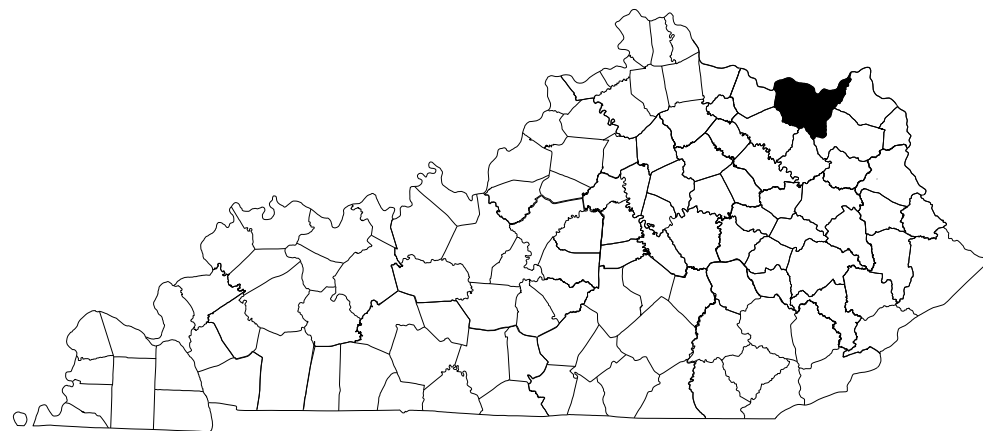


# COMMONWEALTH OF KENTUCKY

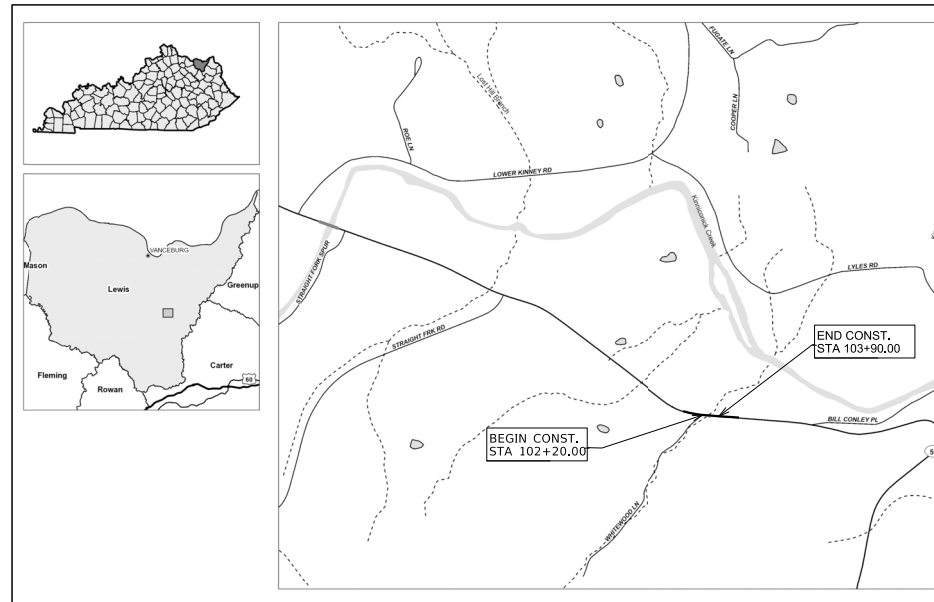
## DEPARTMENT OF HIGHWAYS

### PLANS OF PROPOSED PROJECT Fairlane Drive (KY 59) Over Tributary of Kinniconick Creek Lewis County, Kentucky Grade, Drain, and Surfacing Plans



**THIS PROJECT IS OFF THE NH SYSTEM**

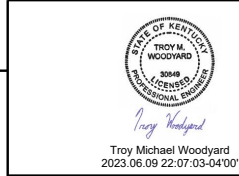
THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT



### LAYOUT MAP

**BEFORE YOU DIG**

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.



LETTING DATE: 7/20/2023  
ITEM NO. 09-40004.00 COUNTY OF Lewis  
SHEET NO. R1

#### DESIGN CRITERIA

CLASS OF HIGHWAY MINOR COLLECTOR (RURAL)  
TYPE OF TERRAIN MOUNTAINOUS  
DESIGN SPEED \_\_\_\_\_  
REQUIRED NPSD NA  
REQUIRED PSD NA  
LEVEL OF SERVICE NA  
ADT PRESENT ( 2022 ) 390  
ADT FUTURE ( X ) X  
DHV X  
D % 58  
T % 9.0

#### INDEX OF SHEETS

R1 LAYOUT  
R2 TYPICAL SECTIONS  
R2A GENERAL SUMMARY  
R2B GENERAL NOTES AND SPECIAL NOTES  
R3 LEGEND AND UTILITY OWNER  
R4 - R6 PLAN AND PROFILE SHEETS  
R7 MOT NOTES  
R7A - R7C MOT PLAN SHEETS  
R8 NOT USED  
R9 EROSION CONTROL NOTES  
R10 EROSION CONTROL PLAN  
R11 COORDINATE CONTROL  
X1 - X2 CROSS SECTIONS

#### STANDARD DRAWINGS

RBI-001-012	RBM-120-02	RGX-001-06	BHS-012
RBM-020-009	RBR-010-06	RGX-200-01	SEPIA 017
RBM-115-010	RBR-060	RPM-110-07	SEPIA 022
RBR-001-013	RDX-210-03	TPR-115	
RBR-005-011	RDX-215-01	TPR-120	
RBR-015-006	RDX-220-05	TTC-100-05	
RBR-055-001	RDX-225-01	TTC-110-04	

#### FAIRLANE DRIVE (KY 59)

LENGTH <u>170</u> LIN. FT. <u>0.032</u> MILES ADDED <input type="checkbox"/> FOR EQUALITIES <u>X</u> LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES ADDED <input type="checkbox"/> FOR EQUALITIES <u>X</u> LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES ADDED <input type="checkbox"/> FOR EQUALITIES <u>X</u> LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES ADDED <input type="checkbox"/> FOR EQUALITIES <u>X</u> LIN. FT. DEDUCTED <input type="checkbox"/> NOT INCLUDED
RAILROAD CROSSINGS NO. <u>X</u> LIN. FT. BRIDGES <u>X</u> LIN. FT. <u>X</u> <u>X</u>	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT. BRIDGES <u>X</u> LIN. FT. <u>X</u> <u>X</u>	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT. BRIDGES <u>X</u> LIN. FT. <u>X</u> <u>X</u>	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT. BRIDGES <u>X</u> LIN. FT. <u>X</u> <u>X</u>

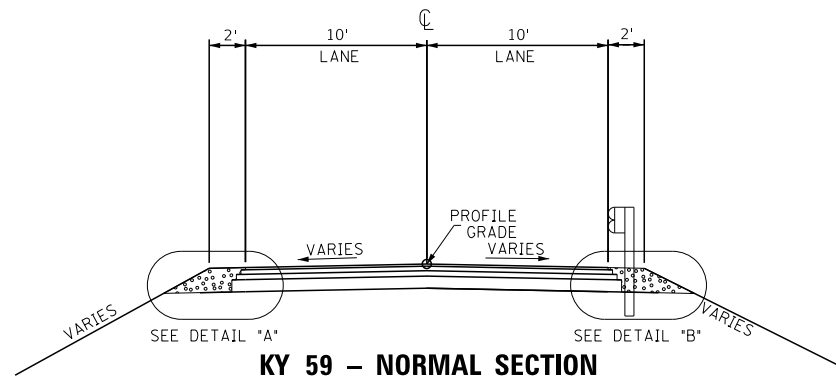
PROJECT NUMBER:

PROJECT DESCRIPTION: CULVERT REPLACEMENT, KY 59 OVER TRIBUTARY OF KINNICONICK CREEK, BRIDGE ID #068B00010N

RECOMMENDED BY: Carl van Zee PROJECT MANAGER DATE: 05/31/2023

PLAN APPROVED BY: \_\_\_\_\_ STATE HIGHWAY ENGINEER DATE: \_\_\_\_\_

# TYPICAL SECTIONS

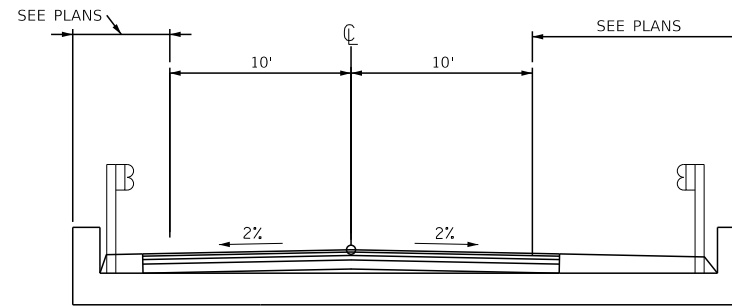


## KY 59 - NORMAL SECTION

STA 102+20.00 TO STA 103+90.00

NOTE: SEE CROSS SECTIONS FOR SLOPES OUTSIDE THE LIMITS OF THE SHOULDERS.

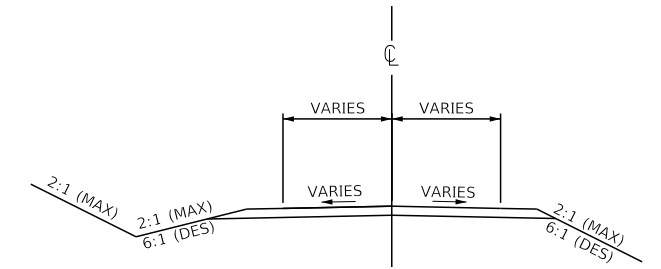
NOTE: PLACE GUARDRAIL IN LINE WITH WIDENED CULVERT SHOULDER AS DIRECTED BY THE ENGINEER TO MAXIMIZE RAIL TO RAIL ROADWAY WIDTH



## CULVERT DETAIL

SEE STRUCTURES PLANS FOR CULVERT DETAILS

NOTE: PLACE GUARDRAIL IN LINE WITH WIDENED CULVERT SHOULDER AS DIRECTED BY THE ENGINEER TO MAXIMIZE RAIL TO RAIL ROADWAY WIDTH



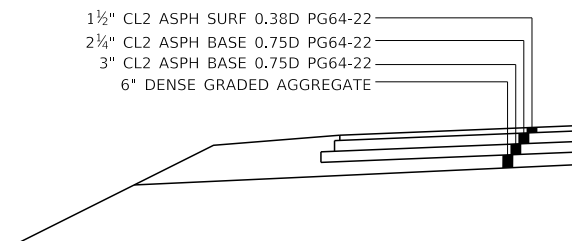
## ENTRANCE TYPICAL SECTION

### ASPHALT ENTRANCE - NEW CONSTRUCTION

DENSE GRADED AGGREGATE	4" DEPTH
CL2 ASPH BASE 0.75D PG64-22	2 1/4" DEPTH
CL2 ASPH SURF 0.75D PG64-22	1 1/2" DEPTH

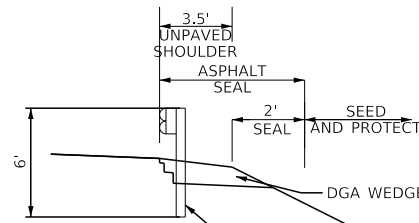
### GRAVEL ENTRANCE - NEW CONSTRUCTION

DENSE GRADED AGGREGATE	8" DEPTH
------------------------	----------



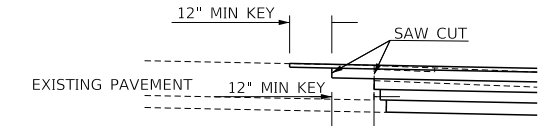
## DETAIL "A" - PAVEMENT DESIGN

FROM EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE SLOPE  
 BITUMINOUS SEAL-TWO APPLICATIONS  
 OF THE FOLLOWING:  
 ASPHALT SEAL COAT 2.4 LB/SY  
 ASPHALT SEAL AGGREGATE 20 LB/SY



## DETAIL "B" - GUARDRAIL INSTALLATION

BITUMINOUS SEAL-TWO APPLICATIONS  
 OF THE FOLLOWING:  
 ASPHALT SEAL COAT 2.4 LB/SY  
 ASPHALT SEAL AGGREGATE 20 LB/SY



ALL SAW CUTS FOR EDGE KEY ARE INCIDENTAL TO EDGE KEY. CONTRACTOR RESPONSIBLE FOR VERIFYING EXISTING PAVEMENT DEPTHS, AND VERIFYING THE EXISTING PAVEMENT ELEVATIONS.

## EDGE KEY

ITEM	DESCRIPTION	UNIT	KY 59 FAIRLANE DR	TOTAL PROJECT
1987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	EACH	10	10
2159	TEMP DITCH	LF	85	85
2160	CLEAN TEMP DITCH	LF	43	43
2200	ROADWAY EXCAVATION	CUYD	139	139
2242	WATER	MGAL	170	170
2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	200	200
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	4	4
2545	CLEARING AND GRUBBING	LS	1	1
2565	OBJECT MARKER TYPE 2	EACH	4	4
2569	DEMOBILIZATION	LS	1	1
2585	EDGE KEY	LF	36	36
2650	MAINTAIN & CONTROL TRAFFIC	LS	1	1
2697	EDGE LINE RUMBLE STRIPS	LF	340	340
2701	TEMP SILT FENCE	LF	85	85
2703	SILT TRAP TYPE A	EACH	1	1
2704	SILT TRAP TYPE B	EACH	1	1
2706	CLEAN SILT TRAP TYPE A	EACH	1	1
2707	CLEAN SILT TRAP TYPE B	EACH	1	1
2726	STAKING	LS	1	1
2731	REMOVE STRUCTURE	LS	1	1
3171	CONCRETE BARRIER WALL TYPE 9T	LF	640	640
4933	TEMP SIGNAL 2 PHASE	EACH	1	1
5950	EROSION CONTROL BLANKET	SQYD	55	56
5952	TEMP MULCH	SQYD	752	752
5953	TEMP SEEDING AND PROTECTION	SQYD	561	561
5963	INITIAL FERTILIZER	TON	0.1	0.1
5964	20-10-10 FERTILIZER	TON	0.1	0.1
5985	SEEDING AND PROTECTION	SQYD	1715	1715
5992	AGRICULTURAL LIMESTONE	TON	1	1
6514	PAVE STRIPING-PERM PAINT-4-IN	LF	595	595
24631EC	BARCODE SIGN INVENTORY	EACH	4	4

- 1 TO BE USED AT THE ENGINEER'S DISCRETION FOR EROSION CONTROL.
- 2 THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.
- 3 APPROX. 0.2 ACRE MORE OR LESS

- A ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD PER INCH OF DEPTH. UNLESS NOTED OTHERWISE.
- B ESTIMATED AT 115 LBS PER SQ YD PER IN OF DEPTH.
- C ESTIMATED AT 20 LBS PER SQ YD. 2 APPLICATIONS REQUIRED.
- D ESTIMATED AT 2.40 LBS PER SQ YD. 2 APPLICATIONS REQUIRED.
- E ESTIMATED AT 0.84 LBS PER SQ YD. TO BE PLACED ON TOP OF DGA PRIOR TO ASPHALT PAVING.
- F ESTIMATED AT 0.84 LBS PER SQ YD. TO BE PLACED ON TOP OF ALL BASE LIFTS.

Paving Areas			
ITEM	KY 59 FAIRLANE DR	ENTRANCES	TOTALS
	SQUARE YARDS		
DGA BASE	408	302	710
ASPHALT SEAL AGGREGATE	275	0	275
ASPHALT SEAL COAT	275	0	275
CL2 ASPH BASE 0.75D PG64-22	375	245	620
ASPHALT PRIME COAT	408	302	710
CL2 ASPH SURF 0.38D PG64-22	366	245	611
ASPHALT MATERIAL FOR TACK	375	245	620

Paving Summary					
ITEM CODE	ITEM	UNIT	KY 59 FAIRLANE DR	ENTRANCES	TOTAL PROJECT
B 00001	DGA BASE	TON	251	99	350
C 00100	ASPHALT SEAL AGGREGATE	TON	6	0	6
D 00103	ASPHALT SEAL COAT	TON	0.66	0.00	0.66
A 00221	CL2 ASPH BASE 0.75D PG64-22	TON	108	30	138
E 00296	ASPHALT PRIME COAT	TON	0.17	0.13	0.30
A 00301	CL2 ASPH SURF 0.38D PG64-22	TON	30	17	47
F 00356	ASPHALT MATERIAL FOR TACK	TON	0.16	0.10	0.26

Earthwork Volumes (CUYD)		
	Exc.	Emb.
KY 59	139	46
Total	139	46

## General Notes

### DIVISION 100 -- GENERAL PROVISIONS

#### 165 BEFORE YOU DIG

THE CONTRACTOR IS INSTRUCTED TO CALL 1-800-752-6007 TO REACH KY 811, THE ONE-CALL SYSTEM FOR INFORMATION ON THE LOCATION OF EXISTING UNDERGROUND UTILITIES. THE CALL IS TO BE PLACED A MINIMUM OF TWO (2) AND NO MORE THAN TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHOULD BE AWARE THAT OWNERS OF UNDERGROUND FACILITIES ARE NOT REQUIRED TO BE MEMBERS OF THE KY 811 ONE-CALL BEFORE-U-DIG (BUD) SERVICE. THE CONTRACTOR MUST COORDINATE EXCAVATION WITH THE UTILITY OWNERS, INCLUDING THOSE WHOM DO NOT SUBSCRIBE TO KY 811. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY COURT CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE AREA.

### DIVISION 400 -- ASPHALT PAVEMENTS

#### 448 COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

#### 455 EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED ELSEWHERE IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT (PER METER) FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

### DIVISION 600 -- STRUCTURES AND CONCRETE

#### 650 STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-4610

## Special Notes

THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

ALONG FAIRLANE DRIVE, CLEAR AND GRUB ONLY AREA THAT IS NECESSARY FOR STAGING AND CONSTRUCTION. IF VEGETATION DOES NOT CONFLICT WITH CONSTRUCTION ACTIVITIES, IT SHOULD REMAIN UNDISTURBED.

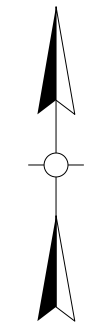
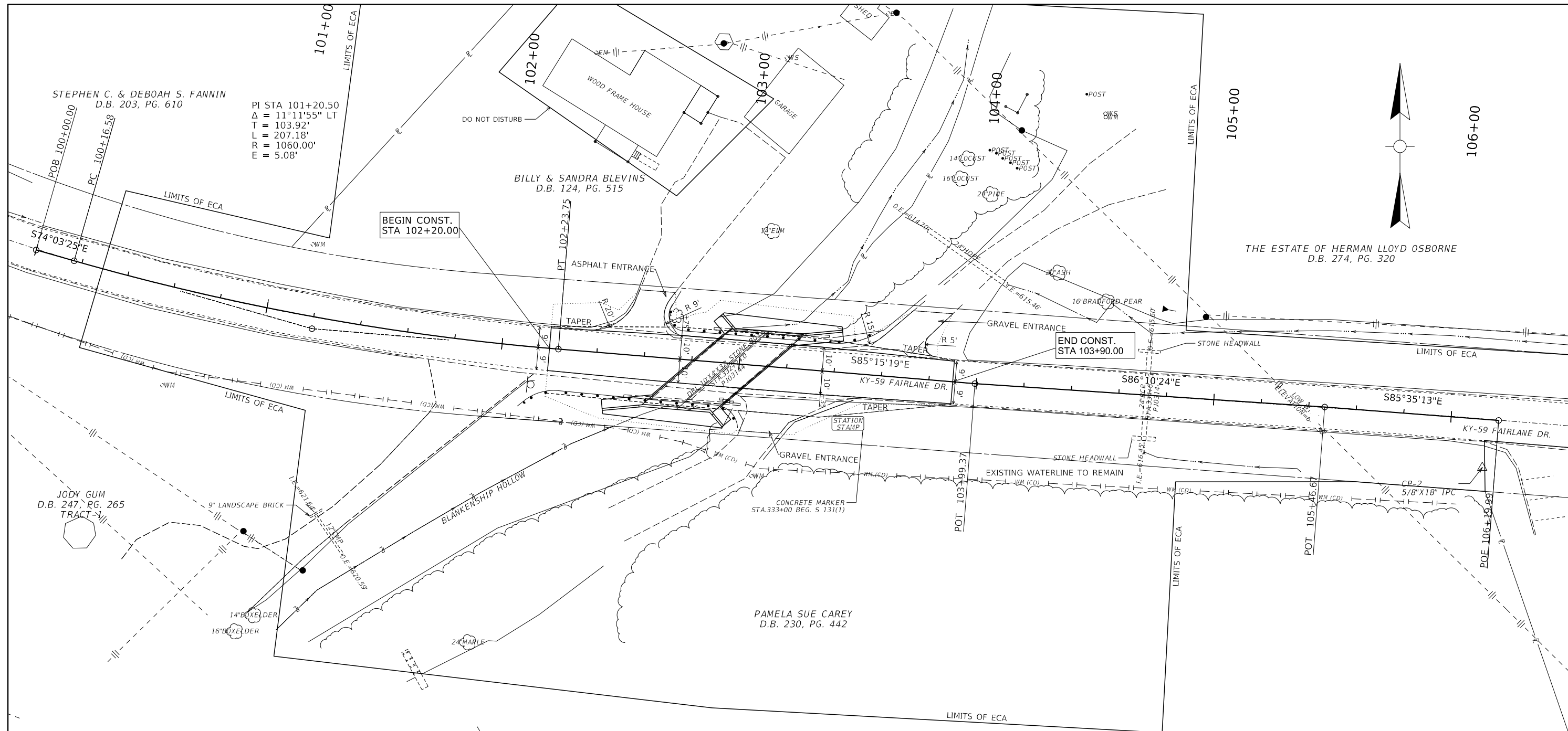
SPECIAL NOTE FOR BARCODES ON PERMANENT SIGNS 2019 SHALL APPLY.

Corporate Limits	---	Main Water Marker	OWLM	Crash Cushion TY 9		Point (Misc)	—	Telephone Pedestal	
County Line	---	Main Water Greater Than 12 Marker	OWLMG12	Cross Notch	•NOTCH	Pole	●	Telephone Pole	●
Easement	---	Sewer Sanitary Marker	OSSM	Curb Box Inlet		Pole (Light)	⊗	Temporary Benchmark	
Fence COA	---XX---	Sewer Sanitary Force Main Marker	OSANFMM	Curb Notch	•NOTCH	Post	•POST	Traffic Light	
Mineral Parcel	-----	Sewer Storm Marker	OSTMM	Combination Pole		Power Pole		Traffic Signal Control Box	
Property Line	---	Multi Utility Bank Marker	OMUBM	Delineator Post	•DP	Quarry		Traffic Signal Junction Box	
Right of Way Line	---	Oil Line Marker	OOLM	Drop Box		Random (Ground Shot)	+	Traffic Signal Pole	●
All Overhead Utility Lines	---   ---	Steam Line Marker	OSLM	Existing Spring		Railroad Mile Marker	•RRMM	Traverse Point	•TRAV
Cable Underground Electric With Quality Levels	--- E (A) --- OE(A) --- E (B) --- --- E (CD) --- --- E (PA) ---	Cable Guardrail		Electric Manhole		Railroad Spike	•RRS	Tree	
Duct Underground Electric With Quality Levels	--- E (A) --- OE(D)(A) --- E (B) --- --- E (CD) --- --- E (PA) ---	Ditch		Electric Meter	SEM	Right of Way Marker	□	TV Junction Box	
Cable Underground Fiber With Quality Levels	--- FO (A) --- OF(A) --- FO (B) --- --- FO (CD) --- --- FO (PA) ---	Edge of Water		Electric Pedestal		RR Traffic Signal Pole	●	Utility Pole	●
Cable Underground Telephone With Quality Levels	--- T (A) --- OT(A) --- T (B) --- --- T (CD) --- --- T (PA) ---	Fence Hedge		Electric Junction Box		RW Parcel		Underground Storage Tank	
Duct Underground Telephone With Quality Levels	--- T (A) --- OT(D)(A) --- T (B) --- --- T (CD) --- --- T (PA) ---	Fence		Fire Hydrant	●	Sanitary Cleanout	OSANCO	Utility Test Hole	●TH
Cable Underground TV With Quality Levels	--- TV (A) --- OTV(A) --- TV (B) --- --- TV (CD) --- --- TV (PA) ---	Flow Line/Thalweg/Int. Stream or Ditch		Flag Pole	•FP	Sanitary Manhole	OSANMH OSANMH	Water Line Marker	OWLM
Main Gas With Quality Levels	--- GM (A) --- OGM(A) --- GM (B) --- --- GM (CD) --- --- GM (PA) ---	Guardrail		Force Main Sewer Valve	∞	Satellite Dish	SD	Water Meter	OWM
Main Water With Quality Levels	--- WM (A) --- OWM(A) --- WM (B) --- --- WM (CD) --- --- WM (PA) ---	Railroad		Fuel Tank Inlet	FTI	Septic Tank Cleanout	STC	Water Spigot	OWS
Main Water Greater Than 12 With Quality Levels	--- WM >12 (A) --- OWM>12(A) --- WM >12 (B) --- --- WM >12 (CD) --- --- WM >12 (PA) ---	Shrub Line		Fuel Tank Vent	FTV	Service Pole	SP	Water Valve	OWV OWV
Sewer Sanitary With Quality Levels	--- SAN (A) --- OSAN(A) --- SAN (B) --- --- SAN (CD) --- --- SAN (PA) ---	Sink Hole		Gas Meter	GM	Sewer Air Release Valve		Water Well	OWW
Sewer Sanitary Force Main With Quality Levels	--- SAN FM (A) --- OSAN FM(A) --- SAN FM (B) --- --- SAN FM (CD) --- --- SAN FM (PA) ---	Tree Line		Gas Monitoring Well	GMW	Shrub		Yard Light	
Sewer Storm With Quality Levels	--- STORM (A) --- OSTORM(A) --- STORM (B) --- --- STORM (CD) --- --- STORM (PA) ---	Wall (WSM or DSM)		Gas Valve	GV OGV	Sign	•SIGN	Yard Sprinkler	YS
Multi Utility Bank Quality Levels	--- MUB (A) --- OMUB(A) --- MUB (B) --- --- MUB (CD) --- --- MUB (PA) ---	Blue Line Stream		Gas Vent	GVE	Sign Post (Single)	○	Yard Sprinkler Water Valve	•SWV
Oil Line Quality Levels	--- OIL (A) --- OOIL(A) --- OIL (B) --- --- OIL (CD) --- --- OIL (PA) ---	Lakes and Ponds		Gas Well	GW	Sign with 2 posts	○ ○		
Steam Line Quality Levels	--- STM (A) --- OSTM(A) --- STM (B) --- --- STM (CD) --- --- STM (PA) ---	Regulated Floodway		Guidewires & Anchors		Sign group (4)	○ ○ ○ ○		
Cable Underground Electric Marker	OCUGEM	RDZ Line		Headstone		Station Stamp			
Duct Underground Electric Marker	ODUGEM	ADA Ramp		Interstate Shield		Storm Manhole	OSSMH		
Cable Underground Fiber Marker	OCUGFM	Anchor Pole	●	Iron Pin	•IP	Stub Power			
Cable Underground Telephone Marker	OCUGTM	Benchmark		Light Pole	⊗	Stub Telephone			
Duct Underground Telephone Marker	ODUGTM	Bike Lane Symbol		Low Wire	+	Survey Cross Notch	•CN		
Cable Underground TV Marker	OCUGTVM	Bollard	•BOLLARD	Mag Nail	•MAG	Survey Curb Notch	•NOTCH		
Main Gas Marker	GLM	Centerline	+	Mailbox		Survey Nail	•MAG		
		Centerline Stationing	○	Manhole		Survey Spike	•RRS		
		Control Monument		Mile Marker Post	•MP	Survey Stone Marker	•STONE		
		Control Point		Mineral Parcel		Swamp			
		Core Hole	•CORE	Misc Location Point		Telephone Booth			
		Crash Cushion TY 6 D		Monitoring Well	OMW	Telephone Junction Box			
		Crash Cushion TY 6 A		Parking Meter	•PM	Telephone Line Overhead	●		
		Crash Cushion TY 9A		Pedestrian Signal		Telephone Manhole			
				Pins/Pipes	•IP				
				PK Nail	•PK				

**Utility Owners**

Electric Plant Board of the  
City of Vanceburg-Water  
P.O. Box 489  
Vanceburg, KY 41179  
Contacts - Bill Stone  
606-796-6311  
epb\_billtom\_stone@hotmail.com

Danny Enix  
606-796-2641  
epbwaterdept@gmail.com



TAPER AND TIE ALL PAVEMENT AS DIRECTED BY THE ENGINEER.

STA 102+20 CONSTRUCT APPROX 18 LF OF EDGE KEY AS DIRECTED BY THE ENGINEER

APPROX RT STA 102+08 TO STA 103+00 CONSTRUCT 100 LF STEEL W-BEAM GUARDRAIL S FACE, AND TWO TERMINAL SECTION NO.1.

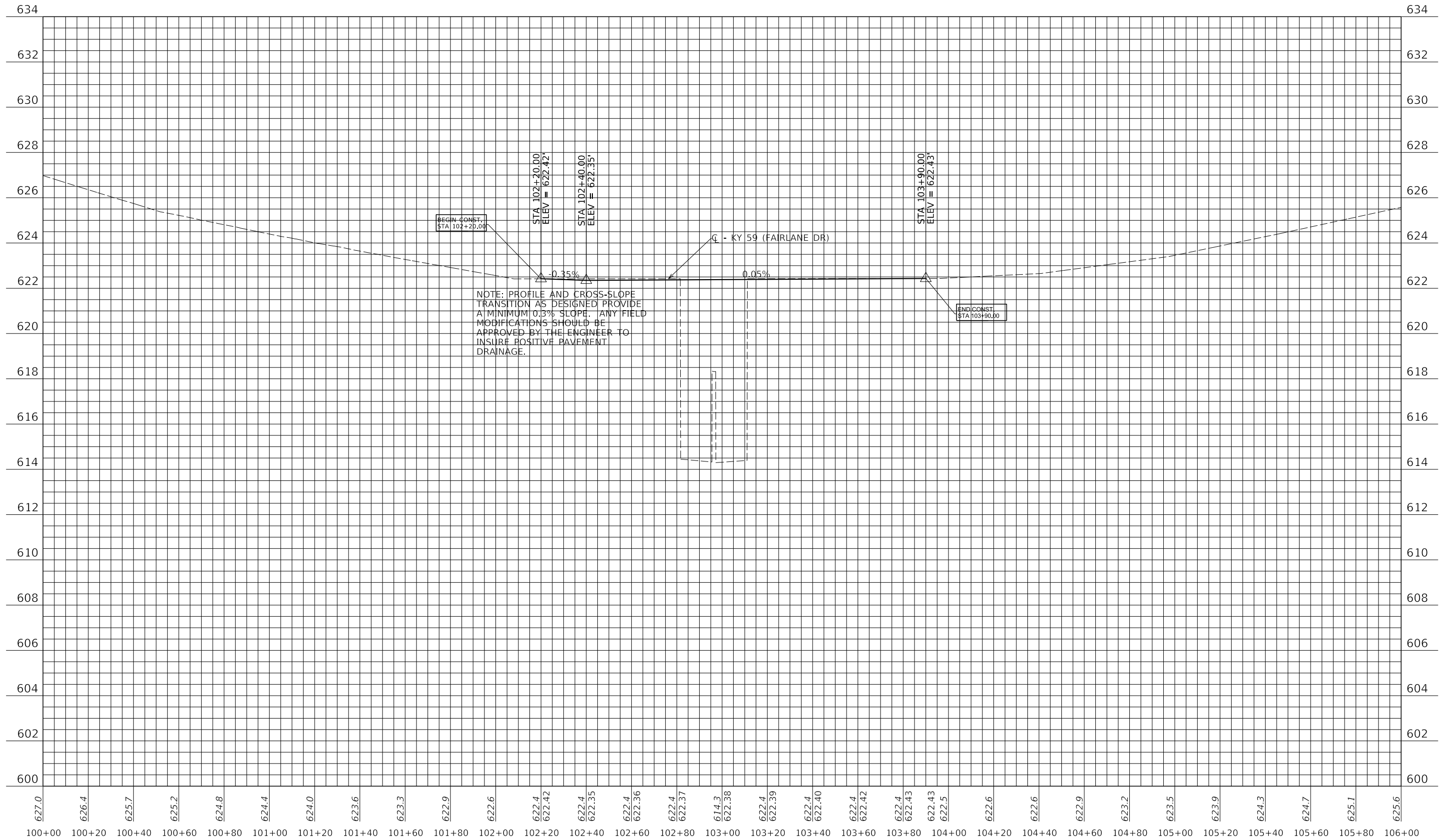
APPROX LT STA 102+70 TO STA 103+59 CONSTRUCT 100 LF STEEL W-BEAM GUARDRAIL S FACE, AND TWO TERMINAL SECTION NO.1.

APPROX STA 102+96 REMOVE EXISTING STRUCTURE (DOUBLE 10' X 4' X 32' STONE BOX CULVERT).

CONSTRUCT 1 OBJECT MARKER TYPE 2 AT EACH CORNER OF CULVERT (4 TOTAL).

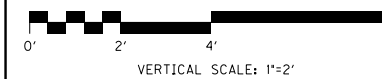
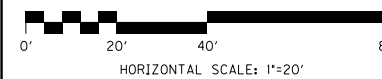
STA 103+90 CONSTRUCT APPROX 18 LF OF EDGE KEY AS DIRECTED BY THE ENGINEER.

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: KY 59 PLAN SHEET	HORIZONTAL SCALE SCALE: 1" = 20'		STA 100+00.00 TO 106+19.99	ITEM NO. 09-40004.00 COUNTY OF Lewis SHEET NO. R4
--	---------------------------------	-------------------------------------	--	----------------------------	--



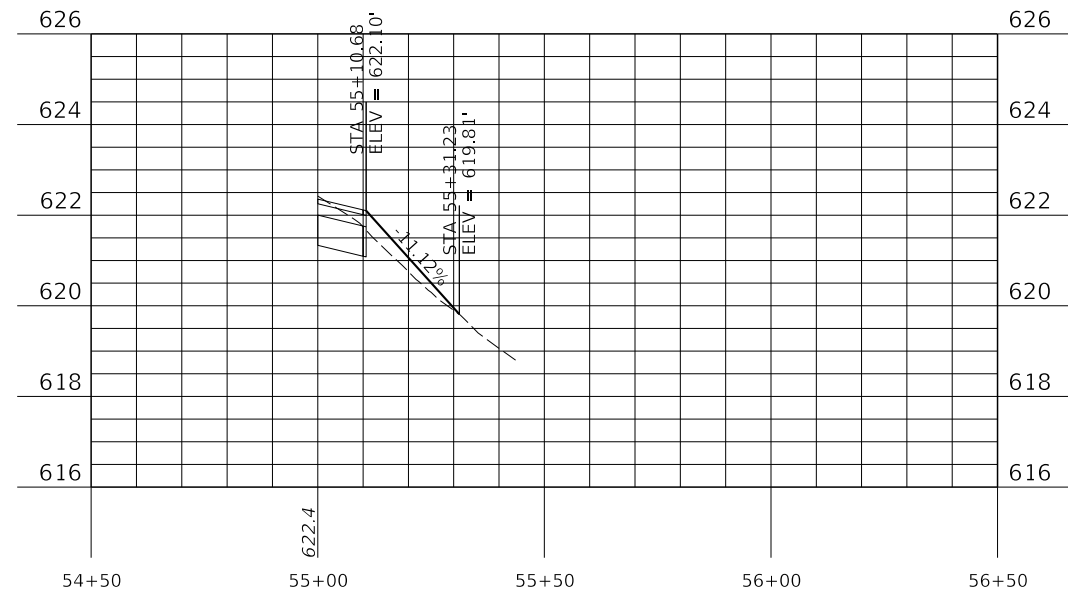
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 59 PROFILE SHEET

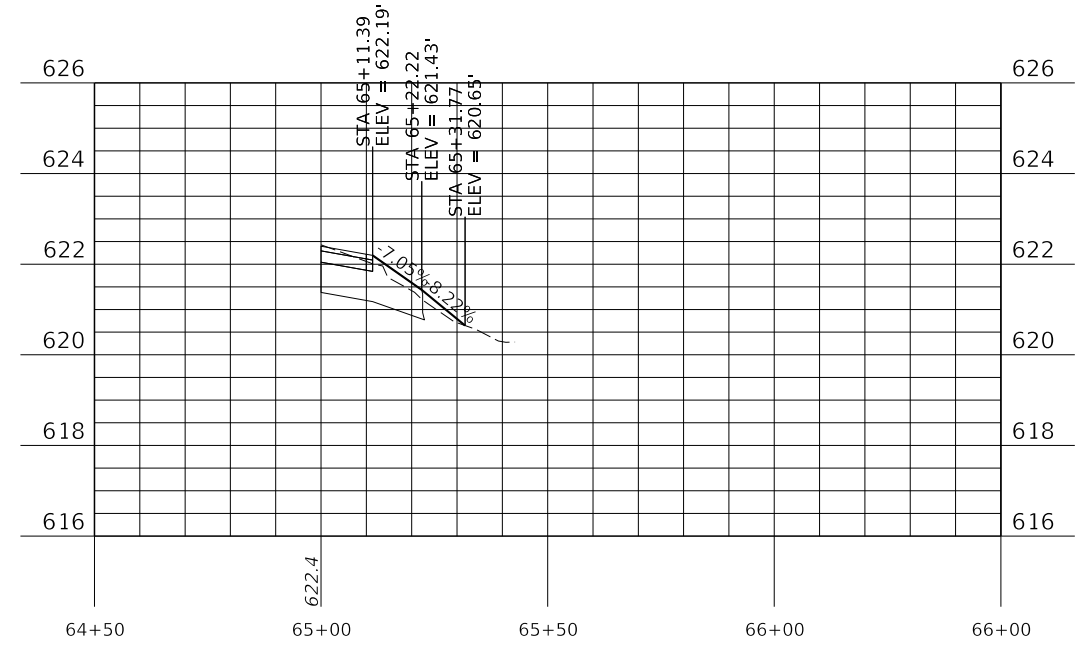


STA 100+00.00 TO STA 106+19.99

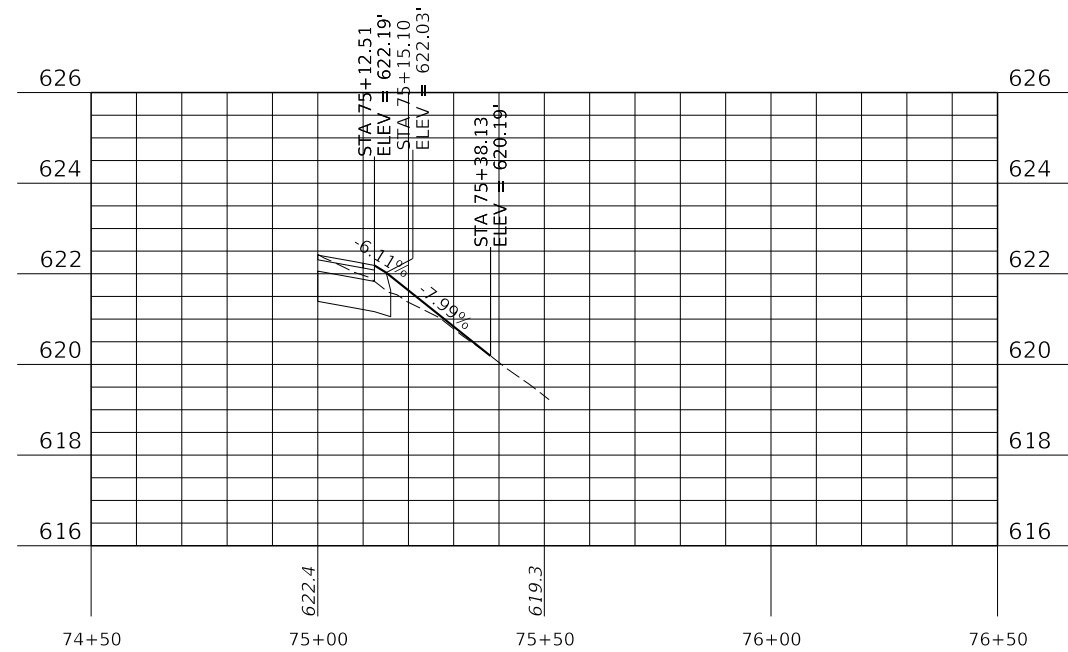
ITEM NO. 09-40004.00 COUNTY OF Lewis  
SHEET NO. R5



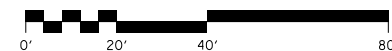
ENTRANCE LT 102+49  
27°21'22" SKEW RT



ENTRANCE RT 103+26  
28°38'23" SKEW RT



ENTRANCE RT 103+54  
41°42'46" SKEW RT





GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2. EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BID ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:
  - A. ALL GRADING AND NECESSARY DRAINAGE (UNLESS A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED) FOR THE TEMPORARY ROADWAY AND REMOVAL THEREOF, WHEN IT IS NO LONGER NEEDED. IF A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED, GRADING AND DRAINAGE WILL BE PAID FOR IN THE BID ITEM "DETOUR CONSTRUCTION".
  - B. ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AND MARKINGS.
  - C. ALL FLAGPERSONS AND TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS BARRICADES AND VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC AS SPECIFIED IN THESE NOTES, THE PLANS, THE MUTCD OR THE ENGINEER.
3. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
4. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 10' LANE WIDTH AS DIRECTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL COMPLETELY COVER ANY SIGNS, EITHER EXISTING, PERMANENT OR TEMPORARY, WHICH DO NOT PROPERLY APPLY TO THE CURRENT TRAFFIC PHASING, AND SHALL MAINTAIN THE COVERING UNTIL THE SIGNS ARE APPLICABLE OR ARE REMOVED.
6. IN GENERAL, ALL TRAFFIC CONTROL DEVICES SHALL BE PLACED STARTING AND PROCEEDING IN THE DIRECTION OF THE FLOW OF TRAFFIC AND REMOVED STARTING AND PROCEEDING IN THE DIRECTION OPPOSITE THE FLOW OF TRAFFIC.
7. THE ENGINEER AND THE CONTRACTOR, OR THEIR AUTHORIZED REPRESENTATIVES, SHALL REVIEW THE SIGNING BEFORE TRAFFIC IS ALLOWED TO USE ANY LANE CLOSURES, CROSSOVERS OR DETOURS. ALL SIGNING SHALL BE APPROVED BY THE ENGINEER BEFORE WORK CAN BE STARTED BY THE CONTRACTOR.
8. IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TRAFFIC CONTROL SCHEME AND CONSTRUCTION SCHEDULE OUTLINED IN THESE PLANS AND THIS PROPOSAL, HE SHALL PREPARE AN ALTERNATE PLAN AND PRESENT IT IN WRITING TO THE ENGINEER. THIS ALTERNATE PLAN CAN BE USED ONLY AFTER REVIEW AND APPROVAL OF THE DIVISIONS OF TRAFFIC, DESIGN AND CONSTRUCTION, AND THE FEDERAL HIGHWAY ADMINISTRATION, WHERE APPLICABLE.
9. IF TRAFFIC SHOULD BE STOPPED DUE TO CONSTRUCTION OPERATIONS AND AN EMERGENCY VEHICLE ON AN OFFICIAL EMERGENCY RUN ARRIVES AT THE SCENE, THE CONTRACTOR SHALL MAKE THE PROVISIONS FOR THE PASSAGE OF THAT VEHICLE AS QUICKLY AS POSSIBLE.
10. ALL SIGNS NECESSARY FOR A MARKED DETOUR WILL BE PROVIDED BY THE CONTRACTOR AS REQUIRED BY STANDARD DRAWINGS AND THE MUTCD. SIGNS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR AS PART OF THE LUMP SUM BID PRICE FOR "MAINTAIN AND CONTROL TRAFFIC". THIS QUANTITY SHALL INCLUDE SIGN MOUNTING HARDWARE AND POSTS.

PAVEMENT DROP-OFF

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

- \* LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.
- \* TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- \* GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE DROP-OFF, THEN DRUMS, PANEL, OR BARRICADES MAY BE USED. IF THE DROP-OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR DGA MATERIAL USED FOR WEDGING.

PHASING PLAN

PHASE 0

- CONSTRUCTION:  
CONSTRUCT TEMPORARY PAVEMENT AS SHOWN IN MOT PHASE 0. INSTALL TEMPORARY SIGNALS AND BARRIERS.
- TRAFFIC:  
UTILIZE SINGLE LANE TRAFFIC WITH SIGNAL.

PHASE 1

- CONSTRUCTION:  
CONSTRUCT 23'-4" OF CULVERT AND TEMPORARY PAVEMENT AS SHOWN IN MOT PHASE 1.
- TRAFFIC:  
UTILIZE SINGLE LANE TRAFFIC WITH SIGNAL.

PHASE 2

- CONSTRUCTION:  
FINISH CULVERT CONSTRUCTION.
- TRAFFIC:  
UTILIZE SINGLE LANE TRAFFIC WITH SIGNAL.

PHASE 3

- CONSTRUCTION:  
STABILIZE TEMPORARILY DISTURBED AREA AND REPAIR ANY DAMAGE TO EXISTING ROADWAY AND SIDE SLOPES.  
REMOVE ALL TEMPORARY PAVEMENT.
- TRAFFIC:  
OPEN FAIRLANE DRIVE TO TRAFFIC.

