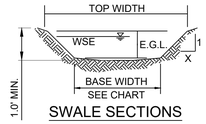
	ENGINEERED CHANNELS														
LOCATION	SECTION	DRAINAGE AREA (AC.)	Q100 (CFS)	Q10 (CFS)	DESIGN OVERFLOW FORMULA	DESIGN OVERFLOW (CFS)	BED SLOPE (%)	SIDE SLOPE (X:1)	BASE WIDTH (FT)	CROSS SECTION AREA (FT^2)	TOP WIDTH (FT)	NOMINAL DEPTH (FT.)	AVERAGE VELOCITY (FPS)	VELOCITY HEAD (FT.)	EGL (FT.)
LOT 25	A	1.25	10.64	6.06	$Q_{100(A)}$	10.64	2.40	5.00	6.00	5.05	11.70	0.38	3.50	0.19	0.57

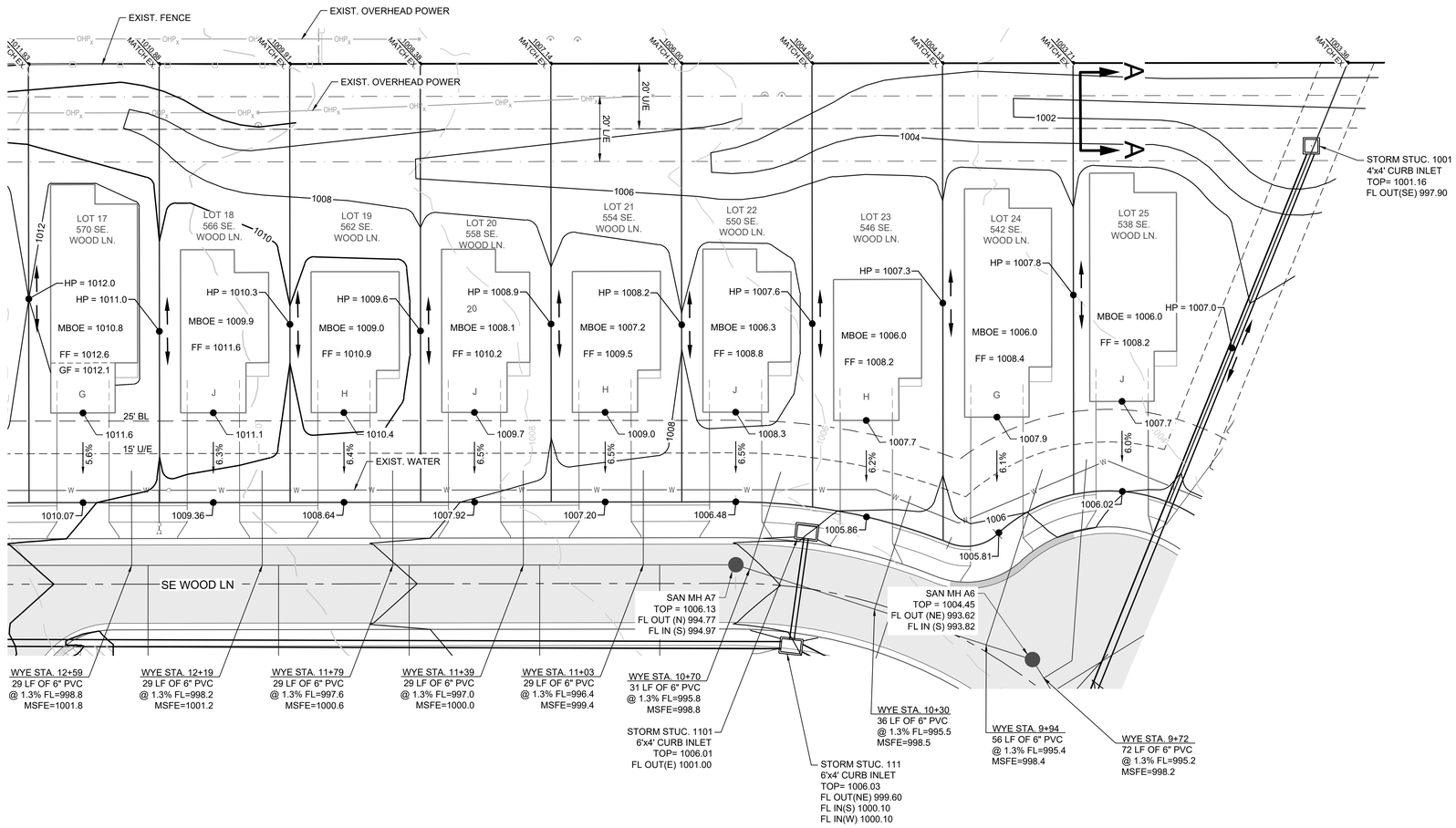
NOTES:

1. MBOE = MINIMUM BUILDING OPENING ELEVATION FOR HOUSES ADJACENT TO ENGINEERED OVERFLOW SWALES SHALL BE A MINIMUM OF 2 FEET ABOVE THE WATER SURFACE ELEVATION FOR THE 1% CHANCE STORM EVENT. APPROVED INDIVIDUAL LOT PLOT PLANS MAY ALTER THE CONSTRUCTED SWALES IN ELEVATION (CONTOUR) FROM THE GRADING PLAN AS LONG AS THE MBOE IS ADJUSTED ACCORDING TO THE ABOVE CRITERIA.
2. EGL = ENERGY GRADE LINE (100 YR)
3. MWSE = MAXIMUM WATER SURFACE ELEVATION (100 YR)
4. MBOE'S ADJACENT TO SUMPED AREA INLETS SHALL BE A MINIMUM OF 1' ABOVE TOP OF ADJACENT BERM.



