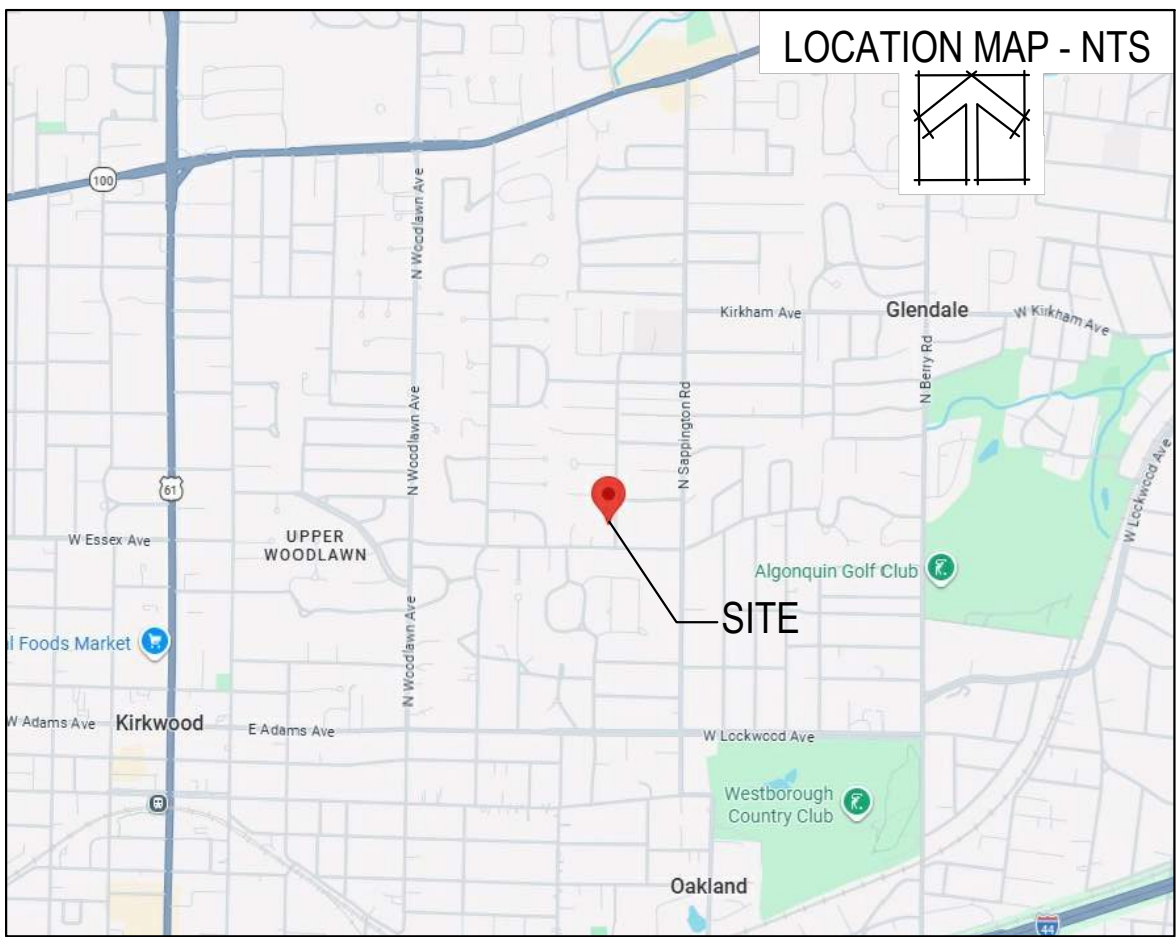




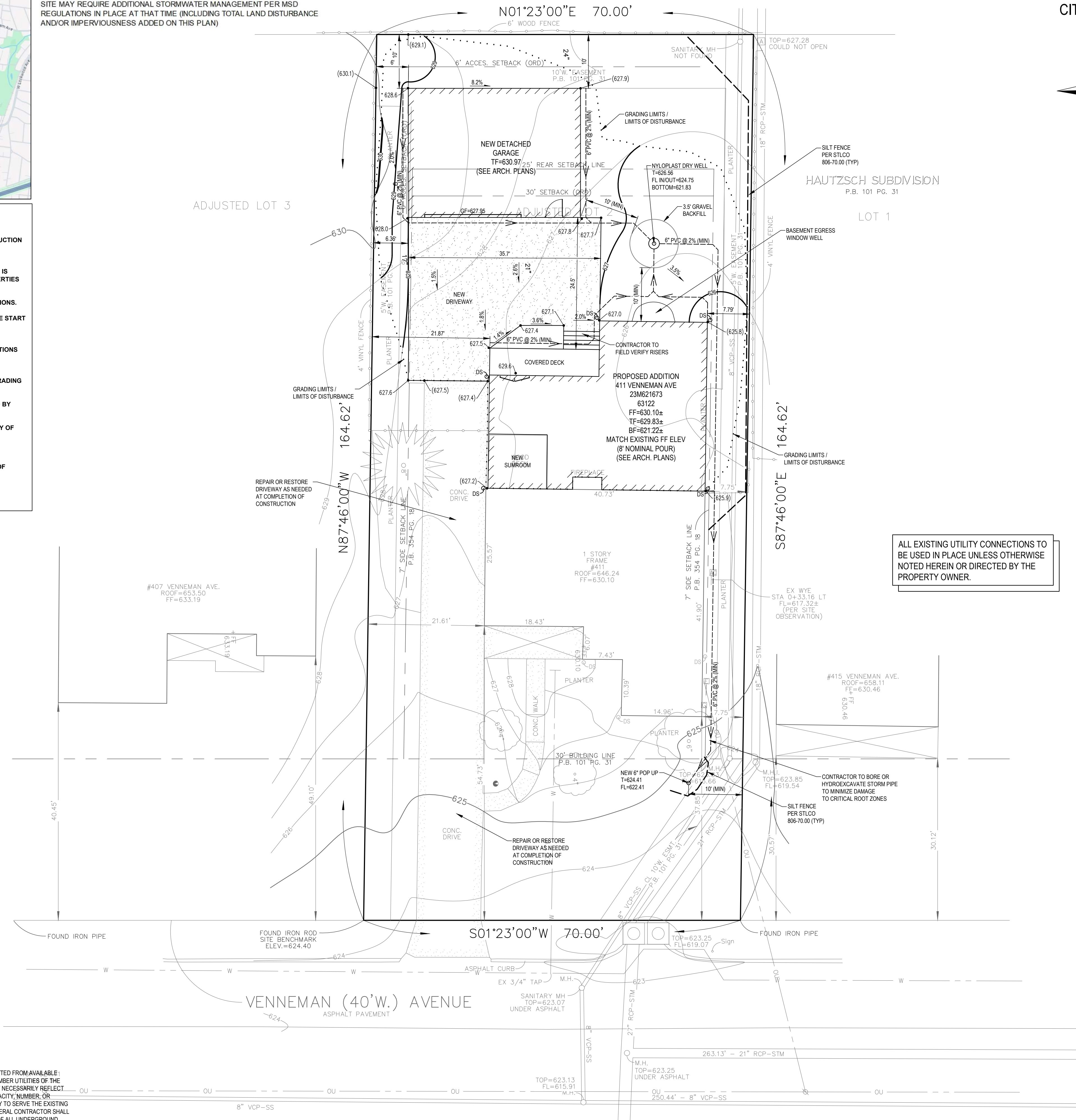
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- TOPOGRAPHIC SURVEY PERFORMED BY VOLZ INC DURING MAY 2026

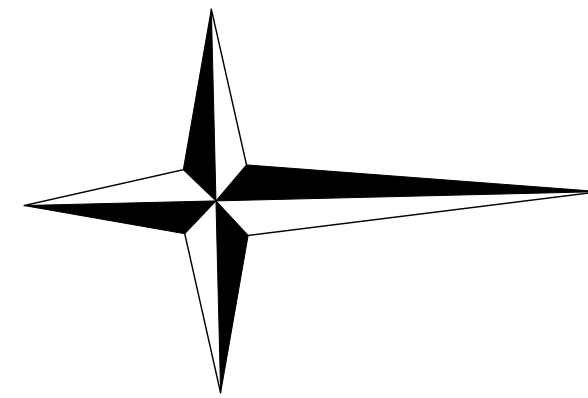
STORMWATER MANAGEMENT FUTURE DISTURBANCE NOTE:

AREA OF LAND DISTURBANCE = 4,473 SF = 0.10 AC
PROJECT RUNOFF DIFFERENTIAL = 0.11 CFS

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORMWATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THAT TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN)



A TRACT OF LAND BEING
ADJUSTED LOT 2 OF HAUTZSCH SUBDIVISION
BOUNDARY ADJUSTMENT PLAT
IN SECTION 3, TOWNSHIP 45 NORTH - RANGE 6 EAST
CITY OF GLENDALE, ST. LOUIS COUNTY, MISSOURI



SCALE IN FEET
1" = 10'

LEGEND

A.I.	AREA INLET
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BF	ELEVATION OF BASEMENT FLOOR
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UP	USE IN PLACE
-OU-	OVERHEAD UTILITIES
-UE-	UNDERGROUND ELECTRIC
-W-	WATER SERVICE
-G-	GAS SERVICE
-F-	FENCE
-X-	NEW CONC OR ASPH PAVEMENT
	NEW STRUCTURE

EXISTING IMPERVIOUS COVERAGE - LOT

TOTAL LOT AREA	11,522 SF
HOUSE / PORCH / DECK	1,559 SF
DRIVE / WALK / PATIO / SHED	1,420 SF
TOTAL IMPERVIOUS AREA	2,979 SF
IMPERVIOUS COVERAGE	25.9 %

PROPOSED IMPERVIOUS COVERAGE - LOT

TOTAL LOT AREA	11,522 SF
HOUSE / GARAGE / PORCHES	3,385 SF
DRIVE / WALKS	2,188 SF
TOTAL IMPERVIOUS AREA	5,573 SF
IMPERVIOUS COVERAGE	48.4 %
"DIST R2" ALLOWED COVERAGE	55.0 %

