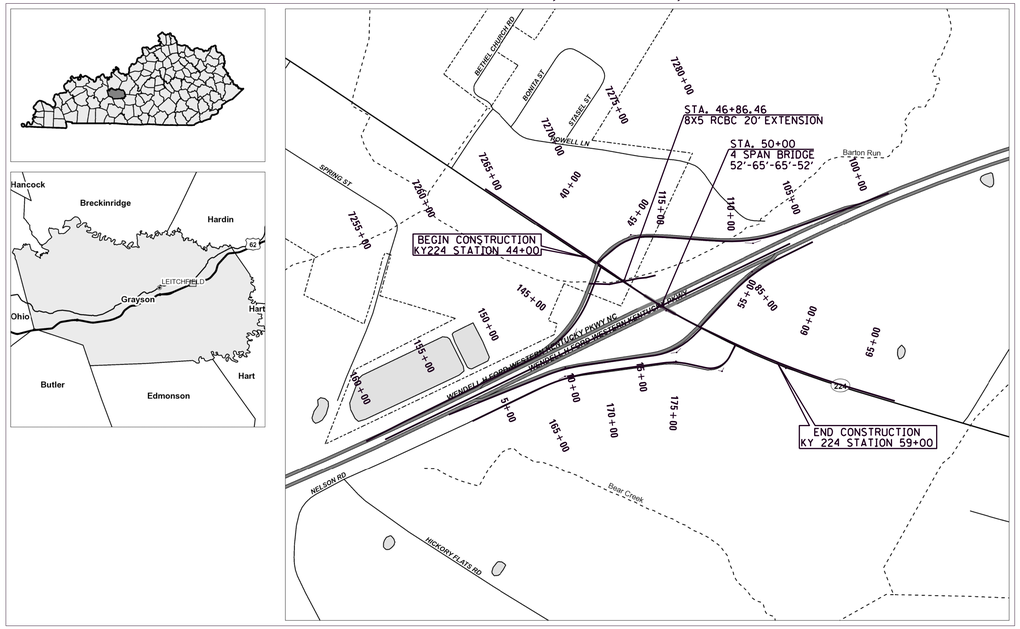
COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R1

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS

PLANS OF
PROPOSED PROJECT

GRAYSON COUNTY
KY 224 BRIDGE REPLACEMENT
FD52 043 9001 111-115
NHPP 9001 (014)
THESE PLANS ARE FOR GRADE, DRAIN, AND SURFACING



THIS PROJECT IS NOT ON THE NH SYSTEM

THE CONTROL OF ACCESS ON THIS PROJECT SHALL BE BY PERMIT

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
R1	LAYOUT SHEET
R2 - R2B	TYPICAL SECTIONS
R3 - R9	PLAN AND PROFILE SHEETS UTILITY REFERENCE SHEETS RIGHT OF WAY SUMMARY SHEETS RIGHT OF WAY STRIP MAP SHEETS
R10 - R13	DETAIL SHEETS
R14 - R25	TRAFFIC CONTROL SHEETS
R26 - R28	EROSION CONTROL SHEETS MITIGATION PLAN SHEETS
R29	COORDINATE CONTROL SHEETS SOIL PROFILE SHEETS
R30 - R31	PIPE DRAINAGE SHEETS
S1 - S24	STRUCTURE PLANS - BRIDGE OVER WK 9001 DRAWING NO. 28464
S1 - S3	STRUCTURE PLANS - CULVERT 8'X5', STA. 46+86.46
T1 - T3	TRAFFIC PLANS
U	UTILITY RELOCATION PLANS
X1 - X30	CROSS SECTION SHEETS

SHEETS NOT INCLUDED IN TOTAL SHEETS

R2A

STANDARD DRAWINGS

NUMBER

SEE PROJECT PROPOSAL FOR LIST OF ROADWAY STANDARD DRAWINGS AND APPLICABLE SEPIAS.

DESIGN CRITERIA

CLASS OF HIGHWAY	MAJOR COLLECTOR
TYPE OF TERRAIN	ROLLING
DESIGN SPEED	50 MPH
REQUIRED NPSD	425'
REQUIRED PSD	N/A
LEVEL OF SERVICE	N/A
ADT PRESENT (2020)	4050
ADT FUTURE ( )	
DHV	
D %	
T %	11.06%

GEOGRAPHIC COORDINATES

LATITUDE 37 DEGREES 29 MINUTES 21 SECONDS NORTH
LONGITUDE 86 DEGREES 12 MINUTES 32 SECONDS WEST

DESIGNED

% RESTRICTED SD
LEVEL OF SERVICE
MAX. DISTANCE W/O PASSING

LAYOUT MAP

0' 500' 1000' 2000'

SCALE 1" = 500'

KY 224

LENGTH 1,500 LIN. FT. 0.284 MILES	LENGTH LIN. FT. MILES	LENGTH LIN. FT. MILES	LENGTH LIN. FT. MILES
ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.	ADDED / DEDUCTED FOR EQUALITIES LIN. FT.
NOT INCLUDED	NOT INCLUDED	NOT INCLUDED	NOT INCLUDED
RAILROAD CROSSINGS NO. LIN. FT.	RAILROAD CROSSINGS NO. LIN. FT.	RAILROAD CROSSINGS NO. LIN. FT.	RAILROAD CROSSINGS NO. LIN. FT.
BRIDGES 239 LIN. FT.	BRIDGES LIN. FT.	BRIDGES LIN. FT.	BRIDGES LIN. FT.

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

GRAYSON

ITEM NO. 4-20001 & 4-20002
PROJECT NUMBER: NHPP 9001 (014)
FD52 043 9001 111-115
LETTING DATE: DECEMBER 8, 2022

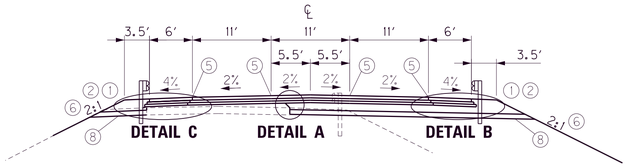
RECOMMENDED BY: ANDRE JOHANNES, PE
PROJECT MANAGER DATE:

PLAN APPROVED BY:
STATE HIGHWAY ENGINEER DATE:

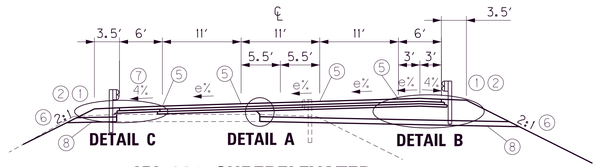
HMB Professional Engineers, Inc.
3 HMB Circle
Frankfort, KY 40601
(502) 695-9800
(502) 695-9810 FAX

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R2

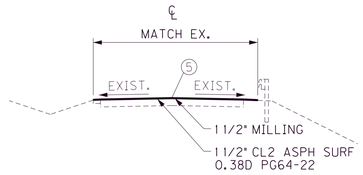
TYPICAL SECTIONS
KY 224



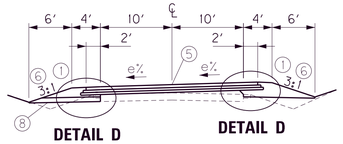
KY 224 NORMAL CROWN
STA. 45+00 TO STA. 53+00



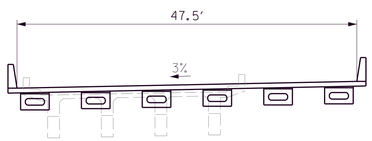
KY 224 SUPERELEVATED
STA. 45+00 TO STA 53+00



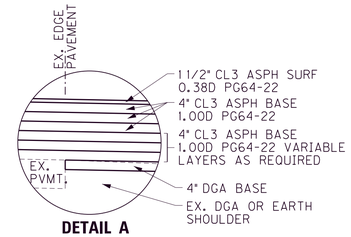
KY 224 NORMAL CROWN
STA. 44+00 TO STA. 45+00
MILL AND INLAY ONLY



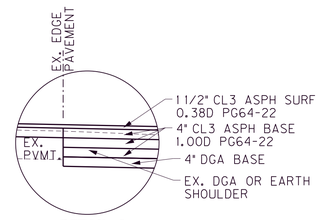
KY 224 SUPERELEVATED
STA. 53+00 TO STA 59+00



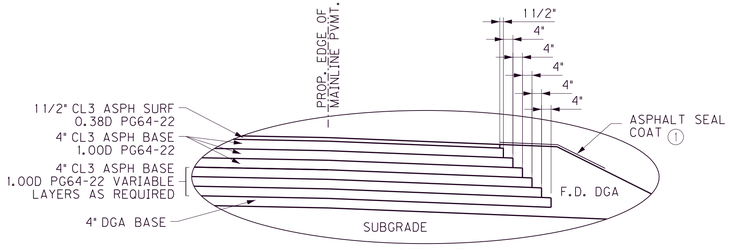
KY 224 OVER WESTERN KY PARKWAY



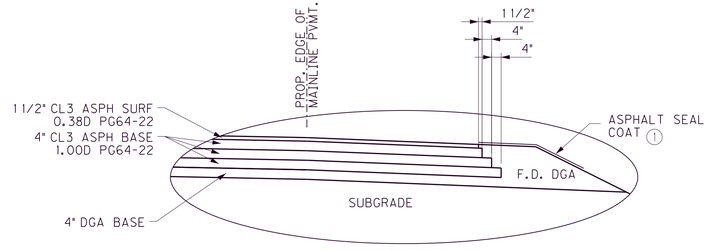
DETAIL A
(GREATER THAN 13.5" OVERLAY)



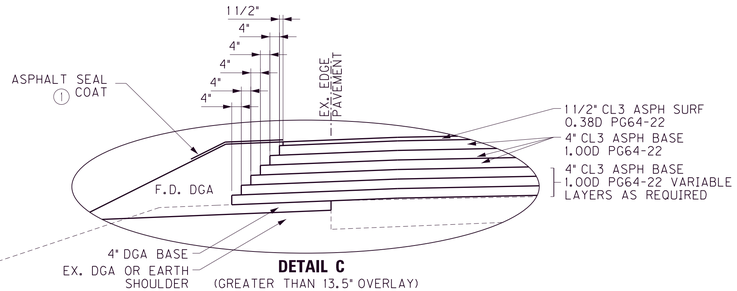
DETAIL A
(LESS THAN 13.5" OVERLAY)



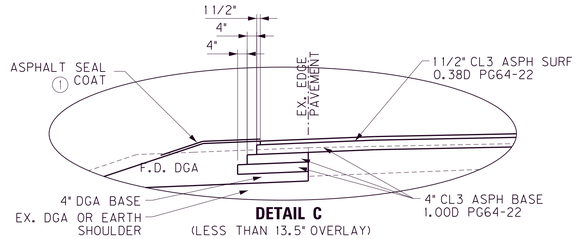
DETAIL B
(GREATER THAN 13.5" OVERLAY)



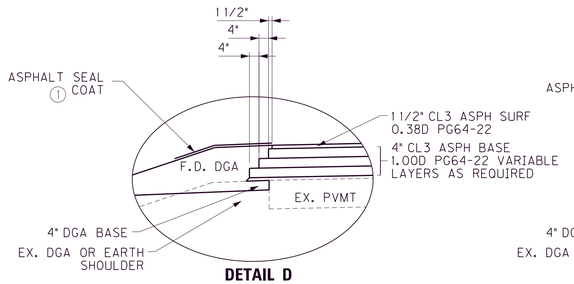
DETAIL B
(LESS THAN 13.5" OVERLAY)



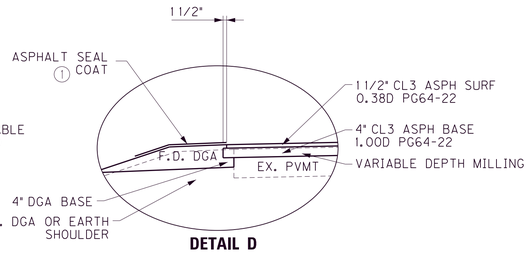
DETAIL C
(GREATER THAN 13.5" OVERLAY)



DETAIL C
(LESS THAN 13.5" OVERLAY)



DETAIL D
(GREATER THAN 5.5" OVERLAY)



DETAIL D
(LESS THAN 5.5" OVERLAY)

SURFACING SCHEDULE

KY 224 WIDENING MAINLINE AND SHOULDERS

DGA BASE.....4" DEPTH
CL3 ASPH BASE 1.00D PG64-22.....4" DEPTH
CL3 ASPH BASE 1.00D PG64-22.....4" DEPTH
CL3 ASPH BASE 1.00D PG64-22.....4" DEPTH
CL3 ASPH BASE 1.00D PG64-22.....4" LIFTS DEPTH VARIES
CL3 ASPH SURFACE 0.38D PG64-22.....1 1/2" DEPTH

KY224 MAINLINE OVERLAY

ASPHALT PAVEMENT MILLING AND TEXTURING.....0"-4" TRANSVERSE KEYS
LEVELING AND WEDGING PG76-22.....AS NEEDED
CL3 ASPH BASE 1.00D PG64-22.....4" LIFTS DEPTH VARIES
CL3 ASPH SURFACE 0.38D PG64-22.....1 1/2" DEPTH

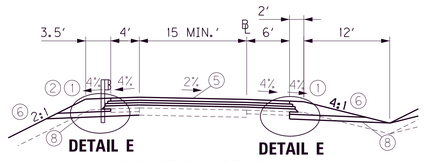
1. ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FOOT DOWN THE DITCH OR FILL SLOPE (Where Applicable). TWO APPLICATIONS OF THE FOLLOWING :
   ASPHALT SEAL COAT ..... 2.4 lbs. / S.Y.
   ASPHALT SEAL AGGREGATE ..... 20 lbs. / S.Y.
2. SHOULDER WIDENED 3.5′ WHERE GUARDRAIL IS PRESENT
3. TO BE USED AS DIRECTED BY THE ENGINEER FOR PROFILE AND CROSS SLOPE REVISION.
4. APPLY ASPHALT MATERIAL FOR TACK AT A RATE OF 0.7 LBS/SY BETWEEN EACH LAYER OF ASPH. CONCRETE.
5. JOINT ADHESIVE
6. SEE CROSS SECTIONS FOR SLOPES OUTSIDE OF SHOULDER
7. SUPERELEVATED SHOULDERS CONSTRUCT TO STANDARD SUPERELEVATION EXCEPT NOT FLATTER THAN SLOPES INDICATED ON NORMAL SHOULDERS.
8. 24" WIDE TRENCH DRAIN, SEE PLANS FOR LOCATIONS.

SCALE: 1"= N.T.S.

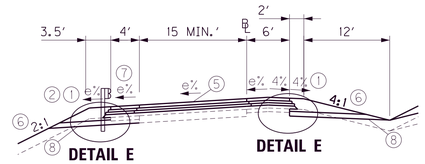
KY 224
TYPICAL SECTIONS

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R2A

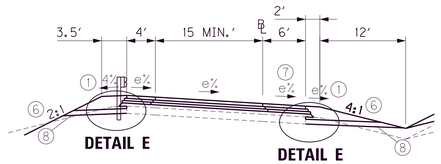
TYPICAL SECTIONS
RAMPS APPROACHES AND ENTRANCES



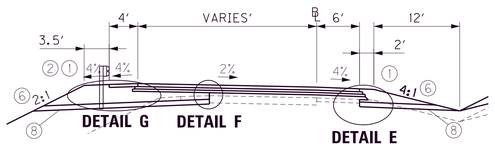
RAMPS NORMAL



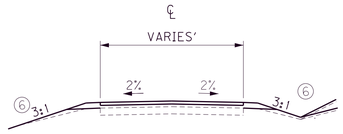
RAMPS SUPERELEVATED LEFT



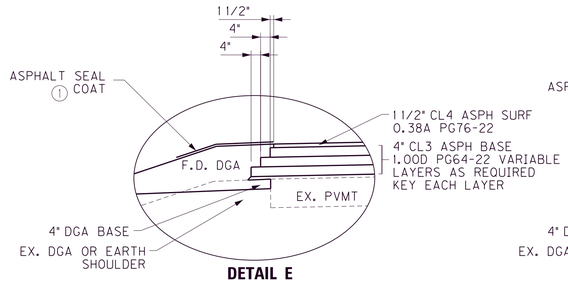
RAMPS SUPERELEVATED RIGHT



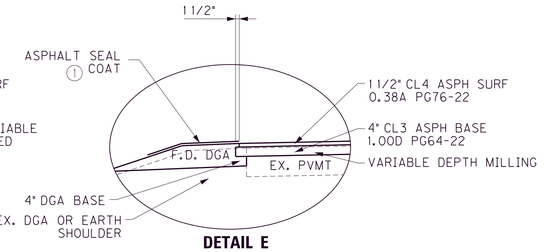
RAMPS WIDENING



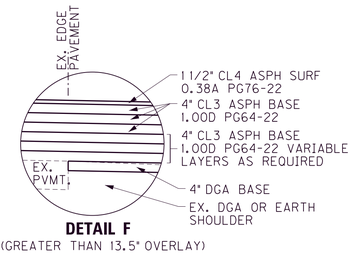
ENTRANCES



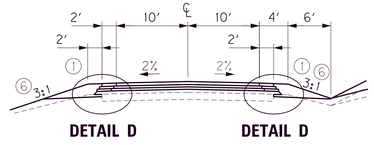
DETAIL E
(GREATER THAN 5.5" OVERLAY)



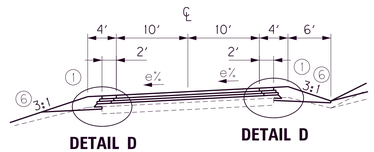
DETAIL E
(LESS THAN 5.5" OVERLAY)



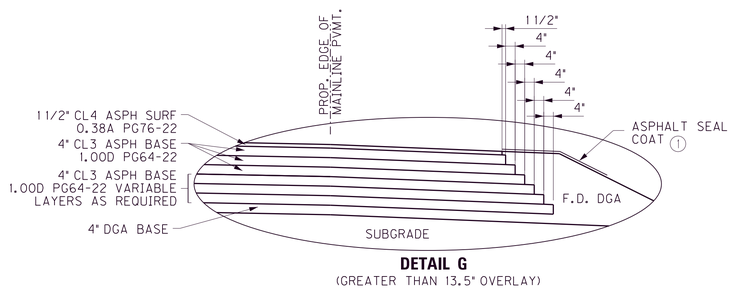
DETAIL F
(GREATER THAN 13.5" OVERLAY)



HICKORY FLATS ROAD NORMAL CROWN



HICKORY FLATS ROAD SUPERELEVATED



DETAIL G
(GREATER THAN 13.5" OVERLAY)

1. ASPHALT SEAL REQUIRED FROM OUTSIDE EDGE OF PAVED SHOULDER TO A POINT 2 FOOT DOWN THE DITCH OR FILL SLOPE (Where Applicable). TWO APPLICATIONS OF THE FOLLOWING :
   ASPHALT SEAL COAT ..... 2.4 lbs. / S.Y.
   ASPHALT SEAL AGGREGATE ..... 20 lbs. / S.Y.
2. SHOULDER WIDENED 3.5' WHERE GUARDRAIL IS PRESENT
3. TO BE USED AS DIRECTED BY THE ENGINEER FOR PROFILE AND CROSS SLOPE REVISION.
4. APPLY ASPHALT MATERIAL FOR TACK AT A RATE OF 0.7 LBS/SY BETWEEN EACH LAYER OF ASPH. CONCRETE.
5. JOINT ADHESIVE
6. SEE CROSS SECTIONS FOR SLOPES OUTSIDE OF SHOULDER
7. SUPERELEVATED SHOULDERS CONSTRUCT TO STANDARD SUPERELEVATION EXCEPT NOT FLATTER THAN SLOPES INDICATED ON NORMAL SHOULDERS.
8. 24" WIDE TRENCH DRAIN, SEE PLANS FOR LOCATIONS.

