

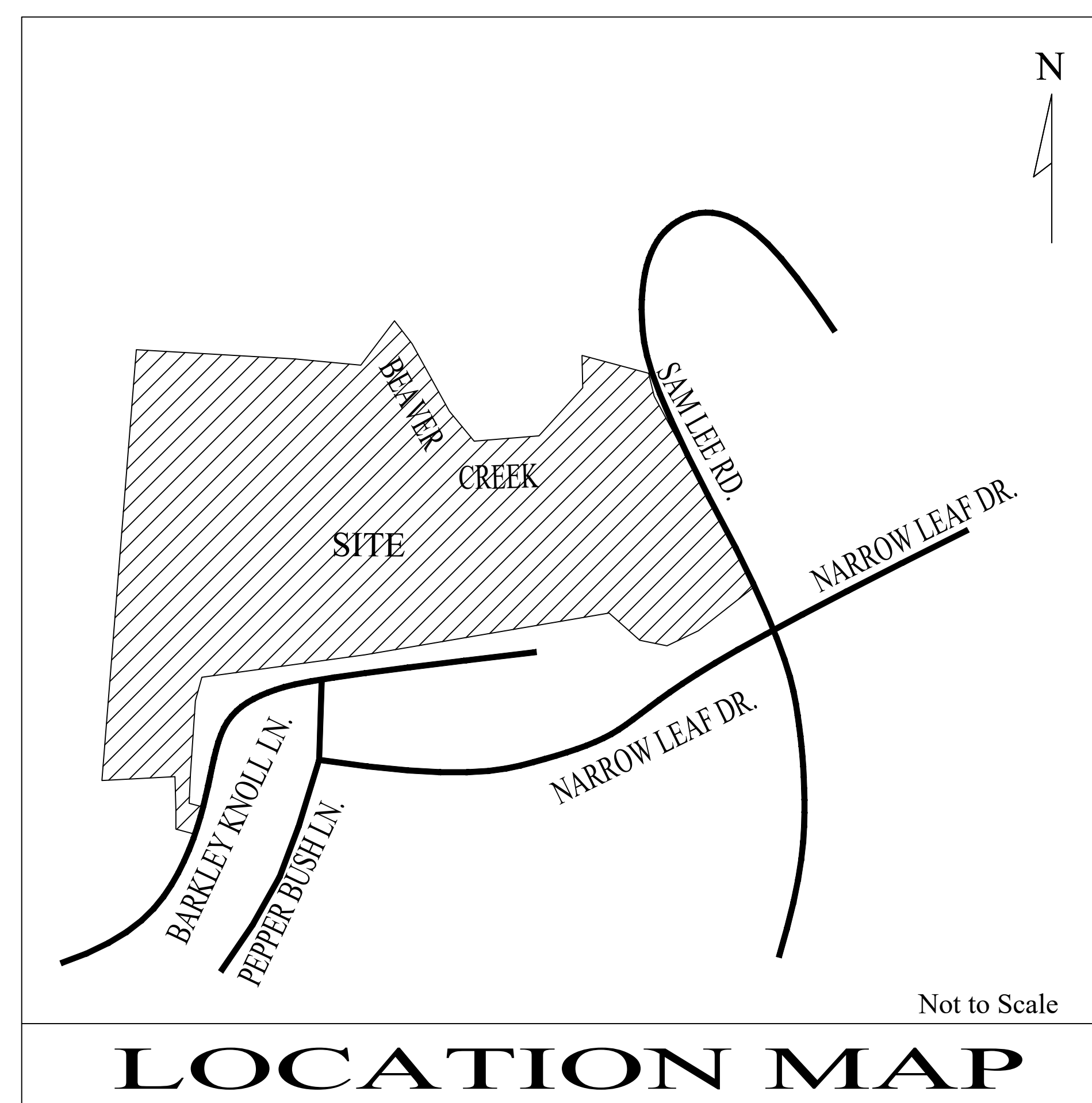
CONCEPT & DESIGN PLAN  
FOR

# HAYDEN FARMS PHASE III

## CLT MAP 103, PARCEL 072 DISTRICT-6, KNOX COUNTY, TENNESSEE

THREE DAYS PRIOR TO ANY EARTHWORK  
OR CONSTRUCTION CONTRACTOR MUST  
CONTACT:  
TENNESSEE ONE-CALL  
1-800-351-1111  
RECORD AND SAVE YOUR  
CONFIRMATION NUMBER: 160926614  
CONFIRMATION NUMBER: 160985276

INDEX OF PLANS	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	DESIGN PLAN, PHASE III, SHEET-2
3	DESIGN PLAN, PHASE III, SHEET-3
4	ROAD PROFILE "A"
5	ROAD PROFILE "B"
6	GRADING PLAN



OWNER:  
**PRIMOS LAND COMPANY, LLC**  
4907 BALL ROAD  
KNOXVILLE, TENNESSEE 37931  
PHONE (865) 694-8582  
FAX: (865) 693-9699

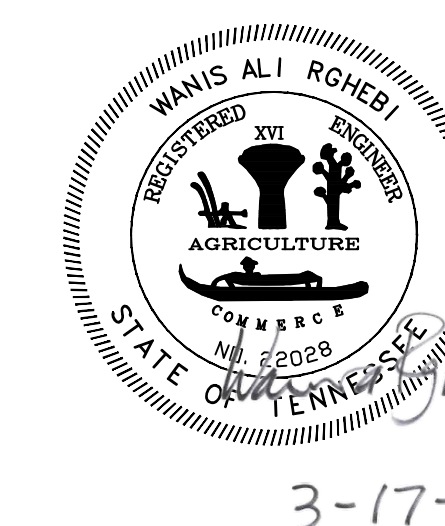
SITE ADDRESS:  
11503 BARKLEY KNOLL LANE  
KNOXVILLE, TENNESSEE 37932

SOUTHLAND ENGINEERING CONSULTANTS, LLC  
GENERAL CIVIL & LAND SURVEYORS  
4909 BALL ROAD  
KNOXVILLE, TENNESSEE 37931  
PHONE: (865) 694-7756  
FAX: (865) 693-9699  
E-MAIL: wrghel@sengconsultants.com  
www.southlandengineeringusa.com

