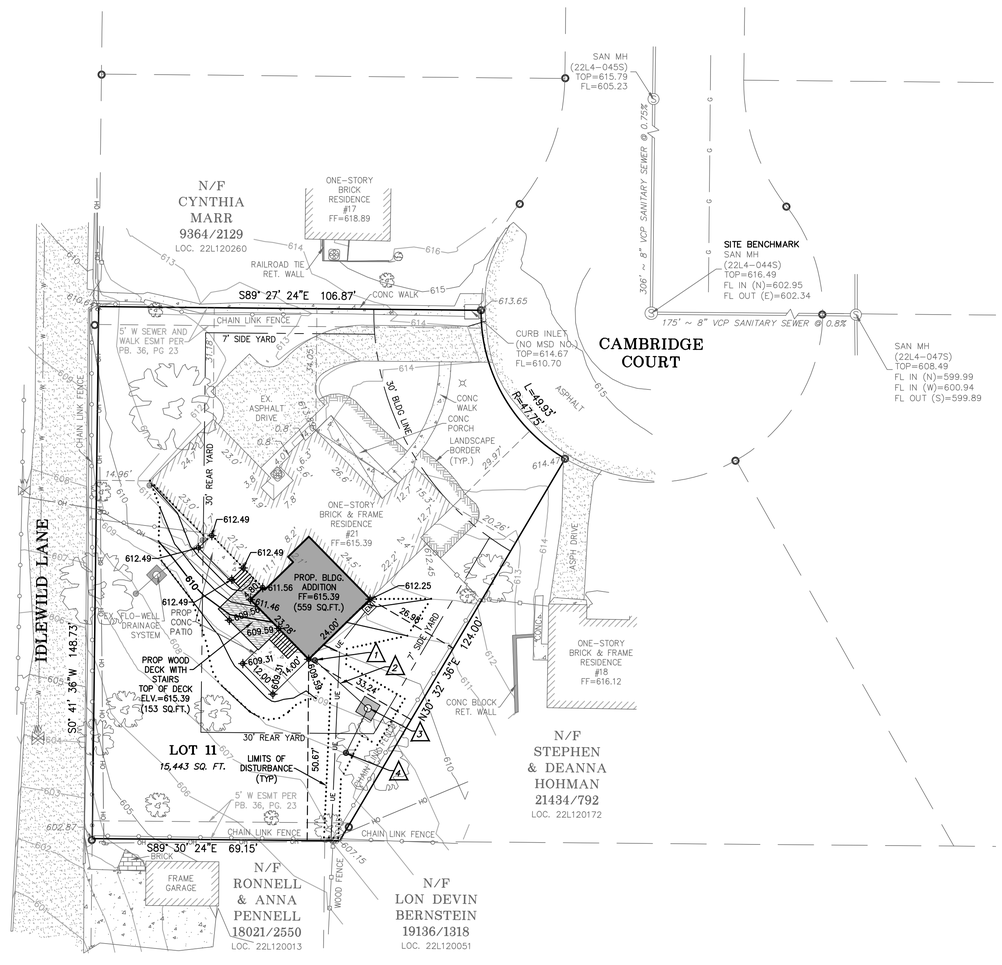




LOCATION MAP



Coverage Calculations				
Existing				
	Building	2,252		14.6%
	Pavement	1,819		11.8%
	Green Space	11,372		73.6%
	Total	15,443		
	Existing Impervious Coverage			26.4%
Proposed				
	Building	2,811		18.2%
	Pavement	2,019		13.1%
	Green Space	10,613		68.7%
	Total	15,443		
	Proposed Impervious Coverage			31.3%

Differential Runoff Calculations with pool						
Existing						
		Area (s.f.)	Area (Ac)	PI	Q	
	Building	2,252	0.052	3.54	0.18	cfs
	Pavement	1,819	0.042	3.54	0.15	cfs
	Green Space	11,372	0.261	1.7	0.44	cfs
	Total	15,443	0.355		**0.77**	cfs
Proposed						
	Building	2,811	0.065	3.54	0.23	cfs
	Pavement	2,019	0.046	3.54	0.16	cfs
	Green Space	10,613	0.244	1.7	0.41	cfs
	Total	15,443	0.355		**0.81**	cfs
	Differential Runoff =		**0.03**	cfs		

