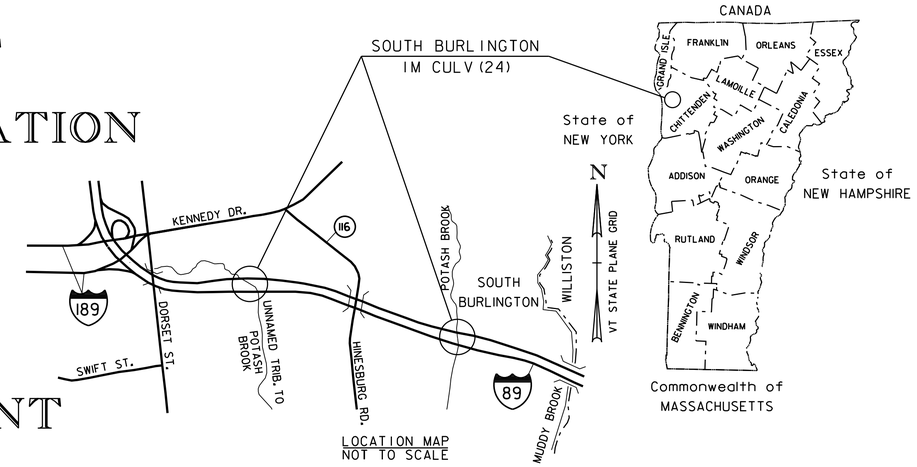
STATE OF VERMONT
AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT
CULVERT PROJECT
TOWN OF SOUTH BURLINGTON
COUNTY OF CHITTENDEN

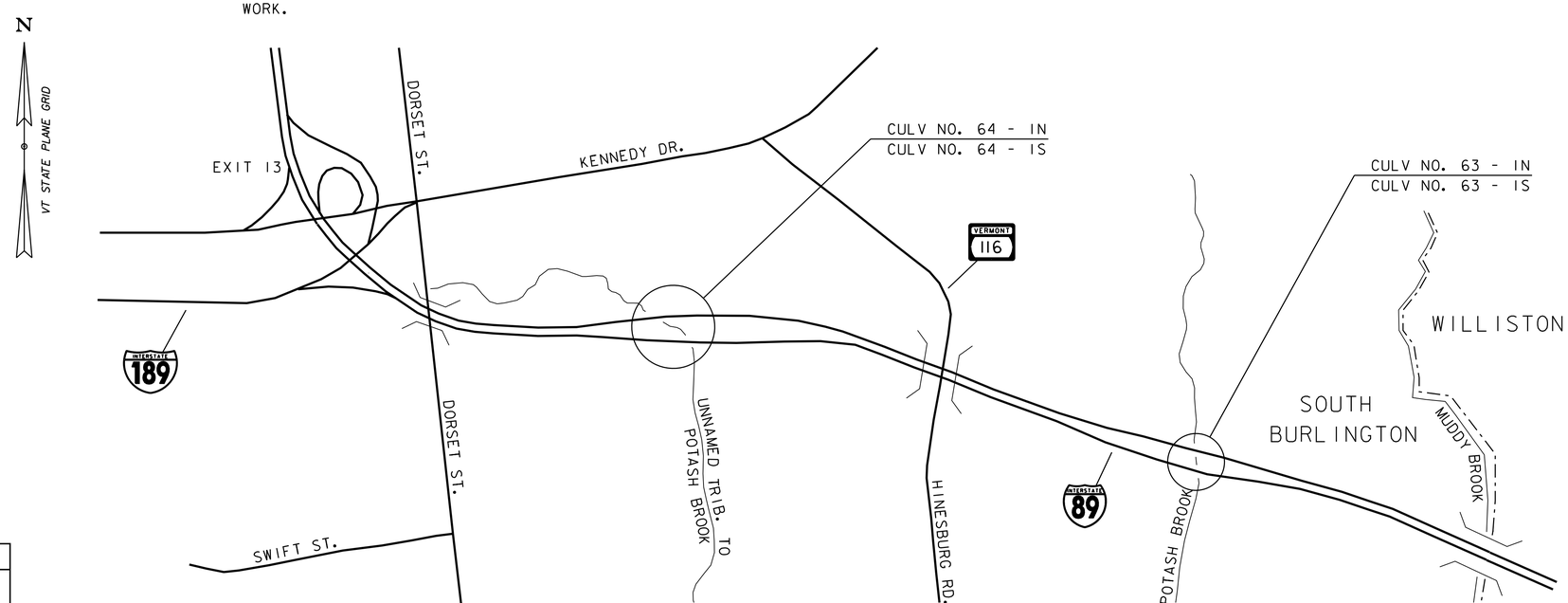
ROUTE: I-89 (PRINCIPAL ARTERIAL)

CULVERT NOS. 63-1N, 63-1S, 64-IN, AND 64-1S

PROJECT LOCATION: LOCATED IN THE COUNTY OF CHITTENDEN, TOWN OF SOUTH BURLINGTON, ON I-89; CULVERT NOS. 63-IN AND 63-IS OVER POTASH BROOK, APPROXIMATELY 0.7 MILES WEST OF THE WILLISTON/SOUTH BURLINGTON TOWN LINE AND CULVERT NOS. 64-IN AND 64-IS OVER AN UNNAMED TRIBUTARY TO POTASH BROOK, APPROXIMATELY 1.8 MILES WEST OF THE WILLISTON/SOUTH BURLINGTON TOWN LINE.

PROJECT LOCATION: WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES THE REMOVAL AND REPLACEMENT OF THE EXISTING CULVERT, WITH ASSOCIATED ROADWAY AND CHANNEL WORK.

LENGTH OF CULVERTS:	63-IN	15.00 FT
	63-IS	15.50 FT
	64-IN	21.76 FT
	64-IS	21.38 FT
TOTAL LENGTH OF CULVERTS:		73.64 FT
LENGTH OF PROJECT:		1200.00 FT



QUALITY ASSURANCE PROGRAM : LEVEL I	
SURVEYED BY :	VHB
SURVEYED DATE :	2013
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD83 (1992)

CONCEPTUAL PLANS
APRIL 2014

Vanasse Hangen Brustlin, Inc.

PROJECT MANAGER :	MAHENDRA THILLIYAR
PROJECT NAME :	SOUTH BURLINGTON
PROJECT NUMBER :	IM CULV (24)

SHEET 1 OF 74 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

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22-25	64-1 LAYOUT SHEET
26	63-1 NORTHBOUND MAINLINE PROFILE
27	63-1 SOUTHBOUND MAINLINE PROFILE
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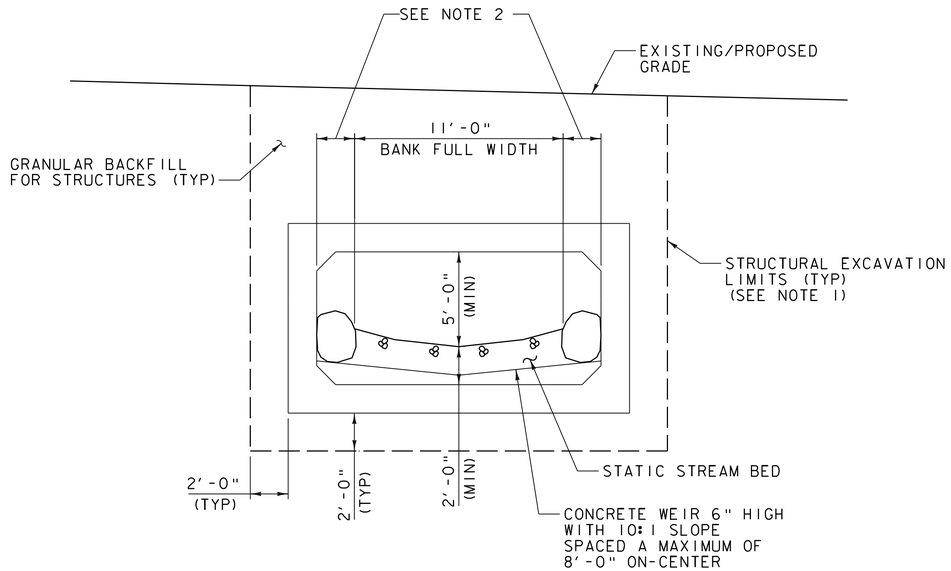
Vanasse Hangen Brustlin, Inc.

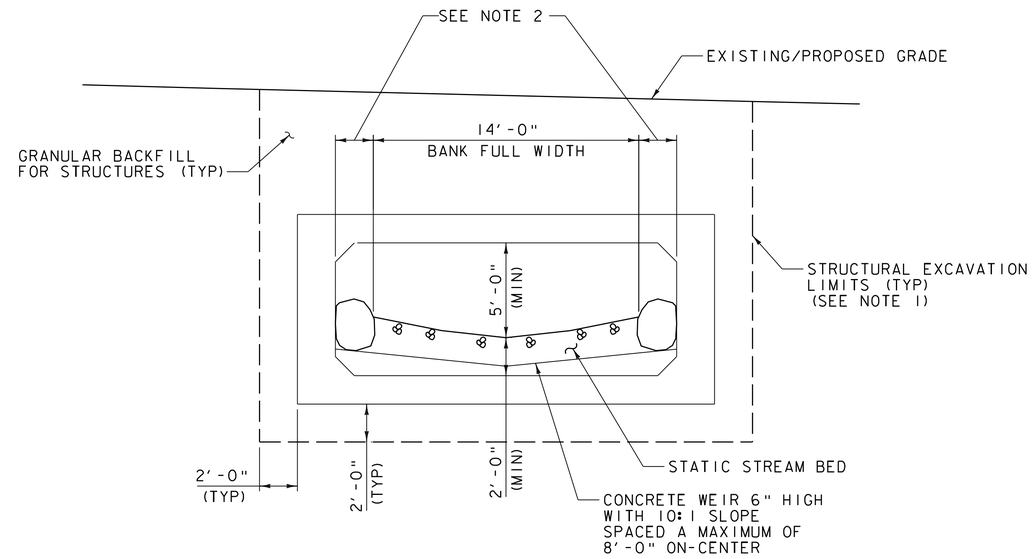
PROJECT NAME:	SOUTH BURLINGTON		
PROJECT NUMBER:	CULV(24)		
FILE NAME:	11a216index.dgn	PLOT DATE:	2/21/2014
PROJECT LEADER:	M.A. COLGAN	DRAWN BY:	M.C. SCOTT
DESIGNED BY:	J.J. WESTCOTT	CHECKED BY:	A.P. GUYETTE
INDEX OF SHEETS		SHEET	2 OF 74



TYPICAL 63-1 CULVERT SECTION

SCALE 1/4" = 1'-0"

1. ACTUAL LIMITS OF STRUCTURE EXCAVATION SHALL BE DETERMINED BY THE DESIGN-BUILDER.
2. THE OVERALL INSIDE CULVERT WIDTH SHALL BE DETERMINED BY THE DESIGN-BUILDER BASED ON BEST PRACTICES FOR DESIGN AND ESTABLISHMENT OF NATURAL STREAM BED.
3. THE INSIDE VERTICAL HEIGHT OF THE CONCRETE BOX CULVERT SHALL BE 7'-0" MINIMUM OR GREATER BASED ON HYDRAULIC ANALYSIS.



TYPICAL 64-1 CULVERT SECTION

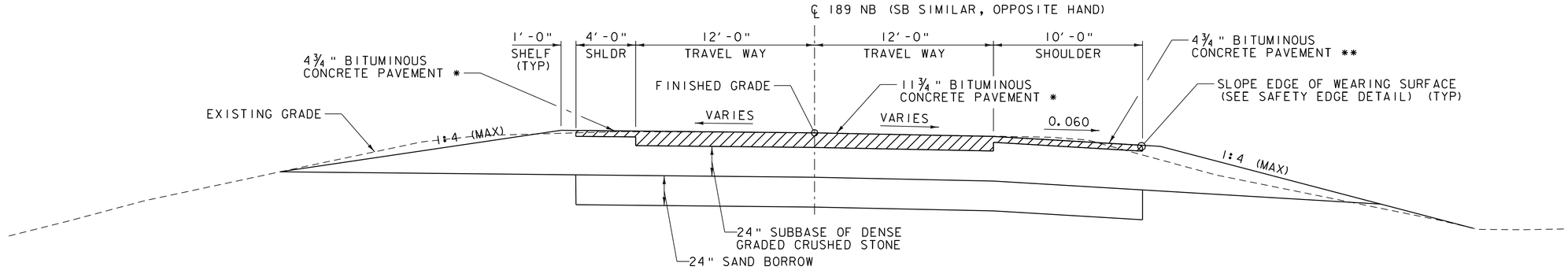
SCALE 1/4" = 1'-0"

1. ACTUAL LIMITS OF STRUCTURE EXCAVATION SHALL BE DETERMINED BY THE DESIGN-BUILDER.
2. THE OVERALL INSIDE CULVERT WIDTH SHALL BE DETERMINED BY THE DESIGN-BUILDER BASED ON BEST PRACTICES FORDESIGN AND ESTABLISHMENT OF NATURAL STREAM BED.
3. THE INSIDE VERTICAL HEIGHT OF THE CONCRETE BOX CULVERT SHALL BE 7'-0" MIN OR GREATER BASED ON HYDRAULIC ANALYSIS.

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
TYPICAL CULVERT SECTIONS	SHEET 3 OF 74

VHB 57578

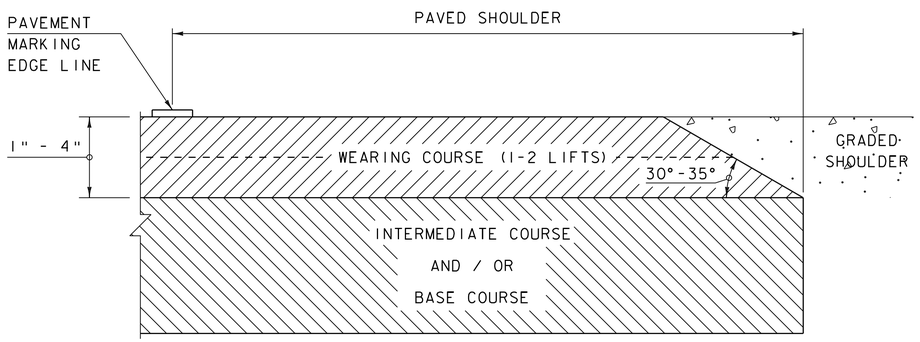


* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS OVER
(2) - 3½" OF TYPE IIS

** (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS OVER

TYPICAL 63-1 ROADWAY SECTION

SCALE ¼" = 1'-0"



SAFETY EDGE DETAIL

NOT TO SCALE

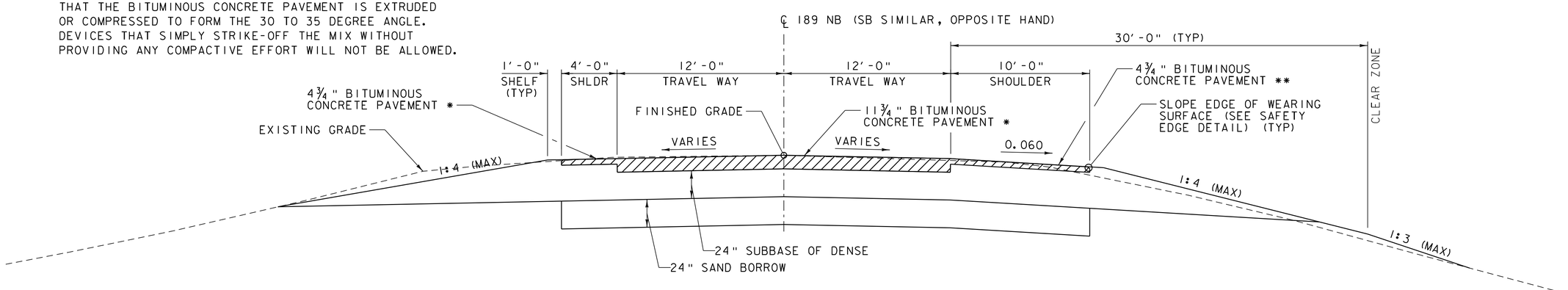
NOTES:

1. LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.
2. 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.

MATERIAL TOLERANCES

(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- ¼"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"



* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS OVER
(2) - 3½" OF TYPE IIS

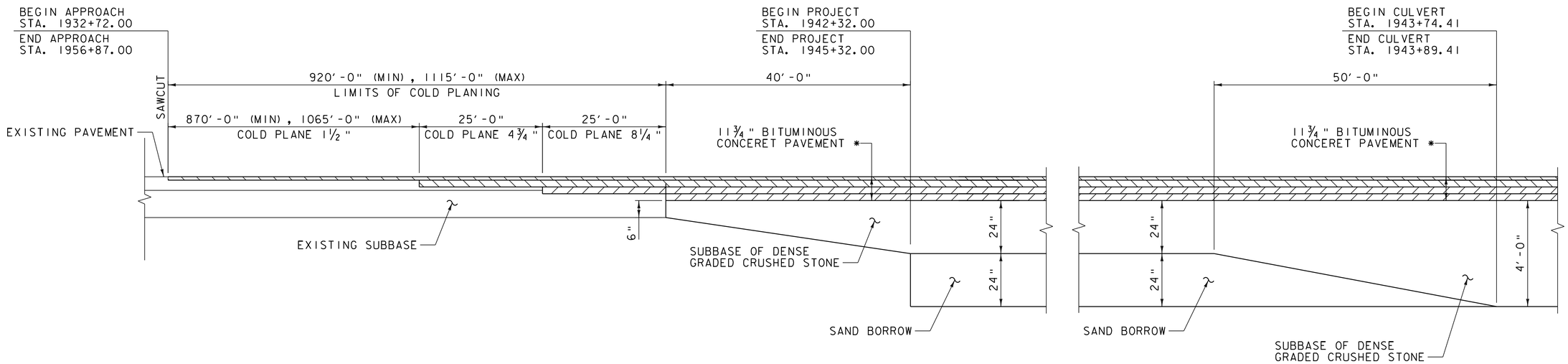
** (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS OVER

TYPICAL 64-1 ROADWAY SECTION

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
TYPICAL I-89 ROADWAY SECTIONS	SHEET 4 OF 74

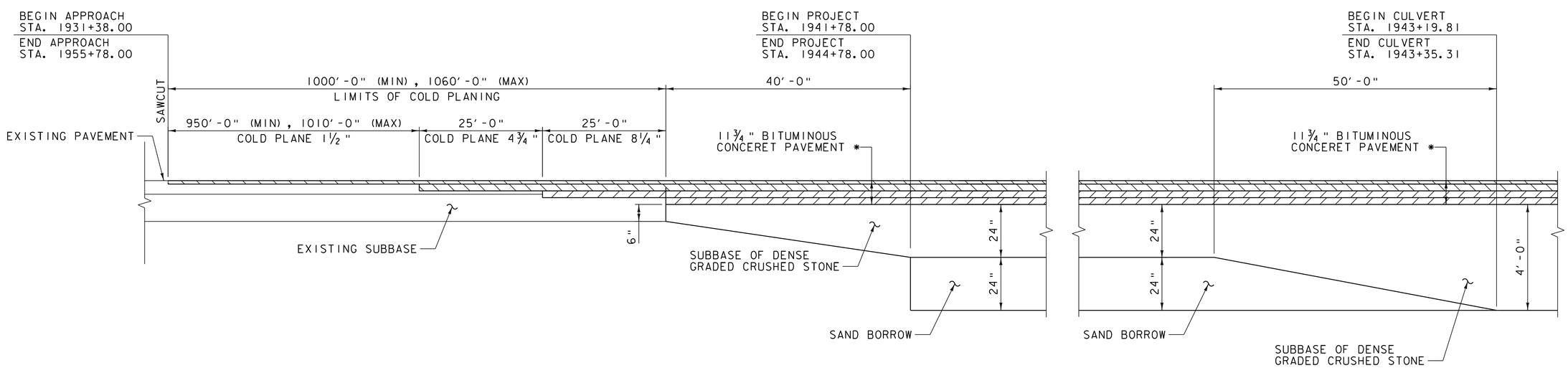


CULVERT 63-1 NORTHBOUND APPROACH SECTION

NOT TO SCALE

* (1) - 1½" LIFTS OF TYPE IVS OVER
(1) - 3¼"" LIFTS OF TYPE IIS
(2) - 3½" 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 AND ON THE EXISTING PAVEMENT AND THE APPROACH SLAB PRIOR TO PLACING THE FIRST LIFT, AS DIRECTED BY THE ENGINEER.



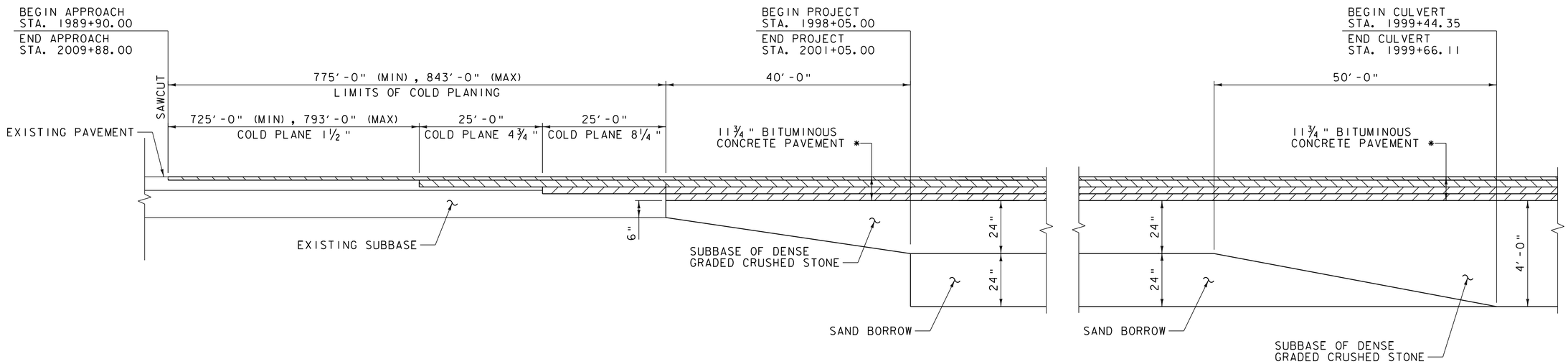
CULVERT 63-1 SOUTHBOUND APPROACH SECTION

NOT TO SCALE

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 TYPICAL APPROACH SECTIONS	SHEET 5 OF 74

VHB 57578

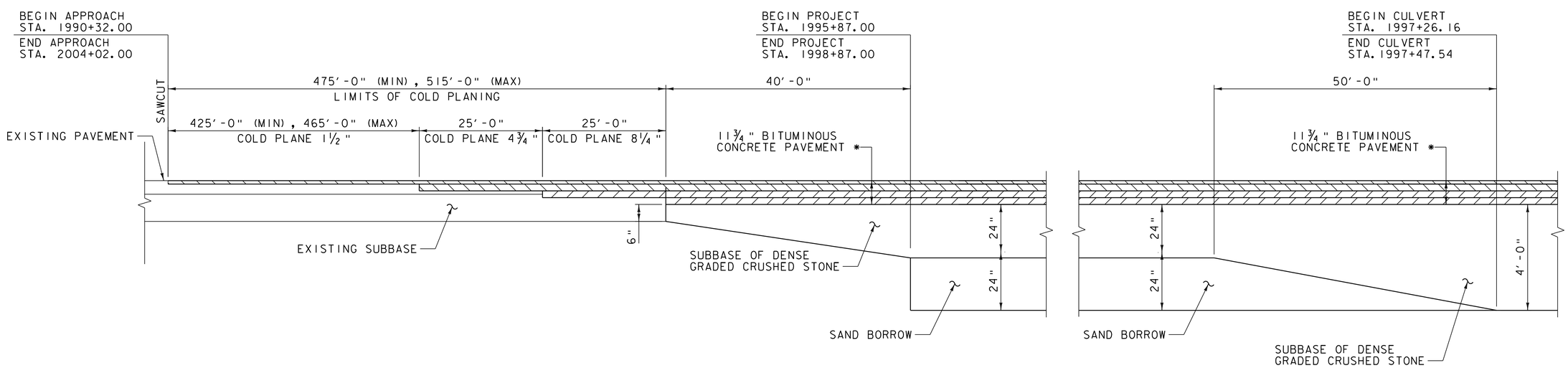


CULVERT 64-1 NORTHBOUND APPROACH SECTION

NOT TO SCALE

* (1) - 1½" LIFTS OF TYPE IVS OVER
(1) - 3¼"" LIFTS OF TYPE IIS
(2) - 3½" 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 AND ON THE EXISTING PAVEMENT AND THE APPROACH SLAB PRIOR TO PLACING THE FIRST LIFT, AS DIRECTED BY THE ENGINEER.



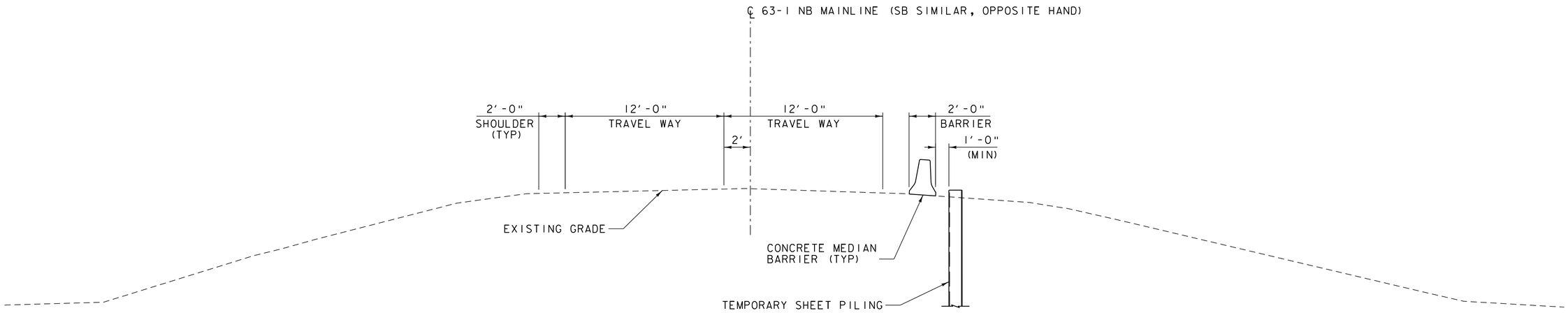
CULVERT 64-1 SOUTHBOUND APPROACH SECTION

NOT TO SCALE

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 TYPICAL APPROACH SECTIONS	SHEET 6 OF 74

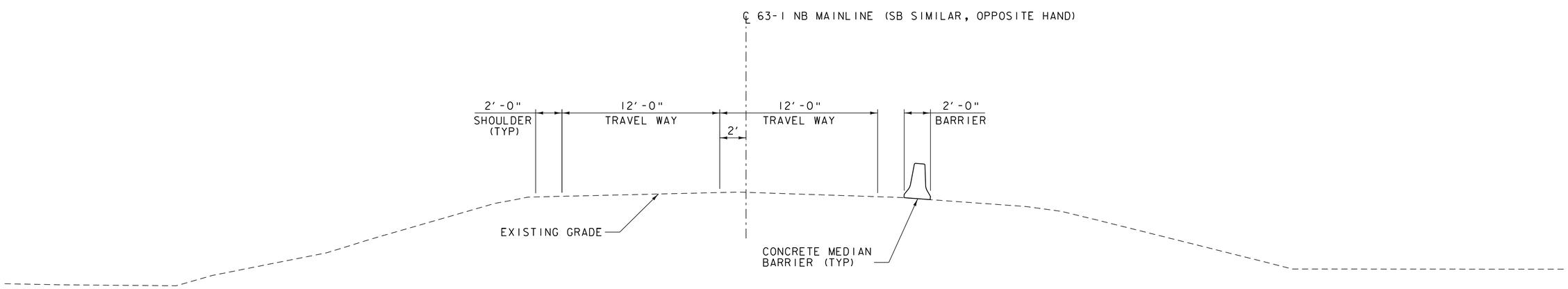
VHB 57578



63-1 LANE SHIFT WITH SHEETING - PHASES 1, 3 AND 5

SCALE 1/4" = 1'-0"

NORTHBOUND: SHEETING STA. 1943+26 - 1944+50, ~15' RT OF MAINLINE
SOUTHBOUND: SHEETING STA. 1942+90 - 1943+60, ~15' LT OF MAINLINE

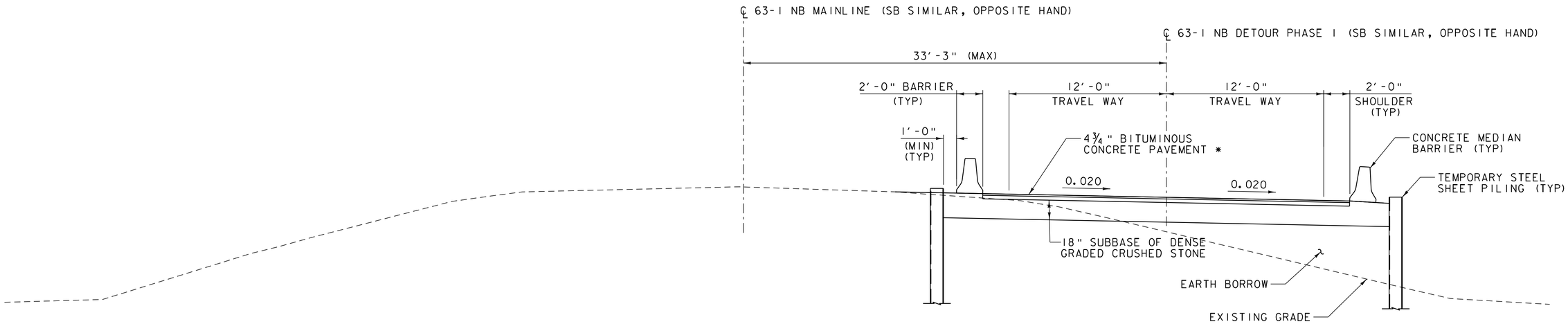


63-1 LANE SHIFT - PHASES 1, 3 AND 5

SCALE 1/4" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 TYP LANE SHIFT SECTIONS (1 OF 2)	SHEET 7 OF 74



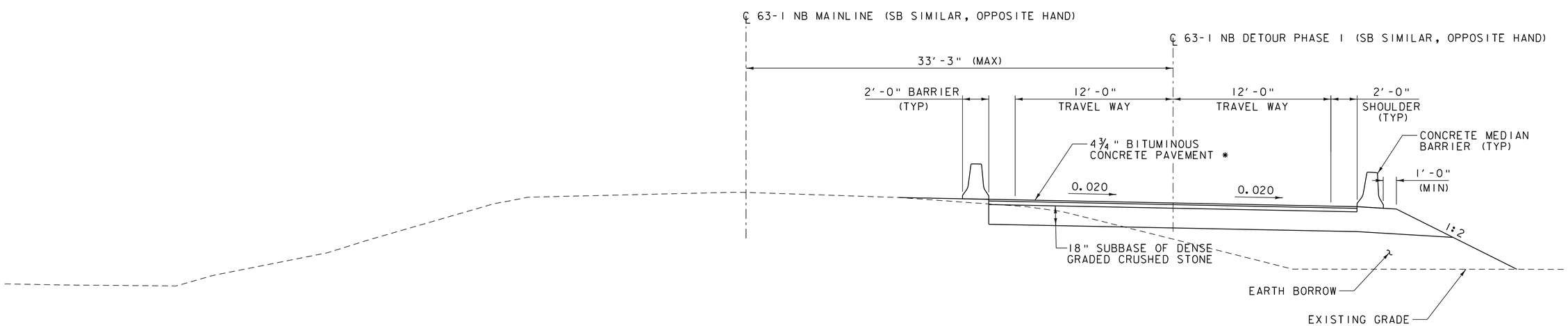
* (1) - 1½" LIFT OF TYPE 1VS OVER
(1) - 3¼" LIFT OF TYPE 11S

63-1 LANE SHIFT WITH SHEETING - PHASES 2 AND 4

SCALE 1"=4" = 1'-0"

NORTHBOUND: SHEETING STA. 1943+26 - 1944+50, ~50' RT OF MAINLINE &
STA. 1943+26 - 1944+50, ~14' RT OF MAINLINE

SOUTHBOUND: SHEETING STA. 1941+99 - 1943+95, ~52' LT OF MAINLINE &
STA. 1942+90 - 1943+60, ~15' LT OF MAINLINE



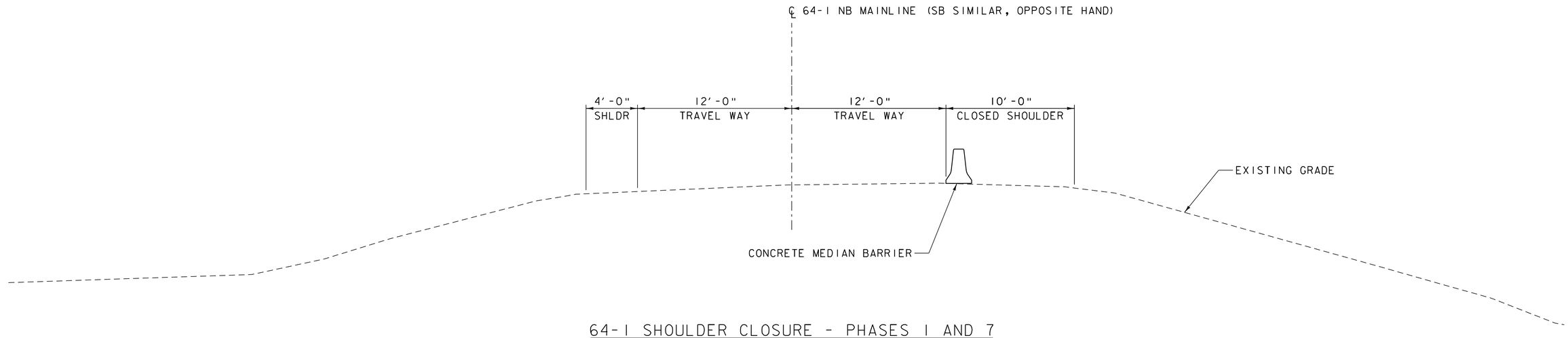
* (1) - 1½" LIFT OF TYPE 1VS OVER
(1) - 3¼" LIFT OF TYPE 11S

63-1 LANE SHIFT - PHASES 2 AND 4

SCALE ¼" = 1'-0"

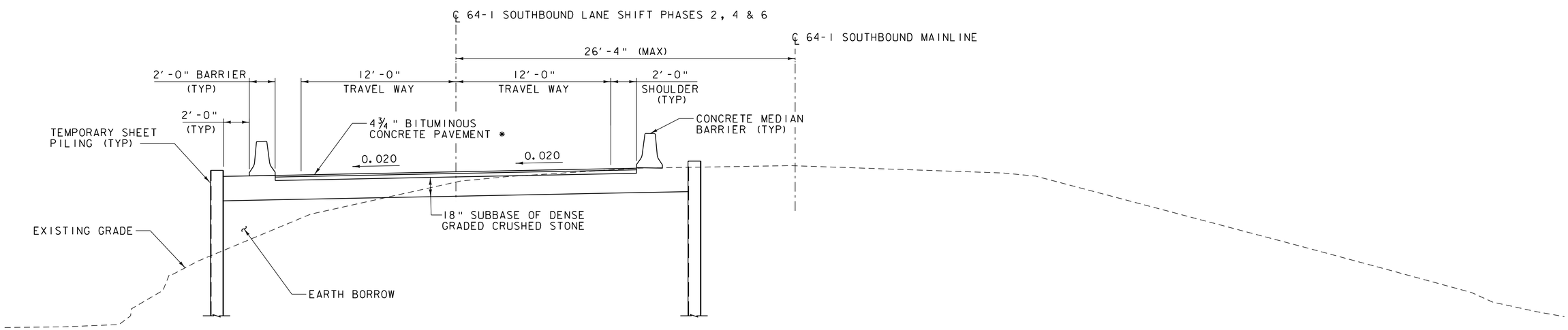
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1TYP LANE SHIFT SECTIONS (2 OF 2)	SHEET 8 OF 74



64-1 SHOULDER CLOSURE - PHASES 1 AND 7

SCALE 1/4" = 1'-0"



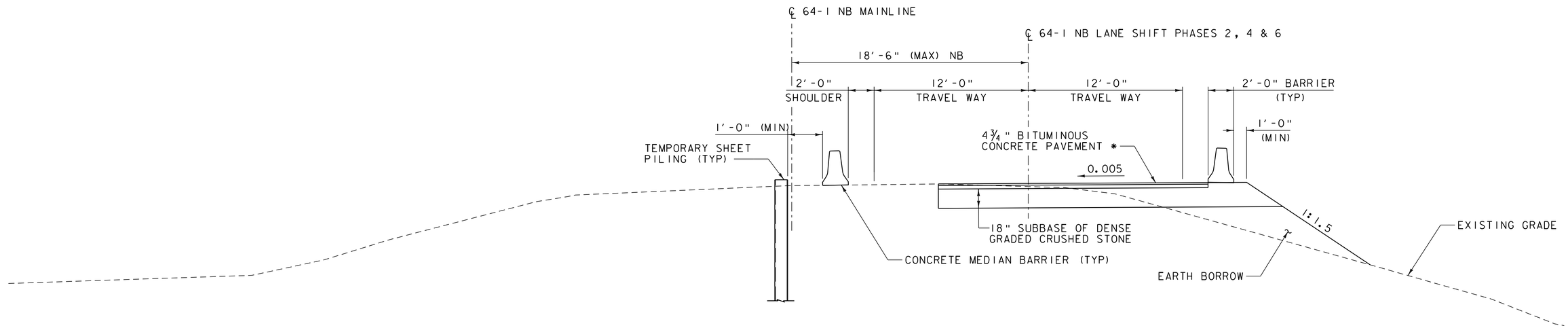
* (1) - 1 1/2" LIFT OF TYPE IVS OVER
(1) - 3 1/4" LIFT OF TYPE IIS

64-1 SOUTHBOUND LANE SHIFT WITH SHEETING - PHASES 2, 4 AND 6

SHEETING STA. 1996+48 - 1998+99, ~45' LT OF MAINLINE &
STA. 1996+82 - 1997+82, ~8' LT OF MAINLINE
SCALE 1/4" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 TYP LANE SHIFT SECTIONS (1 OF 3)	SHEET 9 OF 74

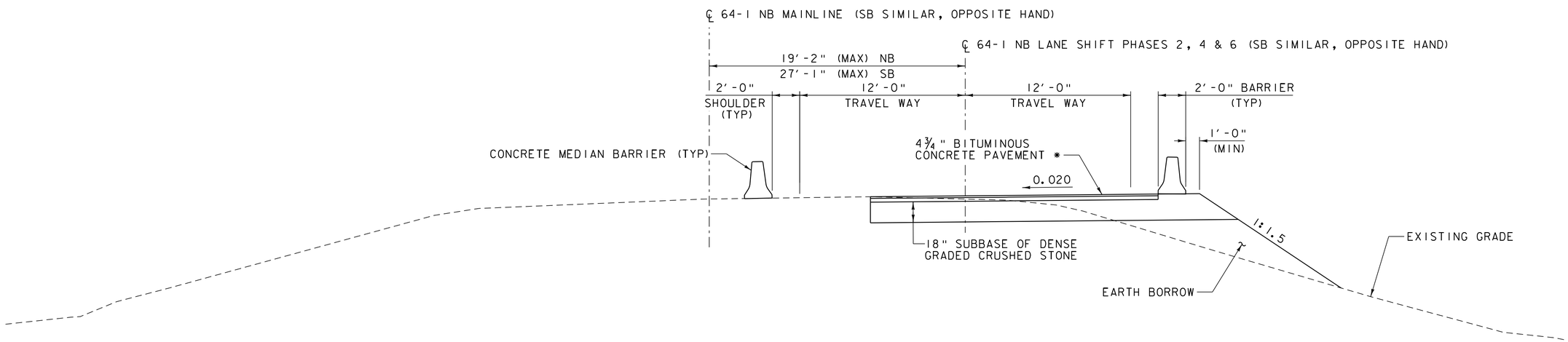


* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

64-1 NORTHBOUND LANE SHIFT WITH SHEETING - PHASES 2, 4 AND 6

SCALE ¼" = 1'-0"

NORTHBOUND: SHEETING STA. 1999+05 - 2000+05, LT OF MAINLINE



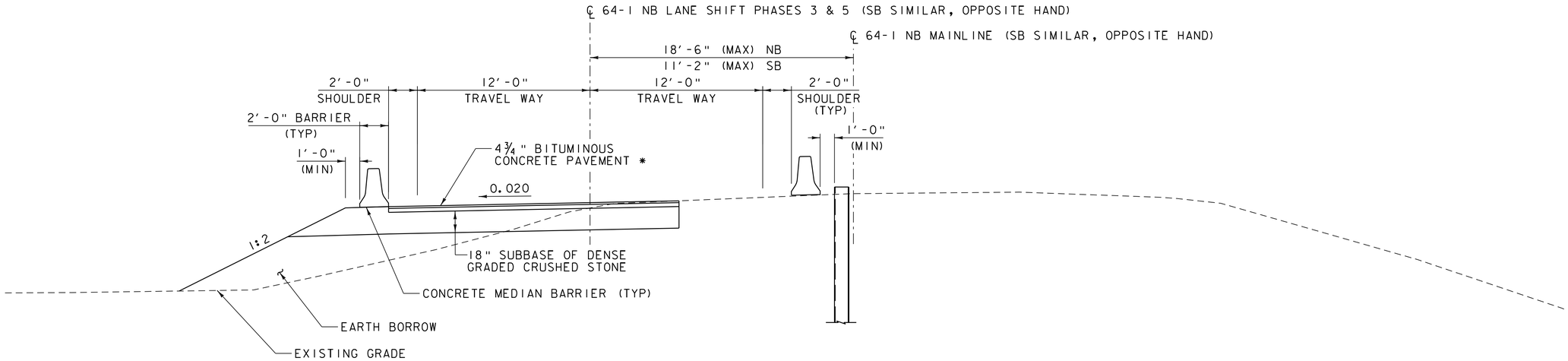
* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

64-1 LANE SHIFT - PHASES 2, 4 AND 6

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1TYP LANE SHIFT SECTIONS (2 OF 3)	SHEET 10 OF 74

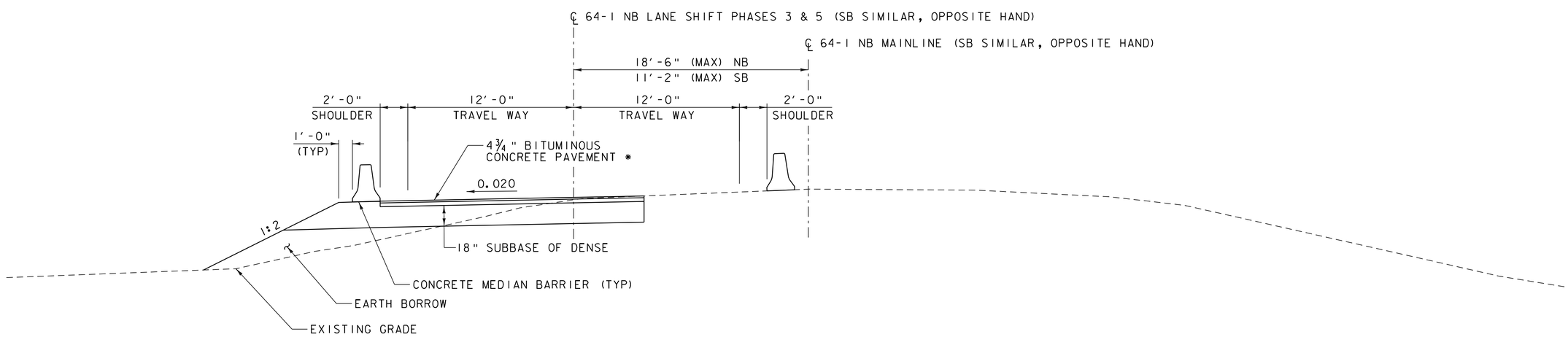


* (1) - 1 1/2" LIFT OF TYPE IVS OVER
(1) - 3 1/4" LIFT OF TYPE IIS

64-1 LANE SHIFT WITH SHEETING - PHASES 3 AND 5

SCALE 1/4" = 1'-0"

NORTHBOUND: SHEETING STA. 1999+05 - 2000+05, LT OF MAINLINE
SOUTHBOUND: SHEETING STA. 1996+82 - 1997+82, ~8' LT OF MAINLINE



* (1) - 1 1/2" LIFT OF TYPE IVS OVER
(1) - 3 1/4" LIFT OF TYPE IIS

64-1 LANE SHIFT - PHASES 3 AND 5

SCALE 1/4" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1TYP LANE SHIFT SECTIONS (3 OF 3)	SHEET 11 OF 74

VHB 57578

PHASE 1:

1. REDUCE MEDIAN SHOULDER TO 2' AND SHIFT TRAFFIC TO MEDIAN.
2. INSTALL TEMPORARY TRAFFIC BARRIER.
3. DRIVE TEMPORARY STEEL SHEET PILING AT EXISTING CULVERT.
4. INSTALL TEMPORARY DIVERSION CULVERT.
5. CONSTRUCT LANE SHIFT EMBANKMENT AND PAVE LANE SHIFT.

PHASE 2:

1. MOVE TRAFFIC TO TEMPORARY LANE SHIFT CONSTRUCTED UNDER PHASE 1.
2. INSTALL REMAINING PORTION OF TEMPORARY DIVERSION CULVERT.
3. DIVERT CHANNEL TO TEMPORARY DIVERSION CULVERT.
4. REMOVE EXISTING CULVERT.
5. INSTALL PROPOSED CONCRETE BOX CULVERT.
6. BACK FILL AND RE-PAVE MAINLINE WITH TEMPORARY PAVEMENT.

PHASE 3:

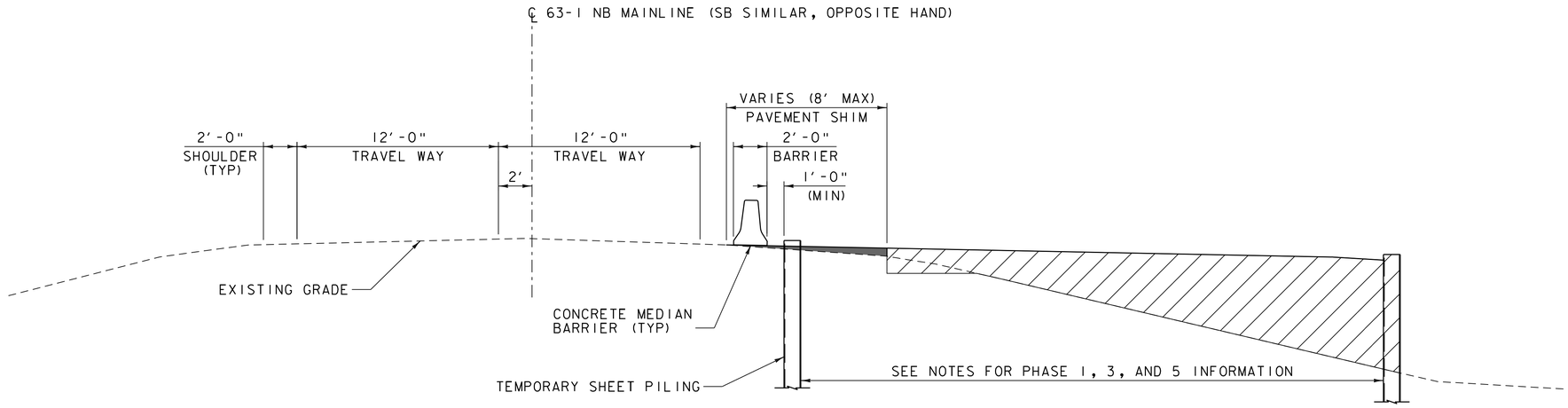
1. MOVE TRAFFIC TO MAINLINE WITH 2' SHIFT TOWARD MEDIAN.
2. REMOVE EXISTING CULVERT.
3. INSTALL PROPOSED CONCRETE BOX CULVERT.
4. RETURN CHANNEL TO PROPOSED CONCRETE BOX CULVERT.
5. REMOVE TEMPORARY DIVERSION CULVERT AND BACK FILL AND RE-PAVE LANE SHIFT.

PHASE 4:

1. MOVE TRAFFIC TO TEMPORARY LANE SHIFT CONSTRUCTED UNDER PHASE 1.
2. REMOVE TEMPORARY DIVERSION CULVERT, BACK FILL, AND INSTALL SAND BORROW AND SUBBASE.
3. REMOVE TEMPORARY STEEL SHEET PILING.
4. PAVE 3½" BASE LIFT.

PHASE 5:

1. MOVE TRAFFIC TO MAINLINE WITH 2' SHIFT TOWARD MEDIAN.
2. REMOVE LANE SHIFT EMBANKMENT AND RESTORE SIDE SLOPES.
3. PAVE REMAINING LIFTS AT NIGHT UTILIZING SINGLE LANE CLOSURES.



