

R. O. W. PLANS

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STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT

TOWN OF DUXBURY
COUNTY OF WASHINGTON

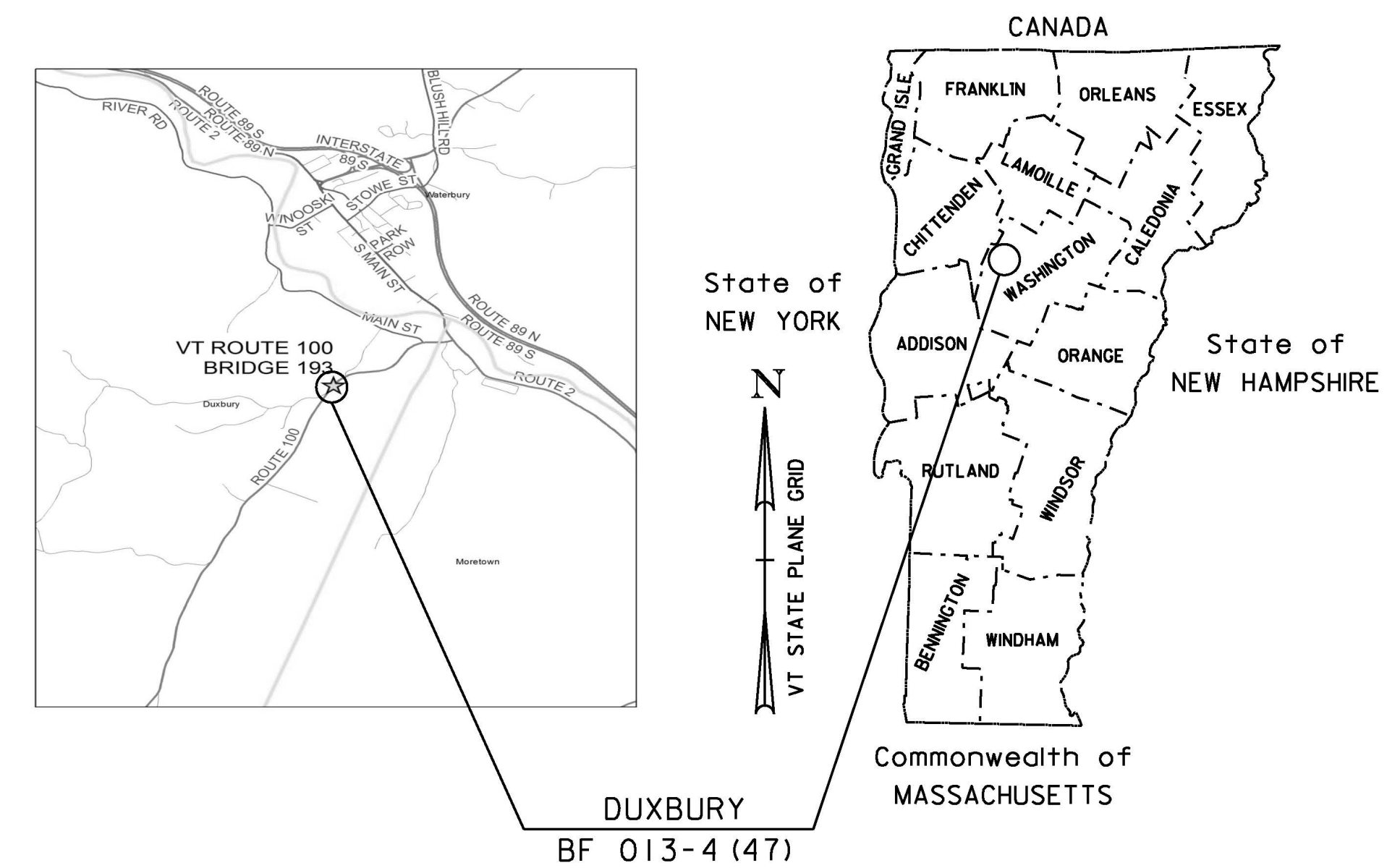
ROUTE NO : VT ROUTE 100, RURAL MINOR ARTERIAL

BRIDGE NO : 193

PROJECT LOCATION: 0.7 MILES SOUTH OF THE JUNCTION WITH US 2

PROJECT DESCRIPTION: REMOVAL AND REPLACEMENT OF EXISTING CULVERT ON EXISTING ALIGNMENT WITH ASSOCIATED CHANNEL AND APPROACH WORK

LENGTH OF STRUCTURE: 50.70 FEET
 LENGTH OF ROADWAY: 174.30 FEET
 LENGTH OF PROJECT: 225.00 FEET
 LENGTH OF ROW PROJECT: 631.00 FEET



**BEGIN R.O.W. PROJECT
DUXBURY BF 013-4(47)
STA. 290+77, 26' LT**

BEGIN PROJECT
STA 293+00.00
MM = 5.549

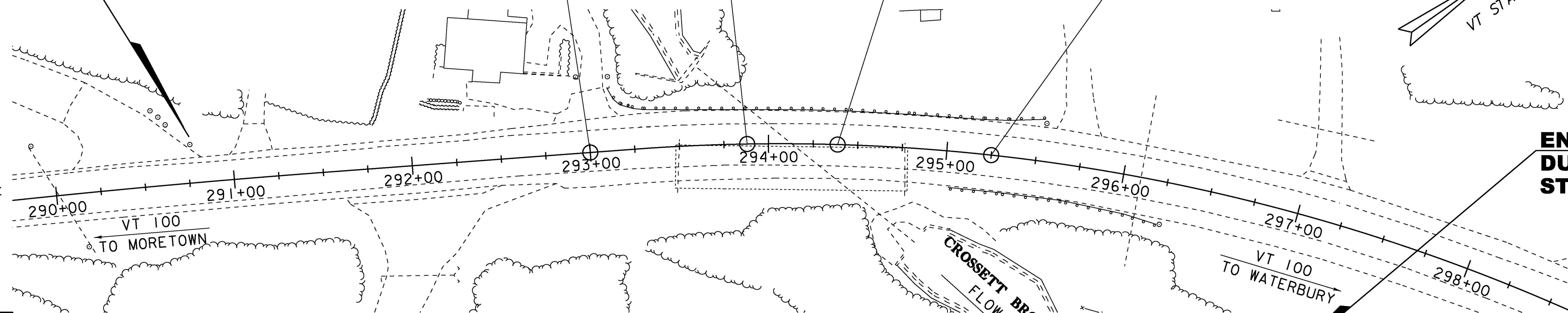
BEGIN BRIDGE
STA 293+88.00

END BRIDGE
STA 294+38.70

END PROJECT
STA 295+25.00
MM = 5.592

**END R.O.W. PROJECT
DUXBURY BF 013-4(47)
STA. 297+08, 94' RT**

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2014, 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 2	
SURVEYED BY :	R. GILMAN
SURVEYED DATE :	04-12-2016
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)

SCALE 1" = 40' - 0"

ALL DRIVES AS INDICATED ON PLANS ARE SUBJECT TO PERMITS PURSUANT TO TITLE 19 V.S.A. § 1111.

CHIEF OF RIGHT OF WAY	
APPROVED	ROBERT M. WHITE DATE 05-05-16
PROJECT MANAGER : KRISTIN HIGGINS, P.E.,	
PROJECT NAME :	DUXBURY
PROJECT NUMBER :	BF 013-4 (47)
SHEET	1 OF 19 SHEETS

GENERAL INFORMATION

SYMBOLGY LEGEND NOTE

THE SYMBOLGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLGY. THE SYMBOLGY 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. SYMBOLGY 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
■	BNDNS BOUND SET
▣	BNDNS 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 RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLGY

UNDERGROUND UTILITIES

— UGU —	UTILITY (GENERIC-UNKNOWN)
— UT —	TELEPHONE
— UE —	ELECTRIC
— UC —	CABLE (TV)
— UEC —	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)

— AGU —	UTILITY (GENERIC-UNKNOWN)
— T —	TELEPHONE
— E —	ELECTRIC
— C —	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 SYMBOLGY

PROJECT DESIGN & LAYOUT SYMBOLGY

— — — 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 SYMBOLGY**

**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
— — — — —	PROPERTY LINE (P/L)
— — — — —	SLOPE RIGHTS
6f — — — — — 6f	6F PROPERTY BOUNDARY
4f — — — — — 4f	4F PROPERTY BOUNDARY
HAZ — — — — — HAZ	HAZARDOUS WASTE

**EPSC LAYOUT PLAN SYMBOLGY**

**EPSC MEASURES**

ONNOONNOONNO	FILTER CURTAIN
— — — — —	SILT FENCE
— — — — —	SILT FENCE WOVEN WIRE
— — — — —	CHECK DAM
▣	DISTURBED AREAS REQUIRING RE-VEGETATION
⊠	EROSION MATTING

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLGY

**ENVIRONMENTAL RESOURCES**

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

**ARCHEOLOGICAL & HISTORIC**

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

**CONVENTIONAL TOPOGRAPHIC SYMBOLGY**

**EXISTING FEATURES**

— — — — —	ROAD EDGE PAVEMENT
— — — — —	ROAD EDGE GRAVEL
— — — — —	DRIVEWAY EDGE
— — — — —	DITCH
— — — — —	FOUNDATION
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: DUXBURY
 PROJECT NUMBER: BF 013-4(47)
 FILE NAME: r16b00legend.dgn PLOT DATE: 05-MAY-2016
 PROJECT LEADER: K. HIGGINS DRAWN BY: M. LONGSTREET
 DESIGNED BY: M. LONGSTREET CHECKED BY: M. LONGSTREET
 LEGEND SHEET SHEET 2 OF 19

RIGHT - OF - WAY DETAIL SHEET

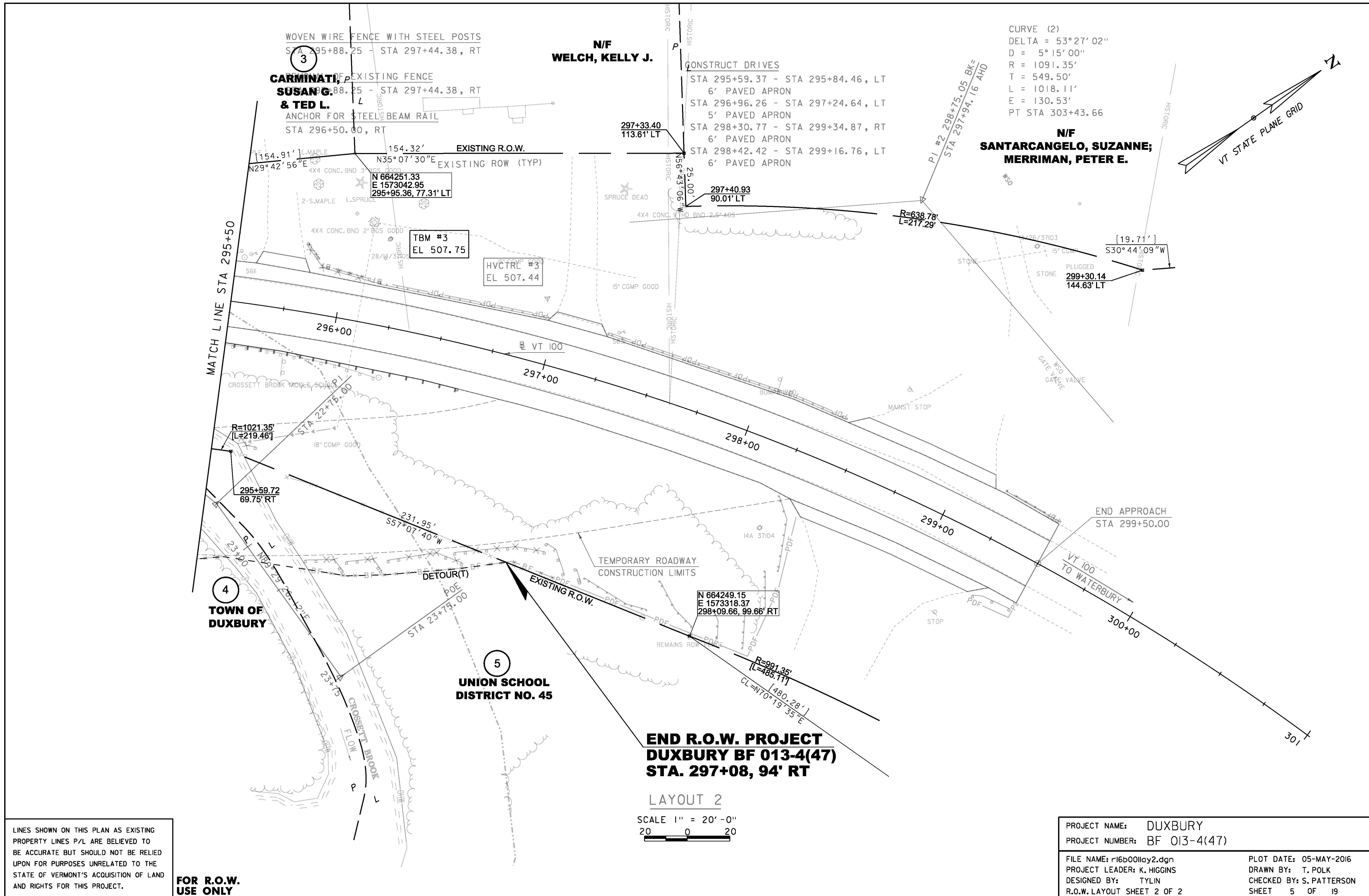
TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	ROW LAYOUT NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA				REMARKS	
					AREA±	AREA±	TYPE	T / P	AREA ±	TITLE	DATE	TOWN / CITY	BOOK		PAGE
1	CHAMPNEY, LINDA H.	1								GTR	06/03/16	DUXBURY	127	364-365	UNAFFECTED
2	BLACKMAN, JUSTIN E. & REBECCA A.; DOUGLAS, JUDITH M.	1	292+01 LT 293+09.57 LT	293+06 LT 293+39.70 LT			UTILITY CONSTRUCTION	T T	2,524 SF 828 SF	GTR	06/03/16	DUXBURY	127	361-363	INCL. BF & EC
3	CARMINATI, SUSAN G. & TED L.	1, 2	292+84 LT 293+40.38 LT 294+51 LT	294+24 LT 293+79.96 LT 294+67 LT			CONSTRUCTION CHANNEL CONSTRUCTION	T P T	0.14 A 391 SF 93 SF	WD	06/08/16	DUXBURY	127	388-390	INCL. BF, EC, TEMP. UTILITIES & ACCESS DRIVE; 6,250 SF± INCL. STONE FILL INCL. BF & EC
4	TOWN OF DUXBURY	1, 2	292+92 LT 294+66.97 RT	295+90 LT 295+19.23 RT			DETOUR CHANNEL	T P	0.23 A 518 SF	WDOE	06/21/16	DUXBURY	127	420-421	INCL. PDF, BF & EC; PLANT TREES & SHRUBS; 10,694 SF± INCL. STONE FILL
5	UNION SCHOOL DISTRICT NO. 45	1, 2	295+25 RT 295+88 RT	297+08 RT 298+12 RT			DETOUR ALL R. T. & I.	T	3,106 SF	WD	09/29/16	DUXBURY	128	387-380	INCL. BF & EC; PLANT TREES & SHRUBS FENCE
6	TOWNE, GLENN R. & RESMA	1	290+77 LT	292+22 LT			UTILITY	T	3,155 SF	GTR	07/05/16	DUXBURY	127	494-495	
7	GREEN MOUNTAIN POWER CORPORATION		290+77 LT	297+08 RT											UTILITY
8	COMCAST OF CONNECTICUT/GEORGIA/ MASSACHUSETTS/NEW HAMPSHIRE/ NEW YORK/NORTH CAROLINA/VIRGINIA/ VERMONT, LLC		290+77 LT	297+08 RT											UTILITY
9	TELEPHONE OPERATING COMPANY OF VERMONT LLC		290+77 LT	297+08 RT											UTILITY
10	DUXBURY-MORETOWN FIRE DISTRICT #1		290+77 LT	297+08 RT											UTILITY
11	WATERBURY WATER DISTRICT		290+77 LT	297+08 RT											UTILITY

TABLE OF REVISIONS

REVISION NO.	ROW SET SHEET #	DESCRIPTION	DATE
1	3, 4	PARCEL 1, CHAMPNEY - DELETE RIGHTS. ADD REMARK "UNAFFECTED". REV BY: MT CO 10119 APPR BY: RC	06/06/16
2	3, 4	PARCEL 6, TOWNE - ADDED PARCEL & RENUMBERED UTILITY PARCELS. REV BY: MT CO 10120 APPR BY: RC	06/06/16

PROJECT NAME: **DUXBURY**
PROJECT NUMBER: **BF 013-4(47)**
FILE NAME: **r16b001detail.xls** PLOT DATE: **10-OCT-2016**
PROJECT LEADER: **K. HIGGINS** DRAWN BY: **M. TROTTIER**
DESIGNED BY: **T. POLK** CHECKED BY: **S. PATTERSON**
R.O.W. DETAIL SHEET #1 SHEET **3** OF **19**



WOVEN WIRE FENCE WITH STEEL POSTS
 STA 295+88.25 - STA 297+44.38, RT

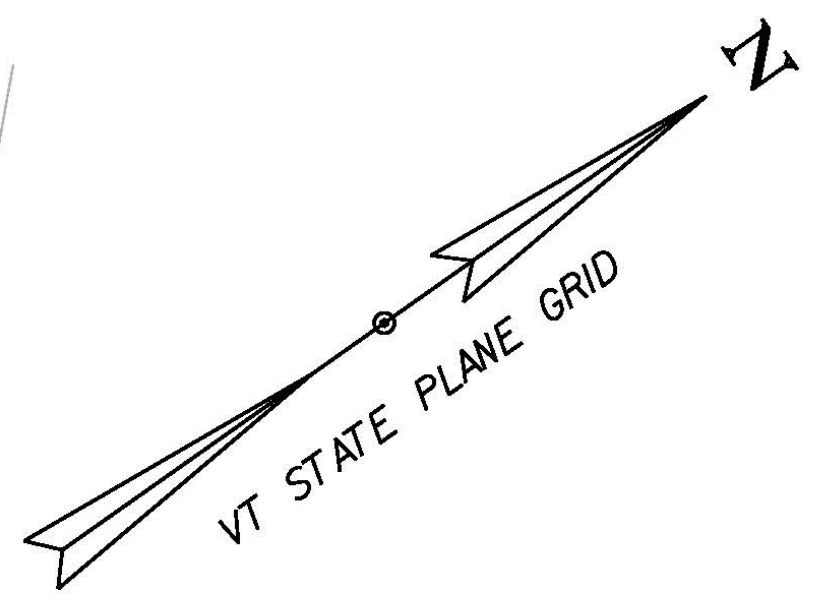
N/F
WELCH, KELLY J.