SWALE SECTIONS

RUNOFF CALCULATIONS:
Q = K * C * I * A
K_{100} = 1.25 K_{10} = 1.0 C = 0.51
I_{10} = 7.35 I_{100} = 10.32
VELOCITY HEAD = (VELOCITY)^2 / 64.4
EGL = DEPTH + VELOCITY HEAD



NOTES:

1. THIS PLOT PLAN WAS PREPARED FOR FOUNDATION CONSTRUCTION ONLY.
2. BUILDER IS REQUIRED TO VERIFY ALL DIMENSIONS, GRADES, EXISTING UTILITIES AND ADEQUATE FALL TO SEWER PRIOR TO CONSTRUCTION.
3. WALL HEIGHTS AND LOCATIONS SHOWN ARE APROXIMATE. BUILDER TO VERIFY WALL HEIGHTS AND LOCATIONS WITH EXCAVATOR AND FOUNDATION CONTRACTOR.
4. ONLY PLATTED EASEMENTS HAVE BEEN SHOWN. NO TITLE INFORMATION WAS FURNISHED, THERFORE, NOT RESPONSIBLE FOR UNPLATTED EASEMENTS.
5. DRIVEWAY ALIGNMENT SHOWN IS CONCEPTUAL IN NATURE AND IS SUBJECT TO CHANGE DUE TO CITY REQUIREMENTS.
6. STREET GRADES AND FRONT LOT CORNER GRADES ARE PROPOSED. RE: BLACKWELL RESERVE STREET AND STORM SEWER PLANS.
7. PROPOSED FINISHED DIRT GRADE ADJACENT TO STRUCTURES SHALL BE A MINIMUM OF 6" BELOW TOP OF SLAB.

LEGEND:

FF	FINISHED FLOOR
TF	TOP OF FOUNDATION
BF	BASEMENT FLOOR
GF	GARAGE FLOOR - AT GARAGE STEPS
EX	EXISTING
PR	PROPOSED
HP	HIGH POINT
TW	TOP OF WALL
BW	BOTTOM OF WALL
1000	EXISTING CONTOUR
1000	PROPOSED CONTOUR (FINISHED GRADE)

MO GRS BENCHMARK:

STATION NAME - JA-90

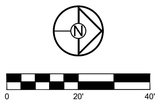
KC METRO ALUMINUM GRS DISK SET IN CONCRETE STAMPED "JA-90, 1988" LOCATED NEAR THE INTERSECTION OF LANGSFORD ROAD AND OLD LANGSFORD ROAD, 43 FEET SOUTHEAST OF THE CENTER OF LANGSFORD ROAD AND 32 FEET NORTH OF THE CENTER OF OLD LANGSFORD ROAD.
N:1001052.8503, E:2845604.8272

ELEV. 997.045

PROJECT BENCHMARK:

"SQUARE" CUT IN TOP OF CONCRETE STORM MANHOLE
STORM MANHOLE IS LOCATED APPROX. 130 FEET EAST OF THE INTERSECTION OF SE JOEL AVE & BLUE PARKWAY AND 26 FEET SOUTH OF THE CENTERLINE OF BLUE PARKWAY.
N:996874.9690, E:2840937.1365

ELEV. 1005.719



SCALE: 1" = 20'

SCHLAGEL
ENGINEERS PLANNERS SURVEYORS LANDSCAPE ARCHITECTS
14920 W. 107th Street • Lenexa, Kansas 66215
(913) 492-5158 • Fax (913) 492-8400
WWW.SCHLAGELASSOCIATES.COM
Missouri State Certificates of Authority
#E2000003800-F #LA2001005237 #LS2000008859-F

PREPARED BY:

STATE OF MISSOURI
MARK ALLEN BREUER
NUMBER PE-2009007268
06.26.2025
PROFESSIONAL ENGINEER

SCHLAGEL & ASSOCIATES, P.A.

BLACKWELL RESERVE PLOT PLANS

LEE'S SUMMIT, MO

REVISION DATE	DESCRIPTION
1 06/17/25	PRODUCT REVISION
2	
3	
4	
5	
6	
7	
8	

DRAWN BY: MWM
CHECKED BY: MAB
DATE PREPARED: 6/27/25
PROJ. NUMBER: 22-093

PLOT PLANS
PHASE 2
GROUP 1

SHEET
1