

DRAINAGE PLAN

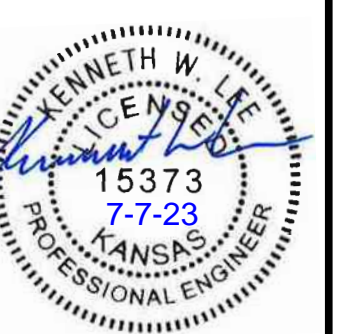
# ARTHUR HEIGHTS ESTATES

BEL AIRE, SEDGWICK COUNTY, KANSAS



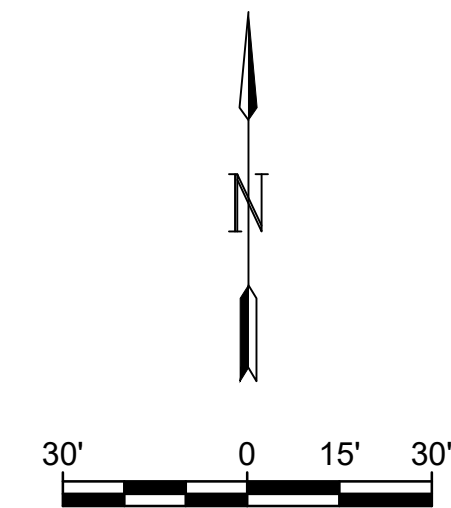
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Suite 130  
Wichita, Kansas 67206



#### NOTES

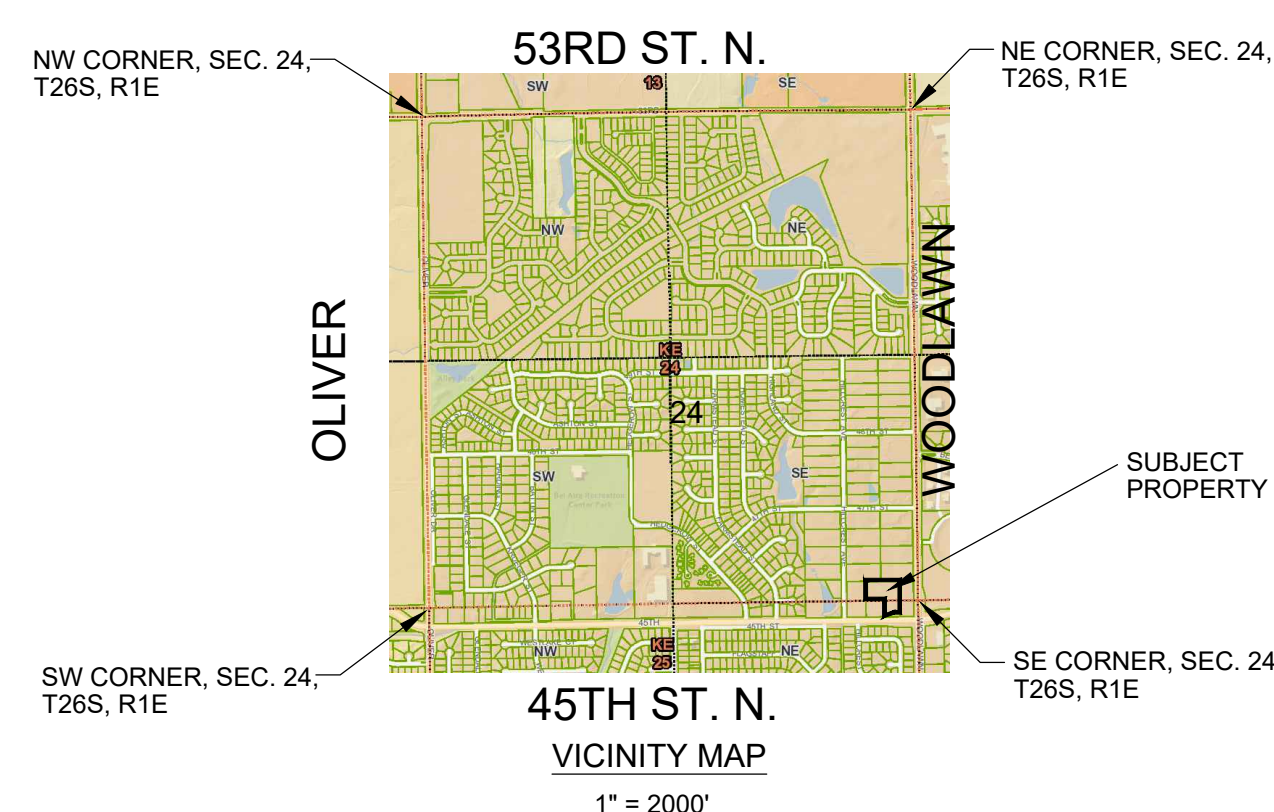
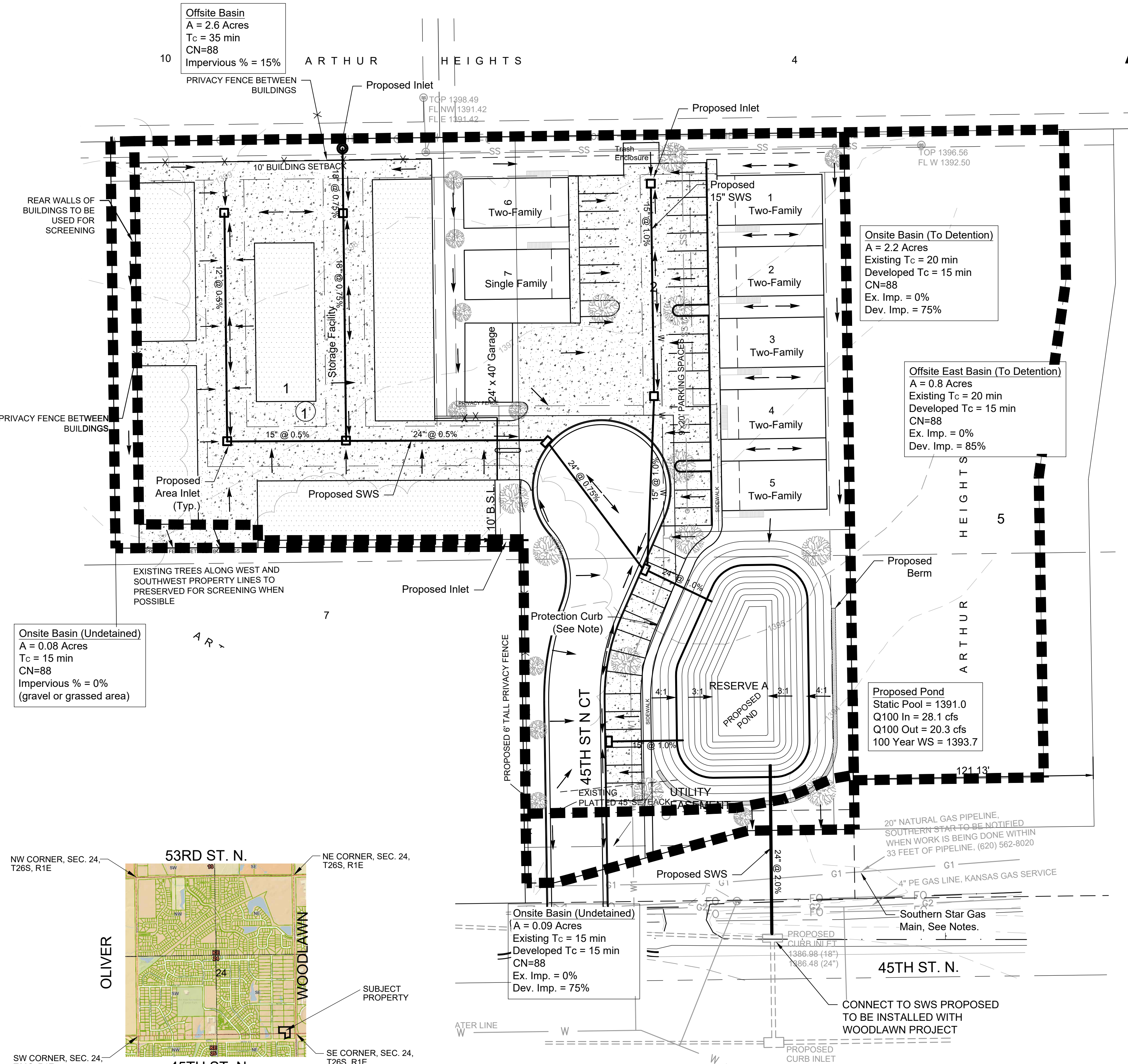
- The on-site soils are Rosehill Silty Clay (Hydrologic Soil Group D).
- Detention Pond shall provide detention for this parcel and adjacent parcel.
- Pond will require a berm with a 1394.7 Top Elevation
- Storage Building Roofs shall be designed to drain into the interior of the site and into the proposed storm sewer system.
- Hydroexcavation in coordination with Southern Star will be performed during the design process to determine best means for SWS crossings. A siphon will be incorporated if necessary to provide necessary vertical clearance.
- Protection curb to be installed on east side of sidewalk where adjacent to pond.



