

REVIEWER NOTES:

- 1. THERE WILL BE A 10 DAY CLOSURE PERIOD, WITH OFF SITE DETOUR.
- 2. PROJECT IS TO BE CONSTRUCTED USING ABC METHODS; PBUS SUPPORTED ON PRECAST CONCRETE SEMI-INTEGRAL ABUTMENTS WITH STEEL H-PILES.
- 3. RIGHT-OF-WAY IS NOT ANTICIPATED FOR THIS PROJECT.
- 4. A DESIGN EXCEPTION HAS BEEN SUBMITTED FOR THE SUBSTANDARD SHOULDER WIDTH.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
BRIDGE PROJECT

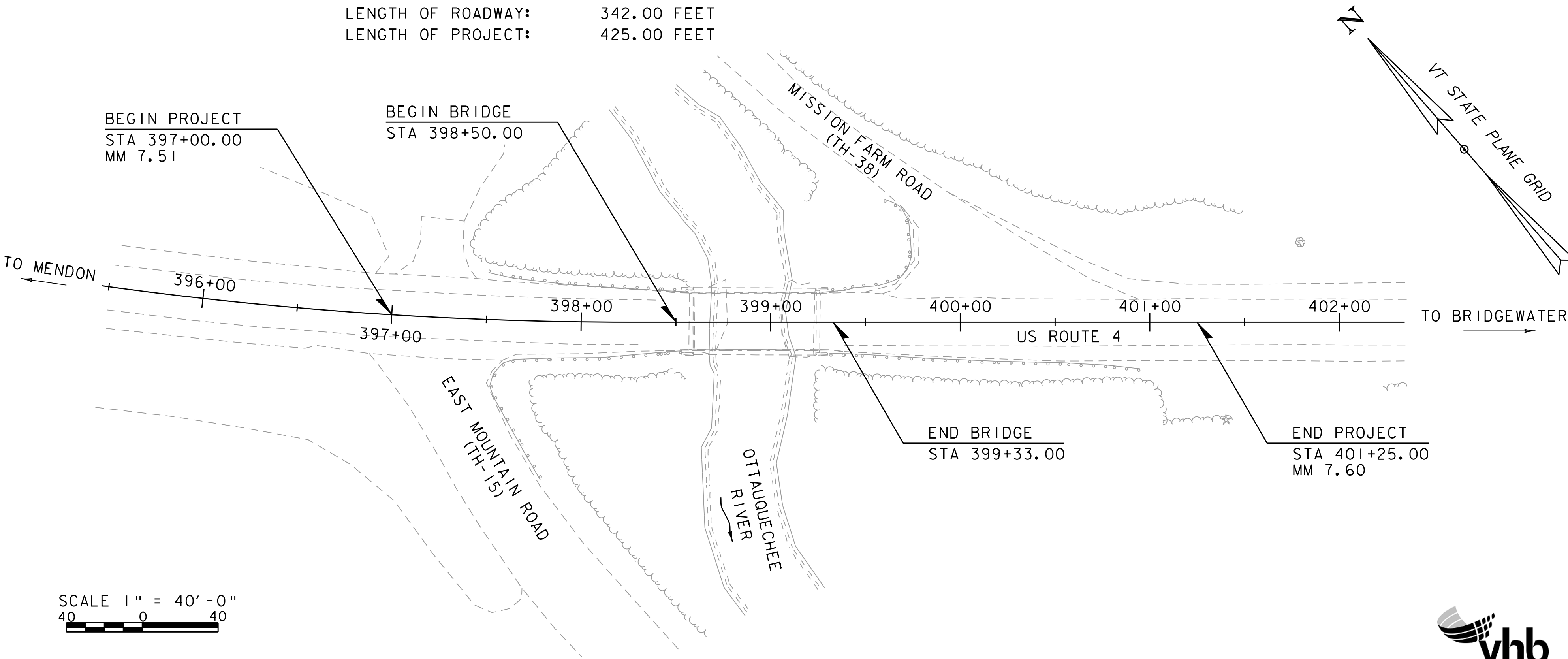
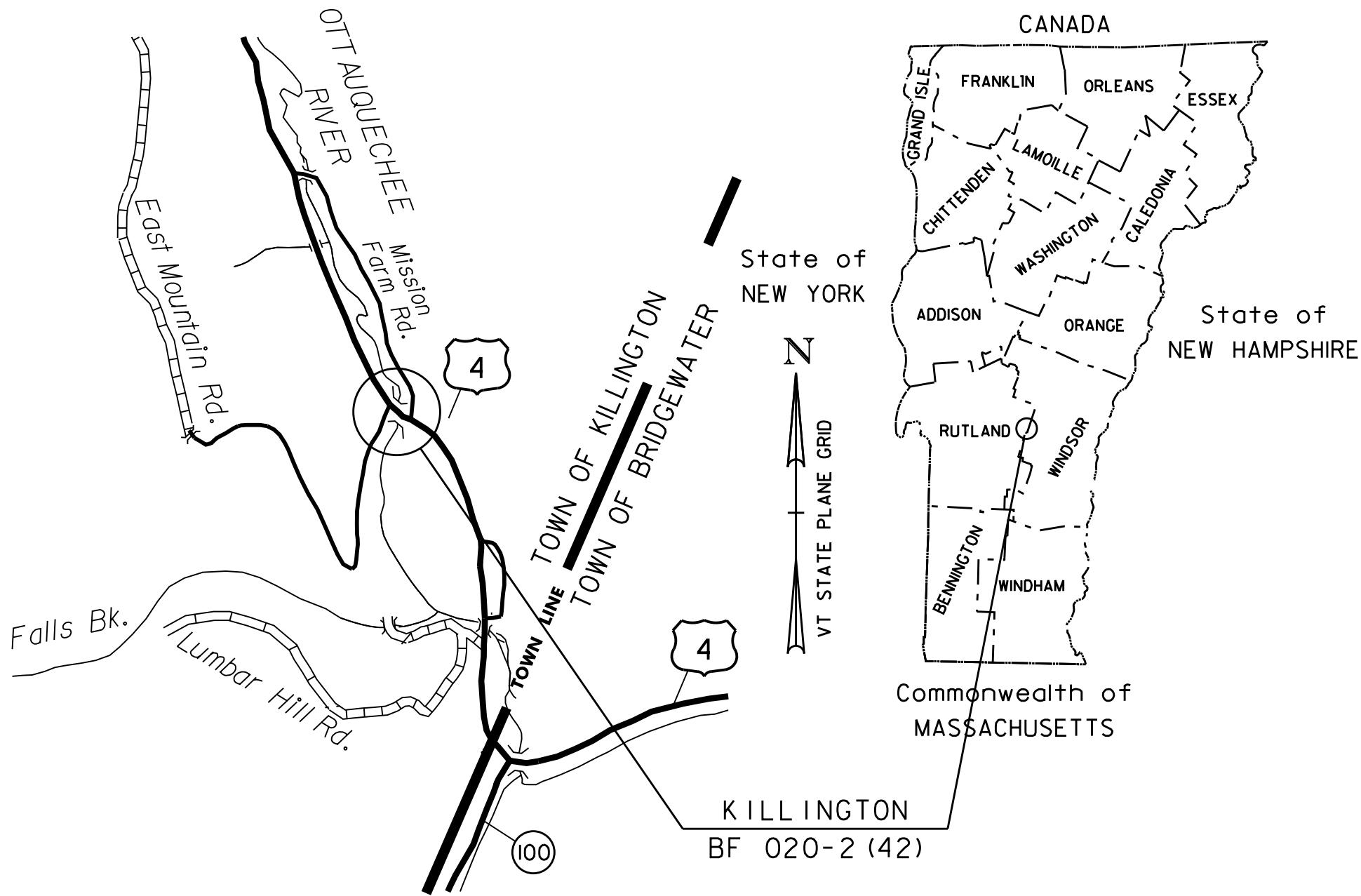
TOWN OF KILLINGTON
COUNTY OF RUTLAND

US ROUTE 4 (RURAL PRINCIPAL ARTERIAL) , BRIDGE NO 33

PROJECT LOCATION: LOCATED IN THE COUNTY OF RUTLAND , IN THE TOWN OF KILLINGTON, ON US ROUTE 4; BRIDGE NO. 33 OVER THE OTTAUQUECHEE RIVER; APPROXIMATELY 1.0 MILE WEST OF THE INTERSECTION OF US ROUTE 4 AND VT ROUTE 100 IN THE TOWN OF BRIDGEWATER.

PROJECT DESCRIPTION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF BRIDGE NO. 33 ON THE EXISTING ALIGNMENT, WITH ASSOCIATED ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE: 83.00 FEET
LENGTH OF ROADWAY: 342.00 FEET
LENGTH OF PROJECT: 425.00 FEET



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

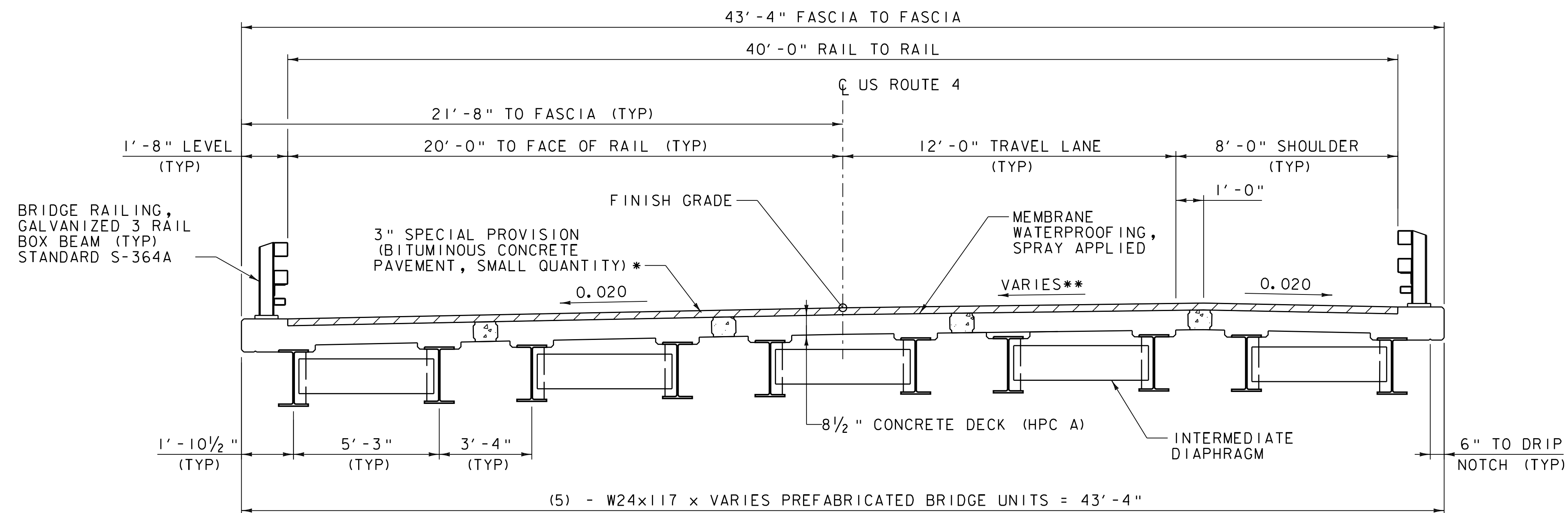
QUALITY ASSURANCE PROGRAM : LEVEL 1	
SURVEYED BY :	R. GILMAN
SURVEYED DATE :	12/2013
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83 (2011)

SCALE 1" = 40'-0"
40 0 40

PRELIMINARY
PLANS
FEBRUARY 2016

DIRECTOR OF PROJECT DELIVERY	
APPROVED _____	DATE _____
PROJECT MANAGER : JENNIFER M.V. FITCH, PE	
PROJECT NAME : KILLINGTON	
PROJECT NUMBER : BF 020-2 (42)	
SHEET 1 OF 50 SHEETS	





- * - (2) - 1 1/2" LIFTS OF TYPE IVS
 ** - SEE PROFILE AND BANKING DIAGRAM FOR SLOPE

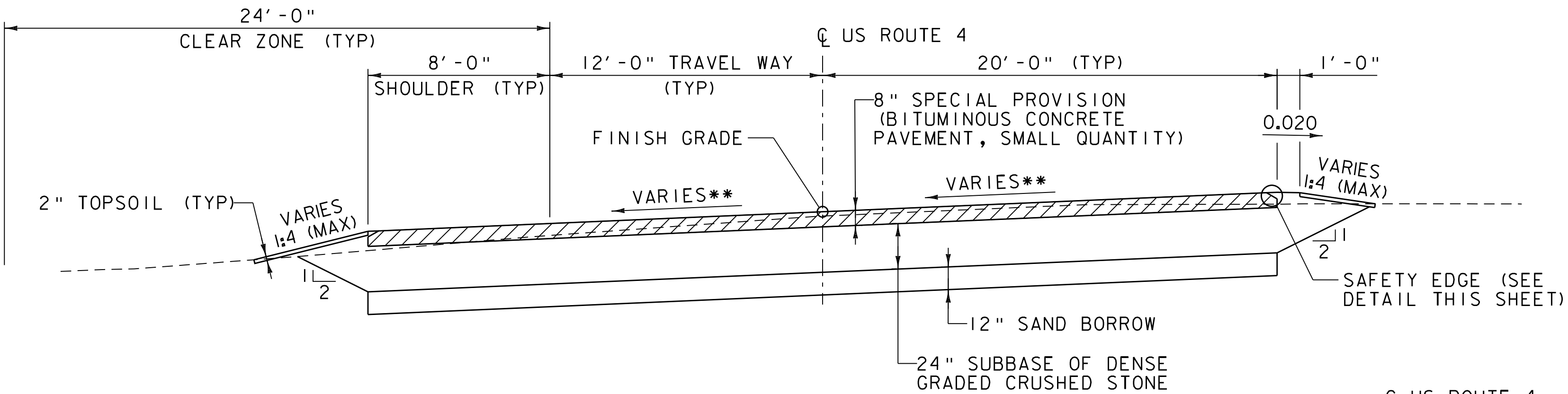
TYPICAL BRIDGE SECTION
 SCALE 3/8" = 1'-0"



PROJECT NAME: KILLINGTON
 PROJECT NUMBER: BF 020-2(42)
 FILE NAME: z13b260typ.dgn
 PROJECT LEADER: S.E. BURBANK
 DESIGNED BY: R.H. BARNES
 TYPICAL BRIDGE SECTION

PLOT DATE: 2/12/2016
 DRAWN BY: R.H. BARNES
 CHECKED BY: E.F. LAWES
 SHEET 3 OF 50

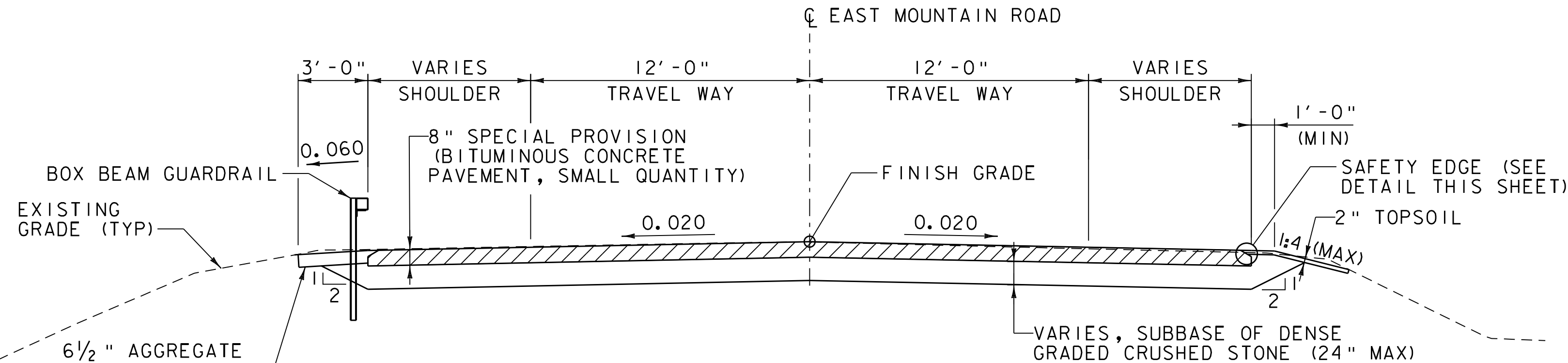
MATERIAL TOLERANCES (IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"



* - (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

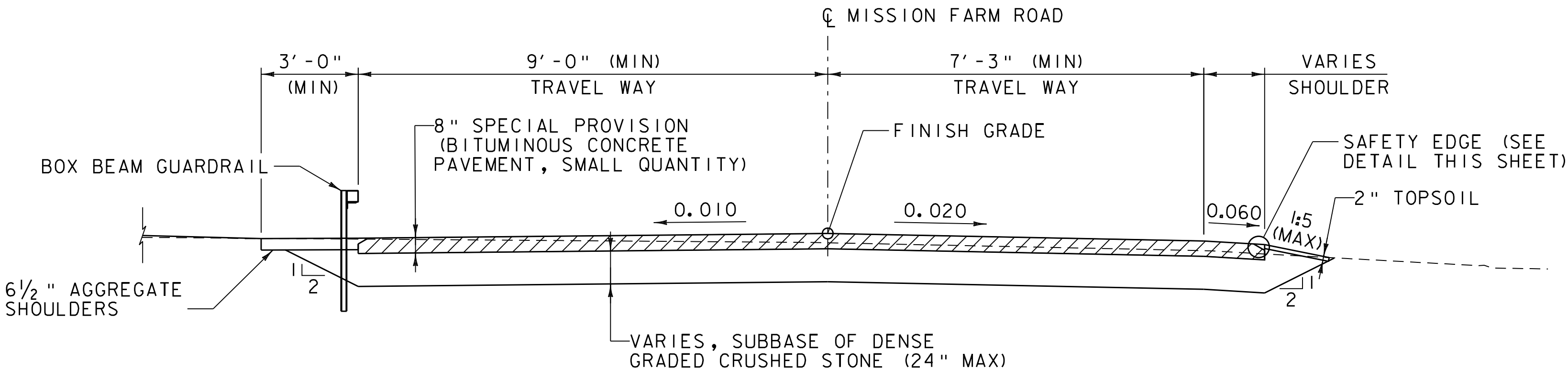
** - SEE PROFILE AND BANKING DIAGRAM FOR SLOPES

TYPICAL US ROUTE 4 SECTION
SCALE 1/4" = 1'-0"



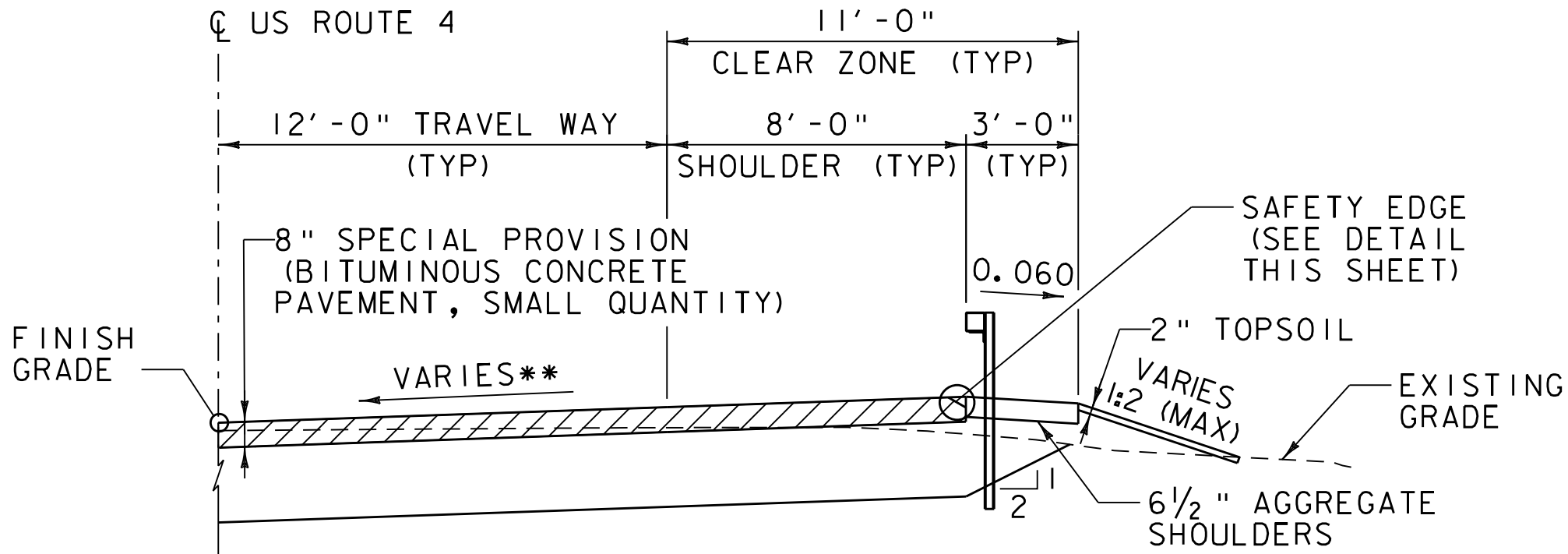
* - (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

TYPICAL EAST MOUNTAIN ROAD SECTION
SCALE 1/4" = 1'-0"



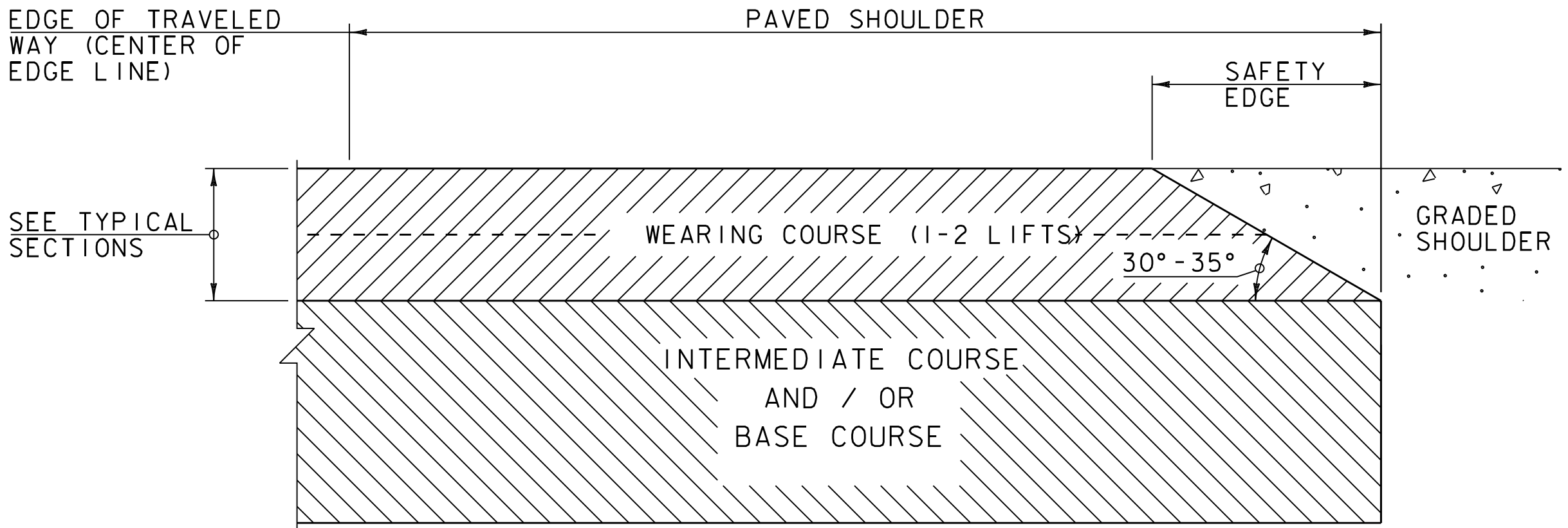
* - (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

TYPICAL MISSION FARM ROAD SECTION
SCALE 1/4" = 1'-0"



* - (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

TYPICAL US ROUTE 4 SECTION WITH GUARDRAIL
SCALE 1/4" = 1'-0"



SAFETY EDGE DETAIL
NOT TO SCALE

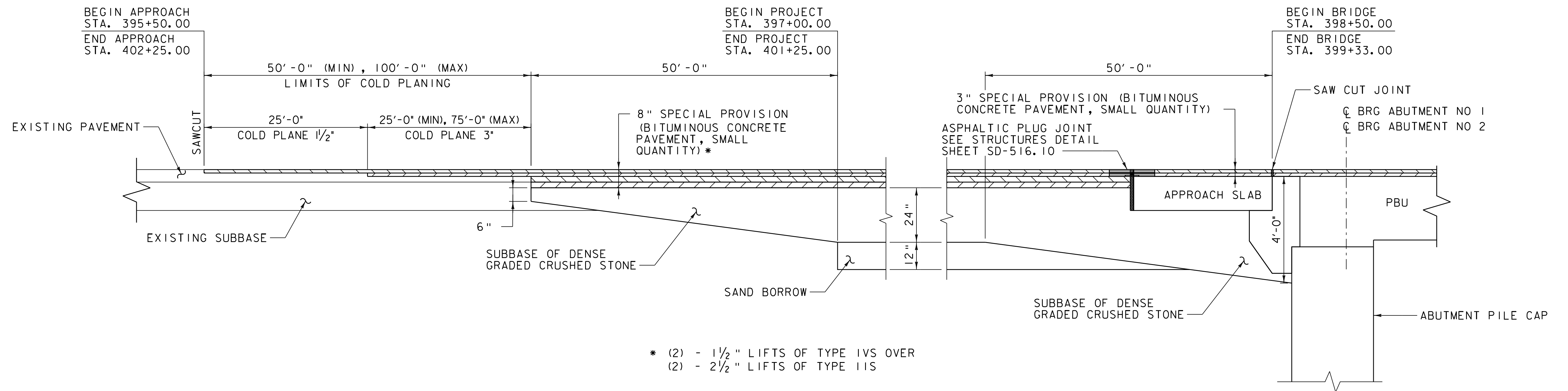
1. THE EDGE OF PAVEMENT SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE 30 TO 35 DEGREE ANGLE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.
2. THE PAVED SHOULDER EXTENDS FROM THE EDGE OF TRAVELED WAY TO THE EDGE OF THE WEARING COURSE, INCLUDING THE "SAFETY EDGE".

PROJECT NAME: KILLINGTON
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260typ.dgn
PROJECT LEADER: S.E. BURBANK
DESIGNED BY: E.F. LAWES
TYPICAL ROADWAY SECTIONS (1 OF 3)

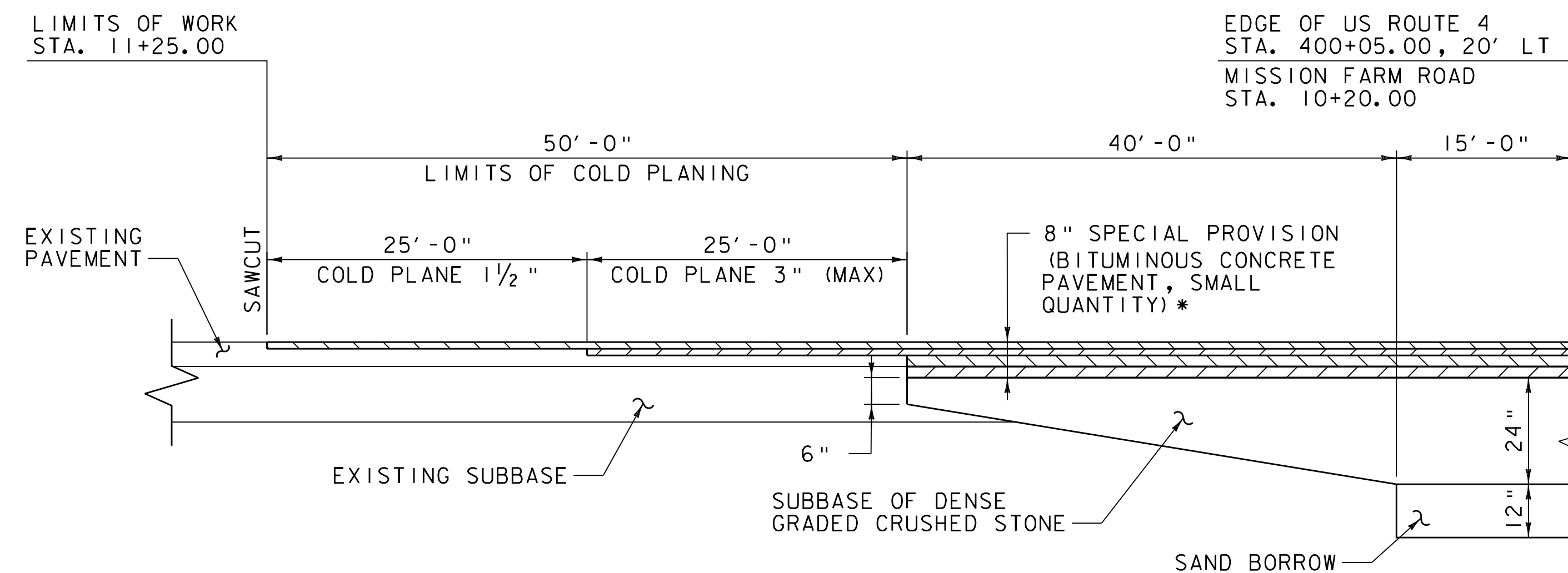
PLOT DATE: 2/12/2016
DRAWN BY: E.F. LAWES
CHECKED BY: S.E. BURBANK
SHEET 4 OF 50





NOTE: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.040 GAL/SY BETWEEN ALL LIFTS OF BITUMINOUS CONCRETE PAVEMENT, ON ALL COLD PLANED SURFACES, AND THE APPROACH SLAB PRIOR TO PLACING THE FIRST LIFT, AS DIRECTED BY THE ENGINEER.

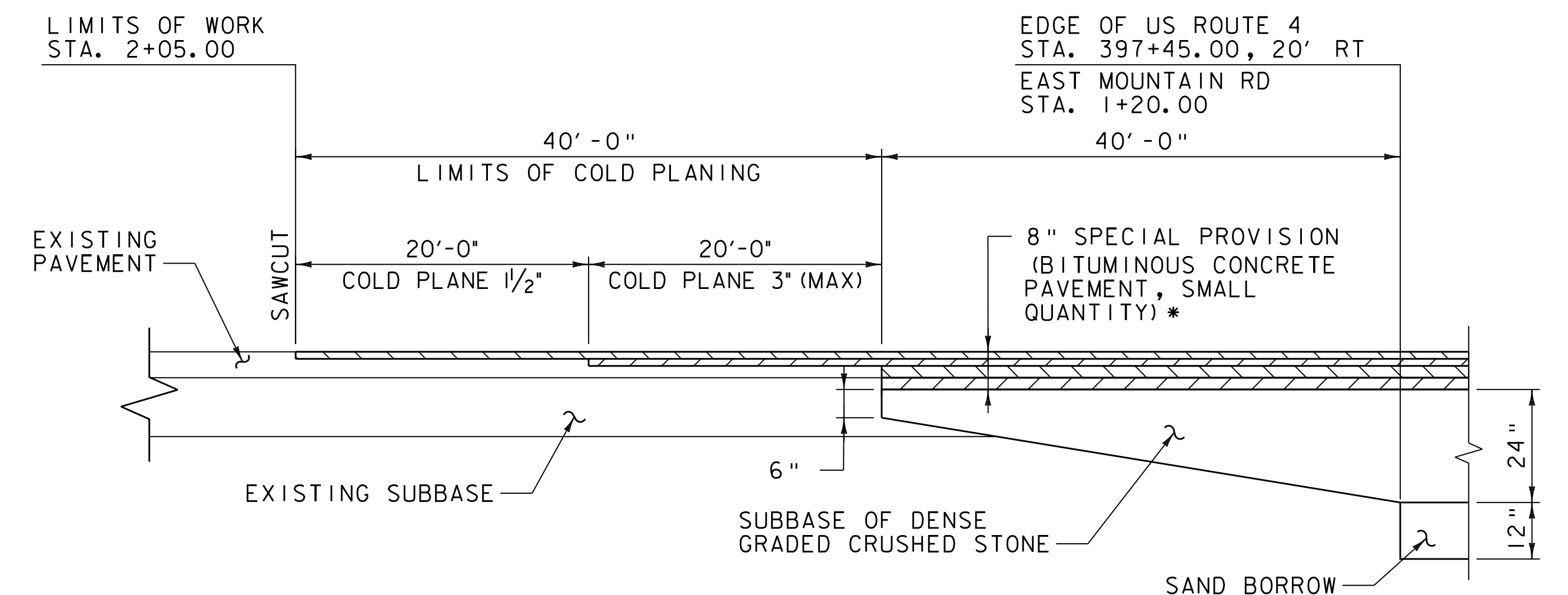
APPROACH SECTION NOT TO SCALE



* (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

NOTE: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.040 GAL/SY BETWEEN ALL LIFTS OF BITUMINOUS CONCRETE PAVEMENT, ON ALL COLD PLANED SURFACES, AND THE APPROACH SLAB PRIOR TO PLACING THE FIRST LIFT, AS DIRECTED BY THE ENGINEER.

MISSION FARM ROAD (TH-38) APPROACH SECTION NOT TO SCALE



* (2) - 1 1/2" LIFTS OF TYPE IVS OVER
(2) - 2 1/2" LIFTS OF TYPE IIS

NOTE: EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.040 GAL/SY BETWEEN ALL LIFTS OF BITUMINOUS CONCRETE PAVEMENT, ON ALL COLD PLANED SURFACES, AND THE APPROACH SLAB PRIOR TO PLACING THE FIRST LIFT, AS DIRECTED BY THE ENGINEER.

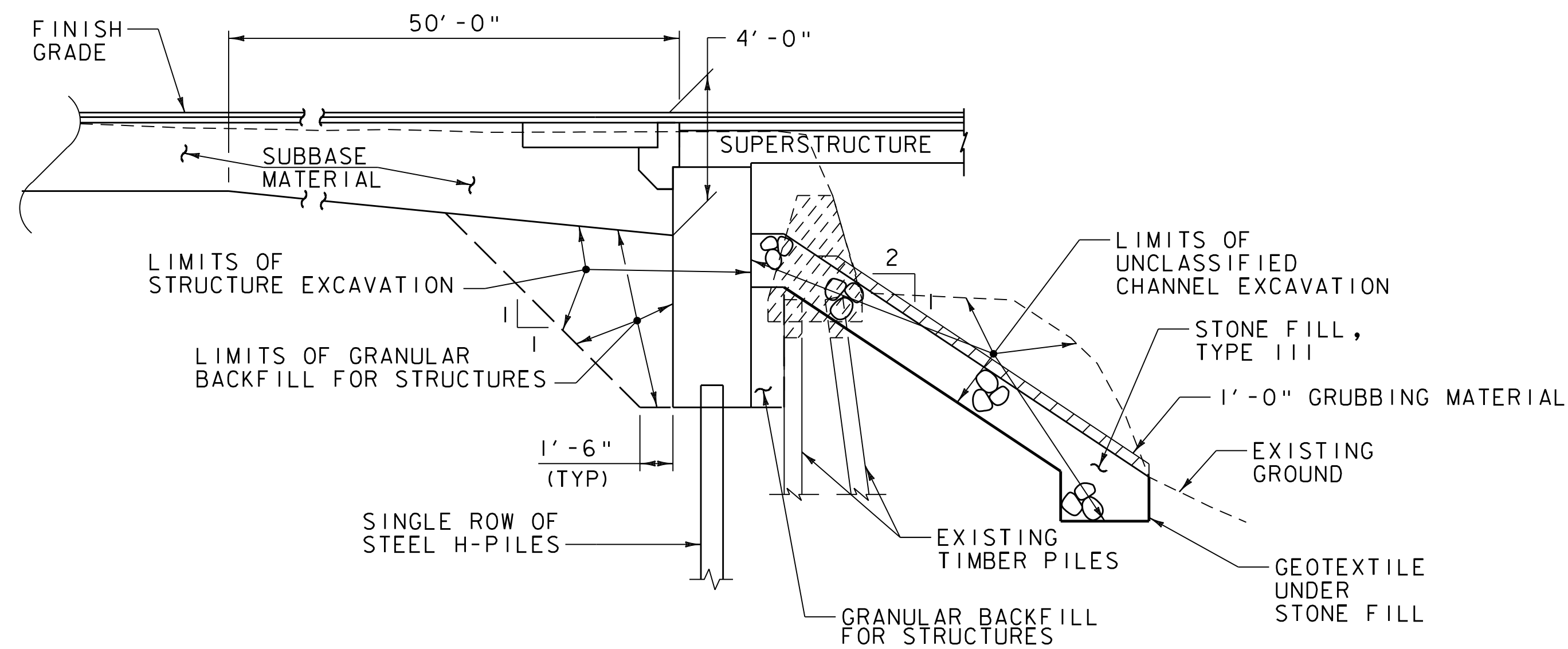
EAST MOUNTAIN ROAD (TH-15) APPROACH SECTION NOT TO SCALE

PROJECT NAME: KILLINGTON
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260typ.dgn
PROJECT LEADER: S.E. BURBANK
DESIGNED BY: E.F. LAWES
TYPICAL ROADWAY SECTIONS (2 OF 3)

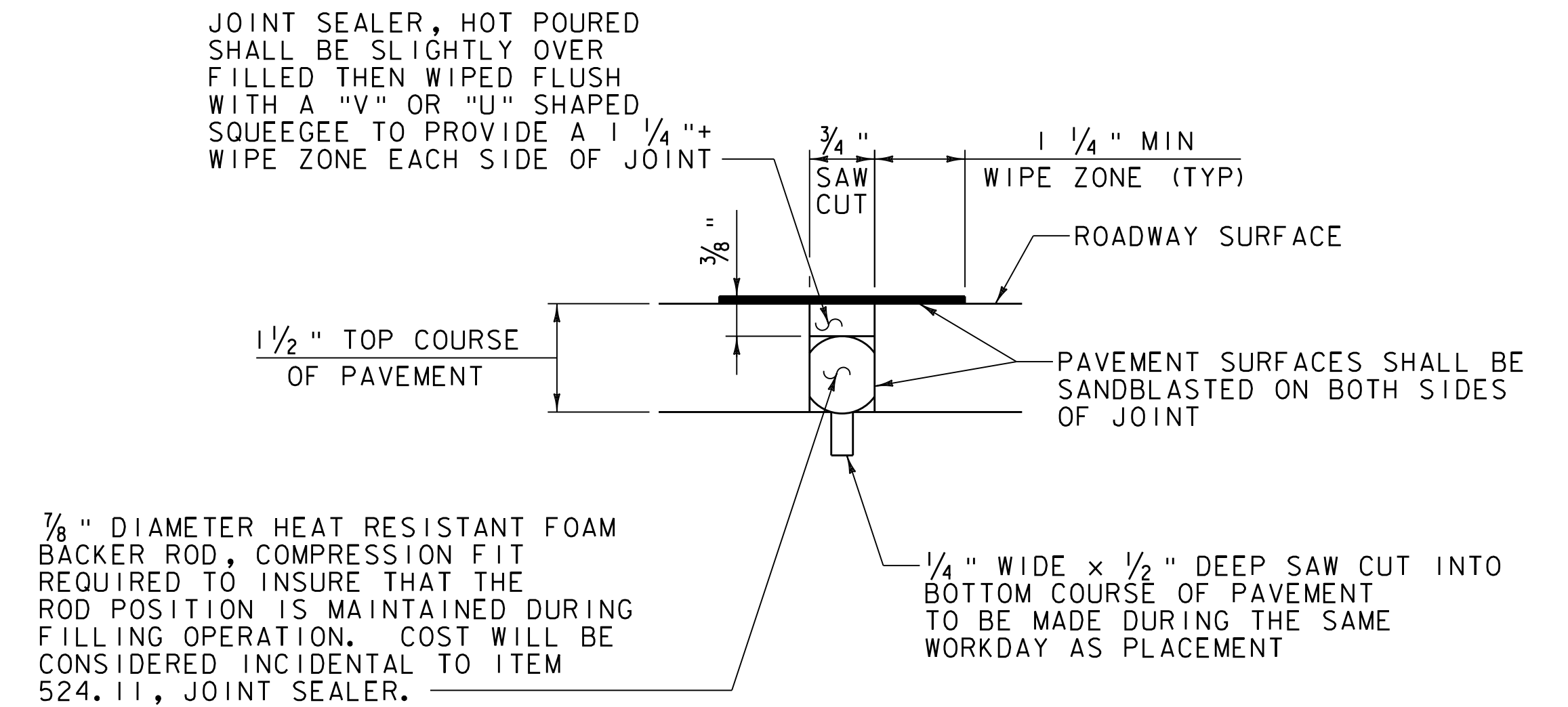
PLOT DATE: 2/12/2016
DRAWN BY: E.F. LAWES
CHECKED BY: S.E. BURBANK
SHEET 5 OF 50





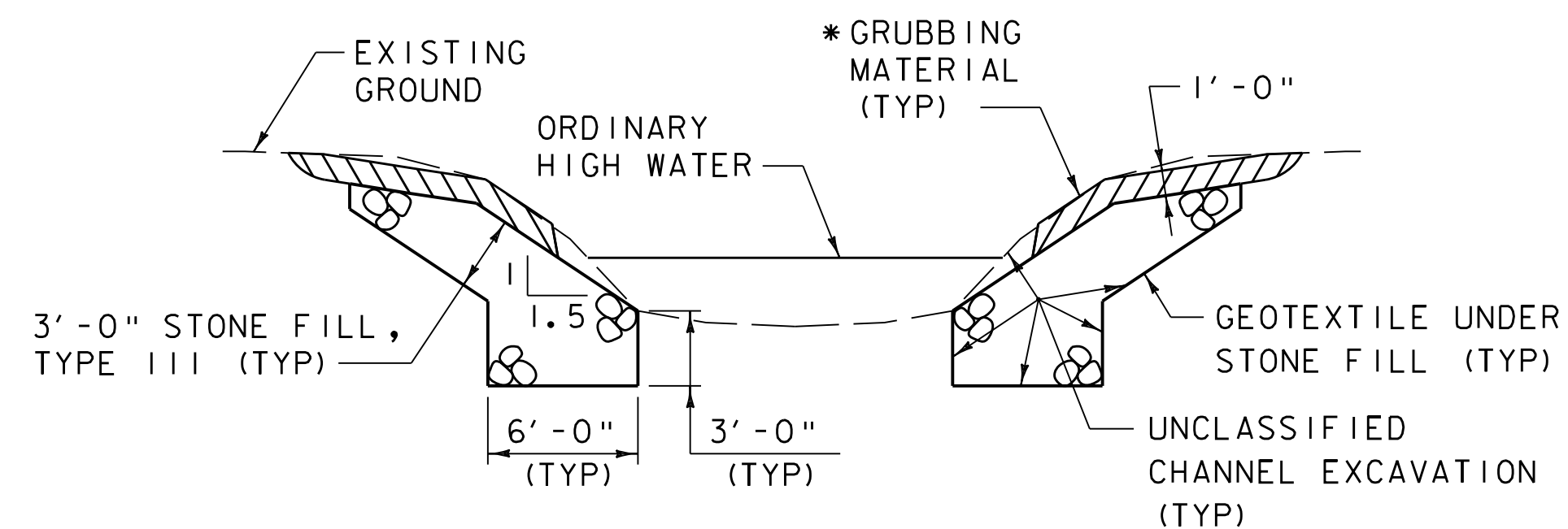
NOTE: ACTUAL STRUCTURE EXCAVATION LIMITS SHALL BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS SHOWN FOR STRUCTURE EXCAVATION WILL BE PAID FOR UNDER ITEM 204.25, "STRUCTURE EXCAVATION". EXCAVATION OUTSIDE OF THESE LIMITS WILL BE AT THE EXPENSE OF THE CONTRACTOR.

ABUTMENT EARTHWORK SECTION
NOT TO SCALE



SAW CUT JOINT DETAIL
NOT TO SCALE

1. JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF THE CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER.
2. SAWED PAVEMENT JOINTS SHALL BE LOCATED BETWEEN THE APPROACH SLABS AND EACH END OF THE BRIDGE AND BETWEEN THE APPROACH SLABS AND ANY PAVED APRONS FOR DRIVES.