63-1 LANE SHIFT WITH SHEETING - PHASES 1, 3 AND 5

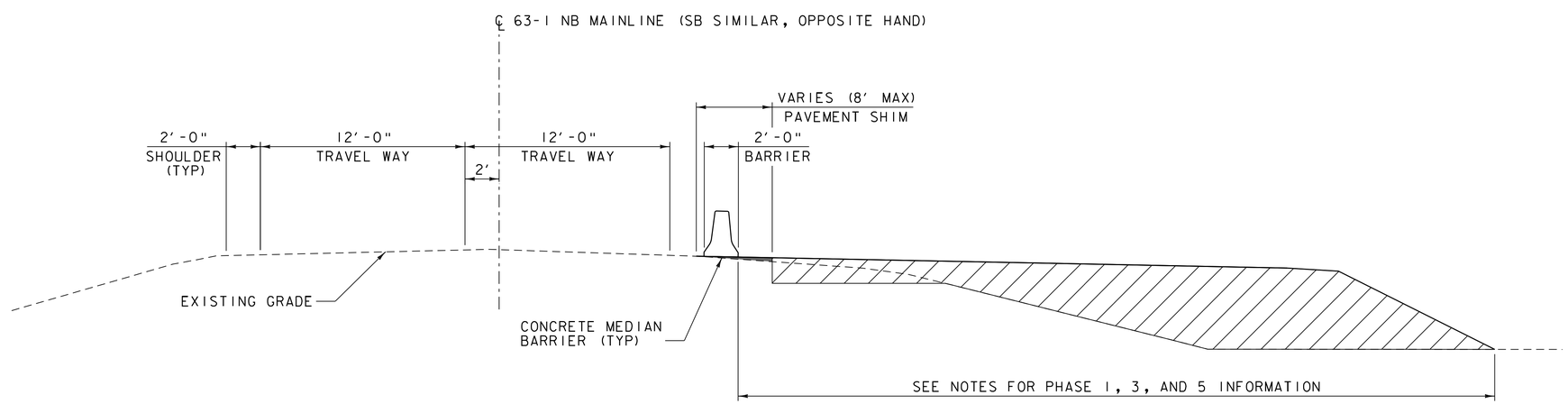
SCALE ¼" = 1'-0"

NORTHBOUND: SHEETING STA. 1943+26 - 1944+50, ~15' RT OF MAINLINE
SOUTHBOUND: SHEETING STA. 1942+90 - 1943+60, ~15' LT OF MAINLINE

LEGEND

= AREA UNDER CONSTRUCTION

= PAVEMENT SHIM

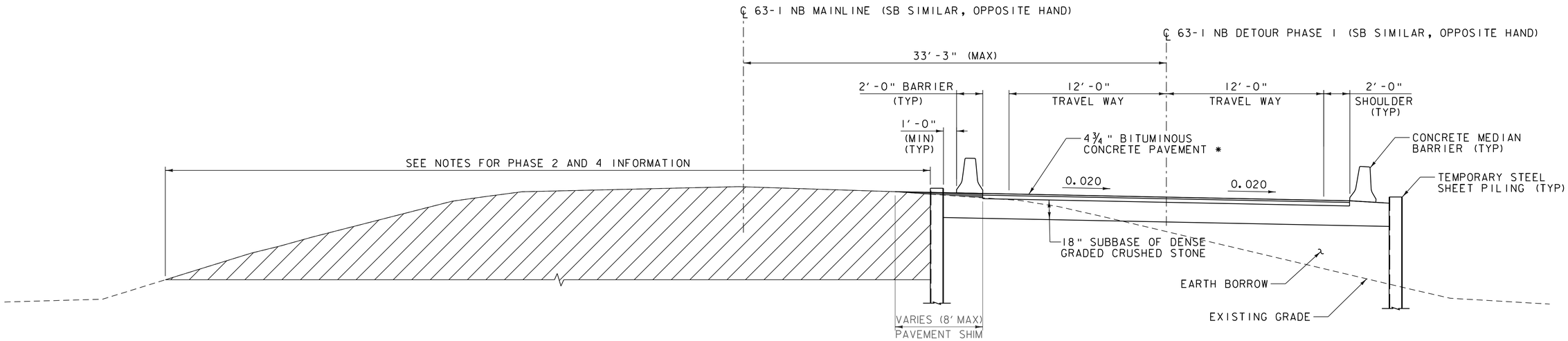


63-1 LANE SHIFT - PHASES 1, 3 AND 5

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 TRAFFIC CONTROL SHEET (1 OF 2)	SHEET 12 OF 74



* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

63-1 LANE SHIFT WITH SHEETING - PHASES 2 AND 4

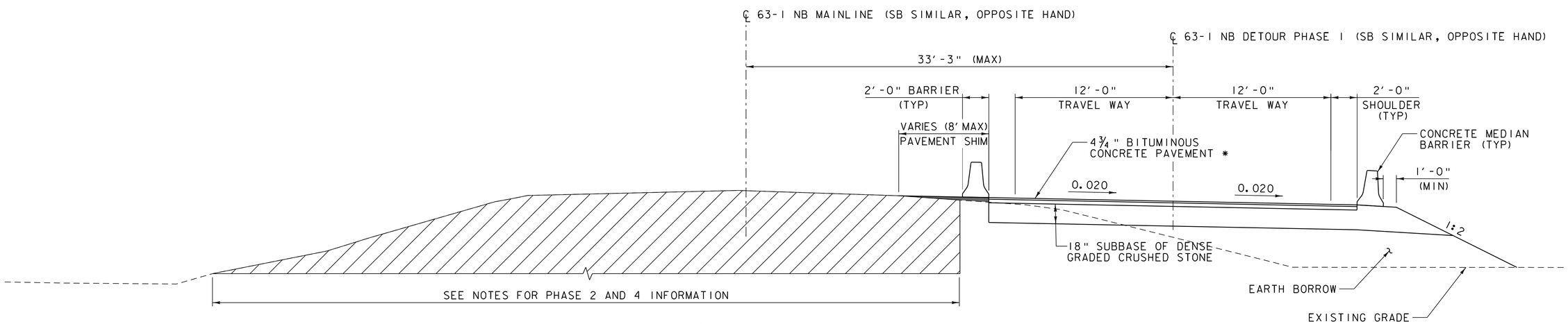
SCALE 1"=4" = 1'-0"

NORTHBOUND: SHEETING STA. 1943+26 - 1944+50, ~50' RT OF MAINLINE &
STA. 1943+26 - 1944+50, ~14' RT OF MAINLINE

SOUTHBOUND: SHEETING STA. 1941+99 - 1943+95, ~52' LT OF MAINLINE &
STA. 1942+90 - 1943+60, ~15' LT OF MAINLINE

LEGEND

- = AREA UNDER CONSTRUCTION
- = PAVEMENT SHIM



* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

63-1 LANE SHIFT - PHASES 2 AND 4

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 TRAFFIC CONTROL SHEET (2 OF 2)	SHEET 13 OF 74

PHASE 1:

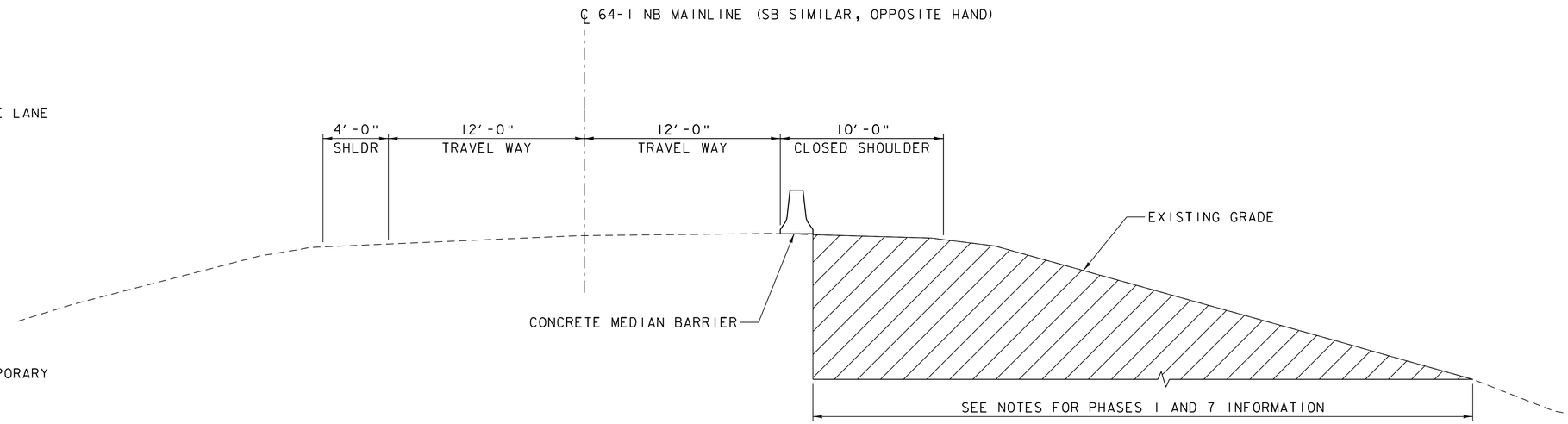
1. REDUCE MEDIAN SHOULDER TO 2' AND SHIFT TRAFFIC TO MEDIAN.
2. INSTALL TEMPORARY TRAFFIC BARRIER.
3. DRIVE TEMPORARY STEEL SHEET PILING AT EXISTING CULVERT.
4. INSTALL TEMPORARY DIVERSION CULVERT.
5. CONSTRUCT LANE SHIFT EMBANKMENT AND PAVE LANE SHIFT.

PHASE 2:

1. MOVE TRAFFIC TO TEMPORARY LANE SHIFT CONSTRUCTED UNDER PHASE 1.
2. INSTALL REMAINING PORTION OF TEMPORARY DIVERSION CULVERT.
3. DIVERT CHANNEL TO TEMPORARY DIVERSION CULVERT.
4. REMOVE EXISTING CULVERT.
5. INSTALL PROPOSED CONCRETE BOX CULVERT.
6. BACK FILL AND RE-PAVE MAINLINE WITH TEMPORARY PAVEMENT.

PHASE 3:

1. MOVE TRAFFIC TO MAINLINE WITH 2' SHIFT TOWARD MEDIAN.
2. REMOVE EXISTING CULVERT.
3. INSTALL PROPOSED CONCRETE BOX CULVERT.
4. RETURN CHANNEL TO PROPOSED CONCRETE BOX CULVERT.
5. REMOVE TEMPORARY DIVERSION CULVERT AND BACK FILL AND RE-PAVE LANE SHIFT.

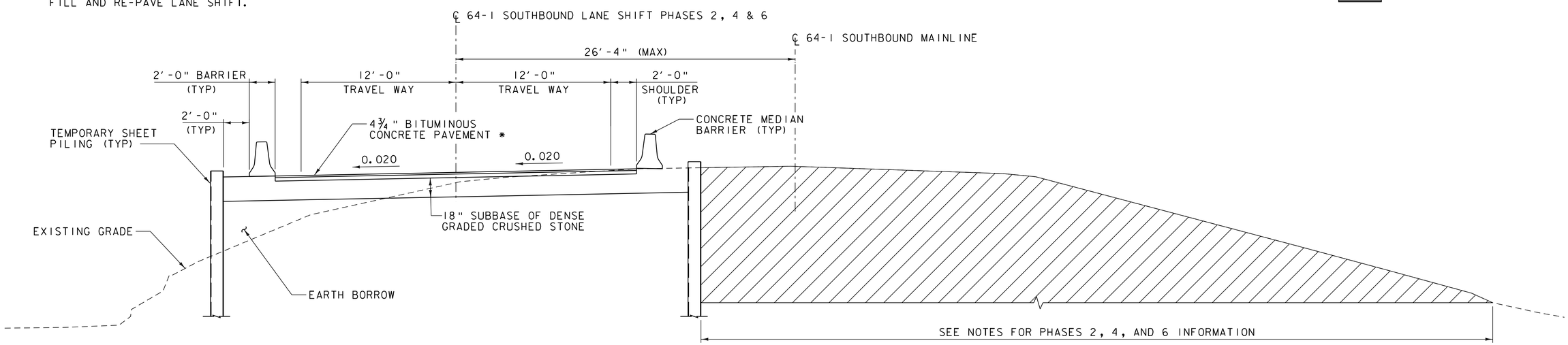


64-1 SHOULDER CLOSURE - PHASES 1 AND 7

SCALE 1/4" = 1'-0"

LEGEND

- = AREA UNDER CONSTRUCTION
- = PAVEMENT SHIM



* (1) - 1 1/2" LIFT OF TYPE IVS OVER
(1) - 3 1/4" LIFT OF TYPE IIS

64-1 SOUTHBOUND LANE SHIFT WITH SHEETING - PHASES 2, 4 AND 6

SHEETING STA. 1996+48 - 1998+99, ~45' LT OF MAINLINE &
STA. 1996+82 - 1997+82, ~8' LT OF MAINLINE
SCALE 1/4" = 1'-0"

Vanasse Hangen Brustlin, Inc.

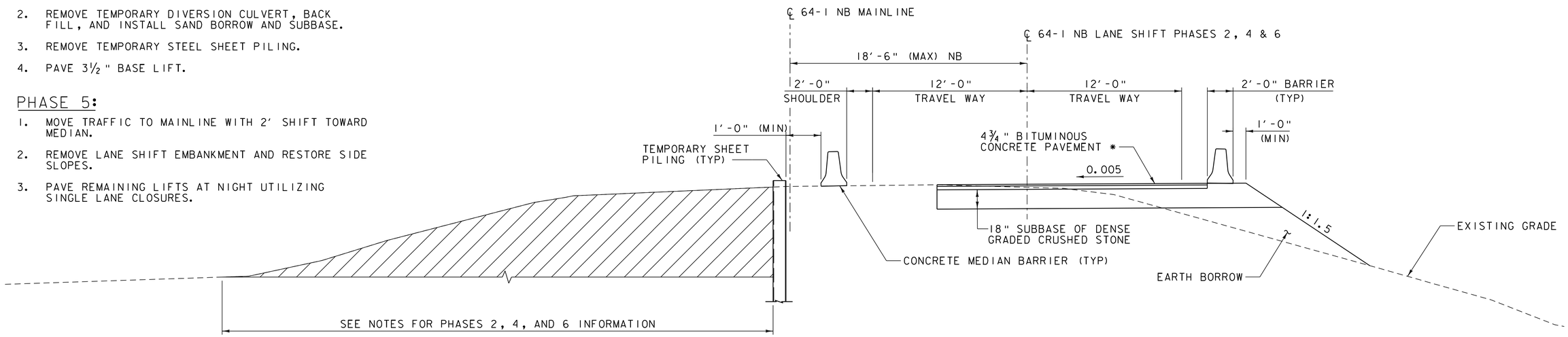
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 TRAFFIC CONTROL SHEET (1 OF 3)	SHEET 14 OF 74

PHASE 4:

1. MOVE TRAFFIC TO TEMPORARY LANE SHIFT CONSTRUCTED UNDER PHASE 1.
2. REMOVE TEMPORARY DIVERSION CULVERT, BACK FILL, AND INSTALL SAND BORROW AND SUBBASE.
3. REMOVE TEMPORARY STEEL SHEET PILING.
4. PAVE 3½" BASE LIFT.

PHASE 5:

1. MOVE TRAFFIC TO MAINLINE WITH 2' SHIFT TOWARD MEDIAN.
2. REMOVE LANE SHIFT EMBANKMENT AND RESTORE SIDE SLOPES.
3. PAVE REMAINING LIFTS AT NIGHT UTILIZING SINGLE LANE CLOSURES.



* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

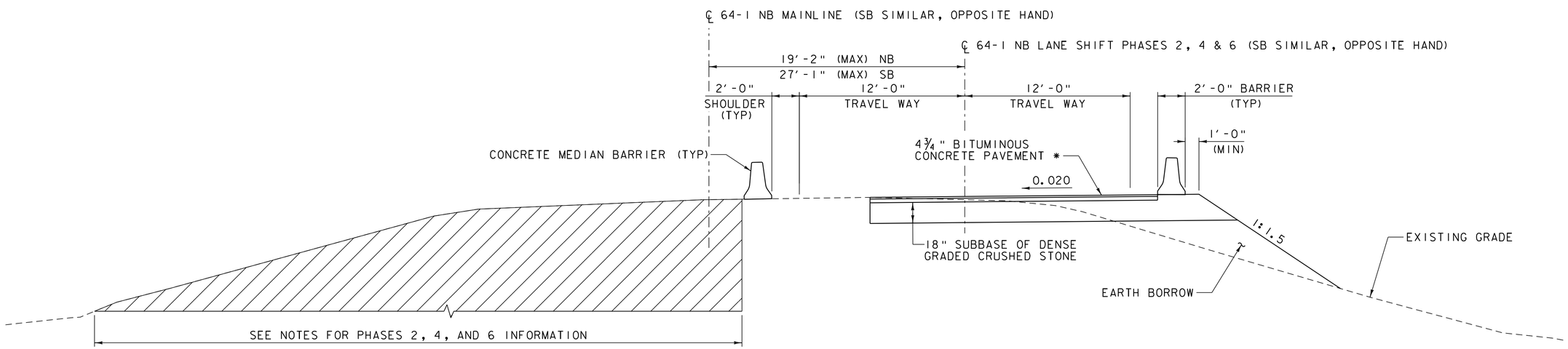
64-1 NORTHBOUND LANE SHIFT WITH SHEETING - PHASES 2, 4 AND 6

SCALE ¼" = 1'-0"

NORTHBOUND: SHEETING STA. 1999+05 - 2000+05, LT OF MAINLINE

LEGEND

- = AREA UNDER CONSTRUCTION
- = PAVEMENT SHIM



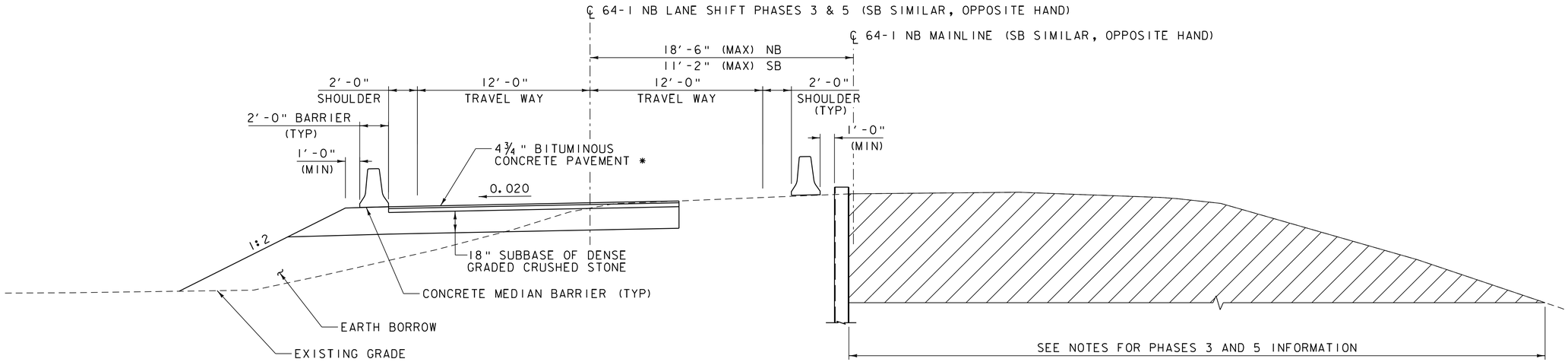
* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

64-1 LANE SHIFT - PHASES 2, 4 AND 6

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 TRAFFIC CONTROL SHEET (2 OF 3)	SHEET 15 OF 74



* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

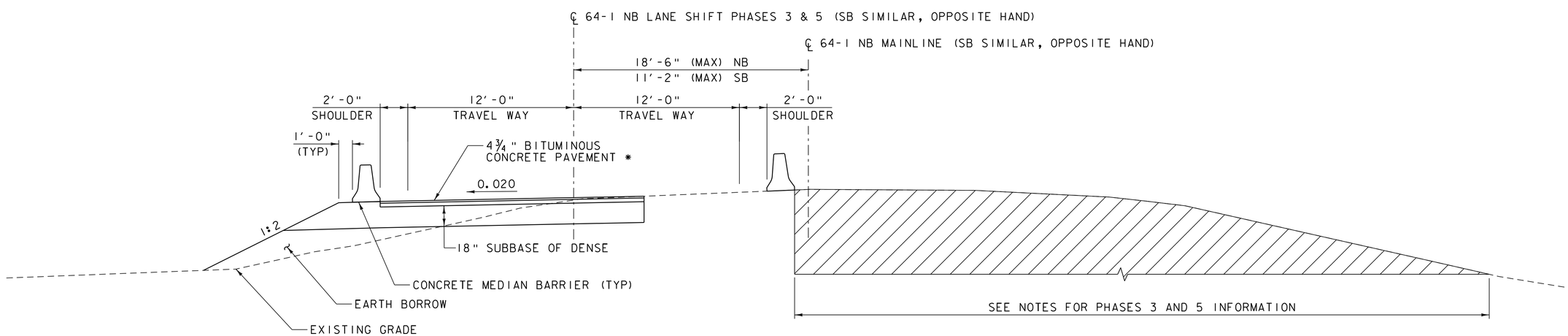
64-I LANE SHIFT WITH SHEETING - PHASES 3 AND 5

SCALE ¼" = 1'-0"

NORTHBOUND: SHEETING STA. 1999+05 - 2000+05, LT OF MAINLINE
SOUTHBOUND: SHEETING STA. 1996+82 - 1997+82, ~8' LT OF MAINLINE

LEGEND

- = AREA UNDER CONSTRUCTION
- = PAVEMENT SHIM



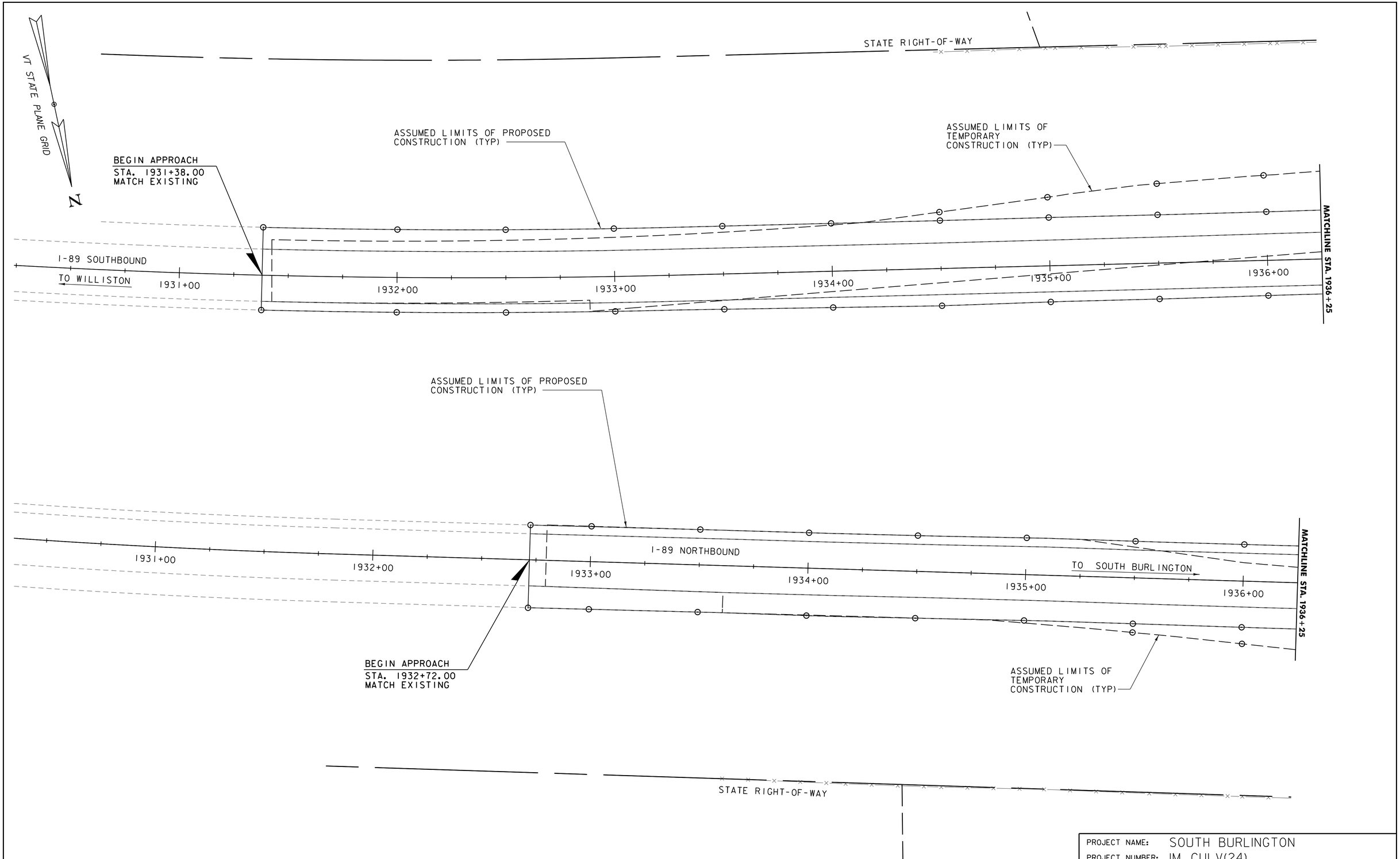
* (1) - 1½" LIFT OF TYPE IVS OVER
(1) - 3¼" LIFT OF TYPE IIS

64-I LANE SHIFT - PHASES 3 AND 5

SCALE ¼" = 1'-0"

Vanasse Hangen Brustlin, Inc.

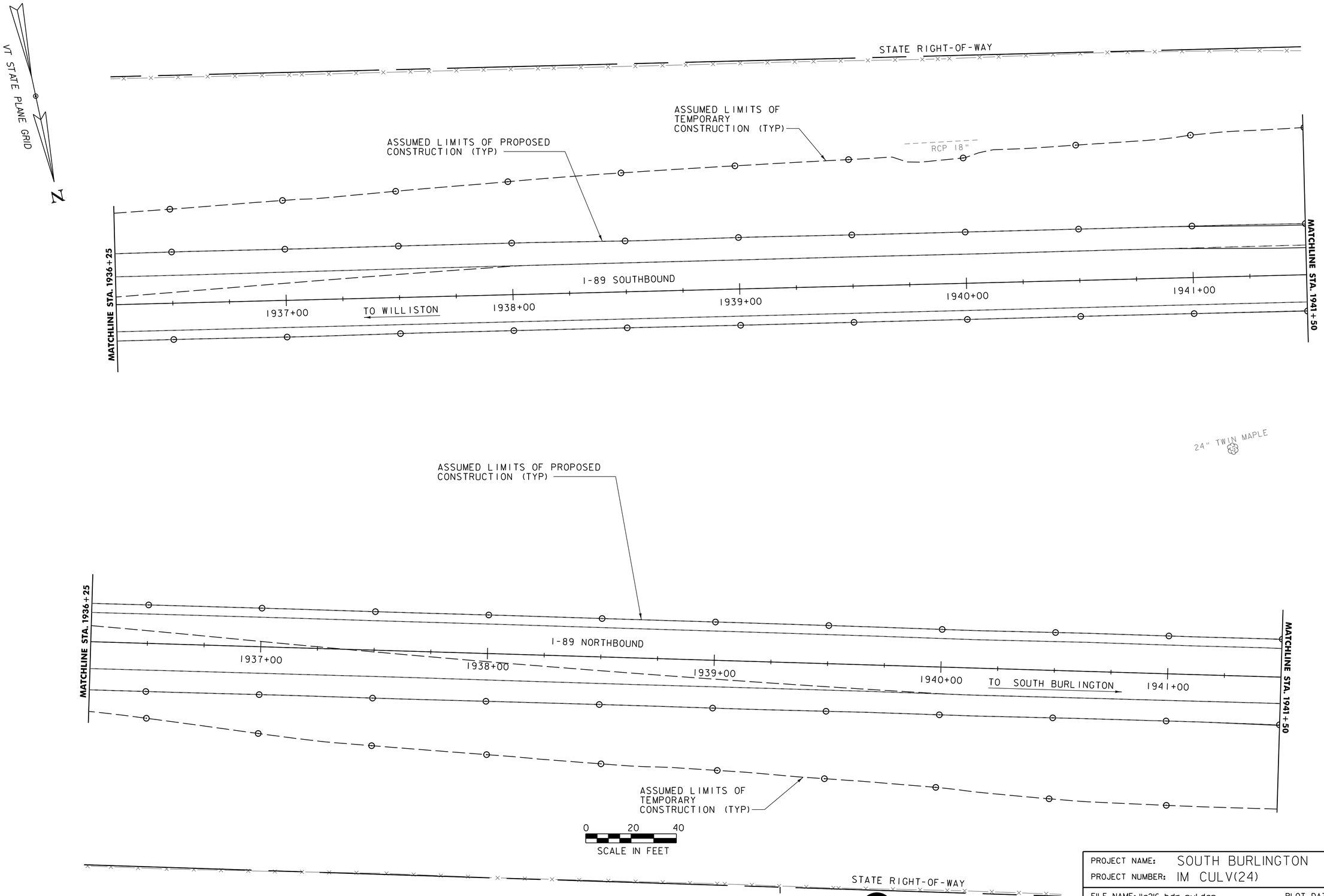
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_typ.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-I TRAFFIC CONTROL SHEET (3 OF 3)	SHEET 16 OF 74



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1 LAYOUT SHEET (1 OF 5)	SHEET 17 OF 74

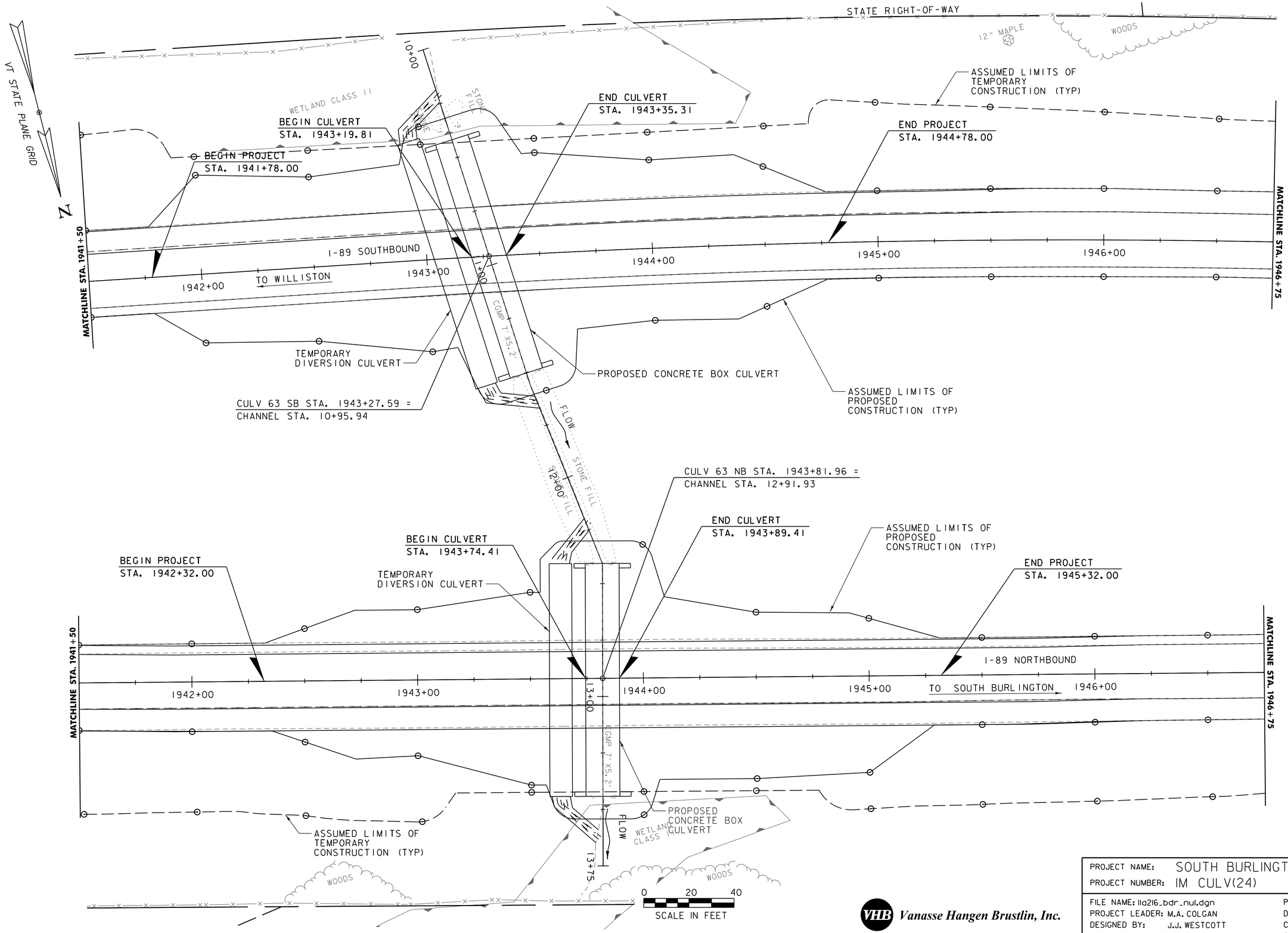
VHB 57578



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LAYOUT SHEET (2 OF 5)	SHEET 18 OF 74

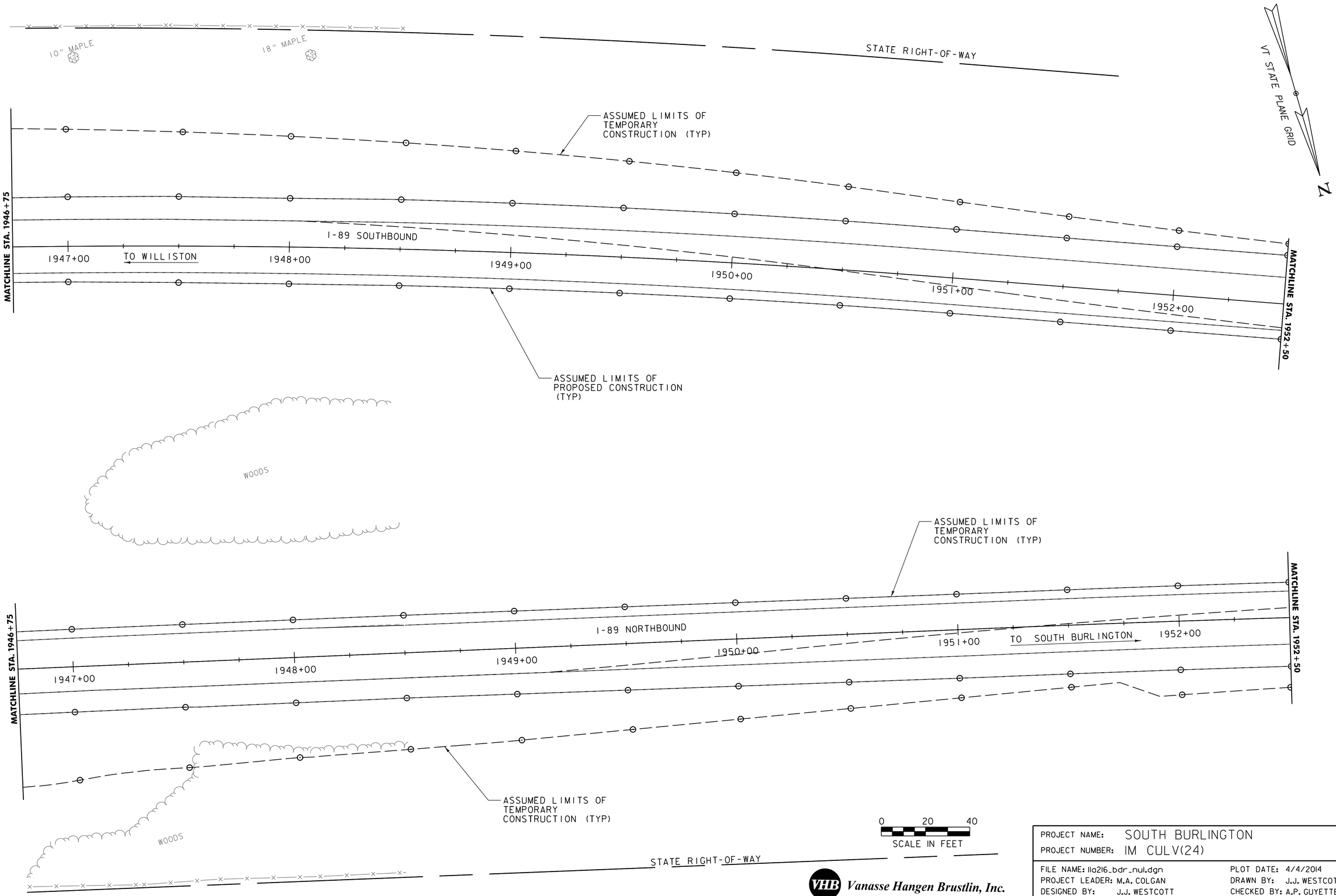
VHB 57578



Vanasse Hangen Brustlin, Inc.

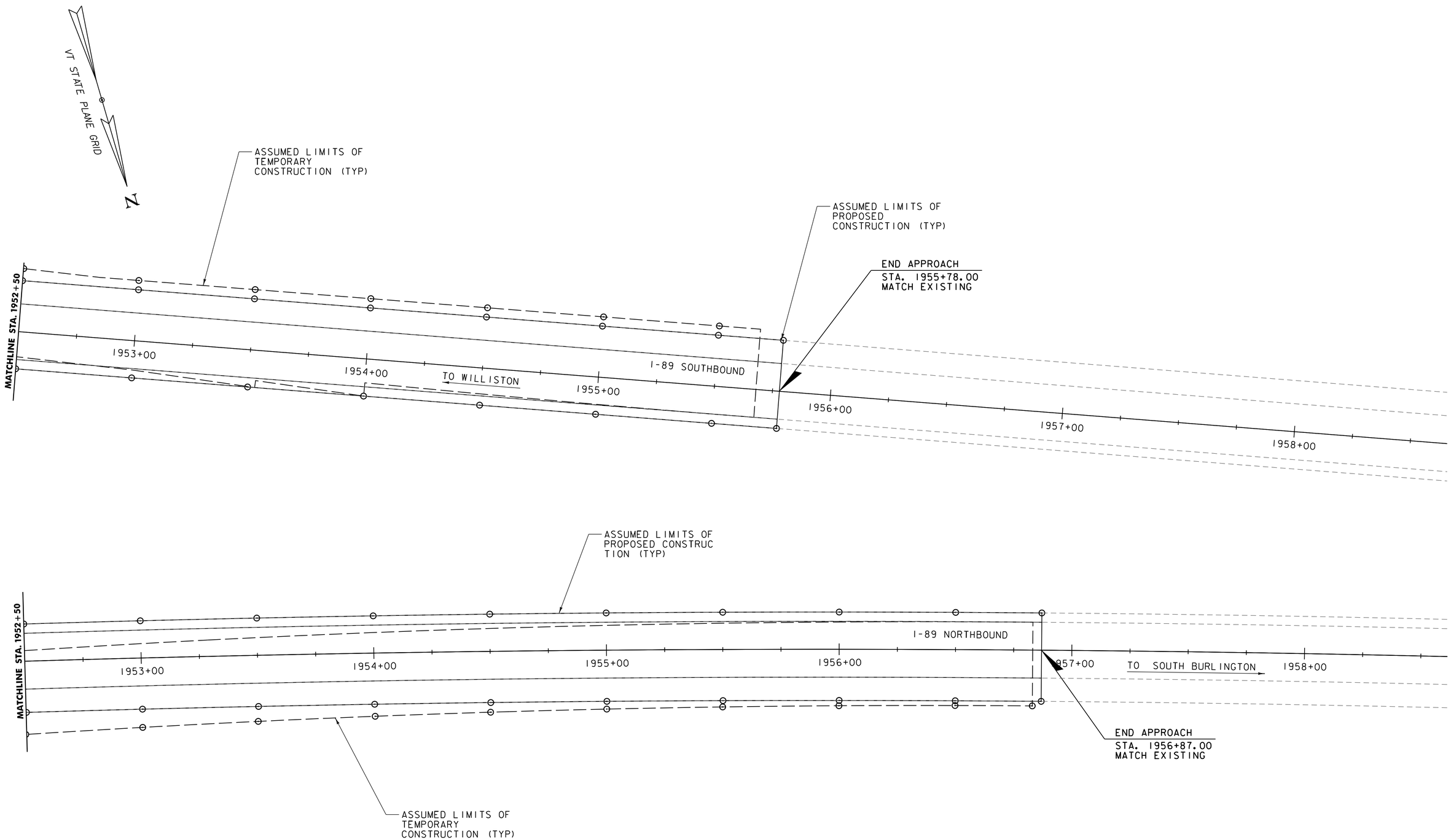
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LAYOUT SHEET (3 OF 5)	SHEET 19 OF 74

VHB 57578



PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LAYOUT SHEET (4 OF 5)	SHEET 20 OF 74

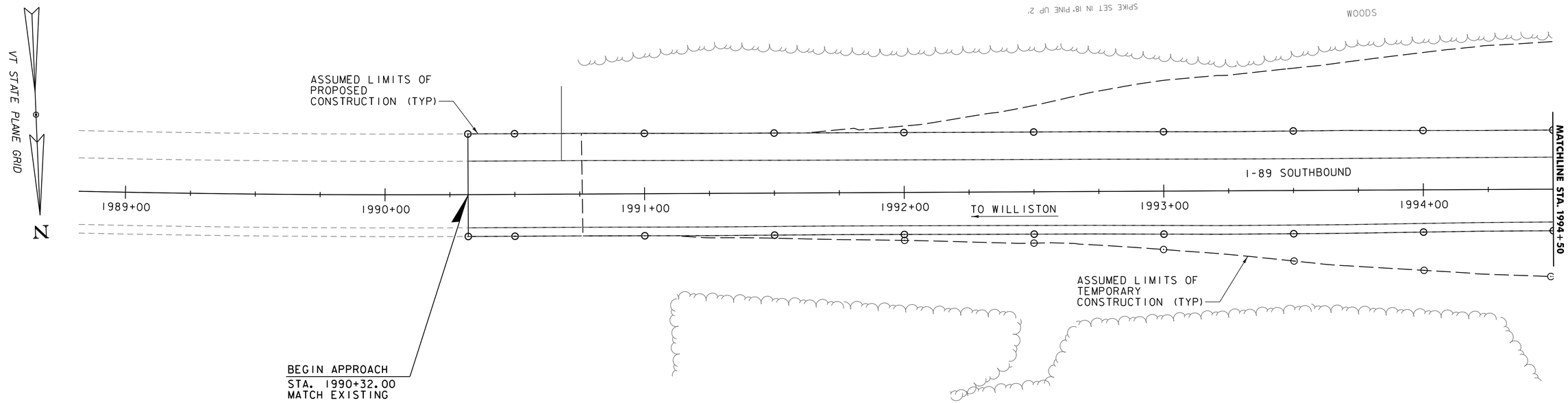
VHB 57578

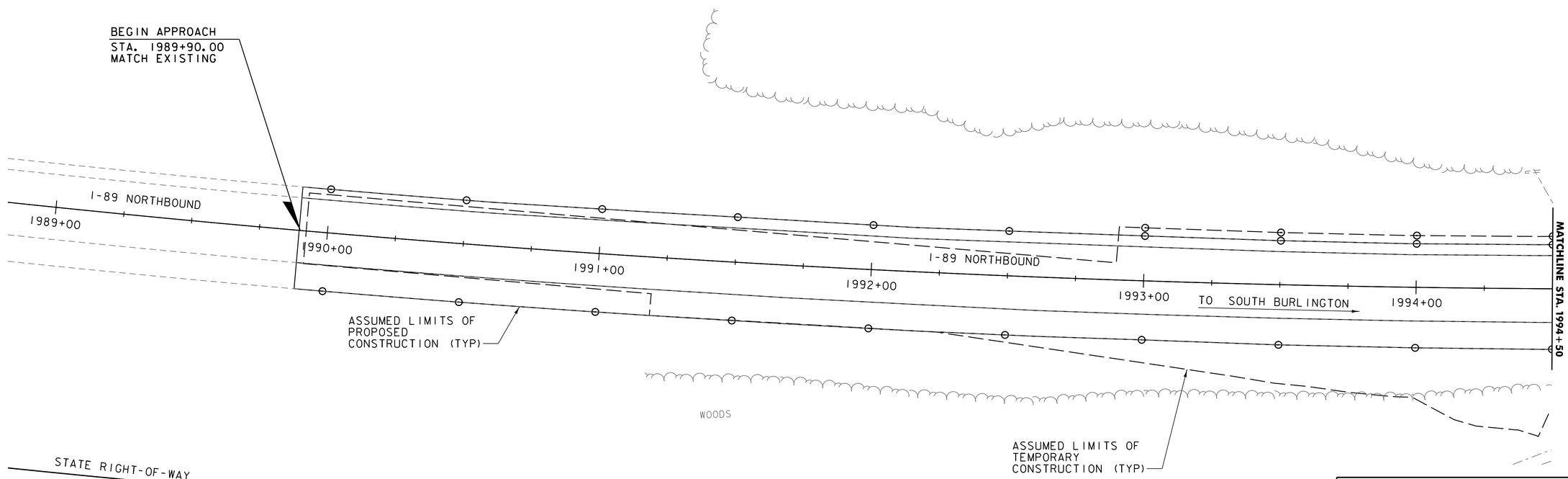


VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: lla216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J.WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LAYOUT SHEET (5 OF 5)	SHEET 21 OF 74

VHB 57578

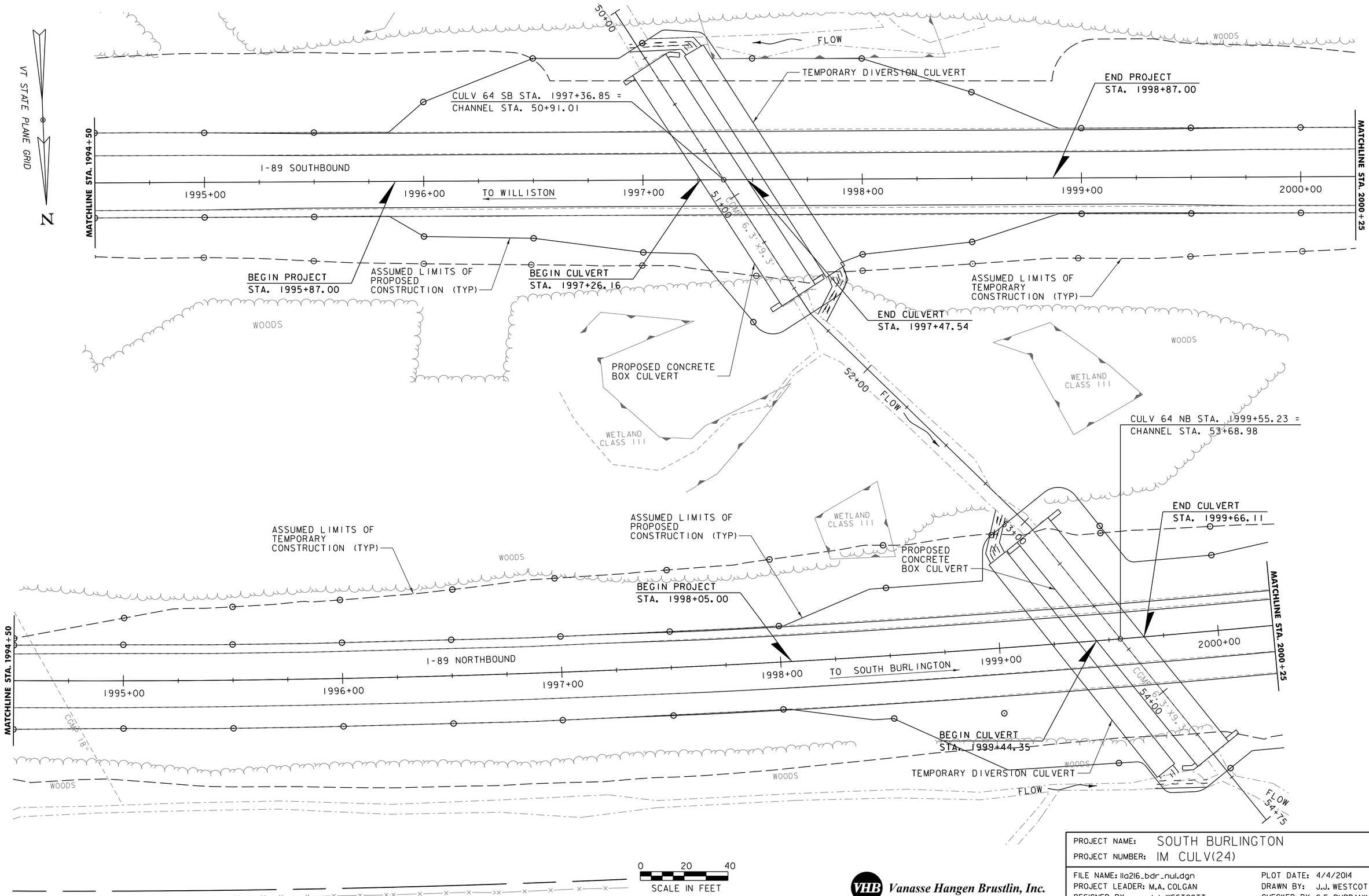




Vanasse Hangen Brustlin, Inc.