CARMINATI, SUSAN G. & TED L.
 ANCHOR FOR STEEL BEAM RAIL
 STA 296+50.00, RT

CONSTRUCT DRIVES
 STA 295+59.37 - STA 295+84.46, LT
 6' PAVED APRON
 STA 296+96.26 - STA 297+24.64, LT
 5' PAVED APRON
 STA 298+30.77 - STA 299+34.87, RT
 6' PAVED APRON
 STA 298+42.42 - STA 299+16.76, LT
 6' PAVED APRON

CURVE (2)
 DELTA = 53°27'02"
 D = 5°15'00"
 R = 1091.35'
 T = 549.50'
 L = 1018.11'
 E = 130.53'
 PT STA 303+43.66

N/F
SANTARCANGELO, SUZANNE; MERRIMAN, PETER E.



MATCH LINE STA 295+50

4
TOWN OF DUXBURY

5
UNION SCHOOL DISTRICT NO. 45

**END R.O.W. PROJECT
 DUXBURY BF 013-4(47)
 STA. 297+08, 94' RT**

LAYOUT 2
 SCALE 1" = 20' - 0"
 20 0 20

LINES SHOWN ON THIS PLAN AS EXISTING
 PROPERTY LINES P/L ARE BELIEVED TO
 BE ACCURATE BUT SHOULD NOT BE RELIED
 UPON FOR PURPOSES UNRELATED TO THE
 STATE OF VERMONT'S ACQUISITION OF LAND
 AND RIGHTS FOR THIS PROJECT.

**FOR R.O.W.
 USE ONLY**

PROJECT NAME: DUXBURY	PLOT DATE: 05-MAY-2016
PROJECT NUMBER: BF 013-4(47)	DRAWN BY: T. POLK
FILE NAME: r16b00lay2.dgn	CHECKED BY: S. PATTERSON
PROJECT LEADER: K. HIGGINS	SHEET 5 OF 19
DESIGNED BY: TYLIN	
R.O.W. LAYOUT SHEET 2 OF 2	

PRELIMINARY INFORMATION SHEET (BRIDGE)

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA Date: April 2016

DRAINAGE AREA : 5.1 sq. mi.
 CHARACTER OF TERRAIN : Mountainous, mostly forested, rural
 STREAM CHARACTERISTICS : Sinuous and alluvial
 NATURE OF STREAMBED : Gravel and cobbles

PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP)

43% =	310 cfs	2% =	1120 cfs
10% =	660 cfs	1% =	1310 cfs
4% =	890 cfs	0.2% =	1830 cfs

DATE OF FLOOD OF RECORD : Unknown
 ESTIMATED DISCHARGE : Unknown
 WATER SURFACE ELEV. : Unknown
 NATURAL STREAM VELOCITY : @ 2% AEP = 12.0 fps
 ICE CONDITIONS : Moderate
 DEBRIS : Light to moderate
 DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
 IS ORDINARY RISE RAPID? No
 IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
 IF YES, DESCRIBE:

WATERSHED STORAGE: <1% HEADWATERS: _____
 UNIFORM: X
 IMMEDIATELY ABOVE SITE: _____

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: CGMPPA
 YEAR BUILT: 1977
 CLEAR SPAN(NORMAL TO STREAM): 15' - 10"
 VERTICAL CLEARANCE ABOVE STREAMBED: 10' - 8"
 WATERWAY OF FULL OPENING: 132 sq. ft.
 DISPOSITION OF STRUCTURE: Remove and replace
 TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings

WATER SURFACE ELEVATIONS AT:

43% AEP =	494.5'	VELOCITY =	10.4 fps
10% AEP =	496.7'	"	11.0 fps
4% AEP =	498.0'	"	14.5 fps
2% AEP =	499.4'	"	15.5 fps
1% AEP =	500.4'	"	16.3 fps

LONG TERM STREAMBED CHANGES: Scour hole at outlet

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
 FREQUENCY: N/A
 RELIEF ELEVATION: 511.4'
 DISCHARGE OVER ROAD @ 1% AEP: None

UPSTREAM STRUCTURE

TOWN: Duxbury DISTANCE: 1000'
 HIGHWAY #: Th 37 STRUCTURE #: 7
 CLEAR SPAN: _____ CLEAR HEIGHT: _____
 YEAR BUILT: _____ FULL WATERWAY: _____
 STRUCTURE TYPE: _____

DOWNSTREAM STRUCTURE

TOWN: Duxbury DISTANCE: 7000'
 HIGHWAY #: _____ STRUCTURE #: _____
 CLEAR SPAN: _____ CLEAR HEIGHT: _____
 YEAR BUILT: _____ FULL WATERWAY: _____
 STRUCTURE TYPE: Confluence with Winooski River

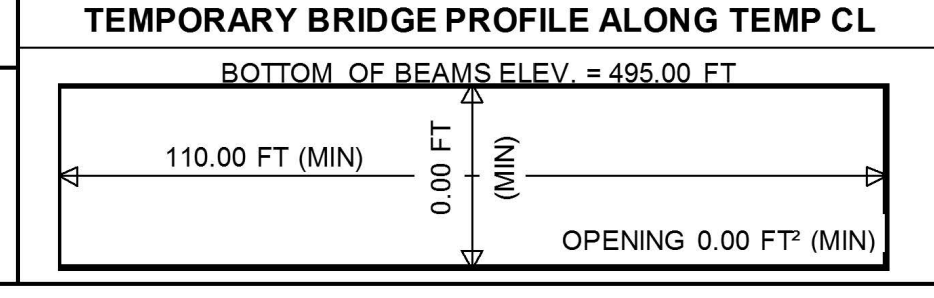
LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A STR.	4A STR.	5A SEM
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

FABRICATOR TO PROVIDE
LOAD RATING (SEE
GENERAL NOTES)

AS BUILT "REBAR" DETAIL

LEVEL I	LEVEL II	LEVEL III
TYPE: _____	TYPE: _____	TYPE: _____
GRADE: _____	GRADE: _____	GRADE: _____



PROPOSED STRUCTURE

STRUCTURE TYPE: Precast Conspan Arch

CLEAR SPAN(NORMAL TO STREAM): 28'
 VERTICAL CLEARANCE ABOVE STREAMBED: ~8.5'
 WATERWAY OF FULL OPENING: 195 sq. ft.

WATER SURFACE ELEVATIONS AT:

43% AEP =	493.4'	VELOCITY =	7.0 fps
10% AEP =	494.8'	"	8.7 fps
4% AEP =	495.6'	"	9.8 fps
2% AEP =	496.3'	"	10.7 fps
1% AEP =	498.8'	"	11.1 fps

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
 FREQUENCY: N/A
 RELIEF ELEVATION: 511.4'
 DISCHARGE OVER ROAD @ 1% AEP: None

BRIDGE LOW CHORD ELEVATION: 499.8'
 FREEBOARD: @ 2% AEP = 3.5'

SCOUR: Contraction scour at 0.5% AEP = 2.0'. Design foundations to be 6.0' below streambed.
 REQUIRED CHANNEL PROTECTION: Stone Fill Type IV*

PERMIT INFORMATION

AVERAGE DAILY FLOW: _____ DEPTH OR ELEVATION: _____
 ORDINARY LOW WATER: _____
 ORDINARY HIGH WATER: _____

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: Bridge
 CLEAR SPAN (NORMAL TO STREAM): Minimum clear span 35'
 VERTICAL CLEARANCE ABOVE STREAMBED: Minimum low beam elev. = 495.0'
 WATERWAY AREA OF FULL OPENING: 250 sq. ft. minimum

ADDITIONAL INFORMATION

*Rebuild channel through structure with E-stone type E4

- TRAFFIC MAINTENANCE NOTES**
1. MAINTAIN TWO-WAY TRAFFIC ON A TEMPORARY BRIDGE.
 2. TRAFFIC SIGNALS ARE NOT NECESSARY.
 3. SIDEWALKS ARE NOT NECESSARY
 4. THE APPROACHES FOR THE TEMPORARY BRIDGE SHALL BE PAVED.

DESIGN VALUES

1. DESIGN LIVE LOAD	HL-93
2. FUTURE PAVEMENT	d _p : 3.0 INCH
3. DESIGN SPAN	L: 28.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ: ---
5. PRESTRESSING STRAND	f _y : ---
6. PRESTRESSED CONCRETE STRENGTH	f' _c : ---
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f' _{cr} : ---
8. CONCRETE, HIGH PERFORMANCE CLASS AA	f' _c : ---
9. CONCRETE, HIGH PERFORMANCE CLASS A	f' _c : ---
10. CONCRETE, HIGH PERFORMANCE CLASS B	f' _c : 3.5 KSI
11. CONCRETE, CLASS C	f' _c : 3.0 KSI
12. REINFORCING STEEL	f _y : 60 KSI
13. STRUCTURAL STEEL AASHTO M270	f _y : ---
14. NOMINAL BEARING RESISTANCE OF SOIL	q _n : ---
15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: ---
16. NOMINAL BEARING RESISTANCE OF ROCK	q _n : 10.0 KSF
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	φ: 0.45
18. PILE RESISTANCE FACTOR	φ: ---
19. LATERAL PILE DEFLECTION	Δ: ---
20. BASIC WIND SPEED	V _{3s} : ---
21. MINIMUM GROUND SNOW LOAD	p _g : ---
22. SEISMIC DATA	PGA: 0 S _s : --- S ₁ : ---
23.	---
24.	---
25.	---
26.	---

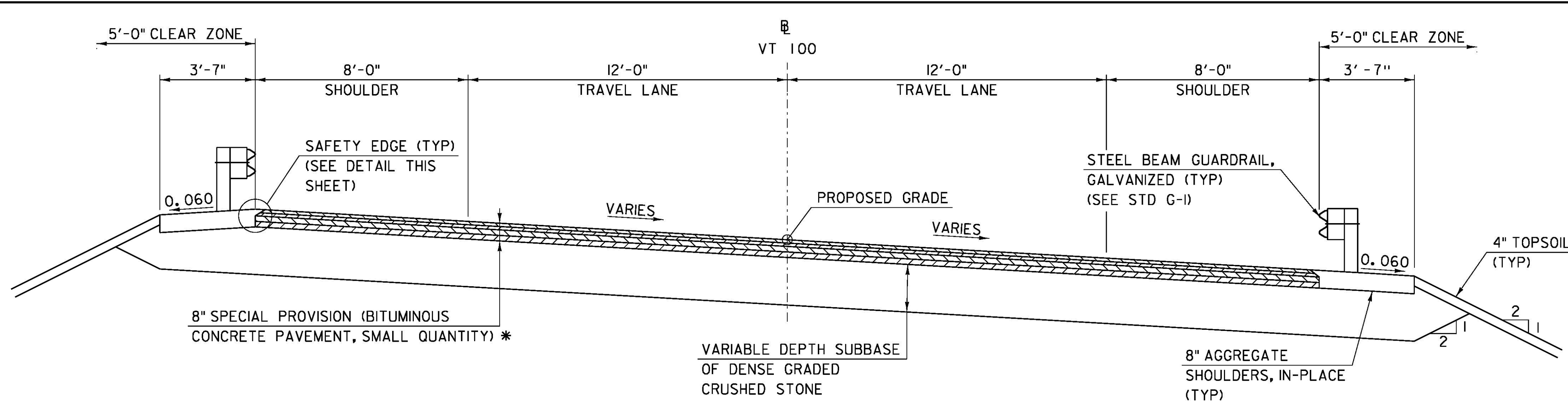
TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT	ESAL
2016	3800	500	54	5.7	280	1564000
2036	4300	560	54	9.6	530	3728000

20 year ESAL for flexible pavement from 2016 to 2036 : 1564000
 40 year ESAL for flexible pavement from 2016 to 2056 : 3728000
 Design Speed : 40 mph

PROJECT NAME: DUXBURY
 PROJECT NUMBER: BF 013-4(47)

FILE NAME: r16b001pl.dgn PLOT DATE: 05-MAY-2016
 PROJECT LEADER: K. HIGGINS DRAWN BY: TYLIN
 DESIGNED BY: TYLIN CHECKED BY: TYLIN
 PRELIMINARY INFORMATION SHEET SHEET 6 OF 19

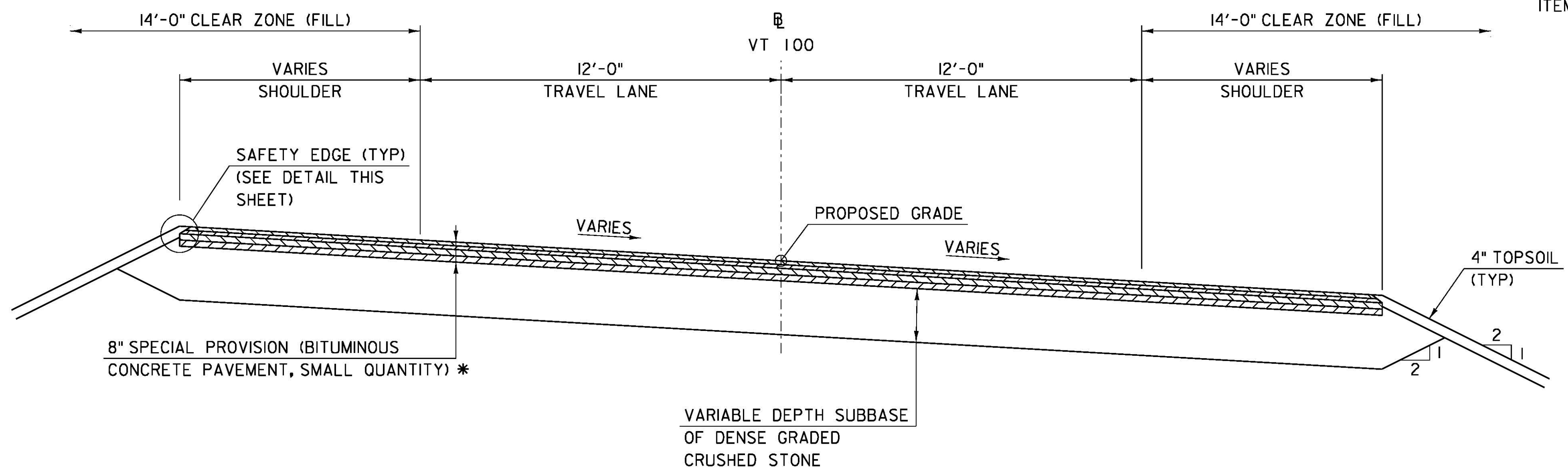


MATERIAL TOLERANCES (IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"