This is to certify that I have consulted the Federal Insurance  
Administration Flood Hazard Boundary Map, and found that the  
above described is not located in a special flood hazard area as  
shown on the Federal Insurance Rate Map Panel 47093C0233G,  
Knox County Community Number 475433 effective date August 5,  
2013.  
Date: *Handwritten Signature*

Signature: *Handwritten Signature*  
3-17-26

CERTIFICATION OF CONCEPT PLAN  
I HEREBY CERTIFY THAT I AM AN ENGINEER, LICENSED TO PRACTICE  
UNDER THE LAWS OF THE STATE OF TENNESSEE, AND THAT THE  
ENGINEERING INFORMATION PROVIDED AS PART OF THIS DESIGN  
PLAN IS TRUE AND IS BASED ON SOUND ENGINEERING PRACTICE.  
ENGINEER: *Handwritten Signature*  
TENNESSEE CERTIFICATE NUMBER 2028



3-17-26

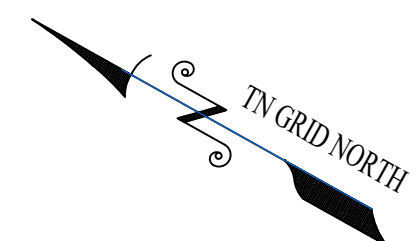
PERMITS FOR THIS PROJECT ARE ISSUED THROUGH KNOX COUNTY GOVERNMENT



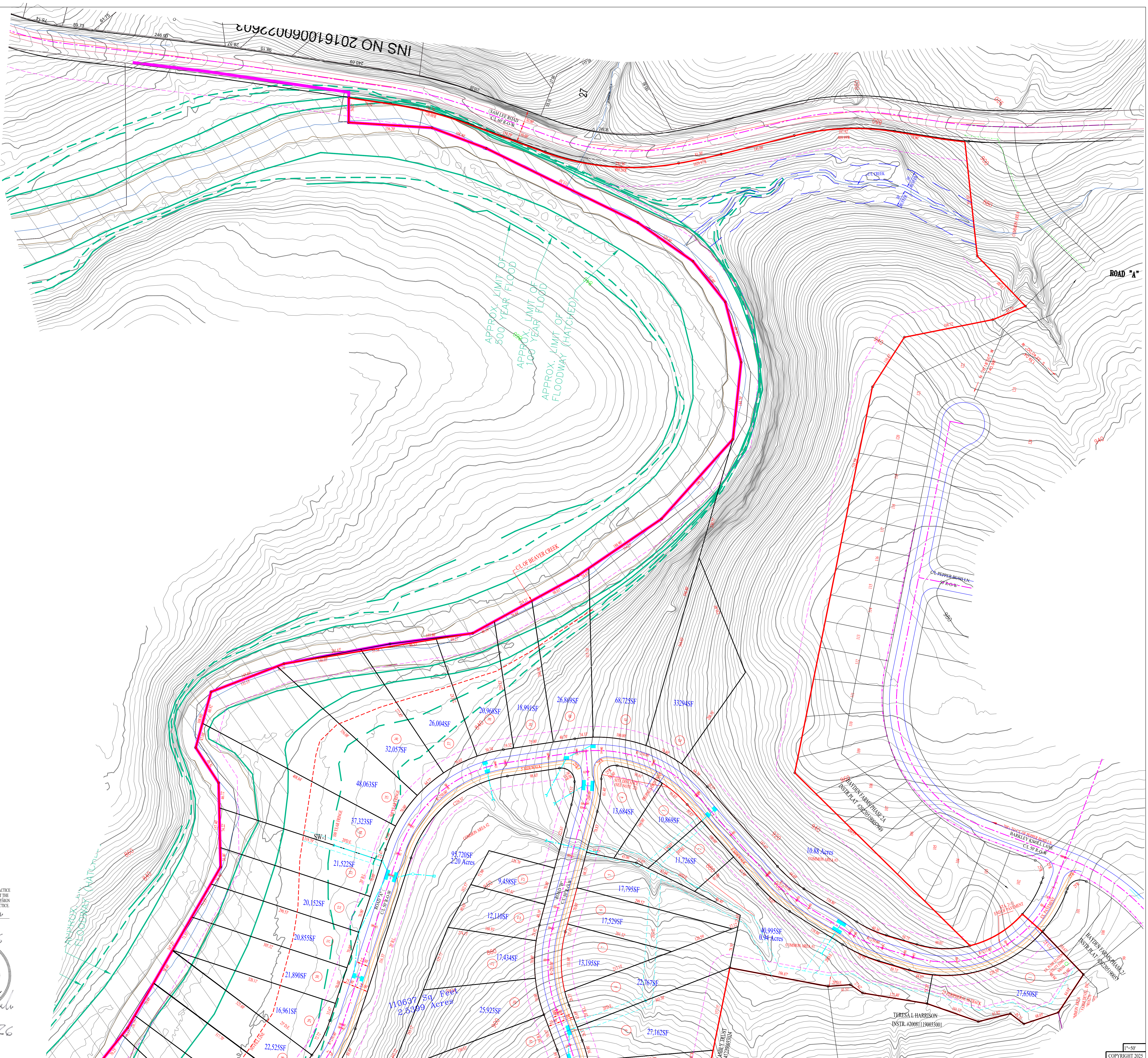
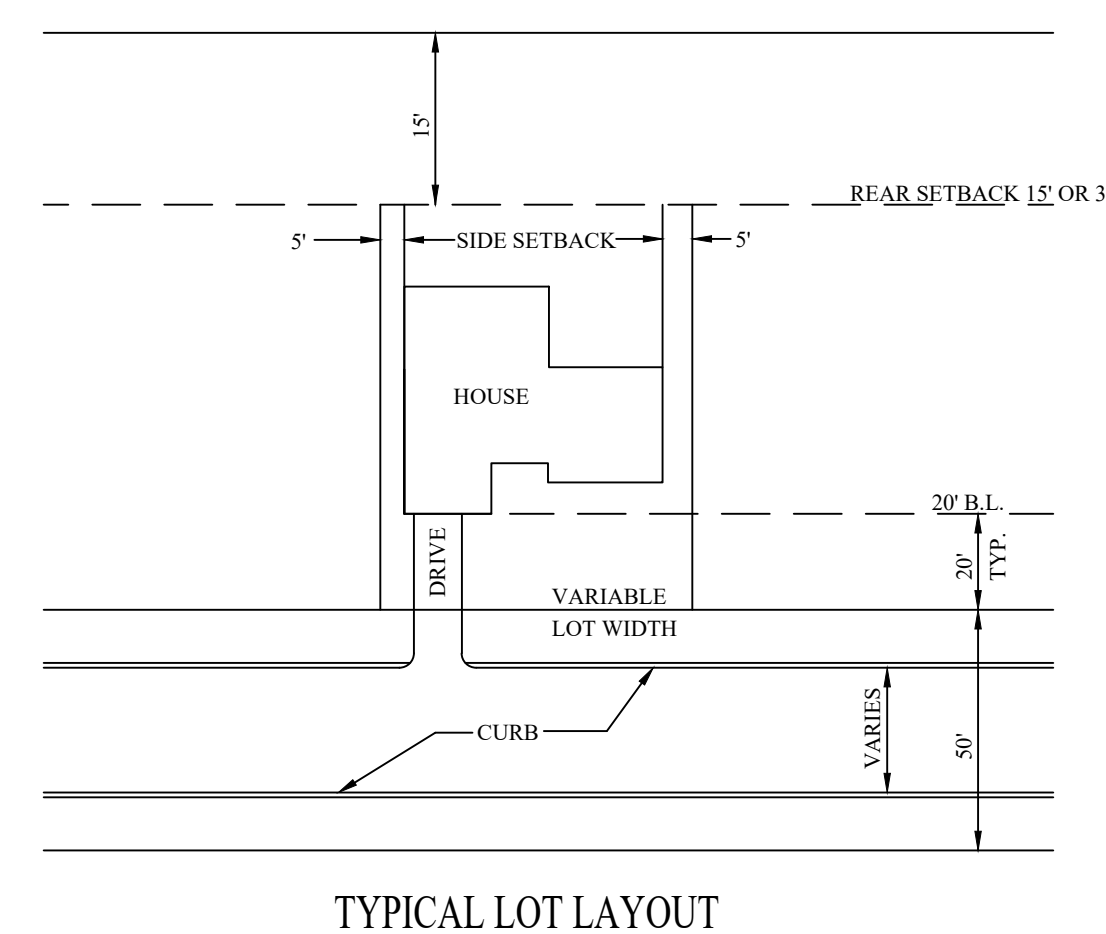
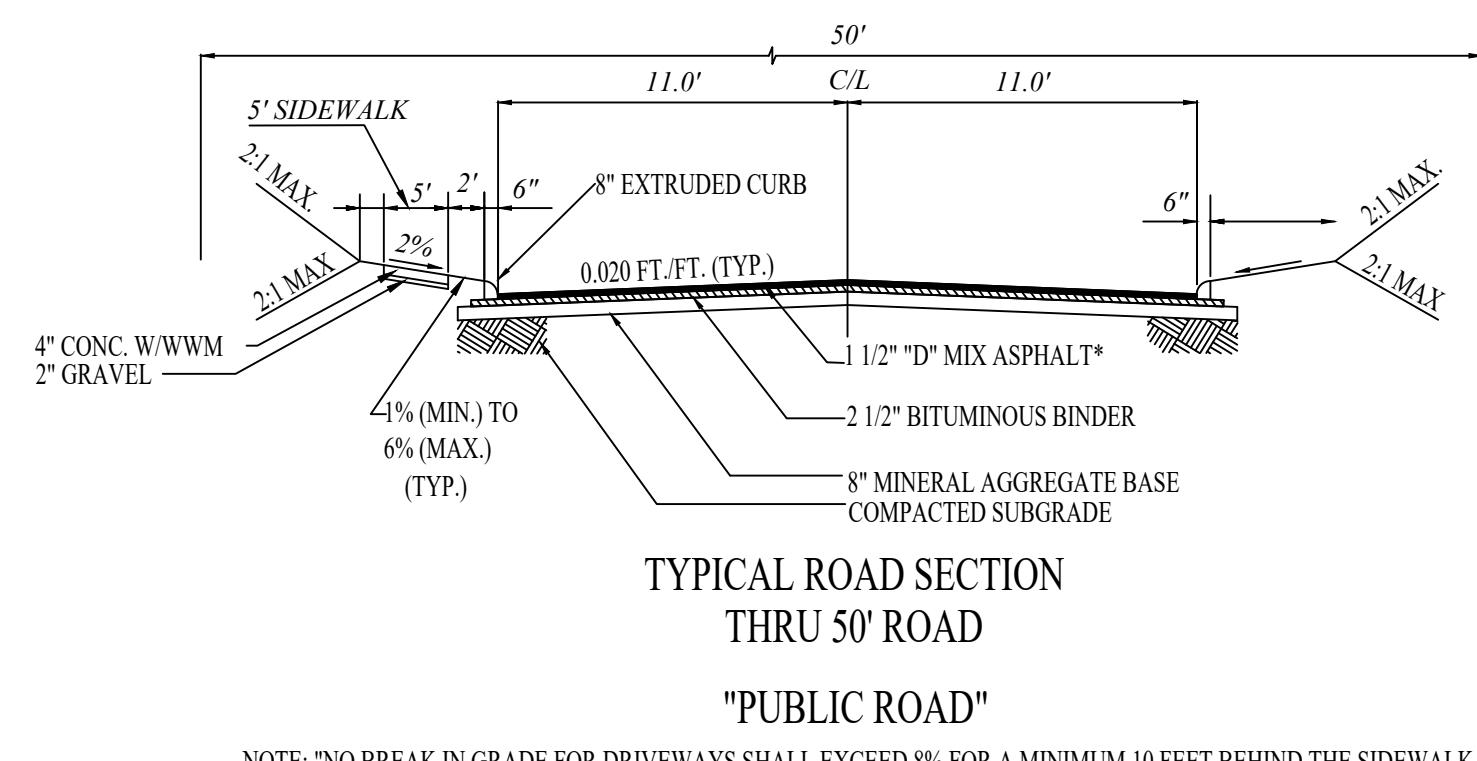
NOTE:  
 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY  
 CONTRACTOR SHALL SHIELD AND BRACE ALL OPEN TRENCHES AS  
 REQUIRED BY STATE AND FEDERAL LAWS AND LOCAL ORDINANCES TO  
 CONFORM WITH REQUIREMENTS SET FORTH IN THE MANUAL OF  
 ACCIDENT PREVENTION IN CONSTRUCTION TO PROTECT LIFE, PROPERTY,  
 OR WORK TO AVOID EXCESSIVE WASTE COSTS BY UNDESIRABLE MATERIAL.  
 OSHA RULES SHALL BE ABIDED BY.