#### Runoff Summary

Design Storm	North Offsite Basin (cfs)	Onsite Undetained Developed (cfs)	Onsite Undetained Existing (cfs)	Onsite Detained Basin Developed (cfs)	Onsite Existing (cfs)	Offsite East Basin Existing (cfs)	Offsite East Basin Developed (cfs)	Total to Detention (cfs)	Pond Outflow Developed (cfs)	Existing Flow Woodlawn Inlet (cfs)	Total Site Developed (cfs)	Total Site Existing (cfs)
2 year	3.9	0.6	0.4	5.9	4.1	1.5	2.2	11.3	8.0	7.8	8.2	9.6
10 year	6.8	0.9	0.6	9.2	7.0	2.6	3.4	18.3	13.7	13.6	14.0	16.7
25 year	8.2	1.1	0.7	10.7	8.3	3.0	3.9	21.5	15.8	16.1	16.1	19.9
100 year	11.0	1.4	1.0	13.8	11.1	4.0	5.0	28.1	20.3	21.6	20.8	26.6

● BENCHMARK:  
CHISELED SQUARE WITH DIVOT ON THE CONCRETE  
TRANSFORMER PAD IN LOT 2, BLOCK 1, NORTH  
WOODLAWN SECOND ADDITION, SEDGWICK COUNTY,  
KANSAS, 91' W. AND 72' S. OF THE CENTER OF  
INTERSECTION OF 45TH ST. N. AND WOODLAWN  
ELEVATION = 1393.91 (NAVD88, G18)



REV.	DATE	DESCRIPTION	BY



CITY OF BEL AIRE  
KANSAS

ARTHUR HEIGHTS PUD  
AMENDMENT  
DRAINAGE CONCEPT

JOB NO.:  
DATE:  
DESIGNED BY:  
DRAWN BY:

BAR IS ONE INCH ON  
ORIGINAL DRAWING  
0 1' IF NOT ONE INCH ON THIS SHEET,  
ADJUST SCALES ACCORDINGLY.

DRAWING NUMBER

SHEET  
NUMBER