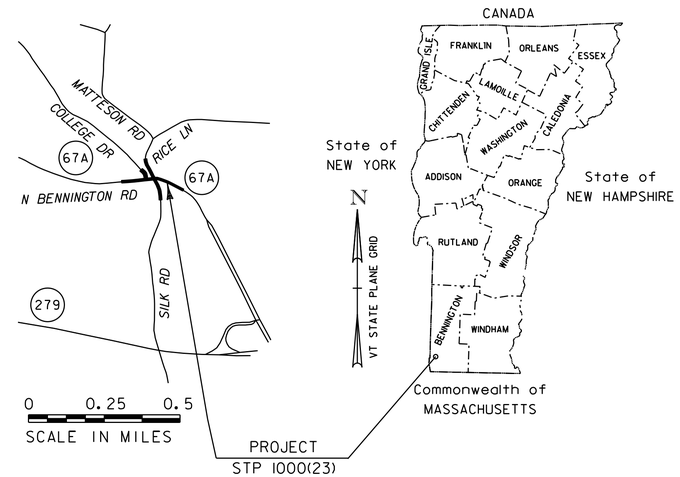
# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

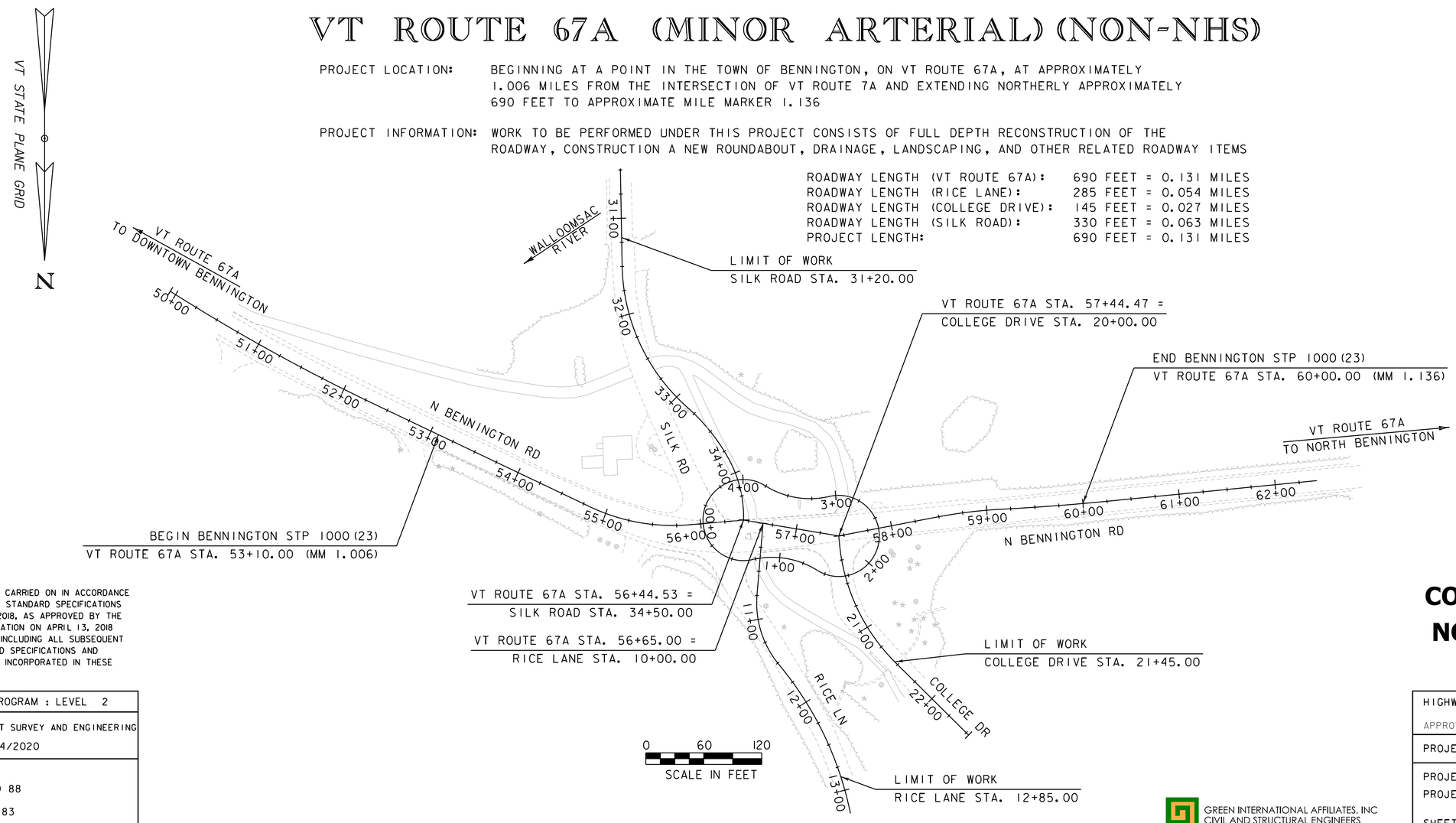



# TOWN OF BENNINGTON
# BENNINGTON COUNTY
# VT ROUTE 67A (MINOR ARTERIAL) (NON-NHS)

PROJECT LOCATION: BEGINNING AT A POINT IN THE TOWN OF BENNINGTON, ON VT ROUTE 67A, AT APPROXIMATELY 1.006 MILES FROM THE INTERSECTION OF VT ROUTE 7A AND EXTENDING NORTHERLY APPROXIMATELY 690 FEET TO APPROXIMATE MILE MARKER 1.136

PROJECT INFORMATION: WORK TO BE PERFORMED UNDER THIS PROJECT CONSISTS OF FULL DEPTH RECONSTRUCTION OF THE ROADWAY, CONSTRUCTION A NEW ROUNDABOUT, DRAINAGE, LANDSCAPING, AND OTHER RELATED ROADWAY ITEMS

| | | |
|---|---|---|
| ROADWAY LENGTH (VT ROUTE 67A): | 690 FEET | = 0.131 MILES |
| ROADWAY LENGTH (RICE LANE): | 285 FEET | = 0.054 MILES |
| ROADWAY LENGTH (COLLEGE DRIVE): | 145 FEET | = 0.027 MILES |
| ROADWAY LENGTH (SILK ROAD): | 330 FEET | = 0.063 MILES |
| PROJECT LENGTH: | 690 FEET | = 0.131 MILES |




CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

**CONCEPTUAL PLANS**
**NOVEMBER 6, 2020**

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : VERMONT SURVEY AND ENGINEERING
SURVEYED DATE : 9/14/2020

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83

HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : MICHAEL LACROIX, P.E.

PROJECT NAME : BENNINGTON
PROJECT NUMBER : STP 1000(23)

SHEET 1 OF 22 SHEETS

GREEN INTERNATIONAL AFFILIATES, INC
CIVIL AND STRUCTURAL ENGINEERS

# INDEX OF SHEETS



# HIGHWAY SAFETY AND DESIGN DETAILS

| | |
|---|---|
| HSD - 400.01 SAFETY EDGE DETAILS | 01/05/2018 |

# STANDARDS LIST

| | | |
|---|---|---|
| A-76 | STANDARDS FOR TOWN & DEVELOPMENT ROADS | 03/03/2003 |
| A-78 | SHARED USE PATH TYPICAL | 04/07/2020 |
| B-5 | SLOPE GRADING, EMBANKMENTS, MUCK | 06/01/1994 |
| B-71a | STANDARD FOR RESIDENTIAL DRIVES | 04/07/2020 |
| C-3A | SIDEWALK RAMPS | 04/07/2020 |
| C-3B | SIDEWALK RAMPS AND MEDIAN ISLANDS | 04/07/2020 |
| C-10 | CURBING | 02/11/2008 |
| D-15 | PRECAST REINF CONC. MH-GRATES, CAST IRON GRATE WITH FRAME, TYPE D & E | 06/01/1994 |
| D-30 | UNDERDRAIN CONSTRUCTION DETAILS | 08/13/2007 |
| E-1 | TREE PLANTING | 07/11/2017 |
| E-2 | SHRUB PLANTING | 07/11/2017 |
| E-3 | PERENNIAL GROUND COVERS AND VINES | 07/11/2017 |
| E-10 | ROLLED EROSION CONTROL PRODUCT, TYPE I | 04/07/2020 |
| E-11 | CHECK DAM, TYPE I | 04/07/2020 |
| E-12 | STABILIZED CONSTRUCTION ENTRANCE | 04/07/2020 |
| E-13 | INLET PROTECTION DEVICE, TIPE I | 04/07/2020 |
| E-14 | INLET PROTECTION DEVICE, TYPE II | 04/07/2020 |
| E-15 | SILT FENCE | 04/07/2020 |
| E-121 | STANDARD SIGN PLACEMENT - CONVENTIONAL ROAD | 08/08/1995 |
| E-127 | ROUTE MARKINGS AT RURAL INTERSECTIONS | 08/08/1995 |
| E-136B | STATE ROUTE MARKER SIGN DETAILS | 08/08/1995 |
| E-146 | REGULATORY SIGN DETAILS | 09/20/1995 |
| E-173 | PULL BOXES AND JUNCTION BOXES | 08/09/1995 |
| E-175 | POWER DROP STANCHIONS | 06/08/2009 |
| E-191 | PAVEMENT MARKING DETAILS | 02/01/1999 |
| E-192 | PAVEMENT MARKING DETAILS | 10/12/2000 |
| E-193 | PAVEMENT MARKING DETAILS | 08/18/1995 |
| J-1 | PROJECT AND BOUNDARY MARKERS | 06/01/1994 |
| T-1 | TRAFFIC CONTROL GENERAL NOTES | 04/25/2016 |
| T-2 | TRAFFIC SIGN GENERAL NOTES | 04/07/2020 |
| T-10 | CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING | 08/06/2012 |
| T-17 | TRAFFIC CONTROL MISCELLANEOUS DETAILS | 08/06/2012 |
| T-35 | CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS | 08/06/2012 |
| T-36 | CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING | 08/06/2012 |
| T-40 | DELINEATORS AND MILEPOSTS | 01/02/2013 |
| T-44 | MILEMAKER DETAILS STATE AND TOWN HIGHWAY | 04/09/2014 |
| T-45 | SQUARE TUBE SIGN POST AND ANCHOR | 01/02/2013 |
| T-56 | STANDARD SIGN PLACEMENT | 10/26/2015 |
| T-70 | VERMONT REGULATORY SIGN DETAILS | 04/25/2016 |
| T-92 | ROUTE MARKER FRAME DETAILS | 10/26/2015 |
| T-133 | LIGHT POLE FOUNDATION DETAILS | 07/25/2016 |
| T-134 | LIGHT POLE & TRANSFORMER BASE DETAILS | 03/10/2017 |

TRAFFIC DATA

| SECTION | AADT | | DHV | | %T | | %D | | ADTT | | ESALS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2019 | 2040 | 2019 | 2040 | 2019 | 2040 | 2019 | 2040 | 2019 | 2040 | (2019-2040) | (2019-2060) |
| VT ROUTE 67A | 7050 | 8900 | 880* | 1100* | 5* | 5* | 51* | 51* | 350* | 450* | TBD | TBD |
| RICE LANE | 1940 | 2450 | 195* | 245* | 3* | 3* | 50* | 50* | 60* | 75* | TBD | TBD |
| SILK ROAD | 1300 | 1650 | 130* | 165* | 2* | 2* | 50* | 50* | 25* | 35* | TBD | TBD |
| COLLEGE DRIVE | 1200 | 1500 | 120* | 150* | 2* | 2* | 50* | 50* | 25* | 30* | TBD | TBD |
| DESIGN SPEED: 40 MPH<br>POSTED SPEED: 40 MPH | | | | | | | | | | | | |

*TO BE COORDINATED WITH VTRANS

| SUPERPAVE BITUMINOUS CONCRETE PAVEMENT MIXTURE DESIGN CRITERIA | |
|---|---|
| DESIGN LIFE ESAL (DESIGN LANE) | TBD |
| DESIGN NUMBER OF GYRATIONS | TBD |
| PERFORMANCE GRADED ASPHALT BINDER | SEE SUBSECTION 490.03(b) |

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165frm.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
INDEX OF SHEETS

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 2 OF 22

## GENERAL INFORMATION

### SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY 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. SYMBOLOGY 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 |
| | R.T.& I. | RIGHT, TITLE, AND INTEREST |
| | SR | SLOPE RIGHT |
| | UE | UTILITY EASEMENT |
| | (P) | PERMANENT EASEMENT |
| | (T) | TEMPORARY EASEMENT |
| ■ | BNDNS | BOUND SET |
| ⧈ | BNDNS | BOUND TO BE SET |
| ◎ | IPNF | IRON PIN FOUND |
| ● | 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 VALVE |
| | 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 |
| CB | CHORD BEARING |

## UTILITY SYMBOLOGY

### 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+TELEPHONE
- 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+TELEPHONE
- UTILITY POLE GUY WIRE

## PROJECT CONSTRUCTION SYMBOLOGY

### PROJECT DESIGN & LAYOUT SYMBOLOGY

- 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 — PROJECT DEMARCATION FENCE
- BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

## CONVENTIONAL BOUNDARY SYMBOLOGY

### BOUNDARY LINES

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

## EPSC LAYOUT PLAN SYMBOLOGY

### EPSC MEASURES

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

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

### ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AG — AGRICULTURAL LAND
- HABITAT — FISH & WILDLIFE HABITAT
- FLOOD PLAIN — FLOOD PLAIN
- OHW — ORDINARY HIGH WATER (OHW)
- STORM WATER
- 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 SYMBOLOGY

### EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- 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

GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165legend.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CONVENTIONAL SYMBOLOGY LEGEND SHEET

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 3 OF 22

# TYPICAL SECTIONS

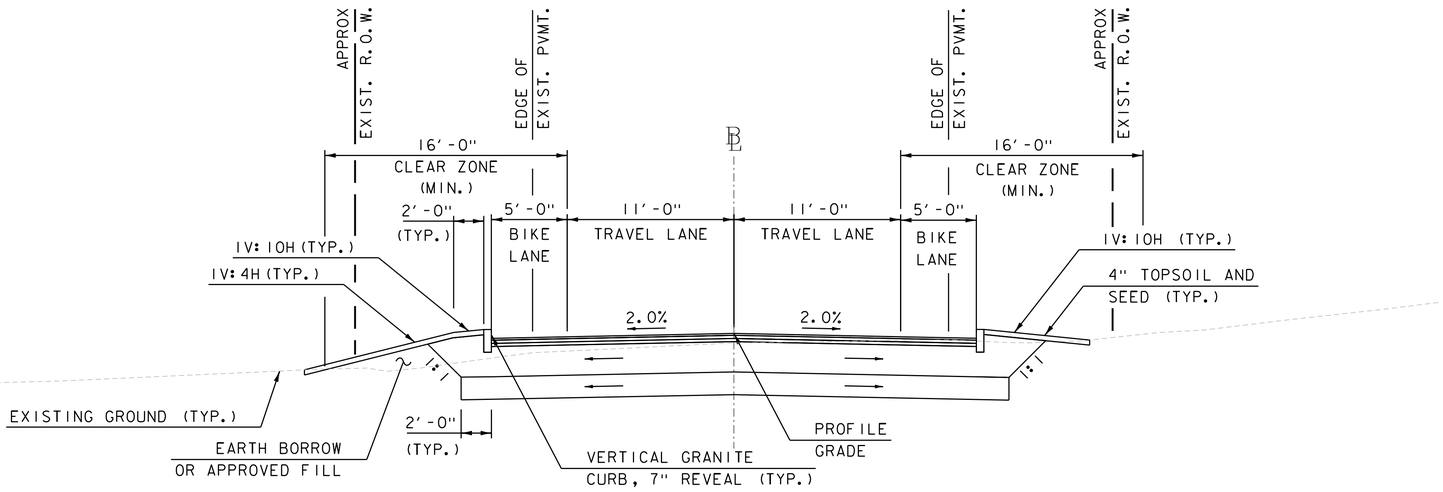
| MATERIAL ITEM: | THICKNESS TOLERANCE |
|---|---|
| PAVEMENT (TOTAL DEPTH ALL LAYERS) | +/- 1/4" |
| SUBBASE (TOTAL DEPTH ALL LAYERS) | +/- 1" |
| SAND BORROW (TOTAL DEPTH ALL LAYERS) | +/- 1" |

**VT ROUTE 67A & RICE LANE:**
1-1/2" TYPE IVS - WEARING COURSE
2-1/2" TYPE IIS - INTERMEDIATE COURSE
2-1/2" TYPE IIS - BASE COURSE
24" SUBBASE OF DENSE GRADED CRUSHED STONE
18" SAND BORROW

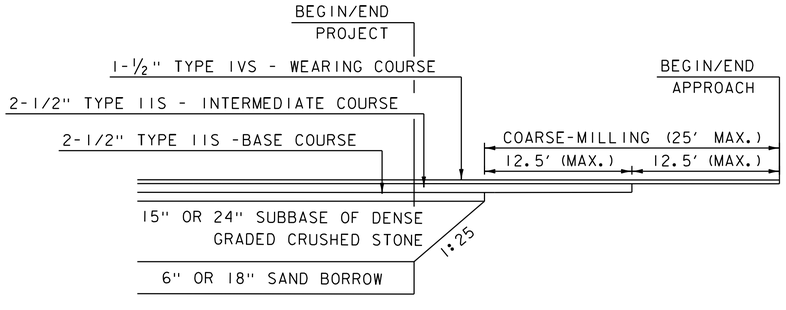
**SILK ROAD & COLLEGE DRIVE:**
1-1/2" TYPE IIIS - WEARING COURSE
2-1/2" TYPE IIS - INTERMEDIATE COURSE
2-1/2" TYPE IIS - BASE COURSE
15" SUBBASE OF DENSE GRADED CRUSHED STONE
6" SAND BORROW

**SIDEWALK & SHARED USE PATH:**
2" TYPE IVS BITUMINOUS CONCRETE PAVEMENT
8" SUBBASE OF DENSE GRADED CRUSHED STONE

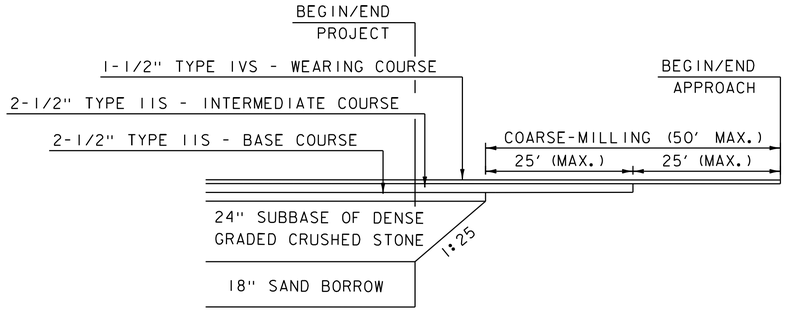
**SIDEWALK & SHARED USE PATH RAMPS:**
5" PORTLAND CEMENT CONCRETE
5" SUBBASE OF DENSE GRADED CRUSHED STONE




VT ROUTE 67A TYPICAL SECTION
STA. 53+10.00 - 60+00.00
NOT TO SCALE




SIDE ROAD FULL DEPTH RECONSTRUCTION
MATERIAL TRANSITION DETAIL
NOT TO SCALE

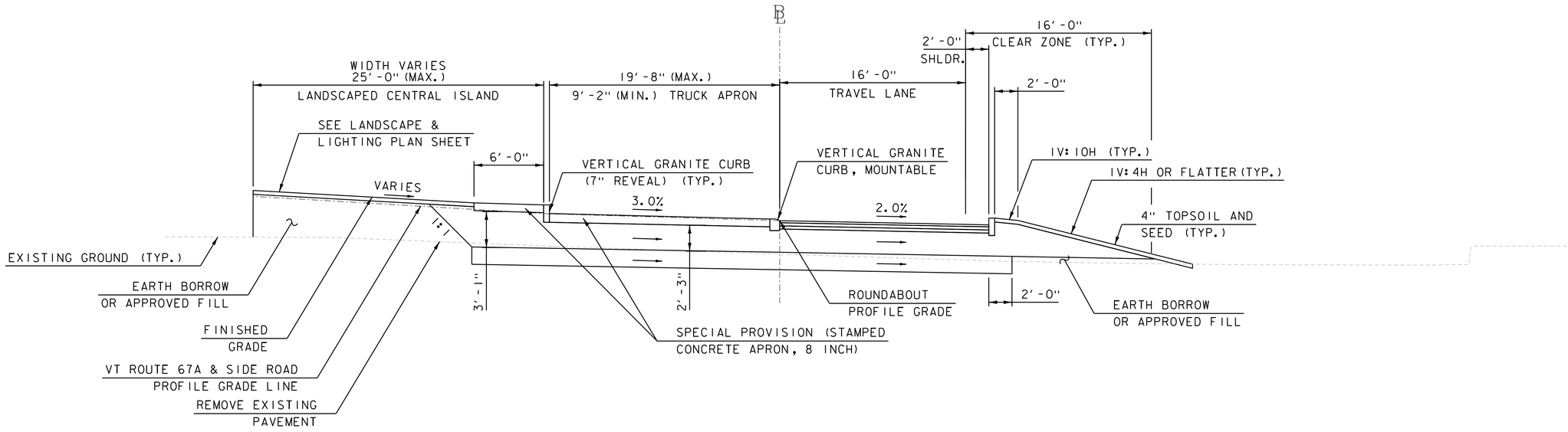



VT ROUTE 67A FULL DEPTH RECONSTRUCTION
MATERIAL TRANSITION DETAIL
NOT TO SCALE

GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

| | |
|---|---|
| PROJECT NAME: | BENNINGTON |
| PROJECT NUMBER: | STP 1000(23) |
| FILE NAME: z18d165typ.dgn | PLOT DATE: 11/6/2020 |
| PROJECT LEADER: E. ATKINS | DRAWN BY: M. PEREZ |
| DESIGNED BY: S. SACCO | CHECKED BY: D. VERTIYEV |
| TYPICAL SECTIONS SHEET 1 | SHEET 4 OF 22 |

# TYPICAL SECTIONS



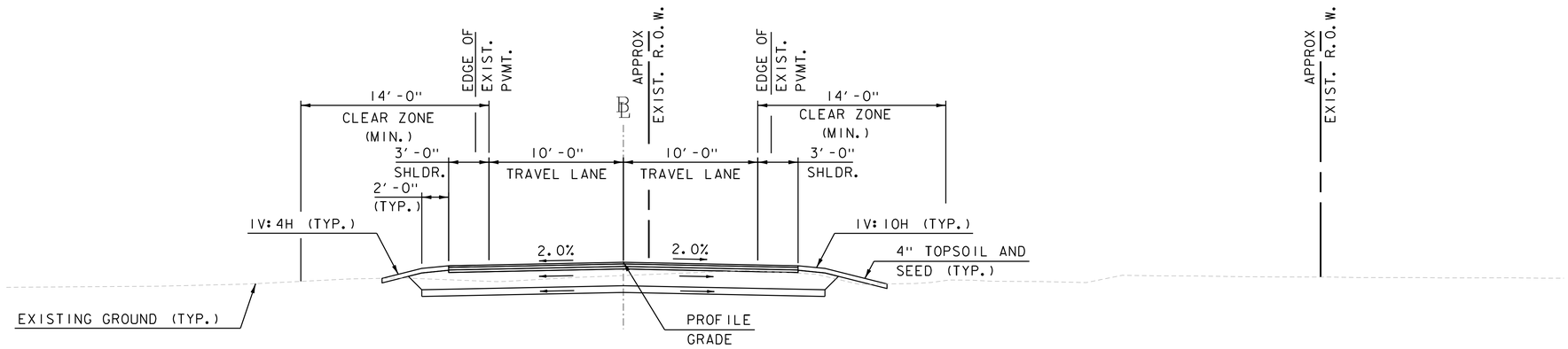

## VT ROUTE 67A ROUNDABOUT
## TYPICAL SECTION

NOT TO SCALE

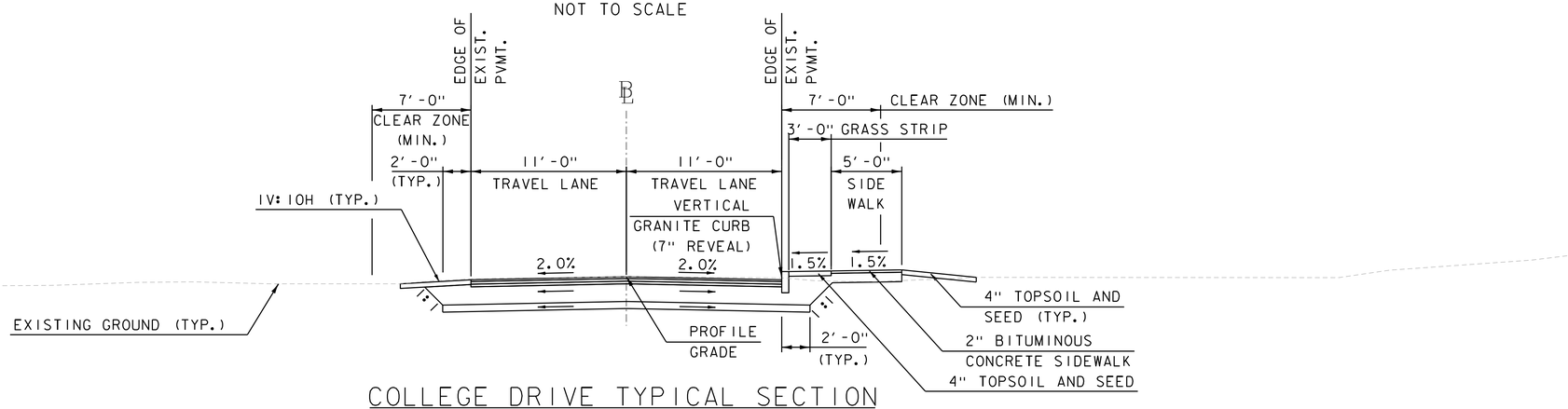
| | |
|---|---|
| PROJECT NAME: | BENNINGTON |
| PROJECT NUMBER: | STP 1000(23) |
| FILE NAME: z18d165typ.dgn | PLOT DATE: 11/6/2020 |
| PROJECT LEADER: E. ATKINS | DRAWN BY: M. PEREZ |
| DESIGNED BY: S. SACCO | CHECKED BY: D. VERTIYEV |
| TYPICAL SECTIONS SHEET 2 | SHEET 5 OF 22 |

GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

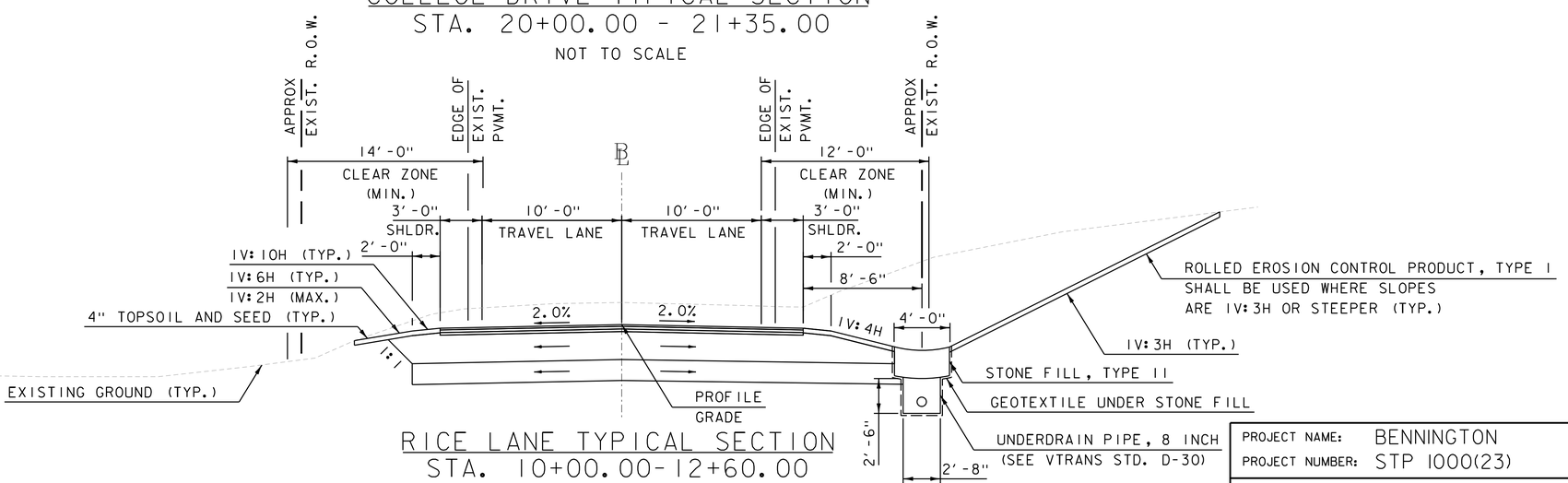
# TYPICAL SECTIONS




## SILK ROAD TYPICAL SECTION
STA. 31+45.00-34+50.00
NOT TO SCALE




## COLLEGE DRIVE TYPICAL SECTION
STA. 20+00.00 - 21+35.00
NOT TO SCALE




## RICE LANE TYPICAL SECTION
STA. 10+00.00-12+60.00
NOT TO SCALE

GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

| | |
|---|---|
| PROJECT NAME: | BENNINGTON |
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| FILE NAME: z18d165typ.dgn | PLOT DATE: 11/6/2020 |
| PROJECT LEADER: E. ATKINS | DRAWN BY: M. PEREZ |
| DESIGNED BY: S. SACCO | CHECKED BY: D. VERTIYEV |
| TYPICAL SECTIONS SHEET 3 | SHEET 6 OF 22 |

END COARSE-MILLING
LIMIT OF WORK
STA. 31+20.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 31+45.00

PC
STA 31+49.73

N10°04'19"W

VT ROUTE 67A CURVE (1)
DELTA = 6°56'39"
D = 2°51'53"
R = 2000.00'
T = 121.35'
L = 242.40'
E = 3.68'

PT
STA 52+35.88

PI
STA 32+37.75

PRC
STA 33+15.56

SILK ROAD CURVE (1)
DELTA = 47°30'24"
D = 28°38'52"
R = 200.00'
T = 88.02'
L = 165.83'
E = 18.51'

PT
STA 55+88.77

PCC
STA 33+82.85

SILK ROAD CURVE (2)
DELTA = 50°03'18"
D = 28°38'52" (1)
R = 200.00' (1)
T = 79.60' (1)
L = 67.29' (1)
E = 15.26'

D = 45°50'12" (2)
R = 125.00' (2)
T = 63.85' (2)
L = 67.15' (2)

PI
STA 33+95.16

PI
STA 58+80.87

PRC
STA 59+15.13

VT ROUTE 67A CURVE (6)
DELTA = 2°35'18"
D = 2°17'31"
R = 2500.00'
T = 56.48'
L = 112.93'
E = 0.64'

BEGIN APPROACH
END BENNINGTON STP 1000(23)
STA. 60+00.00 (MM 1.136)

END APPROACH
STA. 61+00.00
(MM 1.155)

PI
STA 57+44.48

PC
STA 20+08.28

PC
STA 58+46.50

PI
STA 59+71.60

PT
STA 60+28.06

PI
STA 21+47.38

VT ROUTE 67A CURVE (5)
DELTA = 7°51'52"
D = 11°27'33"
R = 500.00'
T = 34.37'
L = 68.63'
E = 1.18'

PI
STA 20+80.77

PRC
STA 11+52.08

PI
STA 12+41.64

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 21+35.00

END COARSE-MILLING
LIMIT OF WORK
STA. 21+45.00

COLLEGE DRIVE CURVE (1)
DELTA = 39°50'52"
D = 28°38'52"
R = 200.00'
T = 72.49'
L = 139.09'
E = 12.73'

N45°14'56"W
22+53

S84°22'12"W 61+00

S79°05'38"W

N80°30'19"W

S84°57'26"W

N4°50'33"E

PC
STA 54+82.33

END APPROACH
BEGIN BENNINGTON STP 1000(23)
STA. 53+10.00 (MM 1.006)

BEGIN APPROACH
STA. 52+10.00 (MM 0.987)

PI
STA 55+36.84

VT ROUTE 67A CURVE (2)
DELTA = 30°29'28"
D = 28°38'52"
R = 200.00'
T = 54.51'
L = 106.43'
E = 7.30'

PI
STA 56+44.54

PI
STA 11+15.23

PC
STA 10+74.18

RICE LANE CURVE (1)
DELTA = 44°37'58"
D = 57°17'45"
R = 100.00'
T = 41.05'
L = 77.90'
E = 8.10'

RICE LANE CURVE (2)
DELTA = 28°42'20"
D = 16°22'13"
R = 350.00'
T = 89.56'
L = 175.35'
E = 11.28'

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 12+60.00

END COARSE-MILLING
LIMIT OF WORK
STA. 12+85.00

N/F BENNINGTON COLLEGE CORP.
N/F COHEN, ADAM R.
N/F CARVER, STEVE A.
APPROX. EXISTING R.O.W.
EXIST. WATERLINE EASE.
AER E&T

VT STATE PLANE GRID
N

0 30 60
SCALE IN FEET

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165algbdr.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
ALIGNMENT SHEET

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 7 OF 22

CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS
10+60.0 - 12+60.0
20+75.0 - 21+35.0
31+50.0 - 33+75.0
51+60.0 - 60+50.0

COARSE-MILLING, BITUMINOUS PAVEMENT
12+60.0 - 12+85.0
21+35.0 - 21+45.0
31+20.0 - 31+45.0
52+10.0 - 52+60.0
60+50.0 - 61+00.0

END COARSE-MILLING
LIMIT OF WORK
STA. 31+20.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 31+45.00

RELOCATE UTILITY
POLE - BY OTHERS

RELOCATE UTILITY
POLE - BY OTHERS

HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES
31+35.0 LT 52+85.0 RT
32+95.0 RT 55+35.0 RT

CHANGING ELEVATION OF SEWER MANHOLES
32+36.6 LT

UNDERDRAIN PIPE, 8 INCHES
10+67.0 RT - 12+50.0 RT

STONE FILL, TYPE II
10+67.0 RT - 12+50.0 RT

VERTICAL GRANITE CURB
0+00.0 - 4+69.1 LT
11+25.0 LT - 21+20.0 RT
20+59.9 - 21+10.6 LT & RT
21+20.0 LT - 59+20.0 RT
33+40.6 - 33+89.4 LT & RT
33+70.0 LT - 59+20.0 LT
53+00.0 LT - 33+20.0 RT
53+00.0 RT - 55+20.0 RT
55+55.0 RT - 11+25.0 RT
54+75.0 - 55+84.3 LT & RT
58+03.8 - 59+15.1 LT & RT

VERTICAL GRANITE CURB, MOUNTABLE
0+00.0 - 4+69.1
10+55.6 - 11+07.1 LT & RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH
20+88.4 - 20+98.4 LT & RT
32+57.4 - 32+68.8 LT & RT

PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH (CONT.)
58+25.9 - 58+39.9 LT & RT

BITUMINOUS CONCRETE SIDEWALK
20+94.0 RT - 21+45.0 RT
20+99.6 LT - 59+25.6 RT
32+62.3 RT - 32+62.3 RT
32+62.1 LT - 58+32.50 LT

DETECTABLE WARNING SURFACE

| | |
|---|---|
| 58+32.8 RT | 20+99.8 LT |
| 58+32.8 RT | 20+93.0 LT |
| 58+31.0 LT | 20+92.9 RT |
| 58+32.6 LT | 20+94.7 RT |
| 20+90.0 RT | 21+45.0 RT |
| 59+26.4 LT | 32+62.0 LT |

REMOVAL OF EXISTING FENCE
57+03.0 LT - 57+69.0 LT
57+69.0 LT - 59+07.0 LT

ADJUST ELEVATION OF VALVE BOX
33+77.4 RT 33+99.4 RT
33+98.1 RT 34+04.5 RT

DUCTILE IRON WATER PIPE, CEMENT-LINED
32+70.0 LT - 32+75.0 LT (6")
58+70.0 LT - 59+05.0 LT (8")

GATE VALVE WITH VALVE BOX (6")
32+70.0 LT

RELOCATE HYDRANT
34+11.9 RT TO 32+75.0 LT

SPECIAL PROVISION (INFILTRATION TRENCH)
32+70.0 LT - 58+25.0 LT
32+70.0 LT - 59+26.0 LT
58+75.0 LT - 59+05.0 LT

PROPOSED INFILTRATION TRENCH

RELOCATE EXISTING WATER LINE

BEGIN APPROACH
END BENNINGTON STP 1000(23)
STA. 60+00.00 (MM 1.136)

END APPROACH
STA. 61+00.00
(MM 1.155)

BEGIN APPROACH
STA. 52+10.00 (MM 0.987)

END APPROACH
BEGIN BENNINGTON STP 1000(23)
STA. 53+10.00 (MM 1.006)

GRASS SWALE

STONE FILL, TYPE II SWALE

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 21+35.00
END COARSE-MILLING
LIMIT OF WORK
STA. 21+45.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 12+60.00
END COARSE-MILLING
LIMIT OF WORK
STA. 12+85.00

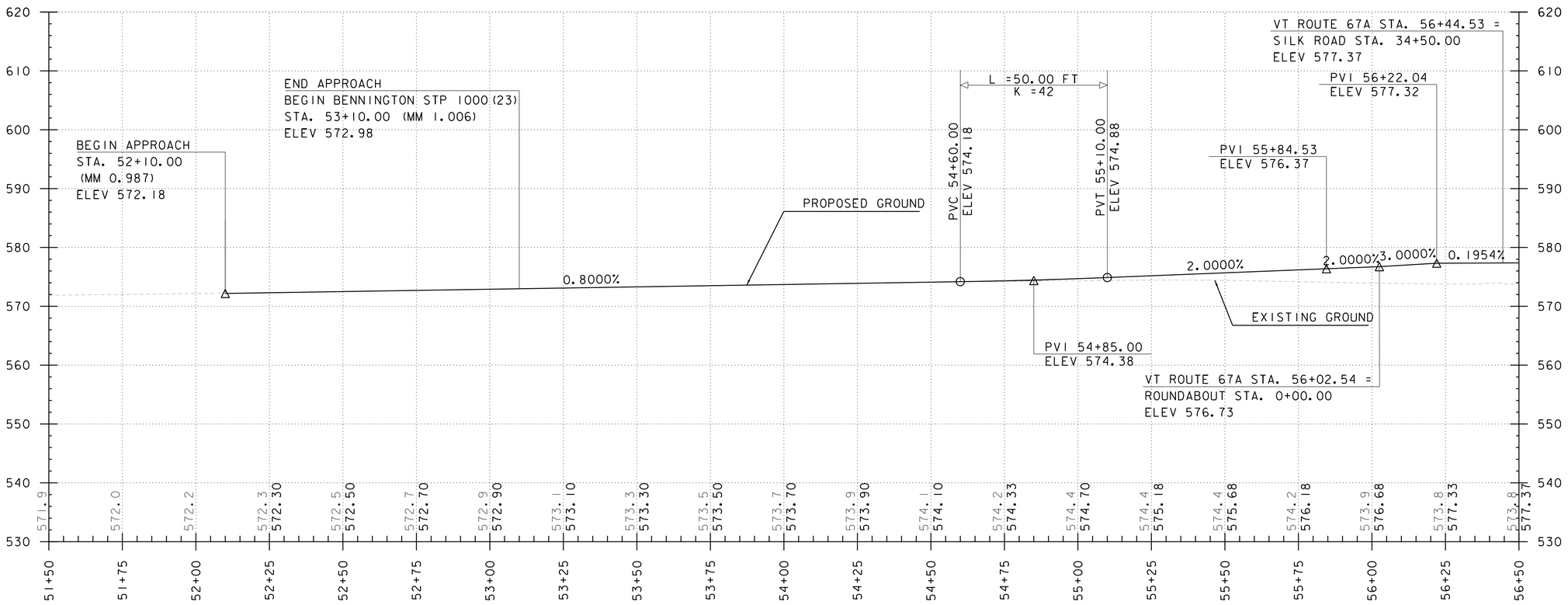
VT STATE PLANE GRID
N

0 30 60
SCALE IN FEET

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

| | |
|---|---|
| PROJECT NAME: | BENNINGTON |
| PROJECT NUMBER: | STP 1000(23) |
| FILE NAME: | z18d165bdr.dgn |
| PROJECT LEADER: | E. ATKINS |
| DESIGNED BY: | S. SACCO |
| LAYOUT PLAN SHEET | |
| PLOT DATE: | 11/6/2020 |
| DRAWN BY: | M. PEREZ |
| CHECKED BY: | D. VERTIYEV |
| SHEET | 8 OF 22 |