SURFACING SCHEDULE

RAMP TRAFFIC LANES AND SHOULDER

ASPHALT PAVEMENT MILLING AND TEXTURING.....11/2" DEPTH
ASPHALT PAVEMENT MILLING AND TEXTURING.....0"-3" TRANSVERSE KEYS
LEVELING AND WEDGING PG76-22.....AS NEEDED
CL3 ASPH BASE 1.00D PG64-22.....4" LIFTS DEPTH VARIES
CL3 ASPH BASE 1.00D PG76-22.....4" DEPTH
CL3 ASPH SURFACE 0.38A PG76-22.....11/2" DEPTH

RAMP WIDENING

DGA BASE.....4" LIFTS DEPTH VARIES
CL3 ASPH BASE 1.00D PG64-22.....4" DEPTH
CL3 ASPH BASE 1.00D PG64-22.....4" DEPTH
CL3 ASPH BASE 1.00D PG76-22.....4" DEPTH
CL3 ASPH SURFACE 0.38A PG76-22.....11/2" DEPTH

HICKORY FLATS MAINLINE AND SHOULDER

ASPHALT PAVEMENT MILLING AND TEXTURING.....0"-3" TRANSVERSE KEYS
LEVELING AND WEDGING PG64-22.....AS NEEDED
CL2 ASPH BASE 1.00D PG64-22.....4" LIFTS DEPTH VARIES
CL2 ASPH SURFACE 0.38D PG64-22.....11/2" DEPTH

ENTRANCES

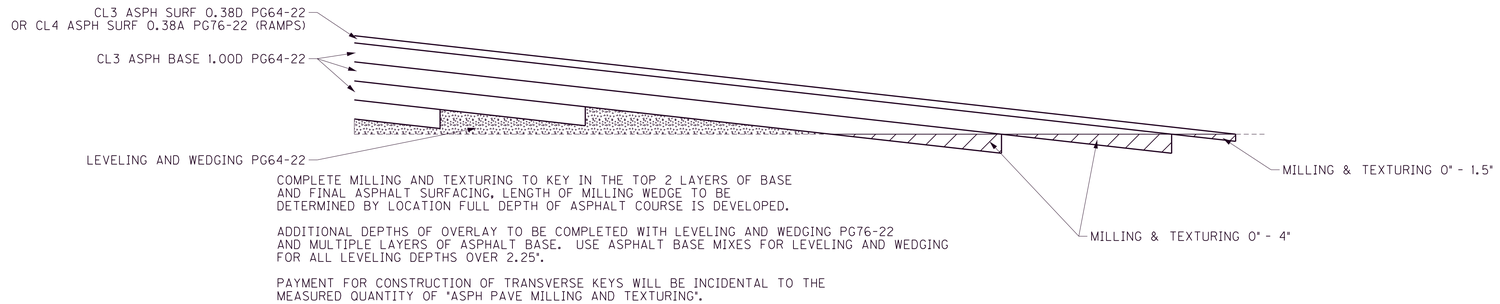
DGA BASE.....4" DEPTH
CEM CONC ENT PAVEMENT - 8 INCH.....8" DEPTH
OR
LEVELING AND WEDGING PG76-22.....VARIABLE DEPTH
CL3 ASPH SURFACE 0.38D PG64-22.....11/2" DEPTH

SCALE: 1"= N.T.S.

KY 224
TYPICAL SECTIONS
RAMPS, APPROACHES, & ENTRANCES

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R2B

TYPICAL SECTIONS
DETAILS

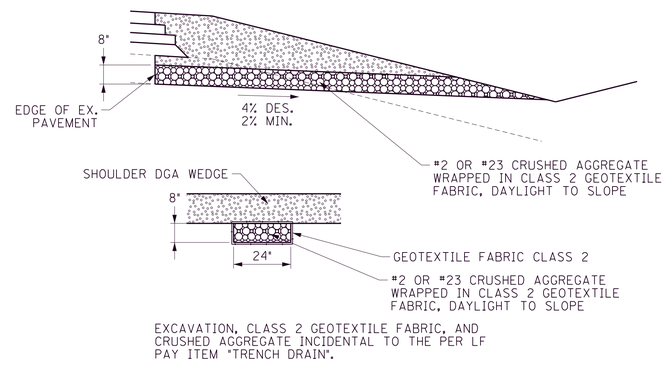


COMPLETE MILLING AND TEXTURING TO KEY IN THE TOP 2 LAYERS OF BASE AND FINAL ASPHALT SURFACING, LENGTH OF MILLING WEDGE TO BE DETERMINED BY LOCATION FULL DEPTH OF ASPHALT COURSE IS DEVELOPED.

ADDITIONAL DEPTHS OF OVERLAY TO BE COMPLETED WITH LEVELING AND WEDGING PG76-22 AND MULTIPLE LAYERS OF ASPHALT BASE. USE ASPHALT BASE MIXES FOR LEVELING AND WEDGING FOR ALL LEVELING DEPTHS OVER 2.25".

PAYMENT FOR CONSTRUCTION OF TRANSVERSE KEYS WILL BE INCIDENTAL TO THE MEASURED QUANTITY OF "ASPH PAVE MILLING AND TEXTURING".

MILLING & TEXTURING FOR TRANSVERSE KEY OF PAVEMENT LAYERS DETAIL



EXCAVATION, CLASS 2 GEOTEXTILE FABRIC, AND CRUSHED AGGREGATE INCIDENTAL TO THE PER LF PAY ITEM "TRENCH DRAIN".

TRENCH DRAIN DETAIL

SCALE: 1"= N.T.S.

KY 224
TYPICAL SECTIONS
DETAILS

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R3

CONVENTIONAL SIGNS

SURVEY LINE
GRADE LINE
GROUND LINE
COUNTY LINE
CORPORATE LIMITS
EXIST. PROPERTY LINE
EXIST. RIGHT OF WAY & PROPERTY LINE
PROPOSED RIGHT OF WAY
RIGHT OF WAY MONUMENT
BENCH MARK
EXISTING R/W MARKER
RIGHT OF WAY MONUMENT EXISTING/PROPOSED
UTILITY TEST HOLE
EXISTING ROAD
RAILROAD
FENCE (CONTROLLED ACCESS)
FENCE (EXCEPT STONE AND HEDGE)
TREE LINE
TREES
PIPE CULVERT
CULVERT
BRIDGE
BUILDINGS
GUARDRAIL

	EXISTING	PROPOSED
LIGHTING POLE		
POWER POLE		
JOINT POWER & TELEPHONE POLE		
TELEPHONE & TELEGRAPH POLE		
ANCHOR, POWER OR TELEPHONE		
STUB POWER		
STUB TELEPHONE		
WATER MAIN	WM	6" WM
GAS MAIN	GM	GM
TELEPHONE DUCT	T	T
ELECTRIC DUCT	E	E
DIRECT BURIAL TV CABLE	TV	TV
SANITARY SEWER (WITH MANHOLE)	SAN	SAN
STORM SEWER (WITH MANHOLE)	STORM	STORM
DIRECT BURIAL ELECTRIC CABLE	E	E
DIRECT BURIAL TELEPHONE CABLE	T	T
OVERHEAD WIRE		
TRAFFIC LIGHTS		
ELECTRIC MANHOLE	EMH	EMH
TELEPHONE MANHOLE	TMH	TMH

STONE FENCE
HEDGE FENCE
SWAMP OR MARSH
SPRINGS
SINKHOLE
QUARRY SITE
BLUE LINE STREAM
INTERMITTENT STREAM OR DITCH
LAKES OR PONDS
REGULATED FLOODWAY
NORTH POINT

GUARDRAIL (KY 224)							
RT/LT	BEGINNING STATION	BEGINNING TREATMENT	ENDING STATION	ENDING TREATMENT	PAY LENGTH	GUARDRAIL TYPE	REMOVE GUARDRAIL
LT	45+31	END TREAT TY. 2A	48+89	SEE BRIDGE PLANS	350'	STEEL W BEAM	375'
RT	45+40	TIE TO EXISTING	48+60	SEE BRIDGE PLANS	375	STEEL W BEAM	400'
RT	51+09	SEE BRIDGE PLANS	52+00	MATCH LINE	75'	STEEL W BEAM	100'
LT	51+43	SEE BRIDGE PLANS	52+00	MATCH LINE	50'	STEEL W BEAM	62.5'
GUARDRAIL (WKY PARKWAY)							
RT/LT	BEGINNING STATION	BEGINNING TREATMENT	ENDING STATION	ENDING TREATMENT	PAY LENGTH	GUARDRAIL TYPE	REMOVE GUARDRAIL
LT	7271+64	THRIE BM GR TR TL3	7272+14	TIE TO EXISTING	37.5'	STEEL W BEAM	100'
RT	7271+16	TIE TO EXISTING	7271+66	THRIE BM GR TR TL3	37.5'	STEEL W BEAM	75'

WINDSTREAM COMMUNICATIONS LLC
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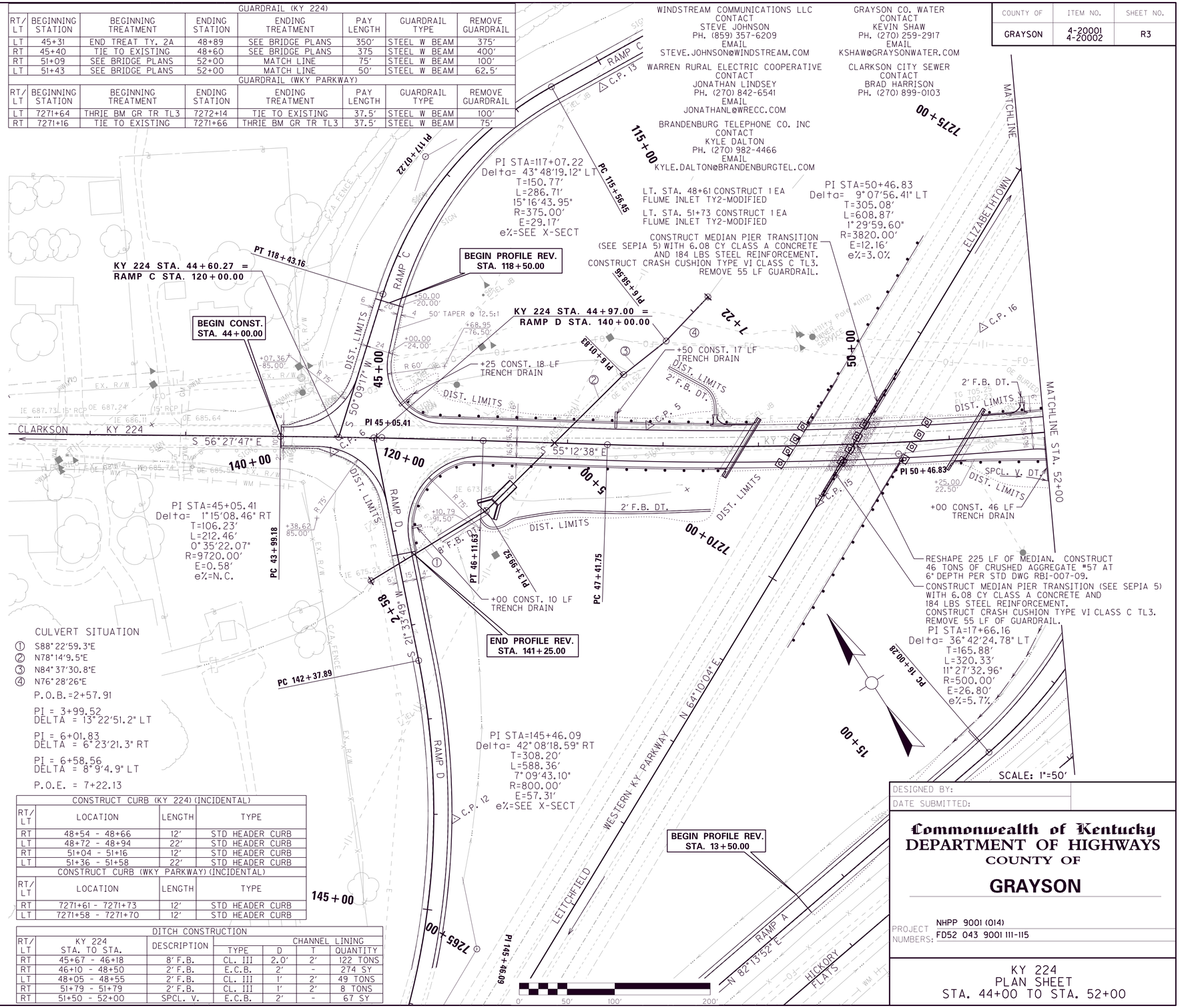
EMAIL
JONATHANL@WRECC.COM

BRANDENBURG TELEPHONE CO. INC
CONTACT
KYLE DALTON
PH. (270) 982-4466
EMAIL
KYLE.DALTON@BRANDENBURGTEL.COM

GRAYSON CO. WATER
CONTACT
KEVIN SHAW
PH. (270) 259-2917
EMAIL
KSHAW@GRAYSONWATER.COM

CLARKSON CITY SEWER
CONTACT
BRAD HARRISON
PH. (270) 899-0103



CULVERT SITUATION
① S88°22'59.3"E
② N78°14'9.5"E
③ N84°37'30.8"E
④ N76°28'26"E
P.O.B.=2+57.91
PI = 3+99.52
DELTA = 13°22'51.2" LT
PI = 6+01.83
DELTA = 6°23'21.3" RT
PI = 6+58.56
DELTA = 8°9'4.9" LT
P.O.E. = 7+22.13

CONSTRUCT CURB (KY 224) (INCIDENTAL)			
RT/LT	LOCATION	LENGTH	TYPE
RT	48+54 - 48+66	12'	STD HEADER CURB
LT	48+72 - 48+94	22'	STD HEADER CURB
RT	51+04 - 51+16	12'	STD HEADER CURB
LT	51+36 - 51+58	22'	STD HEADER CURB
CONSTRUCT CURB (WKY PARKWAY) (INCIDENTAL)			
RT/LT	LOCATION	LENGTH	TYPE
RT	7271+61 - 7271+73	12'	STD HEADER CURB
LT	7271+58 - 7271+70	12'	STD HEADER CURB

DITCH CONSTRUCTION						
RT/LT	KY 224 STA. TO STA.	DESCRIPTION	CHANNEL LINING TYPE	D	T	QUANTITY
RT	45+67 - 46+18	8' F.B.	CL. III	2.0'	2'	122 TONS
RT	46+10 - 48+50	2' F.B.	E.C.B.	2'	-	274 SY
LT	48+05 - 48+55	2' F.B.	CL. III	1'	2'	49 TONS
RT	51+79 - 51+79	2' F.B.	CL. III	1'	2'	8 TONS
RT	51+50 - 52+00	SPCL. V.	E.C.B.	2'	-	67 SY

DESIGNED BY:
DATE SUBMITTED:

Commonwealth of Kentucky
DEPARTMENT OF HIGHWAYS
COUNTY OF

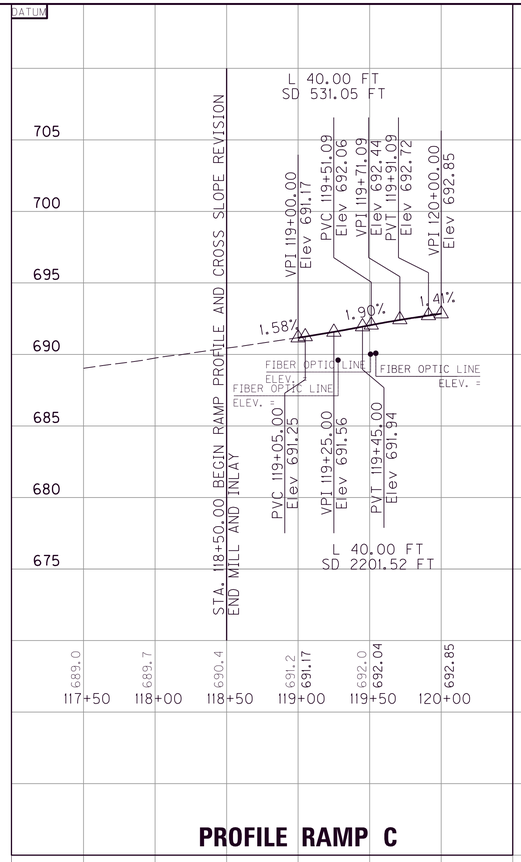
GRAYSON

PROJECT NUMBERS: NHPP 9001 (014)
FD52 043 9001 111-115

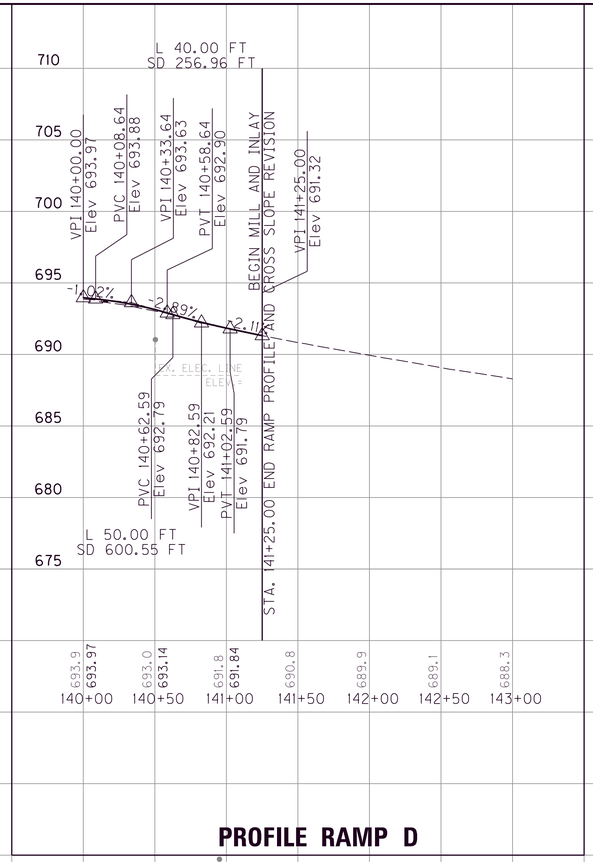
KY 224
PLAN SHEET
STA. 44+00 TO STA. 52+00

FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\R003.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

