RECORD PLANS

CONTRACTOR: KUBRICKY CONSTURCTION CORP.- GLENS FALLS, NY

RESIDENT ENGINEER: CHAD GREENWOOD

CONSTRUCTION BEGAN: JUNE 30, 2014

CONSTRUCTION COMPLETE: OCTOBER 8, 2015

RECORD PLANS BY: CHAD GREENWOOD & AARON JAMES

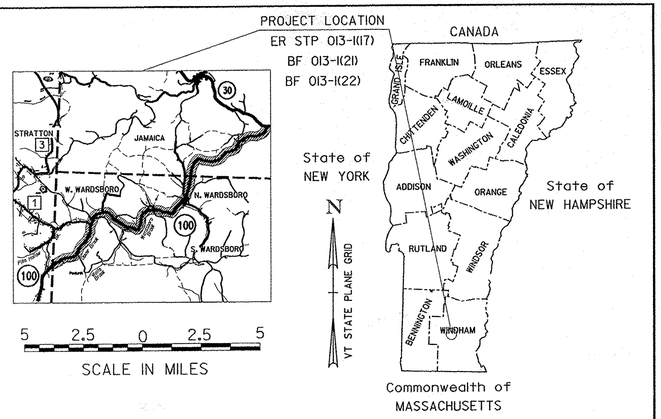
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY _____ RESIDENT ENGINEER

DATE 5/19/16

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION




# PROPOSED IMPROVEMENT
# TOWNS OF WARDSBORO AND JAMAICA
# COUNTY OF WINDHAM
# VT ROUTE 100 (MINOR ARTERIAL)

## WARDSBORO–JAMAICA
## ER STP 013–1(17)

**PROJECT LOCATION:** BEGINNING IN THE TOWN OF WARDSBORO ON VT ROUTE 100 AT STATION A 1+75.00 (MM 0.033) EXTENDING NORTHERLY 56462.74 FEET (10.694 MILES) TO STATION B 178+38.00 (MM 3.378) IN THE TOWN OF JAMAICA.

**PROJECT DESCRIPTION:** WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES PAVEMENT RECLAMATION, PAVEMENT RESURFACING, PAVEMENT MARKINGS, GUARDRAIL ADJUSTMENT AND REPLACEMENT, NEW SIGNS, DRAINAGE IMPROVEMENTS, TRAFFIC CONTROL AND OTHER HIGHWAY RELATED ITEMS.

## WARDSBORO
## BF 013–1(21)

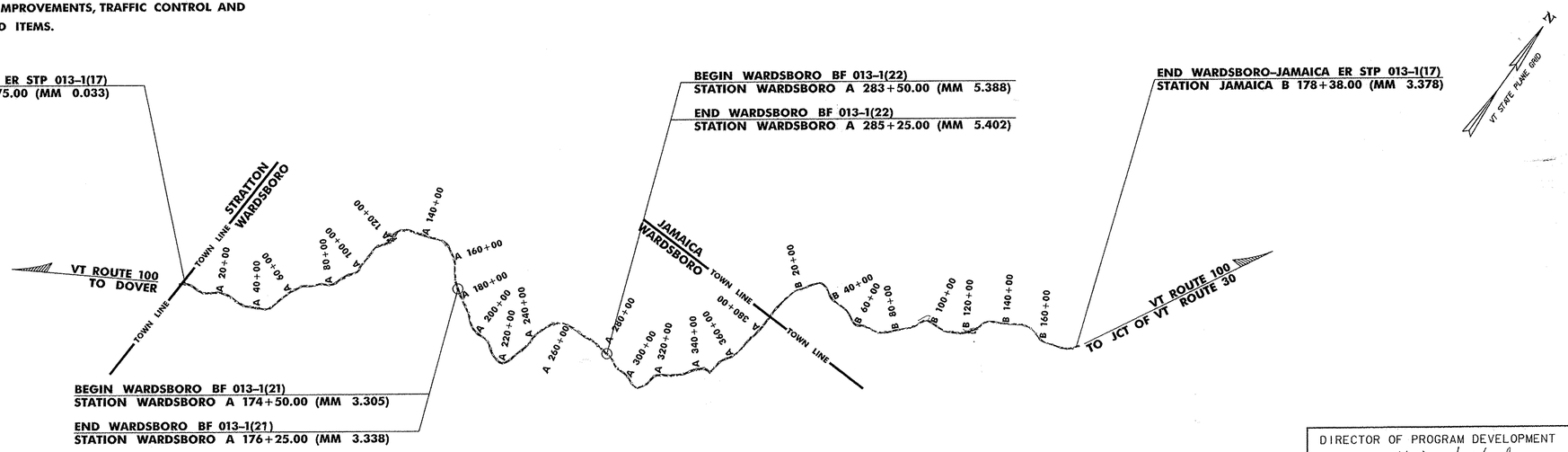
**PROJECT LOCATION:** 7.7 MILES SOUTH OF THE JUNCTION OF VT ROUTE 100 AND VT ROUTE 30.

**PROJECT DESCRIPTION:** REMOVAL OF EXISTING STRUCTURE AND REPLACMENT WITH A NEW PRECAST STRUCTURE.

## WARDSBORO
## BF 013–1(22)

**PROJECT LOCATION:** 5.6 MILES SOUTH OF THE JUNCTION OF VT ROUTE 100 AND VT ROUTE 30.

**PROJECT DESCRIPTION:** REMOVAL OF EXISTING STRUCTURE AND REPLACMENT WITH A NEW PRECAST STRUCTURE.




THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : VTRANS
SURVEYED DATE : 1/3/13

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2007)

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Kevin S Marshia DATE 2/25/14

PROJECT MANAGER : KEN UPMAL, P.E.
KRISTIN HIGGINS, P.E.

PROJECT NAME : WARDSBORO - JAMAICA
PROJECT NUMBER : ER STP 013-1(17)
BF 013-1(21)
BF 013-1(22)
SHEET 1 OF 444 SHEETS

# INDEX OF SHEETS


| INDEX OF SHEETS | |
|---|---|
| 1. | COMPOSITE TITLE SHEET |
| 2. | COMPOSITE INDEX OF SHEETS |
| 3. | COMPOSITE CONVENTIONAL SYMBOLOGY LEGEND SHEET |
| 4–7. | COMPOSITE QUANTITY SHEETS |
| **WARDSBORO–JAMAICA ER STP 013–1(17)** | |
| 8. | TITLE SHEET |
| 9–10. | TYPICAL SECTIONS SHEETS |
| 11–14. | DETAIL SHEETS |
| 15–31. | TIE SHEETS |
| 32–35. | HORIZONTAL ALIGNMENT SHEETS |
| 36–37. | BORING AND CORING SHEETS |
| 38–40. | QUANTITY SHEETS |
| 41–50. | ITEM DETAIL SHEETS |
| 51. | DRAINAGE DETAIL SHEET |
| 52. | HANDWORK DETAILS FOR DRIVES |
| 53. | UNDERDRAIN DETAIL SHEET |
| 54. | CULVERT INVENTORY |
| 55. | DITCH CLEANING DETAIL SHEET |
| 56–148. | PROJECT LAYOUT SHEETS, PROFILES AND BANKING DIAGRAMS |
| 149–164. | TRAFFIC SIGN SUMMARY SHEETS |
| 165–168. | SIGN DETAIL SHEETS |
| 169–398. | CROSS SECTION SHEETS |
| 399. | CONSTRUCTION APPROACH SIGNING SHEET |
| 400. | CONSTRUCTION OPERATIONS TRAFFIC PROTECTION PLAN |
| **WARDSBORO BF 013–1(21)** | |
| 401. | TITLE SHEET |
| 402. | PRELIMINARY INFORMATION SHEET |
| 403. | PROJECT NOTES |
| 404. | QUANTITY SHEET |
| 405. | TYPICAL SECTIONS |
| 406. | EXISTING CONDITIONS |
| 407. | LAYOUT SHEET |
| 408–410. | DETOUR PLAN 1–3 |
| 411. | TEMPORARY UTILITY RELOCATION |
| 412. | BORING LAYOUT SHEET |
| 413. | BORING LOGS |
| 414. | EPSC NARRATIVE |
| 415. | EPSC PLAN |
| 416. | EPSC DETAILS |
| 417. | BOX LAYOUT |
| 418–421. | CHANNEL CROSS SECTIONS 1–4 |
| 422–423. | RIGHT–OF–WAY SHEETS |
| **WARDSBORO BF 013–1(22)** | |
| 424. | TITLE SHEET |
| 425. | PRELIMINARY INFORMATION SHEET |
| 426. | PROJECT NOTES |
| 427. | QUANTITY SHEET |
| 428. | TYPICAL SECTIONS |
| 429. | EXISTING CONDITIONS |
| 430. | LAYOUT SHEET |
| 431–433. | DETOUR PLAN 1–3 |
| 434. | BORING LAYOUT SHEET |
| 435. | BORING LOGS |
| 436. | EPSC NARRATIVE |
| 437. | EPSC PLAN |
| 438. | EPSC DETAILS |
| 439. | BOX LAYOUT |
| 440–442. | CHANNEL CROSS SECTIONS 1–3 |
| 443–444. | RIGHT–OF–WAY SHEETS |

| VAOT STANDARDS | | DATE |
|---|---|---|
| D–15 | PRECAST REINFORCED CONCRETE CATCH BASIN W/CAST IRON GRATE<br>PRECAST REINFORCED MAN HOLE W/CAST IRON COVER<br>CAST IRON GRATE WITH FRAME, TYPE D<br>CAST IRON GRATE WITH FRAME, TYPE E | 06–01–1994 |
| D–30 | UNDERDRAIN CONSTRUCTION DETAILS | 08–13–2007 |
| E–121 | STANDARD SIGN PLACEMENT – CONVENTIONAL ROAD | 08–08–1995 |
| E–124 | TOWN LINE SIGNS | 08–08–1995 |
| E–125 | TRAVEL INFORMATION COUNCIL SIGNS | 08–08–1995 |
| E–134 | BRIDGE NUMBER PLAQUE | 08–08–1995 |
| E–138 | MILE MARKER SIGNS – STATE & TOWN HIGHWAYS | 05–30–2003 |
| E–141 | REGULATORY SIGN DETAILS | 09–20–1995 |
| E–142 | REGULATORY SIGN DETAILS | 09–20–1995 |
| E–143 | REGULATORY SIGN DETAILS | 06–15–2004 |
| E–151 | WARNING SIGN DETAILS | 05–01–2004 |
| E–152 | WARNING SIGN DETAILS | 05–01–2004 |
| E–153 | WARNING SIGN DETAILS | 05–01–2004 |
| E–191 | PAVEMENT MARKING DETAILS | 02–01–1999 |
| E–193 | PAVEMENT MARKING DETAILS | 08–18–1995 |
| G–1 | STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS) | 01–03–2000 |
| G–1D | STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIAN) | 01–03–2000 |
| G–19 | GENERIC PLANS FOR GUARDRAIL END TERMINALS | 11–15–2002 |
| J–3 | MAIL BOX SUPPORT DETAILS | 08–07–1995 |
| T–1 | TRAFFIC CONTROL GENERAL NOTES | 08–06–2012 |
| T–10 | CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING | 08–06–2012 |
| T–17 | TRAFFIC CONTROL – MISCELLANEOUS DETAILS | 08–06–2012 |
| T–24 | TRAFFIC CONTROL FOR MAINTENANCE PAVEMENT MARKING OPERATION | 08–06–2012 |
| T–25 | TRAFFIC CONTROL FOR MAINTENANCE MOWING OPERATIONS | 08–06–2012 |
| T–28 | CONSTRUCTION SIGN DETAILS | 08–06–2012 |
| T–29 | CONSTRUCTION SIGN DETAILS | 08–06–2012 |
| T–30 | CONSTRUCTION SIGN DETAILS | 08–06–2012 |
| T–31 | CONSTRUCTION SIGN DETAIL | 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–45 | SQUARE TUBE SIGN POST AND ANCHOR | 01–02–2013 |

| STRUCTURES DETAILS | | DATE |
|---|---|---|
| SD–501.00 | CONCRETE DETAILS AND NOTES | 02–09–2012 |
| SD–502.00 | CONCRETE DETAILS AND NOTES | 10–10–2012 |


PROJECT NAME: WARDSBORO-JAMAICA

PROJECT NUMBER: ER STP 013-1(17) / BF 013-1(21) / BF 013-1(22)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL / K. HIGGINS
DESIGNED BY: B. KIPP / J. SALVATORI
INDEX OF SHEETS

PLOT DATE: 3/17/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 2 OF 444

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

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

## PROPOSED GEOMETRY CODES

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

## UTILITY SYMBOLOGY

### UNDERGROUND UTILITIES

- 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)

- 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 SYMBOLOGY

### PROJECT DESIGN & LAYOUT SYMBOLOGY

- CLEAR ZONE
- PLAN LAYOUT MATCHLINE

### PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH 'L'
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — 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
- PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6f — 6F PROPERTY BOUNDARY
- 4f — 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

## EPSC LAYOUT PLAN SYMBOLOGY

### EPSC MEASURES

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

### ENVIRONMENTAL RESOURCES

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

### ARCHEOLOGICAL & HISTORIC

- ARCHEOLOGICAL BOUNDARY
- HISTORIC DISTRICT BOUNDARY
- 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

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) / BF 013-1(22) |
| FILE NAME: dl2b236_frm.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL / K. HIGGINS | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP / J. SALVATORI | CHECKED BY: A. KEMPTON |
| CONVENTIONAL SYMBOLOGY LEGEND SHEET | SHEET 3 OF 444 |

# COMPOSITE QUANTITY SHEET 1

| WARDSBORO-JAMAICA ER STP 013-1(17) | | | WARDSBORO BF 013-1(21) | | | WARDSBORO BF 013-1(22) | | | TOTALS | | DESCRIPTIONS | | | | DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROADWAY | TRAINING | FULL C.E. ITEMS | ROADWAY | EROSION CONTROL | BRIDGE | ROADWAY | EROSION CONTROL | BRIDGE | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND | QUANTITIES | UNIT | ITEMS |
| 1 | | | | | | | | | 1 | | LS | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10 | | | | |
| 21800 | | | 25 | | | 25 | | | 21850 | | CY | COMMON EXCAVATION | 203.15 | | | | |
| | | | | | 125 | | | 105 | 230 | | CY | UNCLASSIFIED CHANNEL EXCAVATION | 203.27 | | | | |
| 2500 | | | | | | | | | 2500 | | CY | EARTH BORROW | 203.30 | | | | |
| 4100 | | | | | | | | | 4100 | | CY | TRENCH EXCAVATION OF EARTH | 204.20 | | | | |
| 550 | | | | | | | | | 550 | | CY | TRENCH EXCAVATION OF ROCK | 204.21 | | | | |
| 1 | | | | | | | | | 1 | | CY | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.) | 204.22 | | | | |
| | | | | | 575 | | | 500 | 1075 | | CY | STRUCTURE EXCAVATION | 204.25 | | | | |
| 260 | | | | | 310 | | | 270 | 840 | | CY | GRANULAR BACKFILL FOR STRUCTURES | 204.30 | | | | |
| 163900 | | | | | | | | | 163900 | | SY | COLD PLANING, BITUMINOUS PAVEMENT | 210.10 | | | | |
| 96150 | | | 50 | | | 50 | | | 96250 | | TON | SUBBASE OF CRUSHED GRAVEL, FINE GRADED | 301.28 | | | | |
| 14400 | | | | | | | | | 14400 | | CY | SUBBASE OF DENSE GRADED CRUSHED STONE | 301.35 | | | | |
| 144100 | | | | | | | | | 144100 | | SY | RECLAIMED STABILIZED BASE | 310.20 | | | | |
| 2650 | | | | | | | | | 2650 | | TON | AGGREGATE SHOULDERS | 402.12 | | | | |
| 1 | | | | | | | | | 1 | | LU | PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.) | 406.50 | | | | |
| 33750 | | | | | | 50 | | | 33800 | | TON | SUPERPAVE BITUMINOUS CONCRETE PAVEMENT | 490.30 | | | | |
| 1 | | | | | | | | | 1 | | LU | AIR VOIDS PAY ADJUSTMENT (N.A.B.I.) | 490.31 | | | | |
| 1 | | | | | | | | | 1 | | LU | MAT DENSITY PAY ADJUSTMENT (N.A.B.I.) | 490.32 | | | | |
| 1 | | | | | | | | | 1 | | LU | SURFACE TOLERANCE PAY ADJUSTMENT (N.A.B.I.) | 490.33 | | | | |
| 1 | | | | | | | | | 1 | | LU | LONGITUDINAL JOINT COMPACTION PAY ADJUSTMENT (N.A.B.I.) | 490.34 | | | | |
| 70 | | | | | | | | | 70 | | LF | BRIDGE EXPANSION JOINT, ASPHALTIC PLUG | 516.10 | | | | |
| | | | | | | | | 1 | 1 | | EACH | REMOVAL OF STRUCTURE (5'-9" x 8'-2" CGMPPA) | 529.15 | | | | |
| | | | | | 1 | | | | 1 | | EACH | REMOVAL OF STRUCTURE (6'-1" x 8'-10" CGMPPA) | 529.15 | | | | |
| | | | | | | | | 1 | 1 | | LS | PRECAST CONCRETE STRUCTURE (14'-0" x 8'-0" x 52'-6" BOX) | 540.10 | | | | |
| | | | | | 1 | | | | 1 | | LS | PRECAST CONCRETE STRUCTURE (14'-0" x 8'-0" x 60'-0" BOX) | 540.10 | | | | |
| 5 | | | | | | | | | 5 | | LF | 15" CSP .079 (2-2/3 X 1/2) | 601.0011 | | | | |
| 5 | | | | | | | | | 5 | | LF | 18" CSP .079 (2-2/3 X 1/2) | 601.0016 | | | | |
| | | | | | | | | | | | | BEGIN OPTION AA | | | | | |
| 250 | | | | | | | | | 250 | | LF | 24" CSP .064 (2-2/3 X 1/2) | 601.0025 | | | | |
| 250 | | | | | | | | | 250 | | LF | 24" RCP CLASS IV | 601.0826 | | | | |
| 250 | | | | | | | | | 250 | | LF | 24" CPEP | 601.0920 | | | | |
| | | | | | | | | | | | | END OPTION AA | | | | | |
| 95 | | | | | | | | | 95 | | LF | 18" CPEP | 601.0915 | | | | |
| 14 | | | | | | | | | 14 | | EACH | REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II | 604.415 | | | | |
| 9800 | | | | | | | | | 9800 | | LF | 6 INCH UNDERDRAIN PIPE | 605.10 | | | | |
| 100 | | | | | | | | | 100 | | HR | POWER GRADER RENTAL | 608.15 | | | | |
| 1150 | | | | | | | | | 1150 | | HR | ALL PURPOSE EXCAVATOR RENTAL, TYPE I | 608.25 | | | | |
| 100 | | | | | | | | | 100 | | HR | POWER BROOM RENTAL, TYPE I | 608.30 | | | | |
| 2300 | | | | | | | | | 2300 | | HR | TRUCK RENTAL | 608.37 | | | | |
| 50 | | | | | | | | | 50 | | HR | LOADER RENTAL, TYPE I | 608.40 | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17) / BF 013-1(21) / BF 013-1(22)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL / K. HIGGINS
DESIGNED BY: B. KIPP / J. SALVATORI
COMPOSITE QUANTITY SHEET 1

PLOT DATE: 3/31/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 4 OF 444

# COMPOSITE QUANTITY SHEET 2

| WARDSBORO-JAMAICA ER STP 013-1(17) | | | WARDSBORO BF 013-1(21) | | | WARDSBORO BF 013-1(22) | | | TOTALS | | DESCRIPTIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROADWAY | TRAINING | FULL C.E. ITEMS | ROADWAY | EROSION CONTROL | BRIDGE | ROADWAY | EROSION CONTROL | BRIDGE | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
| | | | | 1 | | | 1 | | 2 | | MGAL | DUST CONTROL WITH WATER | 609.10 | |
| 3150 | | | | | | | | | 3150 | | CY | STONE FILL, TYPE I | 613.10 | |
| | | | | | 50 | | | | 50 | | CY | STONE FILL, TYPE II | 613.11 | |
| | | | | | 75 | | | 70 | 145 | | CY | STONE FILL, TYPE III | 613.12 | |
| 13 | | | | | | | | | 13 | | EACH | RELOCATE MAILBOX, SINGLE SUPPORT | 617.10 | |
| 3 | | | | | | | | | 3 | | EACH | RELOCATE MAILBOX, MULTIPLE SUPPORT | 617.12 | |
| 274 | | | | | | | | | 274 | | EACH | YIELDING MARKER POSTS | 619.17 | |
| 1363 | | | | | | | | | 1363 | | LF | STEEL BEAM GUARDRAIL, GALVANIZED | 621.20 | |
| 28825 | | | | | | | | | 28825 | | LF | STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS | 621.205 | |
| 14.5 | | | | | | | | | 14.5 | | LF | HD STEEL BEAM GUARDRAIL, GALVANIZED | 621.21 | |
| 187.5 | | | | | | | | | 187.5 | | LF | HD STEEL BEAM GUARDRAIL, GALVANIZED/NESTED | 621.216 | |
| 3 | | | | | | | | | 3 | | EACH | MANUFACTURED TERMINAL SECTION, TANGENT | 621.51 | |
| 95 | | | | | | | | | 95 | | EACH | ANCHOR FOR STEEL BEAM RAIL | 621.60 | |
| 27625 | | | | | | | | | 27625 | | LF | REMOVAL AND DISPOSAL OF GUARDRAIL | 621.80 | |
| 1950 | | | | | | | | | 1950 | | HR | UNIFORMED TRAFFIC OFFICERS | 630.10 | |
| 8500 | | | 500 | | | 500 | | | 9500 | | HR | FLAGGERS | 630.15 | |
| | | 1 | | | | | | | 1 | | LS | FIELD OFFICE, ENGINEERS | 631.10 | |
| | | 1 | | | | | | | 1 | | LS | TESTING EQUIPMENT, BITUMINOUS | 631.17 | |
| | | 3000 | | | | | | | 3000 | | DL | FIELD OFFICE TELEPHONE (N.A.B.I.) | 631.26 | |
| | 520 | | | | | | | | 520 | | HR | EMPLOYEE TRAINEESHIP | 634.10 | |
| 1 | | | | | | | | | 1 | | LS | MOBILIZATION/DEMOBILIZATION | 635.11 | |
| 1 | | | | | | | | | 1 | | LS | TRAFFIC CONTROL (ER STP 013-1(17)) | 641.10 | |
| 2 | | | | | | | | | 2 | | EACH | PORTABLE CHANGEABLE MESSAGE SIGN | 641.15 | |
| | | | | | | | | | | | | BEGIN OPTION BB | | |
| 115400 | | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, THERMOPLASTIC | 646.402 | |
| 115400 | | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, EPOXY PAINT | 646.403 | |
| 115400 | | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, POLYUREA | 646.404 | |
| | | | | | | | | | | | | END OPTION BB | | |
| | | | | | | | | | | | | BEGIN OPTION CC | | |
| 113700 | | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC | 646.412 | |
| 113700 | | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, EPOXY PAINT | 646.413 | |
| 113700 | | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, POLYUREA | 646.414 | |
| | | | | | | | | | | | | END OPTION CC | | |
| | | | | | | | | | | | | BEGIN OPTION DD | | |
| 300 | | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, THERMOPLASTIC | 646.482 | |
| 300 | | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, EPOXY PAINT | 646.483 | |
| 300 | | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, POLYUREA | 646.484 | |
| | | | | | | | | | | | | END OPTION DD | | |

| DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|
| QUANTITIES | UNIT | ITEMS |

PROJECT NAME: WARDSBORO-JAMAICA

PROJECT NUMBER: ER STP 013-1(17) / BF 013-1(21) / BF 013-1(22)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL / K. HIGGINS
DESIGNED BY: B. KIPP / J. SALVATORI
COMPOSITE QUANTITY SHEET 2

PLOT DATE: 3/31/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 5 OF 444

# COMPOSITE QUANTITY SHEET 3

| WARDSBORO-JAMAICA ER STP 013-1(17) | | | WARDSBORO BF 013-1(21) | | | WARDSBORO BF 013-1(22) | | | TOTALS | | DESCRIPTIONS | | | | DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROADWAY | TRAINING | FULL C.E. ITEMS | ROADWAY | EROSION CONTROL | BRIDGE | ROADWAY | EROSION CONTROL | BRIDGE | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND | QUANTITIES | UNIT | ITEMS |
| | | | | | | | | | | | | BEGIN OPTION EE | | | | | |
| 60 | | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, THERMOPLASTIC | 646.492 | | | | |
| 60 | | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, EPOXY PAINT | 646.493 | | | | |
| 60 | | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, POLYUREA | 646.494 | | | | |
| | | | | | | | | | | | | END OPTION EE | | | | | |
| 115400 | | | | | | | | | 115400 | | LF | TEMPORARY 4 INCH WHITE LINE | 646.600 | | | | |
| 113700 | | | | | | | | | 113700 | | LF | TEMPORARY 4 INCH YELLOW LINE | 646.610 | | | | |
| 300 | | | | | | | | | 300 | | LF | TEMPORARY 24 INCH STOP BAR, PAINT | 646.682 | | | | |
| 60 | | | | | | | | | 60 | | EACH | TEMPORARY LETTER OR SYMBOL | 646.690 | | | | |
| 5750 | | | | | | | | | 5750 | | EACH | LINE STRIPING TARGETS | 646.76 | | | | |
| 28550 | | | | | | | | | 28550 | | SY | GEOTEXTILE FOR ROADBED SEPARATOR | 649.11 | | | | |
| 14500 | | | | | 125 | | | 75 | 14700 | | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | | | | |
| 3100 | | | | 120 | | | 130 | | 3350 | | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | | | | |
| | | | | 40 | | | 45 | | 85 | | SY | GEOTEXTILE FOR FILTER CURTAIN | 649.61 | | | | |
| 550 | | | | 5 | | | 7 | | 562 | | LB | SEED | 651.15 | | | | |
| | | | | 5 | | | 7 | | 12 | | LB | SEED, WINTER RYE | 651.17 | | | | |
| 3375 | | | | 40 | | | 50 | | 3465 | | LB | FERTILIZER | 651.18 | | | | |
| 14 | | | | 1 | | | 1 | | 16 | | TON | AGRICULTURAL LIMESTONE | 651.20 | | | | |
| 14 | | | | 1 | | | 1 | | 16 | | TON | HAY MULCH | 651.25 | | | | |
| 710 | | | | 40 | | | 65 | | 815 | | CY | TOPSOIL | 651.35 | | | | |
| 5900 | | | | | 125 | | | 40 | 6065 | | SY | GRUBBING MATERIAL | 651.40 | | | | |
| | | | | 1 | | | | | 1 | | LS | EPSC PLAN (BF 013-1(21)) | 652.10 | | | | |
| | | | | | | | 1 | | 1 | | LS | EPSC PLAN (BF 013-1(22)) | 652.10 | | | | |
| | | | | 40 | | | 40 | | 80 | | HR | MONITORING EPSC PLAN | 652.20 | | | | |
| | | | | 1 | | | | | 1 | | LU | MAINTENANCE OF EPSC PLAN (N.A.B.I.) (BF 013-1(21)) | 652.30 | | | | |
| | | | | | | | 1 | | 1 | | LU | MAINTENANCE OF EPSC PLAN (N.A.B.I.) (BF 013-1(22)) | 652.30 | | | | |
| 35400 | | | | 350 | | | 570 | | 36320 | | SY | TEMPORARY EROSION MATTING | 653.20 | | | | |
| | | | | 60 | | | 60 | | 120 | | CY | VEHICLE TRACKING PAD | 653.35 | | | | |
| | | | | 1 | | | 1 | | 2 | | EACH | FILTER BAG | 653.45 | | | | |
| 5100 | | | | 230 | | | | | 5330 | | LF | BARRIER FENCE | 653.50 | | | | |
| | | | | 80 | | | 300 | | 380 | | LF | PROJECT DEMARCATION FENCE | 653.55 | | | | |
| 5100 | | | | | | | | | 5100 | | LF | EROSION LOG | 653.60 | | | | |
| 258 | | | | | | | | | 258 | | SF | TRAFFIC SIGNS, TYPE A | 675.20 | | | | |
| 2730 | | | | | | | | | 2730 | | LF | SQUARE TUBE SIGN POST AND ANCHOR | 675.341 | | | | |
| 174 | | | | | | | | | 174 | | EACH | REMOVING SIGNS | 675.50 | | | | |
| 87 | | | | | | | | | 87 | | EACH | ERECTING SALVAGED SIGNS | 675.60 | | | | |
| 98 | | | | | | | | | 98 | | EACH | DELINEATOR WITH STEEL POST | 676.10 | | | | |
| 77 | | | | | | | | | 77 | | EACH | REMOVAL OF EXISTING DELINEATOR | 676.12 | | | | |
| 1 | | | | | | | | | 1 | | LU | PRICE ADJUSTMENT, FUEL (N.A.B.I.) | 690.50 | | | | |
| | | | | | 105 | | | 90 | 195 | | CY | SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL) | 900.608 | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17) / BF 013-1(21) / BF 013-1(22)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER:
DESIGNED BY: B. KIPP / J. SALVATORI
COMPOSITE QUANTITY SHEET 3

PLOT DATE: 3/31/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 6 OF 444

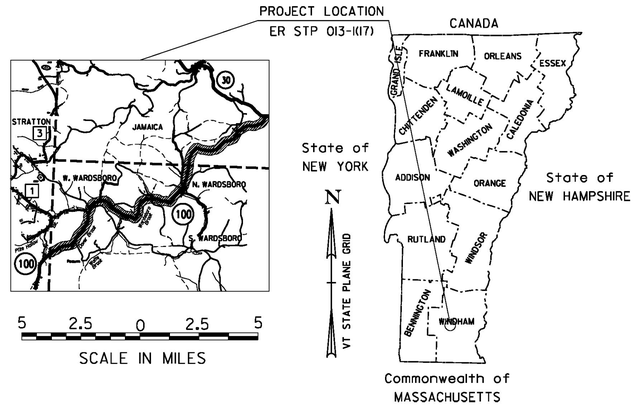
# COMPOSITE QUANTITY SHEET 4

| WARDSBORO-JAMAICA ER STP 013-1(17) | | | WARDSBORO BF 013-1(21) | | | WARDSBORO BF 013-1(22) | | | TOTALS | | DESCRIPTIONS | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROADWAY | TRAINING | FULL C.E. ITEMS | ROADWAY | EROSION CONTROL | BRIDGE | ROADWAY | EROSION CONTROL | BRIDGE | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
| 11 | | | | | | | | | 11 | | EACH | SPECIAL PROVISION (CPM SCHEDULE)(ER STP 013-1(17)) | 900.620 | |
| 1 | | | | | | | | | 1 | | EACH | SPECIAL PROVISION (GNSS CONSTRUCTION INSPECTION EQUIPMENT) | 900.620 | |
| 6150 | | | | | | | | | 6150 | | LF | SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION) | 900.640 | |
| | | | 1 | | | | | | 1 | | LS | SPECIAL PROVISION (CPM SCHEDULE)(BF 013-1(21)) | 900.645 | |
| | | | | | | 1 | | | 1 | | LS | SPECIAL PROVISION (CPM SCHEDULE)(BF 013-1(22)) | 900.645 | |
| 1 | | | | | | | | | 1 | | LS | SPECIAL PROVISION (GPS MACHINE CONTROL GRADING) | 900.645 | |
| | | | | | 1 | | | | 1 | | LS | SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)(BF 013-1(21)) | 900.645 | |
| | | | | | | | | 1 | 1 | | LS | SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)(BF 013-1(22)) | 900.645 | |
| | | | 1 | | | | | | 1 | | LS | SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)(BF 013-1(21)) | 900.645 | |
| | | | | | | 1 | | | 1 | | LS | SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)(BF 013-1(22)) | 900.645 | |
| | | | 1 | | | | | | 1 | | LU | SPECIAL PROVISION (INCENTIVE/DISINCENTIVE)(N.A.B.I.)(BF 013-1(21)) | 900.650 | |
| | | | | | | 1 | | | 1 | | LU | SPECIAL PROVISION (INCENTIVE/DISINCENTIVE)(N.A.B.I.)(BF 013-1(22)) | 900.650 | |
| 172550 | | | | | | | | | 172550 | | SY | SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT) | 900.675 | |
| 3510 | | | | | | | | | 3510 | | SY | SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES) | 900.675 | |
| 172550 | | | | | | | | | 172550 | | SY | SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT) | 900.675 | |
| 4575 | | | | | | | | | 4575 | | TON | SPECIAL PROVISION (AGGREGATE TO MEET COLD MIXED GRADATION) | 900.680 | |
| 10 | | | | | | | | | 10 | | TON | SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I) | 900.680 | |
| 33800 | | | | | | | | | 33800 | | TON | SPECIAL PROVISION (MATERIAL TRANSFER VEHICLE) | 900.680 | |
| 30500 | | | | | | | | | 30500 | | TON | SPECIAL PROVISION (MATERIAL TRANSFER VEHICLE, COLD MIX) | 900.680 | |
| 2600 | | | | | | | | | 2600 | | TON | SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION) | 900.680 | |
| 300 | | | | | | | | | 300 | | TON | SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING) | 900.680 | |
| 1525 | | | | | | | | | 1525 | | CWT | SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H) | 900.683 | |
| 22700 | | | | | | | | | 22700 | | CWT | SPECIAL PROVISION (EMULSIFIED ASPHALT, COLD MIX WITH CEMENT) | 900.683 | |
| 2170 | | | | | | | | | 2170 | | CWT | SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT) | 900.683 | |

| DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|
| QUANTITIES | UNIT | ITEMS |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) / BF 013-1(21) / BF 013-1(22) |
| FILE NAME: d12b236_frm.dgn | PLOT DATE: 3/31/2014 |
| PROJECT LEADER: K. UPMAL / K. HIGGINS | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP / J. SALVATORI | CHECKED BY: A. KEMPTON |
| COMPOSITE QUANTITY SHEET 4 | SHEET 7 OF 444 |

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

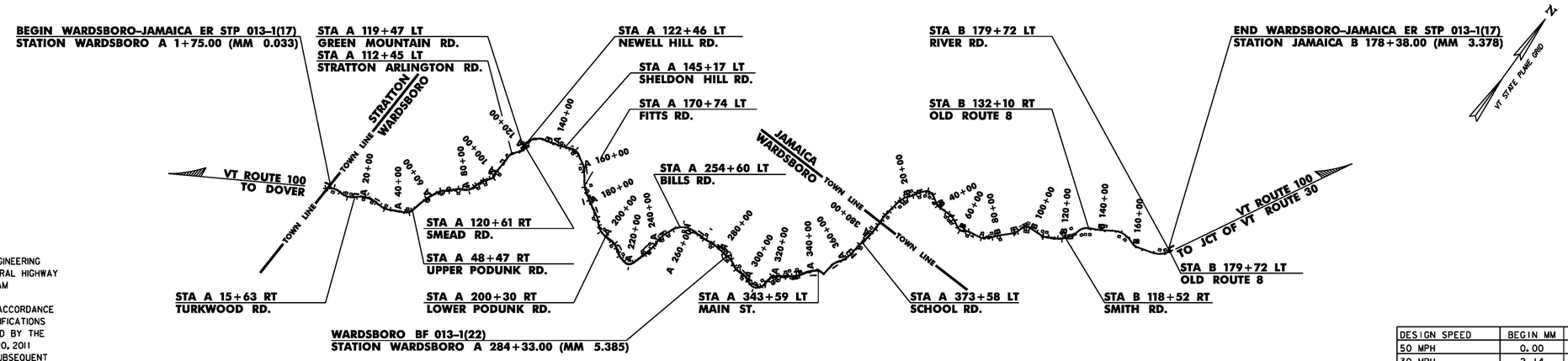



# PROPOSED IMPROVEMENT
# TOWNS OF WARDSBORO AND JAMAICA
# COUNTY OF WINDHAM
# VT ROUTE 100 (MINOR ARTERIAL)

BEGINNING IN THE TOWN OF WARDSBORO ON VT ROUTE 100 AT STATION A 1+75.00 (MM 0.033) EXTENDING NORTHERLY 56462.74 FEET (10.694 MILES) TO STATION B 178+38.00 (MM 3.378) IN THE TOWN OF JAMAICA.

| PROJECT DATA: | LENGTH (FEET) | LENGTH (MILES) |
|---|---|---|
| TOWN OF WARDSBORO VT ROUTE 100 STA A 1+75.00 TO A 387+99.74 | 38,624.74 | 7.315 |
| TOWN OF JAMAICA VT ROUTE 100 STA B 0+00.00 TO B 178+38.00 | 17,838.00 | 3.378 |
| TOTAL LENGTH OF PROJECT | 56,462.74 | 10.694 |

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES PAVEMENT RECLAMATION, PAVEMENT RESURFACING, PAVEMENT MARKINGS, GUARDRAIL ADJUSTMENT AND REPLACEMENT, NEW SIGNS, DRAINAGE IMPROVEMENTS, TRAFFIC CONTROL AND OTHER HIGHWAY RELATED ITEMS.




THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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

| DESIGN SPEED | BEGIN MM | END MM | TOWN |
|---|---|---|---|
| 50 MPH | 0.00 | 2.14 | WARDSBORO |
| 30 MPH | 2.14 | 2.76 | WARDSBORO |
| 50 MPH | 2.76 | 6.23 | WARDSBORO |
| 35 MPH | 6.23 | 6.88 | WARDSBORO |
| 40 MPH | 6.88 | 7.27 | WARDSBORO |
| 50 MPH | 7.27 | 7.35 | WARDSBORO |
| 50 MPH | 0.00 | 3.29 | JAMAICA |
| 40 MPH | 3.29 | 3.38 | JAMAICA |

QUALITY ASSURANCE PROGRAM : LEVEL 2

SURVEYED BY : VTRANS

SURVEYED DATE : 1/3/13

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

| BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA | |
|---|---|
| DESIGN LIFE ESAL'S (DESIGN LANE) | 749,500 |
| DESIGN NUMBER OF GYRATIONS | 65 |
| PERFORMANCE GRADED ASPHALT BINDER | SEE SUBSECTION 490.03 (b) |

**TRAFFIC DATA**

| LOCATION | | AADT | | DHV | | %T | | %D | | ADTT | | ESALs | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGIN MM/TOWN | END MM/TOWN | 2016 | 2036 | 2016 | 2036 | 2016 | 2036 | 2016 | 2036 | 2016 | 2036 | (2016-2036) | (2016-2056) |
| 0.000/WARDSBORO | 2.130/WARDSBORO | 1300 | 1400 | 270 | 290 | 7.8 | 12.3 | 54 | 54 | 110 | 190 | 508,000 | 1,182,000 |
| 2.130/WARDSBORO | 6.564/WARDSBORO | 1400 | 1500 | 290 | 310 | 8.5 | 13.2 | 53 | 53 | 130 | 220 | 650,000 | 1,497,000 |
| 6.564/WARDSBORO | 3.593/JAMAICA | 1200 | 1300 | 250 | 270 | 19.0 | 26.1 | 54 | 54 | 170 | 260 | 1,388,000 | 3,087,000 |

PROJECT MANAGER : KEN UPMAL, P.E.

PROJECT NAME : WARDSBORO - JAMAICA

PROJECT NUMBER : ER STP 013-1(17)

SHEET 8 OF 444 SHEETS

## GENERAL NOTES

1. WETLANDS, ARCHEOLOGICALLY SENSITIVE AREAS AND HISTORIC DISTRICTS HAVE BEEN LOCATED NEAR SECTIONS OF THE PROJECT AREA. THE PROJECT HAS BEEN DESIGNED TO AVOID ENVIRONMENTALLY SENSITIVE AREAS. IF WORK EXTENDS INTO THESE AREAS, STATE AND FEDERAL PERMITS WILL BE REQUIRED (TO BE ACQUIRED BY CONTRACTOR). SEE LAYOUTS SHEETS FOR INDIVIDUAL SENSITIVE LOCATIONS.

2. ITEM 201.10 "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS" HAS BEEN INCLUDED TO BE USED AT THE DISCRETION OF THE ENGINEER ALONG THE PROJECT CORRIDOR WITHIN THE EXISTING RIGHT OF WAY WHERE VEGETATION, PARTIAL AND FULL TREE REMOVAL AND ANY ASSOCIATED GRUBBING ARE DEEMED NECESSARY.

3. ALL BORINGS WERE TAKEN IN THE CENTER OF THE TRAVEL LANE AND THEREFORE MAY NOT BE REPRESENTATIVE OF FOOTPRINT.

4. THE CONTRACTOR SHALL BE FAMILIAR WITH THE PROJECT AREA TO OBTAIN A UNIT COST FOR PAY ITEM 201.10 "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS".

5. "THINNING AND TRIMMING FOR SIGNS" SHALL BE INCIDENTAL TO ITEM 201.10 "CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS". REFER TO DETAIL SHEETS.

6. ADDITIONAL QUANTITIES FOR ITEMS 203.15 "COMMON EXCAVATION", 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED", 301.35 "SUBBASE OF DENSE GRADED CRUSHED STONE", AND 649.11 "GEOTEXTILE FOR ROADBED SEPARATOR" HAVE BEEN ESTIMATED TO ADDRESS POSSIBLE UNSUITABLE SUBBASE MATERIAL ENCOUNTERED WITHIN THE PROJECT.

7. A QUANTITY OF ITEM 204.21 "TRENCH EXCAVATION OF ROCK" HAS BEEN INCLUDED IN CASE LEDGE IS ENCOUNTERED DURING THE INSTALLATION OF UNDERDRAIN.

8. COLD PLANING SHALL BE COMPLETED ACCORDING TO THE TYPICAL OR AS OTHERWISE NOTED ON THE PLANS. A FULL DEPTH BUTT JOINT SHALL BE CONSTRUCTED AT THE BEGINNING AND END OF THE PROJECT AND ALL PAVED SIDE ROAD APPROACHES AS DENOTED ON THE PROJECT PLANS OR AS OTHERWISE DIRECTED BY THE ENGINEER. SAWCUTTING WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE PAID INCIDENTAL TO ITEM 490.30. PRIOR TO RECLAIMING, ANY EXISTING SHOULDER MATERIAL DEEMED UNSUITABLE BY THE ENGINEER WILL BE EXCAVATED TO THE DEPTH OF RECLAIMING OR AS DIRECTED BY THE ENGINEER. EXCAVATED MATERIAL WILL BE SPREAD ON THE ADJACENT SLOPES OR REMOVED FROM THE PROJECT AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR USING THE APPROPRIATE RENTAL ITEMS. THE METHOD OF REMOVAL AND THE USE OF RENTAL ITEMS SHALL BE APPROVED BY THE ENGINEER PRIOR TO ANY WORK BEING DONE. MATERIAL REMOVED SHALL BE REPLACED WITH ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED".

9. AN ADDITIONAL QUANTITY OF 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED" HAS BEEN INCLUDED TO CORRECT SUPERELEVATION AND GRADATION DEFICIENCIES WITHIN THE RECLAIMED SECTION. "EXISTING SHOULDER RECONSTRUCTION DETAIL" CAN BE FOUND IN THE PROJECT DETAIL SHEETS.

10. ITEM 900.683 "SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)" SHALL BE APPLIED ON THE SURFACE OF THE RECLAIMED STABILIZED BASE, PORTLAND CEMENT AT THE RATE OF 0.15 GAL/SY OR AS DIRECTED BY THE ENGINEER.

11. THE FIRST RECLAIM PASS SHALL BE PERFORMED FROM TOP OF BANK TO TOP OF BANK WHERE FULL WIDTH IS NOT ACHIEVABLE AND PAID UNDER ITEM 310.10 "RECLAIMED STABILIZED BASE". THE SECOND RECLAIM PASS SHALL BE PERFORMED FULL WIDTH PER THE TYPICAL SECTION AND PAID UNDER ITEM 900.675 "SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT)". IF THE EXISTING GUARDRAIL IS REMOVED WHEN FULL WIDTH IS BEING CONSTRUCTED, THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING TEMPORARY TRAFFIC PROTECTION. A QUANTITY FOR ITEM 900.640 "SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION)" IS INCLUDED IN THE QUANTITIES FOR THE PURPOSE OF PROTECTING TRAFFIC AS DIRECTED BY THE ENGINEER.

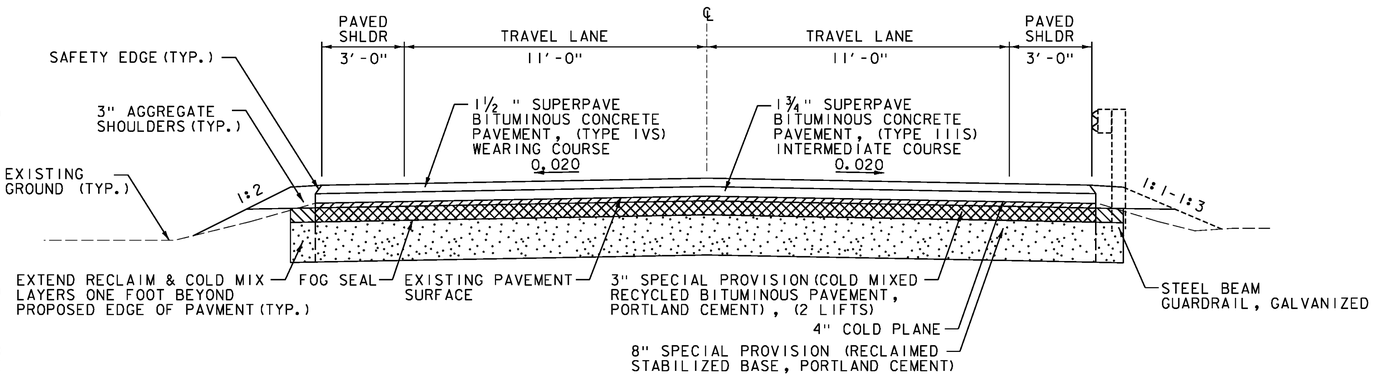
12. ALL EDGES OF PAVEMENT SHALL BE BACKED UP TO FULL HEIGHT WITH AGGREGATE SHOULDER MATERIAL AS DIRECTED BY THE ENGINEER AND WILL BE PAID UNDER ITEM 402.12 "AGGREGATE SHOULDERS".

13. COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT SHALL BE PRODUCED FROM THE COLD PLANE GRINDINGS GENERATED FROM THE PROJECT AND PAID FOR UNDER ITEM 900.675 "SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT)". IF THERE IS NOT A SUFFICIENT AMOUNT OF COLD PLANE GRINDINGS AVAILABLE TO PRODUCE THE (2) 3" LIFTS OF PORTLAND CEMENT STABILIZED COLD MIX, THE CONTRACTOR SHALL OBTAIN THE NECESSARY MATERIAL FROM ANOTHER SOURCE. THE COST ASSOCIATED WITH PROVIDING ADDITIONAL COLD PLANE GRINDINGS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.675 "SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT)".

14. FOR THE PURPOSES OF QUANTITY CALCULATION IT HAS BEEN ASSUMED ITEM 900.675 "SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT,PORTLAND CEMENT)" WILL REQUIRE 3% BY WEIGHT OF ITEM 415.25 "EMULSIFIED ASPHALT,COLD MIX". FOR THE SAME PURPOSE IT HAS ALSO BEEN ASSUMED 1% BY WEIGHT ITEM 900.680 "SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING)" WILL BE REQUIRED BY MIX DESIGN.

15. EMULSIFIED ASPHALT TYPE CRS-1H OR RS-1H SHALL BE APPLIED AS A TACK COAT ON ALL EXISTING PAVEMENT SURFACES AND BETWEEN ALL COURSES OF PAVEMENT (WHERE APPLICABLE) NOT INCLUDING RECLAIMED SURFACES AT THE RATE OF 0.025 TO 0.040 GAL/SY, AND 0.080 GAL/SY ON MILLED SURFACES OR AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE UNDER ITEM 900.683, "SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H)". IF ITEM 415.25 "EMULSIFIED ASPHALT,COLD MIX" IS SPECIFIED IN THE MIX DESIGN AS A CATIONIC EMULSION AND USED IN THE PRODUCTION OF ITEM 900.675 "SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT)" THEN CRS-1H SHALL BE USED FOR TACK BETWEEN SUCCESSIVE LAYERS OF COLD MIX BASE COURSE AND PRIOR TO PLACEMENT OF THE TYPE IVS LEVELING COURSE. AN APPLICATION RATE OF 0.040 TO 0.060 GAL/SY SHALL BE USED AS DIRECTED BY THE ENGINEER.

# TYPICAL SECTIONS




## RECLAIMED STABILIZED TYPICAL SECTION

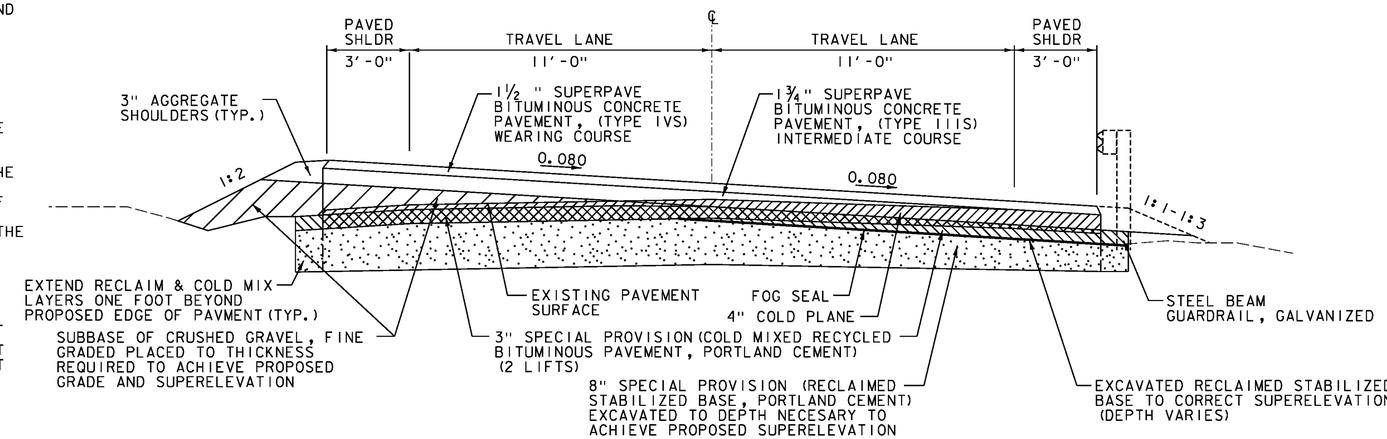
**NOT TO SCALE**

WARDSBORO

STA. A 1+75.00 - A 109+00.00
STA. A 135+50.00 - A 335+00.00
STA. A 365+00.00 - A 387+99.74

JAMAICA

STA. B 0+00.00 - B 8+75.00
STA B 11+29.00 - B 119+04.00
STA. B 121+97.00 - B 178+38.00




## RECLAIMED STABILIZED MAX BANK TYPICAL SECTION

**NOT TO SCALE**

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: d12b236_typ.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: C. LEACH |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| TYPICAL SECTIONS SHEET 1 | SHEET 9 OF 444 |

## GENERAL NOTES (CONT.)

17. ALL PAVED AND GRAVEL RESIDENTIAL AND COMMERCIAL DRIVES SHALL RECEIVE A PAVED APRON OF 4' AND ALL FIELD AND WOODS DRIVES SHALL RECEIVE A 2' PAVED APRON UNLESS OTHERWISE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER. ANY AND ALL REQUIRED EXCAVATION AND ASSOCIATED DRIVE GRADING IN DRIVE AREAS SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE NEW BITUMINOUS SURFACE SHALL BE CONSTRUCTED AS DIRECTED AND WILL BE PAID FOR UNDER ITEM 900.675 "SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)". ALL OTHER BITUMINOUS MATERIAL PLACED WITHIN THE PROJECT LIMITS WHETHER BY HAND OR MECHANICAL METHODS SHALL BE PAID AS ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT".

18. SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = +/- 1/4 INCH (TOTAL THICKNESS, EXCLUDING LEVELING). SUBBASE OF CRUSHED GRAVEL, FINE GRADED TOLERANCE = +/- 1 INCH (TOTAL SUBBASE THICKNESS).

19. EDGES OF PAVEMENT SHALL INCLUDE A SAFETY EDGE AS SHOWN WITHIN THE PROJECT DETAIL SHEETS.

20. A QUANTITY FOR ITEM 604.415 "REHAB DI, CB OR MH CLASS II" HAS BEEN INCLUDED IN THE QUANTITIES TO BE USED AS DIRECTED BY THE ENGINEER. ALL DI'S SHALL BE RAISED OR REHABILITATED SUCH THAT THE NEW GRATE ELEVATION IS LEVEL WITH THE SURROUNDING TERRAIN.

21. DAMAGE TO ANY DI'S, CROSS CULVERTS OR OTHER DRAINAGE FEATURES SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE ENGINEER AT NO ADDITIONAL COST TO THE STATE.

22. ITEM 613.10 "STONE FILL, TYPE I"; ITEM 651.40 "GRUBBING MATERIAL"; ITEM 649.31 "GEOTEXTILE UNDER STONE FILL" AND ITEM 608.25 "ALL PURPOSE EXCAVATOR RENTAL, TYPE I" HAVE BEEN INCLUDED FOR AREAS WITH PROPOSED SIDE SLOPES STEEPER THAN 1:1.5 AND TO PROVIDE FOR REPAIR OF EXISTING STONE LINED DRAINAGE OUTLETS OR WASHOUTS LOCATED ALONG THE ROADWAY SIDE SLOPES AS DIRECTED BY THE ENGINEER.

23. A QUANTITY HAS BEEN ESTIMATED FOR ITEM 617.10 "RELOCATE MAILBOX, SINGLE SUPPORT" AND ITEM 617.12 "RELOCATE MAILBOX, MULTIPLE SUPPORT", TO BE USED AS DETERMINED BY THE ENGINEER.

24. AN ESTIMATED QUANTITY FOR ITEM 619.17 "YIELDING MARKER POSTS" HAS BEEN INCLUDED TO DELINEATE PIPE INLETS, PIPE OUTLETS AND DROP INLETS LOCATED OUTSIDE THE PAVEMENT SURFACES OR AS DIRECTED BY THE ENGINEER. ESTIMATED QUANTITIES OF ITEMS 608.25, "ALL PURPOSE EXCAVATOR RENTAL, TYPE I", 608.37, "TRUCK RENTAL", AND 608.40, "LOADER RENTAL, TYPE I" HAVE BEEN INCLUDED FOR THE PROVISION OF CONSTRUCTING GUARDRAIL END SECTIONS WITH EXCAVATED DITCHING MATERIAL AND THE REMOVAL OF BUILT UP EXCESS SHOULDER MATERIAL IN NON-GUARDRAIL LOCATIONS. AN ESTIMATED QUANTITY OF ITEM 203.30, "EARTH BORROW" HAS BEEN INCLUDED FOR USE WITH THE GUARDRAIL END SECTIONS. 25 CY OF ITEM 203.30, "EARTH BORROW" HAS BEEN ESTIMATED FOR EACH NEW END SECTION. GUARDRAIL END SECTIONS SHALL BE CAPPED WITH AN ESTIMATED 3 INCH DEPTH OF ITEM 651.35, "TOPSOIL" UNLESS OTHERWISE DIRECTED BY THE ENGINEER. THE QUANTITIES INCLUDED REFLECT 5 CY OF ITEM 651.35, "TOPSOIL" FOR EACH NEW GUARDRAIL END SECTION. ITEM 653.20, "TEMPORARY EROSION MATTING" SHALL BE PLACED ON SLOPES GREATER THAN 1:6 CREATED BY THE GUARDRAIL END SECTIONS. THE QUANTITIES INCLUDED REFLECT 25 SY OF ITEM 653.20, "TEMPORARY EROSION MATTING" FOR EACH NEW GUARDRAIL END SECTION. PRIOR TO THE PLACEMENT OF TEMPORARY EROSION MATTING, THE AREA SHALL BE TOPSOILED AND SEEDED USING ITEM 651.35, "TOPSOIL" AND ITEM 651.15 "SEED".

25. STEEL BEAM GUARDRAIL WITH STEEL POSTS SHALL BE USED ON THIS PROJECT.

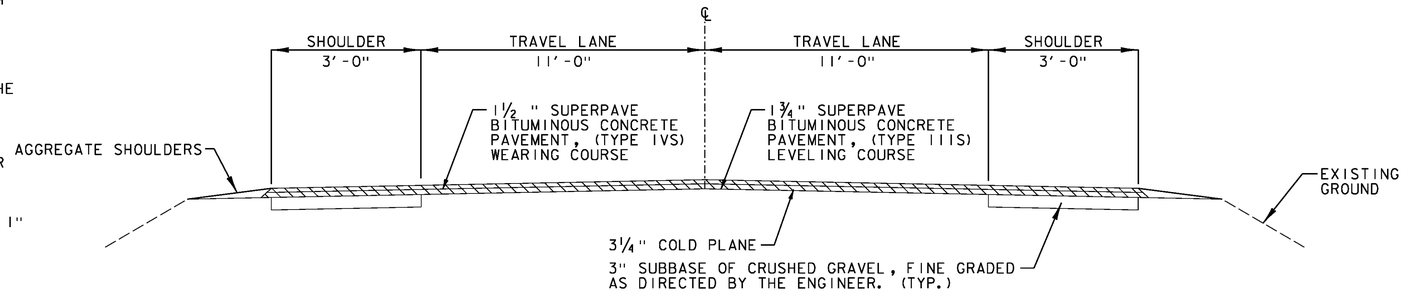
26. ADDITIONAL QUANTITIES FOR PAY ITEMS 649.51 "GEOTEXTILE FOR SILT FENCE", 651.15 "SEED", 651.18 "FERTILIZER", 651.20 "AGRICULTURAL LIMESTONE", 653.20 "TEMPORARY EROSION MATTING" AND 651.25 "HAY MULCH" HAVE BEEN INCLUDED FOR STONE FILL SLOPE STABILIZATION AREAS TO BE PLACED ON GRUBBING MATERIAL.

27. ITEM 653.20 "TEMPORARY EROSION MATTING" HAS BEEN INCLUDED FOR AREAS WITH PROPOSED SLOPES BETWEEN 1:2 AND 1:1.5 AS DIRECTED BY THE ENGINEER.

28. ITEM 653.50 "BARRIER FENCE" SHALL BE USED IN AREAS OF EXISTING WETLANDS. ITEM 653.60 "EROSION LOG" SHALL BE USED AT THE DISCRETION OF THE ENGINEER AND SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.

29. WHEN FINISHED GRADE HAS BEEN MET, THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL SIGNS BEING RETAINED ARE IN CONFORMANCE WITH VTRANS STANDARD E-121 AS DIRECTED BY THE ENGINEER.

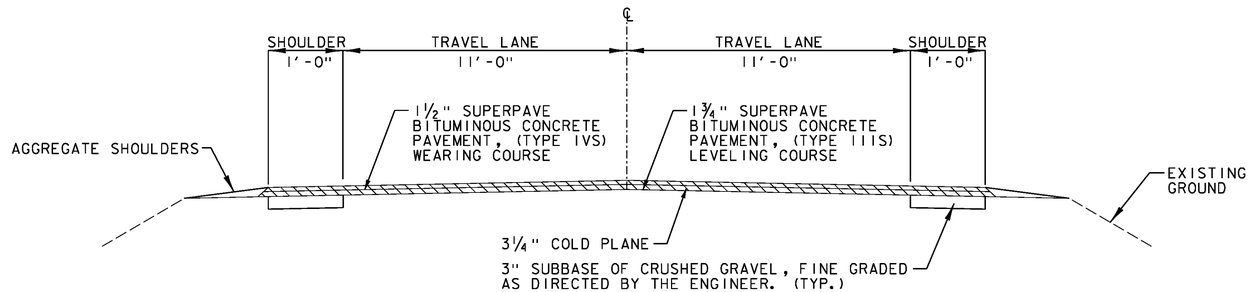
# TYPICAL SECTIONS




## COLD PLANE AND OVERLAY TYPICAL SECTION

**NOT TO SCALE**

WARDSBORO
STA. 109+00.00 - 133+75.00

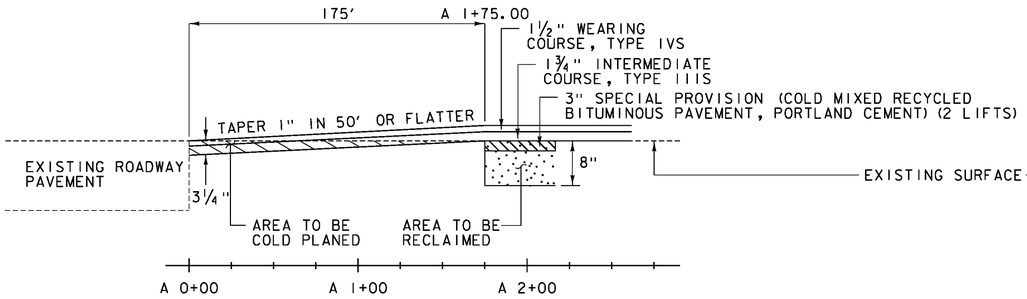



## COLD PLANE AND OVERLAY TYPICAL SECTION

**NOT TO SCALE**

WARDSBORO
STA. 335+00.00 - 363+25.00

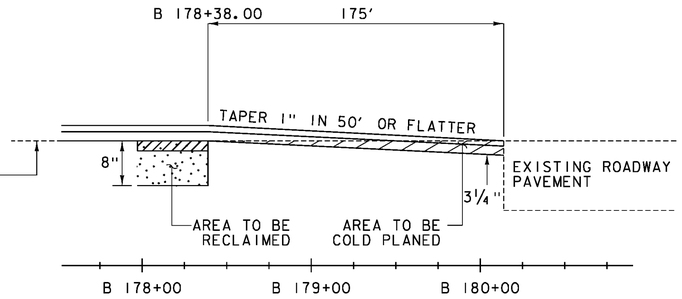
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_typ.dgn | PLOT DATE: 3/17/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: C. LEACH |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| TYPICAL SECTIONS SHEET 2 | SHEET 10 OF 444 |




## BEGIN APPROACH TRANSITION DETAIL

**NOT TO SCALE**

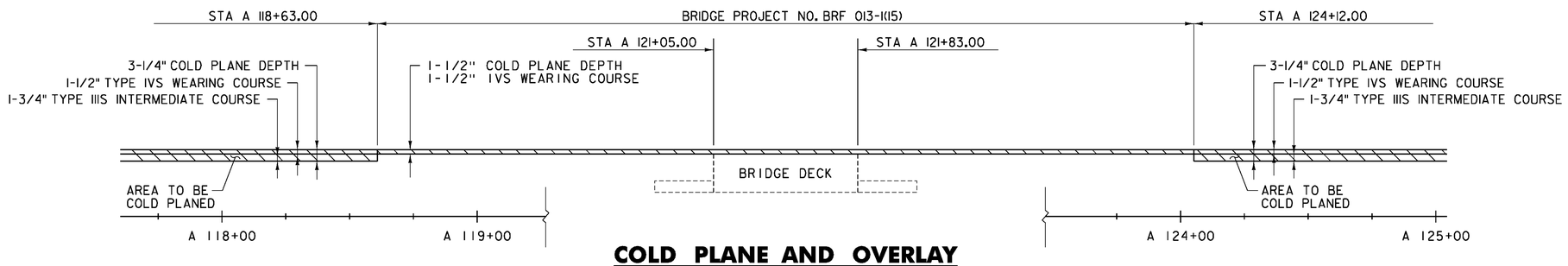
WARDSBORO




## END APPROACH TRANSITION DETAIL

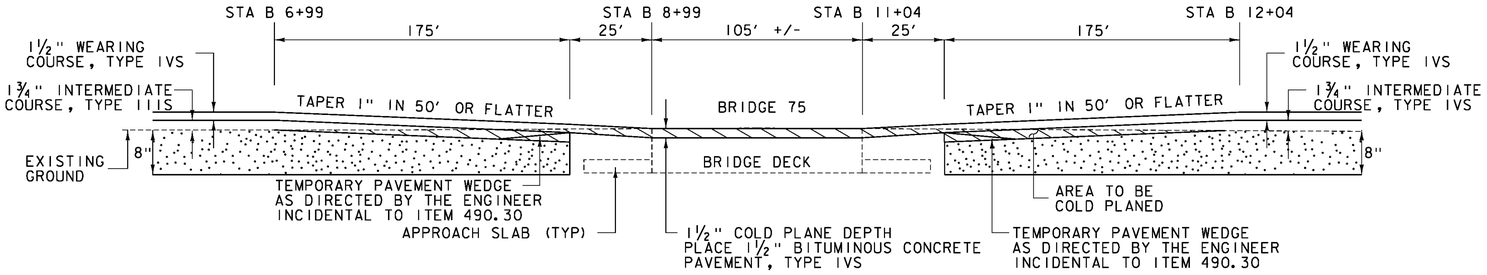
**NOT TO SCALE**

JAMAICA




## COLD PLANE AND OVERLAY END AND BEGIN AREA DETAIL

**NOT TO SCALE**

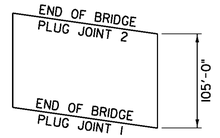



## JAMAICA – BRIDGE #75 TRANSITION DETAIL

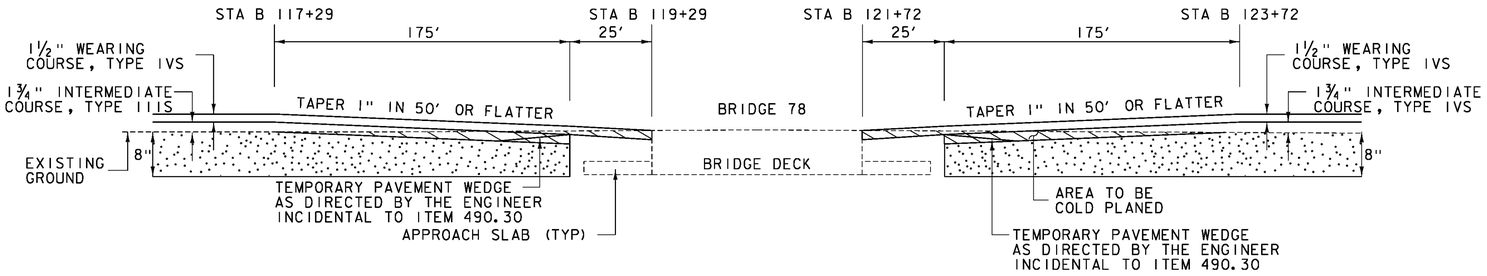
**NOT TO SCALE**

| JOINT | STATION | LENGTH |
|---|---|---|
| 1 | B 8+99 | 35' - 0" |
| 2 | B 11+04 | 35' - 0" |
| | BRIDGE #75 | 70' - 0" |

TOTAL LENGTH OF JOINT



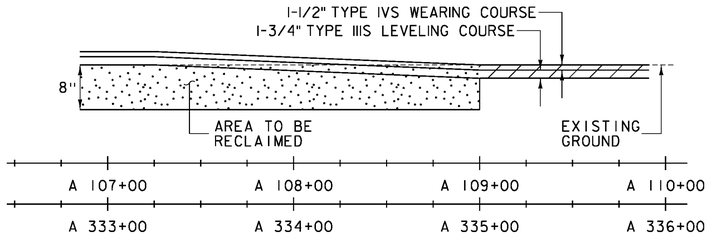

## JAMAICA BRIDGE #75 STA. B 10+02 (MM 0.19) COLD PLANE AND PAVE




## JAMAICA – BRIDGE #78 TRANSITION DETAIL

**NOT TO SCALE**

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| DETAIL SHEET 1 | SHEET 11 OF 444 |



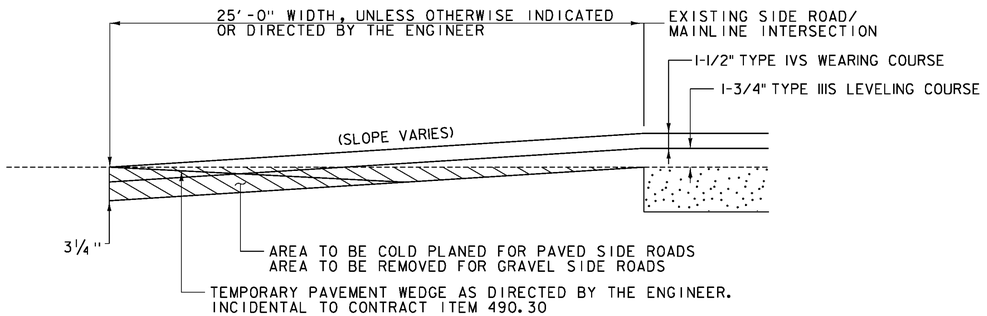

## RECLAIM TO COLD PLANE AND OVERLAY TRANSITION DETAIL

**NOT TO SCALE**

WARDSBORO

STA A 107+25.00 - STA A 109+00.00

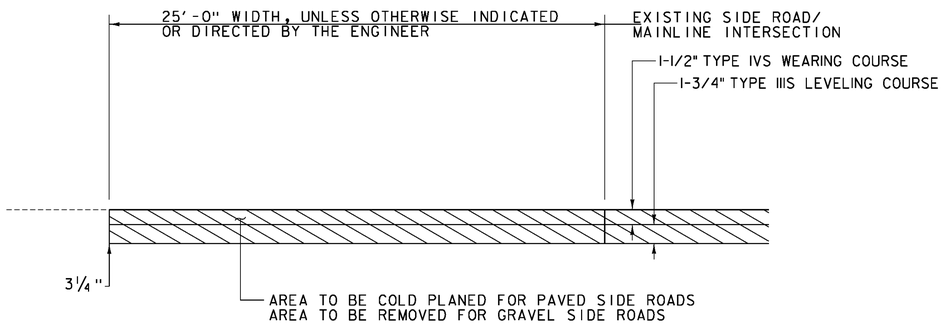
STA A 333+25.00 - STA A 335+00.00




## TOWN HIGHWAY TRANSITION DETAIL IN RECLAIM AREAS

**NOT TO SCALE**

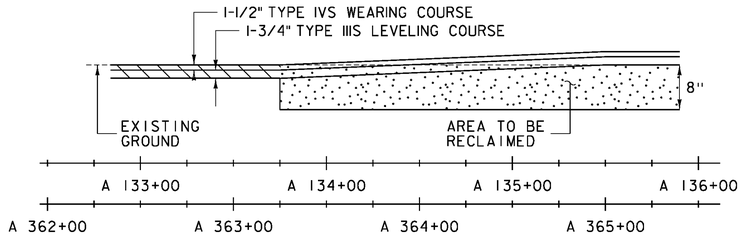
SEE LAYOUT SHEETS FOR LOCATIONS




## TOWN HIGHWAY TRANSITION DETAIL IN COLD PLANE AREAS

**NOT TO SCALE**

SEE LAYOUT SHEETS FOR LOCATIONS



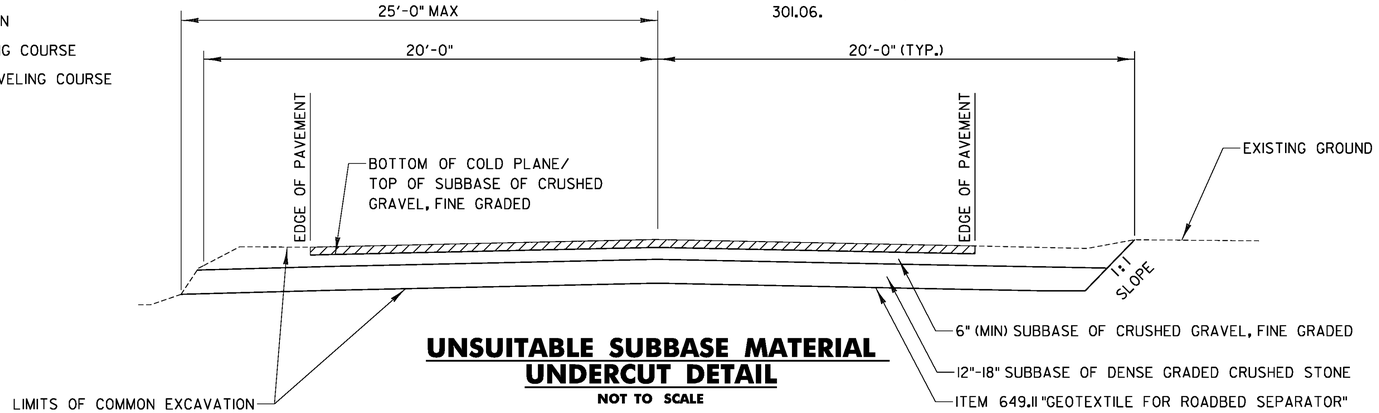

## COLD PLANE AND OVERLAY TO RECLAIM TRANSITION DETAIL

**NOT TO SCALE**

WARDSBORO

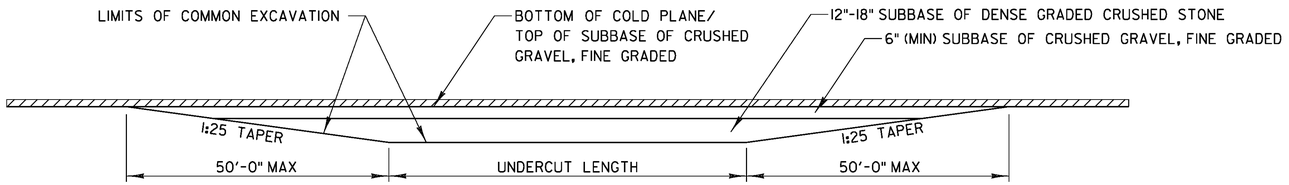
STA A 133+75.00 - STA A 135+50.00

STA A 363+25.00 - STA A 365+00.00




## UNSUITABLE SUBBASE MATERIAL UNDERCUT DETAIL

**NOT TO SCALE**

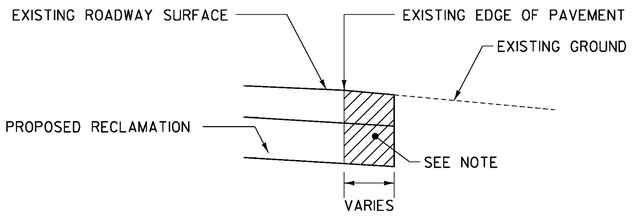



NOTES: 1. UNDERCUTS TO USED AT THE DISCRETION OF THE ENGINEER AND ALL UNDERCUT LENGTHS TO BE APPROVED BY THE VAOT PAVING ENGINEER.

2. ALL UNDERCUTS SHALL BE FULL WIDTH.

## UNSUITABLE SUBBASE MATERIAL TRANSITION DETAIL

**NOT TO SCALE**




## EXISTING SHOULDER RECONSTRUCTION DETAIL

**NOT TO SCALE**

NOTE: HATCHED AREA REPRESENTS EXISTING UNSUITABLE MATERIAL TO BE REMOVED AS DIRECTED BY THE ENGINEER (PAID AS ITEM 608.25 ALL PURPOSE EXCAVATOR RENTAL, TYPE I). REPLACE WITH ITEM 301.28 SUBBASE OF CRUSHED GRAVEL, FINE GRADED AND COMPACT AS SPECIFIED IN SUBSECTION 301.06.

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| DETAIL SHEET 2 | SHEET 12 OF 444 |

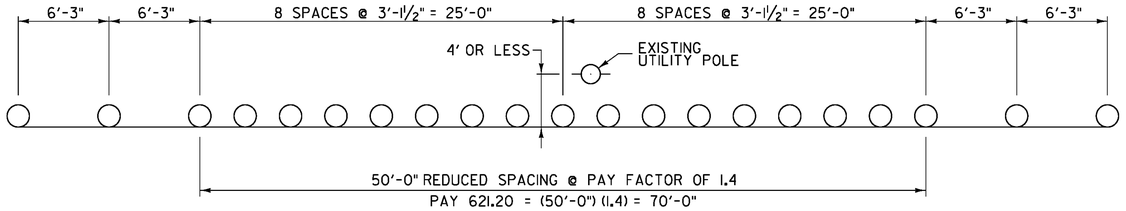
## RECOMMENDED ORDER OF OPERATIONS FOR RECLAIMED STABILIZED BASE WITH PORTLAND CEMENT PAVEMENT REHABILITATION

| STEP | DESCRIPTION | PAYMENT ITEM(S) |
|---|---|---|
| 1 | COLD PLANE EXISTING BITUMINOUS CONCRETE PAVEMENT TO INDICATED DEPTH | ITEM 210.10 "COLD PLANING, BITUMINOUS PAVEMENT" |
| 2 | LOCATE AREAS OF UNSUITABLE SUBBASE MATERIAL<br>REPAIR AREAS OF UNSUITABLE SUBBASE MATERIAL | ITEM 203.15 "COMMON EXCAVATION"<br>ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"<br>ITEM 301.35 "SUBBASE OF DENSE GRADED CRUSHED STONE"<br>ITEM 649.11 "GEOTEXTILE FOR ROADBED SEPARATOR" |
| 3 | REPAIR EXISTING SHOULDERS AS DIRECTED BY THE ENGINEER | ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED" |
| 4 | RECLAIM EXISTING ROADBED 8" FROM TOP OF SLOPE TO TOP OF SLOPE USING WATER FOR STABILIZATION AND COMPACTION | ITEM 310.20 "RECLAIMED STABILIZED BASE" |
| 5 | CORRECT SUPERELEVATION DEFICIENCIES | ITEM 301.28 "SUBBASE OF CRUSHED GRAVEL, FINE GRADED"<br>SEE TYPICAL SECTIONS |
| 6 | PERFORM SECOND RECLAIM PASS AS DIRECTED BY THE ENGINEER | ITEM 310.20 "RECLAIMED STABILIZED BASE" |
| 7 | PLACE PORTLAND CEMENT ON ROADBED SURFACE AND RECLAIM ROADBED 8", CURE, MICROCRACK, AND APPLY FOG SEAL SURFACE TREATMENT | ITEM 900.675 "SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT)"<br>ITEM 900.680 "SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION)"<br>ITEM 900.683 "SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT)" |
| 8 | PLACE 3" COLD MIX IN (2) 1-1/2" LIFTS | ITEM 415.25 "EMULSIFIED ASPHALT, COLD MIX"<br>ITEM 900.675 "SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT)"<br>ITEM 900.680 "SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING)" |
| 9 | PLACE 1-3/4" TYPE IIIS INTERMEDIATE COURSE | ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT"<br>ITEM 900.680 "SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H)" |
| 10 | PLACE 1 1/2" TYPE IVS WEARING COURSE | ITEM 490.30 "SUPERPAVE BITUMINOUS CONCRETE PAVEMENT" |

NOTES:

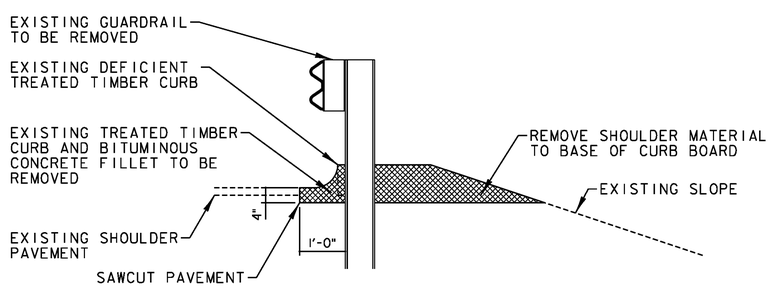
1. THIS LIST OF PROCEDURES FOR REHABILITATING THE EXISTING ROADBED IS PRESENTED FOR INFORMATIONAL PURPOSES ONLY AND SHALL NOT BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL PREPARE THEIR OWN SCHEDULE OF OPERATIONS TO COMPLETE THE PROPOSED WORK IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS WHILE UTILIZING THE APPROPRIATE PAY ITEMS AS SHOWN IN THE PLANS AS DIRECTED BY THE RESIDENT ENGINEER.

2. DEPTH OF SHOULDER PAVEMENTS ARE NOT CERTAIN FOR THE LENGTH OF THE PROJECT, AS THE BORINGS ARE TAKEN IN THE CENTER OF THE TRAVEL LANES.




## STEEL BEAM GUARDRAIL POST SPACING AT UTILITY POLE DETAIL

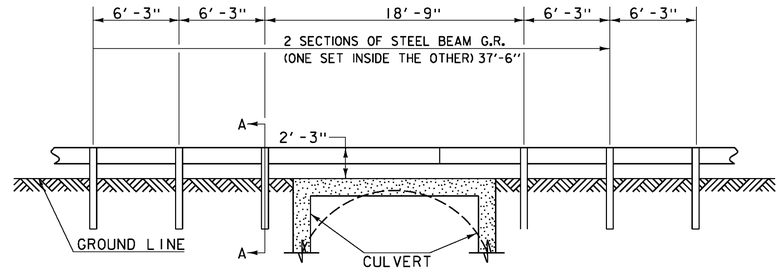
| WARDSBORO | JAMAICA |
|---|---|
| STA A 48+48 LT | STA B 16+81 LT |
| STA A 234+56 RT | STA B 75+67 LT |
| STA A 319+65 RT | |
| STA A 372+98 RT | |
| STA A 377+32 RT | |




## TREATED TIMBER CURB REMOVAL

NOT TO SCALE

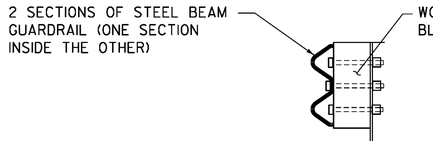
NOTE: THE REMOVAL OF TREATED TIMBER CURBING, INCLUDING THE BITUMINOUS CONCRETE FILLET, AND ANY SAWCUTTING, FROM INSTALLATIONS WHERE EXISTING GUARDRAIL IS REMOVED WILL NOT BE PAID FOR DIRECTLY, BUT WILL BE CONSIDERED INCIDENTAL TO REMOVAL AND DISPOSAL OF GUARDRAIL.



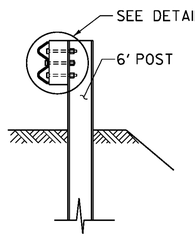

## DETAIL OF STEEL BEAM GUARDRAIL AT LARGE CULVERTS

NOT TO SCALE

| WARDSBORO | JAMAICA |
|---|---|
| STA A 47+38 RT&LT | STA 58+60 RT&LT |
| STA A 84+18 RT | STA 72+25 RT&LT |
| STA A 151+33 LT | STA 130+22 RT&LT |
| STA 175+44 RT&LT | |
| STA A 189+81LT | |
| STA A 221+99 RT&LT | |
| STA A 257+18 RT&LT | |
| STA A 284+33 RT&LT | |



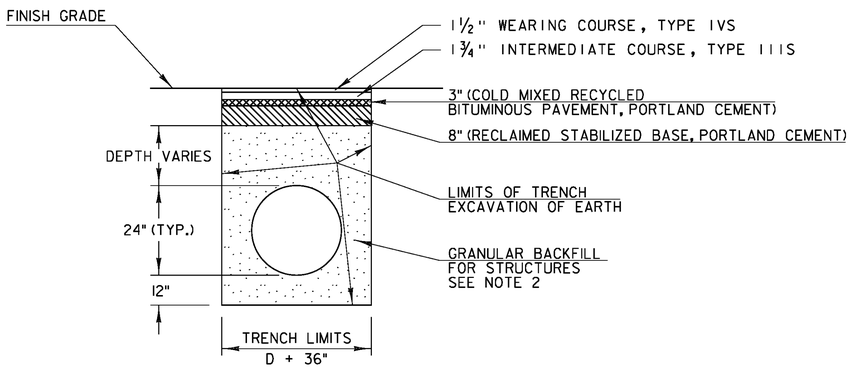

**DETAIL A**




**SECTION A-A**

NOTES:

1. SEE STANDARD G-1 FOR STEEL BEAM GUARDRAIL DETAILS.
2. THIS WORK SHALL BE PAID UNDER ITEM 621.205, STEEL BEAM GUARD RAIL, GALVANIZED W/8 FOOT POSTS.
3. THIS DETAIL TO BE USED AS INDICATED ON THE LAYOUT SHEETS OR AS DIRECTED BY THE ENGINEER.




## TYPICAL TRENCH DETAIL

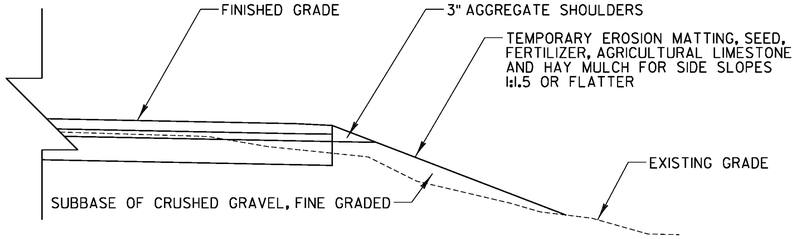
**NOT TO SCALE**

| WARDSBORO | JAMAICA |
|---|---|
| A 300+81 | B 39+26 |
| A 303+96 | B 40+60 |
| A 312+85 | B 42+93 |

NOTES:

1. THE CONTRACTOR SHALL KEEP THE TRENCH ENTIRELY FREE OF WATER AT ALL TIMES UNTIL ALL WORK IS FINISHED & READY FOR BACKFILLING.
2. GRANULAR BACKFILL FOR STRUCTURES OR APPROVED MATERIAL COMPACTED IN 6" LIFTS.

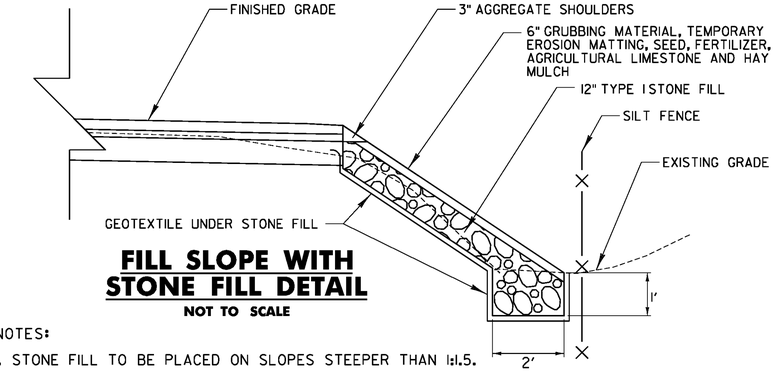
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| DETAIL SHEET 3 | SHEET 13 OF 444 |




## FILL SLOPE DETAIL

**NOT TO SCALE**

(FOR SLOPES I:I.5 OR FLATTER)




## FILL SLOPE WITH STONE FILL DETAIL

**NOT TO SCALE**

NOTES:

1. STONE FILL TO BE PLACED ON SLOPES STEEPER THAN I:I.5.
2. ANY EXCAVATION REQUIRED TO INSTALL STONE SHALL BE PAID FOR UNDER ITEM 608.25 "ALL PURPOSE EXCAVATOR RENTAL, TYPE I".
3. GEOTEXTILE UNDER STONE FILL SHALL BE USED AS DIRECTED BY THE ENGINEER.

## SEEDING FORMULA

RATE: DOUBLE IF HYDROSEEDING

| % WT. | LBS./A. | NAME | PUR % | GERM % |
|---|---|---|---|---|
| 38 | 32 | CREEPING RED FESCUE | 98 | 90 |
| 29 | 24 | SPARTAN HARD FESCUE | 95 | 85 |
| 15 | 12 | AZAY SHEEP'S FESCUE | 95 | 87 |
| 15 | 12 | ANNUAL RYE GRASS | 95 | 90 |
| 3 | -- | INERTS | -- | -- |
| 100.0 | 80 LB/A | | | |

**GENERAL NOTES**

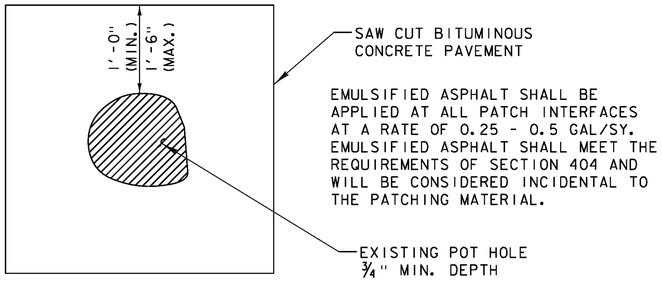
SEED MIXTURE: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.

SEED ITEM 651.15: TO BE APPLIED PER SEEDING FORMULAS OR AS DIRECTED BY THE ENGINEER.

FERTILIZER ITEM 651.18: FORMULA 10-20-10, TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE. (HYDRO SEEDERS MAY USE 19-19-19 FORMULA)

AGRICULTURAL LIMESTONE ITEM 651.20: TO BE APPLIED AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

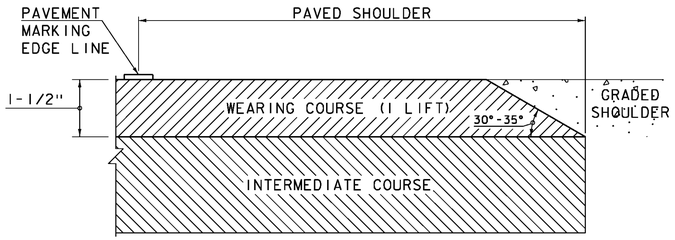
TOPSOIL ITEM 651.35: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTIED BY THE ENGINEER.




## POT HOLE REPAIR DETAIL

**NOT TO SCALE**

NOTE: SAW CUTTING BITUMINOUS CONCRETE PAVEMENT SHALL BE INCIDENTAL TO ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)

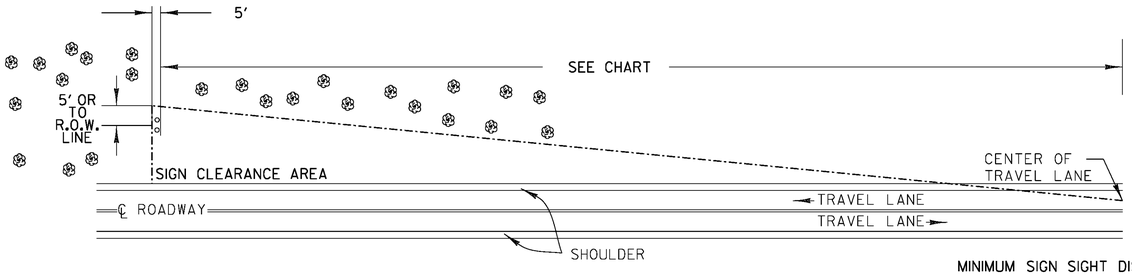



## SAFETY EDGE DETAIL

**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.




THE CONTRACTOR SHALL REMOVE ALL WOODY STEMMED GROWTH INCLUDING BRUSH, SAPLINGS AND TREE LIMBS GROWING WITHIN OR PROJECTING INTO THE CLEARANCE AREA AND DOWN TO GROUND LEVEL OR AT LEAST 10 FT BELOW THE BOTTOM OF THE SIGN. PAYMENT WILL BE UNDER ITEM 201.10 CLEARING AND GRUBBING, INCLUDING INDIVDUAL TREES AND STUMPS. NO CHEMICALS (POISONS OR DEFOLIANTS) ALLOWED.

## THINNING AND TRIMMING FOR SIGNS DETAIL

MINIMUM SIGN SIGHT DISTANCE CHART

| APPROACH SPEED (mph) | SIGHT DISTANCE (feet) |
|---|---|
| 30 OR LESS | 300 |
| 35 | 350 |
| 40 | 400 |
| 45 | 450 |
| 50 | 500 |
| 55 | 550 |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_det.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
DETAIL SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 14 OF 444

## GPS CONTROL POINTS

### HVCTRL #1

H CLARK

NORTH = 193128.822
EAST = 1544611.500
ELEV. = 1478.230

GENERAL LOCATION, WARDSBORO, VT., IN THE VILLAGE OF WEST WARDSBORO. OWNERSHIP, HAROLD CLARK, POST OFFICE BOX 482, SOUTHINGTON, CT 06489. TO REACH FROM THE INTERSECTION OF VT ROUTE 100 SOUTH AND VT ROUTE 30 IN EAST JAMAICA GO SOUTH ALONG VT ROUTE 100 FOR 8.9 MI (14.3 KM) TO THE INTERSECTION OF THE STRATTON-ARLINGTON ROAD RIGHT, IN WEST WARDSBORO. TURN RIGHT AND GO NORTHWEST ALONG THE STRATTON-ARLINGTON ROAD FOR 0.3 MI (0.5 KM) TO THE SITE OF THE MARK ON THE RIGHT. THE MARK IS SET 4 CM (2 INCHES) BELOW GROUND SURFACE IN THE TOP OF A 30 CM (12 INCHES) DIAMETER CONCRETE MONUMENT. IT IS 10.4 M (34.1FT) NORTHEAST OF AND ABOUT 0.5 M (1.6 FT) LOWER THAN THE CENTERLINE OF STRATTON-ARLINGTON ROAD, 11.5 M (37.7 FT) WEST OF THE WEST CORNER OF HOUSE NO 284, 16.6 M (54.5 FT) WEST-SOUTHWEST OF THE NORTH CORNER OF THE HOUSE, 24.8 M (81.4 FT) EAST-NORTHEAST OF AND ACROSS THE ROAD FROM POLE NO 7/251/137, 3.2 M (10.5 FT) SOUTHEAST OF THE CENTERLINE OF A HEDGE, AND 13.7 M (44.9 FT) NORTHWEST OF A 15 CM (6 INCHES) MAPLE.

### HVCTRL #2

SPENGLER

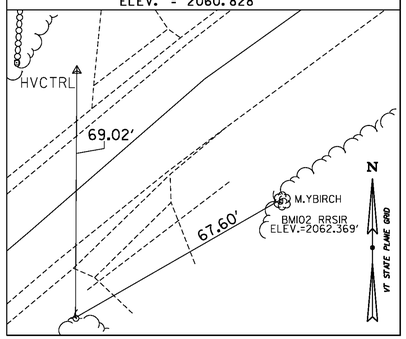
NORTH = 192833.352
EAST = 1545545.992
ELEV. = 1479.253

GENERAL LOCATION, WARDSBORO, VT., IN THE VILLAGE OF WEST WARDSBORO. OWNERSHIP, CATHY KOELSCH, 137 STRATTON-ARLINGTON ROAD, WEST WARDSDBORO, VT 05360. TO REACH FROM THE INTERSECTION OF VT ROUTE 100 SOUTH AND VT ROUTE 30 IN EAST JAMAICA GO SOUTH ALONG VT ROUTE 100 FOR 8.9 MI (14.3 KM) TO THE INTERSECTION OF THE STRATTON-ARLINGTON ROAD RIGHT, IN WEST WARDSBORO. TURN RIGHT AND GO NORTHWEST ALONG THE STRATTON-ARLINGTON ROAD FOR 0.1 MI (0.2 KM) TO THE SITE OF THE MARK ON THE LEFT IN A FIELD. IT IS ABOUT 45 M (147.6 FT) SOUTHEAST ALONG THE STRATTON-ARLINGTON ROAD FROM ITS INTERSECTION WITH CROSS ROAD RIGHT. THE MARK IS SET IN THE TOP OF A 0.7 M (2.3 FT) X 0.7 M (2.3 FT) ROCK OUTCROP WHICH PROJECTS ABOUT 0.2 M (0.7 FT) ABOVE GROUND SURFACE. IT IS 23.5 M (77.1FT) SOUTHWEST OF AND ABOUT 2.2 M (7.2 FT) HIGHER THAN THE CENTERLINE OF STRATTON ARLINGTON ROAD, 53.5 M (175.5 FT) EAST OF THE EAST CORNER OF HOUSE NO 137, 46.4 M (152.2 FT) NORTH NORTHWEST OF A 30 CM (12 INCHES) FIR, AND 28.6 M (93.8 FT) SOUTH OF A SCHOOL BUS STOP AHEAD SIGN.

## TRAVERSE TIES

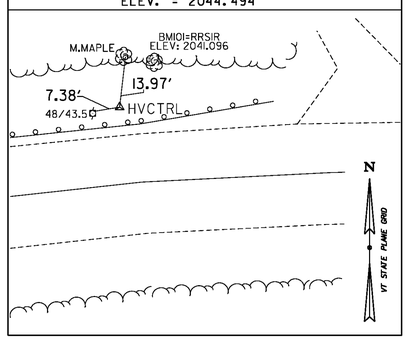
### HVCTRL #102

NORTH = 185488.209
EAST = 1539227.043
ELEV. = 2060.828



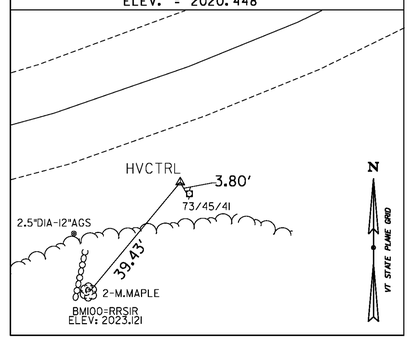

### HVCTRL #101

NORTH = 185709.427
EAST = 1539770.218
ELEV. = 2044.494




### HVCTRL #100

NORTH = 185701.597
EAST = 1540388.538
ELEV. = 2020.448



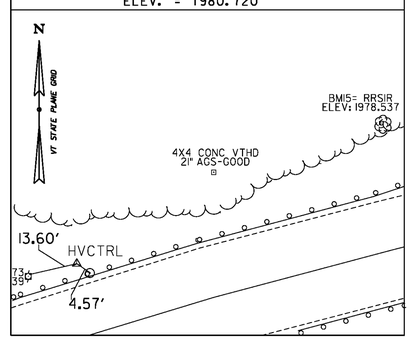

### HVCTRL #16

NORTH = 185902.558
EAST = 1540611.066
ELEV. = 2008.690

NOT TIED

### HVCTRL #15

NORTH = 186326.776
EAST = 1541303.499
ELEV. = 1980.720




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 15 OF 444

## GPS CONTROL POINTS

### HVCTRL #3

REBAR W CAP

NORTH = 192683.283
EAST = 1546159.991
ELEV. = 1462.187

### HVCTRL #37

BILL TEMP 1

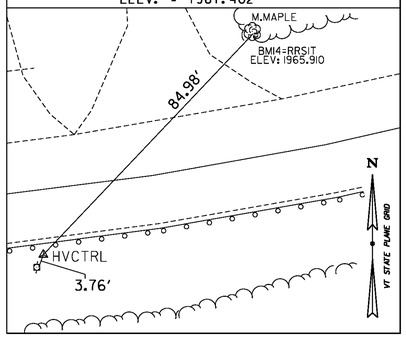
NORTH = 195089.425
EAST = 1557502.028
ELEV. = 1109.215

REBAR WITH ALUMINIUM CAP

## TRAVERSE TIES

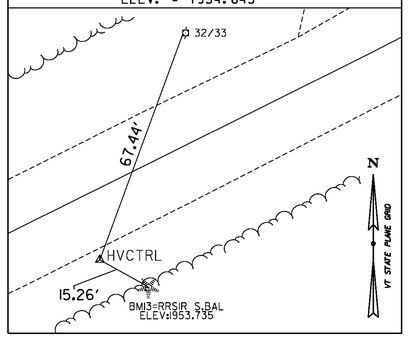
### HVCTRL #14

NORTH = 186343.838
EAST = 1542247.517
ELEV. = 1967.402



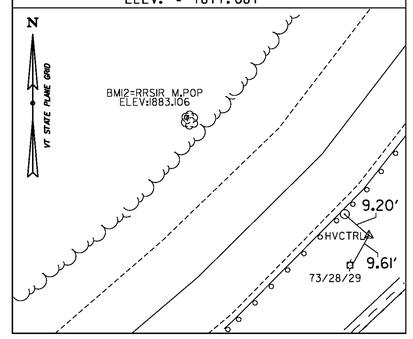

### HVCTRL #13

NORTH = 186503.506
EAST = 1542717.878
ELEV. = 1954.645



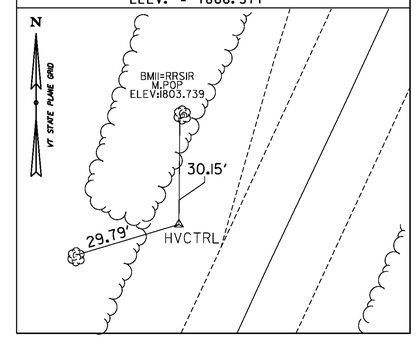

### HVCTRL #12

NORTH = 186929.966
EAST = 1543495.975
ELEV. = 1877.081



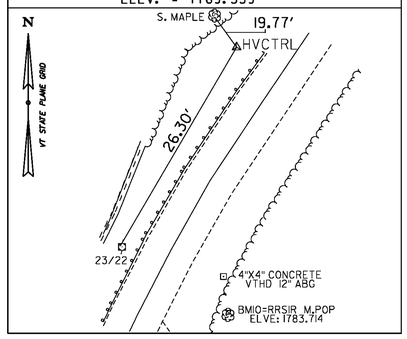

### HVCTRL #11

NORTH = 187044.113
EAST = 1543578.221
ELEV. = 1866.577




### HVCTRL #10

NORTH = 188845.684
EAST = 1544170.155
ELEV. = 1769.559




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| NORTH = | NORTH = | NORTH = | NORTH = | NORTH = |
| EAST = | EAST = | EAST = | EAST = | EAST = |
| ELEV. = | ELEV. = | ELEV. = | ELEV. = | ELEV. = |

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (2007)
ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236T1.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 16 OF 444

## GPS CONTROL POINTS

### HVCTRL #97

BILL TEMP 2

NORTH = 195647.681
EAST = 1556734.527
ELEV. = 1224.417

REBAR WITH ALUMINIUM CAP

### HVCTRL #401

T 127

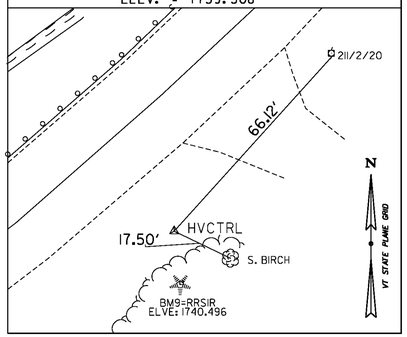
NORTH = 209820.851
EAST = 1578913.605
ELEV. = 571.838

GENERAL LOCATION, JAMAICA, VT.
TO REACH FROM THE MOST SOUTHERLY INTERSECTION OF VT ROUTES 100 AND 30 IN EAST JAMAICA GO WEST ALONG VT ROUTE 100 AND 30 FOR ABOUT 65 M (213.3 FT) TO THE INTERSECTION OF A GRAVEL ROAD RIGHT AND THE MARK ON THE RIGHT IN THE SOUTHWEST CORNER OF THE STEPHEN BALLANTINE MEMORIAL ATHLETIC FIELD COMPLEX.
THE MARK IS SET FLUSH WITH GROUND SURFACE IN THE TOP OF A CAST ALUMINUM MONUMENT. IT IS 10.7 M (35.1 FT) NORTH OF AND ABOUT 2 M (6.6 FT) LOWER THAN THE NORTH EDGE OF PAVEMENT OF VT ROUTE 100 AND 30, 9.5 M (31.2 FT) EAST OF THE CENTERLINE OF THE GRAVEL ROAD, 18.2 M (59.7 FT) NORTHWEST OF POLE NO. 599/5/505, AND 0.1 SOUTH OF A FIBERGLASS WITNESS POST.

## TRAVERSE TIES

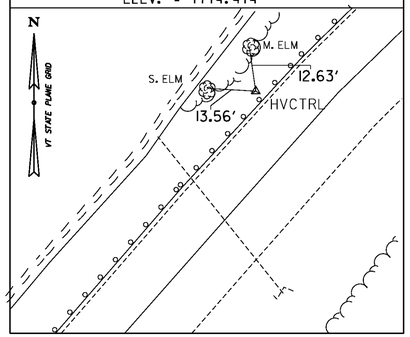
### HVCTRL #9

NORTH = 189100.0129
EAST = 1544569.971
ELEV. = 1739.508



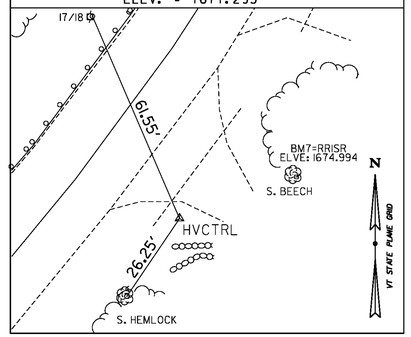

### HVCTRL #8

NORTH = 189435.187
EAST = 1544808.241
ELEV. = 1714.414



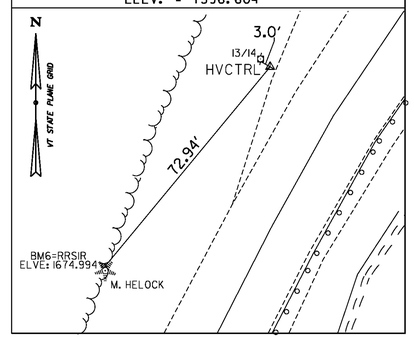

### HVCTRL #7

NORTH = 189805.319
EAST = 1545419.518
ELEV. = 1671.293



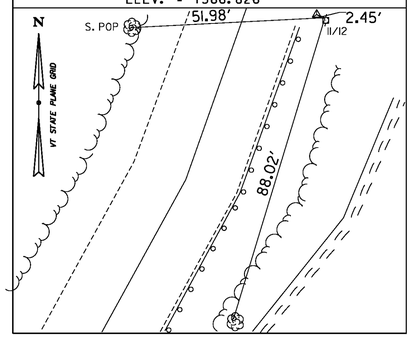

### HVCTRL #6

NORTH = 190661.176
EAST = 1545731.548
ELEV. = 1596.604




### HVCTRL #5

NORTH = 191054.041
EAST = 1546054.301
ELEV. = 1566.826




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (2007)
ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 3

PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 17 OF 444

## GPS CONTROL POINTS

### HVCTRL #402

T 127 AZ MK

NORTH = 209918.831
EAST = 1577683.039
ELEV. = 553.597

GENERAL LOCATION, JAMAICA, VT.
TO REACH FROM THE MOST SOUTHERLY INTERSECTION OF VT ROUTES 100 AND 30 N EAST JAMAICA GO EAST ALONG VT ROUTE 30 FOR 0.2 MI (0.3 KM) TO THE MARK ON THE RIGHT OPPOSITE A LEDGE CUT. THE MARK IS SET IN THE TOP OF A FENO TYPE MONUMENT FLUSH WITH GROUND SURFACE. IT IS 1.9 M (6.2 FT) SOUTH OF AND ABOUT LEVEL WITH THE SOUTH EDGE OF PAVEMENT OF VT ROUTE 30, 5.0 M (16.4 FT) WEST NORTHWEST OF POLE NO.594/514, 21.0 M (68.9 FT) NORTHWEST OF A 60 CM PINE, AND 0.3 NORTH OF A FIBERGLASS WITNESS POST.

### HVCTRL #414

W BROOK

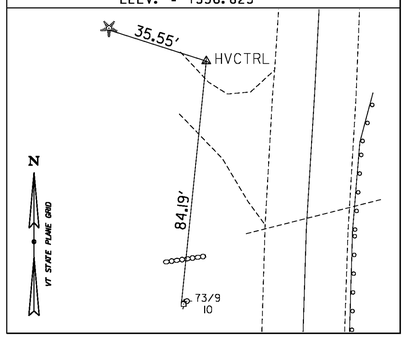
NORTH = 205589.173
EAST = 1570478.825
ELEV. = 726.710

REBAR WITH ALUMINIUM CAP.
SEE TRAVERSE TIE BOX BELOW FOR DETAILS.

## TRAVERSE TIES

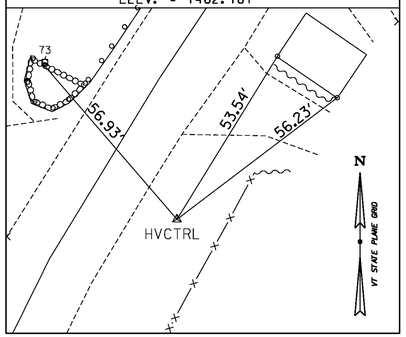
### HVCTRL #4

NORTH = 191558.748
EAST = 1545979.536
ELEV. = 1536.823




### HVCTRL #3

NORTH = 192683.283
EAST = 1546159.991
ELEV. = 1462.187

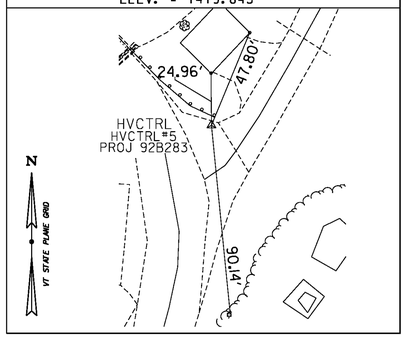



### HVCTRL #17

NOT TIED

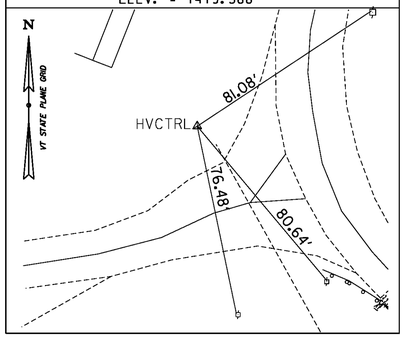
### HVCTRL #5 PROJ 92B283

NORTH = 193410.147
EAST = 1546528.397
ELEV. = 1419.845




### HVCTRL #18

NORTH = 193545.931
EAST = 1546359.221
ELEV. = 1419.588




## ALIGNMENT TIES

| | NORTH = | EAST = | ELEV. = |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

DATUM

VERTICAL NAVD 88
HORIZONTAL NAD 83 (2007)
ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 18 OF 444

## GPS CONTROL POINTS

__HVCTRL__#428__

BRIDGE

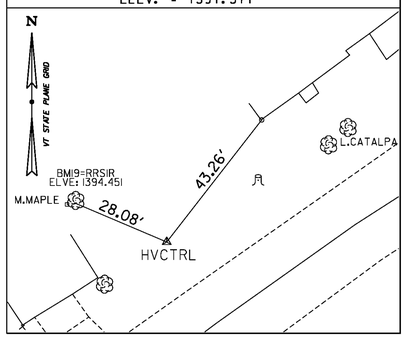
NORTH = 202295.934
EAST = 1564192.960
ELEV. = 927.723

REBAR WITH ALUMINIUM CAP

## TRAVERSE TIES

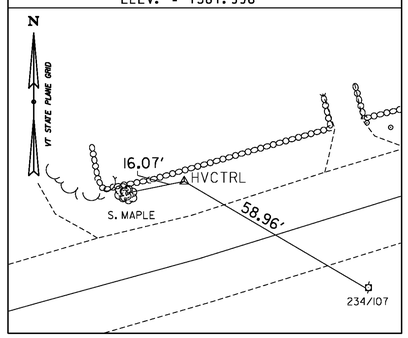
### HVCTRL #19

NORTH = 194151.119
EAST = 1546734.905
ELEV. = 1391.577



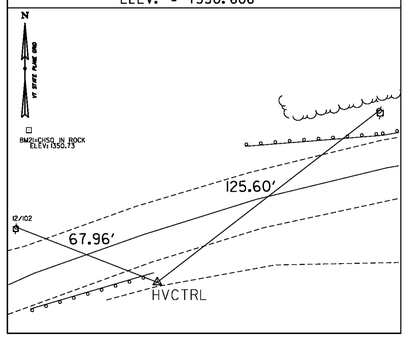

### HVCTRL #20

NORTH = 194402.430
EAST = 1547414.593
ELEV. = 1381.996



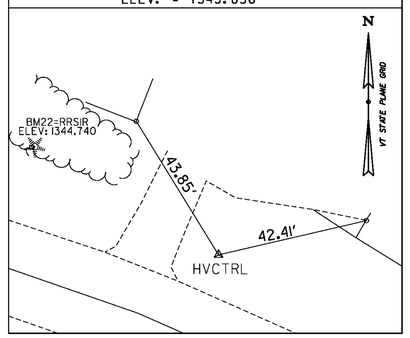

### HVCTRL #21

NORTH = 194722.0032
EAST = 1548478.798
ELEV. = 1350.606



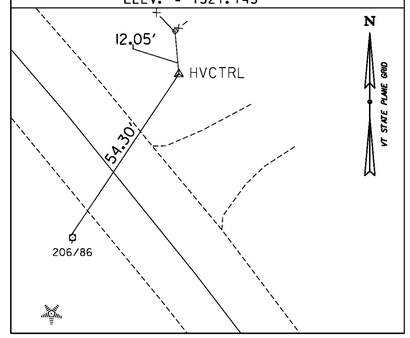

### HVCTRL #22

NORTH = 194754.634
EAST = 1548983.351
ELEV. = 1343.856




### HVCTRL #23

NORTH = 194217.140
EAST = 1549794.955
ELEV. = 1321.745




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 5

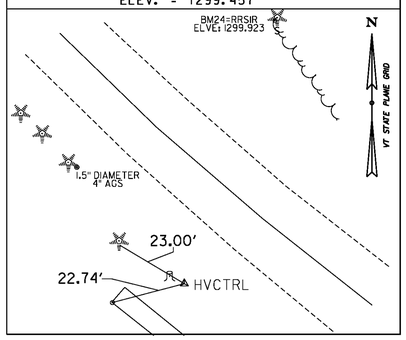
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 19 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

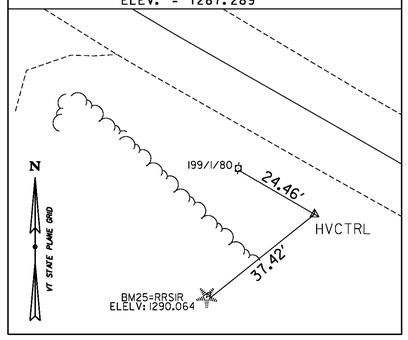
### HVCTRL #24

NORTH = 193458.176
EAST = 1550317.278
ELEV. = 1299.457



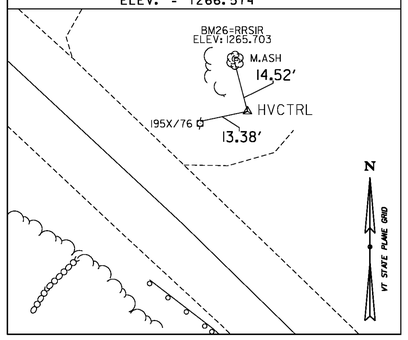

### HVCTRL #25

NORTH = 192995.961
EAST = 1551011.909
ELEV. = 1287.289



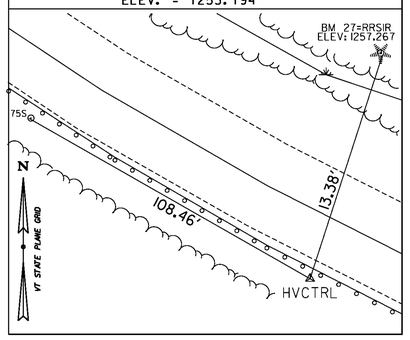

### HVCTRL #26

NORTH = 192493.735
EAST = 1551932.865
ELEV. = 1266.574



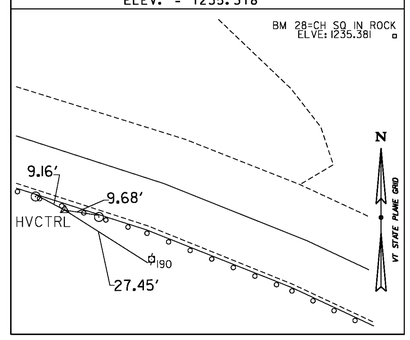

### HVCTRL #27

NORTH = 192121.954
EAST = 1552302.910
ELEV. = 1253.194




### HVCTRL #28

NORTH = 191982.949
EAST = 1553335.542
ELEV. = 1235.318




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 6

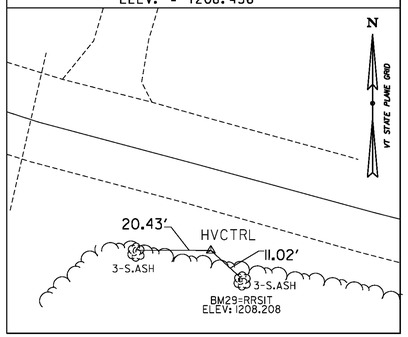
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 20 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

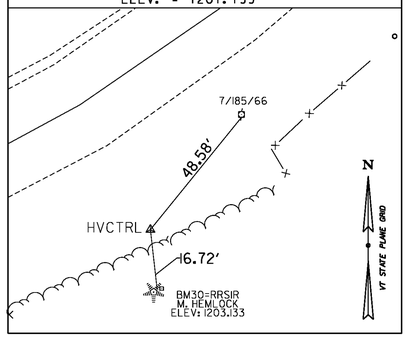
### HVCTRL #29

NORTH = 191536.511
EAST = 1554165.325
ELEV. = 1208.436



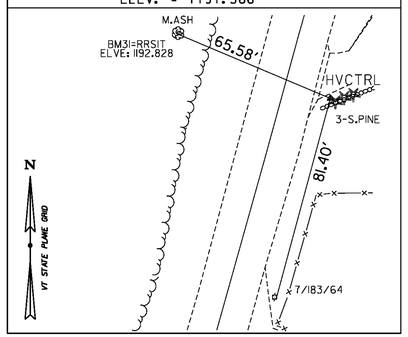

### HVCTRL #30

NORTH = 191526.186
EAST = 1554602.571
ELEV. = 1201.199



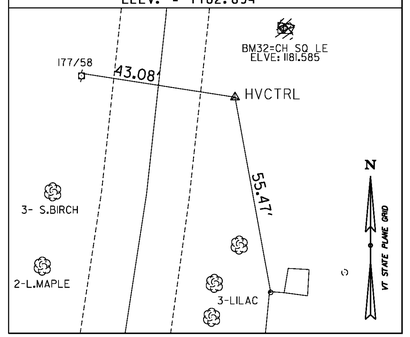

### HVCTRL #31

NORTH = 191986.794
EAST = 1554836.791
ELEV. = 1191.366



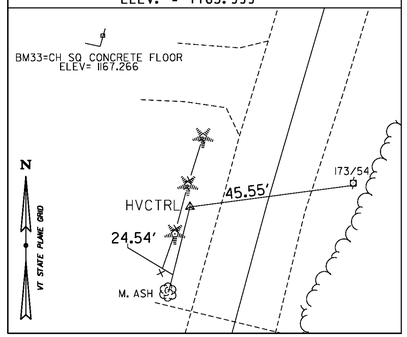

### HVCTRL #32

NORTH = 193083.321
EAST = 1555118.173
ELEV. = 1182.894




### HVCTRL #33

NORTH = 193789.928
EAST = 1555136.916
ELEV. = 1165.999




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236T1.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 7

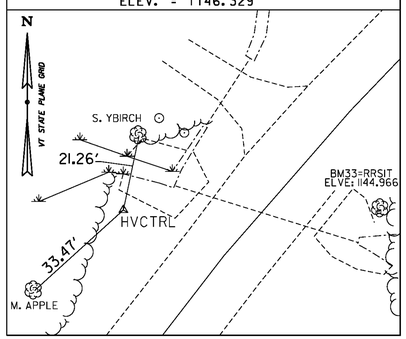
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 21 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

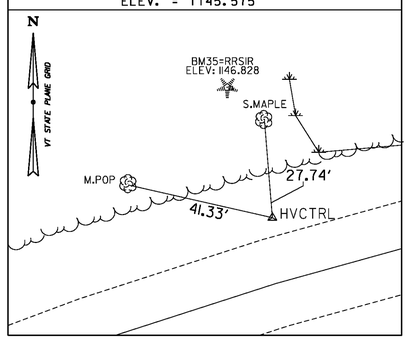
### HVCTRL #34

NORTH = 194643.065
EAST = 1555513.122
ELEV. = 1146.329



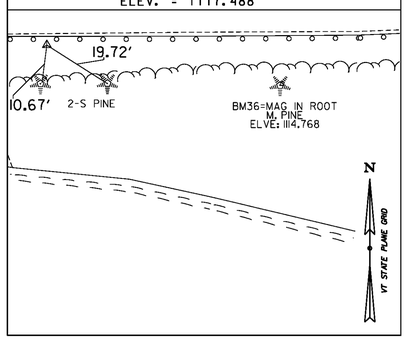

### HVCTRL #35

NORTH = 194984.924
EAST = 1556054.051
ELEV. = 1145.575



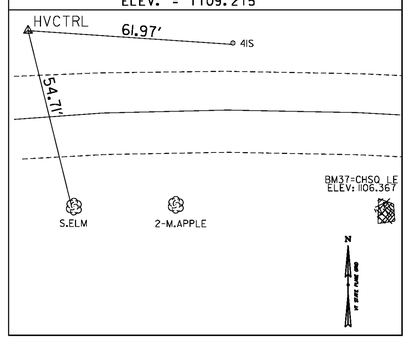

### HVCTRL #36

NORTH = 194988.088
EAST = 1556881.947
ELEV. = 1117.488



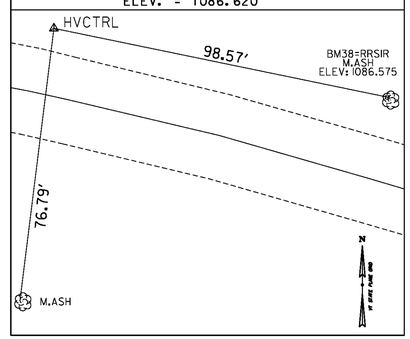

### HVCTRL #37

NORTH = 195089.425
EAST = 1557502.028
ELEV. = 1109.215




### HVCTRL #38

NORTH = 194959.643
EAST = 1558775.193
ELEV. = 1086.620




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 8

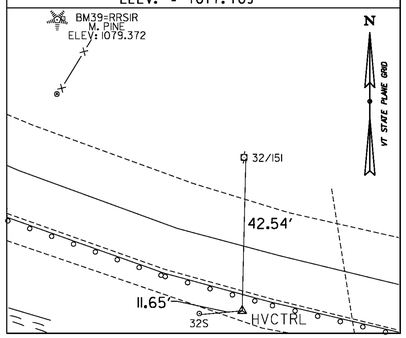
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 22 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

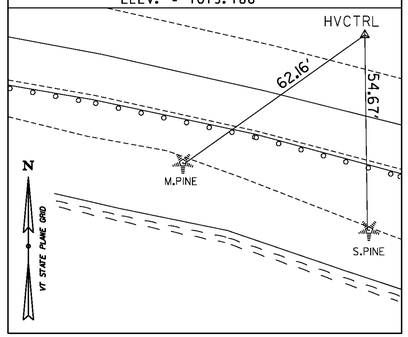
### HVCTRL #39

NORTH = 194678.465
EAST = 1559360.218
ELEV. = 1077.709



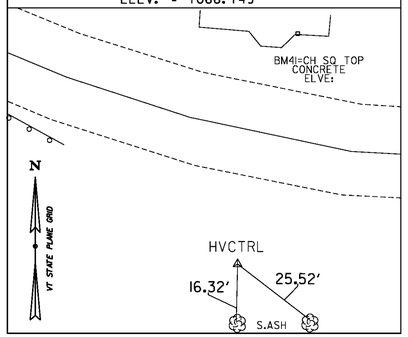

### HVCTRL #40

NORTH = 194659.332
EAST = 1560062.932
ELEV. = 1079.786



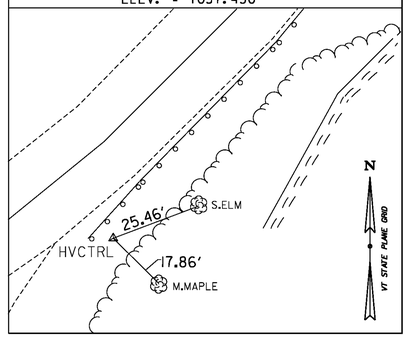

### HVCTRL #41

NORTH = 194416.413
EAST = 1560512.362
ELEV. = 1066.749



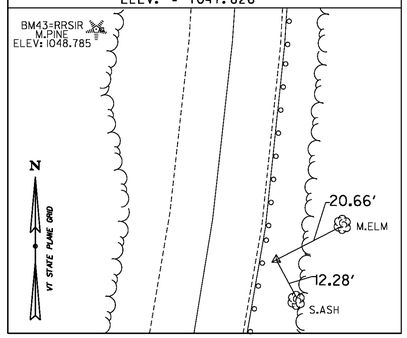

### HVCTRL #42

NORTH = 194513.513
EAST = 1560838.329
ELEV. = 1057.430




### HVCTRL #43

NORTH = 194964.701
EAST = 1561091.861
ELEV. = 1047.826




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 9

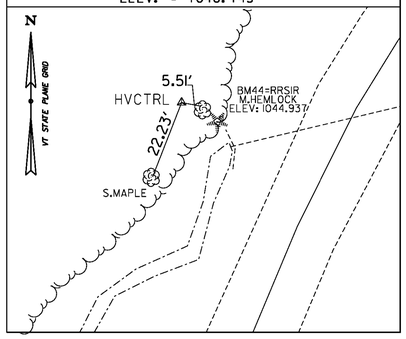
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 23 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

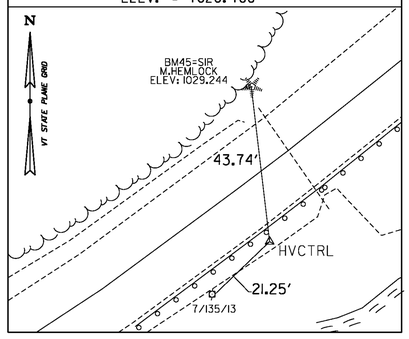
### HVCTRL #44

NORTH = 195491.036
EAST = 1561123.787
ELEV. = 1046.145



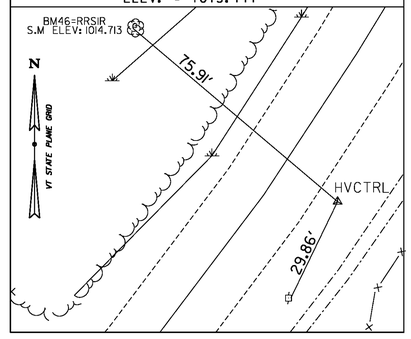

### HVCTRL #45

NORTH = 195911.108
EAST = 1561767.970
ELEV. = 1026.188



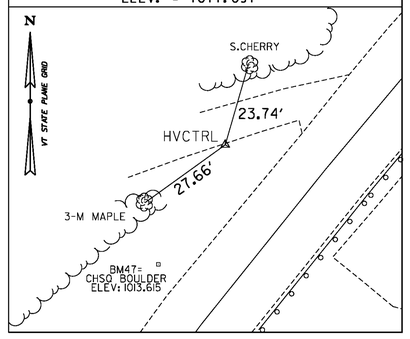

### HVCTRL #46

NORTH = 196422.306
EAST = 1562320.582
ELEV. = 1013.117



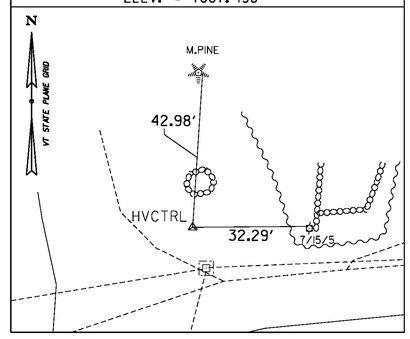

### HVCTRL #47

NORTH = 196869.791
EAST = 1562559.977
ELEV. = 1017.097




### HVCTRL #48

NORTH = 197227.513
EAST = 1562990.990
ELEV. = 1007.458




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 10

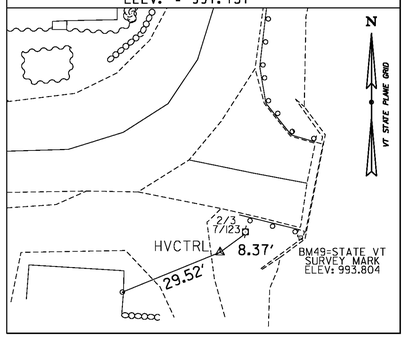
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 24 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

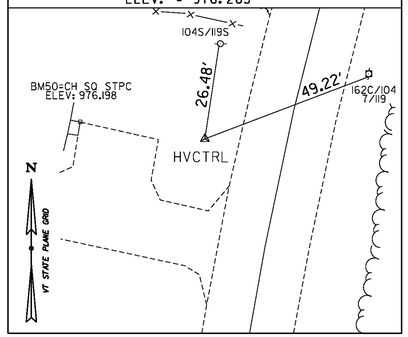
### HVCTRL #49

NORTH = 197174.224
EAST = 1563296.396
ELEV. = 991.157



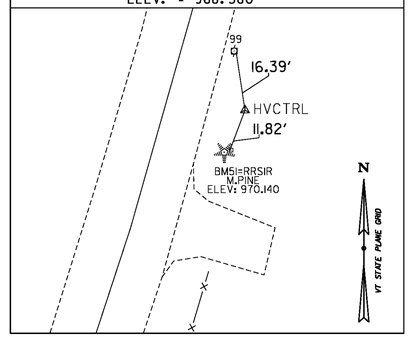

### HVCTRL #50

NORTH = 197852.239
EAST = 1563355.477
ELEV. = 976.263



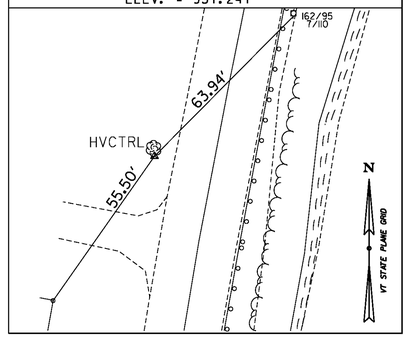

### HVCTRL #51

NORTH = 198620.218
EAST = 1563793.379
ELEV. = 968.580



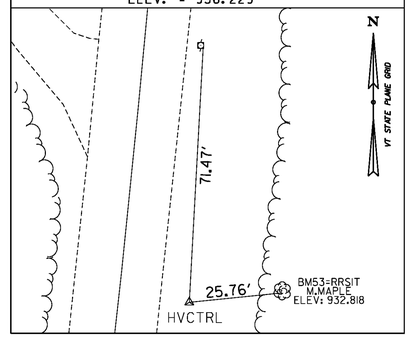

### HVCTRL #52

NORTH = 199653.495
EAST = 1563917.673
ELEV. = 951.241




### HVCTRL #53

NORTH = 200397.023
EAST = 1564094.792
ELEV. = 936.229




## ALIGNMENT TIES

| | | | |
|---|---|---|---|
| _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236T1.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 11

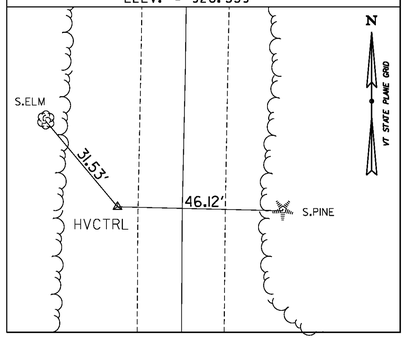
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 25 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

### HVCTRL #54

NORTH = 201407.300
EAST = 1564089.722
ELEV. = 926.539



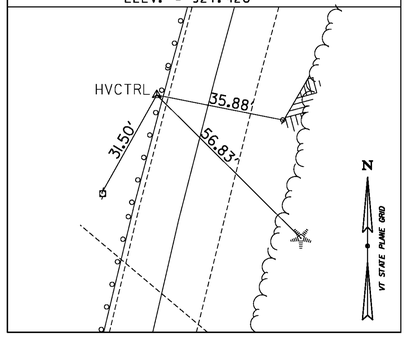

### HVCTRL #55

NORTH = 202295.934
EAST = 1564192.960
ELEV. = 927.723

NOT TIED

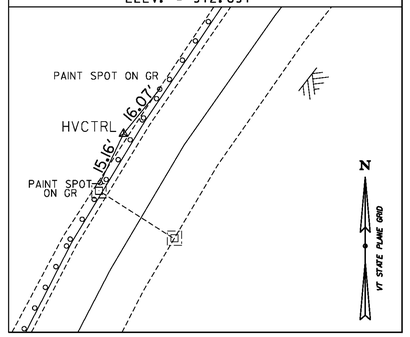
### HVCTRL #427

NORTH = 202697.497
EAST = 1564279.871
ELEV. = 921.426



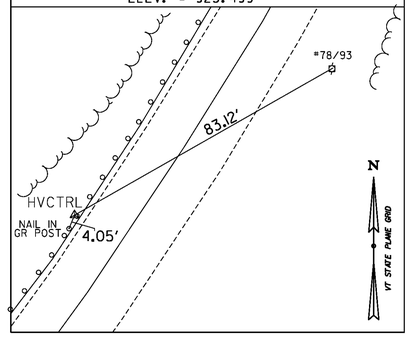

### HVCTRL #426

NORTH = 203029.583
EAST = 1564405.915
ELEV. = 912.691




### HVCTRL #425

NORTH = 203356.217
EAST = 1564669.157
ELEV. = 923.499




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 12

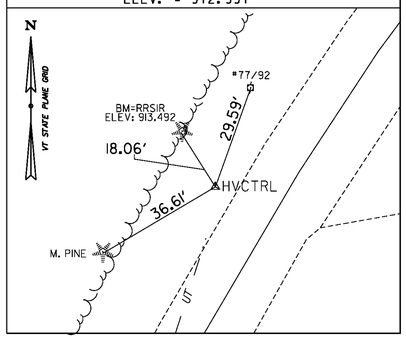
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 26 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

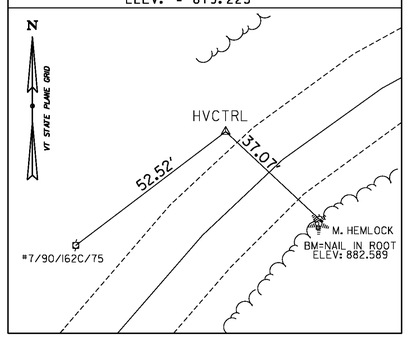
### HVCTRL #424

NORTH = 203600.785
EAST = 1564804.458
ELEV. = 912.991



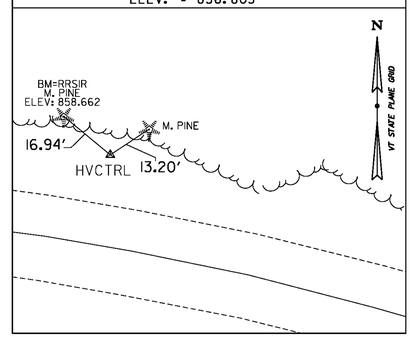

### HVCTRL #423

NORTH = 203979.084
EAST = 1565115.697
ELEV. = 879.223



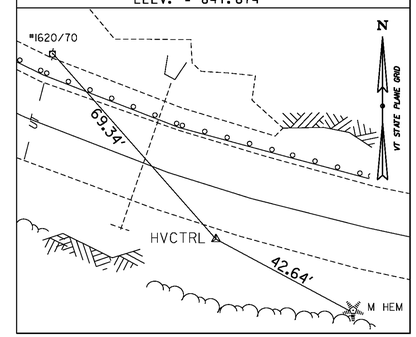

### HVCTRL #422

NORTH = 204045.143
EAST = 1565425.920
ELEV. = 856.805



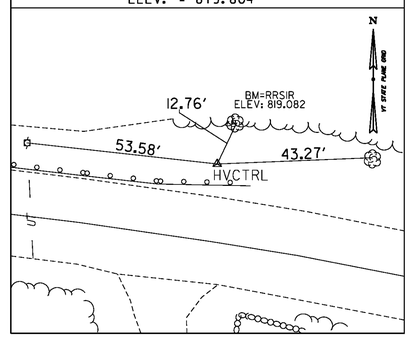

### HVCTRL #421

NORTH = 203693.415
EAST = 1566059.012
ELEV. = 841.674




### HVCTRL #420

NORTH = 203681.089
EAST = 1566980.601
ELEV. = 819.804




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA

PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 13

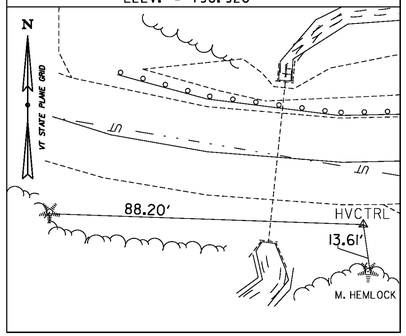
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 27 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

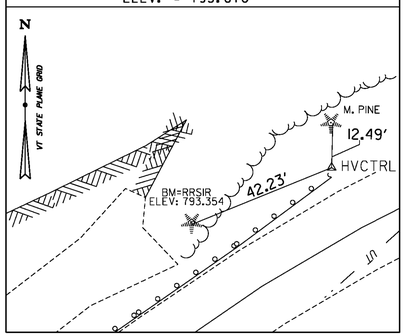
### HVCTRL #419

NORTH = 203316.572
EAST = 1567786.160
ELEV. = 796.920



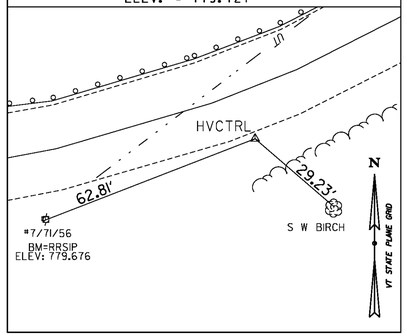

### HVCTRL #418

NORTH = 203512.893
EAST = 1568124.800
ELEV. = 793.870



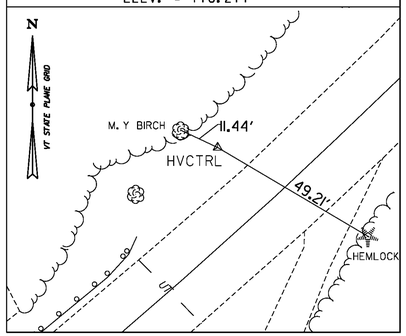

### HVCTRL #417

NORTH = 203645.118
EAST = 1568939.910
ELEV. = 779.727



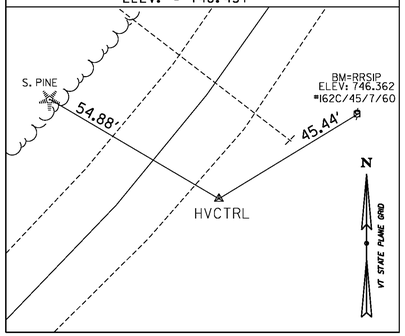

### HVCTRL #416

NORTH = 203980.541
EAST = 1569328.165
ELEV. = 776.271




### HVCTRL #415

NORTH = 204834.796
EAST = 1570204.861
ELEV. = 748.451




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 14

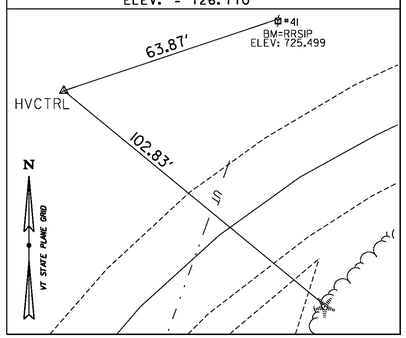
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 28 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

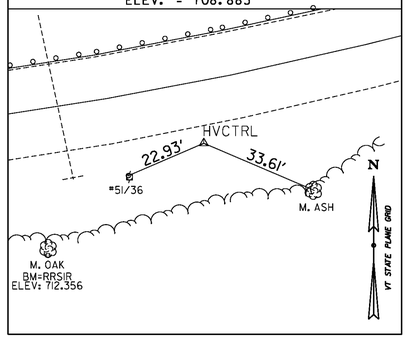
### HVCTRL #414

NORTH = 205589.173
EAST = 1570478.825
ELEV. = 726.710



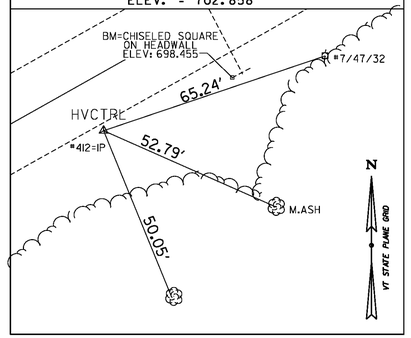

### HVCTRL #413

NORTH = 205646.596
EAST = 1571563.279
ELEV. = 708.883



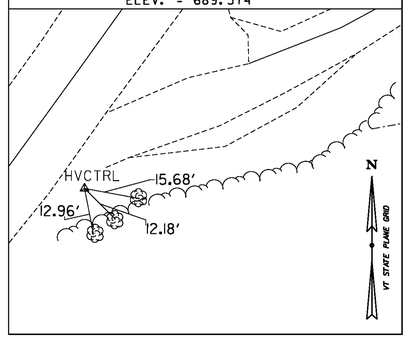

### HVCTRL #412

NORTH = 205920.160
EAST = 1572150.814
ELEV. = 702.858



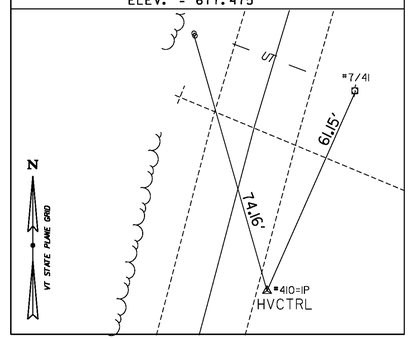

### HVCTRL #411

NORTH = 206267.094
EAST = 1572598.024
ELEV. = 689.374




### HVCTRL #410

NORTH = 206916.892
EAST = 1572929.300
ELEV. = 677.475




## ALIGNMENT TIES

| | | | | |
|---|---|---|---|---|
| _____ | _____ | _____ | _____ | _____ |
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 15

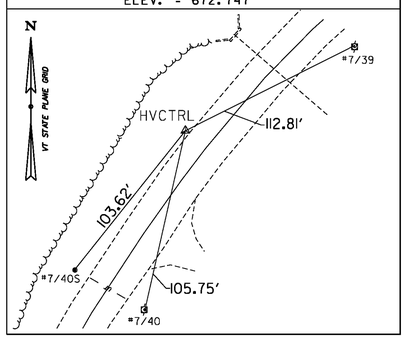
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 29 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

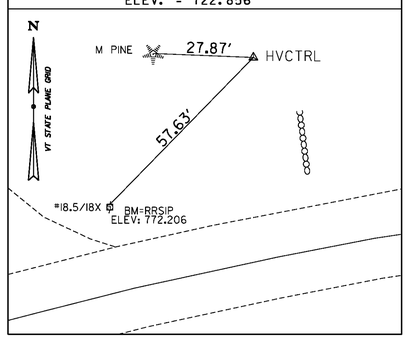
### HVCTRL #409

NORTH = 207261.005
EAST = 1573065.076
ELEV. = 672.747



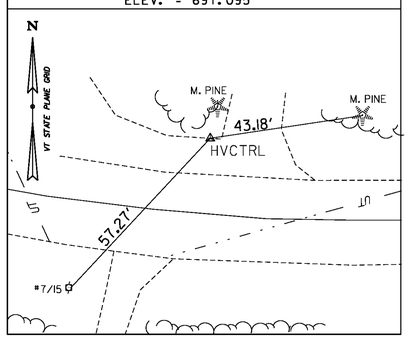

### HVCTRL #408

NORTH = 208293.579
EAST = 1574817.172
ELEV. = 722.856



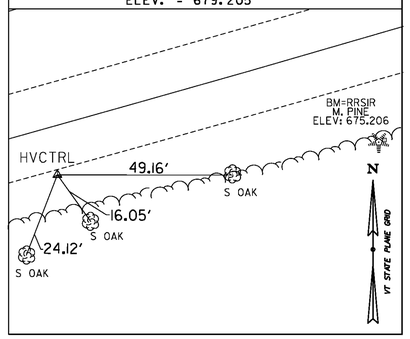

### HVCTRL #407

NORTH = 208121.433
EAST = 1575785.020
ELEV. = 691.095



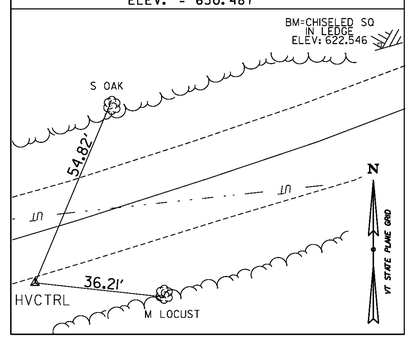

### HVCTRL #406

NORTH = 208144.519
EAST = 1576121.936
ELEV. = 679.205




### HVCTRL #405

NORTH = 208326.329
EAST = 1576758.607
ELEV. = 630.487




## ALIGNMENT TIES

| _____ | _____ | _____ | _____ | _____ |
|---|---|---|---|---|
| NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ | NORTH = _____ |
| EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ | EAST = _____ |
| ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ | ELEV. = _____ |

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 16

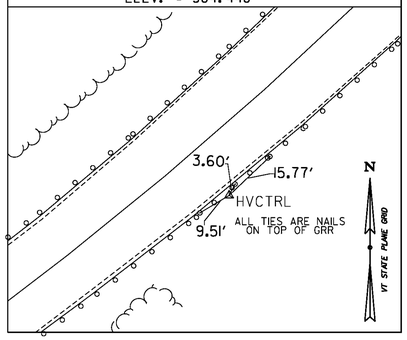
PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 30 OF 444

## GPS CONTROL POINTS

## TRAVERSE TIES

### HVCTRL #404

NORTH = 208568.581
EAST = 1577223.503
ELEV. = 584.448




_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

## ALIGNMENT TIES

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

_____

NORTH = _____
EAST = _____
ELEV. = _____

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (2007)

ADJUSTMENT COMPASS

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: X12B236TI.DGN
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TIE SHEET 17

PLOT DATE: 2/26/2014
DRAWN BY: S. DONOVAN
CHECKED BY: P. BEYOR
SHEET 31 OF 444

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Tangent | PT | 69+50.00 | 185395.746 | 1539158.47 | | | | | | |
| | PC | 70+47.39 | 185459.811 | 1539231.83 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | 70+47.39 | 185459.811 | 1539231.83 | 940 | 713.61 | 43°29'47.64" | Right | | |
| | PI | A 3+47.73 | 185706.483 | 1539514.26 | | | | | | |
| | CC | | 184751.819 | 1539850.17 | | | | | | |
| | Back Station | 70+74.65 | 185477.443 | 1539252.61 | | | | | | |
| | Ahead Station | A 0+00.00 | | | | | | | | |
| | PT | A 6+86.35 | 185691.02 | 1539888.93 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 6+86.35 | 185691.02 | 1539888.93 | | | | | | |
| | PC | A 8+68.32 | 185683.516 | 1540070.75 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 8+68.32 | 185683.516 | 1540070.75 | 800 | 616.39 | 44°08'45.73" | Left | | |
| | PI | A 11+92.73 | 185670.138 | 1540394.88 | | | | | | |
| | CC | | 186482.835 | 1540103.74 | | | | | | |
| | PT | A 14+84.71 | 185886.293 | 1540636.78 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 14+84.71 | 185886.293 | 1540636.78 | | | | | | |
| | PC | A 16+66.11 | 186007.161 | 1540772.05 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 16+66.11 | 186007.161 | 1540772.05 | 1420 | 1101.59 | 44°26'53.25" | Right | | |
| | PI | A 22+46.30 | 186393.744 | 1541204.68 | | | | | | |
| | CC | | 184948.299 | 1541718.2 | | | | | | |
| | PT | A 27+67.70 | 186366.762 | 1541784.24 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 27+67.70 | 186366.762 | 1541784.24 | | | | | | |
| | PC | A 30+35.38 | 186354.314 | 1542051.63 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 30+35.38 | 186354.314 | 1542051.63 | 1150 | 589.94 | 29°23'31.32" | Left | | |
| | PI | A 33+36.99 | 186340.288 | 1542352.91 | | | | | | |
| | CC | | 187503.07 | 1542105.11 | | | | | | |
| | PT | A 36+25.32 | 186475.932 | 1542622.3 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 36+25.32 | 186475.932 | 1542622.3 | | | | | | |
| | PC | A 44+08.50 | 186828.154 | 1543321.81 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 44+08.50 | 186828.154 | 1543321.81 | 510 | 433.28 | 48°40'35.47" | Left | | |
| | PI | A 46+39.18 | 186931.9 | 1543527.85 | | | | | | |
| | CC | | 187283.667 | 1543092.45 | | | | | | |
| | PT | A 48+41.78 | 187155.138 | 1543585.99 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 48+41.78 | 187155.138 | 1543585.99 | | | | | | |
| | PC | A 56+74.66 | 187961.143 | 1543795.89 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 56+74.66 | 187961.143 | 1543795.89 | 1430 | 263.28 | 10°32'55.69" | Right | | |
| | PI | A 58+06.68 | 188088.895 | 1543829.16 | | | | | | |
| | CC | | 187600.758 | 1545179.73 | | | | | | |
| | PT | A 59+37.94 | 188208.397 | 1543885.25 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 59+37.94 | 188208.397 | 1543885.25 | | | | | | |
| | PC | A 64+91.21 | 188709.233 | 1544120.35 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 64+91.21 | 188709.233 | 1544120.35 | 680 | 363.65 | 30°38'25.04" | Right | | |
| | PI | A 66+77.50 | 188877.862 | 1544199.51 | | | | | | |
| | CC | | 188420.286 | 1544735.91 | | | | | | |
| | PT | A 68+54.86 | 188982.607 | 1544353.55 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 68+54.86 | 188982.607 | 1544353.55 | | | | | | |
| | PC | A 69+95.61 | 189061.752 | 1544469.95 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 69+95.61 | 189061.752 | 1544469.95 | 860 | 225.48 | 15°01'18.85" | Left | | |
| | PI | A 71+09.00 | 189125.508 | 1544563.71 | | | | | | |
| | CC | | 189772.923 | 1543986.38 | | | | | | |
| | PT | A 72+21.09 | 189211.389 | 1544637.75 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 72+21.09 | 189211.389 | 1544637.75 | | | | | | |
| | PC | A 75+07.87 | 189428.595 | 1544825 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 75+07.87 | 189428.595 | 1544825 | 480 | 225.97 | 26°58'23.97" | Right | | |
| | PI | A 76+22.99 | 189515.787 | 1544900.17 | | | | | | |
| | CC | | 189115.18 | 1545188.55 | | | | | | |
| | PT | A 77+33.84 | 189559.4 | 1545006.71 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 77+33.84 | 189559.4 | 1545006.71 | | | | | | |
| | PC | A 78+28.34 | 189595.2 | 1545094.16 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Arc | PC | A 78+28.34 | 189595.2 | 1545094.16 | 730 | 685.11 | 53°46'22.04" | Left | | |
| | PI | A 81+98.47 | 189735.425 | 1545436.7 | | | | | | |
| | CC | | 190270.784 | 1544817.6 | | | | | | |
| | PT | A 85+13.45 | 190094.618 | 1545526.02 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 85+13.45 | 190094.618 | 1545526.02 | | | | | | |
| | PC | A 85+54.32 | 190134.281 | 1545535.89 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 85+54.32 | 190134.281 | 1545535.89 | 1200 | 202.55 | 9°40'15.59" | Right | | |
| | PI | A 86+55.84 | 190232.796 | 1545560.38 | | | | | | |
| | CC | | 189844.693 | 1546700.42 | | | | | | |
| | PT | A 87+56.87 | 190325.796 | 1545601.08 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 87+56.87 | 190325.796 | 1545601.08 | | | | | | |
| | PC | A 90+14.18 | 190561.527 | 1545704.25 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 90+14.18 | 190561.527 | 1545704.25 | 740 | 207.03 | 16°01'47.56" | Right | | |
| | PI | A 91+18.38 | 190656.983 | 1545746.02 | | | | | | |
| | CC | | 190264.846 | 1546382.17 | | | | | | |
| | PT | A 92+21.22 | 190737.192 | 1545812.53 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 92+21.22 | 190737.192 | 1545812.53 | | | | | | |
| | PC | A 94+53.84 | 190916.264 | 1545961.02 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 94+53.84 | 190916.264 | 1545961.02 | 380 | 342.77 | 51°40'57.80" | Left | | |
| | PI | A 96+37.88 | 191057.933 | 1546078.49 | | | | | | |
| | CC | | 191158.82 | 1545668.5 | | | | | | |
| | PT | A 97+96.62 | 191237.938 | 1546040.17 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 97+96.62 | 191237.938 | 1546040.17 | | | | | | |
| | PC | A 98+67.40 | 191307.17 | 1546025.43 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 98+67.40 | 191307.17 | 1546025.43 | 600 | 154.82 | 14°47'02.72" | Right | | |
| | PI | A 99+45.24 | 191383.305 | 1546009.23 | | | | | | |
| | CC | | 191432.093 | 1546612.28 | | | | | | |
| | PT | A 100+22.22 | 191461.056 | 1546012.98 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 100+22.22 | 191461.056 | 1546012.98 | | | | | | |
| | PC | A 109+97.27 | 192434.971 | 1546060.05 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 109+97.27 | 192434.971 | 1546060.05 | 580 | 344.3 | 34°00'43.74" | Right | | |
| | PI | A 111+74.66 | 192612.155 | 1546068.62 | | | | | | |
| | CC | | 192406.973 | 1546639.38 | | | | | | |
| | PT | A 113+41.57 | 192754.237 | 1546174.83 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 113+41.57 | 192754.237 | 1546174.83 | | | | | | |
| | PC | A 116+72.30 | 193019.131 | 1546372.84 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 116+72.30 | 193019.131 | 1546372.84 | 700 | 241.76 | 19°47'18.54" | Left | | |
| | PI | A 117+94.39 | 193116.925 | 1546445.94 | | | | | | |
| | CC | | 193438.243 | 1545812.18 | | | | | | |
| | PT | A 119+14.06 | 193233.693 | 1546481.62 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 119+14.06 | 193233.693 | 1546481.62 | | | | | | |
| | PC | A 120+03.90 | 193319.616 | 1546507.88 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 120+03.90 | 193319.616 | 1546507.88 | 125 | 130.97 | 60°01'56.93" | Left | | |
| | PI | A 120+76.12 | 193388.681 | 1546528.98 | | | | | | |
| | CC | | 193356.143 | 1546388.33 | | | | | | |
| | PT | A 121+34.87 | 193441.46 | 1546479.69 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 121+34.87 | 193441.46 | 1546479.69 | | | | | | |
| | PC | A 121+95.97 | 193486.109 | 1546437.99 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 121+95.97 | 193486.109 | 1546437.99 | 130 | 149.66 | 65°57'32.88" | Right | | |
| | PI | A 122+80.32 | 193547.762 | 1546380.42 | | | | | | |
| | CC | | 193574.838 | 1546533 | | | | | | |
| | PT | A 123+45.62 | 193625.46 | 1546413.27 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 123+45.62 | 193625.46 | 1546413.27 | | | | | | |
| | PC | A 126+03.38 | 193862.875 | 1546513.64 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 126+03.38 | 193862.875 | 1546513.64 | 520 | 273.1 | 30°05'29.35" | Right | | |
| | PI | A 127+43.16 | 193991.62 | 1546568.07 | | | | | | |
| | CC | | 193660.386 | 1546992.59 | | | | | | |
| | PT | A 128+76.48 | 194075.724 | 1546679.71 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Tangent | PT | A 128+76.48 | 194075.724 | 1546679.71 | | | | | | |
| | PC | A 129+95.13 | 194147.113 | 1546774.48 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 129+95.13 | 194147.113 | 1546774.48 | 850 | 339.37 | 22°52'32.63" | Right | | |
| | PI | A 131+67.10 | 194250.589 | 1546911.84 | | | | | | |
| | CC | | 193468.195 | 1547285.92 | | | | | | |
| | PT | A 133+34.50 | 194292.53 | 1547078.62 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 133+34.50 | 194292.53 | 1547078.62 | | | | | | |
| | PC | A 135+20.44 | 194337.877 | 1547258.95 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 135+20.44 | 194337.877 | 1547258.95 | 5730 | 205.85 | 2°03'30.14" | Left | | |
| | PI | A 136+23.38 | 194362.981 | 1547358.78 | | | | | | |
| | CC | | 199894.864 | 1545861.53 | | | | | | |
| | PT | A 137+26.29 | 194391.655 | 1547457.64 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 137+26.29 | 194391.655 | 1547457.64 | | | | | | |
| | PC | A 141+21.54 | 194501.753 | 1547837.24 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 141+21.54 | 194501.753 | 1547837.24 | 2900 | 320.2 | 6°19'34.63" | Left | | |
| | PI | A 142+81.80 | 194546.395 | 1547991.17 | | | | | | |
| | CC | | 197286.972 | 1547029.44 | | | | | | |
| | PT | A 144+41.74 | 194607.726 | 1548139.23 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 144+41.74 | 194607.726 | 1548139.23 | | | | | | |
| | PC | A 147+69.15 | 194733.022 | 1548441.72 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 147+69.15 | 194733.022 | 1548441.72 | 700 | 643.21 | 52°38'50.25" | Right | | |
| | PI | A 151+15.47 | 194865.554 | 1548761.68 | | | | | | |
| | CC | | 194086.307 | 1548709.6 | | | | | | |
| | PT | A 154+12.36 | 194691.624 | 1549061.15 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 154+12.36 | 194691.624 | 1549061.15 | | | | | | |
| | PC | A 158+70.45 | 194461.562 | 1549457.28 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 158+70.45 | 194461.562 | 1549457.28 | 1200 | 493.57 | 23°33'58.23" | Right | | |
| | PI | A 161+20.77 | 194335.844 | 1549673.75 | | | | | | |
| | CC | | 193423.875 | 1548854.61 | | | | | | |
| | PT | A 163+64.02 | 194134.067 | 1549821.89 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 163+64.02 | 194134.067 | 1549821.89 | | | | | | |
| | PC | A 169+32.44 | 193675.883 | 1550158.3 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 169+32.44 | 193675.883 | 1550158.3 | 1200 | 405.7 | 19°22'14.78" | Left | | |
| | PI | A 171+37.24 | 193510.798 | 1550279.51 | | | | | | |
| | CC | | 194386.076 | 1551125.58 | | | | | | |
| | PT | A 173+38.14 | 193395.259 | 1550448.61 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 173+38.14 | 193395.259 | 1550448.61 | | | | | | |
| | PC | A 177+51.71 | 193161.95 | 1550790.09 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 177+51.71 | 193161.95 | 1550790.09 | 2900 | 258.65 | 5°06'36.62" | Left | | |
| | PI | A 178+81.12 | 193088.945 | 1550896.94 | | | | | | |
| | CC | | 195556.423 | 1552426.09 | | | | | | |
| | PT | A 180+10.36 | 193025.747 | 1551009.87 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 180+10.36 | 193025.747 | 1551009.87 | | | | | | |
| | PC | A 187+39.48 | 192669.677 | 1551646.14 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 187+39.48 | 192669.677 | 1551646.14 | 1150 | 299.96 | 14°56'41.88" | Right | | |
| | PI | A 188+90.32 | 192596.015 | 1551777.77 | | | | | | |
| | CC | | 191666.133 | 1551084.53 | | | | | | |
| | PT | A 190+39.45 | 192490.898 | 1551885.95 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 190+39.45 | 192490.898 | 1551885.95 | | | | | | |
| | PC | A 193+13.26 | 192300.082 | 1552082.32 | | | | | | |
| | | | | | | | | | | |
| Arc | PC | A 193+13.26 | 192300.082 | 1552082.32 | 920 | 707.02 | 44°01'55.57" | Left | | |
| | PI | A 196+85.27 | 192040.84 | 1552349.12 | | | | | | |
| | CC | | 192959.895 | 1552723.45 | | | | | | |
| | PT | A 200+20.29 | 192039.897 | 1552721.12 | | | | | | |
| | | | | | | | | | | |
| Tangent | PT | A 200+20.29 | 192039.897 | 1552721.12 | | | | | | |
| | PC | A 203+79.85 | 192038.986 | 1553080.69 | | | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
HORIZONTAL ALIGNMENT SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 32 OF 444

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Arc | PC | A 203+79.85 | 192038.986 | 1553080.69 | 840 | 515.34 | 35°09'03.47" | Right | | |
| | PI | A 206+45.92 | 192038.312 | 1553346.75 | | | | | | |
| | CC | | 191198.989 | 1553078.56 | | | | | | |
| | PT | A 208+95.19 | 191884.577 | 1553563.91 | | | | | | |
| Tangent | PT | A 208+95.19 | 191884.577 | 1553563.91 | | | | | | |
| | PC | A 211+62.09 | 191730.365 | 1553781.75 | | | | | | |
| Arc | PC | A 211+62.09 | 191730.365 | 1553781.75 | 1040 | 367.13 | 20°13'32.48" | Left | | |
| | PI | A 213+47.58 | 191623.187 | 1553933.14 | | | | | | |
| | CC | | 192579.189 | 1554382.66 | | | | | | |
| | PT | A 215+29.21 | 191574.958 | 1554112.25 | | | | | | |
| Tangent | PT | A 215+29.21 | 191574.958 | 1554112.25 | | | | | | |
| | PC | A 217+19.47 | 191525.49 | 1554295.97 | | | | | | |
| Arc | PC | A 217+19.47 | 191525.49 | 1554295.97 | 380 | 590.61 | 89°03'02.24" | Left | | |
| | PI | A 220+93.22 | 191428.311 | 1554656.87 | | | | | | |
| | CC | | 191892.421 | 1554394.77 | | | | | | |
| | PT | A 223+10.07 | 191787.552 | 1554760.01 | | | | | | |
| Tangent | PT | A 223+10.07 | 191787.552 | 1554760.01 | | | | | | |
| | PC | A 229+32.64 | 192385.937 | 1554931.82 | | | | | | |
| Arc | PC | A 229+32.64 | 192385.937 | 1554931.82 | 5700 | 197.78 | 1°59'16.86" | Left | | |
| | PI | A 230+31.53 | 192480.994 | 1554959.11 | | | | | | |
| | CC | | 193958.966 | 1549453.17 | | | | | | |
| | PT | A 231+30.41 | 192576.941 | 1554983.09 | | | | | | |
| Tangent | PT | A 231+30.41 | 192576.941 | 1554983.09 | | | | | | |
| | PC | A 234+63.91 | 192900.485 | 1555063.95 | | | | | | |
| Arc | PC | A 234+63.91 | 192900.485 | 1555063.95 | 1400 | 309.58 | 12°40'11.76" | Left | | |
| | PI | A 236+19.33 | 193051.273 | 1555101.63 | | | | | | |
| | CC | | 193239.929 | 1553705.72 | | | | | | |
| | PT | A 237+73.49 | 193206.655 | 1555105.33 | | | | | | |
| Tangent | PT | A 237+73.49 | 193206.655 | 1555105.33 | | | | | | |
| | PC | A 240+77.51 | 193510.592 | 1555112.55 | | | | | | |
| Arc | PC | A 240+77.51 | 193510.592 | 1555112.55 | 1050 | 284.54 | 15°31'35.98" | Right | | |
| | PI | A 242+20.66 | 193653.699 | 1555115.96 | | | | | | |
| | CC | | 193485.637 | 1556162.26 | | | | | | |
| | PT | A 243+62.06 | 193790.673 | 1555157.54 | | | | | | |
| Tangent | PT | A 243+62.06 | 193790.673 | 1555157.54 | | | | | | |
| | PC | A 245+63.95 | 193983.856 | 1555216.19 | | | | | | |
| Arc | PC | A 245+63.95 | 193983.856 | 1555216.19 | 1400 | 219.76 | 8°59'37.19" | Right | | |
| | PI | A 246+74.05 | 194089.212 | 1555248.18 | | | | | | |
| | CC | | 193577.141 | 1556555.81 | | | | | | |
| | PT | A 247+83.70 | 194188.273 | 1555296.24 | | | | | | |
| Tangent | PT | A 247+83.70 | 194188.273 | 1555296.24 | | | | | | |
| | PC | A 250+44.37 | 194422.795 | 1555410.03 | | | | | | |
| Arc | PC | A 250+44.37 | 194422.795 | 1555410.03 | 1040 | 1173.77 | 64°39'55.40" | Right | | |
| | PI | A 257+02.66 | 195015.056 | 1555697.39 | | | | | | |
| | CC | | 193968.812 | 1556345.71 | | | | | | |
| | PT | A 262+18.14 | 195008.764 | 1556355.65 | | | | | | |
| Tangent | PT | A 262+18.14 | 195008.764 | 1556355.65 | | | | | | |
| | PC | A 267+64.41 | 195003.543 | 1556901.89 | | | | | | |
| Arc | PC | A 267+64.41 | 195003.543 | 1556901.89 | 1800 | 267.33 | 8°30'33.66" | Left | | |
| | PI | A 268+98.32 | 195002.264 | 1557035.8 | | | | | | |
| | CC | | 196803.461 | 1556919.1 | | | | | | |
| | PT | A 270+31.73 | 195020.812 | 1557168.42 | | | | | | |
| Tangent | PT | A 270+31.73 | 195020.812 | 1557168.42 | | | | | | |
| | PC | A 272+79.29 | 195055.102 | 1557413.59 | | | | | | |
| Arc | PC | A 272+79.29 | 195055.102 | 1557413.59 | 1150 | 297.08 | 14°48'03.65" | Right | | |
| | PI | A 274+28.66 | 195075.791 | 1557561.52 | | | | | | |
| | CC | | 193916.187 | 1557572.88 | | | | | | |
| | PT | A 275+76.37 | 195058.003 | 1557709.82 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Tangent | PT | A 275+76.37 | 195058.003 | 1557709.82 | | | | | | |
| | PC | A 280+37.41 | 195003.1 | 1558167.59 | | | | | | |
| Arc | PC | A 280+37.41 | 195003.1 | 1558167.59 | 5730 | 293.74 | 2°56'13.92" | Left | | |
| | PI | A 281+84.31 | 194985.606 | 1558313.45 | | | | | | |
| | CC | | 200692.326 | 1558849.94 | | | | | | |
| | PT | A 283+31.15 | 194975.61 | 1558460.01 | | | | | | |
| Tangent | PT | A 283+31.15 | 194975.61 | 1558460.01 | | | | | | |
| | PC | A 284+61.11 | 194966.766 | 1558589.66 | | | | | | |
| Arc | PC | A 284+61.11 | 194966.766 | 1558589.66 | 1270 | 567.61 | 25°36'28.11" | Right | | |
| | PI | A 287+49.74 | 194947.125 | 1558877.62 | | | | | | |
| | CC | | 193699.71 | 1558503.24 | | | | | | |
| | PT | A 290+28.72 | 194804.954 | 1559128.8 | | | | | | |
| Tangent | PT | A 290+28.72 | 194804.954 | 1559128.8 | | | | | | |
| | PC | A 291+17.26 | 194761.34 | 1559205.86 | | | | | | |
| Arc | PC | A 291+17.26 | 194761.34 | 1559205.86 | 700 | 367.11 | 30°02'53.89" | Left | | |
| | PI | A 293+05.15 | 194668.795 | 1559369.37 | | | | | | |
| | CC | | 195370.53 | 1559550.66 | | | | | | |
| | PT | A 294+84.37 | 194670.561 | 1559557.24 | | | | | | |
| Tangent | PT | A 294+84.37 | 194670.561 | 1559557.24 | | | | | | |
| | PC | A 297+13.23 | 194672.712 | 1559786.09 | | | | | | |
| Arc | PC | A 297+13.23 | 194672.712 | 1559786.09 | 1040 | 475.6 | 26°12'05.94" | Right | | |
| | PI | A 299+55.27 | 194674.986 | 1560028.11 | | | | | | |
| | CC | | 193632.758 | 1559795.86 | | | | | | |
| | PT | A 301+88.83 | 194570.167 | 1560246.27 | | | | | | |
| Tangent | PT | A 301+88.83 | 194570.167 | 1560246.27 | | | | | | |
| | PC | A 303+90.28 | 194482.926 | 1560427.84 | | | | | | |
| Arc | PC | A 303+90.28 | 194482.926 | 1560427.84 | 375 | 529.46 | 80°53'42.80" | Left | | |
| | PI | A 307+09.96 | 194344.475 | 1560715.99 | | | | | | |
| | CC | | 194820.934 | 1560590.24 | | | | | | |
| | PT | A 309+19.73 | 194607.089 | 1560898.3 | | | | | | |
| Tangent | PT | A 309+19.73 | 194607.089 | 1560898.3 | | | | | | |
| | PC | A 310+46.90 | 194711.55 | 1560970.81 | | | | | | |
| Arc | PC | A 310+46.90 | 194711.55 | 1560970.81 | 620 | 345.73 | 31°57'00.55" | Left | | |
| | PI | A 312+24.39 | 194857.353 | 1561072.03 | | | | | | |
| | CC | | 195065.108 | 1560461.5 | | | | | | |
| | PT | A 313+92.63 | 195034.629 | 1561080.75 | | | | | | |
| Tangent | PT | A 313+92.63 | 195034.629 | 1561080.75 | | | | | | |
| | PC | A 315+44.61 | 195186.426 | 1561088.22 | | | | | | |
| Arc | PC | A 315+44.61 | 195186.426 | 1561088.22 | 720 | 290.51 | 23°07'05.46" | Right | | |
| | PI | A 316+91.87 | 195333.507 | 1561095.46 | | | | | | |
| | CC | | 195151.031 | 1561807.35 | | | | | | |
| | PCC | A 318+35.13 | 195465.935 | 1561159.87 | | | | | | |
| Arc | PCC | A 318+35.13 | 195465.935 | 1561159.87 | 410 | 195.79 | 27°21'39.94" | Right | | |
| | PI | A 319+34.93 | 195555.683 | 1561203.52 | | | | | | |
| | CC | | 195286.615 | 1561528.57 | | | | | | |
| | PT | A 320+30.92 | 195615.33 | 1561283.53 | | | | | | |
| Tangent | PT | A 320+30.92 | 195615.33 | 1561283.53 | | | | | | |
| | PC | A 321+03.12 | 195658.482 | 1561341.42 | | | | | | |
| Arc | PC | A 321+03.12 | 195658.482 | 1561341.42 | 1800 | 199.5 | 6°21'00.96" | Right | | |
| | PI | A 322+02.97 | 195718.16 | 1561421.47 | | | | | | |
| | CC | | 194215.34 | 1562417.22 | | | | | | |
| | PT | A 323+02.62 | 195768.617 | 1561507.64 | | | | | | |
| Tangent | PT | A 323+02.62 | 195768.617 | 1561507.64 | | | | | | |
| | PC | A 324+58.61 | 195847.442 | 1561642.25 | | | | | | |
| Arc | PC | A 324+58.61 | 195847.442 | 1561642.25 | 1200 | 196.47 | 9°22'51.24" | Left | | |
| | PI | A 325+57.06 | 195897.194 | 1561727.21 | | | | | | |
| | CC | | 196882.96 | 1561035.86 | | | | | | |
| | PT | A 326+55.08 | 195960.13 | 1561802.93 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Tangent | PT | A 326+55.08 | 195960.13 | 1561802.93 | | | | | | |
| | PC | A 327+06.46 | 195992.975 | 1561842.44 | | | | | | |
| Arc | PC | A 327+06.46 | 195992.975 | 1561842.44 | 5730 | 188.51 | 1°53'05.93" | Left | | |
| | PI | A 328+00.73 | 196053.231 | 1561914.93 | | | | | | |
| | CC | | 200399.493 | 1558179.72 | | | | | | |
| | PT | A 328+94.98 | 196115.838 | 1561985.4 | | | | | | |
| Tangent | PT | A 328+94.98 | 196115.838 | 1561985.4 | | | | | | |
| | PC | A 331+47.62 | 196283.637 | 1562174.28 | | | | | | |
| Arc | PC | A 331+47.62 | 196283.637 | 1562174.28 | 820 | 257.18 | 17°58'10.86" | Left | | |
| | PI | A 332+77.27 | 196369.748 | 1562271.2 | | | | | | |
| | CC | | 196896.655 | 1561629.66 | | | | | | |
| | PT | A 334+04.80 | 196481.562 | 1562336.83 | | | | | | |
| Tangent | PT | A 334+04.80 | 196481.562 | 1562336.83 | | | | | | |
| | PC | A 335+68.93 | 196623.109 | 1562419.92 | | | | | | |
| Arc | PC | A 335+68.93 | 196623.109 | 1562419.92 | 1830 | 319.69 | 10°00'33.73" | Right | | |
| | PI | A 337+29.18 | 196761.315 | 1562501.04 | | | | | | |
| | CC | | 195696.742 | 1563998.13 | | | | | | |
| | PCC | A 338+88.62 | 196883.317 | 1562604.95 | | | | | | |
| Arc | PCC | A 338+88.62 | 196883.317 | 1562604.95 | 1020 | 172.83 | 9°42'29.58" | Right | | |
| | PI | A 339+75.25 | 196949.262 | 1562661.12 | | | | | | |
| | CC | | 196221.947 | 1563381.48 | | | | | | |
| | PT | A 340+61.45 | 197004.791 | 1562727.6 | | | | | | |
| Tangent | PT | A 340+61.45 | 197004.791 | 1562727.6 | | | | | | |
| | PC | A 342+73.50 | 197140.726 | 1562890.34 | | | | | | |
| Arc | PC | A 342+73.50 | 197140.726 | 1562890.34 | 280 | 200.97 | 41°07'29.59" | Right | | |
| | PI | A 343+78.54 | 197208.059 | 1562970.96 | | | | | | |
| | CC | | 196925.827 | 1563069.84 | | | | | | |
| | PT | A 344+74.47 | 197205.76 | 1563075.97 | | | | | | |
| Tangent | PT | A 344+74.47 | 197205.76 | 1563075.97 | | | | | | |
| | PC | A 346+45.45 | 197202.017 | 1563246.9 | | | | | | |
| Arc | PC | A 346+45.45 | 197202.017 | 1563246.9 | 50 | 74.76 | 85°40'06.95" | Left | | |
| | PI | A 346+91.81 | 197201.003 | 1563293.25 | | | | | | |
| | CC | | 197252.005 | 1563248 | | | | | | |
| | PT | A 347+20.21 | 197247.139 | 1563297.76 | | | | | | |
| Tangent | PT | A 347+20.21 | 197247.139 | 1563297.76 | | | | | | |
| | PC | A 348+09.47 | 197335.975 | 1563306.45 | | | | | | |
| Arc | PC | A 348+09.47 | 197335.975 | 1563306.45 | 5730 | 251.72 | 2°31'01.36" | Right | | |
| | PI | A 349+35.35 | 197461.259 | 1563318.7 | | | | | | |
| | CC | | 196778.249 | 1569009.24 | | | | | | |
| | PT | A 350+61.19 | 197585.884 | 1563336.44 | | | | | | |
| Tangent | PT | A 350+61.19 | 197585.884 | 1563336.44 | | | | | | |
| | PC | A 352+52.56 | 197775.343 | 1563363.42 | | | | | | |
| Arc | PC | A 352+52.56 | 197775.343 | 1563363.42 | 840 | 368.95 | 25°09'58.00" | Right | | |
| | PI | A 354+40.06 | 197960.973 | 1563389.85 | | | | | | |
| | CC | | 197656.946 | 1564195.03 | | | | | | |
| | PT | A 356+21.52 | 198117.744 | 1563492.7 | | | | | | |
| Tangent | PT | A 356+21.52 | 198117.744 | 1563492.7 | | | | | | |
| | PC | A 359+42.54 | 198386.153 | 1563668.81 | | | | | | |
| Arc | PC | A 359+42.54 | 198386.153 | 1563668.81 | 740 | 226.32 | 17°31'23.68" | Left | | |
| | PI | A 360+56.59 | 198481.511 | 1563731.37 | | | | | | |
| | CC | | 198792.094 | 1563050.09 | | | | | | |
| | PT | A 361+68.86 | 198591.282 | 1563762.32 | | | | | | |
| Tangent | PT | A 361+68.86 | 198591.282 | 1563762.32 | | | | | | |
| | PC | A 362+00.89 | 198622.113 | 1563771.01 | | | | | | |
| Arc | PC | A 362+00.89 | 198622.113 | 1563771.01 | 3000 | 495.06 | 9°27'17.65" | Left | | |
| | PI | A 364+48.98 | 198860.895 | 1563838.34 | | | | | | |
| | CC | | 199436.212 | 1560883.58 | | | | | | |
| | PT | A 366+95.95 | 199107.494 | 1563865.52 | | | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
HORIZONTAL ALIGNMENT SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 33 OF 444

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Tangent | PT | A 366+95.95 | 199107.494 | 1563865.52 | | | | | | |
| | PC | A 369+71.55 | 199381.438 | 1563895.72 | | | | | | |
| Arc | PC | A 369+71.55 | 199381.438 | 1563895.72 | 3500 | 396.23 | 6°29'11.01" | Right | | |
| | PI | A 371+69.88 | 199578.571 | 1563917.45 | | | | | | |
| | CC | | 198997.933 | 1567374.65 | | | | | | |
| | PT | A 373+67.78 | 199771.988 | 1563961.31 | | | | | | |
| Tangent | PT | A 373+67.78 | 199771.988 | 1563961.31 | | | | | | |
| | PC | A 375+71.06 | 199970.234 | 1564006.27 | | | | | | |
| Arc | PC | A 375+71.06 | 199970.234 | 1564006.27 | 3300 | 399.02 | 6°55'40.39" | Left | | |
| | PI | A 377+70.82 | 200165.04 | 1564050.45 | | | | | | |
| | CC | | 200700.057 | 1560787.99 | | | | | | |
| | PT | A 379+70.08 | 200363.752 | 1564070.8 | | | | | | |
| Tangent | PT | A 379+70.08 | 200363.752 | 1564070.8 | | | | | | |
| | PC | A 381+08.24 | 200501.191 | 1564084.88 | | | | | | |
| Arc | PC | A 381+08.24 | 200501.191 | 1564084.88 | 4600 | 497.15 | 6°11'32.51" | Left | | |
| | PI | A 383+57.06 | 200748.715 | 1564110.24 | | | | | | |
| | CC | | 200969.98 | 1559508.83 | | | | | | |
| | PT | A 386+05.39 | 200997.53 | 1564108.75 | | | | | | |
| Tangent | PT | A 386+05.39 | 200997.53 | 1564108.75 | | | | | | |
| | Back Station | A 387+99.74 | 201191.872 | 1564107.59 | | | | | | |
| | Ahead Station | B 0+00.00 | | | | | | | | |
| | PC | B 1+63.45 | 201355.316 | 1564106.61 | | | | | | |
| Arc | PC | B 1+63.45 | 201355.316 | 1564106.61 | 3500 | 603.37 | 9°52'38.44" | Right | | |
| | PI | B 4+65.88 | 201657.746 | 1564104.8 | | | | | | |
| | CC | | 201376.278 | 1567606.55 | | | | | | |
| | PT | B 7+66.82 | 201956.004 | 1564154.89 | | | | | | |
| Tangent | PT | B 7+66.82 | 201956.004 | 1564154.89 | | | | | | |
| | PC | B 11+29.76 | 202313.928 | 1564215.01 | | | | | | |
| Arc | PC | B 11+29.76 | 202313.928 | 1564215.01 | 4800 | 388.74 | 4°38'24.73" | Right | | |
| | PI | B 13+24.23 | 202505.716 | 1564247.22 | | | | | | |
| | CC | | 201518.875 | 1568948.7 | | | | | | |
| | PT | B 15+18.49 | 202694.27 | 1564294.84 | | | | | | |
| Tangent | PT | B 15+18.49 | 202694.27 | 1564294.84 | | | | | | |
| | PC | B 15+61.35 | 202735.825 | 1564305.34 | | | | | | |
| Arc | PC | B 15+61.35 | 202735.825 | 1564305.34 | 1200 | 142.03 | 6°46'52.55" | Right | | |
| | PI | B 16+32.45 | 202804.757 | 1564322.74 | | | | | | |
| | CC | | 202441.976 | 1565468.8 | | | | | | |
| | PT | B 17+03.38 | 202871.15 | 1564348.17 | | | | | | |
| Tangent | PT | B 17+03.38 | 202871.15 | 1564348.17 | | | | | | |
| | PC | B 17+41.01 | 202906.291 | 1564361.63 | | | | | | |
| Arc | PC | B 17+41.01 | 202906.291 | 1564361.63 | 660 | 232.71 | 20°12'06.73" | Right | | |
| | PI | B 18+58.58 | 203016.089 | 1564403.68 | | | | | | |
| | CC | | 202670.245 | 1564977.98 | | | | | | |
| | PT | B 19+73.72 | 203104.612 | 1564481.06 | | | | | | |
| Tangent | PT | B 19+73.72 | 203104.612 | 1564481.06 | | | | | | |
| | PC | B 21+43.79 | 203232.659 | 1564592.99 | | | | | | |
| Arc | PC | B 21+43.79 | 203232.659 | 1564592.99 | 1200 | 299.85 | 14°19'01.14" | Left | | |
| | PI | B 22+94.50 | 203346.131 | 1564692.18 | | | | | | |
| | CC | | 204022.417 | 1563689.51 | | | | | | |
| | PT | B 24+43.64 | 203480.606 | 1564760.23 | | | | | | |
| Tangent | PT | B 24+43.64 | 203480.606 | 1564760.23 | | | | | | |
| | PC | B 24+92.07 | 203523.817 | 1564782.09 | | | | | | |
| Arc | PC | B 24+92.07 | 203523.817 | 1564782.09 | 955 | 221.98 | 13°19'03.47" | Right | | |
| | PI | B 26+03.56 | 203623.296 | 1564832.43 | | | | | | |
| | CC | | 203092.626 | 1565634.21 | | | | | | |
| | PT | B 27+14.05 | 203708.505 | 1564904.33 | | | | | | |
| Tangent | PT | B 27+14.05 | 203708.505 | 1564904.33 | | | | | | |
| | PC | B 30+11.85 | 203936.108 | 1565096.39 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Arc | PC | B 30+11.85 | 203936.108 | 1565096.39 | 270 | 257.46 | 54°38'07.05" | Right | | |
| | PI | B 31+51.32 | 204042.694 | 1565186.32 | | | | | | |
| | CC | | 203761.985 | 1565302.74 | | | | | | |
| | PT | B 32+69.32 | 204031.04 | 1565325.3 | | | | | | |
| Tangent | PT | B 32+69.32 | 204031.04 | 1565325.3 | | | | | | |
| | PC | B 33+01.32 | 204028.366 | 1565357.19 | | | | | | |
| Arc | PC | B 33+01.32 | 204028.366 | 1565357.19 | 780 | 382.38 | 28°05'17.55" | Right | | |
| | PI | B 34+96.43 | 204012.061 | 1565551.62 | | | | | | |
| | CC | | 203251.094 | 1565292.01 | | | | | | |
| | PT | B 36+83.70 | 203906.133 | 1565715.48 | | | | | | |
| Tangent | PT | B 36+83.70 | 203906.133 | 1565715.48 | | | | | | |
| | PC | B 39+29.07 | 203772.921 | 1565921.54 | | | | | | |
| Arc | PC | B 39+29.07 | 203772.921 | 1565921.54 | 570 | 193.99 | 19°29'57.39" | Left | | |
| | PI | B 40+27.01 | 203719.749 | 1566003.79 | | | | | | |
| | CC | | 204251.603 | 1566230.99 | | | | | | |
| | PCC | B 41+23.05 | 203697.081 | 1566099.07 | | | | | | |
| Arc | PCC | B 41+23.05 | 203697.081 | 1566099.07 | 750 | 183.2 | 13°59'43.59" | Left | | |
| | PI | B 42+15.11 | 203675.774 | 1566188.63 | | | | | | |
| | CC | | 204426.716 | 1566272.65 | | | | | | |
| | PT | B 43+06.25 | 203676.759 | 1566280.68 | | | | | | |
| Tangent | PT | B 43+06.25 | 203676.759 | 1566280.68 | | | | | | |
| | PC | B 46+74.41 | 203680.698 | 1566648.81 | | | | | | |
| Arc | PC | B 46+74.41 | 203680.698 | 1566648.81 | 2290 | 240.57 | 6°01'08.50" | Right | | |
| | PI | B 47+94.81 | 203681.986 | 1566769.2 | | | | | | |
| | CC | | 201390.829 | 1566673.32 | | | | | | |
| | PT | B 49+14.98 | 203670.643 | 1566889.06 | | | | | | |
| Tangent | PT | B 49+14.98 | 203670.643 | 1566889.06 | | | | | | |
| | PC | B 49+45.16 | 203667.8 | 1566919.1 | | | | | | |
| Arc | PC | B 49+45.16 | 203667.8 | 1566919.1 | 955 | 283.62 | 17°00'58.19" | Right | | |
| | PI | B 50+88.02 | 203654.341 | 1567061.33 | | | | | | |
| | CC | | 202717.048 | 1566829.13 | | | | | | |
| | PT | B 52+28.78 | 203599.849 | 1567193.39 | | | | | | |
| Tangent | PT | B 52+28.78 | 203599.849 | 1567193.39 | | | | | | |
| | PC | B 52+28.82 | 203599.833 | 1567193.43 | | | | | | |
| Arc | PC | B 52+28.82 | 203599.833 | 1567193.43 | 1650 | 194.48 | 6°45'12.20" | Right | | |
| | PI | B 53+26.18 | 203562.699 | 1567283.43 | | | | | | |
| | CC | | 202074.575 | 1566564.08 | | | | | | |
| | PT | B 54+23.31 | 203515.24 | 1567368.43 | | | | | | |
| Tangent | PT | B 54+23.31 | 203515.24 | 1567368.43 | | | | | | |
| | PC | B 56+98.59 | 203381.042 | 1567608.79 | | | | | | |
| Arc | PC | B 56+98.59 | 203381.042 | 1567608.79 | 360 | 402.76 | 64°06'07.23" | Left | | |
| | PI | B 59+23.99 | 203271.163 | 1567805.59 | | | | | | |
| | CC | | 203695.369 | 1567784.29 | | | | | | |
| | PT | B 61+01.35 | 203400.21 | 1567990.39 | | | | | | |
| Tangent | PT | B 61+01.35 | 203400.21 | 1567990.39 | | | | | | |
| | PC | B 62+08.38 | 203461.486 | 1568078.15 | | | | | | |
| Arc | PC | B 62+08.38 | 203461.486 | 1568078.15 | 580 | 268.94 | 26°34'03.03" | Right | | |
| | PI | B 63+45.32 | 203539.883 | 1568190.41 | | | | | | |
| | CC | | 202985.951 | 1568410.21 | | | | | | |
| | PT | B 64+77.32 | 203559.79 | 1568325.89 | | | | | | |
| Tangent | PT | B 64+77.32 | 203559.79 | 1568325.89 | | | | | | |
| | PC | B 69+98.77 | 203635.595 | 1568841.8 | | | | | | |
| Arc | PC | B 69+98.77 | 203635.595 | 1568841.8 | 420 | 223.21 | 30°27'00.95" | Left | | |
| | PI | B 71+13.08 | 203652.213 | 1568954.9 | | | | | | |
| | CC | | 204051.133 | 1568780.74 | | | | | | |
| | PT | B 72+21.98 | 203723.854 | 1569043.97 | | | | | | |
| Tangent | PT | B 72+21.98 | 203723.854 | 1569043.97 | | | | | | |
| | PC | B 75+19.95 | 203910.599 | 1569276.16 | | | | | | |

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Arc | PC | B 75+19.95 | 203910.599 | 1569276.16 | 1400 | 349.1 | 14°17'14.32" | Left | | |
| | PI | B 76+95.41 | 204020.566 | 1569412.88 | | | | | | |
| | CC | | 205001.53 | 1568398.74 | | | | | | |
| | PT | B 78+69.06 | 204160.875 | 1569518.24 | | | | | | |
| Tangent | PT | B 78+69.06 | 204160.875 | 1569518.24 | | | | | | |
| | PC | B 79+53.93 | 204228.747 | 1569569.21 | | | | | | |
| Arc | PC | B 79+53.93 | 204228.747 | 1569569.21 | 980 | 156.05 | 9°07'25.55" | Right | | |
| | PI | B 80+32.13 | 204291.274 | 1569616.16 | | | | | | |
| | CC | | 203640.288 | 1570352.87 | | | | | | |
| | PT | B 81+09.99 | 204345.565 | 1569672.44 | | | | | | |
| Tangent | PT | B 81+09.99 | 204345.565 | 1569672.44 | | | | | | |
| | PC | B 87+70.47 | 204804.145 | 1570147.76 | | | | | | |
| Arc | PC | B 87+70.47 | 204804.145 | 1570147.76 | 550 | 164.61 | 17°08'52.03" | Left | | |
| | PI | B 88+53.39 | 204861.72 | 1570207.44 | | | | | | |
| | CC | | 205199.964 | 1569765.89 | | | | | | |
| | PT | B 89+35.07 | 204934.331 | 1570247.49 | | | | | | |
| Tangent | PT | B 89+35.07 | 204934.331 | 1570247.49 | | | | | | |
| | PC | B 89+58.41 | 204954.77 | 1570258.76 | | | | | | |
| Arc | PC | B 89+58.41 | 204954.77 | 1570258.76 | 1200 | 198.67 | 9°29'08.69" | Left | | |
| | PI | B 90+57.98 | 205041.95 | 1570306.85 | | | | | | |
| | CC | | 205534.331 | 1569208 | | | | | | |
| | PT | B 91+57.08 | 205135.863 | 1570339.91 | | | | | | |
| Tangent | PT | B 91+57.08 | 205135.863 | 1570339.91 | | | | | | |
| | PC | B 94+57.38 | 205419.116 | 1570439.62 | | | | | | |
| Arc | PC | B 94+57.38 | 205419.116 | 1570439.62 | 260 | 193.84 | 42°42'54.71" | Right | | |
| | PI | B 95+59.05 | 205515.018 | 1570473.38 | | | | | | |
| | CC | | 205332.781 | 1570684.87 | | | | | | |
| | PCC | B 96+51.21 | 205562.579 | 1570563.24 | | | | | | |
| Arc | PCC | B 96+51.21 | 205562.579 | 1570563.24 | 440 | 202.15 | 26°19'24.31" | Right | | |
| | PI | B 97+54.10 | 205610.711 | 1570654.18 | | | | | | |
| | CC | | 205173.69 | 1570769.07 | | | | | | |
| | PT | B 98+53.36 | 205613.526 | 1570757.03 | | | | | | |
| Tangent | PT | B 98+53.36 | 205613.526 | 1570757.03 | | | | | | |
| | PC | B 102+64.35 | 205624.769 | 1571167.87 | | | | | | |
| Arc | PC | B 102+64.35 | 205624.769 | 1571167.87 | 2865 | 365.53 | 7°18'36.30" | Left | | |
| | PI | B 104+47.37 | 205629.776 | 1571350.82 | | | | | | |
| | CC | | 208488.697 | 1571089.49 | | | | | | |
| | PCC | B 106+29.88 | 205658.02 | 1571531.64 | | | | | | |
| Arc | PCC | B 106+29.88 | 205658.02 | 1571531.64 | 920 | 321.25 | 20°00'25.48" | Left | | |
| | PI | B 107+92.16 | 205683.064 | 1571691.97 | | | | | | |
| | CC | | 206566.999 | 1571389.66 | | | | | | |
| | PT | B 109+51.14 | 205761.454 | 1571834.06 | | | | | | |
| Tangent | PT | B 109+51.14 | 205761.454 | 1571834.06 | | | | | | |
| | PC | B 114+57.12 | 206005.871 | 1572277.1 | | | | | | |
| Arc | PC | B 114+57.12 | 206005.871 | 1572277.1 | 900 | 414.67 | 26°23'55.73" | Left | | |
| | PI | B 116+68.21 | 206107.835 | 1572461.93 | | | | | | |
| | CC | | 206793.904 | 1571842.36 | | | | | | |
| | PT | B 118+71.80 | 206281.341 | 1572582.14 | | | | | | |
| Tangent | PT | B 118+71.80 | 206281.341 | 1572582.14 | | | | | | |
| | PC | B 121+75.79 | 206531.217 | 1572755.27 | | | | | | |
| Arc | PC | B 121+75.79 | 206531.217 | 1572755.27 | 920 | 320.2 | 19°56'28.60" | Left | | |
| | PI | B 123+37.52 | 206664.16 | 1572847.38 | | | | | | |
| | CC | | 207055.17 | 1571999.04 | | | | | | |
| | PT | B 124+95.99 | 206820.547 | 1572888.62 | | | | | | |
| Tangent | PT | B 124+95.99 | 206820.547 | 1572888.62 | | | | | | |
| | PC | B 126+55.30 | 206974.592 | 1572929.25 | | | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
HORIZONTAL ALIGNMENT SHEET 3

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 34 OF 444

| Element | Point Type | Station | Northing | Easting | Radius | Length | Delta / Theta | Rotation Direction | Maximum Banking | Design Speed |
|---|---|---|---|---|---|---|---|---|---|---|
| Arc | PC | B 126+55.30 | 206974.592 | 1572929.25 | 637 | 213.64 | 19°12'58.20" | Right | | |
| | PI | B 127+63.13 | 207078.859 | 1572956.75 | | | | | | |
| | CC | | 206812.141 | 1573545.19 | | | | | | |
| | PT | B 128+68.94 | 207168.266 | 1573017.04 | | | | | | |
| Tangent | PT | B 128+68.94 | 207168.266 | 1573017.04 | | | | | | |
| | PC | B 129+26.65 | 207216.112 | 1573049.3 | | | | | | |
| Arc | PC | B 129+26.65 | 207216.112 | 1573049.3 | 580 | 270 | 26°40'21.34" | Right | | |
| | PI | B 130+64.14 | 207330.112 | 1573126.17 | | | | | | |
| | CC | | 206891.854 | 1573530.19 | | | | | | |
| | PT | B 131+96.65 | 207397.474 | 1573246.03 | | | | | | |
| Tangent | PT | B 131+96.65 | 207397.474 | 1573246.03 | | | | | | |
| | PC | B 132+83.89 | 207440.218 | 1573322.09 | | | | | | |
| Arc | PC | B 132+83.89 | 207440.218 | 1573322.09 | 2300 | 118.54 | 2°57'10.31" | Right | | |
| | PI | B 133+43.17 | 207469.262 | 1573373.77 | | | | | | |
| | CC | | 205435.17 | 1574448.93 | | | | | | |
| | PT | B 134+02.43 | 207495.605 | 1573426.87 | | | | | | |
| Tangent | PT | B 134+02.43 | 207495.605 | 1573426.87 | | | | | | |
| | PC | B 135+61.39 | 207566.245 | 1573569.28 | | | | | | |
| Arc | PC | B 135+61.39 | 207566.245 | 1573569.28 | 5750 | 638.64 | 6°21'49.39" | Left | | |
| | PI | B 138+81.04 | 207708.289 | 1573855.63 | | | | | | |
| | CC | | 212717.332 | 1571014.13 | | | | | | |
| | PT | B 142+00.03 | 207881.197 | 1574124.48 | | | | | | |
| Tangent | PT | B 142+00.03 | 207881.197 | 1574124.48 | | | | | | |
| | PC | B 145+69.23 | 208080.906 | 1574435 | | | | | | |
| Arc | PC | B 145+69.23 | 208080.906 | 1574435 | 1145 | 1030.1 | 51°32'47.01" | Right | | |
| | PI | B 151+22.08 | 208379.962 | 1574899.99 | | | | | | |
| | CC | | 207117.885 | 1575054.37 | | | | | | |
| | PT | B 155+99.34 | 208201.802 | 1575423.35 | | | | | | |
| Tangent | PT | B 155+99.34 | 208201.802 | 1575423.35 | | | | | | |
| | PC | B 158+20.72 | 208130.459 | 1575632.93 | | | | | | |
| Arc | PC | B 158+20.72 | 208130.459 | 1575632.93 | 600 | 363.23 | 34°41'08.09" | Left | | |
| | PI | B 160+08.09 | 208070.077 | 1575810.3 | | | | | | |
| | CC | | 208698.45 | 1575826.28 | | | | | | |
| | PT | B 161+83.95 | 208121.366 | 1575990.52 | | | | | | |
| Tangent | PT | B 161+83.95 | 208121.366 | 1575990.52 | | | | | | |
| | PC | B 169+92.44 | 208342.673 | 1576768.13 | | | | | | |
| Arc | PC | B 169+92.44 | 208342.673 | 1576768.13 | 1190 | 954.33 | 45°56'54.86" | Left | | |
| | PI | B 174+96.94 | 208480.768 | 1577253.36 | | | | | | |
| | CC | | 209487.224 | 1576442.39 | | | | | | |
| | PT | B 179+46.77 | 208925.525 | 1577491.49 | | | | | | |
| Tangent | PT | B 179+46.77 | 208925.525 | 1577491.49 | | | | | | |
| | POE | B 180+12.81 | 208983.743 | 1577522.66 | | | | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
HORIZONTAL ALIGNMENT SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

# BORING AND CORING SHEET 1

| BORING No. | DATE DRILLED | MILE MARKER | OFFSET (FT) | DEPTH (FT) | SAMPLE TYPE | FIELD DESCRIPTION | LABORATORY RESULTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | SOIL TYPE, COLOR, MOISTURE | % MOISTURE | AASHTO CLASS. | SOIL DES. | % GRAVEL | % SAND | % FINES | LIQUID LIMIT | PLASTIC LIMIT |
| **B-101** | 11/19/2012 | 0 | 6.3 RT | 0.00 – 0.85 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.85 – 2.3 | A | Sa, brn, dry | 4.8 | A-1-b | Si Gr Sa | 32.8 | 46.1 | 21.1 | | |
| | | | | 2.3 – 5.0 | A | Sa Si, dk/brn, moist | 16.9 | A-2-4 | Gr Si Sa | 23.1 | 51.6 | 25.3 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-102** | 11/19/2012 | 0.2 | 4.6 LT | 0.00 – 0.63 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.63 – 2.4 | A | Sa, brn, moist | 4.9 | A-2-4 | Gr Sa | 22.5 | 58.1 | 19.4 | | |
| | | | | 2.4 – 5.0 | A | Si, dk/brn, moist | 24.2 | A-2-4 | Si Sa | 16.4 | 60.5 | 23.1 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-103** | 11/19/2012 | 0.4 | 6.1 RT | 0.00 – 0.65 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.65 – 2.4 | A | Sa, brn, moist | 4.9 | A-1-b | Gr Sa | 30.7 | 56.3 | 13 | | |
| | | | | 2.4 – 5.0 | A | Gr Sa, brn, moist | 6.9 | A-2-4 | Si Sa Gr | 36.5 | 33 | 30.5 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-104** | 11/19/2012 | 0.6 | 8.7 LT | 0.00 – 0.70 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.70 – 2.5 | A | Sa, brn, moist | 5.3 | A-2-4 | Sa | 19.1 | 63.9 | 17 | | |
| | | | | 2.5 – 4.0 | A | Sa, rusty, moist | 4.4 | A-2-4 | Gr Si Sa | 24.9 | 50.1 | 25 | | |
| | | | | 4.0 – 5.0 | A | Sa, brn, moist | 8.6 | A-2-4 | Si Sa | 10 | 57.4 | 32.6 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-105** | 11/19/2012 | 0.8 | 3.9 RT | 0.00 – 0.50 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.50 – 2.3 | A | Sa, brn, moist | 3.3 | A-1-b | Si Gr Sa | 27.9 | 48.9 | 23.2 | | |
| | | | | 2.3 – 5.0 | A | Gr Sa, brn, moist | 3.7 | A-1-a | Sa Gr | 59 | 32.7 | 8.3 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-106** | 11/19/2012 | 1 | 4.7 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 2.3 | A | Sa, brn, moist | 3.7 | A-1-b | Gr Sa | 28.7 | 56.6 | 14.7 | | |
| | | | | 2.3 – 4.0 | A | Sa, brn, moist | 8.7 | A-2-4 | Si Sa | 15.1 | 63.4 | 21.5 | | |
| | | | | 4.0 – 5.0 | A | Si Sa, blk, moist | 22.7 | A-2-4 | Si Gr Sa | 23.8 | 53.4 | 22.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-107** | 11/19/2012 | 1.2 | 5.8 RT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 2.0 | A | Sa, brn, moist | 9.4 | A-2-4 | Sa | 20 | 61.5 | 18.5 | | |
| | | | | 2.0 – 5.0 | A | Si Sa, dk/gry, moist | 12.9 | A-2-4 | Gr Si Sa | 24.8 | 41.8 | 33.4 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-108** | 11/19/2012 | 1.4 | 6.1 LT | 0.00 – 0.55 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.55 – 2.1 | A | Sa, brn, moist | 4.1 | A-2-4 | Si Gr Sa | 25.1 | 51.3 | 23.6 | | |
| | | | | 2.1 – 5.0 | A | Si Sa, brn, moist | 9.7 | A-2-4 | Gr Si Sa | 20.4 | 51.5 | 28.1 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-109** | 11/19/2012 | 1.6 | 7.8 RT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 5.0 | A | Gr Sa, brn, moist | 2.5 | A-1-b | Gr Sa | 43.5 | 43.5 | 13 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-110** | 11/19/2012 | 1.8 | 4.6 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 5.0 | A | Si Sa, brn, moist | 3.1 | A-1-b | Si Gr Sa | 27.1 | 52 | 20.9 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-111** | 11/19/2012 | 2 | 6.6 RT | 0.00 – 0.55 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.55 – 5.0 | A | Si Sa, brn, moist | 8.7 | A-2-4 | Si Sa | 19.2 | 49.6 | 31.2 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-112** | 11/19/2012 | 2.2 | 7.7 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 2.0 | A | Si Gr Sa, brn, moist | 2.6 | A-1-b | Si Gr Sa | 36.7 | 41 | 22.3 | | |
| | | | | TLOB | | | | | | | | | | |
| **B-112A** | 11/19/2012 | 2.19 | 7.7 LT | 0.00 – 0.67 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.67 – 2.4 | A | Si Gr Sa, brn, moist | 3.6 | A-1-b | Sa Gr | 44.8 | 38.9 | 16.3 | | |
| | | | | 2.4 – 4.5 | A | Sa Si, dk/brn, moist | 21.6 | A-2-4 | Si Sa | 18.8 | 56.1 | 25.1 | | |
| | | | | TLOB | | | | | | | | | | |
| **B-112B** | 11/19/2012 | 2.21 | 7.7 LT | 0.00 – 0.54 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.54 – 4.5 | A | Si Sa, brn, moist | 4.1 | A-2-4 | Si Gr Sa | 28.9 | 49.3 | 21.8 | | |
| | | | | TLOB | | | | | | | | | | |
| **B-113** | 11/19/2012 | 2.4 | 6.3 RT | 0.00 – 0.50 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.50 – 4.0 | A | Si Sa, brn, moist | 3.4 | A-2-4 | Si Gr Sa | 31 | 42.3 | 26.7 | | |
| | | | | 4.0 – 5.0 | A | Cobbles | | | | | | | | |
| | | | | NLTD | | | | | | | | | | |

| BORING No. | DATE DRILLED | MILE MARKER | OFFSET (FT) | DEPTH (FT) | SAMPLE TYPE | FIELD DESCRIPTION | LABORATORY RESULTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | SOIL TYPE, COLOR, MOISTURE | % MOISTURE | AASHTO CLASS. | SOIL DES. | % GRAVEL | % SAND | % FINES | LIQUID LIMIT | PLASTIC LIMIT |
| **B-114** | 11/19/2012 | 2.6 | 6.6 LT | 0.00 – 0.76 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.76 – 1.5 | A | Si Sa, gry, moist | 2.1 | A-2-4 | Si Sa | 18.8 | 51.4 | 29.8 | | |
| | | | | 1.5 – 5.0 | A | Si Sa, rusty, moist | 6.9 | A-2-4 | Gr Sa | 21.9 | 63.1 | 15 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-115** | 11/19/2012 | 2.8 | 5.7 RT | 0.00 – 0.45 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.45 – 5.0 | A | Si Gr Sa, brn, moist | 4.7 | A-1-b | Gr Sa | 37 | 49.4 | 13.6 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-116** | 11/19/2012 | 3 | 4.8 LT | 0.00 – 0.43 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.43 – 5.0 | A | Si Gr Sa, brn, moist | 3.8 | A-1-b | Sa Gr | 53.3 | 34.4 | 12.3 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-117** | 11/19/2012 | 3.2 | 5.1 RT | 0.00 – 0.43 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.43 – 5.0 | A | Si Sa, brn, moist | 9.5 | A-4 | Gr Si Sa | 21.4 | 40.1 | 38.5 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-118** | 11/20/2012 | 3.4 | 7.2 LT | 0.00 – 0.52 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.52 – 2.6 | A | Si Gr Sa, brn, moist | 3.3 | A-1-b | Sa Gr | 53.9 | 33.4 | 12.7 | | |
| | | | | 2.6 – 5.0 | A | Sa, brn, moist | 8.8 | A-2-4 | Gr Sa | 23.3 | 58.9 | 17.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-119** | 11/20/2012 | 3.6 | 5.4 RT | 0.00 – 0.45 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.45 – 2.6 | A | Si Sa, brn, moist | 2.3 | A-2-4 | Si Gr Sa | 22.7 | 54.8 | 22.5 | | |
| | | | | 2.6 – 5.0 | A | Si Gr Sa, brn, moist | 5.1 | A-1-b | Si Sa Gr | 43.3 | 36.6 | 20.1 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-120** | 11/20/2012 | 3.8 | 6.2 LT | 0.00 – 0.50 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.50 – 5.0 | A | Si Sa, brn, moist | 3.3 | A-2-4 | Si Gr Sa | 27.8 | 49.4 | 22.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-121** | 11/20/2012 | 4 | 7.7 RT | 0.00 – 0.43 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.43 -1.8 | A | Si Sa, brn, moist | 3.3 | A-2-4 | Si Gr Sa | 25.2 | 53.3 | 21.5 | | |
| | | | | 1.8 – 5.0 | A | Si Gr Sa, brn, moist | 3.4 | A-1-b | Sa Gr | 52.7 | 34.1 | 13.2 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-122** | 11/20/2012 | 4.2 | 8.8 LT | 0.00 – 0.45 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.45 – 5.0 | A | Gr Si Sa, brn, moist | 2.9 | A-1-b | Si Gr Sa | 32.5 | 44.7 | 22.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-123** | 11/20/2012 | 4.5 | 4.0 RT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 5.0 | A | Gr Si Sa, brn, moist | 2.2 | A-1-b | Sa Gr | 48.4 | 39.7 | 11.9 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-124** | 11/20/2012 | 4.61 | 4.3 LT | 0.00 – 0.63 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.63 – 1.63 | A | Si Sa, brn, moist | 1.6 | A-2-4 | Si Gr Sa | 25.2 | 50.6 | 24.2 | | |
| | | | | 1.63 – 3.0 | A | Sa Si, blk, moist | 13.8 | A-2-4 | Si Sa | 13.4 | 61.9 | 24.7 | | |
| | | | | 3.0 – 5.0 | A | Si Sa, rusty, moist | 13.9 | A-1-b | Gr Sa | 33.5 | 51 | 15.5 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-125** | 11/20/2012 | 4.8 | 6.7 RT | 0.00 – 0.50 | A | Asphalt Pavment | | | | | | | | |
| | | | | 0.50 – 5.0 | A | Si Gr Sa, brn, moist | 2.1 | A-1-b | Sa Gr | 55.4 | 34.1 | 10.5 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-126** | 11/20/2012 | 5 | 4.9 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 2.5 | A | Si Sa, brn, moist | 1.8 | A-1-b | Si Gr Sa | 34.6 | 45.1 | 20.3 | | |
| | | | | 2.5 – 5.0 | A | Si Sa Gr, brn, moist | 2.5 | A-1-a | Gr | 78.1 | 15.2 | 6.7 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-127** | 11/20/2012 | 5.2 | 5.1 LT | 0.00 – 0.63 | A | Asphalt Gravel | | | | | | | | |
| | | | | 0.63 – 2.5 | A | Gr Si Sa, brn, moist | 2 | A-1-b | Sa Gr | 42.9 | 39.2 | 17.9 | | |
| | | | | 2.5 – 5.0 | A | Si Sa, dk/brn, moist | 5.8 | A-2-4 | Si Gr Sa | 25.5 | 51.5 | 23 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-128** | 11/20/2012 | 5.4 | 7.2 LT | 0.00 – 0.45 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.45 – 4.0 | A | Si Sa, brn, moist | 3.3 | A-2-4 | Gr Sa | 24.1 | 57.8 | 18.1 | | |
| | | | | 4.0 – 5.0 | A | Sa Si, brn, moist | 16.4 | A-2-4 | Si Sa | 12.9 | 59.8 | 27.3 | | |
| | | | | NLTD | | | | | | | | | | |

| |
|---|
| SAMPLE TYPE "A" = Auger |
| NLTD = No Ledge to Depth |
| TLOB = To Ledge or Boulder |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
BORING AND CORING SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 36 OF 444