DEVELOPMENT NOTES:

1. Site Address:
   21 Caimbridge Ct
   Glendale, MO 63122
   Locator No. 22L120233

2. Owner Information:
   Nicholas C. & Merissa L. Doran
   21 Caimbridge Ct.
   Glendale, MO 63122
   Deed Book 22808 Page 2671

3. Area of Tract: 15,443 square feet or 0.35 acres, more or less.

4. Present Zoning: "R-2" Single Family Dwelling District (Glendale)

   "R-2" Single Family Dwelling District Dimensional Requirements

Front Yard Setback:	30 Feet (Zoning) 30 Feet (Platted)
Side Yard Setback:	7 Feet
Rear Yard Setback:	30 Feet
Minimum Site Area:	7,500 SQ.FT.

   * The client has requested a variance for the proposed garage.

   * Accessory Structure Requirements:
     Accessory buildings not exceeding twelve (12) feet in height which are not a part of or attached to the main building may be built in a rear yard within six (6) feet of the side or rear lot line; except that an accessory building abutting any alley may be built up to the street line if no portion of the building including eaves and doors shall encroach into the public right-of-way. In the case of a corner lot, no accessory building shall be closer to any street line than permitted for the main building in relation to the same street line. Accessory buildings which are not a part of the main building shall not occupy more than thirty percent (30%) of the required rear yard and shall not be closer than ten (10) feet to the building or to another accessory building. Accessory garages may be constructed to the height of twenty (20) feet and if it is necessary to match the roof pitch of the main residential structure, additional height may be permitted subject to a determination made by the Building Commissioner.

5. Utility Provider Districts:

		Situs Served
Water:	Missouri American Water	Yes
Sewer:	MSD	Yes
Telephone:	AT&T	Yes
Gas:	Spire	Yes
Electric:	Ameren UE	Yes
Fire District:	Glendale	
School District:	Kirkwood	

6. According to the FIRM Flood Insurance Rate Map 29183C0237 K Dated February 4, 2015, this development is located in Zone X unshaded, Areas determined to be outside the 0.2% chance annual floodplain.

7. This is not a boundary survey.

8. Existing conditions shown hereon represent the conditions found at the time of the survey performed on 3/28/18.

1. DOWNSPOUTS TO CONNECT TO ROOF DRAIN PIPE SYSTEM AND DISCHARGE INTO FLOW-WELL DRYWELL SYSTEM
2. ROOF DRAIN SYSTEM PIPING SHALL BE 4" PVC AT A MINIMUM OF 1% SLOPE
3. FLOW-WELL DRYWELL SYSTEM (5'LX5'WX4'D) TOP OF INSPECTION PORT=509.17
4. POP-UP EMITTER, TOP=608.07

PROJECT BENCHMARK:

St. Louis County Benchmark – "SL-48" NAVD 1988
Published Elev.=615.48
Collected Elev.=615.32

The station is in Section 31, T45N, R6E, 1.0± mile southeast of the MO Hwy 100 and US Hwys 61 & 67 intersection; 26.10 ft. north of the center line of driveway into the North Glendale School parking lot; 6.96 ft. NNE of the corner of the sidewalk; 6.51 ft. south of a chain link fence corner post; 22.9 ft. west of the center line of North Sappington Road; and 5 ft. south of a carsonite witness post.

SITE BENCHMARK:

Top of sanitary manhole (22L4-044S)

Top=616.49

Located approximately 50' E of curb inlet near the NE corner of subject property and approximately 46' NE of NW corner of driveway at #18 Cambridge Court.

SYMBOL LEGEND

×	FOUND CROSS	EB	ELECTRIC BOX	TV	CABLE TV BOX
○	FOUND IRON PIPE	EM	ELECTRIC METER		LIGHT STANDARD
●	SET IRON ROD		POWER POLE		CLEAN OUT
	BENCHMARK		GUY WIRE	S	SANITARY MANHOLE (EXISTING)
TS	TRAFFIC SIGNAL BOX	GM	GAS METER	D	STORM SEWER MANHOLE (EXISTING)
	PHONE BOX	GV	GAS VALVE	D	STORM SEWER DRAIN (EXISTING)
U	UTILITY MANHOLE		WATER METER		GRATE INLET (EXISTING)
	BOLLARD	WV	WATER VALVE		AREA INLET (EXISTING)
	MAILBOX		HYDRANT		GENERAL SURFACE DRAINAGE
	SIGN		WATER SHUT OFF	516	EXISTING CONTOUR
	POST		SPRINKLER HEAD		TREE LINE
	EXISTING SHRUB		IRRIGATION VALVE BOX	8" PVC	SAN. SEWER (EXISTING)
	EXISTING DECIDUOUS TREE	W	WELL	12" CMP	STORM DRAIN (EXISTING)
	EXISTING EVERGREEN TREE	TP	TEST HOLE		