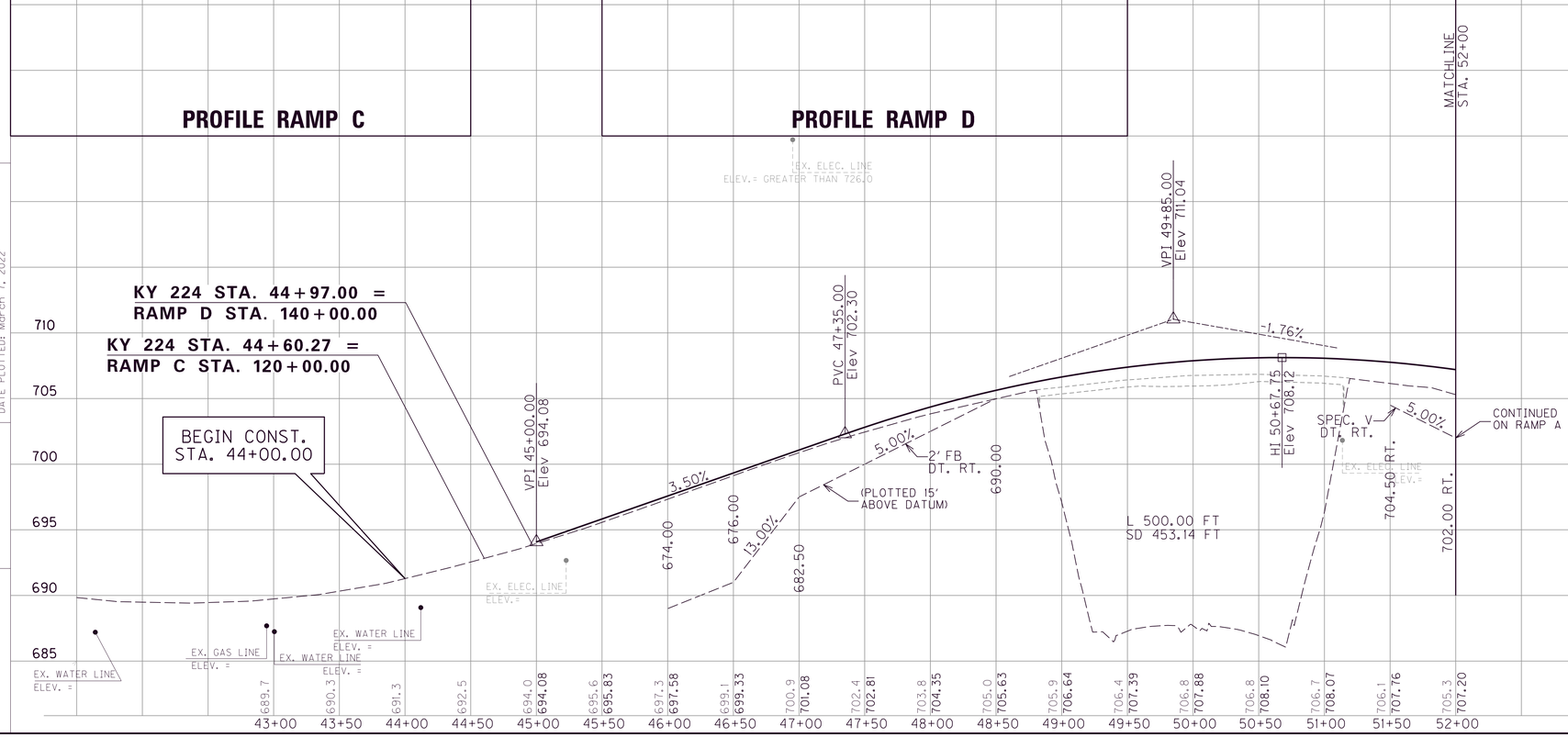
COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R4



PROFILE RAMP C



PROFILE RAMP D



SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

KY 224
PROFILE
STA. 44+00 TO STA. 52+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R5

PI STA=85+30.21
Delta= 20°35'58.66" RT
T=215.23'
L=425.81'
4°50'15.87"
R=1184.35'
E=19.40'
e%=6.2%

PI STA=59+74.14
Delta= 8°56'05.63" LT
T=447.66'
L=893.51'
0°59'59.94"
R=5729.68'
E=17.46'
e%=2.2%

PI STA=17+66.16
Delta= 36°42'24.78" LT
T=165.88'
L=320.33'
11°27'32.96"
R=500.00'
E=26.80'
e%=5.7%

PI STA=174+93.75
Delta= 19°56'28.68" RT
T=87.90'
L=174.02'
11°27'32.96"
R=500.00'
E=7.67'

PI STA=178+21.78
Delta= 75°08'44.54" LT
T=115.40'
L=196.73'
38°11'49.87"
R=150.00'
E=39.26'
e%=4.0%

KY 224 STA. 53+10.52 = RAMP B STA. 80+00.00

KY 224 STA. 53+21.56 = RAMP A STA. 20+00.00

KY 224 STA. 55+86.76 = HICKORY FLATS RD. STA. 180+00.00

BEGIN CONST. STA. 176+25.00

END CONST. STA. 59+00.00

+50 CONST. 22 LF TRENCH DRAIN

KENNETH A LASHLEY

SIMMY INC

JOSH & TRACI STANTON

VINETTA K DAVIS

CHARLES K & MELANIE A CRAWFORD

KENNETH D ROOF

BILL & PEGGY EDWARDS

MILLERSTOWN

HICKORY FLATS

CONSTRUCT ENTRANCE (KY 224)

RT/ LT	LOCATION	WIDTH	TYPE	S.Y. ASPHALT	S.Y. CONCRETE	ENTRANCE PIPE
LT	55+59	58'	COMMERCIAL		93	75' - 15"
RT	56+96	12'	RESIDENTIAL	43		NONE
RT	58+38	22'	RESIDENTIAL	36		NONE
LT	58+49	46'	RESIDENTIAL	21		D.N.D.

GUARDRAIL

RT/ LT	BEGINNING STATION	BEGINNING TREATMENT	ENDING STATION	ENDING TREATMENT	PAY LENGTH	GUARDRAIL TYPE	REMOVE GUARDRAIL
RT	52+00	MATCH LINE	52+54	END TREAT TY 4A	137.5'	STEEL W BEAM	162.5'
LT	52+00	MATCH LINE	53+18	END TREAT TY 2A	162.5'	STEEL W BEAM	187.5'

DITCH CONSTRUCTION

RT/ LT	KY 224 STA. TO STA.	DESCRIPTION	CHANNEL LINING TYPE	D	T	QUANTITY
RT	52+00 - 52+24	SPCL. V.	E.C.B.	2'	-	37 SY
LT	52+50 - 52+69	SPCL. V.	E.C.B.	2'	-	31 SY
RT	53+46 - 55+54	SPCL. V	E.C.B.	2	-	299 SY
LT	53+79 - 59+50	SPCL. V	E.C.B.	2	-	377 SY

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
PLAN SHEET
STA. 52+00 TO STA. 59+00

FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\ROOS.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R6

SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

KY 224
PROFILE
STA. 52+00 TO STA. 59+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R7

PI STA=50+46.83
Delta= 9°07'56.41" LT
T=305.08'
L=608.87'
1°29'59.60"
R=3820.00'
E=12.16'
e%=3.0%

PI STA=17+66.16
Delta= 36°42'24.78" LT
T=165.88'
L=320.33'
11°27'32.96"
R=500.00'
E=26.80'
e%=5.7%

PI STA=174+93.75
Delta= 19°56'28.68" RT
T=87.90'
L=174.02'
11°27'32.96"
R=500.00'
E=7.67'

PI STA=178+21.78
Delta= 75°08'44.54" LT
T=115.40'
L=196.73'
38°11'49.87"
R=150.00'
E=39.26'
e%=4.0%

PI STA=85+30.21
Delta= 20°35'58.66" RT
T=215.23'
L=425.81'
4°50'15.87"
R=1184.35'
E=19.40'
e%=6.2%

PI STA=59+74.14
Delta= 8°56'05.63" LT
T=447.66'
L=893.51'
0°59'59.94"
R=5729.68'
E=17.46'
e%=2.2%

CONSTRUCT ENTRANCE (HICKORY FLATS)						
RT/ LT	LOCATION	WIDTH	TYPE	S.Y. ASPHALT	S.Y. CONCRETE	ENTRANCE PIPE
RT	176+90	12'	RESIDENTIAL	25	-	D.N.D.
LT	177+20	12'	SPCL. USE	10		D.N.D.
RT	178+02	12'	RESIDENTIAL	46		NONE

DITCH CONSTRUCTION						
RT/ LT	RAMP A STA. TO STA.	DESCRIPTION	CHANNEL LINING			
			TYPE	D	T	QUANTITY
LT	15+65 - 19+04	SPCL. V.	E.C.B.	2'	-	420 SY
RT	17+50 - 19+61	SPCL. V.	E.C.B.	2'	-	296 SY

DITCH CONSTRUCTION						
RT/ LT	RAMP B STA. TO STA.	DESCRIPTION	CHANNEL LINING			
			TYPE	D	T	QUANTITY
LT	80+39 -82+41	SPCL. V.	E.C.B.	2'	-	272 SY
RT	80+75 - 84+17	SPCL. V.	E.C.B.	2'	-	461 SY

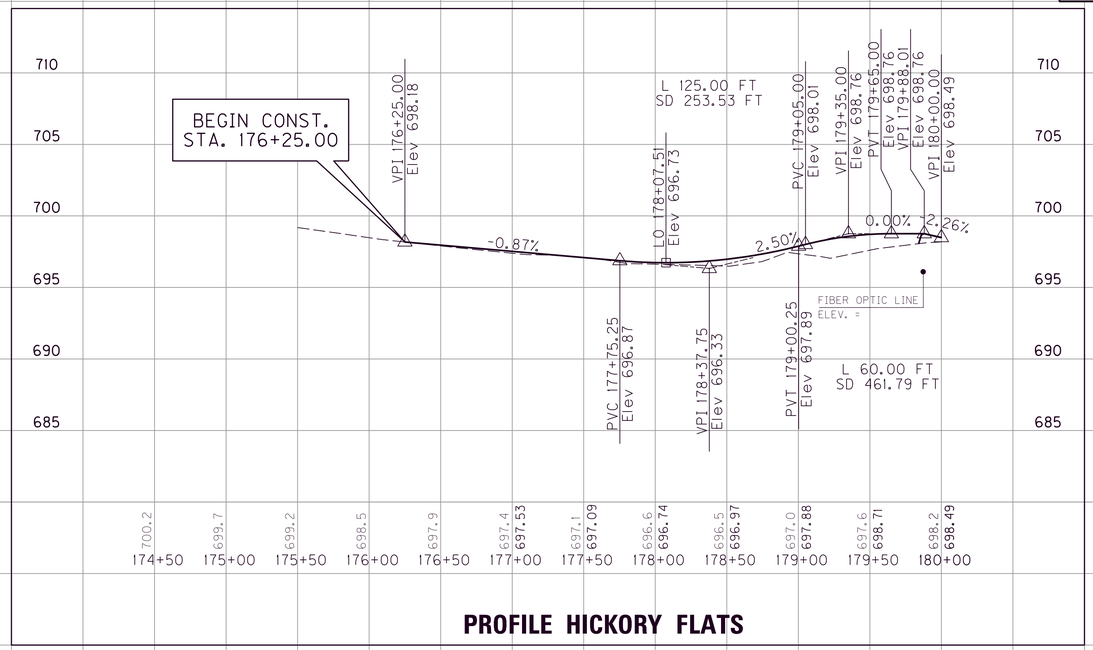
SCALE: 1"=50'

KY 224
APPROACHES AND RAMPS
PLAN SHEET

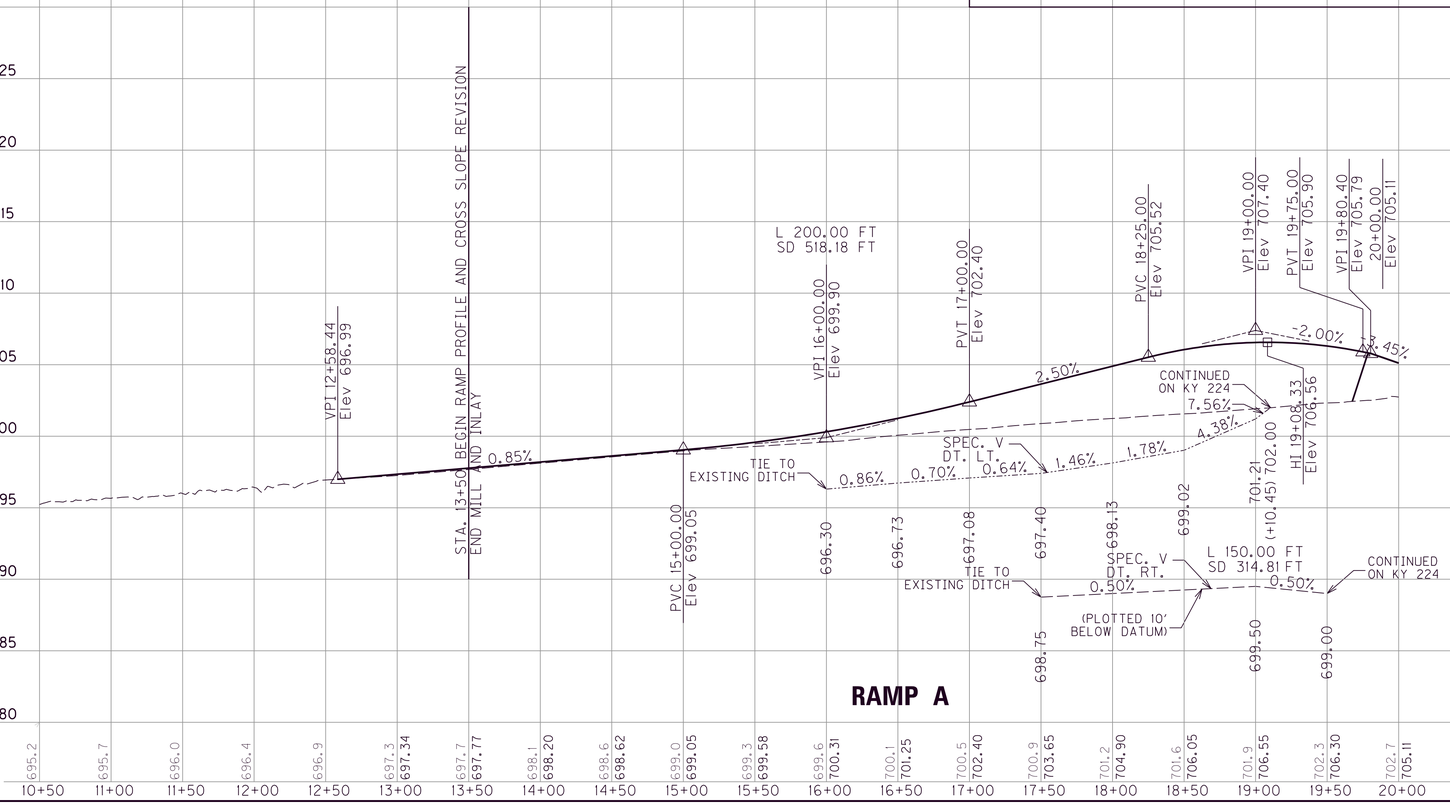
FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\ROO7.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R8

DATUM



PROFILE HICKORY FLATS



RAMP A

SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

RAMP A & HICKORY FLATS
PROFILE

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R9

FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\PROFILES\R009 PROFILE.DGN

USER: phoward
DATE PLOTTED: March 7, 2022

E-SHEET NAME:

MicroStation v8.11.9.459

RAMP B
PROFILE

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R010

51+00

52+00

53+00

54+00

RAMP B

KY 224

KY 224

80+00

20+00

19+00

RAMP A

20′ 20′ 20′ 20′ 20′ 15.83′

16.5′

707.88 +85.65

707.70

707.39

707.06

706.71

706.35

706.00

705.72

707.97 STA +85.65 +19.5′

707.69 STA +85.65 +26.55′

706.86 STA +43.37 -81.24′

707.22 -15.30′

704.36 STA +70.55 +10.00′

704.42 STA +70.55 +19.5′

705.80 1.01%

705.06 STA +94.95 +27.88′

705.66 +13.83′

704.82

705.42

706.10 +3.74′

705.86

706.44 24′ 1.23% 706.16 6′ 4% 20′

1.08%

706.67 24′ 1.08% 706.41 6′ 4% 706.17 20′

706.63 -45.96′

706.47

0.20%

706.59 24′ 0.20% 706.54 6′ 4% 706.30 20′

706.32 -33.19′

706.16

0.69%

706.39 24′ 0.69% 706.55 6′ 4% 706.31 20′

706.03 -26.06′

705.90

706.06 24′ 1.58% 706.44 6′ 4% 706.20 20′

705.67 24′ 2.33% 706.23 6′ 4% 705.99 20′

4%

0′ 10′ 20′ 40′

SCALE: 1"=10′

PAVEMENT DEVELOPMENT

RAMP A

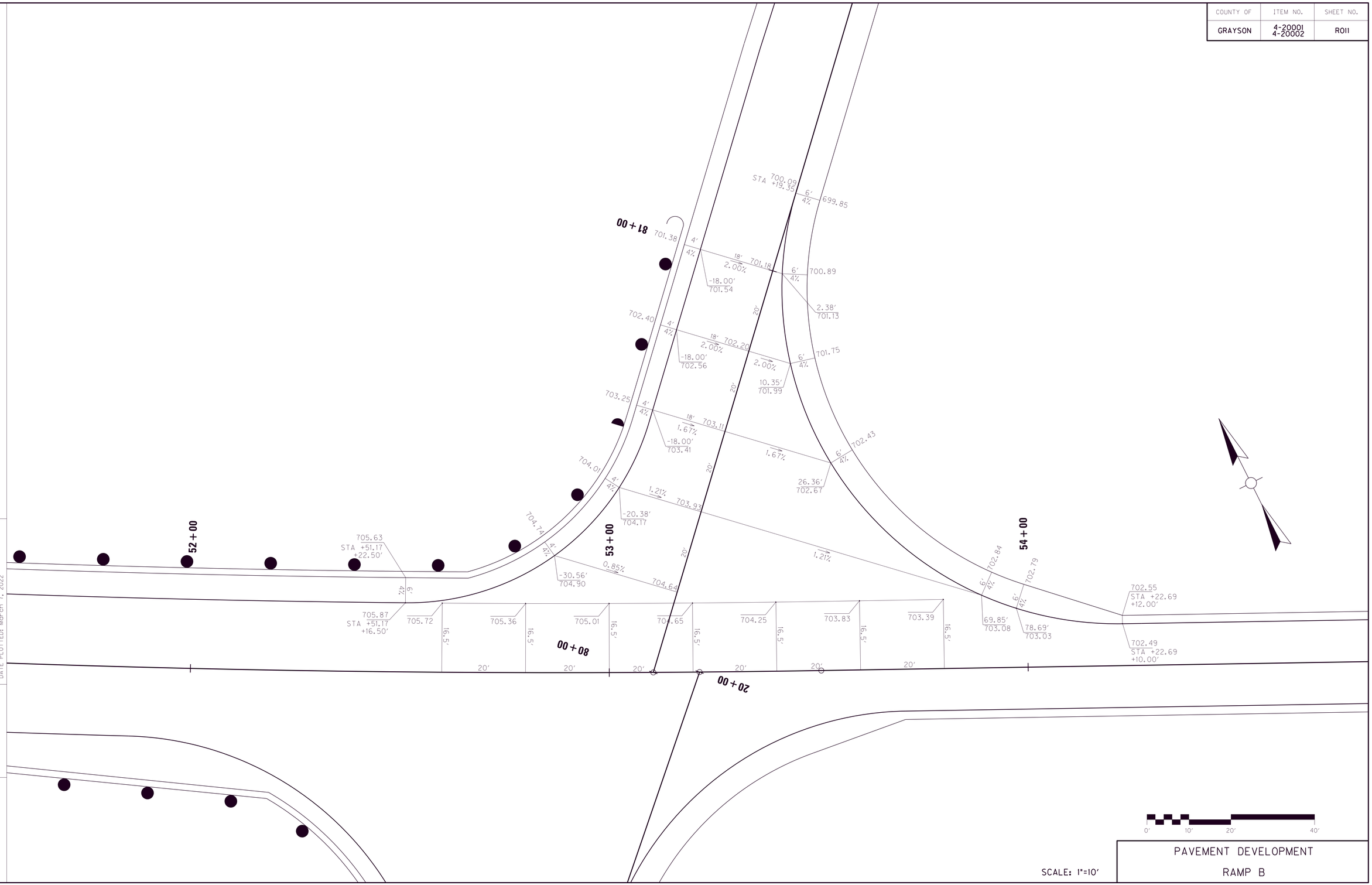
FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\PAVEMENT DEVELOPMENT\R010 PAVEMENT DEVELOPMENT 1.DGN