# BORING AND CORING SHEET 2

| BORING No. | DATE DRILLED | MILE MARKER | OFFSET (FT) | DEPTH (FT) | SAMPLE TYPE | FIELD DESCRIPTION | LABORATORY RESULTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | SOIL TYPE, COLOR, MOISTURE | % MOISTURE | AASHTO CLASS. | SOIL DES. | % GRAVEL | % SAND | % FINES | LIQUID LIMIT | PLASTIC LIMIT |
| **B-129** | 11/20/2012 | 5.6 | 7.3 RT | 0.00 – 0.73 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.73 – 1.6 | A | Si Sa, dk/brn, moist | 9.8 | A-2-4 | Si Sa | 9.7 | 63.3 | 27 | | |
| | | | | 1.6 – 5.0 | A | Si Sa, brn, moist | 13.5 | A-2-4 | Si Sa | 2.3 | 71.3 | 26.4 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-130** | 11/20/2012 | 5.8 | 5.1 LT | 0.00 – 0.95 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.95 – 4.0 | A | Si Gr Sa, brn, moist | 8.2 | A-1-b | Gr Sa | 39.8 | 43.7 | 16.5 | | |
| | | | | 4.0 – 5.0 | A | Gr Sa, rusty, moist | 12.5 | A-1-b | Gr Sa | 40.2 | 42.4 | 17.4 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-131** | 11/20/2012 | 6 | 7.3 RT | 0.00 – 0.80 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.80 – 2.4 | A | Si Sa, brn, moist | 5.2 | A-2-4 | Gr Sa | 26 | 56.7 | 17.3 | | |
| | | | | 2.4 – 5.0 | A | Sa, brn, moist | 6.1 | A-2-4 | Sa | 15.1 | 72.1 | 12.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-132** | 11/20/2012 | 6.2 | 4.6 LT | 0.00 – 0.50 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.50 – 4.0 | A | Si Sa, brn, moist | 4.9 | A-2-4 | Gr Si Sa | 21.3 | 52.7 | 26 | | |
| | | | | 4.0 – 5.0 | A | Si Sa, dk/brn, moist | 18.1 | A-2-4 | Si Sa | 2.6 | 73.8 | 23.6 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-133** | 11/20/2012 | 6.4 | 7.8 RT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 3.5 | A | Si Sa, brn, moist | 4.1 | A-2-4 | Si Gr Sa | 25.2 | 52.7 | 22.1 | | |
| | | | | 3.5 – 5.0 | A | Sa Si, gry, moist | 12.4 | A-4 | Si Sa | 9.8 | 53.2 | 37 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-134** | 11/20/2012 | 6.6 | 8.0 LT | 0.00 – 0.63 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.63 – 2.0 | A | Si Sa, brn, moist | 4.8 | A-2-4 | Gr Si Sa | 20.9 | 53.8 | 25.3 | | |
| | | | | 2.0 – 3.5 | A | Si Sa, dk/brn, moist | 13.6 | A-2-4 | Si Sa | 2.1 | 71.5 | 26.4 | | |
| | | | | 3.5 – 5.0 | A | Sa, brn, moist | 10.9 | A-2-4 | Sa | 1.2 | 80.3 | 18.5 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-135** | 11/20/2012 | 6.8 | 6.1 RT | 0.00 – 0.70 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.70 – 3.5 | A | Si Sa, brn, moist | 6.2 | A-2-4 | Si Sa | 15.9 | 53.1 | 31 | | |
| | | | | 3.5 – 5.0 | A | Si Sa, brn, moist | 3.4 | A-1-b | Si Gr Sa | 33.6 | 42.7 | 23.7 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-136** | 11/20/2012 | 7 | 4.5 RT | 0.00 – 0.65 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.65 – 3.5 | A | Si Sa, brn, moist | 5.9 | A-2-4 | Gr Si Sa | 24.9 | 48.8 | 26.3 | | |
| | | | | 3.5 – 5.0 | A | Si Sa, dk/brn, moist | 10.8 | A-2-4 | Si Sa | 15.4 | 62.4 | 22.2 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-137** | 11/20/2012 | 7.2 | 7.6 RT | 0.00 – 1.10 | A | Asphalt Pavement | | | | | | | | |
| | | | | 1.10 – 2.8 | A | Si Sa, brn, moist | 6.5 | A-2-4 | Si Sa | 17 | 54.4 | 28.6 | | |
| | | | | 2.8 – 5.0 | A | Sa Si, brn, moist | 10 | A-4 | Sa Si | 11.7 | 43.4 | 44.9 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-138** | 11/20/2012 | 0 | 5.0 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 5.0 | A | Si Sa, brn, moist | 3.9 | A-2-4 | Gr Si Sa | 21.9 | 49.1 | 29 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-139** | 11/20/2012 | 0.2 | 6.5 RT | 0.00 – 1.05 | A | Asphalt Pavement | | | | | | | | |
| | | | | 1.05 – 5.0 | A | Si Sa, brn, moist | 5.9 | A-2-4 | Si Gr Sa | 27.3 | 49.8 | 22.9 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-140** | 11/20/2012 | 0.4 | 4.0 LT | 0.00 – 0.70 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.70 – 2.7 | A | Si Sa, brn, moist | 3.8 | A-2-4 | Si Gr Sa | 26.8 | 51.1 | 22.1 | | |
| | | | | 2.7 – 5.0 | A | Si Sa, dk/brn, moist | 8.5 | A-1-b | Gr Sa | 30.1 | 53.9 | 16 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-141** | 11/20/2012 | 0.6 | 7.1 RT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 2.6 | A | Si Sa, brn, moist | 6.3 | A-2-4 | Gr Si Sa | 20.2 | 56 | 23.8 | | |
| | | | | 2.6 – 5.0 | A | Si Sa, dk/brn, moist | 13 | A-2-4 | Sa | 11.6 | 70.6 | 17.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-142** | 11/21/2012 | 0.8 | 7.8 LT | 0.00 – 0.60 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.60 – 5.0 | A | Si Gr Sa, brn, moist | 3.7 | A-1-b | Sa Gr | 47.7 | 42.4 | 9.9 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-143** | 11/21/2012 | 1 | 5.4 RT | 0.00 – 0.53 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.53 – 2.4 | A | Si Sa, brn, moist | 3.5 | A-2-4 | Gr Si Sa | 22.1 | 51.6 | 26.3 | | |
| | | | | 2.4 – 5.0 | A | Gr Sa, brn, moist | 2.8 | A-1-a | Sa Gr | 67.9 | 25.5 | 6.6 | | |
| | | | | NLTD | | | | | | | | | | |

| BORING No. | DATE DRILLED | MILE MARKER | OFFSET (FT) | DEPTH (FT) | SAMPLE TYPE | FIELD DESCRIPTION | LABORATORY RESULTS | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | SOIL TYPE, COLOR, MOISTURE | % MOISTURE | AASHTO CLASS. | SOIL DES. | % GRAVEL | % SAND | % FINES | LIQUID LIMIT | PLASTIC LIMIT |
| **B-144** | 11/21/2012 | 1.2 | 6.5 LT | 0.00 -0.53 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.53 – 2.0 | A | Si Sa, brn, moist | 4.3 | A-2-4 | Si Sa | 19.4 | 53.1 | 27.5 | | |
| | | | | 2.0 – 4.0 | A | Si Sa, brn, moist | 28.2 | A-2-4 | Sa | 13.4 | 69 | 17.6 | | |
| | | | | 4.0 – 5.0 | A | Cobbles | | | | | | | | |
| | | | | NLTD | | | | | | | | | | |
| **B-145** | 11/21/2012 | 1.4 | 4.7 RT | 0.00 – 0.57 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.57 – 3.0 | A | Si Sa, lt/brn, moist | 5.4 | A-2-4 | Si Sa | 10.2 | 55.8 | 34 | | |
| | | | | 3.0 – 5.0 | A | Si Gr Sa, lt/brn, moist | 2.2 | A-1-b | Sa Gr | 41.1 | 39.2 | 19.7 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-146** | 11/21/2012 | 1.6 | 3.7 LT | 0.00 – 0.35 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.35 – 3.1 | A | Si Sa, lt/brn, moist | 2.8 | A-2-4 | Gr Si Sa | 21.2 | 51.4 | 27.4 | | |
| | | | | 3.1 – 5.0 | A | Si Sa Gr, brn, moist | 1.9 | A-1-a | Sa Gr | 69.4 | 20.9 | 9.7 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-147** | 11/21/2012 | 1.8 | 7.4 RT | 0.00 – 0.75 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.75 – 3.5 | A | Si Sa, lt/brn, moist | 3.7 | A-2-4 | Gr Si Sa | 23.3 | 51.1 | 25.6 | | |
| | | | | 3.5 – 5.0 | A | Sa Gr, brn, moist | 3.2 | A-1-a | Sa Gr | 64.2 | 26.5 | 9.3 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-148** | 11/21/2012 | 2 | 5.8 LT | 0.00 – 1.00 | A | Asphalt Pavement | | | | | | | | |
| | | | | 1.00 – 4.0 | A | Si Sa, lt/brn, moist | 3 | A-2-4 | Si Gr Sa | 24.9 | 51.5 | 23.6 | | |
| | | | | 4.0 – 5.0 | A | Si Gr Sa, brn, moist | 4.6 | A-1-b | Sa Gr | 43.2 | 41.2 | 15.6 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-149** | 11/21/2012 | 2.2 | 6.7 RT | 0.00 – 0.20 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.20 – 2.5 | A | Si Sa, gry, moist | 3.7 | A-1-b | Si Gr Sa | 35 | 43.9 | 21.1 | | |
| | | | | 2.5 – 5.0 | A | Cobbles | | | | | | | | |
| | | | | NLTD | | | | | | | | | | |
| **B-150** | 11/21/2012 | 2.4 | 7.0 LT | 0.00 – 0.30 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.30 – 4.0 | A | Si Sa, lt/brn, moist | 4.1 | A-2-4 | Si Gr Sa | 23.9 | 53.8 | 22.3 | | |
| | | | | 4.0 – 5.0 | A | Si Sa, brn, moist | 5.5 | A-2-4 | Si Gr Sa | 21.8 | 56.6 | 21.6 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-151** | 11/21/2012 | 2.6 | 7.6 RT | 0.00 – 0.47 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.47 – 5.0 | A | Si Sa, lt/brn, moist | 3.2 | A-1-b | Si Gr Sa | 33.6 | 45.2 | 21.2 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-152** | 11/21/2012 | 2.8 | 6.3 LT | 0.00 – 0.35 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.35 – 2.2 | A | Si Sa, lt/brn, moist | 3.5 | A-2-4 | Si Sa | 17.2 | 60.1 | 22.7 | | |
| | | | | 2.2 – 5.0 | A | Si Sa, dk/brn, moist | 17.3 | A-2-4 | Si Sa | 13.8 | 62.4 | 23.8 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-153** | 11/21/2012 | 3 | 7.3 RT | 0.00 – 0.45 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.45 – 5.0 | A | Si Sa, lt/brn, moist | 3.3 | A-2-4 | Si Sa | 16.2 | 58.6 | 25.2 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-154** | 11/21/2012 | 3.2 | 6.8 LT | 0.00 – 0.43 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.43 – 5.0 | A | Si Sa, lt/brn, moist | 4.7 | A-2-4 | Si Sa | 12.8 | 57.1 | 30.1 | | |
| | | | | NLTD | | | | | | | | | | |
| **B-155** | 11/21/2012 | 3.4 | 6.5 RT | 0.00 – 0.43 | A | Asphalt Pavement | | | | | | | | |
| | | | | 0.43 – 2.7 | A | Si Sa, gry, moist | 2.9 | A-2-4 | Si Gr Sa | 31.8 | 42.4 | 25.8 | | |
| | | | | 2.7 – 5.0 | A | Si Gr Sa, brn, moist | 3.2 | A-2-4 | Gr Sa | 30 | 53.9 | 16.1 | | |
| | | | | NLTD | | | | | | | | | | |

| |
|---|
| SAMPLE TYPE "A" = Auger |
| NLTD = No Ledge to Depth |
| TLOB = To Ledge or Boulder |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
BORING AND CORING SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 37 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# QUANTITY SHEET 1

## SUMMARY OF ESTIMATED QUANTITIES

| ROADWAY | TRAINING | FULL C.E. ITEMS | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
|---|---|---|---|---|---|---|---|---|
| 1 | | | 1 | | LS | CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS | 201.10 | - |
| 21800 | | | 21800 | | CY | COMMON EXCAVATION | 203.15 | 419 |
| 2500 | | | 2500 | | CY | EARTH BORROW | 203.30 | 50 |
| 4100 | | | 4100 | | CY | TRENCH EXCAVATION OF EARTH | 204.20 | 90 |
| 550 | | | 550 | | CY | TRENCH EXCAVATION OF ROCK | 204.21 | EST. |
| 1 | | | 1 | | CY | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.) | 204.22 | - |
| 260 | | | 260 | | CY | GRANULAR BACKFILL FOR STRUCTURES | 204.30 | 9 |
| 163900 | | | 163900 | | SY | COLD PLANING, BITUMINOUS PAVEMENT | 210.10 | 1636 |
| 96150 | | | 96150 | | TON | SUBBASE OF CRUSHED GRAVEL, FINE GRADED | 301.28 | 1916 |
| 14400 | | | 14400 | | CY | SUBBASE OF DENSE GRADED CRUSHED STONE | 301.35 | 271 |
| 144100 | | | 144100 | | SY | RECLAIMED STABILIZED BASE | 310.20 | 1504 |
| 2650 | | | 2650 | | TON | AGGREGATE SHOULDERS | 402.12 | 47 |
| 1 | | | 1 | | LU | PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.) | 406.50 | - |
| 33750 | | | 33750 | | TON | SUPERPAVE BITUMINOUS CONCRETE PAVEMENT | 490.30 | 379 |
| 1 | | | 1 | | LU | AIR VOIDS PAY ADJUSTMENT (N.A.B.I.) | 490.31 | - |
| 1 | | | 1 | | LU | MAT DENSITY PAY ADJUSTMENT (N.A.B.I.) | 490.32 | - |
| 1 | | | 1 | | LU | SURFACE TOLERANCE PAY ADJUSTMENT (N.A.B.I.) | 490.33 | - |
| 1 | | | 1 | | LU | LONGITUDINAL JOINT COMPACTION PAY ADJUSTMENT (N.A.B.I.) | 490.34 | - |
| 70 | | | 70 | | LF | BRIDGE EXPANSION JOINT, ASPHALTIC PLUG | 516.10 | EST. |
| 5 | | | 5 | | LF | 15" CSP .079 (2-2/3 X 1/2) | 601.0011 | - |
| 5 | | | 5 | | LF | 18" CSP .079 (2-2/3 X 1/2) | 601.0016 | - |
| | | | | | | BEGIN OPTION AA | | |
| 250 | | | 250 | | LF | 24" CSP .064 (2-2/3 X 1/2) | 601.0025 | - |
| 250 | | | 250 | | LF | 24" RCP CLASS IV | 601.0826 | - |
| 250 | | | 250 | | LF | 24" CPEP | 601.0920 | - |
| | | | | | | END OPTION AA | | |
| 95 | | | 95 | | LF | 18" CPEP | 601.0915 | - |
| 14 | | | 14 | | EACH | REHAB. DROP INLETS, CATCH BASINS, OR MANHOLES, CLASS II | 604.415 | EST. |
| 9800 | | | 9800 | | LF | 6 INCH UNDERDRAIN PIPE | 605.10 | 112 |
| 100 | | | 100 | | HR | POWER GRADER RENTAL | 608.15 | EST. |
| 1150 | | | 1150 | | HR | ALL PURPOSE EXCAVATOR RENTAL, TYPE I | 608.25 | EST. |
| 100 | | | 100 | | HR | POWER BROOM RENTAL, TYPE I | 608.30 | EST. |
| 2300 | | | 2300 | | HR | TRUCK RENTAL | 608.37 | EST. |
| 50 | | | 50 | | HR | LOADER RENTAL, TYPE I | 608.40 | EST. |
| 3150 | | | 3150 | | CY | STONE FILL, TYPE I | 613.10 | 54 |
| 13 | | | 13 | | EACH | RELOCATE MAILBOX, SINGLE SUPPORT | 617.10 | EST. |
| 3 | | | 3 | | EACH | RELOCATE MAILBOX, MULTIPLE SUPPORT | 617.12 | EST. |
| 274 | | | 274 | | EACH | YIELDING MARKER POSTS | 619.17 | - |
| 1363 | | | 1363 | | LF | STEEL BEAM GUARDRAIL, GALVANIZED | 621.20 | - |
| 28825 | | | 28825 | | LF | STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS | 621.205 | - |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | TRENCH EXCAVATION OF EARTH |
| 360 | CY | DRIANAGE DETAIL SHEET |
| 3650 | CY | UNDERDRAIN DETAIL SHEET |
| 90 | CY | ROUNDING |
| 4100 | CY | TOTAL |
| | | COLD PLANING, BITUMINOUS PAVEMENT |
| 160610 | SY | MAINLINE |
| 1654 | SY | SIDE ROAD APRONS |
| 1636 | SY | ROUNDING |
| 163900 | SY | TOTAL |
| | | SUBBASE OF DENSE GRADED CRUSHED STONE, FINE GRADED |
| 83437 | TON | RESHAPE ROADWAY |
| 10797 | TON | UNSUITABLE SHOULDER MATERIAL |
| 1916 | TON | ROUNDING |
| 96150 | TON | TOTAL |
| | | SUPERPAVE BITUMINOUS CONCRETE PAVEMENT |
| | | INTERMEDIATE/LEVELING COURSES |
| 17588 | TON | TYPE IIIS |
| | | WEARING COURSE |
| 15291 | TON | TYPE IVS |
| | | SIDE ROADS |
| 265 | TON | TYPE IIIS |
| 227 | TON | TYPE IVS |
| 379 | TON | ROUNDING |
| 33750 | TON | TOTAL |
| | | STONE FILL, TYPE I |
| 1200 | CY | DITCH CLEANING DETAIL SHEET |
| 36 | CY | DRAINAGE DETAIL SHEET |
| 1860 | CY | STONE FILL FOR SLOPE STABILZATION |
| 54 | CY | ROUNDING |
| 3150 | CY | TOTAL |
| | | YIELDING MARKER POSTS |
| 216 | EACH | EXISTING AND PROPOSED DRAINAGE STRUCTURES |
| 58 | EACH | UNDERDRAIN DETAIL SHEET |
| - | EACH | ROUNDING |
| 274 | EACH | TOTAL |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
QUANTITY SHEET 1

PLOT DATE: 3/28/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 38 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# QUANTITY SHEET 2

| SUMMARY OF ESTIMATED QUANTITIES | | | | | | | | TOTALS | | DESCRIPTIONS | | | | DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ROADWAY | | | | TRAINING | | FULL C.E. ITEMS | | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND | QUANTITIES | UNIT | ITEMS |
| 14.5 | | | | | | | | 14.5 | | LF | HD STEEL BEAM GUARDRAIL, GALVANIZED | 621.21 | - | | | |
| 187.5 | | | | | | | | 187.5 | | LF | HD STEEL BEAM GUARDRAIL, GALVANIZED/NESTED | 621.216 | - | | | |
| 3 | | | | | | | | 3 | | EACH | MANUFACTURED TERMINAL SECTION, TANGENT | 621.51 | - | | | |
| 95 | | | | | | | | 95 | | EACH | ANCHOR FOR STEEL BEAM RAIL | 621.60 | - | | | |
| 27625 | | | | | | | | 27625 | | LF | REMOVAL AND DISPOSAL OF GUARDRAIL | 621.80 | - | | | |
| 1950 | | | | | | | | 1950 | | HR | UNIFORMED TRAFFIC OFFICERS | 630.10 | EST. | | | |
| 8500 | | | | | | | | 8500 | | HR | FLAGGERS | 630.15 | EST. | | | |
| | | | | | | 1 | | 1 | | LS | FIELD OFFICE, ENGINEERS | 631.10 | - | | | |
| | | | | | | 1 | | 1 | | LS | TESTING EQUIPMENT, BITUMINOUS | 631.17 | - | | | |
| | | | | | | 3000 | | 3000 | | DL | FIELD OFFICE TELEPHONE (N.A.B.I.) | 631.26 | - | | | |
| | | | | 520 | | | | 520 | | HR | EMPLOYEE TRAINEESHIP | 634.10 | EST. | | | |
| 1 | | | | | | | | 1 | | LS | MOBILIZATION/DEMOBILIZATION | 635.11 | - | | | |
| 1 | | | | | | | | 1 | | LS | TRAFFIC CONTROL (ER STP 013-1(17)) | 641.10 | - | | | |
| 2 | | | | | | | | 2 | | EACH | PORTABLE CHANGEABLE MESSAGE SIGN | 641.15 | - | | | |
| | | | | | | | | | | | BEGIN OPTION BB | | | | | |
| 115400 | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, THERMOPLASTIC | 646.402 | 2260 | | | |
| 115400 | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, EPOXY PAINT | 646.403 | 2260 | | | |
| 115400 | | | | | | | | 115400 | | LF | DURABLE 4 INCH WHITE LINE, POLYUREA | 646.404 | 2260 | | | |
| | | | | | | | | | | | END OPTION BB | | | | | |
| | | | | | | | | | | | BEGIN OPTION CC | | | | | |
| 113700 | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC | 646.412 | 2229 | | | |
| 113700 | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, EPOXY PAINT | 646.413 | 2229 | | | |
| 113700 | | | | | | | | 113700 | | LF | DURABLE 4 INCH YELLOW LINE, POLYUREA | 646.414 | 2229 | | | |
| | | | | | | | | | | | END OPTION CC | | | | | |
| | | | | | | | | | | | BEGIN OPTION DD | | | | | |
| 300 | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, THERMOPLASTIC | 646.482 | 10 | | | |
| 300 | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, EPOXY PAINT | 646.483 | 10 | | | |
| 300 | | | | | | | | 300 | | LF | DURABLE 24 INCH STOP BAR, POLYUREA | 646.484 | 10 | | | |
| | | | | | | | | | | | END OPTION DD | | | | | |
| | | | | | | | | | | | BEGIN OPTION EE | | | | | |
| 60 | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, THERMOPLASTIC | 646.492 | - | | | |
| 60 | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, EPOXY PAINT | 646.493 | - | | | |
| 60 | | | | | | | | 60 | | EACH | DURABLE LETTER OR SYMBOL, POLYUREA | 646.494 | - | | | |
| | | | | | | | | | | | END OPTION EE | | | | | |
| 115400 | | | | | | | | 115400 | | LF | TEMPORARY 4 INCH WHITE LINE | 646.600 | 2260 | | | |
| 113700 | | | | | | | | 113700 | | LF | TEMPORARY 4 INCH YELLOW LINE | 646.610 | 2229 | | | |
| 300 | | | | | | | | 300 | | LF | TEMPORARY 24 INCH STOP BAR, PAINT | 646.682 | 10 | | | |
| 60 | | | | | | | | 60 | | EACH | TEMPORARY LETTER OR SYMBOL | 646.690 | - | | | |
| 5750 | | | | | | | | 5750 | | EACH | LINE STRIPING TARGETS | 646.76 | 135 | | | |
| 28550 | | | | | | | | 28550 | | SY | GEOTEXTILE FOR ROADBED SEPARATOR | 649.11 | 293 | | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
QUANTITY SHEET 2

PLOT DATE: 3/28/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 39 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# QUANTITY SHEET 3

## SUMMARY OF ESTIMATED QUANTITIES

| ROADWAY | TRAINING | FULL C.E. ITEMS | TOTALS GRAND TOTAL | TOTALS FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND |
|---|---|---|---|---|---|---|---|---|
| 14500 | | | 14500 | | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | 256 |
| 3100 | | | 3100 | | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | 78 |
| 550 | | | 550 | | LB | SEED | 651.15 | 21 |
| 3375 | | | 3375 | | LB | FERTILIZER | 651.18 | 72 |
| 14 | | | 14 | | TON | AGRICULTURAL LIMESTONE | 651.20 | 0.8 |
| 14 | | | 14 | | TON | HAY MULCH | 651.25 | 0.8 |
| 710 | | | 710 | | CY | TOPSOIL | 651.35 | 28 |
| 5900 | | | 5900 | | SY | GRUBBING MATERIAL | 651.40 | 169 |
| 35400 | | | 35400 | | SY | TEMPORARY EROSION MATTING | 653.20 | 731 |
| 5100 | | | 5100 | | LF | BARRIER FENCE | 653.50 | 125 |
| 5100 | | | 5100 | | LF | EROSION LOG | 653.60 | 125 |
| 258 | | | 258 | | SF | TRAFFIC SIGNS, TYPE A | 675.20 | - |
| 2730 | | | 2730 | | LF | SQUARE TUBE SIGN POST AND ANCHOR | 675.341 | - |
| 174 | | | 174 | | EACH | REMOVING SIGNS | 675.50 | - |
| 87 | | | 87 | | EACH | ERECTING SALVAGED SIGNS | 675.60 | - |
| 98 | | | 98 | | EACH | DELINEATOR WITH STEEL POST | 676.10 | EST. |
| 77 | | | 77 | | EACH | REMOVAL OF EXISTING DELINEATOR | 676.12 | EST. |
| 1 | | | 1 | | LU | PRICE ADJUSTMENT, FUEL (N.A.B.I.) | 690.50 | - |
| 11 | | | 11 | | EACH | SPECIAL PROVISION (CPM SCHEDULE)(ER STP 013-1(17)) | 900.620 | - |
| 1 | | | 1 | | EACH | SPECIAL PROVISION (GNSS CONSTRUCTION INSPECTION EQUIPMENT) | 900.620 | |
| 6150 | | | 6150 | | LF | SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION) | 900.640 | 119 |
| 1 | | | 1 | | LS | SPECIAL PROVISION (GPS MACHINE CONTROL GRADING) | 900.645 | - |
| 172550 | | | 172550 | | SY | SPECIAL PROVISION (COLD MIXED RECYCLED BITUMINOUS PAVEMENT, PORTLAND CEMENT) | 900.675 | 1737 |
| 3510 | | | 3510 | | SY | SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES) | 900.675 | 72 |
| 172550 | | | 172550 | | SY | SPECIAL PROVISION (RECLAIMED STABILIZED BASE, PORTLAND CEMENT) | 900.675 | 1737 |
| 4575 | | | 4575 | | TON | SPECIAL PROVISION (AGGREGATE TO MEET COLD MIXED GRADATION) | 900.680 | 93 |
| 10 | | | 10 | | TON | SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I) | 900.680 | EST. |
| 33800 | | | 33800 | | TON | SPECIAL PROVISION (MATERIAL TRANSFER VEHICLE) | 900.680 | 635 |
| 30500 | | | 30500 | | TON | SPECIAL PROVISION (MATERIAL TRANSFER VEHICLE, COLD MIX) | 900.680 | 618 |
| 2600 | | | 2600 | | TON | SPECIAL PROVISION (PORTLAND CEMENT FOR BASE STABILIZATION) | 900.680 | 38 |
| 300 | | | 300 | | TON | SPECIAL PROVISION (PORTLAND CEMENT FOR COLD MIXED RECYCLING) | 900.680 | 12 |
| 1525 | | | 1525 | | CWT | SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H) | 900.683 | EST. |
| 22700 | | | 22700 | | CWT | SPECIAL PROVISION (EMULSIFIED ASPHALT, COLD MIX WITH CEMENT) | 900.683 | 74 |
| 2170 | | | 2170 | | CWT | SPECIAL PROVISION (FOG SEAL SURFACE TREATMENT) | 900.683 | 18 |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | GEOTEXTILE UNDER STONE FILL |
| 5400 | SY | DITCH CLEANING DETAIL SHEET |
| 90 | SY | GEOTEXTILE FOR NEW DRAINAGE |
| 8754 | SY | GEOTEXTILE FOR SIDE SLOPE WITH STONE FILL |
| 256 | SY | ROUNDING |
| 14500 | SY | TOTAL |
| | | TOPSOIL |
| 192 | CY | SIDE SLOPES |
| 490 | CY | GUARDRAIL END TERMINALS |
| 28 | CY | ROUNDING |
| 710 | CY | TOTAL |
| | | TEMPORARY EROSION MATTING |
| 760 | SY | DITCH CLEANING DETAIL SHEET |
| 5731 | SY | EROSION MATTING FOR SIDE SLOPES WITH STONE FILL |
| 25728 | SY | EROSION MATTING FOR ALL OTHER SIDE SLOPES |
| 2450 | SY | GUARDRAIL END TERMINALS |
| 731 | SY | ROUNDING |
| 35400 | SY | TOTAL |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
QUANTITY SHEET 3

PLOT DATE: 3/28/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 40 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ITEM DETAIL SHEET 1

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 6 FT POSTS | 621.20 STEEL BEAM G.R. GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.90 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| A 0+00 | B 178+38 | | | 3650.0 | | | | | | 58.0 | | | | | | | | | | | UNDERDRAIN DETAIL SHEET |
| A 0+00 | B 178+38 | | | | 1 | | | | | | | | | | | | | | | | |
| A 0+00 | B 178+38 | | | | | | 2603.0 | | | | | | | | | | | | | | |
| A 0+00 | B 178+38 | | | | | | | | | 216.0 | | | | | | | | | | | PLACE AT D'S AND PIPE INLETS/OUTLETS |
| A 0+00 | B 178+38 | | | | | | | | 1200.0 | | | | | | 5400.0 | | | 760.0 | | | DITCH CLEANING DETAIL SHEET |
| A 0+00 | B 178+38 | | | 360.0 | | 251.0 | | | 36.0 | | | | | | | | | | | | DRAINAGE DETAIL SHEET |
| A 0+00 | B 178+38 | | | | | | | | | | | | | | | 192.3 | | 25727.6 | | | TOPSOIL/EROSION MATTING FOR SIDE SLOPES FLATTER THAN 1:1 |
| A 0+19 | A 3+32 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 0+23 | A 3+11 | LT | | | | | | | | | | | | 600.0 | | | | | | 2 | |
| A 0+32 | A 3+03 | LT | | | | | | | | | 587.5 | | | | | | | | 1 | | |
| A 6+03 | A 3+16 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 6+80 | A 3+73 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 6+03 | A 10+01 | LT | | | | | | | | | | | | 350.0 | | | | | | 2 | |
| A 6+73 | A 9+91 | LT | | | | | | | | | 325.0 | | | | | | | | | | |
| A 9+91 | A 10+04 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 13+41 | A 16+54 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 16+57 | A 24+47 | RT | | | | | | | | | | | | 800.0 | | | | | | 2 | |
| A 13+54 | A 24+35 | RT | | | | | | | | | 775.0 | | | | | | | | | | |
| A 13+80 | A 17+03 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 13+97 | A 24+07 | LT | | | | | | | | | | | | 725.0 | | | | | | 2 | |
| A 17+03 | A 23+97 | LT | | | | | | | | | 712.5 | | | | | | | | | | |
| A 23+97 | A 24+10 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 24+35 | A 24+48 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 24+76 | A 24+89 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 24+76 | A 34+11 | RT | | | | | | | | | | | | 950.0 | | | | | | | |
| A 24+89 | A 33+96 | RT | | | | | | | | | 925.0 | | | | | | | | | | |
| A 27+43 | | | | | | | | | 23.6 | | | | | | | | | | | | |
| ~~A 27+50~~ | ~~A 29+00~~ | RT | | | | | | | ~~43.0~~ | | | | | | 110.6 | | 60.6 | 80.6 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 27+50 | A 32+02 | LT | | | | | | | | | | | | 462.5 | | | | | | 2 | |
| A 27+51 | A 27+63 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 27+63 | A 31+90 | LT | | | | | | | | | 437.5 | | | | | | | | | | |
| SHEET 1 TOTAL | | | 250.0 | 4010.0 | 1.0 | 251.0 | 2603.0 | 0.0 | 1259.6 ~~1259.6~~ | 274.0 | 3762.5 | 140.0 | 10.0 | 3887.5 | 5510.6 | 242.3 | 60.6 | 26798.2 | 11.0 | 10.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 41 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ITEM DETAIL SHEET 2

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX OF EARTH, EXP. (N.A.B.L.) | 204.30 GRAN BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 6 FT POSTS | 621.20 STEEL BEAM G.R. GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.90 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| ~~A 31+50~~ | A 33+00 | RT | | | | | | | ~~24.6~~ | | | | | | 117.3 | | 67.3 | 67.3 | | | STONE FILL FOR SLOPE STABILIZATION |
| **A 31+10** | | | | | | | | | **32.0** | | | | | | | | | | | | |
| A 31+90 | A 32+03 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 33+98 | A 34+11 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 41+09 | A 41+22 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 41+11 | A 47+63 | RT | | | | | | | | | | | | 675.0 | | | | | | 2 | |
| A 41+17 | A 47+52 | RT | | | | | | | | | 650.0 | | | | | | | | | | |
| A 47+03 | A 47+16 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 47+08 | A 51+98 | LT | | | | | | | | | | | | 500.0 | | | | | | 2 | |
| A 47+16 | A 51+65 | LT | | | | | | | | | 475.0 | | | | | | | | | | |
| A 47+52 | A 47+65 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 51+50 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| A 51+65 | A 51+98 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 54+27 | A 54+40 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 54+32 | A 56+80 | LT | | | | | | | | | | | | 462.5 | | | | | | 2 | |
| A 54+40 | A 56+69 | LT | | | | | | | | | 437.5 | | | | | | | | | | |
| A 59+69 | A 56+82 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 62+93 | A 63+09 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 62+97 | A 84+37 | LT | | | | | | | | | | | | 2150.0 | | | | | | 2 | |
| A 63+06 | A 84+14 | LT | | | | | | | | | 2125.0 | | | | | | | | | | |
| A 83+16 | A 83+29 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 84+14 | A 84+27 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 83+21 | A 101+10 | RT | | | | | | | | | | | | 1812.5 | | | | | | 2 | |
| A 83+29 | A 101+00 | RT | | | | | | | | | 1787.5 | | | | | | | | | | |
| **A 90+15** | **A 90+77** | | | | | | | | **13.6** | | | | | | | | | | | | |
| ~~A 89+39~~ | ~~A 91+09~~ | LT | | | | | | | ~~12.6~~ | | | | | | 66.5 | | 43.2 | 43.2 | | | STONE FILL FOR SLOPE STABILIZATION |
| **A 92+10** | **A 93+83** | | | | | | | | **27.4** | | | | | | | | | | | | |
| ~~A 92+36~~ | ~~A 93+50~~ | LT | | | | | | | ~~19.0~~ | | | | | | 107.8 | | 57.8 | 57.8 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 101+00 | A 101+15 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 103+21 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 104+35 | A 104+50 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 104+40 | A 107+55 | RT | | | | | | | | | | | | 325.0 | | | | | | 2 | |
| A 104+50 | A 107+45 | RT | | | | | | | | | 300.0 | | | | | | | | | | |
| | | | | | | | | | **73.0** | | | | | | | | | | | | |
| SHEET 2 TOTAL | | | 325.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | ~~53.1~~ | 0.0 | 5775.0 | 188.5 | 13.0 | 5925.0 | 291.6 | 65.0 | 168.3 | 493.3 | 13.0 | 12.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 42 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ITEM DETAIL SHEET 3

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX OF EARTH, EXP. (N.A.B.L.) | 204.30 GRAN BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YIELDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 6 FT POSTS | 621.20 STEEL BEAM G.R. GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.90 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| A 107+45 | A 107-58 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 107+82 | A 107-95 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 107+95 | A 111-48 | RT | | | | | | | | | 350.0 | | | | | | | | | | |
| A 107+96 | A 111-50 | RT | | | | | | | | | | | | 362.5 | | | | | | 2 | |
| A 111+23 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 111+48 | A 111-61 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 112+80 | A 116-02 | LT | | | | | | | | | | | | 250.0 | | | | | | 2 | |
| A 115+85 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 117+31 | A 117-44 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 117+34 | A 118-77 | RT | | | | | | | | | | | | 162.5 | | | | | | 2 | |
| A 117+44 | A 118-62 | RT | | | | | | | | | 137.5 | | | | | | | | | | |
| A 118+62 | A 118-75 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 125+23 | A 125-36 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 125+23 | A 127-24 | RT | | | | | | | | | | | | 212.5 | | | | | | 2 | |
| A 125+39 | A 127-11 | RT | | | | | | | | | 187.5 | | | | | | | | | | |
| A 127+11 | A 127-24 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 138+38 | A 138-51 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 138+38 | A 148-00 | RT | | | | | | | | | | | | 975.0 | | | | | | 2 | |
| A 138+51 | A 147-87 | RT | | | | | | | | | 950.0 | | | | | | | | | | |
| A 145+41 | A 145+91 | | | | | | | | 34.7 | | | | | | | | | | | | |
| ~~A 145+75~~ | ~~A 146-00~~ | RT | | | | | | | ~~0.0~~ | | | | | | 57.8 | | 26.8 | 26.8 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 147+87 | A 148-00 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 148+51 | A 148-64 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 148+64 | A 152-32 | LT | | | | | | | | | 387.5 | | | | | | | | | | |
| A 148+85 | A 152+40 | LT | | | | | | | | | | | | 375.0 | | | | | | 2 | |
| A 151+12 | A 151-25 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 151+25 | A 151-62 | RT | | | | | | | | | 37.5 | | | | | | | | | | |
| A 151+29 | A 151-96 | LT | | | | | | | | | | | | 37.5 | | | | | | 2 | |
| A 151+44 | A 151-57 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 152+32 | A 152-45 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 50 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 174+78 | A 174-92 | LT | 25.0 | | | | | | | | | | | | | 50 | | 25.0 | 1 | | BRIDGE 70 - NTS |
| SHEET 3 TOTAL | | | 350.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 34.7<br>~~0.0~~ | 0.0 | 2050.0 | 188.5 | 13.0 | 2375.0 | 57.8 | 700 | 26.8 | 376.8 | 14.0 | 14.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-K(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 3

PLOT DATE: 2/26/2014
DRAWN BY: B. KPP
CHECKED BY: A. KEMPTON
SHEET 43 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# ITEM DETAIL SHEET 4

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX OF EARTH, EXP. (N.A. B.L.) | 204.30 GRAN BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 6 FT POSTS | 621.20 STEEL BEAM G.R. GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.90 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| A 175+88 | A 178+00 | LT | 25.0 | | | | | | | | | | | | | 5.0 | | 25.0 | 1 | | BRIDGE 70 - N/S |
| A 186+27 | A 187+30 | | | | | | | | 22.9 | | | | | | | | | | | | |
| ~~A 186+00~~ | ~~A 187+50~~ | RT | | | | | | | ~~28.6~~ | | | | | | 115.7 | | 65.7 | 65.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 189+00 | A 189+13 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 189+13 | A 189+87 | LT | | | | | | | | | 87.5 | | | | | | | | | | |
| A 189+70 | A 189+83 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | | | GI-D TERMINAL END SECTION |
| A 189+83 | A 200+23 | RT | | | | | | | | | 1075.0 | | | | | | | | | | |
| A 189+87 | A 190+00 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 190+84 | A 200+23 | RT | | | | | | | | | | | | 875.0 | | | | | | 1 | |
| | A 197+00 | | | | | | | | 84.3 | | | | | | | | | | | | |
| A 193+00 | ~~A 197+00~~ | RT | | | | | | | ~~81.3~~ | | | | | | 387.5 | | 254.2 | 254.2 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 200+38 | A 211+69 | RT | | | | | | | | | 1162.5 | | | | | | | | | | |
| A 200+38 | A 212+01 | RT | | | | | | | | | | | | 1175.0 | | | | | | 2 | |
| A 210+86 | A 211+70 | | | | | | | | 7.8 | | | | | | | | | | | | |
| ~~A 211+00~~ | ~~A 212+00~~ | RT | | | | | | | ~~19.3~~ | | | | | | 72.0 | | 38.7 | 38.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 211+89 | A 212+02 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 226+66 | A 230+16 | RT | | | | | | | | | | | | 362.5 | | | | | | 2 | |
| A 226+88 | A 227+01 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 227+01 | A 230+06 | RT | | | | | | | | | 312.5 | | | | | | | | | | |
| A 230+08 | A 230+19 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 230+69 | | RT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION SEE DRAINAGE DETAIL SHEET |
| A 232+98 | A 233+09 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 232+98 | A 234+83 | RT | | | | | | | | | | | | 200.0 | | | | | | 2 | |
| A 233+00 | A 235+00 | RT | | | | | | | 22.8 | | | | | | 137.8 | | 71.2 | 71.2 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 234+70 | A 234+83 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 233+09 | A 234+83 | RT | | | | | | | | | 175.0 | | | | | | | | | | |
| A 239+00 | A 240+90 | RT | | | | | | | 28.1 | | | | | | 149.3 | | 86.0 | 86.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 239+87 | | LT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION SEE DRAINAGE DETAIL SHEET |
| A 242+50 | A 243+50 | RT | | | | | | | 9.2 | | | | | | 61.1 | | 27.8 | 27.8 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 262+23 | A 262+36 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 262+23 | A 269+72 | RT | | | | | | | | | | | | 762.5 | | | | | | 2 | |
| A 262+36 | A 269+64 | RT | | | | | | | | | 737.5 | | | | | | | | | | |
| A 265+00 | A 266+00 | RT | | | | | | | 10.3 | | | | | | 119.3 | | 86.0 | 86.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| | | | | | | | | | 185.4 | | | | | | | | | | | | |
| SHEET 4 TOTAL | | | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | ~~208.5~~ | 0.0 | 3550.0 | 130.5 | 9.0 | 3475.0 | 1052.7 | 50.0 | 629.6 | 879.6 | 9.0 | 8.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 44 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 5

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| A 268+55 | A 271+00 | RT | | | | | | | 35.2 | | | | | | 191.1 | | 109.5 | 109.5 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 269+59 | A 269+72 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 283+72 | | RT | | | | | | | | | | | | | | | | | 1 | | BRIDGE 73 |
| A 283+74 | A 283+88 | RT | 25.0 | | | | | | | | | | | | | 5.0 | | 25.0 | | | BRIDGE 73 - MTS |
| A 284+82 | A 284+95 | RT | 25.0 | | | | | | | | | | | | | 5.0 | | 25.0 | | | BRIDGE 73 - G1-D WITH HD GUARDRAIL |
| A 284+86 | | RT | | | | | | | | | | | 1 | | | | | | | | BRIDGE 73 |
| A 284+93 | | RT | | | | | | | | | | | | | | | | | 1 | | BRIDGE 73 |
| A 291+02 | A 291+15 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 291+02 | A 304+35 | RT | | | | | | | | | | | | 1337.5 | | | | | | 2 | |
| A 291+15 | A 304+27 | RT | | | | | | | | | 1325.0 | | | | | | | | | | |
| A 295+00 | A 295+30 | LT | | | | | | | 7.5 | | | | | | 37.7 | | 27.7 | 27.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 298+00 | A 299+50 | RT | | | | | | | 20.4 | | | | | | 98.3 | | 48.3 | 48.3 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 300+81 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACEMENT<br>SEE DRAINAGE DETAIL SHEET |
| A 301+75 | A 303+00 | RT | | | | | | | 18.4 | | | | | | 96.7 | | 55.1 | 55.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 303+96 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACEMENT<br>SEE DRAINAGE DETAIL SHEET |
| A 304+27 | A 304+40 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 308+07 | A 308+20 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 308+08 | A 315+59 | RT | | | | | | | | | | | | 775.0 | | | | | | 2 | |
| A 308+20 | A 315+59 | RT | | | | | | | | | 750.0 | | | | | | | | | | |
| A 310+20 | A 311+50 | RT | | | | | | | 23.4 | | | | | | 118.4 | | 75.0 | 75.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 312+85 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACEMENT<br>SEE DRAINAGE DETAIL SHEET |
| A 315+59 | A 315+72 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 318+00 | A 319+00 | LT | | | | | | | 21.0 | | | | | | 100.2 | | 66.8 | 66.8 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 318+47 | A 318+60 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 318+60 | A 326+97 | RT | | | | | | | | | 837.5 | | | | | | | | | | |
| A 318+60 | A 327+00 | RT | | | | | | | | | | | | 837.5 | | | | | | 2 | |
| A 319+00 | A 320+00 | RT | | | | | | | 12.0 | | | | | | 69.7 | | 36.4 | 36.4 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 321+76 | | LT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION<br>SEE DRAINAGE DETAIL SHEET |
| A 323+75 | A 324+25 | RT | | | | | | | 7.0 | | | | | | 37.3 | | 20.6 | 20.6 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 326+00 | A 327+00 | RT | | | | | | | 22.5 | | | | | | 107.1 | | 73.7 | 73.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| SHEET 5 TOTAL | | | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 167.3 | 0.0 | 2912.5 | 87.0 | 7.0 | 2950.0 | 891.5 | 40.0 | 513.1 | 713.1 | 8.0 | 6.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 5

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 6

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX. OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| A 326+17 | | RT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| A 326+17 | | LT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| A 326+97 | A 327+10 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 332+00 | A 332+13 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 332+13 | A 340+12 | RT | | | | | | | | | 812.5 | | | | | | | | | | |
| A 335+54 | A 340+21 | RT | | | | | | | | | | | | 500.0 | | | | | | 2 | |
| A 340+07 | A 340+20 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 340+48 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 343+25 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 343+79 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| A 343+97 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 345+17 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 346+82 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| A 346+97 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| A 346+97 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| A 346+97 | A 347+90 | RT | | | | | | | | | 125.0 | | | | | | | | | | |
| A 346+97 | A 348+09 | RT | | | | | | | | | | | | 137.5 | | | | | | 1 | |
| A 347+90 | A 348+03 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 368+67 | A 368+80 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 368+80 | A 378+77 | RT | | | | | | | | | 1012.5 | | | | | | | | | | |
| A 368+84 | A 378+83 | RT | | | | | | | | | | | | 1000.0 | | | | | | 2 | |
| A 369+00 | A 377+00 | RT | | | | | | | 153.4 | | | | | | 757.7 | | 491.1 | 491.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 373+86 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| A 378+77 | A 378+90 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 380+75 | A 380+88 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 380+88 | A 383+61 | RT | | | | | | | | | 275.0 | | | | | | | | | | |
| A 381+00 | A 387+00 | RT | | | | | | | 155.0 | | | | | | 672.9 | | 472.9 | 472.9 | | | STONE FILL FOR SLOPE STABILIZATION |
| A 383+61 | A 383+74 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | |
| A 384+79 | A 384+92 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| A 384+92 | B 0+51 | RT | | | | | | | | | 350.0 | | | 362.5 | | | | | | 2 | |
| B 0+43 | B 0+53 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| SHEET 6 TOTAL | | | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 308.3 | 0.0 | 2575.0 | 145.0 | 10.0 | 2000.0 | 1440.6 | 50.0 | 964.0 | 1214.0 | 10.0 | 7.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 6

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 46 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 7

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX. OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| B 3+70 | B 4+25 | LT | | | | | | | 17.0 | | | | | | 61.5 | | 43.2 | 43.2 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 5+50 | B 7+00 | LT | | | | | | | 32.3 | | | | | | 154.5 | | 104.5 | 104.5 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 12+73 | B 25+06 | LT | | | | | | | | | | | | 1250.0 | | | | | | 2 | |
| B 12+74 | B 12+87 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 12+87 | B 25+00 | LT | | | | | | | | | 1225.0 | | | | | | | | | | |
| B 13+65 | B 20+05 | LT | | | | | | | 137.7 | | | | | | 654.5 | | 441.1 | 441.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 18+52 | | RT | | | | | | 1 | | | | | | | | | | | | | |
| B 18+52 | | LT | | | | | | 1 | | | | | | | | | | | | | |
| B 23+25 | B 24+00 | LT | | | | | | | 8.6 | | | | | | 50.1 | | 25.1 | 25.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 25+00 | B 25+13 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 27+55 | B 29+50 | LT | | | | | | | 80.1 | | | | | | 282.7 | | 217.7 | 217.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 39+04 | B 39+17 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 39+07 | B 50+14 | LT | | | | | | | | | | | | 1112.5 | | | | | | 2 | |
| B 39+17 | B 50+12 | LT | | | | | | | | | 1100.0 | | | | | | | | | | |
| B 39+26 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACEMENT |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| B 40+60 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACEMENT |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| B 42+93 | | | | | | | | | | | | | | | 10.0 | | | | | | PIPE REPLACMENT |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| B 44+60 | B 50+00 | LT | | | | | | | 88.6 | | | | | | 454.0 | | 274.0 | 274.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 50+12 | B 50+25 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 56+60 | B 58+00 | RT | | | | | | | 34.8 | | | | | | 139.9 | | 93.3 | 93.3 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 58+03 | B 58+19 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 58+03 | B 58+19 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 58+11 | B 62+73 | LT | | | | | | | | | | | | 462.5 | | | | | | 2 | |
| B 58+19 | B 58+83 | RT | | | | | | | | | 75.0 | | | | | | | | | | |
| B 58+19 | B 62+72 | LT | | | | | | | | | 450.0 | | | | | | | | | | |
| B 58+83 | B 58+96 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 62+72 | B 62+85 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 66+42 | | RT | | | | | | | | | | | | | 5.0 | | | | | | PIPE EXTENSION |
| | | | | | | | | | | | | | | | | | | | | | SEE DRAINAGE DETAIL SHEET |
| B 69+79 | B 69+92 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 69+89 | B 75+72 | LT | | | | | | | | | | | | 587.5 | | | | | | 2 | |
| SHEET 7 TOTAL | | | 225.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 399.0 | 0.0 | 2850.0 | 130.5 | 9.0 | 3412.5 | 1832.2 | 45.0 | 1198.9 | 1423.9 | 9.0 | 8.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET 7

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 47 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 8

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX. OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| B 69+92 | B 77+44 | LT | | | | | | | | | 750.0 | | | | | | | | | | |
| B 71+88 | B 72+01 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 72+00 | B 72+37 | RT | | | | | | | 6.2 | | | | | | 33.0 | | 20.7 | 20.7 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 72+01 | B 72+23 | RT | | | | | | | | | 37.5 | | | | | | | | | | |
| B 72+23 | B 72+36 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 72+50 | B 74+50 | LT | | | | | | | 28.1 | | | | | | 161.6 | | 95.0 | 95.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 72+60 | B 75+00 | RT | | | | | | | 45.2 | | | | | | 220.1 | | 140.1 | 140.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 76+15 | B 77+50 | LT | | | | | | | 68.3 | | | | | | 196.4 | | 151.4 | 151.4 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 77+40 | B 77+53 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 104+24 | B 104+37 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 104+37 | B 113+87 | LT | | | | | | | | | 950.0 | | | | | | | | | | |
| B 104+88 | B 111+20 | LT | | | | | | | | | | | | 637.5 | | | | | | 2 | |
| B 111+00 | B 113+75 | LT | | | | | | | 57.2 | | | | | | 260.6 | | 169.0 | 169.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 112+38 | B 112+51 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 112+51 | B 113+87 | RT | | | | | | | | | 137.5 | | | | | | | | | | |
| B 113+00 | B 114+00 | RT | | | | | | | 27.2 | | | | | | 111.2 | | 77.8 | 77.8 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 113+87 | B 114+00 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 113+87 | B 114+00 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 133+10 | B 140+35 | RT | | | | | | | | | | | | 737.5 | | | | | | 2 | |
| B 133+12 | B 133+25 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 133+25 | B 140+15 | RT | | | | | | | | | 700.0 | | | | | | | | | | |
| B 133+75 | B 141+00 | RT | | | | | | | 172.0 | | | | | | 846.1 | | 604.4 | 604.4 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 137+47 | B 137+60 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 137+50 | B 139+00 | LT | | | | | | | 22.7 | | | | | | 136.0 | | 86.0 | 86.0 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 137+60 | B 138+87 | LT | | | | | | | | | 137.5 | | | | | | | | | | |
| B 138+87 | B 139+00 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 140+15 | B 140+28 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 144+06 | B 144+19 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 144+07 | B 148+88 | RT | | | | | | | | | | | | 487.5 | | | | | | 2 | |
| B 144+19 | B 148+76 | RT | | | | | | | | | 475.0 | | | | | | | | | | |
| SHEET 8 TOTAL | | | 300.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 427.0 | 0.0 | 3187.5 | 174.0 | 12.0 | 1862.5 | 1965.0 | 60.0 | 1344.4 | 1644.4 | 12.0 | 6.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET

PLOT DATE: 3/18/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 48 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 9

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX. OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| B 144+50 | B 148+00 | RT | | | | | | | 75.0 | | | | | | 328.2 | | 211.6 | 211.6 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 148+76 | B 148+89 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 152+96 | B 155+52 | RT | | | | | | | | | | | | 237.5 | | | | | | 2 | |
| B 152+97 | B 153+10 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 153+10 | B 155+39 | RT | | | | | | | | | 237.5 | | | | | | | | | | |
| B 153+50 | B 155+50 | RT | | | | | | | 55.5 | | | | | | 223.3 | | 156.6 | 156.6 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 154+00 | B 154+13 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 154+00 | B 155+50 | LT | | | | | | | 34.1 | | | | | | 161.5 | | 111.5 | 111.5 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 154+13 | B 155+39 | LT | | | | | | | | | 137.5 | | | | | | | | | | |
| B 155+39 | B 155+52 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 155+39 | B 155+52 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 159+67 | B 159+80 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 159+80 | B 161+24 | RT | | | | | | | | | 162.5 | | | | | | | | | | |
| B 160+00 | B 161+25 | RT | | | | | | | 24.4 | | | | | | 123.1 | | 83.1 | 83.1 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 161+24 | B 161+37 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 161+76 | B 161+89 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 161+89 | B 163+38 | RT | | | | | | | | | 162.5 | | | | | | | | | | |
| B 162+00 | B 163+00 | RT | | | | | | | 20.3 | | | | | | 104.6 | | 71.3 | 71.3 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 163+38 | B 163+51 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 171+14 | B 171+27 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 171+15 | B 176+33 | RT | | | | | | | | | | | | 537.5 | | | | | | 2 | |
| B 171+27 | B 176+25 | RT | | | | | | | | | 512.5 | | | | | | | | | | |
| B 172+50 | B 174+75 | RT | | | | | | | 66.9 | | | | | | 266.5 | | 191.5 | 191.5 | | | STONE FILL FOR SLOPE STABILIZATION |
| B 173+64 | B 179+91 | LT | | | | | | | | | | | | 625.0 | | | | | | 1 | |
| B 173+65 | B 173+78 | LT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | | GI-D TERMINAL END SECTION |
| B 173+78 | B 179+61 | LT | | | | | | | | | 612.5 | | | | | | | | | | |
| B 176+25 | B 176+38 | RT | 25.0 | | | | | | | | | 14.5 | 1 | | | 5.0 | | 25.0 | 1 | 1 | GI-D TERMINAL END SECTION |
| B 176+54 | B 179+55 | RT | | | | | | | | | 337.5 | | | 337.5 | | | | | | | |
| SHEET 9 TOTAL | | | 300.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 276.2 | 0.0 | 2162.5 | 174.0 | 12.0 | 1737.5 | 1207.2 | 60.0 | 825.6 | 1125.6 | 12.0 | 6.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET

PLOT DATE: 3/18/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 49 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# ITEM DETAIL SHEET 10

| STATION | STATION | POS. | 203.30 EARTH BORROW | 204.20 TRENCH. EX OF EARTH | 204.22 TRENCH EX. OF EARTH, EXP. (N.A.B.I.) | 204.30 GRAN. BACKFILL FOR STRUCTURES | 402.12 AG. SHLDRS | 604.415 REHAB D.I.'S, C.B.'S OR M.H.'S CLASS II | 613.10 STONE FILL TYPE I | 619.17 YEILDING MARKER POSTS | 621.205 STEEL BEAM G.R., GALV W / 8 FT POSTS | 621.20 STEEL BEAM G.R., GALV. | 621.60 ANCHOR FOR S.B. GUARDRAIL | 621.80 REMOVE & DISP. OF G.R. | 649.31 GEOT. UNDER STONE FILL | 651.35 TOPSOIL | 651.40 GRUBBING MATERIAL | 653.20 TEMP. EROSION MATTING | 676.10 DELINE. WITH STEEL POSTS | 676.12 REMOVAL OF EXIST. DELINE. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | CY | CY | CY | CY | TON | EACH | CY | EACH | LF | LF | EACH | LF | SY | CY | SY | SY | EACH | EACH | |
| THIS SHEET TOTAL | | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| SHEET 1 TOTAL | | | 250.0 | 4010.0 | 1.0 | 251.0 | 2603.0 | 0.0 | 1255.0 | 274.0 | 3762.5 | 145.0 | 10.0 | 3887.5 | 5510.6 | 242.3 | 60.6 | 26798.2 | 11.0 | 10.0 | |
| SHEET 2 TOTAL | | | 325.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 53.1 | 0.0 | 5775.0 | 188.5 | 13.0 | 5925.0 | 291.6 | 65.0 | 168.3 | 493.3 | 13.0 | 12.0 | |
| SHEET 3 TOTAL | | | 350.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 6.3 | 0.0 | 2050.0 | 188.5 | 13.0 | 2375.0 | 51.8 | 70.0 | 26.8 | 376.8 | 14.0 | 14.0 | |
| SHEET 4 TOTAL | | | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 203.5 | 0.0 | 3550.0 | 130.5 | 9.0 | 3475.0 | 1052.7 | 50.0 | 629.6 | 879.6 | 9.0 | 8.0 | |
| SHEET 5 TOTAL | | | 200.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 167.3 | 0.0 | 2912.5 | 87.0 | 7.0 | 2950.0 | 891.5 | 40.0 | 513.1 | 713.1 | 8.0 | 6.0 | |
| SHEET 6 TOTAL | | | 250.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 308.3 | 0.0 | 2575.0 | 145.0 | 10.0 | 2000.0 | 1440.6 | 50.0 | 964.0 | 1214.0 | 10.0 | 7.0 | |
| SHEET 7 TOTAL | | | 225.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.0 | 399.0 | 0.0 | 2850.0 | 130.5 | 9.0 | 3412.5 | 1832.2 | 45.0 | 1198.9 | 1423.9 | 9.0 | 8.0 | |
| SHEET 8 TOTAL | | | 300.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 427.0 | 0.0 | 3187.5 | 174.0 | 12.0 | 1862.5 | 1965.0 | 60.0 | 1344.4 | 1644.4 | 12.0 | 6.0 | |
| SHEET 9 TOTAL | | | 300.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 276.2 | 0.0 | 2162.5 | 174.0 | 12.0 | 1737.5 | 1207.2 | 60.0 | 825.6 | 1125.6 | 12.0 | 6.0 | |
| TOTALS | | | 2450.0 | 4010.0 | 1.0 | 251.0 | 2603.0 | 14.0 | 3095.8 | 274.0 | 28825.0 | 1363.0 | 95.0 | 27625.0 | 14243.2 | 682.3 | 5731.3 | 34668.9 | 98.0 | 77.0 | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
ITEM DETAIL SHEET

PLOT DATE: 3/18/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 50 OF 444

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

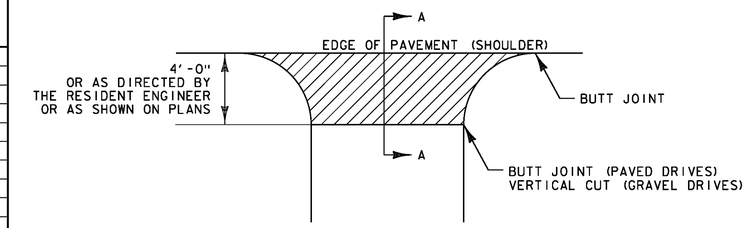
# DRAINAGE DETAIL SHEET

| STATION | EXISTING STRUCTURE TYPE | POS. | PIPE NO. | INLET/OUTLET TYPE | | DITCH | | PIPE ARCH | | | PIPE | | ALLOWABLE OPTIONS | | | | | | PIPE ELBOW | ES | CB | PRCCDI | DEPTH DI | CONC CLASS B | REINF STEEL | DI GRATE | CHAN ELEV | CRM | TRENCH EXCAVATION | | COMM EXC | UNC CHAN EXC | STRUCT EXCAV | | GRAN B F. FOR STRUCT-URES | EROS MATT | STONE FILL | | MARKER POSTS | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | INLET | OUTLET | IN | OUT | SPAN IN | RISE IN | L FT | D IN | L FT | PCCSP TH | CAAP TH | RCP CL | CSP TH | CPEP SL | PCCSP PI TH | NO. DEG. | EA | EA | | FT | CY | LBS | TYPE | EA | CY | EARTH CY | ROCK CY | CY | CY | CY | CY | CY | CY | SY | CY | TYPE | LT EA | RT EA | | | |
| A 230+69 | CPEP | LT | 1 | | | | | | | | 18 | 5 | | | | | X | | | | | | | | | | | | 5.0 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' (CUT TO SIZE IN FIELD) |
| A 239+87 | CGMP | LT | 2 | | | | | | | | 18 | 5 | | | | 0.75 | | | | | | | | | | | | | 5.0 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' (CUT TO SIZE IN FIELD) |
| A 300+81 | CGMP | LT-RT | 3 | | | | | | | | 24 | 40 | | | IV | 0.75 | X | | | | | | | | | | | | 35.4 | | | | | | 29.63 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| A 303+96 | CGMP | LT-RT | 4 | | | | | | | | 24 | 40 | | | IV | 0.75 | X | | | | | | | | | | | | 39.3 | | | | | | 29.63 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| A 312+85 | CGMP | LT-RT | 5 | | | | | | | | 24 | 40 | | | IV | 0.75 | X | | | | | | | | | | | | 36.2 | | | | | | 29.63 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| A 321+76 | CPEP | LT | 6 | | | | | | | | 18 | 5 | | | | | X | | | | | | | | | | | | 5.0 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' (CUT TO SIZE IN FIELD) |
| A 326+17 | CPEP | RT | 7 | | | | | | | | 18 | 5 | | | | 0.75 | | | | | | | | | | | | | 5.0 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' (CUT TO SIZE IN FIELD) |
| A 326+17 | CGMP | LT | 8 | | | | | | | | 18 | 5 | | | | 0.75 | | | | | | | | | | | | | 5.0 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' (CUT TO SIZE IN FIELD) |
| B 25+62 | CGMP | RT | 9 | | | | | | | | 18 | 80 | | | | | X | | | | | | | | | | | | 59.3 | | | | | | 53.33 | | - | - | | | | | REMOVE EXISTING CGMP - NEW CPEP DRIVE PIPE |
| B 39+26 | CGMP | LT-RT | 10 | | | | | | | | 24 | 45 | | | IV | 0.75 | X | | | | | | | | | | | | 59.5 | | | | | | 33.33 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| B 40+60 | CGMP | LT-RT | 11 | | | | | | | | 24 | 45 | | | IV | 0.75 | X | | | | | | | | | | | | 60.3 | | | | | | 33.33 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| B 42+93 | CGMP | LT-RT | 12 | | | | | | | | 24 | 40 | | | IV | 0.75 | X | | | | | | | | | | | | 40.5 | | | | | | 29.63 | | 4.0 | I | | | | | REMOVE EXISTING CGMP - PLACE NEW AT SAME ELEV. |
| B 66+42 | CGMP | RT | 13 | | | | | | | | 15 | 5 | | | | 0.75 | | | | | | | | | | | | | 4.5 | | | | | | 2.08 | | 2.0 | I | | | | | EXTENSION - 5' |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 360.0 | | | | | | 251 | | 36.0 | | | | | | |

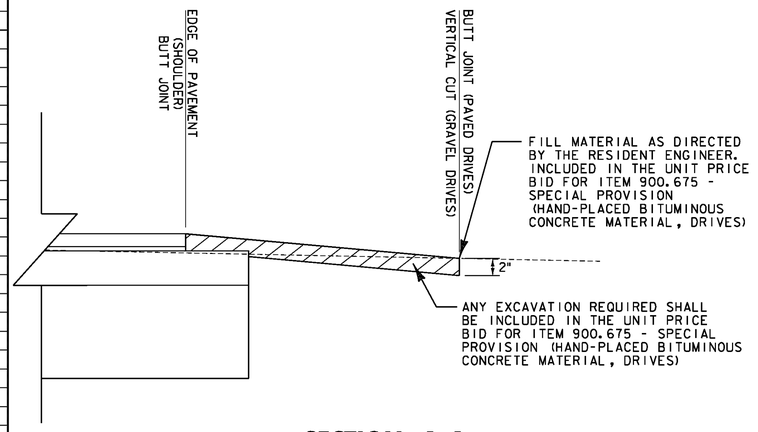
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_frm.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| DRAINAGE DETAIL SHEET | SHEET 51 OF 444 |

# HANDWORK DETAILS FOR DRIVES

| WARDSBORO | | | | | WARDSBORO | | | | | WARDSBORO | | | | | JAMAICA | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STATION | POSITION | APPROX. WIDTH (FT) | QUANTITY (SY) | DISCRIPTION | STATION | POSITION | APPROX. WIDTH (FT) | QUANTITY (SY) | DISCRIPTION | STATION | POSITION | APPROX. WIDTH (FT) | QUANTITY (SY) | DISCRIPTION | STATION | POSITION | APPROX. WIDTH (FT) | QUANTITY (SY) | DISCRIPTION |
| A 3+66 | RT | 44 | 23.85 | GRAVEL | A 158+03 | LT | 26 | 13.86 | GRAVEL | A 307+75 | RT | 19 | 9.93 | GRAVEL | B 53+25 | RT | 15 | 6.31 | GRAVEL |
| A 6+39 | LT | 36 | 19.09 | GRAVEL | A 158+58 | RT | 27 | 13.84 | GRAVEL | A 312+36 | LT | 19 | 10.80 | GRAVEL | B 53+52 | LT | 41 | 18.94 | GRAVEL |
| A 10+20 | RT | 29 | 5.93 | FIELD | A 162+48 | RT | 23 | 9.49 | GRAVEL | A 316+66 | RT | 115 | 56.86 | GRAVEL | B 53+66 | RT | 14 | 7.69 | GRAVEL |
| A 10+52 | LT | 43 | 21.81 | GRAVEL | A 163+08 | LT | 23 | 10.90 | PAVED | A 327+84 | LT | 27 | 12.44 | PAVED | B 55+59 | RT | 22 | 10.48 | GRAVEL |
| A 12+25 | LT | 17 | 8.72 | GRAVEL | A 164+08 | RT | 32 | 16.02 | GRAVEL | A 328+66 | LT | 20 | 10.42 | GRAVEL | B 56+47 | RT | 16 | 7.99 | GRAVEL |
| A 13+18 | LT | 36 | 18.18 | MEADOW RD | A 169+31 | RT | 25 | 11.98 | GRAVEL | A 329+42 | LT | 16 | 9.09 | GRAVEL | B 57+76 | LT | 36 | 17.59 | GRAVEL |
| A 13+41 | RT | 28 | 6.35 | FIELD | A 170+61 | RT | 28 | 13.68 | GRAVEL | A 329+60 | RT | 22 | 5.20 | FIELD | B 59+17 | RT | 39 | 19.92 | GRAVEL |
| A 15+10 | LT | 67 | 32.80 | PAVED | A 172+70 | RT | 34 | 16.48 | GRAVEL | A 330+28 | LT | 15 | 7.29 | GRAVEL | B 61+72 | RT | 19 | 9.24 | GRAVEL |
| A 15+65 | RT | 44 | 21.30 | TURKWOOD DR | A 174+92 | RT | 16 | 10.08 | GRAVEL | A 331+13 | LT | 33 | 15.73 | PAVED | B 63+98 | RT | 31 | 15.40 | GRAVEL |
| A 24+61 | RT | 28 | 6.65 | WOODS | A 177+10 | LT | 46 | 23.36 | GRAVEL | A 331+33 | RT | 25 | 11.86 | GRAVEL | B 66+36 | LT | 15 | 7.69 | GRAVEL |
| A 24+87 | LT | 98 | 46.14 | GRAVEL | A 178+77 | RT | 162 | 76.08 | GRAVEL | A 338+75 | LT | 16 | 7.53 | GRAVEL | B 68+13 | RT | 37 | 19.17 | GRAVEL |
| A 27+32 | LT | 36 | 18.29 | GRAVEL | A 179+73 | LT | 202 | 91.08 | GRAVEL | A 340+56 | LT | 34 | 16.81 | GRAVEL | B 72+48 | RT | 24 | 12.07 | GRAVEL |
| A 32+24 | LT | 29 | 14.24 | GRAVEL | A 187+72 | RT | 39 | 18.55 | GRAVEL | A 342+42 | RT | 235 | 16.81 | GRAVEL | B 76+18 | RT | 24 | 12.06 | GRAVEL |
| A 32+70 | LT | 51 | 24.80 | FIELD | A 190+10 | LT | 19 | 8.65 | FIELD | A 344+84 | LT | 64 | 106.08 | GRAVEL | B 81+97 | LT | 34 | 17.32 | GRAVEL |
| A 35+06 | RT | 122 | 58.18 | GRAVEL | A 207+70 | LT | 130 | 59.73 | GRAVEL | A 345+08 | RT | 45 | 49.83 | GRAVEL | B 99+27 | LT | 32 | 15.48 | GRAVEL |
| A 38+20 | LT | 27 | 12.50 | GRAVEL | A 212+48 | LT | 32 | 16.04 | PAVED | A 345+30 | LT | 33 | 15.84 | GRAVEL | B 114+11 | LT | 23 | 11.63 | PAVED |
| A 39+95 | LT | 35 | 16.16 | GRAVEL | A 215+51 | LT | 19 | 9.43 | GRAVEL | A 346+19 | LT | 31 | 15.57 | GRAVEL | B 114+43 | RT | 17 | 8.62 | PVT RD |
| A 40+85 | RT | 35 | 16.78 | GRAVEL | A 218+90 | LT | 17 | 8.39 | GRAVEL | A 346+25 | RT | 35 | 19.22 | GRAVEL | B 129+12 | RT | 28 | 0.00 | GRAVEL |
| A 41+20 | LT | 20 | 27.12 | GRAVEL | A 219+23 | RT | 40 | 19.86 | GRAVEL | A 350+01 | LT | 20 | 9.45 | PAVED | B 143+29 | LT | 20 | 10.31 | GRAVEL |
| A 51+07 | RT | 26 | 12.92 | GRAVEL | A 221+15 | RT | 15 | 8.31 | GRAVEL | A 351+62 | LT | 100 | 47.87 | GRAVEL | B 143+75 | RT | 32 | 15.61 | GRAVEL |
| A 52+04 | RT | 22 | 11.23 | GRAVEL | A 221+97 | RT | 19 | 9.71 | GRAVEL | A 353+00 | LT | 19 | 12.02 | PAVED | B 149+24 | LT | 28 | 15.13 | GRAVEL |
| A 52+31 | LT | 63 | 29.76 | GRAVEL | A 222+52 | RT | 20 | 10.52 | GRAVEL | A 353+75 | LT | 15 | 15.40 | GRAVEL | B 151+22 | LT | 28 | 14.03 | GRAVEL |
| A 53+09 | RT | 25 | 12.38 | GRAVEL | A 222+55 | LT | 53 | 25.51 | GRAVEL | A 354+91 | LT | 16 | 16.70 | GRAVEL | B 155+72 | RT | 19 | 11.03 | GRAVEL |
| A 57+78 | RT | 22 | 5.28 | WOODS | A 223+97 | RT | 91 | 44.59 | GRAVEL | A 355+31 | LT | 18 | 7.63 | PAVED | B 155+77 | LT | 49 | 23.14 | GRAVEL |
| A 61+38 | LT | 237 | 111.09 | GRAVEL | A 225+32 | RT | 17 | 8.08 | GRAVEL | A 355+85 | LT | 21 | 8.93 | PAVED | B 159+50 | LT | 93 | 42.62 | GRAVEL |
| A 64+55 | RT | 50 | 24.19 | GRAVEL | A 226+13 | RT | 48 | 20.83 | GRAVEL | A 356+68 | LT | 40 | 22.89 | GRAVEL | B 159+60 | RT | 13 | 6.39 | WOODS |
| A 67+00 | RT | 22 | 10.58 | GRAVEL | A 232+70 | RT | 24 | 12.54 | GRAVEL | A 357+62 | LT | 22 | 11.13 | GRAVEL | B 161+52 | RT | 21 | 10.46 | GRAVEL |
| A 71+33 | RT | 34 | 16.29 | GRAVEL | A 235+02 | LT | 39 | 17.98 | GRAVEL | A 358+04 | LT | 36 | 19.67 | GRAVEL | B 165+64 | LT | 21 | 11.10 | GRAVEL |
| A 82+24 | RT | 40 | 20.26 | GRAVEL | A 235+47 | RT | 50 | 23.37 | GRAVEL | A 359+88 | LT | 49 | 23.30 | PAVED | B 166+23 | LT | 20 | 9.75 | GRAVEL |
| A 82+83 | RT | 33 | 16.25 | GRAVEL | A 237+00 | LT | 31 | 15.63 | GRAVEL | A 361+70 | RT | 22 | 6.46 | FIELD | B 166+59 | LT | 32 | 15.72 | GRAVEL |
| A 100+91 | LT | 46 | 22.57 | GRAVEL | A 237+90 | RT | 30 | 14.54 | GRAVEL | A 368+08 | RT | 28 | 13.88 | GRAVEL | B 166+91 | RT | 29 | 14.52 | GRAVEL |
| A 105+50 | LT | 39 | 19.53 | GRAVEL | A 238+10 | LT | 22 | 12.05 | GRAVEL | A 369+89 | LT | 25 | 11.91 | GRAVEL | B 170+83 | RT | 12 | 2.93 | WOODS |
| A 107+68 | RT | 15 | 7.88 | GRAVEL | A 240+12 | LT | 29 | 31.08 | GRAVEL | A 371+34 | LT | 33 | 15.25 | PAVED | B 173+51 | LT | 13 | 12.00 | GRAVEL |
| A 109+74 | LT | 24 | 12.37 | GRAVEL | A 241+59 | LT | 20 | 10.15 | GRAVEL | A 372+18 | LT | 16 | 8.28 | PAVED | | | | | |
| A 113+12 | RT | 28 | 13.31 | PAVED | A 242+29 | LT | 13 | 2.91 | WOODS | A 377+30 | LT | 52 | 26.06 | GRAVEL | | | | | |
| A 113+60 | RT | 21 | 10.70 | PAVED | A 243+93 | LT | 18 | 9.38 | GRAVEL | A 378+91 | LT | 26 | 12.25 | GRAVEL | | | | | |
| A 115+18 | LT | 25 | 13.02 | GRAVEL | A 244+96 | RT | 34 | 14.66 | GRAVEL | A 380+67 | LT | 23 | 11.78 | GRAVEL | | | | | |
| A 124+49 | LT | 14 | 6.67 | GRAVEL | A 246+08 | LT | 13 | 7.10 | GRAVEL | A 381+29 | LT | 20 | 10.76 | GRAVEL | | | | | |
| A 125+46 | LT | 18 | 8.30 | GRAVEL | A 246+37 | RT | 15 | 3.48 | FIELD | A 382+75 | LT | 18 | 9.05 | WOODS | | | | | |
| A 127+18 | LT | 105 | 47.78 | GRAVEL | A 246+39 | LT | 17 | 8.73 | GRAVEL | A 384+02 | LT | 42 | 21.36 | PVT RD | | | | | |
| A 129+29 | LT | 12 | 15.74 | PAVED | A 248+63 | LT | 20 | 9.74 | PAVED | A 386+02 | LT | 24 | 11.62 | FIELD | | | | | |
| A 130+75 | LT | 56 | 27.08 | GRAVEL | A 249+77 | RT | 19 | 9.99 | GRAVEL | A 386+43 | LT | 32 | 15.88 | GRAVEL | | | | | |
| A 131+71 | LT | 13 | 13.16 | PAVED | A 250+72 | RT | 32 | 16.36 | PAVED | JAMAICA | | | | | | | | | |
| A 132+60 | RT | 58 | 27.46 | PAVED | A 253+27 | LT | 20 | 10.75 | GRAVEL | B 4+48 | LT | 18 | 9.13 | GRAVEL | | | | | |
| A 133+23 | LT | 10 | 8.06 | PAVED | A 270+55 | LT | 22 | 11.29 | GRAVEL | B 7+34 | RT | 100 | 48.75 | GRAVEL | | | | | |
| A 133+96 | LT | 31 | 15.51 | GRAVEL | A 278+49 | RT | 25 | 12.23 | PAVED | B 12+42 | LT | 41 | 19.69 | PAVED | COLUMN 1 | | | 1046.6 | |
| A 136+36 | LT | 44 | 21.88 | GRAVEL | A 280+71 | RT | 37 | 17.55 | GRAVEL | B 13+98 | RT | 21 | 10.37 | GRAVEL | COLUMN 2 | | | 951.4 | |
| A 137+36 | LT | 20 | 4.85 | FIELD | A 281+81 | LT | 14 | 6.70 | FIELD | B 26+02 | RT | 46 | 61.42 | GRAVEL | COLUMN 3 | | | 1007.8 | |
| A 138+13 | LT | 15 | 3.61 | FIELD | A 282+66 | RT | 26 | 14.15 | GRAVEL | B 31+75 | LT | 32 | 16.28 | GRAVEL | COLUMN 4 | | | 432.3 | |
| A 138+20 | RT | 9 | 5.51 | GRAVEL | A 284+79 | LT | USE ITEM 490.30 FOR PAVED DRIVE | | | B 35+13 | RT | 24 | 13.65 | GRAVEL | | | | | |
| A 138+96 | LT | 13 | 3.73 | FIELD | A 285+06 | RT | 22 | 10.56 | PAVED | B 35+22 | LT | 17 | 8.79 | PAVED | | | | | |
| A 139+82 | LT | 52 | 25.81 | GRAVEL | A 286+05 | LT | 15 | 3.42 | FIELD | B 37+93 | RT | 23 | 10.53 | PAVED | | | | | |
| A 152+99 | LT | 16 | 7.19 | PAVED | A 293+72 | LT | 21 | 11.42 | GRAVEL | B 38+83 | LT | 27 | 13.60 | GRAVEL | SUBTOTAL | | | 3438.2 | |
| A 154+81 | RT | 27 | 6.44 | FIELD | A 295+52 | LT | 38 | 18.50 | GRAVEL | B 47+59 | RT | 28 | 14.01 | GRAVEL | ROUNDING | | | 72 | |
| A 155+10 | LT | 54 | 24.45 | PAVED | A 305+84 | LT | 25 | 12.39 | GRAVEL | B 49+95 | RT | 21 | 10.35 | GRAVEL | TOTAL | | | 3510 | |
| A 155+55 | RT | 21 | 4.82 | FIELD | A 306+43 | RT | 58 | 27.74 | GRAVEL | B 52+55 | LT | 10 | 4.41 | WOODS | | | | | |




**PLAN**




**SECTION A–A**

AREAS FOR 900.675 - SPECIAL PROVISION (HAND-PLACED BIT. CONC. MATERIAL, DRIVES)

## HANDWORK DETAILS FOR DRIVES

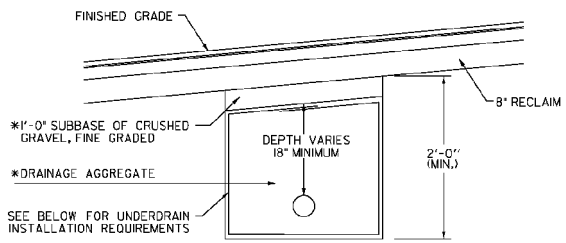
NOT TO SCALE

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

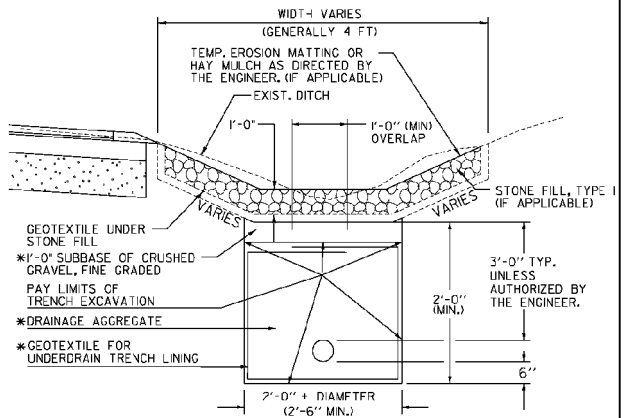
FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
HANDWORK DETAILS FOR DRIVES

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 52 OF 444

| LOCATION | | | | | UNDERDRAIN | | | | MISC. ITEMS | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 204.20 | 204.21 | 605.10 | 619.17 | * | * | * | |
| PIPE NO. | OUTLET INVERT | BEGIN STA. | END STA. | POS. | TRENCH EXCAVATION OF EARTH CY | TRENCH EXCAVATION OF ROCK CY | 6 INCH UNDERDRAIN PIPE LF | YIELDING MARKER POSTS EA | DRAINAGE AGGREGATE CY | GEOTEXTILE FABRIC SY | CRUSHED GRAVEL CY | |
| | | VT ROUTE 100 | | | | | | | | | | |
| | | WARDSBORO | | | | | | | | | | |
| UD-1 | | A 35+50 | A 39+68 | LT | 154.9 | - | 418 | 2 | 154.9 | 650.2 | 40.3 | A 35+50 - A 38+00 AND A 38+38 - A 39+48 = 360 LF |
| UD-2 | | A 42+50 | A 47+38 | LT | 180.8 | - | 488 | 2 | 180.8 | 759.1 | 47.0 | A 43+94 - A 47+74 AND A 42+50 - A 43+50 = 480 LF |
| UD-3 | | A 58+50 | A 62+00 | RT | 129.7 | - | 350 | 2 | 129.7 | 544.4 | 33.7 | A 58+45 - A 62+85 = 440 LF |
| UD-4 | | A 65+50 | A 68+56 | RT | 113.4 | - | 306 | 2 | 113.4 | 476.0 | 29.5 | A 64+65 - A 65+50 = 85 LF |
| UD-5 | | A 75+00 | A 78+48 | RT | 128.9 | - | 348 | 2 | 128.9 | 541.3 | 33.5 | A 75+08 - A 78+48 = 340 LF |
| UD-6 | | A 85+00 | A 87+62 | LT | 97.1 | - | 262 | 2 | 97.1 | 407.5 | 25.2 | |
| UD-7 | | A 88+50 | A 90+00 | LT | 55.6 | - | 150 | 2 | 55.6 | 233.3 | 14.4 | A 89+05 - A 90+25 = 120 LF |
| UD-8 | | A 94+50 | A 98+00 | RT | 129.7 | - | 350 | 2 | 129.7 | 544.4 | 33.7 | A 94+60 - A 98+10 = 350 LF |
| UD-9 | | A 140+50 | A 144+84 | LT | 160.8 | - | 434 | 2 | 160.8 | 675.1 | 41.8 | A 141+04 - A 144+84 = 380 LF |
| UD-10 | | A 182+00 | A 185+02 | LT | 111.9 | - | 302 | 2 | 111.9 | 469.8 | 29.1 | A 181+00 - A 184+00 = 300 LF |
| UD-11 | | A 228+00 | A 230+69 | LT | 99.7 | - | 269 | 2 | 99.7 | 418.4 | 25.9 | A 227+67 - A 230+67 = 300 LF |
| UD-12 | | A 265+00 | A 269+31 | LT | 159.7 | - | 431 | 2 | 159.7 | 670.4 | 41.5 | A 265+00 - A 269+30 = 430 LF |
| UD-13 | | A 291+50 | A 293+15 | LT | 61.1 | - | 165 | 2 | 61.1 | 256.7 | 15.9 | A 291+53 - A 293+00 = 147 LF |
| UD-14 | | A 301+00 | A 303+96 | LT | 109.7 | - | 296 | 2 | 109.7 | 460.4 | 28.5 | A 301+06 - A 303+86 = 280 LF |
| UD-15 | | A 306+50 | A 309+23 | LT | 101.1 | - | 273 | 2 | 101.1 | 424.7 | 26.3 | A 306+58 - A 309+18 = 260 LF |
| UD-16 | | A 310+00 | A 312+85 | LT | 105.6 | - | 285 | 2 | 105.6 | 443.3 | 27.4 | A 310+45 - A 312+85 = 240 LF |
| UD-17 | | A 319+00 | A 321+76 | LT | 102.3 | - | 276 | 2 | 102.3 | 429.3 | 26.6 | A 319+00 - A 320+40 = 140 LF |
| UD-18 | | A 322+00 | A 324+11 | LT | 78.2 | - | 211 | 2 | 78.2 | 328.2 | 20.3 | A 322+08 - A 324+08 = 200 LF |
| | | | | | | | | | | | | UD 4A: A 66+35 - A 68+55 RT = 220 LF |
| | | | | | | | | | | | | UD 6A: A 87+65 - A 88+15 LT = 50 LF |
| | | | | | | | | | | | | UD 13A: A 298+35 - A 300+68 LT = 213 LF |
| | | | | | | | | | | | | UD 17A: A 320+40 - A 321+60 LT = 120 LF |
| | | JAMAICA | | | | | | | | | | |
| UD-19 | | B 12+50 | B 14+64 | RT | 79.3 | | 214 | 2 | 79.3 | 332.9 | 20.6 | |
| UD-20 | | B 15+00 | B 18+53 | RT | 130.8 | - | 353 | 2 | 130.8 | 549.1 | 34.0 | |
| UD-21 | | B 19+00 | B 24+50 | RT | 203.8 | - | 550 | 2 | 203.8 | 855.5 | 53.0 | B 18+60 - B 24+50 = 590 LF |
| UD-22 | | B 26+50 | B 31+50 | LT | 185.3 | - | 500 | 2 | 185.3 | 777.8 | 48.1 | B 26+72 - B 31+50 = 478 LF |
| UD-23 | | B 41+00 | B 42+93 | LT | 71.5 | - | 193 | 2 | 71.5 | 300.2 | 18.6 | B 41+00 - B 42+95 = 195 LF |
| UD-24 | | B 59+50 | B 60+64 | RT | 42.2 | - | 114 | 2 | 42.2 | 177.3 | 11.0 | B 59+50 - B 60+60 = 110 LF |
| UD-25 | | B 74+50 | B 80+00 | RT | 203.8 | - | 550 | 2 | 203.8 | 855.5 | 53.0 | B 74+50 - B 80+00 = 560 LF |
| UD-26 | | B 94+00 | B 98+50 | RT | 166.7 | - | 450 | 2 | 166.7 | 700.0 | 43.3 | B 94+00 - B 98+40 = 440 LF |
| UD-27 | | B 114+00 | B 118+00 | RT | 148.2 | - | 400 | 2 | 148.2 | 622.2 | 38.5 | B 114+00 - B 118+10 = 410 LF |
| UD 28 | | B 134+00 | B 138+00 | LT | 148.2 | | 400 | 2 | 148.2 | 622.2 | 38.5 | B 134+00 - B 137+80 = 380 LF |
| UD-29 | | B 139+50 | B 143+00 | LT | 129.7 | - | 350 | 2 | 129.7 | 544.4 | 33.7 | B 139+14 - B 143+00 = 386 LF |
| | | | | | | | | | | | | UD 30: B 170+25 - B 171+25 LT = 100 LF |
| | WARDSBORO SUBTOTAL | | | | 2080 | - | 5614 | 36 | 2080 | 8733 | 541 | |
| | JAMAICA SUBTOTAL | | | | 1510 | - | 4074 | 22 | 1510 | 6337 | 392 | |
| | SUBTOTAL | | | | 3590 | - | 9688 | 58 | 3590 | 15070 | 933 | |
| | ROUNDING | | | | 60 | - | 112 | - | 40 | 160 | 17 | |
| | TOTALS | | | | 3650 | - | 9800 | 58 | 3630 | 15230 | 950 | |




**UNDERDRAIN CROSSING ROAD DETAIL**




DRAINAGE AGGREGATE SHALL MEET THE REQUIREMENTS OF SUBSECTION 704.16

*ITEMS ARE INCLUDED IN THE UNIT PRICE BID FOR PAY ITEM 605.10 6 INCH UNDERDRAIN PIPE

**UNDERDRAIN DETAIL**

NOTES:

1. GEOTEXTILE FOR UNDERDRAIN TRENCH LINING SHALL NOT BE PLACED AROUND UNDERDRAIN WHEN COVER ABOVE UNDERDRAIN IS LESS THAN 1 FOOT.
2. THE END OF THE UNDERDRAIN PIPE AT THE BEGINNING OF ALL UNDERDRAIN RUNS SHALL BE WRAPPED IN GEOTEXTILE FABRIC. PAYMENT FOR THIS WORK S INCLUDED IN THE UNIT PRICE BID FOR ITEM 605.10 6 INCH UNDERDRAIN PIPE.
3. ESTIMATED QUANTITIES ARE INCLUDED FOR INFORMATIONAL PURPOSES AND ACTUAL FIELD INSTALLATIONS MAY BE LESS THAN OR GREATER THAN THOSE SUMMARIZED.
4. REFER TO THE "DITCH CLEANING DETAIL SHEET" FOR PROPOSED DITCH TREATMENT AND PROPOSED DITCH LOCATIONS.

**NOT TO SCALE**

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
UNDERDRAIN DETAIL SHEET

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

# CULVERT INVENTORY

| WARDSBORO | | | | | |
|---|---|---|---|---|---|
| STATION | SIZE | TYPE | COVER RT | COVER LT | REMARKS |
| A 0+55 | 18" | CGMP | 2 '- 1 " | 4 '- 9 " | |
| A 2+76 | 24" | CGMP | 2 '-10 " | 6 '- 1 " | |
| A 4+20 | 18" | CGMP | 2 '- 1 " | 5 '-10 " | |
| A 8+84 | 18" | CGMP | 7 '- 6 " | 8 ' - 0 " | |
| A 14+75 | 18" | CGMP | 3 '- 1 " | 2 '- 6 " | |
| A 22+67 | 36" | CGMP | 14 '- 4 " | 14 '- 9 " | |
| A 27+93 | 18" | RCP | 11 '- 8 " | 11 '- 6 " | |
| A 30+77 | 18" | CGMP | 17 '- 7 " | 14 '- 8 " | |
| A 33+91 | 18" | CGMP | 6 '- 8 " | 4 '-11 " | |
| A 39+68 | 18" | CPEP | 1 '- 3 " | 2 '- 4 " | |
| A 42+43 | 24" | CGMP | 4 '- 4 " | 5 '- 6 " | |
| A 47+38 | 7' X 9.5' | CONCRETE BOX | 5 '-11 " | 4 '-11 " | |
| A 51+57 | 18" | RCP | 1 '-11 " | 5 '- 5 " | DI RT |
| A 58+37 | 24" | CGMP | 3 '-11 " | 6 ' - 0 " | HW RT |
| A 64+33 | 24" | CGMP | 7 '- 8 " | 8 '- 6 " | HW RT |
| A 68+56 | 18" | CGMP | 3 '-11 " | 4 '-10 " | |
| A 72+44 | 30" | CGMP | 5 '- 1 " | 5 '- 5 " | HW RT |
| A 74+69 | 18" | CGMP | 3 '- 9 " | 5 '- 3 " | HW RT |
| A 78+48 | 18" | CGMP | 3 '- 5 " | 3 '- 1 " | HW RT |
| A 80+14 | 18" | CGMP | 4 '- 2 " | 4 '- 3 " | HW RT |
| A 84+18 | 10' X 12' | CONCRETE BOX | 7 ' - 0 " | 4 ' - 0 " | |
| A 87+62 | 24" | CGMP | 4 '- 1 " | 3 '- 9 " | HW LT |
| A 92+30 | 24" | CGMP | 7 '- 7 " | 7 '- 7 " | |
| A 93+94 | 18" | CGMP | 6 '- 3 " | 4 '-11 " | |
| A 99+74 | 24" | CGMP | 5 '- 5 " | 6 '- 7 " | |
| A 100+66 | 24" | CGMP | 3 '- 8 " | 2 '- 6 " | |
| A 103+34 | 18" | RCP | 3 '- 9 " | 4 '- 2 " | DI LT |
| A 106+77 | 18" | RCP | 4 '- 5 " | 3 '- 5 " | |
| A 109+53 | 18" | RCP | 2 '- 9 " | 0 '- 5 " | |
| A 111+29 | 18" | RCP | 2 '- 5 " | 3 '- 7 " | DI LT |
| A 115+78 | 12" | ACCGMP | 3 '- 2 " | 2 '- 4 " | DI LT |
| A 117+99 | 18" | CGMP | 4 '- 2 " | 1 '- 7 " | HW RT |
| A 118+63 | 8' X 14' | CONCRETE BOX | 1 '- 8 " | 2 '- 8 " | HW RT/LT |
| A 121+63 | BRIDGE #68 | | | | |
| A 127+12 | 24" | CPEP | 4 '-11 " | 4 '- 8 " | |
| A 128+15 | 18" | CPEP | 2 '- 9 " | 2 '- 4 " | HW LT |
| A 133+79 | 18" | CGMP | 3 ' - 0 " | 2 '-10 " | |
| A 144+84 | 18" | CGMP | 3 '- 5 " | 2 '- 2 " | HW LT |
| A 151+33 | 72" | CGMP | 0 '- 8 " | 2 '- 1 " | |
| A 175+44 | 72" | CGMP | 3 '- 6 " | 2 '- 9 " | |
| A 185+02 | 18" | CGMP | 5 ' - 0 " | 4 '- 3 " | |
| A 189+81 | 48" | ACCGMP | 3 '- 3 " | 4 '- 7 " | HW LT |
| A 194+30 | 24" | CGMP | 12 ' - 0 " | 9 '-12 " | DI LT |
| A 210+96 | 18" | CGMP | 9 '- 5 " | 9 ' - 0 " | |
| A 215+32 | 18" | RCP | 4 ' - 0 " | 2 '- 6 " | |
| A 221+99 | 48" | CGMP | 3 '- 2 " | 1 '- 3 " | |
| A 230+69 | 18" | CPEP | 4 ' - 0 " | 3 ' - 0 " | |
| A 232+45 | 18" | CPEP | 3 '-10 " | 3 '- 1 " | |
| A 239+87 | 18" | CGMP | 6 '- 4 " | 4 ' - 0 " | |
| A 243+28 | 18" | RCP | 3 '- 3 " | 3 '- 5 " | |
| A 245+58 | 18" | CGMP | 2 '-11 " | 3 '- 1 " | |
| A 249+37 | 36" | CGMP | 1 '- 8 " | 1 '-10 " | |
| A 253+07 | 18" | CGMP | 3 '- 6 " | 3 '- 8 " | |
| A 257+18 | 48" | CGMP | 2 '- 4 " | 2 '-10 " | |
| A 260+84 | 18" | RCP | 4 '- 3 " | 4 ' - 0 " | |
| A 264+33 | 30" | CPEP | 3 '- 6 " | 3 ' - 0 " | |
| A 269+31 | 18" | CGMP | 5 '- 8 " | 3 '- 1 " | |
| A 272+34 | 18" | RCP | 2 '-10 " | 3 '- 3 " | |
| A 284+33 | 72" | CGMP | 1 '- 9 " | 2 '- 1 " | |
| A 293+15 | 30" | CPEP | 3 '- 8 " | 1 '-11 " | |
| A 295+22 | 30" | CGMP | 2 '- 5 " | 1 '- 9 " | |
| A 298+24 | 18" | CGMP | 4 '-11 " | 4 '- 2 " | |
| A 300+81 | 18" | CGMP | 3 ' - 0 " | 2 '- 1 " | |

| WARDSBORO | | | | | |
|---|---|---|---|---|---|
| STATION | SIZE | TYPE | COVER RT | COVER LT | REMARKS |
| A 303+96 | 18" | CGMP | 3 '- 6 " | 2 '- 6 " | |
| A 309+23 | 18" | CGMP | 3 '- 9 " | 2 '- 3 " | |
| A 312+85 | 15" | CGMP | 4 '- 8 " | 2 '- 5 " | |
| A 318+58 | 42" | CGMP | 4 '- 1 " | 3 '- 8 " | |
| A 321+76 | 18" | CPEP | 4 '-11 " | 3 '- 2 " | |
| A 324+11 | 18" | CPEP | 5 '- 7 " | 3 '- 6 " | |
| A 326+17 | 18" | CPEP | 4 '- 7 " | 2 '- 9 " | |
| A 329+35 | 30" | CPEP | 1 '-12 " | 1 '- 2 " | HW LT |
| A 332+78 | 18" | CPEP | 3 '- 1 " | 1 '- 5 " | |
| A 335+14 | 15" | CGMP | 4 '- 7 " | 3 '- 4 " | |
| A 336+81 | 15" | CGMP | 3 '- 9 " | 3 '- 2 " | |
| A 339+32 | 18" | CPEP | 2 '- 2 " | 2 '- 7 " | |
| A 340+46 | 18" | CGMP | 4 '- 5 " | 3 '- 2 " | |
| A 343+87 | 15" | CPEP | 1 '- 2 " | 1 '-10 " | DI RT/LT |
| A 346+94 | 15" | CGMP | 2 '-11 " | 1 '- 3 " | |
| A 346+98 | 18" | CGMP | -987 '- 7 " | -987 '- 7 " | DI, TOWN HIGHWAY |
| A 370+68 | 5' X 10' | CONCRETE BOX | 8 '- 4 " | 7 '- 9 " | |
| A 373+88 | 18" | CPEP | 7 '- 1 " | 5 '- 4 " | DI LT |

| JAMAICA | | | | | |
|---|---|---|---|---|---|
| STATION | SIZE | TYPE | COVER RT | COVER LT | REMARKS |
| B 4+21 | 24" | RCP | 9 '- 4 " | 9 '- 3 " | HW LT |
| B 6+32 | 30" | RCP | 10 '-10 " | 10 '- 9 " | HW LT |
| B 10+15 | BRIDGE #75 | | | | |
| B 14+64 | 18" | CGMP | 2 '- 4 " | 3 '- 5 " | |
| B 18+53 | 18" | CGMP | 0 '- 7 " | 3 '- 6 " | 2 DI'S, RT & LT |
| B 39+26 | 18" | CGMP | 3 '- 1 " | 2 '-12 " | HW RT |
| B 40+60 | 18" | CGMP | 4 '- 2 " | 3 '- 8 " | HW RT |
| B 42+93 | 18" | CGMP | 2 '-11 " | 2 '-11 " | |
| B 58+60 | 4'X4' | CONCRETE BOX | 7 '- 3 " | 5 '- 7 " | BRIDGE #76 |
| B 60+64 | 18" | CPEP | 3 '- 3 " | 2 '- 9 " | HW RT |
| B 62+96 | 18" | CGMP | 1 '- 9 " | 3 '-10 " | HW LT |
| B 66+42 | 15" | CGMP | 2 '- 2 " | 2 '- 4 " | |
| B 72+25 | 5.5' X 5' | CONCRETE BOX | 2 '- 9 " | 2 '- 3 " | BRDIGE #77 |
| B 73+51 | 36" | CGMP | 5 '- 3 " | 6 '- 9 " | HW RT |
| B 85+85 | 18" | CPEP | 2 '- 4 " | 3 '- 3 " | |
| B 88+56 | 18" | CGMP | 2 '-10 " | 2 '- 3 " | |
| B 91+29 | 18" | CGMP | 3 '- 3 " | 3 '- 7 " | HW RT |
| B 93+24 | 18" | CGMP | 3 '- 3 " | 4 '- 1 " | HW RT |
| B 104+44 | 18" | CGMP | 5 ' - 0 " | 5 '- 5 " | HW RT |
| B 106+22 | 18" | CGMP | 4 '- 2 " | 4 '-11 " | HW RT |
| B 110+18 | 36" | CPEP | 3 '- 8 " | 4 '- 7 " | HW RT |
| B 113+48 | 18" | CGMP | 5 '-11 " | 5 '-11 " | HW RT |
| B 119+30 | BRIDGE #78 | | | | |
| B 123+97 | 18" | CGMP | 6 '-12 " | 4 '-10 " | |
| B 125+16 | 15" | CGMP | 5 '- 6 " | 4 '- 8 " | |
| B 126+43 | 15" | CGMP | 7 '- " | 2 '- 6 " | HW LT |
| B 127+80 | 18" | CGMP | 6 '- 4 " | 2 '- 7 " | HW LT |
| B 130+22 | 6'X5' | CONCRETE BOX | 5 '- 9 " | 3 '-12 " | HW LT |
| B 133+42 | 18" | CGMP | 9 '-12 " | 8 '-11 " | |
| B 138+05 | 18" | CGMP | 4 '- 1 " | 3 '- 4 " | |
| B 145+03 | 30" | CGMP | 15 '- 5 " | 14 '- 3 " | |
| B 154+44 | 24" | CGMP | 12 '-11 " | 12 '- 3 " | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

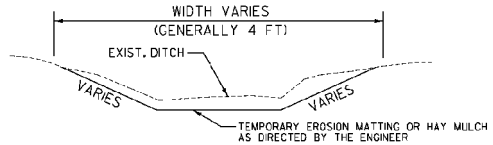
FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CULVERT INVENTORY

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 54 OF 444

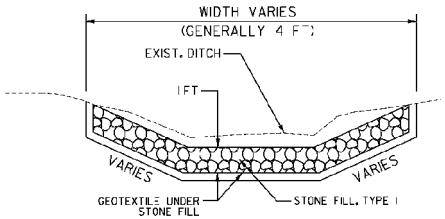
| LOCATION | | | | FEET OF DITCHING | | | MISC. ITEMS 653.20 | 613.10 | 649.31 | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| SITE | STA. | STA. | POS. | PERCENT GRADE 0-1 | 1-2.5 | 2.5-10 | TEMP. EROS. MATT. SY | STONE FILL TYP. I CY | GEOT. UNDER STONE FILL SY | |
| | VT 100 WARDSBORO | | | | | | | | | |
| 1 | A 35+50 | A 39+68 | LT | | | 418 | | 62.7 | 278.4 | |
| 2 | A 42+50 | A 47+38 | LT | | | 488 | | 73.2 | 325.0 | |
| 3 | A 58+50 | A 62+00 | RT | | | 350 | | ~~52.5~~ | 233.1 | |
| 4 | A 65+50 | A 68+56 | RT | | | 306 | | 45.9 | 203.8 | |
| 5 | A 75+00 | A 78+48 | RT | | | 348 | | ~~52.2~~ | 23.8 | |
| 6 | A 85+00 | A 87+52 | LT | | | 252 | | 39.3 | 174.5 | |
| 7 | A 88+50 | A 90+00 | LT | | | 150 | | 22.5 | 99.9 | |
| 8 | A 94+50 | A 98+00 | RT | | | 350 | | 52.5 | 233.1 | |
| 9 | A 140+50 | A 144+84 | LT | | | 434 | | 65.1 | 289.0 | |
| 10 | A 182+00 | A 185+02 | LT | | | 302 | | 45.3 | 287 | |
| 11 | A 228+00 | A 230+69 | LT | | | 269 | | 40.4 | 201.1 | |
| 12 | A 265+00 | A 269+31 | LT | | | 431 | | 64.7 | 179.1 | |
| 13 | A 291+50 | A 293+15 | LT | | | 165 | | 24.8 | 287.0 | |
| 14 | A 301+00 | A 303+96 | LT | | | 296 | | 44.4 | 109.9 | |
| 15 | A 306+50 | A 309+23 | LT | | | 273 | | 41.0 | 197.1 | |
| 16 | A 310+00 | A 312+85 | LT | | | 285 | | 42.8 | 189.8 | |
| 17 | A 319+00 | A 321+76 | LT | | | 276 | | 41.4 | 183.8 | |
| 18 | A 322+00 | A 324+11 | LT | | | 211 | | 31.7 | 140.5 | |
| | VT 100 JAMAICA | | | | | | | | | |
| 19 | B 12+50 | B 14+64 | RT | 214 | | | 95.4 | | | |
| 20 | B 15+00 | B 18+53 | RT | | | 353 | | 53.0 | 235.1 | |
| 21 | B 21+00 | B 24+50 | RT | 350 | | | 156.1 | | | |
| 22 | B 26+50 | B 31+50 | LT | | | 500 | | 75.0 | 333.0 | |
| 23 | B 41+00 | B 42+93 | LT | | | 193 | | 29.0 | 128.5 | |
| 24 | B 59+50 | B 60+64 | RT | | 114 | | 50.8 | | | |
| 25 | B 74+50 | B 80+00 | RT | 550 | | | 245.3 | | | |
| 26 | B 94+00 | B 98+50 | RT | | 564 | | 200.7 | | | |
| 27 | B 114+00 | B 118+00 | RT | | | 400 | | 60.0 | 266.4 | |
| 28 | B 134+00 | B 138+00 | LT | | | 400 | | 60.0 | 266.4 | |
| 29 | B 139+50 | B 143+00 | LT | | | 350 | | 52.5 | 233.1 | |
| WARDSBORO | | | | 0 | 0 | 5614 | 0 | 842 | 3844 | |
| JAMAICA | | | | 1114 | 678 | 2196 | 748 | 330 | 1462 | |
| SUBTOTAL | | | | 1114 | 678 | 7810 | 748 | 1172 | 5306 | |
| ROUNDING | | | | 16 | 12 | 80 | 12 | 28 | 94 | |
| TOTAL | | | | 1130 | 690 | 7890 | 760 | 1200 | 5400 | |

| LOCATION | | | | FEET OF DITCHING | | | MISC. ITEMS 653.20 | 613.10 | 649.31 | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| SITE | STATION | STATION | POS. | PERCENT GRADE 0-1 | 1-2.5 | 2.5-10 | TEMP. EROS. MATT. SY | STONE FILL TYP. I CY | GEOT. UNDER STONE FILL SY | |
| 1 | A34+88 | A38+05 | | | | | | 67.4 | | |
| 2 | A42+55 | A47+65 | | | | | | 84.5 | | |
| 3 | | | | | | | | 0 | | |
| 4 | A64+72 | A68+49 | | | | | | 82.8 | | |
| 5 | | | | | | | | 0 | | |
| 6 | A84+75 | A87+70 | | | | | | 63.8 | | |
| 7 | | | | | | | | 0 | | |
| 8 | A94+09 | A98+39 | | | | | | 86.0 | | |
| 9 | A140+14 | A144+78 | | | | | | 76.0 | | |
| 10 | A183+70 | A184+16 | | | | | | 8.5 | | |
| 11 | | | | | | | | 0 | | |
| 12 | | | | | | | | 0 | | |
| 13 | | | | | | | | 0 | | |
| 14 | A300+68 | A303+90 | | | | | | 18.75 | | |
| 15 | | | | | | | | 0 | | |
| 16 | | | | | | | | 0 | | |
| 17 | | | | | | | | 0 | | |
| 18 | | | | | | | | 0 | | |

| LOCATION | | | | FEET OF DITCHING | | | MISC. ITEMS 653.20 | 613.10 | 649.31 | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|
| SITE | STATION | STATION | POS. | PERCENT GRADE 0-1 | 1-2.5 | 2.5-10 | TEMP. EROS. MA T. SY | STONE FILL TYP. I CY | GEOT. UNDER STONE FILL SY | |




**DITCH DETAIL 0 – 2.5 PERCENT**
**NOT TO SCALE**




**DITCH DETAIL ≥ 2.5 PERCENT**
**NOT TO SCALE**

**NOTES:**

1. EXCAVATION OF PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGHOUT THE PROJECT SHALL BE PERFORMED AT LOCATIONS IDENTIFIED ON THIS SHEET AND AS DIRECTED BY THE ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).

2. GRADES LESS THAN 1 PERCENT SHALL USE ITEM 651.15, SEED AND ITEM 651.25, HAY MULCH. GRADES BETWEEN 0 AND 2.5 PERCENT SHALL USE ITEM 651.25, HAY MULCH OR ITEM 653.20, TEMPORARY EROSION MATTING AS DIRECTED BY THE ENGINEER. GRADES OVER 2.5 PERCENT SHALL USE ITEM 649.31, GEOTEXTILE UNDER STONE FILL AND ITEM 613.10, STONE FILL TYPE I AS DIRECTED BY THE ENGINEER.

**NOT TO SCALE**

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER S⊃ 013-K(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
DITCH CLEANING DETAIL SHEET

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 55 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 0+32 - STA A 6+03 LT
STA A 6+73 - STA A 9+91 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 0+23 - STA A 6+11 LT
STA A 6+63 - STA A 10+01 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 0+19 - STA A 0+32 LT
STA A 6+03 - STA A 6+16 LT
STA A 6+60 - STA A 6+73 LT
STA A 9+91 - STA A 10+04 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 0+28 LT
STA A 6+07 LT
STA A 6+69 LT
STA A 9+95 LT

DELINEATOR WITH STEEL POSTS
STA A 0+19 LT
STA A 6+16 LT
STA A 6+60 LT
STA A 10+04 LT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 48+25 (SOLID LT + RT)

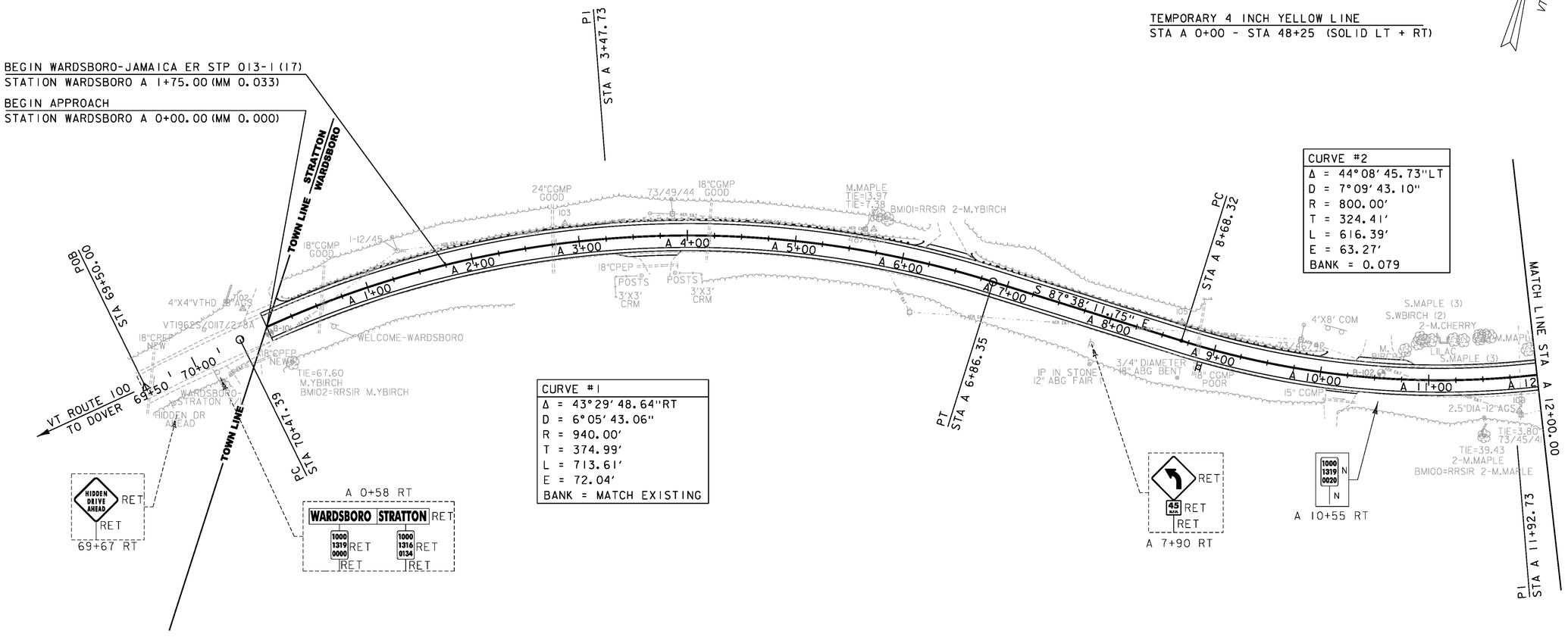
TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 0+00 - STA 48+25 (SOLID LT + RT)

N
VT STATE PLANE GRID

BEGIN WARDSBORO-JAMAICA ER STP 013-1(17)
STATION WARDSBORO A 1+75.00 (MM 0.033)

BEGIN APPROACH
STATION WARDSBORO A 0+00.00 (MM 0.000)




| CURVE #1 |
|---|
| Δ = 43°29' 48.64"RT |
| D = 6°05' 43.06" |
| R = 940.00' |
| T = 374.99' |
| L = 713.61' |
| E = 72.04' |
| BANK = MATCH EXISTING |

| CURVE #2 |
|---|
| Δ = 44°08' 45.73"LT |
| D = 7°09' 43.10" |
| R = 800.00' |
| T = 324.41' |
| L = 616.39' |
| E = 63.27' |
| BANK = 0.079 |

0 50 100
SCALE IN FEET

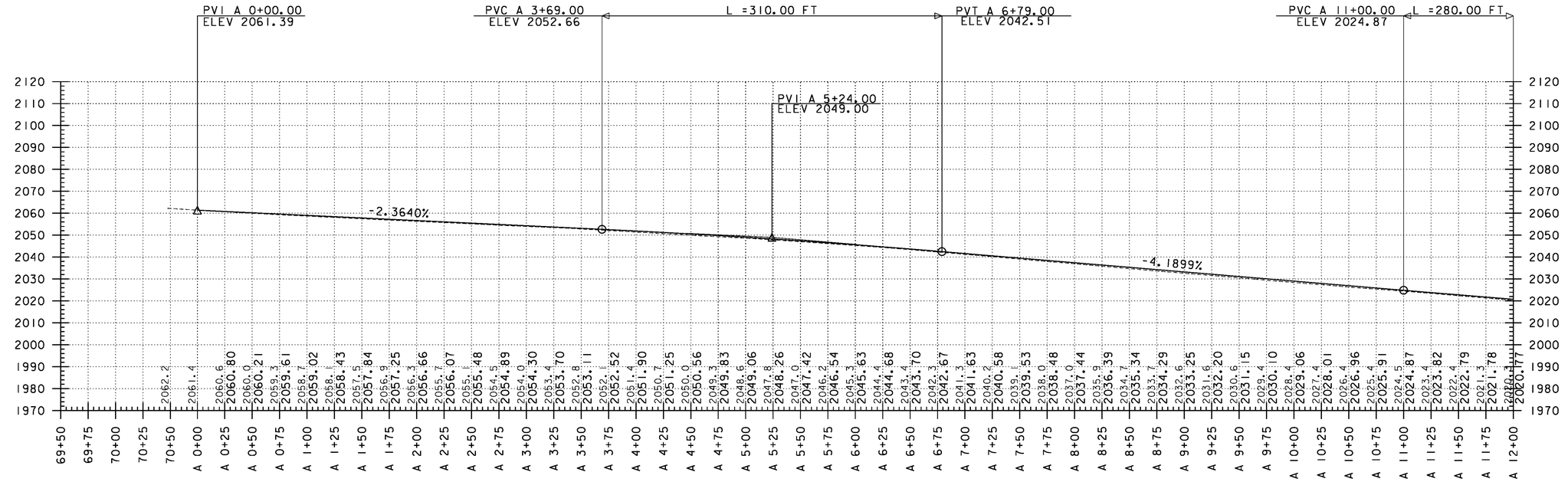
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

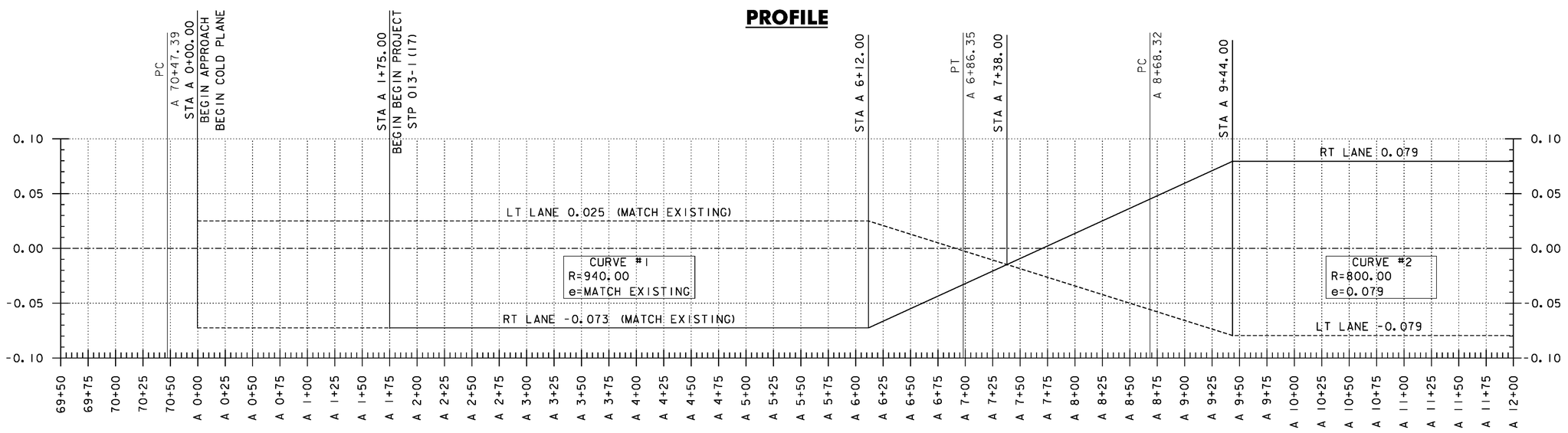
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 56 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 16+54 - STA A 24+35 RT
STA A 17+03 - STA A 23+97 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 16+51 - STA A 24+47 RT
STA A 16+91 - STA A 24+07 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 16+41 - STA A 16+54 RT
STA A 16+90 - STA A 17+03 LT
STA A 23+97 - STA A 24+10 LT

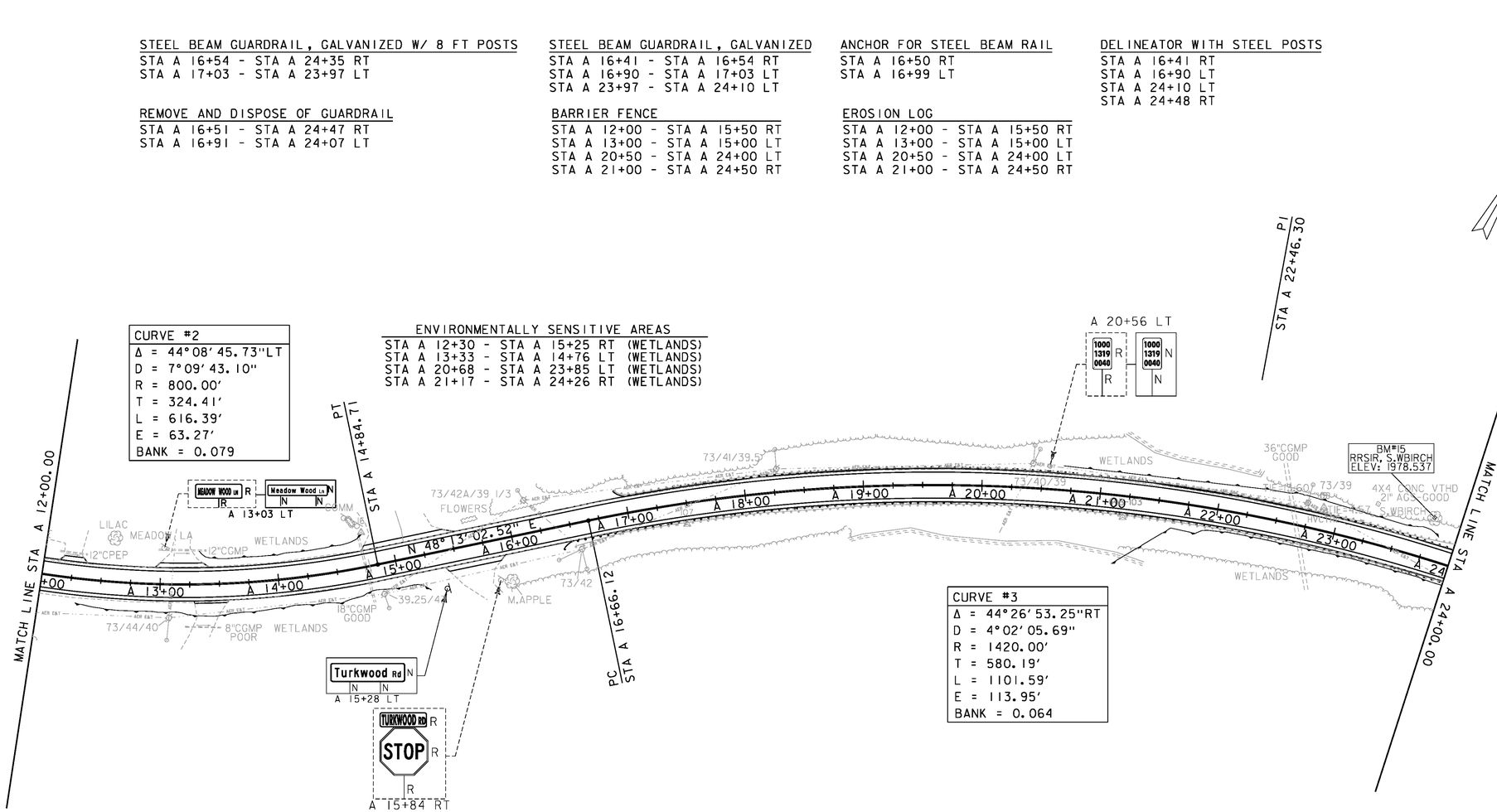
BARRIER FENCE
STA A 12+00 - STA A 15+50 RT
STA A 13+00 - STA A 15+00 LT
STA A 20+50 - STA A 24+00 LT
STA A 21+00 - STA A 24+50 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 16+50 RT
STA A 16+99 LT

EROSION LOG
STA A 12+00 - STA A 15+50 RT
STA A 13+00 - STA A 15+00 LT
STA A 20+50 - STA A 24+00 LT
STA A 21+00 - STA A 24+50 RT

DELINEATOR WITH STEEL POSTS
STA A 16+41 RT
STA A 16+90 LT
STA A 24+10 LT
STA A 24+48 RT

ENVIRONMENTALLY SENSITIVE AREAS
STA A 12+30 - STA A 15+25 RT (WETLANDS)
STA A 13+33 - STA A 14+76 LT (WETLANDS)
STA A 20+68 - STA A 23+85 LT (WETLANDS)
STA A 21+17 - STA A 24+26 RT (WETLANDS)




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 0+00 - STA 48+25 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 0+00 - STA 48+25 (SOLID LT + RT)

0 50 100
SCALE IN FEET

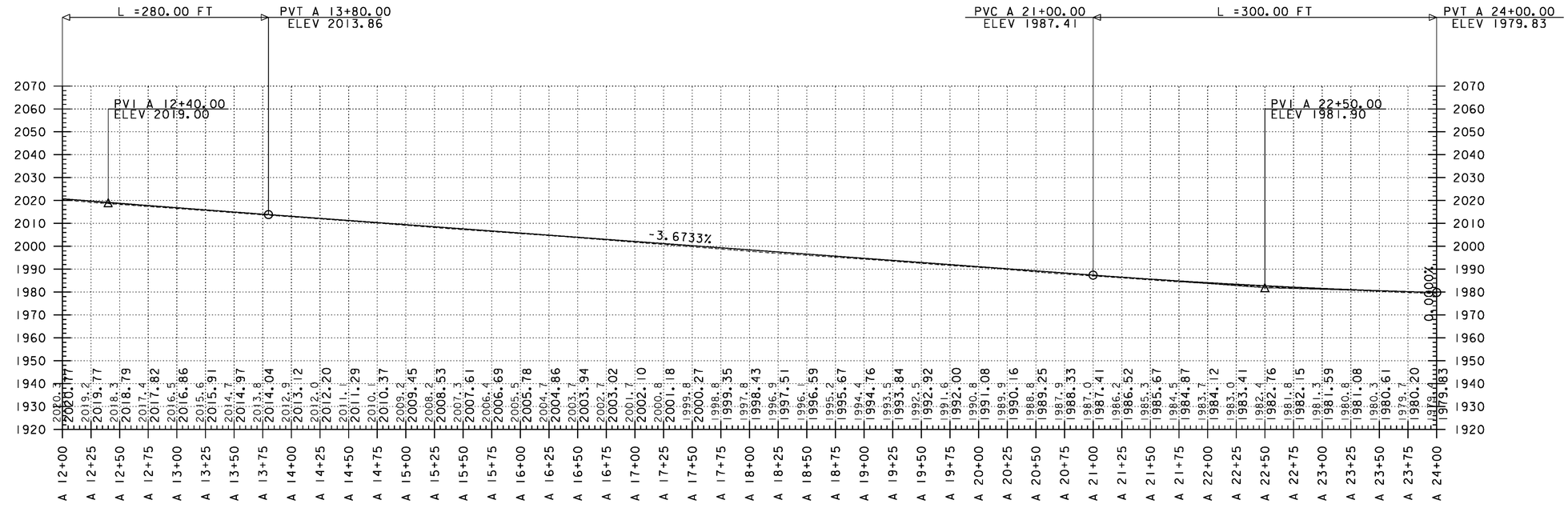
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

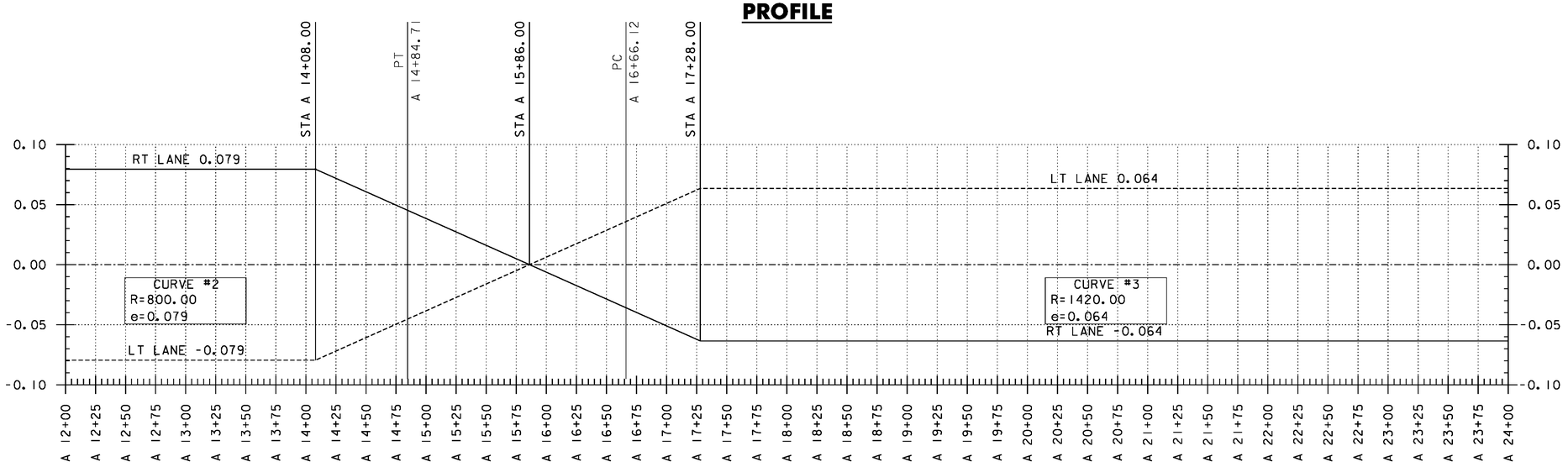
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 58 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 59 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 16+54 - STA A 24+35 RT
STA A 17+03 - STA A 23+97 LT
STA A 24+89 - STA A 33+98 RT
STA A 27+63 - STA A 31+90 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 16+51 - STA A 24+45 RT
STA A 16+91 - STA A 24+07 LT
STA A 24+76 - STA A 34+11 RT
STA A 27+50 - STA A 32+02 LT

STONE FILL, TYPE I
~~STA A 27+50 - STA A 29+00 RT~~
~~STA A 31+50 - STA A 33+00 RT~~
STA A 27+43 - STA A 29+00 RT
STA A 31+40 - STA A 33+00 RT
STA A 34+88 - STA A 38+05 LT
STA A 38+00 - STA A 39+20 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 23+97 - STA A 24+10 LT
STA A 24+35 - STA A 24+48 RT
STA A 24+76 - STA A 24+89 RT
STA A 27+51 - STA A 27+63 LT
STA A 31+90 - STA A 32+03 LT
STA A 33+98 - STA A 34+11 RT

BARRIER FENCE
STA A 21+00 - STA A 24+50 RT
STA A 25+00 - STA A 31+50 RT

GRUBBING MATERIAL
STA A 27+50 - STA A 29+00 RT
STA A 31+50 - STA A 33+00 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 24+03 LT
STA A 24+39 RT
STA A 24+85 RT
STA A 27+59 LT
STA A 31+94 LT
STA A 34+02 RT

EROSION LOG
STA A 21+00 - STA A 24+50 RT
STA A 25+00 - STA A 31+50 RT

GEOTEXTILE FOR SILT FENCE
STA A 27+50 - STA A 29+00 RT
STA A 31+50 - STA A 33+00 RT

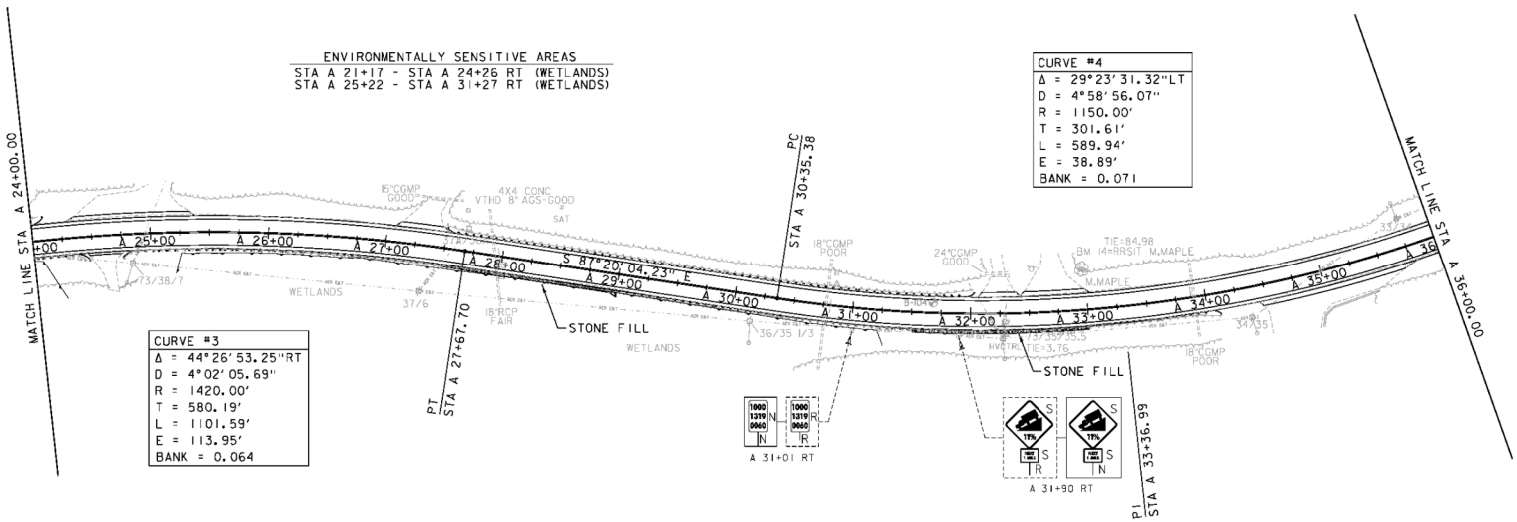
DELINEATOR WITH STEEL POSTS
STA A 24+10 LT
STA A 24+48 RT
STA A 24+76 RT
STA A 27+51 LT
STA A 32+03 LT
STA A 34+11 RT

N
VT STATE PLANE GRID

ENVIRONMENTALLY SENSITIVE AREAS
STA A 21+17 - STA A 24+26 RT (WETLANDS)
STA A 25+22 - STA A 31+27 RT (WETLANDS)

CURVE #4
Δ = 29°23'31.32"LT
D = 4°58'56.07"
R = 1150.00'
T = 301.61'
L = 589.94'
E = 38.89'
BANK = 0.071

CURVE #3
Δ = 44°26'53.25"RT
D = 4°02'05.69"
R = 1420.00'
T = 580.19'
L = 1101.59'
E = 113.95'
BANK = 0.064




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 0+00 - STA 48+25 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 0+00 - STA 48+25 (SOLID LT + RT)

0 50 100
SCALE IN FEET

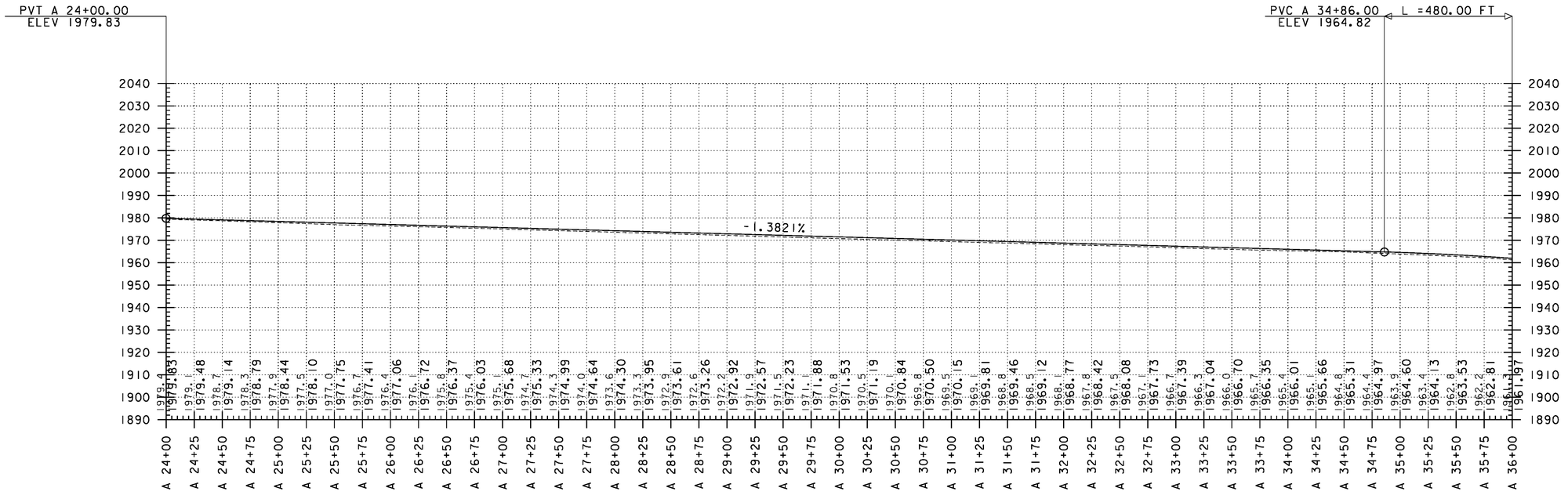
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | _____ |

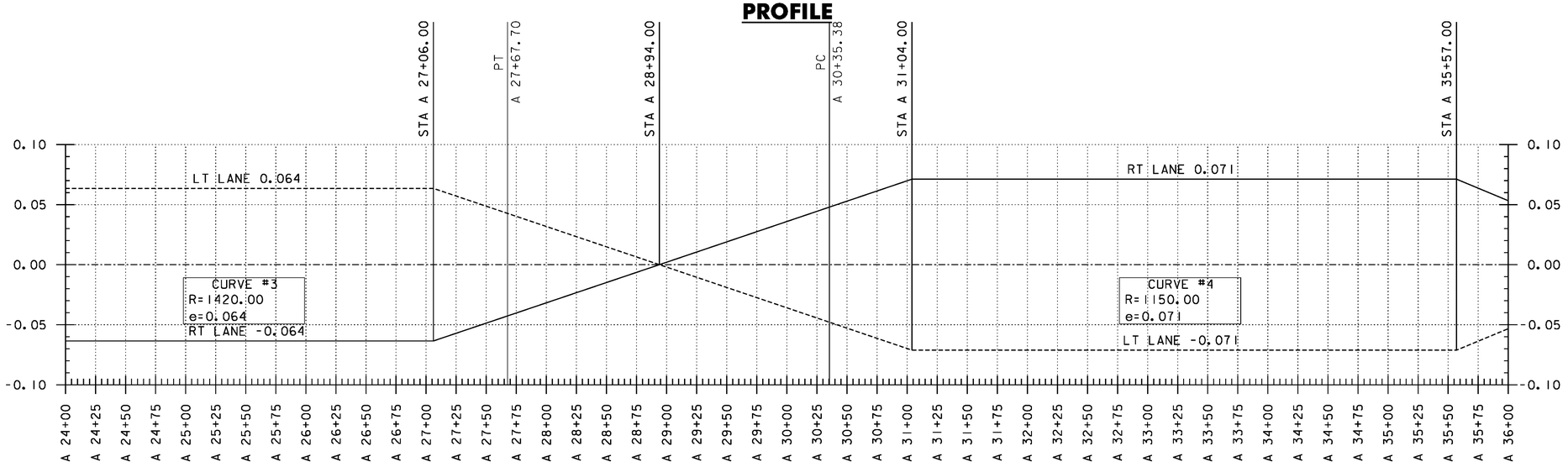
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPVAL
DESIGNED BY: B. KIPP
PLAN SHEET 3

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 60 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 61 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 41+17 - STA A 47+52 RT
STA A 47+16 - STA A 51+85 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 41+11 - STA A 47+63 RT
STA A 47+08 - STA A 51+98 LT

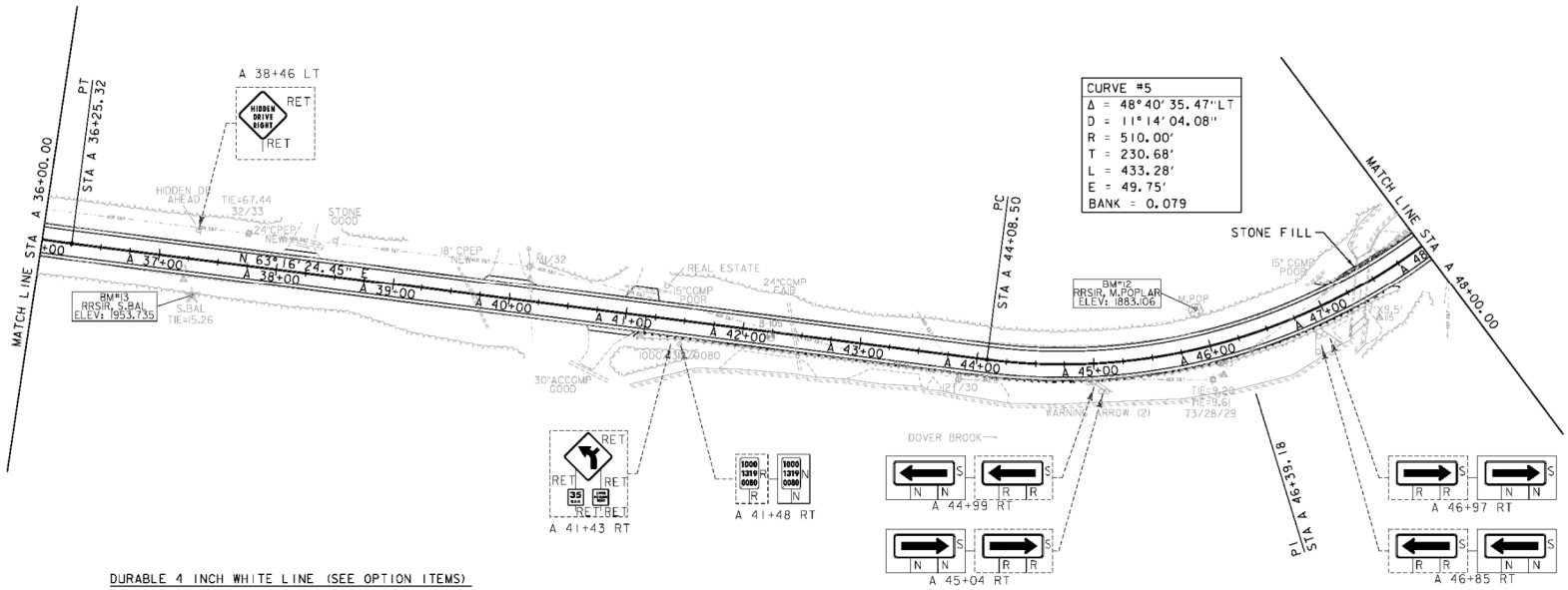
STEEL BEAM GUARDRAIL, GALVANIZED
STA A 41+09 - STA A 41+22 RT
STA A 47+03 - STA A 47+16 LT
STA A 47+52 - STA A 47+65 RT

STONE FILL TYPE I
STA A 42+55 - STA A 47+65 LT
STA A 38+36 - STA A 39+54 LT
STA A 40+22 - STA A 40+92 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 41+18 RT
STA A 47+12 LT
STA A 47+56 RT

DELINEATOR WITH STEEL POSTS
STA A 41+09 RT
STA A 47+03 LT
STA A 47+65 RT

N
VT STATE PLANE GRID




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 0+00 - STA 48+25 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 0+00 - STA 48+25 (SOLID LT + RT)

0 50 100
SCALE IN FEET

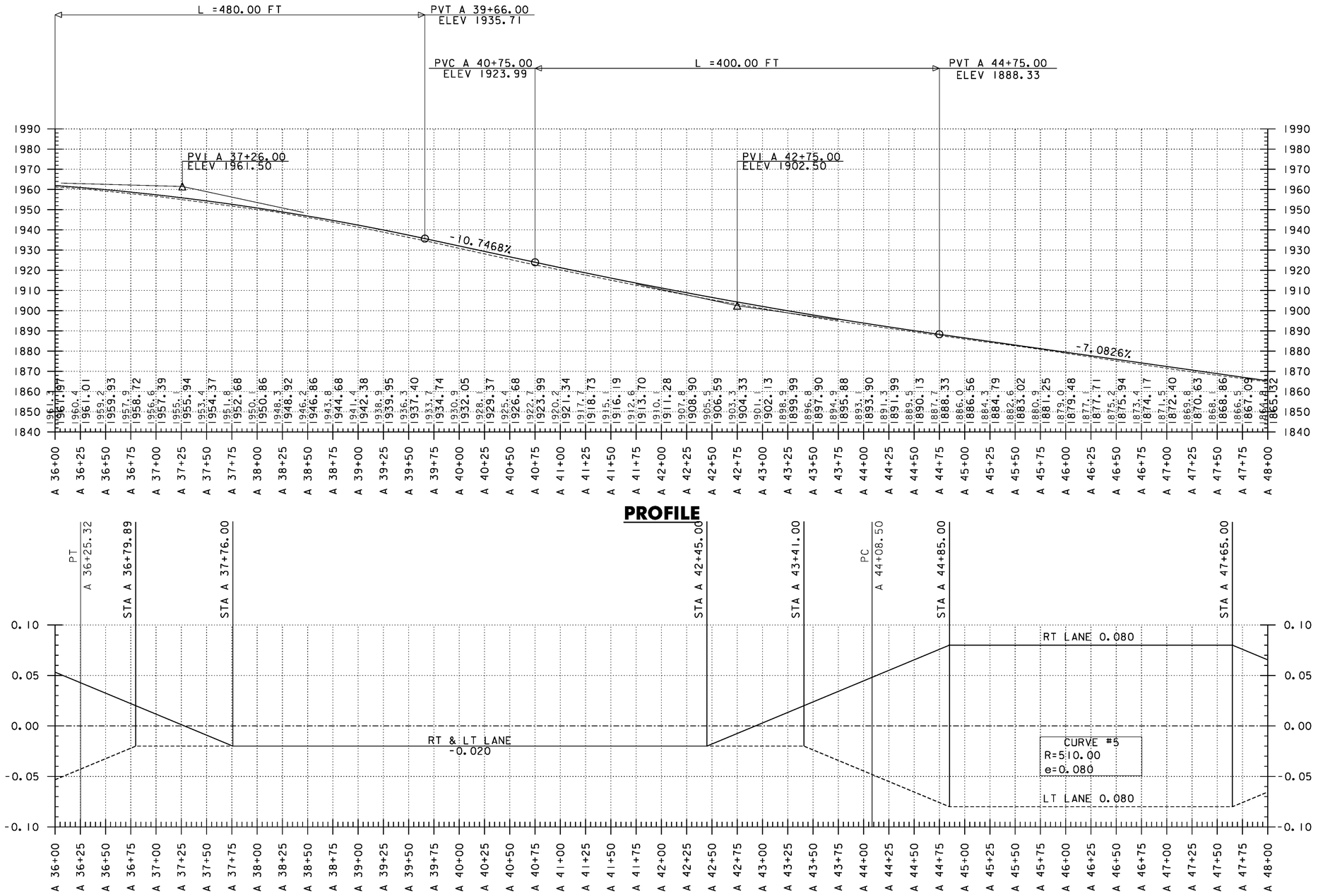
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ---------- |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 62 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 47+16 - STA A 51+85 LT
STA A 54+40 - STA A 58+69 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 51+85 - STA A 51+98 LT
STA A 54+27 - STA A 54+40 LT
STA A 58+69 - STA A 58+82 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 51+89 LT
STA A 54+36 LT
STA A 58+73 LT

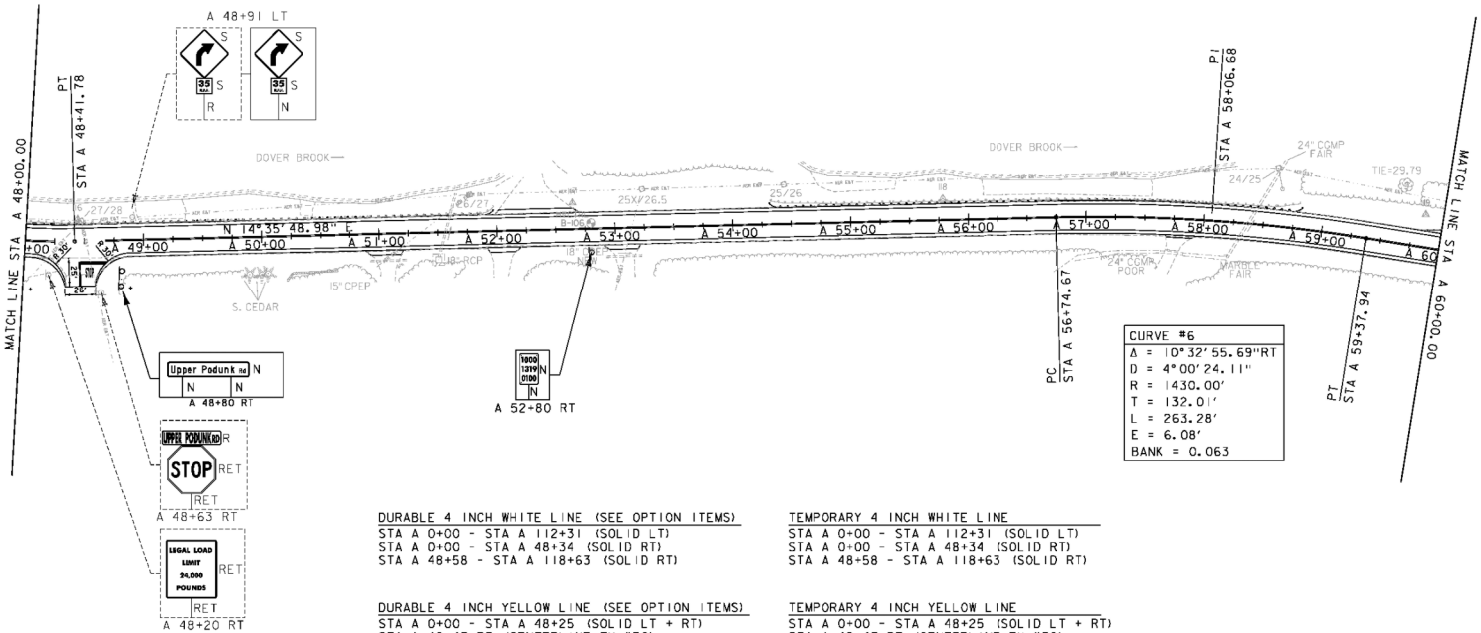
DELINEATOR WITH STEEL POSTS
STA A 51+98 LT
STA A 54+27 LT
STA A 58+82 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 47+08 - STA A 51+98 LT
STA A 54+32 - STA A 58+80 LT

REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS II
STA A 51+50 RT

STONE FILL TYPE I
STA A 52+74 - STA A 53+04 LT

N
VT STATE PLANE GRID




CURVE #6
Δ = 10°32'55.69"RT
D = 4°00'24.11"
R = 1430.00'
T = 132.01'
L = 263.28'
E = 6.08'
BANK = 0.063

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)
STA A 48+58 - STA A 118+63 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 0+00 - STA A 48+34 (SOLID RT)
STA A 48+58 - STA A 118+63 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 48+25 (SOLID LT + RT)
STA A 48+47 RT (CENTERLINE TH #30)
STA A 48+68 - STA 112+19 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 0+00 - STA A 48+25 (SOLID LT + RT)
STA A 48+47 RT (CENTERLINE TH #30)
STA A 48+25 - STA 112+19 (SOLID LT + RT)

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA A 48+55 RT

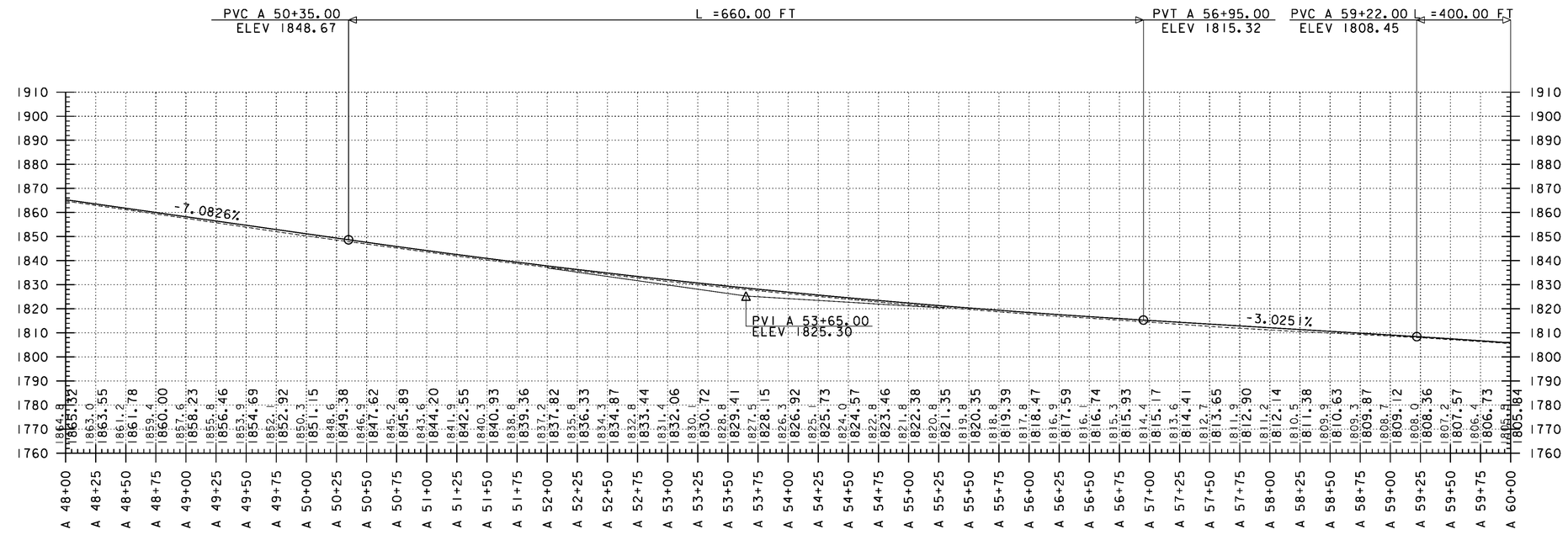
DURABLE LETTTER OR SYMBOL (SEE OPTION ITEMS)
STA A 48+55 RT "STOP"

SIGN LEGEND
R = REMOVE
S = SALVAGE
N = NEW
RET = RETAIN
T&T = THINNING & TRIMMING
B-B = BACK TO BACK
EXISTING ----------
NEW ——————

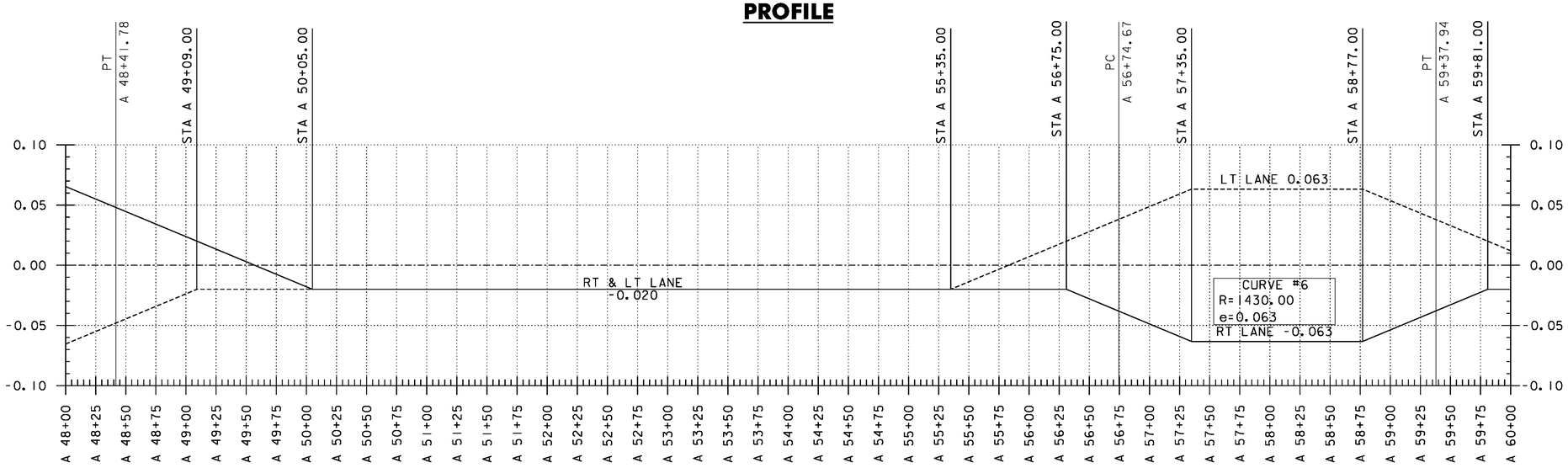
0 50 100
SCALE IN FEET

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 5
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 64 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 65 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 63+06 - STA A 84+14 LT

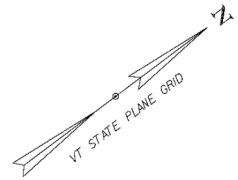
REMOVE AND DISPOSE OF GUARDRAIL
STA A 62+97 - STA A 84+37 LT

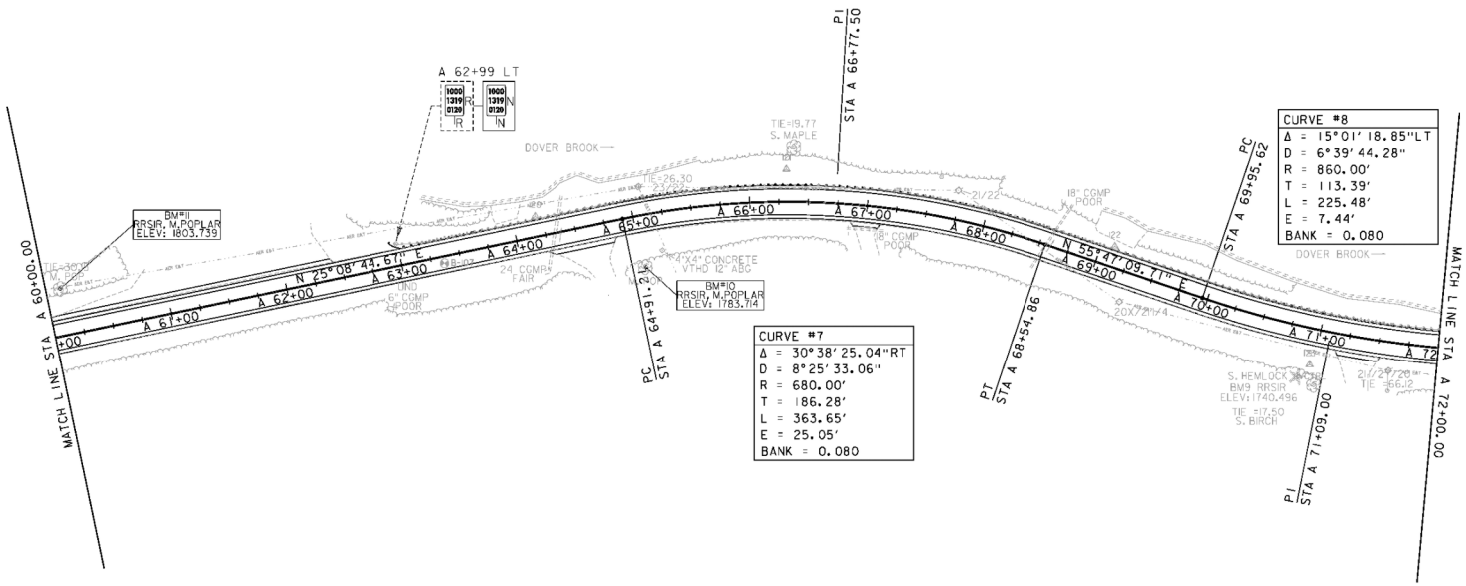
STEEL BEAM GUARDRAIL, GALVANIZED
STA A 62+93 - STA A 63+06 LT

STONE FILL TYPE I
STA A 64+72 - STA A 66+79 RT
STA A 67+19 - STA A 68+49 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 63+02 LT

DELINEATOR WITH STEEL POSTS
STA A 62+93 LT




| CURVE #8 |
|---|
| Δ = 15° 01' 18.85" LT |
| D = 6° 39' 44.28" |
| R = 860.00' |
| T = 113.39' |
| L = 225.48' |
| E = 7.44' |
| BANK = 0.080 |

| CURVE #7 |
|---|
| Δ = 30° 38' 25.04" RT |
| D = 8° 25' 33.06" |
| R = 680.00' |
| T = 186.28' |
| L = 363.65' |
| E = 25.05' |
| BANK = 0.080 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

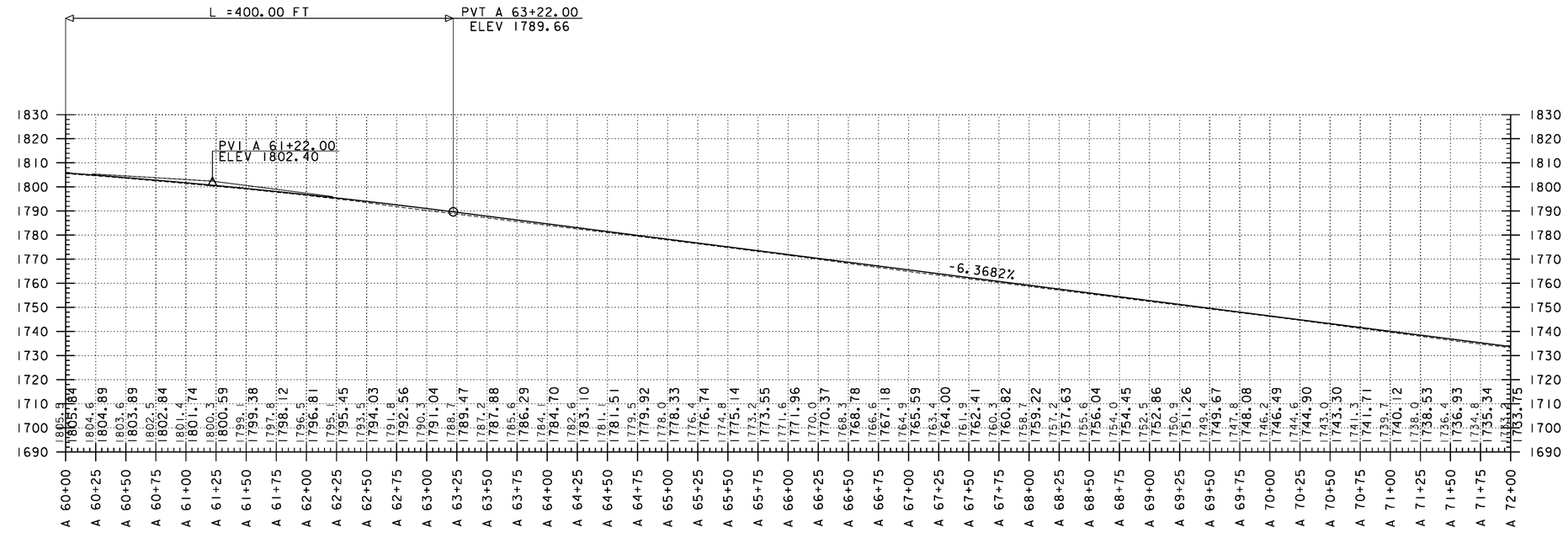
TEMPORARY 4 INCH YELLOW LINE
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

0 50 100
SCALE IN FEET

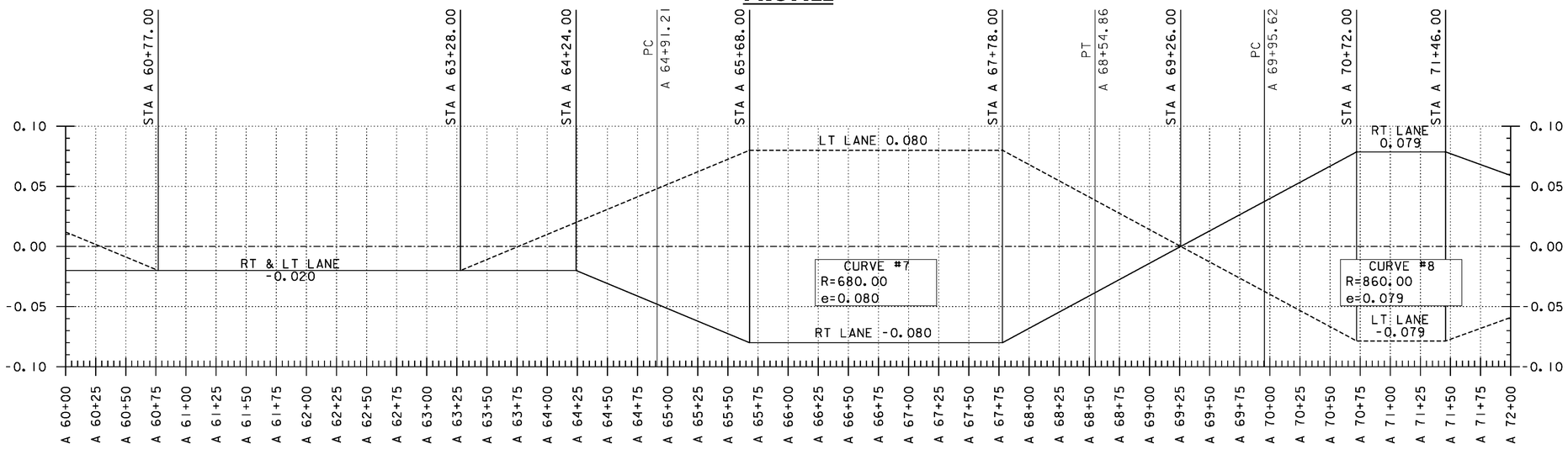
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: d12b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 6 | SHEET 66 OF 444 |




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 63+06 - STA A 84+14 LT
STA A 83+29 - STA A 101+00 RT

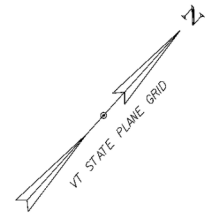
STEEL BEAM GUARDRAIL, GALVANIZED
STA A 83+16 - STA A 83+29 RT

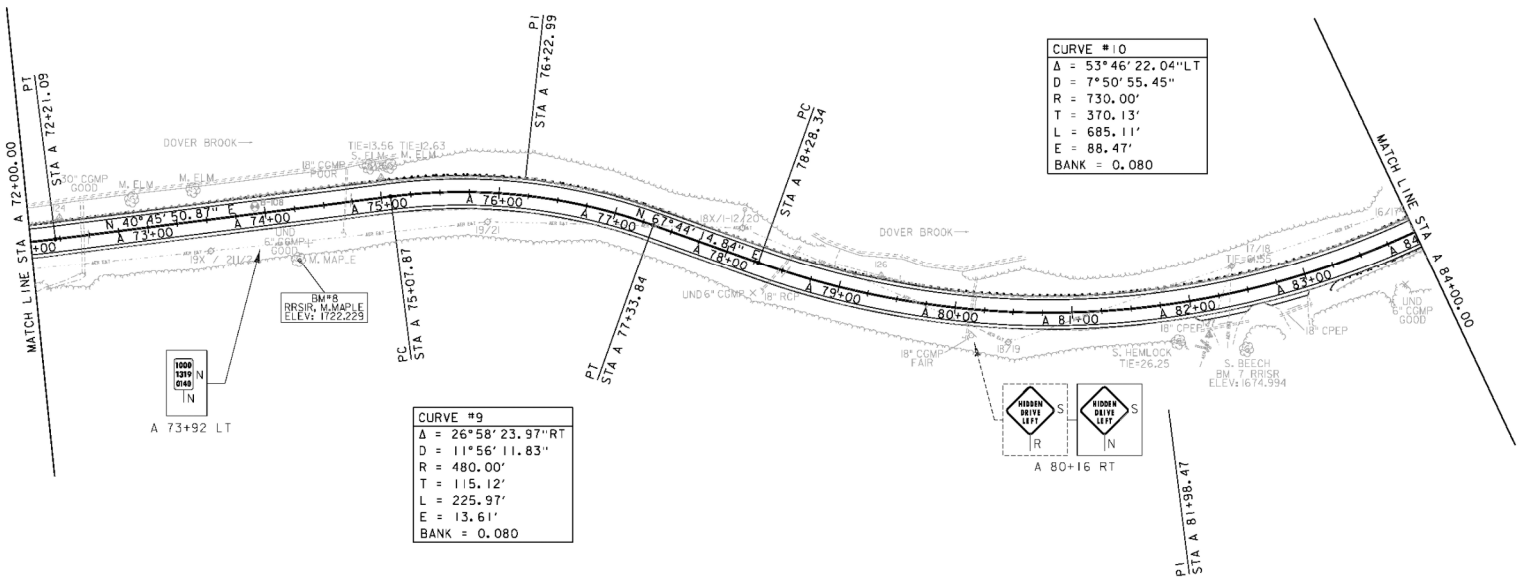
ANCHOR FOR STEEL BEAM RAIL
STA A 83+25 RT

DELINEATOR WITH STEEL POSTS
STA A 83+16 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 62+97 - STA A 84+37 LT
STA A 83+21 - STA A 101+10 RT

STONE FILL TYPE I
STA A 74+70 - STA A 78+40 RT
STA A 74+00 - STA A 74+60 RT




CURVE #10
Δ = 53°46'22.04"LT
D = 7°50'55.45"
R = 730.00'
T = 370.13'
L = 685.11'
E = 88.47'
BANK = 0.080

CURVE #9
Δ = 26°58'23.97"RT
D = 11°56'11.83"
R = 480.00'
T = 115.12'
L = 225.97'
E = 13.61'
BANK = 0.080

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

0 50 100
SCALE IN FEET

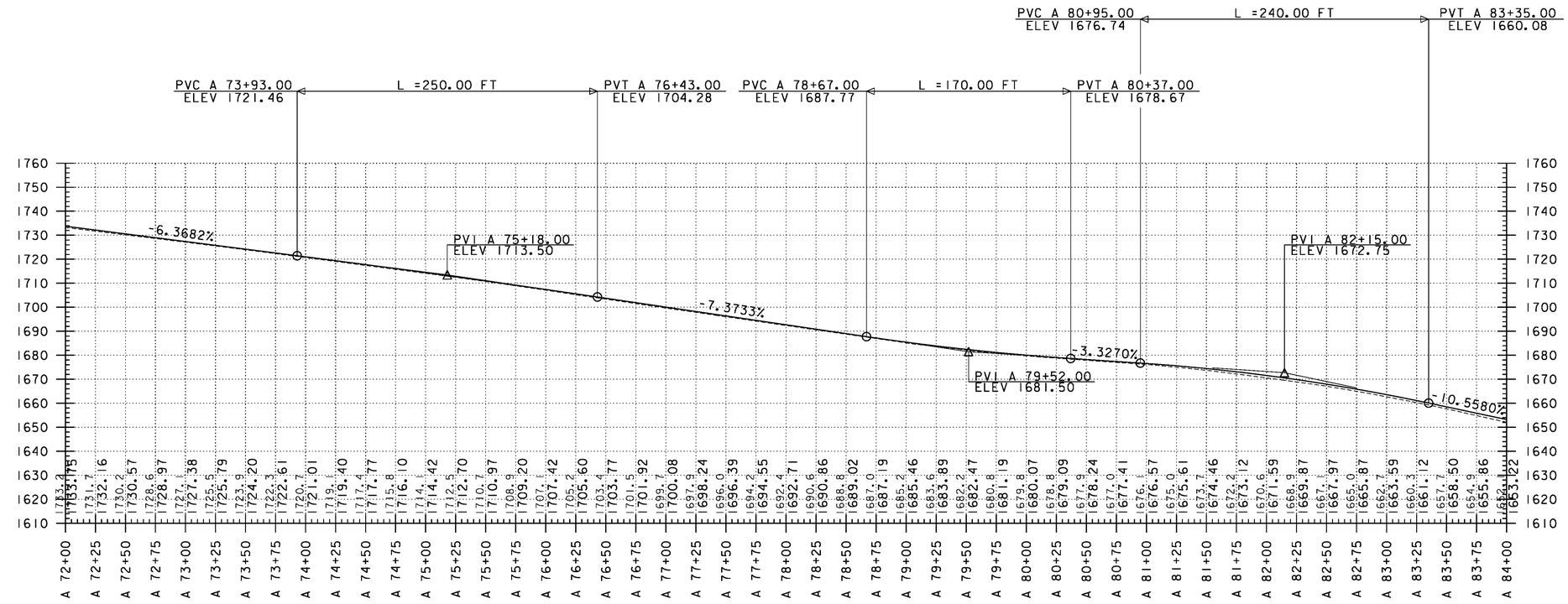
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ---------- |

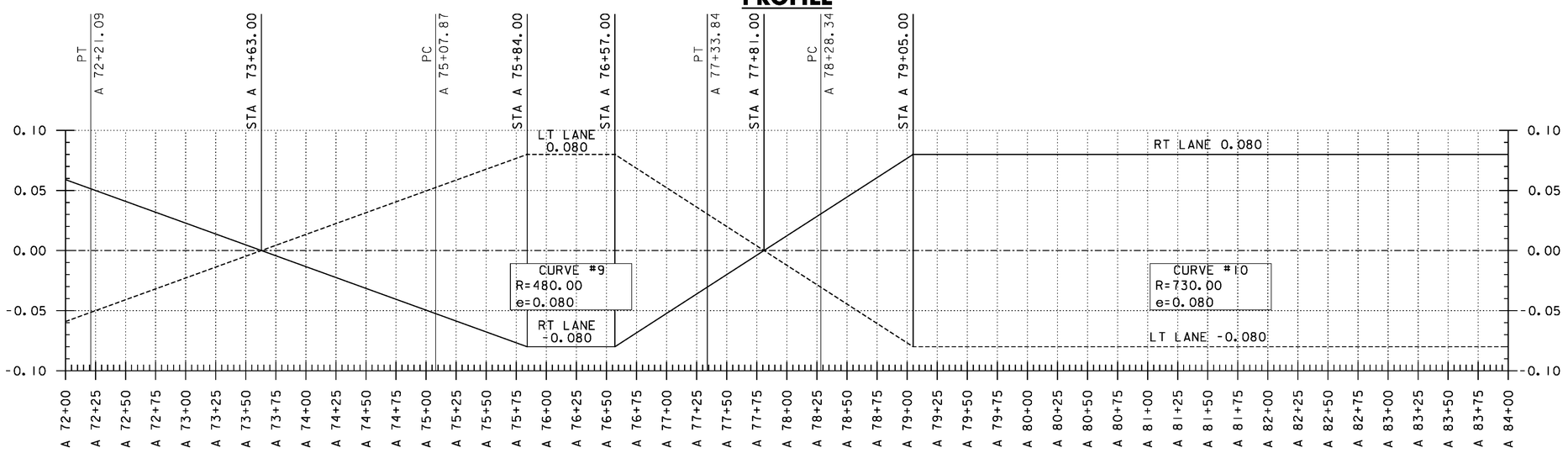
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPVAL
DESIGNED BY: B. KIPP
PLAN SHEET 7

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 68 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 69 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 63+06 - STA A 84+14 LT
STA A 83+29 - STA A 101+00 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 84+14 - STA A 84+27 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 84+18 LT

DELINEATOR WITH STEEL POSTS
STA A 83+27 LT

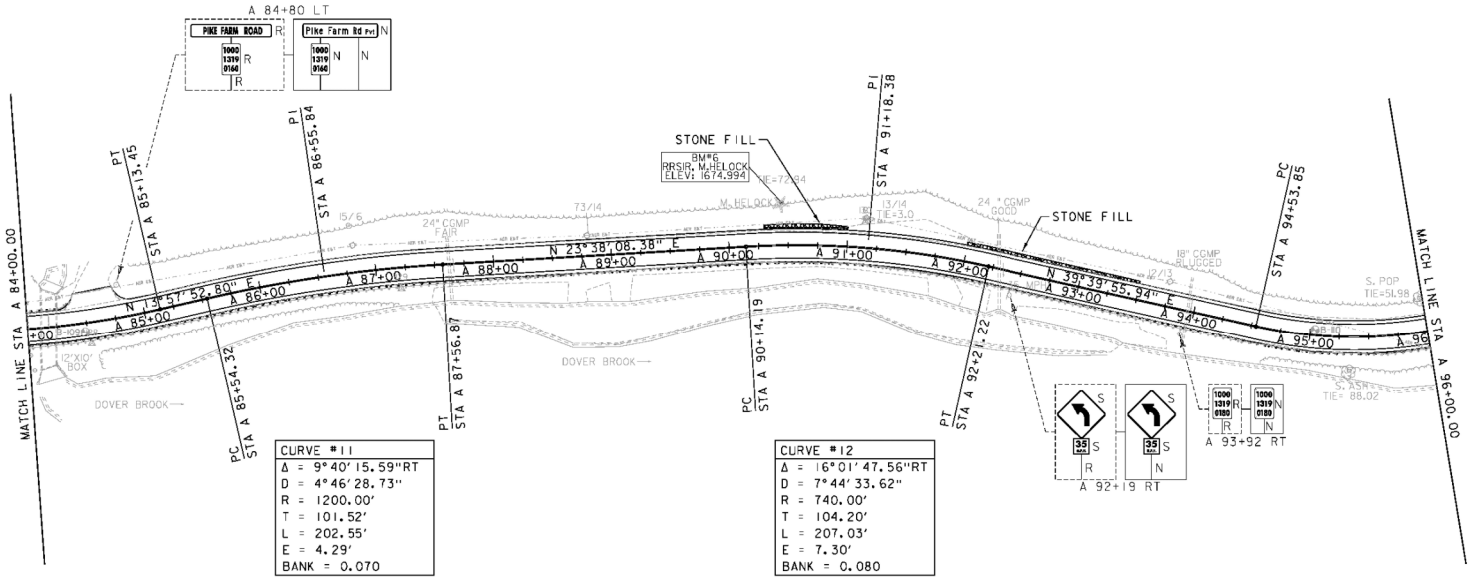
REMOVE AND DISPOSE OF GUARDRAIL
STA A 62+97 - STA A 84+37 LT
STA A 83+21 - STA A 101+10 RT

STONE FILL, TYPE I
~~STA A 90+30 - STA A 91+00 LT~~
~~STA A 92+00 - STA A 93+50 LT~~
STA A 90+15 - STA A 90+77 LT
STA A 92+10 - STA A 93+83 LT
STA A 94+09 - STA A 98+39 LT
STA A 84+75 - STA A 87+70 LT

GRUBBING MATERIAL
STA A 90+30 - STA A 91+00 LT
STA A 92+00 - STA A 93+50 LT

GEOTEXTILE FOR SILT FENCE
STA A 90+30 - STA A 91+00 LT
STA A 92+00 - STA A 93+50 LT

VT STATE PLANE GRID




CURVE #11
Δ = 9°40'15.59"RT
D = 4°46'28.73"
R = 1200.00'
T = 101.52'
L = 202.55'
E = 4.29'
BANK = 0.070

CURVE #12
Δ = 16°01'47.56"RT
D = 7°44'33.62"
R = 740.00'
T = 104.20'
L = 207.03'
E = 7.30'
BANK = 0.080

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

0 50 100
SCALE IN FEET

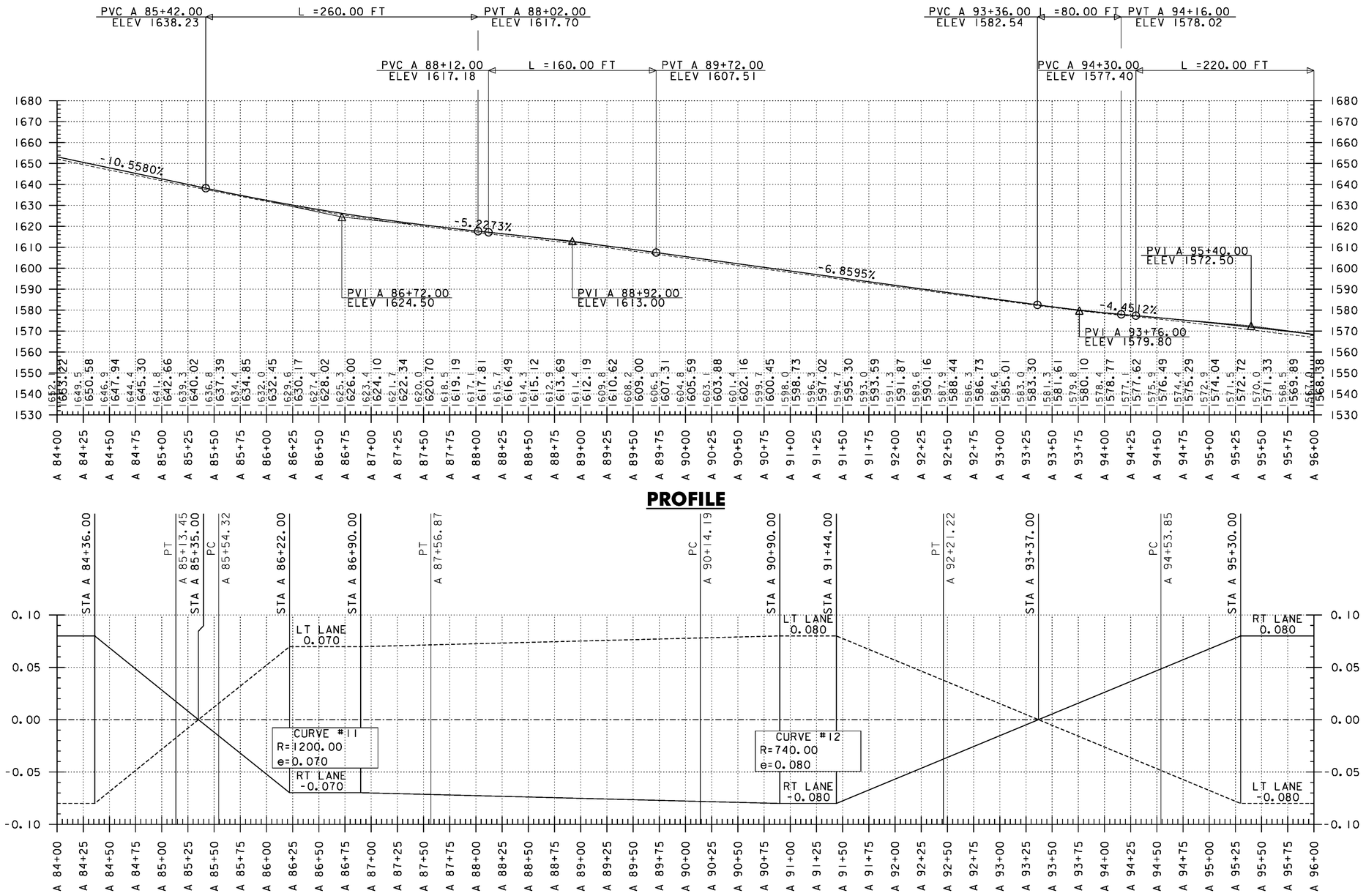
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARSDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 8

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 70 OF 444




THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 71 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 83+29 - STA A 101+00 RT
STA A 104+50 - STA A 107+45 RT
STA A 107+95 - STA A 111+48 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 83+21 - STA A 101+10 RT
STA A 104+40 - STA A 107+55 RT
STA A 107+96 - STA A 111+50 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 101+00 - STA A 101+15 RT
STA A 104+35 - STA A 104+50 RT
STA A 107+45 - STA A 107+58 RT
STA A 107+82 - STA A 107+95 RT

REHAB. DROP INLETS,
CATCH BASINS OR MANHOLES, CLASS II
STA A 103+21 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 101+04 RT
STA A 104+46 RT
STA A 107+49 RT
STA A 107+91 RT

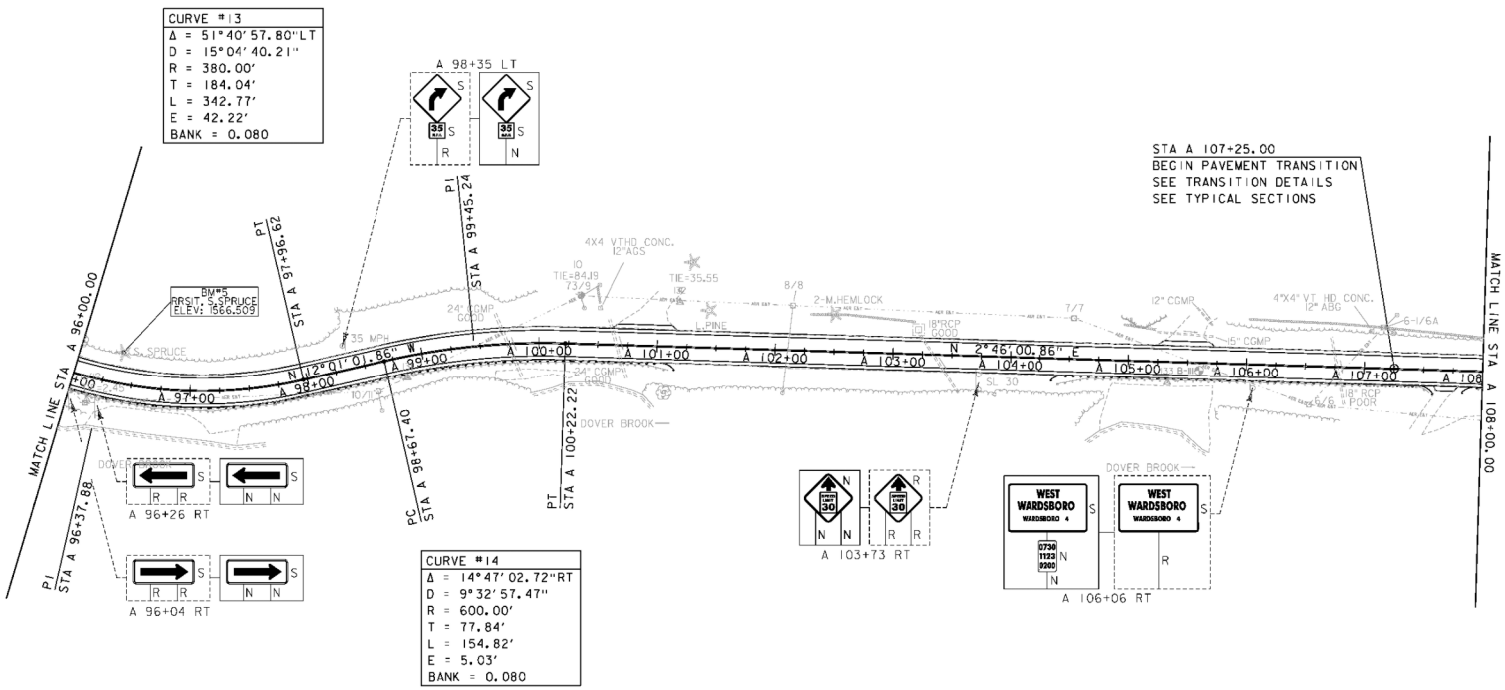
STONE FILL, TYPE I
STA A 100+45 - STA A 100+69 LT
STA A 101+20 - STA A 103+09 LT
STA A 103+09 - STA A 105+25 LT
STA A 105+80 - STA A 106+75 LT

DELINEATOR WITH STEEL POSTS
STA A 101+15 RT
STA A 104+35 RT
STA A 107+58 RT
STA A 107+82 RT

VT STATE PLANE GRID

CURVE #13
Δ = 51°40'57.80"LT
D = 15°04'40.21"
R = 380.00'
T = 184.04'
L = 342.77'
E = 42.22'
BANK = 0.080

CURVE #14
Δ = 14°47'02.72"RT
D = 9°32'57.47"
R = 600.00'
T = 77.84'
L = 154.82'
E = 5.03'
BANK = 0.080




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 48+58 - STA A 118+63 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 48+68 - STA A 112+19 (SOLID LT + RT)

0 50 100
SCALE IN FEET

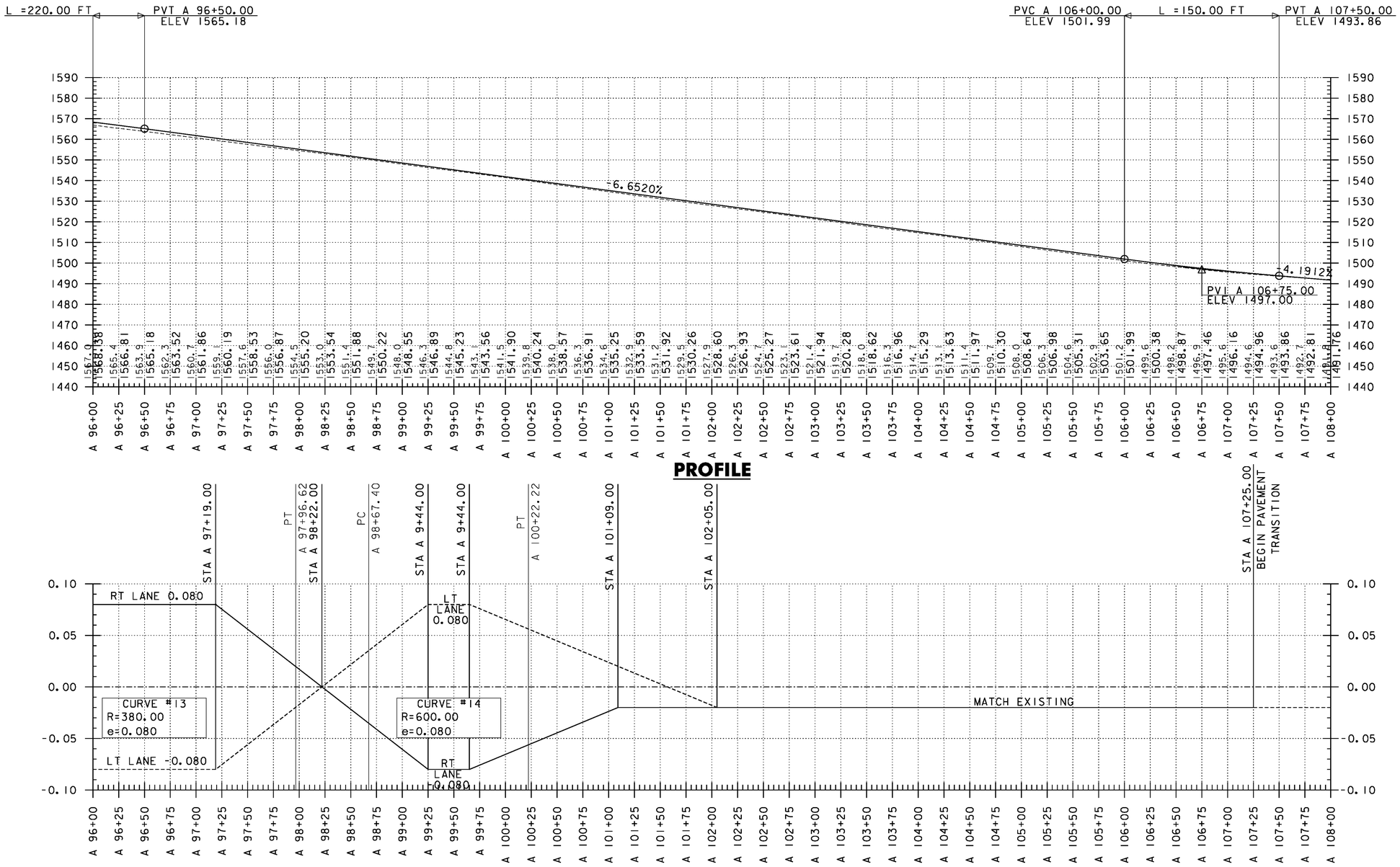
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ---------- |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 9

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 72 OF 444

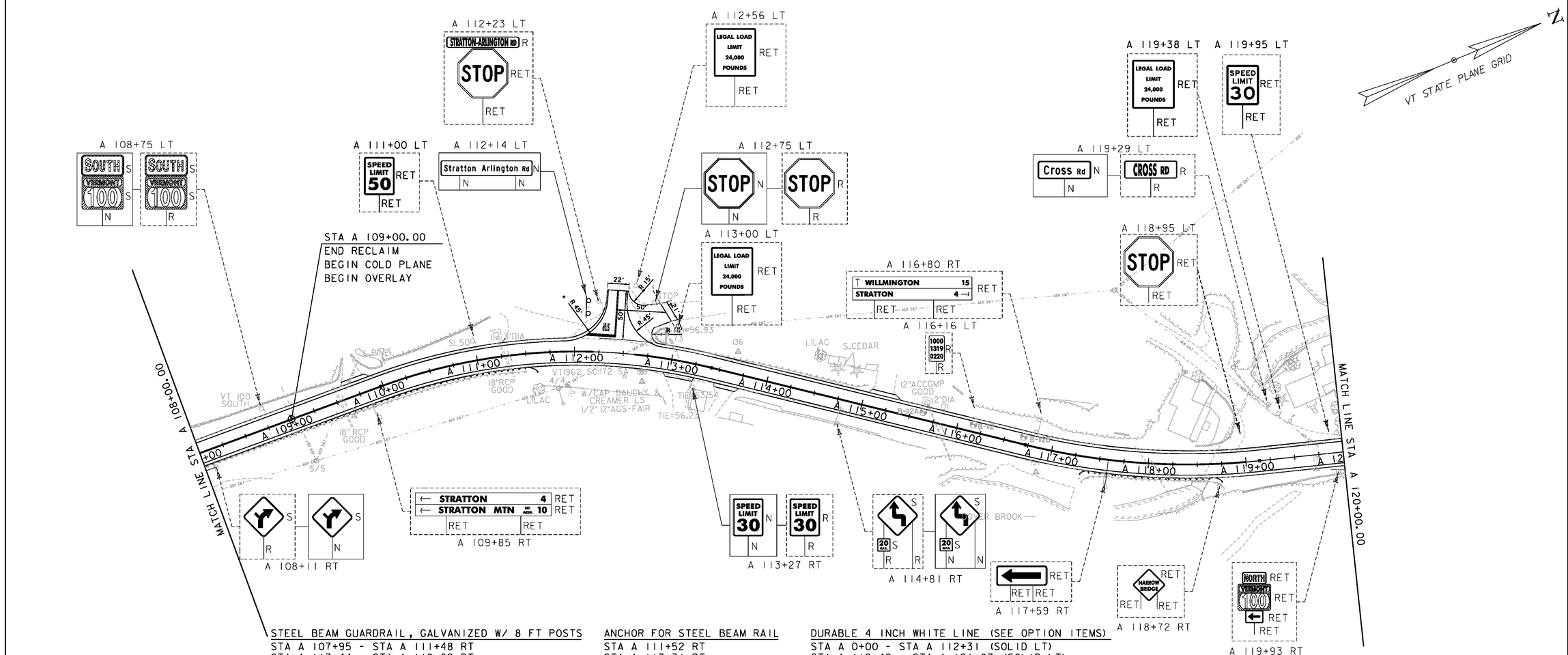



THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 73 OF 444




STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 107+95 - STA A 111+48 RT
STA A 117+44 - STA A 118+62 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 107+96 - STA A 111+50 RT
STA A 112+80 - STA A 115+02 LT
STA A 117+34 - STA A 118+77 RT

STEEL BEAM GUARDRAIL, GUARDRAIL
STA A 111+48 - STA A 111+61 RT
STA A 117+31 - STA A 117+44 RT
STA A 118+62 - STA A 118+75 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 111+52 RT
STA A 117+31 RT
STA A 118+75 RT

DELINEATOR WITH STEEL POSTS
STA A 111+61 RT
STA A 112+82 LT
STA A 115+06 LT
STA A 107+31 RT
STA A 118+75 RT

REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS II
STA A 111+23 LT
STA A 115+65 LT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 112+49 - STA A 121+07 (SOLID LT)
STA A 48+58 - STA A 121+07 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 48+68 - STA A 112+19 (SOLID LT + RT)
STA A 112+40 LT (CENTERLINES TH #1)
STA A 112+60 - STA A 119+00 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 0+00 - STA A 112+31 (SOLID LT)
STA A 112+49 - STA A 121+07 (SOLID LT)
STA A 48+58 - STA A 121+07 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 48+68 - STA A 112+19 (SOLID LT + RT)
STA A 112+40 LT (CENTERLINES TH #1)
STA A 112+60 - STA A 119+00 (SOLID LT + RT)

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA A 112+38 LT
STA A 112+75 LT

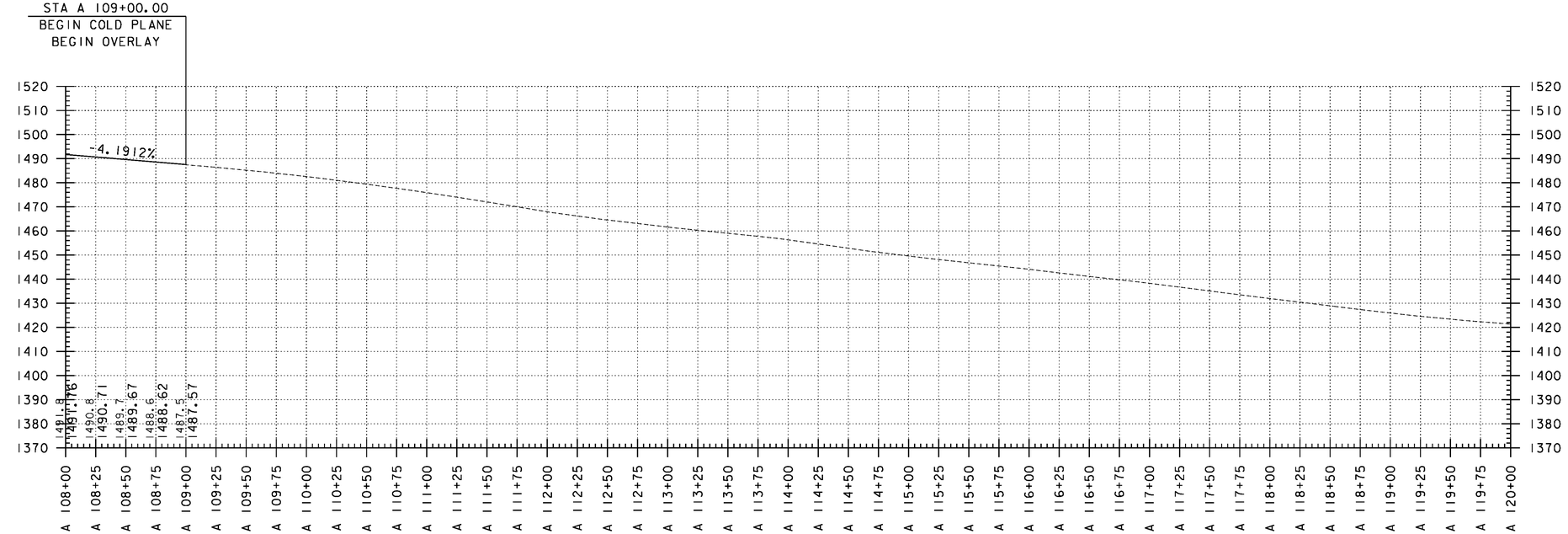
DURRABLE LETTERS OR SYMBOLS (SEE OPTION ITEMS)
STA A 112+38 LT "STOP"
STA A 112+75 LT "STOP"

0 50 100
SCALE IN FEET

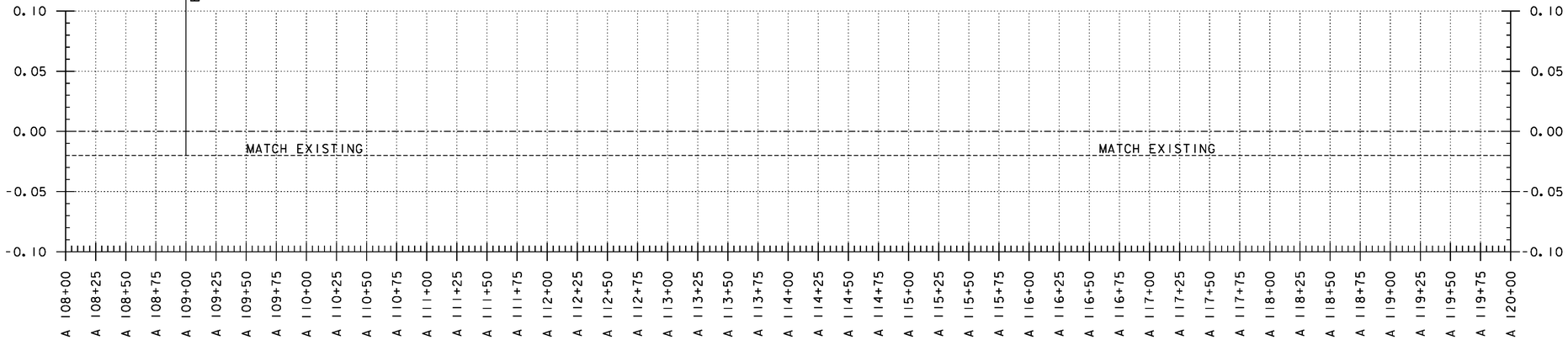
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

| | |
|---|---|
| PROJECT NAME: | WARSDBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 10 | SHEET 74 OF 444 |




**PROFILE**



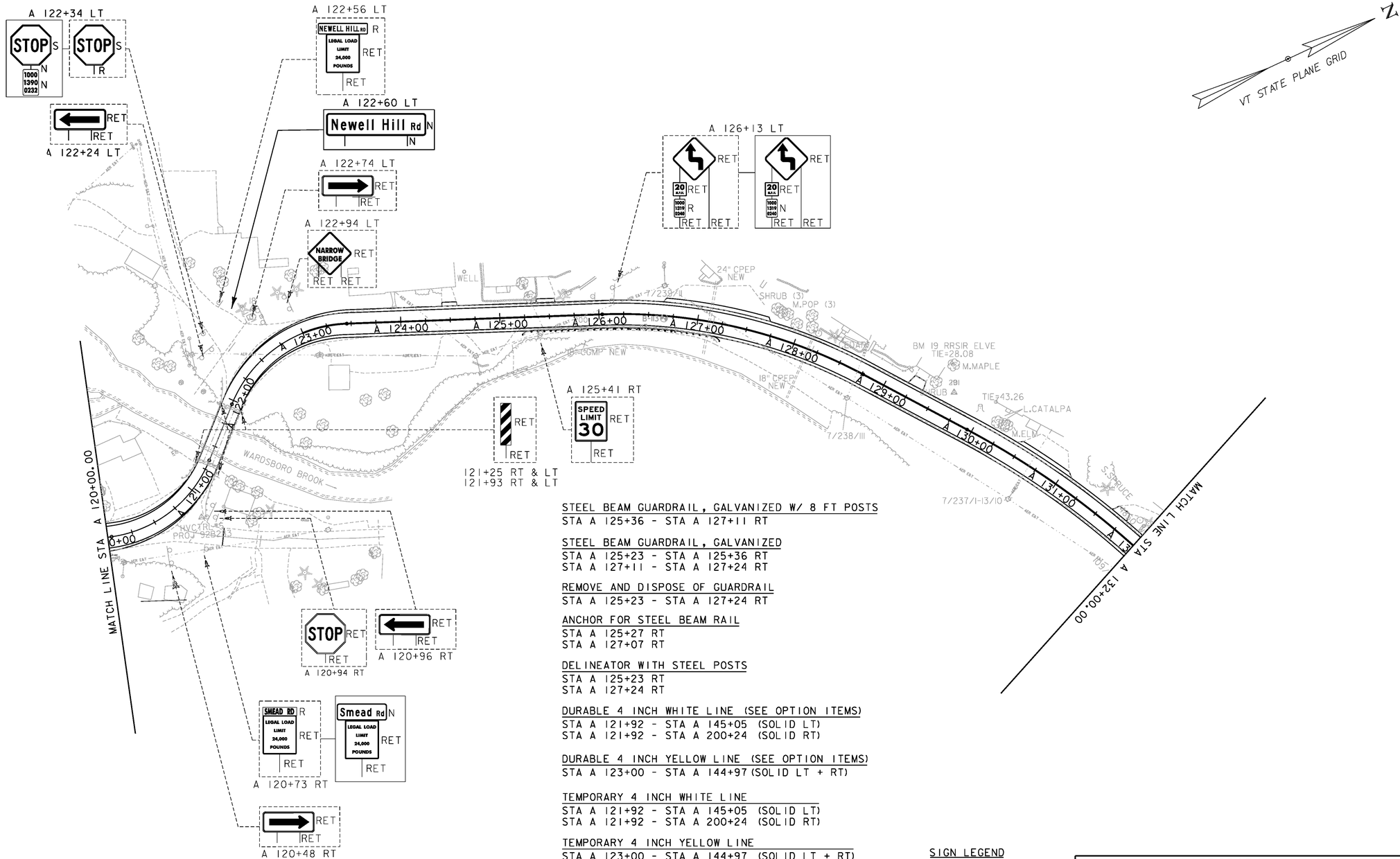

**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 75 OF 444




STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 125+36 - STA A 127+11 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 125+23 - STA A 125+36 RT
STA A 127+11 - STA A 127+24 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 125+23 - STA A 127+24 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 125+27 RT
STA A 127+07 RT

DELINEATOR WITH STEEL POSTS
STA A 125+23 RT
STA A 127+24 RT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 123+00 - STA A 144+97 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 123+00 - STA A 144+97 (SOLID LT + RT)

0 50 100
SCALE IN FEET

SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET II

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 76 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 138+51 - STA A 147+87 RT

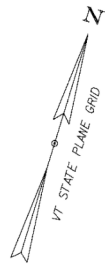
REMOVE AND DISPOSE OF GUARDRAIL
138+38 - STA A 148+00 RT

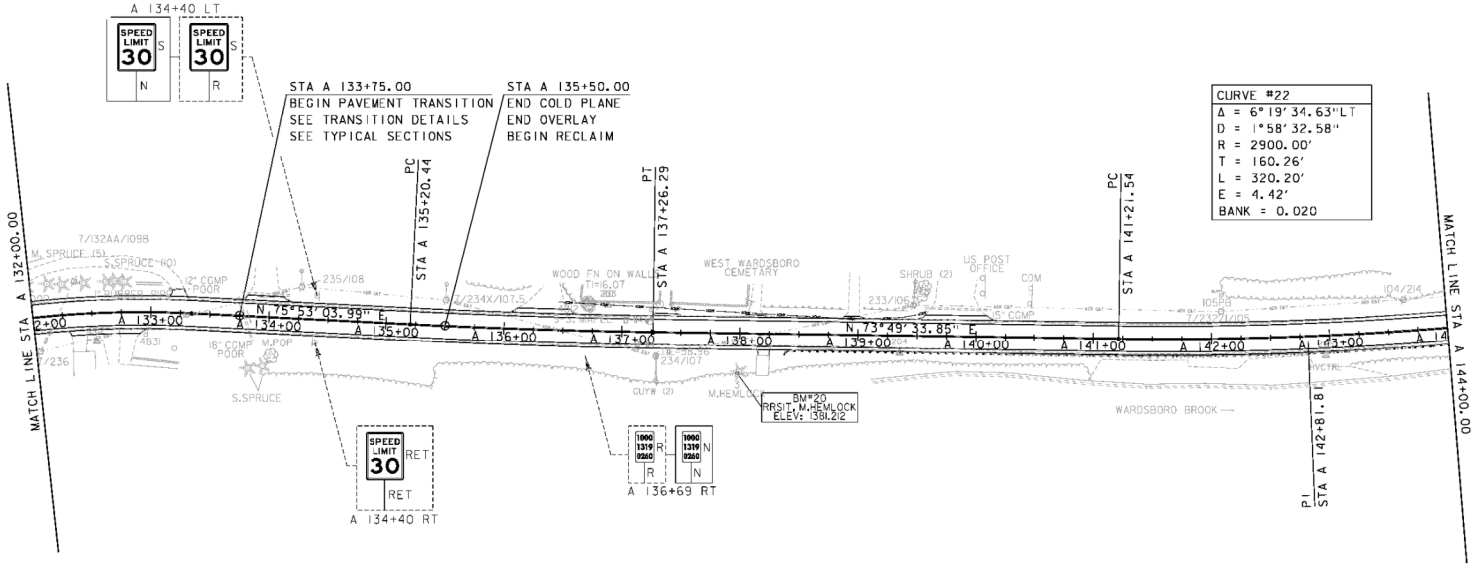
STEEL BEAM GUARDRAIL, GALVANIZED
STA A 138+38 - STA A 138+51 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 138+34 RT

DELINEATOR WITH STEEL POSTS
STA A 138+47 RT

STONE FILL, TYPE I
STA A 139+07 - STA A 139+57 LT
STA A 140+14 - STA A 144+78 LT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 123+00 - STA A 144+97 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 123+00 - STA A 144+97 (SOLID LT + RT)