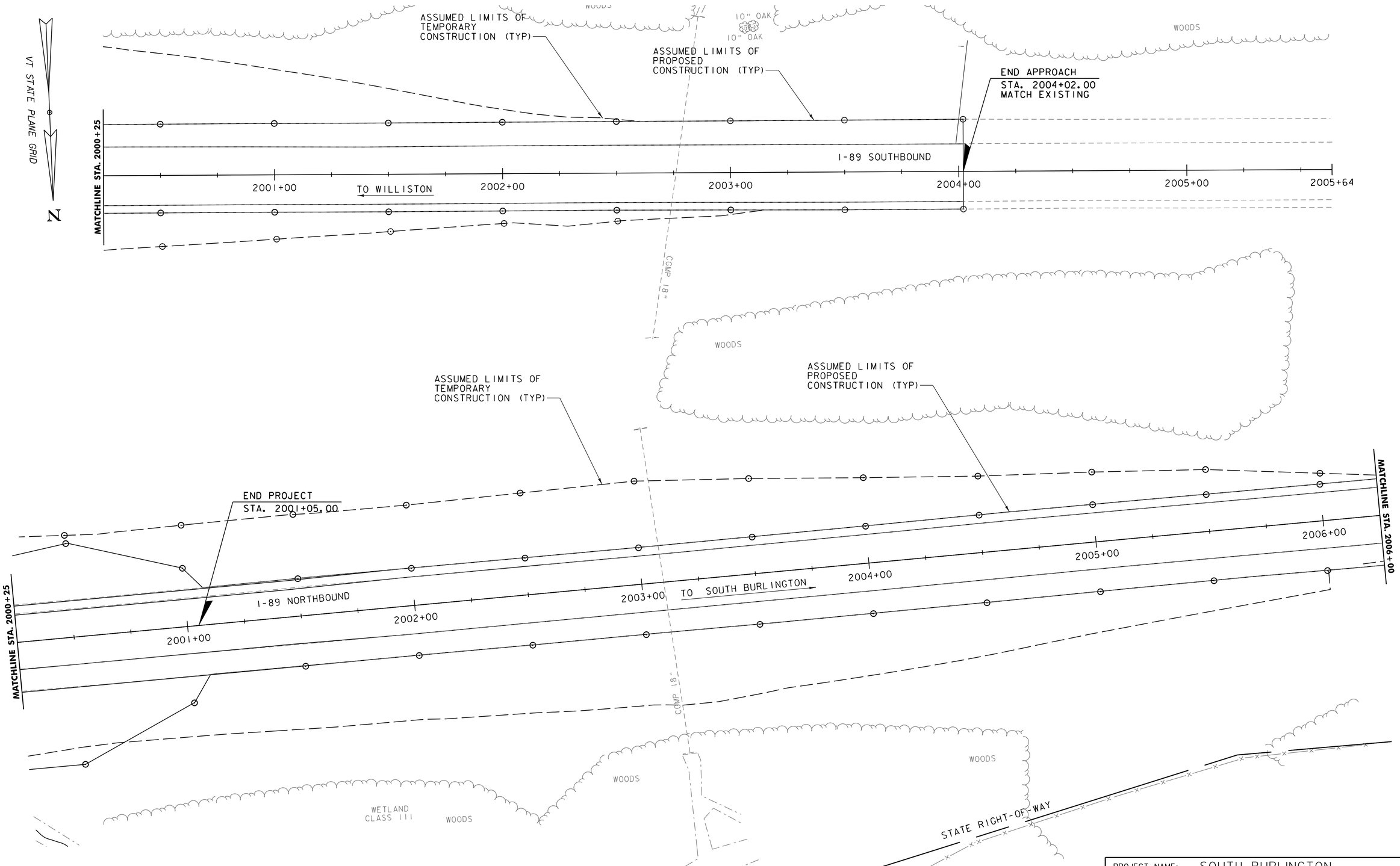
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 LAYOUT SHEET (1 OF 4)	SHEET 22 OF 74

VHB 57578



PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: lla216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-ILAYOUT SHEET (2 OF 4)	SHEET 23 OF 74

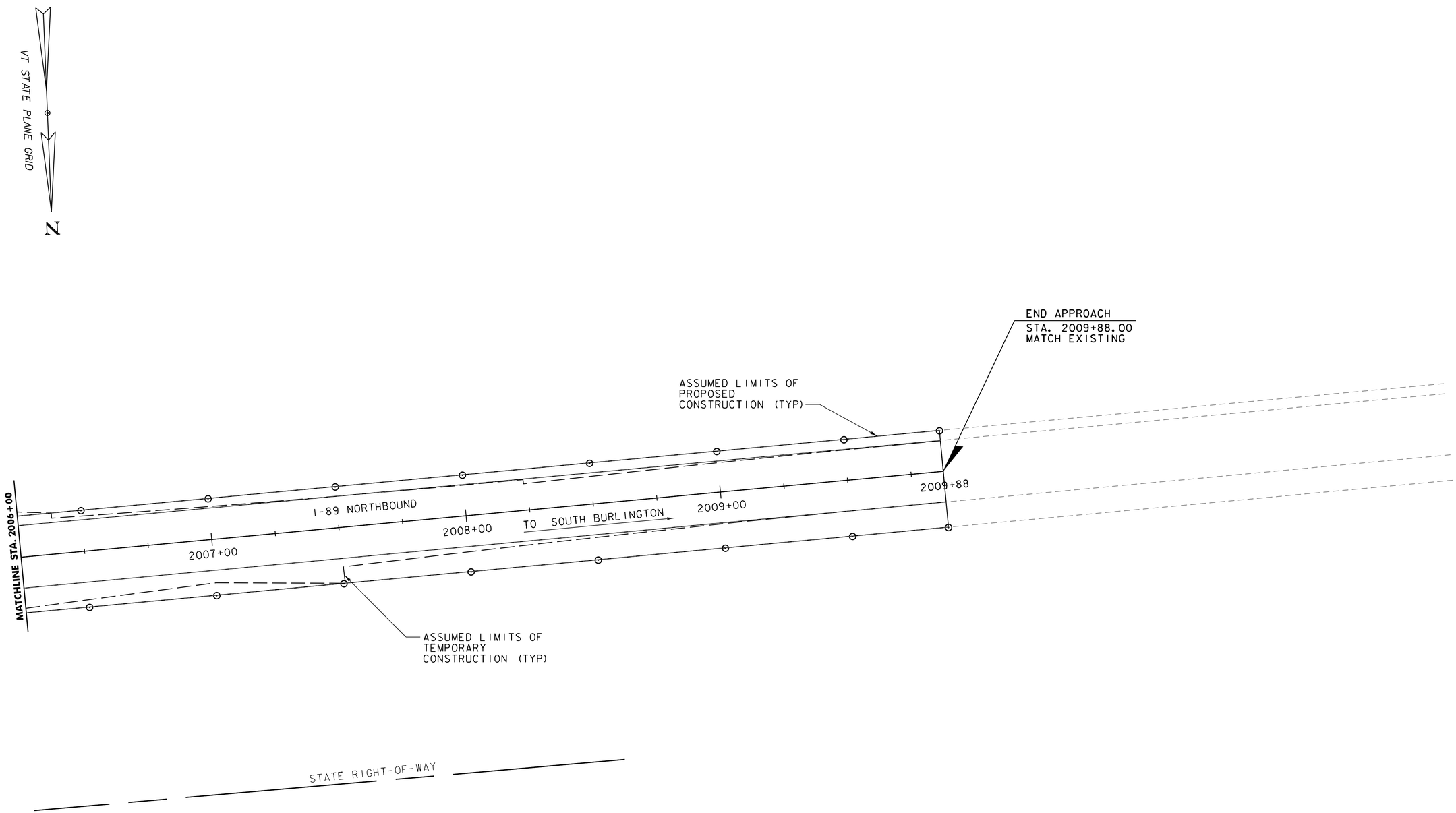
VHB 57578



VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: lla216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LAYOUT SHEET (3 OF 4)	SHEET 24 OF 74

VHB 57578

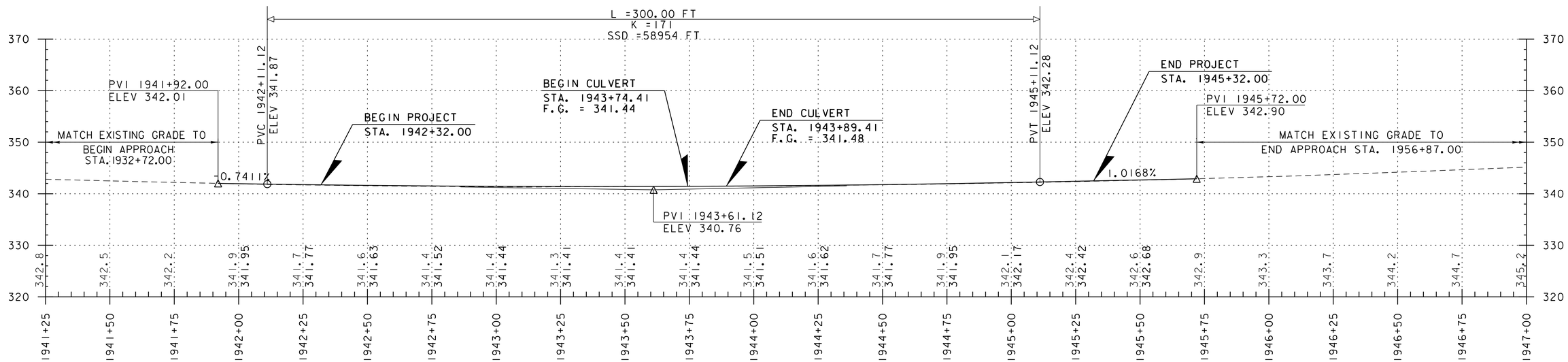


0 20 40
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_nul.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LAYOUT SHEET (4 OF 4)	SHEET 25 OF 74

VHB 57578



CULVERT 63 NORTHBOUND PROFILE

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

NOTE:

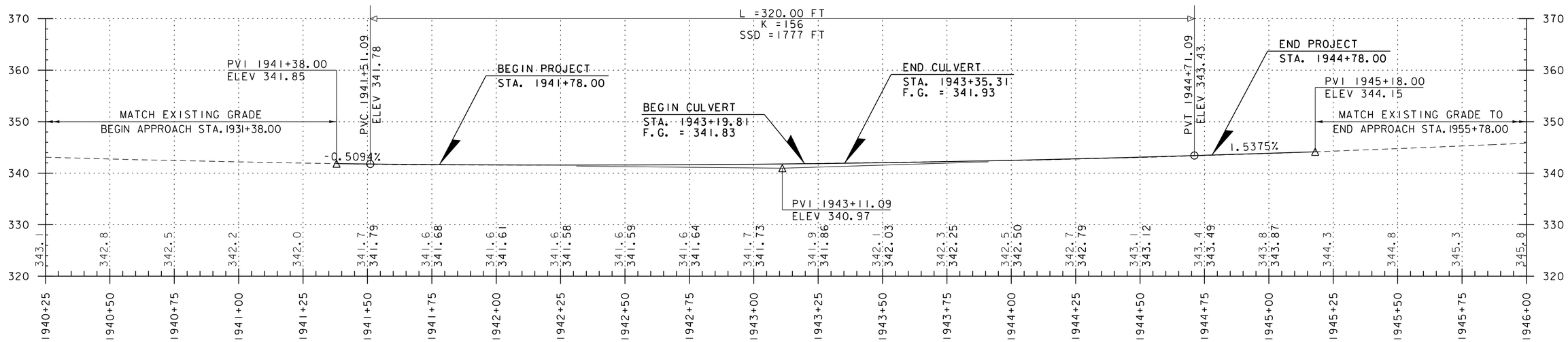
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GRADE ALONG ℄

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63pro.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND MAINLINE PROFILE	SHEET 26 OF 74

VHB 57578



CULVERT 63 SOUTHBOUND PROFILE

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

NOTE:

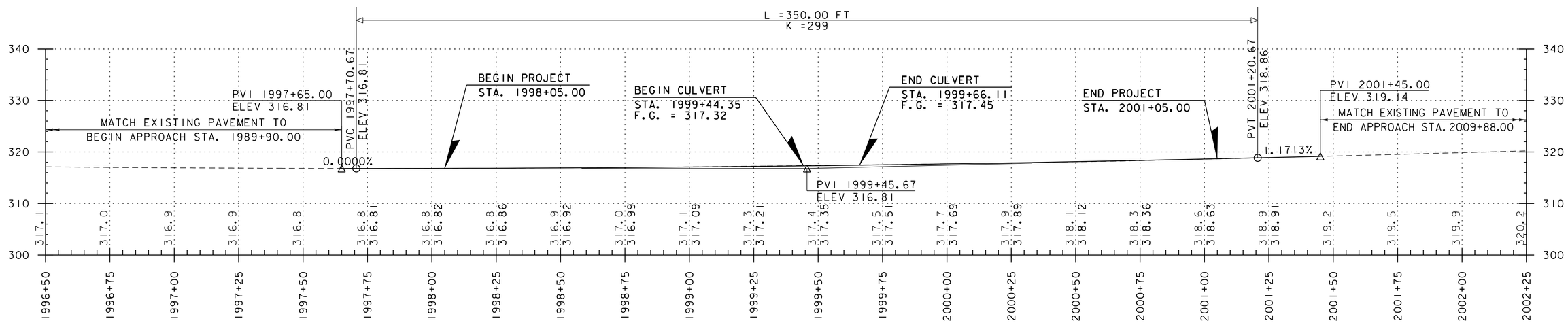
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GRADE ALONG ℄

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63pro.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
63-1 SOUTHBOUND MAINLINE PROFILE	SHEET 27 OF 74

VHB 57578



CULVERT 64 NORTHBOUND PROFILE

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

NOTE:

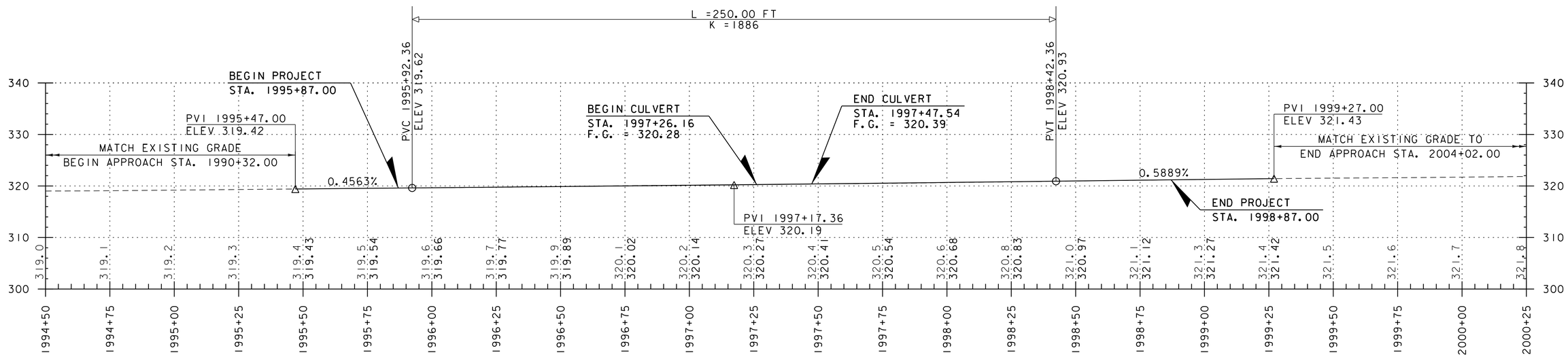
GRADES SHOWN TO THE NEAREST
TENTH ARE EXISTING GRADE ALONG ℄

GRADES SHOWN TO THE NEAREST
HUNDREDTH ARE FINISH GRADE ALONG ℄

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64pro.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
64-I NORTHBOUND MAINLINE PROFILE	SHEET 28 OF 74

VHB 57578



CULVERT 64 SOUTHBOUND PROFILE

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

NOTE:

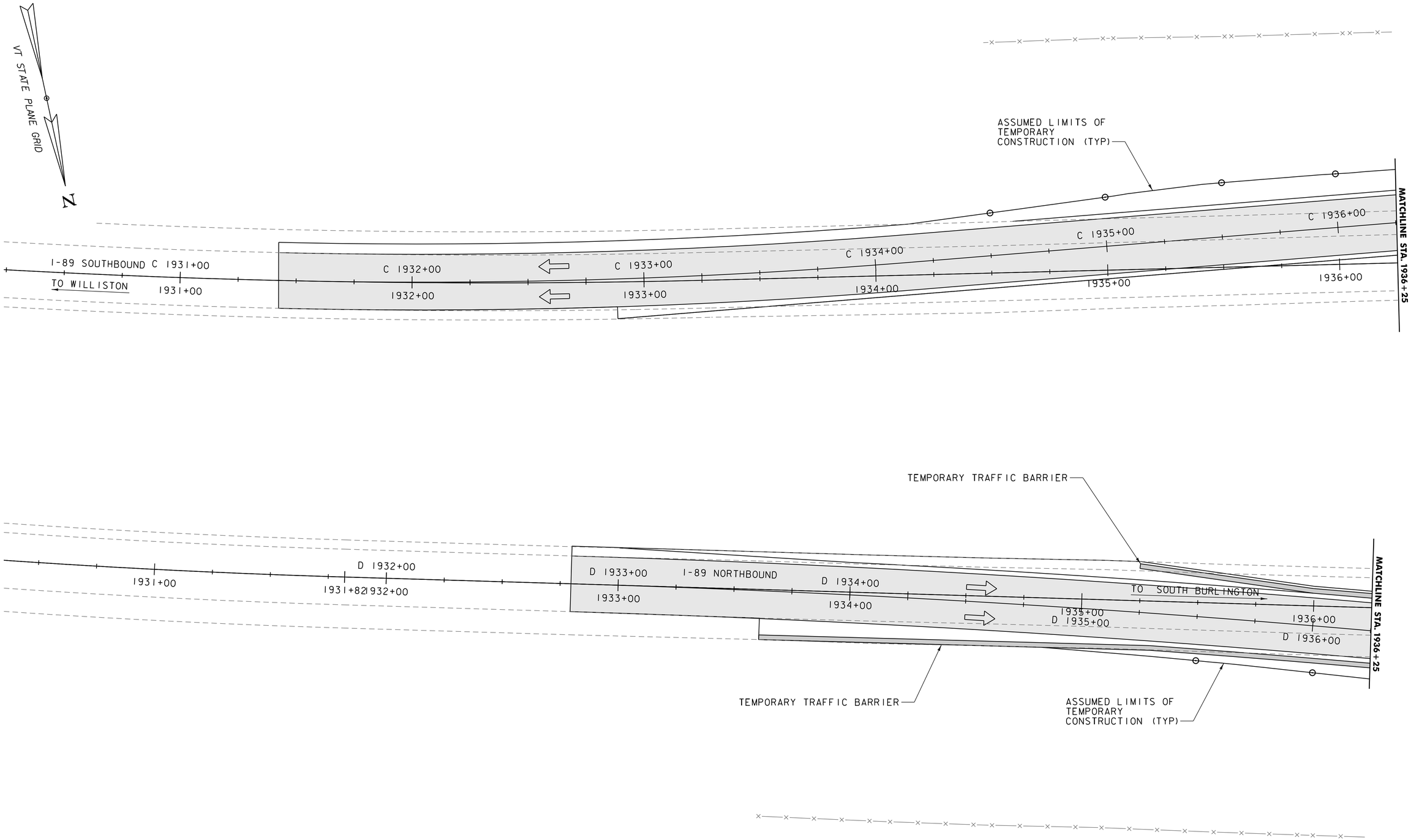
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GRADE ALONG ℄

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64pro.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
64-I SOUTHBOUND MAINLINE PROFILE	SHEET 29 OF 74

VHB 57578

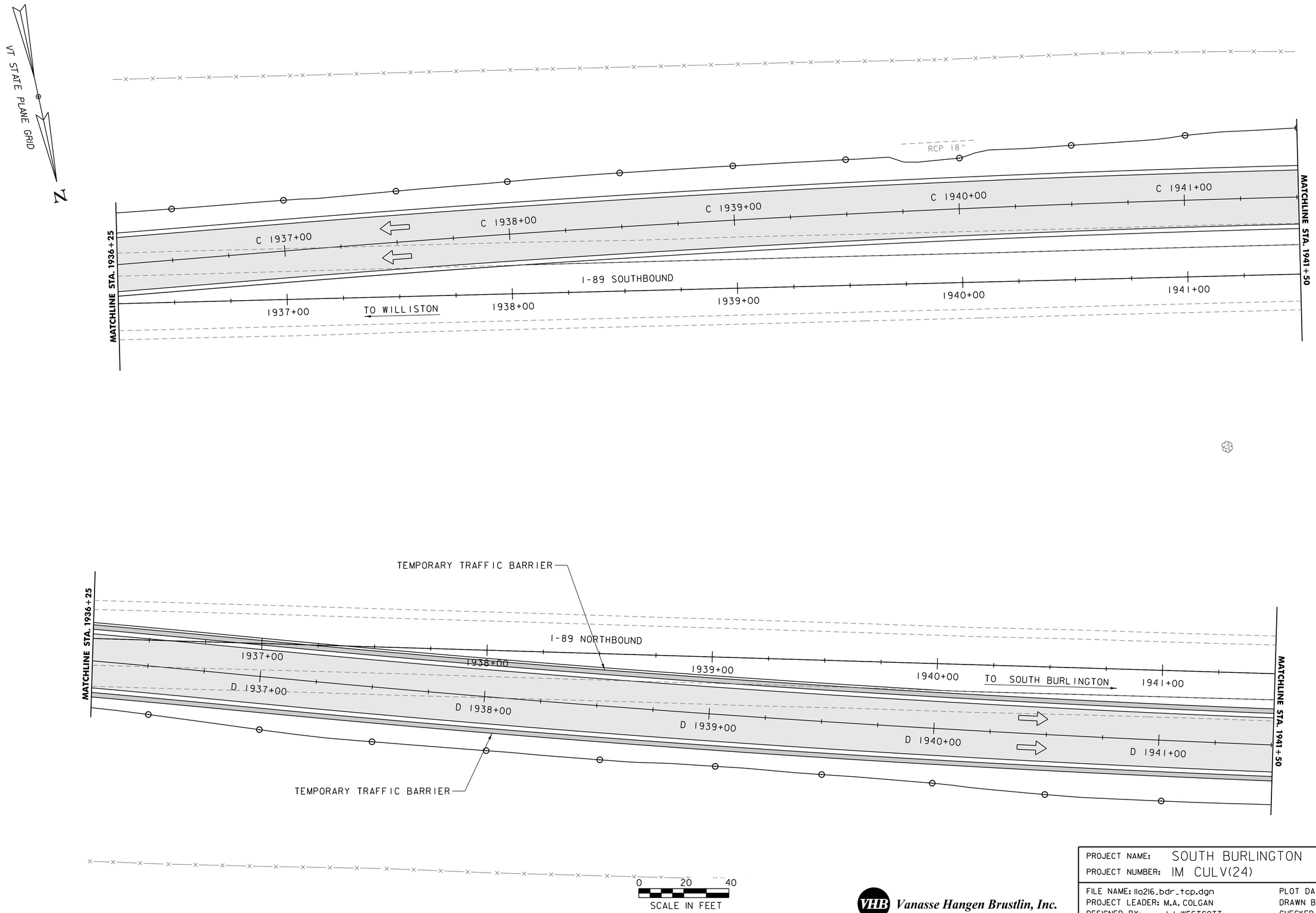


0 20 40
SCALE IN FEET

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LANE SHIFT: PHASES 2 & 4 (1 OF 5)	SHEET 30 OF 74

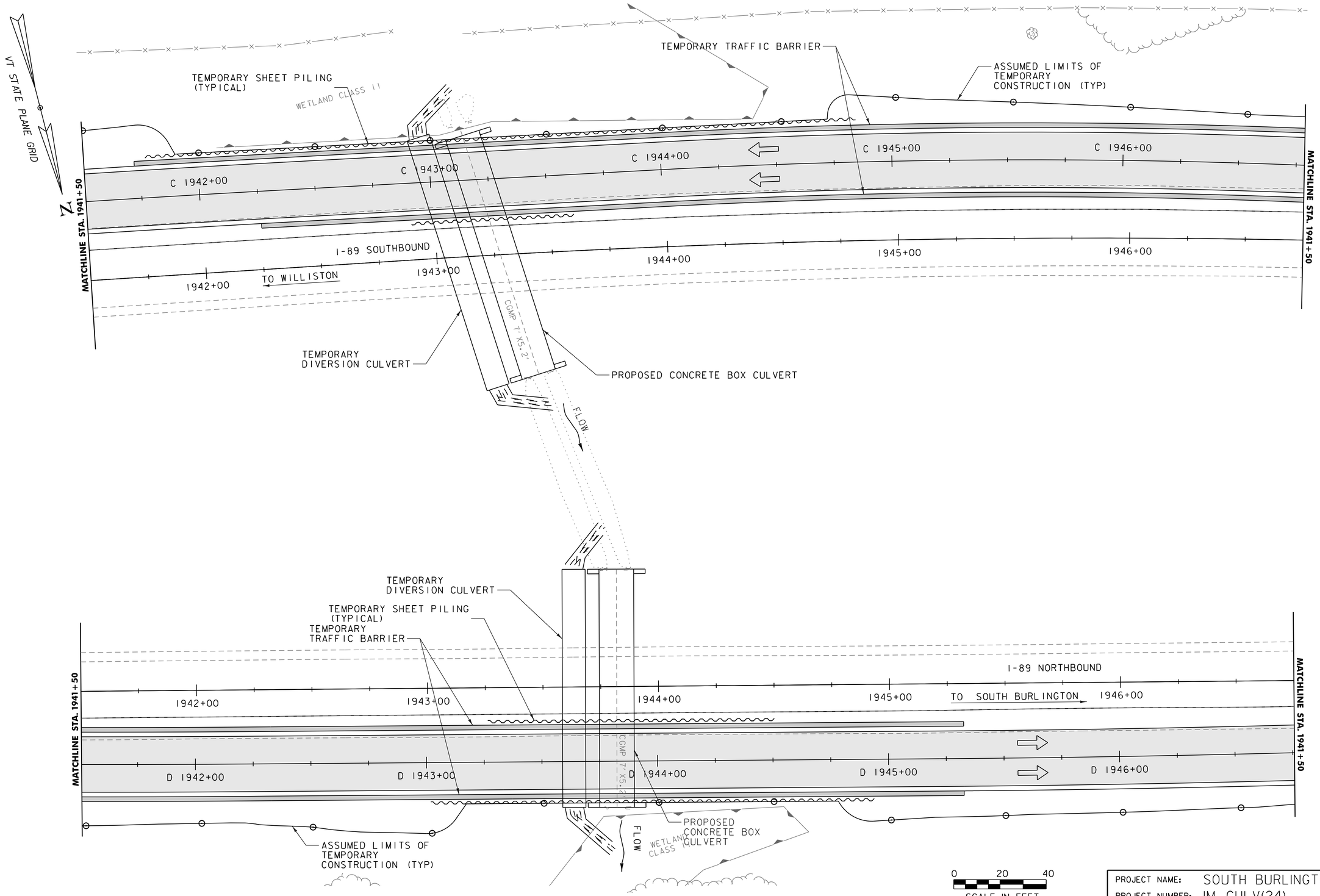
VHB 57578



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LANE SHIFT: PHASES 2 & 4 (2 OF 5)	SHEET 31 OF 74

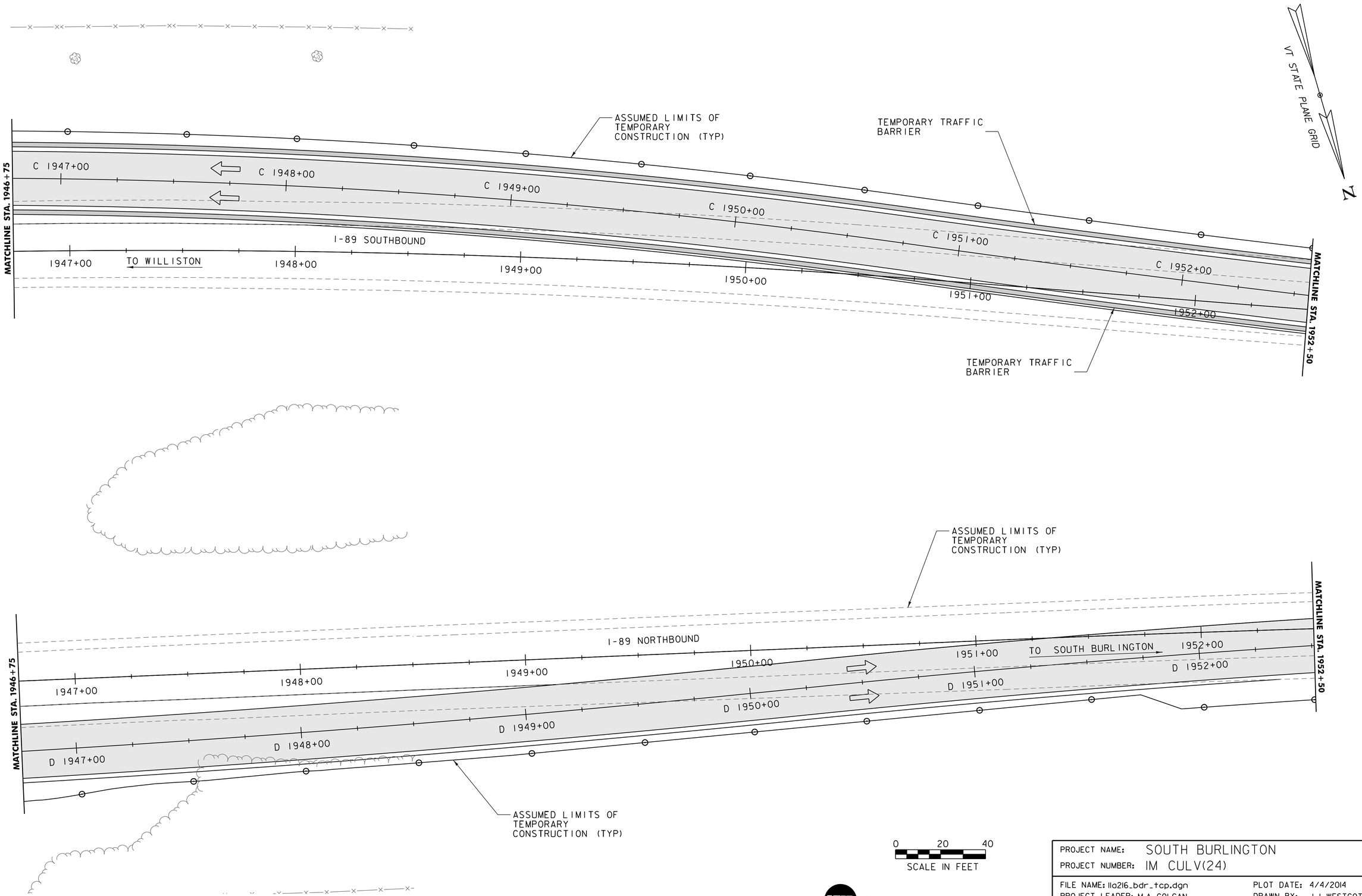
VHB 57578



Vanasse Hangen Brustlin, Inc.

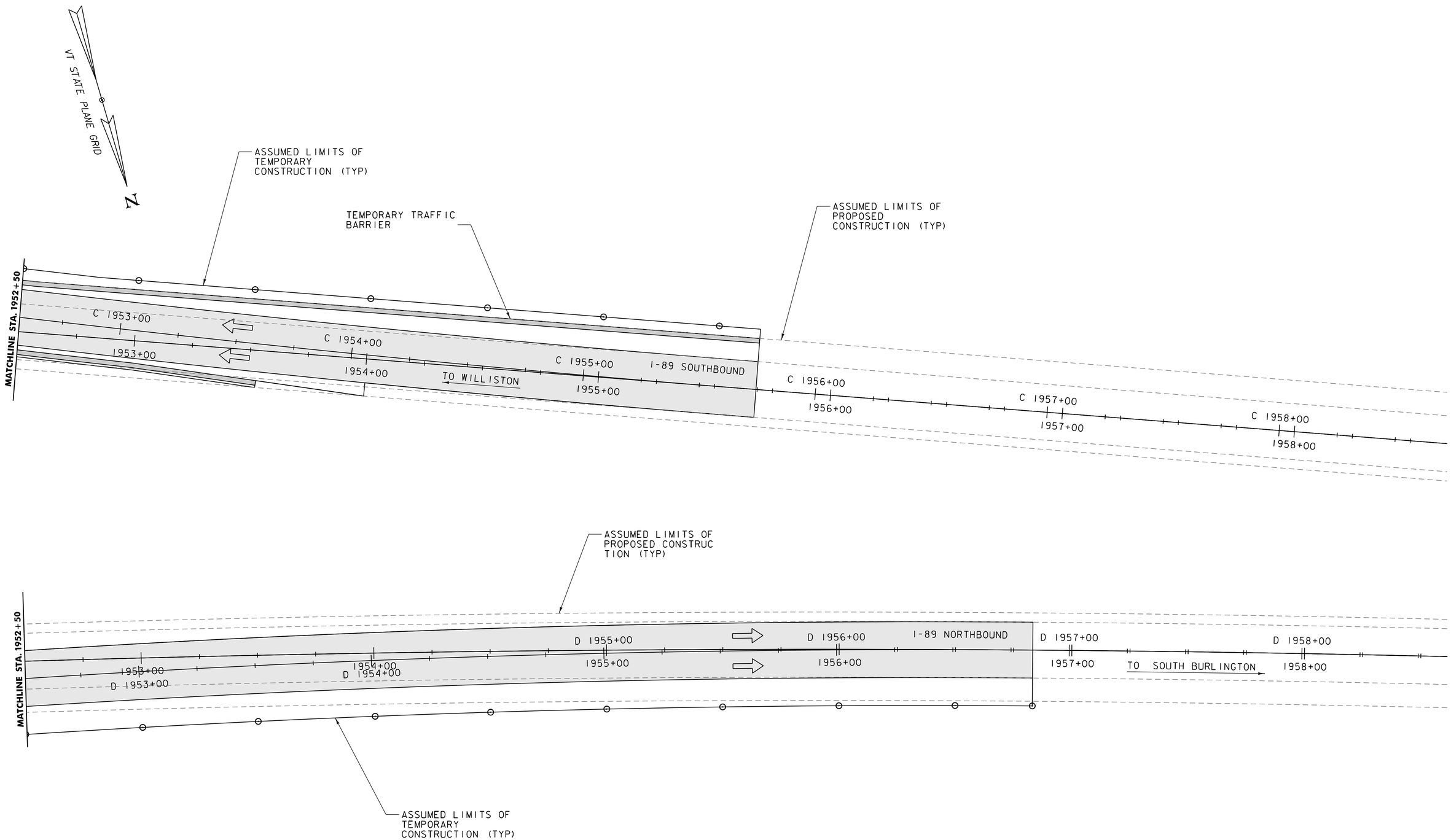
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LANE SHIFT: PHASES 2 & 4 (3 OF 4)	SHEET 32 OF 74

VHB 57578



Vanasse Hangen Brustlin, Inc.

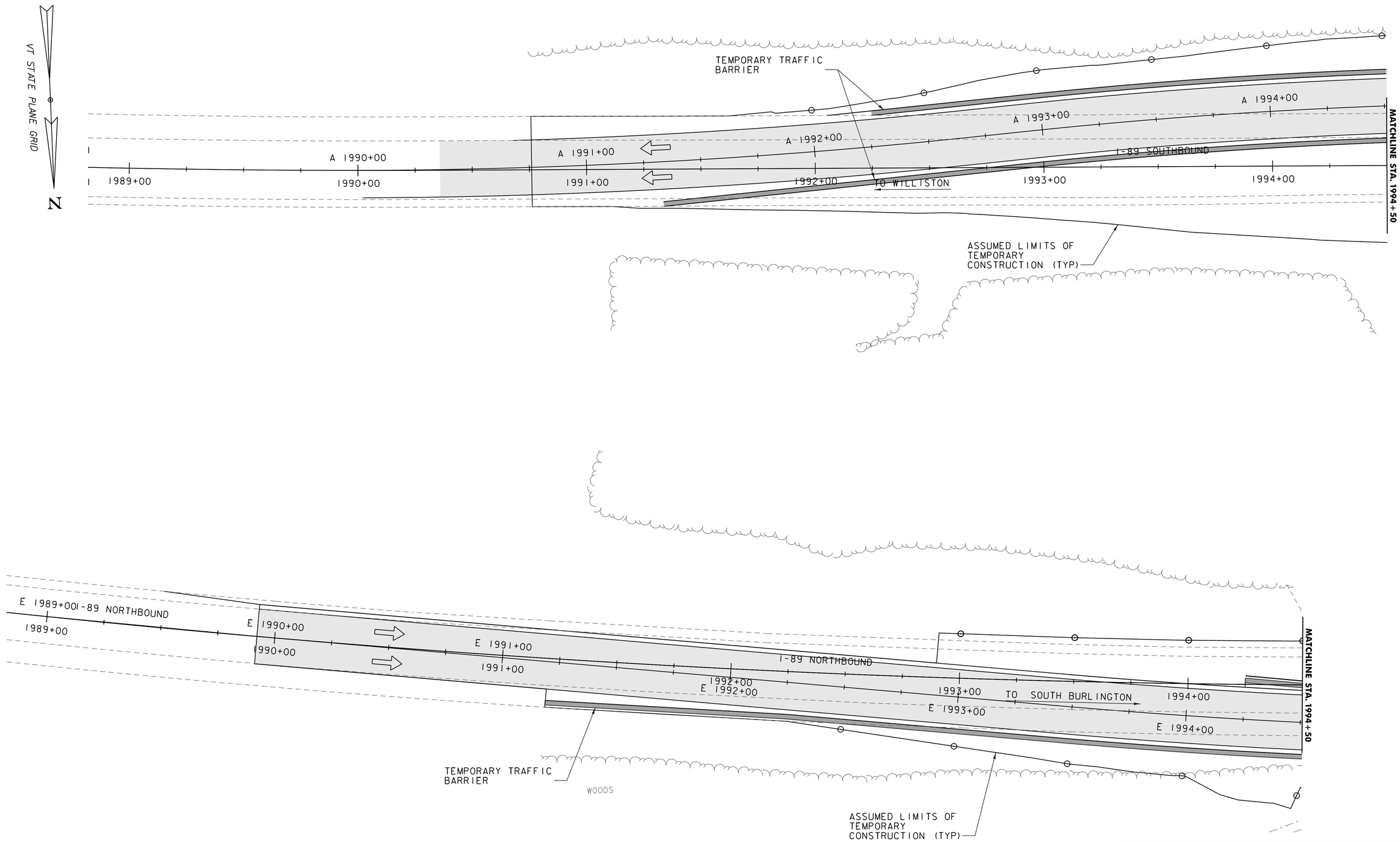
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LANE SHIFT: PHASES 2 & 4 (4 OF 5)	SHEET 33 OF 74



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J.WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: A.P. GUYETTE
63-1LANE SHIFT: PHASES 2 & 4 (5 OF 5)	SHEET 34 OF 74

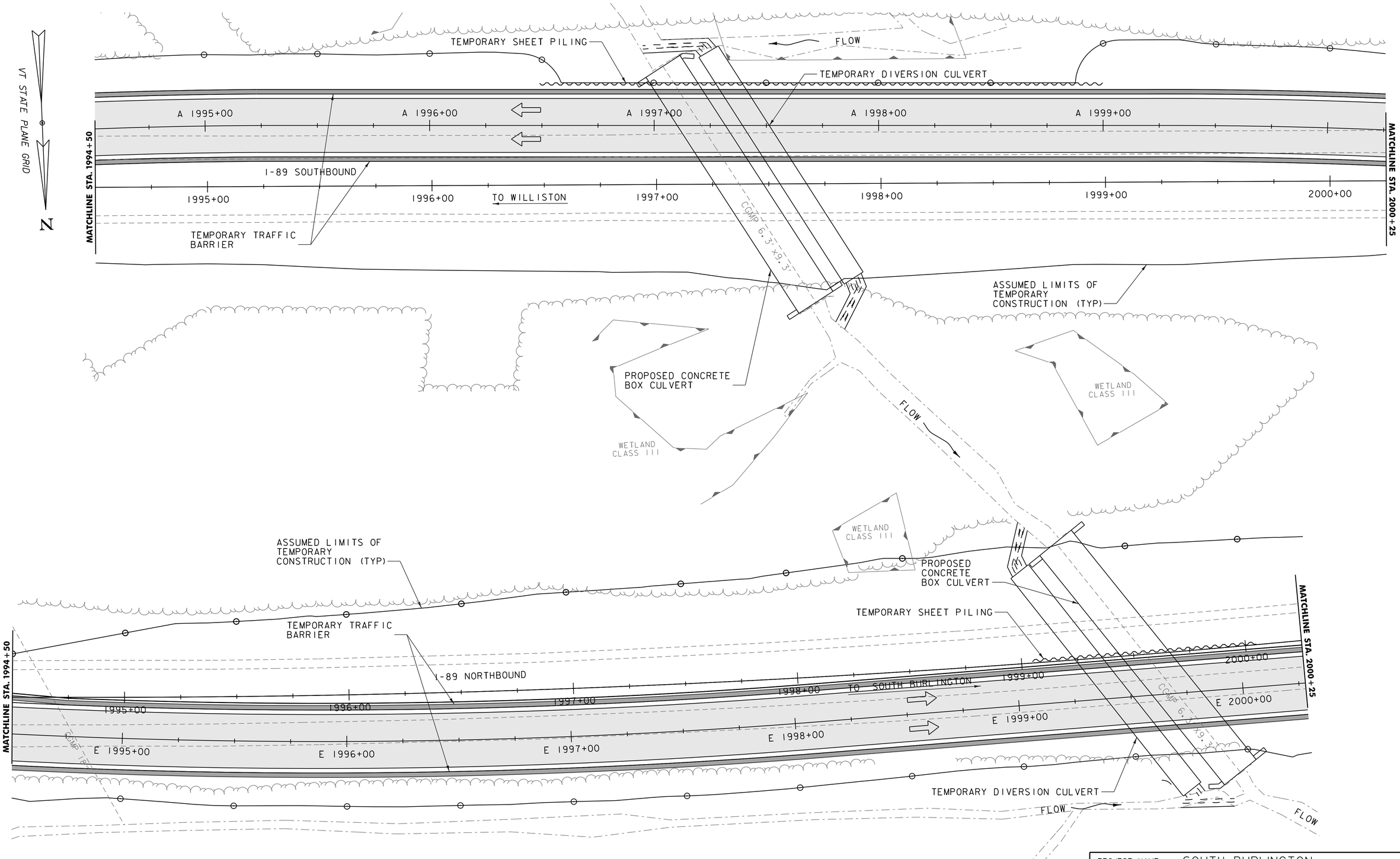
VHB 57578



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LANE SHIFT: PHASES 2, 4 & 6 (1OF 4)	SHEET 35 OF 74

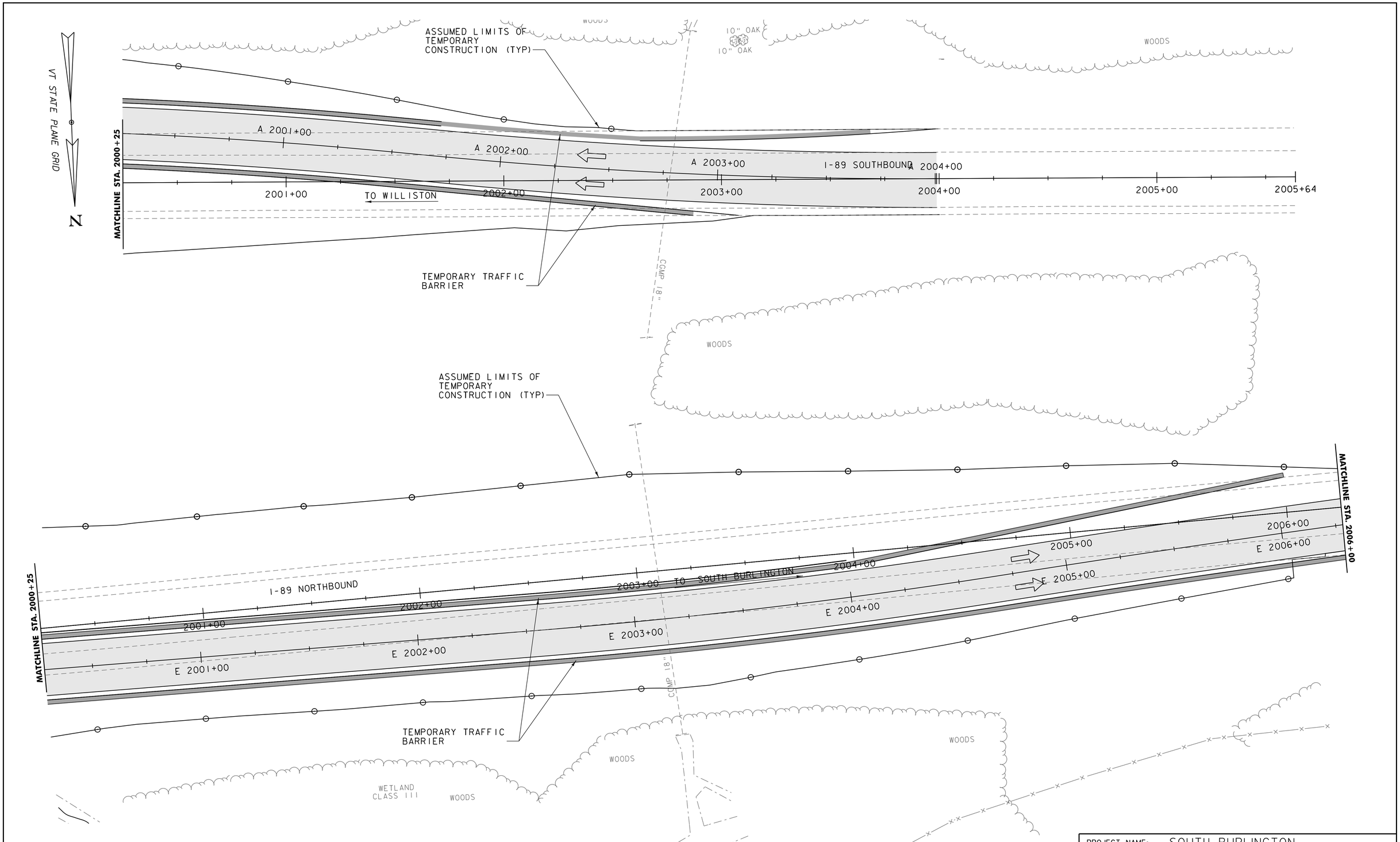
VHB 57578



VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: lla216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-LANE SHIFT: PHASES 2, 4 & 6 (2 OF 4)	SHEET 36 OF 74

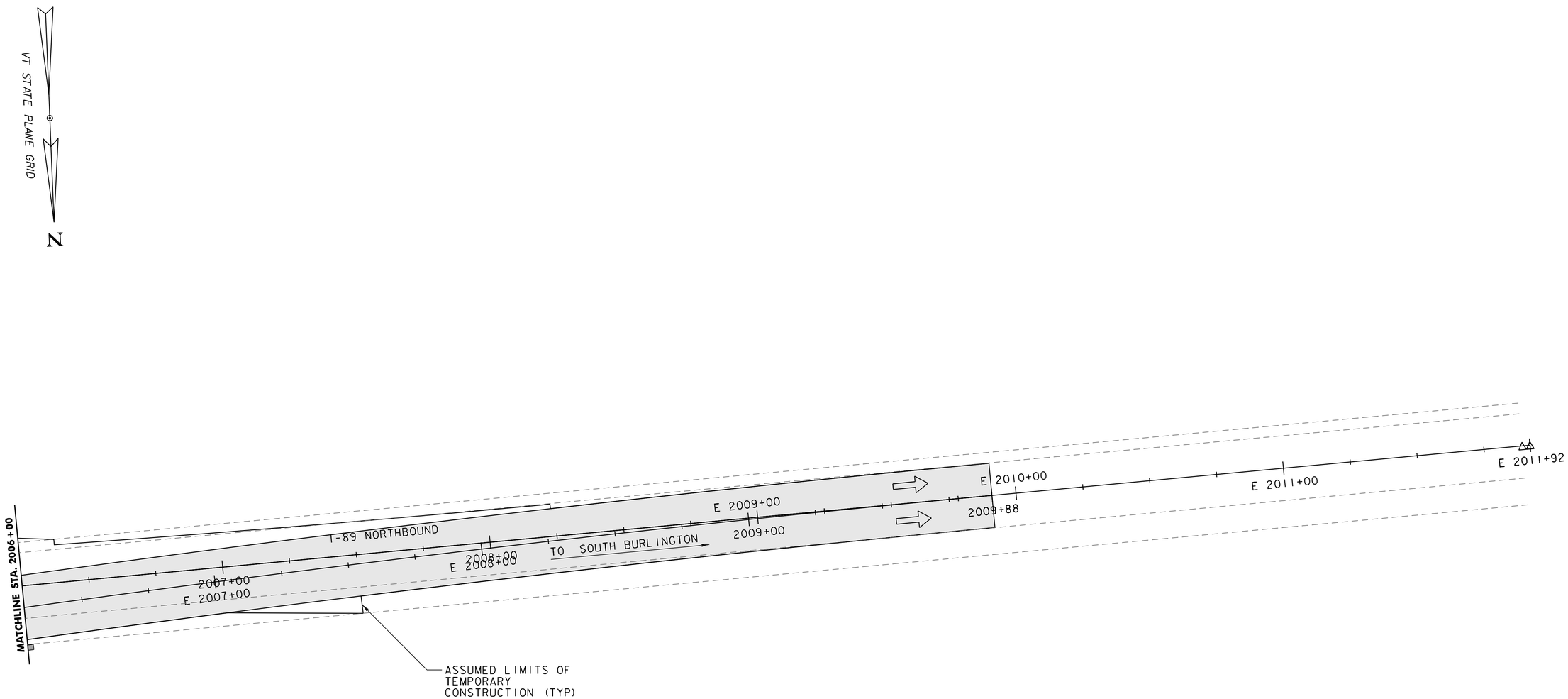
VHB 57578



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LANE SHIFT: PHASES 2, 4 & 6 (3 OF 4)	SHEET 37 OF 74