USER: phoward
DATE PLOTTED: March 7, 2022

E-SHEET NAME:

MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	RO11



SCALE: 1"=10'

PAVEMENT DEVELOPMENT

RAMP B

FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\PAVEMENT DEVELOPMENT\RO11 PAVEMENT DEVELOPMENT 2.DGN

USER: phoward
DATE PLOTTED: March 7, 2022

E-SHEET NAME:

MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R012

KY 224

RAMP C

RAMP D

118+00

119+00

45+00

46+00

140+00

141+00

120+00

697.63
STA +10.79

697.39

697.25

696.55

696.37

696.61
-80.94'

696.16
STA +68.95

695.92

694.77

694.09

694.25
-38.42'

692.86

692.34
-16.41'

692.18

691.83

693.02
-23.38'

691.99
STA +14.45

694.93
-70.92'

695.85

695.15

694.45

694.31
16.50'

693.98

693.40

692.76

692.29

691.84

693.38

692.31

690.93

691.09
-24'

691.67

693.04
-42.60'

691.83
-28.71'

691.73

691.17

691.49

691.85

692.41

692.75

692.22

MILL & INLAY ONLY

MILL & INLAY ONLY

0' 10' 20' 40'

SCALE: 1"=10'

PAVEMENT DEVELOPMENT
RAMP C AND RAMP D

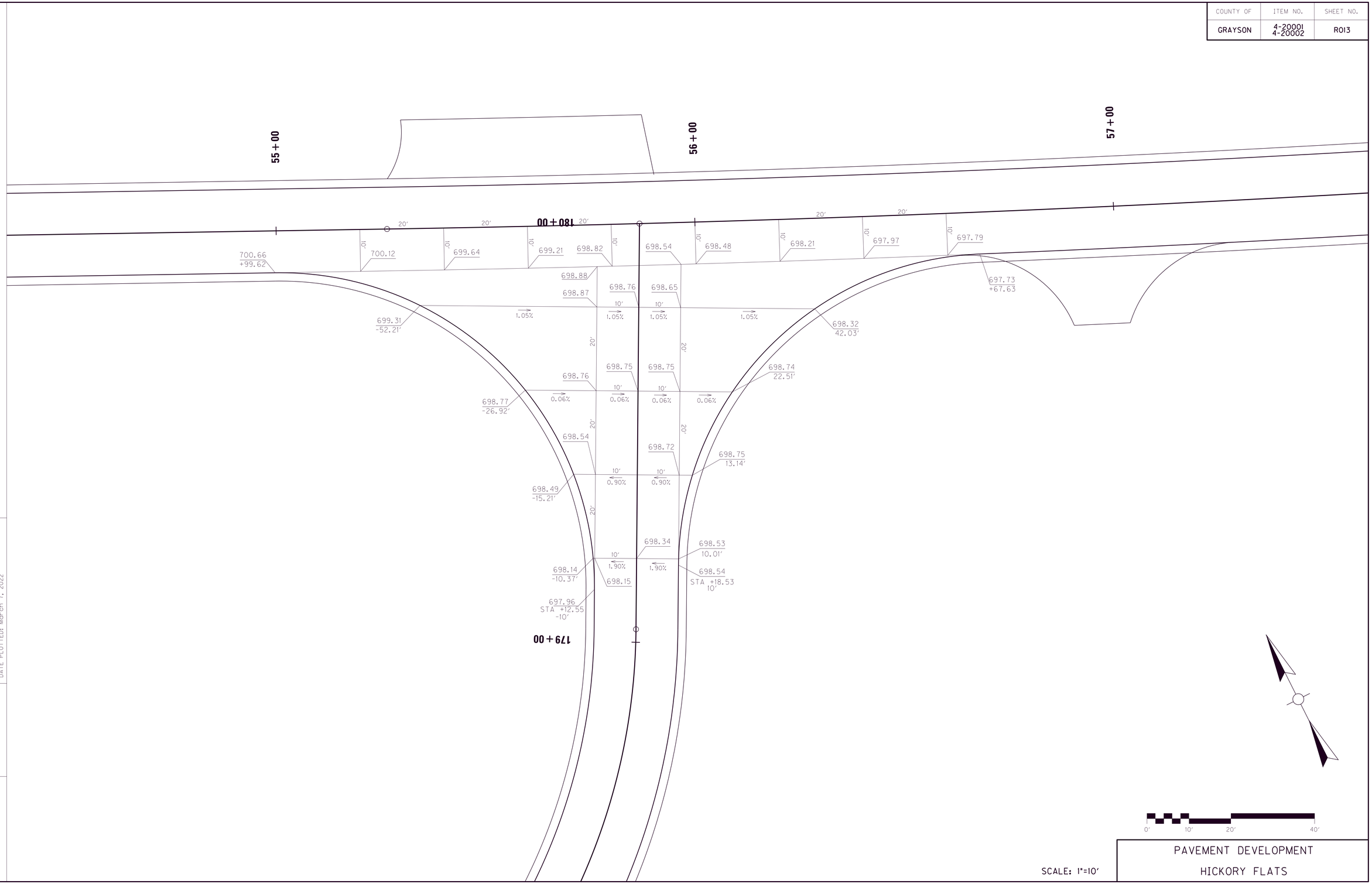
MicroStation v8.11.9.459

E-SHEET NAME:

USER: phoward
DATE PLOTTED: March 7, 2022

FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\PAVEMENT DEVELOPMENT\R012 PAVEMENT DEVELOPMENT 3.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R013



SCALE: 1"=10'

PAVEMENT DEVELOPMENT
HICKORY FLATS

MicroStation v8.11.9.459
E-SHEET NAME:
USER: phoward
DATE PLOTTED: March 7, 2022
FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\PAVEMENT DEVELOPMENT\R013 PAVEMENT DEVELOPMENT 4.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R14

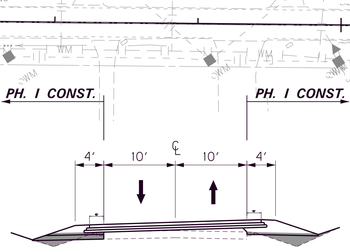
SEE PROJECT PROPOSAL FOR GENERAL TRAFFIC CONTROL NOTES.

PHASE I MAINTENACE OF TRAFFIC NOTES

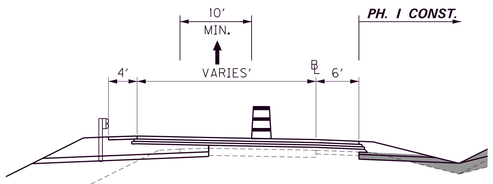
1. KY 224 STATION 53+50 TO STATION 59+00 - USING FLAGGERS AND ALTERNATING LANE CLOSURES, PERFORM ANY REQUIRED EXCAVATION OR EMBANKMENT, EMBANKMENT UNDERCUT AND CUT PROPOSED DITCHES. REMOVE THE EXISTING SHOULDER TO THE PROPOSED SUBGRADE AND PLACE A DGA WEDGE MATCHING THE GRADE OF THE EXISTING MAINLINE PAVEMENT.

2. HICKORY FLATS ROAD ENTIRE LENGTH - USING FLAGGERS AND ALTERNATING LANE CLOSURES, PERFORM ANY REQUIRED EXCAVATION OR EMBANKMENT, EMBANKMENT UNDERCUT AND CUT PROPOSED DITCHES. REMOVE THE EXISTING SHOULDER TO THE PROPOSED SUBGRADE AND PLACE A DGA WEDGE MATCHING THE GRADE OF THE EXISTING MAINLINE PAVEMENT.

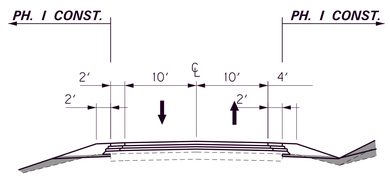
3. RAMPS A & B ENTIRE LENGTH - USING TRAFFIC DRUMS SHIFT TRAFFIC TO THE LEFT SIDE OF THE RAMP AND PERFORM ANY REQUIRED EXCAVATION OR EMBANKMENT, EMBANKMENT UNDERCUT AND CUT PROPOSED DITCHES. REMOVE THE EXISTING SHOULDER TO THE PROPOSED SUBGRADE AND PLACE A DGA WEDGE MATCHING THE GRADE OF THE EXISTING MAINLINE PAVEMENT.



KY 224
STA. 53+50 TO STA 59+00



RAMPS A & B



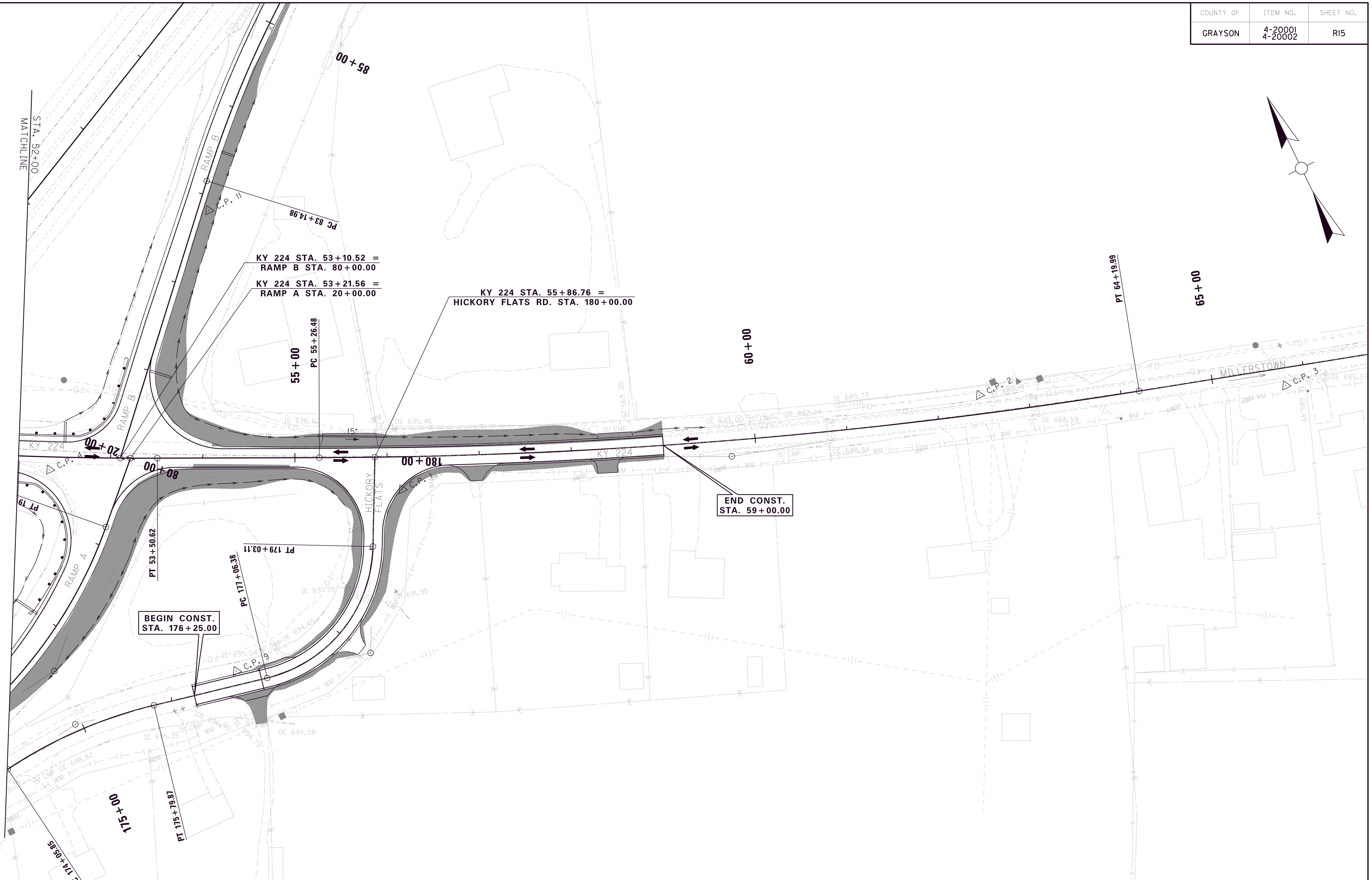
HICKORY FLATS ROAD

LEGEND

CONSTRUCT THIS PHASE

KY 224
MAINTENANCE OF TRAFFIC PHASE I
STA. 44+00 TO STA. 52+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R15



STA. 52+00
MATCHLINE
RAMP B
C.P. 11
PC 83+14.98
85+00
KY 224 STA. 53+10.52 =
RAMP B STA. 80+00.00
KY 224 STA. 53+21.56 =
RAMP A STA. 20+00.00
KY 224 STA. 55+86.76 =
HICKORY FLATS RD. STA. 180+00.00
PC 55+26.48
55+00
60+00
PT 64+19.99
65+00
C.P. 2
C.P. 3
MILLERSTOWN
KY 224
20+00
80+00
180+00
C.P. A
PT 19
RAMP A
HICKORY FLATS
END CONST.
STA. 59+00.00
PT 53+50.62
PT 179+03.11
PC 177+06.38
BEGIN CONST.
STA. 176+25.00
C.P. 9
175+00
PT 175+79.87
PC 174+05.85

LEGEND

CONSTRUCT THIS PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
MAINTENANCE OF TRAFFIC PHASE I
STA. 52+00 TO STA. 59+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R16

BEGIN PF REV.
STA. 13+50.00

KY 224 STA. 53+10.52 =
RAMP B STA. 80+00.00

END PROFILE REV.
STA. 86+00.00

KY 224 STA. 53+21.56 =
RAMP A STA. 20+00.00

KY 224 STA. 55+86.76 =
HICKORY FLATS RD. STA. 180+00.00

BEGIN CONST.
STA. 176+25.00

END CONST.
STA. 59+00.00

LEITCHFIELD

WESTERN KY PARKWAY

ELIZABETHTOWN

HICKORY FLATS

RAMP A

RAMP B

7270+00
50+00
7275+00
110+00
7280+00
7281+60
15+00
PC 16+00.28
PT 19+20.51
80+00
PT 53+50.62
85+00
PT 87+40.79
PC 83+14.98
55+00
PC 55+26.48
PC 174+05.85
175+00
PT 175+78.87
PC 177+06.38
PT 179+03.71
180+00
60+00

C.P. 10
C.P. 11
C.P. 15
C.P. 16
C.P. A
C.P. B

LEGEND

CONSTRUCT THIS PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
APPROACHES AND RAMPS
MAINTENANCE OF TRAFFIC PHASE I

MicroStation v8.11.9.459 | E-SHEET NAME: | USER: phoward DATE PLOTTED: March 7, 2022 | FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\MOT\R016 MOT PHI-3.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R17

SEE PROJECT PROPOSAL FOR GENERAL TRAFFIC CONTROL NOTES.

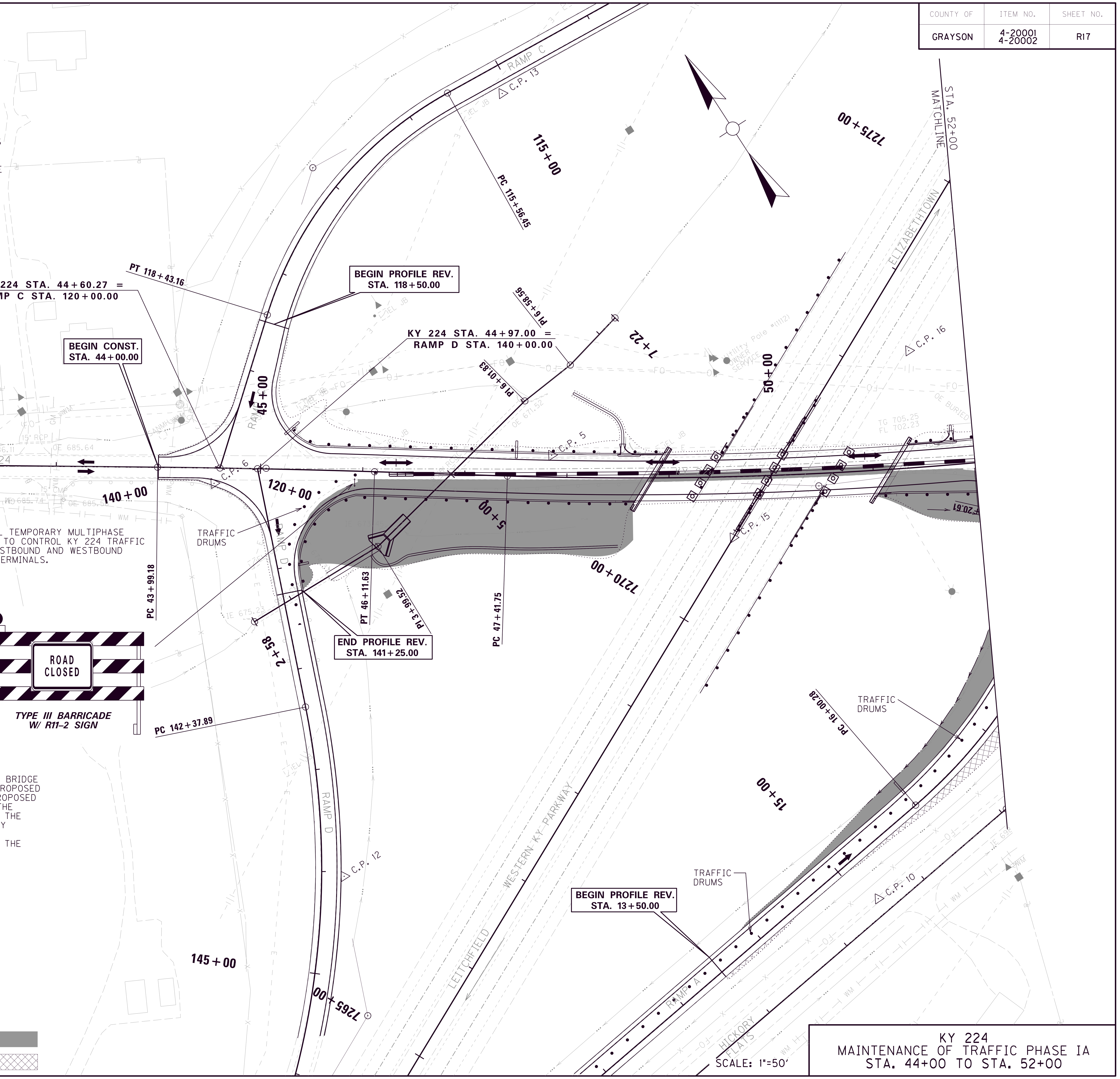
PHASE IA MAINTENACE OF TRAFFIC NOTES

1. KY 224 STATION 45+50 TO STATION 52+50 - USING TEMPORARY SIGNALS, AND TEMPORARY BARRIER WALL, SHIFT TRAFFIC TO A ONE LANE DIVERSION IN THE WESTBOUND LANE OF KY 224. REMOVE THE OUTSIDE BEAM AND A PORTION OF THE DECK OF THE EXISTING BRIDGE. PERFORM ANY REQUIRED EXCAVATION OR EMBANKMENT, EMBANKMENT UNDERCUT AND CUT PROPOSED DITCHES ON THE RIGHT SIDE OF KY 224. REMOVE THE EXISTING SHOULDER TO THE PROPOSED SUBGRADE AND PLACE A DGA WEDGE MATCHING THE GRADE OF THE EXISTING MAINLINE PAVEMENT.

