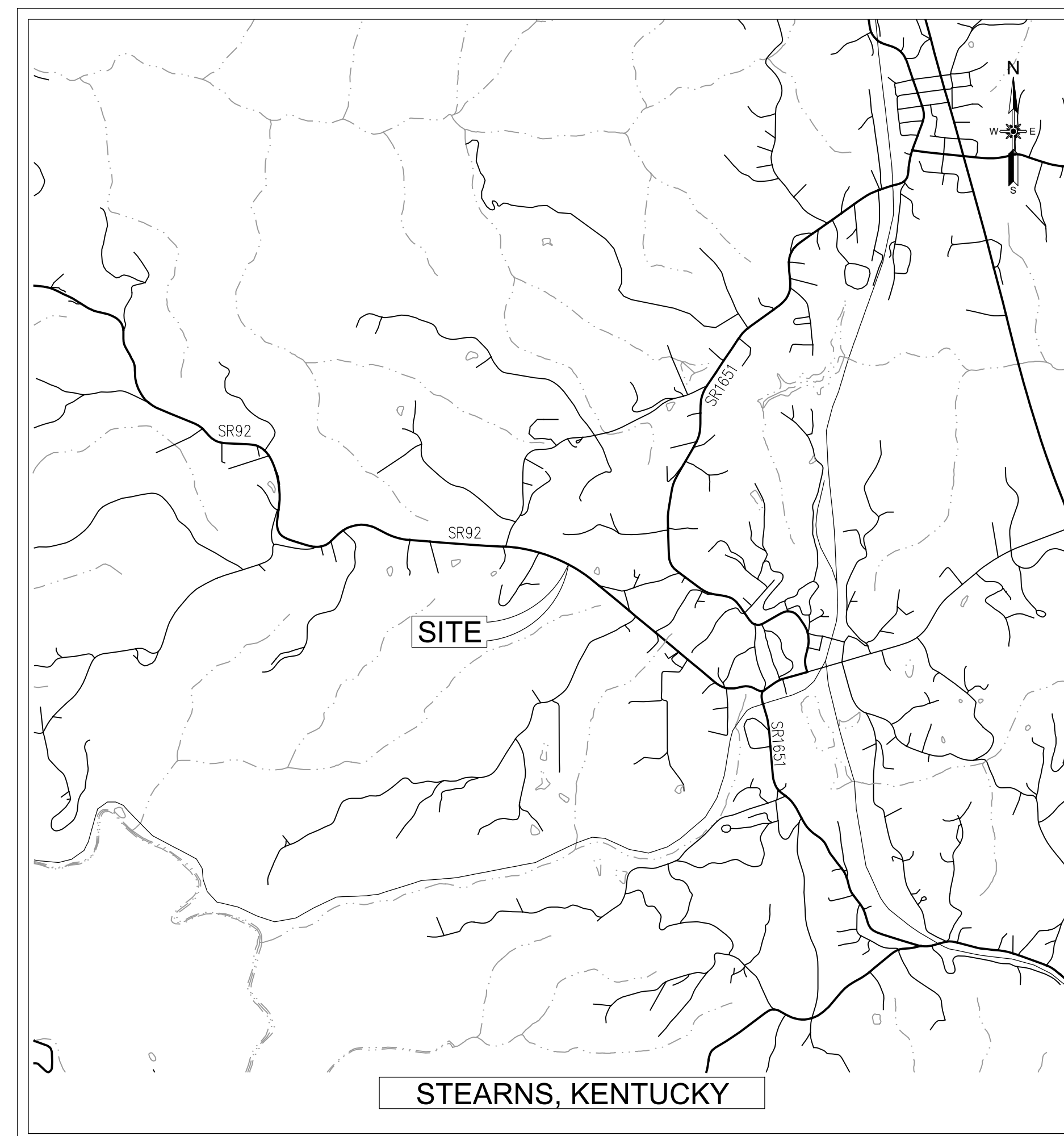


SANITARY SEWER COLLECTION SYSTEM EXPANSION - PHASE ONE CONTRACT No. 39

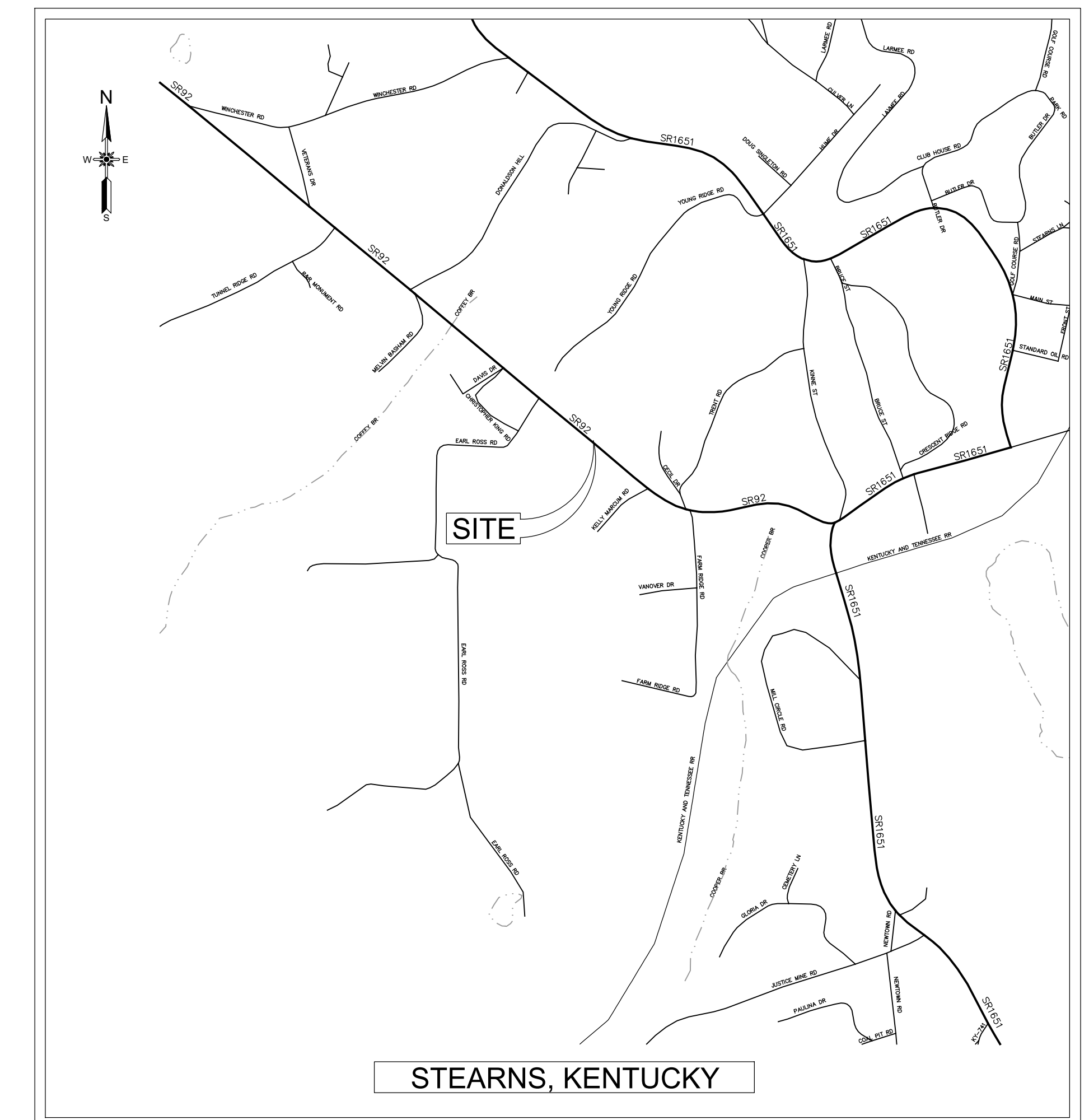
NOVEMBER 2020

LOCATION



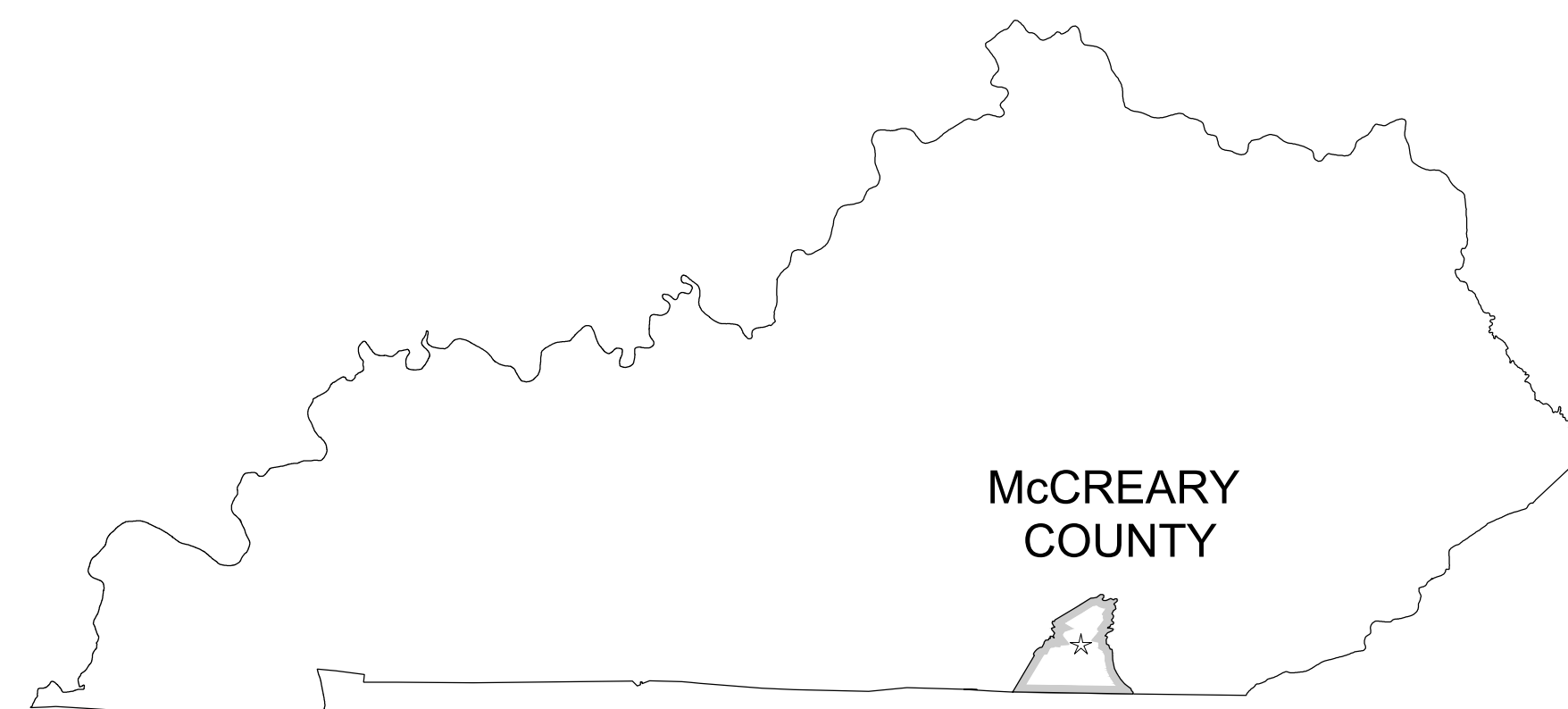
SCALE: 1"=1000'