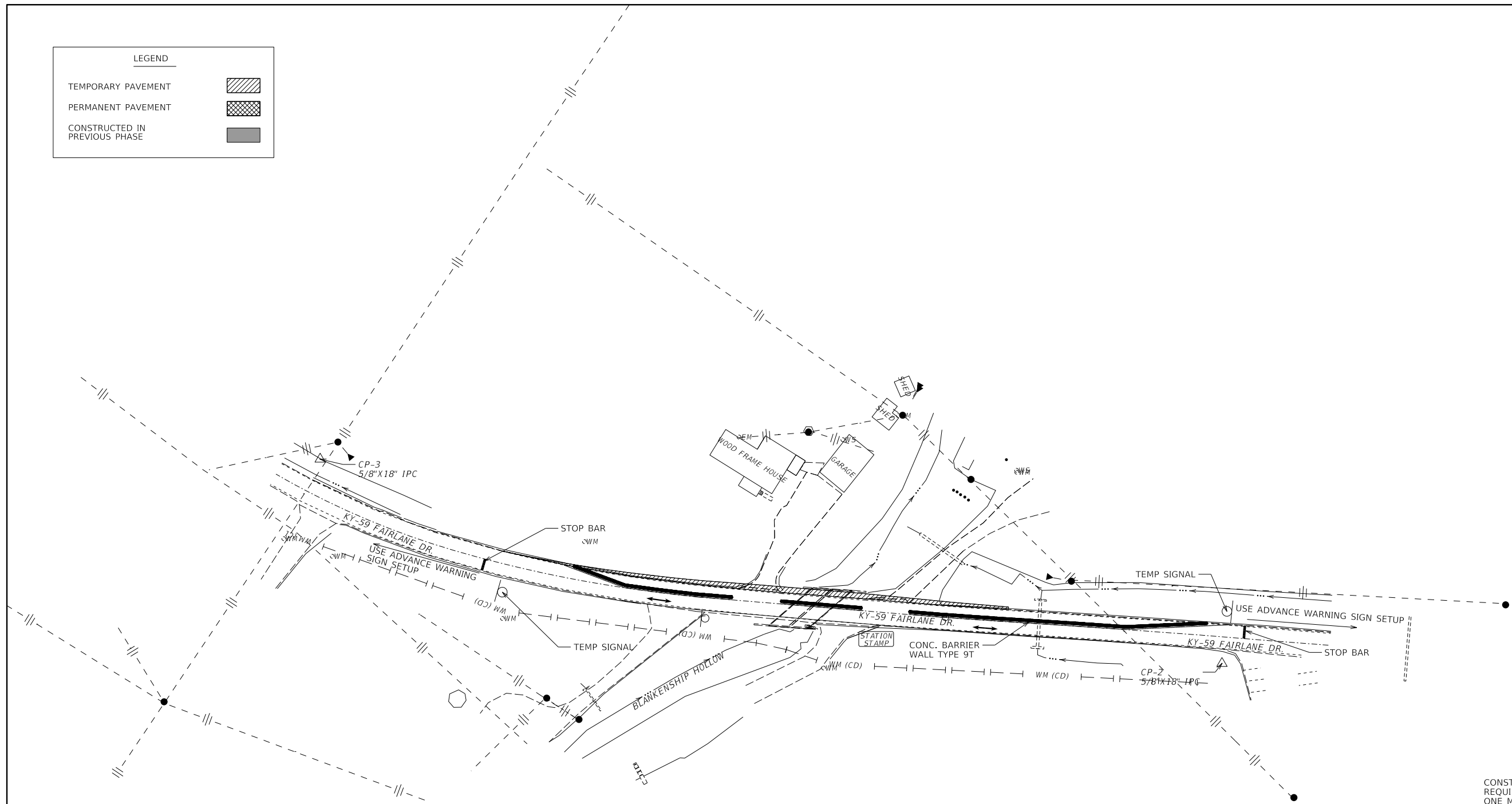
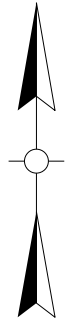
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT NOTES

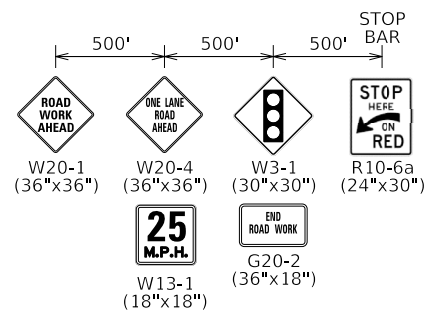
ITEM NO. 09-40004.00 COUNTY OF Lewis

SHEET NO. R7

LEGEND	
TEMPORARY PAVEMENT	
PERMANENT PAVEMENT	
CONSTRUCTED IN PREVIOUS PHASE	



ADVANCE WARNING SIGN SETUP



CONSTRUCT TEMPORARY PAVEMENT AS REQUIRED FOR PHASE 1 TO MAINTAIN ONE MINIMUM 10' LANE. REMOVE AND RESET MAILBOXES AS NEEDED AS INCIDENTAL TO "MAINTAIN AND CONTROL TRAFFIC".

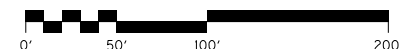
MOVEMENT OF CONCRETE BARRIER WALLS IN BETWEEN MOT PHASES SHALL BE INCIDENTAL TO CONCRETE BARRIER WALL TYPE 9T.

SEE STRUCTURES PLANS FOR CULVERT PHASING.

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT PLAN SHEET PHASE 0

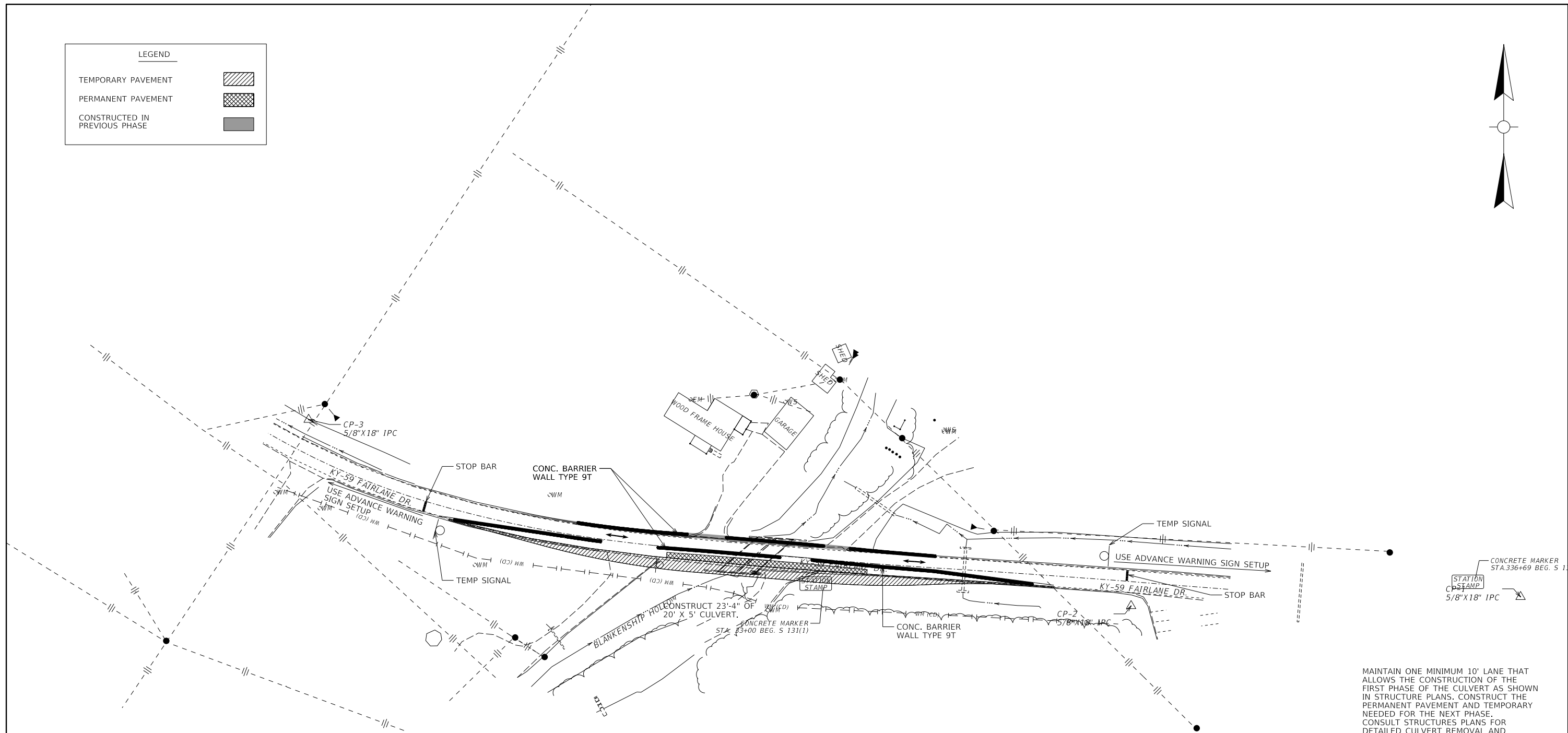
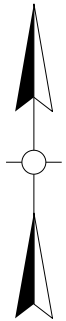
HORIZONTAL SCALE  
SCALE: 1" = 50'



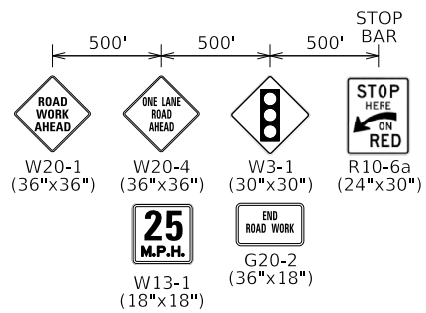
STA 100+00.00 TO STA 106+19.99

ITEM NO.	09-40004.00	COUNTY OF	Lewis
SHEET NO.	R7A		

LEGEND	
TEMPORARY PAVEMENT	
PERMANENT PAVEMENT	
CONSTRUCTED IN PREVIOUS PHASE	



ADVANCE WARNING SIGN SETUP



MAINTAIN ONE MINIMUM 10' LANE THAT ALLOWS THE CONSTRUCTION OF THE FIRST PHASE OF THE CULVERT AS SHOWN IN STRUCTURE PLANS. CONSTRUCT THE PERMANENT PAVEMENT AND TEMPORARY NEEDED FOR THE NEXT PHASE. CONSULT STRUCTURES PLANS FOR DETAILED CULVERT REMOVAL AND CONSTRUCTION PHASING.

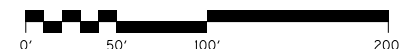
MOVEMENT OF CONCRETE BARRIER IN BETWEEN MOT PHASES SHALL BE INCIDENTAL TO CONCRETE BARRIER WALL TYPE 9T.

SEE STRUCTURES PLAN FOR CULVERT PHASING.

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT PLAN SHEET PHASE 1

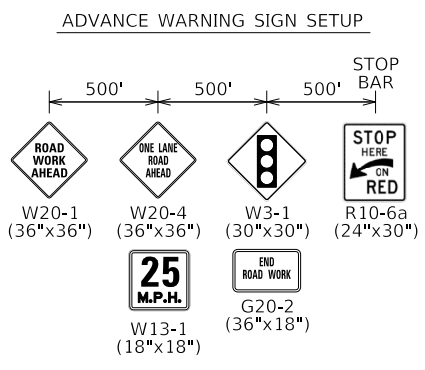
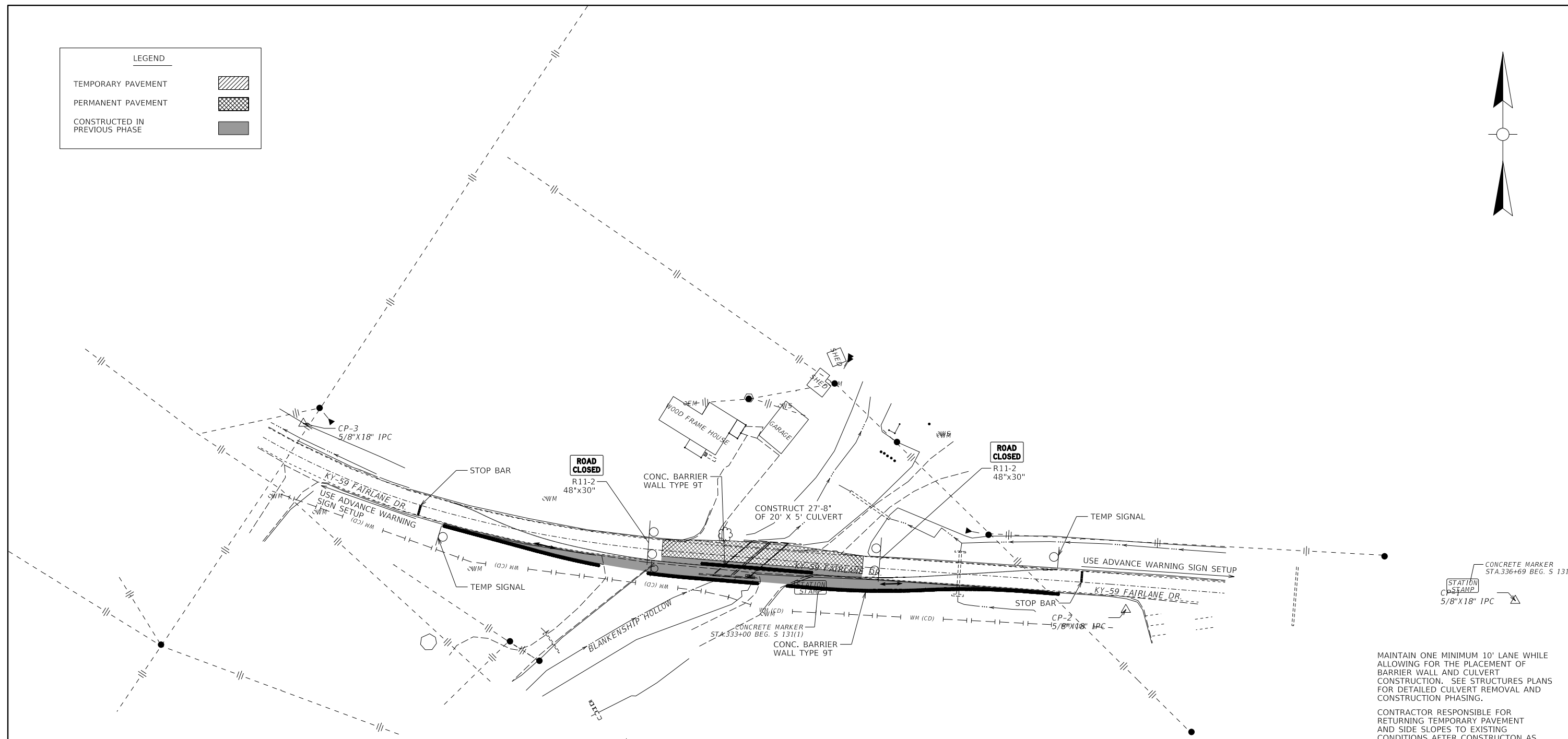
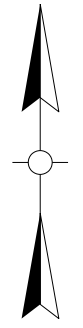
HORIZONTAL SCALE  
SCALE: 1" = 50'



STA 100+00.00 TO STA 106+19.99

ITEM NO.	09-40004.00	COUNTY OF	Lewis
SHEET NO.	R7B		

LEGEND	
TEMPORARY PAVEMENT	
PERMANENT PAVEMENT	
CONSTRUCTED IN PREVIOUS PHASE	



MAINTAIN ONE MINIMUM 10' LANE WHILE ALLOWING FOR THE PLACEMENT OF BARRIER WALL AND CULVERT CONSTRUCTION. SEE STRUCTURES PLANS FOR DETAILED CULVERT REMOVAL AND CONSTRUCTION PHASING.

CONTRACTOR RESPONSIBLE FOR RETURNING TEMPORARY PAVEMENT AND SIDE SLOPES TO EXISTING CONDITIONS AFTER CONSTRUCTION AS INCIDENTAL TO MAINTAIN AND CONTROL TRAFFIC

MOVEMENT OF CONCRETE BARRIER IN BETWEEN MOT PHASES SHALL BE INCIDENTAL TO CONCRETE BARRIER WALL TYPE 9T

SEE STRUCTURES PLAN FOR CULVERT PHASING.

COMMONWEALTH OF KENTUCKY DEPARTMENT OF HIGHWAYS	DRAWING TITLE: MOT PLAN SHEET PHASE 2	HORIZONTAL SCALE SCALE: 1" = 50'		STA 100+00.00 TO STA 106+19.99	ITEM NO. 09-40004.00 COUNTY OF Lewis
					SHEET NO. R7C

## EROSION CONTROL NOTES

ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN. THE REQUIRED VOLUME AT EACH ADDED SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:

- UP GRADIENT AREAS NOT DISTURBED (ACRES).
- UP GRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH.(ACRES).
- THE USE OF TEMPORARY MULCH IS ENCOURAGED.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT TRAPS (ACRES).

THE EROSION CONTROL PLAN SHALL BE ANNOTATED AS THE WORK PROCEEDS BY THE CONTRACTOR TO DETAIL THE SELECTION OF EACH EROSION CONTROL DEVICE USED AND THE VOLUME PROVIDED BY EACH SILT TRAP IN ACCORDANCE WITH THE DOCUMENTATION PROCEDURES ESTABLISHED BY THE DIVISION OF CONSTRUCTION.

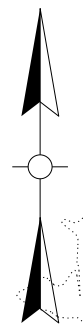
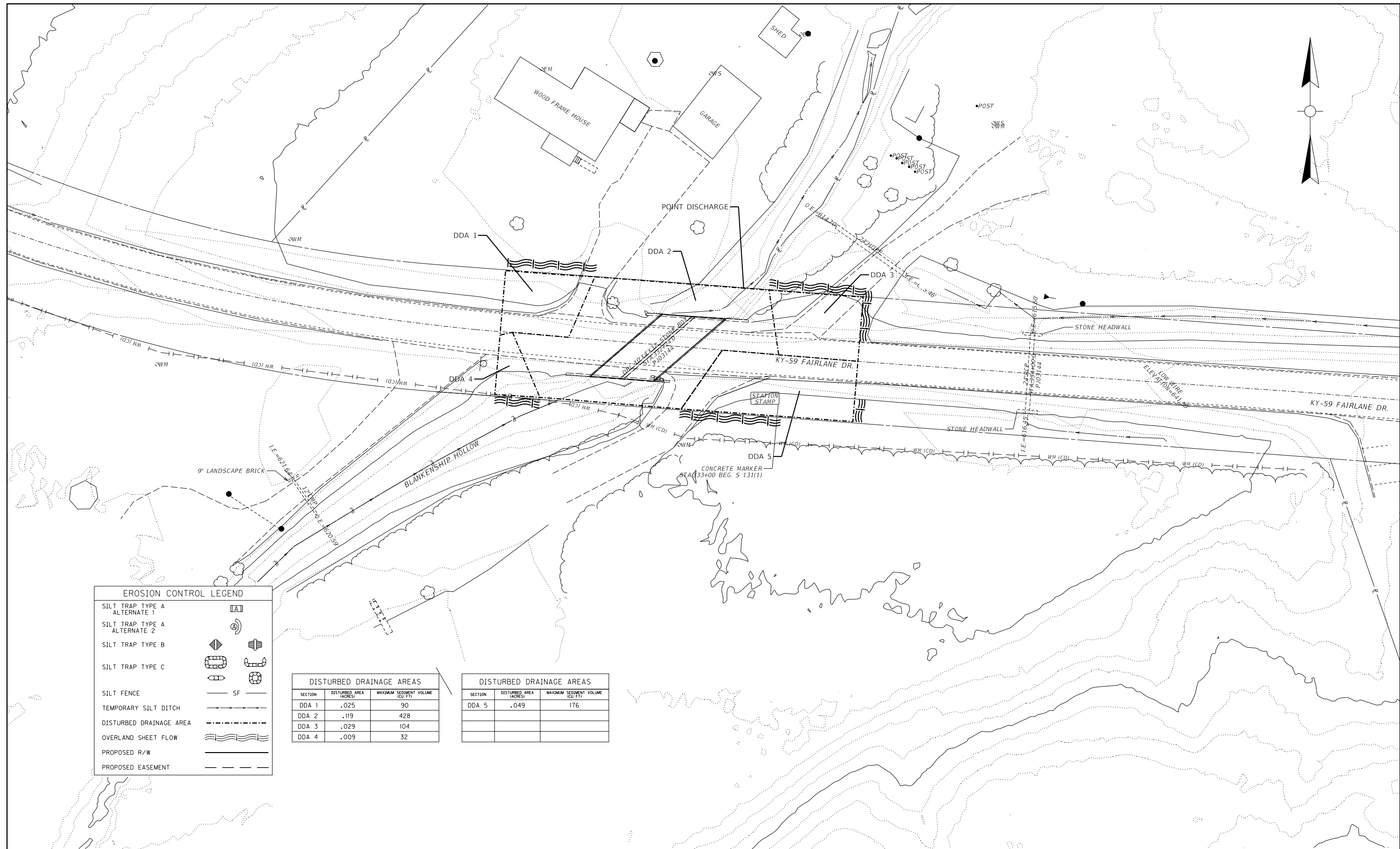
IF A SILT BASIN IS NOT USED THEN ONE SILT TRAP TYPE A, ALTERNATE NUMBER 2 OR SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE MOST REMOTE DOWNSTREAM COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOW EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED OR THE OVERLAND FLOW MAY BE DIVERTED TO ONE OF THE AFOREMENTED SILT BASIN OR TRAPS.

THE EROSION CONTROL PLANS DO NOT CONSTITUTE A BMP BY THEMSELVES. THEY PROVIDE A STARTING POINT FOR THE CONTRACTOR AND SECTION ENGINEER TO DEVELOP THE BMP ACCORDING TO SECTION 213.03.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE SUPPLEMENTAL SPECS EFFECTIVE WITH THE OCTOBER, 2004 LETTING.

EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER THEY BECOME ONE- HALF FULL AND PROPERLY DISPOSE OF THE MATERIAL AT SITES APPROVED BY THE SECTION ENGINEER.

EROSION CONTROL MEASURES EMPLOYED BY THE CONTRACTOR WILL BE UNIQUE TO THE PROJECT AND WORK CONDITIONS AND SHALL BE APPROVED BY THE SECTION ENGINEER. THE DEVELOPMENT AND UTILIZATION OF THESE MEASURES WILL BE RECORDED AS PART OF THE BMP, KEPT ON SITE, AND AVAILABLE FOR PUBLIC INSPECTION.



**EROSION CONTROL LEGEND**

SILT TRAP TYPE A ALTERNATE 1	
SILT TRAP TYPE A ALTERNATE 2	
SILT TRAP TYPE B	
SILT TRAP TYPE C	
SILT FENCE	SF
TEMPORARY SILT DITCH	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	
PROPOSED R/W	
PROPOSED EASEMENT	

**DISTURBED DRAINAGE AREAS**

SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 1	.025	90
DDA 2	.119	428
DDA 3	.029	104
DDA 4	.009	32

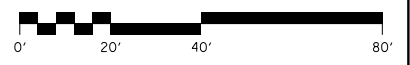
**DISTURBED DRAINAGE AREAS**

SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 5	.049	176

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

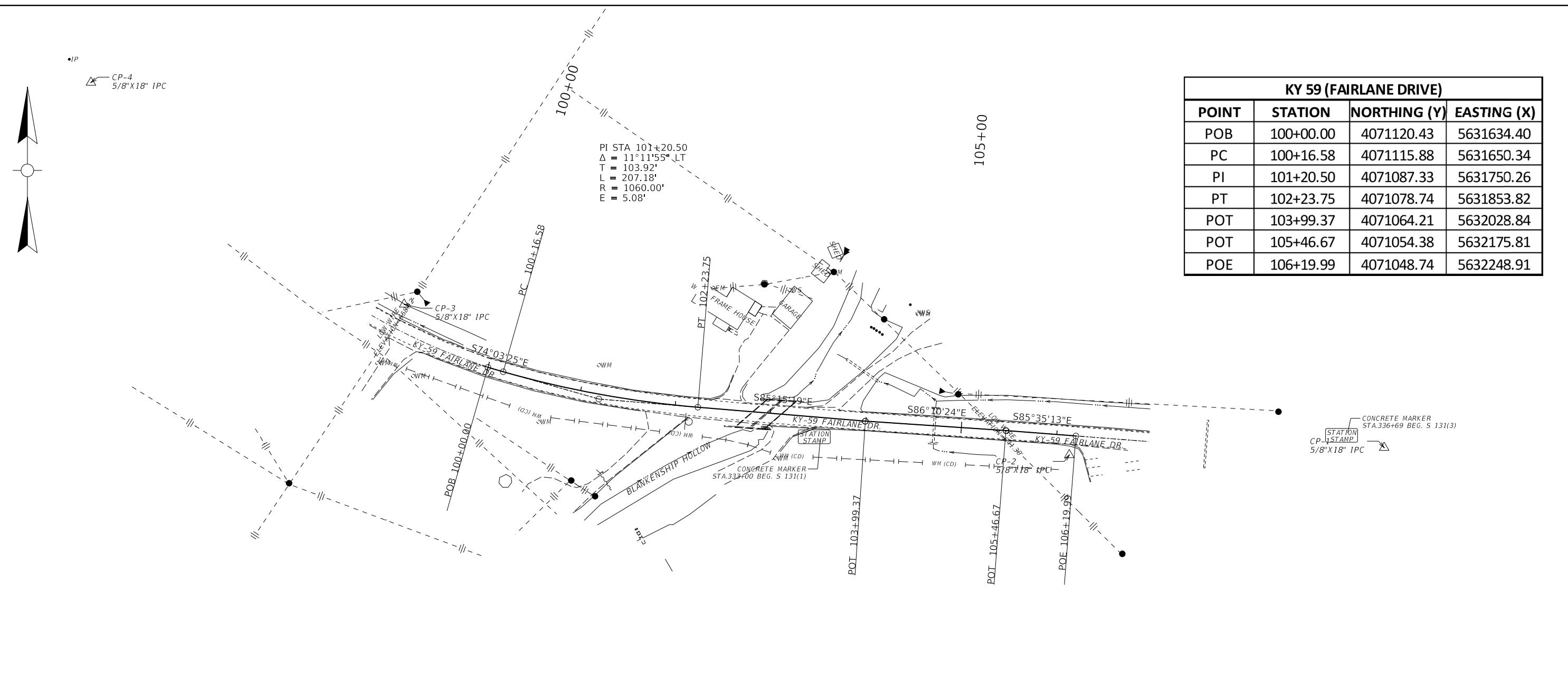
DRAWING TITLE: EROSION CONTROL PLAN SHEET

HORIZONTAL SCALE  
SCALE: 1" = 20'



STA 100+00.00 TO 106+19.99

ITEM NO. 09-40004.00 COUNTY OF Lewis  
SHEET NO. R10



KY 59 (FAIRLANE DRIVE)			
POINT	STATION	NORTHING (Y)	EASTING (X)
POB	100+00.00	4071120.43	5631634.40
PC	100+16.58	4071115.88	5631650.34
PI	101+20.50	4071087.33	5631750.26
PT	102+23.75	4071078.74	5631853.82
POT	103+99.37	4071064.21	5632028.84
POT	105+46.67	4071054.38	5632175.81
POE	106+19.99	4071048.74	5632248.91

COORDINATE CONTROL POINTS						
CP NUMBER	TYPE	EASTING (X)	NORTHING (Y)	ELEVATION (Z)	STATION	OFFSET
CP 1	5/8" X 18" IPC	5632571.1670	4071036.5400	635.0810	NA	NA
CP 2	5/8" X 18" IPC	5632242.0230	4071028.8860	625.2810	106+14.65	20.3224
CP 3	5/8" X 18" IPC	5631546.8670	4071186.3080	632.2850	NA	NA
CP 4	5/8" X 18" IPC	5631219.4430	4071418.2230	631.1070	NA	NA

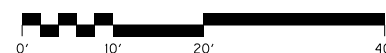
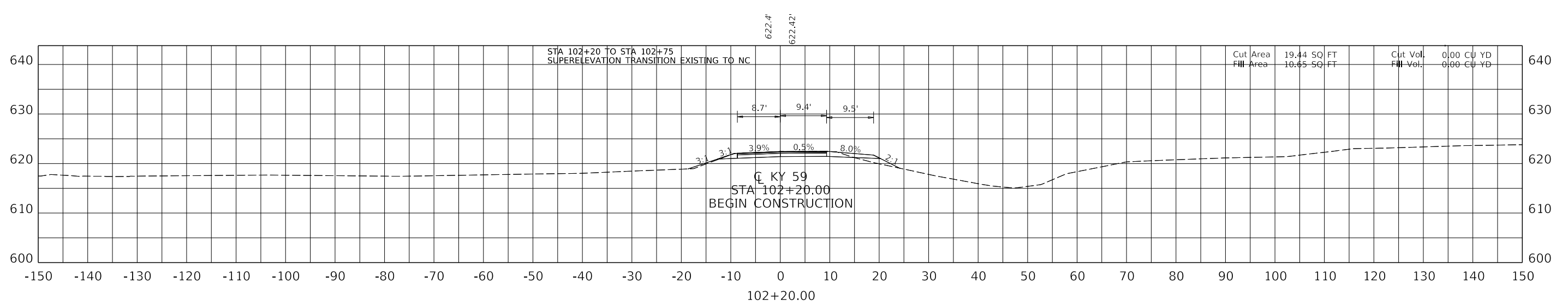
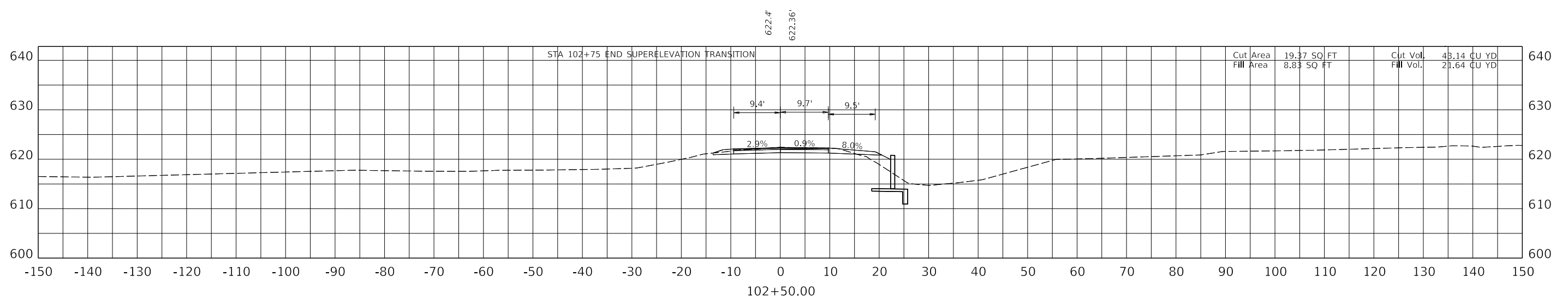
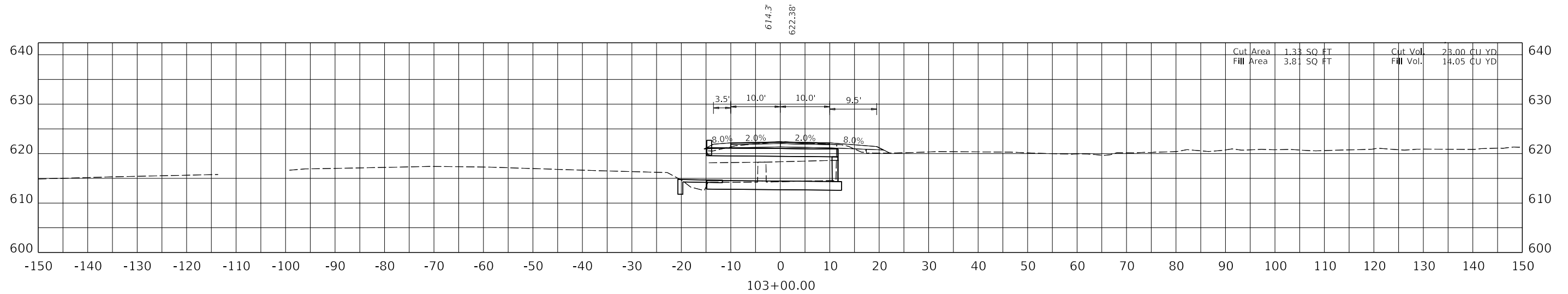
### BASIS OF ELEVATIONS

Elevations were derived from GPS methods and are adjusted to the NAVD88 Vertical Datum. Geoid model used was Geoid18.

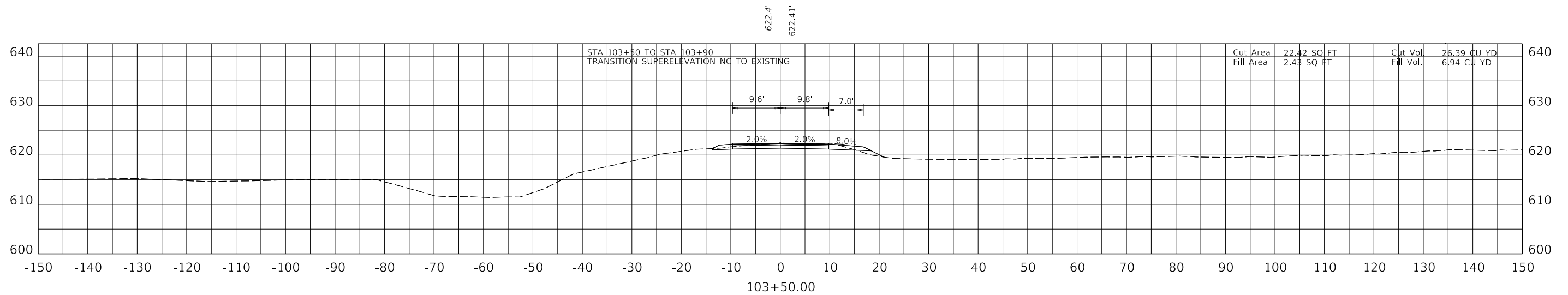
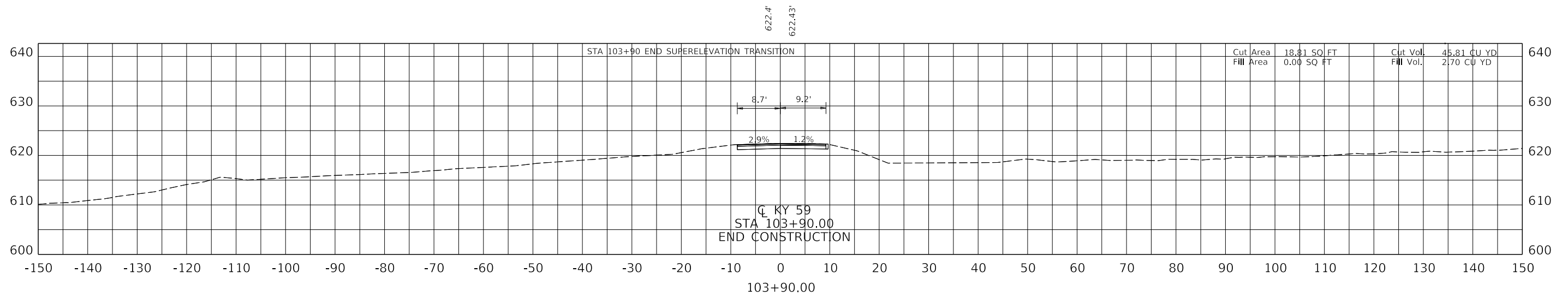
### COORDINATE SYSTEM

Coordinates for horizontal control were obtained from GPS methods and adjusted to the National NAD83/FBN System.

Coordinate are based on State Plane Coordinate System Single Zone and in US Survey Feet.



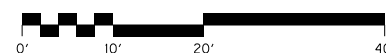




COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 103+50.00 TO STA 103+90.00

ITEM NO.	09-40004.00	COUNTY OF	Lewis
SHEET NO.	X2		

# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LEWIS COUNTY KY 59

### KY 59 OVER TRIB. TO KINNICONICK CREEK Station 102+96.36

#### GENERAL NOTES

**SPECIFICATIONS:** All references to the standard Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO are to the current edition of the AASHTO LRFD Bridge Design Specifications, with interims.

**DESIGN LOAD:** This structure is designed for HL-93 live load increased by 25%. The 25% increase is arrived by increasing the design truck or tandem and the design lane load by 25%.

**DESIGN METHOD:** All reinforced concrete members are designed by the load factor method as specified in the current AASHTO Specifications.

**MASONRY COATING:** Masonry coating will not be required for this structure.

**COMPLETION OF THE STRUCTURE:** The Contractor is required to complete the structure in accordance with the plans and specifications. Material, labor or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor, or anything else required to complete the structure.

**REINFORCEMENT:** Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2" unless otherwise noted. Any reinforcing bars designated by suffix (e) in the Plans shall be epoxy coated in accordance with section 811.10 of the Standard Specifications. Any reinforcing bars designated by suffix (s) in a Bill of Reinforcement shall be considered a stirrup for purposes of bend diameters.

**BEVELED EDGES:** All exposed edges shall be beveled 3/4" unless otherwise shown.

**DIMENSIONS:** Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal measurements.

**WEIGHT OF FILL MATERIAL:** The assumed weight of fill material is 120 lbs per cubic foot.

**CONCRETE:** Class "A" concrete shall be used throughout.

**CONSTRUCTION JOINTS:** Vertical construction joints shall be located in the field, except that no construction joint shall be located in the barrel within six feet of the ends of the culvert.

**FOOTING PRESSURE:** Foundation materials for wing footings required to resist a maximum bearing pressure of 1759 PSF.

**FLOWLINE REINFORCEMENT:** Reinforcement in the 6 in thick slab shall be Size 4 bars at 18 in centers in each direction or an equivalent area of welded deformed steel fabric. The bars shall extend a minimum of 12 in into wing footings and/or the bottom slab. The cost of this reinforcement shall be incidental to the unit price bid for Concrete, Class "A".

**CONSTRUCTION NOTES:** Temporary sheeting, shoring, cofferdams, and/or dewatering methods may be necessary for construction of the culvert. Include all costs in the price bid for Foundation Preparation.

**YIELDING FOUNDATION:** Rock and boulders within 2 ft of the design flowline must be excavated and backfilled with properly compacted soil to the base of the slab. Payment for this work shall be included in the lump sum bid for Foundation Preparation.

**ROCK EXCAVATION:** Solid rock excavation may be required to construct the barrel or footings.

#### INDEX OF SHEETS

Sheet No.	Description
1	Title
2	Layout
3	Proposed Phases
4 & 5	Barrel Details
6	Wings 1 & 3
7	Wings 2 & 4
8	Bill of Reinforcement

#### SPECIAL NOTES

Special Note for One Step Membrane

#### SPECIAL PROVISIONS

#### ESTIMATE OF QUANTITIES

BID CODE	ITEM	QUANTITY	UNIT
8100	Class "A" Concrete	206.4	C.Y.
8150	Steel Reinforcement	20434	Lb
8003	Foundation Preparation	1	L.S.
3250	Waterproofing Membrane	124	S.Y.
8151	Epoxy Coated Steel Reinforcement	23531	Lb
8002	Structure Excavation Solid Rock	25	C.Y.

#### STANDARD DRAWINGS

BGX-006-10	Stencils for Structures
BGX-012-02	Geotechnical Legend
RBM-115-10	Concrete Barrier Wall Type 9T (Temporary)
RBM-120-02	Box Beam Stiffening of Temp. Concrete Barrier
RBR-015-04	Guardrail Posts

#### SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.

2020 AASHTO LRFD Bridge Design Specifications, 9th Ed.



REVISION	DATE

PREPARED BY  
**Division of  
Structural Design**

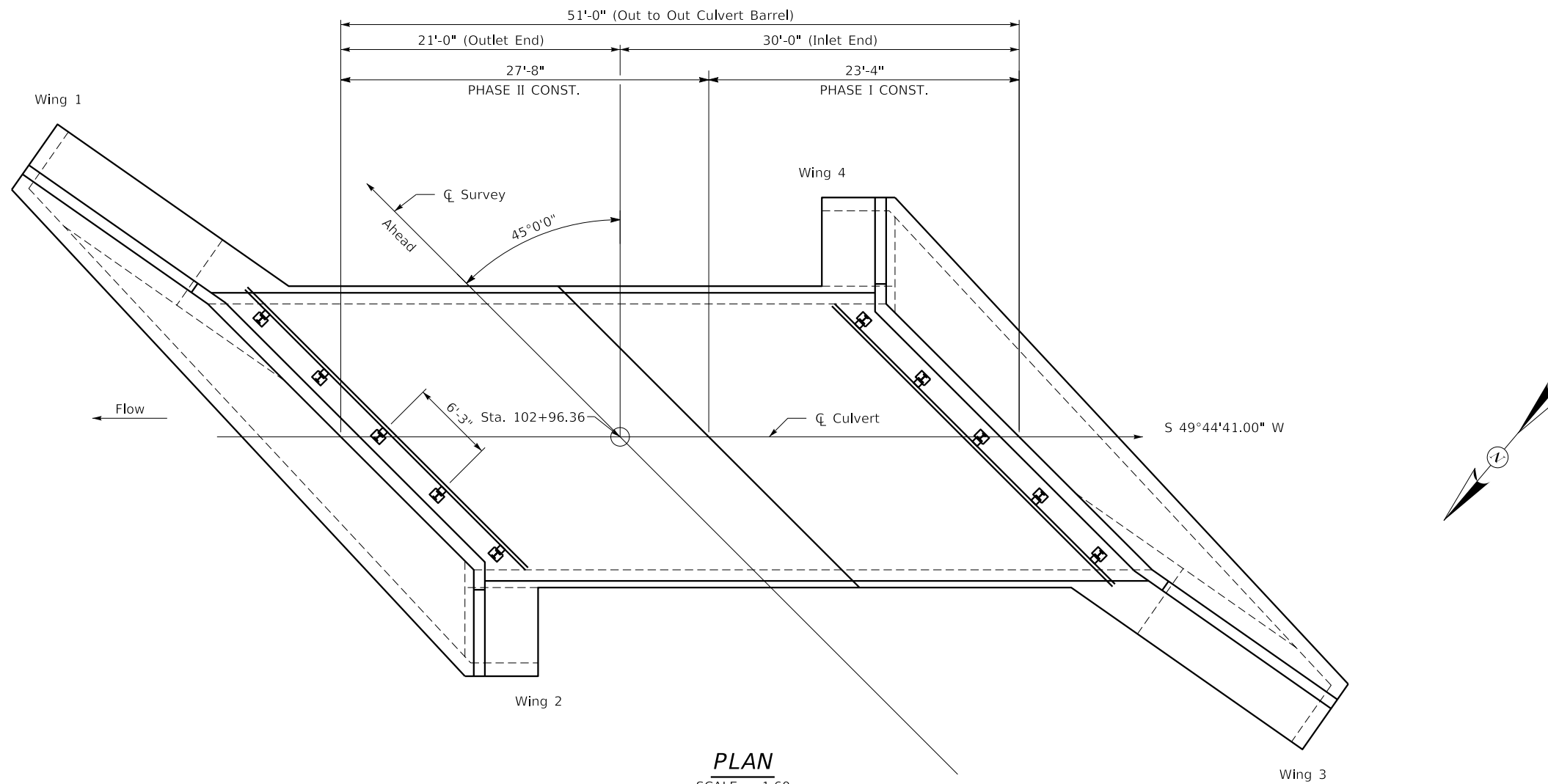
DATE: MARCH 2023	CHECKED BY:
DESIGNED BY: J. VAN ZEE	S.T. ANDARDS
DETAILED BY: M. BAWITHAWNG	J. VAN ZEE

**SINGLE 20.0 X 5.0 CULVERT**  
CROSSING  
TRIB. TO KINNICONICK CREEK

ROUTE  
KY 59

ITEM NO.  
9-40004  
SHEET NO.  
S1

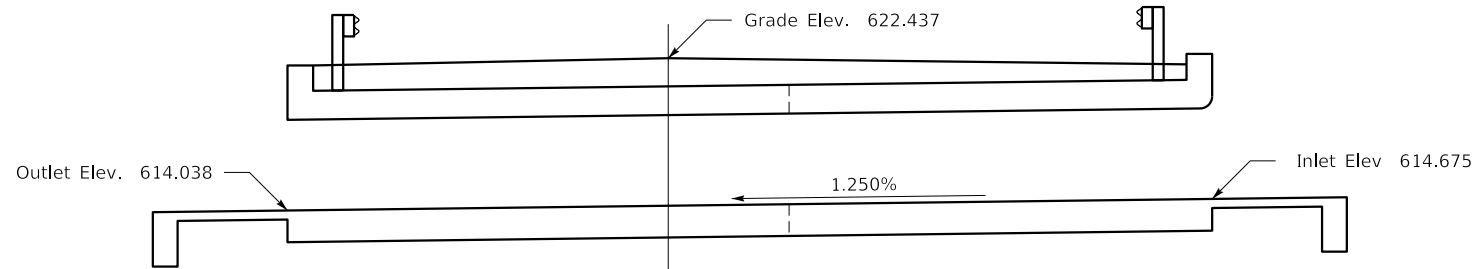
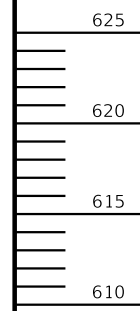
COUNTY OF  
LEWIS  
DRAWING NUMBER  
28727



**PLAN**  
SCALE = 1:60

For Guardrail Attachment to Culvert Top Slab See Standard Drawing RBR-015

Note: For Guardrail Location, see roadway plans.