STORMWATER RUNOFF
DIFFERENTIAL CALCULATIONS

TOTAL SITE AREA	=	11,522 sf
EXISTING		
PERVIOUS AREA	=	8,543 sf
PERVIOUS PERCENTAGE	=	74.1%
15YR-20MIN PI FACTOR	=	1.70
PERVIOUS FLOWRATE (Q)	=	0.33 cfs
IMPERVIOUS AREA = 2,979 sf		
IMPERVIOUS PERCENTAGE	=	25.9%
15YR-20MIN PI FACTOR	=	3.54
IMPERVIOUS FLOWRATE (Q)	=	0.24 cfs
FLOWRATE (Q)	=	0.58 cfs
PROPOSED		
PERVIOUS AREA	=	5,949 sf
PERVIOUS PERCENTAGE	=	51.6%
15YR-20MIN PI FACTOR	=	1.70
PERVIOUS FLOWRATE (Q)	=	0.23 cfs
IMPERVIOUS AREA = 5,573 sf		
IMPERVIOUS PERCENTAGE	=	48.4%
15YR-20MIN PI FACTOR	=	3.54
IMPERVIOUS FLOWRATE (Q)	=	0.45 cfs
FLOWRATE (Q)	=	0.69 cfs
DIFFERENTIAL FLOWRATE		
PROP Q - EX Q	=	0.11 cfs

DIFFERENTIAL RUNOFF MITIGATION CALCULATIONS

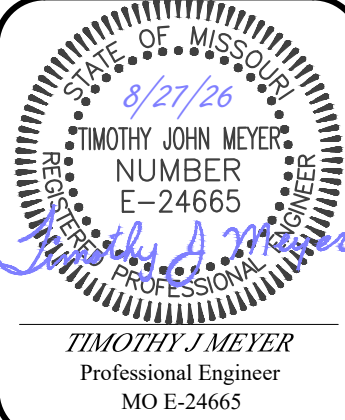
15 YR-20 MIN DIFFERENTIAL RUNOFF = 0.11 CFS
20 MIN DIFFERENTIAL VOLUME = 0.11 x 20 x 60 = 132 CF
DRY WELL TRIBUTARY RUNOFF = 0.11 CFS
20 MIN TRIBUTARY VOLUME = 0.11 x 20 x 60 = 132 CF
0.11 CFS REQUIRED <= 0.11 CFS TRIBUTARY
132 CF REQUIRED <= 134.84 CF TOTAL DESIGN VOLUME
EXCESS TRIBUTARY FLOWS TO BYPASS THROUGH DRY WELL, SEE SHEET C5 FOR DRY WELL DETAIL

St. Louis County Benchmark 14-353 Elev = 619.05 FIPS (NAVD88)
"L" on the northwest corner of the first concrete step at #500 Sappington Road;
(Glendale Presbyterian Church) 41' east of the centerline of Sappington Road
and 15' north of the centerline of Winnetka Lane extended.

Site Benchmark - Elevation 624.40, Top of iron rod found near the Southeast
corner of 411 Venneman Avenue.
MSD BASEMAP 23M MSD RECORD # XXMSD-00XX

MATT GALAKATOS

ENGINEERING
LAND PLANNING
LAND SURVEYING
TRANSPORTATION
CONSULTING
VOLZ
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10849 Indian Head Trl. Blvd.
St. Louis, MO 63125
314.426.6212 Main/314.890.1250 Fax
www.volzinc.com
Authority #2000
Copyright © 2026 VOLZ INCORPORATED
mgalakatos@gmail.com