NOTE:  
 THREE DAYS PRIOR TO ANY EARTHWORK  
 OR CONSTRUCTION CONTRACTOR MUST  
 CONTACT:  
 TENNESSEE ONE-CALL  
 1-800-351-1111  
 RECORD AND SAVE YOUR  
 CONFIRMATION NUMBER.

NOTE:  
 CONTRACTOR TO NOTIFY ENGINEER  
 BEFORE START OF CONSTRUCTION



- NOTES:
1. ALL DIMENSIONS AND AREAS ARE SCALED AND SUBJECT TO CHANGE ON THE FINAL PLAN.
  2. THERE SHALL BE TEN (10) FEET IN WIDTH UTILITY AND DRAINAGE EASEMENTS INSIDE ALL EXTERIOR LOT LINES  
 OPENING STREETS AND PRIVATE DRIVEWAYS AND THE EASEMENTS SHALL BE PROTECTED ALONG BOTH SIDES OF  
 ALL INTERIOR LOT LINES AND ON THE INSIDE OF ALL OTHER EXTERIOR LOT LINES UTILITY AND DRAINAGE EASEMENTS  
 TO BE PROTECTED ALONG BOTH SIDES OF THE LOTS.
  3. SANITARY SEWER EASEMENT OF 12" TO 18" BACK SIDE OF SEWER AS INSTALLED WHERE APPLICABLE.
  4. THIS PROPERTY CONTAINS APPROXIMATELY 27.5 ACRES AND A PROPOSED DRIVEWAY, DRIVE LANE, FOUR COMMON  
 AREAS (15.4 ACRES), PUBLIC RIGHT-OF-WAY, THE TOTAL FLOOD AREA FOR PHASE III IS 84.0 ACRES.
  5. THIS PARCEL IS ZONED R-10.
  6. CONTROLS PROVIDED BY KNOXVILLE AND DECATUR COUNTY GOALS AND ROAD PROFILES ARE BASED ON KGS.
  7. UTILITIES:  
 WATER: WEST KNOX UTILITY DISTRICT  
 SEWER: WEST KNOX UTILITY DISTRICT  
 ELECTRIC: LINNEX CITY UTILITY BOARD  
 GAS: KNOXVILLE UTILITY BOARD  
 TELEPHONE: FRONTIER, AT & S AND COMCAST  
 THIS SUBDIVISION WILL HAVE A LARGE OPENING ASSOCIATION.  
 8. BELIEVED UTILITY LINES WILL BE AS FOLLOWS:  
 FRONT: 2" OR 4" DRAIN  
 SIDES: 3" OR 4" DRAIN  
 REAR: 2" DRAIN CONTROLLED BY PERMITS SETBACK  
 9. BOUNDARY IS BASED ON A FIELD SURVEY.  
 10. FOR ALL LOTS 24' OR GREATER THERE SHALL BE ONE FOOT ABOVE THE 50 YEAR FLOOD ELEVATION (ELEV. 1510)  
 11. ALL ROADS IN THIS SUBDIVISION ARE PUBLIC ROADS WITH 10' OR 12' WIDE PAVEMENT.  
 12. VEHICLE ACCESS FOR ALL LOTS IS LIMITED TO TRENCH ROADS OR SYSTEMS ONLY.  
 13. ALL FUTURE DRIVEWAYS WILL BE LOCATED IN THE WATER PLANS.  
 14. BEFORE LOTS ARE TO BE BUILT AND MARKED WITH EASEMENT OR FENCING FROM ANY DISTURBANCE,  
 STREAM DETERMINATION STUDY WILL BE DONE AT THE START OF THE STREAM WHEN THE REPORT BECOMES AVAILABLE.  
 IT WILL BE SUBMITTED TO THE STATE AND THE KNOX COUNTY ENGINEERING AND ROAD DEPARTMENT.  
 15. ALL UTILITIES AND DRAINAGE STRUCTURES WILL BE DESIGNED IN THE DESIGN STAGE AFTER THE PRELIMINARY  
 APPROVAL OF THIS CONCEPT.  
 16. VARIATIONS:  
 a. Road "A" - proposed reduction in R value from 15 to 10.02, in an existing road from Hayden Farms, Phase 2A and it is already paved to  
 10.02.  
 b. Road "B" - proposed reduction in R value from 25 to 20.76, from Sta. 7+22.48 to 9+11.12 because of the topography.  
 c. Road "C" - proposed reduction in R value from 150 to 110.00 from Sta. 7+10.00 to 7+10.00.  
 17. ALTERNATIVE DESIGN STANDARDS REQUESTED:  
 a. Road "B" - proposed horizontal curve of R=1074.11 from 5+50 to 5+200 because the road is less than 100' wide and topography  
 is steep.  
 b. Road "C" - proposed horizontal curve of R=1074.11 from 5+50 to 5+200 because the road is less than 100' wide and topography  
 is steep.  
 c. proposed maximum grade Road "A" and Road "B" will be 2.00% because of an existing paved road from Hayden Farms, Phase 2A.  
 d. proposed maximum grade Road "C" will be 2.00% because of an existing paved road from Hayden Farms, Phase 2A.  
 e. proposed reduction in pavement width from 30' to 27' because of topography.  
 18. LOTS 24' SHALL BE ONE FOOT ABOVE THE TOP OF THE DRIVE.  
 19. THERE SHALL BE A 5' WIDE SIDEWALK ALONGSIDE ALL PUBLIC ROADS. THE SIDEWALKS SHALL MEET THE ADA  
 REQUIREMENTS AND TO BE BELIEVED AS MARKED WITH EASEMENT OR FENCING FROM ANY DISTURBANCE.  
 STREAM DETERMINATION STUDY WILL BE DONE AT THE START OF THE STREAM.  
 20. LOTS 24' THROUGH 30' SHALL HAVE 50' FLOOD ELEVATION AS SHOWN.  
 21. NO STRUCTURE OR THERE WILL BE LOCATED UNDER THE DEED DISTANCE EASEMENT AREA.  
 22. THE TOTAL BELIEVED PROTECTIVE AREA IS 8.4 ACRES.  
 23. FOR LOTS 24' THERE SHALL BE NO STRUCTURE BELOW THE NOTED LINE IF A STRUCTURE IS REMOVED THE OWNER  
 WILL BE RESPONSIBLE FOR THE COST.