VHB 57578

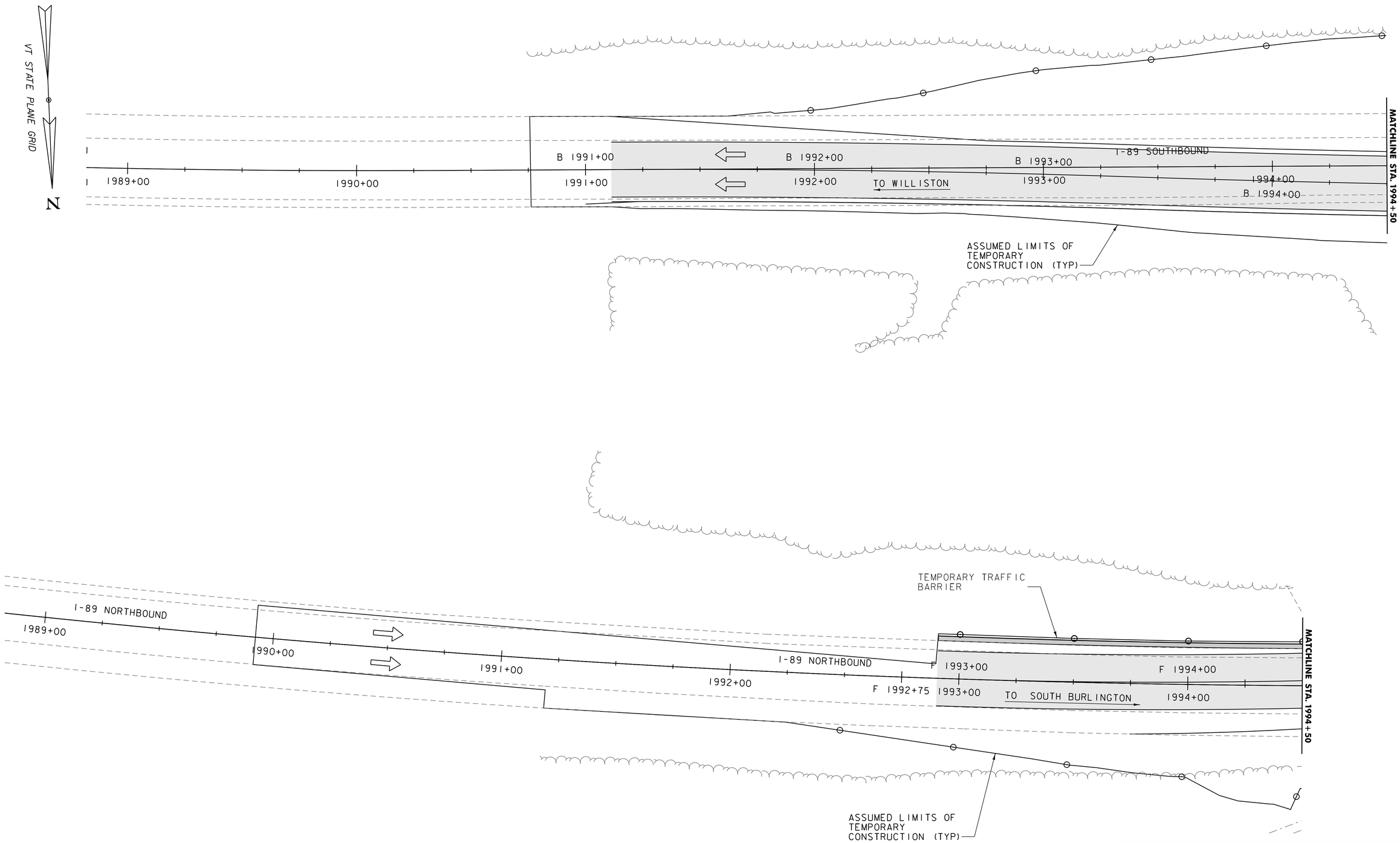


0 20 40
SCALE IN FEET

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-LANE SHIFT: PHASES 2, 4 & 6 (4 OF 4)	SHEET 38 OF 74

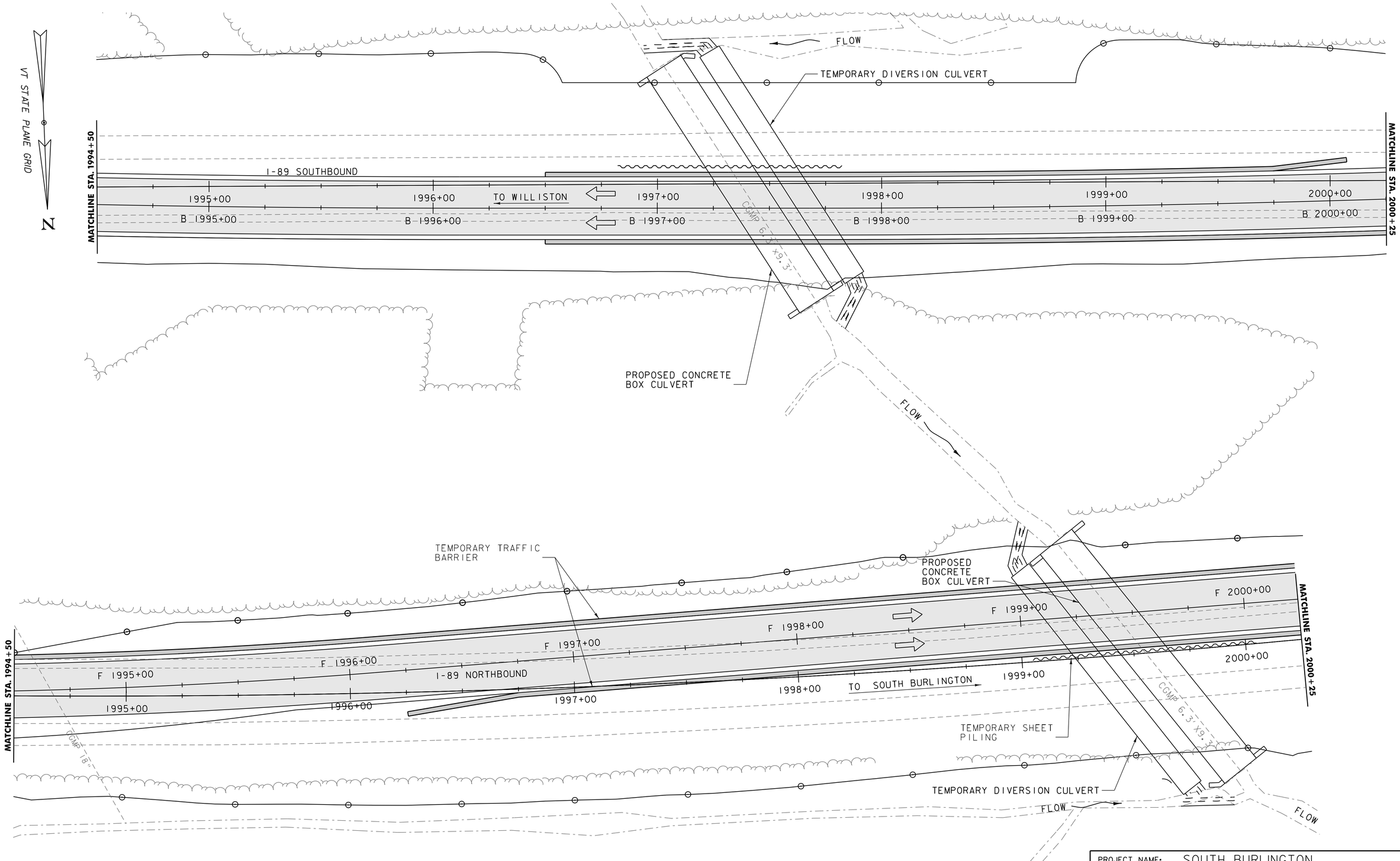
VHB 57578



Vanasse Hangen Brustlin, Inc.

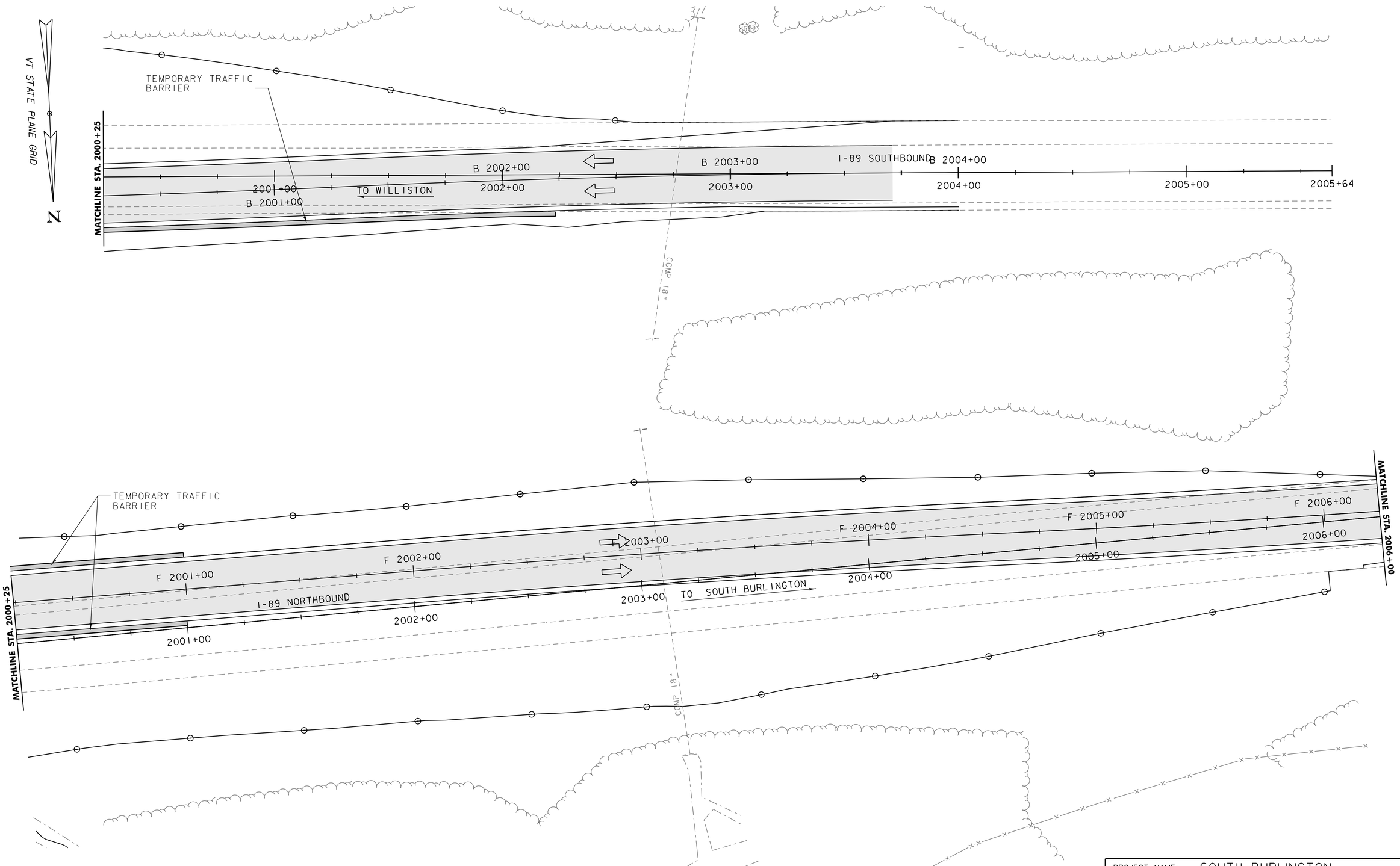
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LANE SHIFT: PHASES 3 & 5 (1OF 4)	SHEET 39 OF 74

VHB 57578



PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1LANE SHIFT: PHASES 3 & 5 (2 OF 4)	SHEET 40 OF 74

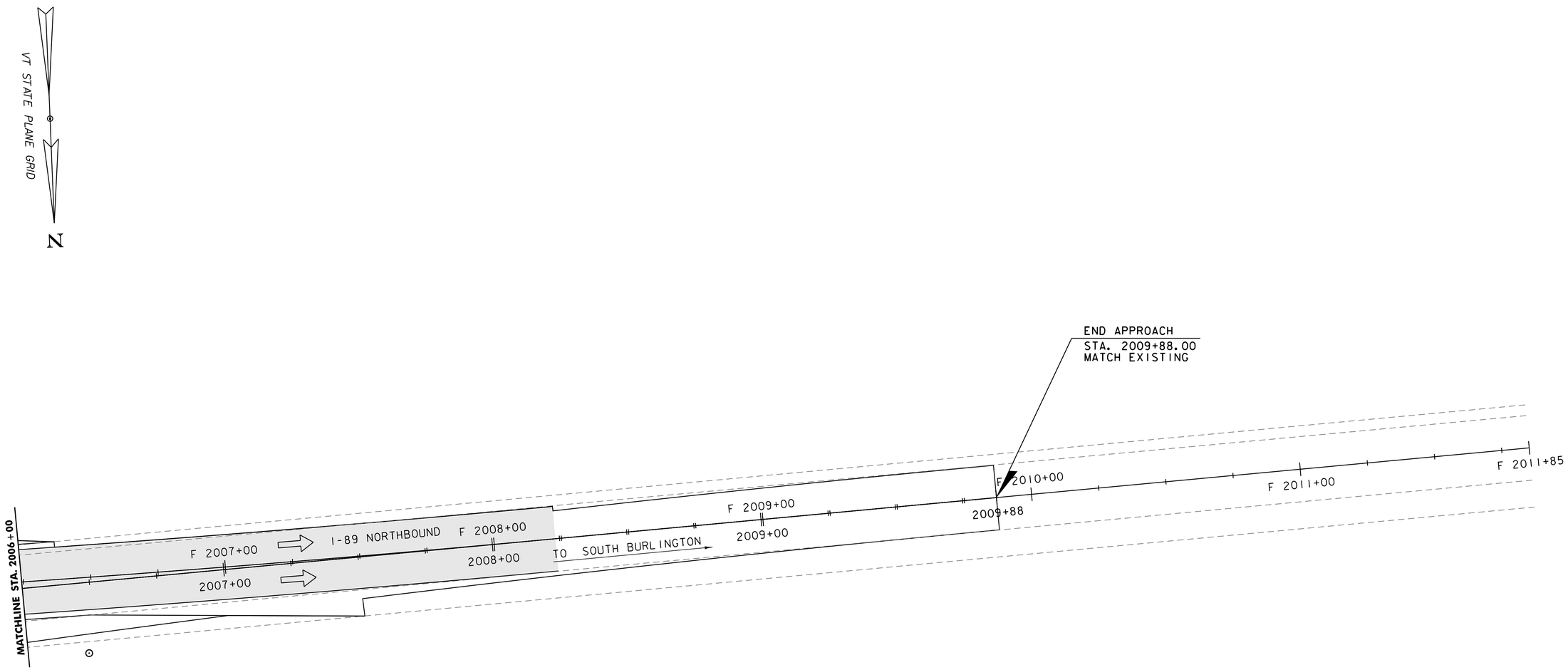
VHB 57578



Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-I LANE SHIFT: PHASES 3 & 5 (3 OF 4)	SHEET 41 OF 74

VHB 57578

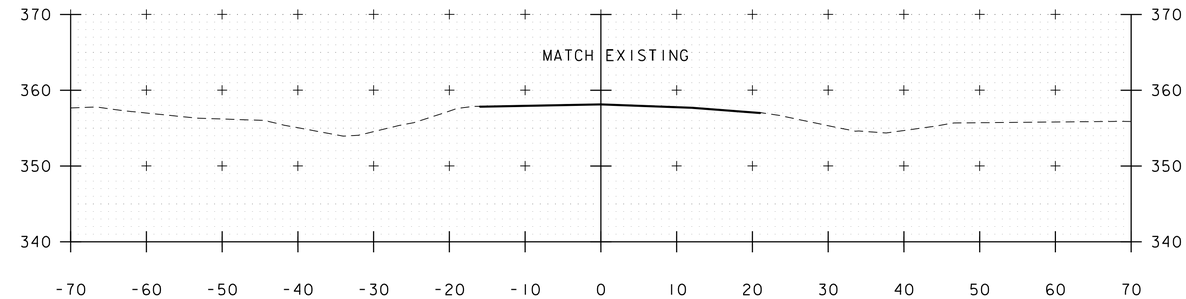


0 20 40
SCALE IN FEET

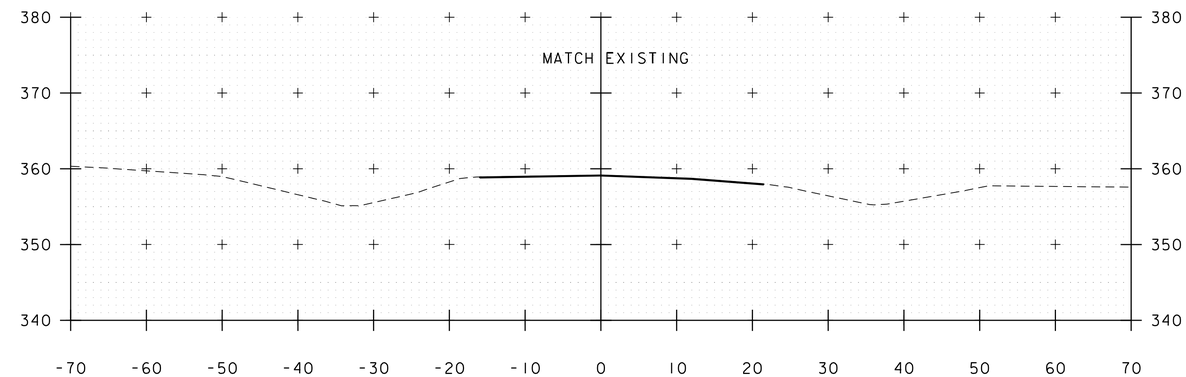
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_bdr_tcp.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: J.J. WESTCOTT
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
64-1 LANE SHIFT: PHASES 3 & 5 (4 OF 4)	SHEET 42 OF 74

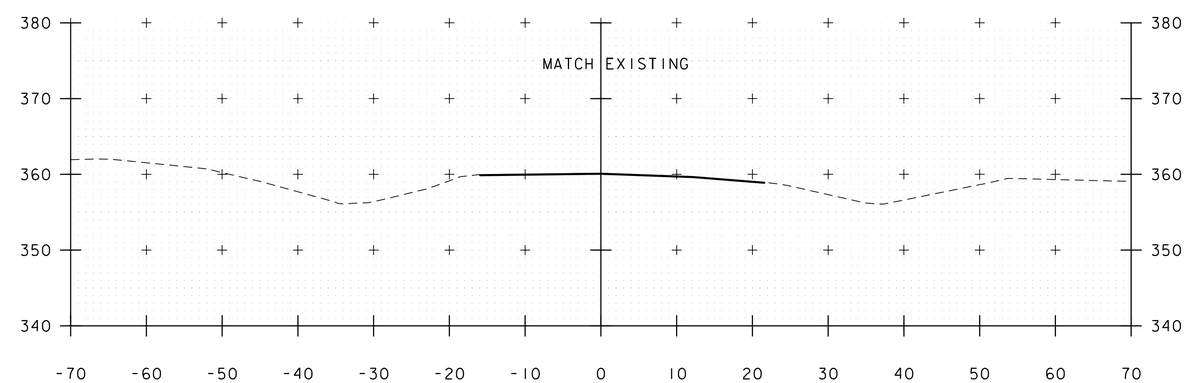
VHB 57578



1935+00



1934+50



1934+00

BEGIN APPROACH STA. 1932+72.00

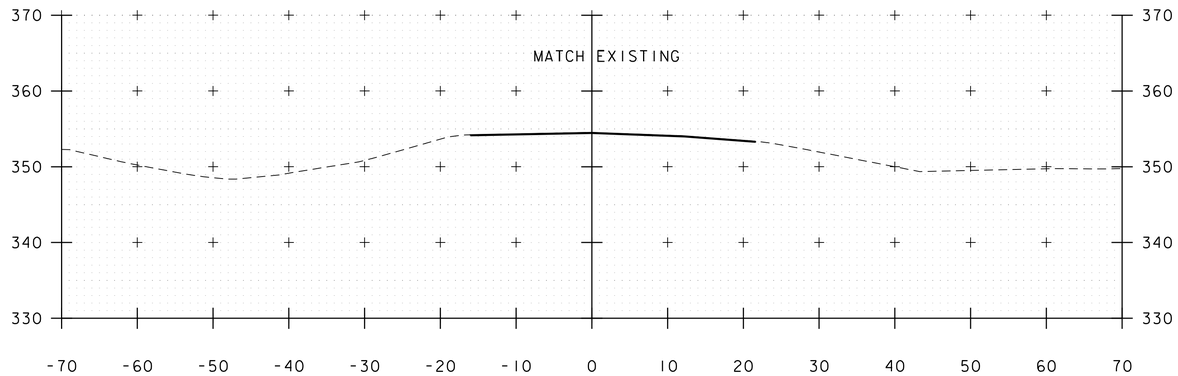
CULVERT 63 NORTHBOUND CROSS SECTIONS

STA. 1933+50 - 1935+00
SCALE 1" = 10"

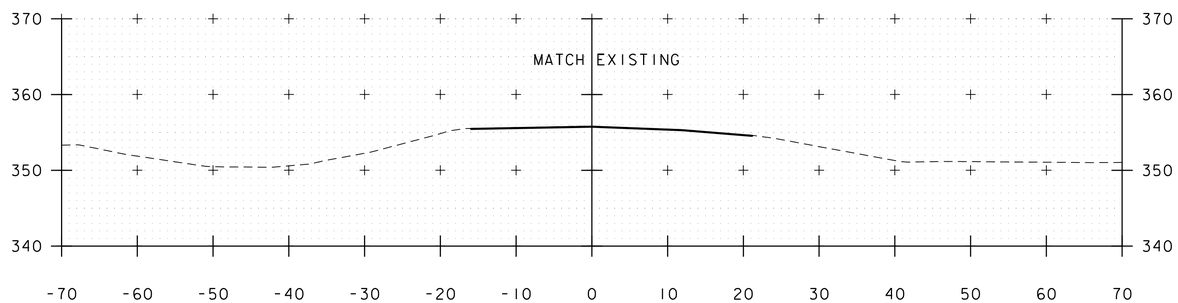
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (1 OF 6)	SHEET 43 OF 74

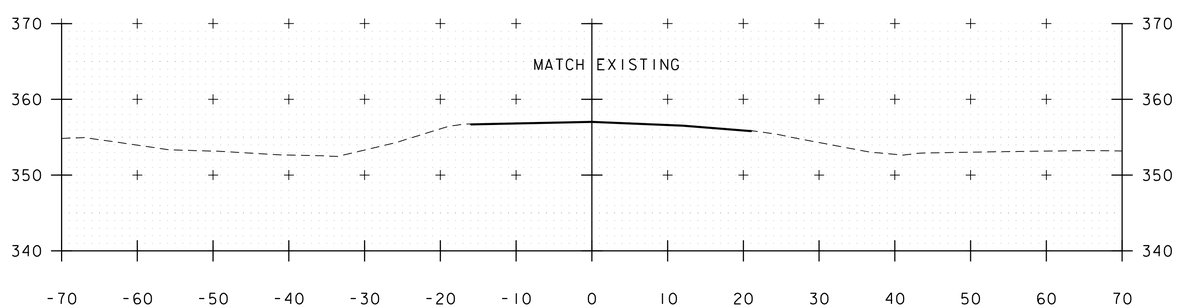
VHB 57578



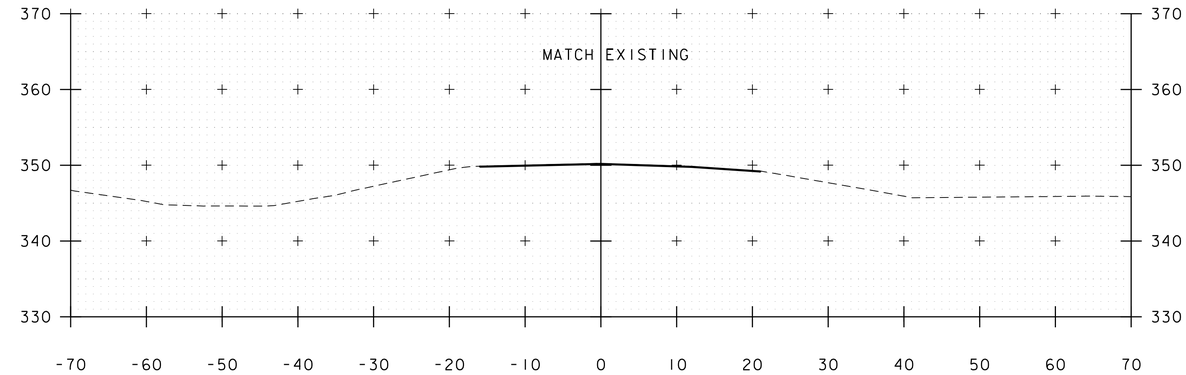
1936+50



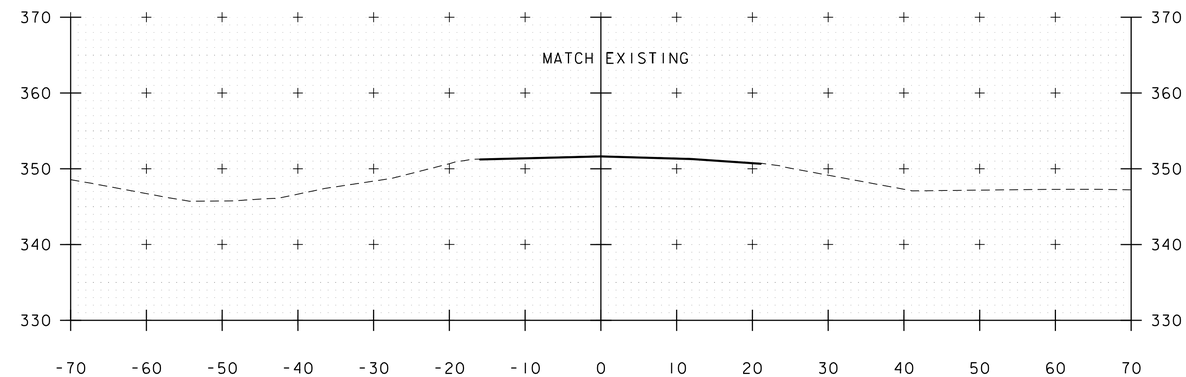
1936+00



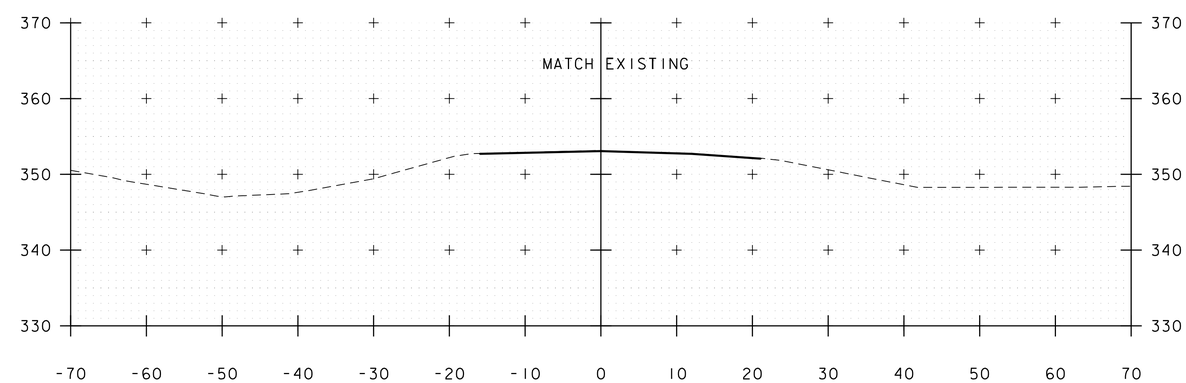
1935+50



1938+00



1937+50



1937+00

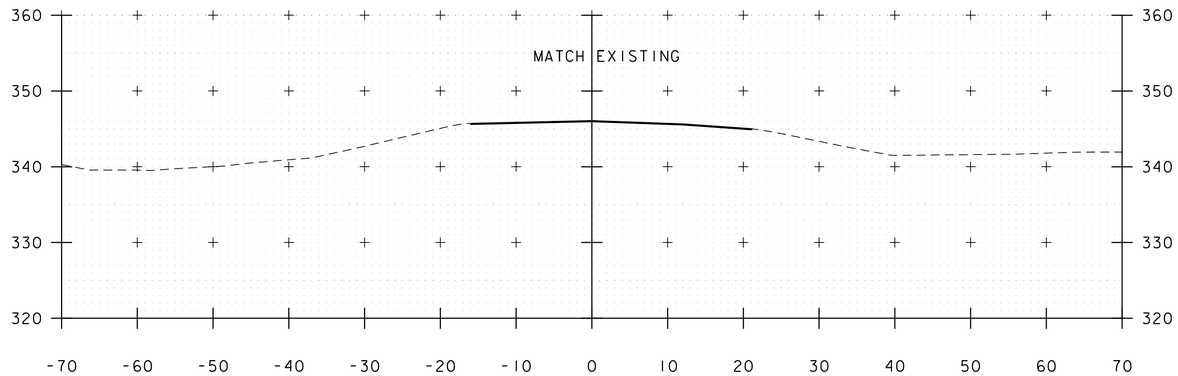
CULVERT 63 NORTHBOUND CROSS SECTIONS

STA. 1935+50 - 1938+00
SCALE 1" = 10"

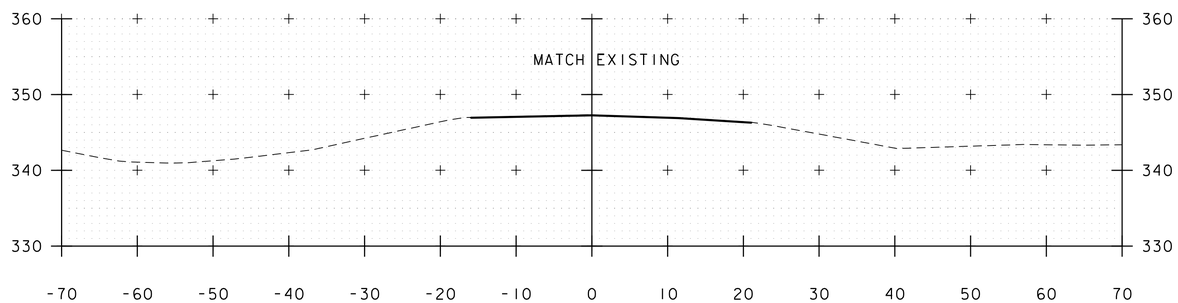
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (2 OF 6)	SHEET 44 OF 74

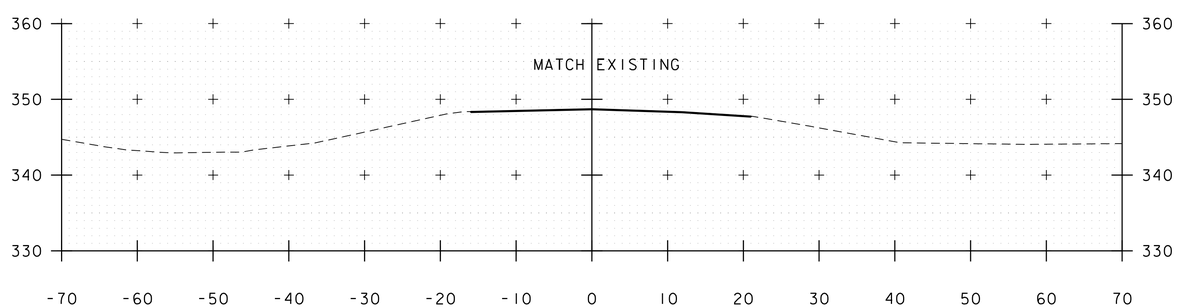
VHB 57578



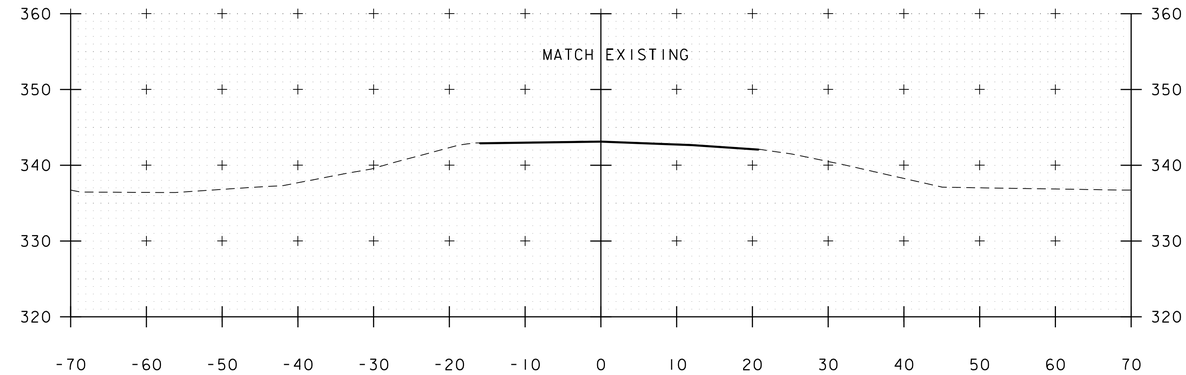
1939+50



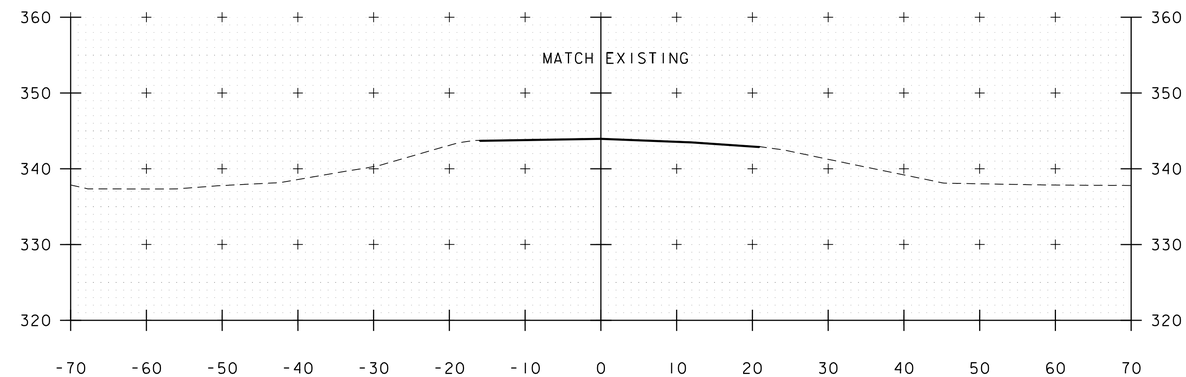
1939+00



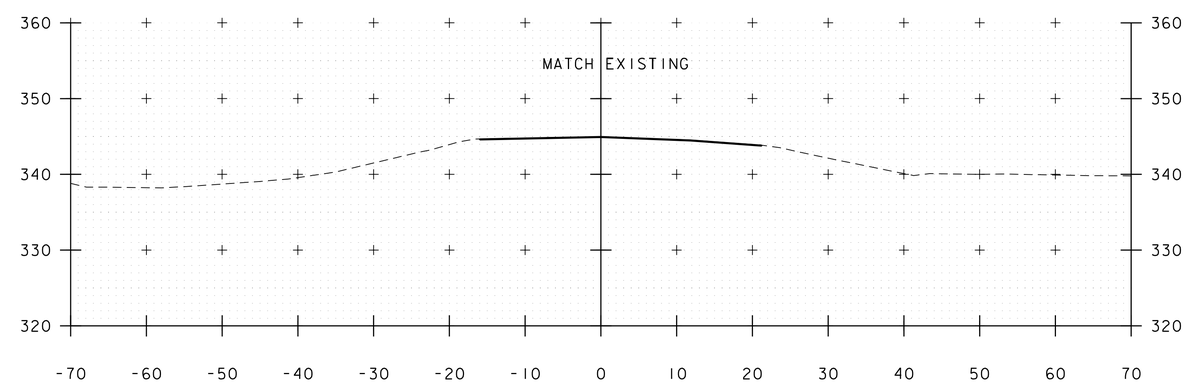
1938+50



1941+00



1940+50



1940+00

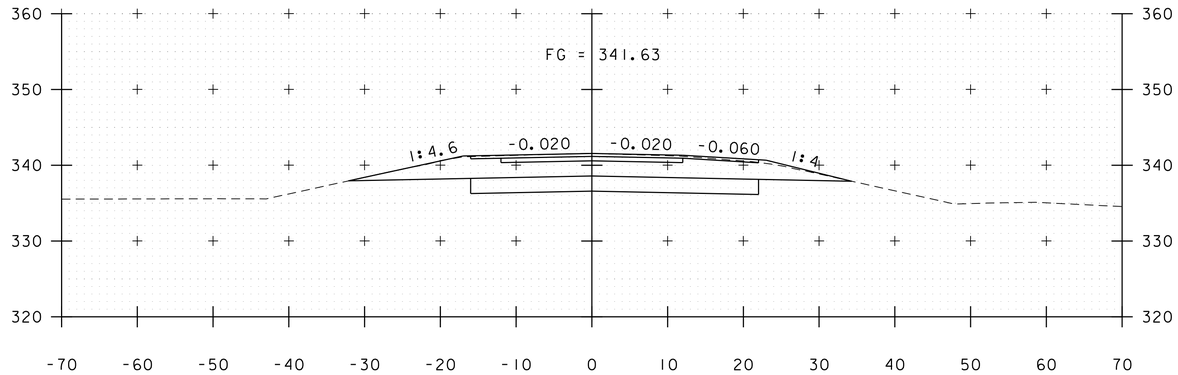
CULVERT 63 NORTHBOUND CROSS SECTIONS

STA. 1938+50 - 1941+00
SCALE 1" = 10'

Vanasse Hangen Brustlin, Inc.

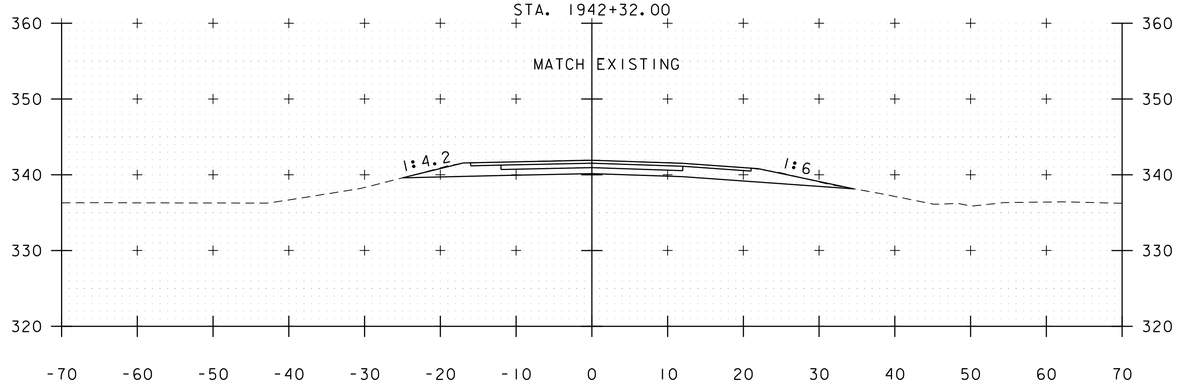
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (3 OF 6)	SHEET 45 OF 74

VHB 57578

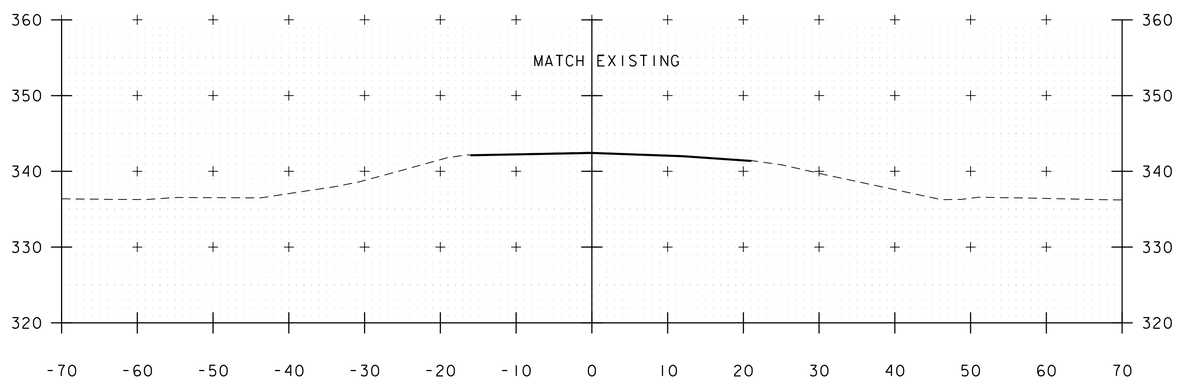


1942+50

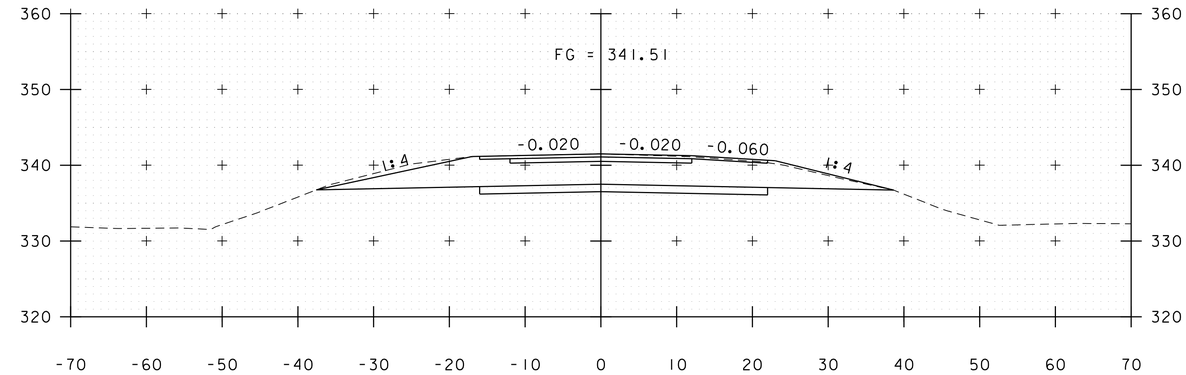
BEGIN PROJECT
STA. 1942+32.00



1942+00

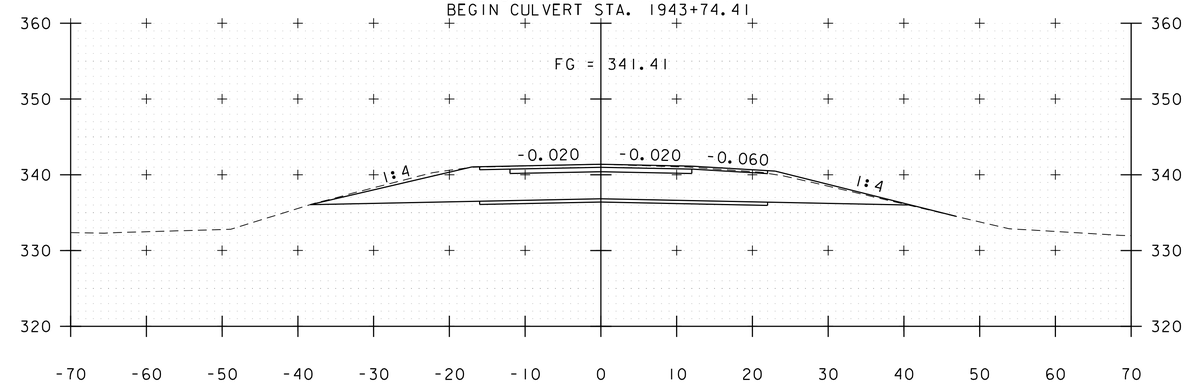


1941+50

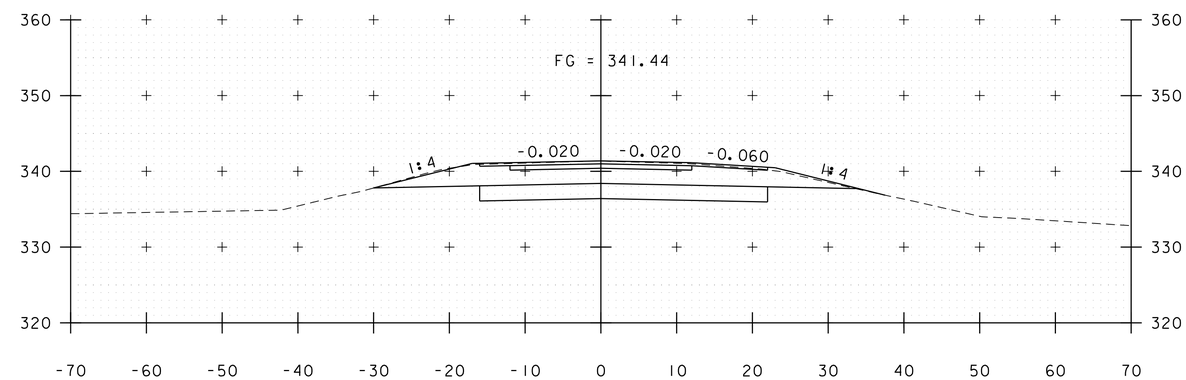


1944+00

END CULVERT STA. 1943+89.41
BEGIN CULVERT STA. 1943+74.41



1943+50



1943+00

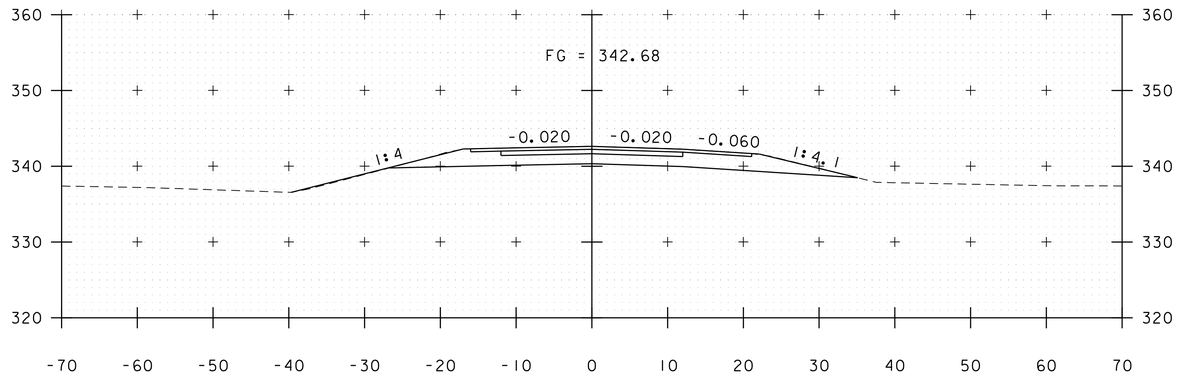
CULVERT 63 NORTHBOUND CROSS SECTIONS

STA. 1941+50 - 1944+00
SCALE 1" = 10"

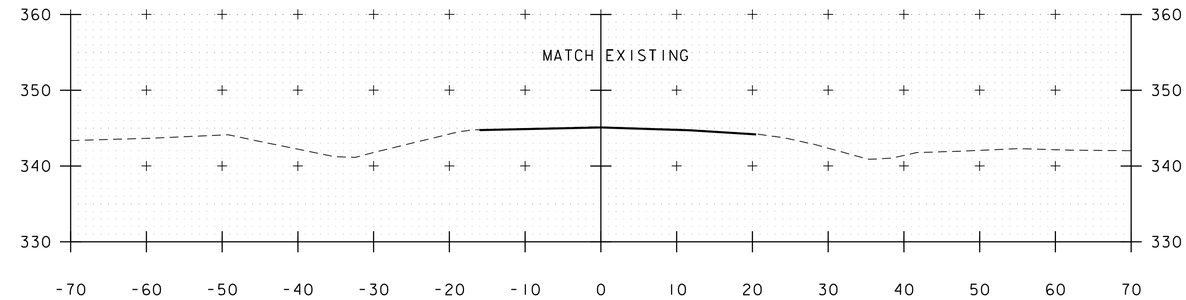
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (4 OF 6)	SHEET 46 OF 74