TYPICAL CHANNEL SECTION
NOT TO SCALE

*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



PROJECT NAME: KILLINGTON
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260typ.dgn
PROJECT LEADER: S.E. BURBANK
DESIGNED BY: E.F. LAWES
TYPICAL ROADWAY SECTIONS (3 OF 3)

PLOT DATE: 2/12/2016
DRAWN BY: E.F. LAWES
CHECKED BY: S.E. BURBANK
SHEET 6 OF 50

GENERAL INFORMATION

SYMBOLOLOGY LEGEND NOTE

THE SYMBOLOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOLOGY. THE SYMBOLOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BDNS	BOUND SET
▣	BDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
⊙	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
⌘	APL	BOUND APPARENT LOCATION
▣	BM	BENCHMARK
▣	BND	BOUND
▣	CB	CATCH BASIN
⊕	COMB	COMBINATION POLE
▣	DITHR	DROP INLET THROATED DNC
⊕	EL	ELECTRIC POWER POLE
⊙	FPOLE	FLAGPOLE
○	GASFIL	GAS FILLER
○	GP	GUIDE POST
⌘	GSO	GAS SHUT OFF
⊙	GUY	GUY POLE
⊙	GUYW	GUY WIRE
⌘	GV	GATE VALUE
⊕	H	TREE HARDWOOD
△	HCTRL	CONTROL HORIZONTAL
△	HVCTRL	CONTROL HORIZ. & VERTICAL
◇	HYD	HYDRANT
⊙	IP	IRON PIN
⊙	IPIPE	IRON PIPE
⊕	LI	LIGHT - STREET OR YARD
⊕	MB	MAILBOX
○	MH	MANHOLE (MH)
▣	MM	MILE MARKER
⊙	PM	PARKING METER
▣	PMK	PROJECT MARKER
⊙	POST	POST STONE/WOOD
⊕	RRSIG	RAILROAD SIGNAL
⊕	RRSL	RAILROAD SWITCH LEVER
⊕	S	TREE SOFTWOOD
⊕	SAT	SATELLITE DISH
⊕	SHRUB	SHRUB
⊕	SIGN	SIGN
⊕	STUMP	STUMP
⊕	TEL	TELEPHONE POLE
⊙	TIE	TIE
⊕	TSIGN	SIGN W/DOUBLE POST
⊕	VCTRL	CONTROL VERTICAL
⊙	WELL	WELL
⌘	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOLOGY

UNDERGROUND UTILITIES	
— UT —	UTILITY (GENERIC-UNKNOWN)
— UE —	TELEPHONE
— UC —	ELECTRIC
— UEC —	CABLE (TV)
— UET —	ELECTRIC+CABLE
— UET —	ELECTRIC+TELEPHONE
— UCT —	CABLE+TELEPHONE
— UECT —	ELECTRIC+CABLE+TELEP.
— G —	GAS LINE
— W —	WATER LINE
— S —	SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)	
— T —	UTILITY (GENERIC-UNKNOWN)
— E —	TELEPHONE
— C —	ELECTRIC
— EC —	CABLE (TV)
— EC —	ELECTRIC+CABLE
— ET —	ELECTRIC+TELEPHONE
— AER E&T —	ELECTRIC+TELEPHONE
— CT —	CABLE+TELEPHONE
— ECT —	ELECTRIC+CABLE+TELEP.
— ... —	UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOLOGY	
— -- -- CZ — -- --	CLEAR ZONE
—————	PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES	
△ — △ — △ — △	TOP OF CUT SLOPE
○ — ○ — ○ — ○	TOE OF FILL SLOPE
⊗ ⊗ ⊗ ⊗ ⊗	STONE FILL
-----	BOTTOM OF DITCH
=====	CULVERT PROPOSED
-----	STRUCTURE SUBSURFACE
PDF — PDF —	PROJECT DEMARCATION FENCE
BF — — — — BF — — — —	BARRIER FENCE
xxxxxxxxxxxxxxxxxxxx	TREE PROTECTION ZONE (TPZ)
//////////	STRIPING LINE REMOVAL
~~~~~	SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOLOGY

BOUNDARY LINES	
————— TOWN LINE —————	TOWN BOUNDARY LINE
————— COUNTY LINE —————	COUNTY BOUNDARY LINE
————— STATE LINE —————	STATE BOUNDARY LINE
——— / / / ———	PROPOSED STATE R.O.W. (LIMITED ACCESS)
——— / / / ———	PROPOSED STATE R.O.W.
——— / / / ———	STATE ROW (LIMITED ACCESS)
——— / / / ———	STATE ROW
——— / / / ———	TOWN ROW
— - - - -	PERMANENT EASEMENT LINE (P)
— - - - -	TEMPORARY EASEMENT LINE (T)
— + — + — + —	SURVEY LINE
— P — L — P — L —	PROPERTY LINE (P/L)
△ — SR — ○ — SR — △ — SR — ○	SLOPE RIGHTS
6f ——— 6f ———	6F PROPERTY BOUNDARY
4f ——— 4f ———	4F PROPERTY BOUNDARY
HAZ ——— HAZ ———	HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOLOGY

EPSC MEASURES	
ONNOONNOONNO	FILTER CURTAIN
▣ — ▣ — ▣ — ▣	SILT FENCE
▣ — X — ▣ — X — ▣	SILT FENCE WOVEN WIRE
▶ —▶ —▶ —	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
▣	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOLOGY

ENVIRONMENTAL RESOURCES	
——— WETLAND BOUNDARY ———	WETLAND BOUNDARY
-----	RIPARIAN BUFFER ZONE
-----	WETLAND BUFFER ZONE
-----	SOIL TYPE BOUNDARY
——— T&E ———	THREATENED & ENDANGERED SPECIES
HAZ ——— HAZ ———	HAZARDOUS WASTE AREA
——— AG ———	AGRICULTURAL LAND
——— HABITAT ———	FISH & WILDLIFE HABITAT
——— FLOOD PLAIN ———	FLOOD PLAIN
——— OHW ———	ORDINARY HIGH WATER (OHW)
——— STORM WATER ———	STORM WATER
——— USDA FOREST SERVICE LANDS ———	USDA FOREST SERVICE LANDS
——— WILDLIFE HABITAT SUIT/CONN ———	WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC	
——— ARCH ———	ARCHEOLOGICAL BOUNDARY
——— HISTORIC DIST ———	HISTORIC DISTRICT BOUNDARY
——— HISTORIC ———	HISTORIC AREA
(H)	HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOLOGY	
EXISTING FEATURES	
-----	ROAD EDGE PAVEMENT
-----	ROAD EDGE GRAVEL
-----	DRIVEWAY EDGE
-----	DITCH
-----	FOUNDATION
x — x — x — x —	FENCE (EXISTING)
▣ — ▣ — ▣ — ▣	FENCE WOOD POST
○ — ○ — ○ — ○	FENCE STEEL POST
~~~~~	GARDEN
○ — ○ — ○ — ○	ROAD GUARDRAIL
	RAILROAD TRACKS
-----	CULVERT (EXISTING)
○○○○○○○○○○○○○○○○	STONE WALL
-----	WALL
~~~~~	WOOD LINE
~~~~~	BRUSH LINE
~~~~~	HEDGE
=====	BODY OF WATER EDGE
=====	LEDGE EXPOSED

PROJECT NAME:	KILLINGTON
PROJECT NUMBER:	BF 020-2(42)
FILE NAME:	z13B260LegendSheet.dgn
PROJECT LEADER:	S.E. BURBANK
DESIGNED BY:	VTRANS
CONVENTIONAL SYMBOLOLOGY LEGEND	
PLOT DATE:	2/12/2016
DRAWN BY:	VTRANS
CHECKED BY:	S.E. BURBANK
SHEET	7 OF 50





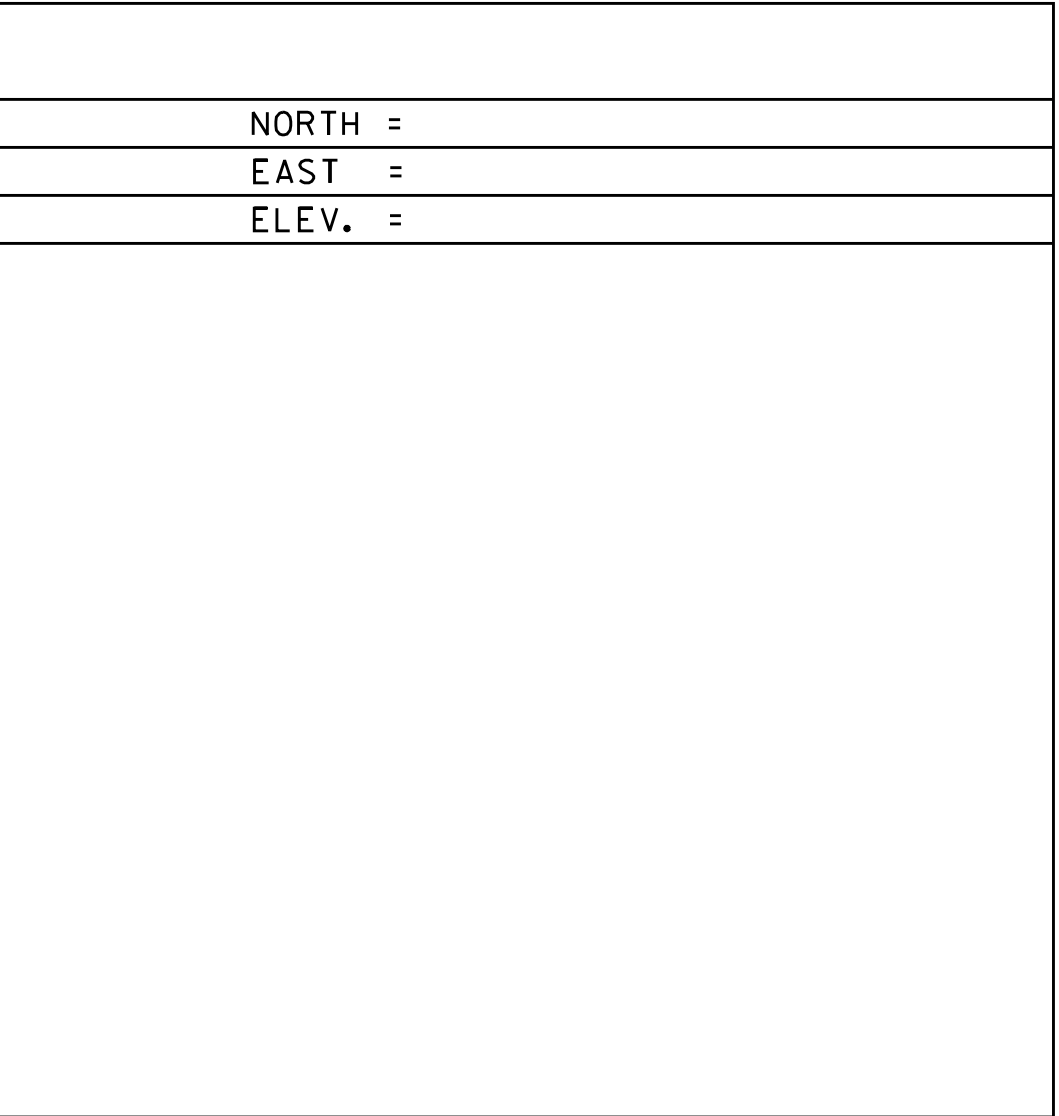
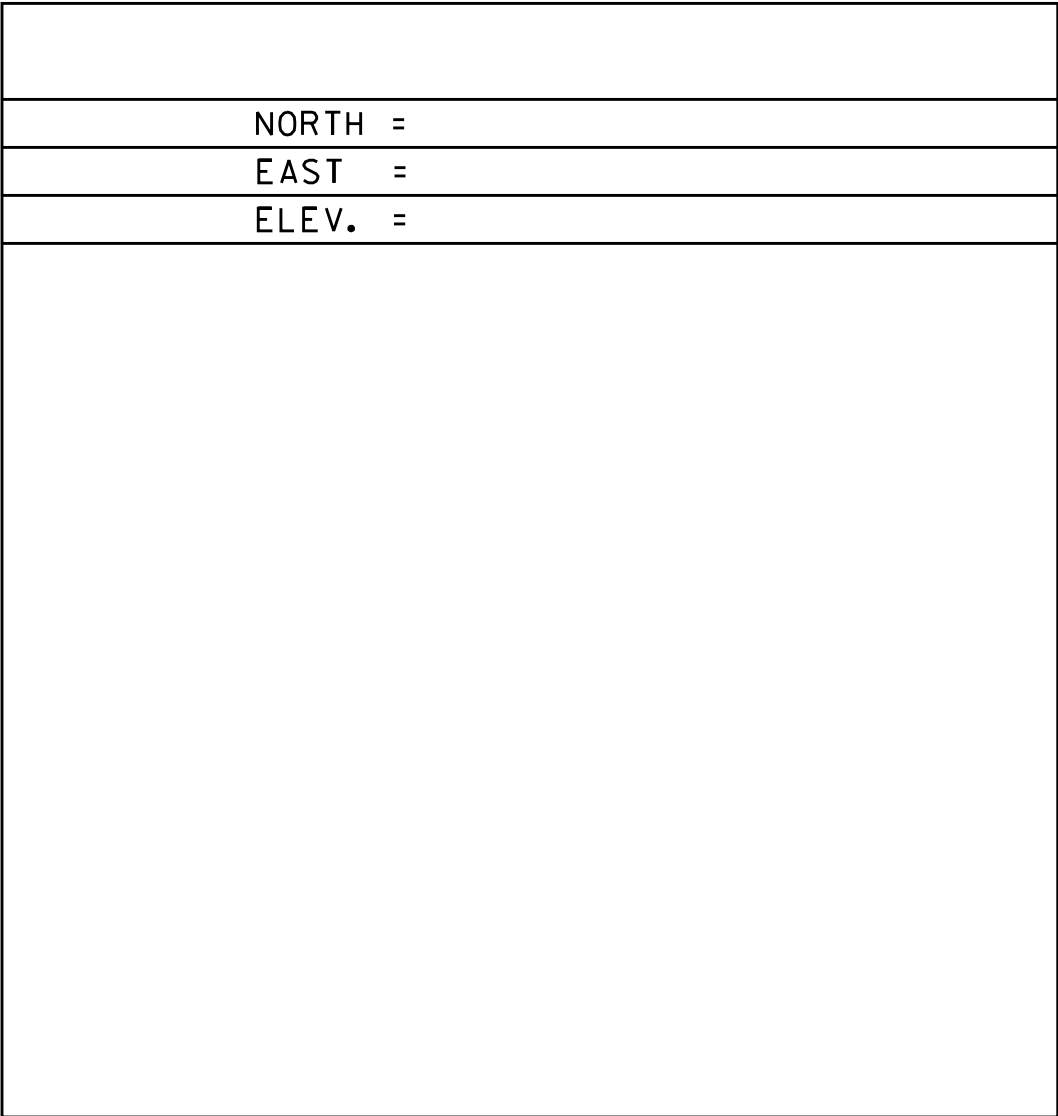
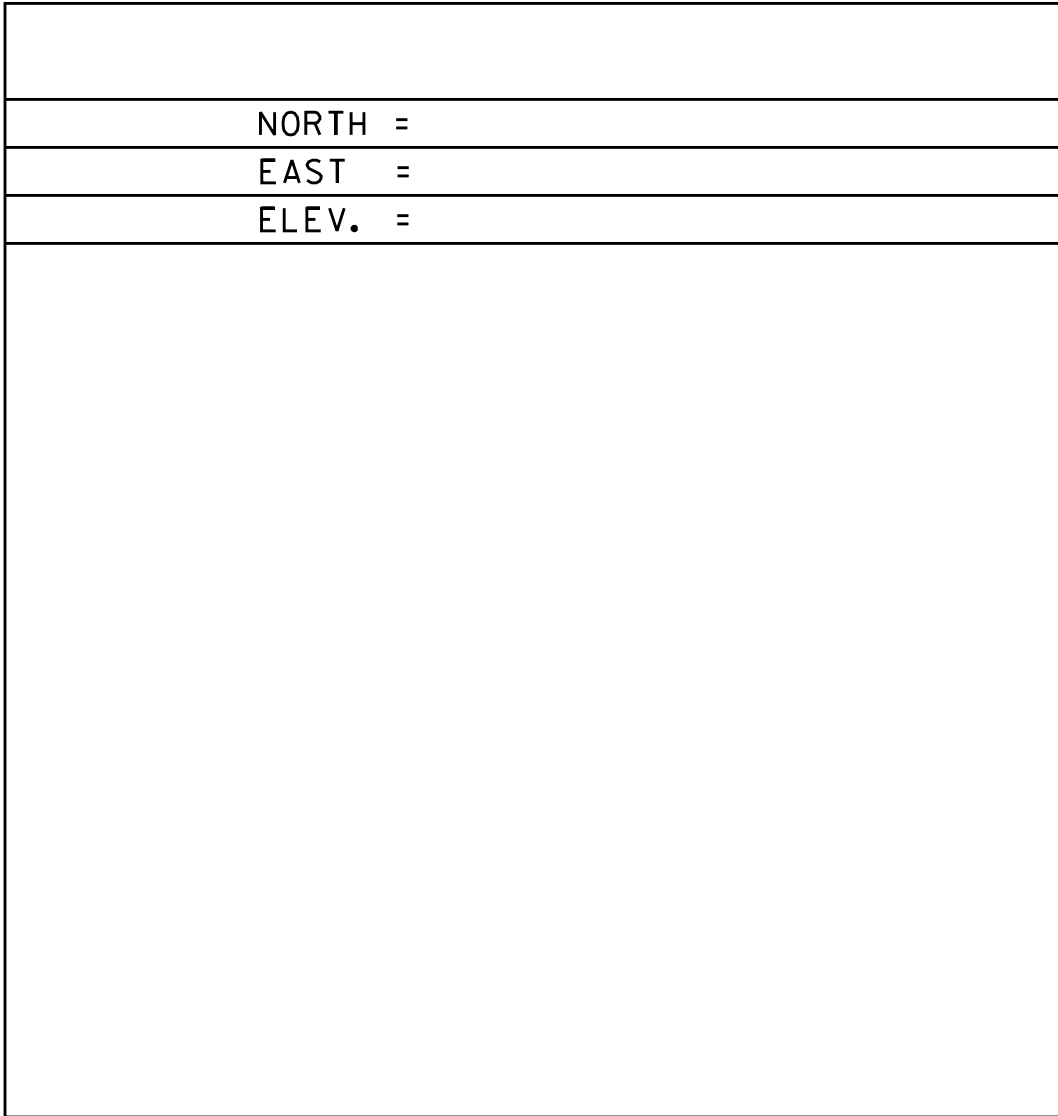
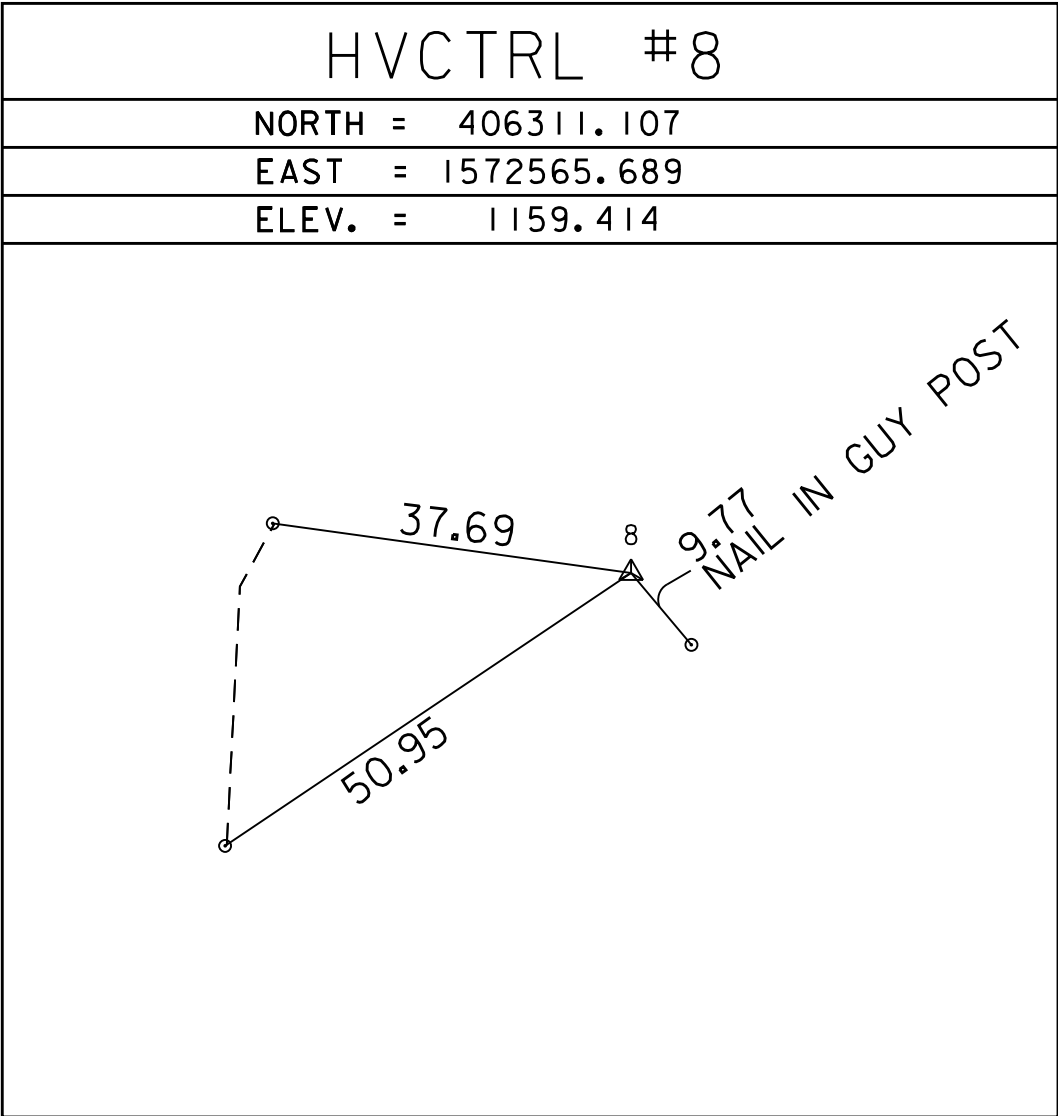
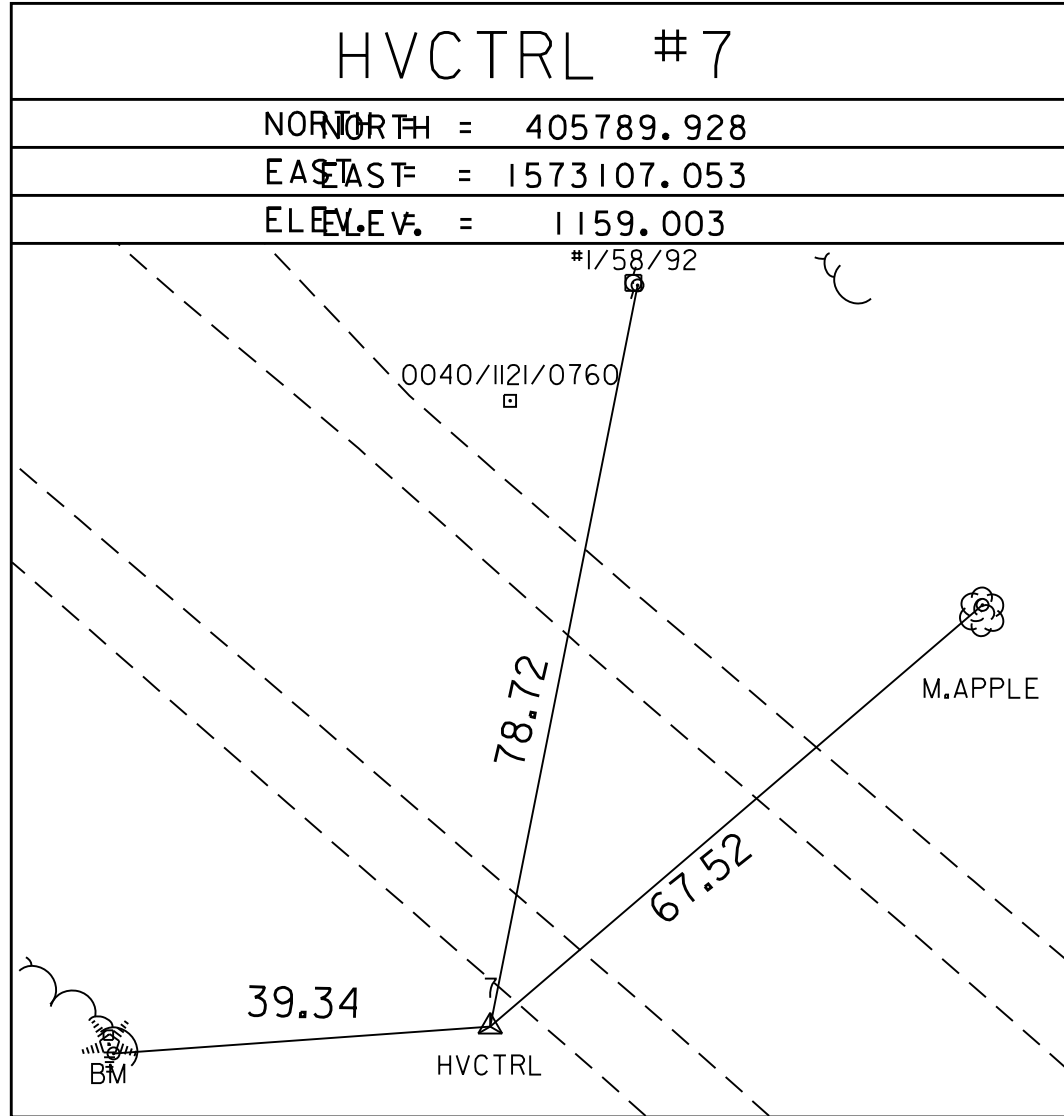
GPS CONTROL POINTS

PT #1 CEDAR BROOK AZ MK  
NORTH = 399663.02  
EAST = 1573671.02  
ELEV. = 1070.40

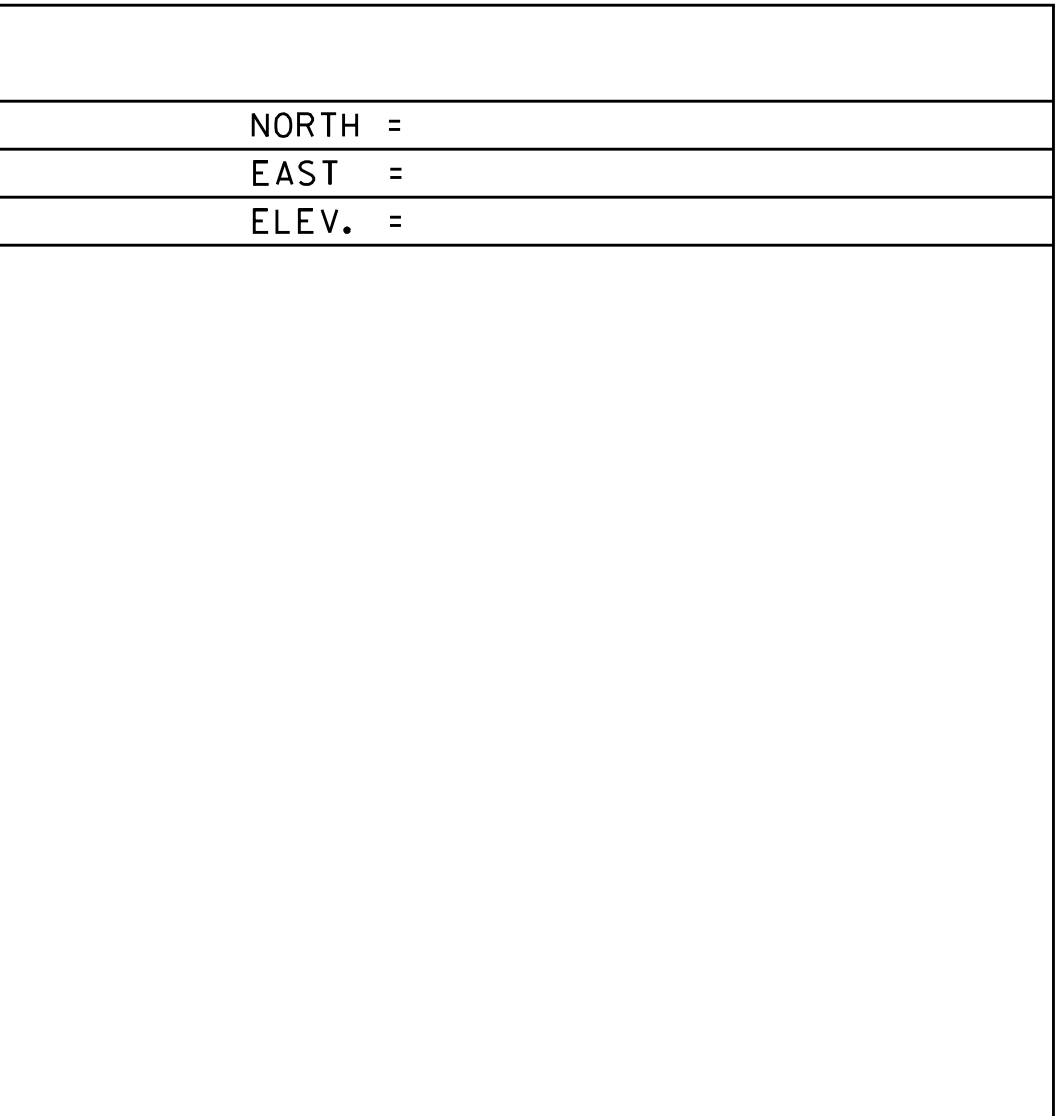
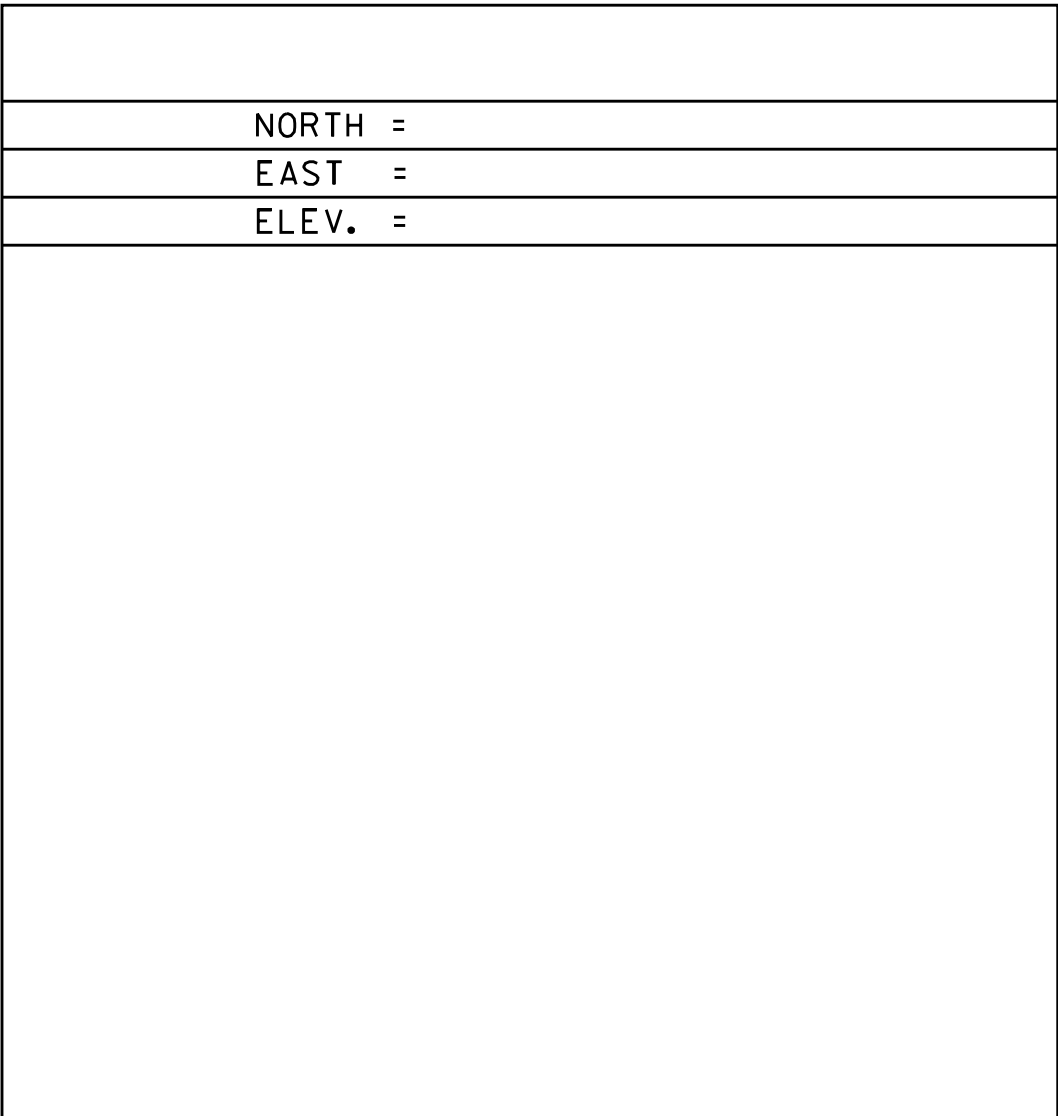
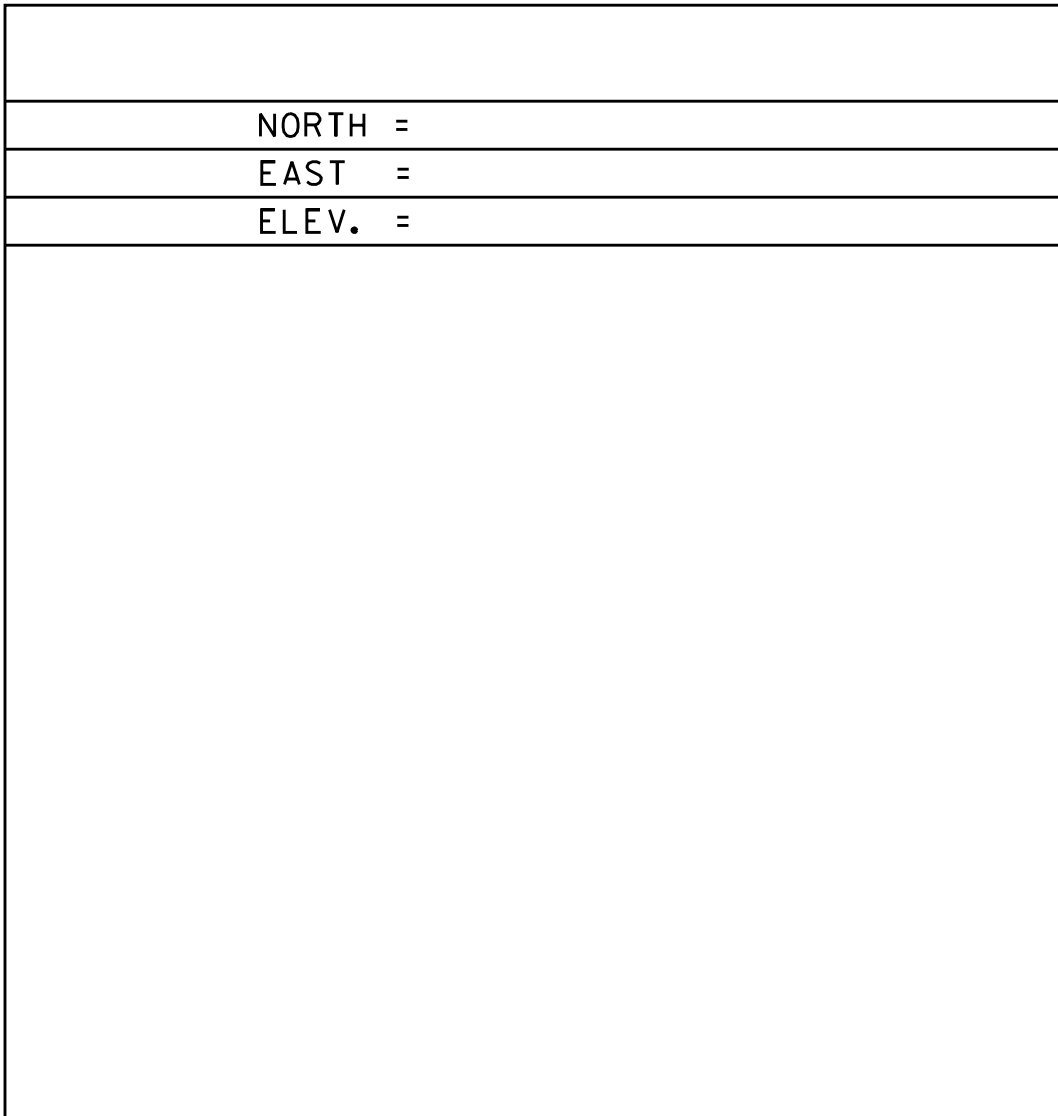
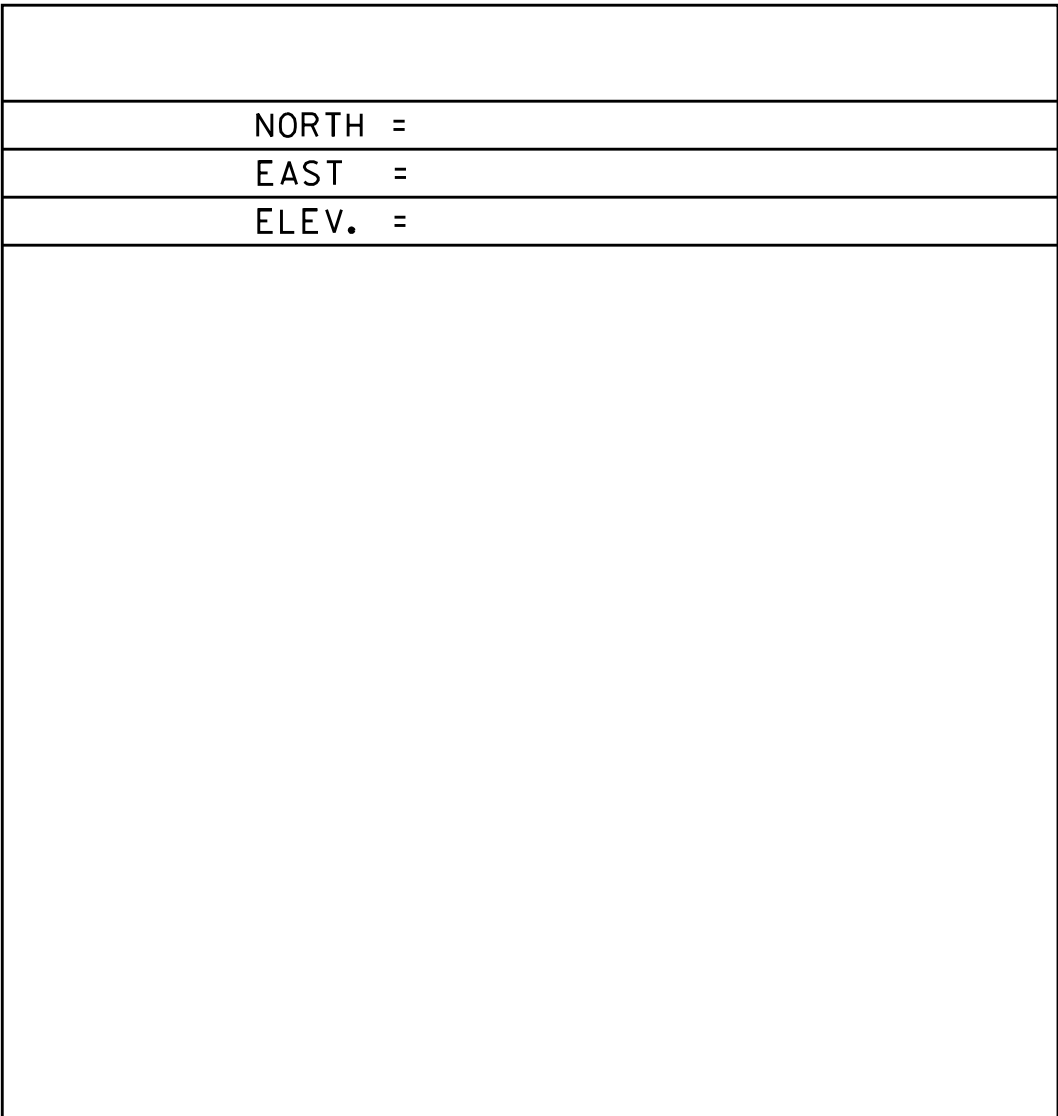
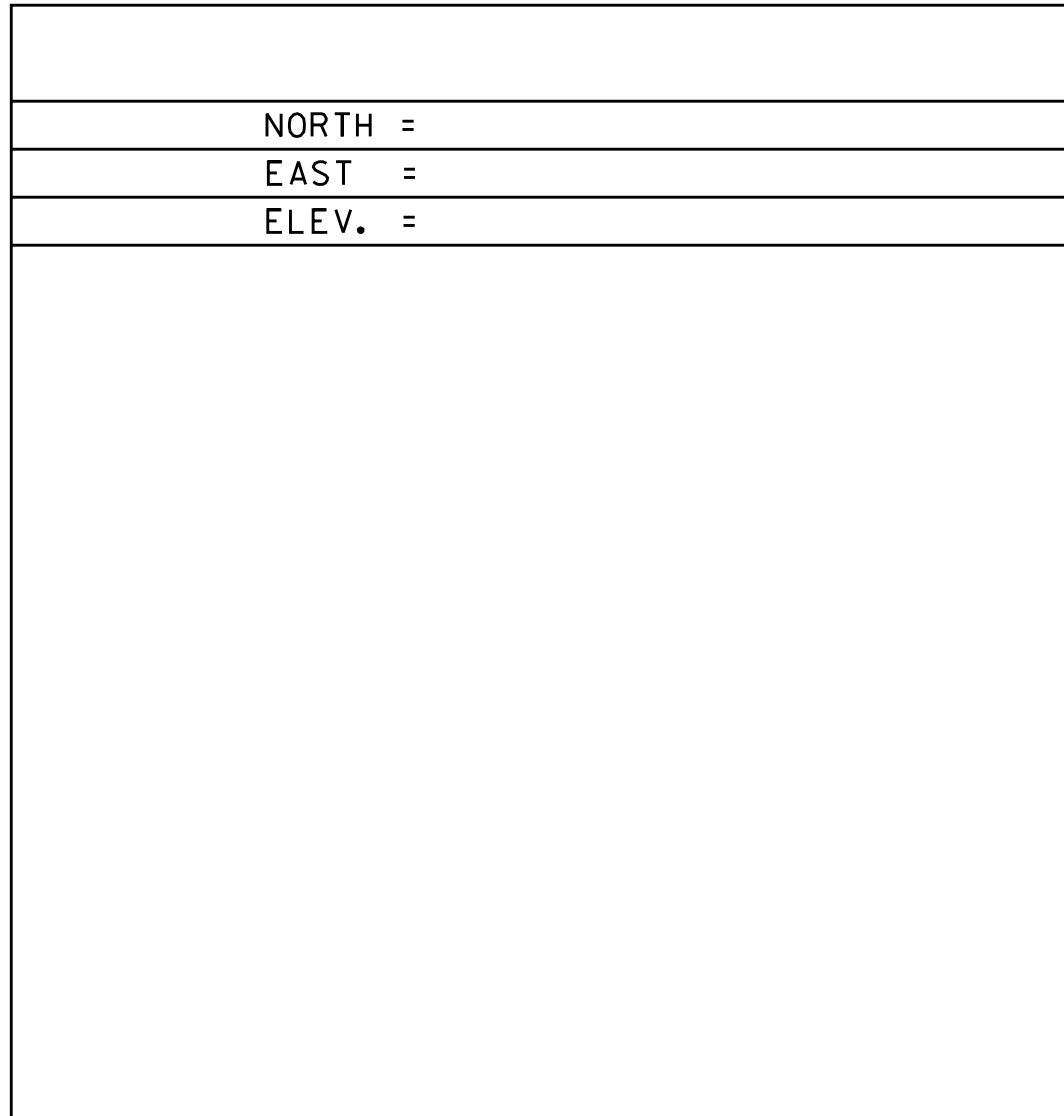
PT #2 CEDAR BROOK  
NORTH = 400948.98  
EAST = 1574460.50  
ELEV. = 1055.91

PT #9 B94027  
NORTH = 405999.88  
EAST = 1572876.94  
ELEV. = 1159.80

TRAVERSE TIES



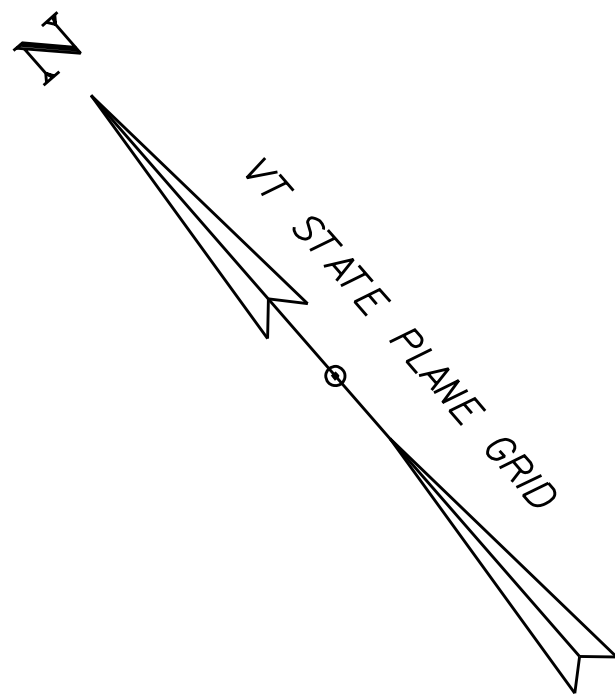
ALIGNMENT TIES



DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83/11
ADJUSTMENT	COMPASS

PROJECT NAME:	KILLINGTON	
PROJECT NUMBER:	BF 020-2(42)	
FILE NAME:	xl3b260+1.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER:	S.E. BURBANK	DRAWN BY: VTRANS
DESIGNED BY:	VTRANS	CHECKED BY: VTRANS
TIE SHEET		SHEET 8 OF 50





US ROUTE 4 ALIGNMENT

HORIZONTAL ALIGNMENT NAME: US4_PROP

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	388+50.00	406823.0457	1572306.7222
PC	388+81.80	406793.6248	1572318.8033
TANGENT DIRECTION: S 22°19'28.68" E			
TANGENT LENGTH: 31.80			
ELEMENT: CIRCULAR			
PC	388+81.80	406793.6248	1572318.8033
PI	393+62.30	406349.1444	1572501.3213
PT	398+25.43	406033.6452	1572863.7243
RADIUS: 2030.00			
DELTA: 26°38'00.00" LEFT			
DEGREE OF CURVATURE (ARC): 2°49'20.83"			
LENGTH: 943.62			
TANGENT: 480.50			
CHORD: 935.15			
MIDDLE ORDINATE: 54.58			
EXTERNAL: 56.09			
ELEMENT: LINEAR			
PT	398+25.43	406033.6452	1572863.7243
POE	402+34.44	405765.0822	1573172.2134
TANGENT DIRECTION: S 48°57'28.68" E			
TANGENT LENGTH: 409.01			

MISSION FARM RD (TH-38) ALIGNMENT

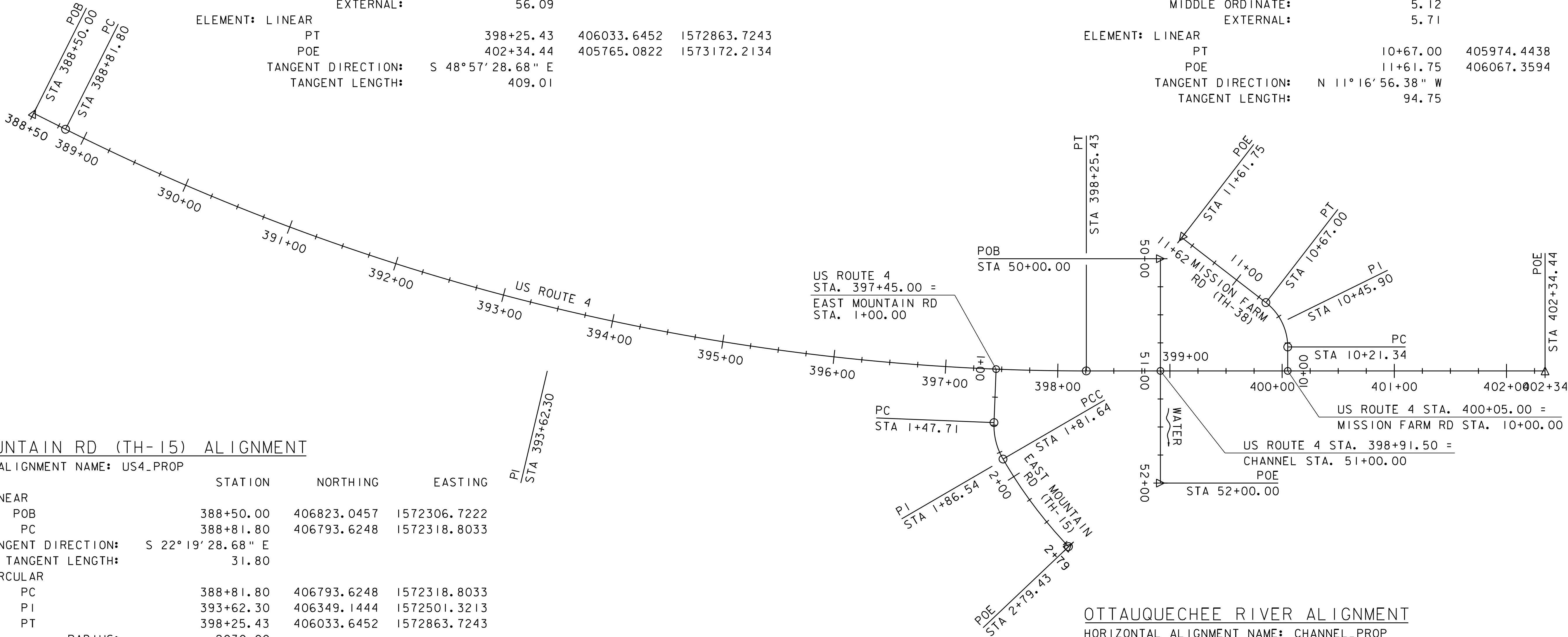
HORIZONTAL ALIGNMENT NAME: TH-38_PROP

	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	10+00.00	405915.7364	1572999.1620
PC	10+21.34	405931.8310	1573013.1736
TANGENT DIRECTION: N 41°02'31.32" E			
TANGENT LENGTH: 21.34			
ELEMENT: CIRCULAR			
PC	10+21.34	405931.8310	1573013.1736
PI	10+45.90	405950.3564	1573029.3013
PT	10+67.00	405974.4438	1573024.4959
RADIUS: 50.00			
DELTA: 52°19'27.70" LEFT			
DEGREE OF CURVATURE (ARC): 114°35'29.61"			
LENGTH: 45.66			
TANGENT: 24.56			
CHORD: 44.09			
MIDDLE ORDINATE: 5.12			
EXTERNAL: 5.71			
ELEMENT: LINEAR			
PT	10+67.00	405974.4438	1573024.4959
POE	11+61.75	406067.3594	1573005.9594
TANGENT DIRECTION: N 11°16'56.38" W			
TANGENT LENGTH: 94.75			

EAST MOUNTAIN RD (TH-15) ALIGNMENT

HORIZONTAL ALIGNMENT NAME: US4_PROP

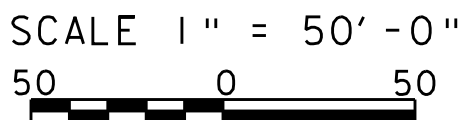
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	388+50.00	406823.0457	1572306.7222
PC	388+81.80	406793.6248	1572318.8033
TANGENT DIRECTION: S 22°19'28.68" E			
TANGENT LENGTH: 31.80			
ELEMENT: CIRCULAR			
PC	388+81.80	406793.6248	1572318.8033
PI	393+62.30	406349.1444	1572501.3213
PT	398+25.43	406033.6452	1572863.7243
RADIUS: 2030.00			
DELTA: 26°38'00.00" LEFT			
DEGREE OF CURVATURE (ARC): 2°49'20.83"			
LENGTH: 943.62			
TANGENT: 480.50			
CHORD: 935.15			
MIDDLE ORDINATE: 54.58			
EXTERNAL: 56.09			
ELEMENT: LINEAR			
PT	398+25.43	406033.6452	1572863.7243
POE	402+34.44	405765.0822	1573172.2134
TANGENT DIRECTION: S 48°57'28.68" E			
TANGENT LENGTH: 409.01			



OTTAUQUECHEE RIVER ALIGNMENT

HORIZONTAL ALIGNMENT NAME: CHANNEL_PROP

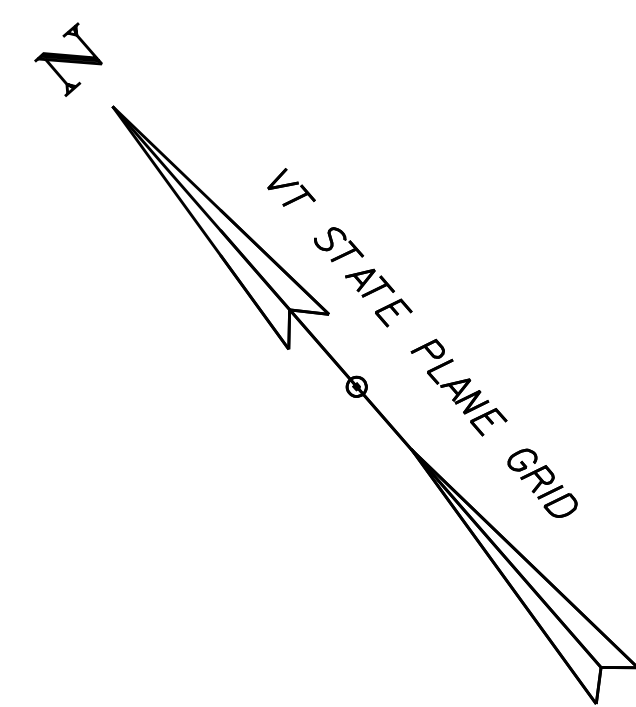
	STATION	NORTHING	EASTING
ELEMENT: LINEAR			
POB	50+00.00	406065.6848	1572979.2184
POE	52+00.00	405914.8391	1572847.8959
TANGENT DIRECTION: S 41°02'31.32" W			
TANGENT LENGTH: 200.00			



PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260align.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
ALIGNMENT LAYOUT SHEET	SHEET 9 OF 50





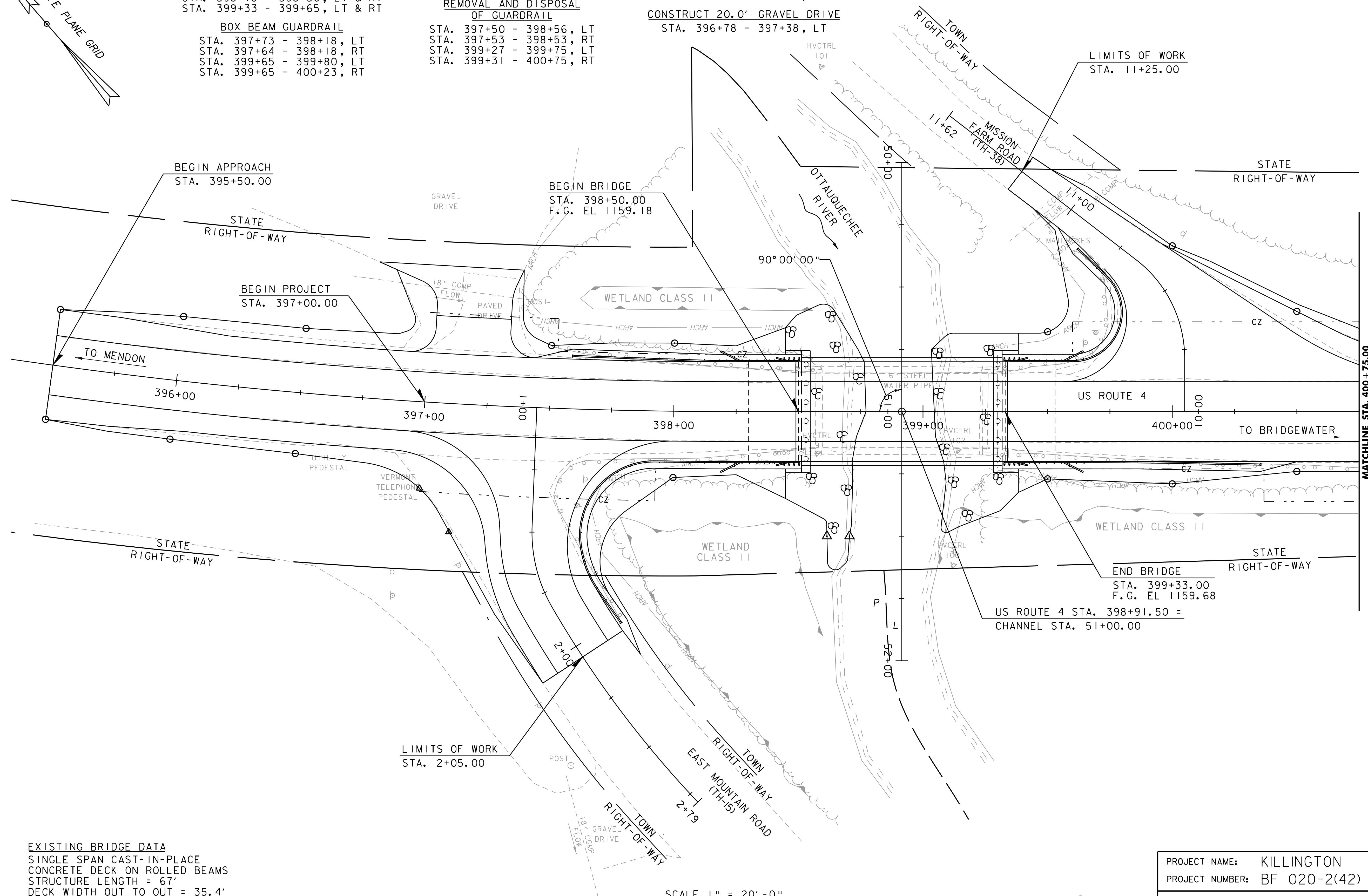
BRIDGE RAILING, GALVANIZED  
3 RAIL BOX BEAM  
STA. 398+50 - 399+33, LT & RT  
GUARDRAIL APPROACH SECTION,  
3 RAIL BOX BEAM  
STA. 398+18 - 398+50, LT & RT  
STA. 399+33 - 399+65, LT & RT

BOX BEAM GUARDRAIL  
STA. 397+73 - 398+18, LT  
STA. 397+64 - 398+18, RT  
STA. 399+65 - 399+80, LT  
STA. 399+65 - 400+23, RT

MANUFACTURED TERMINAL  
SECTION, TANGENT  
STA. 397+59 - 397+73, LT  
STA. 400+23 - 400+37, RT  
STA. 1+87 - 2+02, LT  
STA. 10+74 - 10+88, LT

REMOVAL AND DISPOSAL  
OF GUARDRAIL  
STA. 397+50 - 398+56, LT  
STA. 397+53 - 398+53, RT  
STA. 399+27 - 399+75, LT  
STA. 399+31 - 400+75, RT

LIMITS OF COLD PLANING  
STA. 395+50 - 396+50, LT & RT  