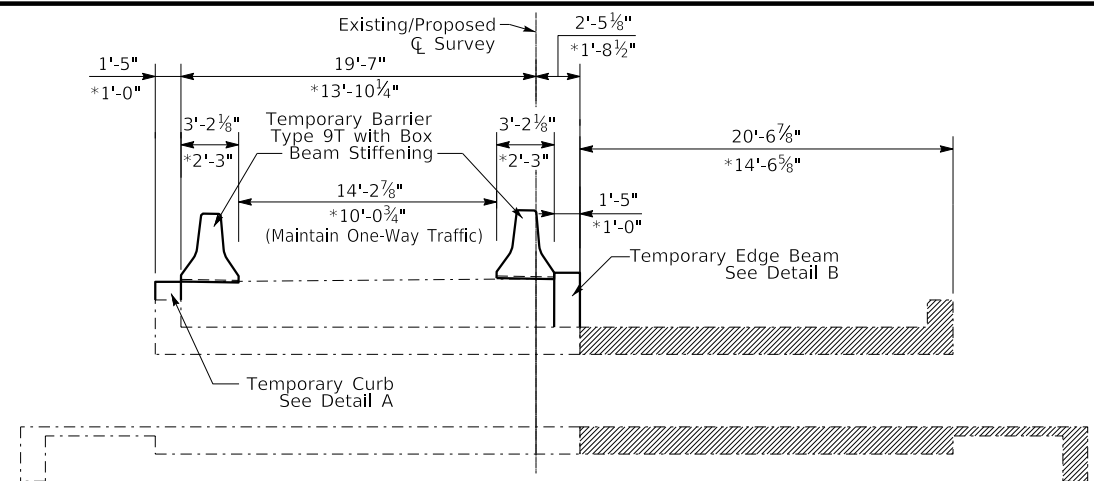


**SECTION ON CL**  
Single 20'-0" x 5'-0" x 51'-0" R.C.B.C.  
30'-0" Inlet End and 21'-0" Outlet End  
45° Rt. Skew ~ KYHL-93 Loading ~ 1:2 Fill Slope  
Yielding Foundation

REVISION	DATE

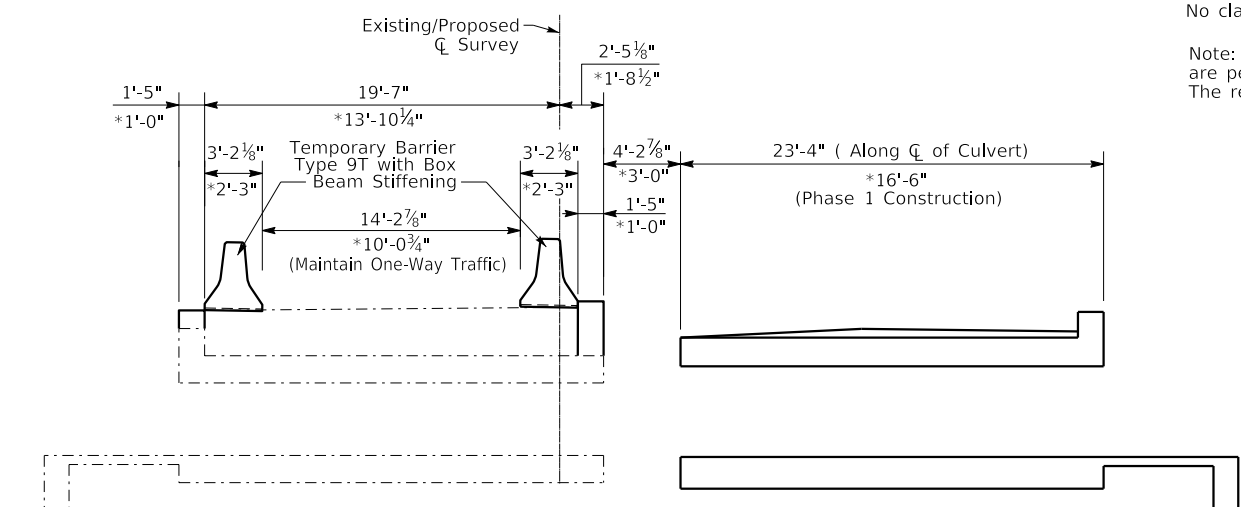
DATE: MARCH 2023	CHECKED BY:
DESIGNED BY: J. VAN ZEE	S.T. ANDARDS
DETAILED BY: M. BAWITHAWNG	J. VAN ZEE

ROUTE KY 59	ITEM NO. 9-40004	COUNTY OF LEWIS
	SHEET NO. S2	DRAWING NUMBER 28727



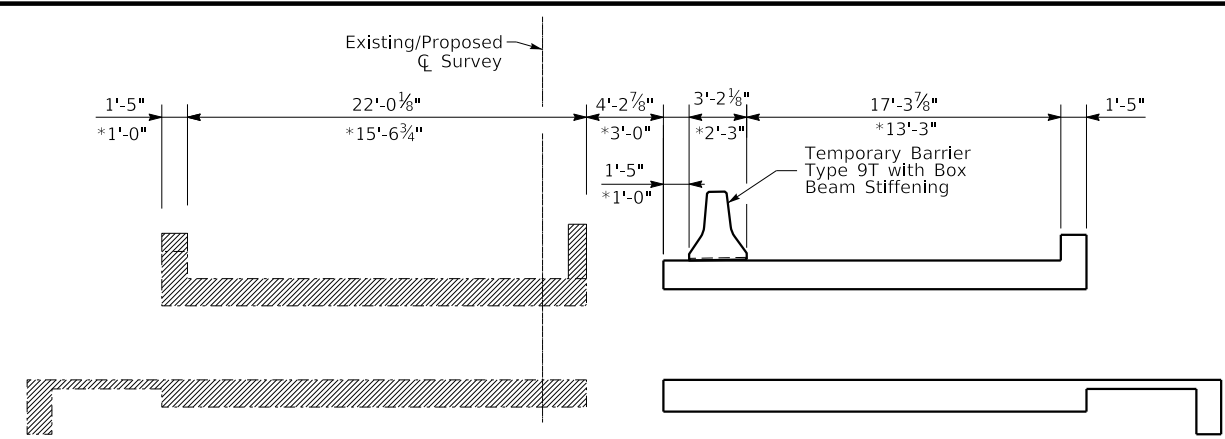
**PHASE 1 REMOVAL**

SCALE = 1:60



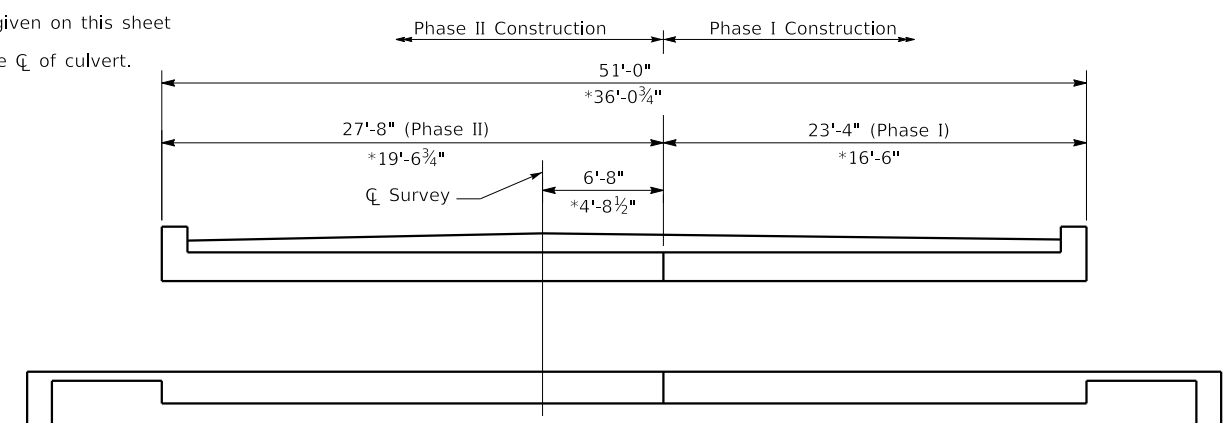
**PHASE 1 CONSTRUCTION**

SCALE = 1:60



**PHASE 2 REMOVAL**

SCALE = 1:60



**PHASE 2 CONSTRUCTION**

SCALE = 1:60

Barrier Note: Provide Temporary Barrier Type 9T (Std. Dwg. RBM-115, c.e., Barrier Quantities are included in Roadway Quantities) and Box Beam Stiffening (Std. Dwg. RBM-120, c.e., Include all costs in the price bid for Temporary Barrier)

Note: Contractor to field verify all dimensions prior to submitting bid. No claims for changed site conditions shall be allowed.

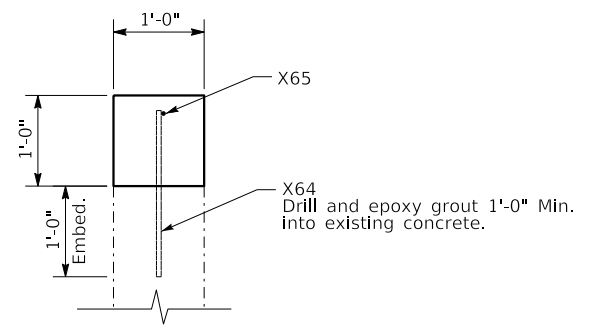
Note: All dimensions with (\*) denotation given on this sheet are perpendicular to centerline. The rest of dimensions given are along the centerline of culvert.

**SUGGESTED CONSTRUCTION PHASING SEQUENCE**

Phase 1.) Maintain traffic on existing roadway and portions of existing culvert during phase 1 culvert construction. Portions of existing culvert shall be removed to facilitate phased construction. Use sheeting or shoring as necessary to maintain existing roadway. Include all costs of sheeting, shoring, dewatering, etc. in price bid for foundation preparation. Construct phase 1 of culvert.

Phase 2.) Move barrier onto new structure and install box beam stiffening. Backfill new structure and apply fill to top to provide a smooth riding surface. Shift traffic to new structure. Remove the rest of existing structure. Use sheeting or shoring as necessary to maintain roadway. Complete proposed structure construction. Complete backfill of new structure. Remove temporary concrete barrier. Complete paving operations.

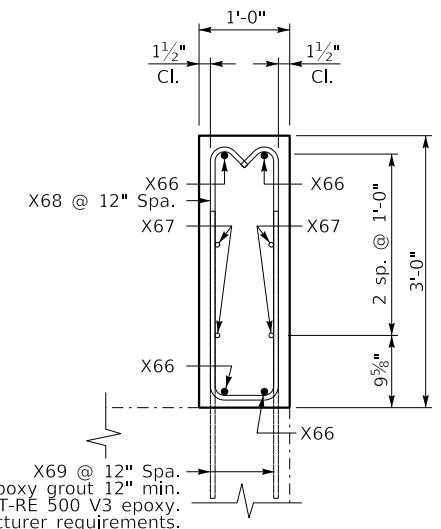
Adjust sequence as necessary and in accordance with the Engineers recommendations.



**DETAIL A**

SCALE = 1:12

Curb extension required along full length of wings and culvert on outlet end. Approximate length is 48'-6" as measured from survey data. Contractor to verify length prior to ordering materials.



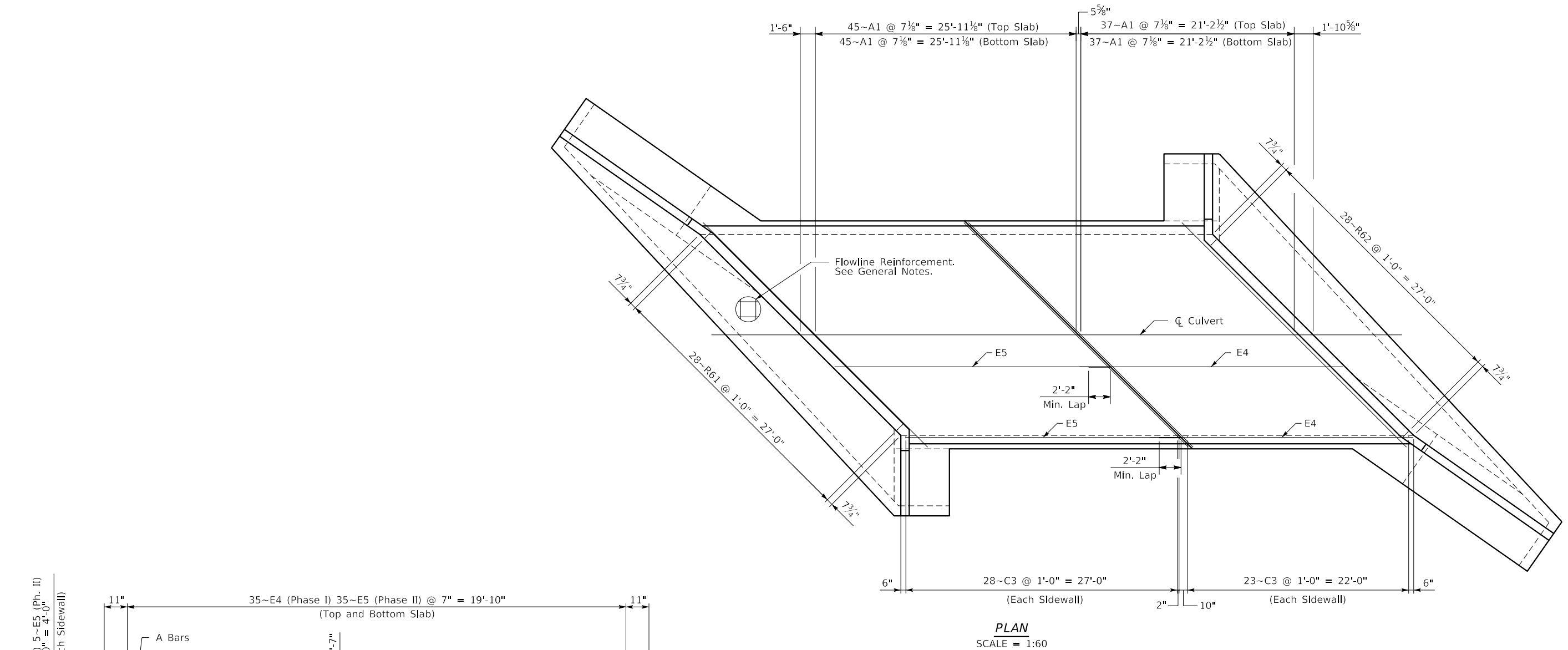
**DETAIL B**

SCALE = 1:12

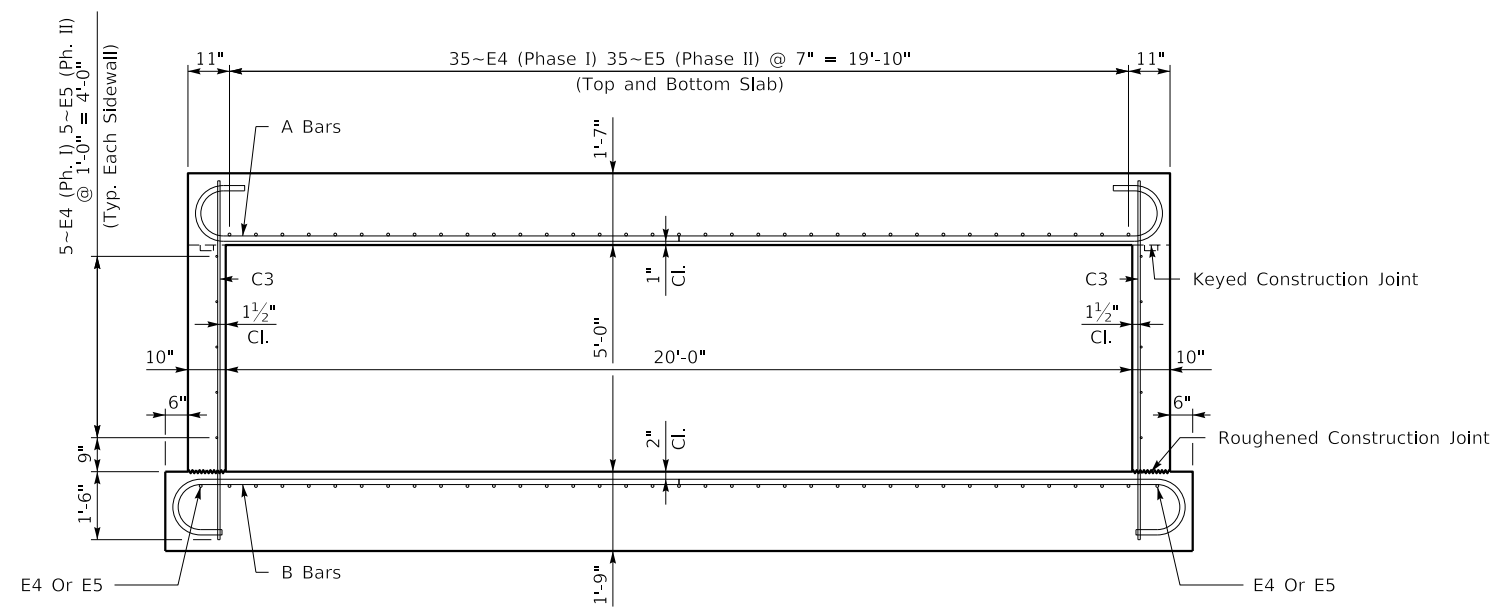
2 Ea. Spa. Drill and epoxy grout 12" min. into existing concrete. Use Hilti HIT-RE 500 V3 epoxy. Install in accordance with manufacturer requirements.

Edge beam must be installed along skewed cut line (~31'-6" Contractor must verify) and must be at 3500 psi strength prior to any removal of concrete for phasing. Quantities included in Class A Concrete Quantity on Title Sheet.

	REVISION	DATE	PREPARED BY	DATE: MARCH 2023	CHECKED BY	<b>PROPOSED PHASING</b> CROSSING TRIB. TO KINNICONICK CREEK	ROUTE	ITEM NO.	COUNTY OF
				Division of Structural Design	DESIGNED BY: J. VAN ZEE		S.T. ANDARDS	KY 59	9-40004
				FILE NAME: J:\District09\9-40004 Lewis co KY 59 10x4 rcbc at trib of kinniconick creek\Culvert Design\28727.dgn	DATE PLOTTED: 2-JUN-2023			SHEET NO. S3	DRAWING NUMBER 28727



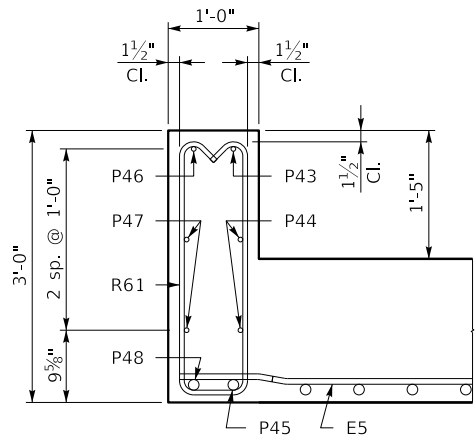
**PLAN**  
SCALE = 1:60



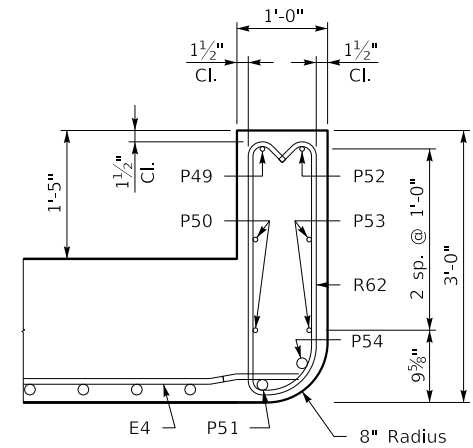
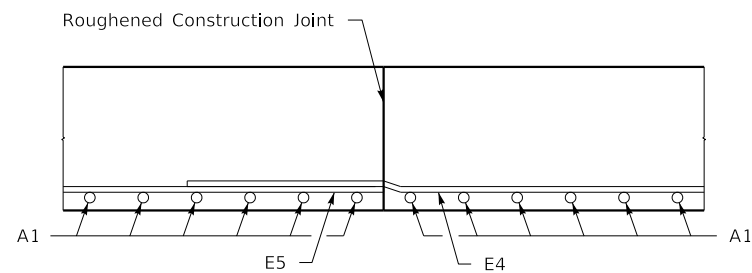
**TYPICAL BARREL SECTION**  
SCALE = 1:24

Minimum Lap Distance for E4 Bars 26 in  
Minimum Lap Distance for E5 Bars 26 in

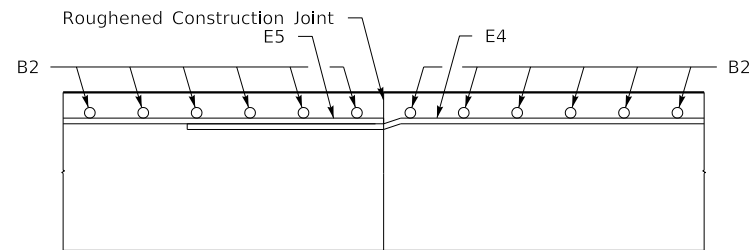
		REVISION	DATE	PREPARED BY	DATE: MARCH 2023	CHECKED BY	<b>BARREL</b> CROSSING TRIB. TO KINNICONICK CREEK	ROUTE	ITEM NO.	COUNTY OF
				Division of Structural Design	DESIGNED BY: J. VAN ZEE	S.T. ANDARDS		KY 59	9-40004	LEWIS
OpenRoads Designer v10.16.2.267	USER: Brian.Miller		DATE PLOTTED: 2-JUN-2023		FILE NAME: J:\District09\9-40004 Lewis co KY 59 10x4 rcbc at trib of kinniconick creek\Culvert Design\28727.dgn	J. VAN ZEE			SHEET NO. S4	DRAWING NUMBER 28727



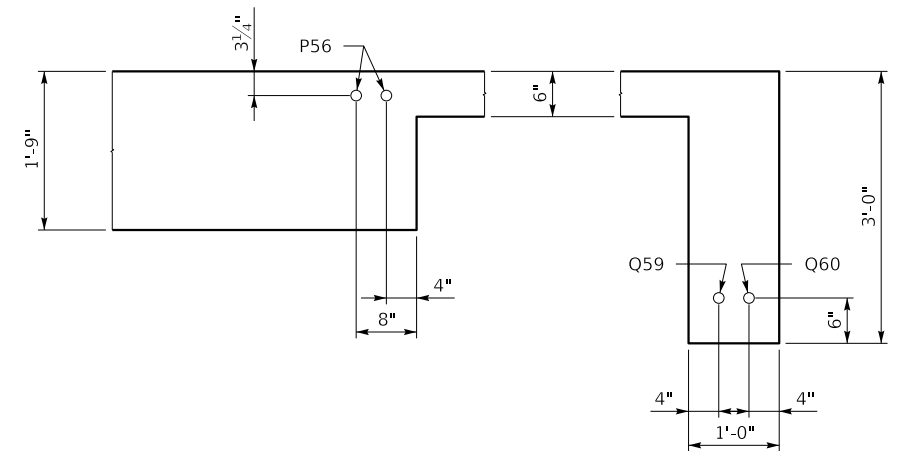
**LEFT PARAPET**  
SCALE = 1:12  
(Perpendicular to Parapet)



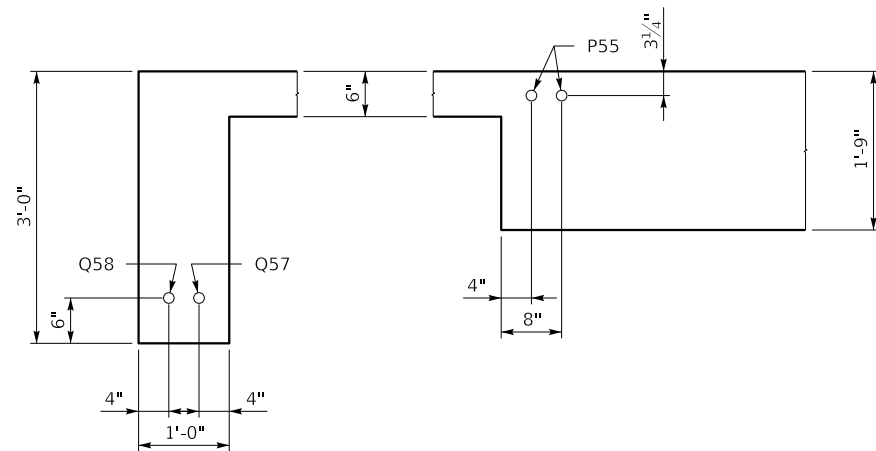
**RIGHT PARAPET**  
SCALE = 1:12  
(Perpendicular to Parapet)



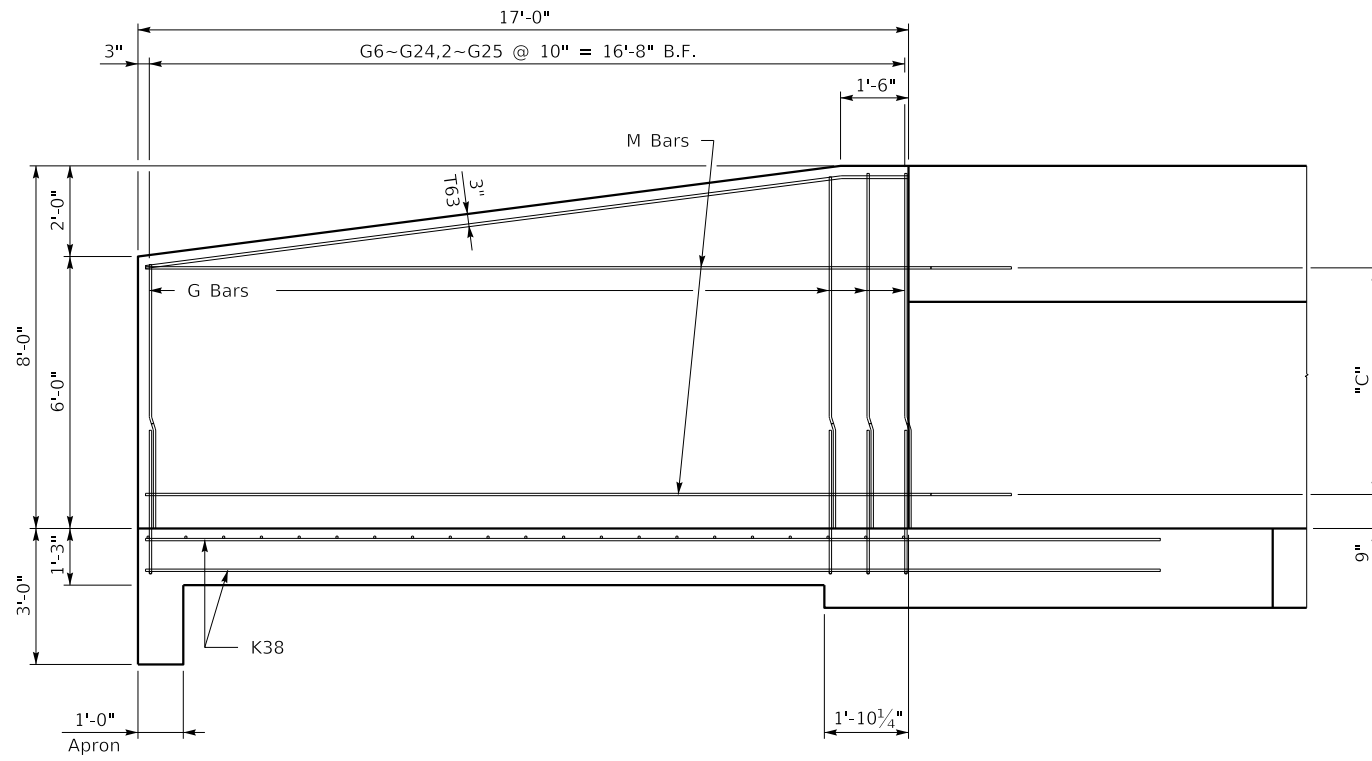
**SECTION ON Q**  
SCALE = 1:12



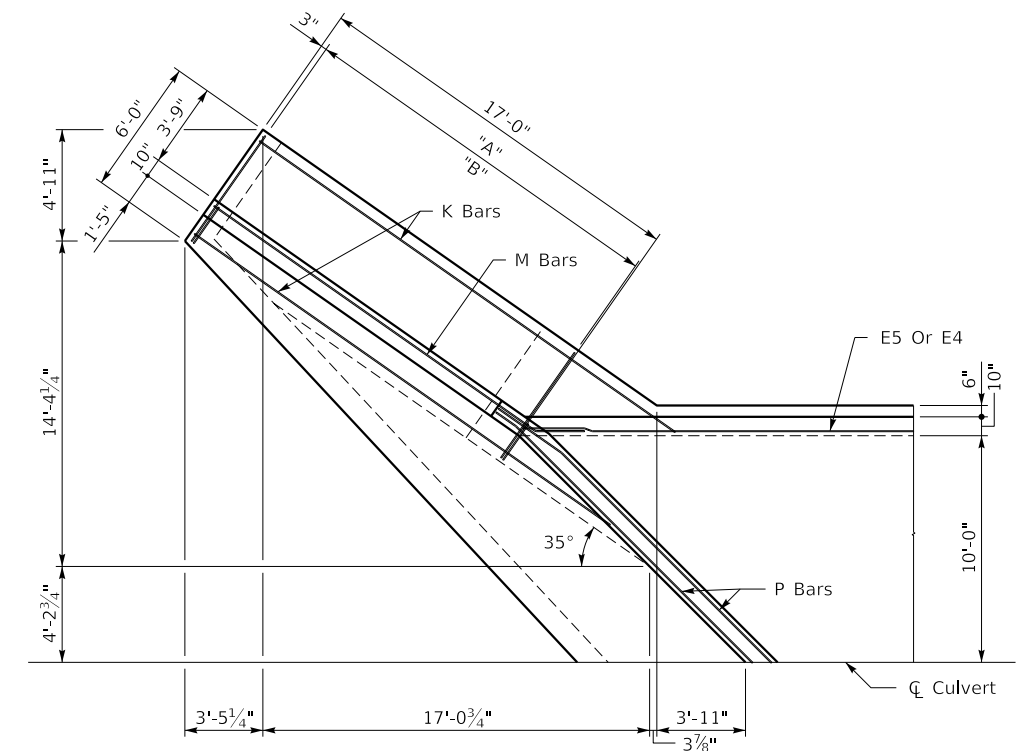
**RIGHT END**  
SCALE = 1:12  
(Perpendicular to Apron)



**LEFT END**  
SCALE = 1:12  
(Perpendicular to Apron)

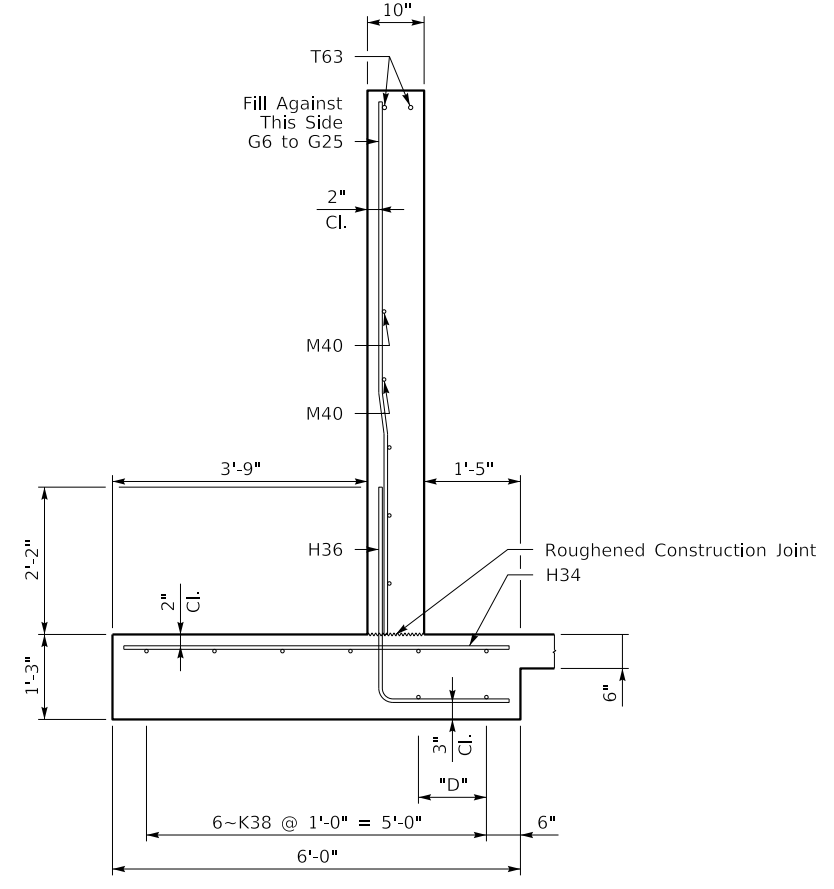


**WING ELEVATION**  
SCALE = 1:24



**PLAN**  
SCALE = 1:48

"A" 21~H34 @ 10" = 16'-8" Top of Ftg.  
 "B" 21~H36 @ 10" = 16'-8" Bot of Ftg. to B.F. Wall  
 "C" 6~M40 @ 1'-0" = 5'-0" B.F.  
 "D" 2~K38 @ 1'-0" = 1'-0" Bot of Ftg.

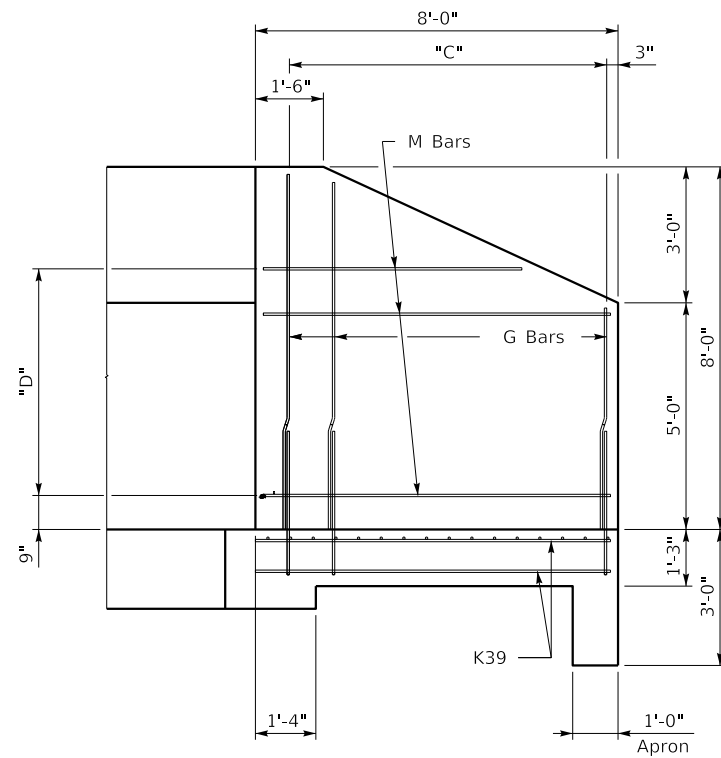


**WING SECTION**  
SCALE = 1:16

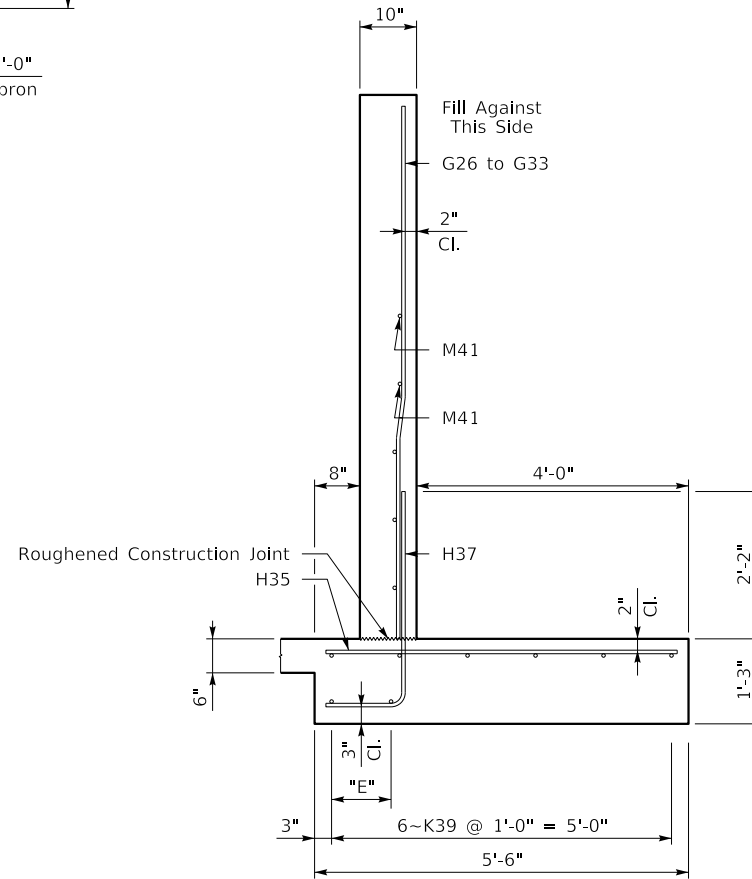
REVISION	DATE

DATE: MARCH 2023	CHECKED BY:
DESIGNED BY: J. VAN ZEE	S.T. ANDARDS
DETAILED BY: M. BAWITHAWNG	J. VAN ZEE

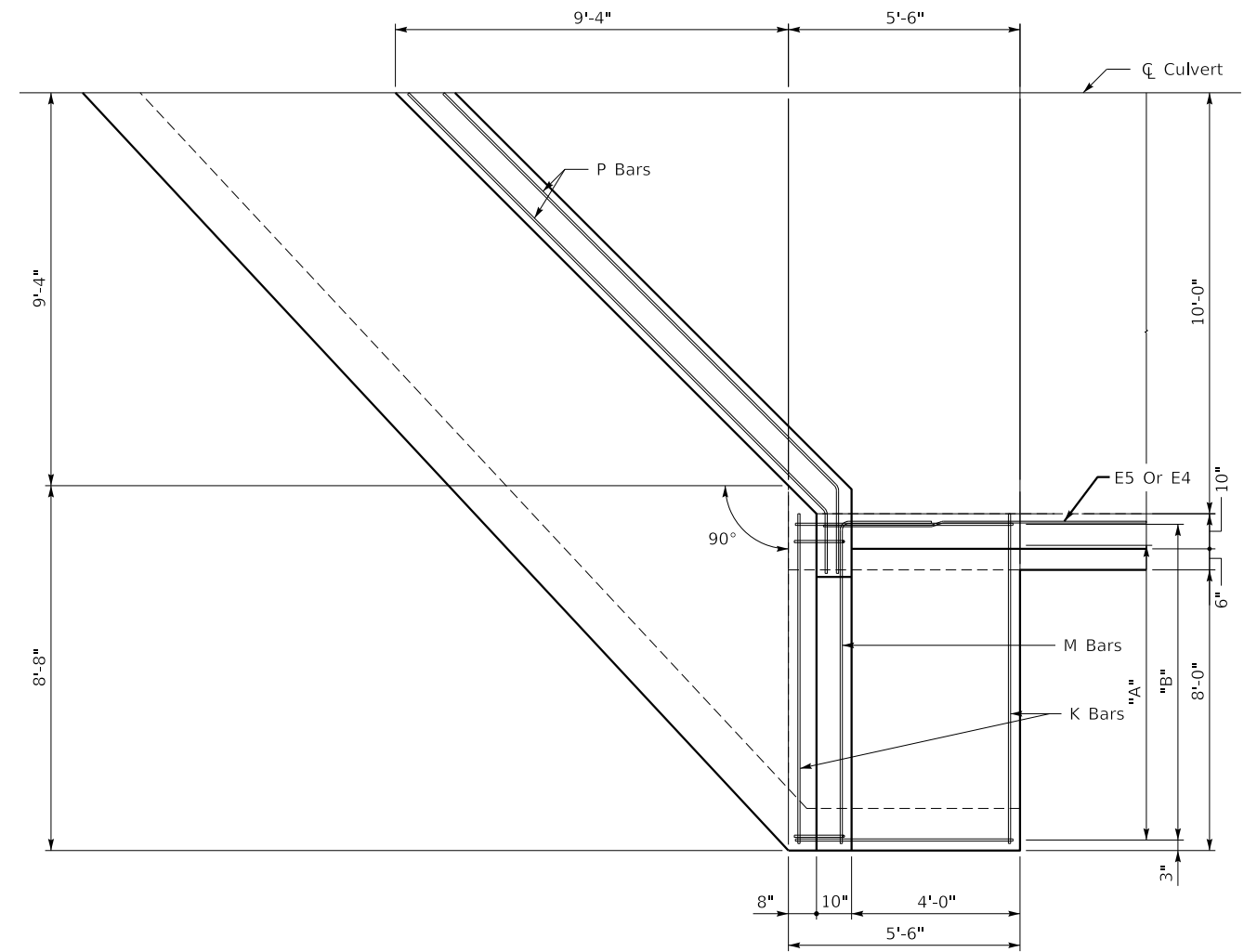
ROUTE KY 59	ITEM NO. 9-40004	COUNTY OF LEWIS
	SHEET NO. S6	DRAWING NUMBER 28727



**WING ELEVATION**  
SCALE = 1:24



**WING SECTION**  
SCALE = 1:16



**PLAN**  
SCALE = 1:24

- "A" 8~H37 @ 1'-0" = 7'-0" Bot of Ftg to B.F. Wall
- "B" 16~H35 @ 6" = 7'-6" Top of Ftg.
- "C" G33~G26 @ 1'-0" = 7'-0" B.F.
- "D" 5~M41, 1~M42 @ 1'-0" = 5'-0" B.F.
- "E" 2~K39 @ 10 1/2" = 10 1/2" Bot of Ftg.

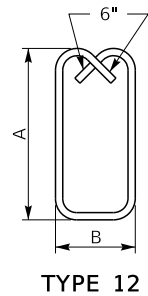
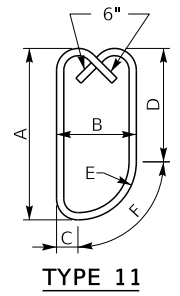
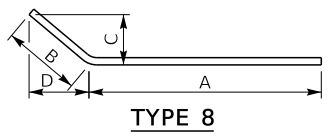
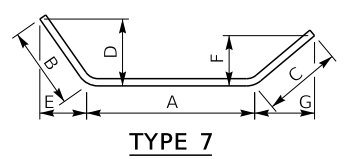
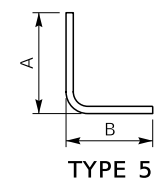
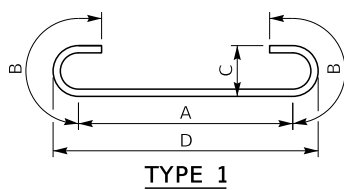


BILL OF REINFORCEMENT

MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A/E	B/F	C/G	D/H
A1e	I	82	11	33- 9	Top Slab	28- 11 1/4	2- 5	1- 2 3/4	30- 2
B2	I	82	11	35- 2	Bottom Slab	30- 4 1/4	2- 5	1- 2 3/4	31- 7
C3e	Str.	102	5	7- 11	Sidewalls				
E4e	Str.	82	6	25- 4	Sidewalls, Top & Bottom Slabs (Phase II)				
E5e	Str.	82	6	27- 5	Sidewalls, Top & Bottom Slabs (Phase III)				
G6	Str.	2	5	5- 10	B.F Wings I & 3				
G7	Str.	2	5	5- 11	B.F Wings I & 3				
G8	Str.	2	5	6- 0	B.F Wings I & 3				
G9	Str.	2	5	6- 2	B.F Wings I & 3				
G10	Str.	2	5	6- 3	B.F Wings I & 3				
G11	Str.	2	5	6- 4	B.F Wings I & 3				
G12	Str.	2	5	6- 6	B.F Wings I & 3				
G13	Str.	2	5	6- 7	B.F Wings I & 3				
G14	Str.	2	5	6- 8	B.F Wings I & 3				
G15	Str.	2	5	6- 9	B.F Wings I & 3				
G16	Str.	2	5	6- 11	B.F Wings I & 3				
G17	Str.	2	5	7- 0	B.F Wings I & 3				
G18	Str.	2	5	7- 1	B.F Wings I & 3				
G19	Str.	2	5	7- 3	B.F Wings I & 3				

BILL OF REINFORCEMENT

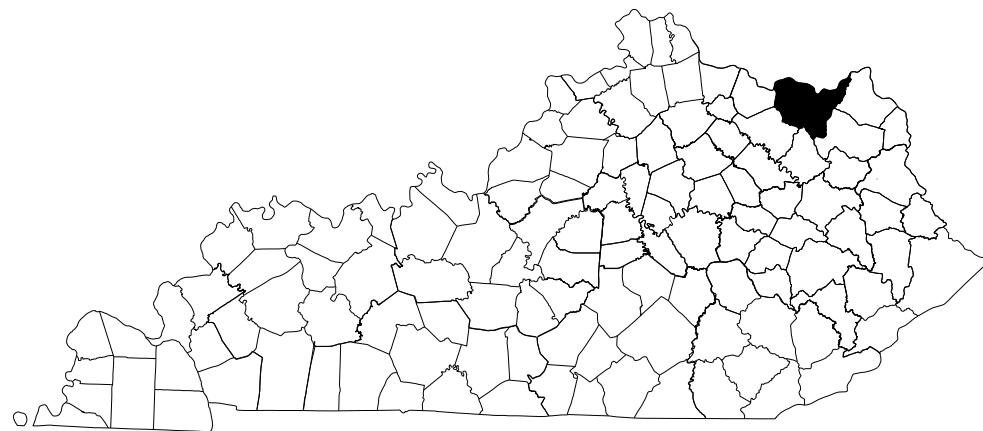
MARK	TYPE	NO.	SIZE	LENGTH	LOCATION	A/E	B/F	C/G	D/H
G20	Str.	2	5	7- 4	B.F Wings I & 3				
G21	Str.	2	5	7- 5	B.F Wings I & 3				
G22	Str.	2	5	7- 7	B.F Wings I & 3				
G23	Str.	2	5	7- 8	B.F Wings I & 3				
G24	Str.	2	5	7- 9	B.F Wings I & 3				
G25	Str.	4	5	7- 10	B.F Wings I & 3				
G26	Str.	2	5	4- 11	B.F Wings 2 & 4				
G27	Str.	2	5	5- 4	B.F Wings 2 & 4				
G28	Str.	2	5	5- 10	B.F Wings 2 & 4				
G29	Str.	2	5	6- 3	B.F Wings 2 & 4				
G30	Str.	2	5	6- 9	B.F Wings 2 & 4				
G31	Str.	2	5	7- 2	B.F Wings 2 & 4				
G32	Str.	2	5	7- 8	B.F Wings 2 & 4				
G33	Str.	2	5	7- 10	B.F Wings 2 & 4				
H34	Str.	42	5	5- 8	Top Ftq Wings I & 3				
H35	Str.	32	5	5- 2	Top Ftq Wings 2 & 4				
H36	5	42	5	4- 11	Bot Ftq Wings I & 3	3- 2	1- 11		
H37	5	16	5	4- 2	Bot Ftq Wings 2 & 4	3- 2	1- 2		
K38	Str.	16	5	22- 5	Ftq Wings I & 3				
K39	Str.	16	5	7- 10	Ftq Wings 2 & 4				
M40	8	12	5	19- 6	B.F. Wings I & 3	17- 3 3/8	2- 2	1- 2 1/8	1- 9 1/4
M41	8	10	5	9- 8	B.F. Wings 2 & 4	7- 7 7/8	2- 2	2- 2	0- 0
M42	8	2	5	7- 9	B.F. Wings 2 & 4	5- 8 3/8	2- 2	2- 2	0- 0
P43e	7	1	5	31- 11	B.F. Parapet Lt. End	27- 8 5/8	2- 3 1/2	1- 10 3/4	0- 4 3/4
						2- 3 1/8	1- 4 1/8	1- 4 1/8	
P44e	7	2	5	31- 11	B.F. Parapet Lt. End	27- 2 3/8	2- 8 1/8	2- 0 1/8	0- 5 3/4
						2- 8 3/8	1- 5	1- 5	
P45e	7	1	11	31- 10	B.F. Parapet Lt. End	27- 6 1/8	2- 5 3/4	1- 11 3/8	0- 5 1/8
						2- 5 3/8	1- 4 1/2	1- 4 1/2	
P46e	7	1	5	31- 6	F.F. Parapet Lt. End	27- 9 5/8	2- 0 1/4	1- 8 1/8	0- 4 1/4
						1- 11 1/8	1- 2 1/4	1- 2 1/4	
P47e	7	2	5	31- 5	F.F. Parapet Lt. End	28- 3 1/8	1- 6 7/8	1- 6 3/4	0- 3 1/4
						1- 6 1/2	1- 1 1/4	1- 1 1/4	
P48e	7	1	11	31- 6	F.F. Parapet Lt. End	28- 0 5/8	1- 10	1- 7 7/8	0- 3 3/8
						1- 9 5/8	1- 2 1/8	1- 2 1/8	
P49e	7	1	5	31- 11	B.F. Parapet Rt. End	27- 8 3/8	2- 3 1/2	1- 10 3/4	0- 4 3/4
						2- 3 1/8	1- 4 1/8	1- 4 1/8	
P50e	7	2	5	31- 11	B.F. Parapet Rt. End	27- 2 3/8	2- 8 1/8	2- 0 1/8	0- 5 3/4
						2- 8 3/8	1- 5	1- 5	
P51e	7	1	11	31- 10	B.F. Parapet Rt. End	27- 6 1/8	2- 5 3/4	1- 11 3/8	0- 5 1/8
						2- 5 3/8	1- 4 1/2	1- 4 1/2	
P52e	7	1	5	31- 6	F.F. Parapet Rt. End	27- 9 5/8	2- 0 1/4	1- 8 1/8	0- 4 1/4
						1- 11 1/8	1- 2 1/4	1- 2 1/4	
P53e	7	2	5	31- 5	F.F. Parapet Rt. End	28- 3 3/8	1- 6 7/8	1- 6 3/4	0- 3 1/4
						1- 6 1/2	1- 1 1/4	1- 1 1/4	
P54e	7	1	11	31- 6	F.F. Parapet Rt. End	28- 0 5/8	1- 10	1- 7 7/8	0- 3 3/8
						1- 9 5/8	1- 2 1/8	1- 2 1/8	
P55	Str.	2	11	31- 7	Bottom Slab Lt. End				
P56	Str.	2	11	31- 7	Bottom Slab Rt. End				
Q57	7	1	11	59- 2	Apron Lt. End	49- 2 1/8	5- 3 3/8	4- 11 1/8	5- 1 3/4
						1- 1 1/8	3- 7 3/4	3- 4 3/4	
Q58	7	1	11	60- 0	Apron Lt. End	49- 7 7/8	5- 6 3/8	5- 1 1/2	5- 4 7/8
						1- 1 1/8	3- 9	3- 6	
Q59	7	1	11	59- 2	Apron Rt. End	49- 2 1/8	5- 3 3/8	4- 11 1/8	5- 1 3/4
						1- 1 1/8	3- 7 3/4	3- 4 3/4	
Q60	7	1	11	60- 0	Apron Rt. End	49- 7 7/8	5- 6 3/8	5- 1 1/2	5- 4 7/8
						1- 1 1/8	3- 9	3- 6	
R61e	12s	28	5	7- 1	Parapet Wall (Left End)	2- 9 1/2	0- 9		
R62e	11s	28	5	6- 11	Parapet Wall (Right End)	2- 9 1/2	0- 9	0- 2 1/2	2- 3
						0- 6 1/2	0- 9 3/4		
T63	8	4	6	16- 11	Top of Wings I & 3	15- 5 3/4	1- 5 1/8	0- 2 1/4	1- 5 5/8
X64	Str.	49	5	1- 9	Curb Extension				
X65	Str.	1	5	48- 2	Curb Extension				
X66	Str.	4	8	31- 2	Phase Edge Beam				
X67	Str.	4	5	31- 2	Phase Edge Beam				
X68	12s	33	5	7- 1	Phase Edge Beam	2- 9 1/2	0- 9		
X69	Str.	66	5	3- 6	Phase Edge Beam				



# COMMONWEALTH OF KENTUCKY

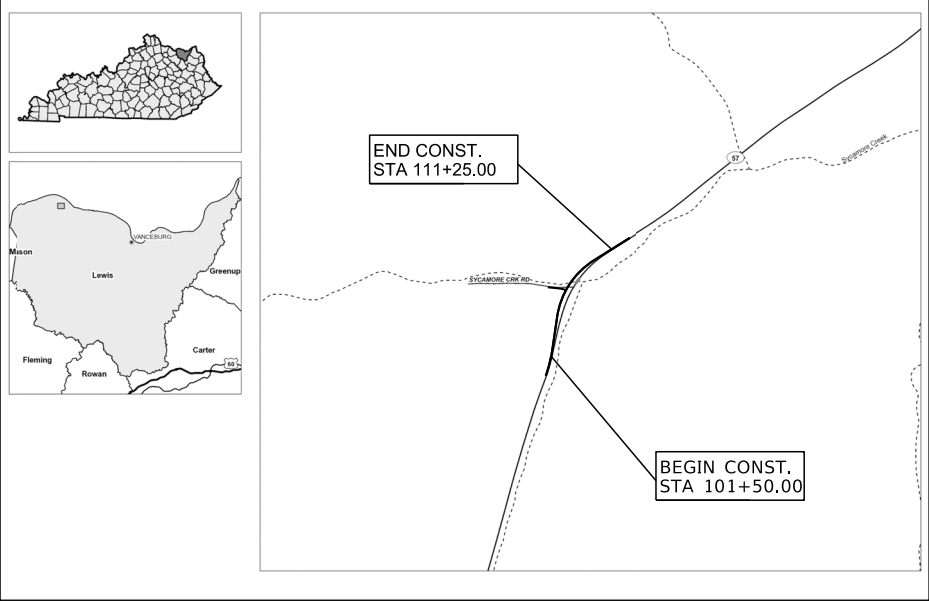
## DEPARTMENT OF HIGHWAYS

### PLANS OF PROPOSED PROJECT KY 57 over Sycamore Creek Lewis County, Kentucky Grade, Drain, and Surfacing Plans



THIS PROJECT IS OFF THE NH SYSTEM

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT



### LAYOUT MAP

**BEFORE YOU DIG**

The contractor is instructed to call 1-800-752-6007 to reach KY 811, the one-call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that owners of underground facilities are not required to be members of the KY 811 one-call Before-U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Court Clerk to determine what utility companies have facilities in the area.