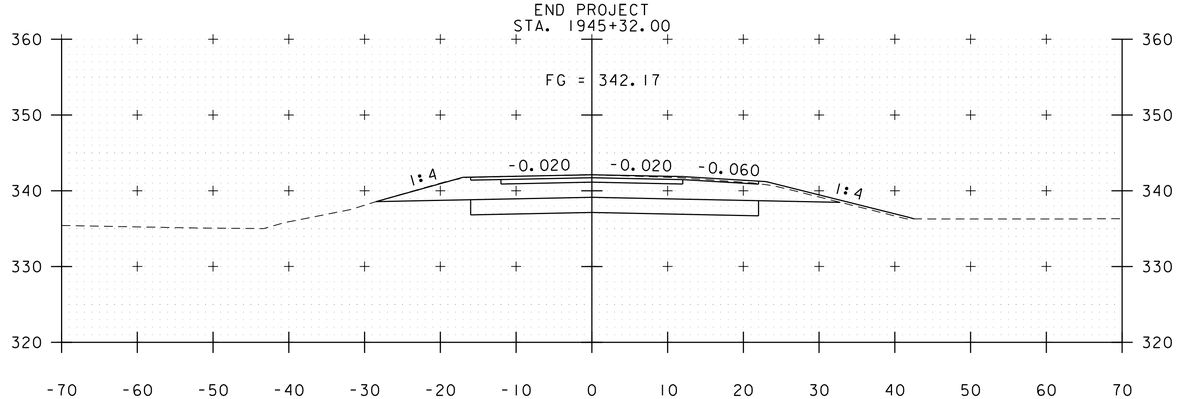
VHB 57578



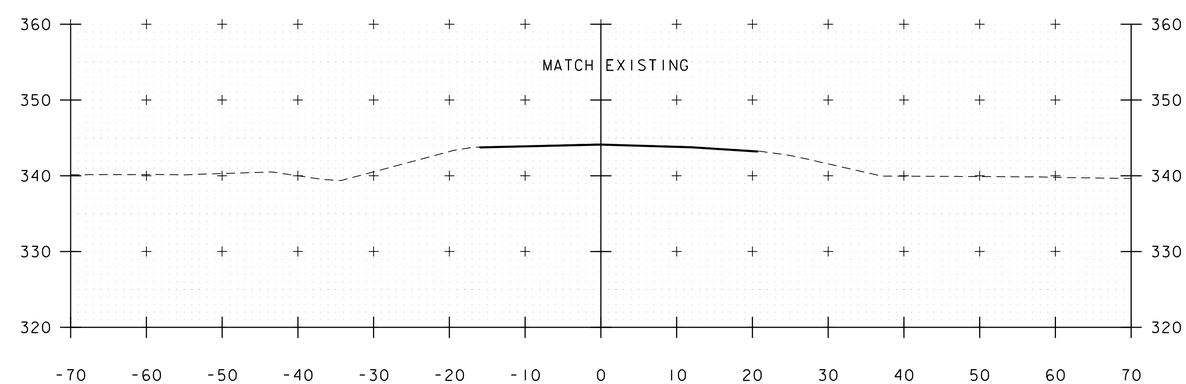
1945+50
END PROJECT
STA. 1945+32.00



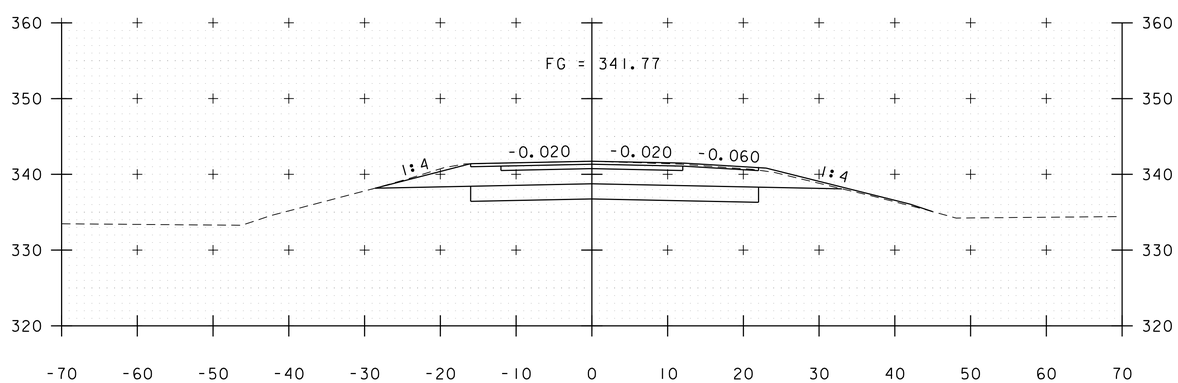
1947+00



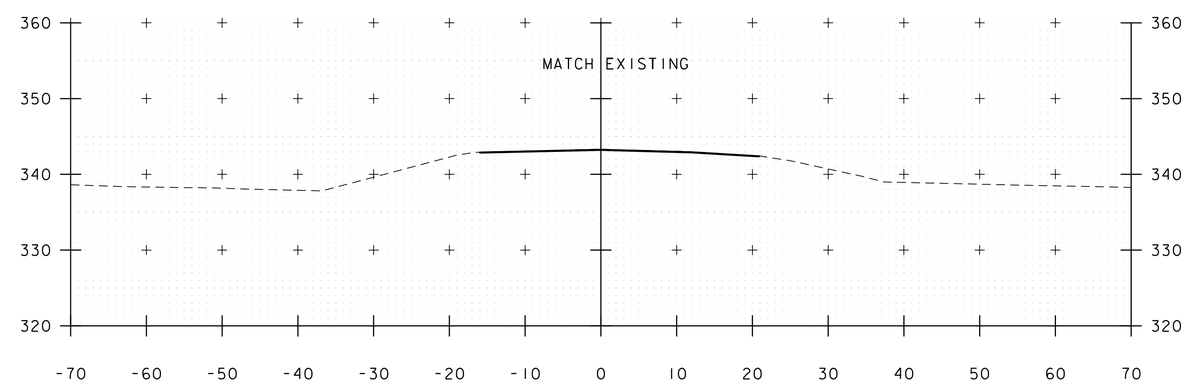
1945+00



1946+50



1944+50



1946+00

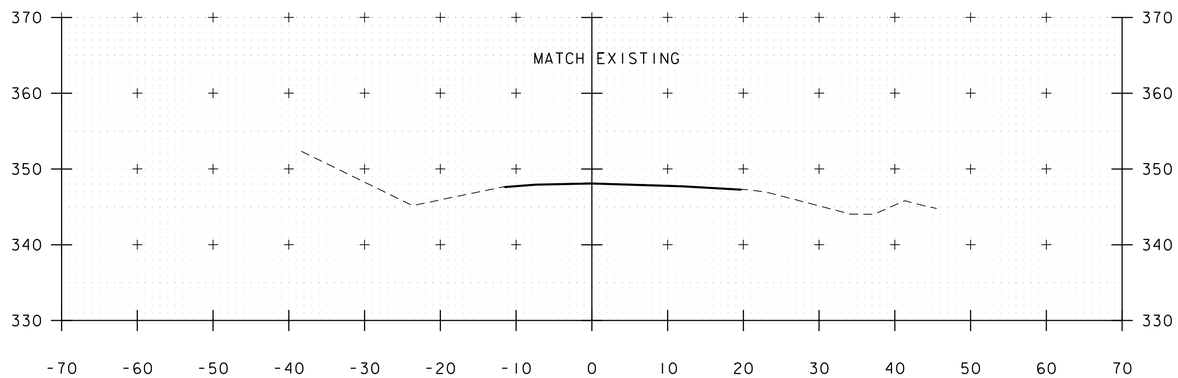
CULVERT 63 NORTHBOUND CROSS SECTIONS
STA. 1944+50 - 1947+00
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

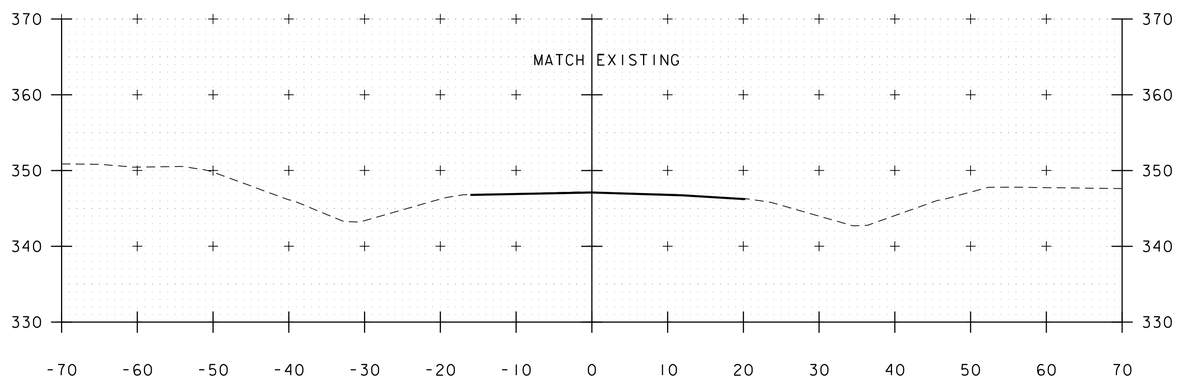
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (5 OF 6)	SHEET 47 OF 74

VHB 57578

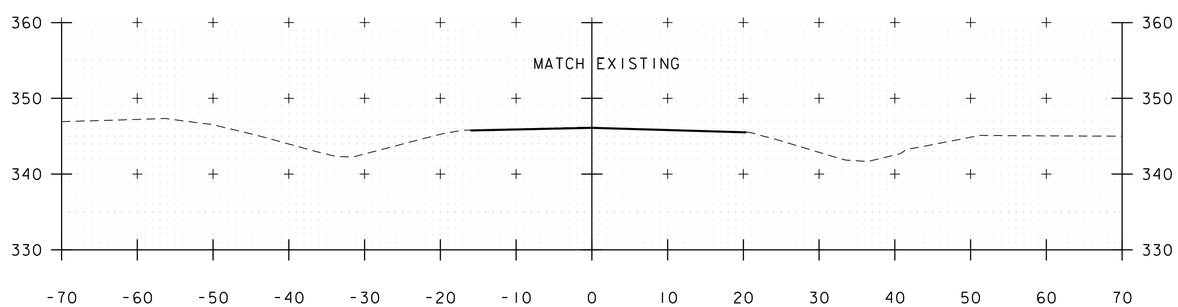
END APPROACH
STA. 1956+87.00



1948+50



1948+00



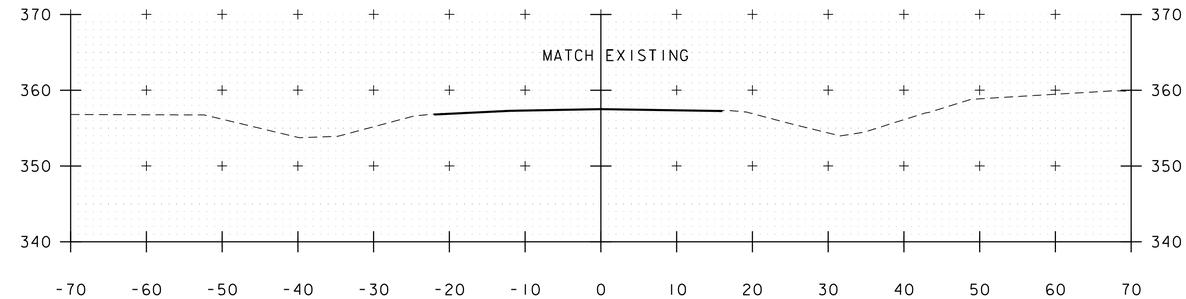
1947+50

CULVERT 63 NORTHBOUND CROSS SECTIONS

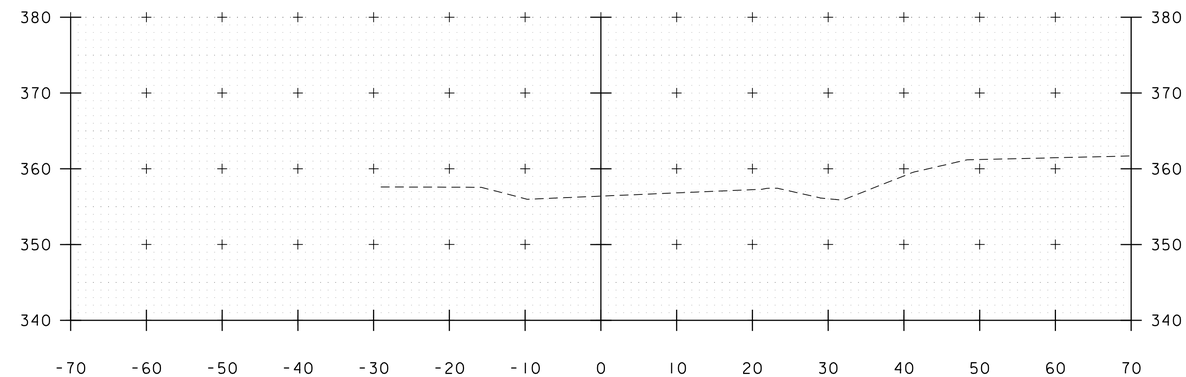
STA. 1947+50 - 1949+00
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

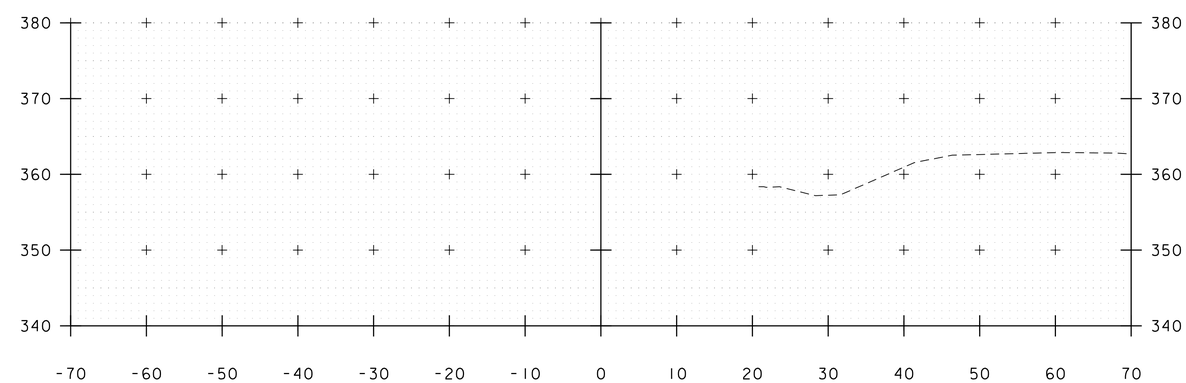
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 NORTHBOUND CROSS SECTIONS (6 OF 6)	SHEET 48 OF 74



1934+50



1934+00



1933+50

BEGIN APPROACH STA. 1931+38.00

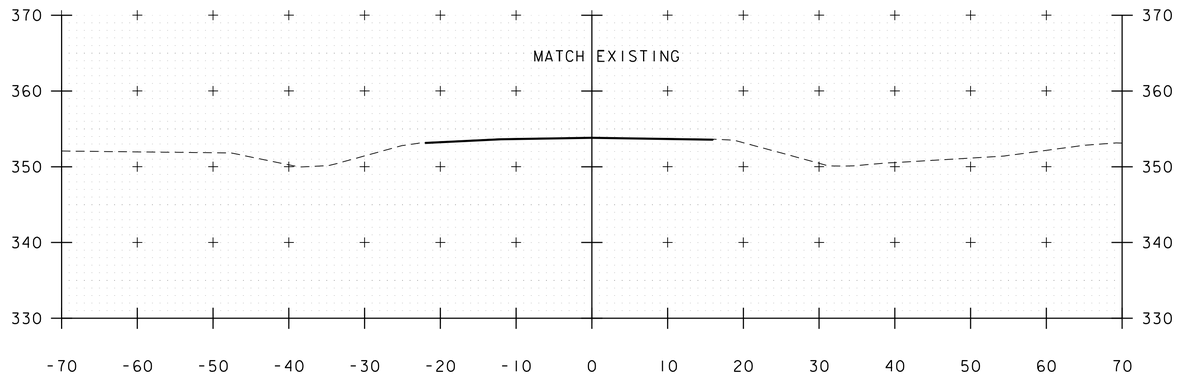
CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1933+00 - 1934+50
SCALE 1" = 10"

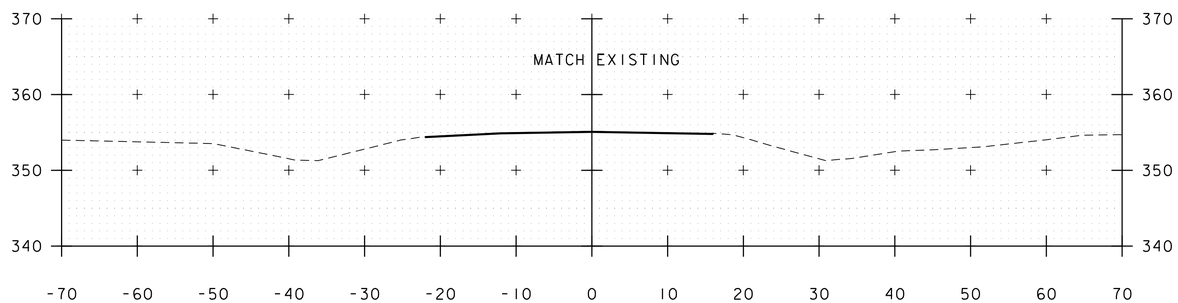
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 SOUTHBOUND CROSS SECTIONS (1 OF 6)	SHEET 49 OF 74

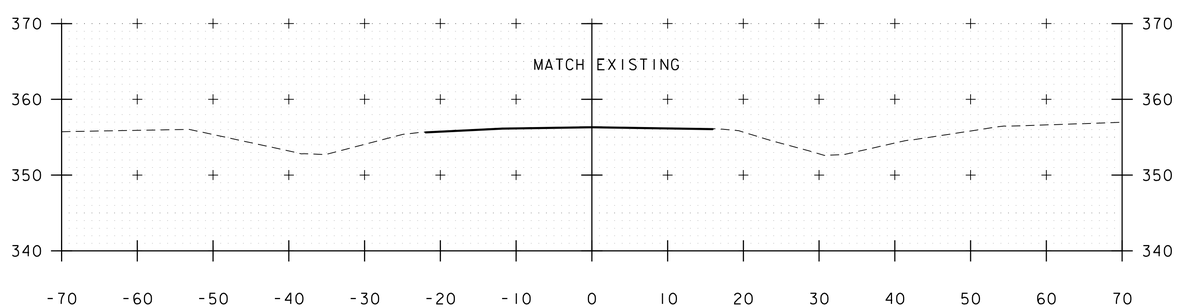
VHB 57578



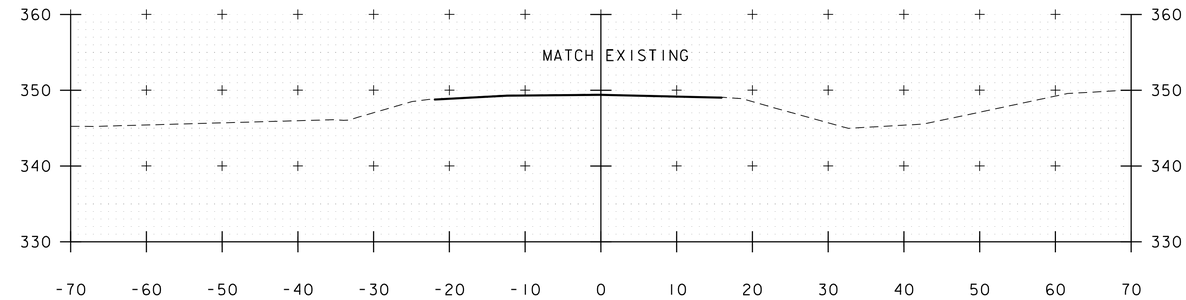
1936+00



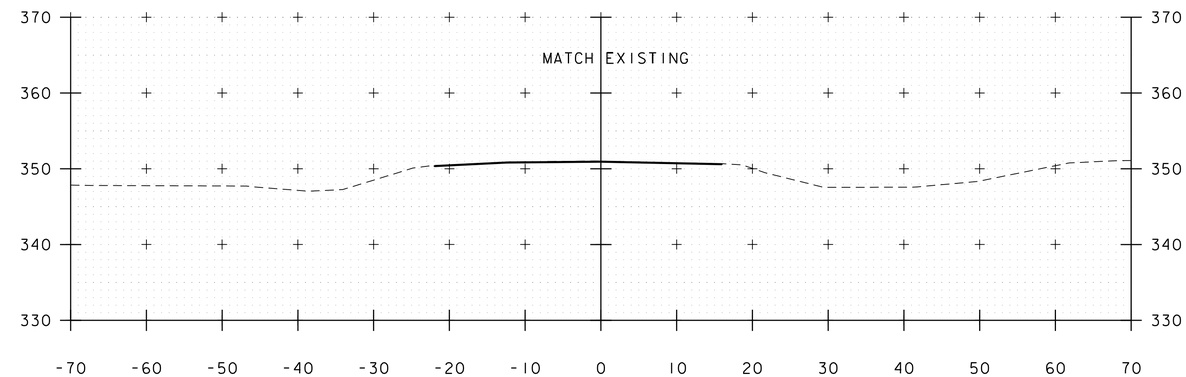
1935+50



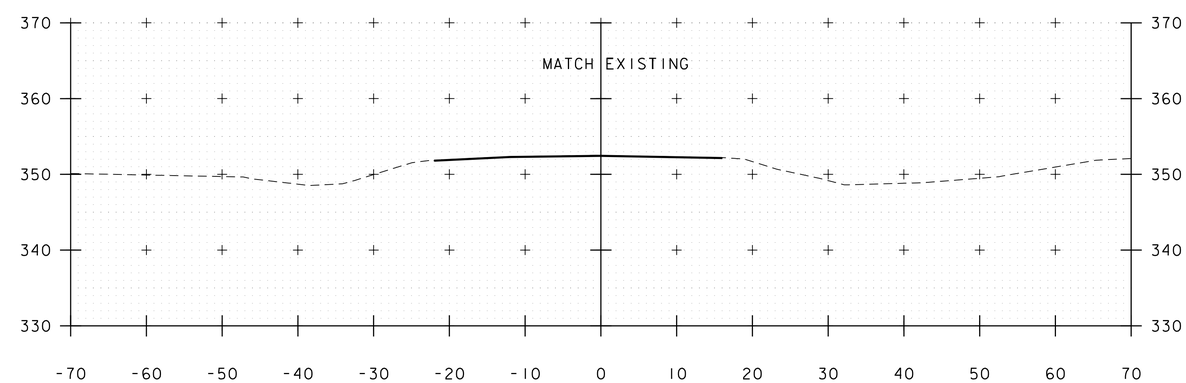
1935+00



1937+50



1937+00



1936+50

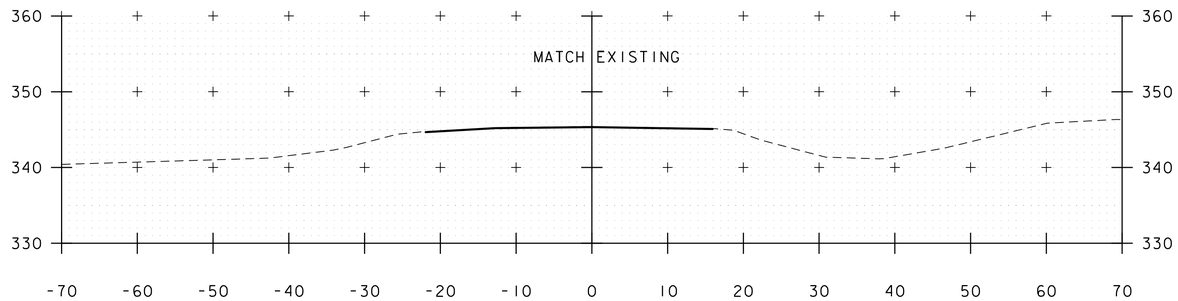
CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1935+00 - 1937+50
SCALE 1" = 10'

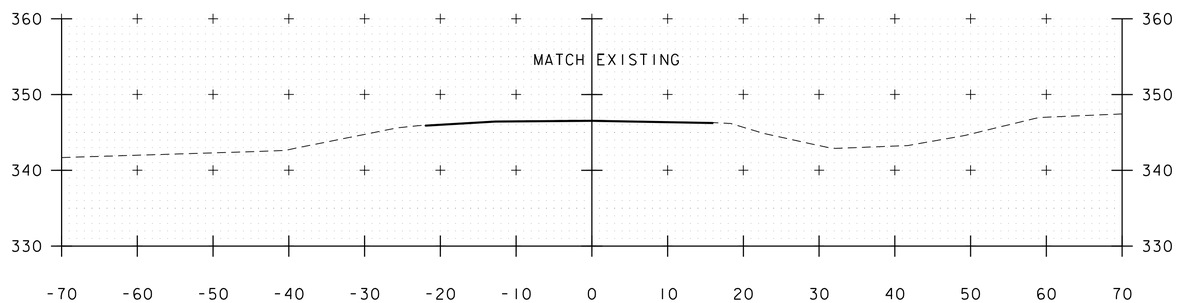
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 SOUTHBOUND CROSS SECTIONS (2 OF 6)	SHEET 50 OF 74

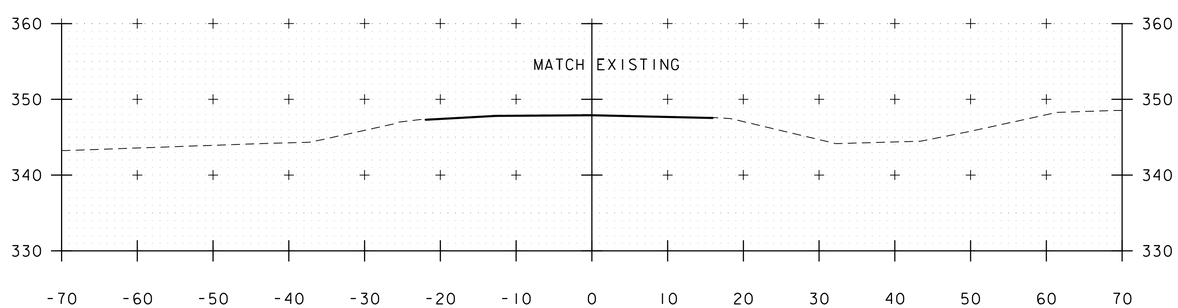
VHB 57578



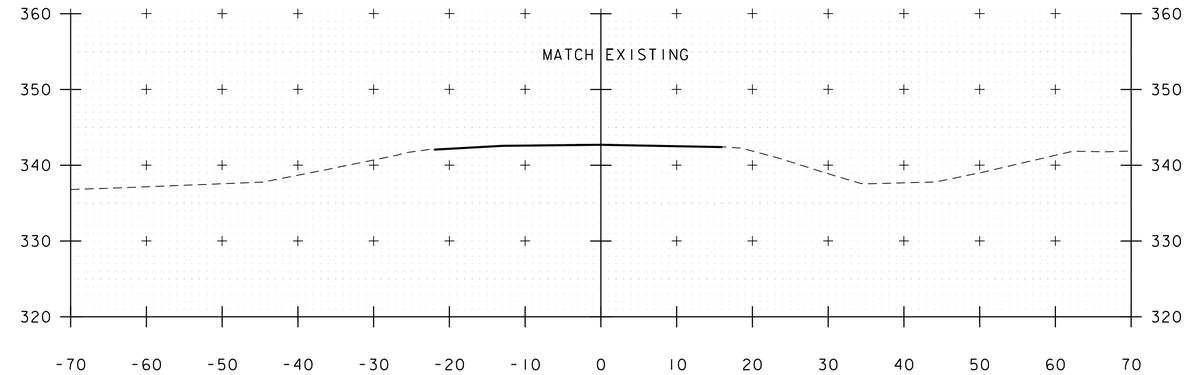
1939+00



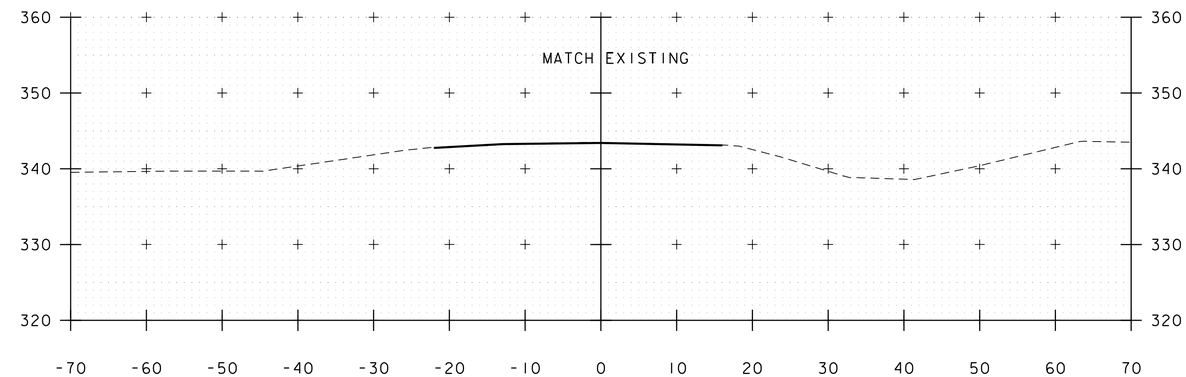
1938+50



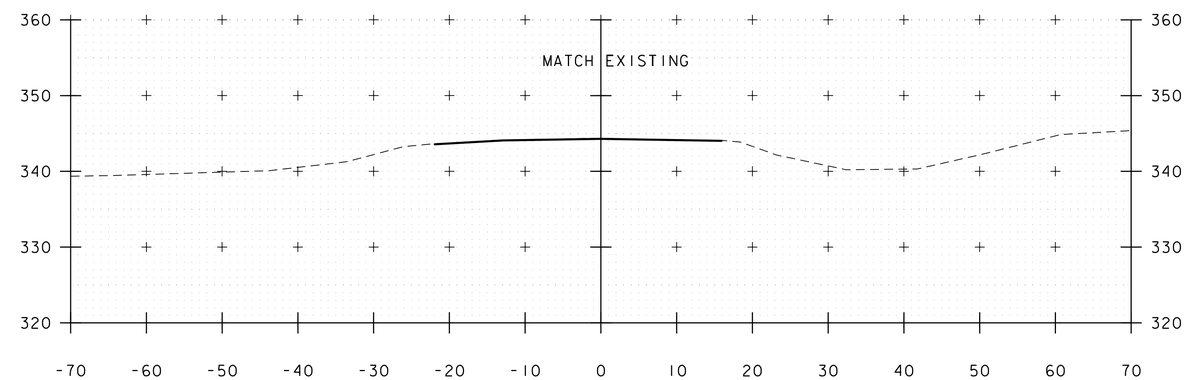
1938+00



1940+50



1940+00



1939+50

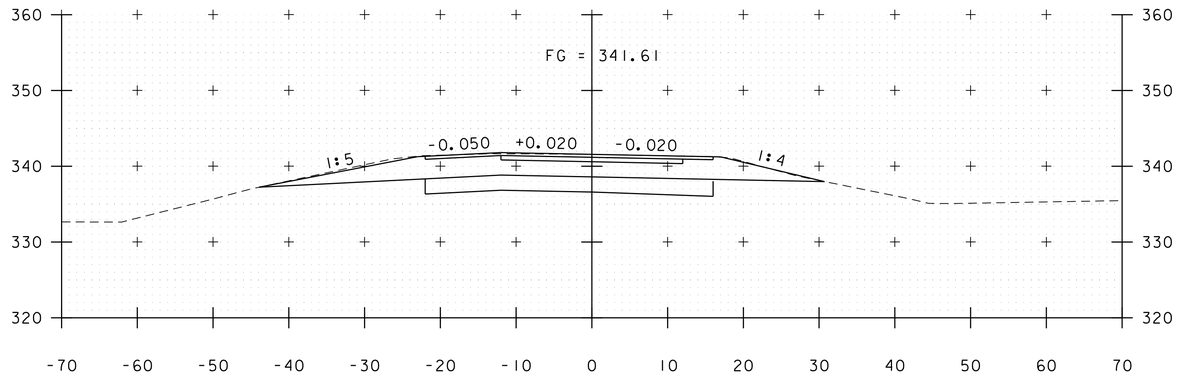
CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1938+00 - 1940+50
SCALE 1" = 10'

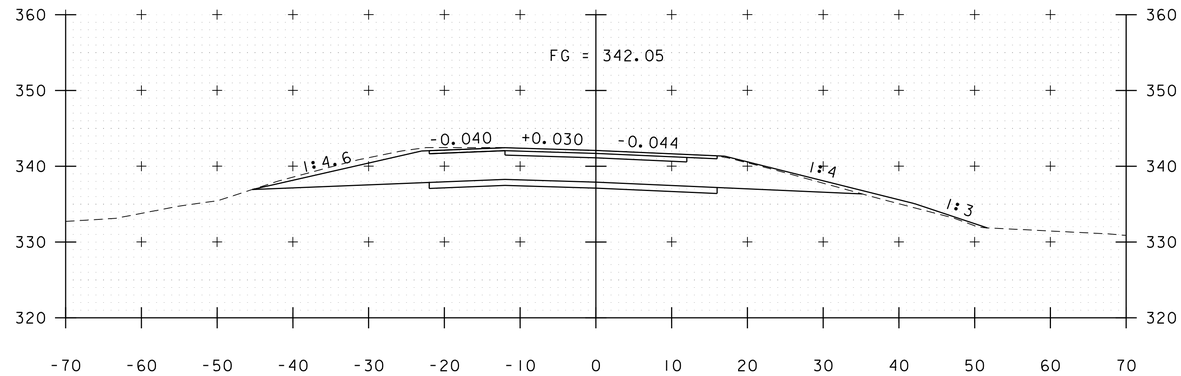
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 SOUTHBOUND CROSS SECTIONS (3 OF 6)	SHEET 51 OF 74

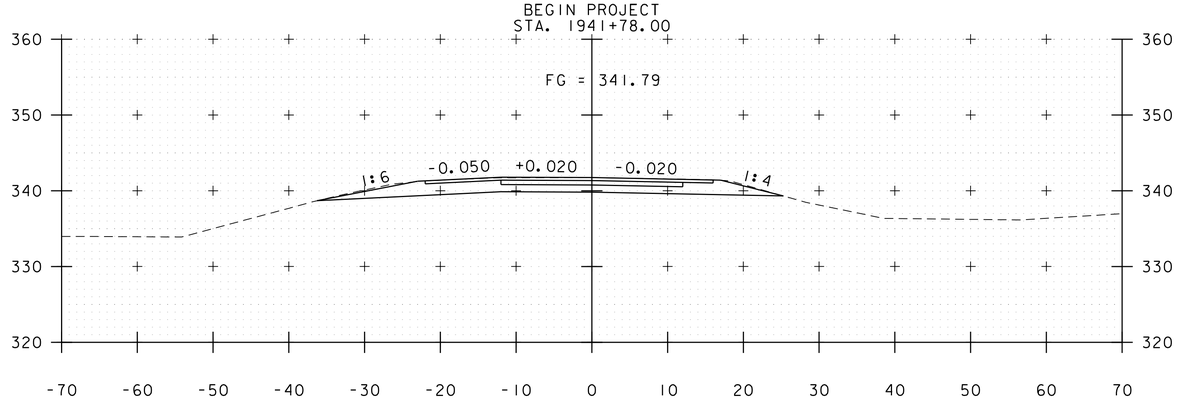
VHB 57578



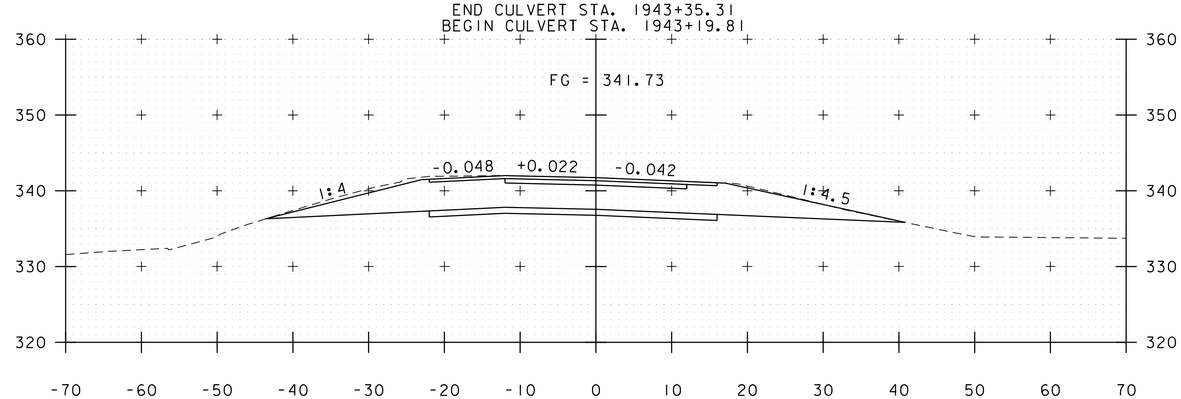
1942+00
BEGIN PROJECT
STA. 1941+78.00



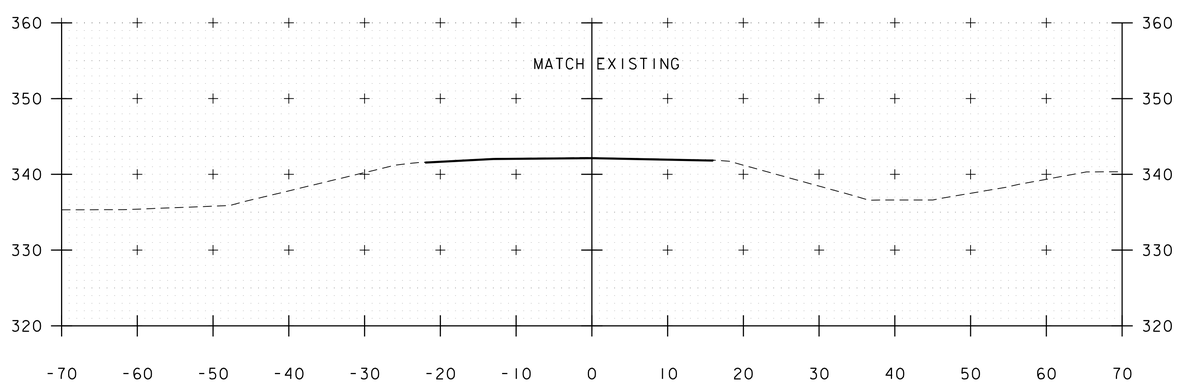
1943+50
END CULVERT STA. 1943+35.31
BEGIN CULVERT STA. 1943+19.81



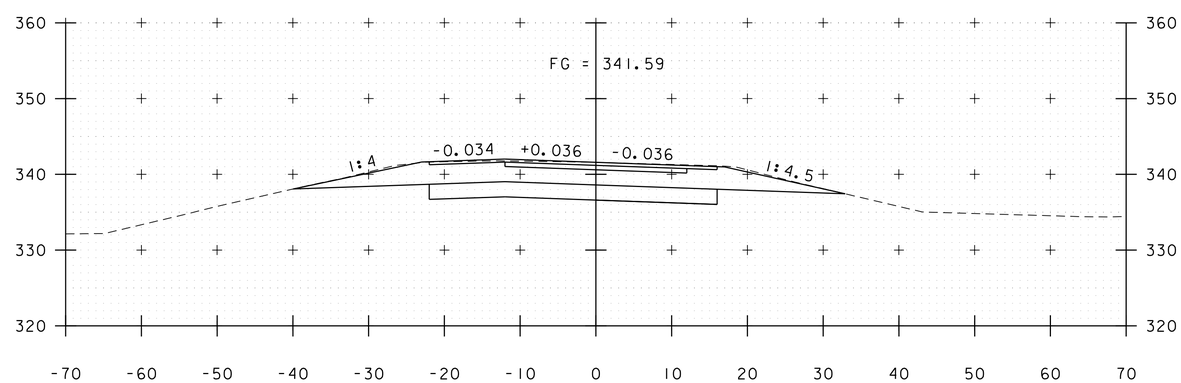
1941+50



1943+00



1941+00



1942+50

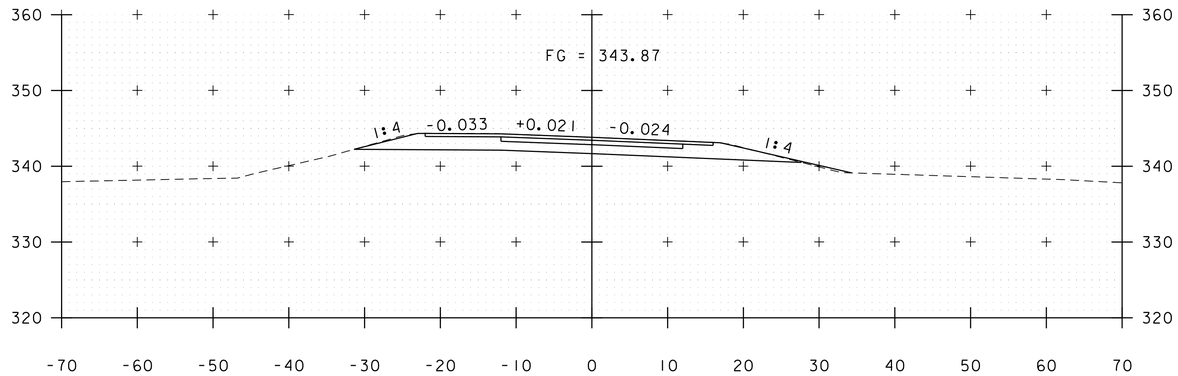
CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1941+00 - 1943+50
SCALE 1" = 10'

Vanasse Hangen Brustlin, Inc.

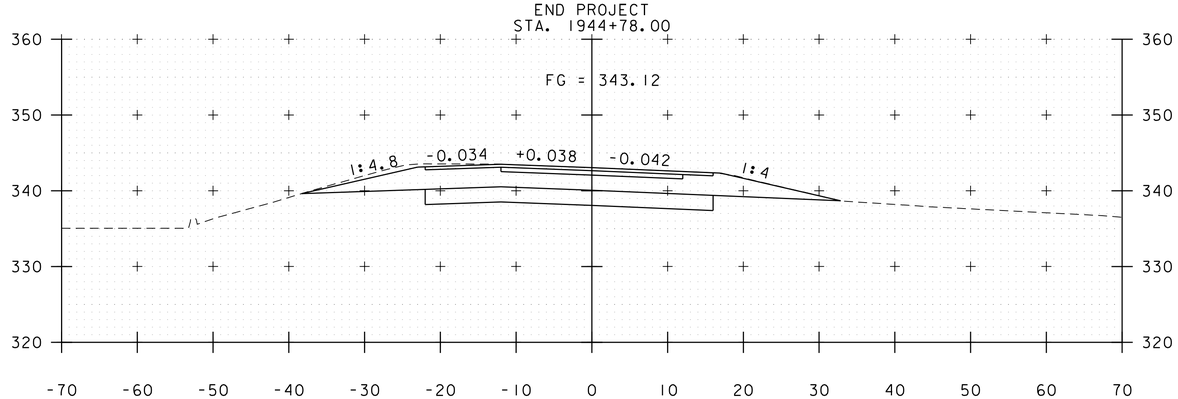
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-I SOUTHBOUND CROSS SECTIONS (4 OF 6)	SHEET 52 OF 74

VHB 57578

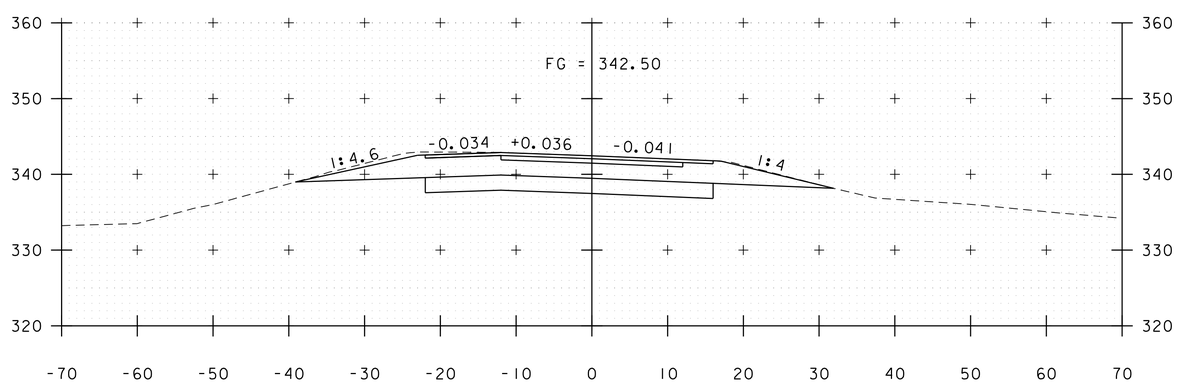


1945+00

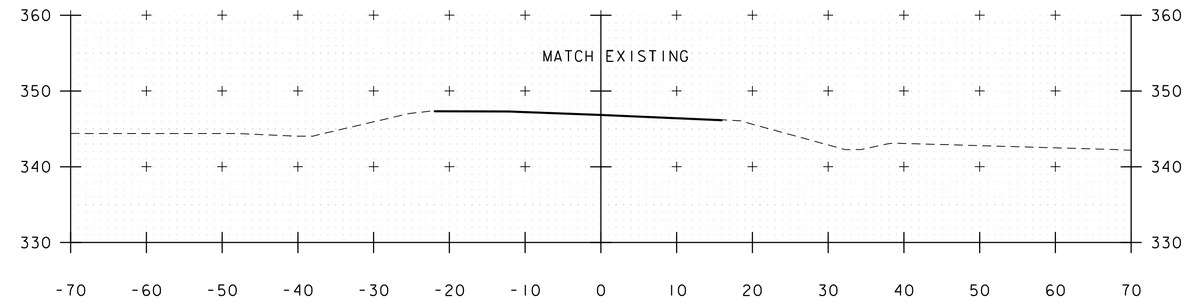
END PROJECT
STA. 1944+78.00



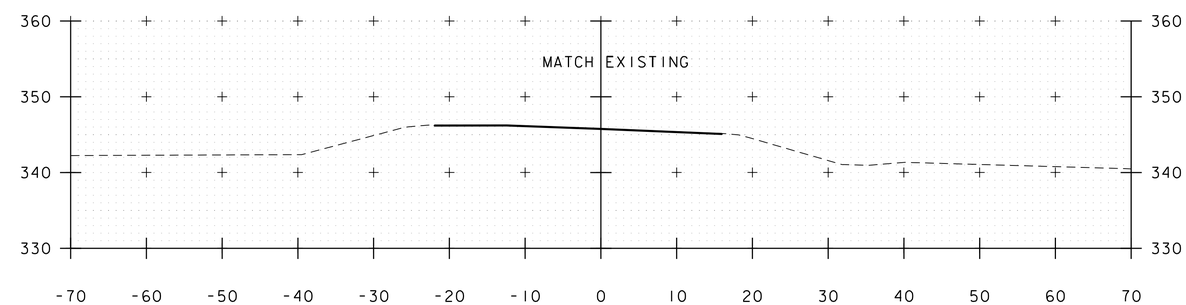
1944+50



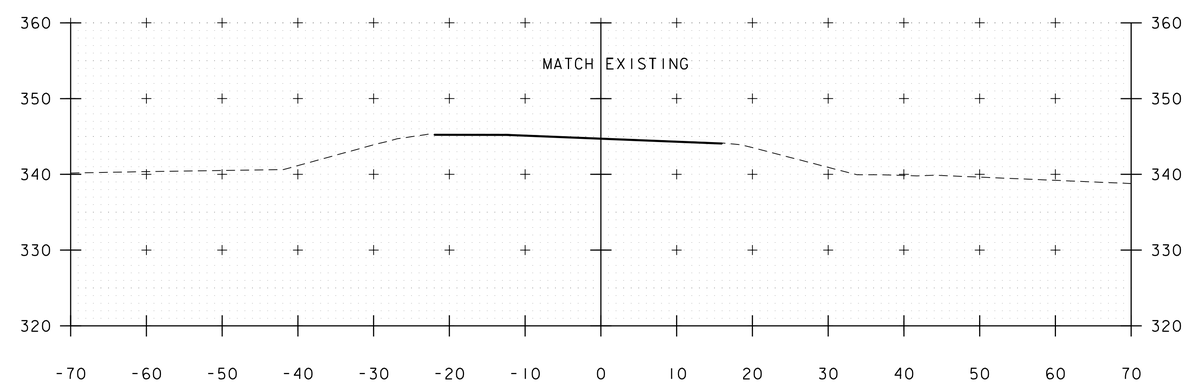
1944+00



1946+50



1946+00



1945+50

CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1944+00 - 1946+50
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-I SOUTHBOUND CROSS SECTIONS (5 OF 6)	SHEET 53 OF 74

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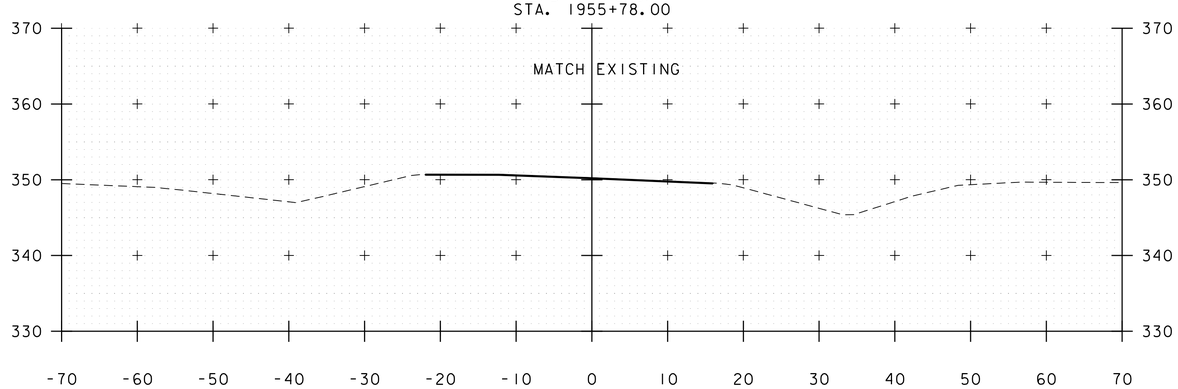
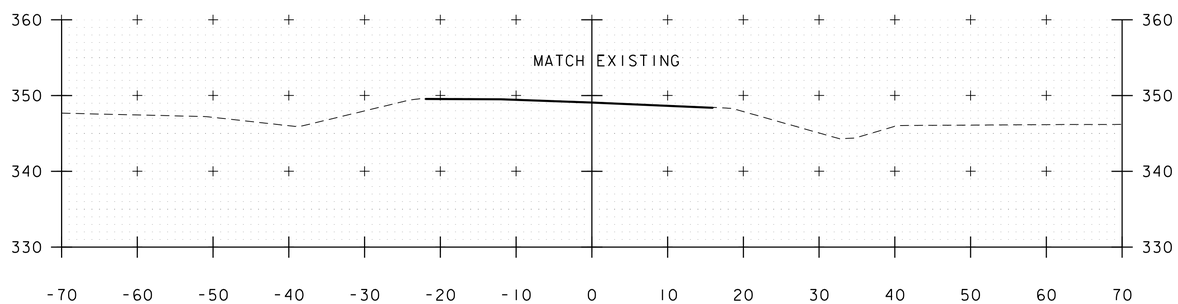
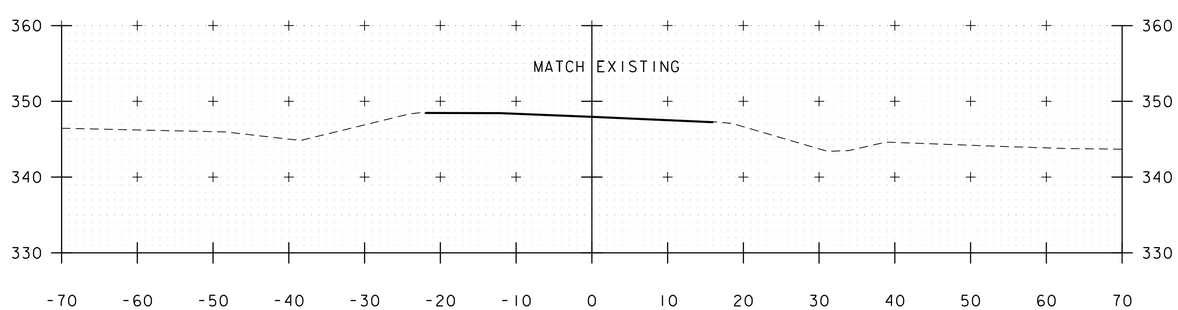
END APPROACH
STA. 1955+78.00