STA. 2+05 - 2+45, LT & RT  
STA. 10+75 - 11+25, LT & RT  
CONSTRUCT 15.0' PAVED APRON  
STA. 396+93 - 397+43, LT  
CONSTRUCT 20.0' GRAVEL DRIVE  
STA. 396+78 - 397+38, LT



EXISTING BRIDGE DATA  
SINGLE SPAN CAST-IN-PLACE  
CONCRETE DECK ON ROLLED BEAMS  
STRUCTURE LENGTH = 67'  
DECK WIDTH OUT TO OUT = 35.4'  
BRIDGE WIDTH CURB TO CURB = 29.8'

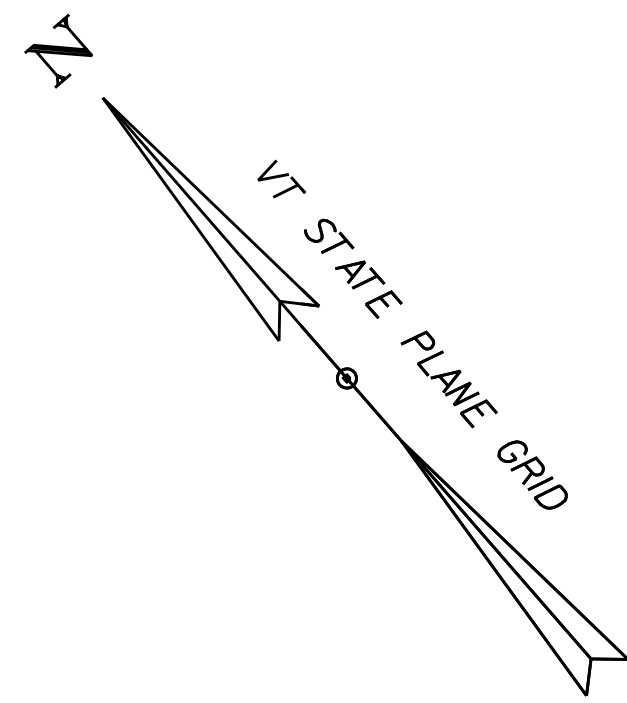
SCALE 1" = 20'-0"  
20 0 20



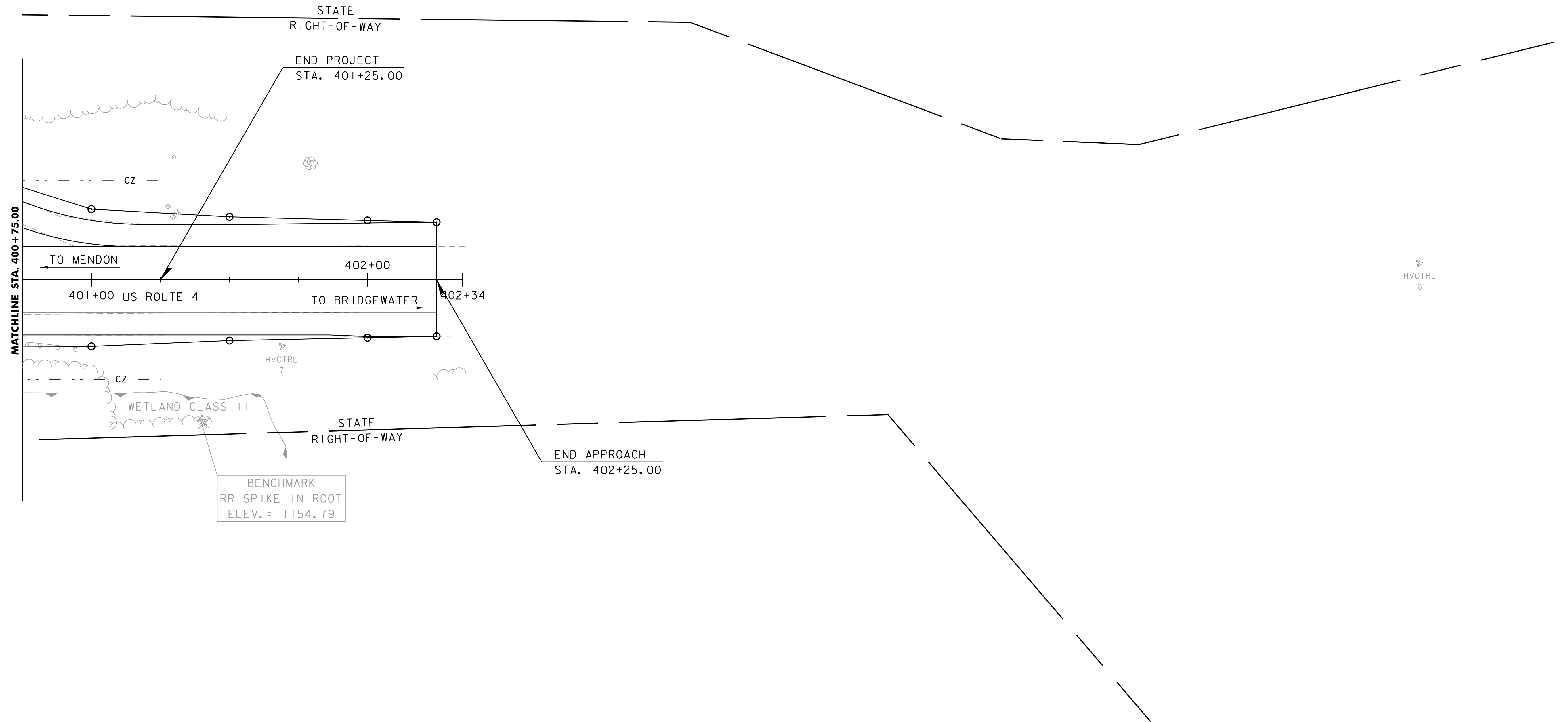
PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)  
FILE NAME: z13b260bdr_nul.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
LAYOUT SHEET (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 10 OF 50





LIMITS OF COLD PLANING  
STA. 401+75 - 402+25, LT & RT  
REMOVAL AND DISPOSAL  
OF GUARDRAIL  
STA. 400+75 - 400+95, RT

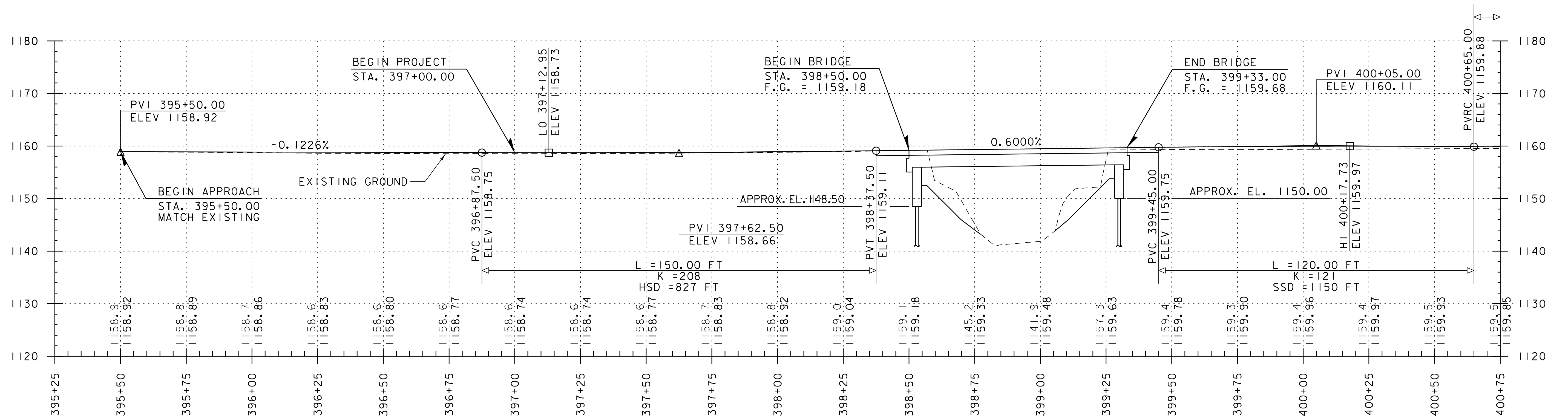


SCALE 1" = 20'-0"  
20 0 20



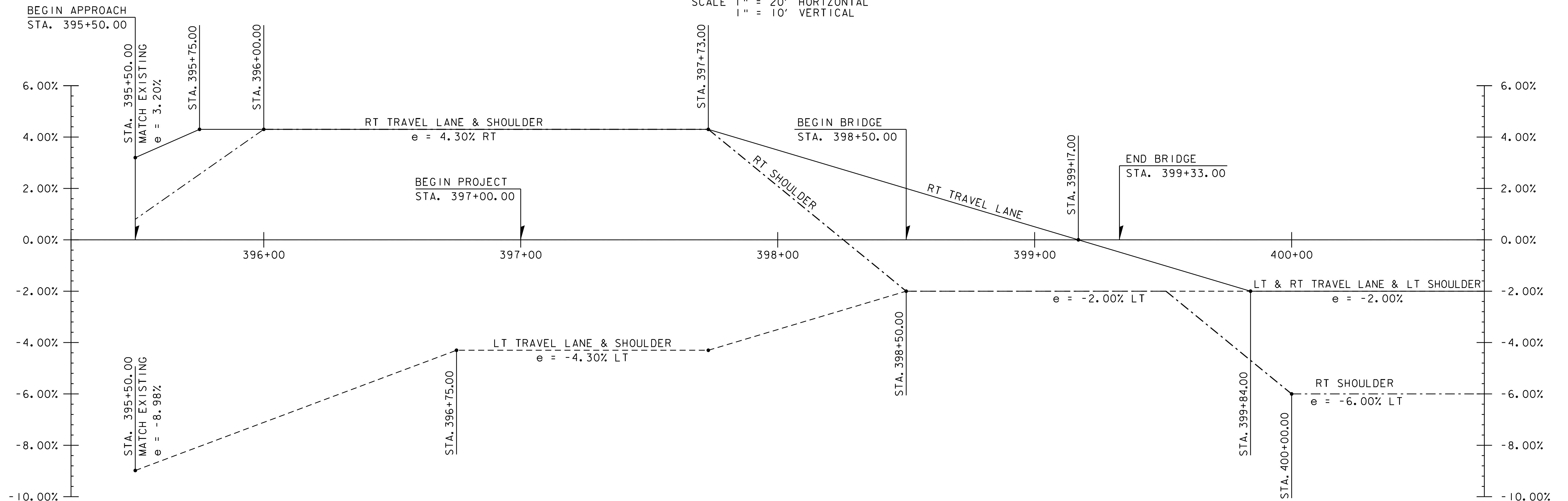
PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260bdr_nul.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: E.F. LAWES
LAYOUT SHEET (2 OF 2)	SHEET II OF 50





### US ROUTE 4 PROFILE

SCALE 1" = 20' HORIZONTAL  
1" = 10' VERTICAL



### US ROUTE 4 BANKING DIAGRAM

SCALE 1" = 20' HORIZONTAL  
1" = 0.020 FT/FT VERTICAL

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

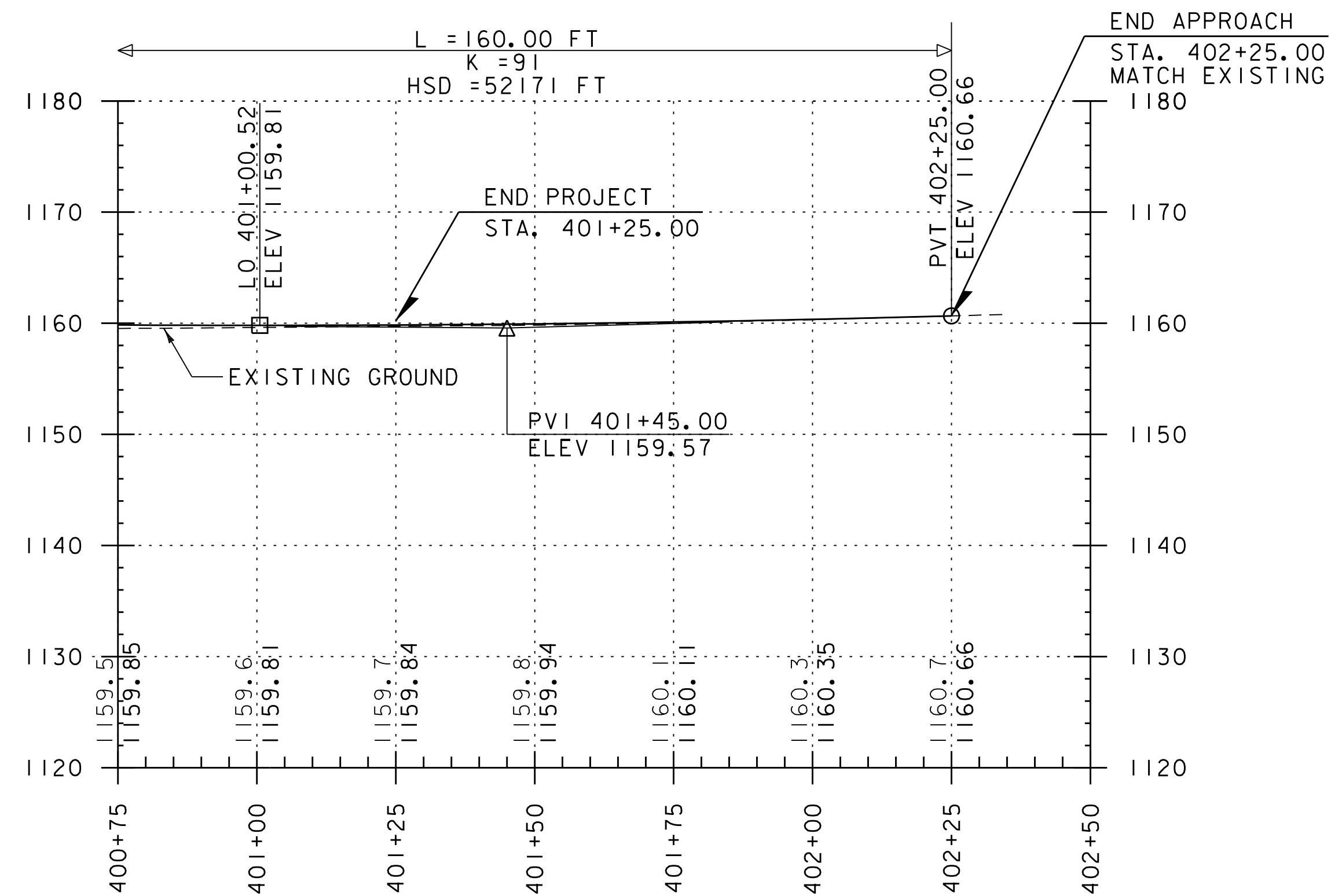


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

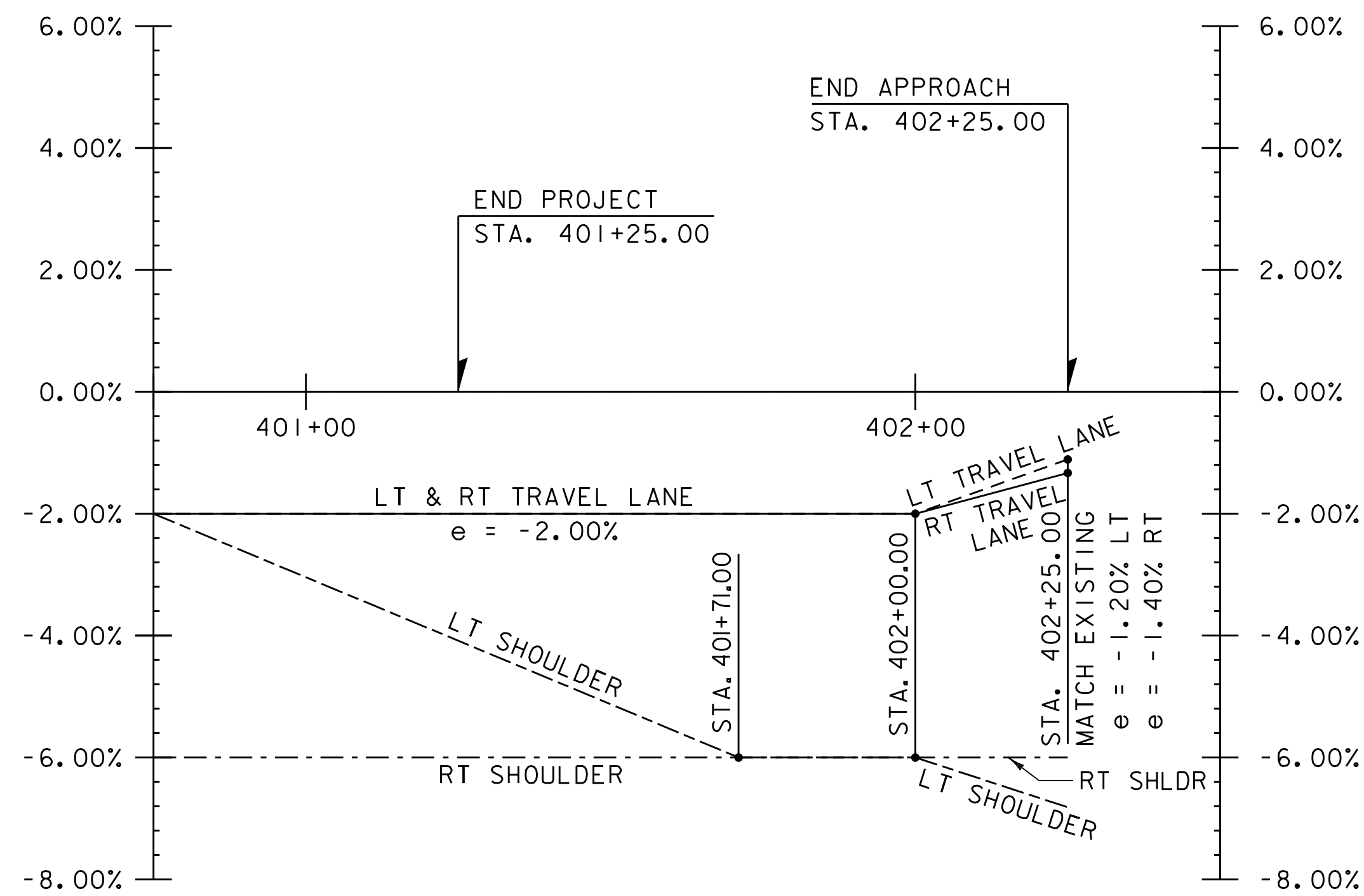
FILE NAME: z13b260pro.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
PROFILE AND BANKING DIAGRAM (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 12 OF 50

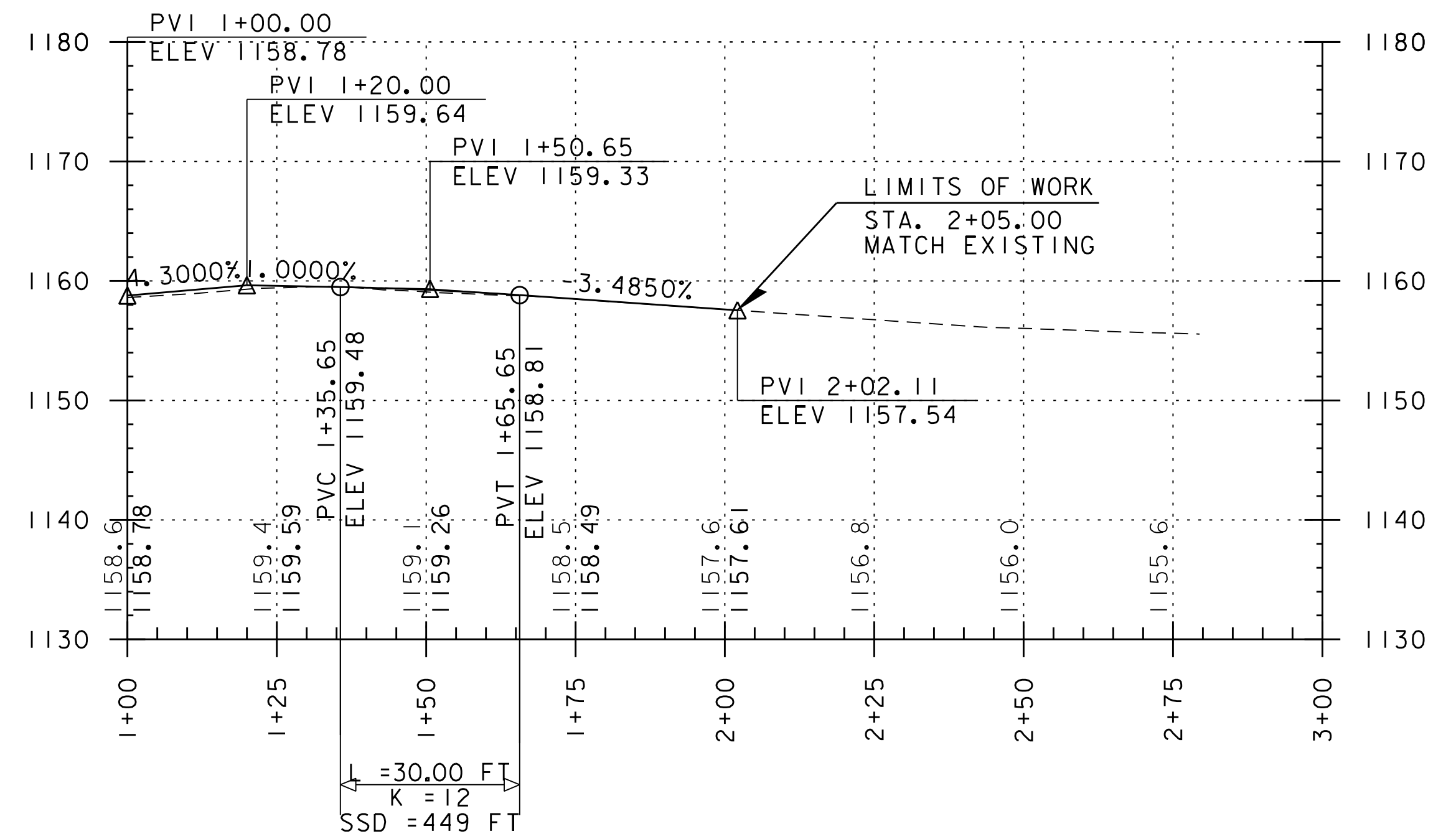




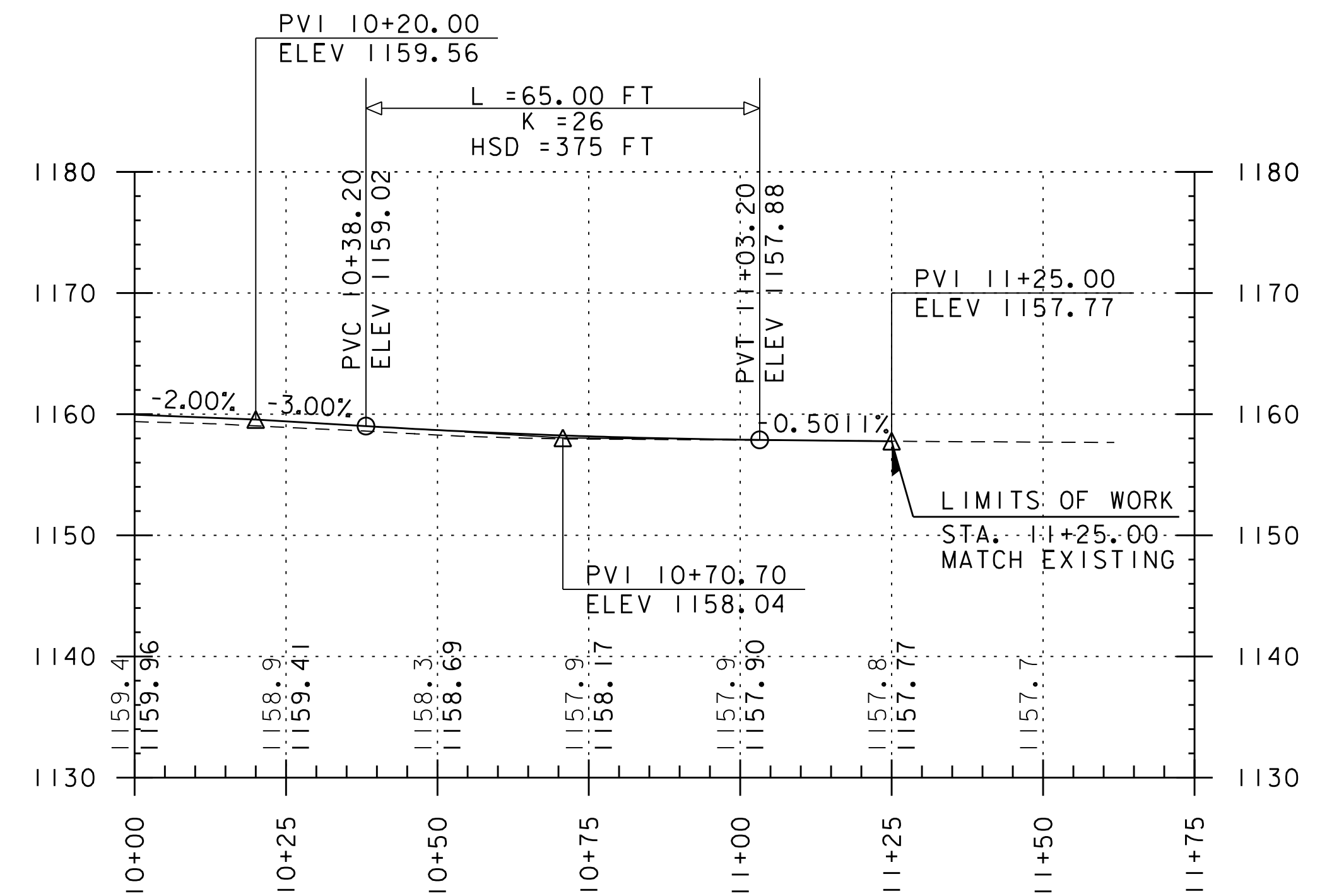
US ROUTE 4 PROFILE  
SCALE 1" = 20' HORIZONTAL  
1" = 10' VERTICAL



US ROUTE 4 BANKING DIAGRAM  
SCALE 1" = 20' HORIZONTAL  
1" = 0.020 FT/FT VERTICAL



EAST MOUNTAIN ROAD (TH-15) PROFILE  
SCALE 1" = 20' HORIZONTAL  
1" = 10' VERTICAL



MISSION FARM ROAD (TH-38) PROFILE  
SCALE 1" = 20' HORIZONTAL  
1" = 10' VERTICAL

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

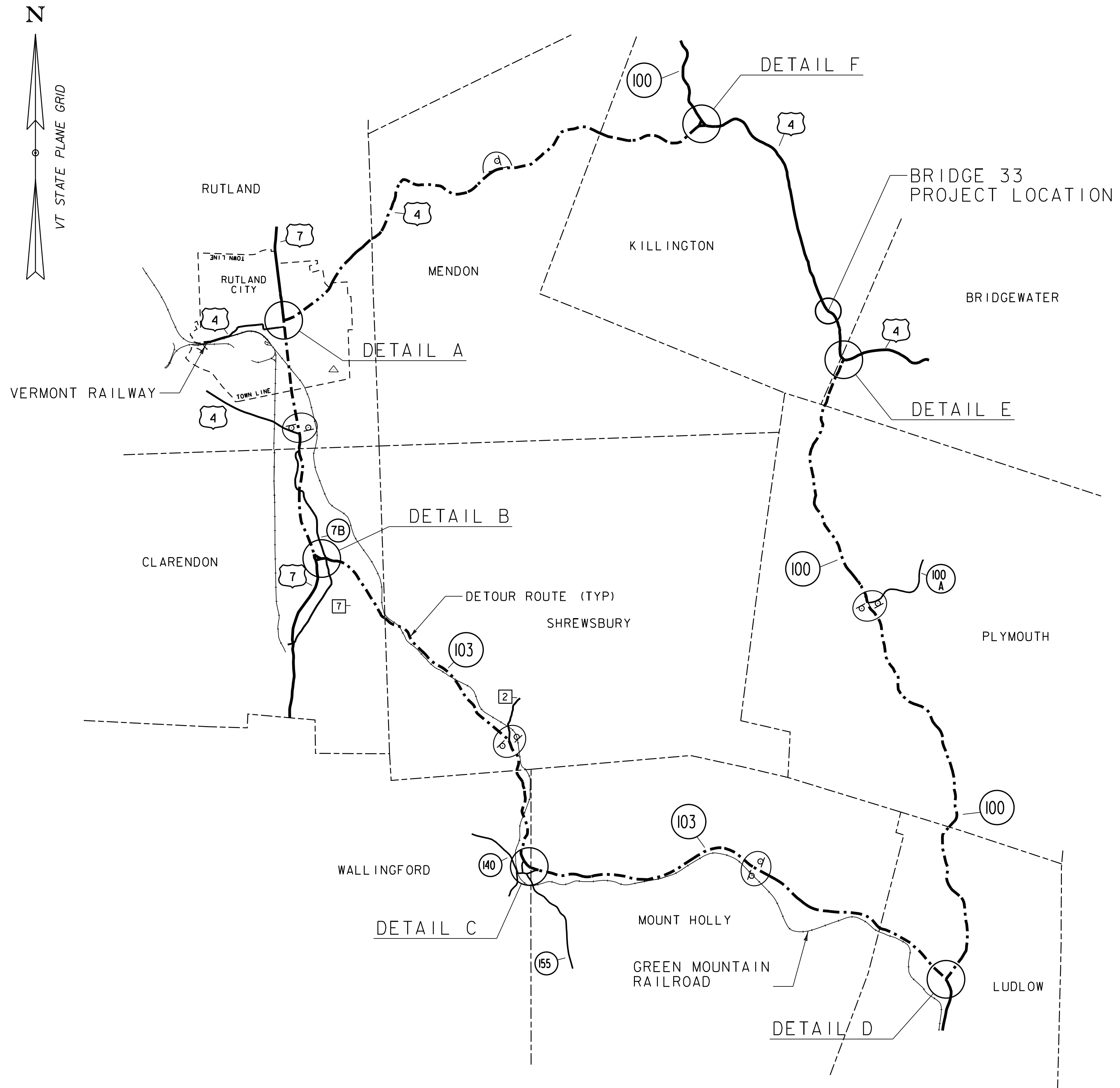


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260pro.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
PROFILE AND BANKING DIAGRAM (2 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 13 OF 50

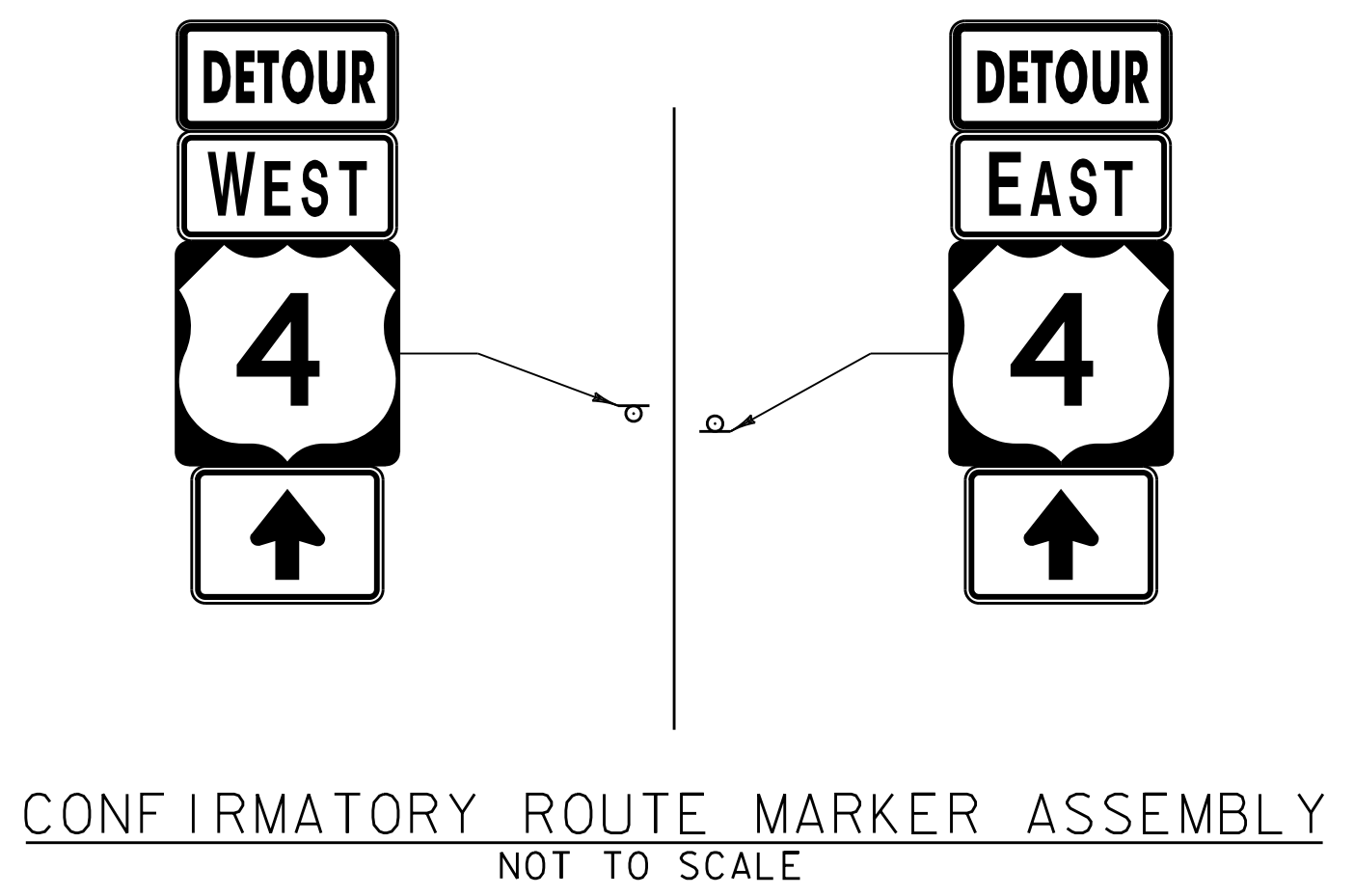




- TRAFFIC CONTROL NOTES:**
1. SEE TRAFFIC CONTROL PLAN 2-5 FOR ADDITIONAL NOTES.
  2. INSTALL CONFIRMATORY ROUTE MARKERS ALONG THE DETOUR ROUTE AT LOCATIONS AS INDICATED ON THIS PLAN.
  3. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES AND THE ROUTE MARKER SHALL BE COVERED IF ASSEMBLY CONFLICTS WITH DETOUR ROUTE MARKER ASSEMBLY.
  4. WHERE SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUB SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
  5. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED OFF THE EDGE OF THE ROADWAY, OUTSIDE THE CLEAR ZONE, BUT SHALL BE VISIBLE FROM THE ROADWAY. ANY VEGETATION THAT INTERFERES WITH VISIBILITY OF THE PCMS SHALL BE REMOVED. REMOVAL OF THE VEGETATION SHALL BE INCIDENTAL TO ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN". WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
  6. THE PCMS SHALL BE USED IN ACCORDANCE WITH SECTION 6F.60 OF THE MUTCD.
  7. SEE TRAFFIC CONTROL PLANS 2-3 FOR DETAILS A-F.

**LEGEND**

 CONFIRMATORY ROUTE MARKER ASSEMBLY (SEE NOTE 2 AND 3 ABOVE).

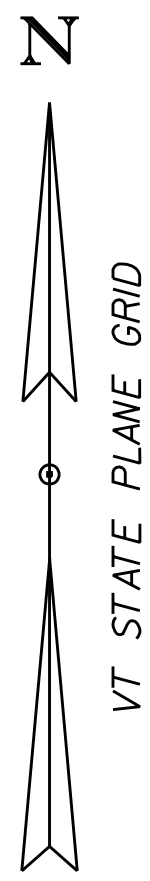


**REGIONAL TRAFFIC DETOUR**  
NOT TO SCALE



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260detour.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC CONTROL PLAN (1 OF 5)	SHEET 14 OF 50





BRIDGE CLOSED  
US 4 KILLINGTON  
5.3 MILES EAST OF  
VT 100 INTERSECTION



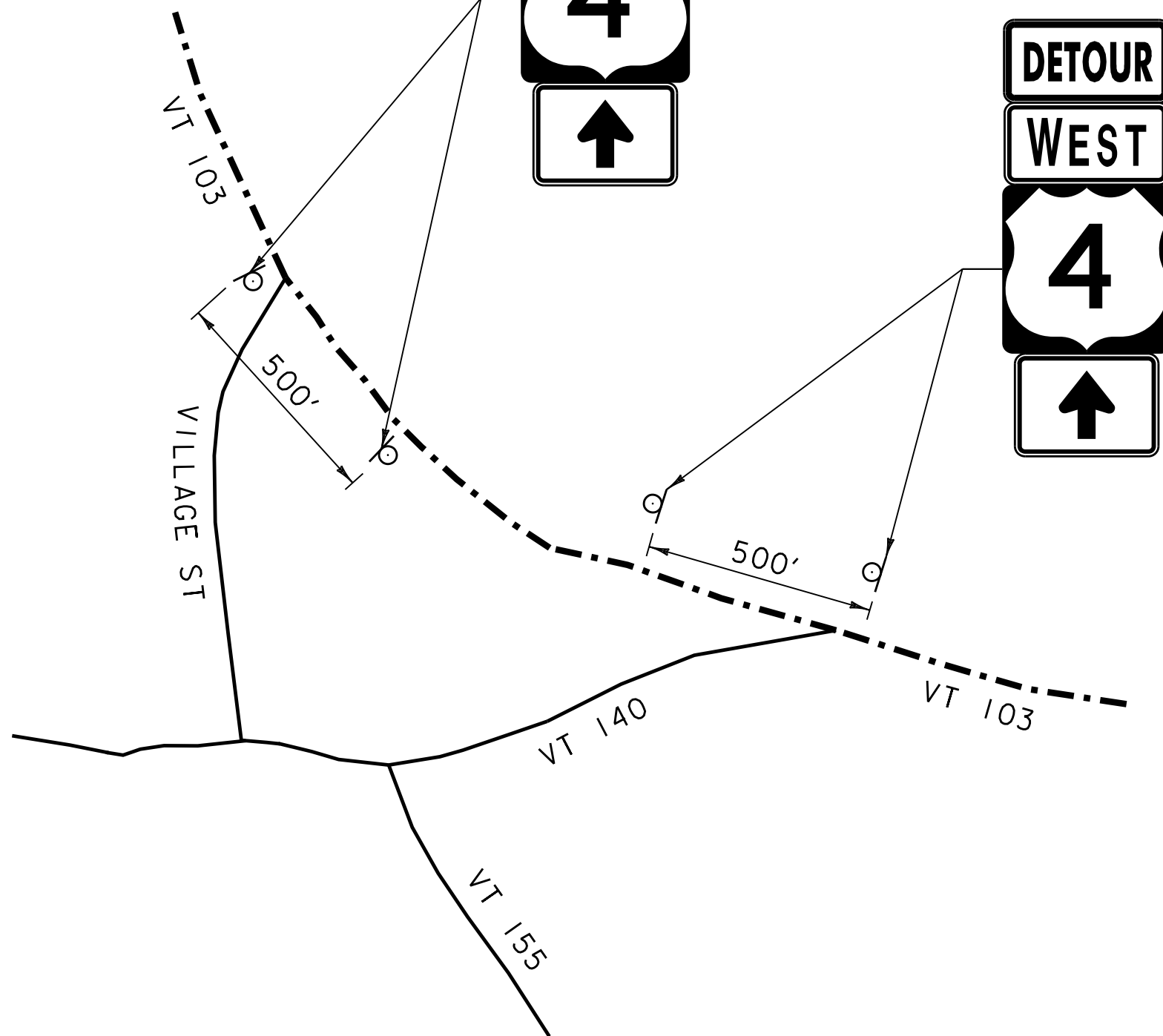
ROUTE 7



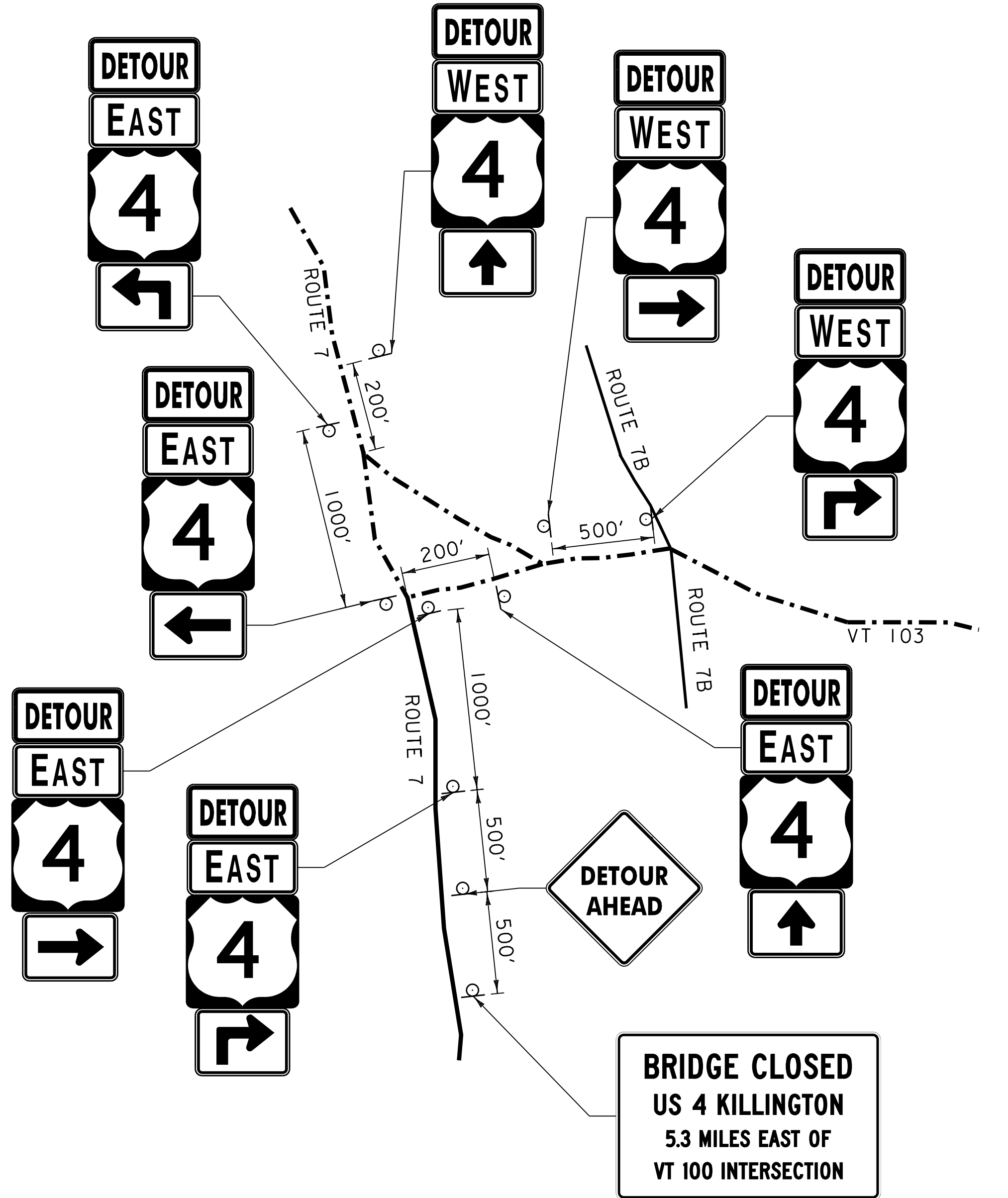
BRIDGE CLOSED  
US 4 KILLINGTON  
5.3 MILES EAST OF  
VT 100 INTERSECTION



DETAIL A  
NOT TO SCALE



DETAIL C  
NOT TO SCALE



DETAIL B  
NOT TO SCALE

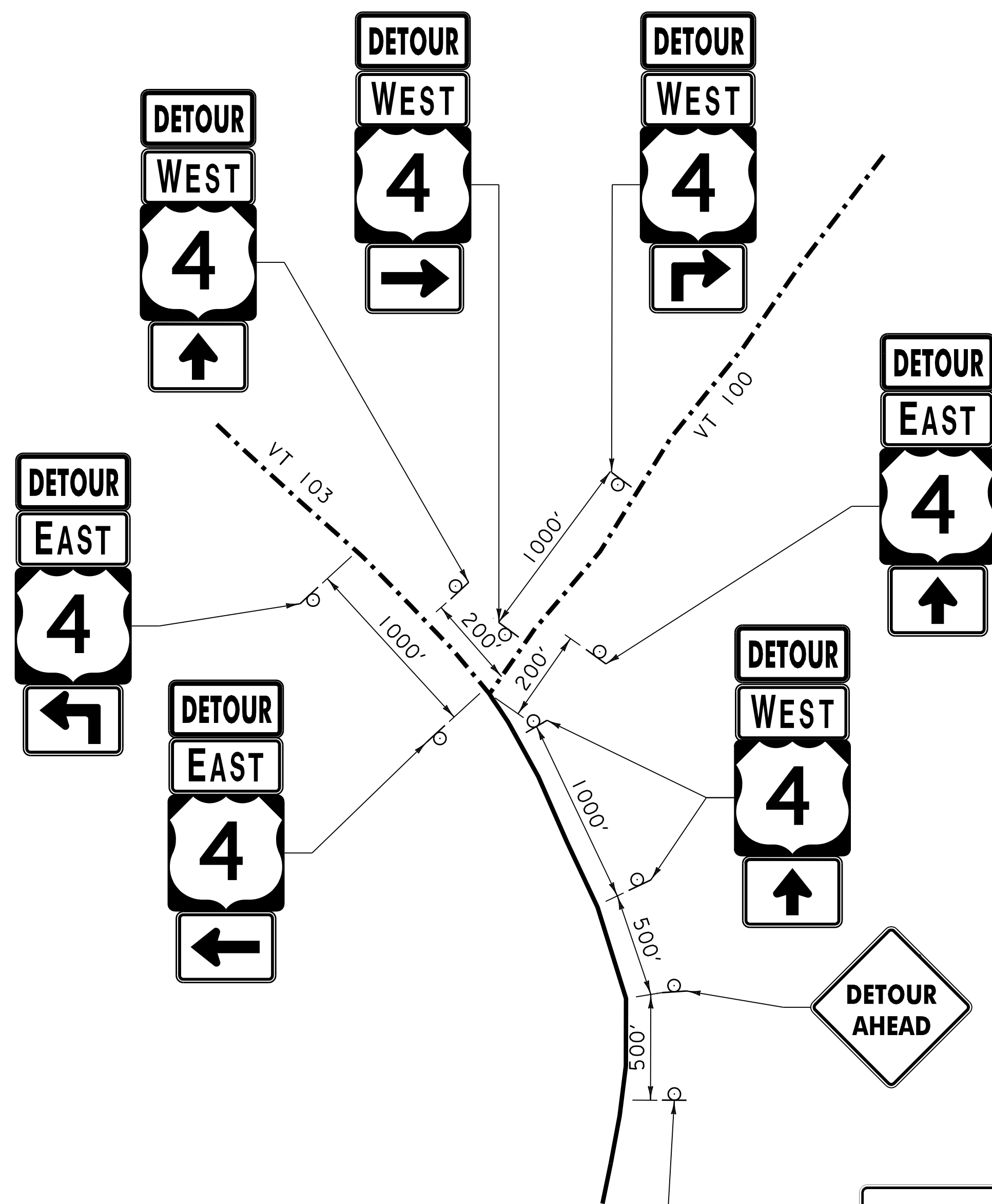
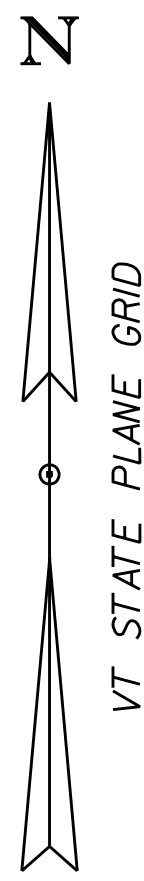
- NOTES:
1. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES.
  2. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN THE FIELD.

PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260detour.dts.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC CONTROL PLAN (2 OF 5)	SHEET 15 OF 50





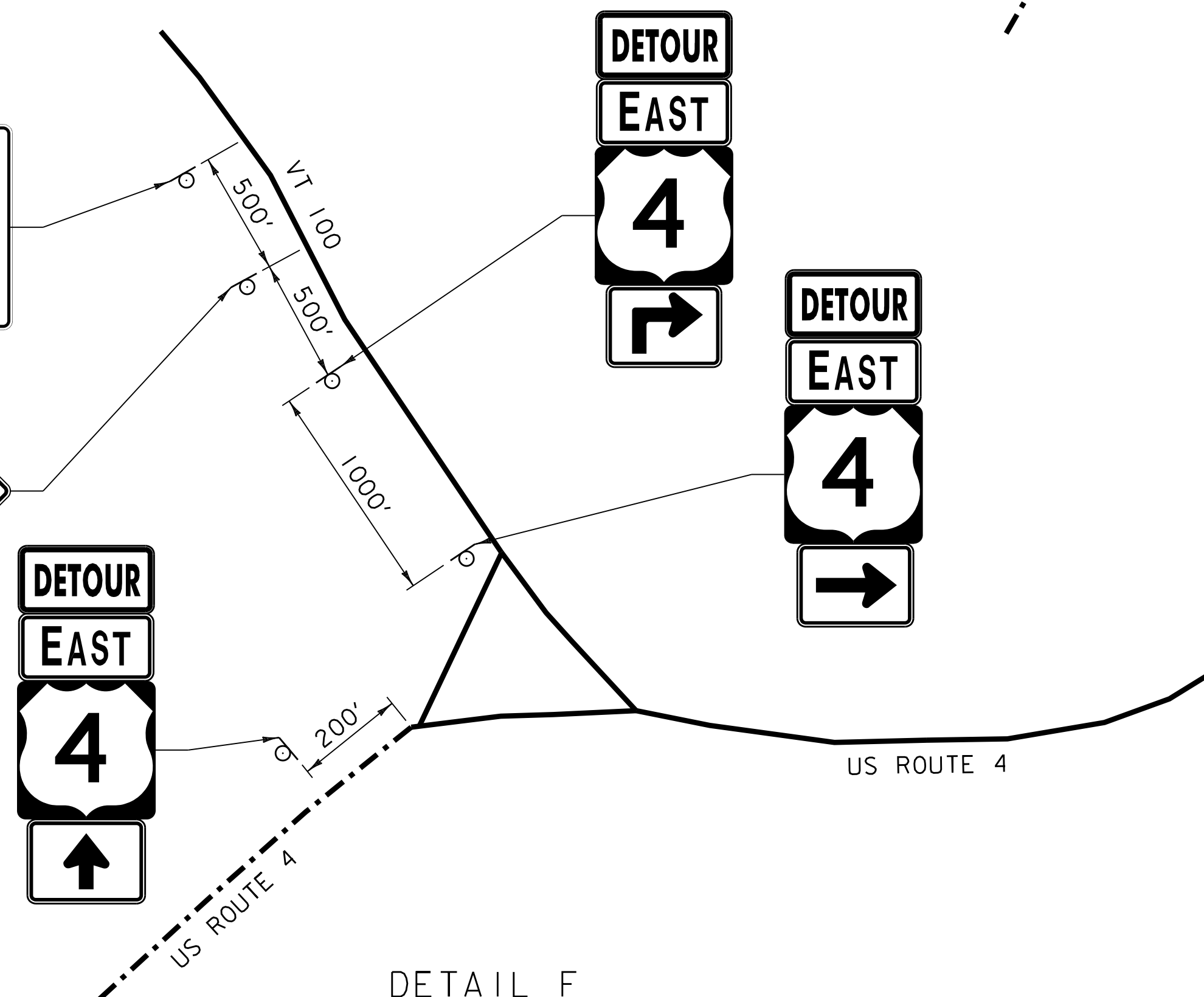


BRIDGE CLOSED  
US 4 KILLINGTON  
1.0 MILES WEST OF  
VT 100 INTERSECTION

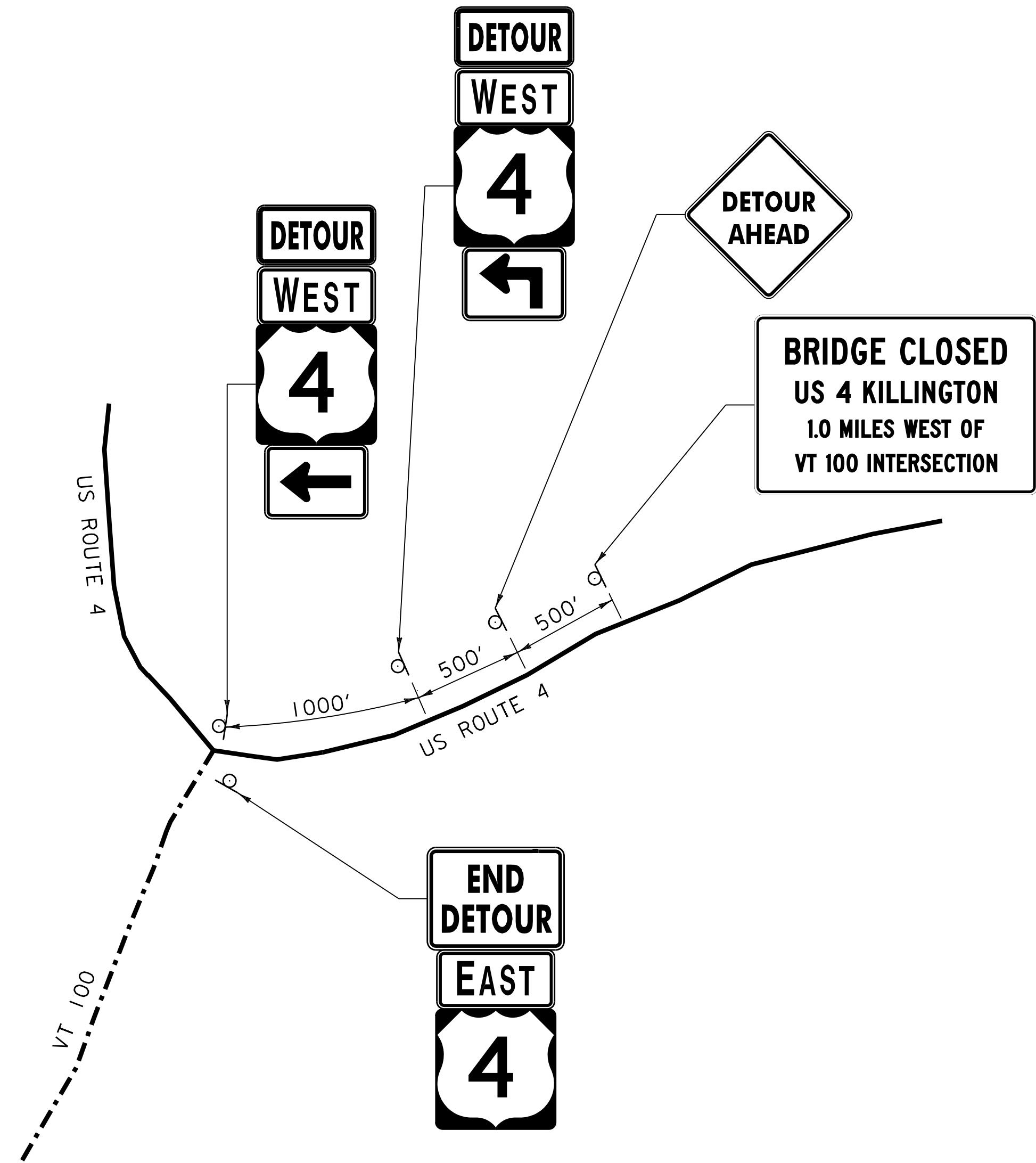
DETAIL D  
NOT TO SCALE

BRIDGE CLOSED  
US 4 KILLINGTON  
5.3 MILES EAST OF  
VT 100 INTERSECTION

DETOUR  
AHEAD



DETAIL F  
NOT TO SCALE



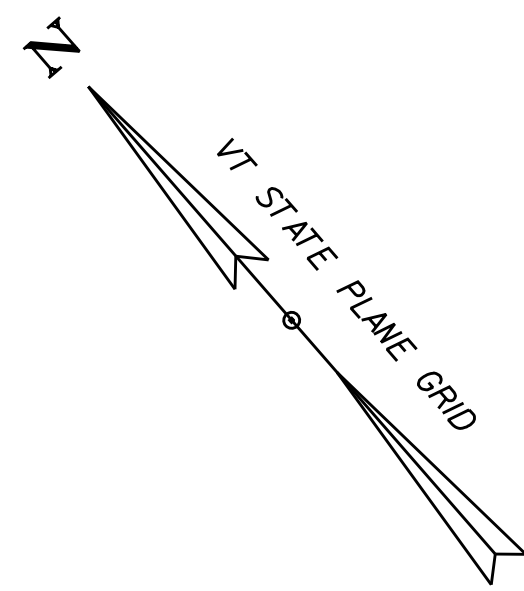
DETAIL E  
NOT TO SCALE

- NOTES:
1. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES.
  2. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN THE FIELD.

PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260detour.dts.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC CONTROL PLAN (3 OF 5)	SHEET 16 OF 50

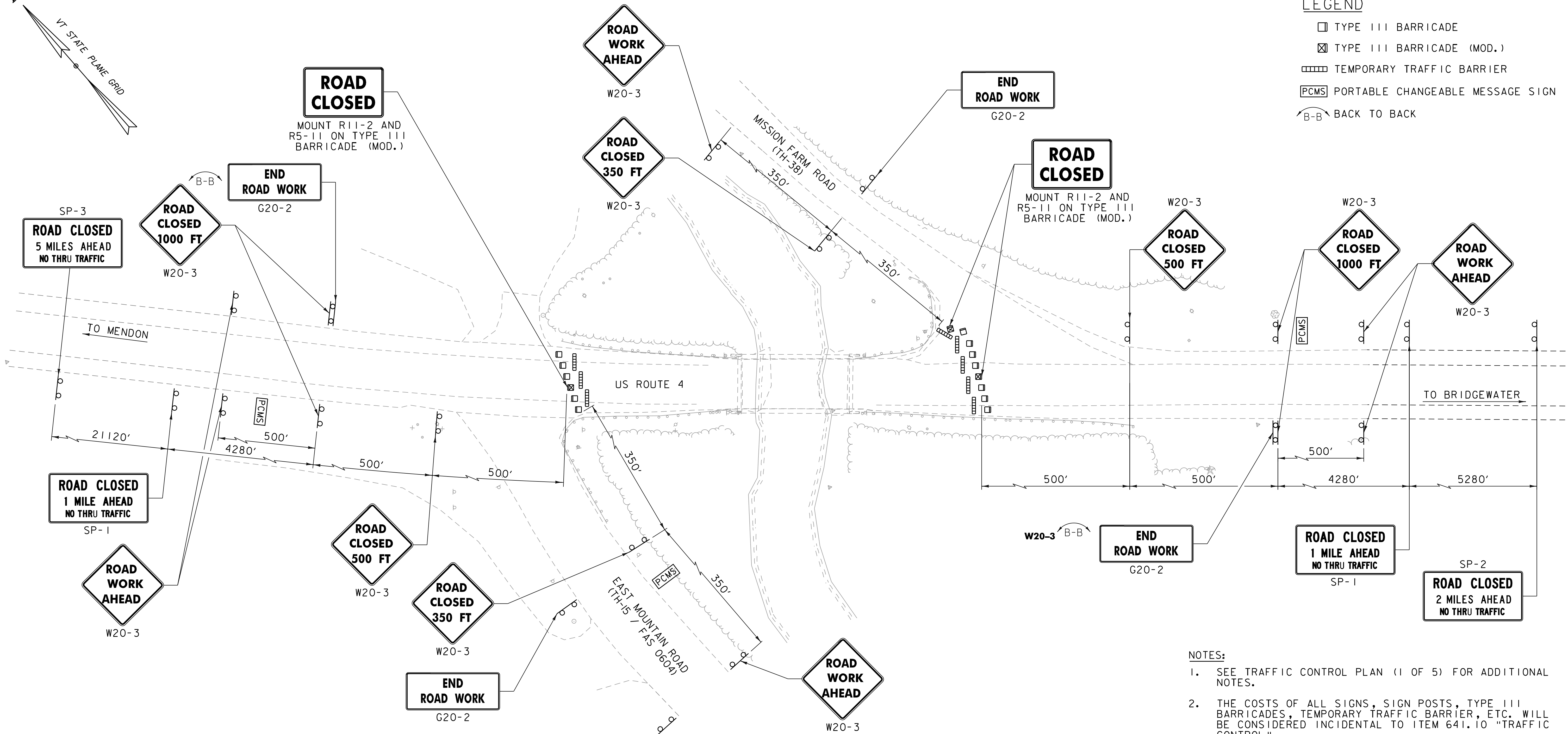






LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE (MOD.)
- TEMPORARY TRAFFIC BARRIER
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- B-B BACK TO BACK



LOCAL TRAFFIC CONTROL PLAN  
NOT TO SCALE

NOTES:

- SEE TRAFFIC CONTROL PLAN (1 OF 5) FOR ADDITIONAL NOTES.
- THE COSTS OF ALL SIGNS, SIGN POSTS, TYPE III BARRICADES, TEMPORARY TRAFFIC BARRIER, ETC. WILL BE CONSIDERED INCIDENTAL TO ITEM 641.10 "TRAFFIC CONTROL".
- THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL DISPLAY THE MESSAGES SHOWN ON TRAFFIC CONTROL PLAN (5 OF 5) ONE WEEK (7 DAYS) PRIOR TO THE CLOSURE OF THE BRIDGE. THE PCMS SHALL REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION, UNTIL THE ROAD IS OPEN TO TRAFFIC.
- THE NUMBER OF TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL ROADWAY CLOSURE REQUIREMENTS.
- SEE THE PROJECT SPECIAL PROVISIONS FOR ALLOWABLE BRIDGE CLOSURE PERIOD.

PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260+cp.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC CONTROL PLAN (4 OF 5)	SHEET 17 OF 50

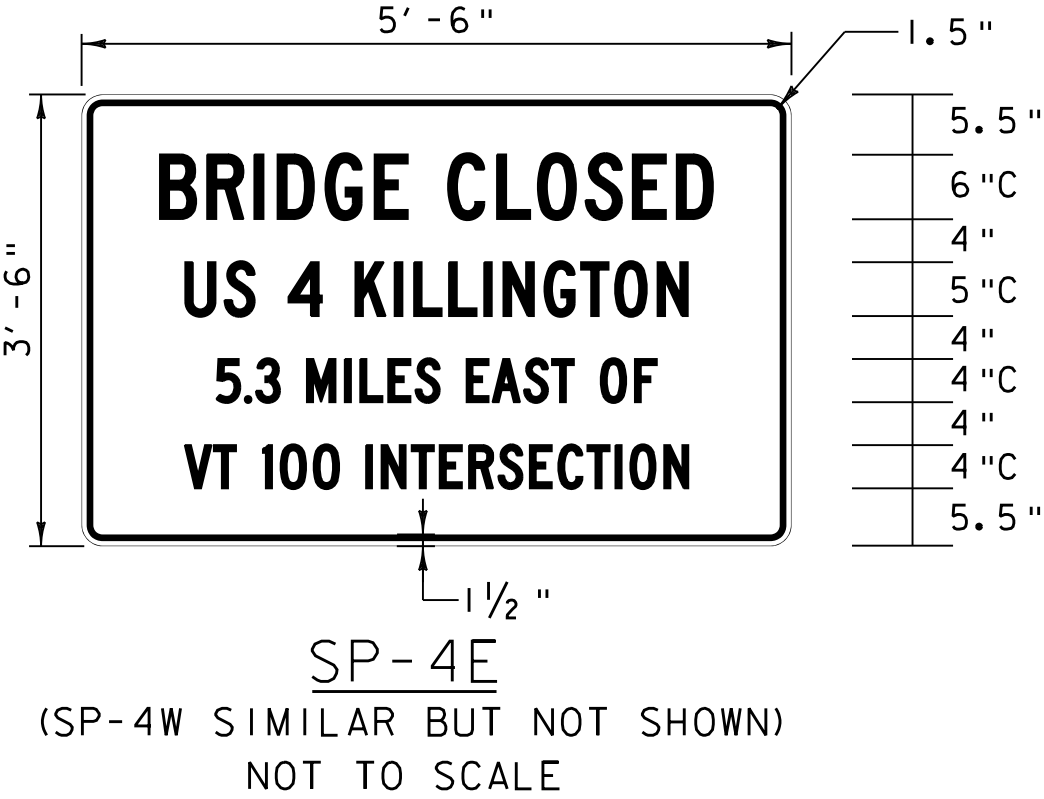
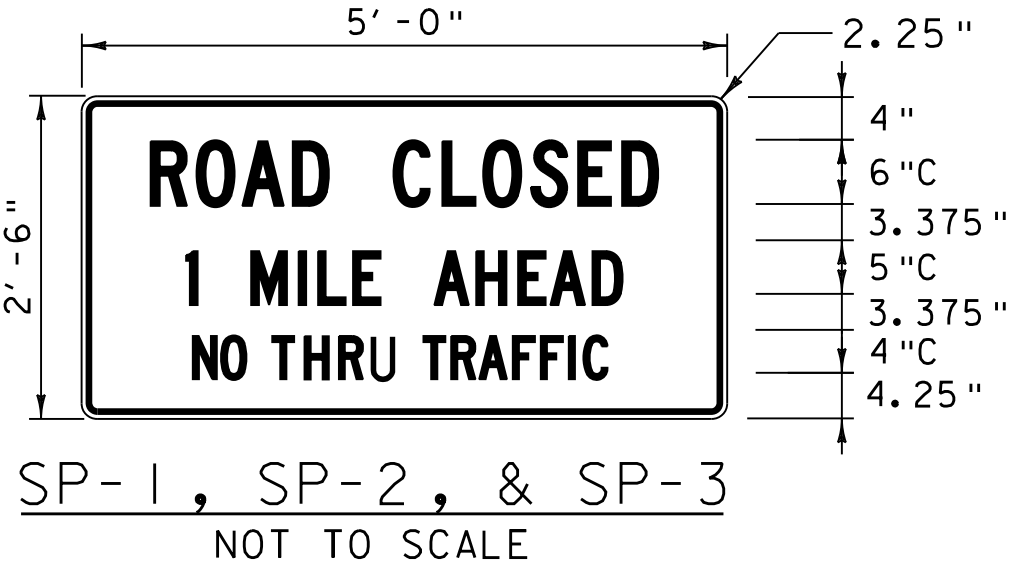




IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS	COLOR
	WIDTH (IN)	HEIGHT (IN)				
M1-4	24	24		42*	SEE NOTE 2	VTRANS STD E-I36B
M3-1	24	12		25*	SEE NOTE 2	VTRANS STD E-I36B
M3-3	24	12		17*	SEE NOTE 2	VTRANS STD E-I36B
G20-2	36	18		4	MOUNT ON ONE POST	LEGEND BLACK BACKGROUND ORANGE **
M4-8	24	12		40*	MOUNT ABOVE THE M3-1OR M3-3	LEGEND BLACK BACKGROUND ORANGE **
M4-8A	24	18		2	MOUNT ON ONE POST	LEGEND BLACK BACKGROUND ORANGE **
M5-1L	21	15		4	MOUNT BELOW THE MI-5	LEGEND BLACK BACKGROUND ORANGE***
M5-1R	21	15		4	MOUNT BELOW THE MI-5	LEGEND BLACK BACKGROUND ORANGE***
M6-1L	21	15		4	MOUNT BELOW THE MI-5	LEGEND BLACK BACKGROUND ORANGE***
M6-1R	21	15		5	MOUNT BELOW THE MI-5	LEGEND BLACK BACKGROUND ORANGE***
M6-3	21	15		23*	MOUNT BELOW THE MI-5	LEGEND BLACK BACKGROUND ORANGE***
R11-2	48	30		3	MOUNT ON TYPE III BARRICADE (MOD.)	LEGEND BLACK BACKGROUND WHITE ***
SP-1	60	30		2	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND WHITE ***
SP-2	60	30		1	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND WHITE ***
SP-3	60	30		1	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
SP-4E	66	42		4	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
SP-4E	66	42		2	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **

* = NUMBER OF SIGNS REQ'D ASSUMING APPROXIMATELY 3 LOCATIONS OF  
CONFIRMATORY ROUTE MARKER ASSEMBLY DETAIL  
** = SIGN BACKGROUND SHALL BE RETROREFLECTIVE FLUORESCENT  
*** = SIGN BACKGROUNDS SHALL BE RETOREFLECTIVE

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS	COLOR
	WIDTH (IN)	HEIGHT (IN)				
W20-2	48	48		6	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