CERTIFICATION OF CONCEPT PLAN  
 I HEREBY CERTIFY THAT I AM AN ENGINEER, LICENSED TO PRACTICE  
 UNDER THE LAWS OF THE STATE OF TENNESSEE, AND THAT THE  
 ENGINEERING INFORMATION PROVIDED AS PART OF THIS DESIGN  
 PLAN IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
 ENGINEER: *Josh Harrison*  
 TENNESSEE CERTIFICATE NUMBER 2028



OWNER/DEVELOPER:  
 PRIMOS LAND COMPANY, LLC  
 4909 BALL RD.  
 KNOXVILLE, TN 37931  
 PHONE: (865) 694-7756  
 FAX: (865) 693-9699  
 EMAIL: JOSH@RHSCO.COM

SITE ADDRESS:  
 11503 BARKEY KNOLL LANE  
 KNOXVILLE, TENNESSEE 37932

FILE # 4-SB-26-C & 4-D-26-DP

SOUTHLAND ENGINEERING CONSULTANTS, LLC  
 GENERAL CIVIL & LAND SURVEYORS  
 4909 BALL ROAD  
 KNOXVILLE, TENNESSEE 37931  
 PHONE: (865) 694-7756  
 FAX: (865) 693-9699  
 E-MAIL: wrghcb@seconconsultants.com  
 www.southlandengineering.com

DESIGNED	WAR	APPROVED	ENGINEER
DRAWN	WAR		
CHECKED	WAR		

NO.	DATE	REVISION	APPR.
1	3-12-26	REVISED PER KP COMMENTS	



SCALE  
 HORIZONTAL SCALE: 1"=20'  
 CONTOUR INTERVAL: 2'  
 DATE  
 01-22-2026

DEED REFERENCES:  
 DEED INST. # 20251230003729

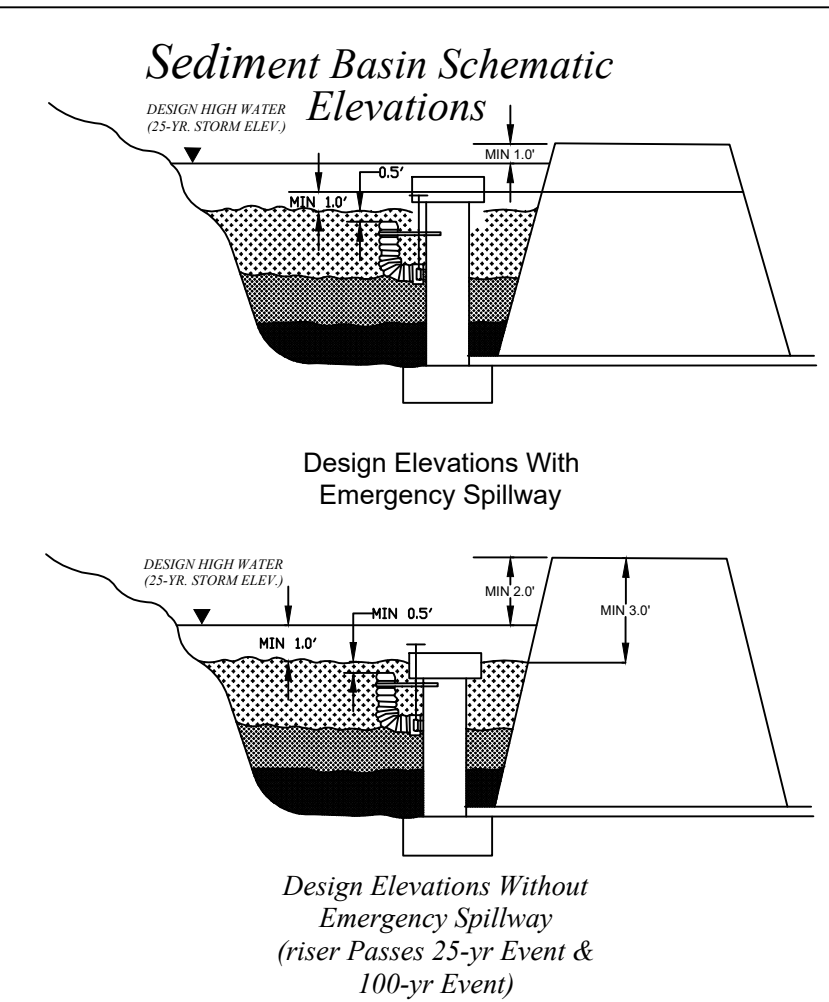
CONCEPT FOR HAYDEN FARMS, PHASE III  
 ON SAM LEE ROAD  
 CLT MAP 103, PARCEL 072  
 DISTRICT-6, KNOX COUNTY, TENNESSEE

HFS-III-01-22-26-CP-SH3  
 SHEET 3 OF 6 SHEETS

1"=50'  
 COPYRIGHT 2025







PERMANENT SEDIMENT VOLUME FOR POND #1  
 WATER QUALITY VOLUME (1.159 AC-FT BELOW 844.0)  
 DRY STORAGE (1.35 AC-FT BELOW 845.0)  
 25 YEAR ELEVATION IS 849.4 MAX.  
 100 YEAR ELEVATION IS 850.9