GALAKATOS ADDITION
411 VENNEMAN AVE
GLENDALE, MO 63122

SITE & GRADING PLAN

Designed By: EWV

Drawn By: EWV

Checked By: T.M

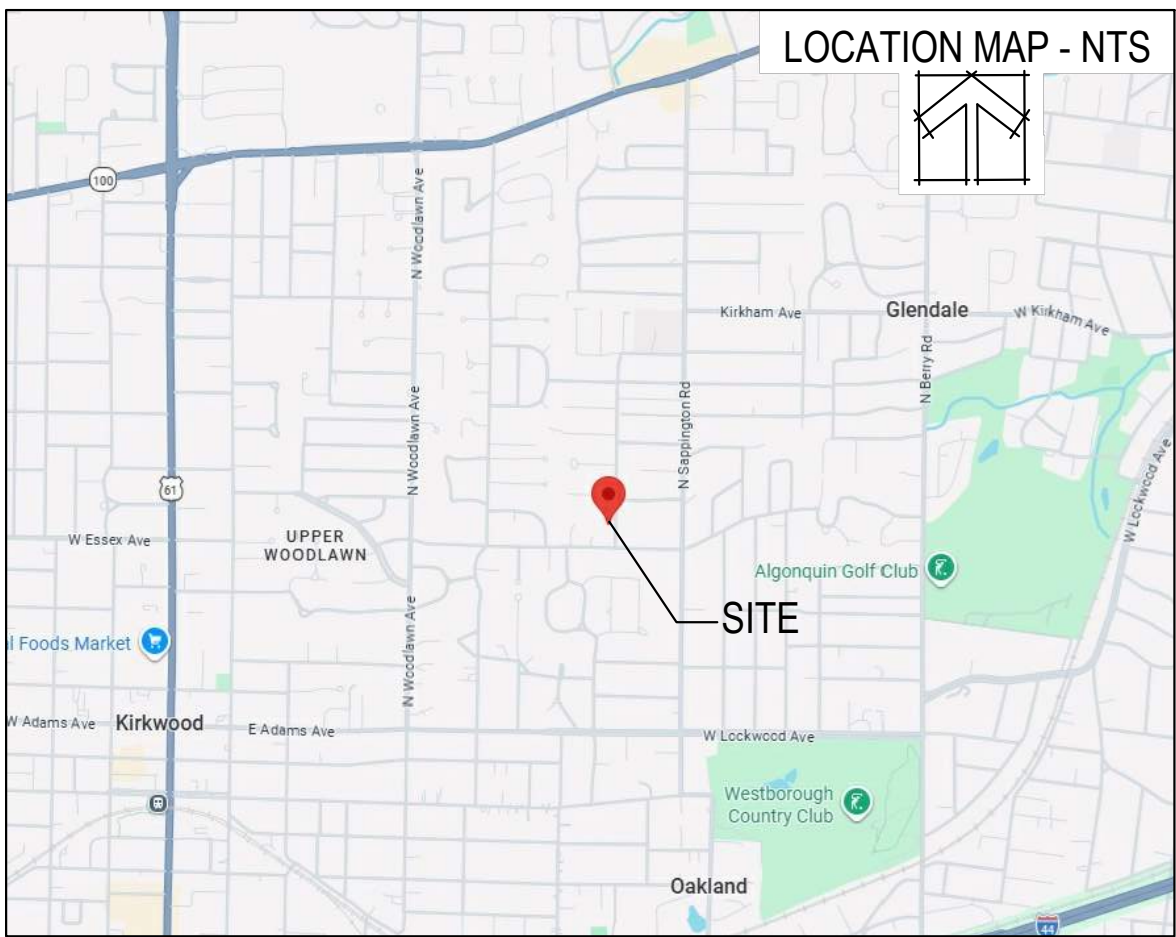
Base Map No. 23M

MSD Record # XXMSD-00XX

Project # 25134-0

8/25/26

C7

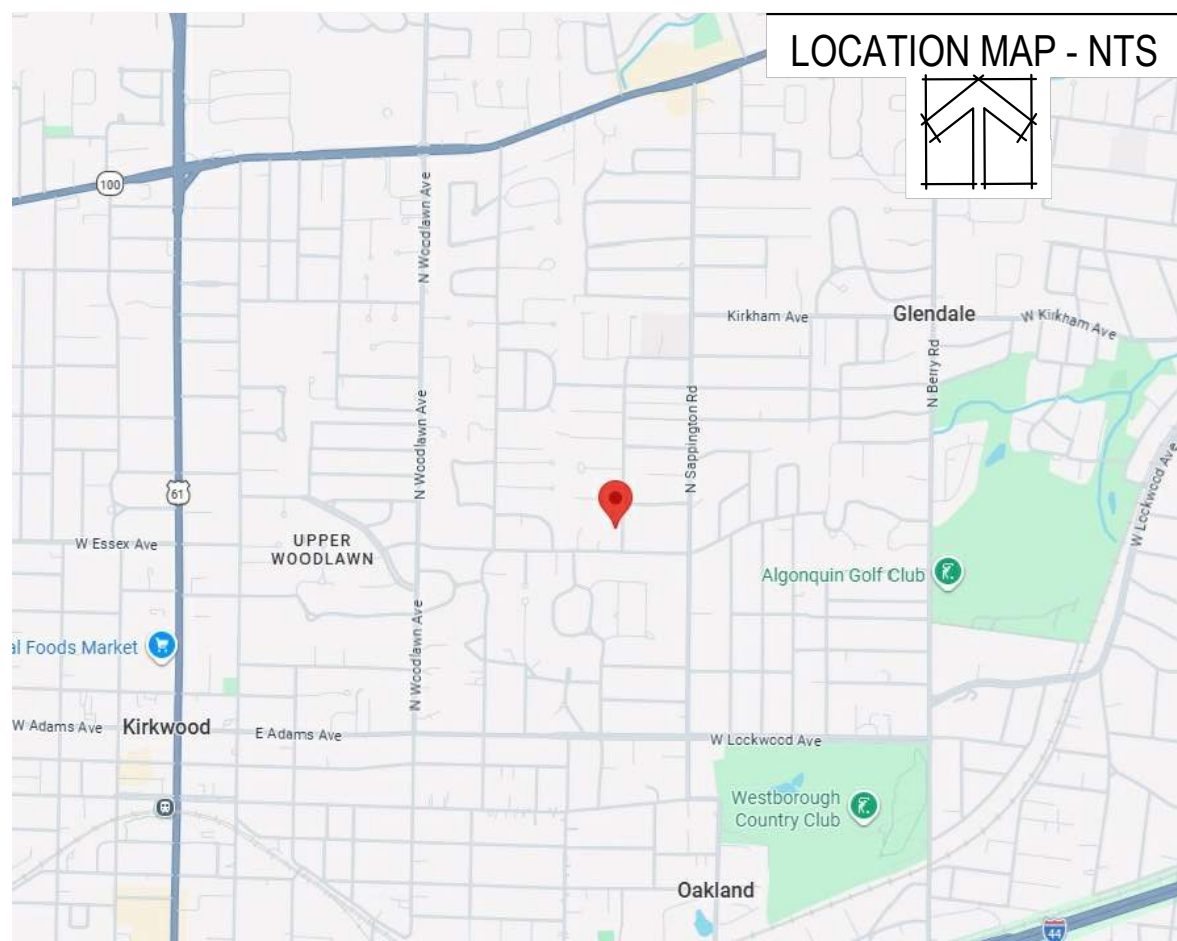


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20 MIN DIFFERENTIAL VOLUME = 0.11 x 20 x 60 = 132 CF