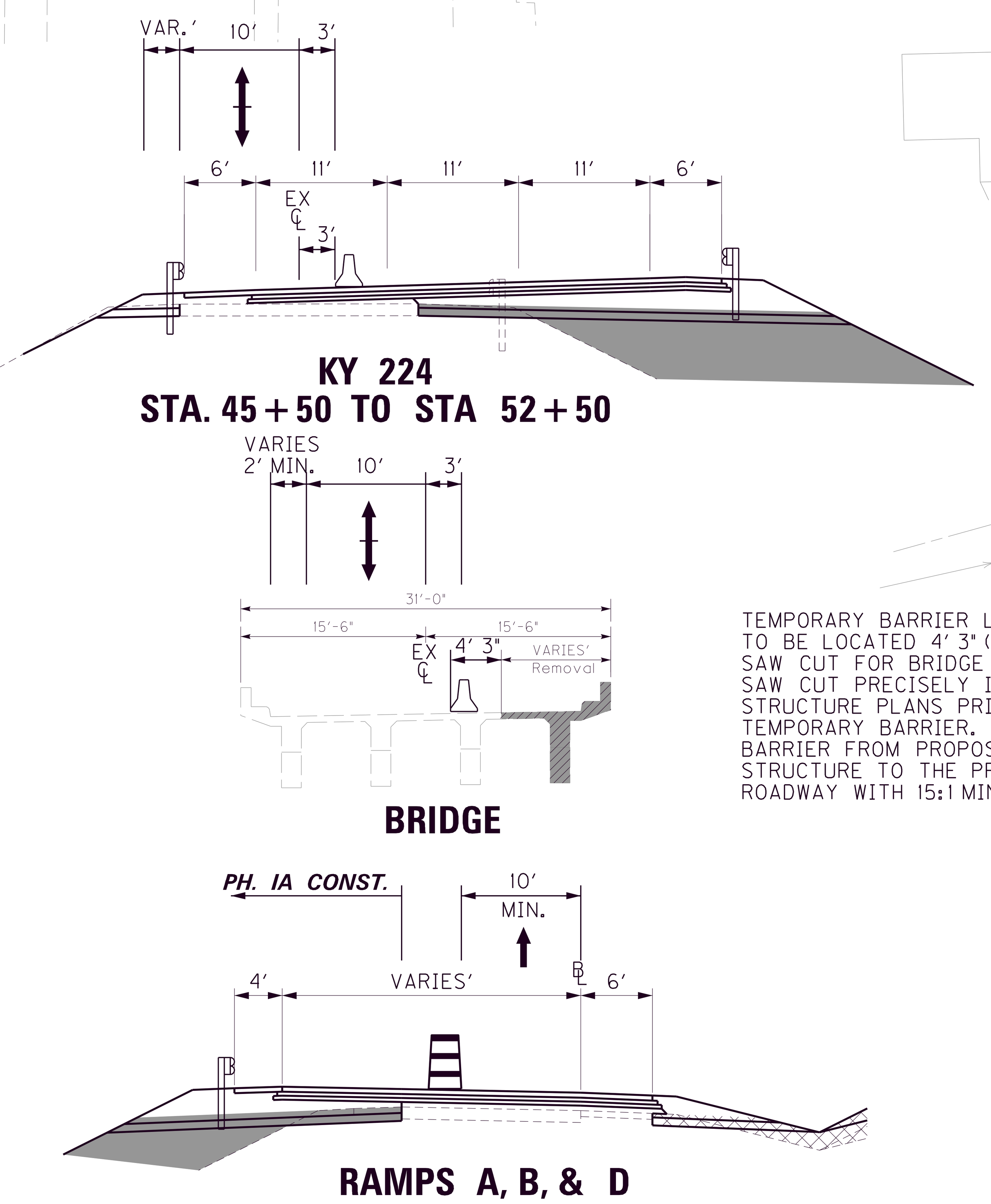
   WHEN REMOVAL OF THE PORTION OF THE EXISTING BRIDGE PRESENTS AN OVERHEAD DANGER TO WK 9001 TRAFFIC, CLOSE THE INSIDE LANE AND CHANNELIZE TRAFFIC ONTO THE INTERCHANGE RAMPS CLOSING THAT DIRECTION OF TRAVEL ON WK 9001 THROUGH THE INTERCHANGE VICINITY. USE FLAGGERS TO CONTROL TRAFFIC AT THE RAMP TERMINALS UNTIL WK 9001 TRAFFIC IS RESTORED.

2. RAMPS A, B & D ENTIRE LENGTH - USING TRAFFIC DRUMS SHIFT TRAFFIC TO THE RIGHT SIDE OF THE RAMP AND PERFORM ANY REQUIRED EXCAVATION OR EMBANKMENT, EMBANKMENT UNDERCUT AND CUT PROPOSED DITCHES ON THE LEFT SIDE. REMOVE THE SHOULDER TO THE PROPOSED SUBGRADE AND PLACE A DGA WEDGE MATCHING THE GRADE OF THE EXISTING MAINLINE PAVEMENT.

3. PROTECT THE EXISTING LIGHTING CONDUIT TO CIRCUIT 6 AND MAINTAIN ALL LIGHTING THIS PHASE.



TEMPORARY BARRIER LOCATION ON EXISTING BRIDGE TO BE LOCATED 4' 3" (TRAFFIC SIDE) FROM PROPOSED SAW CUT FOR BRIDGE REMOVAL. LOCATE PROPOSED SAW CUT PRECISELY IN ACCORDANCE WITH THE STRUCTURE PLANS PRIOR TO PLACEMENT OF THE TEMPORARY BARRIER. TRANSITION TEMPORARY BARRIER FROM PROPOSED LOCATION ON THE STRUCTURE TO THE PROPOSED LOCATION ON THE ROADWAY WITH 15:1 MINIMUM TAPER.



LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

SCALE: 1"=50'

KY 224
MAINTENANCE OF TRAFFIC PHASE IA
STA. 44+00 TO STA. 52+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R18

STA. 52+00
MATCHLINE
ROAD CLOSED
TYPE III BARRICADE
W/ R11-2 SIGN
TRAFFIC DRUMS
KY 224 STA. 53+10.52 =
RAMP B STA. 80+00.00
KY 224 STA. 53+21.56 =
RAMP A STA. 20+00.00
KY 224 STA. 55+86.76 =
HICKORY FLATS RD. STA. 180+00.00
PC 83+14.98
PC 55+26.48
PT 64+19.99
85+00
55+00
60+00
65+00
180+00
20+00
80+00
175+00
RAMP B
RAMP A
KY 224
HICKORY FLATS
MILLERSTOWN
C.P. 2
C.P. 3
C.P. 9
C.P. 11
INSTALL TEMPORARY MULTIPHASE
SIGNAL TO CONTROL KY 224 TRAFFIC
AND EASTBOUND AND WESTBOUND
RAMP TERMINALS.
PT 53+50.62
PT 179+03.11
PC 177+06.38
END CONST.
STA. 59+00.00
BEGIN CONST.
STA. 176+25.00
TRAFFIC DRUMS
PT 175+79.87
PC 174+05.85

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
MAINTENANCE OF TRAFFIC PHASE 1A
STA. 52+00 TO STA. 59+00

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R19

LEITCHFIELD

WESTERN KY PARKWAY

ELIZABETHTOWN

HICKORY FLATS

RAMP A

RAMP B

7270 + 00

7275 + 00

7280 + 00

7281 + 60

50 + 00

110 + 00

15 + 00

20 + 00

80 + 00

85 + 00

55 + 00

175 + 00

180 + 00

60 + 00

C.P. 15

C.P. 16

C.P. 10

C.P. 11

C.P. 9

BEGIN PF REV.
STA. 13 + 50.00

TRAFFIC DRUMS

ROAD CLOSED

TYPE III BARRICADE
W/ R11-2 SIGN

PC 16 + 00.28

PT 19 + 20.19

KY 224 STA. 53 + 10.52 =
RAMP B STA. 80 + 00.00

PT 53 + 50.62

KY 224 STA. 53 + 21.56 =
RAMP A STA. 20 + 00.00

PC 83 + 14.98

PC 55 + 26.48

END PROFILE REV.
STA. 86 + 00.00

PT 87 + 40.79

INSTALL TEMPORARY MULTIPHASE SIGNAL TO CONTROL KY 224 TRAFFIC AND EASTBOUND AND WESTBOUND RAMP TERMINALS.

PC 174 + 05.85

PC 177 + 06.38

PT 179 + 03.71

PT 175 + 78.87

KY 224 STA. 55 + 86.76 =
HICKORY FLATS RD. STA. 180 + 00.00

BEGIN CONST.
STA. 176 + 25.00

END CONST.
STA. 59 + 00.00

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
APPROACHES AND RAMPS
MAINTENANCE OF TRAFFIC PHASE IA

FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLANS\MOT\R019 MOT PHIA-3.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R20

SEE PROJECT PROPOSAL FOR GENERAL TRAFFIC CONTROL NOTES.

PHASE IB MAINTENACE OF TRAFFIC NOTES

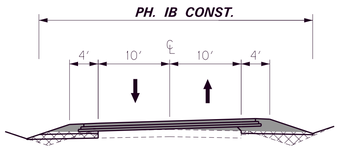
1. KY 224 STATION 45+50 TO STATION 59+00 - USING TEMPORARY SIGNALS, AND TEMPORARY BARRIER WALL, TRAFFIC REMAINS IN THE ONE LANE DIVERSION IN THE WESTBOUND LANE OF KY 224. CONSTRUCT THE RIGHT PORTION OF THE KY 224 BRIDGE TO THE LIMITS SHOWN IN THE BRIDGE PHASING. CONSTRUCT THE ASPHALT BASE OVERLAY FOR PROFILE REVISION IN THE CLOSED LANE. CONSTRUCT THE ASPHALT BASE OVERLAY IN AREAS OUTSIDE THE LIMITS OF THE DIVERSION BY USE OF FLAGGERS AND ALTERNATING LANE CLOSURES. PERFORM KEY-IN MILLING AND PLACE A LAYER OF ASPHALT BASE IN ONE LANE AND SHOULDER, ALLOW TO COOL, THEN SHIFT TRAFFIC ONTO THE NEWLY PLACED BASE LAYER AND CONSTRUCT ASPHALT BASE OVERLAY IN THE REMAINING LANES AND SHOULDER. CONTINUE ALTERNATING PLACEMENT OF 4" THICK ASPHALT BASE LAYER UNTIL THE PROPOSED TOP OF BASE GRADE IS ACHIEVED.

2. RAMPS A, B & D ENTIRE LENGTH - USING TRAFFIC DRUMS SHIFT TRAFFIC PARTIALLY ONTO EXISTING SHOULDERS AND CONSTRUCT ASPHALT BASE HALF WIDTH OF THE RAMP, ALLOW TO COOL, THEN SHIFT TRAFFIC ONTO THE NEWLY PLACED BASE LAYER AND CONSTRUCT ASPHALT BASE OVERLAY IN THE REMAINING WIDTH OF LANES AND OTHER SHOULDER. CONTINUE ALTERNATING PLACEMENT OF 4" THICK ASPHALT BASE LAYER UNTIL THE PROPOSED TOP OF BASE GRADE IS ACHIEVED.

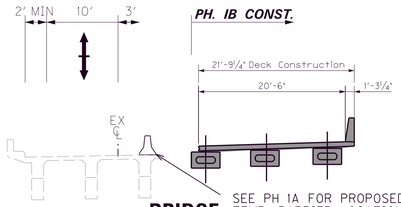
3. HICKORY FLATS ROAD ENTIRE LENGTH - CONSTRUCT THE ASPHALT BASE OVERLAY BY USE OF FLAGGERS AND ALTERNATING LANE CLOSURES. PERFORM KEY-IN MILLING AND PLACE A LAYER OF ASPHALT BASE IN ONE LANE AND SHOULDER, ALLOW TO COOL, THEN SHIFT TRAFFIC ONTO THE NEWLY PLACED BASE LAYER AND CONSTRUCT ASPHALT BASE OVERLAY IN THE REMAINING LANES AND SHOULDER. CONTINUE ALTERNATING PLACEMENT OF 4" THICK ASPHALT BASE LAYER UNTIL THE PROPOSED TOP OF BASE GRADE IS ACHIEVED.

3. CONSTRUCT ABUTMENT 1, PIER 1, PIER 2, AND PIER 3 PRIOR TO DEMOLITION OF ABUTMENT 2. PROTECT THE EXISTING LIGHTING CONDUIT TO CIRCUIT 6 AND MAINTAIN ALL LIGHTING UNTIL DEMOLITION OF EXISTING ABUTMENT 2 BEGINS. USE LANE CLOSURES AND TEMPORARY BARRIER ON WK 9001 FOR PIER CONSTRUCTION. CLOSE THE INSIDE LANE OF WK 9001, AND CLOSE WK 9001 IN THE VICINITY OF THE INTERCHANGE AND DIVERT TRAFFIC ONTO THE RAMPS WHEN SETTING BEAMS. USE FLAGGERS TO CONTROL TRAFFIC AT THE RAMP TERMINALS.

4. CONSTRUCT NEW LIGHTING CIRCUIT 6 AND RESTORE LIGHTING TO POLE 6 AT THE CONCLUSION OF THIS PHASE.

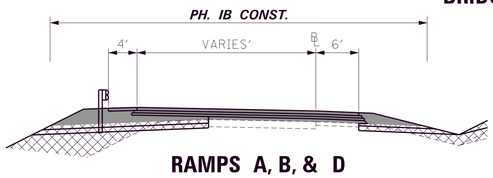


KY 224
STA. 53+50 TO STA 59+00

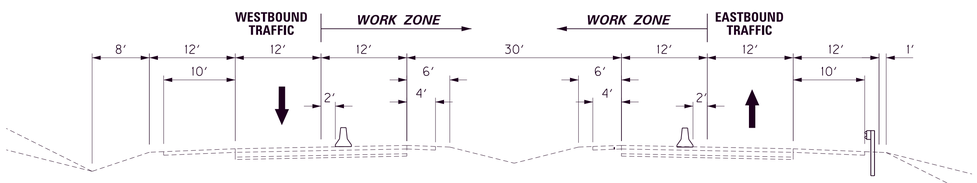


BRIDGE

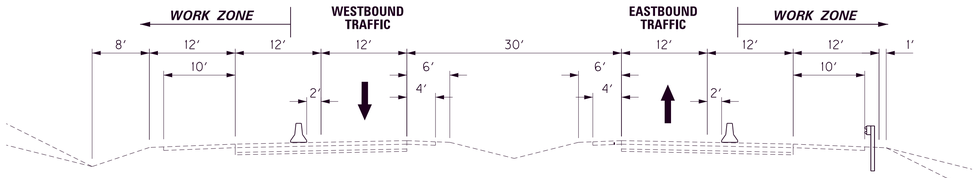
SEE PH IA FOR PROPOSED TEMP. BARRIER LOCATION



RAMPS A, B, & D



WK 9001
INSIDE LANE CLOSURES



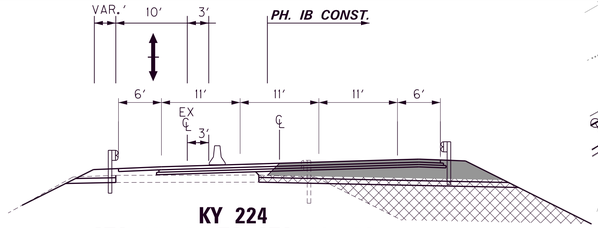
WK 9001
OUTSIDE LANE CLOSURES

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'



KY 224
STA. 45+50 TO STA 52+50

INSTALL TEMPORARY MULTIPHASE SIGNAL TO CONTROL KY 224 TRAFFIC AND EASTBOUND AND WESTBOUND RAMP TERMINALS.

SCALE: 1"=50'

KY 224
MAINTENANCE OF TRAFFIC PHASE IB
STA. 44+00 TO STA. 52+00

MicroStation v8.11.9.459
E-SHEET NAME:
USER: phoward
DATE PLOTTED: March 7, 2022
FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\MOT\R020 MOT PHIB-1.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R21

STA. 52+00
MATCHLINE
ROAD CLOSED
TYPE III BARRICADE
W/ R11-2 SIGN
TRAFFIC DRUMS
KY 224 STA. 53+10.52 =
RAMP B STA. 80+00.00
KY 224 STA. 53+21.56 =
RAMP A STA. 20+00.00
KY 224 STA. 55+86.76 =
HICKORY FLATS RD. STA. 180+00.00
PC 83+14.98
85+00
55+00
PC 55+26.48
60+00
65+00
PT 64+19.99
MILLERSTOWN
C.P. 2
C.P. 3
C.P. 11
KY 224
20+00
80+00
180+00
END CONST.
STA. 59+00.00
INSTALL TEMPORARY MULTIPHASE
SIGNAL TO CONTROL KY 224 TRAFFIC
AND EASTBOUND AND WESTBOUND
RAMP TERMINALS.
PT 179+03.11
PT 53+50.62
PC 177+06.38
TRAFFIC DRUMS
BEGIN CONST.
STA. 176+25.00
175+00
PT 175+79.87
PC 174+05.85

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
MAINTENANCE OF TRAFFIC PHASE 1B
STA. 52+00 TO STA. 59+00

MicroStation v8.11.9.459 E-SHEET NAME: USER: phoward DATE PLOTTED: March 7, 2022 FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\MOT\R021 MOT PH1B-2.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R22

BEGIN PF REV.
STA. 13+50.00

ROAD CLOSED

TYPE III BARRICADE
W/ R11-2 SIGN

TRAFFIC DRUMS

TRAFFIC DRUMS

KY 224 STA. 53+10.52 =
RAMP B STA. 80+00.00

END PROFILE REV.
STA. 86+00.00

PT 87+40.79

KY 224 STA. 53+21.56 =
RAMP A STA. 20+00.00

INSTALL TEMPORARY MULTIPHASE SIGNAL TO CONTROL KY 224 TRAFFIC AND EASTBOUND AND WESTBOUND RAMP TERMINALS.

KY 224 STA. 55+86.76 =
HICKORY FLATS RD. STA. 180+00.00

BEGIN CONST.
STA. 176+25.00

END CONST.
STA. 59+00.00

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
APPROACHES AND RAMPS
MAINTENANCE OF TRAFFIC PHASE IB

MicroStation v8.11.9.459 | E-SHEET NAME: | USER: phoward DATE PLOTTED: March 7, 2022 | FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\MOT\R022 MOT PHIB-3.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R23

SEE PROJECT PROPOSAL FOR GENERAL TRAFFIC CONTROL NOTES.

PHASE II MAINTENACE OF TRAFFIC NOTES

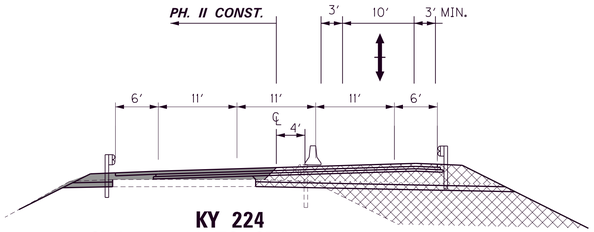
1. KY 224 STATION 45+00 TO STATION 52+50 - USING TEMPORARY SIGNALS, AND TEMPORARY BARRIER WALL, SHIFT TRAFFIC TO A ONE LANE DIVERSION IN THE EASTBOUND LANE OF KY 224. CONSTRUCT THE LEFT PORTION OF THE KY 224 BRIDGE TO THE LIMITS SHOWN IN THE BRIDGE PHASING. CONSTRUCT THE ASPHALT BASE OVERLAY FOR PROFILE REVISION IN THE CLOSED LANE.