0 50 100
SCALE IN FEET

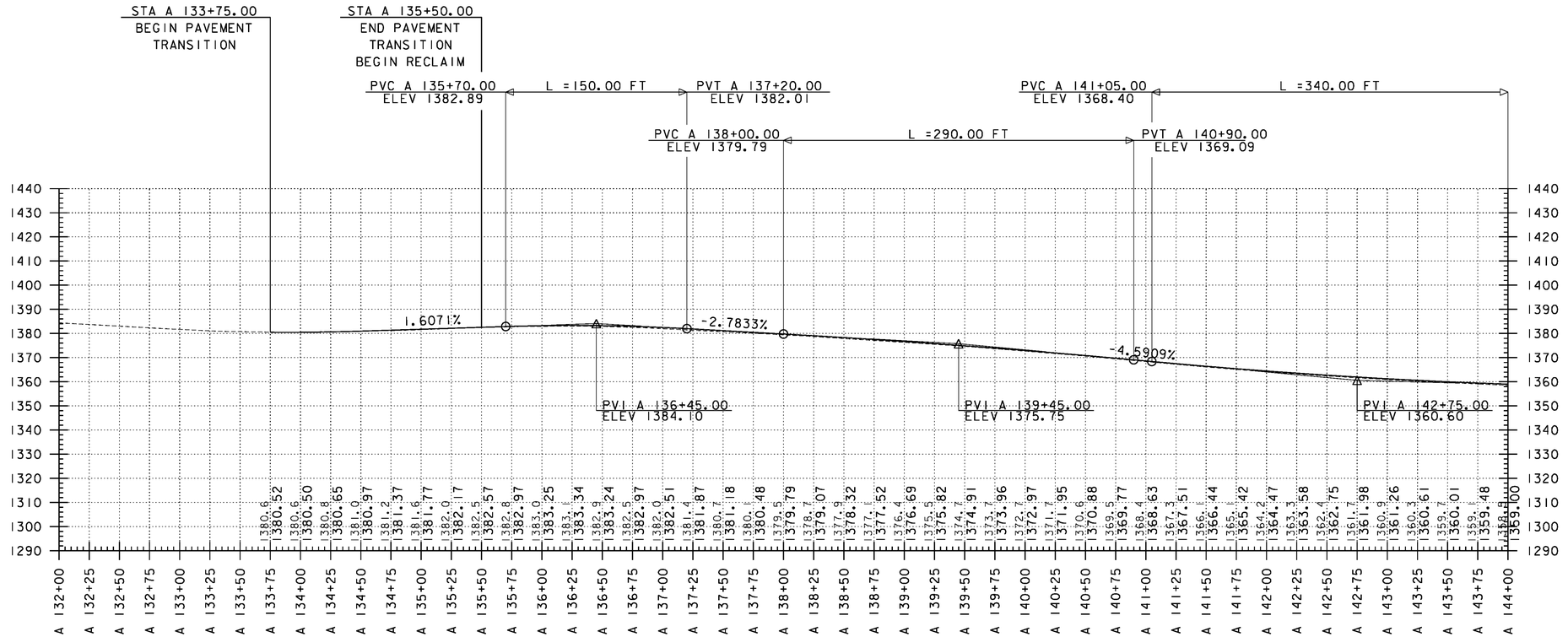
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | ---------- |

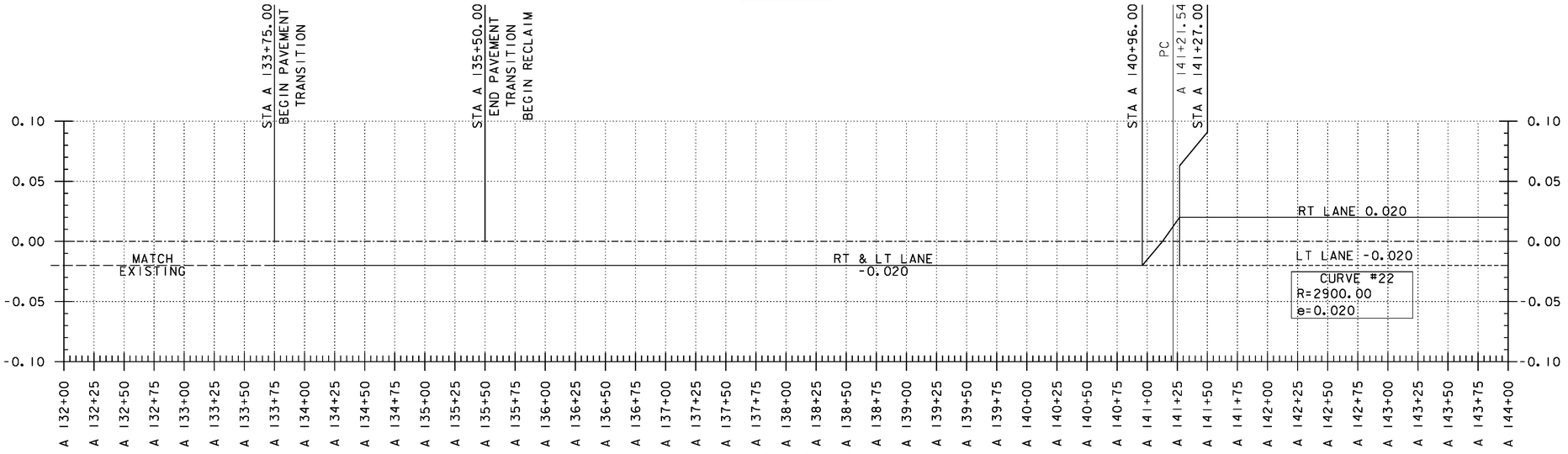
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 12

PLOT DATE: 3/18/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 77 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 78 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W 8/ POSTS
STA A 138+51 - STA A 147+87 RT
STA A 148+64 - STA A 152+32 LT
STA A 151+25 - STA A 151+44 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 138+38 - STA A 148+00 RT
STA A 148+85 - STA A 152+40 LT
STA A 151+29 - STA A 151+56 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 147+87 - STA A 148+00 RT
STA A 148+51 - STA A 148+64 LT
STA A 151+12 - STA A 151+25 RT
STA A 151+44 - STA A 151+57 RT
STA A 152+32 - STA A 152+45 LT

STONE FILL, TYPE I
~~STA A 145+75 - STA A 146+50 RT~~
STA A 145+41 - STA A 145+91 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA A 152+71 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 147+91 RT
STA A 148+60 LT
STA A 151+21 RT
STA A 151+48 RT
STA A 152+36 LT

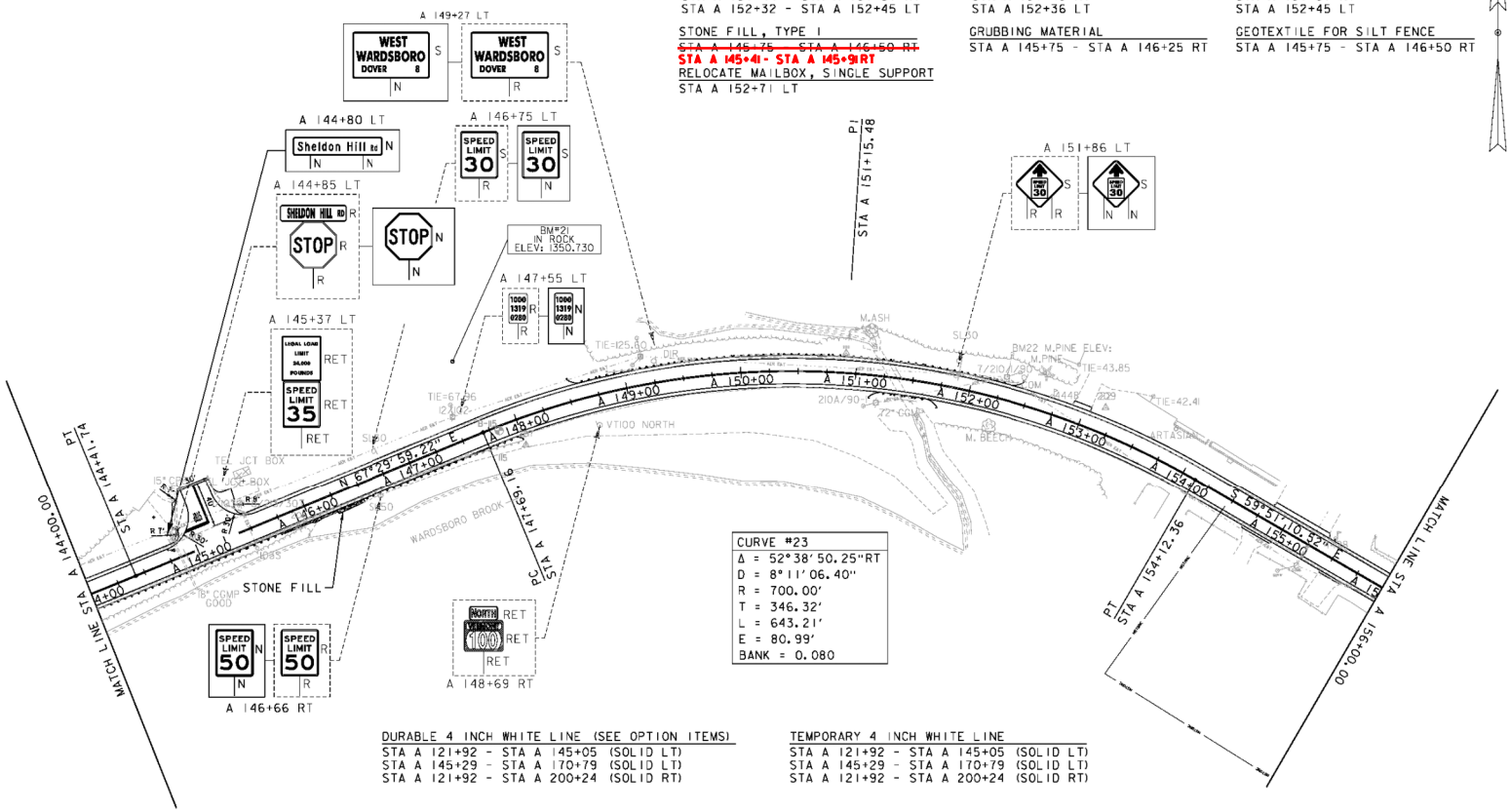
GRUBBING MATERIAL
STA A 145+75 - STA A 146+25 RT

DELINEATOR WITH STEEL POSTS
STA A 148+00 RT
STA A 148+51 LT
STA A 151+12 RT
STA A 151+57 RT
STA A 152+45 LT

GEOTEXTILE FOR SILT FECTION
STA A 145+75 - STA A 146+50 RT

N

VT STATE PLANE GRID




| CURVE #23 |
|---|
| Δ = 52°38'50.25"RT |
| D = 8°11'06.40" |
| R = 700.00' |
| T = 346.32' |
| L = 643.21' |
| E = 80.99' |
| BANK = 0.080 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 121+92 - STA A 145+05 (SOLID LT)
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 121+92 - STA A 200+24 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 123+00 - STA A 144+97 (SOLID LT + RT)
STA A 145+17 LT (CENTERLINES TH #10)
STA A 145+38 - STA A 170+65 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 123+00 - STA A 144+97 (SOLID LT + RT)
STA A 145+17 LT (CENTERLINES TH #10)
STA A 145+38 - STA A 170+65 (SOLID LT + RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 145+03 LT

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA A 145+03 LT

0 50 100
SCALE IN FEET

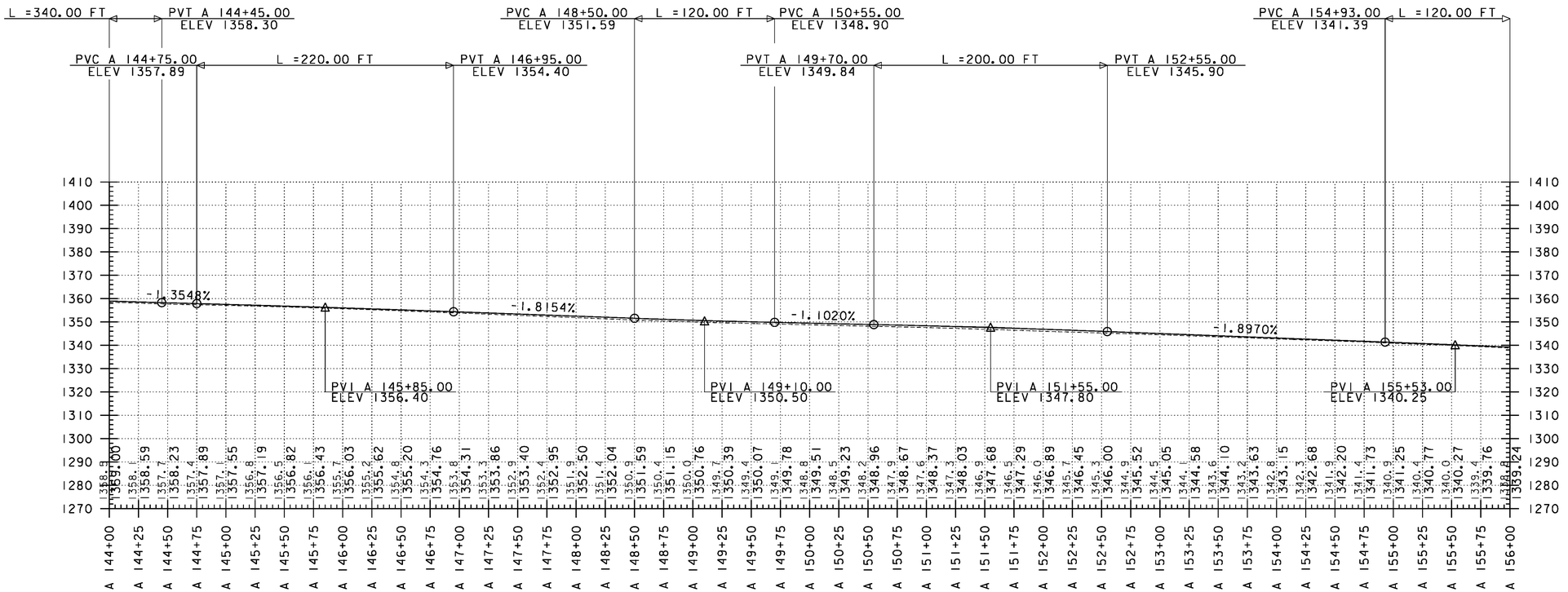
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | _____ |

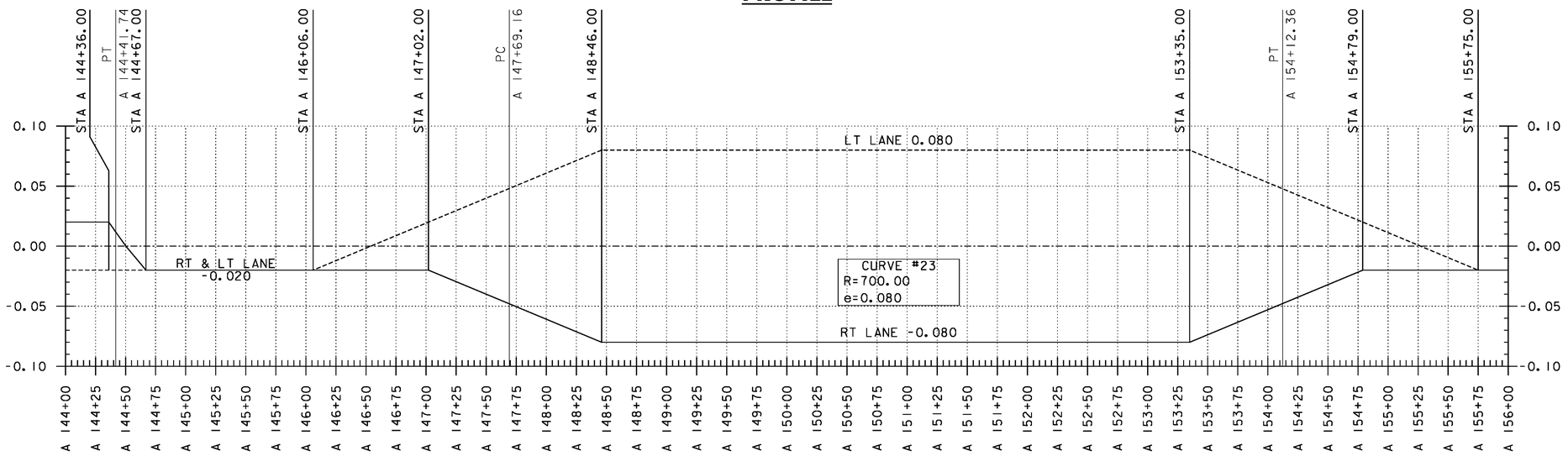
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 13

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 79 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 80 OF 444

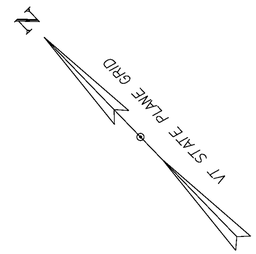
RELOCATE MAILBOX, MULTIPLE SUPPORT
STA A 162+90 LT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

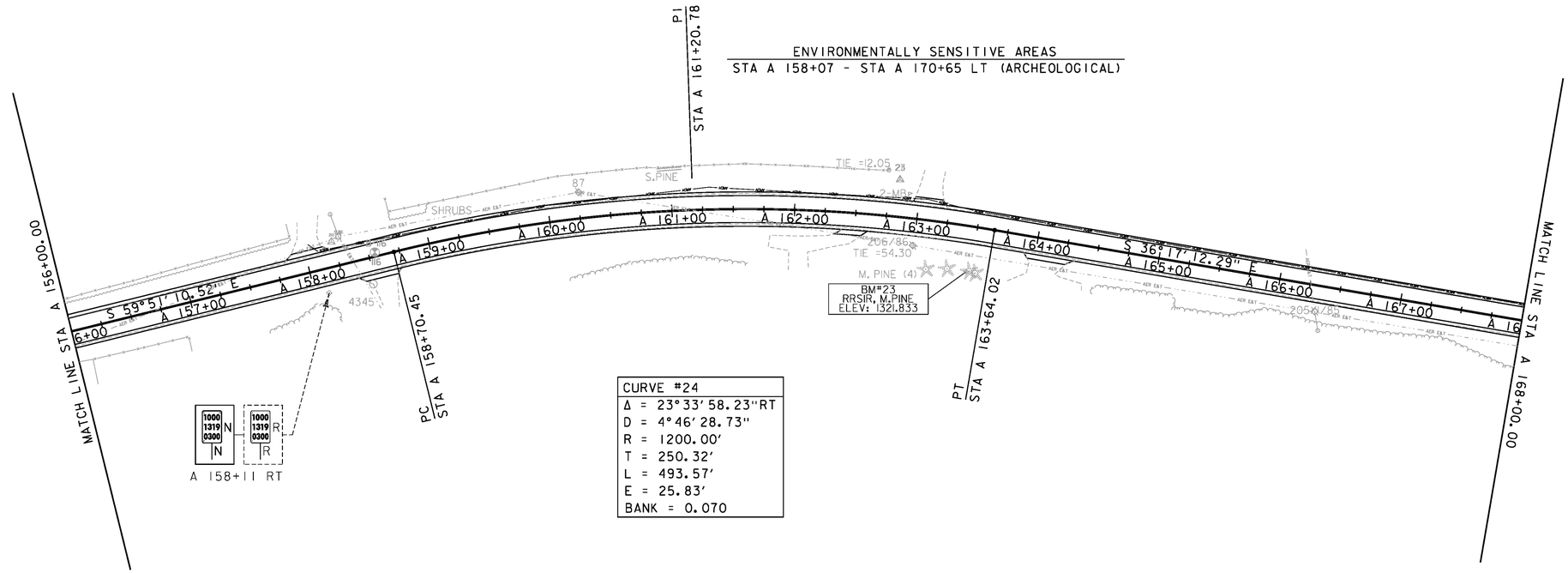
DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 145+38 - STA A 170+65 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 145+38 - STA A 170+65 (SOLID LT + RT)




ENVIRONMENTALLY SENSITIVE AREAS
STA A 158+07 - STA A 170+65 LT (ARCHEOLOGICAL)




| CURVE #24 |
|---|
| Δ = 23°33'58.23"RT |
| D = 4°46'28.73" |
| R = 1200.00' |
| T = 250.32' |
| L = 493.57' |
| E = 25.83' |
| BANK = 0.070 |

0 50 100
SCALE IN FEET

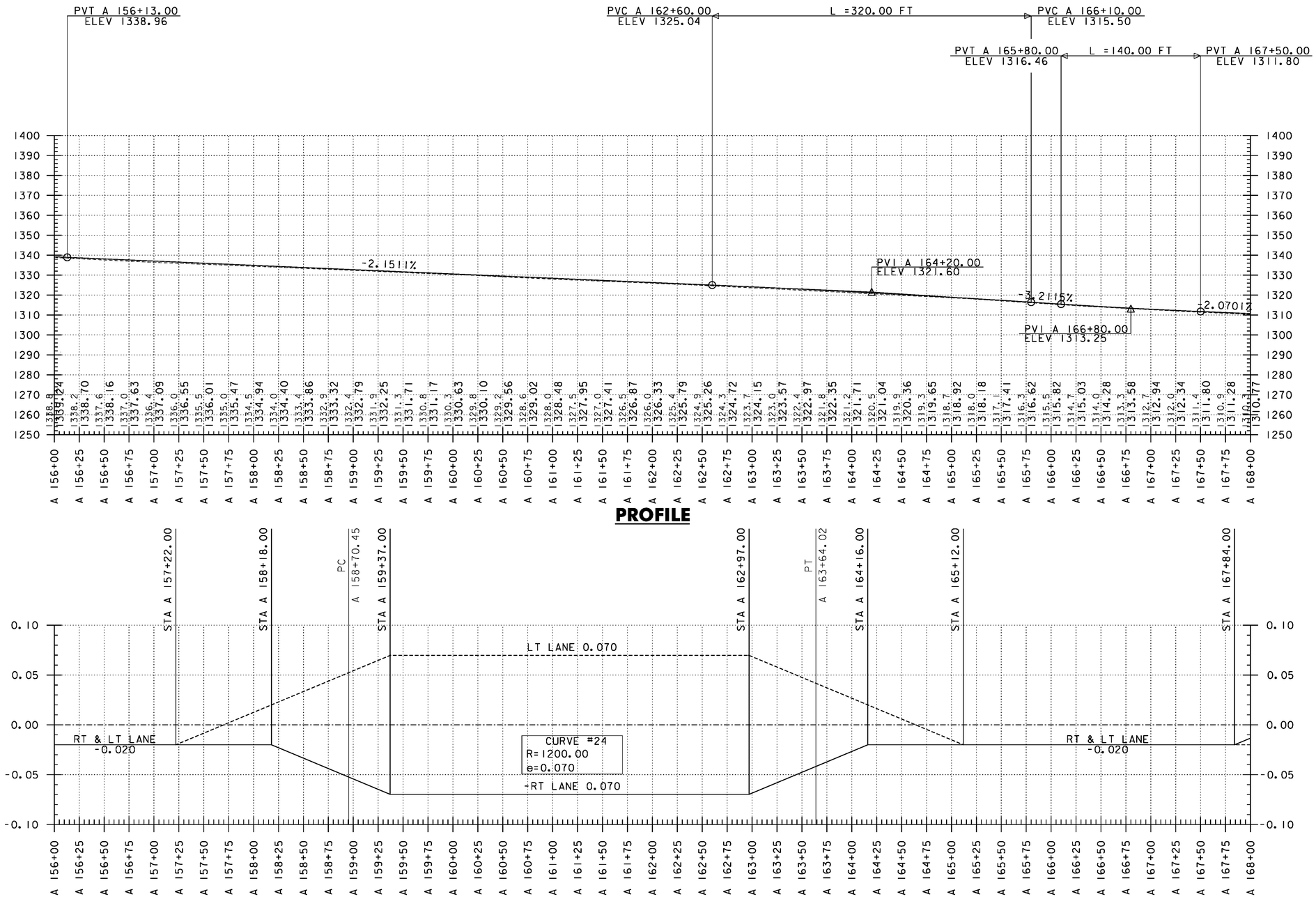
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 14

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 81 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

BARRIER FENCE
STA A 172+00 - STA A 176+50 LT

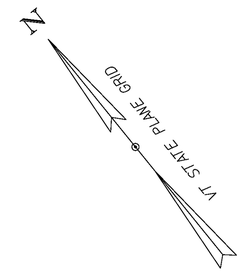
EROSION LOG
STA A 172+00 - STA A 176+50 LT

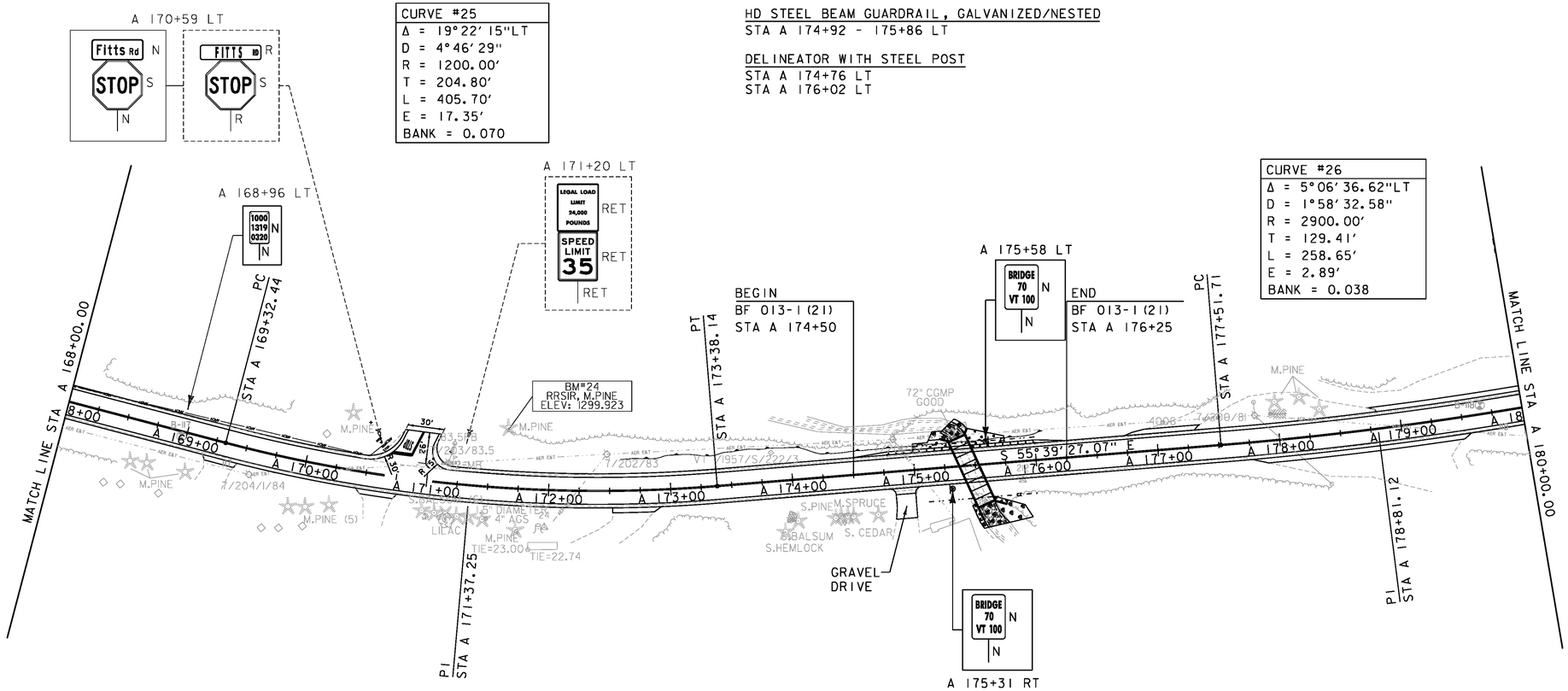
RELOCATE MAILBOX, MULTIPLE SUPPORT
STA A 171+19 LT

MANUFACTURED TERMINAL SECTION, TANGENT
STA A 174+78 - 174+92 LT
STA A 175+86 - 176+00 LT

HD STEEL BEAM GUARDRAIL, GALVANIZED/NESTED
STA A 174+92 - 175+86 LT

DELINEATOR WITH STEEL POST
STA A 174+76 LT
STA A 176+02 LT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 145+29 - STA A 170+79 (SOLID LT)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 145+38 - STA A 170+65 (SOLID LT + RT)
STA A 170+90 LT (CENTERLINES TH #11)
STA A 171+04 - STA A 200+16 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 145+38 - STA A 170+65 (SOLID LT + RT)
STA A 170+90 LT (CENTERLINES TH #11)
STA A 171+04 - STA A 200+16 (SOLID LT + RT)

DURABLE 24 INCH STOP BAR (SEE OPTION DETAILS)
STA A 170+80 LT

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 170+80 LT "STOP"

0 50 100
SCALE IN FEET

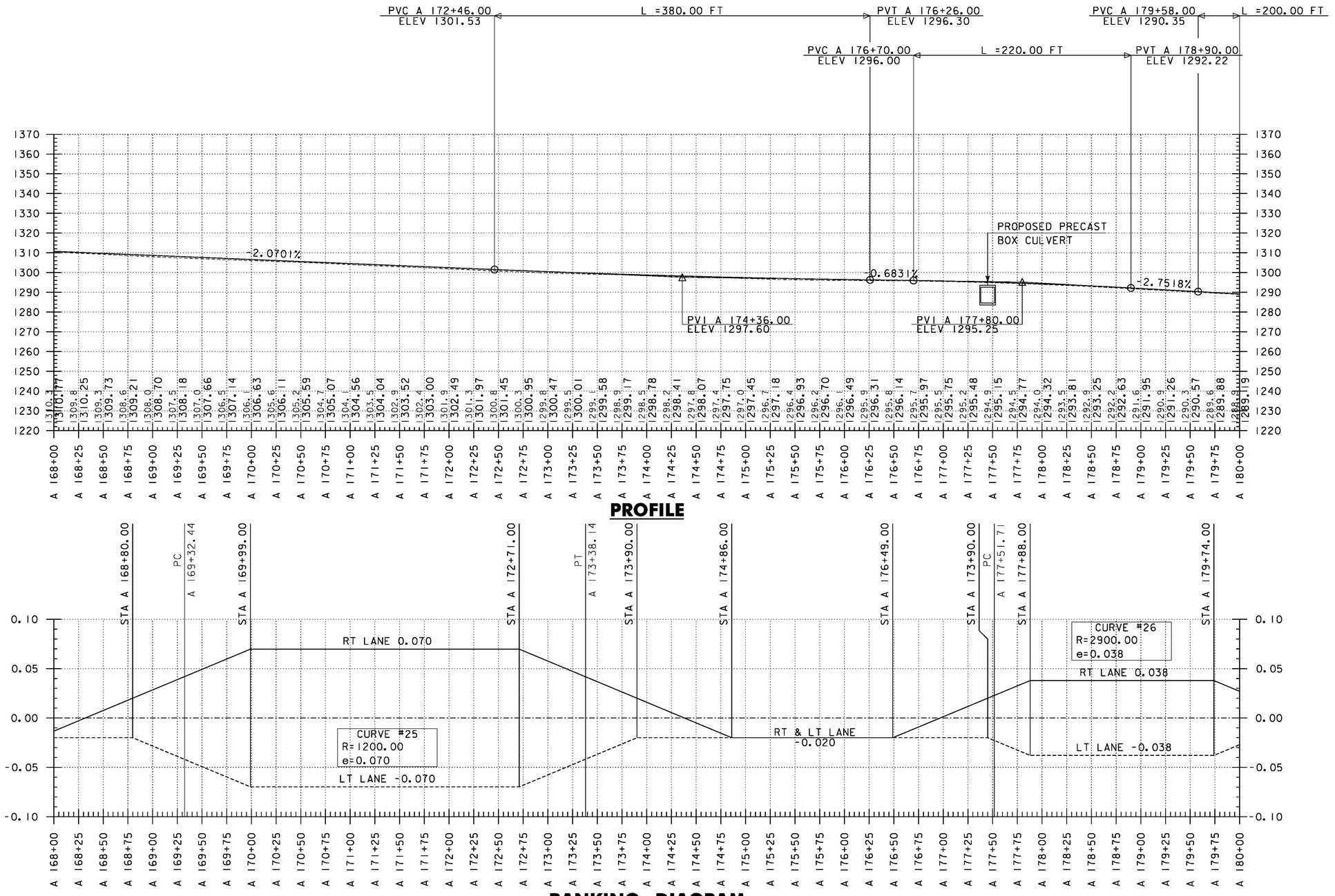
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 15

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 83 OF 444




THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 84 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 189+13 - STA A 189+87 LT
STA A 190+83 - STA A 200+23 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 190+84 - STA A 200+23 RT

EROSION LOG
STA A 180+50 - STA A 182+50 LT
STA A 186+75 - STA A 190+75 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 189+00 - STA A 189+13 LT
STA A 189+70 - STA A 189+83 RT
STA A 189+87 - STA A 190+00 LT

~~STONE FILL, TYPE I~~
~~STA A 186+00 - STA A 187+50 RT~~

BARRIER FENCE
STA A 180+50 - STA A 182+50 LT
STA A 186+75 - STA A 190+75 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 189+09 LT
STA A 189+79 RT
STA A 189+91 LT

GRUBBING MATERIAL
STA A 186+00 - STA A 187+50 RT

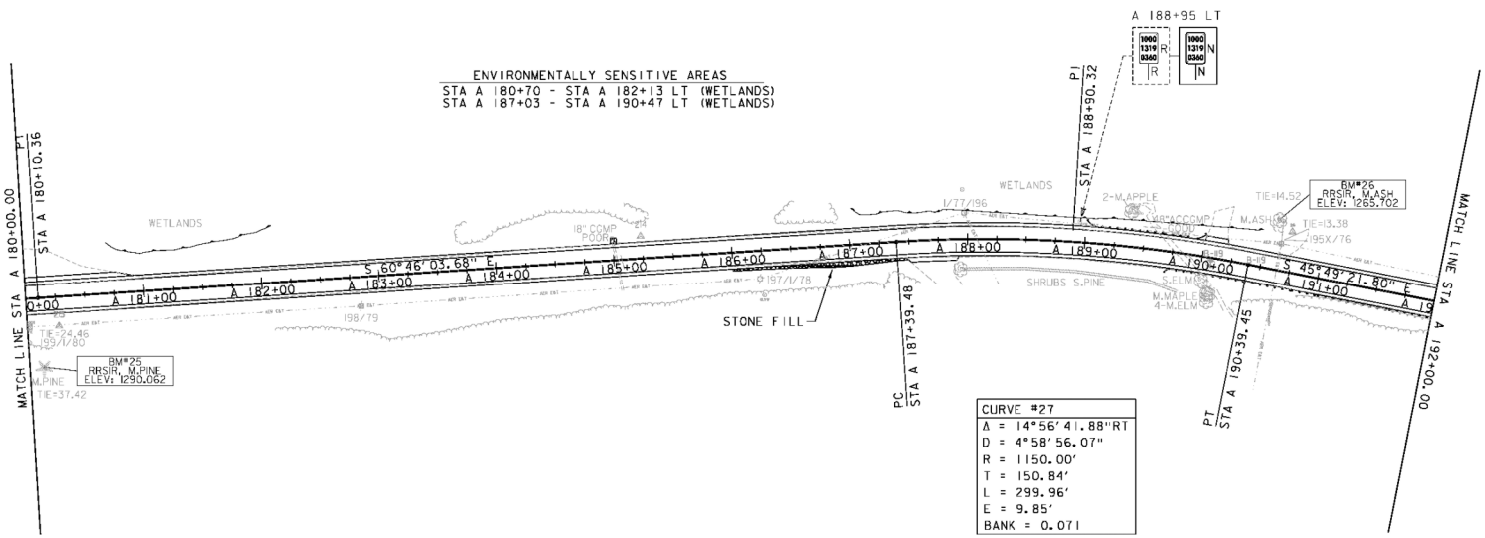
**STONE FILL, TYPE I**
**STA A 183+70 - STA A 184+16 LT**
**STA A 186+27 - STA A 187+30 RT**
**STA A 190+20 RT**

DELINEATOR WITH STEEL POSTS
STA A 189+00 LT
STA A 189+70 RT
STA A 190+00 LT

GEOTEXTILE FOR SILT FENCE
STA A 186+00 - STA A 187+50 RT

N
VT STATE PLANE GRID

ENVIRONMENTALLY SENSITIVE AREAS
STA A 180+70 - STA A 182+13 LT (WETLANDS)
STA A 187+03 - STA A 190+47 LT (WETLANDS)




| CURVE #27 |
|---|
| Δ = 14°56'41.88"RT |
| D = 4°58'56.07" |
| R = 1150.00' |
| T = 150.84' |
| L = 299.96' |
| E = 9.85' |
| BANK = 0.071 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 171+04 - STA A 200+16 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 171+04 - STA A 200+16 (SOLID LT + RT)

0 50 100
SCALE IN FEET

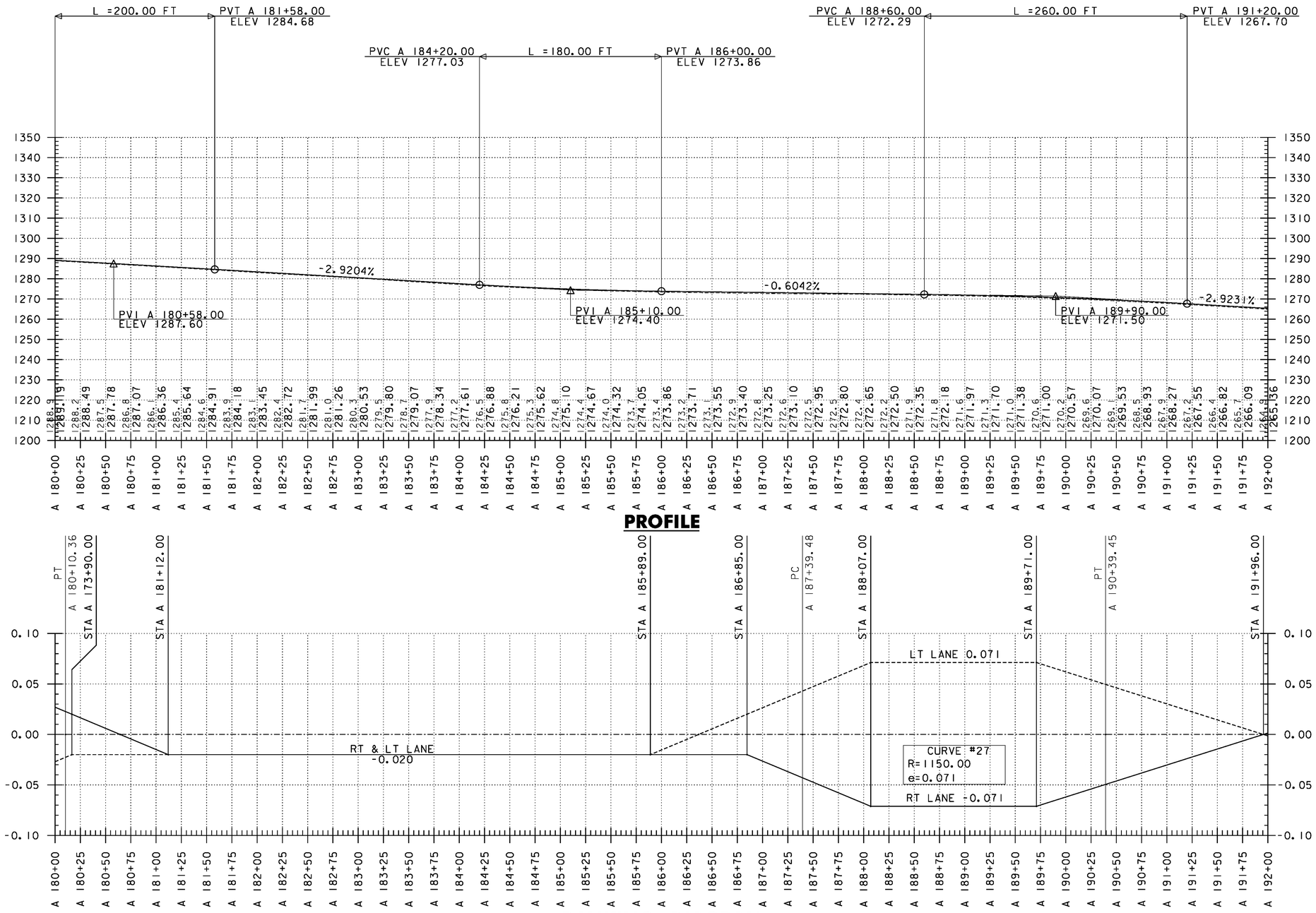
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ---------- |

PROJECT NAME: WARSDBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 16

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 85 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 86 OF 444

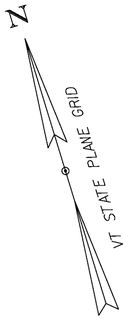
STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 190+29 - STA A 200+23 RT
STA A 200+38 - STA A 211+89 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 190+84 - STA A 200+23 RT
STA A 200+38 - STA A 212+01 RT

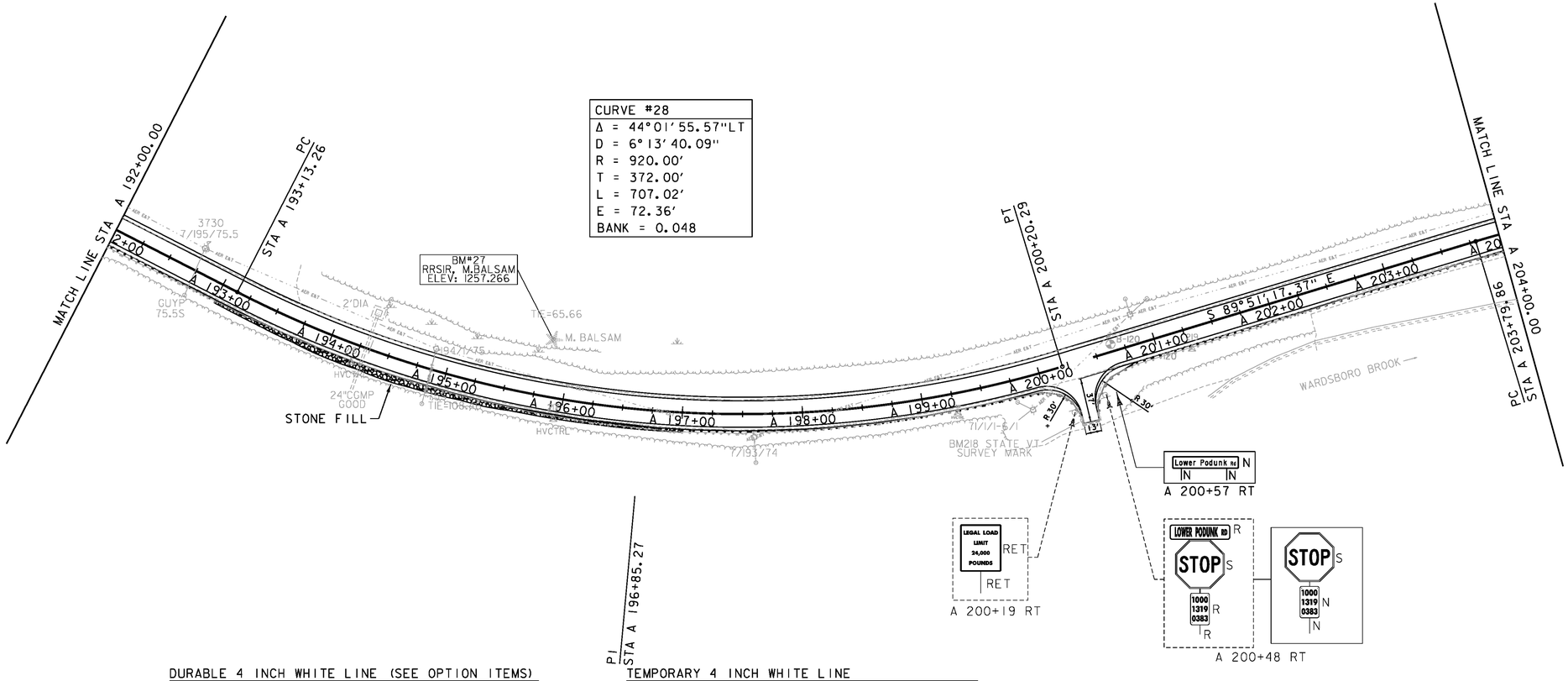
STONE FILL, TYPE I
STA A 193+00 - STA A 197+00 RT

GRUBBING MATERIAL
STA A 193+00 - STA A 197+00 RT

GEOTEXTILE FOR SILT FINCE
STA A 193+00 - STA A 197+00 RT




| CURVE #28 |
|---|
| Δ = 44°01'55.57"LT |
| D = 6°13'40.09" |
| R = 920.00' |
| T = 372.00' |
| L = 707.02' |
| E = 72.36' |
| BANK = 0.048 |




PI STA A 196+85.27



A 200+19 RT



A 200+57 RT



A 200+48 RT

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 171+04 - STA A 200+16 (SOLID LT + RT)
STA A 200+30 RT (CENTERLINES TH #6)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 200+34 RT "STOP"

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 124+12 - STA A 200+24 (SOLID RT)
STA A 200+37 - STA A 273+11 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 171+04 - STA A 200+16 (SOLID LT + RT)
STA A 200+30 RT (CENTERLINES TH #6)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

DURABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA A 200+40 RT

0 50 100
SCALE IN FEET

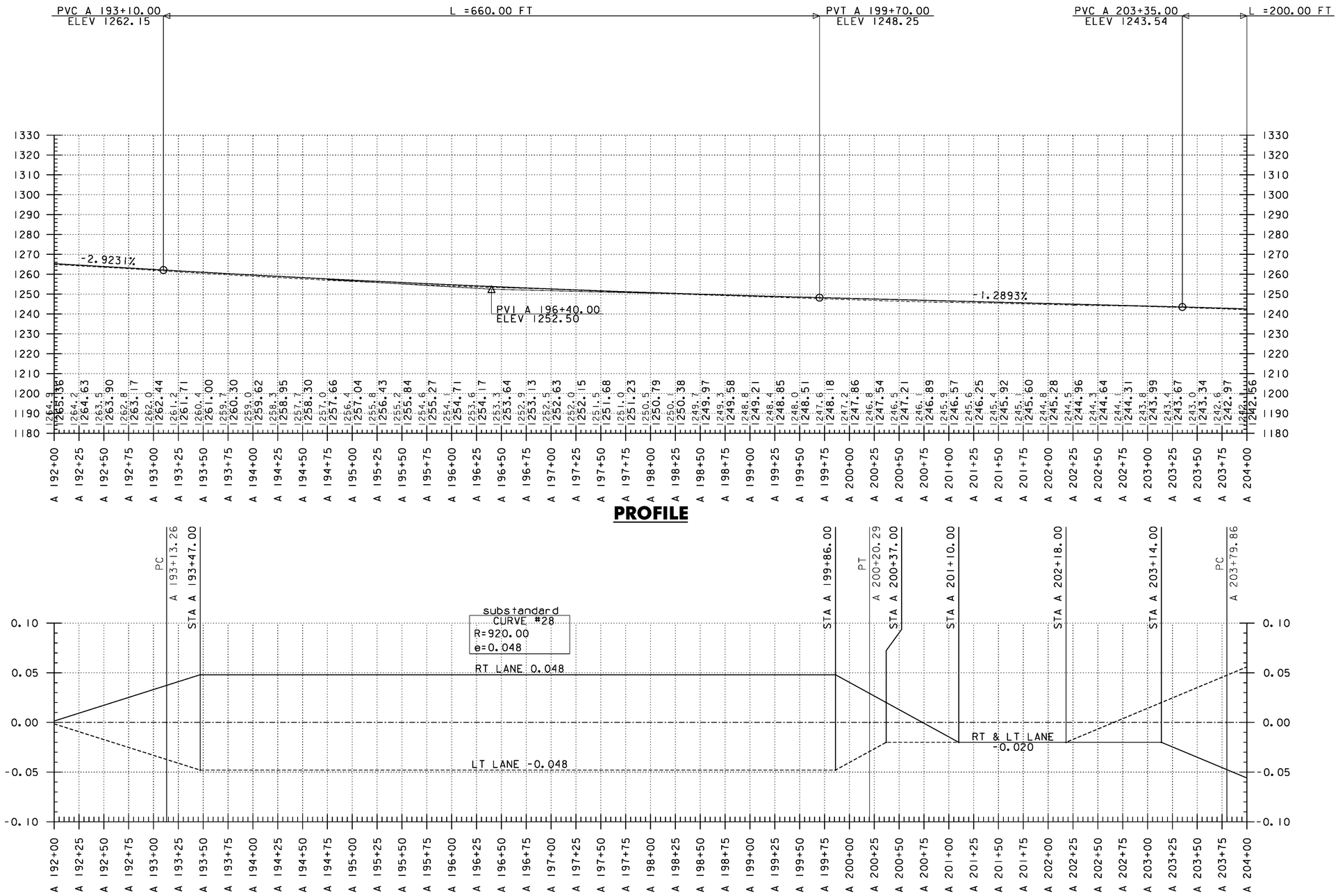
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 17

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 87 OF 444




## PROFILE

## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 200+38 - STA A 211+89 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 200+38 - STA A 212+01 RT

EROSION LOG
STA A 209+50 - STA A 211+00 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 211+89 - STA A 212+02 LT

STONE FILL, TYPE I
~~STA A 211+90 - STA A 212+00 RT~~
STA A 210+86 - STA A 211+70 RT

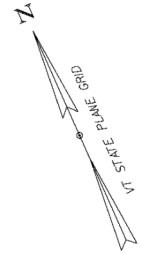
BARRIER FENCE
STA A 209+50 - STA A 211+00 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 211+93 RT

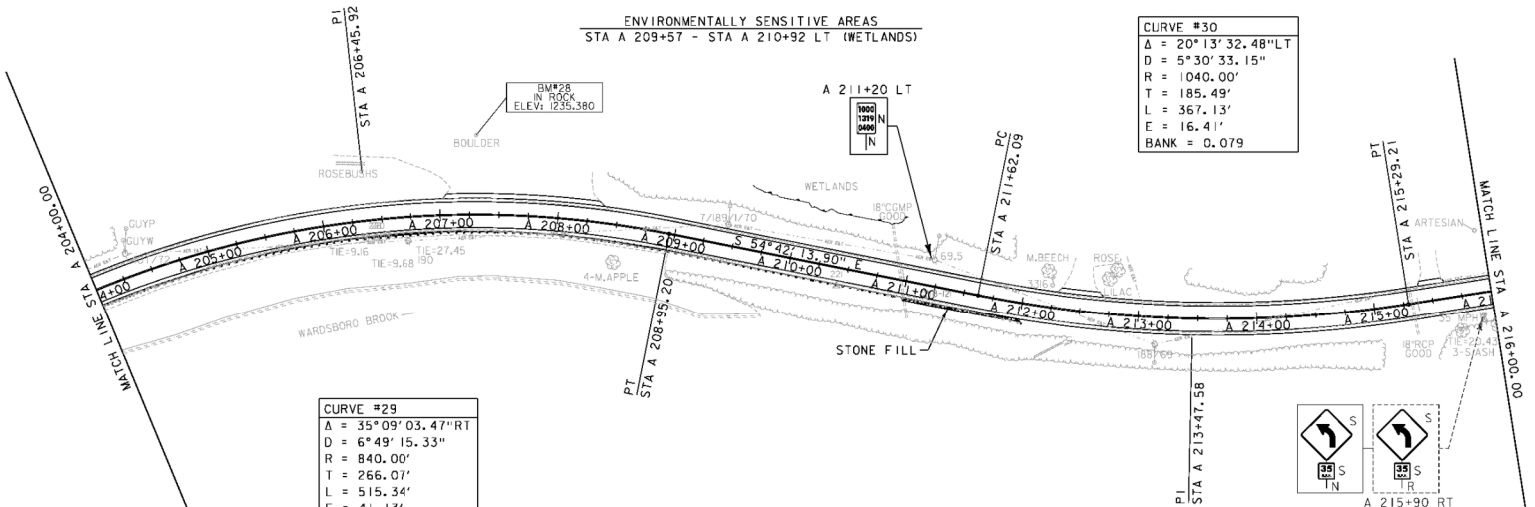
GRUBBING MATERIAL
STA A 210+95 - A 212+00 RT

DELINEATOR WITH STEEL POSTS
STA A 212+02 RT

GEOTEXTILE FOR SILT FENCE
STA A 211+00 - STA A 212+00 RT




ENVIRONMENTALLY SENSITIVE AREAS
STA A 209+57 - STA A 210+92 LT (WETLANDS)




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

0 50 100
SCALE IN FEET

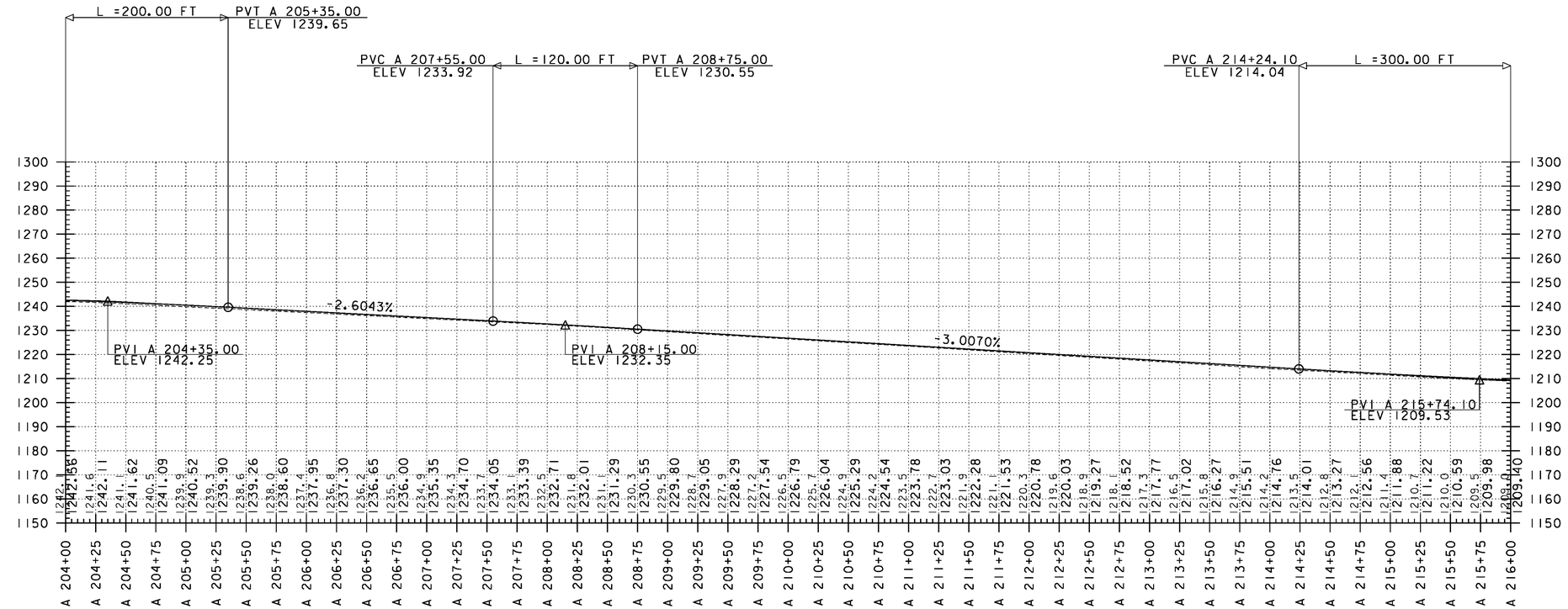
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

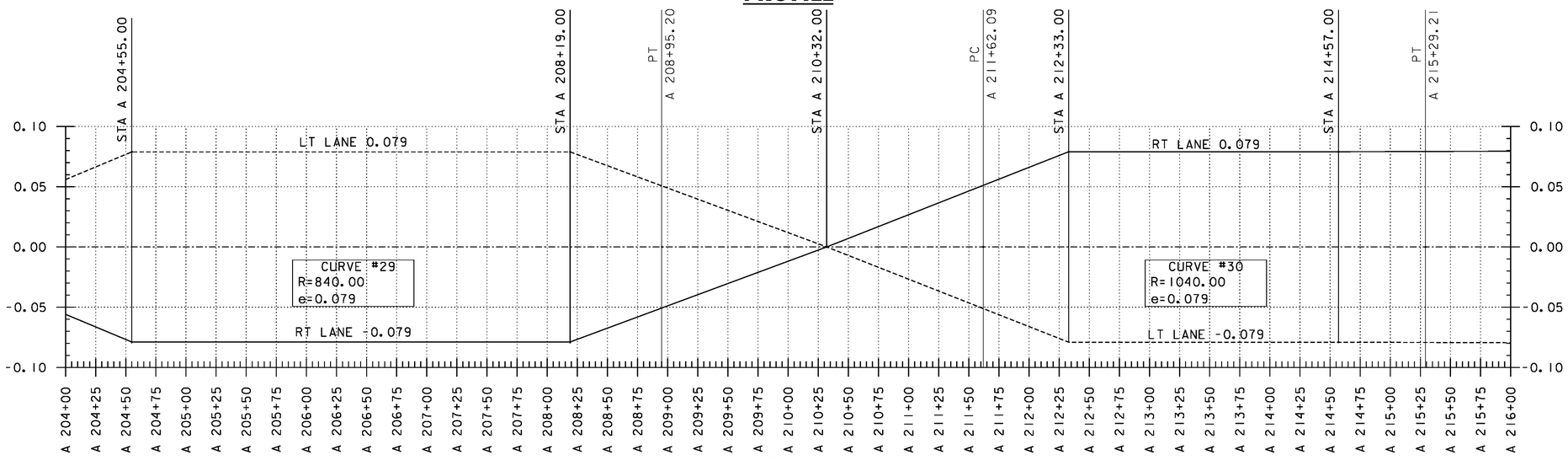
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 18

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 89 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 90 OF 444

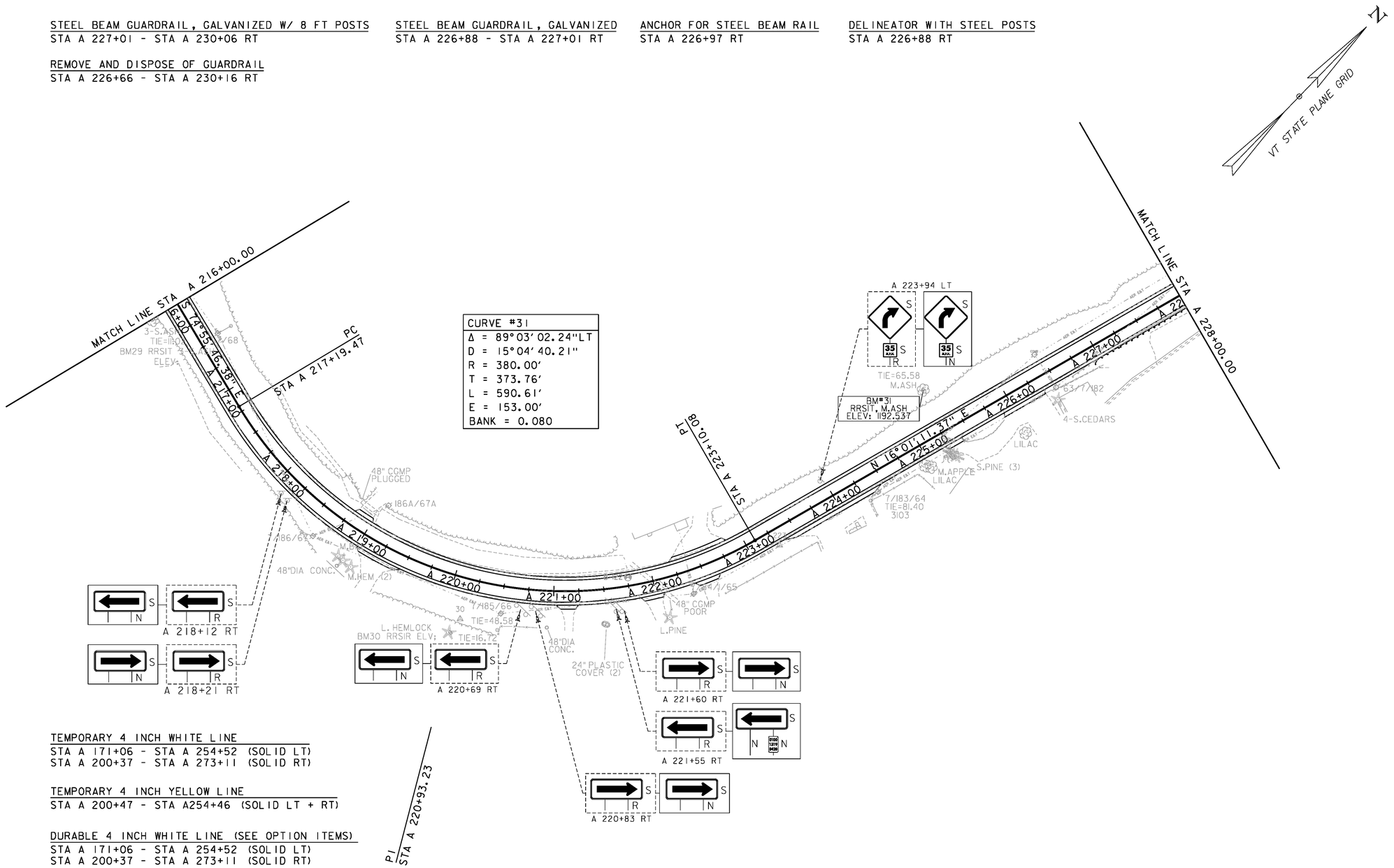
STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 227+01 - STA A 230+06 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 226+88 - STA A 227+01 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 226+97 RT

DELINEATOR WITH STEEL POSTS
STA A 226+88 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 226+66 - STA A 230+16 RT




TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 200+47 - STA A254+46 (SOLID LT + RT)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

0 50 100
SCALE IN FEET

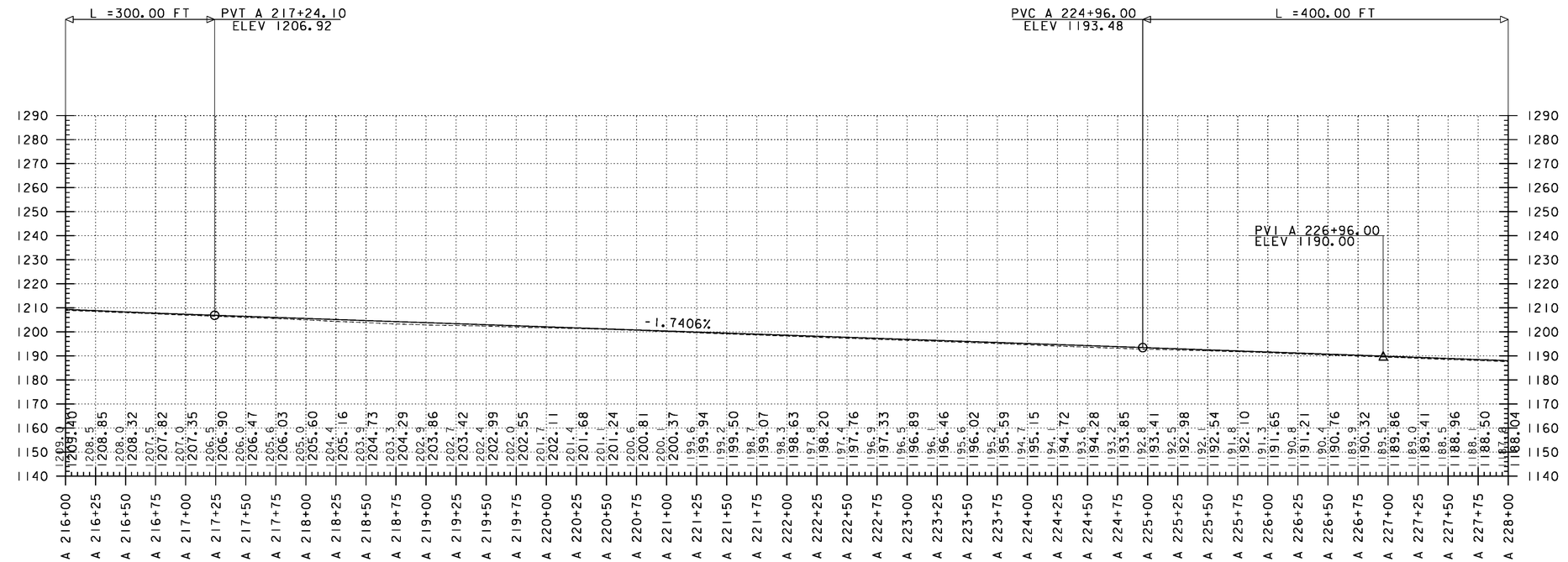
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

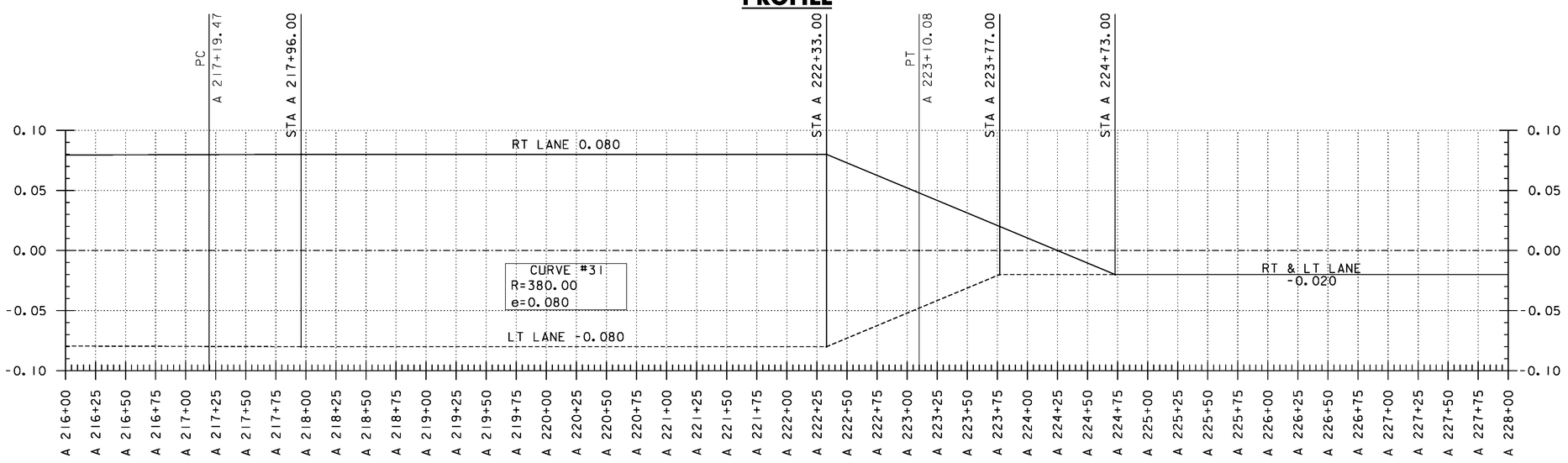
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 19

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 91 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 227+01 - STA A 230+06 RT
STA A 233+09 - STA A 234+83 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 230+06 - STA A 230+19 RT
STA A 232+96 - STA A 233+09 RT
STA A 234+70 - STA A 234+83 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 230+10 RT
STA A 233+05 RT
STA A 234+87 RT

DELINEATOR WITH STEEL POSTS
STA A 230+19 RT
STA A 232+96 RT
STA A 234+83 RT

N
VT STATE PLANE GRID

REMOVE AND DISPOSE OF GUARDRAIL
STA A 226+66 - STA A 230+16 RT
STA A 232+96 - STA A 234+83 RT

STONE FILL, TYPE I
STA A 233+00 - STA A 235+00 RT
STA A 239+00 - STA A 240+90 RT

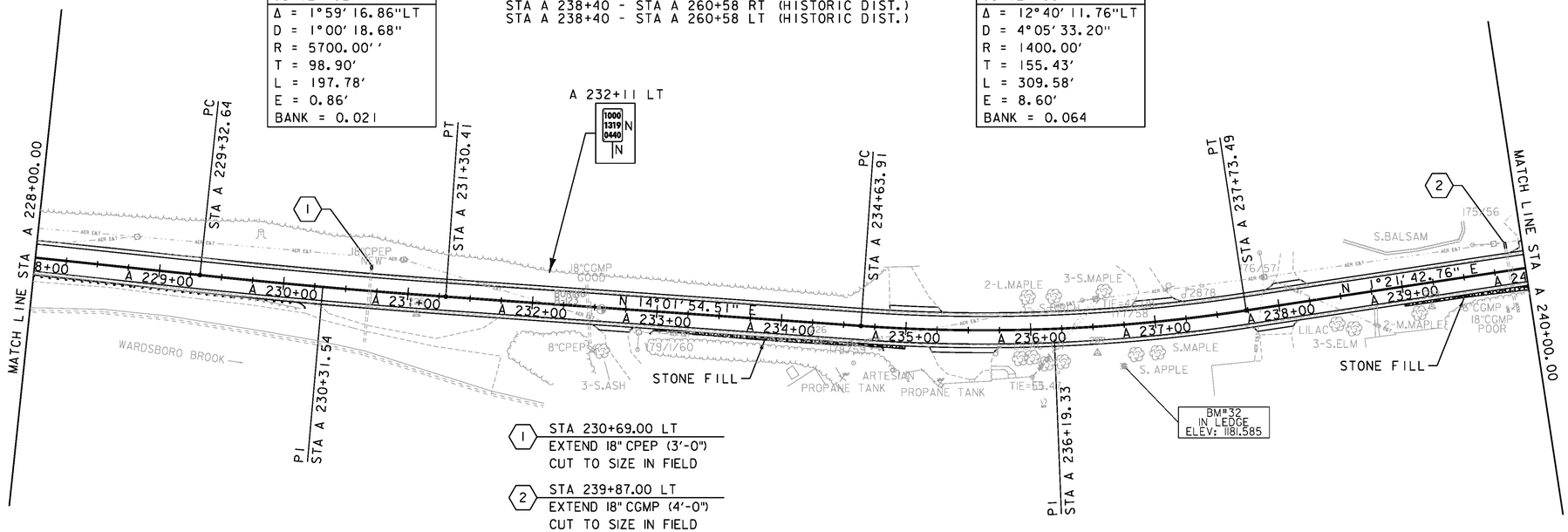
GRUBBING MATERIAL
STA A 233+00 - STA A 235+00 RT
STA A 239+00 - STA A 240+90 RT

GEOTEXTILE FOR SILT FENCE
STA A 233+00 - STA A 235+00 RT
STA A 239+00 - STA A 240+90 RT

| CURVE #32 |
|---|
| Δ = 1°59'16.86"LT |
| D = 1°00'18.68" |
| R = 5700.00'' |
| T = 98.90' |
| L = 197.78' |
| E = 0.86' |
| BANK = 0.021 |

ENVIRONMENTALLY SENSITIVE AREAS
STA A 238+40 - STA A 260+58 RT (HISTORIC DIST.)
STA A 238+40 - STA A 260+58 LT (HISTORIC DIST.)

| CURVE #33 |
|---|
| Δ = 12°40'11.76"LT |
| D = 4°05'33.20" |
| R = 1400.00' |
| T = 155.43' |
| L = 309.58' |
| E = 8.60' |
| BANK = 0.064 |




1 STA 230+69.00 LT
EXTEND 18" CPEP (3'-0")
CUT TO SIZE IN FIELD

2 STA 239+87.00 LT
EXTEND 18" CGMP (4'-0")
CUT TO SIZE IN FIELD

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 254+46 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

0 50 100
SCALE IN FEET

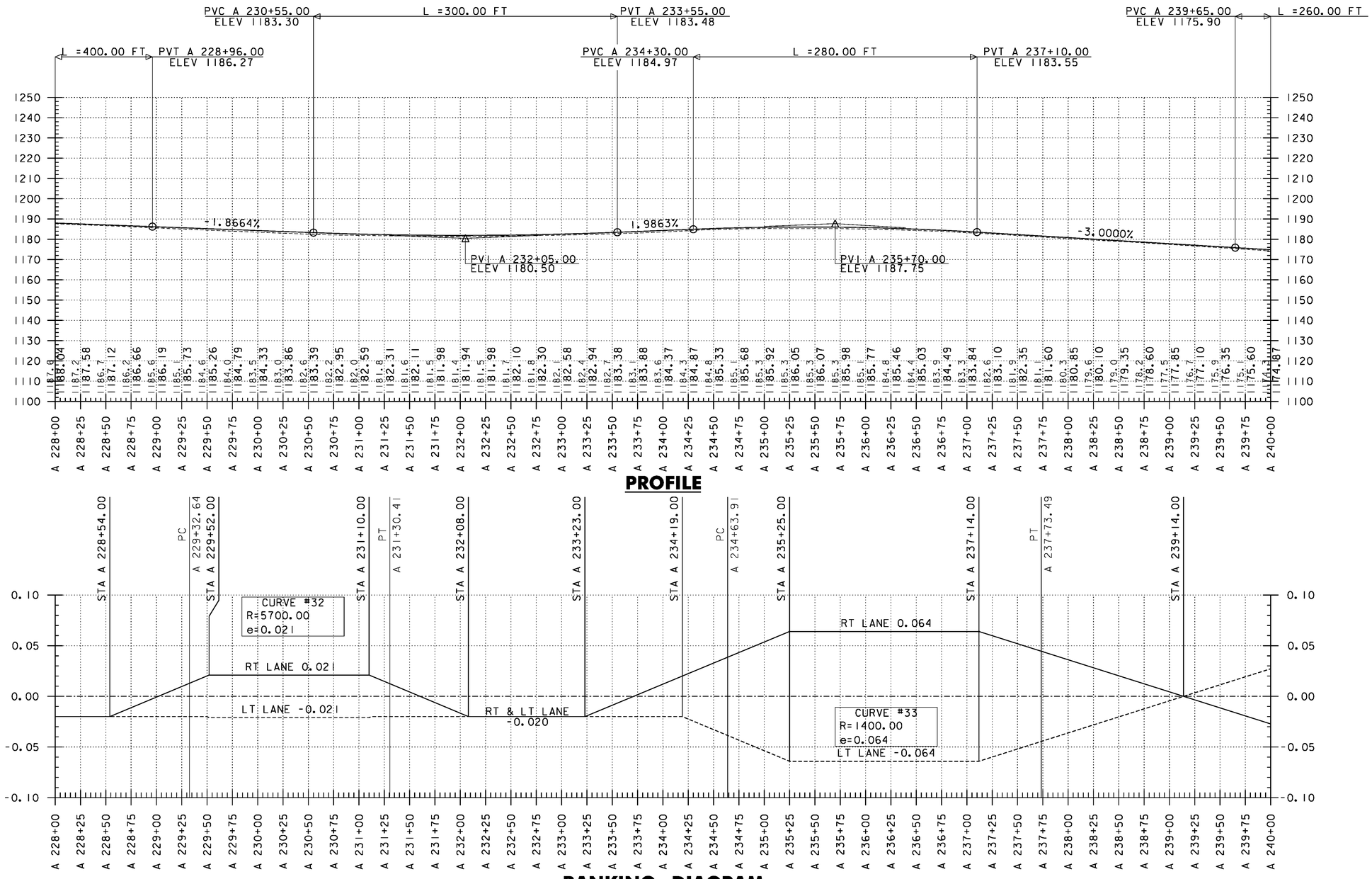
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 20

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 93 OF 444




THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 94 OF 444

STONE FILL, TYPE I
STA A 239+00 - STA A 240+90 RT
STA A 242+50 - STA A 243+50 RT

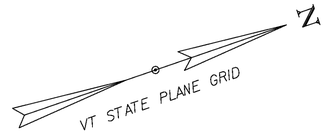
EROSION LOG
STA A 250+25 - STA A 253+25 LT

GRUBBING MATERIAL
STA A 239+00 - STA A 240+90 RT
STA A 242+50 - STA A 243+50 RT

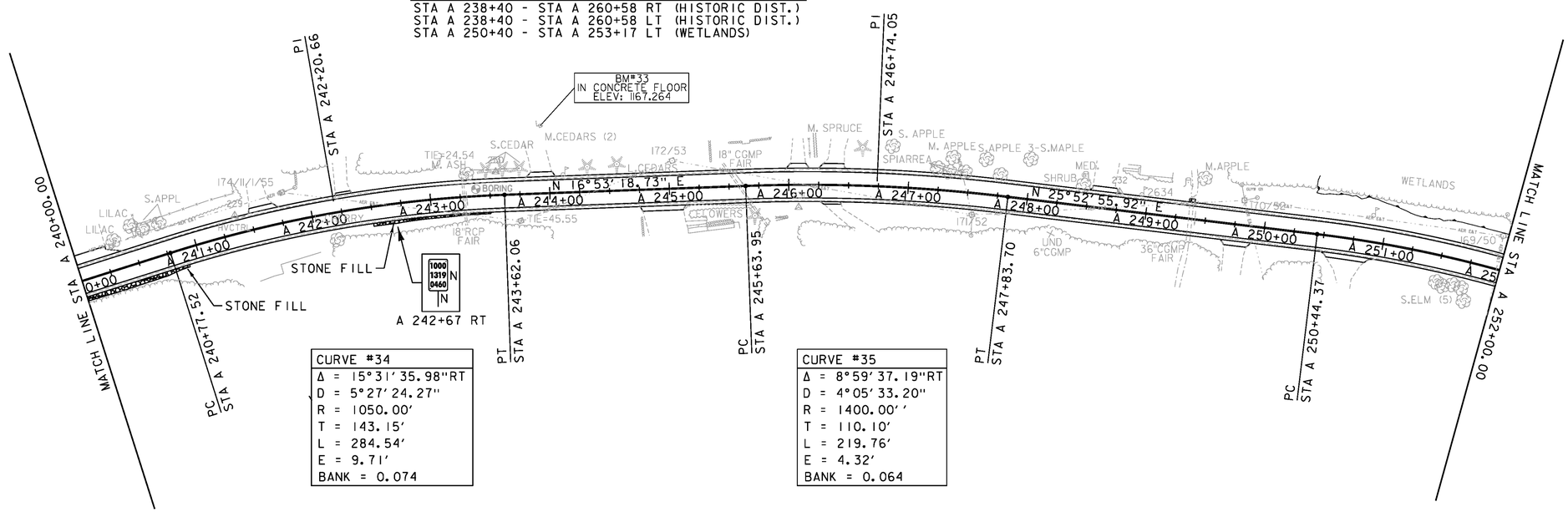
BARRIER FENCE
STA A 250+25 - STA A 253+25 LT

GEOTEXTILE FOR SILT FENCE
STA A 239+00 - STA A 240+90 RT
STA A 242+50 - STA A 243+50 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA A 244+11 LT
STA A 248+95 LT




ENVIRONMENTALLY SENSITIVE AREAS
STA A 238+40 - STA A 260+58 RT (HISTORIC DIST.)
STA A 238+40 - STA A 260+58 LT (HISTORIC DIST.)
STA A 250+40 - STA A 253+17 LT (WETLANDS)




| CURVE #34 |
|---|
| Δ = 15°31'35.98"RT |
| D = 5°27'24.27" |
| R = 1050.00' |
| T = 143.15' |
| L = 284.54' |
| E = 9.71' |
| BANK = 0.074 |

| CURVE #35 |
|---|
| Δ = 8°59'37.19"RT |
| D = 4°05'33.20" |
| R = 1400.00'' |
| T = 110.10' |
| L = 219.76' |
| E = 4.32' |
| BANK = 0.064 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

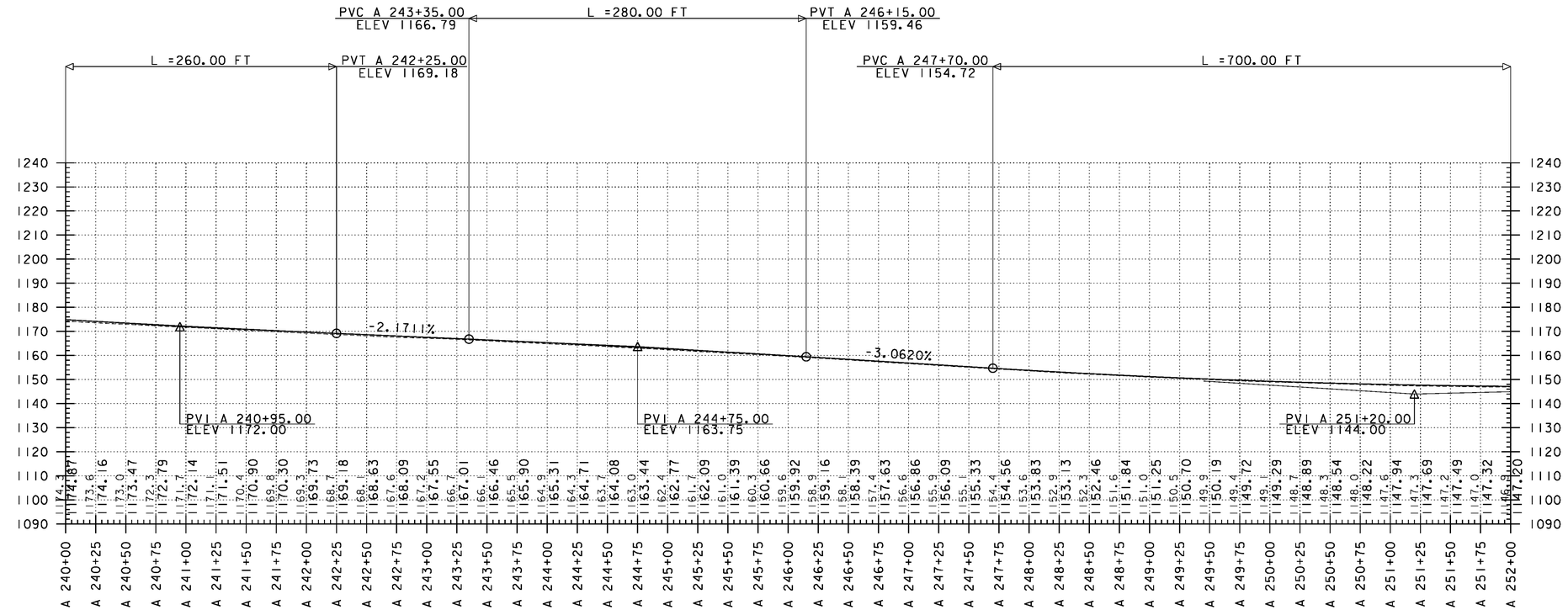
TEMPORARY 4 INCH YELLOW LINE
STA A200+47 - STA A 254+46 (SOLID LT + RT)

0 50 100
SCALE IN FEET

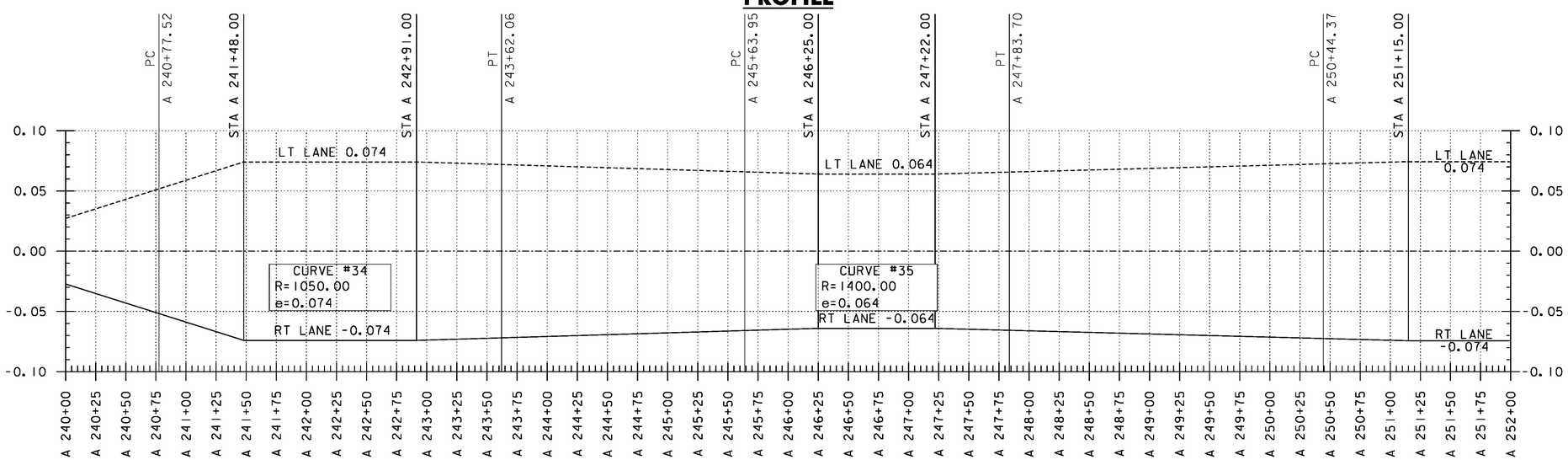
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 21 | SHEET 95 OF 444 |




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 96 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 262+36 - STA A 269+64 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 262+23 - STA A 269+72 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 262+23 - STA A 262+36 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 262+32 RT

BARRIER FENCE
STA A 250+25 - STA A 253+25 LT
STA A 257+75 - STA A 261+75 LT

DELINEATOR WITH STEEL POSTS
STA A 262+23 RT

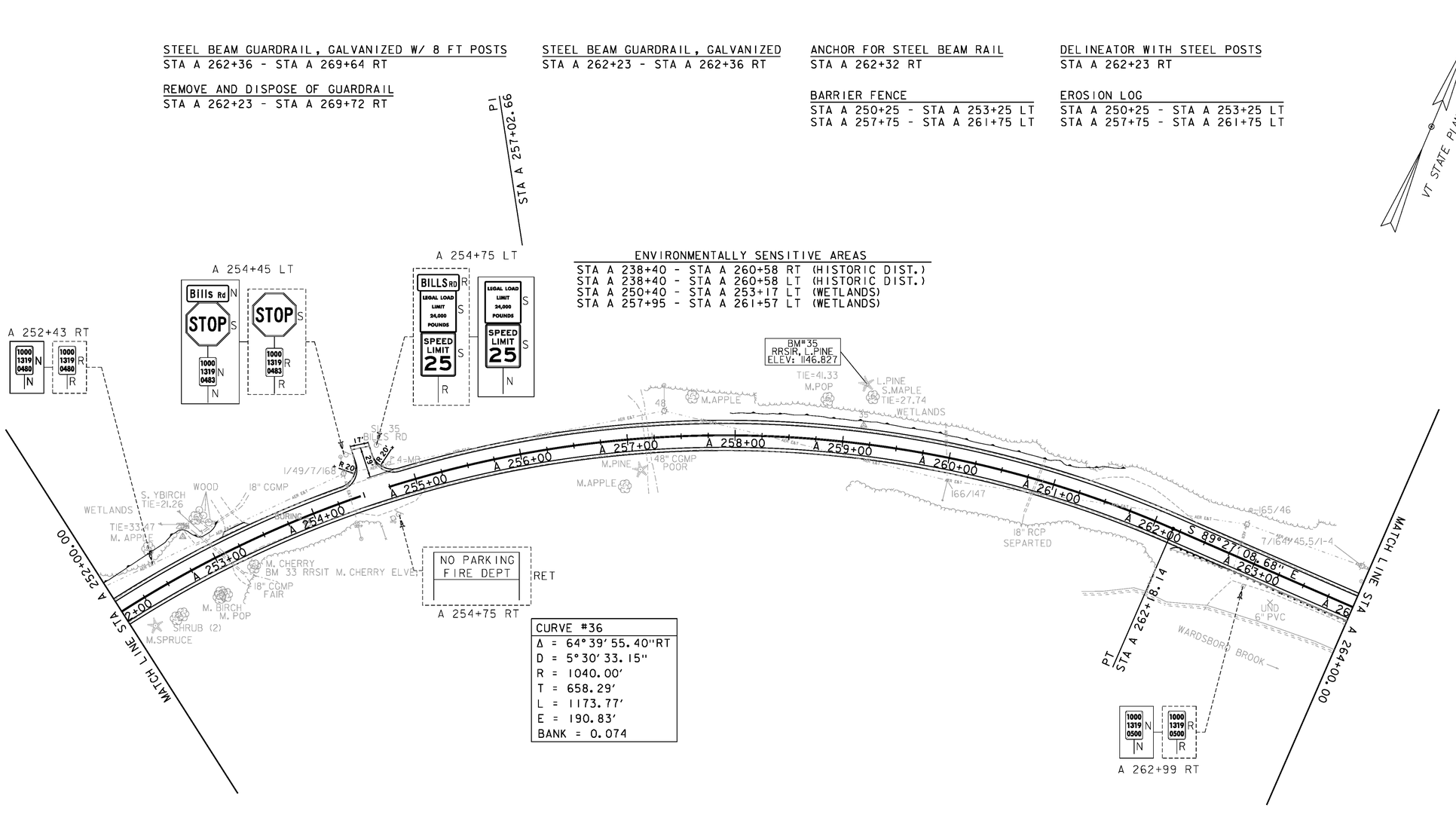
EROSION LOG
STA A 250+25 - STA A 253+25 LT
STA A 257+75 - STA A 261+75 LT

N

VT STATE PLANE GRID

PI STA A 257+02.66

ENVIRONMENTALLY SENSITIVE AREAS
STA A 238+40 - STA A 260+58 RT (HISTORIC DIST.)
STA A 238+40 - STA A 260+58 LT (HISTORIC DIST.)
STA A 250+40 - STA A 253+17 LT (WETLANDS)
STA A 257+95 - STA A 261+57 LT (WETLANDS)




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 254+68 - STA A 273+13 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 200+47 - STA A 254+46 (SOLID LT + RT)
STA A 254+60 LT (CENTERLINES TH #16)
STA A 254+73 - STA A 273+01 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 171+06 - STA A 254+52 (SOLID LT)
STA A 254+68 - STA A 273+13 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 200+47 - STA A 254+46 (SOLID LT + RT)
STA A 254+60 LT (CENTERLINES TH #16)
STA A 254+73 - STA A 273+01 (SOLID LT + RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 254+51 LT "STOP"

DURABLE 24 IN STOP BAR (SEE OPTION ITEMS)
STA A 254+51 LT

0 50 100
SCALE IN FEET

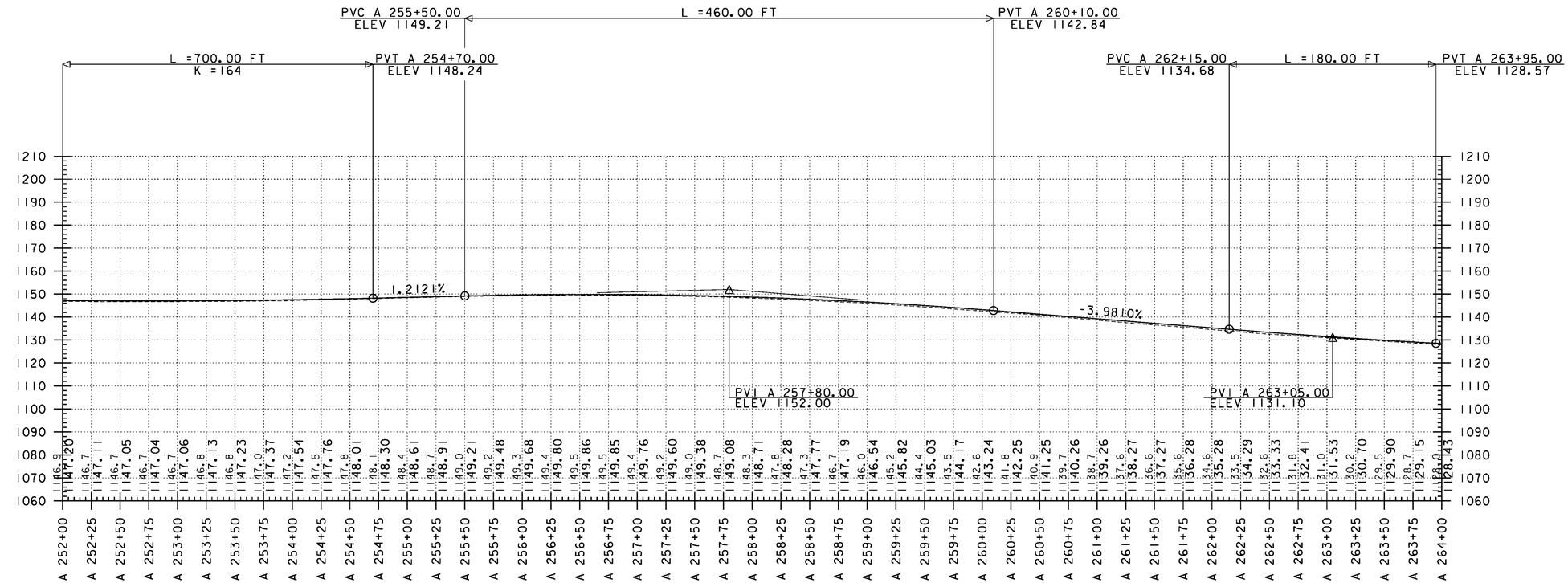
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

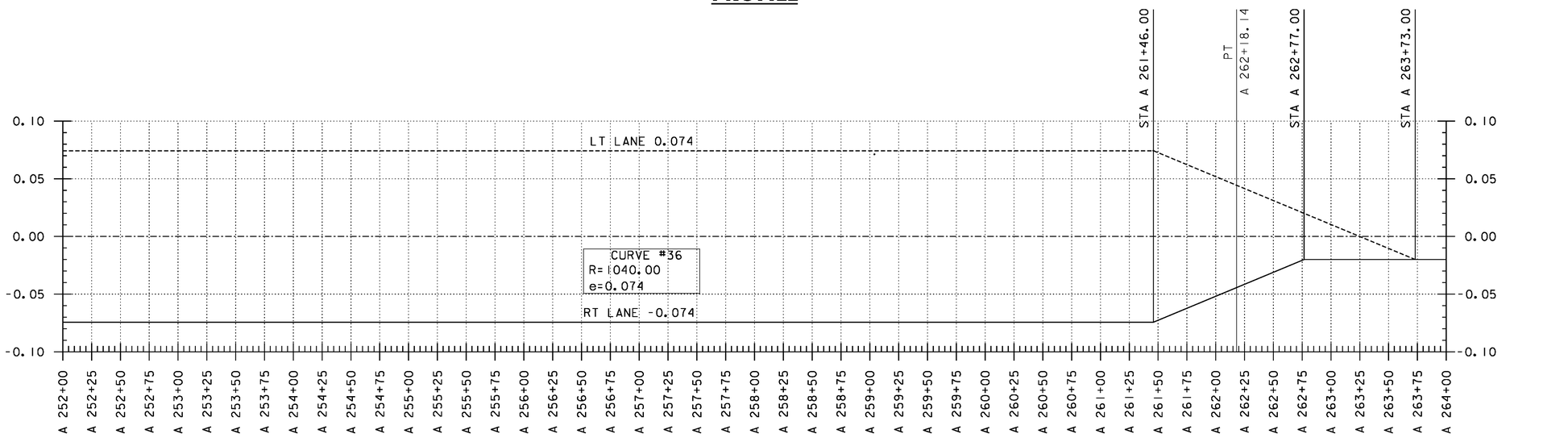
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 22

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 97 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 98 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 262+36 - STA A 269+64 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 262+23 - STA A 269+72 RT

RELOCATE MAILBOX, MULTIPLE SUPPORT
STA A 273+98 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 269+59 - STA A 269+72 RT

STONE FILL, TYPE I
STA A 265+00 - STA A 266+00 RT
STA A 268+55 - STA A 271+00 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 269+63 RT

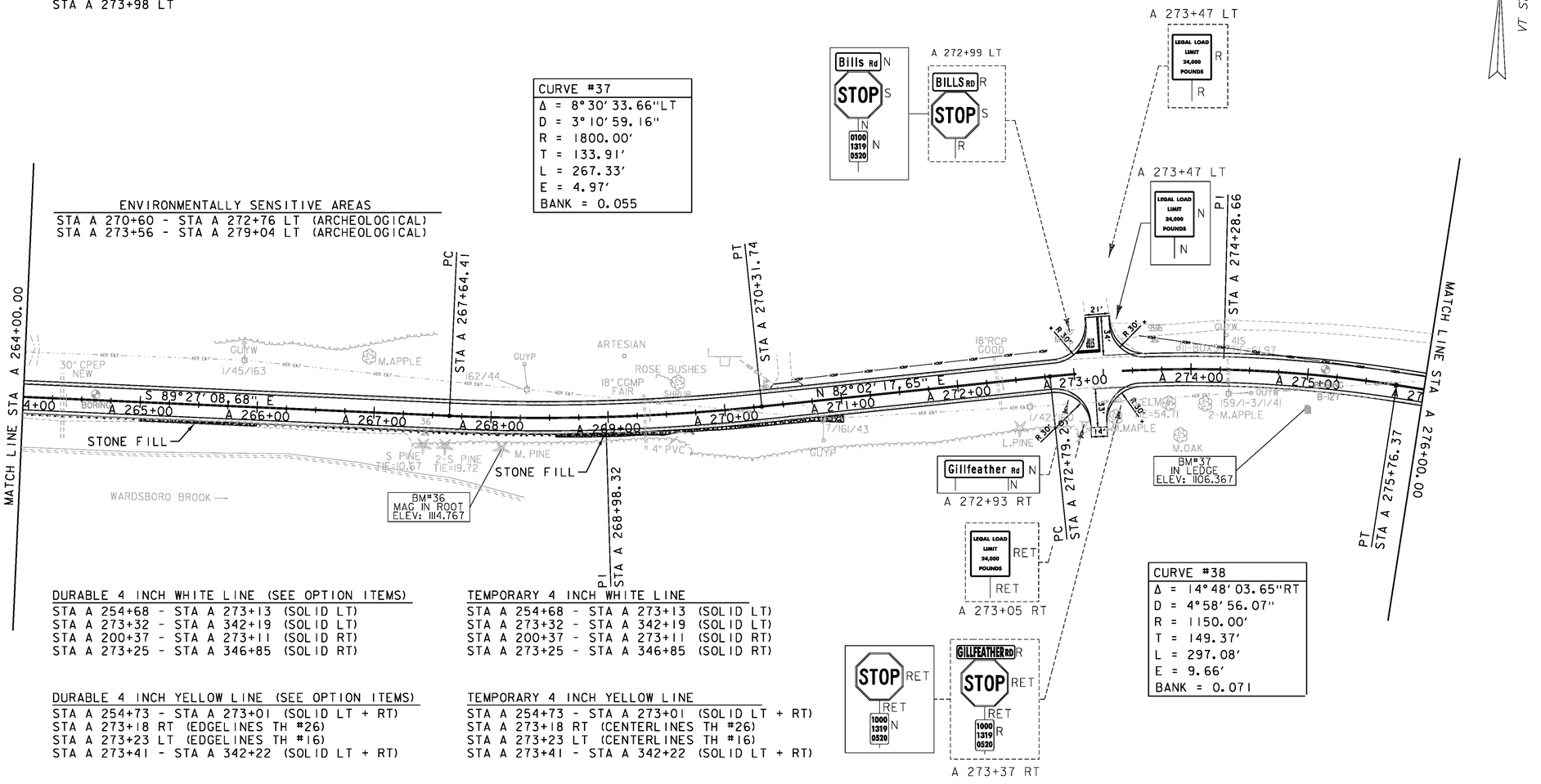
GRUBBING MATERIAL
STA A 265+00 - STA A 266+00 RT
STA A 268+55 - STA A 271+00 RT

DELINEATOR WITH STEEL POSTS
STA A 269+72 RT

GEOTEXTILE FOR SILT FENCE
STA A 265+00 - STA A 266+00 RT
STA A 268+55 - STA A 271+00 RT

ENVIRONMENTALLY SENSITIVE AREAS
STA A 270+60 - STA A 272+76 LT (ARCHEOLOGICAL)
STA A 273+56 - STA A 279+04 LT (ARCHEOLOGICAL)

| CURVE #37 |
|---|
| Δ = 8°30'33.66"LT |
| D = 3°10'59.16" |
| R = 1800.00' |
| T = 133.91' |
| L = 267.33' |
| E = 4.97' |
| BANK = 0.055 |




| CURVE #38 |
|---|
| Δ = 14°48'03.65"RT |
| D = 4°58'56.07" |
| R = 1150.00' |
| T = 149.37' |
| L = 297.08' |
| E = 9.66' |
| BANK = 0.071 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 254+68 - STA A 273+13 (SOLID LT)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)
STA A 273+25 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 254+68 - STA A 273+13 (SOLID LT)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 200+37 - STA A 273+11 (SOLID RT)
STA A 273+25 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 254+73 - STA A 273+01 (SOLID LT + RT)
STA A 273+18 RT (EDGELINES TH #26)
STA A 273+23 LT (EDGELINES TH #16)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 254+73 - STA A 273+01 (SOLID LT + RT)
STA A 273+18 RT (CENTERLINES TH #26)
STA A 273+23 LT (CENTERLINES TH #16)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

DURABLE 24 IN STOP BAR (SEE OPTION ITEMS)
STA A 273+16 LT
STA A 273+25 RT

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 273+16 LT "STOP"
STA A 273+25 RT "STOP

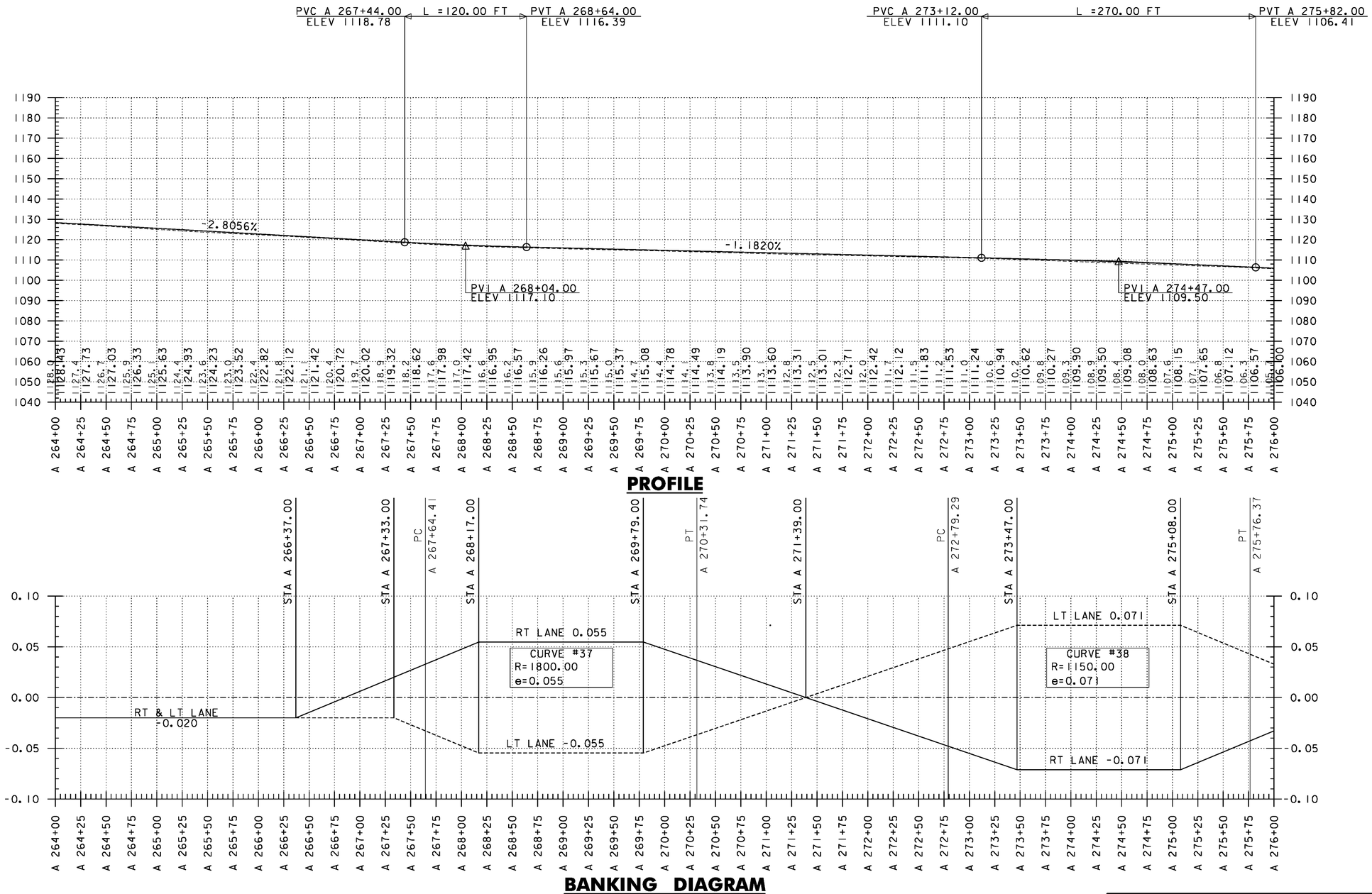
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 23

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 99 OF 444




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 100 OF 444

HD STEEL BEAM GUARDRAIL, GALVANIZED
STA A 284+82 - STA A 284+95 RT

HD STEEL BEAM GUARDRAIL, GALVANIZED/NESTED
STA A 283+88 - STA A 284+82 RT

MANUFACTURED TERMINAL SECTION, TANGENT
STA A 283+74 - STA A 283+88 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA A 280+87 LT
STA A 282+63 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 284+86 RT

DELINEATOR WITH STEEL POSTS
STA A 283+72 RT
STA A 284+93 RT

N

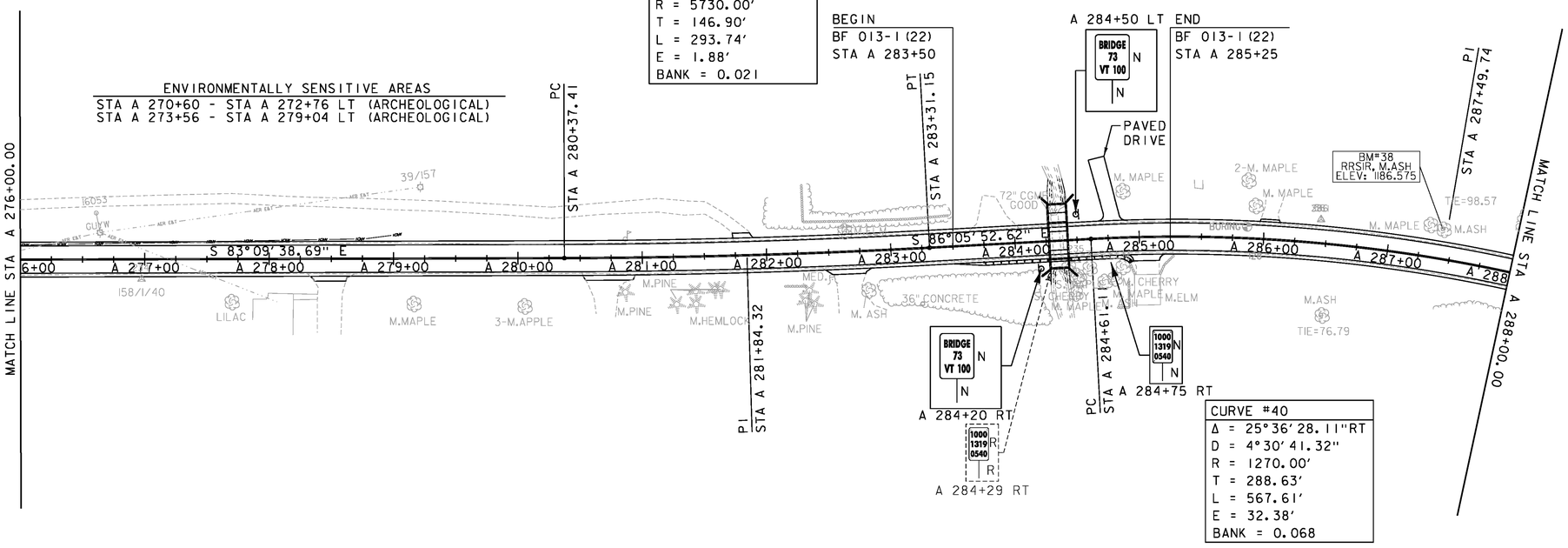
VT STATE PLANE GRID

ENVIRONMENTALLY SENSITIVE AREAS
STA A 270+60 - STA A 272+76 LT (ARCHEOLOGICAL)
STA A 273+56 - STA A 279+04 LT (ARCHEOLOGICAL)

| CURVE #39 |
|---|
| Δ = 2°56'13.92"LT |
| D = 0°59'59.73" |
| R = 5730.00' |
| T = 146.90' |
| L = 293.74' |
| E = 1.88' |
| BANK = 0.021 |

BEGIN
BF 013-1(22)
STA A 283+50

A 284+50 LT END
BF 013-1(22)
STA A 285+25




| CURVE #40 |
|---|
| Δ = 25°36'28.11"RT |
| D = 4°30'41.32" |
| R = 1270.00' |
| T = 288.63' |
| L = 567.61' |
| E = 32.38' |
| BANK = 0.068 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

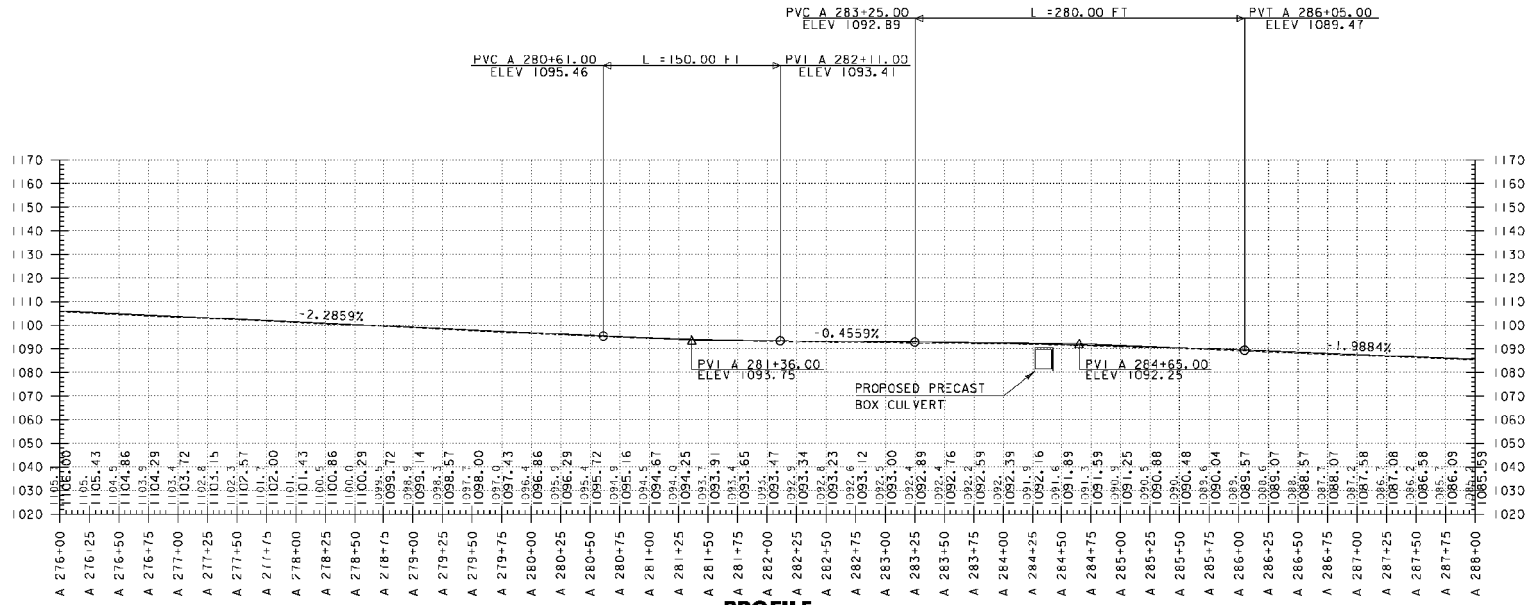
TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

0 50 100
SCALE IN FEET

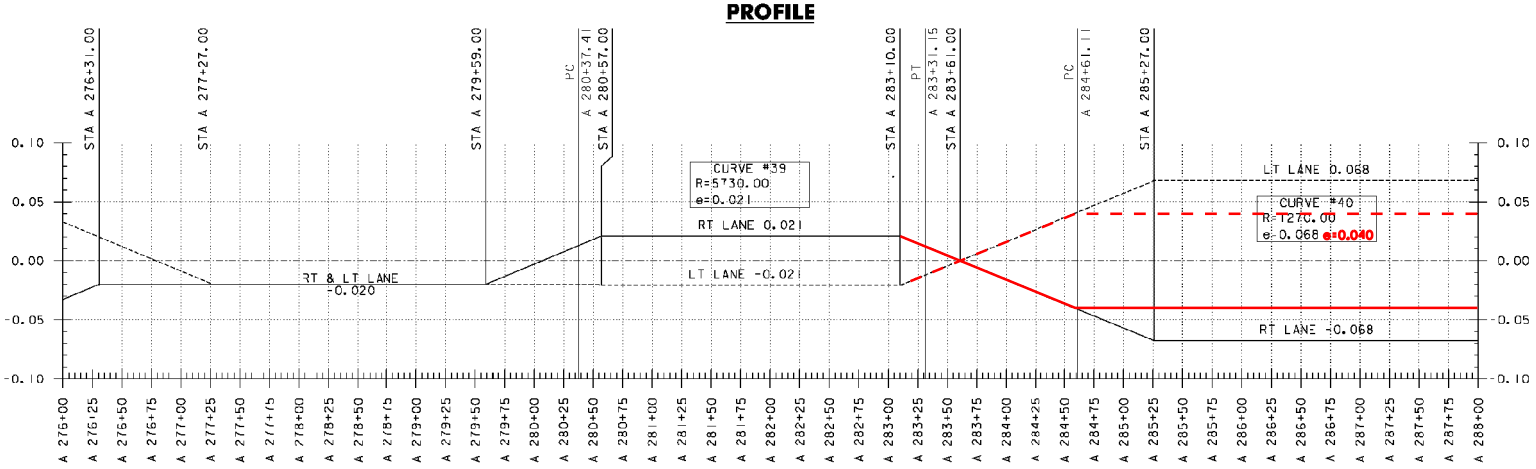
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: di2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 24 | SHEET 101 OF 444 |




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12o236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 102 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 291+15 - STA A 304+27 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 291+02 - STA A 304+35 RT

EROSION LOG
STA A 296+50 - STA A 298+25 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 291+02 - STA A 291+15 RT

STONE FILL, TYPE I
STA A 295+00 - STA A 295+30 LT
STA A 298+00 - STA A 299+50 RT

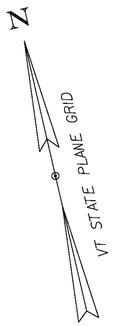
BARRIER FENCE
STA A 296+50 - STA A 298+25 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 291+11 RT

GRUBBING MATERIAL
STA A 295+00 - STA A 295+30 LT
STA A 298+00 - STA A 299+50 RT

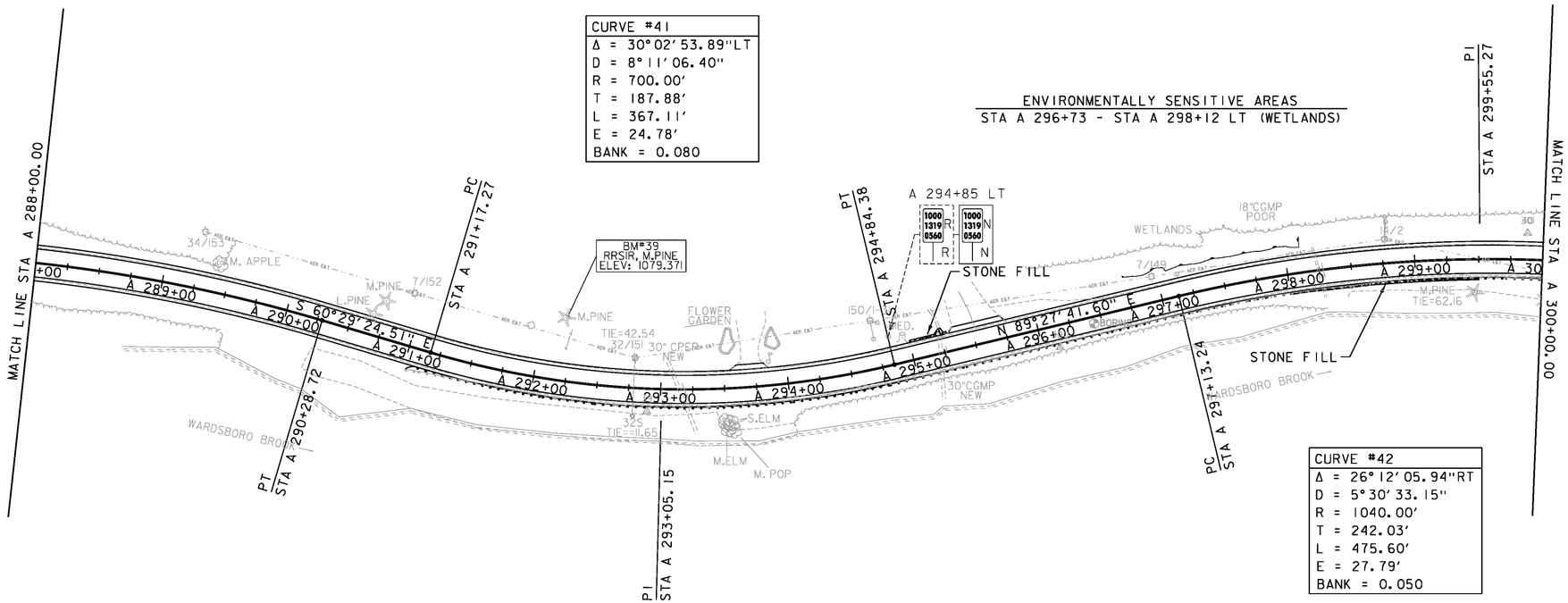
DELINEATOR WITH STEEL POSTS
STA A 291+02 RT

GEOTEXTILE FOR SILT FENCE
STA A 295+00 - STA A 295+30 LT
STA A 298+00 - STA A 299+50 RT




| CURVE #41 |
|---|
| Δ = 30°02'53.89"LT |
| D = 8°11'06.40" |
| R = 700.00' |
| T = 187.88' |
| L = 367.11' |
| E = 24.78' |
| BANK = 0.080 |

ENVIRONMENTALLY SENSITIVE AREAS
STA A 296+73 - STA A 298+12 LT (WETLANDS)




| CURVE #42 |
|---|
| Δ = 26°12'05.94"RT |
| D = 5°30'33.15" |
| R = 1040.00' |
| T = 242.03' |
| L = 475.60' |
| E = 27.79' |
| BANK = 0.050 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

0 50 100
SCALE IN FEET

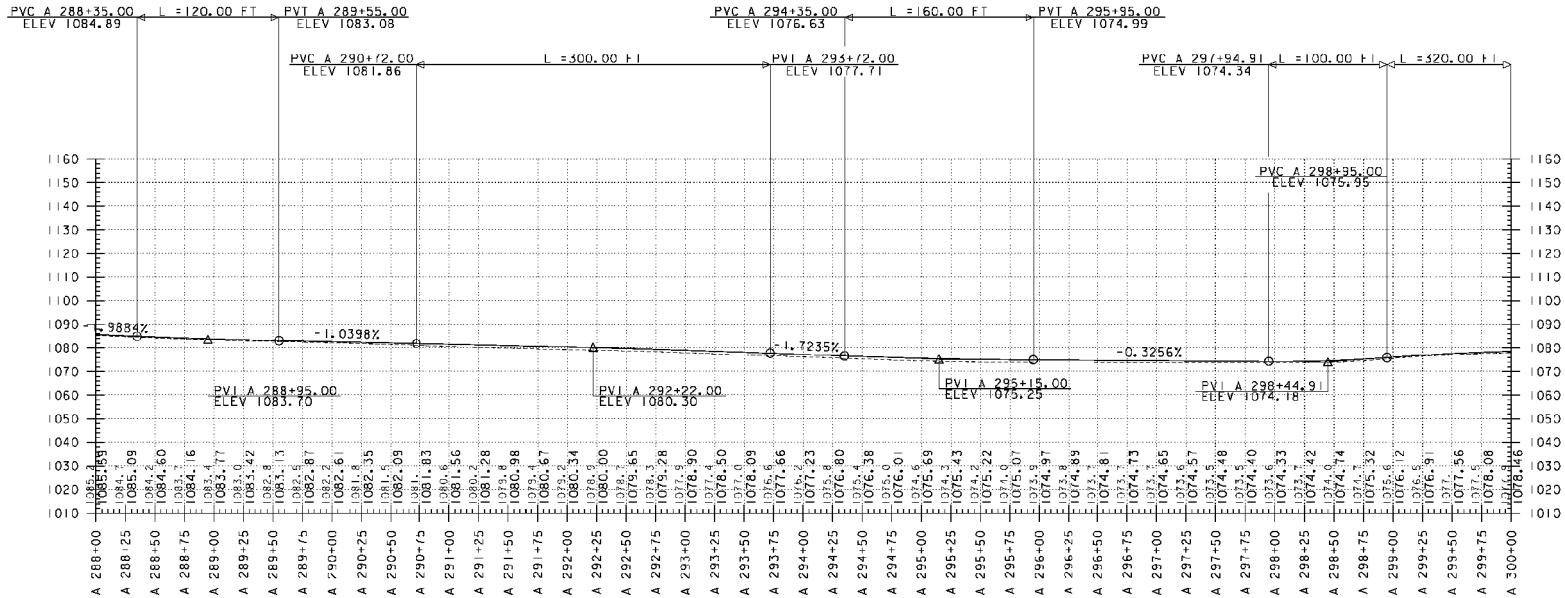
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

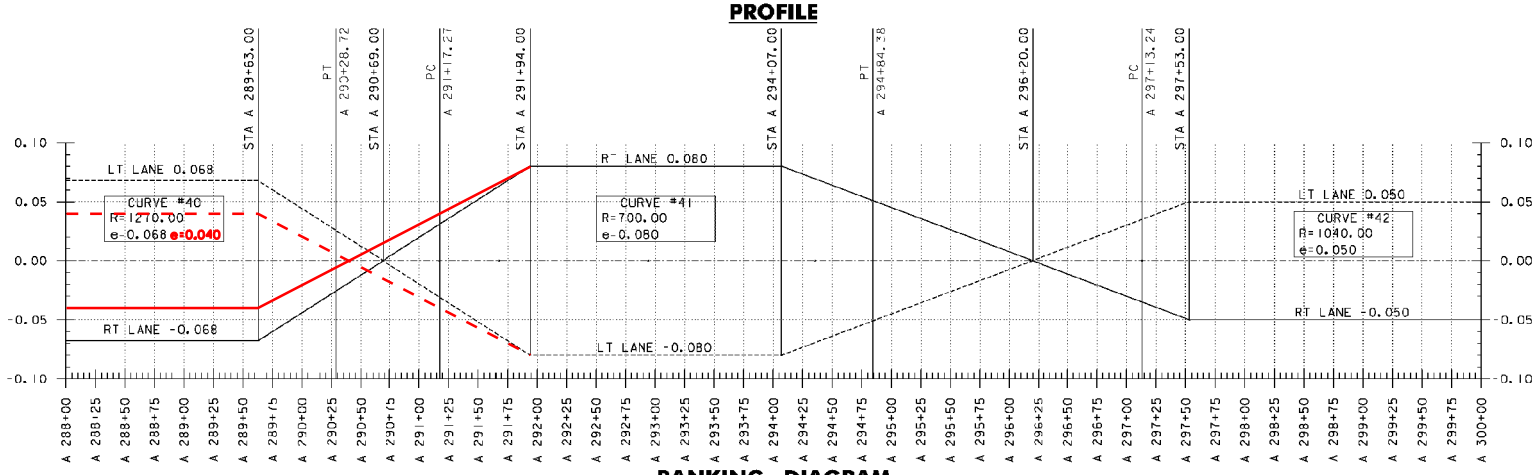
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 25

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 103 OF 444




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d120236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 104 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 291+15 - STA A 304+27 RT
STA A 308+20 - STA A 315+59 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 291+02 - STA A 304+35 RT
STA A 308+08 - STA A 315+59 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 304+27 - STA A 304+40 RT
STA A 308+07 - STA A 308+20 RT

STONE FILL, TYPE I
STA A 301+75 - STA A 303+00 RT
STA A 310+20 - STA A 311+50 RT

EROSION LOG
STA A 302+50 - STA A 304+50 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 304+31 RT
STA A 308+16 RT

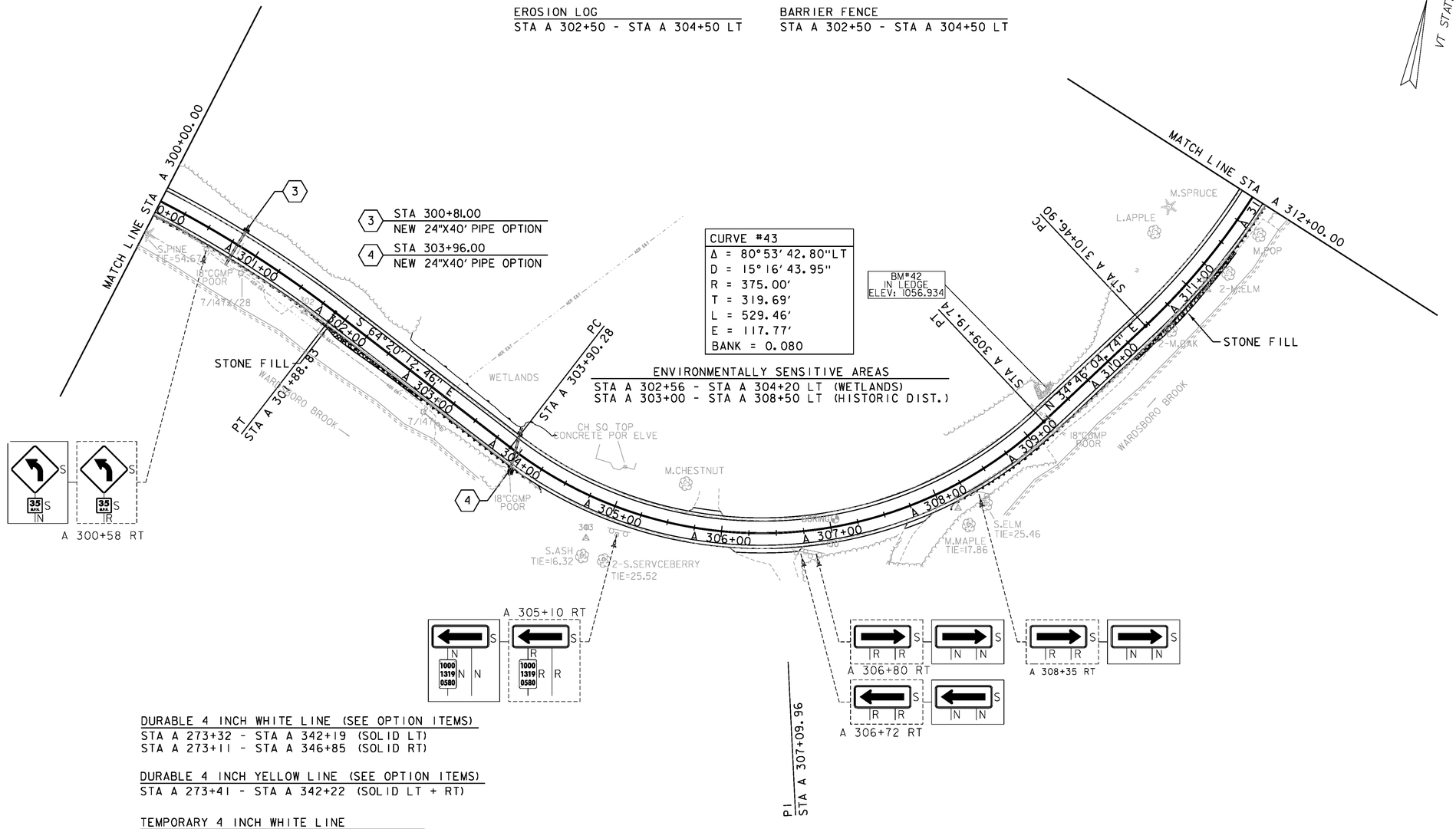
GRUBBING MATERIAL
STA A 301+75 - STA A 303+00 RT
STA A 310+20 - STA A 311+50 RT

BARRIER FENCE
STA A 302+50 - STA A 304+50 LT

DELINEATOR WITH STEEL POSTS
STA A 304+40 RT
STA A 308+07 RT

GEOTEXTILE FOR SILT FENCE
STA A 301+75 - STA A 303+00 RT
STA A 310+20 - STA A 311+50 RT

N
VT STATE PLANE GRID




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

0 50 100
SCALE IN FEET

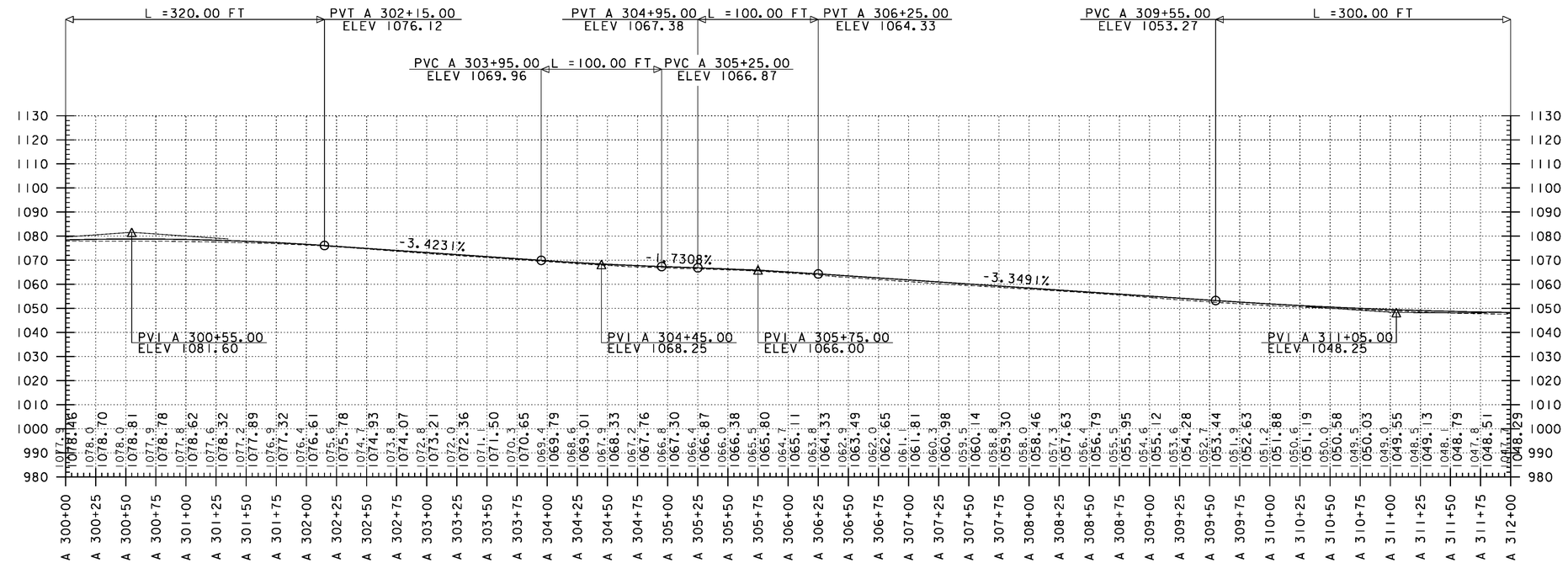
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

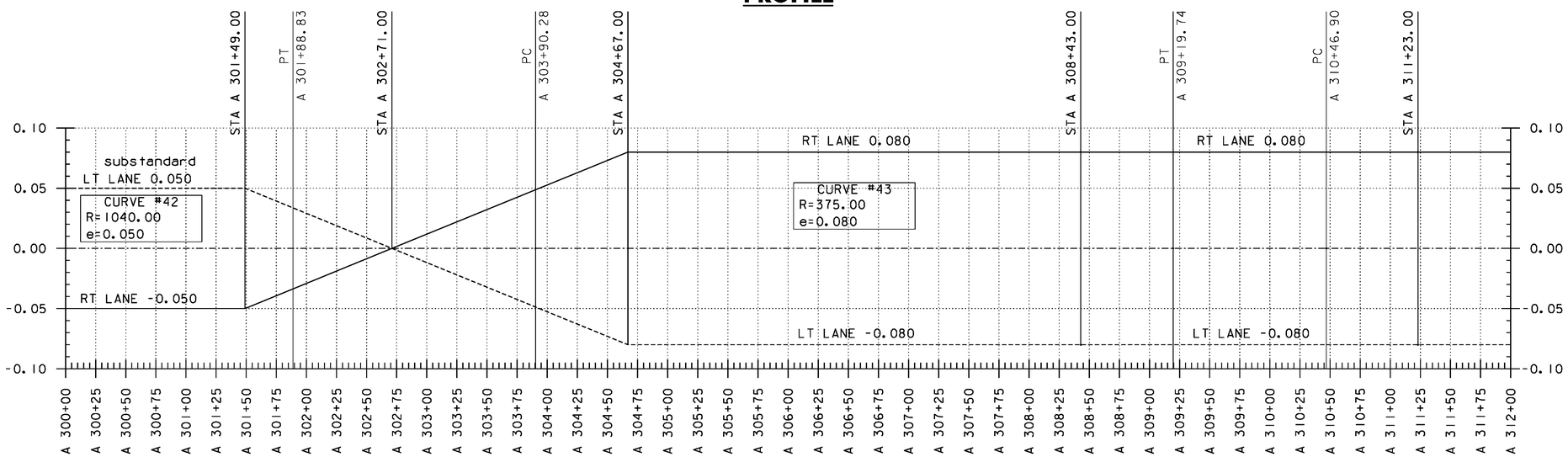
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 26

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 105 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 106 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 308+20 - STA A 315+59 RT
STA A 318+60 - STA A 326+97 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 308+08 - STA A 315+59 RT
STA A 318+60 - STA A 327+00 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 315+59 - STA A 315+72 RT
STA A 318+47 - STA A 318+60 RT

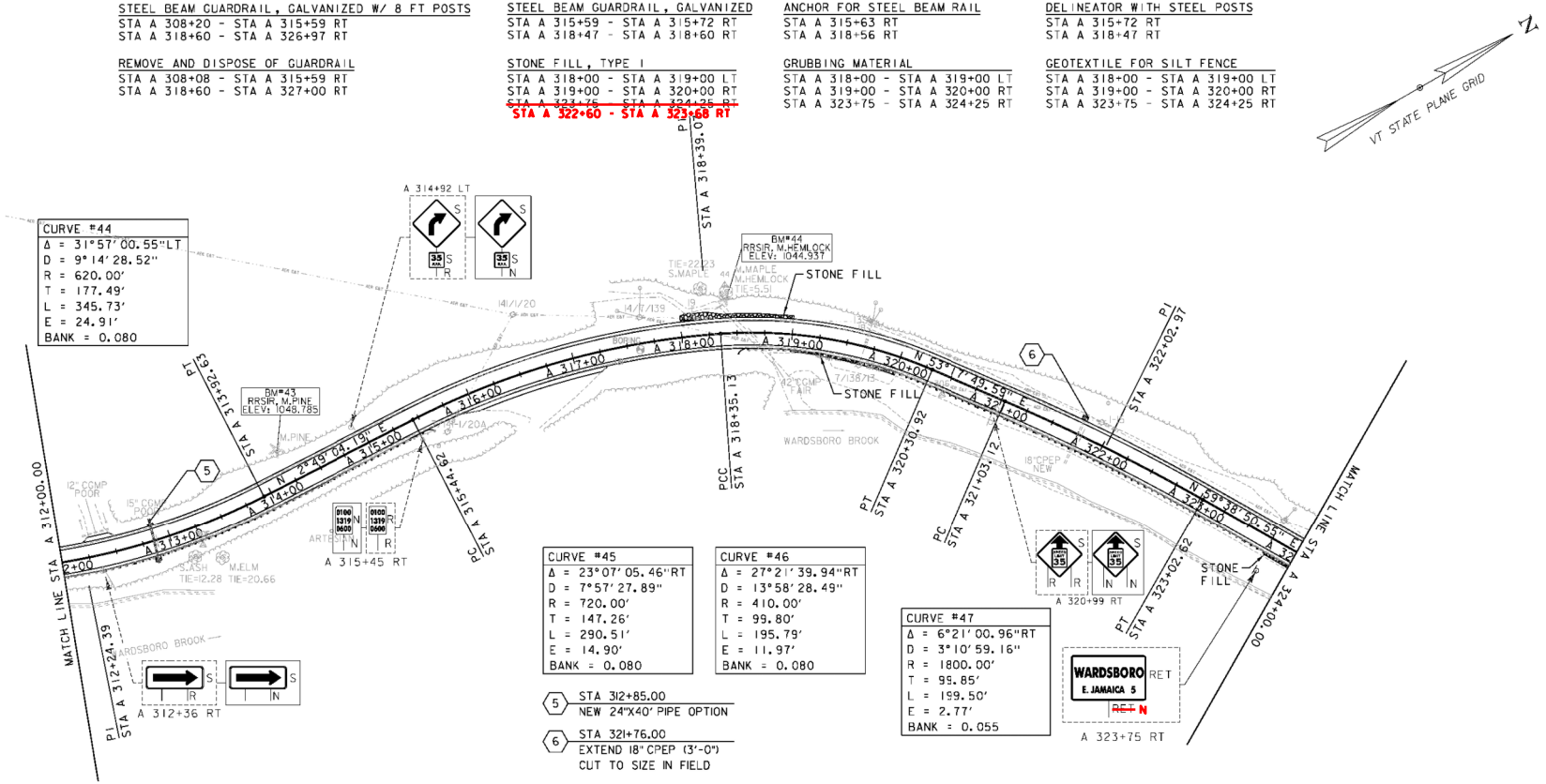
STONE FILL, TYPE I
STA A 318+00 - STA A 319+00 LT
STA A 319+00 - STA A 320+00 RT
~~STA A 323+75 - STA A 324+25 RT~~
STA A 322+60 - STA A 323+68 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 315+63 RT
STA A 318+56 RT

GRUBBING MATERIAL
STA A 318+00 - STA A 319+00 LT
STA A 319+00 - STA A 320+00 RT
STA A 323+75 - STA A 324+25 RT

DELINEATOR WITH STEEL POSTS
STA A 315+72 RT
STA A 318+47 RT

GEOTEXTILE FOR SILT FENCE
STA A 318+00 - STA A 319+00 LT
STA A 319+00 - STA A 320+00 RT
STA A 323+75 - STA A 324+25 RT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

0 50 100
SCALE IN FEET

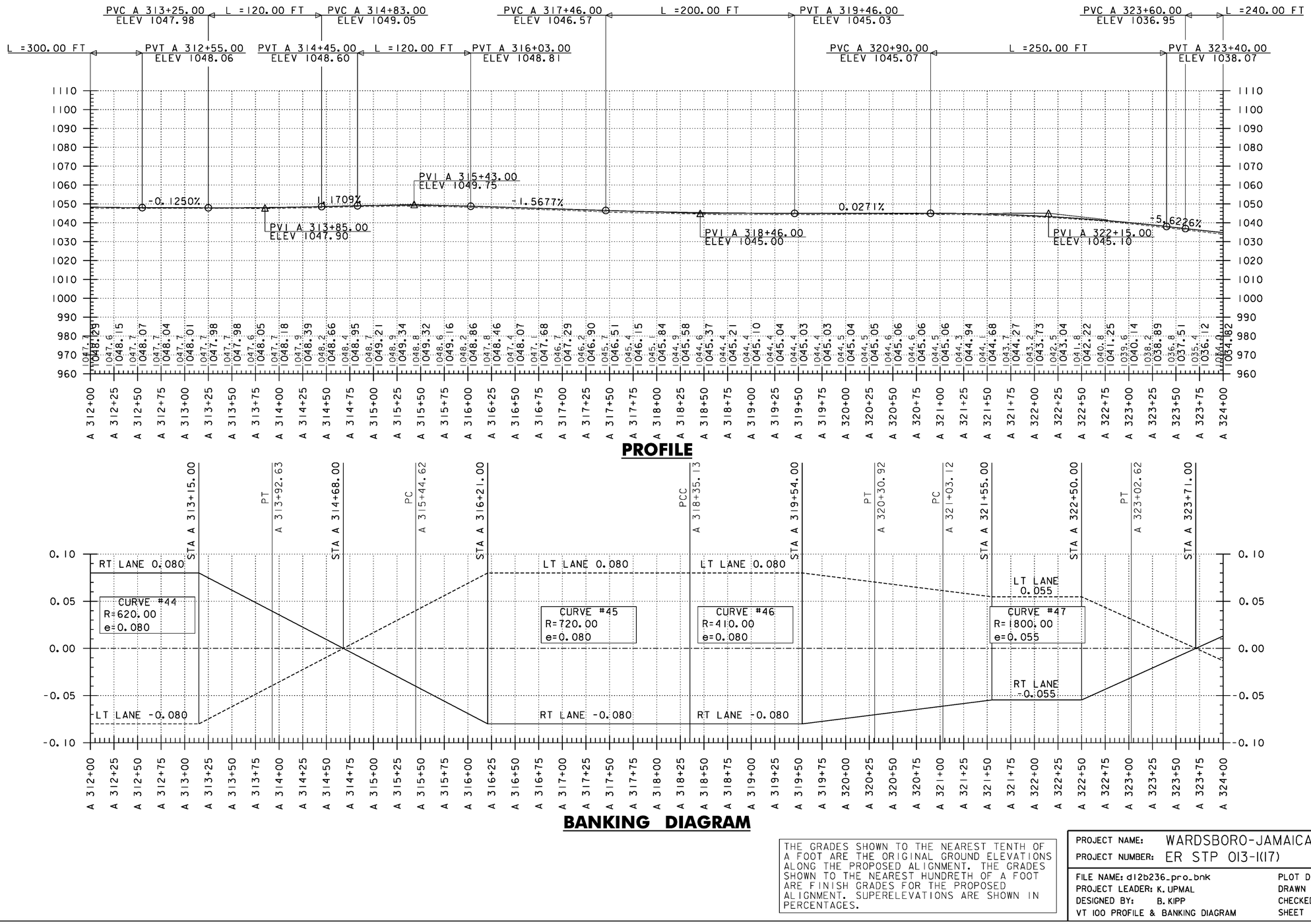
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 27

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 107 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 108 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 318+60 - STA A 326+97 RT
STA A 332+13 - STA A 340+12 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 318+60 - STA A 327+00 RT
STA A 335+54 - STA A 340+21 RT

EROSION LOG
STA A 331+25 - STA A 336+00 RT
STA A 332+00 - STA A 335+25 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 326+97 - STA A 327+10 RT
STA A 332+00 - STA A 332+13 RT

STONE FILL, TYPE I
STA A 323+75 - STA A 324+25 RT
STA A 326+00 - STA A 327+00 RT

BARRIER FENCE
STA A 331+25 - STA A 336+00 RT
STA A 332+00 - STA A 335+25 LT

ANCHOR FOR STEEL BEAM RAIL
STA A 327+01 RT
STA A 332+09 RT

GRUBBING MATERIAL
STA A 323+75 - STA A 324+25 RT
STA A 326+00 - STA A 327+00 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA A 330+02 LT

DELINEATOR WITH STEEL POSTS
STA A 327+10 RT
STA A 332+00 RT

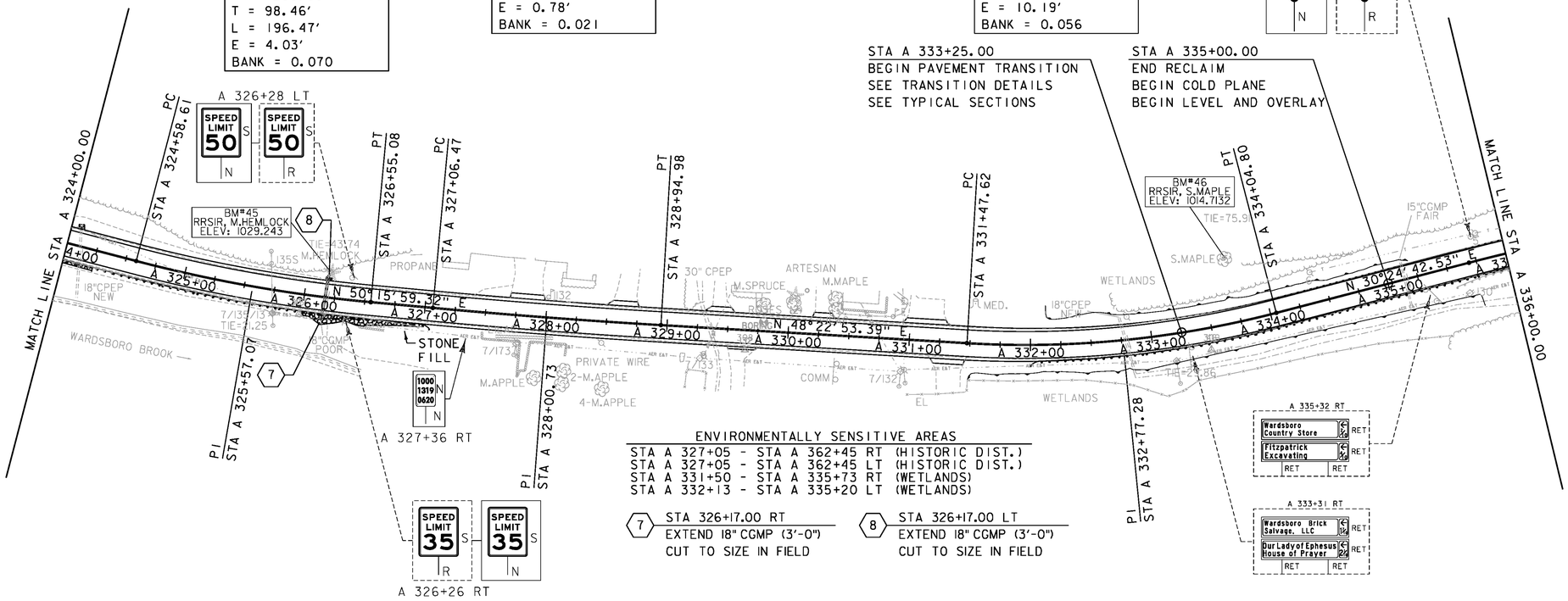
GEOTEXTILE FOR SILT FENCE
STA A 323+75 - STA A 324+25 RT
STA A 326+00 - STA A 327+00 RT

VT STATE PLANE GRID

| CURVE #48 |
|---|
| Δ = 9°22'51.24"LT |
| D = 4°46'28.73" |
| R = 1200.00' |
| T = 98.46' |
| L = 196.47' |
| E = 4.03' |
| BANK = 0.070 |

| CURVE #49 |
|---|
| Δ = 1°53'05.93"LT |
| D = 0°59'59.73" |
| R = 5730.00' |
| T = 94.26' |
| L = 188.51' |
| E = 0.78' |
| BANK = 0.021 |

| CURVE #50 |
|---|
| Δ = 17°58'10.86"LT |
| D = 6°59'14.24" |
| R = 820' |
| T = 129.65' |
| L = 257.18' |
| E = 10.19' |
| BANK = 0.056 |




ENVIRONMENTALLY SENSITIVE AREAS
STA A 327+05 - STA A 362+45 RT (HISTORIC DIST.)
STA A 327+05 - STA A 362+45 LT (HISTORIC DIST.)
STA A 331+50 - STA A 335+73 RT (WETLANDS)
STA A 332+13 - STA A 335+20 LT (WETLANDS)

7 STA 326+17.00 RT
EXTEND 18" CGMP (3'-0")
CUT TO SIZE IN FIELD

8 STA 326+17.00 LT
EXTEND 18" CGMP (3'-0")
CUT TO SIZE IN FIELD

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)

0 50 100
SCALE IN FEET

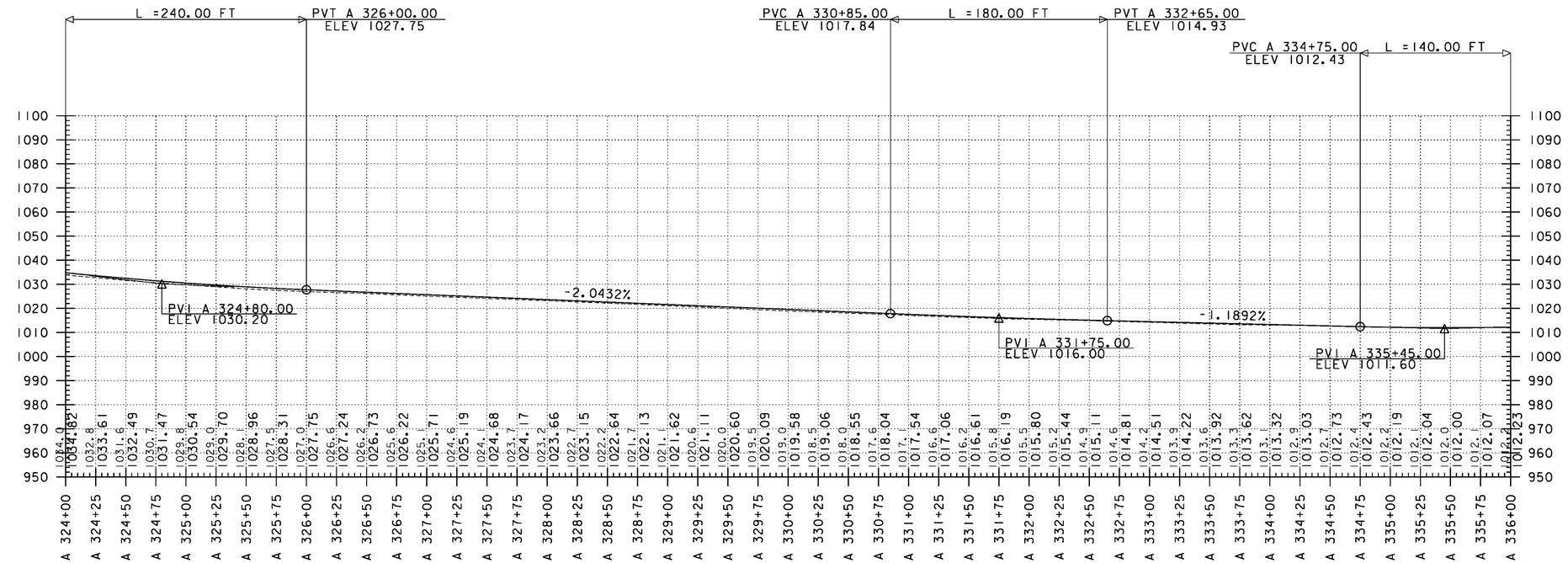
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

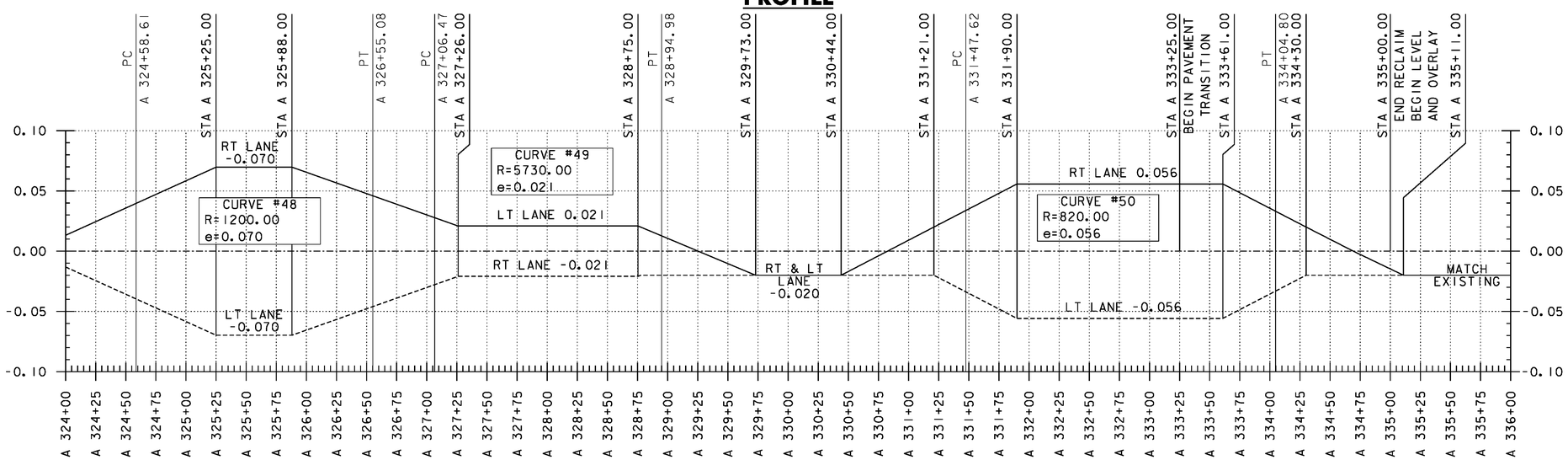
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 28

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 109 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 110 OF 444

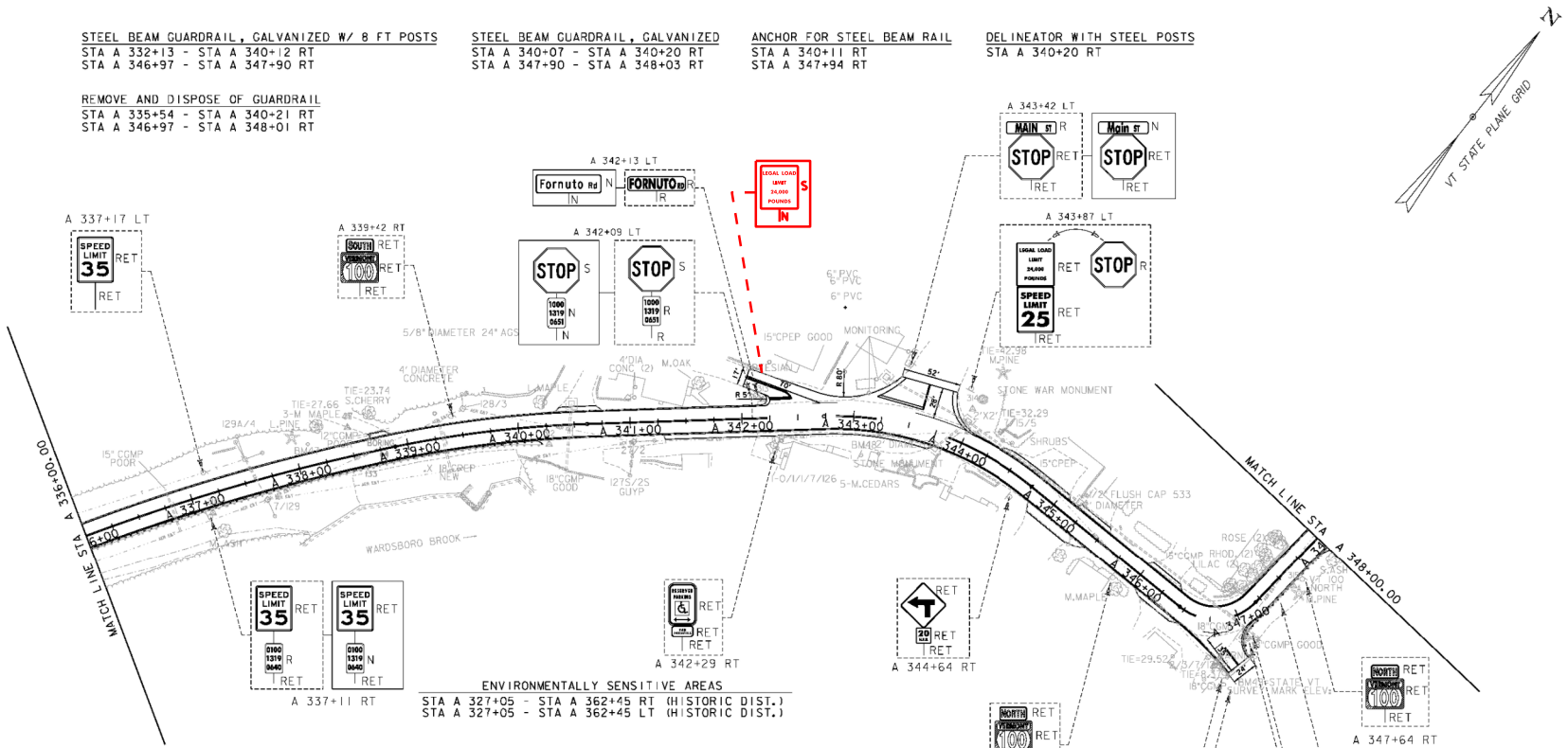
STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 332+13 - STA A 340+12 RT
STA A 346+97 - STA A 347+90 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 340+07 - STA A 340+20 RT
STA A 347+90 - STA A 348+03 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 340+11 RT
STA A 347+94 RT

DELINEATOR WITH STEEL POSTS
STA A 340+20 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 335+54 - STA A 340+21 RT
STA A 346+97 - STA A 348+01 RT




ENVIRONMENTALLY SENSITIVE AREAS
STA A 327+05 - STA A 362+45 RT (HISTORIC DIST.)
STA A 327+05 - STA A 362+45 LT (HISTORIC DIST.)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 343+18 - STA A 343+39 (SOLID LT)
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 273+41 - STA A 342+22 (SOLID LT + RT)
STA A 342+44 LT (CENTERLINES TH #14)
STA A 342+84 - STA A 343+20 (SOLID LT + RT
STA A 343+58 LT (CENTERLINES TH #5)
STA A 343+87 - STA A 346+62 (SOLID LT + RT
STA A 346+85 RT (CENTERLINES TH #2)
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

DURABLE 24 IN STOP BAR (SEE OPTION ITEMS)
STA A 342+86 LT
STA A 343+49 LT
STA A 346+90 RT

TEMPORARY 4 INCH WHITE LINE
STA A 273+32 - STA A 342+19 (SOLID LT)
STA A 343+18 - STA A 343+39 (SOLID LT)
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 273+11 - STA A 346+85 (SOLID RT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 273+41 - STA A 342+22 (SOLID LT + RT)
STA A 342+44 LT (CENTERLINES TH #14)
STA A 342+84 - STA A 343+20 (SOLID LT + RT)
STA A 343+58 LT (CENTERLINES TH #5)
STA A 343+87 - STA A 346+62 (SOLID LT + RT)
STA A 346+85 RT (CENTERLINES TH #2)
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 342+86 LT "STOP"
STA A 343+49 LT "STOP"
STA A 346+90 RT "STOP"

REHAB. DROP INLETS,
CATCH BASINS OR MANHOLES, CLASS II
STA A 340+48 LT
STA A 343+25 LT
STA A 343+79 RT
STA A 343+97 LT
STA A 345+17 LT
STA A 346+82 RT
STA A 346+97 RT

0 50 100
SCALE IN FEET

SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

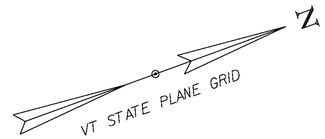
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

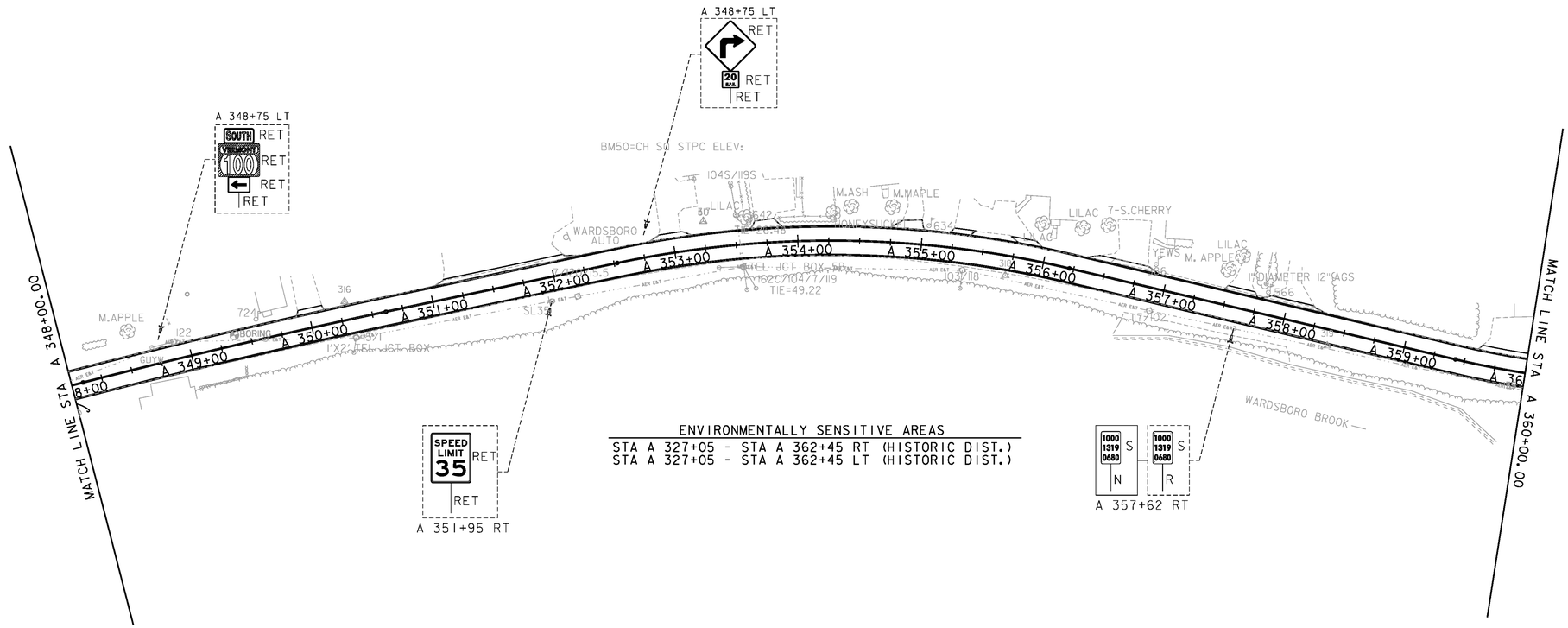
FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 29

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET III OF 444

REMOVE AND DISPOSE OF GUARDRAIL
STA A 346+97 - STA A 348+01 RT

DELINEATOR WITH STEEL POSTS
STA A 348+03 RT




ENVIRONMENTALLY SENSITIVE AREAS
STA A 327+05 - STA A 362+45 RT (HISTORIC DIST.)
STA A 327+05 - STA A 362+45 LT (HISTORIC DIST.)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

0 50 100
SCALE IN FEET

SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 30

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 112 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 368+80 - STA A 378+77 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 368+67 - STA A 368+80 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 368+76 RT

DELINEATOR WITH STEEL POSTS
STA A 368+67 RT

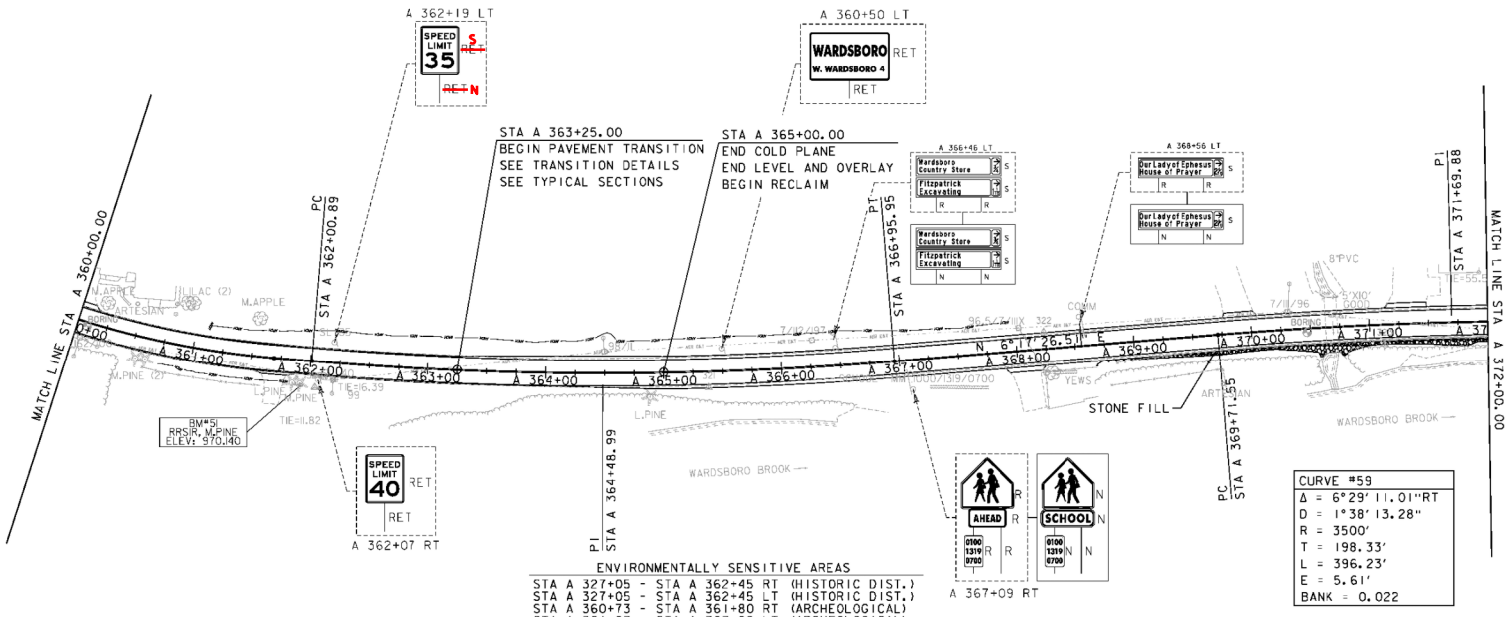
REMOVE AND DISPOSE OF GUARDRAIL
STA A 368+84 - STA A 378+83 RT

STONE FILL, TYPE I
STA A 369+00 - STA A 377+00 RT

GRUBBING MATERIAL
STA A 369+00 - STA A 377+00

GEOTEXTILE FOR SILT FENCE
STA A 369+00 - STA A 377+00 RT

VT STATE PLANE GRID




ENVIRONMENTALLY SENSITIVE AREAS
STA A 327+05 - STA A 362+45 RT (HISTORIC DIST.)
STA A 327+05 - STA A 362+45 LT (HISTORIC DIST.)
STA A 360+73 - STA A 361+80 RT (ARCHEOLOGICAL)
STA A 361+03 - STA A 367+92 LT (ARCHEOLOGICAL)

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 367+09 RT "SCHOOL"

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

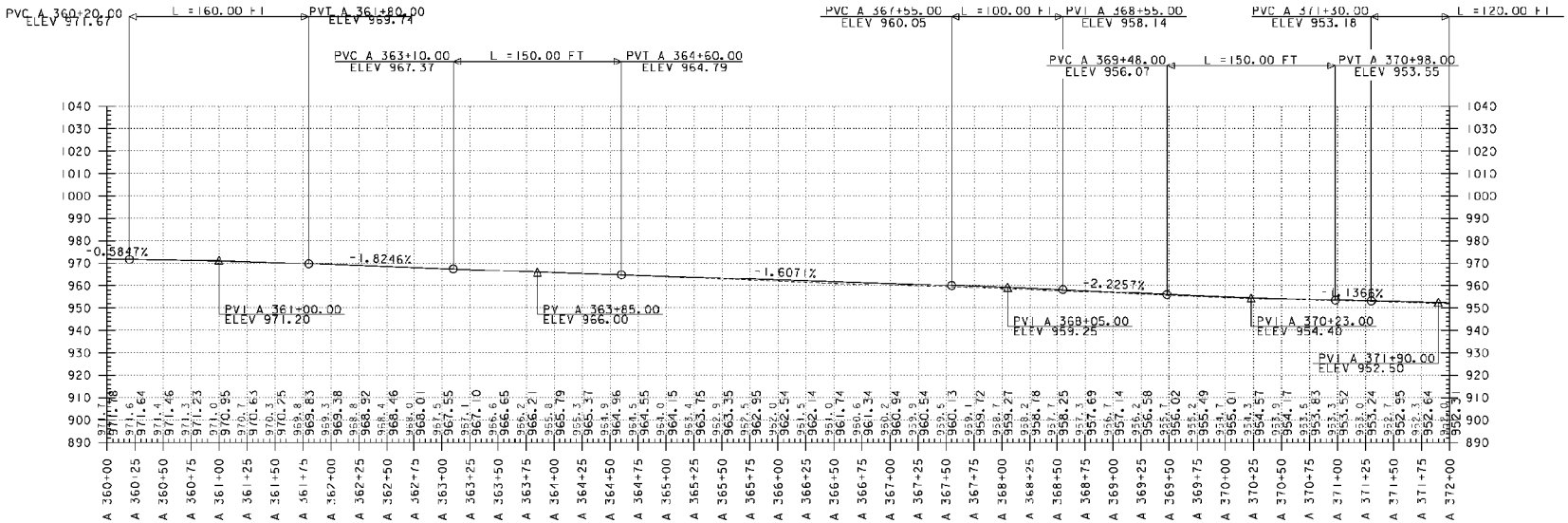
TEMPORARY 4 INCH YELLOW LINE
STA A 346+97 - STA A 373+40 (SOLID LT + RT)

SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | ———— |

0 50 100
SCALE IN FEET

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: d2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 31 | SHEET 113 OF 444 |

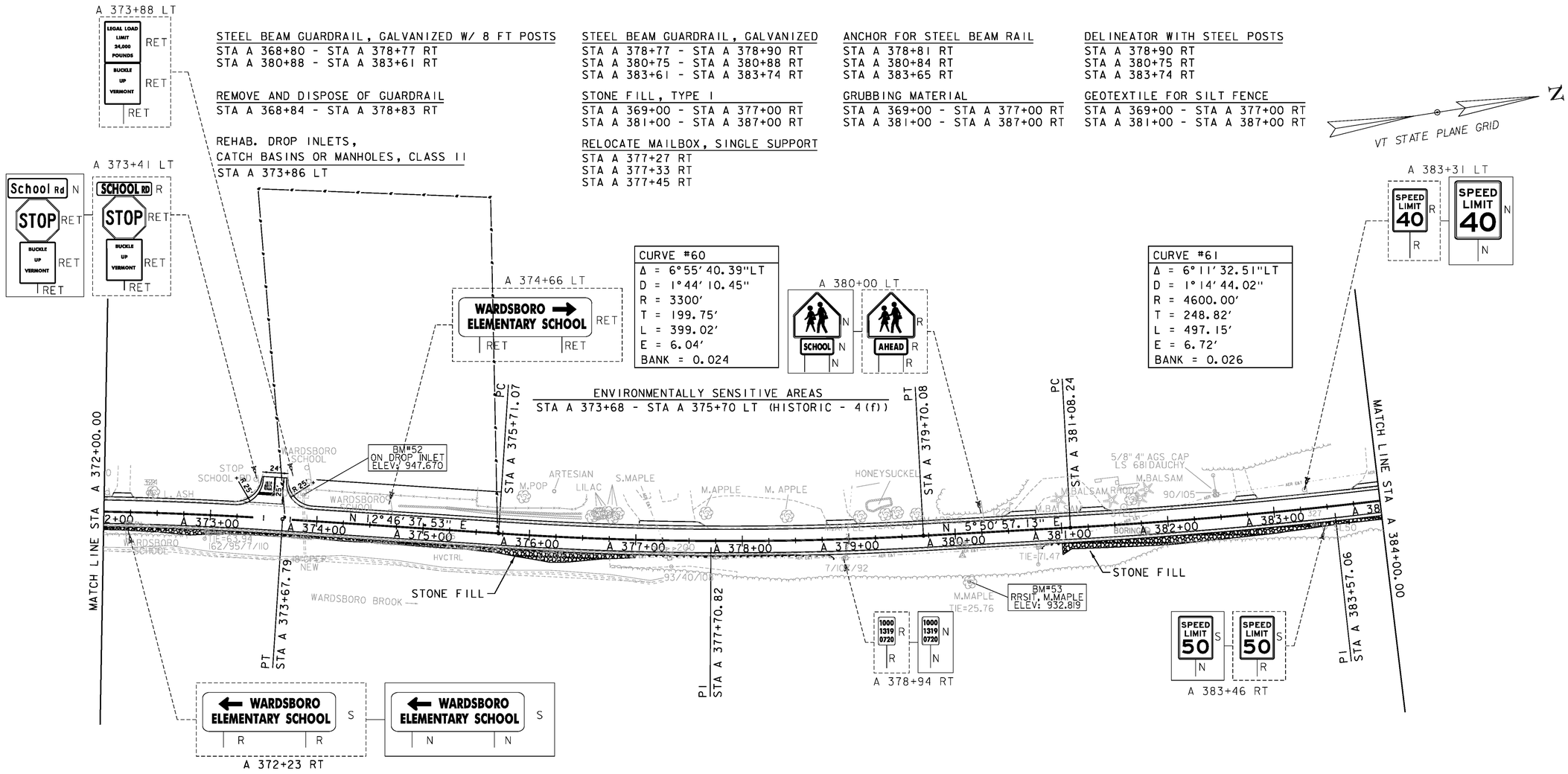



THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12o236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KPP
CHECKED BY: A. KEMPTON
SHEET #4 OF 444




STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 368+80 - STA A 378+77 RT
STA A 380+88 - STA A 383+61 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 368+84 - STA A 378+83 RT

REHAB. DROP INLETS, CATCH BASINS OR MANHOLES, CLASS II
STA A 373+86 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 378+77 - STA A 378+90 RT
STA A 380+75 - STA A 380+88 RT
STA A 383+61 - STA A 383+74 RT

STONE FILL, TYPE I
STA A 369+00 - STA A 377+00 RT
STA A 381+00 - STA A 387+00 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA A 377+27 RT
STA A 377+33 RT
STA A 377+45 RT

ANCHOR FOR STEEL BEAM RAIL
STA A 378+81 RT
STA A 380+84 RT
STA A 383+65 RT

GRUBBING MATERIAL
STA A 369+00 - STA A 377+00 RT
STA A 381+00 - STA A 387+00 RT

DELINEATOR WITH STEEL POSTS
STA A 378+90 RT
STA A 380+75 RT
STA A 383+74 RT

GEOTEXTILE FOR SILT FENCE
STA A 369+00 - STA A 377+00 RT
STA A 381+00 - STA A 387+00 RT

VT STATE PLANE GRID

CURVE #60
Δ = 6°55'40.39"LT
D = 1°44'10.45"
R = 3300'
T = 199.75'
L = 399.02'
E = 6.04'
BANK = 0.024

CURVE #61
Δ = 6°11'32.51"LT
D = 1°14'44.02"
R = 4600.00'
T = 248.82'
L = 497.15'
E = 6.72'
BANK = 0.026

ENVIRONMENTALLY SENSITIVE AREAS
STA A 373+68 - STA A 375+70 LT (HISTORIC - 4(f))

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 346+97 - STA A 373+40 (SOLID LT + RT)
STA 373+58 LT (CENTERLINES TH #45)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 343+77 - STA A 373+47 (SOLID LT)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 346+97 - STA A 373+40 (SOLID LT + RT)
STA A 373+58 LT (CENTERLINES TH #45)
STA A 373+76 - STA B 118+58 (SOLID LT +RT)

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA A 373+52 LT "STOP"
STA A 380+25 LT "SCHOOL"

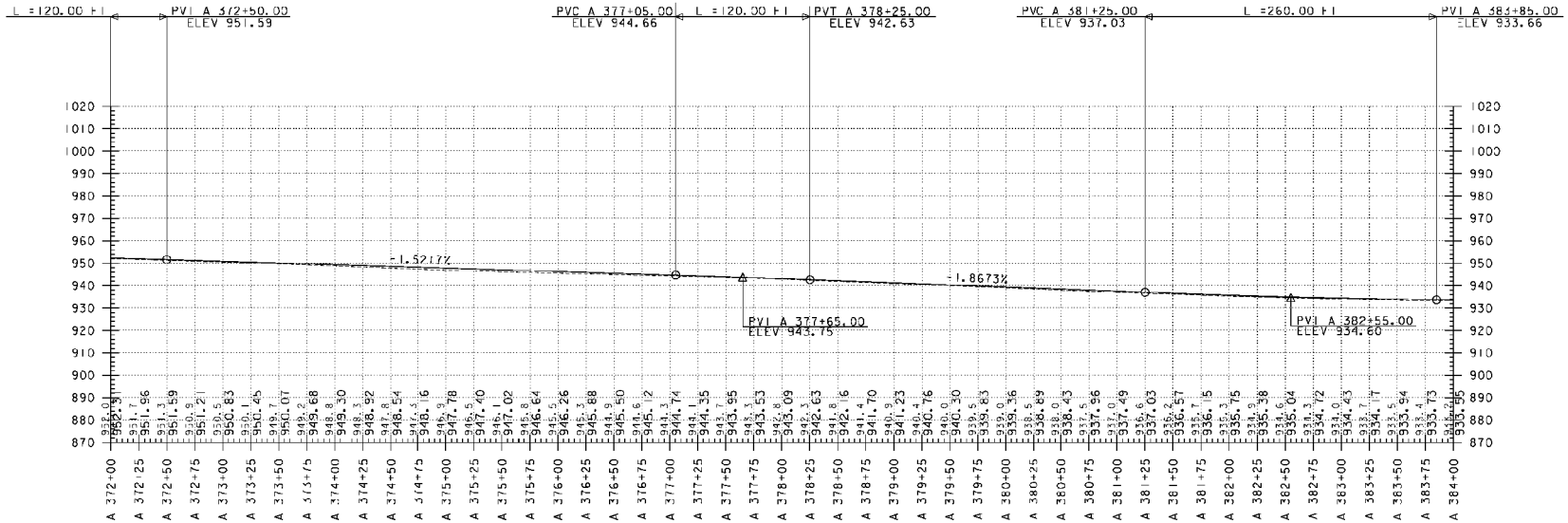
DURRABLE 24 INCH STOP BAR (SEE OPTION ITEMS)
STA A 373+52 LT

SIGN LEGEND

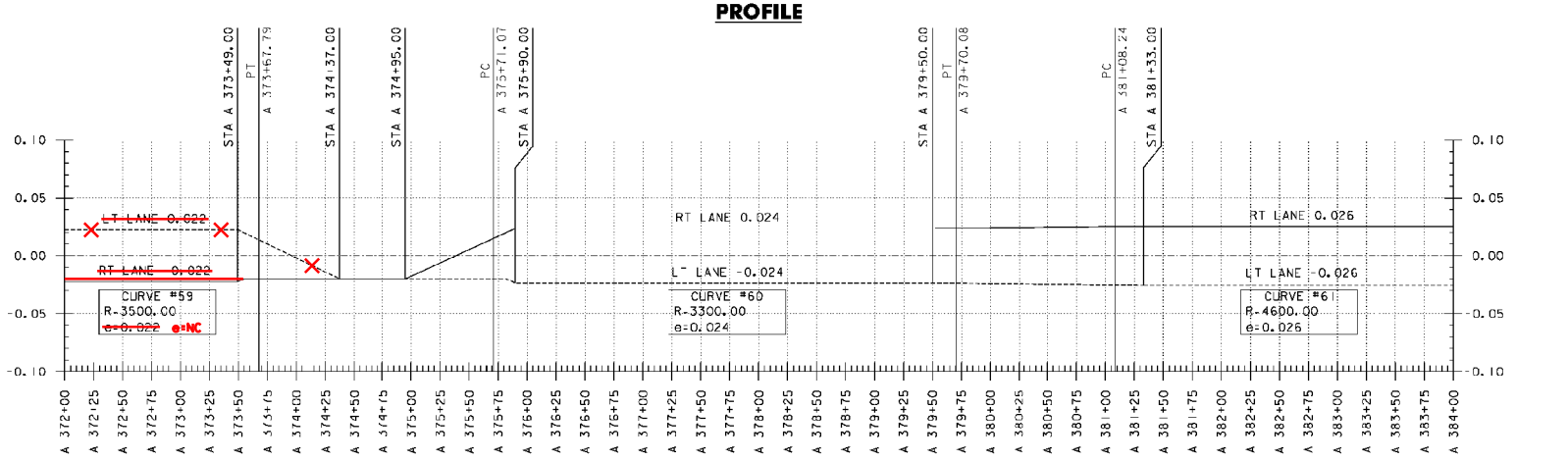
| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

0 50 100
SCALE IN FEET

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 32 | SHEET 115 OF 444 |




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d120236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 16 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA A 384+92 - STA B 0+43 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA A 384+89 - STA B 0+51 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA B 4+34 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA A 384+79 - STA A 384+92 RT
STA B 0+43 - STA B 0+53 RT

STONE FILL, TYPE I
STA A 381+00 - STA A 387+00 RT
STA B 3+70 - STA B 4+25 LT
STA B 5+50 - STA B 7+00 LT

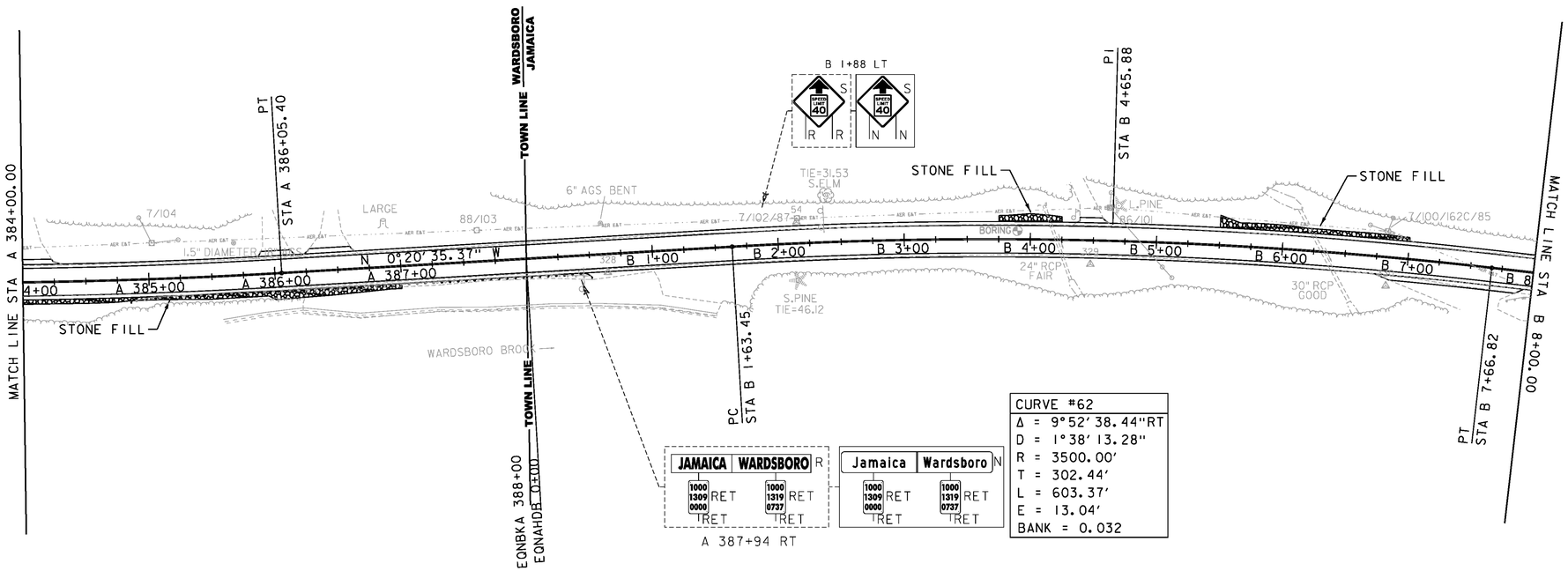
ANCHOR FOR STEEL BEAM RAIL
STA B 0+47 RT

GRUBBING MATERIAL
STA A 381+00 - STA A 387+00 RT
STA B 3+70 - STA B 4+25 LT
STA B 5+50 - STA B 7+00 LT

DELINEATOR WITH STEEL POSTS
STA A 384+79 RT
STA B 0+53 RT

GEOTEXTILE FOR SILT FENCE
STA A 381+00 - STA A 387+00 RT
STA B 3+70 - STA B 4+25 LT
STA B 5+50 - STA B 7+00 LT

N
VT STATE PLANE GRID




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

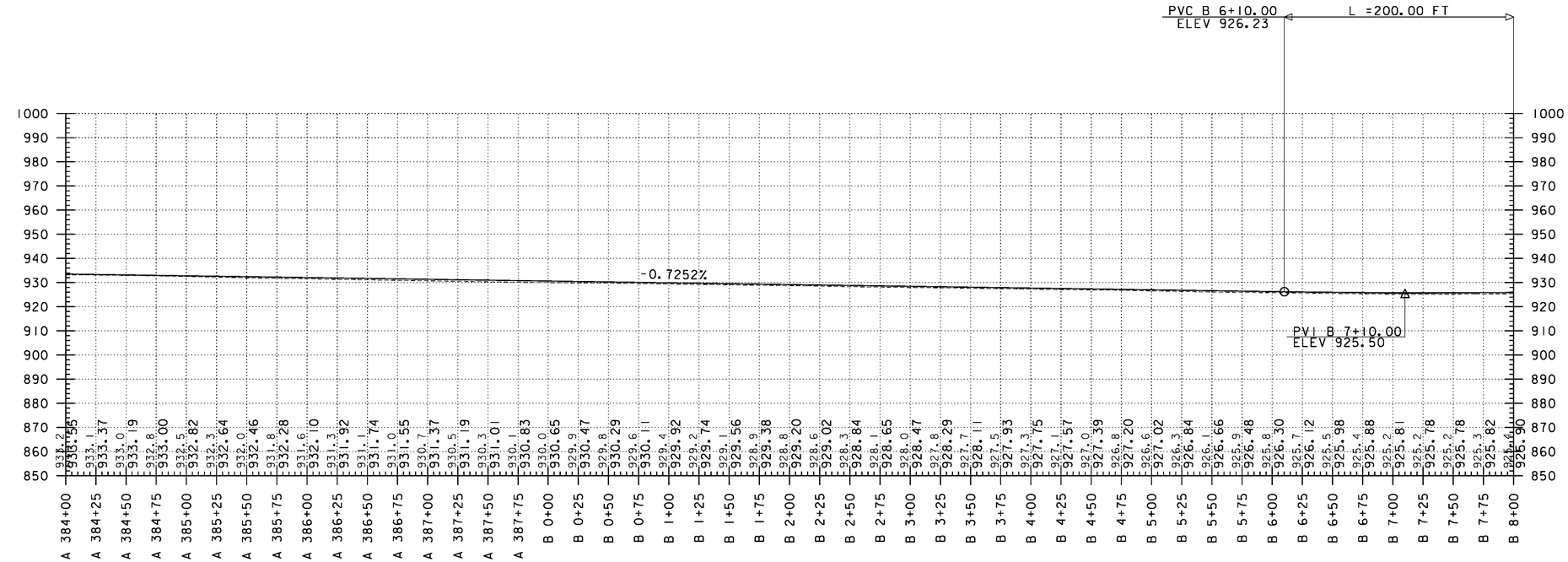
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ——— |
| NEW | ——— |

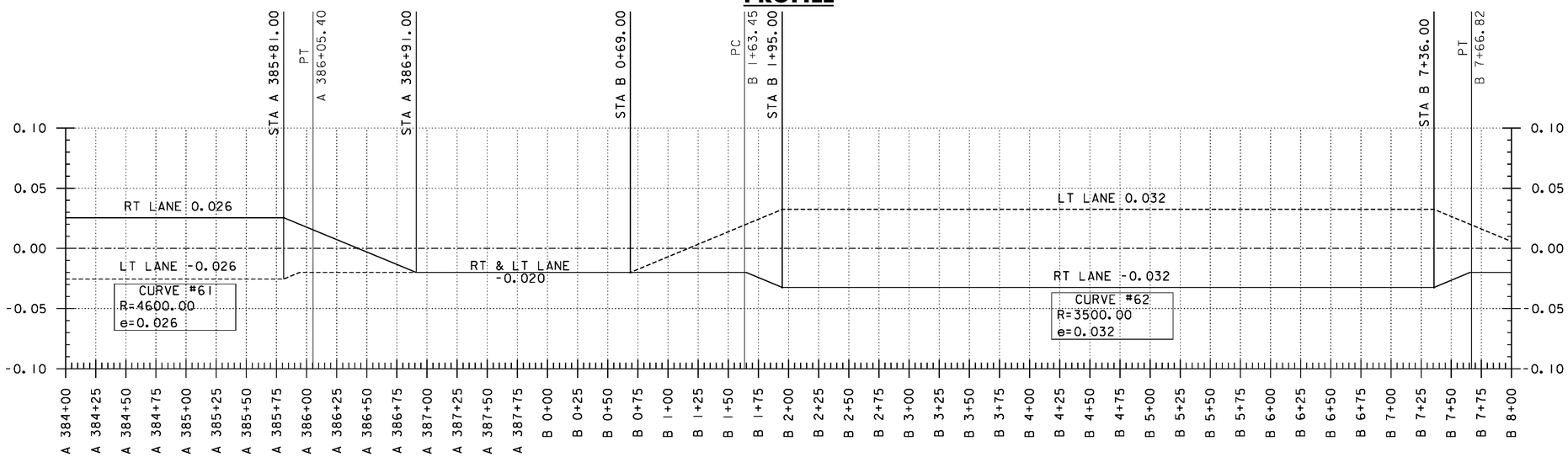
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 33

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 117 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 118 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 12+87 - STA B 25+00 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 12+74 - STA B 12+87 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 12+83 LT

DELINEATOR WITH STEEL POSTS
STA B 12+74 LT

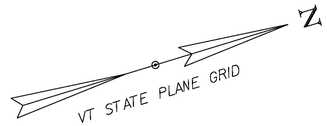
REMOVE AND DISPOSE OF GUARDRAIL
STA B 12+73 - STA B 25+06 LT

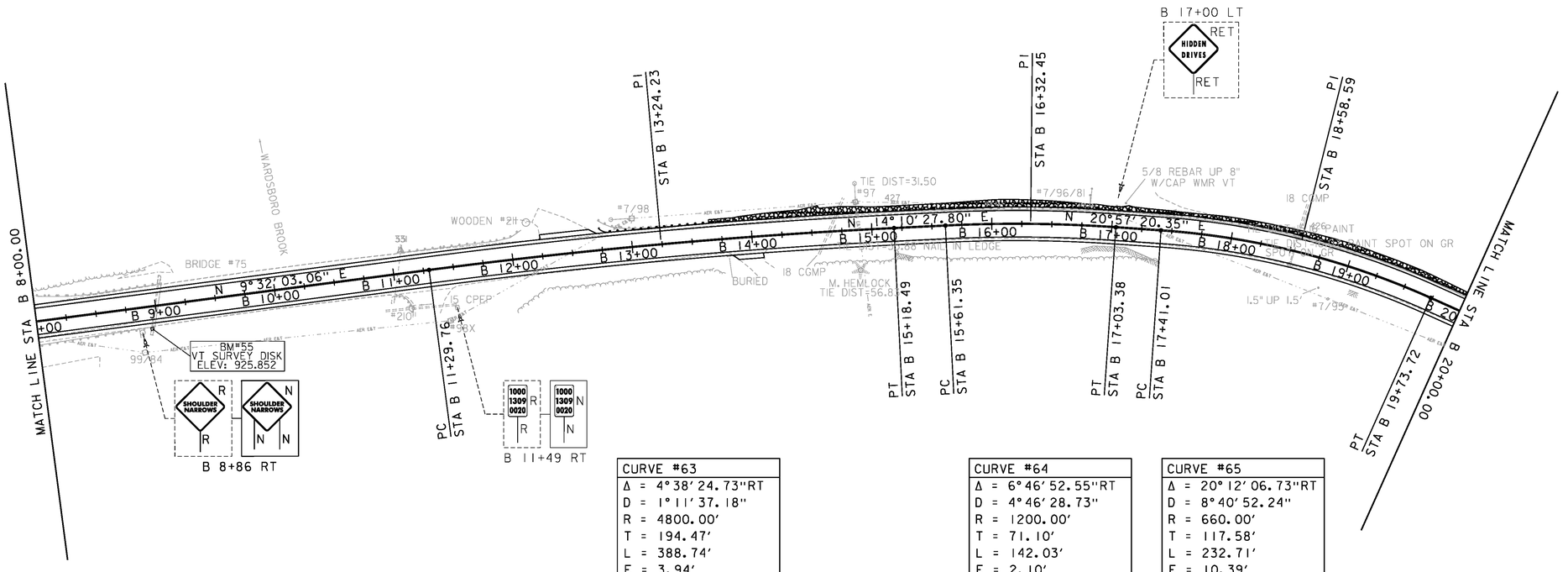
STONE FILL, TYPE I
STA B 13+65 - STA B 20+05 LT

GRUBBING MATERIAL
STA B 13+65 - STA B 20+05 LT

GEOTEXTILE FOR SILT FENCE
STA B 13+65 - STA B 20+05 LT

REHAB. DROP INLETS,
CATCH BASINS OR MANHOLES, CLASS II
STA B 18+52 RT
STA B 18+52 LT




| CURVE #63 |
|---|
| Δ = 4°38'24.73"RT |
| D = 1°11'37.18" |
| R = 4800.00' |
| T = 194.47' |
| L = 388.74' |
| E = 3.94' |
| BANK = 0.025 |

| CURVE #64 |
|---|
| Δ = 6°46'52.55"RT |
| D = 4°46'28.73" |
| R = 1200.00' |
| T = 71.10' |
| L = 142.03' |
| E = 2.10' |
| BANK = 0.030 |

| CURVE #65 |
|---|
| Δ = 20°12'06.73"RT |
| D = 8°40'52.24" |
| R = 660.00' |
| T = 117.58' |
| L = 232.71' |
| E = 10.39' |
| BANK = 0.060 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

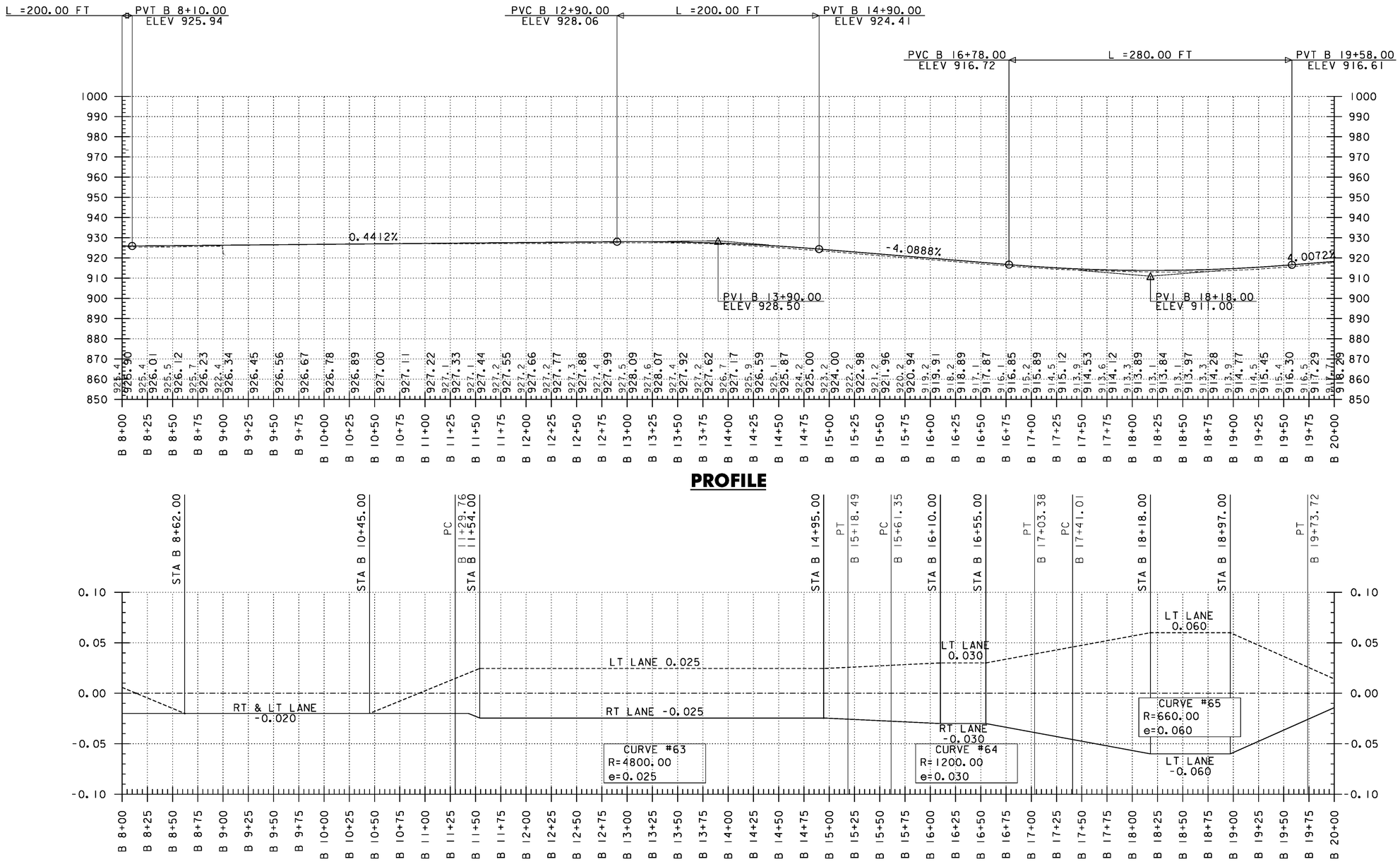
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 34

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 119 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 120 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 12+87 - STA B 25+00 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 25+00 - B STA 25+13 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 25+04 LT

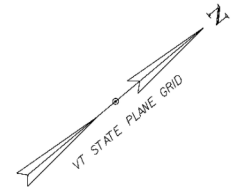
DELINEATOR WITH STEEL POSTS
STA B 25+13 LT

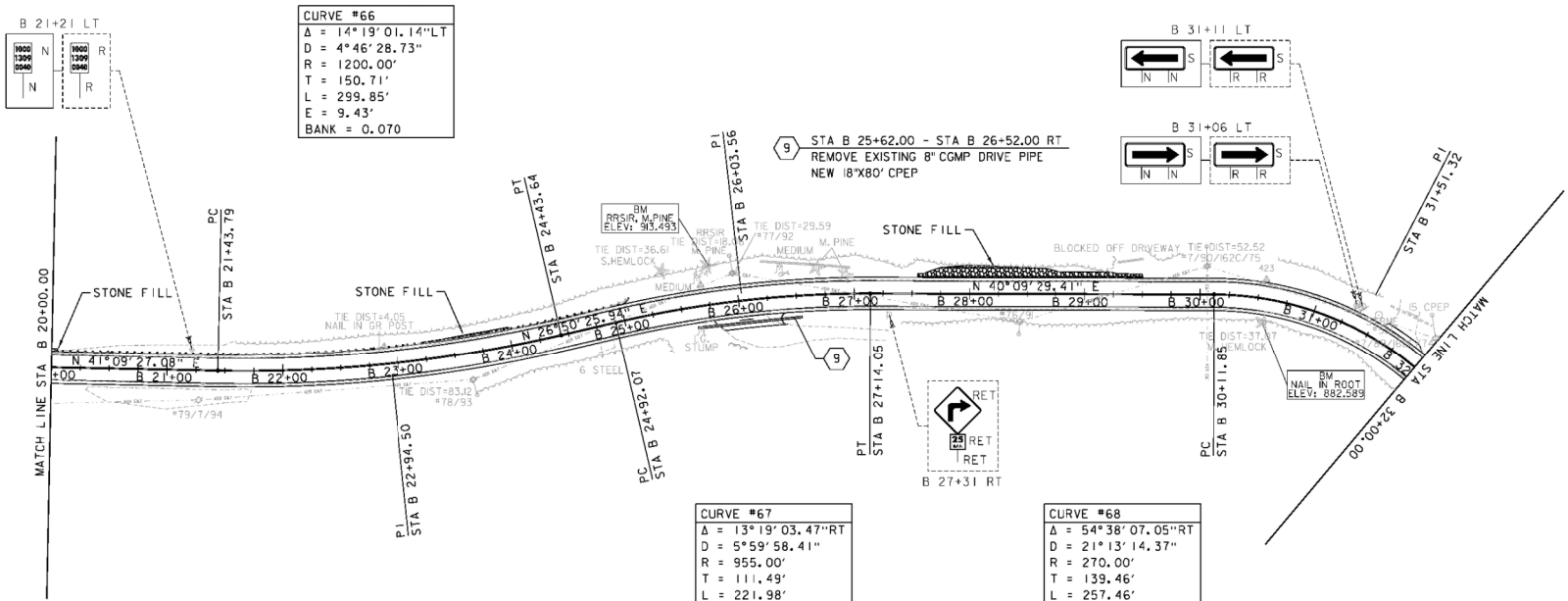
REMOVE AND DISPOSE OF GUARDRAIL
STA B 12+73 - STA B 25+06 LT

STONE FILL, TYPE I
STA B 13+65 - STA B 20+05 LT
STA B 23+25 - STA B 24+00 LT
~~STA B 27+55 - STA B 29+50 LT~~
STA B 27+52 - STA B 28+75 LT

GRUBBING MATERIAL
STA B 13+65 - STA B 20+05 LT
STA B 23+25 - STA B 24+00 LT
STA B 27+55 - STA B 29+50 LT

GEOTEXTILE FOR SILT FENCE
STA B 13+65 - STA B 20+05 LT
STA B 23+25 - STA B 24+00 LT
STA B 27+55 - STA B 29+50 LT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

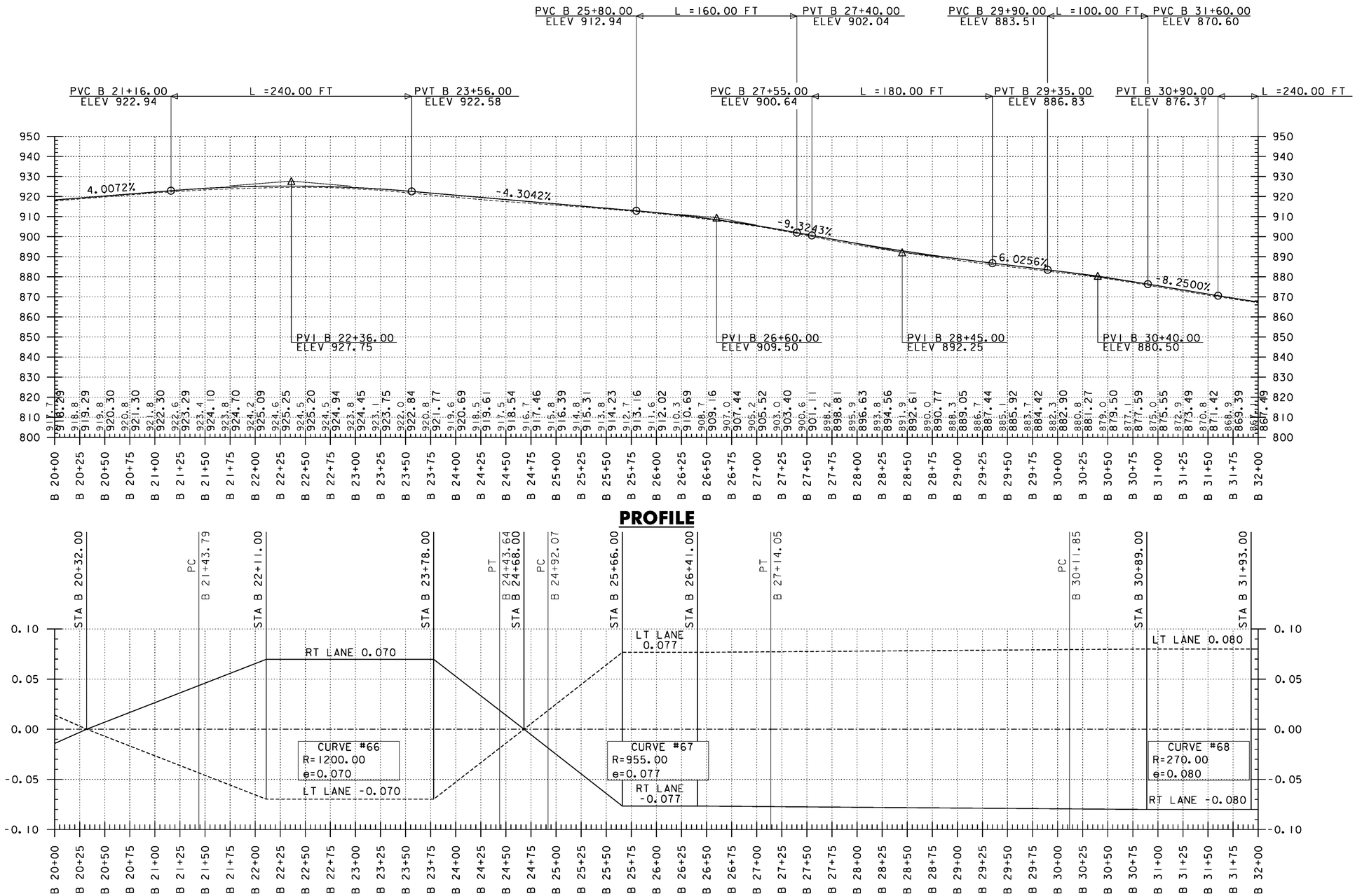
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | |
| NEW | | |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 35

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 121 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 122 OF 444

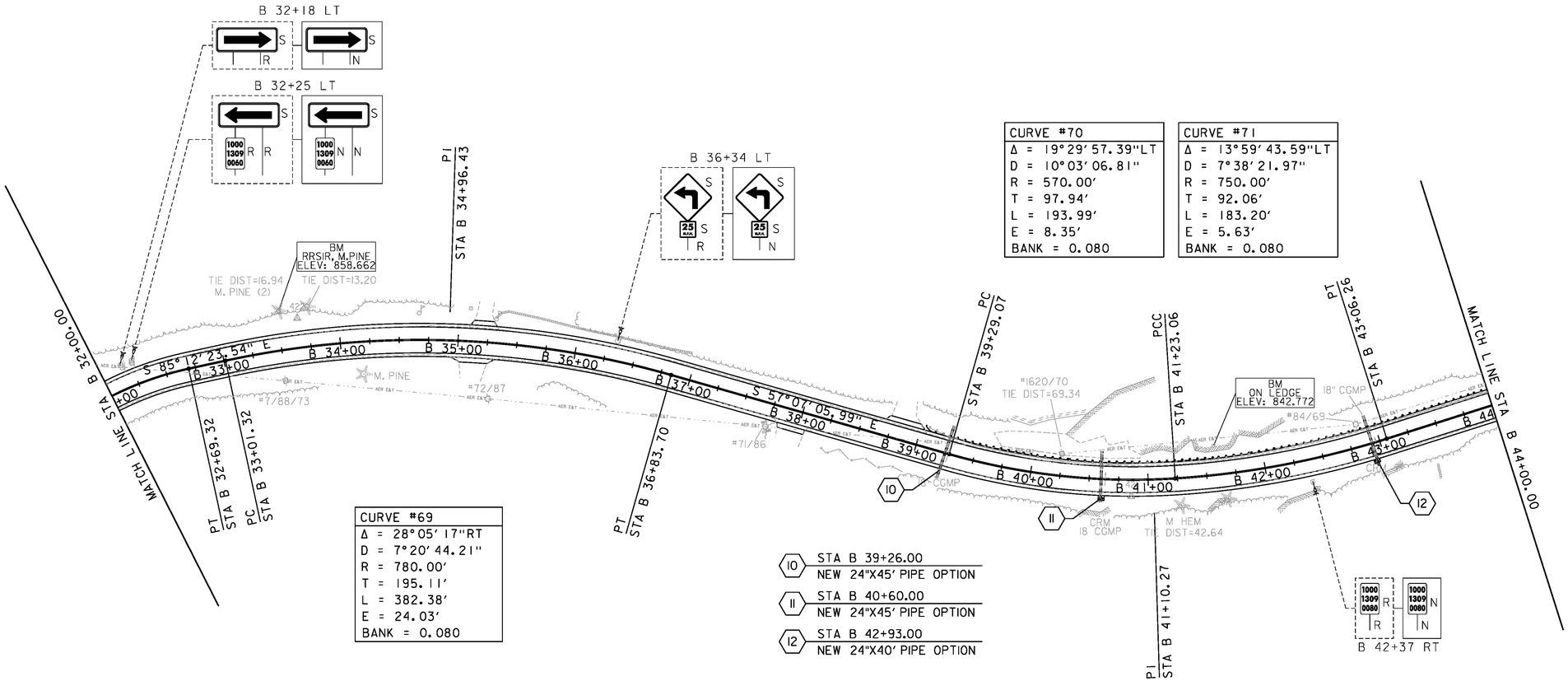
STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 39+17 - STA B 50+12 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 39+04 - STA B 39+17 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 39+13 LT