* 1/2" TYPE IVS OVER
 1/2" TYPE IVS OVER
 2 1/2" TYPE IIS OVER
 2 1/2" TYPE IIS

**ROADWAY TYPICAL SECTION
 WITH GUARDRAIL**
 SCALE 3/8" = 1'-0"

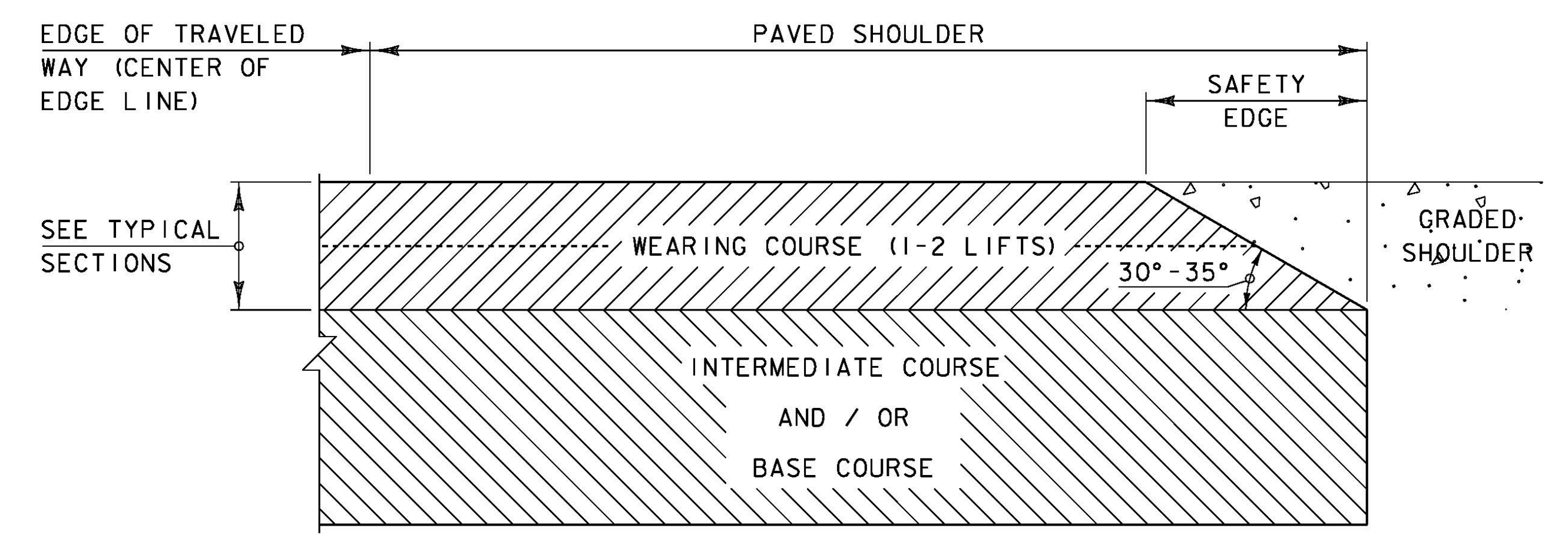
NOTE: EMULSIFIED ASPHALT SHALL BE APPLIED TO ALL COLD PLANED BITUMINOUS CONCRETE PAVEMENT SURFACES AND BETWEEN ALL LIFTS OF PAVEMENT AT THE RATE OF 0.04 GAL/SY OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER ITEM 404.65, "EMULSIFIED ASPHALT."



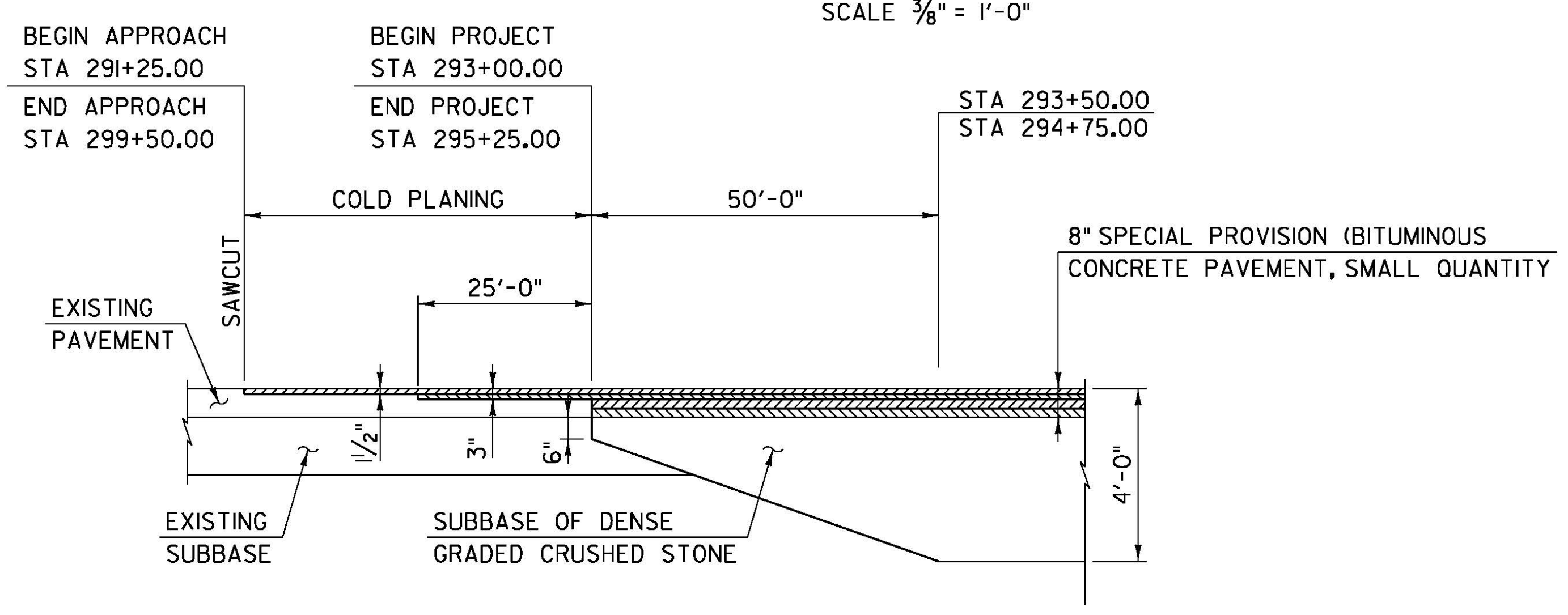
**ROADWAY TYPICAL SECTION
 WITHOUT GUARDRAIL**
 SCALE 3/8" = 1'-0"

SAFETY EDGE 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.
3. THE PAVED SHOULDER EXTENDS FROM THE EDGE OF TRAVELED WAY TO THE EDGE OF THE WEARING COURSE, INCLUDING THE "SAFETY EDGE".

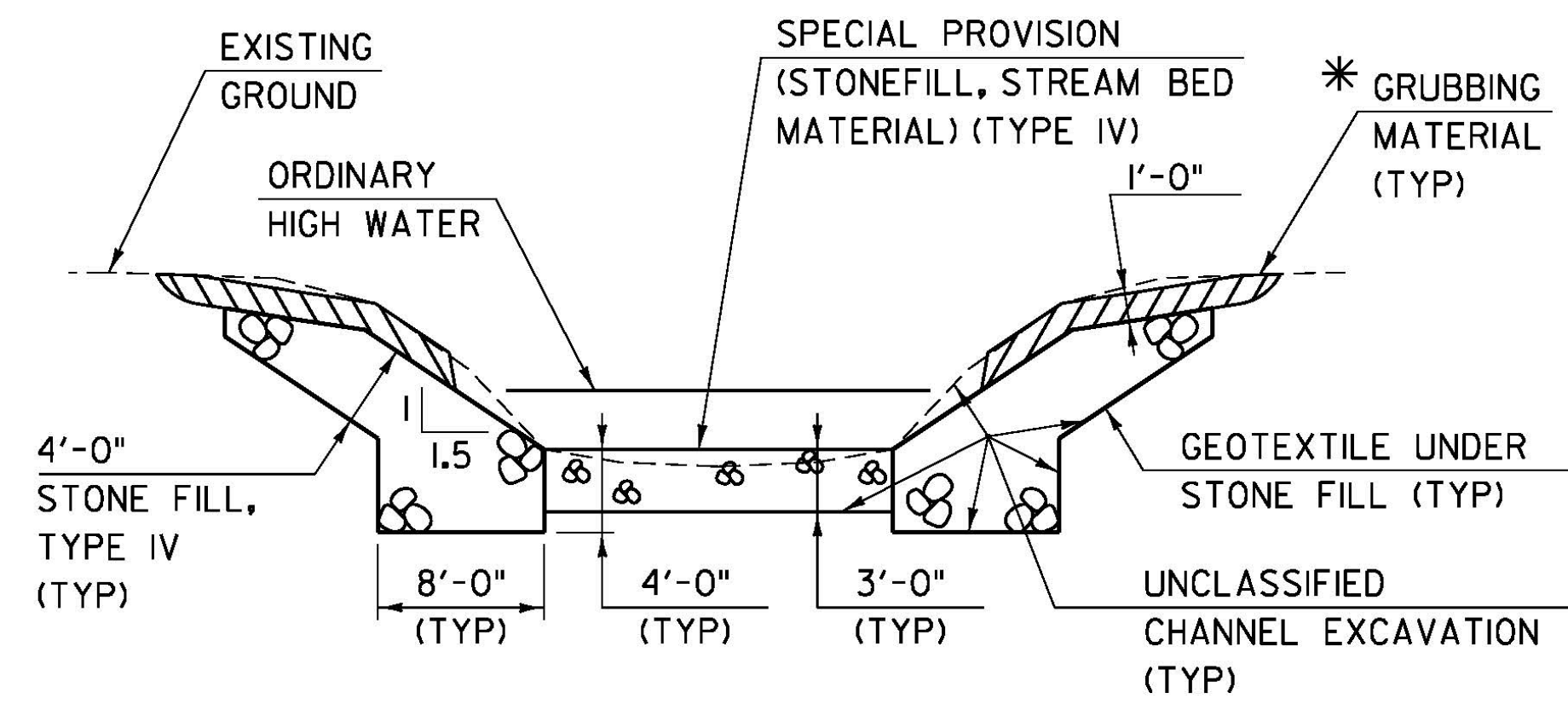


SAFETY EDGE DETAIL
 NOT TO SCALE



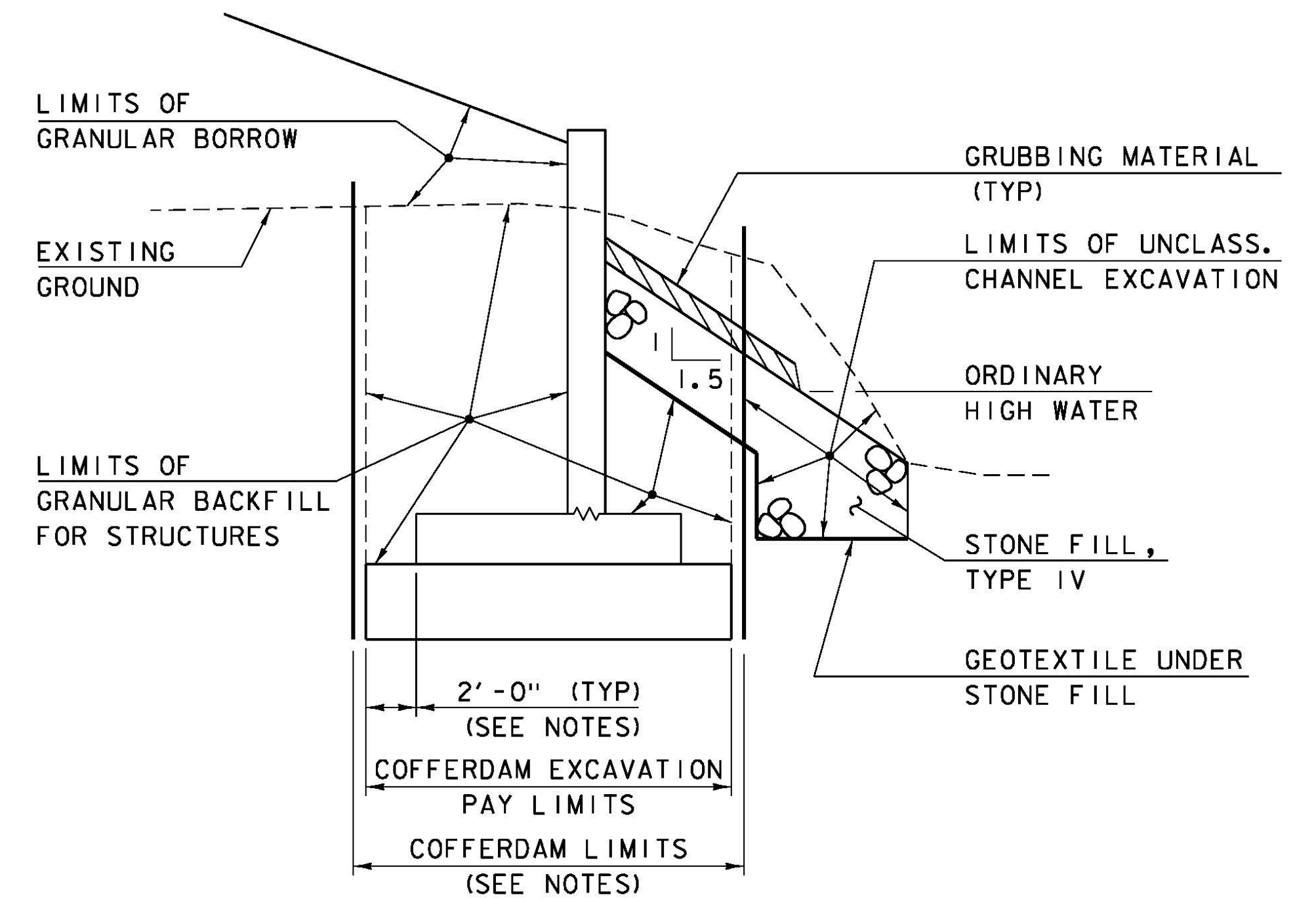
APPROACH SECTION
 (NOT TO SCALE)

PROJECT NAME: DUXBURY	PLOT DATE: 05-MAY-2016
PROJECT NUMBER: BF 013-4(47)	DRAWN BY: TYLIN
FILE NAME: r16b001typ1.dgn	CHECKED BY: TYLIN
PROJECT LEADER: K. HIGGINS	SHEET 7 OF 19
DESIGNED BY: TYLIN	
TYPICAL SECTIONS & DETAILS I	