# VT ROUTE 67A




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

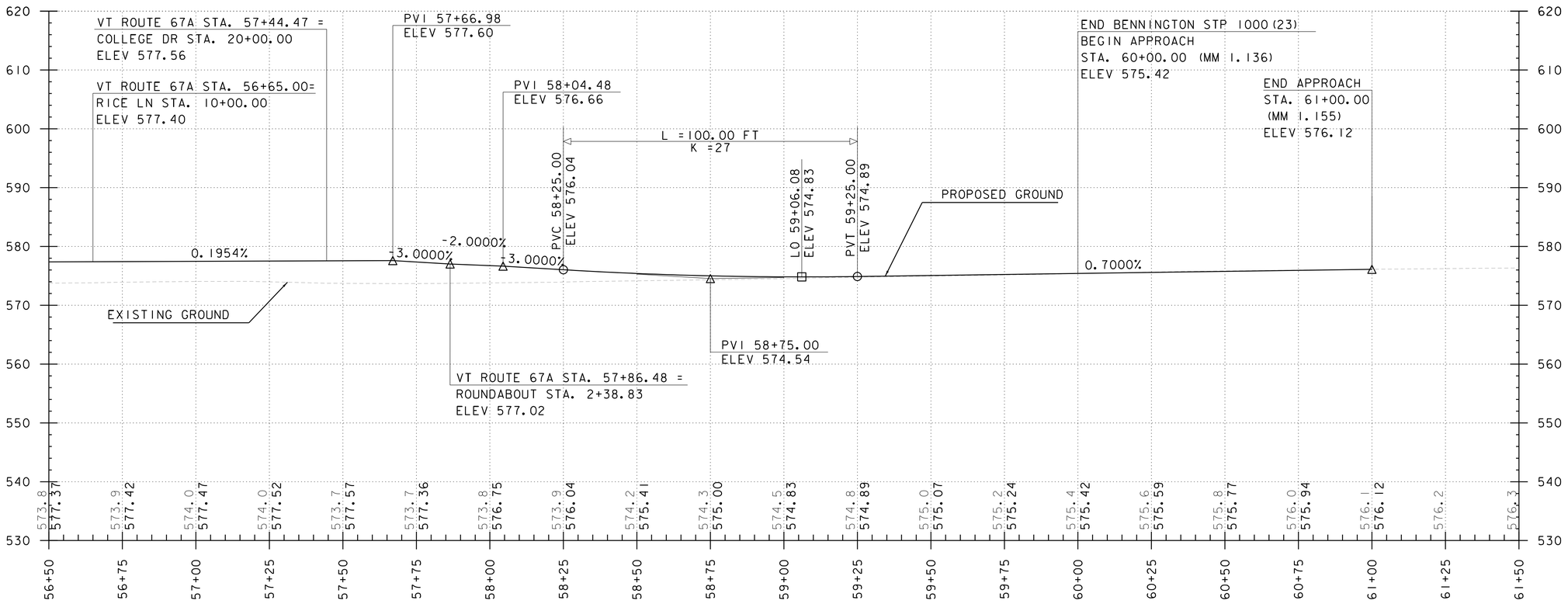
GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 1

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 9 OF 22

# VT ROUTE 67A




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

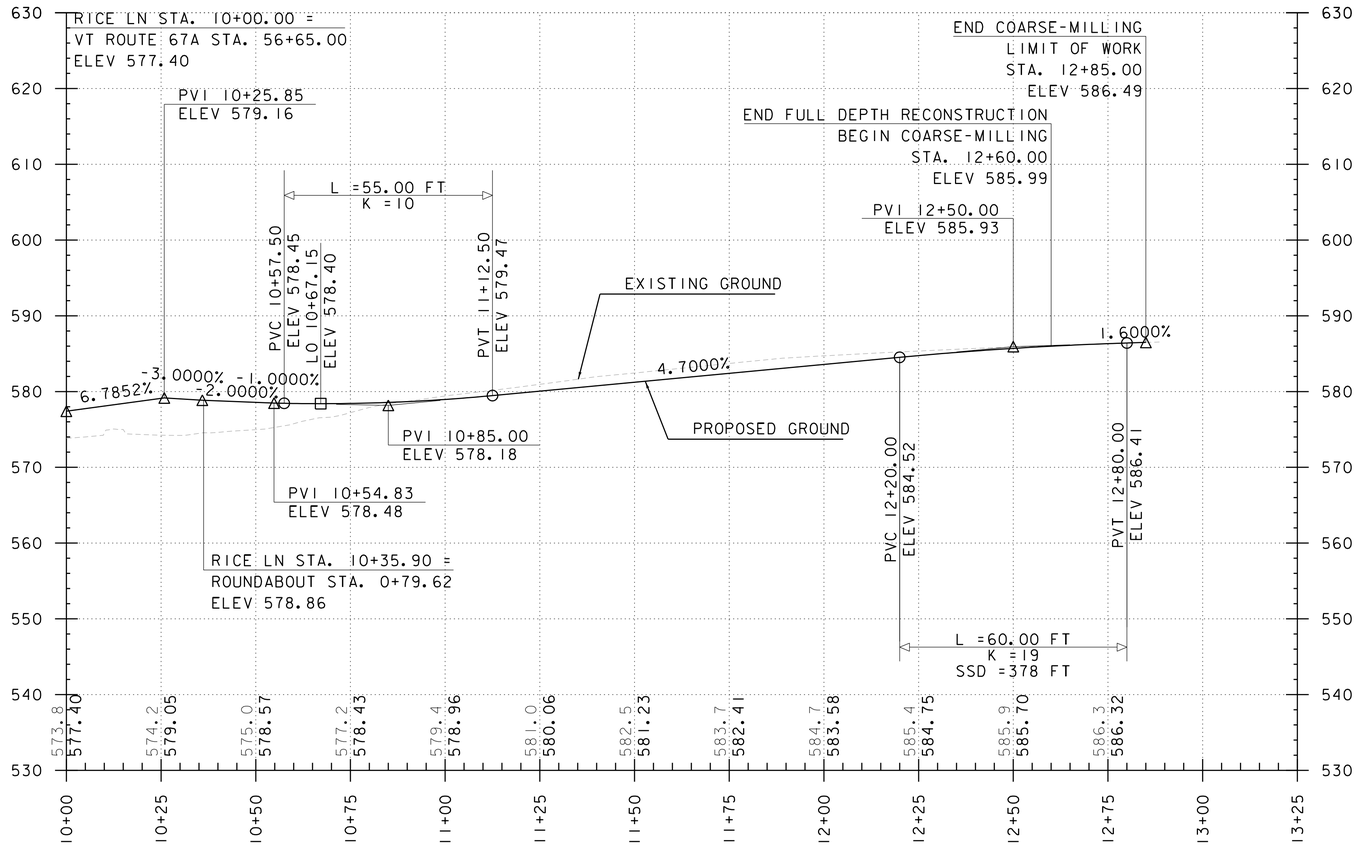
GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 2

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 10 OF 22

# RICE LN




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

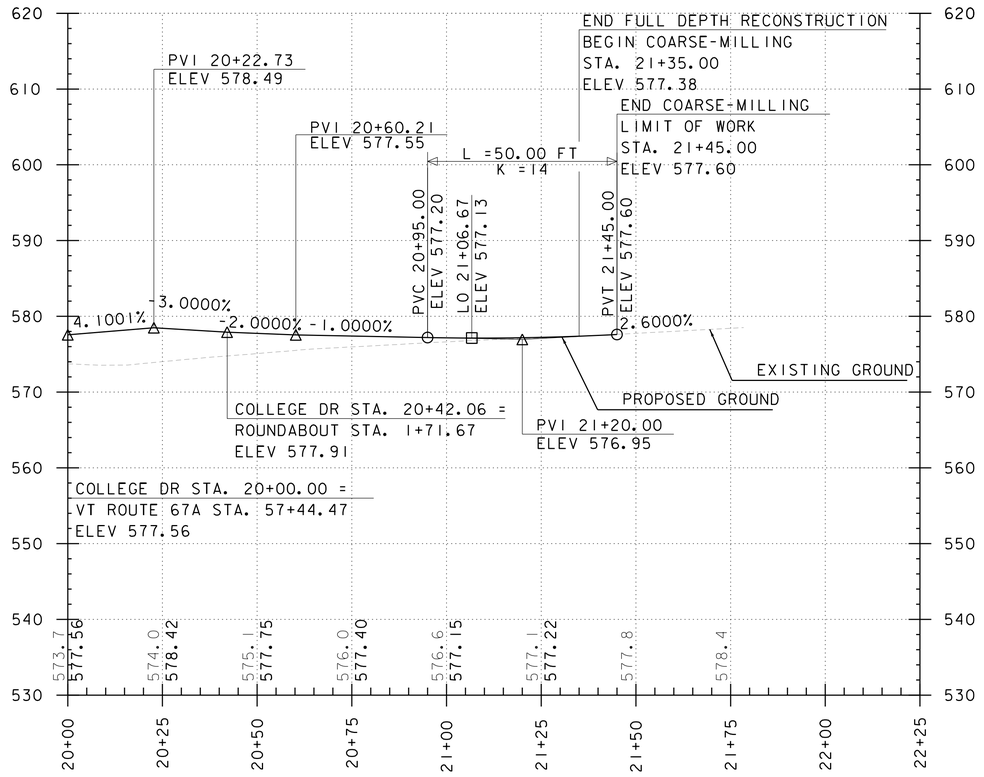
GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 3

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 11 OF 22

# COLLEGE DR




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

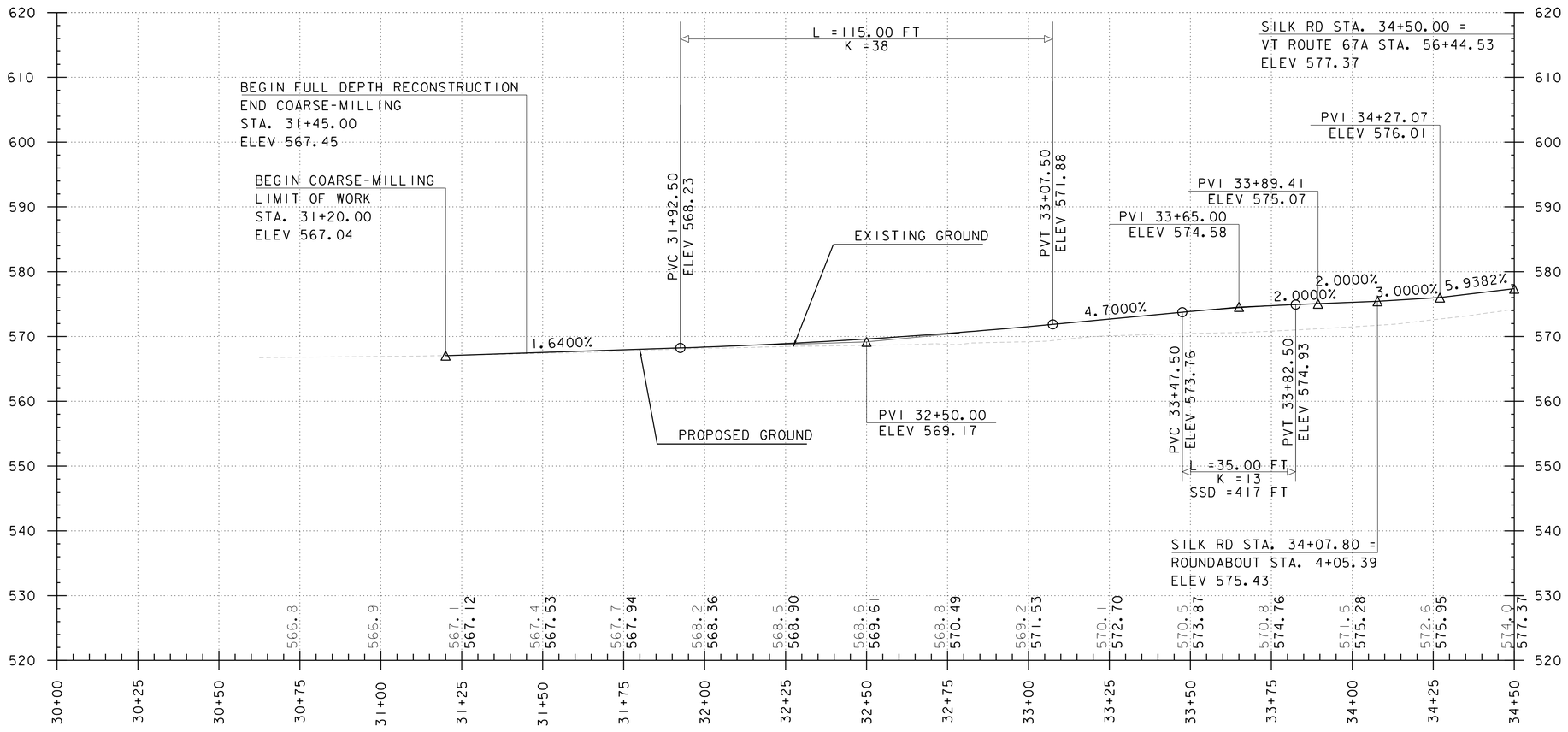
GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 4