DELINEATOR WITH STEEL POSTS
STA B 39+04

REMOVE AND DISPOSE OF GUARDRAIL
STA B 39+07 - STA 50+14 LT




| CURVE #70 |
|---|
| Δ = 19°29'57.39"LT |
| D = 10°03'06.81" |
| R = 570.00' |
| T = 97.94' |
| L = 193.99' |
| E = 8.35' |
| BANK = 0.080 |

| CURVE #71 |
|---|
| Δ = 13°59'43.59"LT |
| D = 7°38'21.97" |
| R = 750.00' |
| T = 92.06' |
| L = 183.20' |
| E = 5.63' |
| BANK = 0.080 |

| CURVE #69 |
|---|
| Δ = 28°05'17"RT |
| D = 7°20'44.21" |
| R = 780.00' |
| T = 195.11' |
| L = 382.38' |
| E = 24.03' |
| BANK = 0.080 |

10 STA B 39+26.00
NEW 24"X45' PIPE OPTION

11 STA B 40+60.00
NEW 24"X45' PIPE OPTION

12 STA B 42+93.00
NEW 24"X40' PIPE OPTION

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

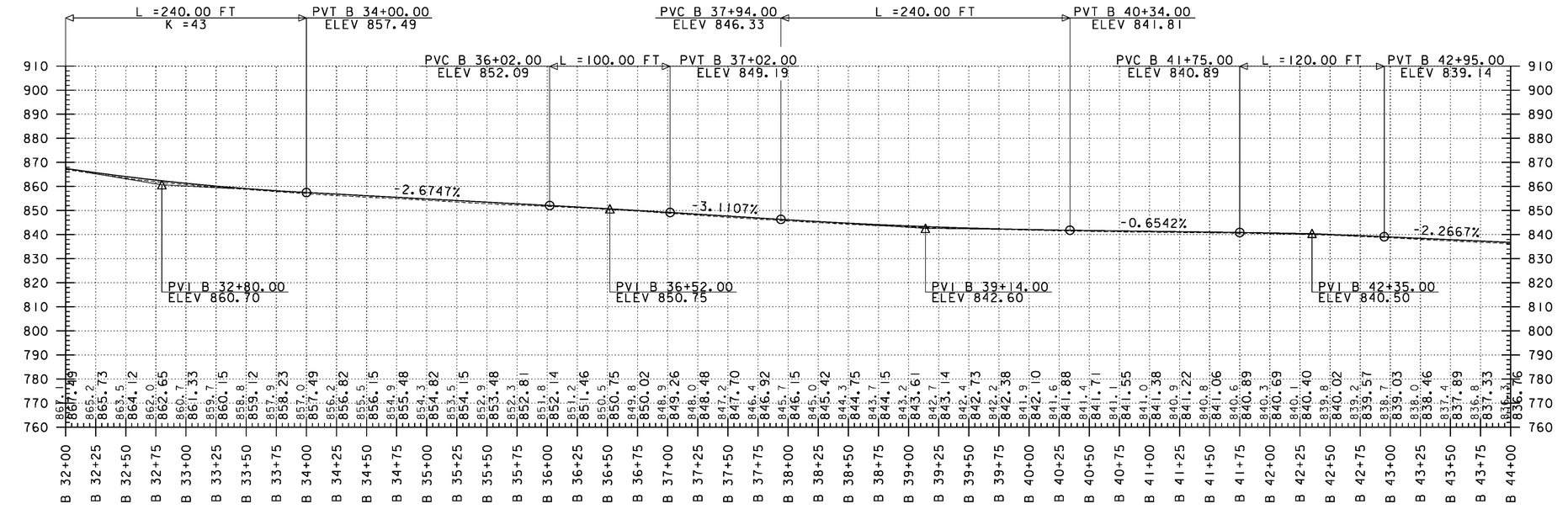
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

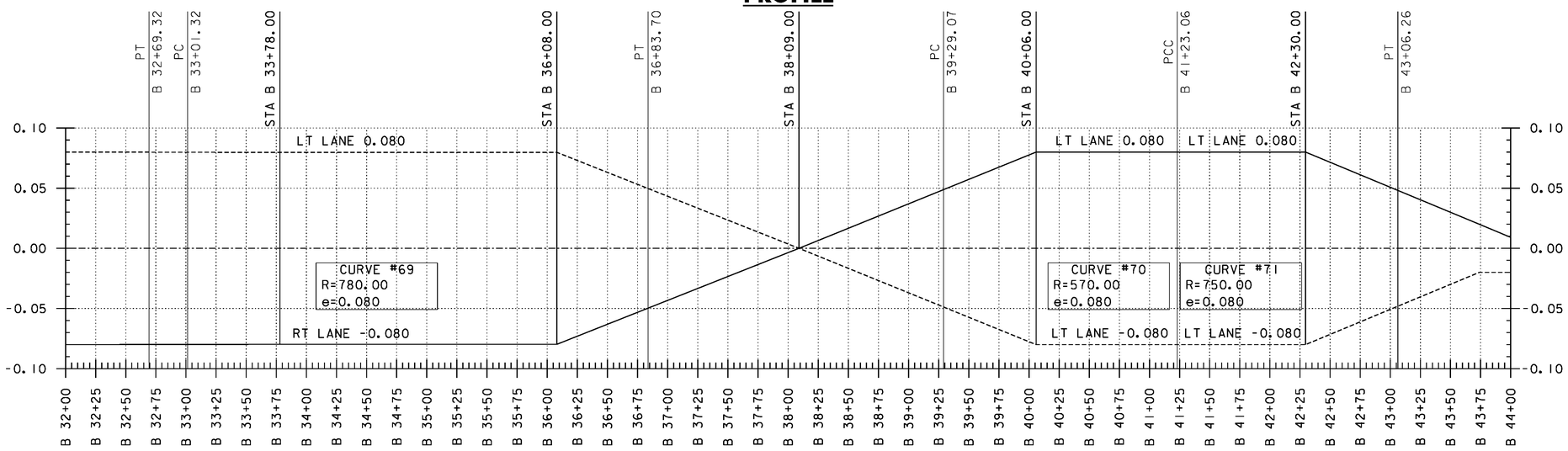
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 36

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 123 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 124 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 39+17 - STA B 50+12 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 50+12 - STA B 50+25 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 50+16 LT

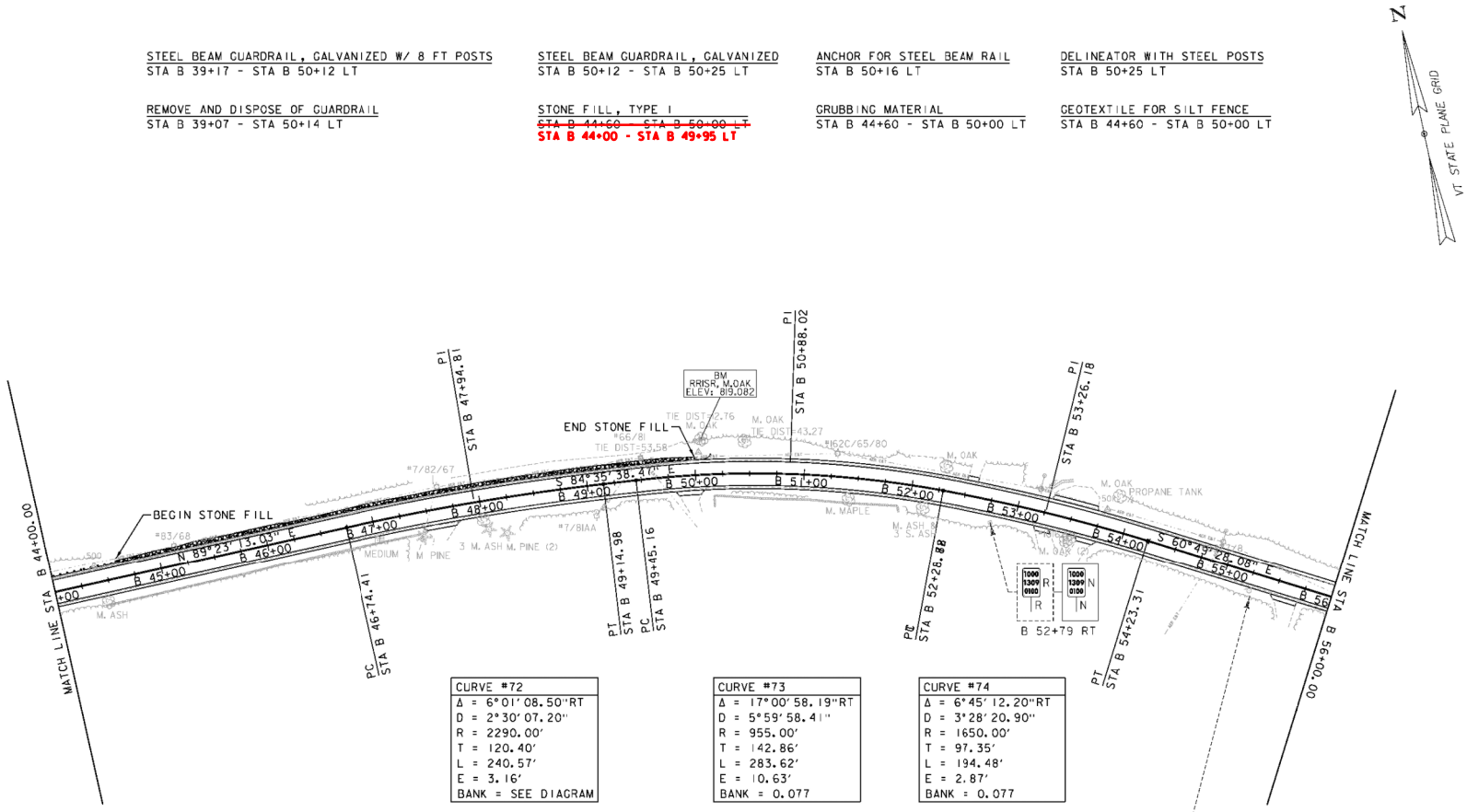
DELINEATOR WITH STEEL POSTS
STA B 50+25 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 39+07 - STA 50+14 LT

STONE FILL, TYPE I
~~STA B 44+60 - STA B 50+00 LT~~
STA B 44+00 - STA B 49+95 LT

GRUBBING MATERIAL
STA B 44+60 - STA B 50+00 LT

GEOTEXTILE FOR SILT FENCE
STA B 44+60 - STA B 50+00 LT




| CURVE #72 |
|---|
| Δ = 6°01'08.50"RT |
| D = 2°30'07.20" |
| R = 2290.00' |
| T = 120.40' |
| L = 240.57' |
| E = 3.16' |
| BANK = SEE DIAGRAM |

| CURVE #73 |
|---|
| Δ = 17°00'58.19"RT |
| D = 5°59'58.41" |
| R = 955.00' |
| T = 142.86' |
| L = 283.62' |
| E = 10.63' |
| BANK = 0.077 |

| CURVE #74 |
|---|
| Δ = 6°45'12.20"RT |
| D = 3°28'20.90" |
| R = 1650.00' |
| T = 97.35' |
| L = 194.48' |
| E = 2.87' |
| BANK = 0.077 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

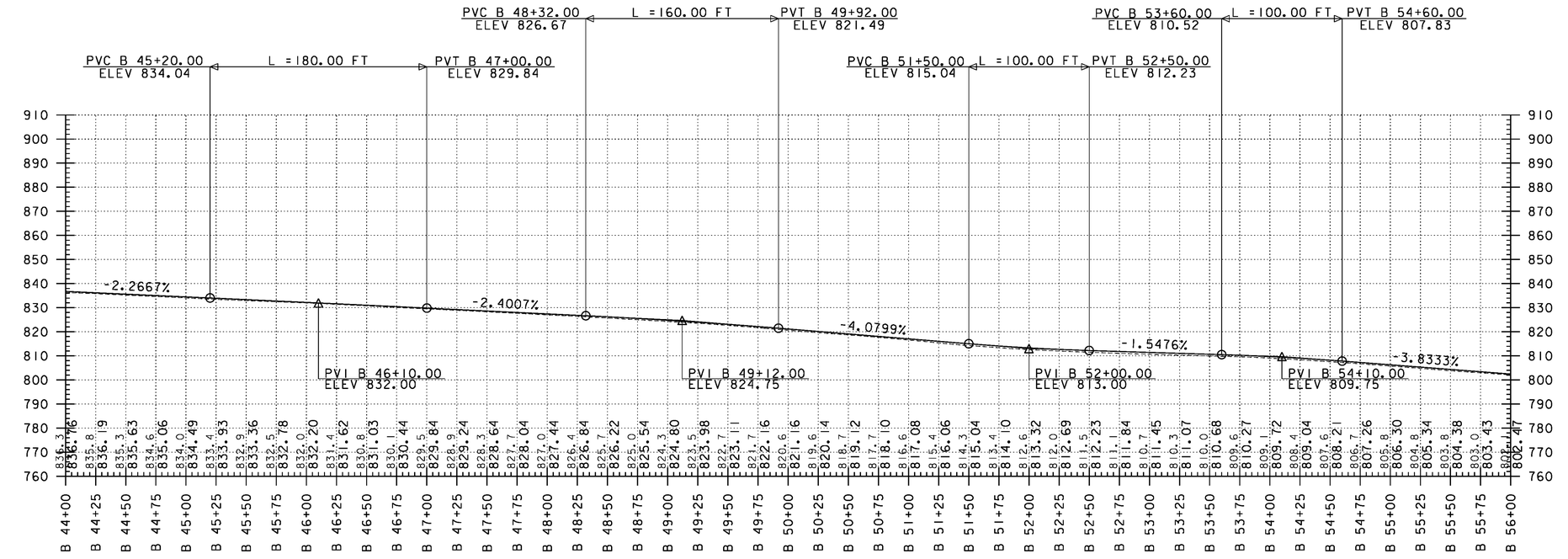
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ---------- |

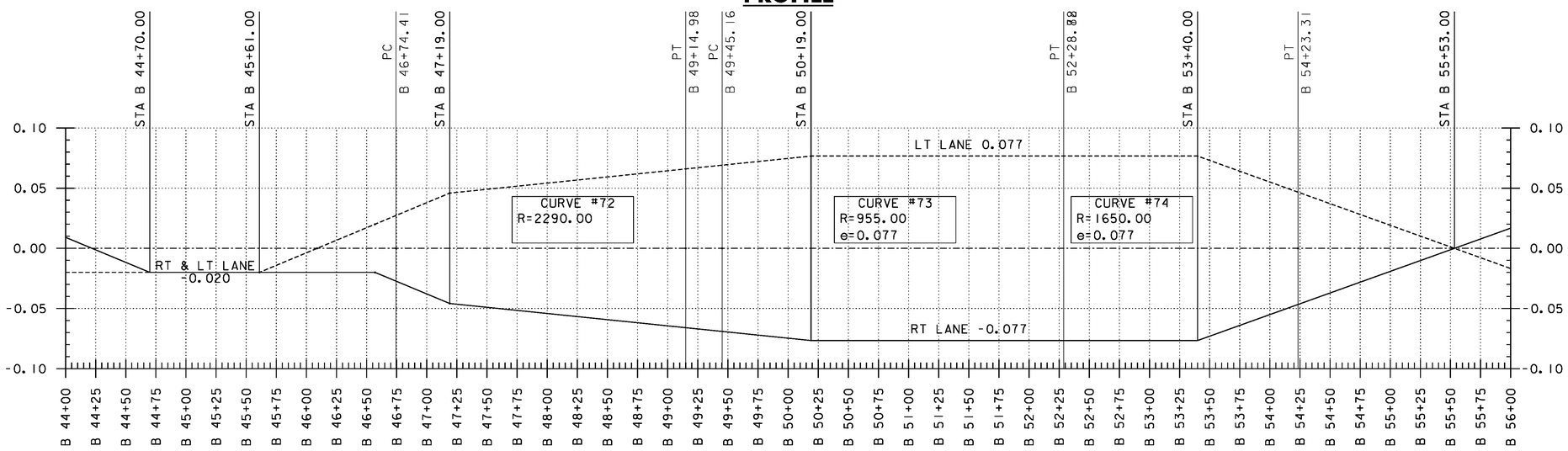
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 37

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 125 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 126 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 58+19 - STA B 58+83 RT
STA B 58+19 - STA B 62+72 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 58+03 - STA B 58+19 RT
STA B 58+03 - STA B 58+19 LT
STA B 58+83 - STA B 58+96 RT
STA B 62+72 - STA B 62+85 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 58+15 RT
STA B 58+15 LT
STA B 58+87 RT
STA B 62+76 LT

DELINEATOR WITH STEEL POSTS
STA B 58+03 RT
STA B 58+03 LT
STA B 58+96 RT
STA B 62+85 LT

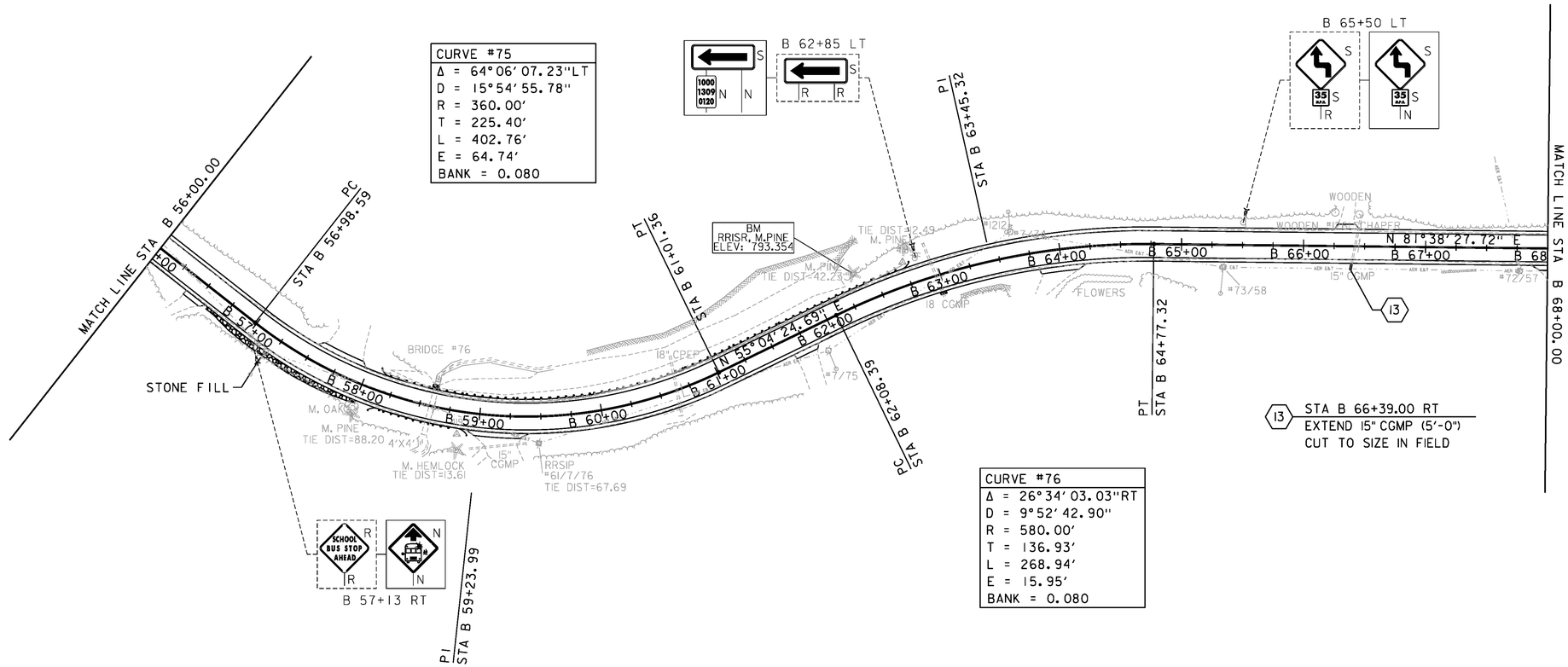
REMOVE AND DISPOSE OF GUARDRAIL
STA B 58+11 - STA B 62+73 LT

STONE FILL, TYPE I
STA B 56+60 - STA B 58+00 RT

GRUBBING MATERIAL
STA B 56+60 - STA B 58+00 RT

GEOTEXTILE FOR SILT FENCE
STA B 56+60 - STA B 58+00 RT

N
VT STATE PLANE GRID




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

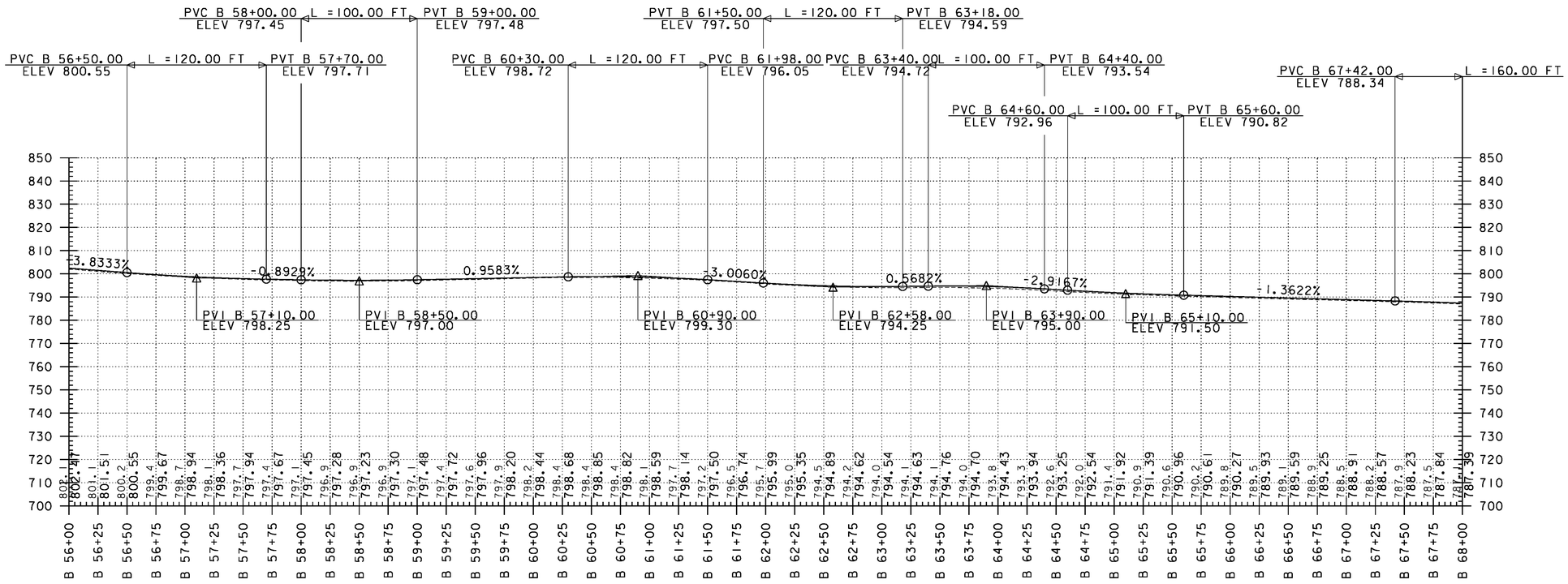
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

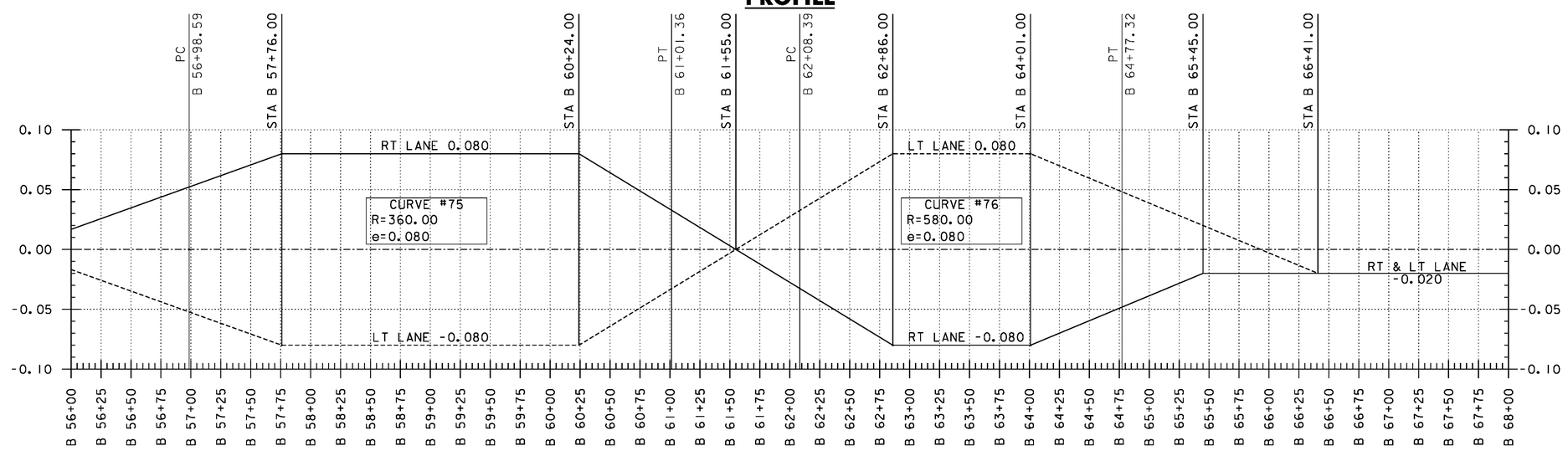
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 38

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 127 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 69+92 - STA B 77+44 LT
STA B 72+01 - STA B 72+23 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 69+79 - STA B 69+92 LT
STA B 71+88 - STA B 72+01 RT
STA B 72+23 - STA B 72+36 RT
STA B 77+40 - STA B 77+53 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 69+88 LT
STA B 71+97 RT
STA B 72+27 RT
STA B 77+44 LT

DELINEATOR WITH STEEL POSTS
STA B 69+79 LT
STA B 71+88 RT
STA B 72+36 RT
STA B 77+53 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 69+89 - STA B 75+72 LT

STONE FILL, TYPE I
STA B 72+00 - STA 72+37 RT
STA B 72+50 - STA 74+50 LT
STA B 72+60 - STA 75+00 RT
STA B 76+15 - STA 77+50 LT

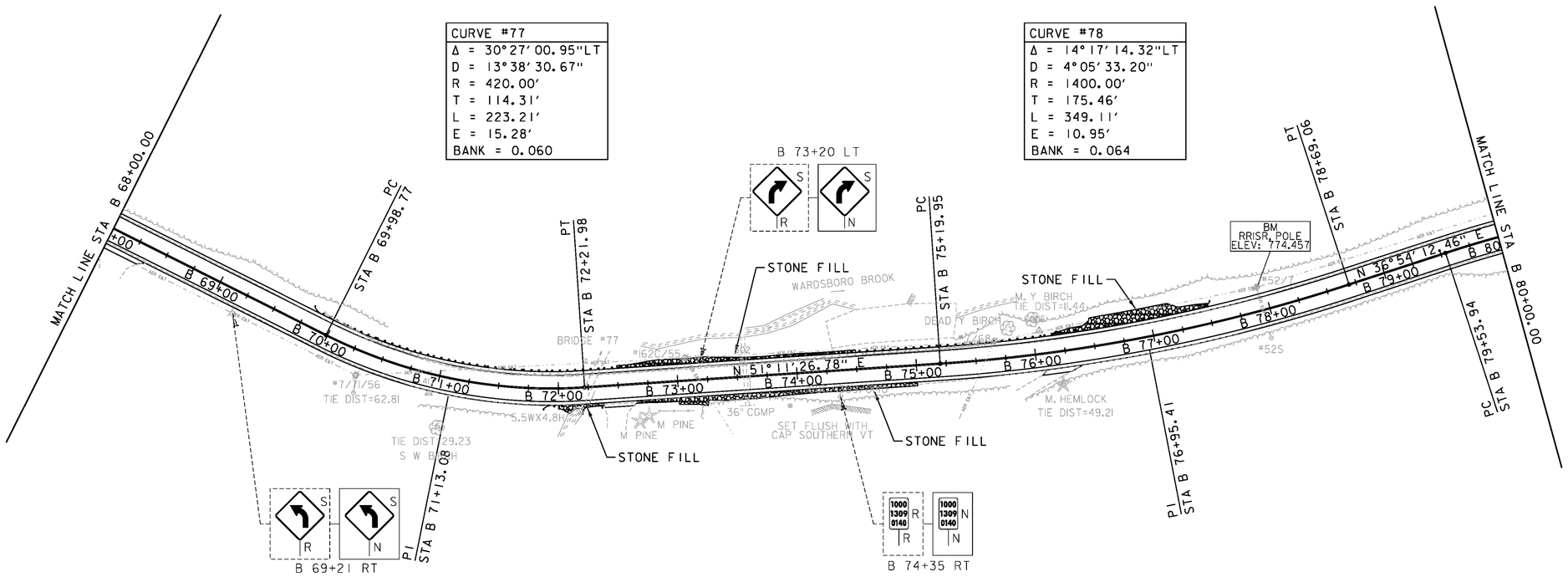
GRUBBING MATERIAL
STA B 72+00 - STA 72+37 RT
STA B 72+50 - STA 74+50 LT
STA B 72+60 - STA 75+00 RT
STA B 76+15 - STA 77+50 LT

GEOTEXTILE FOR SILT FENCE
STA B 72+00 - STA 72+37 RT
STA B 72+50 - STA 74+50 LT
STA B 72+60 - STA 75+00 RT
STA B 76+15 - STA 77+50 LT

N
VT STATE PLANE GRID

| CURVE #77 |
|---|
| Δ = 30°27'00.95"LT |
| D = 13°38'30.67" |
| R = 420.00' |
| T = 114.31' |
| L = 223.21' |
| E = 15.28' |
| BANK = 0.060 |

| CURVE #78 |
|---|
| Δ = 14°17'14.32"LT |
| D = 4°05'33.20" |
| R = 1400.00' |
| T = 175.46' |
| L = 349.11' |
| E = 10.95' |
| BANK = 0.064 |




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

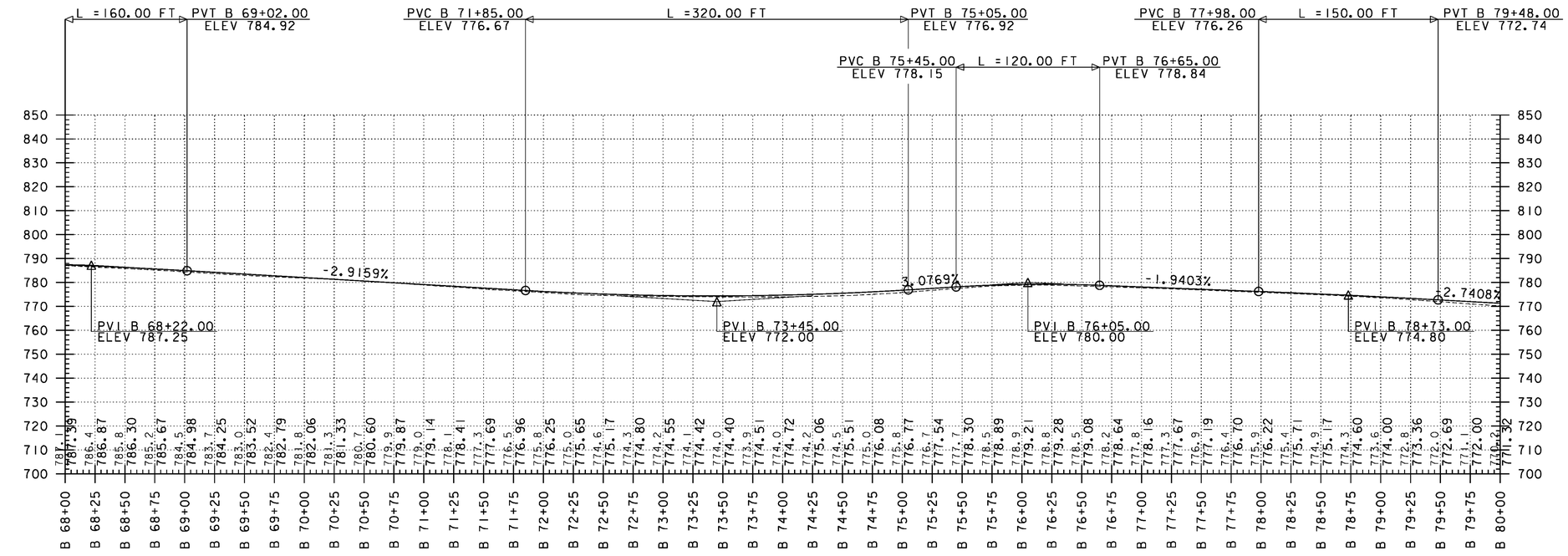
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

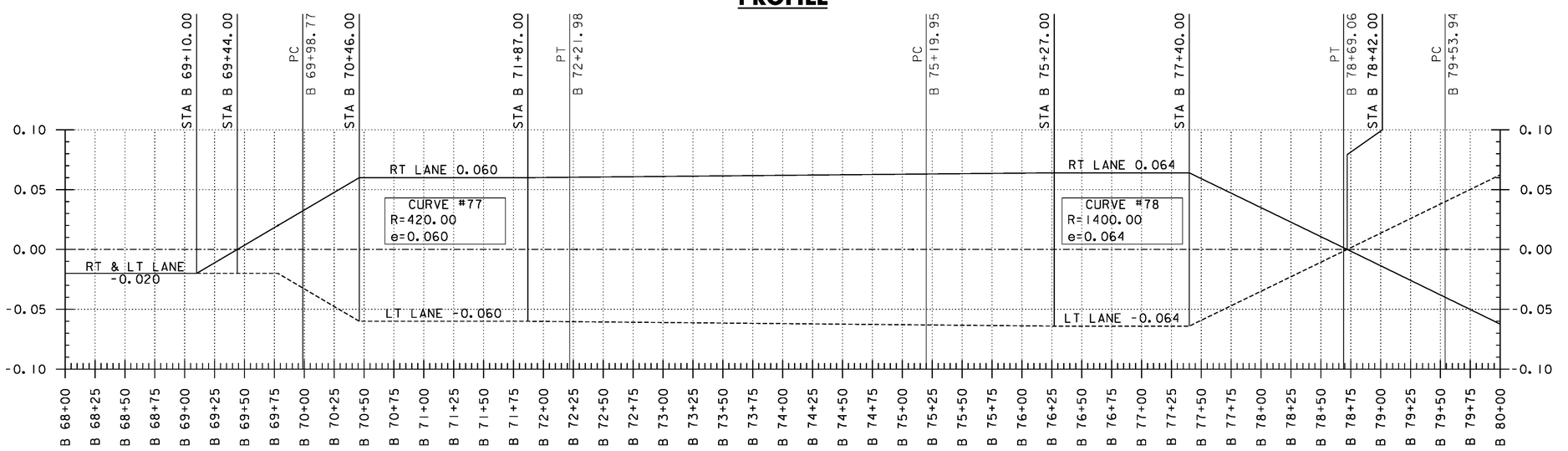
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 39

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 129 OF 444




## PROFILE



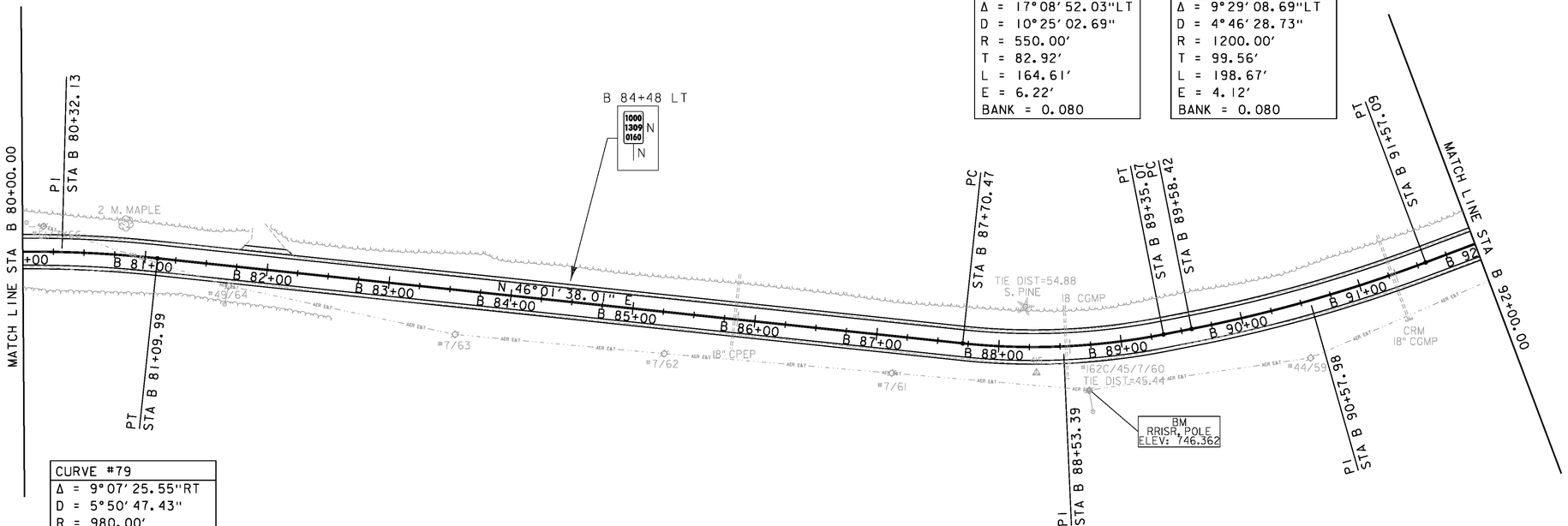

## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 130 OF 444




| CURVE #80 |
|---|
| Δ = 17° 08' 52.03" LT |
| D = 10° 25' 02.69" |
| R = 550.00' |
| T = 82.92' |
| L = 164.61' |
| E = 6.22' |
| BANK = 0.080 |

| CURVE #81 |
|---|
| Δ = 9° 29' 08.69" LT |
| D = 4° 46' 28.73" |
| R = 1200.00' |
| T = 99.56' |
| L = 198.67' |
| E = 4.12' |
| BANK = 0.080 |

| CURVE #79 |
|---|
| Δ = 9° 07' 25.55" RT |
| D = 5° 50' 47.43" |
| R = 980.00' |
| T = 78.19' |
| L = 156.05' |
| E = 3.11' |
| BANK = 0.076 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

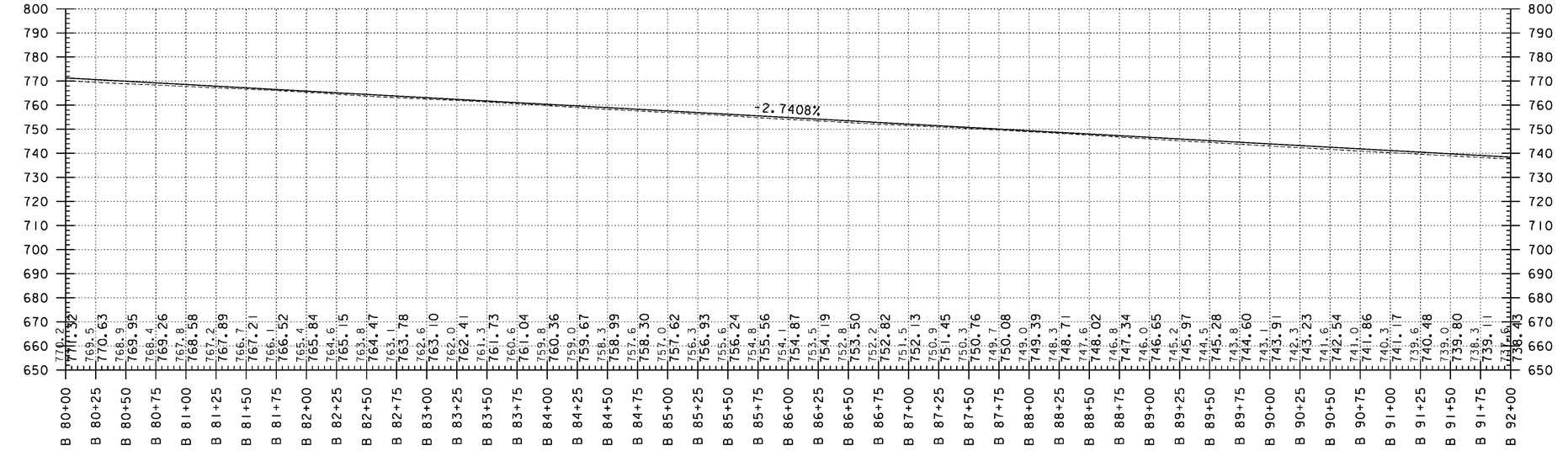
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ——— |
| NEW | ——— |

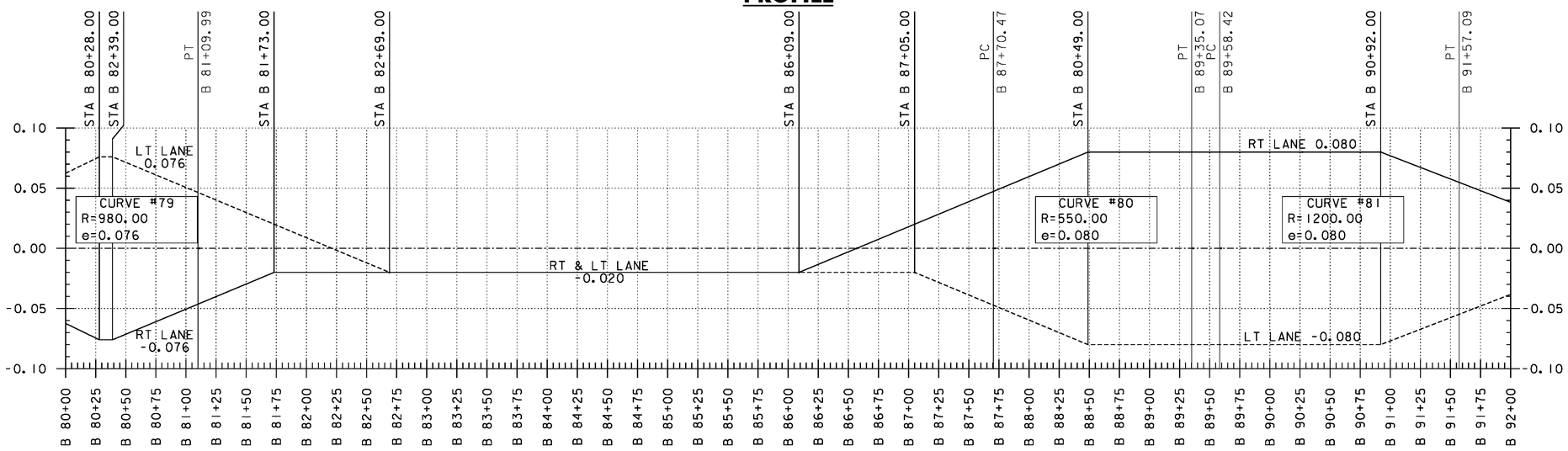
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 40

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 131 OF 444




## PROFILE



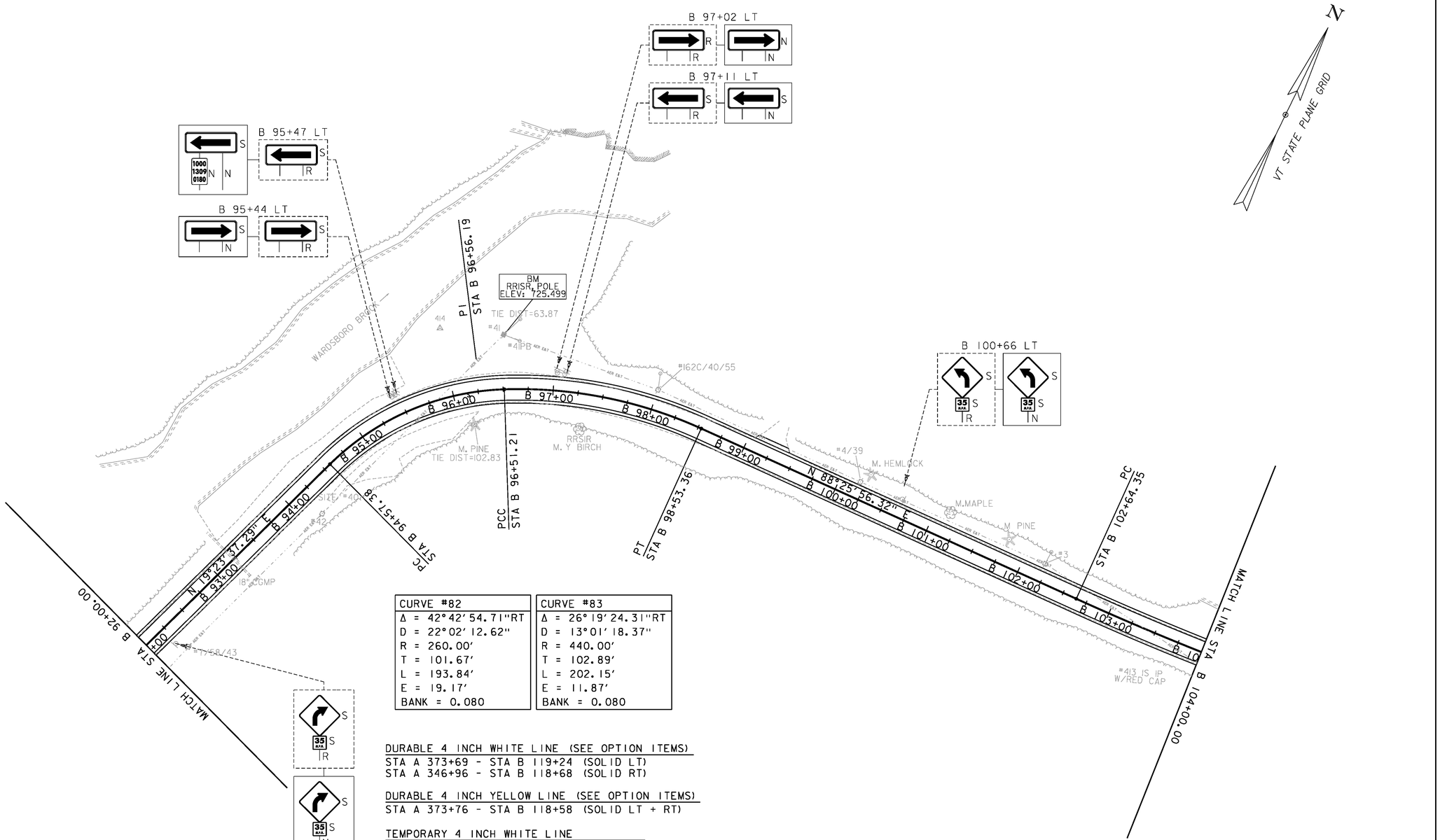

## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON




| CURVE #82 | |
|---|---|
| Δ | = 42°42'54.71"RT |
| D | = 22°02'12.62" |
| R | = 260.00' |
| T | = 101.67' |
| L | = 193.84' |
| E | = 19.17' |
| BANK | = 0.080 |

| CURVE #83 | |
|---|---|
| Δ | = 26°19'24.31"RT |
| D | = 13°01'18.37" |
| R | = 440.00' |
| T | = 102.89' |
| L | = 202.15' |
| E | = 11.87' |
| BANK | = 0.080 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA 373+76 - STA B 118+58 (SOLID LT + RT)

0 50 100
SCALE IN FEET

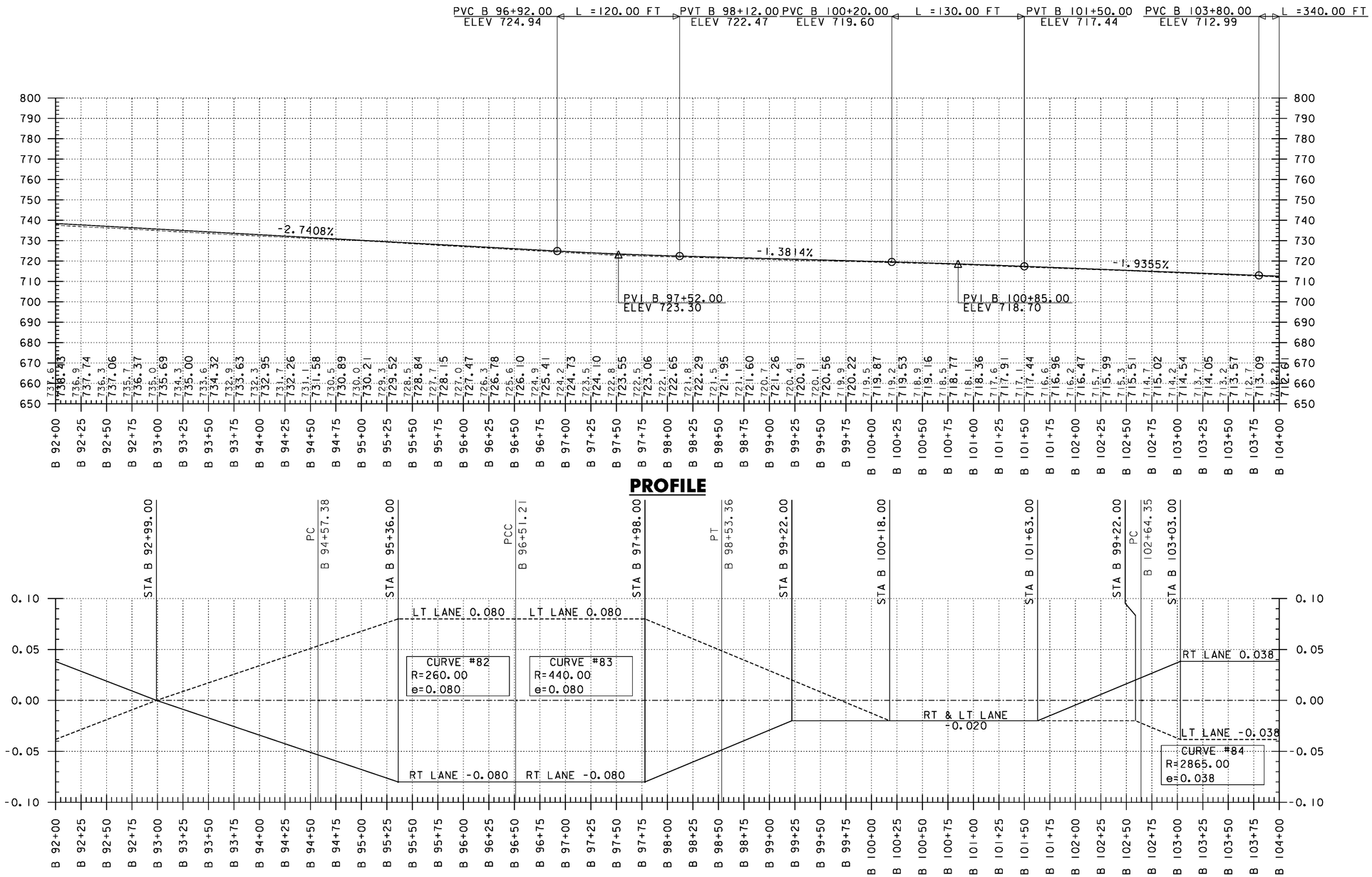
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 41

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 133 OF 444




THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 134 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 104+37 - STA B 113+87 LT
STA B 112+51 - STA B 113+87 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 104+88 - STA B 111+20 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 104+24 - STA B 104+37 LT
STA B 112+38 - STA B 112+51 RT
STA B 113+87 - STA B 114+00 RT
STA B 113+87 - STA B 114+00 LT

STONE FILL, TYPE I
~~STA B 111+00 - STA B 113+75 LT~~
STA B 113+00 - STA B 114+00 RT
STA B 111+64 - STA B 113+50 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 104+33 LT
STA B 112+47 RT
STA B 113+91 RT
STA B 113+91 LT

GRUBBING MATERIAL
STA B 111+00 - STA B 113+75 LT
STA B 113+00 - STA B 114+00 RT

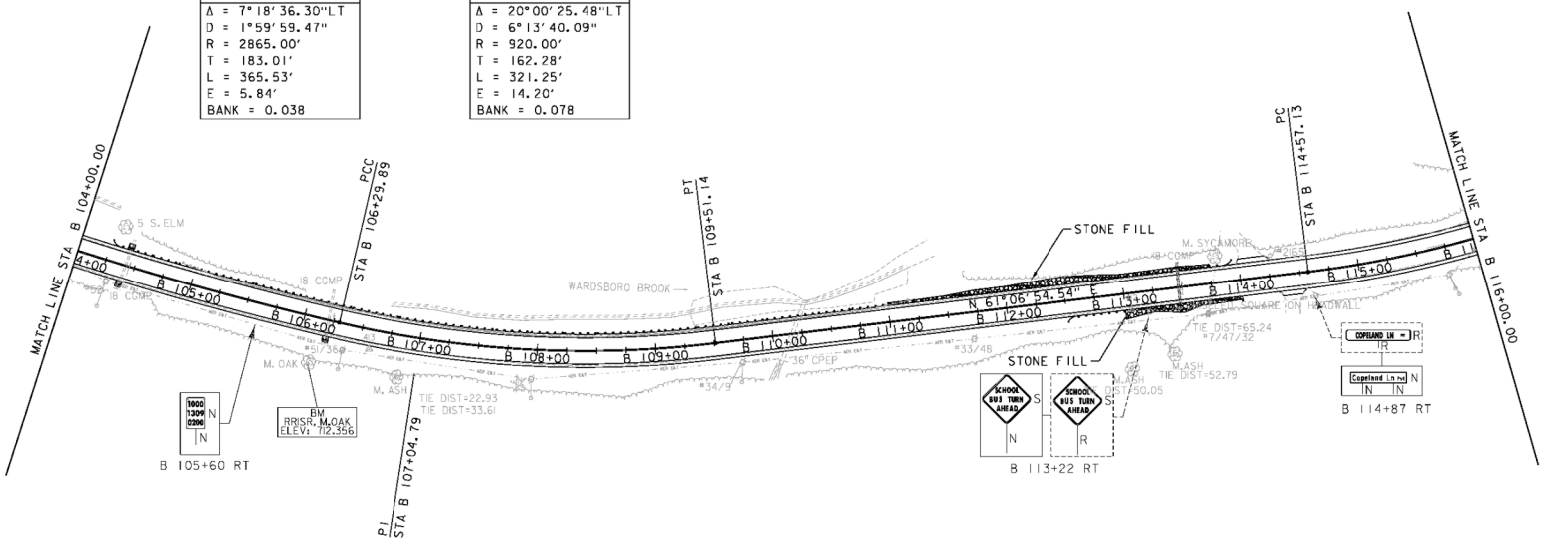
DELINEATOR WITH STEEL POSTS
STA B 104+24 RT
STA B 112+38 RT
STA B 114+00 RT
STA B 114+00 LT

GEOTEXTILE FOR SILT FENCE
STA B 111+00 - STA B 113+75 LT
STA B 113+00 - STA B 114+00 RT

N
VT STATE PLANE GRID

| CURVE #84 |
|---|
| Δ = 7°18'36.30"LT |
| D = 1°59'59.47" |
| R = 2865.00' |
| T = 183.01' |
| L = 365.53' |
| E = 5.84' |
| BANK = 0.038 |

| CURVE #85 |
|---|
| Δ = 20°00'25.48"LT |
| D = 6°13'40.09" |
| R = 920.00' |
| T = 162.28' |
| L = 321.25' |
| E = 14.20' |
| BANK = 0.078 |




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA A 373+69 - STA B 119+24 (SOLID _T)
STA A 346+96 - STA B 118+68 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA A 373+76 - STA B 118+58 (SOLID _T + RT)

TEMPORARY 4 INCH WHITE LINE
STA A 373+69 - STA B 119+24 (SOLID _T)
STA A 346+96 - STA B 118+68 (SOLID RT)

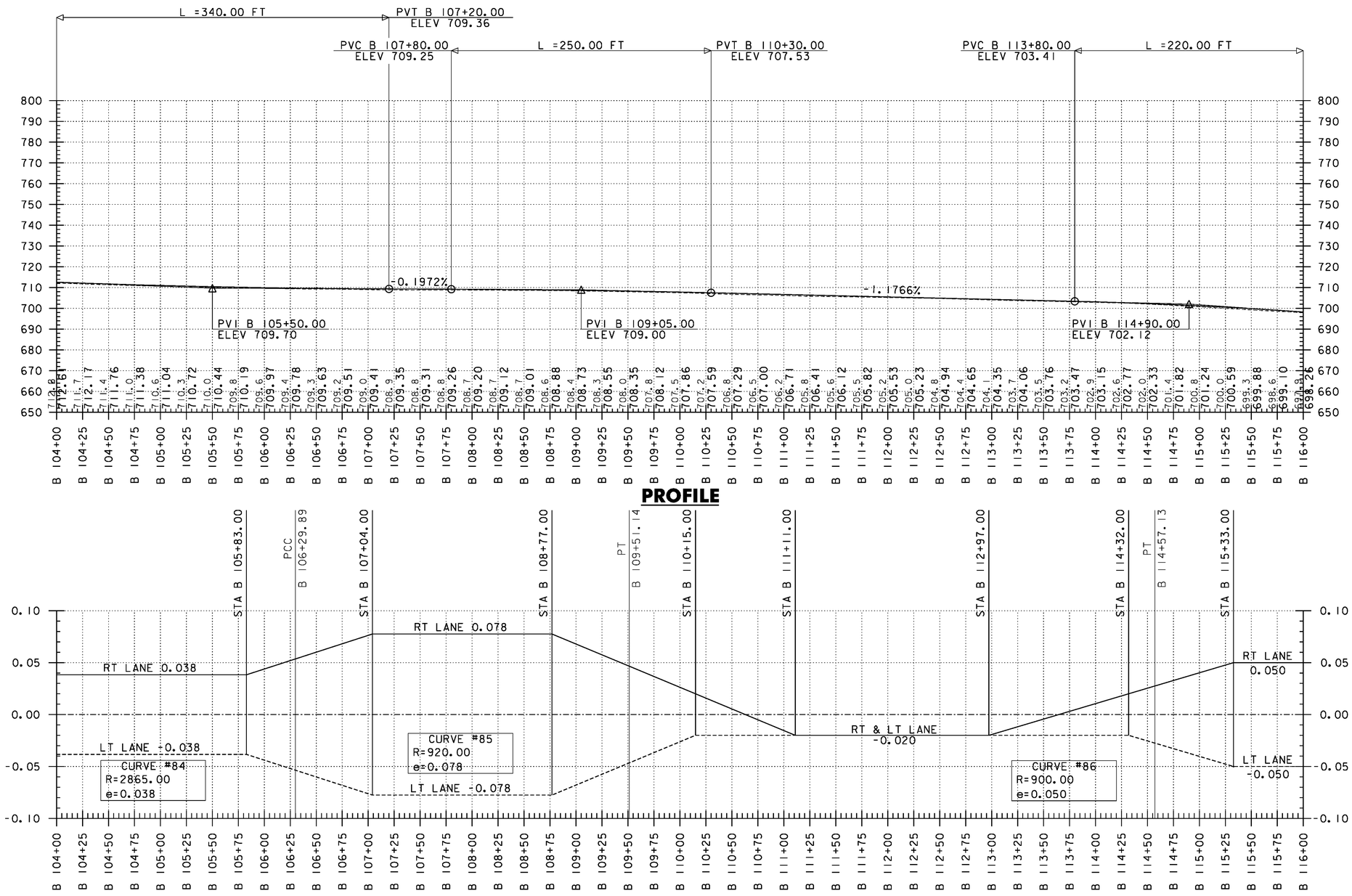
TEMPORARY 4 INCH YELLOW LINE
STA A 373+76 - STA B 118+58 (SOLID _T + RT)

0 50 100
SCALE IN FEET

SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: d12b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 42 | SHEET 135 OF 444 |




## PROFILE



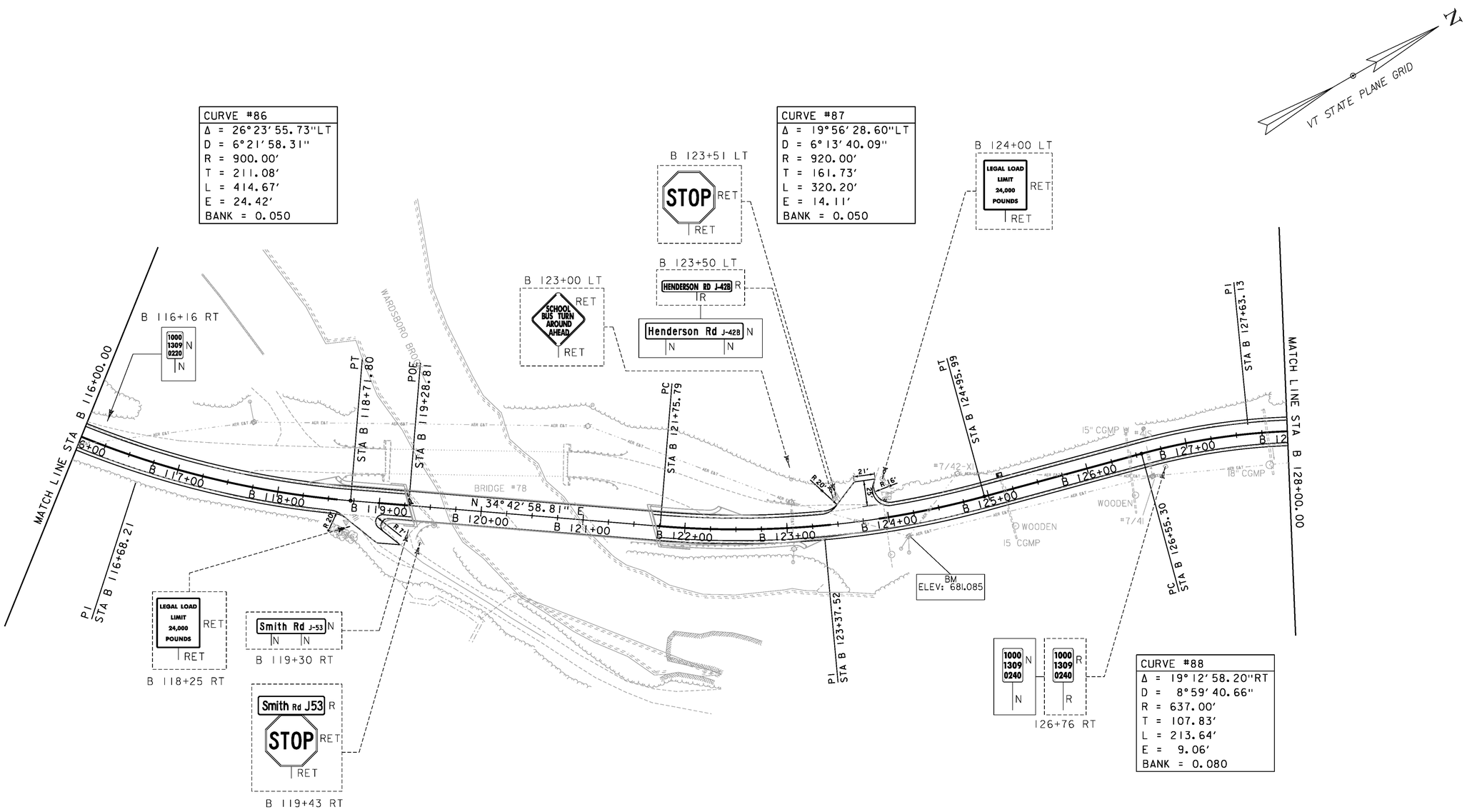

## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 136 OF 444




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)

STA A 373+69 - STA B 119+24 (SOLID LT)
STA B 121+67 - STA B 123+51 (SOLID LT)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)
STA B 119+06 - STA B 119+32 (SOLID RT)
STA B 121+76 - STA B 132+80 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)

STA A 373+76 - STA B 118+58 (SOLID LT + RT)
STA B 118+98 - STA B 119+28 (SOLID LT + RT)
STA B 121+72 - STA B 123+42 (SOLID LT + RT)
STA B 123+90 - STA B 132+35 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE

STA A 373+69 - STA B 119+24 (SOLID LT)
STA B 121+67 - STA B 123+51 (SOLID LT)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA A 346+96 - STA B 118+68 (SOLID RT)
STA B 119+06 - STA B 119+32 (SOLID RT)
STA B 121+76 - STA B 132+80 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE

STA A 373+76 - STA B 118+58 (SOLID LT + RT)
STA B 118+98 - STA B 119+28 (SOLID LT + RT)
STA B 121+72 - STA B 123+42 (SOLID LT + RT)
STA B 132+90 - STA B 135+35 (SOLID LT + RT)

0 50 100
SCALE IN FEET

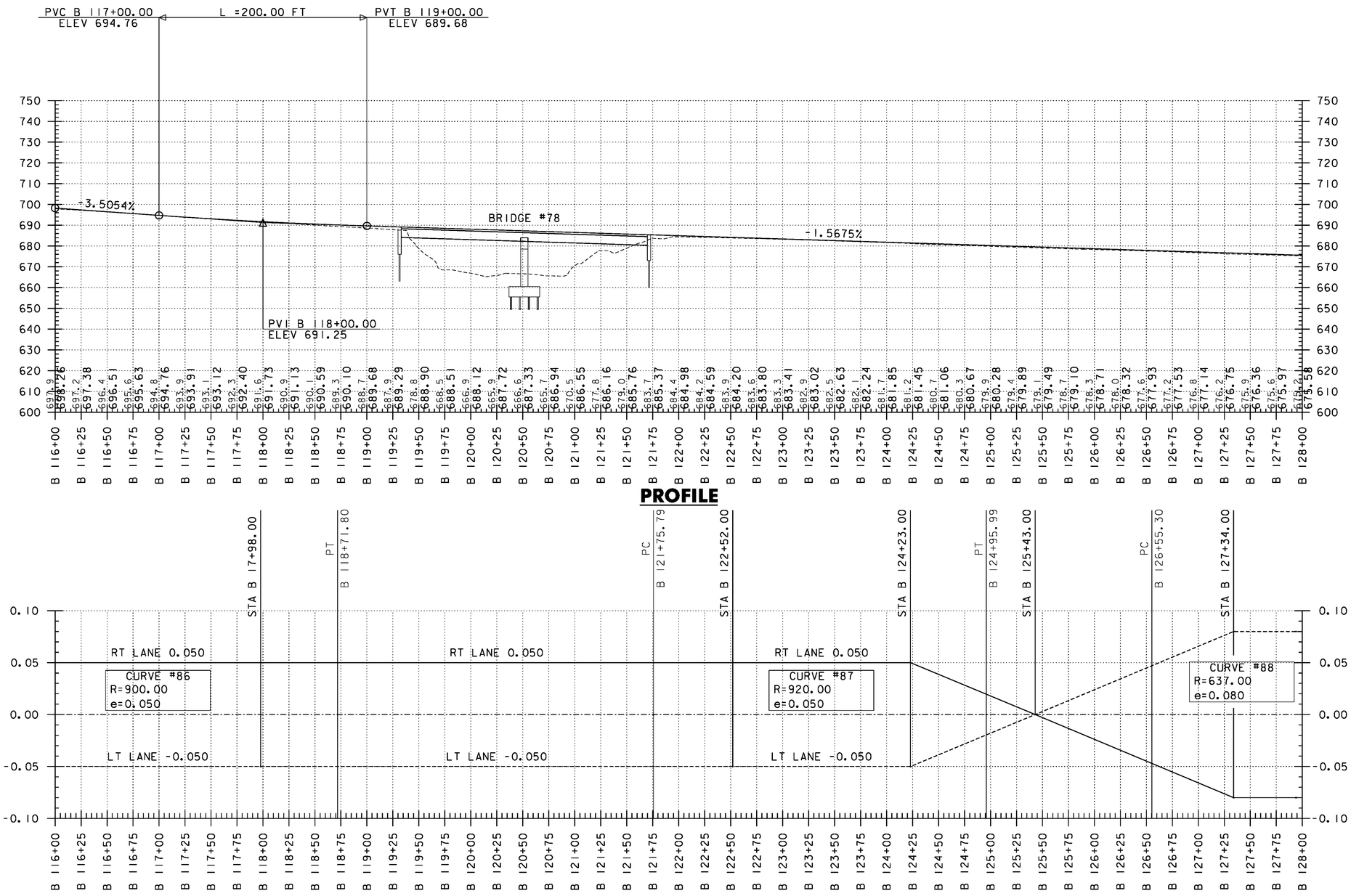
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 43

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 137 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDRETH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 138 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 133+25 - STA B 140+15 RT
STA B 137+60 - STA B 138+87 LT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 133+10 - STA B 140+35 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA B 129+18 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 133+12 - STA B 133+25 RT
STA B 137+47 - STA B 137+60 LT
STA B 138+87 - STA B 139+00 LT

STONE FILL, TYPE I
~~STA B 133+75 - STA B 141+00 RT~~
~~STA B 137+50 - STA B 139+00 LT~~
STA B 133+75 - STA B 140+18 RT
STA B 135+50 - STA B 136+20 LT
STA B 137+95 - STA B 138+88 LT

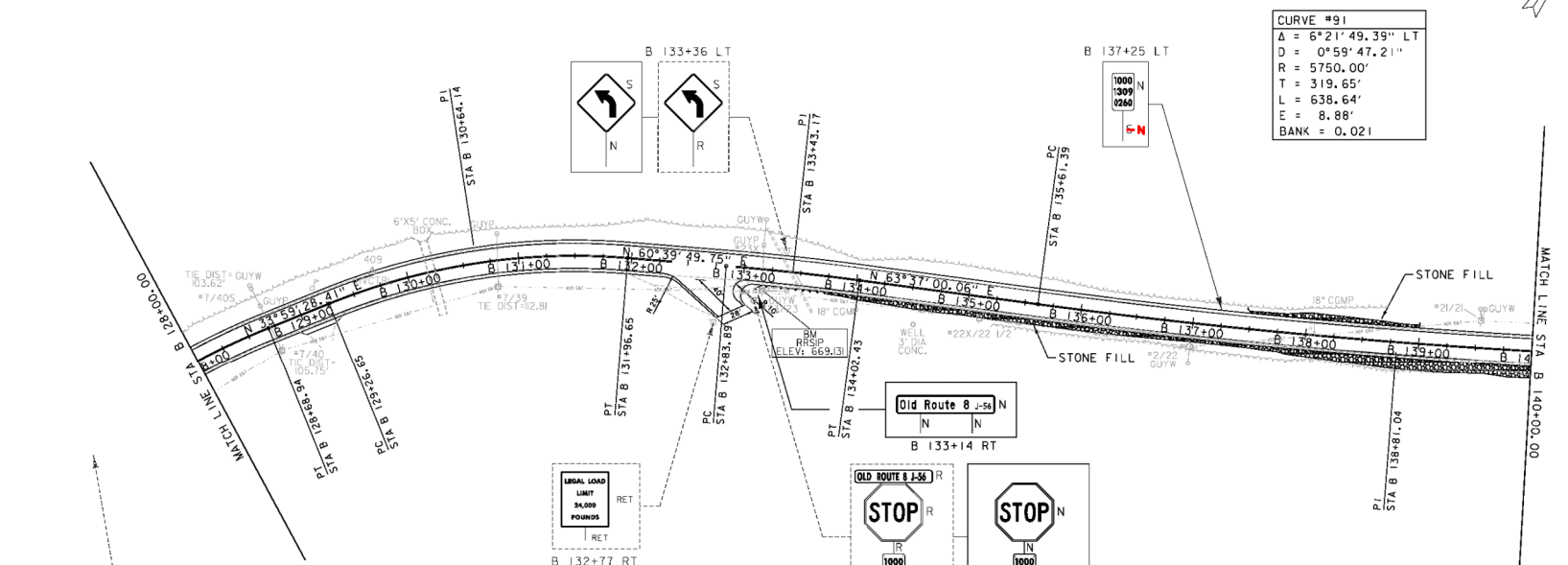
ANCHOR FOR STEEL BEAM RAIL
STA B 133+21 RT
STA B 137+56 LT
STA B 138+91 LT

GRUBBING MATERIAL
STA B 133+75 - STA B 141+00 RT
STA B 137+50 - STA B 139+00 LT

DELINEATOR WITH STEEL POSTS
STA B 133+12 RT
STA B 137+47 LT
STA B 139+00 LT

GEOTEXTILE FOR SILT FENCE
STA B 133+75 - STA B 141+00 RT
STA B 137+50 - STA B 139+00 LT

VT STATE PLANE GRID




CURVE #89
Δ = 26°40'21.34" RT
D = 9°52'42.90"
R = 580.00'
T = 137.49'
L = 270.00'
E = 16.07'
BANK = 0.080

CURVE #90
Δ = 2°57'10.31" RT
D = 2°29'28.04"
R = 2300.00'
T = 59.28'
L = 118.52'
E = 0.76'
BANK = SEE DIAGRAM

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 121+76 - STA B 132+80 (SOLID RT)
STA B 133+01 - STA B 176+30 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA B 123+90 - STA B 132+35 (SOLID LT + RT)
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA B 123+92 - STA B 179+62 (SOLID LT + RT)
STA B 121+76 - STA B 132+80 (SOLID LT + RT)
STA B 133+01 - STA B 176+30 (SOLID LT + RT)

TEMPORARY 4 INCH YELLOW LINE
STA B 123+90 - STA B 132+35 (SOLID LT + RT)
STA B 123+90 - STA B 176+45 (SOLID LT + RT)

0 50 100
SCALE IN FEET

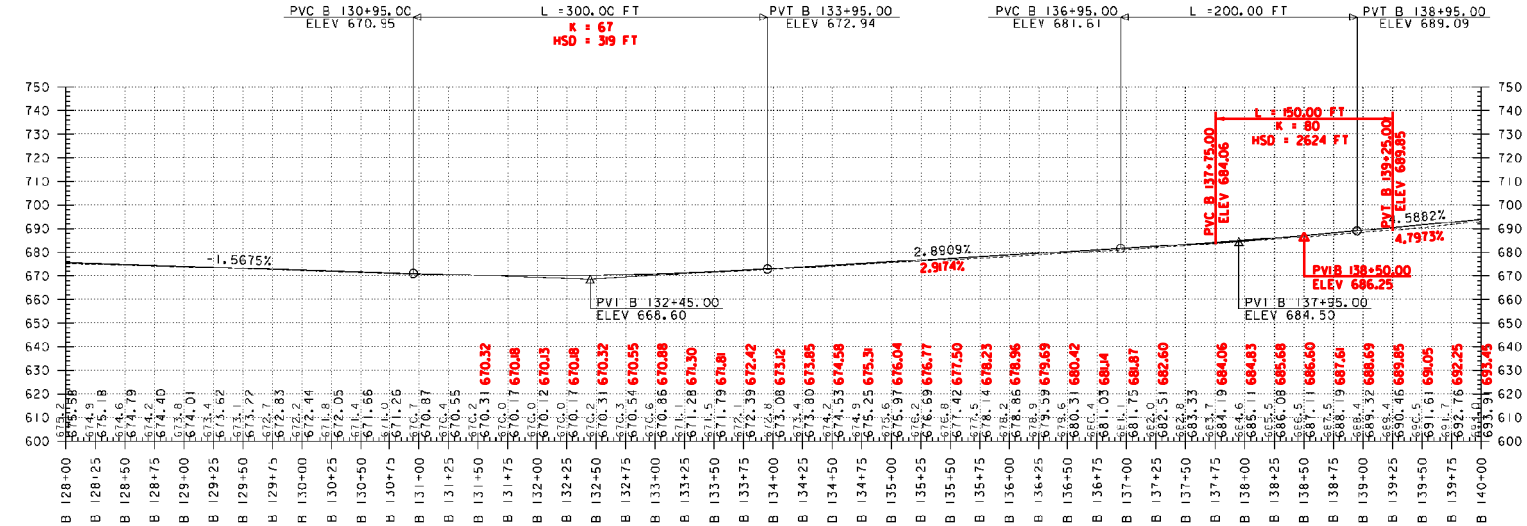
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | | ---------- |
| NEW | | _____ |

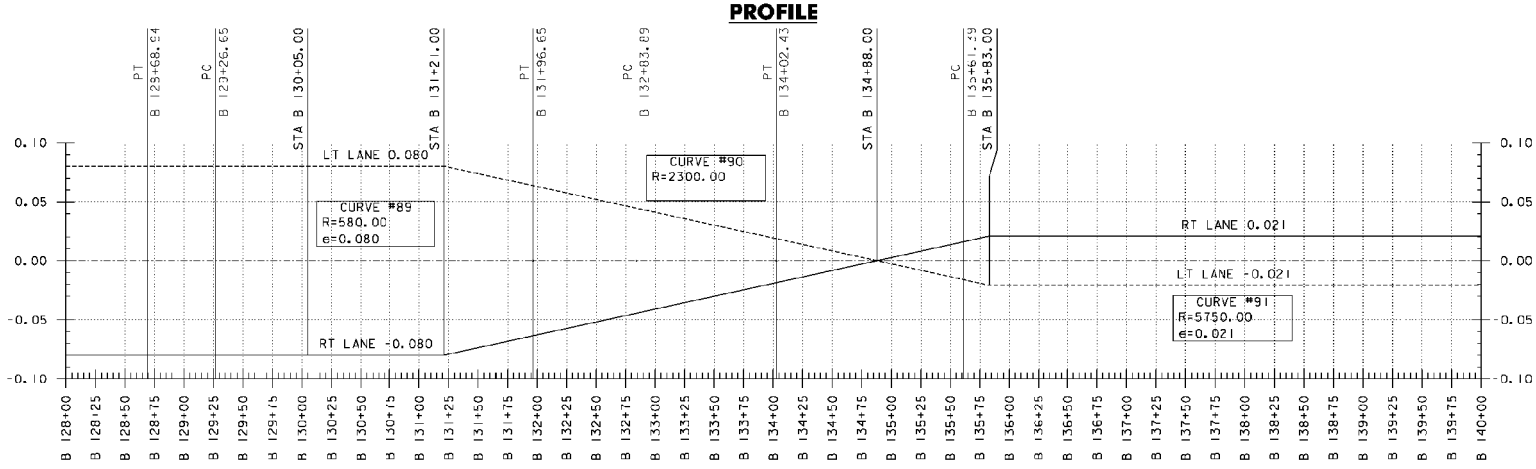
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 44

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 139 OF 444




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12p236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 140 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 133+25 - STA B 140+15 RT
STA B 144+19 - STA B 148+76 RT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 140+15 - STA B 140+28 RT
STA B 144+06 - STA B 144+19 RT
STA B 148+76 - STA B 148+89 RT

ANCHOR FOR STEEL BEAM RAIL
STA B 140+19 RT
STA B 144+15 RT
STA B 148+80 RT

DELINEATOR WITH STEEL POSTS
STA B 140+28 RT
STA B 144+06 RT
STA B 148+89 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 133+10 - STA B 140+35 RT
STA B 144+07 - STA B 148+88 RT

STONE FILL, TYPE I
STA B 133+75 - STA B 141+00 RT
STA B 144+50 - STA B 148+00 RT

GRUBBING MATERIAL
STA B 133+75 - STA B 141+00 RT
STA B 144+50 - STA B 148+00 RT

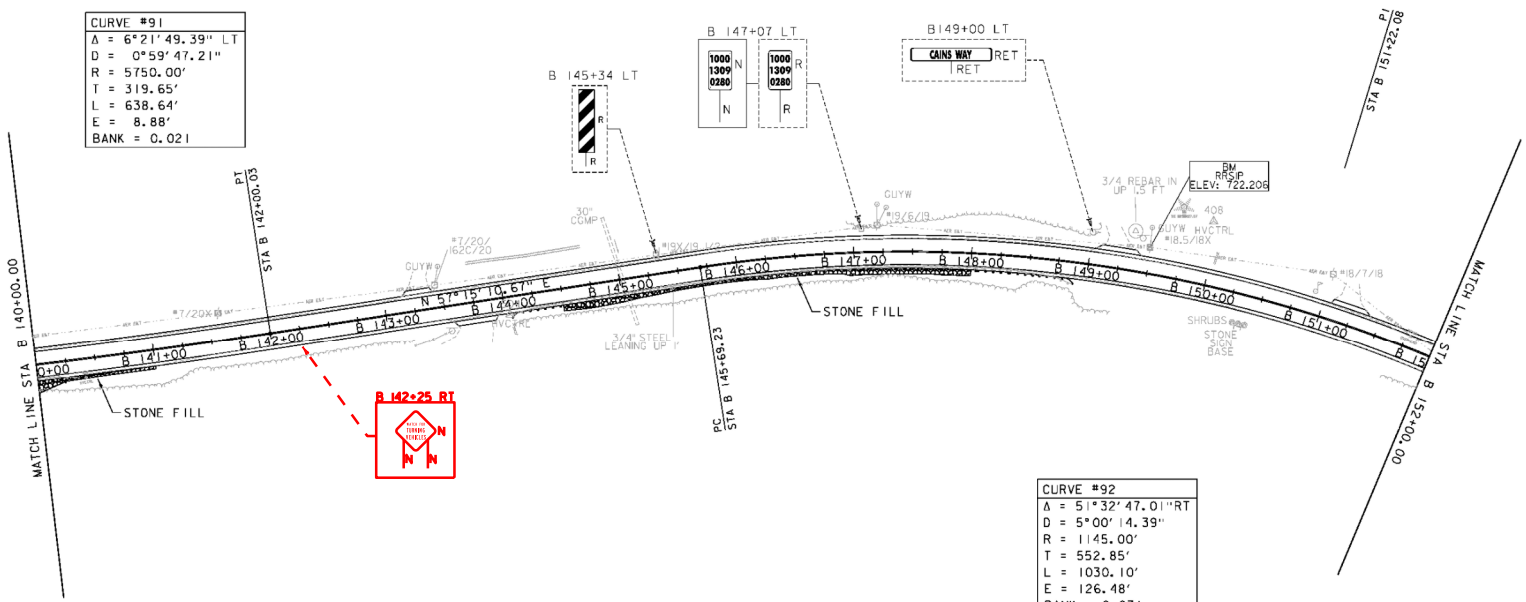
GEOTEXTILE FOR SILT FENCE
STA B 133+75 - STA B 141+00 RT
STA B 144+50 - STA B 148+00 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA B 150+91 LT

N

VT STATE PLANE GRID

| CURVE #91 |
|---|
| Δ = 6°21'49.39" LT |
| D = 0°59'47.21" |
| R = 5750.00' |
| T = 319.65' |
| L = 638.64' |
| E = 8.88' |
| BANK = 0.021 |




| CURVE #92 |
|---|
| Δ = 51°32'47.01"RT |
| D = 5°00'14.39" |
| R = 1145.00' |
| T = 552.85' |
| L = 1030.10' |
| E = 126.48' |
| BANK = 0.071 |

DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA B 123+92 - STA B 179+62 (SOLID LT + RT)
STA B 133+01 - STA B 176+30 (SOLID LT + RT)

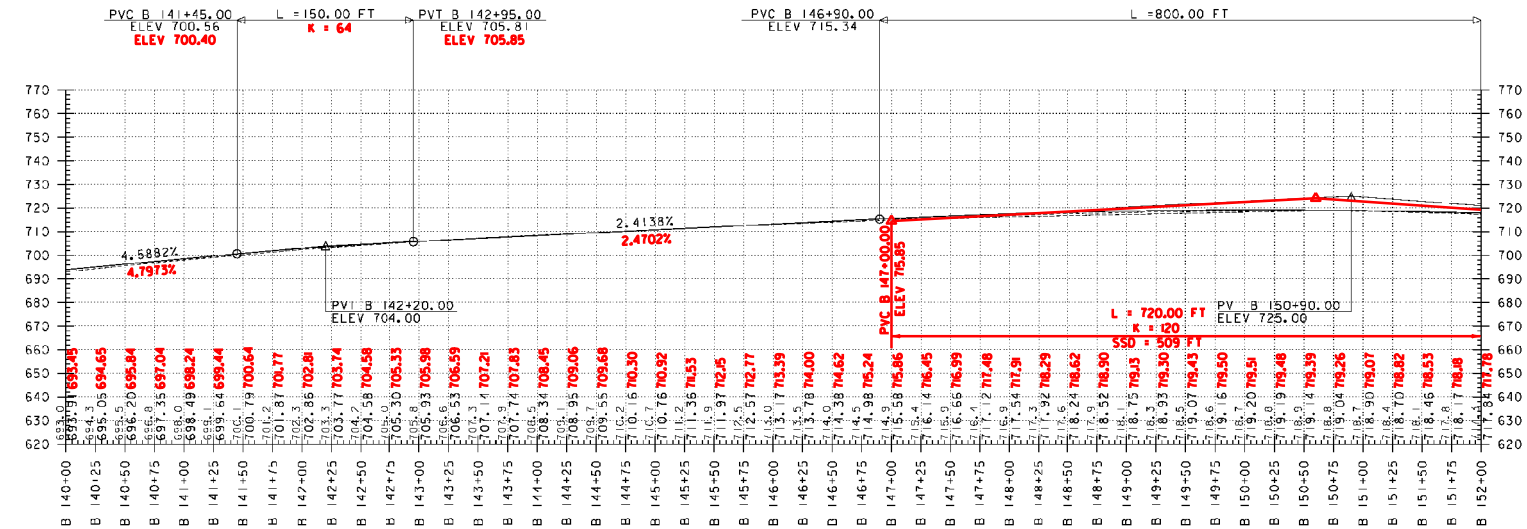
TEMPORARY 4 INCH YELLOW LINE
STA B 132+92 - STA B 175+45 (SOLID LT + RT)

0 50 100
SCALE IN FEET

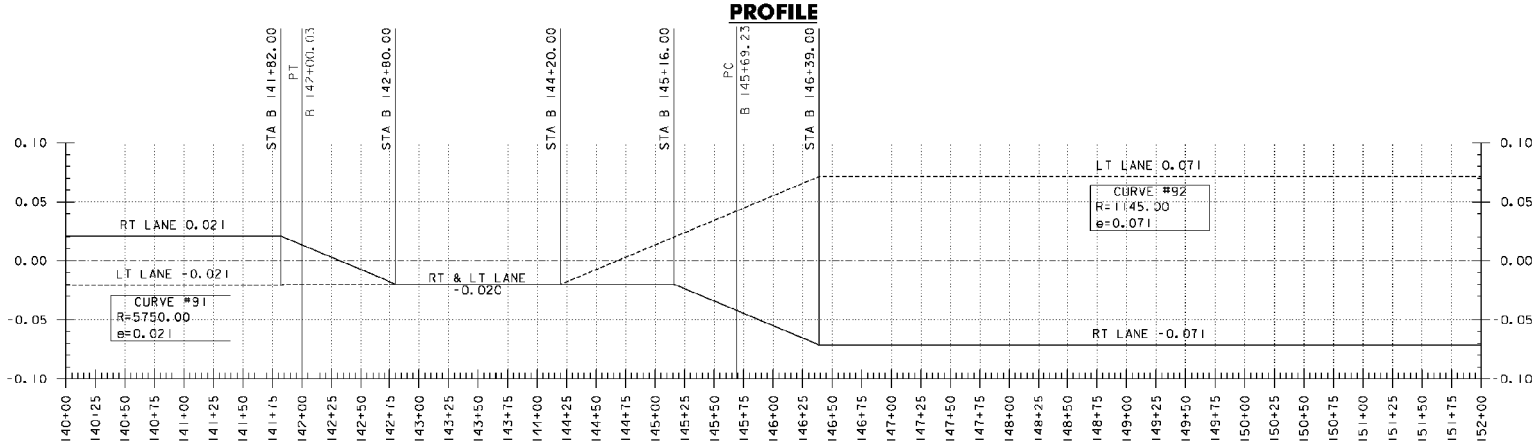
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: d2b236_bdr.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| PLAN SHEET 45 | SHEET 141 OF 444 |




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12o236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 142 OF 444

**STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS**
STA B 153+10 - STA B 155+39 RT
STA B 154+13 - STA B 155+39 LT
STA B 159+80 - STA B 161+24 RT
STA B 161+89 - STA B 163+38 RT

**STEEL BEAM GUARDRAIL, GALVANIZED**
STA B 152+97 - STA B 153+10 RT
STA B 154+00 - STA B 154+13 LT
STA B 155+39 - STA B 155+52 RT
STA B 155+39 - STA B 155+52 LT
STA B 159+67 - STA B 159+80 RT
STA B 161+24 - STA B 161+37 RT
STA B 161+76 - STA B 161+89 RT
STA B 163+38 - STA B 163+51 RT

**ANCHOR FOR STEEL BEAM RAIL**
STA B 153+06 RT
STA B 154+09 LT
STA B 155+43 RT
STA B 155+43 LT
STA B 159+76 RT
STA B 161+28 RT
STA B 161+85 RT
STA B 163+42 RT

**DELINEATOR WITH STEEL POSTS**
STA B 152+97 RT
STA B 154+00 LT
STA B 155+52 RT
STA B 155+52 LT
STA B 159+67 RT
STA B 161+37 RT
STA B 167+76 RT
STA B 163+51 RT

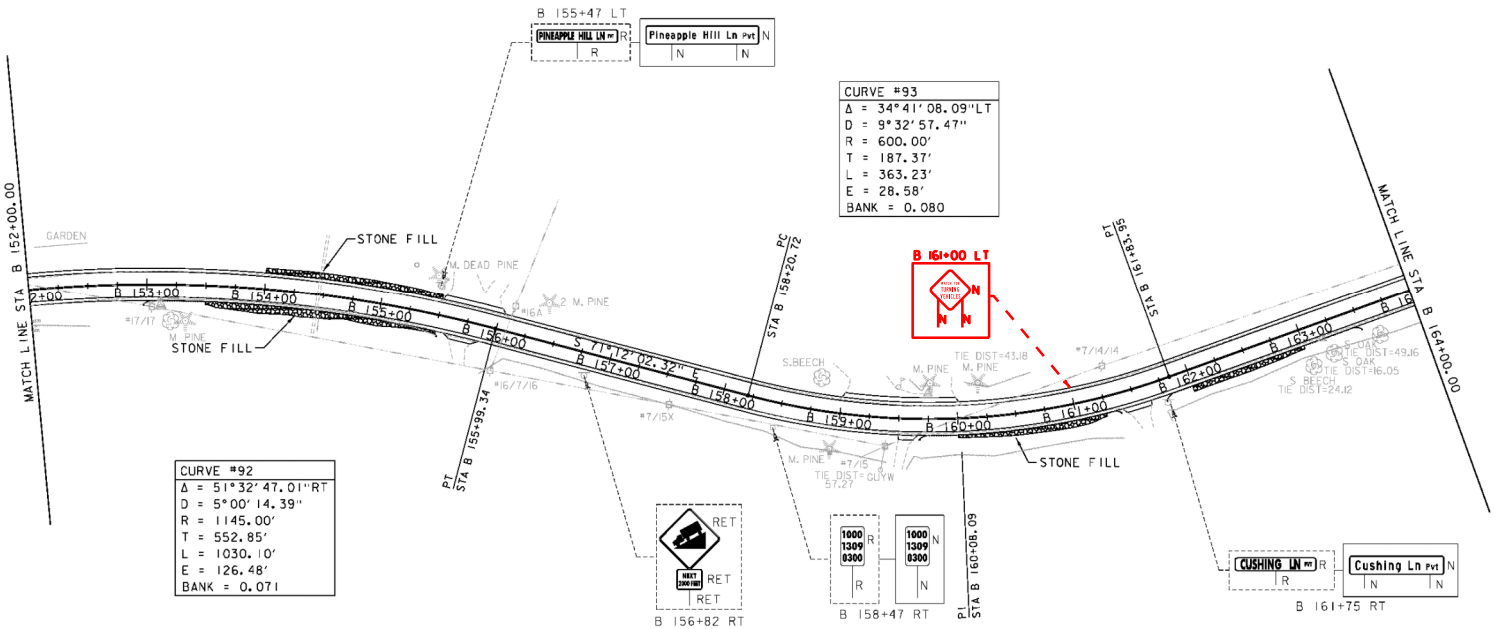
**REMOVE AND DISPOSE OF GUARDRAIL**
STA B 152+96 - STA B 155+52 RT

**STONE FILL, TYPE I**
STA B 153+50 - STA B 155+50 RT
STA B 154+00 - STA B 155+50 LT
STA B 160+00 - STA B 161+25 RT
STA B 162+00 - STA B 163+00 RT

**GRUBBING MATERIAL**
STA B 153+50 - STA B 155+50 RT
STA B 154+00 - STA B 155+50 LT
STA B 160+00 - STA B 161+25 RT
STA B 162+00 - STA B 163+00 RT

**GEOTEXTILE FOR SILT FENCE**
STA B 153+50 - STA B 155+50 RT
STA B 154+00 - STA B 155+50 LT
STA B 160+00 - STA B 161+25 RT
STA B 162+00 - STA B 163+00 RT

N
VT STATE PLANE GRID




**DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)**
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)

**DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)**
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

**TEMPORARY 4 INCH WHITE LINE**
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)

**TEMPORARY 4 INCH YELLOW LINE**
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

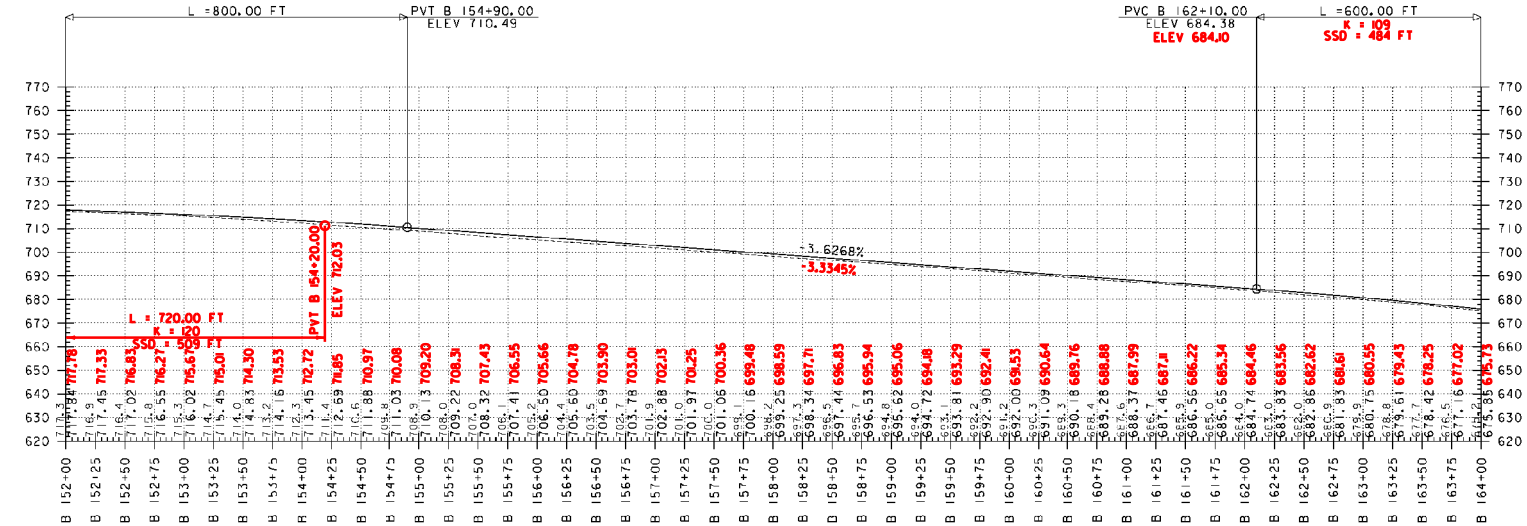
0 50 100
SCALE IN FEET

**SIGN LEGEND**

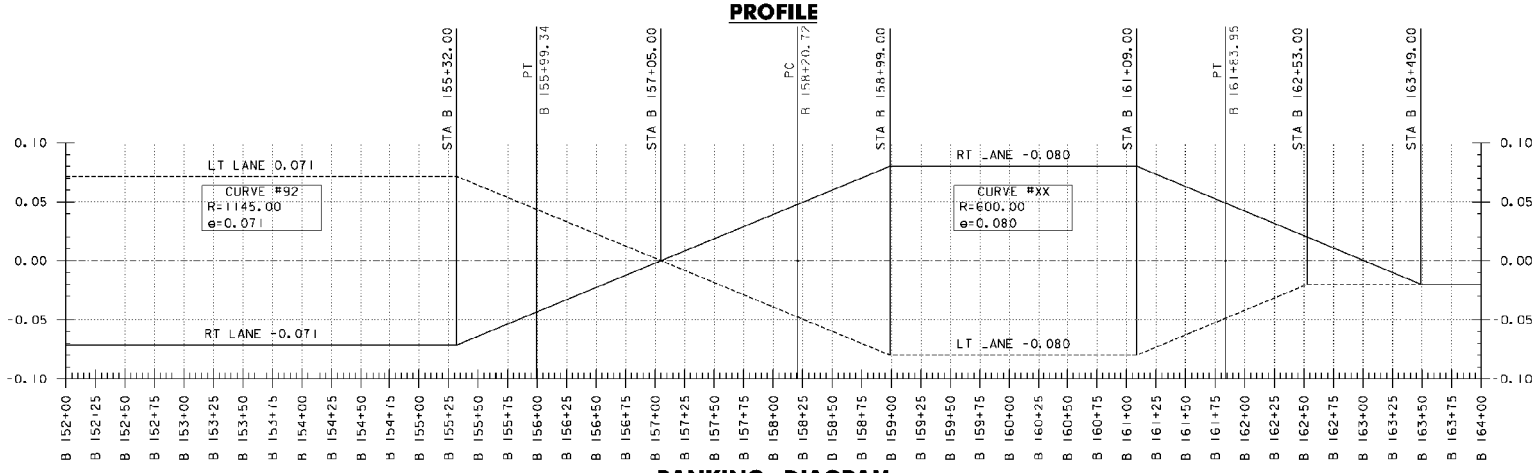
| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | ———— |

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 46
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 143 OF 444




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d120236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 144 OF 444

STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 171+27 - STA B 176+25 RT
STA B 173+78 - STA B 179+61 LT

STEEL BEAM GUARDRAIL, GALVANIZED
STA B 171+14 - STA B 171+27 RT
STA B 173+65 - STA B 173+78 LT

ANCHOR FOR STEEL BEAM RAIL
STA B 171+23 RT
STA B 173+74 RT

DELINEATOR WITH STEEL POSTS
STA B 171+14 RT
STA B 173+65 LT

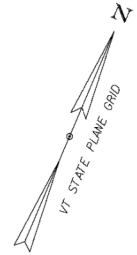
REMOVE AND DISPOSE OF GUARDRAIL
STA B 171+15 - STA B 176+33 RT
STA B 173+64 - STA B 179+61 LT

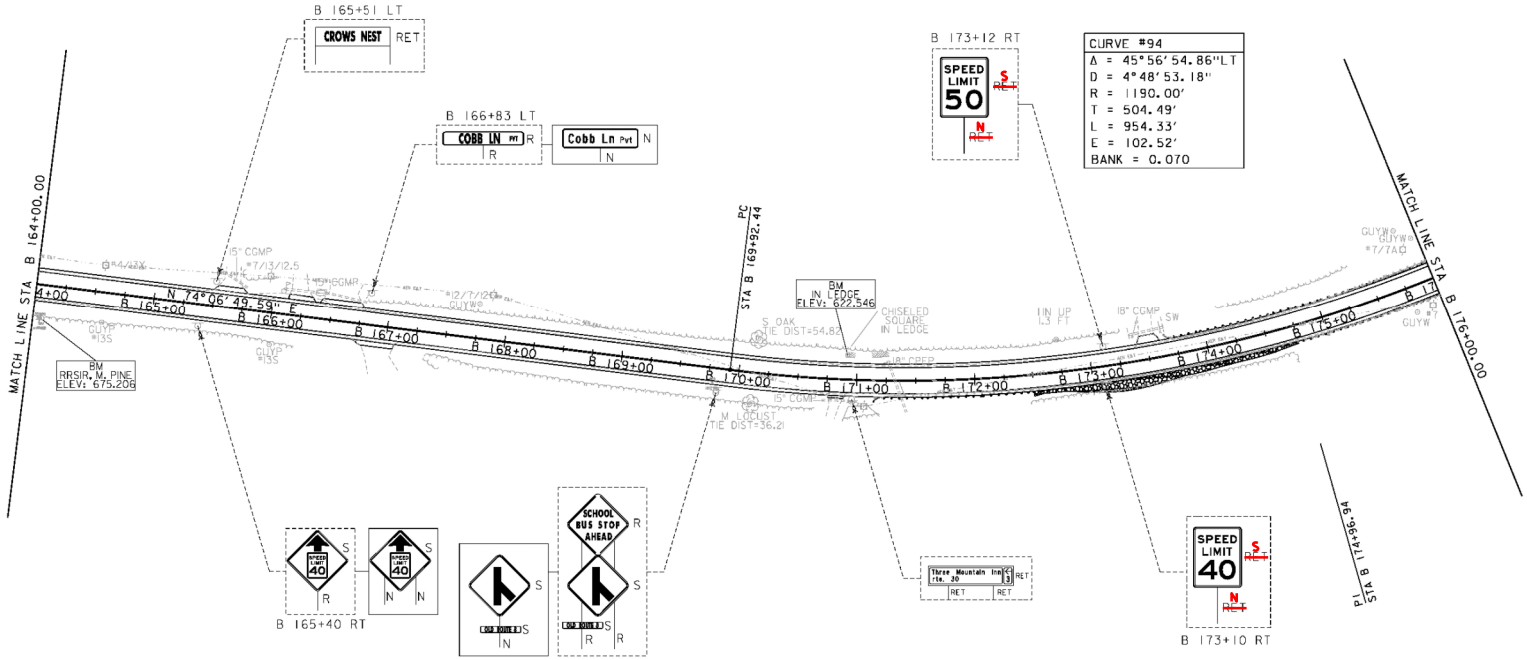
STONE FILL, TYPE I
STA B 172+50 - STA B 174+75 RT

GRUBBING MATERIAL
STA B 172+50 - STA B 174+75 RT

GEOTEXTILE FOR SILT FENCE
STA B 172+50 - STA B 174+75 RT

RELOCATE MAILBOX, SINGLE SUPPORT
STA B 166+08 LT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA B 132+92 - STA B 176+45 (SOLID LT + RT)

0 50 100
SCALE IN FEET

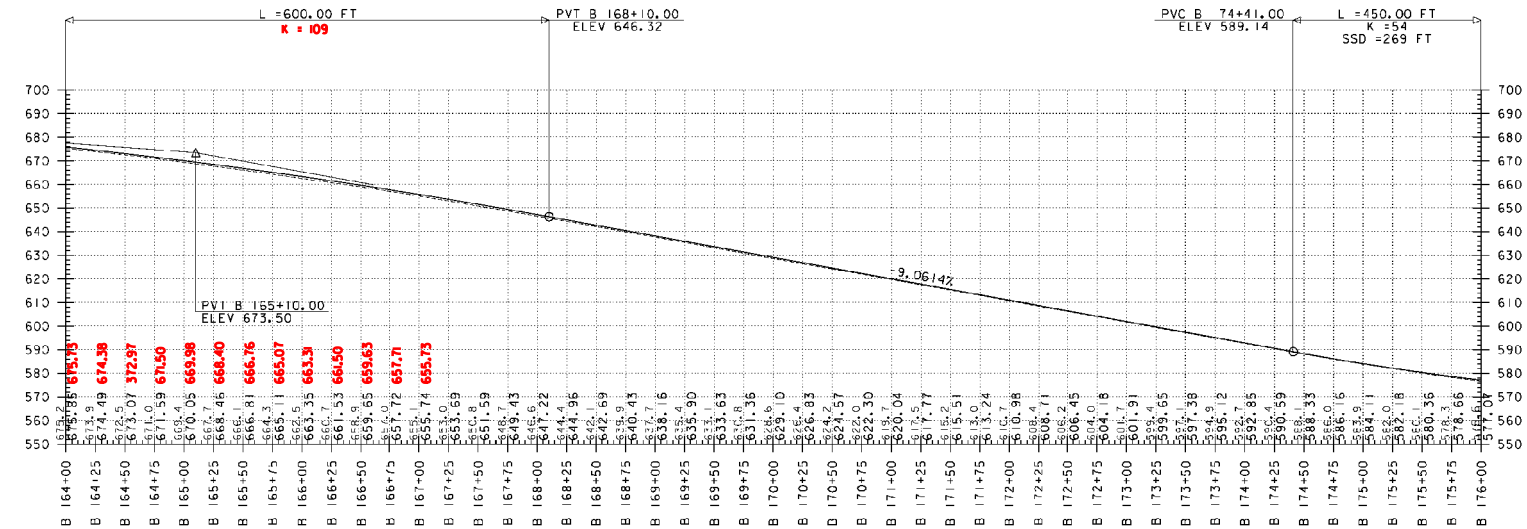
SIGN LEGEND

| | | |
|---|---|---|
| R | = | REMOVE |
| S | = | SALVAGE |
| N | = | NEW |
| RET | = | RETAIN |
| T&T | = | THINNING & TRIMMING |
| B-B | = | BACK TO BACK |
| EXISTING | = | ---------- |
| NEW | = | ———— |

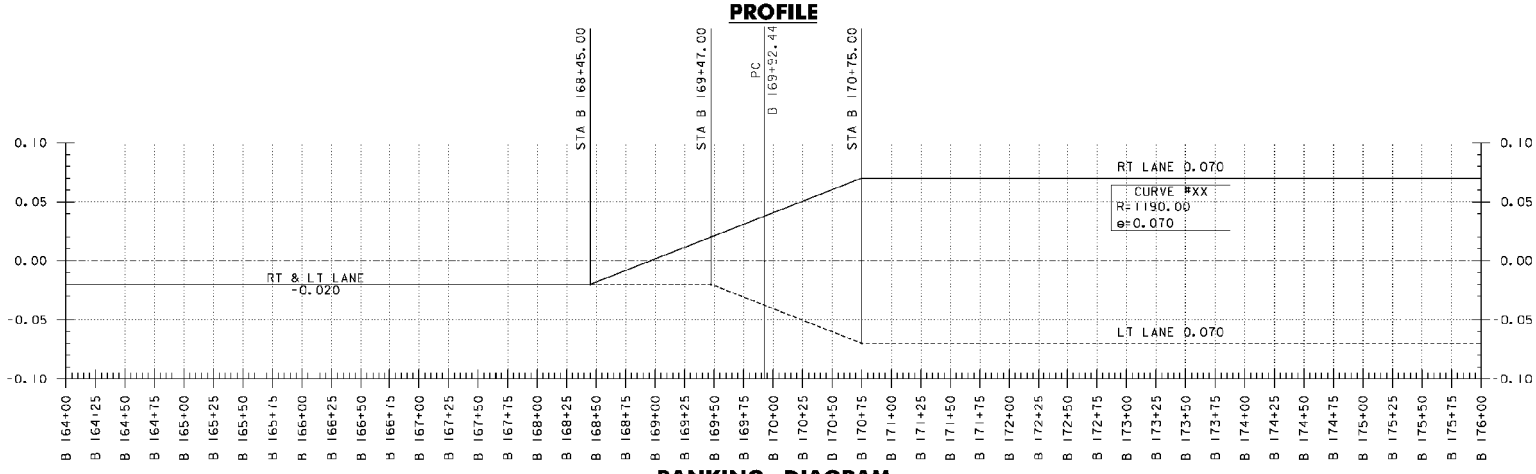
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 47

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 145 OF 444




**PROFILE**




**BANKING DIAGRAM**

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d120236.pro.bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 146 OF 444

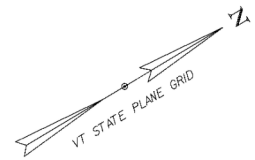
STEEL BEAM GUARDRAIL, GALVANIZED W/ 8 FT POSTS
STA B 171+27 - STA B 176+25 RT
STA B 173+78 - STA B 179+61 LT
STA B 176+54 - STA B 179+55 RT

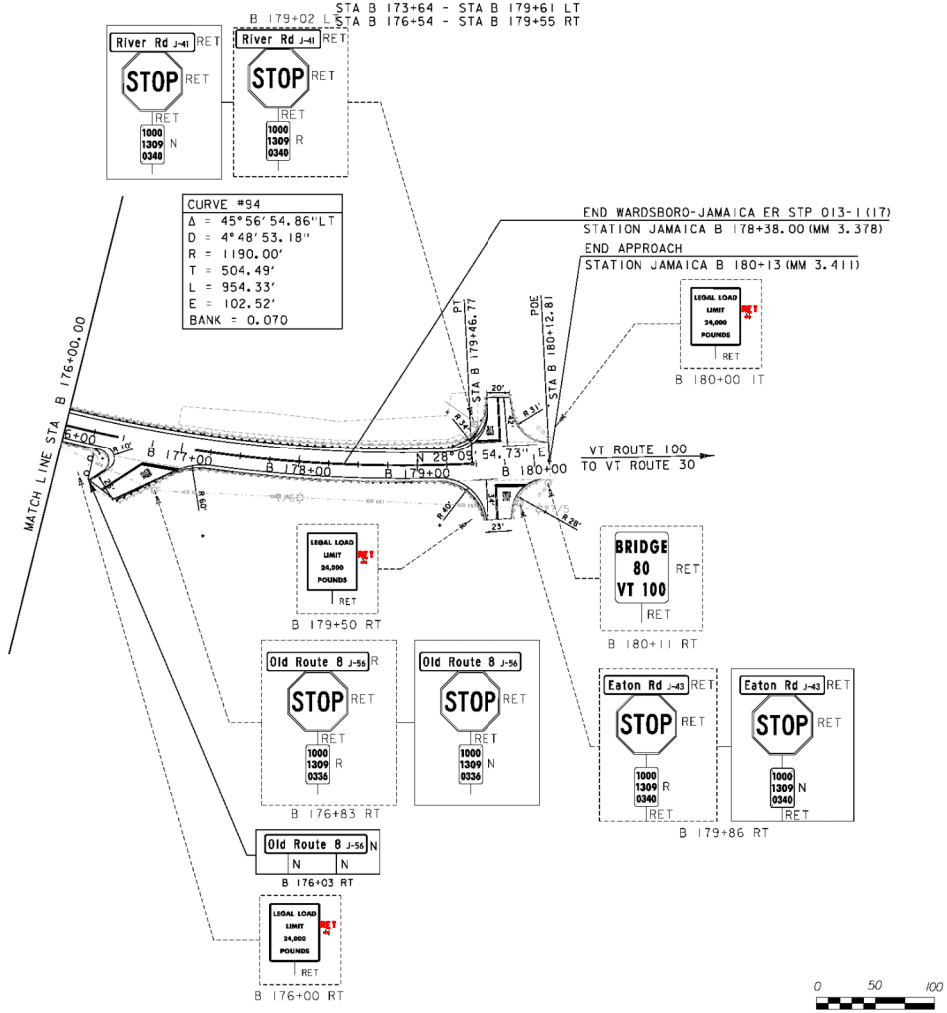
STEEL BEAM GUARDRAIL, GALVANIZED
STA B 176+25 - STA B 176+38 RT

ANCHOR FOR STEEL BEAM RAIL
STA B 176+29 RT

DELINEATOR WITH STEEL POSTS
STA B 176+29 RT

REMOVE AND DISPOSE OF GUARDRAIL
STA B 171+06 - STA B 176+37 RT
STA B 173+64 - STA B 179+61 LT
STA B 176+54 - STA B 179+55 RT




DURABLE 4 INCH WHITE LINE (SEE OPTION ITEMS)
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)
STA B 176+51 - STA B 179+56 (SOLID RT)

DURABLE 4 INCH YELLOW LINE (SEE OPTION ITEMS)
STA B 132+92 - STA B 176+45 (SOLID LT + RT)
STA B 177+11 - STA B 179+44 (SOLID LT + RT)

TEMPORARY 4 INCH WHITE LINE
STA B 123+92 - STA B 179+62 (SOLID LT)
STA B 133+01 - STA B 176+30 (SOLID RT)
STA B 176+51 - STA B 179+56 (SOLID RT)

TEMPORARY 4 INCH YELLOW LINE
STA B 132+92 - STA B 176+45 (SOLID LT)
STA B 177+11 - STA B 179+44 (SOLID RT)

DURABLE 24 IN STOP BAR (SEE OPTION ITEMS)
STA B 176+75 RT
STA B 179+46 LT
STA B 179+66 RT

DURABLE LETTER OR SYMBOL (SEE OPTION ITEMS)
STA B 176+75 RT "STOP"
STA B 179+66 LT "STOP"
STA B 179+75 RT "STOP"

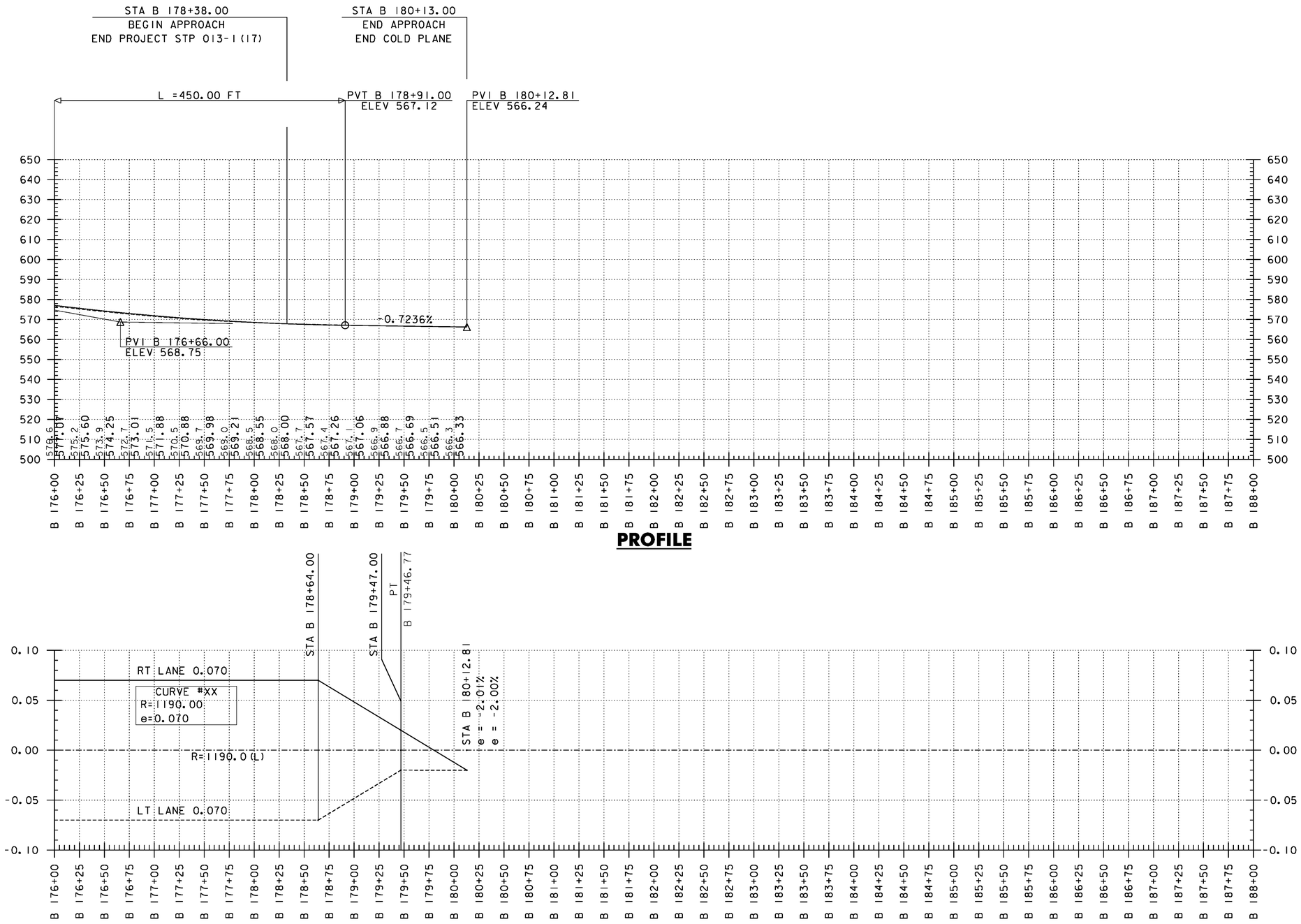
SIGN LEGEND

| | |
|---|---|
| R | = REMOVE |
| S | = SALVAGE |
| N | = NEW |
| RET | = RETAIN |
| T&T | = THINNING & TRIMMING |
| B-B | = BACK TO BACK |
| EXISTING | ---------- |
| NEW | _____ |

0 50 100
SCALE IN FEET

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d2b236_bdr.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLAN SHEET 48
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 147 OF 444




## PROFILE




## BANKING DIAGRAM

THE GRADES SHOWN TO THE NEAREST TENTH OF A FOOT ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH OF A FOOT ARE FINISH GRADES FOR THE PROPOSED ALIGNMENT. SUPERELEVATIONS ARE SHOWN IN PERCENTAGES.

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_pro_bnk
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
VT 100 PROFILE & BANKING DIAGRAM

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 148 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 1

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | TUBULAR STEEL Ø (in) FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 10+55, RT | 1000 1319 0020 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 13+03, LT | Meadow Wood Ln | 1 | 66 | 12 | 5.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 166 | |
| STA. A 15+28, RT | Turkwood Rd | 1 | 48 | 12 | 4.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 167 | |
| STA. A 20+56, LT | 1000 1319 0040 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 31+01, RT | 1000 1319 0060 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 31+90, RT | 11% / NEXT 1 MILE | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 41+48, RT | 1000 1319 0080 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 44+99, RT | ← | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 45+04, RT | → | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 46+85, RT | ← | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 46+97, RT | → | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 48+80, RT | Upper Podunk Rd | 1 | 66 | 12 | 5.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 167 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT<br>257 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| GRAND TOTALS | | SF<br>16.67 | SF | EA<br>6 | SF | | | | | | | FT | | | | FT<br>257 | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | | |

SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP.
FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

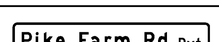
PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(37)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 1

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 149 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 2

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | 2.0 | 3.0 | SQUARE STEEL (in) lb/ft 1.75 2.16 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | TUBULAR STEEL Ø (in) FOUND-ATION | lb/ft 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 48+91, LT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| |  | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 52+80, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 62+99, LT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 73+92, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 80+16, RT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | VW-133 | | |
| STA. A 84+80, LT |  | 1 | 66 | 12 | 5.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 168 | |
| |  | 1 | 6 | 10 | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 92+19, RT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| |  | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 93+92, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 96+04, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 96+26, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 167 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| **GRAND TOTALS** | | SF 7.58 | SF | EA 7 | SF | | | | | | | FT | | | | FT 167 | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | | | |

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 2

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 3

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL | | | | SIGN FRAME REQUIRED | | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | 3.0 | 3.5 | 4.0 | 5.0 | FTG. SIZE | | WEIGHT | POST SIZE | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | 24" | 30" | | | | | | | |
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 98+35, LT |   | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 103+73, RT |  | 1 | 36 | 36 | 9.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | W3-5 | | |
| STA. A 106+06, RT |   | 1 | 6 | 10 | 0.42 | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 108+11, RT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 108+75, LT |   | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 112+14, LT |  | 1 | 72 | 12 | 6.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | 167 | |
| STA. A 112+75, LT |  | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | R1-1 | | E-143 |
| STA. A 113+27, RT |  | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | R2-1 | | E-142 |
| STA . A 114+81, RT |   | | | | | | X<br>X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA . A 116+16, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND TOTALS | | SF 27.08 | SF | EA 8 | SF | | | | | | | FT | FT | FT | FT | FT 188 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 3

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 4

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | 2.0 | 3.0 | SQUARE STEEL (in) lb/ft 2.0 2.16 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 119+29, LT | Cross Rd | 1 | 36 | 12 | 3.00 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | 165 | |
| STA. A 120+73, RT | Smead Rd | 1 | 36 | 12 | 3.00 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | INSTALL ONTOP OF EXISTING STOP SIGN ASSEMBLY | | 166 | |
| STA. A 122+34, LT | STOP | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| | 1000 1319 0233 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 122+60, LT | Newell Hill Rd | 1 | 54 | 12 | 4.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 166 | |
| STA. A 126+13, LT | 1000 1319 0240 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 134+40, LT | SPEED LIMIT 30 | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 136+69, RT | 1000 1319 0260 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 144+80, LT | Sheldon Hill Rd | 1 | 60 | 12 | 5.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 166 | |
| STA. A 144+85, LT | STOP | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | R1-1 | | E-143 |
| STA. A 146+66, RT | SPEED LIMIT 50 | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | R2-1 | | E-142 |
| STA. A 146+75, LT | SPEED LIMIT 30 | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 147+55, LT | 1000 1319 0280 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 149+27, LT | WEST WARDSBORO DOVER 8 | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 174 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | | |
| GRAND TOTALS | | SF 28.42 | SF | EA 4 | SF | | | | | | | FT | | | FT 174 | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | | | | |

SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP.
FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 4

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 5

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL FTG. SIZE | | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | | | | | 24" | 30" | | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | | | | | | | | |
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 151+86, LT | SPEED LIMIT 30 | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | |
| STA. A 158+11, RT | 1000 1319 0300 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. A 168+96, LT | 1000 1319 0320 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. A 175+31, RT | BRIDGE 70 VT 100 | 1 | 6 | 8 | 0.33 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | VD-701 | | E-134 |
| STA. A 175+58, LT | BRIDGE 70 VT 100 | 1 | 6 | 8 | 0.33 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | VD-701 | | E-134 |
| STA. A 170+59, LT | Fitts Rd<br>STOP | 1 | 30 | 12 | 2.50 | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | 165 | |
| STA. A 188+95, LT | 1000 1319 0360 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | E-138 |
| STA. A 200+48, RT | STOP<br>1000 1319 0383 | 1 | 6 | 10 | 0.42 | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | E-138 |
| STA. A 200+57, RT | Lower Podunk Rd | 1 | 66 | 12 | 5.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | 165 | |
| STA. A 211+20, LT | 1000 1319 0400 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | E-138 |
| STA. A 215+90, RT | 35 MPH | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | E-151 |
| STA. A 218+12, RT | | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 183 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | |
| GRAND TOTALS | | SF 10.75 | SF | EA 6 | SF | | | | | | | FT | | | | FT 183 | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | |

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FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 5

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 153 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 6

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | SIGN DIMENSIONS WIDTH (in) | SIGN DIMENSIONS HEIGHT (in) | NEW & SALVAGED SIGNS "A" | NEW & SALVAGED SIGNS "B" | NEW & SALVAGED SIGNS SALV SIGN | NEW & SALVAGED SIGNS SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | TUBULAR STEEL FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 218+21, RT | → | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 220+69, RT | ← | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 220+83, RT | → | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA A. 221+55, RT | ← | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| | 1000 1319 0420 | 1 | 6 | 10 | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA A 221+60, RT | → | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 223+94, LT | ↱ | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| | 35 MPH | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 232+11, RT | 1000 1319 0440 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 242+67, RT | 1000 1319 0460 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 252+43, RT | 1000 1319 0480 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 254+45, LT | Bills Rd | 1 | 30 | 12 | 2.50 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | 165 | |
| | STOP | | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1000 1319 0483 | 1 | 6 | 10 | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **GRAND TOTALS** | | SF 4.58 | SF | EA 8 | SF | | | | | | | FT | FT | FT | FT | FT 204 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

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FYG = FLUORESCENT YELLOW GREEN

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 6

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 154 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 7

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | TUBULAR STEEL Ø (in) FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 254+75, LT | LEGAL LOAD LIMIT 24,000 POUNDS<br>SPEED LIMIT 25 | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 262+99, RT | 1000 1319 0500 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 272+93, RT | Gillfeather Rd | 1 | 54 | 12 | 4.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | 165 | |
| STA. A 272+99, LT | Bills Rd<br>STOP<br>1000 1319 0520 | 1<br><br>1 | 30<br><br>6 | 12<br><br>10 | 2.50<br><br>0.42 | | <br>X<br> | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | 165 | E-138 |
| STA. A 273+37, RT | 1000 1319 0520 | 1 | 6 | 10 | 0.42 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 273+47, LT | LEGAL LOAD LIMIT 24,000 POUNDS | 1 | 24 | 30 | 5.00 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | VR-017 | | | E-141 |
| STA. A 284+20, RT | BRIDGE 73 VT 100 | 1 | 6 | 8 | 0.33 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | VD-701 | | E-134 |
| STA. A 284+50, LT | BRIDGE 73 VT 100 | 1 | 6 | 8 | 0.33 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | VD-701 | | E-134 |
| STA. A 284+75, RT | 1000 1319 0540 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 294+85, LT | 1000 1319 0560 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 300+58, RT | <br>35 MPH | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND TOTALS | | SF 14.75 | SF | EA 5 | SF | | | | | | | FT | FT | FT | FT | FT 130 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | |

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FYG = FLUORESCENT YELLOW GREEN

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PROJECT NAME: WARDSBORO - JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 7

PLOT DATE: 3/18/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 155 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 8

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | 2.0 | 3.0 | SQUARE STEEL (in) lb/ft 1.75 2.16 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 305+10, RT |   | 1 | 6 | 10 | 0.42 | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 306+72, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 306+80, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 308+35, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 312+36, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 314+92, LT. |   | | | | | | X X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 315+45, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 320+99, RT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 326+26, RT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| STA. A 326+28, LT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP. FYG = FLUORESCENT YELLOW GREEN | | | | | | | | | | | | FT | FT | FT | FT | FT 233 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE." | **GRAND TOTALS** | | SF 0.83 | SF | EA 10 | SF | | | | | | FT | | | FT 233 | | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | | | | |

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 8

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 156 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 9

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL | | | | SIGN FRAME REQUIRED | | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | 3.0 | 3.5 | 4.0 | 5.0 | FTG. SIZE 24" | FTG. SIZE 30" | WEIGHT | POST SIZE | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | | | | | | | | | |
| | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 327+36, RT | 1000 1319 0620 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 335+75, LT | WATCH FOR TURNING VEHICLES | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 337+11, RT | 1000 1319 0640 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | PLACE IN SAME LOCATION AS EXISTING | | | E-138 |
| STA. A 342+09, LT | STOP<br>1000 1319 0651 | 1 | 6 | 10 | 0.42 | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 342+13, LT | Fornuto Rd | 1 | 42 | 12 | 3.50 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | 165 | |
| STA. A 343+42, LT | Main St | 1 | 30 | 12 | 4.50 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | INSTALL ON TOP OF EXISTING STOP SIGN | | 166 | |
| STA. A 347+00, RT. | STOP<br>1000 1319 0660 | 1<br>1 | 30<br>6 | 30<br>10 | 6.25<br>0.42 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | R1-1 | | E-143<br>E-138 |
| STA. A 347+02, RT. | S. Wardsboro Rd | 1 | 60 | 12 | 6.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | 167 | |
| STA. A 357+62, RT | 1000 1319 0680 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 366+46, LT | Wardsboro Country Store 3 mi<br>Fitzpatrick Excavating 1 mi | | | | | | X<br>X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | E-125 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **GRAND TOTALS** | | SF 19.33 | SF | EA 4 | SF | | | | | | | FT | FT | FT | FT | FT 144 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP.
FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 010-1(37)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 9

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: C. LEACH
SHEET 157 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 10

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAMEMENT REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. A 367+09, RT |  | 1 | 36 | 36 | 9.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | S1-1 | | E-153 |
| | SCHOOL | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | S4-3 | | E-153 |
| | 1000 1319 0700 | 1 | 6 | 10 | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 368+56, LT | Our Lady of Ephesus House of Prayer 2½ | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | E-125 |
| STA. A 372+73, RT | ← WARDSBORO ELEMENTARY SCHOOL | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 373+41, LT | School Rd | 1 | 36 | 12 | 3.00 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | 166 | | |
| STA. A 378+94, RT | 1000 1319 0720 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. A 380+00, LT |  | 1 | 36 | 36 | 9.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | S1-1 | | E-153 |
| | SCHOOL | 1 | 36 | 12 | 3.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | S4-3 | | E-153 |
| STA. A 383+31, LT | SPEED LIMIT 40 | 1 | 30 | 36 | 7.50 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | R2-1 | | E-142 |
| STA. A 383+46, RT | SPEED LIMIT 50 | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. A 387+94, RT | Jamaica Wardsboro | 1 | 72 | 12 | 6.00 | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | PLACE ON RETAINED POSTS AND MILE MARKERS | | 165 | |
| STA. B 1+88, LT | SPEED LIMIT 40 | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 8+86, RT | SHOULDER NARROWS | 1 | 36 | 36 | 9.0 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | VW-619 | | | E-151 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND TOTALS | | SF 50.33 | SF | EA 4 | SF | | | | | | | FT | FT | FT | FT | FT 218 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

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FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 10

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 158 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 11

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUND-ATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL FTG. SIZE | | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | | | | | 24" | 30" | | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | | | | | | | | |
| | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. B 11+49, RT | 1000 1309 0020 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. B 21+21, LT | 1000 1309 0040 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. B 31+06, LT | | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | |
| STA. B 31+11, LT | | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | |
| STA. B 32+18, LT | | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | |
| STA. B 32+25, LT | 1000 1309 0060 | 1 | 6 | 10 | 0.42 | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. B 36+34, LT | 25 MPH | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | |
| STA. B 42+37, RT | 1000 1309 0080 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. B 52+79, RT | 1000 1309 0100 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | E-138 |
| STA. B 55+26, RT | 35 MPH | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | |
| STA. B 57+13, RT | | 1 | 36 | 36 | 6.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | S3-1 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| GRAND TOTALS | | SF 11.08 | SF | EA 8 | SF | | | | | | | FT | FT | FT | FT | FT 212 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | |

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET II

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 159 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 12

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | SIGN DIMENSIONS WIDTH (in) | SIGN DIMENSIONS HEIGHT (in) | NEW & SALVAGED SIGNS "A" | NEW & SALVAGED SIGNS "B" | NEW & SALVAGED SIGNS SALV SIGN | NEW & SALVAGED SIGNS SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | TUBULAR STEEL FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. B 62+85, LT | 1000 1309 0120 | 1 | 6 | 10 | 0.42 | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 65+50, LT | 35 MAX | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 69+21, RT | | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 73+20, LT | | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 74+35, RT | 1000 1309 0140 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 84+48, LT | 1000 1309 0160 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| GRAND TOTALS | | SF 1.25 | SF | EA 5 | SF | | | | | | | FT | FT | FT | FT | FT 91 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 12

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 160 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 13

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | SIGN DIMENSIONS WIDTH (in) | SIGN DIMENSIONS HEIGHT (in) | NEW & SALVAGED SIGNS "A" | NEW & SALVAGED SIGNS "B" | NEW & SALVAGED SIGNS SALV SIGN | NEW & SALVAGED SIGNS SALV TIS | EXIST POST RETAIN | EXIST POST SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | FLANGED CHANNEL lb/ft 2.0 | FLANGED CHANNEL lb/ft 3.0 | SQUARE STEEL (in) 1.75 lb/ft 2.16 | SQUARE STEEL (in) 2.0 lb/ft 2.42 | SQUARE STEEL (in) 2.5 lb/ft 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) 3.0 lb/ft 1.3 | TUBULAR ALUMINUM Ø (in) 4.0 lb/ft 1.7 | TUBULAR ALUMINUM Ø (in) 4.0 MOD lb/ft 1.7 | TUBULAR STEEL Ø (in) FOUNDATION | TUBULAR STEEL Ø (in) 3.0 lb/ft 7.6 | TUBULAR STEEL Ø (in) 3.5 lb/ft 9.0 | TUBULAR STEEL Ø (in) 4.0 lb/ft 10.8 | TUBULAR STEEL Ø (in) 5.0 lb/ft 14.6 | W-SHAPE STEEL FTG. SIZE 24" | W-SHAPE STEEL FTG. SIZE 30" | W-SHAPE STEEL WEIGHT | W-SHAPE STEEL POST SIZE | SIGN FRAMES REQUIRED | REMARKS | SIGN DETAIL SHSM | SIGN DETAIL DETAIL ON SHEET NUMBER | SIGN DETAIL STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. B 92+22, RT |   | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 95+44, LT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 95+47, LT |   | 1 | 6 | 10 | 0.42 | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 97+02, LT |  | 1 | 48 | 24 | 8.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | E-152 |
| STA. B 97+11, LT |  | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 100+66, LT |   | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 105+60, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 113+22, RT |  | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | |
| STA. B 114+63, RT |  | 1 | 60 | 12 | 5.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 168 | |
| STA. B 116+16, RT |  | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 119+30, RT |  | 1 | 54 | 12 | 4.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | 166 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| **GRAND TOTALS** | | | | | SF 18.75 | SF | EA 8 | SF | | | | FT | FT | FT | FT | FT 241 | FT | | EA | LB | LB | LB | EA | LB | LB | LB | LB | EA | EA | LB | | | | | | |

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PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 13

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 161 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 14

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS EA | WIDTH (in) | HEIGHT (in) | NEW & SALVAGED SIGNS "A" | "B" | SALV SIGN | SALV TIS | EXIST POST RETAIN | SALVAGE | NEW SIGN POSTS NO. OF POSTS | FLANGED CHANNEL lb/ft 1.12 | 2.0 | 3.0 | SQUARE STEEL (in) lb/ft 1.75 2.16 | 2.0 2.42 | 2.5 3.35 | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3 | 4.0 1.7 | 4.0 MOD 1.7 | FOUNDATION | TUBULAR STEEL Ø (in) lb/ft 3.0 7.6 | 3.5 9.0 | 4.0 10.8 | 5.0 14.6 | W-SHAPE STEEL FTG. SIZE 24" | 30" | WEIGHT | POST SIZE | SIGN FRAME REQUIRED | REMARKS | SIGN DETAIL SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. B 123+50, LT | Henderson Rd J-42B | 1 | 72 | 12 | 6.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | 165 | |
| STA. B 126+76, RT | 1000 1309 0240 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 133+11, RT | STOP | 1 | 30 | 30 | 6.25 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | R1-1 | | E-143 |
| | 1000 1309 0253 | 1 | 6 | 10 | 0.42 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 133+14, RT | Old Route 8 J-56 | 1 | 66 | 12 | 5.42 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | 166 | |
| STA. B 133+36, LT | | | | | | | X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | | |
| STA. B 137+25, LT | 1000 1309 0260 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 147+07, LT | 1000 1309 0280 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 155+47, LT | Pineapple Hill Ln Pvt | 1 | 72 | 12 | 6.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | 168 | |
| STA. B 158+47, RT | 1000 1309 0300 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 161+75, RT | Cushing Ln Pvt | 1 | 60 | 12 | 5.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | 168 | |
| STA. B 165+40, RT | SPEED LIMIT 40 | | | | | | X | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | | |
| STA. B 166+83, LT | Cobb Ln Pvt | 1 | 48 | 12 | 4.00 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | | | 168 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 278 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | | |
| **GRAND TOTALS** | | SF 34.83 | SF | EA 2 | SF | | | | | | | FT | | | FT 278 | | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | | | |

SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP.
FYG = FLUORESCENT YELLOW GREEN

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 14

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 162 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 15

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | REMARKS | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUNDATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL | | | | SIGN FRAME REQUIRED | | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | 3.0 | 3.5 | 4.0 | 5.0 | FTG. SIZE 24" | FTG. SIZE 30" | WEIGHT | POST SIZE | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | | | | | | | | | |
| | | | | | | | | | | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| STA. B 169+82, RT |  Old Route 8 | | | | | | X<br>X | | | | 1 | | | | | 15.0 | | X | | | | | | | | | | | | | | | PLACE SIGN AND PLAQUE ON NEW SINGLE POST | | | |
| STA. B 176+00, RT | LEGAL LOAD LIMIT 34,000 POUNDS | 1 | 24 | 30 | 5.00 | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | E-141 |
| STA. B 176+03, RT | Old Route 8 J-56 | 1 | 66 | 12 | 5.50 | | | | | | 2 | | | | | 30.0 | | X | | | | | | | | | | | | | | | | | 166 | |
| STA. B 176+83, RT | 1000 1309 0336 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 179+02, LT | 1000 1309 0340 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| STA. B 179+86, RT | 1000 1309 0340 | 1 | 6 | 10 | 0.42 | | | | | | 1 | | | | | 8.0 | | X | | | | | | | | | | | | | | | | | | E-138 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# TRAFFIC SIGN SUMMARY SHEET 16

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | | | NEW & SALVAGED SIGNS | | | | EXIST POST | | NEW SIGN POSTS | | | | | | | | | | | | | | | | | | | | SIGN DETAIL | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | EA | WIDTH (in) | HEIGHT (in) | "A" | "B" | SALV SIGN | SALV TIS | RETAIN | SALVAGE | NO. OF POSTS | FLANGED CHANNEL lb/ft | | | SQUARE STEEL (in) lb/ft | | | ANCHOR | SLEEVE | TUBULAR ALUMINUM Ø (in) lb/ft | | | FOUNDATION | TUBULAR STEEL Ø (in) lb/ft | | | | W-SHAPE STEEL | | | | SIGN FRAMME REQUIRED | REMARKS | SHSM | DETAIL ON SHEET NUMBER | STD. SHEET NUMBER |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | FTG. SIZE | | WEIGHT | POST SIZE | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | 24" | 30" | | | | | | | |
| | | | | | | | | | | | | 1.12 | 2.0 | 3.0 | 1.75 | 2.0 | 2.5 | | | 3.0 | 4.0 | 4.0 MOD | | 3.0 | 3.5 | 4.0 | 5.0 | | | | | | | | |
| | | | | | | | | | | | | | | | 2.16 | 2.42 | 3.35 | | | 1.3 | 1.7 | 1.7 | | 7.6 | 9.0 | 10.8 | 14.6 | | | | | | | | |
| | | OPTION ITEMS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 1 | | | | 16.67 | | 6 | | | | | | | | | 257 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 2 | | | | 7.58 | | 7 | | | | | | | | | 167 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 3 | | | | 27.08 | | 8 | | | | | | | | | 188 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 4 | | | | 28.42 | | 4 | | | | | | | | | 174 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 5 | | | | 10.76 | | 6 | | | | | | | | | 183 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 6 | | | | 4.58 | | 8 | | | | | | | | | 204 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 7 | | | | 14.76 | | 5 | | | | | | | | | 130 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 8 | | | | 0.83 | | 10 | | | | | | | | | 233 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 9 | | | | 19.33 | | 4 | | | | | | | | | 144 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 10 | | | | 50.33 | | 4 | | | | | | | | | 218 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 11 | | | | 11.10 | | 8 | | | | | | | | | 212 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 12 | | | | 1.26 | | 5 | | | | | | | | | 91 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 13 | | | | 18.75 | | 8 | | | | | | | | | 241 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 14 | | | | 34.85 | | 2 | | | | | | | | | 227 | | | | | | | | | | | | | | | | | | | |
| | TSS SHEET 15 | | | | 11.75 | | 2 | | | | | | | | | 61 | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | FT | FT | FT | FT | FT 2730 | FT | | EA | LB | LB | LB | | LB | LB | LB | LB | | | | | | | | |
| GRAND TOTALS | | | | | SF 258.00 | SF | EA 87 | SF | | | | FT | | | FT 2730 | | | | | LB | | | EA | LB | | | | EA | EA | LB | | | | |

SHS = 2004 FHWA STANDARD HIGHWAY SIGNS & MARKINGS/2012 SUPP.
FYG = FLUORESCENT YELLOW GREEN

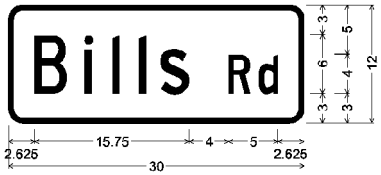
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."

PROJECT NAME: WARDSBORO JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

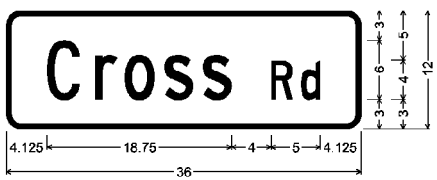
FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
TRAFFIC SIGN SUMMARY SHEET 16

PLOT DATE: 2/26/2014
DRAWN BY: C. LEACH
CHECKED BY: B. KIPP
SHEET 164 OF 444

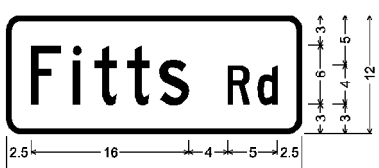
# SIGN DETAIL SHEET 1



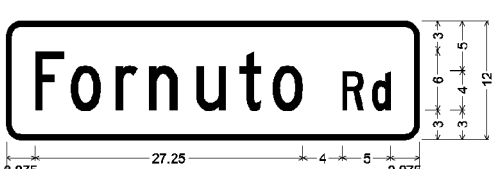

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[BILLS RD] C;



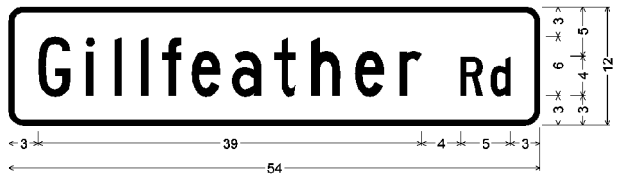

1.500" Radius, 0.500" Border, White on Green;
[Cross Rd] C;



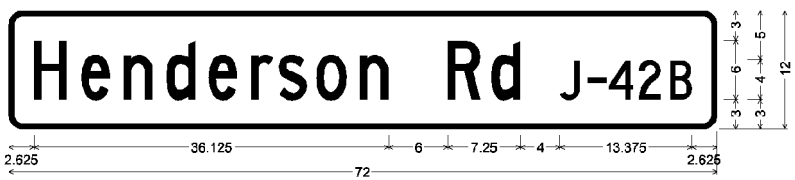

1.500" Radius, 0.500" Border, White on Green;
[Fitts Rd] C;



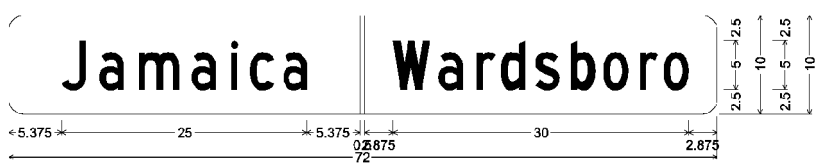

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[FORNUTO RD] C;



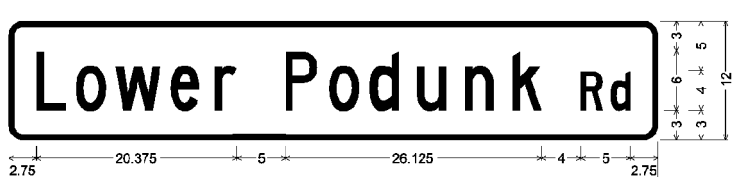

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[~~GILLFEATHER~~ GILFEATHER RD] C;




1.500" Radius, 0.500" Border, White on Green;
[Henderson Rd J-42B] C 90% spacing;




VD-024; 1.500" Radius, No border, White on Green;
[Jamaica] C specified length; [Wardsboro] C specified length;



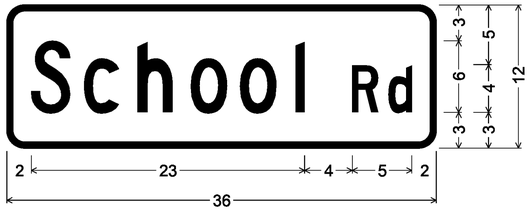

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[LOWER PODUNK RD] C;

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| SIGN DETAIL SHEET 1 | SHEET 165 OF 444 |

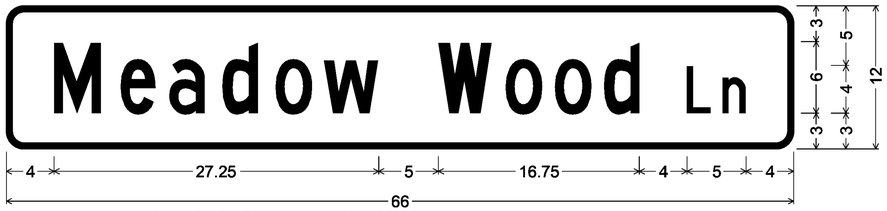
# SIGN DETAIL SHEET 2



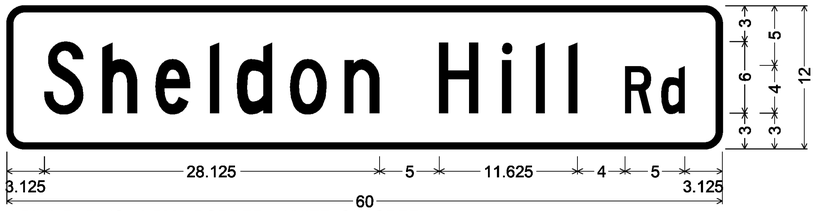

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[MAIN ST] C;



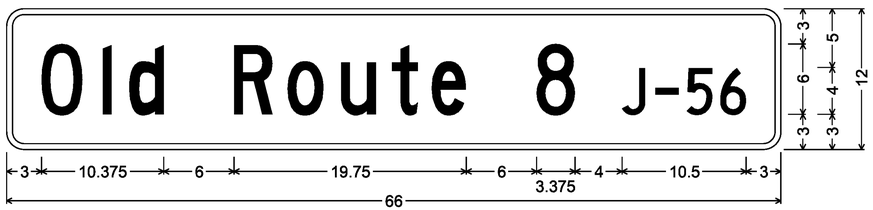

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[SCHOOL RD] C;



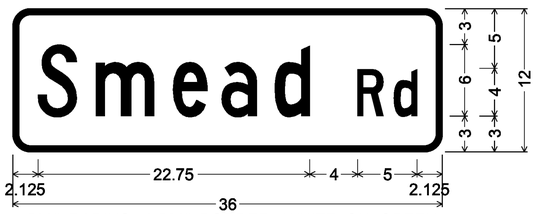

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[MEADOW WOOD LN] C;




1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[SHELDON HILL RD] C;



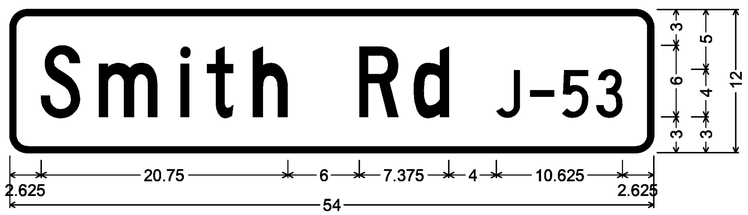

1.500" Radius, 0.500" Border, White on Green;
[Old Route 8 J-56] C;




1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[SMEAD RD] C;



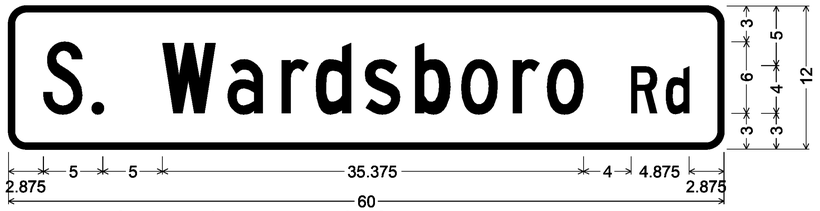

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[NEWELL HILL RD] C;




1.500" Radius, 0.500" Border, White on Green;
[Smith Rd J-53] C;

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| SIGN DETAIL SHEET 2 | SHEET 166 OF 444 |

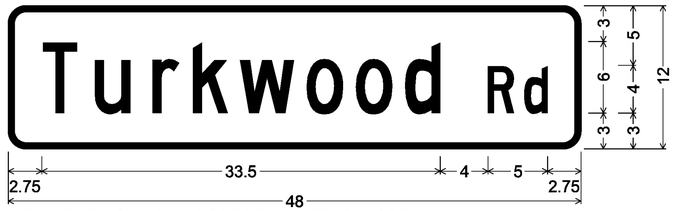
# SIGN DETAIL SHEET 3



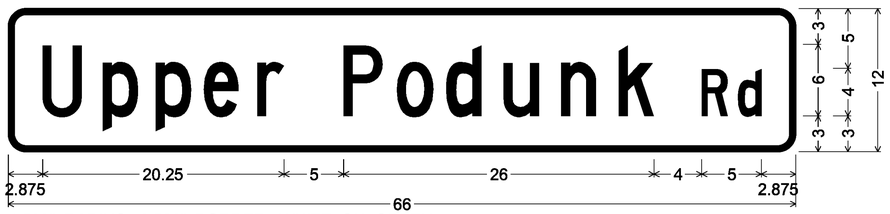

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[S. WARDSBORO RD] C 85% SPACING;




1.500" RADIUS, 0.500" BORDER, WHITE ON Green;
[STRATTON ARLINGTON RD] C;



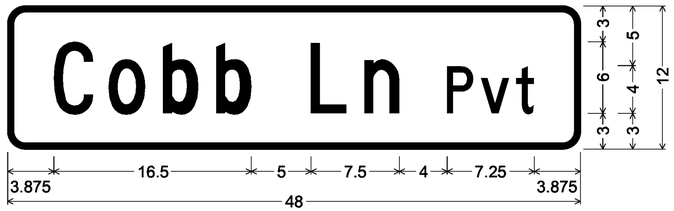

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[TURKWOOD RD] C;



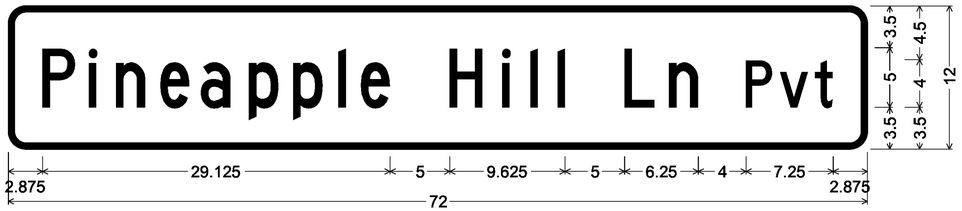

1.500" RADIUS, 0.500" BORDER, WHITE ON GREEN;
[UPPER PODUNK RD] C;

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| SIGN DETAIL SHEET 3 | SHEET 167 OF 444 |

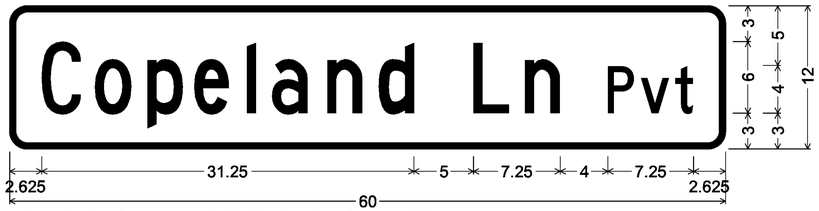
# SIGN DETAIL SHEET 4



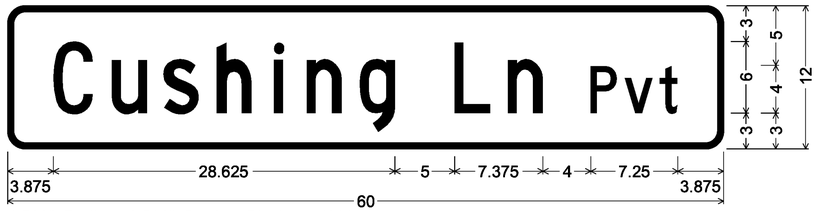

1.500" Radius, 0.500" Border, Black on White;
[Cobb Ln Pvt] C;



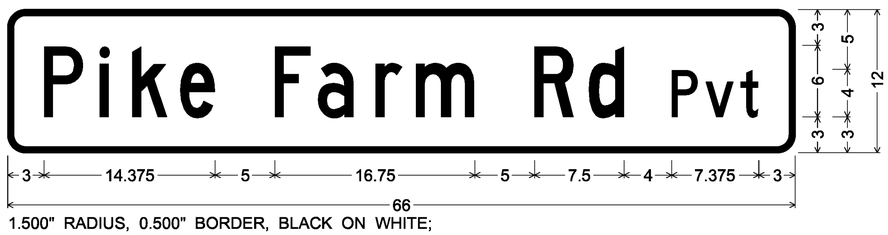

1.500" Radius, 0.500" Border, Black on White;
[Pineapple Hill Ln Pvt] C;




1.500" RADIUS, 0.500" BORDER, BLACK ON WHITE;
[COPELAND LN PVT] C 90% SPACING;



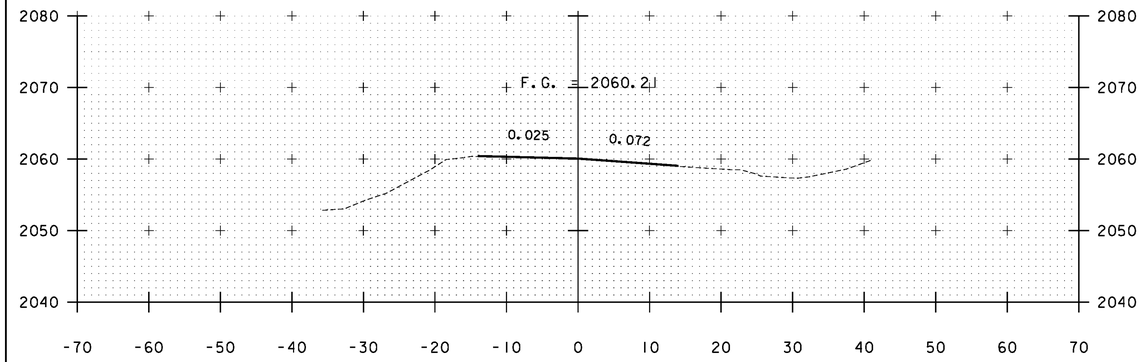

1.500" Radius, 0.500" Border, Black on White;
[Cushing Ln Pvt] C;



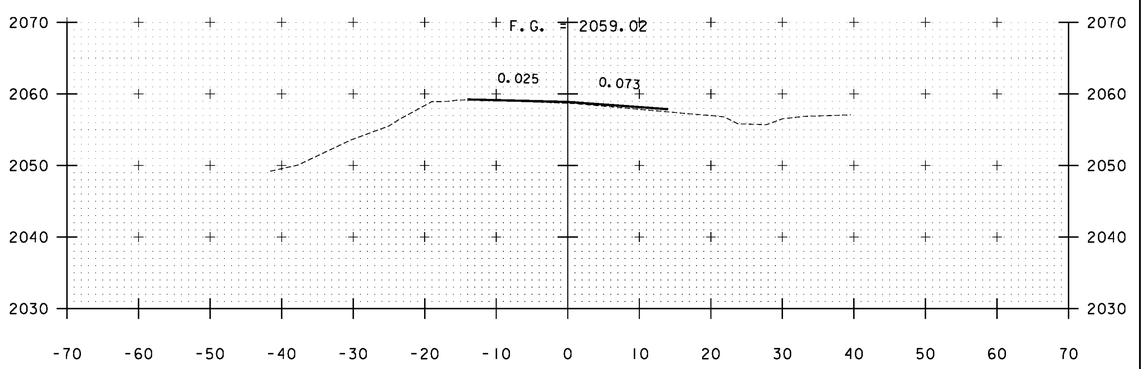

1.500" RADIUS, 0.500" BORDER, BLACK ON WHITE;
[PIKE FARM RD PVT] C;

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |

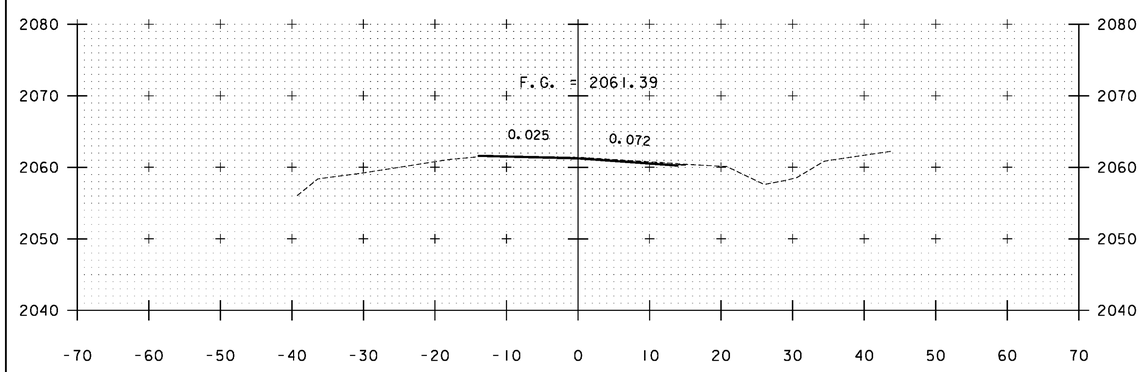
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|---|---|
| FILE NAME: dl2b236_det.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: A. KEMPTON |
| SIGN DETAIL SHEET 4 | SHEET 168 OF 444 |



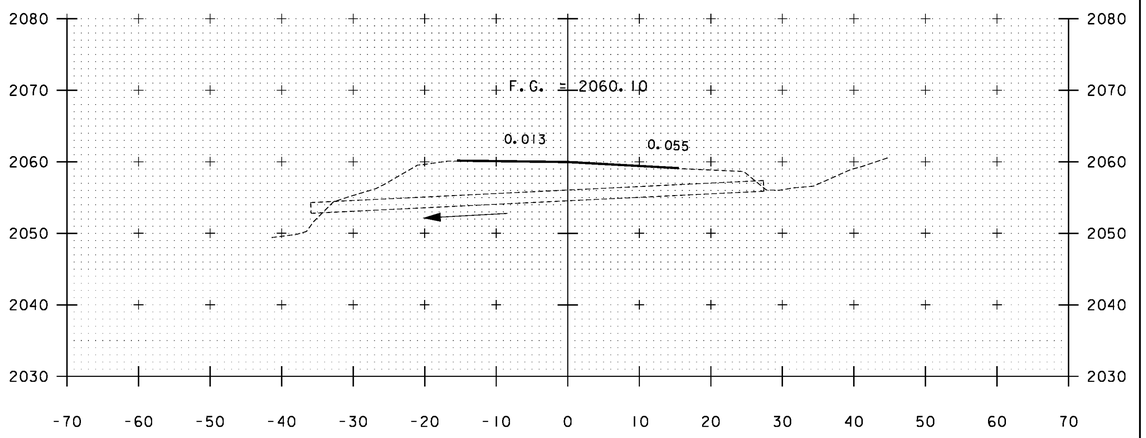

A 0+50




A 1+00



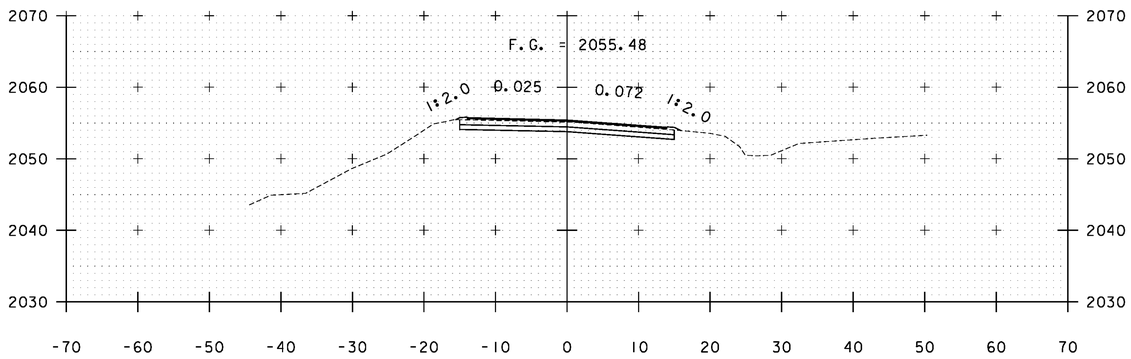

A 0+00



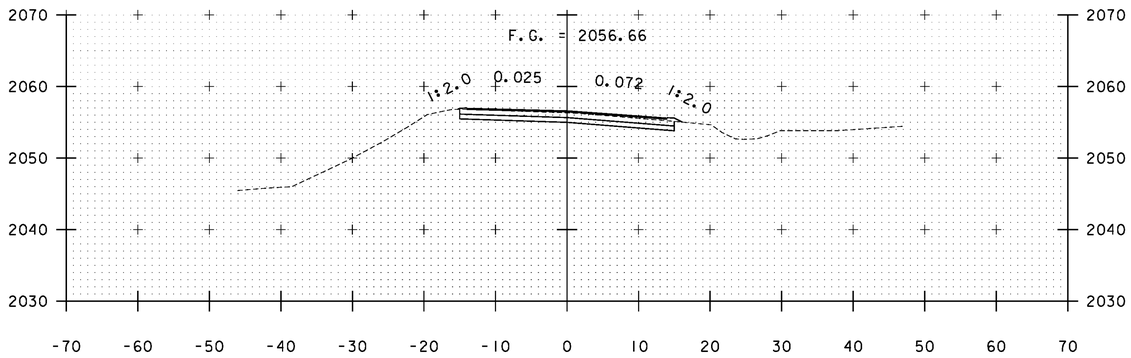

A 0+55

STA. A 0+00 TO STA. A 1+00

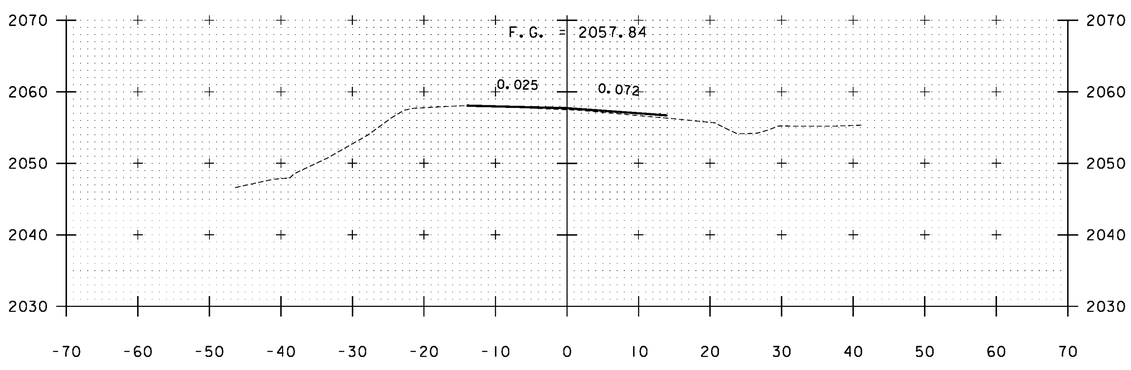
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 169 OF 444 |



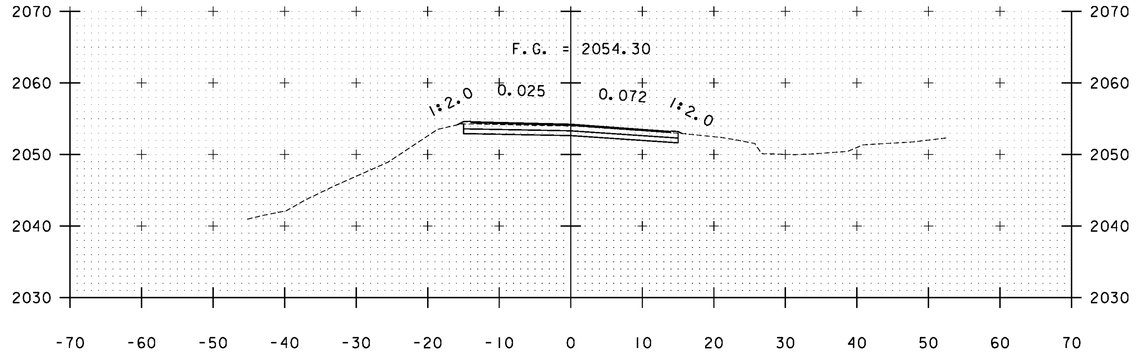

A 2+50



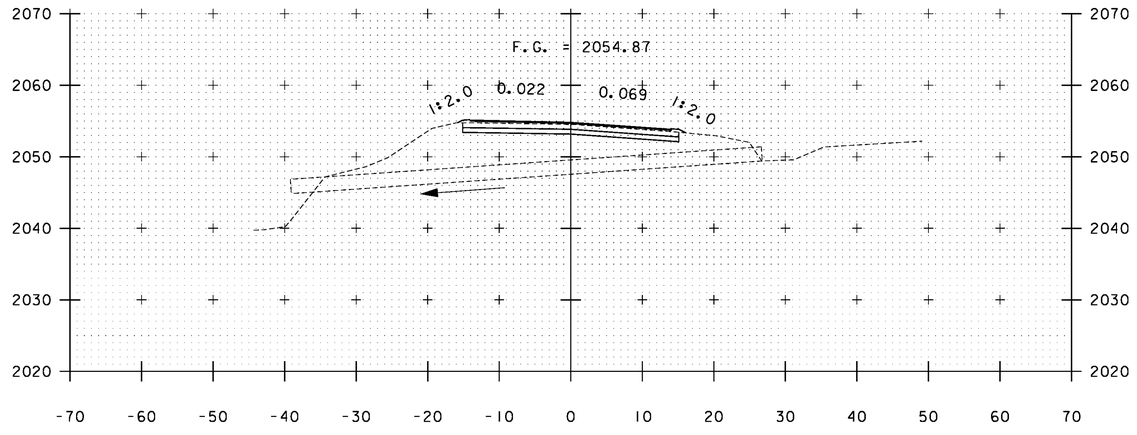

A 2+00




A 1+50




A 3+00



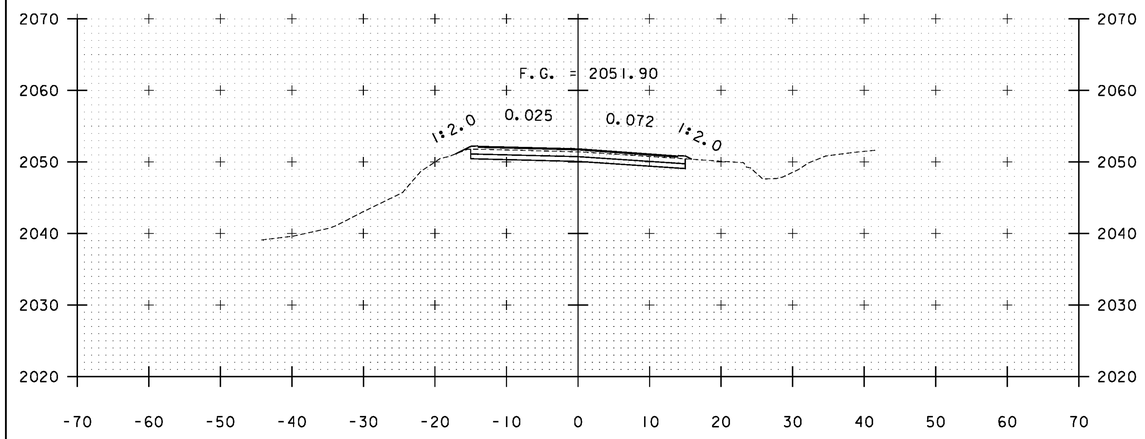

A 2+76

STA. A 1+50 TO STA. A 3+00

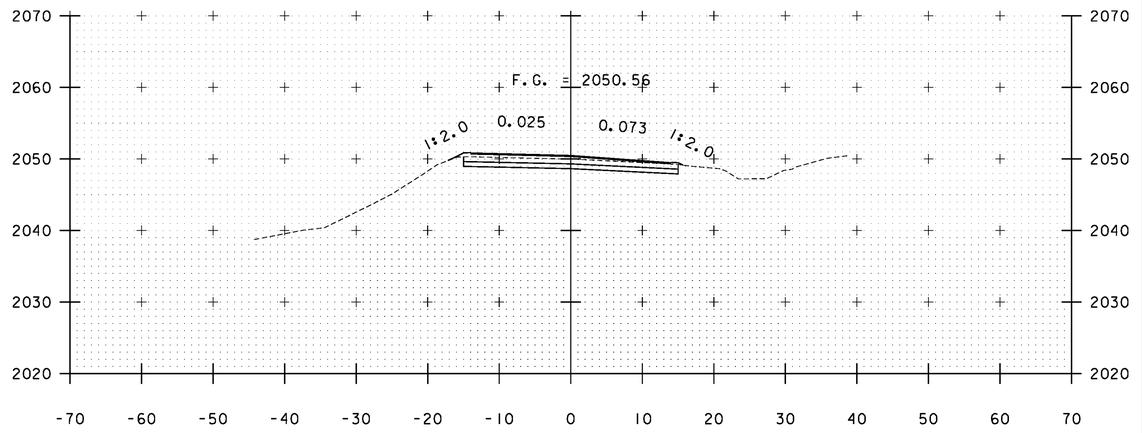
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

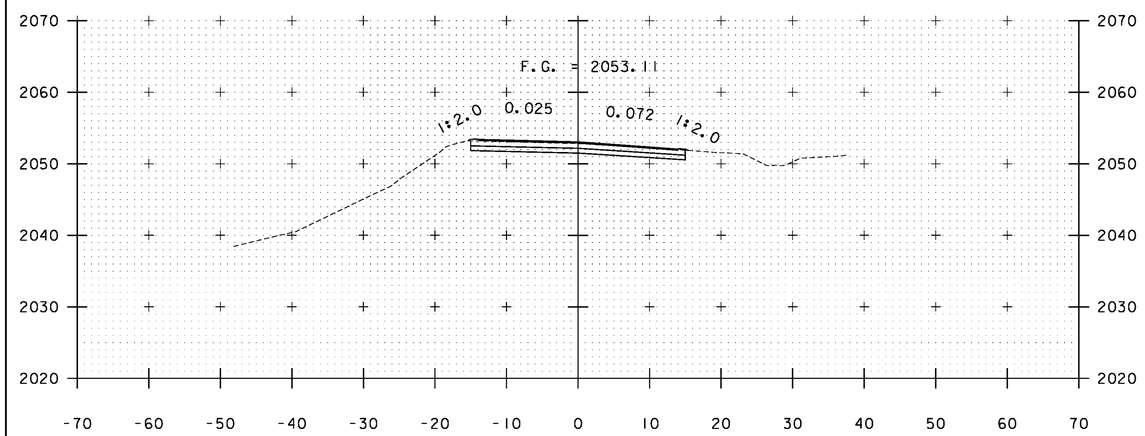
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 170 OF 444



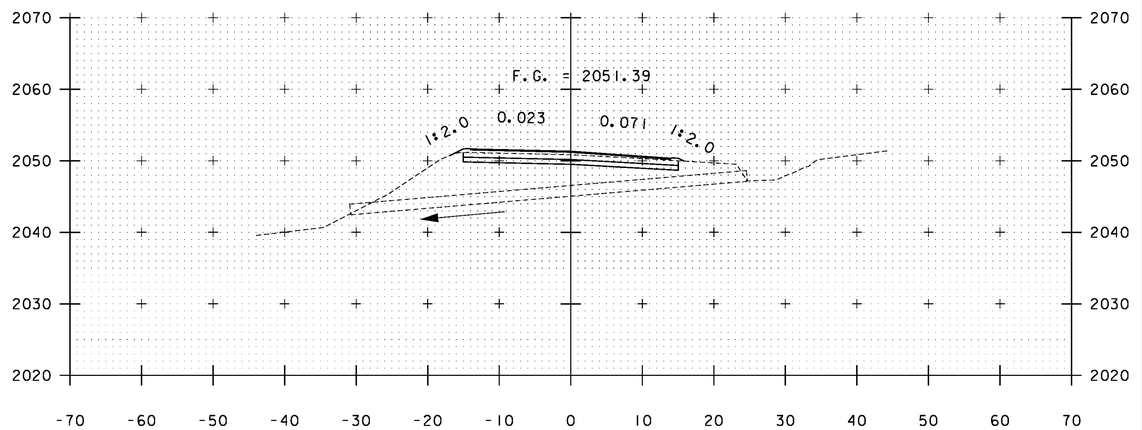

A 4+00




A 4+50




A 3+50



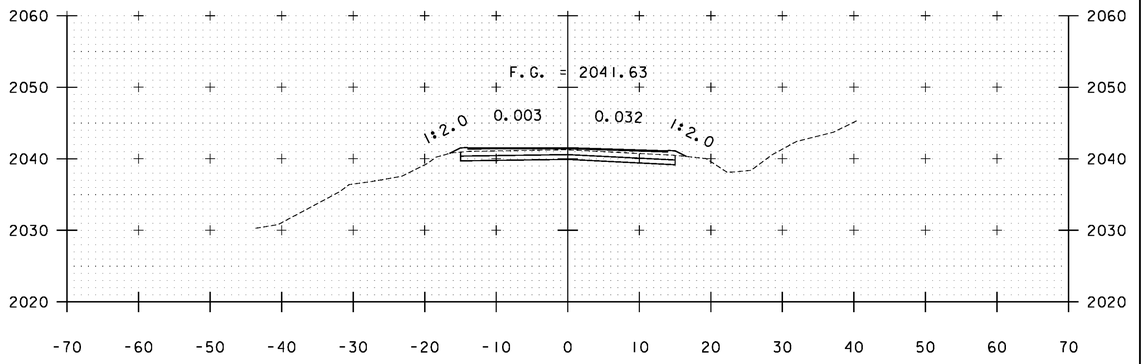

A 4+20

STA. A 3+50 TO STA. A 4+50

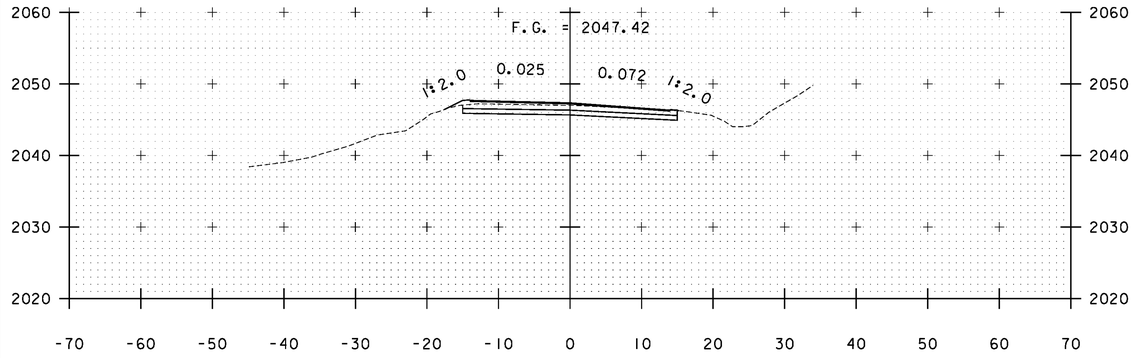
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

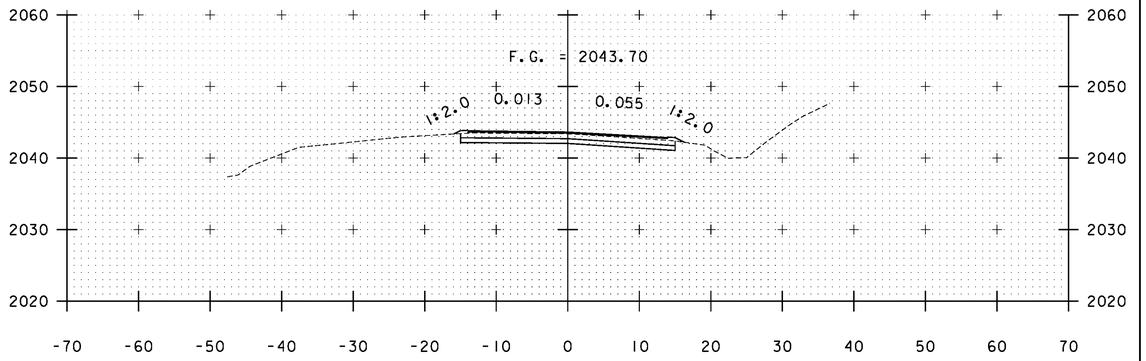
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 171 OF 444



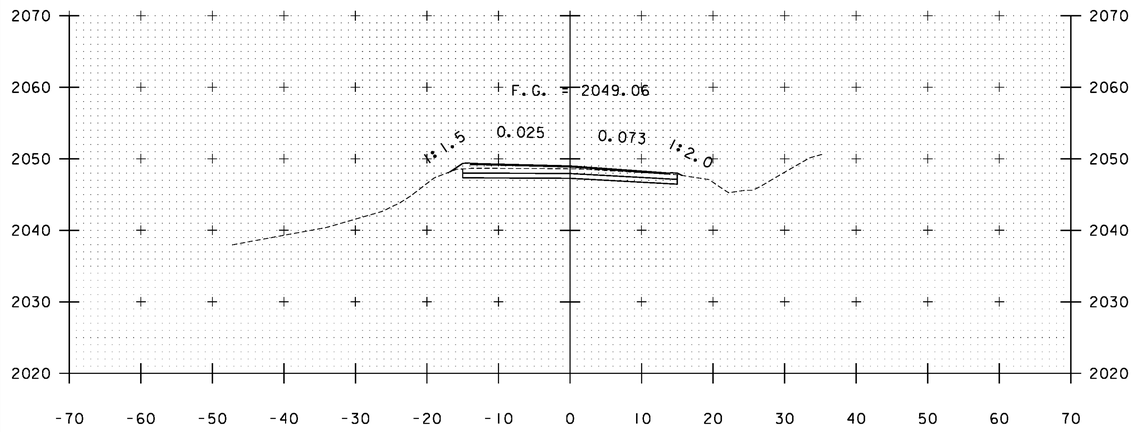

A 7+00



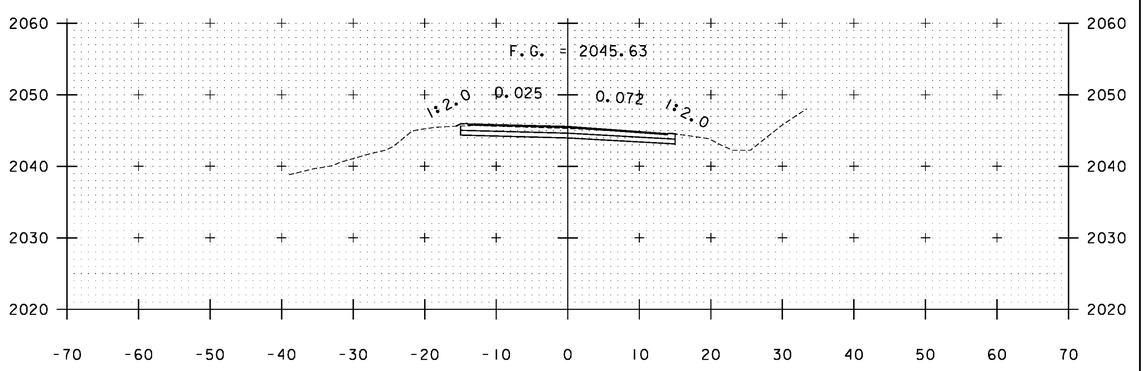

A 5+50




A 6+50




A 5+00



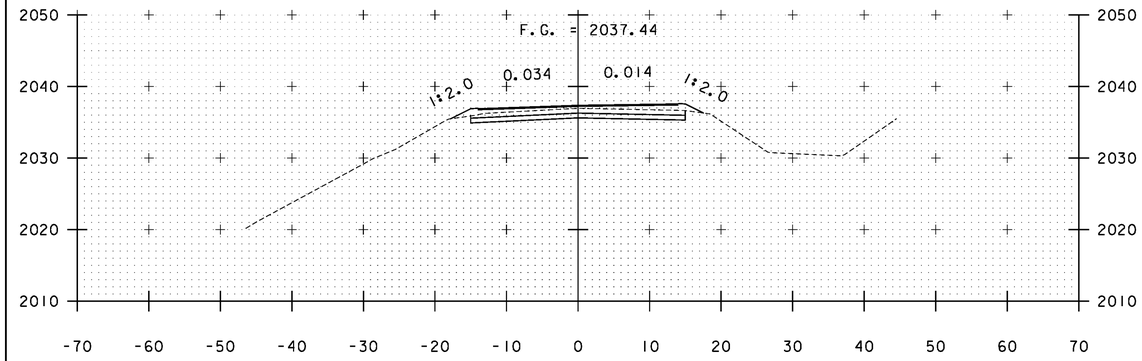

A 6+00

STA. A 5+00 TO STA. A 7+00

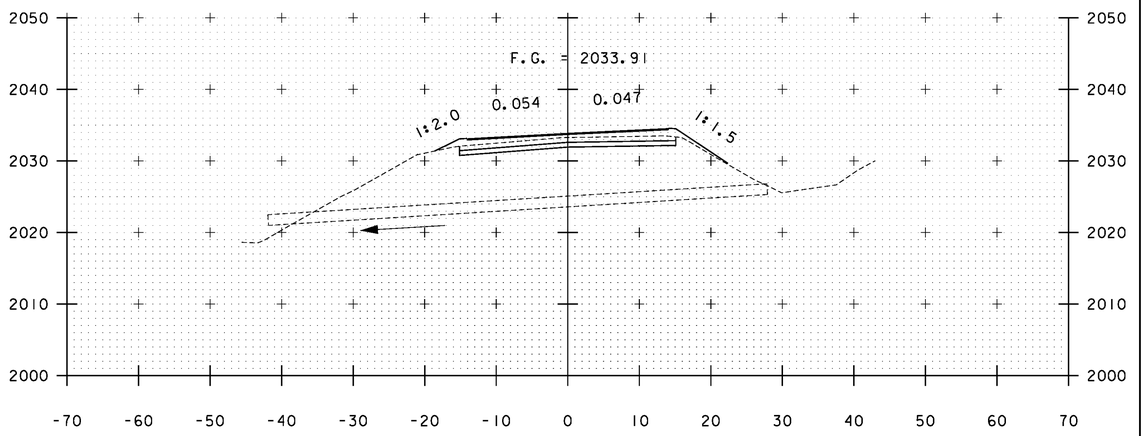
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

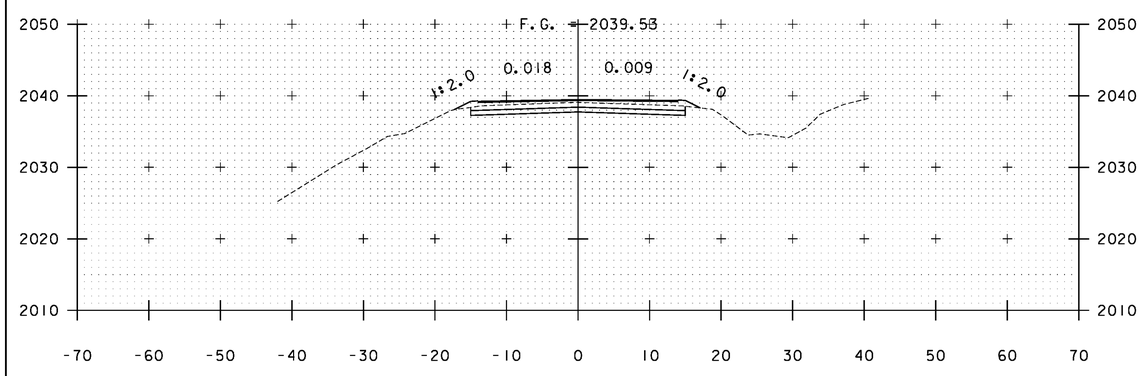
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 172 OF 444



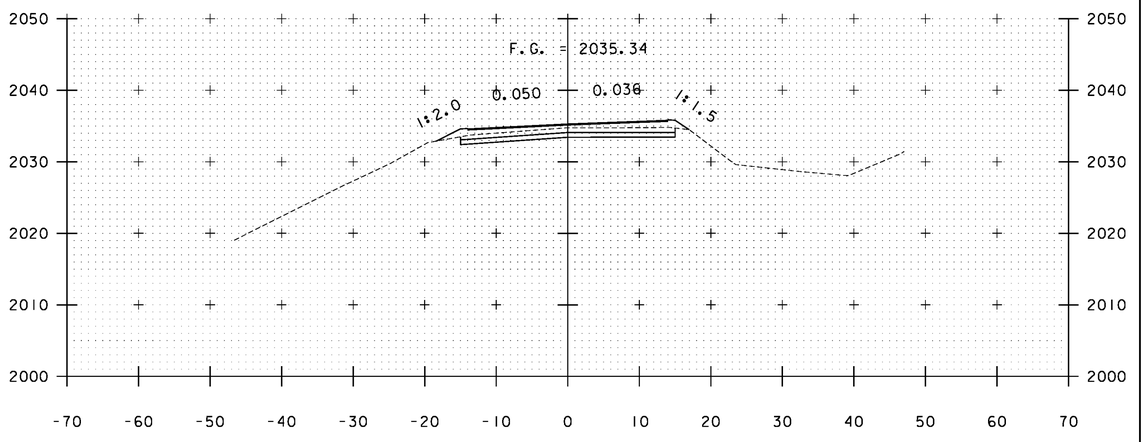

A 8+00




A 8+84




A 7+50



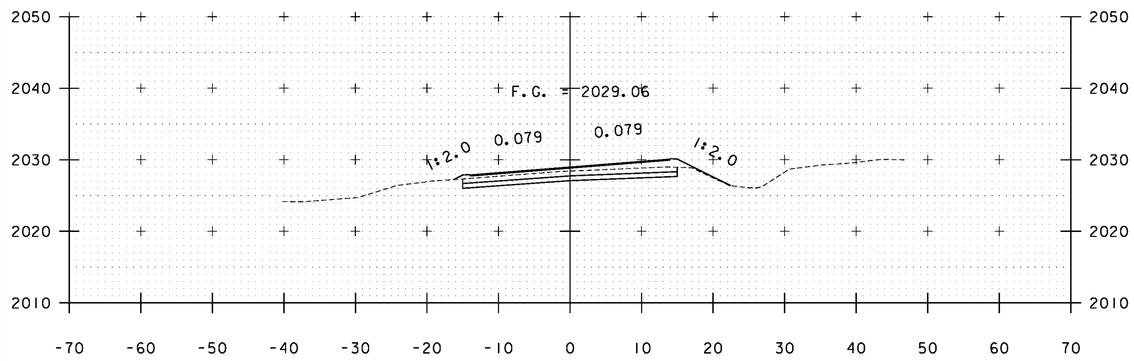

A 8+50

STA. A 7+50 TO STA. A 8+84

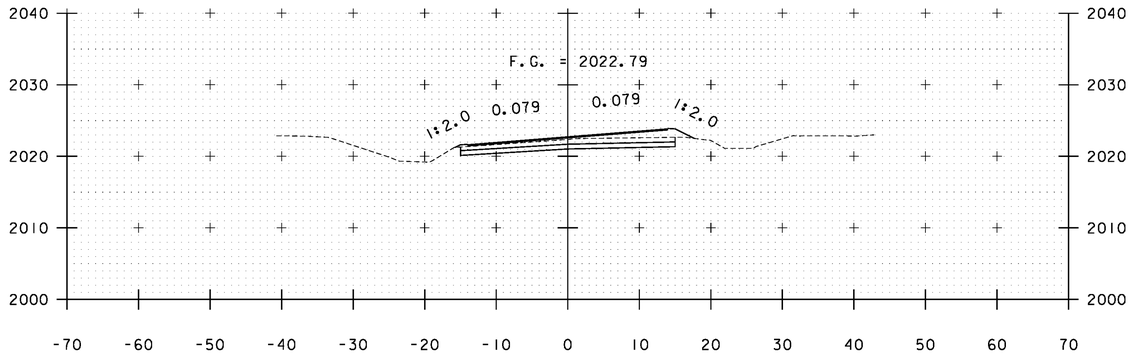
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

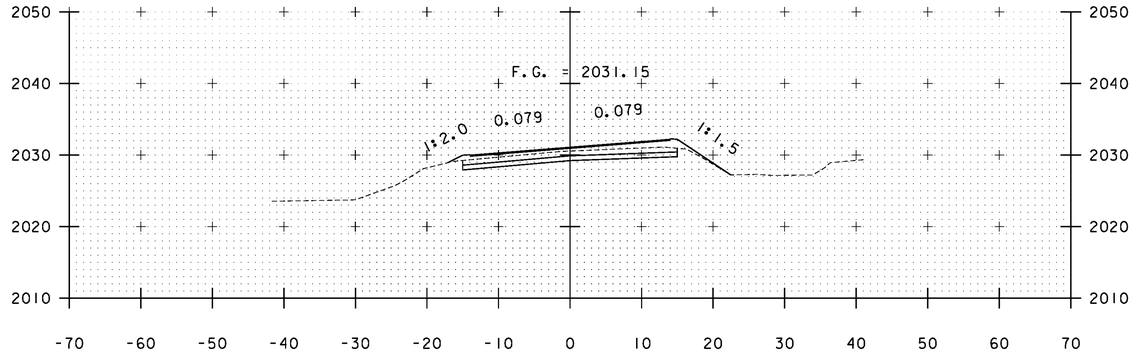
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 173 OF 444



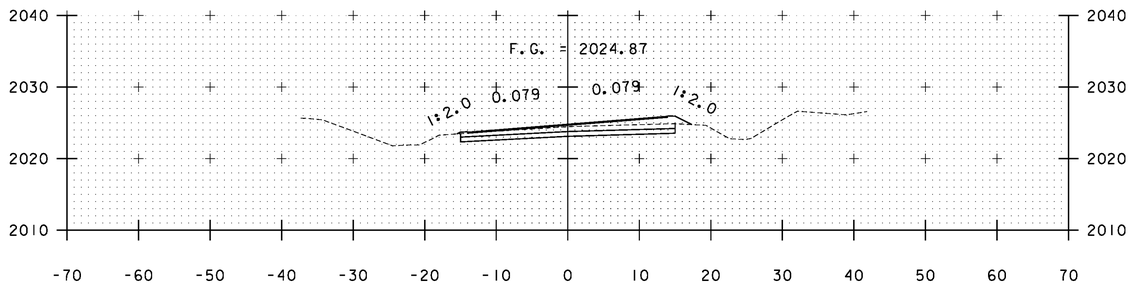

A 10+00



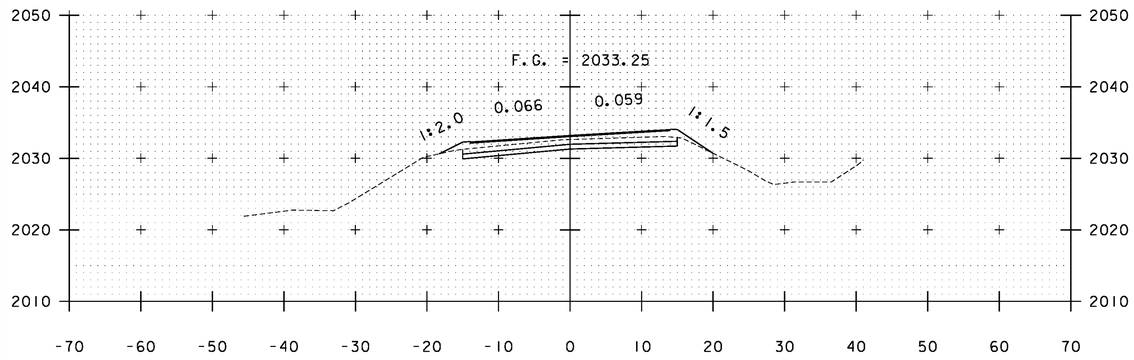

A 11+50



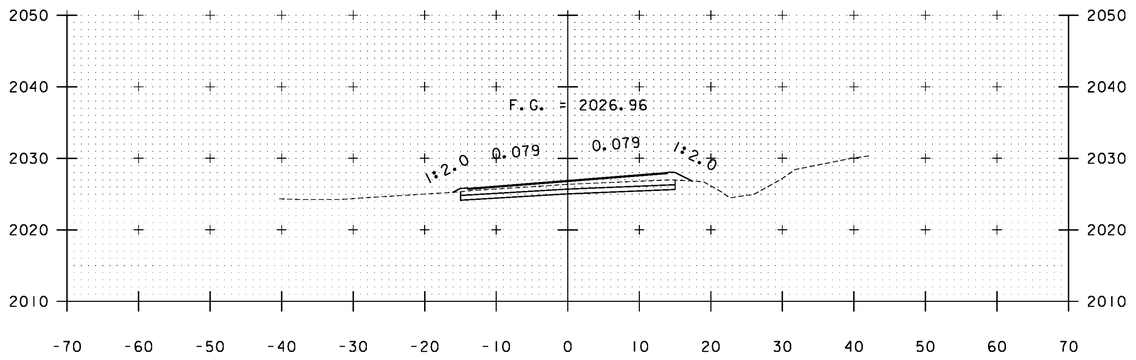

A 9+50




A 11+00



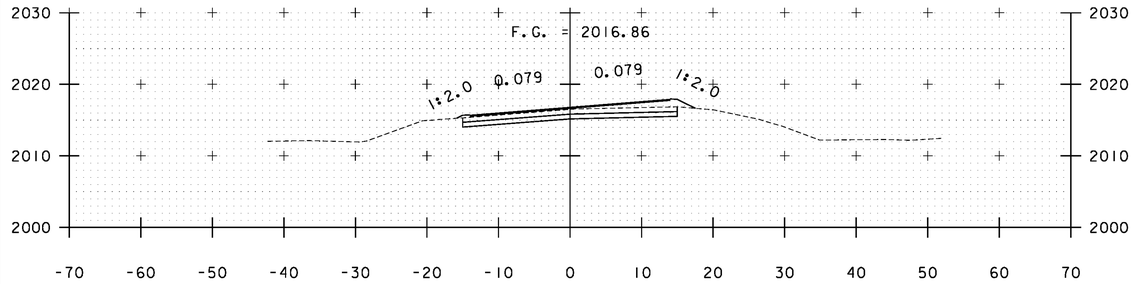

A 9+00



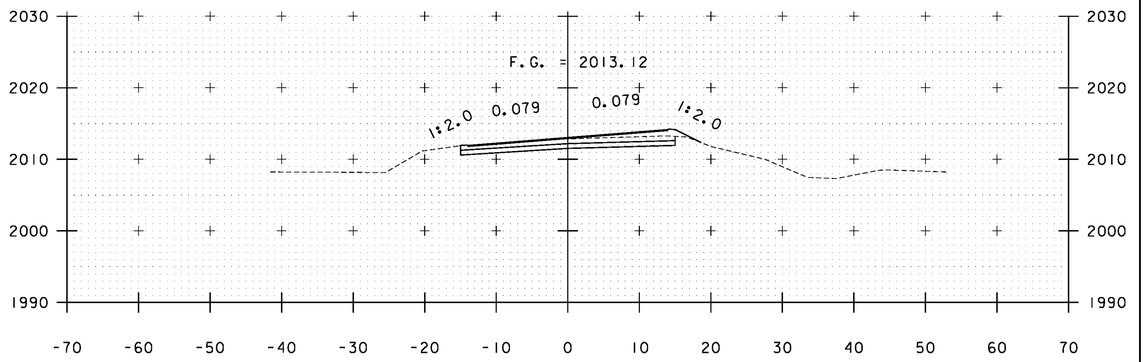

A 10+50

STA. A 9+00 TO STA. A 11+50

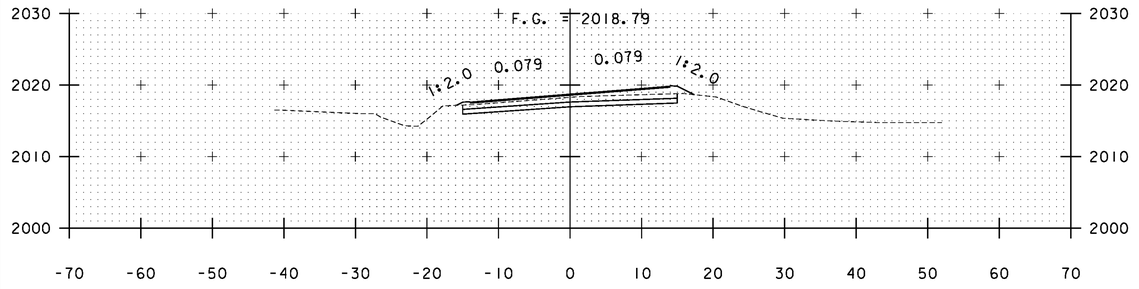
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 174 OF 444 |



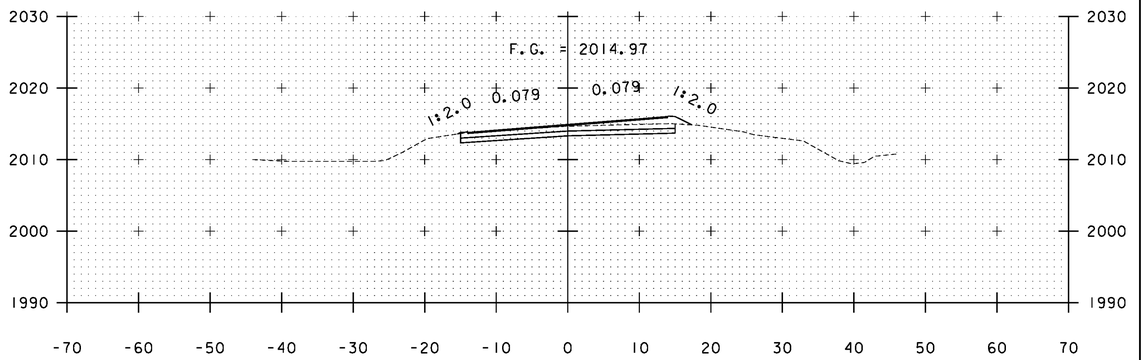

A 13+00



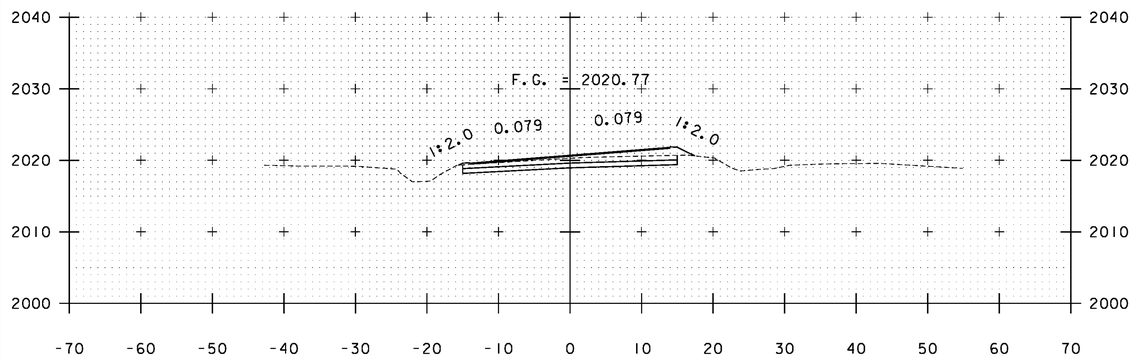

A 14+00




A 12+50



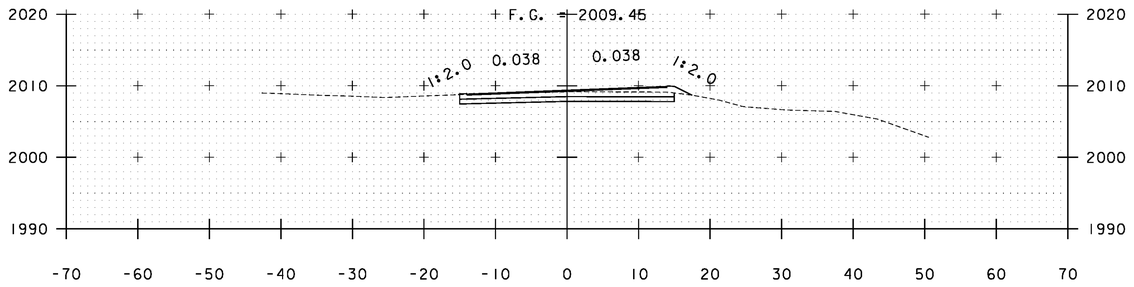

A 13+50



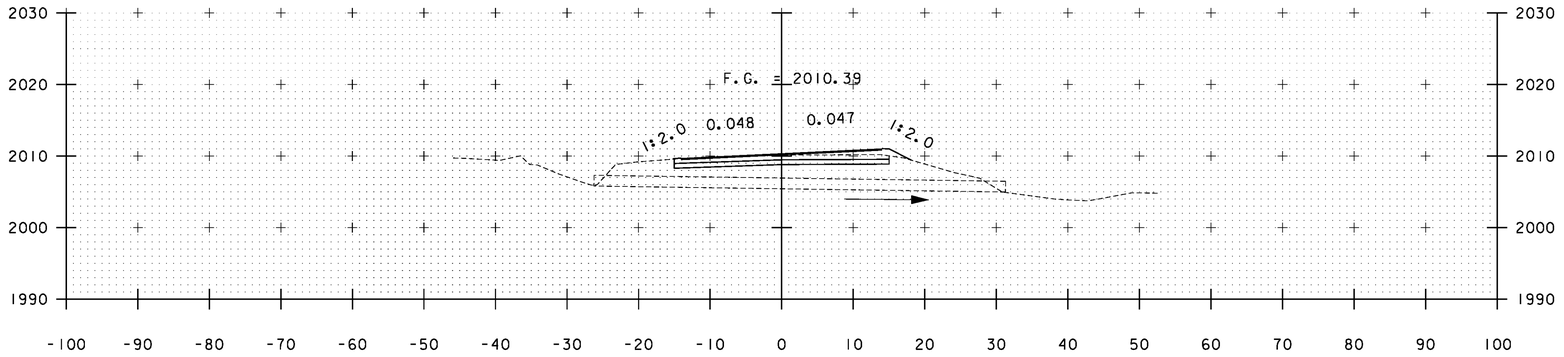

A 12+00

STA. A 12+00 TO STA. A 14+00

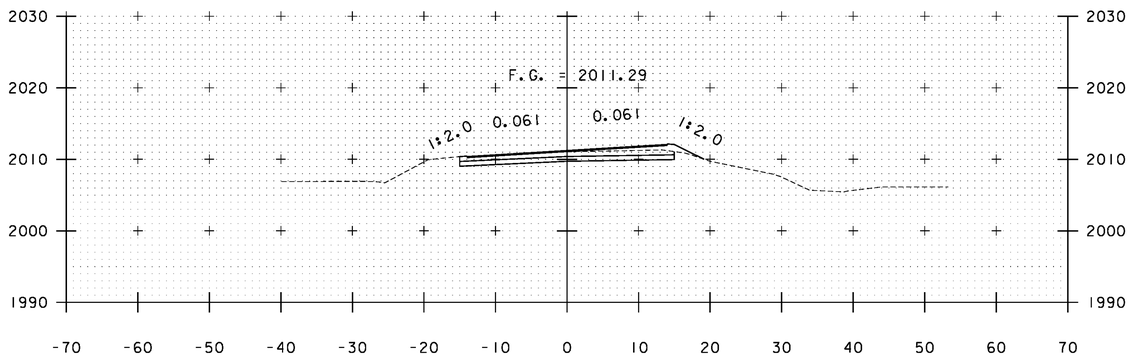
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 175 OF 444 |




A 15+00



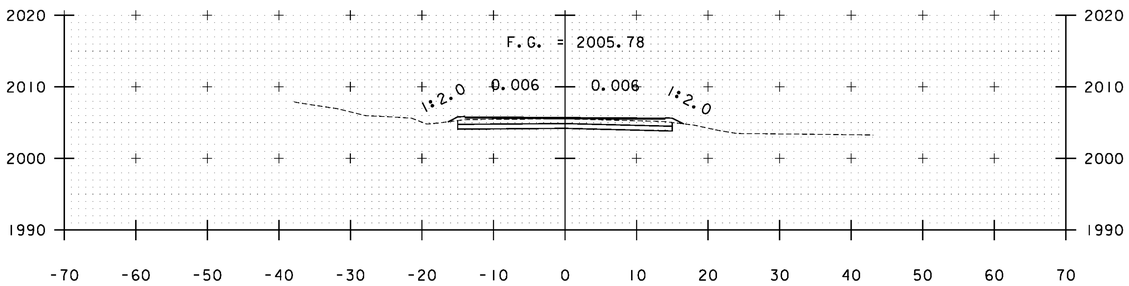

A 14+75



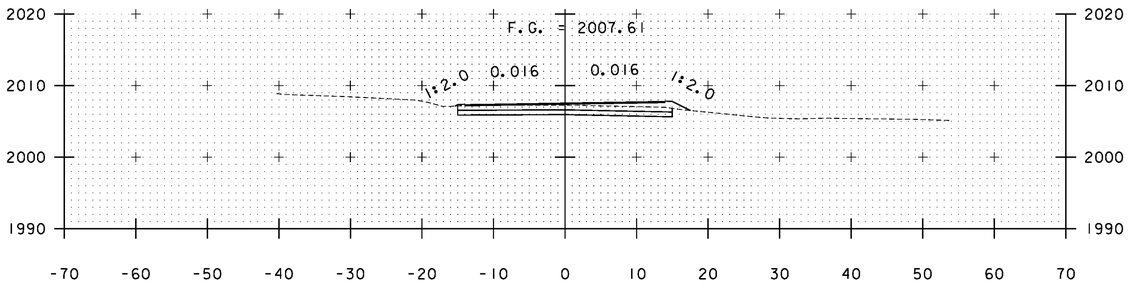

A 14+50

STA. A 14+50 TO STA. A 15+00

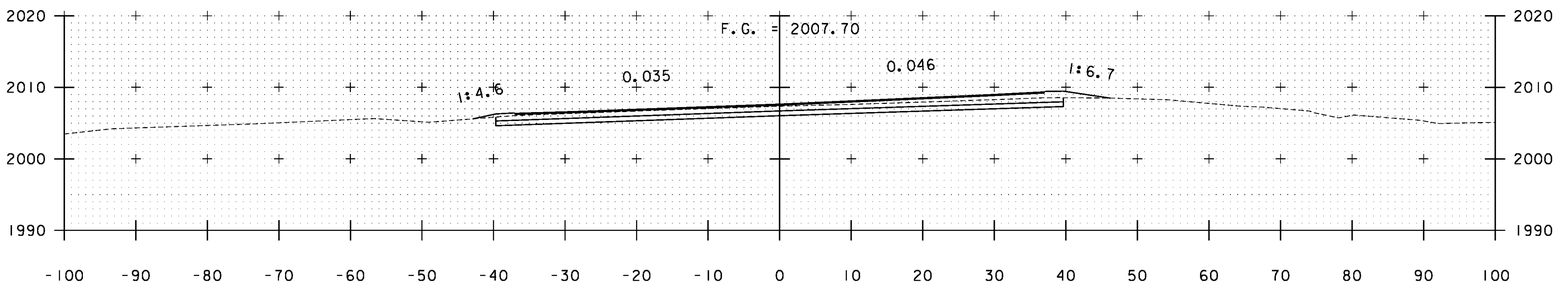
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 176 OF 444 |