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21 CAMBRIDGE COURT

SITE PLAN

SITE DEVELOPMENT PLAN

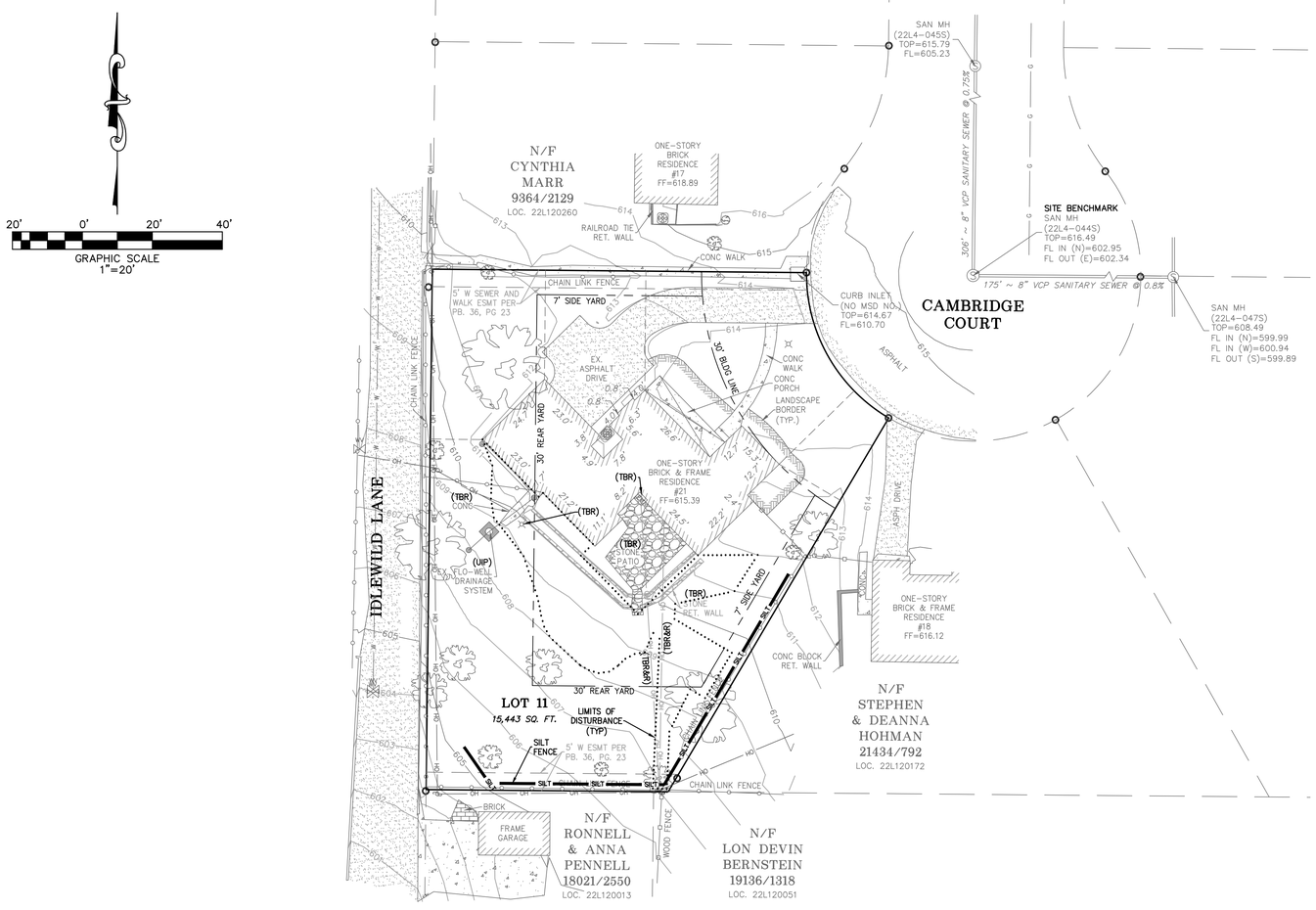
STATE OF MISSOURI
ROBERT S. TIEMANN
NUMBER PE-2016001308
PROFESSIONAL ENGINEER

Date: Oct 18, 2023
Robert Tiemann
License No. PE-2016001308
Civil Engineer