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 12 OF 22

# SILK RD




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

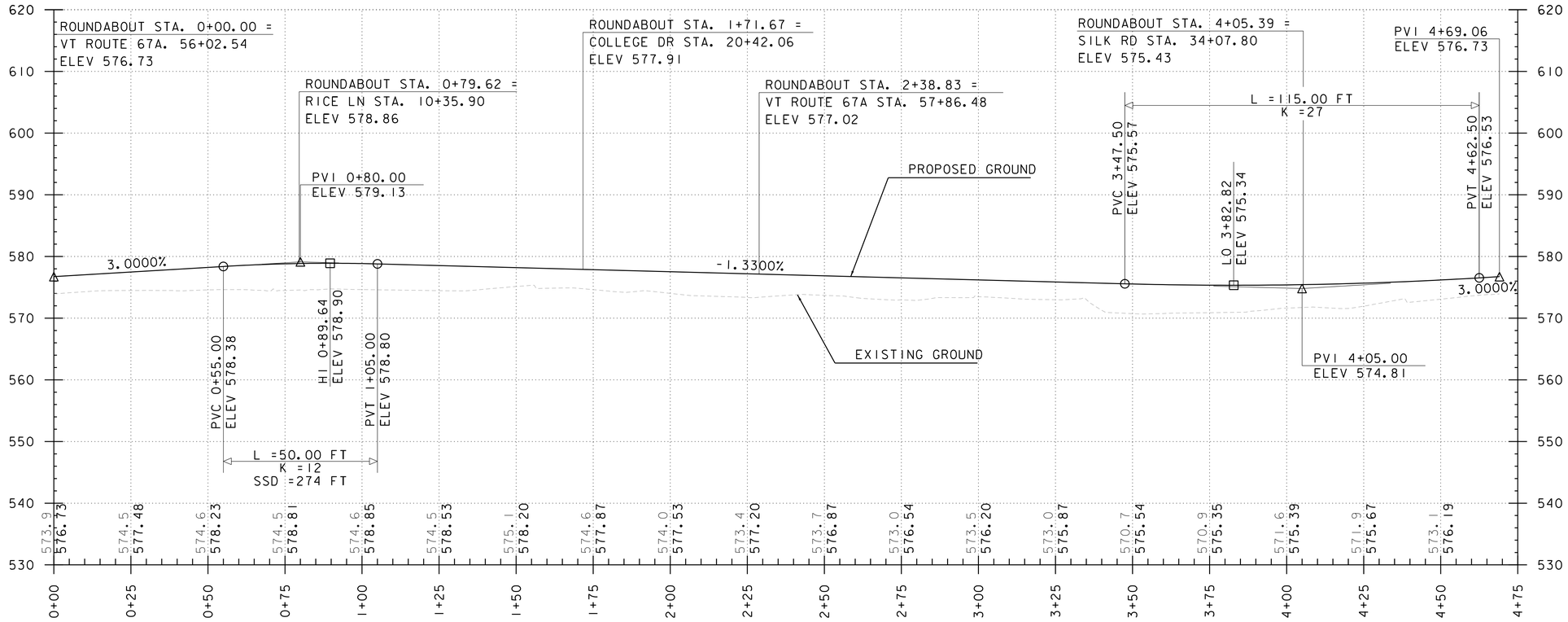
GREEN INTERNATIONAL AFFILIATES, INC.
*CIVIL AND STRUCTURAL ENGINEERS*

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 5

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 13 OF 22

# ROUNDABOUT




THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND APPROXIMATE ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED PROFILE GRADES FOR THE NEW ALIGNMENT.

NOTE: ALL STATIONS AND ELEVATIONS ARE SHOWN IN FEET.

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
PROFILE SHEET 6

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 14 OF 22

END COARSE-MILLING
LIMIT OF WORK
STA. 31+20.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 31+45.00

VT STATE PLANE GRID

N

BEGIN APPROACH
END BENNINGTON STP 1000(23)
STA. 60+00.00 (MM 1.136)

END APPROACH
STA. 61+00.00
(MM 1.155)

END APPROACH
BEGIN BENNINGTON STP 1000(23)
STA. 53+10.00 (MM 1.006)

BEGIN APPROACH
STA. 52+10.00 (MM 0.987)

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 21+35.00

END COARSE-MILLING
LIMIT OF WORK
STA. 21+45.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 12+60.00

END COARSE-MILLING
LIMIT OF WORK
STA. 12+85.00

LEGEND

- DECIDUOUS TREE
- PERENNIALS AND ORNAMENTAL GRASS
- LOW-GROWING DECIDUOUS SHRUBS
- EVERGREEN GROUND COVER
- LIGHT POLE

0 30 60
SCALE IN FEET

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

| | |
|---|---|
| PROJECT NAME: BENNINGTON | |
| PROJECT NUMBER: STP 1000(23) | |
| FILE NAME: z18d165landbdr.dgn | PLOT DATE: 11/6/2020 |
| PROJECT LEADER: E. ATKINS | DRAWN BY: M. PEREZ |
| DESIGNED BY: S. SACCO | CHECKED BY: D. VERTIYEV |
| LANDSCAPE & LIGHTING PLAN SHEET | SHEET 15 OF 22 |

TEMPORARY 4 INCH WHITE LINE, PAINT
DURABLE 4 INCH WHITE LINE, (SEE OPTION ITEMS)
STA. 10+50 - 12+85 (SOLID LT & RT)
STA. 20+50 - 21+60 (SOLID LT & RT)
STA. 31+20 - 34+00 (SOLID LT & RT)
STA. 52+00 - 56+00 (SOLID LT & RT)
STA. 56+18 - 56+46 (SOLID LT)
STA. 56+37 - 57+00 (SOLID RT)
STA. 56+53 - 58+00 (SOLID LT)
STA. 57+44 - 57+62 (SOLID RT)
STA. 58+00 - 61+00 (SOLID LT & RT)
STA. 55+87 (SOLID LT & RT)
STA. 58+02 (SOLID LT & RT)

REMOVING SIGNS
AS SHOWN - 39

END COARSE-MILLING
LIMIT OF WORK
STA. 31+20.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 31+45.00

R&R RECTANGULAR RAPID
FLASH BEACON (RRFB)
FROM STA 56+58

R&R RECTANGULAR RAPID
FLASH BEACON (RRFB)
FROM STA 56+61

TEMPORARY 4 INCH YELLOW LINE, PAINT
DURABLE 4 INCH YELLOW LINE,
(SEE OPTION ITEMS)
(ALL LINES WILL INCLUDE EDGE LINE BREAKS)
STA. 10+50 - 11+25 (SOLID LT & RT)
STA. 20+56 - 21+60 (SOLID LT & RT)
STA. 31+20 - 33+86 (SOLID LT & RT)
STA. 52+10 - 55+90 (SOLID LT & RT)
STA. 58+00 - 61+00 (SOLID LT & RT)

TEMPORARY 8 INCH WHITE LINE, PAINT
DURABLE 8 INCH WHITE LINE,
(SEE OPTION ITEMS)
(ALL LINES WILL INCLUDE EDGE LINE BREAKS)
STA. 54+85 - 55+61 (SOLID LT)
STA. 57+96 - 58+27 (SOLID LT)

R&R RECTANGULAR RAPID
FLASH BEACON (RRFB)
TO STA 32+68

TEMPORARY 8 INCH YELLOW LINE, PAINT
DURABLE 8 INCH YELLOW LINE,
(SEE OPTION ITEMS)
STA. N 33+27 - 33+41 (GORE)
STA. N 54+09 - 54+79 (GORE)
STA. N 59+16 - 59+90 (GORE)

TEMPORARY 12 INCH WHITE LINE, PAINT
DURABLE 12 INCH WHITE LINE,
(SEE OPTION ITEMS)
STA. 55+99 - 56+18 (DASHED RT)
STA. 55+90 - 56+04 (DASHED LT)
STA. 57+00 - 57+29 (DASHED RT)
STA. 57+88 - 58+01 (DASHED RT)
STA. 57+62 - 57+88 (DASHED LT)

RECTANGULAR RAPID
FLASHING BEACON (RRFB)

TEMPORARY LETTER OR SYMBOL, PAINT
DURABLE LETTER OR SYMBOL,
(SEE OPTION ITEMS)
STA. 55+80 RT "YIELD" (5 EA)
STA. 55+87 RT YIELD LINE (3 EA)
STA. 56+09 LT "YIELD" (5 EA)
STA. 56+09 LT YIELD LINE (3 EA)
STA. 56+97 RT "YIELD" (5 EA)
STA. 57+06 RT YIELD LINE (5 EA)
STA. 57+67 RT "YIELD" (5 EA)
STA. 57+67 RT YIELD LINE (4 EA)
STA. 58+16 LT "YIELD" (5 EA)
STA. 58+00 LT YIELD LINE (3 EA)

TEMPORARY CROSSWALK MARKING, PAINT
DURABLE CROSSWALK MARKING,
(SEE OPTION ITEMS)
STA. 20+95 RT
STA. 20+96 LT
STA. 32+62 LT & RT
STA. 58+29 RT
STA. 58+31 LT

BEGIN APPROACH
END BENNINGTON STP 1000(23)
STA. 60+00.00 (MM 1.136)

END APPROACH
STA. 61+00.00
(MM 1.155)

BEGIN APPROACH
STA. 52+10.00 (MM 0.987)

END APPROACH
BEGIN BENNINGTON STP 1000(23)
STA. 53+10.00 (MM 1.006)

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 12+60.00
END COARSE-MILLING
LIMIT OF WORK
STA. 12+85.00

END FULL DEPTH RECONSTRUCTION
BEGIN COARSE-MILLING
STA. 21+35.00
END COARSE-MILLING
LIMIT OF WORK
STA. 21+45.00

INSTALL W2-6 WITH W3-2 and W13-1P SIGN ASSEMBLY
APPROX 200 FEET FROM THE YIELD POINT
AT THE APPROACH TO THE ROUNDABOUT

RELOCATE PRIVATE SIGN
(FINAL LOCATION TBD)

RECTANGULAR RAPID
FLASHING BEACON (RRFB)

R = REMOVE
R&R = REMOVE AND RESET
RET = RETAIN
N = NEW
B-B = BACK TO BACK
– – – = EXISTING
——— = NEW

VT STATE PLANE GRID
N

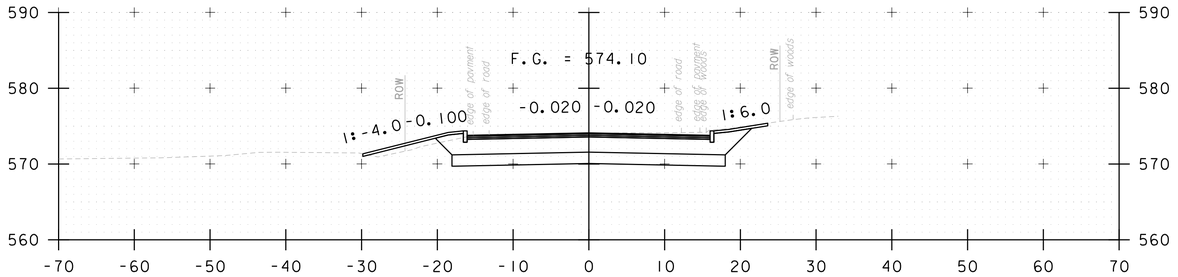
0 30 60
SCALE IN FEET

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

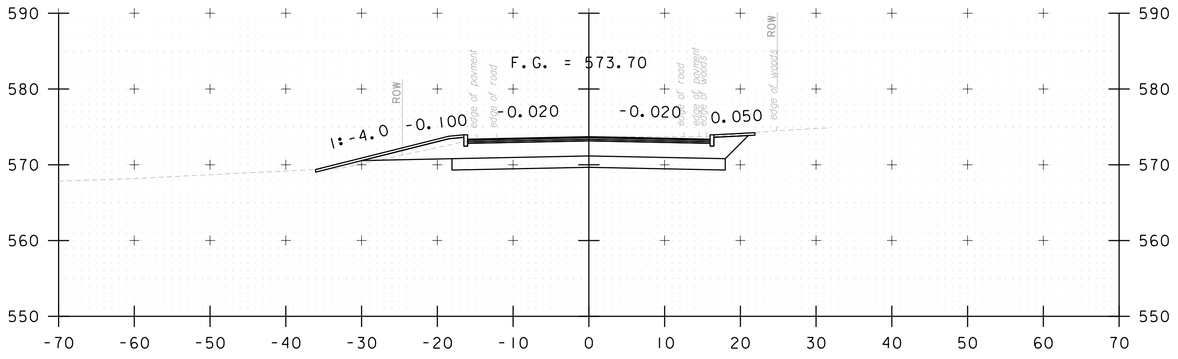
PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: zl8dl65trfbdr.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: J. GAUVIN
PAVEMENT MARKINGS & SIGNS PLAN SHEET

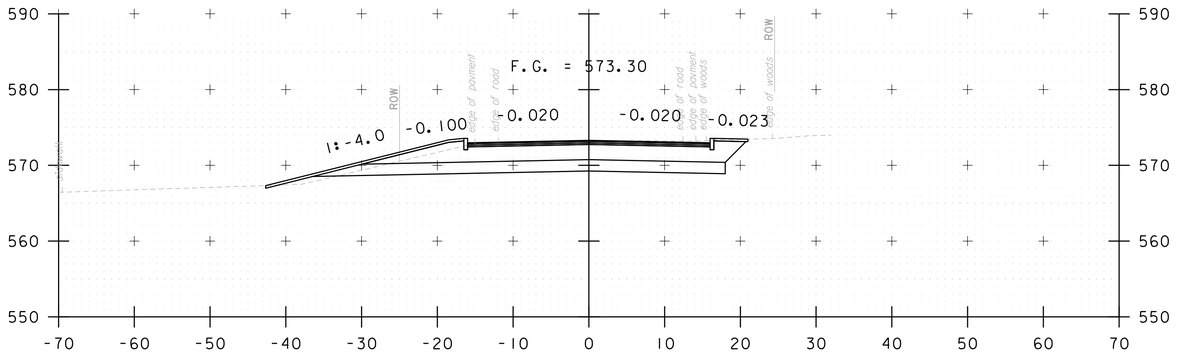
PLOT DATE: 11/6/2020
DRAWN BY: D. PERLOFF
CHECKED BY: D. VERTIYEV
SHEET 16 OF 22