W20-3	48	48		4	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
W20-3	48	48		2	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
W20-3	48	48		2	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **
W20-3	48	48		7	MOUNT ON TWO POSTS	LEGEND BLACK BACKGROUND ORANGE **



- NOTES:
- PAYMENT OF ALL DETOUR SIGNS AND REQUIRED SIGN POSTS WILL BE MADE UNDER ITEM 641.10, "TRAFFIC CONTROL".
  - THE M1-4, M3-1, AND THE M3-3 SIGNS SHALL BECOME PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE STATE GARAGE IN THE TOWN OF LONDONDERRY. ALL COSTS ASSOCIATED WITH PROVIDING SIGNS TO THE STATE WILL BE CONSIDERED INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".
  - ONE WEEK PRIOR (7 DAYS) TO CONSTRUCTION ON THE BRIDGE, PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) MESSAGES 1 AND 2 WILL BE DISPLAYED AT THE BRIDGE AND PCMS MESSAGES 3, 4, AND 5 WILL BE DISPLAYED REGIONALLY.

MESSAGES FOR PORTABLE CHANGEABLE  
MESSAGE SIGNS (PCMS) - AT BRIDGE

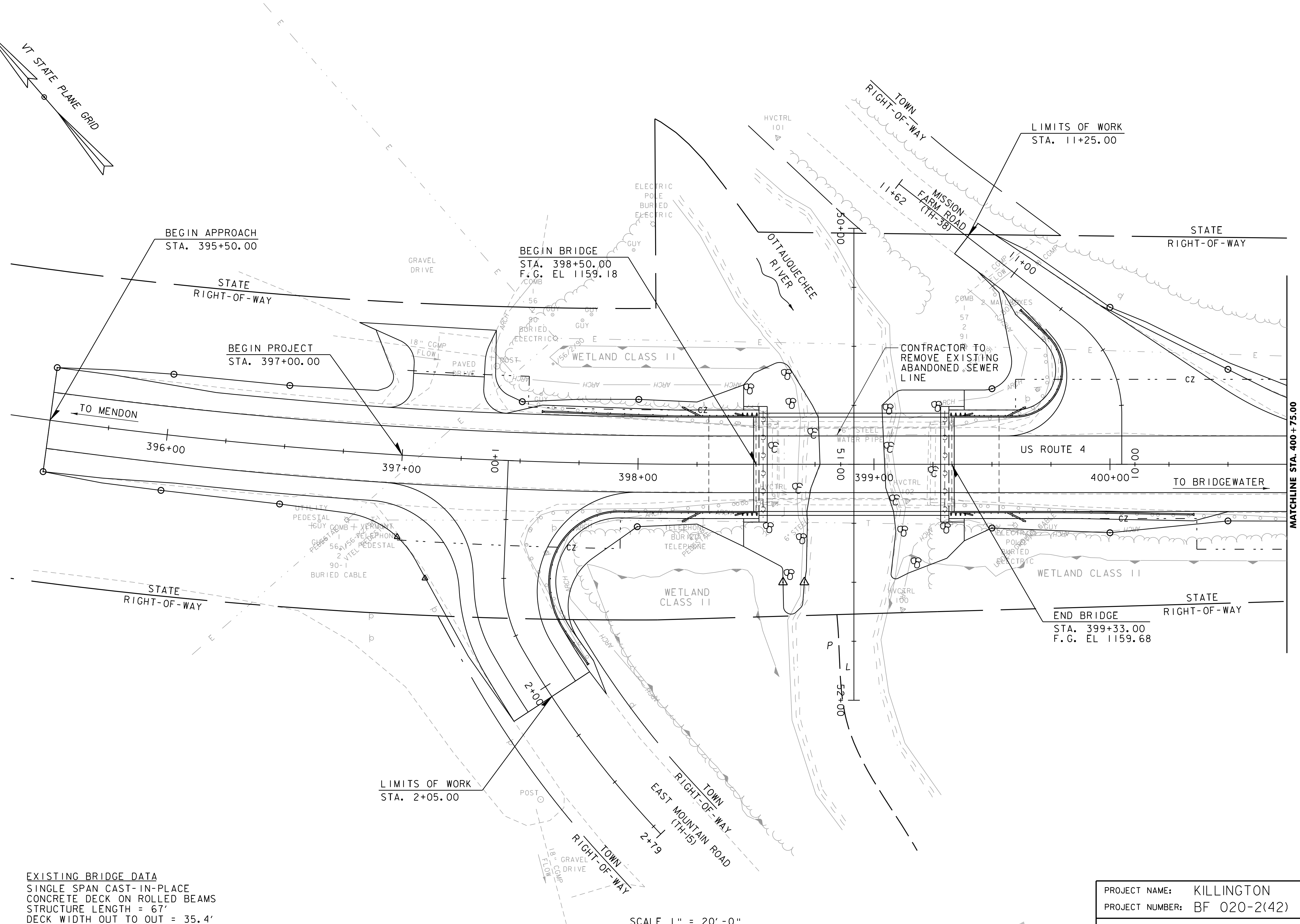
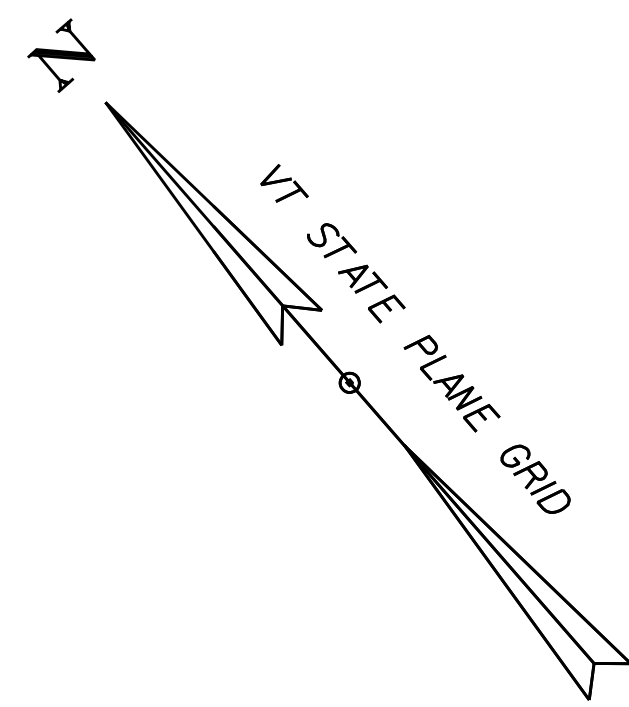
ONE WEEK PRIOR		
(ROUTE) ***	MESSAGE 1	MESSAGE 2
	US RT 4	MMMM DD
	BRIDGE	TO
	CLOSED	MMMM DD
		(DATE) **

** - MONTH SHALL BE SPELLED OUT - JUNE 10 NOT 06/10  
*** - ROUTE VT 100 SHALL SPECIFY N (NORTH) OR S (SOUTH) AS APPROPRIATE FOR THE DETOUR.

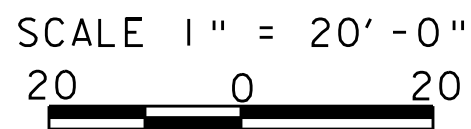
PROJECT NAME:	KILLINGTON
PROJECT NUMBER:	BF 020-2(42)
FILE NAME: z13b260detour.dts.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC CONTROL PLAN (5 OF 5)	SHEET 18 OF 50







EXISTING BRIDGE DATA  
SINGLE SPAN CAST-IN-PLACE  
CONCRETE DECK ON ROLLED BEAMS  
STRUCTURE LENGTH = 67'  
DECK WIDTH OUT TO OUT = 35.4'  
BRIDGE WIDTH CURB TO CURB = 29.8'

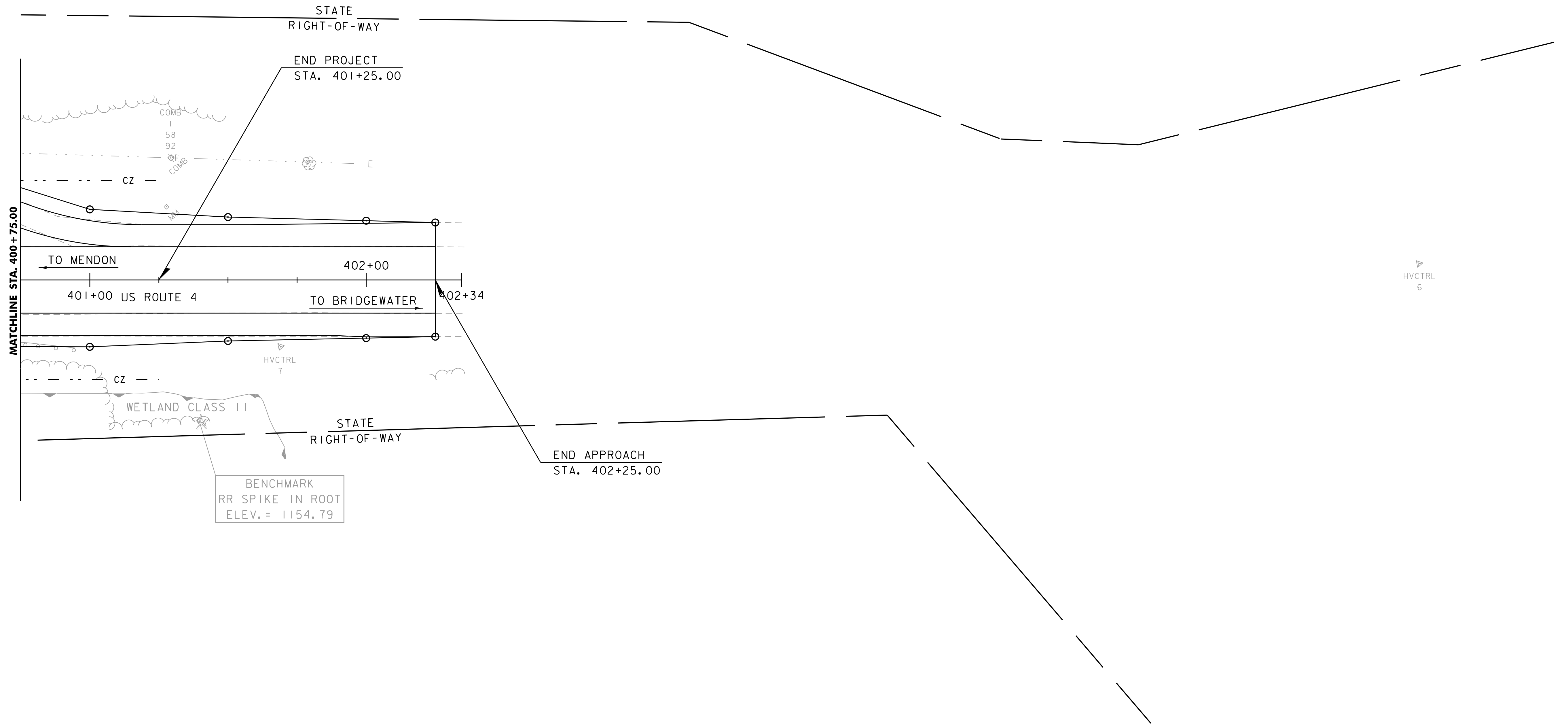
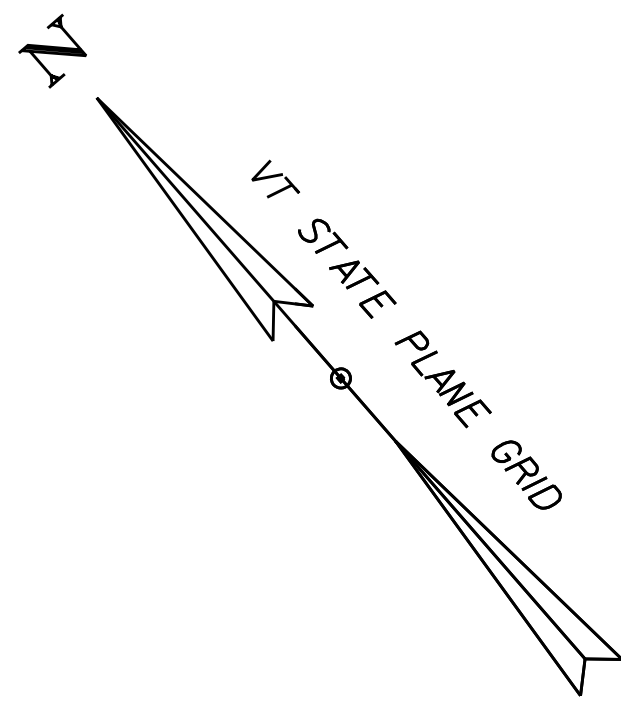


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260bdr_utilities.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
UTILITY LAYOUT SHEET (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 19 OF 50



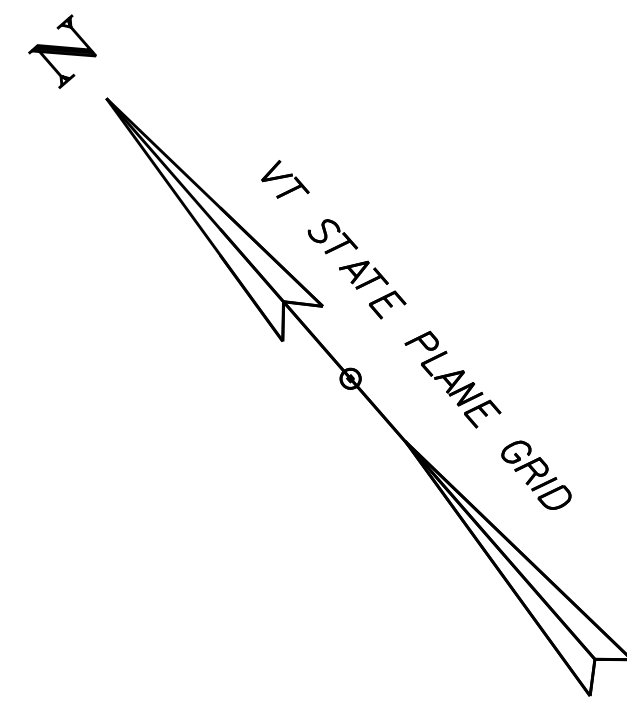


SCALE 1" = 20'-0"  
20 0 20



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260bdr_utilities.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: E.F. LAWES
UTILITY LAYOUT SHEET (2 OF 2)	SHEET 20 OF 50





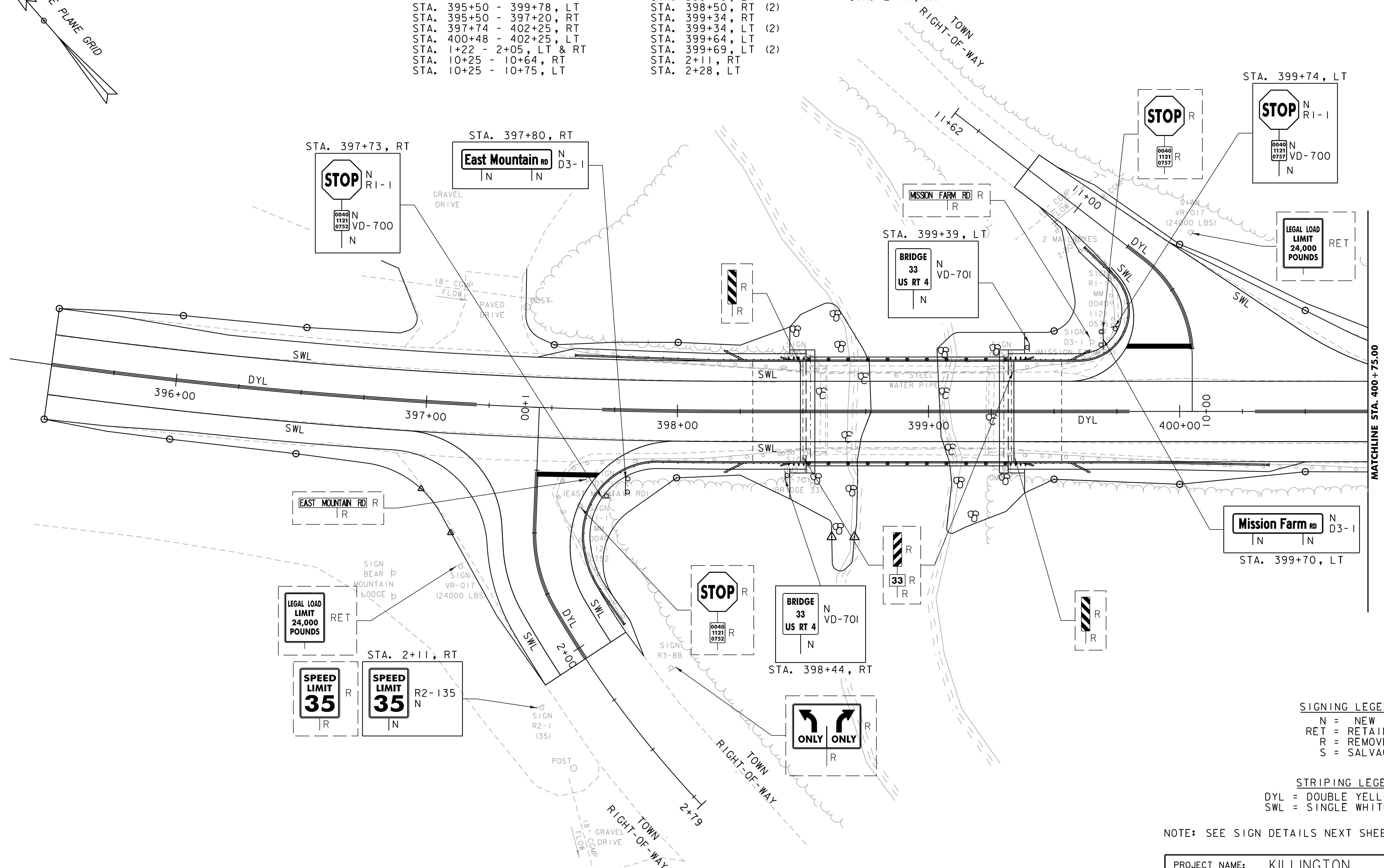
4 INCH YELLOW LINE  
STA. 395+50 - 397+20, LT & RT  
STA. 397+70 - 399+80, LT & RT  
STA. 400+30 - 402+25, LT & RT  
STA. 1+25 - 2+05, LT & RT  
STA. 10+25 - 10+75, LT & RT

4 INCH WHITE LINE  
STA. 395+50 - 399+78, LT  
STA. 395+50 - 397+20, RT  
STA. 397+74 - 402+25, RT  
STA. 400+48 - 402+25, LT  
STA. 1+22 - 2+05, LT & RT  
STA. 10+25 - 10+64, RT  
STA. 10+25 - 10+75, LT

STOP BAR  
STA. 397+45 - 397+69, RT  
STA. 399+79 - 400+05, LT

REMOVING SIGNS  
STA. 397+63, RT (2)  
STA. 397+65, RT  
STA. 398+49, LT  
STA. 398+50, RT (2)  
STA. 399+34, RT  
STA. 399+34, LT (2)  
STA. 399+64, LT  
STA. 399+69, LT (2)  
STA. 2+11, RT  
STA. 2+28, LT

TRAFFIC SIGNS, TYPE A  
STA. 397+73, RT (2)  
STA. 397+80, RT  
STA. 398+44, RT  
STA. 399+39, LT  
STA. 399+70, LT  
STA. 399+74, LT (2)  
STA. 2+11, RT



SIGNING LEGEND  
N = NEW  
RET = RETAIN  
R = REMOVE  
S = SALVAGE

STRIPING LEGEND  
DYL = DOUBLE YELLOW LINE  
SWL = SINGLE WHITE LINE

NOTE: SEE SIGN DETAILS NEXT SHEET.

SCALE 1" = 20'-0"  
20 0 20

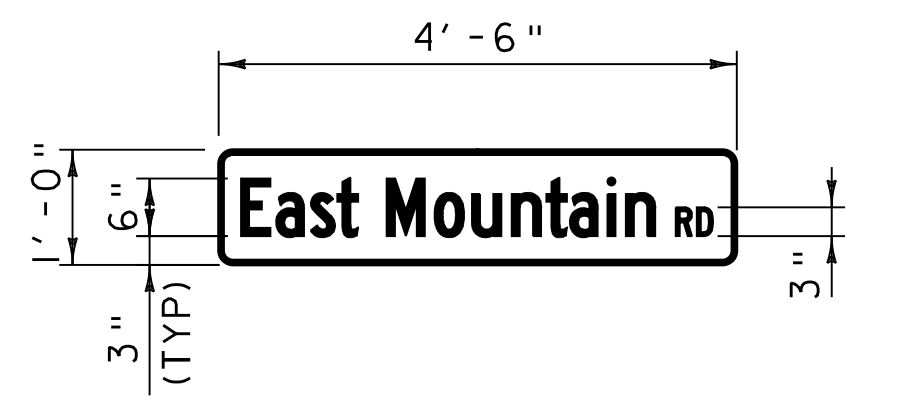
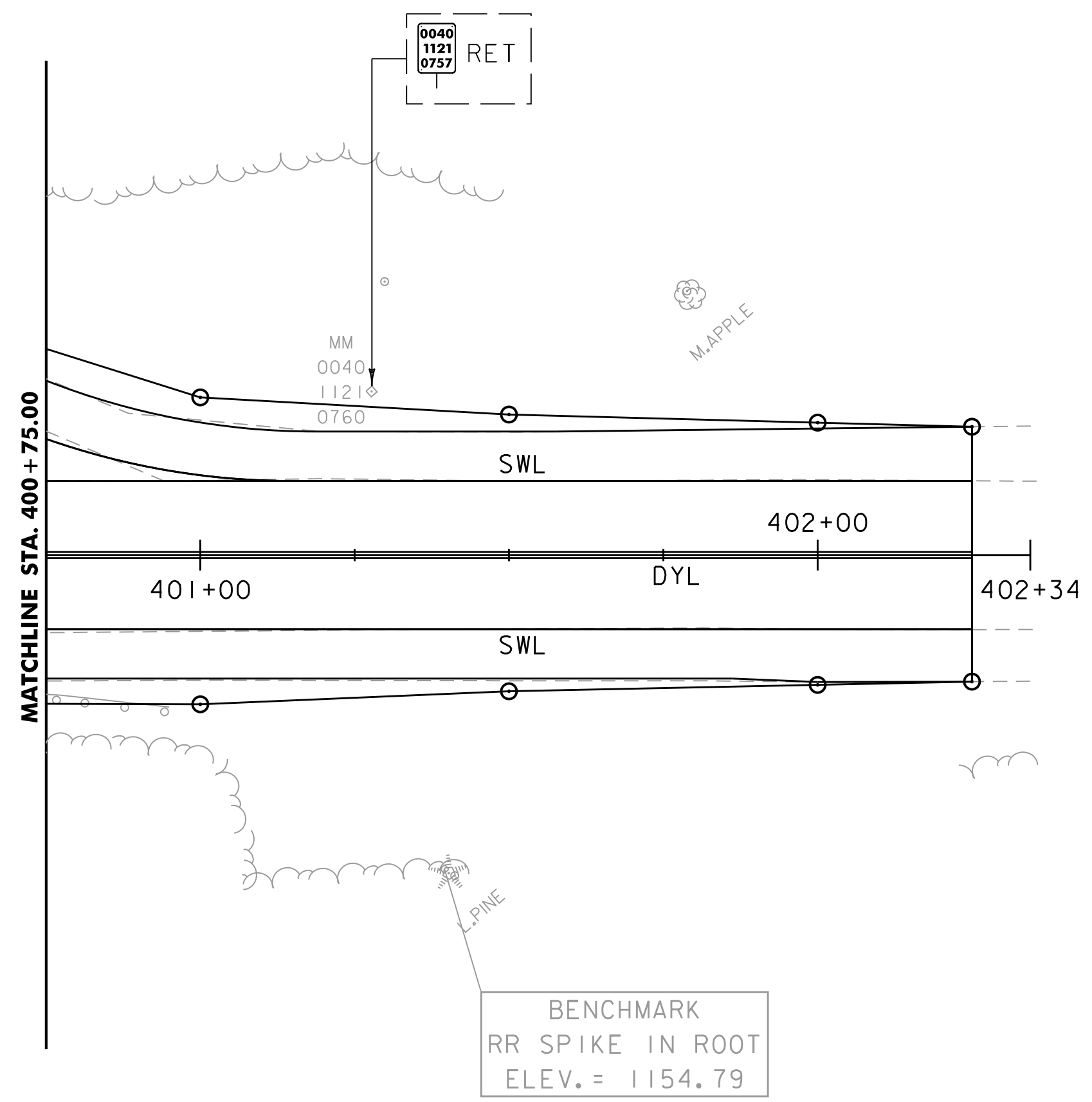
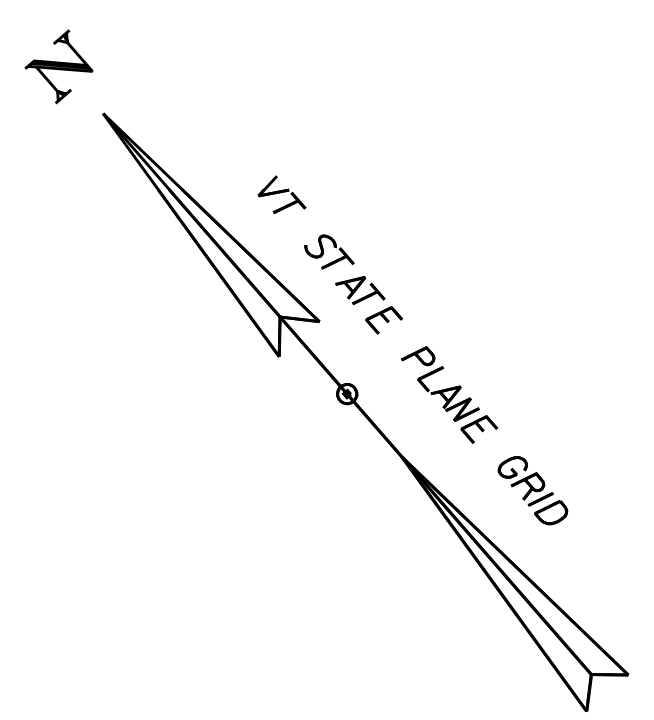


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

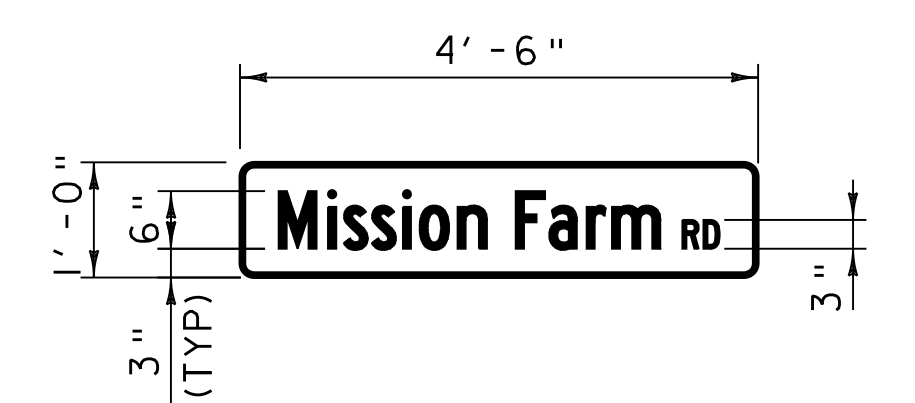
FILE NAME: z13b260+sl.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
TRAFFIC SIGNS & LINE STRIPING (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 21 OF 50





EAST MOUNTAIN RD SIGN  
NOT TO SCALE



MISSION FARM RD SIGN  
NOT TO SCALE

- NOTES:
1. STREET NAME SIGN LEGEND TEXT 6"X4.5"  
C SIGN BACKGROUND SHALL BE GREEN  
WITH WHITE LETTERING.
  2. SIGNS SHALL BE DOUBLE SIDED.

SIGNING LEGEND  
N = NEW  
RET = RETAIN  
R = REMOVE  
S = SALVAGE

STRIPING LEGEND  
DYL = DOUBLE YELLOW LINE  
SWL = SINGLE WHITE LINE

SCALE 1" = 20'-0"  
20 0 20



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260+sl.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: E.F. LAWES
TRAFFIC SIGNS & LINE STRIPING (2 OF 2)	SHEET 22 OF 50



# TRAFFIC SIGN SUMMARY SHEET

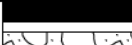
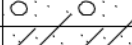
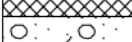
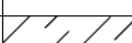
PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260+ss.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
TRAFFIC SIGN SUMMARY SHEET	SHEET 23 OF 50

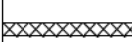






ESTIMATED BOTTOM OF CAP  
EL = 1148.50

		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: <b>B-101</b>		
				KILLINGTON BF 020-2(42) US-4 BR #33		Page No.: 1 of 2 Pin No.: 13b260 Checked By: MRG		
Boring Crew: Garrow, Nieto				Casing Type: WB I.D.: 4 in		Sampler SS 1.5 in		
Date Started: 10/19/15 Date Finished: 11/02/15				Date		Groundwater Observations		
VTSPG NAD83: N 406024.24 ft E 1572888.14 ft				Hammer Wt: N.A. 140 lb.		10/27/15 12.2 W.T. Before Drilling		
Station: 398+50 Offset: -11.20				Hammer Fall: N.A. 30 in.		10/28/15 12.9 W.T. Before Drilling		
Ground Elevation: 1159.2 ft				Hammer/Rod Type: Auto/AWJ		1/02/15 12.4 W.T. Before Drilling		
Rig: CME 45C SKID C _e = Unknown								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)		Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
10		Asphalt Pavement, 0.0 ft - 0.66 ft		13-9-11	5.3	47.7	36.6	15.7
		A-1-b, SaGr, brn, Moist, Rec. = 1.5 ft		11				
		Field Note:, NXDC, Cleaned out casing.		(20)	7.7	42.4	40.5	17.1
		A-1-b, SaGr, brn, Moist, Rec. = 0.9 ft		6-8-9-10				
		Field Note:, NXDC, Cleaned out casing.		(17)				
		A-1-a, SaGr, Lt/brn-brn, Moist, Rec. = 0.6 ft, Lab Note: Broken rock was within sample.		9-8-10-	10.0	65.0	25.6	9.4
		Field Note:, No Recovery		(25)				
		Field Note:, NXDC, Cleaned out casing.		R@6"				
		A-2-4, Sa, gry-rust, Moist, Rec. = 0.8 ft, Lab Note: Sample was rust colored.		(8)	22.7	10.2	73.6	16.2
		Field Note:, NXDC, Cleaned out casing.		15-10-5-				
20		A-2-4, SiSa, gry, Moist, Rec. = 0.9 ft, Lab Note: Black silt layers were within sample.		6	32.7	3.7	65.6	30.7
		Field Note:, No Recovery		(15)				
		A-2-4, SiSa, gry, Moist, Rec. = 0.9 ft, Lab Note: Black silt layers were within sample.		3-3-3-2				
		Field Note:, No Recovery		(6)				
		A-2-4, Sa, brn-gry, Moist, Rec. = 1.2 ft, Lab Note: Wood and wood fibers were within sample.		WH-2-2-	59.8	4.2	79.4	16.4
		Sample was black.		2				
		Field Note:, No Recovery		(4)				
		A-2-4, SiSa, gry, Moist, Rec. = 0.5 ft		2-3-4-4				
				(7)				
				6-4-4-5				
30				(8)	28.2	1.4	73.5	25.1
				3-2-3-5				
				(5)				
		A-2-4, SiSa, brn, Moist, Rec. = 0.9 ft		3-3-3-3	27.3	0.2	68.2	31.6
				(6)				
		Field Note:, No Recovery		3-3-5-4				
				(8)				
		A-4, SaSi, brn, Moist, Rec. = 1.3 ft		2-2-2-2	34.2	2.9	31.3	65.8
				(4)				
		A-4, SiSa, brn, Moist, Rec. = 0.9 ft		3-3-5-3	32.7	0.1	53.8	46.1
40				(8)				
		Field Note:, NXDC, Cleaned out casing.		6-6-6-7				
		Field Note:, No Recovery		(12)				
		Field Note:, NXDC, Cleaned out casing.						
		A-1-b, GrSa, brn, Moist, Rec. = 1.0 ft		11-33-	15.1	38.2	52.9	8.9
				18-16				
				(51)				
		Field Note:, NXDC, Cleaned out casing.		R@0"				
		Field Note:, No Recovery		(R)				
		Field Note:, NXDC, Cobbles						
Notes:	1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _e is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.							

		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: <b>B-101</b>		
				KILLINGTON BF 020-2(42) US-4 BR #33		Page No.: 2 of 2 Pin No.: 13b260 Checked By: MRG		
Boring Crew: Garrow, Nieto				Casing Type: WB I.D.: 4 in		Sampler SS 1.5 in		
Date Started: 10/19/15 Date Finished: 11/02/15				Date		Groundwater Observations		