   USE LANE CLOSURES AND TEMPORARY BARRIER ON WK 9001 FOR PIER CONSTRUCTION. CLOSE THE INSIDE LANE OF WK 9001, AND CLOSE WK 9001 IN THE VICINITY OF THE INTERCHANGE AND DIVERT TRAFFIC ONTO THE RAMPS WHEN SETTING BEAMS. USE FLAGGERS TO CONTROL TRAFFIC AT THE RAMP TERMINALS.

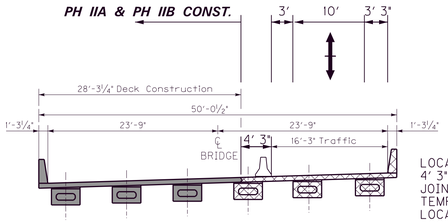
2. RAMP C - USING TRAFFIC DRUMS SHIFT TRAFFIC TO THE RIGHT AND PARTIALLY ONTO THE EXISTING SHOULDER AND CONSTRUCT ALL EMBANKMENT, EXCAVATION, PREPARE SUBGRADE FOR WIDENING AND PLACE ASPHALT BASE AND ASPHALT BASE OVERLAY.

PHASE III MAINTENANCE OF TRAFFIC NOTES

1. REMOVE THE BARRIER WALL. USING ALTERNATING LANE CLOSURES AND FLAGGERS PLACE FINAL ASPHALT SURFACING ON KY 224 AND HICKORY FLATS ROAD. COMPLETE FINAL SURFACING OF THE RAMPS AS PART OF THE MAINLINE WESTERN KY PARKWAY PAVEMENT REHABILITATION PORTION OF THE PROJECT.

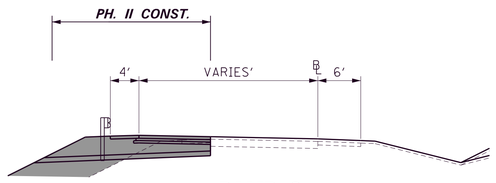


KY 224
STA. 45+00 TO STA 52+50

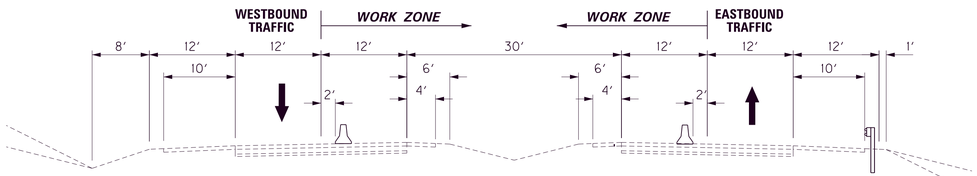


BRIDGE

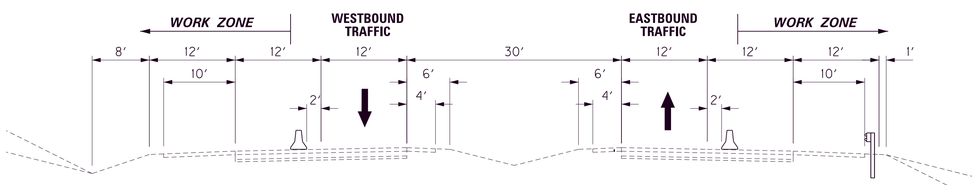
LOCATE TEMPORARY BARRIER 4′ 3″ FROM PHASE I CONSTRUCTION JOINT (TRAFFIC SIDE). TRANSITION TEMPORARY BARRIER FROM STRUCTURE LOCATION TO ROADWAY OFFSET LOCATION OVER 15:1 MIN TAPER.



RAMP C



WK 9001
INSIDE LANE CLOSURES



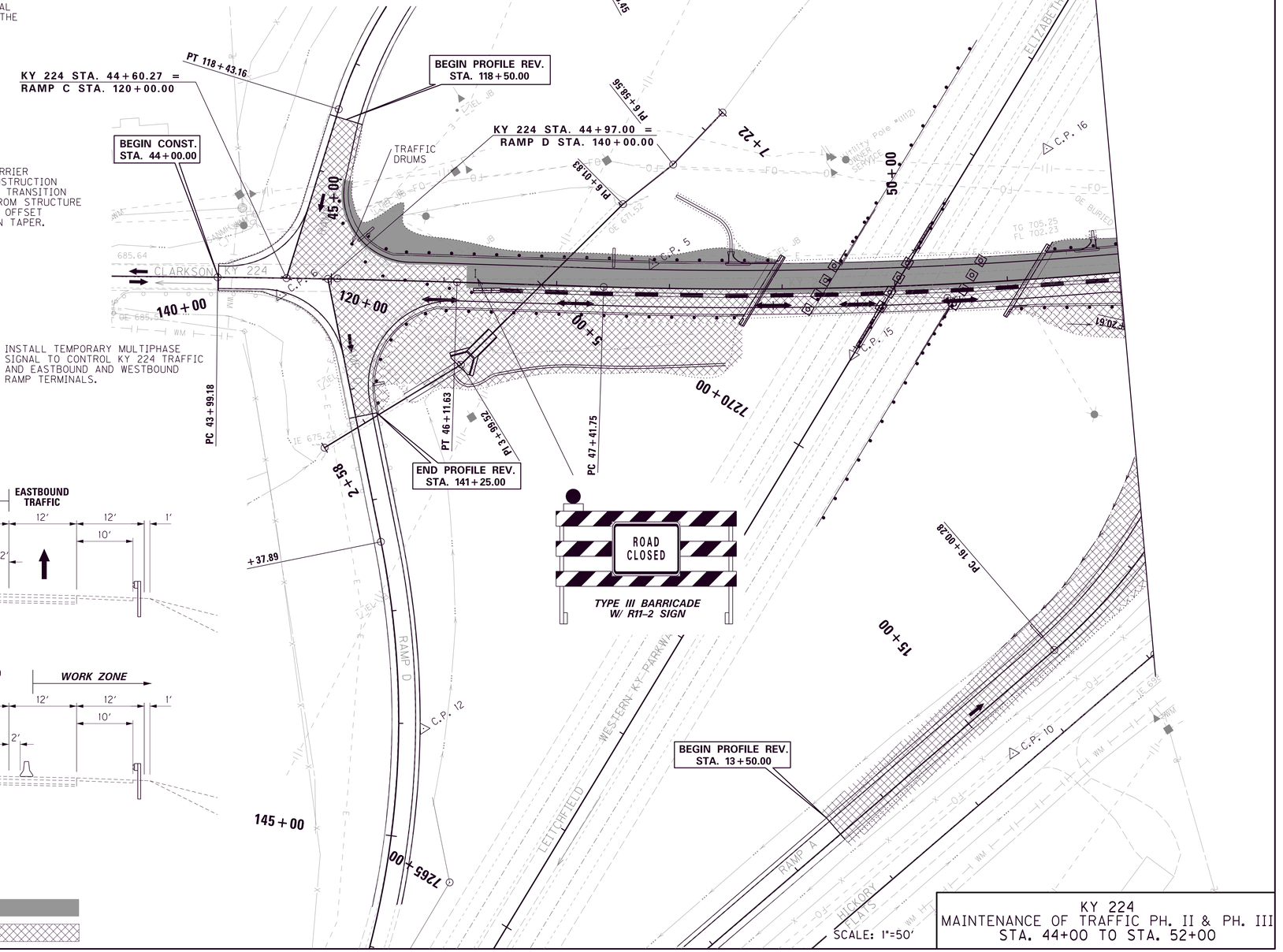
WK 9001
OUTSIDE LANE CLOSURES

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0′ 50′ 100′ 200′



SCALE: 1″=50′

KY 224
MAINTENANCE OF TRAFFIC PH. II & PH. III
STA. 44+00 TO STA. 52+00

COUNTY OF | ITEM NO. | SHEET NO.
GRAYSON | 4-20001 4-20002 | R24
STA. 52+00 MATCHLINE
ROAD CLOSED
TYPE III BARRICADE W/ R11-2 SIGN
TRAFFIC DRUMS
KY 224 STA. 53+10.52 = RAMP B STA. 80+00.00
KY 224 STA. 53+21.56 = RAMP A STA. 20+00.00
KY 224 STA. 55+86.76 = HICKORY FLATS RD. STA. 180+00.00
PC 83+14.98
PC 55+26.48
PT 64+19.99
PT 53+50.62
PT 179+03.11
PC 177+06.38
PT 175+79.87
PC 174+05.85
INSTALL TEMPORARY MULTIPHASE SIGNAL TO CONTROL KY 224 TRAFFIC AND EASTBOUND AND WESTBOUND RAMP TERMINALS.
BEGIN CONST. STA. 176+25.00
END CONST. STA. 59+00.00
85+00
55+00
60+00
65+00
175+00
180+00
MILLERSTOWN
LEGEND
CONSTRUCT THIS PHASE
CONSTRUCTED PRIOR PHASE
SCALE: 1"=50'
KY 224
MAINTENANCE OF TRAFFIC PHASE II
STA. 52+00 TO STA. 59+00
FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\MOT\R024 MOT PH2-2.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R25

LEITCHFIELD

WESTERN KY PARKWAY

ELIZABETHTOWN

RAMP A

HICKORY FLATS

7270 + 00

50 + 00

7275 + 00

110 + 00

7280 + 00

7281 + 60

15 + 00

20 + 00

80 + 00

85 + 00

55 + 00

175 + 00

180 + 00

60 + 00

C.P. 15

C.P. 16

C.P. 11

C.P. 10

C.P. 9

BEGIN PF REV.
STA. 13 + 50.00

ROAD CLOSED

TYPE III BARRICADE
W/ R11-2 SIGN

PC 16 + 00.28

PT 19 + 20.67

KY 224 STA. 53 + 10.52 =
RAMP B STA. 80 + 00.00

TRAFFIC DRUMS

PT 53 + 50.62

KY 224 STA. 53 + 21.56 =
RAMP A STA. 20 + 00.00

PC 83 + 14.98

PC 55 + 26.48

END PROFILE REV.
STA. 86 + 00.00

PT 87 + 40.79

INSTALL TEMPORARY MULTIPHASE SIGNAL TO CONTROL KY 224 TRAFFIC AND EASTBOUND AND WESTBOUND RAMP TERMINALS.

PC 174 + 05.85

PT 175 + 79.87

PC 177 + 06.38

PT 179 + 03.11

KY 224 STA. 55 + 86.76 =
HICKORY FLATS RD. STA. 180 + 00.00

BEGIN CONST.
STA. 176 + 25.00

END CONST.
STA. 59 + 00.00

LERSTOWN

LEGEND

CONSTRUCT THIS PHASE

CONSTRUCTED PRIOR PHASE

0' 50' 100' 200'

SCALE: 1"=50'

KY 224
APPROACHES AND RAMPS
MAINTENANCE OF TRAFFIC PHASE II

MicroStation v8.11.9.459 | E-SHEET NAME: | USER: phoward DATE PLOTTED: March 7, 2022 | FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\MOT\R025 MOT PH2-3.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R26

DISTURBED DRAINAGE AREAS				
SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)	OUTFALL LATITUDE	OUTFALL LONGITUDE
10	0.3111	1120	37°29'24.79"N	86°12'37.05"W
11	1.1506	4142	37°29'22.48"N	86°12'34.60"W
12	0.3225	1161	SF	SF
13	0.1434	516	37°29'22.29"N	86°12'34.05"W
14	0.0788	284	37°29'20.06"N	86°12'30.40"W
15	0.7936	2857	37°29'17.15"N	86°12'36.38"W
16	0.2830	1019	37°29'22.75"N	86°12'25.32"W
17	0.3322	1196	37°29'16.62"N	86°12'36.29"W
18	0.5572	2006	37°29'16.50"N	86°12'26.78"W
19	1.2642	4551	37°29'23.10"N	86°12'23.71"W
20	0.4414	1589	37°29'16.90"N	86°12'22.42"W
21	0.0577	208	37°29'15.84"N	86°12'28.79"W
22	0.4590	1652	SF	SF

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

0' 50' 100' 200'

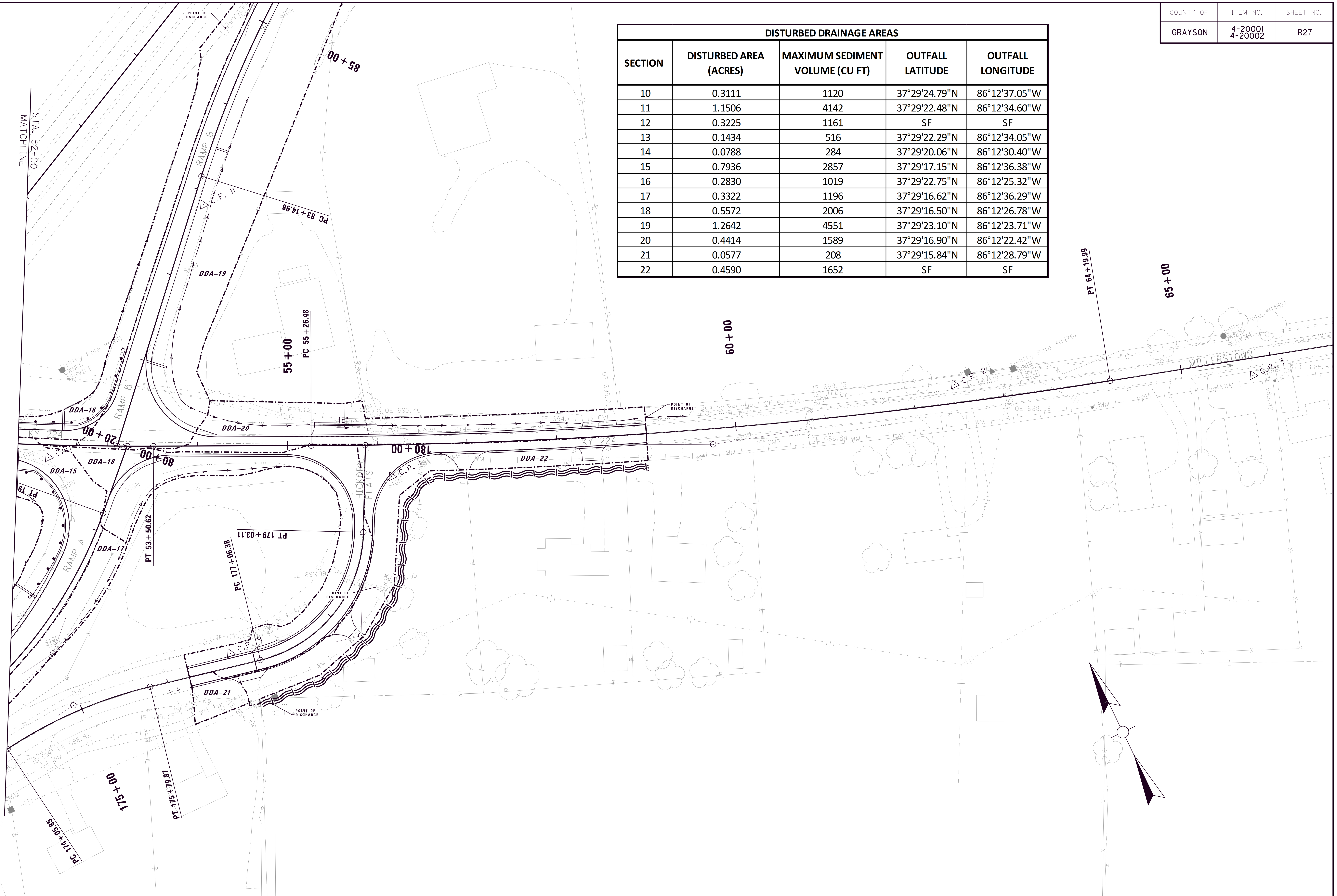
KY 224
EROSION CONTROL PLAN
STA. 44+00 TO STA. 52+00
SCALE: 1"=50'

MicroStation v8.11.9.459
E-SHEET NAME:
USER: phoward
DATE PLOTTED: March 7, 2022
FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\EROSION CONTROL\R026 EC.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R27

DISTURBED DRAINAGE AREAS

SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)	OUTFALL LATITUDE	OUTFALL LONGITUDE
10	0.3111	1120	37°29'24.79"N	86°12'37.05"W
11	1.1506	4142	37°29'22.48"N	86°12'34.60"W
12	0.3225	1161	SF	SF
13	0.1434	516	37°29'22.29"N	86°12'34.05"W
14	0.0788	284	37°29'20.06"N	86°12'30.40"W
15	0.7936	2857	37°29'17.15"N	86°12'36.38"W
16	0.2830	1019	37°29'22.75"N	86°12'25.32"W
17	0.3322	1196	37°29'16.62"N	86°12'36.29"W
18	0.5572	2006	37°29'16.50"N	86°12'26.78"W
19	1.2642	4551	37°29'23.10"N	86°12'23.71"W
20	0.4414	1589	37°29'16.90"N	86°12'22.42"W
21	0.0577	208	37°29'15.84"N	86°12'28.79"W
22	0.4590	1652	SF	SF



SCALE: 1"=50'

KY 224
EROSION CONTROL PLAN
STA. 52+00 TO STA. 59+00

FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\EROSION CONTROL\R027 EC.DGN

USER: phoward
DATE PLOTTED: March 7, 2022

E-SHEET NAME:

MicroStation v8.11.9.459

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R28

DISTURBED DRAINAGE AREAS

SECTION	DISTURBED AREA (ACRES)	MAXIMUM SEDIMENT VOLUME (CU FT)	OUTFALL LATITUDE	OUTFALL LONGITUDE
10	0.3111	1120	37°29'24.79"N	86°12'37.05"W
11	1.1506	4142	37°29'22.48"N	86°12'34.60"W
12	0.3225	1161	SF	SF
13	0.1434	516	37°29'22.29"N	86°12'34.05"W
14	0.0788	284	37°29'20.06"N	86°12'30.40"W
15	0.7936	2857	37°29'17.15"N	86°12'36.38"W
16	0.2830	1019	37°29'22.75"N	86°12'25.32"W
17	0.3322	1196	37°29'16.62"N	86°12'36.29"W
18	0.5572	2006	37°29'16.50"N	86°12'26.78"W
19	1.2642	4551	37°29'23.10"N	86°12'23.71"W
20	0.4414	1589	37°29'16.90"N	86°12'22.42"W
21	0.0577	208	37°29'15.84"N	86°12'28.79"W
22	0.4590	1652	SF	SF

SCALE: 1"=50'

APPROACHES AND RAMPS
EROSION CONTROL PLANS

MicroStation v8.11.9.459
E-SHEET NAME:
USER: phoward
DATE PLOTTED: March 7, 2022
FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\EROSION CONTROL\R028 EC.DGN