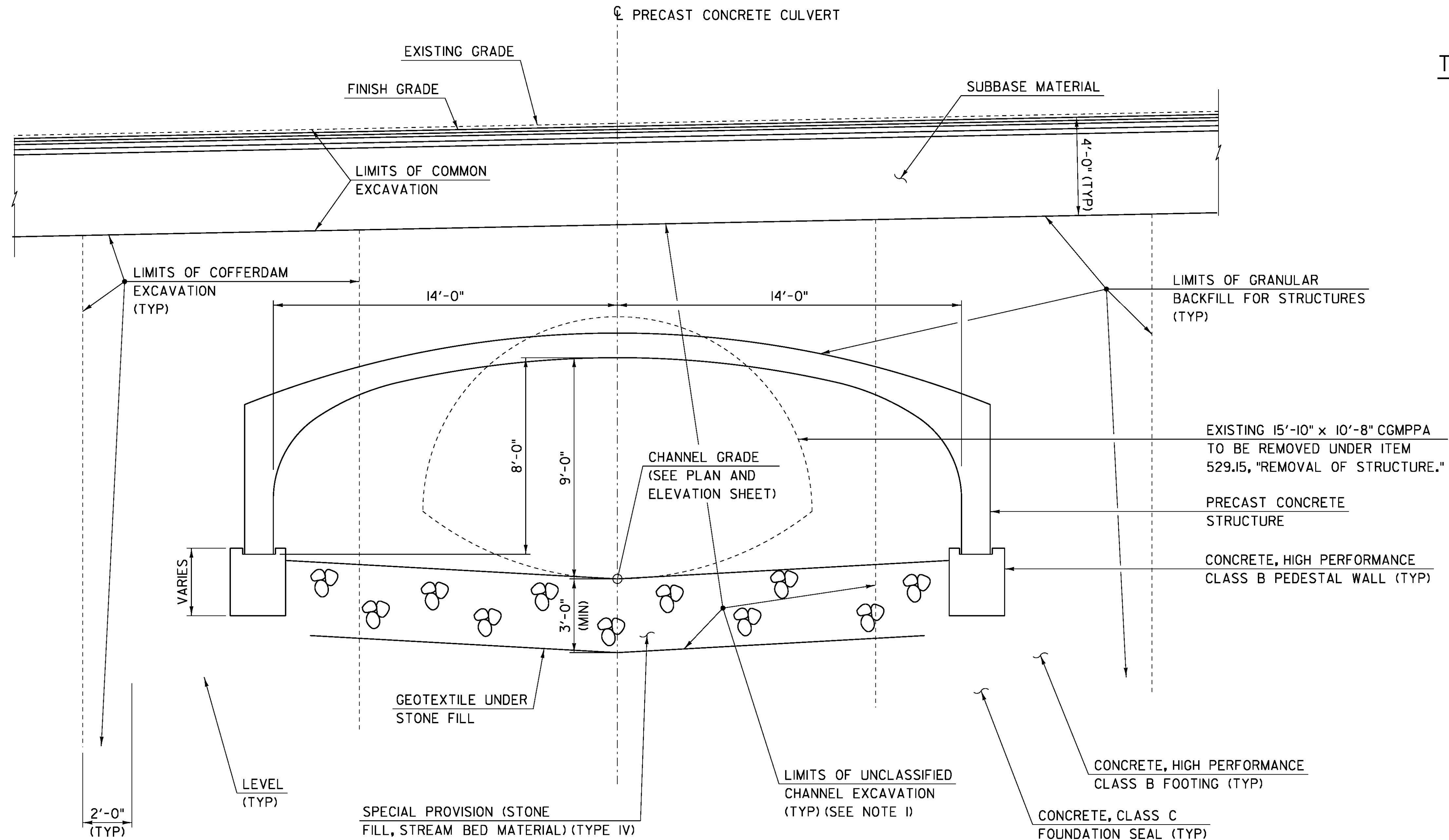


TYPICAL CHANNEL SECTION
(NOT TO SCALE)

* 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.



TYPICAL WINGWALL EARTHWORK SECTION
(NOT TO SCALE)



PRECAST CONCRETE CULVERT AND EARTHWORK TYPICAL SECTION

(NORMAL TO CHANNEL ALIGNMENT)
SCALE: 3/8" = 1'-0"

NOTES:

1. LIMITS EXCLUDE EXISTING CGMPA CULVERT. REMOVAL OF LEDGE NOT REQUIRED FOR PLACEMENT OF STONE FILL.
2. THE CONTRACTOR IS MADE AWARE OF THE POTENTIAL TO ENCOUNTER EXISTING SUBSTRUCTURE REMNANTS. REMOVAL OF ANY EXISTING SUBSTRUCTURE WILL BE PAID UNDER ITEM 208.35, "COFFERDAM EXCAVATION, ROCK."
3. COFFERDAM DIMENSIONS TO BE DETERMINED BY THE CONTRACTOR.
4. THE PAY LIMITS OF EITHER "COFFERDAM EXCAVATION, EARTH" OR "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING AND FROM BOTTOM OF EXCAVATION UP TO THE EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
5. IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION. NO MEASUREMENT AND PAYMENT WILL BE MADE FOR COFFERDAM EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURES OUTSIDE THE PAY LIMITS DEFINED IN NOTE 4.

PROJECT NAME:	DUXBURY	FILE NAME:	r16b001typ2.dgn	PLOT DATE:	05-MAY-2016
PROJECT NUMBER:	BF 013-4(47)	PROJECT LEADER:	K. HIGGINS	DRAWN BY:	TYLIN
		DESIGNED BY:	TYLIN	CHECKED BY:	TYLIN
		TYPICAL SECTIONS & DETAILS 2		SHEET	8 OF 19

GPS CONTROL POINTS

HVCTRL #1
 "STATE FARM"
 NORTH = 665405.5920
 EAST = 1575241.4560
 ELEV. = 456.5610

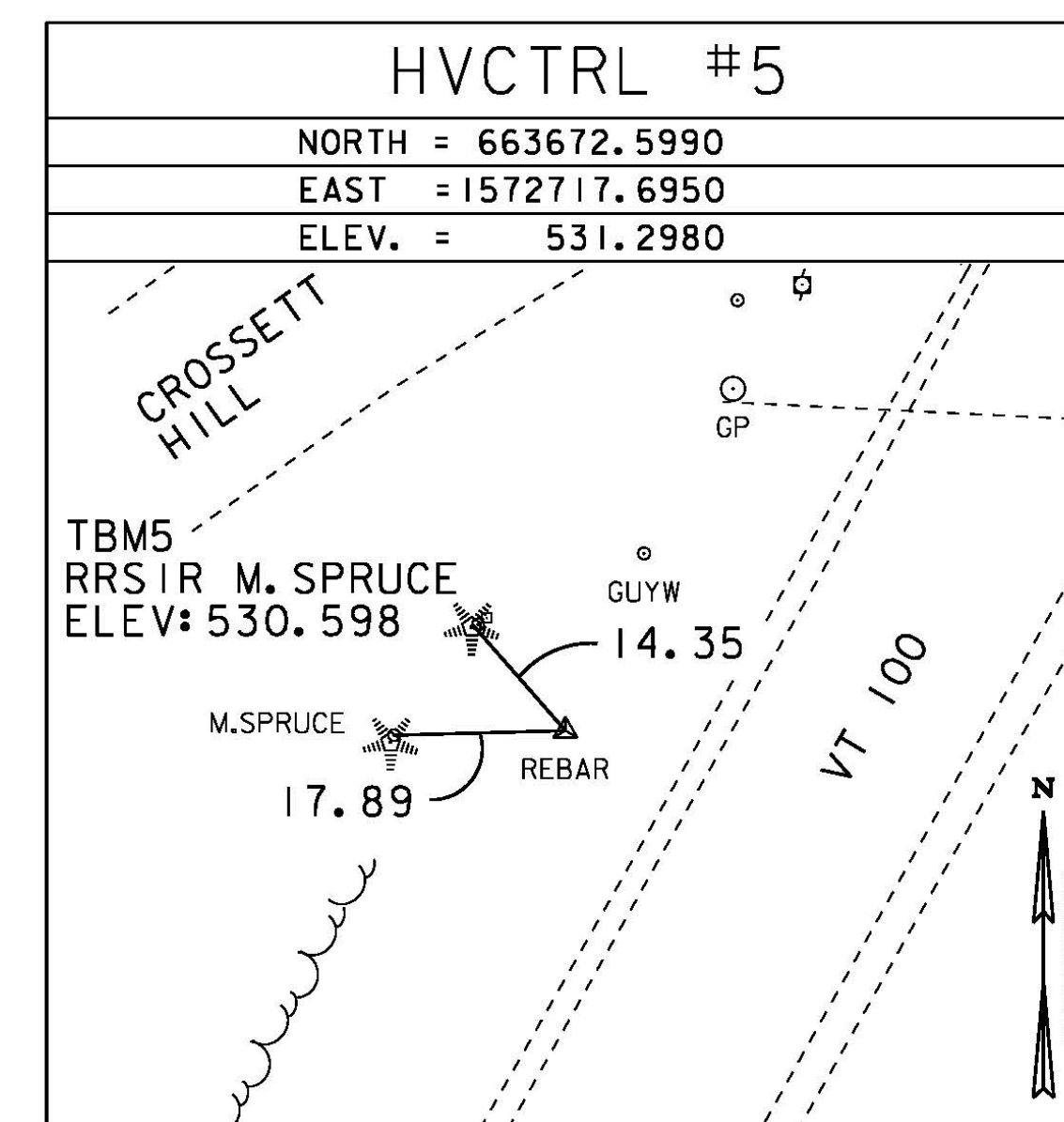
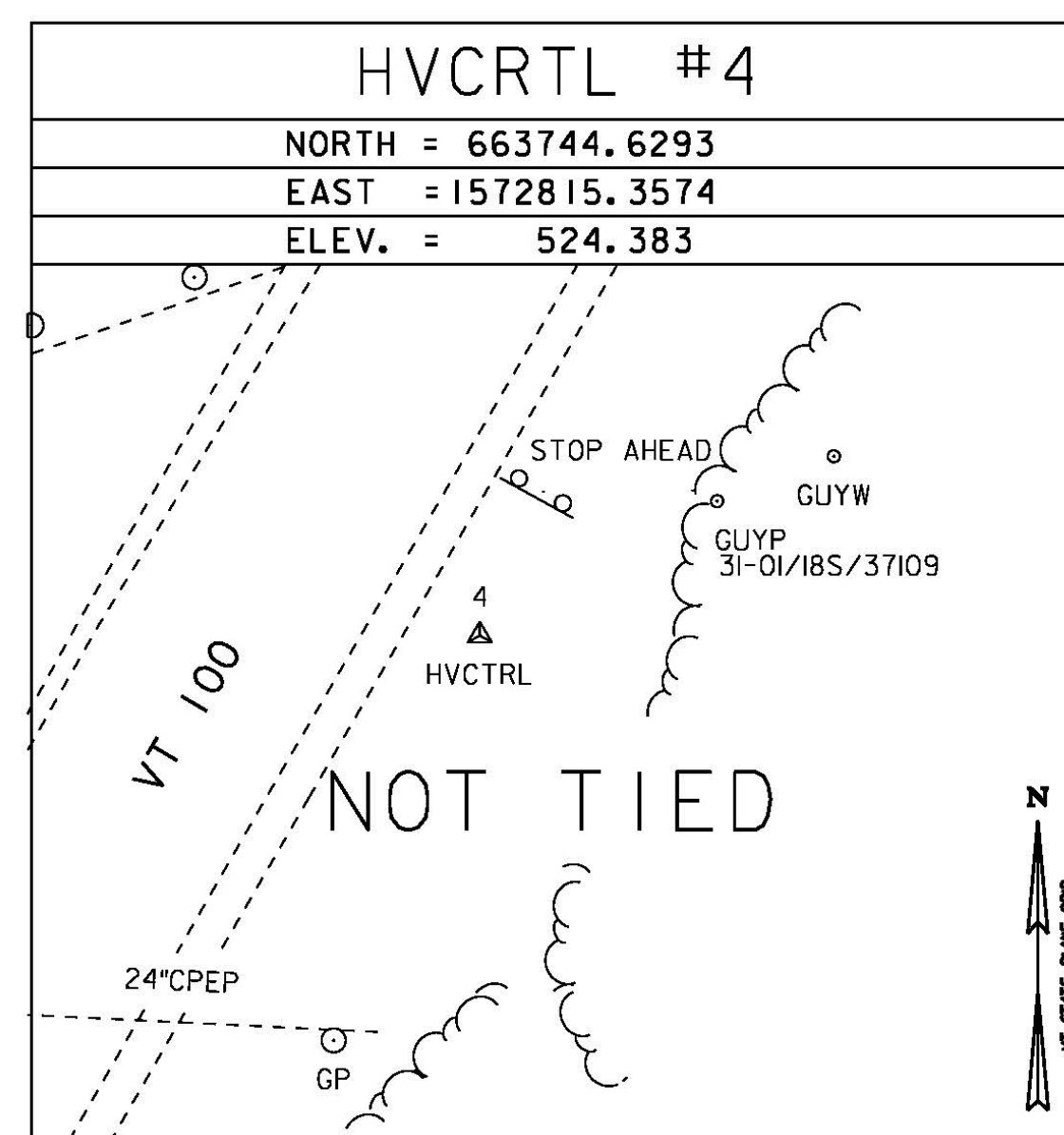
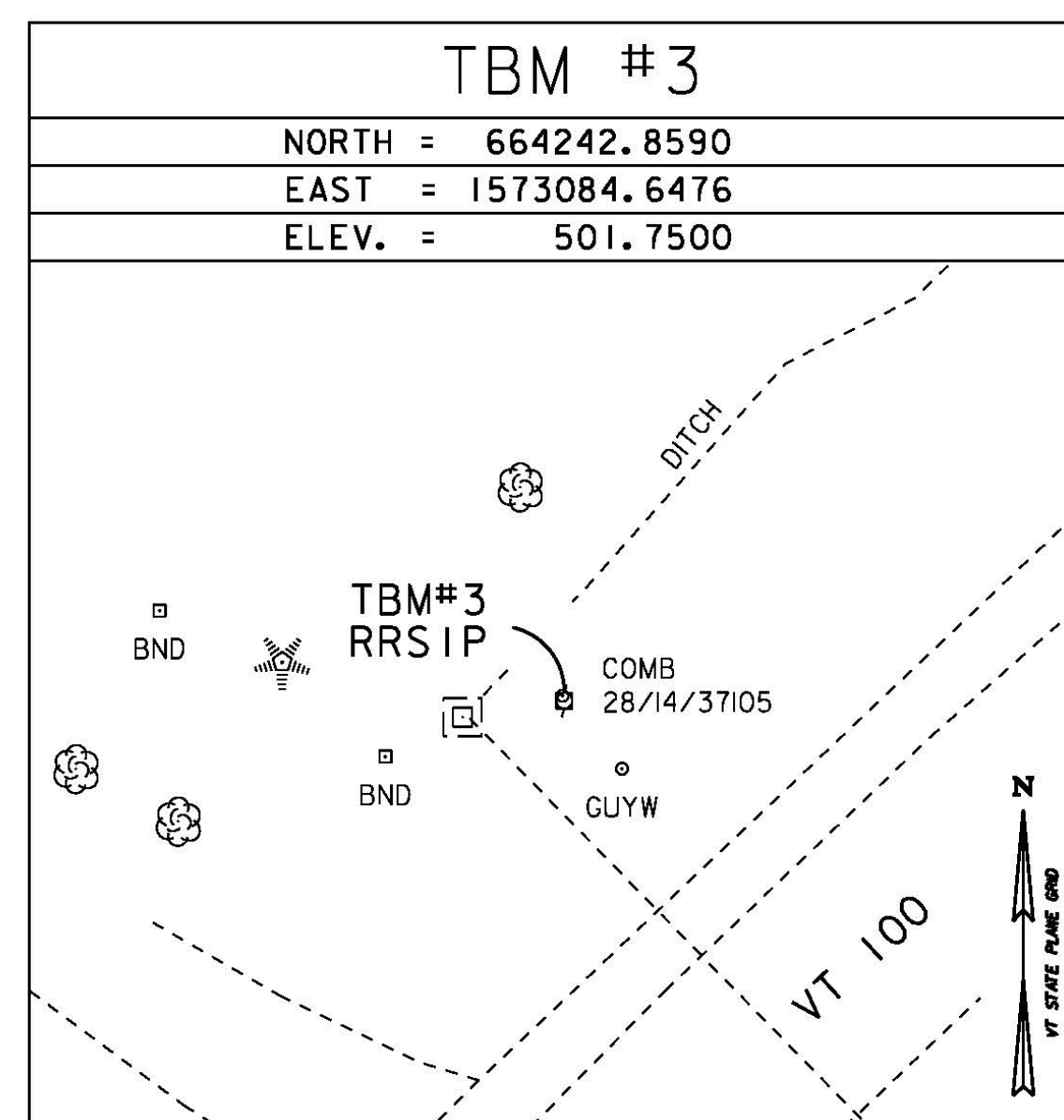
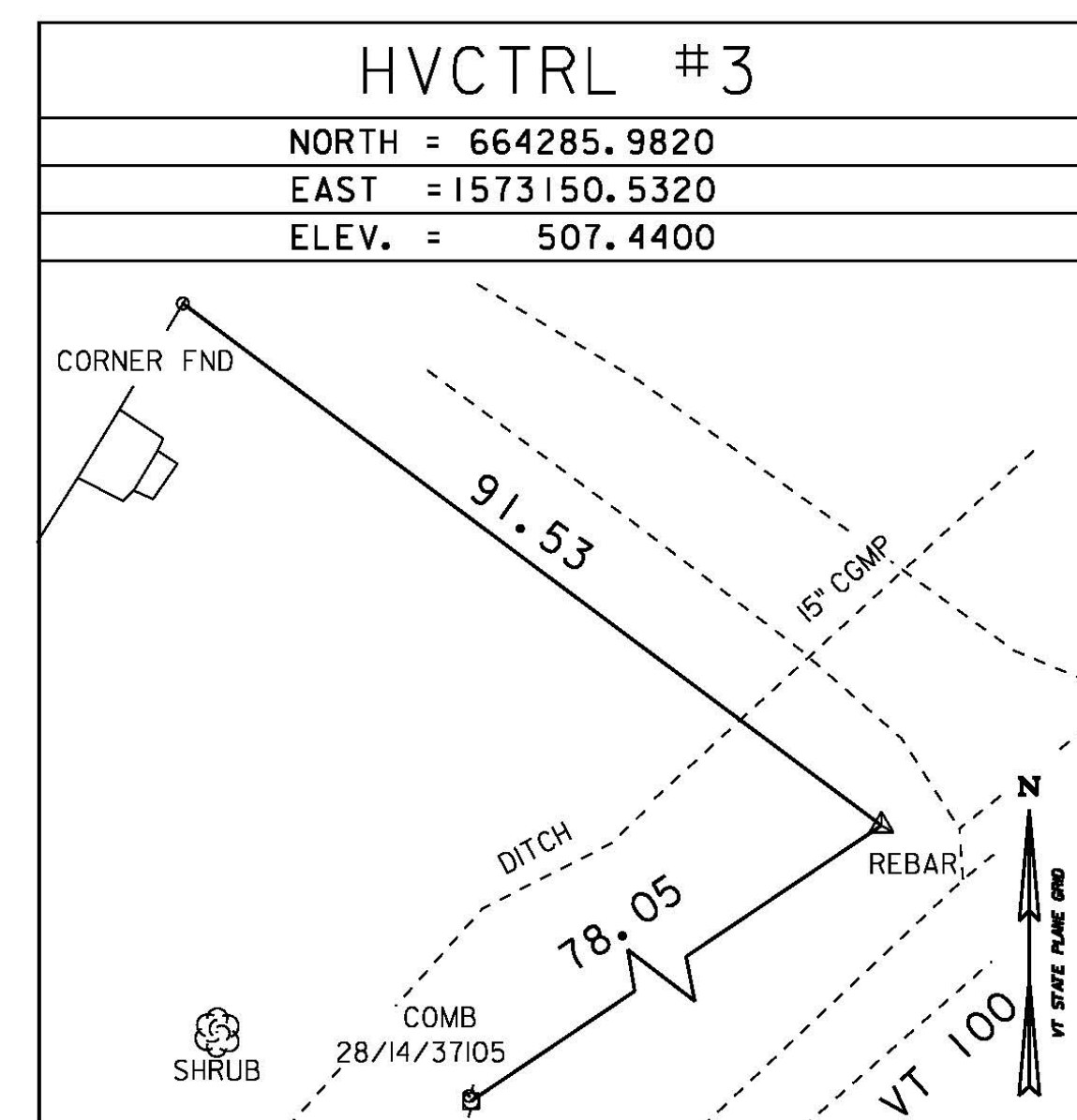
DUXBURY, VT.
 THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT, AT THE SITE OF THE FORMER STATE OF VERMONT FARM STORAGE BARN. IT IS 24.7 M SOUTH OF AND 1.5 M HIGHER THAN THE CENTERLINE OF VT ROUTE 100, 9.4 M EAST-NORTHEAST OF THE CENTERLINE OF A PAVED DRIVE LEADING TO THE BARN, 36.1 M NORTH-NORTHWEST OF THE NORTH CORNER OF THE BARN, 23.1 M EAST-NORTHEAST OF POLE NO 2/2, AND 1.9 M SOUTH OF THE GRAVEL DRIVE LEADING TO HOUSE NO 11.