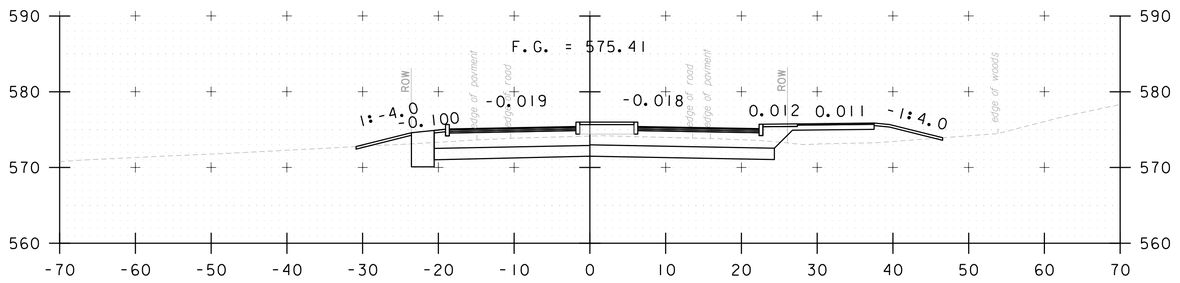

54+50



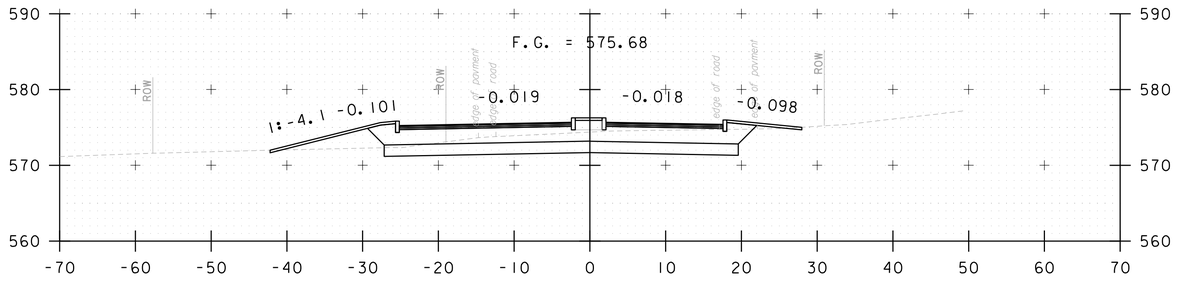

54+00



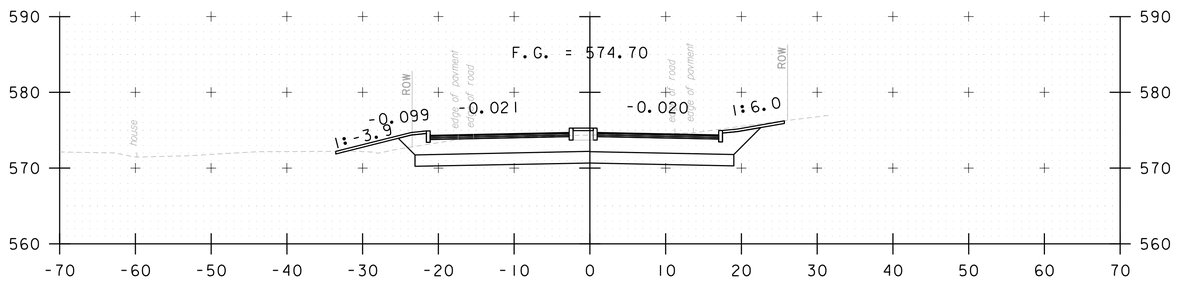

53+50




58+50




55+50




55+00

STA. 53+50 TO STA. 58+50

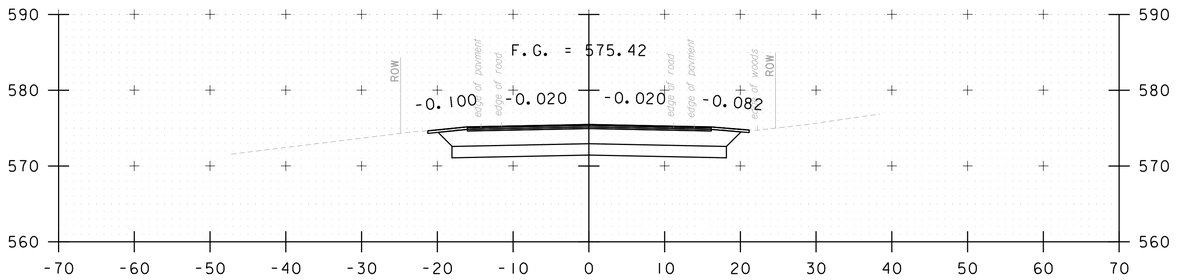
NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

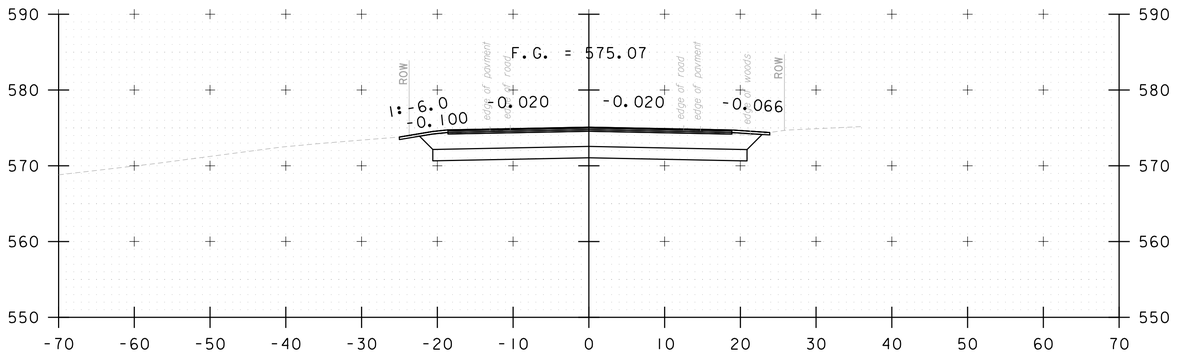
PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CRITICAL CROSS SECTION SHEET 1

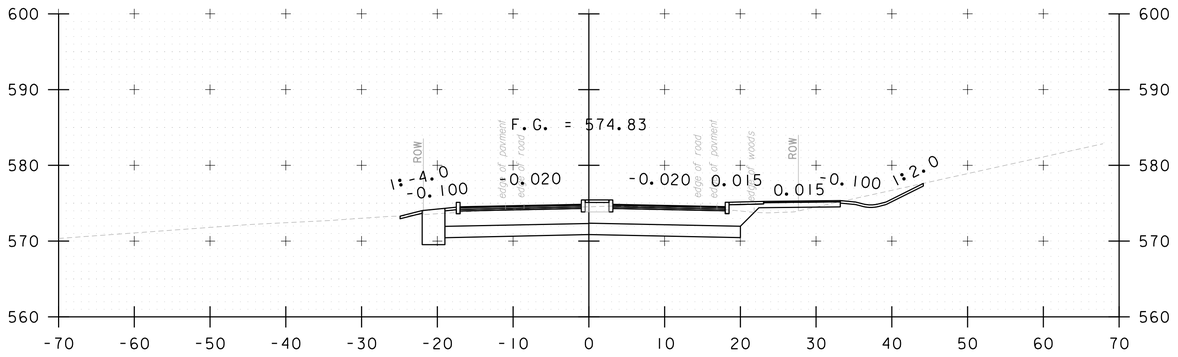
PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 17 OF 22




60+00




59+50




59+00

NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

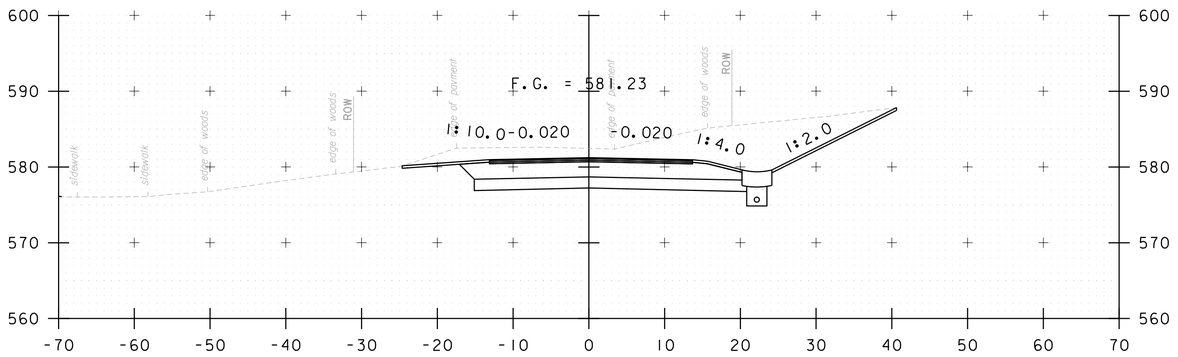
STA. 59+00 TO STA. 60+00

PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

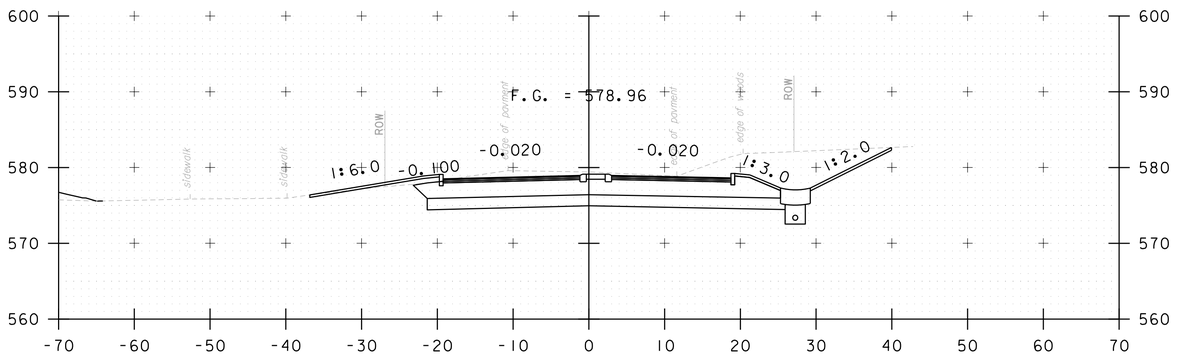
FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CRITICAL CROSS SECTION SHEET 2

PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 18 OF 22

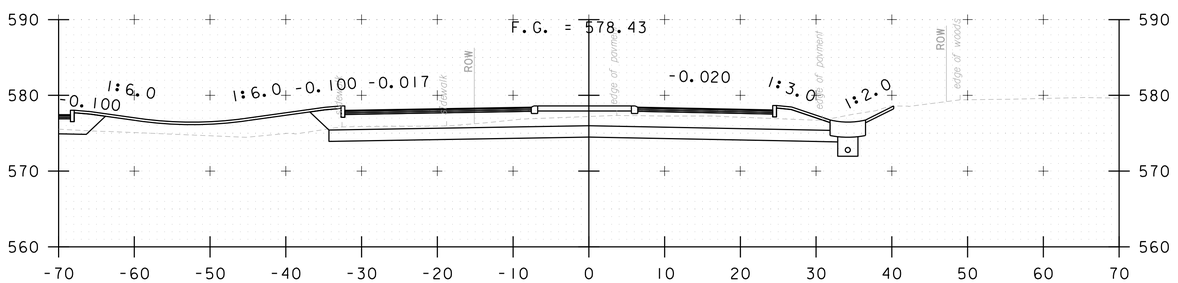
GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS



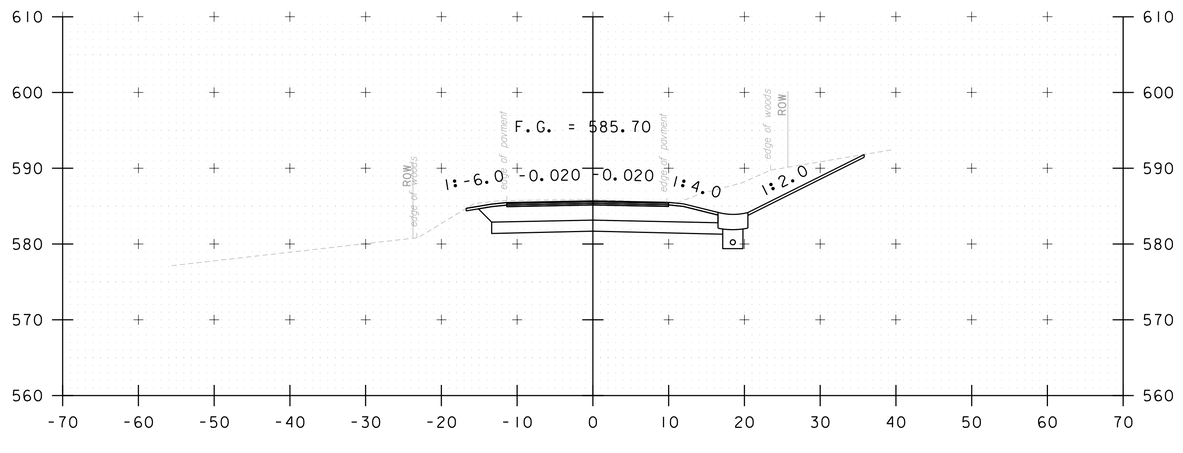

11+50



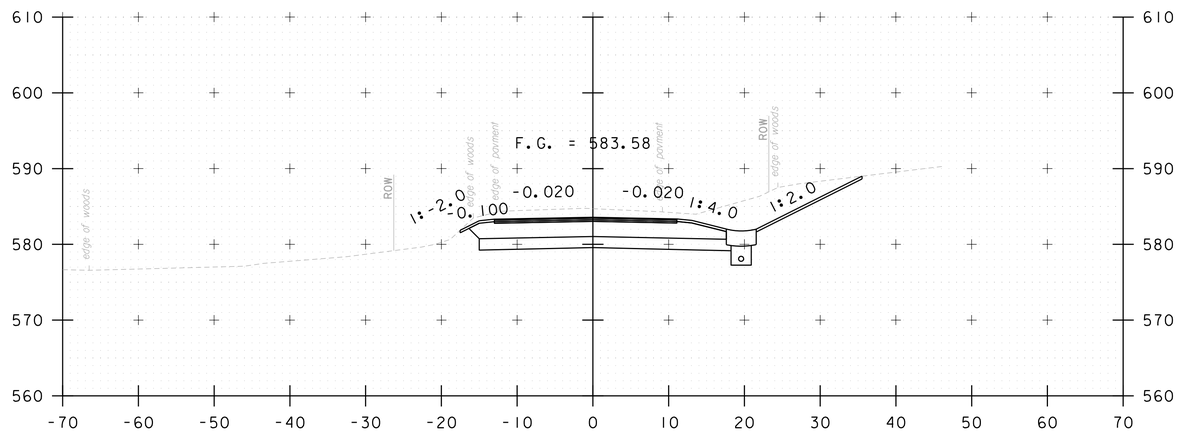

11+00




10+75




12+50




12+00

STA. 10+75 TO STA. 12+50

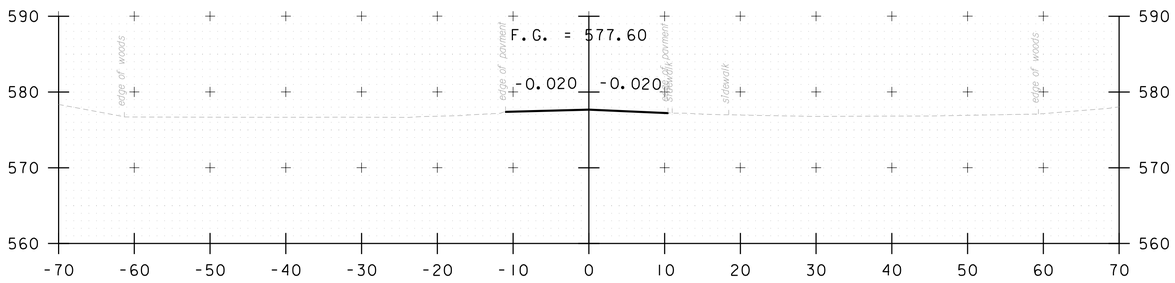
NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

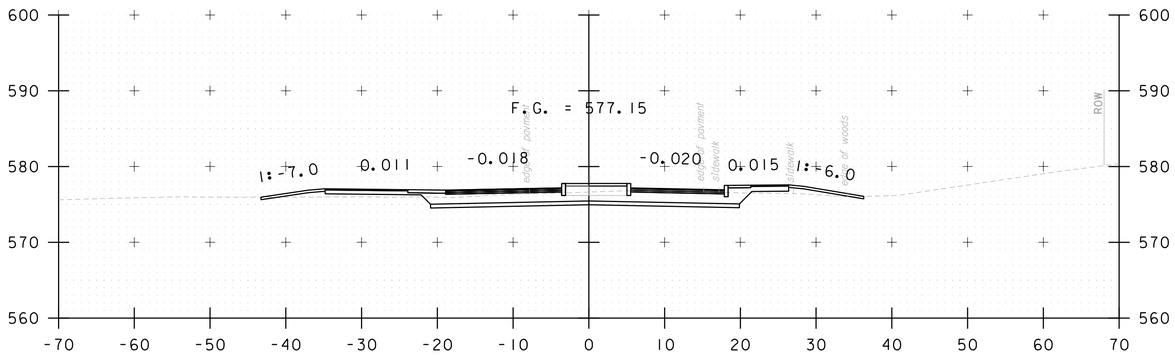
PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CRITICAL CROSS SECTION SHEET 3

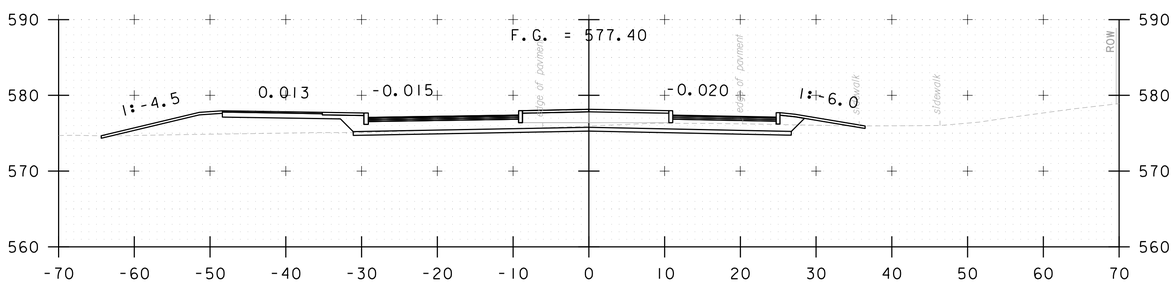
PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 19 OF 22




21+45




21+00




20+75

NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

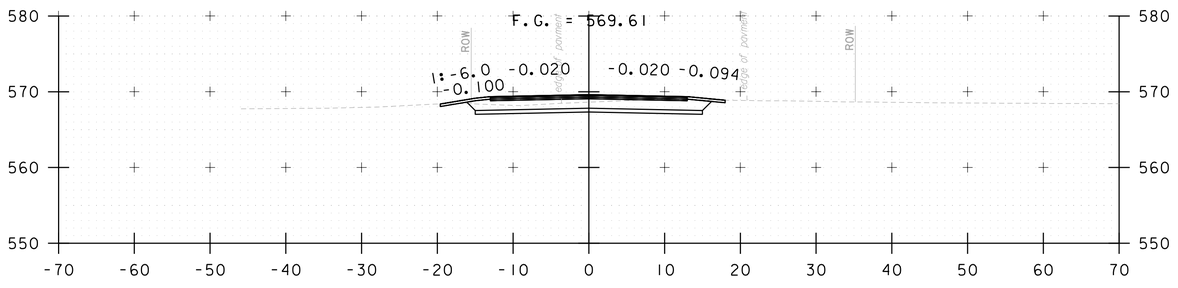
GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

STA. 20+75 TO STA. 21+50

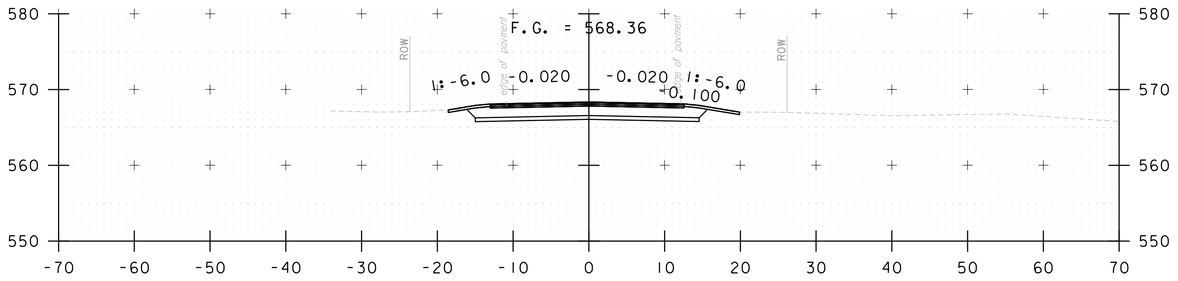
PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CRITICAL CROSS SECTION SHEET 4

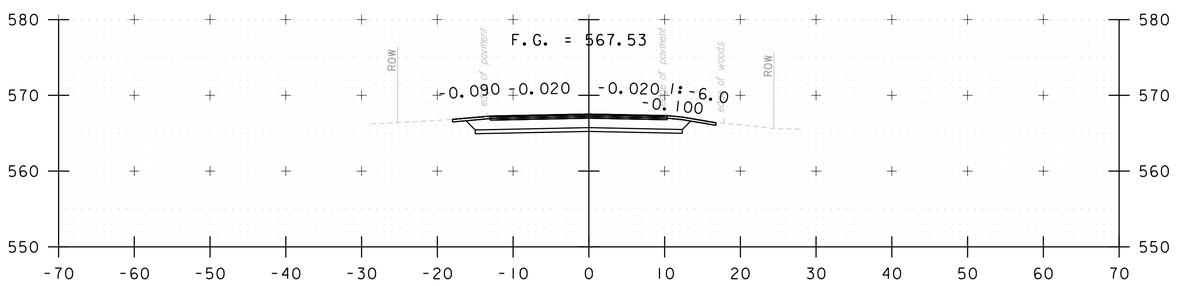
PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERIYEV
SHEET 20 OF 22



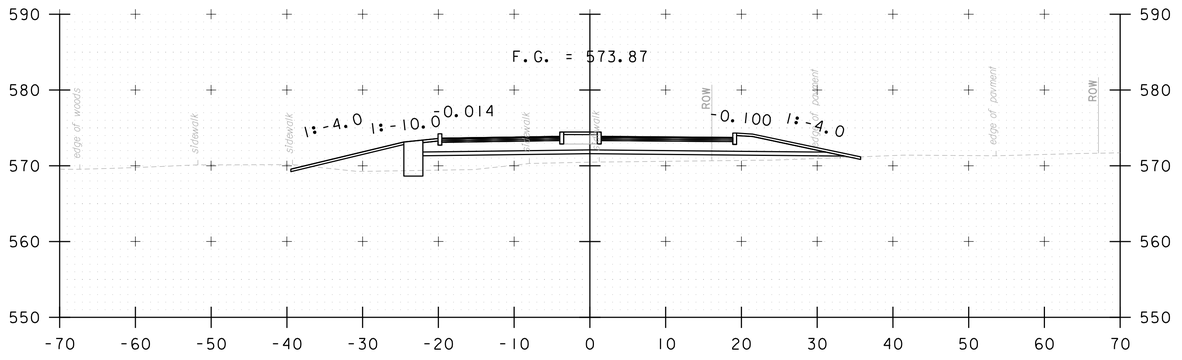

32+50



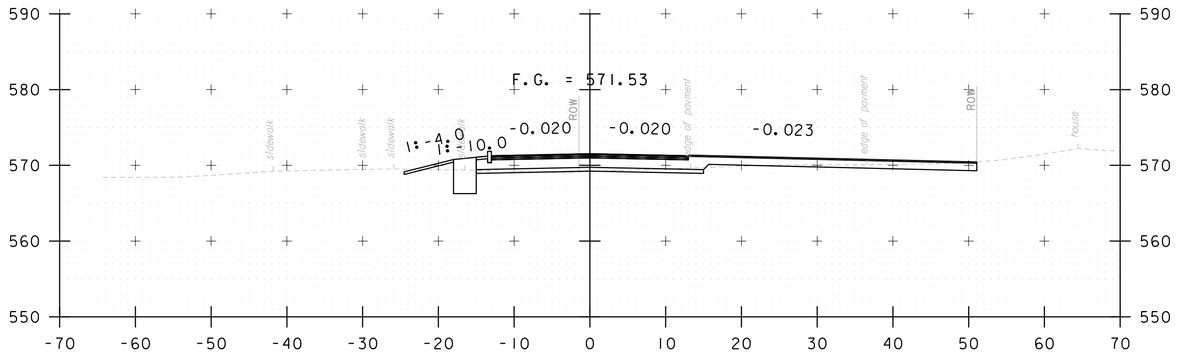

32+00




31+50




33+50




33+00

STA. 31+50 TO STA. 33+50

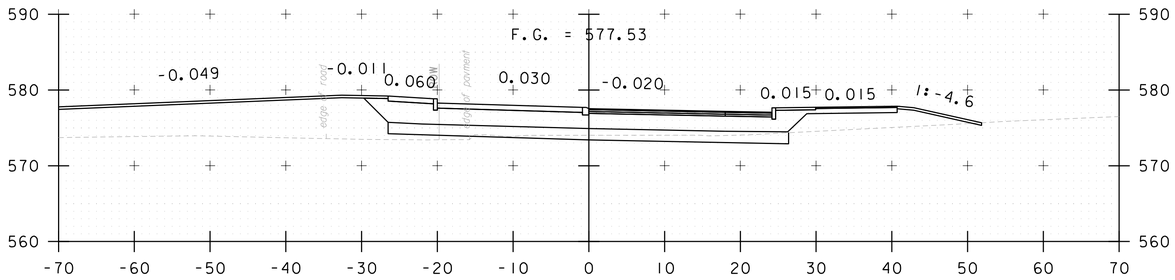
NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