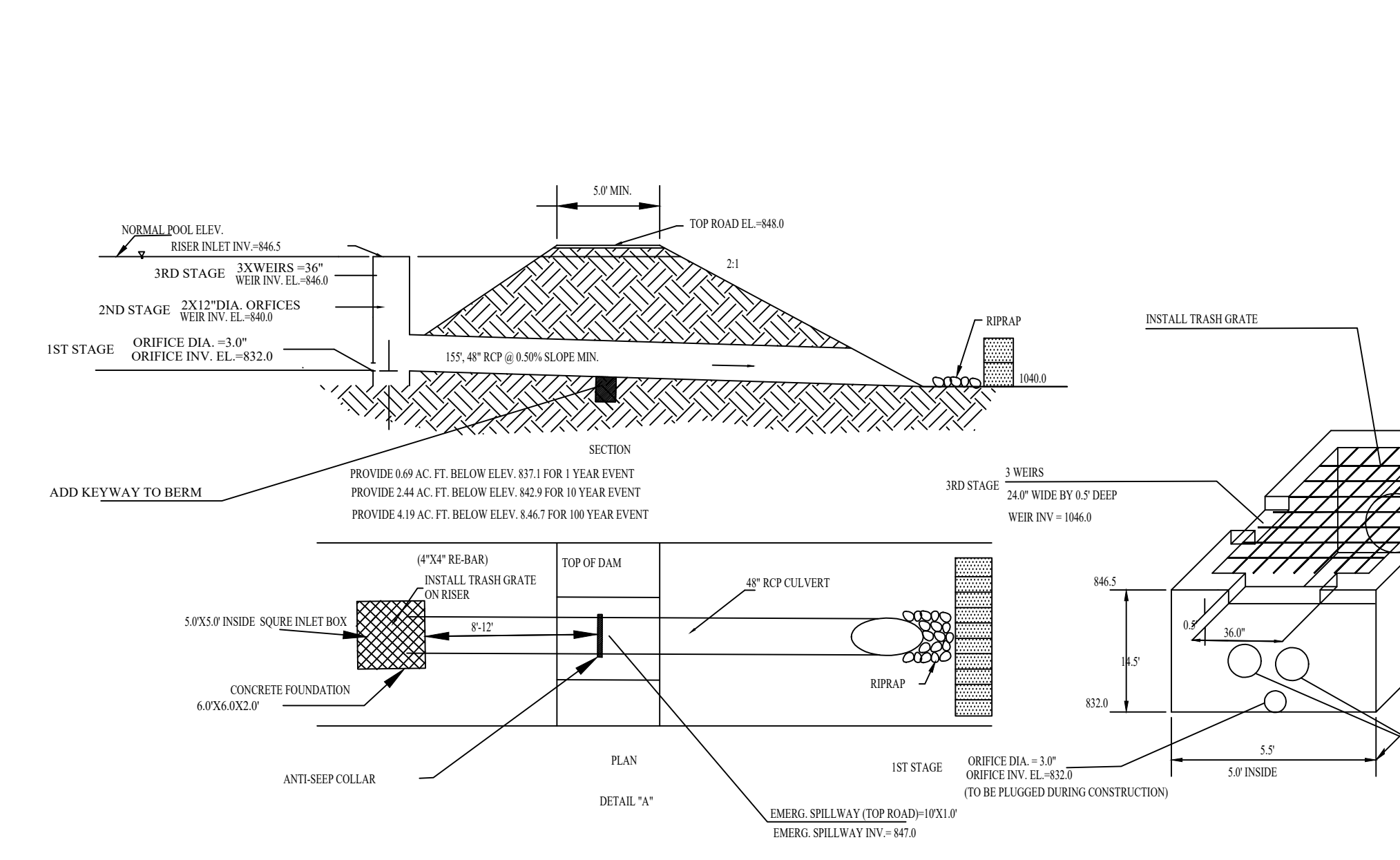
NOTE:  
 TOTAL GRADED AREA DRAINS INTO SEDIMENT POND #1 - 43.3 ACRES  
 TOTAL RUNOFF FOR 1 YEAR EVENT - 1.191 ACRE-FEET  
 REQUIRED WATER QUALITY VOLUME - 0.7521 ACF - 0.893 ACRE-FEET  
 THIS VOLUME MUST BE DRAWN 24 HOURS OR MORE  
 TOTAL DRAW-DOWN TIME - 1.58 DAYS - 37.9 HOURS  
 THE PERMANENT SEDIMENT & DETENTION POND #1.

ELEVATION (FT)	AREA (ACRES)	CUMULATIVE VOLUME (AC-FT)
802	0.00	0.00
803	1.76	1.76
804	5.00	6.76
805	10.00	16.76
806	15.75	32.51
807	21.25	53.76
808	26.50	80.26
809	31.50	111.76
810	36.25	148.01
811	40.75	188.76
812	45.00	233.76
813	48.90	282.66
814	52.50	335.16
815	55.75	390.91
816	58.60	448.51
817	61.10	507.61
818	63.25	567.86
819	65.00	628.86
820	66.35	690.51
821	67.30	752.81
822	67.85	815.66
823	68.00	879.06
824	67.75	942.81
825	67.10	1006.91
826	66.00	1071.41
827	64.45	1136.31
828	62.45	1201.61
829	60.00	1267.31
830	57.10	1333.41
831	53.75	1400.16
832	50.00	1467.46
833	45.75	1535.21
834	41.00	1603.41
835	35.75	1672.16
836	30.00	1741.46
837	23.75	1811.21
838	17.00	1881.46
839	9.75	1952.21
840	2.00	2023.46