LOCATION



SCALE: 1"=500'

Prepared For:
McCREARY COUNTY WATER DISTRICT
 456 N. HWY 27
 WHITLEY CITY, KENTUCKY 42653

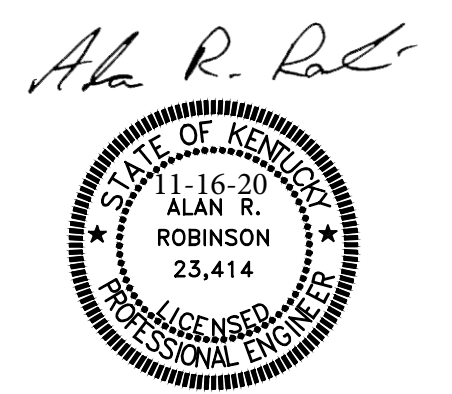


BOARD OF COMMISSIONERS

RANDY KIDD, CHAIRMAN
 MAYNARD NEW
 DOUG SEXTON
 COY TAYLOR
 RAYMOND TAYLOR
 STEPHEN WHITAKER, SUPERINTENDENT

INDEX OF DRAWINGS

1	COVER
2	GENERAL NOTES, ABBREVIATIONS, LEGEND AND UTILITIES
2A	OVERALL SHEET LAYOUT
3-32	STEARNS AREA SITE PLANS
33-51	REVELO AREA SITE PLANS
52-73	STEARNS AREA LINE PROFILES
74-91	REVELO AREA LINE PROFILES
92-93	GRINDER PUMP DETAILS
94-95	STANDARD DETAILS