DRY WELL TRIBUTARY RUNOFF = 0.11 CFS
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ADJUSTED LOT 3

EXISTING IMPERVIOUS COVERAGE - LOT

TOTAL LOT AREA	11,522 SF
HOUSE / PORCH / DECK	1,559 SF
DRIVE / WALK / PATIO / SHED	1,420 SF
TOTAL IMPERVIOUS AREA	2,979 SF
IMPERVIOUS COVERAGE	25.9 %

PROPOSED IMPERVIOUS COVERAGE - LOT

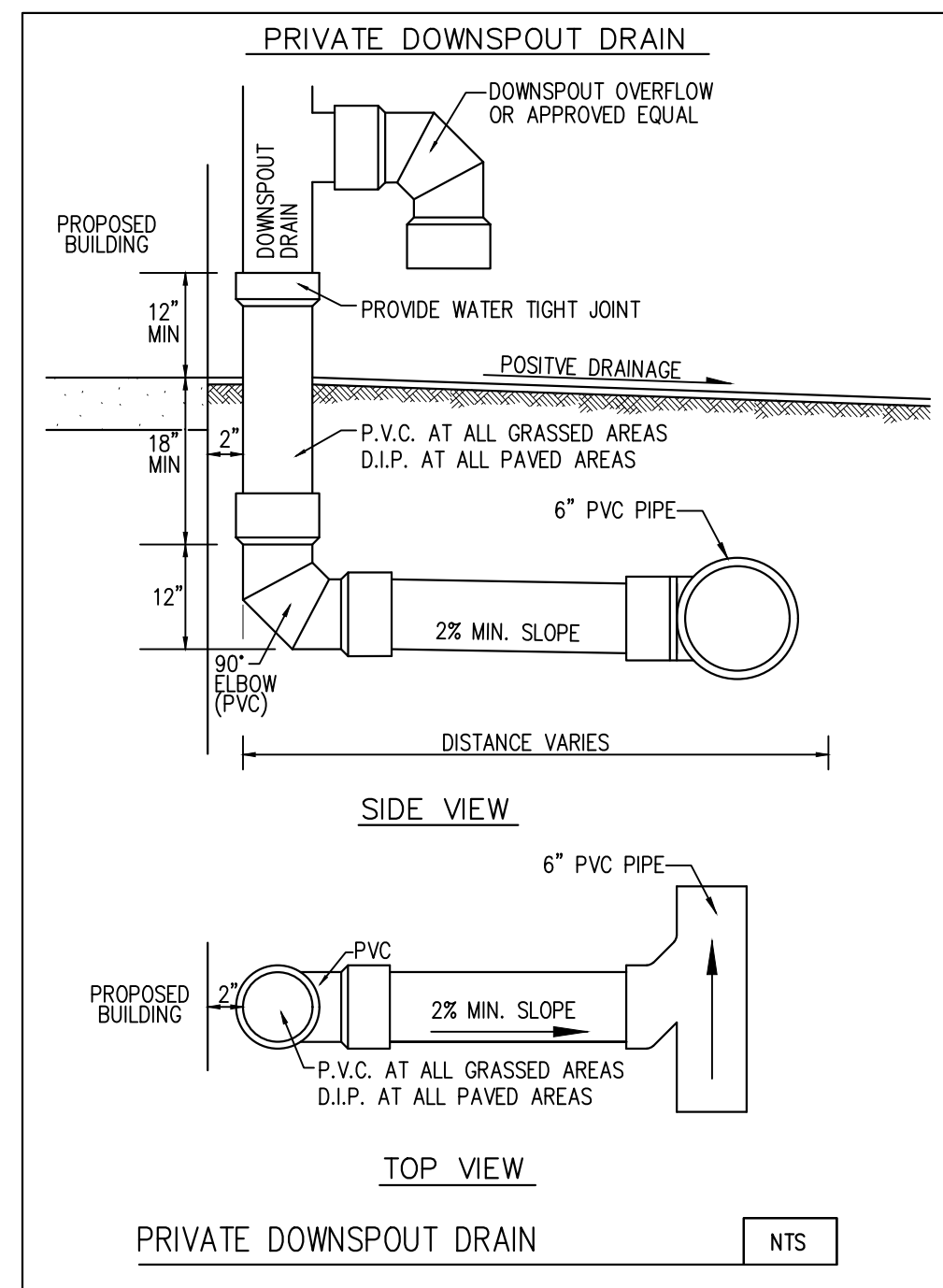
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DRIVE / WALKS	2,188 SF
TOTAL IMPERVIOUS AREA	5,573 SF
IMPERVIOUS COVERAGE	48.4 %
"DIST R2" ALLOWED COVERAGE	55.0 %