A 16+00



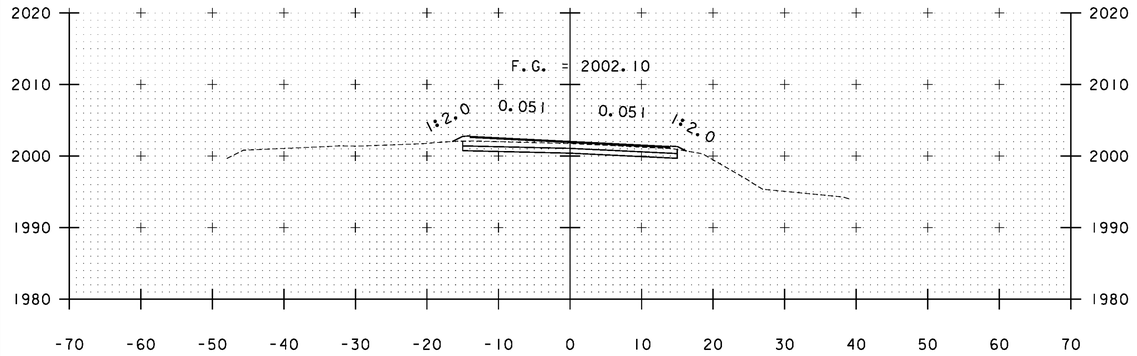

A 15+50



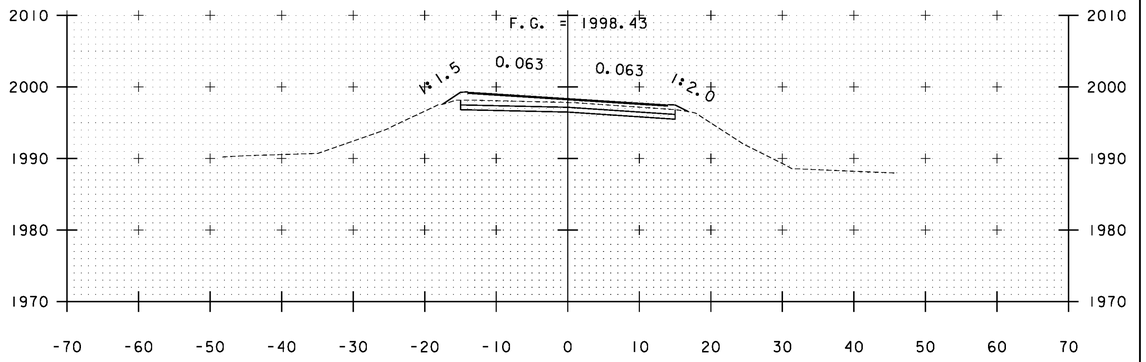

A 15+48

STA. A 15+48 TO STA. A 16+00

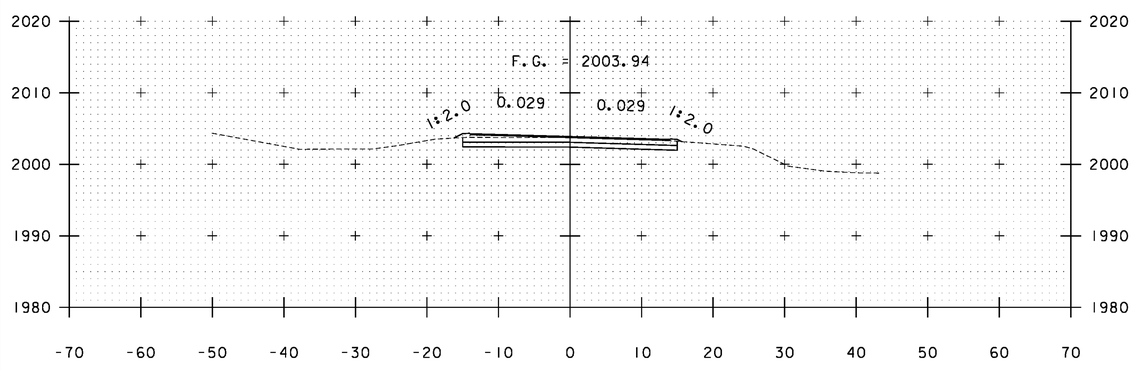
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 177 OF 444 |



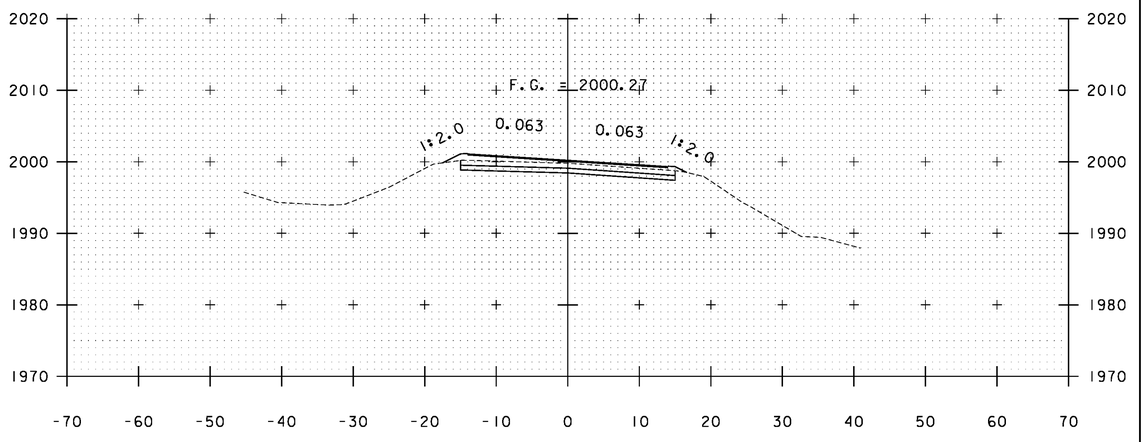

A 17+00




A 18+00



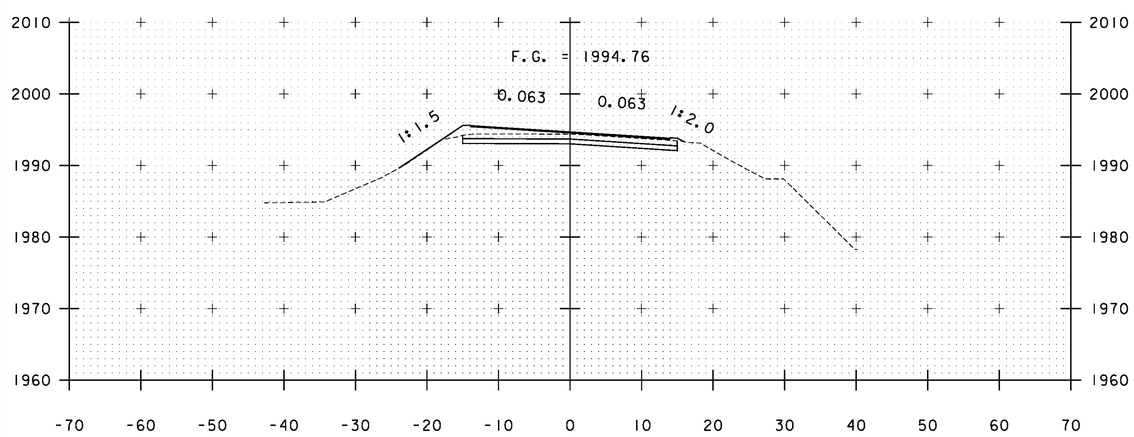

A 16+50



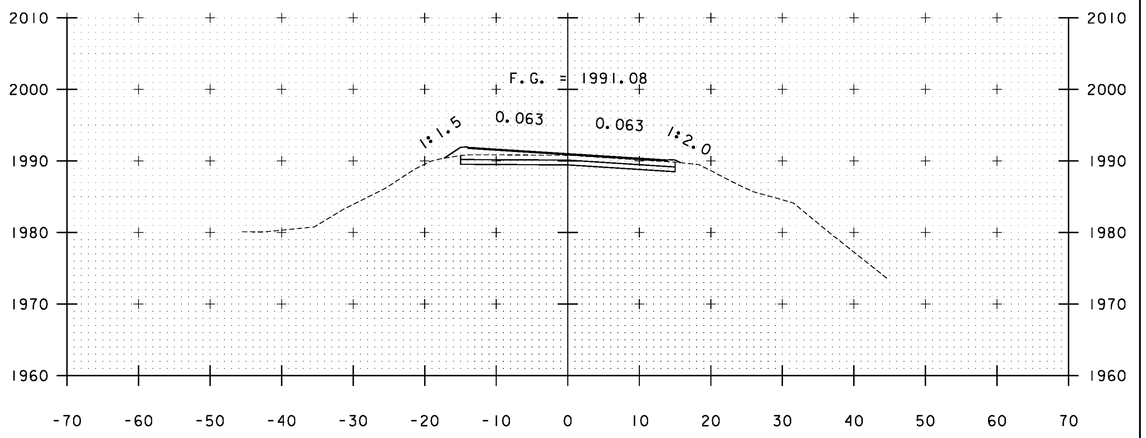

A 17+50

STA. A 16+50 TO STA. A 18+00

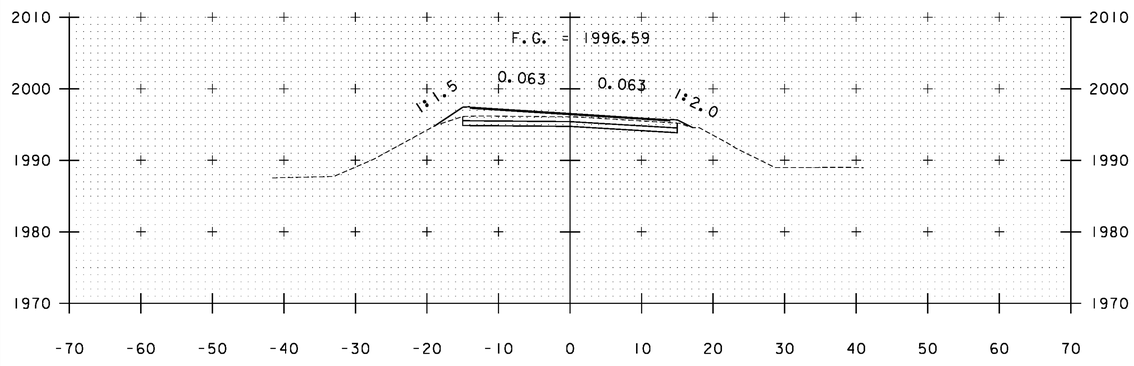
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 178 OF 444 |



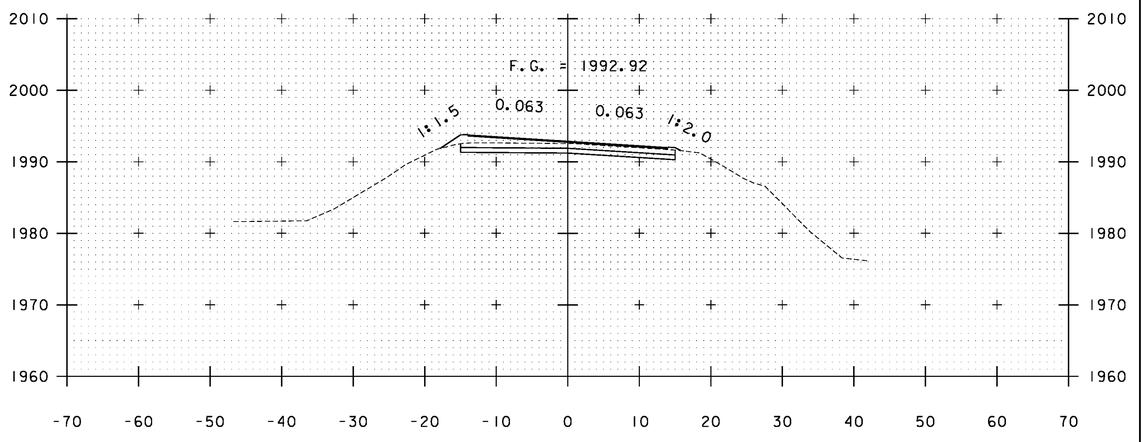

A 19+00




A 20+00




A 18+50



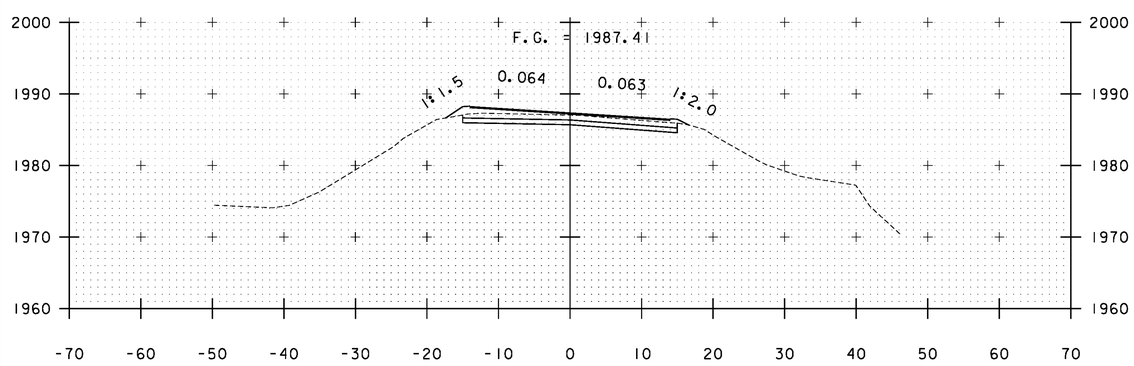

A 19+50

STA. A 18+50 TO STA. A 20+00

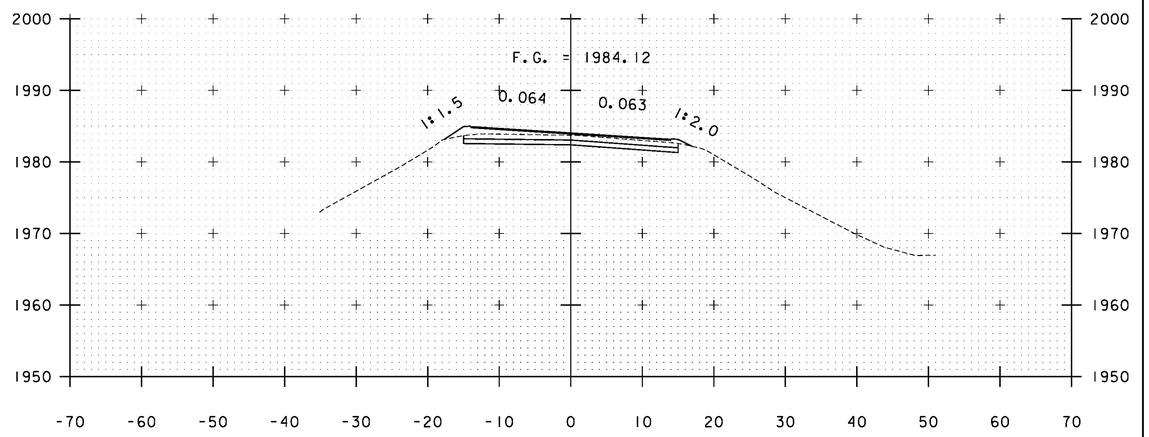
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

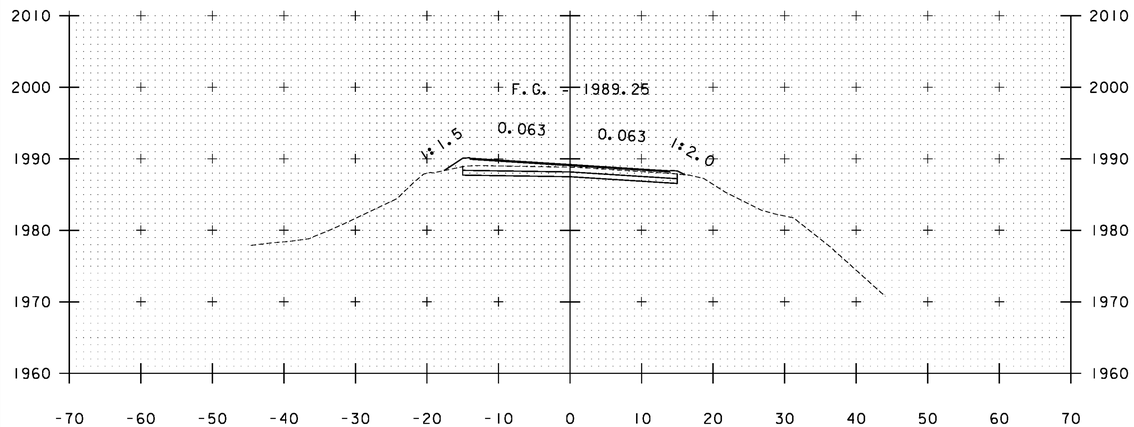
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 179 OF 444



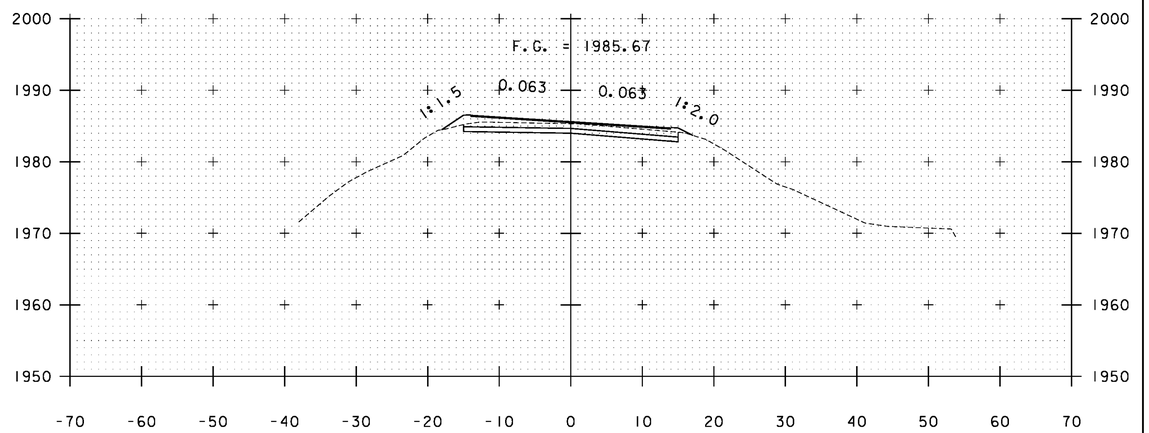

A 21+00




A 22+00




A 20+50



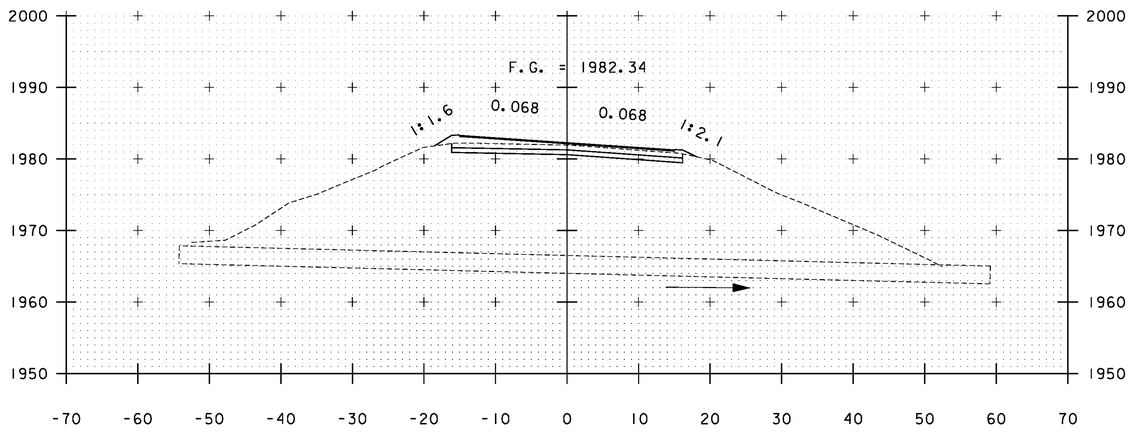

A 21+50

STA. A 20+50 TO STA. A 22+00

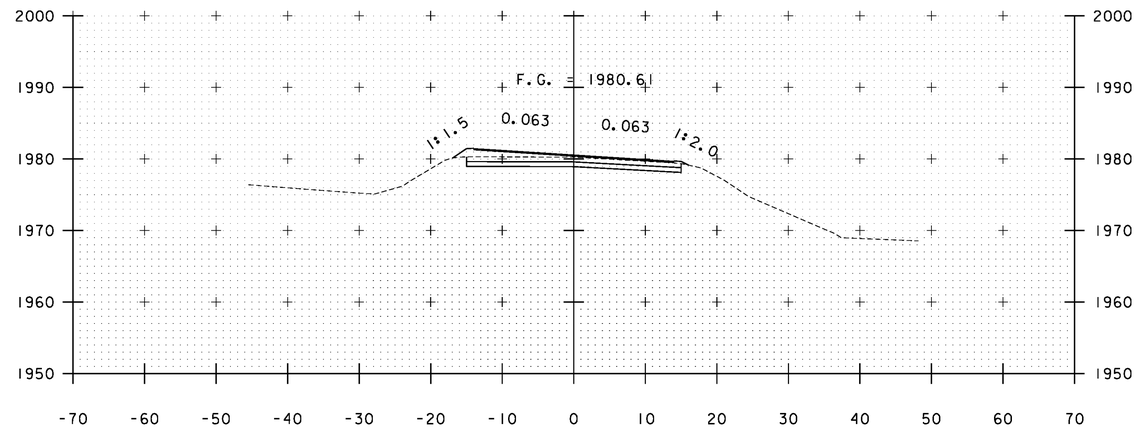
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

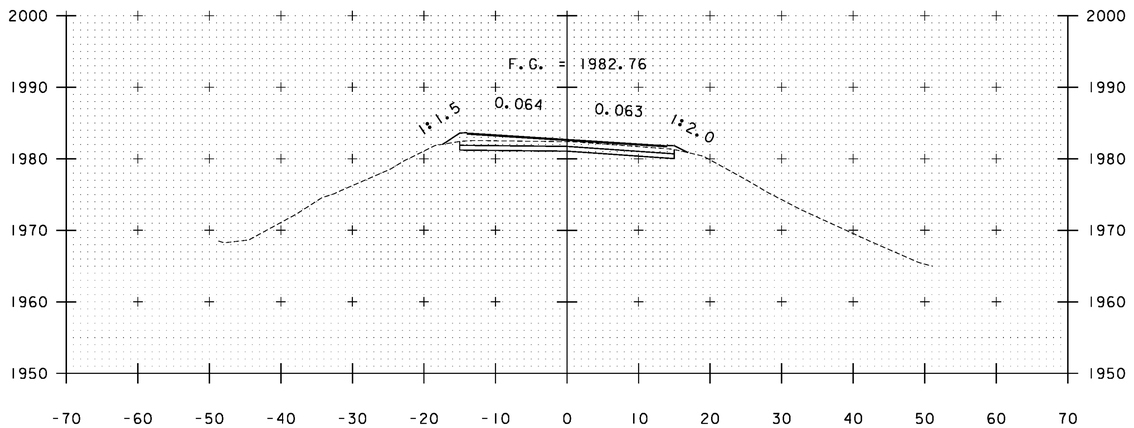
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 180 OF 444



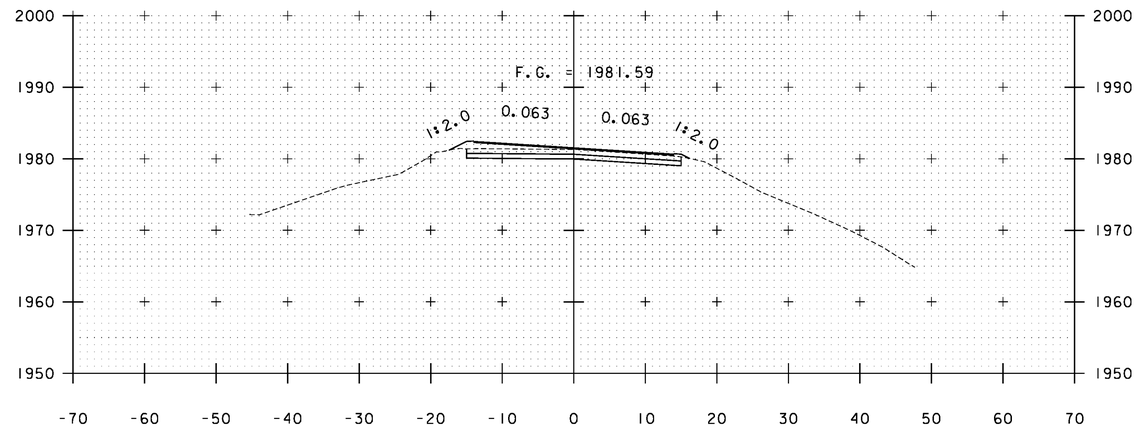

A 22+67




A 23+50




A 22+50



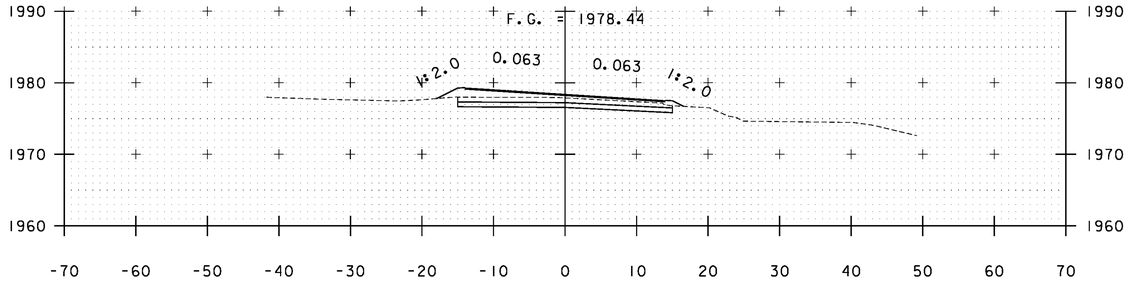

A 23+00

STA. A 22+50 TO STA. A 23+50

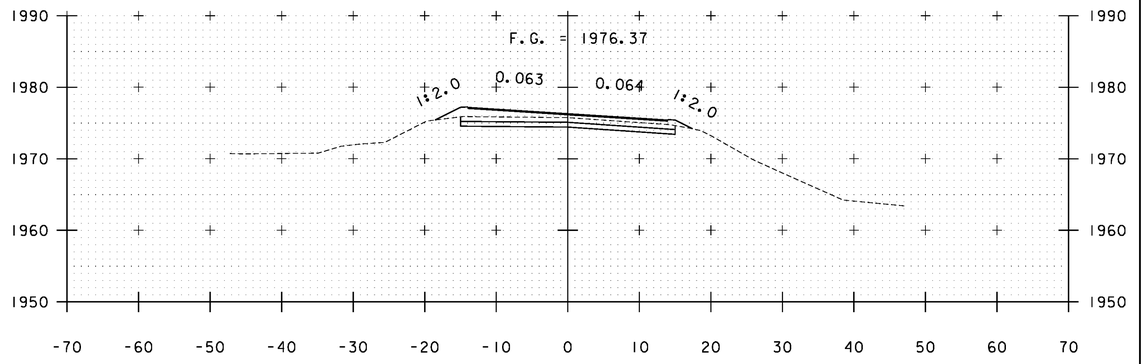
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

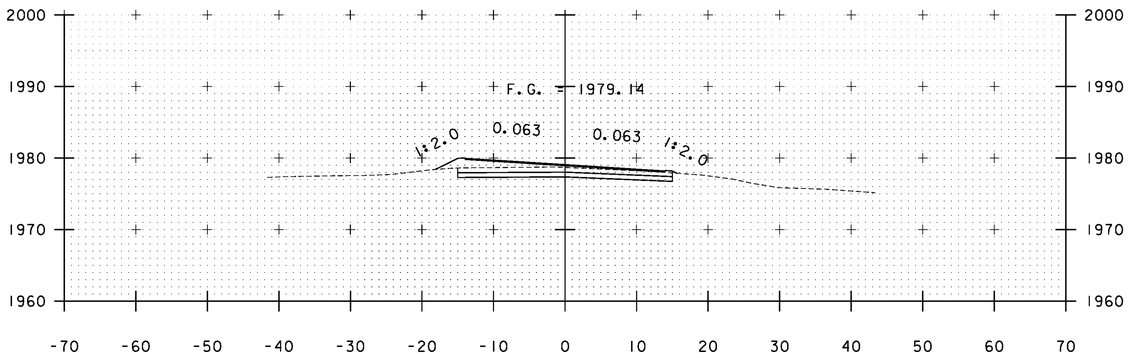
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 181 OF 444



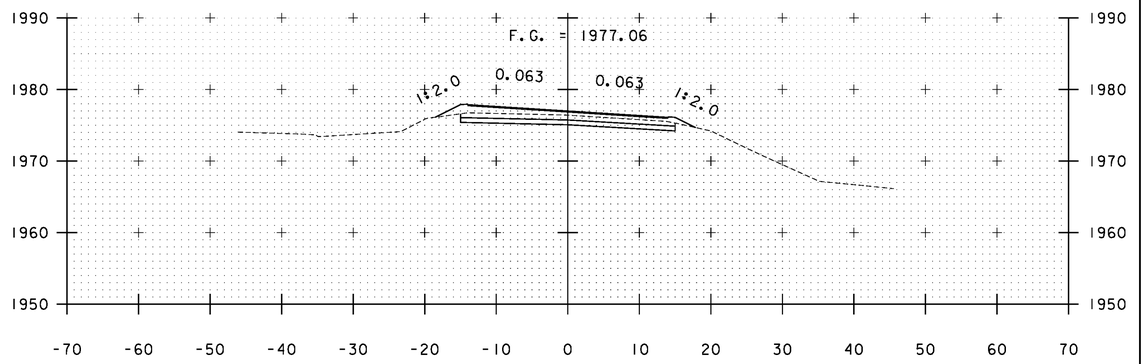

A 25+00



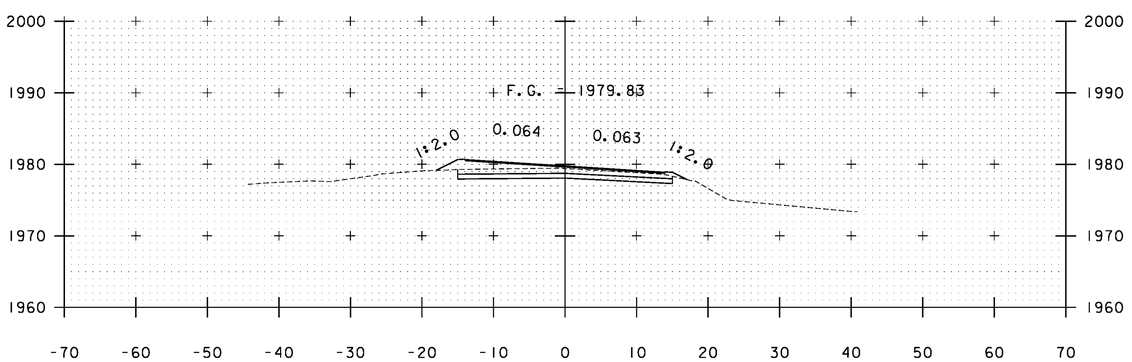

A 26+50



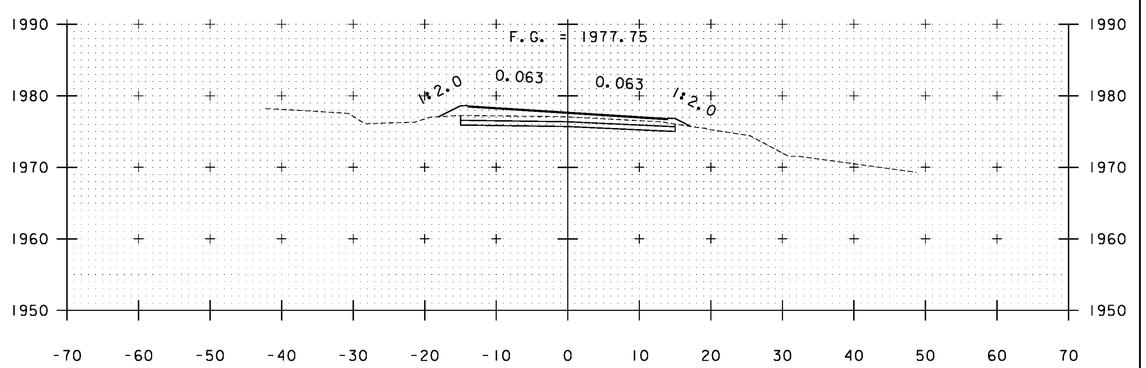

A 24+50




A 26+00




A 24+00



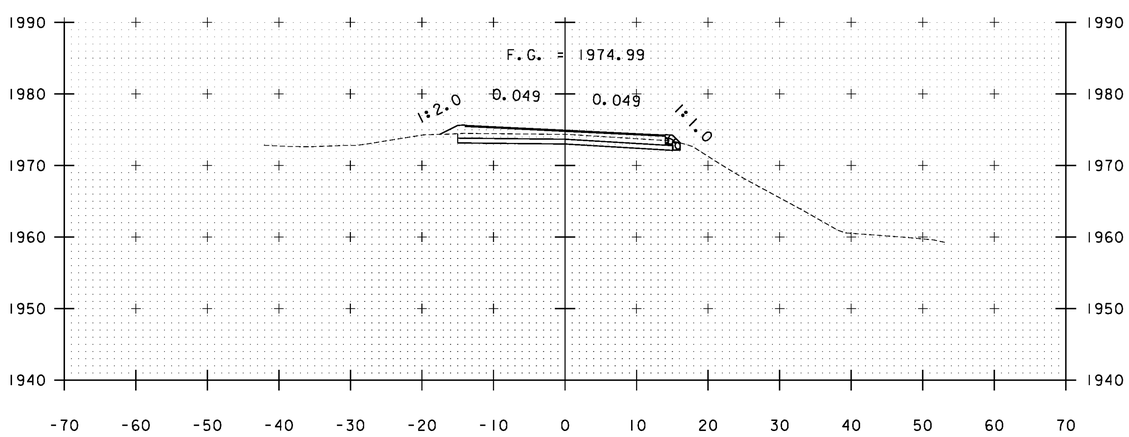

A 25+50

STA. A 24+00 TO STA. A 26+50

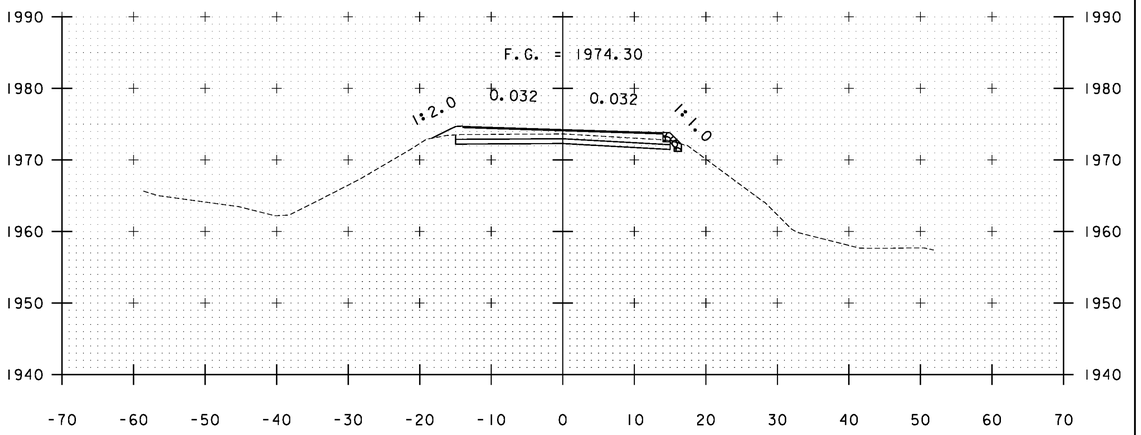
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

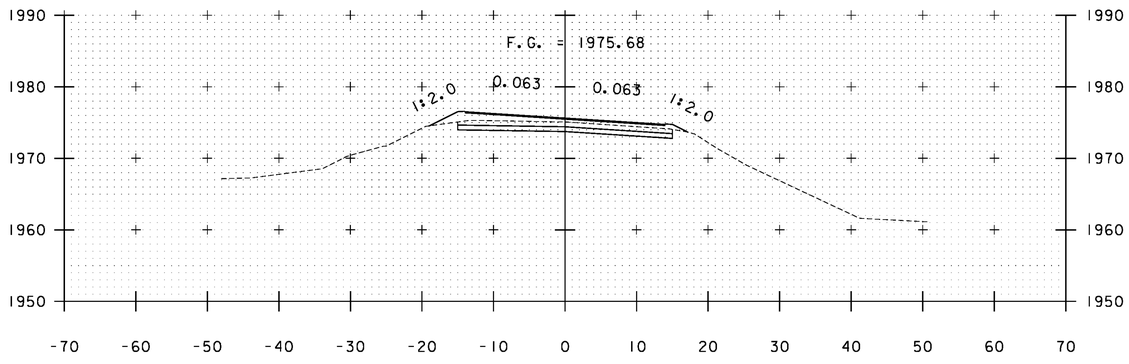
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 182 OF 444



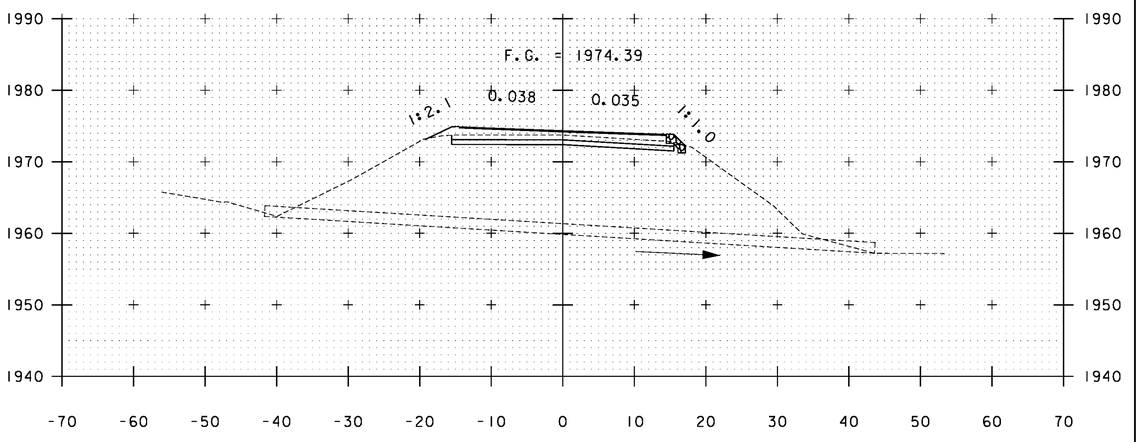

A 27+50




A 28+00



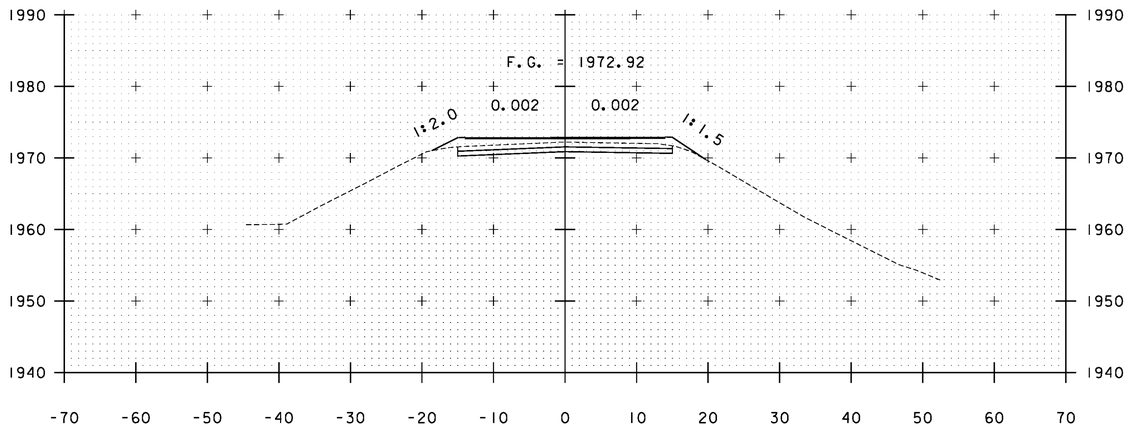

A 27+00



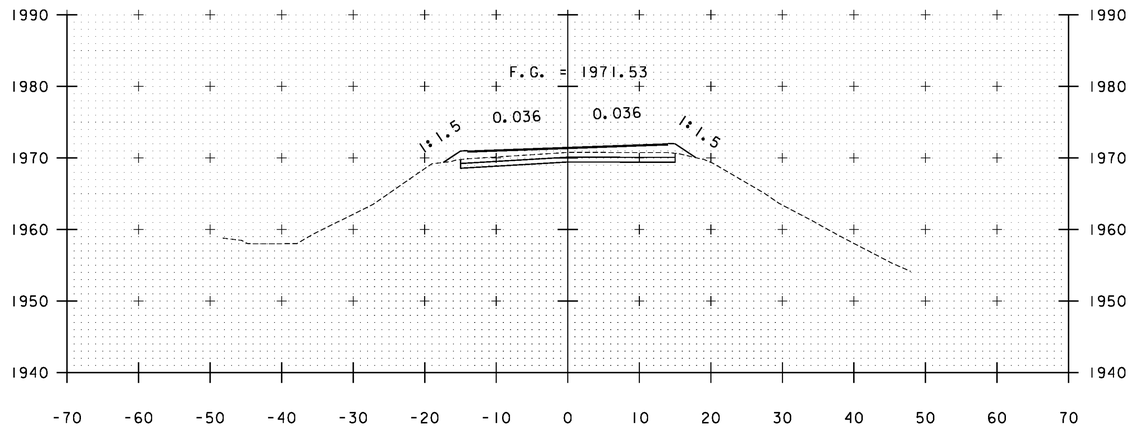

A 27+93

STA. A 27+00 TO STA. A 28+00

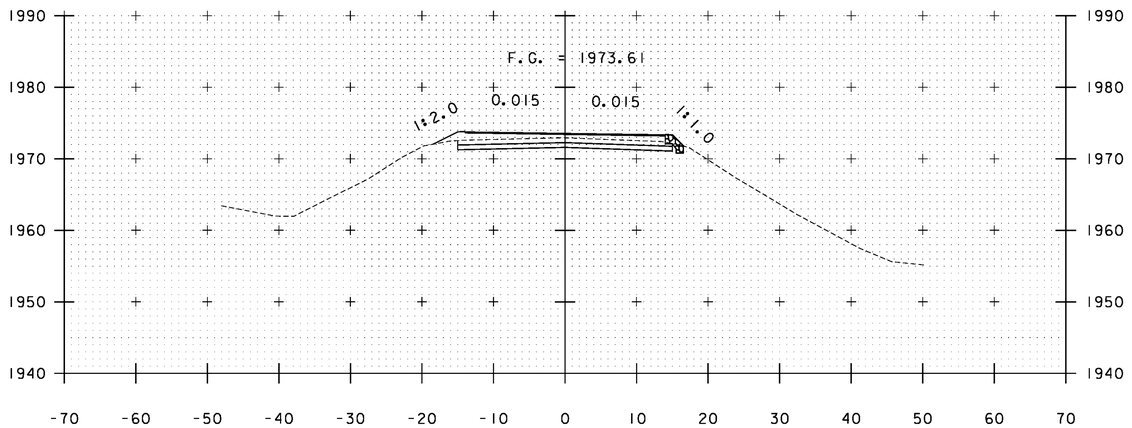
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 183 OF 444 |



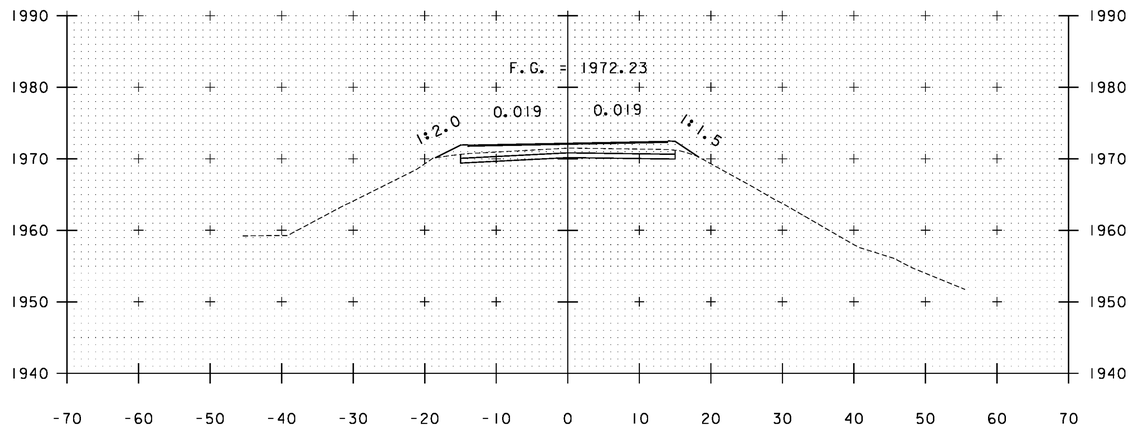

A 29+00




A 30+00




A 28+50



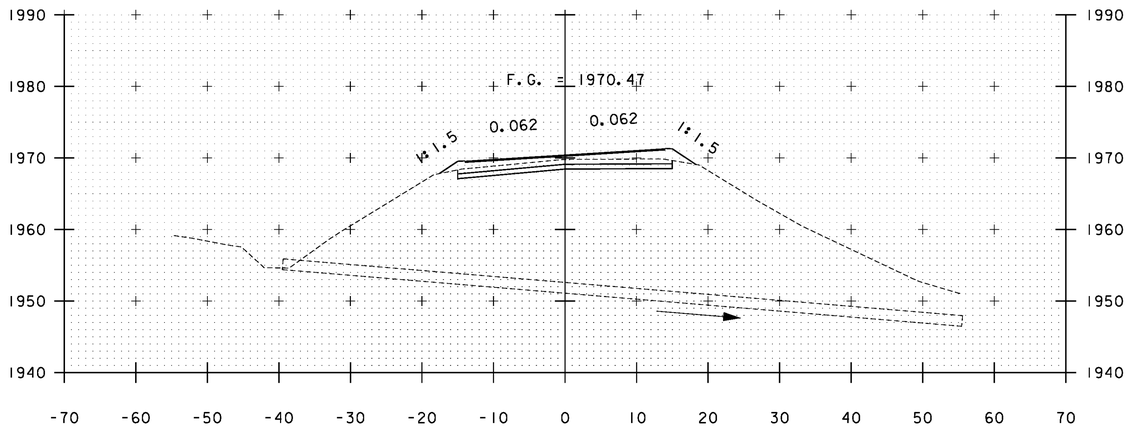

A 29+50

STA. A 28+50 TO STA. A 30+00

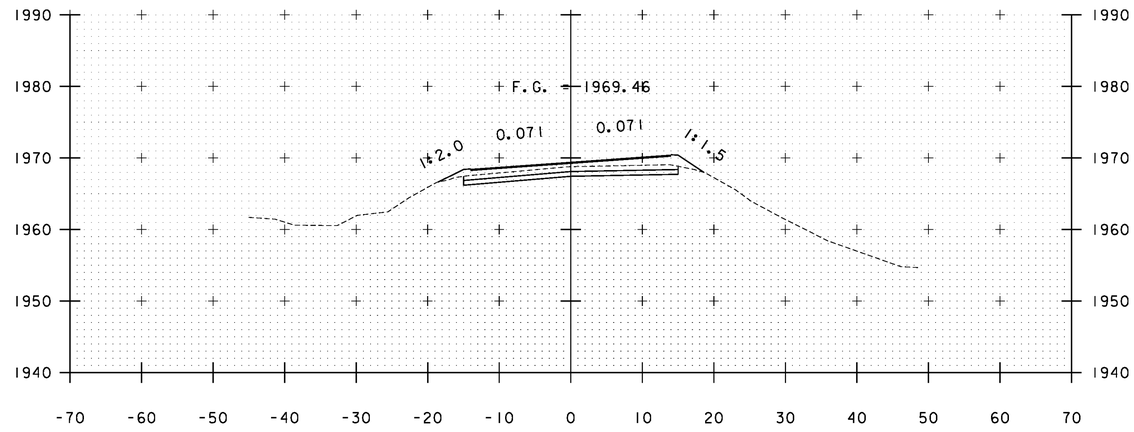
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

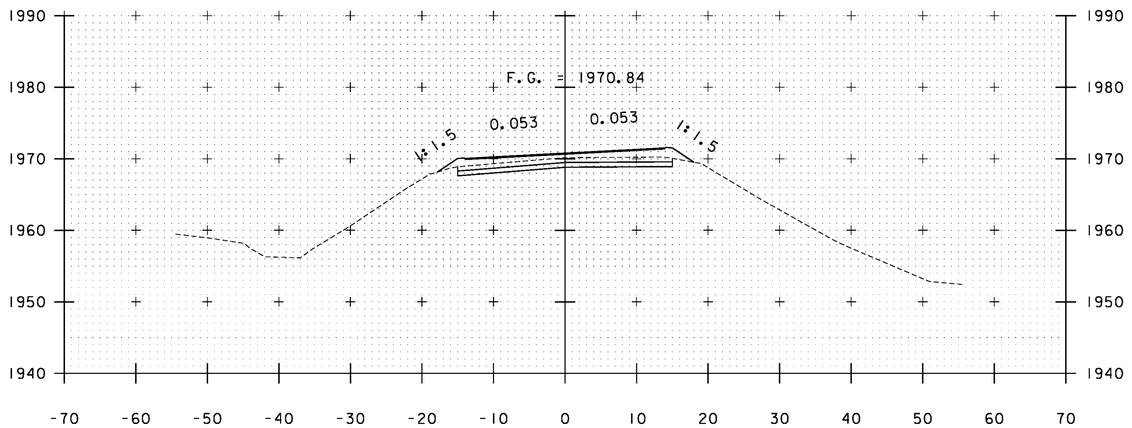
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 184 OF 444



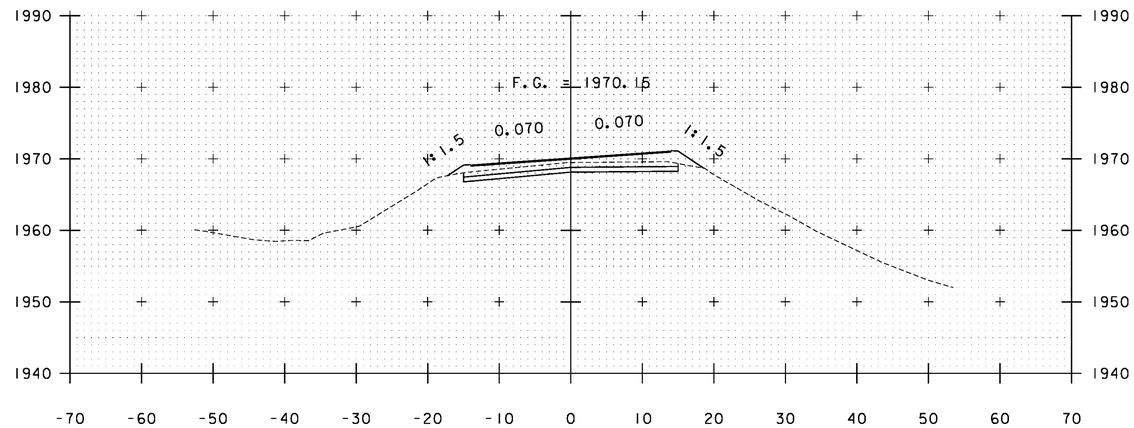

A 30+77




A 31+50




A 30+50



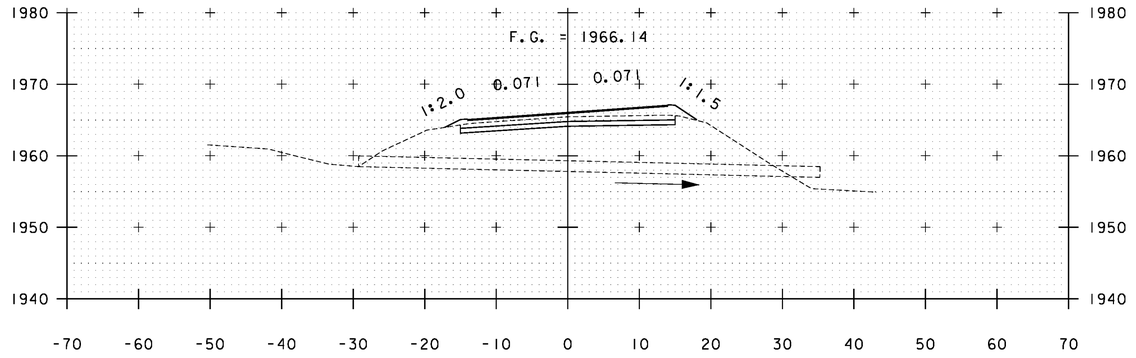

A 31+00

STA. A 30+50 TO STA. A 31+50

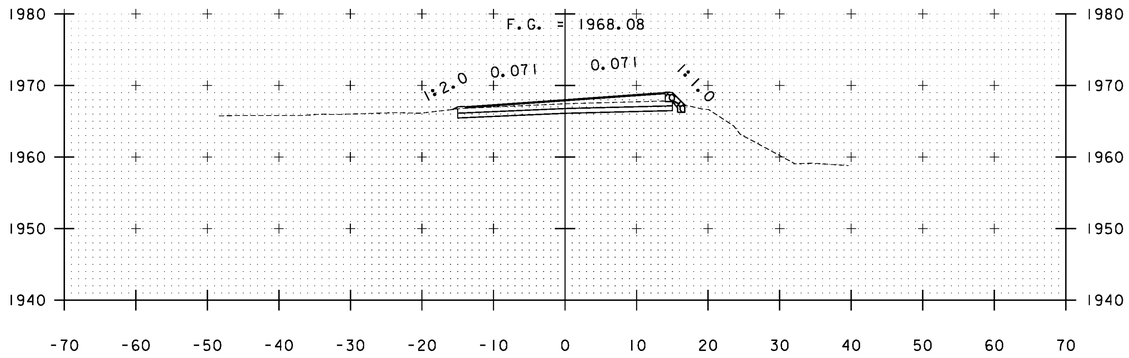
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

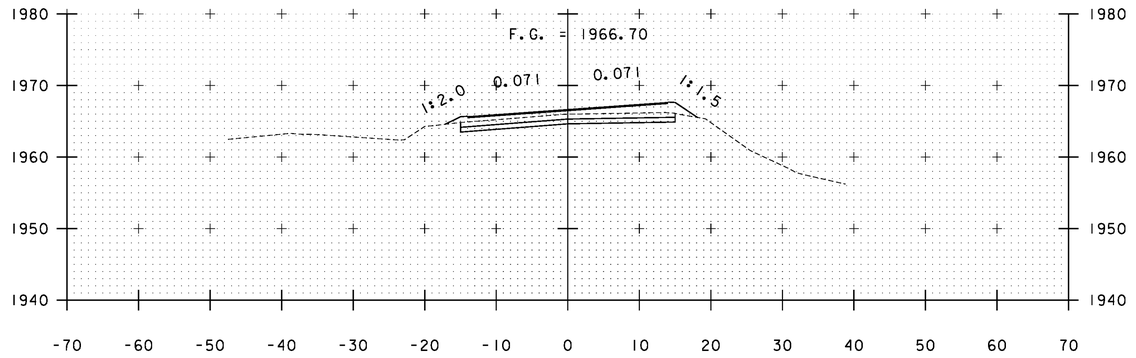
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 185 OF 444



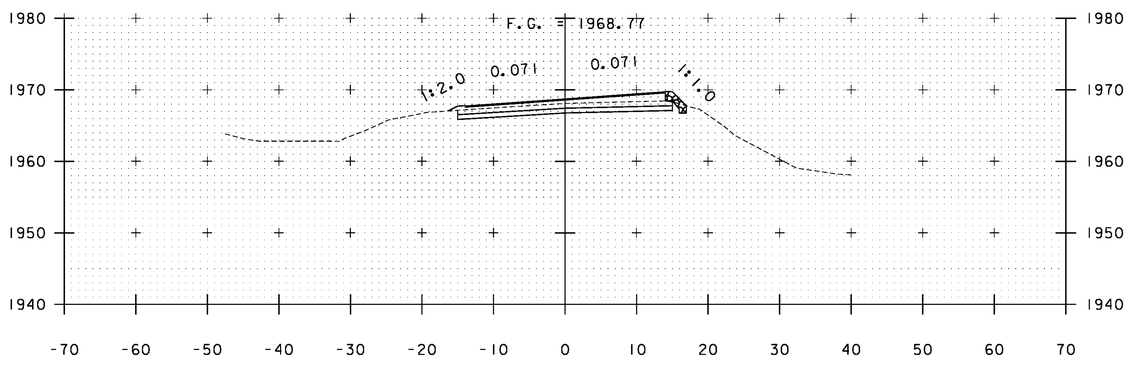

A 33+91



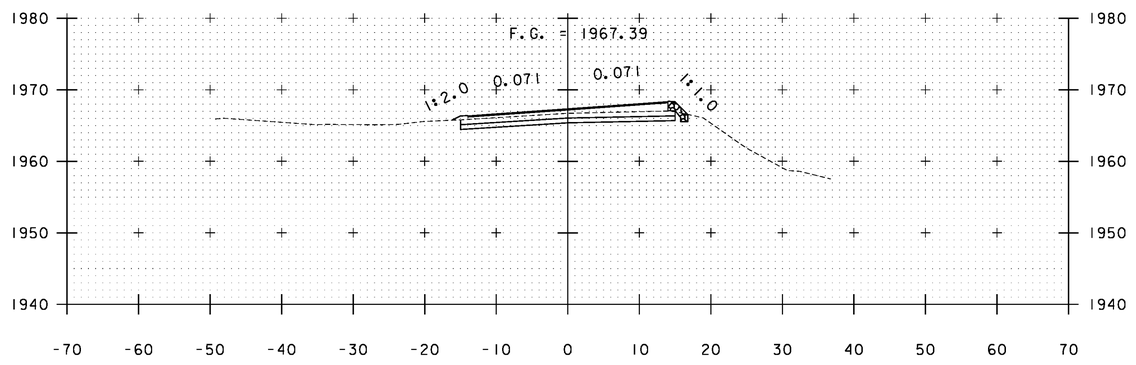

A 32+50




A 33+50




A 32+00



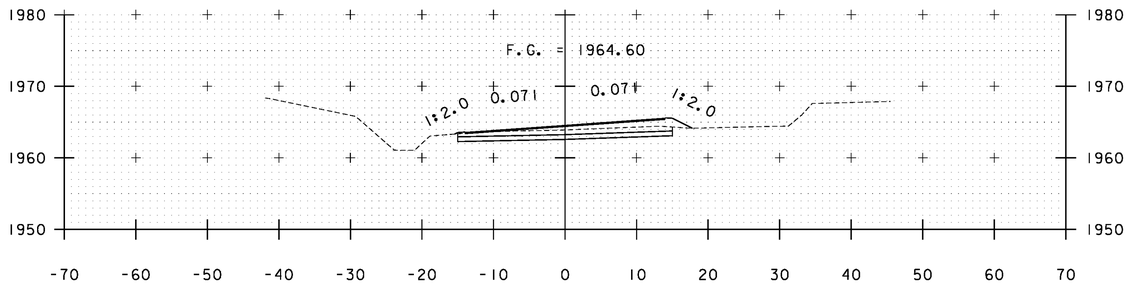

A 33+00

STA. A 32+00 TO STA. A 33+91

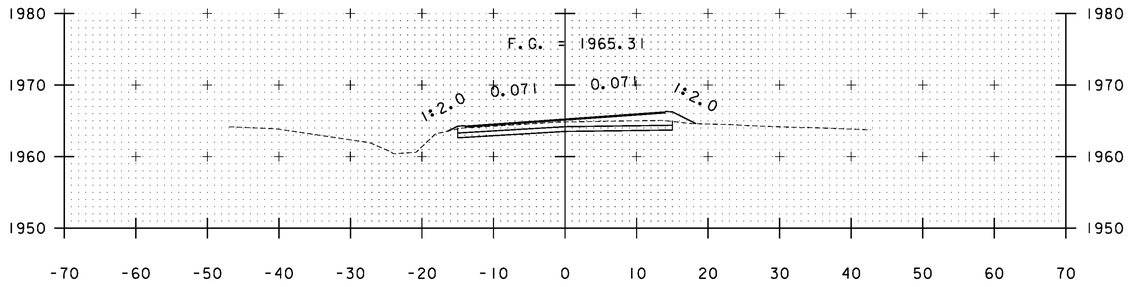
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

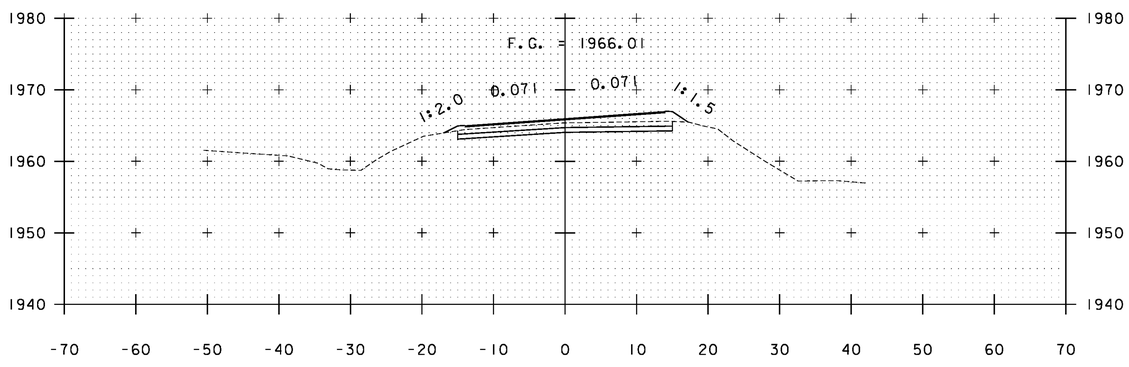
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 186 OF 444



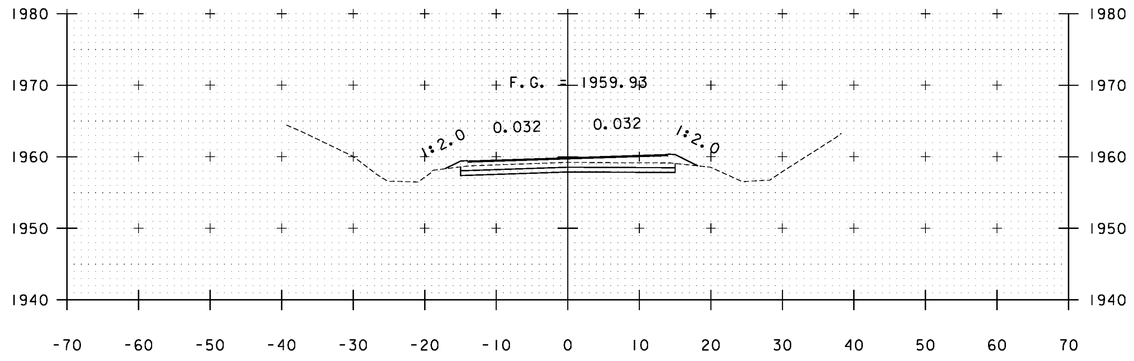

A 35+00



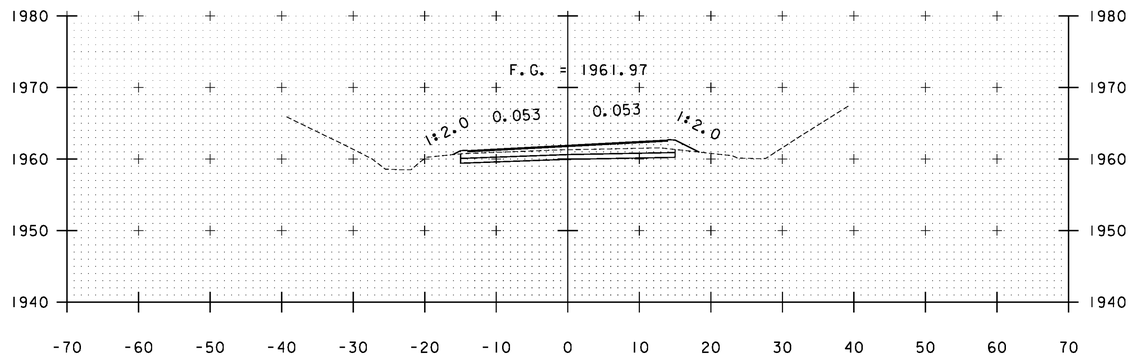

A 34+50



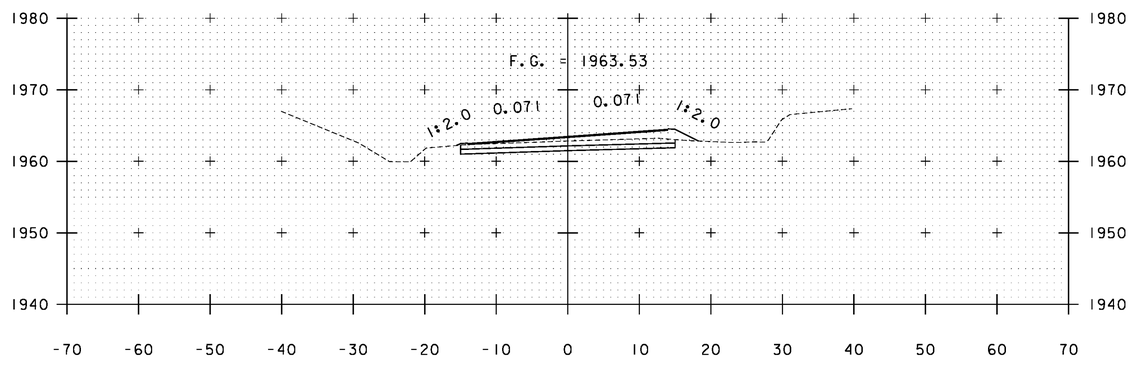

A 34+00




A 36+50




A 36+00



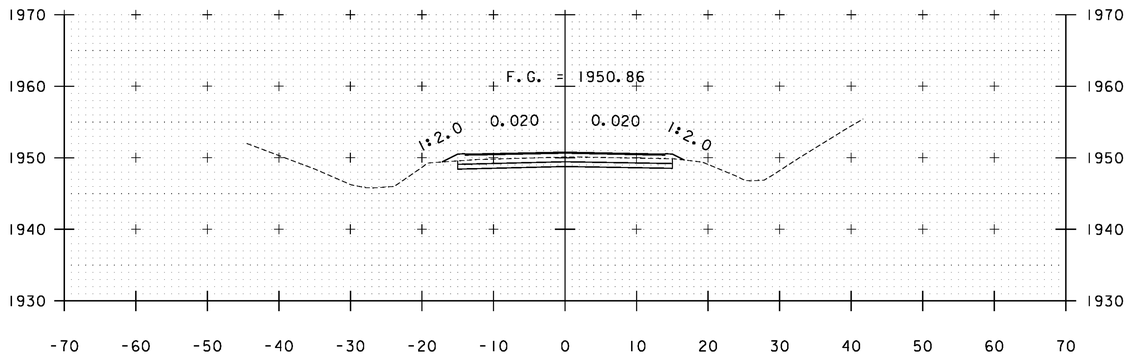

A 35+50

STA. A 34+00 TO STA. A 36+50

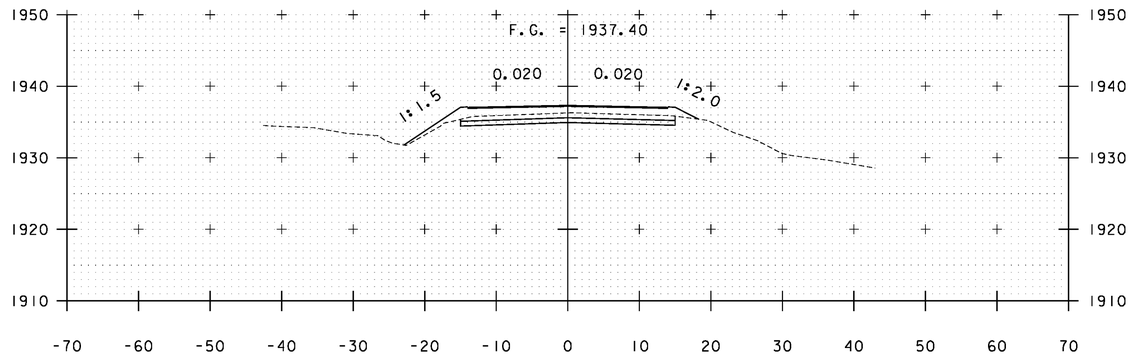
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

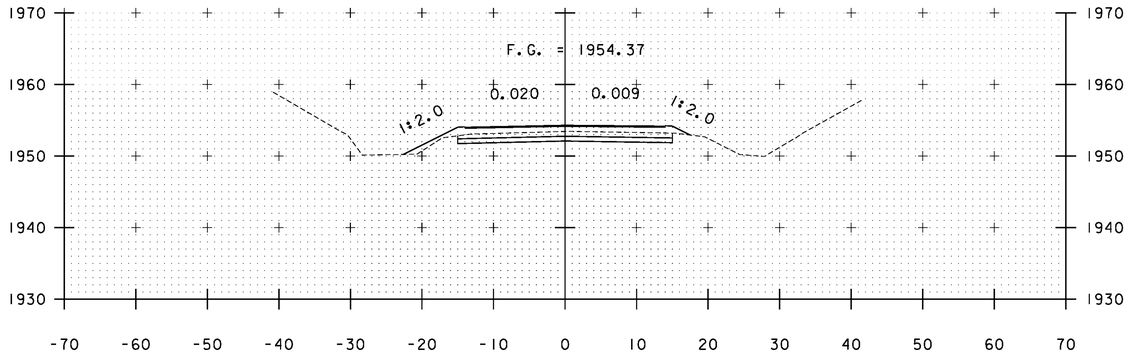
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 187 OF 444



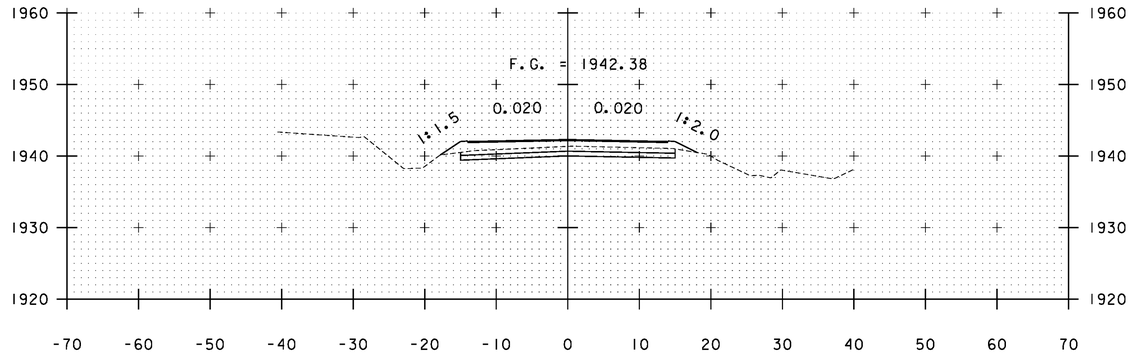

A 38+00



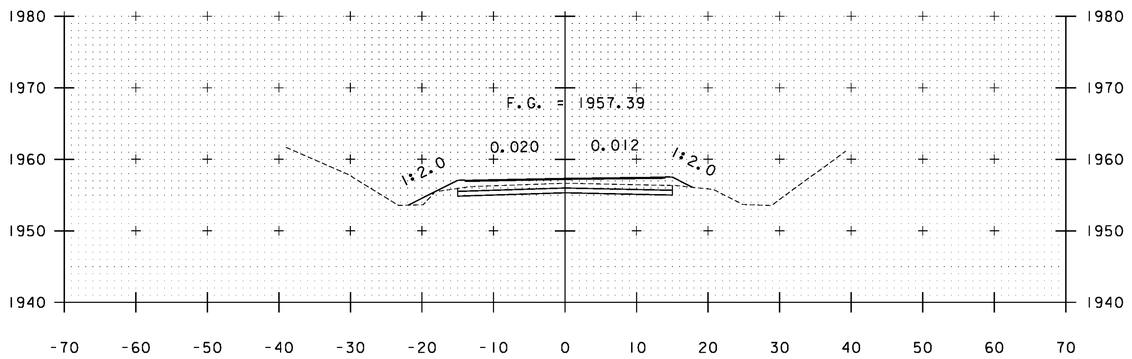

A 39+50



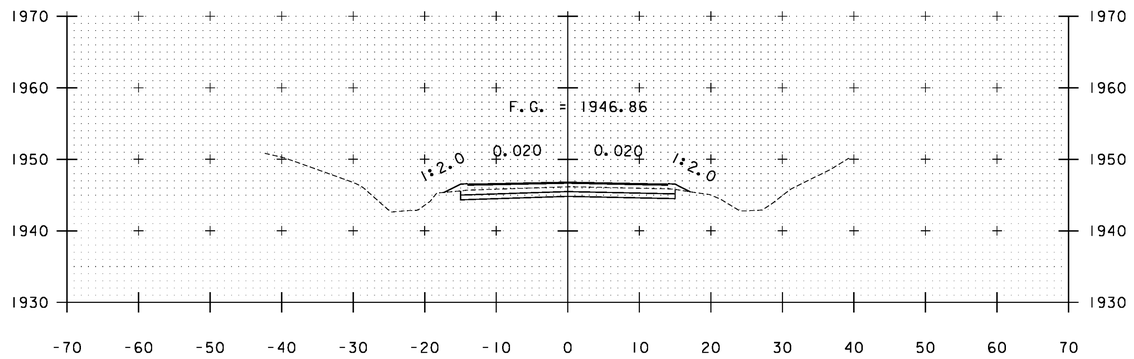

A 37+50




A 39+00




A 37+00



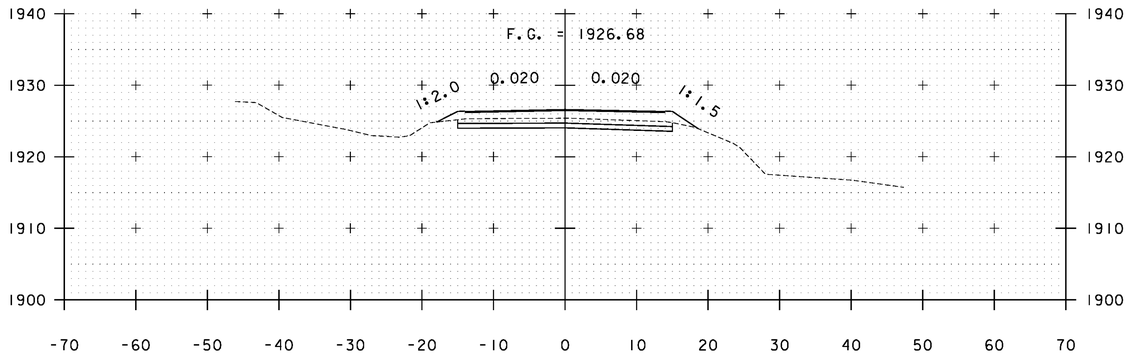

A 38+50

STA. A 37+00 TO STA. A 39+50

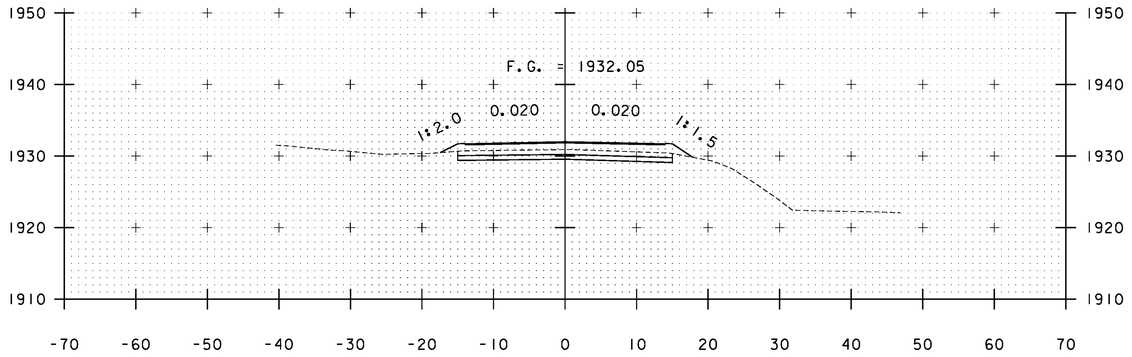
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

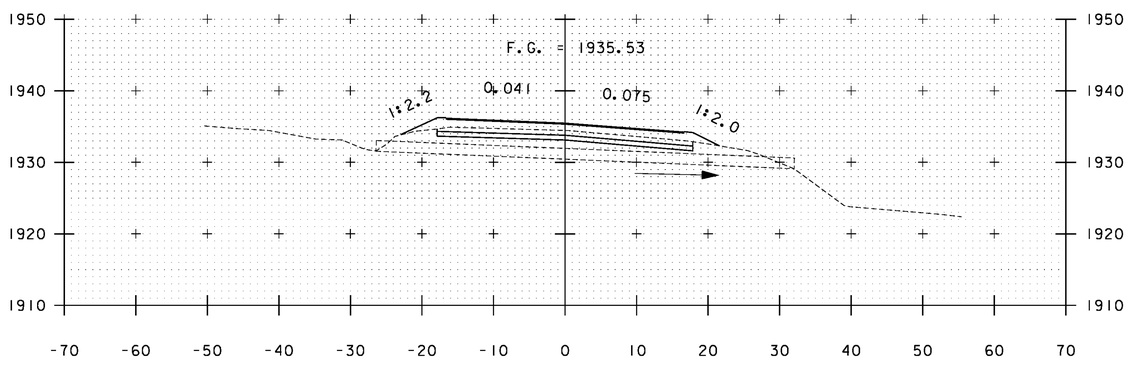
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 188 OF 444



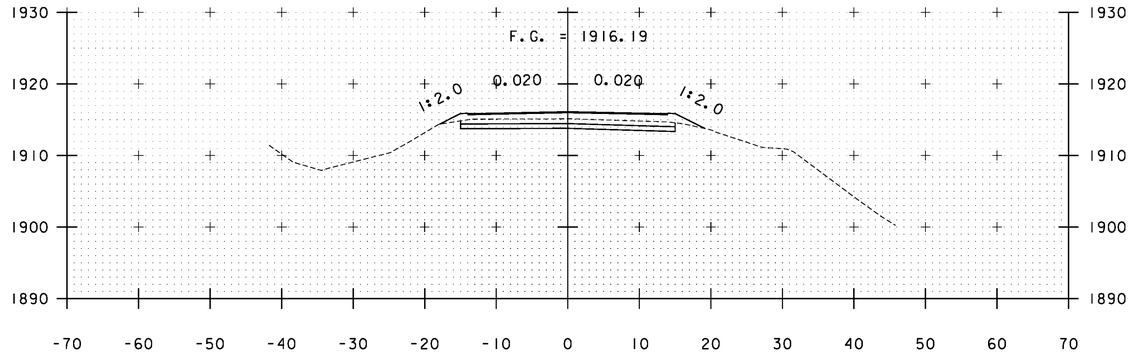

A 40+50



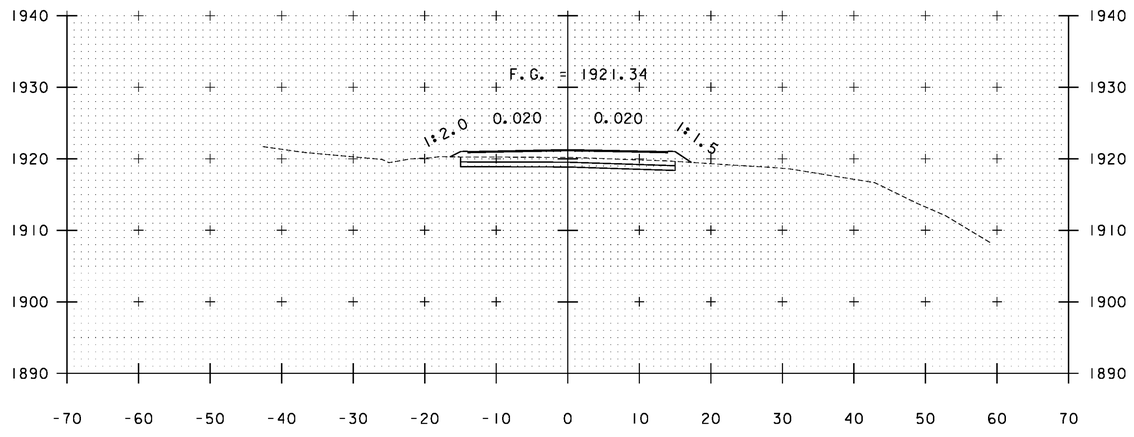

A 40+00




A 39+68




A 41+50



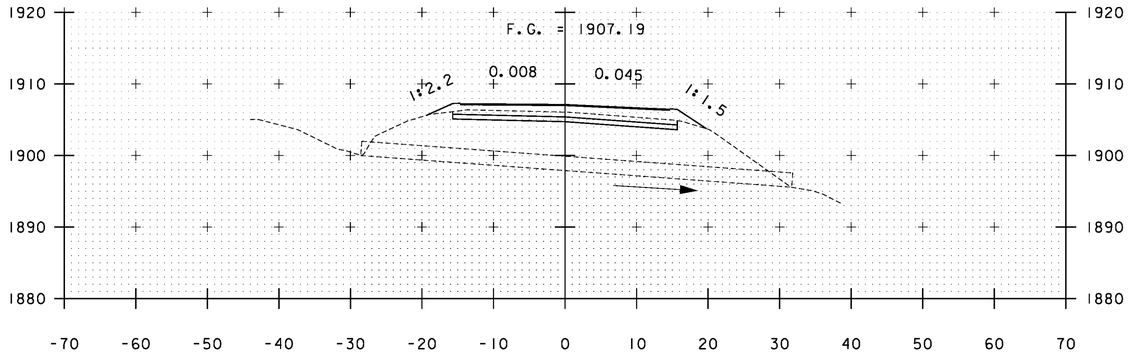

A 41+00

STA. A 39+68 TO STA. A 41+50

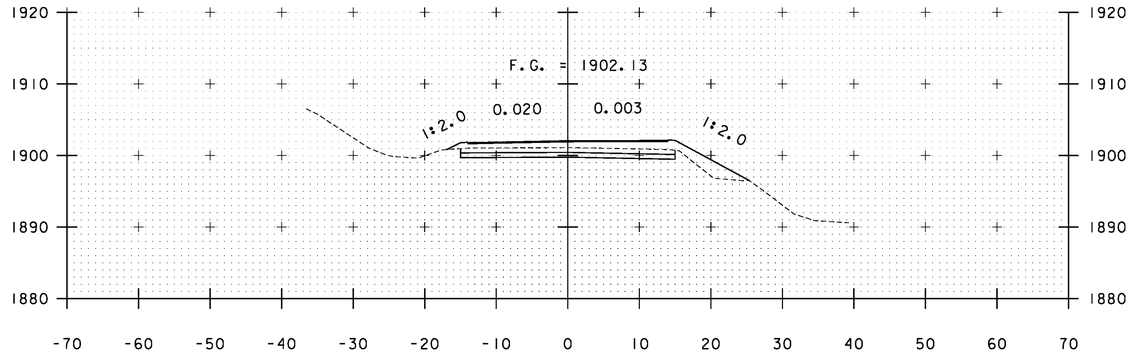
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

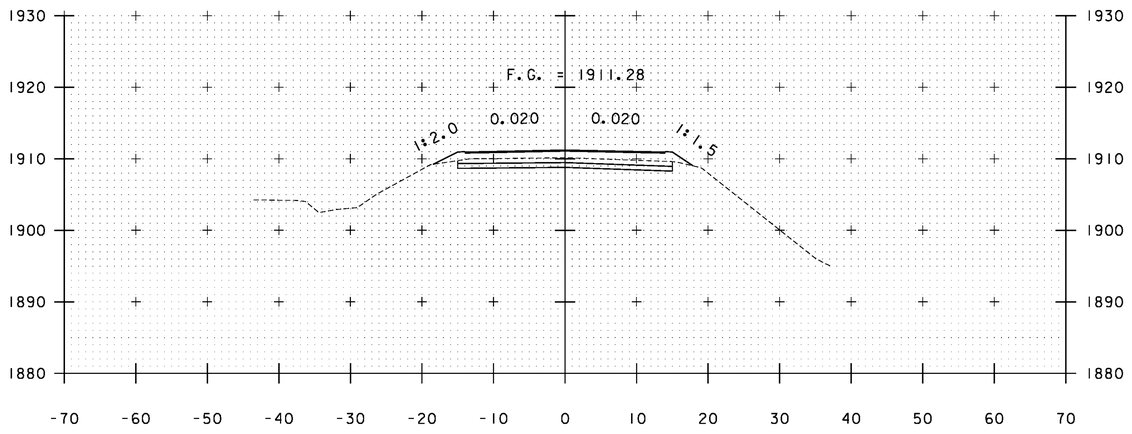
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 189 OF 444



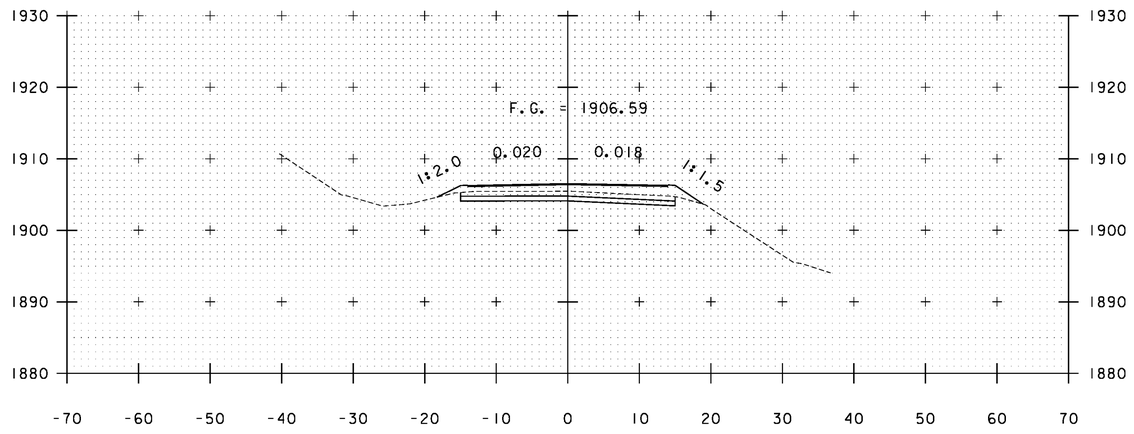

A 42+43




A 43+00




A 42+00



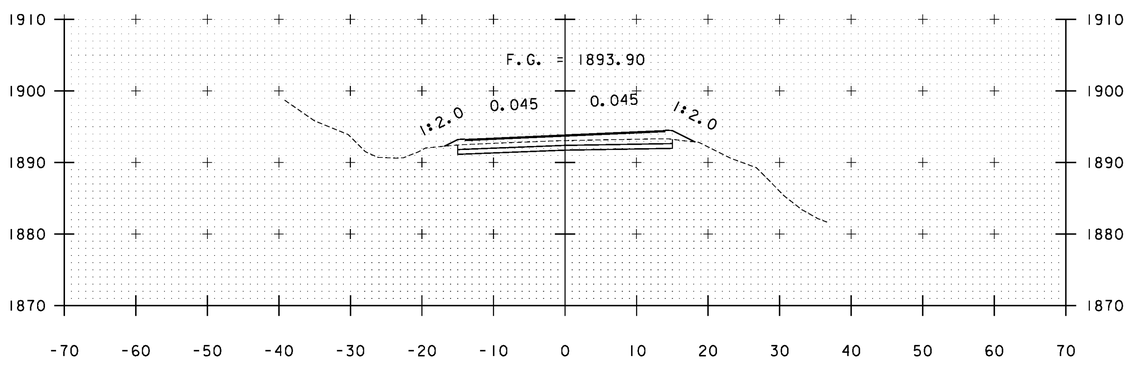

A 42+50

STA. A 42+00 TO STA. A 43+00

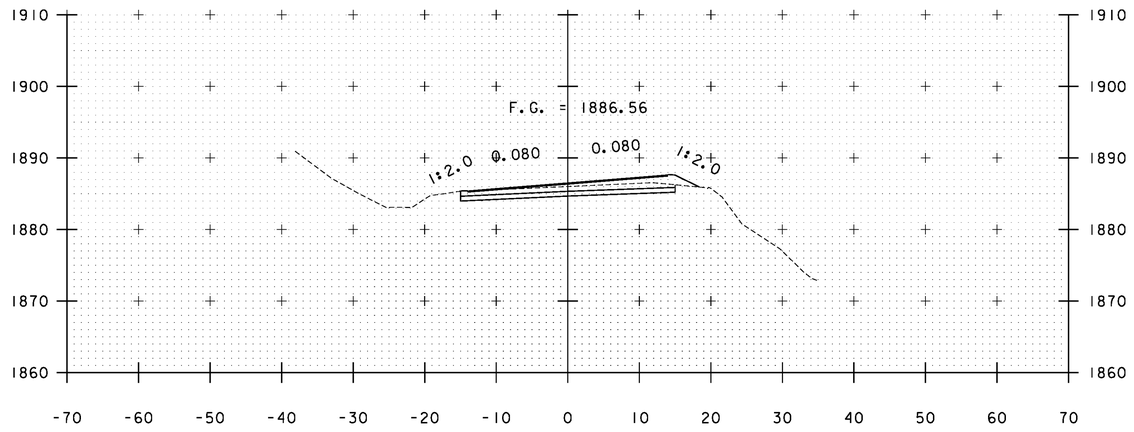
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

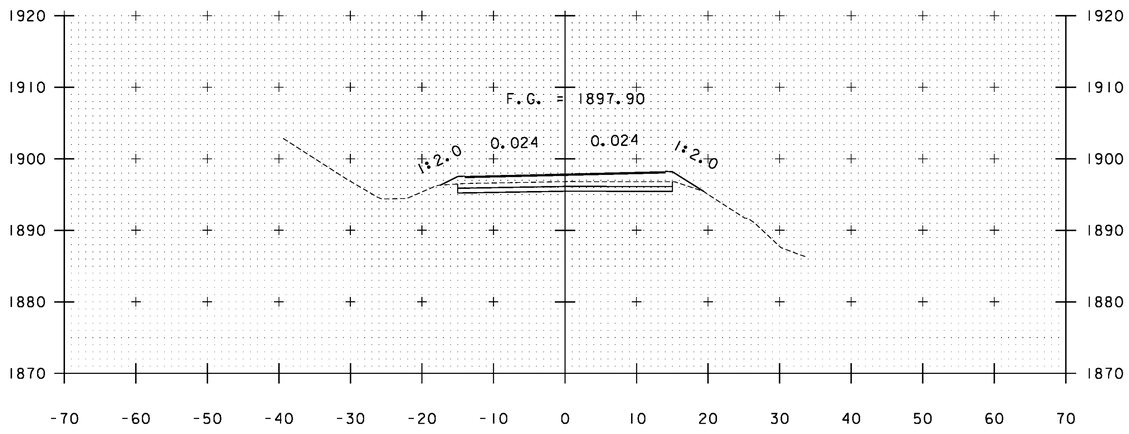
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 190 OF 444



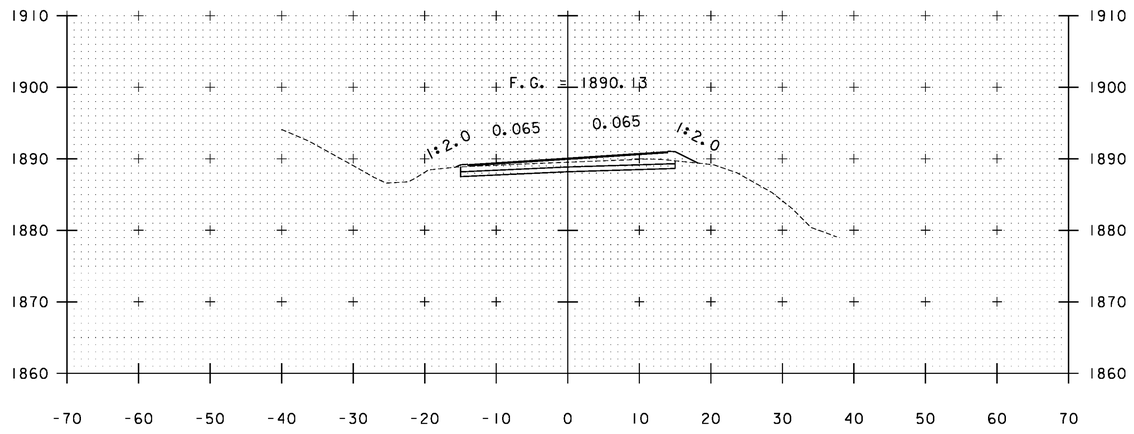

A 44+00




A 45+00




A 43+50



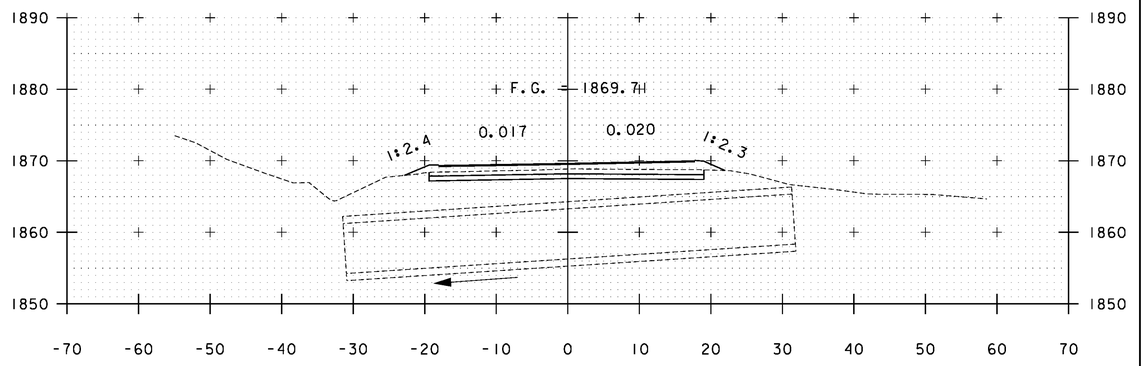

A 44+50

STA. A 43+50 TO STA. A 45+00

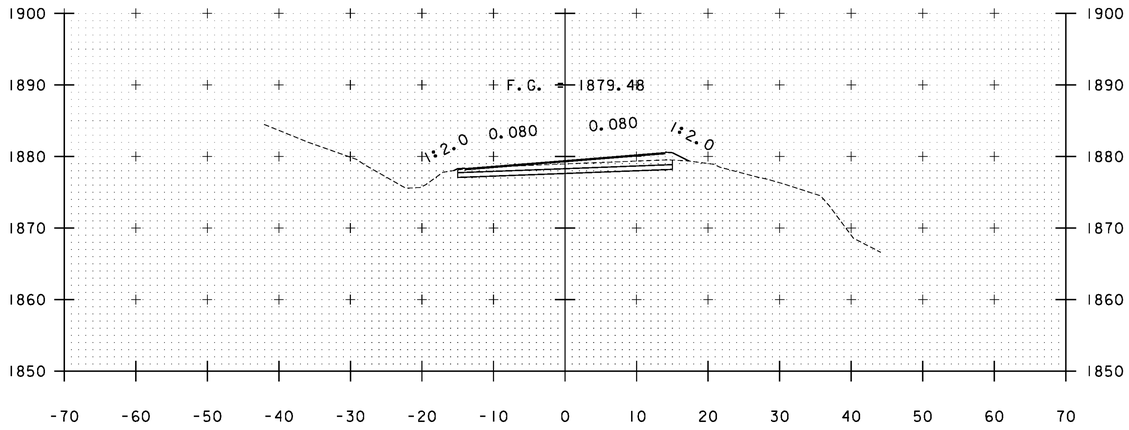
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

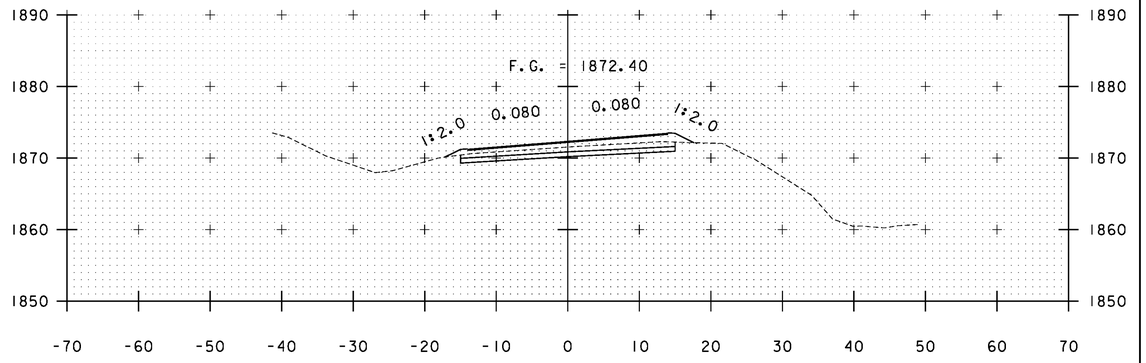
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 191 OF 444



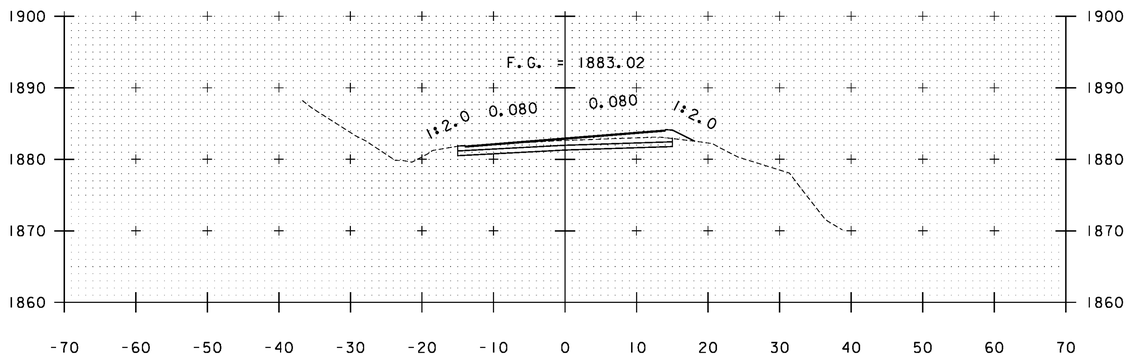

A 47+38



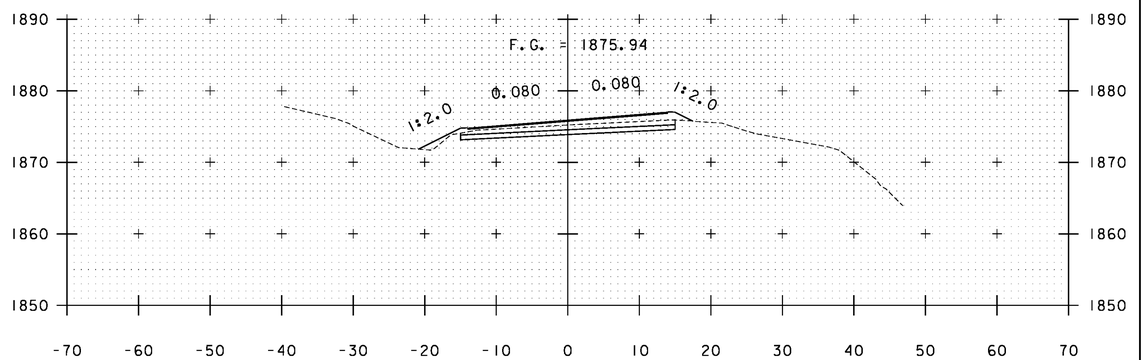

A 46+00




A 47+00




A 45+50



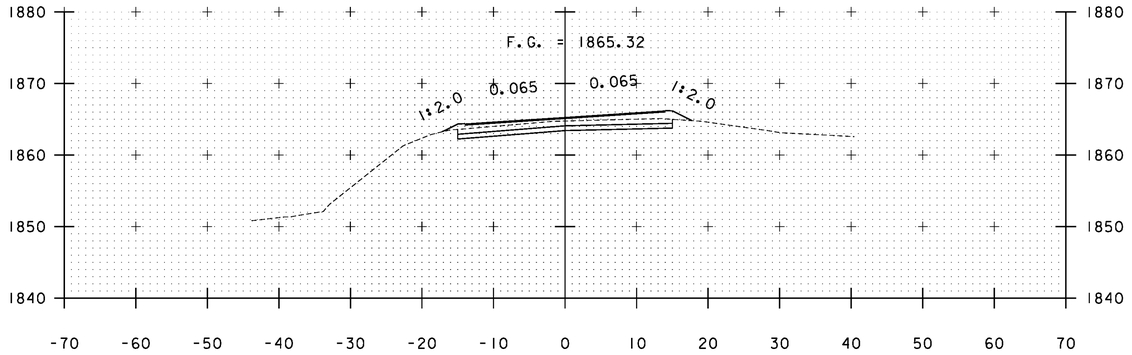

A 46+50

STA. A 45+50 TO STA. A 47+38

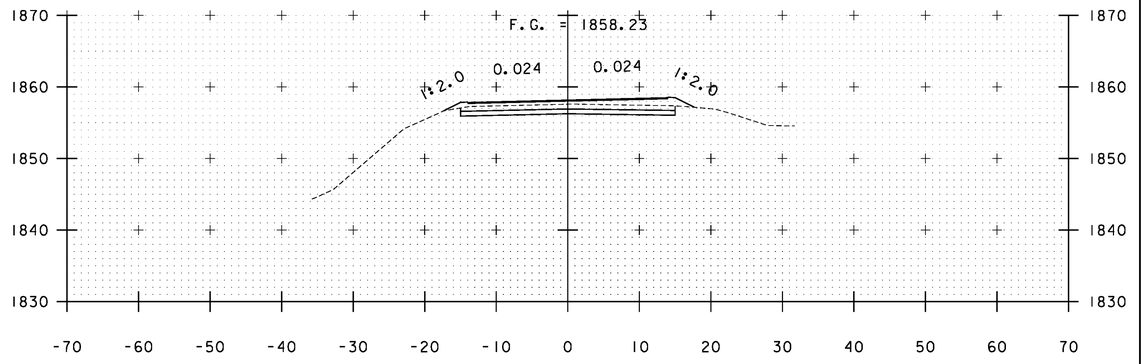
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

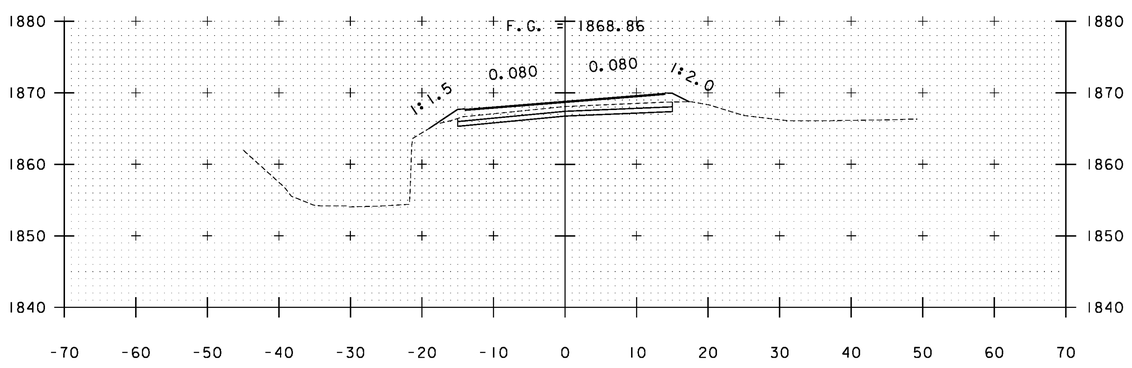
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 192 OF 444



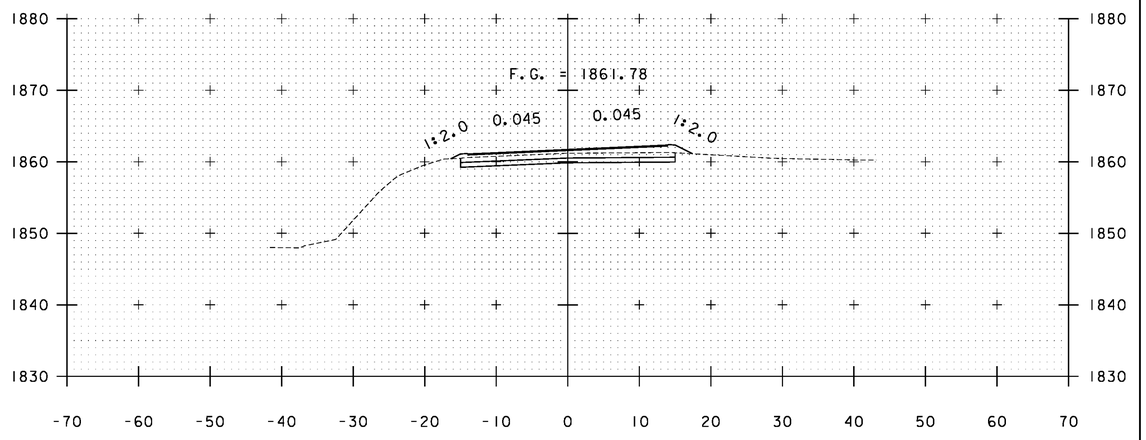

A 48+00




A 49+00




A 47+50



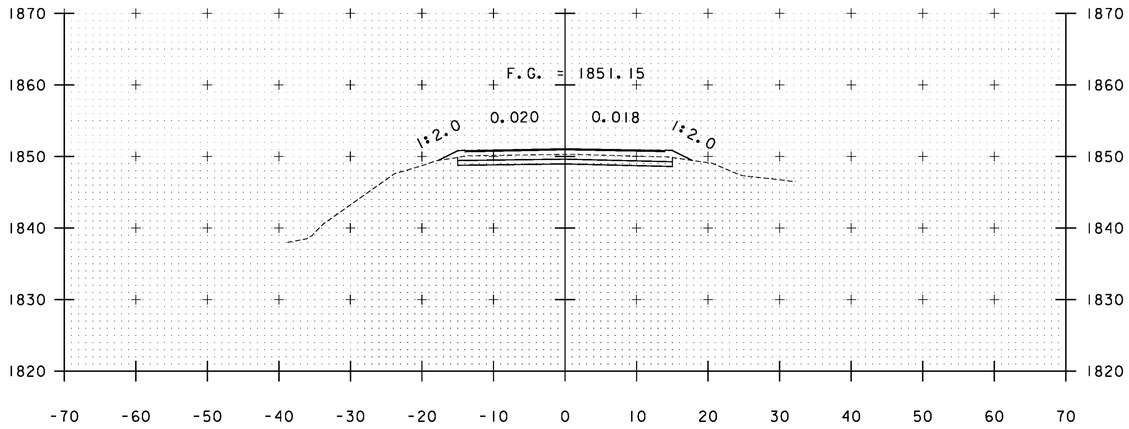

A 48+50

STA. A 47+50 TO STA. A 49+00

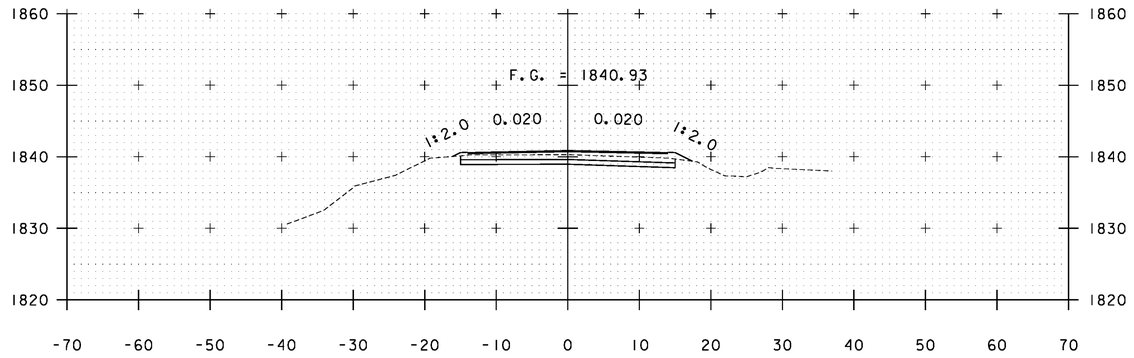
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER 5RPS0P3-013-I(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

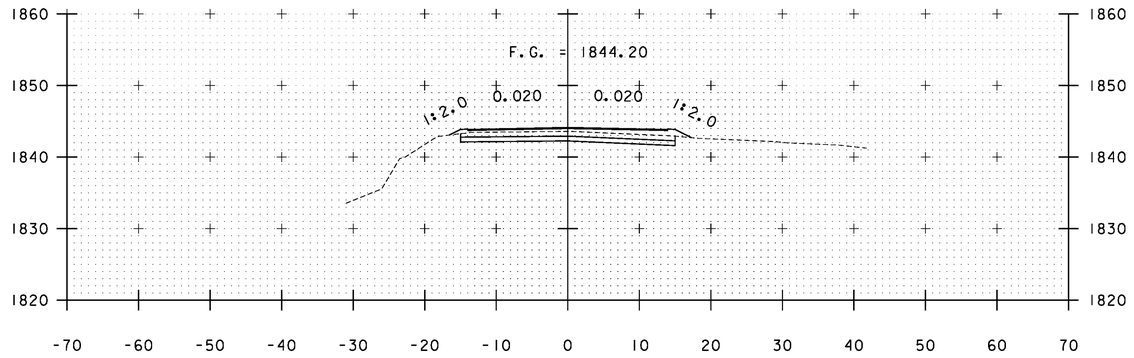
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 193 OF 444



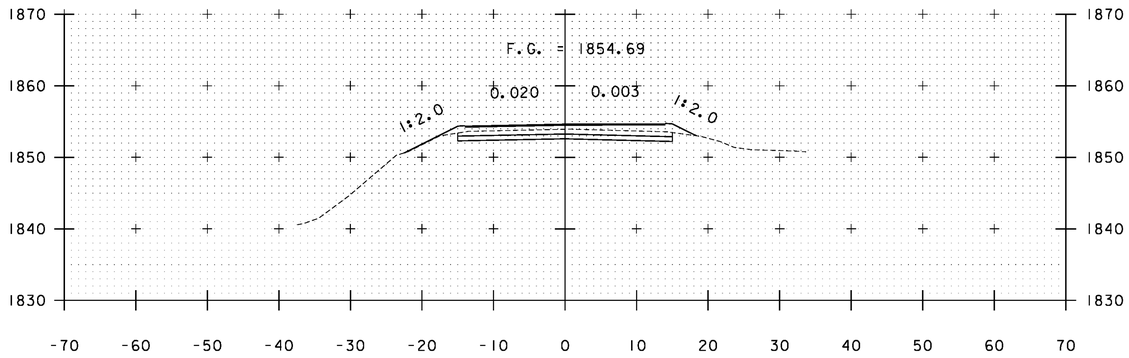

A 50+00



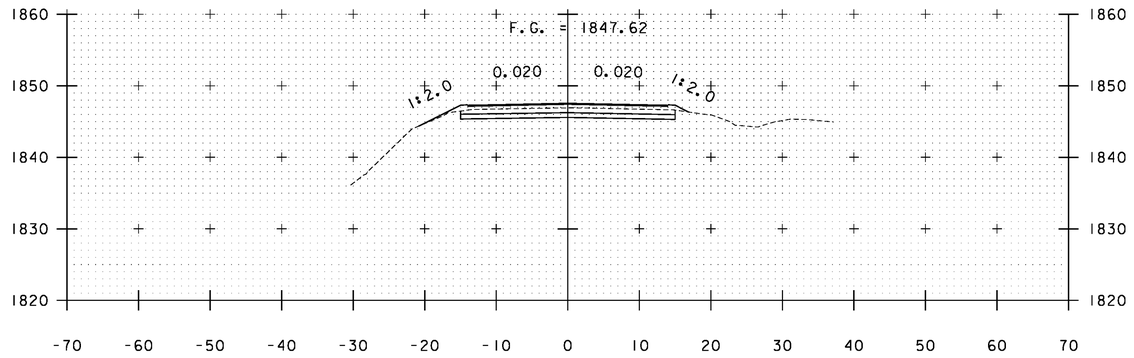

A 51+50




A 51+00




A 49+50



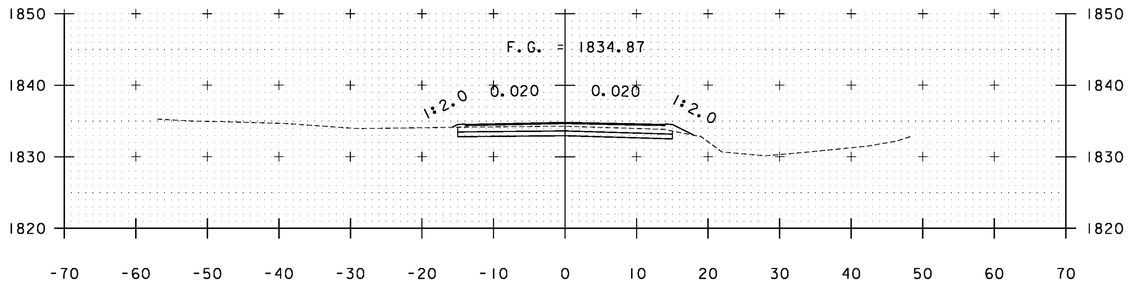

A 50+50

STA. A 49+50 TO STA. A 51+50

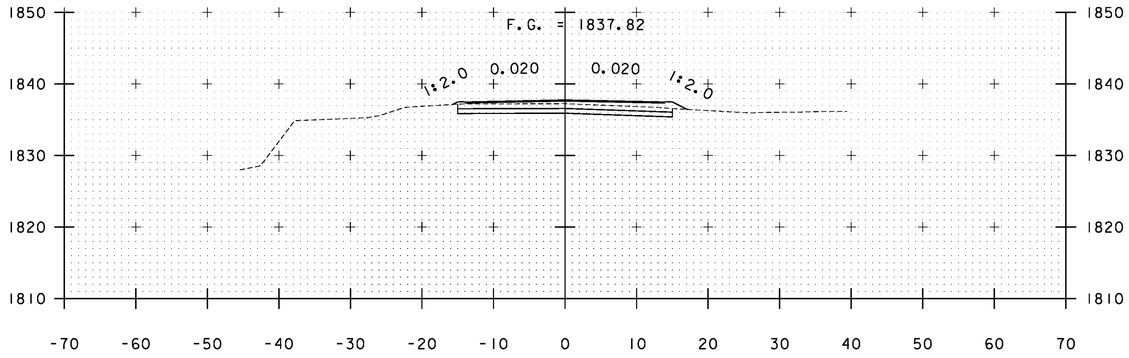
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

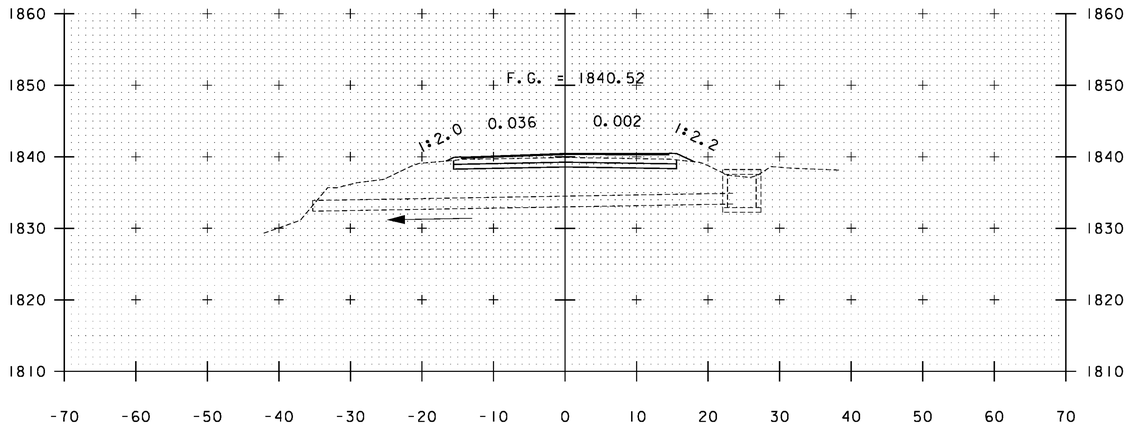
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 194 OF 444



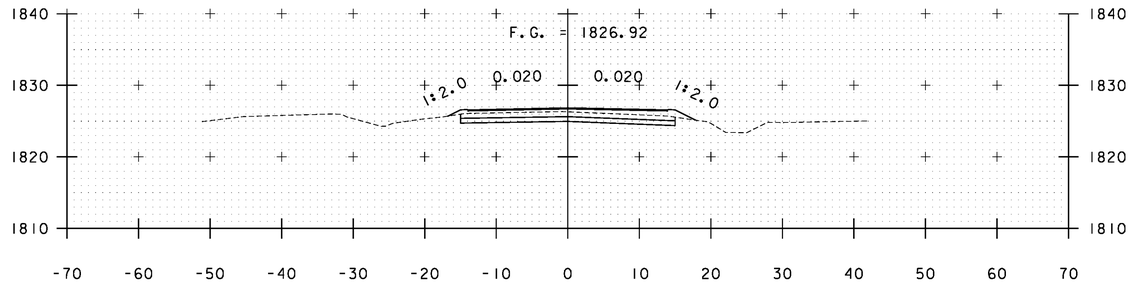

A 52+50



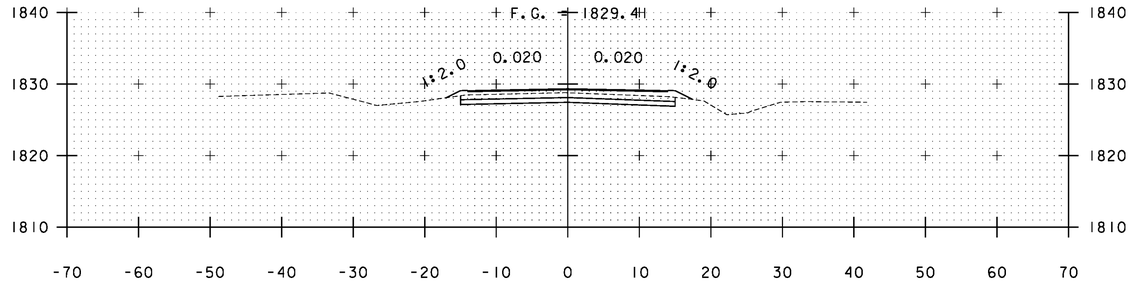

A 52+00



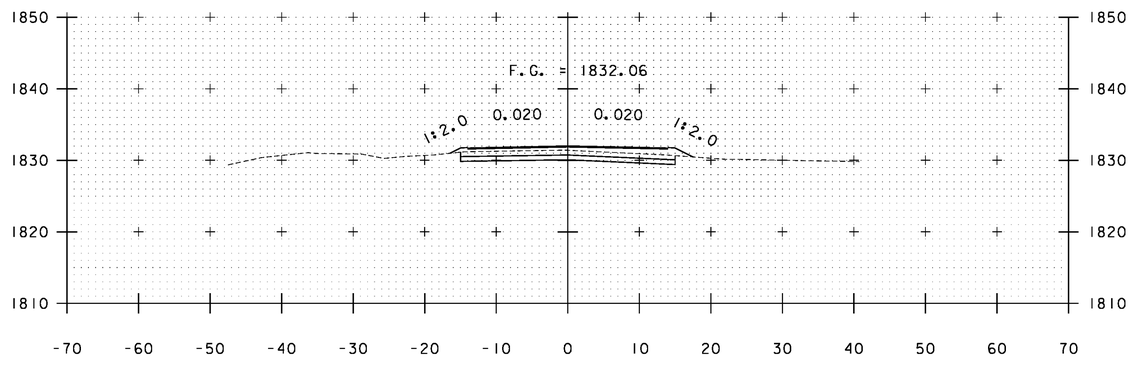

A 51+57




A 54+00



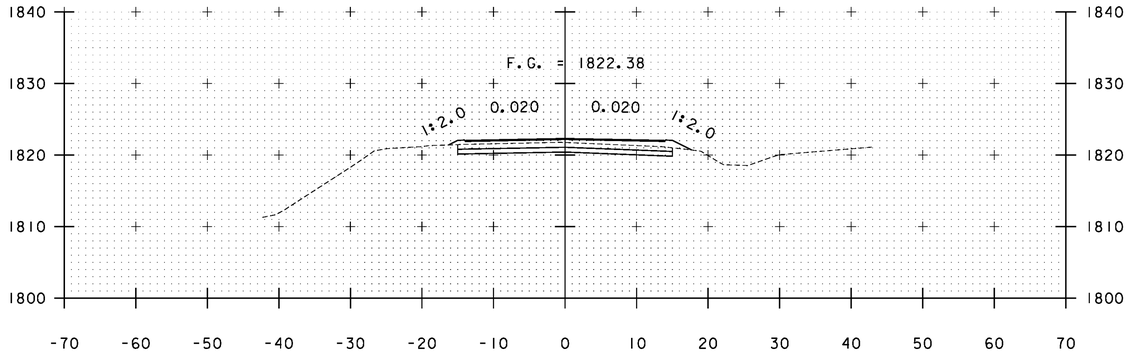

A 53+50



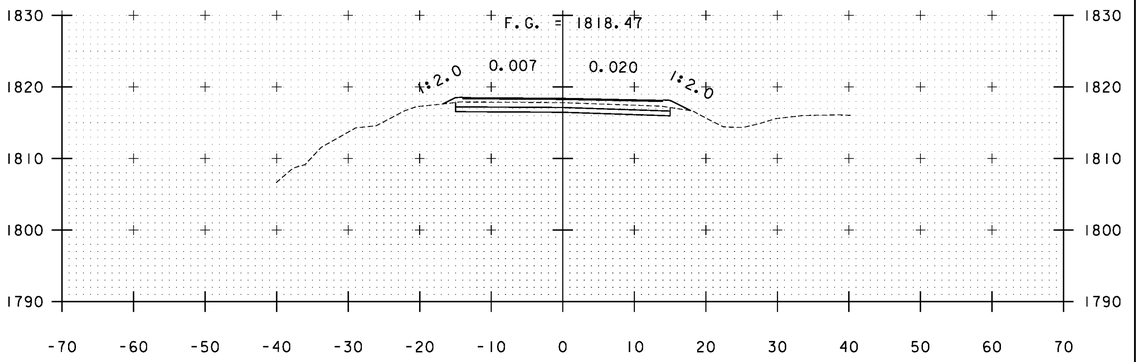

A 53+00

STA. A 51+57 TO STA. A 54+00

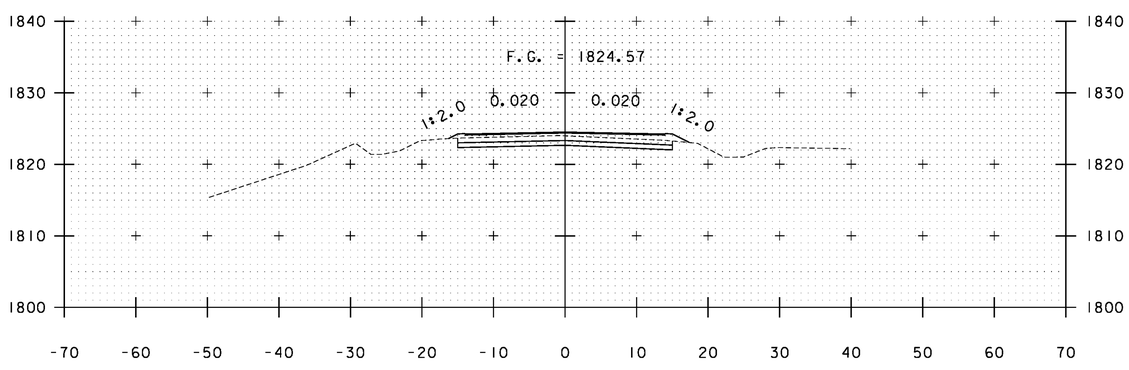
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 195 OF 444 |



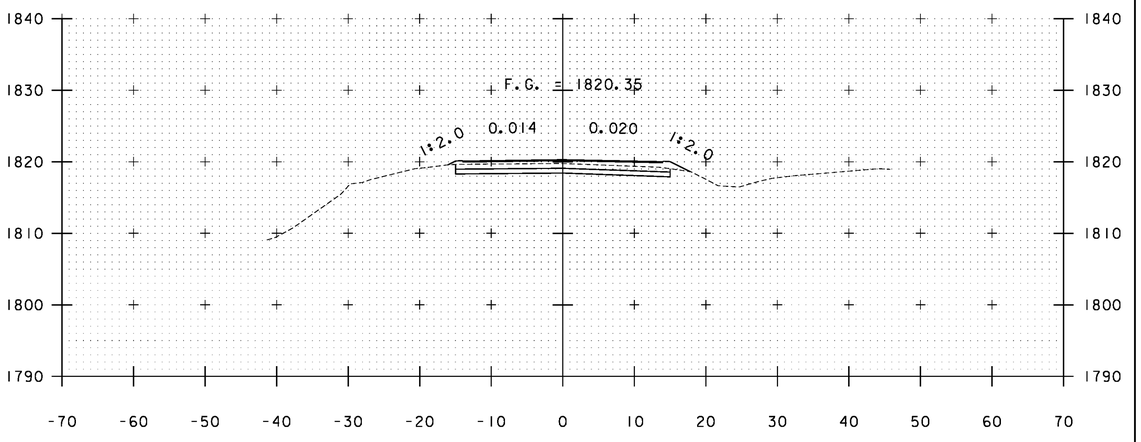

A 55+00




A 56+00




A 54+50



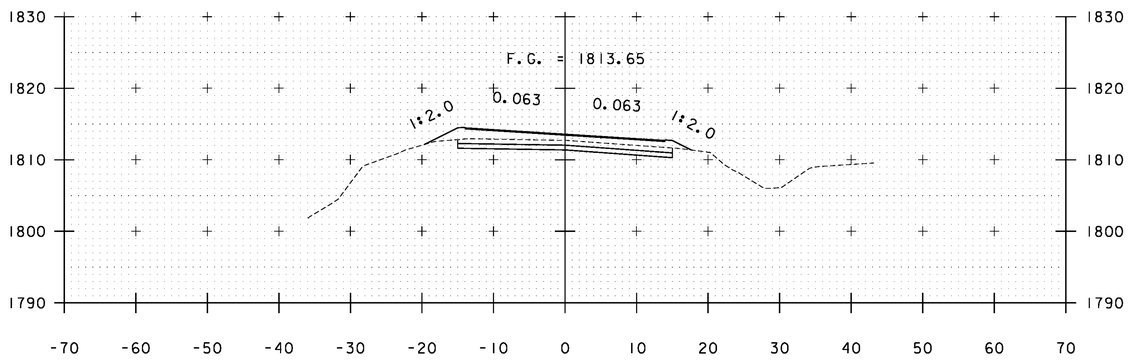

A 55+50

STA. A 54+50 TO STA. A 56+00

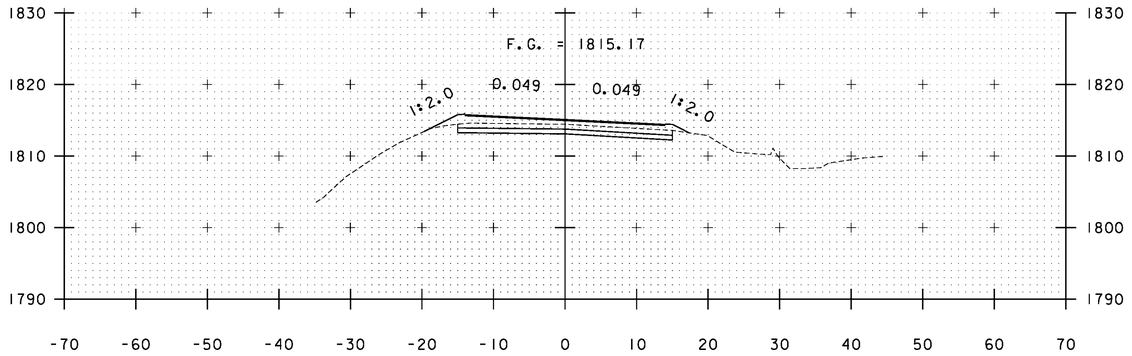
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

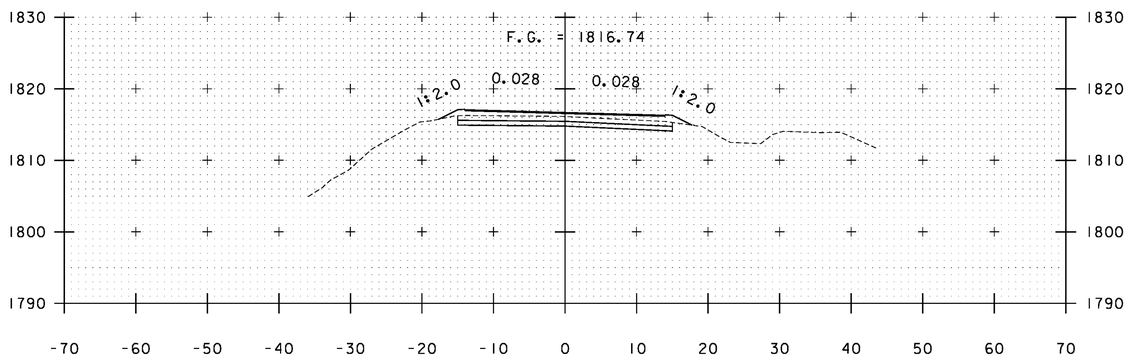
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 196 OF 444



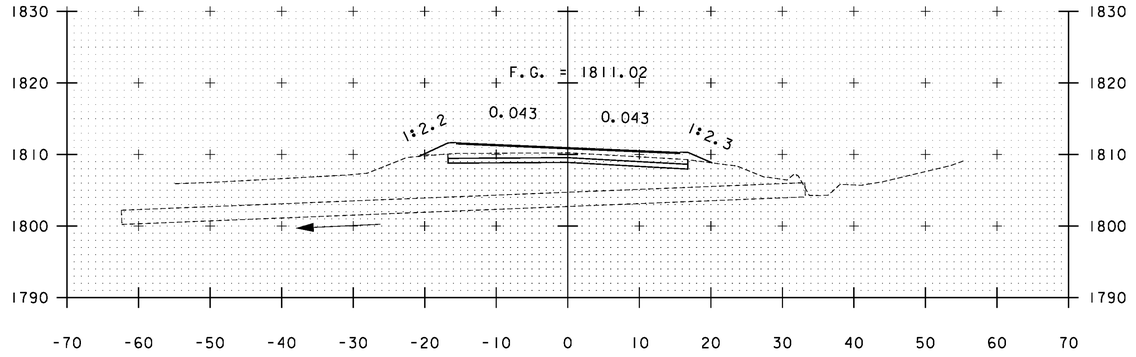

A 57+50



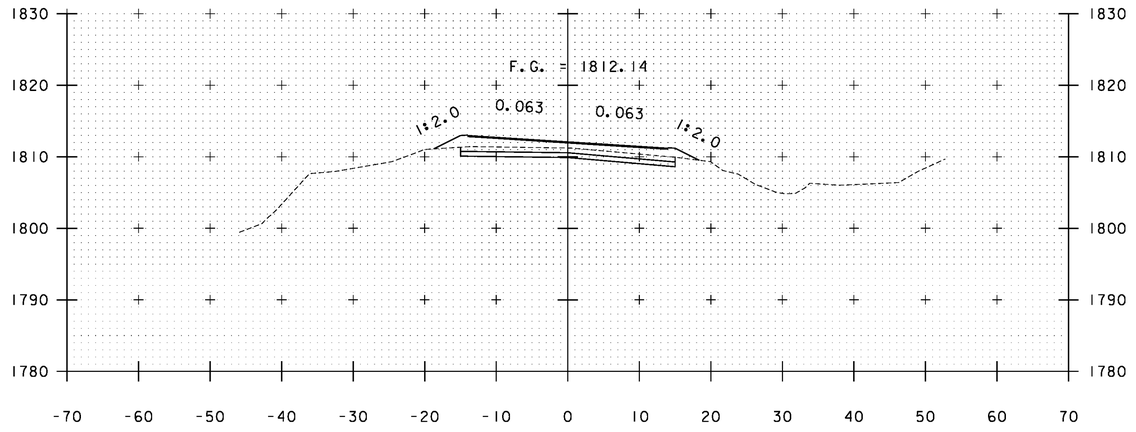

A 57+00




A 56+50




A 58+37



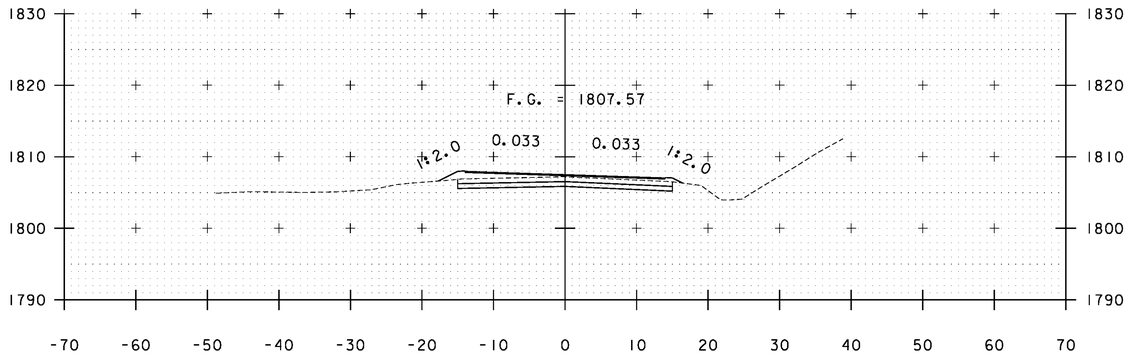

A 58+00

STA. A 56+50 TO STA. A 58+37

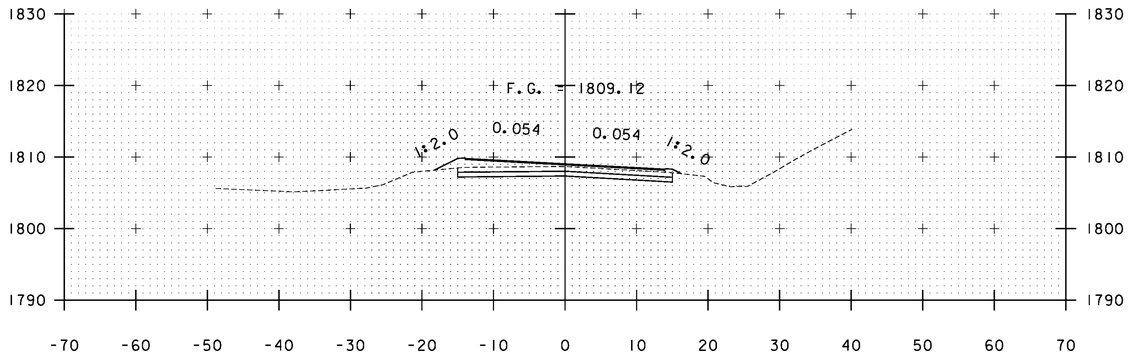
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

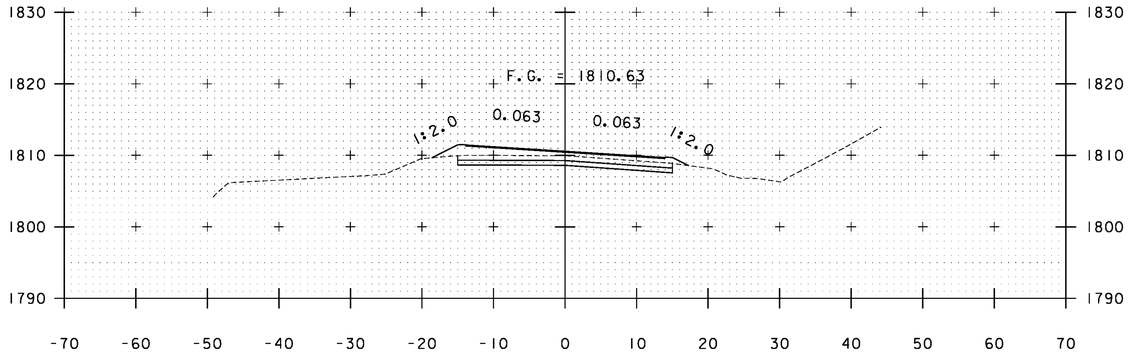
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 197 OF 444



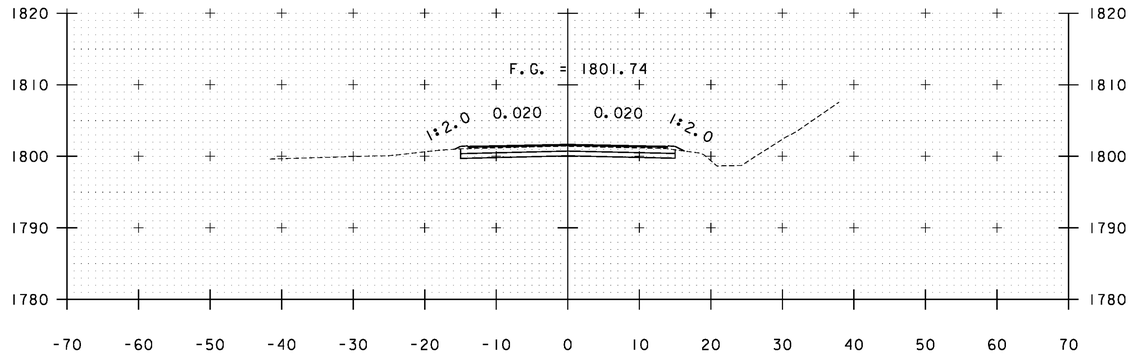

A 59+50



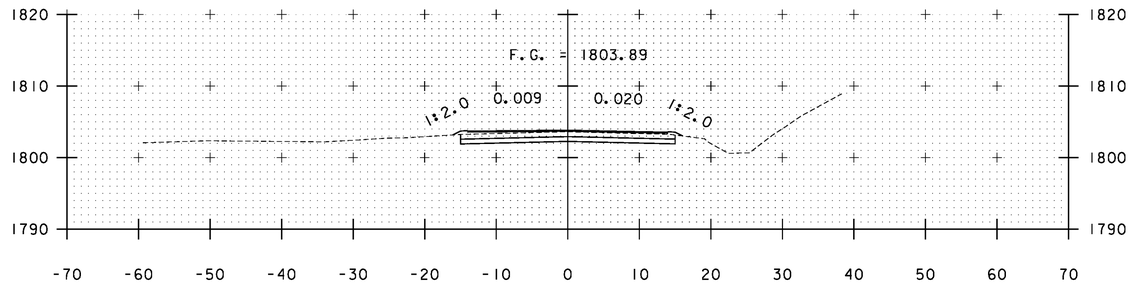

A 59+00



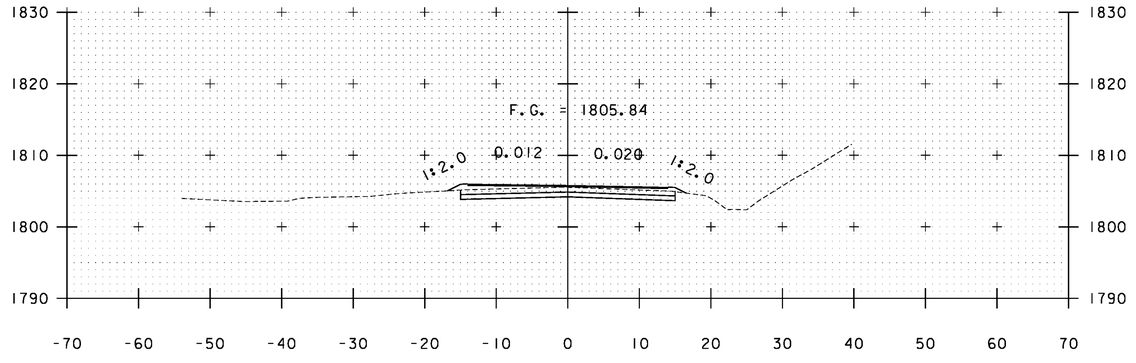

A 58+50




A 61+00



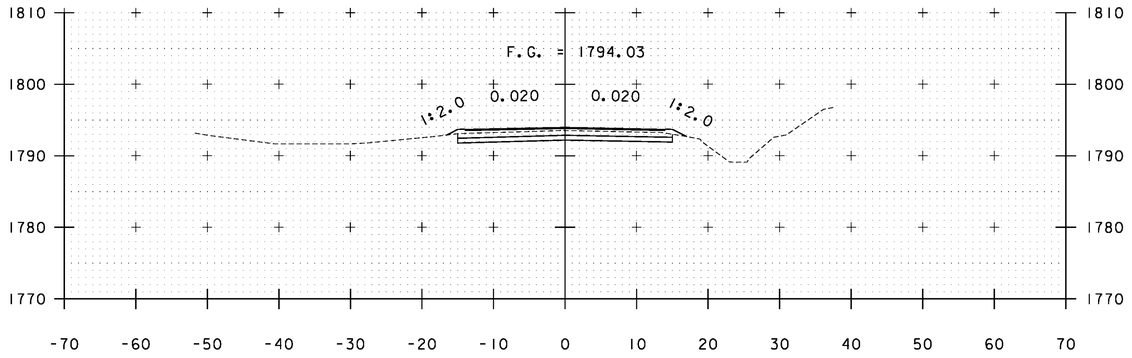

A 60+50



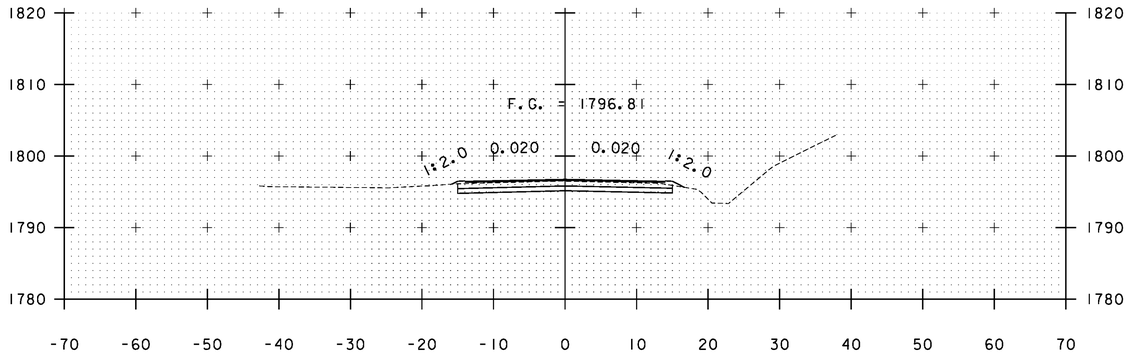

A 60+00

STA. A 58+50 TO STA. A 61+00

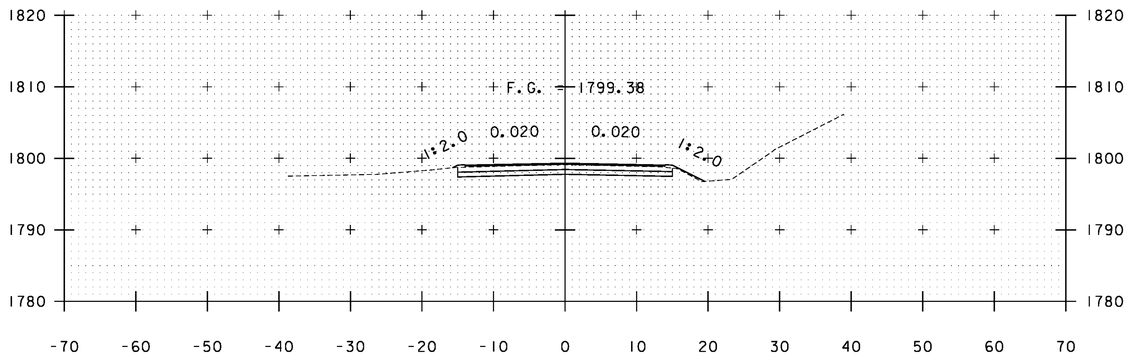
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 198 OF 444 |



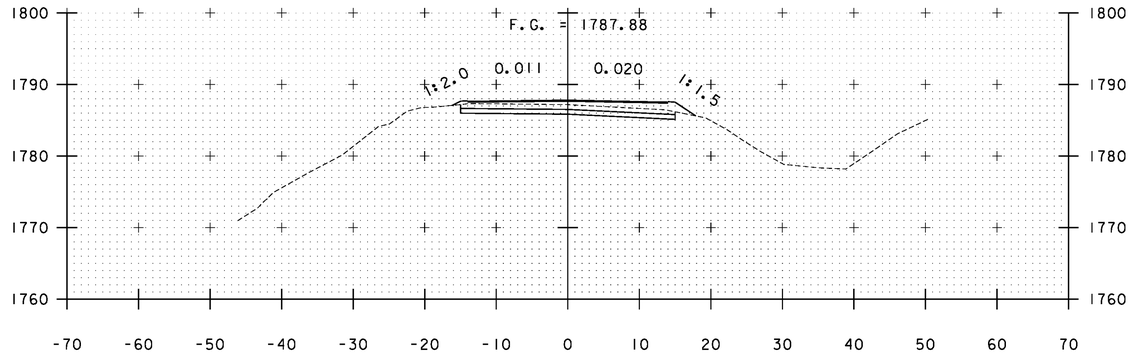

A 62+50



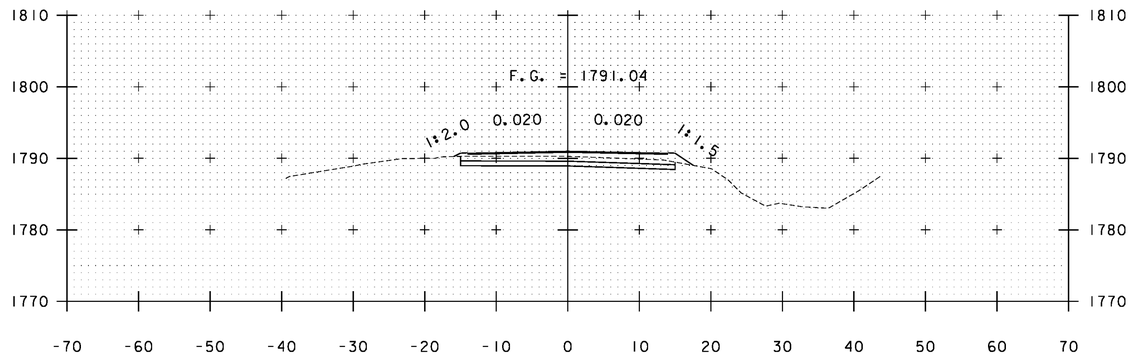

A 62+00




A 61+50




A 63+50



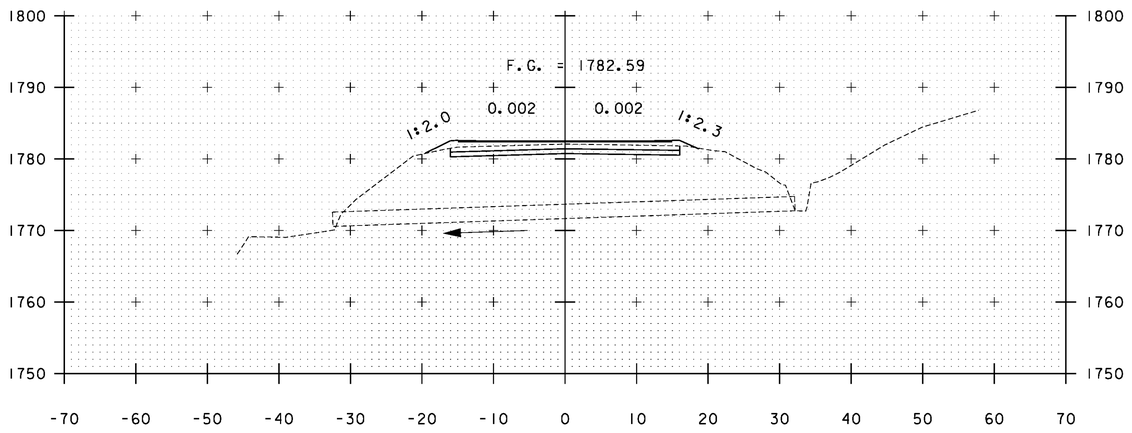

A 63+00

STA. A 61+50 TO STA. A 63+50

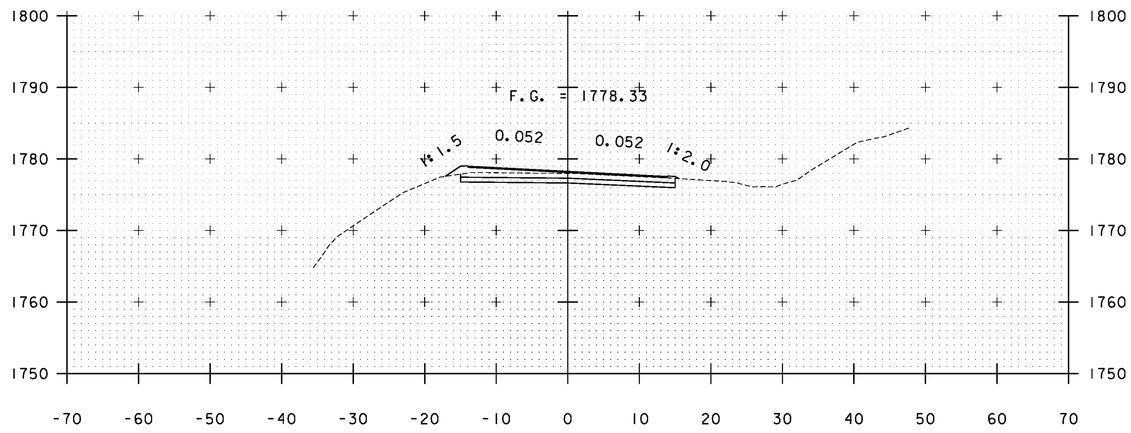
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

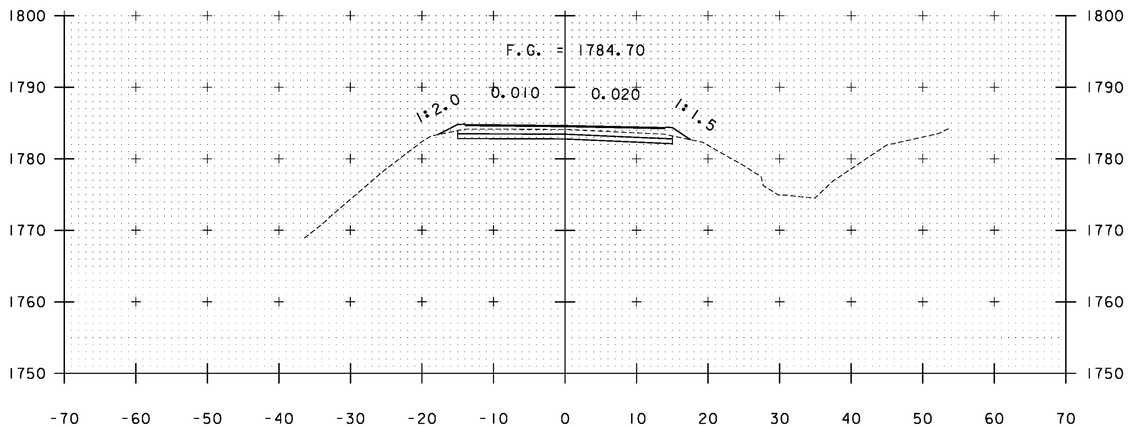
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 199 OF 444



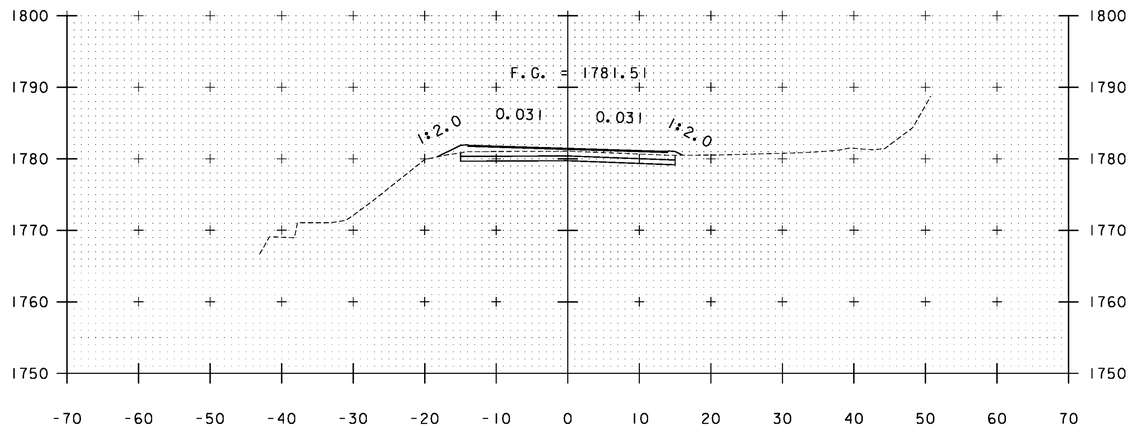

A 64+33




A 65+00




A 64+00



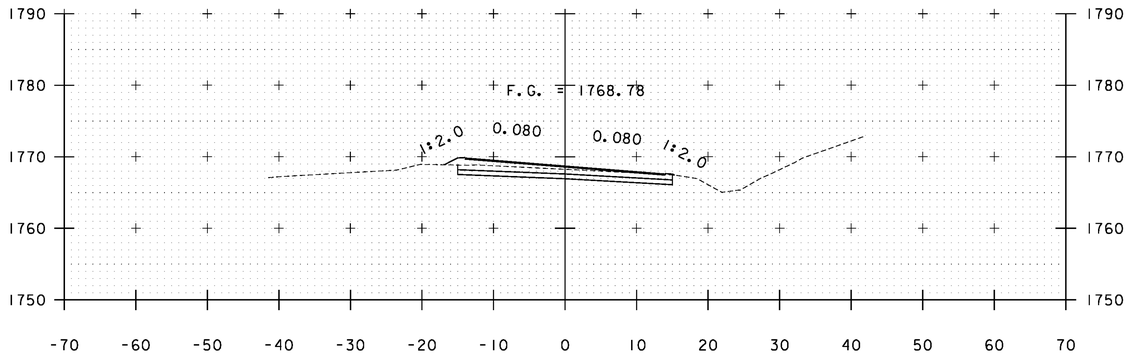

A 64+50

STA. A 64+00 TO STA. A 65+00

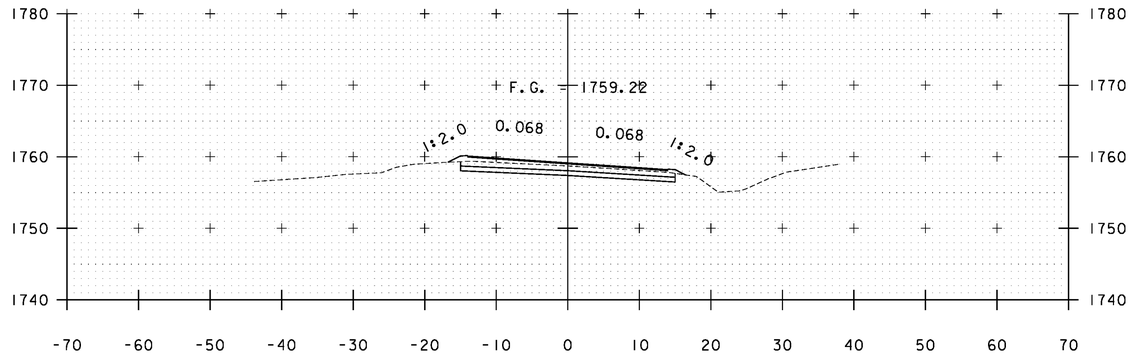
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

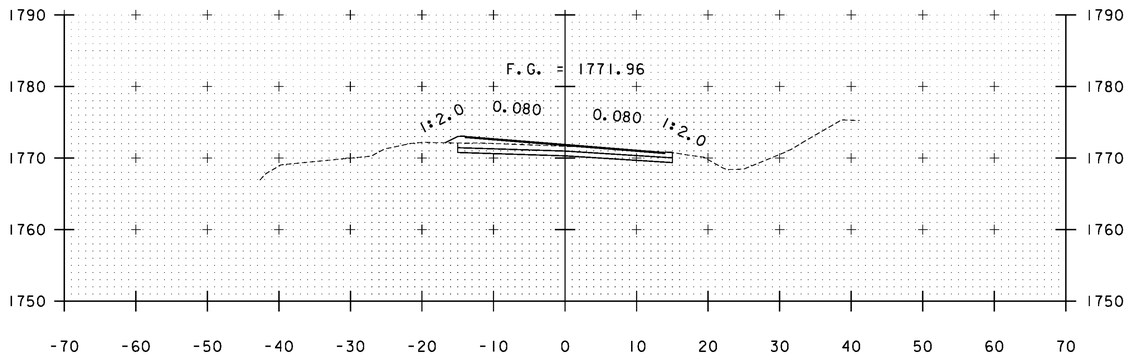
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 200 OF 444



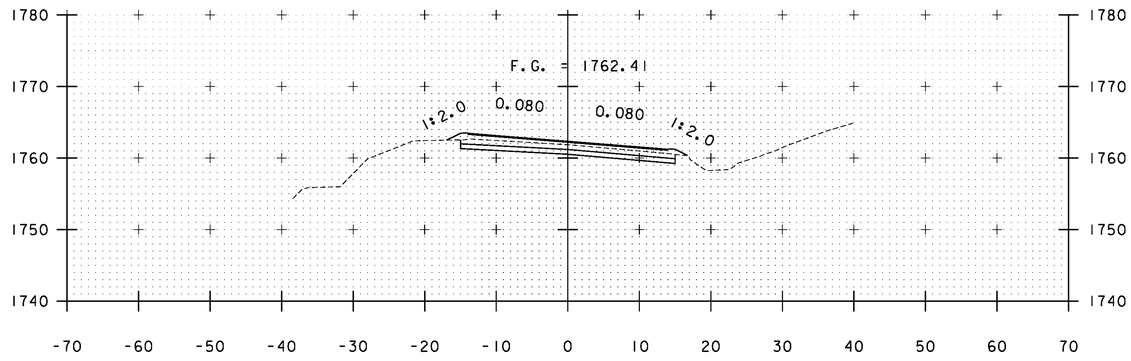

A 66+50



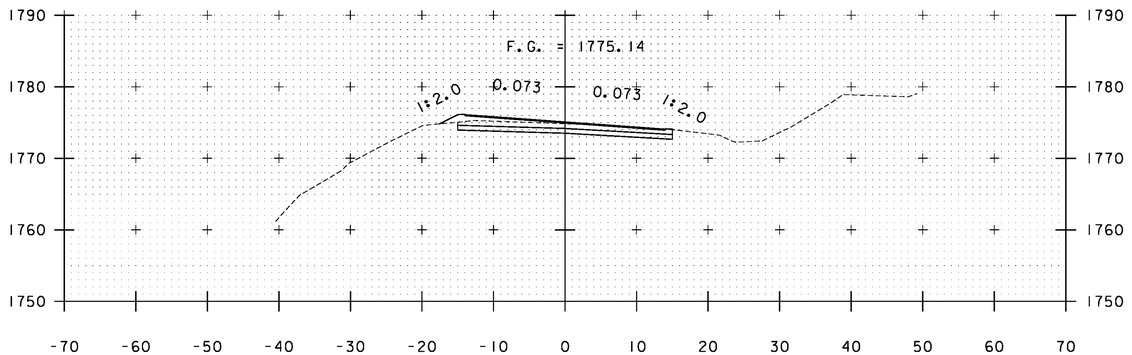

A 68+00



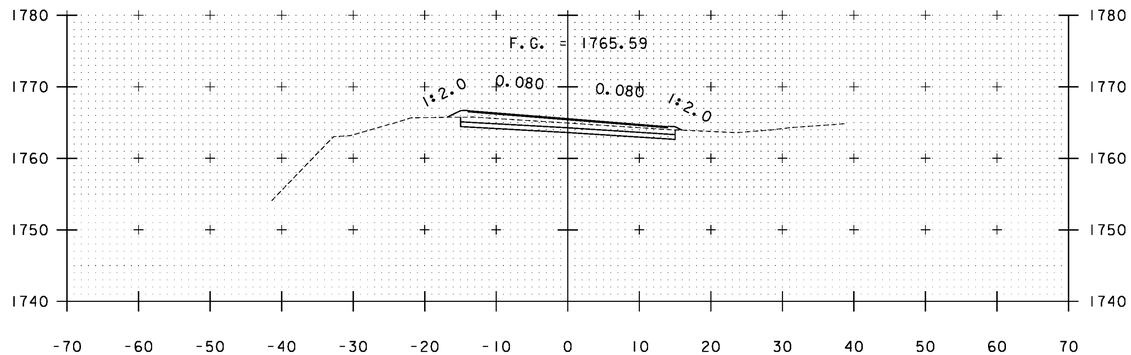

A 66+00




A 67+50




A 65+50



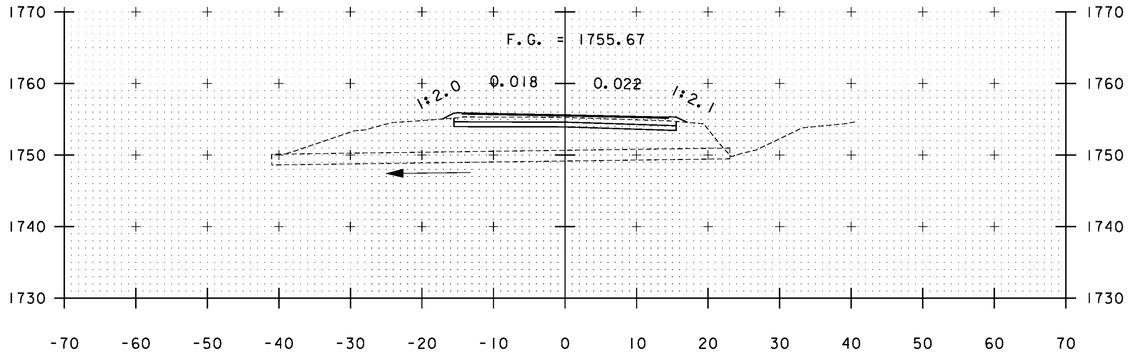

A 67+00

STA. A 65+50 TO STA. A 68+00

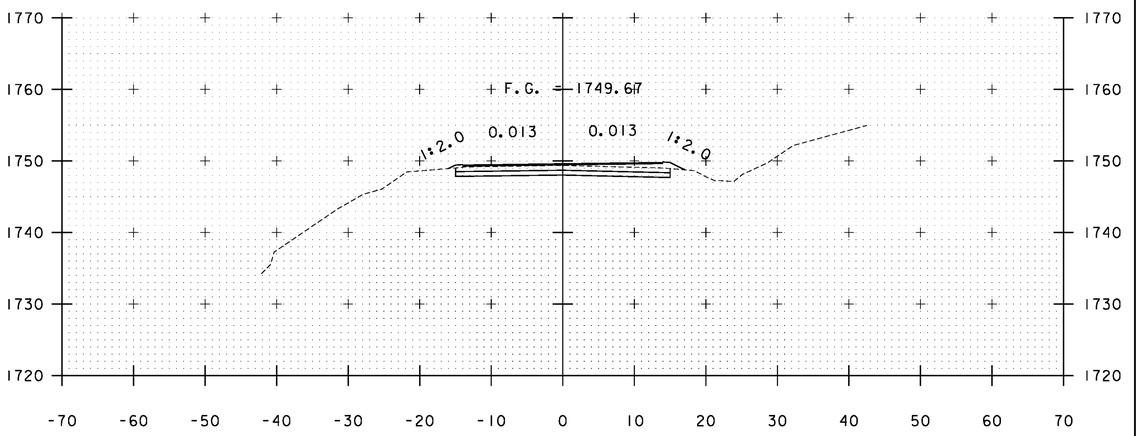
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

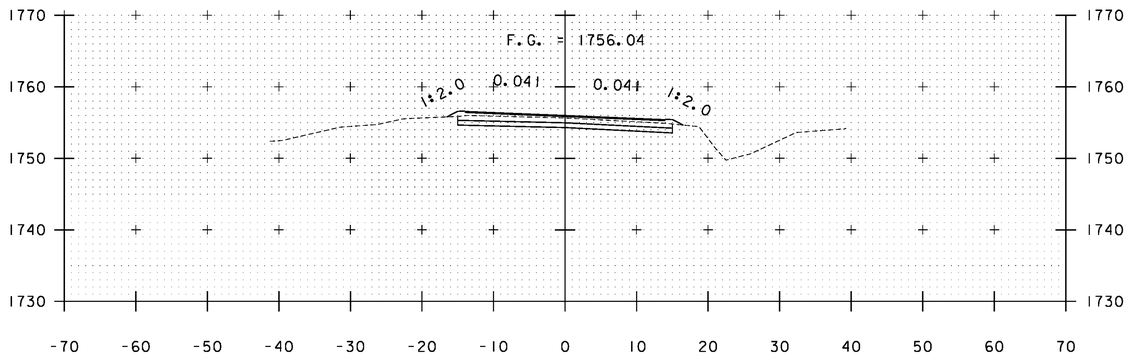
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 201 OF 444



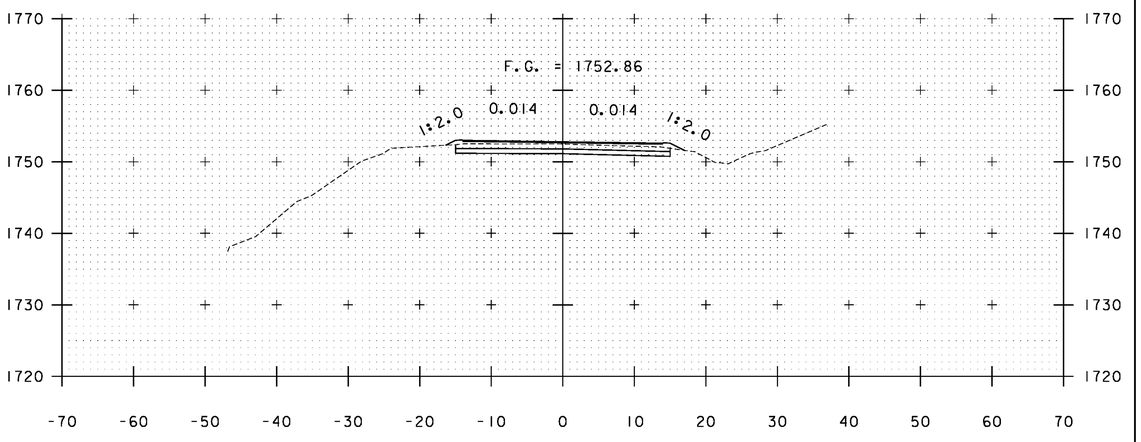

A 68+56




A 69+50



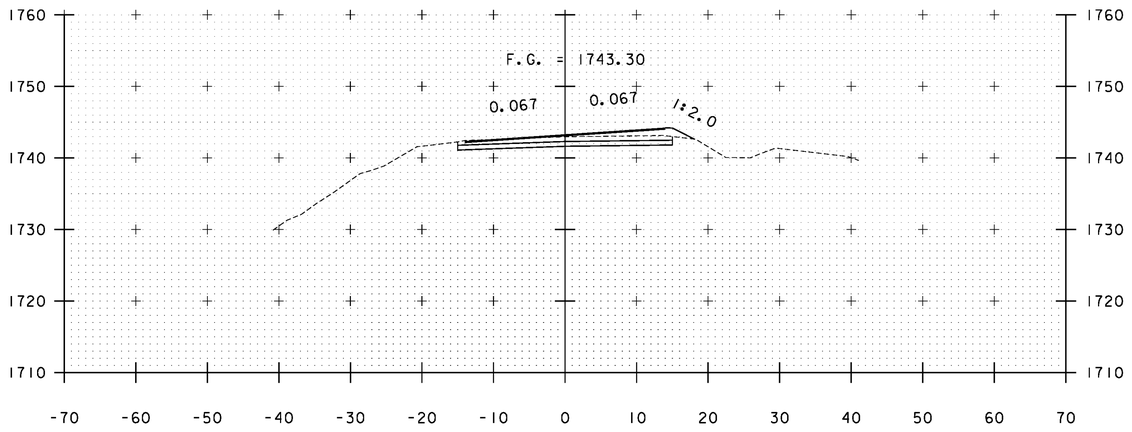

A 68+50



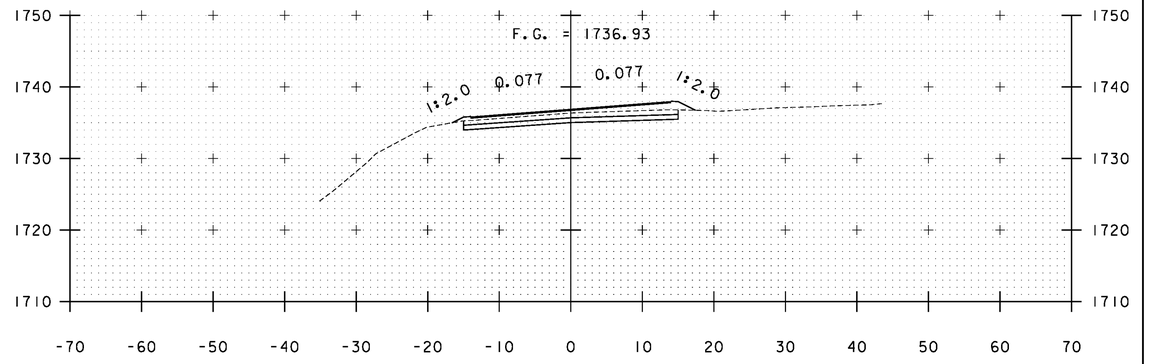

A 69+00

STA. A 68+50 TO STA. A 69+50

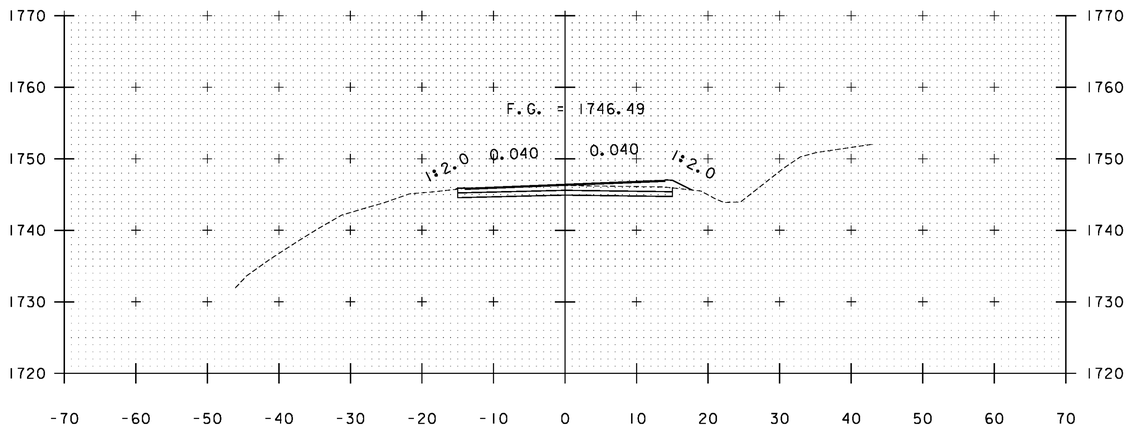
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 202 OF 444 |



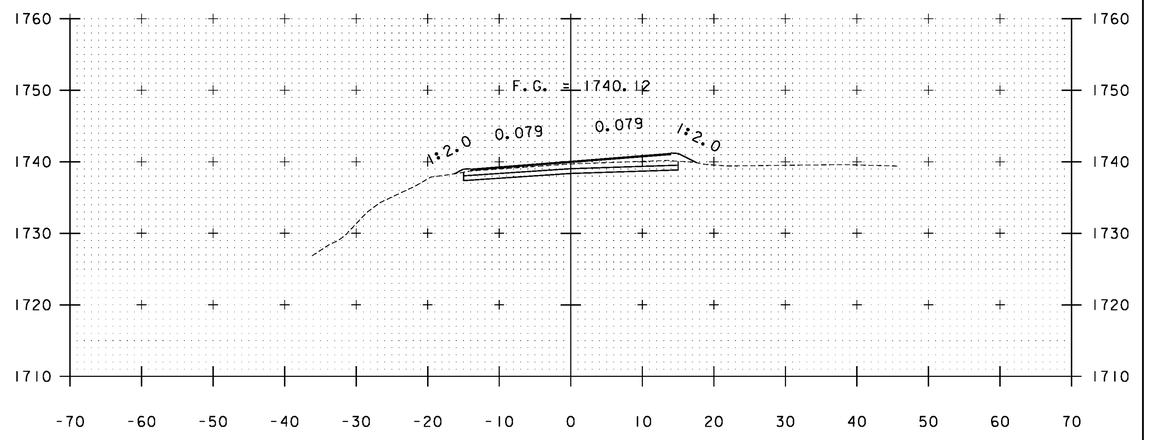

A 70+50




A 71+50




A 70+00



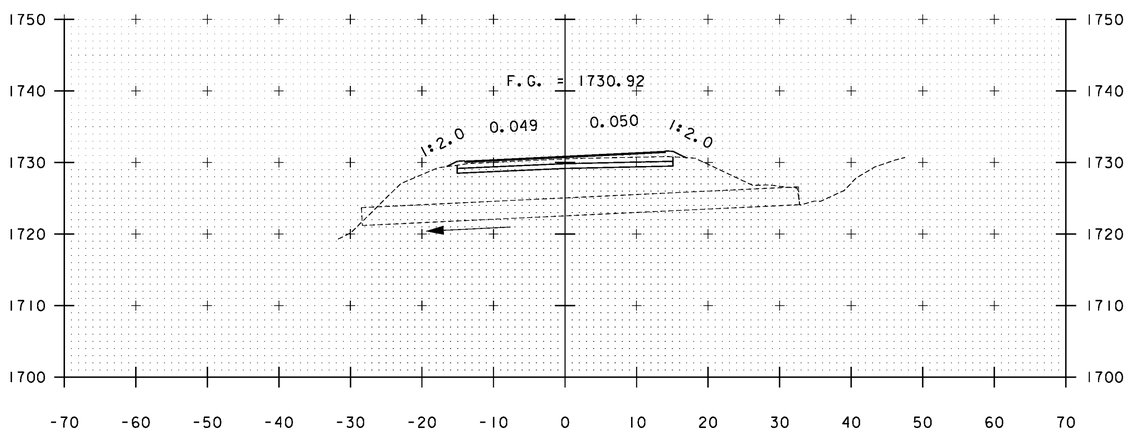

A 71+00

STA. A 70+00 TO STA. A 71+50

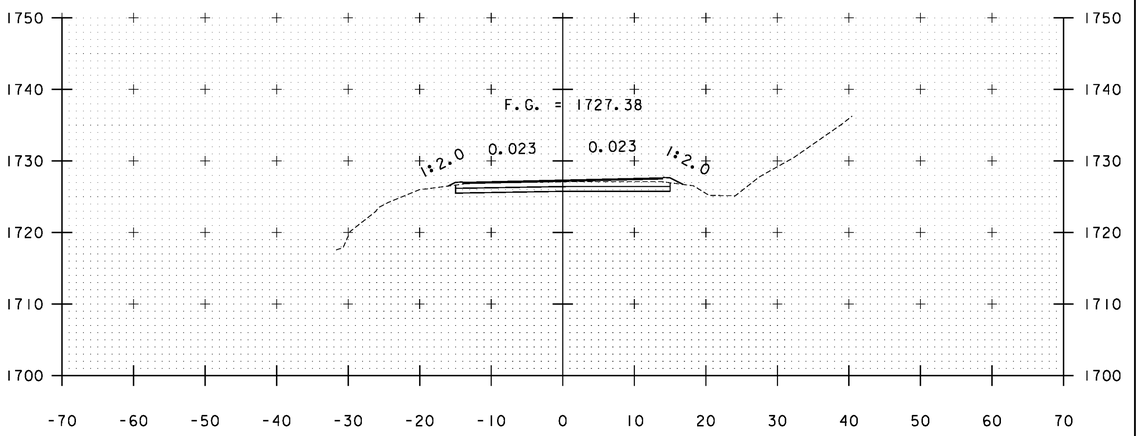
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

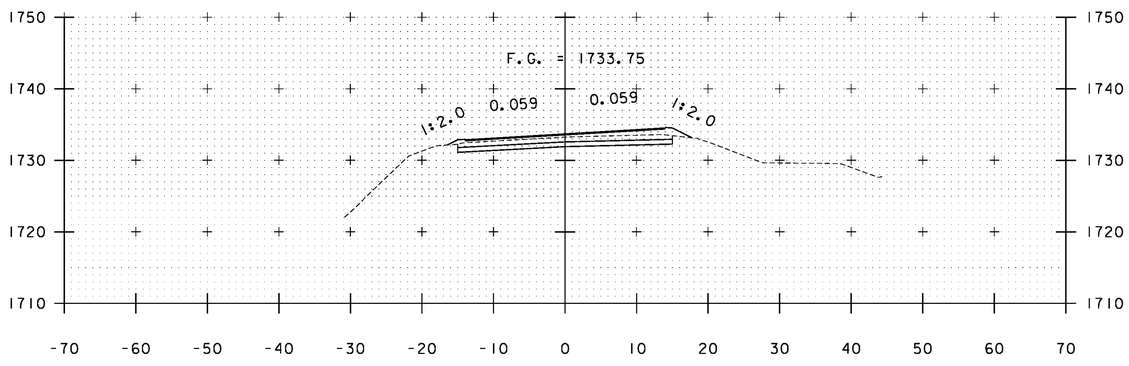
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 203 OF 444



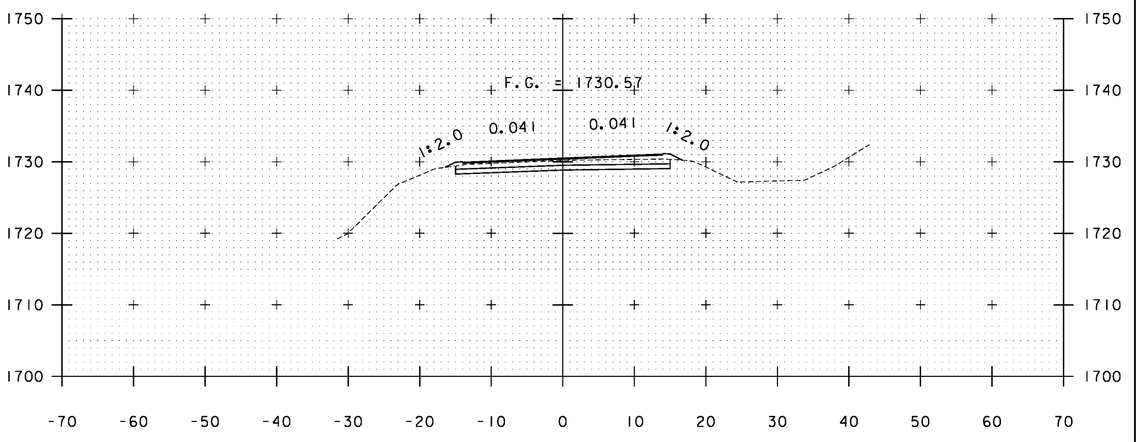

A 72+44




A 73+00



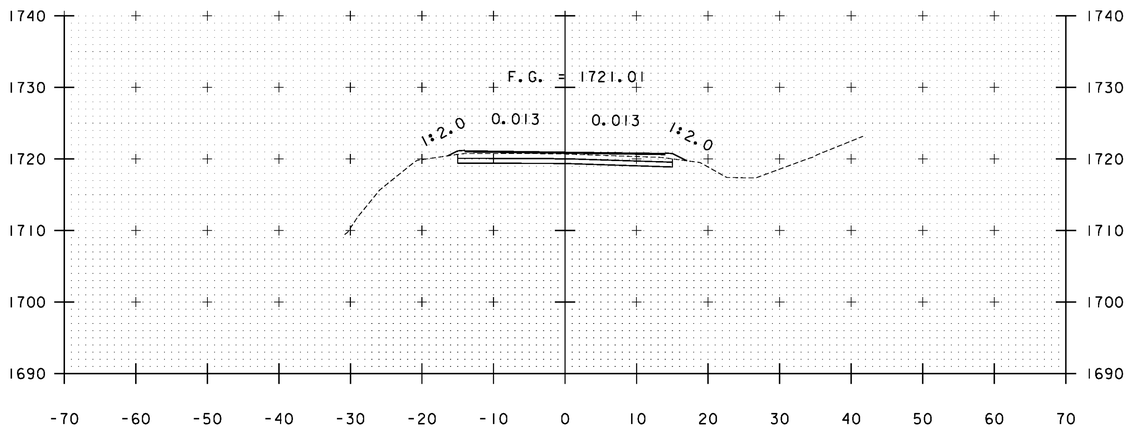

A 72+00



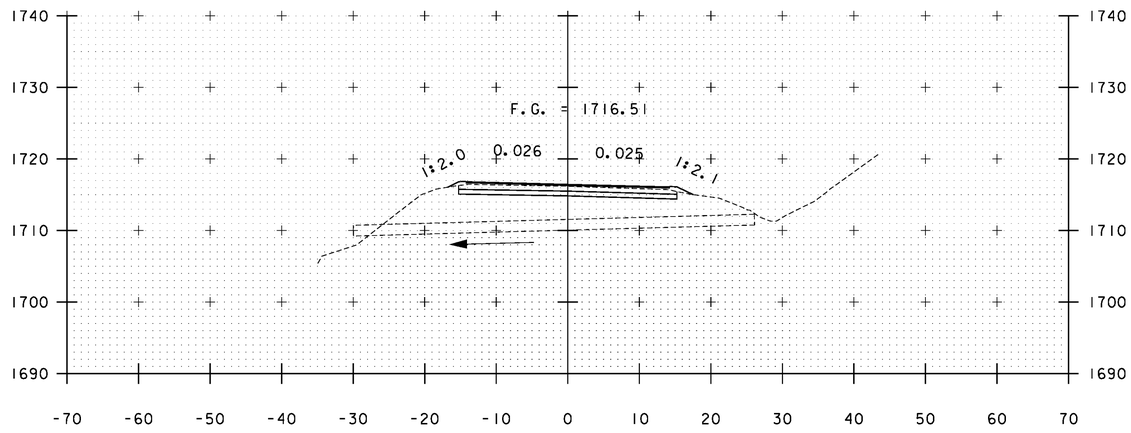

A 72+50

STA. A 72+00 TO STA. A 73+00

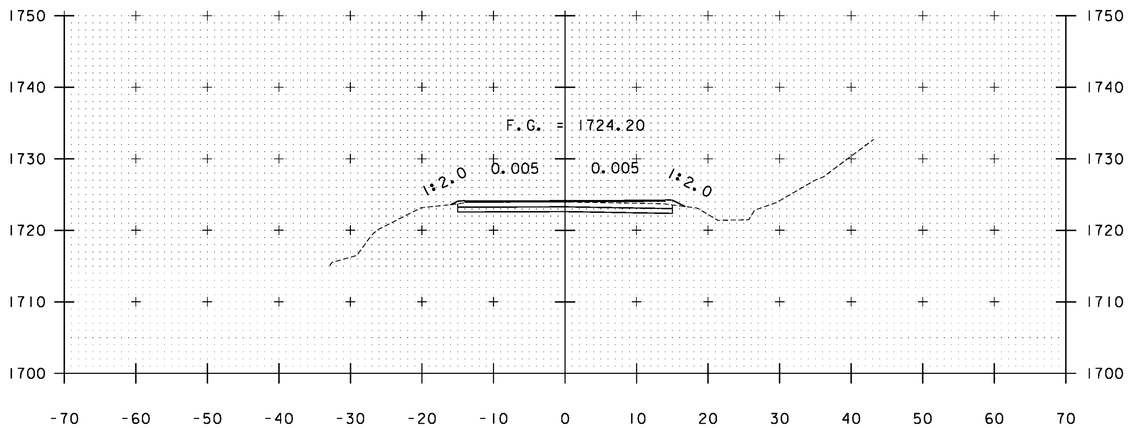
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 204 OF 444 |



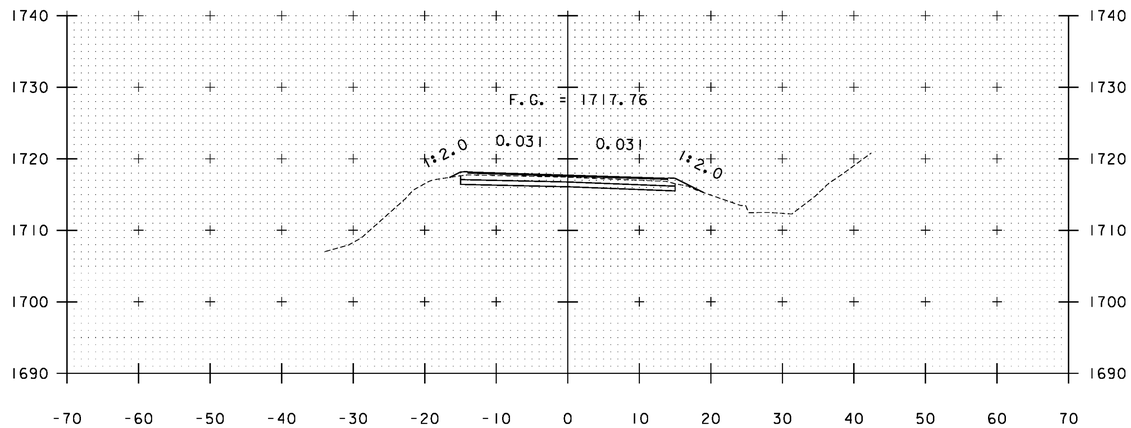

A 74+00




A 74+69




A 73+50



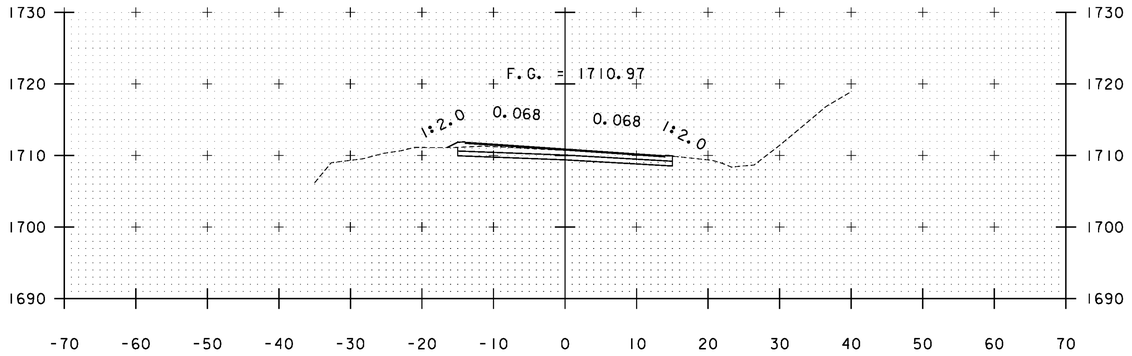

A 74+50

STA. A 73+50 TO STA. A 74+69

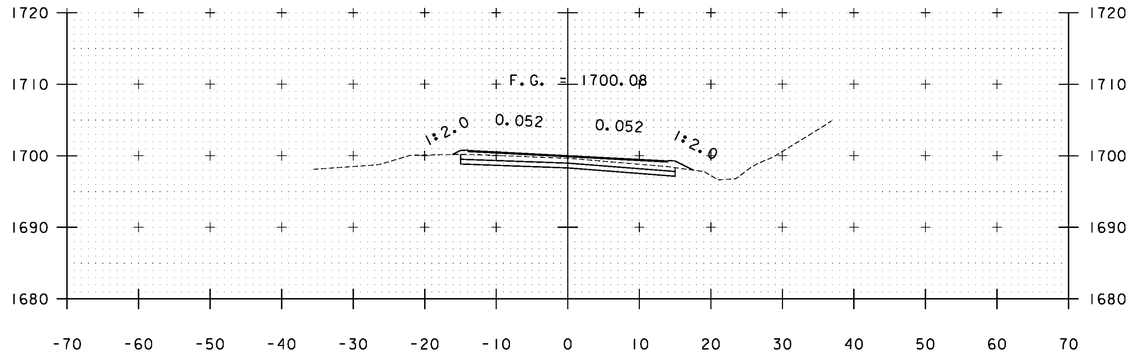
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

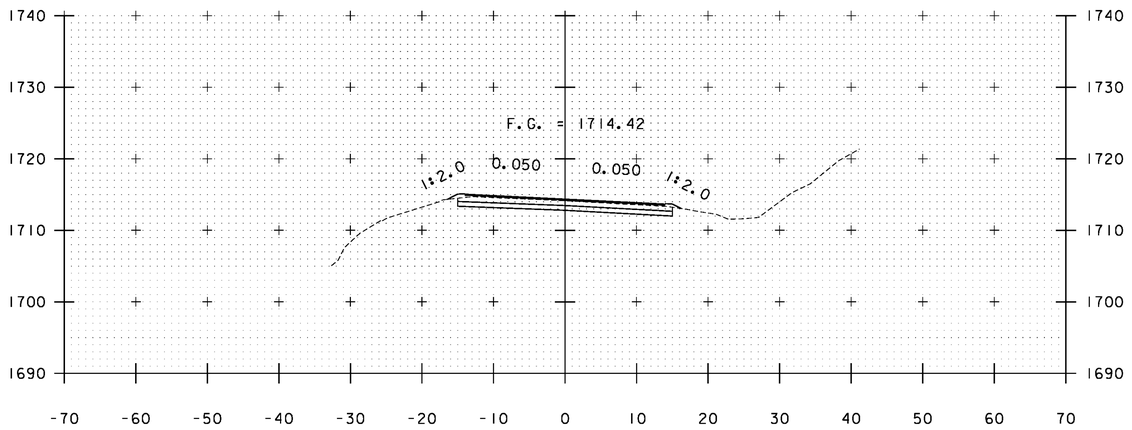
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 205 OF 444



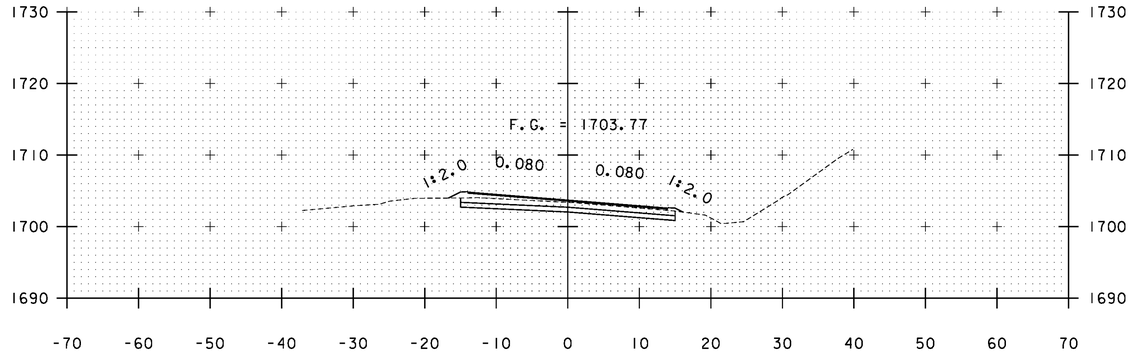

A 75+50



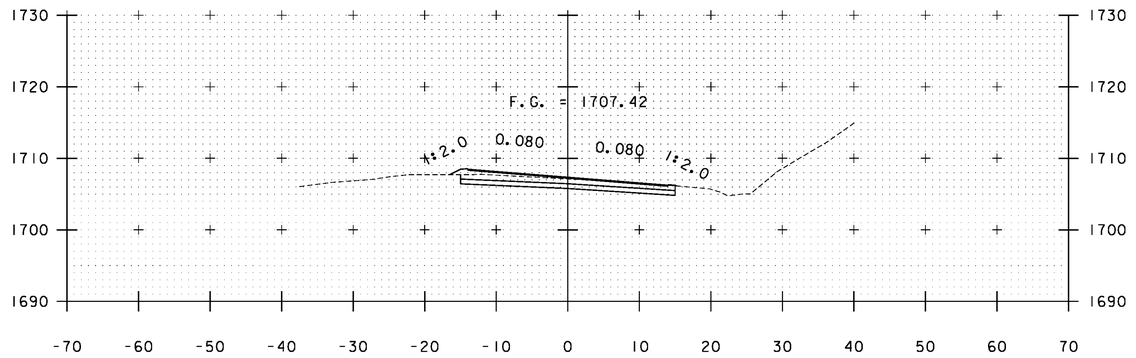

A 77+00




A 75+00




A 76+50



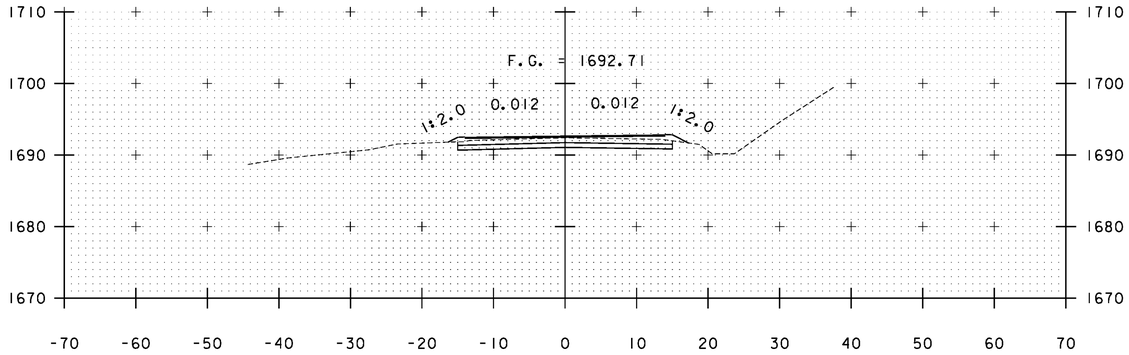

A 76+00

STA. A 75+00 TO STA. A 77+00

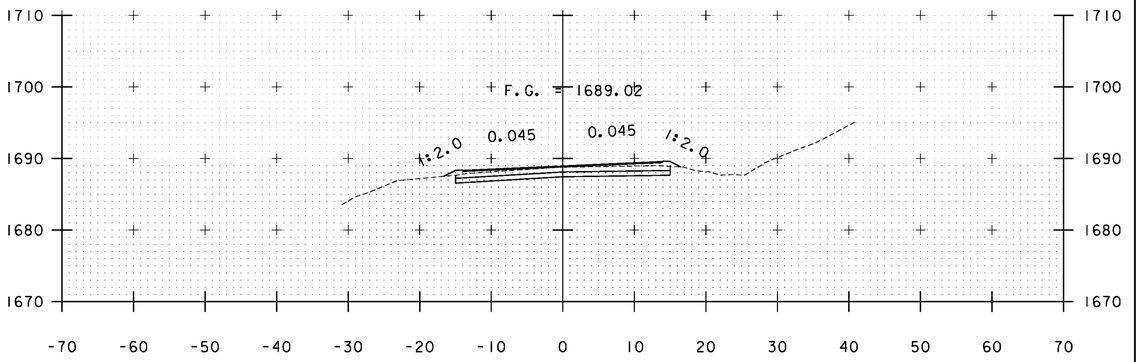
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

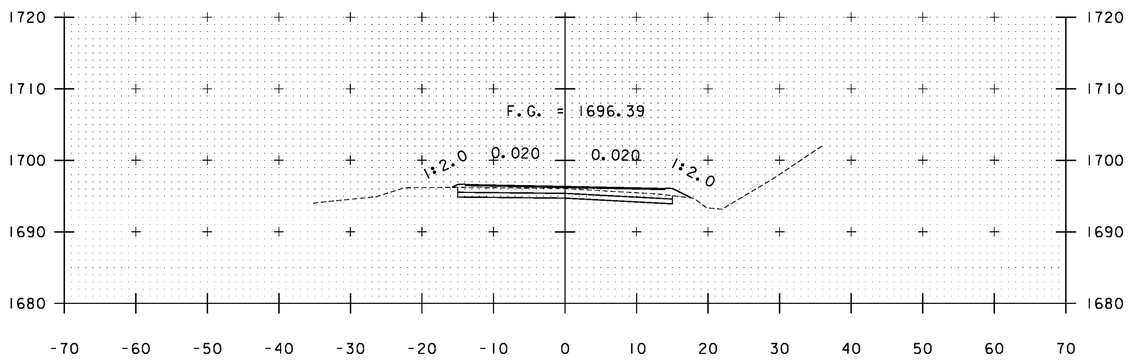
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 206 OF 444



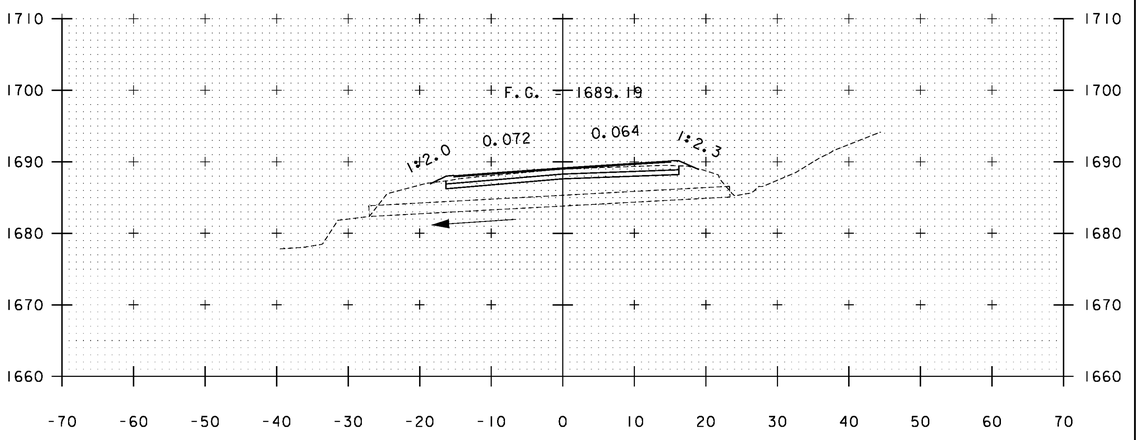

A 78+00




A 78+50




A 77+50



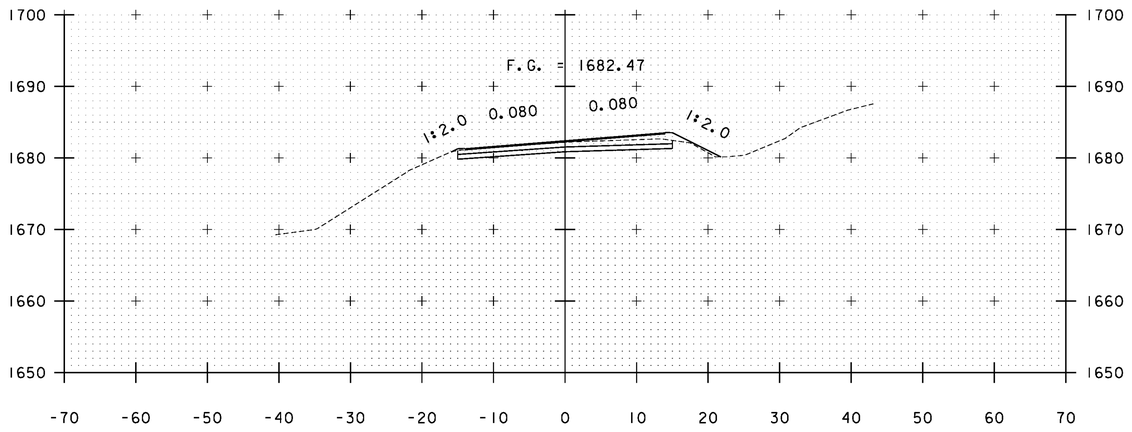

A 78+48

STA. A 77+50 TO STA. A 78+50

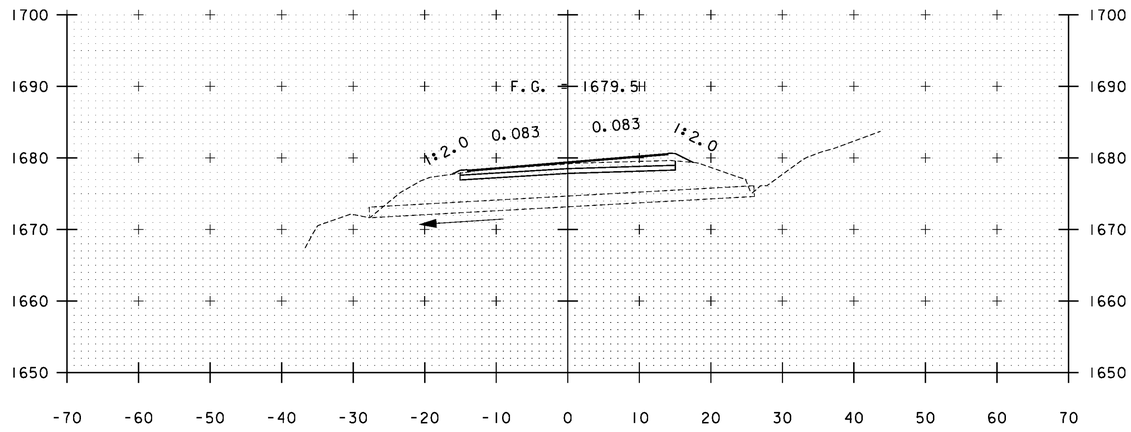
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

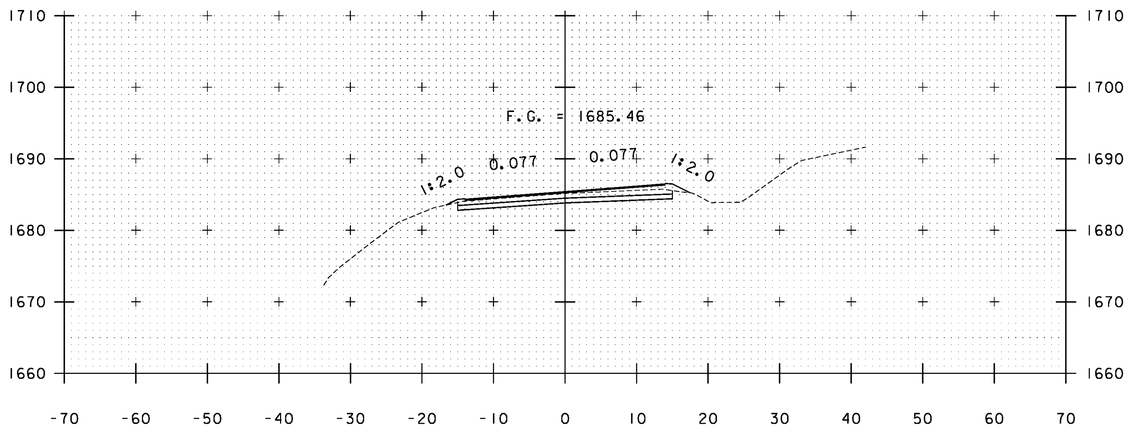
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 207 OF 444



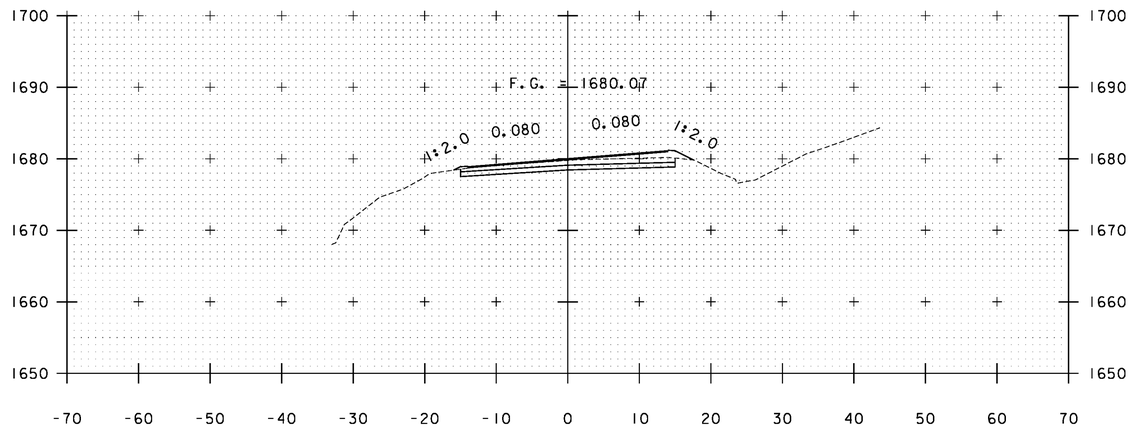

A 79+50




A 80+14




A 79+00



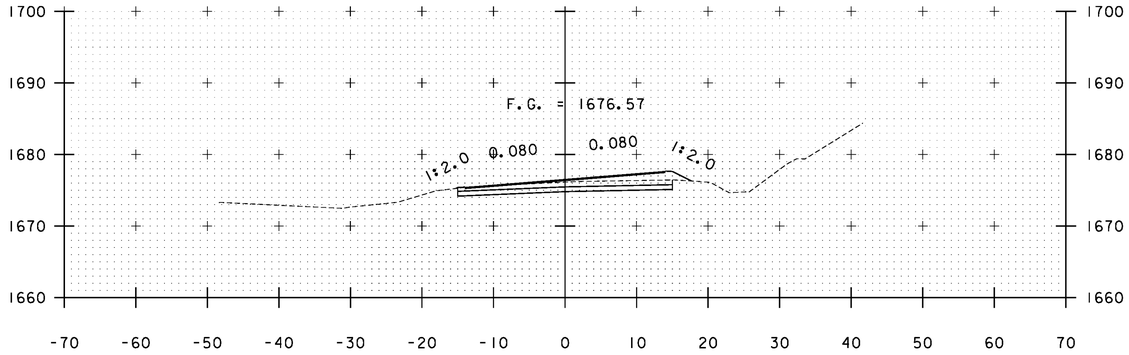

A 80+00

STA. A 79+00 TO STA. A 80+14

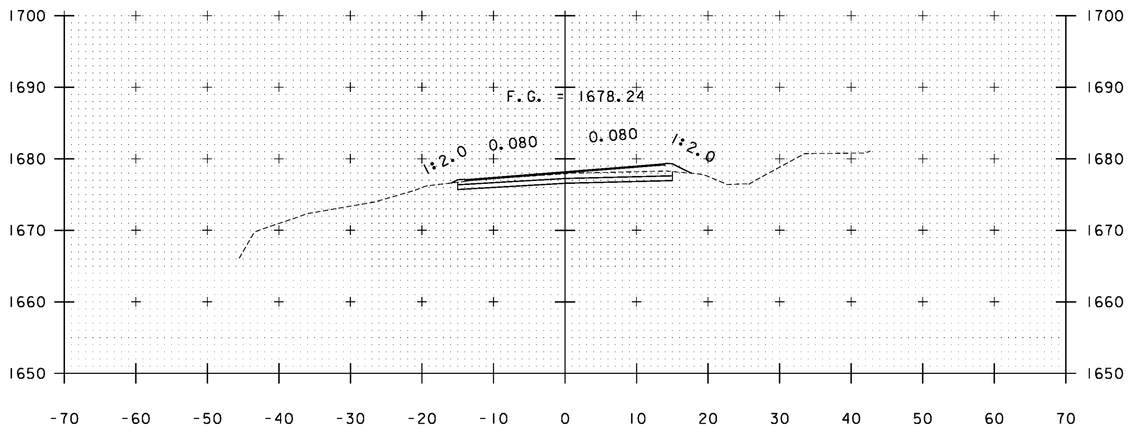
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