PROJECT NUMBER: 18-5023

DATE: 10/18/2023

DRAWN BY: MLP



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EXISTING CONDITIONS & DEMO PLAN

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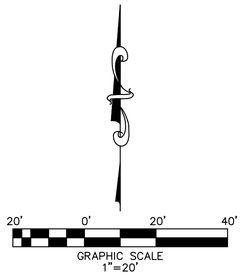
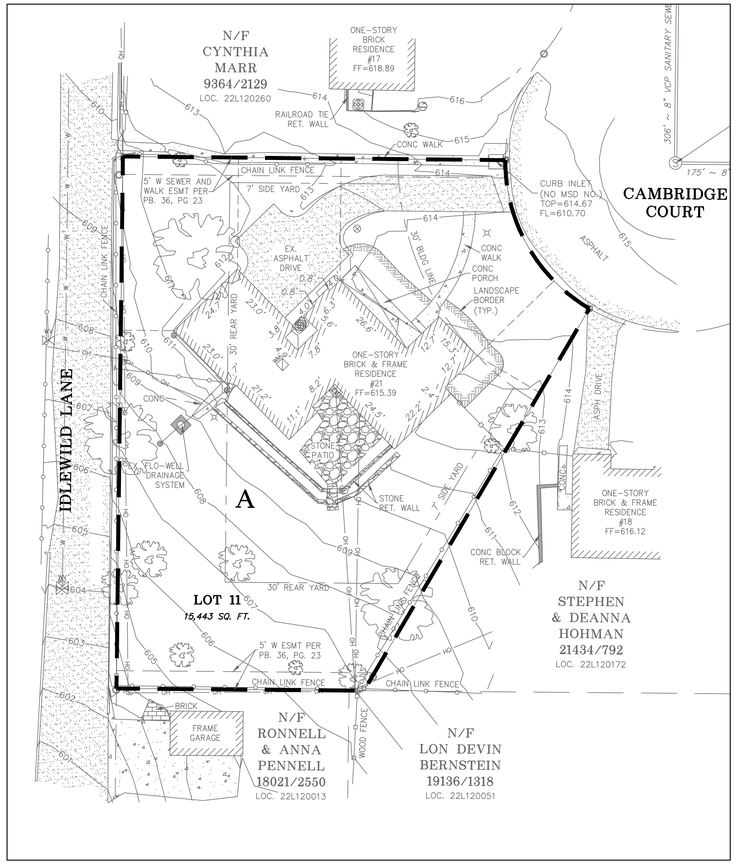
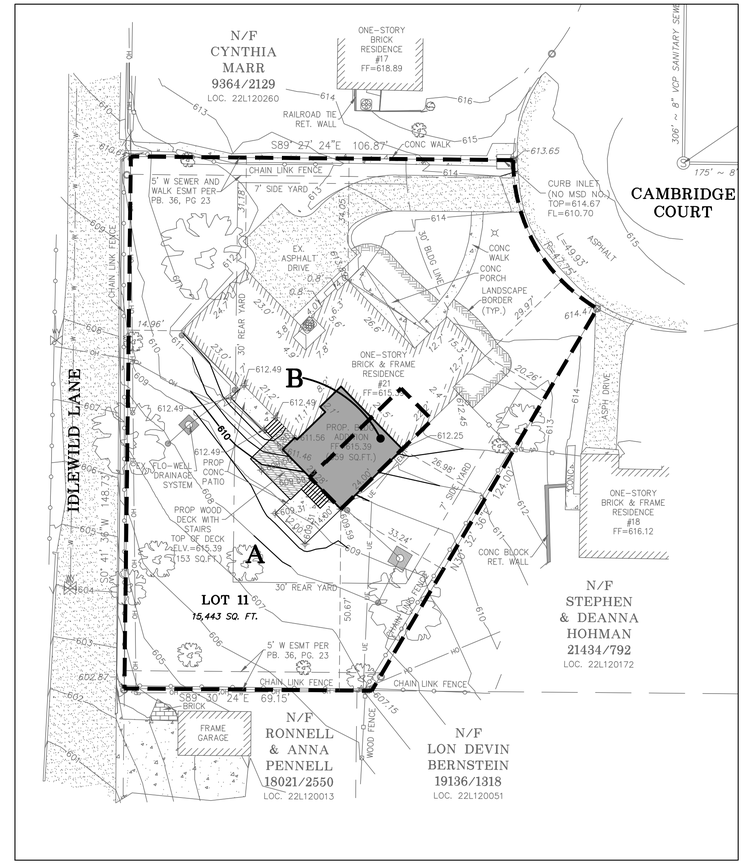