GENERAL NOTES

ABBREVIATIONS

LEGEND

- EXISTING UTILITY LOCATIONS ARE APPROXIMATE 1"=50'. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY COMPANIES AND VERIFY UTILITY LOCATIONS PRIOR TO CONSTRUCTION. THE OWNER AND THE ENGINEER ARE NOT RESPONSIBLE FOR DAMAGES TO EXISTING UTILITIES THAT AUGUST OCCUR DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES BY CALLING BUD (BEFORE YOU DIG): 800-752-6007.
- ACTUAL DEPTHS OF EXISTING UTILITIES SHALL BE VERIFIED PRIOR TO EXCAVATION. ADJUSTMENTS TO PROPOSED GRADES SHALL BE APPROVED BY THE ENGINEER.
- ANY ADJUSTMENTS OR RELOCATIONS OF EXISTING WATER AND GAS UTILITIES, DISTRIBUTION LINES OR SERVICE LINES SHALL BE PERFORMED BY OTHERS. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PROTECT EXISTING UTILITIES TO THE MAXIMUM EXTENT PRACTICABLE. THE CONTRACTOR SHALL COORDINATE WORK WITH THE OWNER TO MINIMIZE DISRUPTION OF EXISTING SERVICES. THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER 2 DAYS IN ADVANCE OF ANY WORK WHICH REQUIRES EXISTING UTILITIES TO BE TAKEN OUT OF SERVICE.
- ANY UNSUITABLE SUBGRADE MATERIAL ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH PROPERLY COMPACTED ENGINEERED FILL AT THE CONTRACTORS EXPENSE.
- EXISTING FENCES, WALLS, TREES, LANDSCAPING OR OTHER VEGETATION AND IMPROVEMENTS SHALL BE PROTECTED FROM DAMAGE TO THE MAXIMUM EXTENT POSSIBLE. TREES WHICH ARE ANTICIPATED TO BE DAMAGED OR REMOVED SHALL BE FLAGGED AND REVIEWED WITH THE ENGINEER OR OWNER PRIOR TO PROCEEDING WITH ADJACENT WORK. THE CONTRACTOR SHALL RESTORE EXISTING IMPROVEMENTS TO CONDITIONS EQUAL TO PRE-CONSTRUCTION CONDITIONS. DAMAGED AREAS NOT APPROVED FOR REMOVAL SHALL BE REPLACED BY THE CONTRACTOR. FENCES REMOVED SHALL BE RESET AFTER WORK IS COMPLETE.
- COMBINATION AIR RELEASE VALVES SHALL BE PLACED AT HIGH POINTS IN FORCE MAINS 1"=50'. LOCATIONS ARE APPROXIMATE.
- ALL NON-PAVED DISTURBED AREAS SHALL BE REVEGETATED AFTER WORK IN THE IMMEDIATE VICINITY HAS BEEN COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS. REVEGETATION SHALL BE COMPLETED NO LATER THAN TWO (2) WEEKS FOLLOWING COMPLETION OF WORK IN THE IMMEDIATE VICINITY.
- EXCAVATION IS UNCLASSIFIED; NO SEPARATE PAYMENT SHALL BE MADE FOR ROCK REMOVAL. BIDDERS ARE ENCOURAGED TO EXCAVATE TEST HOLES WITH COORDINATION OF THE OWNER. NO BLASTING WILL BE ALLOWED.
- THE CONTRACTOR SHALL MAINTAIN CONTINUOUS ACCESS TO ALL COMMERCIAL ESTABLISHMENTS AND RESIDENTIAL DWELLINGS.
- FOR EROSION CONTROL PURPOSES, THE CONTRACTOR SHALL STOCKPILE EXCAVATED TRENCH MATERIAL ON THE UPHILL SIDE (OPPOSITE OF STREAM) OF EXPOSED TRENCH.
- ALL NEW MANHOLES SHALL INCLUDE FLOW CHANNELS WITH DEPTHS EQUAL TO THE DIAMETER OF THE SEWER PIPE.
- ALL MANHOLES ARE 4' DIAMETER UNLESS OTHERWISE NOTED.
- CONTRACTOR IS RESPONSIBLE FOR TEMPORARY FACILITIES TO MAINTAIN SEWER SERVICE. NO BYPASSES SHALL BE ALLOWED. CONTRACTOR SHALL SUBMIT A CONSTRUCTION PHASING PLAN TO INCLUDE MAINTAINING EXISTING SERVICE.
- NEW SANITARY SEWERS WILL NOT BE ACCEPTED UNTIL ALL TESTING REQUIRED BY THE CONTRACT DOCUMENTS ARE CONDUCTED.
- MANHOLE RIMS SHALL BE SET TO SPECIFIED GRADES, BUT IN NO CASE BELOW SURROUNDING GROUND.
- ALL FORCE MAINS SHALL BE MARKED BY USING DETECTABLE MOLAR SEWER LINE TAPE APPROVED BY THE ENGINEER. (18" BELOW FINAL GRADE).
- BENCHMARKS/CONTROL POINTS ARE SHOWN ON EACH SITE PLAN. THE CONTRACTOR SHALL USE THESE POINTS FOR LAYOUT OF THE PROPOSED WORK.
- ELEVATIONS SHOWN ARE BASED ON FEET ABOVE MEAN SEA LEVEL, FROM GPS NAD83. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DIFFERENCES IN FIELD CONDITIONS AND THE MAPPING.
- NO SEPARATE PAY ITEM HAS BEEN ESTABLISHED FOR FITTINGS AND NO DETERMINATION OF THE NUMBER OF FITTINGS REQUIRED ON THE JOB HAS BEEN MADE. THE CONTRACTOR, DURING THE BIDDING PHASE, SHALL DETERMINE THE NUMBER OF FITTINGS REQUIRED ON THE JOB AND INCLUDE THE COST OF THE FITTINGS AND INSTALLATION IN THE CONTRACT UNIT PRICE OF LF OF PIPE. PUMP STATIONS WILL BE BID LS THROUGH THE VALVE VAULT.
- SILT CHECKS/FENCES SHALL BE PROVIDED TO PREVENT SEDIMENT RUNOFF FROM ENTERING THE CREEK. SILT CHECKS SHALL BE INSTALLED PER THE SPECIFICATIONS.
- CONTRACTOR SHALL ENSURE THAT ALL NEW AND REPAVED AREAS ALLOW THE FOLLOWING:
 - SLOPE DIRECTS RAINFALL TO CATCH BASINS OR GRASS AREAS.
 - SLOPE DIRECTS RAINFALL AWAY FROM ALL STRUCTURES.