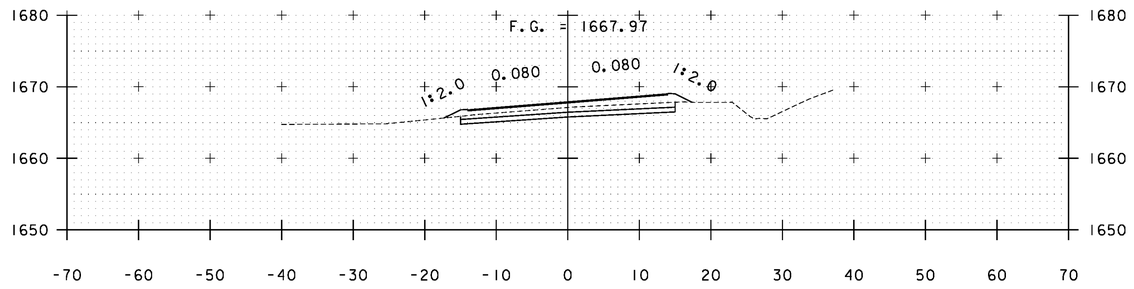
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 208 OF 444



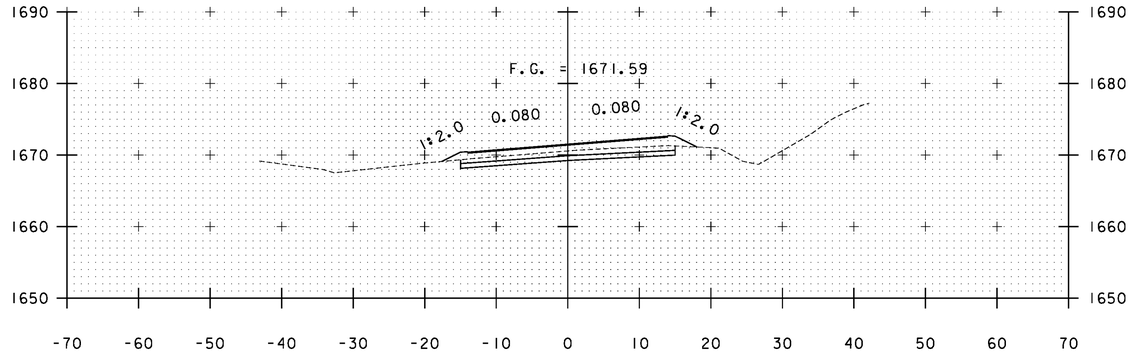

A 81+00



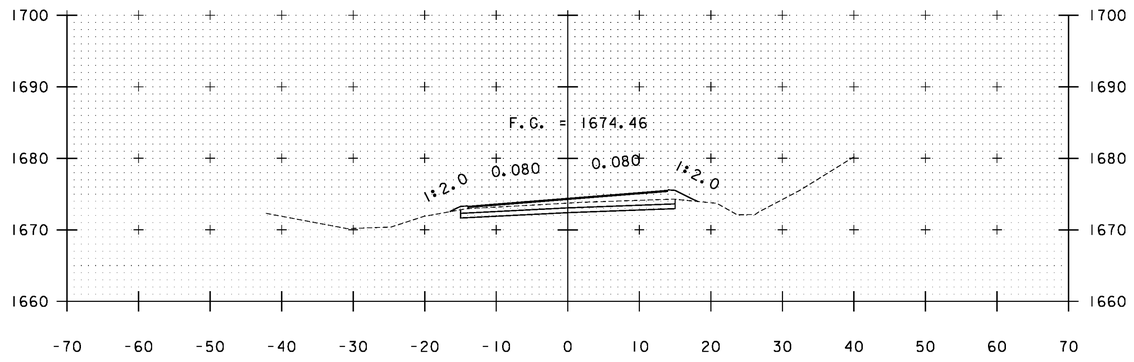

A 80+50




A 82+50



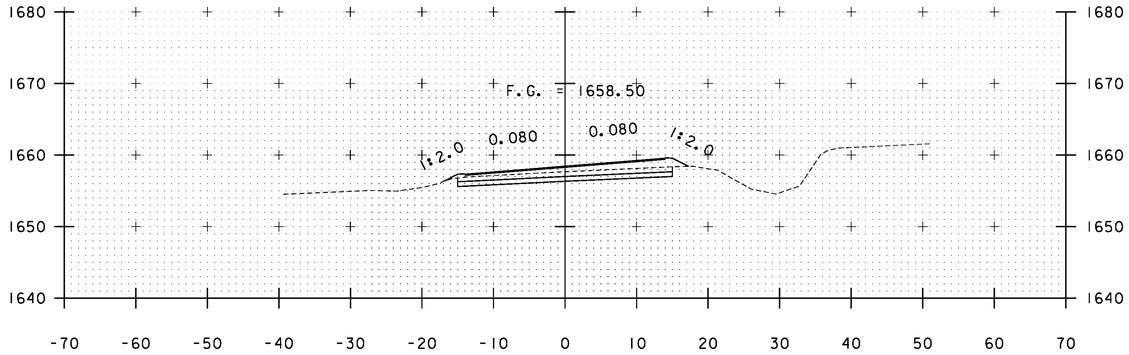

A 82+00



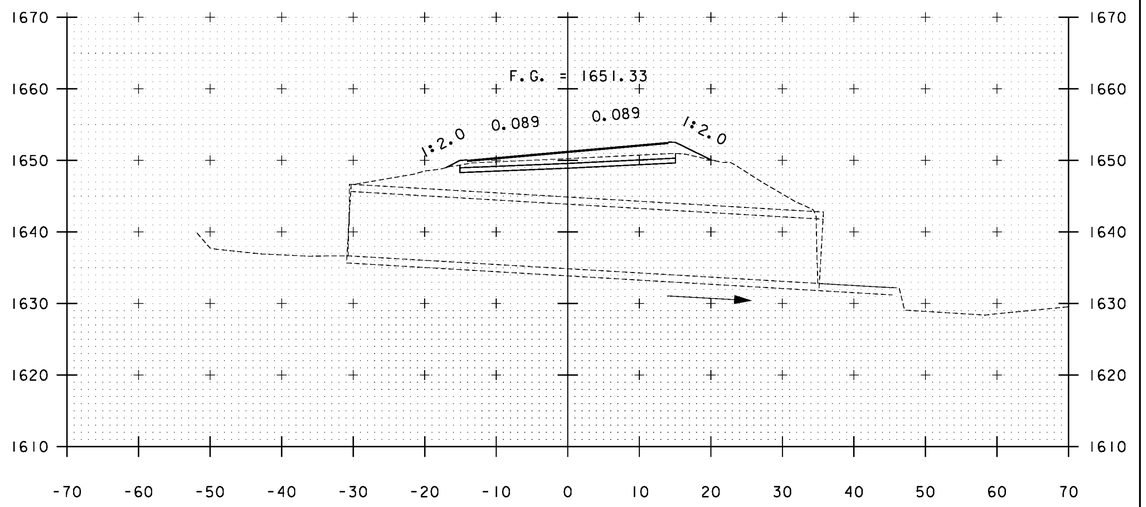

A 81+50

STA. A 80+50 TO STA. A 82+50

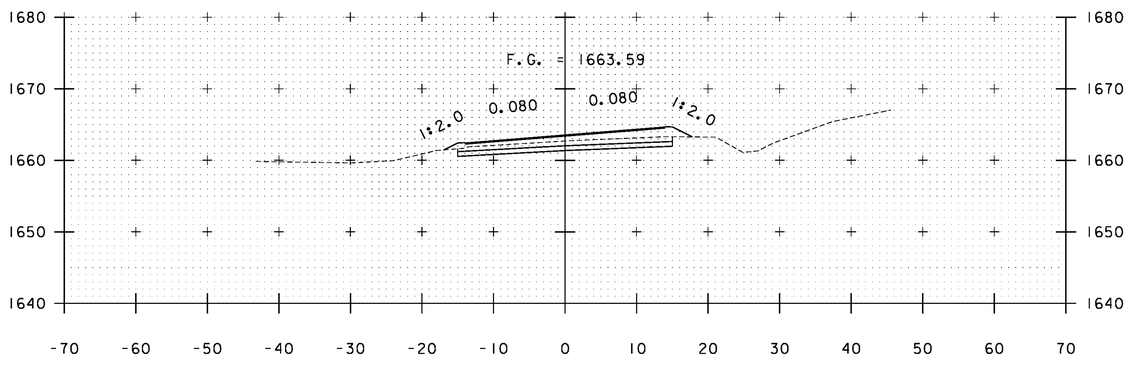
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 209 OF 444 |



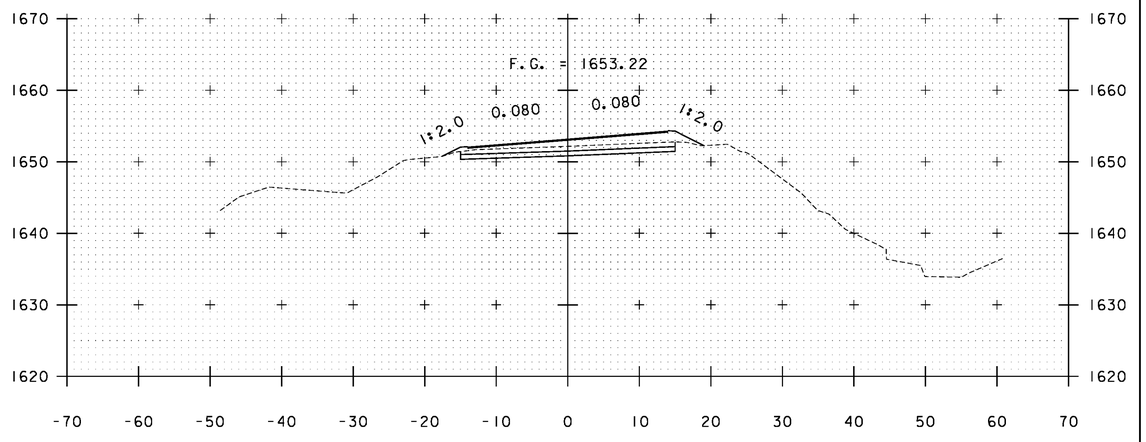

A 83+50




A 84+18




A 83+00



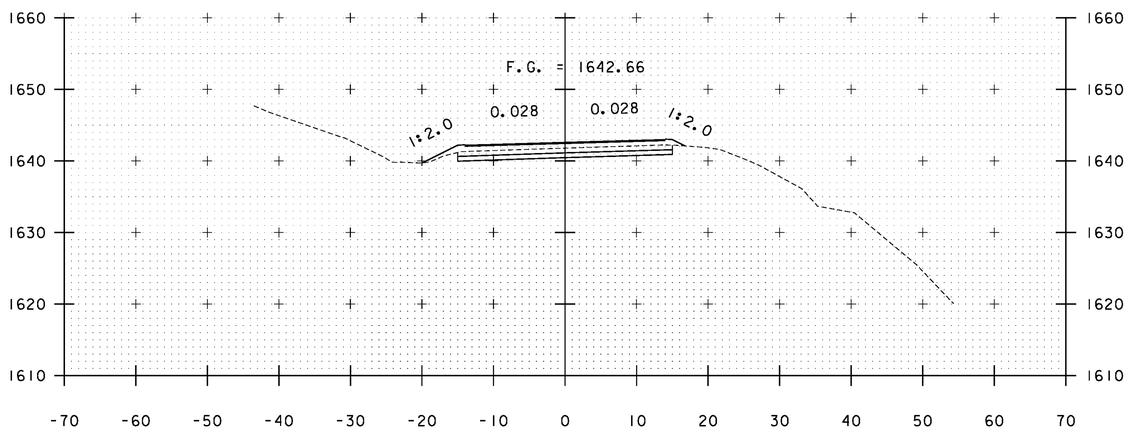

A 84+00

STA. A 83+00 TO STA. A 84+18

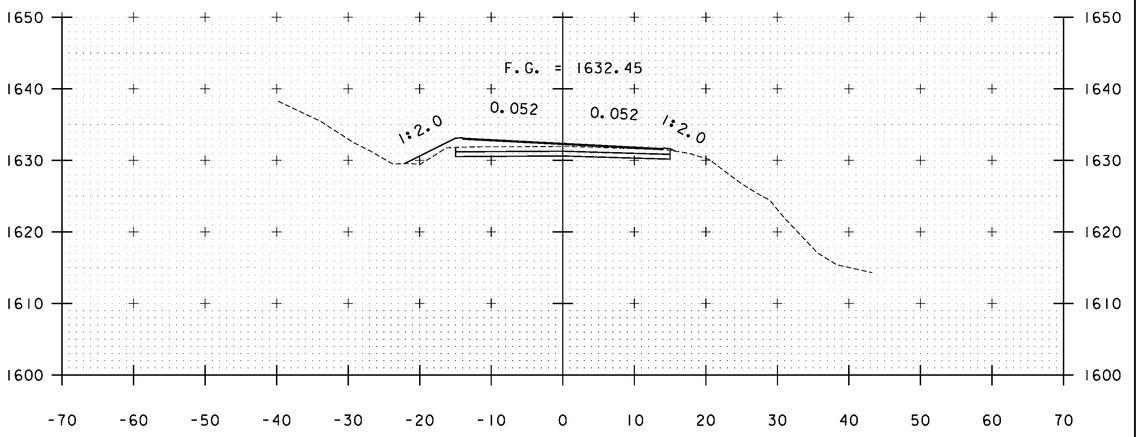
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

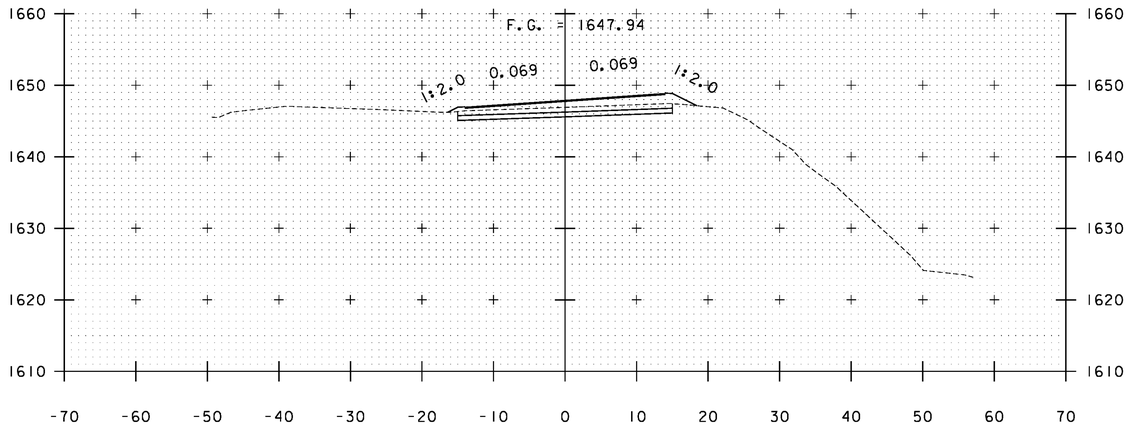
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 210 OF 444



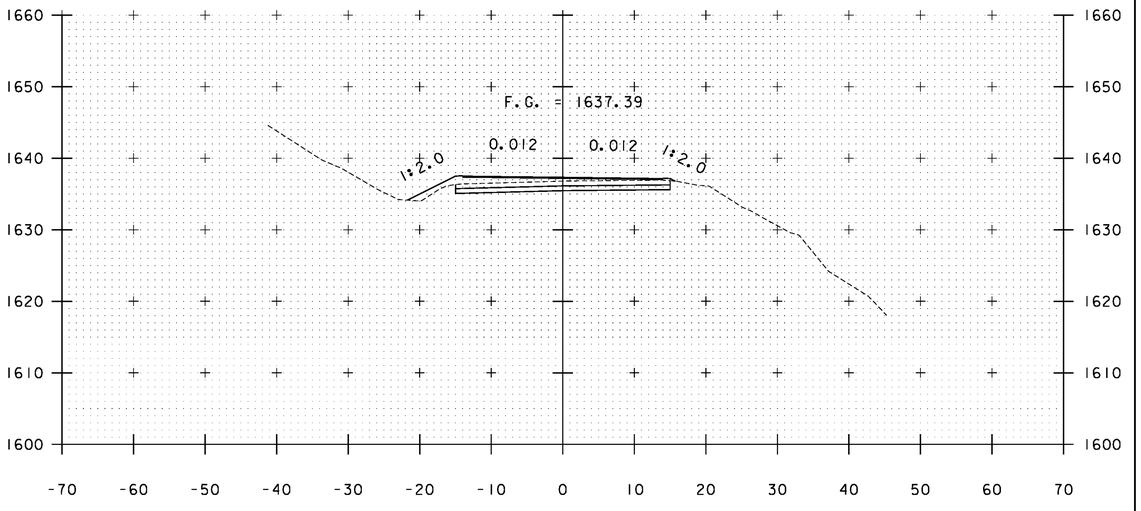

A 85+00




A 86+00




A 84+50



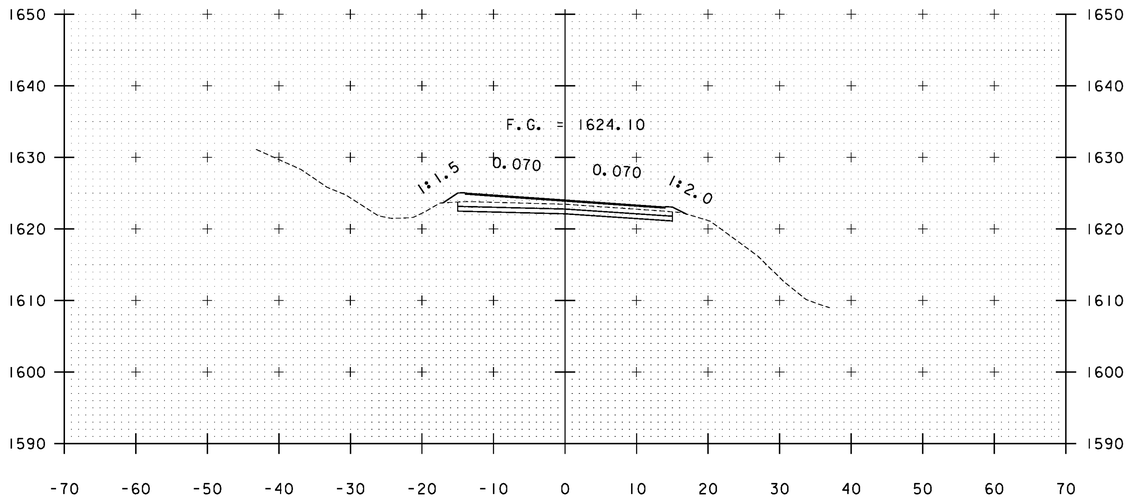

A 85+50

STA. A 84+50 TO STA. A 86+00

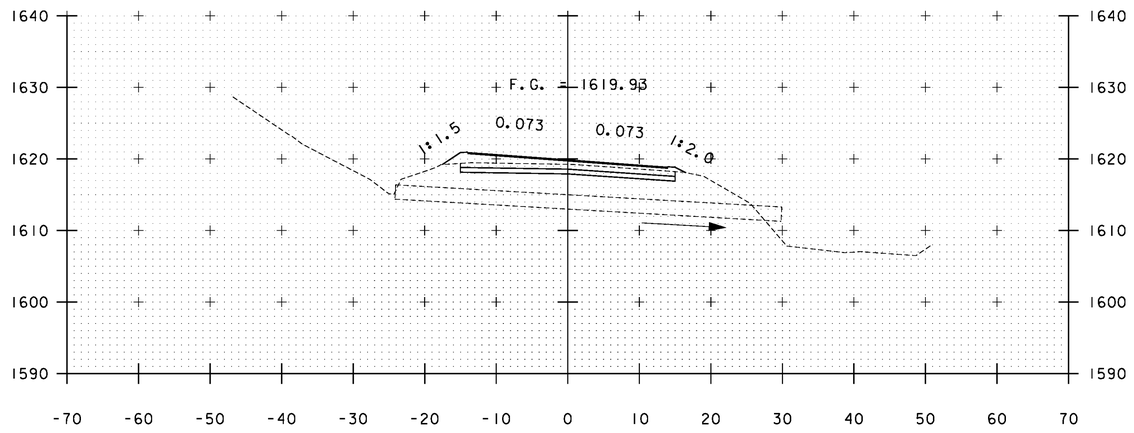
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

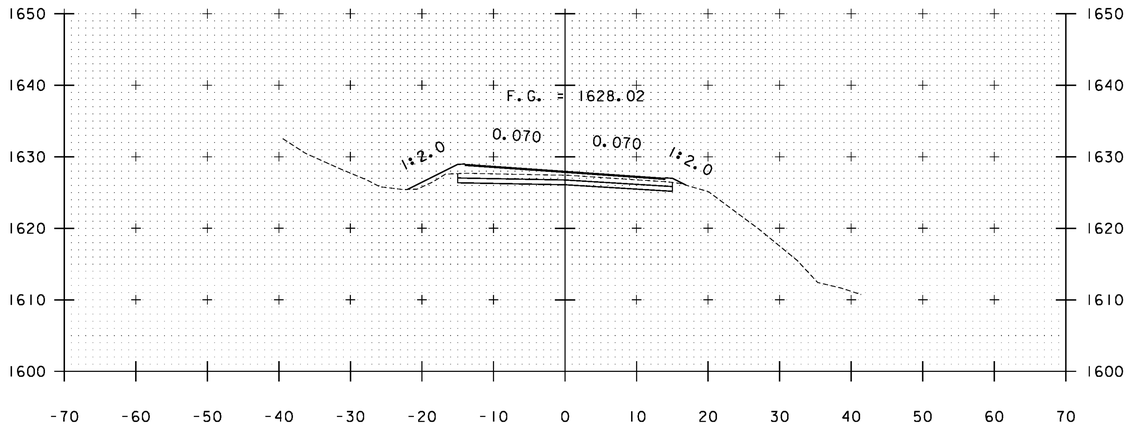
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 211 OF 444



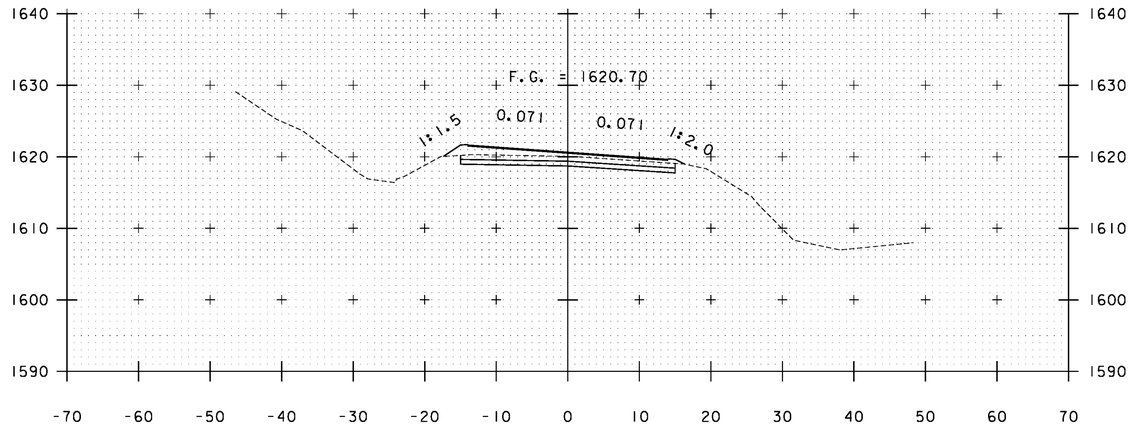

A 87+00




A 87+62




A 86+50



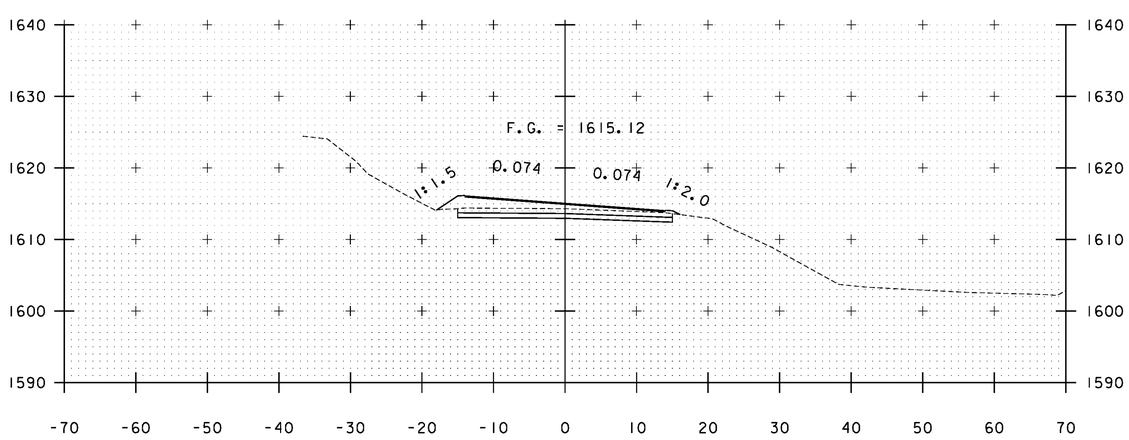

A 87+50

STA. A 86+50 TO STA. A 87+62

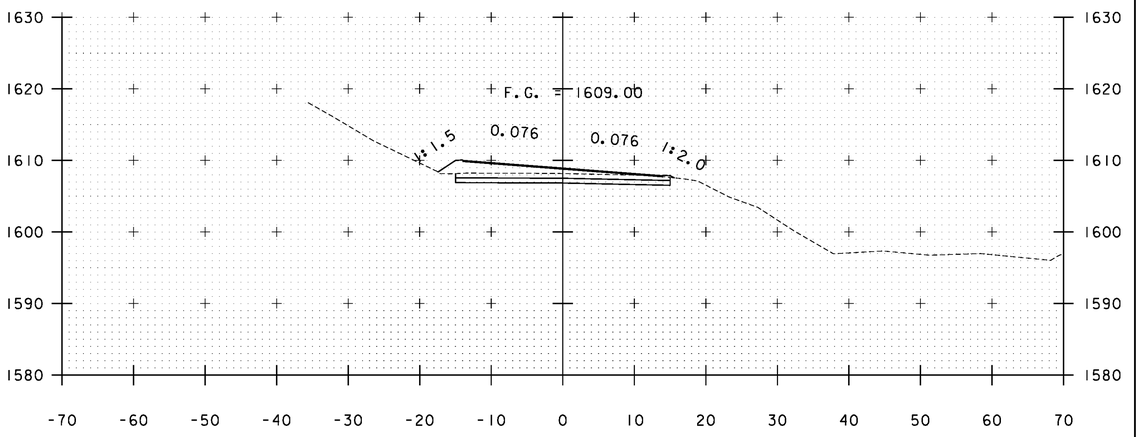
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

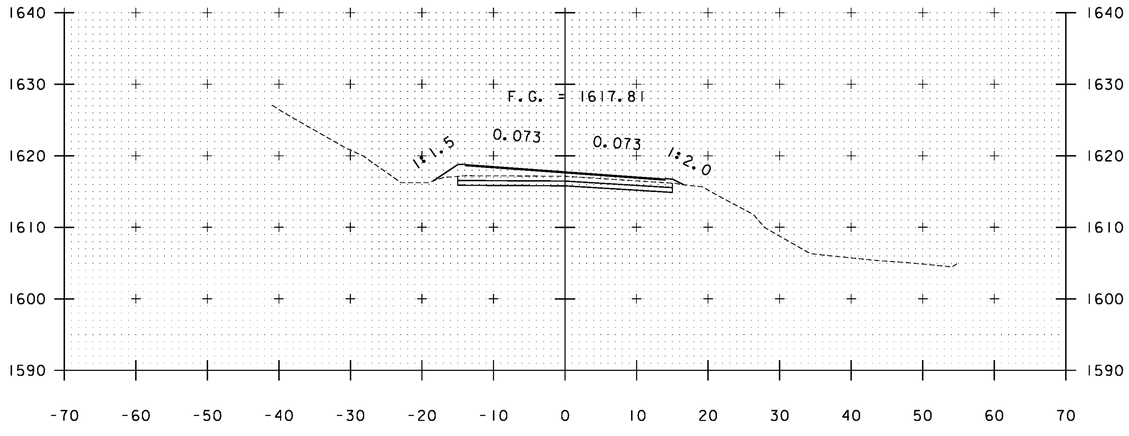
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 212 OF 444



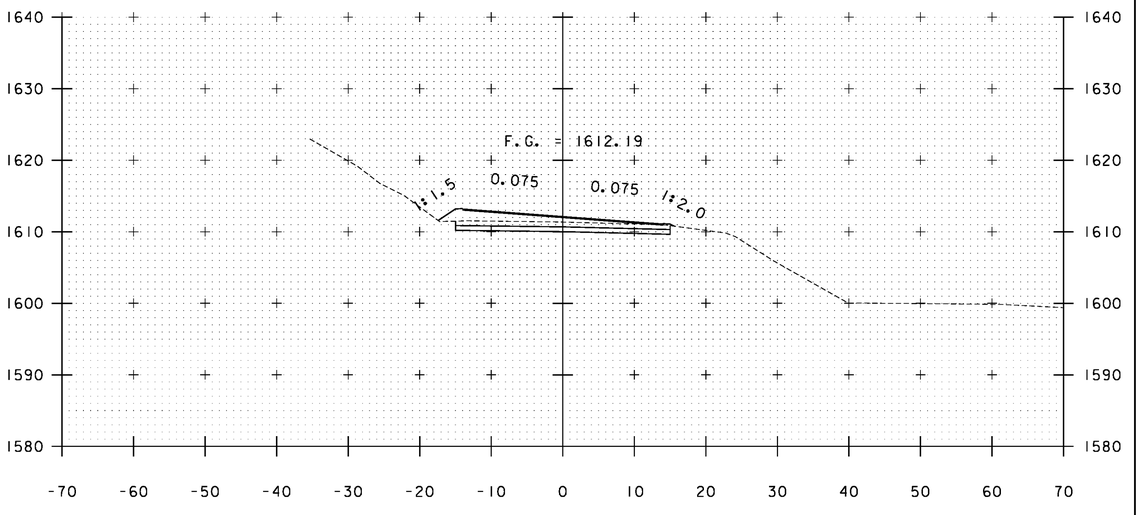

A 88+50




A 89+50




A 88+00



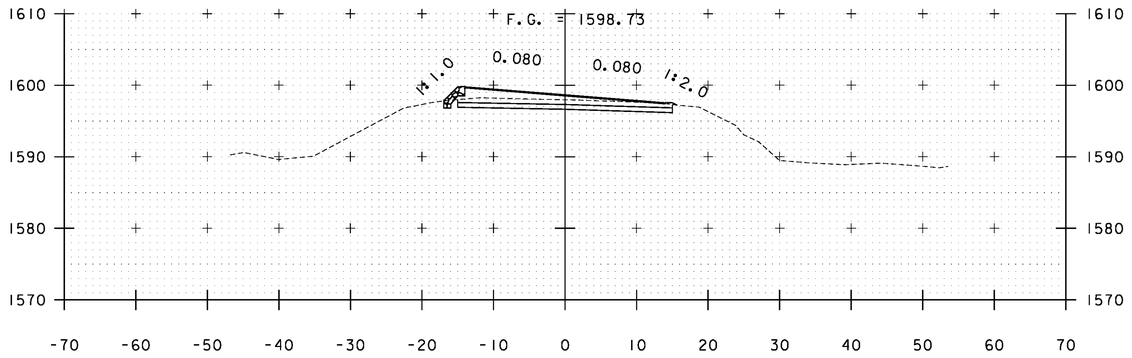

A 89+00

STA. A 88+00 TO STA. A 89+50

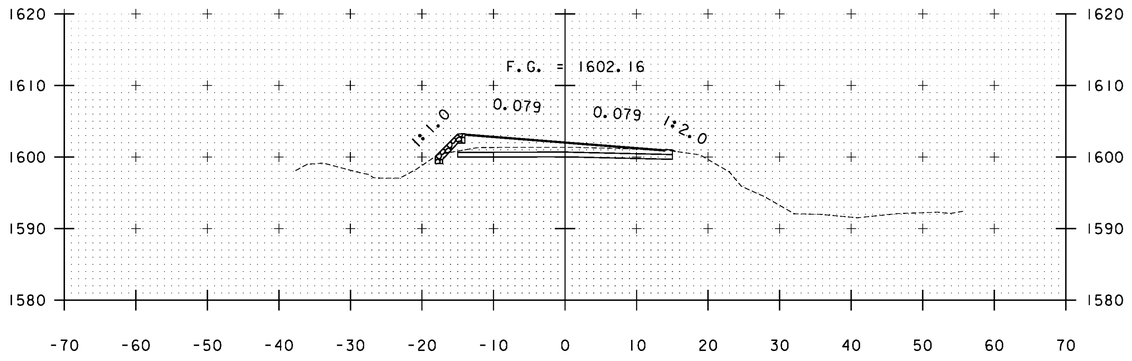
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

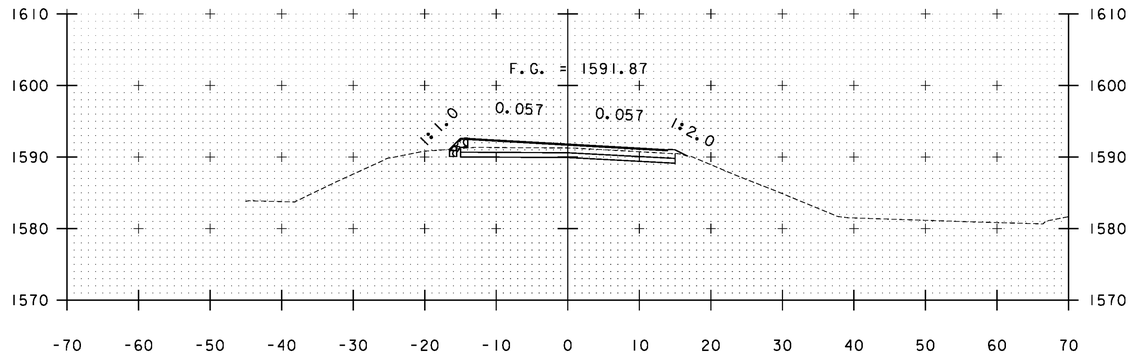
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 213 OF 444



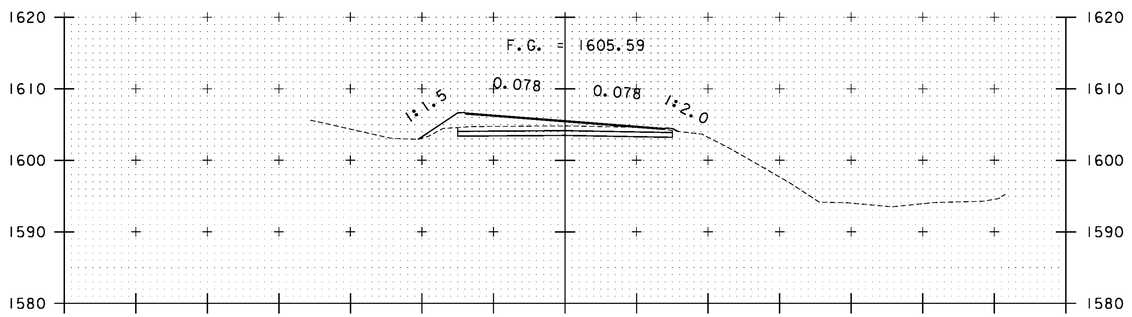

A 91+00



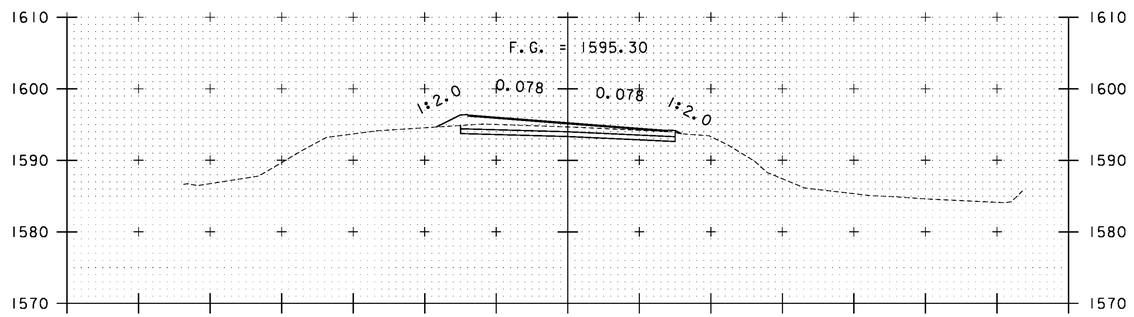

A 90+50




A 92+00




A 90+00



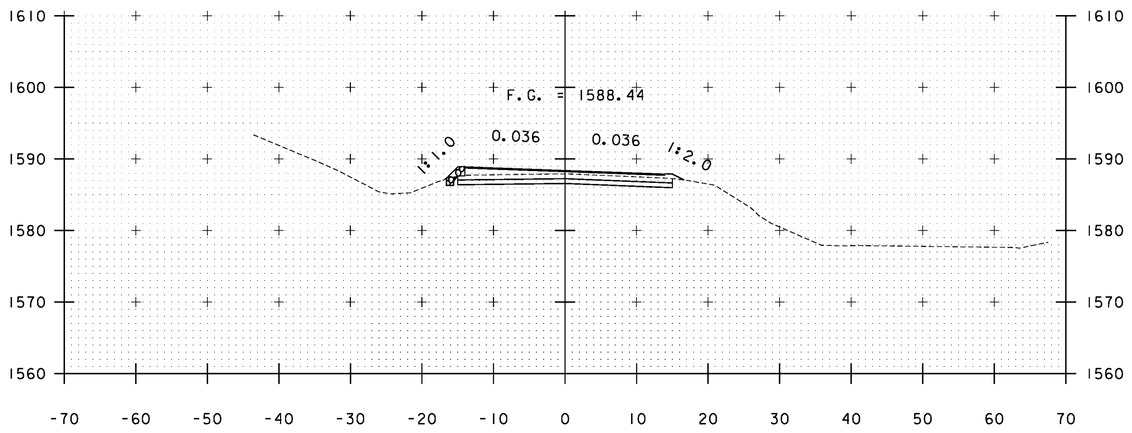

A 91+50

STA. A 90+00 TO STA. A 92+00

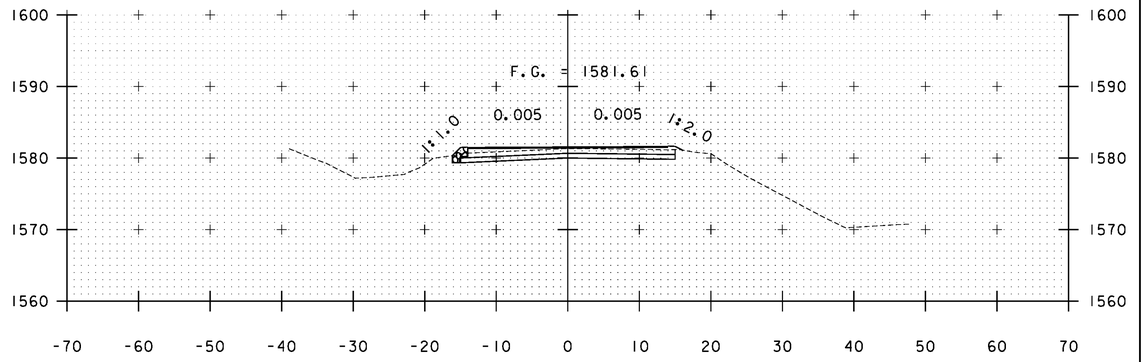
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

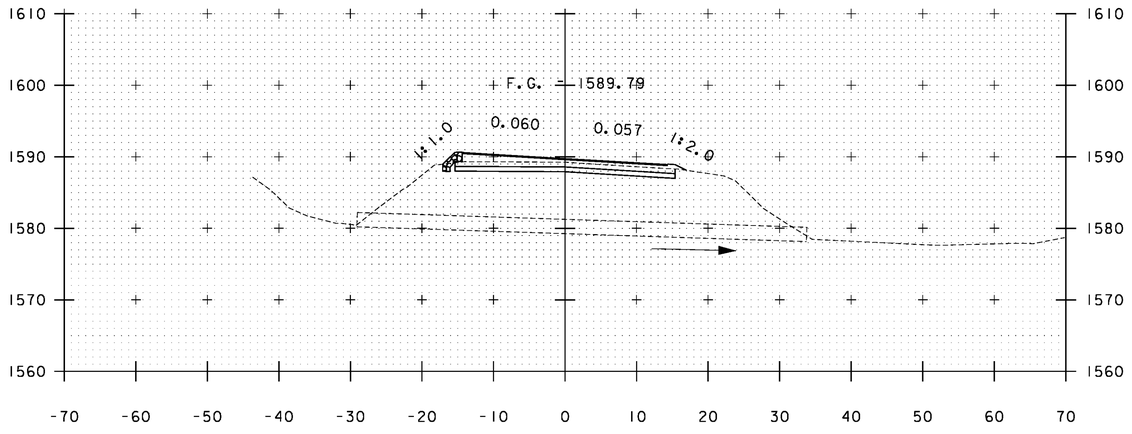
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 214 OF 444



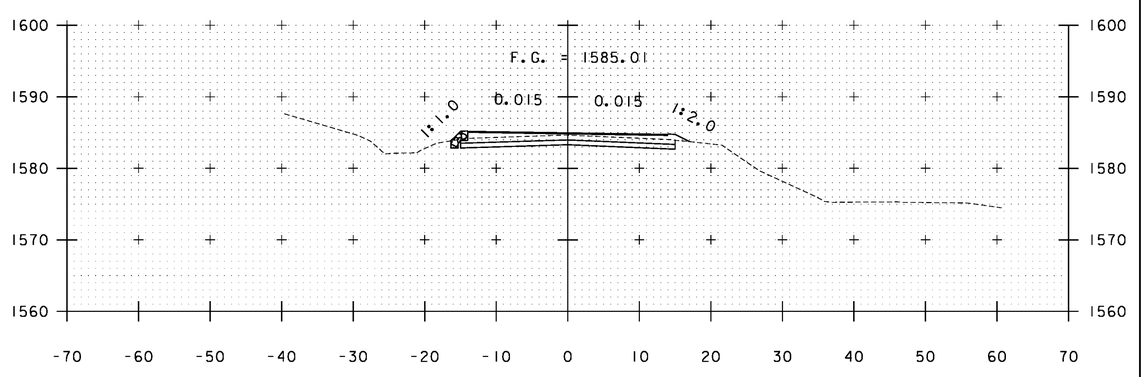

A 92+50




A 93+50




A 92+30



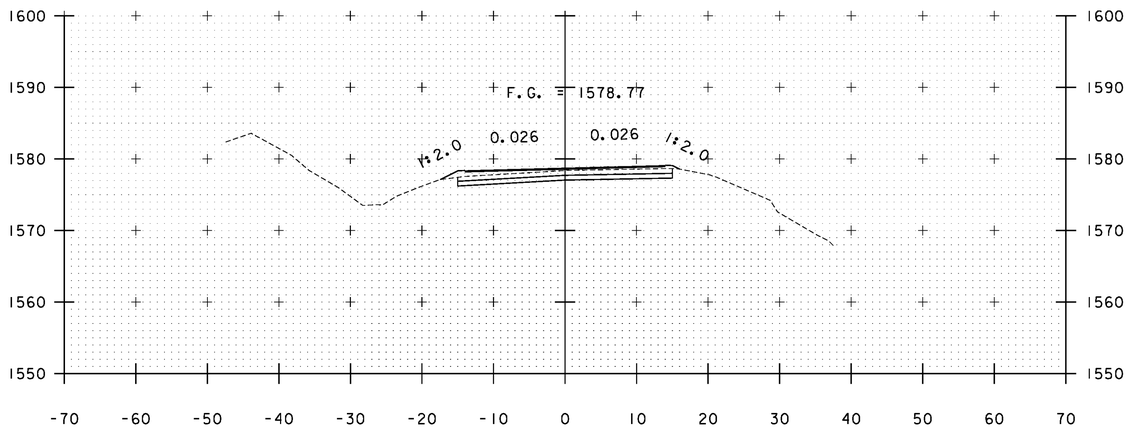

A 93+00

STA. A 92+30 TO STA. A 93+50

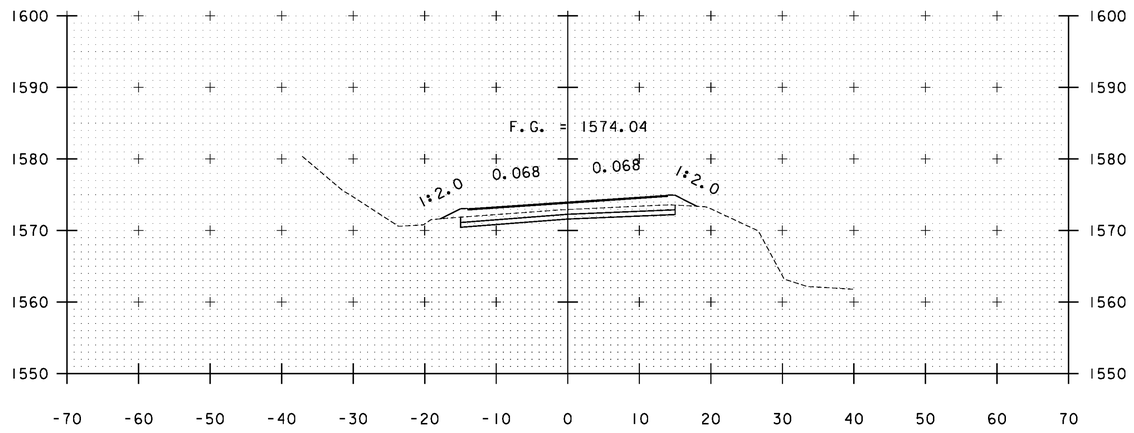
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

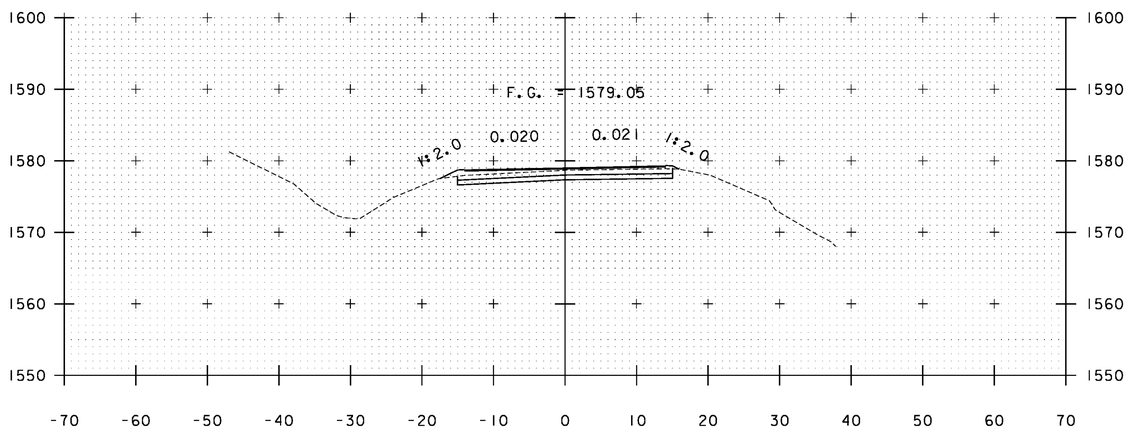
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 215 OF 444



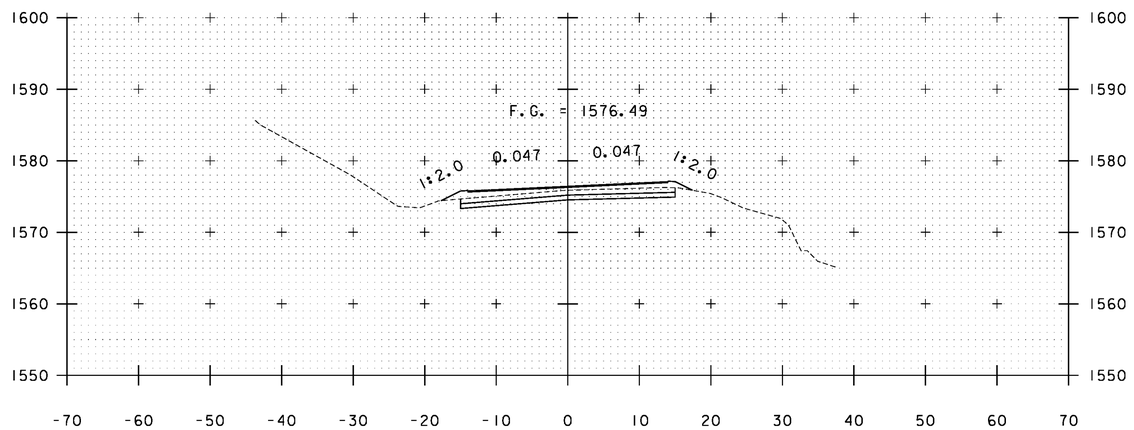

A 94+00




A 95+00




A 93+94



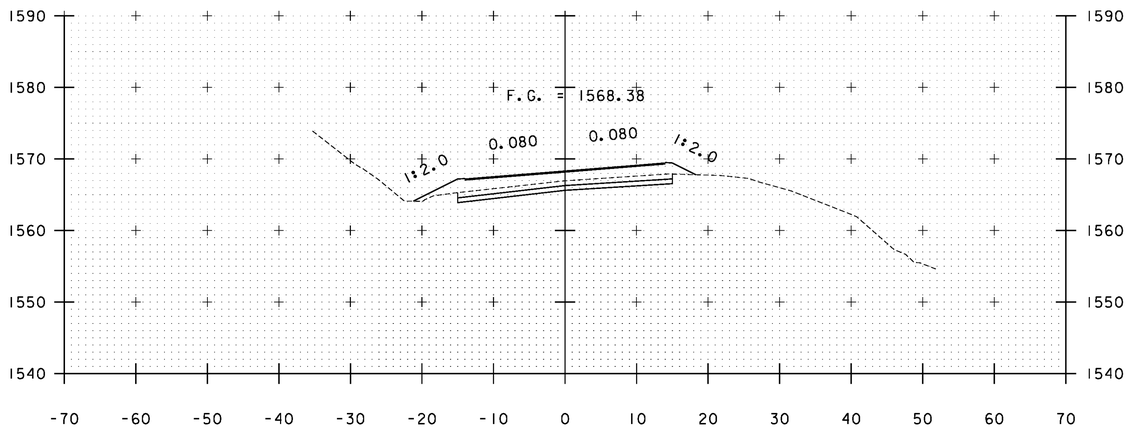

A 94+50

STA. A 93+94 TO STA. A 95+00

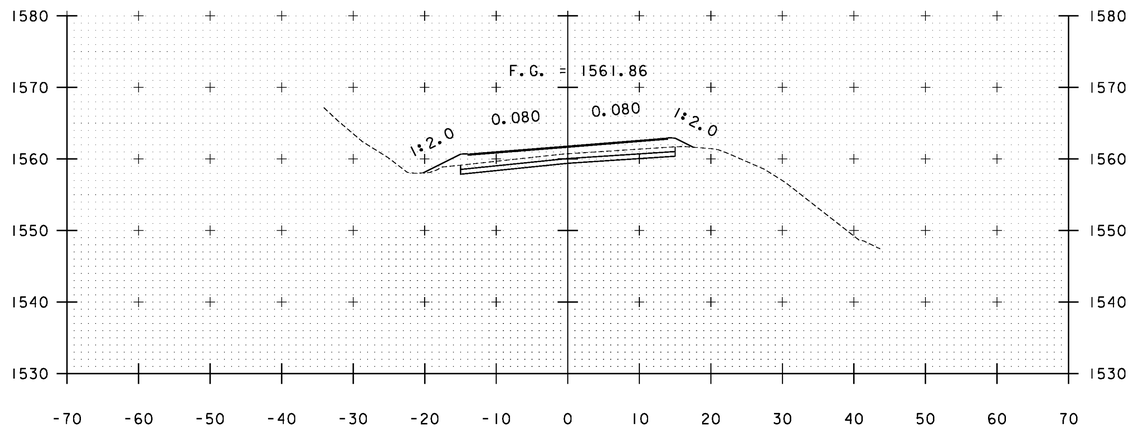
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

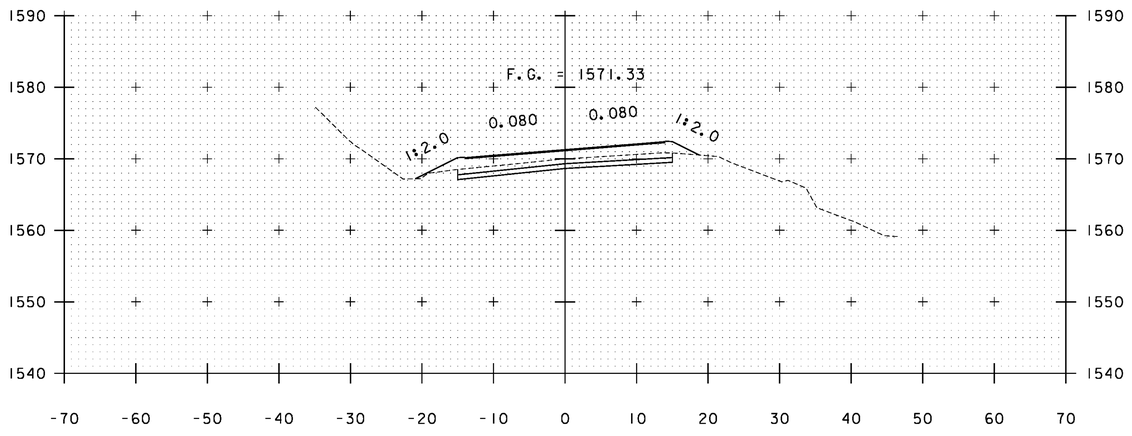
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 216 OF 444



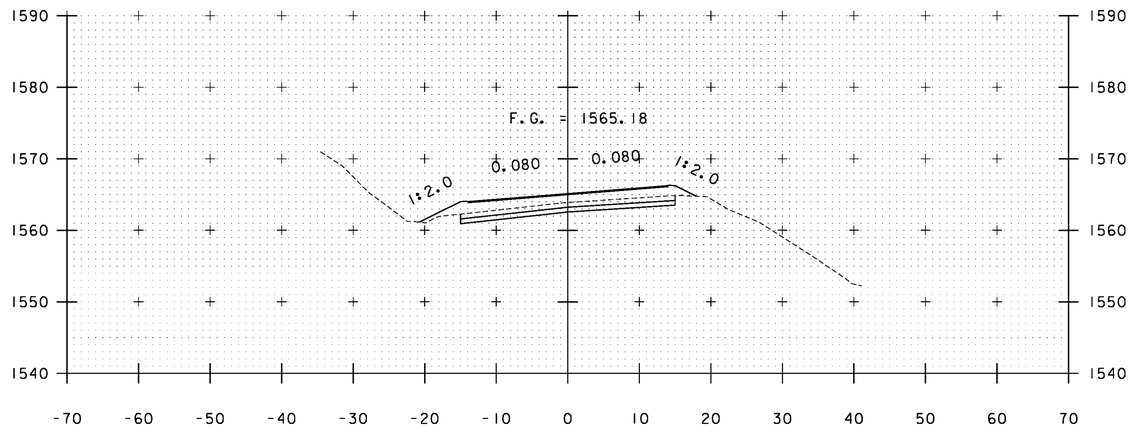

A 96+00




A 97+00




A 95+50



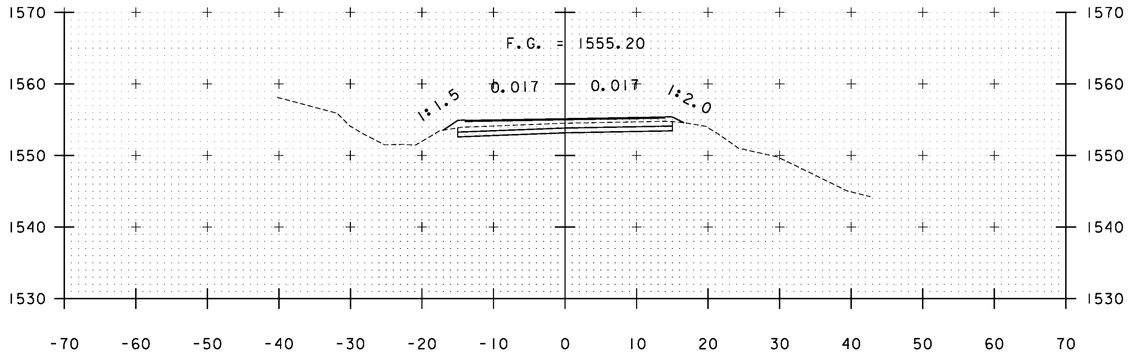

A 96+50

STA. A 95+50 TO STA. A 97+00

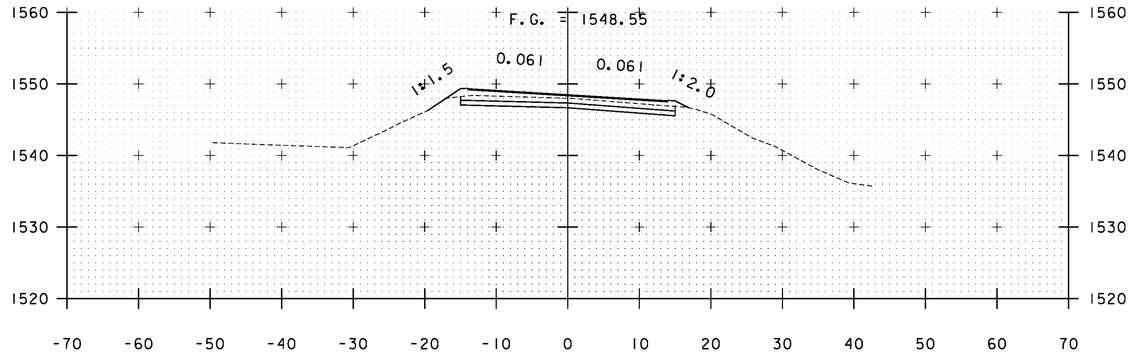
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

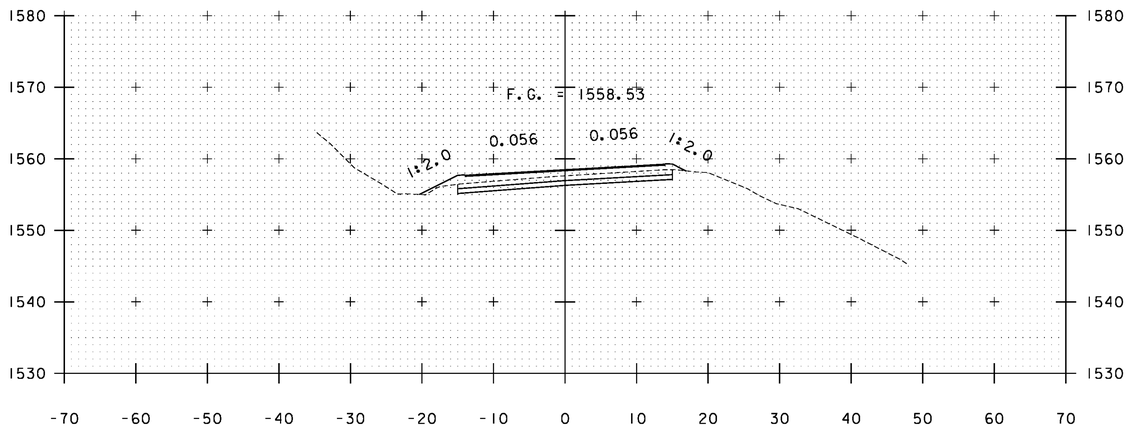
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 217 OF 444



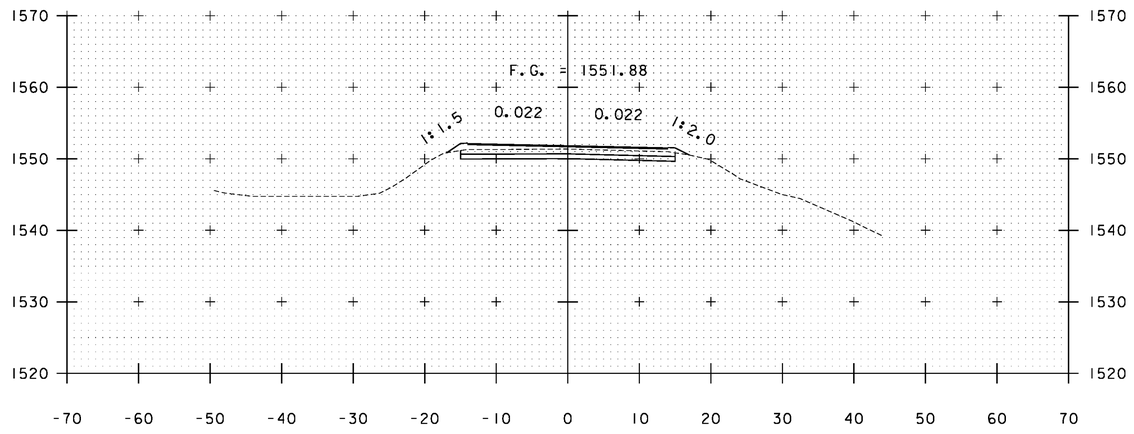

A 98+00




A 99+00




A 97+50



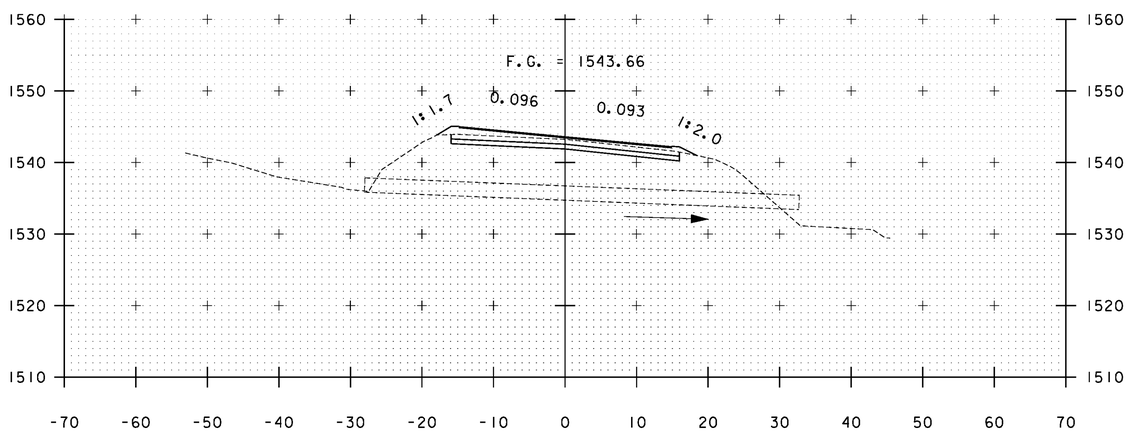

A 98+50

STA. A 97+50 TO STA. A 99+00

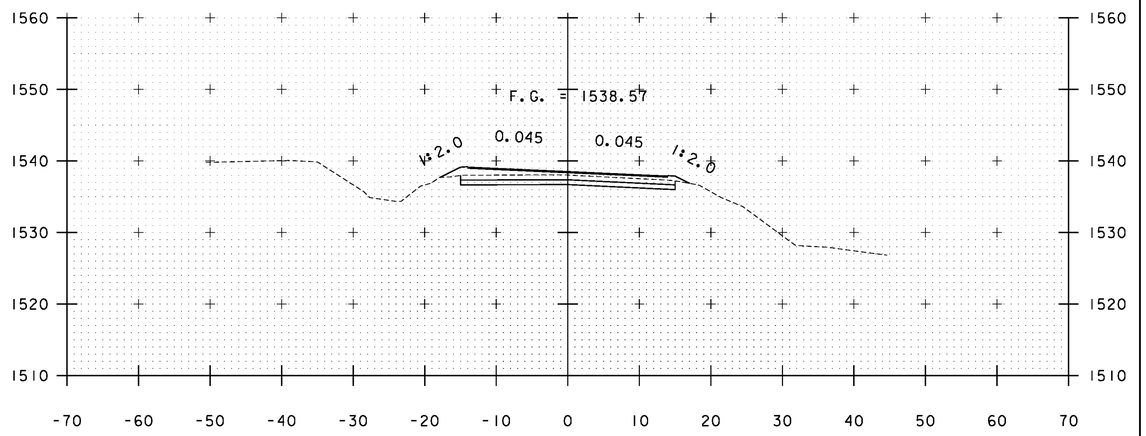
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

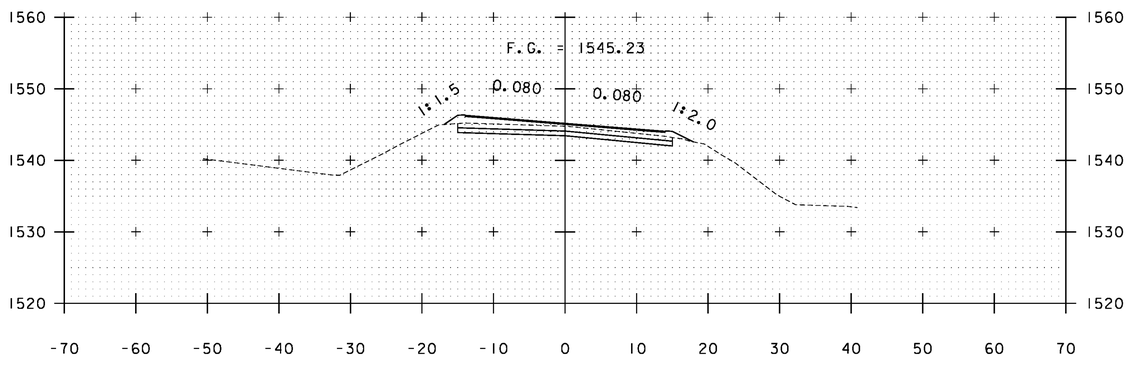
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 218 OF 444



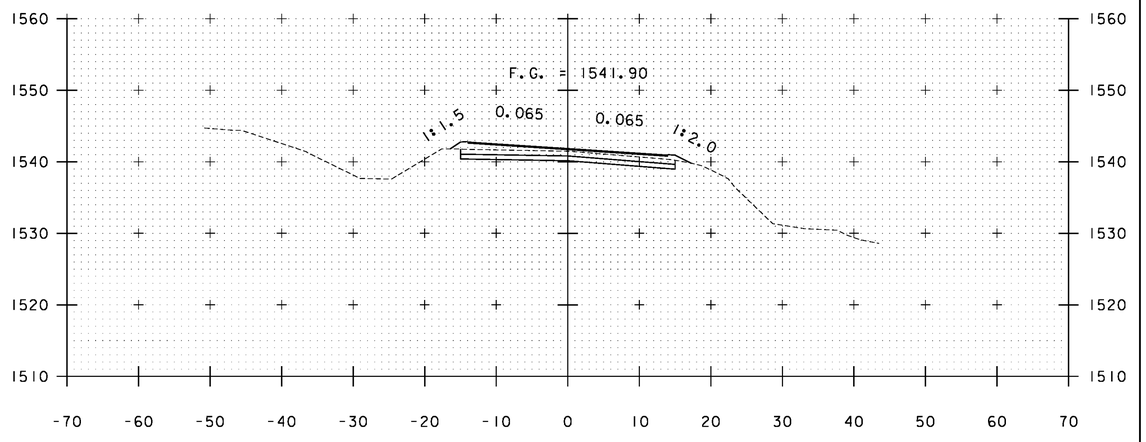

A 99+74




A 100+50



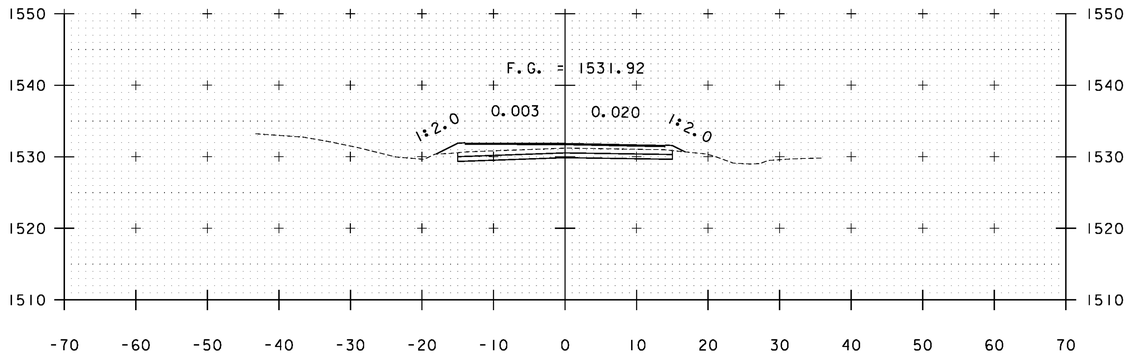

A 99+50



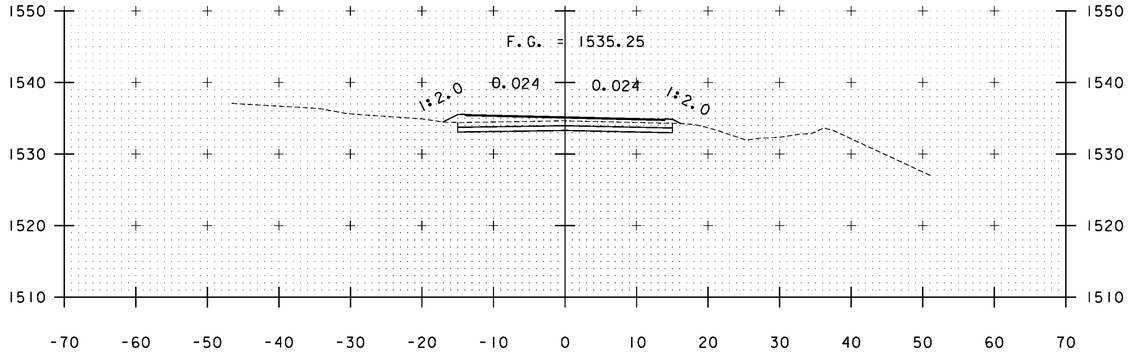

A 100+00

STA. A 99+50 TO STA. A 100+50

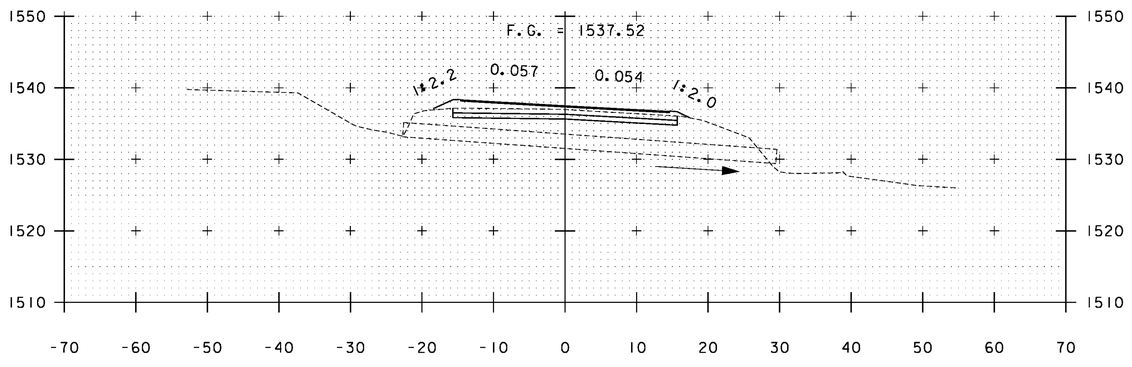
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 219 OF 444 |



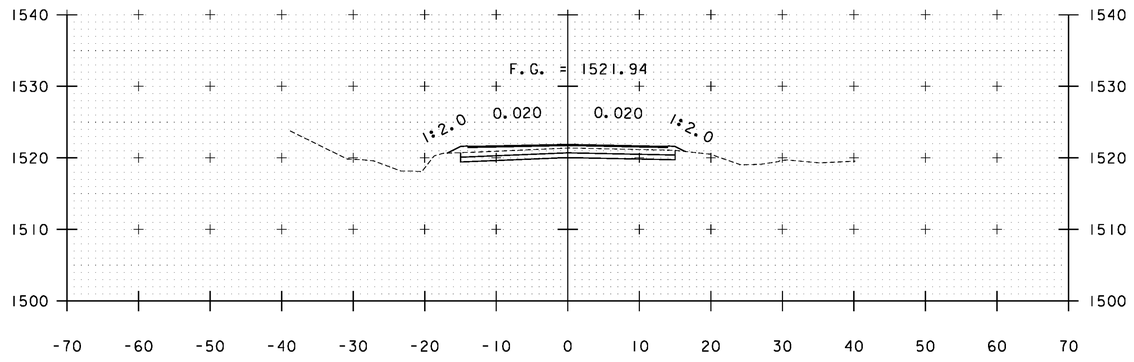

A 101+50



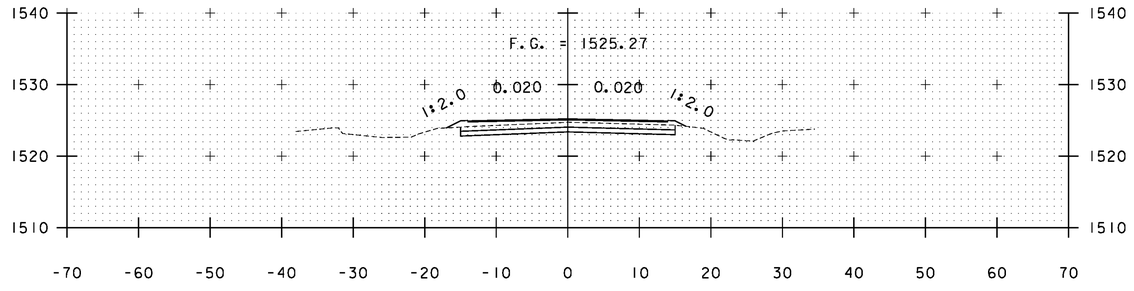

A 101+00



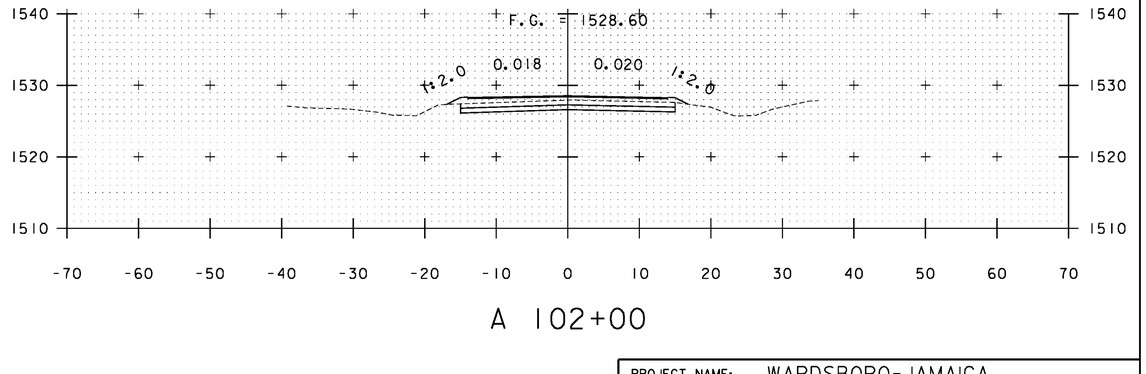

A 100+66




A 103+00



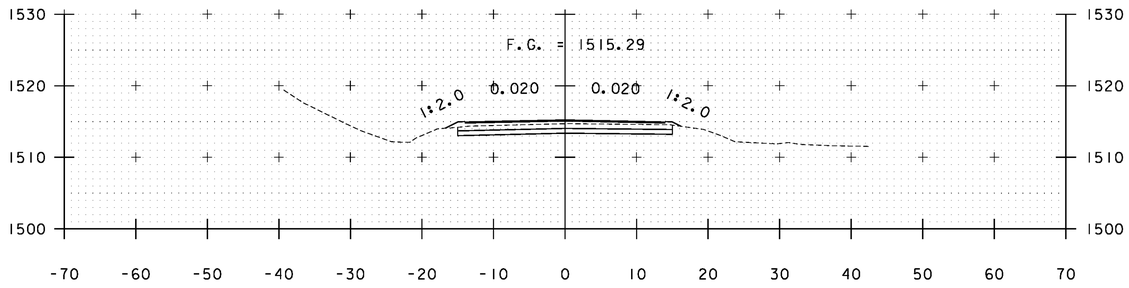

A 102+50



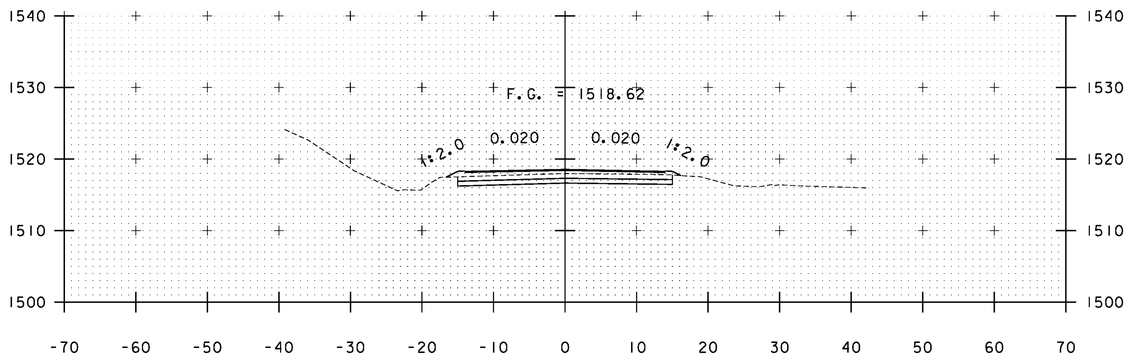

A 102+00

STA. A 100+66 TO STA. A 103+00

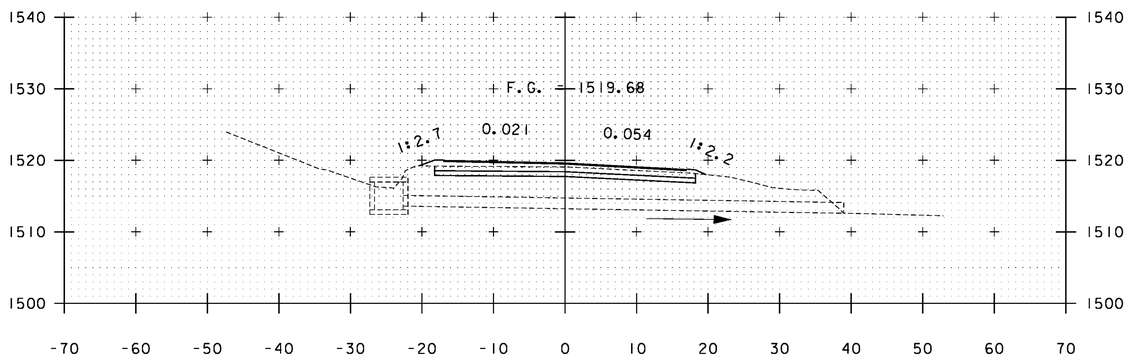
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 220 OF 444 |



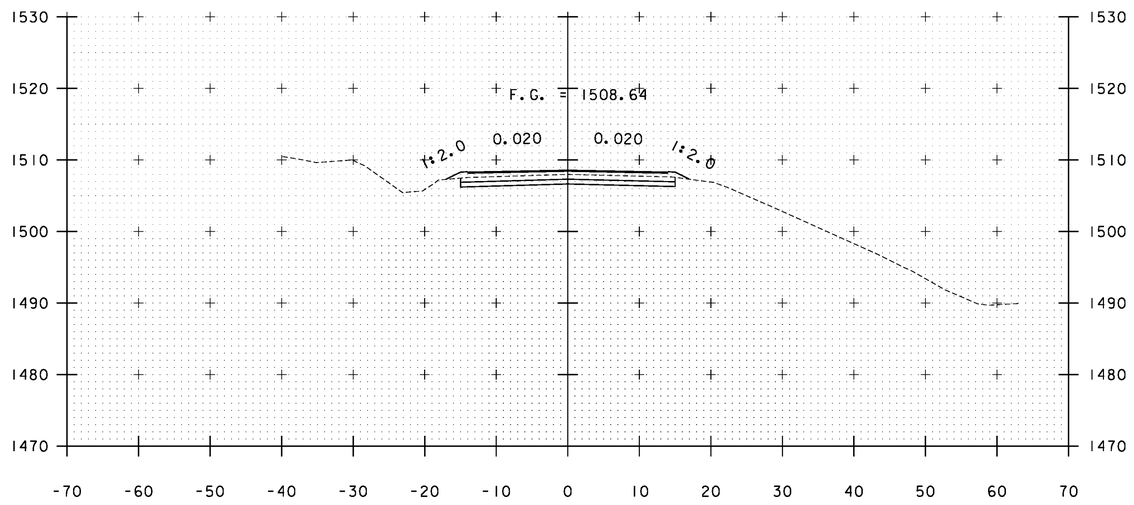

A 104+00



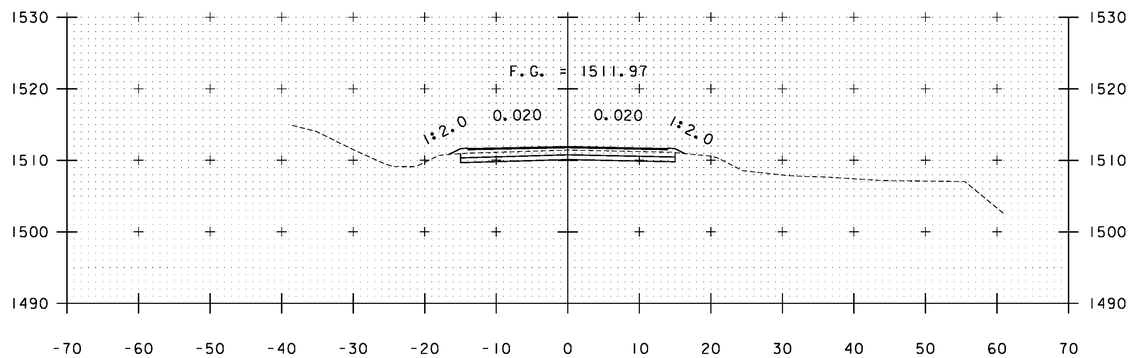

A 103+50




A 103+34



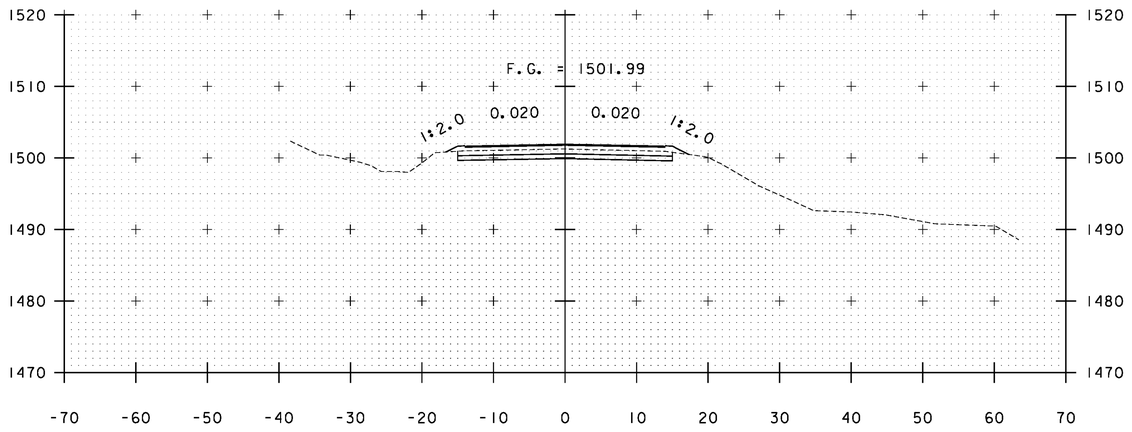

A 105+00



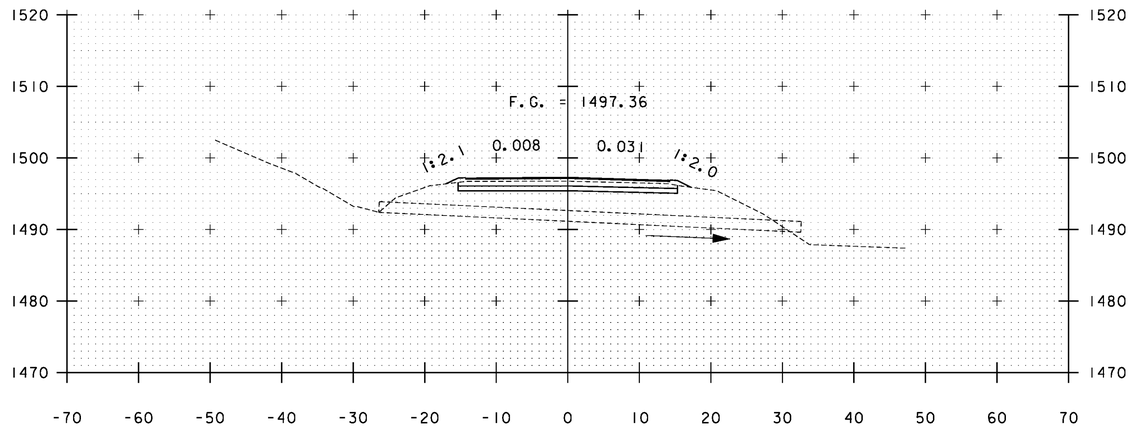

A 104+50

STA. A 103+34 TO STA. A 105+00

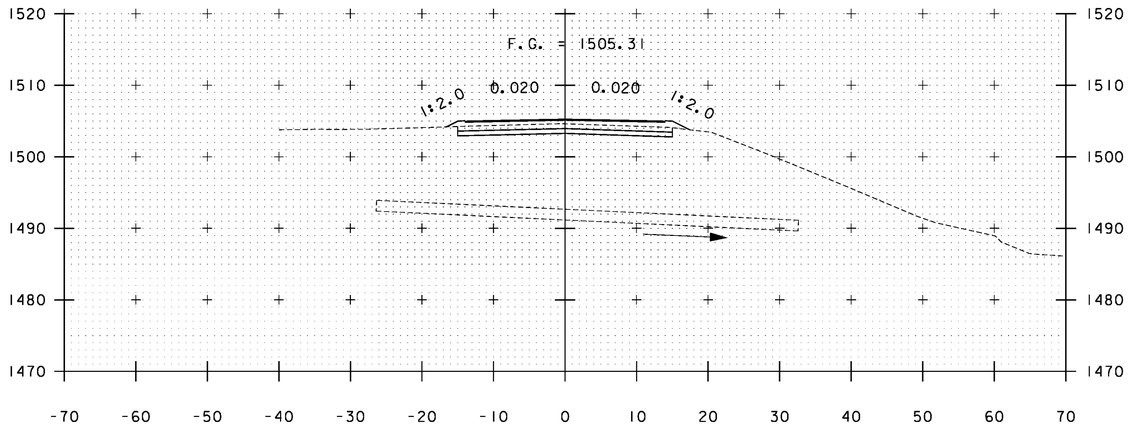
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 221 OF 444 |



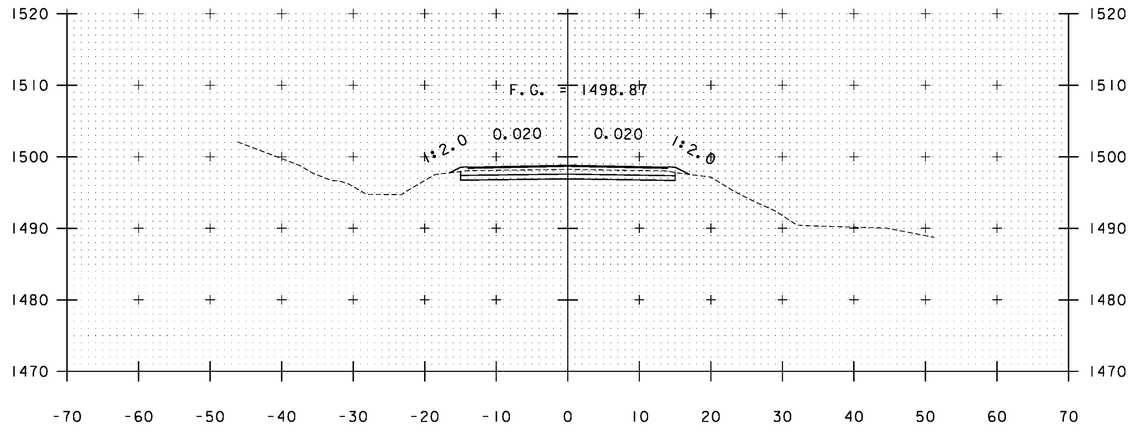

A 106+00




A 106+77




A 105+50



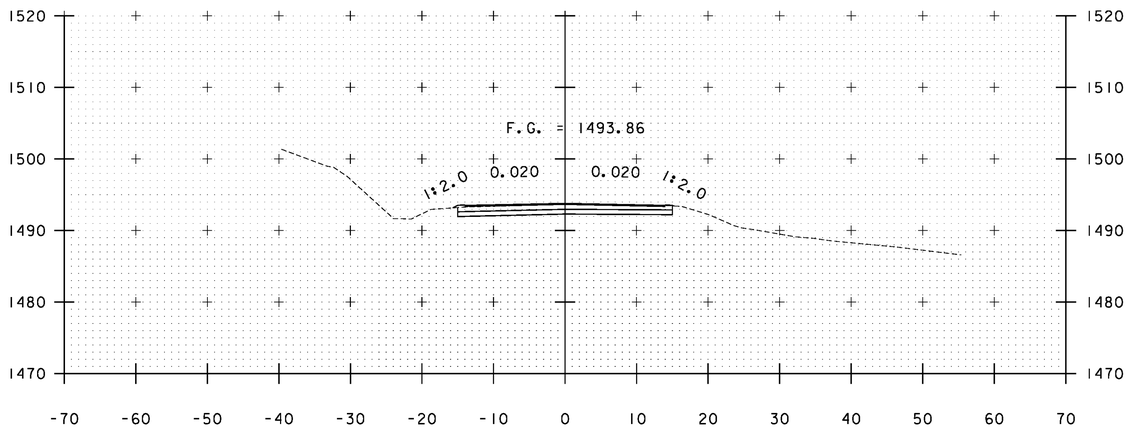

A 106+50

STA. A 105+50 TO STA. A 106+77

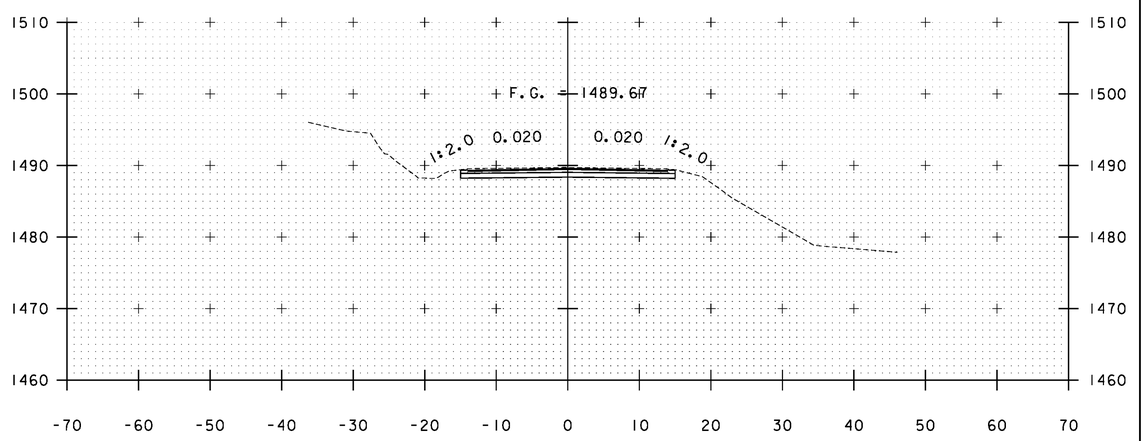
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER 5RPS0P3-013-I(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

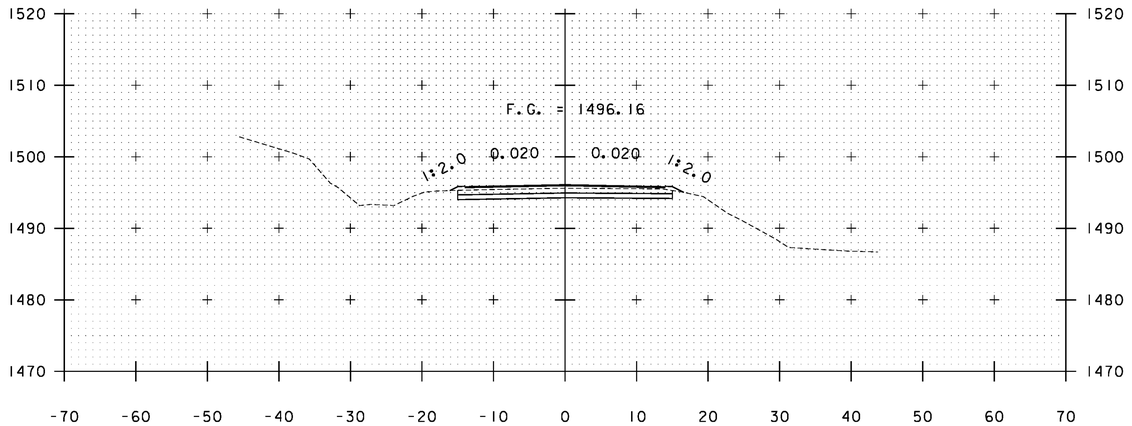
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 222 OF 444



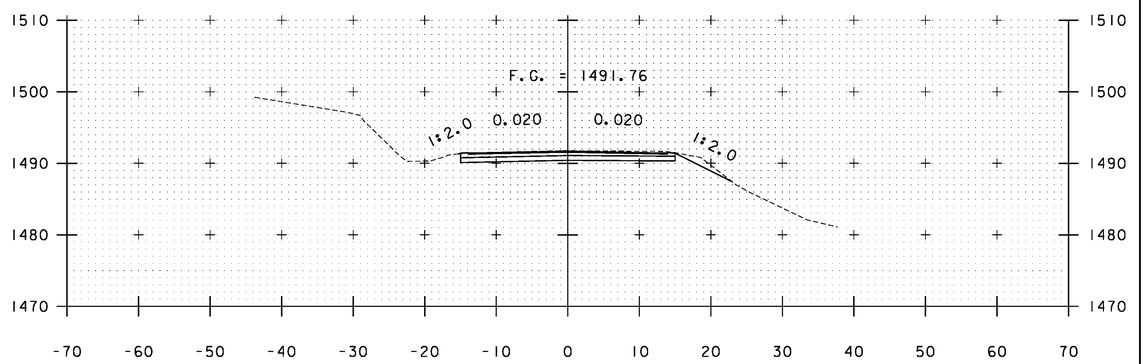

A 107+50




A 108+50




A 107+00



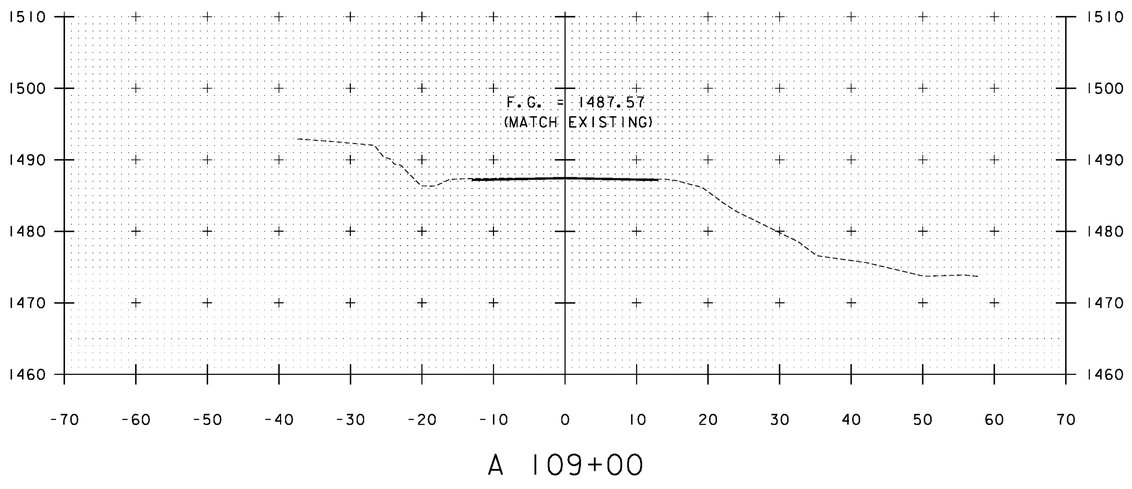

A 108+00

STA. A 107+00 TO STA. A 108+50

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

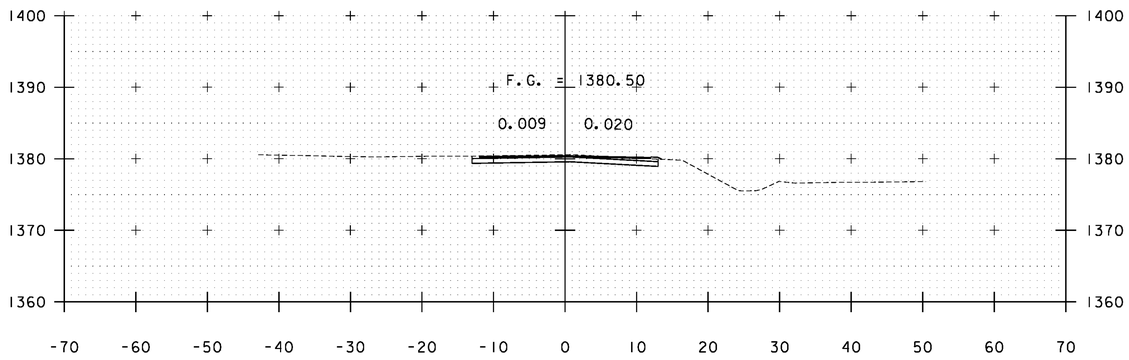
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 223 OF 444



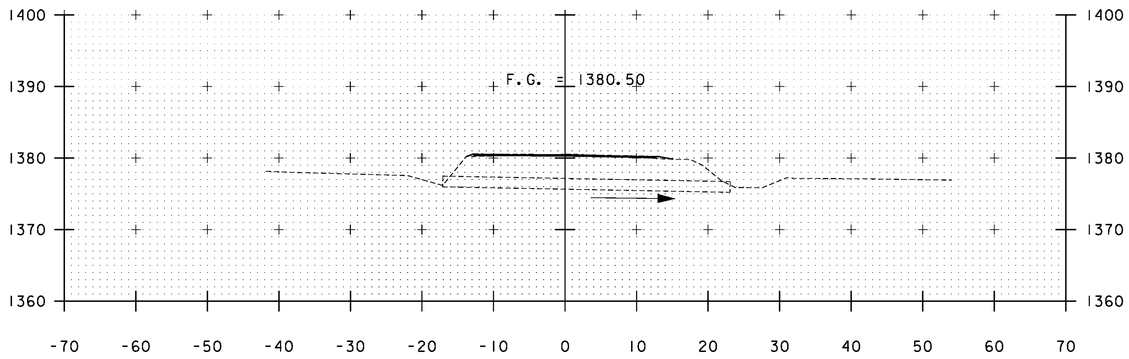

A 109+00

STA. A 109+00

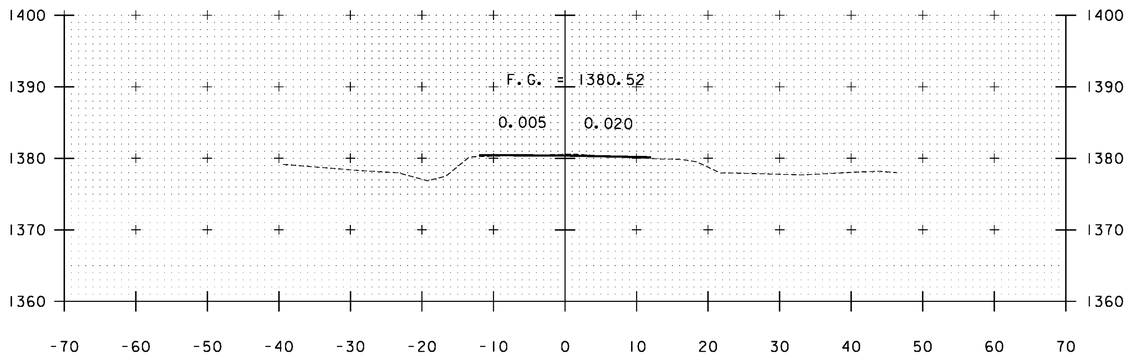
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 224 OF 444 |



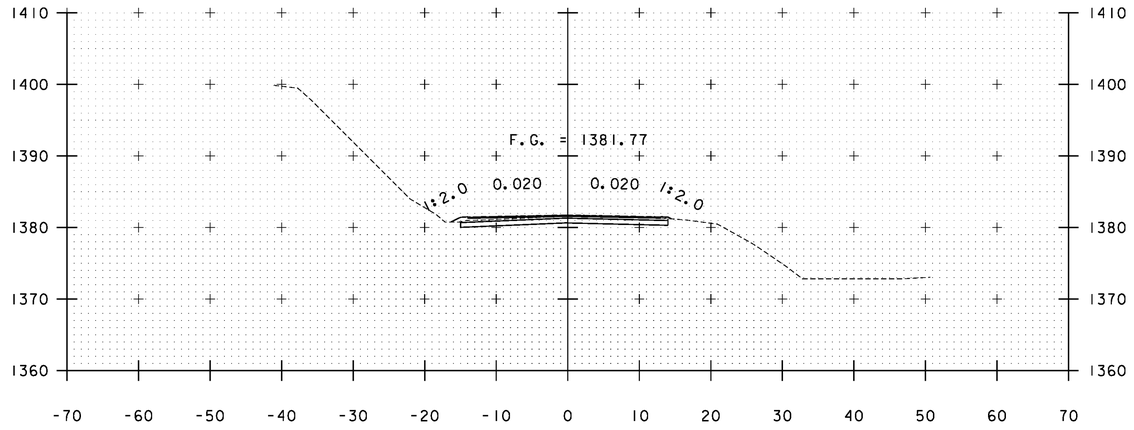

A 134+00



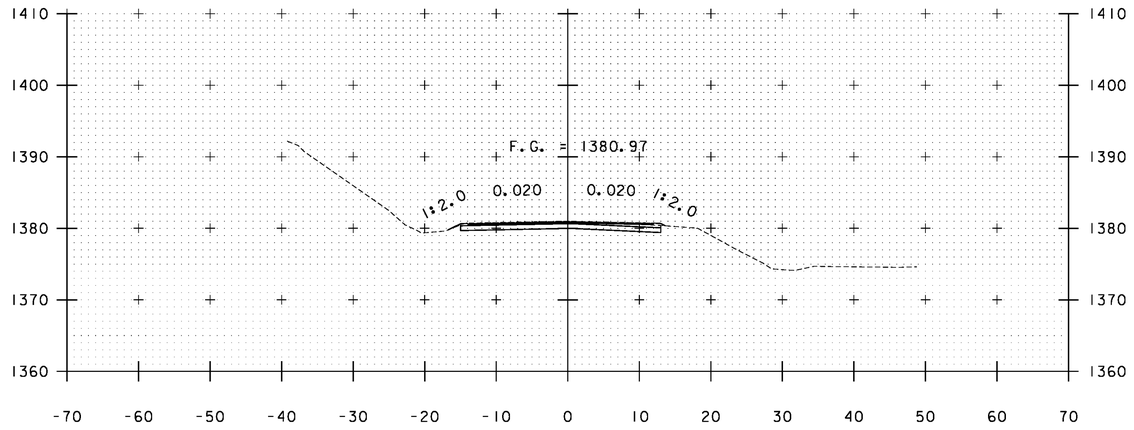

A 133+79




A 133+75




A 135+00



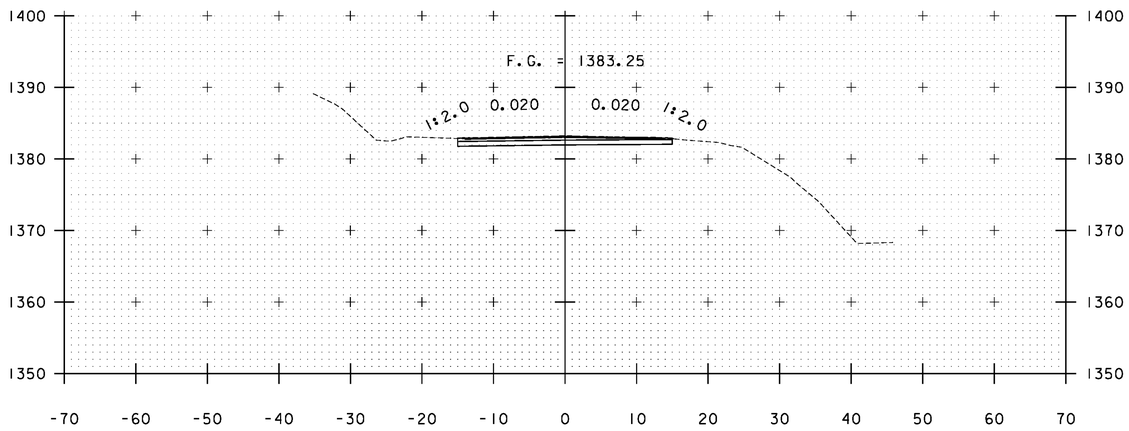

A 134+50

STA. A 133+75 TO STA. A 135+00

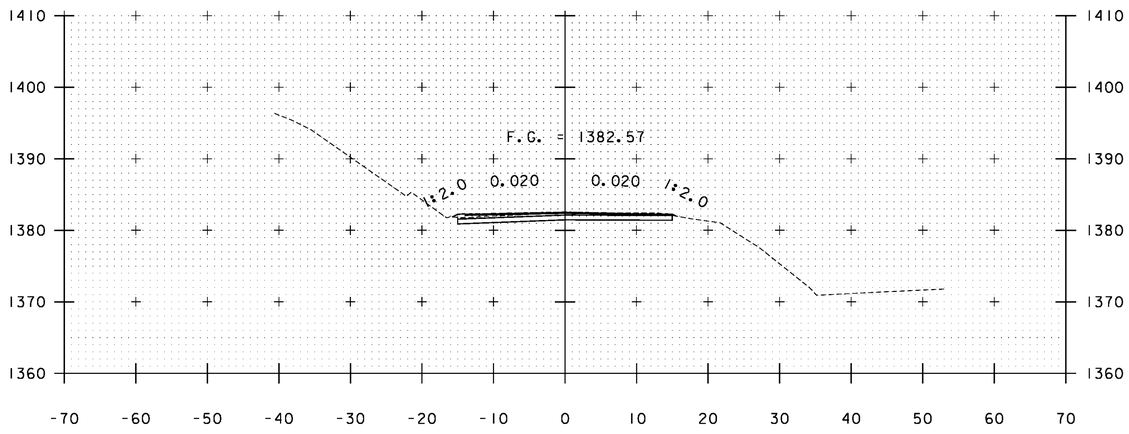
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

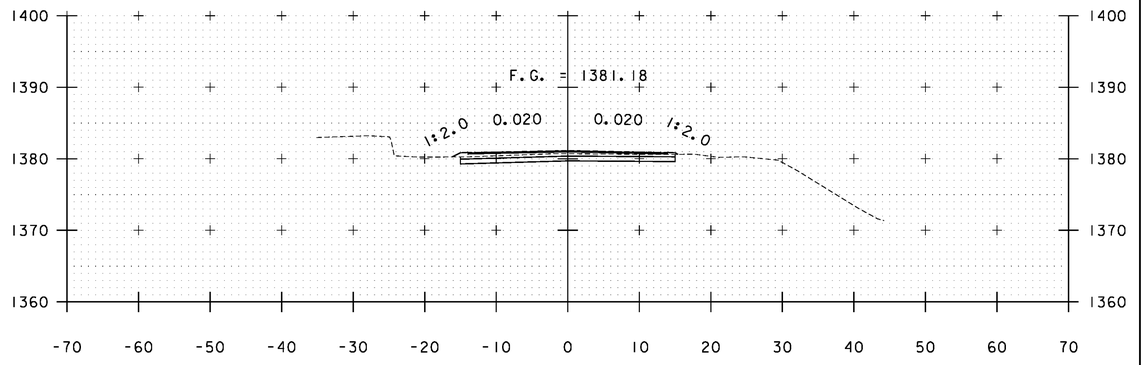
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 225 OF 444



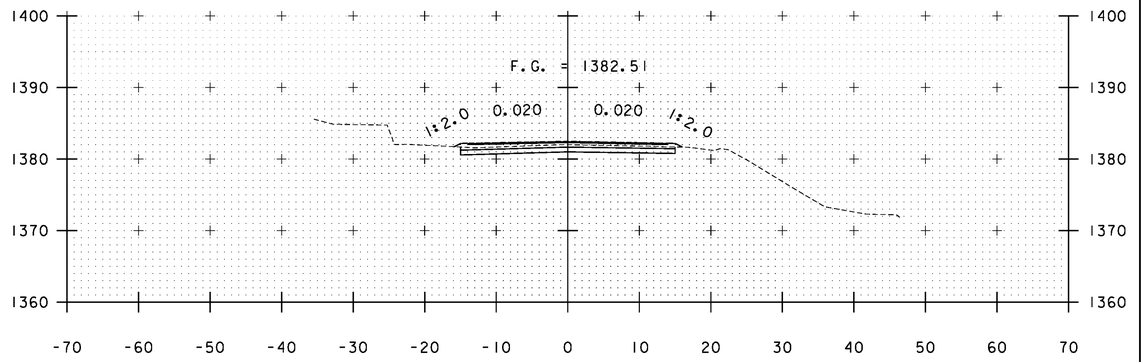

A 136+00



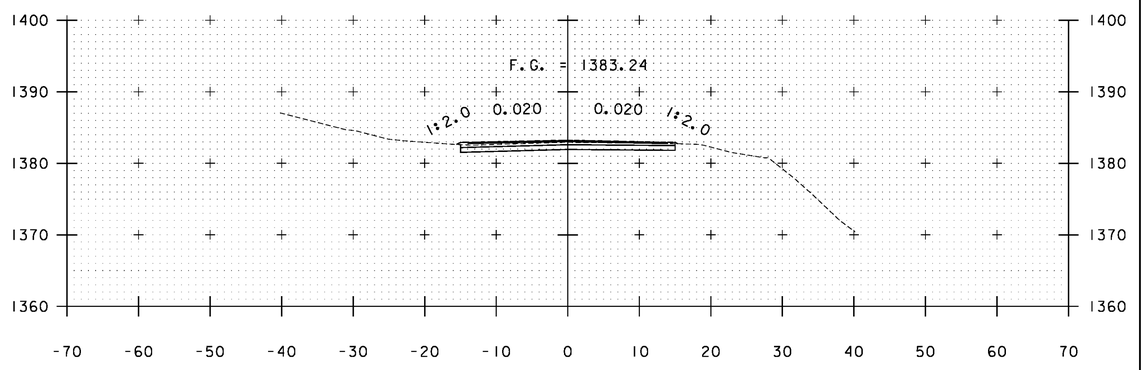

A 135+50




A 137+50




A 137+00



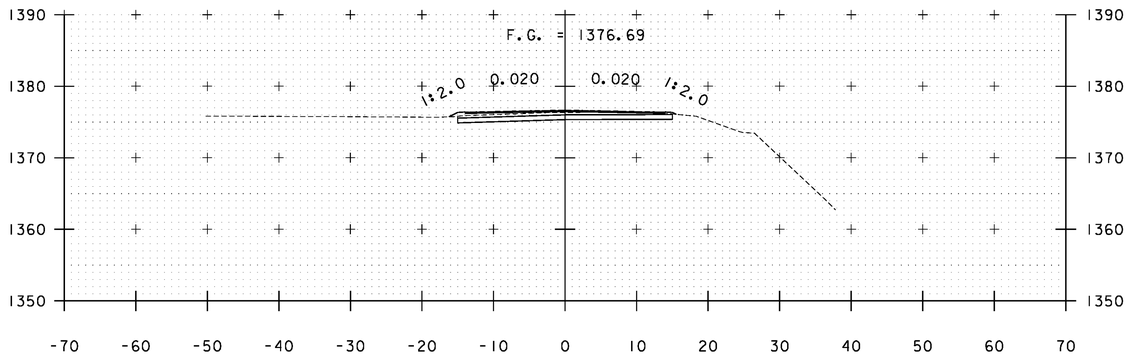

A 136+50

STA. A 135+50 TO STA. A 137+50

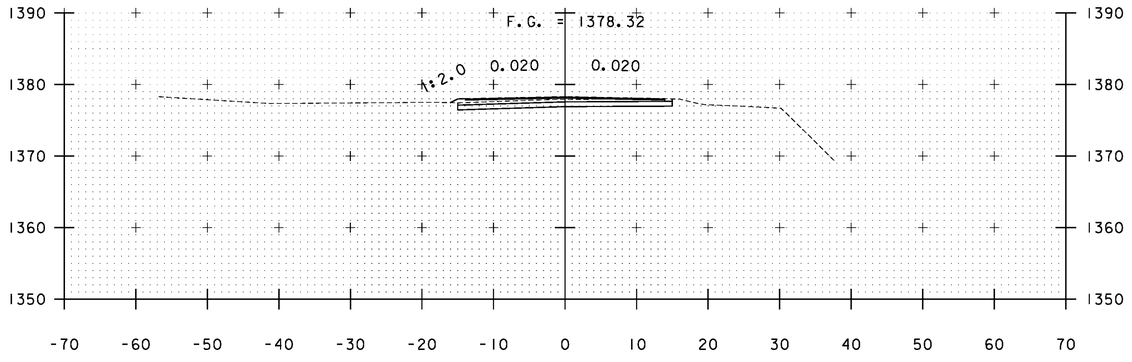
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

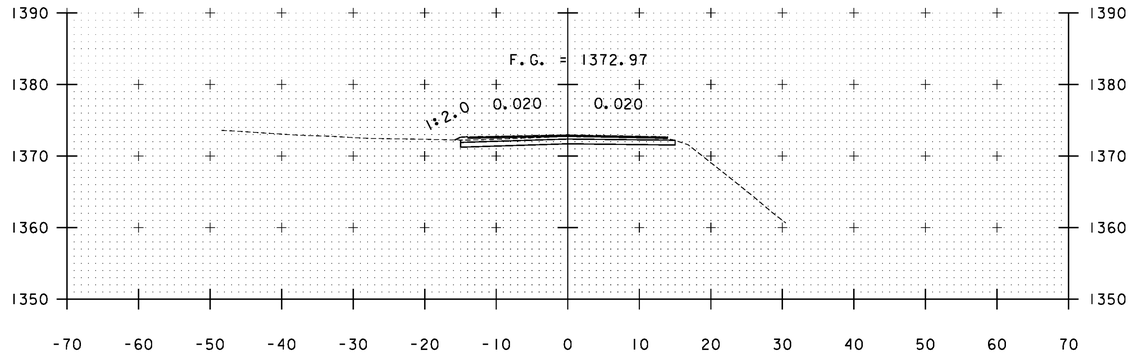
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 226 OF 444



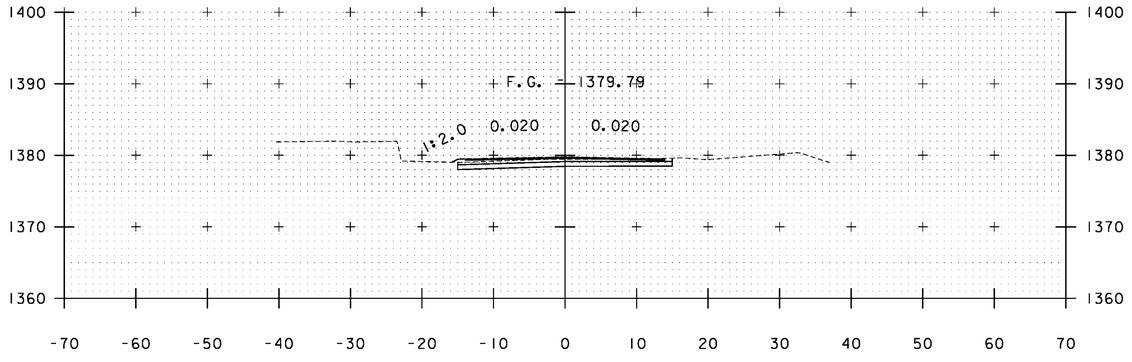

A 139+00



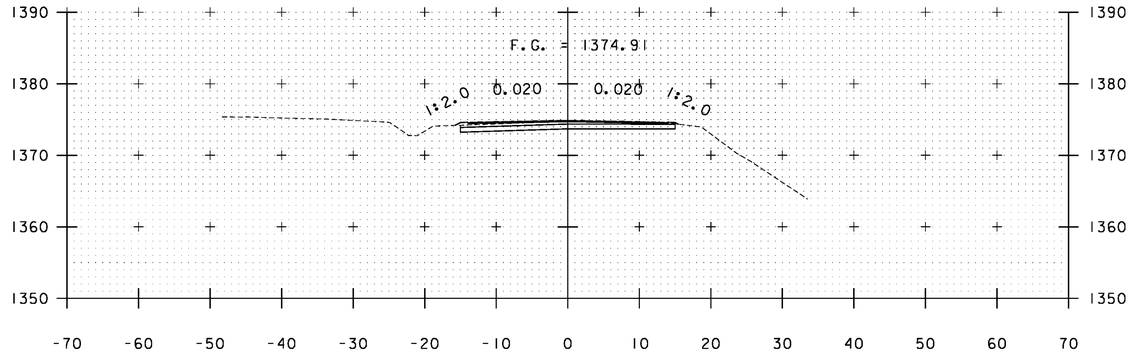

A 138+50




A 140+00



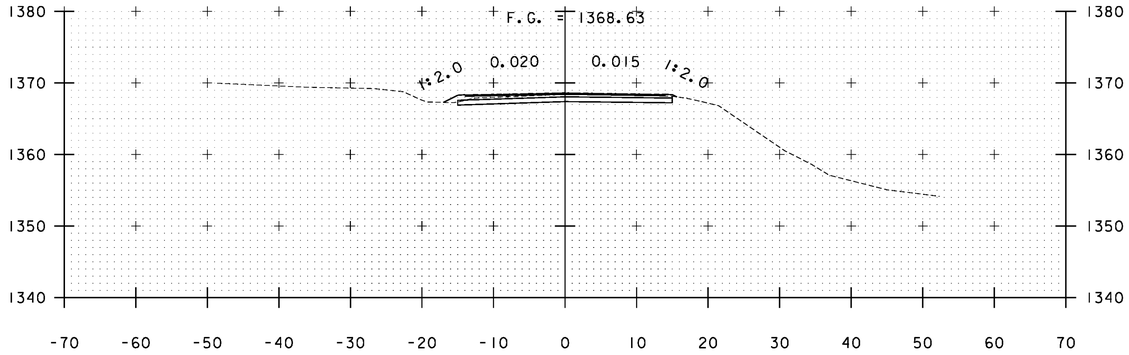

A 138+00



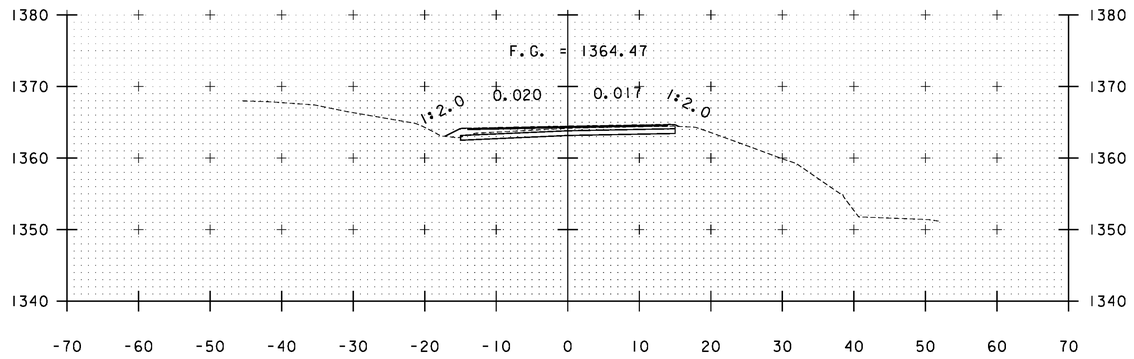

A 139+50

STA. A 138+00 TO STA. A 140+00

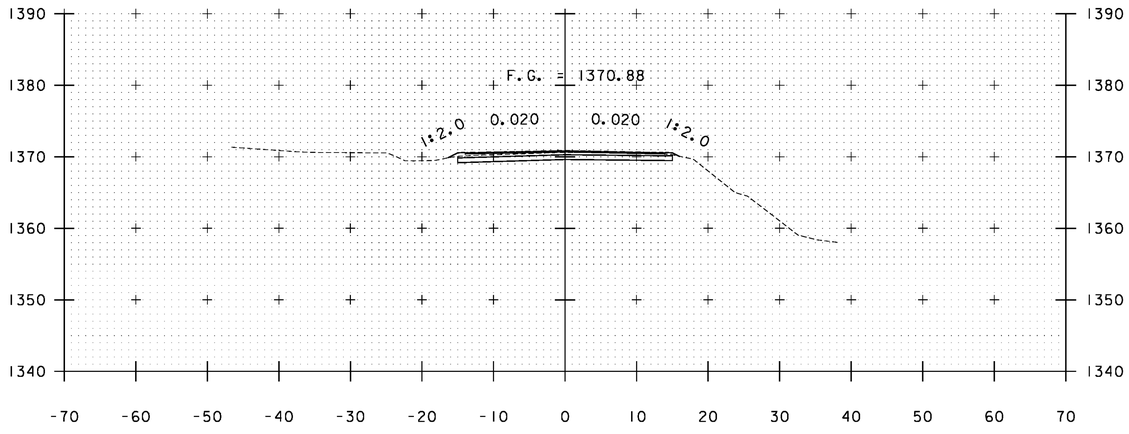
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 227 OF 444 |



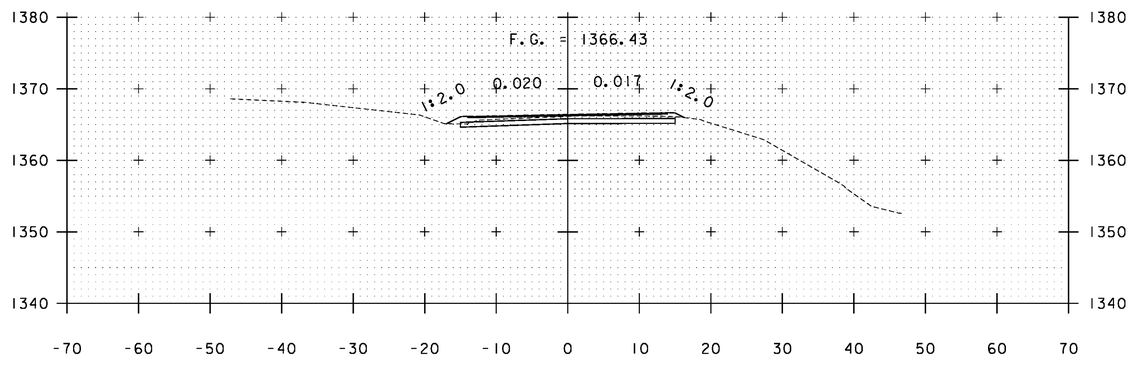

A 141+00




A 142+00




A 140+50



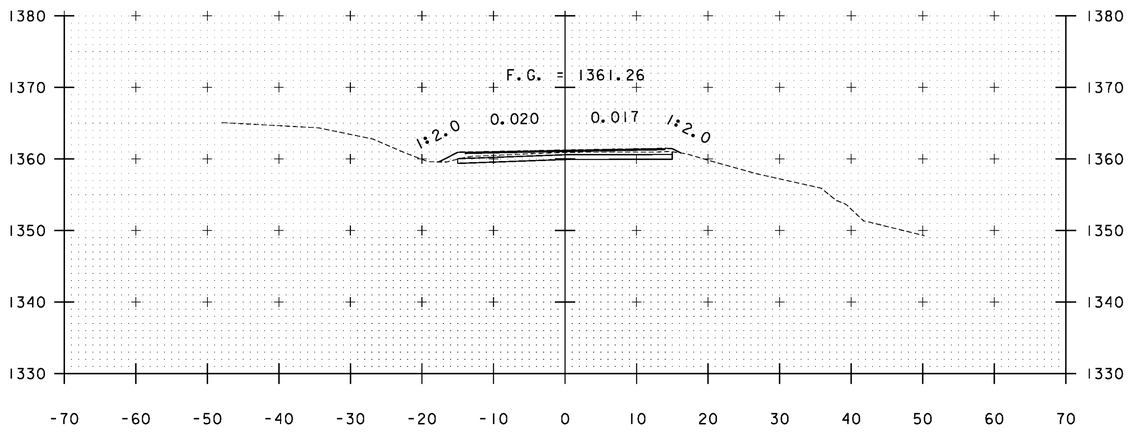

A 141+50

STA. A 140+50 TO STA. A 142+00

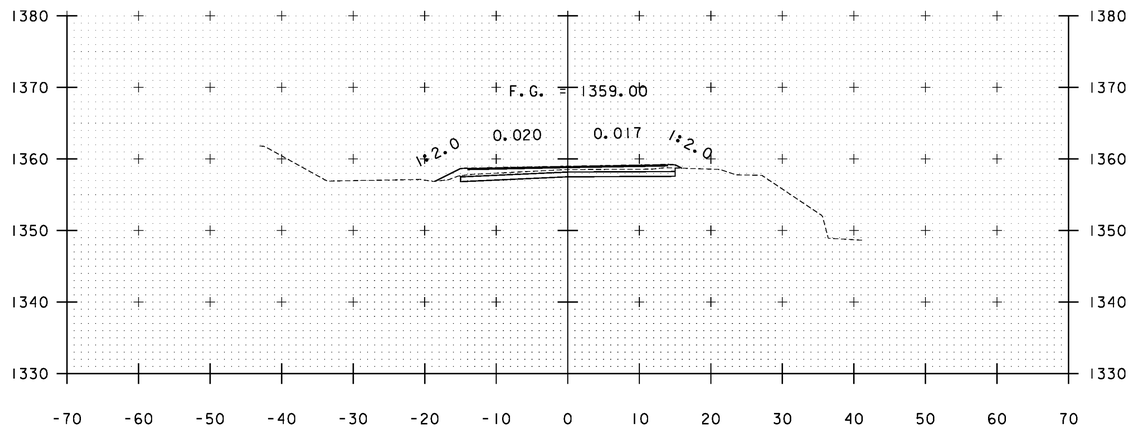
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

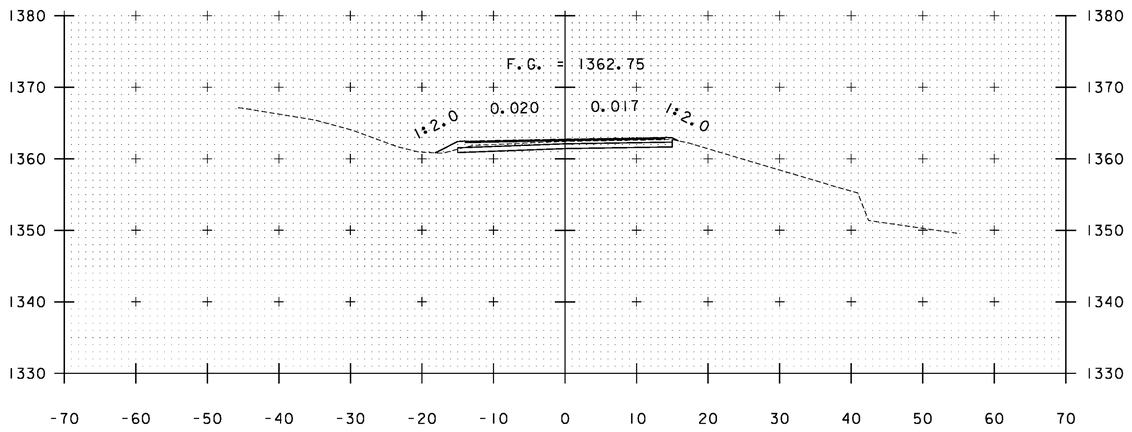
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 228 OF 444



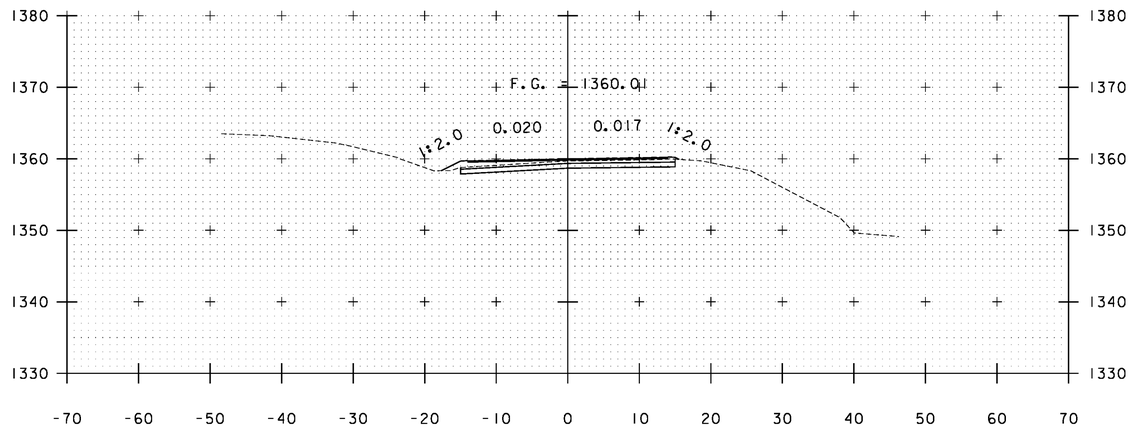

A 143+00




A 144+00




A 142+50



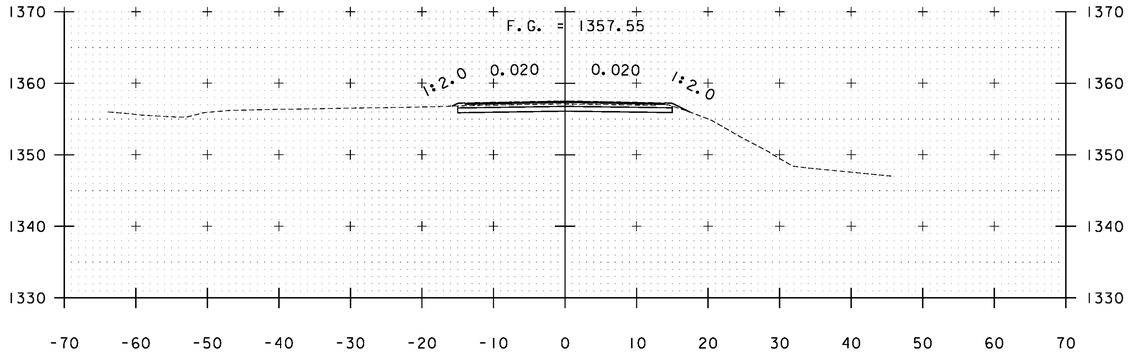

A 143+50

STA. A 142+50 TO STA. A 144+00

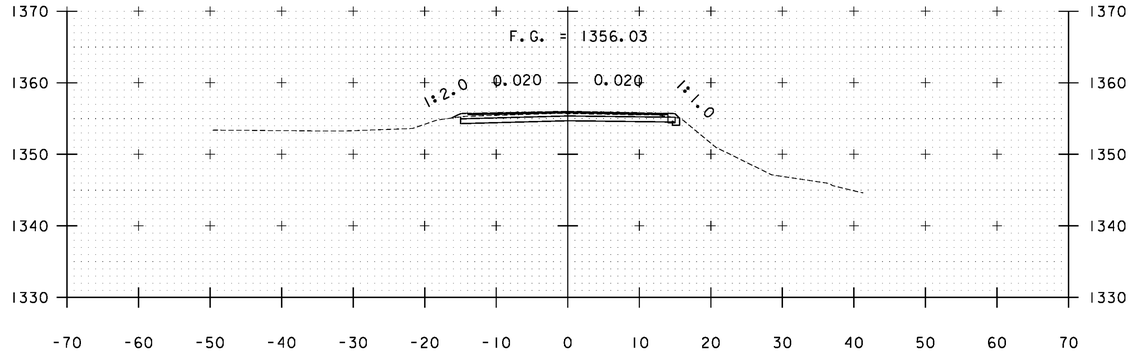
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

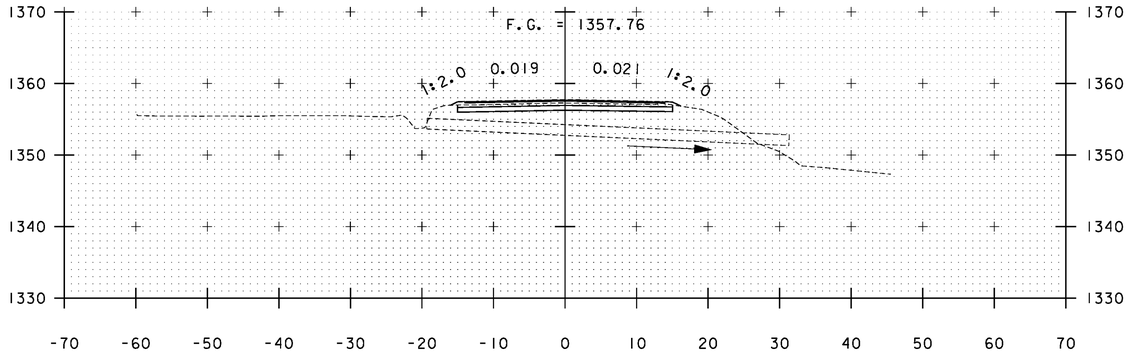
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 229 OF 444



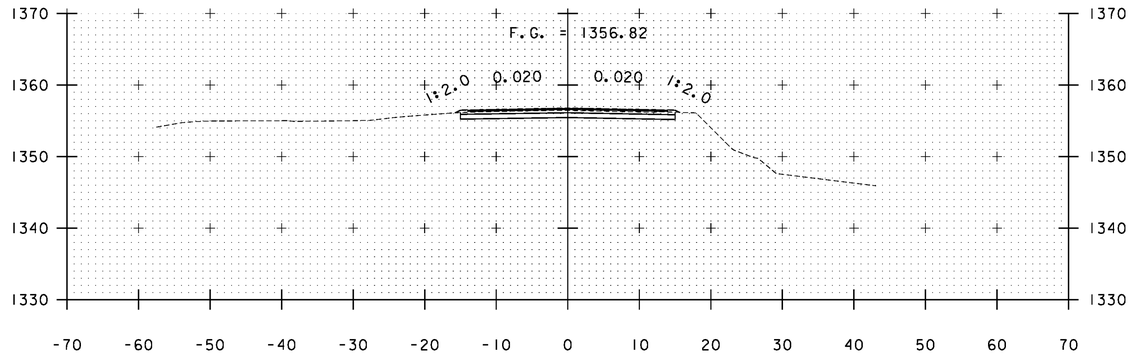

A 145+00



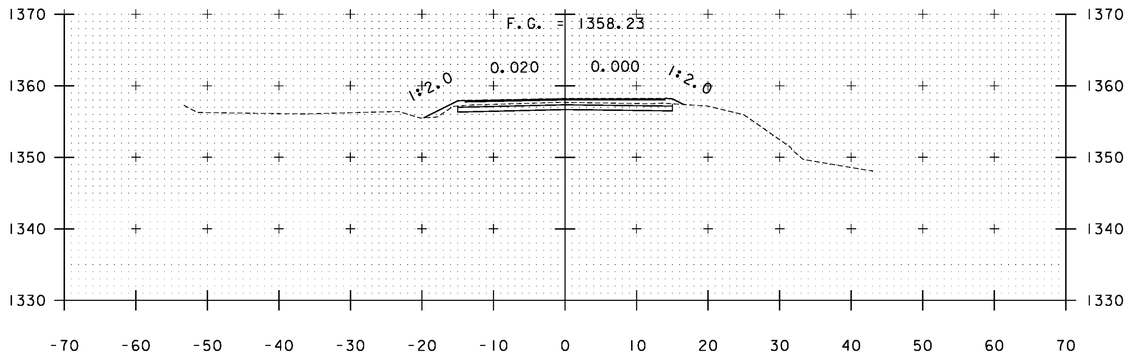

A 146+00




A 144+84




A 145+50



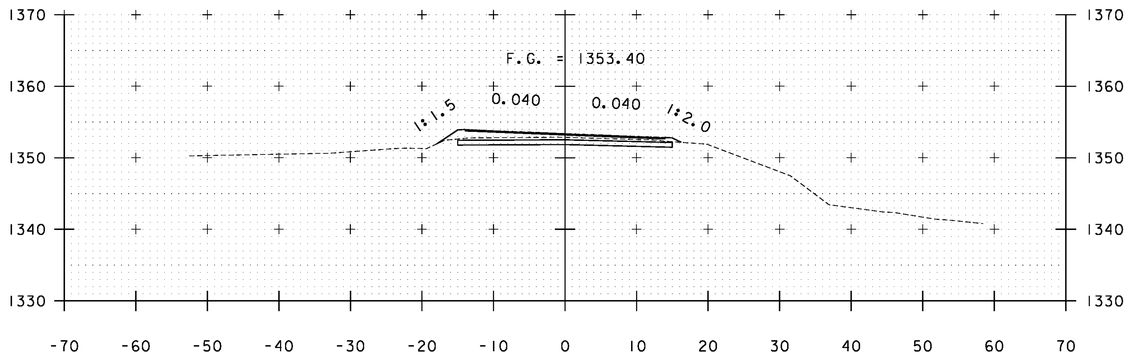

A 144+50

STA. A 144+50 TO STA. A 146+00

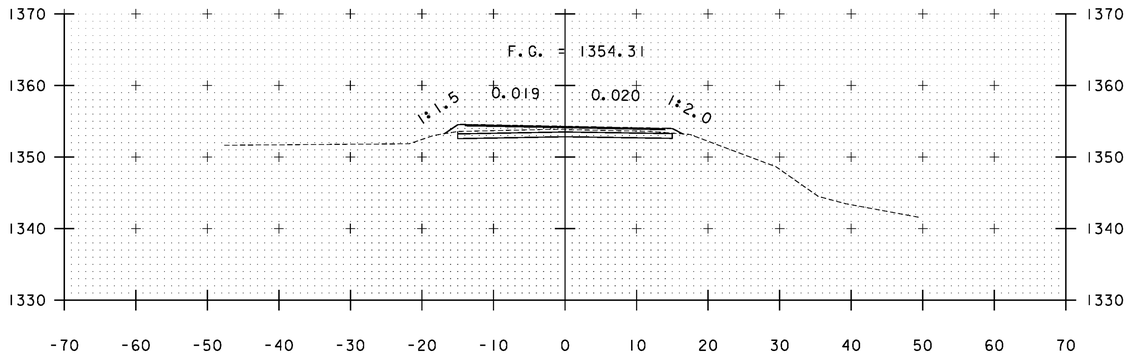
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

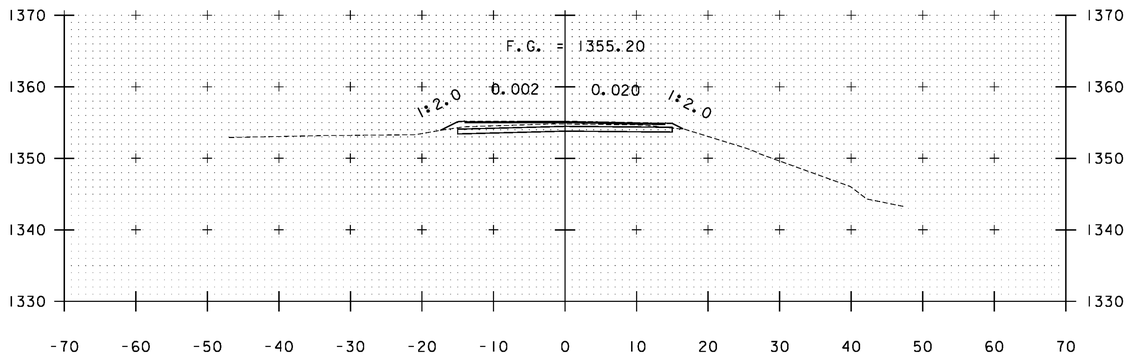
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 230 OF 444



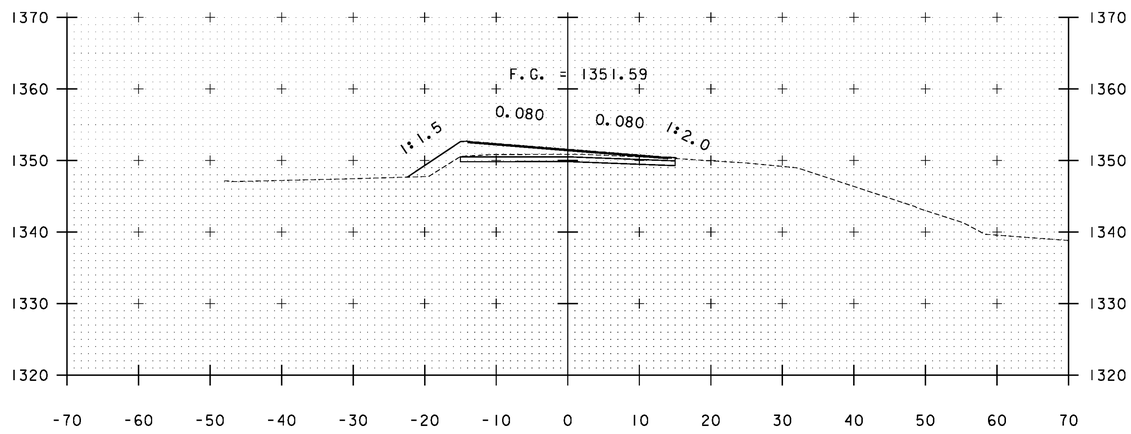

A 147+50



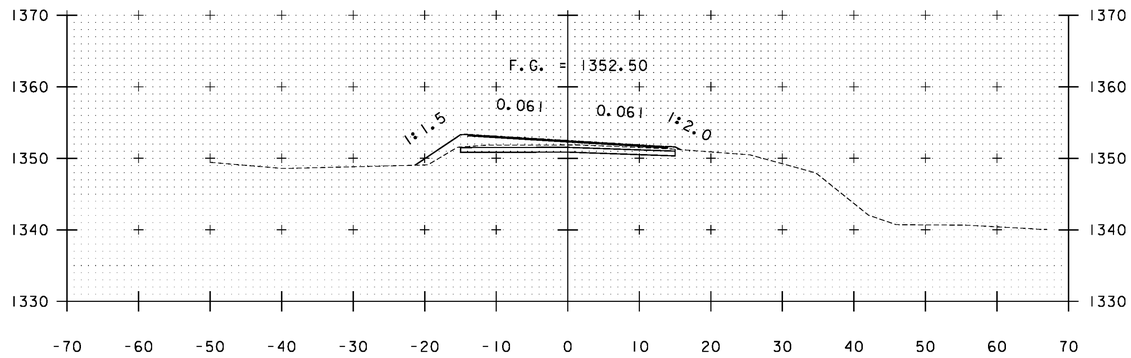

A 147+00




A 146+50



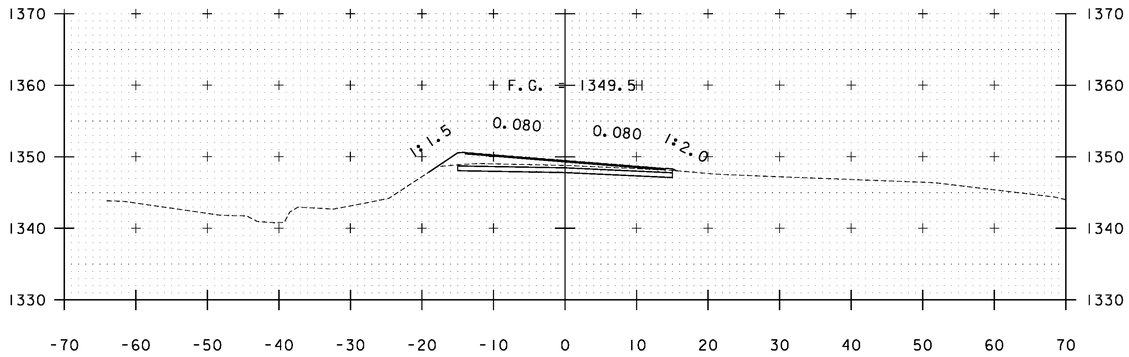

A 148+50



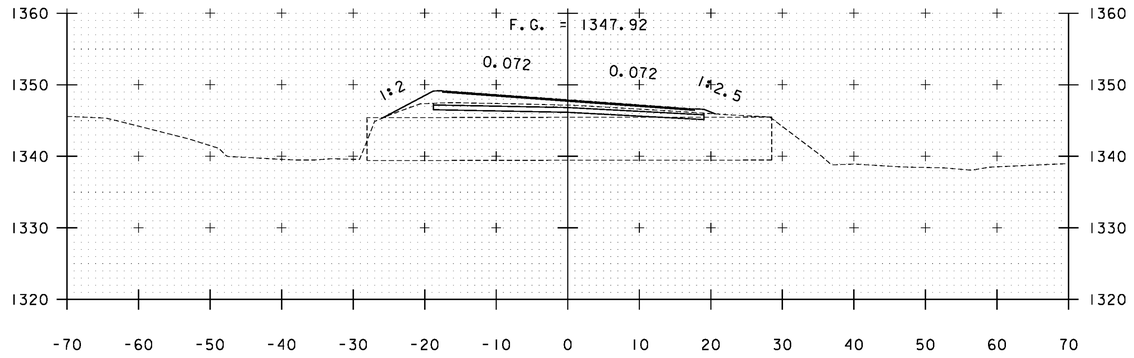

A 148+00

STA. A 146+50 TO STA. A 148+50

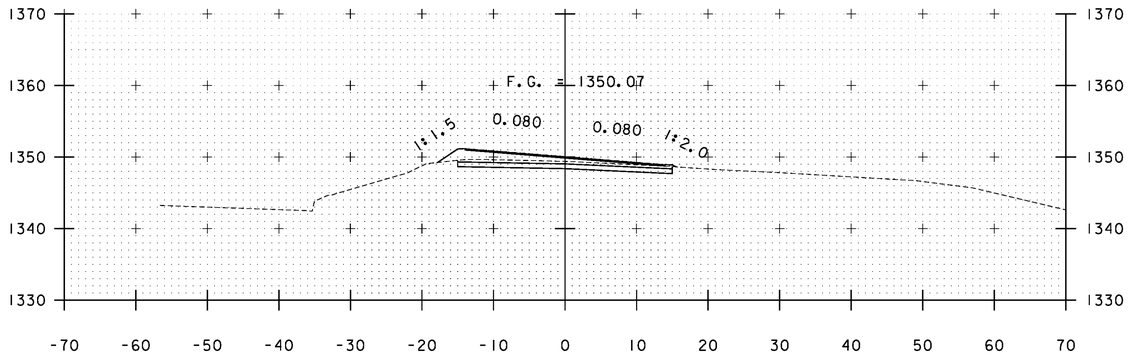
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 231 OF 444 |



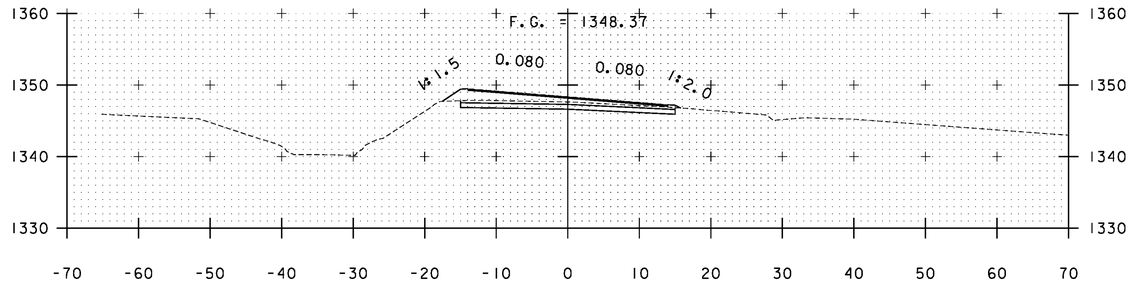

A 150+00



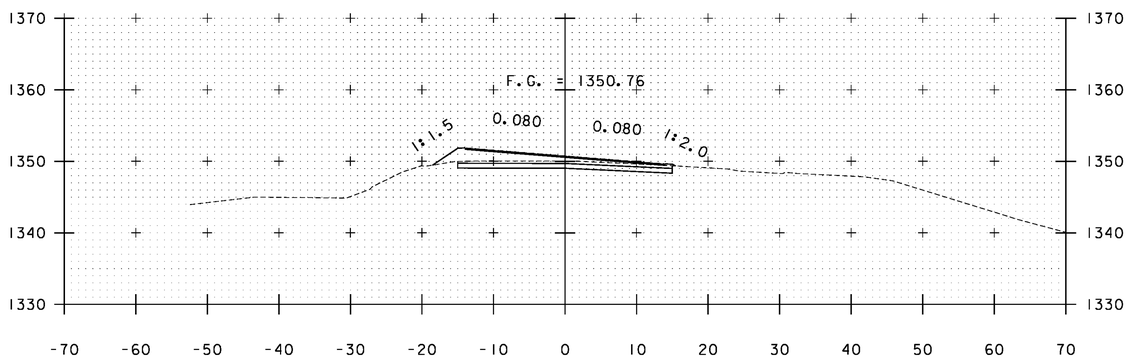

A 151+33



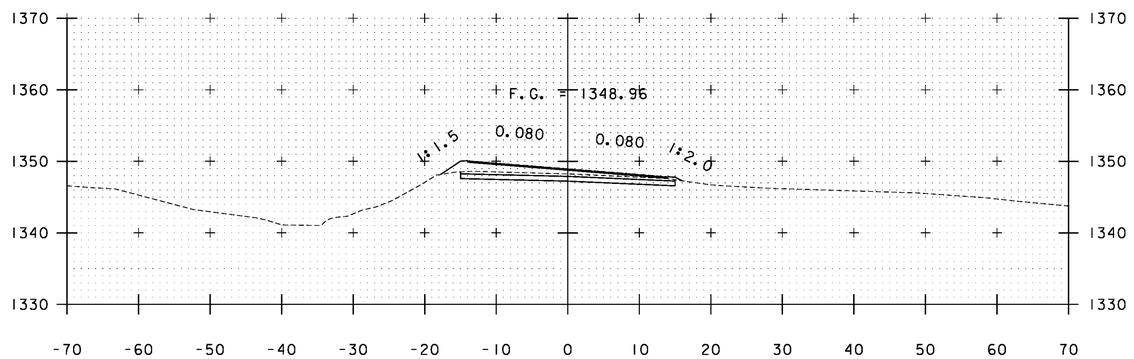

A 149+50




A 151+00




A 149+00



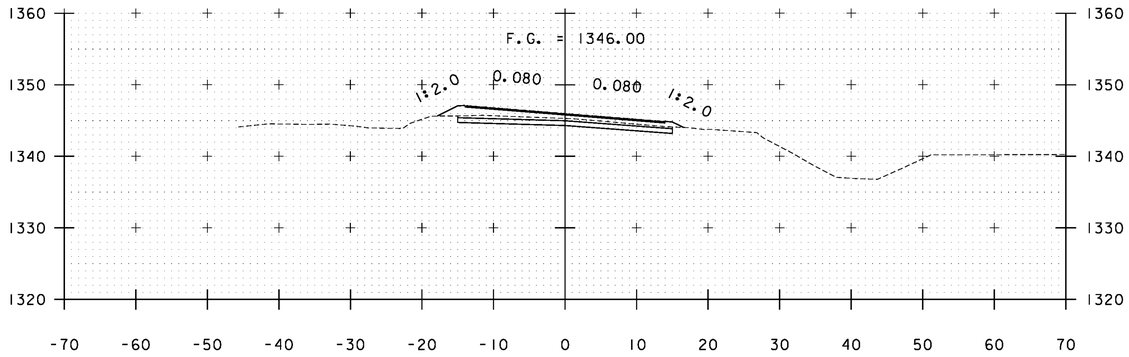

A 150+50

STA. A 149+00 TO STA. A 151+33

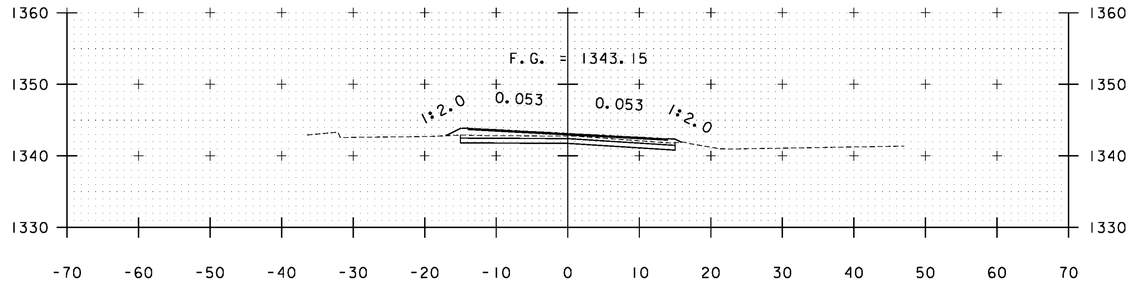
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

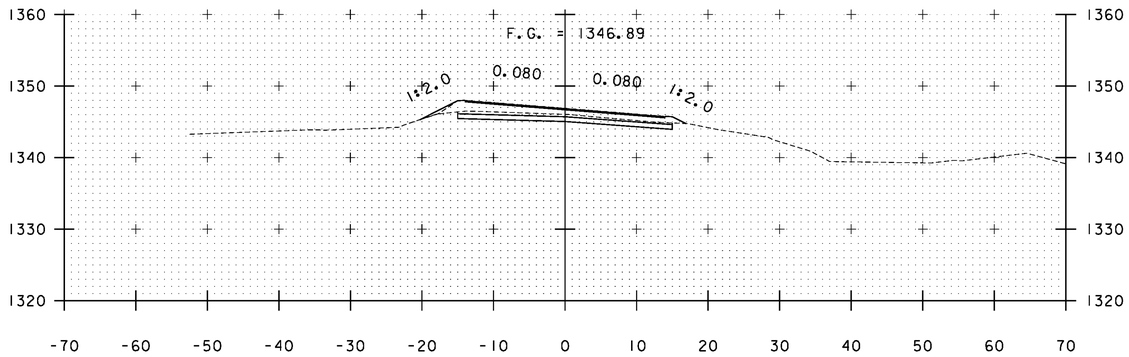
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 232 OF 444



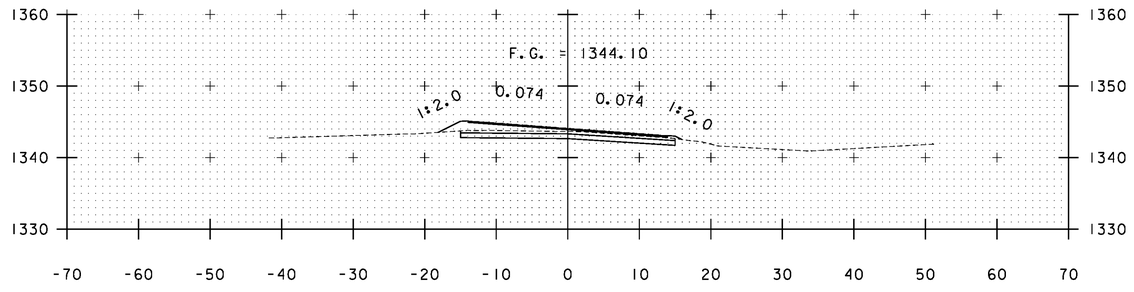

A 152+50



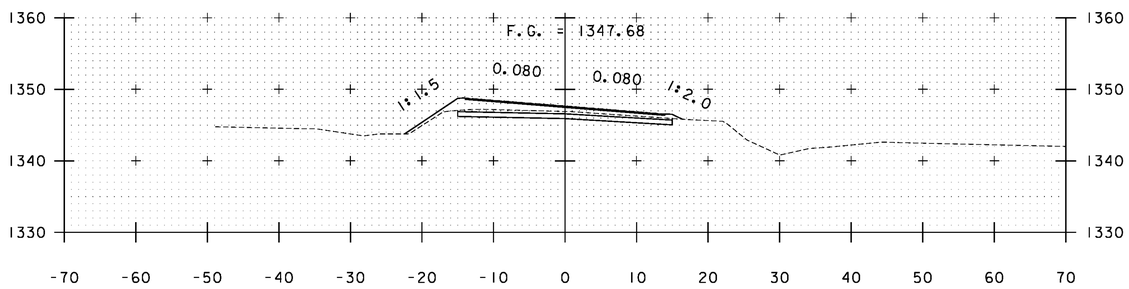

A 154+00



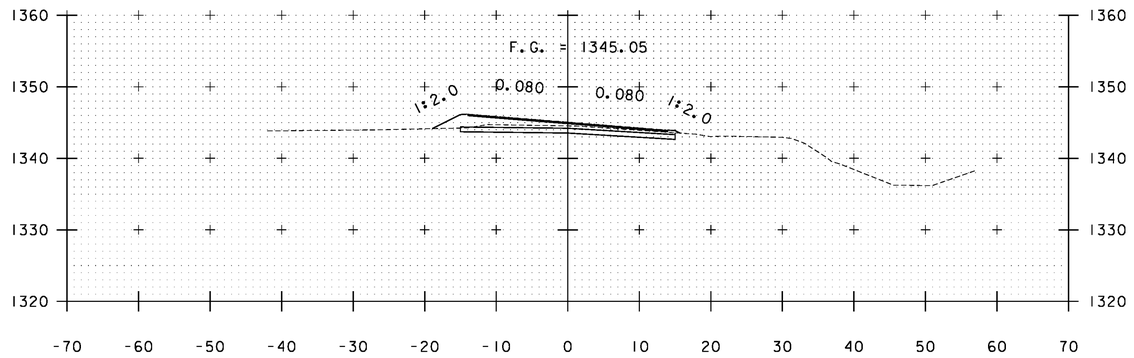

A 152+00




A 153+50



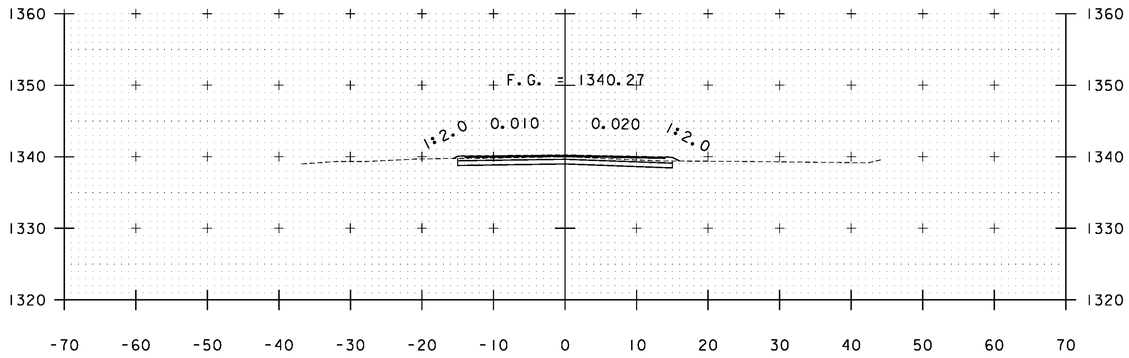

A 151+50



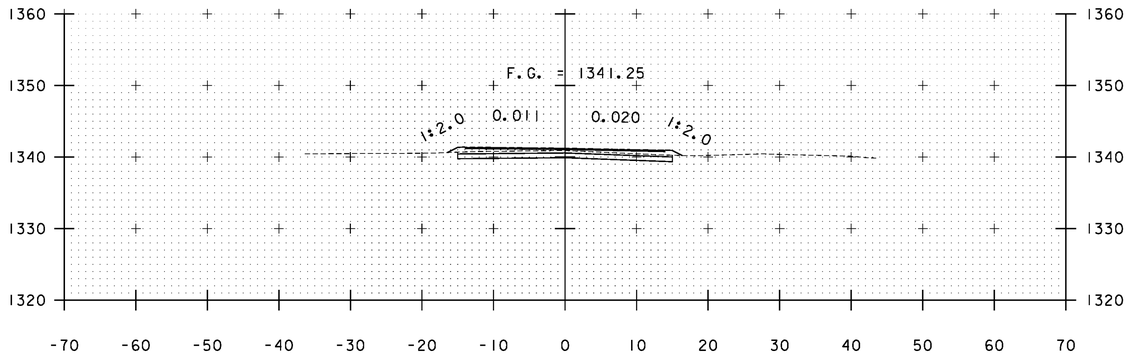

A 153+00

STA. A 151+50 TO STA. A 154+00

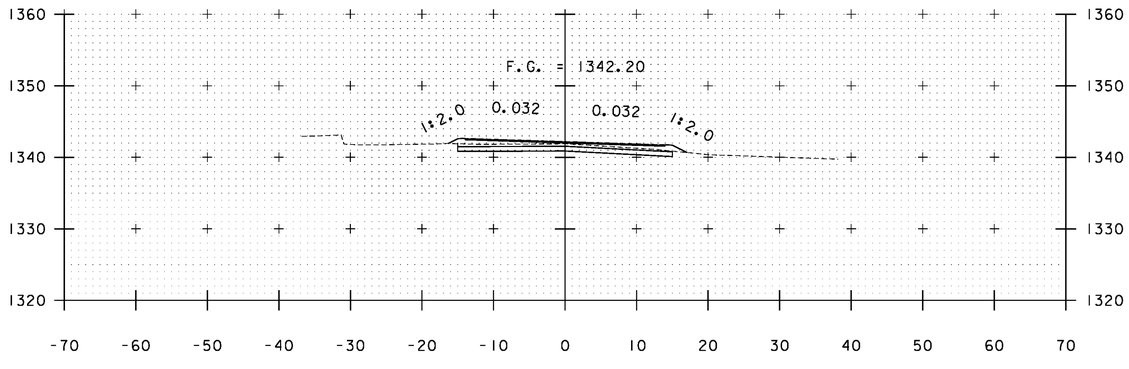
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 233 OF 444 |



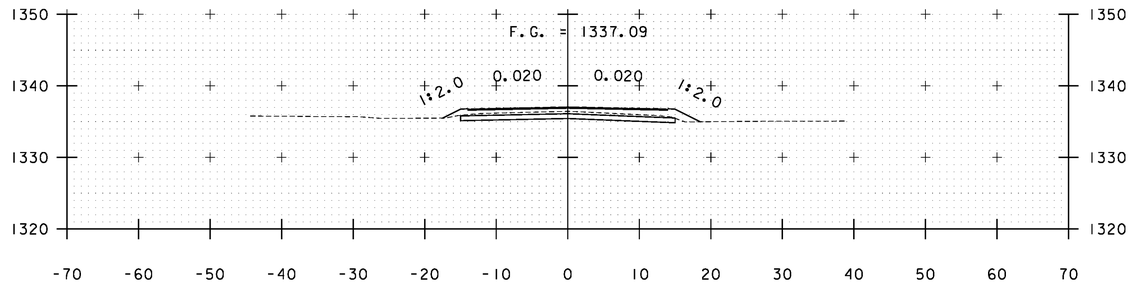

A 155+50



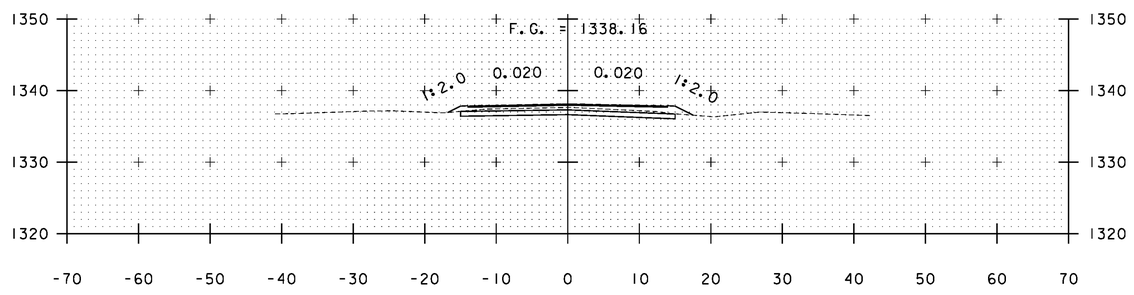

A 155+00



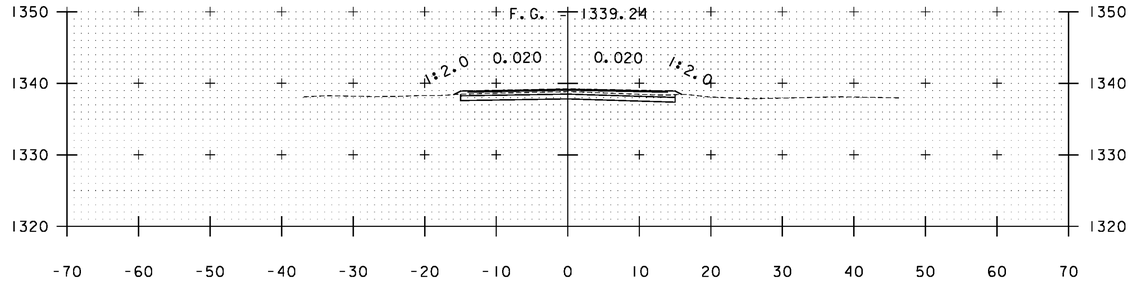

A 154+50




A 157+00




A 156+50



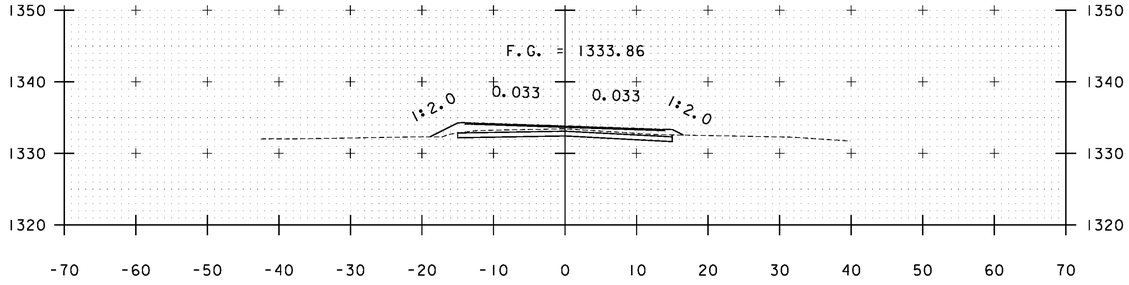

A 156+00

STA. A 154+50 TO STA. A 157+00

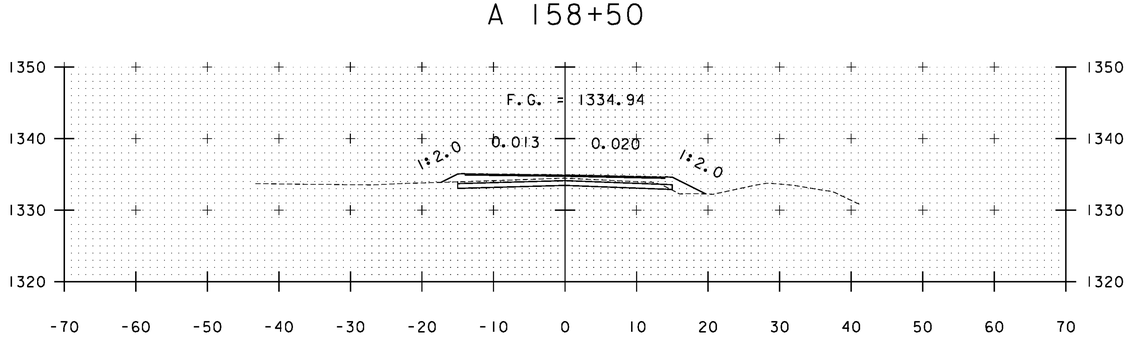
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

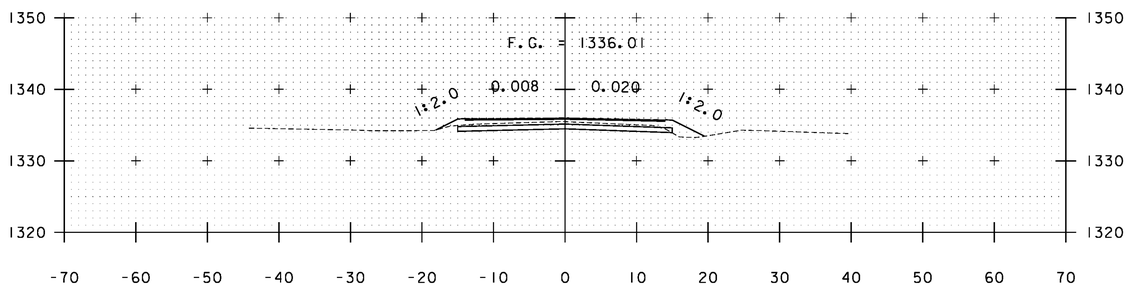
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 234 OF 444



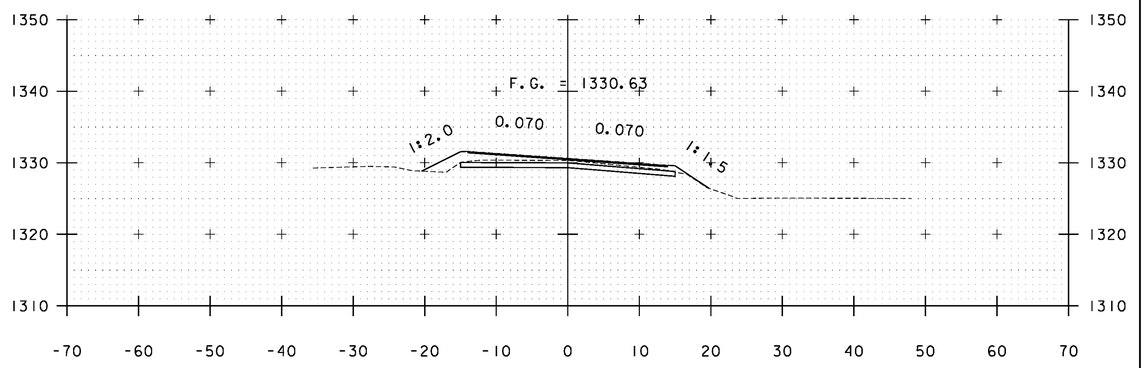

A 158+50



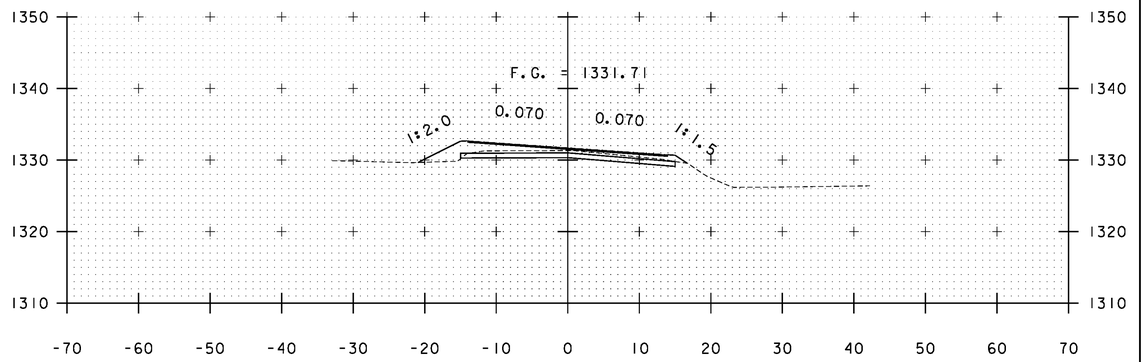

A 158+00



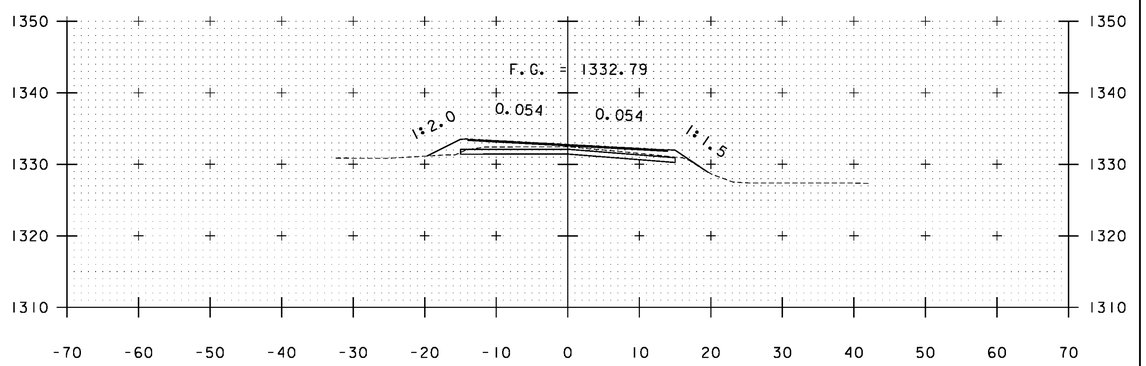

A 157+50




A 160+00



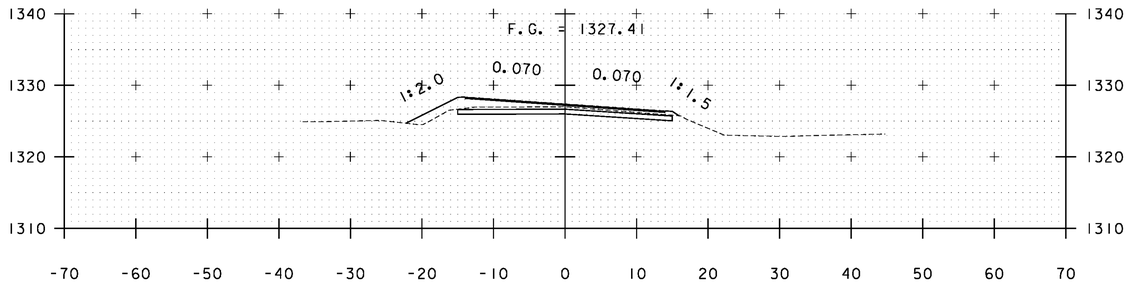

A 159+50



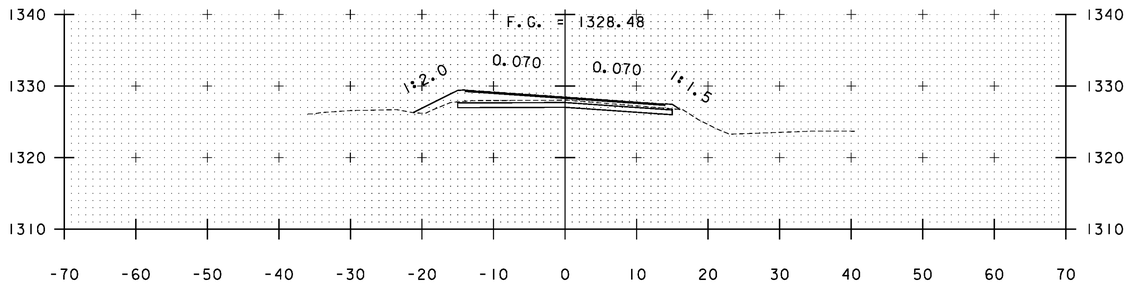

A 159+00

STA. A 157+50 TO STA. A 160+00

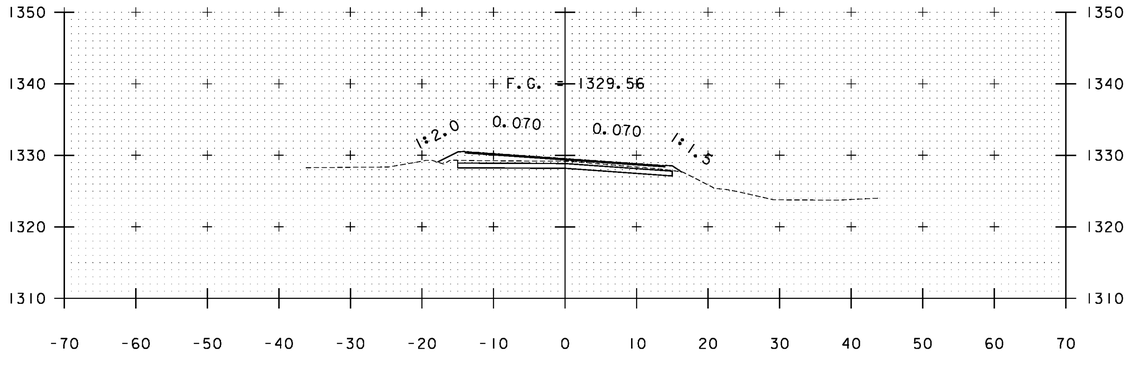
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 235 OF 444 |



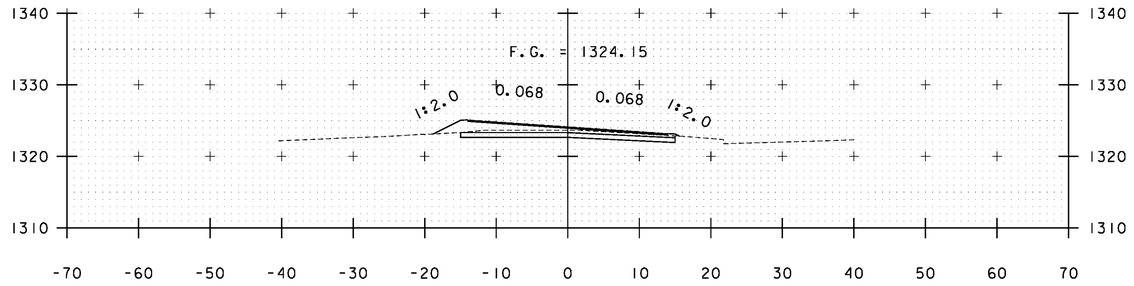

A 161+50



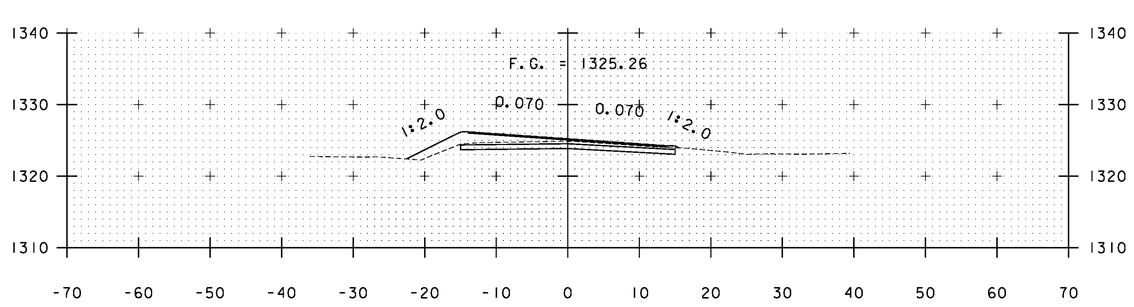

A 161+00



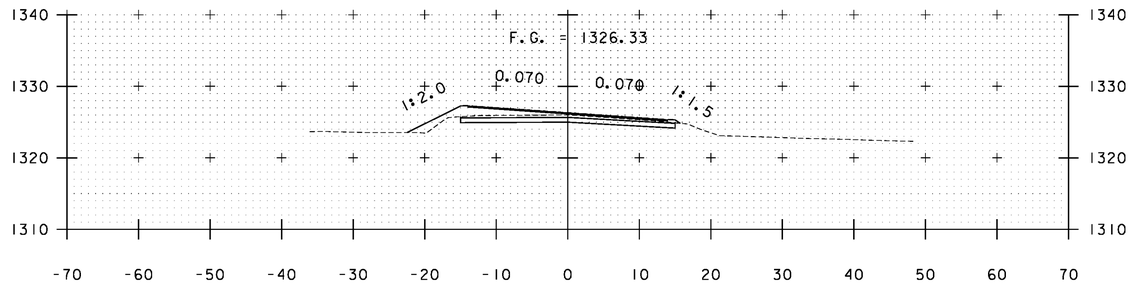

A 160+50




A 163+00




A 162+50



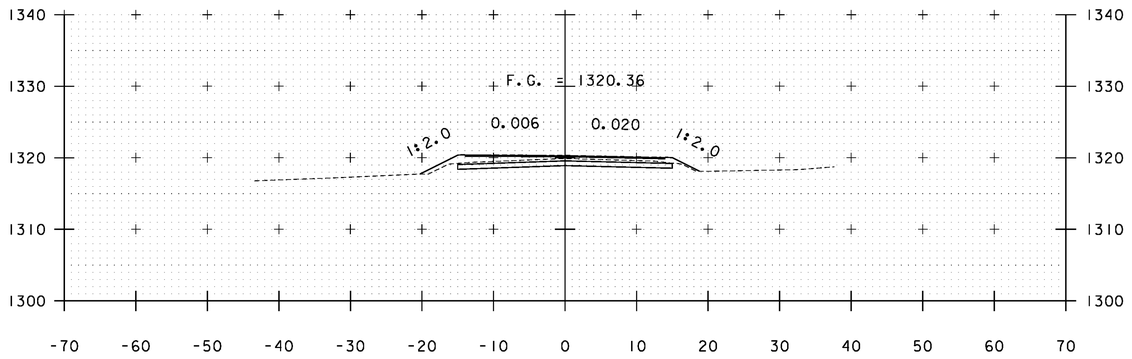

A 162+00

STA. A 160+50 TO STA. A 163+00

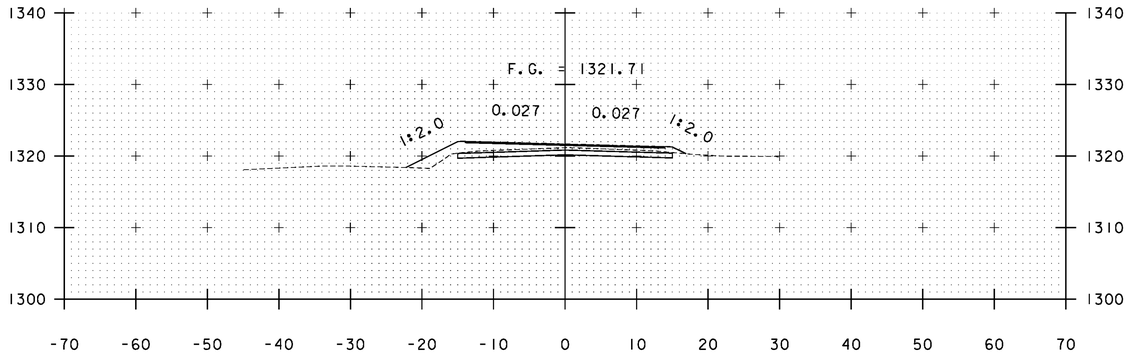
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

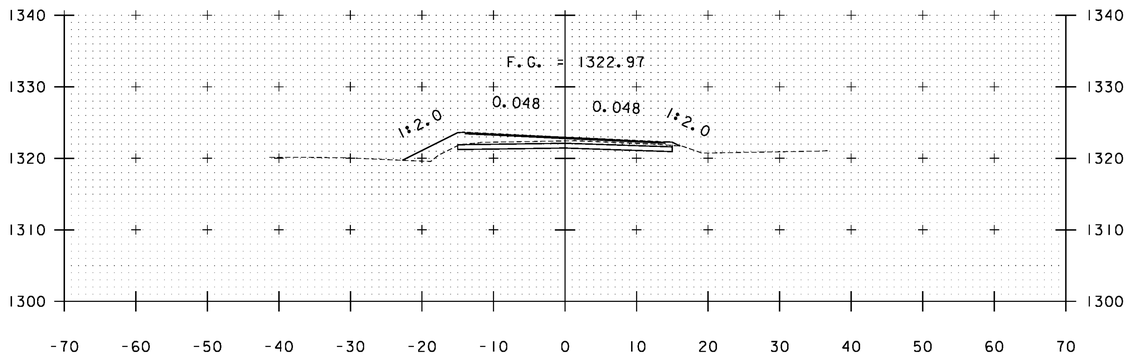
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 236 OF 444



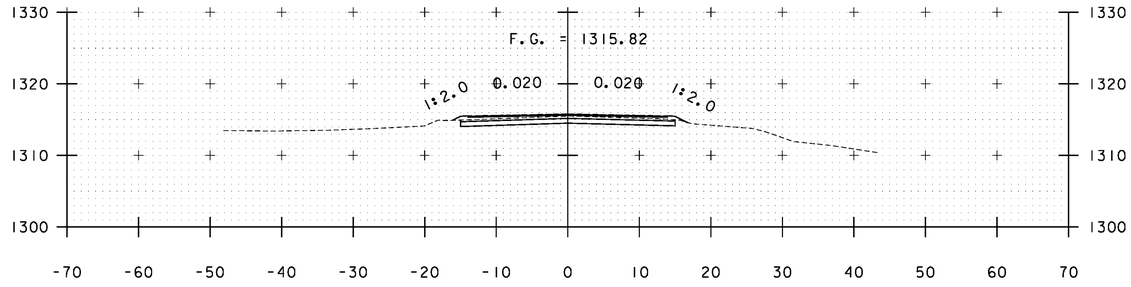

A 164+50



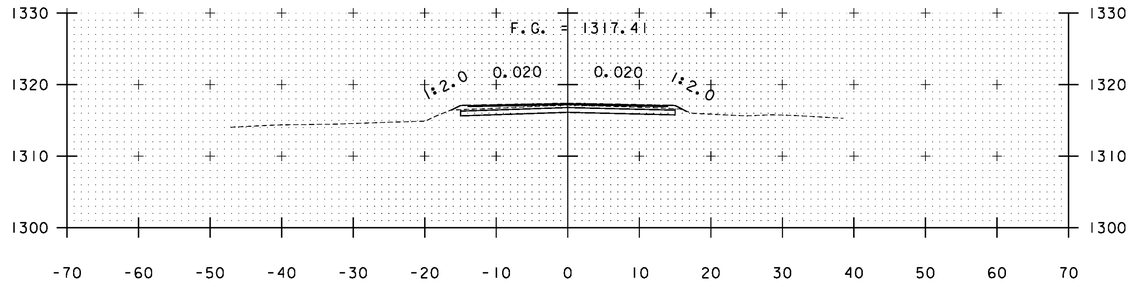

A 164+00



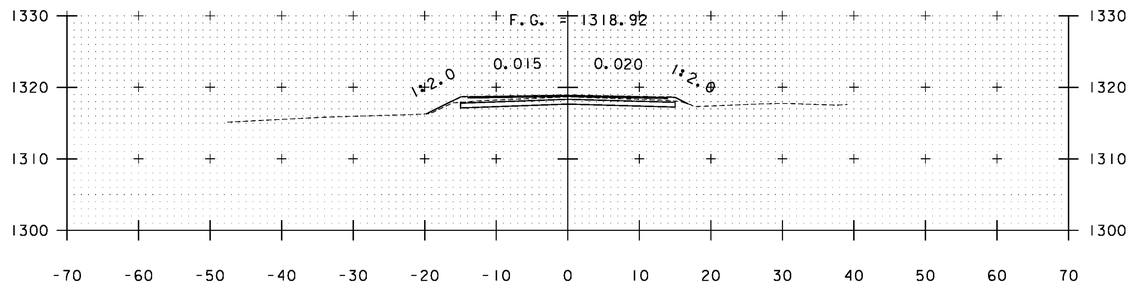

A 163+50




A 166+00




A 165+50



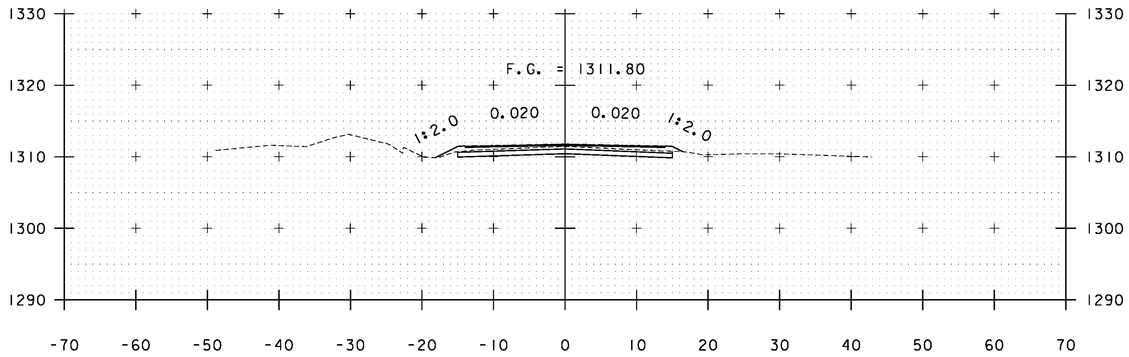

A 165+00

STA. A 163+50 TO STA. A 166+00

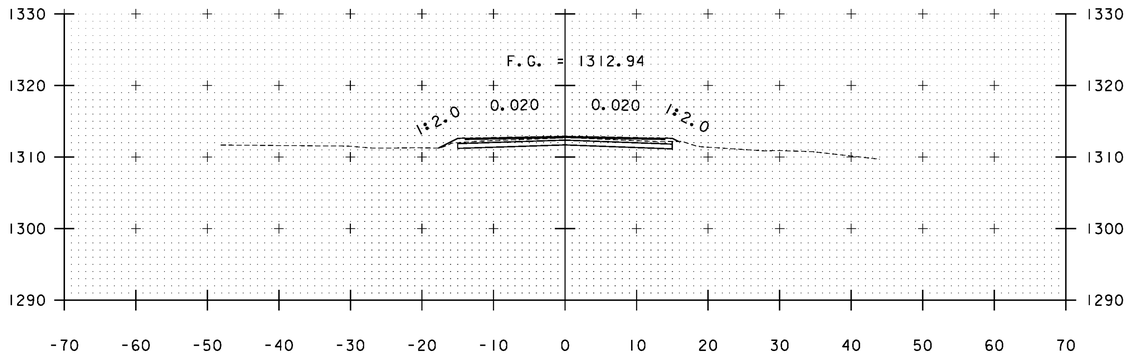
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

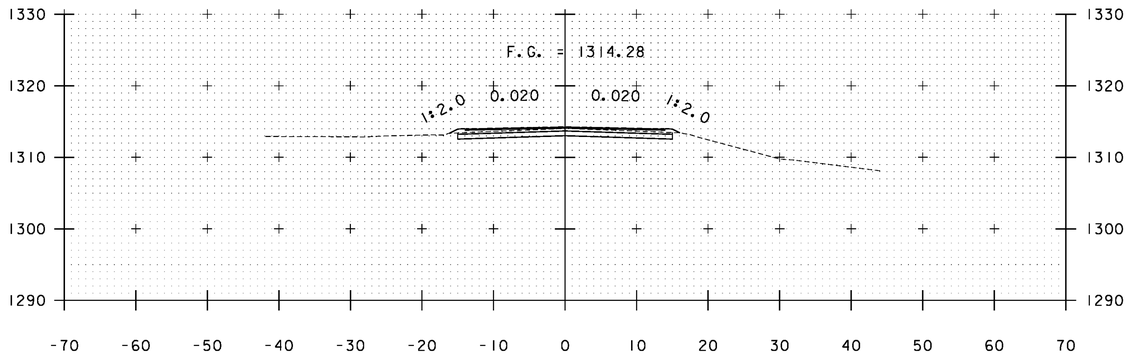
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 237 OF 444



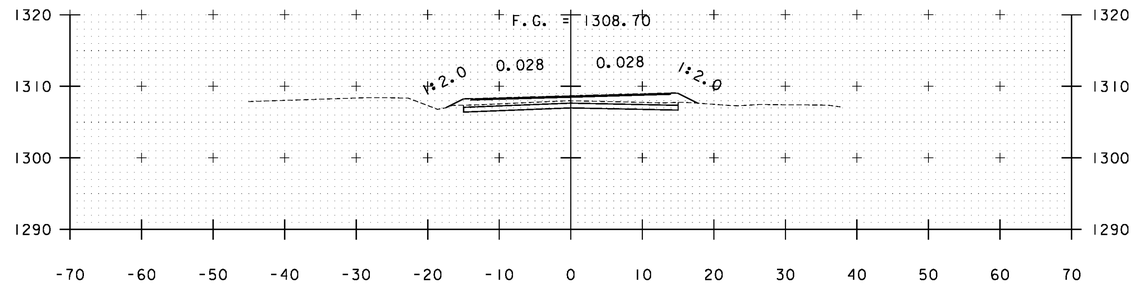

A 167+50



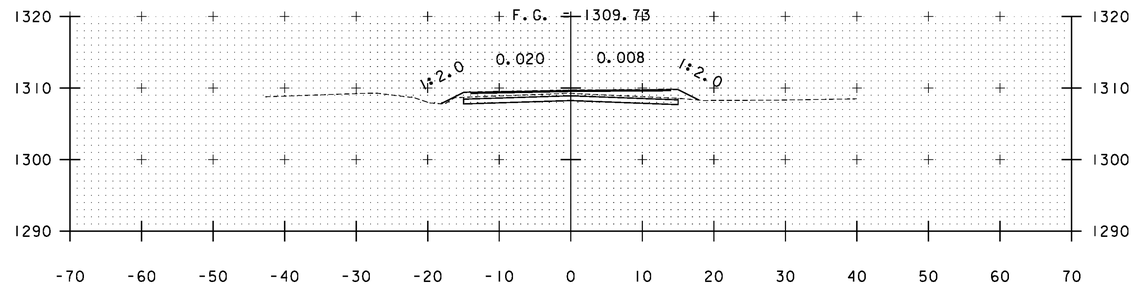

A 167+00



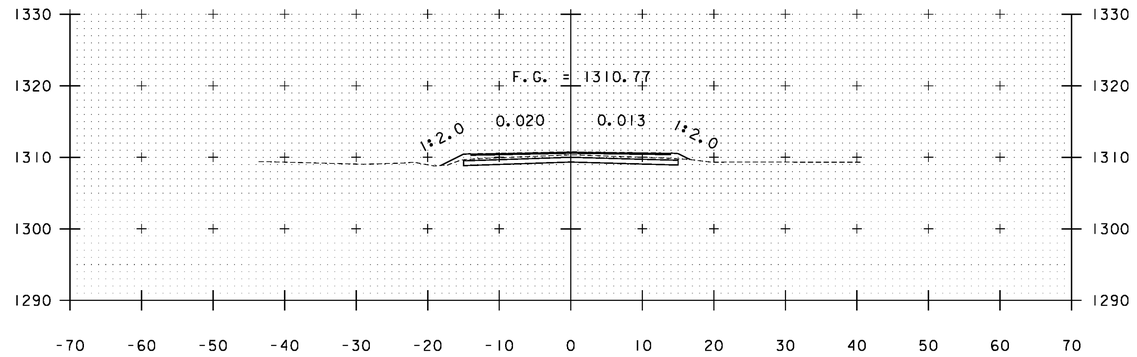

A 166+50




A 169+00



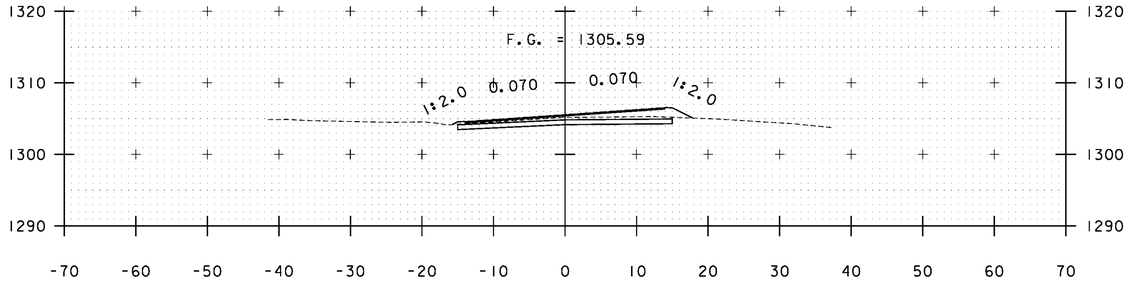

A 168+50



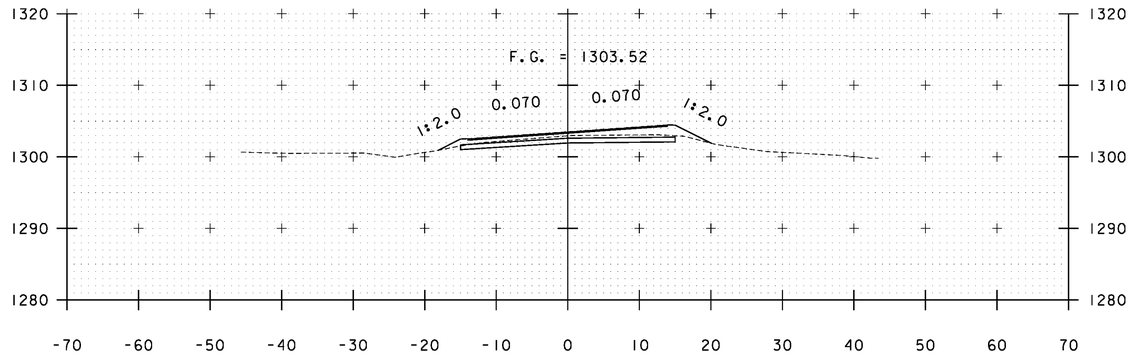

A 168+00

STA. A 166+50 TO STA. A 169+00

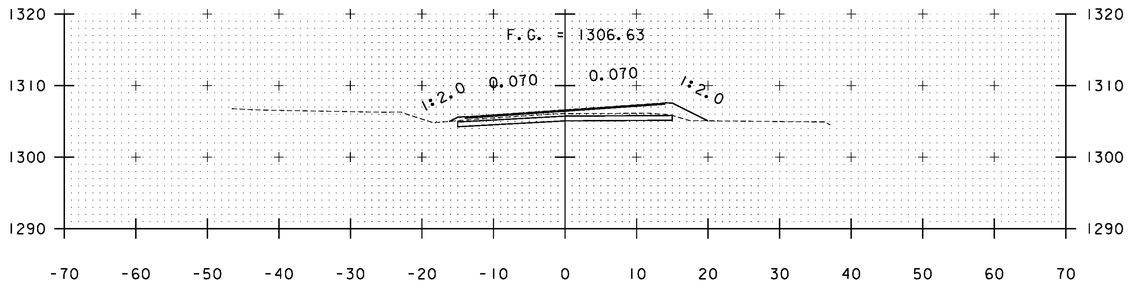
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 238 OF 444 |



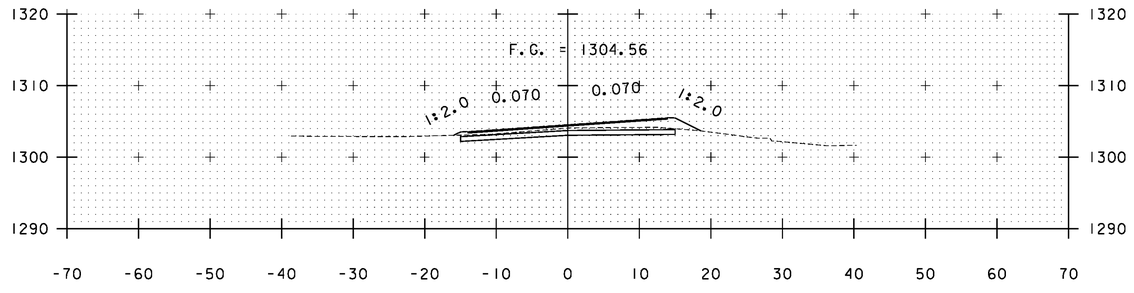

A 170+50



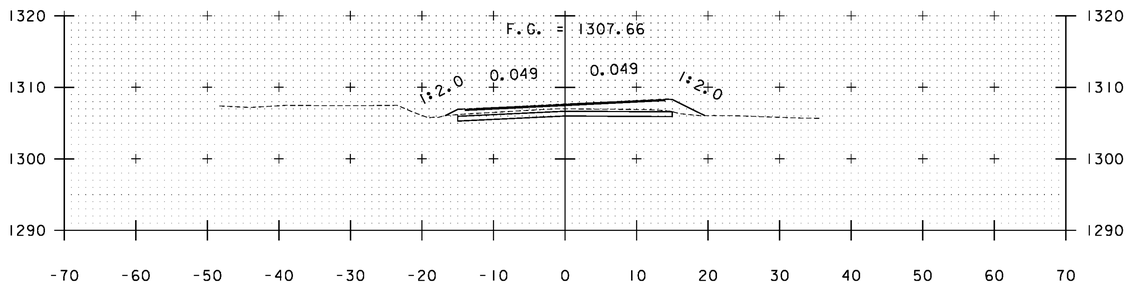

A 171+50




A 170+00




A 171+00



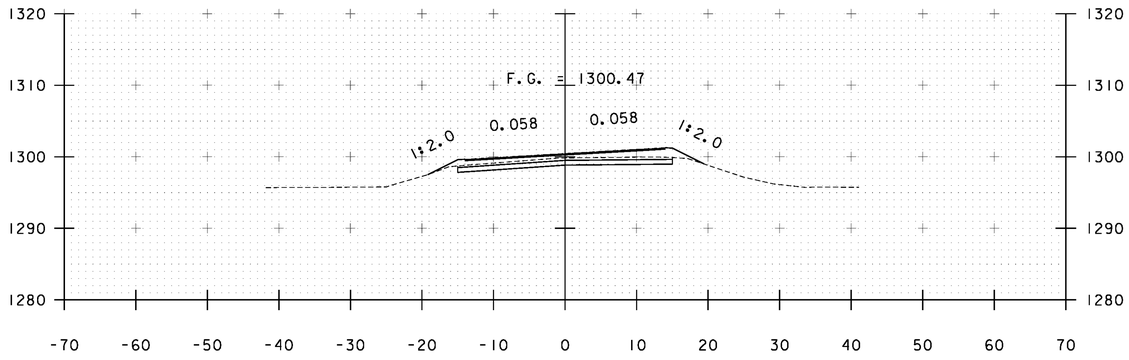

A 169+50

STA. A 169+50 TO STA. A 171+50

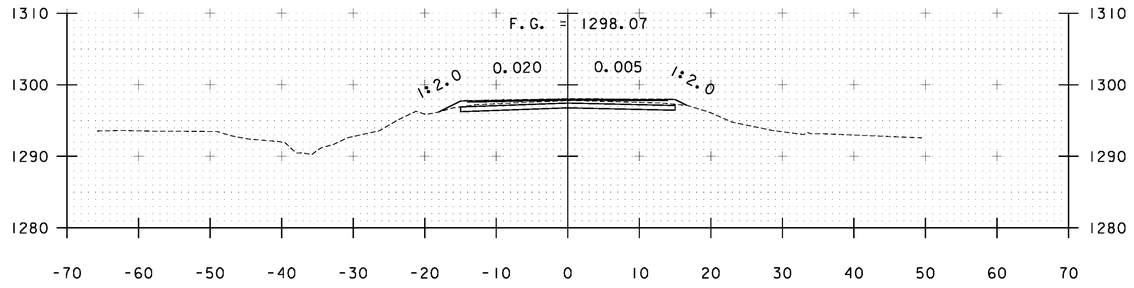
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

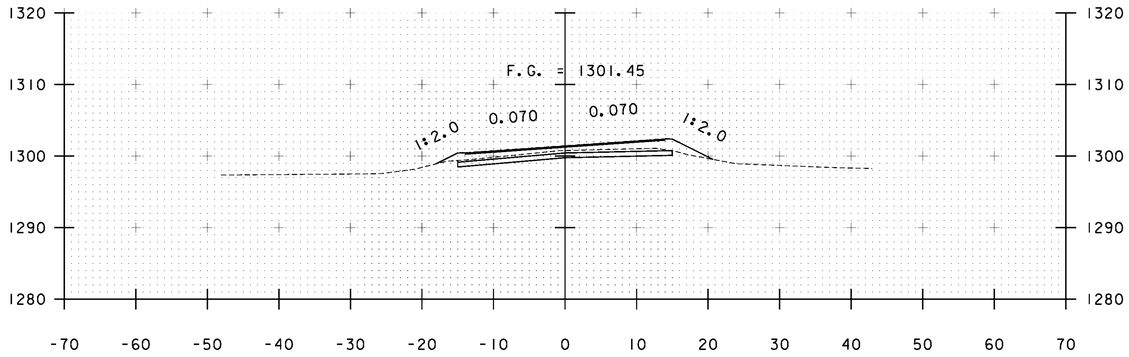
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 239 OF 444



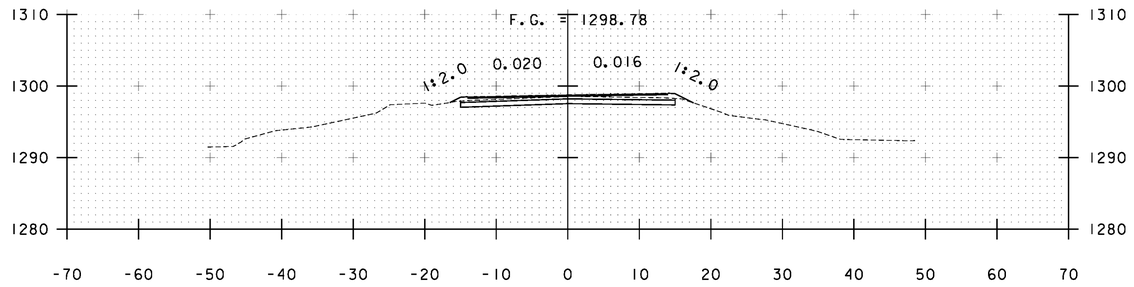

A 173+00



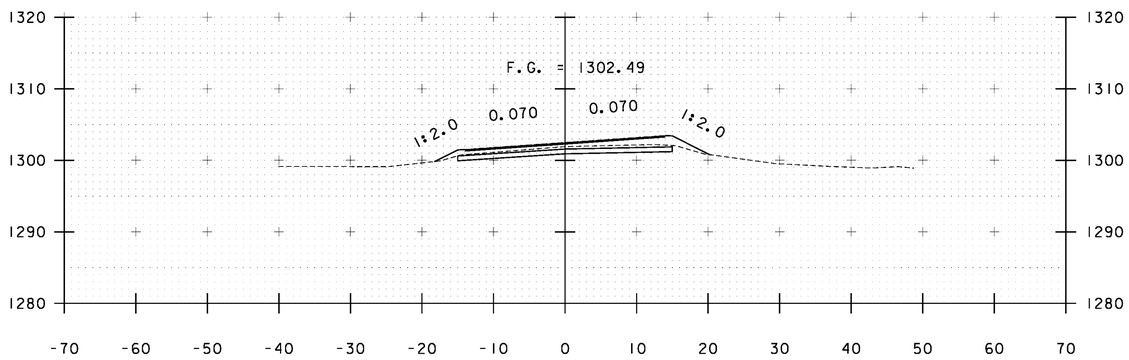

A 174+50
BEGIN BF 013-1(21)