**LOCHNER**

LETTING DATE: 7/20/2023

ITEM NO. 9-40005.00 COUNTY OF Lewis

SHEET NO. R1

#### DESIGN CRITERIA

CLASS OF HIGHWAY RURAL MINOR COLLECTOR

TYPE OF TERRAIN ROLLING

DESIGN SPEED 55 MPH

REQUIRED NPSD 495'

REQUIRED PSD 900'

LEVEL OF SERVICE A

ADT PRESENT ( 2021 ) 233

ADT FUTURE ( X ) X

DHV 23

D % 57

T % X

#### INDEX OF SHEETS

R1 LAYOUT SHEET

R2 TYPICAL SECTIONS

R2A GENERAL SUMMARY

R2B GENERAL NOTES AND SPECIAL NOTES SHEET

R3 LEGEND AND UTILITY OWNERS SHEET

R4-R10 PLAN AND PROFILE SHEETS

R11 MOT NOTES AND PHASING SHEET

R12-R14 MOT PLAN SHEETS

R15 EROSION CONTROL NOTES

R16 EROSION CONTROL PLAN

R17 RIGHT OF WAY SUMMARY SHEET

R18 COORDINATE CONTROL AND ROW STRIP MAP

R19 PIPE SECTION

X1-X18 CROSS SECTIONS

#### STANDARD DRAWINGS

RBI-001-012 RBR-015-006 RDH-212-002 FDX-220-005 TPR-120-000

RBI-004-006 RBR-018-000 RDI-001-010 FDX-225-001 TTC-100-005

RBM-020-009 RBR-020-007 RDI-020-010 FGS-001-007 TTC-110-004

RBM-115-010 RBR-050-008 RDI-021-001 FGX-001-006 SEPA 017

RBM-120-002 RBR-051-001 RDI-025-006 FGX-005-006 SEPA 021

RBR-001-013 RBR-055-001 RDI-026-001 FGX-200-001 SEPA 022

RBR-005-011 RRD-040-005 RDX-210-003 FPM-110-007

RBR-010-006 RDH-120-002 RDX-215-001 TPR-115-000

LENGTH <u>975'</u> LIN. FT. <u>.185</u> MILES	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES	LENGTH <u>X</u> LIN. FT. <u>X</u> MILES
ADDED <input type="checkbox"/> FOR EQUALITIES <input checked="" type="checkbox"/> NOT INCLUDED	ADDED <input type="checkbox"/> FOR EQUALITIES <input checked="" type="checkbox"/> NOT INCLUDED	ADDED <input type="checkbox"/> FOR EQUALITIES <input checked="" type="checkbox"/> NOT INCLUDED	ADDED <input type="checkbox"/> FOR EQUALITIES <input checked="" type="checkbox"/> NOT INCLUDED
RAILROAD CROSSINGS NO. <u>X</u> LIN. FT.	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT.	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT.	RAILROAD CROSSINGS NO. <u>X</u> LIN. FT.
BRIDGES <u>X</u> LIN. FT.	BRIDGES <u>X</u> LIN. FT.	BRIDGES <u>X</u> LIN. FT.	BRIDGES <u>X</u> LIN. FT.
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>
<u>X</u>	<u>X</u>	<u>X</u>	<u>X</u>

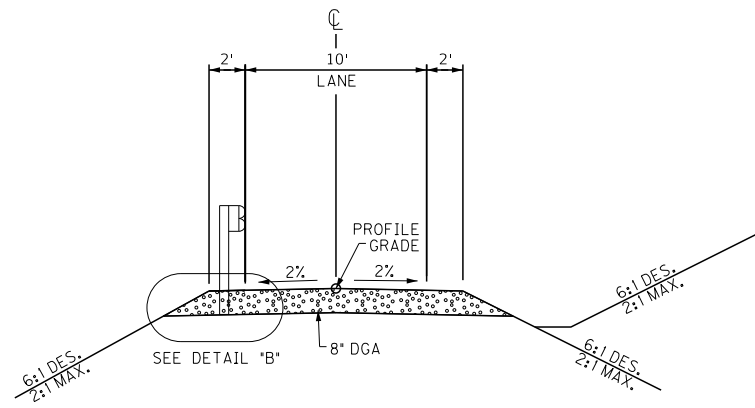
PROJECT NUMBER:

PROJECT DESCRIPTION: KY 57 REPLACE CULVERT OVER SYCAMORE CREEK

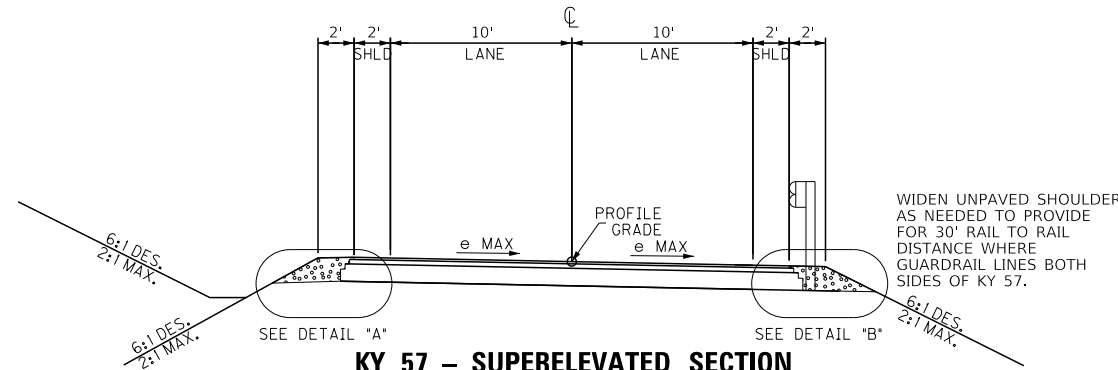
RECOMMENDED BY: Carl Van Zee PROJECT MANAGER DATE: 4/14/2023

PLAN APPROVED BY: \_\_\_\_\_ STATE HIGHWAY ENGINEER DATE: \_\_\_\_\_

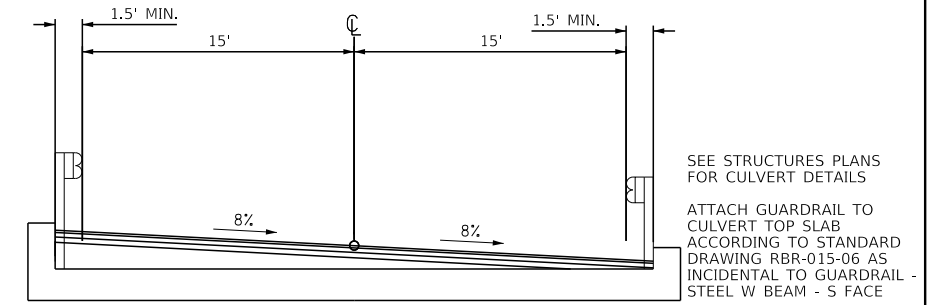
# TYPICAL SECTIONS



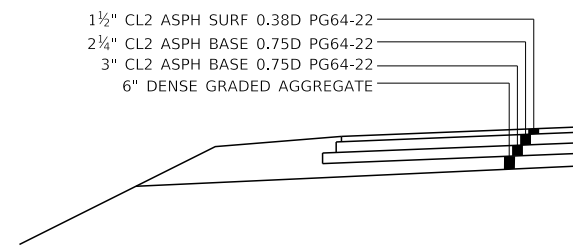
**SYCAMORE CREEK ROAD  
NORMAL SECTION**  
STA 48+80.00 TO STA 49+89.85



**KY 57 - SUPERELEVATED SECTION**  
STA 101+50.00 TO STA 111+25.00

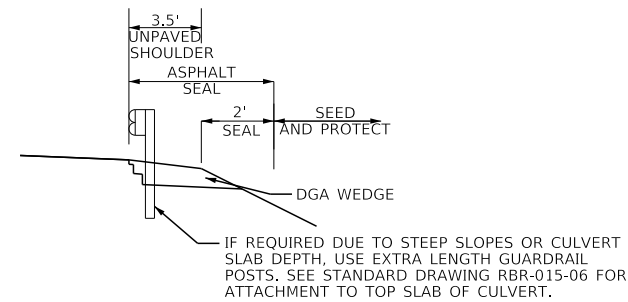


**CULVERT DETAIL**



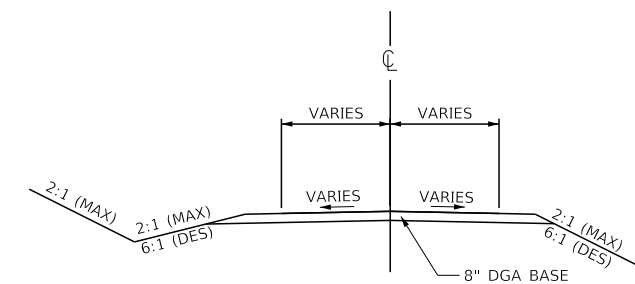
**DETAIL "A" - KY 57 PAVEMENT DESIGN**

FROM EDGE OF PAVED SHOULDER TO A POINT 2' DOWN THE SLOPE  
BITUMINOUS SEAL-TWO APPLICATIONS  
OF THE FOLLOWING:  
ASPHALT SEAL COAT 2.4 LB/SY  
ASPHALT SEAL AGGREGATE 20 LB/SY



**DETAIL "B" - GUARDRAIL INSTALLATION**

BITUMINOUS SEAL-TWO APPLICATIONS  
OF THE FOLLOWING:  
ASPHALT SEAL COAT 2.4 LB/SY  
ASPHALT SEAL AGGREGATE 20 LB/SY



**ENTRANCE TYPICAL SECTION**

ITEM	DESCRIPTION	UNIT	KY 57	TOTAL PROJECT
468	CULVERT PIPE-36 IN	LF	33	33
1212	PIPE CULVER HEADWALL - 36 IN	EACH	2	2
1987	DELINEATOR FOR GUARDRAIL BI DIRECTIONAL WHITE	EACH	21	21
① 2159	TEMP DITCH	LF	488	488
① 2160	CLEAN TEMP DITCH	LF	244	244
④ 2200	ROADWAY EXCAVATION	CUYD	5452	5452
① 2242	WATER	MGAL	185	185
2351	GUARDRAIL-STEEL W BEAM-S FACE	LF	1037.5	1037.5
2360	GUARDRAIL TERMINAL SECTION NO 1	EACH	2	2
2367	GUARDRAIL END TREATMENT TYPE 1	EACH	1	1
2429	RIGHT-OF-WAY MONUMENT TYPE 1	EACH	15	15
2432	WITNESS POST	EACH	3	3
2484	CHANNEL LINING CLASS III	TON	134	134
③ 2545	CLEARING AND GRUBBING	LS	1	1
⑤ 2565	OBJECT MARKER TYPE 2	EACH	4	4
2569	DEMobilIZATION	LS	1	1
2585	EDGE KEY	LF	36	36
2602	FABRIC-GEOTEXTILE CLASS 1	SQYD	134	134
2607	FABRIC-GEOTEXTILE CLASS 2 FOR PIPE	SQYD	87	87
2650	MAINTAIN & CONTROL TRAFFIC	LS	1	1
① 2701	TEMP SILT FENCE	LF	488	488
① 2703	SILT TRAP TYPE A	EACH	3	3
① 2704	SILT TRAP TYPE B	EACH	3	3
① 2706	CLEAN SILT TRAP TYPE A	EACH	3	3
① 2707	CLEAN SILT TRAP TYPE B	EACH	3	3
2726	STAKING	LS	1	1
2731	REMOVE STRUCTURE	LS	1	1
3171	CONCRETE BARRIER WALL TYPE 9T	LF	520	520
⑥ 4933	TEMP SIGNAL PHASE 2	EACH	1	1
① 5950	EROSION CONTROL BLANKET	SQYD	597	597
① 5952	TEMP MULCH	SQYD	8000	8000
① 5953	TEMP SEEDING AND PROTECTION	SQYD	5970	5970
① 5963	INITIAL FERTILIZER	TON	0.29	0.29
① 5964	MAINTAINENCE FERTILIZER	TON	0.49	0.49
① 5985	SEEDING AND PROTECTION	SQYD	8015	8015
① 5992	AGRICULTURAL LIMESTONE	TON	5.84	5.84
6510	PAVE STRIPING-TEMP PAINT-4 IN	LF	2637	2637
6514	PAVE STRIPING-PERM PAINT-4 IN	LF	1950	1950
23274EN11F	TURF REINFORCEMENT MAT 1	SQYD	812	812
24631EC	BARCODE SIGN INVENTORY	EACH	4	4

PAVING AREAS				
ITEM	KY 57	SYCAMORE CREEK ROAD	ENTRANCES	TOTALS
				SQUARE YARDS
6" DGA BASE	3512			3512
8" DGA BASE		228	207	435
ASPHALT SEAL AGGREGATE	1290			1290
ASPHALT SEAL COAT	1290			1290
2.25" CL2 ASPH BASE 0.75D PG64-22	2561			2561
3" CL2 ASPH BASE 0.75D PG64-22	2601			2601
ASPHALT PRIME COAT	2655			2655
1.25" CL2 ASPH SURF 0.38D PG64-22	2534			2534
ASPHALT MATERIAL FOR TACK	5162			5162

PAVING SUMMARY						
ITEM CODE	ITEM	UNIT	KY 57	SYCAMORE CREEK ROAD	ENTRANCES	TOTAL PROJECT
② B 00001	DGA BASE	TON	1797	112	111	2021
② C 00100	ASPHALT SEAL AGGREGATE	TON	26			26
② D 00103	ASPHALT SEAL COAT	TON	3.10			3.10
② A 00221	CL2 ASPH BASE 0.75D PG64-22	TON	746			746
② E 00296	ASPHALT PRIME COAT	TON	1.12			1.12
② A 00301	CL2 ASPH SURF 0.38D PG64-22	TON	209			209
② F 00356	ASPHALT MATERIAL FOR TACK	TON	2.17			2.17

Earthwork Volumes (CUYD)		
	Exc.	Emb.
KY 57	5437	2161
Sycamore Creek Road	10	261
Entrances	5	41
Total	5452	2462

- A ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS PER SQ YD PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.
- B ESTIMATED AT 115 LBS PER SQ YD PER IN OF DEPTH.
- C ESTIMATED AT 20 LBS PER SQ YD, 2 APPLICATIONS REQUIRED.
- D ESTIMATED AT 2.40 LBS PER SQ YD, 2 APPLICATIONS REQUIRED.
- E ESTIMATED AT 0.84 LBS PER SQ YD, TO BE PLACED ON TOP OF DGA PRIOR TO ASPHALT PAVING.
- F ESTIMATED AT 0.84 LBS PER SQ YD, TO BE PLACED ON TOP OF ALL BASE LIFTS.
- 1 TO BE USED AT THE ENGINEER'S DISCRETION FOR EROSION CONTROL.
- 2 THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.
- 3 APPROX 2.5 ACRE MORE OR LESS
- 4 EXCLUDES QUANTITIES NEEDED TO CONSTRUCT DIVERSION
- 5 TO BE USED AT THE ENGINEER'S DISCRETION TO DELINEATE PROPOSED STRUCTURE.
- 6 INCLUDES 3 SIGNAL HEADS.

## General Notes

### DIVISION 100 -- GENERAL PROVISIONS

#### 165 BEFORE YOU DIG

THE CONTRACTOR IS INSTRUCTED TO CALL 1-800-752-6007 TO REACH KY 811, THE ONE-CALL SYSTEM FOR INFORMATION ON THE LOCATION OF EXISTING UNDERGROUND UTILITIES. THE CALL IS TO BE PLACED A MINIMUM OF TWO (2) AND NO MORE THAN TEN (10) BUSINESS DAYS PRIOR TO EXCAVATION. THE CONTRACTOR SHOULD BE AWARE THAT OWNERS OF UNDERGROUND FACILITIES ARE NOT REQUIRED TO BE MEMBERS OF THE KY 811 ONE-CALL BEFORE-U-DIG (BUD) SERVICE. THE CONTRACTOR MUST COORDINATE EXCAVATION WITH THE UTILITY OWNERS, INCLUDING THOSE WHO DO NOT SUBSCRIBE TO KY 811. IT MAY BE NECESSARY FOR THE CONTRACTOR TO CONTACT THE COUNTY COURT CLERK TO DETERMINE WHAT UTILITY COMPANIES HAVE FACILITIES IN THE AREA.

### DIVISION 400 -- ASPHALT PAVEMENTS

#### 448 COMPACTION OF ASPHALT MIXTURES

WILL ACCEPT THE COMPACTION OF ASPHALT MIXTURES FURNISHED ON THIS PROJECT BY OPTION B ACCORDING TO SUBSECTIONS 402.03.02 AND 403.03.10 OF THE STANDARD SPECIFICATIONS.

#### 455 EDGE KEY

THIS WORK INCLUDES CUTTING OUT THE EXISTING ASPHALT SURFACE TO A MINIMUM DEPTH AND WIDTH AS DETAILED ELSEWHERE IN THE PLANS SO THAT THE NEW SURFACE MAY HEEL INTO THE EXISTING SURFACE. THE CONTRACT UNIT PRICE BID LINEAR FOOT (PER METER) FOR "EDGE KEY" INCLUDES ALL NECESSARY MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO PERFORM THE WORK AND DISPOSE OF THE REMOVED ASPHALT MATERIAL.

### DIVISION 600 -- STRUCTURES AND CONCRETE

#### 650 STANDARD DRAWINGS

STANDARD DRAWINGS ARE NOT ATTACHED TO THESE PLANS. A STANDARD DRAWING BOOK AND THE HEADWALL SUPPLEMENTAL BOOK MAY BE OBTAINED FROM THE POLICY SUPPORT BRANCH OF THE DEPARTMENT OF ADMINISTRATIVE SERVICES IN FRANKFORT, KY. AT (502) 564-4610

## Special Notes

THE CONTRACTOR IS ADVISED THAT THE EARTHWORK CALCULATIONS SHOWN ARE FOR INFORMATION ONLY. ASSUMPTIONS FOR SHRINKAGE AND SWELL FACTORS ARE THE CONTRACTOR'S RESPONSIBILITY.

ALONG SYCAMORE CREEK ROAD, CLEAR AND GRUB ONLY AREA THAT IS NECESSARY FOR STAGING AND CONSTRUCTION. IF VEGETATION DOES NOT CONFLICT WITH CONSTRUCTION ACTIVITIES, IT SHOULD REMAIN UNDISTURBED.

SPECIAL NOTE FOR BARCODES ON PERMANENT SIGNS 2019 SHALL APPLY.

SPECIAL NOTE 11F FOR TURF REINFORCEMENT MAT SHALL APPLY.

Corporate Limits	---	Main Water Marker	OWLM	Crash Cushion TY 9		Point (Misc)	—	Telephone Pedestal	
County Line	---	Main Water Greater Than 12 Marker	OWLMG12	Cross Notch	•NOTCH	Pole	●	Telephone Pole	●
Easement	---	Sewer Sanitary Marker	OSSM	Curb Box Inlet		Pole (Light)		Temporary Benchmark	
Fence COA	---XX---	Sewer Sanitary Force Main Marker	OSANFMM	Curb Notch	•NOTCH	Post	•POST	Traffic Light	
Mineral Parcel	-----	Sewer Storm Marker	OSTMM	Combination Pole		Power Pole		Traffic Signal Control Box	
Property Line	---	Multi Utility Bank Marker	OMUBM	Delineator Post	•DP	Quarry		Traffic Signal Junction Box	
Right of Way Line	---	Oil Line Marker	OOLM	Drop Box		Random (Ground Shot)	+	Traffic Signal Pole	●
All Overhead Utility Lines	-----   -----	Steam Line Marker	OSLM	Existing Spring		Railroad Mile Marker	•RRMM	Traverse Point	•TRAV
Cable Underground Electric With Quality Levels	--- E (A) --- OE(A) --- E (B) --- --- E (CD) --- --- E (PA) ---	Cable Guardrail		Electric Manhole		Railroad Spike	•RRS	Tree	
Duct Underground Electric With Quality Levels	--- E (A) --- OE(D)(A) --- E (B) --- --- E (CD) --- --- E (PA) ---	Ditch		Electric Meter	•EM	Right of Way Marker	□	TV Junction Box	
Cable Underground Fiber With Quality Levels	--- FO (A) --- OF(A) --- FO (B) --- --- FO (CD) --- --- FO (PA) ---	Edge of Water		Electric Pedestal		RR Traffic Signal Pole	●	Utility Pole	●
Cable Underground Telephone With Quality Levels	--- T (A) --- OT(A) --- T (B) --- --- T (CD) --- --- T (PA) ---	Fence Hedge		Electric Junction Box		RW Parcel		Underground Storage Tank	
Duct Underground Telephone With Quality Levels	--- T (A) --- OT(D)(A) --- T (B) --- --- T (CD) --- --- T (PA) ---	Fence		Fire Hydrant	•FH	Sanitary Cleanout	•SANCO	Utility Test Hole	•TH
Cable Underground TV With Quality Levels	--- TV (A) --- OTV(A) --- TV (B) --- --- TV (CD) --- --- TV (PA) ---	Flow Line/Thalweg/Int. Stream or Ditch		Flag Pole	•FP	Sanitary Manhole	•SANMH OSANMH	Water Line Marker	•WLM
Main Gas With Quality Levels	--- GM (A) --- OGM(A) --- GM (B) --- --- GM (CD) --- --- GM (PA) ---	Guardrail		Force Main Sewer Valve	•FMV	Satellite Dish	•SD	Water Meter	•WM
Main Water With Quality Levels	--- WM (A) --- OWM(A) --- WM (B) --- --- WM (CD) --- --- WM (PA) ---	Railroad		Fuel Tank Inlet	•FTI	Septic Tank Cleanout	•STC	Water Spigot	•WS
Main Water Greater Than 12 With Quality Levels	--- WM >12 (A) --- OWM >12(A) --- WM >12 (B) --- --- WM >12 (CD) --- --- WM >12 (PA) ---	Shrub Line		Fuel Tank Vent	•FTV	Service Pole	•SP	Water Valve	•WV
Sewer Sanitary With Quality Levels	--- SAN (A) --- OSAN(A) --- SAN (B) --- --- SAN (CD) --- --- SAN (PA) ---	Sink Hole		Gas Meter	•GM	Sewer Air Release Valve	•SARV	Water Well	•WW
Sewer Sanitary Force Main With Quality Levels	--- SAN FM (A) --- OSAN FM(A) --- SAN FM (B) --- --- SAN FM (CD) --- --- SAN FM (PA) ---	Tree Line		Gas Monitoring Well	•GMW	Shrub		Yard Light	•YL
Sewer Storm With Quality Levels	--- STORM (A) --- OSTORM(A) --- STORM (B) --- --- STORM (CD) --- --- STORM (PA) ---	Wall (WSM or DSM)		Gas Valve	•GV	Sign	•SIGN	Yard Sprinkler	•YS
Multi Utility Bank Quality Levels	--- MUB (A) --- OMUB(A) --- MUB (B) --- --- MUB (CD) --- --- MUB (PA) ---	Blue Line Stream		Gas Vent	•GVE	Sign Post (Single)		Yard Sprinkler Water Valve	•YSWV
Oil Line Quality Levels	--- OIL (A) --- OOIL(A) --- OIL (B) --- --- OIL (CD) --- --- OIL (PA) ---	Lakes and Ponds		Gas Well	•GW	Sign with 2 posts			
Steam Line Quality Levels	--- STM (A) --- OSTM(A) --- STM (B) --- --- STM (CD) --- --- STM (PA) ---	Regulated Floodway		Guidewires & Anchors		Sign group (4)			
Cable Underground Electric Marker	•CUGEM	RDZ Line		Headstone		Station Stamp			
Duct Underground Electric Marker	•DUGEM	ADA Ramp		Interstate Shield		Storm Manhole	•SSMH		
Cable Underground Fiber Marker	•CUGFM	Anchor Pole	•AP	Iron Pin	•IP	Stub Power			
Cable Underground Telephone Marker	•CUGTM	Benchmark	•B	Light Pole		Stub Telephone			
Duct Underground Telephone Marker	•DUGTM	Bike Lane Symbol		Low Wire	+	Survey Cross Notch	•CN		
Cable Underground TV Marker	•CUGTVM	Bollard	•BOLLARD	Mag Nail	•MAG	Survey Curb Notch	•NOTCH		
Main Gas Marker	•GLM	Centerline	+	Mailbox		Survey Nail	•MAG		
		Centerline Stationing	○	Manhole		Survey Spike	•RRS		
		Control Monument		Mile Marker Post	•MP	Survey Stone Marker	•STONE		
		Control Point	△	Mineral Parcel		Swamp			
		Core Hole	•CORE	Misc Location Point	○	Telephone Booth			
		Crash Cushion TY 6 D		Monitoring Well	•MW	Telephone Junction Box			
		Crash Cushion TY 6 A		Parking Meter	•PM	Telephone Line Overhead	•TL		
		Crash Cushion TY 9A		Pedestrian Signal	•PED SIG	Telephone Manhole			
				Pins/Pipes	•IP				
				PK Nail	•PK				

**Utility Owners**

Western Lewis-Rectorville Water & Gas District - Water  
8044 KY 3161  
Maysville, KY 41056  
Contact - Chad Clark  
Phone - (606) 742-0014  
Email - wlrwaterandgas2@yahoo.com

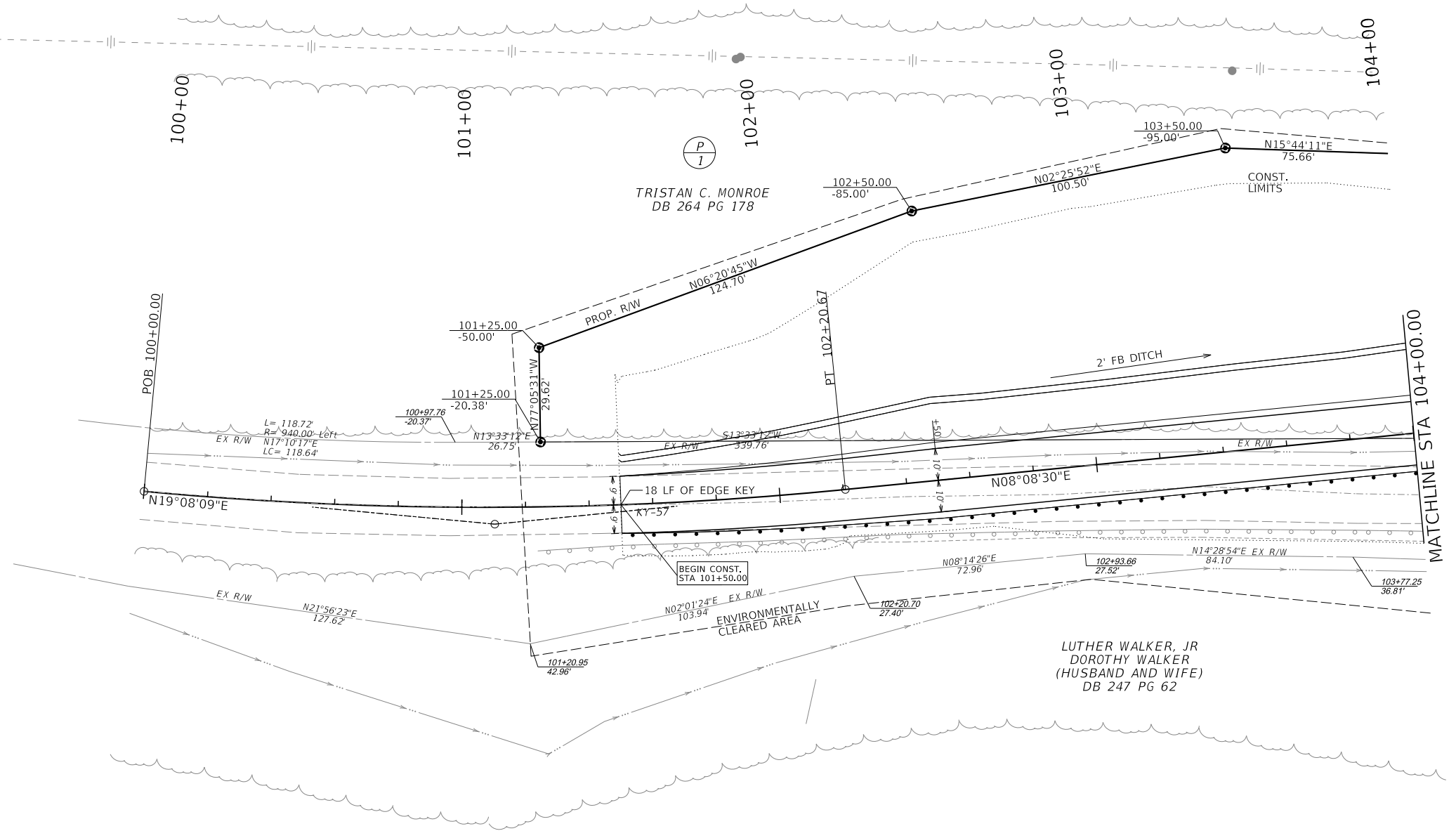
Fleming-Mason Energy Cooperative, Inc. - Electrical  
PO Box 328  
Flemingsburg, KY 41041  
Contact - Brandon Hunt  
Office - (606) 845-2661  
Email - bhunt@fme.coop

APPROX RT KY 57 STA 101+50 TO APPROX RT  
 KY 57 STA 109+22 CONSTRUCT 712.5 LF OF  
 GUARDRAIL - STEEL W BEAM - S FACE AND 1  
 END TREATMENT TYPE 1. TIE TO EXISTING  
 GUARDRAIL APPROX RT STA 101+50 AS  
 INCIDENTAL TO GUARDRAIL - STEEL W BEAM -  
 S FACE.

KY 57 STA 101+00 TO 102+50 TAPER AND  
 TIE ALL PAVEMENT AS DIRECTED BY THE  
 ENGINEER.

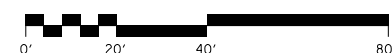
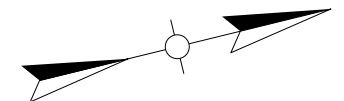
KY 57 APPROX STA 101+50 CONSTRUCT 18  
 LF OF EDGE KEY AS DIRECTED BY THE  
 ENGINEER.

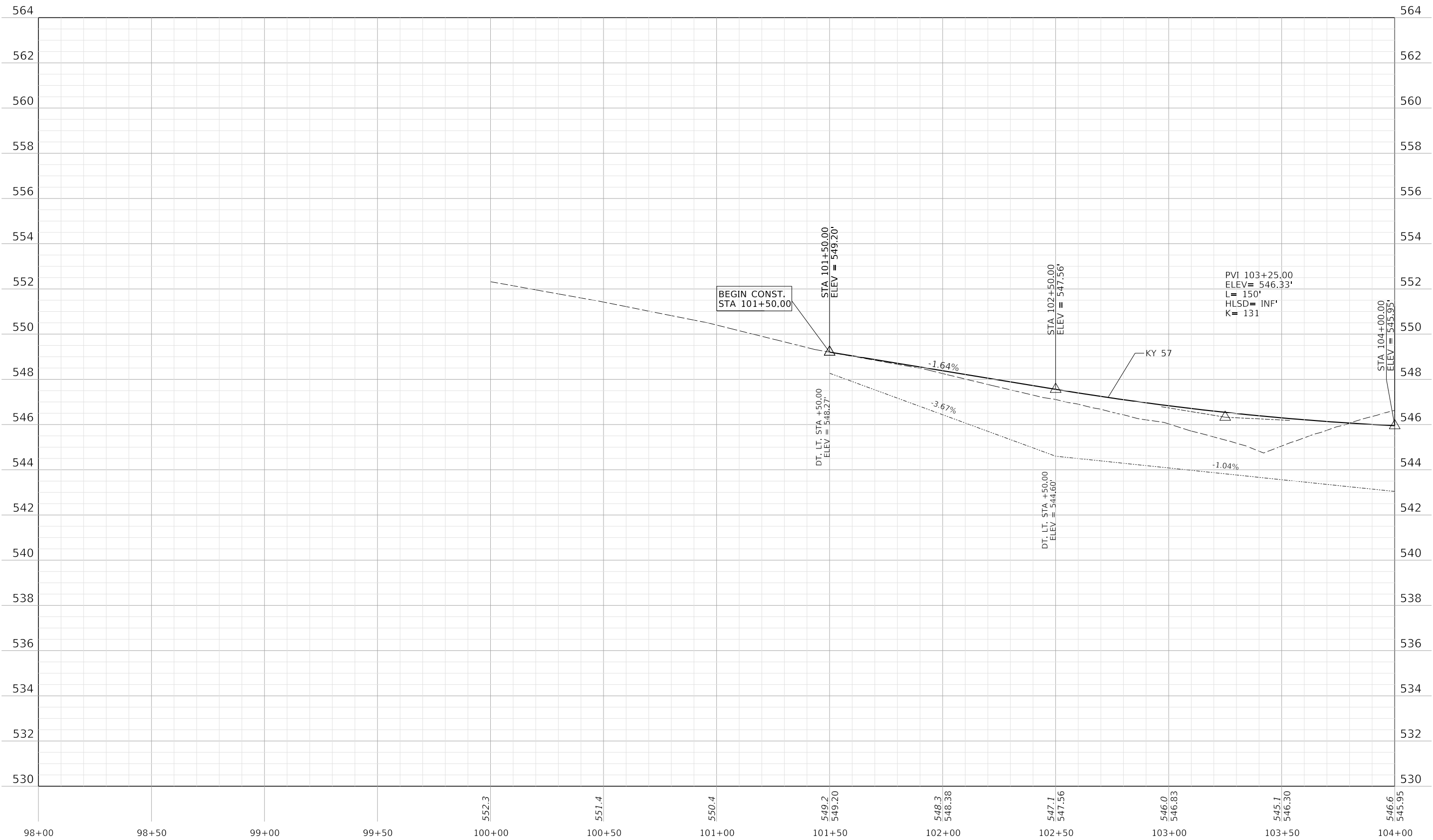
△ C.P.-4  
 5/8"X18" IPC



DITCH CONSTRUCTION				
STATION TO STATION	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
101+50.00 TO 102+50.00	LT	2' FB	TRM TY I	1.00
102+50.00 TO 104+00.00	LT	2' FB	TRM TY I	1.50
				93 SQ. YD
				193 SQ. YD

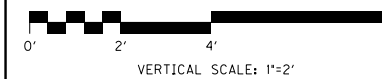
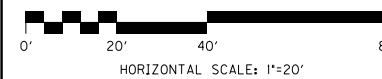
KY 57 CURVE #1  
 PI STA 101+10.67  
 $\Delta = 10^{\circ}59'39''$  LT  
 T = 110.67'  
 L = 220.67'  
 R = 1150.00'  
 E = 2.00%  
 Runoff = SEE CROSS SECTIONS  
 Runout = SEE CROSS SECTIONS





COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 57 PROFILE SHEET

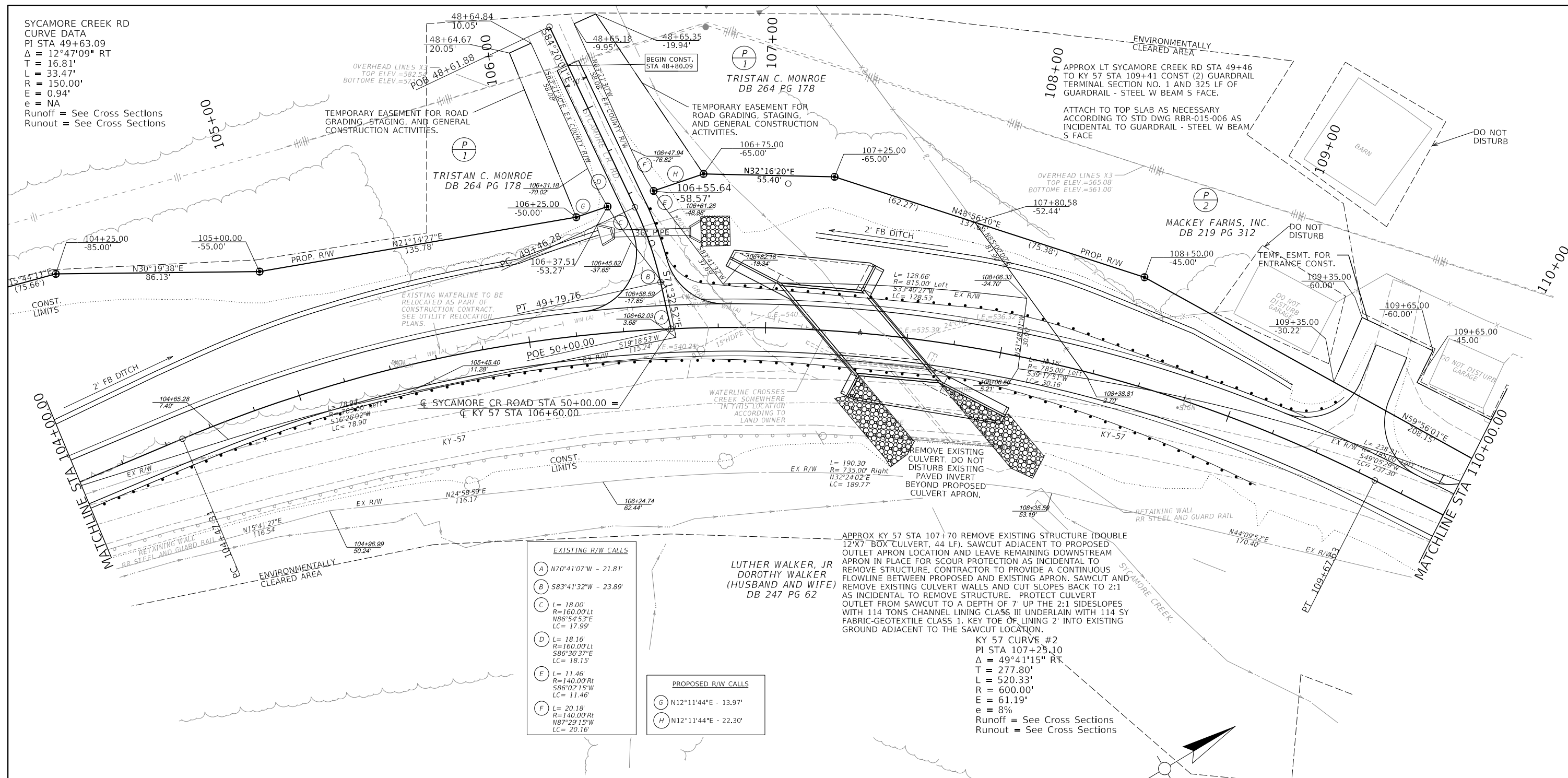


STA 100+00 TO 104+00

ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R5



SYCAMORE CREEK RD  
 CURVE DATA  
 PI STA 49+63.09  
 $\Delta = 12^\circ 47' 09''$  RT  
 T = 16.81'  
 L = 33.47'  
 R = 150.00'  
 E = 0.94'  
 e = NA  
 Runoff = See Cross Sections  
 Runout = See Cross Sections



**EXISTING R/W CALLS**

- (A)  $N70^\circ 41' 07'' W - 21.81'$
- (B)  $S83^\circ 41' 32'' W - 23.89'$
- (C)  $L = 18.00'$   
 $R = 160.00' Lt$   
 $N86^\circ 54' 53'' E$   
 $LC = 17.99'$
- (D)  $L = 18.16'$   
 $R = 160.00' Lt$   
 $S86^\circ 36' 37'' E$   
 $LC = 18.15'$
- (E)  $L = 11.46'$   
 $R = 140.00' Rt$   
 $S86^\circ 02' 15'' W$   
 $LC = 11.46'$
- (F)  $L = 20.18'$   
 $R = 140.00' Rt$   
 $N87^\circ 29' 15'' W$   
 $LC = 20.16'$

**PROPOSED R/W CALLS**

- (G)  $N12^\circ 11' 44'' E - 13.97'$
- (H)  $N12^\circ 11' 44'' E - 22.30'$

APPROX KY 57 STA 107+70 REMOVE EXISTING STRUCTURE (DOUBLE 12'X7' BOX CULVERT, 44 LF). SAWCUT ADJACENT TO PROPOSED OUTLET APRON LOCATION AND LEAVE REMAINING DOWNSTREAM APRON IN PLACE FOR SCOUR PROTECTION AS INCIDENTAL TO REMOVE STRUCTURE. CONTRACTOR TO PROVIDE A CONTINUOUS FLOWLINE BETWEEN PROPOSED AND EXISTING APRON. SAWCUT AND REMOVE EXISTING CULVERT WALLS AND CUT SLOPES BACK TO 2:1 AS INCIDENTAL TO REMOVE STRUCTURE. PROTECT CULVERT OUTLET FROM SAWCUT TO A DEPTH OF 7' UP THE 2:1 SIDESLOPES WITH 114 TONS CHANNEL LINING CLASS III UNDERLAIN WITH 114 SY FABRIC-GEOTEXTILE CLASS 1. KEY TOE OF LINING 2' INTO EXISTING GROUND ADJACENT TO THE SAWCUT LOCATION.