 - PAVEMENT AND BACKFILL IS PLACED IN A MANNER WHICH PROHIBITS PONDING.
- CONTRACTOR SHALL REPAIR OR REPLACE AREAS OF ROADS, DRIVEWAYS, OR SIDEWALKS DAMAGED DURING CONSTRUCTION.
- ALL FITTINGS 4" AND LARGER SHALL BE DUCTILE IRON RESTRAINED JOINT.
- ALL FORCE MAINS SHALL BE MARKED BY USING DETECTABLE MYLAR WATER LINE TAPE AND COPPER TRACER WIRE APPROVED BY THE ENGINEER. (A MINIMUM OF 18" BELOW FINAL GRADE).
- SEPTIC TANK AND HOLDING TANK LOCATIONS (IF SHOWN) ARE APPROXIMATE. CONTRACTOR SHALL VERIFY LOCATION OF TANKS AND DEPTH OF LATERAL FROM HOUSE PRIOR TO THE DEVELOPMENT PRIOR TO THE DEVELOPMENT OF MANHOLE SHOP DRAWINGS AND PRIOR TO ANY OTHER EXCAVATION. IF ANY LATERAL LINES ARE FOUND TO BE UNUSUALLY DEEP (MORE THAN 3' OF COVER) THEN THE CONTRACTOR IS RESPONSIBLE TO BRING HIS/HER FINDINGS TO THE ENGINEER PRIOR TO BEGINNING THE WORK.
- LATERAL SEWER LINES SHALL BE 4-INCH PVC 35 UNLESS NOTED OTHERWISE. LINES SHALL MAINTAIN A UNIFORM SLOPE OF A MINIMUM OF 1%. CLEANOUTS (CO) SHALL BE INSTALLED AT ALL HORIZONTAL AND VERTICAL CHANGES IN DIRECTION AND SHALL BE PLACED IN STRAIGHT RUNS SUCH THAT THE MAXIMUM DISTANCE BETWEEN CLEANOUTS IS 200 FEET.
- EFFORTS HAVE BEEN MADE TO INDICATE THE MOST ACCURATE LOCATIONS OF EXISTING STRUCTURES, PIPING, AND UTILITIES. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE SITE, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES ENCOUNTERED BEFORE BEGINNING CONSTRUCTION OPERATIONS. SITE PIPING DIMENSIONS ARE GIVEN TO SHOW THE ENGINEER'S INTENT AND TO AID THE CONTRACTOR IN PIPE INSTALLATION.
- DIMENSIONS OF EXISTING STRUCTURES AND/OR SIZE RESTRICTIONS ARE APPROXIMATE. ALL NECESSARY DIMENSIONS AND ELEVATIONS OF EXISTING STRUCTURES AND TOPOGRAPHY SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO CONSTRUCTION OPERATIONS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO EXISTING FACILITIES DURING CONSTRUCTION.
- CONSTRUCTION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE PERMIT REQUIREMENTS.
- PIPING INDICATED ON SITE PLAN(S) IS TO AN EXTENT SCHEMATIC IN NATURE. PROPOSED WORK INDICATED AUGUST REQUIRE SHIFTING TO AVOID CONFLICT WITH EXIST. PIPING, UTILITIES, AND/OR SITE FEATURES. ALL FITTINGS ARE NOT SHOWN - THE CONTRACTOR SHALL PROVIDE ALL FITTINGS REQUIRED. (INCLUDING FITTINGS REQUIRED TO TRANSITION OVER NEW AND EXIST. PIPING).
- IT IS THE CONTRACTOR RESPONSIBILITY TO DETERMINE THE PRESENT OF UNDERGROUND UTILITIES INCLUDING THEIR LOCATION(S) AND ELEVATION(S).
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL MODIFICATIONS TO EXISTING PIPING REQUIRED TO ACCOMMODATE NEW CONSTRUCTION.
- ALL PIPING SHALL BE TESTED IN ACCORDANCE WITH THE SPECIFICATIONS.
- SEQUENCING OF CONSTRUCTION SHALL BE COORDINATED WITH UTILITY PERSONNEL AND THE ENGINEER TO ENSURE EXISTING FACILITIES REMAIN IN SERVICE DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION/COORDINATION/LOCATION/SIZE OF ALL PENETRATIONS AND OPENINGS (WITH ALL TRADES AND MANUFACTURER(S)).
- ANY SHADED NOTE DESCRIBING AN OBJECT OR DIRECTION THE CONTRACTOR SHALL BE UNDERSTOOD TO NOT APPLY TO THIS WORK. ALL PROPOSED WORK AND NOTES WILL BE SHOWN IN DARKER TEXT AND LINE TYPES.
- UNLESS NOTED OTHERWISE, ALL EQUIPMENT AND MATERIALS TO BE REMOVED SHALL REMAIN PROPERTY OF THE OWNER.
- ALL WALL PENETRATIONS FOR PIPING SHALL CONFORM TO THE STANDARD DETAILS AS REQUIRED BY THE CONTRACT DRAWINGS & SPECIFICATIONS UNLESS OTHERWISE NOTED.
- GENERALLY, NO PIPE SUPPORTS HAVE BEEN SHOWN. HOWEVER ALL PIPING, INSIDE AND OUTSIDE, SHALL BE ADEQUATELY SUPPORTED SO AS NOT TO PRODUCE UNDUE STRAIN OR VIBRATION ON PIPE JOINTS OR EQUIPMENT. SEE SPECIFICATIONS.
- THE CONSTRUCTION OF THIS PROJECT AND THE OPERATION OF THESE FACILITIES INVOLVE EXPOSURE TO HEALTH AND SAFETY HAZARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH APPLICABLE FEDERAL AND STATE OSHA REGULATIONS, INCLUDING BUT NOT LIMITED TO PREPARING AND IMPLEMENTING A SITE/PROJECT SPECIFIC HEALTH AND SAFETY FOR THE CONTRACTORS EMPLOYEES, SUB-CONTRACTOR'S AND SUPPLIERS. THE SITE/PROJECT SPECIFIC HEALTH AND SAFETY PLAN SHALL ADDRESS THE HAZARDS AT THIS WASTE WATER TREATMENT PLANT, AND PUMP STATIONS, INCLUDING BUT NOT LIMITED TO CONFINED SPACES. A COPY OF THE CONTRACTOR'S SITE/PROJECT SPECIFIC HEALTH AND SAFETY PLAN SHALL BE AVAILABLE FOR REVIEW AT THE PROJECT SITE.