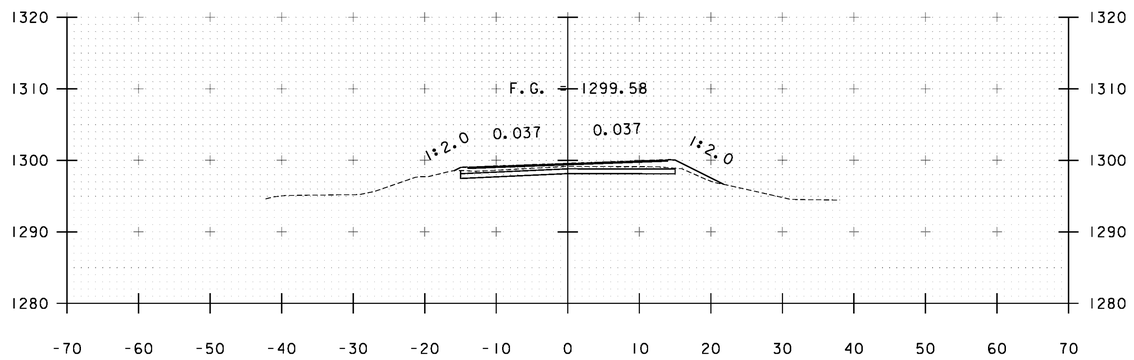

A 172+50




A 174+00



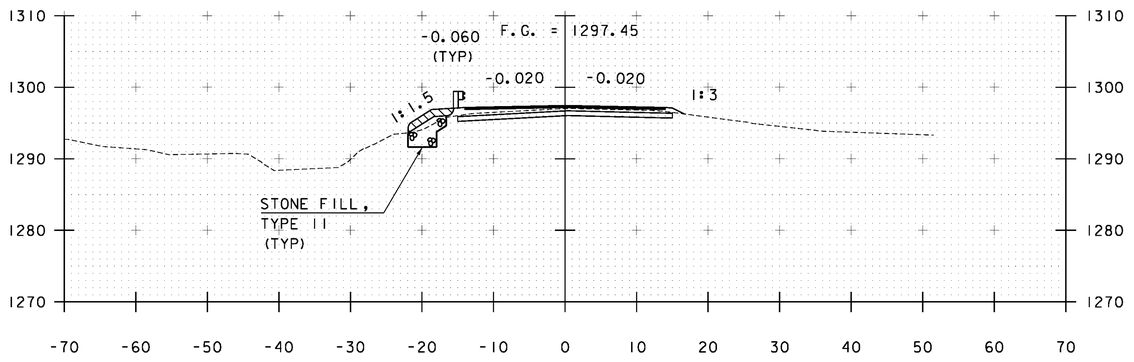

A 172+00



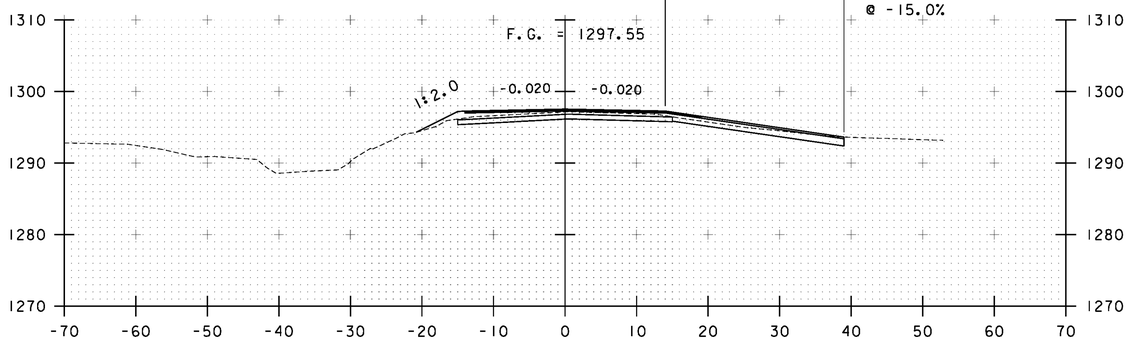

A 173+50

STA. A 172+00 TO STA. A 174+50

| | |
|---|---|
| PROJECT NAME: WARDSBORO-JAMAICA | |
| PROJECT NUMBER: ER STP 013-1(17) | |
| FILE NAME: xs_C70.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 240 OF 444 |

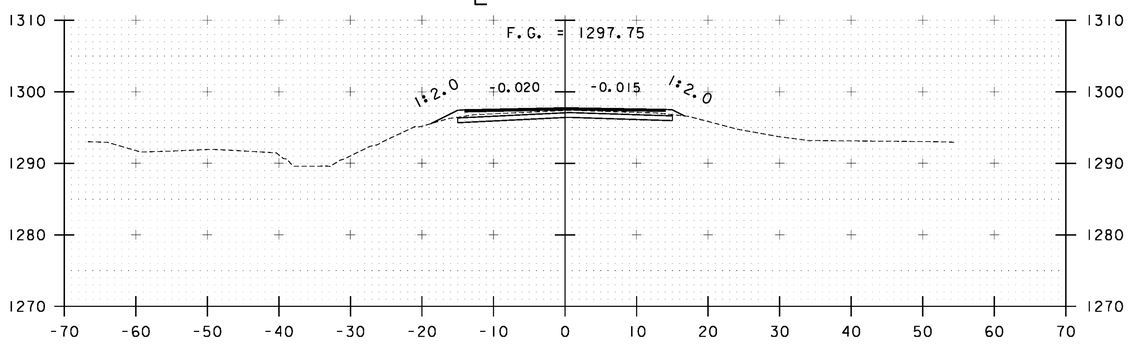



A 175+00

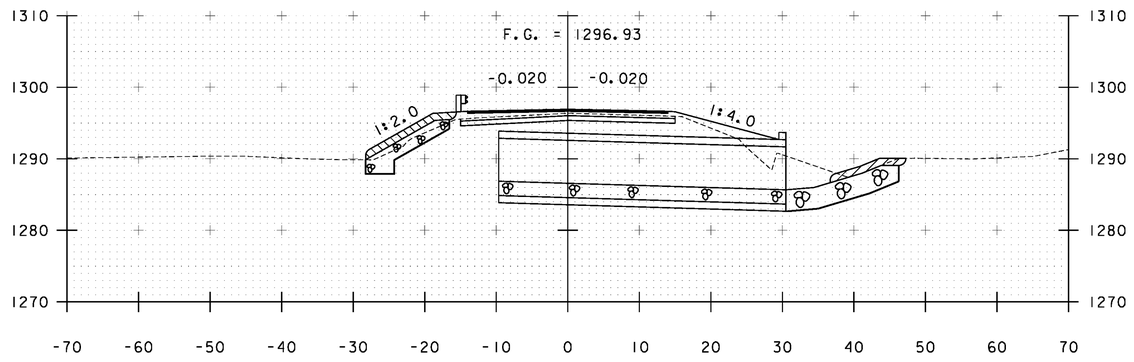



A 174+92

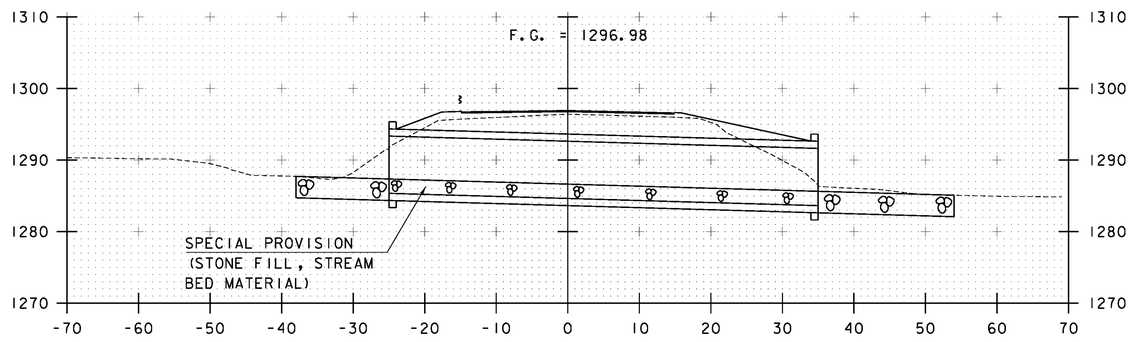
℄ DRIVEWAY




A 174+75

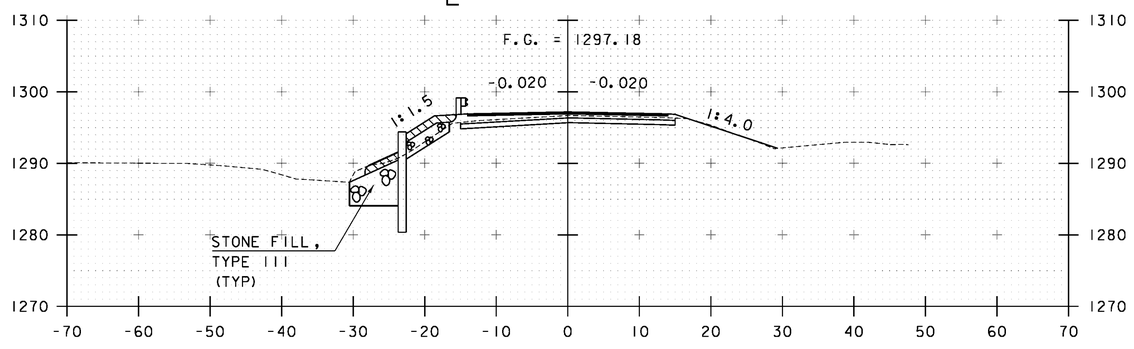



A 175+50




A 175+45 SKEWED @ 30°

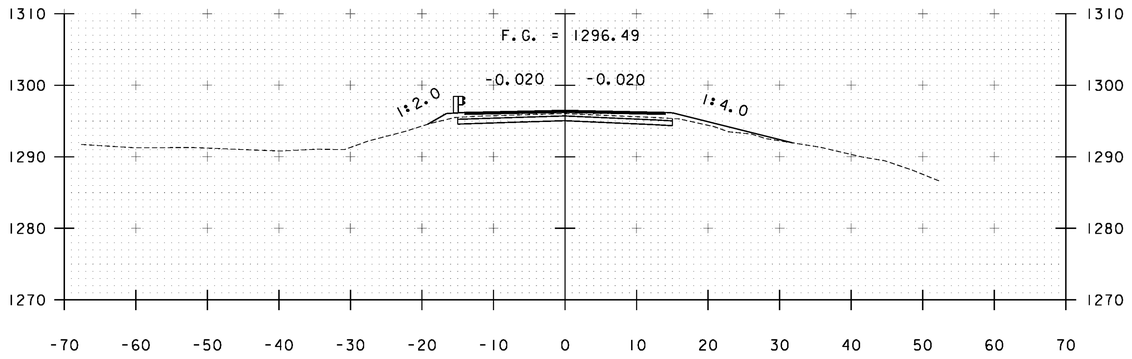
℄ BRIDGE #70



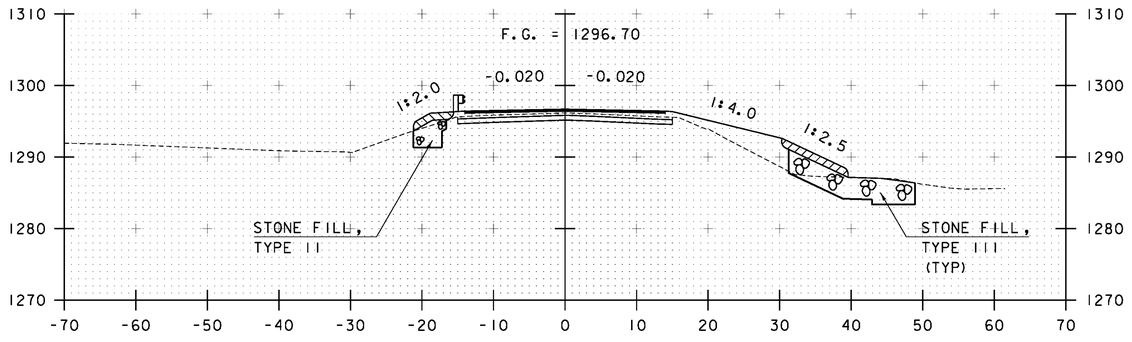

A 175+25

STA. A 174+75 TO STA. A 175+50

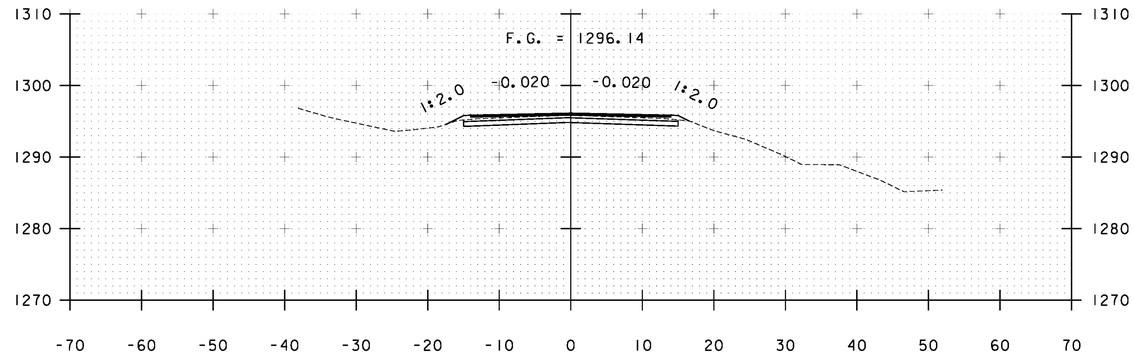
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs_C70.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 241 OF 444 |



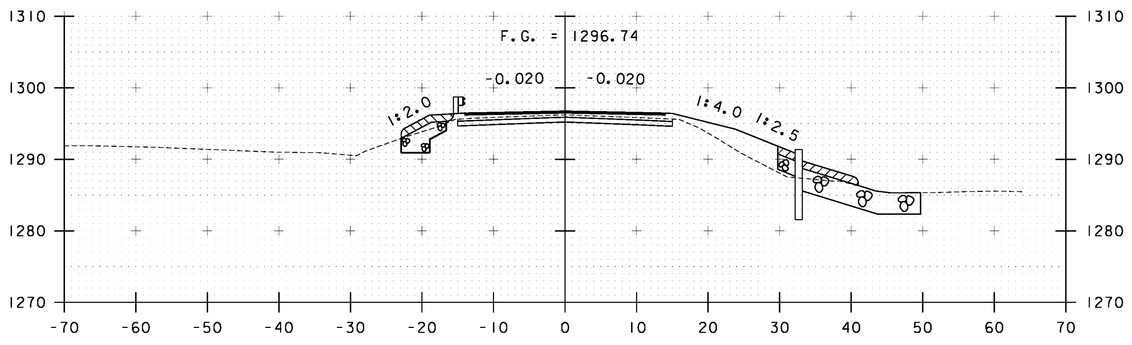

A 176+00



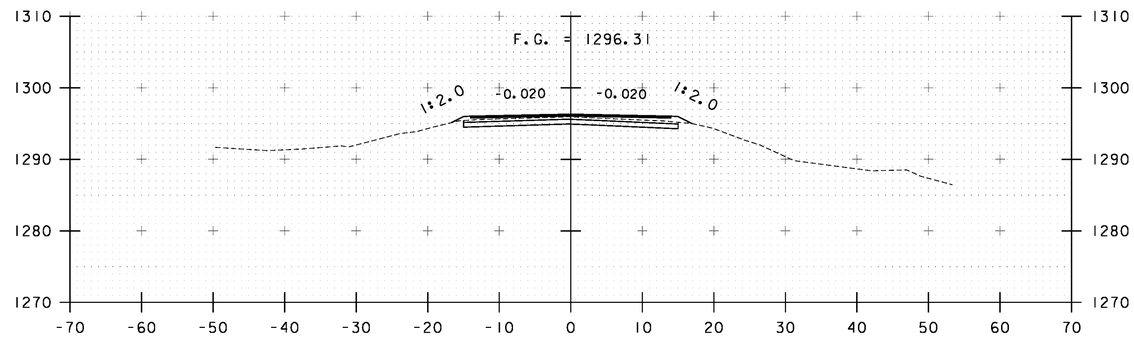

A 175+75




A 176+50




A 175+70

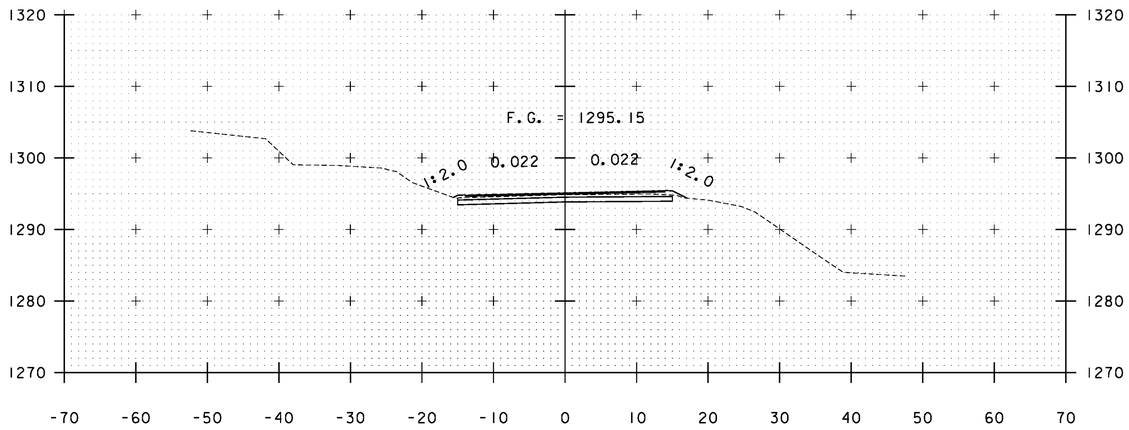



A 176+25

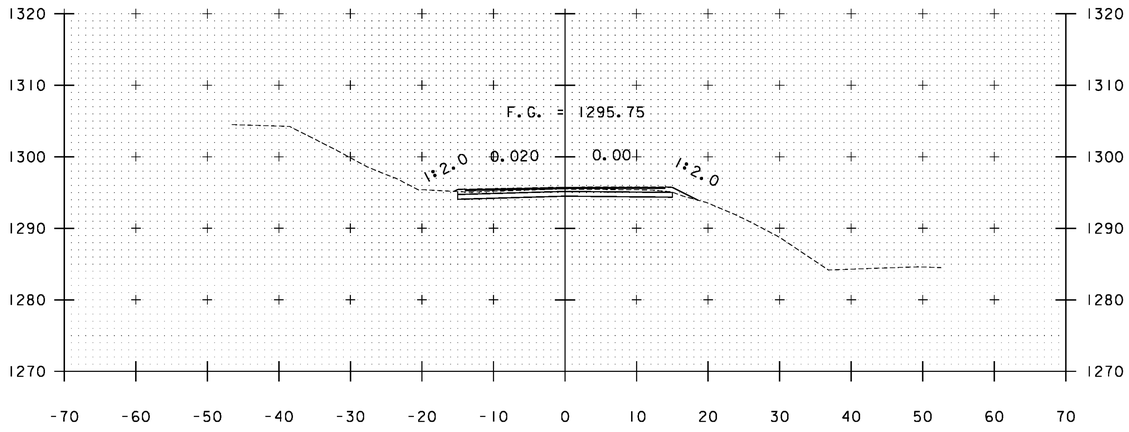
END BF 013-1(21)

STA. A 175+70 TO STA. A 176+50

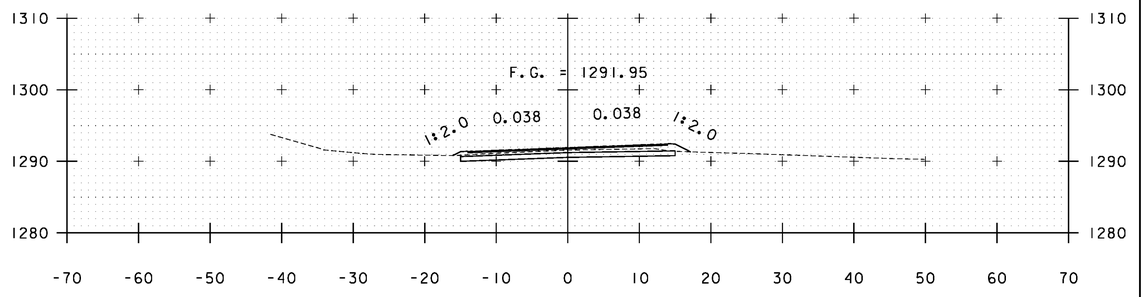
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs_C70.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 242 OF 444 |



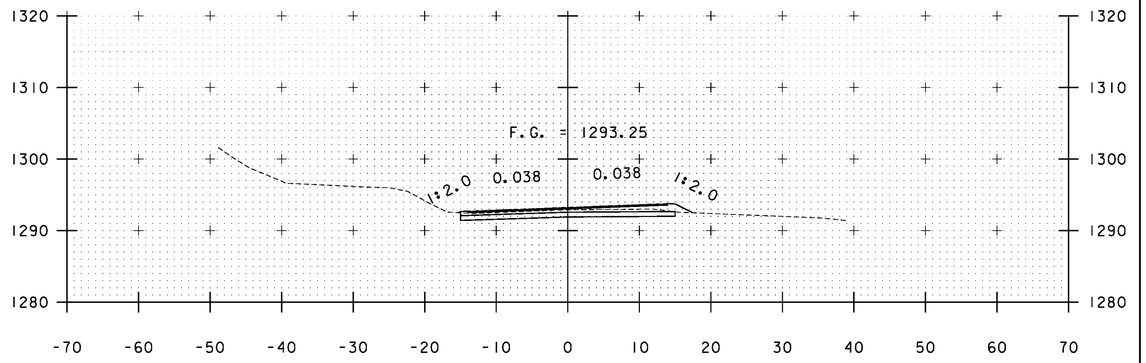

A 177+50



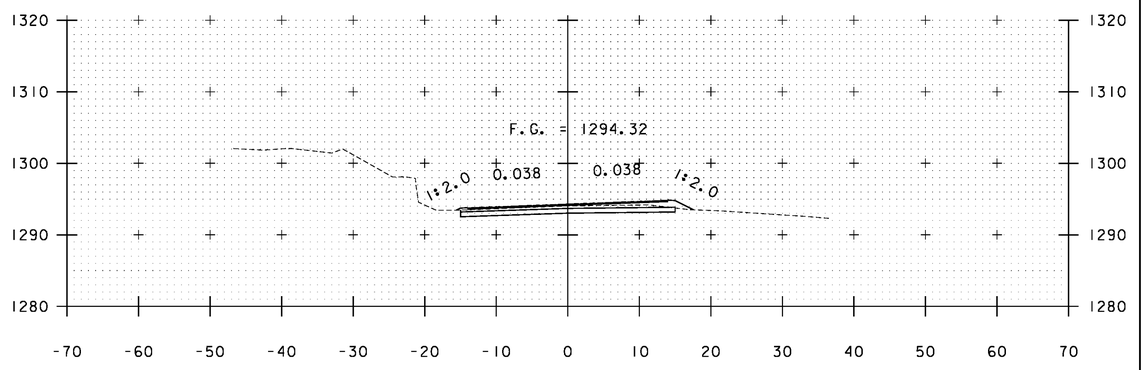

A 177+00




A 179+00




A 178+50



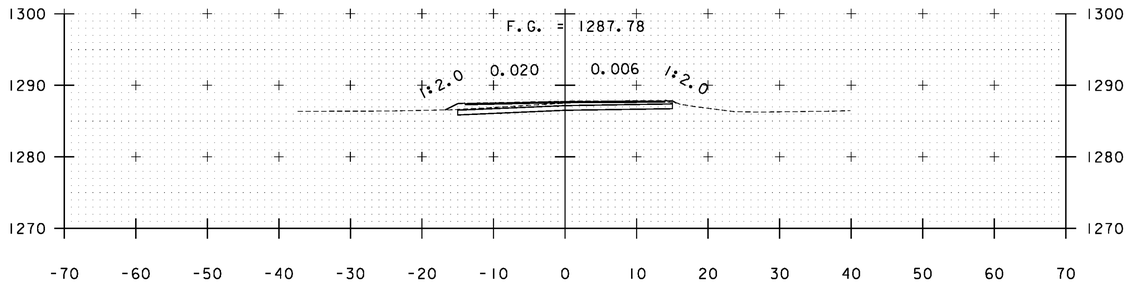

A 178+00

STA. A 177+00 TO STA. A 179+00

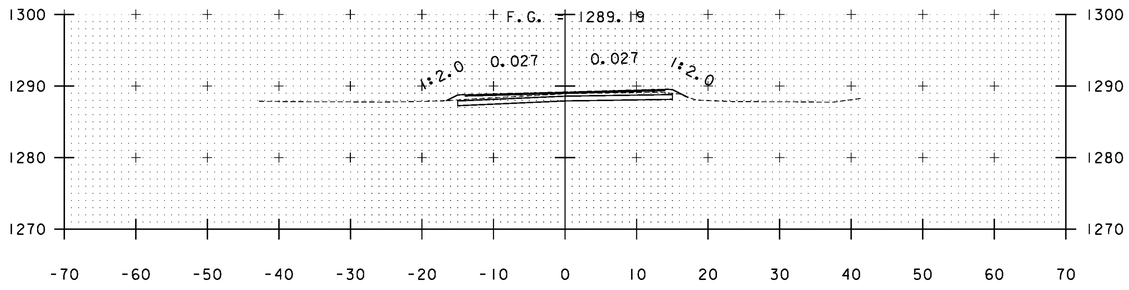
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

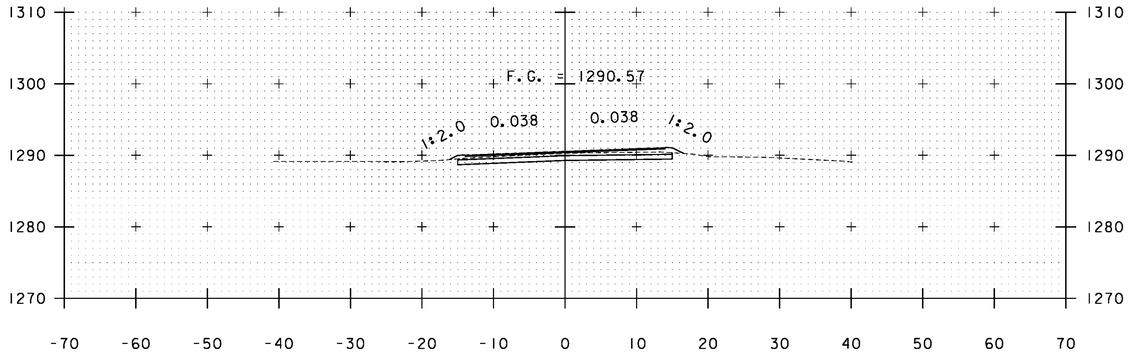
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 243 OF 444



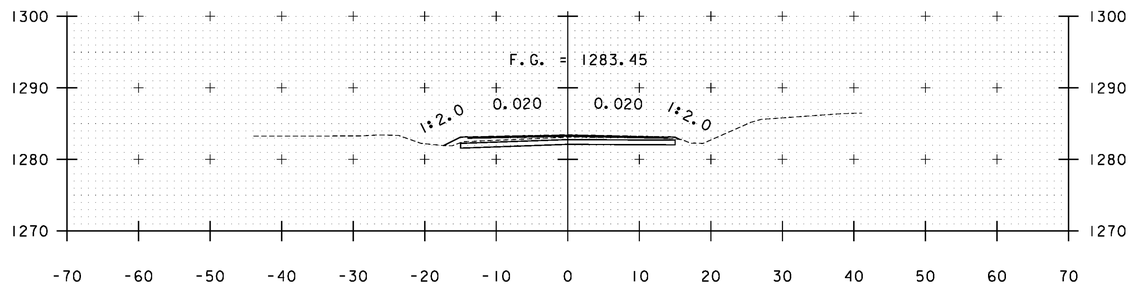

A 180+50



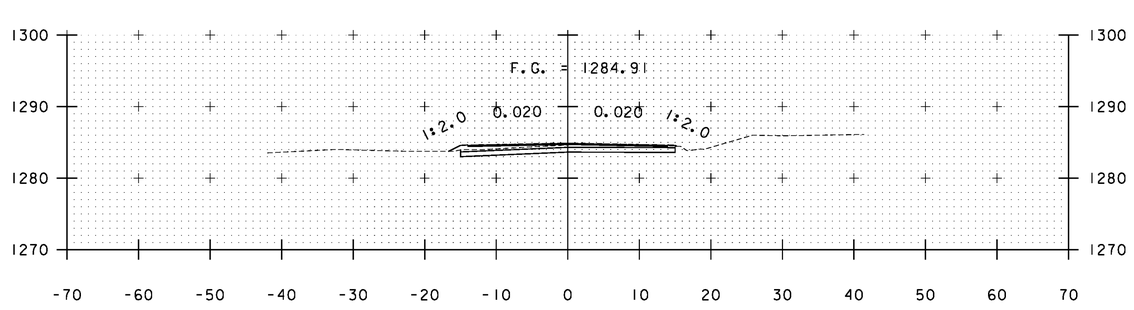

A 180+00



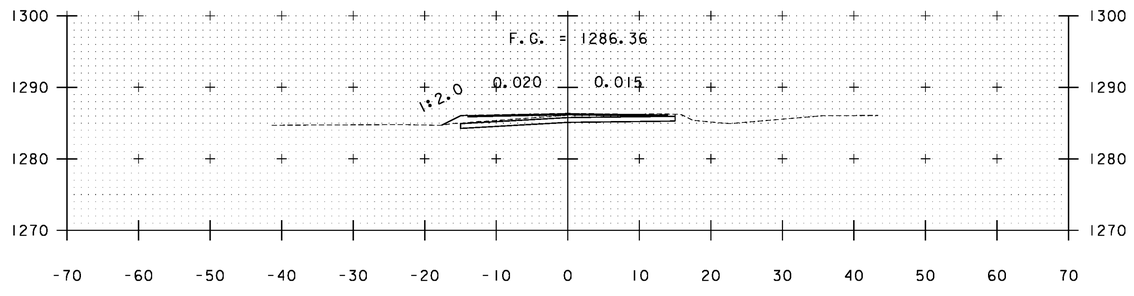

A 179+50




A 182+00




A 181+50



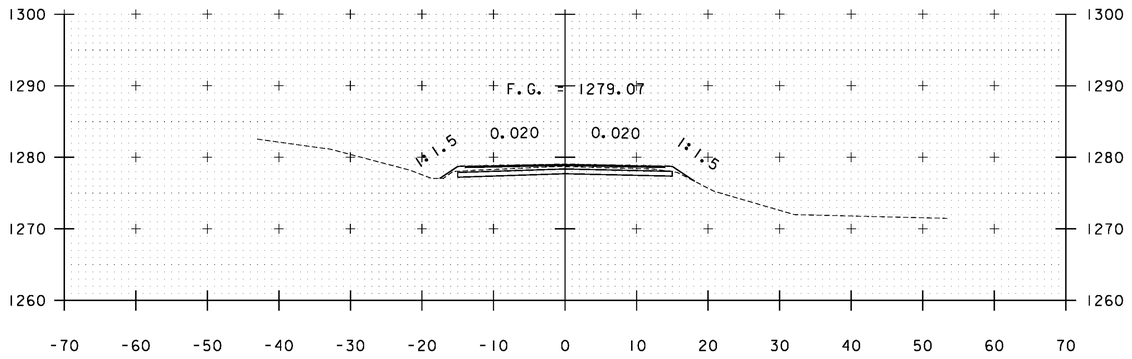

A 181+00

STA. A 179+50 TO STA. A 182+00

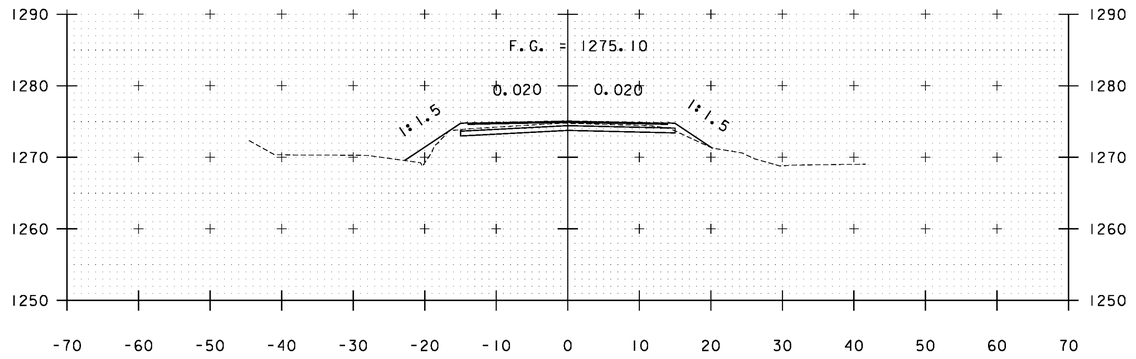
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

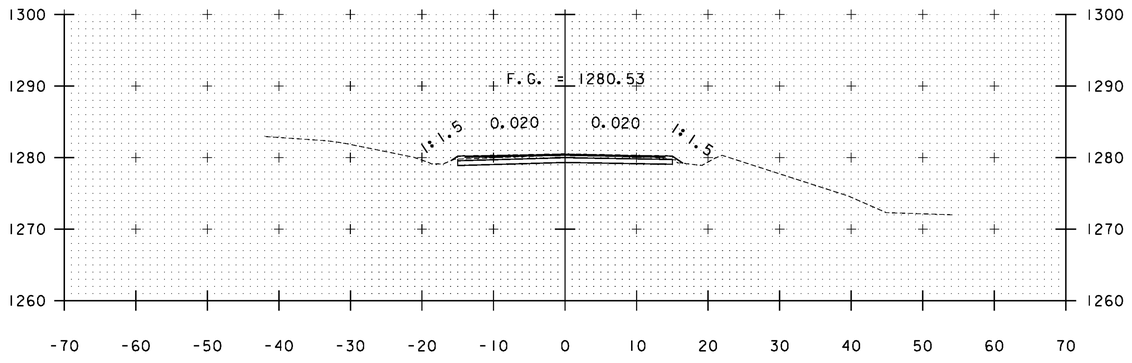
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 244 OF 444



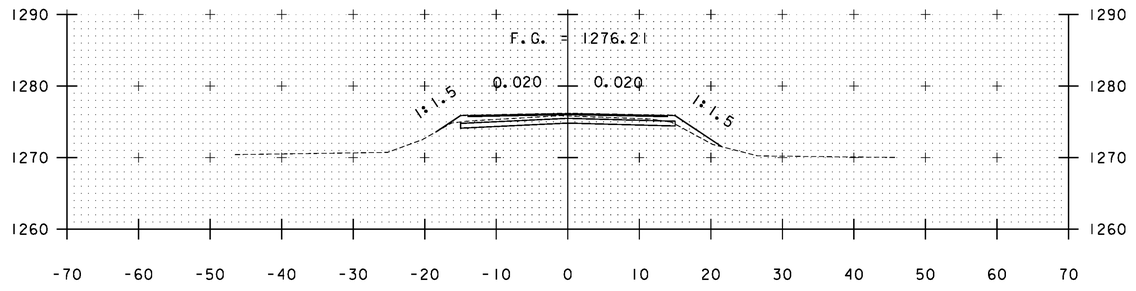

A 183+50



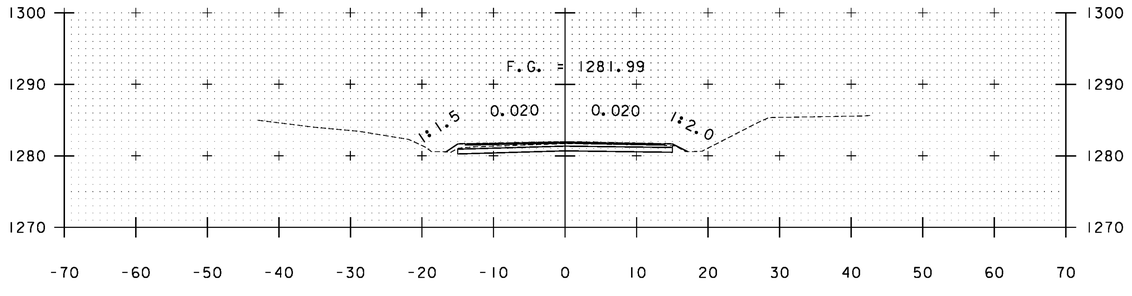

A 185+00



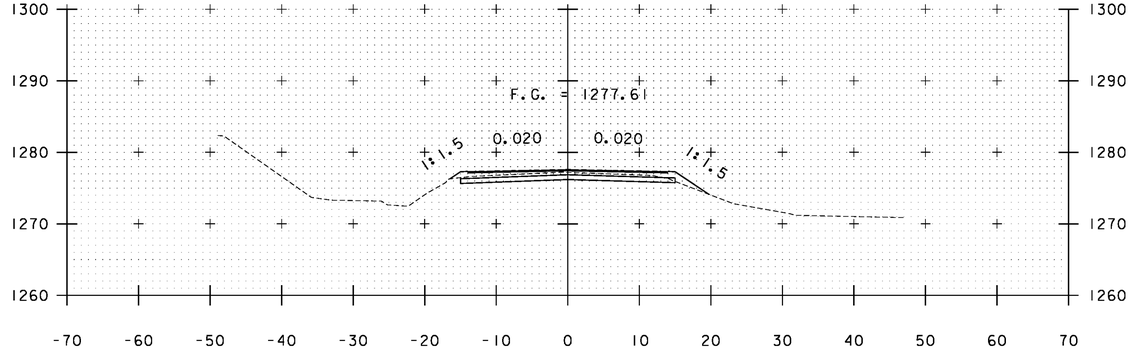

A 183+00




A 184+50



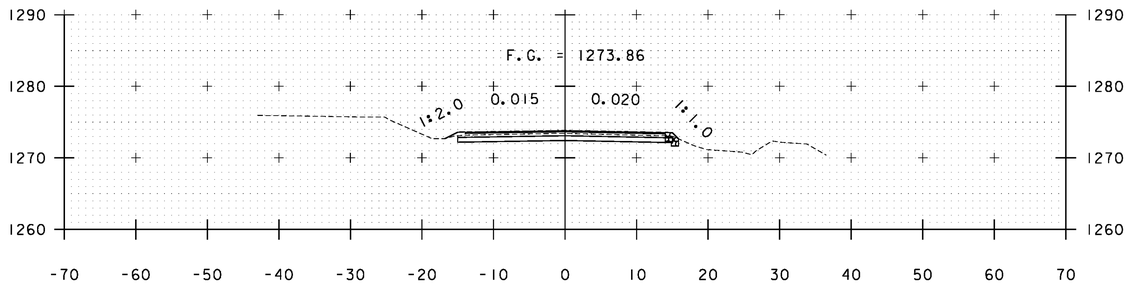

A 182+50



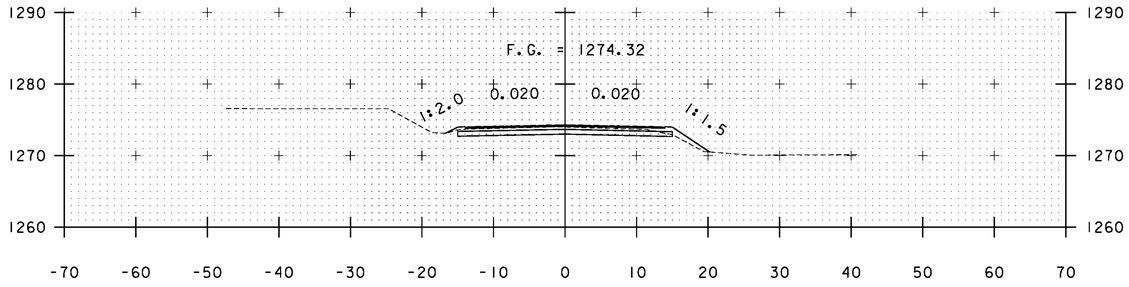

A 184+00

STA. A 182+50 TO STA. A 185+00

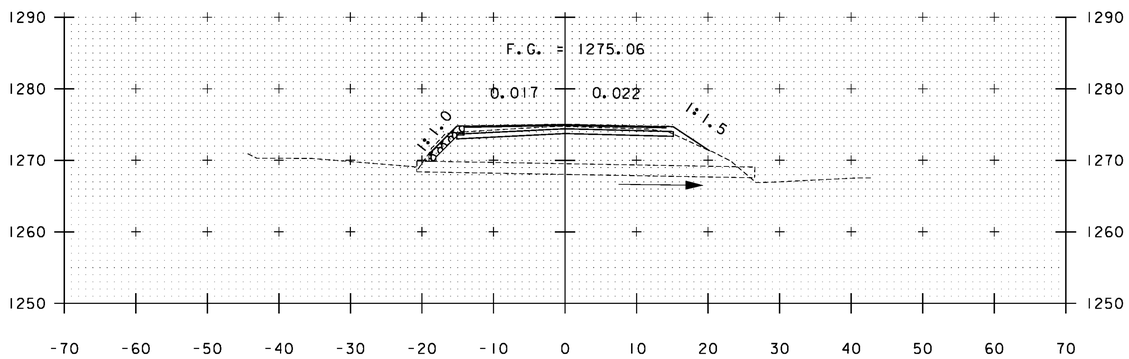
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 245 OF 444 |



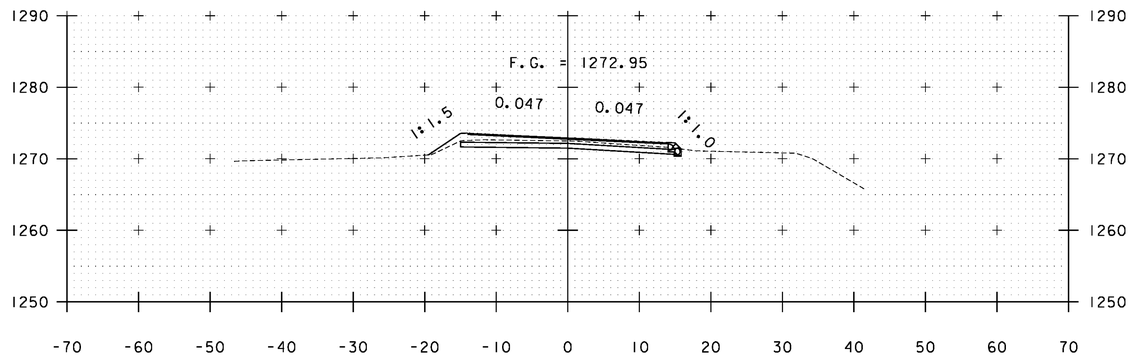

A 186+00



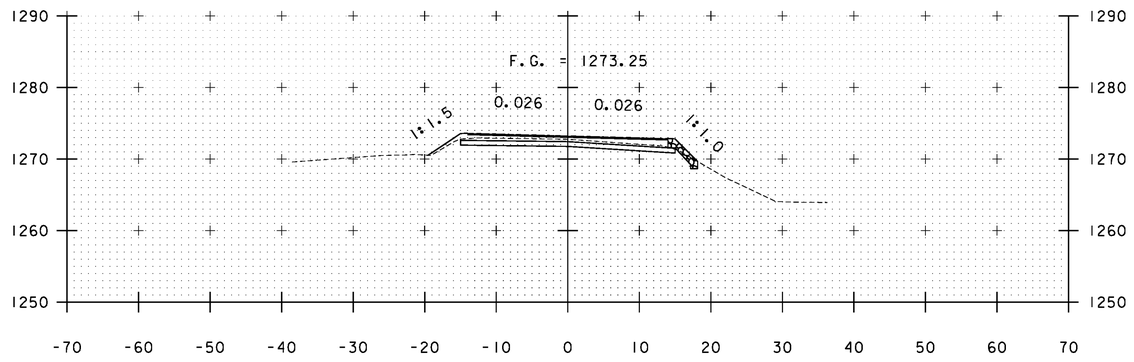

A 185+50



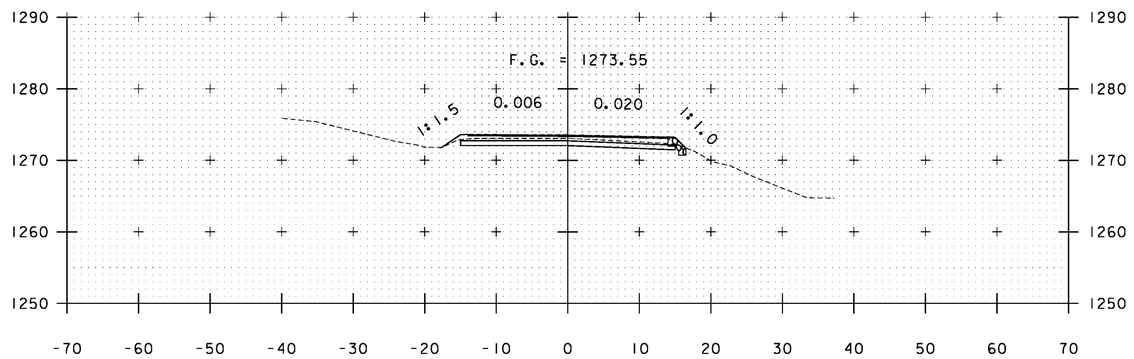

A 185+02




A 187+50




A 187+00



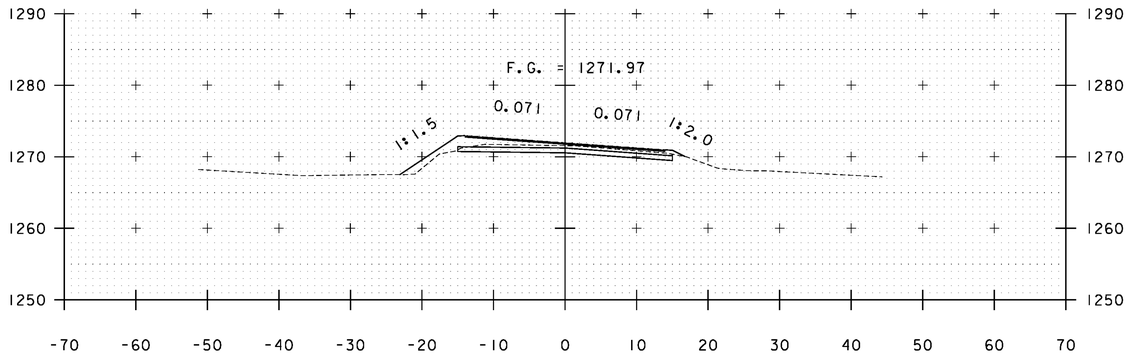

A 186+50

STA. A 185+02 TO STA. A 187+50

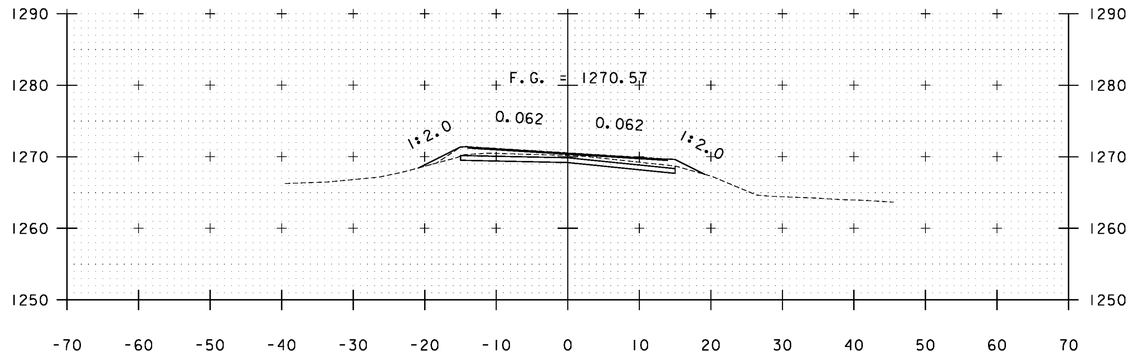
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

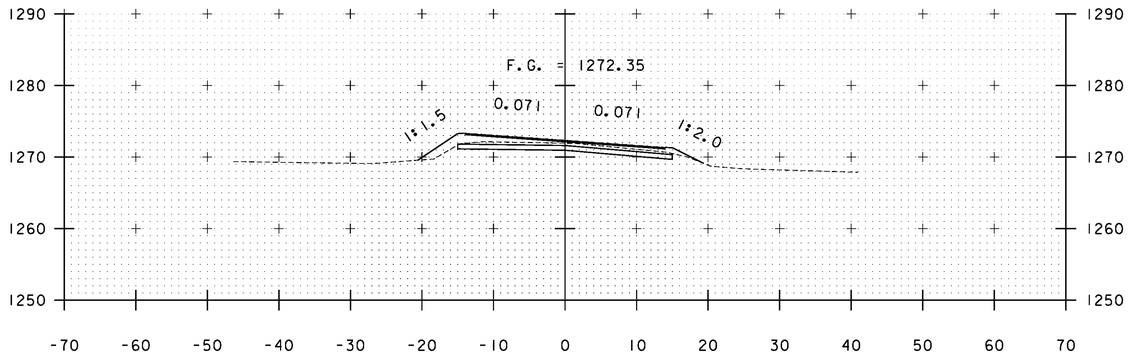
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 246 OF 444



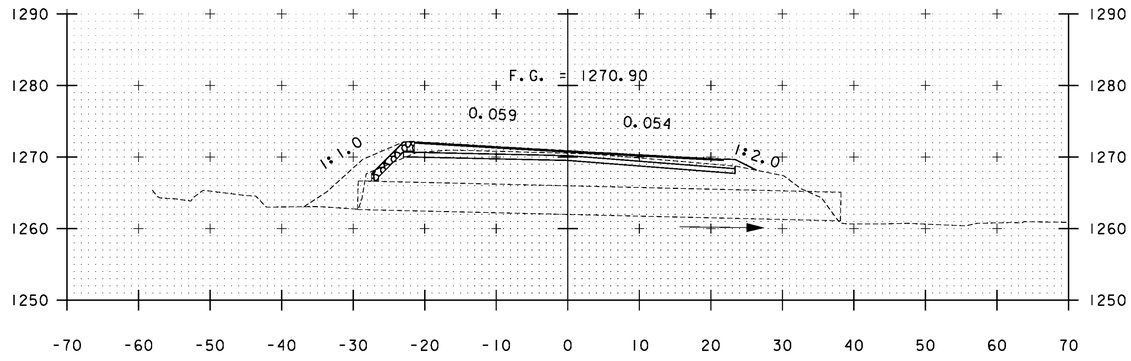

A 189+00



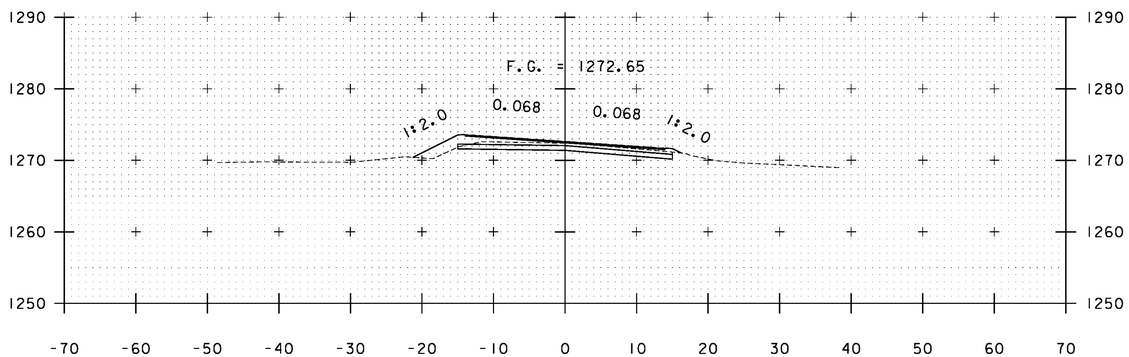

A 190+00



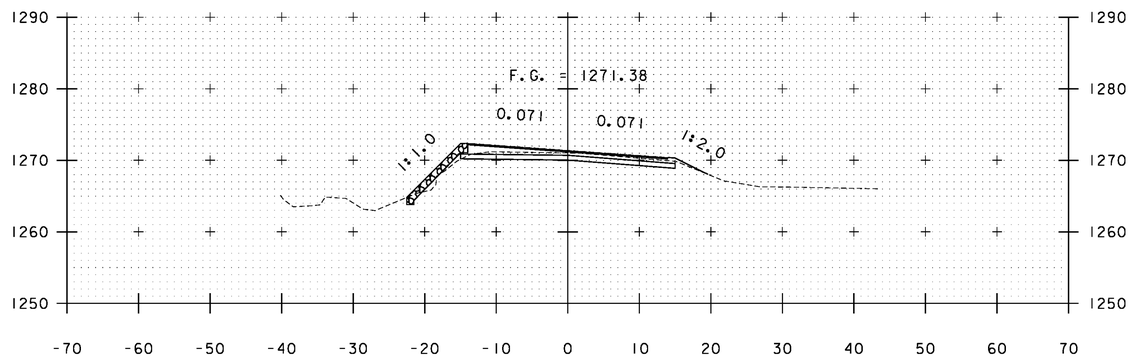

A 188+50




A 189+81



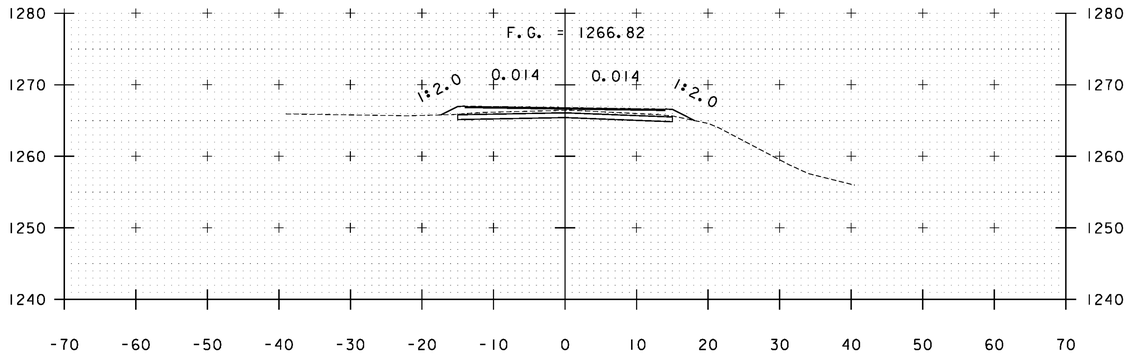

A 188+00



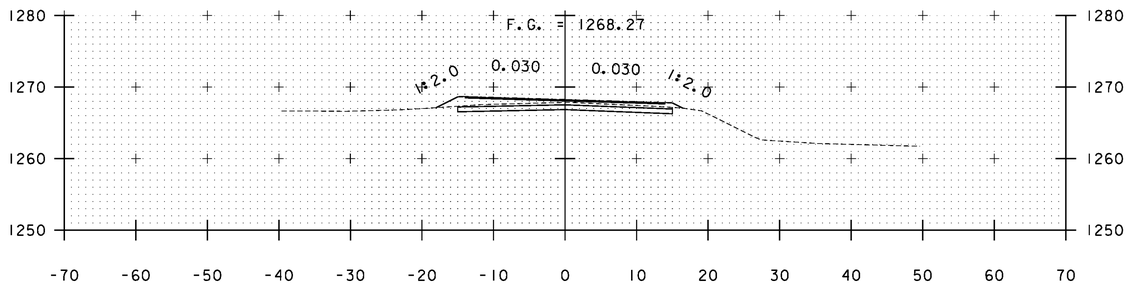

A 189+50

STA. A 188+00 TO STA. A 190+00

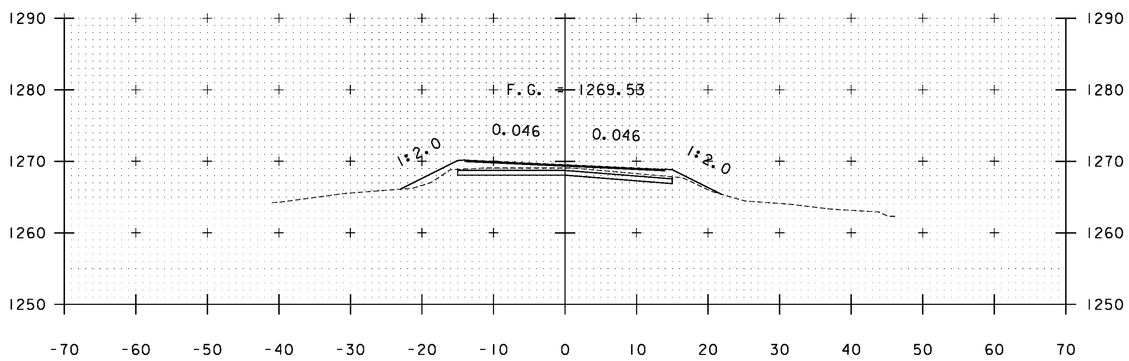
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 247 OF 444 |



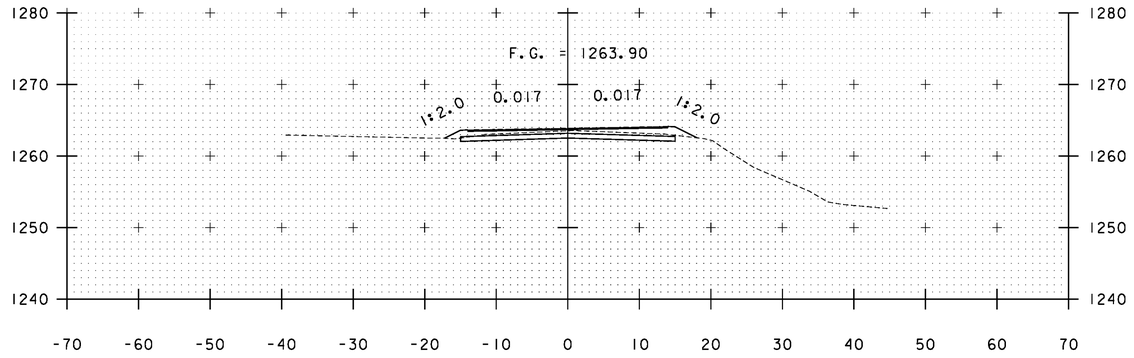

A 191+50



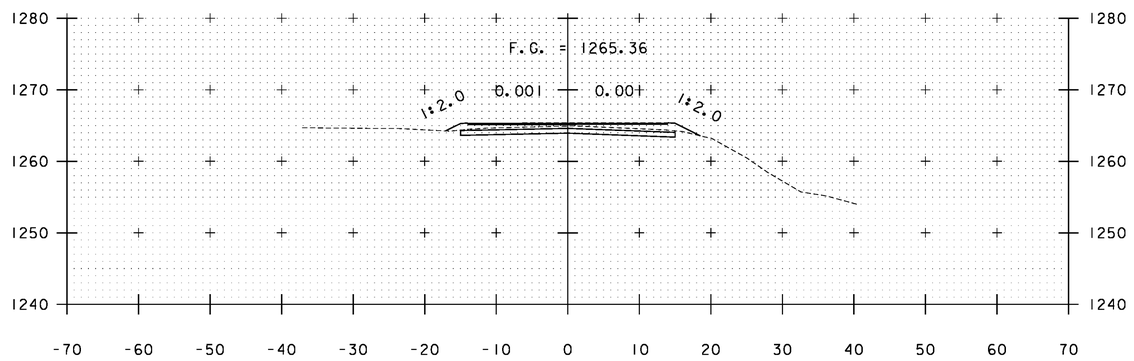

A 191+00




A 190+50



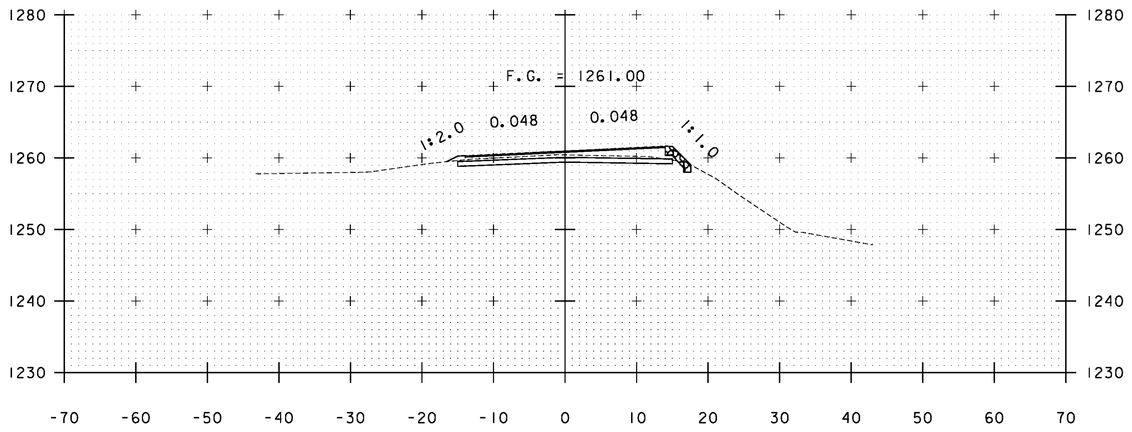

A 192+50



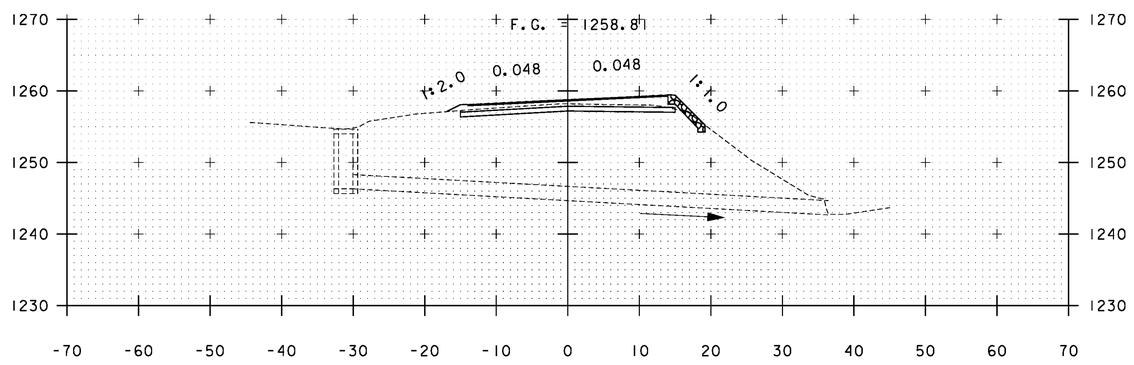

A 192+00

STA. A 190+50 TO STA. A 192+50

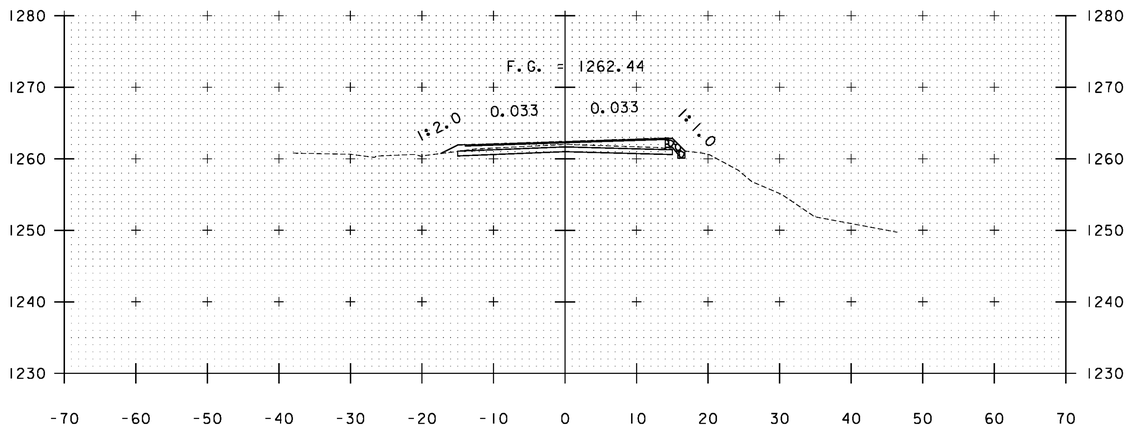
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 248 OF 444 |



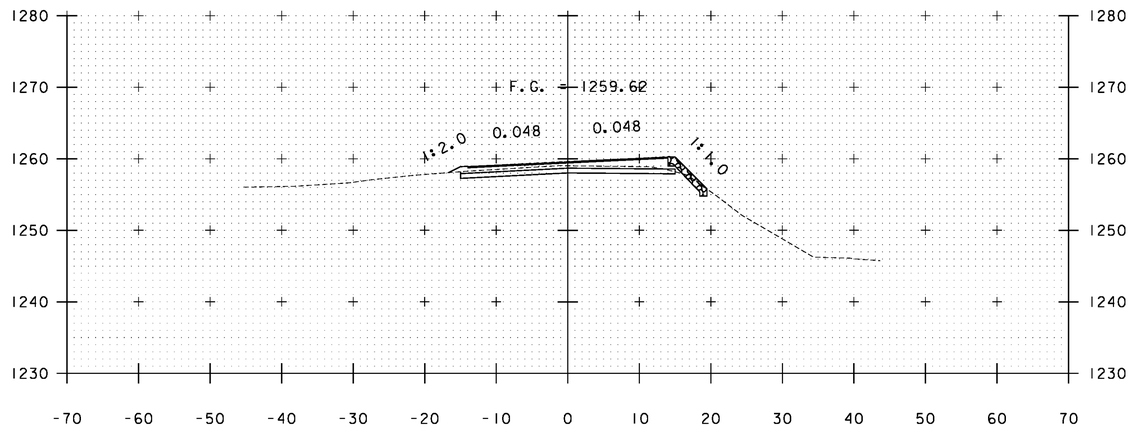

A 193+50




A 194+30




A 193+00



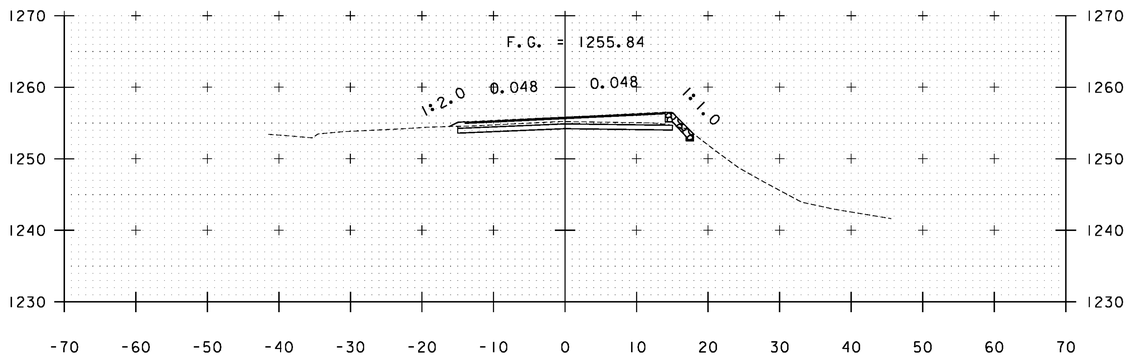

A 194+00

STA. A 193+00 TO STA. A 194+30

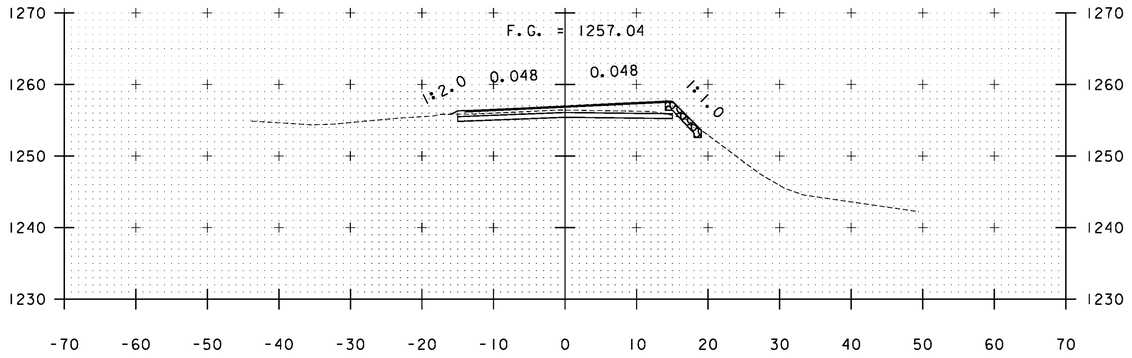
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

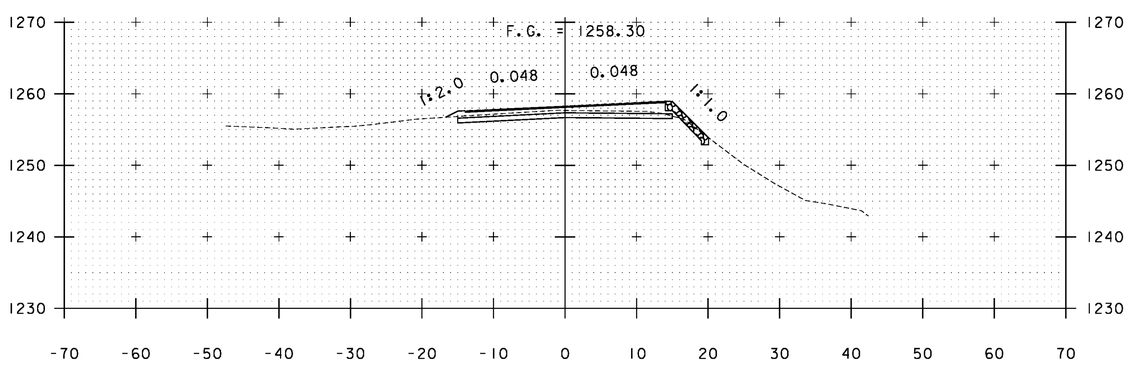
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 249 OF 444



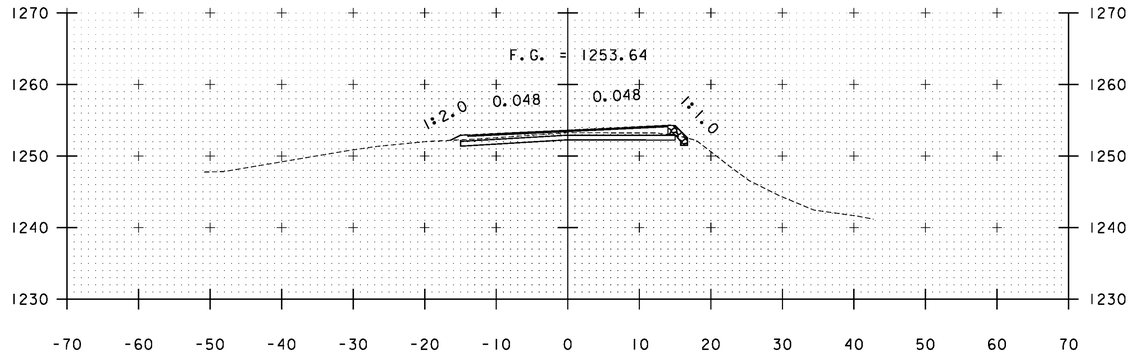

A 195+50



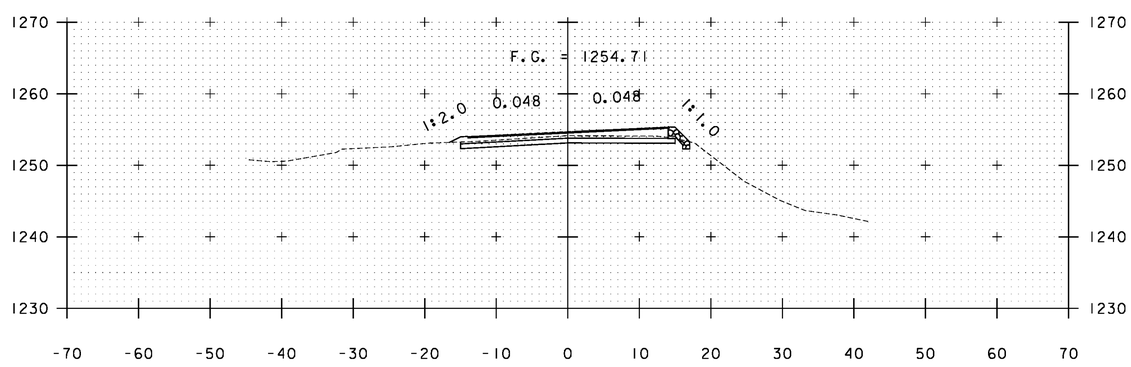

A 195+00




A 194+50



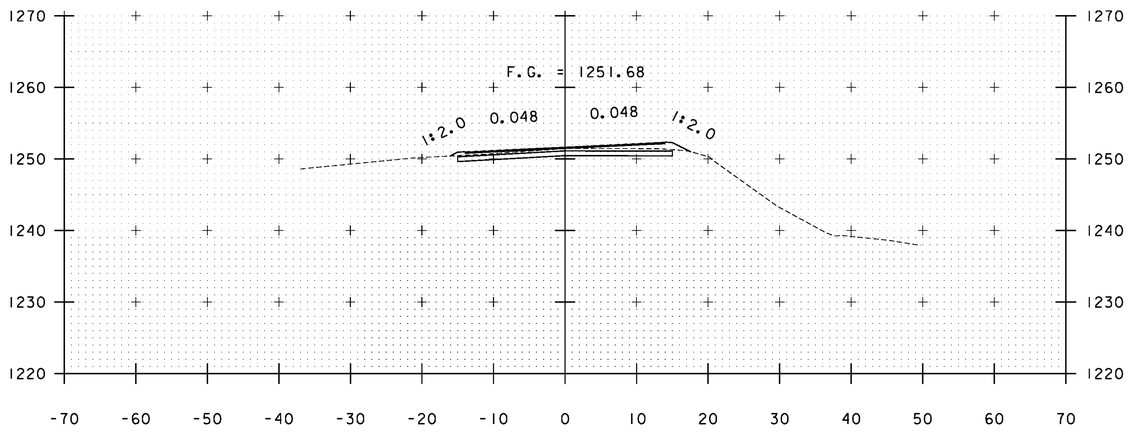

A 196+50



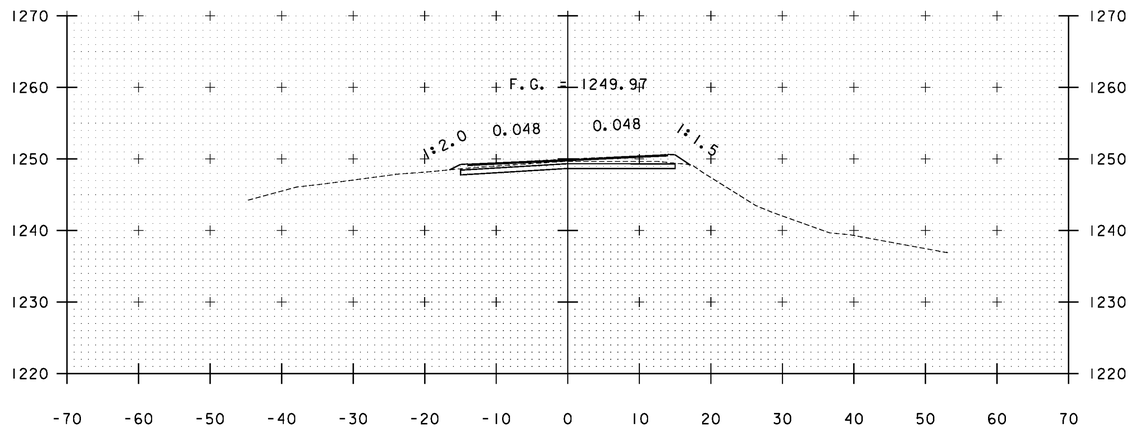

A 196+00

STA. A 194+50 TO STA. A 196+50

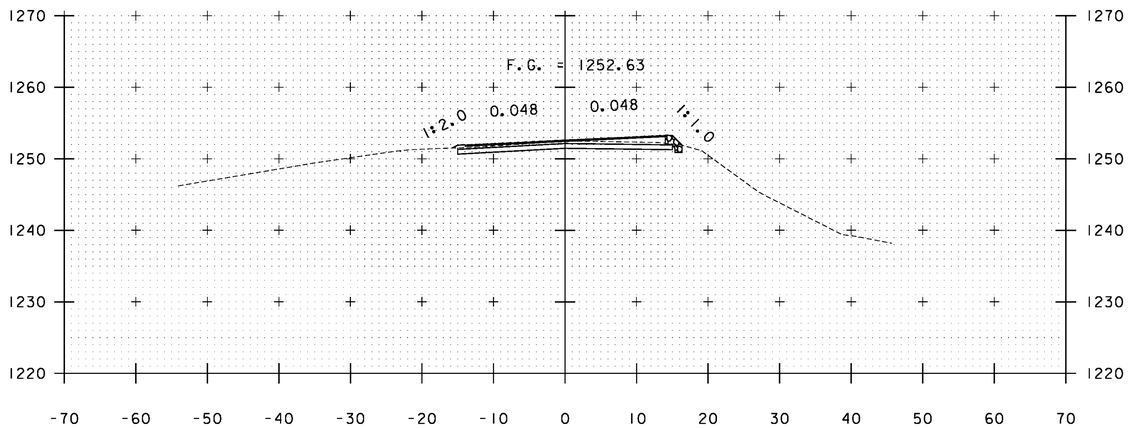
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 250 OF 444 |



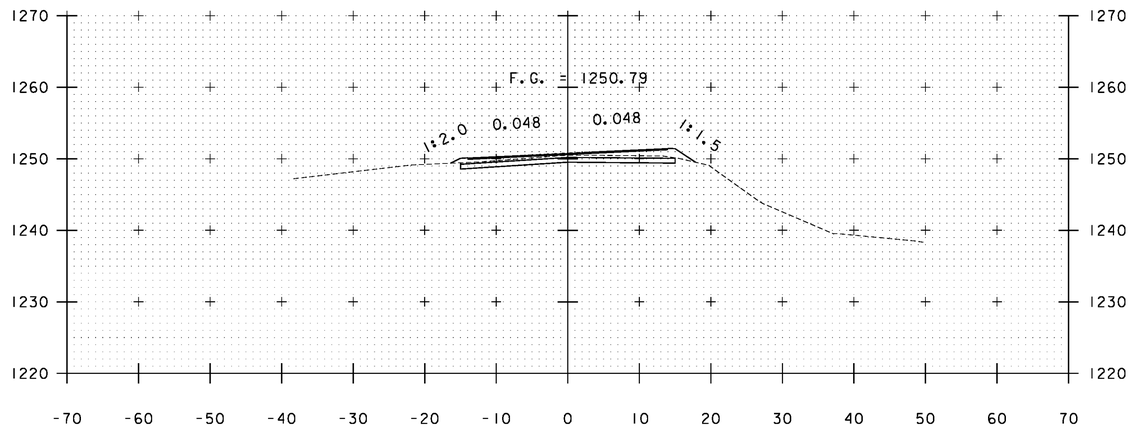

A 197+50




A 198+50




A 197+00



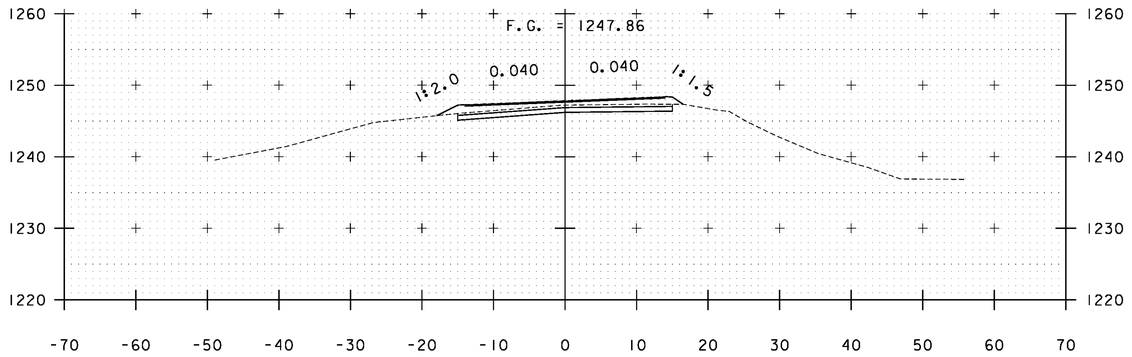

A 198+00

STA. A 197+00 TO STA. A 198+50

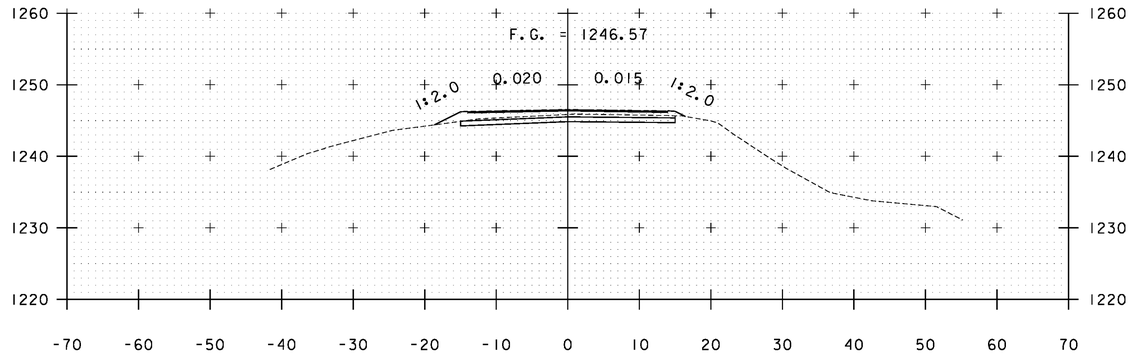
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

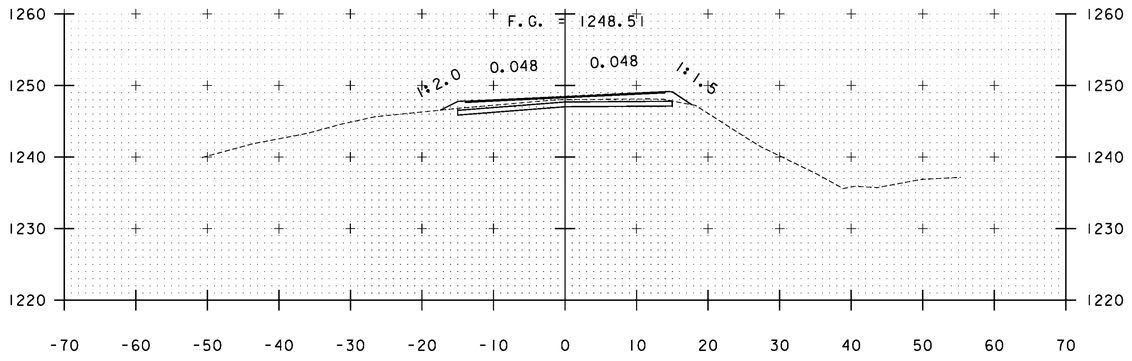
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 251 OF 444



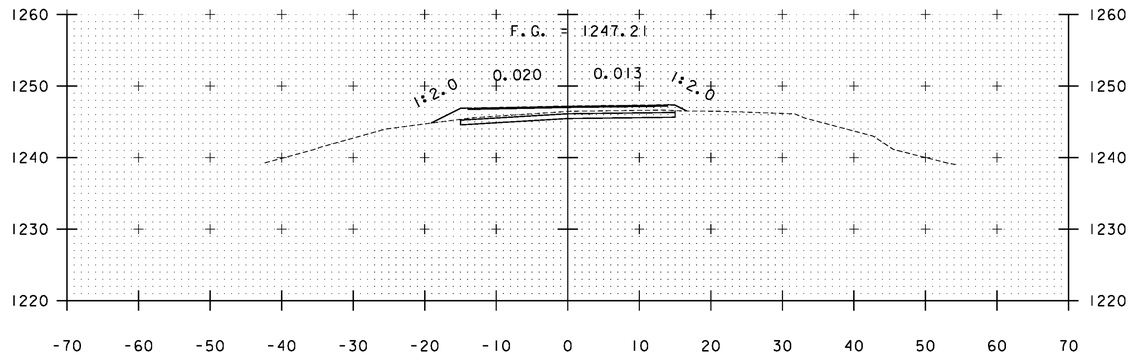

A 200+00



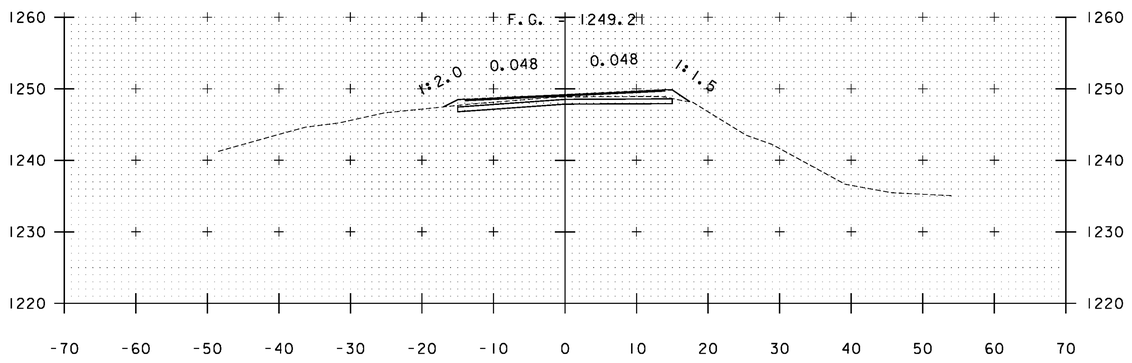

A 201+00




A 199+50




A 200+50



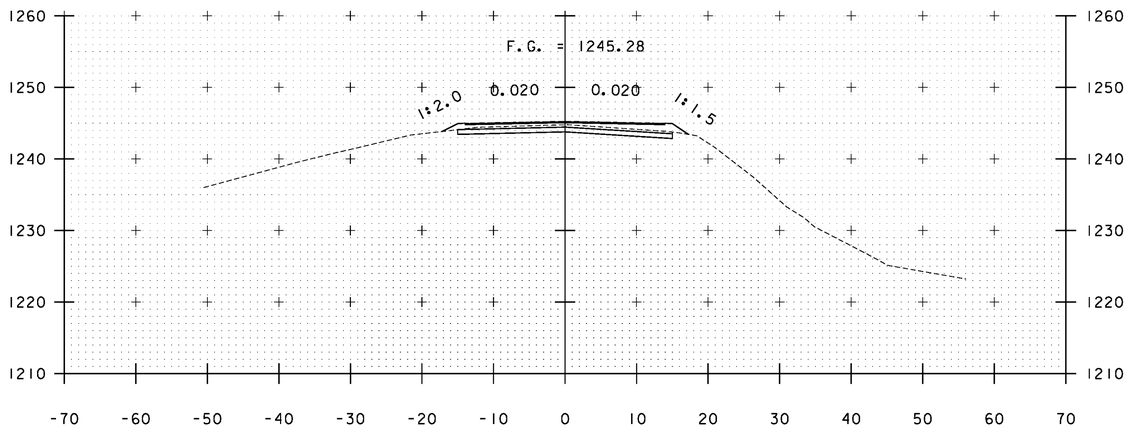

A 199+00

STA. A 199+00 TO STA. A 201+00

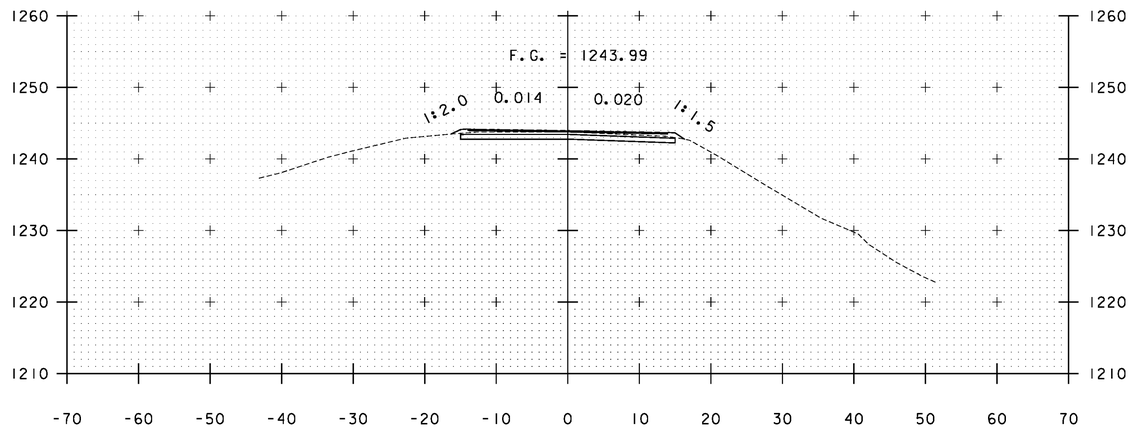
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

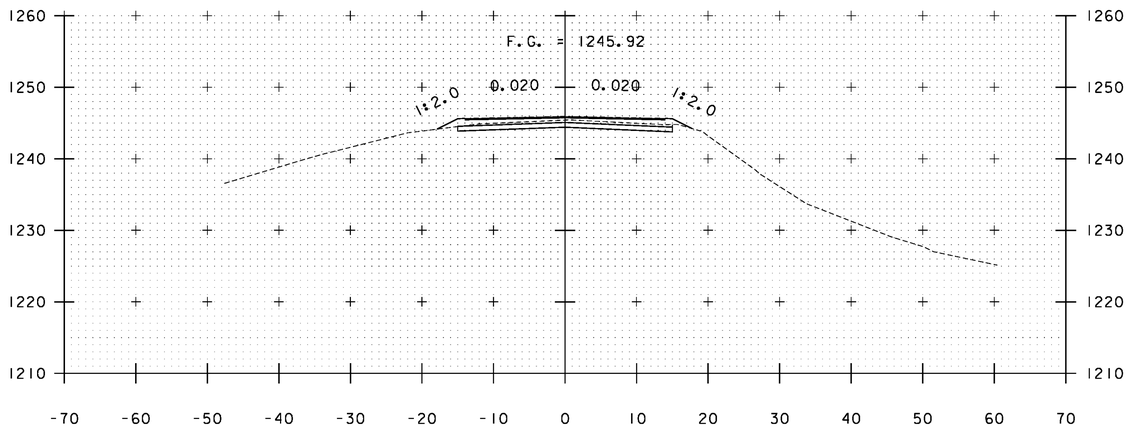
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 252 OF 444



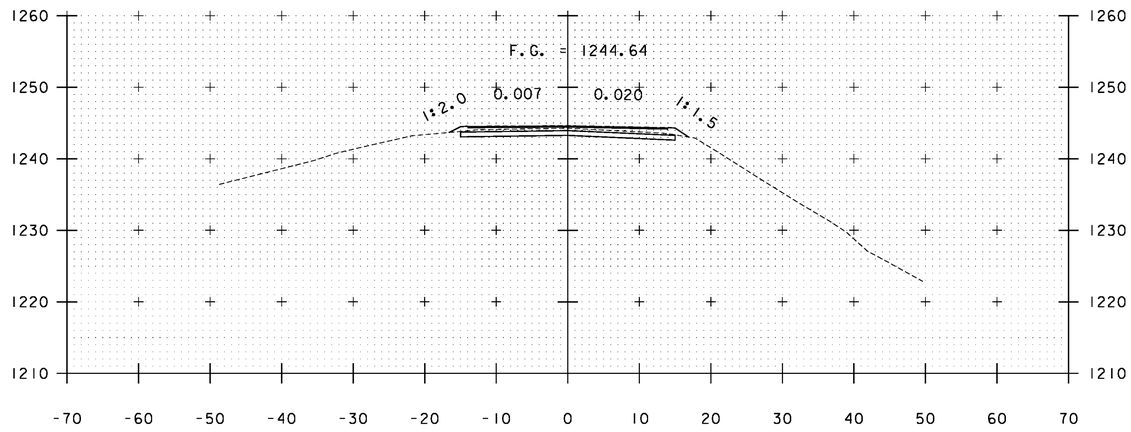

A 202+00




A 203+00




A 201+50



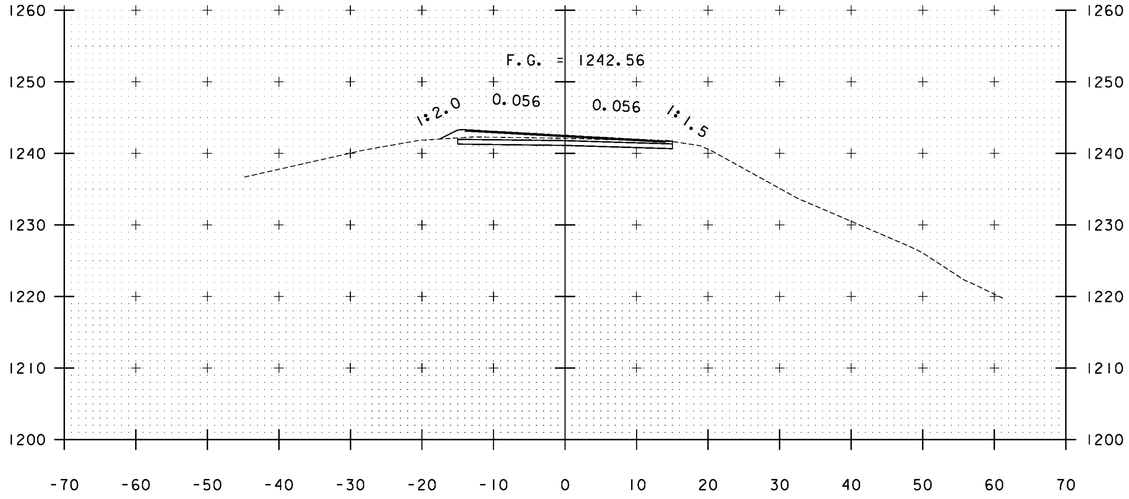

A 202+50

STA. A 201+50 TO STA. A 203+00

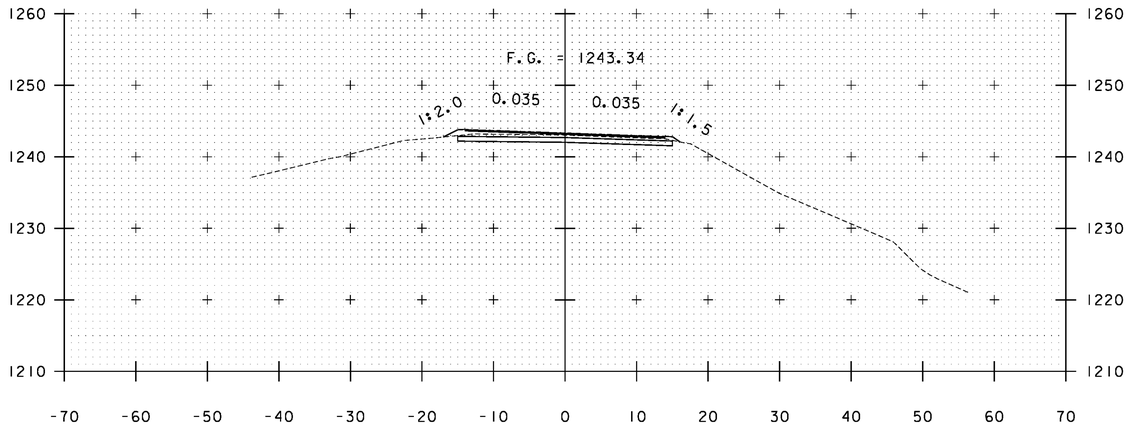
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

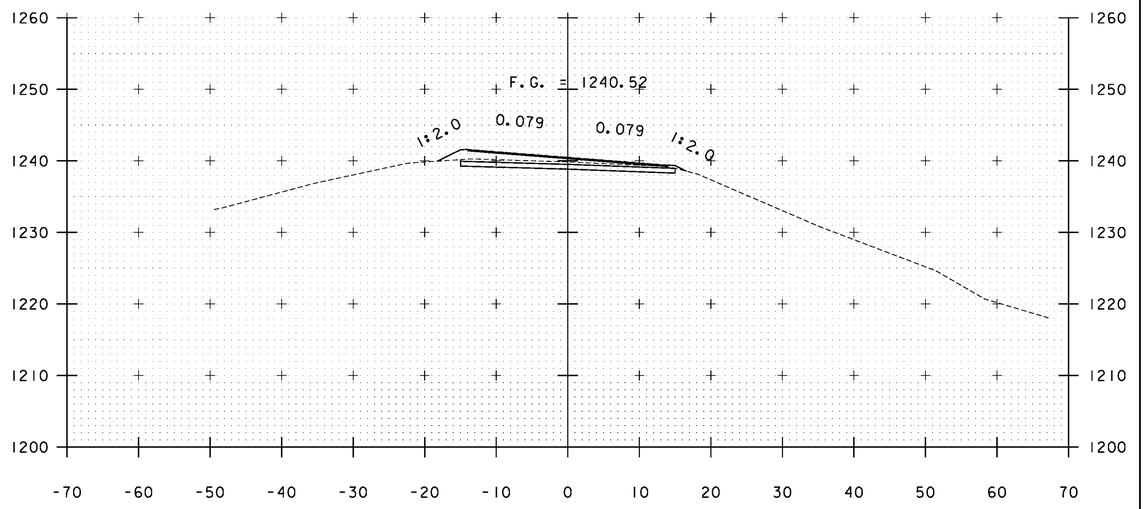
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 253 OF 444



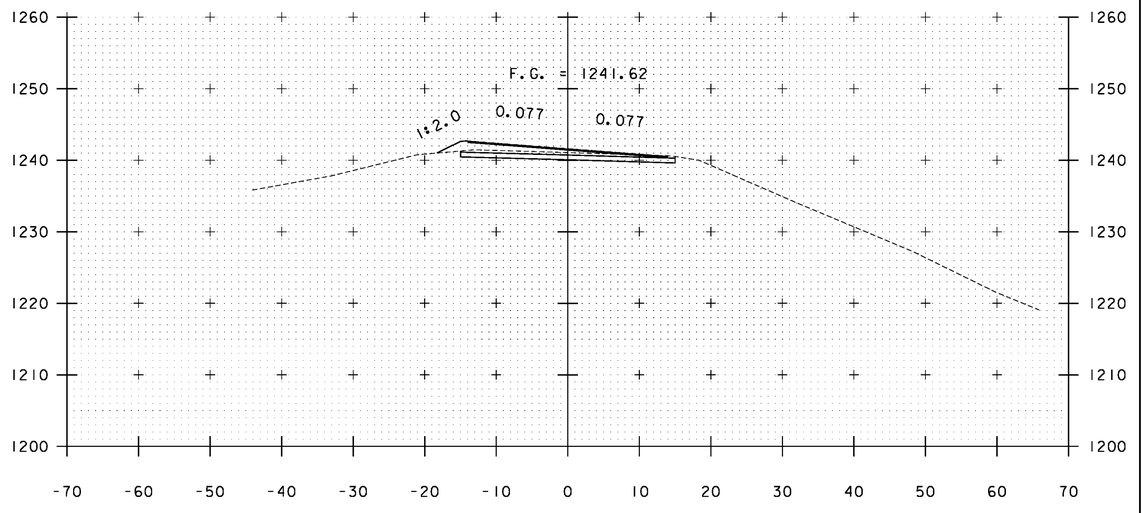

A 204+00




A 203+50




A 205+00



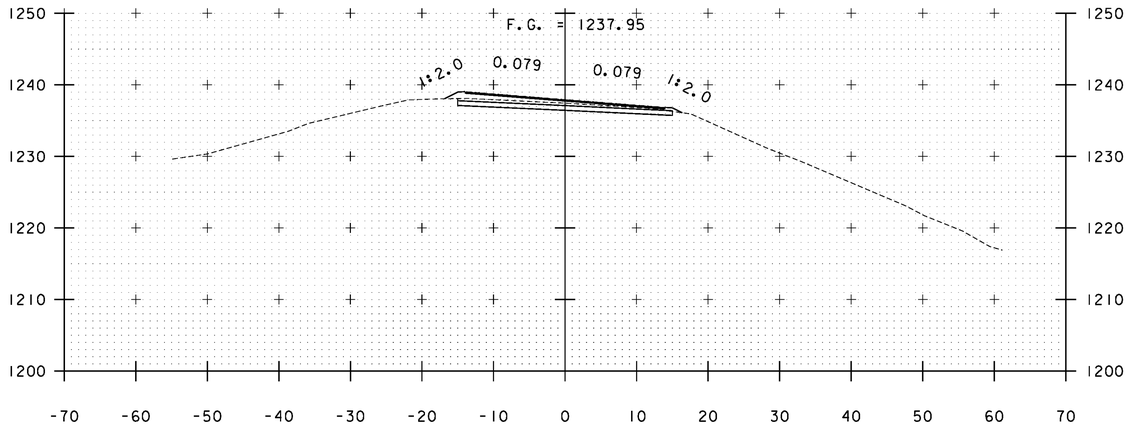

A 204+50

STA. A 203+50 TO STA. A 205+00

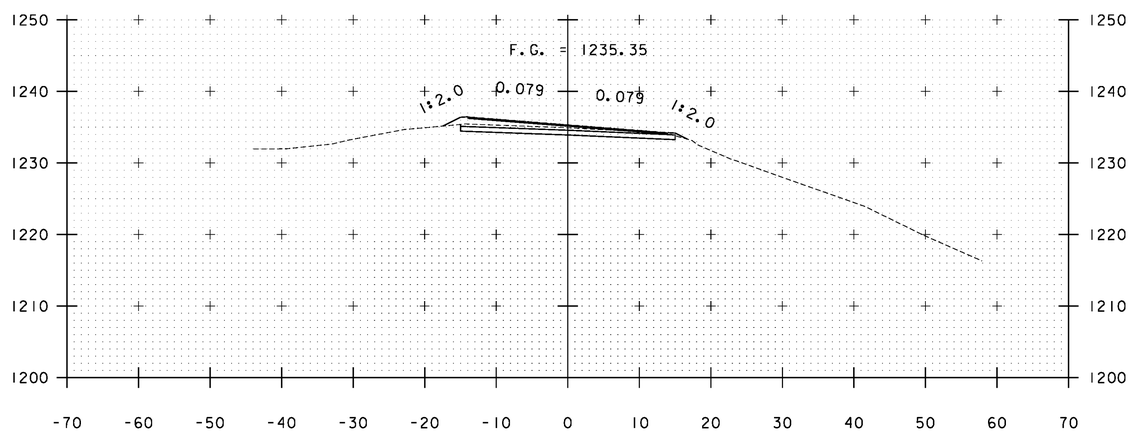
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

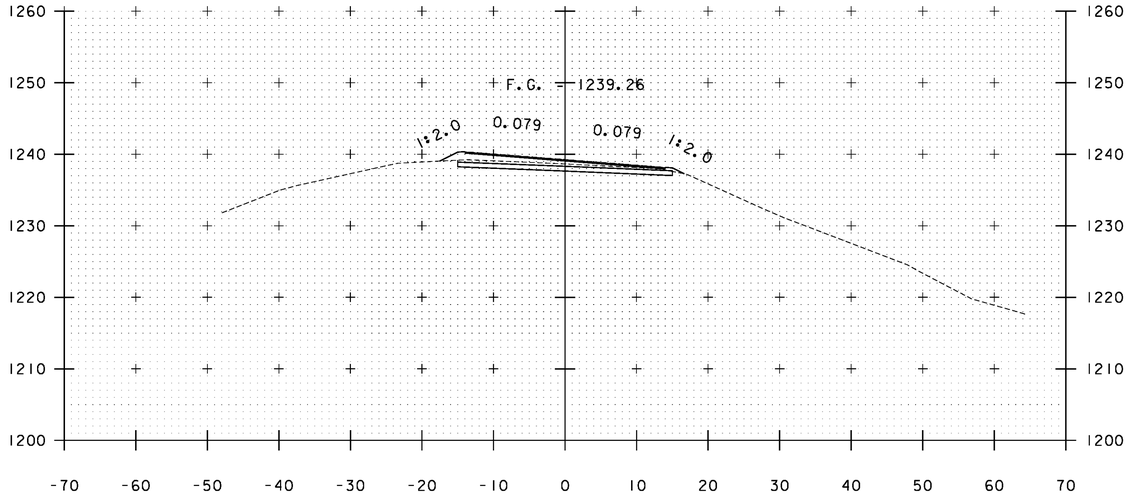
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 254 OF 444



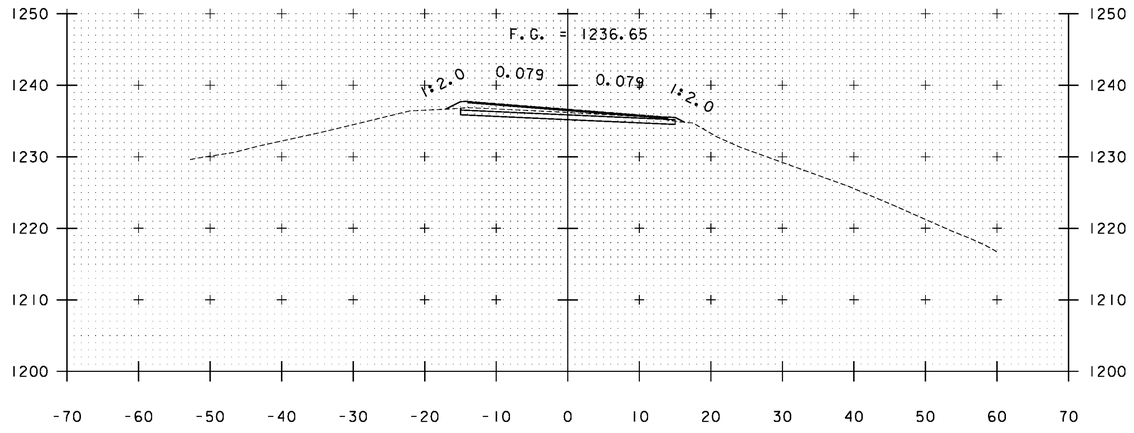

A 206+00




A 207+00




A 205+50



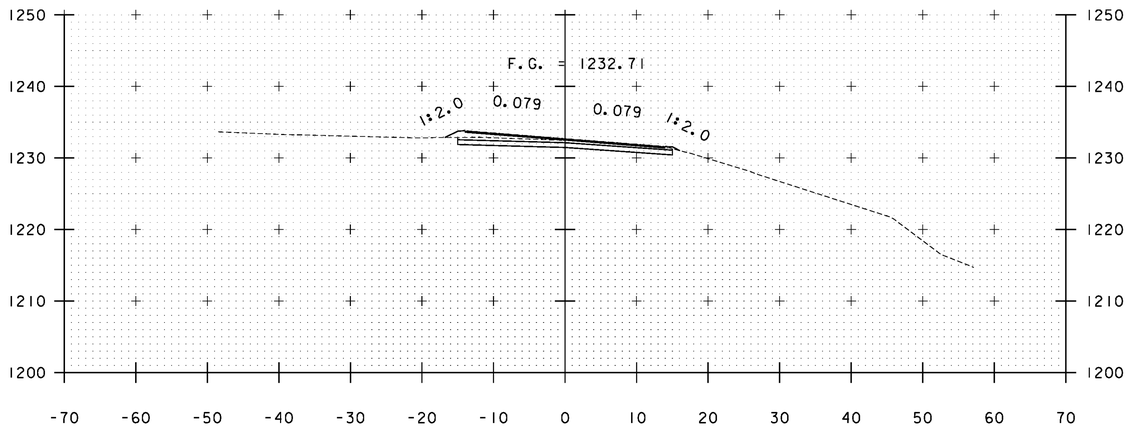

A 206+50

STA. A 205+50 TO STA. A 207+00

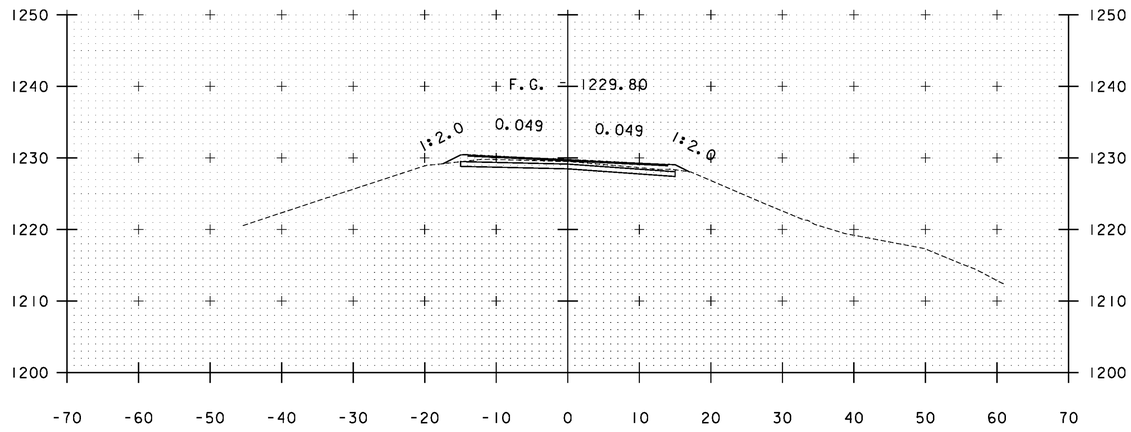
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

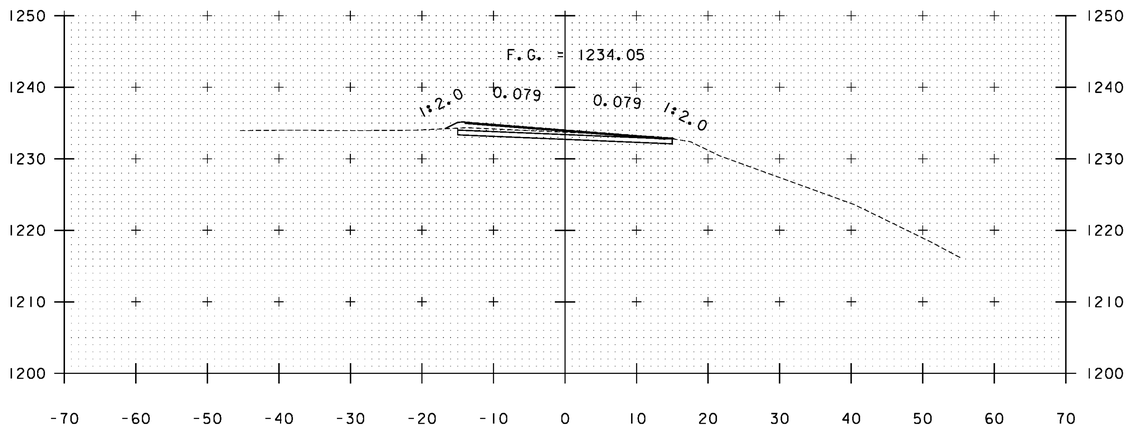
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 255 OF 444



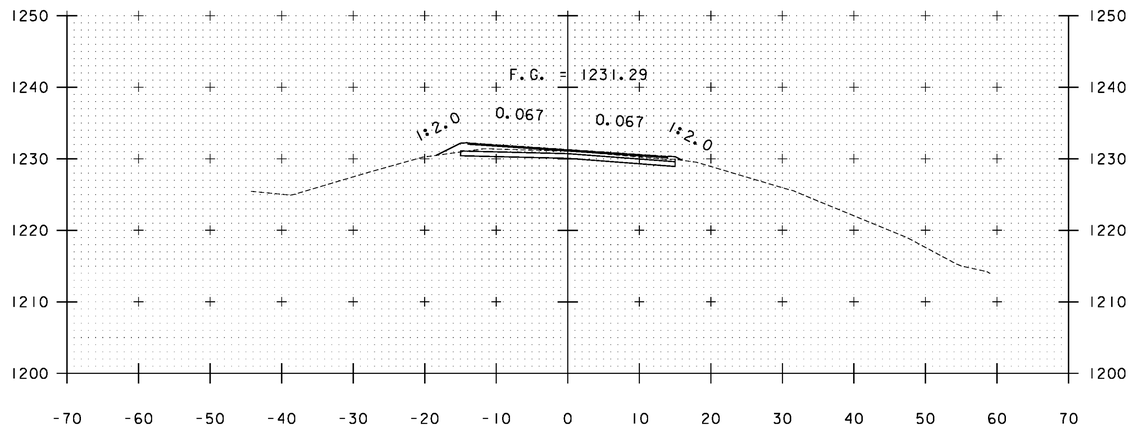

A 208+00




A 209+00




A 207+50



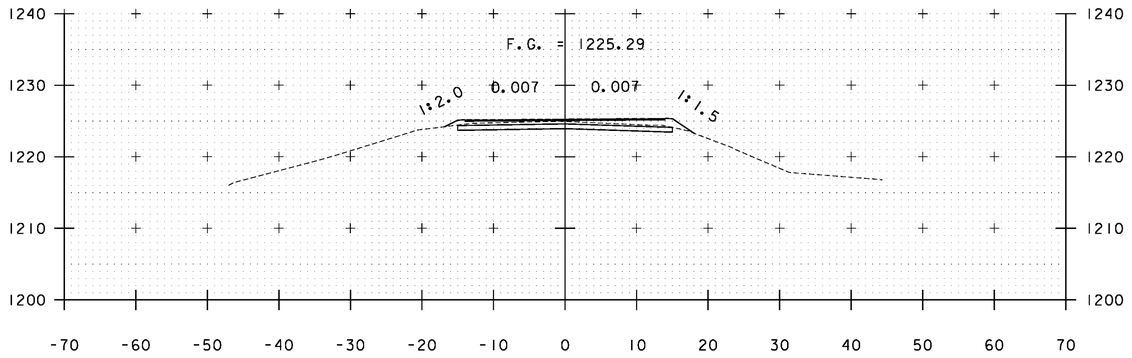

A 208+50

STA. A 207+50 TO STA. A 209+00

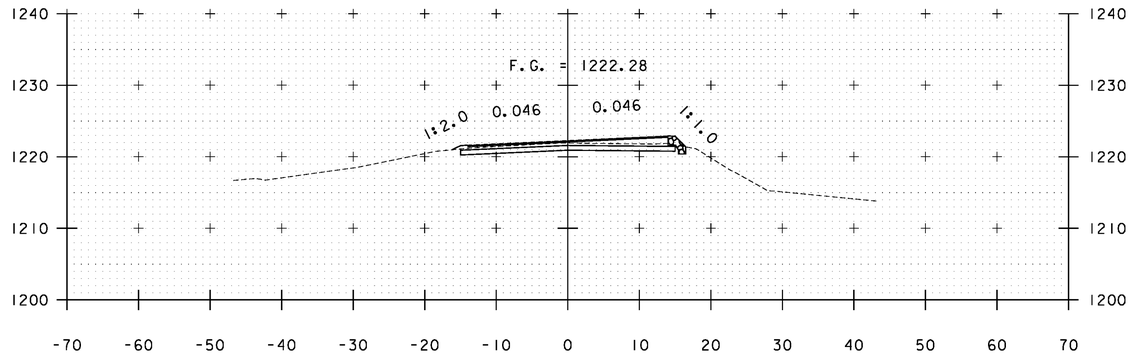
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

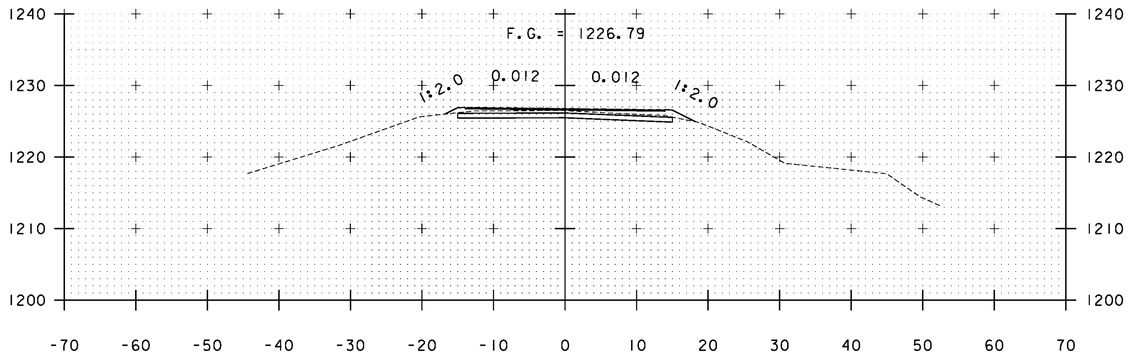
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 256 OF 444



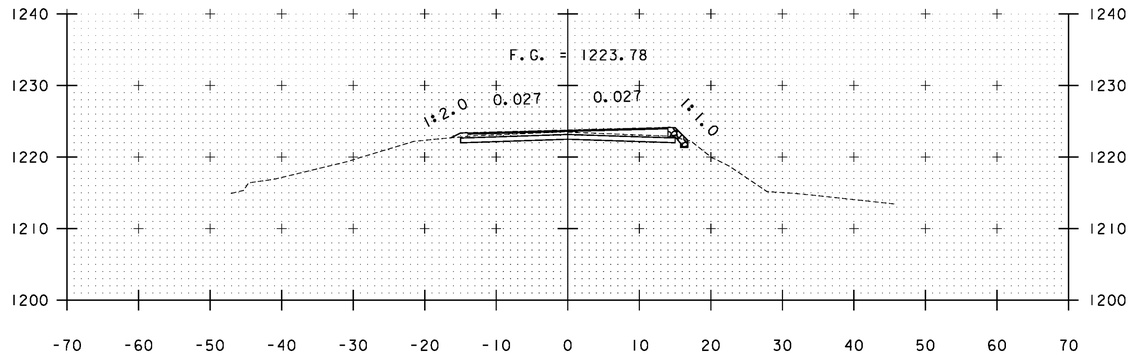

A 210+50



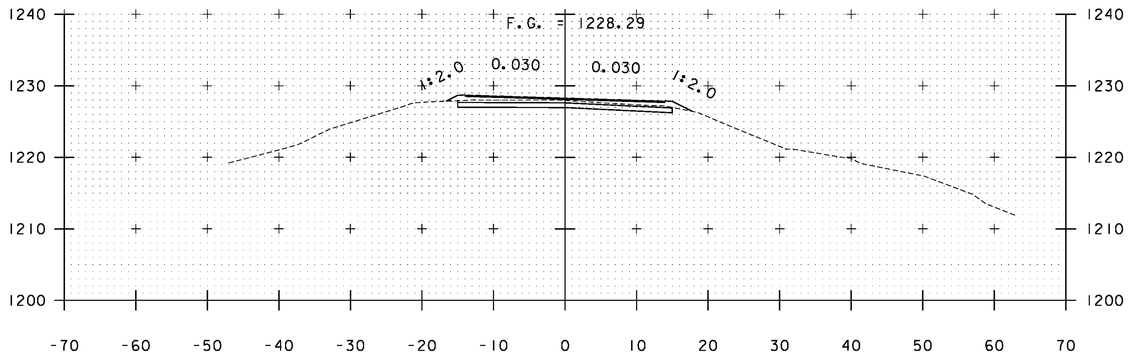

A 211+50



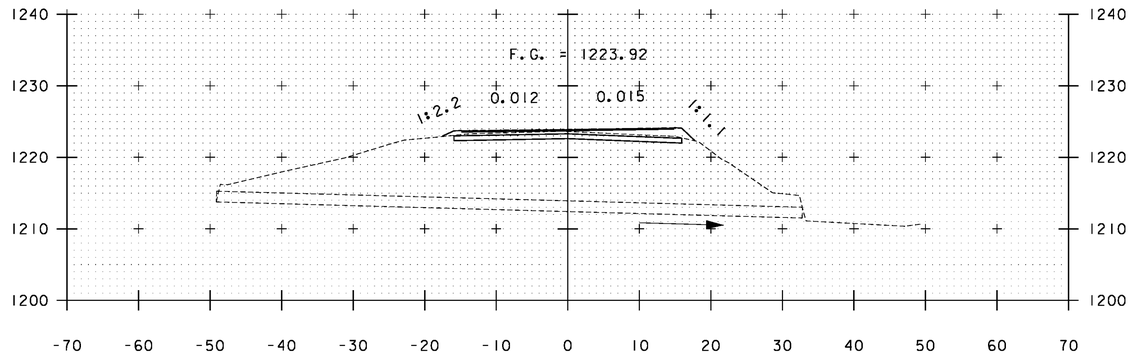

A 210+00




A 211+00




A 209+50



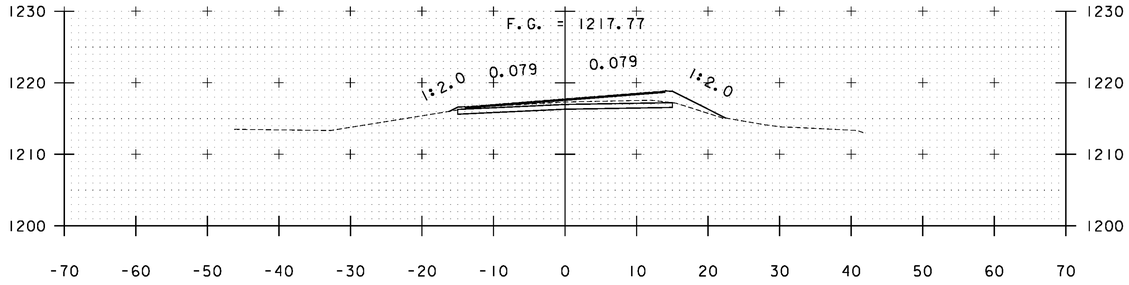

A 210+96

STA. A 209+50 TO STA. A 211+50

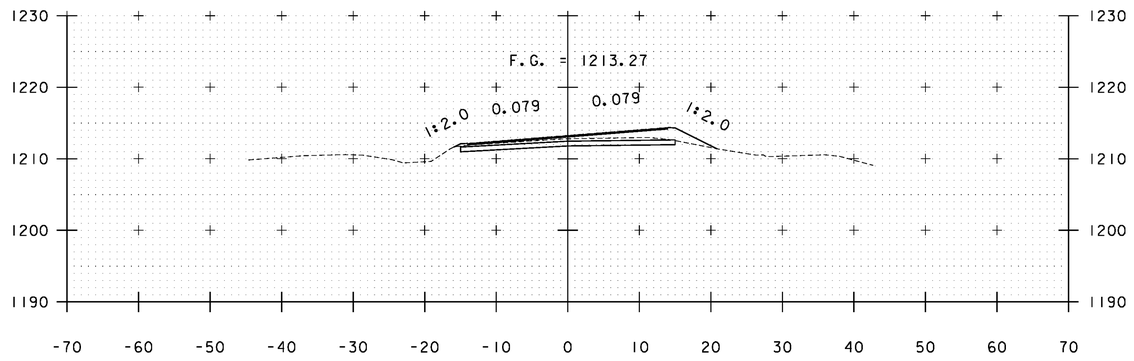
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

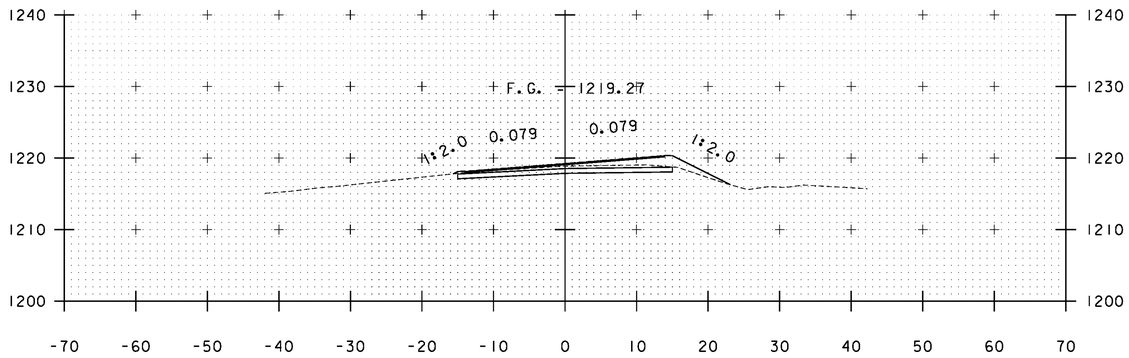
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 257 OF 444



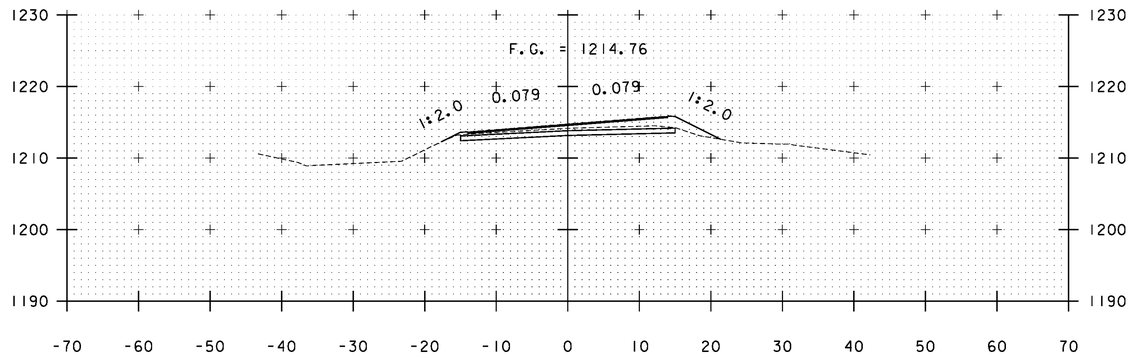

A 213+00



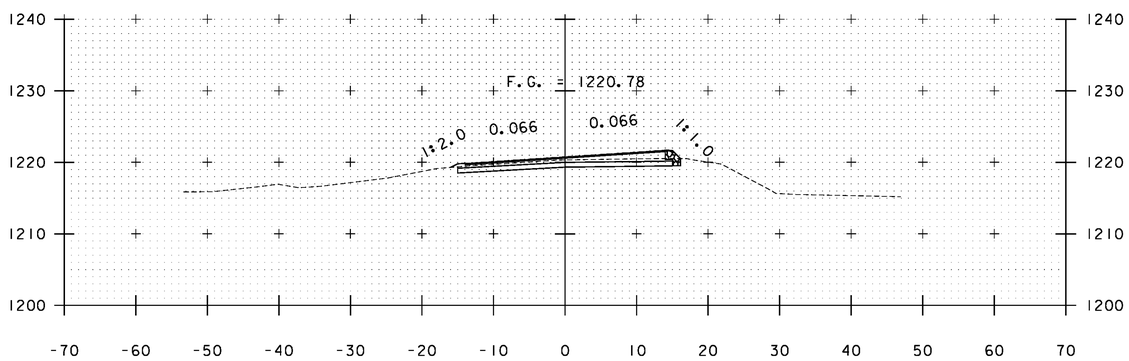

A 214+50



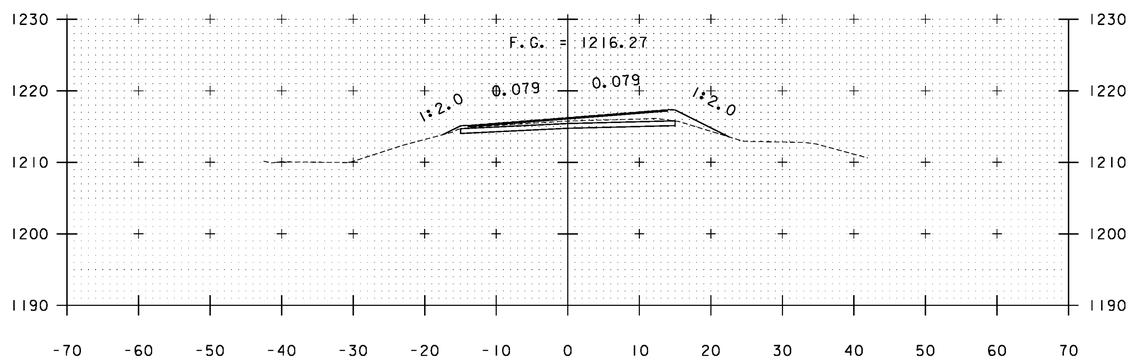

A 212+50




A 214+00




A 212+00



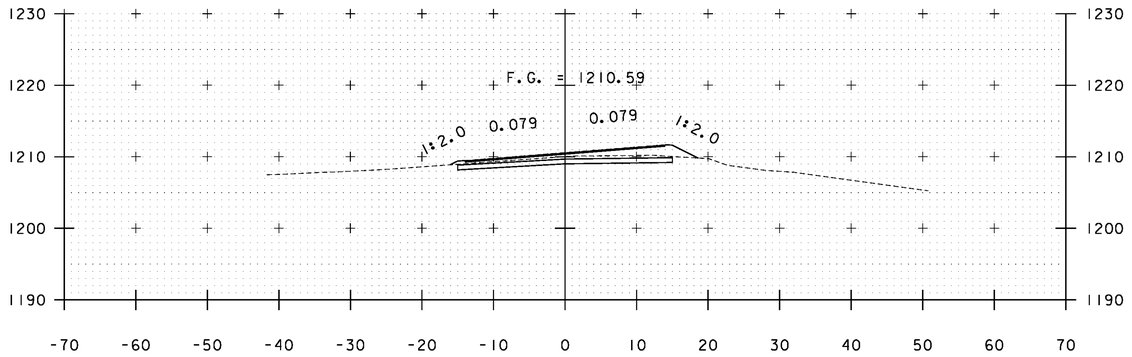

A 213+50

STA. A 212+00 TO STA. A 214+50

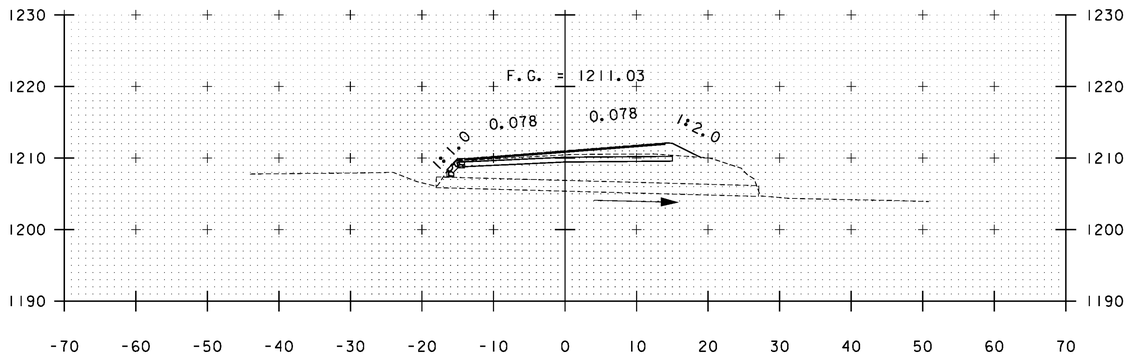
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

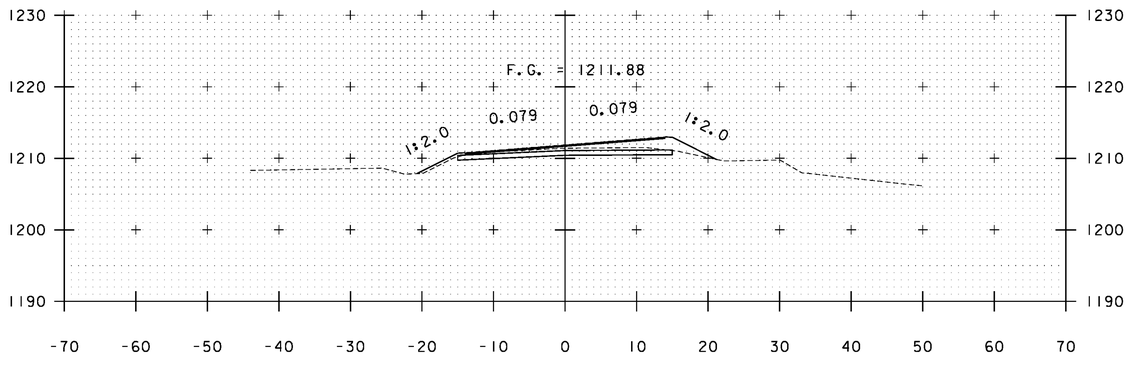
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 258 OF 444



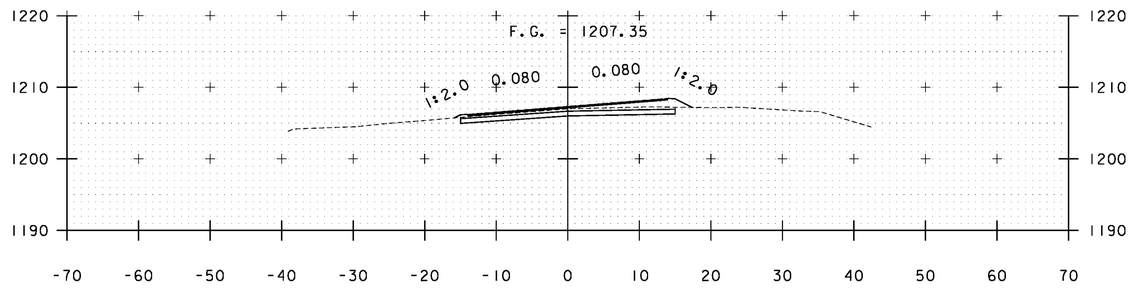

A 215+50



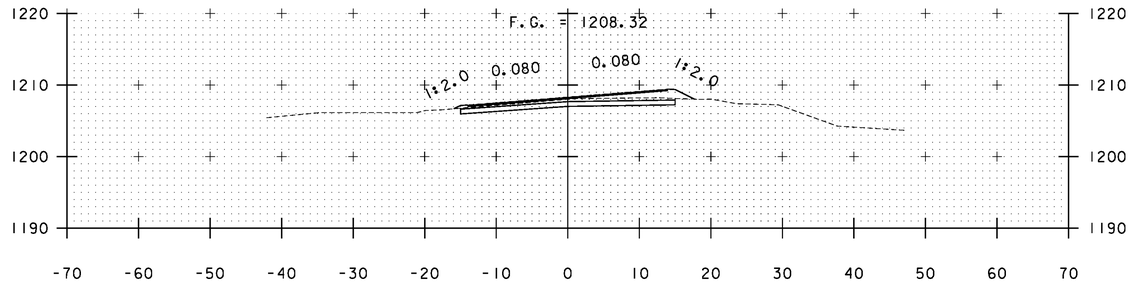

A 215+32



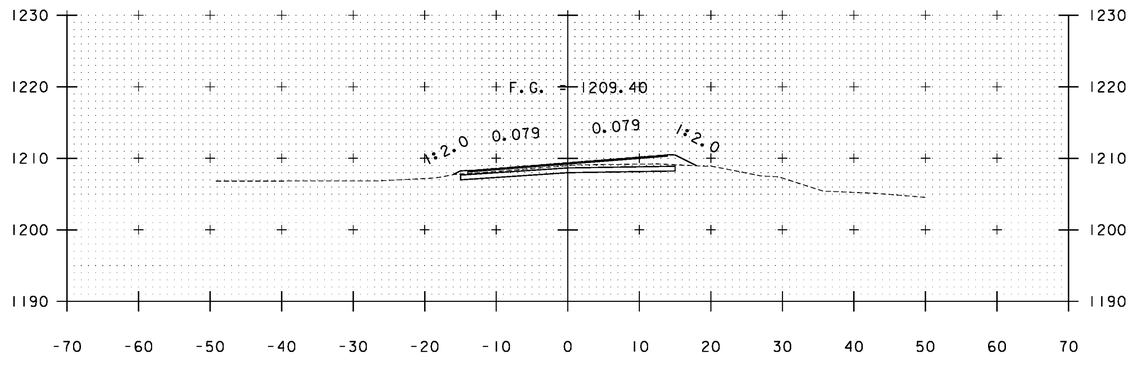

A 215+00




A 217+00




A 216+50



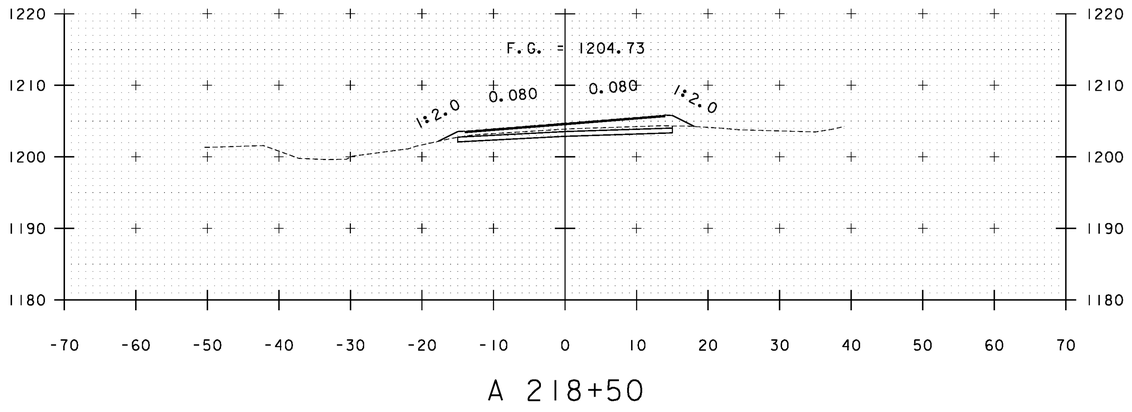

A 216+00

STA. A 215+00 TO STA. A 217+00

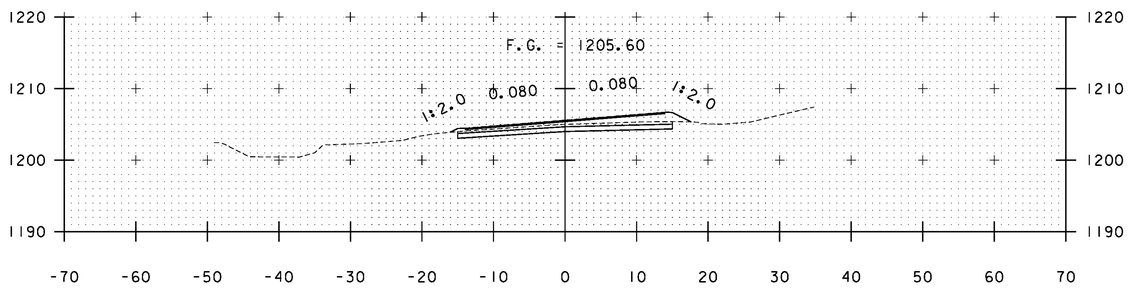
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

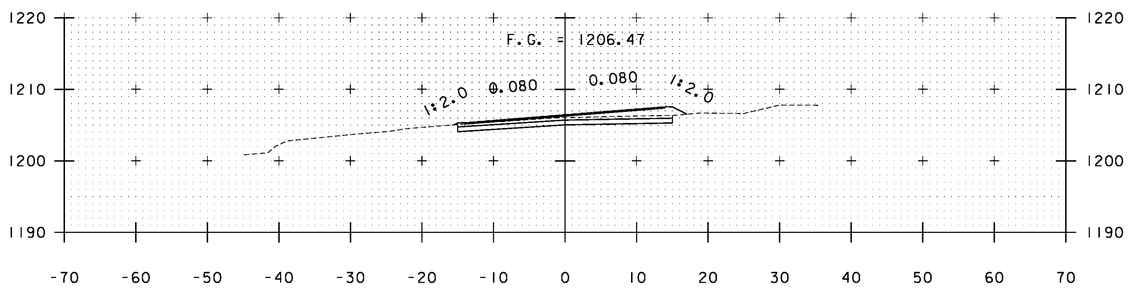
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 259 OF 444



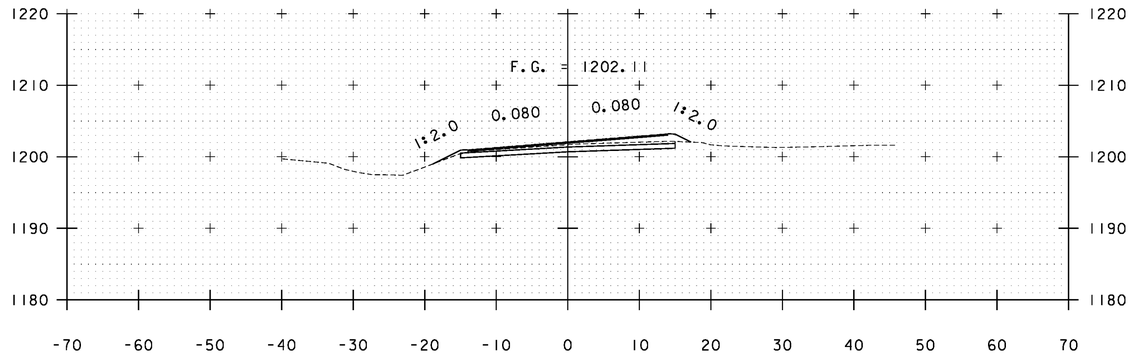

A 218+50



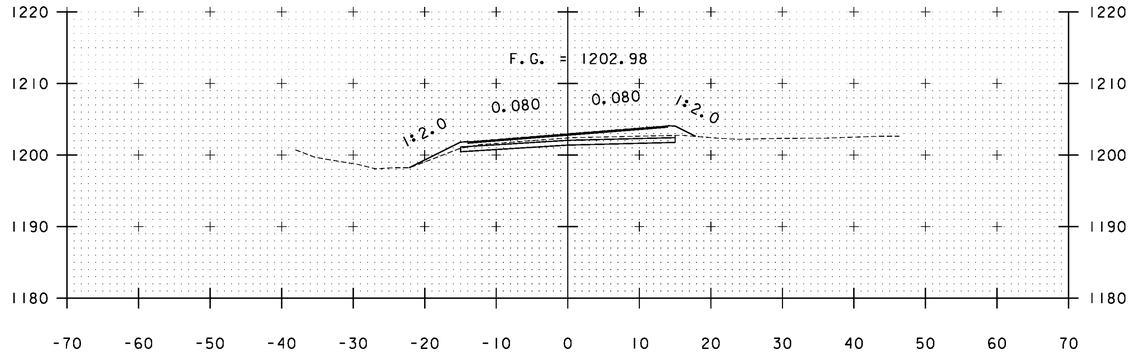

A 218+00



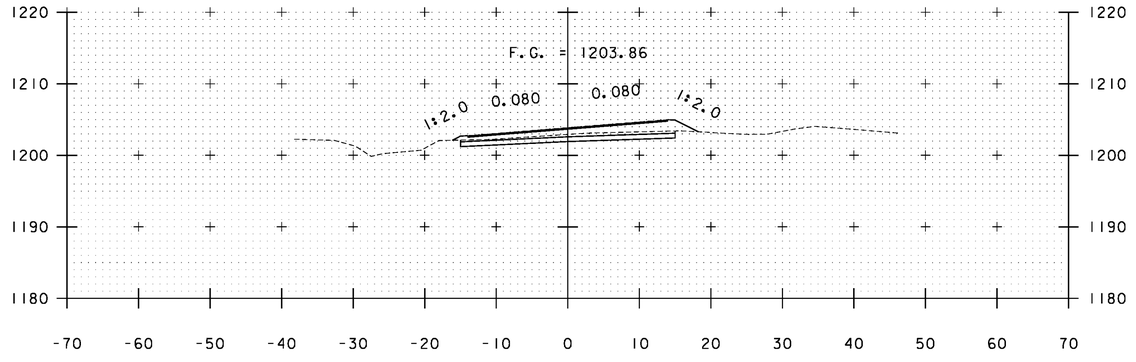

A 217+50




A 220+00




A 219+50



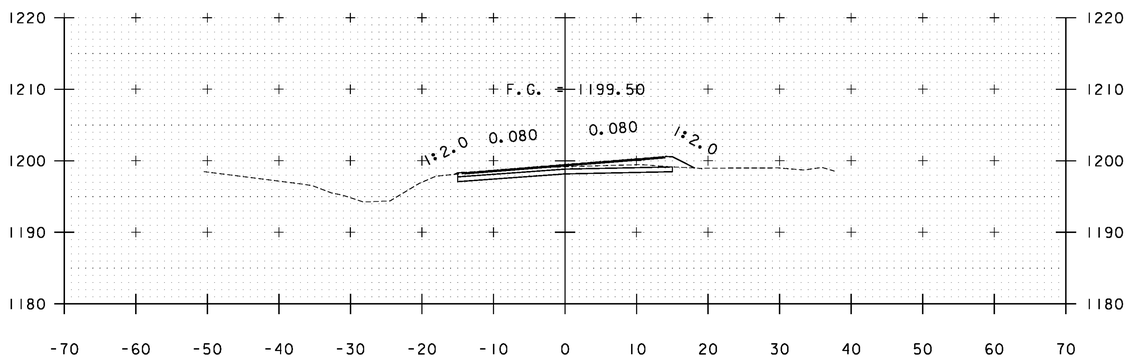

A 219+00

STA. A 217+50 TO STA. A 220+00

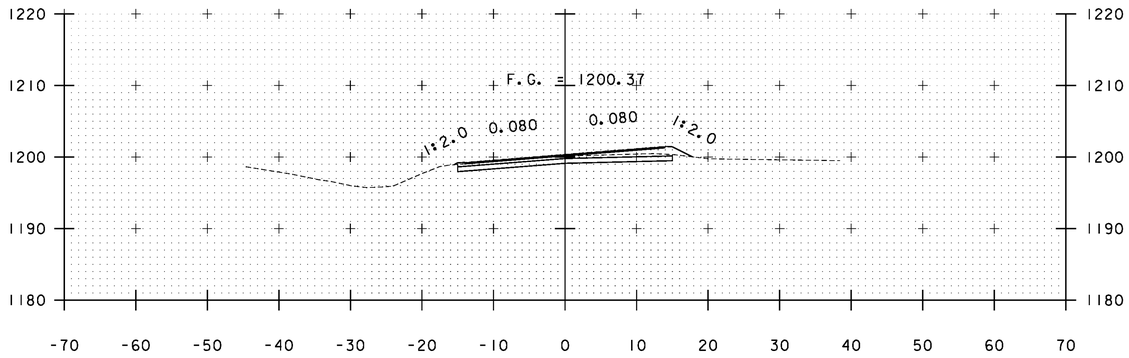
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

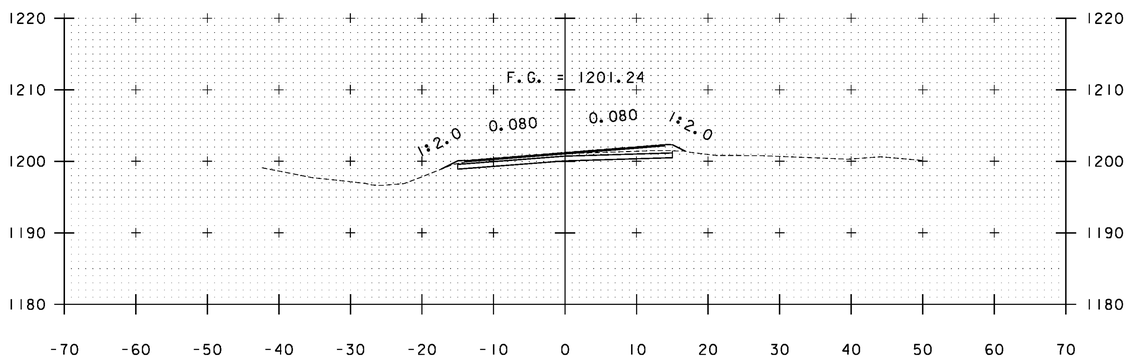
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 260 OF 444



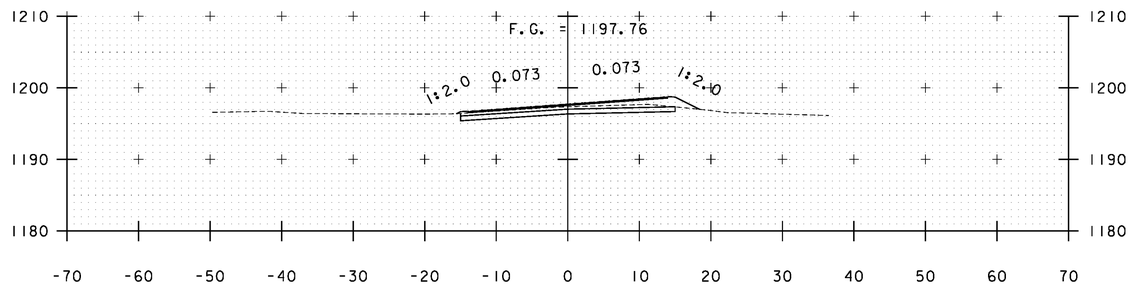

A 221+50



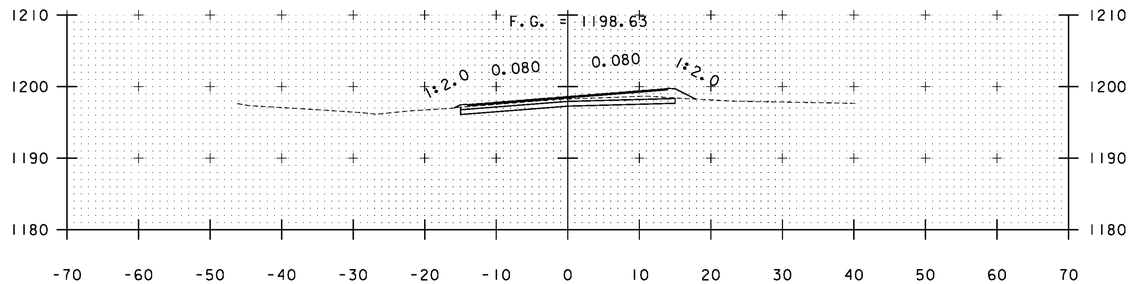

A 221+00



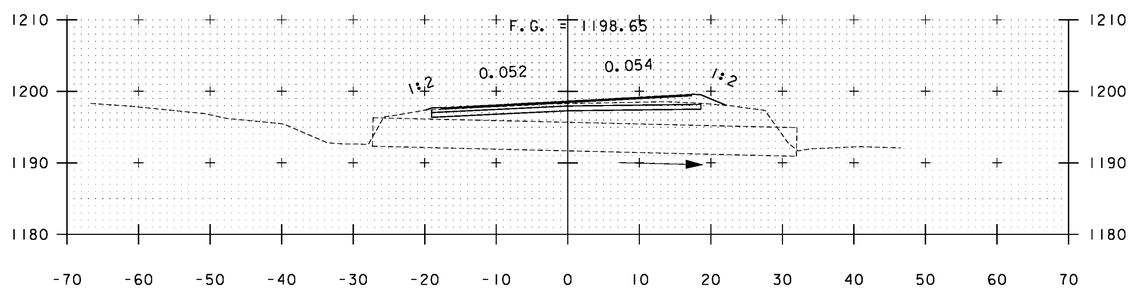

A 220+50




A 222+50




A 222+00



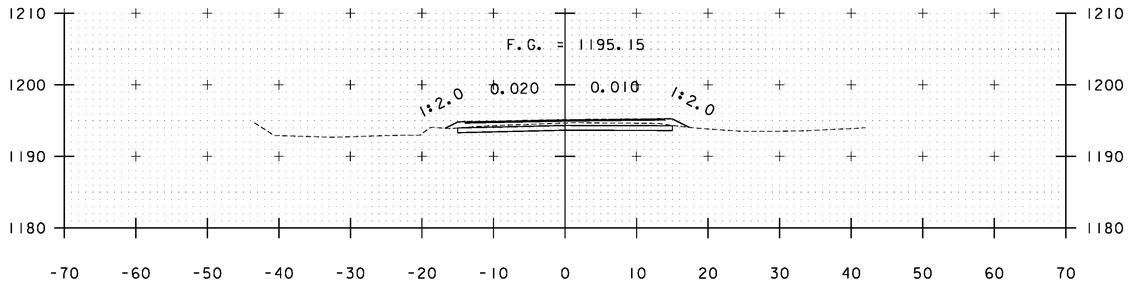

A 221+99

STA. A 220+50 TO STA. A 222+50

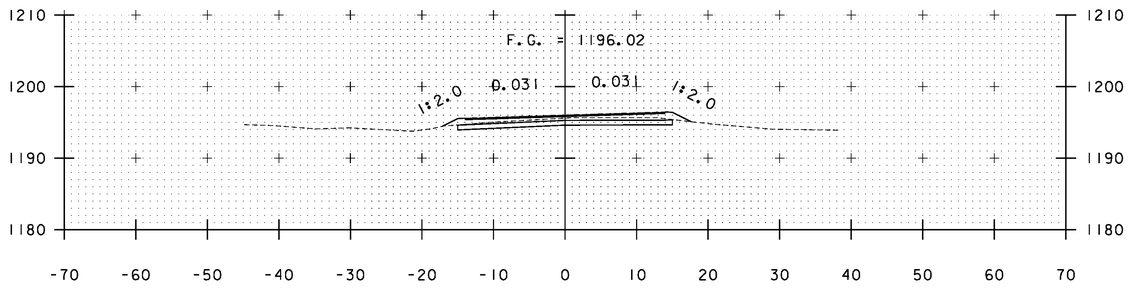
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

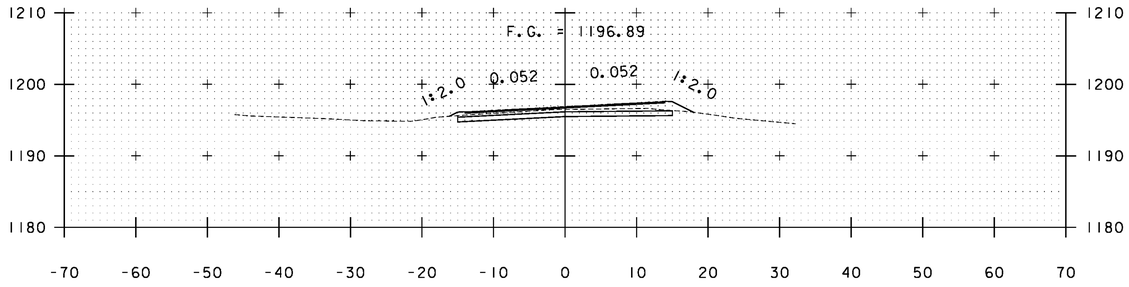
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 261 OF 444



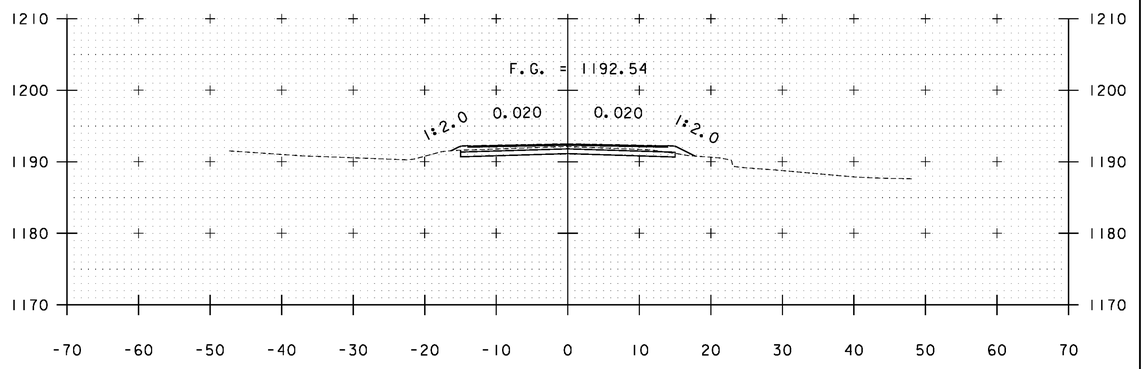

A 224+00



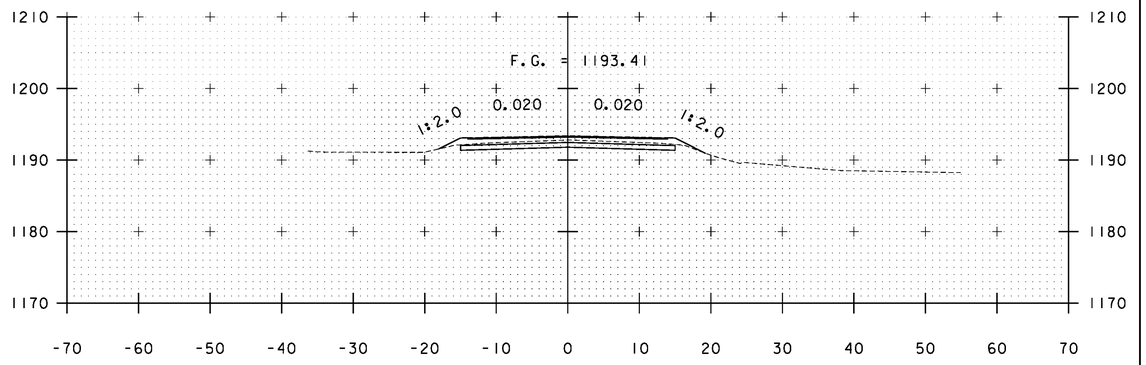

A 223+50



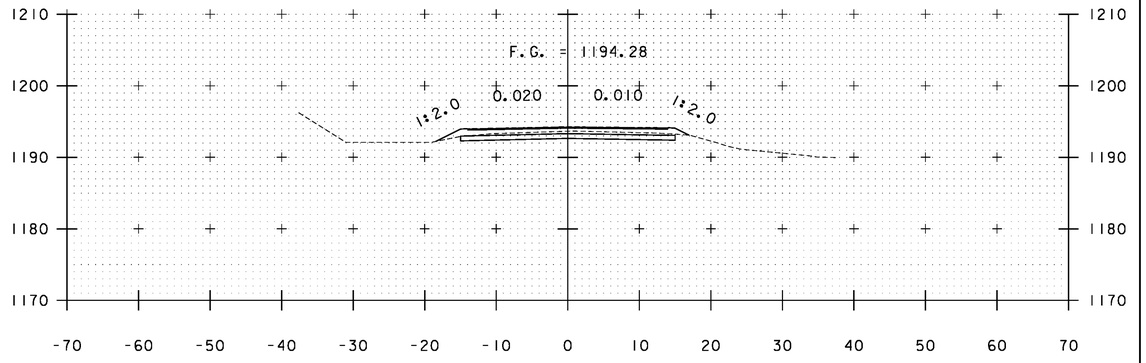

A 223+00




A 225+50



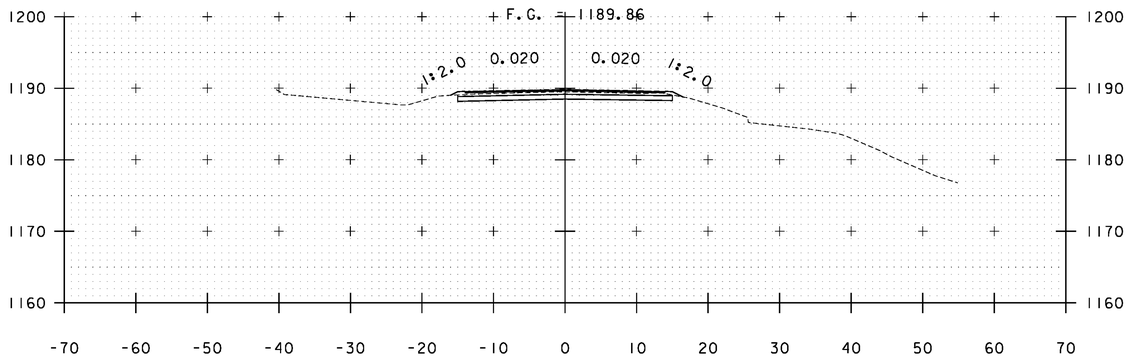

A 225+00



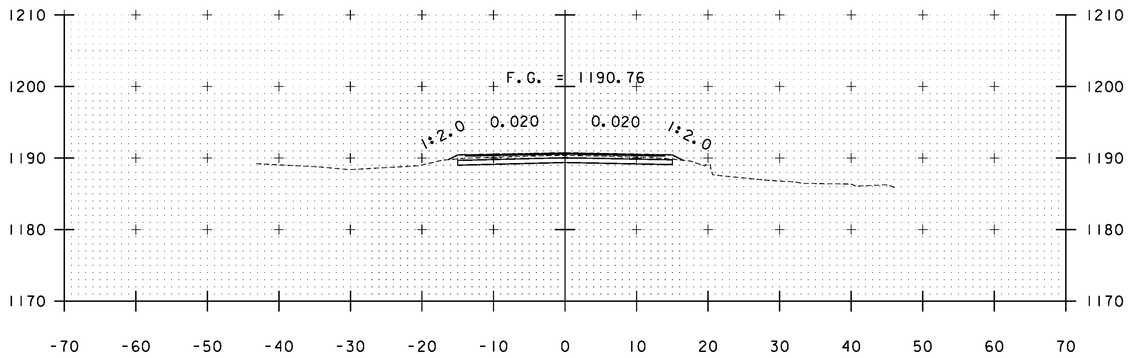

A 224+50

STA. A 223+00 TO STA. A 225+50

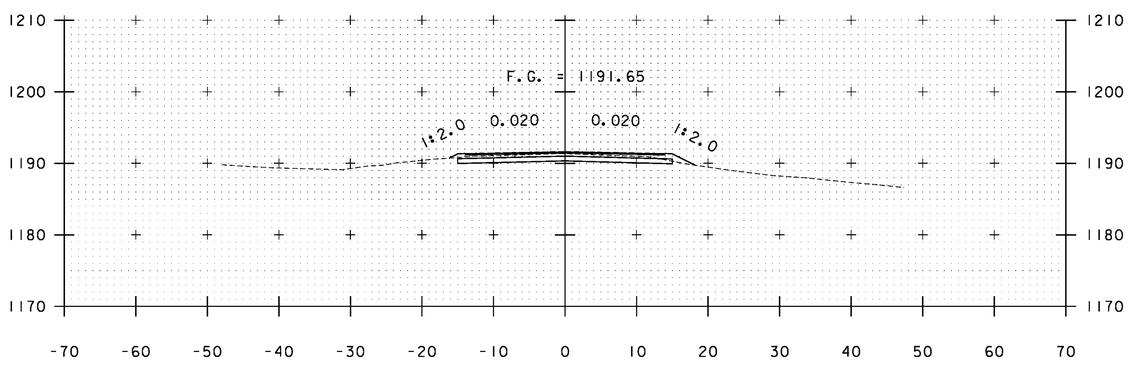
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 262 OF 444 |



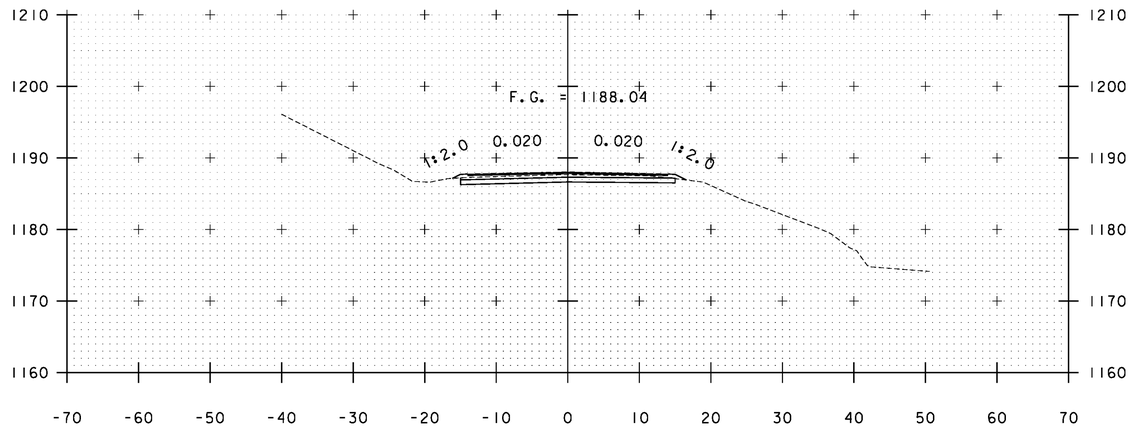

A 227+00



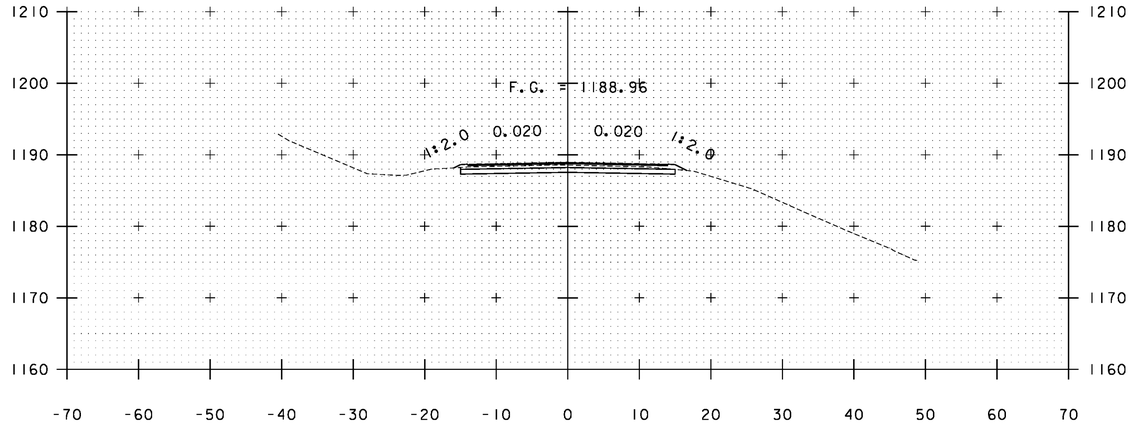

A 226+50




A 226+00




A 228+00



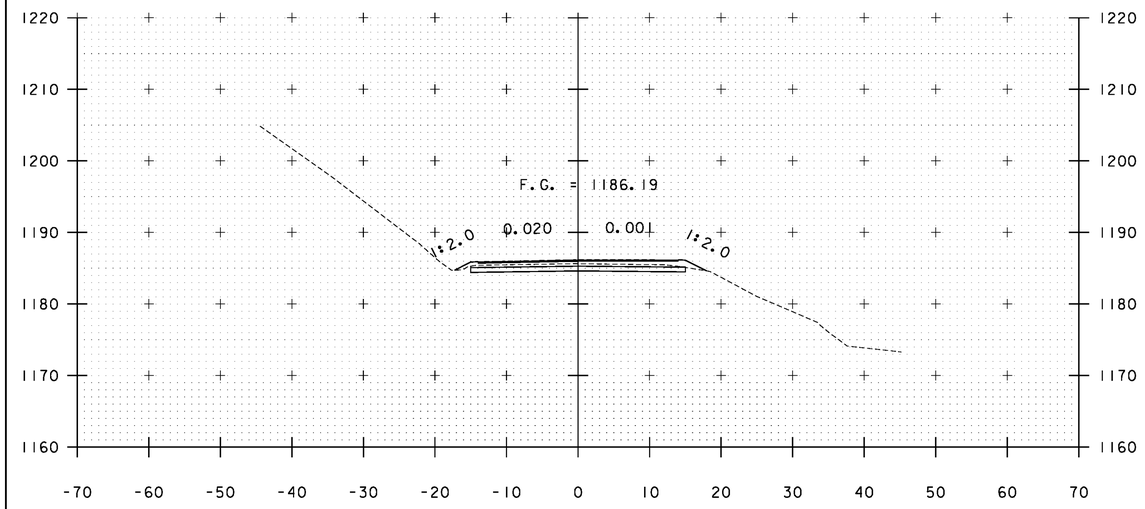

A 227+50

STA. A 226+00 TO STA. A 228+00

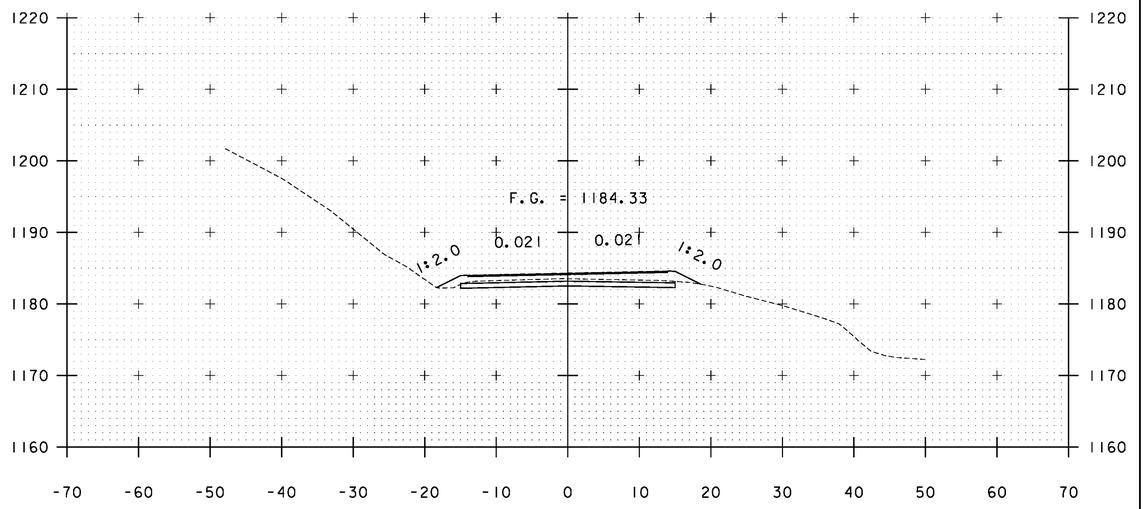
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

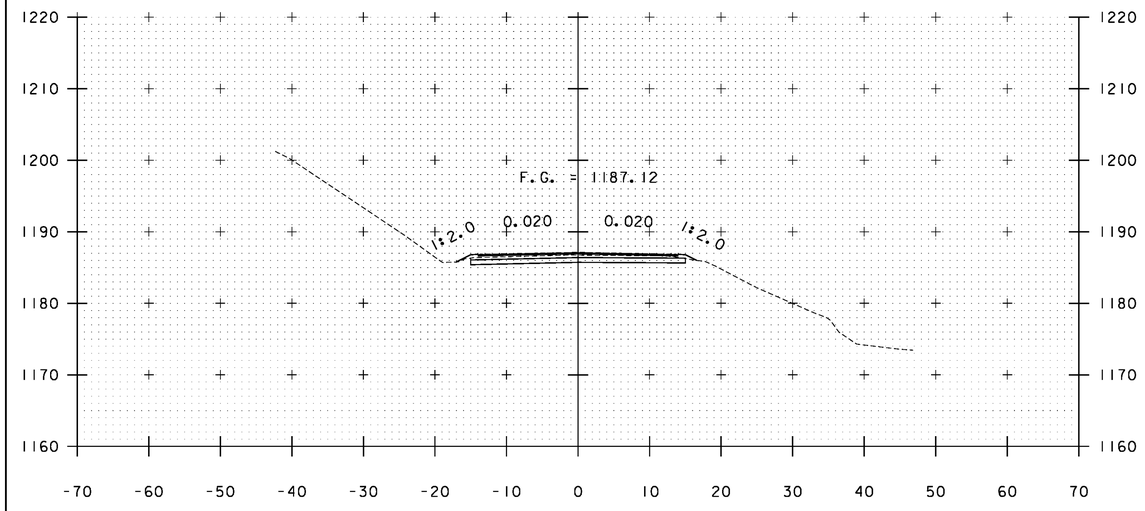
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 263 OF 444



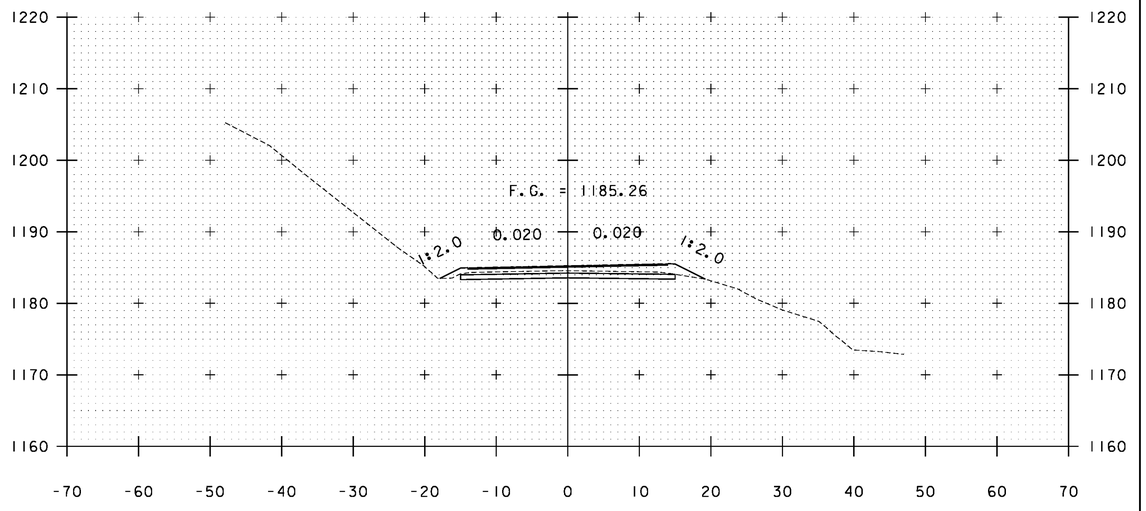

A 229+00




A 230+00




A 228+50



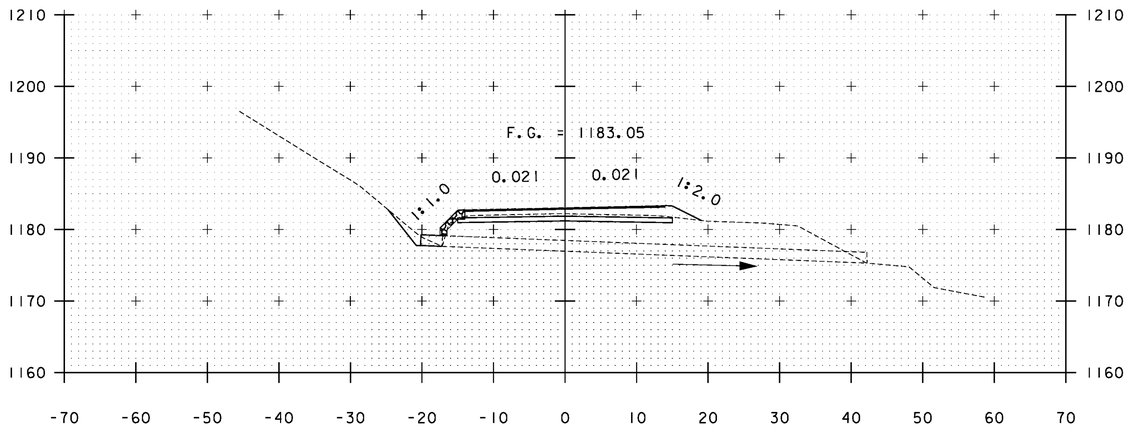

A 229+50

STA. A 228+50 TO STA. A 230+00

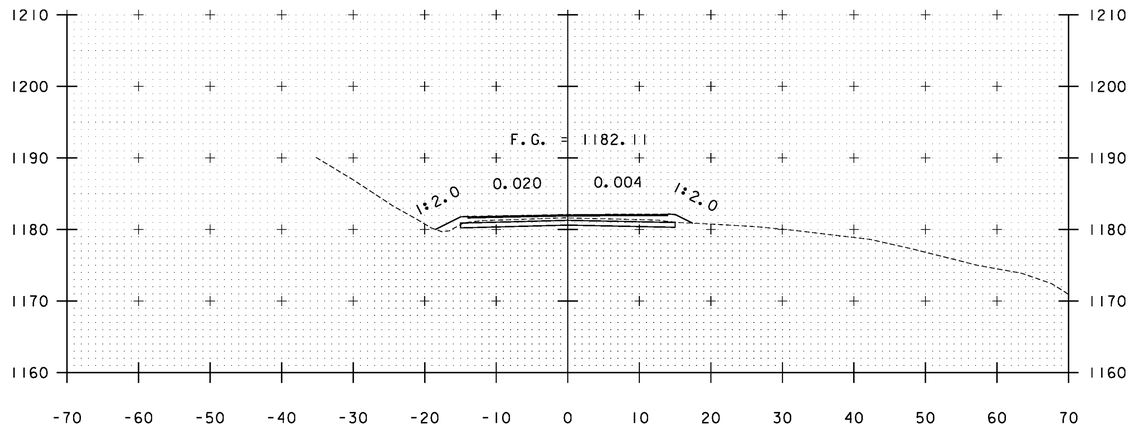
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

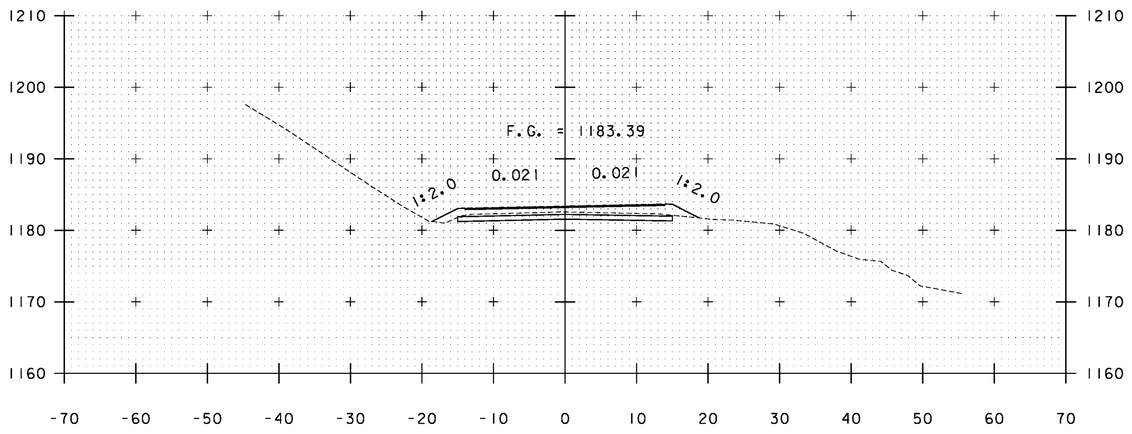
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 264 OF 444



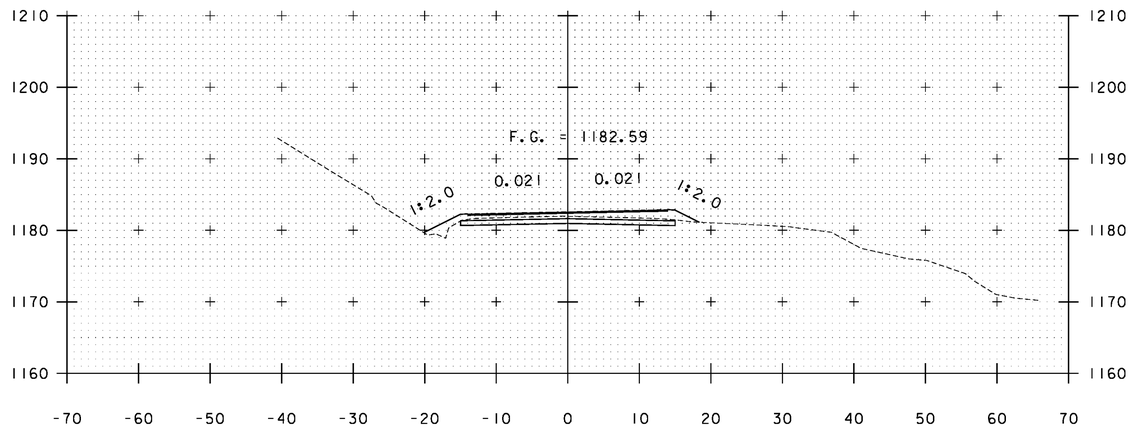

A 230+69




A 231+50




A 230+50



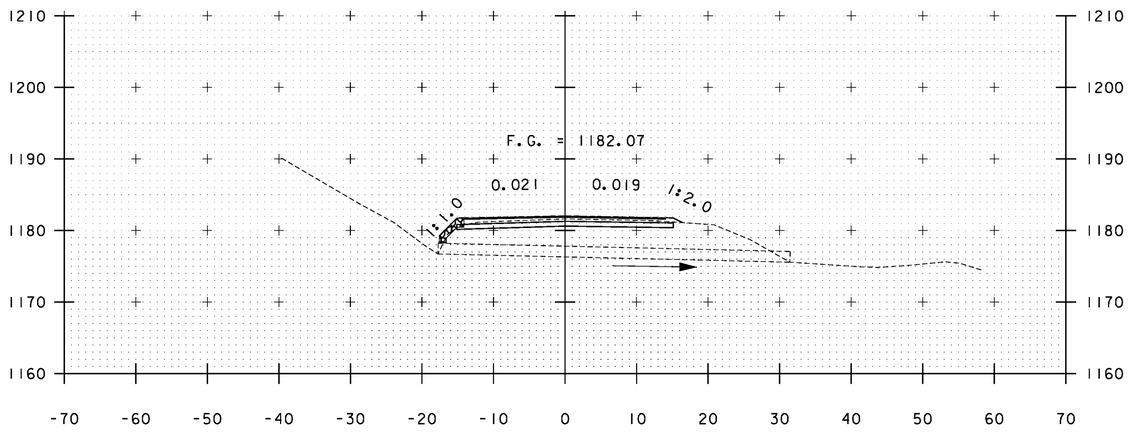

A 231+00

STA. A 230+50 TO STA. A 231+50

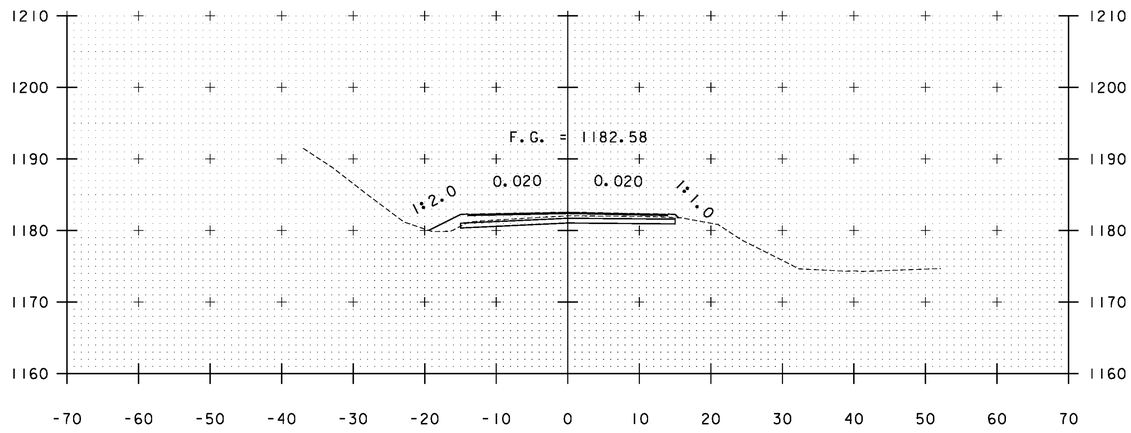
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

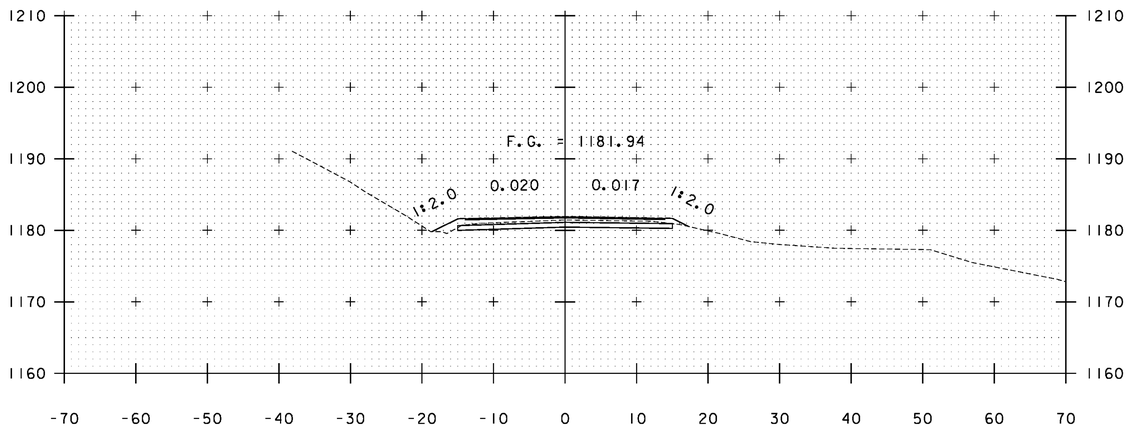
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 265 OF 444



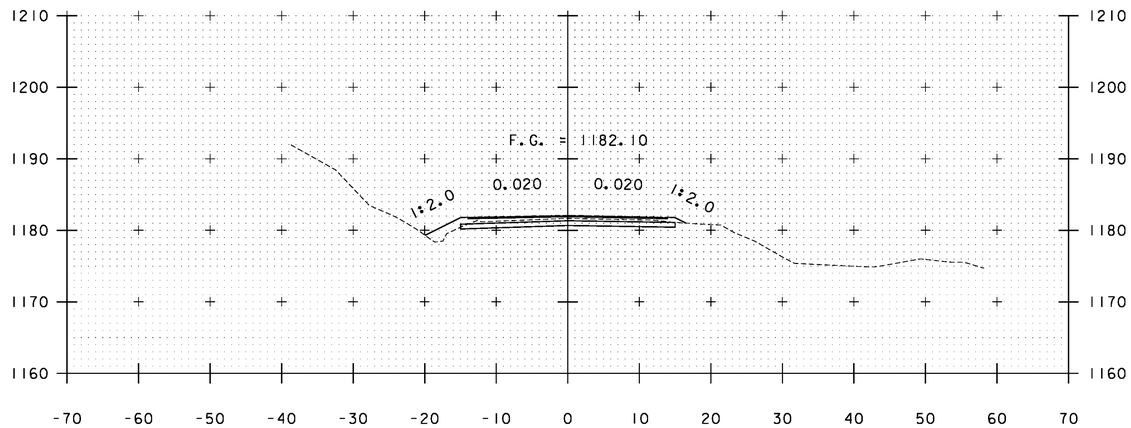

A 232+45




A 233+00




A 232+00



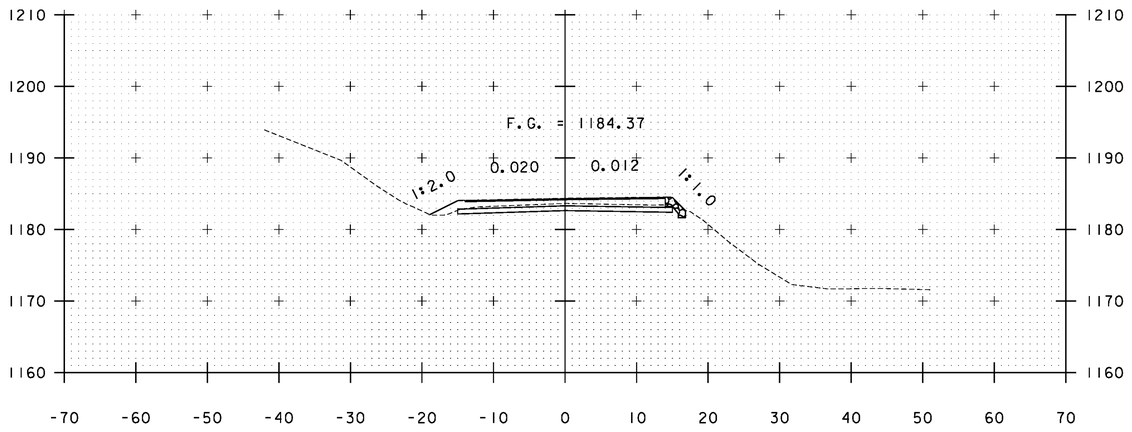

A 232+50

STA. A 232+00 TO STA. A 233+00

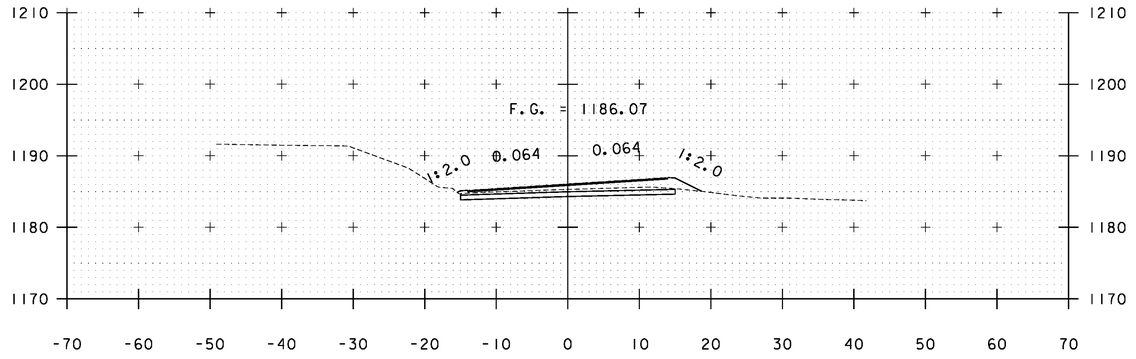
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

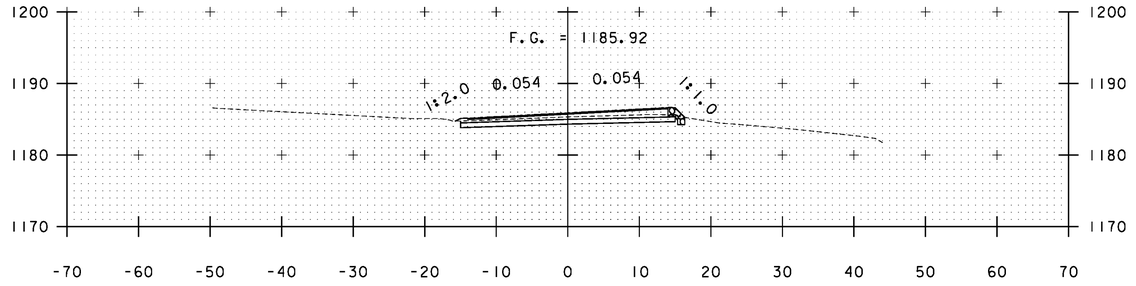
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 266 OF 444



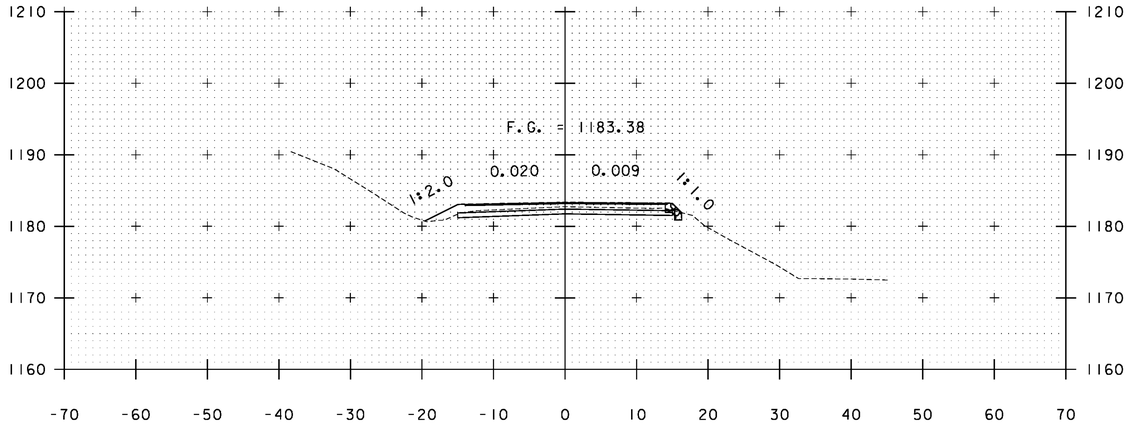

A 234+00



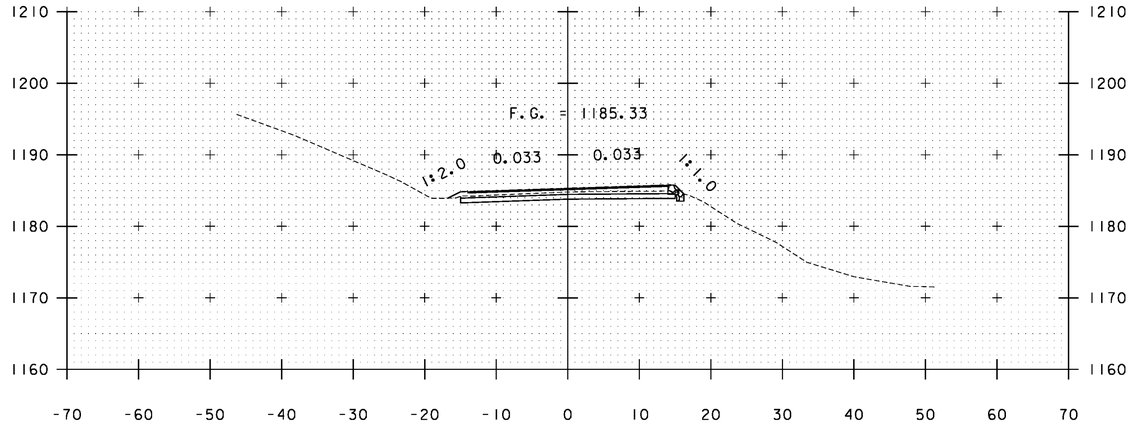

A 235+50




A 235+00



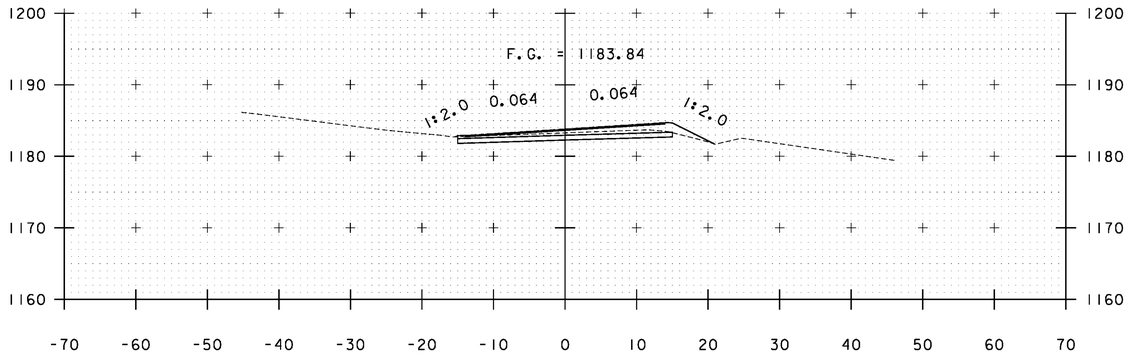

A 233+50



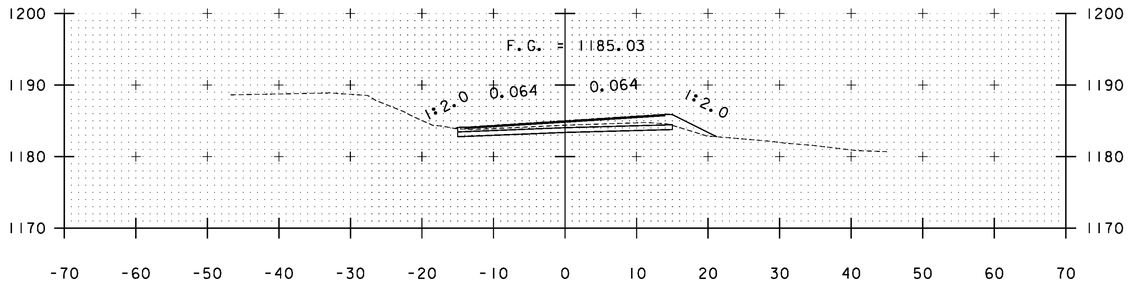

A 234+50

STA. A 233+50 TO STA. A 235+50

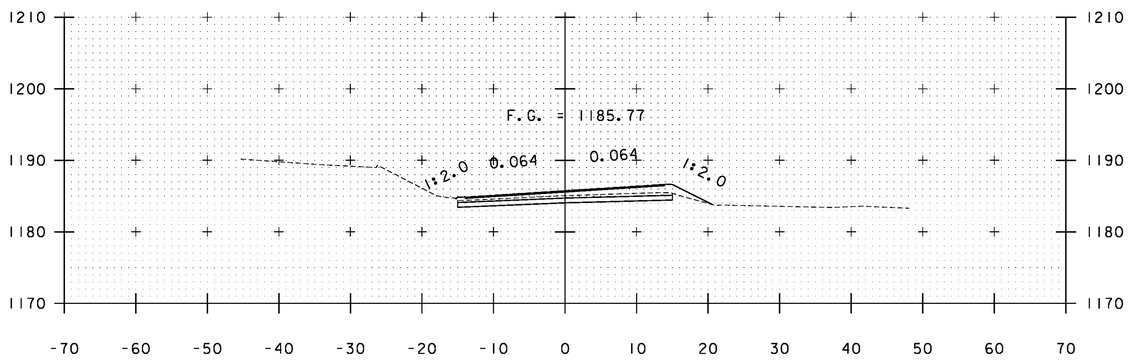
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 267 OF 444 |



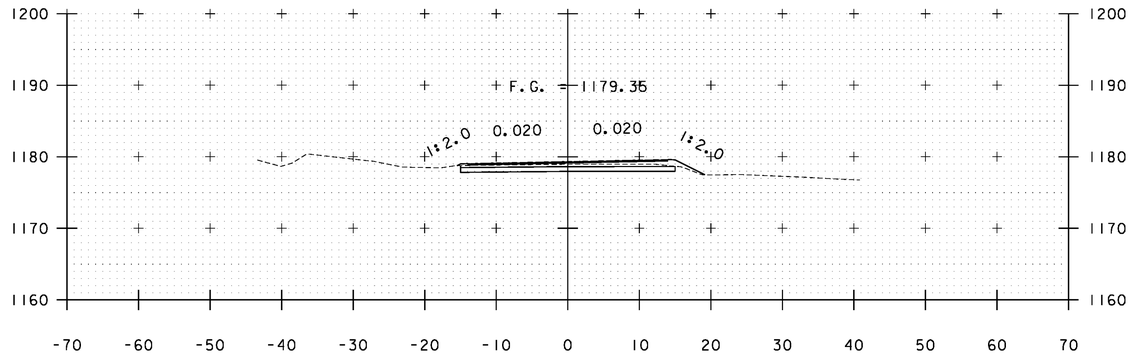

A 237+00



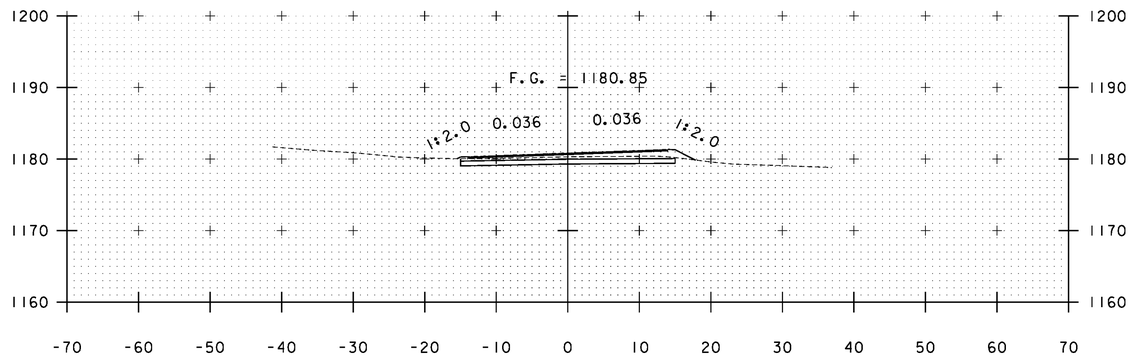

A 236+50



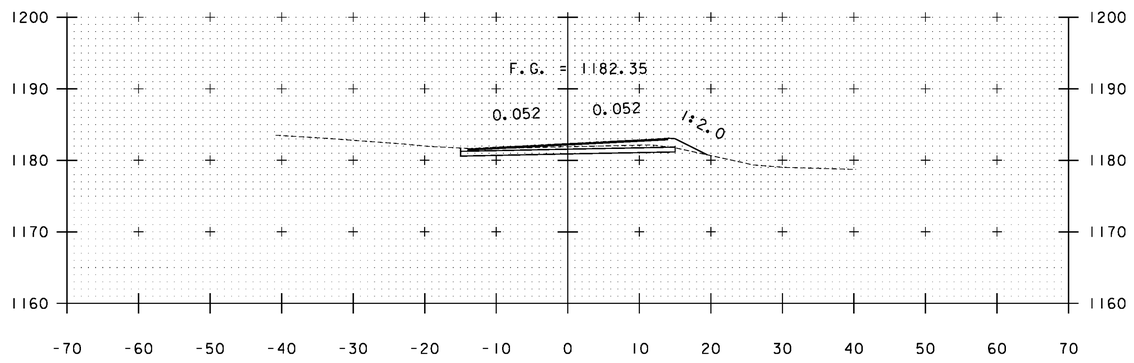

A 236+00




A 238+50




A 238+00



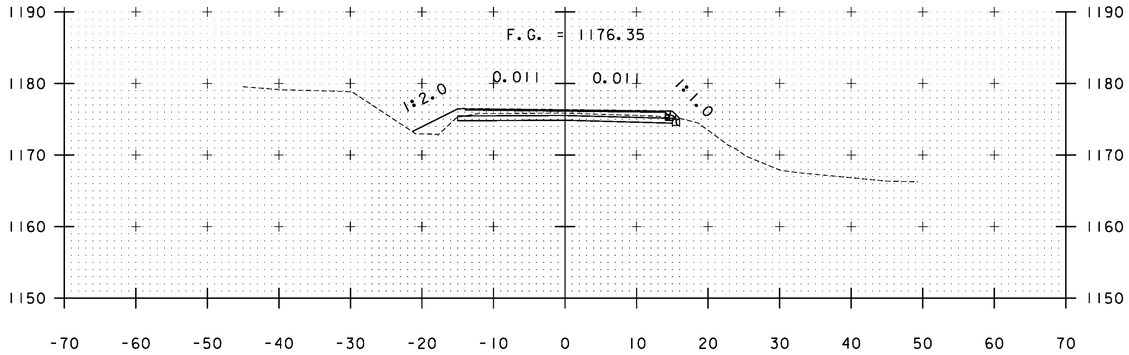

A 237+50

STA. A 236+00 TO STA. A 238+50

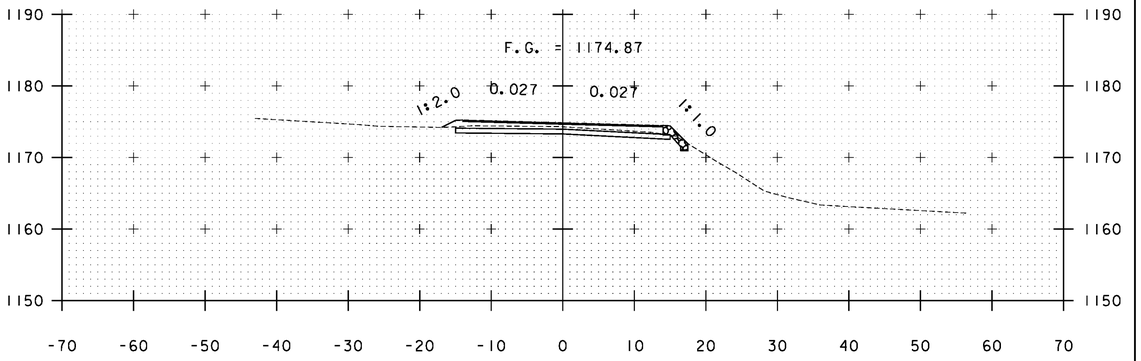
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

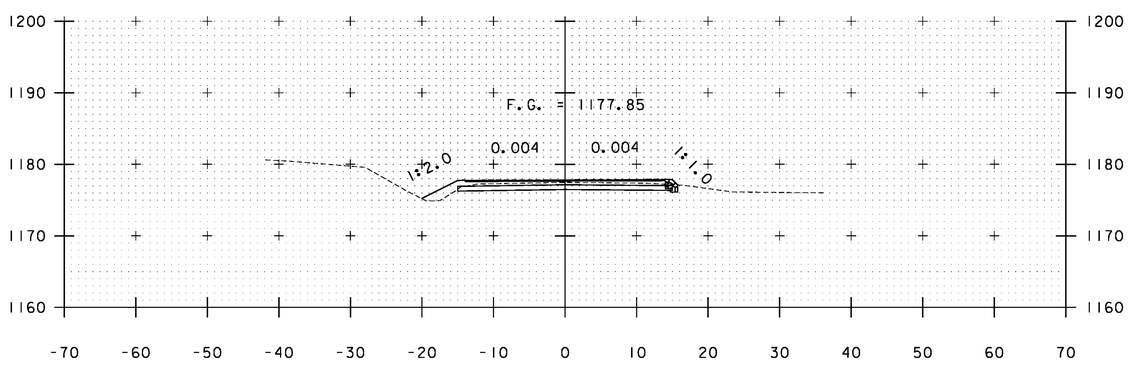
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 268 OF 444



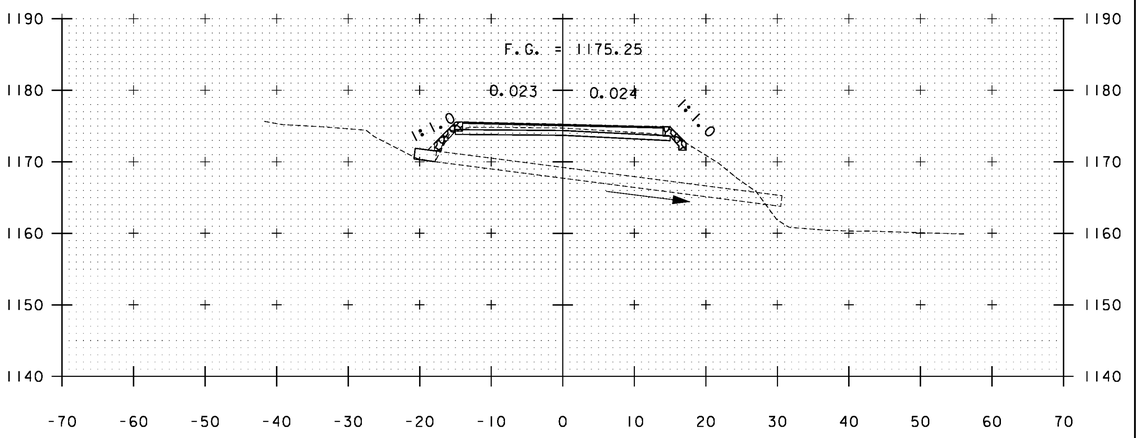

A 239+50




A 240+00



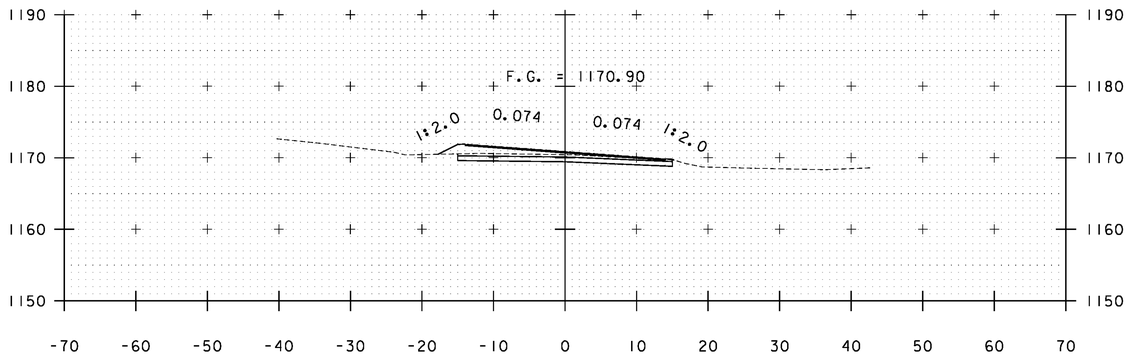

A 239+00



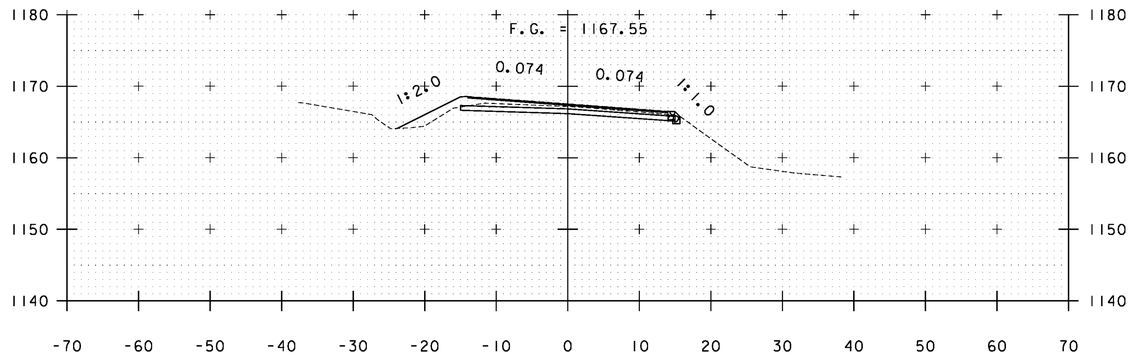

A 239+87

STA. A 239+00 TO STA. A 240+00

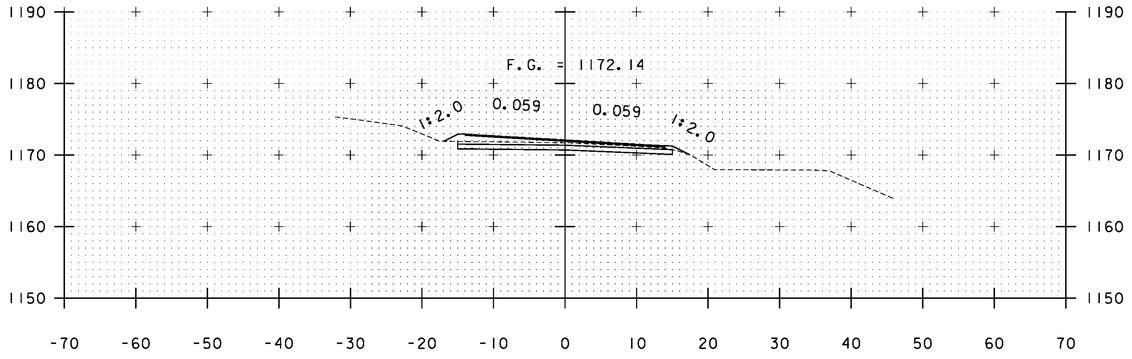
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 269 OF 444 |