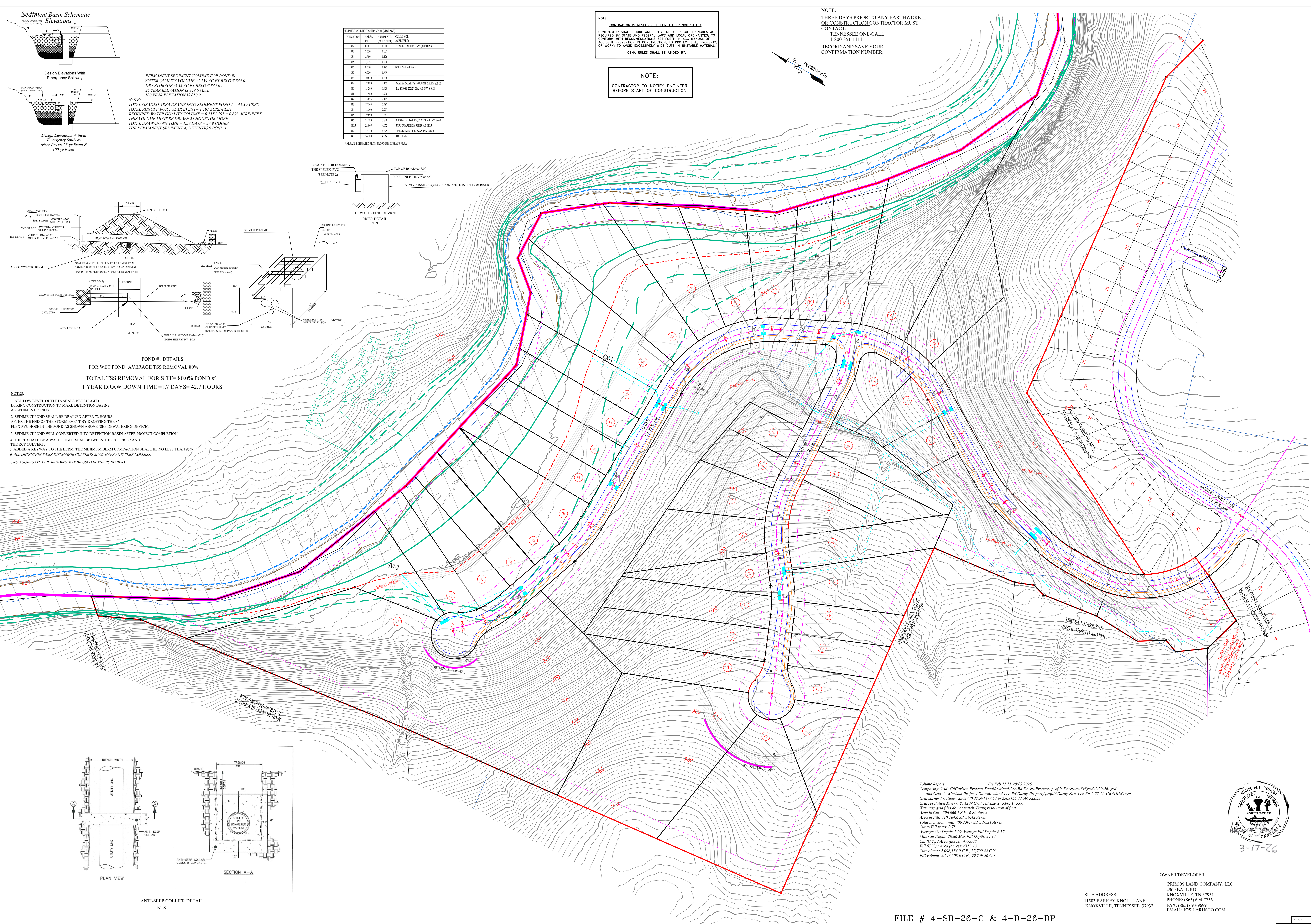
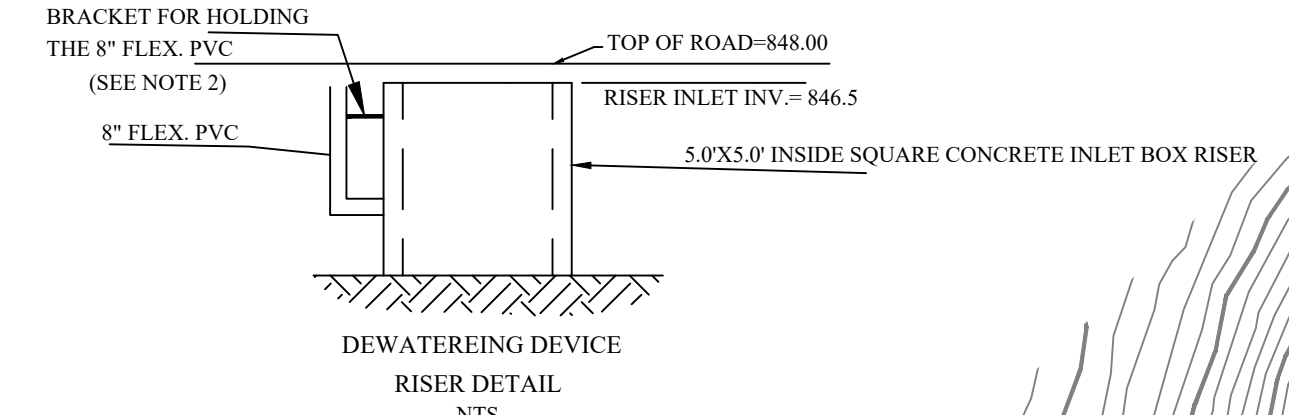
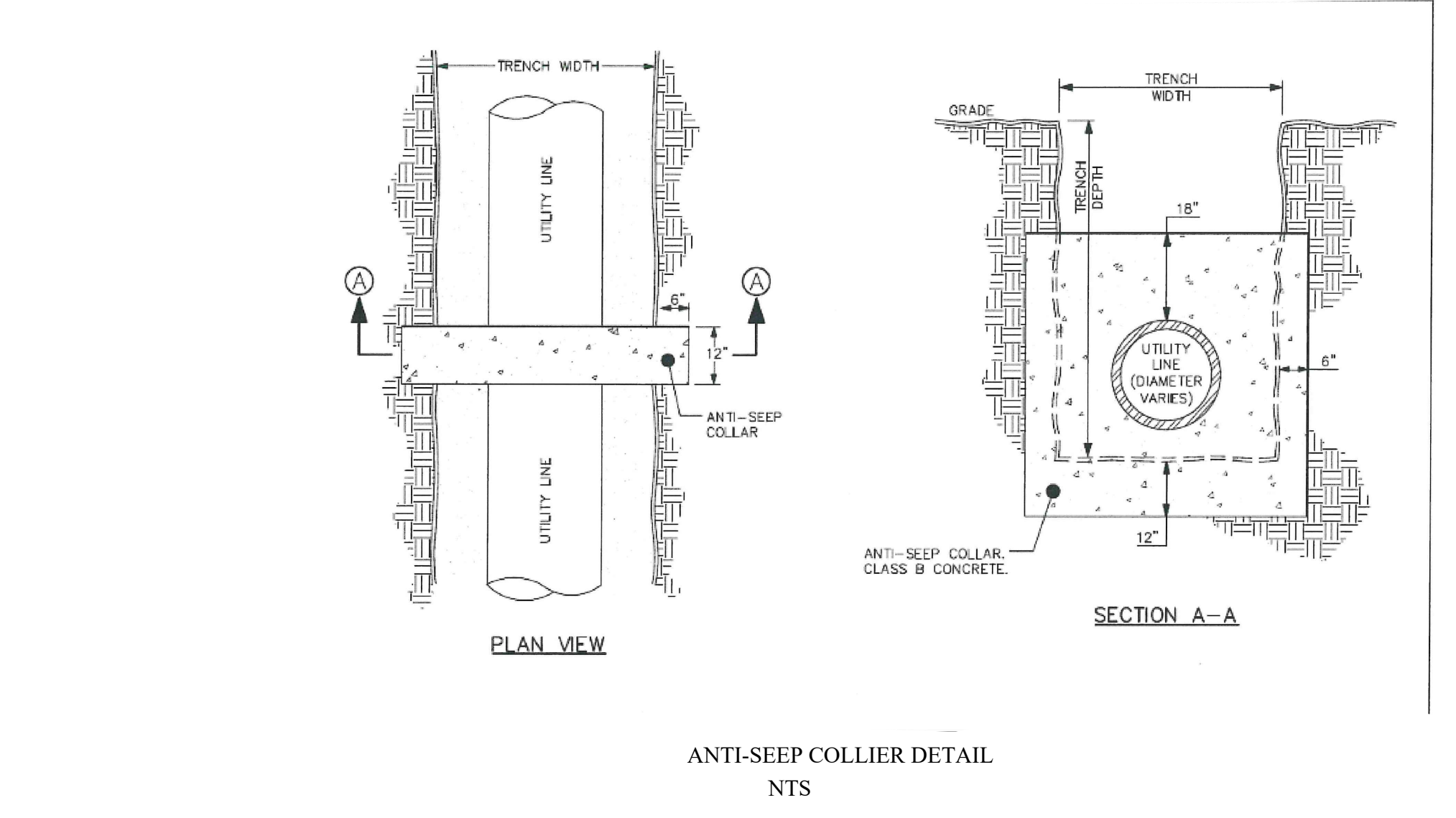
NOTE:  
 CONTRACTOR IS RESPONSIBLE FOR ALL TRENCH SAFETY.  
 CONTRACTOR SHALL SHORE AND BRACE ALL OPEN CUT TRENCHES AS REQUIRED BY STATE AND FEDERAL LAWS AND LOCAL ORDINANCES TO AVOID EXCESSIVELY WIDE CUTS IN UNSTABLE MATERIAL.  
 OSHA RULES SHALL BE ABIDED BY.