AV _____ AIR/VACUUM VALVE	MH _____ MANHOLE
B _____ BOTTOM	MAX. _____ MAXIMUM
C.I. _____ CAST IRON	M.J. _____ MECHANICAL JOINT
CL _____ CENTERLINE	MIN. _____ MINIMUM
CMF _____ CORRUGATED METAL PIPE	N.I.S. _____ NOT IN SERVICE
CO _____ CLEAN OUT	O.D. _____ OUTSIDE DIAMETER
CONC. _____ CONCRETE	P.E. _____ POLYETHYLENE
CONST. _____ CONSTRUCT	PROP. _____ PROPOSED
CPP _____ CORRUGATED PLASTIC PIPE	PV _____ PLUG VALVE
D _____ DRAIN	PVC _____ POLYVINYL CHLORIDE
DIA, Ø _____ DIAMETER	RCP _____ REINFORCED CONC. PIPE
D.I. _____ DUCTILE IRON	RED _____ REDUCER
D.I.P. _____ DUCTILE IRON PIPE	REINF. _____ REINFORCE(D)
DIST. _____ DISTURBED	REQ. _____ REQUIRED
EL., ELEV. _____ ELEVATION	R.J. _____ RESTRAINT JOINT
EOP _____ EDGE OF PAVEMENT	RW _____ RAW WATER
EX., EXIST. _____ EXISTING	SCHED. _____ SCHEDULE
FH _____ FIRE HYDRANT	S.S. _____ SANITARY SEWER
FLH _____ FLUSHING HYDRANT	ST _____ SEPTIC TANK
FM _____ FORCE MAIN	HOPE _____ STEEL
F.V. _____ FIELD VERIFY	T _____ TOP
FC _____ FLUSHING CONNECTION	T.B.A. _____ TO BE ABANDONED
GAL. _____ GALLON	T.B.R. _____ TO BE REMOVED
GL _____ GAS LINE	T.R. _____ TO REMAIN
GM _____ GAS METER	TYP. _____ TYPICAL
GS _____ GAS SERVICE LINE	U.N.O. _____ UNLESS NOTED OTHERWISE
GV _____ GATE VALVE	VERT. _____ VERTICAL
HDPE _____ HIGH-DENSITY POLYETHYLENE	W _____ WATER LINE
I.E. _____ INVERT ELEVATION	WLM _____ WATER LINE MARKER
INV. _____ INVERT	WM _____ WATER METER
KDOH _____ KENTUCKY DEPARTMENT OF HIGHWAYS	WS _____ WATER SERVICE LINE
LA _____ LATERAL ASSEMBLY	UE _____ UNDERGROUND ELECTRIC (DB)
	(OC) _____ OPEN CUT