VTSPG NAD83: N 406024.24 ft E 1572888.14 ft				Hammer Wt: N.A. 140 lb.		10/27/15 12.2 W.T. Before Drilling		
Station: 398+50 Offset: -11.20				Hammer Fall: N.A. 30 in.		10/28/15 12.9 W.T. Before Drilling		
Ground Elevation: 1159.2 ft				Hammer/Rod Type: Auto/AWJ		1/02/15 12.4 W.T. Before Drilling		
Rig: CME 45C SKID C _e = Unknown								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)		Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
70		A-2-4, GrSiSa (Visual Description), white-Lt/gry, Moist, Rec. = 1.1 ft, Lab Note: Sample had a strong "moth ball" type odor. P.I.D. test performed showing 0.4 ppm.		32-41-				
		Field Note:, NXDC, Cleaned out casing.		R@2.5"				
		Visual Description:, SaGr, gry, Moist, Rec. = 2.2 ft, Lab Note: Insufficient sample for testing.		R@3.5"	13.4			
		Field Note:, NXDC, Cleaned out casing.		(R)				
		A-1-b, Sa, Lt/gry, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample.		R@5"	22.8	16.5	79.7	3.8
				(R)				
		A-1-a, SaGr, Lt/gry, Moist, Rec. = 0.5 ft		R@6"	10.3	50.6	35.0	14.4
		Field Note:, Sleeved 3.0 inch casing. Sampling with AWJ rod		(R)				
		Field Note:, NXDC, Cleaned out casing.		R@5"	14.3	48.2	32.9	18.9
		A-1-b, SaGr, brn-gry, Moist, Rec. = 0.4 ft		(R)				
90		Field Note:, NXDC, Cleaned out casing.		R@5"				
		Field Note:, No Recovery		(R)				
		Field Note:, NXDC, Cleaned out casing.						
		Visual Description:, Gr, gry-Lt/brn, Moist, Rec. = 0.2 ft, Lab Note: Insufficient sample for testing.		R@2.5"	2.2			
				(R)				
		Hole stopped @ 111.0 ft						
		Remarks: Hole Collapsed at 9.6 feet.						
Notes:	1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _e is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.							

PROJECT NAME: BF 020-2(42)  
PROJECT NUMBER: KILLINGTON

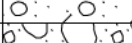
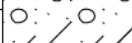
FILE NAME: z13b260borlogs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: VTRANS  
BORING LOGS (1 OF 2)

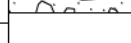


PLOT DATE: 2/12/2016  
DRAWN BY: K.C. BARRY  
CHECKED BY: E.F. LAWES  
SHEET 25 OF 50



ESTIMATED BOTTOM OF CAP  
EL = 1150.00

		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: <b>B-104</b>				
				KILLINGTON BF 020-2(42) US-4 BR #33		Page No.: 1 of 2 Pin No.: 13b260 Checked By: MRG				
Boring Crew: Gardner, GARROW, NIETO Date Started: 11/03/15 Date Finished: 11/05/15 VTSPG NAD83: N 405959.45 ft E 1572933.11 ft Station: 398+28 Offset: 10.40 Ground Elevation: 1160.0 ft				Casing Type: WB I.D.: 4 in Hammer Wt: N.A. Hammer Fall: N.A. Hammer/Rod Type: Auto/AWJ Rig: CME 45C SKID C _e = Unknown		Sampler SS 1.5 in 140 lb. 30 in.		Groundwater Observations Date Depth Notes 11/04/15 12.6 W.T. before drilling 11/05/15 12.8 W.T. before drilling		
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)				Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5		Asphalt Pavement, 0.0 ft - 0.62 ft								
		A-1-b, SaGr, brn, Moist, Rec. = 1.3 ft, Lab Note: Broken rock was within sample.				10-7-8-9 (15)	9.1	44.8	40.4	14.8
		A-1-b, SaGr, brn, Wet, Rec. = 1.2 ft				7-6-5-5 (11)	24.3	44.1	39.9	16.0
		Field Note:, NXDC, Cleaned out casing.				5-6-6-7 (12)	16.4	59.5	27.8	12.7
		A-1-a, SaGr, gry, Moist, Rec. = 0.5 ft				9.3	42.1	41.5	16.4	
10		A-1-b, SaGr, brn, Moist, Rec. = 0.8 ft				8-15-6-5 (21)	25.9	46.2	47.5	6.3
		A-1-b, GrSa, brn, Wet, Rec. = 0.7 ft								
		Field Note:, NXDC, Cleaned out casing.				2-2-6-6 (8)	32.9	32.2	41.7	26.1
		A-2-4, SiGrSa, brn, MTW, Rec. = 1.1 ft				10-15-11-9 (26)	15.8	35.9	47.3	16.8
		A-1-b, GrSa, brn-gry, Moist, Rec. = 1.4 ft				6-7-8-6 (15)	17.7	24.9	56.4	18.7
15		Field Note:, NXDC, Cleaned out casing., Cobbles				2-WH-2-3 (W.H.)	26.1	9.1	65.8	25.1
		A-2-4, GrSa, brn, Moist, Rec. = 1.5 ft, Lab Note: Sample contained rust colored layers.				1-2-2-4 (4)	27.8	2.7	78.9	18.4
		A-2-4, SiSa, brn, Moist, Rec. = 1.1 ft, Lab Note: Sample contained rust colored layers.				2-3-4-4 (7)	25.4	9.4	80.7	9.9
		A-2-4, Sa, brn, Moist, Rec. = 1.0 ft								
		A-3, Sa, brn, Moist, Rec. = 1.0 ft				6-7-6-6 (13)	13.6	58.7	36.3	5.0
20		Field Note:, NXDC, Cleaned out casing.								
		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample.				8-8-8-8 (16)	16.3	55.4	38.6	6.0
		Field Note:, NXDC, Cleaned out casing., Cobbles								
		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample.				6-33-8-10 (41)	12.8	60.1	32.2	7.7
		A-1-a, SaGr, brn, Moist, Rec. = 0.9 ft, Lab Note: Broken rock was within sample.								
25		Field Note:, NXDC, Cleaned out casing.								
		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample.								
		Field Note:, NXDC, Cleaned out casing., Cobbles								
		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample.								
		Field Note:, NXDC, Cleaned out casing., Boulder								
Notes:		1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _e is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.								

		STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY		BORING LOG		Boring No.: <b>B-104</b>					
				KILLINGTON BF 020-2(42) US-4 BR #33		Page No.: 2 of 2 Pin No.: 13b260 Checked By: MRG					
Boring Crew: Gardner, GARROW, NIETO Date Started: 11/03/15 Date Finished: 11/05/15 VTSPG NAD83: N 405959.45 ft E 1572933.11 ft Station: 398+28 Offset: 10.40 Ground Elevation: 1160.0 ft				Casing Type: WB I.D.: 4 in Hammer Wt: N.A. Hammer Fall: N.A. Hammer/Rod Type: Auto/AWJ Rig: CME 45C SKID C _e = Unknown		Sampler SS 1.5 in 140 lb. 30 in.		Groundwater Observations Date Depth Notes 11/04/15 12.6 W.T. before drilling 11/05/15 12.8 W.T. before drilling			
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)				Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %	
45		A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Broken rock was within sample.				10-9-6-5 (15)	11.8	54.6	34.8	10.6	
		Field Note:, NXDC, Cleaned out casing., Cobbles				34-34-R@2.5" (R)	15.3	27.9	58.9	13.2	
		A-1-b, GrSa, brn, Moist, Rec. = 0.5 ft									
		Field Note:, NXDC, Cleaned out casing., Cobbles				20-R@3.5 (R)	15.6	27.1	51.3	21.6	
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.8 ft									
50		Field Note:, NXDC, Cleaned out casing., Cobbles									
		A-1-b, SiGrSa, brn, Moist, Rec. = 0.8 ft				R@5" (R)	10.2	55.8	30.4	13.8	
		Field Note:, NXDC, Cleaned out casing., Cobbles									
		A-1-a, SaGr, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken rock was within sample. Field Note:, Sleeved 3.0 inch casing. Sampling with AWJ rod.									
		A-1-a, SaGr, brn, Moist, Rec. = 0.7 ft, Lab Note: Broken rock was within sample.				4-R@6" (R)	11.0	59.3	28.2	12.5	
60		Field Note:, NXDC, Cleaned out casing.				23-R@3.5" (R)	12.0	56.6	28.7	14.7	
		A-1-a, SaGr, brn, Moist, Rec. = 0.5 ft									
		Field Note:, NXDC, Cleaned out casing.									
		Field Note:, No Recovery				R@1" (R)					
		Hole stopped @ 70.1 ft									
75		Remarks: Hole Collapsed at 12.3 1.) Started mud drilling at 25.0 feet. 2.) Additional sample taken of cuttings from 61.0-65.0 feet. Sample had a moth ball like smell and had brown "oil like" spots. (Lab Note: Sample was not tested)									
		Notes:				1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _e is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.					

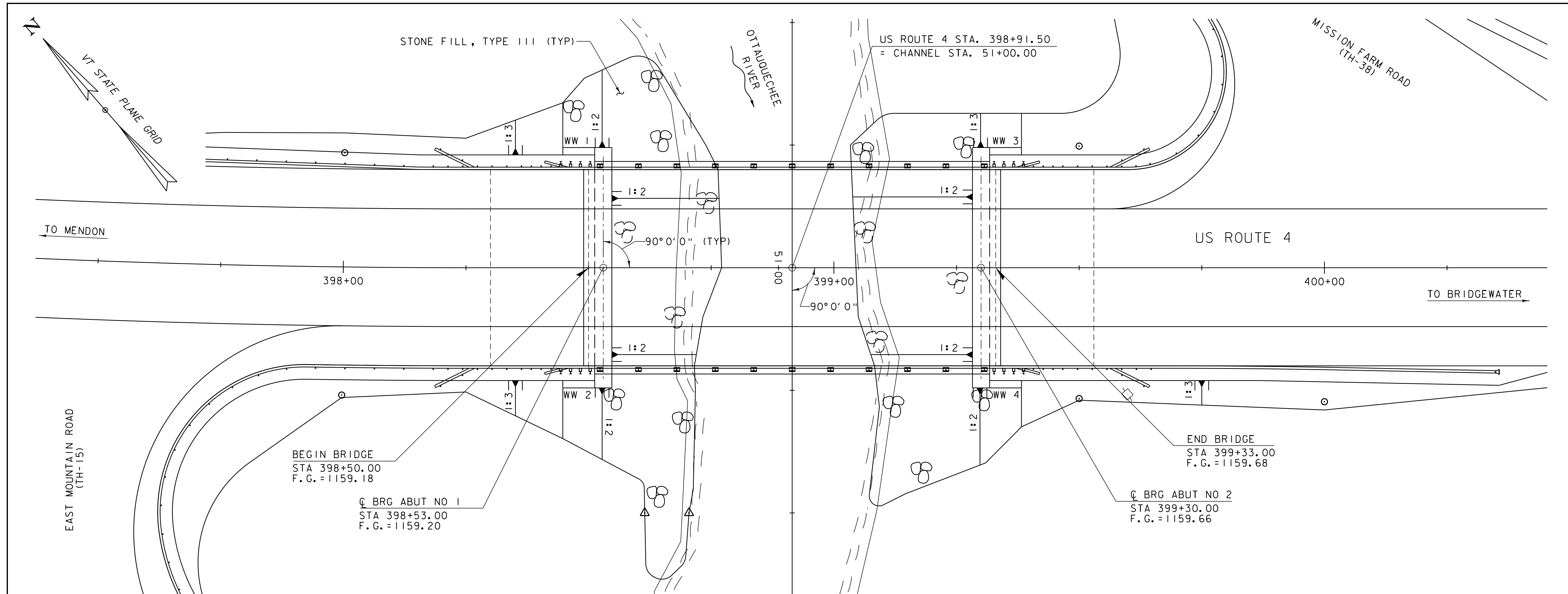
PROJECT NAME: BF 020-2(42)  
PROJECT NUMBER: KILLINGTON

FILE NAME: z13b260borlogs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: VTRANS  
BORING LOGS (2 OF 2)

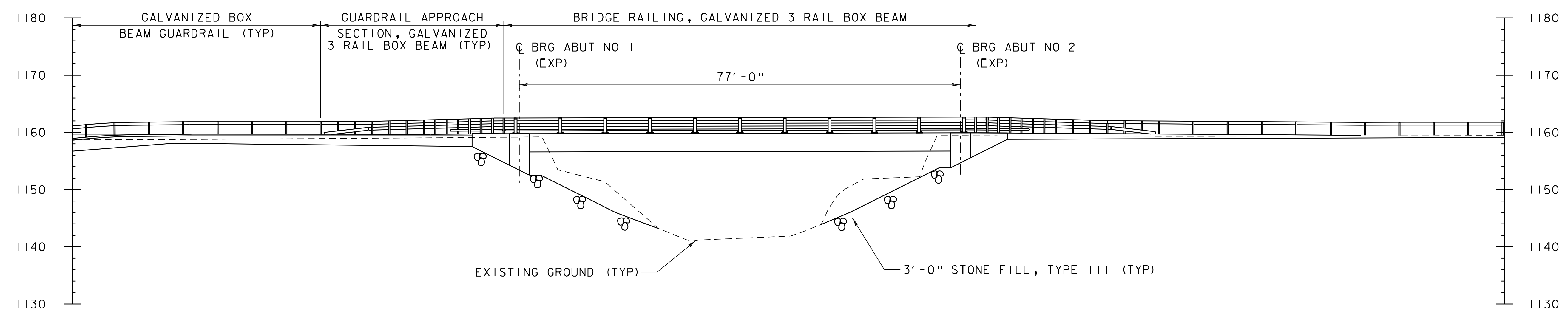
PLOT DATE: 2/12/2016  
DRAWN BY: K.C. BARRY  
CHECKED BY: E.F. LAWES  
SHEET 26 OF 50







PLAN  
SCALE 1" = 10' - 0"

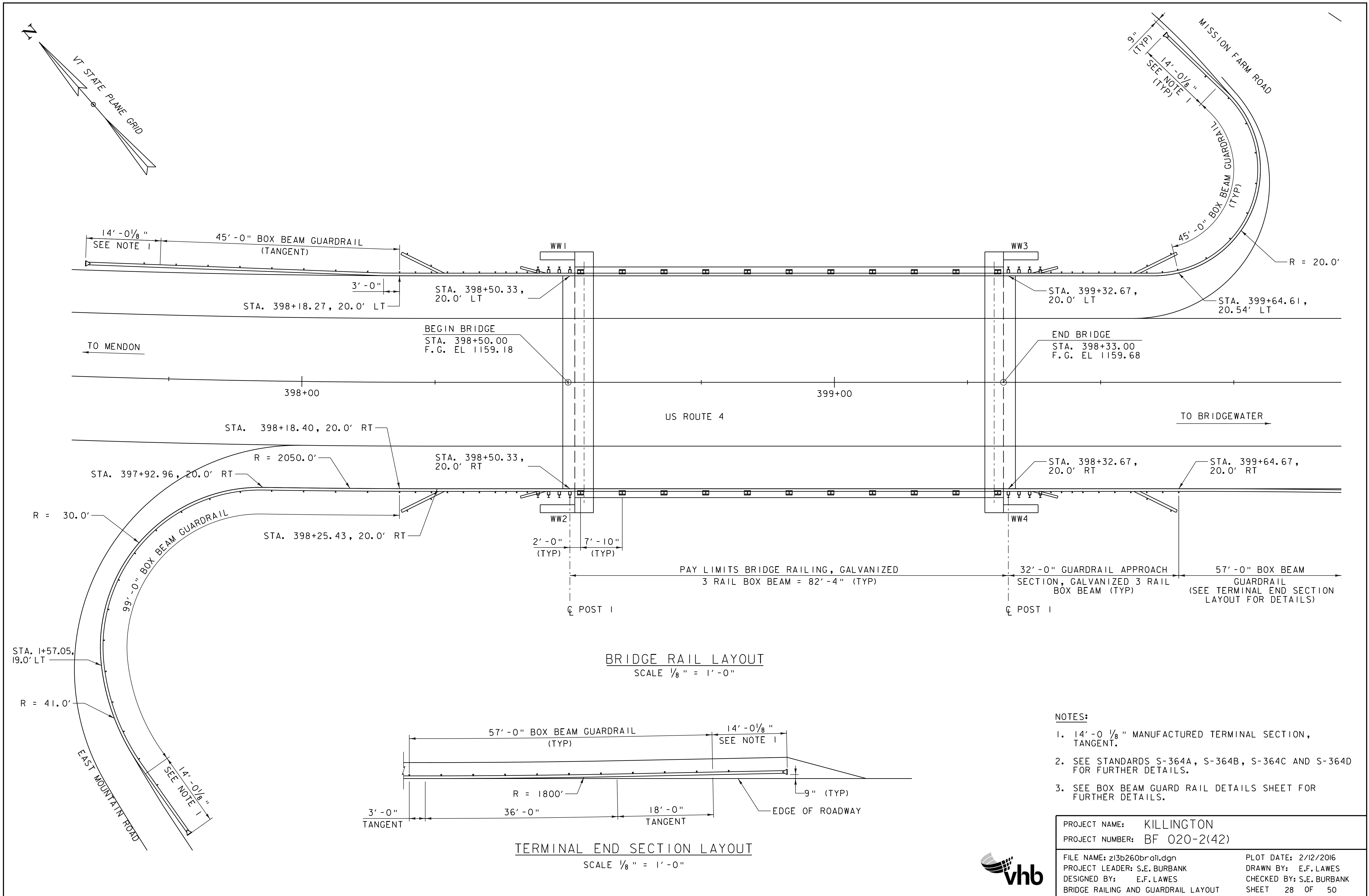


ELEVATION  
SCALE 1" = 10' - 0"

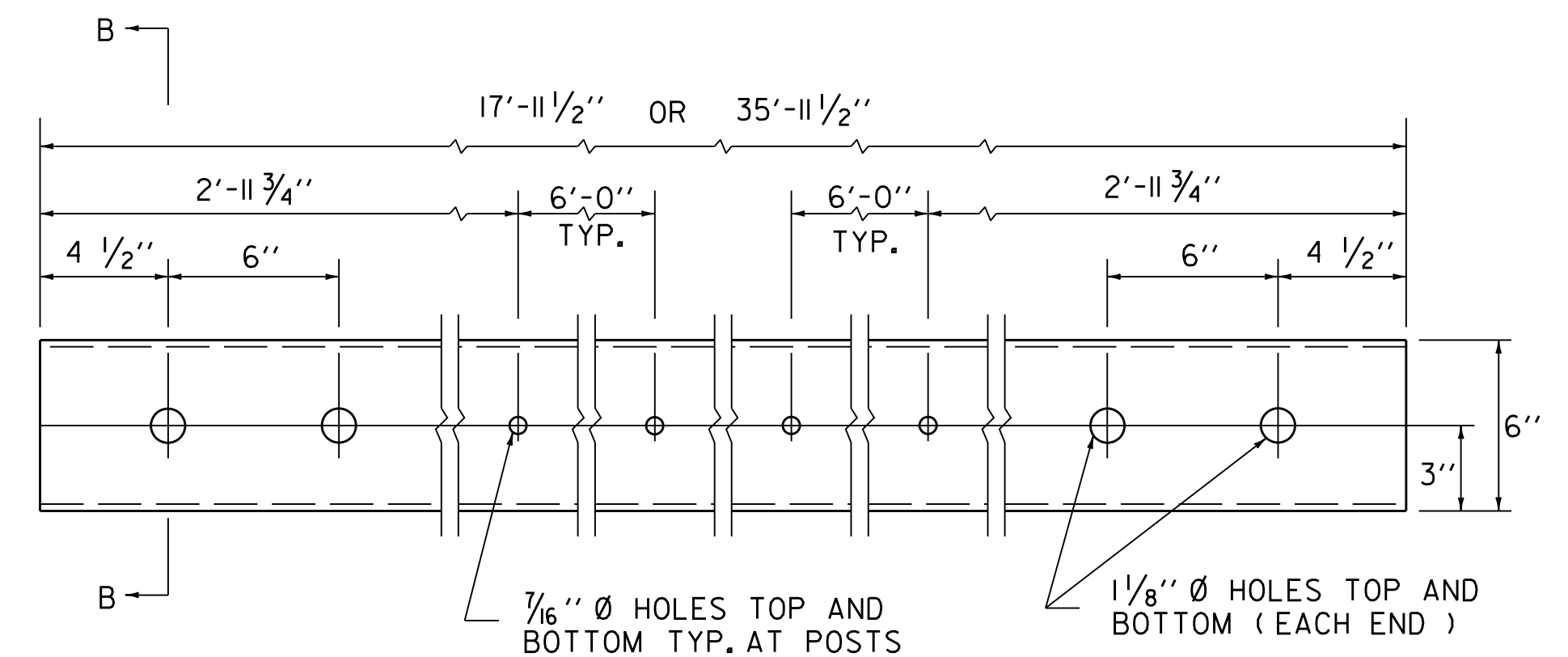
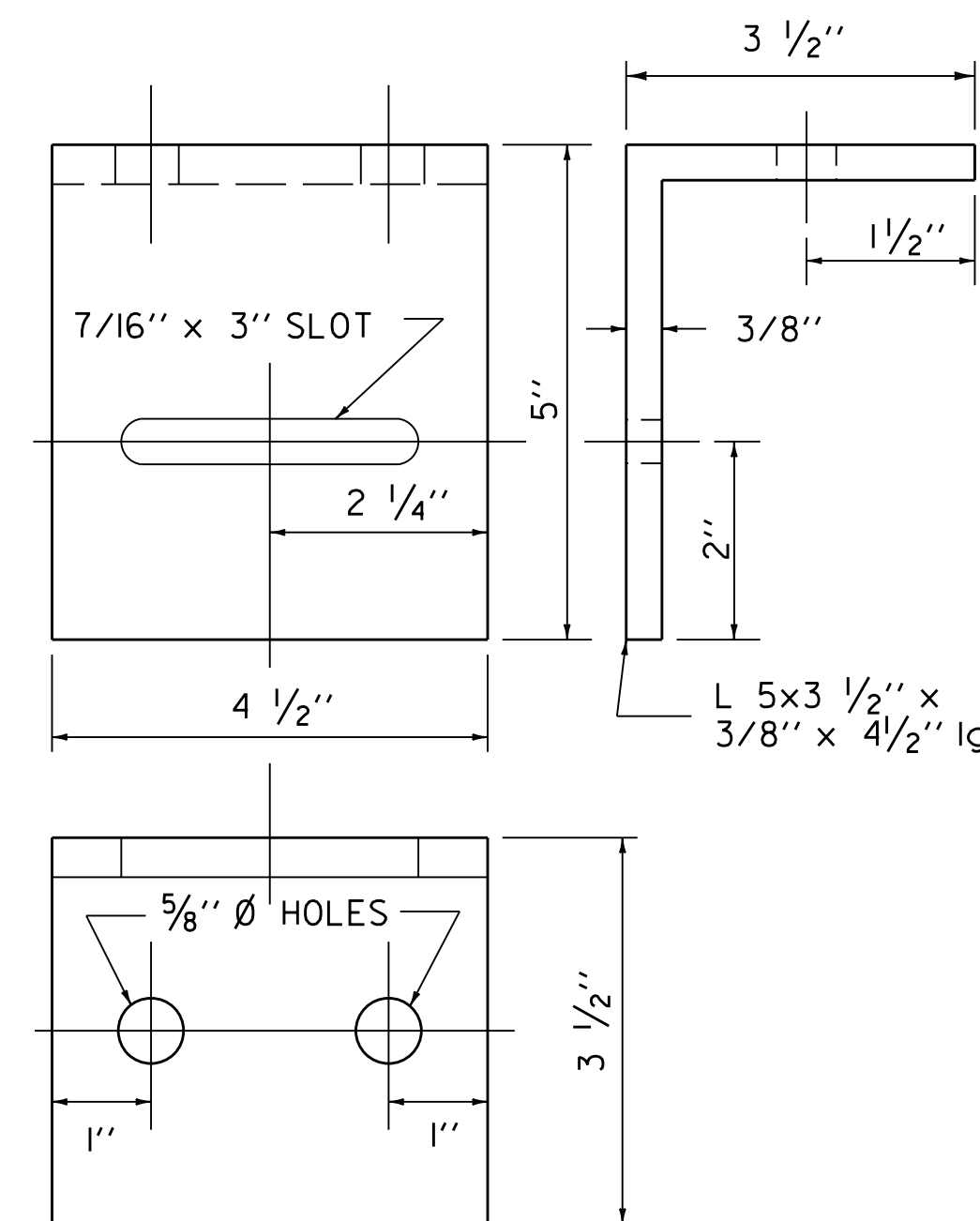
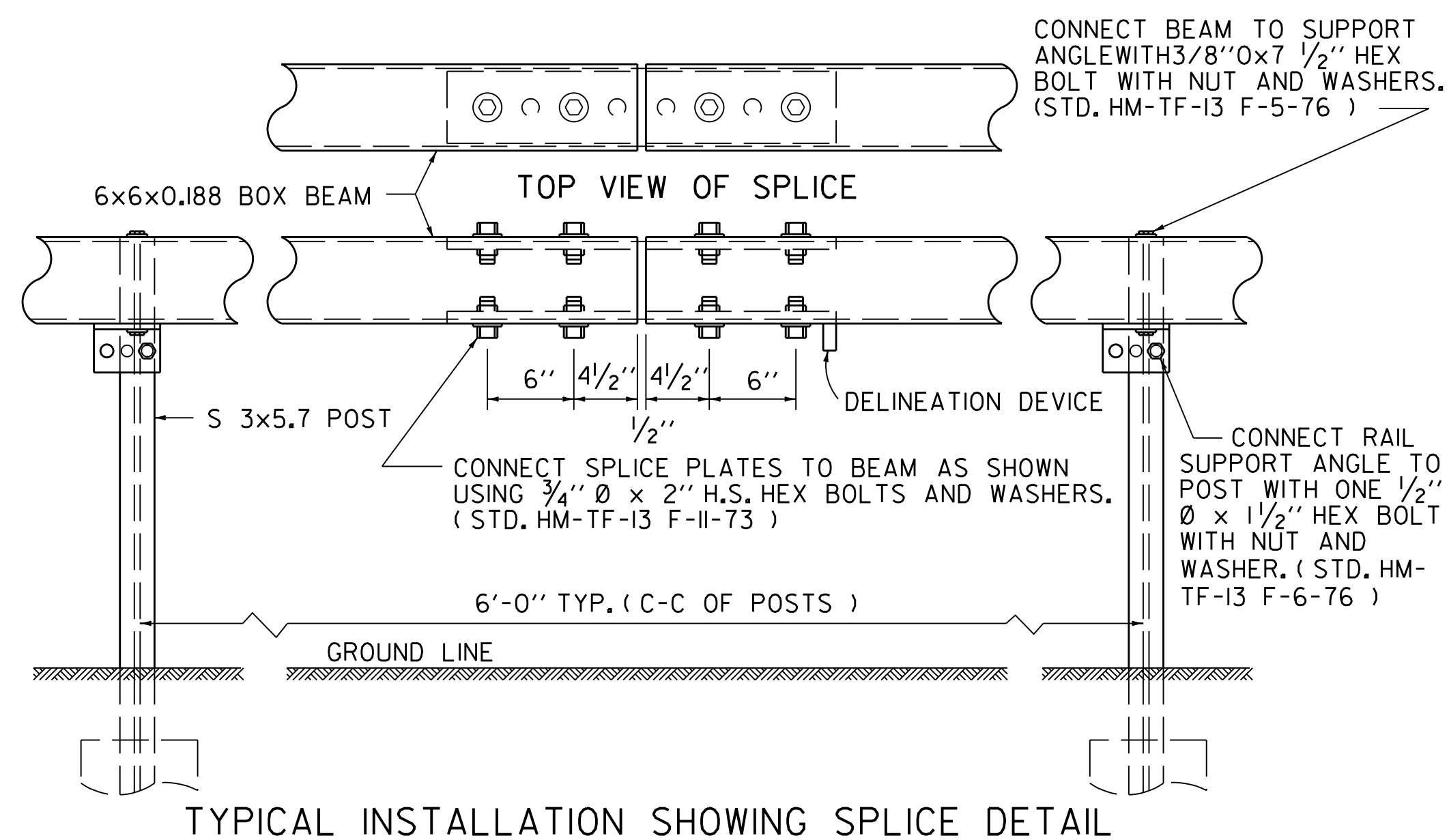
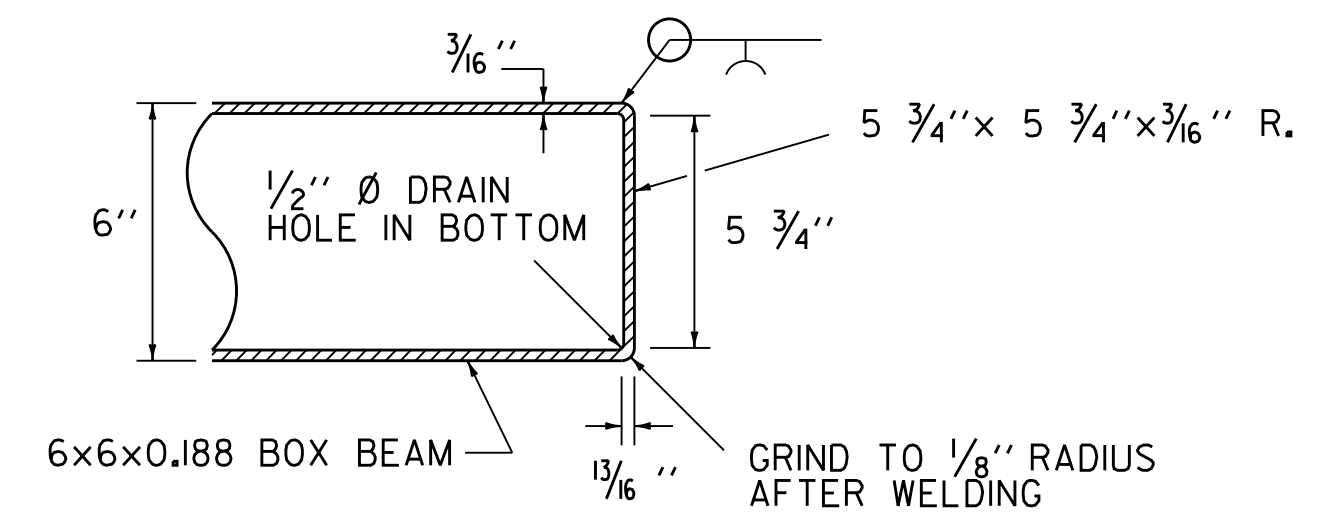
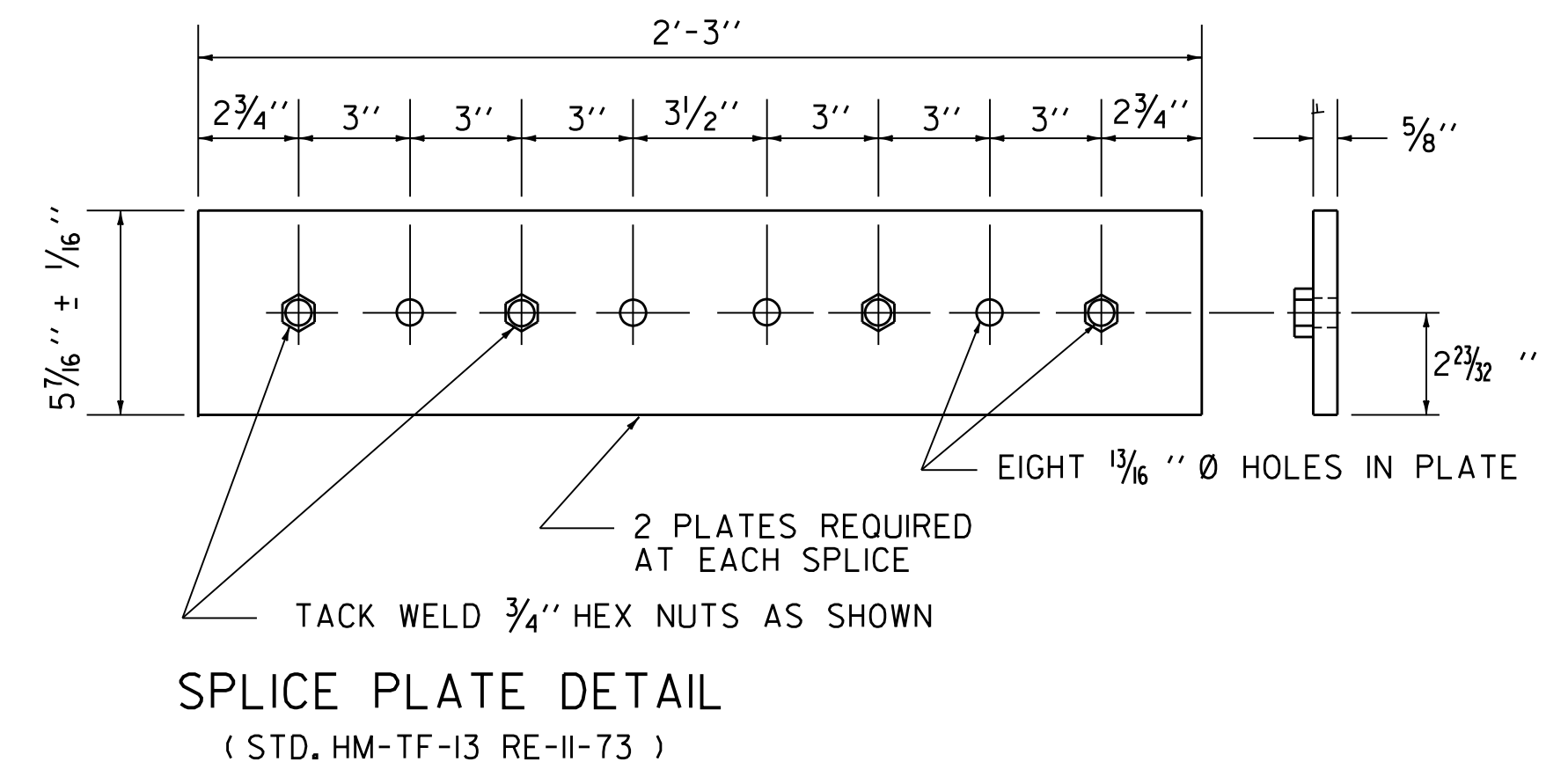
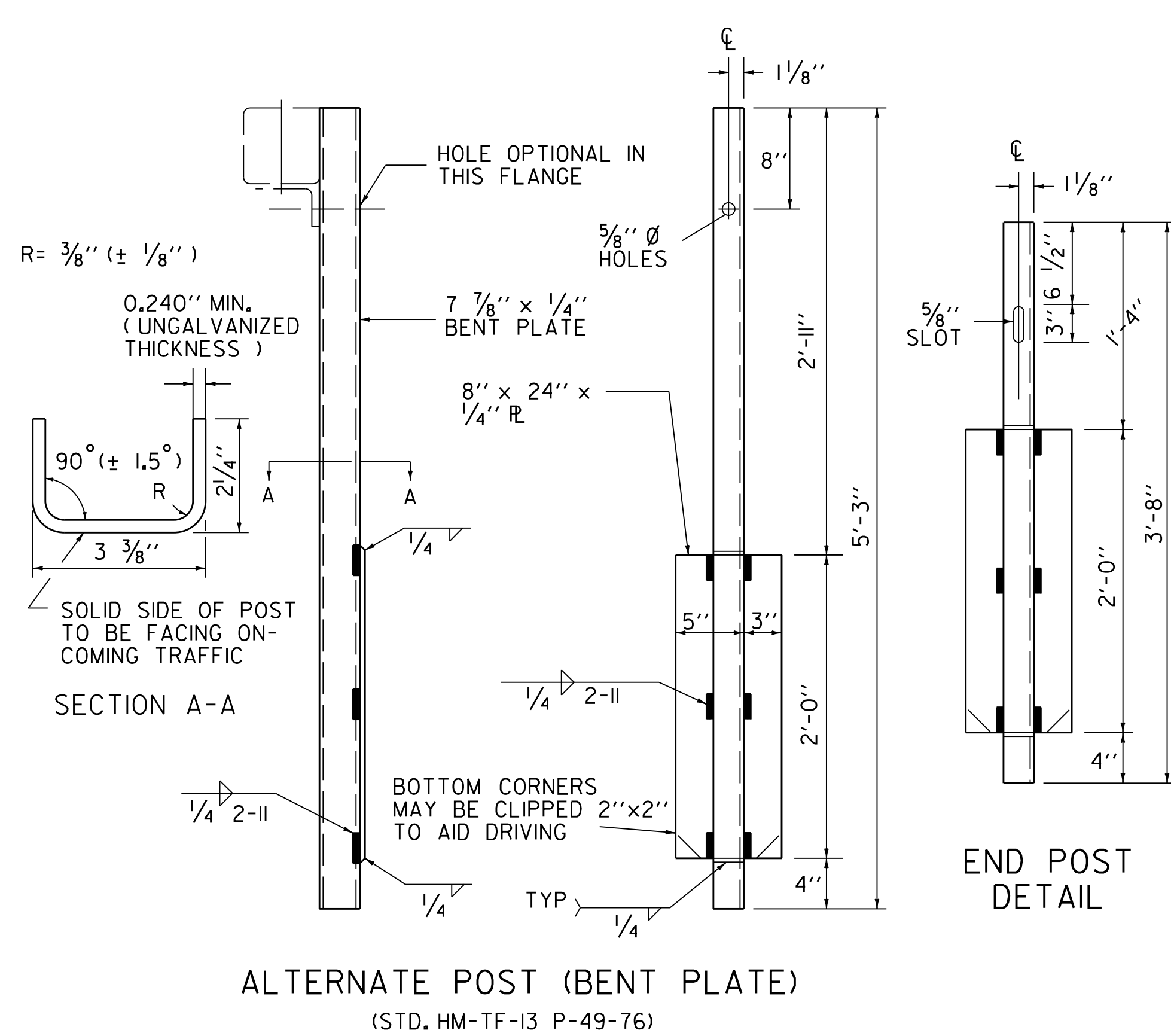
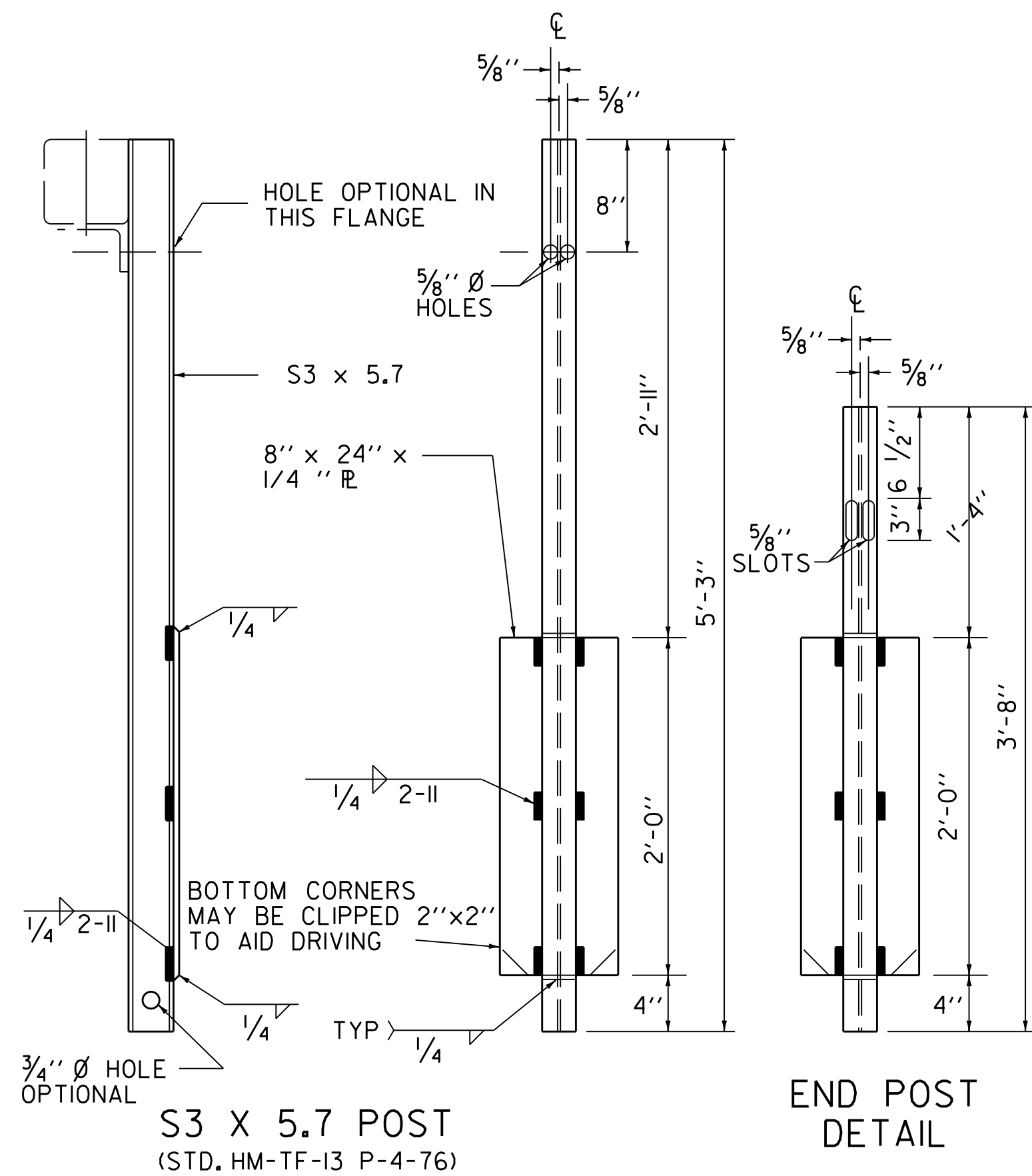