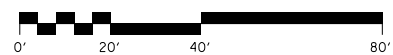
KY 57 CURVE #2  
 PI STA 107+25.10  
 $\Delta = 49^\circ 41' 15''$  RT  
 T = 277.80'  
 L = 520.33'  
 R = 600.00'  
 E = 61.19'  
 e = 8%  
 Runoff = See Cross Sections  
 Runout = See Cross Sections

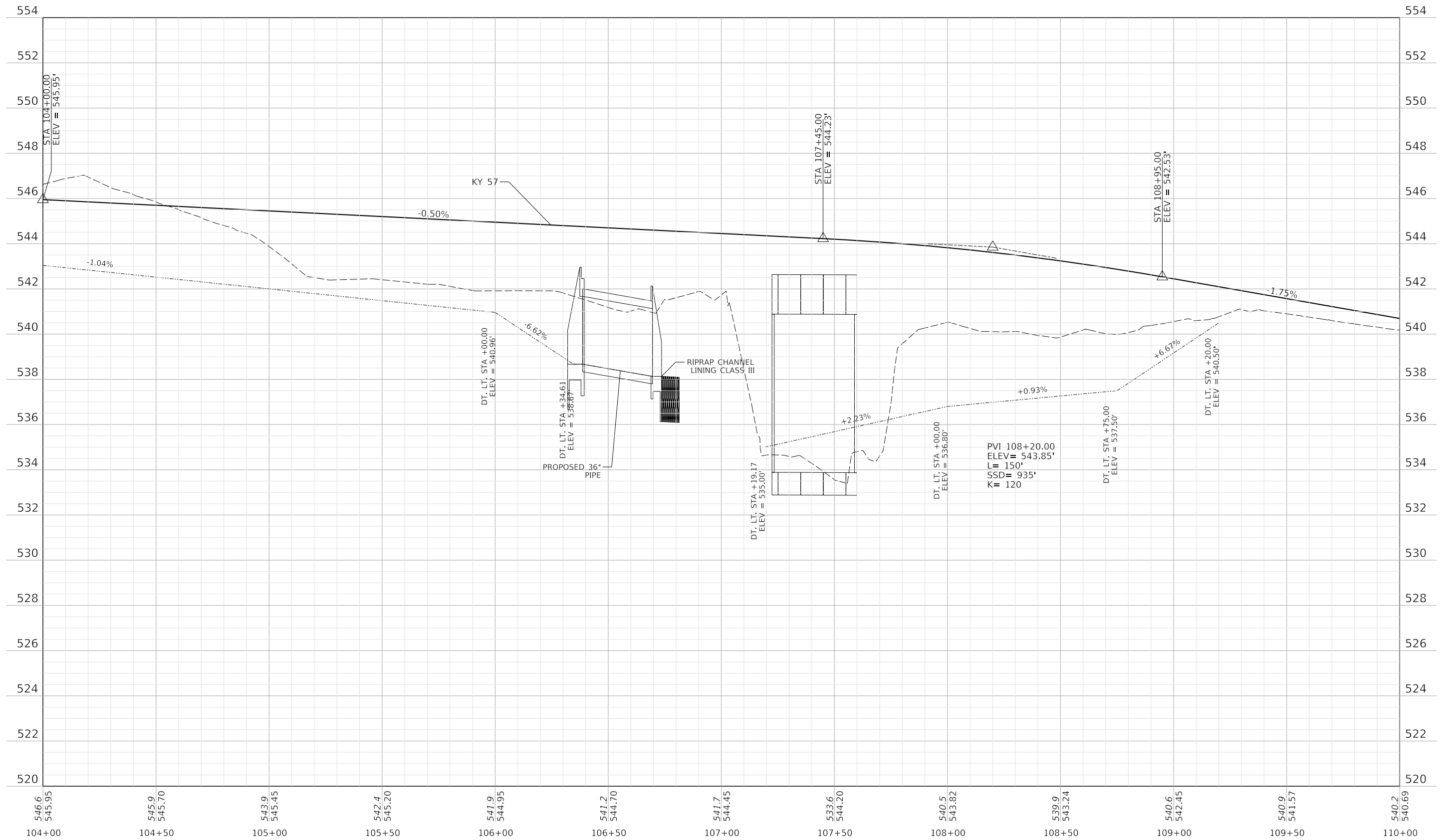
**DITCH CONSTRUCTION**

STATION TO STATION	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
104+00.00 TO 106+34.61 LT	2' FB	TRM TY I	1.50	302 SO. YD.
106+34.61 TO 106+73.58 LT	36" PIPE	SEE PIPE SECTION		
106+73.58 TO 106+85.06 LT	6.5' FB	RIPRAP CL III	1.50	20 TONS
107+19.17 TO 109+20.00 LT	2' FB	TRM TY I	1.00	145 SO. YD.

**ENTRANCE CONSTRUCTION CHART**

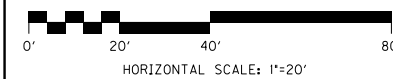
ENTR	SIDE	STATION	WIDTH	QUANTITY	
				GRAVEL (SQ YDS)	
	LT	109+53	14'	89	
TOTAL				89	





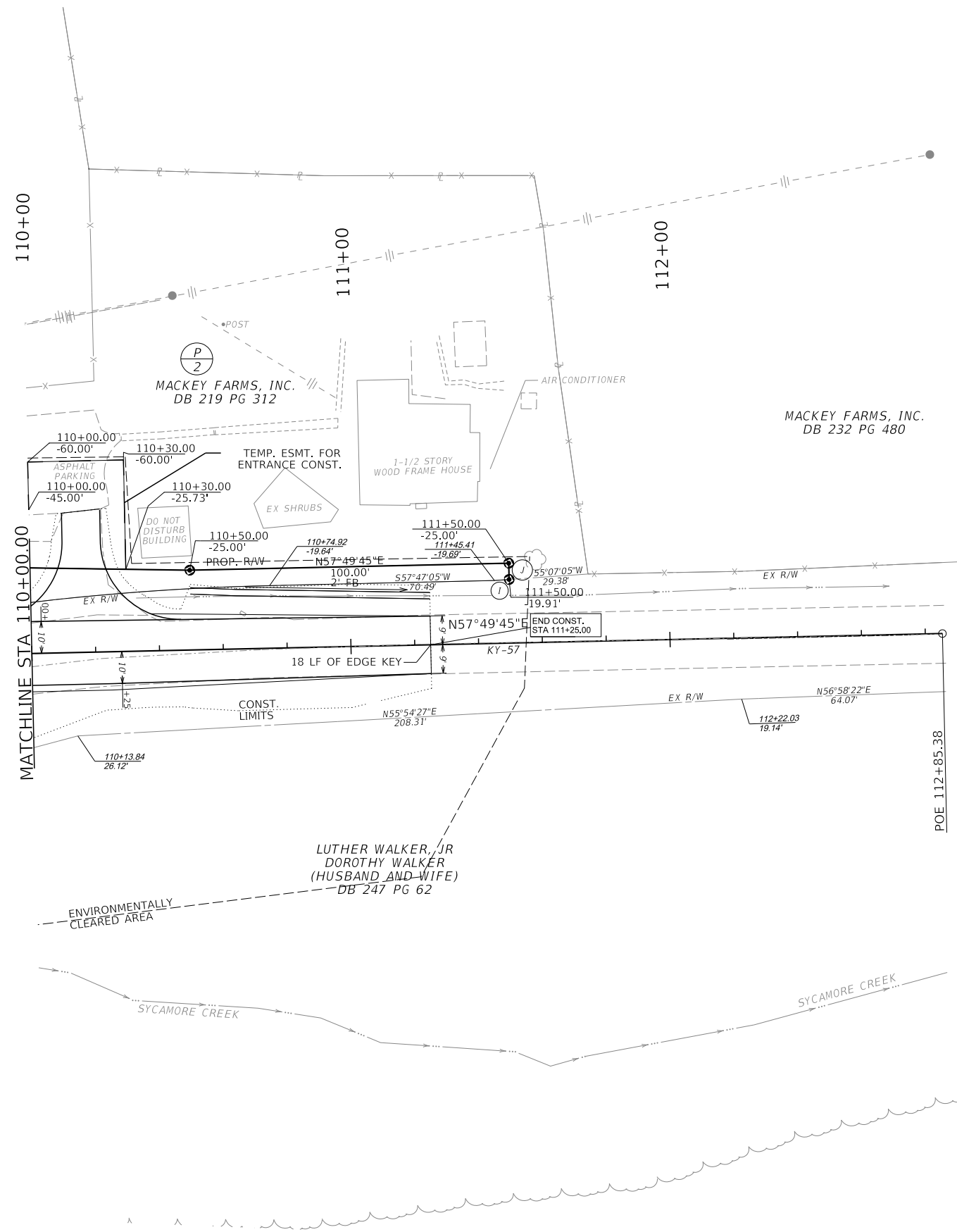
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 57 PROFILE SHEET



STA 104+00 TO 110+00

ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R7



**EXISTING R/W CALLS**  
 (I) S55°07'05"W - 4.60'

**PROPOSED R/W CALLS**  
 (J) S32°10'15"E - 5.09'

ENTRANCE CONSTRUCTION CHART					
ENTR	SIDE	STATION	WIDTH	QUANTITY	
				GRAVEL (SQ. YDS)	
	LT	110+16	12'	76	
TOTAL				76	

DITCH CONSTRUCTION				
STATION TO STATION	SIZE/TYPE	CHANNEL LINING		
		TYPE	DEPTH	QUANTITY
110+40.00 TO 111+25.00	LT 2' FB	TRM TY 1	1.00	79 SQ. YD

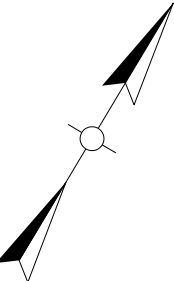
KY 57 LT STA 110+00 TO STA 111+25 TAPER AND TIE ALL PAVEMENT AS DIRECTED BY THE ENGINEER.

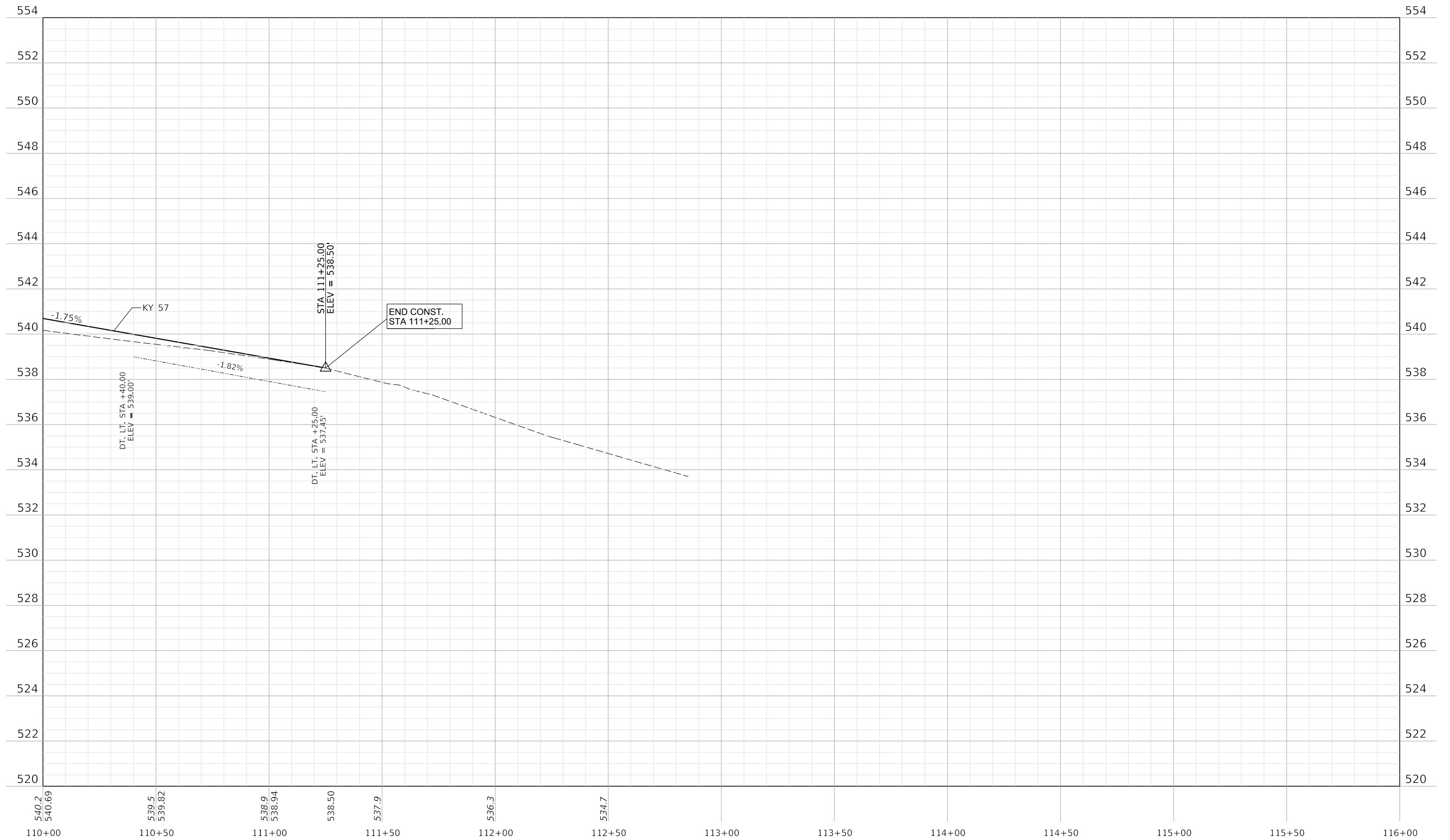
RT STA 110+25 TO STA 111+25 TAPER AND TIE ALL PAVEMENT AS DIRECTED BY THE ENGINEER.

KY 57 STA 111+25 CONSTRUCT 18 LF OF EDGE KEY AS DIRECTED BY THE ENGINEER

T.B.M.  
 NAIL IN FP

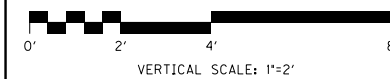
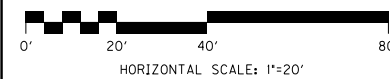
C.P.-3  
 5/8"X18" IPC





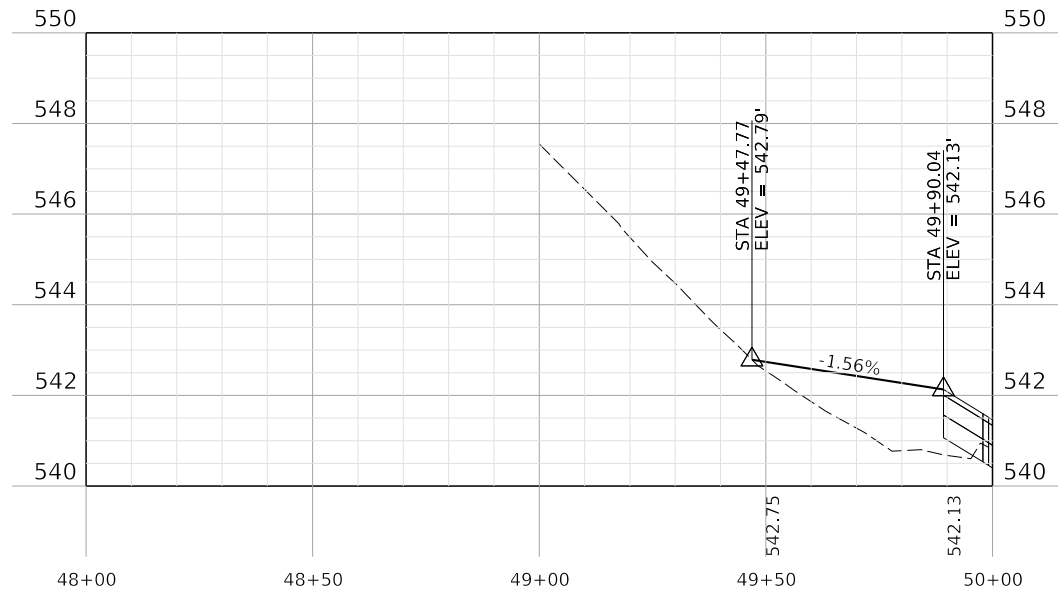
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: KY 57 PROFILE SHEET

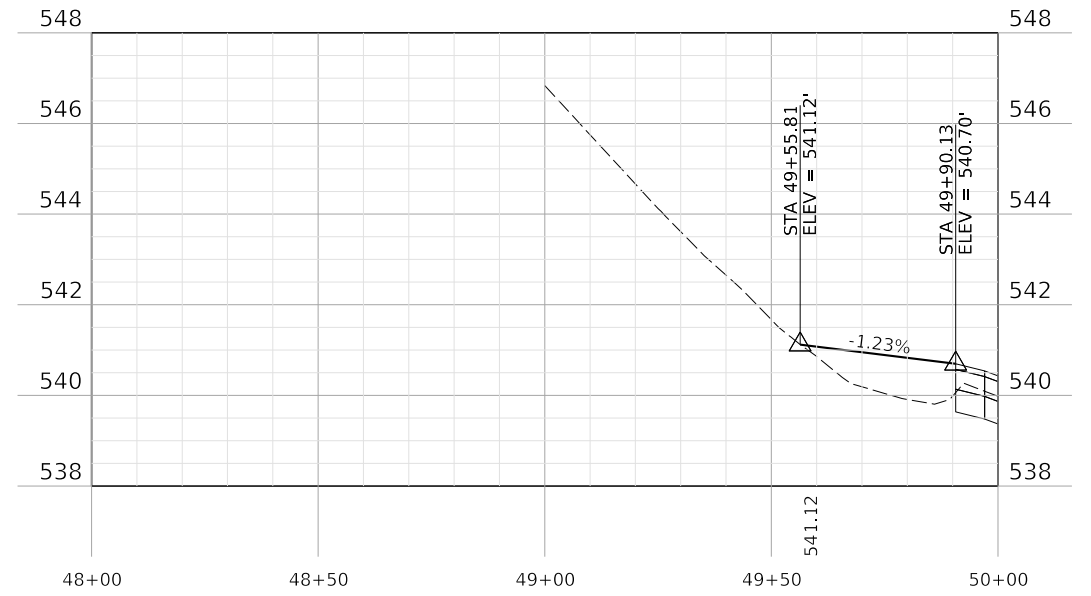


STA 110+00 TO 112+85.38

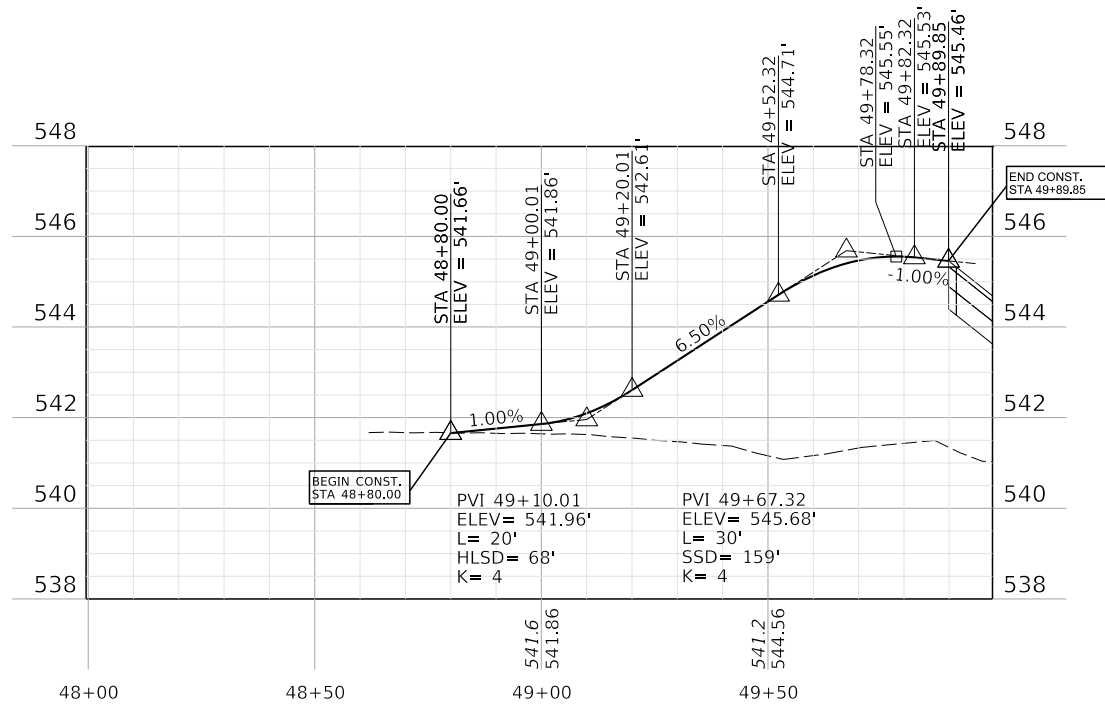
ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R9



ENTRANCE LT 109+53



ENTRANCE LT 110+16



SYCAMORE CREEK ROAD

GENERAL NOTES

1. TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE STANDARD DRAWINGS, CURRENT EDITIONS.
2. EXCEPT FOR THE ROADWAY AND TRAFFIC CONTROL BID ITEMS LISTED, ALL ITEMS OF WORK NECESSARY TO MAINTAIN AND CONTROL TRAFFIC WILL BE PAID AT THE LUMP SUM BID PRICE TO "MAINTAIN AND CONTROL TRAFFIC" AS SET FORTH IN THE CURRENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION UNLESS OTHERWISE PROVIDED FOR IN THESE NOTES. THE LUMP SUM BID TO "MAINTAIN AND CONTROL TRAFFIC" SHALL ALSO INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS AND OPERATIONS:
  - A. ALL GRADING AND NECESSARY DRAINAGE (UNLESS A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED) FOR THE TEMPORARY ROADWAY AND REMOVAL THEREOF, WHEN IT IS NO LONGER NEEDED. IF A BID ITEM FOR DETOUR CONSTRUCTION IS INCLUDED, GRADING AND DRAINAGE WILL BE PAID FOR IN THE BID ITEM "DETOUR CONSTRUCTION".
  - B. ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AND MARKINGS.
  - C. ALL FLAGPERSONS AND TRAFFIC CONTROL DEVICES SUCH AS, BUT NOT LIMITED TO, FLASHERS, SIGNS BARRICADES AND VERTICAL PANELS, PLASTIC DRUMS (STEEL DRUMS WILL NOT BE PERMITTED) AND CONES NECESSARY FOR THE CONTROL AND PROTECTION OF VEHICULAR AND PEDESTRIAN TRAFFIC AS SPECIFIED IN THESE NOTES, THE PLANS, THE MUTCD OR THE ENGINEER.
3. ANY TEMPORARY TRAFFIC CONTROL ITEMS, DEVICES, MATERIALS AND INCIDENTALS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR WHEN NO LONGER NEEDED.
4. THE CONTRACTOR SHALL MAINTAIN A TWO-LANE TRAVELED WAY WITH A MINIMUM LANE WIDTH OF 10 FEET. HOWEVER, DURING WORKING HOURS, ONE-WAY TRAFFIC MAY BE ALLOWED AT THE DISCRETION OF THE ENGINEER, PROVIDED ADEQUATE SIGNING AND A FLAGPERSON ARE AT THE LOCATION. WHEN PHASED CONSTRUCTION REQUIRES THE LONG-TERM REDUCTION IN TRAVELED WAY WIDTH, AND DOES NOT ALLOW FOR A TWO-LANE TRAVELED WAY, SINGLE LANE TRAFFIC CONTROLLED BY A TEMPORARY SIGNAL WILL BE REQUIRED. SYCAMORE CREEK ROAD WILL ALSO NEED A TEMPORARY SIGNAL THAT IS PHASED APPROPRIATELY WITH THE KY 57 SIGNAL PHASING. SEE MOT PLAN SHEETS FOR RECOMMENDED PHASE CONSTRUCTION LAYOUT..
5. THE CONTRACTOR SHALL COMPLETELY COVER ANY SIGNS, EITHER EXISTING, PERMANENT OR TEMPORARY, WHICH DO NOT PROPERLY APPLY TO THE CURRENT TRAFFIC PHASING, AND SHALL MAINTAIN THE COVERING UNTIL THE SIGNS ARE APPLICABLE OR ARE REMOVED.
6. IN GENERAL, ALL TRAFFIC CONTROL DEVICES SHALL BE PLACED STARTING AND PROCEEDING IN THE DIRECTION OF THE FLOW OF TRAFFIC AND REMOVED STARTING AND PROCEEDING IN THE DIRECTION OPPOSITE THE FLOW OF TRAFFIC.
7. THE ENGINEER AND THE CONTRACTOR, OR THEIR AUTHORIZED REPRESENTATIVES, SHALL REVIEW THE SIGNING BEFORE TRAFFIC IS ALLOWED TO USE ANY LANE CLOSURES, CROSSOVERS OR DETOURS. ALL SIGNING SHALL BE APPROVED BY THE ENGINEER BEFORE WORK CAN BE STARTED BY THE CONTRACTOR.
8. IF THE CONTRACTOR DESIRES TO DEVIATE FROM THE TRAFFIC CONTROL SCHEME AND CONSTRUCTION SCHEDULE OUTLINED IN THESE PLANS AND THIS PROPOSAL, HE SHALL PREPARE AN ALTERNATE PLAN AND PRESENT IT IN WRITING TO THE ENGINEER. THIS ALTERNATE PLAN CAN BE USED ONLY AFTER REVIEW AND APPROVAL OF THE DIVISIONS OF TRAFFIC, DESIGN AND CONSTRUCTION, AND THE FEDERAL HIGHWAY ADMINISTRATION, WHERE APPLICABLE.
9. IF TRAFFIC SHOULD BE STOPPED DUE TO CONSTRUCTION OPERATIONS AND AN EMERGENCY VEHICLE ON AN OFFICIAL EMERGENCY RUN ARRIVES AT THE SCENE, THE CONTRACTOR SHALL MAKE THE PROVISIONS FOR THE PASSAGE OF THAT VEHICLE AS QUICKLY AS POSSIBLE.
10. ALL SIGNS NECESSARY FOR A MARKED DETOUR WILL BE PROVIDED BY THE CONTRACTOR AS REQUIRED BY STANDARD DRAWINGS AND THE MUTCD. SIGNS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR BY THE SQUARE FOOT. THIS QUANTITY SHALL INCLUDE SIGN MOUNTING HARDWARE AND POSTS.

PAVEMENT DROP-OFF

A PAVEMENT EDGE THAT TRAFFIC IS NOT EXPECTED TO CROSS, EXCEPT ACCIDENTALLY, SHOULD BE TREATED AS FOLLOWS:

- \* LESS THAN TWO INCHES - NO PROTECTION REQUIRED. WARNING SIGNS SHOULD BE PLACED IN ADVANCE AND THROUGHOUT THE DROP-OFF AREA.
- \* TWO TO FOUR INCHES - PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MPH OR GREATER. CONES MAY BE USED IN PLACE OF PLASTIC DRUMS, PANELS AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MPH AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING OF DEVICES ON TAPERED SECTIONS SHOULD BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION.
- \* GREATER THAN FOUR INCHES - POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS FIVE FEET OR MORE DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE DROP-OFF, THEN DRUMS, PANEL, OR BARRICADES MAY BE USED. IF THE DROP-OFF IS GREATER THAN 12 INCHES, POSITIVE SEPARATION IS STRONGLY ENCOURAGED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.

FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR INCHES MAY BE PROTECTED WITH PLASTIC DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.

LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

PAYMENT WILL BE ALLOWED FOR DGA MATERIAL USED FOR WEDGING.

REASONABLE MEANS OF INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL PROPERTIES WITHIN THE PROJECT LIMITS. ACCESS TO FIRE HYDRANTS MUST ALSO BE MAINTAINED AT ALL TIMES.

KY 57 PHASING

PHASE 1

CONSTRUCTION  
CONSTRUCT THAT PORTION OF KY 57 AND SYCAMORE CREEK ROAD WHICH CAN BE CONSTRUCTED WITHOUT IMPACTING THE EXISTING KY 57 TRAFFIC, INCLUDING THE PORTION OF THE PROPOSED CULVERT AS SHOWN ON THE MOT AND STRUCTURES PLANS.

TRAFFIC  
UTILIZE EXISTING KY 57

PHASE 2

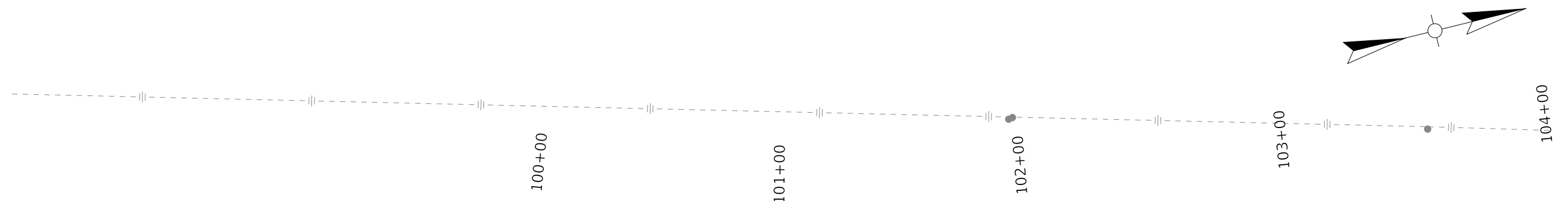
CONSTRUCTION  
DEMOLISH THE PORTION OF EXISTING STRUCTURE REQUIRED TO COMPLETE THE CULVERT CONSTRUCTION. LEAVE DOWNSTREAM APRON IN PLACE FOR SCOUR PROTECTION. CONSTRUCT THE REMAINING PORTION OF THE CULVERT AND THE KY 57 ROADWAY THAT WERE NOT CONSTRUCTED IN PHASE 1.

TRAFFIC  
UTILIZE SINGLE LANE ON THE PROPOSED CULVERT AND PROPOSED KY 57 ROADWAY WITH A TEMPORARY SIGNAL.

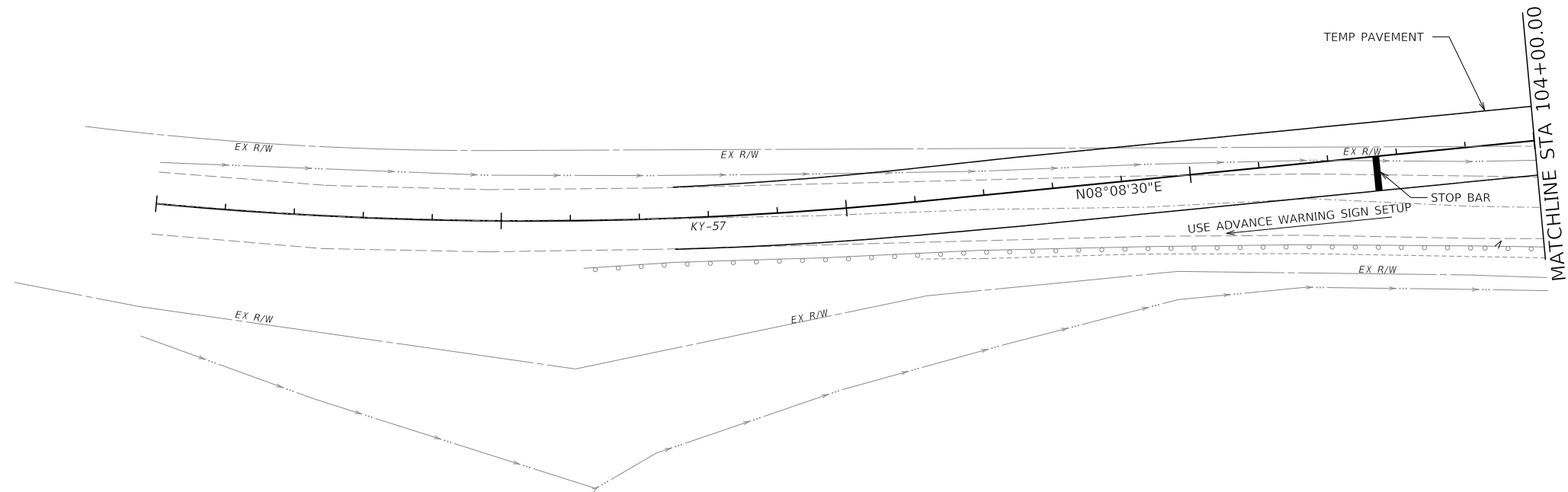
PHASE 3

CONSTRUCTION  
COMPLETE ANY OUTSTANDING GRADING, GUARDRAIL, PAVING, STABILIZATION, ETC TO COMPLETE THE PROJECT.

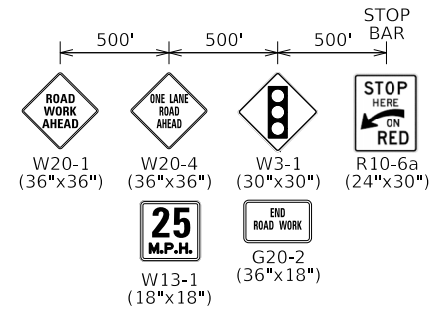
TRAFFIC  
UTILIZE THE PROPOSED KY 57 ROADWAY. FLAG AS NEEDED TO ALLOW FOR PAVING, GUARDRAIL INSTALLATION, AND OTHER MISCELLANEOUS CONSTRUCTION ACTIVITIES.



△ C.P.-4  
5/8"X18" IPC



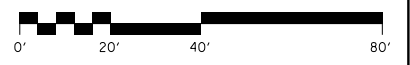
ADVANCE WARNING SIGN SETUP



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

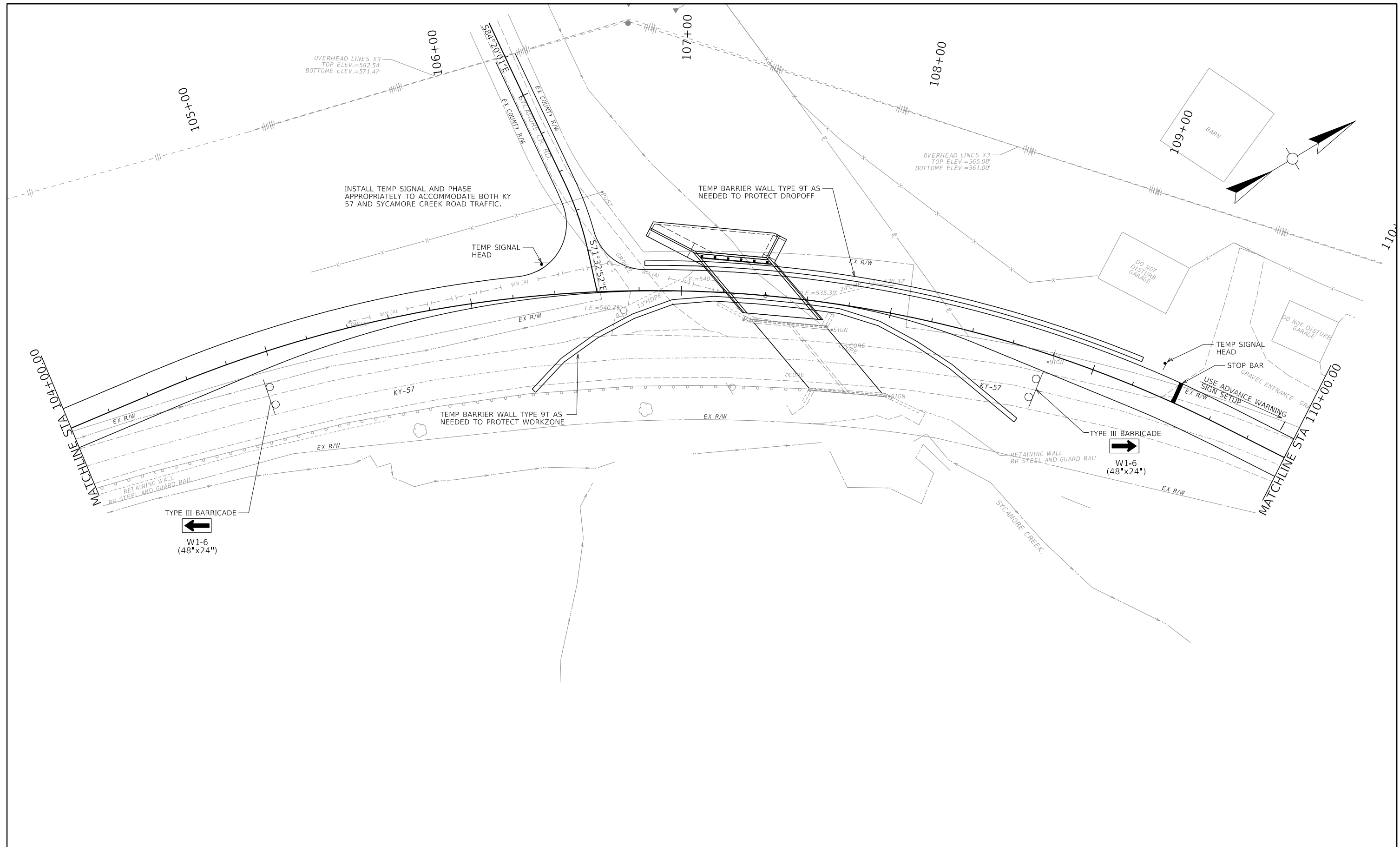
DRAWING TITLE: MOT PLAN SHEET

HORIZONTAL SCALE  
SCALE: 1"=20'



STA 100+00.00 TO STA 104+00.00

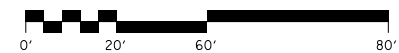
ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R12



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT PLAN SHEET

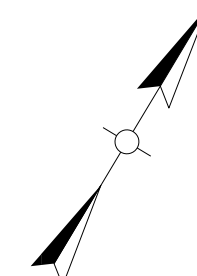
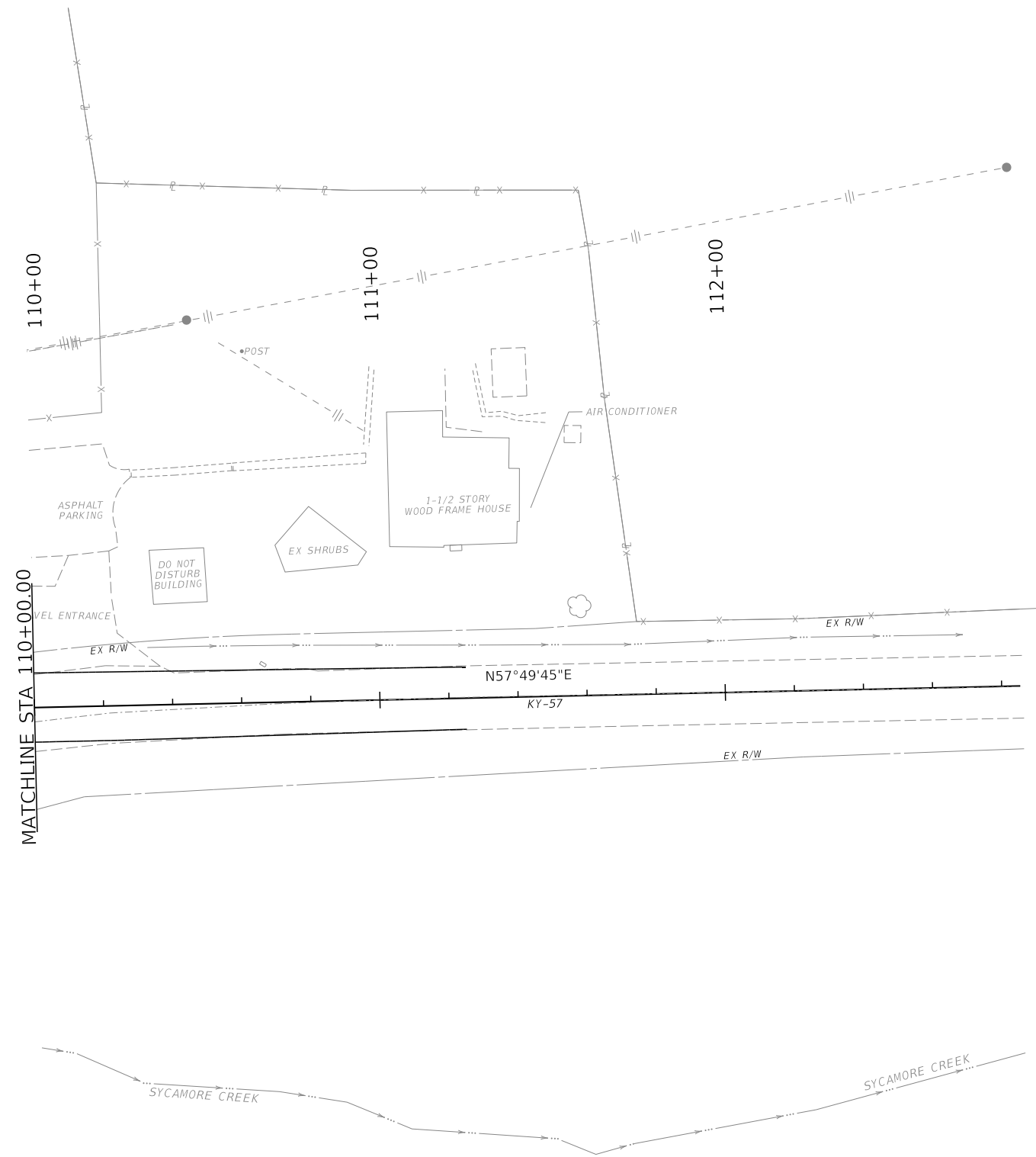
HORIZONTAL SCALE  
SCALE: 1"=20'



STA 104+00.00 TO STA 110+00.00

ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R13

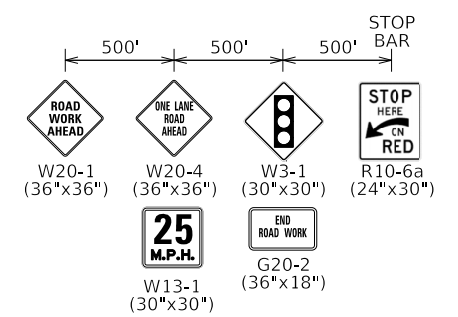




T.B.M.  
NAIL IN FP

C.P.-3  
5/8"X18" IPC

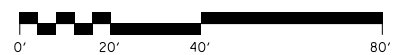
ADVANCE WARNING SIGN SETUP



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: MOT PLAN SHEET

HORIZONTAL SCALE  
SCALE: 1"=20'



STA 110+00.00 TO STA 112+85.38

ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R14

## EROSION CONTROL NOTES

ALL SILT CONTROL DEVICES SHALL BE SIZED TO RETAIN A VOLUME OF 3,600 CUBIC FEET PER DISTURBED CONTRIBUTING ACRE.

THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS TO MINIMIZE THE AMOUNT OF DISTURBED GROUND DURING EACH PHASE OF CONSTRUCTION. THE CONTRACTOR SHALL COMPUTE THE VOLUME NECESSARY TO CONTROL SEDIMENT DURING EACH PHASE OF CONSTRUCTION. AS WORK PROCEEDS, SILT TRAPS MAY BE ADDED OR REMOVED IN ORDER TO ACHIEVE THE BEST MANAGEMENT PLAN. THE REQUIRED VOLUME AT EACH ADDED SILT TRAP SHALL BE COMPUTED AS UP GRADIENT CONTRIBUTING AREAS ARE DISTURBED OR ARE STABILIZED TO THE SATISFACTION OF THE ENGINEER. THE REQUIRED VOLUME CALCULATION FOR EACH SILT TRAP SHALL BE DETERMINED BY THE CONTRACTOR AND VERIFIED BY THE ENGINEER. THE REQUIRED VOLUME AT EACH SILT TRAP MAY BE REDUCED BY THE FOLLOWING AMOUNTS:

- UP GRADIENT AREAS NOT DISTURBED (ACRES).
- UP GRADIENT AREAS THAT HAVE BEEN RECLAIMED AND PROTECTED BY EROSION CONTROL BLANKET OR OTHER GROUND PROTECTION MATERIAL SUCH AS TEMPORARY MULCH.(ACRES).
- THE USE OF TEMPORARY MULCH IS ENCOURAGED.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT FENCE (ACRES). AREAS PROTECTED BY SILT FENCE SHALL BE COMPUTED AT A MAXIMUM RATE OF 100 SQUARE FOOT PER LINEAR FOOT OF SILT FENCE.
- UP GRADIENT AREAS THAT HAVE BEEN PROTECTED BY SILT TRAPS (ACRES).

THE EROSION CONTROL PLAN SHALL BE ANNOTATED AS THE WORK PROCEEDS BY THE CONTRACTOR TO DETAIL THE SELECTION OF EACH EROSION CONTROL DEVICE USED AND THE VOLUME PROVIDED BY EACH SILT TRAP IN ACCORDANCE WITH THE DOCUMENTATION PROCEDURES ESTABLISHED BY THE DIVISION OF CONSTRUCTION.

IF A SILT BASIN IS NOT USED THEN ONE SILT TRAP TYPE A, ALTERNATE NUMBER 2 OR SILT TRAP TYPE B SHALL ALWAYS BE PLACED AT THE MOST REMOTE DOWNSTREAM COLLECTION POINT PRIOR TO DISCHARGING INTO A BLUE LINE STREAM OR ONTO AN ADJACENT PROPERTY OWNER. WHERE OVERLAND FLOW EXIST, A SILT FENCE OR OTHER FILTER DEVICES MAY BE USED OR THE OVERLAND FLOW MAY BE DIVERTED TO ONE OF THE AFOREMENTED SILT BASIN OR TRAPS.

THE EROSION CONTROL PLANS DO NOT CONSTITUTE A BMP BY THEMSELVES. THEY PROVIDE A STARTING POINT FOR THE CONTRACTOR AND SECTION ENGINEER TO DEVELOP THE BMP ACCORDING TO SECTION 213.03.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE SUPPLEMENTAL SPECS EFFECTIVE WITH THE OCTOBER, 2004 LETTING.

EROSION CONTROL MEASURES SHALL BE IN PLACE AND FUNCTIONING PRIOR TO ANY EXCAVATION OR DISTURBANCE WITHIN A DRAINAGE AREA.

THE CONTRACTOR SHALL BE REQUIRED TO CLEAN OUT (REMOVE SEDIMENT FROM) SILT TRAPS AND SILT FENCES WHENEVER THEY BECOME ONE- HALF FULL AND PROPERLY DISPOSE OF THE MATERIAL AT SITES APPROVED BY THE SECTION ENGINEER.

EROSION CONTROL MEASURES EMPLOYED BY THE CONTRACTOR WILL BE UNIQUE TO THE PROJECT AND WORK CONDITIONS AND SHALL BE APPROVED BY THE SECTION ENGINEER. THE DEVELOPMENT AND UTILIZATION OF THESE MEASURES WILL BE RECORDED AS PART OF THE BMP, KEPT ON SITE, AND AVAILABLE FOR PUBLIC INSPECTION.