NOTE:  
 CONTRACTOR TO NOTIFY ENGINEER BEFORE START OF CONSTRUCTION

NOTE:  
 THREE DAYS PRIOR TO ANY EARTHWORK OR CONSTRUCTION CONTRACTOR MUST CONTACT:  
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 1-800-351-1111  
 RECORD AND SAVE YOUR CONFIRMATION NUMBER.



- NOTES:
1. ALL LOW LEVEL OUTLETS SHALL BE PLUGGED DURING CONSTRUCTION TO MAKE DETENTION BASINS AS SEDIMENT PONDS.
  2. SEDIMENT POND SHALL BE DRAINED AFTER 72 HOURS AFTER THE END OF THE STORM EVENT BY DROPPING THE 8" FLEX PVC HOSE IN THE POND AS SHOWN ABOVE (SEE DEWATERING DEVICE).
  3. SEDIMENT POND WILL BE CONVERTED INTO DETENTION BASIN AFTER PROJECT COMPLETION.
  4. THERE SHALL BE A WATER TIGHT SEAL BETWEEN THE RCP RISER AND THE RCP CULVERT.
  5. ADDED A KEYWAY TO THE BERM. THE MINIMUM BERM COMPACTION SHALL BE NO LESS THAN 95%.
  6. ALL DETENTION BASIN DISCHARGE COLLIERIES MUST HAVE ANTI-SEEP COLLIERIES.
  7. NO AGGREGATE PIPE BEDDING MAY BE USED IN THE POND BERM.



Volume Report  
 Comparing Grid: C:\Carlson Projects\Delta\Rawland-Lee-Rd\Hayden-Farms-Subgrid-1-20-26.grd  
 and Grid: C:\Carlson Projects\Delta\Rawland-Lee-Rd\Hayden-Farms-Subgrid-1-20-26-GRADING.grd  
 Grid corner locations: 2503770.37, 291478.53 to 2508155.37, 291523.53  
 Grid resolution: X: 87.7, Y: 1209 Grid cell size: X: 3.00, Y: 3.00  
 Warning: grid files do not match. Using resolution of first.  
 Area in Cut: 206,066.1 S.F. 6.80 Acres  
 Area in Fill: 610,164.6 S.F. 9.42 Acres  
 Total inclusion area: 706,230.7 S.F. 16.21 Acres  
 Cut to Fill ratio: 0.78  
 Average Cut Depth: 7.09 Average Fill Depth: 6.57  
 Max Cut Depth: 28.86 Max Fill Depth: 24.14  
 Cut (C.Y.) / Area (acres): 4793.08  
 Fill (C.Y.) / Area (acres): 6153.13  
 Cut volume: 2,098,154.9 C.Y. 77,709.44 C.Y.  
 Fill volume: 2,693,508.0 C.Y. 99,759.36 C.Y.



OWNER/DEVELOPER:  
 PRIMOS LAND COMPANY, LLC  
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 PHONE: (865) 694-7756  
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FILE # 4-SB-26-C & 4-D-26-DP

SOUTHLAND ENGINEERING CONSULTANTS, LLC GENERAL CIVIL & LAND SURVEYORS 4909 BALL ROAD KNOXVILLE, TENNESSEE 37931 PHONE: (865) 694-7756 FAX: (865) 693-9699 E-MAIL: wrghcb@sengeconsultants.com www.southlandengineering.com	DESIGNED	WAR	APPROVED		SCALE HORIZONTAL SCALE: 1"=60' CONTOUR INTERVAL: 2' DATE 01-22-2026	DEED REFERENCES: DEED INST. # 20251230003729	GRADING FOR HAYDEN FARMS, PHASE III ON SAM LEE ROAD CLT MAP 103, PARCEL 072 DISTRICT-6, KNOX COUNTY, TENNESSEE	HFS-III-01-22-26-GP-SH6 SHEET 6 OF 6 SHEETS
	DRAWN	WAR	ENGINEER					
	CHECKED	WAR						