PROJECT NAME: KILLINGTON		PLOT DATE: 2/12/2016	
PROJECT NUMBER: BF 020-2(42)		DRAWN BY: R.H. BARNES	
FILE NAME: z13b260pe.dgn		CHECKED BY: E.F. LAWES	
PROJECT LEADER: S.E. BURBANK		SHEET 27 OF 50	
DESIGNED BY: R.H. BARNES			
PLAN & ELEVATION			



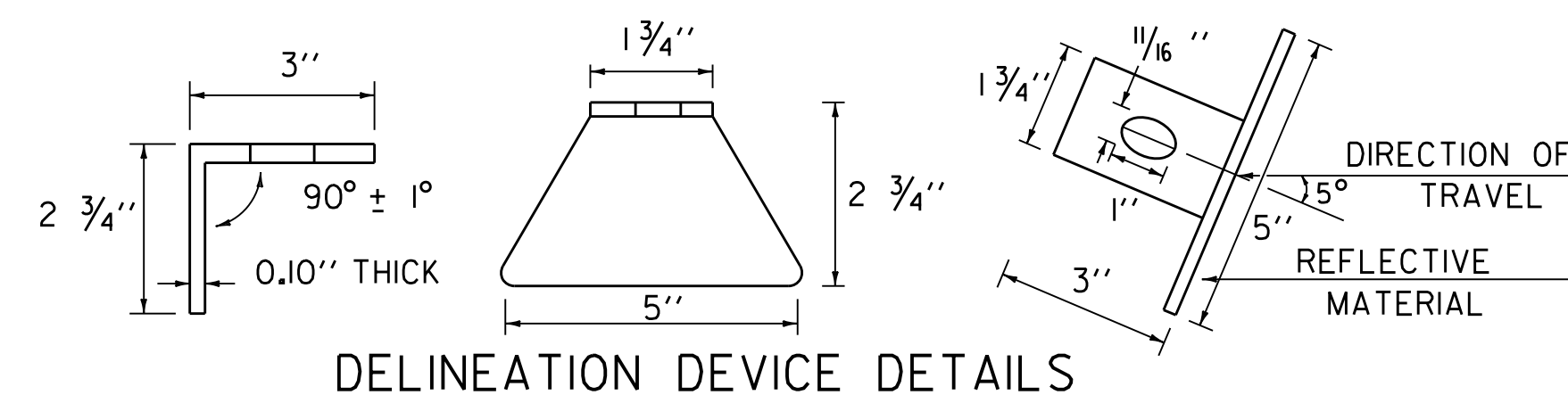
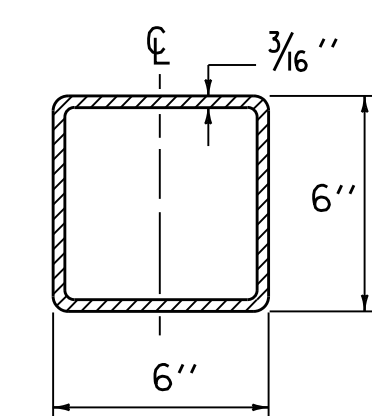






#### NOTES:

1. RAIL SECTIONS FOR TANGENT RUNS WILL BE EITHER 17'-11 1/2" OR 35'-11 1/2" IN LENGTH.
2. ON CURVES, CHORD LENGTHS WILL BE NO LESS THAN 12 FEET.
3. FOR CURVES GREATER THAN 8°, RAIL SECTIONS SHALL BE SHOPFORMED TO THE REQUIRED CURVATURE. PAYMENT OF SUCH SHOP WORK WILL BE CONSIDERED TO BE SUBSIDIARY TO BOX BEAM GUARD RAIL.
4. WELD OR GALVANIZING PROTRUSIONS WILL NOT BE PERMITTED ON TOP OR BOTTOM INSIDE WALLS IN SPLICE AREA.



THIS REFLECTORIZED ALUMINUM DELINEATION DEVICE IS TO BE ERECTED EVERY 36 FEET, AT SPLICES. DELINEATOR SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B209 ALLOY 5052-H32.

REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER. AMBER IS TO BE INSTALLED ON THE LEFT OR MEDIAN SIDE OF INTERSTATE ROADWAYS OR RAMPS.

#### BOX BEAM GUARD RAIL DETAILS NOT TO SCALE

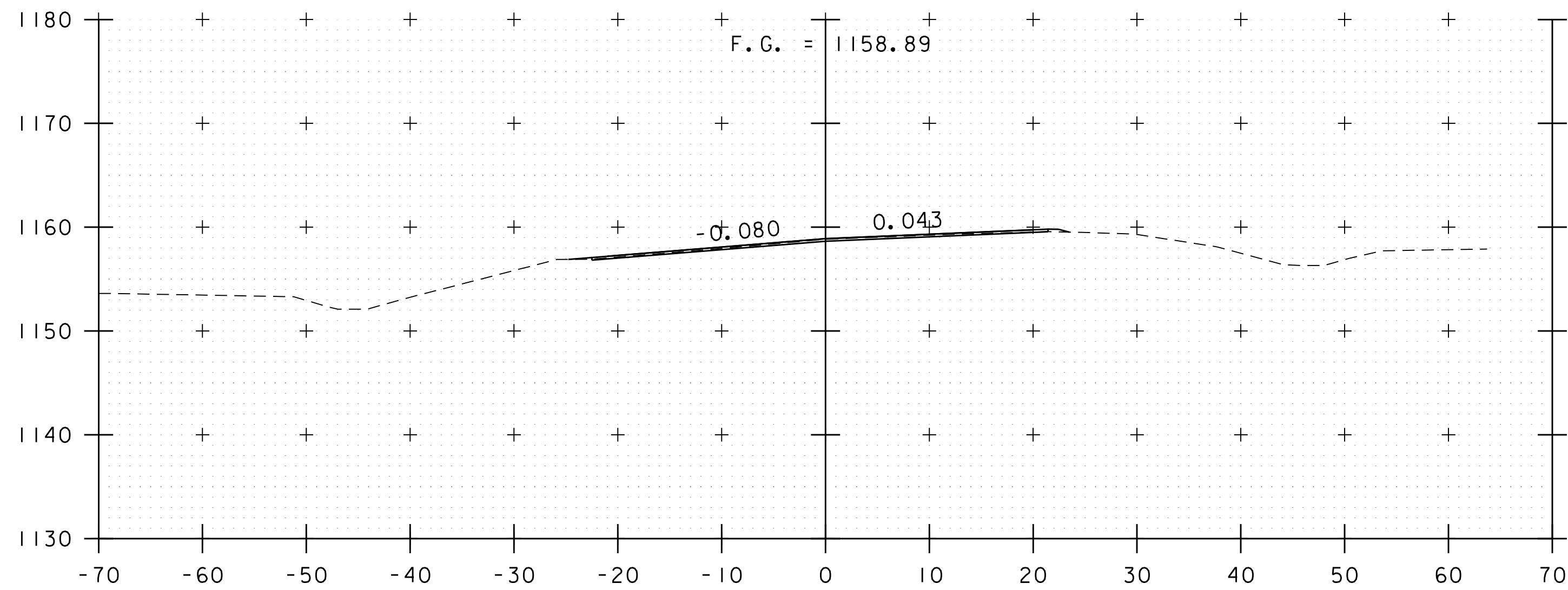


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

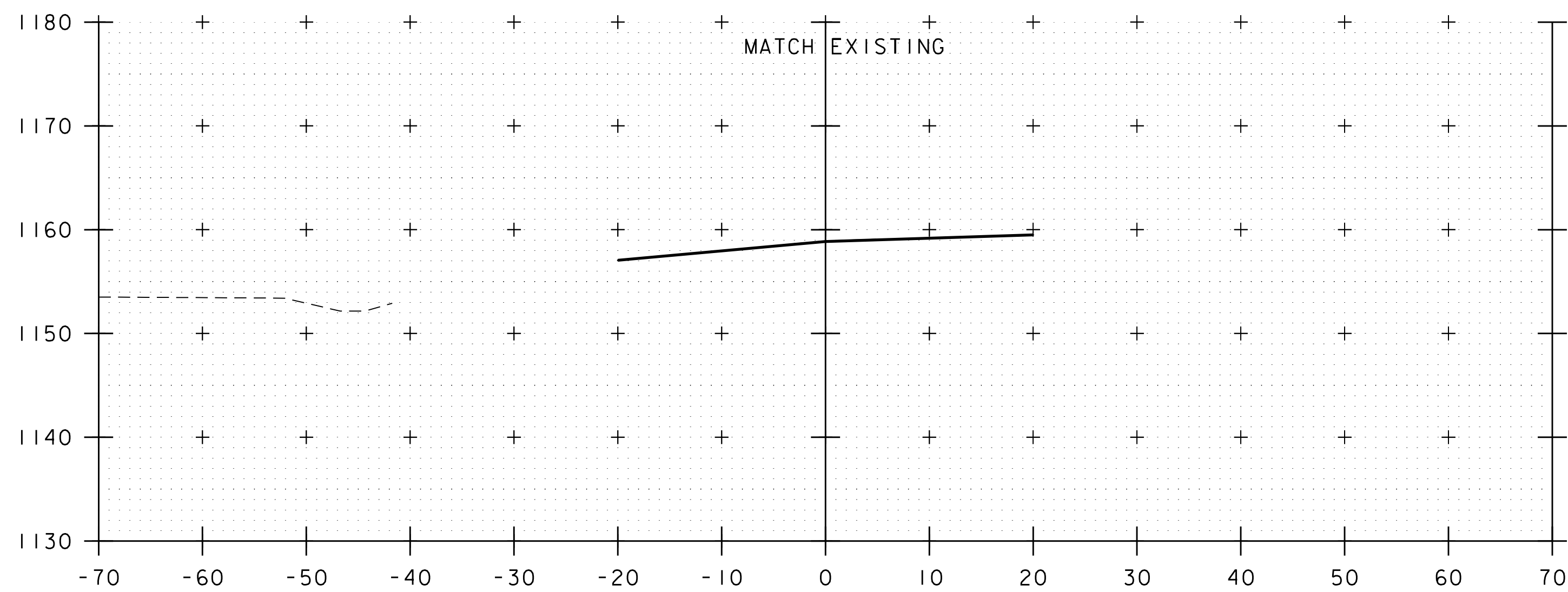
FILE NAME: z13b260brail.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: K.C. BARRY  
BOX BEAM GUARD RAIL DETAILS

PLOT DATE: 2/12/2016  
DRAWN BY: K.C. BARRY  
CHECKED BY: S.E. BURBANK  
SHEET 29 OF 50





395+75

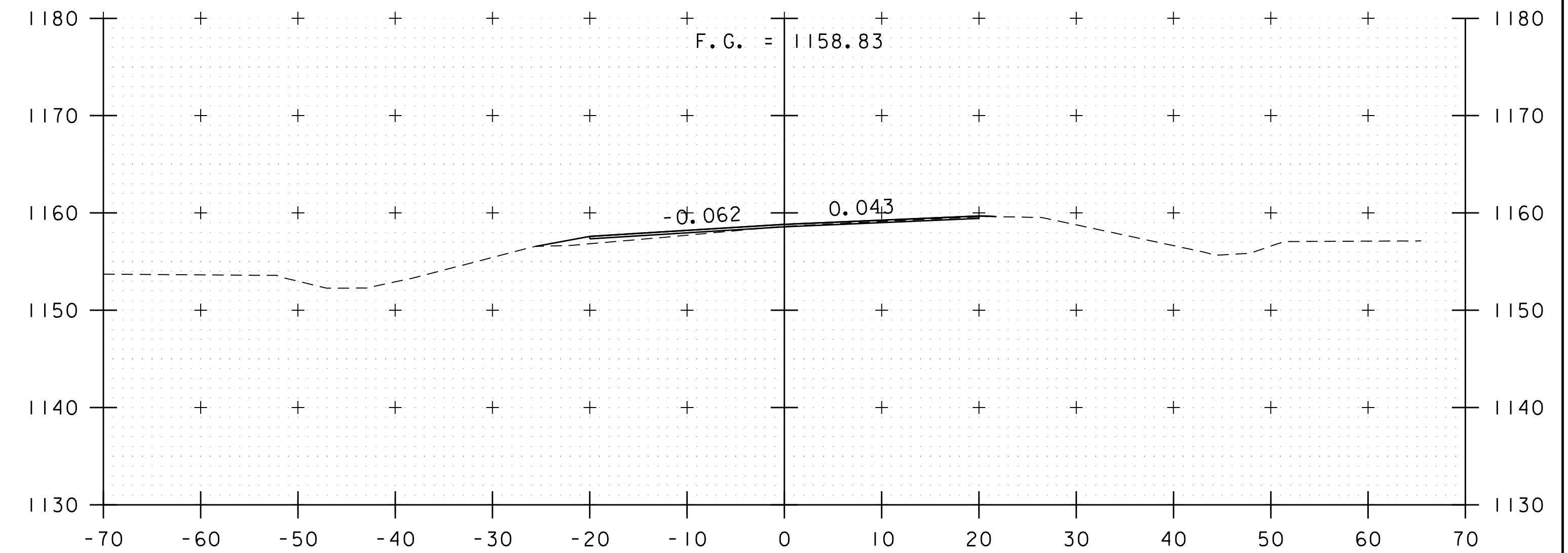


395+50

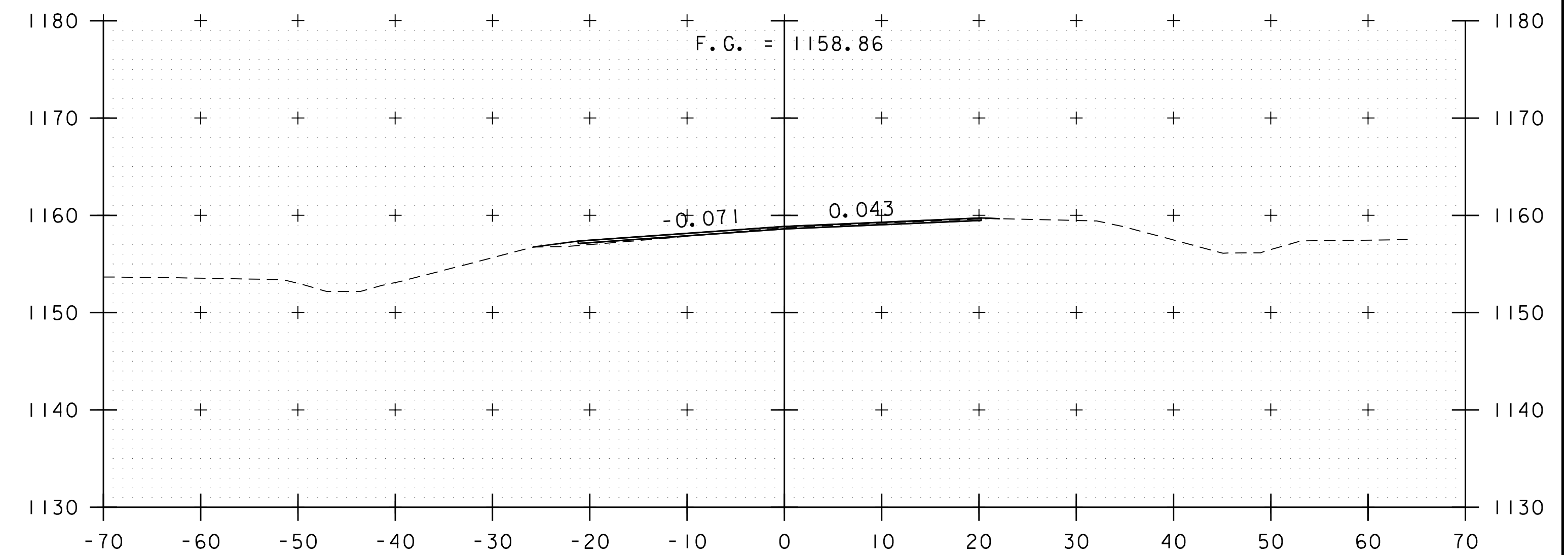
BEGIN APPROACH  
STA. 395+50.00

### US ROUTE 4 CROSS SECTIONS

STA. 395+50 - 396+25  
SCALE 1" = 10'-0"



396+25

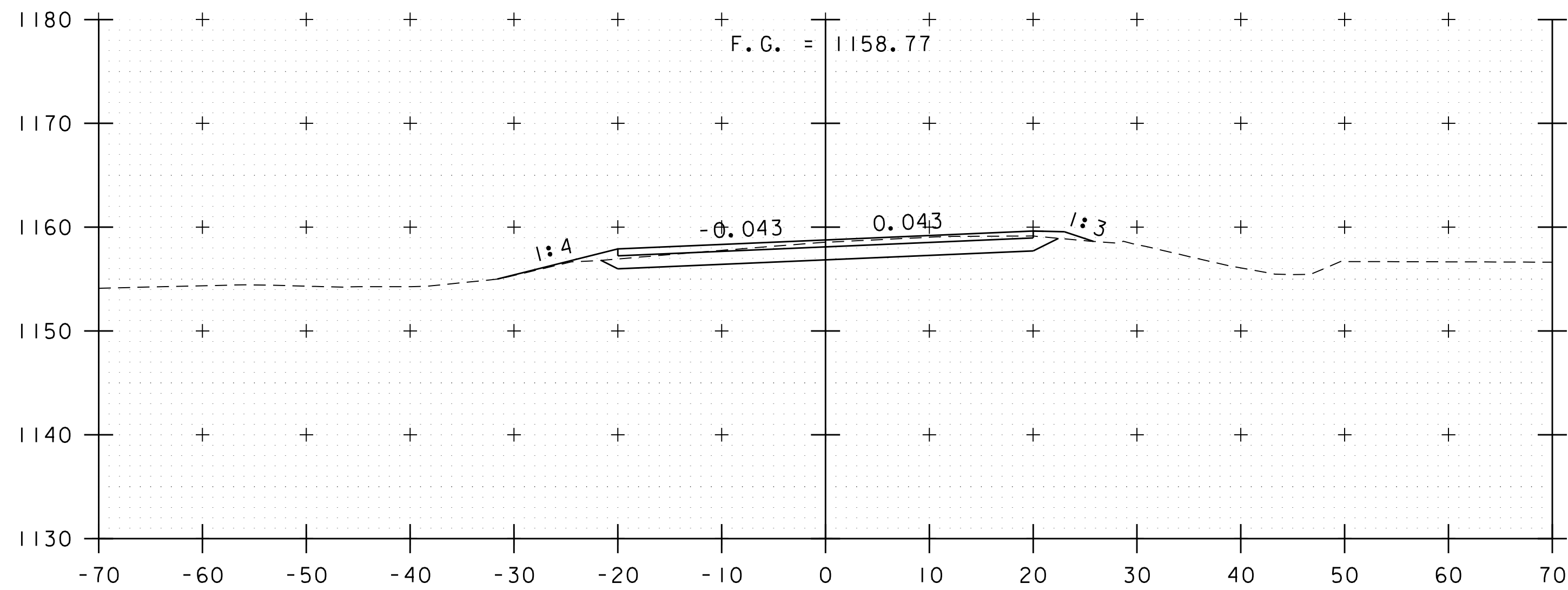


396+00

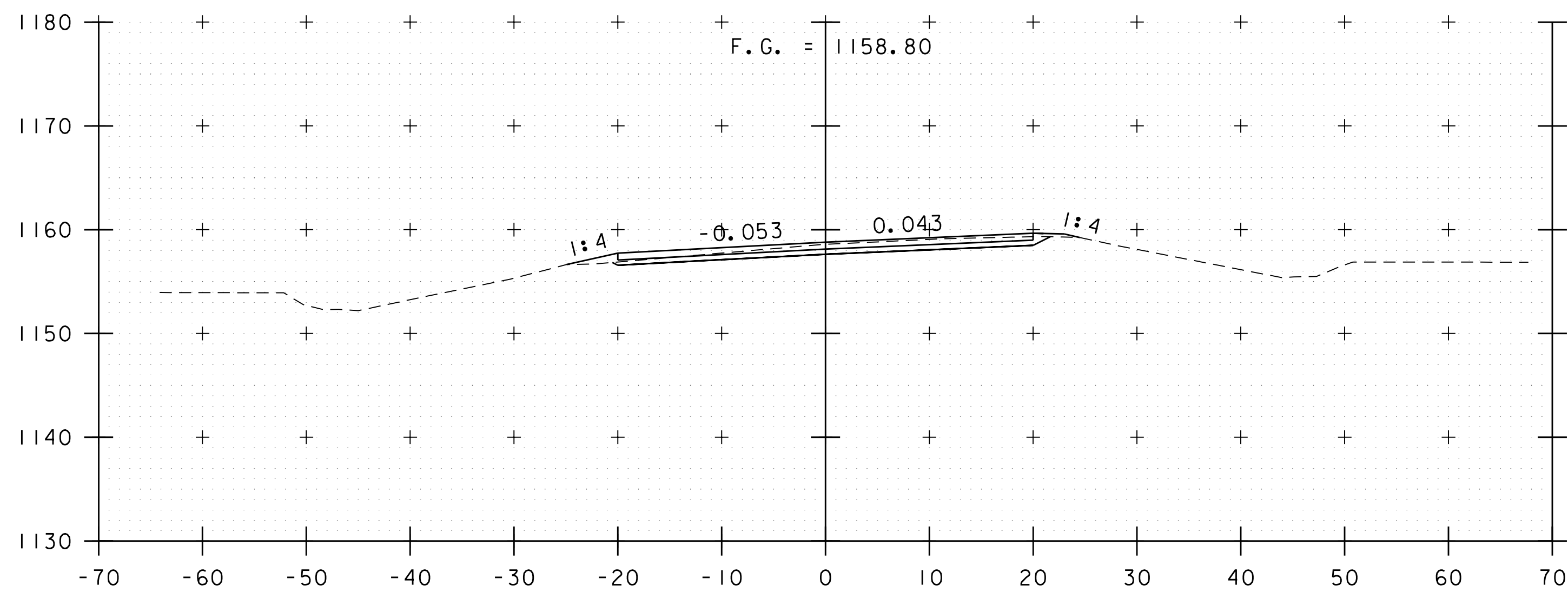


PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: R.H. BARNES	CHECKED BY: S.E. BURBANK
US ROUTE 4 CROSS SECTIONS (10 OF 7)	SHEET 30 OF 50

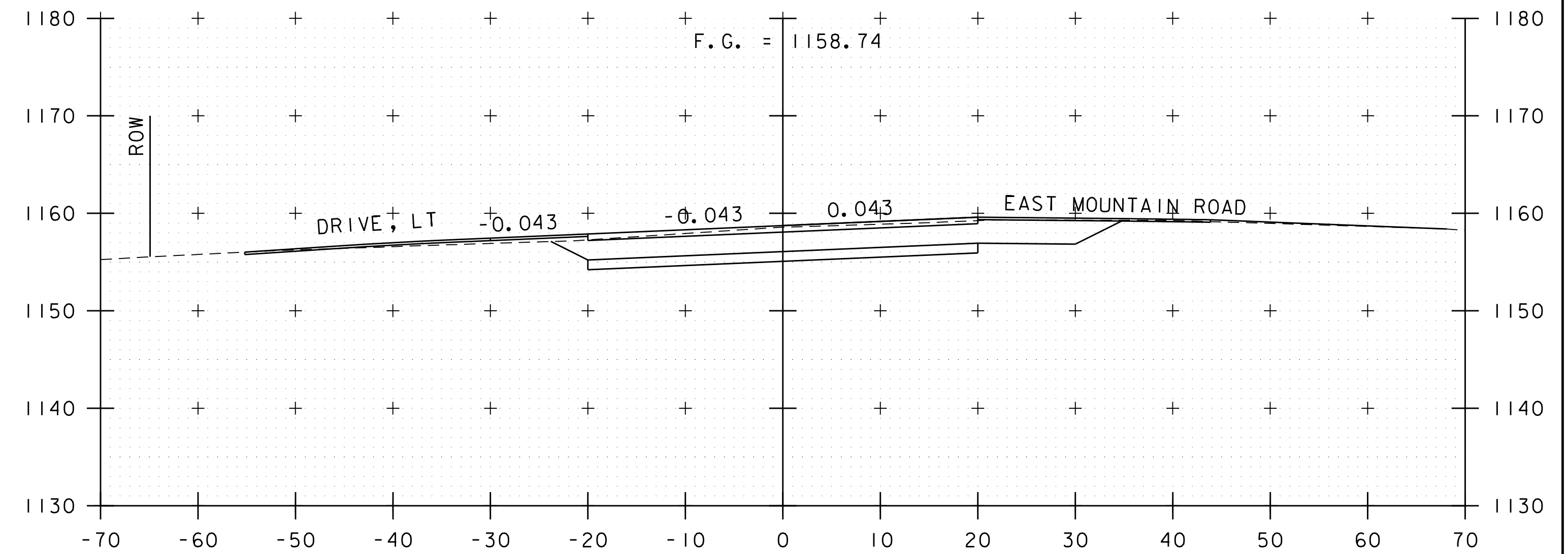




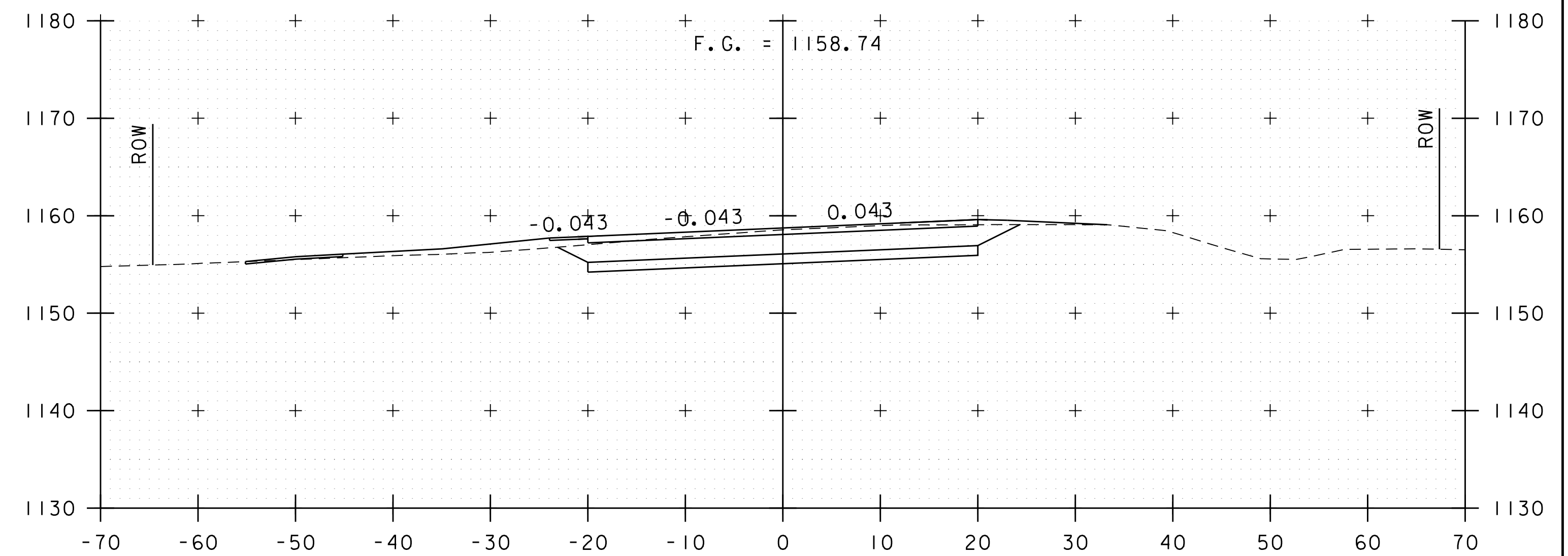
396+75



396+50



397+25



397+00

BEGIN PROJECT  
STA. 397+00.00

US ROUTE 4 CROSS SECTIONS

STA. 396+50 - 397+25  
SCALE 1" = 10'-0"

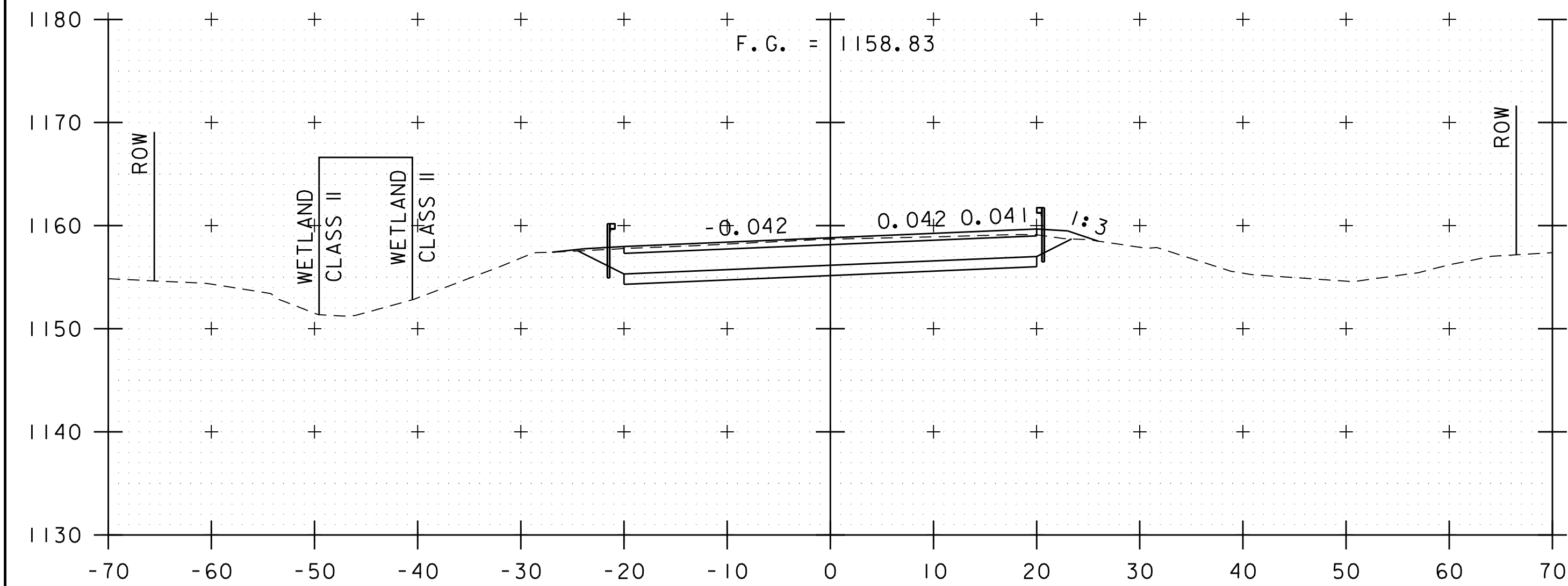


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

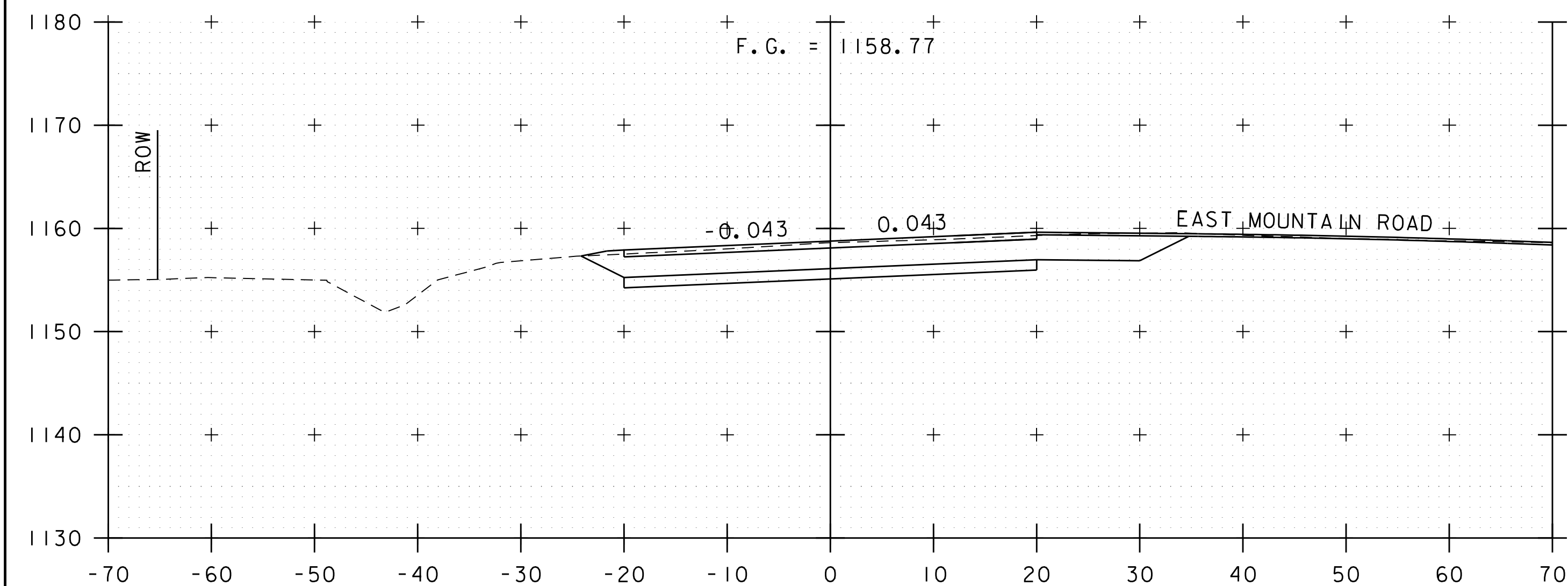
FILE NAME: z13b260xs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
US ROUTE 4 CROSS SECTIONS (2 OF 7)

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 31 OF 50

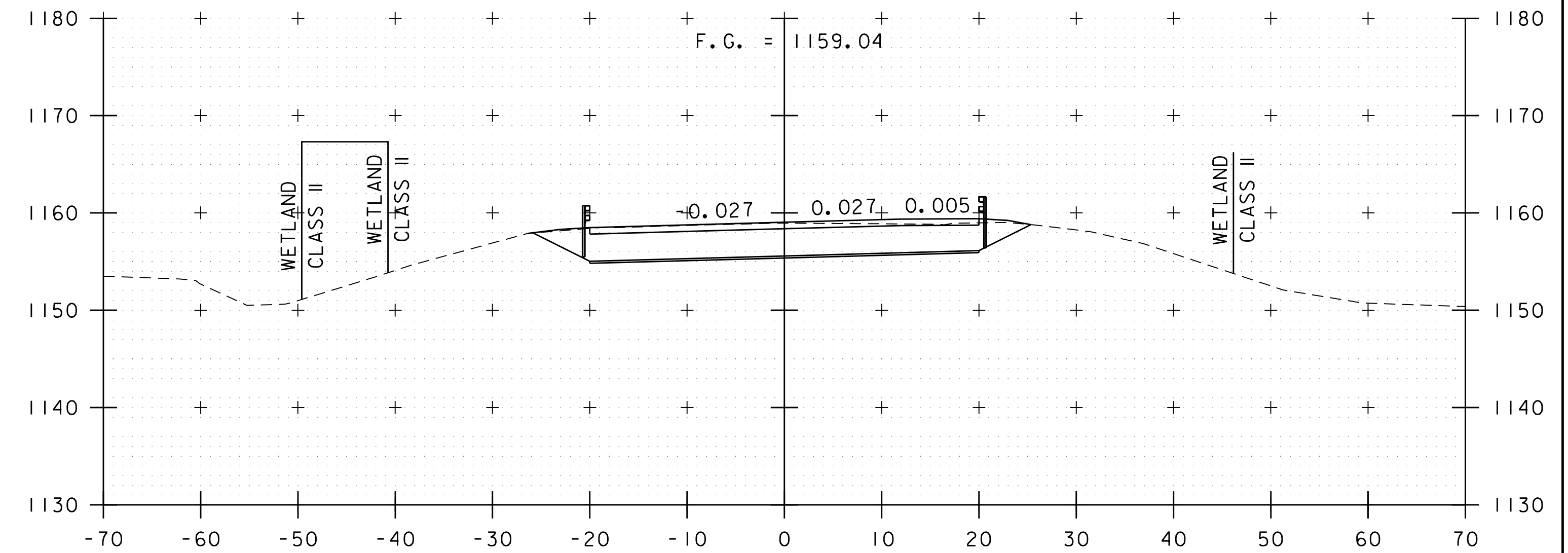




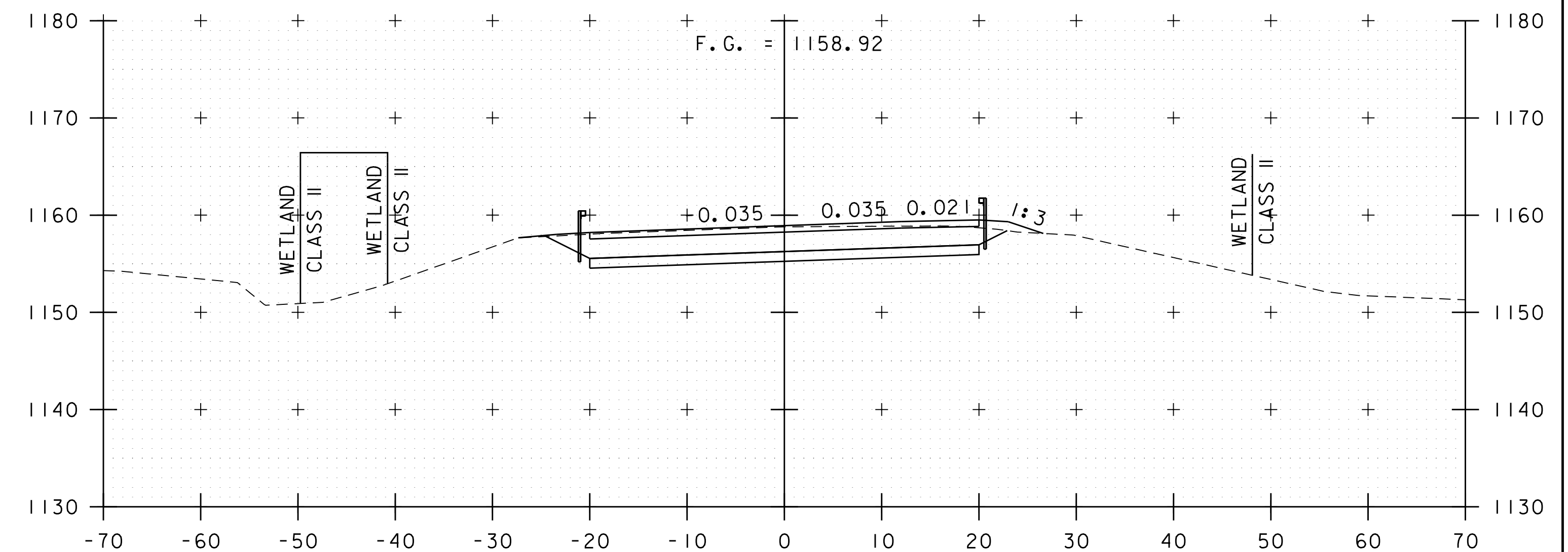
397+75



397+50



398+25



398+00

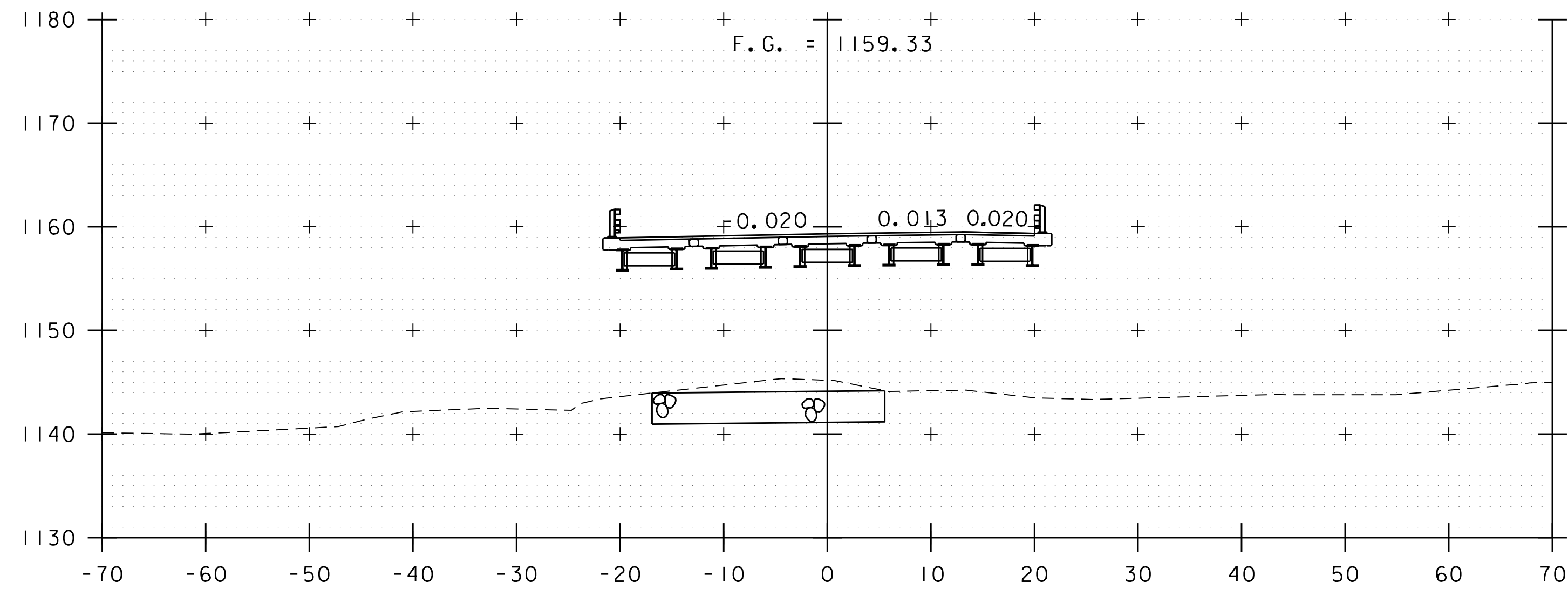
# US ROUTE 4 CROSS SECTIONS

STA. 397+50 - 398+25  
SCALE 1" = 10'-0"

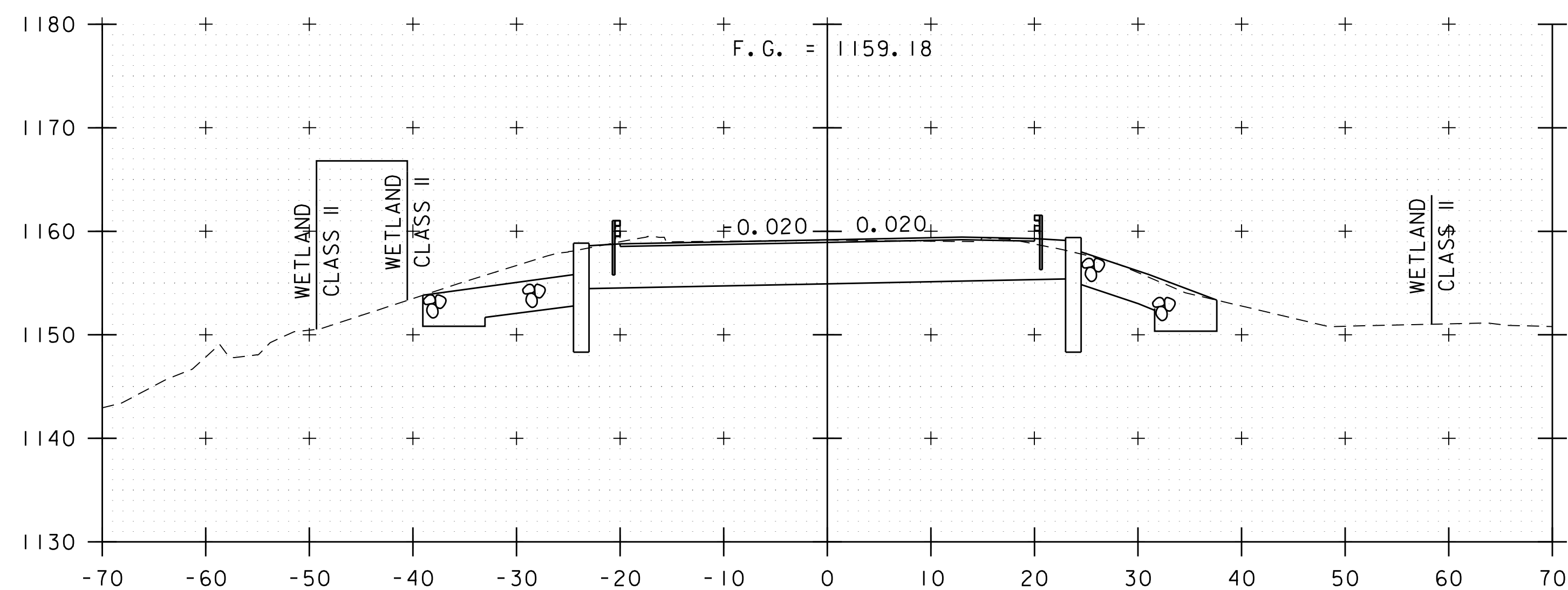


PROJECT NAME: KILILNGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: R.H. BARNES	CHECKED BY: S.E. BURBANK
US ROUTE 4 CROSS SECTIONS (3 OF 7)	SHEET 32 OF 50





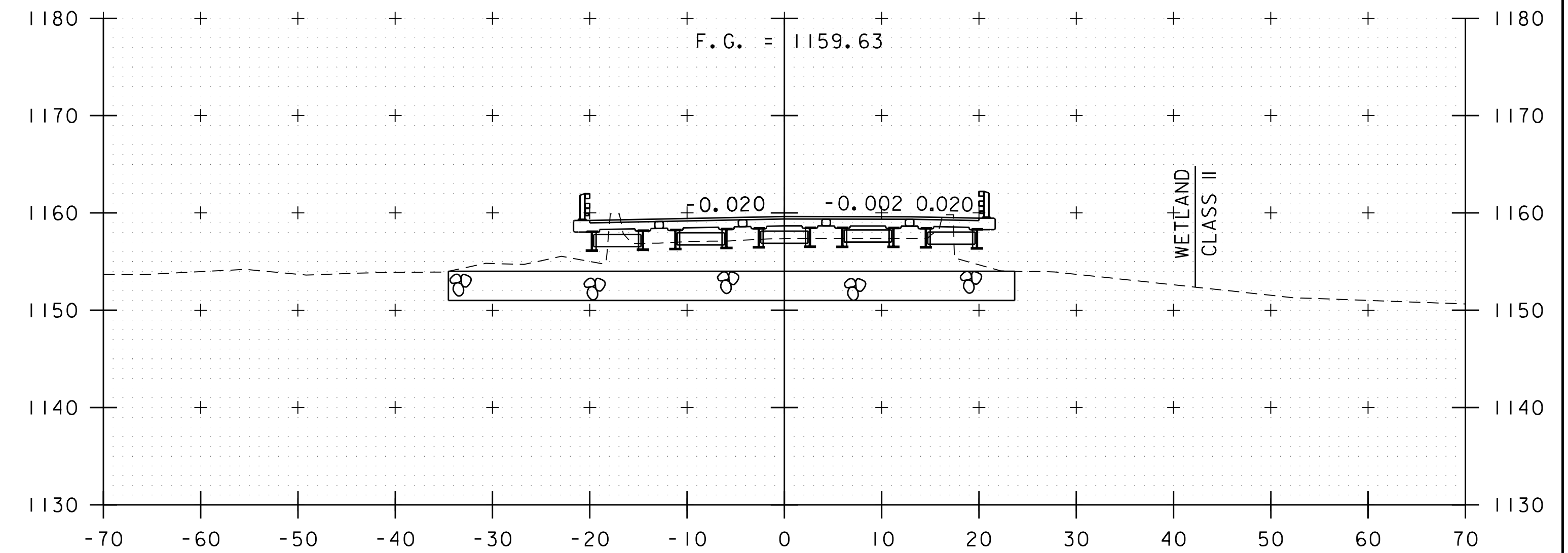
398+75



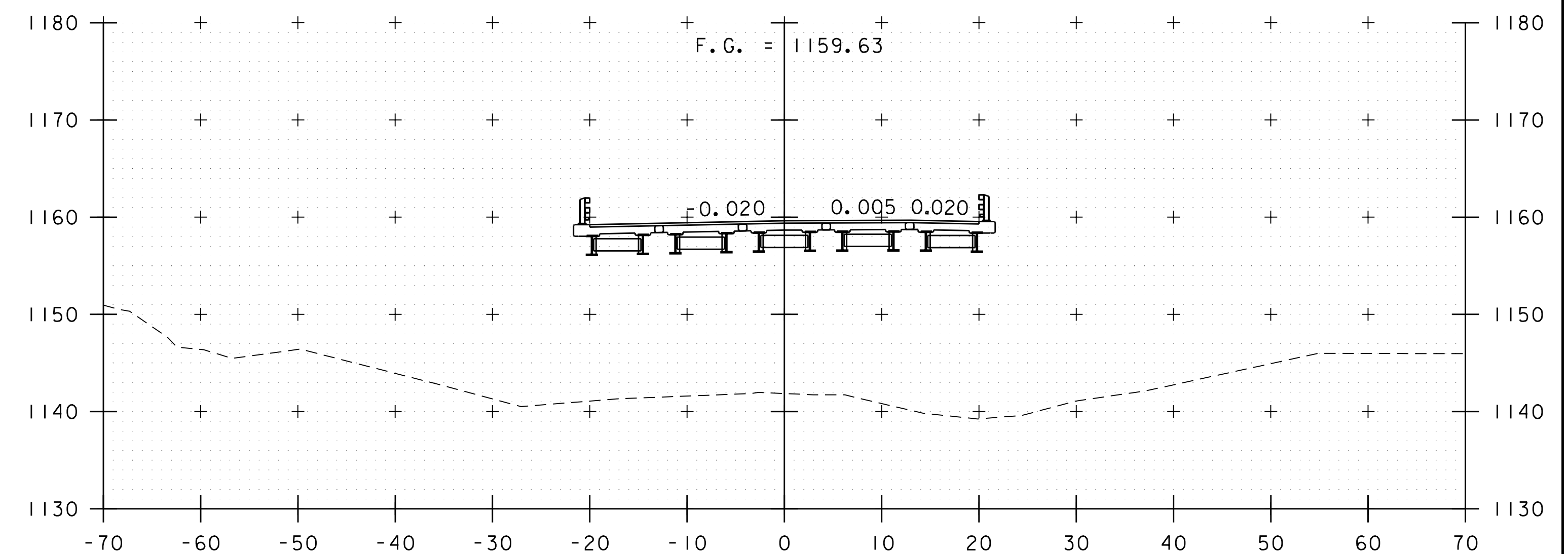
398+50  
BEGIN BRIDGE  
STA. 398+50.00

# US ROUTE 4 CROSS SECTIONS

STA. 398+50 - 399+25  
SCALE 1" = 10'-0"



399+25

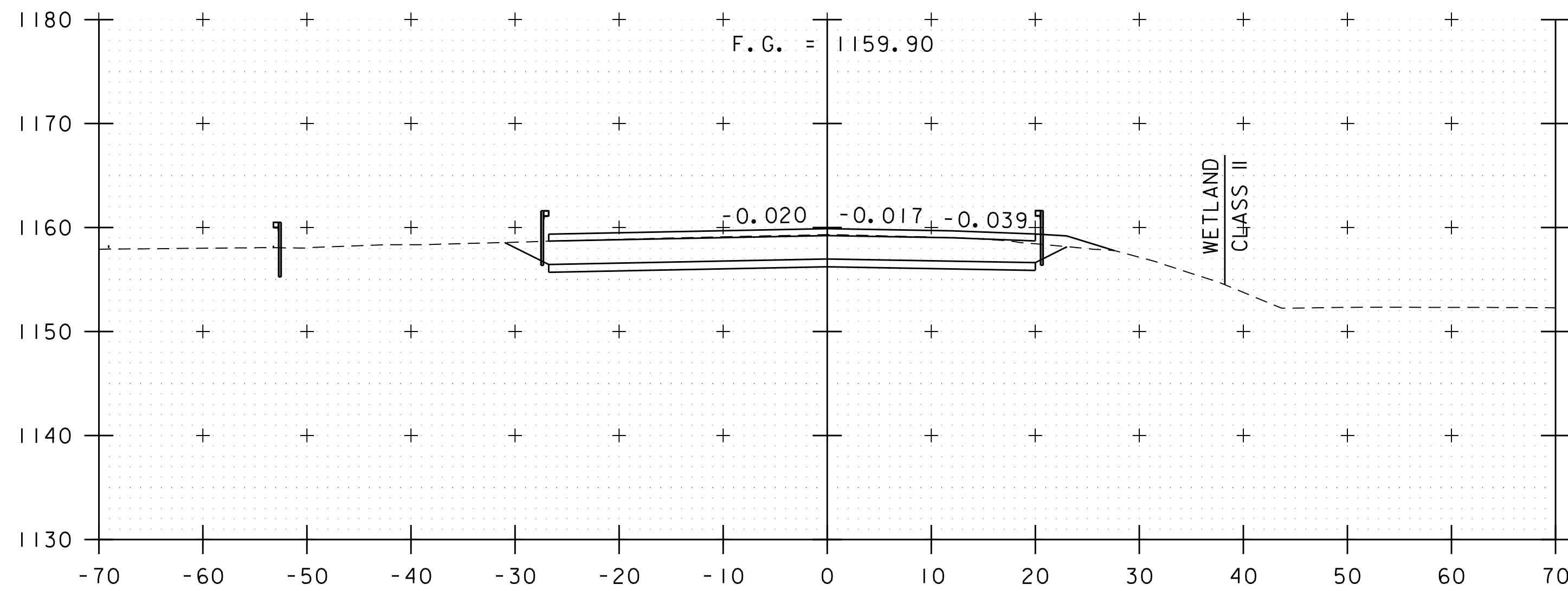


399+00

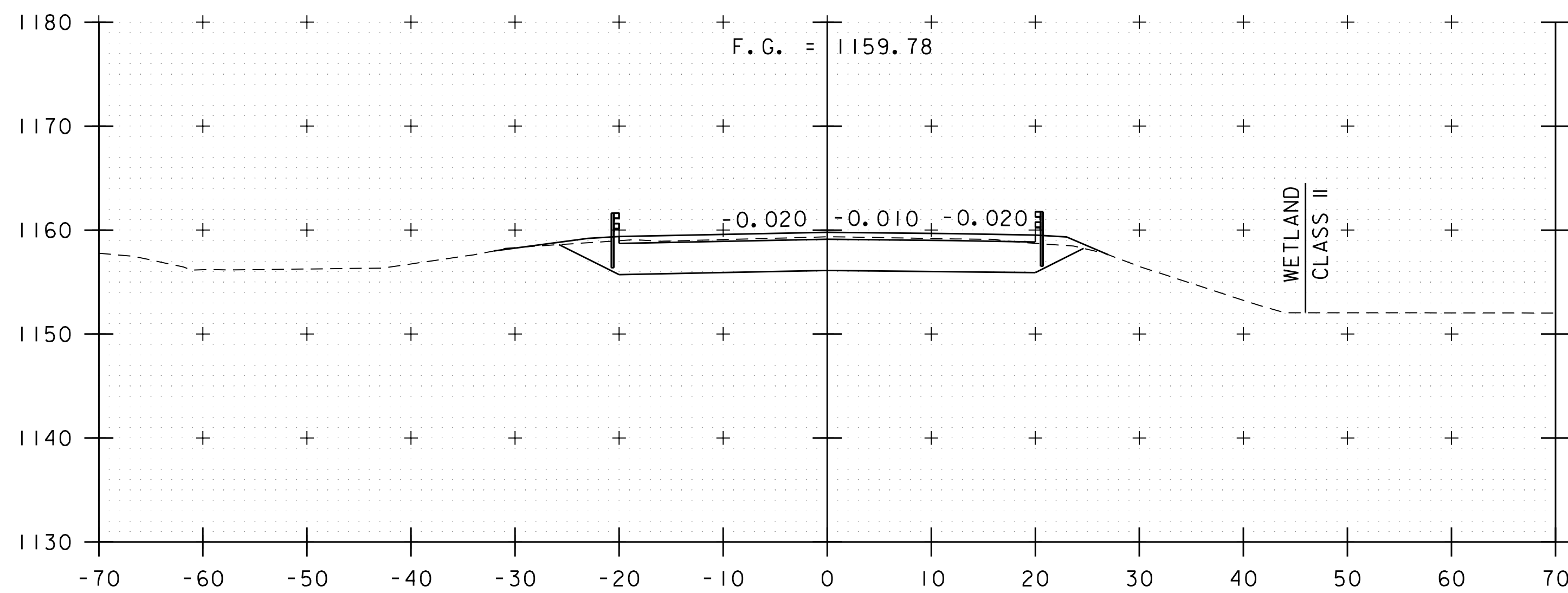
PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: R.H. BARNES	CHECKED BY: S.E. BURBANK
US ROUTE 4 CROSS SECTIONS (4 OF 7)	SHEET 33 OF 50



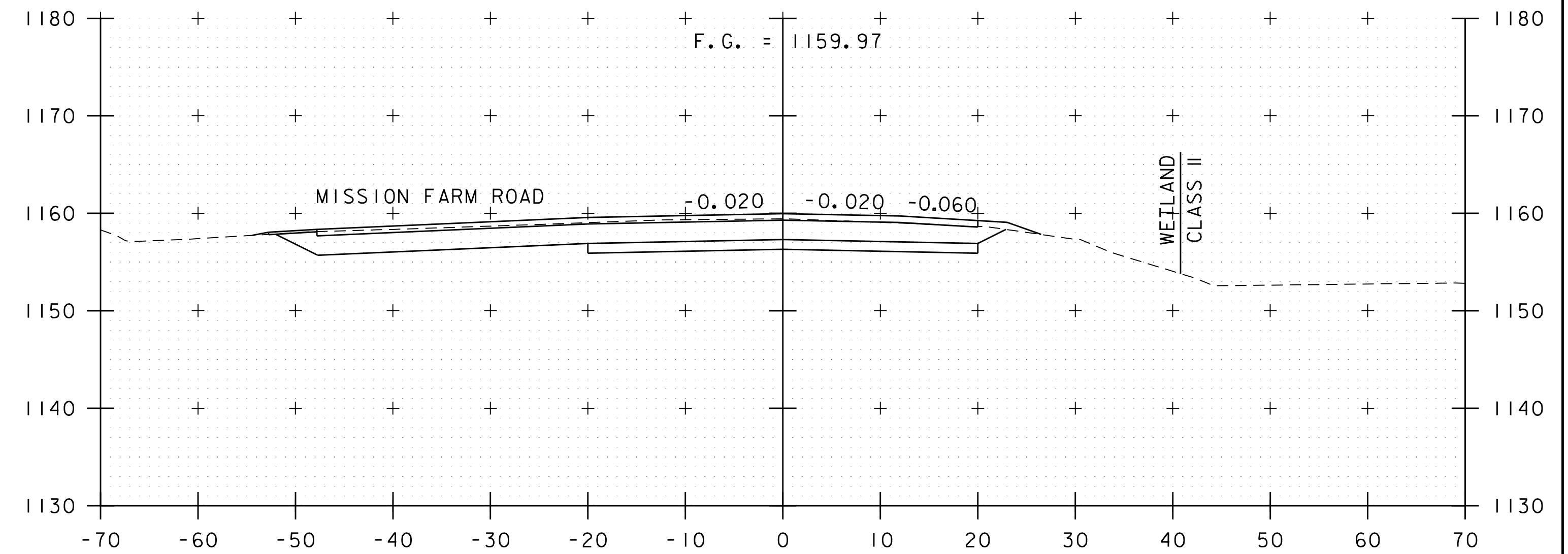




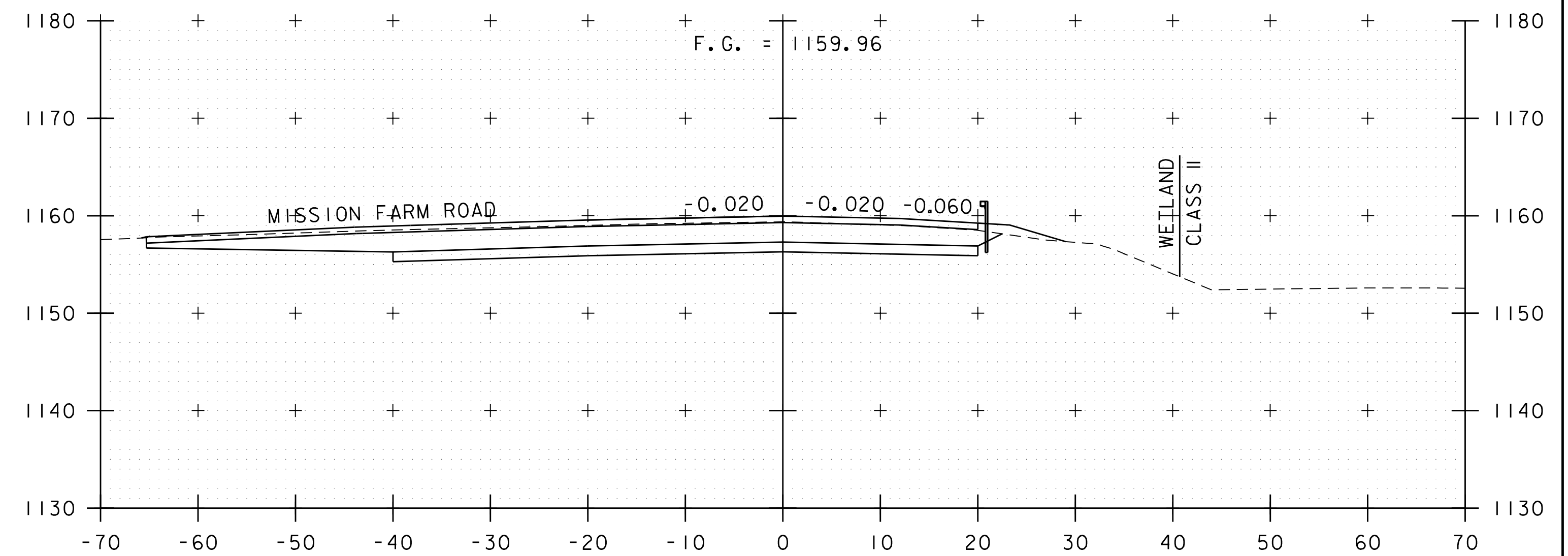
399+75



399+50  
END BRIDGE  
STA. 399+33.00



400+25



400+00

US ROUTE 4 CROSS SECTIONS

STA. 399+50 - 400+25  
SCALE 1" = 10'-0"

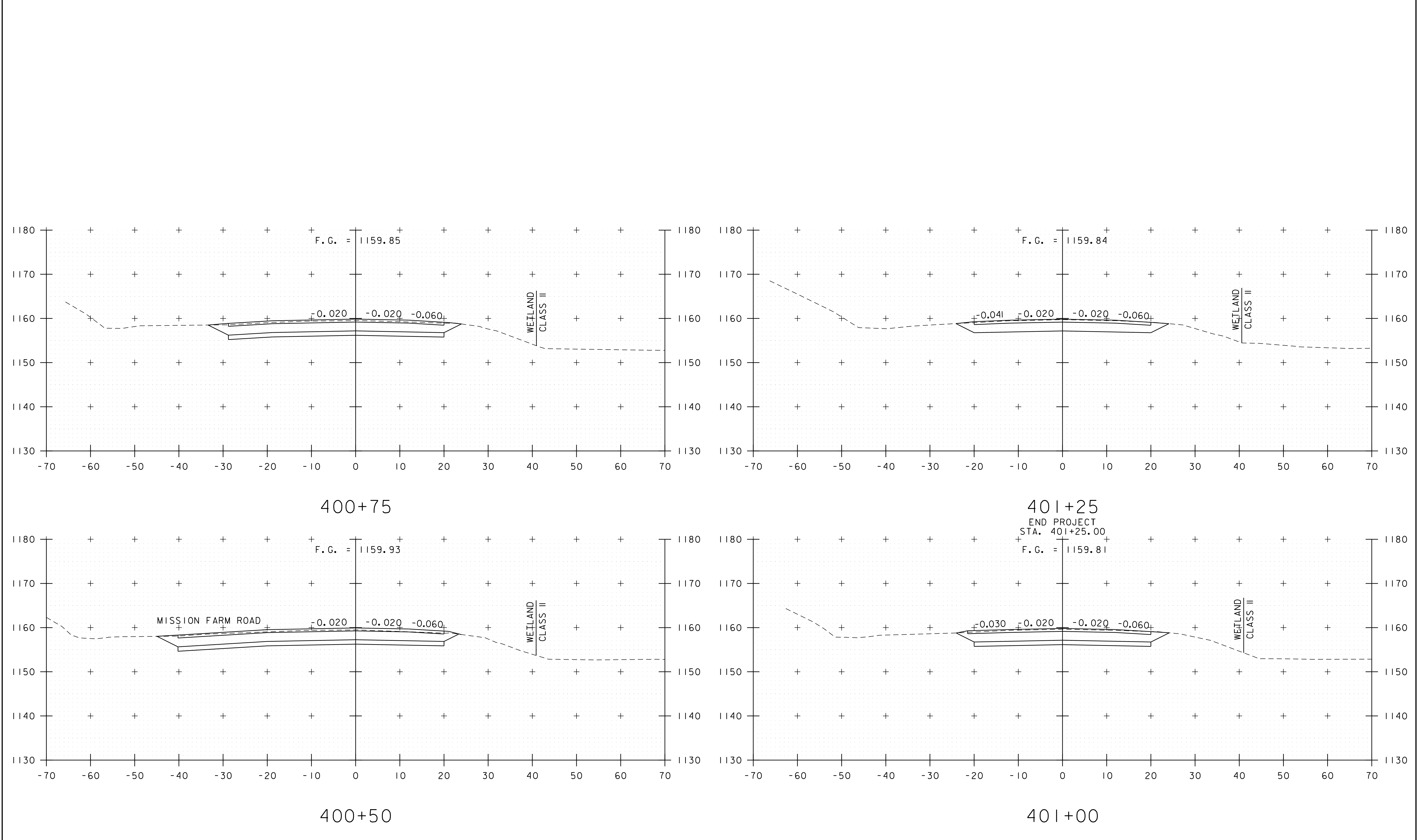


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260xs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
US ROUTE 4 CROSS SECTIONS (5 OF 7)

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 34 OF 50



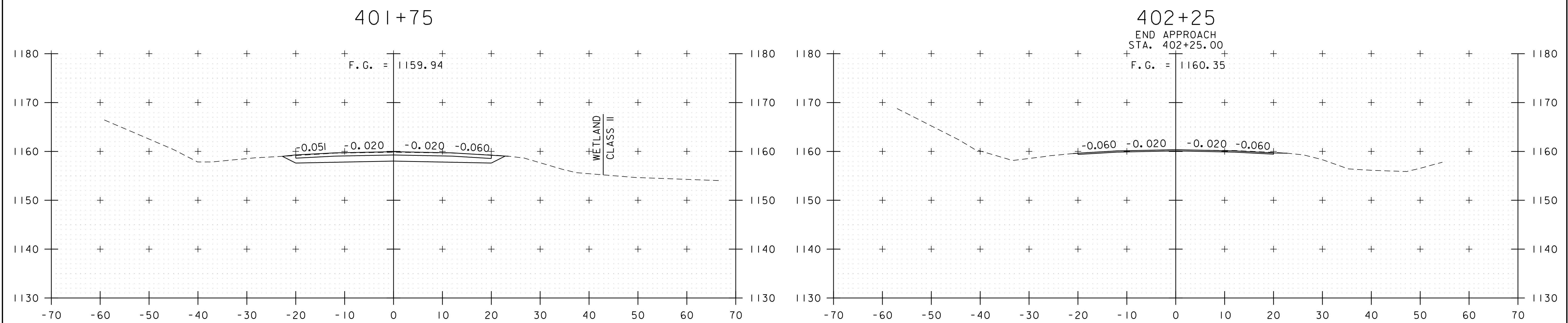
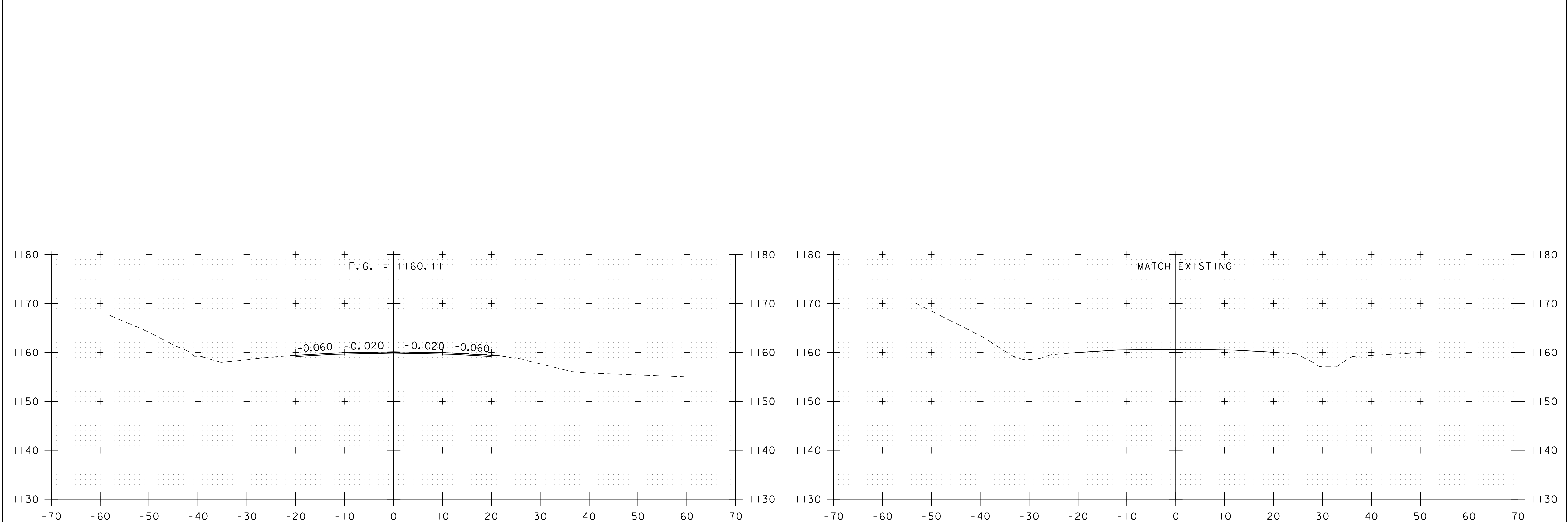


US ROUTE 4 CROSS SECTIONS  
STA. 400+50 - 401+25  
SCALE 1" = 10'-0"



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: R.H. BARNES	CHECKED BY: S.E. BURBANK
US ROUTE 4 CROSS SECTIONS (6 OF 7)	SHEET 35 OF 50





401+75 402+25

401+50 402+00

US ROUTE 4 CROSS SECTIONS

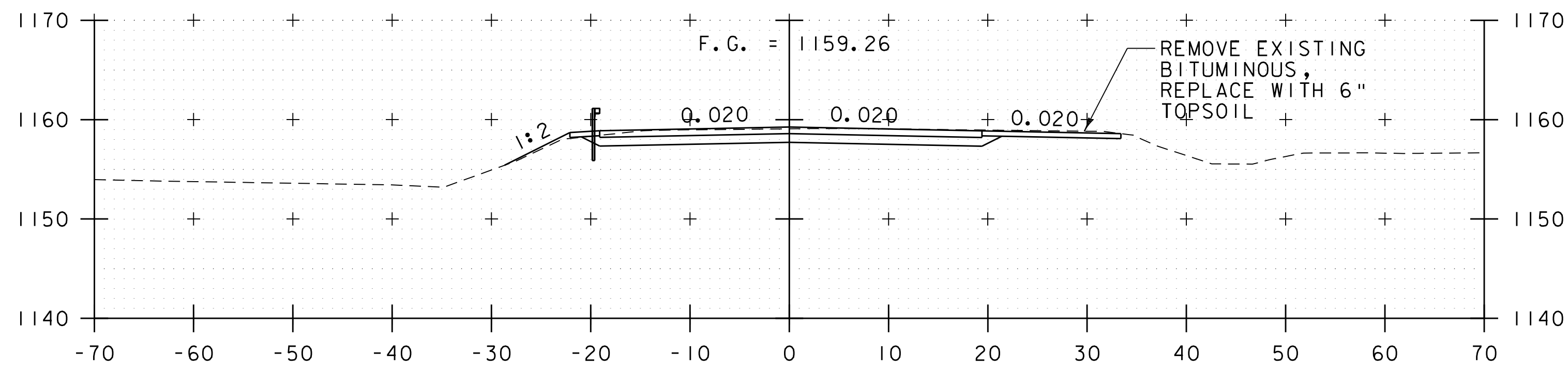
STA. 401+50 - 402+25

SCALE 1" = 10'-0"

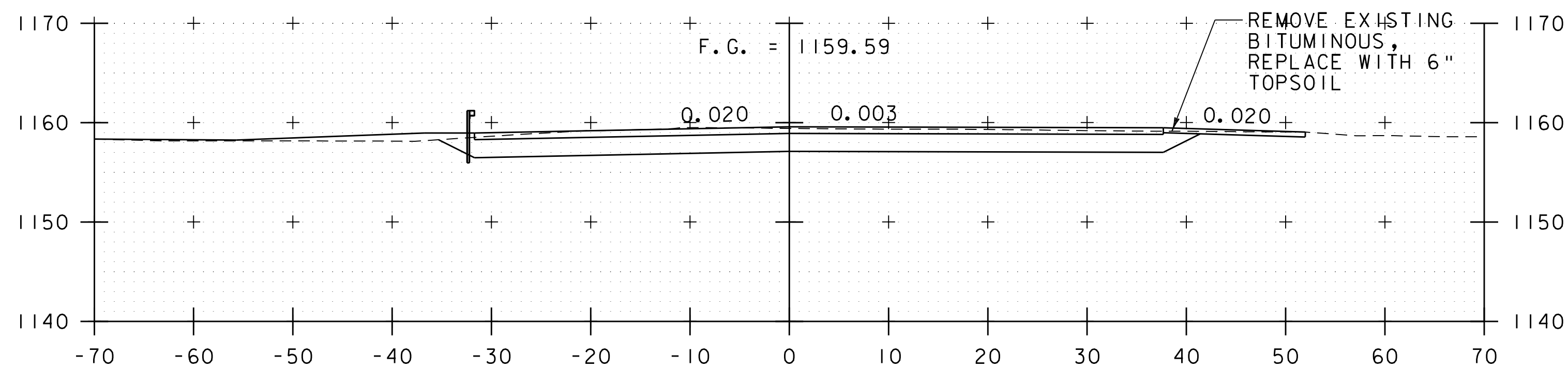


PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: R.H. BARNES	CHECKED BY: S.E. BURBANK
US ROUTE 4 CROSS SECTIONS (7 OF 7)	SHEET 36 OF 50

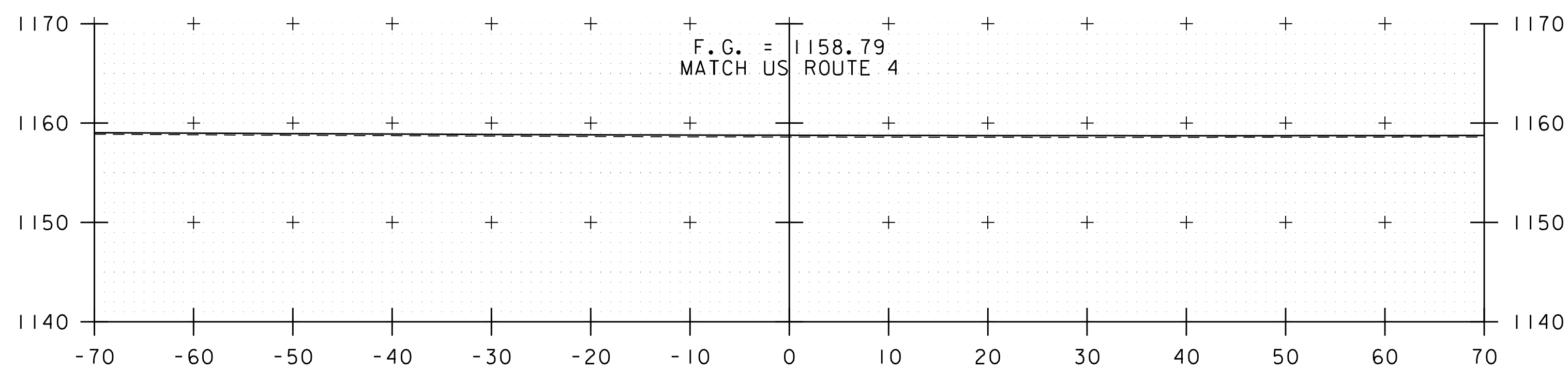




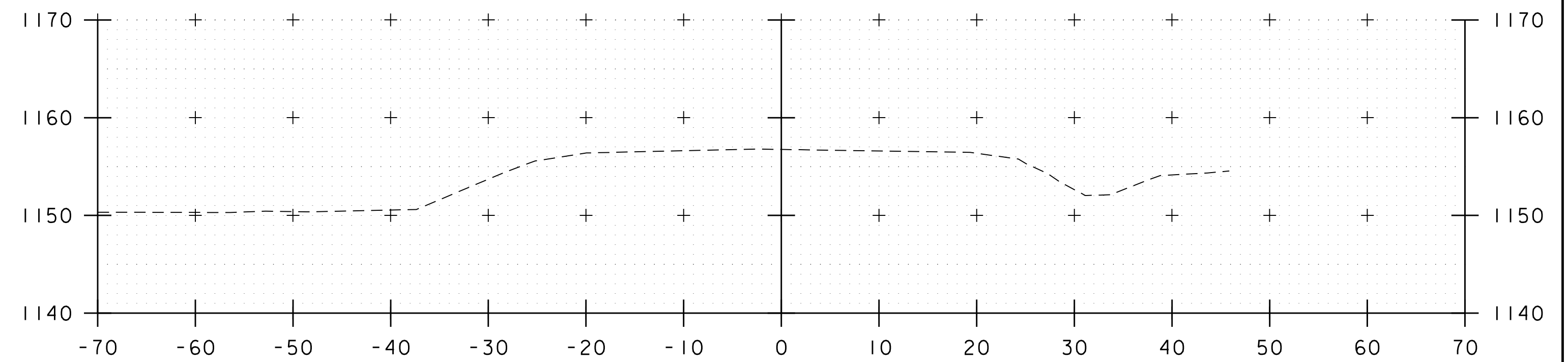
1+50



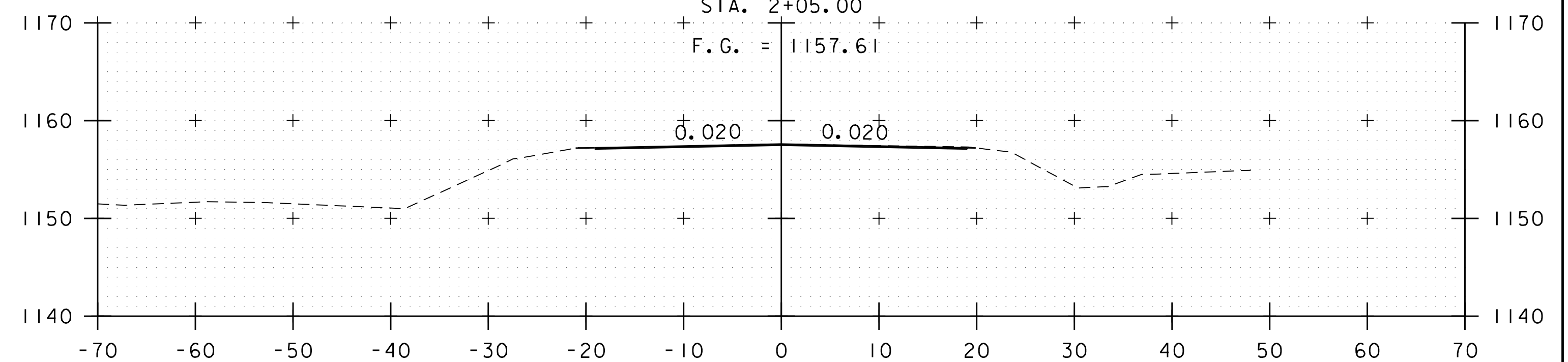
1+25



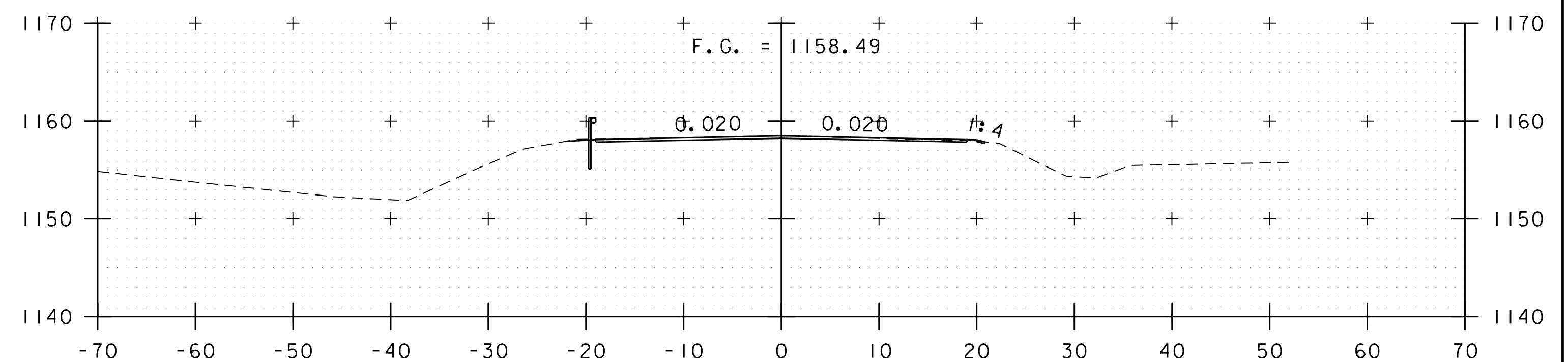
1+00



2+25



2+00



1+75

# EAST MOUNTAIN ROAD CROSS SECTIONS

STA. 1+00 - 2+25  
SCALE 1" = 10'-0"

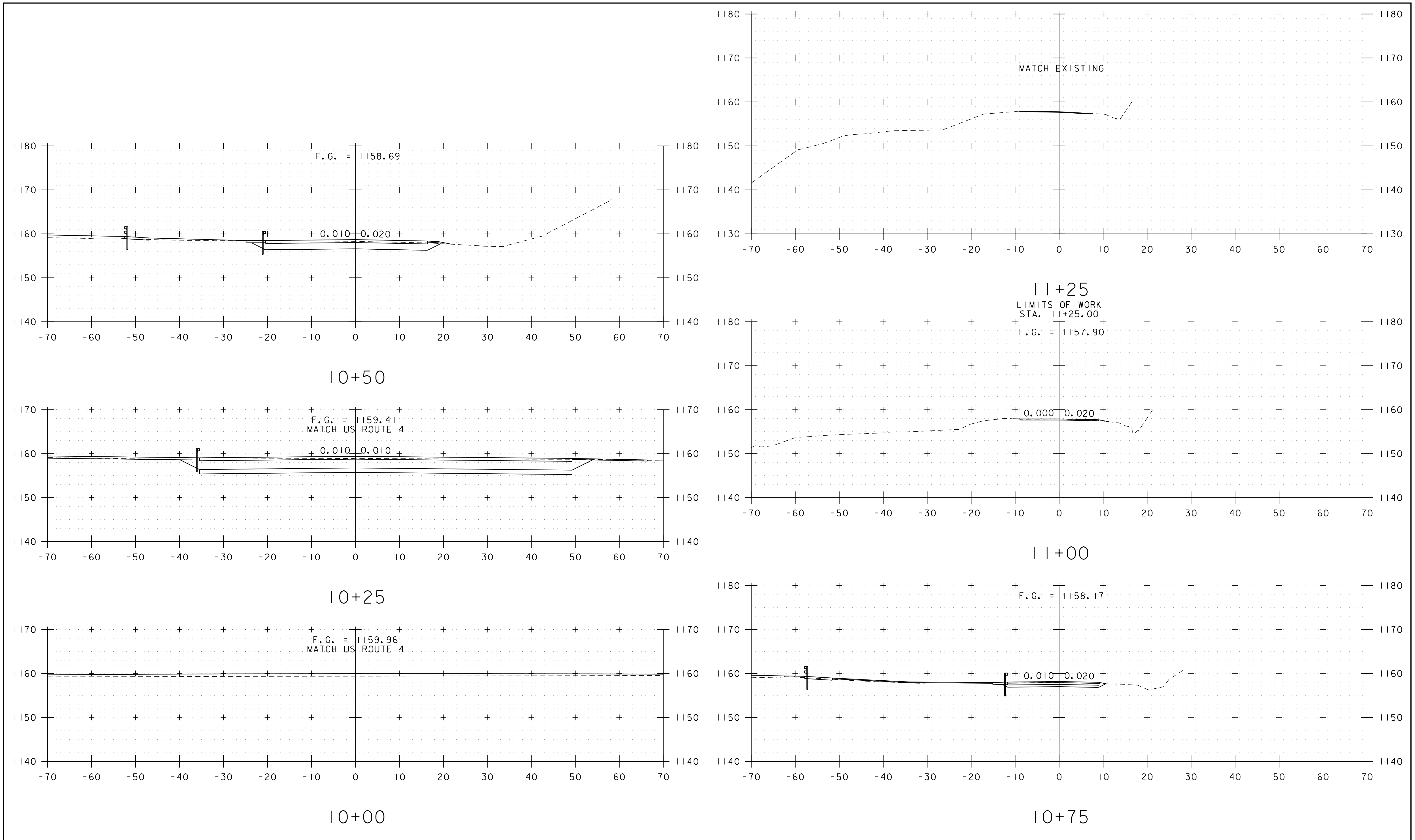


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260xs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: E.F. LAWES  
EAST MOUNTAIN ROAD CROSS SECTIONS

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 37 OF 50



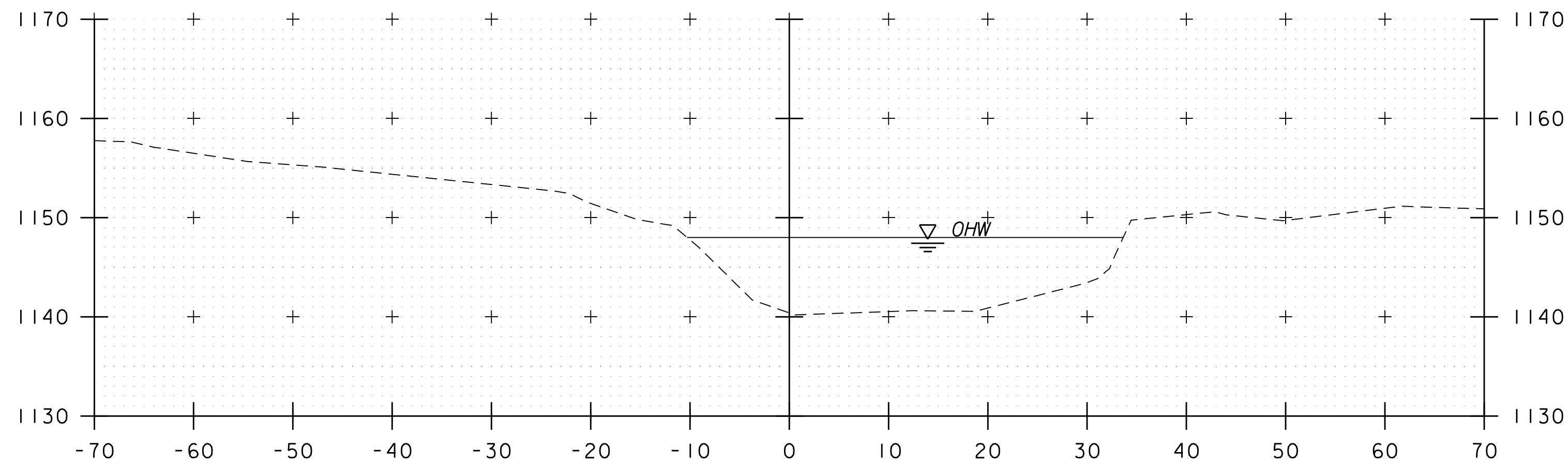


MISSION FARM ROAD CROSS SECTIONS  
STA. 10+00 - 11+25  
SCALE 1" = 10'-0"

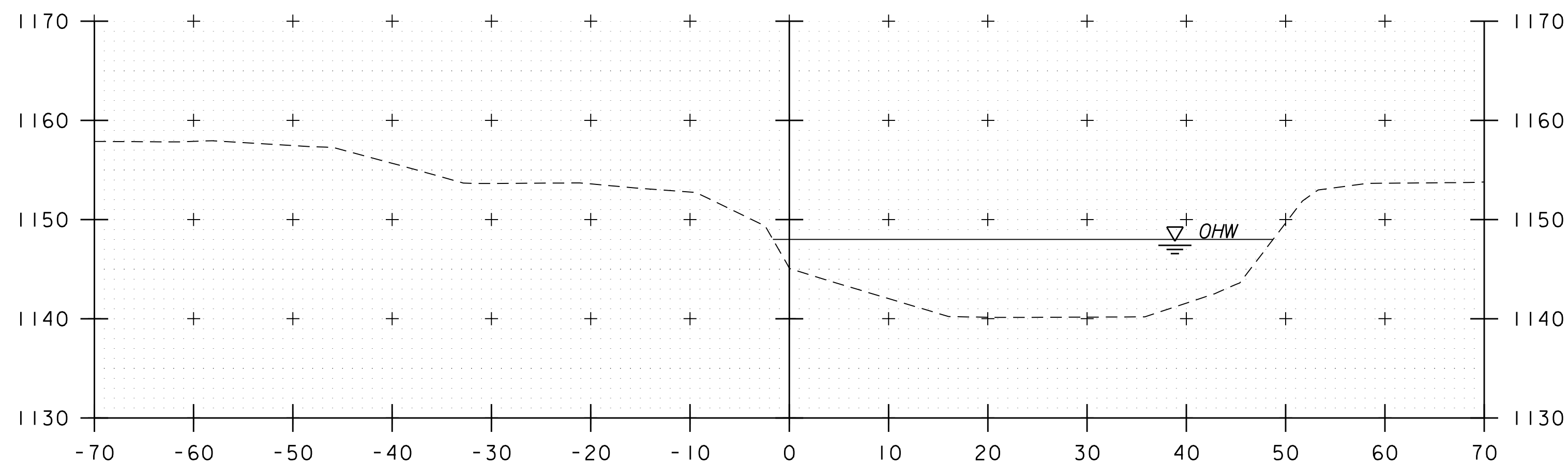


PROJECT NAME: KILILNGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
MISSION FARM ROAD CROSS SECTIONS	SHEET 38 OF 50

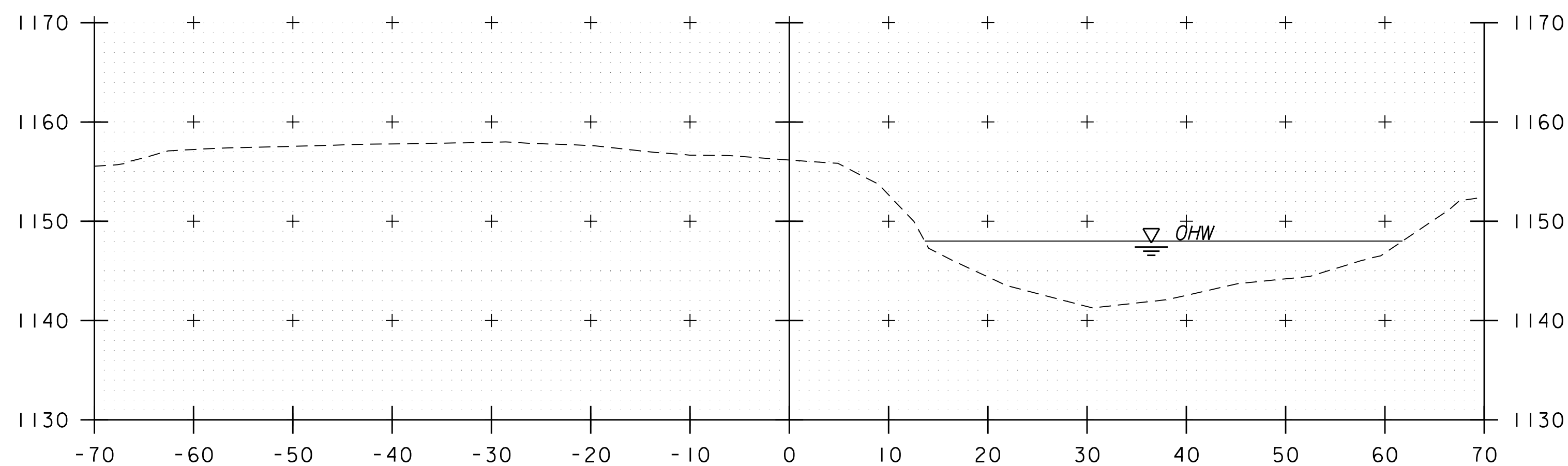




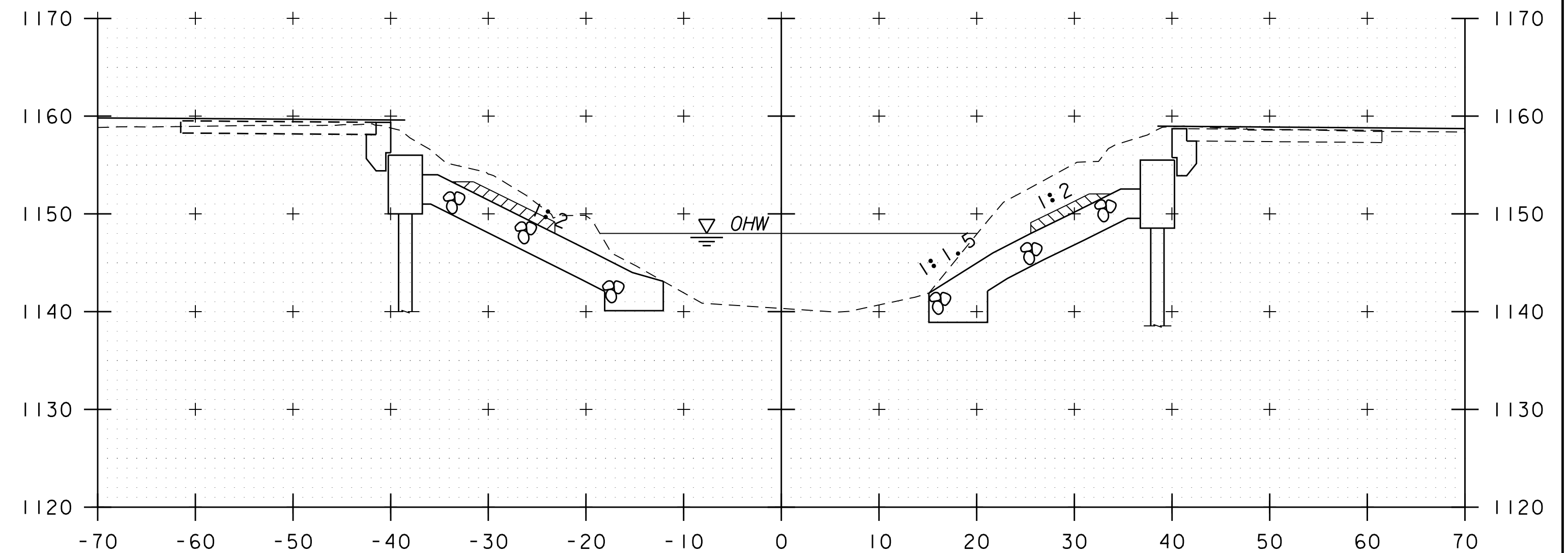
50+50



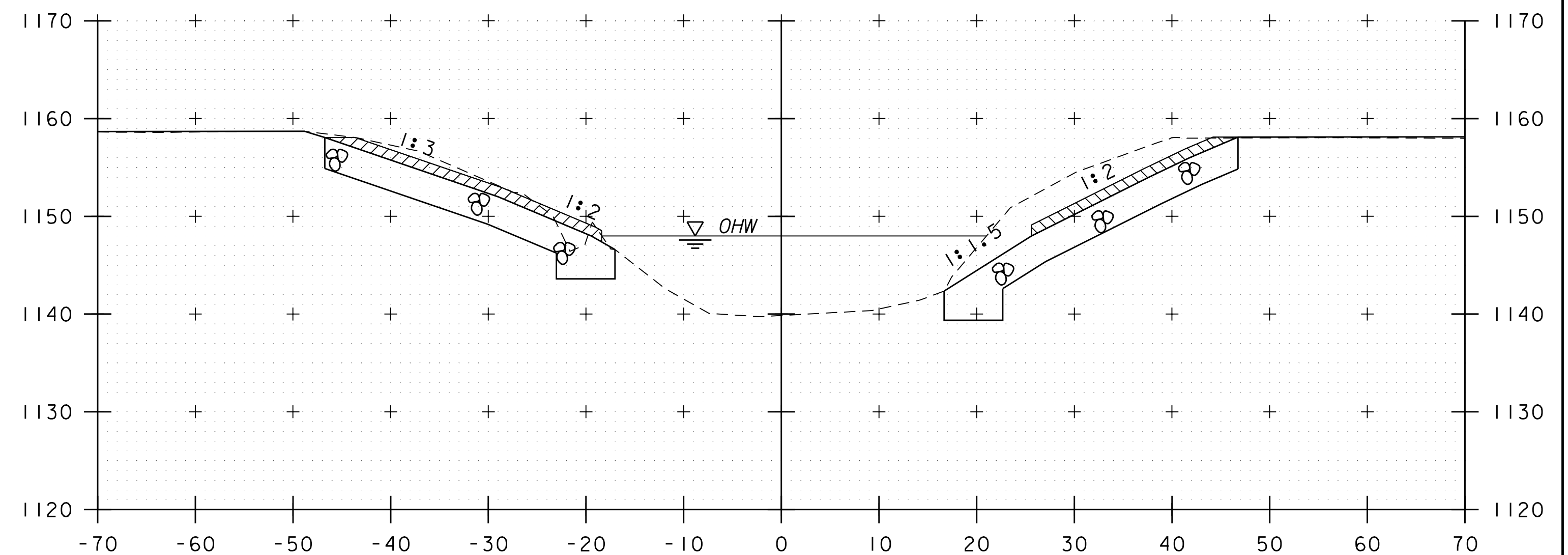
50+25



50+00



50+80



50+75

STA. 50+64, LT  
BEGIN UNCLASSIFIED CHANNEL EXCAVATION  
GEOTEXTILE UNDER STONE FILL  
STONE FILL, TYPE III, & GRUBBING MATERIAL

STA. 50+58, RT  
BEGIN UNCLASSIFIED CHANNEL EXCAVATION  
GEOTEXTILE UNDER STONE FILL  
STONE FILL, TYPE III, & GRUBBING MATERIAL

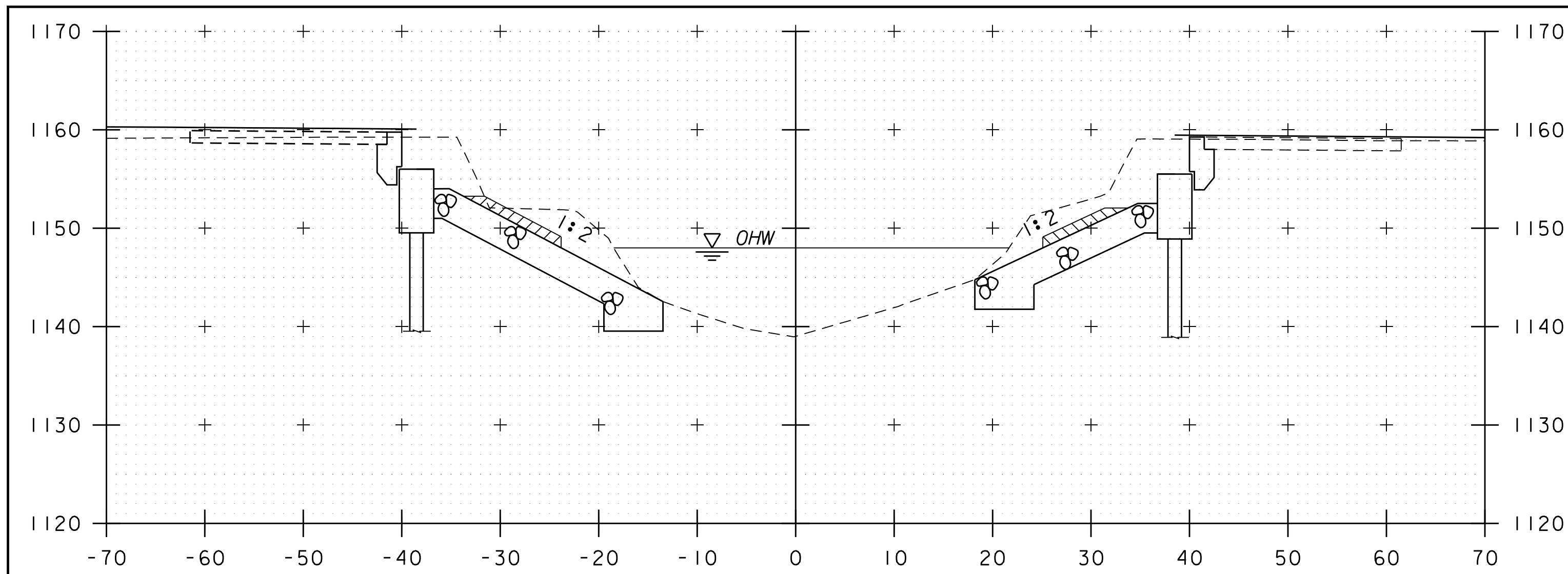
### CHANNEL CROSS SECTIONS

STA. 50+00 - 50+80  
SCALE 1" = 10'-0"

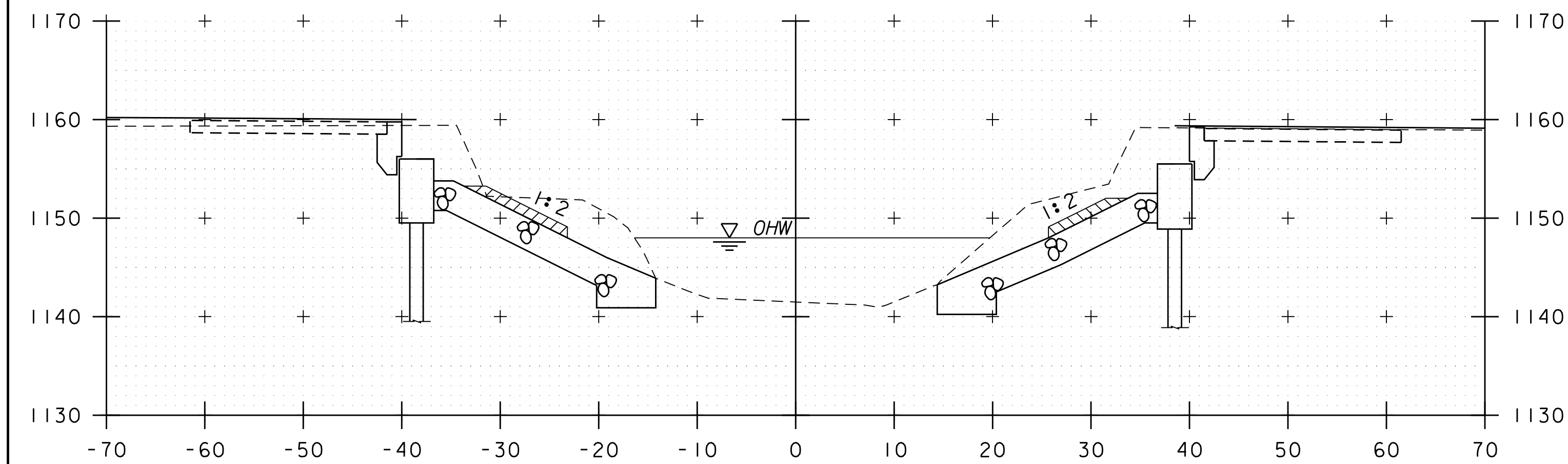


PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260xs.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: K.C. BARRY
DESIGNED BY: E.F. LAWES	CHECKED BY: E.F. LAWES
CHANNEL CROSS SECTIONS (10F 3)	SHEET 39 OF 50

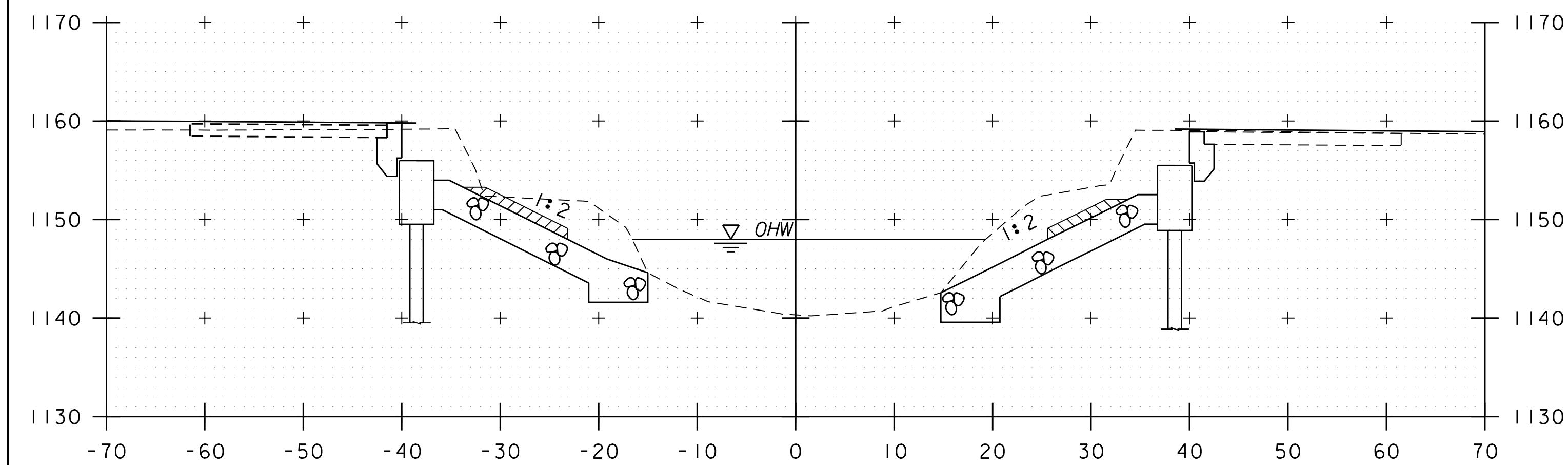




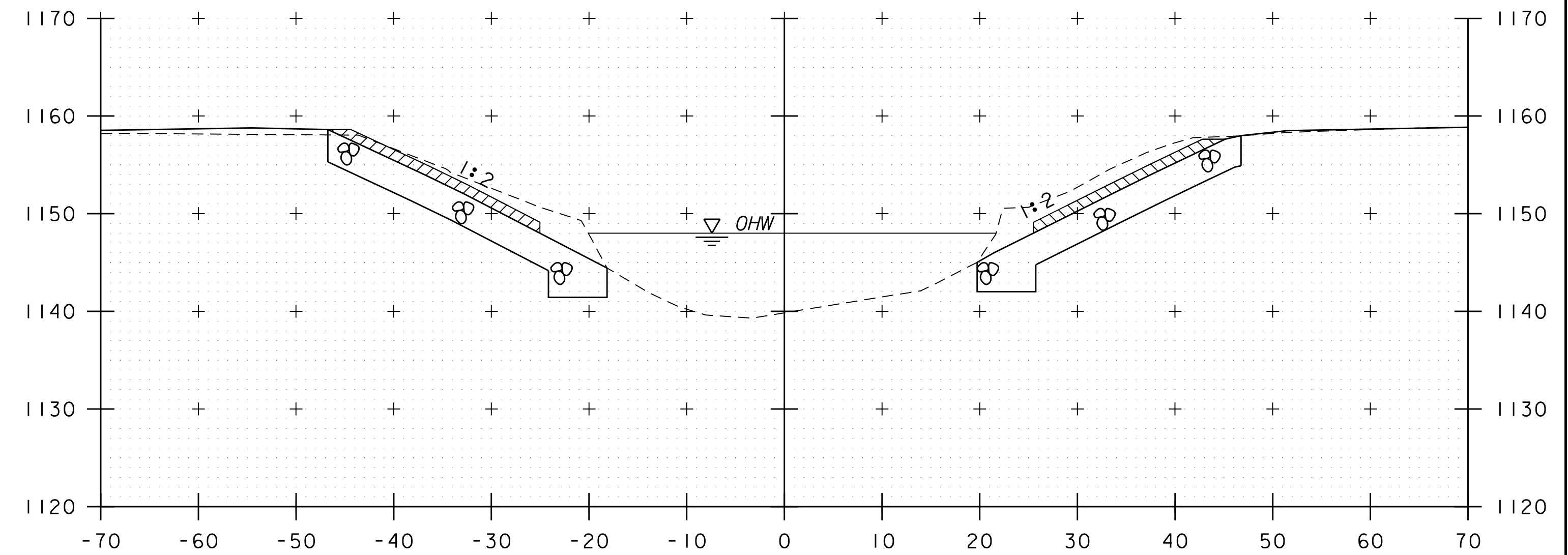
51+10



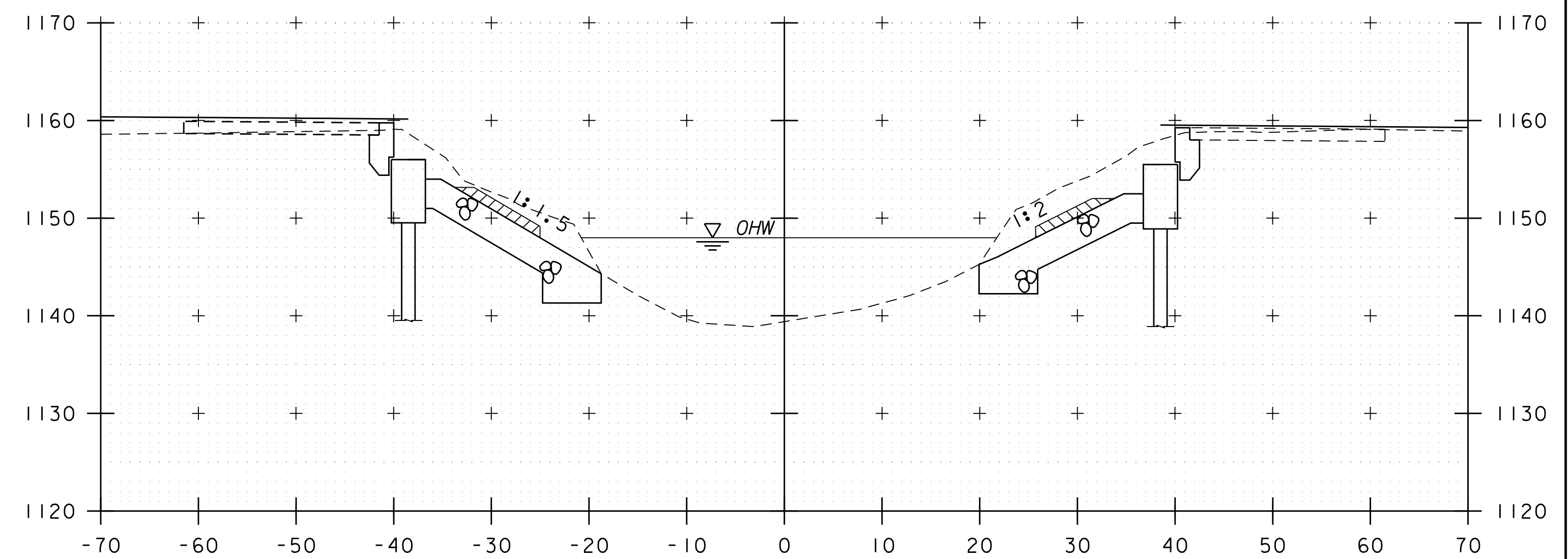
51+00



50+90



51+25



51+20

### CHANNEL CROSS SECTIONS

STA. 50+90 - 51+25  
SCALE 1" = 10'-0"

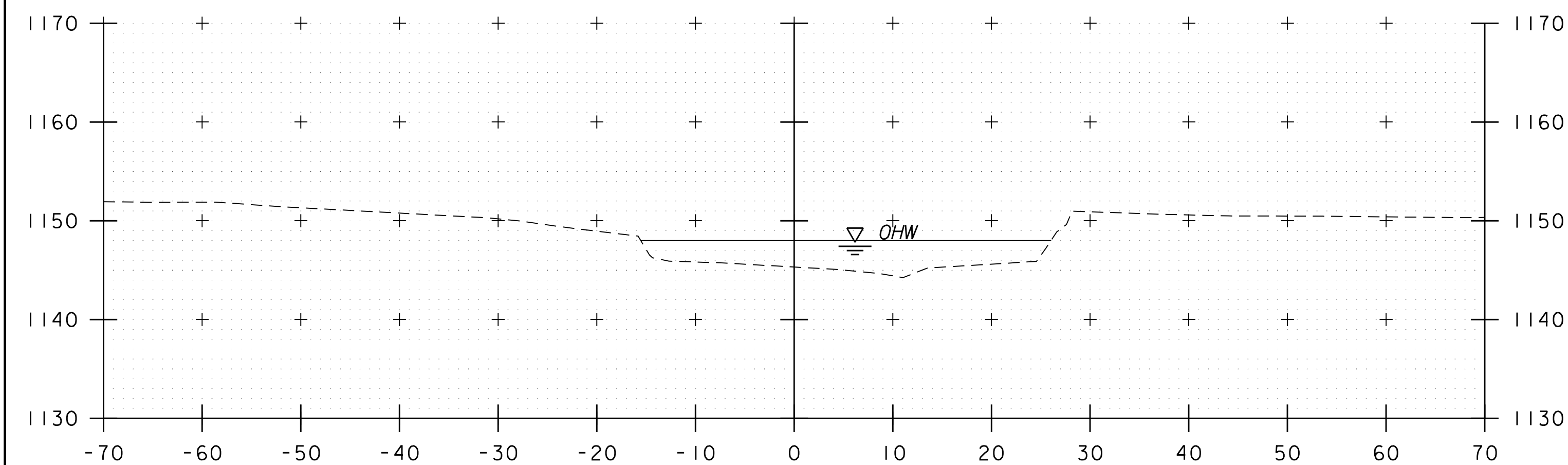


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

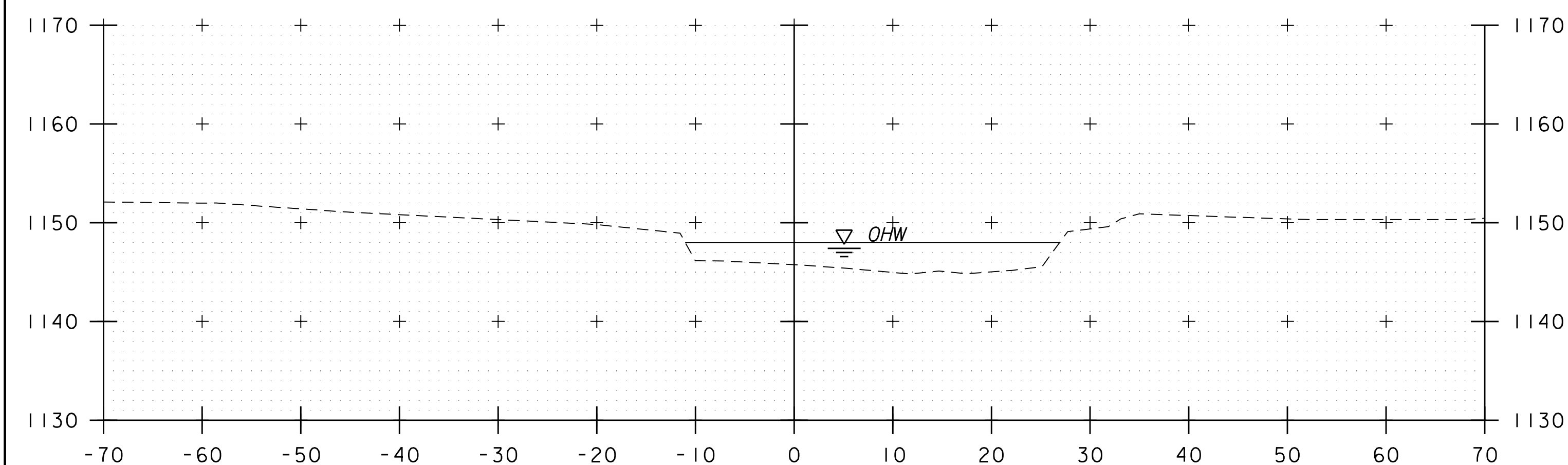
FILE NAME: z13b260xs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: E.F. LAWES  
CHANNEL CROSS SECTIONS (2 OF 3)

PLOT DATE: 2/12/2016  
DRAWN BY: K.C. BARRY  
CHECKED BY: E.F. LAWES  
SHEET 40 OF 50

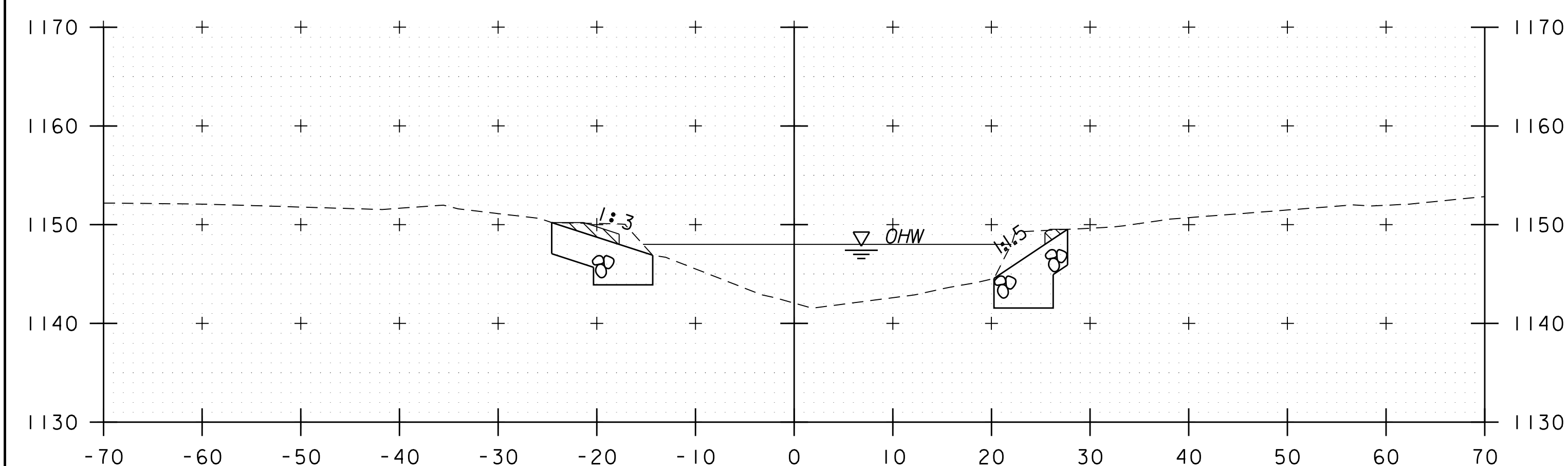




52+00



51+75



STA. 51+63, LT  
END UNCLASSIFIED CHANNEL EXCAVATION  
GEOTEXTILE UNDER STONE FILL  
STONE FILL, TYPE III, & GRUBBING MATERIAL

51+50

STA. 51+63, RT  
END UNCLASSIFIED CHANNEL EXCAVATION  
GEOTEXTILE UNDER STONE FILL  
STONE FILL, TYPE III, & GRUBBING MATERIAL

### CHANNEL CROSS SECTIONS

STA. 51+50 - 52+00  
SCALE 1" = 10'-0"



PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260xs.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: E.F. LAWES  
CHANNEL CROSS SECTIONS (3 OF 3)

PLOT DATE: 2/12/2016  
DRAWN BY: K.C. BARRY  
CHECKED BY: E.F. LAWES  
SHEET 41 OF 50



EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF THE EXISTING STEEL BEAM AND CONCRETE DECK SUPERSTRUCTURE AND CONCRETE ABUTMENTS OF BRIDGE NO. 33 WITH RELATED APPROACH AND CHANNEL WORK. THIS PROJECT IS LOCATED ON US ROUTE 4, OVER THE OTTAUQUECHEE RIVER, APPROXIMATELY 1.0 MILES WEST OF THE INTERSECTION OF US ROUTE 4 AND VT ROUTE 100S IN THE TOWN OF KILLINGTON. DURING CONSTRUCTION TRAFFIC WILL BE MAINTAINED ON AN OFF-SITE DETOUR. THE EXISTING BRIDGE HAS A 67-FOOT SPAN AND A 25’-3” WIDE CONCRETE DECK.