**EROSION CONTROL LEGEND**

SILT TRAP TYPE A ALTERNATE 1	
SILT TRAP TYPE A ALTERNATE 2	
SILT TRAP TYPE B	
SILT TRAP TYPE C	
SILT FENCE	SF
TEMPORARY SILT DITCH	
DISTURBED DRAINAGE AREA	
OVERLAND SHEET FLOW	
PROPOSED R/W	
PROPOSED EASEMENT	

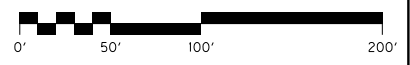
**DISTURBED DRAINAGE AREAS**

SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)
DDA 1	1.621	5836
DDA 2	0.413	1487
DDA 3	0.147	529
DDA 4	0.286	1030

COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: EROSION CONTROL PLAN

HORIZONTAL SCALE  
SCALE: 1" = 50'



STA 100+00.00 TO STA 112+85.38

ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. R16

PARCEL NO.	SHEET NO.	OWNER(S)	TOTAL AREA OF TRACT		PERMANENT R/W ACQUIRED		EASEMENTS		AREA SEVERED				EXCESS PURCHASED		PORTION REMAINING		SEWER SYSTEM TYPE	SEWER SYSTEM AFFECTED BY PROJECT		BUILDINGS ACQUIRED NUMBER				SOURCE OF TITLE	REMARKS*		
			ACRES	SQ. FT.	ACRES	SQ. FT.	PERMANENT SQ. FT.	TEMPORARY SQ. FT.	LEFT		RIGHT		ACRES	SQ. FT.	ACRES	SQ. FT.		YES	NO	C	R	F	S				
									ACRES	SQ. FT.	ACRES	SQ. FT.															
1	R4	TRISTAN C. MONROE	20.406			42534		2186	19.430						19.430				X		0	0	0	0	DB. 264 PG 178	AREA BY DEED	
2	R6	MACKEY FARMS, INC.	24.500			7042		2621	24.338						24.338			SEPTIC TANK TO BE RELOCATED	X		0	0	0	0	DB. 219 PG 312	AREA BY DEED	

NOTE: PERMANENT R/W ACQUIRED + AREA SEVERED = TOTAL AREA OF TRACT.

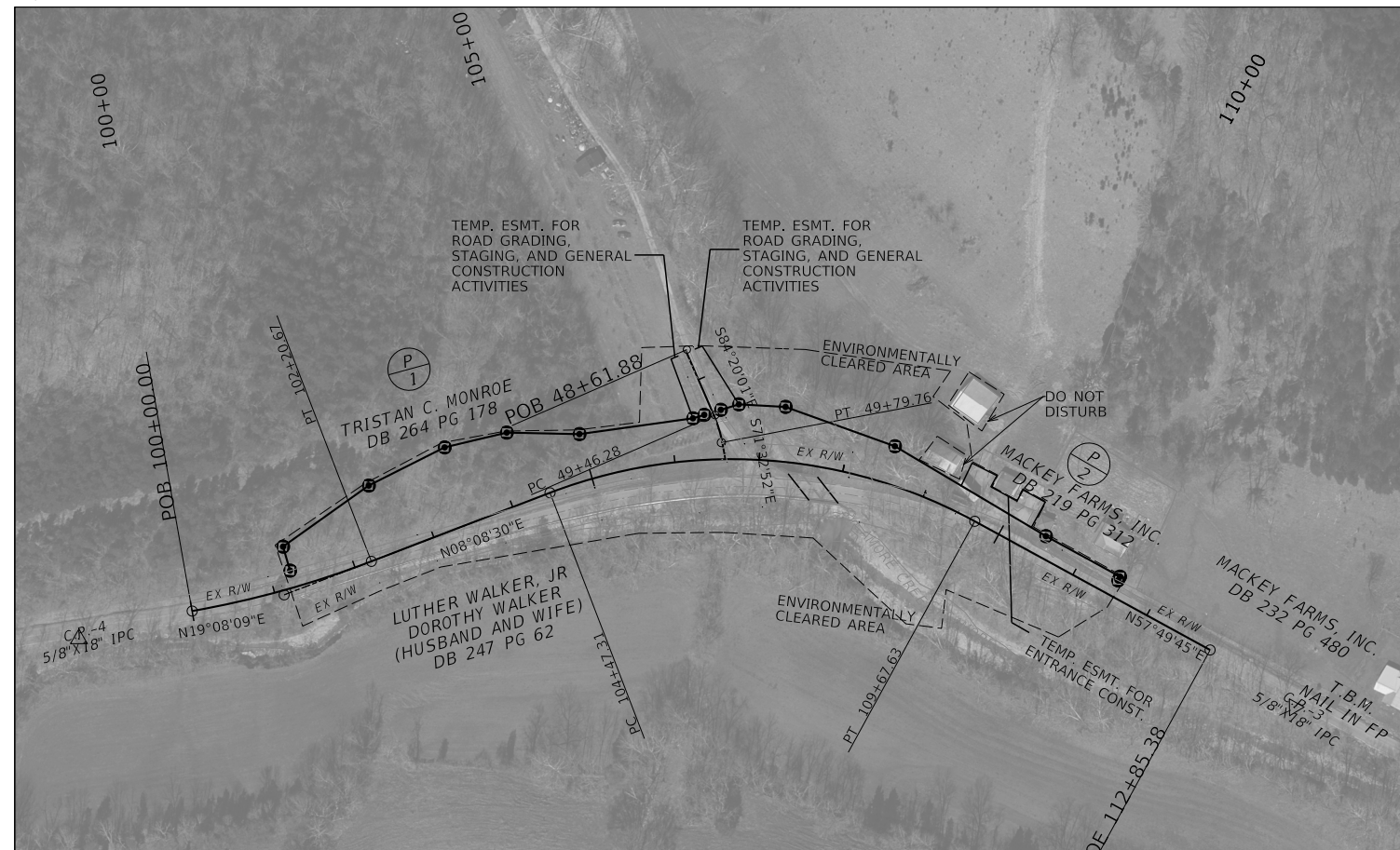
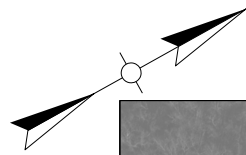
TYPE SEWER SYSTEM

- 1 PRIVATE - INDIVIDUAL
- 2 PRIVATE - MULTI PARTY
- 3 PUBLIC
- 4 NONE
- 5 NOT APPLICABLE

BUILDINGS ACQUIRED CODE

- C COMMERCIAL
- R RESIDENTIAL
- F FARM
- S STORAGE

\* INCLUDES HAZARDOUS WASTE (UST - UNDERGROUND STORAGE TANKS)



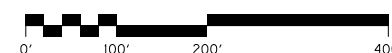
<p>KY 57 CURVE #1          PI STA 101+10.67  <math>\Delta = 10^{\circ}59'39''</math> LT          T = 110.67'          L = 220.67'          R = 1150.00'          E = 5.31'          e = 2.00%          Runoff = SEE CROSS SECTIONS          Runout = SEE CROSS SECTIONS</p>	<p>KY 57 CURVE #2          PI STA 107+25.10  <math>\Delta = 49^{\circ}41'15''</math> RT          T = 277.80'          L = 520.33'          R = 600.00'          E = 61.19'          e = 8.00%          Runoff = SEE CROSS SECTIONS          Runout = SEE CROSS SECTIONS</p>	<p>SYCAMORE CREEK RD CURVE #1          PI STA 49+63.09  <math>\Delta = 12^{\circ}47'09''</math> RT          T = 16.81'          L = 33.47'          R = 150.00'          E = 0.94'          e = NA          Runoff = SEE CROSS SECTIONS          Runout = SEE CROSS SECTIONS</p>
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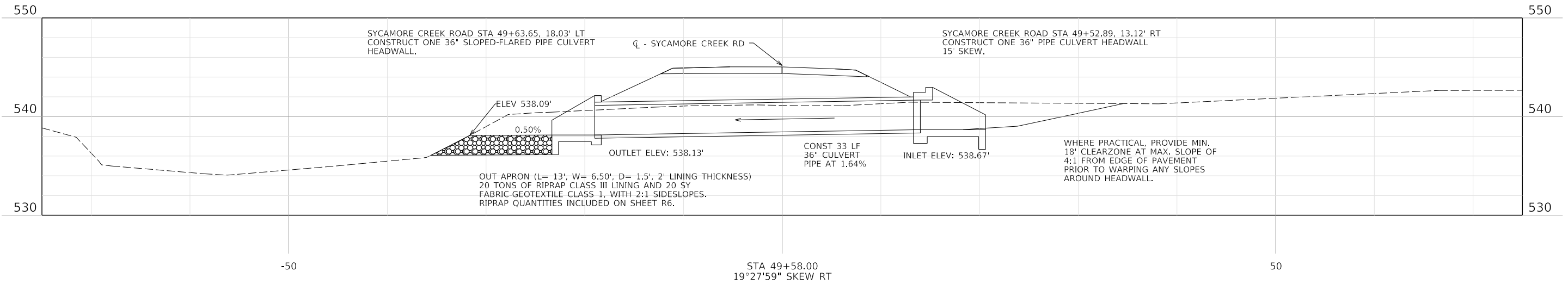
CP NUMBER	TYPE	EASTING (X)	NORTHING (Y)	ELEVATION (Z)	STATION	OFFSET
CP 1	5/8" X 18" IPC	5564154.425	4144154.068	549.971	NA	NA
CP 2	5/8" X 18" IPC	5563544.706	4143658.279	520.099	NA	NA
CP 3	5/8" X 18" IPC	5562922.116	4143188.630	530.946	NA	NA
CP 4	5/8" X 18" IPC	5562150.053	4141970.886	553.416	NA	NA
CP 5	5/8" X 18" IPC	5561951.134	4141434.429	565.687	NA	NA
TBM	NAIL IN FP	5562940.336	4143243.054	534.055	NA	NA

KY 57			
POINT	STATION	NORTHING (Y)	EASTING (X)
POB	100+00.00	4142104.02	5562186.74
PI	101+10.67	4142208.58	5562223.02
PT	102+20.67	4142318.13	5562238.70
PC	104+47.31	4142542.49	5562270.79
PI	107+25.10	4142817.48	5562310.13
PT	109+67.63	4142965.39	5562545.28
POE	112+85.38	4143134.58	5562814.24

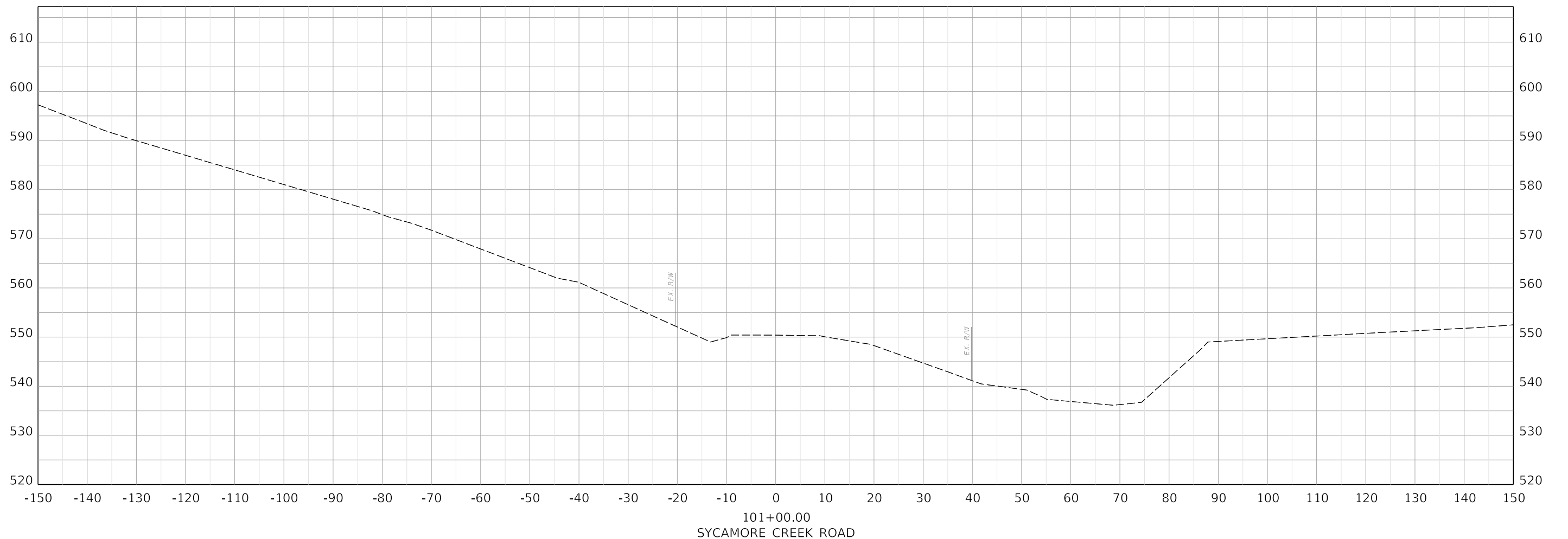
SYCAMORE CREEK ROAD			
POINT	STATION	NORTHING (Y)	EASTING (X)
POB	48+61.88	4142765.09	5562201.36
PC	49+46.28	4142756.76	5562285.35
PI	49+63.09	4142755.10	5562302.07
PT	49+79.76	4142749.78	5562318.02
POE	50+00.00	4142743.37	5562337.22

RIGHT OF WAY MONUMENT POINTS						
ALIGNMENTS	STATION	OFFSET	TYPE	DESCRIPTION	STATE PLANE COORDINATES	
					NORTHING (Y)	EASTING (X)
KY 57	101+25.00	-20.38	TY 1	ROW MON	4142228.66	5562201.36
KY 57	101+25.00	-50.00	TY 1	ROW MON	4142235.27	5562172.49
KY 57	102+50.00	-85.00	TY 1	ROW MON	4142359.21	5562158.71
KY 57	103+50.00	-95.00	TY 1	ROW MON	4142459.62	5562162.97
KY 57	104+25.00	-85.00	TY 1	ROW MON	4142532.44	5562183.49
KY 57	105+00.00	-55.00	TY 1	ROW MON	4142606.79	5562226.98
KY 57	106+25.00	-50.00	TY 1	ROW MON	4142733.35	5562276.17
KY 57	106+37.51	-53.27	TY 1	ROW MON	4142747.01	5562279.13
KY 57	106+55.64	-58.57	TY 1	ROW MON	4142767.06	5562283.46
KY 57	106+75.00	-65.00	TY 1	ROW MON	4142788.86	5562288.17
KY 57	107+25.00	-65.00	TY 1	ROW MON	4142835.70	5562317.75
KY 57	108+50.00	-45.00	TY 1	ROW MON	4142926.13	5562421.54
KY 57	110+50.00	-25.00	TY 1	ROW MON	4143030.41	5562601.69
KY 57	111+50.00	-25.00	TY 1	ROW MON	4143083.66	5562686.33
KY 57	111+50.00	-19.91	TY 1	ROW MON	4143079.35	5562689.04





FLOOD EVALUATION DATA			
DRAINAGE AREA = 18 ACRES			
	RETURN INTERVAL (YR)	RUNOFF (CFS)	HEADWATER ELEVATION (FT)
DESIGN	10	15.70	540.46
CHECK	100	23.70	540.98
ALLOWABLE HIGH WATER = 541.40' EXISTING OVERTOPPING ELEVATION			



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

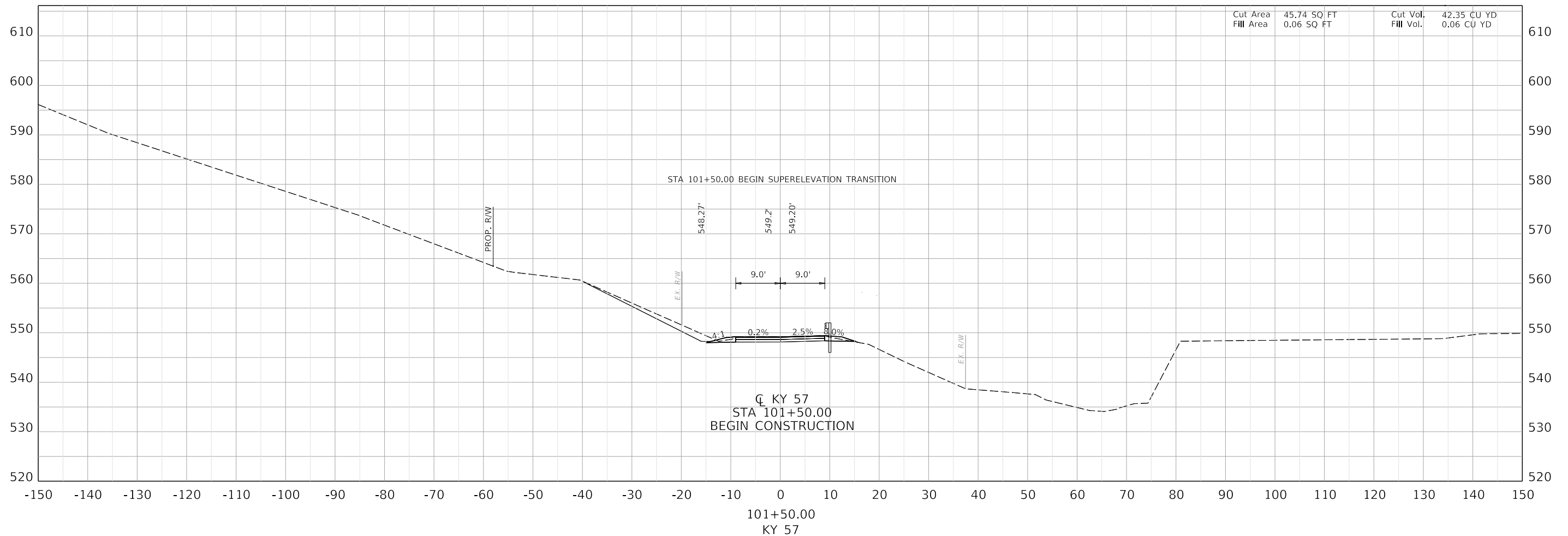
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 101+00.00

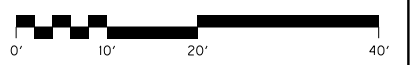
ITEM NO. 9-40005.00	COUNTY OF Lewis
SHEET NO. X1	



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

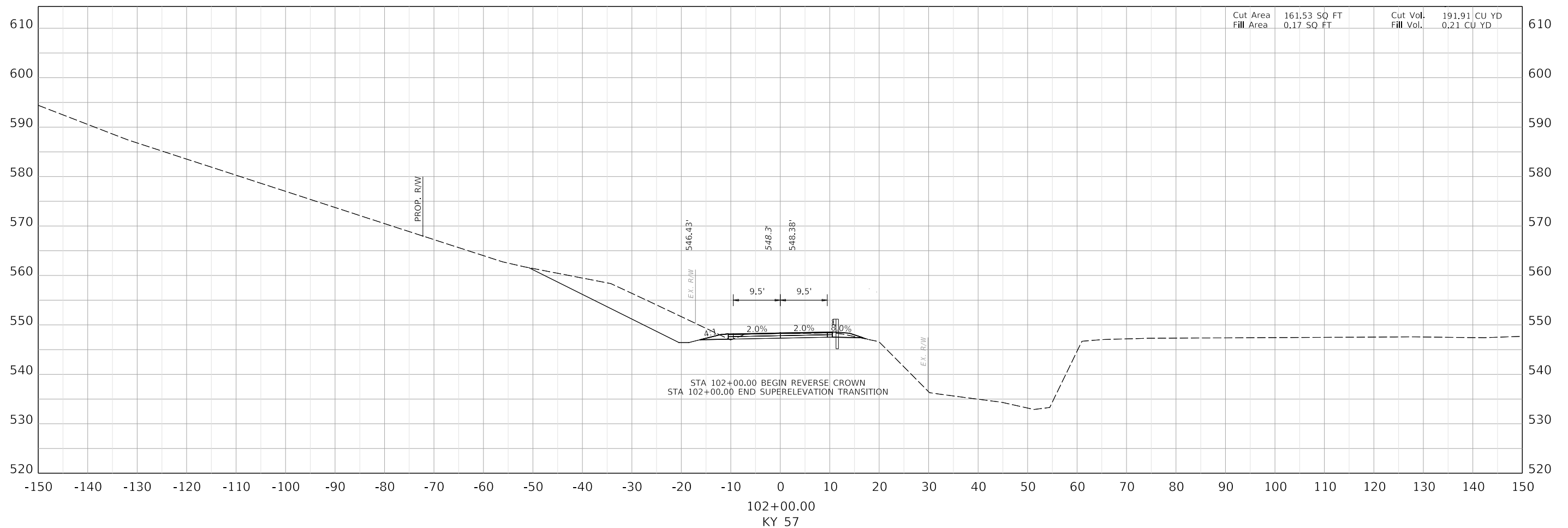
HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 101+50.00

ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X2		





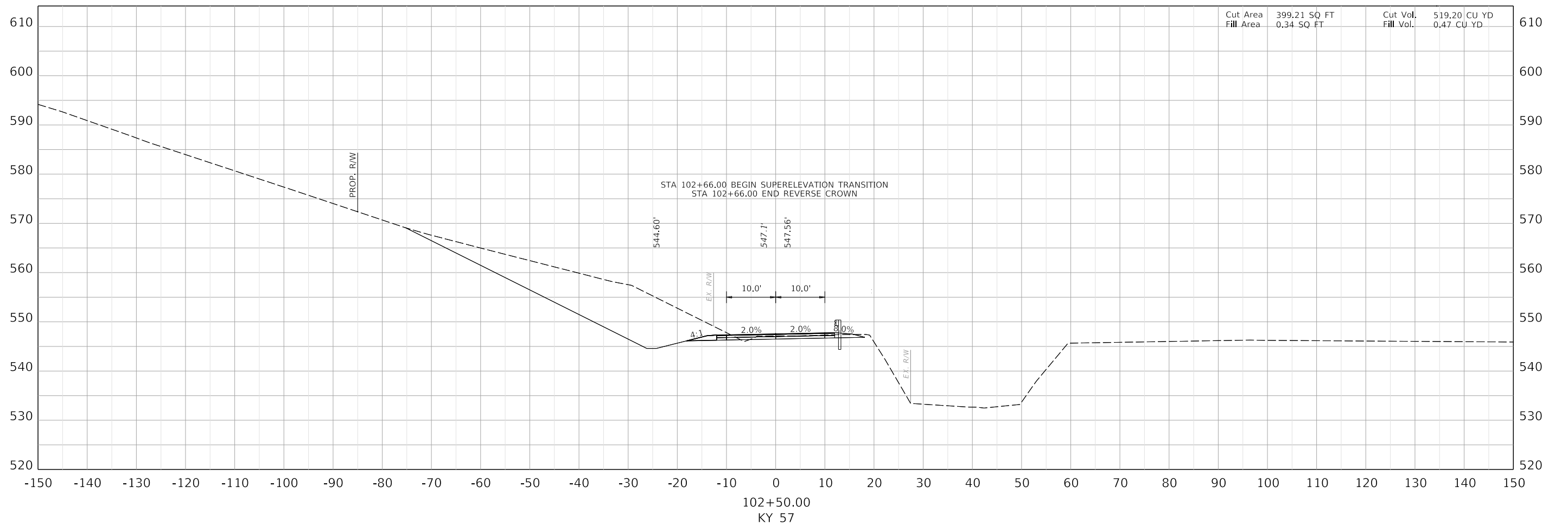
COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'

STA 102+00.00

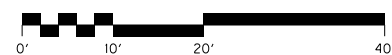
ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. X3



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

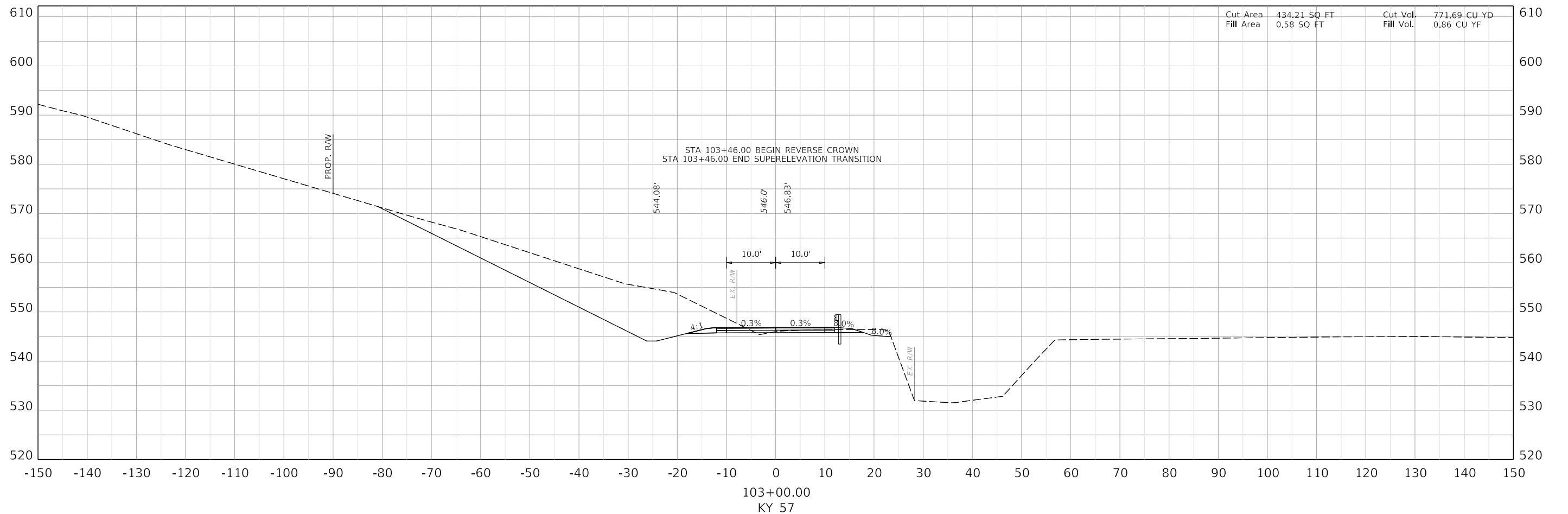
HORIZONTAL SCALE:  
SCALE: 1" = 10'



STA 102+50.00

ITEM NO. 9-40005.00 COUNTY OF Lewis

SHEET NO. X4



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

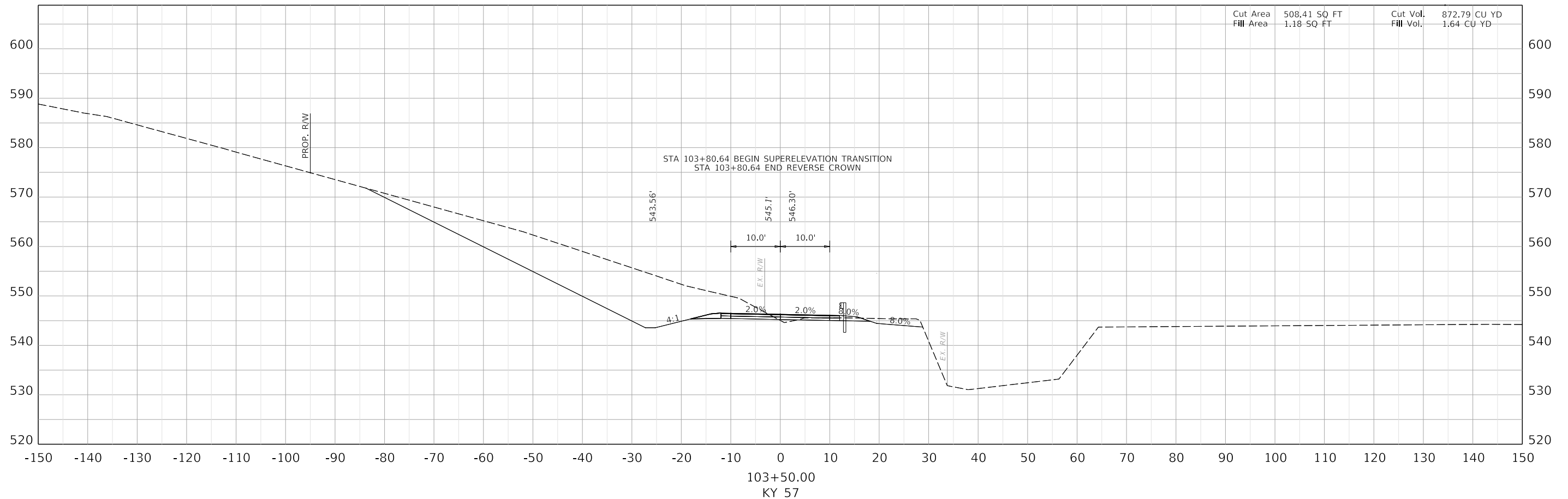
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 103+00.00

ITEM NO.	COUNTY OF
9-40005.00	Lewis
SHEET NO.	
X5	



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

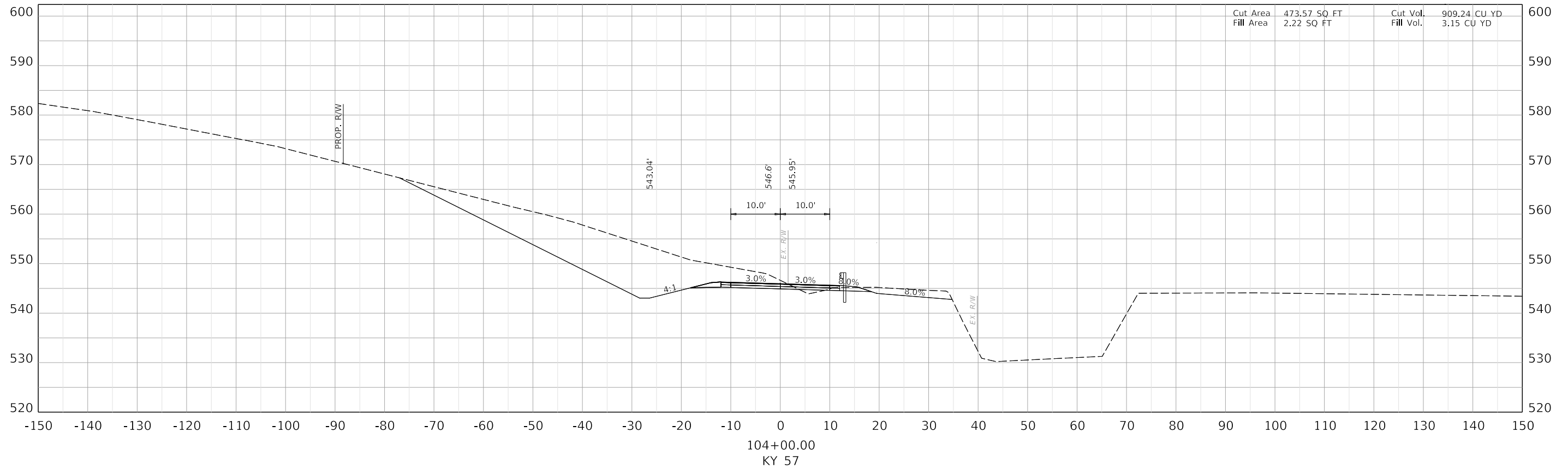
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 103+50.00

ITEM NO.	COUNTY OF
9-40005.00	Lewis
SHEET NO.	
X6	



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

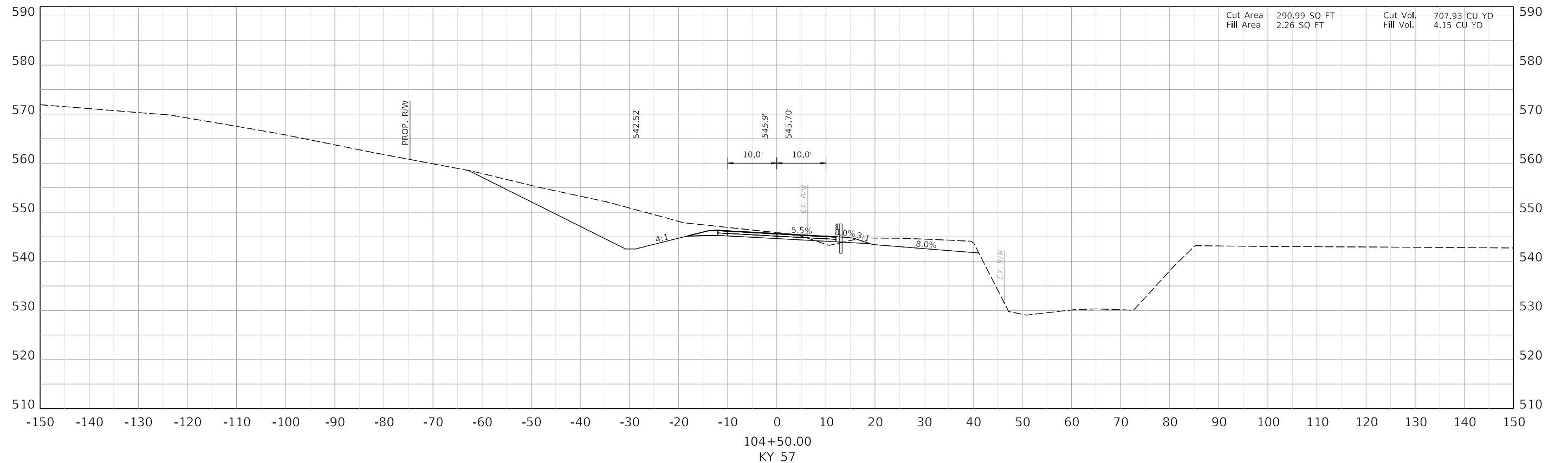
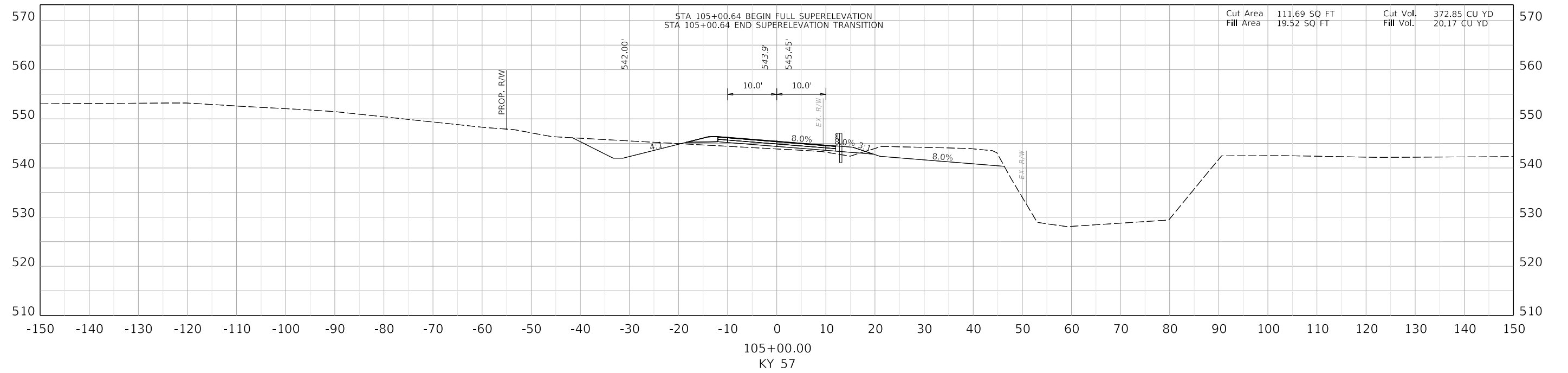
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 104+00.00

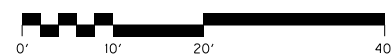
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X7		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

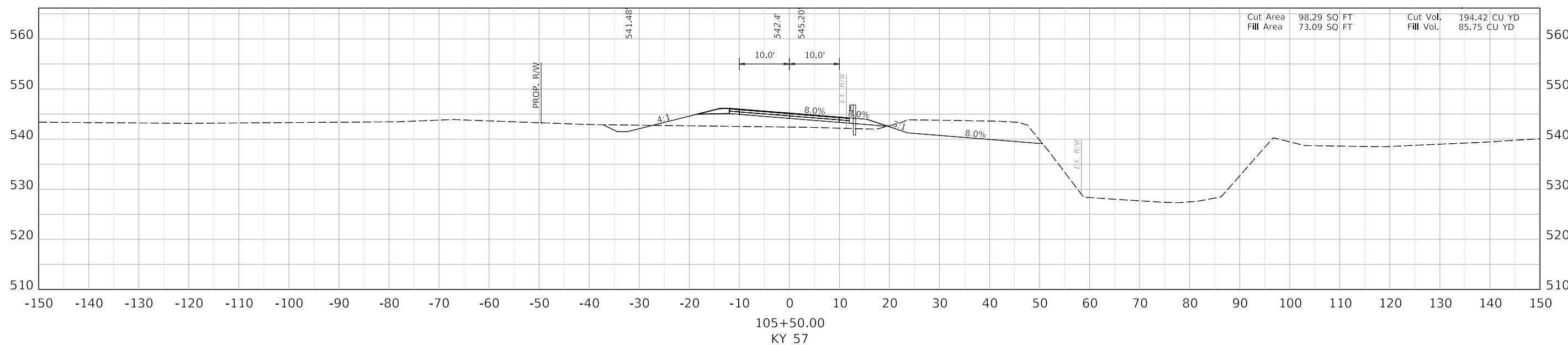
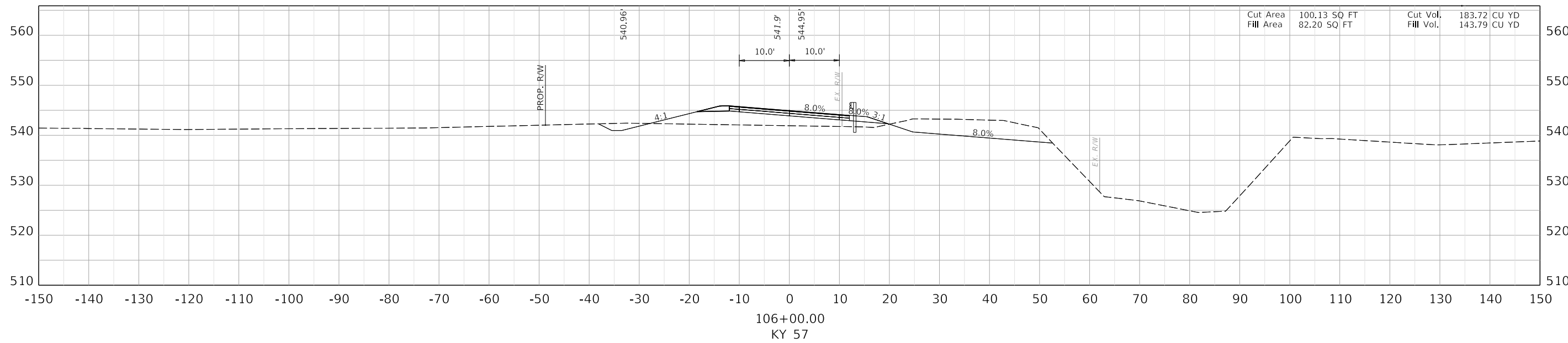
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 104+50.00 TO STA 105+00.00

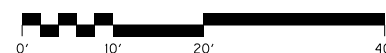
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X8		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

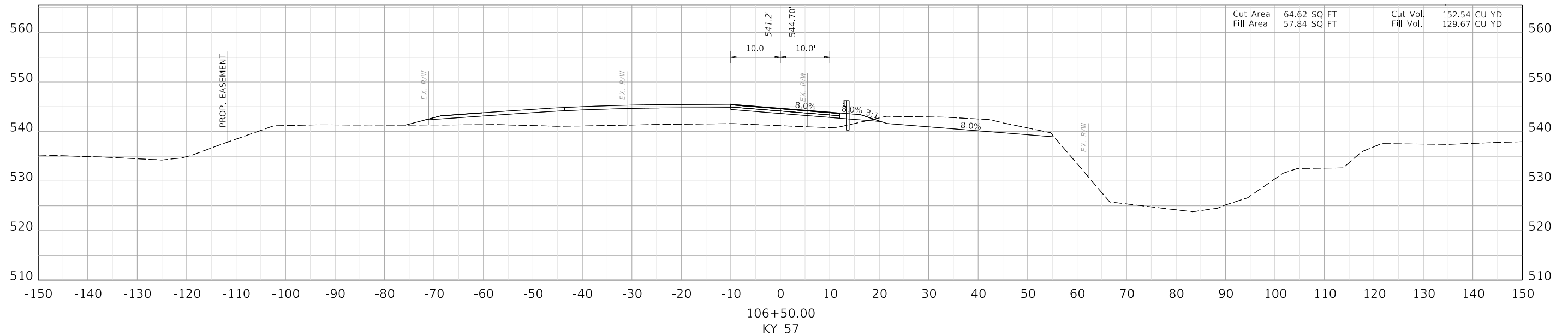
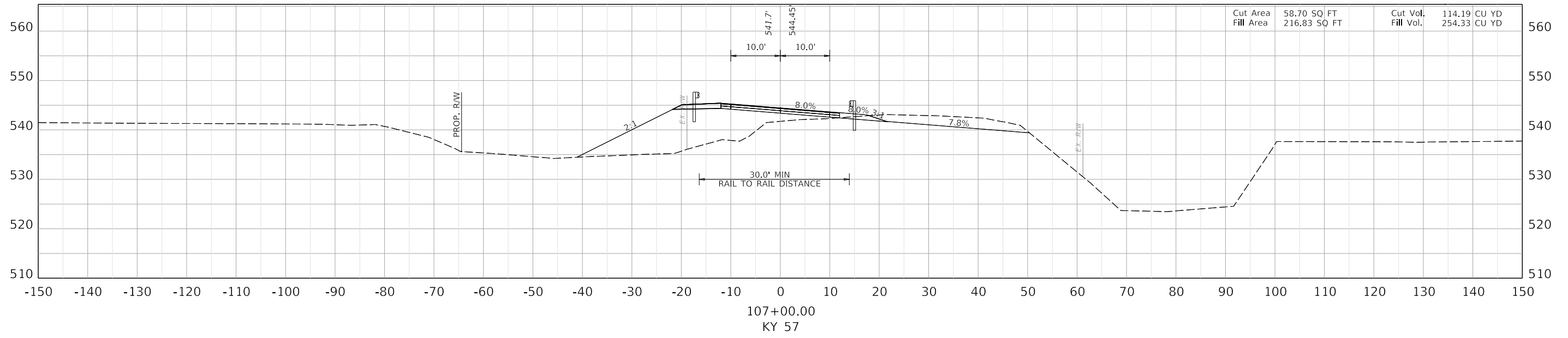
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HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 105+50.00 TO STA 106+00.00

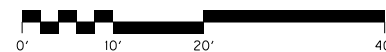
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X9		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

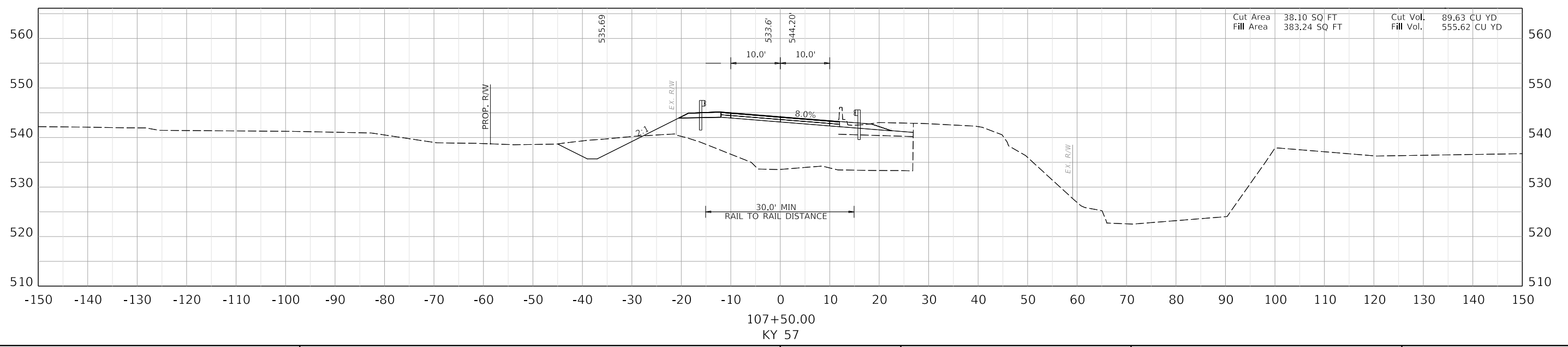
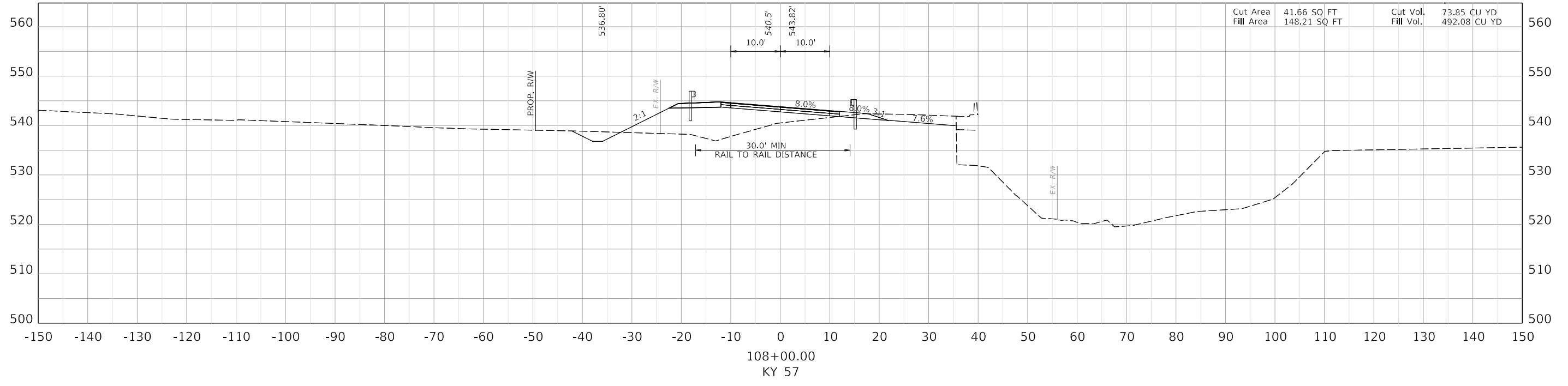
HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 106+50.00 TO STA 107+00.00

ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X10		

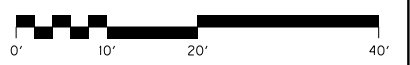




COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

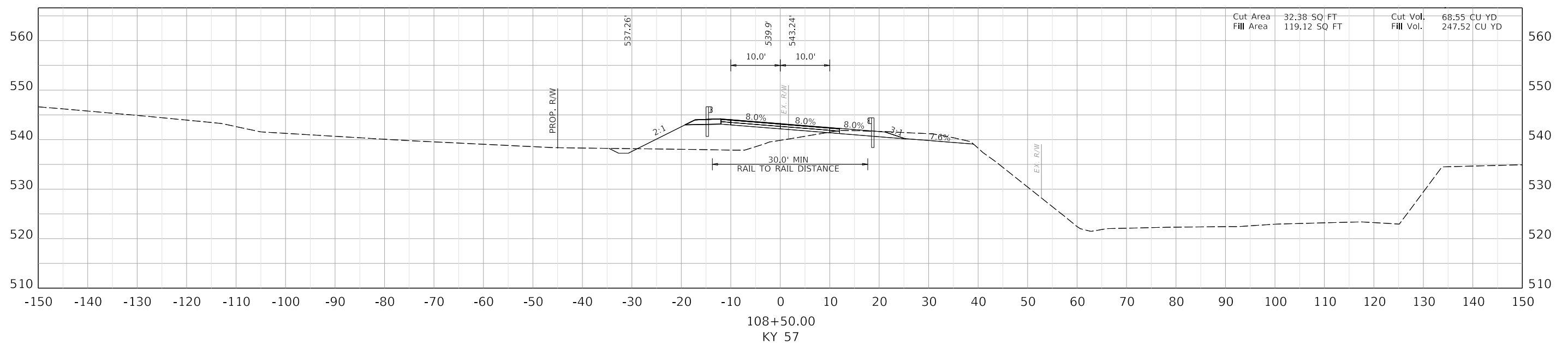
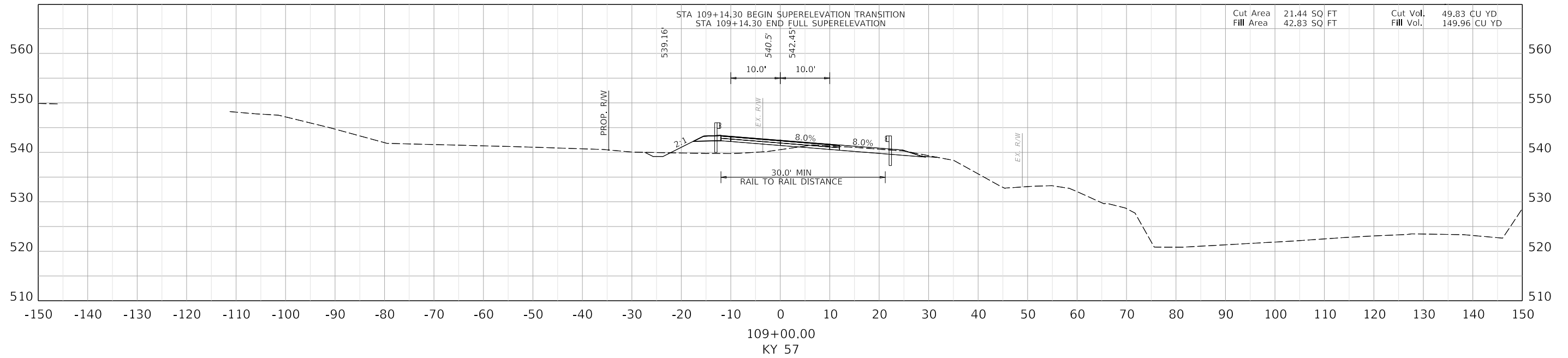
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 107+50.00 TO STA 108+00.00

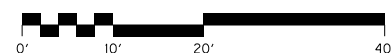
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X11		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

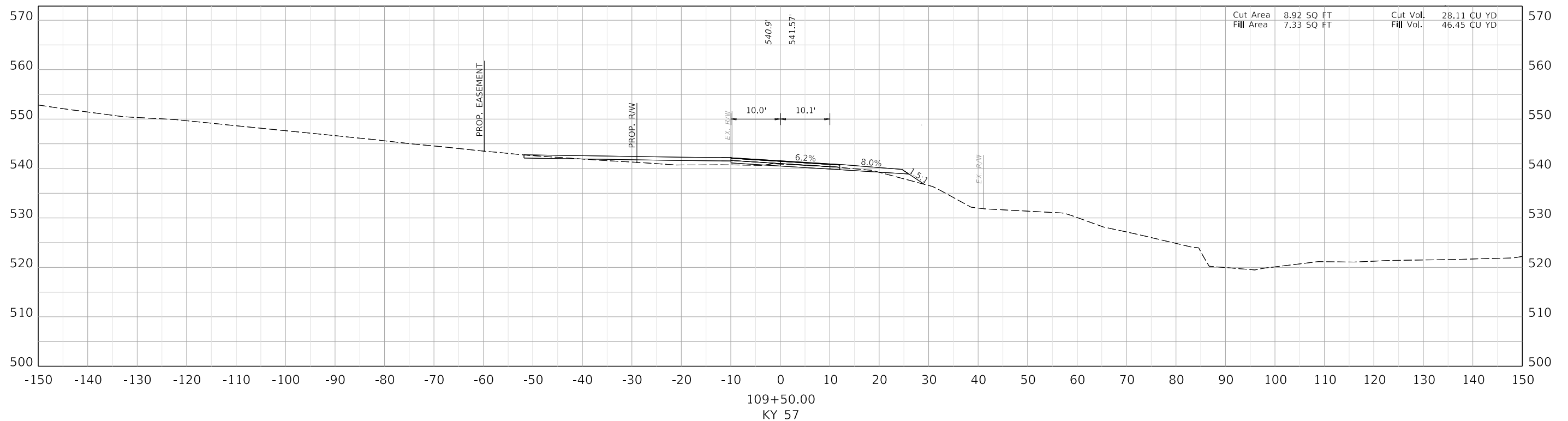
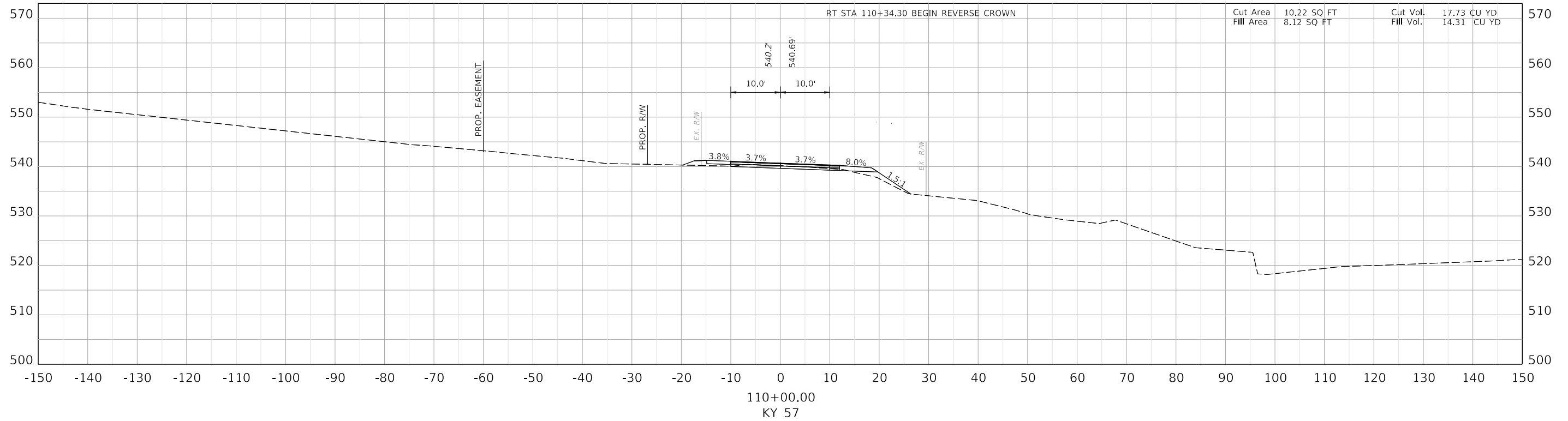
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 108+50.00 TO STA 109+00.00

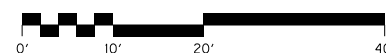
ITEM NO. 9-40005.00 COUNTY OF Lewis  
SHEET NO. X12



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

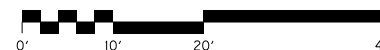
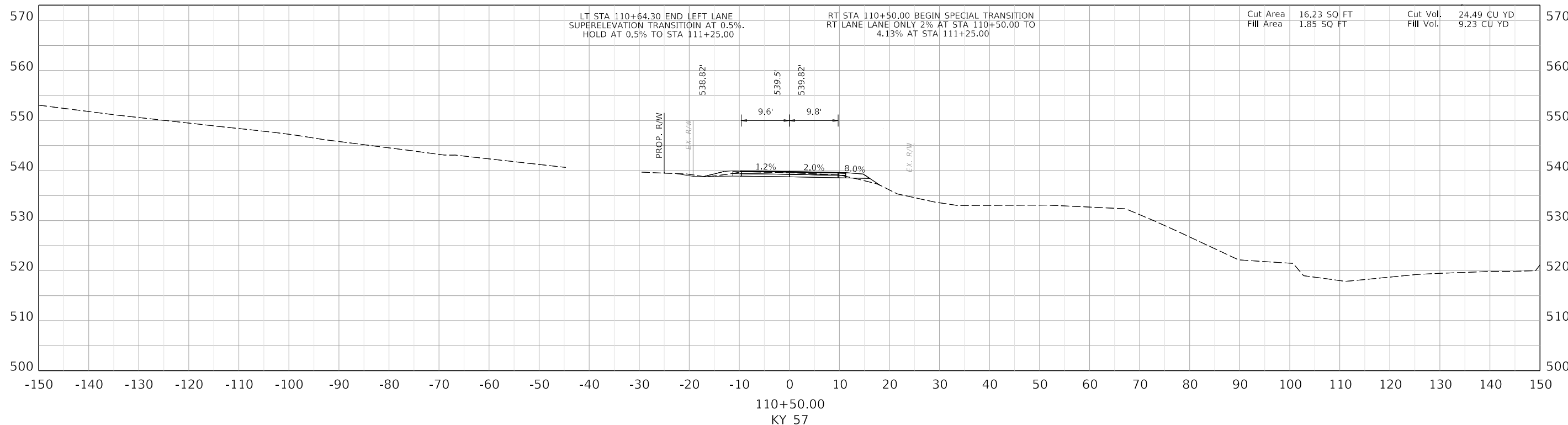
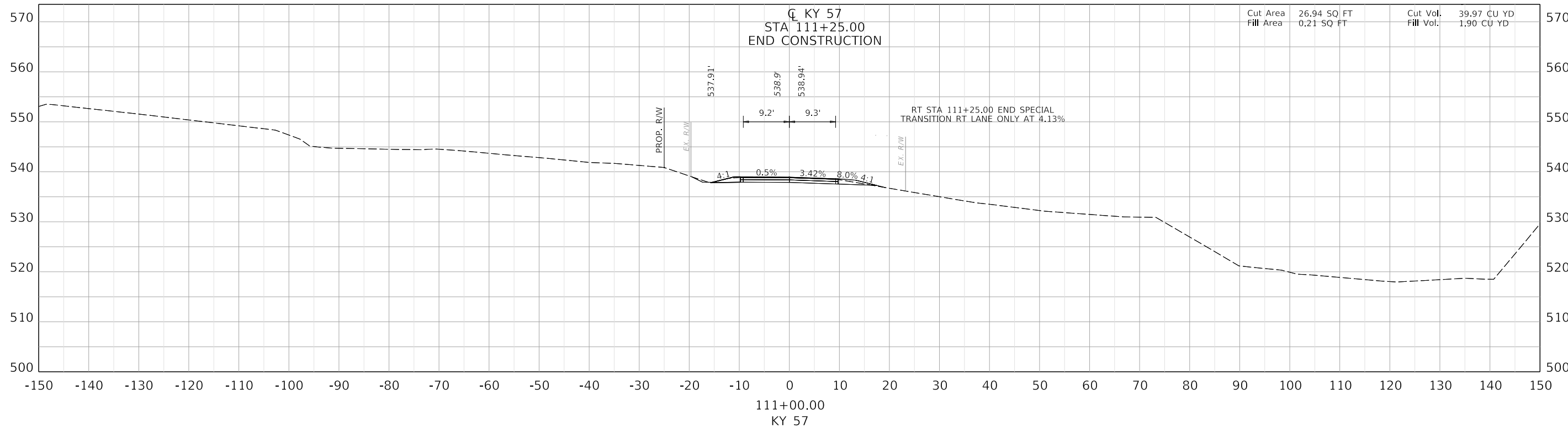
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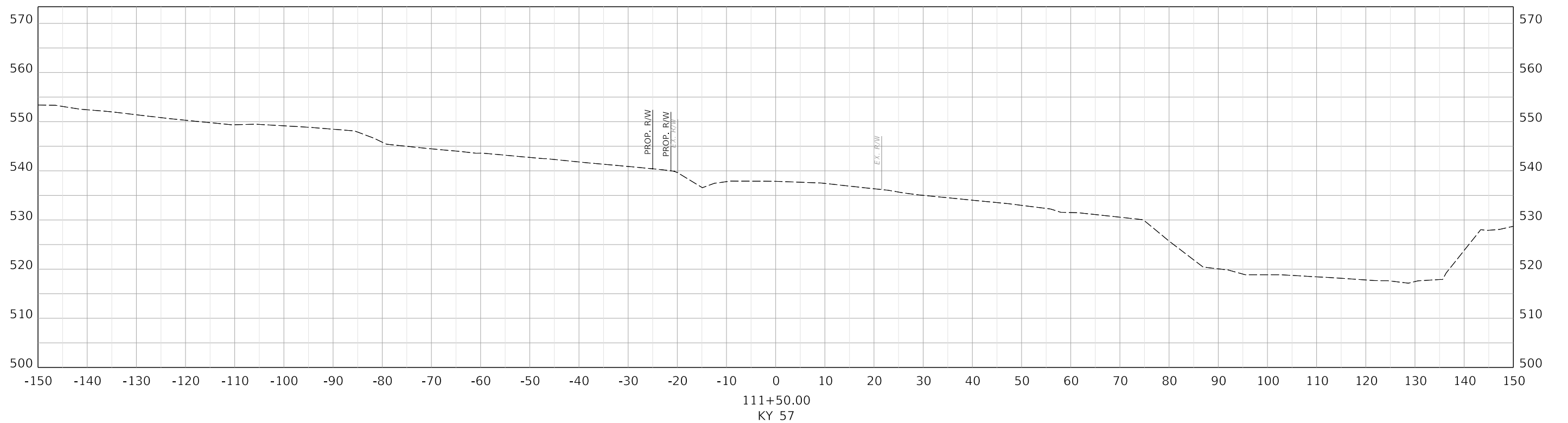
HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 109+50.00 TO STA 110+00.00

ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X13		

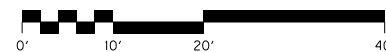




COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

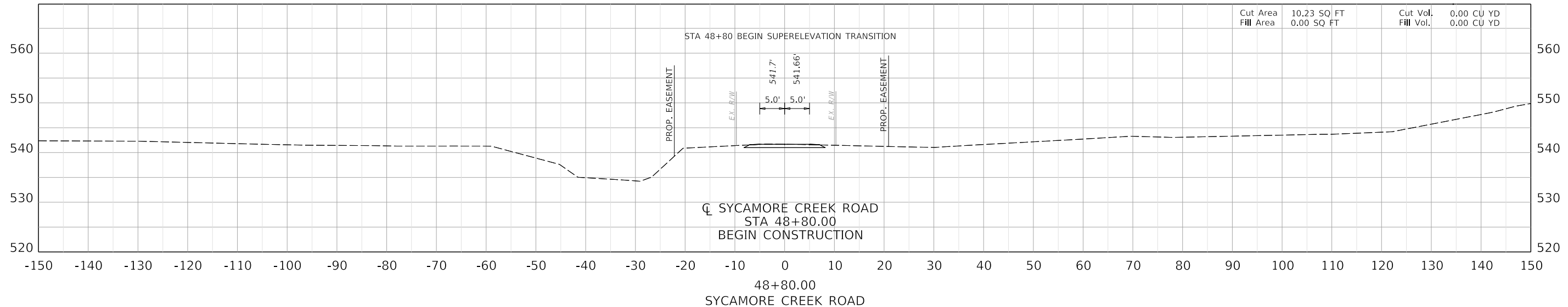
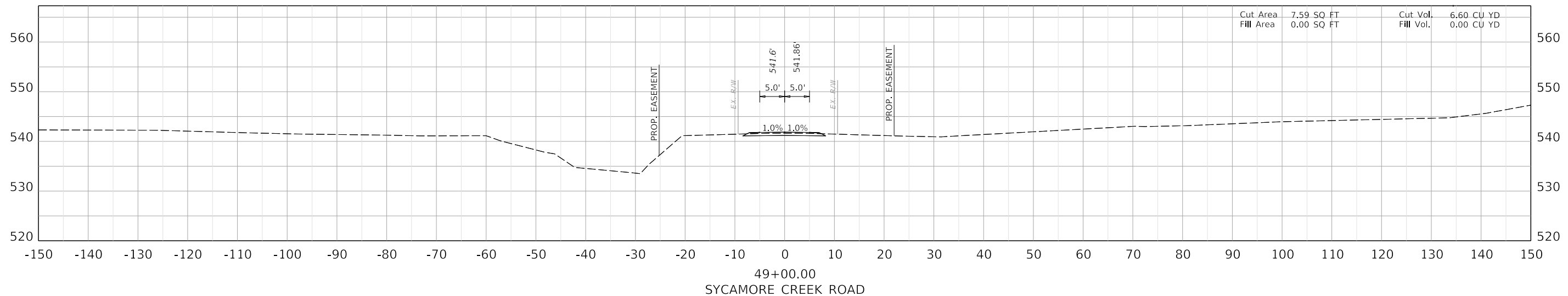
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HORIZONTAL SCALE:  
SCALE: 1" = 10'



STA 111+50.00

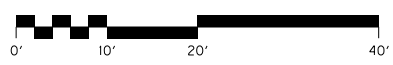
ITEM NO. 9-40005.00	COUNTY OF Lewis
SHEET NO. X15	



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

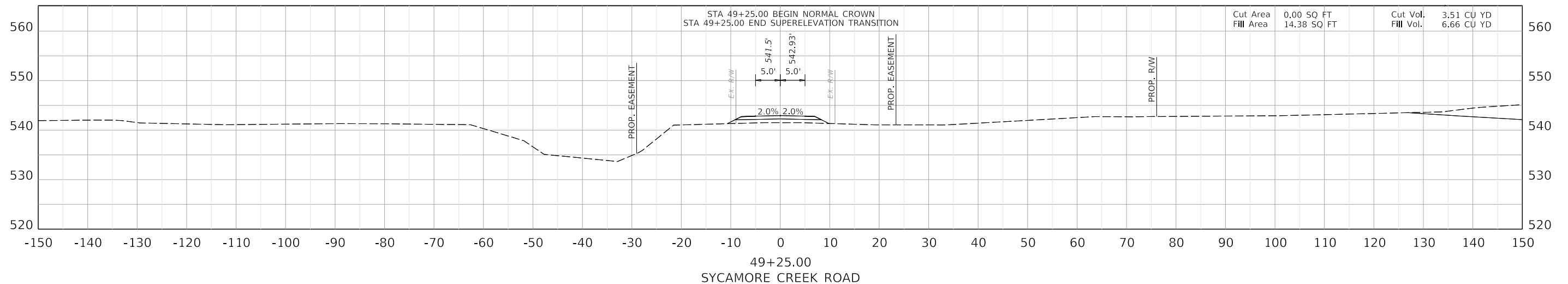
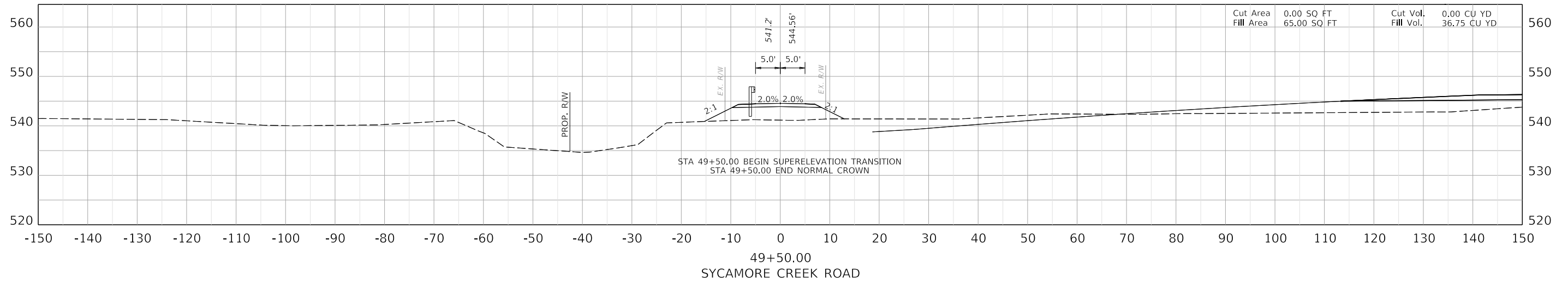
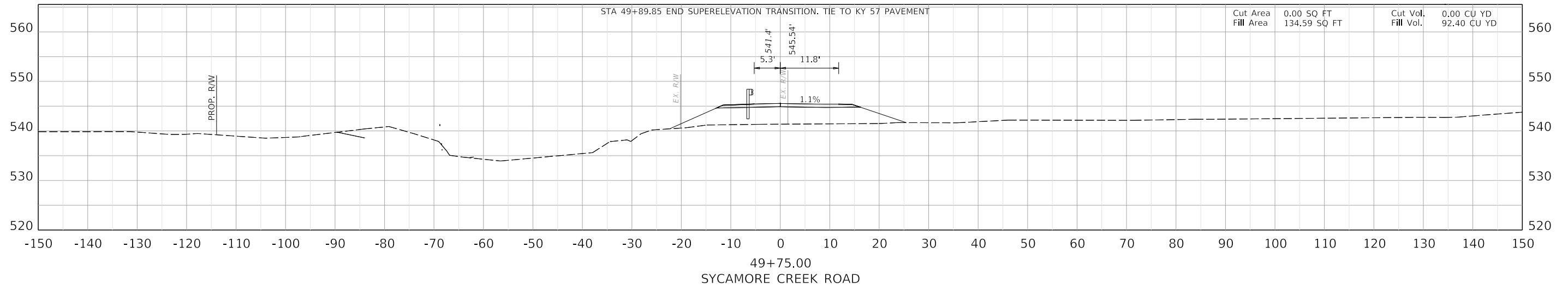
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 48+80.00 TO STA 49+00.00

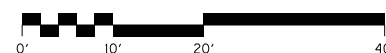
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X16		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

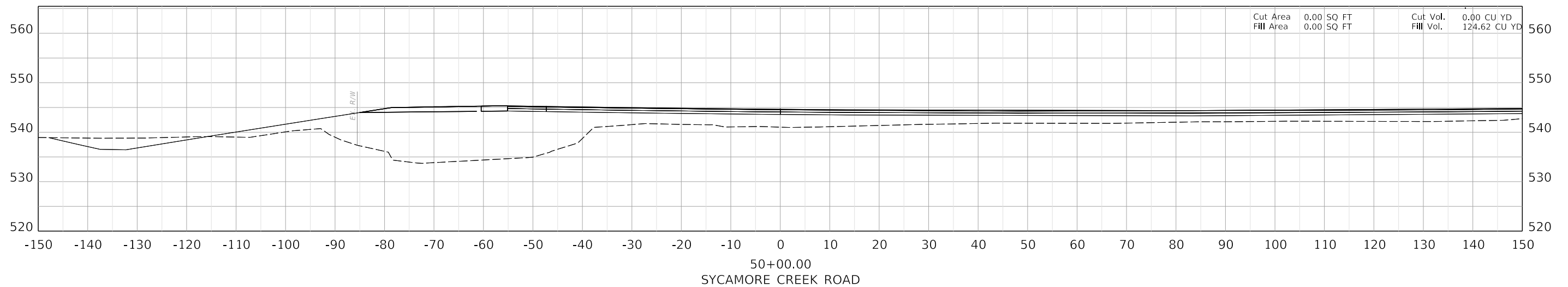
DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 49+25.00 TO STA 49+75.00

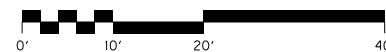
ITEM NO.	9-40005.00	COUNTY OF	Lewis
SHEET NO.	X17		



COMMONWEALTH OF KENTUCKY  
DEPARTMENT OF HIGHWAYS

DRAWING TITLE: CROSS SECTIONS

HORIZONTAL SCALE  
SCALE: 1" = 10'



STA 50+00.00

ITEM NO.	COUNTY OF
9-40005.00	Lewis
SHEET NO.	
X18	



# TRANSPORTATION CABINET DEPARTMENT OF HIGHWAYS

## LEWIS COUNTY

## KY 57

## KY 57 OVER SYCAMORE CREEK

## Station 107+40.03

### INDEX OF SHEETS

Sheet No.	Description
1	Title
2	Layout
3	Proposed Phases
4 & 5	Barrel Details
6	Wing 1
7	Wing 2
8	Wing 3
9	Wing 4
10 & 11	Bill of Reinforcement
12	Sounding Layout

### SPECIAL NOTES

Special Note for One-Step Membrane

### SPECIAL PROVISIONS


### STANDARD DRAWINGS

BGX-006-10	Stencils for Structures
BGX-012-02	Geotechnical Legend
RBM-115-10	Concrete Barrier Wall Type 9T (Temporary)
RBM-120-02	Box Beam Stiffening of Temp. Concrete Barrier
RBR-015-04	Guardrail Posts

### SPECIFICATIONS

2019 Standard Specifications for Road and Bridge Construction.

2020 AASHTO LRFD Bridge Design Specifications, 9th Ed.

### GENERAL NOTES

**SPECIFICATIONS:** All references to the standard Specifications are to the current edition of the Kentucky Department of Highways Standard Specifications for Road and Bridge Construction with current Supplemental Specifications. All references to the AASHTO are to the current edition of the AASHTO LRFD Bridge Design Specifications, with interims.

**DESIGN LOAD:** This structure is designed for HL-93 live load increased by 25%. The 25% increase is arrived by increasing the design truck or tandem and the design lane load by 25%.

**DESIGN METHOD:** All reinforced concrete members are designed by the load factor method as specified in the current AASHTO Specifications.

**MASONRY COATING:** Masonry coating will not be required for this structure.

**COMPLETION OF THE STRUCTURE:** The Contractor is required to complete the structure in accordance with the plans and specifications. Material, labor or construction operations, not otherwise specified, are to be included in the bid item most appropriate to the work involved. This may include cofferdams, shoring, excavations, backfilling, removal of all or parts of existing structures, phase construction, incidental materials, labor, or anything else required to complete the structure.

**REINFORCEMENT:** Dimensions shown from the face of concrete to bars are to center of bars unless otherwise shown. Spacing of bars is from center to center of bars. Clear distance to face of concrete is 2" unless otherwise noted. Any reinforcing bars designated by suffix (e) in the Plans shall be epoxy coated in accordance with section 811.10 of the Standard Specifications. Any reinforcing bars designated by suffix (s) in a Bill of Reinforcement shall be considered a stirrup for purposes of bend diameters.

**BEVELED EDGES:** All exposed edges shall be beveled 3/4" unless otherwise shown.

**DIMENSIONS:** Dimensions are for a normal temperature of 60 degrees Fahrenheit. Layout dimensions are horizontal measurements.

**WEIGHT OF FILL MATERIAL:** The assumed weight of fill material is 120 lbs per cubic foot.

**CONCRETE:** Class "A" concrete shall be used throughout.

**CONSTRUCTION JOINTS:** Vertical construction joints shall be located in the field, except that no construction joint shall be located in the barrel within six feet of the ends of the culvert.

**FOOTING PRESSURE:** Foundation materials for wing footings required to resist a maximum bearing pressure of 1758 PSF.

**FLOWLINE REINFORCEMENT:** Reinforcement in the 6 in thick slab shall be Size 4 bars at 18 in centers in each direction or an equivalent area of welded deformed steel fabric. The bars shall extend a minimum of 12 in into wing footings and/or the bottom slab. The cost of this reinforcement shall be incidental to the unit price bid for Concrete, Class "A".

**CONSTRUCTION NOTES:** Temporary sheeting, shoring, cofferdams, and/ or dewatering methods may be necessary for construction of the culvert. Include all costs in the price bid for Foundation Preparation.

**YIELDING FOUNDATION:** Rock and boulders within 2 ft of the design flowline must be excavated and backfilled with properly compacted soil to the base of the slab. Payment for this work shall be included in the lump sum bid for Foundation Preparation.

**ROCK EXCAVATION:** Solid Rock Excavation may be required for the construction of this culvert.

### ESTIMATE OF QUANTITIES

BID CODE	ITEM	QUANTITY	UNIT
8100	Class "A" Concrete	312.5	C.Y.
8150	Reinforcement	28067	Lb
8003	Foundation Preparation	1	L.S.
8002	Structure Excavation Rock	32	C.Y.
8151	Epoxy Coated Steel Reinforcement	25763	LB
3250	Waterproofing Membrane	146	S.Y.



REVISION DATE

PREPARED BY

Division of  
Structural Design

DATE: APRIL 2023

CHECKED BY

DESIGNED BY: J. VAN ZEE

S. T. ANDARDS

DETAILED BY: M. BAWITHAWNG

J. VAN ZEE

SINGLE 24.0 X 7.0 CULVERT

CROSSING

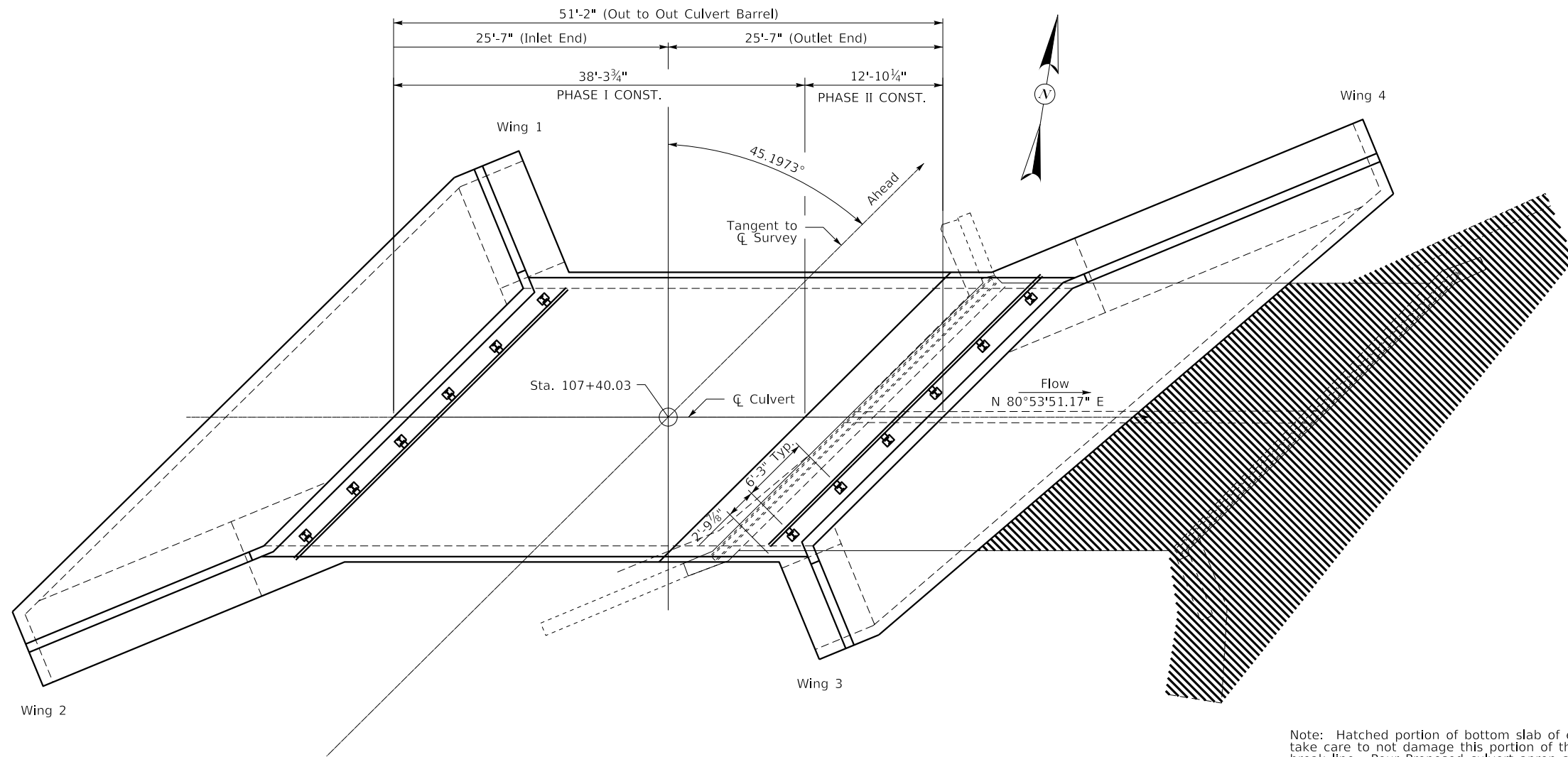
SYCAMORE CREEK

ROUTE  
KY 57

ITEM NO.  
9-40005

SHEET NO.  
S1

COUNTY OF  
LEWIS  
DRAWING NUMBER  
28748



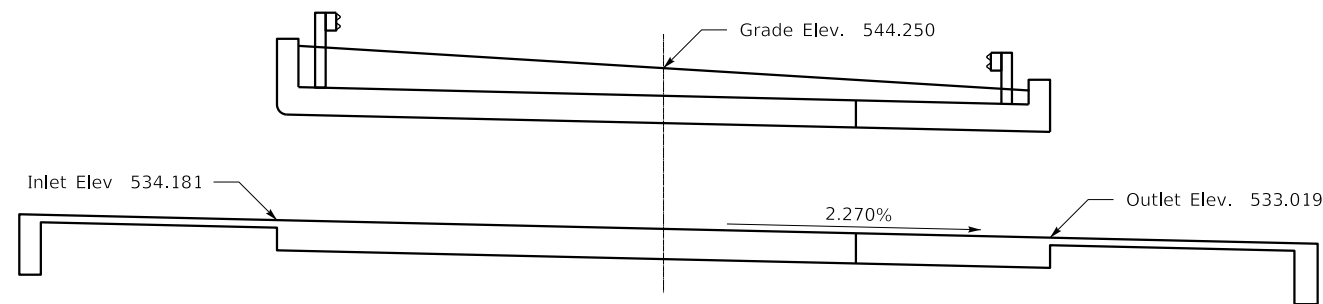
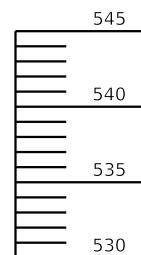
Note: See Roadway Plans for Guardrail Location.

Note: Hatched portion of bottom slab of existing culvert and wing footings to remain. Contractor shall take care to not damage this portion of the existing culvert. Saw cut existing culvert to have a clean break line. Pour Proposed culvert apron against existing culvert flowline that remains in place. All costs incidental to Remove Structure. Engineer to approve removal limits prior to beginning any removal.

**PLAN**

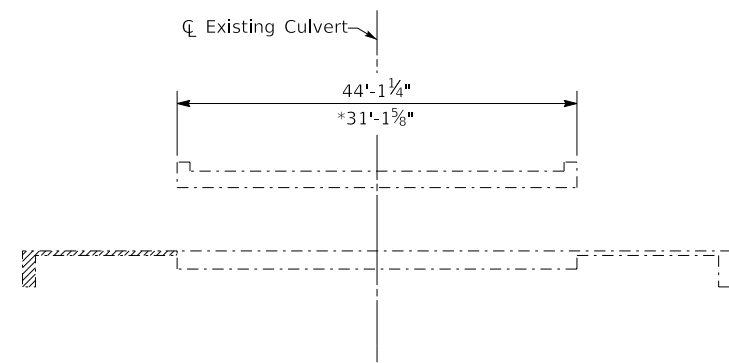
SCALE = 1:72

For Guardrail Attachment to Culvert Top Slab See Standard Drawing RBR-015

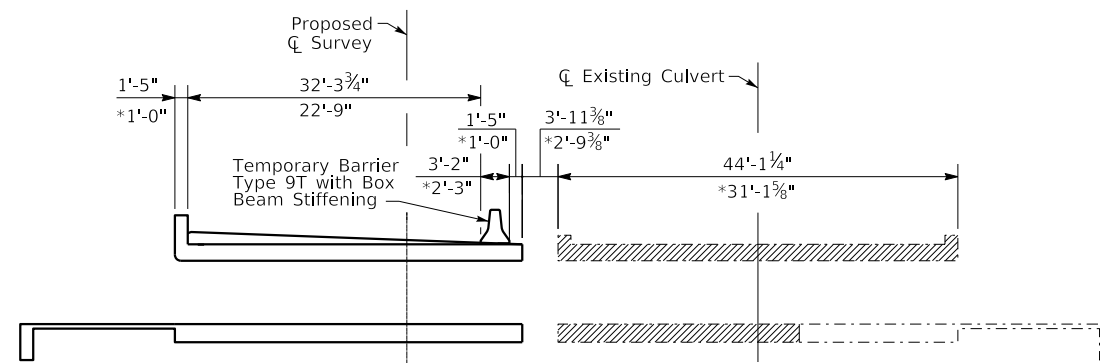


**SECTION ON CL**

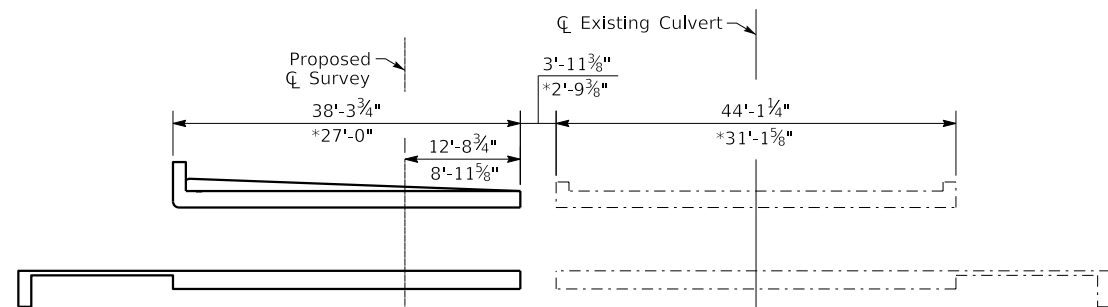
Single 24'-0" x 7'-0" x 51'-2" R.C.B.C.  
 25'-7" Inlet End and 25'-7" Outlet End  
 45.1973° Lt. Skew ~ KYHL-93 Loading ~ 1:2 Fill Slope  
 Yielding Foundation



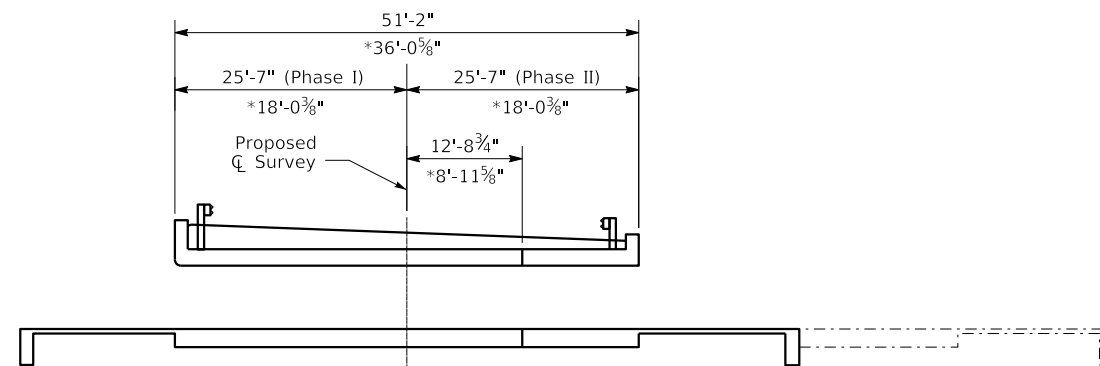
**PHASE 1 REMOVAL**  
SCALE = 1:120



**PHASE 2 REMOVAL**  
SCALE = 1:120



**PHASE 1 CONSTRUCTION**  
SCALE = 1:120



**PHASE 2 CONSTRUCTION**  
SCALE = 1:120

**SUGGESTED CONSTRUCTION PHASING SEQUENCE**

Phase 1.) Maintain traffic on existing roadway and portions of existing culvert during phase 1 culvert construction. Portions of existing culvert shall be removed to facilitate phased construction. Use sheeting or shoring as necessary to maintain existing roadway. Include all costs of sheeting, shoring, dewatering, etc. in price bid for foundation preparation. Construct phase 1 of culvert.

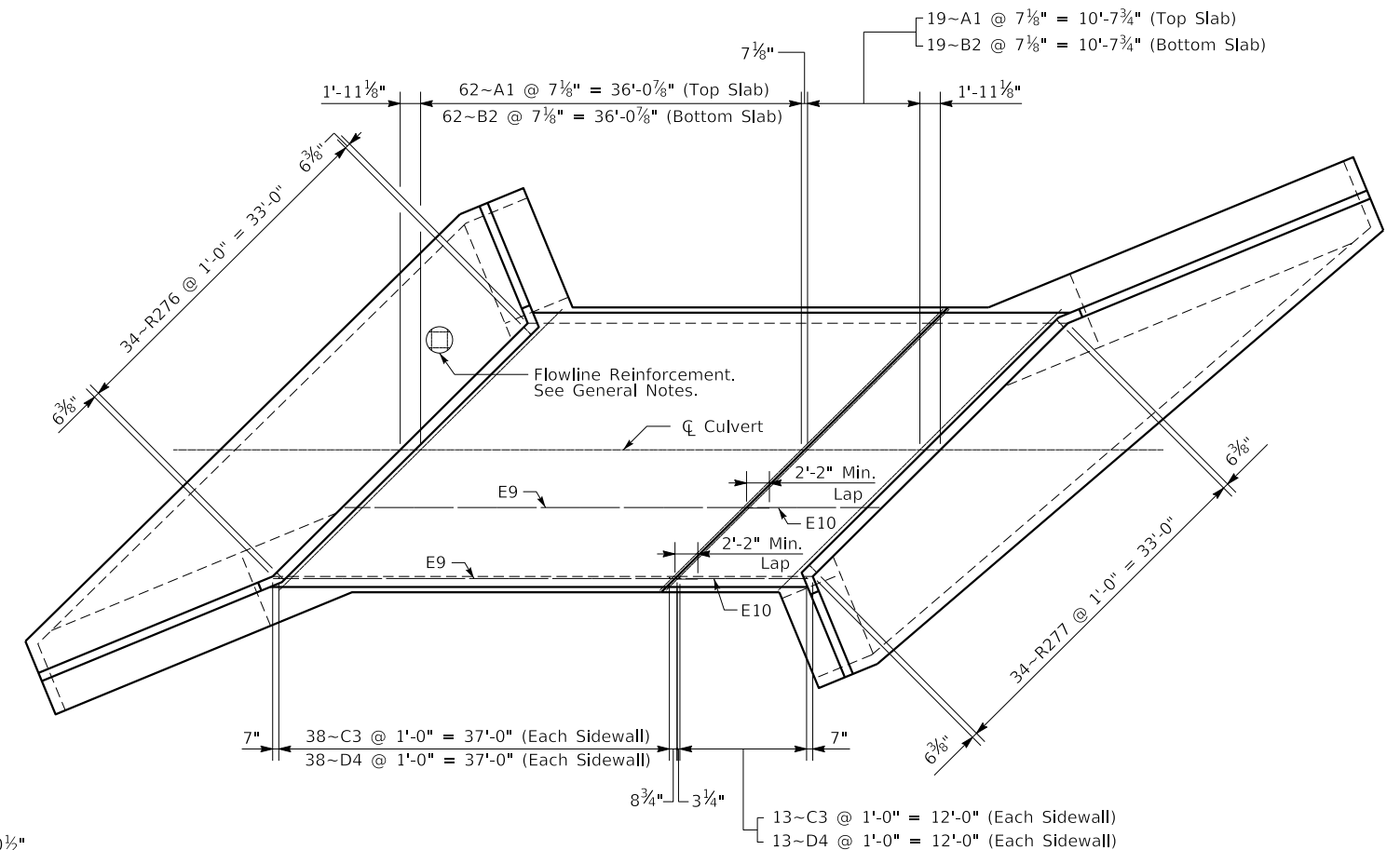
Phase 2.) Move barrier onto new structure and install box beam stiffening. Backfill new structure and apply fill to top to provide a smooth riding surface. Shift traffic to new structure. Remove the rest of existing structure. Use sheeting or shoring as necessary to maintain roadway. Complete proposed structure construction. Complete backfill of new structure. Remove temporary concrete barrier. Complete paving operations.

Adjust sequence as necessary and in accordance with the Engineers recommendations.

Barrier Note: Provide Temporary Barrier Type 9T (Std. Dwg. RBM-115, c.e., Barrier Quantities are included in Roadway Quantities) and Box Beam Stiffening (Std. Dwg. RBM-120, c.e., Include all costs in the price bid for Temporary Barrier)

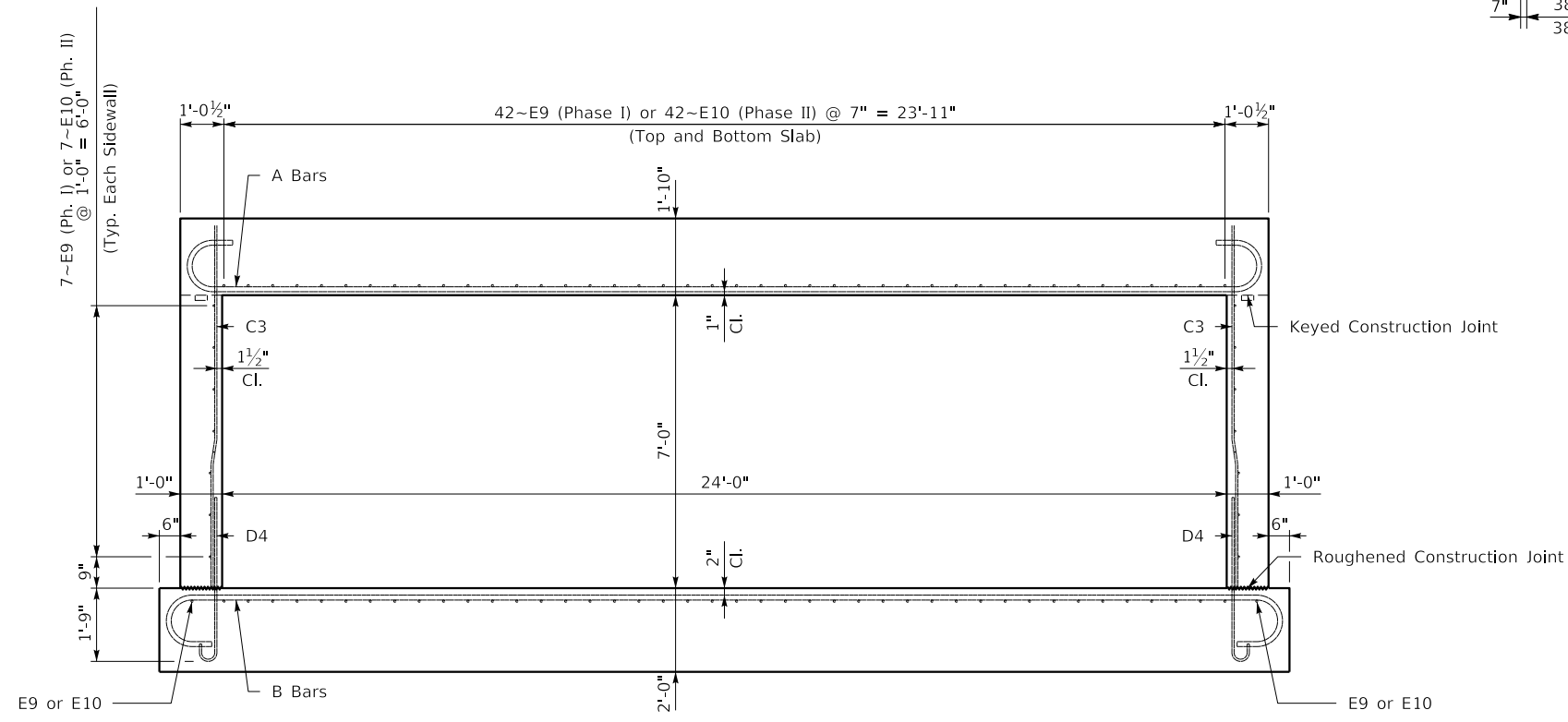
Note: Contractor to field verify all dimensions prior to submitting bid. No claims for changed site conditions shall be allowed.