HVCTRL #2
 "BEDELL"
 NORTH = 664729.5220
 EAST = 1574008.0820
 ELEV. = 561.2400

DUXBURY, VT.
 1.0 MI (1.6 KM) SOUTH SOUTHWEST OF WATERBURY, 4.4 MI (7.1 KM) WEST NORTHWEST OF MIDDLESEX, AND 5.3 MI (8.5 KM) NORTH OF MORETOWN. TO REACH FROM THE JUNCTION OF VERMONT ROUTE 100 SOUTH AND U.S. ROUTE 2 IN WATERBURY, PROCEED SOUTHWEST ALONG VERMONT ROUTE 100 FOR 0.5 MI (0.8 KM) TO AND OPEN KNOLL AND THE STATION SITE ON THE NORTHEAST SIDE OF ROUTE 100. THE MARK IS A STATE OF VERMONT SURVEY DISK SET IN THE TOP OF A CONCRETE MONUMENT 20 CM IN DIAMETER, FLUSH WITH THE GROUND SURFACE. IT IS LOCATED 252 FT (76.8 M) NORTHWEST OF A CONCRETE HIGHWAY BOUND, 194 FT (59.1 M) NORTHEAST OF THE CENTERLINE OF VERMONT ROUTE 100, 31.46 FT (9.59 M) SOUTH OF A CONCRETE HIGHWAY BOUND, 27 FT (8.2 M) SOUTHWEST OF THE STATE HIGHWAY RIGHT OF WAY FENCE, AND 5 FT (1.5 M) NORTHEAST OF A STEEL WITNESS POST. OWNERSHIP IS THE STATE OF VERMONT.

*GPS CONTROL PROVIDED BY VT GSU 2016

TRAVERSE TIES



*TRAVERSE COMPLETED BY: G.HITCHCOCK PC/ B.HERRING, K.KELLY, 4/05/2016

CHANNEL ALIGNMENT

MAINLINE ALIGNMENT

HORIZONTAL ALIGNMENT NAME: BASELINE VT 100 (CONTINUED)

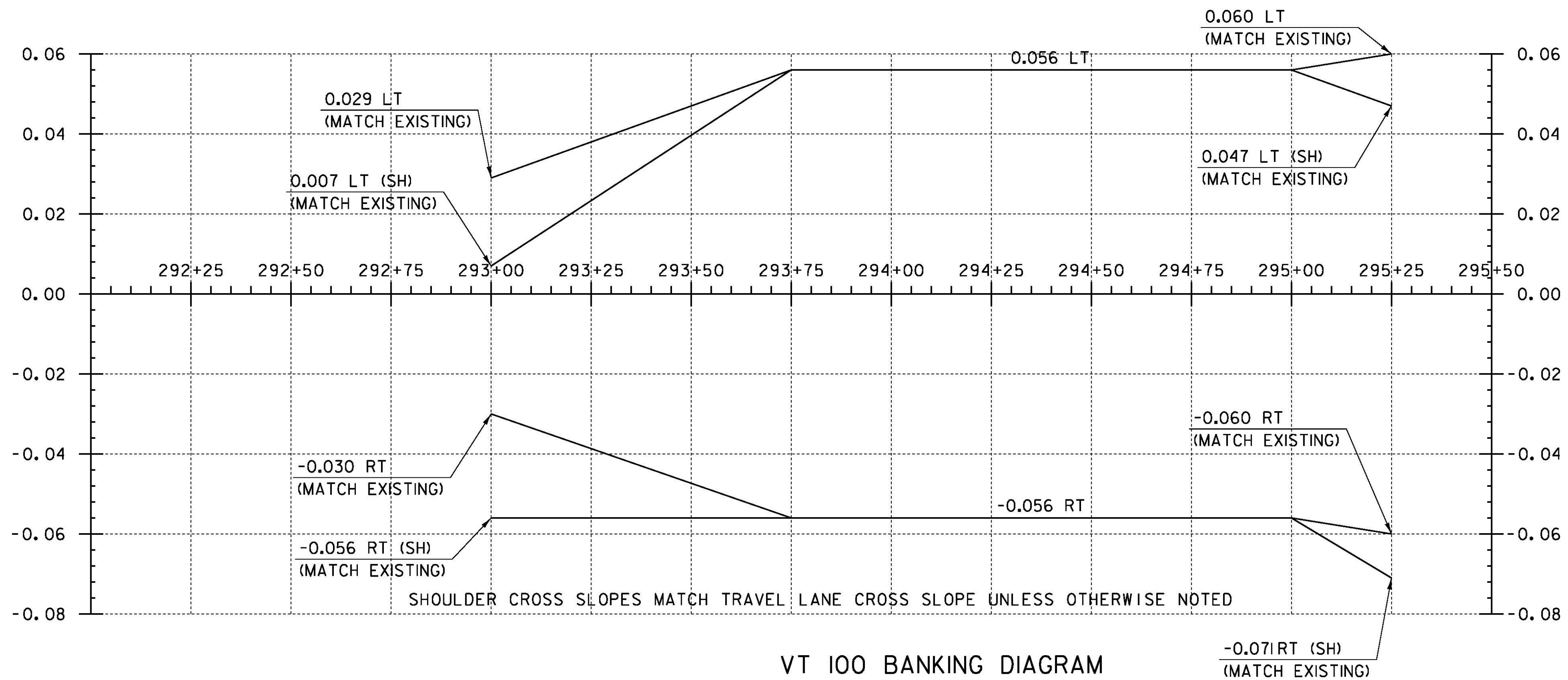
	STATION	NORTHING	EASTING
Element: Linear			
POB	19+25.00	664034.3448	1572799.524
P1	20+25.00	664034.5307	1572899.524
Tangential Direction:	N 89° 53' 36.72" E		
Tangential Length:	100		
Element: Linear			
P1	20+25.00	664034.5307	1572899.524
P1	22+75.00	664103.6964	1573139.766
Tangential Direction:	N 73° 56' 19.85" E		
Tangential Length:	250		
Element: Linear			
P1	22+75.00	664103.6964	1573139.766
POE	23+75.00	664104.5855	1573239.762
Tangential Direction:	N 89° 29' 26.12" E		
Tangential Length:	100		

	STATION	NORTHING	EASTING
Element: Linear			
POB	287+51.15	663486.4469	1572645.853
PC	289+51.36	663661.7050	1572742.653
Tangential Direction:	N 28° 54' 47.28" E		
Tangential Length:	200.21		
Element: Circular			
PC	289+51.36	663661.705	1572742.653
P1	290+51.37	663749.2493	1572791.006
CC		660891.5502	1577758.062
PT	291+51.36	663835.0527	1572842.385
Radius:	5729.58		
Delta:	2° 00' 00.00" Right		
Degree of Curvature:	1° 00' 00.00"		
Length:	200		
Tangent:	100.01		
Chord:	199.99		
Middle Ordinate:	0.87		
External:	0.87		
Tangent Direction:	N 28° 54' 47.28" E		
Radial Direction:	S 61° 05' 12.72" E		
Chord Direction:	N 29° 54' 47.28" E		
Radial Direction:	S 59° 05' 12.72" E		
Tangent Direction:	N 30° 54' 47.28" E		
Element: Linear			
PT	291+51.36	663835.0527	1572842.385
PC	293+25.55	663984.4984	1572931.873
Tangential Direction:	N 30° 54' 47.28" E		
Tangential Length:	174.19		

	STATION	NORTHING	EASTING
Element: Circular			
PC	293+25.55	663984.4984	1572931.873
P1	298+75.05	664455.9369	1573214.17
CC		663423.8305	1573868.193
PT	303+43.66	664509.9043	1573761.009
Radius:	1091.35		
Delta:	53° 27' 02.28" Right		
Degree of Curvature:	5° 14' 59.97"		
Length:	1018.11		
Tangent:	549.5		
Chord:	981.59		
Middle Ordinate:	116.59		
External:	130.53		
Tangent Direction:	N 30° 54' 47.28" E		
Radial Direction:	S 59° 05' 12.72" E		
Chord Direction:	N 57° 38' 18.39" E		
Radial Direction:	S 5° 38' 10.50" E		
Tangent Direction:	N 84° 21' 49.50" E		
Element: Linear			
PT	303+43.66	664509.9043	1573761.009
POE	305+43.66	664529.5465	1573960.039
Tangential Direction:	N 84° 21' 49.50" E		
Tangential Length:	200		

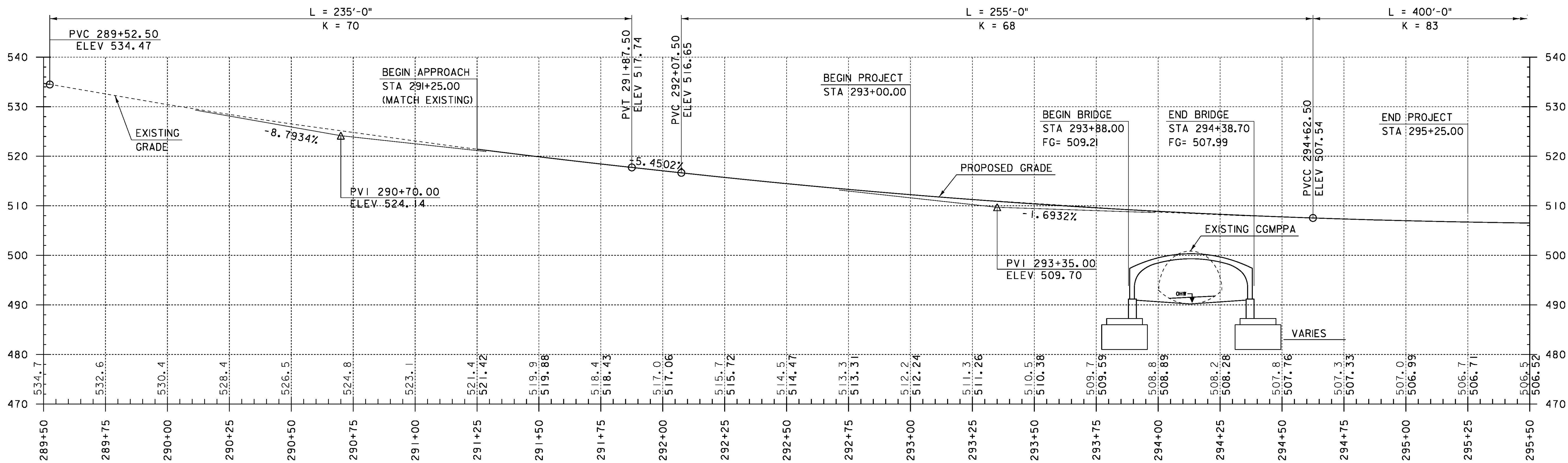
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1996)
ADJUSTMENT	N/A

PROJECT NAME:	DUXBURY
PROJECT NUMBER:	BF 013-4(47)
FILE NAME:	r16b001tie.dgn
PLOT DATE:	05-MAY-2016
PROJECT LEADER:	K. HIGGINS
DRAWN BY:	TYLIN
DESIGNED BY:	TYLIN
CHECKED BY:	TYLIN
TIE SHEET	SHEET 9 OF 19



VT 100 BANKING DIAGRAM

HORIZONTAL SCALE: 1"=20'
NO VERTICAL SCALE



VT 100 PROFILE I

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

NOTE:

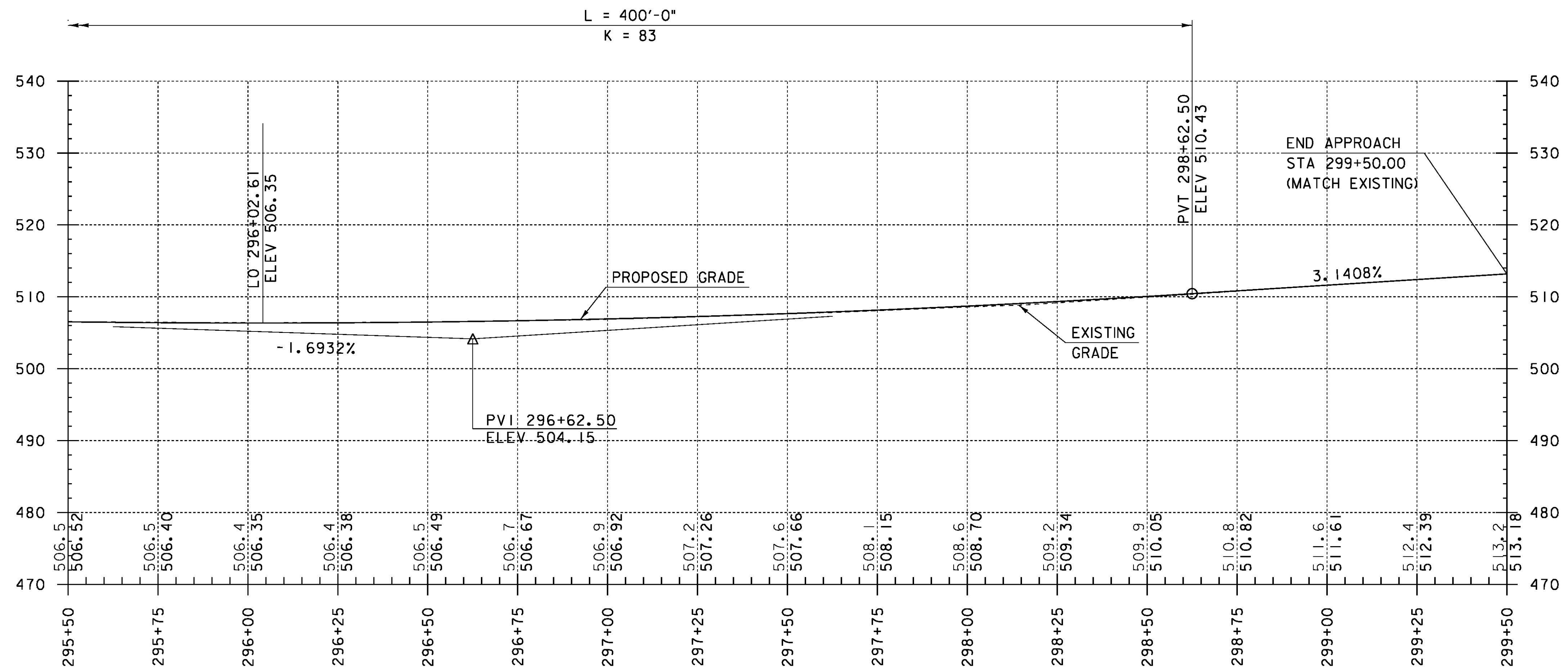
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG \mathcal{C} .

GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG \mathcal{C} .

PROJECT NAME: DUXBURY
PROJECT NUMBER: BF 013-4(47)

FILE NAME: r16b001pro1.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: TYLIN
PROFILE SHEET I

PLOT DATE: 05-MAY-2016
DRAWN BY: TYLIN
CHECKED BY: TYLIN
SHEET 10 OF 19



NOTE:

GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG L.

GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG C.

VT 100 PROFILE 2

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

PROJECT NAME: DUXBURY
 PROJECT NUMBER: BF 013-4(47)

FILE NAME: r16b001pro2.dgn
 PROJECT LEADER: K. HIGGINS
 DESIGNED BY: TYLIN
 PROFILE SHEET 2

PLOT DATE: 05-MAY-2016
 DRAWN BY: TYLIN
 CHECKED BY: TYLIN
 SHEET 11 OF 19

STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS

STA 51+88.02 - 54+40.00, RT
STA 52+37.99 - 54+40.00, LT

ANCHOR FOR STEEL BEAM RAIL
52+50.00, LT

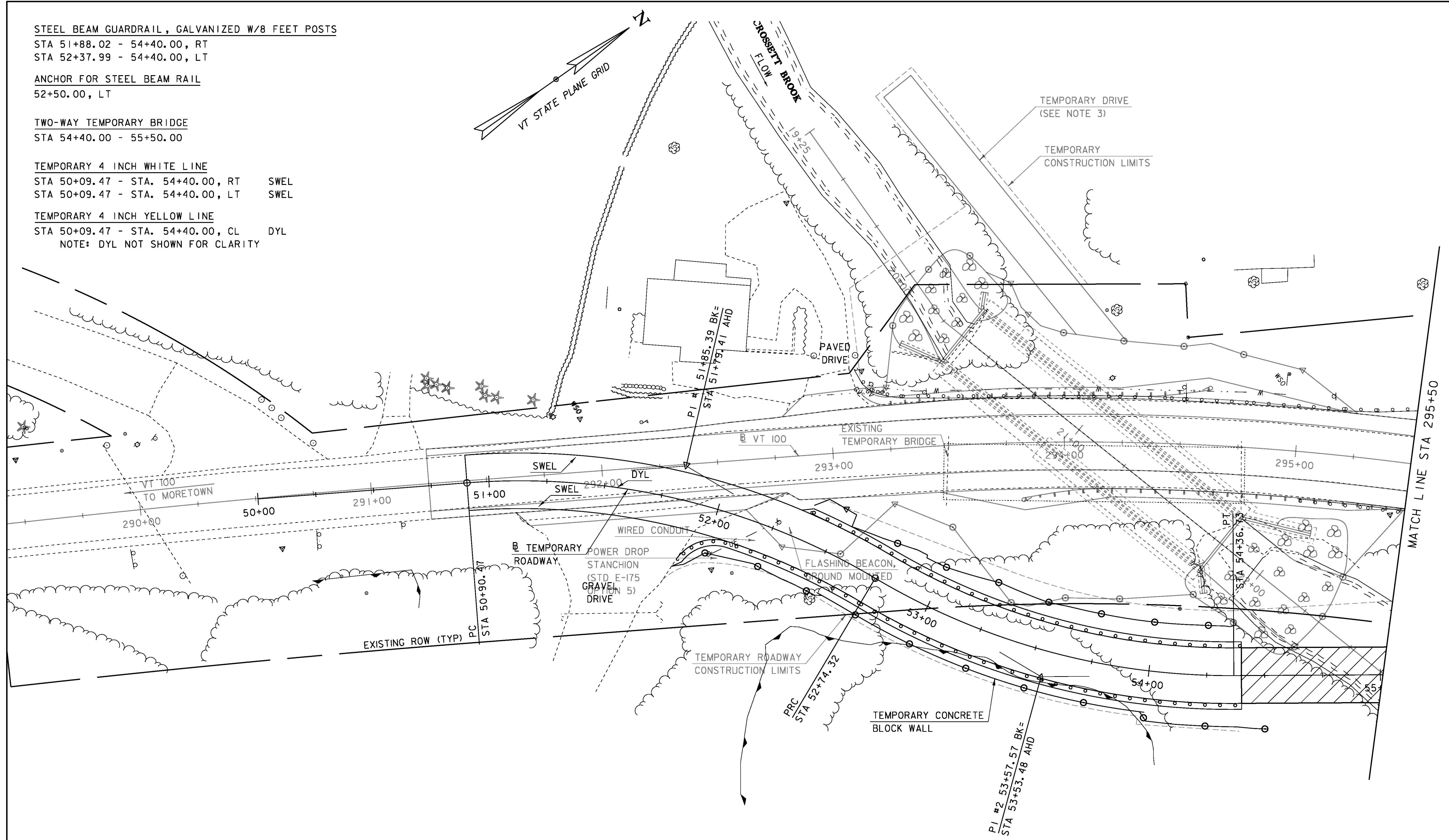
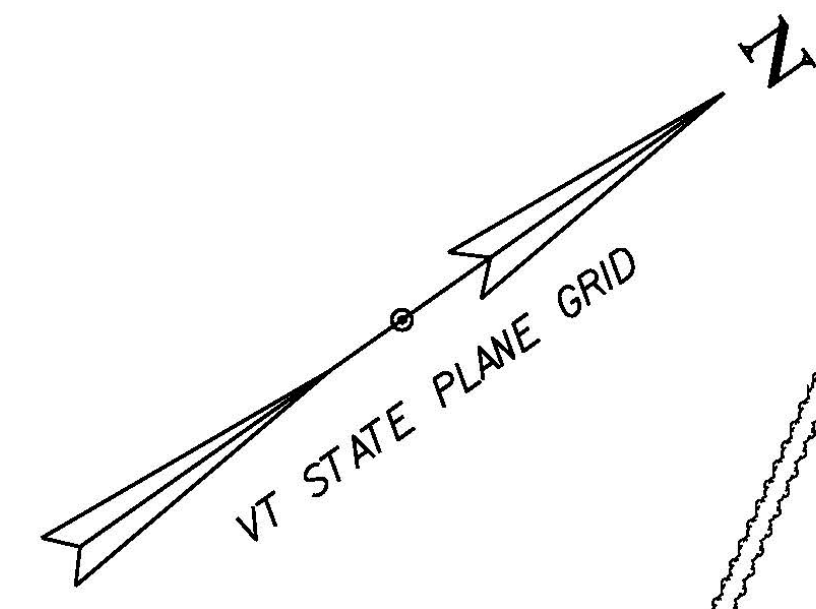
TWO-WAY TEMPORARY BRIDGE
STA 54+40.00 - 55+50.00

TEMPORARY 4 INCH WHITE LINE

STA 50+09.47 - STA. 54+40.00, RT SWEL
STA 50+09.47 - STA. 54+40.00, LT SWEL

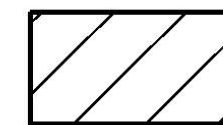
TEMPORARY 4 INCH YELLOW LINE

STA 50+09.47 - STA. 54+40.00, CL DYL
NOTE: DYL NOT SHOWN FOR CLARITY



TEMPORARY ROADWAY LAYOUT I

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



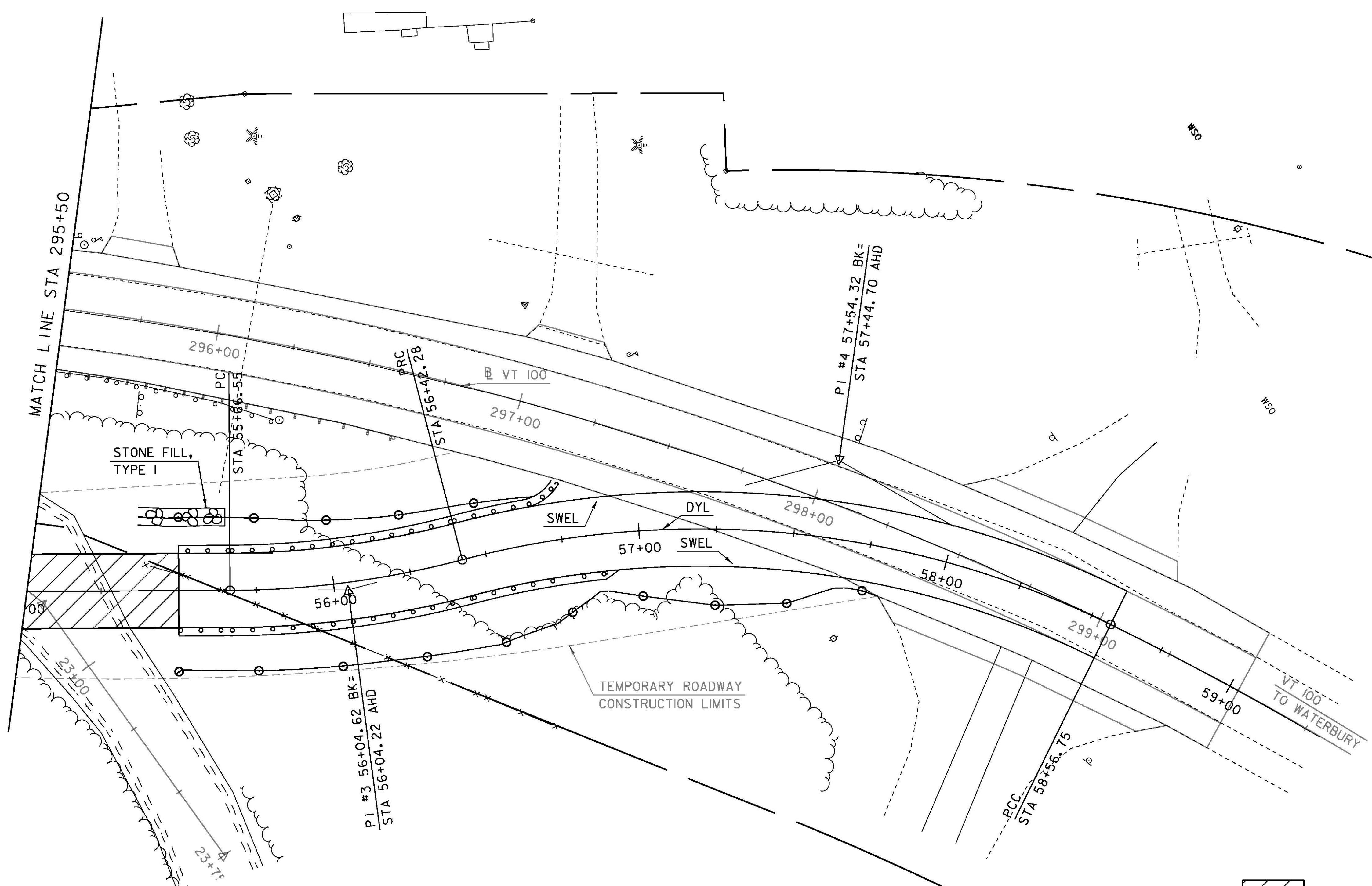
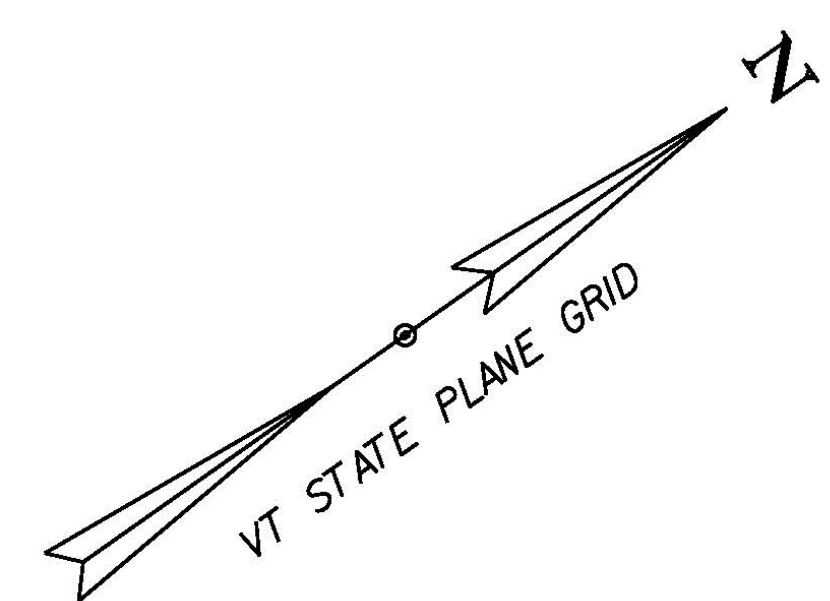
LIMITS OF STRUCTURE

NOTE: ITEM DESCRIPTIONS AND STATION RANGES PROVIDED ARE TO AID IN THE LAYOUT AND CONSTRUCTION OF THE TEMPORARY ROADWAY. ALL ITEMS ARE INCIDENTAL TO ITEM 528.II, "TWO-WAY TEMPORARY BRIDGE."