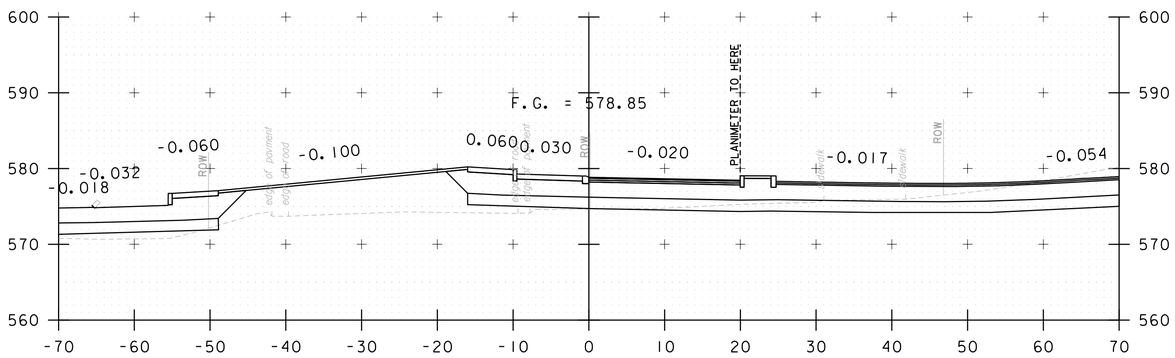
PROJECT NAME: BENNINGTON
PROJECT NUMBER: STP 1000(23)

FILE NAME: z18d165xsl.dgn
PROJECT LEADER: E. ATKINS
DESIGNED BY: S. SACCO
CRITICAL CROSS SECTION SHEET 5

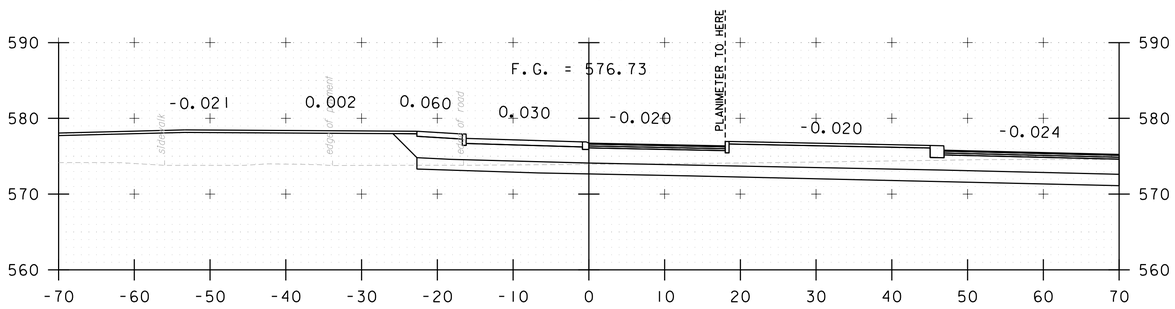
PLOT DATE: 11/6/2020
DRAWN BY: M. PEREZ
CHECKED BY: D. VERTIYEV
SHEET 21 OF 22



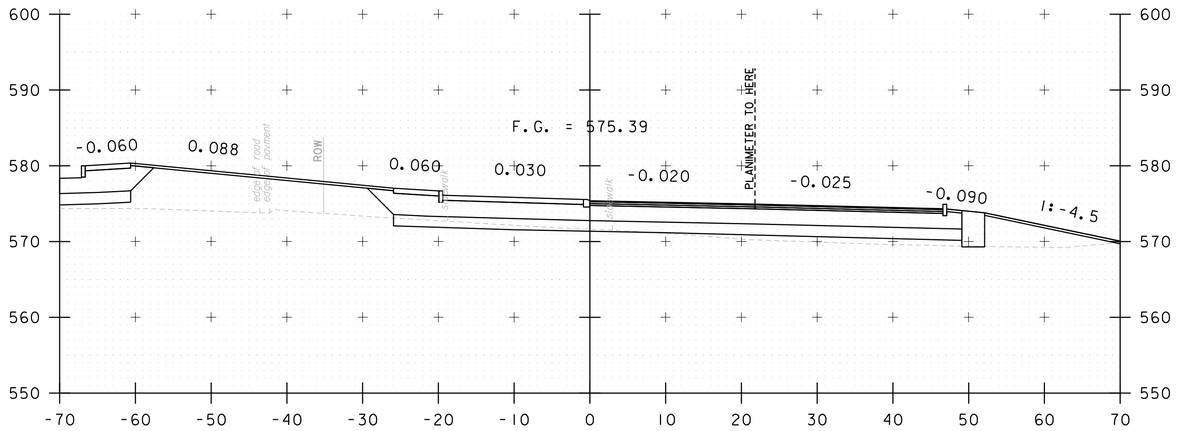

2+00



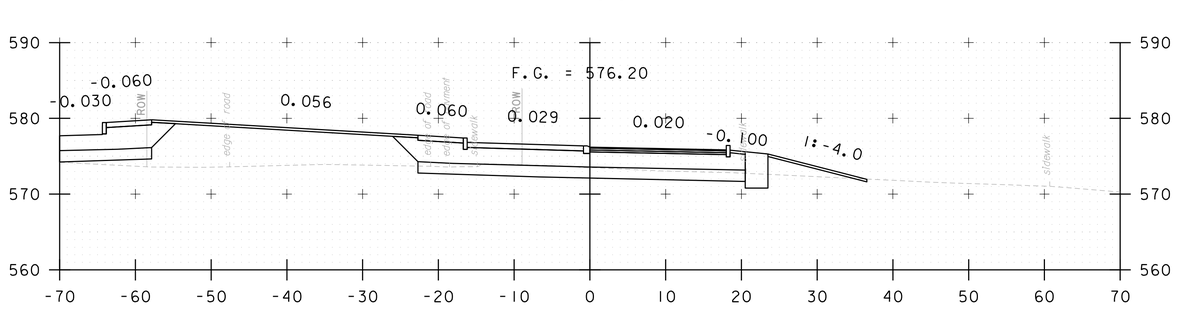

1+00




0+00




4+00



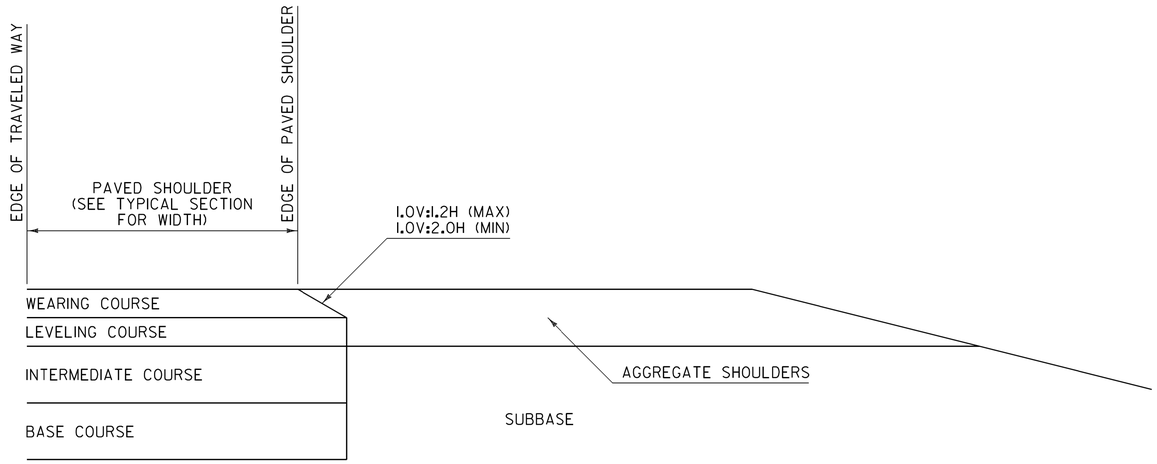

3+00

STA. 0+00 TO STA. 4+69

NOTE: CROSS SLOPES MAY APPEAR NON-STANDARD DUE TO ALIGNMENT SKEW.
SEE TYPICAL SECTIONS FOR STANDARD CROSS SLOPES

GREEN INTERNATIONAL AFFILIATES, INC.
CIVIL AND STRUCTURAL ENGINEERS

| | |
|---|---|
| PROJECT NAME: BENNINGTON | |
| PROJECT NUMBER: STP 1000(23) | |
| FILE NAME: z18d165xsl.dgn | PLOT DATE: 11/6/2020 |
| PROJECT LEADER: E. ATKINS | DRAWN BY: M. PEREZ |
| DESIGNED BY: S. SACCO | CHECKED BY: D. VERTIYEV |
| CRITICAL CROSS SECTION SHEET 6 | SHEET 22 OF 22 |

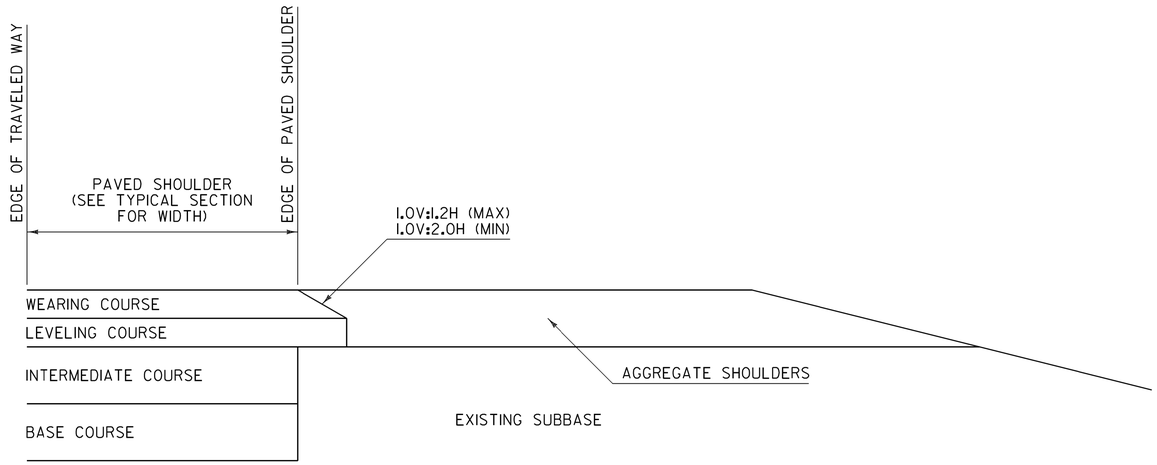



## SAFETY EDGE DETAIL
## FOR PAVING BELOW WEARING COURSE

### NOTES:

1. THIS DETAIL IS INTENDED FOR WHEN PAVING EXTENDS BELOW THE WEARING COURSE.
2. PRIOR TO PLACEMENT OF THE LEVELING AND/OR WEARING COURSE, THE SUBBASE LOCATED BENEATH THE AGGREGATE SHOULDERS SHALL BE PREPARED FLUSH WITH THE BOTTOM OF THE LEVELING COURSE.
3. BASE COURSE LIMITS MAY VARY, SEE TYPICAL SECTIONS FOR WIDTH.

| SAFETY EDGE WIDTH BASED ON WEARING COURSE THICKNESS AND A 1V:1.6H SLOPE | |
|---|---|
| WEARING COURSE THICKNESS (INCHES) | NOMINAL SAFETY EDGE WIDTH (INCHES) |
| 1.25 | 2.000 |
| 1.50 | 2.375 |
| 1.75 | 2.750 |
| 2.00 | 3.125 |
| 2.25 | 3.500 |
| 2.50 | 4.000 |




## SAFETY EDGE DETAIL
## FOR PAVING WEARING COURSE ONLY

### NOTES:

1. THIS DETAIL IS INTENDED FOR WHEN ONLY THE LEVELING AND/OR WEARING COURSE IS TO BE PLACED.
2. PAVEMENT COURSES MAY VARY, SEE TYPICAL SECTIONS FOR ACTUAL PAVEMENT COURSES REQUIRED.

### GENERAL NOTES:

1. PLACEMENT OF THE WEARING COURSE SHALL INCLUDE THE SAFETY EDGE, UNLESS THE FOLLOWING APPLIES:
   - A. THE ADJACENT SLOPE IS STEEPER THAN THE SAFETY EDGE.
   - B. THE EDGE OF PAVEMENT BEING PLACED ABUTS BOUND MATERIAL.
   - C. VEHICLES ARE RESTRICTED FROM LEAVING THE PAVED SURFACE (EXAMPLE: GUARDRAIL).
2. THE SAFETY EDGE SHALL BE FORMED IN SUCH A WAY THAT THE BITUMINOUS CONCRETE PAVEMENT IS EXTRUDED OR COMPRESSED TO FORM THE SLOPE. DEVICES THAT SIMPLY STRIKE-OFF THE MIX WITHOUT PROVIDING ANY COMPACTIVE EFFORT WILL NOT BE ALLOWED.
3. THE SAFETY EDGE SHALL NOT BE CONSIDERED PART OF THE PAVED SHOULDER.
4. THIS WORK SHALL BE INCIDENTAL TO THE RESPECTIVE BITUMINOUS CONCRETE PAVEMENT ITEM.

| REV. | DATE | DESCRIPTION |
|---|---|---|
| 0 | MAR. 29, 2016 | ORIGINAL APPROVAL |
| 1 | JAN. 5, 2018 | ANNOTATION CORRECTIONS |
| | | |
| | | |
| | | |

OTHER DETAILS REQUIRED: NONE

DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN

# SAFETY EDGE DETAILS

VTrans Working To Get You There
VERMONT AGENCY OF TRANSPORTATION

HIGHWAY SAFETY & DESIGN DETAIL

HSD-400.01