1948+00



1947+50



1947+00

CULVERT 63 SOUTHBOUND CROSS SECTIONS

STA. 1947+00 - 1948+50
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: J.J. WESTCOTT	CHECKED BY: S.E. BURBANK
63-1 SOUTHBOUND CROSS SECTIONS (6 OF 6)	SHEET 54 OF 74

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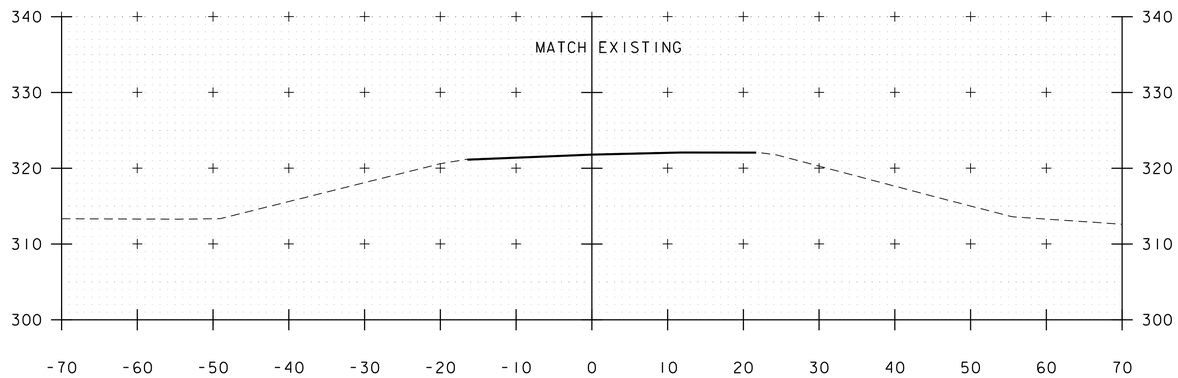
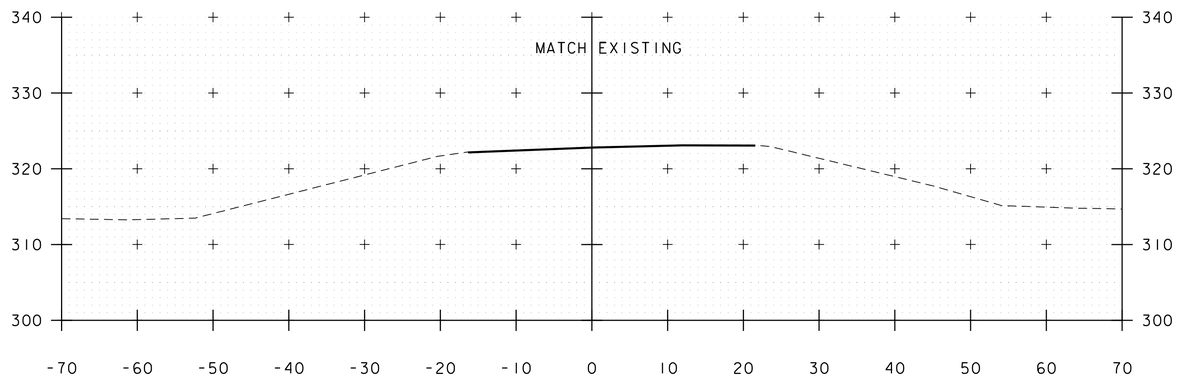
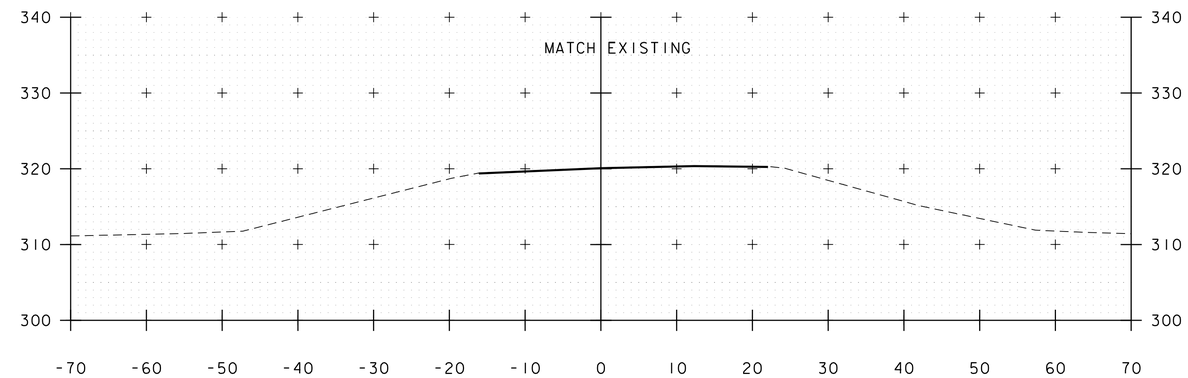


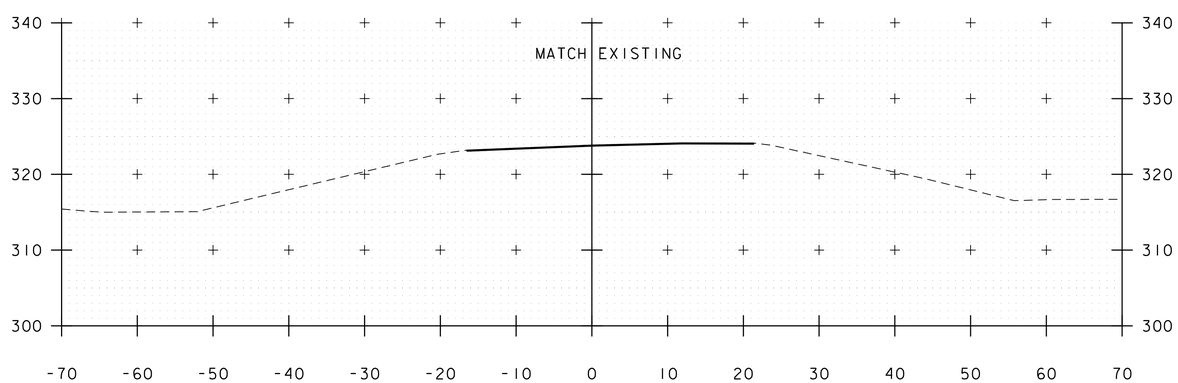
1992+50



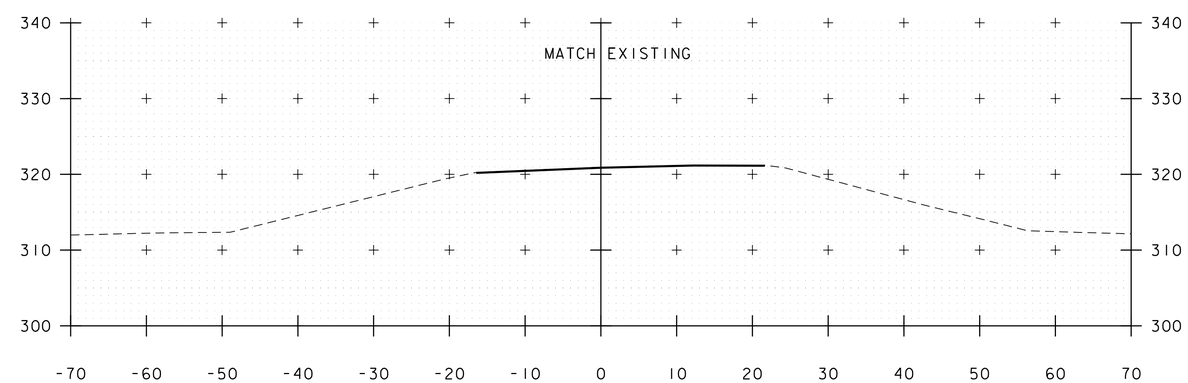
1992+00



1993+50



1991+50
BEGIN APPROACH
STA. 1989+90.00



1993+00

CULVERT 64 NORTHBOUND CROSS SECTIONS

STA. 1991+50 - 1993+50
SCALE 1" = 10'

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 NORTHBOUND CROSS SECTIONS (1 OF 6)	SHEET 55 OF 74

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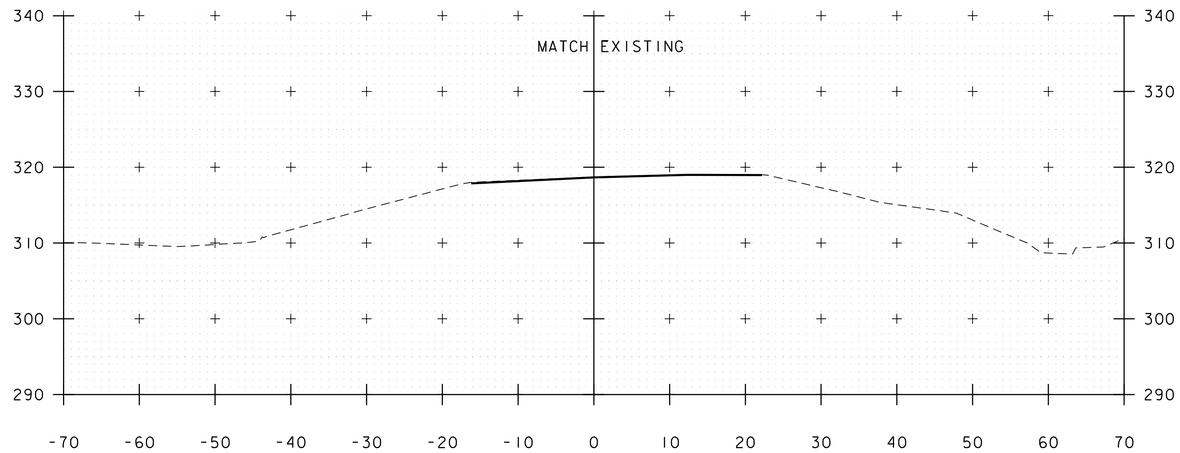
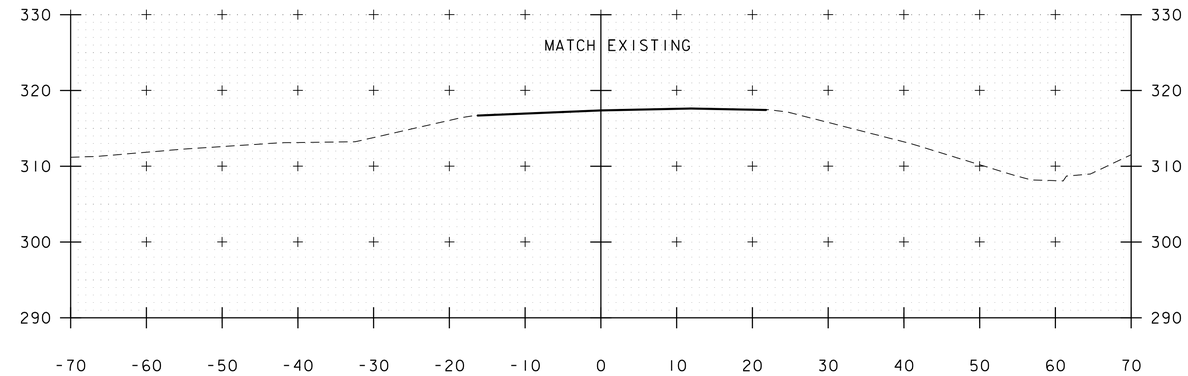
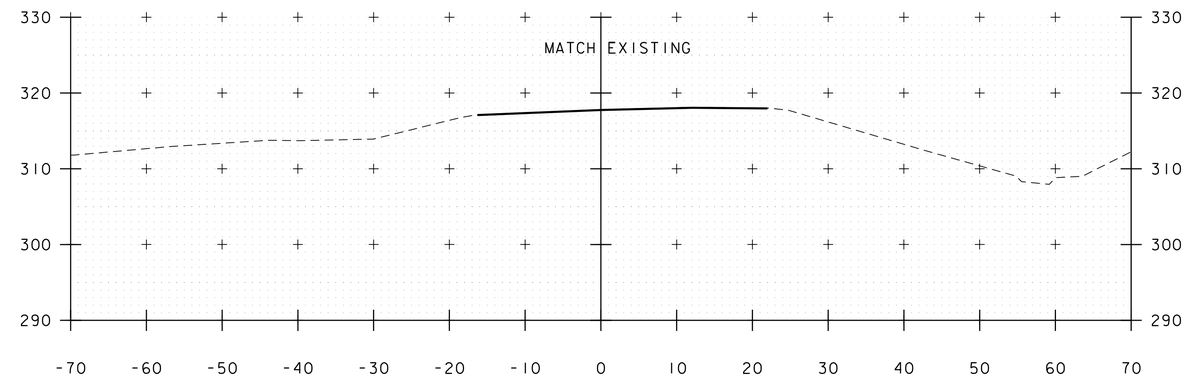


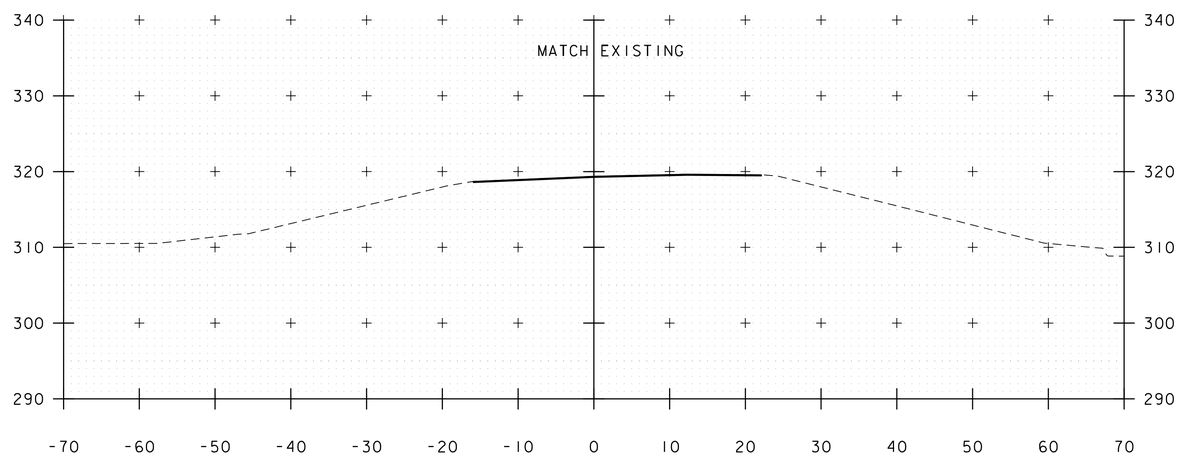
1994+50



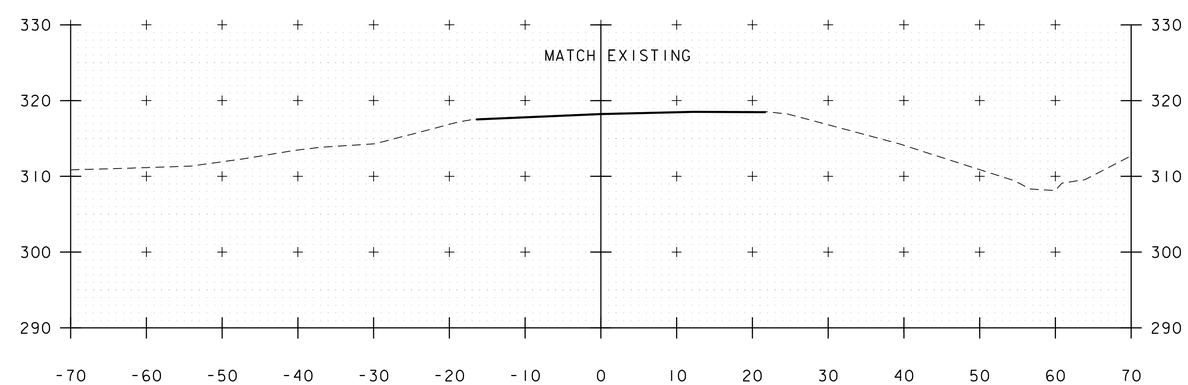
1996+00



1995+50



1994+00



1995+00

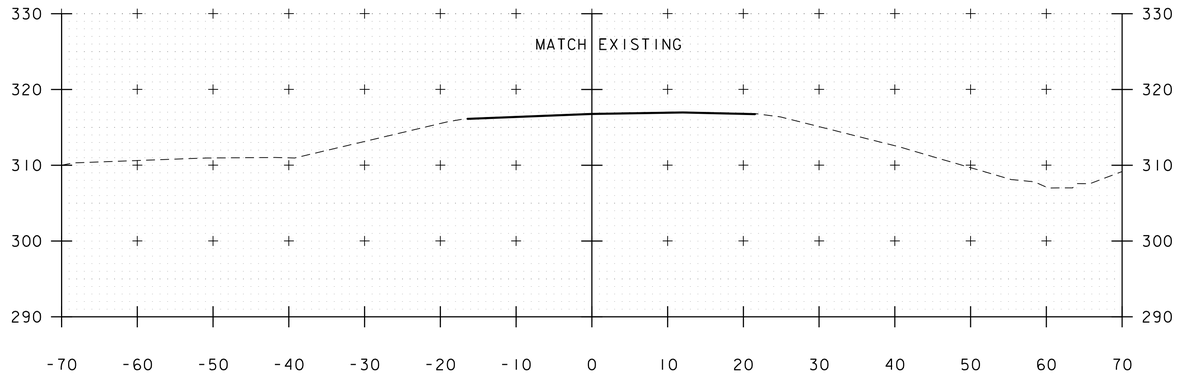
CULVERT 64 NORTHBOUND CROSS SECTIONS

STA. 1994+00 - 1996+00
SCALE 1" = 10"

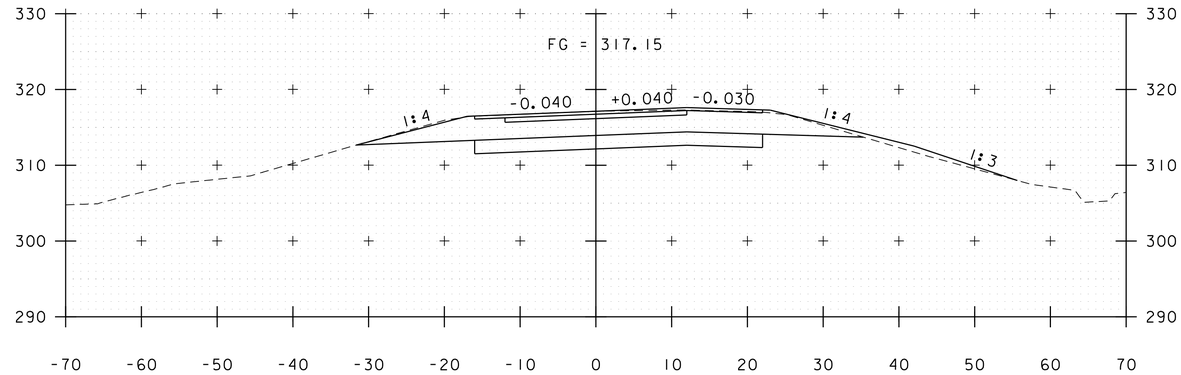
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1NORTHBOUND CROSS SECTIONS (2 OF 6)	SHEET 56 OF 74

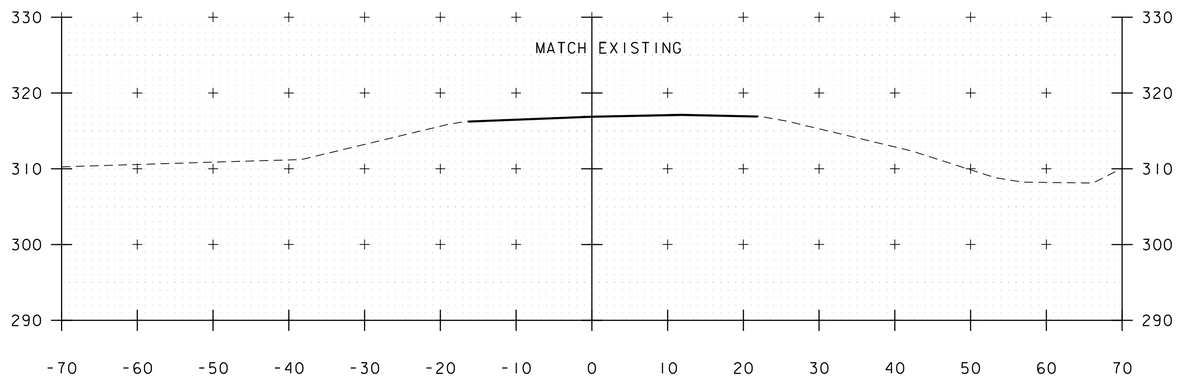
VHB 57578



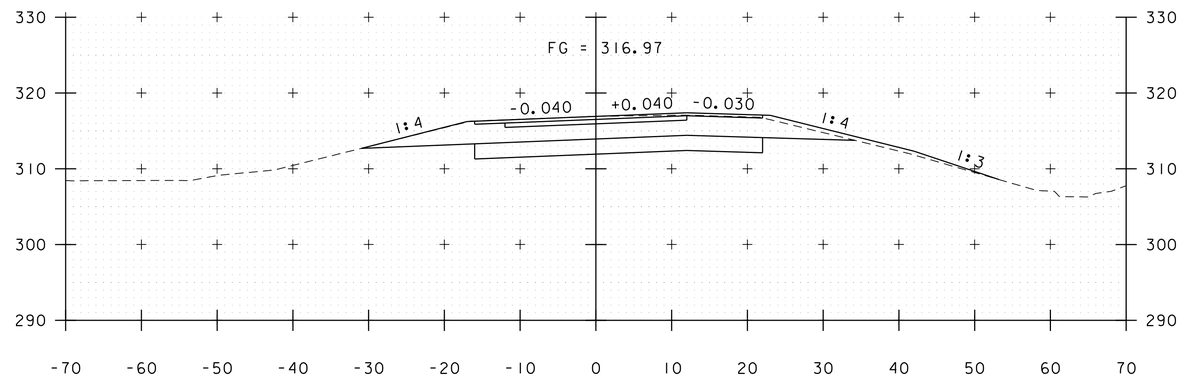
1997+50



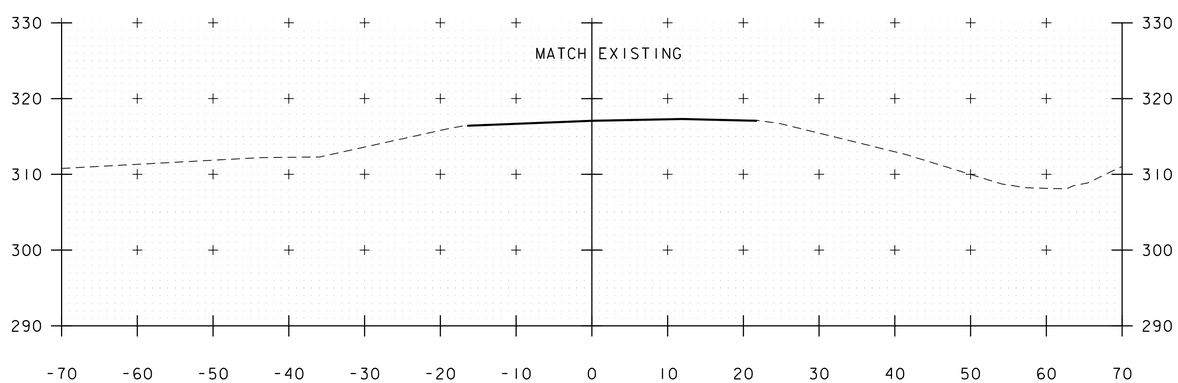
1999+00



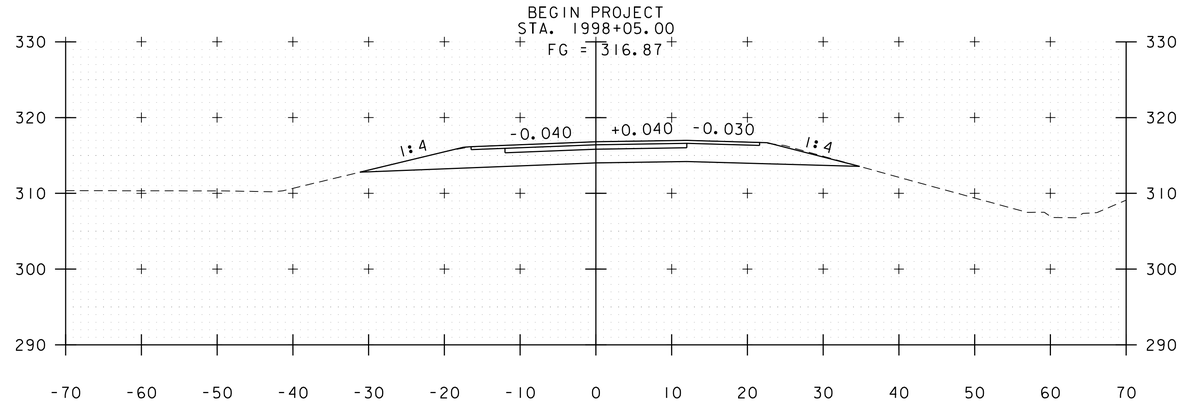
1997+00



1998+50



1996+50



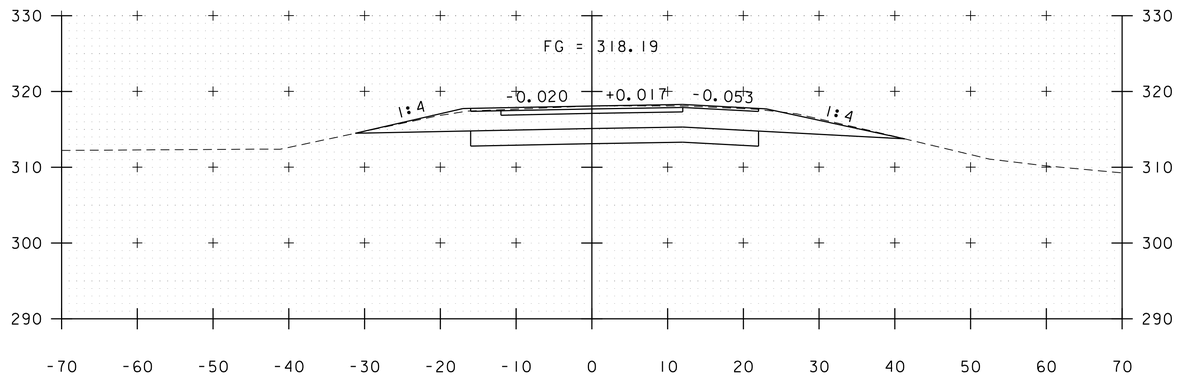
1998+00

CULVERT 64 NORTHBOUND CROSS SECTIONS

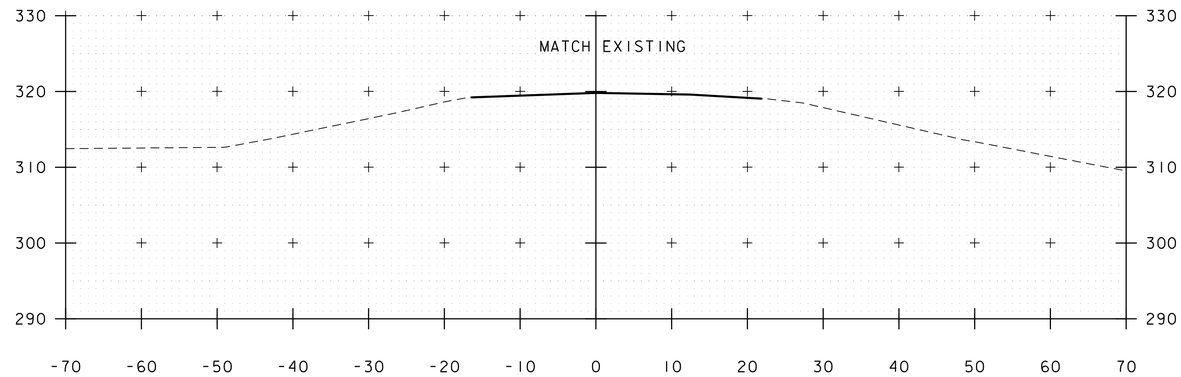
STA. 1996+50 - 1999+00
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

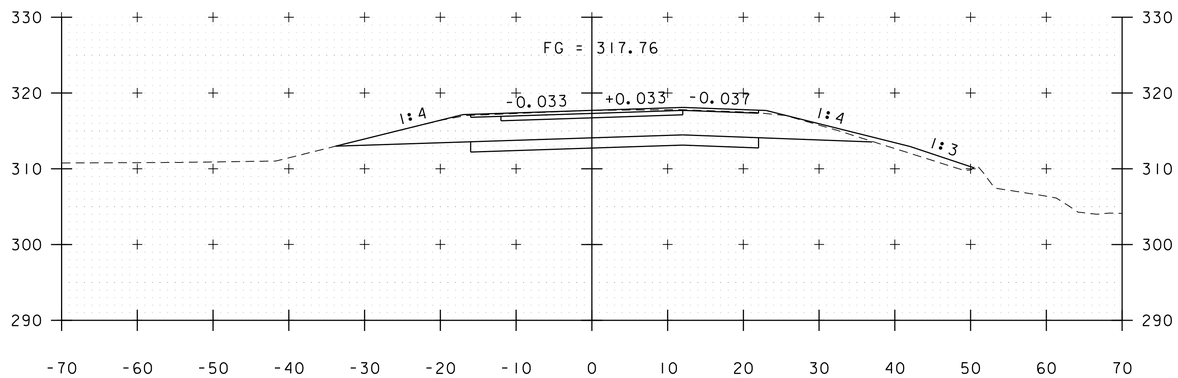
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 NORTHBOUND CROSS SECTIONS (3 OF 6)	SHEET 57 OF 74



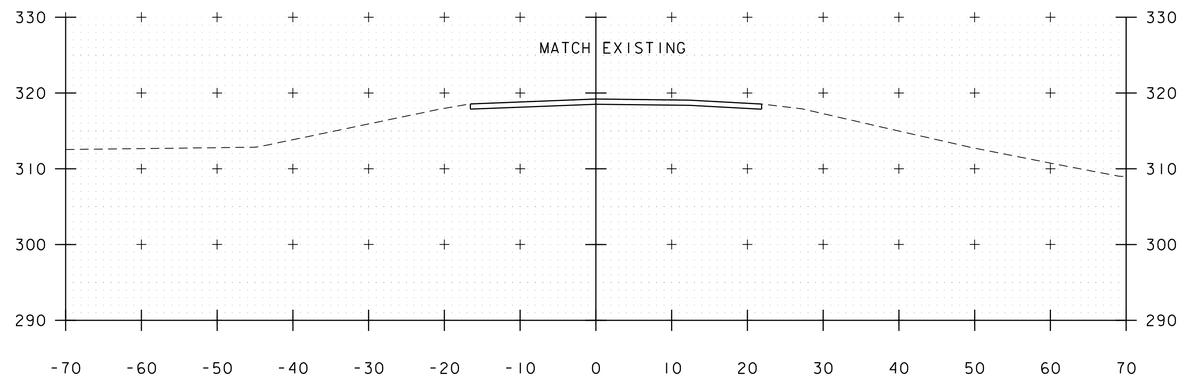
2000+50



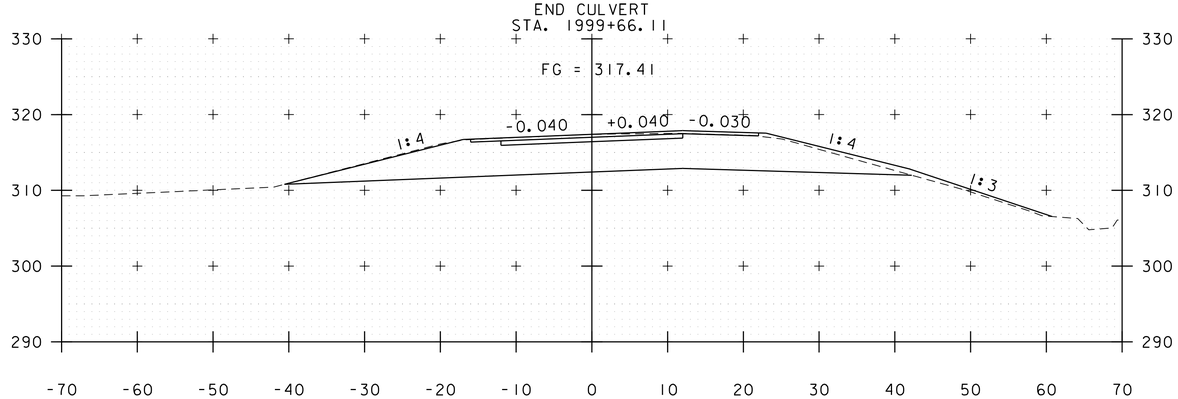
2002+00



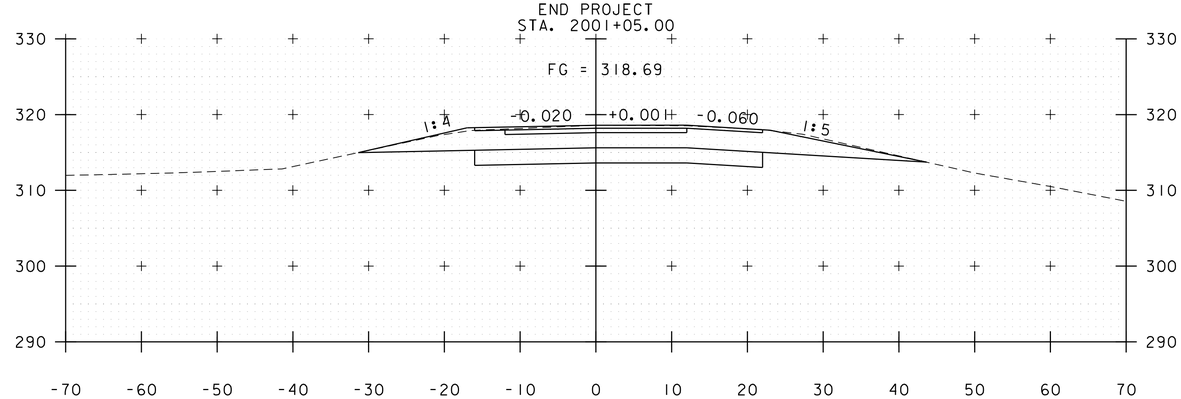
2000+00
END CULVERT
STA. 1999+66.11



2001+50
END PROJECT
STA. 2001+05.00



1999+50
BEGIN CULVERT
STA. 1999+44.35



2001+00

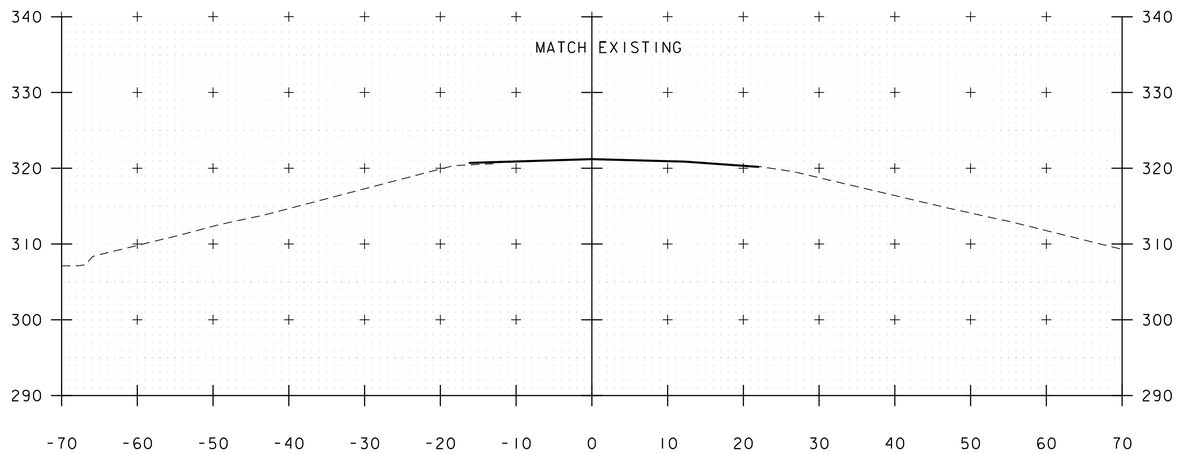
CULVERT 64 NORTHBOUND CROSS SECTIONS

STA. 1999+50 - 2002+00
SCALE 1" = 10"

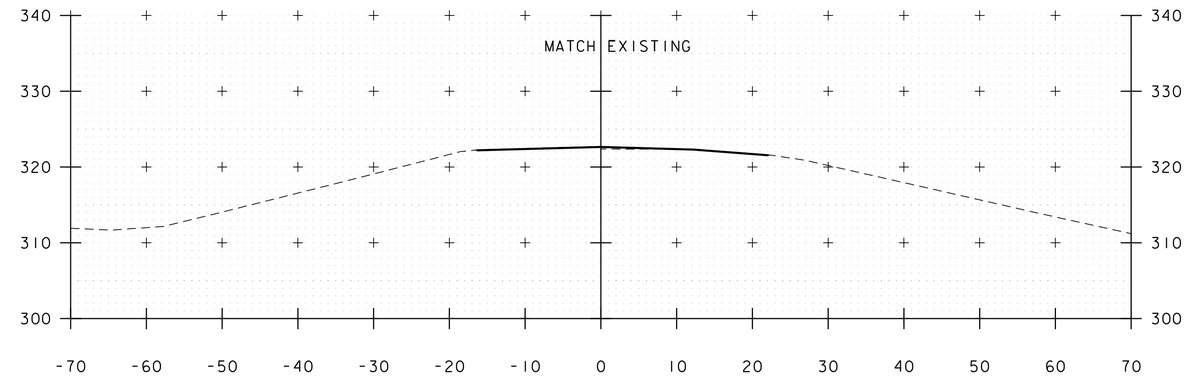
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 NORTHBOUND CROSS SECTIONS (4 OF 6)	SHEET 58 OF 74

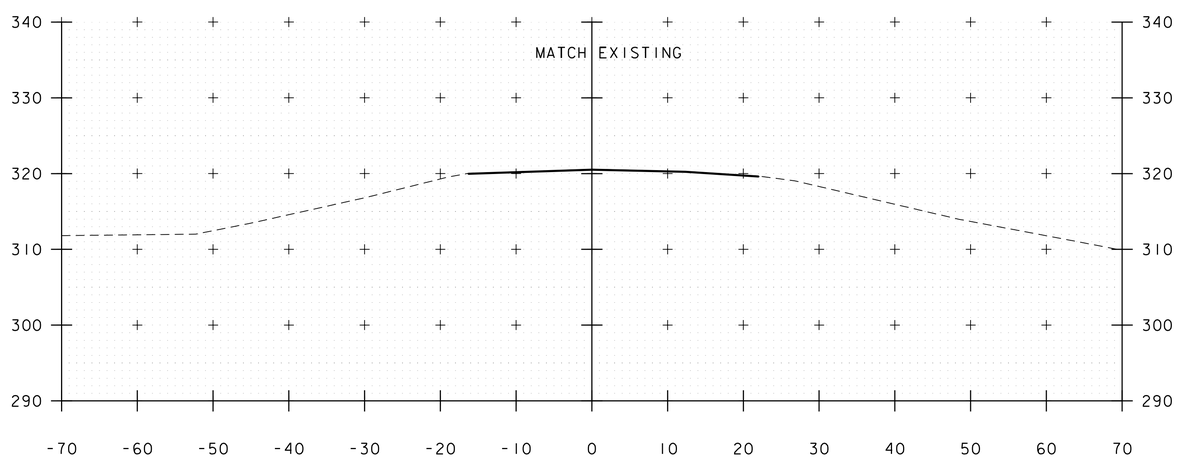
VHB 57578



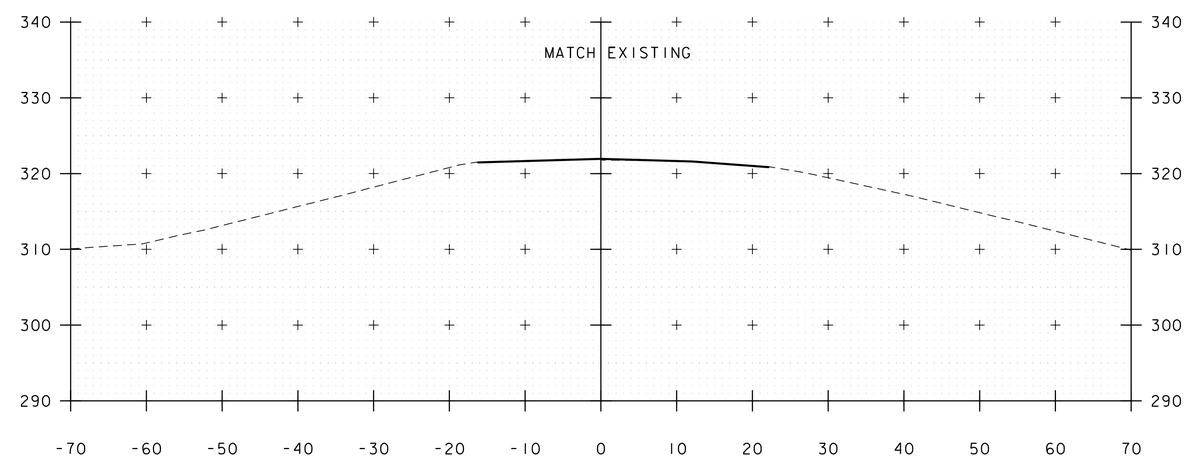
2003+00



2004+00



2002+50



2003+50

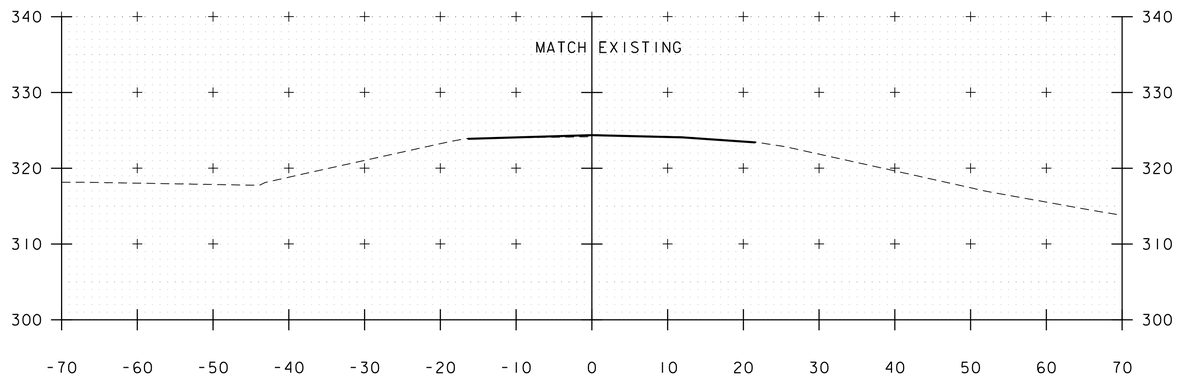
CULVERT 64 NORTHBOUND CROSS SECTIONS

STA. 2002+50 - 2004+00
SCALE 1" = 10"

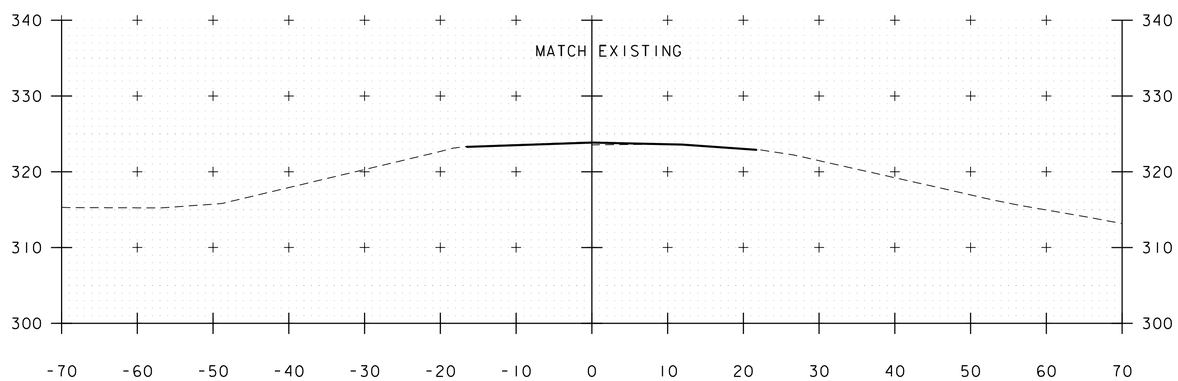
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 NORTHBOUND CROSS SECTIONS (5 OF 6)	SHEET 59 OF 74

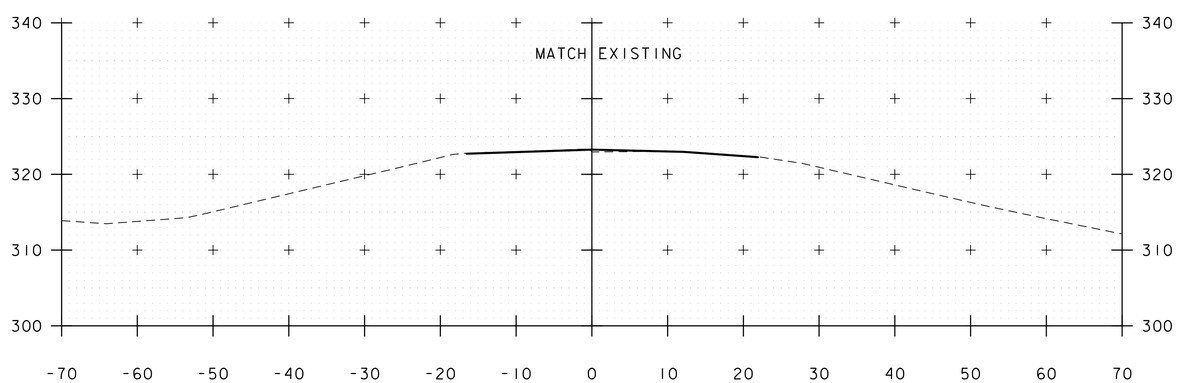
VHB 57578



2005+50

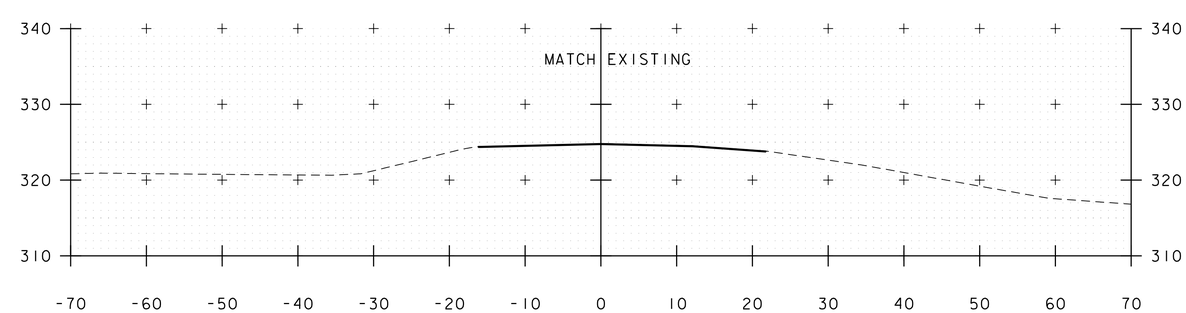


2005+00



2004+50

END APPROACH
STA. 2009+88.00



2006+00

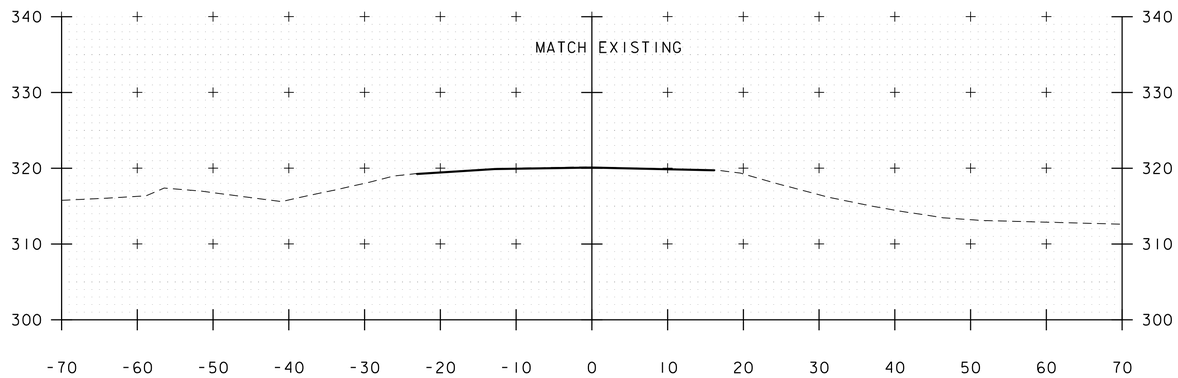
CULVERT 64 NORTHBOUND CROSS SECTIONS

STA. 2004+50 - 2006+00
SCALE 1" = 10"