PROJECT NAME: DUXBURY
PROJECT NUMBER: BF 013-4(47)

FILE NAME: r16b001tempplay1.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: TYLIN
TEMPORARY ROADWAY SHEET I

PLOT DATE: 05-MAY-2016
DRAWN BY: TYLIN
CHECKED BY: TYLIN
SHEET 12 OF 19



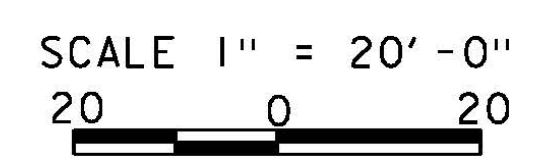
STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS
 STA 55+50.00 - 56+76.31, LT
 STA 55+50.00 - 56+88.02, RT

ANCHOR FOR STEEL BEAM RAIL
 STA 56+65.00, LT
 STA 56+75.00, RT

TEMPORARY 4 INCH WHITE LINE
 STA 55+50.00 - STA. 57+90.00, RT SWEL
 STA 55+50.00 - STA. 58+00.00, LT SWEL

TEMPORARY 4 INCH YELLOW LINE
 STA 55+50.00 - STA. 58+00.00, CL DYL
 NOTE: DYL NOT SHOWN FOR CLARITY

TEMPORARY ROADWAY LAYOUT 2



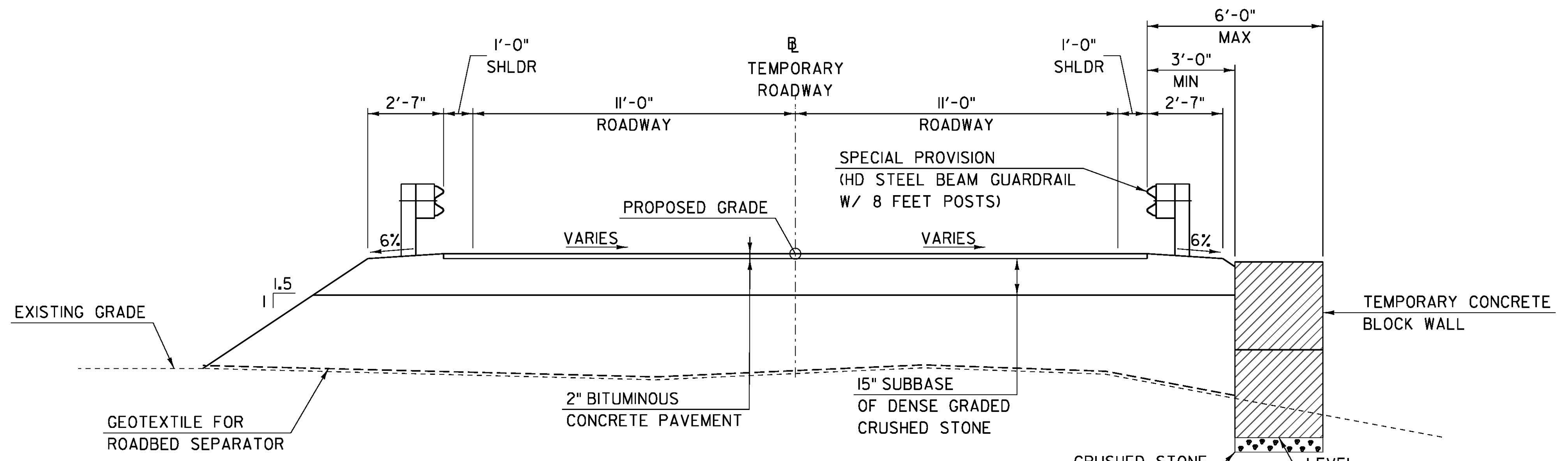
 LIMITS OF STRUCTURE

NOTE: ITEM DESCRIPTIONS AND STATION RANGES PROVIDED ARE TO AID IN THE LAYOUT AND CONSTRUCTION OF THE TEMPORARY ROADWAY. ALL ITEMS ARE INCIDENTAL TO ITEM 528.11, "TWO-WAY TEMPORARY BRIDGE."

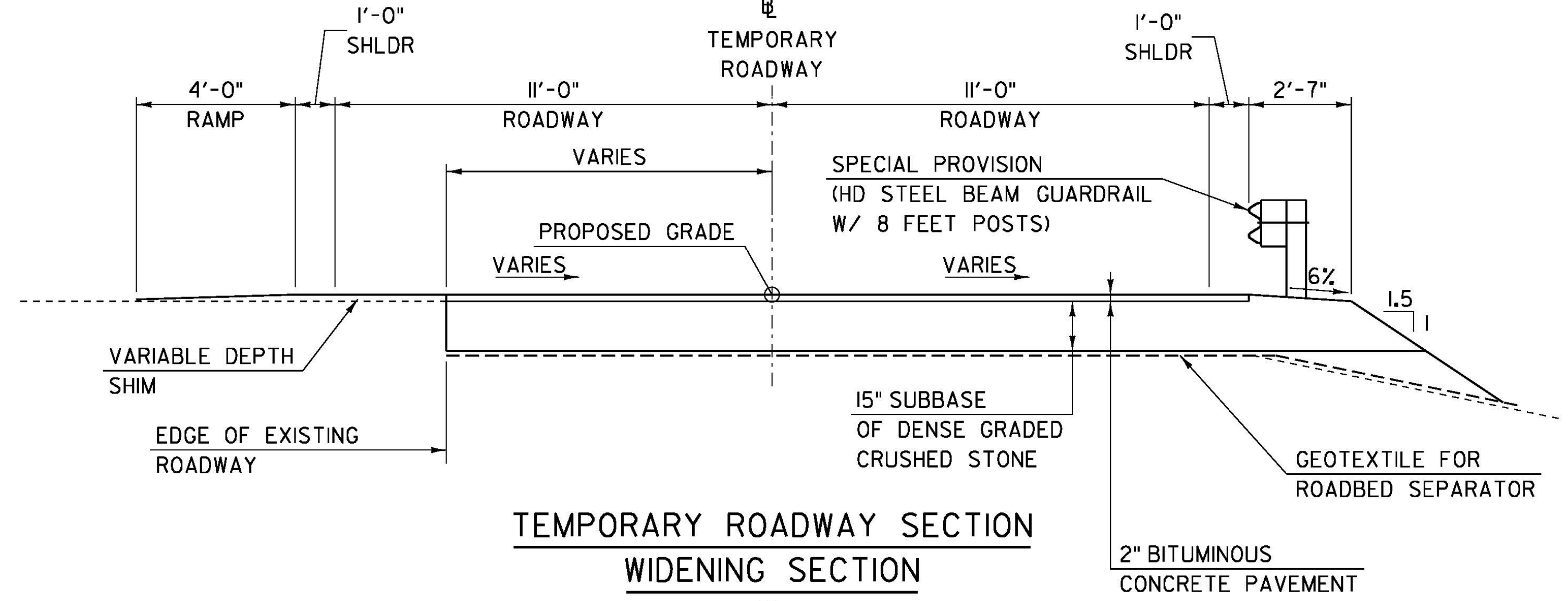
PROJECT NAME: DUXBURY	
PROJECT NUMBER: BF 013-4(47)	
FILE NAME: r16b001temp2.dgn	PLOT DATE: 05-MAY-2016
PROJECT LEADER: K. HIGGINS	DRAWN BY: TYLIN
DESIGNED BY: TYLIN	CHECKED BY: TYLIN
TEMPORARY ROADWAY SHEET 2	SHEET 13 OF 19

TEMPORARY ROADWAY ALIGNMENT

Element	Station	Northing	Easting
Element: Linear	POB (1)	50+00.00	663748.3501 1572791.8006
	PC (12)	50+90.47	663826.0835 1572838.0920
	Tangential Direction:	N 30°46'28.37" E	
	Tangential Length:	90.47	
Element: Circular	PC (12)	50+90.47	663826.0835 1572838.0921
	PI ()	51+85.39	663907.6317 1572886.6556
	PRC (14)	52+74.32	663946.4075 1572973.2868
	Radius:	300	
	Delta:	35°06'44.69" Right	
	Degree of Curvature (Arc):	19°05'54.94"	
	Length:	183.85	
	Tangent:	94.91	
	Chord:	180.98	
	Middle Ordinate:	13.97	
	External:	14.66	
	Tangent Direction:	N 30°46'28.37" E	
	Tangent Direction:	N 65°53'13.05" E	
Element: Circular	PRC (14)	52+74.32	663946.4075 1572973.2868
	PI ()	53+57.57	663980.4171 1573049.2700
	PT (16)	54+36.73	664048.7180 1573096.8629
	Radius:	300	
	Delta:	31°01'03.61" Left	
	Degree of Curvature (Arc):	19°05'54.94"	
	Length:	162.41	
	Tangent:	83.25	
	Chord:	160.43	
	Middle Ordinate:	10.92	
	External:	11.34	
	Tangent Direction:	N 65°53'13.05" E	
	Tangent Direction:	N 34°52'09.44" E	
Element: Linear	PT (16)	54+36.73	664048.7180 1573096.8629
	PC (17)	55+66.55	664155.2344 1573171.0849
	Tangential Direction:	N 34°52'09.44" E	
	Tangential Length:	129.83	
Element: Circular	PC (17)	55+66.55	664155.2344 1573171.0849
	PI ()	56+04.62	664186.4633 1573192.8457
	PRC (19)	56+42.28	664222.1371 1573206.1181
	Radius:	300	
	Delta:	14°27'41.94" Left	
	Degree of Curvature (Arc):	19°05'54.94"	
	Length:	75.72	
	Tangent:	38.06	
	Chord:	75.52	
	Middle Ordinate:	2.39	
	External:	2.4	
	Tangent Direction:	N 34°52'09.44" E	
	Tangent Direction:	N 20°24'27.50" E	
Element: Circular	PRC (19)	56+42.28	664222.1371 1573206.1181
	PI ()	57+54.32	664327.1533 1573245.1892
	PCC (21)	58+56.75	664380.8441 1573343.5367
	Radius:	300	
	Delta:	40°57'39.38" Right	
	Degree of Curvature (Arc):	19°05'54.94"	
	Length:	214.47	
	Tangent:	112.05	
	Chord:	209.93	
	Middle Ordinate:	18.96	
	External:	20.24	
	Tangent Direction:	N 20°24'27.50" E	
	Tangent Direction:	N 61°22'06.88" E	
Element: Circular	PCC (21)	58+56.75	664380.8441 1573343.5367
	PI ()	58+90.78	664397.1497 1573373.4042
	PT (22)	59+24.78	664411.4795 1573404.2684
	Radius:	1046	
	Delta:	3°43'35.70" Right	
	Degree of Curvature (Arc):	5°28'39.39"	
	Length:	68.03	
	Tangent:	34.03	
	Chord:	68.02	
	Middle Ordinate:	0.55	
	External:	0.55	
	Tangent Direction:	N 61°22'06.88" E	
	Tangent Direction:	N 65°05'42.57" E	



**TEMPORARY ROADWAY SECTION
FILL SECTION**
SCALE 3/8" = 1'-0"

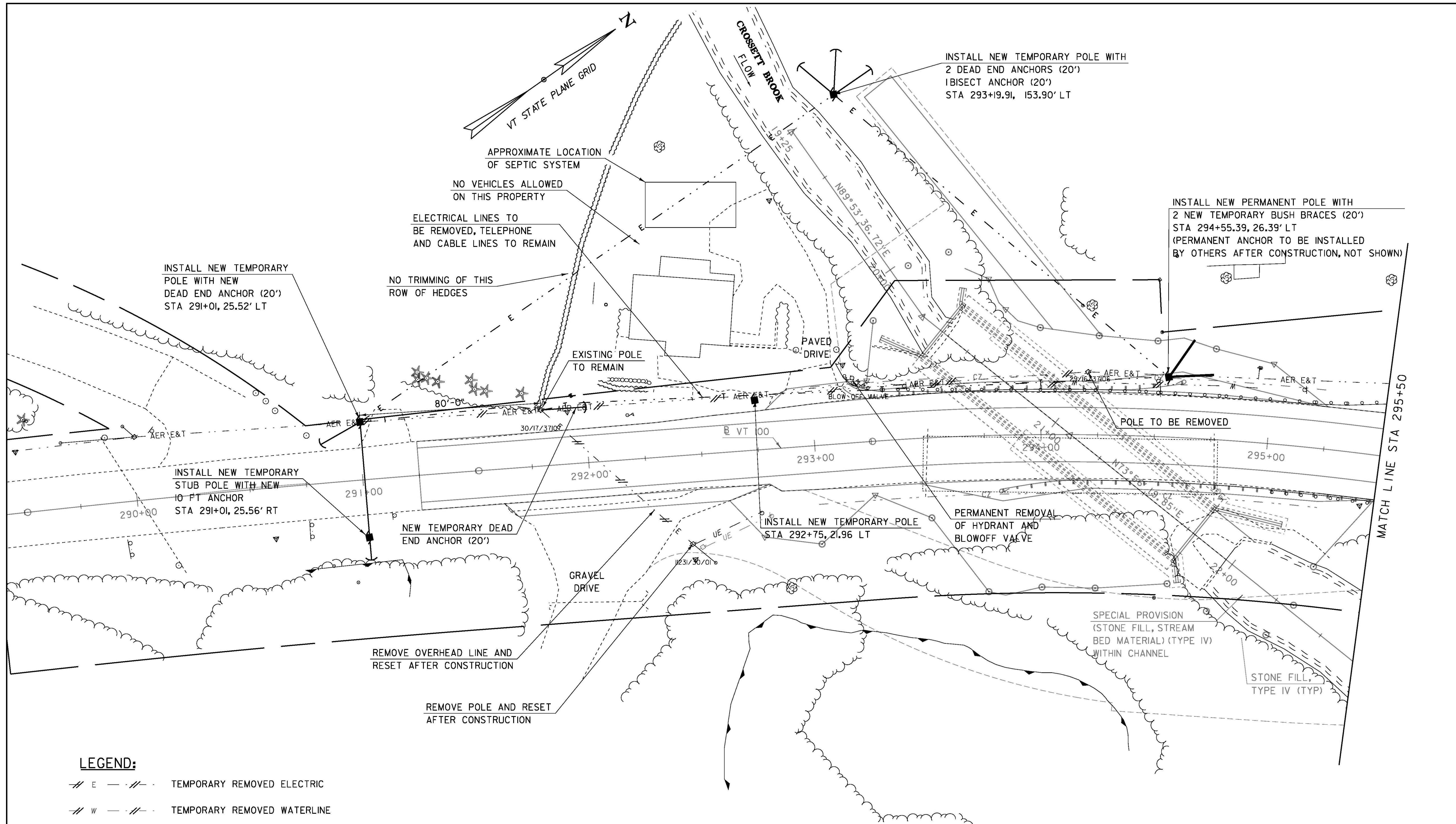


**TEMPORARY ROADWAY SECTION
WIDENING SECTION**
SCALE 3/8" = 1'-0"

TEMPORARY ROADWAY NOTES:

1. THE CONTRACTOR SHALL INSTALL THE TEMPORARY ROADWAY AND ALL SUPPORTING ELEMENTS AS SHOWN ON THE PLANS. PAYMENT FOR CONSTRUCTION, MAINTENANCE, AND REMOVAL OF THE TEMPORARY ROADWAY, INCLUDING BUT NOT LIMITED TO, EXCAVATION, EARTH BORROW, SUBBASE, PAVEMENT, GUARDRAIL, GEOTEXTILE, AND SIGNING AND FOR FURNISHING ALL LABOR, TOOLS, AND INCIDENTALS NECESSARY TO COMPLETE THE WORK WILL BE MADE UNDER ITEM 528.II, "TWO-WAY TEMPORARY BRIDGE."
2. PAYMENT FOR FURNISHING, INSTALLING, AND REMOVING THE TEMPORARY CONCRETE BLOCK WALL WILL BE INCLUDED IN ITEM 528.II, "TWO-WAY TEMPORARY BRIDGE."
3. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, FURNISH, AND INSTALL A TEMPORARY STRUCTURE WITHIN PAY LIMITS NOTED ON THE PLANS AND WITHIN THE GEOMETRIC LIMITATIONS NOTED ON THE PRELIMINARY INFORMATION SHEET. ALL ITEMS WITHIN THE NOTED PAY LIMITS, INCLUDING BUT NOT LIMITED TO, SUBBASE, PAVEMENT, SHORING, SOIL RETENTION STRUCTURES, FOUNDATIONS, AND BRIDGES, WILL BE PAID UNDER ITEM 528.II, "TWO-WAY TEMPORARY BRIDGE."