EXISTING FEATURES	PROPOSED FEATURES
----- EX. PROPERTY LINES	----- PROP. WATER LINES
----- EX. ELECTRIC LINE	----- PROP. ROADS
----- EX. TELEPHONE LINE	----- PROP. SANITARY SEWER
----- EX. GAS ; LINES	----- PROP. SANITARY SEWER FORCE MAIN
----- EX. WATER LINES	----- PROP. STORM SEWER PIPE
----- EX. ROADS	----- PROP. FENCES
----- EX. SANITARY SEWER	----- PROP. INTERMEDIATE CONTOURS
----- EX. SANITARY SEWER FORCE MAIN	----- PROP. INDEX CONTOURS
----- EX. STORM SEWER PIPE	
----- EX. FENCES	
----- EX. INTERMEDIATE CONTOURS	
----- EX. INDEX CONTOURS	
----- EX. STREAMS	
BENCHMARKS/CONTROL POINTS	
EX. SANITARY SEWER MANHOLE	
EX. CLEANOUT	
EX. HEADWALLS	
EX. TREES	
EX. POWER POLES	
EX. GUY WIRES	
EX. GAS METER	
EX. GAS VALVE	
EX. WATER METER	
EX. WATER VALVE	
EX. FIRE HYDRANT	
EX. AIR/VACUUM VALVE	