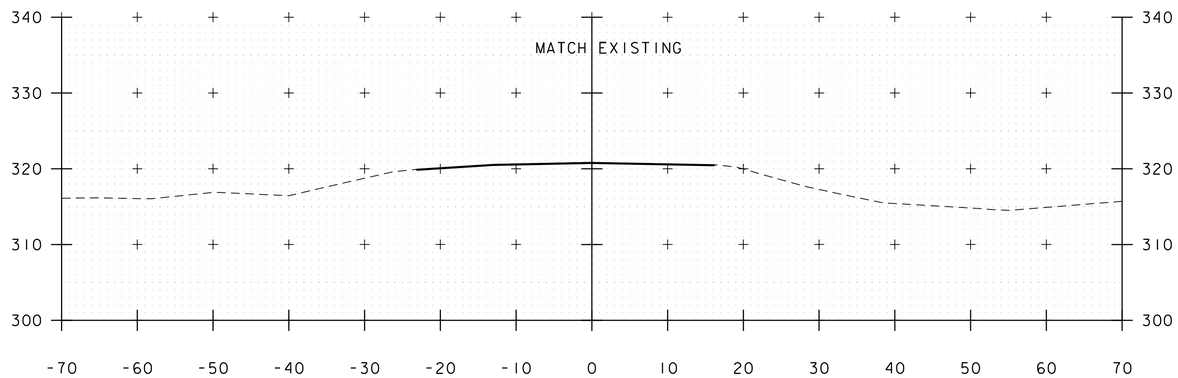
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 NORTHBOUND CROSS SECTIONS (6 OF 6)	SHEET 60 OF 74

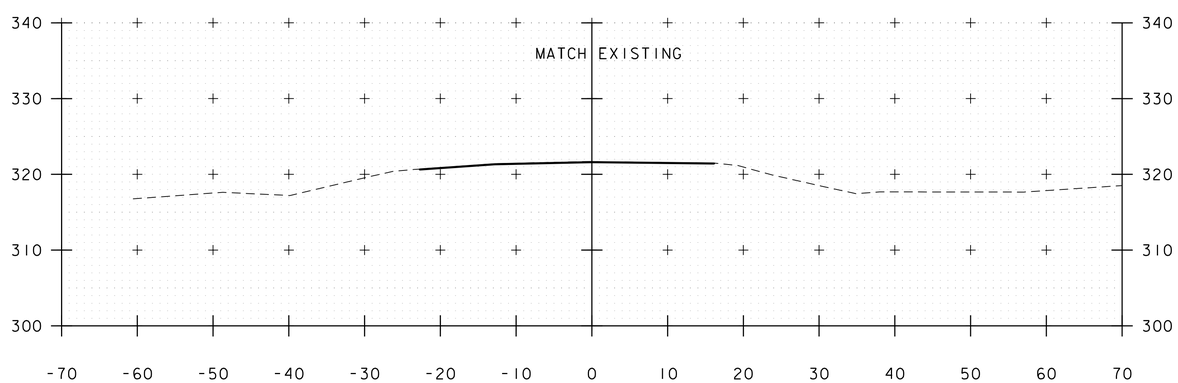
VHB 57578



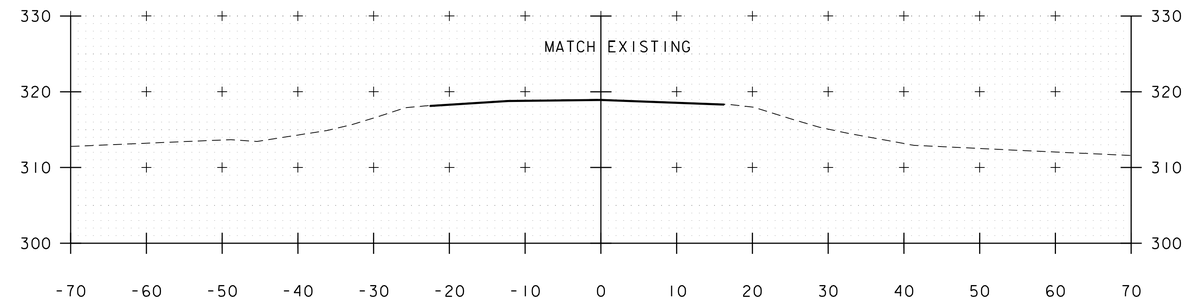
1992+00



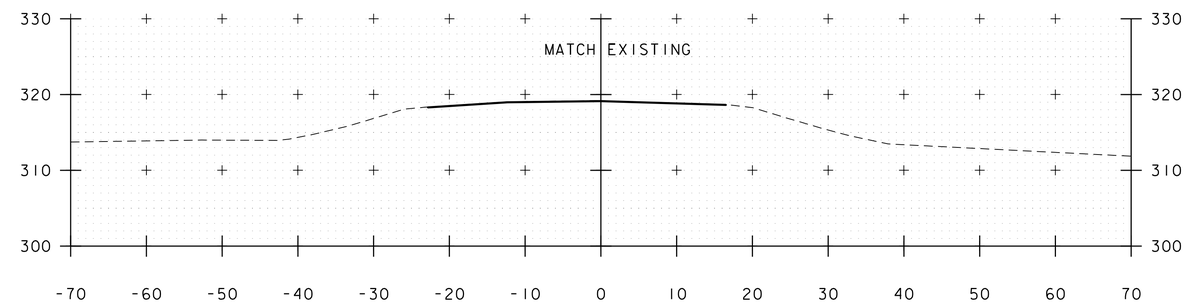
1991+50



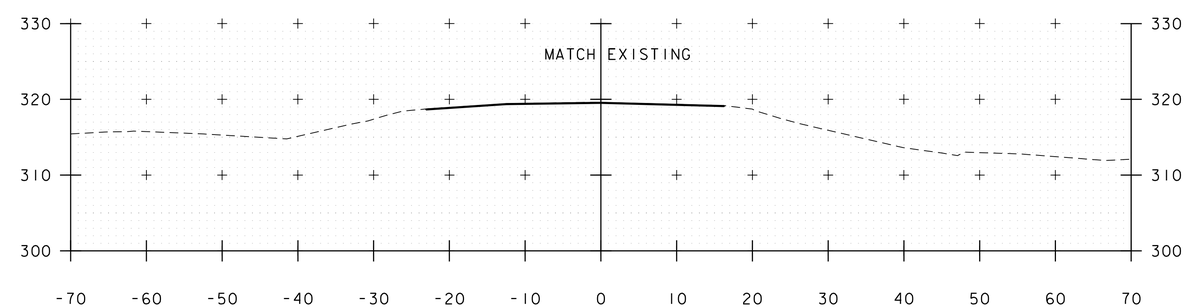
1991+00
BEGIN APPROACH
STA. 1990+32.00



1993+50



1993+00



1992+50

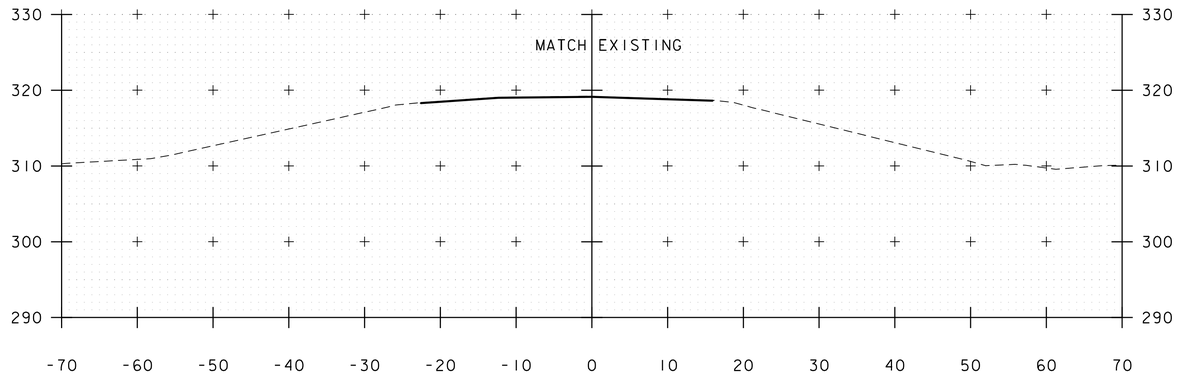
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 1991+00 - 1993+50
SCALE 1" = 10"

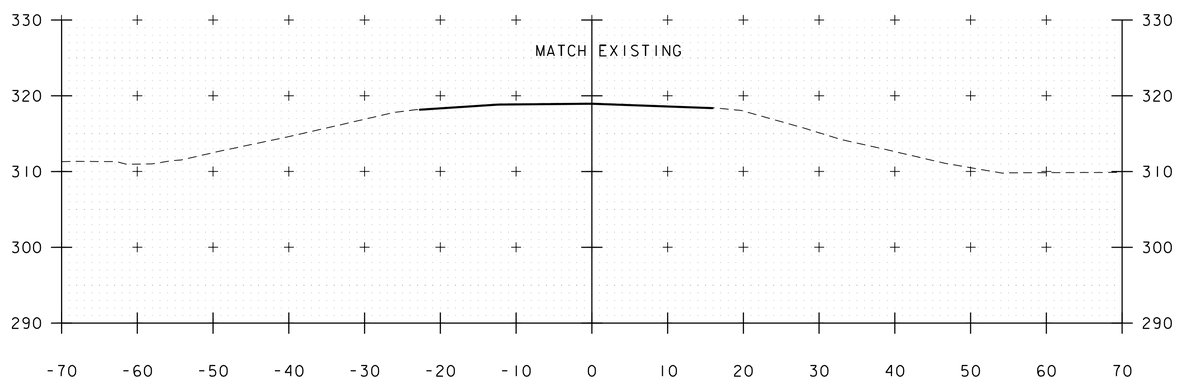
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 SOUTHBOUND CROSS SECTIONS (1 OF 6)	SHEET 61 OF 74

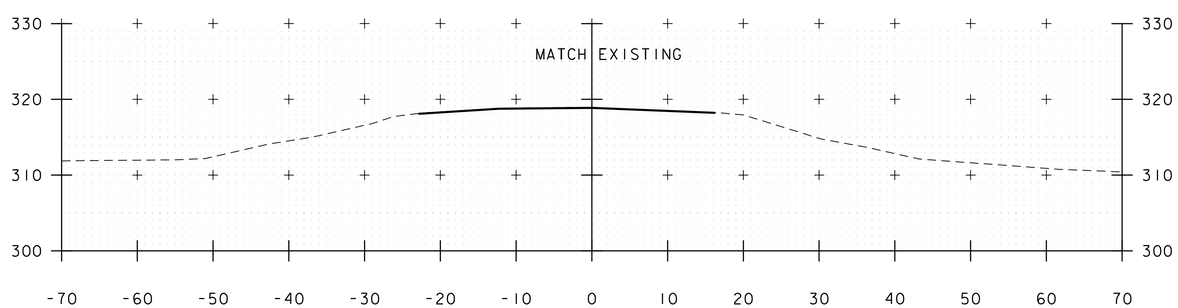
VHB 57578



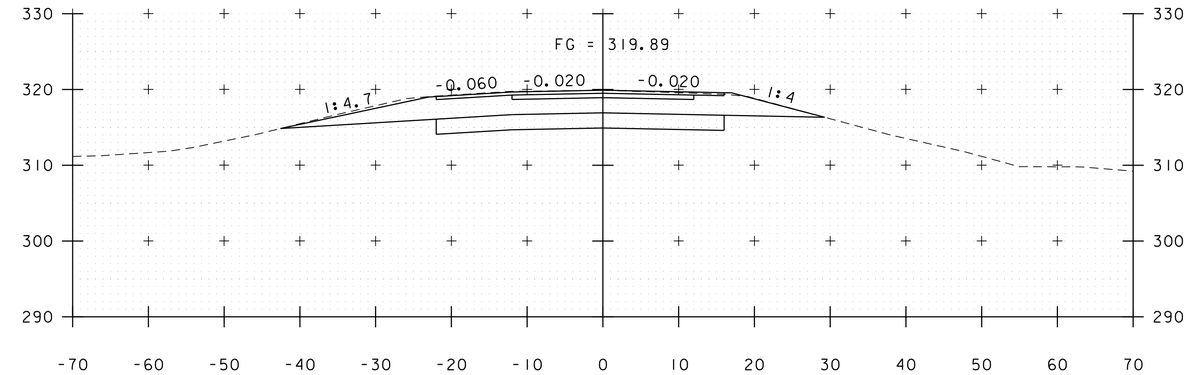
1995+00



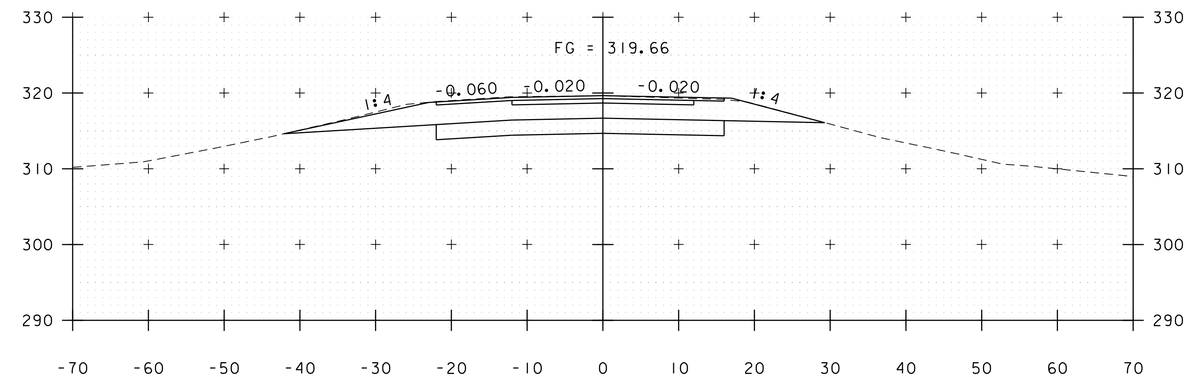
1994+50



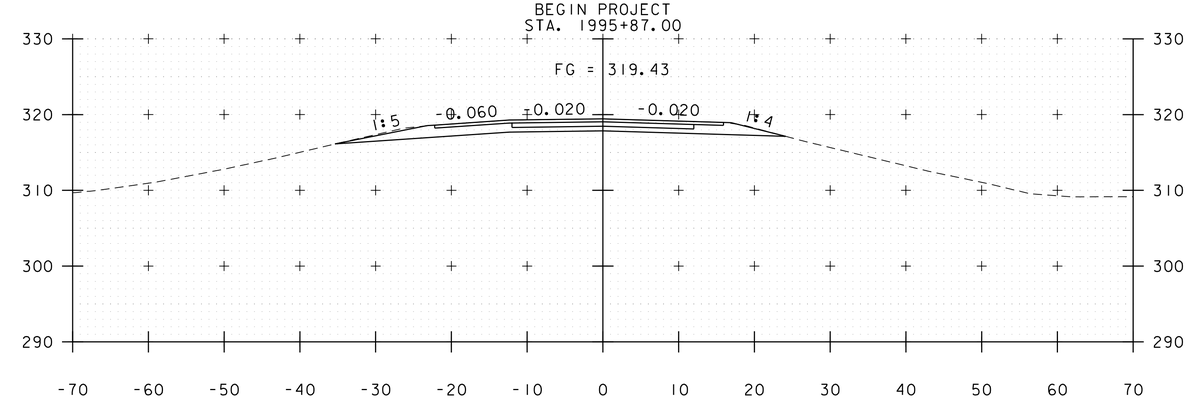
1994+00



1996+50



1996+00
BEGIN PROJECT
STA. 1995+87.00



1995+50

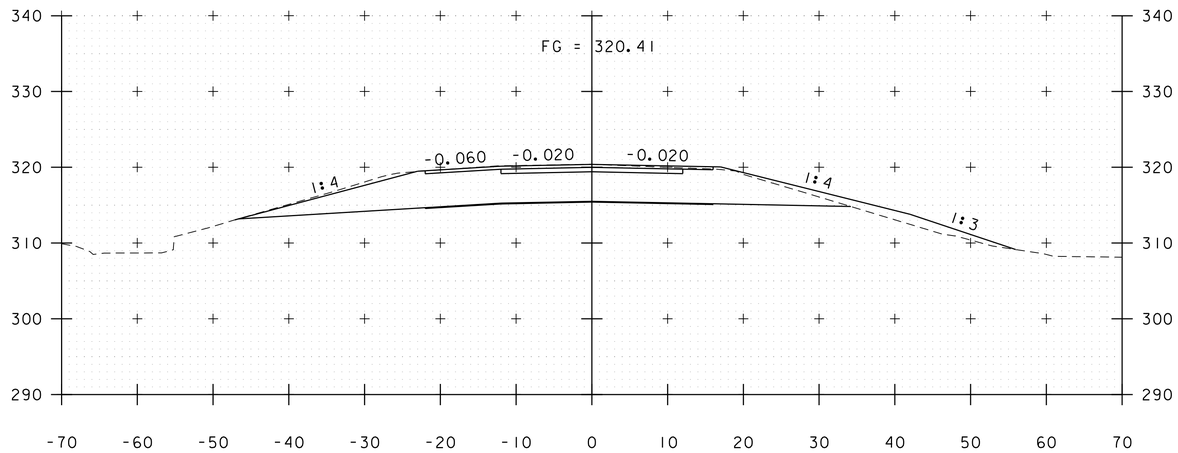
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 1994+00 - 1996+50
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

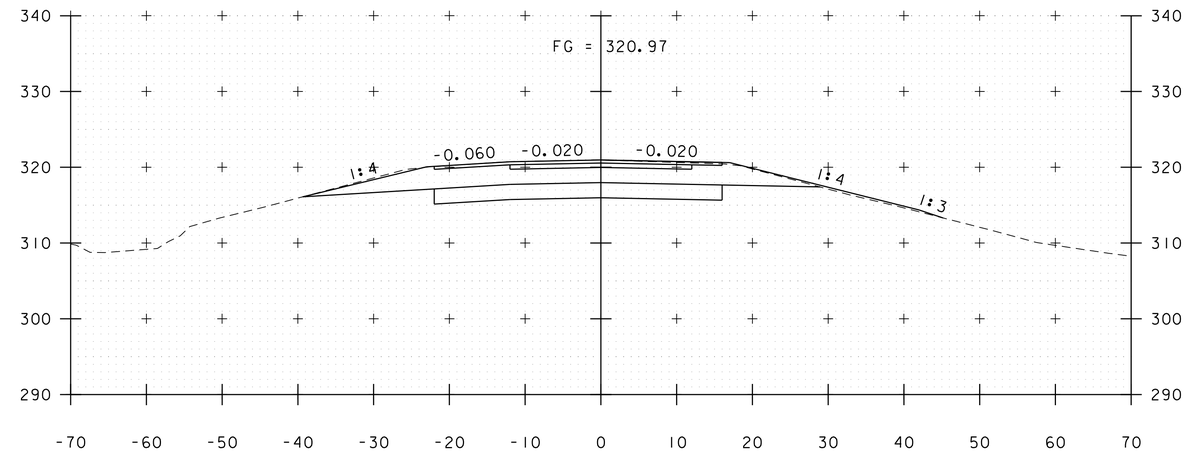
PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-I SOUTHBOUND CROSS SECTIONS (2 OF 6)	SHEET 62 OF 74

VHB 57578

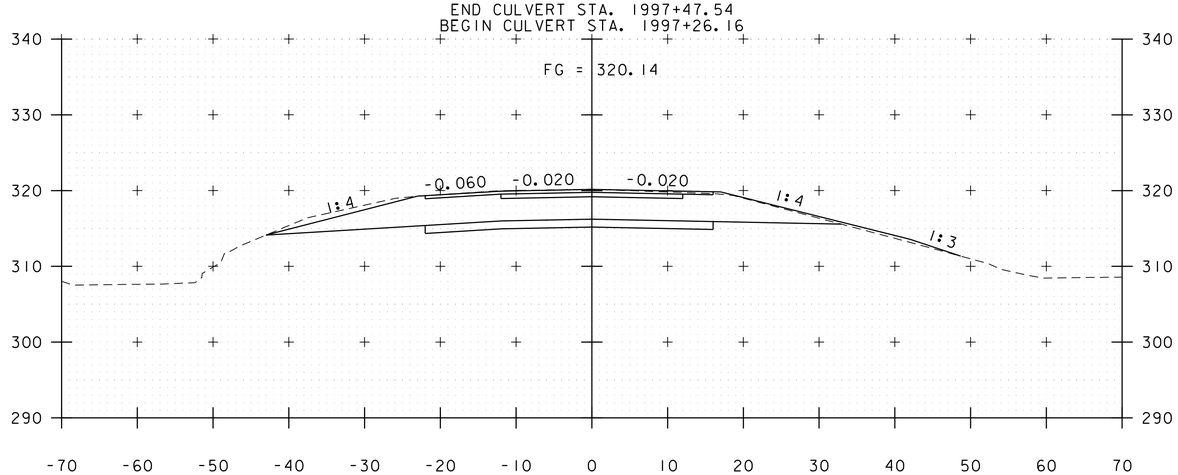


1997+50

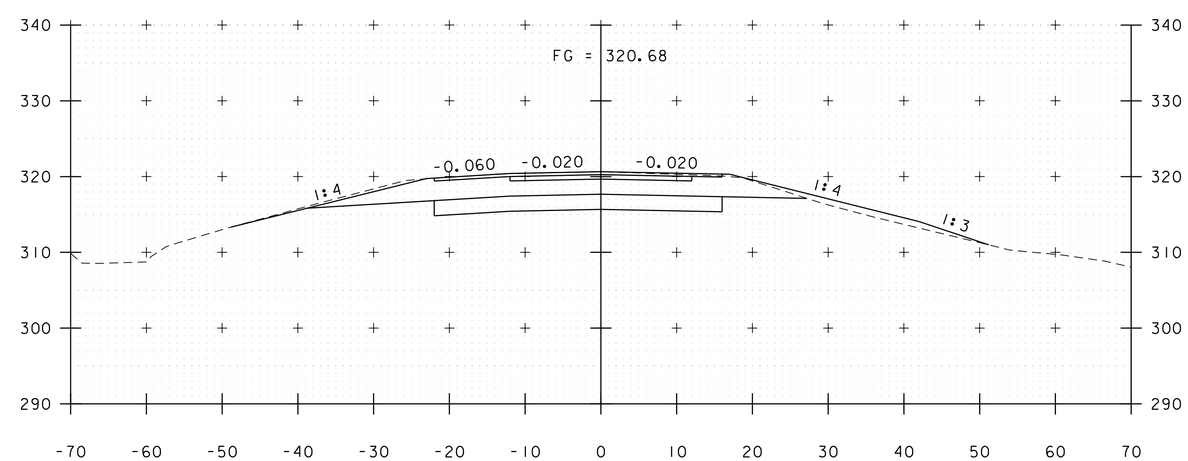
END CULVERT STA. 1997+47.54
BEGIN CULVERT STA. 1997+26.16



1998+50



1997+00



1998+00

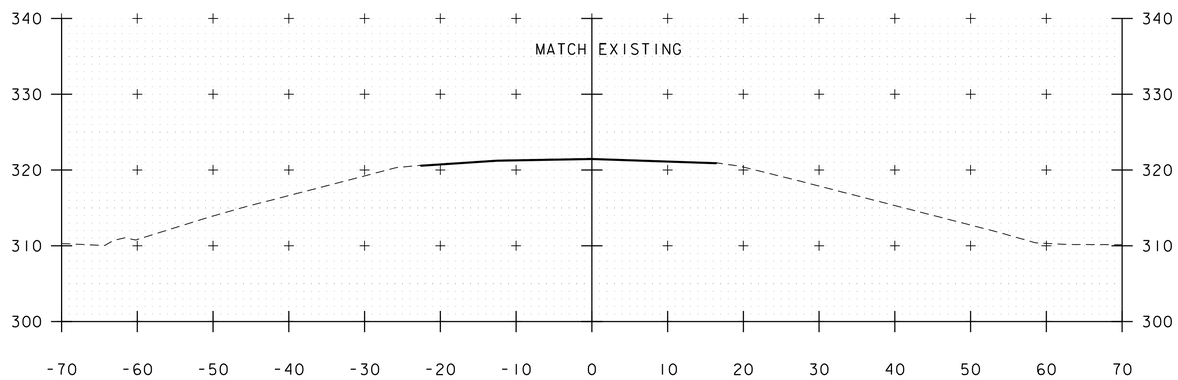
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 1997+00 - 1998+50
SCALE 1" = 10"

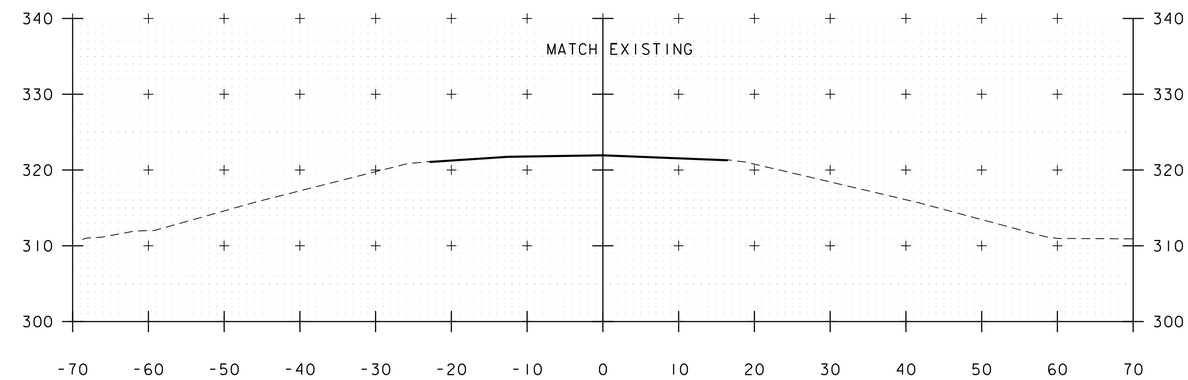
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 SOUTHBOUND CROSS SECTIONS (3 OF 6)	SHEET 63 OF 74

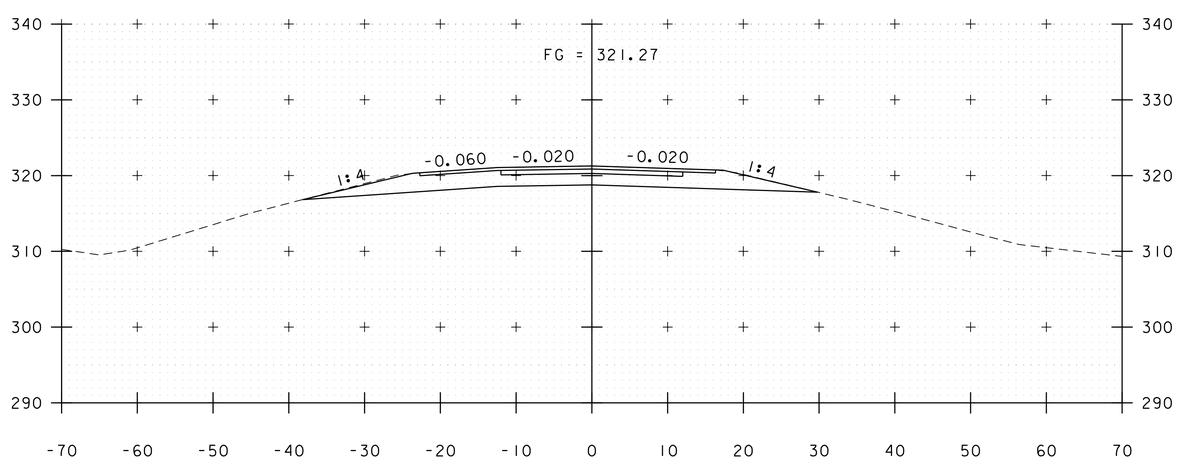
VHB 57578



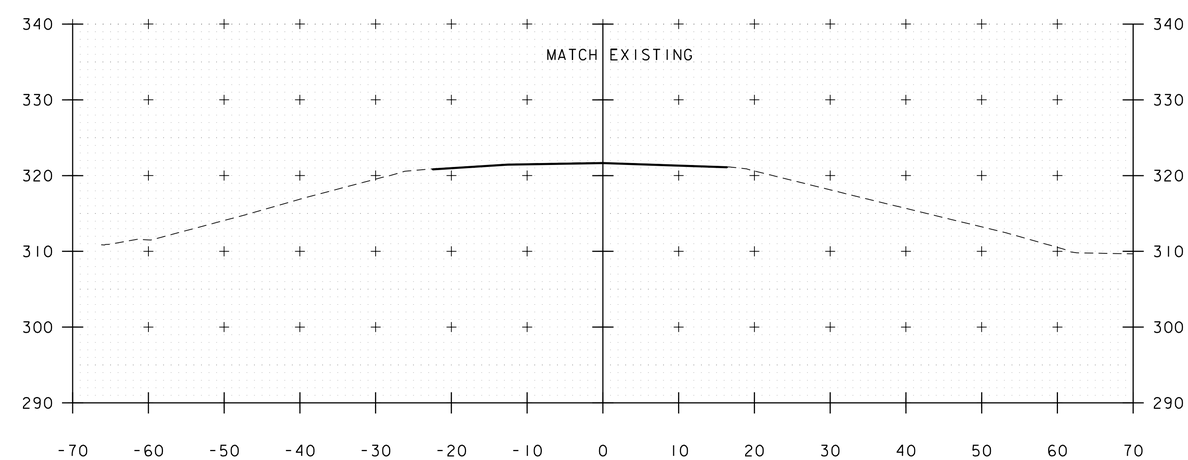
1999+50



2000+50



1999+00
END PROJECT
STA. 1998+87.00



2000+00

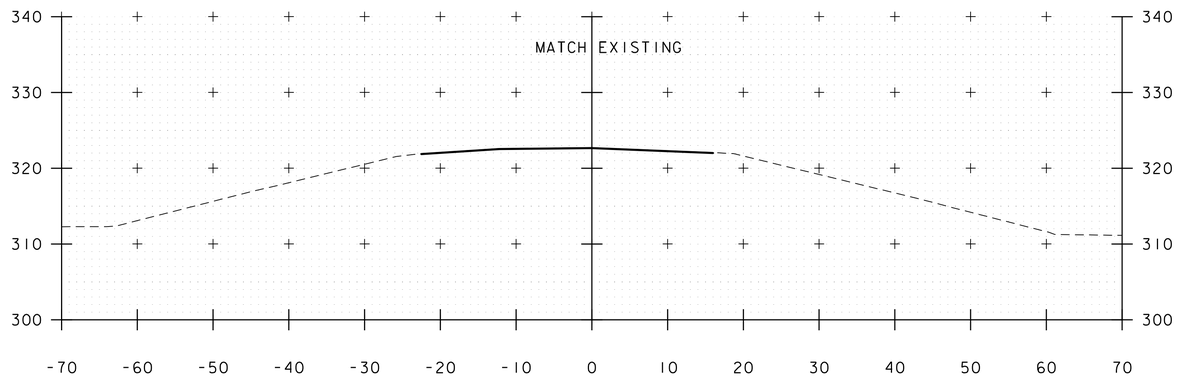
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 1999+00 - 2000+50
SCALE 1" = 10"

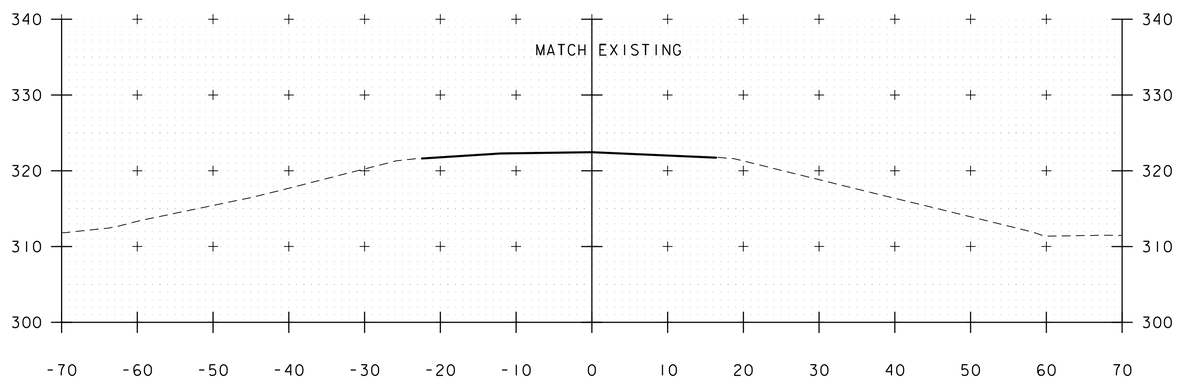
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 SOUTHBOUND CROSS SECTIONS (5 OF 6)	SHEET 64 OF 74

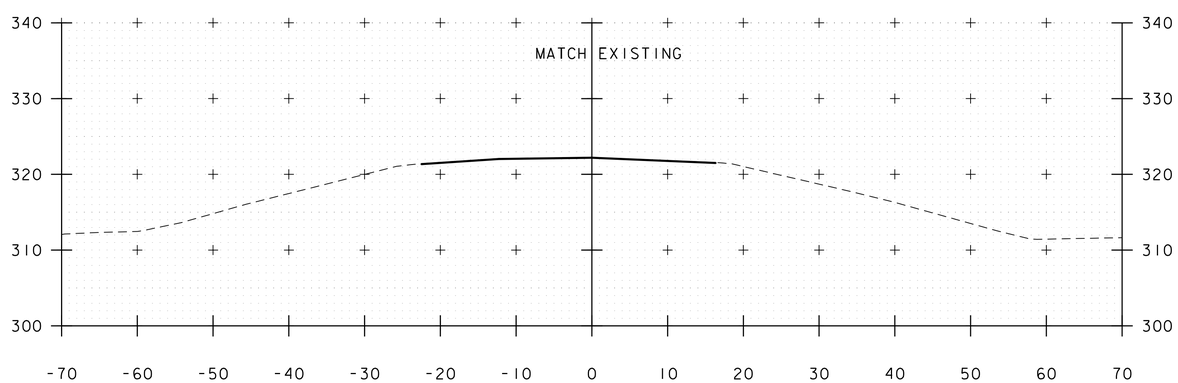
VHB 57578



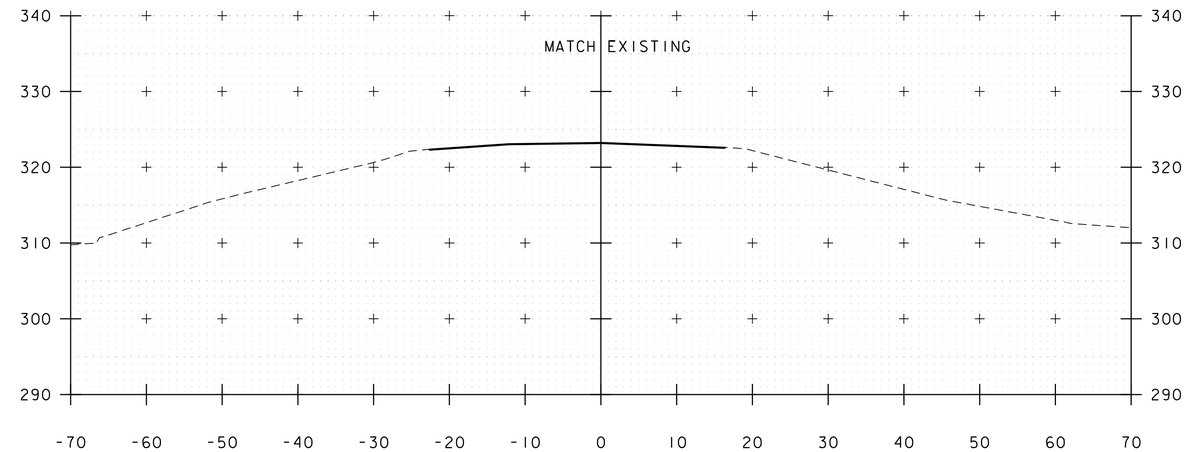
2002+00



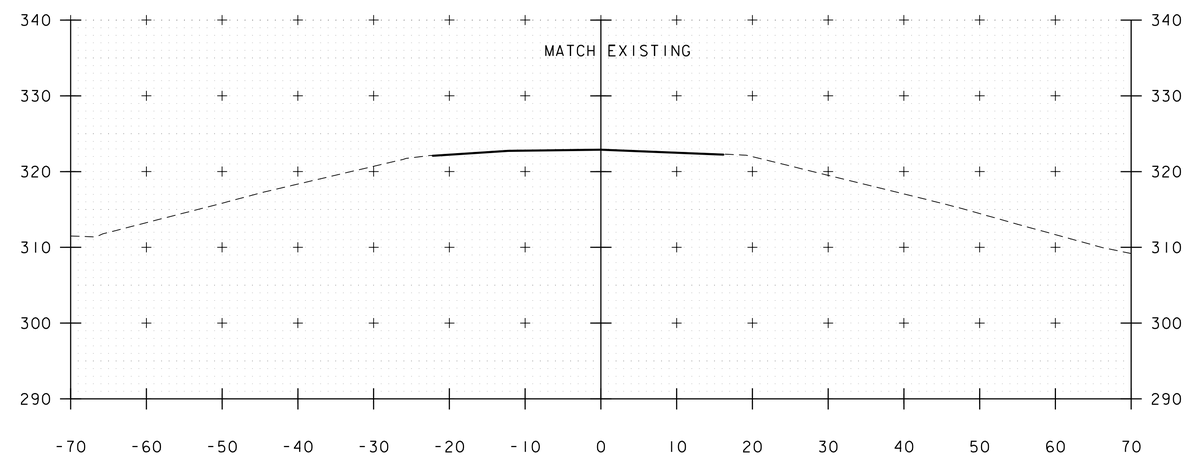
2001+50



2001+00



2003+00



2002+50

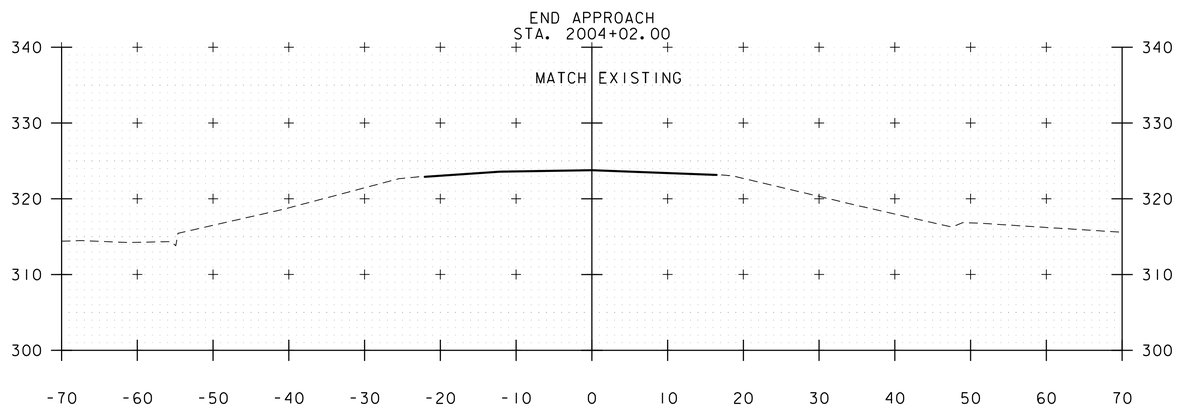
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 2001+00 - 2003+00
SCALE 1" = 10"

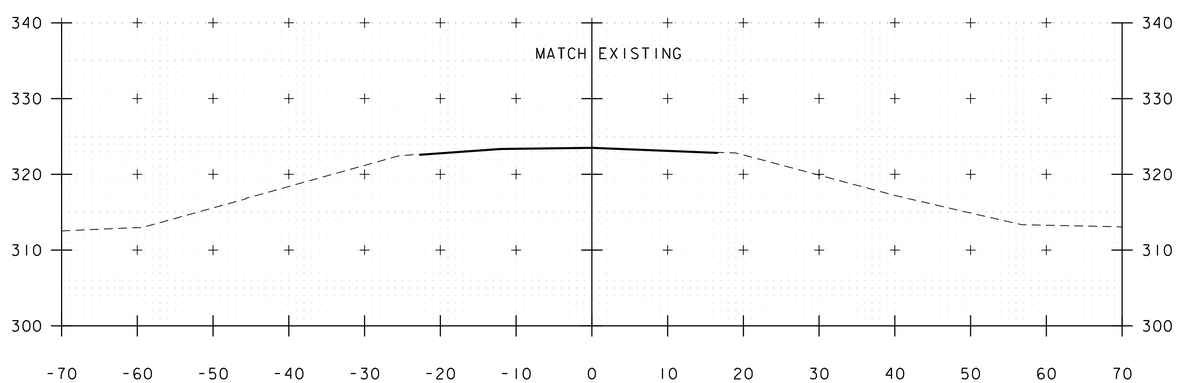
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 SOUTHBOUND CROSS SECTIONS (5 OF 6)	SHEET 65 OF 74

VHB 57578



2004+00



2003+50

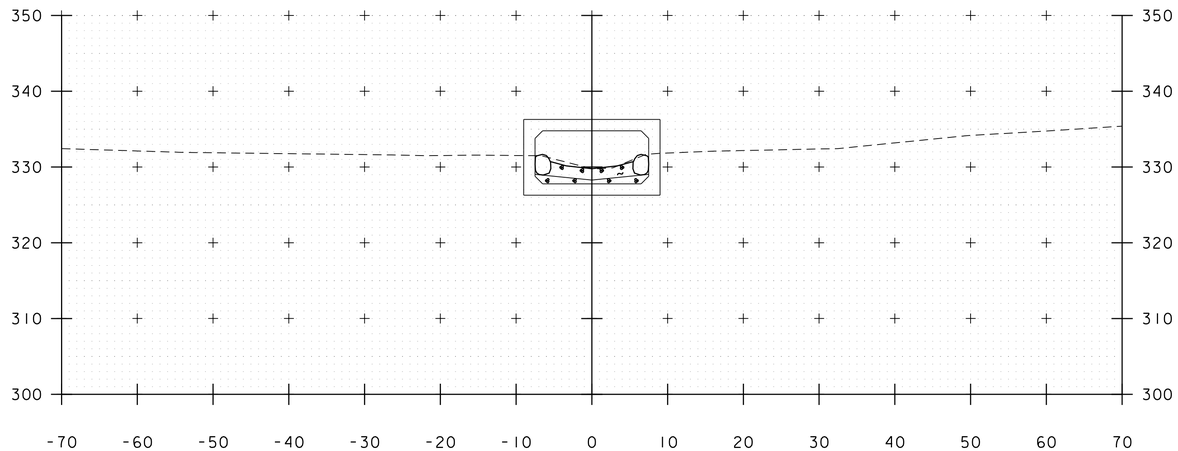
CULVERT 64 SOUTHBOUND CROSS SECTIONS

STA. 2003+50 - 2004+50
SCALE 1" = 10"

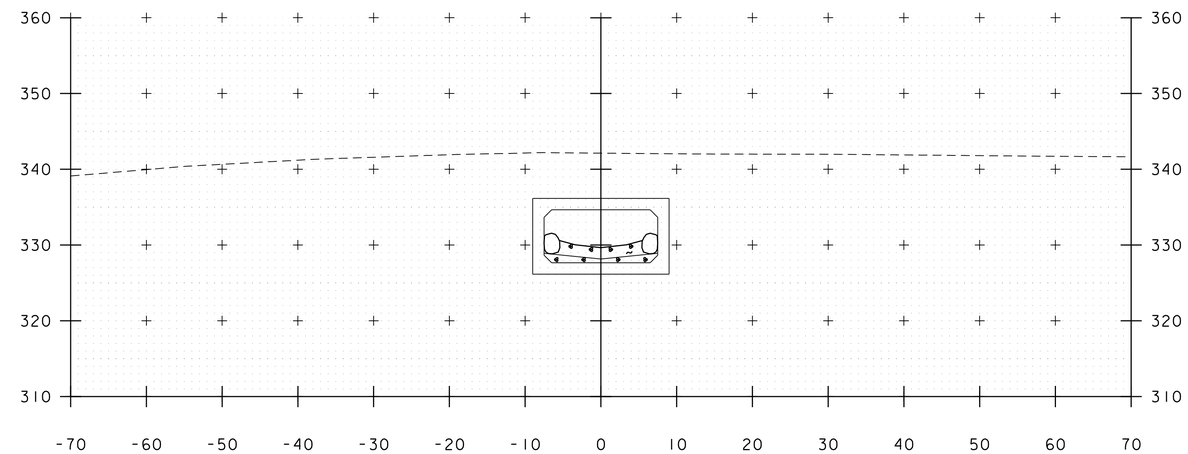
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-I SOUTHBOUND CROSS SECTIONS (6 OF 6)	SHEET 66 OF 74

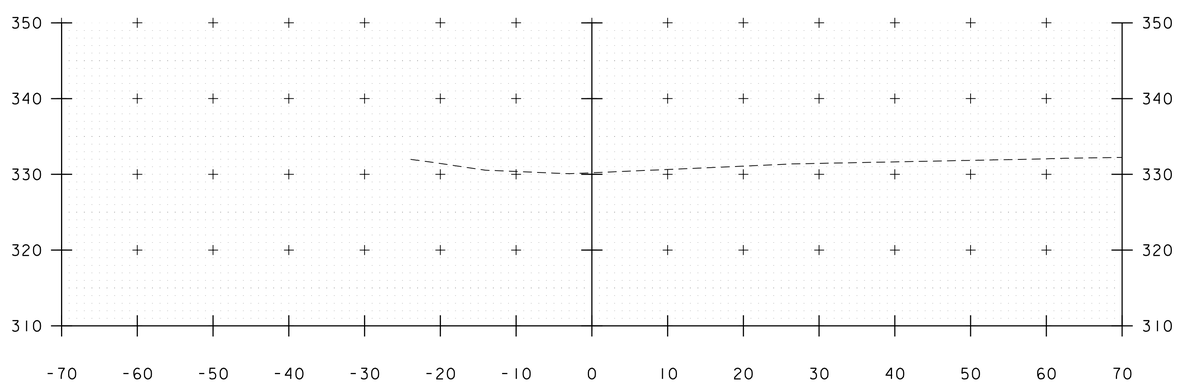
VHB 57578



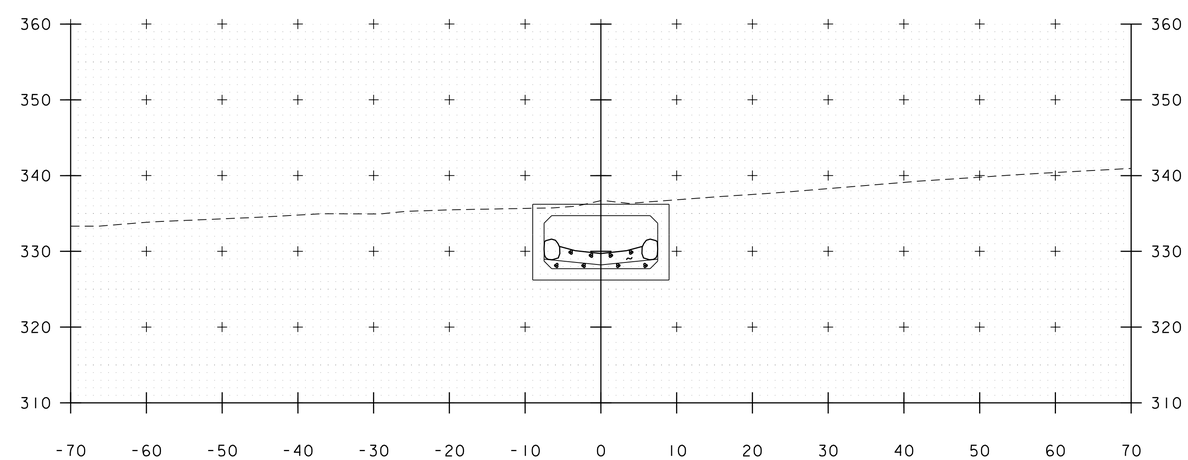
10+25



10+75



10+00



10+50

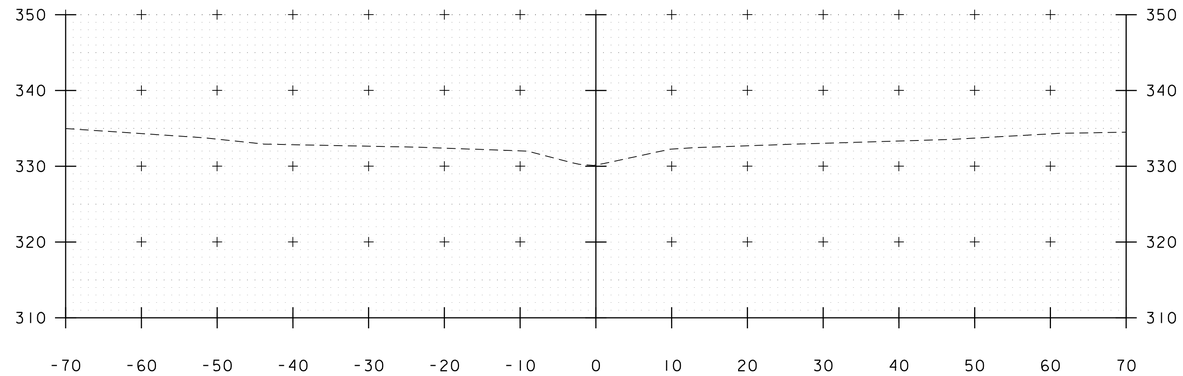
CULVERT 63 CHANNEL CROSS SECTIONS

STA. 10+00 TO 10+75
SCALE 1" = 10"