EXISTING DRAINAGE AREA

EXISTING DRAINAGE AREA									
DRAINAGE SHED	AREA (S.F./ACRE)		% PERVIOUS	% IMPERVIOUS	15yr	100yr	15yr CFS	100yr CFS	DISCHARGE
A	15,443	0.355	75	25	2.09	2.82	0.741	1.000	S & W PROPERTY LINES

* RUNOFF VOLUMES SHOWN HEREON ARE PER THE COMPONENT RATIONAL METHOD
* THE TIME OF CONCENTRATION IS ASSUMED AT 20min FOR THE 15yr-20min RAINFALL



PROPOSED DRAINAGE AREA

PROPOSED DRAINAGE AREA									
DRAINAGE SHED	AREA (S.F./ACRE)		% PERVIOUS	% IMPERVIOUS	15yr	100yr	15yr CFS	100yr CFS	DISCHARGE
A	15,167	0.348	70	30	2.19	2.95	0.763	1.027	S & W PROPERTY LINES
B	440	0.010	0	100	3.54	4.77	0.036	0.048	FLO-WELL SYSTEM

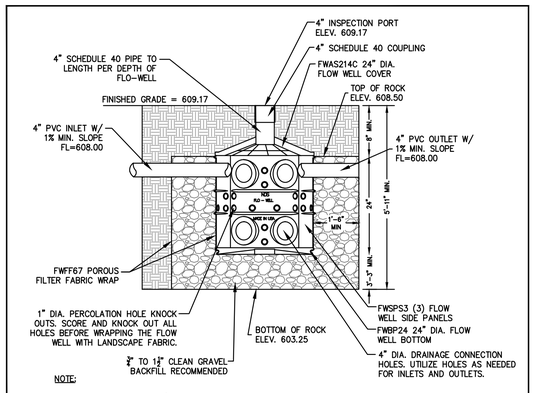
* RUNOFF VOLUMES SHOWN HEREON ARE PER THE COMPONENT RATIONAL METHOD
* THE TIME OF CONCENTRATION IS ASSUMED AT 20min FOR THE 15yr-20min RAINFALL

Differential Run-Off Delta Table					
DRAINAGE SHED	PRE CONST. cfs	POST CONST. cfs	DELTA cfs	CAPTURED cfs	DELTA discharge cfs
A	0.763	0.763	0.000	0.000	0.000
B	0.000	0.036	0.036	0.036	0.000
				0.036	0.000

* THE TOTAL SITE RUNOFF HAS BEEN INCREASED BY 0.000 cfs

DIFFERENTIAL RUN OFF MITIGATION CALCULATION

15yr-20min DIFFERENTIAL RUNOFF:	0.036	cfs									
20min DIFFERENTIAL VOLUME:	0.036	cfs	X	20	min	X	60	sec	=	43.20	C.F.
FIO-WELL DRY WELL SYSTEM:	1	units	X	6.28	C.F.	=	6.280	C.F.			
ROCK VOID STORAGE (LxWxD):	5	X	5	X	4	=	100.00	C.F.			
	100.00	C.F.	-	6.280	C.F.	X	40%	=	37.488	C.F.	
SYSTEM STORAGE:	6.280	C.F.	+	37.488	C.F.		=	43.77	C.F.		
STORM WATER MITIGATION EXCEEDED											



NOTE:

- MUST BE INSTALLED 10' AWAY FROM STRUCTURE OR FOUNDATION.
- FWAS24 KIT DOES NOT COME WITH FWPB24 BOTTOM.