PROP ROOF AREAS TRIBUTARY TO DRY WELL

TOTAL = 1,287 SF = 0.03 AC
IMPERV = 100%
PERV = 0%
15YR-20MIN @ 100%
0.03 AC x 3.54 = 0.11 CFS
100YR-20MIN @ 100%
0.03 AC x 4.77 = 0.14 CFS

PROP ONSITE TRIBUTARY TO VENNEMAN AVENUE

TOTAL = 10,235 SF = 0.23 AC
IMPERV = 38%
PERV = 62%
15YR-20MIN @ 40%
0.23 AC x 2.39 = 0.55 CFS
100YR-20MIN @ 40%
0.23 AC x 3.22 = 0.74 CFS



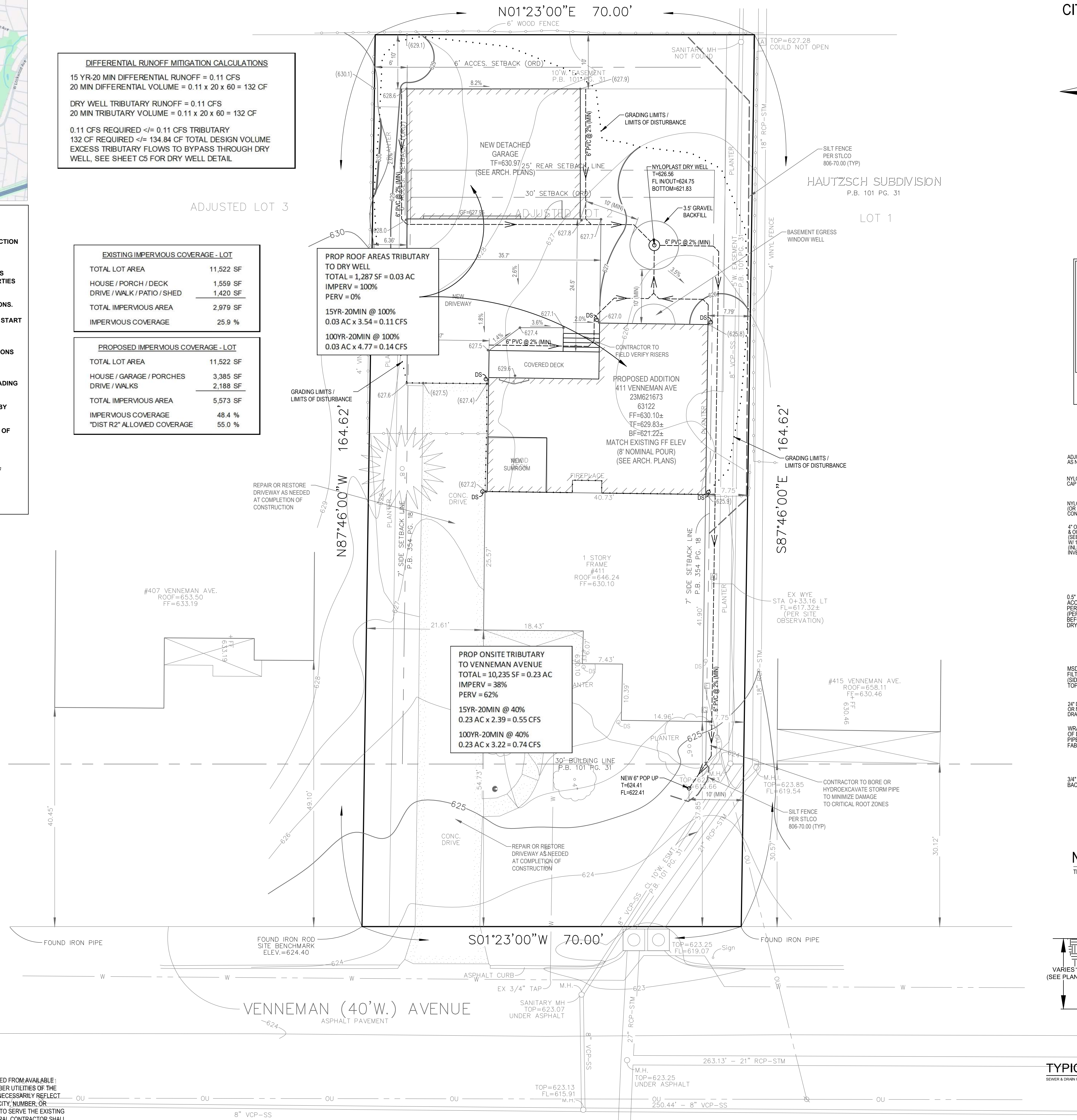
CALL MISSOURI ONE CALL SYSTEMS INC.