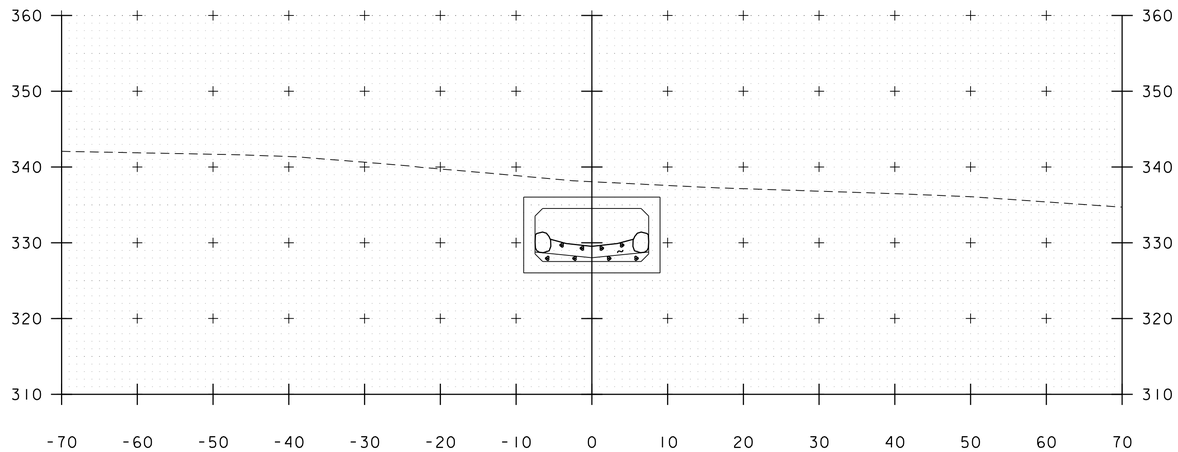
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
63-1 CHANNEL CROSS SECTIONS (1 OF 4)	SHEET 67 OF 74

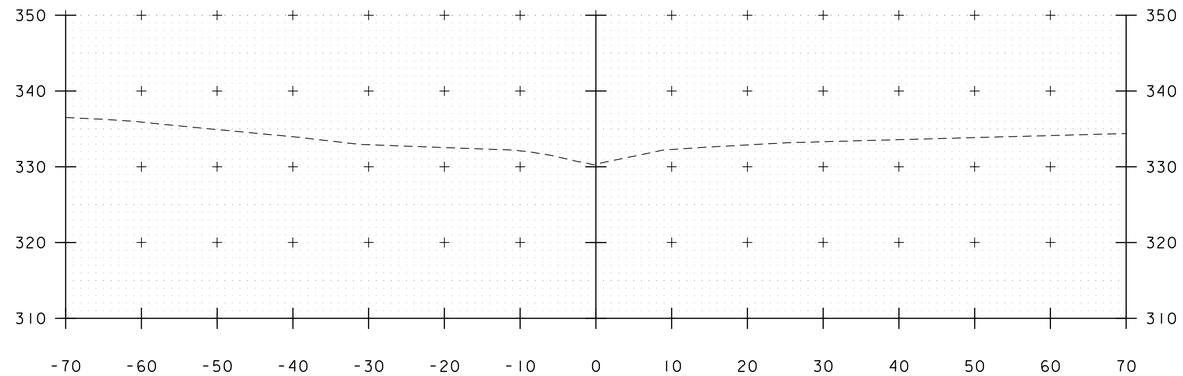
VHB 57578



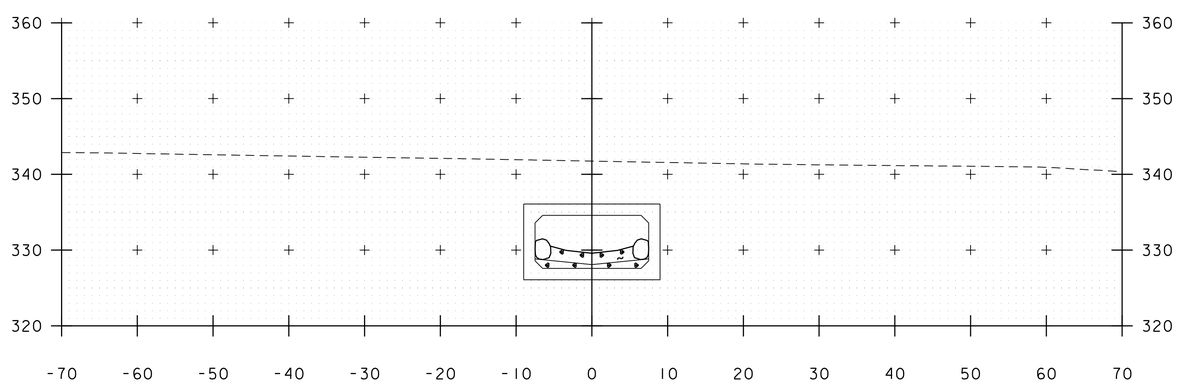
12+00



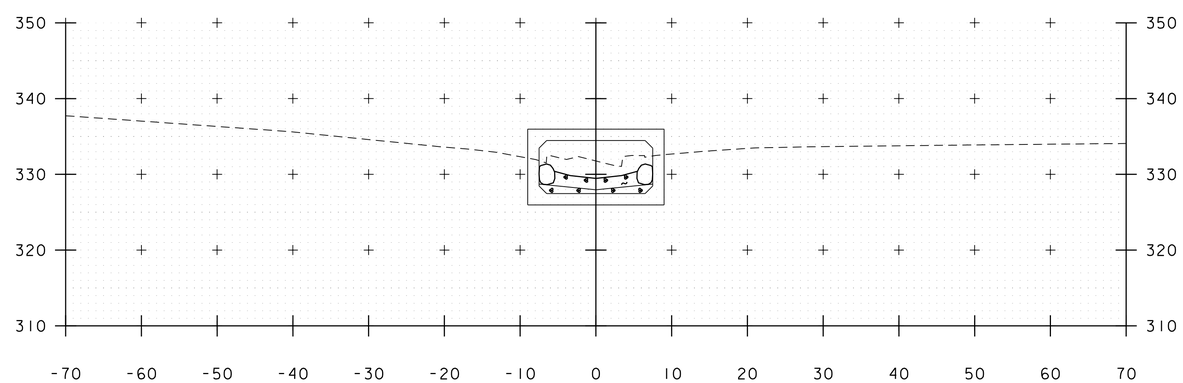
11+25



11+75



11+00



11+50

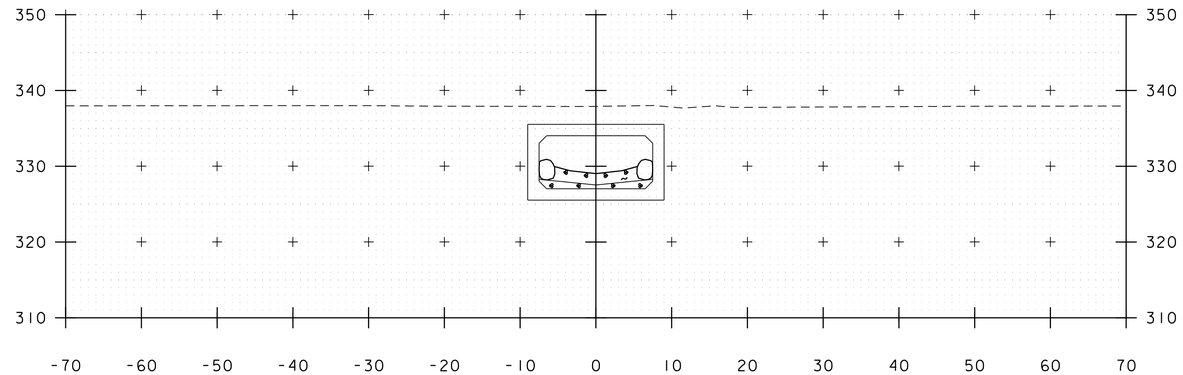
CULVERT 63 CHANNEL CROSS SECTIONS

STA. 11+00 - 12+00
SCALE 1" = 10"

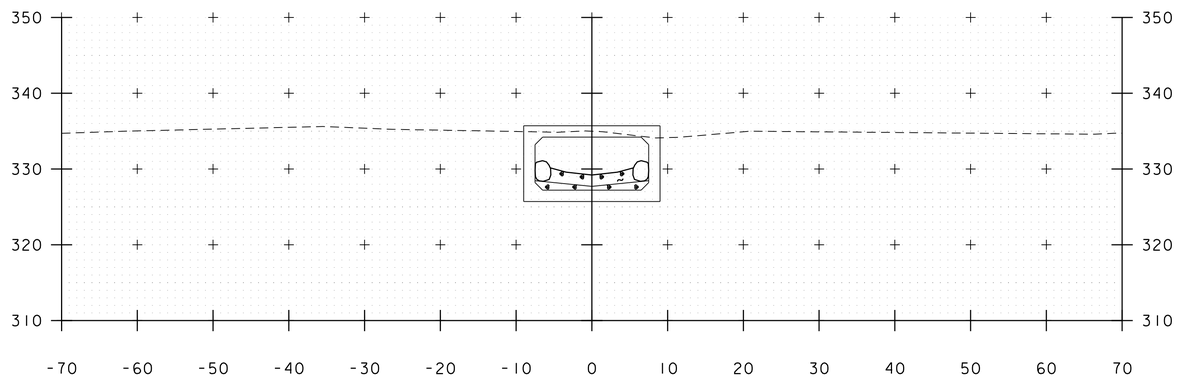
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
63-1 CHANNEL CROSS SECTIONS (2 OF 4)	SHEET 68 OF 74

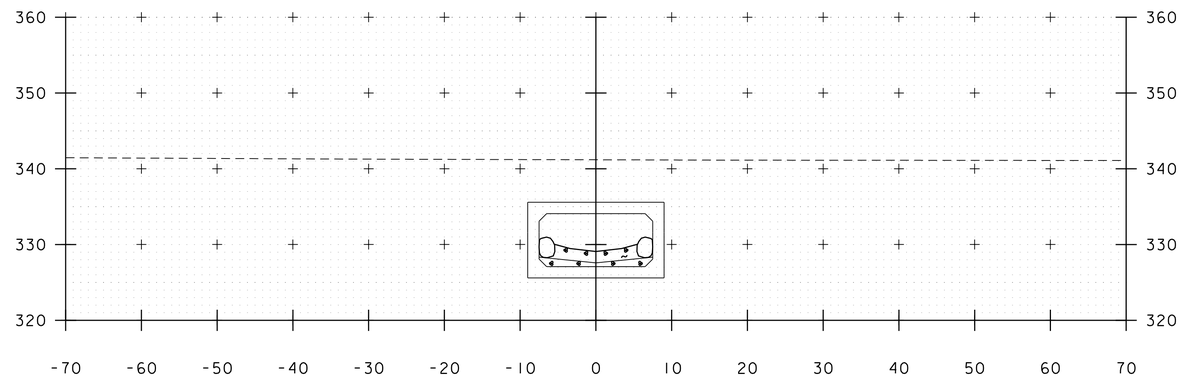
VHB 57578



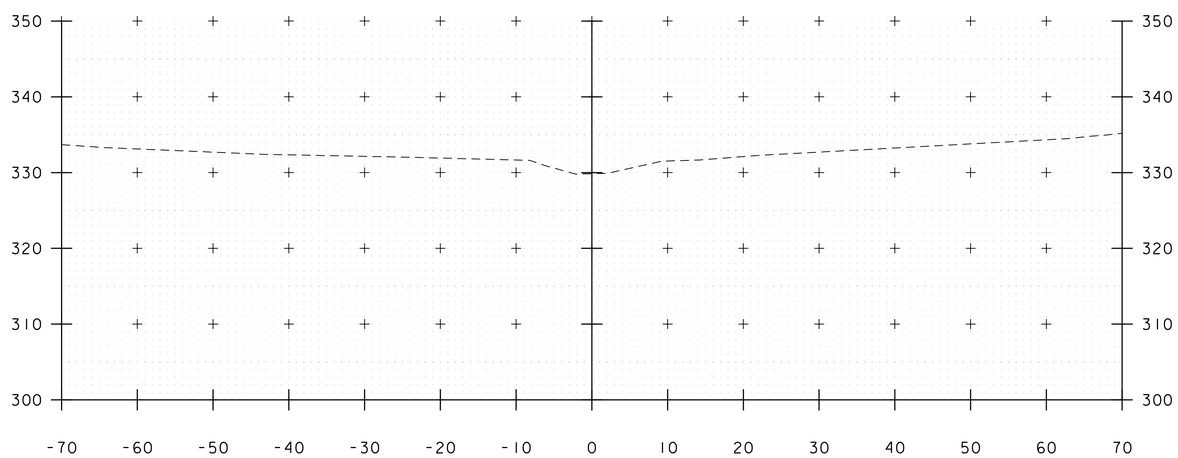
13+25



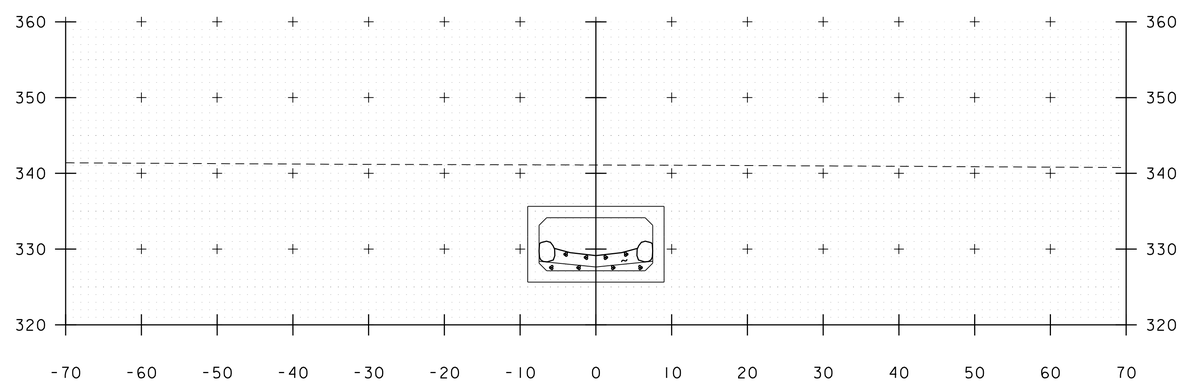
12+50



13+00



12+25



12+75

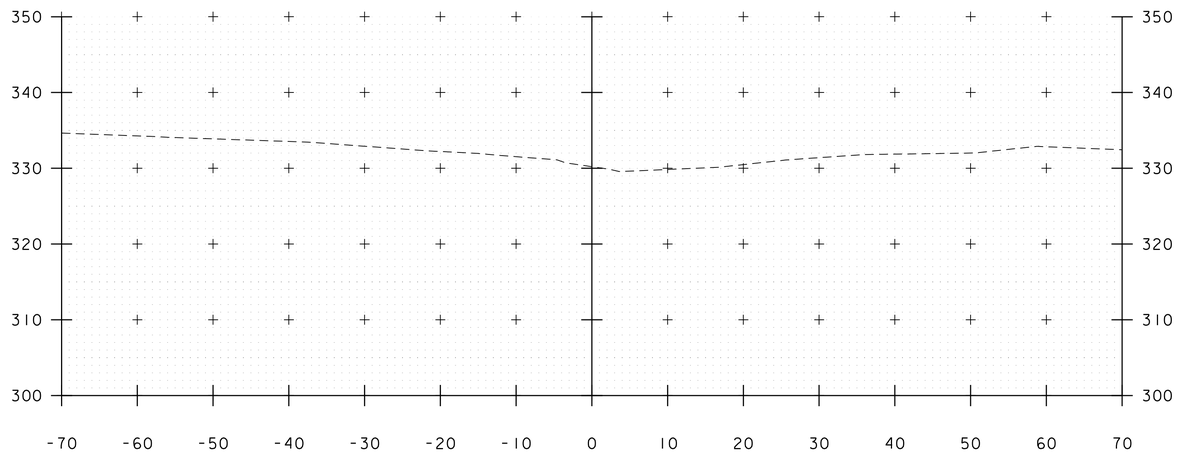
CULVERT 63 CHANNEL CROSS SECTIONS

STA. 12+25 TO 13+25
SCALE 1" = 10"

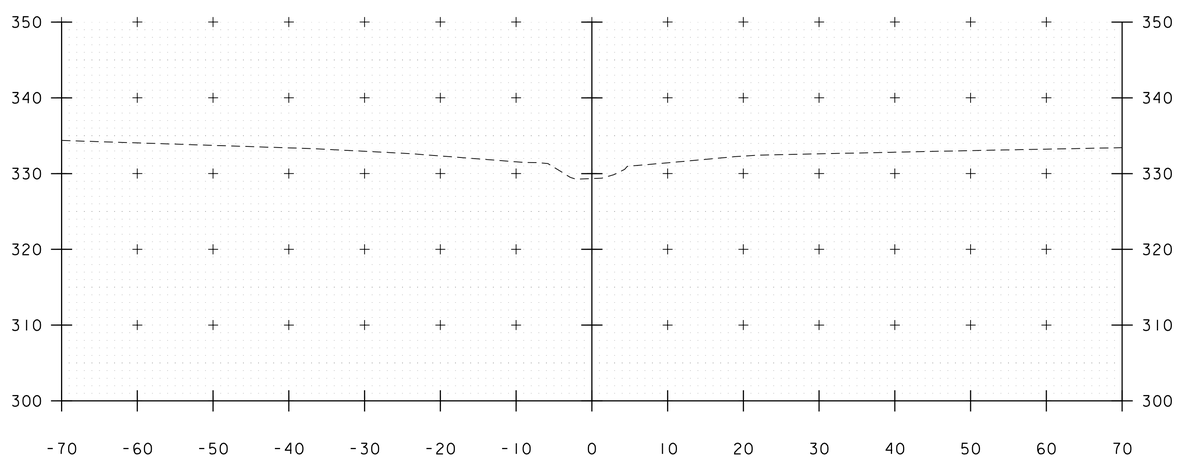
Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
63-1 CHANNEL CROSS SECTIONS (3 OF 4)	SHEET 69 OF 74

VHB 57578



13+75



13+50

CULVERT 63 CHANNEL CROSS SECTIONS

STA. 13+50 - 13+75
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_63xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
63-1 CHANNEL CROSS SECTIONS (4 OF 4)	SHEET 70 OF 74

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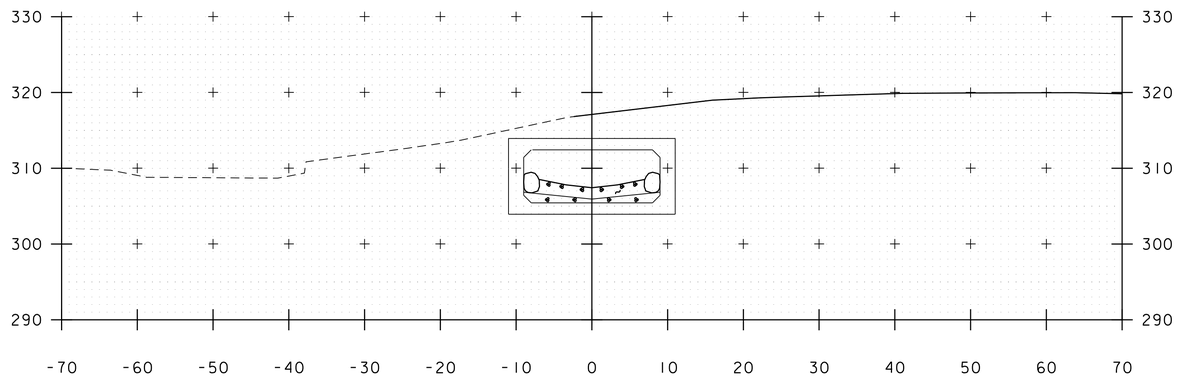
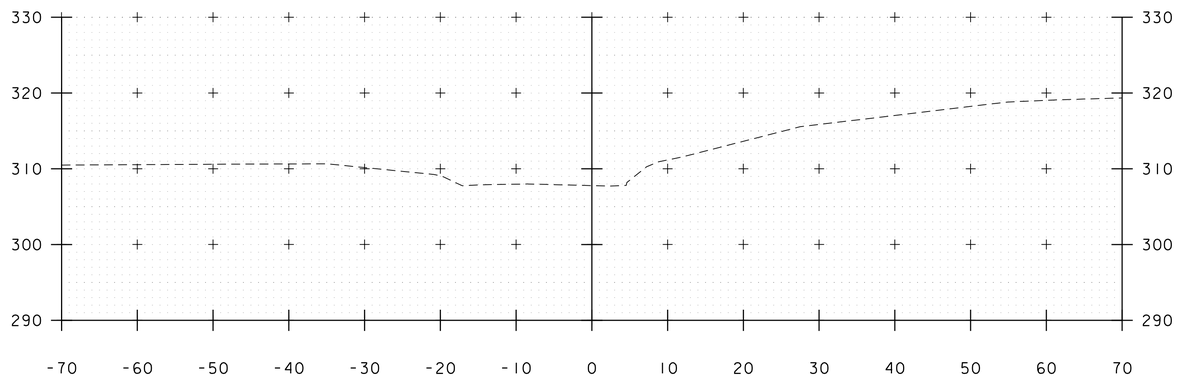
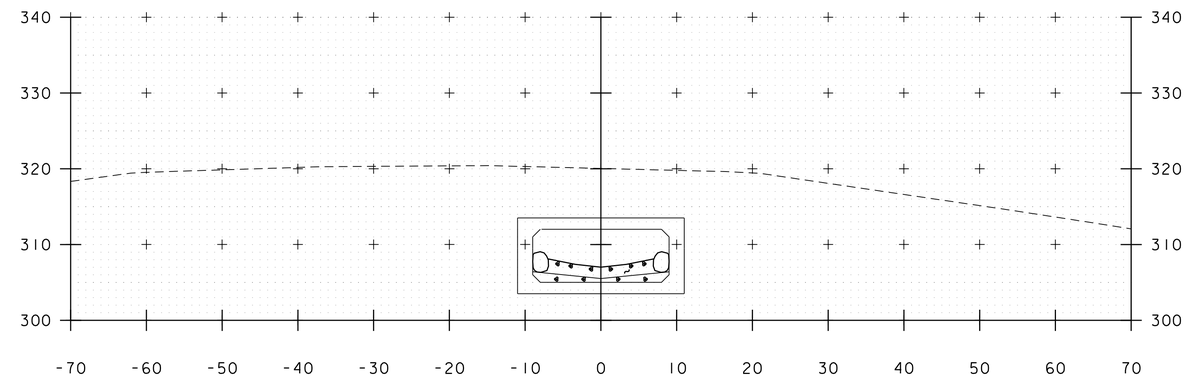


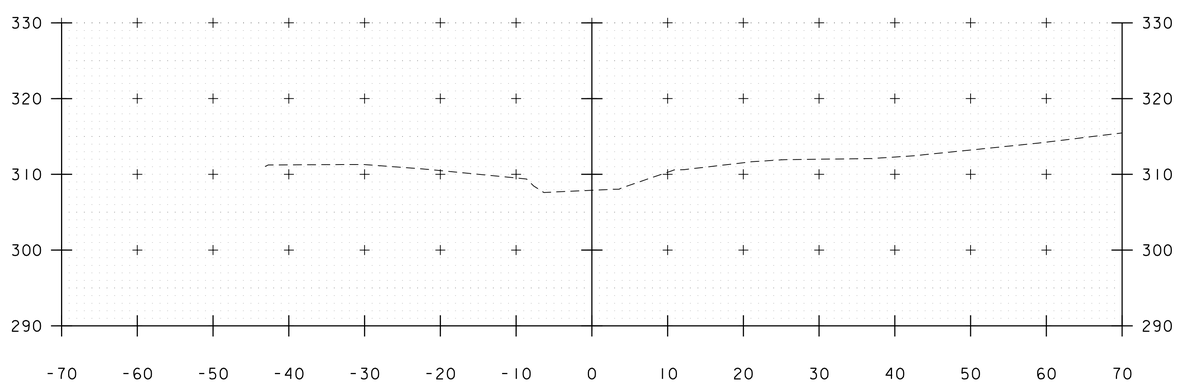
50+50



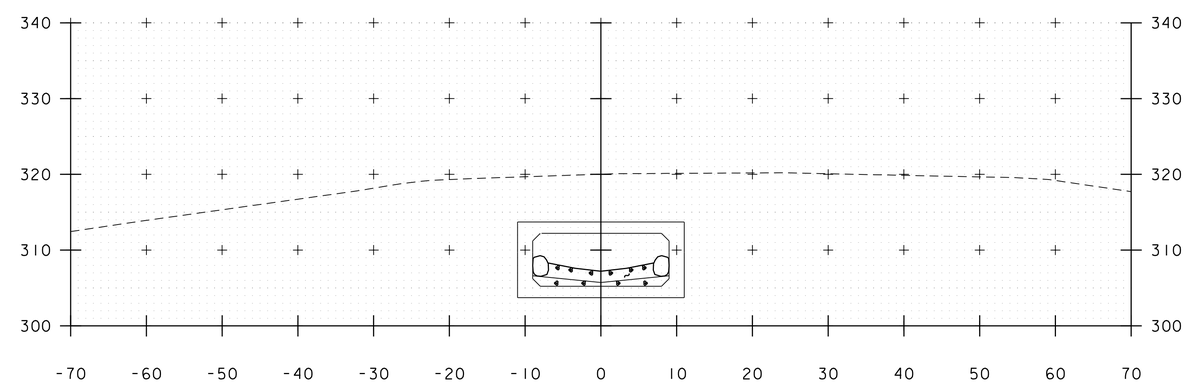
50+25



51+00



50+00



50+75

CULVERT 64 CHANNEL CROSS SECTIONS

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

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 CHANNEL CROSS SECTIONS (1 OF 4)	SHEET 71 OF 74

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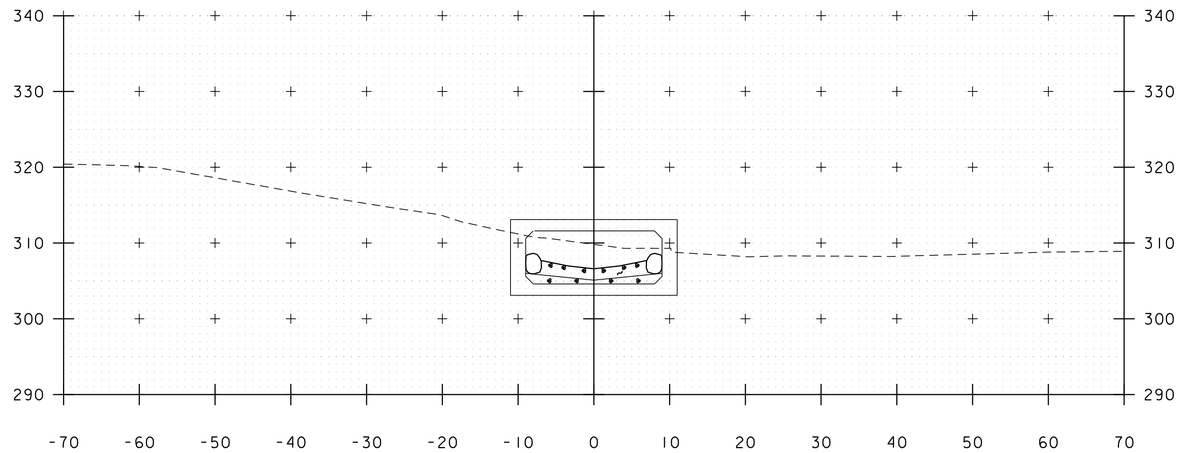
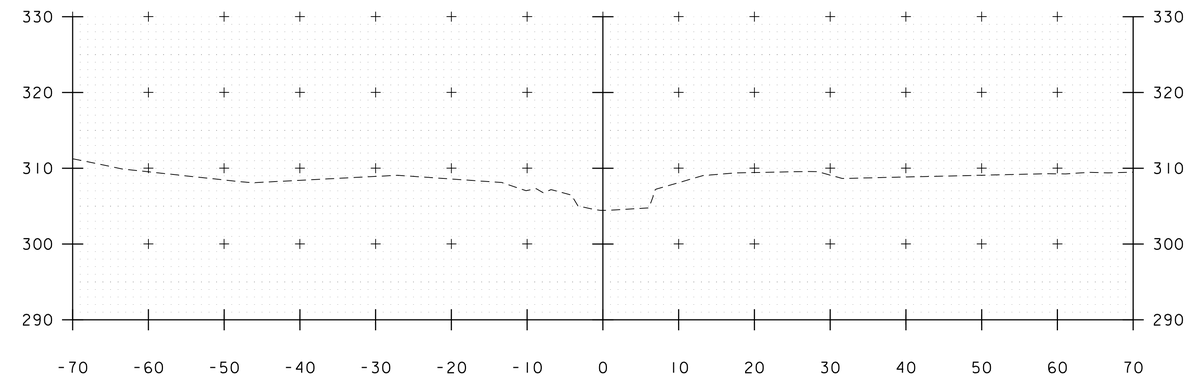
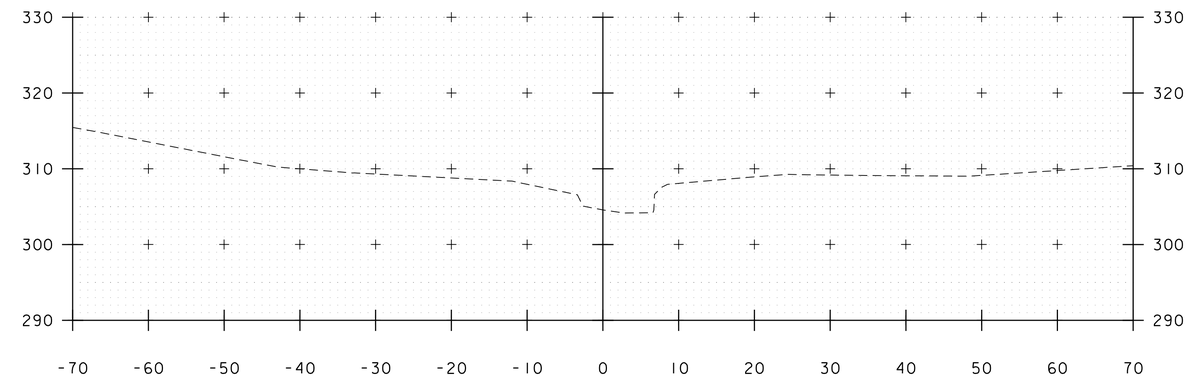


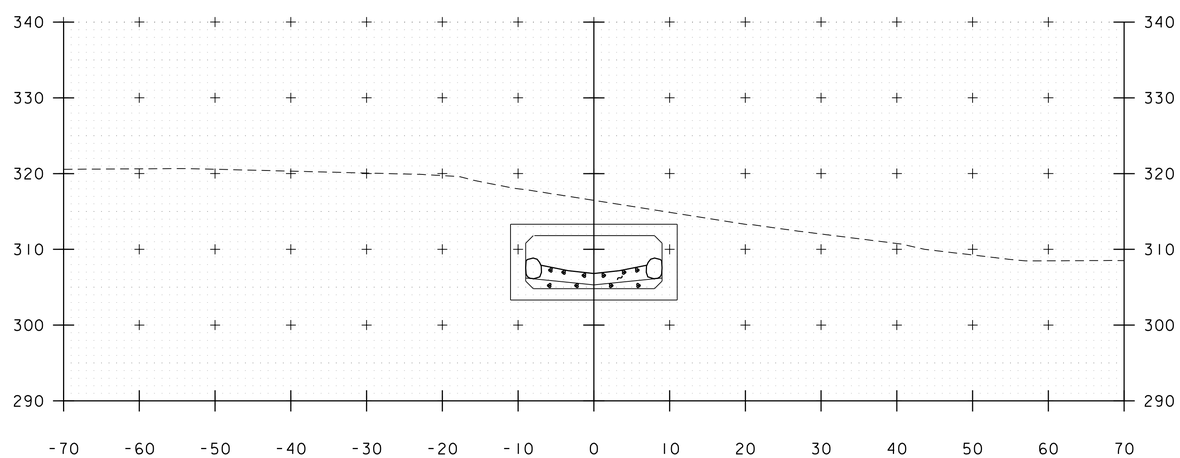
51+50



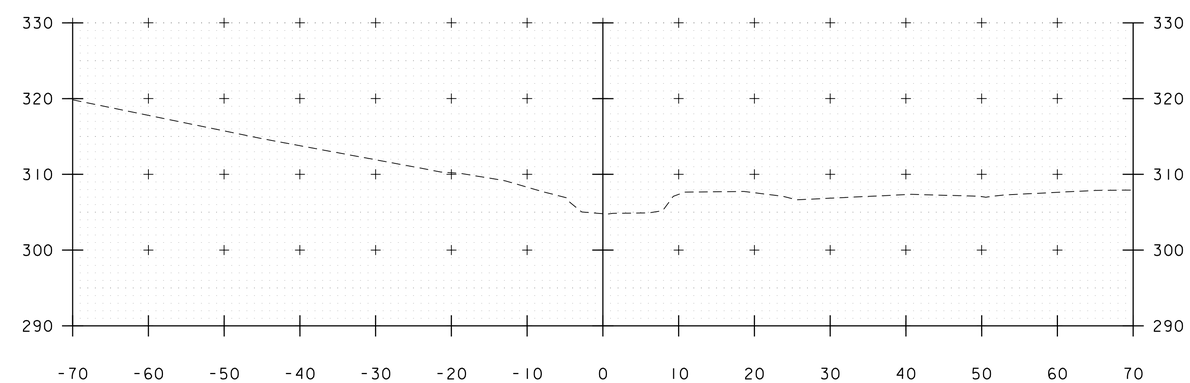
52+25



52+00



51+25



51+75

CULVERT 64 CHANNEL CROSS SECTIONS

STA. 51+25 - 52+25
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 CHANNEL CROSS SECTIONS (2 OF 4)	SHEET 72 OF 74

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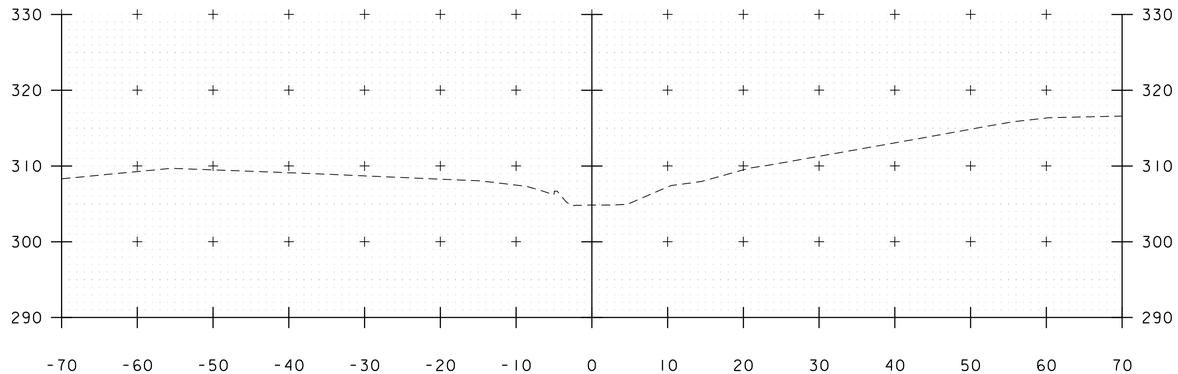
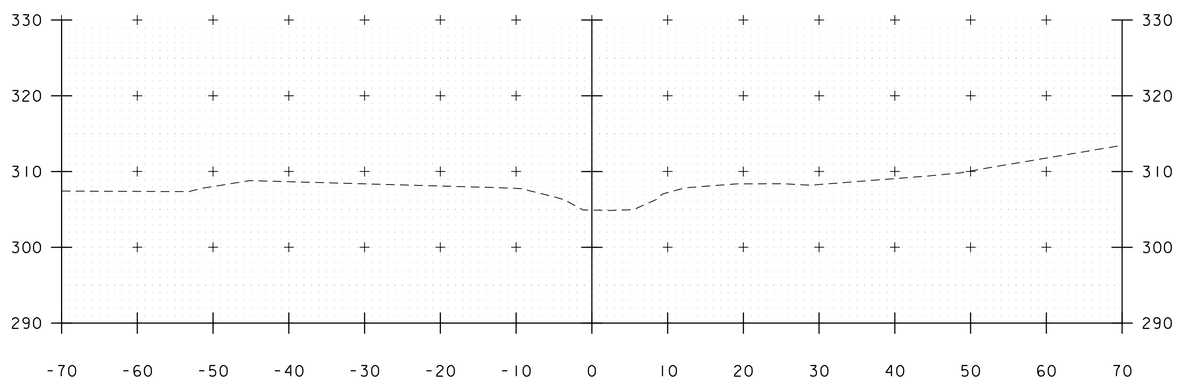
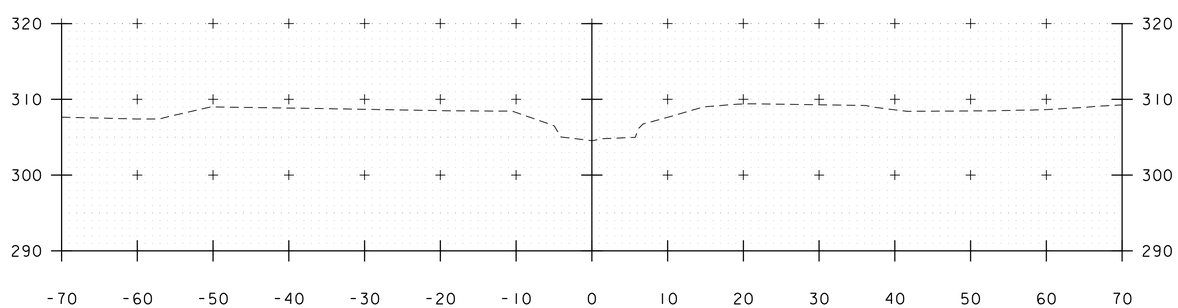


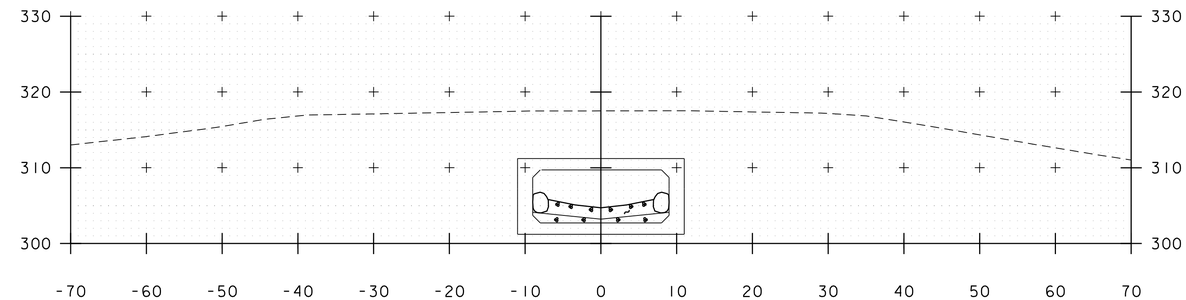
53+00



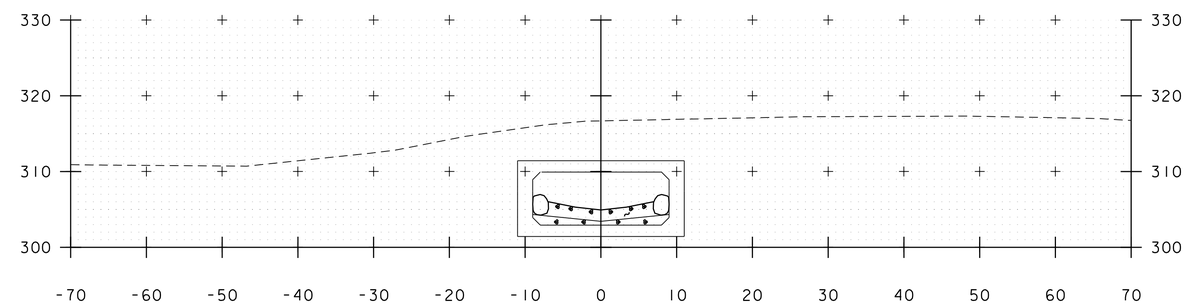
52+75



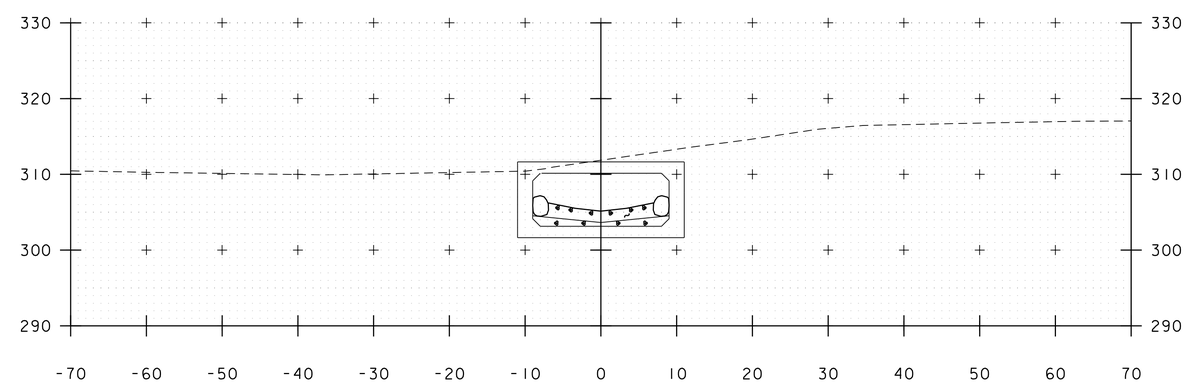
52+50



53+75



53+50



53+25

CULVERT 64 CHANNEL CROSS SECTIONS

STA. 52+00 - 53+75
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 CHANNEL CROSS SECTIONS (3 OF 4)	SHEET 73 OF 74

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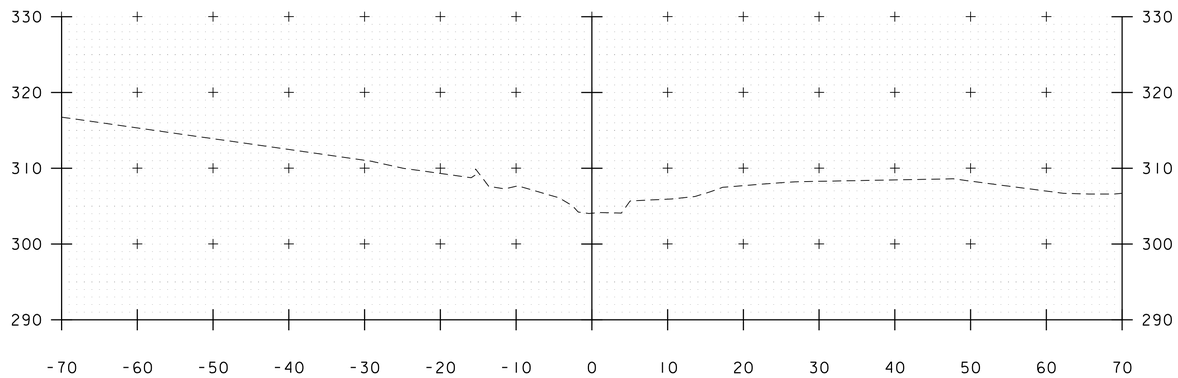
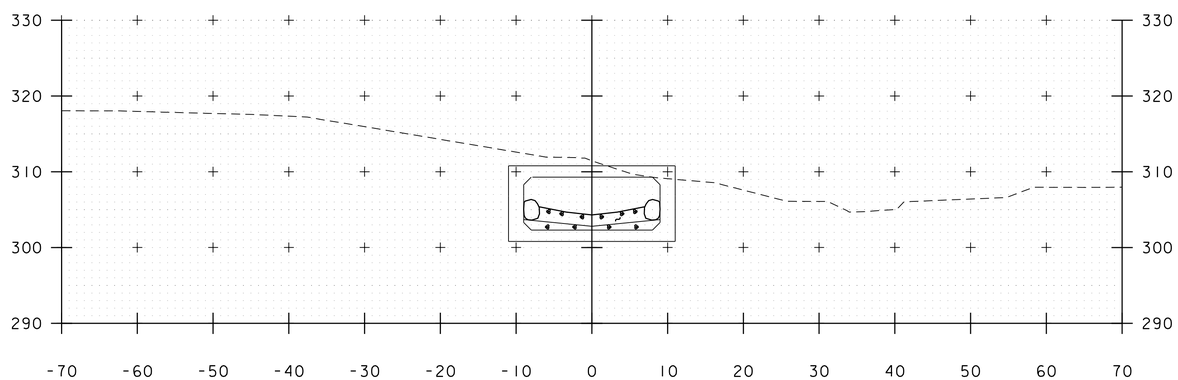
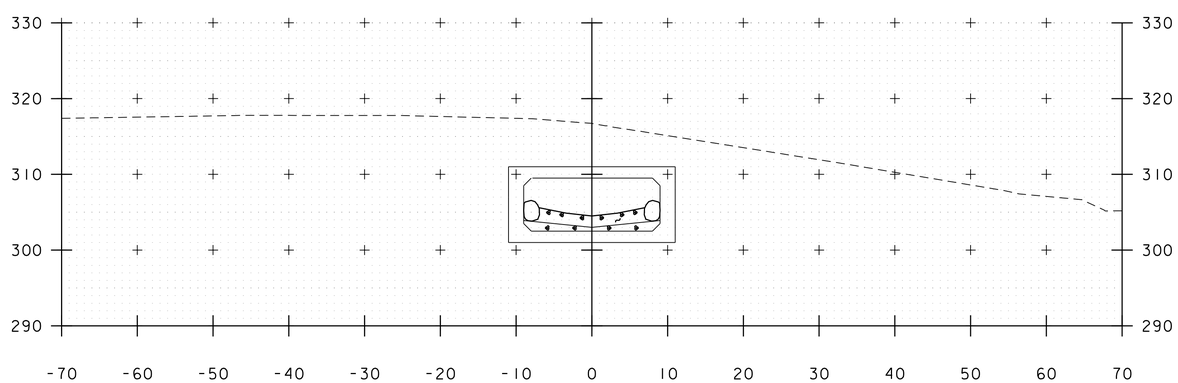


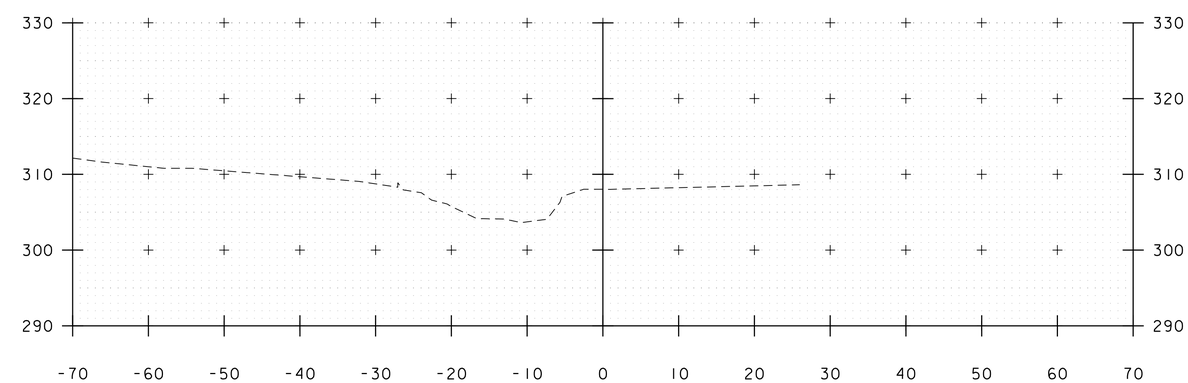
54+50



54+25



54+00



54+75

CULVERT 64 CHANNEL CROSS SECTIONS

STA. 54+00 - 54+75
SCALE 1" = 10"

Vanasse Hangen Brustlin, Inc.

PROJECT NAME: SOUTH BURLINGTON	
PROJECT NUMBER: IM CULV(24)	
FILE NAME: 11a216_64xsl.dgn	PLOT DATE: 4/4/2014
PROJECT LEADER: M.A. COLGAN	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
64-1 CHANNEL CROSS SECTIONS (4 OF 4)	SHEET 74 OF 74

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