THE BRIDGE REPLACEMENT INCLUDES THE REMOVAL OF THE EXISTING STRUCTURE IN ITS ENTIRETY AND THE CONSTRUCTION OF A NEW 77-FOOT SINGLE SPAN BRIDGE WITH PREFABRICATED BRIDGE UNITS (PBUS) TO CREATE A NEW BRIDGE WIDTH OF 43’-4”. NEW INTEGRAL CONCRETE ABUTMENTS, EACH ON A SINGLE ROW OF PILES, AND WINGWALLS WILL BE PRECAST. ASSOCIATED ROADWAY APPROACH WORK INCLUDES BRIDGE APPROACH SLABS AND NEW GUARDRAIL. ONCE THE BRIDGE IS COMPLETED, THE DETOUR SIGNS WILL BE REMOVED AND THE AREA WILL BE RESTORED TO THE PREVIOUS CONDITION.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.15 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON AND WILL REQUIRE A 10 DAY CLOSURE TO MINIMIZE TRAFFIC IMPACTS.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A GENERALLY FLAT AREA THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS. EAST MOUNTAIN ROAD (TH15) AND MISSION FARM ROAD (TH 38) ARE WITHIN THE PROJECT SITE. BRIDGE NO. 33 CROSSES OVER THE OTTAUQUECHEE RIVER WHERE WETLANDS ARE FOUND ON BOTH THE NORTH AND SOUTH SIDES OF THE BRIDGE.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE OTTAUQUECHEE RIVER FLOWS SOUTH THROUGH THE PROJECT SITE AND IS CLASSIFIED AS AN ESSENTIAL FISH HABITAT THAT SUPPORTS A VARIETY OF AQUATIC ORGANISMS AND FISH SPECIES. THE STREAM BED CONSISTS OF SAND-GRAVEL-COBBLE MIX. THERE ARE MAPPED CLASS II WETLANDS IN THREE QUADRANTS OF THE PROJECT AREA. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE WETLANDS AREA CONSISTS OF EMERGENT, SCRUB SHRUB AND FOREST WITH DOMINANT VEGETATION BEING SPECKLED ALDER, ELM, SENSITIVE FERN, MEADOWSWEET, AND WHITE PINE. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING CULVERT. UPON PROJECT COMPLETION, DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS ON THE FAR NORTHEAST SECTION OF THE SITE ARE SUDBURY FINE, SANDY LOAM, 0% TO 3% SLOPES, “K FACTOR” = 0.32. THE WETLAND AREA JUST NORTH OF US ROUTE 4 ARE UDORTHENTS LOAMY SOIL WITH A “K FACTOR” = 0.10. THE SOUTHWESTERN AREA OF THE OTTAUQUECHEE RIVER CONTAINS WINDSOR LOAMY SAND, 8% TO 15% SLOPES, “K FACTOR” = 0.15 AND 25% TO 60% SLOPES, “K FACTOR”= 0.20 CLOSER TO US ROUTE 4. THE SOIL IS CONSIDERED TO HAVE A LOW TO MEDIUM EROSION POTENTIAL THROUGHOUT THE PROJECT.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:  
0.0-0.23 = LOW EROSION POTENTIAL  
0.24-0.36 = MODERATE EROSION POTENTIAL  
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: YES. RANGE 4 ON THE WILDLIFE HABITAT REGIONAL ANALYSIS.  
HISTORICAL OR ARCHEOLOGICAL AREAS: YES. ARCHEOLOGICAL AREA WITHIN ALL FOUR QUADRANTS.  
PRIME AGRICULTURAL LAND: NO  
THREATENED AND ENDANGERED SPECIES: SUBJECT TO NLEB REVIEW  
WATER RESOURCE: OTTAUQUECHEE RIVER  
WETLANDS: YES. CLASS II WETLAND FEATURES WERE LOCATED IN THREE QUADRANTS OF THE AREA. SOME UPSTREAM WETLANDS APPEAR TO HAVE BEEN FILLED IN OVER TIME.

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN. BECAUSE THIS PROJECT FALLS UNDER THE CGP 3-9020, WOVEN WIRE REINFORCED SILT FENCE SHALL BE USED INSTEAD OF SILT FENCE WITHIN 100 FEET UPSLOPE OF RECEIVING WATERS.

FILTER CURTAIN SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLANS.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS ARE NOT ANTICIPATED FOR THIS PROJECT.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT EROSION CONTROL STRUCTURES ARE NOT ANTICIPATED FOR THIS PROJECT.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

TREATMENT OF DEWATERING COFFERDAM IS NOT ANTICIPATED.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

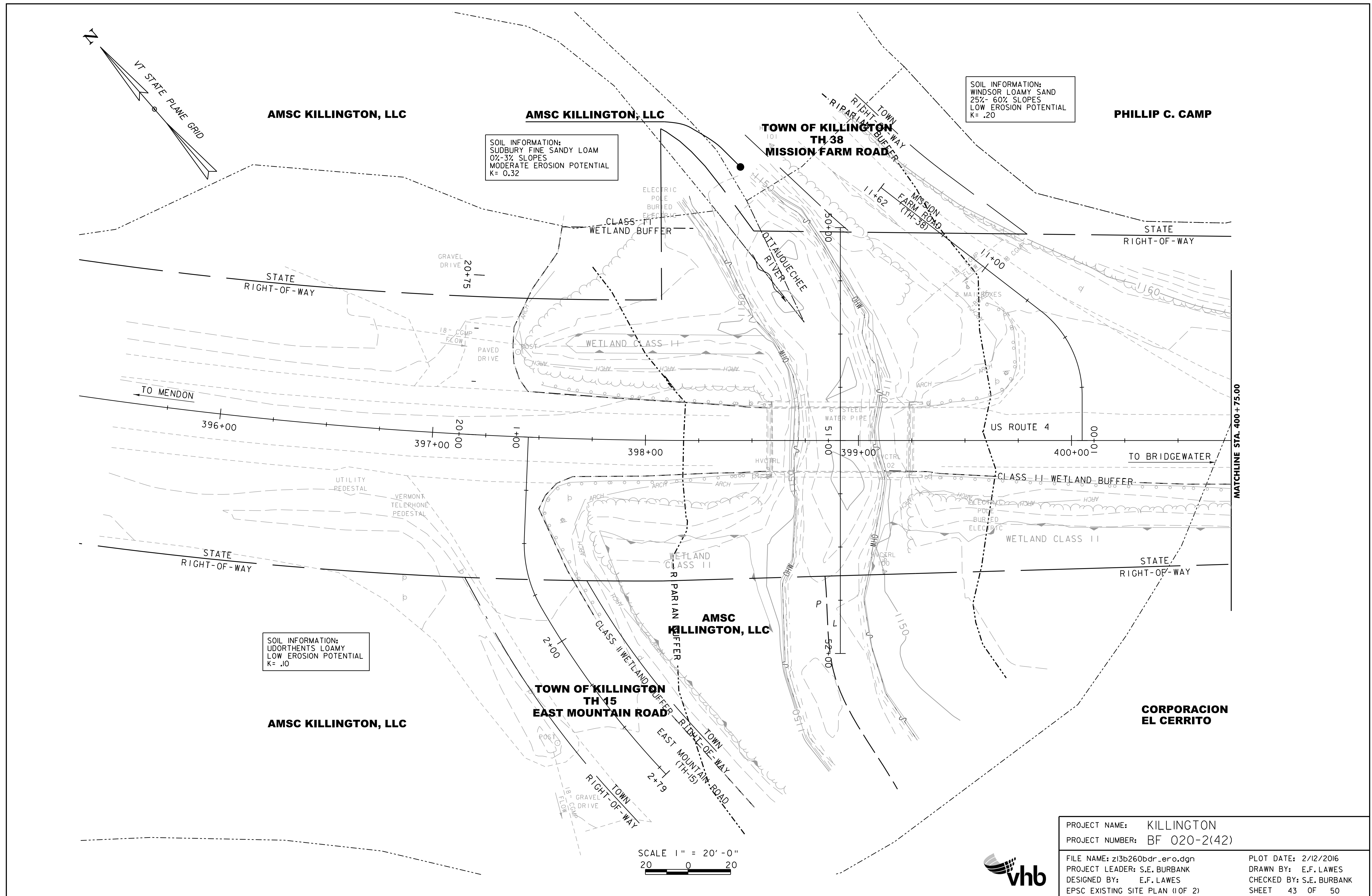
1.5.1 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25 - 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

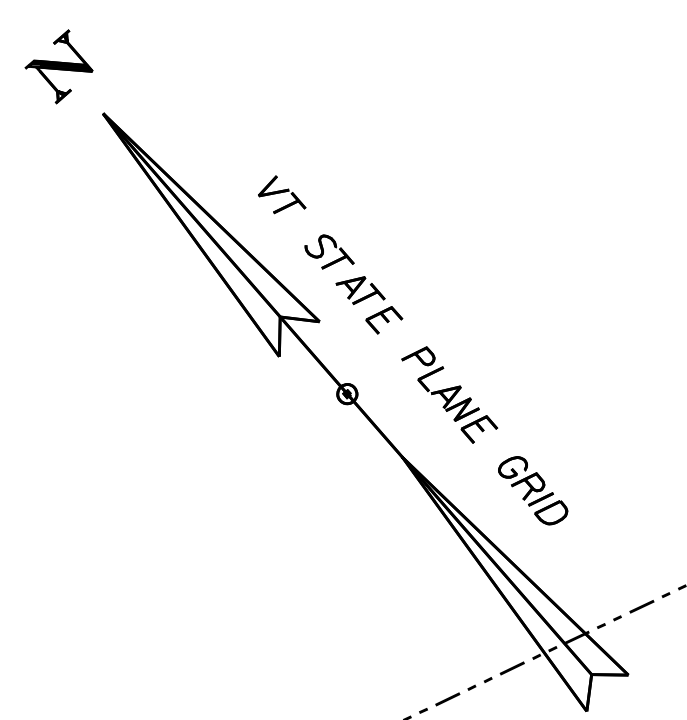


PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260EPSC_Narrative.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.F. LAWES
DESIGNED BY: E.F. LAWES	CHECKED BY: S.E. BURBANK
EPSC NARRATIVE	SHEET 42 OF 50









PHILLIP C. CAMP

STATE  
RIGHT-OF-WAY

END PROJECT  
STA. 401+25.00

MATCHLINE STA. 400+75.00

TO MENDON

401+00 US ROUTE 4

402+00

TO BRIDGEWATER

402+34

WETLAND CLASS II

STATE  
RIGHT-OF-WAY

END APPROACH  
STA. 402+25.00

BENCHMARK  
RR SPIKE IN ROOT  
ELEV. = 1154.79

SOIL INFORMATION:  
WINDSOR LOAMY SAND  
8% - 15% SLOPES  
LOW EROSION POTENTIAL  
K = .15

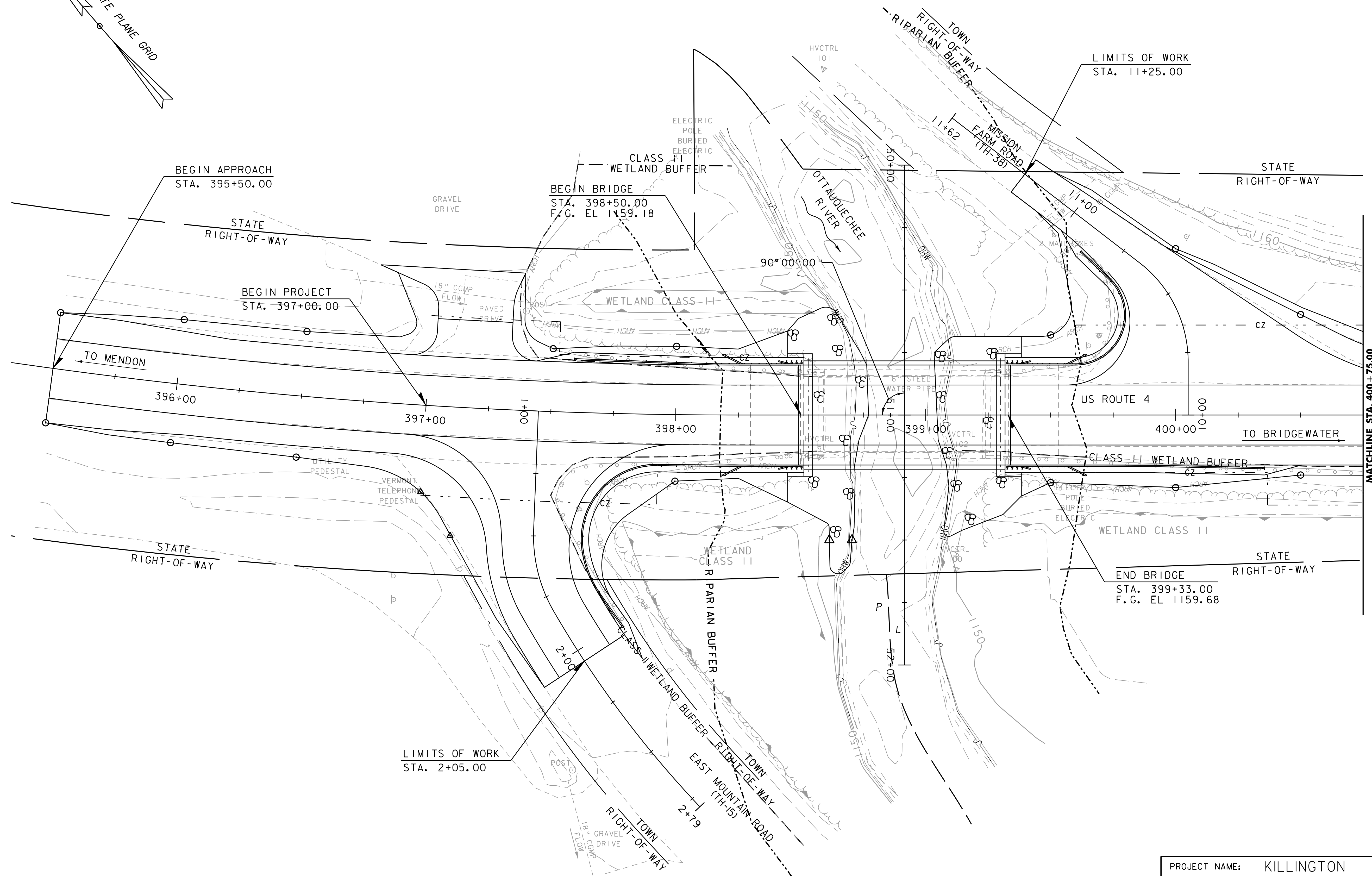
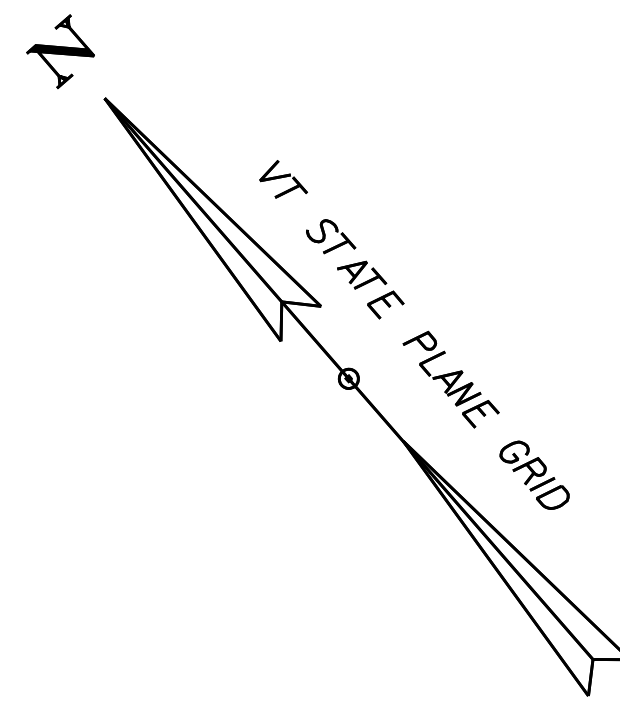
CORPORACION  
EL CERRITO

SCALE 1" = 20'-0"  
20 0 20



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260bdr_ero.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: E.F. LAWES
EPSC EXISTING SITE PLAN (2 OF 2)	SHEET 44 OF 50





SCALE 1" = 20'-0"  
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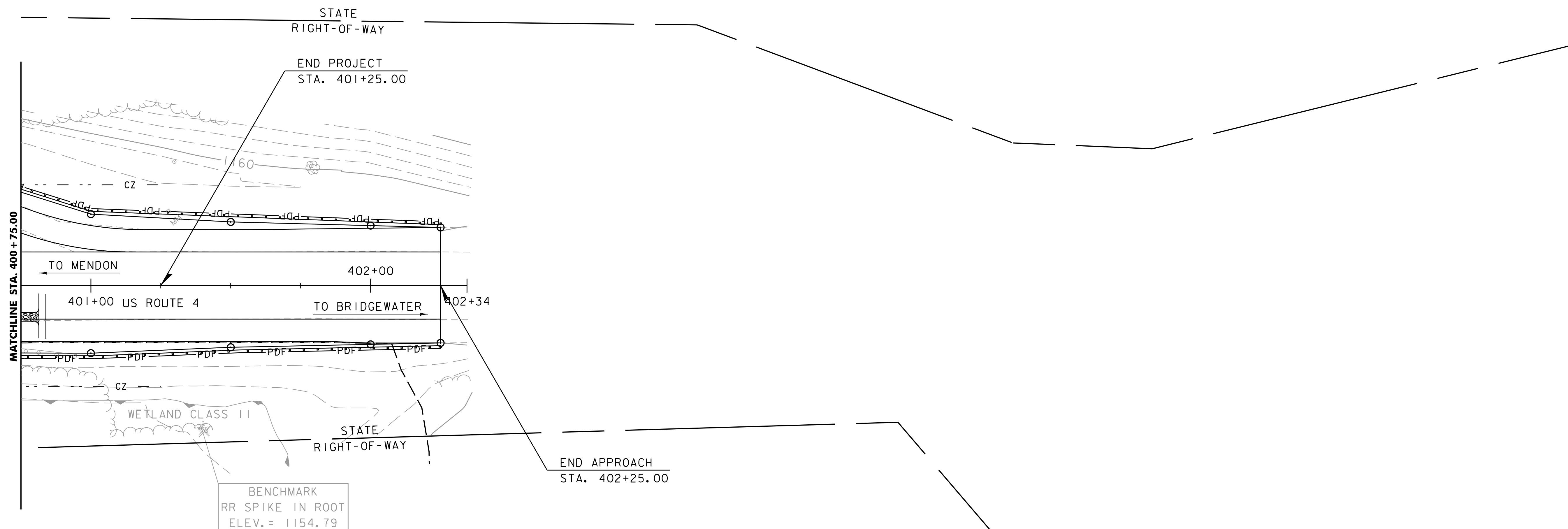
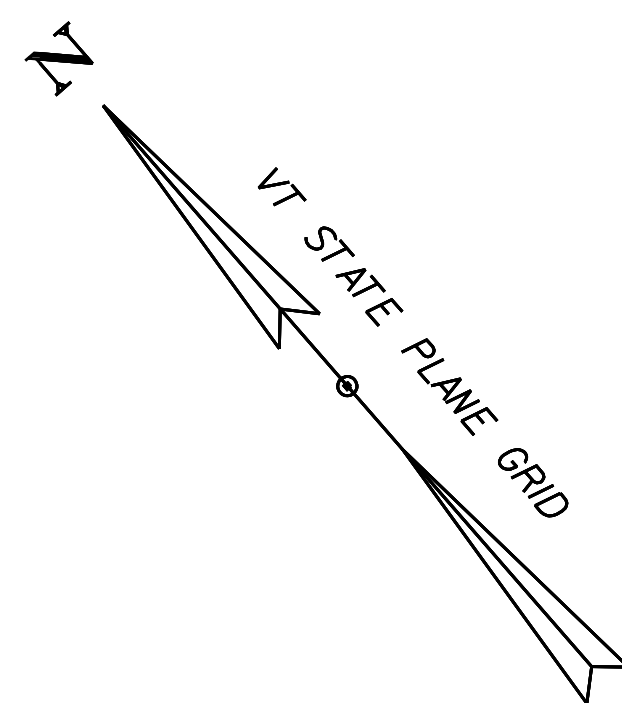


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260bdr_ero.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: E.F. LAWES  
EPSC CONSTRUCTION SITE PLAN (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 45 OF 50





SCALE 1" = 20'-0"  
20 0 20

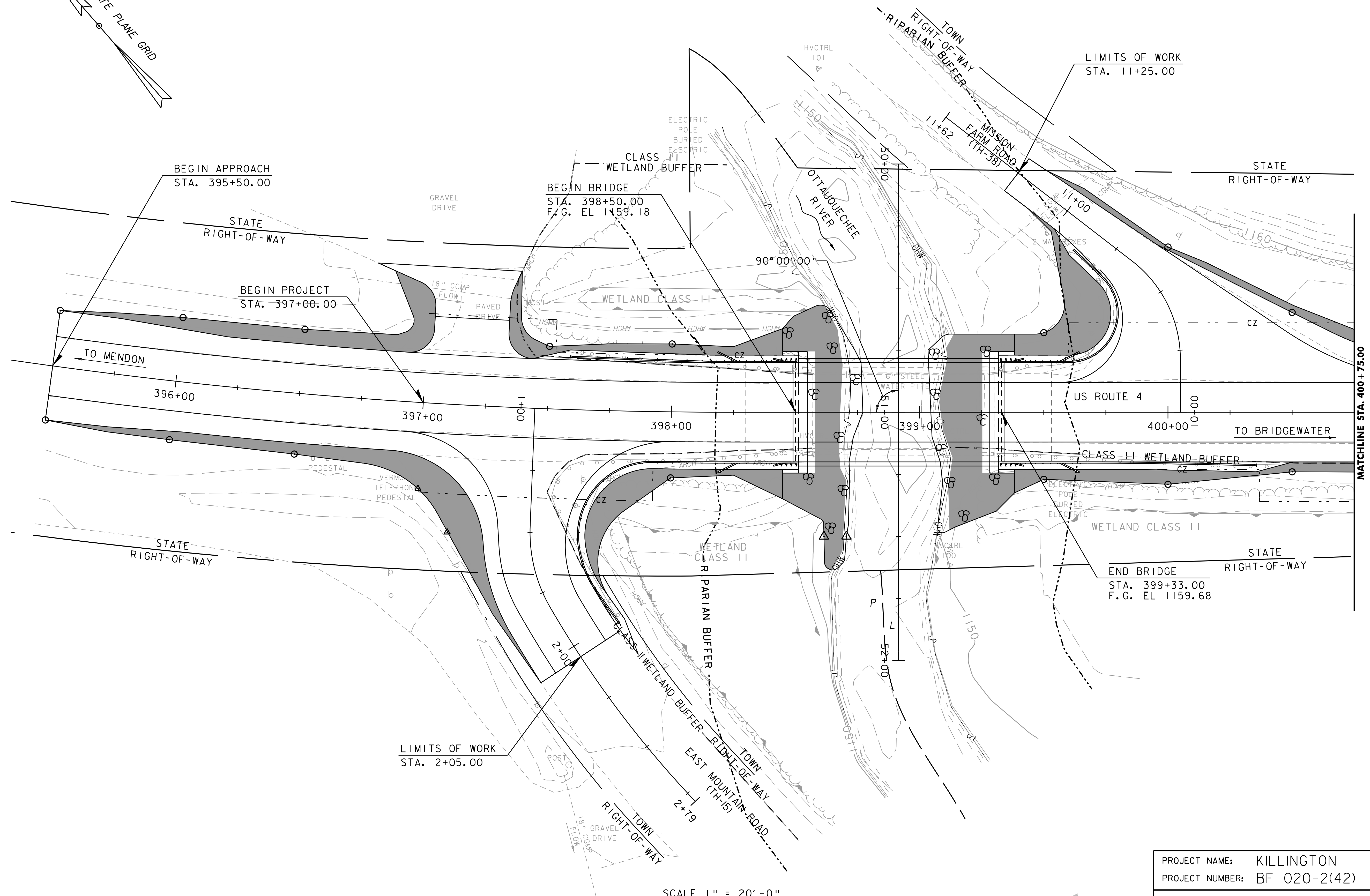
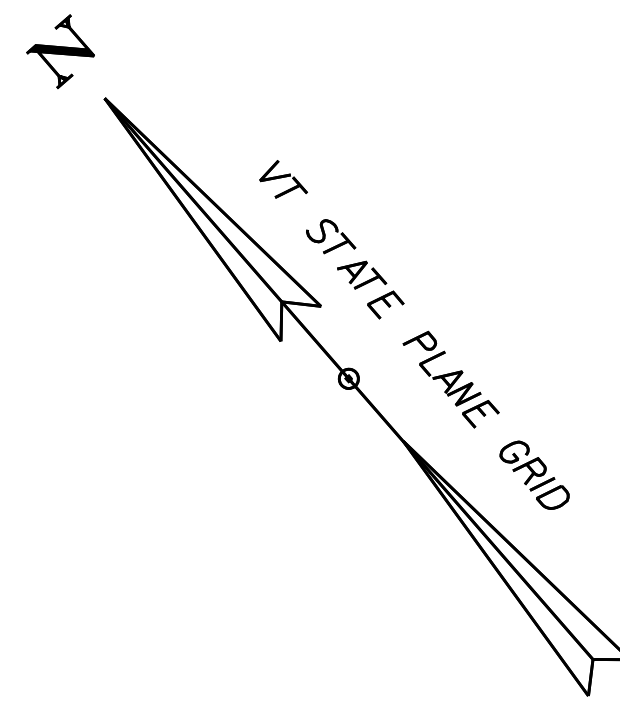


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260bdr_ero.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: R.H. BARNES  
EPSC CONSTRUCTION SITE PLAN (2 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: R.H. BARNES  
CHECKED BY: E.F. LAWES  
SHEET 46 OF 50





SCALE 1" = 20'-0"  
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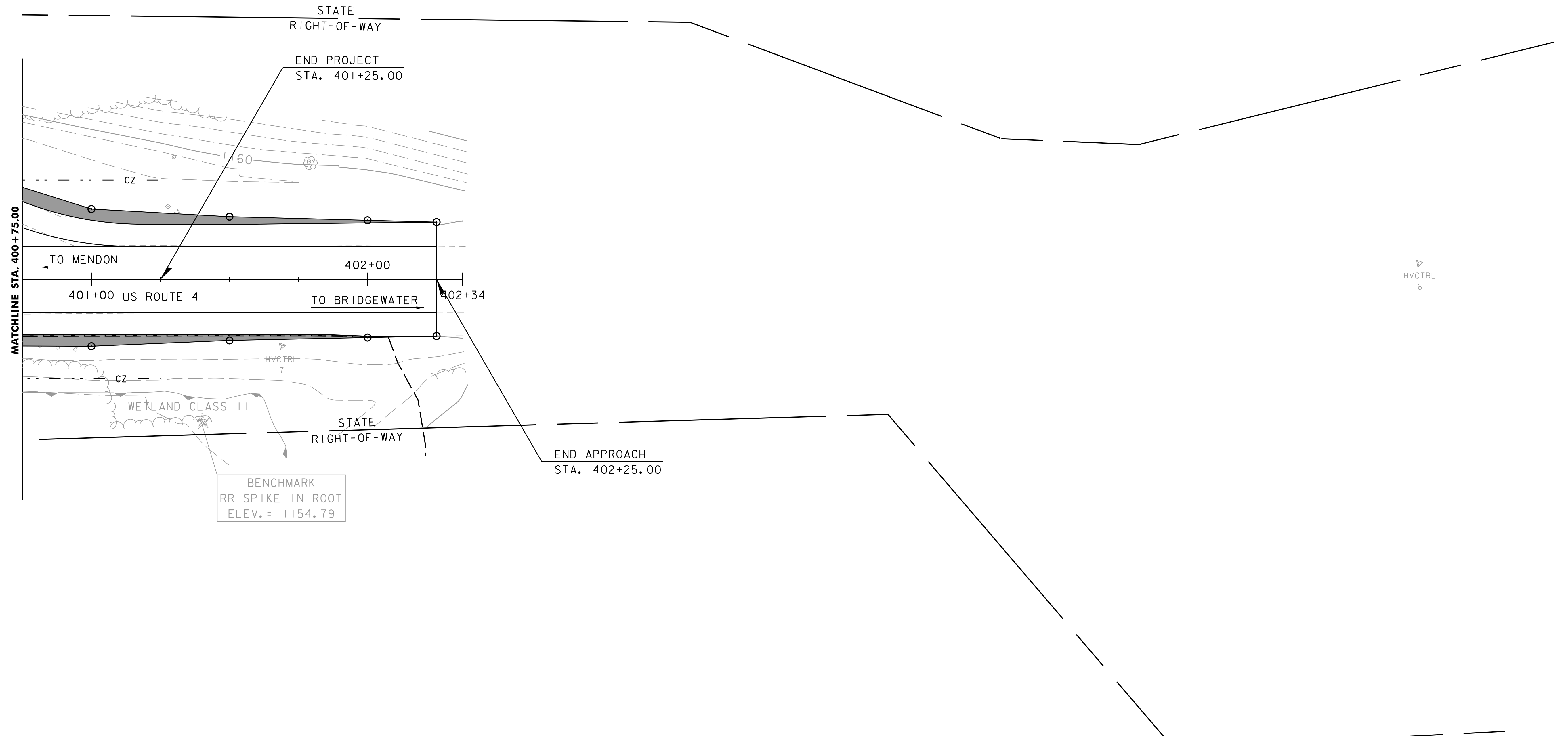
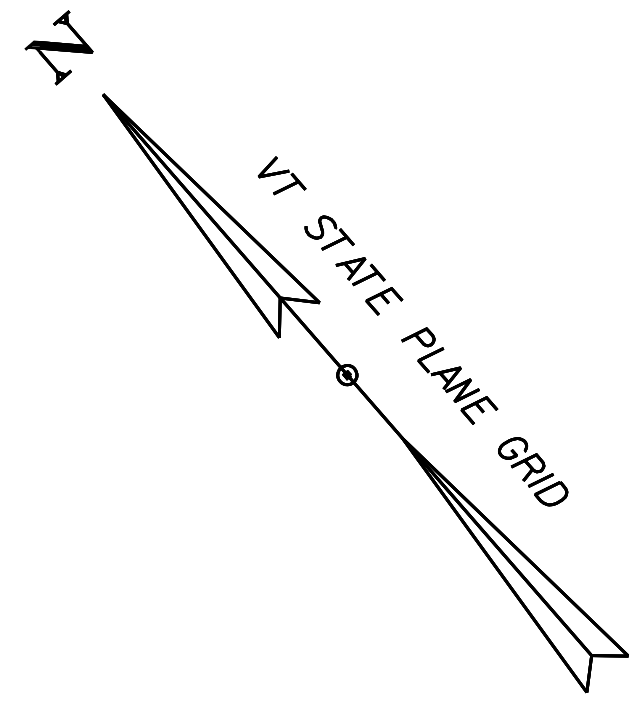


PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260bdr_ero.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: E.F. LAWES  
EPSC FINAL SITE PLAN (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 47 OF 50



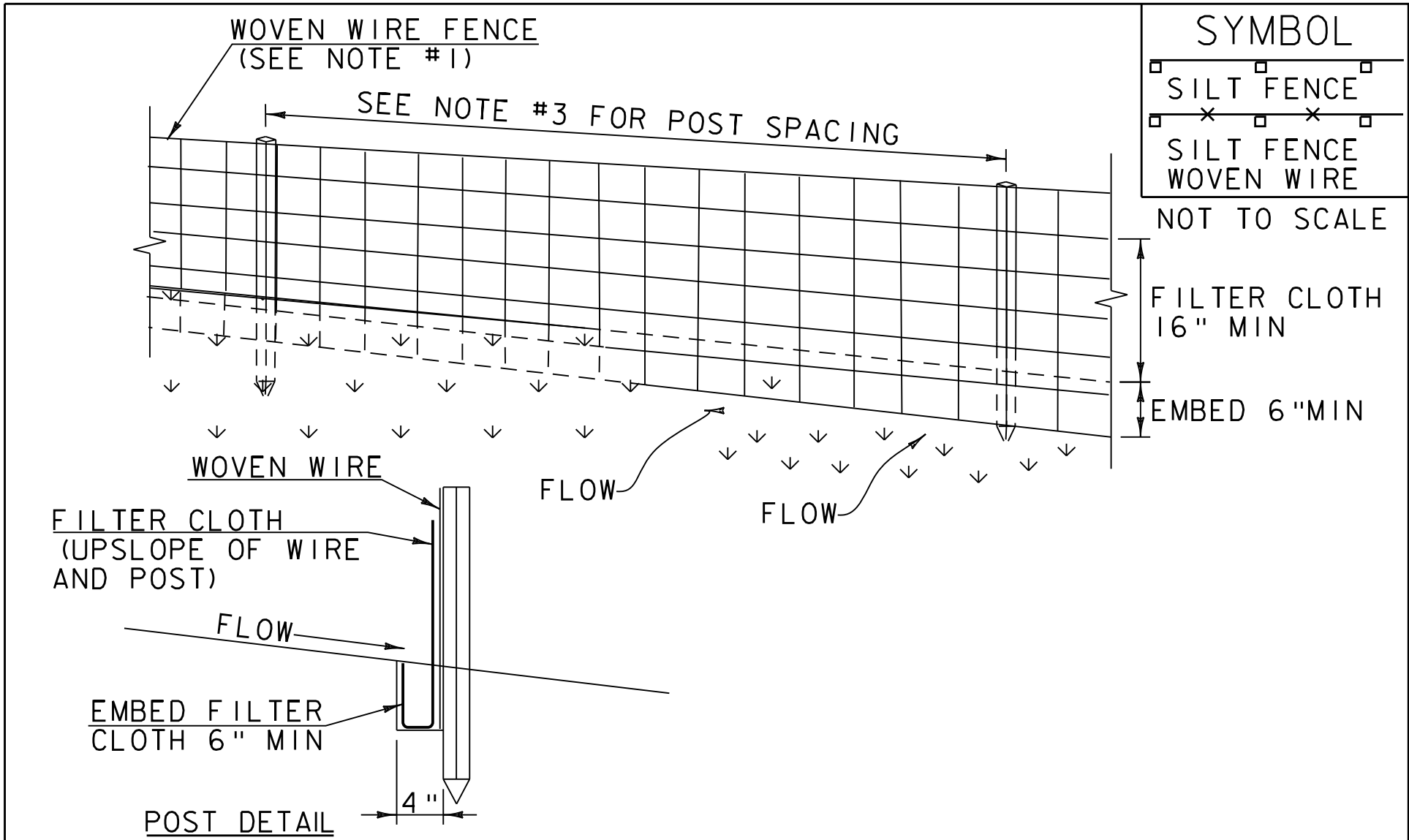


SCALE 1" = 20'-0"  
20 0 20



PROJECT NAME: KILLINGTON	
PROJECT NUMBER: BF 020-2(42)	
FILE NAME: z13b260bdr_ero.dgn	PLOT DATE: 2/12/2016
PROJECT LEADER: S.E. BURBANK	DRAWN BY: R.H. BARNES
DESIGNED BY: R.H. BARNES	CHECKED BY: E.F. LAWES
EPSC FINAL SITE PLAN (2 OF 2)	SHEET 48 OF 50





CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFL100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH  
SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE  
FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR  
SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS  
MARCH 21, 2008 WHF  
DECEMBER 11, 2008 WHF  
JANUARY 13, 2009 WHF

VAOT LOW GROW/FINE FESCUE MIX						
	LBS/AC		NAME	LATIN NAME	GERM	PURITY
WEIGHT	BROADCAST	HYDROSEED				
38%	57	95	CREeping RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX						
	LBS/AC		NAME	LATIN NAME	GERM	PURITY
WEIGHT	BROADCAST	HYDROSEED				
37.5%	22.5	45	CREeping RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE

FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

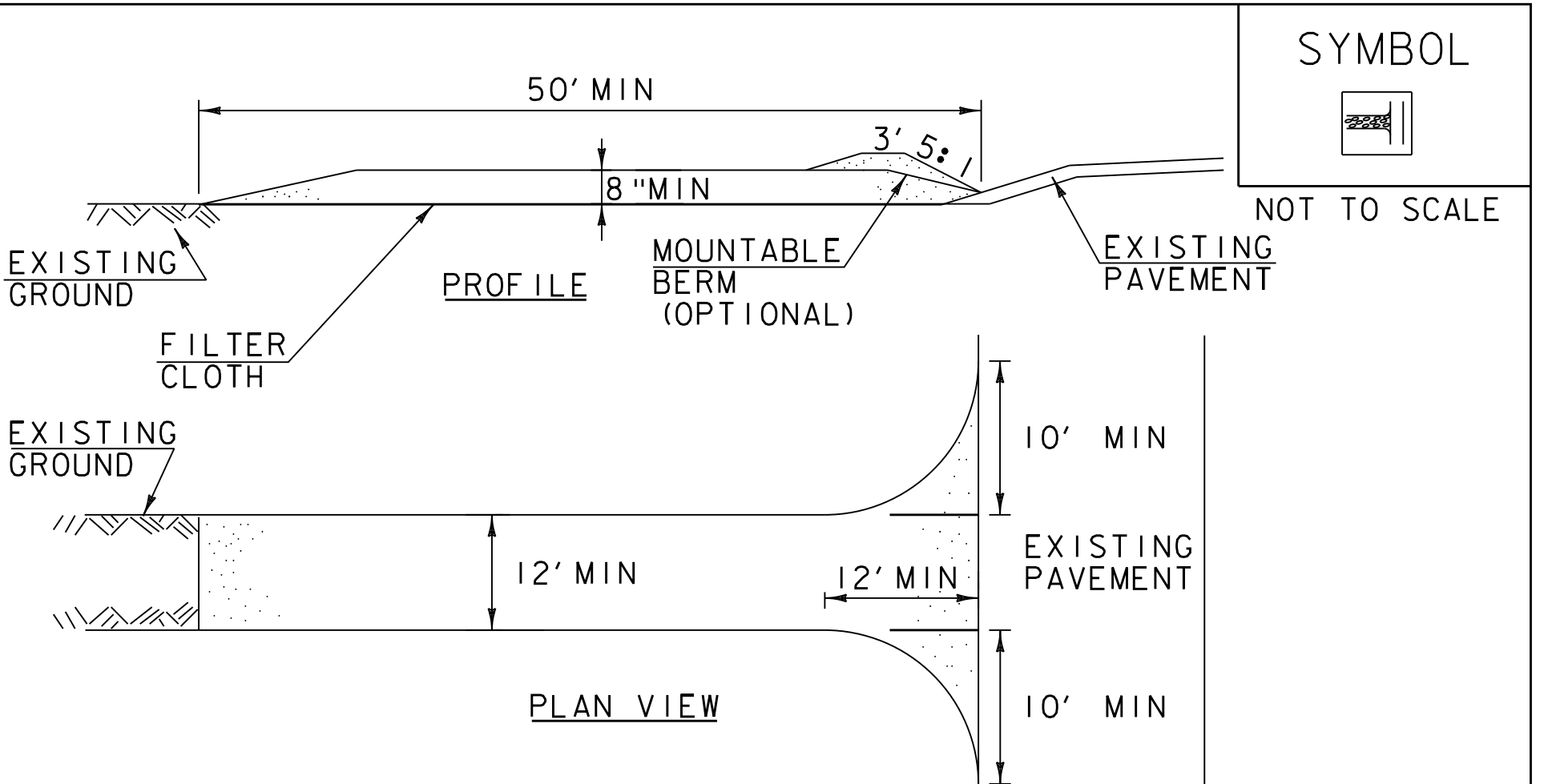
1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR  
ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH  
SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS  
JANUARY 12, 2015 WHF



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
ORIGINALLY DEVELOPED BY USDA-NRCS  
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:  
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR  
EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM  
THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL  
GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH  
SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35)  
OR AS SPECIFIED IN THE CONTRACT.

REVISIONS  
MARCH 24, 2008 WHF  
JANUARY 13, 2009 WHF



PROJECT NAME: KILLINGTON  
PROJECT NUMBER: BF 020-2(42)

FILE NAME: z13b260ero_details.dgn  
PROJECT LEADER: S.E. BURBANK  
DESIGNED BY: VTRANS  
EROSION CONTROL DETAILS (1 OF 2)

PLOT DATE: 2/12/2016  
DRAWN BY: E.F. LAWES  
CHECKED BY: S.E. BURBANK  
SHEET 49 OF 50