TWO FULL DAYS IN ADVANCE
OF STARTING WORK

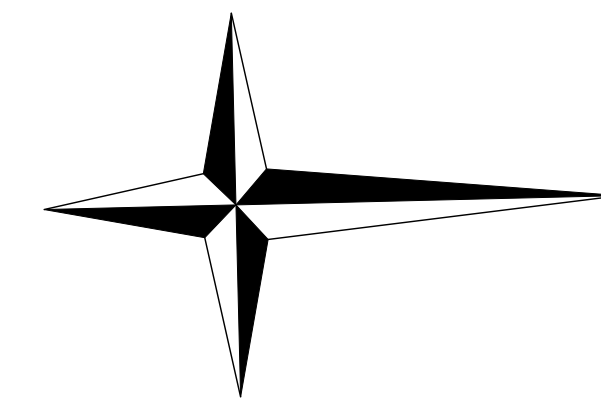


MISSOURI ONE-CALL 1-800-344-7483

THE UNDERGROUND UTILITIES SHOWN HEREIN WERE PLOTTED FROM AVAILABLE INFORMATION AND FIELD MARKINGS PROVIDED BY THE MEMBER UTILITIES OF THE MISSOURI ONE CALL SYSTEM (1-800-DIG-RITE), AND DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NONEXISTENCE, SIZE, TYPE, CAPACITY, NUMBER, OR LOCATION OF THESE OR OTHER UTILITIES, NOR THE ABILITY TO SERVE THE EXISTING OR INTENDED USES OF THIS OR ADJACENT SITES. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITIES IN THE FIELD, SHOWN OR NOT SHOWN, PRIOR TO ANY GRADING, EXCAVATION, OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319, RSMO.



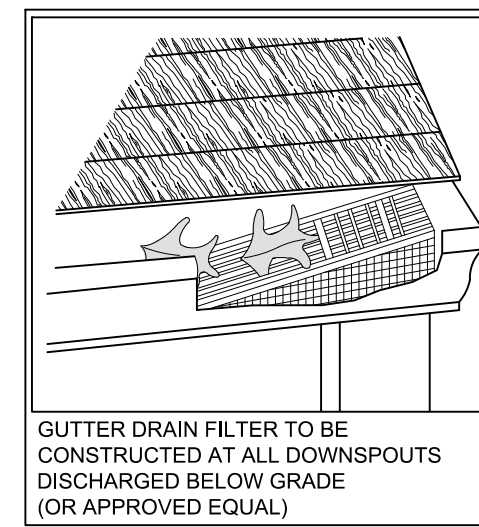
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BOUNDARY ADJUSTMENT PLAT
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CITY OF GLENDALE, ST. LOUIS COUNTY, MISSOURI



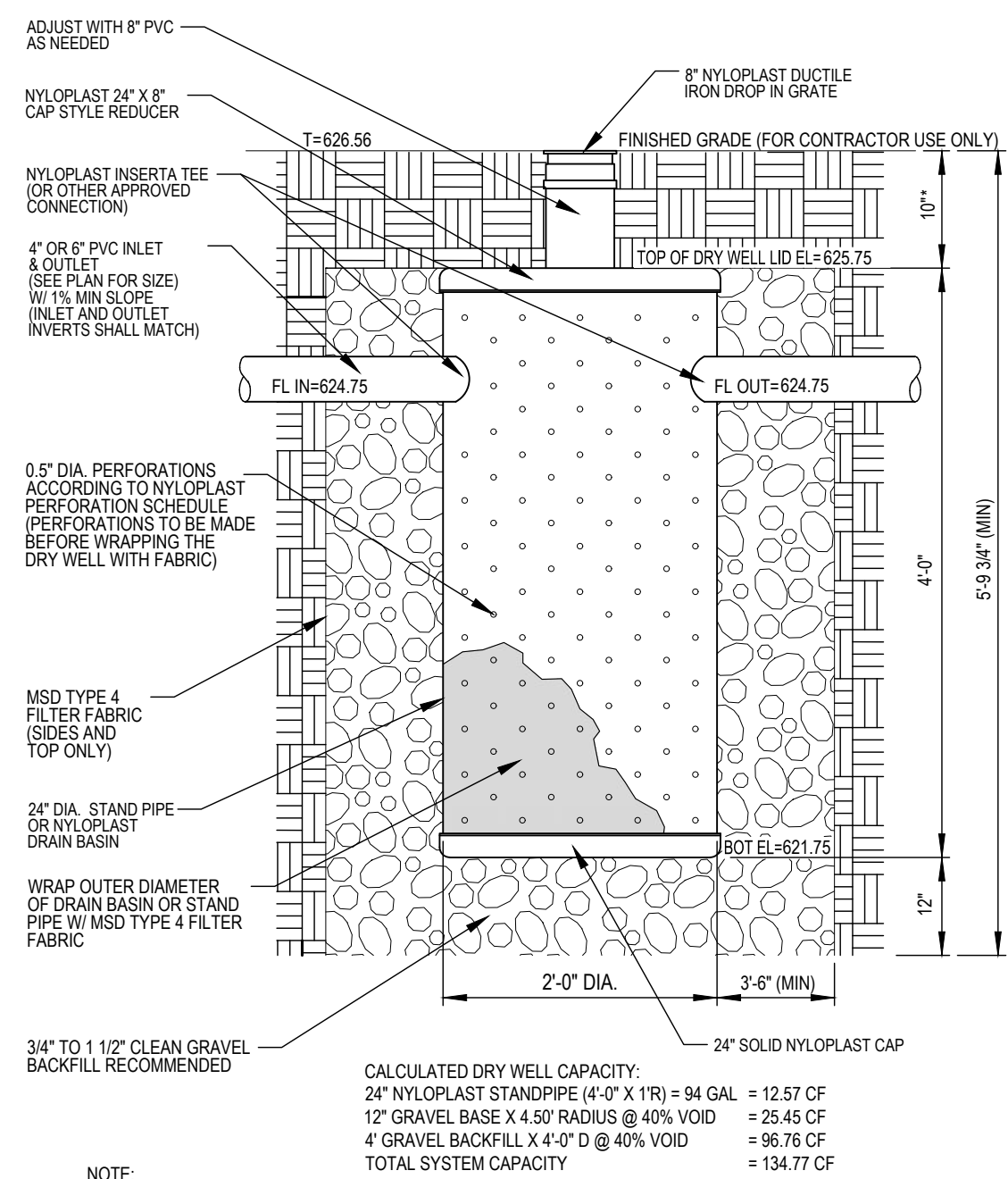
10' 0 10' 20'
SCALE IN FEET
1" = 10'