UTILITIES

CALL BEFORE YOU DIG!
1-800-752-6007

<p>TELEPHONE : HIGHLAND TELEPHONE CO-OP 26 CRIT KING ROAD WHITLEY CITY, KENTUCKY 42653 PHONE (606) 376-5311</p>	<p>POWER : SOUTH KENTUCKY RECC 51 CENTERS AVENUE WHITLEY CITY, KY 42653 PHONE (800) 264-5112</p>	<p>GAS : CITIPOWER 37 COURTHOUSE SQUARE WHITLEY CITY, KY 42653 MR. BILL WEBB PHONE: (606) 376-8373</p>
<p>FIBER OPTIC : AT&T 131 AMESBURY AVE. MIDDLESBORO, KENTUCKY 41965 MR. ODELL KEENE PHONE (606) 248-7243</p>	<p>WATER : McCREARY COUNTY WATER DISTRICT 456 N. HWY 27 WHITLEY CITY, KENTUCKY 42653 MR. STEPHEN WHITAKER PHONE: 606-376-2540</p>	
<p>CABLE : SPECTRUM 5026 SOUTH HIGHWAY 27 SOMERSET, KENTUCKY 42501 MR. DARRELL NAVE OFFICE (606) 678-9215, EXT. 404 CELL : (606) 271-2501</p>	<p>SANITARY SEWER : McCREARY COUNTY WATER DISTRICT 456 N. HWY 27 WHITLEY CITY, KENTUCKY 42653 MR. STEPHEN WHITAKER PHONE: 606-376-2540</p>	