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R29

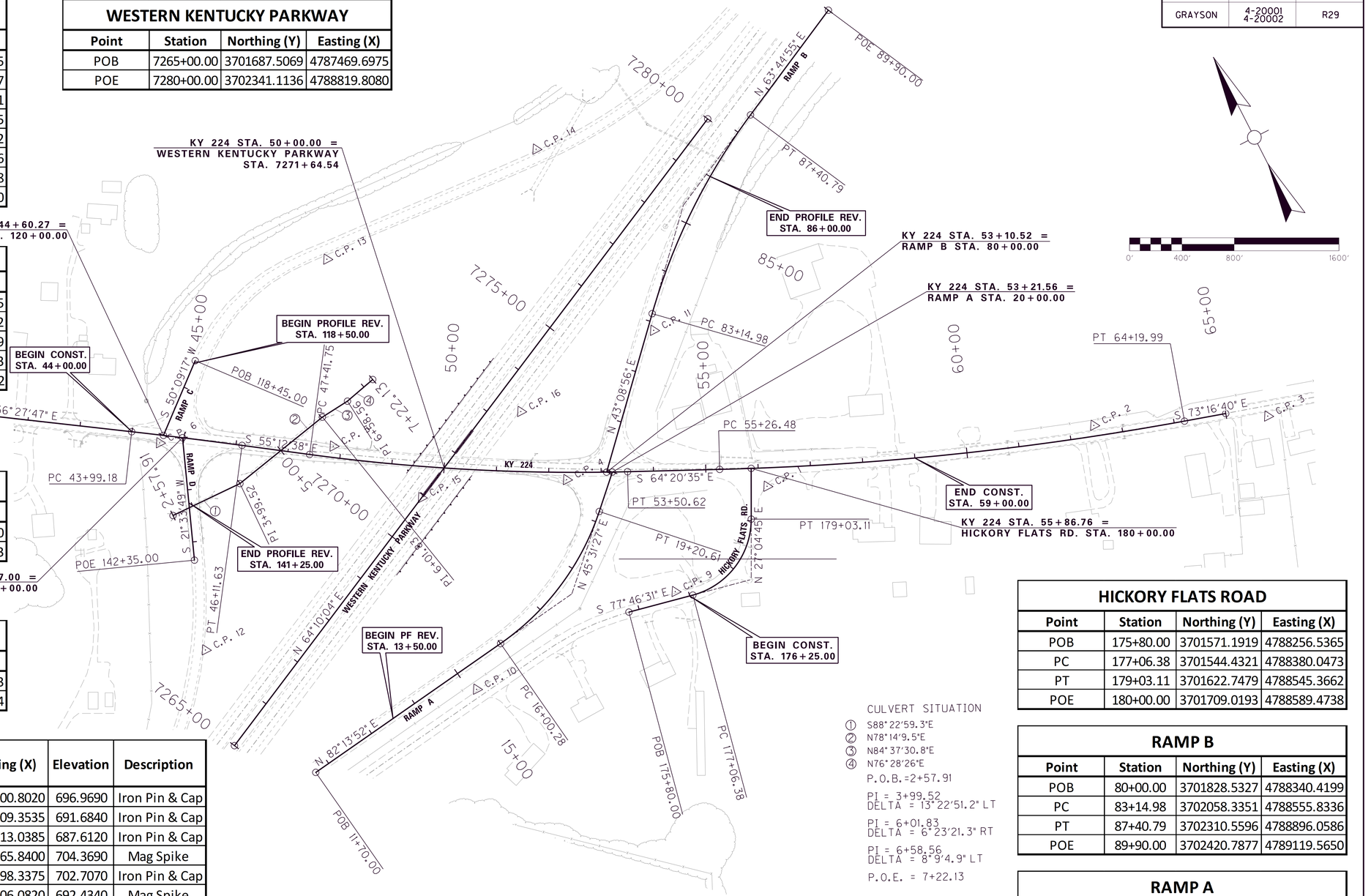
KY 224			
Point	Station	Northing (Y)	Easting (X)
POB	40+00.00	3702531.2200	4787235.5515
PC	43+99.18	3702310.6839	4787568.2777
PT	46+11.63	3702191.3811	4787744.0691
PC	47+41.75	3702117.1405	4787850.9295
PT	53+50.62	3701810.9793	4788376.4772
PC	55+26.48	3701734.8339	4788534.9996
PT	64+19.99	3701412.1986	4789367.2508
POE	65+00.00	3701389.1764	4789443.8800

WESTERN KENTUCKY PARKWAY			
Point	Station	Northing (Y)	Easting (X)
POB	7265+00.00	3701687.5069	4787469.6975
POE	7280+00.00	3702341.1136	4788819.8080

CULVERT SITUATION			
Point	Station	Northing (Y)	Easting (X)
POB	2+57.91	3702132.1960	4787565.6015
PI	3+99.52	3702128.2003	4787707.1552
PI	6+01.83	3702169.4470	4787905.2129
PI	6+58.56	3702174.7607	4787961.6923
POE	7+22.13	3702189.6288	4788023.4982

RAMP C			
Point	Station	Northing (Y)	Easting (X)
POB	118+45.00	3702376.0817	4787738.1010
POE	120+00.00	3702276.7708	4787619.0953

RAMP D			
Point	Station	Northing (Y)	Easting (X)
POB	140+00.00	3702256.2292	4787649.5433
POE	142+35.00	3702037.6770	4787563.1724



CULVERT SITUATION
① S88°22'59.3"E
② N78°14'9.5"E
③ N84°37'30.8"E
④ N76°28'26"E
P.O.B.=2+57.91
PI = 3+99.52
DELTA = 13°22'51.2" LT
PI = 6+01.83
DELTA = 6°23'21.3" RT
PI = 6+58.56
DELTA = 8°9'4.9" LT
P.O.E. = 7+22.13

HICKORY FLATS ROAD			
Point	Station	Northing (Y)	Easting (X)
POB	175+80.00	3701571.1919	4788256.5365
PC	177+06.38	3701544.4321	4788380.0473
PT	179+03.11	3701622.7479	4788545.3662
POE	180+00.00	3701709.0193	4788589.4738

RAMP B			
Point	Station	Northing (Y)	Easting (X)
POB	80+00.00	3701828.5327	4788340.4199
PC	83+14.98	3702058.3351	4788555.8336
PT	87+40.79	3702310.5596	4788896.0586
POE	89+90.00	3702420.7877	4789119.5650

RAMP A			
Point	Station	Northing (Y)	Easting (X)
POB	11+70.00	3701571.2406	4787584.6317
PC	16+00.28	3701629.4048	4788010.9652
PT	19+20.61	3701768.0418	4788293.6804
POE	20+00.00	3701823.6624	4788350.3283

Control Point	Station	Offset	Northing (Y)	Easting (X)	Elevation	Description
C.P. #1	56+15.61	35.42	3701664.7100	4788600.8020	696.9690	Iron Pin & Cap
C.P. #2	62+47.53	-20.53	3701483.7775	4789209.3535	691.6840	Iron Pin & Cap
C.P. #3	65+78.02	19.32	3701348.2300	4789513.0385	687.6120	Iron Pin & Cap
C.P. #4	52+34.17	14.02	3701850.5505	4788265.8400	704.3690	Mag Spike
C.P. #5	47+84.66	-21.43	3702110.5935	4787898.3375	702.7070	Iron Pin & Cap
C.P. #6	44+54.72	15.08	3702267.3460	4787606.0820	692.4340	Mag Spike
C.P. #9	54+35.75	231.29	3701565.6380	4788353.0715	697.0570	Iron Pin & Cap
C.P. #10	50+81.08	418.65	3701572.5075	4787930.4100	701.2640	Iron Pin & Cap
C.P. #11	54+07.31	-268.61	3702028.5555	4788543.8775	688.1420	Iron Pin & Cap
C.P. #12	45+93.73	396.66	3701875.4080	4787503.6380	689.3520	Iron Pin & Cap
C.P. #13	47+24.73	-373.94	3702433.9540	4788050.3080	683.0540	Iron Pin & Cap
C.P. #14	51+60.96	-616.17	3702438.8025	4788501.6570	680.4240	Iron Pin & Cap
C.P. #15	49+61.33	59.81	3701946.1075	4788003.5105	688.7740	Iron Pin & Cap
C.P. #16	51+43.36	-114.58	3702006.1800	4788247.3215	685.9640	Iron Pin & Cap

KY 224
PI 45+05.41
(X) = 4787656.8254
(Y) = 3702251.9931
D = 01°15'08" RT
T = 106.23'
L = 212.46'
R = 9720.00'
E = 0.58'
C = S 55°50'12" E
e = N.C.
Runoff = N/A
Runout = N/A

KY 224
PI 50+46.83
(X) = 4788101.4777
(Y) = 3701943.0738
D = 09°07'56" LT
T = 305.08'
L = 608.87'
R = 3820.00'
E = 12.16'
C = S 59°46'36" E
e = 3.00%
Runoff = SEE X.S.
Runout = SEE X.S.

KY 224
PI 59+74.14
(X) = 4788938.5215
(Y) = 3701541.0043
D = 08°56'06" LT
T = 447.66'
L = 893.51'
R = 5729.68'
E = 17.46'
C = S 68°48'37" E
e = 2.20%
Runoff = SEE X.S.
Runout = SEE X.S

RAMP A
PI 17+66.16
(X) = 4788175.3195
(Y) = 3701651.8274
D = 36°42'25" LT
T = 165.88'
L = 320.33'
R = 500.00'
E = 26.80'
C = N 63°52'40" E
e = 5.70%
Runoff = SEE X.S.
Runout = SEE X.S.

RAMP B
PI 85+30.21
(X) = 4788703.0281
(Y) = 3702215.3615
D = 20°35'59" RT
T = 215.23'
L = 425.81'
R = 1184.35'
E = 19.40'
C = N 53°26'56" E
e = 6.20%
Runoff = SEE X.S.
Runout = SEE X.S.

HICKORY FLATS RD.
PI 178+21.78
(X) = 4788492.8328
(Y) = 3701519.9960
D = 75°08'45" LT
T = 115.40'
L = 196.73'
R = 150.00'
E = 39.26'
C = N 64°39'07" E
e = 4.00%
Runoff = SEE X.S.
Runout = SEE X.S.

SCALE: 1"=100'

COORDINATE CONTROL SHEET
KY 224
STA. 40+00.00 TO STA. 65+00.00

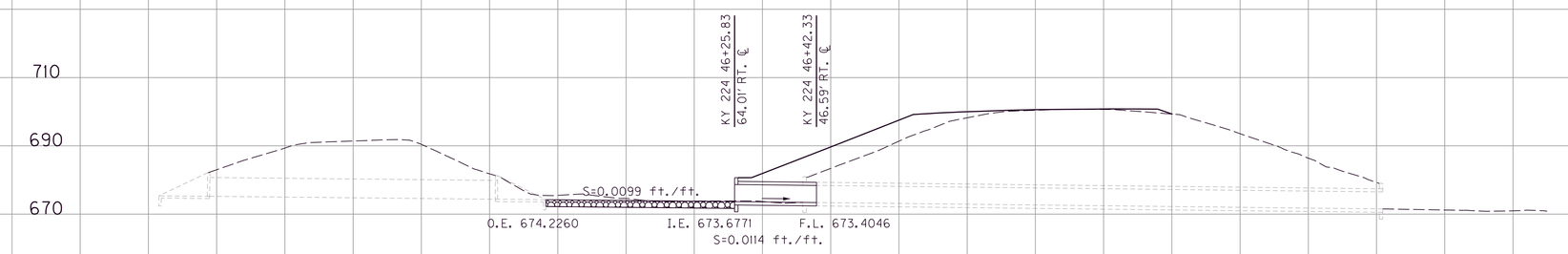
FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\R029 COORDINATE CONTROL.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

PIPE DRAINAGE SHEET 1 of 2

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R30

STORM SEWER PIPE

LINEAR FEET



KY 224 46+86.46

CONST. 24 L.F. - 8'x5' RCBC @ 43°19'05" SKEW RT.

2+50 3+00 3+50 4+00 4+50 5+00 5+50 6+00 6+50

SCALE: 1"=10'

KY 224
STA 46+86.17 - 43°19'05" SKEW RT.
CULVERT SITUATION

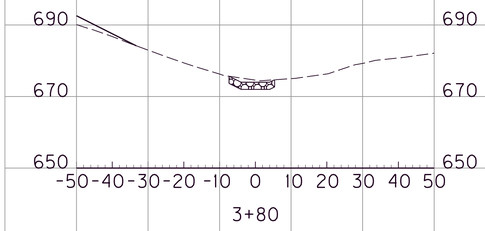
MicroStation v8.11.9.459 | E-SHEET NAME: | USER: phoward DATE PLOTTED: March 7, 2022 | FILE NAME: G:\ENGR\HD1365.10 AND 1365.11 GRAYSON WK\CADD\PLAN\CROSS SECTION\R030 CULVERT SITUATION.DGN

PIPE DRAINAGE SHEET 2 of 2

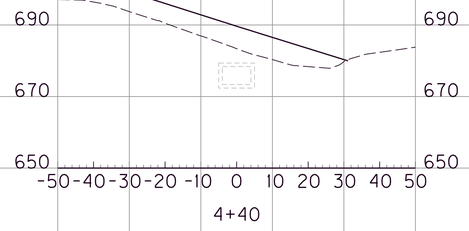
COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	R31

STORM SEWER PIPE

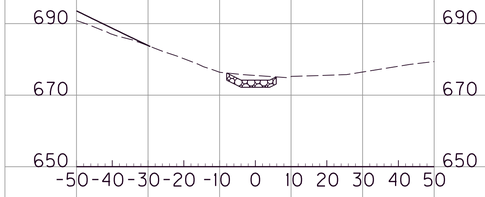
L I N E A R F E E T



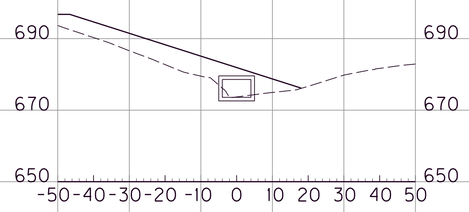
3+80



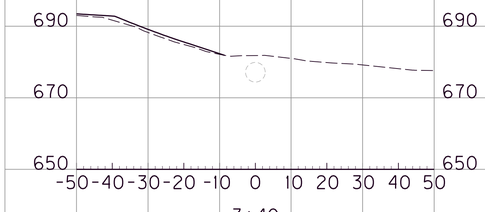
4+40



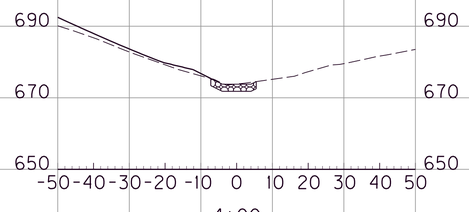
3+60



4+20



3+40



4+00

SCALE: 1"=10'

KY 224
STA 46+86.17 - 43°19'05" SKEW RT.
CULVERT SITUATION

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	T1

ROADWAY LIGHTING ESTIMATE OF QUANTITIES

ITEM CODE	ITEM	UNIT	TOTAL
4798	CONDUIT - 3 ½ INCH	LIN FT	90
4800	MARKER	EACH	1
4820	TRENCHING AND BACKFILLING	LIN FT	515
4860	CABLE - NO. 8/3C DUCTED	LIN FT	825
4940	REMOVE LIGHTING	LP SUM	1
20391NS835	ELECTRICAL JUNCTION BOX TYPE A	EACH	3
21543EN	BORE AND JACK CONDUIT	LIN FT	90
21579EN	FLEX CONDUIT - 1 ¼ INCH	LIN FT	50

MEASUREMENT NOTE THAT ARE IN ADDITION TO SECTION 716:

REMOVE, STORE AND REINSTALL POLE- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT REMOVED, STORE AND REINSTALLED. THE DEPARTMENT WILL NOT MEASURE WORK AND MATERIAL NECESSARY TO RELOCATE AN EXISTING LIGHTING STANDARD AND WILL CONSIDERED THIS INCIDENTAL TO THIS ITEM OF WORK.

WOOD POLE- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE EXCAVATION, BACKFILLING, AND RESTORING DISTURBED AREAS.

ANCHOR- DEPARTMENT WILL MEASURE THE QUANTITY AS EACH INDIVIDUAL UNIT FURNISHED AND INSTALLED. THE DEPARTMENT WILL NOT MEASURE FURNISHING AND INSTALLING SPECIFIED ANCHOR, DOWN-GUY, MESSENGER, CLAMPS, GUY GUARD, AND INSULATORS (IF REQUIRED).

WIRE OR CABLE SHALL INCLUDE INSTALLING SPECIFIED WIRE OR CABLE WITHIN CONDUIT AS INDICATED ON THE PLAN SHEETS. INCIDENTAL TO THIS ITEM SHALL BE THE FURNISHING AND INSTALLING OF SPLICE BOOTS OR ANY OTHER HARDWARE REQUIRED FOR INSTALLING CABLE. THE CONTRACTOR SHALL INSTALL ALL CABLE OR WIRE RUNS SPLICE-FREE FROM THE CONTROLLER TO EACH POLE THE CABLE OR WIRE IS FEEDING. EXCEPTIONS TO THIS MUST BE APPROVED BY THE ENGINEER OR AS SPECIFIED ON THE PLANS. THE CONTRACTOR WILL RECEIVE WIRE IN 1000 FOOT ROLLS FROM OUR WAREHOUSE. THE CONTRACTOR SHALL RETURN ALL EXCESS WIRE TO THE TRAFFIC BARN IN DISTRICT 12. IF THE WIRE SUPPLIED DOES NOT EQUAL ENOUGH SUITABLE TO INSTALL ALL RUNS SPLICE FREE, THE CONTRACTOR CAN ASK FOR MORE WIRE TO BE SUPPLIED BY THE DIVISION OF TRAFFIC OPERATIONS. THIS REQUEST SHALL GO THROUGH THE RESIDENT ENGINEER TO CENTRAL OFFICE DIVISION OF TRAFFIC OPERATIONS. EACH RUN OF WIRE FROM POLE TO POLE (UP EACH POLE) SHALL BE THE FOLLOWING COLOR CODED: 2-BLACK (HOT) AND GREEN (GROUND). THIS NOTE ONLY APPLIES TO BID CODES 23675EC AND 24474ED.

"REMOVE LIGHTING" SHALL INCLUDE THE REMOVAL OF ALL VISIBLE CONDUIT, WIRING, JUNCTION BOXES, OR OTHER EQUIPMENT THAT ARE NOT INTENDED TO BE RE-USED, ARD ARE REQUIRED TO BE REMOVED AS PART OF THE BRIDGE DEMOLITION OR CONSTRUCTION OF THE NEW CIRCUIT. OTHER UNDERGROUND CONDUIT OR WIRING MAY BE ABANDONED IN PLACE WHERE NOT IN CONFLICT WITH THE PROPOSED NEW CONDUIT AND WIRING.

THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, CURRENT EDITION, AND OTHER SPECIAL NOTES AND SPECIFICATIONS WILL APPLY ON THIS PROJECT. SEE SECTION 716 FOR MEASUREMENT AND OTHER DETAILS. SEE SECTION 602 FOR SPIRAL REINFORCEMENT SPLICING

THE CONTRACTOR SHALL MAKE AN INSPECTION OF THE PROJECT SITE PRIOR TO SUBMITTING A BID AND SHALL BE THOROUGHLY FAMILIARIZED WITH EXISTING CONDITIONS. SUBMISSIONS OF A BID WILL BE CONSIDERED AN AFFIRMATION OF THIS INSPECTION HAVING BEEN COMPLETED.

ADD SENTENCE TO SECTION 834.06: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES : "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

ADD SENTENCE TO SECTION 834.10: ALL WIRE SHALL HAVE WORDING ADDED TO THE OUTER JACKET THAT STATES: "PROPERTY OF KENTUCKY TRANSPORTATION CABINET 502 564 0501".