NDS FLO-WELL GRAVEL INSTALLATION
N.T.S.

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DRAINAGE AREA MAPS

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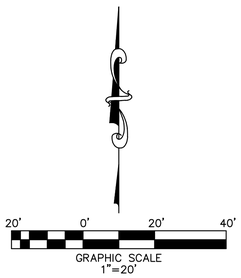

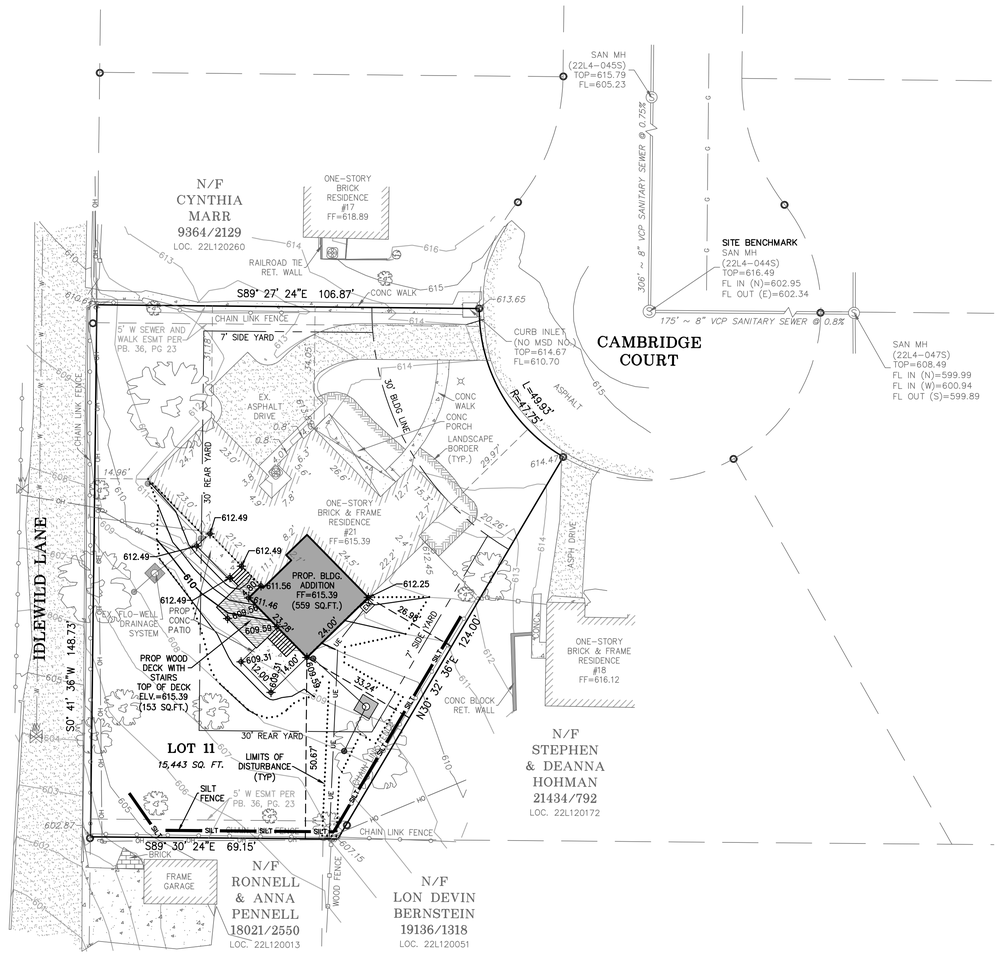

Note:

1. The proposed tree planting shown hereon are from the approved species list for the City of Glendale, MO.

2. Any viable tree to be removed measuring greater that 1 foot caliper should be replaced on site. The Overall measurement of all replacement trees must equal the same caliper of those removed.

Tree removal & replacement calculation as below:

Ex. Trees removed – 0
Ex. Trees greater than 1 foot removed – 0
Proposed Trees – 0

LANDSCAPE LEGEND

SYMBOL	COMMON NAME	QTY
	EXISTING DECIDUOUS	12

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LANDSCAPE & TREE REPLACEMENT PLAN

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