PROJECT NAME:	DUXBURY
PROJECT NUMBER:	BF 013-4(47)
FILE NAME:	r16b001tempdet.dgn
PROJECT LEADER:	K. HIGGINS
DESIGNED BY:	TYLIN
TEMPORARY ROADWAY DETAILS & NOTES	
PLOT DATE:	05-MAY-2016
DRAWN BY:	TYLIN
CHECKED BY:	TYLIN
SHEET	14 OF 19



LEGEND:

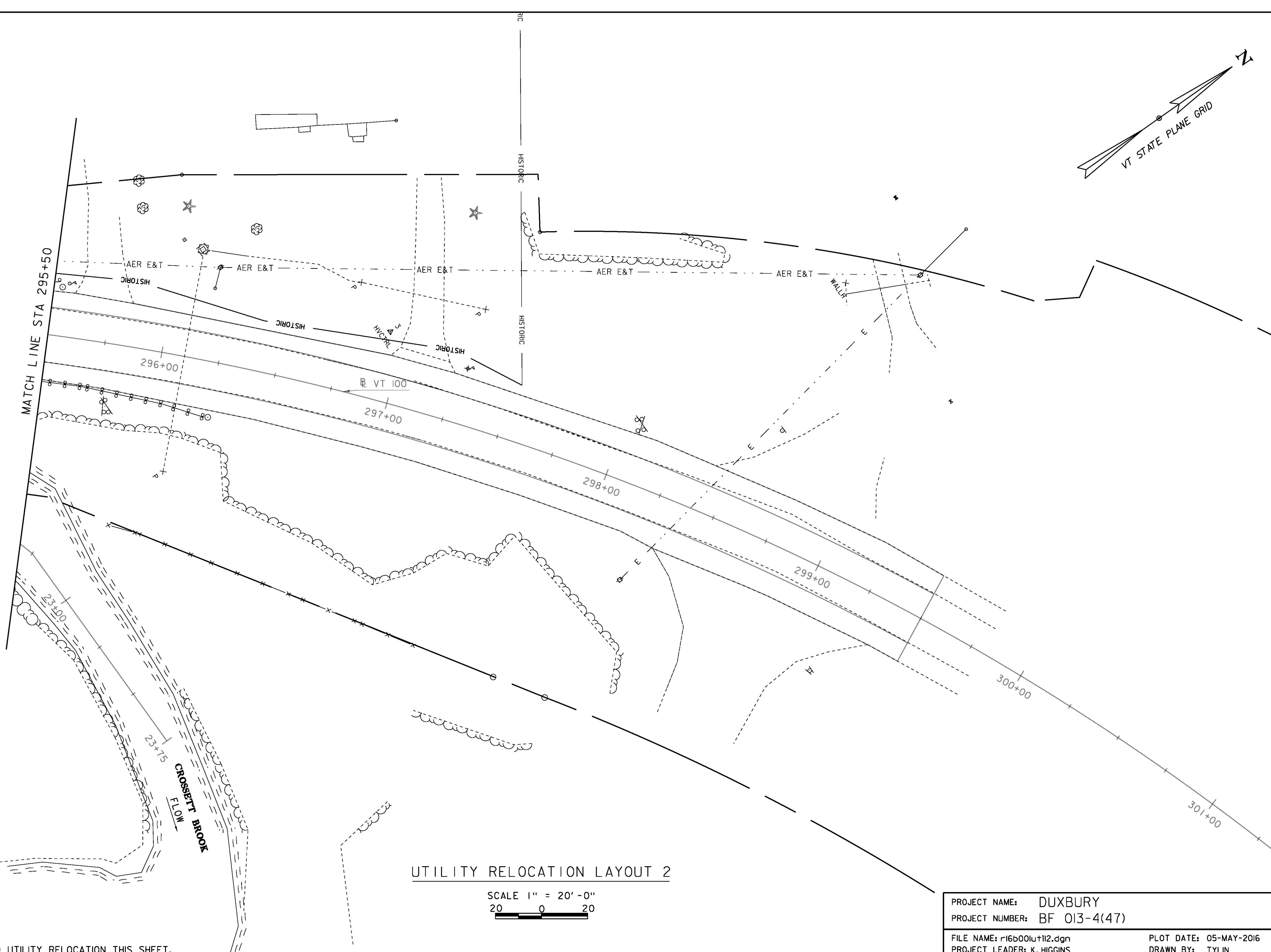
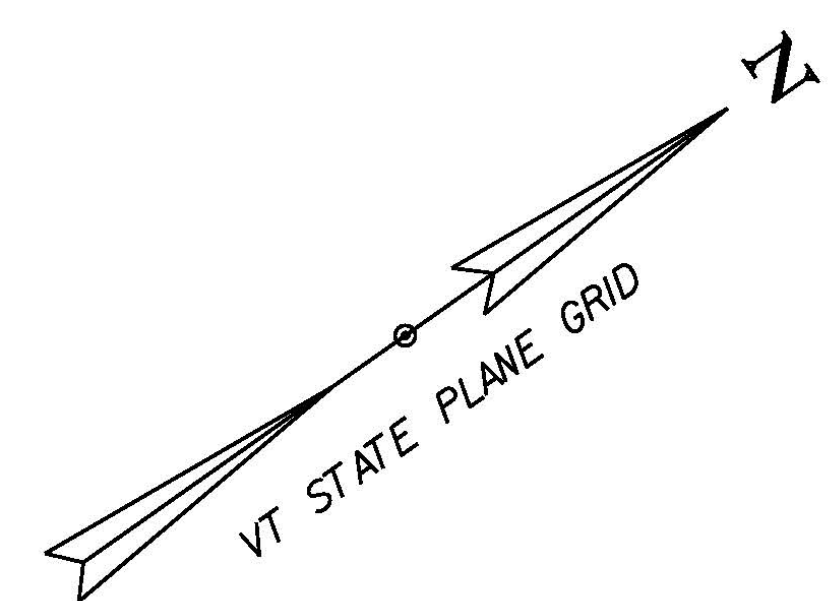
- E --- TEMPORARY REMOVED ELECTRIC
- W --- TEMPORARY REMOVED WATERLINE

NOTE: OVERHEAD UTILITY AND UNDERGROUND WATERLINE RELOCATION EFFORTS SHOWN ON THIS SHEET ARE PERFORMED BY OTHERS AND ARE PROVIDED HEREIN FOR INFORMATION ONLY TO REFLECT CHANGED SITE CONDITIONS. POWER DROP STANCHION, UNDERGROUND ELECTRIC LINE, AND FLASHING LIGHT TO BE REMOVED BY CONTRACTOR. SEE GENERAL NOTES FOR ADDITIONAL DETAILS.

UTILITY RELOCATION LAYOUT I

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

PROJECT NAME: DUXBURY	PLOT DATE: 05-MAY-2016
PROJECT NUMBER: BF 013-4(47)	DRAWN BY: TYLIN
FILE NAME: r16b001u+111.dgn	CHECKED BY: TYLIN
PROJECT LEADER: K. HIGGINS	SHEET 15 OF 19
DESIGNED BY: L. WHEELER	
UTILITY RELOCATION LAYOUT I	

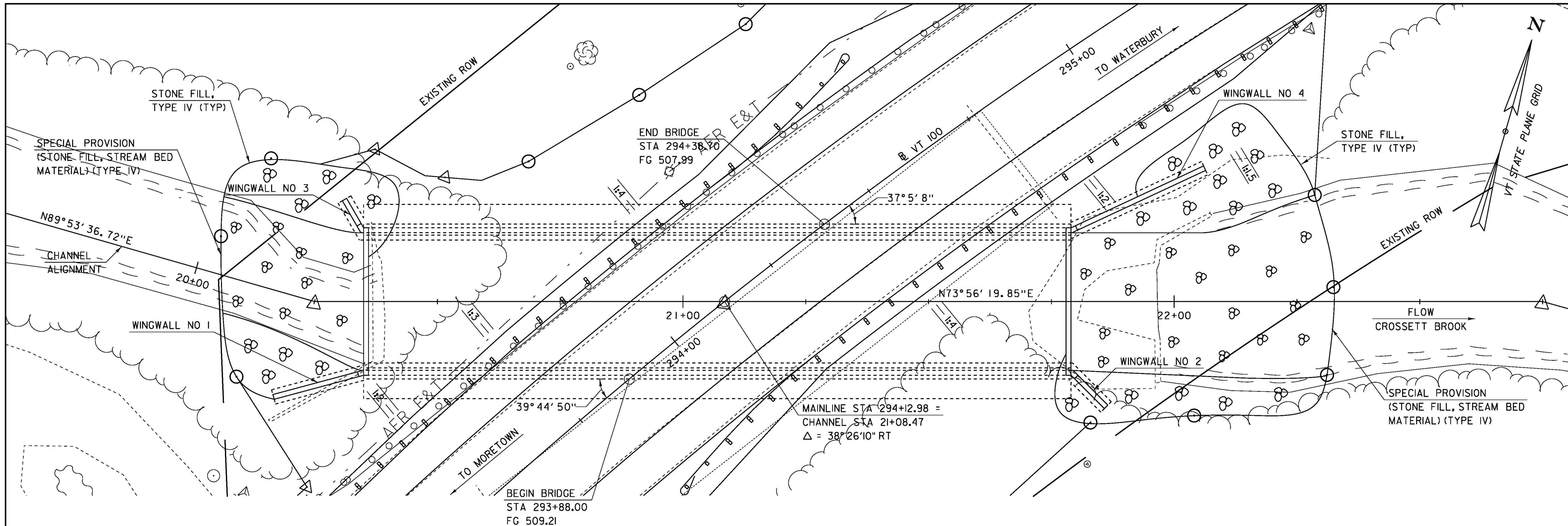


NOTE: NO UTILITY RELOCATION THIS SHEET.

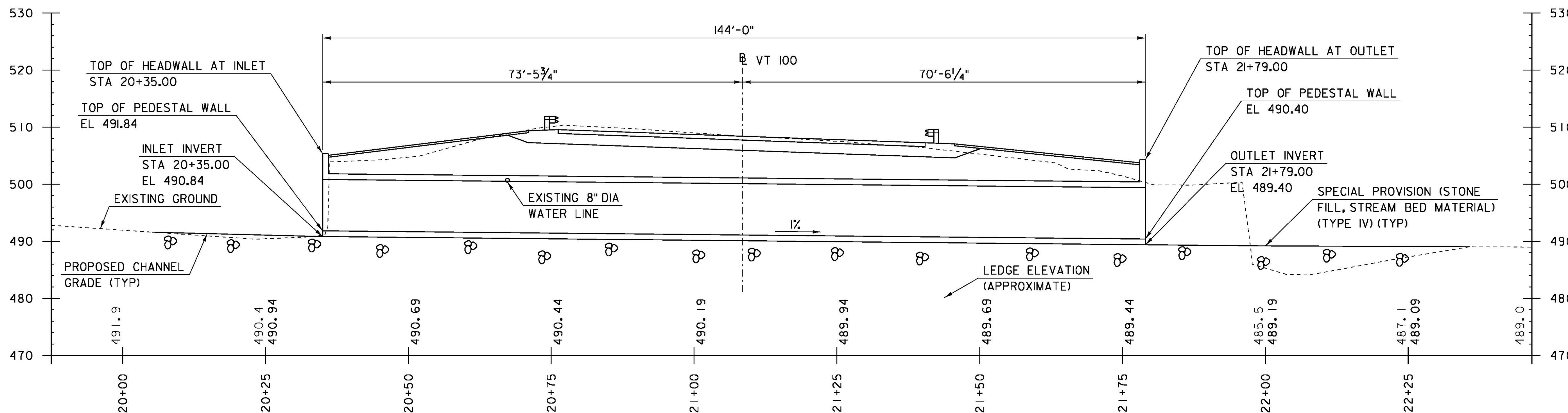
UTILITY RELOCATION LAYOUT 2

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

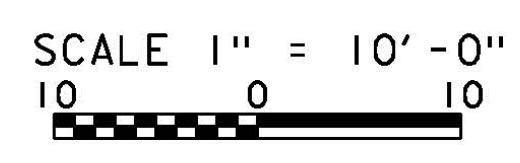
PROJECT NAME: DUXBURY	PLOT DATE: 05-MAY-2016
PROJECT NUMBER: BF 013-4(47)	DRAWN BY: TYLIN
FILE NAME: r16b00lu+112.dgn	CHECKED BY: TYLIN
PROJECT LEADER: K. HIGGINS	SHEET 16 OF 19
DESIGNED BY: L. WHEELER	
UTILITY RELOCATION LAYOUT 2	



PLAN
SCALE: 1" = 10'-0"

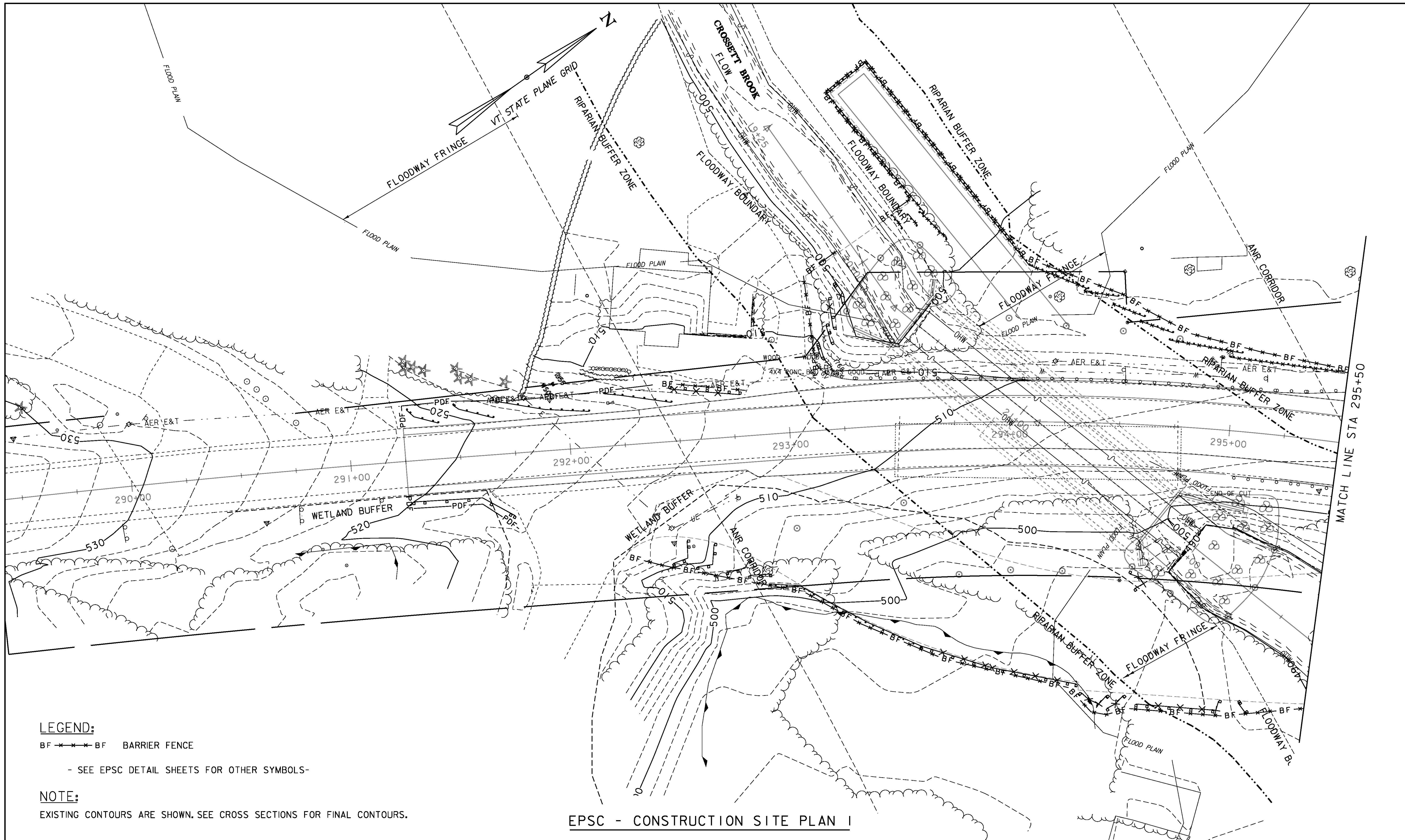


LONGITUDINAL SECTION ALONG CHANNEL LINE
SCALE: 1" = 10'-0"



NOTE:
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℓ .
GRADES SHOWN TO THE NEAREST HUNDRETH ARE FINISH GRADE ALONG ℓ .

PROJECT NAME:	DUXBURY	PLOT DATE:	05-MAY-2016
PROJECT NUMBER:	BF 013-4(47)	DRAWN BY:	TYLIN
FILE NAME:	r16b001pe.dgn	CHECKED BY:	TYLIN
PROJECT LEADER:	K. HIGGINS	SHEET	17 OF 19
DESIGNED BY:	TYLIN		
PLAN & ELEVATION			



LEGEND:

BF - - - BF BARRIER FENCE

- SEE EPSC DETAIL SHEETS FOR OTHER SYMBOLS -

NOTE:

EXISTING CONTOURS ARE SHOWN. SEE CROSS SECTIONS FOR FINAL CONTOURS.

EPSC - CONSTRUCTION SITE PLAN I

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

PROJECT NAME:	DUXBURY	PLOT DATE:	05-MAY-2016
PROJECT NUMBER:	BF 013-4(47)	DRAWN BY:	TYLIN
FILE NAME:	r16b001epscl.dgn	CHECKED BY:	TYLIN
PROJECT LEADER:	K. HIGGINS	SHEET	18 OF 19
DESIGNED BY:	TYLIN		
EPSC CONSTRUCTION SITE PLAN I			