CONSTRUCTION AND MEASUREMENT NOTES THAT ARE CONTRARY TO SECTION 834

SUBSECTION: 834.15.03 TRANSFORMER BASES.
REMOVE: REMOVE SENTENCE: CONSTRUCT THE DOOR OF A HIGH DENSITY POLYETHYLENE MATERIAL IN COLOR THAT MATCHES THE BASE.
REVISION: REPLACE THE FOLLOWING SENTENCE WITH THE FOLLOWING:
CONSTRUCT THE DOOR OF AN ALUMINUM MATERIAL IN A COLOR THAT MATCHES THE BASE. THE DOOR SHOULD HAVE A THEFT DETERRENT DEVICE THAT IS EQUAL TO THE LOCKDOWN LIGHTLOCK DOOR ASSEMBLY. THE DOOR LOCK WILL HAVE A LOCKING DEVICE WITH A KYTC CUSTOM KEY THAT WILL BE SEND TO CENTRAL OFFICE TRAFFIC OPERATIONS FROM THE MANUFACTURER AND BE ISSUED TO THE CONTRACTOR FOR THE INSTALLATION OF THE FINAL DOOR DEVICE. THE KEY FOR THE DOOR SHALL BE RETURNED TO CENTRAL OFFICE TRAFFIC OPERATIONS AFTER THE CLOSURE OF THE CONTRACT. THERE SHALL BE A 4" BY 6" ARC FLASH WARNING STICKER INSTALLED CENTER TOP OF EACH DOOR. THE STICKER SHALL BE METALCRAFT PLY695 PREM STYLEMARK LABEL WITH .007 THICKNESS, WITH UV WHITE POLYCARBINATE MATERIAL, AND WITH MC53FL PRESSURE SENSITIVE ADHESIVE. THE STICKER SHALL HAVE TWO COLORS OF BLACK AND CUSTOM COLOR ORANGE. THE WORDING FOR THE ARC FLASH STICKER SHALL BE THE FOLLOWING: "WARNING ARC FLASH HAZARD. APPROPRIATE PPE REQUIRED. FAILURE TO COMPLY CAN RESULT IN DEATH OR INJURY. REFER TO NFPA 70E."

SECTION: 834.15 LIGHTING POLES.

REVISION: ADD THE FOLLOWING TO THE FIRST PARAGRAGH:
THE CABINET WILL WAIVE THE REQUIREMENT STATED IN THE FIRST SENTENCE OF SECTION 5.14.6.2 - REINFORCED HOLES AND CUTOUT FOR HIGH MAST POLES (ONLY).

SECTION: 834.33 WARNING TAPE.

REVISION: REPLACE FIRST SENTENCE WITH THE FOLLOWING:
PROVIDE DETECTABLE TYPE TAPE THAT IS 6 INCHES WIDE AND 7.0 MILS (NOMINAL)THICK.

NOTE: CLARIFICATION OF REQUIREMENTS IN LIGHTING PLANS, STRUCTURE PLANS, AND STANDARD DRAWINGS.

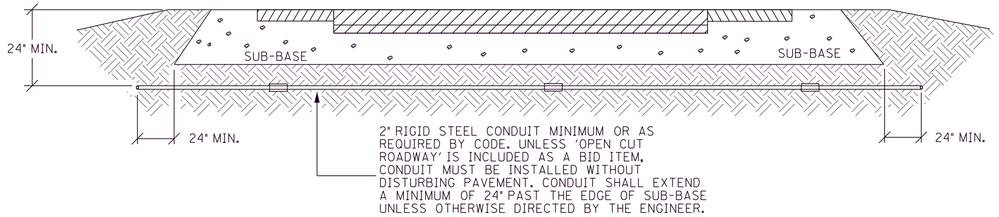
IN ACCORDANCE WITH THE STRUCTURE PLANS, USE RIGID STEEL CONDUIT IN THE BRIDGE BARRIER. STANDARD DRAWING BGX-019 DETAILS THE USE OF THE "JUNCTION BOX-24"" REQUIRED IN THE BRIDGE BARRIERS. IN ACCORDANCE WITH STANDARD DRAWING BGX-021, A 24" JUNCTION BOX (IN BARRIER) WILL BE REQUIRED AT EACH END OF THE PROPOSED BRIDGE BARRIER OR AS DIRECTED BY THE ENGINEER NEAR THE END OF EACH BARRIER. AN EXPANSION FITTING WILL BE REQUIRED AT EACH END OF THE PROPOSED BARRIER IN ACCORDANCE WITH STANDARD DRAWING BGX-021. FOR THE FUTURE USE CONDUIT (NOT USED FOR THE PROPOSED REPLACEMENT OF CIRCUIT 6) CONSTRUCT AN ADDITIONAL 6' OF CONDUIT UNDERGROUND AND BEYOND THE EXPANSION FITTING ON EACH WING AND CAP AND PLACE A MARKER IN ACCORDANCE WITH BGX-021. THE LUMP SUM BID OF THE STRUCTURE ITEM "ELECTRICAL CONDUIT" WILL INCLUDE THE 3" RIGID STEEL CONDUIT IN EACH BRIDGE BARRIER, THE 12' OF 3" RIGID STEEL CONDUIT OUTSIDE THE LIMITS OF THE BARRIER, 4-EACH JUNCTION BOXES (IN BARRIER), 4-EACH EXPANSION FITTINGS, 2-EACH COPPER GROUNDING BUSHINGS, 2-EACH CAPS, 2-EACH MARKERS AND ANY OTHER FITTINGS OR EQUIPMENT REQUIRED, INCLUDING REDUCER AND CONNECTION TO THE 1 1/4" FLEXIBLE CONDUIT DETAILED IN THE LIGHTING PLANS.

THE BRIDGE CONDUIT IN THE WEST BARRIER WILL BE USED FOR THE RACEWAY FOR THE REPLACEMENT OF LIGHTING CIRCUIT 6. SEE LIGHTING PLANS FOR ALL WORK ITEMS AND PAY ITEMS FOR REPLACEMENT OF LIGHTING CIRCUIT 6 (EXCLUDING THE ITEMS INCLUDED IN THE LS STRUCTURE ITEM "ELECTRICAL CONDUIT"). PAYMENT FOR JUNCTION BOXES TYPE A IS INCLUDED IN THE LIGHTING PLANS.

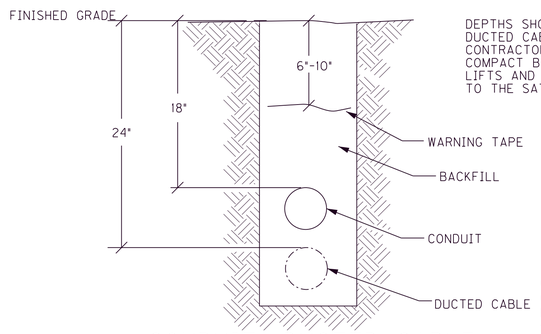
3-17-2021

WKP & KY 224
ROADWAY LIGHTING
ESTIMATE OF QUANTITIES

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	T2



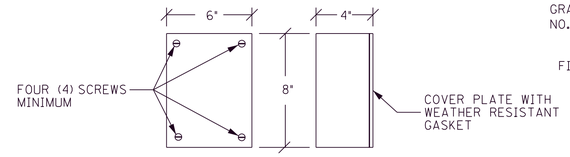
CONDUIT INSTALLATION UNDER EXISTING PAVEMENT DETAIL



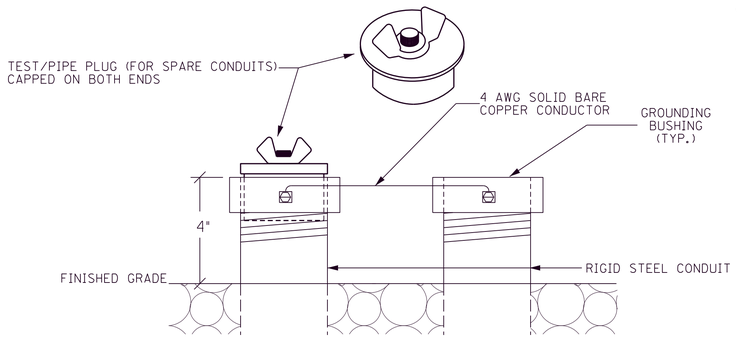
DEPTHS SHOWN FOR CONDUIT AND DUCTED CABLE ARE MINIMUMS. CONTRACTOR SHALL PLACE AND COMPACT BACKFILL IN 9" MAXIMUM LIFTS AND RETORE DISTURBED AREA TO THE SATISFACTION OF THE ENGINEER.

CONDUIT, DUCTED CABLE, AND WARNING TAPE TRENCH

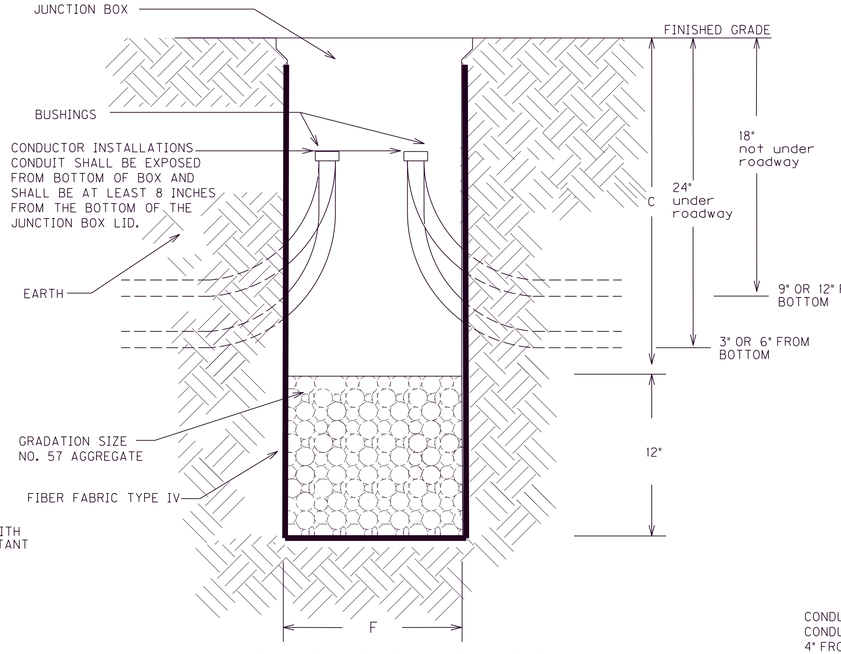
ABOVE GROUND BOX SHALL BE FABRICATED FROM MINIMUM 12 GAUGE STEEL AND GALVANIZED AFTER FABRICATION. BOXES SHALL HAVE NO KNOCKOUTS AND SHALL BE PROVIDED WITH A PLATE COVER WITH A WEATHER RESISTANT GASKET AND A MINIMUM OF FOUR SCREWS FOR ATTACHING THE PLATE COVER TO THE BOX. CABLE CLAMPS SHALL BE PROVIDED FOR CABLES ENTERING AND EXITING THE BOX.



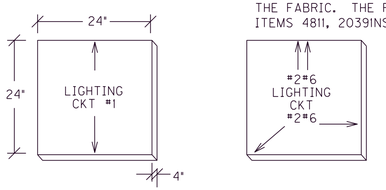
ABOVE GROUND BOX



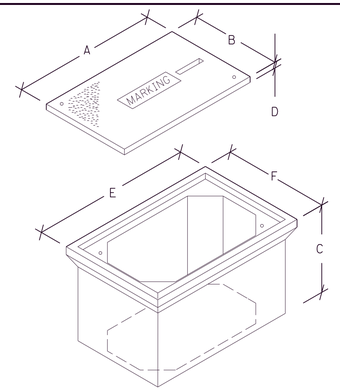
TEST/PIPE PLUG(FOR SPARE CONDUITS) AND GROUNDING DETAIL



JUNCTION BOX INSTALLATION FOR CONVENTIONAL LIGHTING



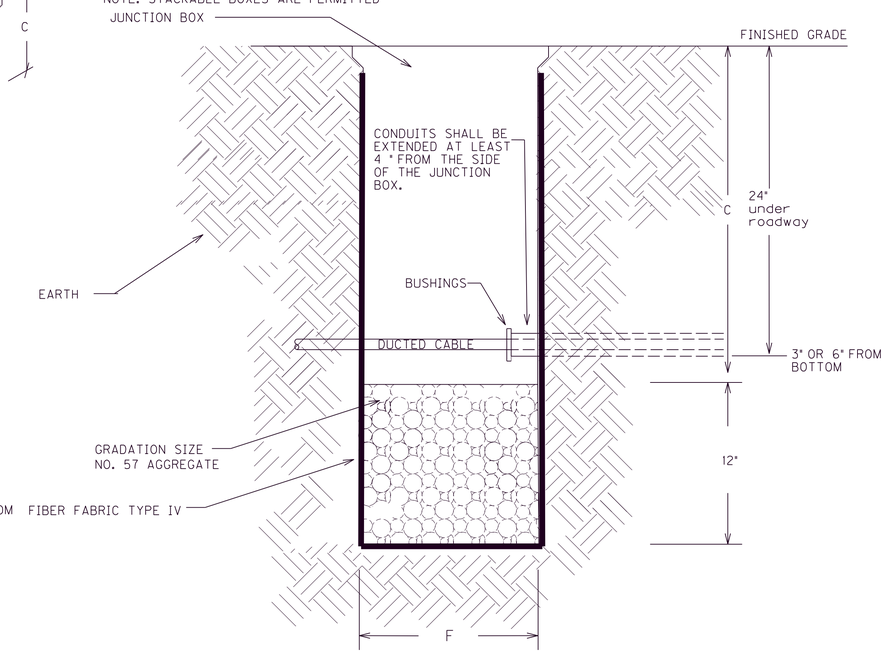
CONCRETE CABLE MARKERS



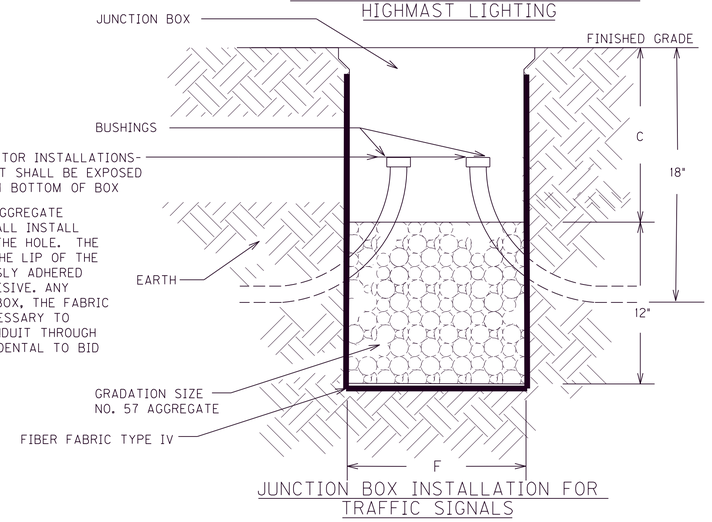
JUNCTION BOX DIMENSIONS (NOMINAL)						
	A	B	C	D	E	F
TYPE A	23"	14"	27"	2"	25"	15"
TYPE B	18"	11"	12"	1¾" •	20"	13"
TYPE C	36"	24"	30"	3"	38"	26"

• MINIMUM
NOTE: STACKABLE BOXES ARE PERMITTED

BEFORE THE INSTALLATION OF THE #57 AGGREGATE AND JUNCTION BOX, THE CONTRACTOR SHALL INSTALL GEOTEXTILE FILTER FABRIC TYPE IV IN THE HOLE. THE FABRIC SHALL EXTEND TO JUST BELOW THE LIP OF THE JUNCTION BOX AND SHALL BE CONTINUOUSLY ADHERED TO THE EXTERIOR OF THE BOX WITH ADHESIVE. ANY LOCATIONS WHERE CONDUITS ENTER THE BOX, THE FABRIC SHALL BE "X CUT" ONLY AS MUCH AS NECESSARY TO ALLOW PASSAGE OF EACH INDIVIDUAL CONDUIT THROUGH THE FABRIC. THE FABRIC SHALL BE INCIDENTAL TO BID ITEMS 4811, 2039INS835, OR 20392NS835.



JUNCTION BOX INSTALLATION FOR HIGHMAST LIGHTING



JUNCTION BOX INSTALLATION FOR TRAFFIC SIGNALS

FILE NAME: G:\ENGR\HDI365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\ROADWAY LIGHTING\T02 JUNCTION BOX.DGN
USER: phoward
DATE PLOTTED: March 7, 2022
E-SHEET NAME:
MicroStation v8.11.9.459

3/13/2017

WKP & KY 224
ROADWAY LIGHTING
_JUNCTION_BOX_AND_CONDUIT_DETAILS_

COUNTY OF	ITEM NO.	SHEET NO.
GRAYSON	4-20001 4-20002	T3

EX. 3 1/2" CONDUIT
CKT 4, 5
(DO NOT DISTURB)

EX. JB TYPE A
(DO NOT DISTURB)

EX. DUCTED CABLE
CKT 4, 5
(DO NOT DISTURB)

EX. HIGH MAST 4
(DO NOT DISTURB)

EX. DUCTED CABLE
CKT 5
(DO NOT DISTURB)

EX. DUCTED CABLE
CKT 4, 5
(DO NOT DISTURB)

EX. JB TYPE A
(DO NOT DISTURB)

EX. DUCTED CABLE
CKT 1, 2, 3
(DO NOT DISTURB)

EX. LIGHTING SERVICE AREA
(UTILITY POLE AND BASE MOUNT
CABINET WITH 480V,
SINGLE PHASE SERVICE)
(DO NOT DISTURB)

CONNECT PROP. CKT 6 - #8 DUCTED CABLE
TO EX. BREAKER IN EX. CABINET

EX. JB TYPE A
(DO NOT DISTURB)

INSTALL #8 DUCTED CABLE
SPLICE FREE FROM EX. SERVICE
AREA TO EX. HIGH MAST 6

EX. HIGH MAST 3
(DO NOT DISTURB)

EX. 3 1/2" CONDUIT
CKT 1, 2
(DO NOT DISTURB)

INSTALL DUCTED
CABLE MARKER

EX. JB TYPE A
(DO NOT DISTURB)

PROP. JB A1

INSTALL 1-3½" RS CONDUIT
WITH #8 DUCTED CABLE
FOR CKT 6

PROP. JB A2

INSTALL #8 DUCTED CABLE
IN CONDUIT ON BRIDGE (BY OTHERS)
SPLICE FREE FROM EX. SERVICE
AREA TO EX. HIGH MAST 6

ON EACH END OF THE PROP. BRIDGE, INSTALL
1-1¼" FLEX CONDUIT FROM PROP. JB A TO
CONDUIT IN BRIDGE

EX. DUCTED CABLE
CKT 1, 2
(DO NOT DISTURB)

PROP. JB A3

INSTALL #8 DUCTED CABLE
SPLICE FREE FROM EX. SERVICE
AREA TO EX. HIGH MAST 6

EX. HIGH MAST 6
(DO NOT DISTURB)

LEGEND

- EX. HIGH MAST POLE (DO NOT DISTURB)
- EX. SERVICE POLE (DO NOT DISTURB)
- EX. BASE MOUNTED CABINET (DO NOT DISTURB)
- EX. JUNCTION BOX - TYPE A (DO NOT DISTURB)
- PROP. JUNCTION BOX - TYPE A
- PROP. CONCRETE MARKER (M)
- 3½" RIGID STEEL CONDUIT
- DUCTED CABLE

0' 50' 100' 200'

SCALE: 1"=50'

WKP & KY 224
ROADWAY LIGHTING
LAYOUT

MicroStation v8.11.9.459 | E-SHEET NAME: | USER: phoward | DATE PLOTTED: March 7, 2022 | FILE NAME: G:\ENGR\HD365.10 AND 1365.11 GRAYSON WK\CAD\PLAN\ROADWAY LIGHTING\T03 ROADWAY LIGHTING LAYOUT.DGN