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-UE-	UNDERGROUND ELECTRIC
-W-	WATER SERVICE
-G-	GAS SERVICE
-X-	FENCE



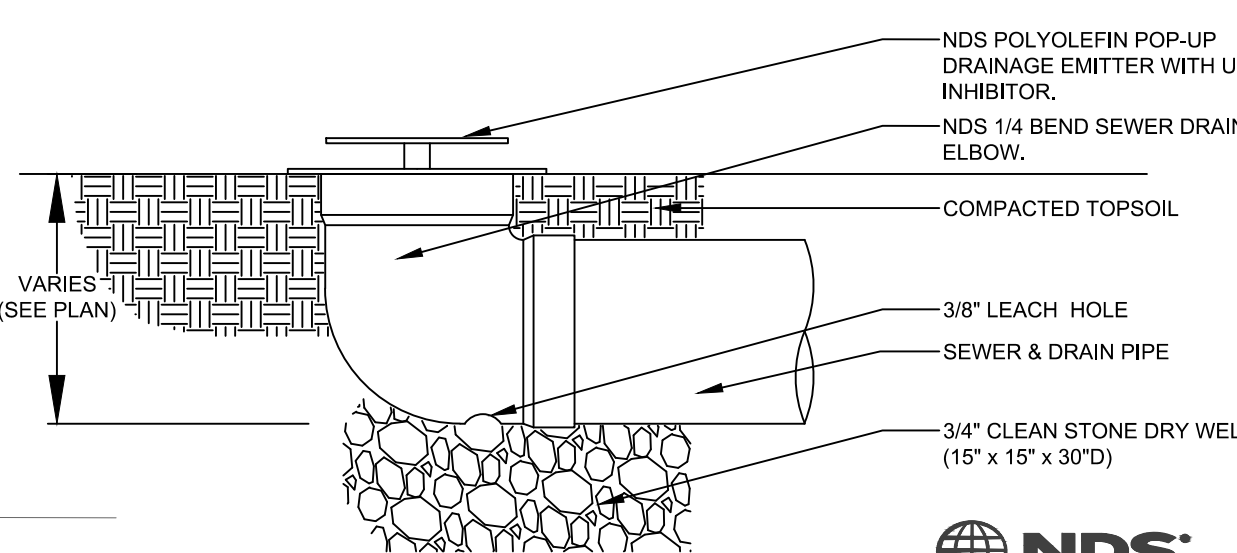
GUTTER DRAIN FILTER TO BE
CONSTRUCTED AT ALL DOWNSPOUTS
(OR APPROVED EQUAL)



NOTE:
• MUST BE INSTALLED 10' MIN. AWAY FROM STRUCTURE OR FOUNDATION.
• REFERENCE NYLOPLAST.COM FOR INDIVIDUAL COMPONENTS.
• CONTRACTOR TO FIELD ADJUST COVER DEPTH AS REQUIRED TO MAINTAIN MINIMUM 9" COVER OVER STANDPIPE AND CAP.

NYLOPLAST DRY WELL

TRAFFIC RATED APPLICATIONS SHALL INCLUDE AN 18" X 18" CONCRETE COLLAR AROUND DROP IN GRATE AT FINISHED GRADE



TYPICAL POP-UP DRAINAGE EMITTER



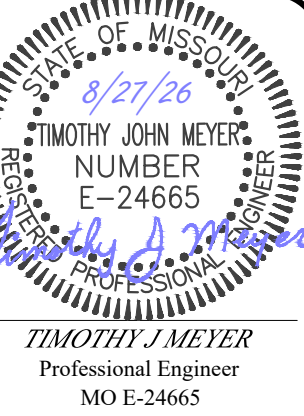
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MSD BASEMAP 23M MSD RECORD # XXMSD-00XXX

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314.426.6212 Main 314.890.1250 Fax
www.volzinc.com
Author: J. Meyer
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GALAKATOS ADDITION
411 VENNEMAN AVE
GLENDALE, MO 63122

STORMWATER MANAGEMENT PLAN

Base Map No. 23M
MSD Record # XXMSD-00XXX
Project # 25194-0

Designed By: EWV
Drawn By: EWV
Checked By: T.M.

8/25/26
C3