Note: All dimensions with (\*) denotation given on this sheet are perpendicular to  $\bar{C}$  Survey. The rest of dimensions given are along the  $\bar{C}$  of culvert.



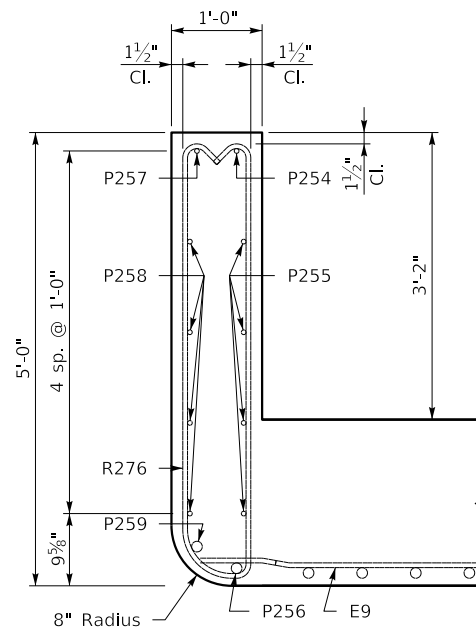
**PLAN**  
 SCALE = 1:96

Minimum Lap Distance for E9 Bars 26 in  
 Minimum Lap Distance for E10 Bars 26 in

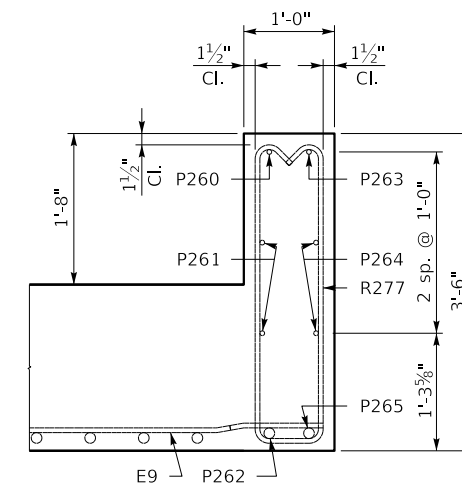
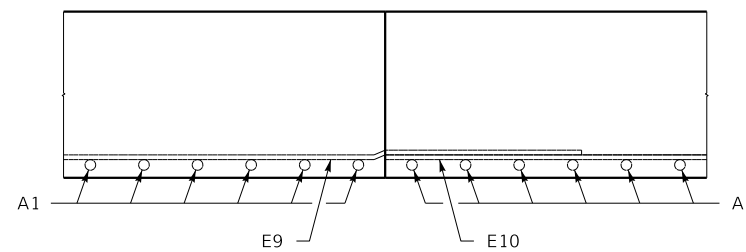


**TYPICAL BARREL SECTION**  
 SCALE = 1:24

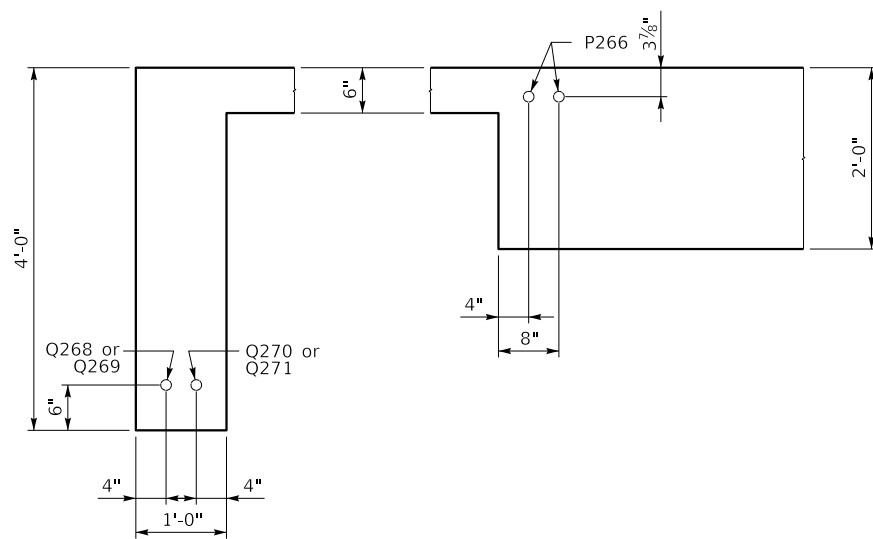
	REVISION	DATE	PREPARED BY	DATE: APRIL 2023	CHECKED BY	<b>BARREL</b> CROSSING SYCAMORE CREEK	ROUTE	ITEM NO.	COUNTY OF
				Division of Structural Design	DESIGNED BY: J. VAN ZEE		S. T. ANDARDS	KY 57	9-40005
				DATE PLOTTED: 1-JUN-2023	DETAILED BY: M. BAWITHAWNG	J. VAN ZEE		SHEET NO. S4	DRAWING NUMBER 28748



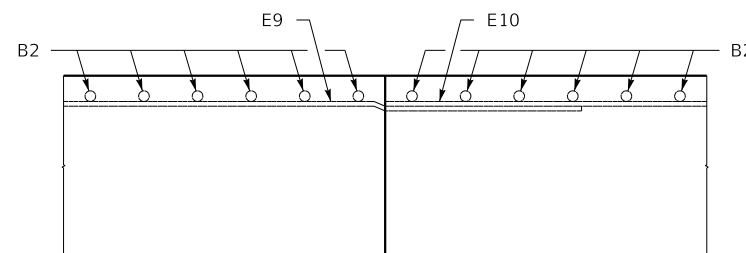
**LEFT PARAPET**  
SCALE = 1:12  
(Perpendicular to Parapet)



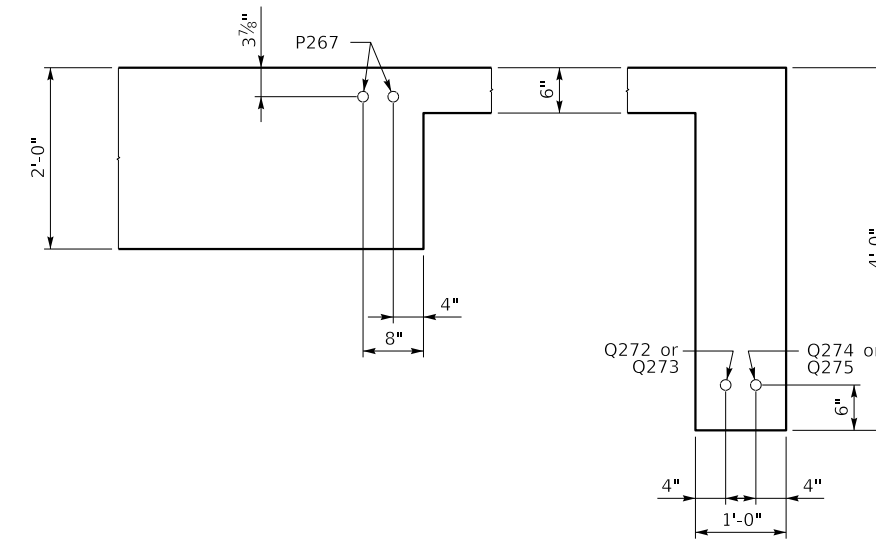
**RIGHT PARAPET**  
SCALE = 1:12  
(Perpendicular to Parapet)



**LEFT END**  
SCALE = 1:12  
(Perpendicular to Apron)

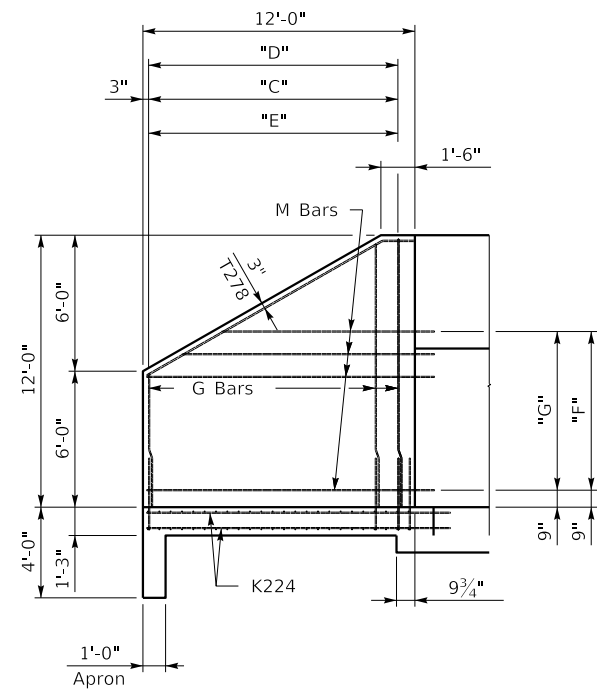


**SECTION ON Q**  
SCALE = 1:12

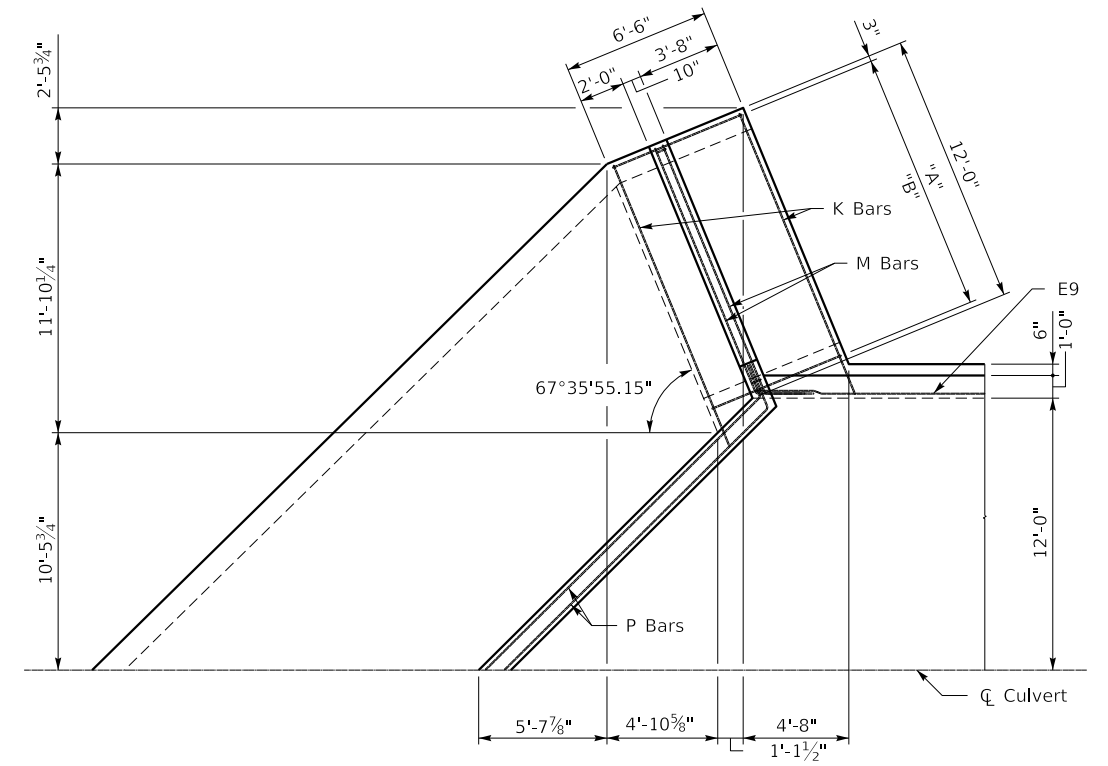


**RIGHT END**  
SCALE = 1:12  
(Perpendicular to Apron)

Note: Lap Q268 with Q269, 6'-2" Min. Lap  
Lap Q270 with Q271, 6'-2" Min. Lap  
Lap Q272 with Q273, 6'-2" Min. Lap  
Lap Q274 with Q275, 6'-2" Min. Lap

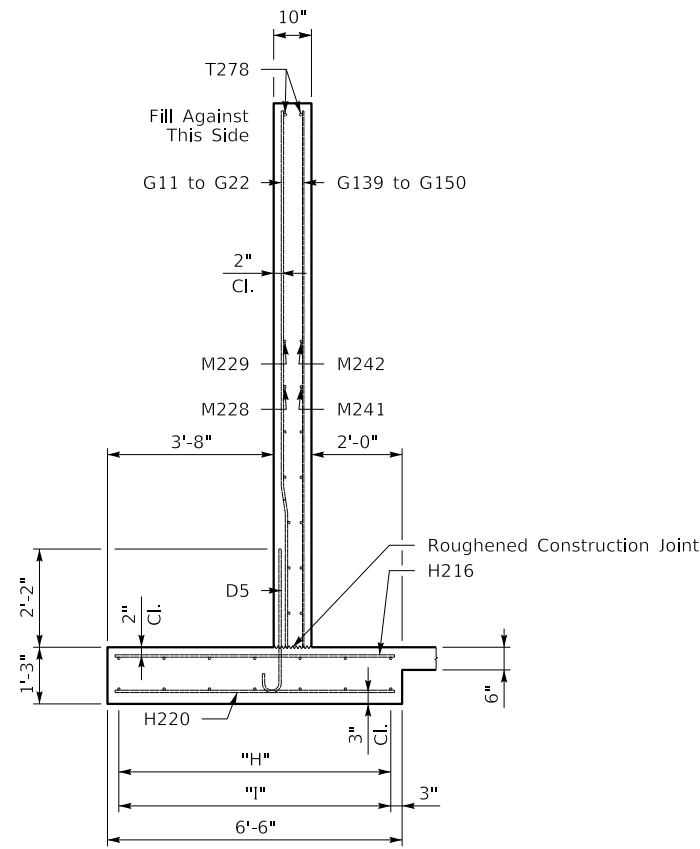


**WING ELEVATION**  
SCALE = 1:48

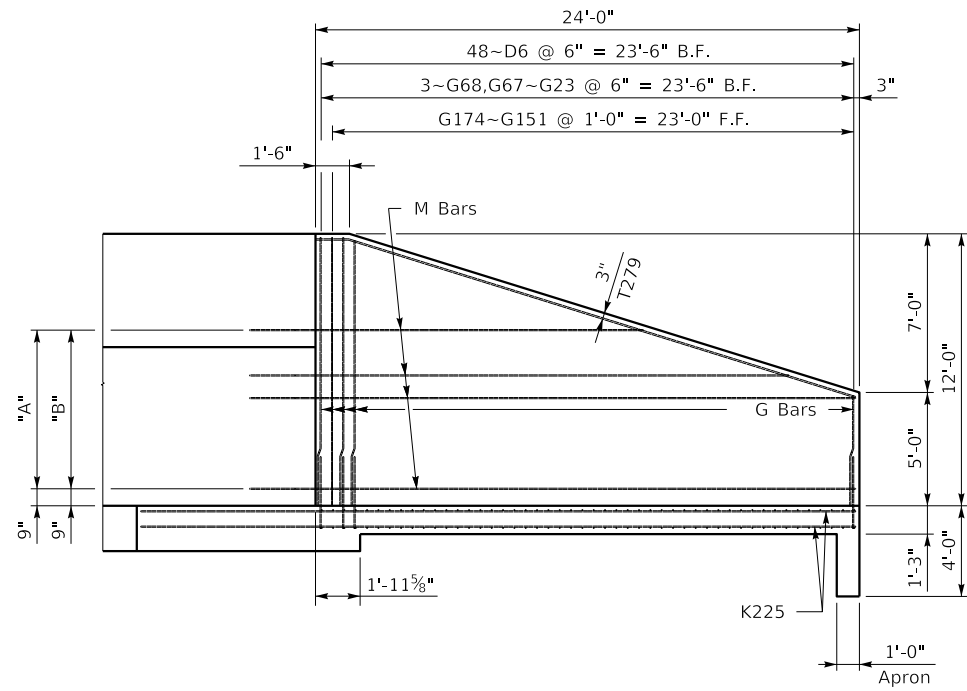


**PLAN**  
SCALE = 1:48

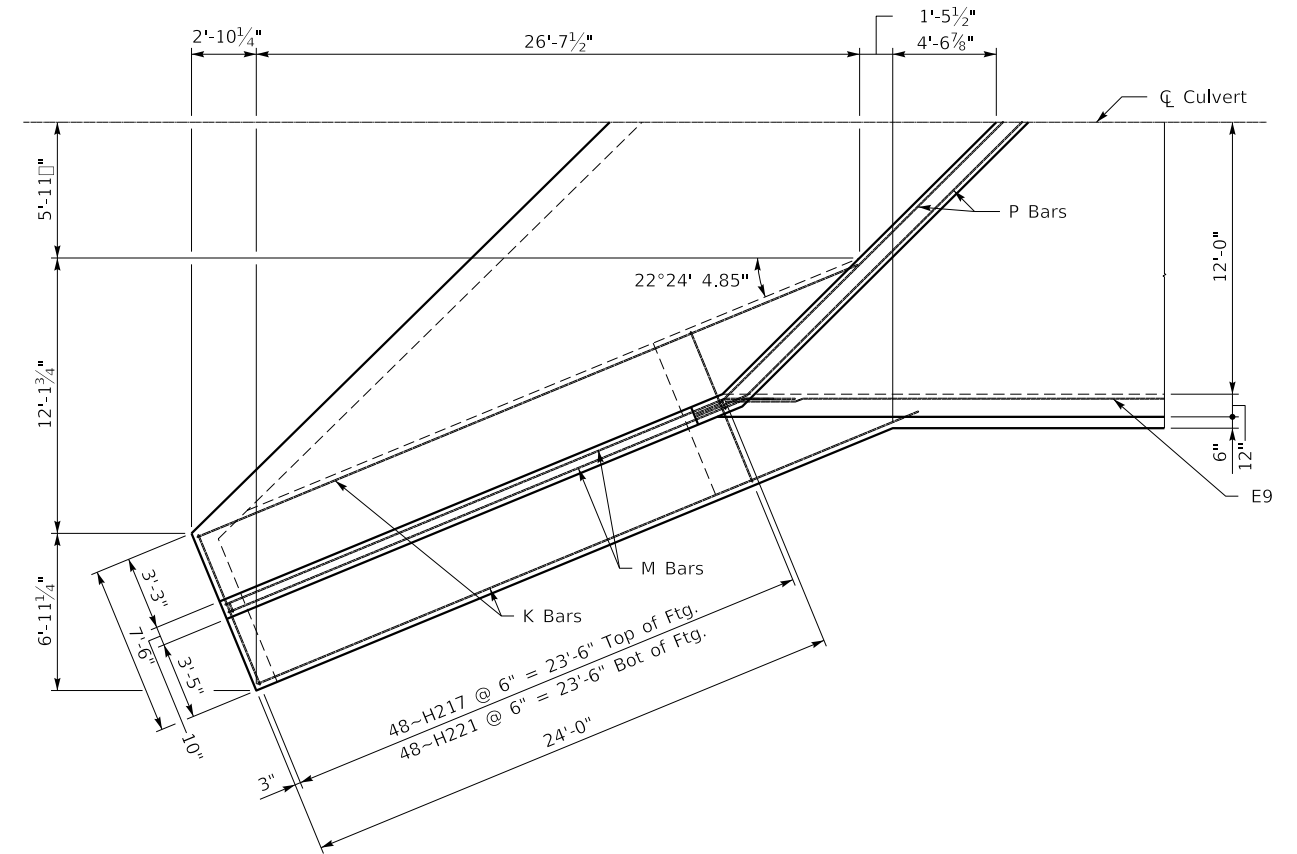
- "A" 24-H216 @ 6" = 11'-6" Top of Ftg.
- "B" 24-H220 @ 6" = 11'-6" Bot of Ftg.
- "C" G11-G22 @ 1'-0" = 11'-0" B.F.
- "D" 24-D5 @ 6" = 11'-6" B.F.
- "E" G139-G150 @ 1'-0" = 11'-0" F.F.
- "F" 6-M228, M229-M230 @ 1'-0" = 7'-0" B.F.
- "G" 6-M241, M242-M243 @ 1'-0" = 7'-0" F.F.
- "H" 7-K224 @ 1'-0" = 6'-0" Bot of Ftg.
- "I" 7-K224 @ 1'-0" = 6'-0" Top of Ftg.



**WING SECTION**  
SCALE = 1:24

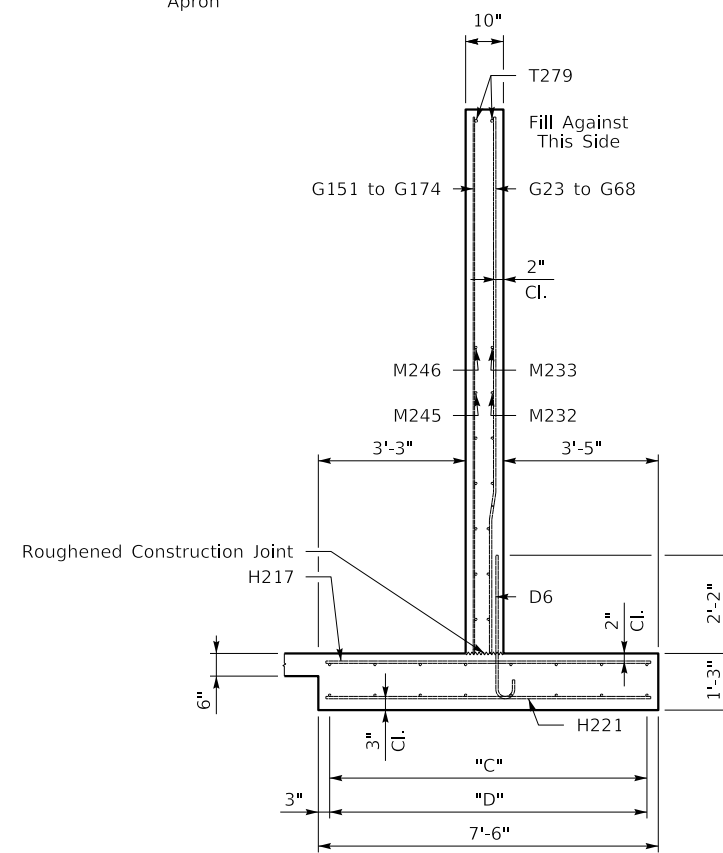


**WING ELEVATION**  
SCALE = 1:48

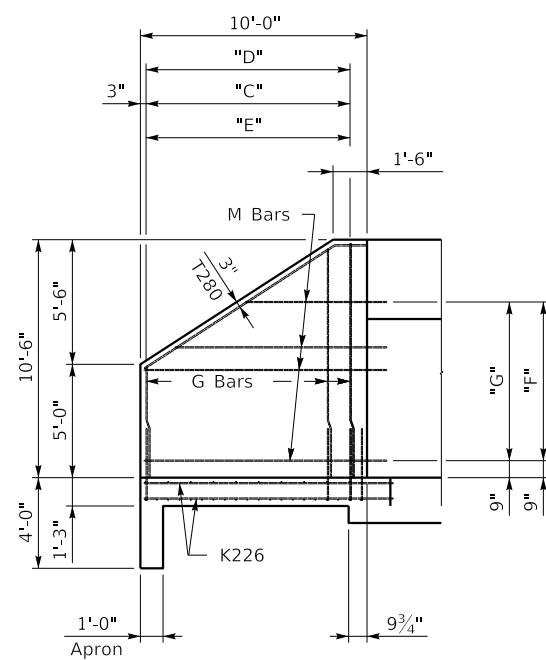


**PLAN**  
SCALE = 1:48

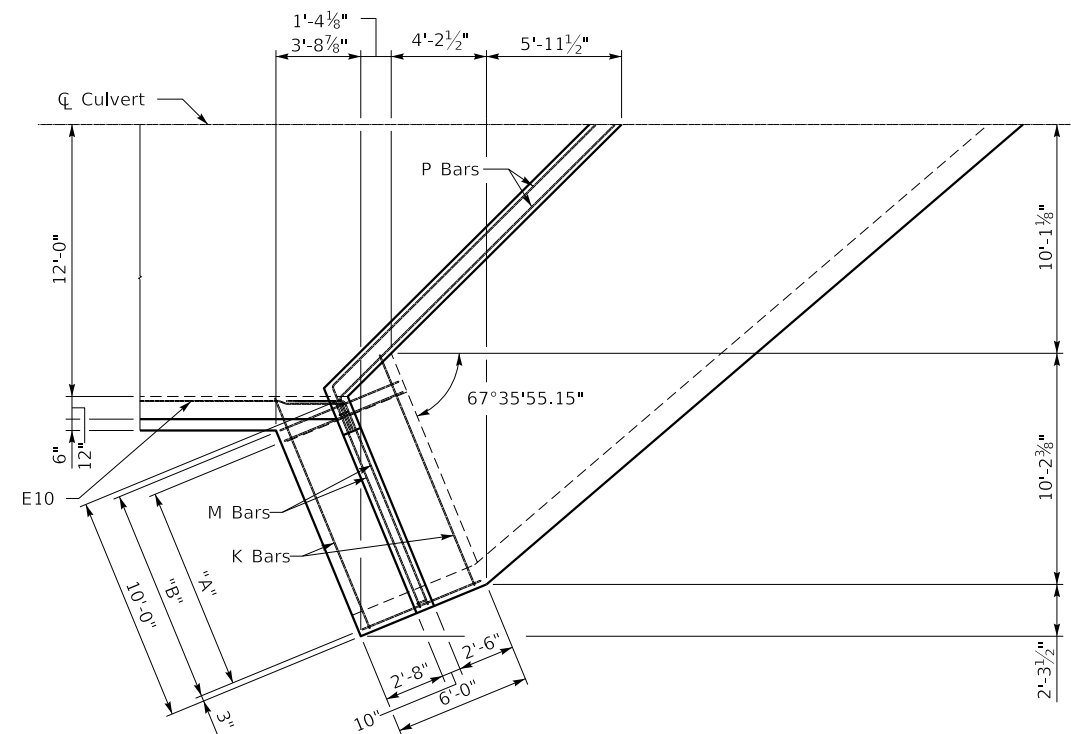
"A" 5~M231,M232~M234 @ 1'-0" = 7'-0" B.F.  
 "B" 5~M244,M245~M247 @ 1'-0" = 7'-0" F.F.  
 "C" 8~K225 @ 1'-0" = 7'-0" Bot of Ftg.  
 "D" 8~K225 @ 1'-0" = 7'-0" Top of Ftg.



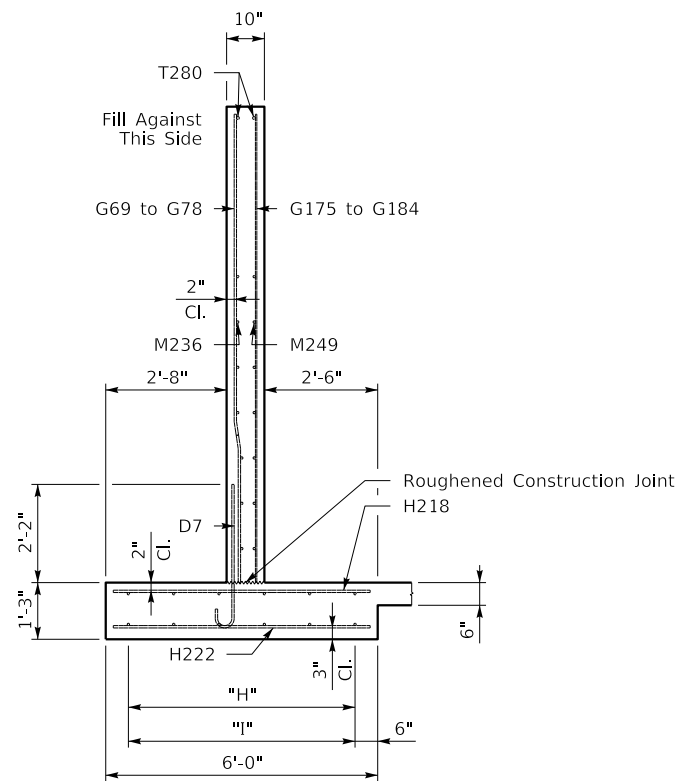
**WING SECTION**  
SCALE = 1:24



**WING ELEVATION**  
SCALE = 1:48



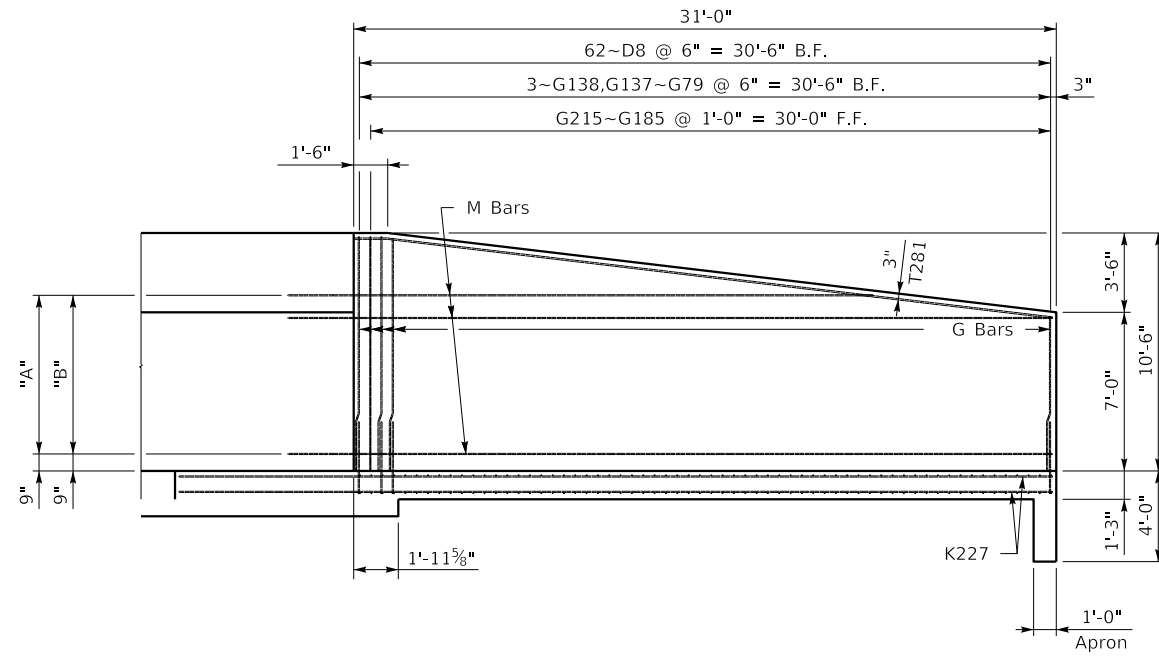
**PLAN**  
SCALE = 1:48



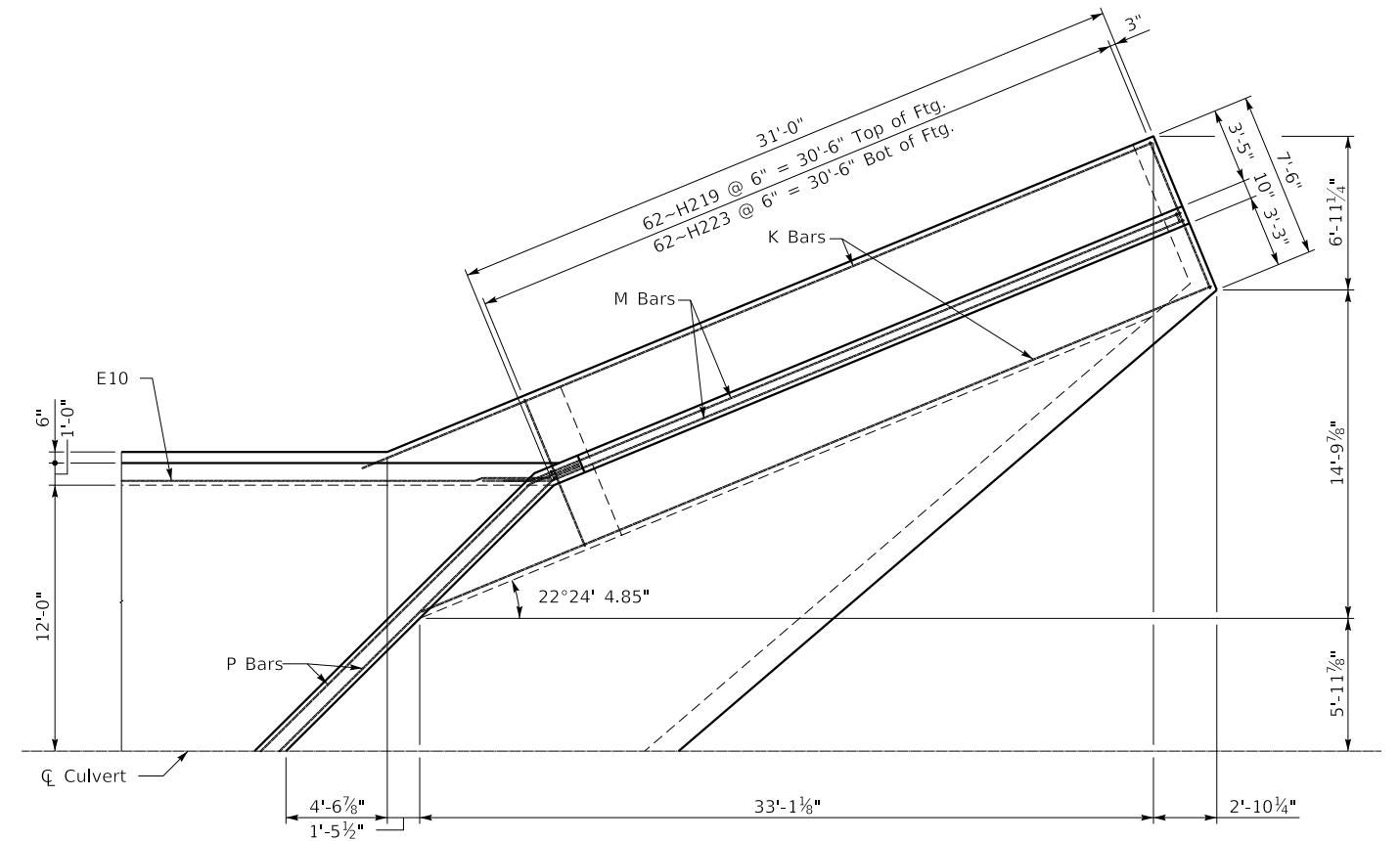
**WING SECTION**  
SCALE = 1:24

- "A" 10-H218 @ 1'-0" = 9'-0" Top of Ftg.
- "B" 20-H222 @ 6" = 9'-6" Bot of Ftg.
- "C" G69-G78 @ 1'-0" = 9'-0" B.F.
- "D" 20-D7 @ 6" = 9'-6" B.F.
- "E" G175-G184 @ 1'-0" = 9'-0" F.F.
- "F" 5-M235,M236-M238 @ 1'-0" = 7'-0" B.F.
- "G" 5-M248,M249-M251 @ 1'-0" = 7'-0" F.F.
- "H" 6-K226 @ 1'-0" = 5'-0" Bot of Ftg.
- "I" 6-K226 @ 1'-0" = 5'-0" Top of Ftg.



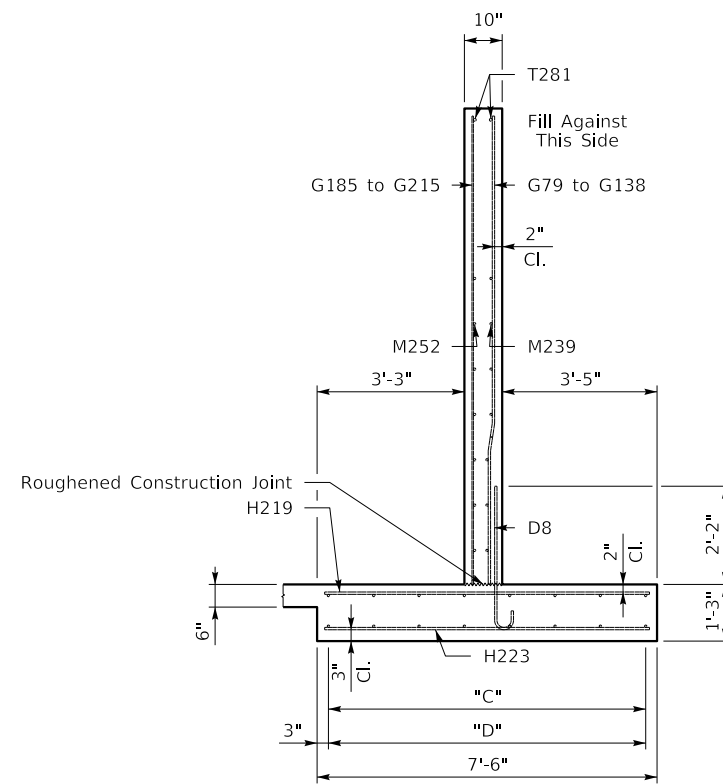


**WING ELEVATION**  
SCALE = 1:48



**PLAN**  
SCALE = 1:48

- "A" 7-M239,1-M240 @ 1'-0" = 7'-0" B.F.
- "B" 7-M252,1-M253 @ 1'-0" = 7'-0" F.F.
- "C" 8-K227 @ 1'-0" = 7'-0" Bot of Ftg.
- "D" 8-K227 @ 1'-0" = 7'-0" Top of Ftg.

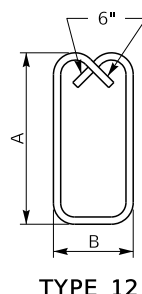
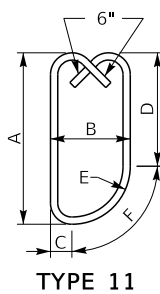
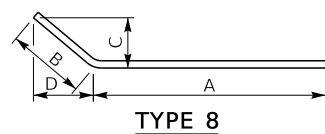
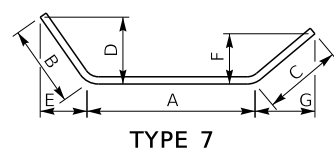
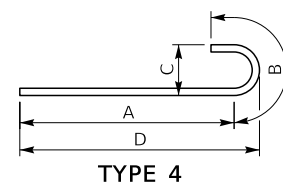
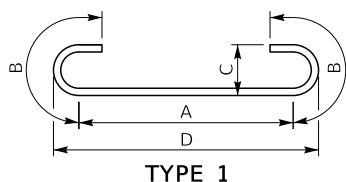


**WING SECTION**  
SCALE = 1:24

BILL OF REINFORCEMENT

BILL OF REINFORCEMENT

Table with columns: MARK, TYPE, NO., SIZE, LENGTH, LOCATION, A/E, B/F, C/G, D/H. Rows include items like A1e, B2, C3e, G76, G77, etc., detailing reinforcement specifications for various slabs and wings.



BILL OF REINFORCEMENT

BILL OF REINFORCEMENT

Table with columns: MARK, TYPE, NO., SIZE, LENGTH, LOCATION, A/E, B/F, C/G, D/H. It lists reinforcement details for various wing sections (F.F. Wing 1-4, Parapet Lt. End, Parapet Rt. End, Bottom Slab Lt. End, Bottom Slab Rt. End, Apron Lt. End, Apron Rt. End, Parapet Wall) with specific dimensions and bar counts.



Table with columns: REVISION, DATE

PREPARED BY Division of Structural Design

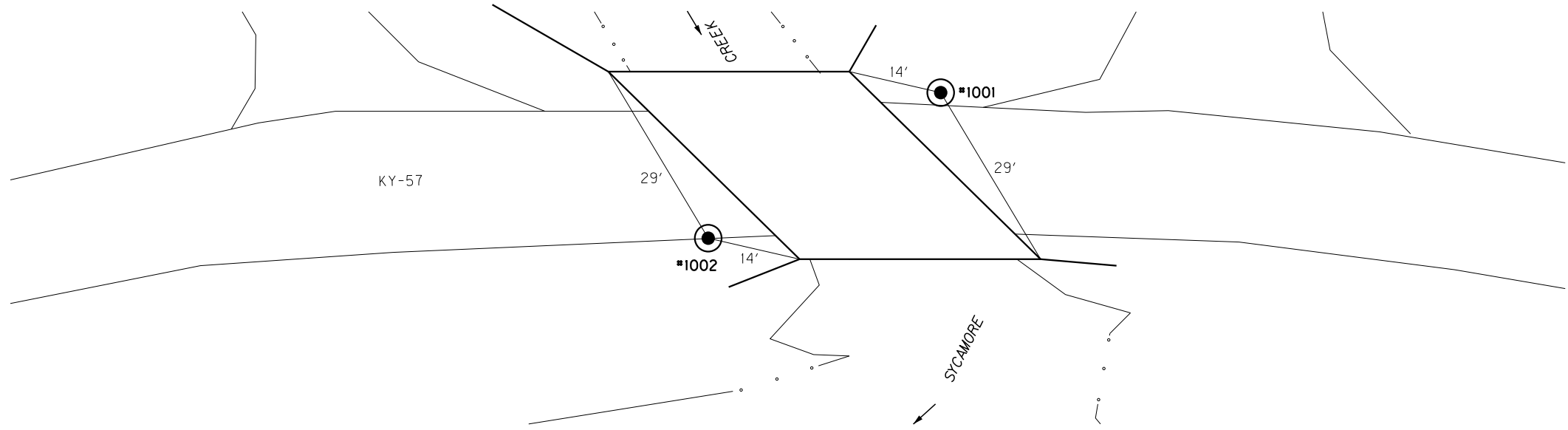
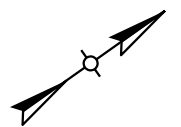
DATE: APRIL 2023 CHECKED BY S. T. ANDARDS

BILL OF REINFORCEMENT CROSSING SYCAMORE CREEK

ROUTE KY 57 ITEM NO. 9-40005 COUNTY OF LEWIS SHEET NO. S11 DRAWING NUMBER 28748

# SUBSURFACE DATA

Plan Scale 1" = 10'



Profile Scale:  
Vertical 1" = 10'  
Horizontal not to scale

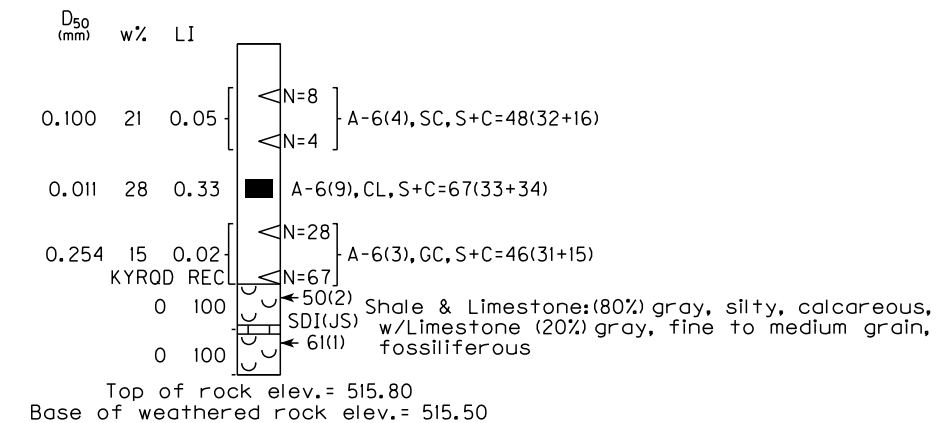
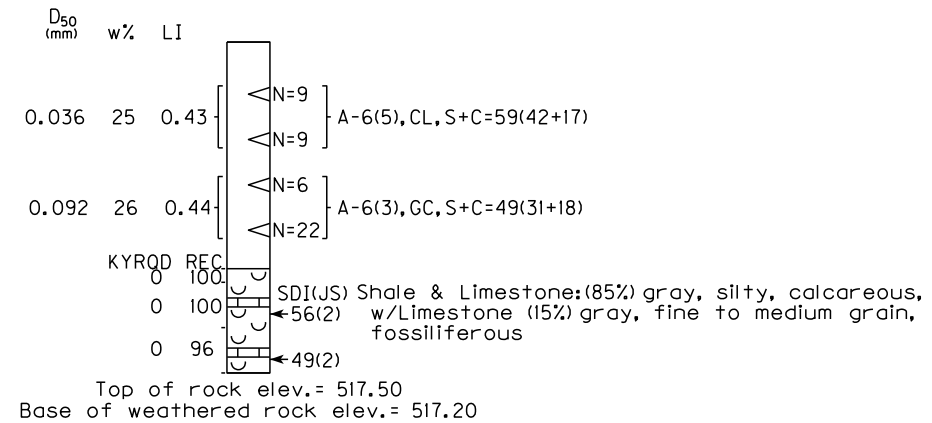
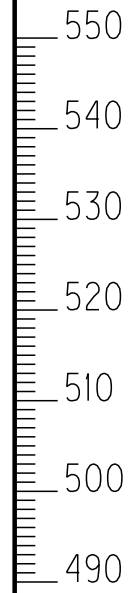
END BENT ONE

END BENT TWO

Hole No.  
Station  
Offset  
Elev.  
(NAVD 88  
datum)

1002  
38.679348, -83.503902  
542.50

1001  
38.679433, -83.503884  
542.30



Datum

The Presumptive Factored Bearing Resistance at the Service Limit State is  
12 ksf for Spread Footings on Competent Unweathered Bedrock

	REVISION	DATE	PREPARED BY	DATE: 01-AUGUST-2021	CHECKED BY	<b>Sounding Layout</b> CROSSING Culvert at Sycamore Creek	ROUTE KY 57	ITEM NO. 9-40005.00	COUNTY OF LEWIS
	Division of Structural Design Geotechnical Branch			DESIGNED BY:	R. McDONALD				