Alan R. Robison

ECLIPSE ENGINEERS, PLLC

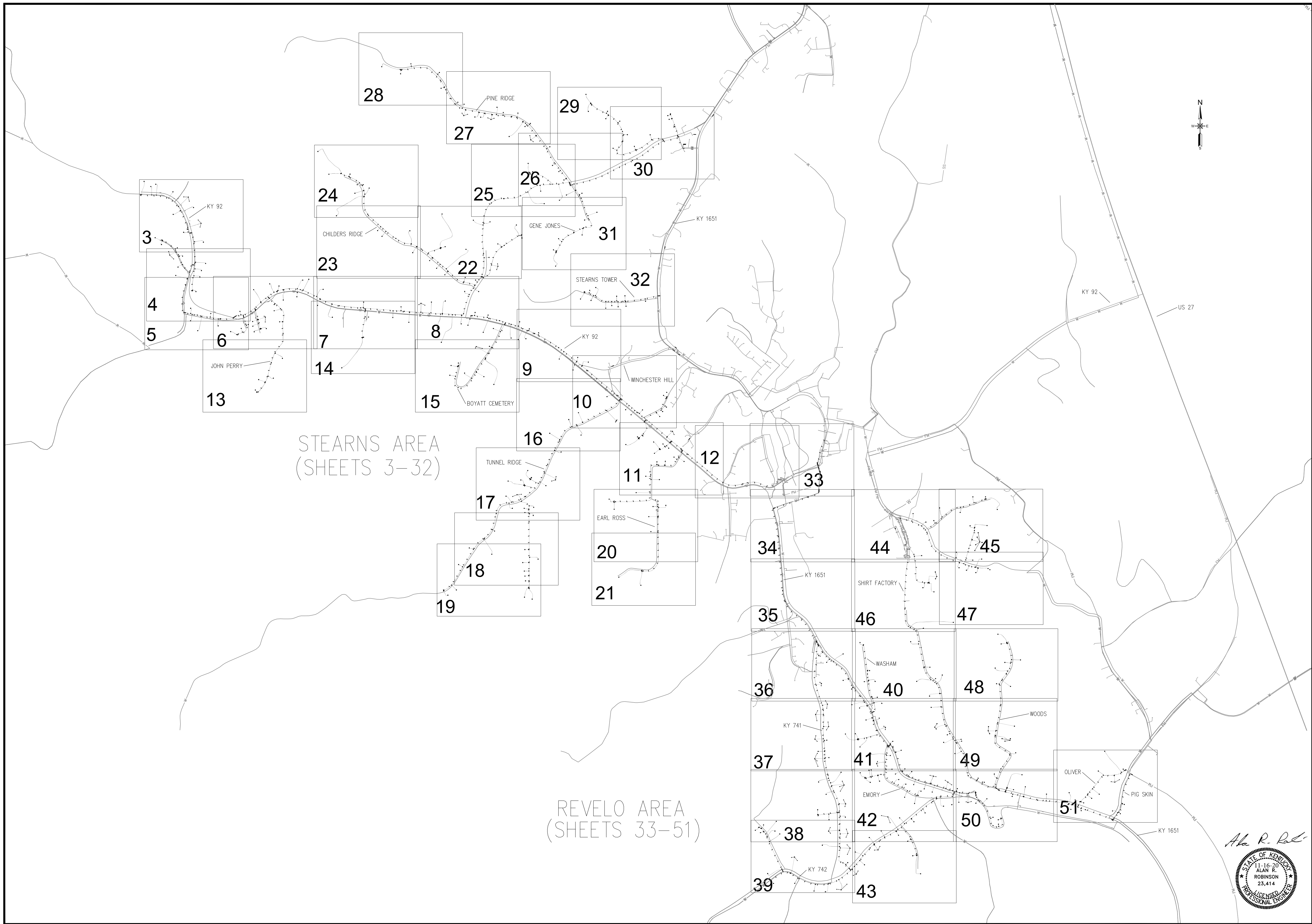
113 WEST MT. VERNON STREET
HOMERSET, KENTUCKY 42501
PHONE: 606-451-0559

SCALE:	DESIGNED BY:	N.T.S.	ARR	DATE:
DRAWN BY:	WBD	ARR	BY:	
CHECKED BY:	ARR	19016	REVISION:	
PROJECT NO.:	DATE:	AUGUST 2020		
CAD DWG ID:				

McCREARY COUNTY
WATER DISTRICT
456 N. HWY 27
WHITLEY CITY, KENTUCKY 42653

GENERAL NOTES, ABBREVIATIONS,
LEGEND AND UTILITIES

SANITARY SEWER COLLECTION SYSTEM EXPANSION
PHASE ONE - CONTRACT No. 39



STEARNS AREA
(SHEETS 3-32)

REVELO AREA
(SHEETS 33-51)

Alan R. Robinson
 STATE OF KENTUCKY
 1-16-20
 ALAN R. ROBINSON
 23,414
 LICENSED PROFESSIONAL ENGINEER

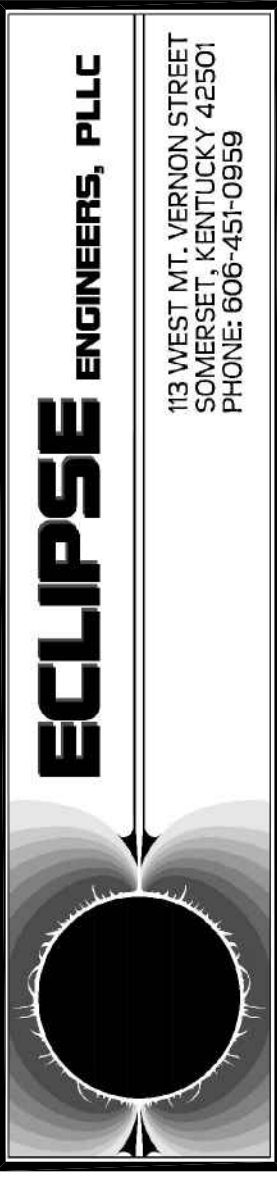
ECLIPSE ENGINEERS, PLLC
 113 WEST MT. VERNON STREET
 BOWLING GREEN, KENTUCKY 42501
 PHONE: 606-451-0929

SCALE:	DESIGNED BY:	1"=600'
DRAWN BY:	ARR	ARR
CHECKED BY:	WBD	WBD
PROJECT NO.:	ARR	ARR
DATE:	19016	19016
CAD DWG ID:	AUGUST 2020	AUGUST 2020
	JOB 19016 SANITARY SEWER	
REVISION:	BY:	DATE:

McCREARY COUNTY
 WATER DISTRICT
 456 N. HWY 27
 WHITLEY CITY, KENTUCKY 42653

OVERALL SHEET LAYOUT
 SANITARY SEWER COLLECTION SYSTEM EXPANSION
 PHASE ONE - CONTRACT No. 39

SHEET NUMBER:
2-A



SCALE:	DESIGNED BY:	1"=50'	ARR	REVISION:	BY:	DATE:
DRAWN BY:	WBD	ARR	19016	ARR		
CHECKED BY:	ARR	19016	AUGUST 2020	ARR		
PROJECT NO.:	DATE:	AUGUST 2020		JOE 1916 SANITARY SEWER		
CAD DWG ID:						

McCREARY COUNTY
WATER DISTRICT
 456 N. HWY 27
 WHITLEY CITY, KENTUCKY 42653

PLAN
SANITARY SEWER COLLECTION SYSTEM EXPANSION
 PHASE ONE - CONTRACT No. 39

SHEET NUMBER:
3

Alan R. Robinson
 STATE OF KENTUCKY
 1-16-20
 ALAN R. ROBINSON
 23,414
 LICENSED PROFESSIONAL ENGINEER