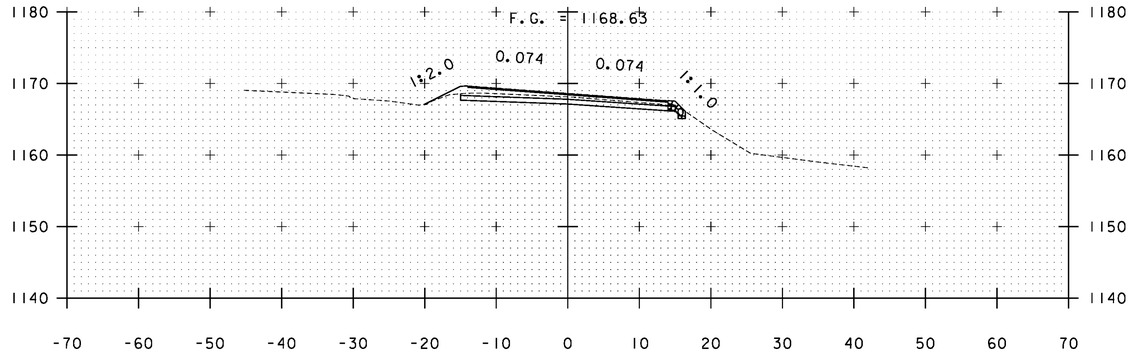

A 241+50



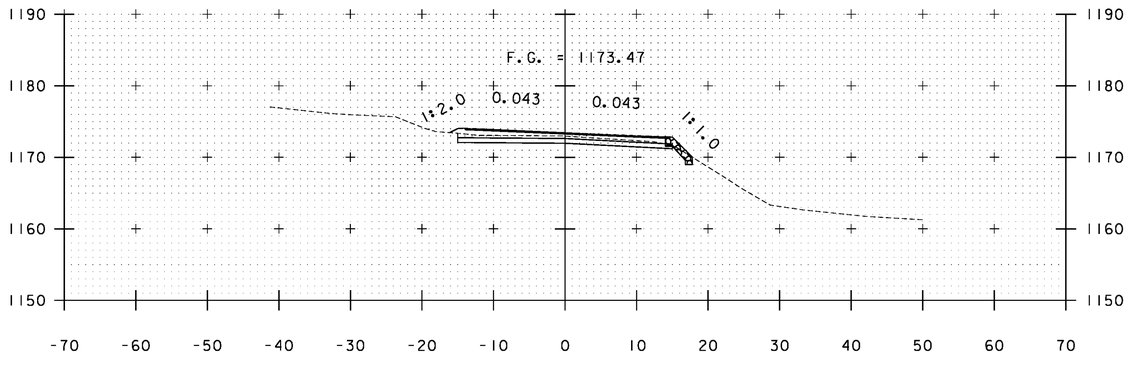

A 243+00



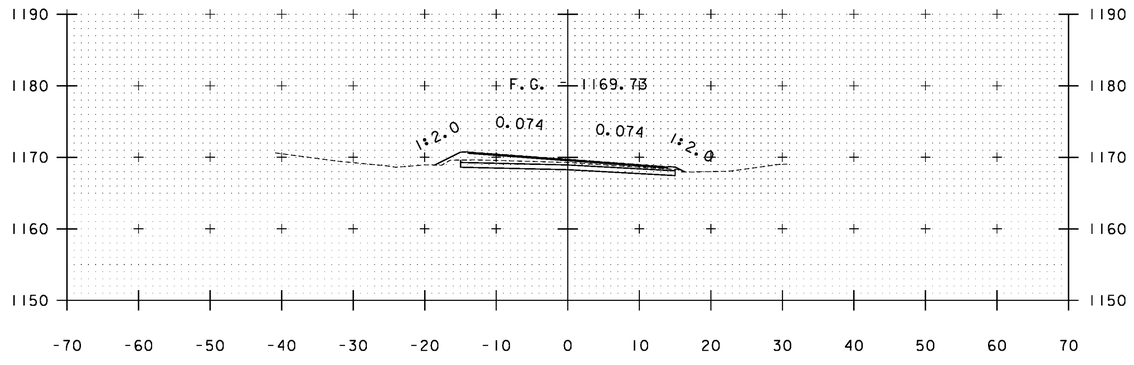

A 241+00




A 242+50




A 240+50



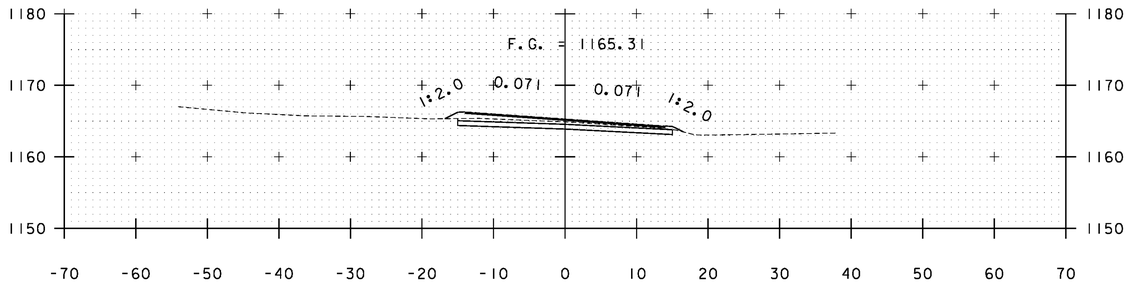

A 242+00

STA. A 240+50 TO STA. A 243+00

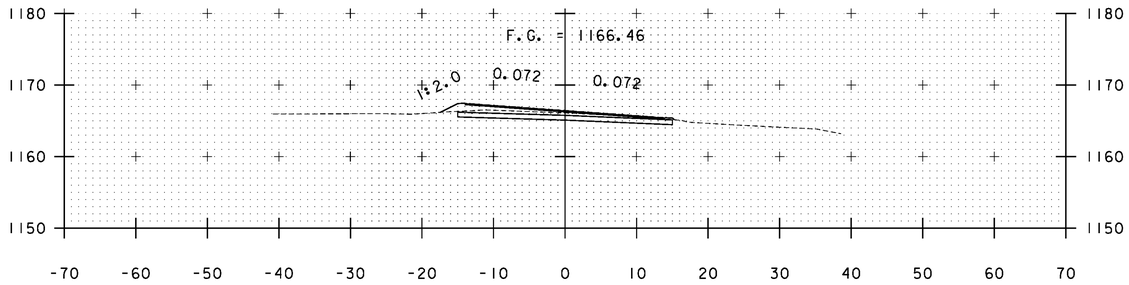
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

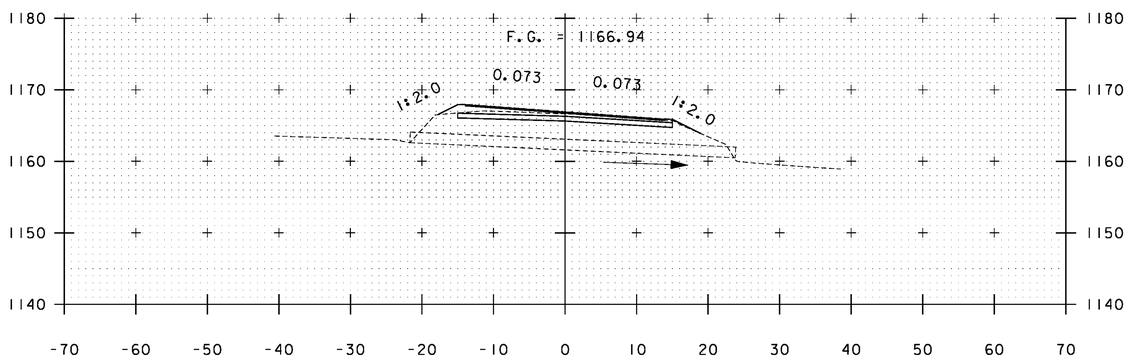
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 270 OF 444



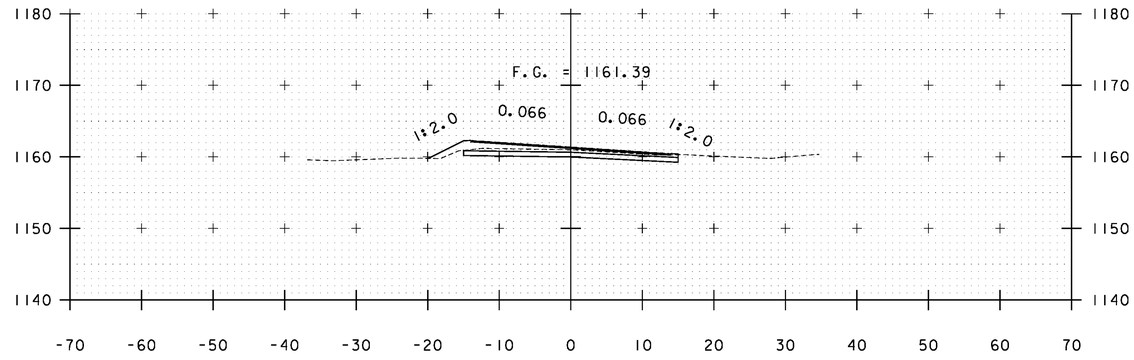

A 244+00




A 243+50



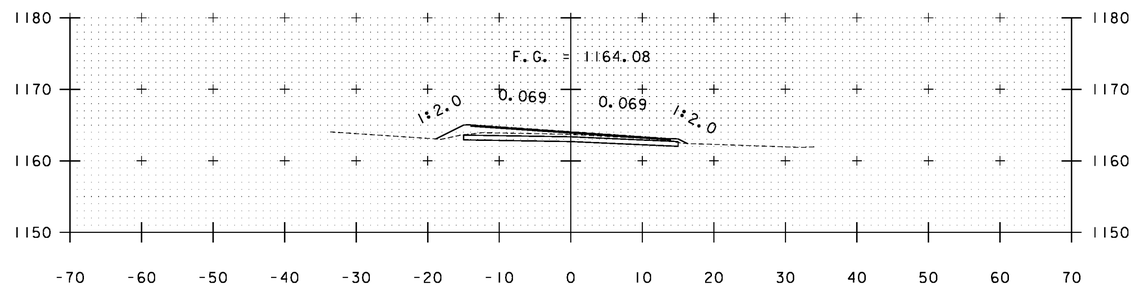

A 243+28




A 245+50



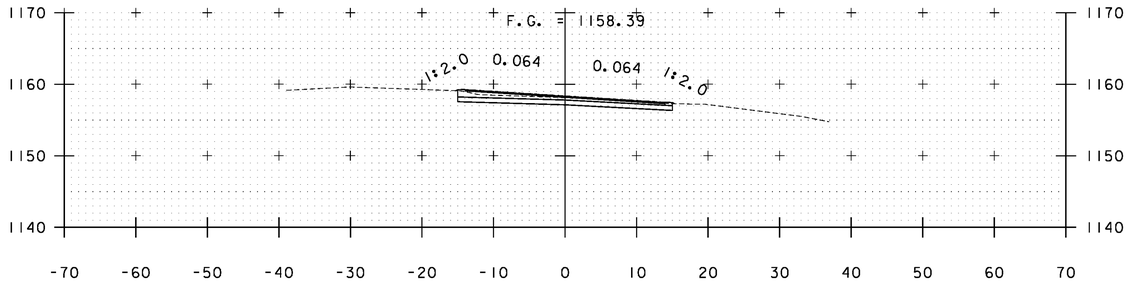

A 245+00



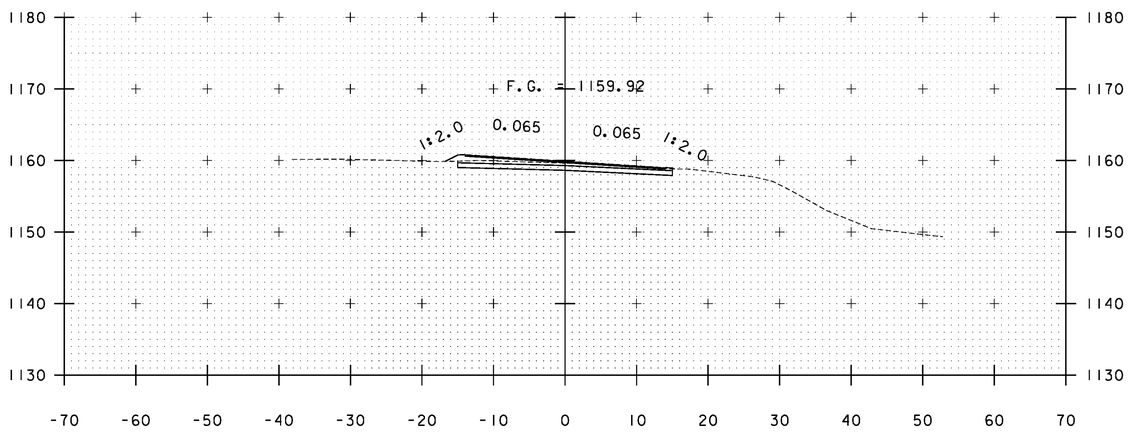

A 244+50

STA. A 243+28 TO STA. A 245+50

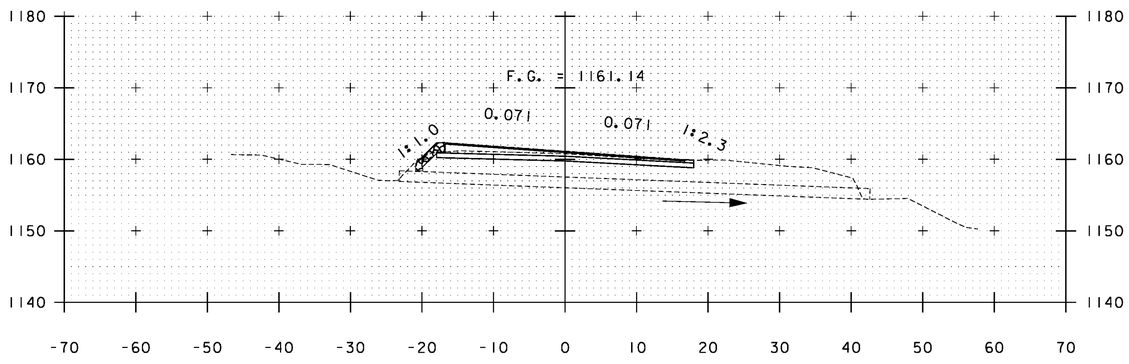
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 271 OF 444 |



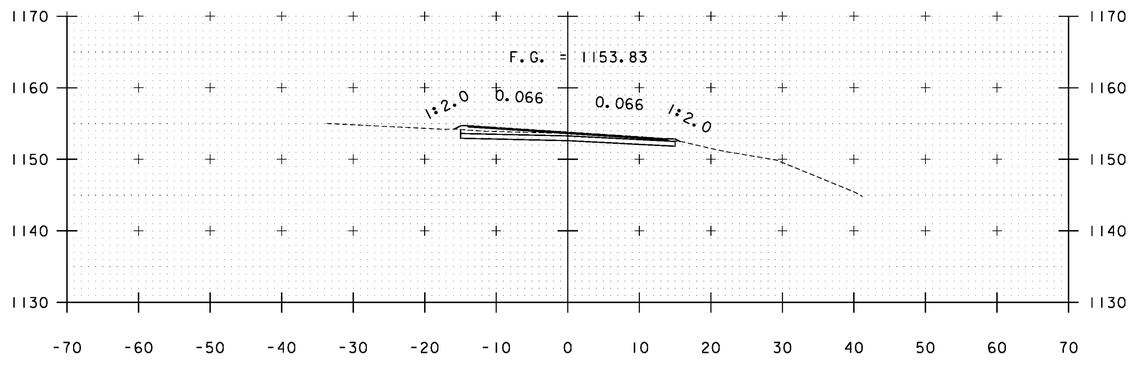

A 246+50



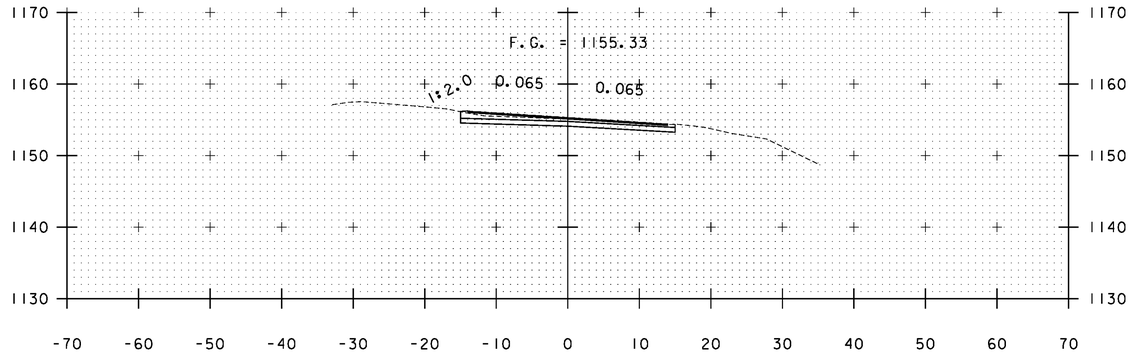

A 246+00



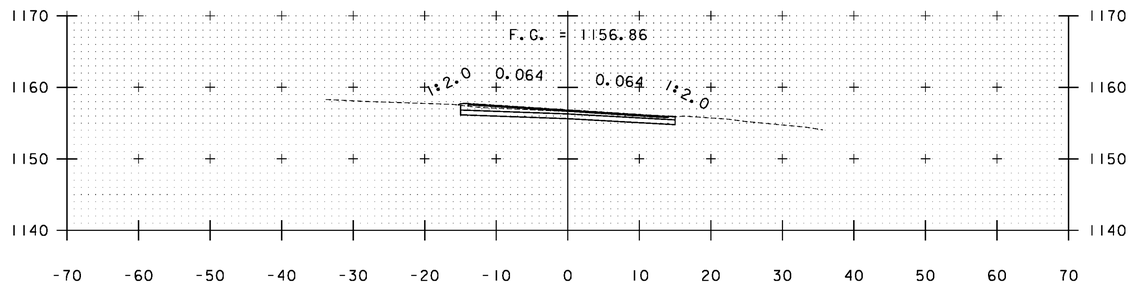

A 245+58




A 248+00




A 247+50



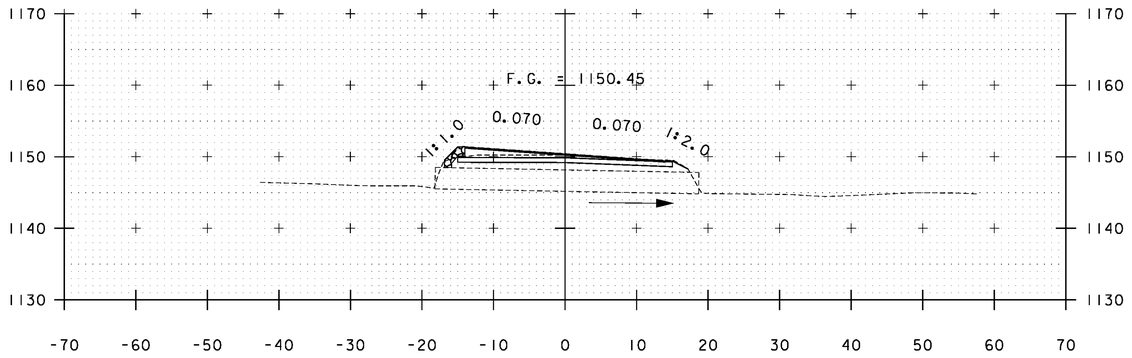

A 247+00

STA. A 245+58 TO STA. A 248+00

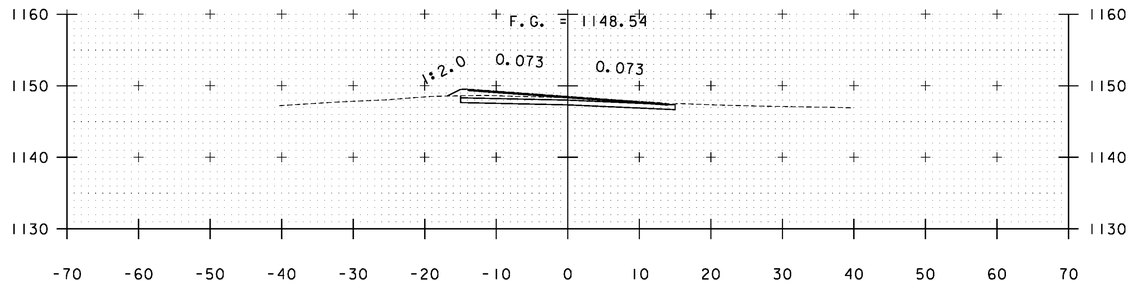
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

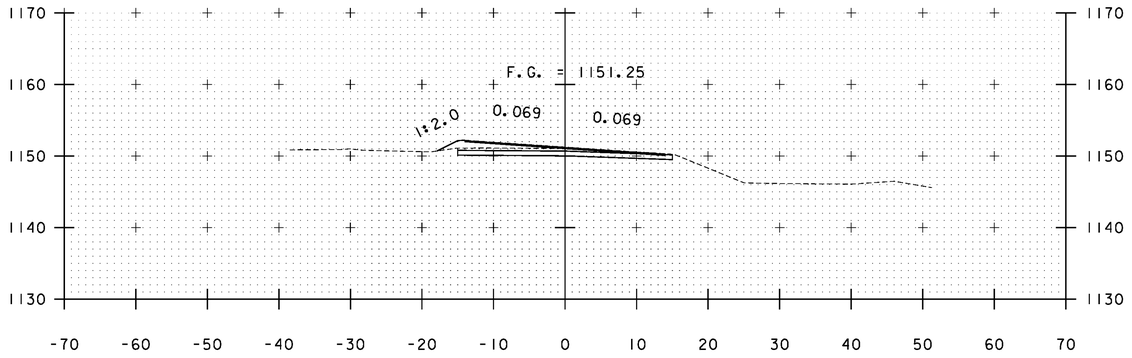
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 272 OF 444



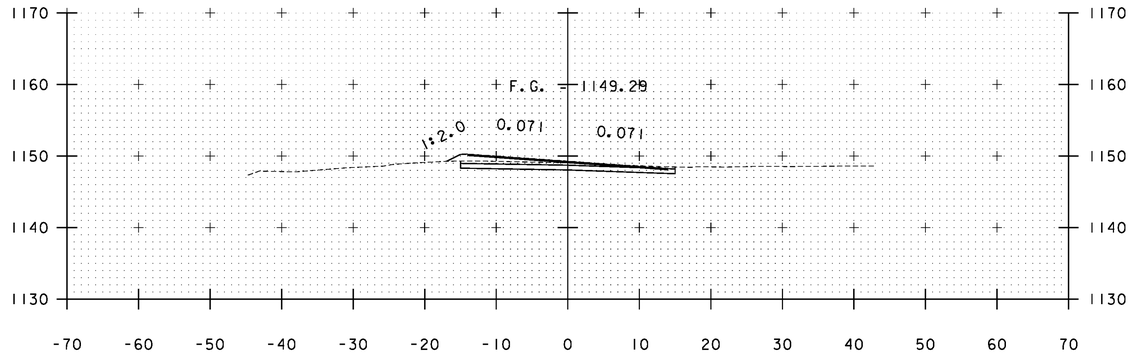

A 249+37



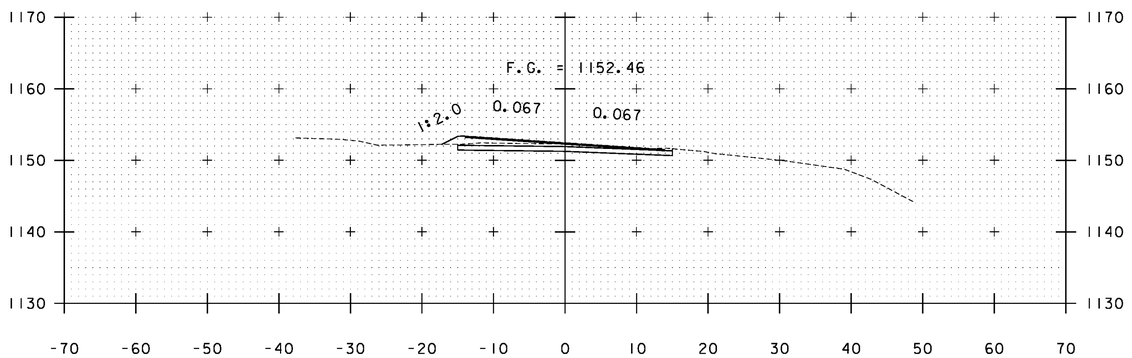

A 250+50



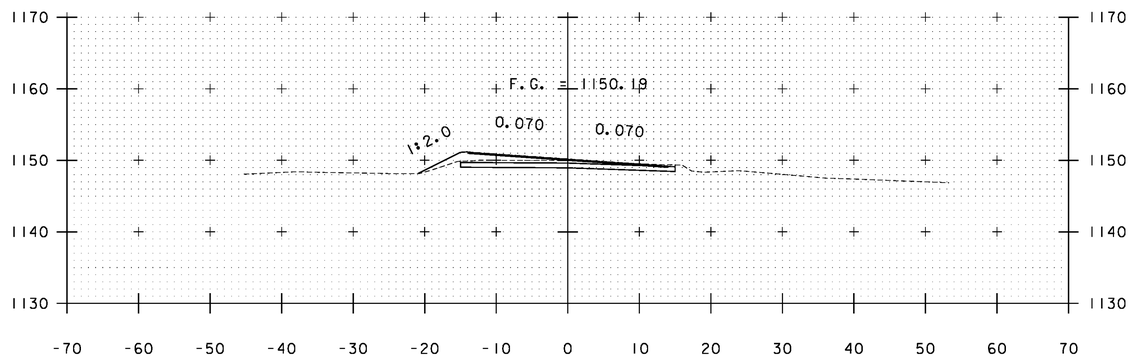

A 249+00




A 250+00



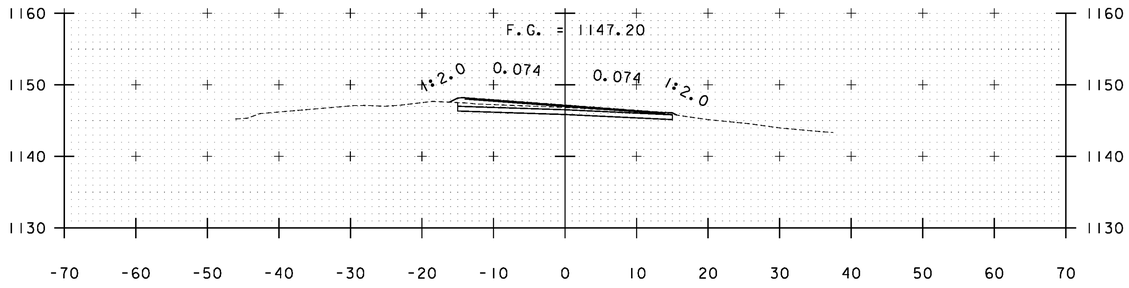

A 248+50



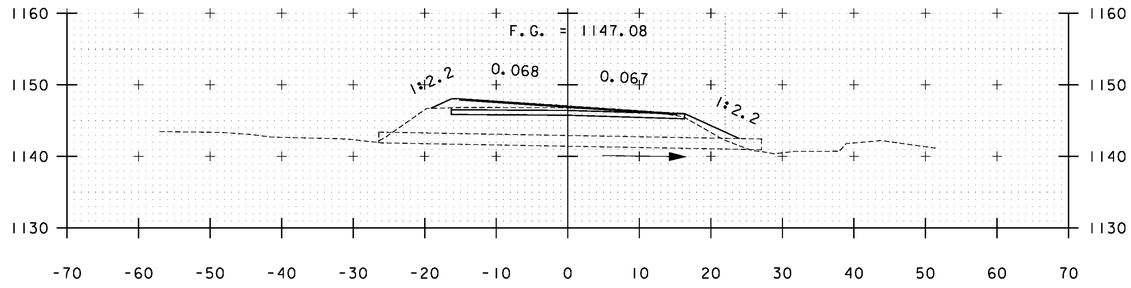

A 249+50

STA. A 248+50 TO STA. A 250+50

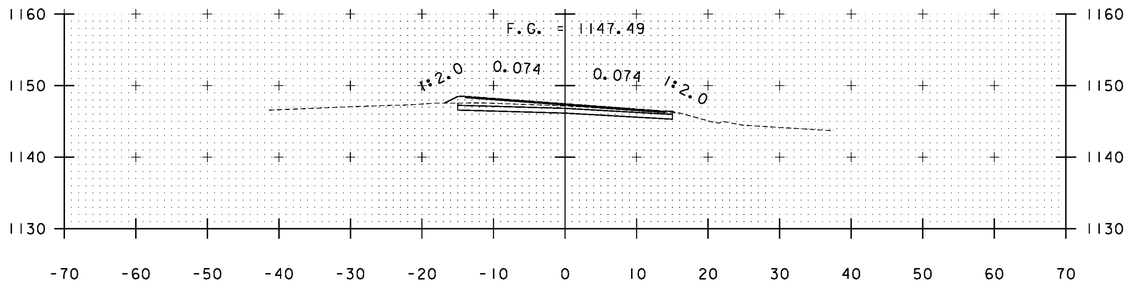
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 273 OF 444 |



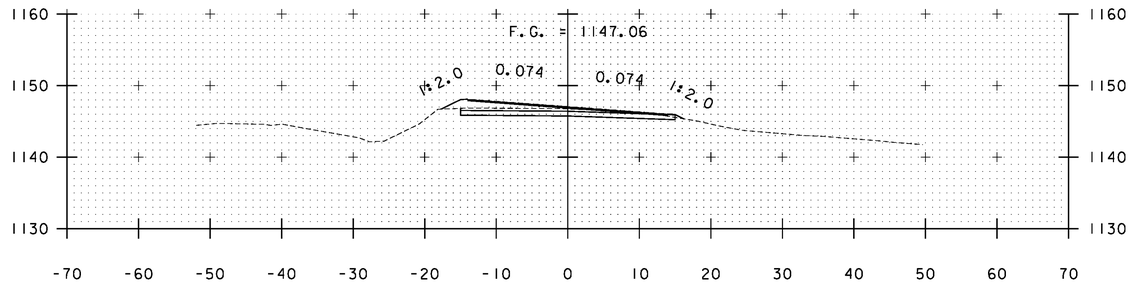

A 252+00



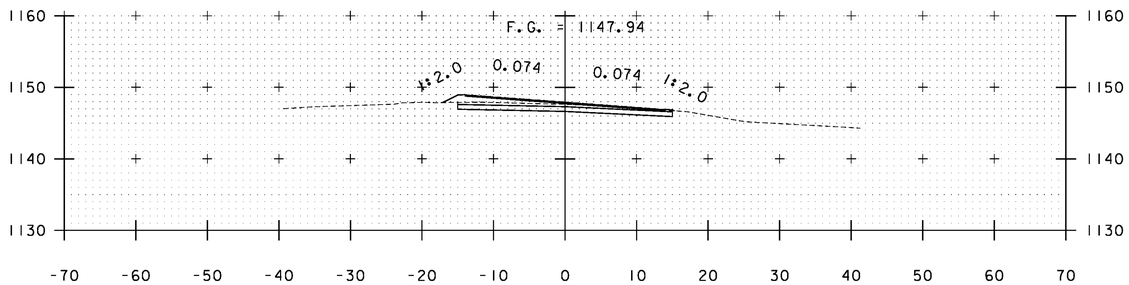

A 253+07



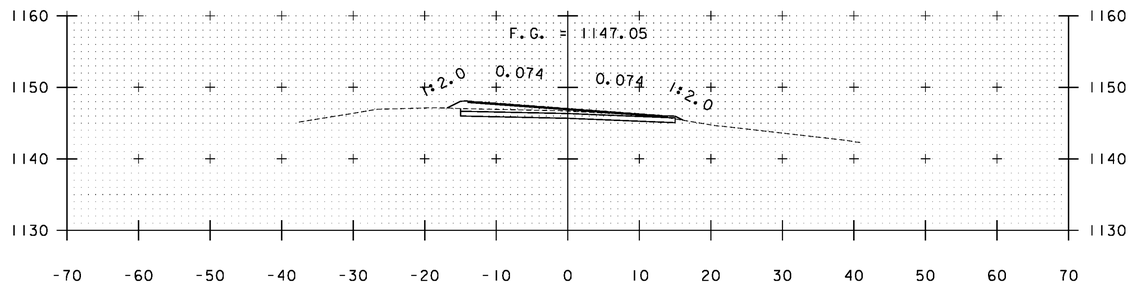

A 251+50




A 253+00



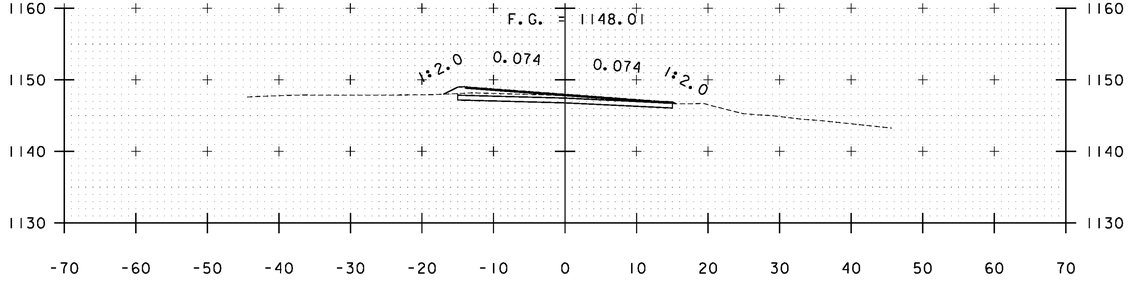

A 251+00



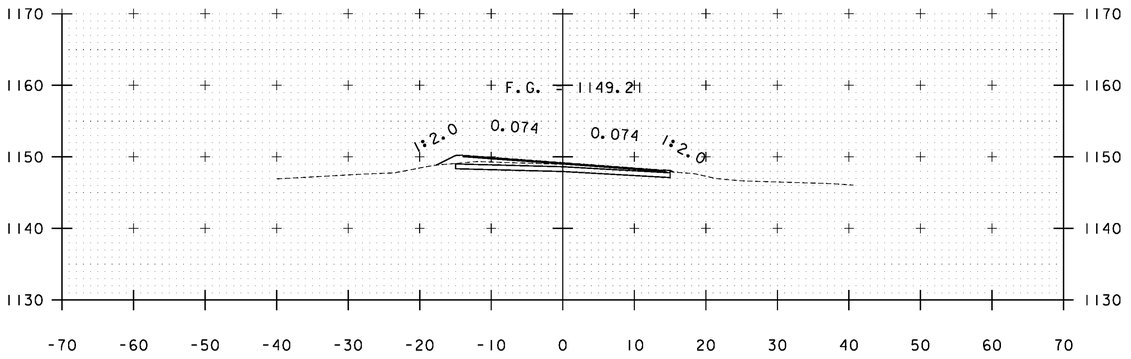

A 252+50

STA. A 251+00 TO STA. A 253+07

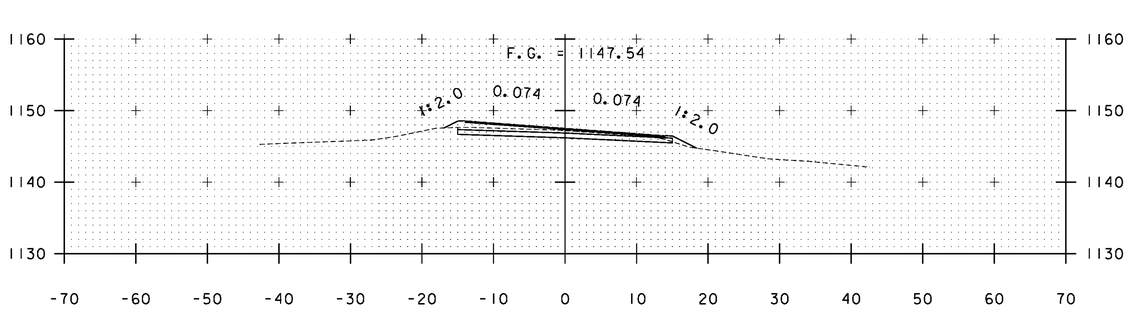
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 274 OF 444 |



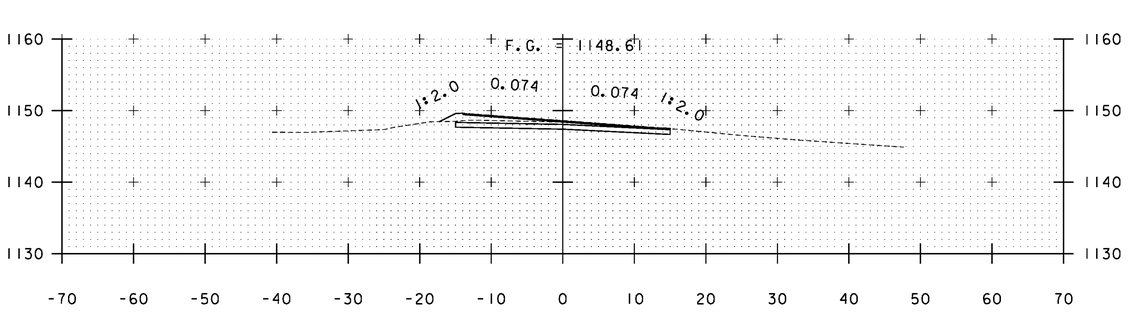

A 254+50



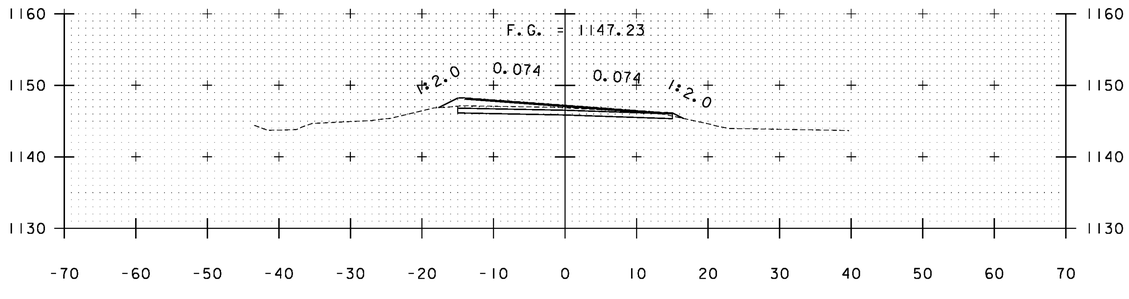

A 255+50




A 254+00



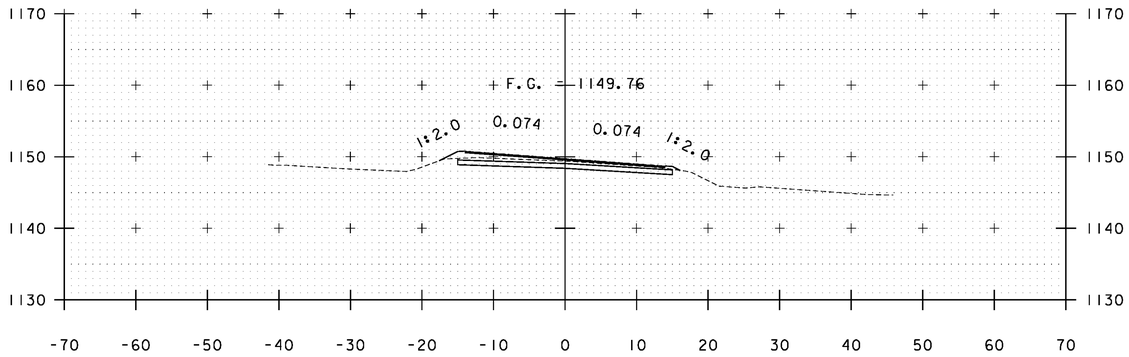

A 255+00



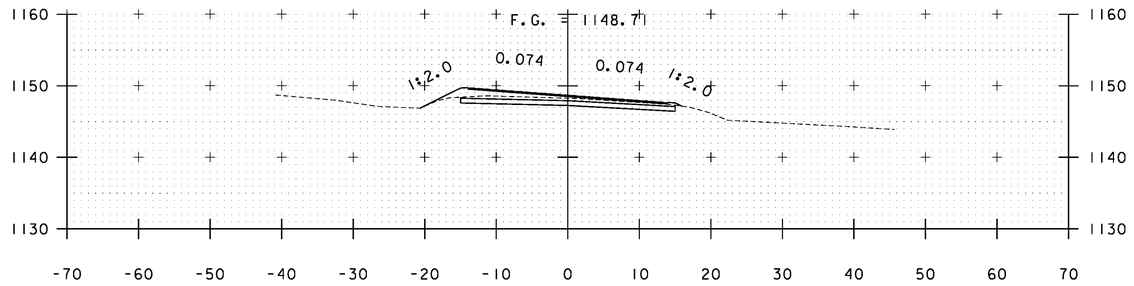

A 253+50

STA. A 253+50 TO STA. A 255+50

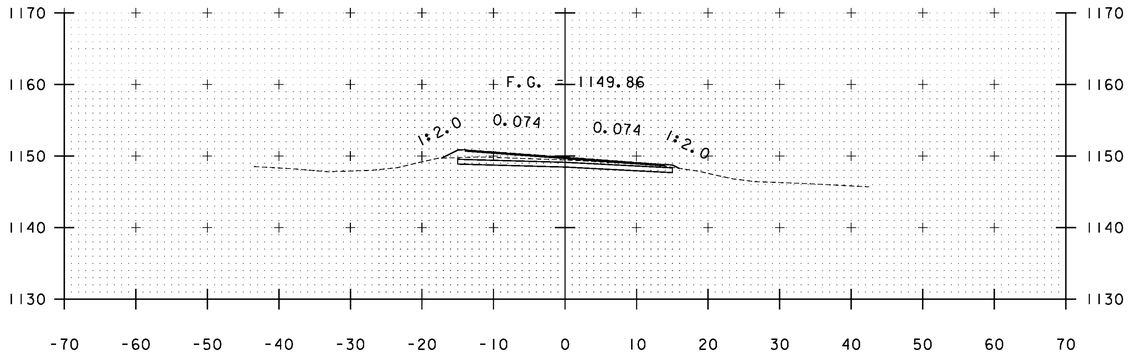
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 275 OF 444 |



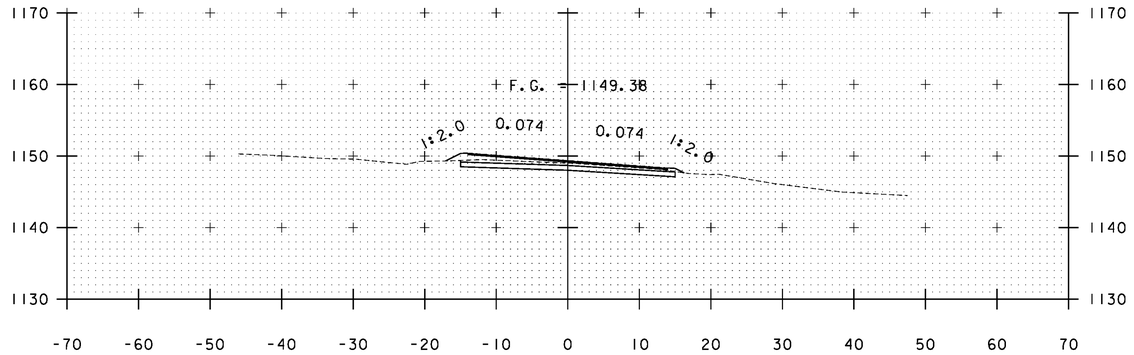

A 257+00



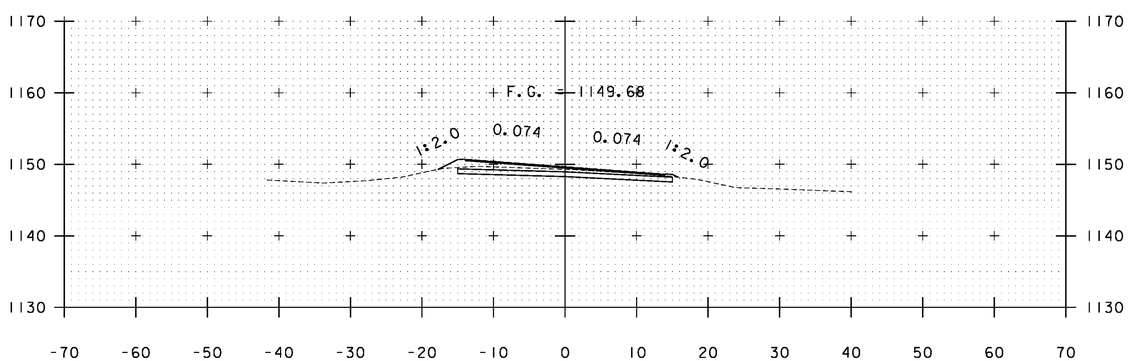

A 258+00



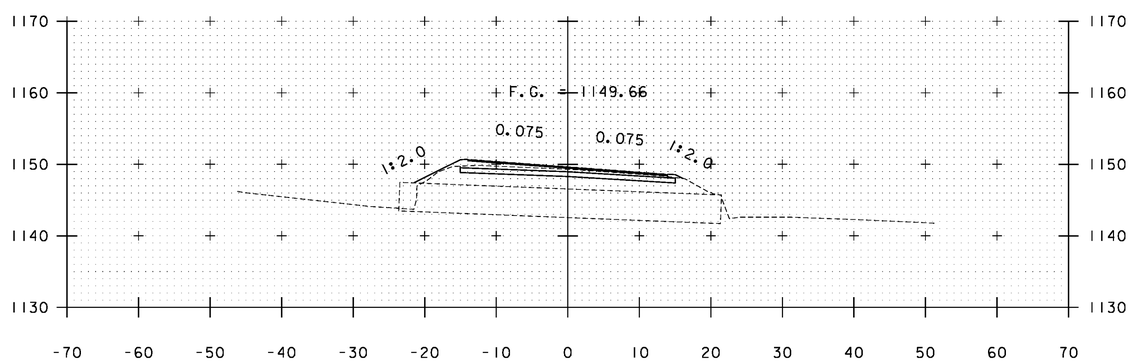

A 256+50




A 257+50




A 256+00



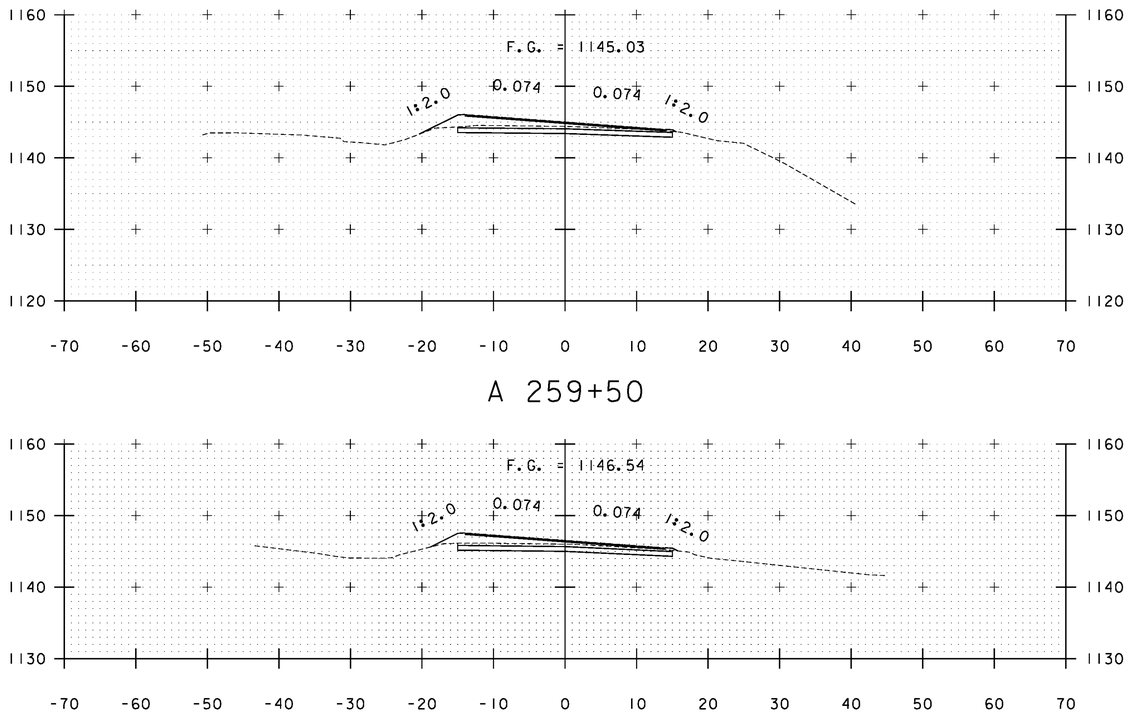

A 257+18

STA. A 256+00 TO STA. A 258+00

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

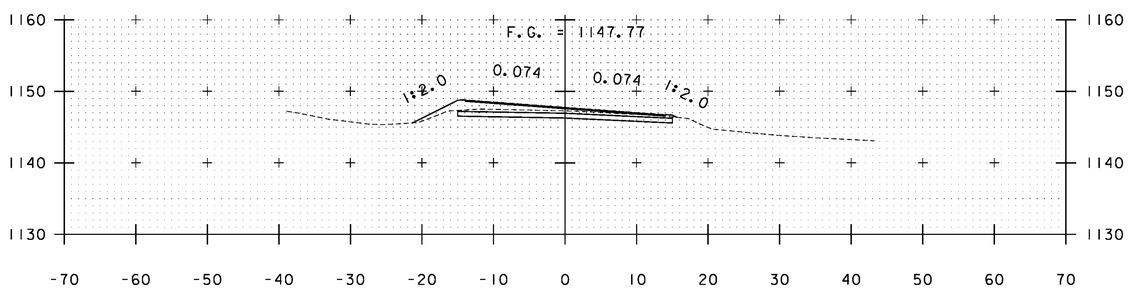
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 276 OF 444



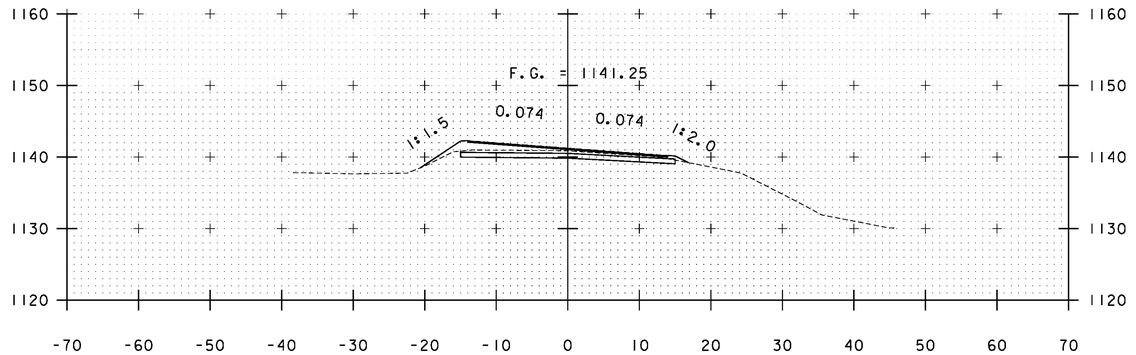

A 259+50



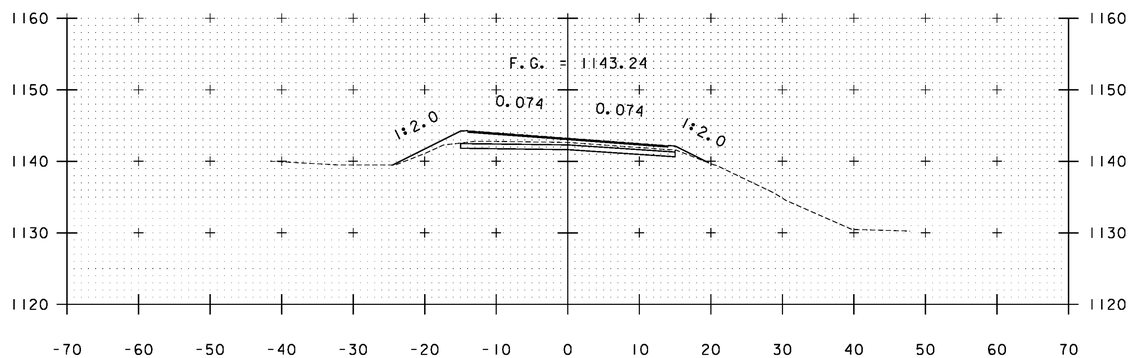

A 259+00




A 258+50




A 260+50



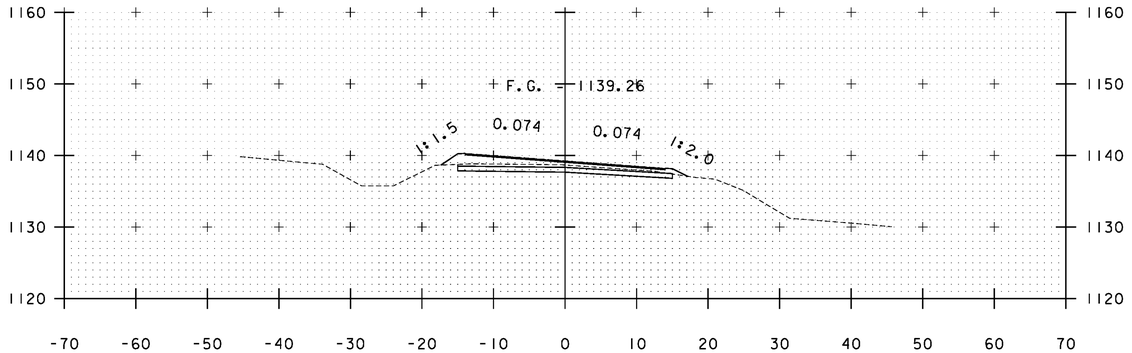

A 260+00

STA. A 258+50 TO STA. A 260+50

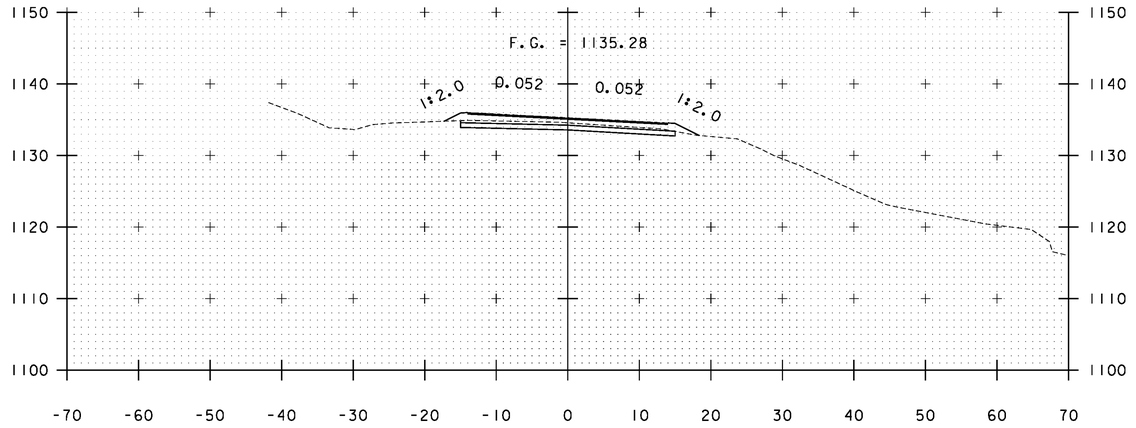
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

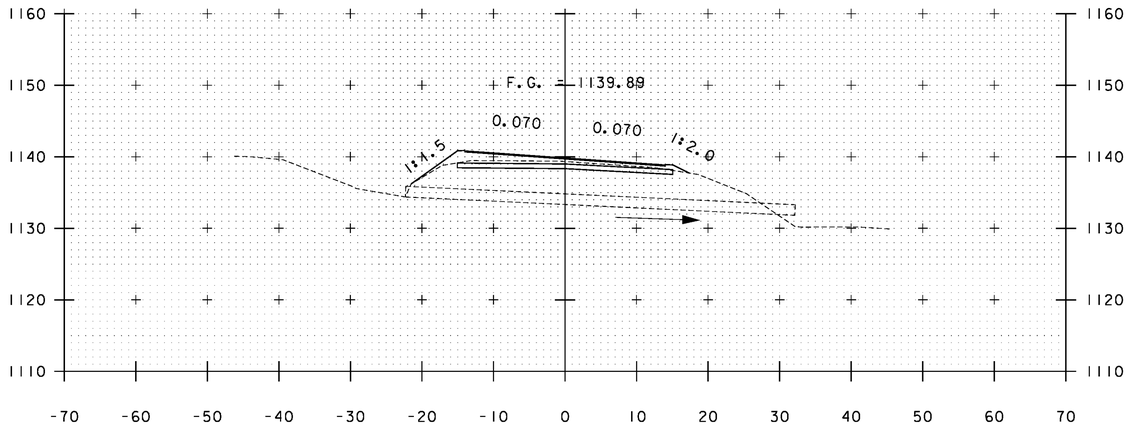
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 277 OF 444



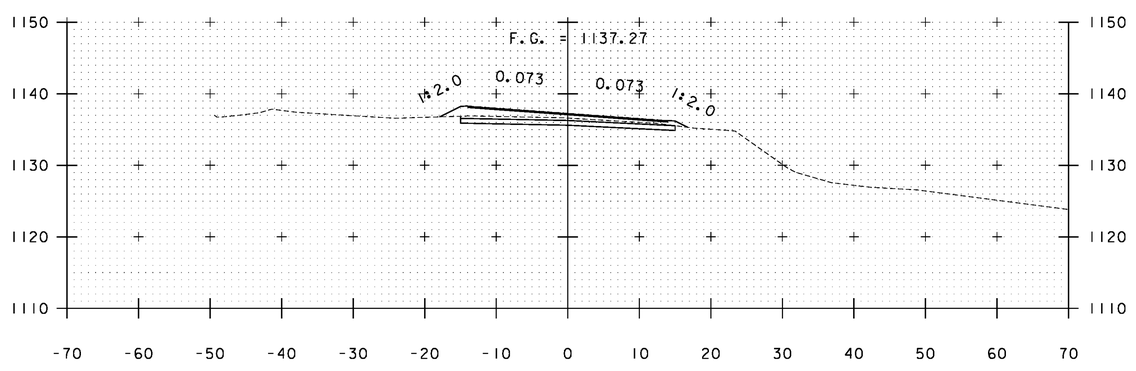

A 261+00




A 262+00



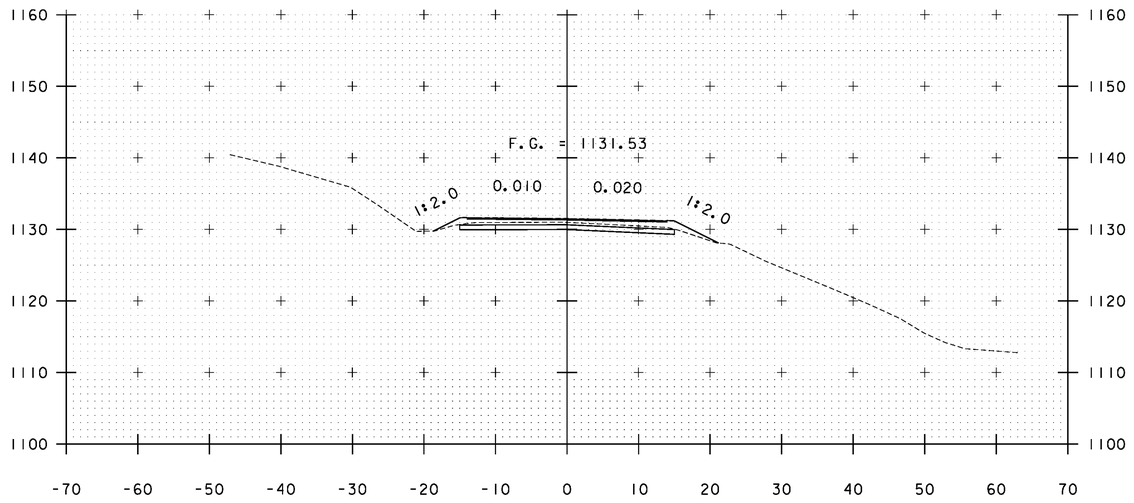

A 260+84



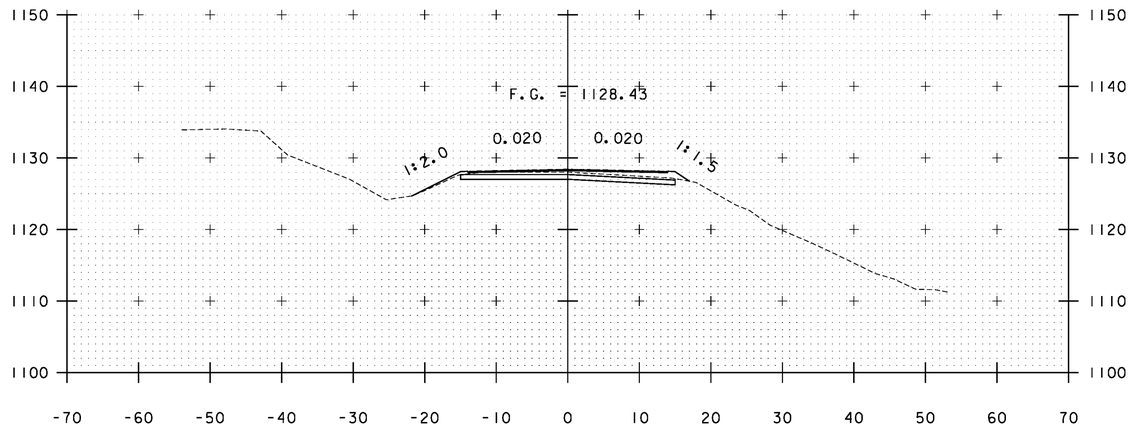

A 261+50

STA. A 260+84 TO STA. A 262+00

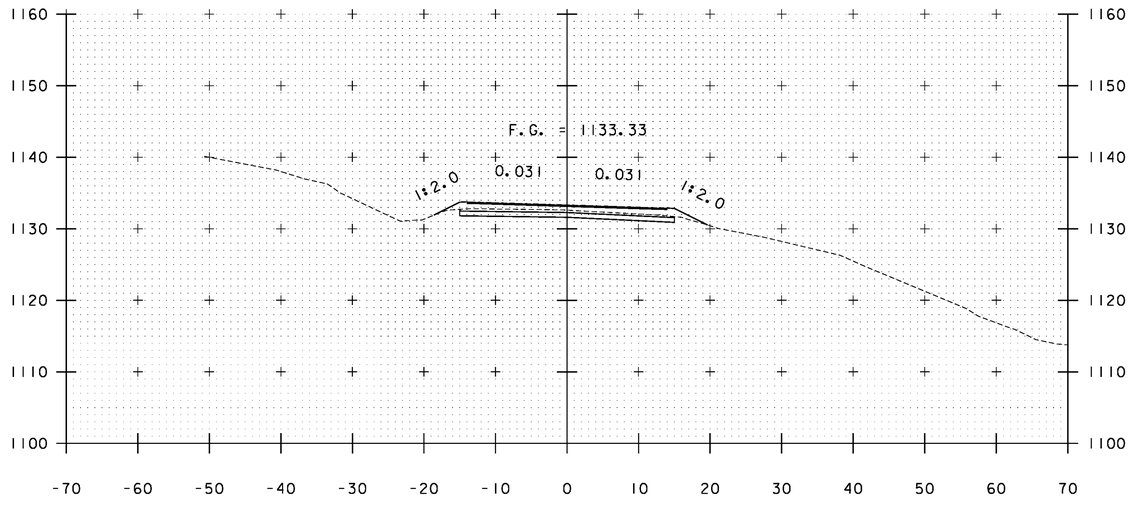
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 278 OF 444 |



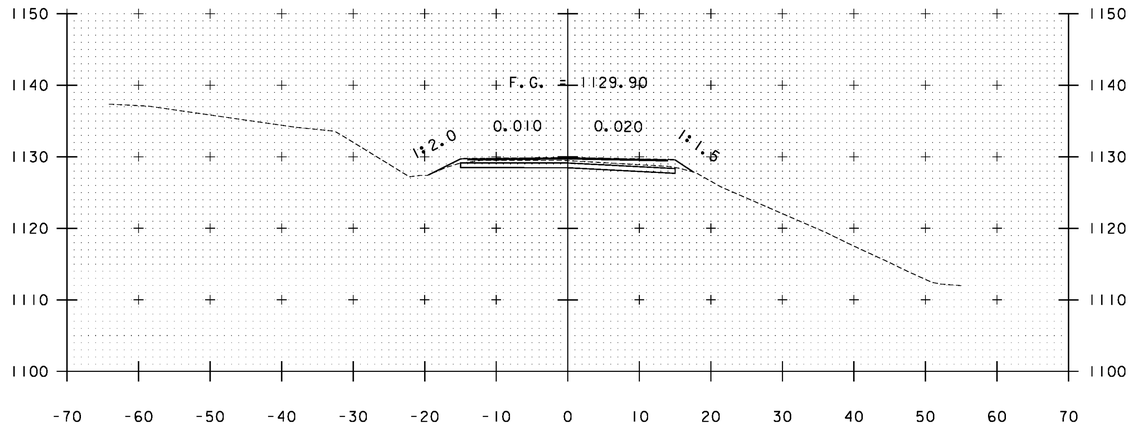

A 263+00




A 264+00



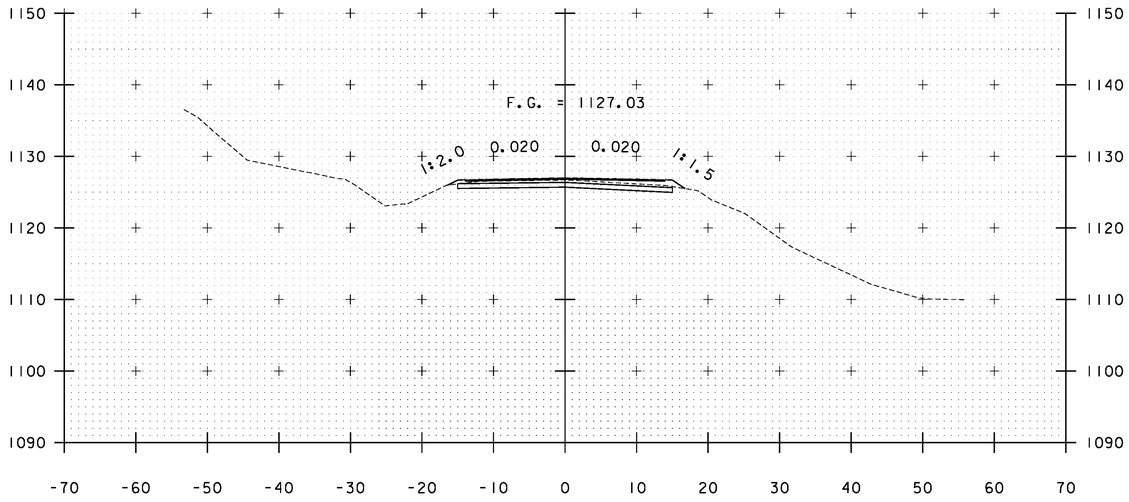

A 262+50



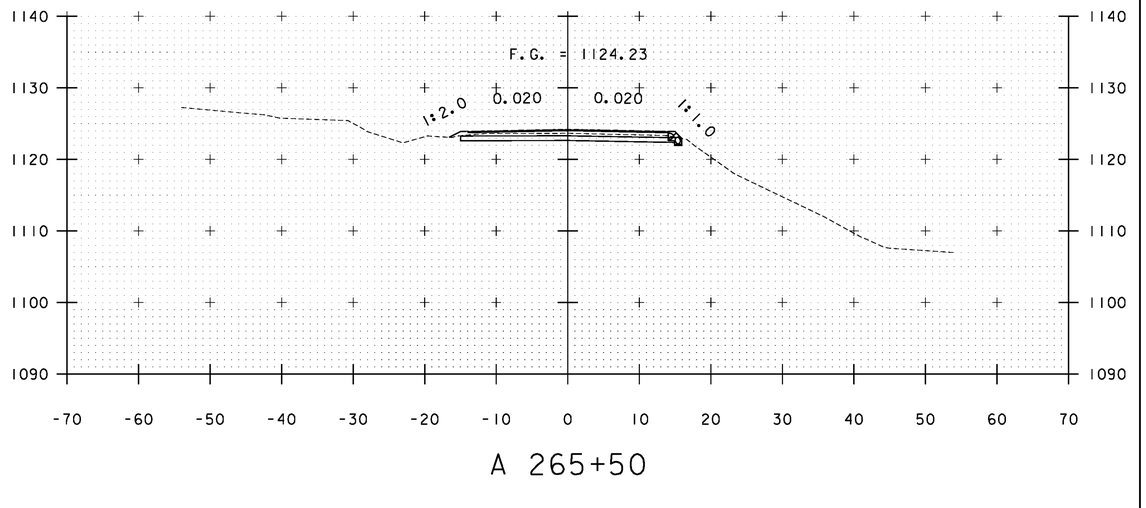

A 263+50

STA. A 262+50 TO STA. A 264+00

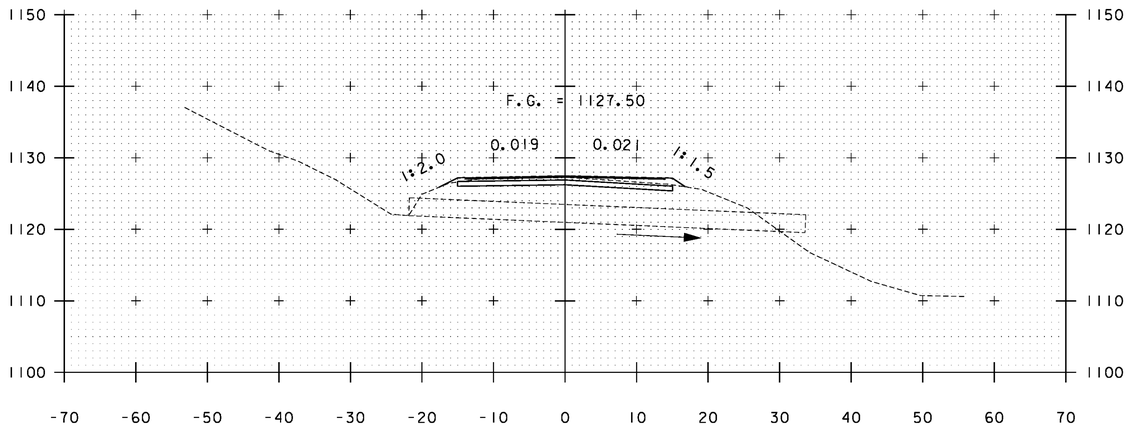
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 279 OF 444 |



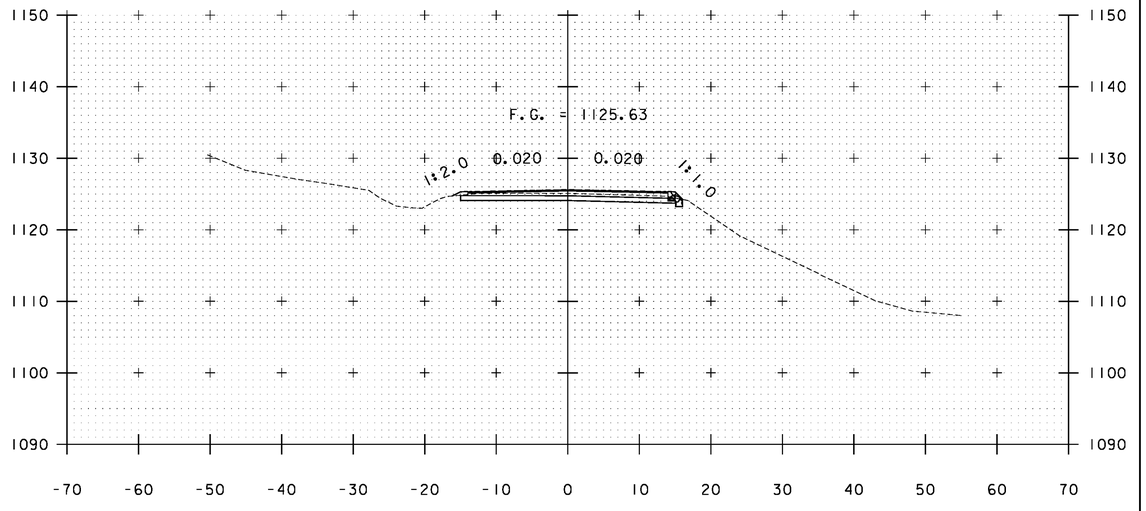

A 264+50




A 265+50




A 264+33



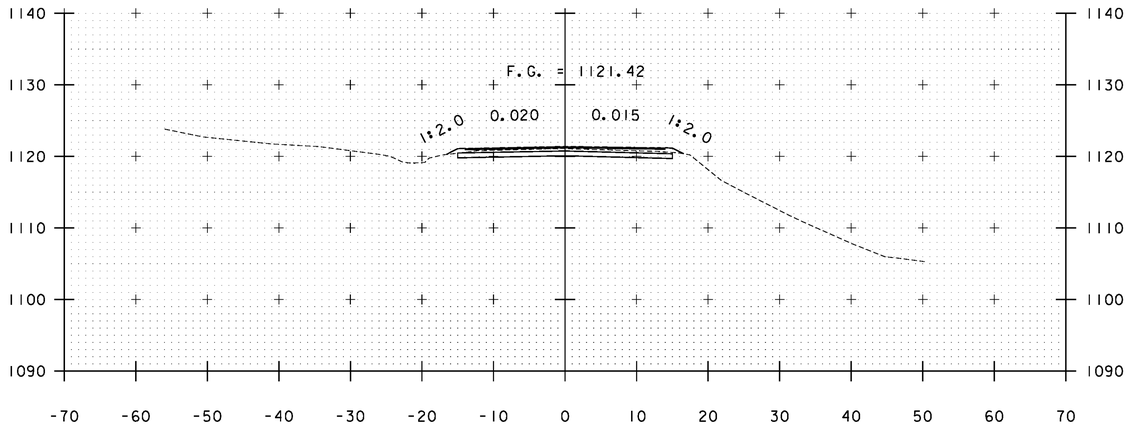

A 265+00

STA. A 264+33 TO STA. A 265+50

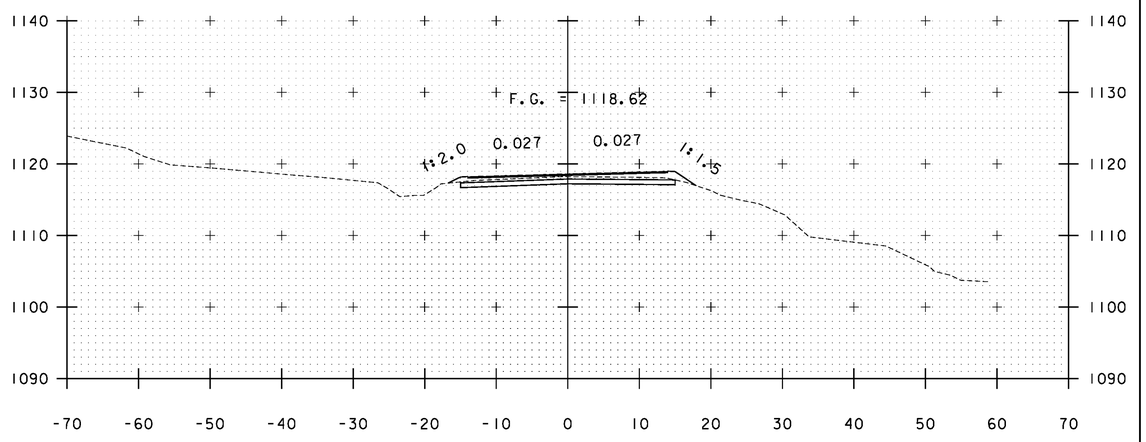
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

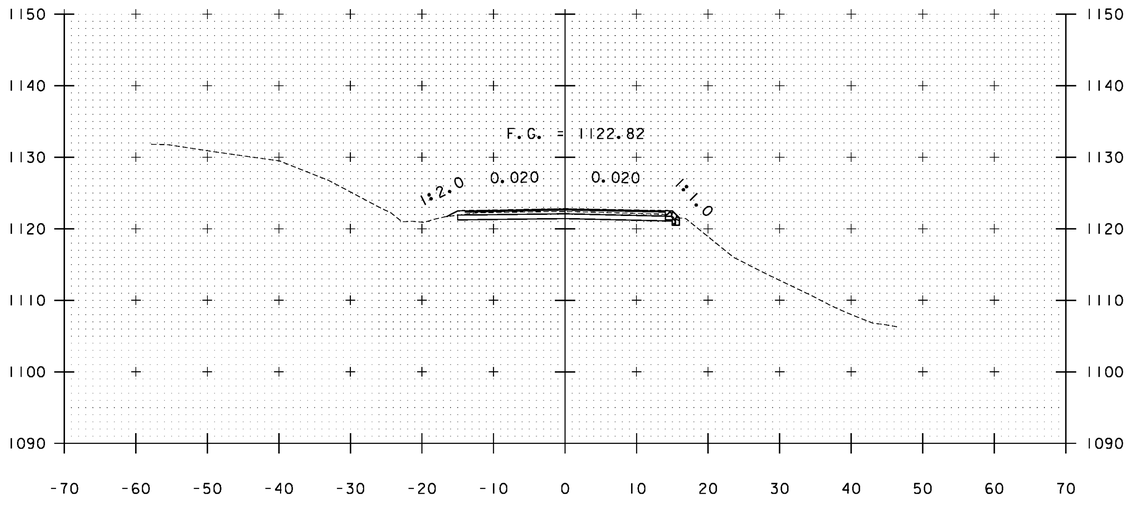
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 280 OF 444



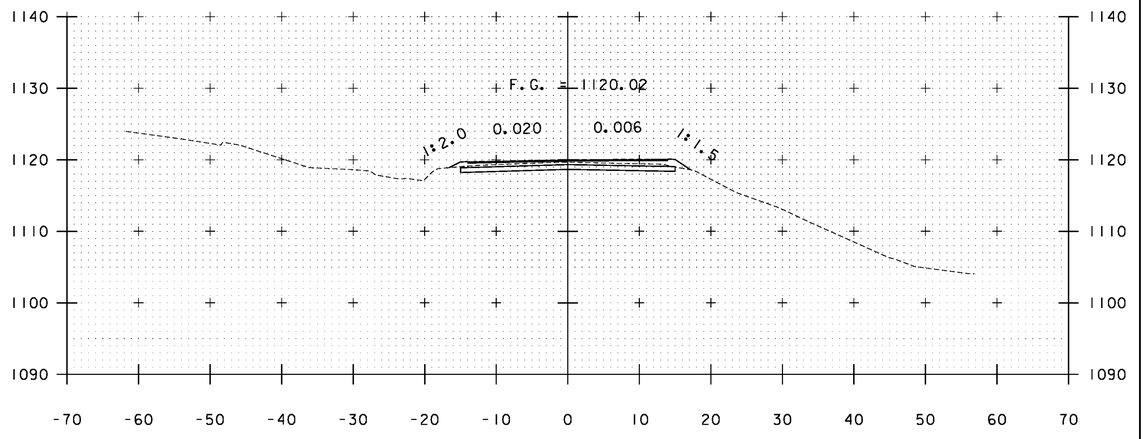

A 266+50




A 267+50



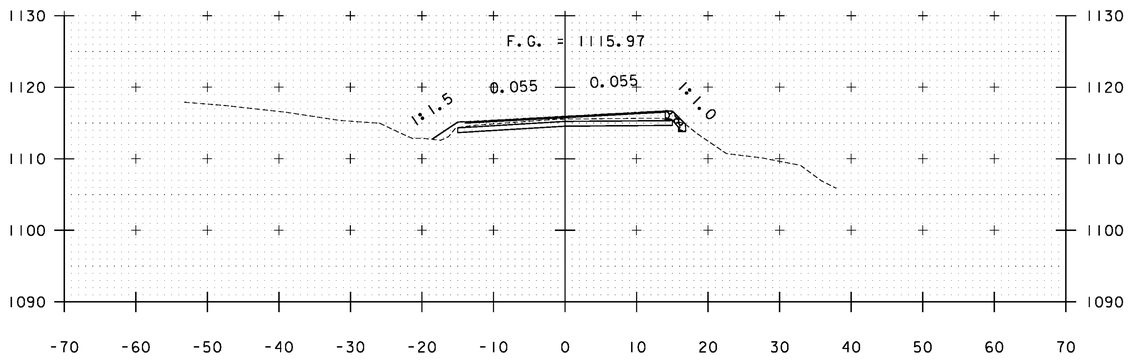

A 266+00



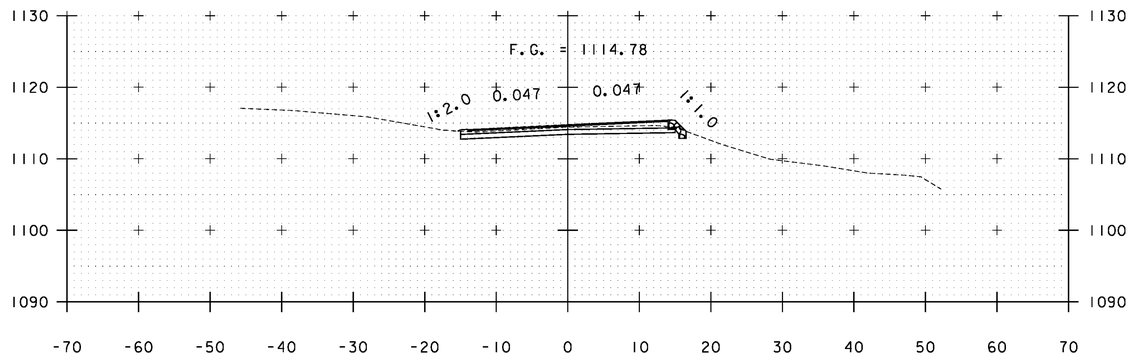

A 267+00

STA. A 266+00 TO STA. A 267+50

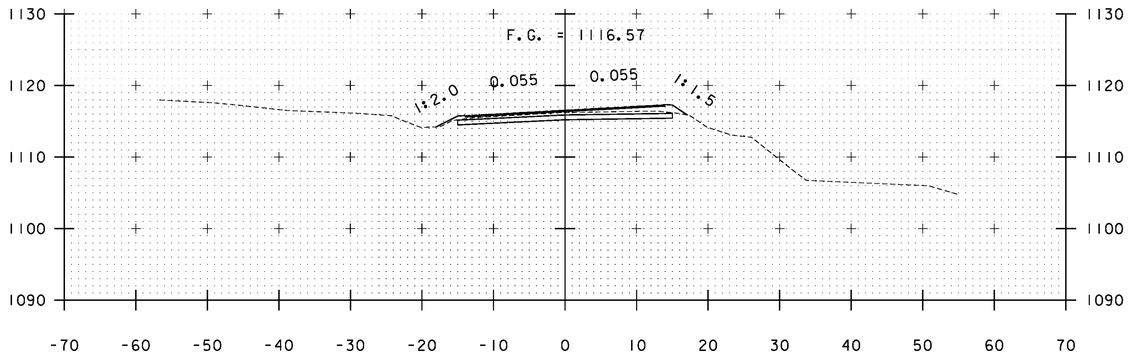
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 281 OF 444 |



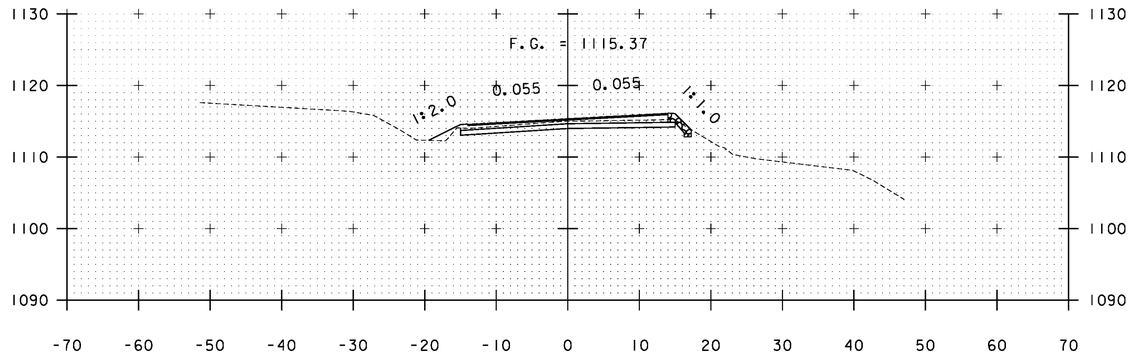

A 269+00



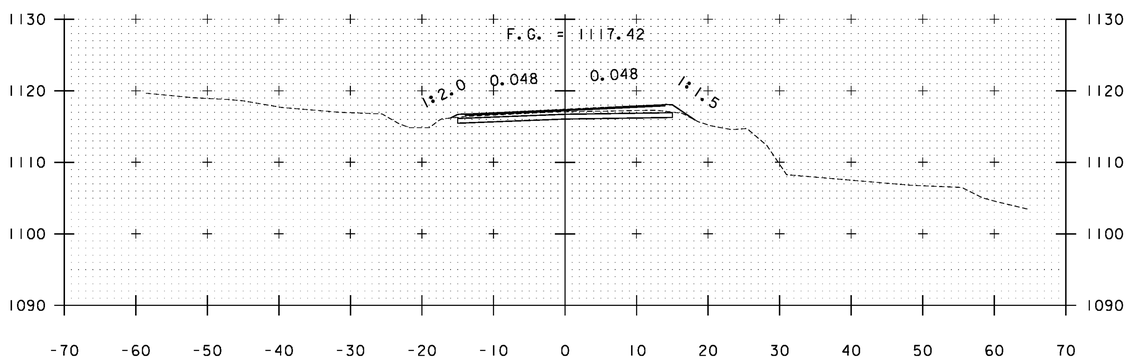

A 270+00



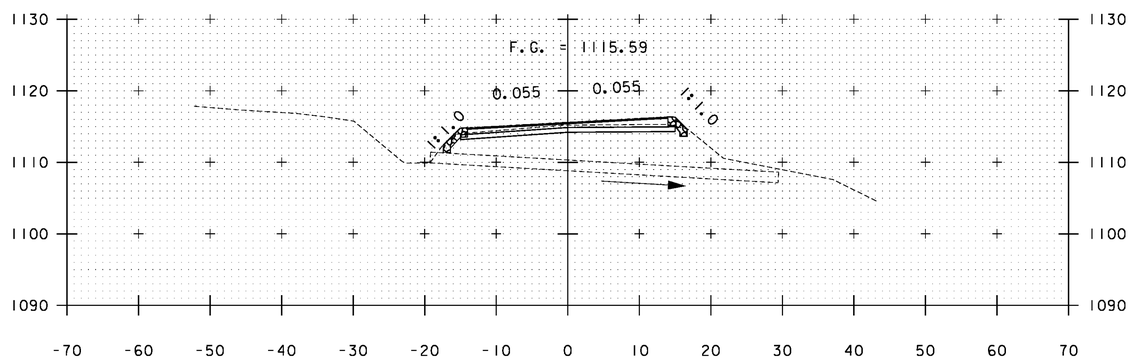

A 268+50




A 269+50




A 268+00



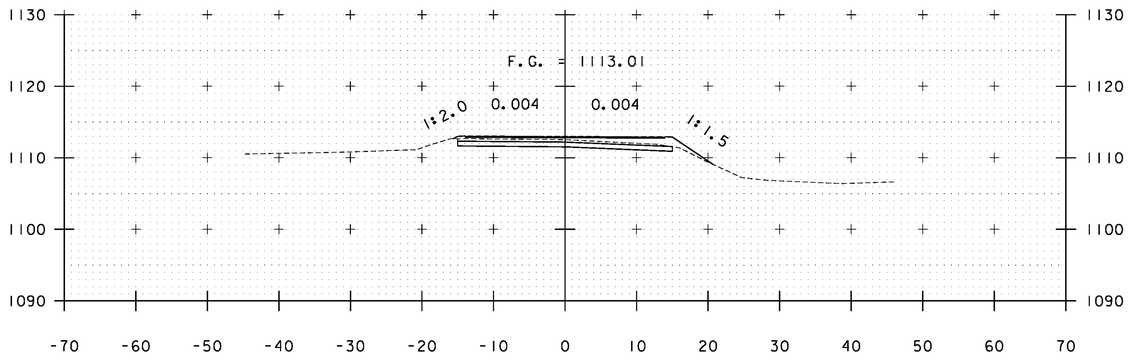

A 269+31

STA. A 268+00 TO STA. A 270+00

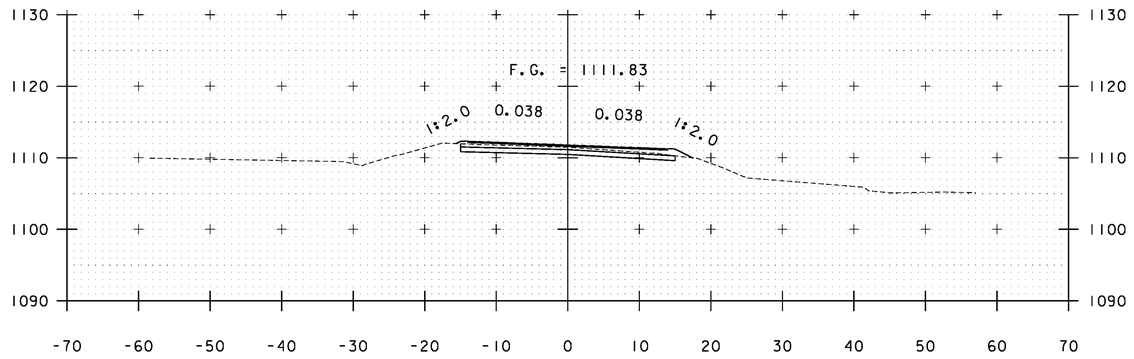
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

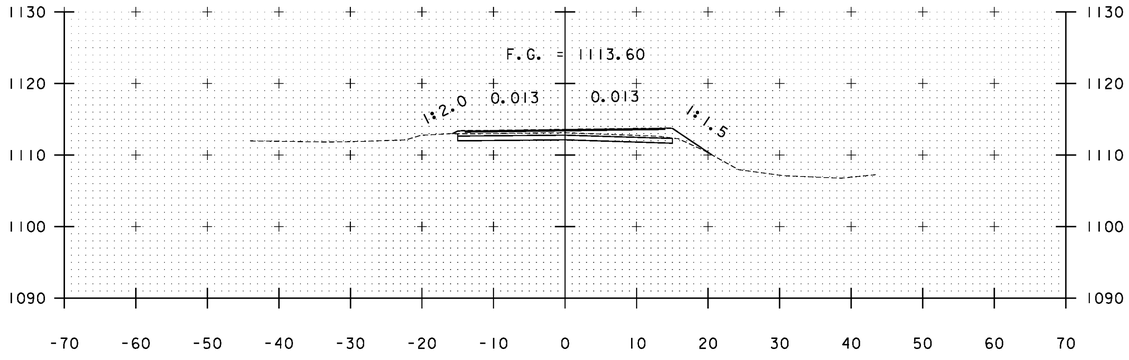
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 282 OF 444



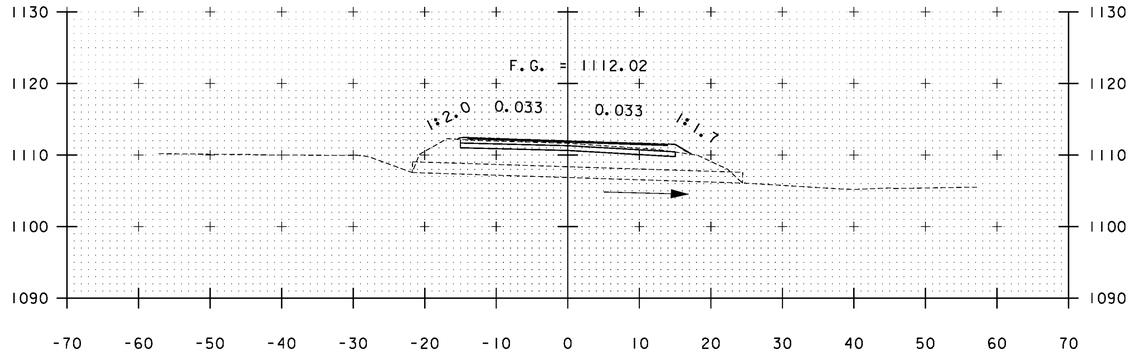

A 271+50



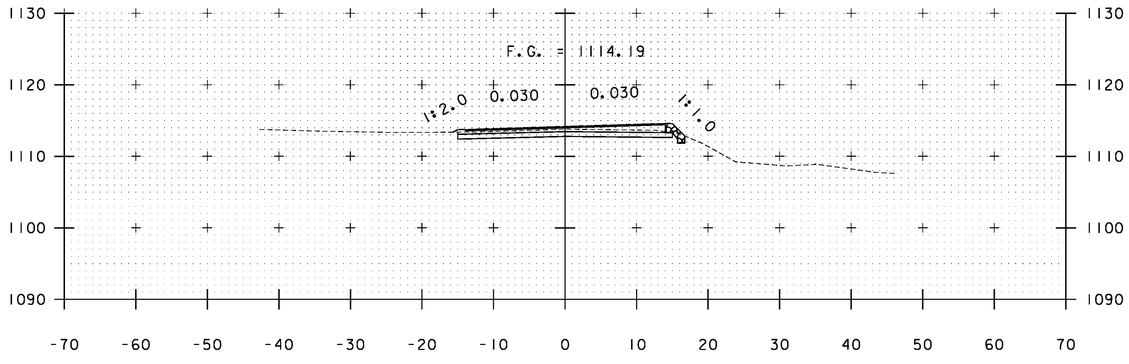

A 272+50



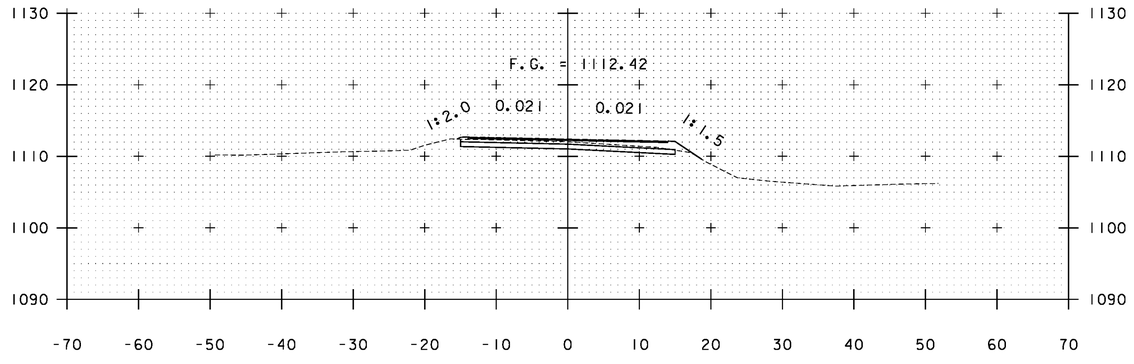

A 271+00




A 272+34




A 270+50



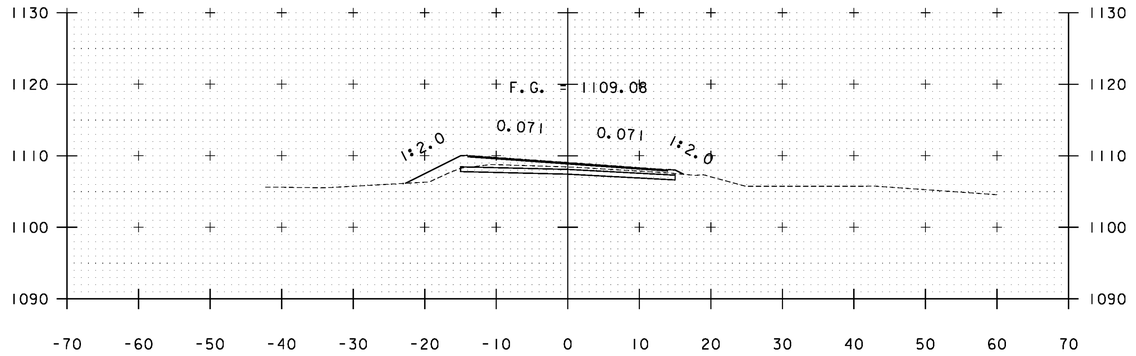

A 272+00

STA. A 270+50 TO STA. A 272+50

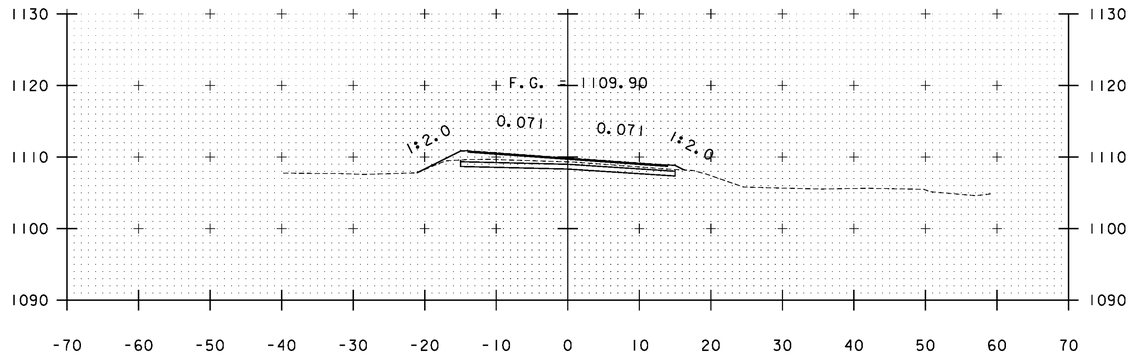
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

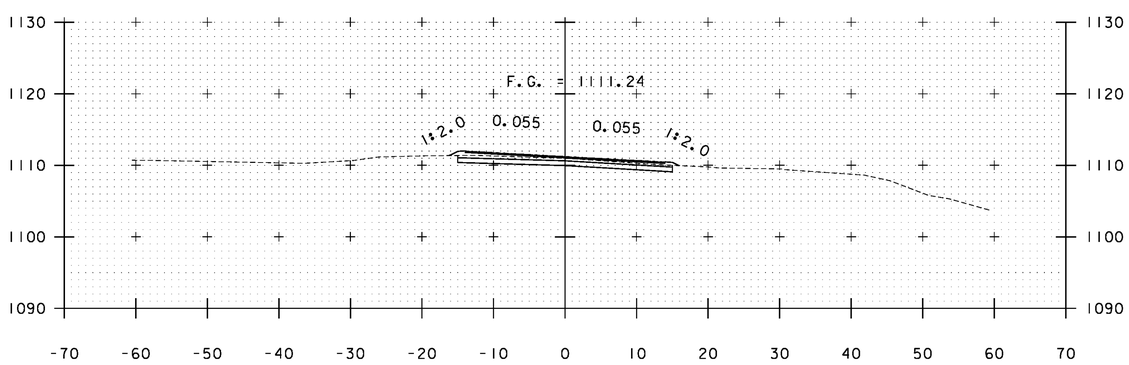
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 283 OF 444



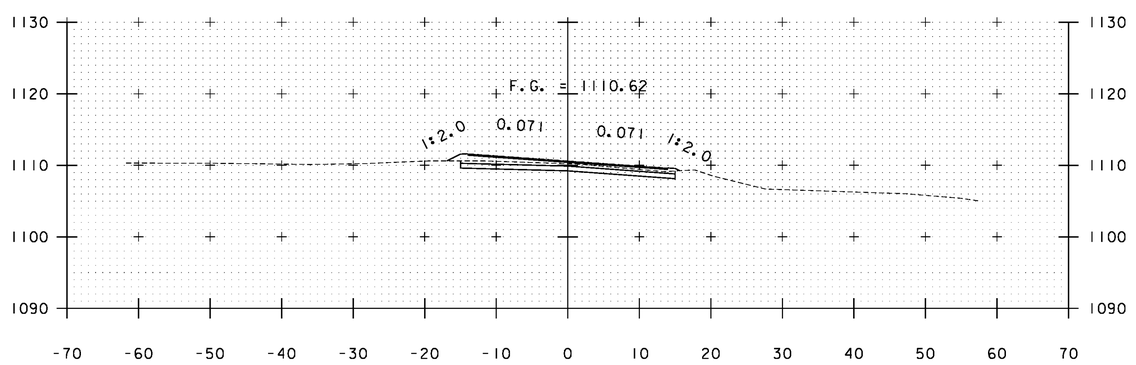

A 274+50




A 274+00




A 273+00



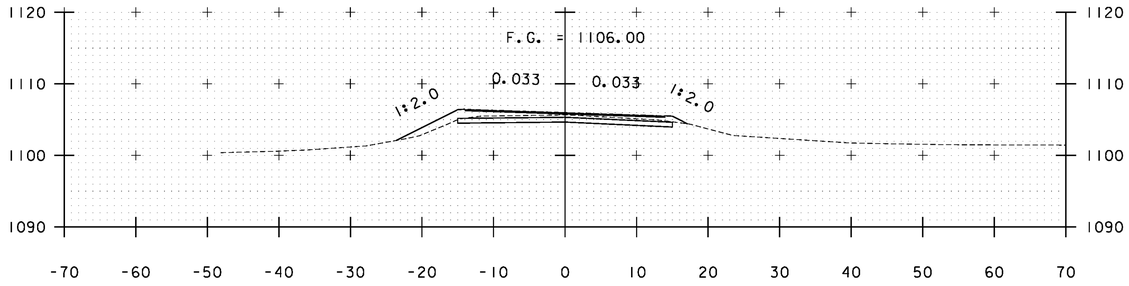

A 273+50

STA. A 273+00 TO STA. A 274+50

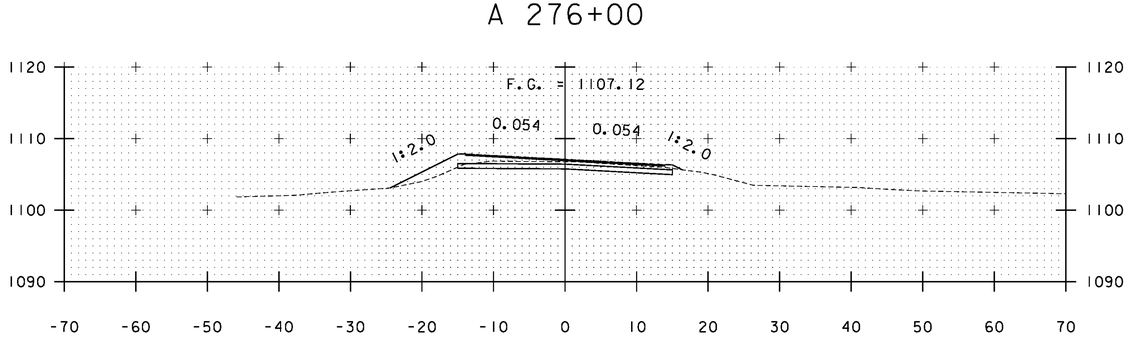
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

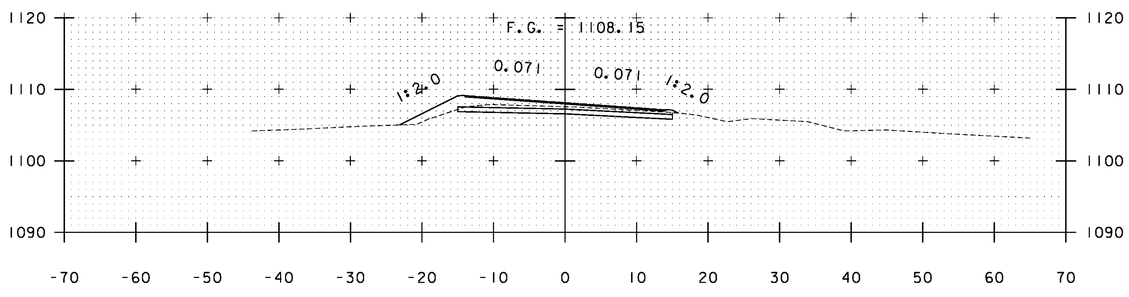
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 284 OF 444



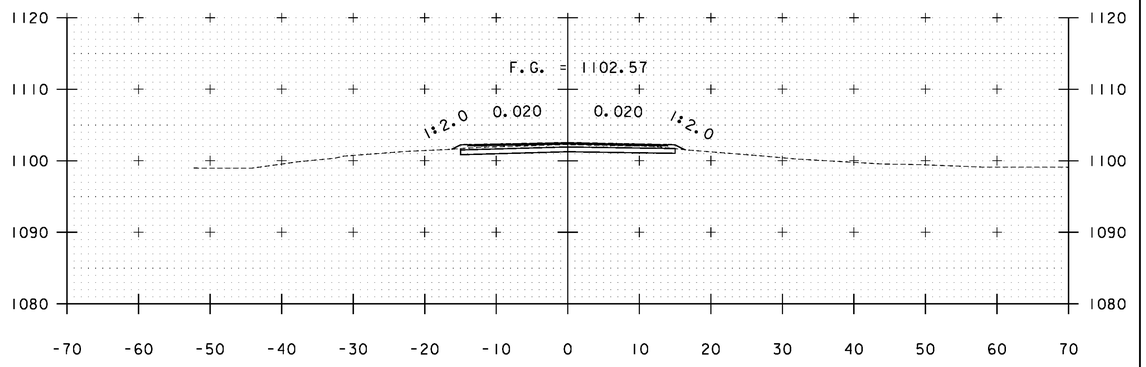

A 276+00



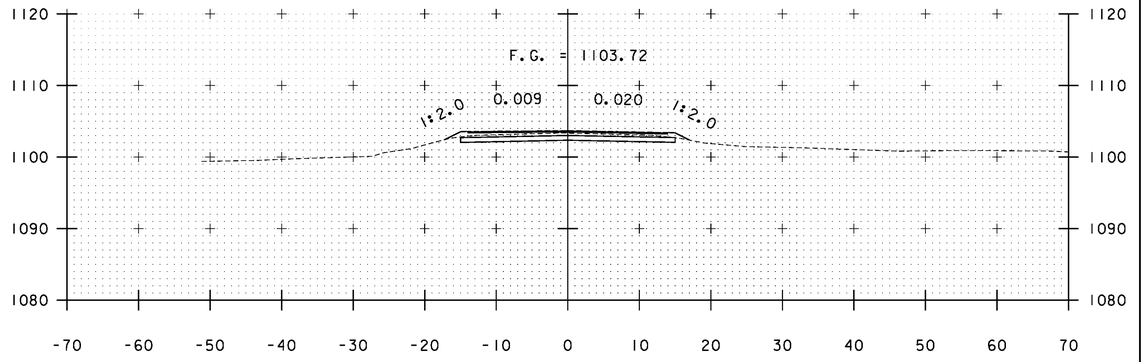

A 275+50



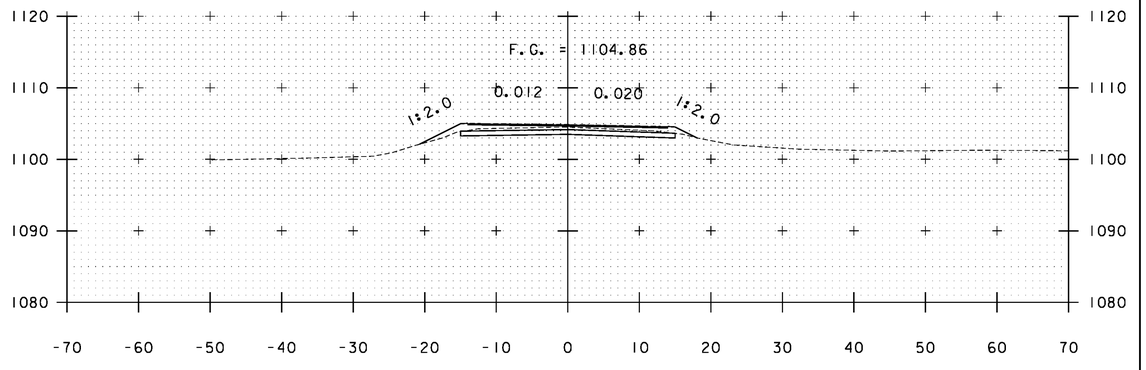

A 275+00




A 277+50



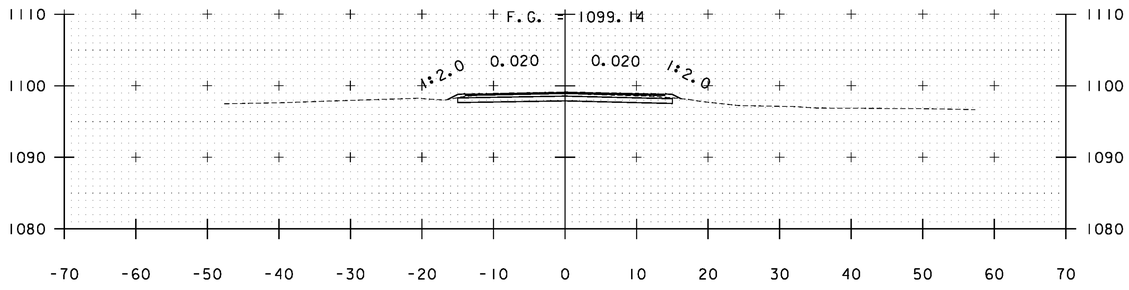

A 277+00



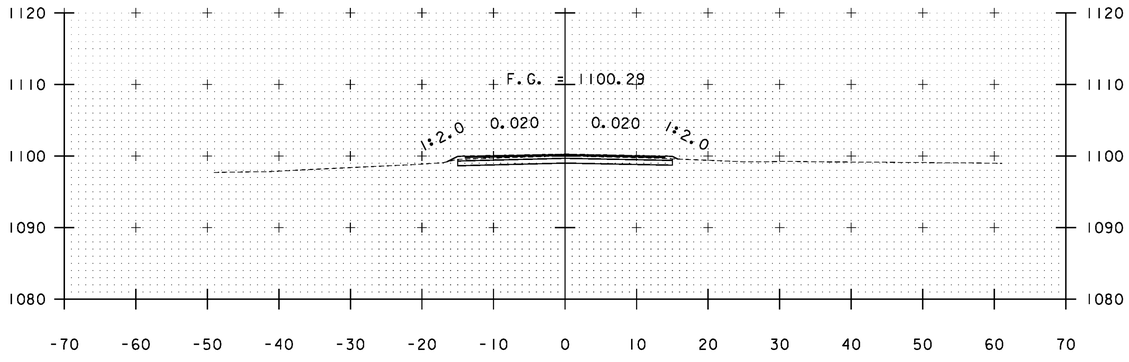

A 276+50

STA. A 275+00 TO STA. A 277+50

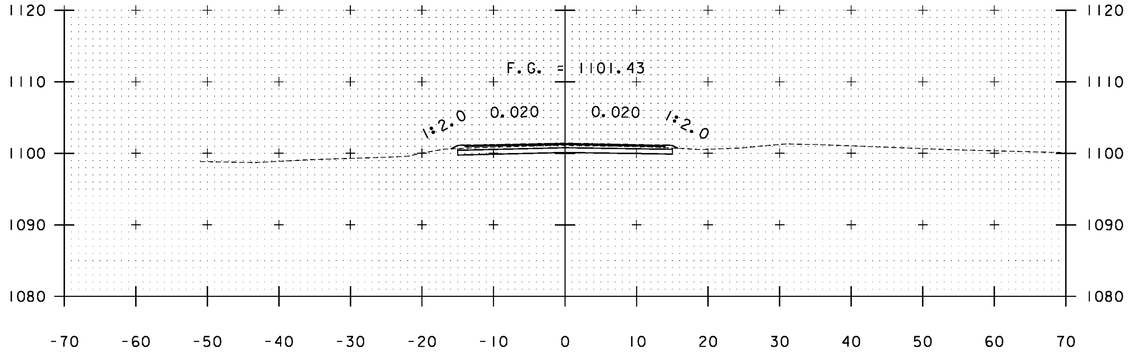
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 285 OF 444 |



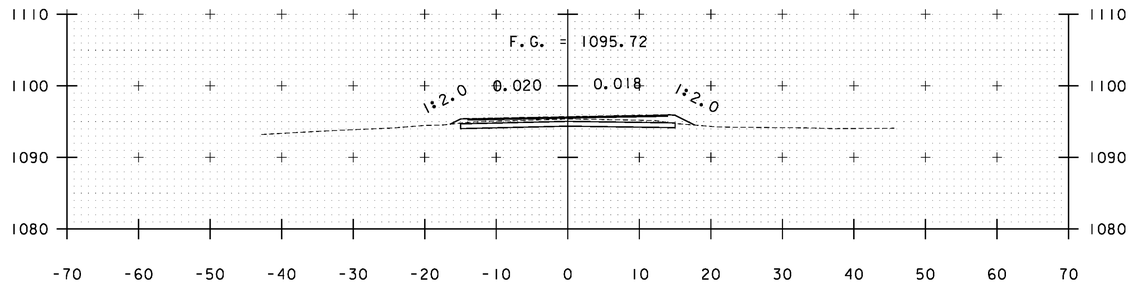

A 279+00



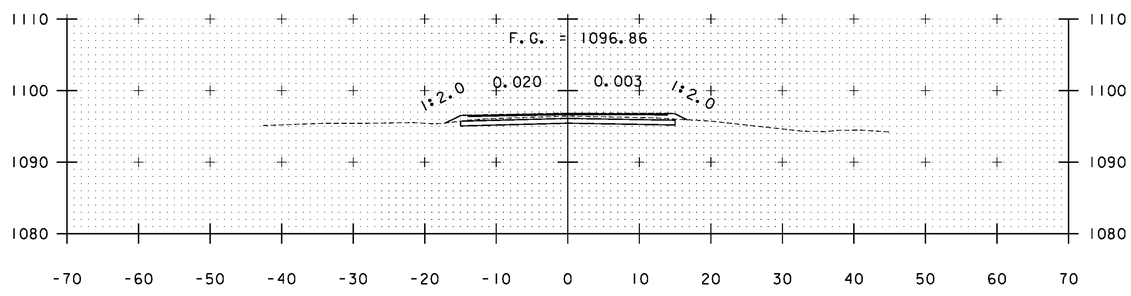

A 278+50



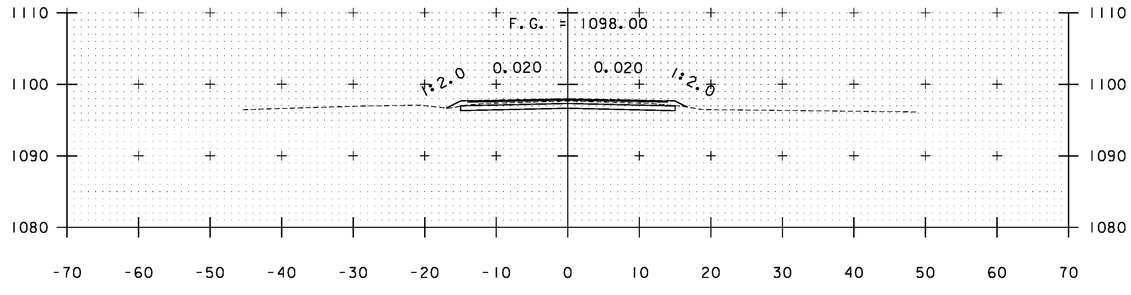

A 278+00




A 280+50



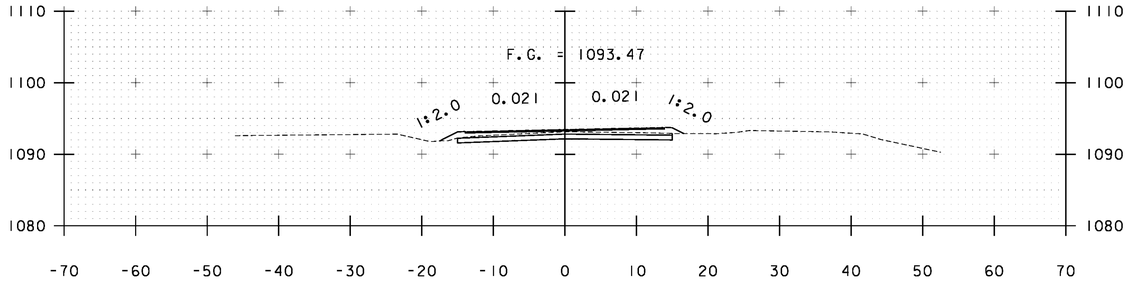

A 280+00



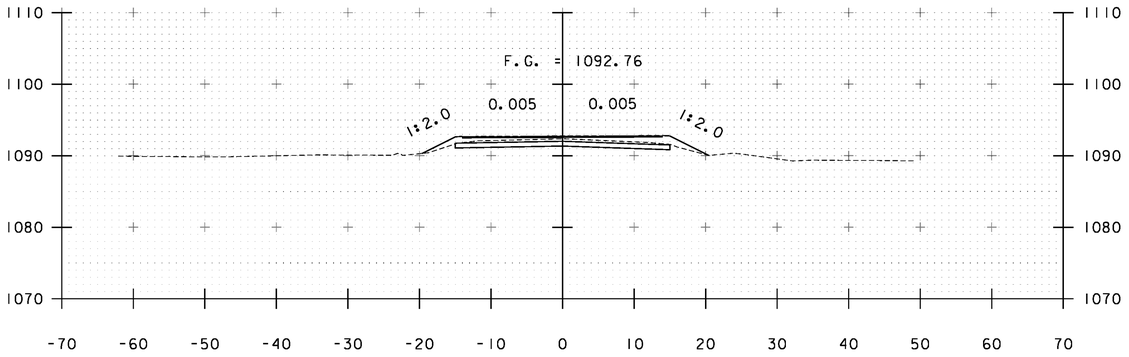

A 279+50

STA. A 278+00 TO STA. A 280+50

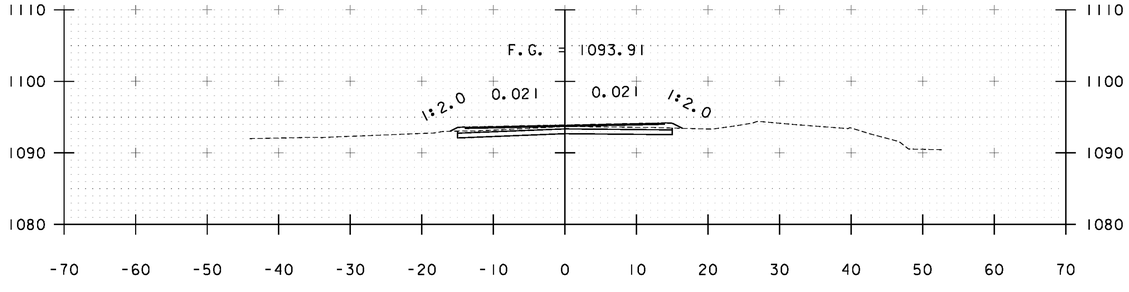
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 286 OF 444 |



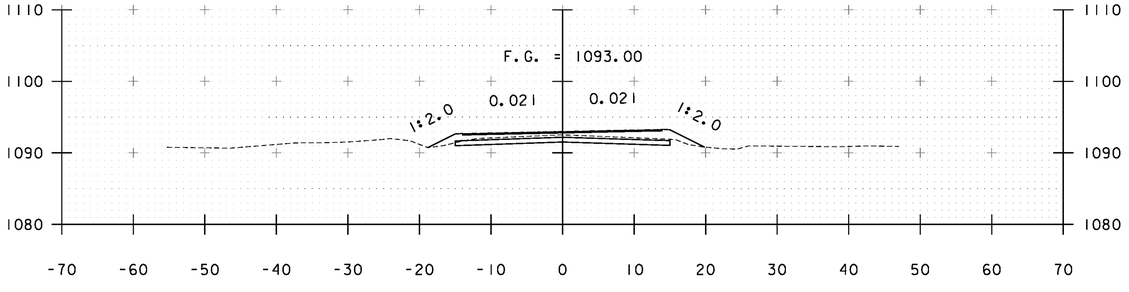

A 282+00



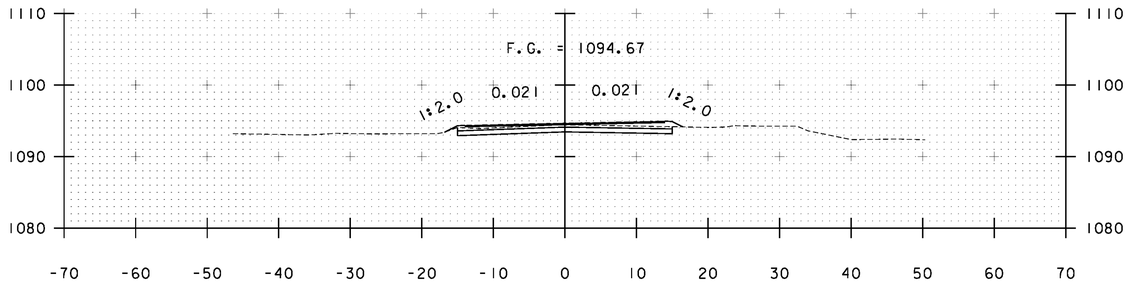

A 283+50
BEGIN BF 013-1(22)



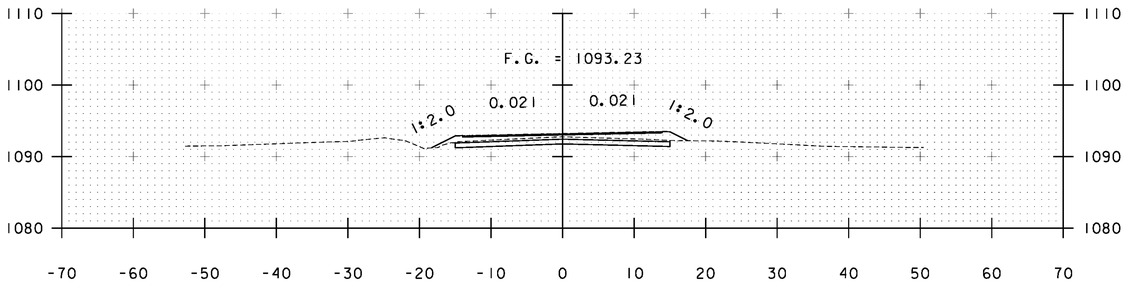

A 281+50




A 283+00



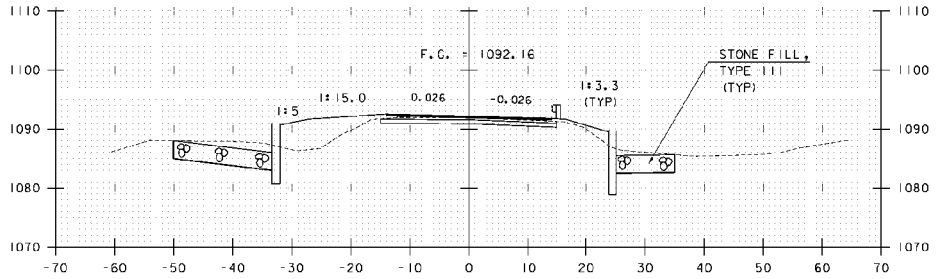

A 281+00



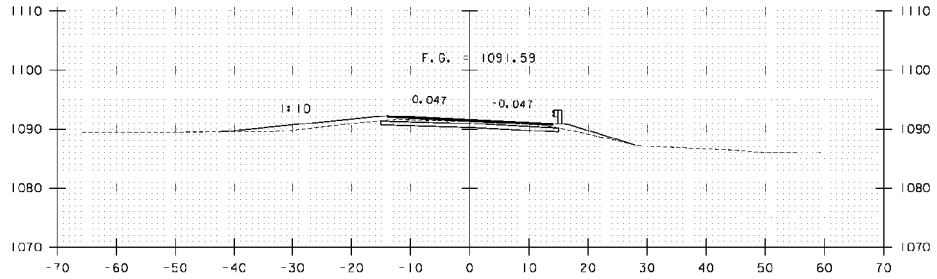

A 282+50

STA. A 281+00 TO STA. A 283+50

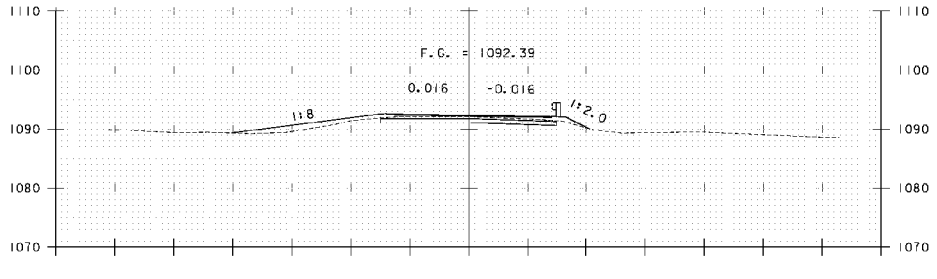
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs_C73.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 287 OF 444 |



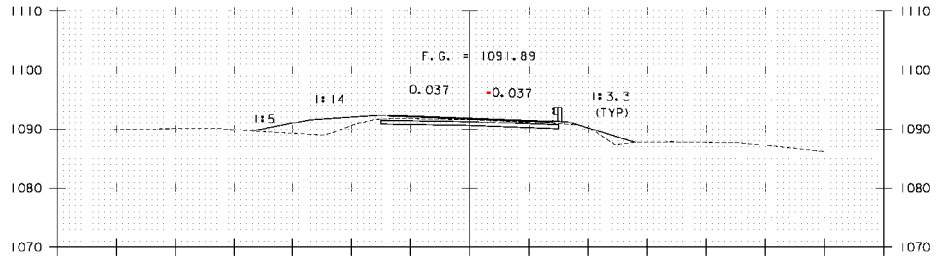

A 284+25



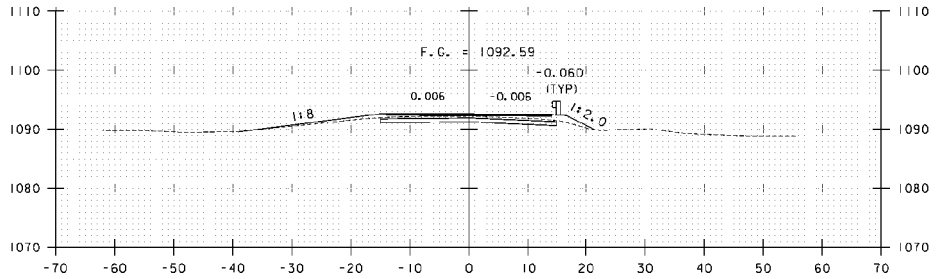

A 284+75



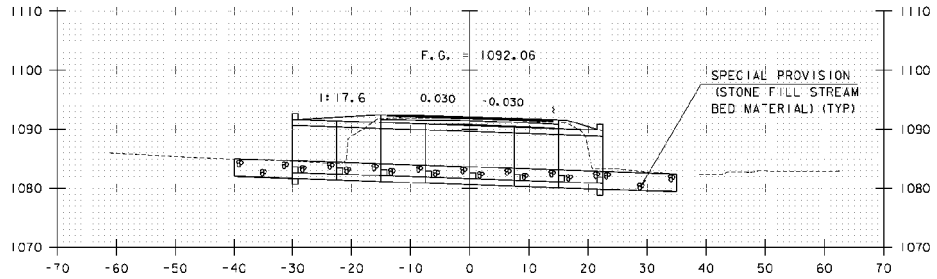

A 284+00




A 284+50




A 283+75



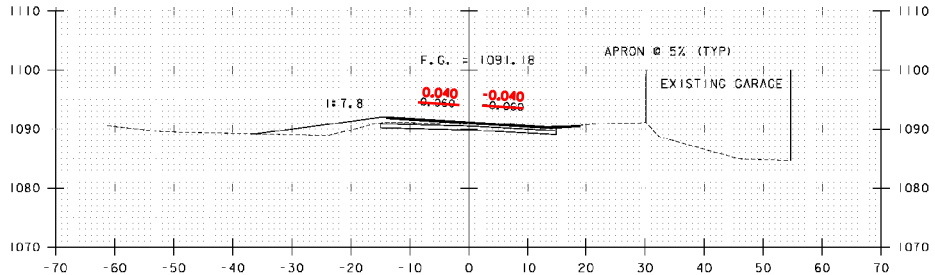

A 284+35
℄ BRIDGE #73

STA. A 283+75 TO STA. A 284+75

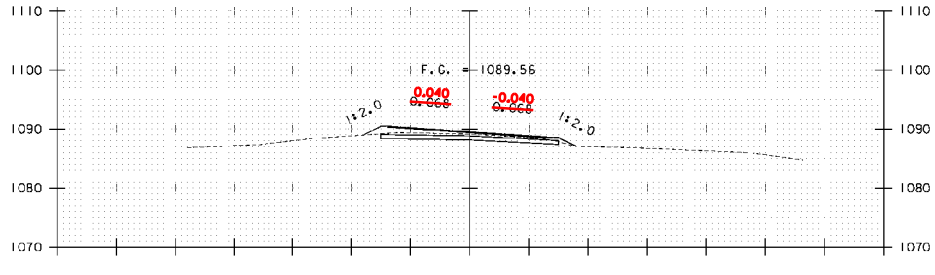
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs_C73.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

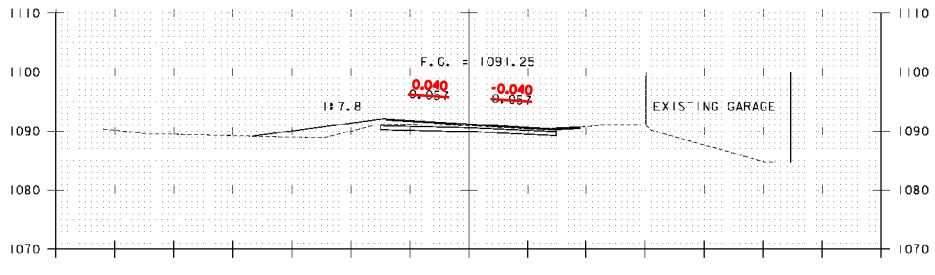
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 283 OF 444



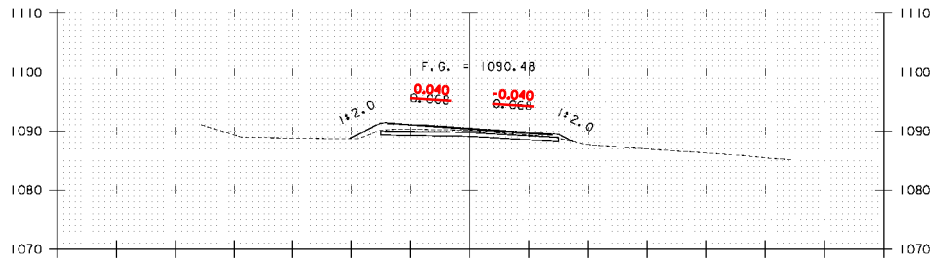

A 285+05
℄ DRIVEWAY



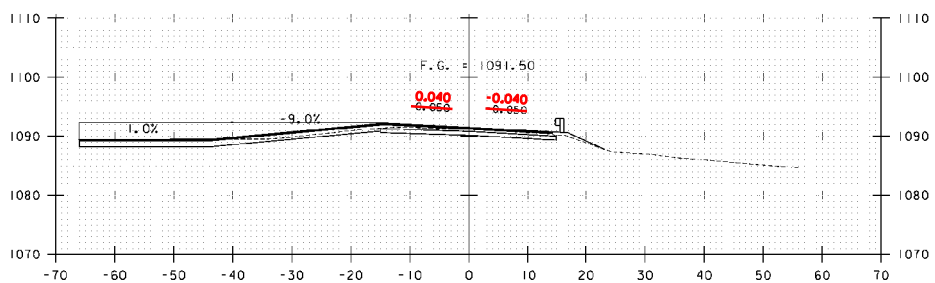

A 286+00



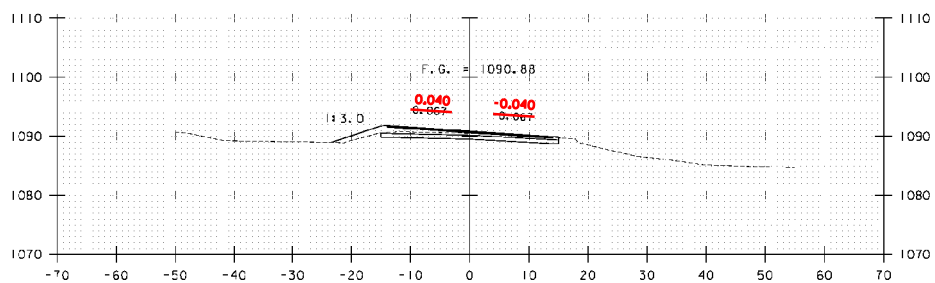

A 285+00




A 285+50



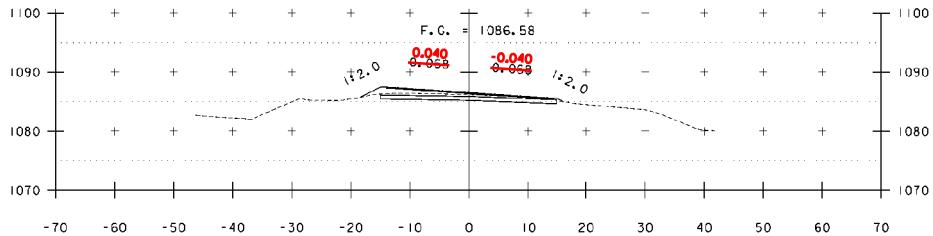

A 284+82 SKEWED @ 12°
℄ DRIVEWAY



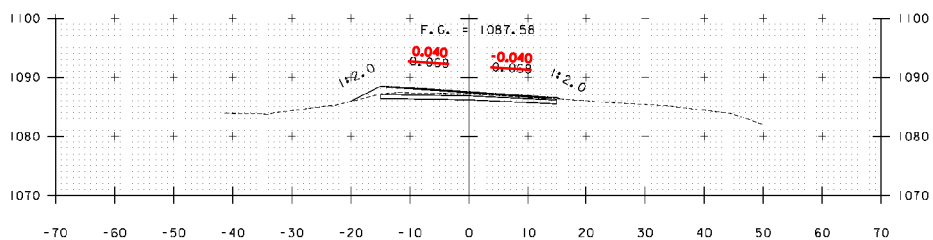

A 285+25
END BF 013-1(22)

STA. A 284+82 TO STA. A 286+00

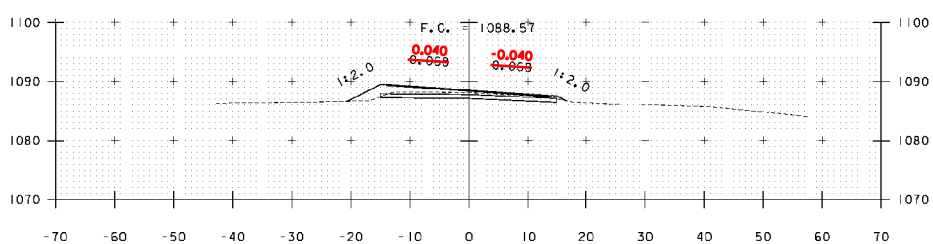
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs_C73.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 283 OF 444 |



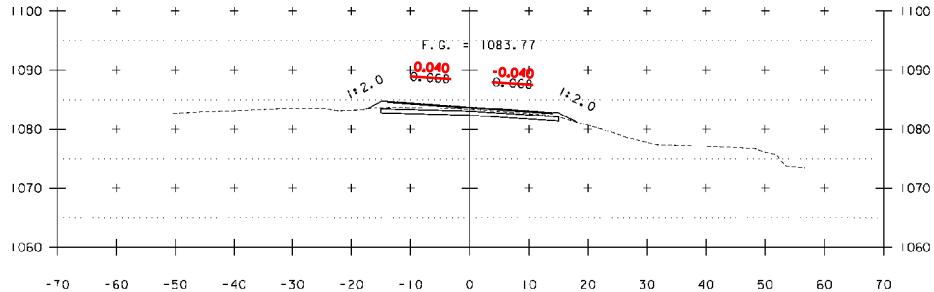

A 287+50



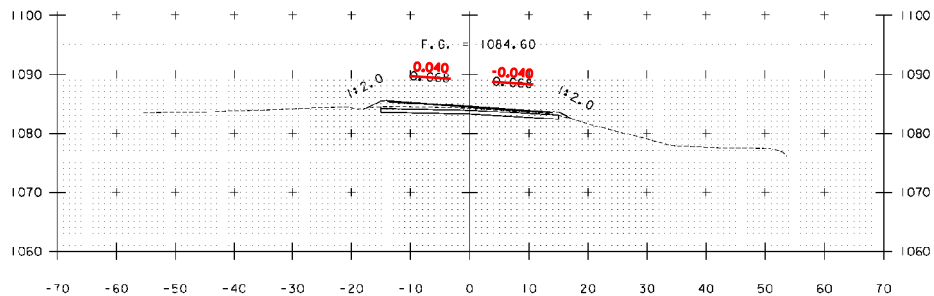

A 287+00



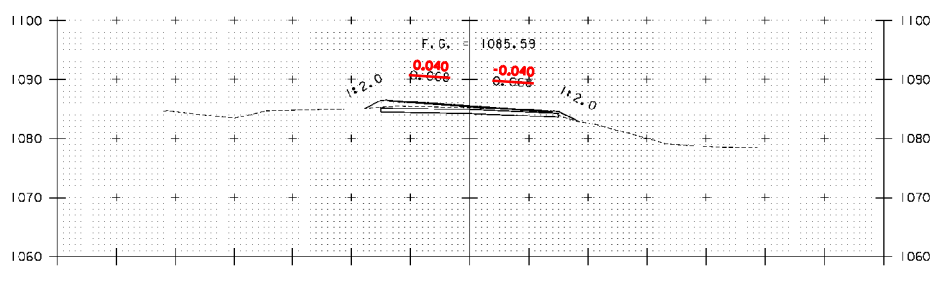

A 286+50




A 289+00




A 288+50



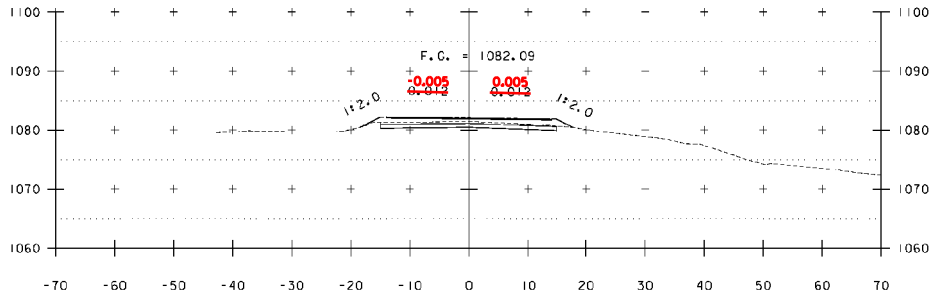

A 288+00

STA. A 286+50 TO STA. A 289+00

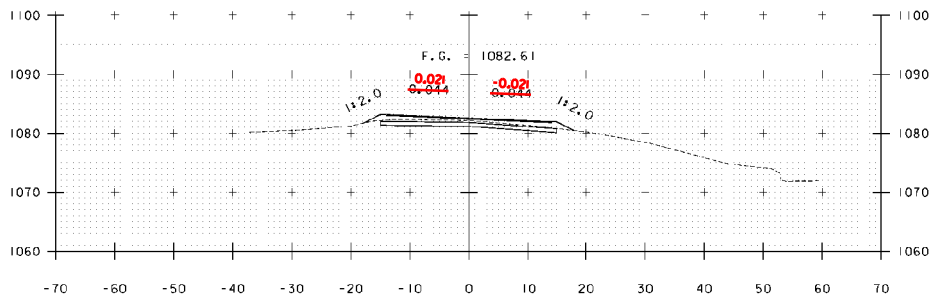
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

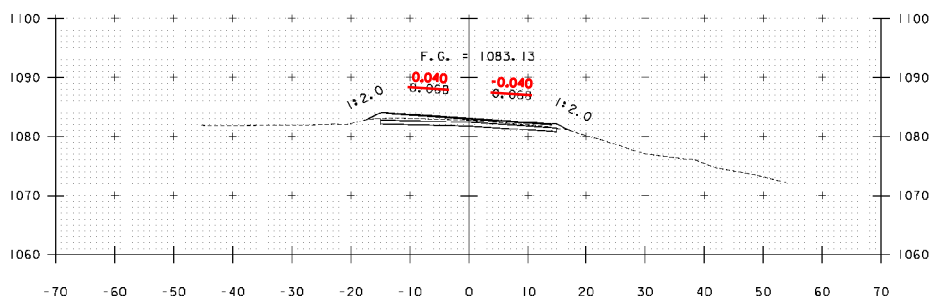
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 290 OF 444



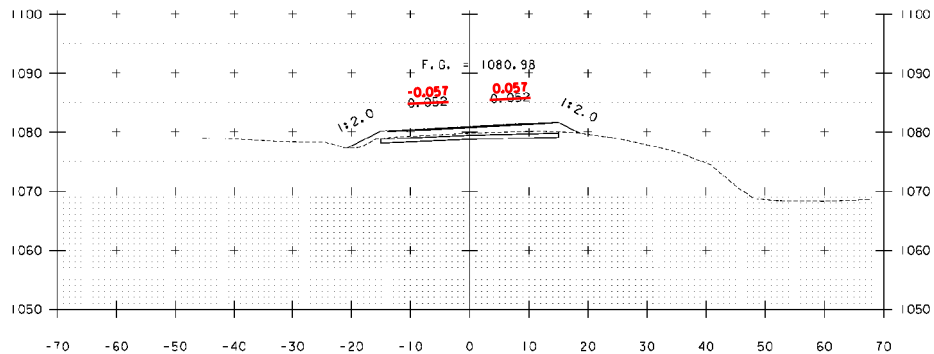

A 290+50



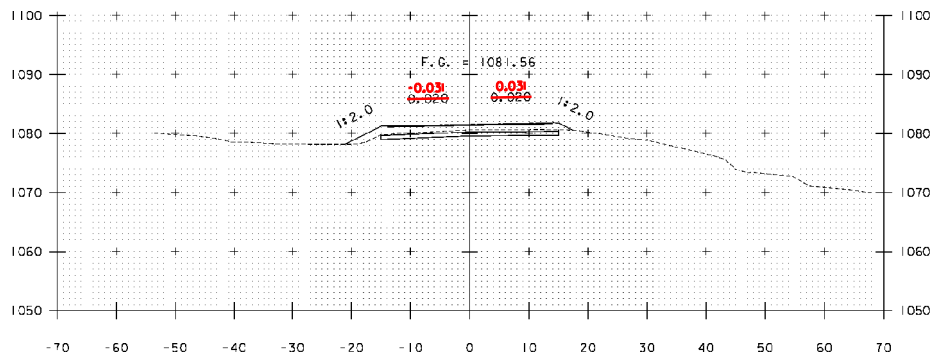

A 290+00




A 289+50




A 291+50



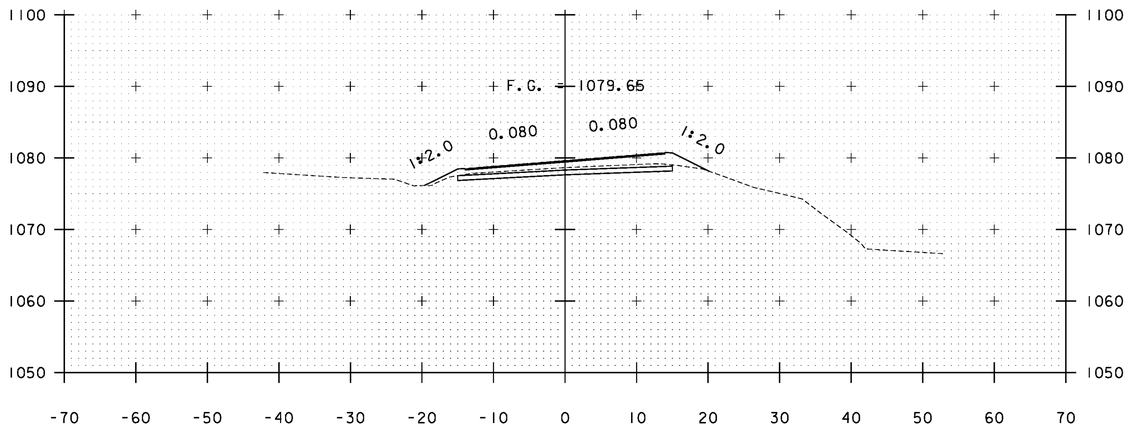

A 291+00

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

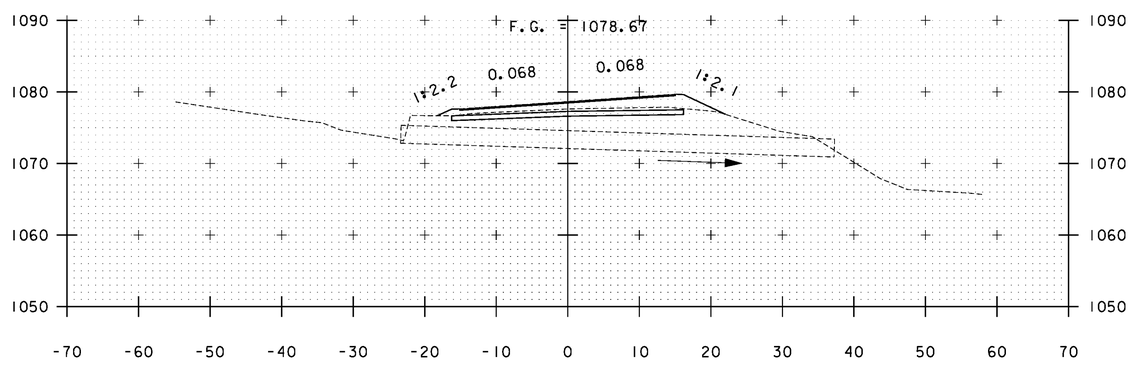
FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 291 OF 444

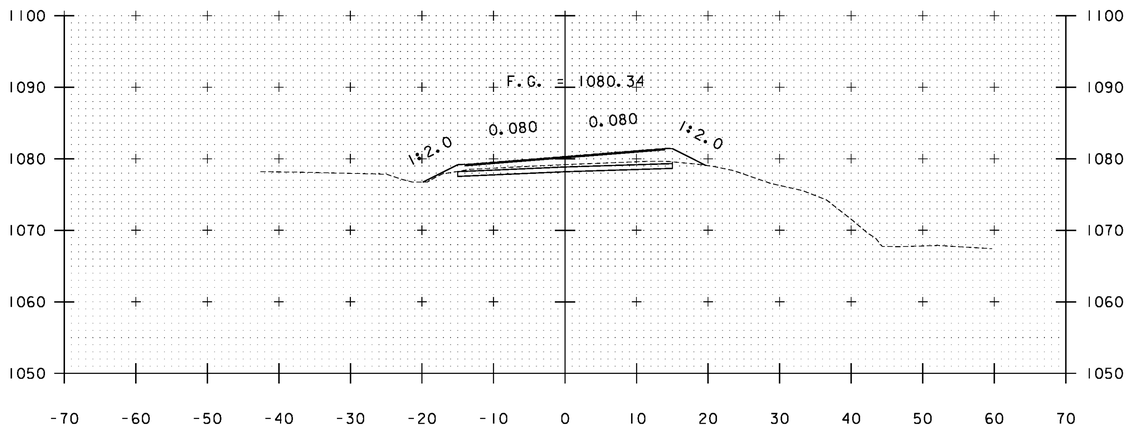
STA. A 289+50 TO STA. A 291+50



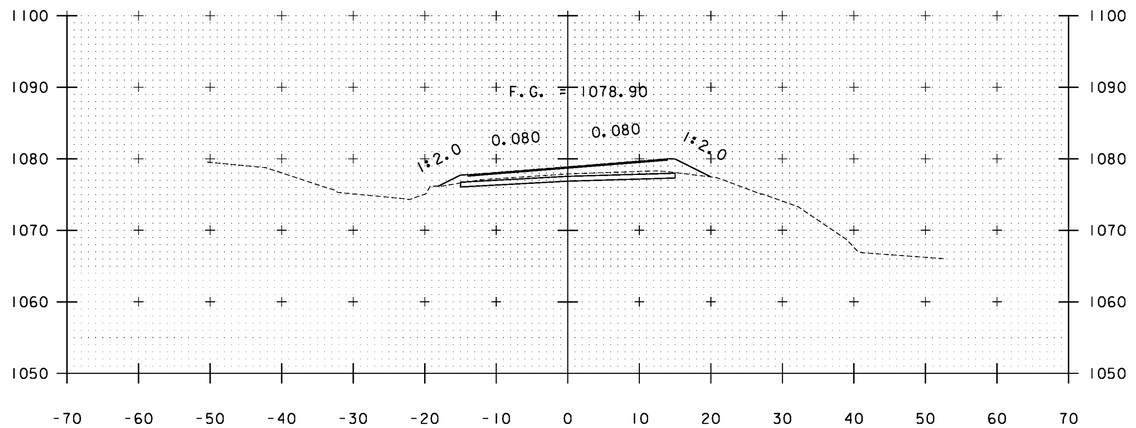

A 292+50




A 293+15




A 292+00



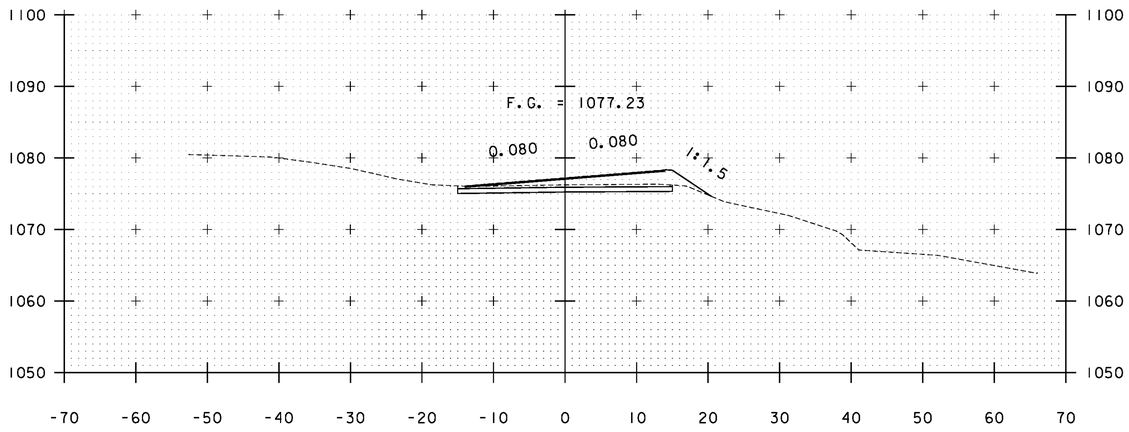

A 293+00

STA. A 292+00 TO STA. A 293+15

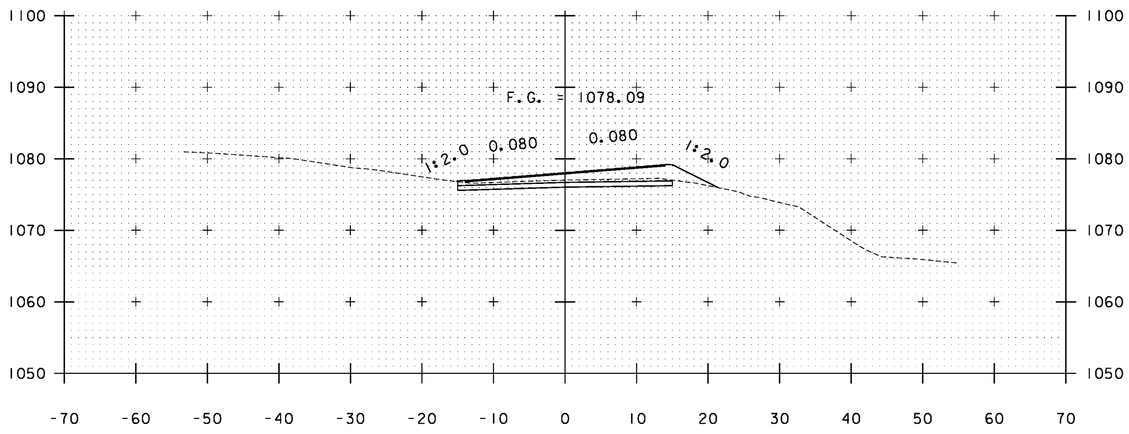
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

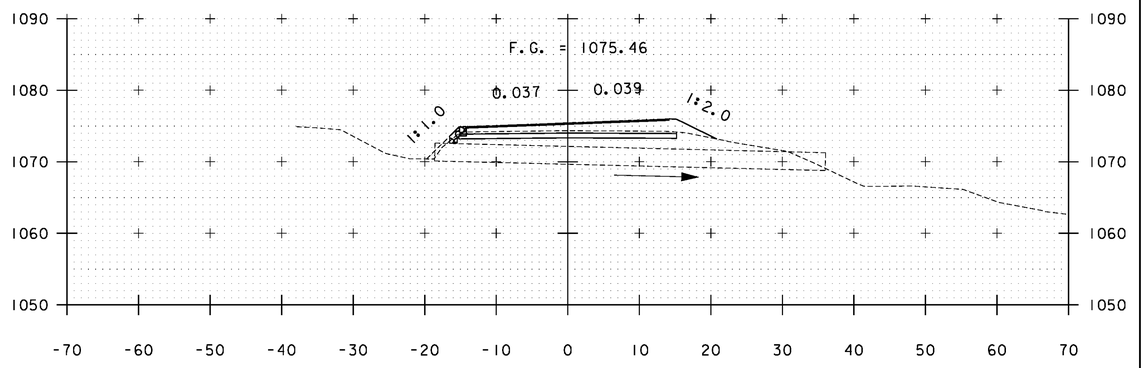
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 292 OF 444



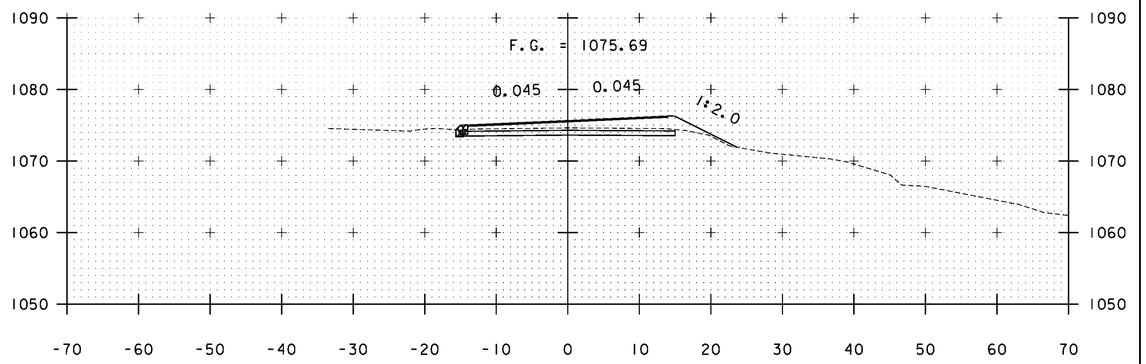

A 294+00



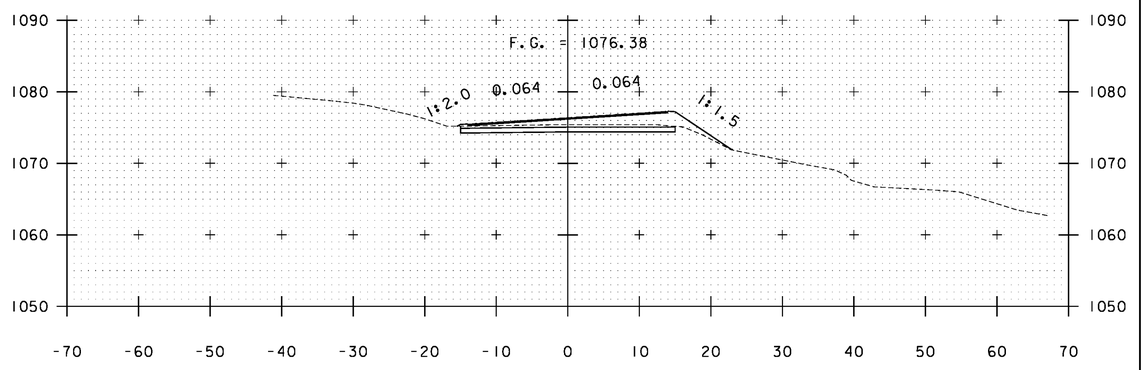

A 293+50




A 295+22




A 295+00



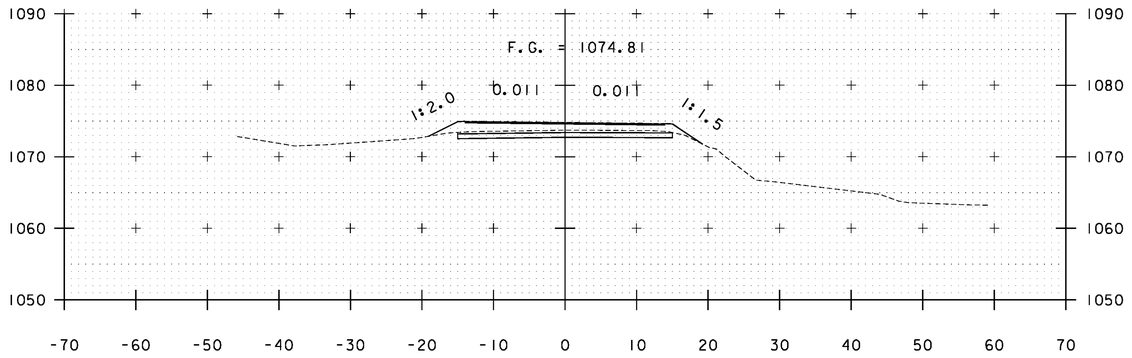

A 294+50

STA. A 293+50 TO STA. A 295+22

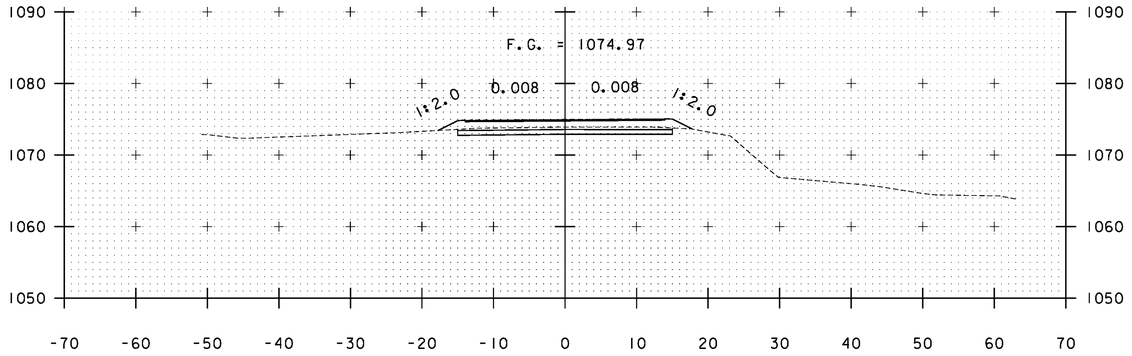
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

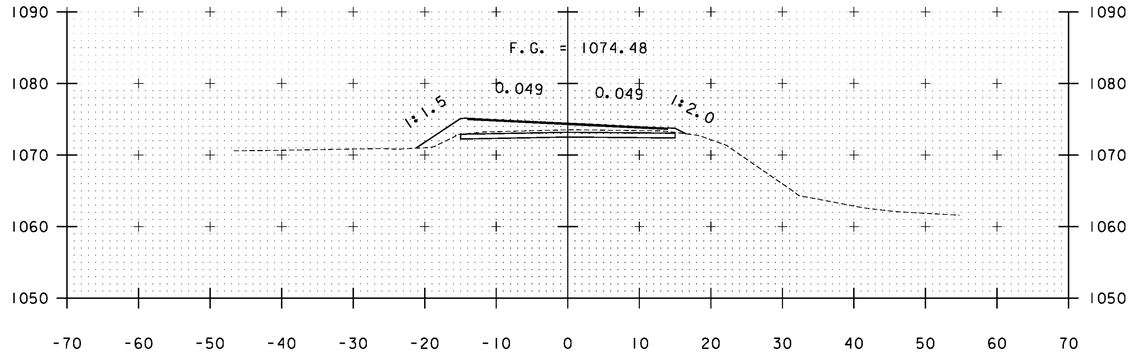
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 293 OF 444



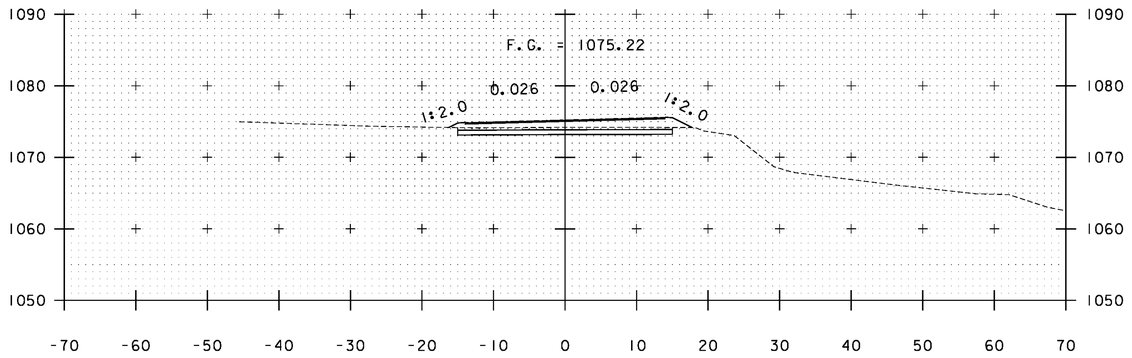

A 296+50



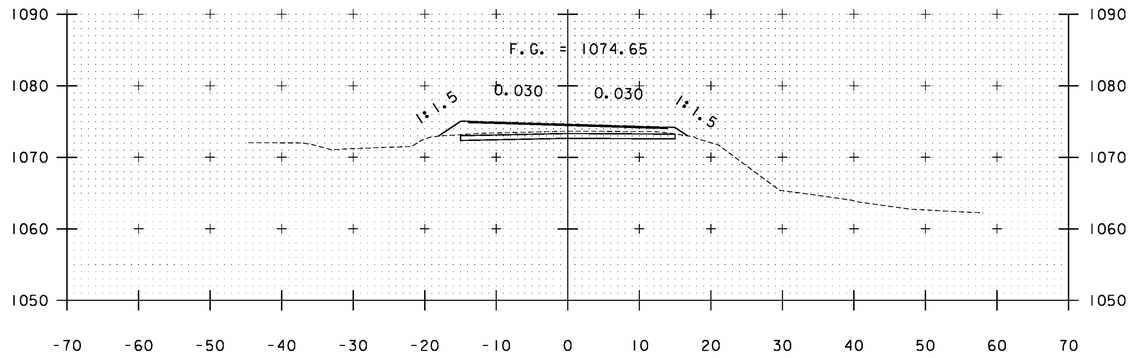

A 296+00




A 297+50




A 295+50



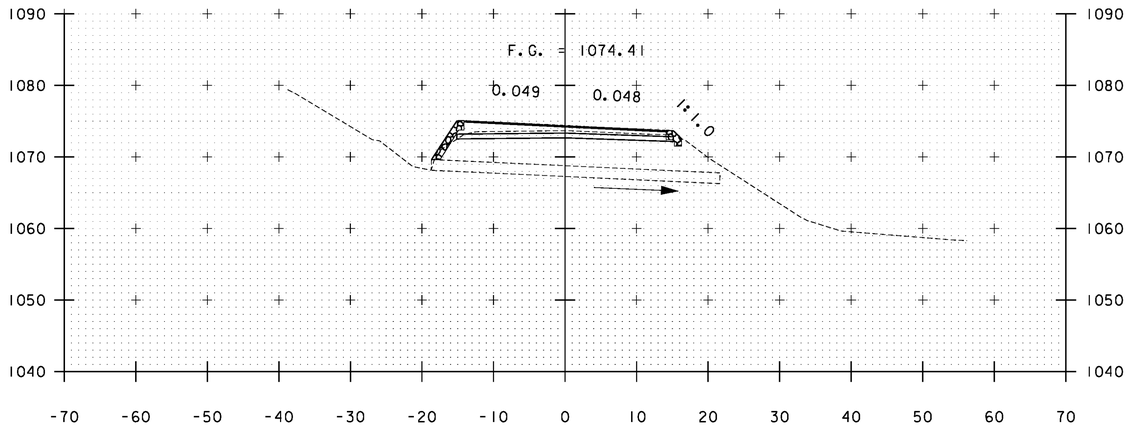

A 297+00

STA. A 295+50 TO STA. A 297+50

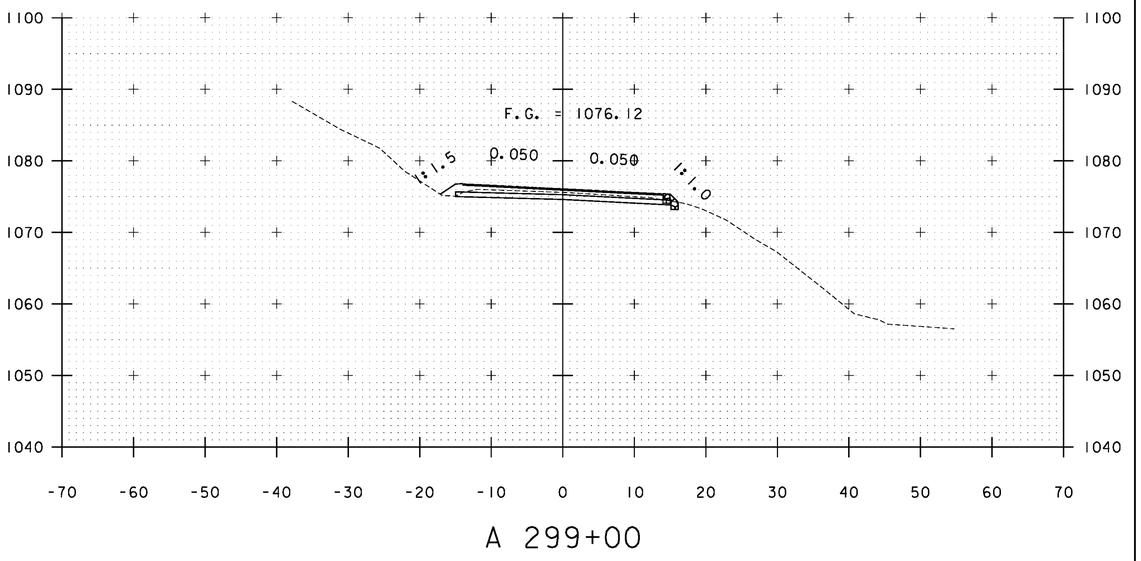
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

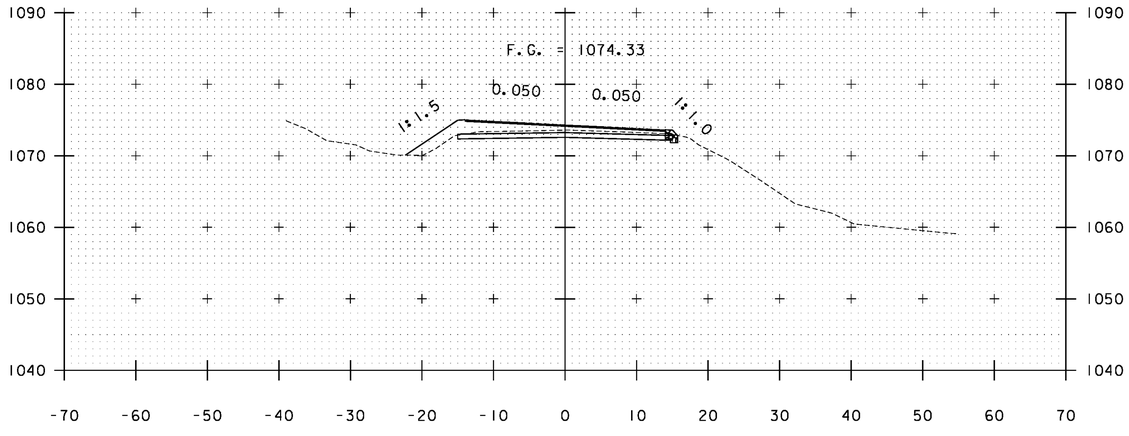
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 294 OF 444



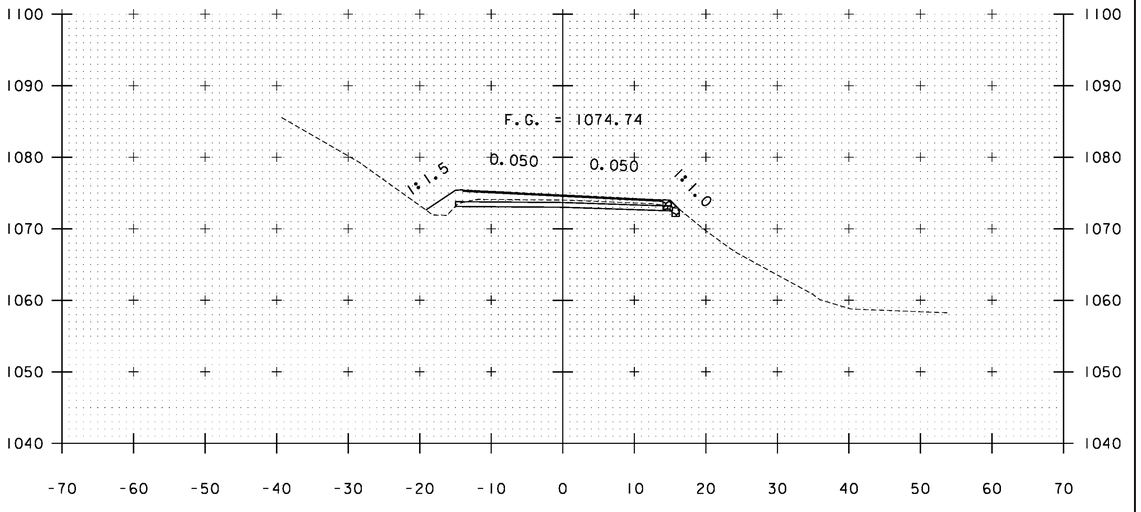

A 298+24




A 299+00




A 298+00



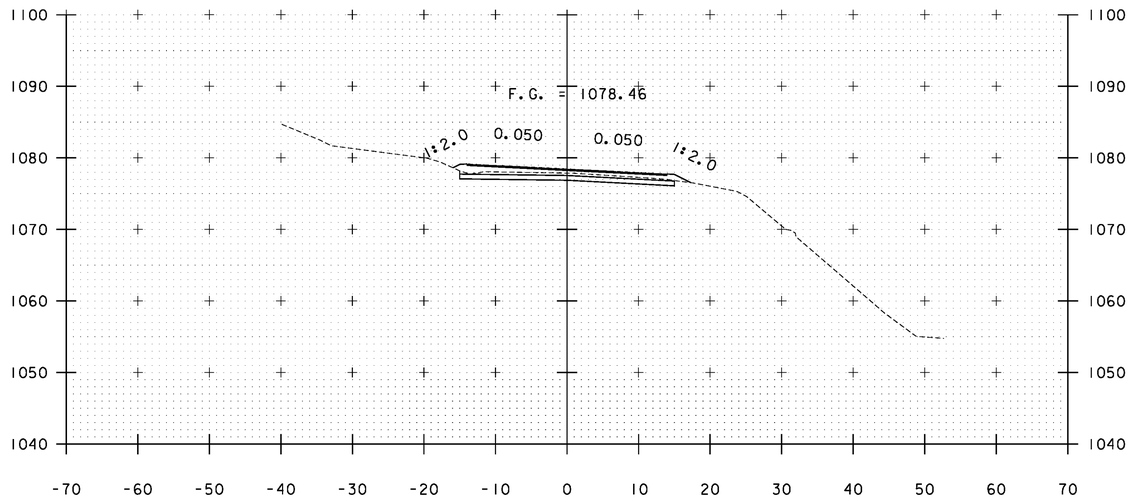

A 298+50

STA. A 298+00 TO STA. A 299+00

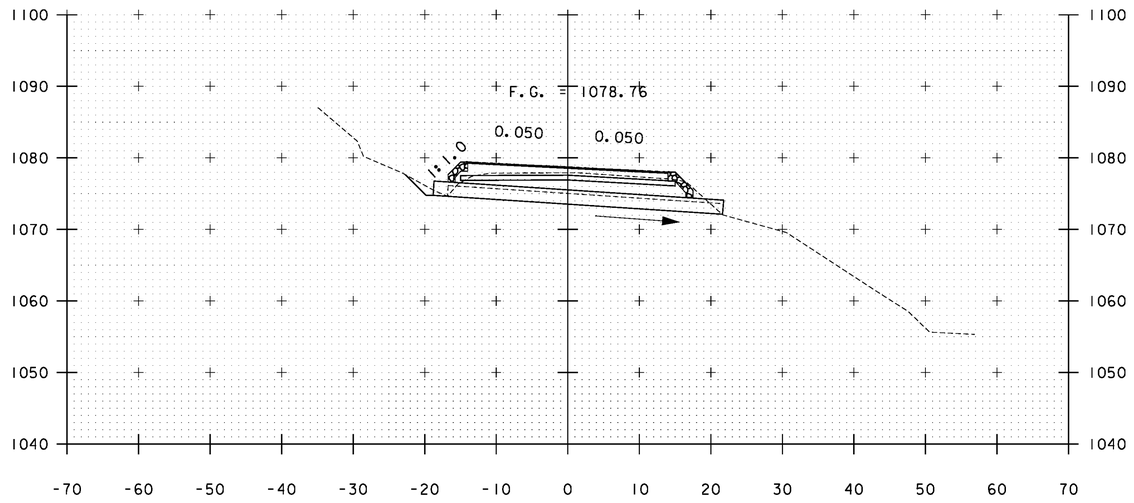
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

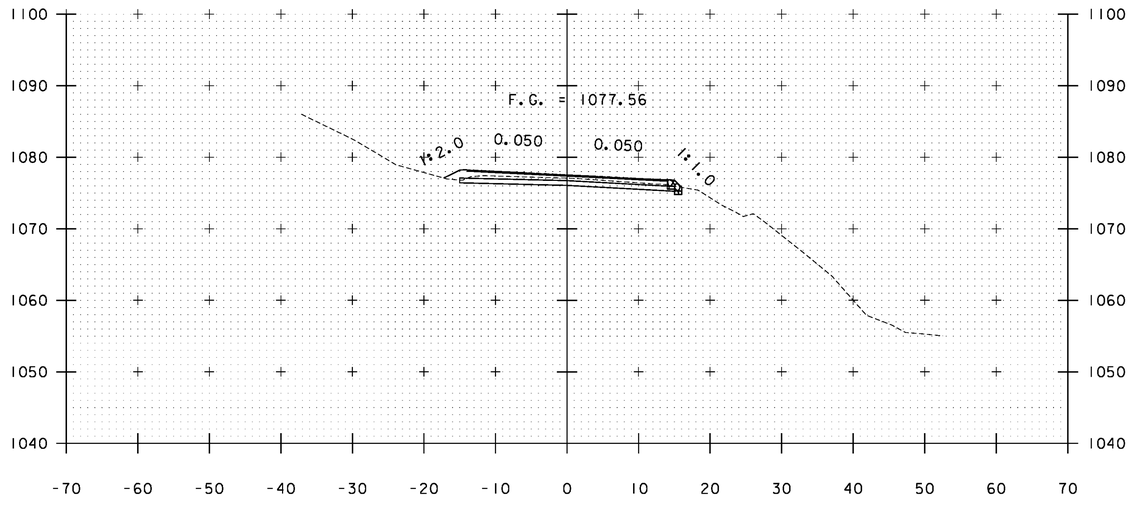
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 295 OF 444



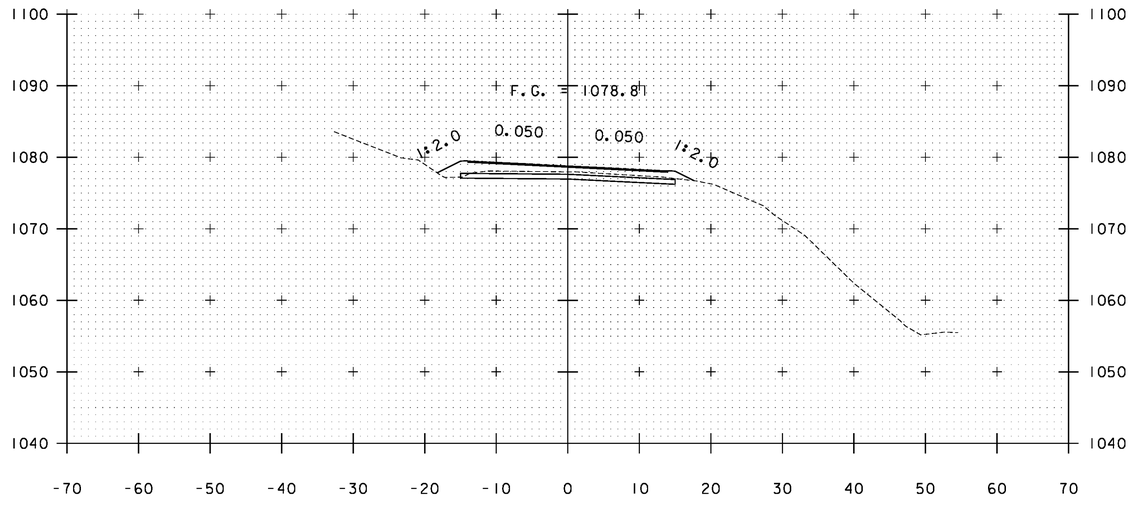

A 300+00




A 300+81




A 299+50



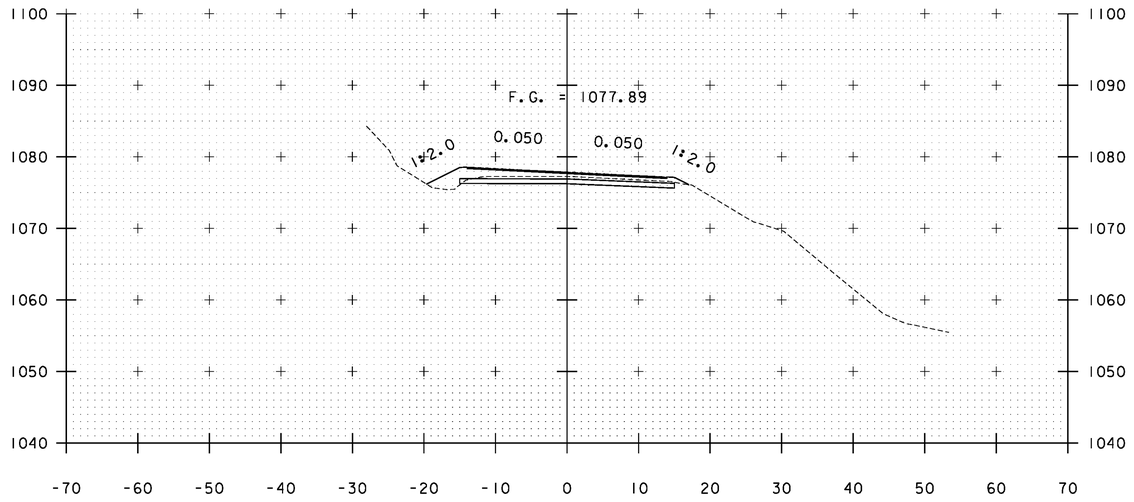

A 300+50

STA. A 299+50 TO STA. A 300+81

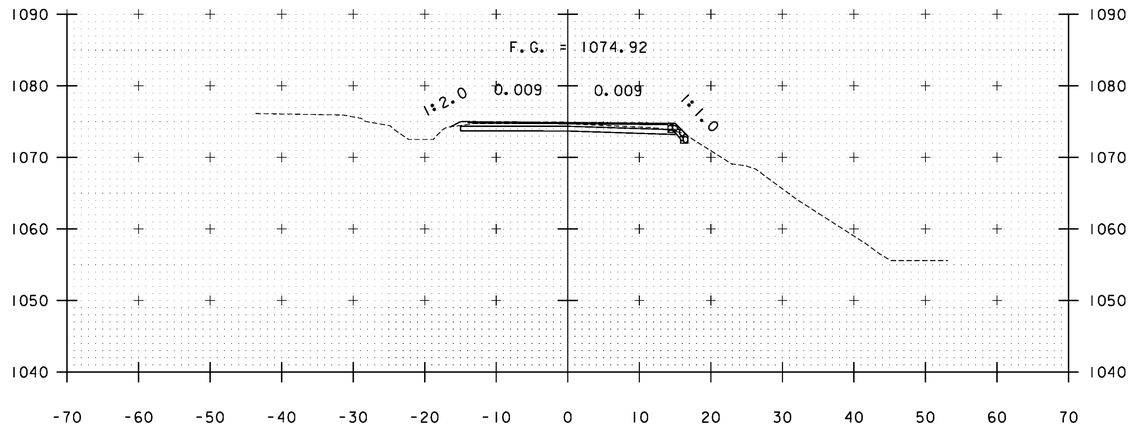
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

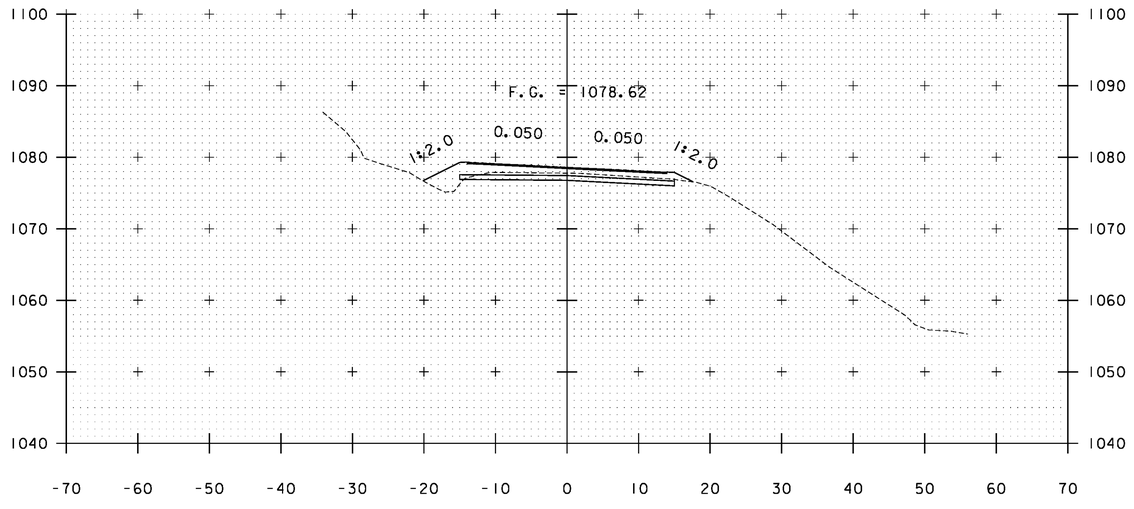
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 296 OF 444



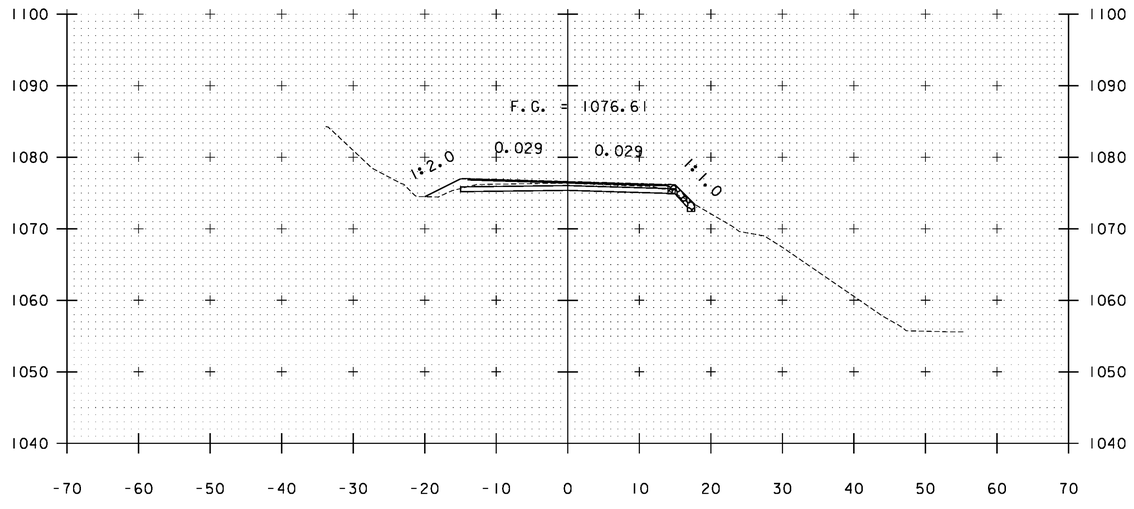

A 301+50




A 302+50




A 301+00



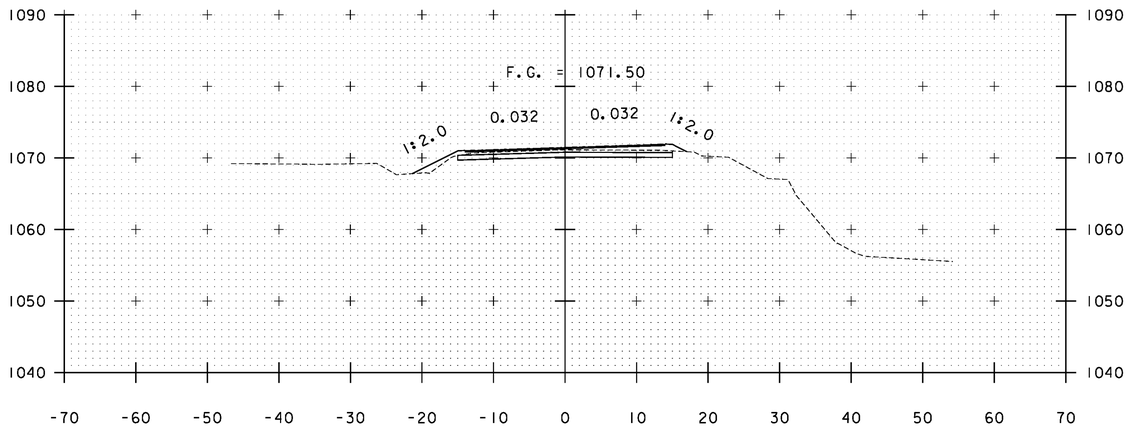

A 302+00

STA. A 301+00 TO STA. A 302+50

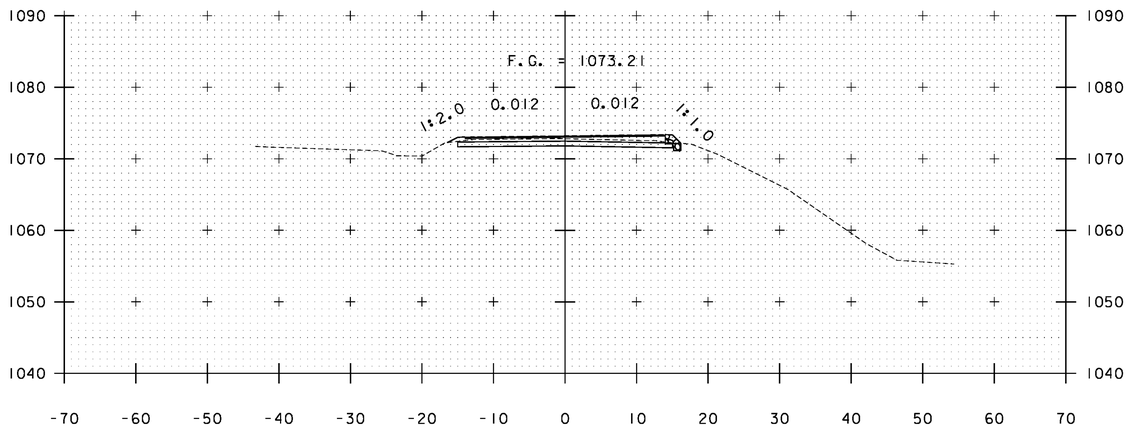
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

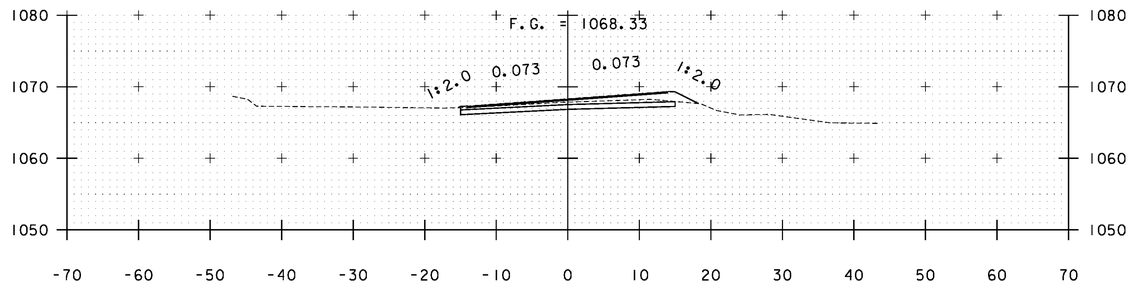
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 297 OF 444



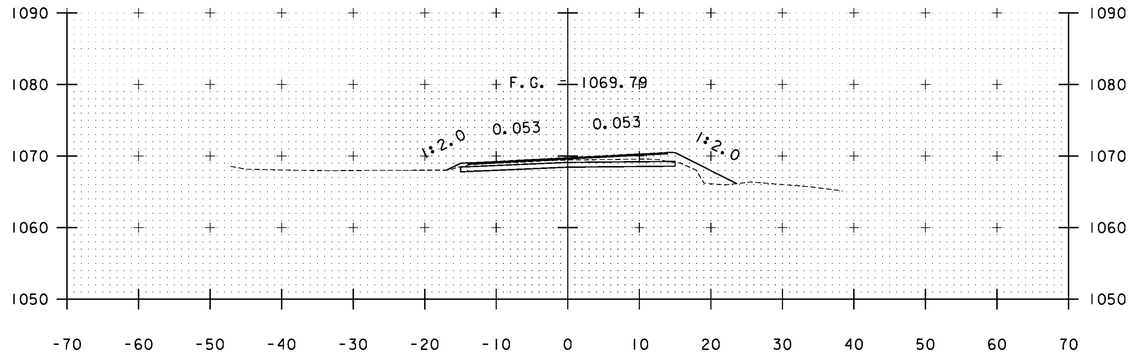

A 303+50



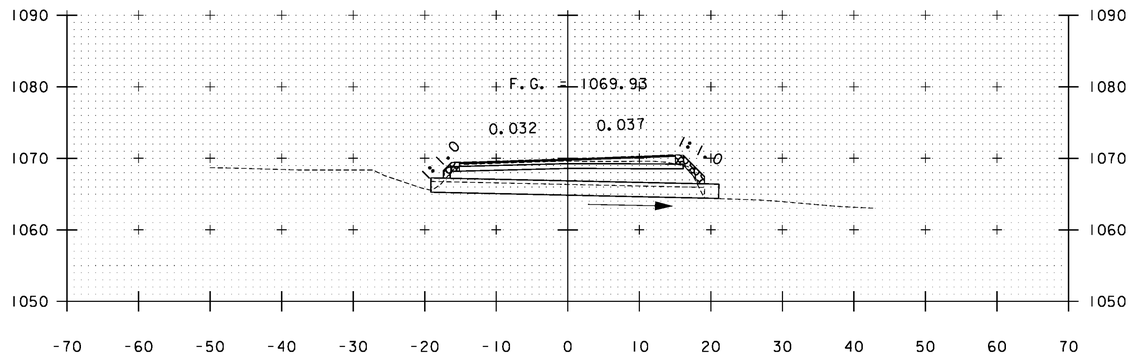

A 303+00




A 304+50



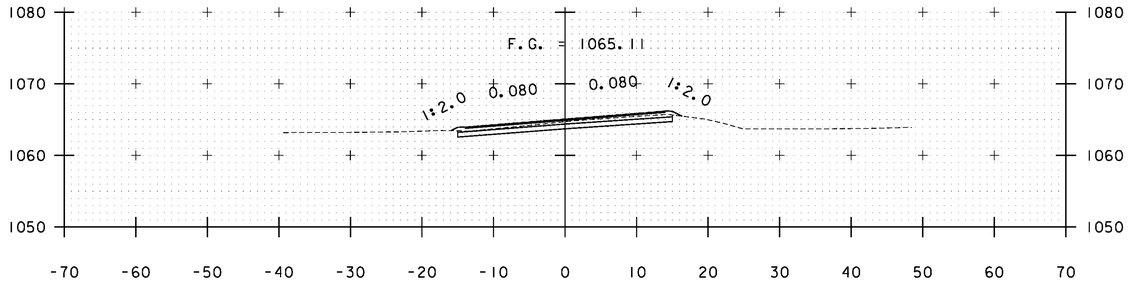

A 304+00



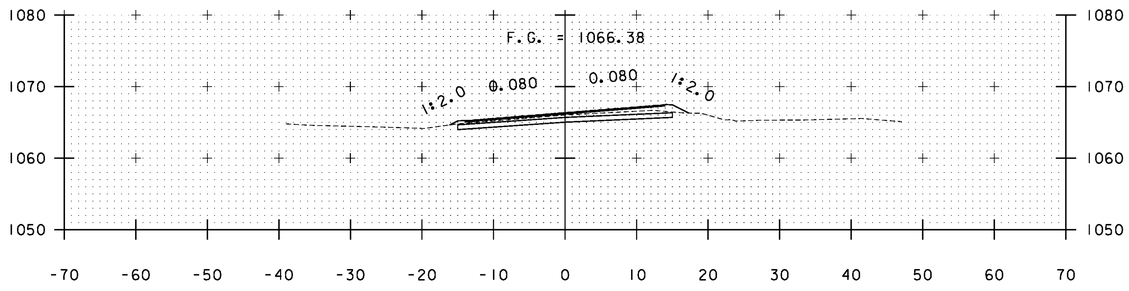

A 303+96

STA. A 303+00 TO STA. A 304+50

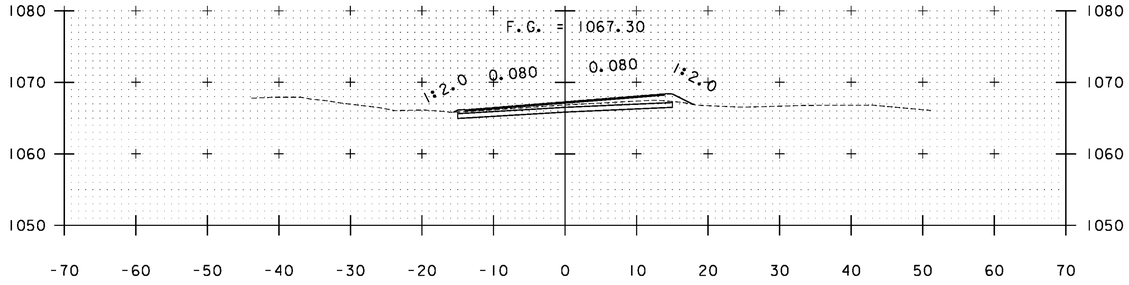
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 298 OF 444 |



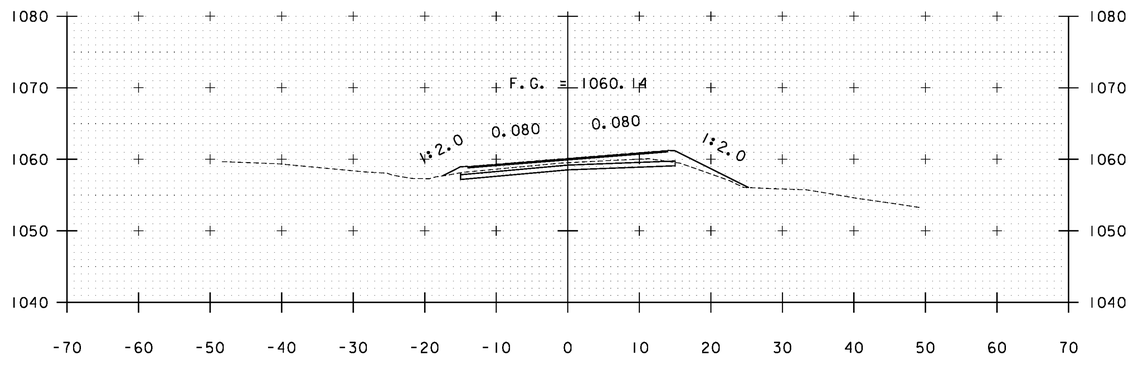

A 306+00



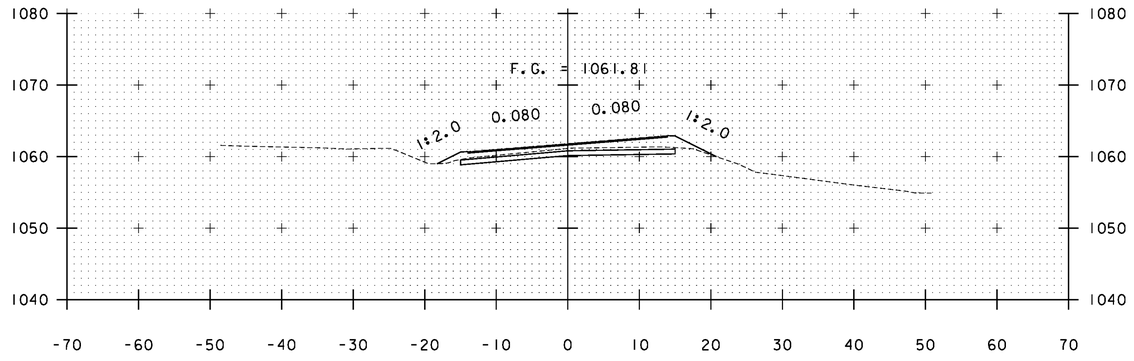

A 305+50



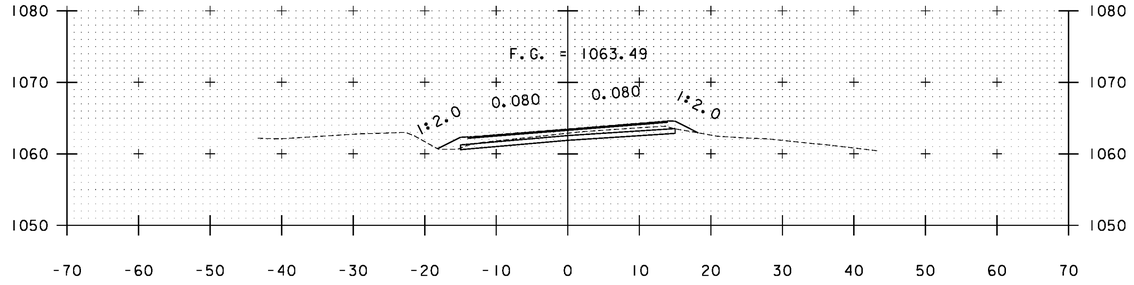

A 305+00




A 307+50



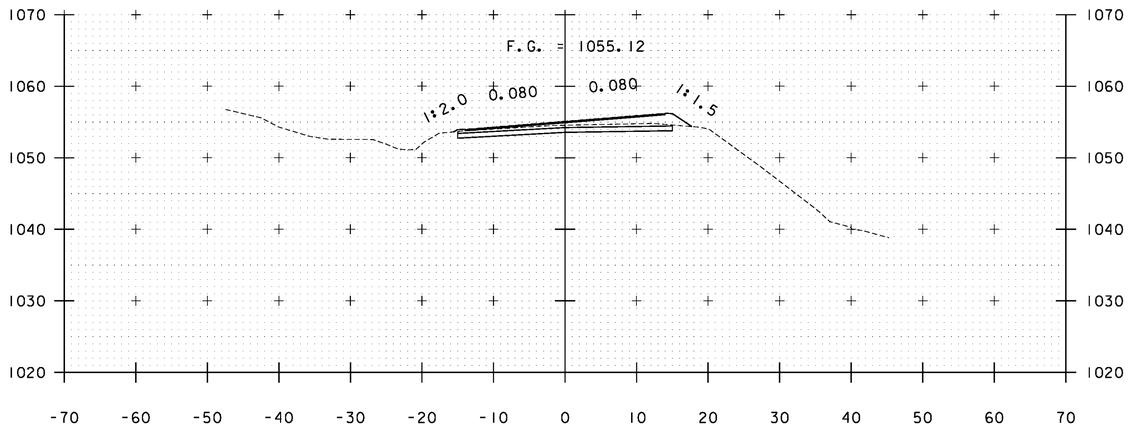

A 307+00



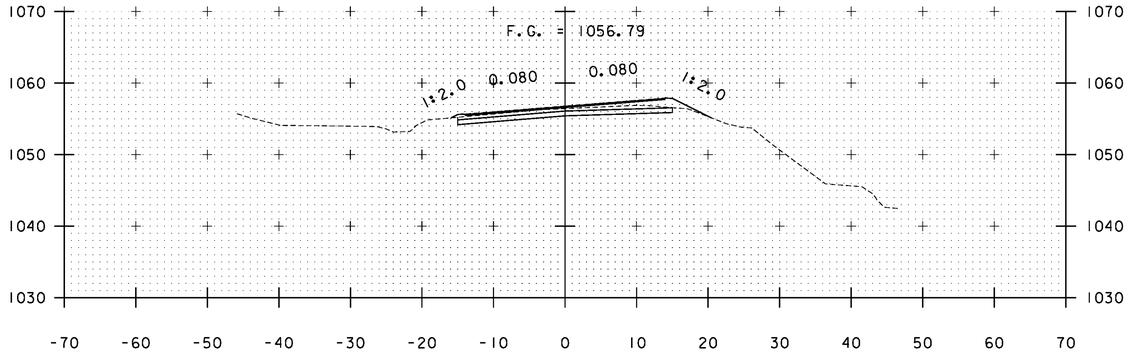

A 306+50

STA. A 305+00 TO STA. A 307+50

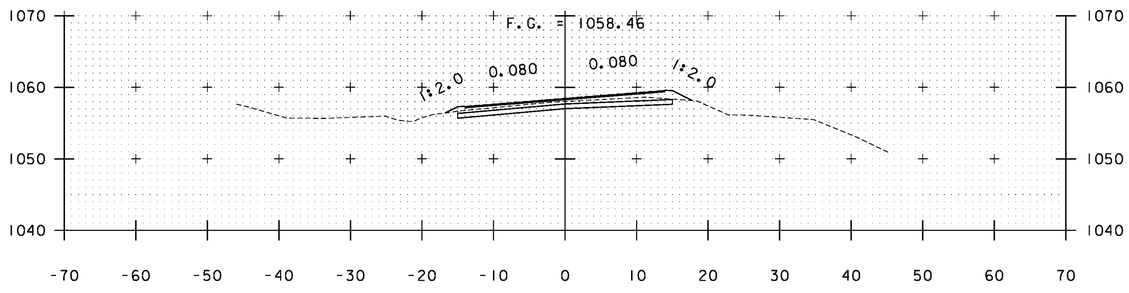
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 299 OF 444 |



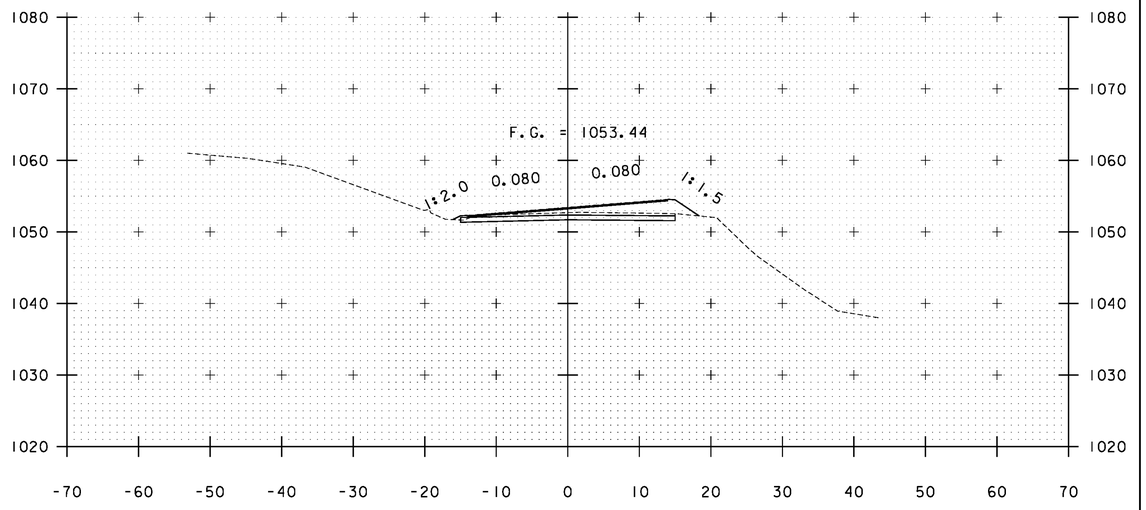

A 309+00



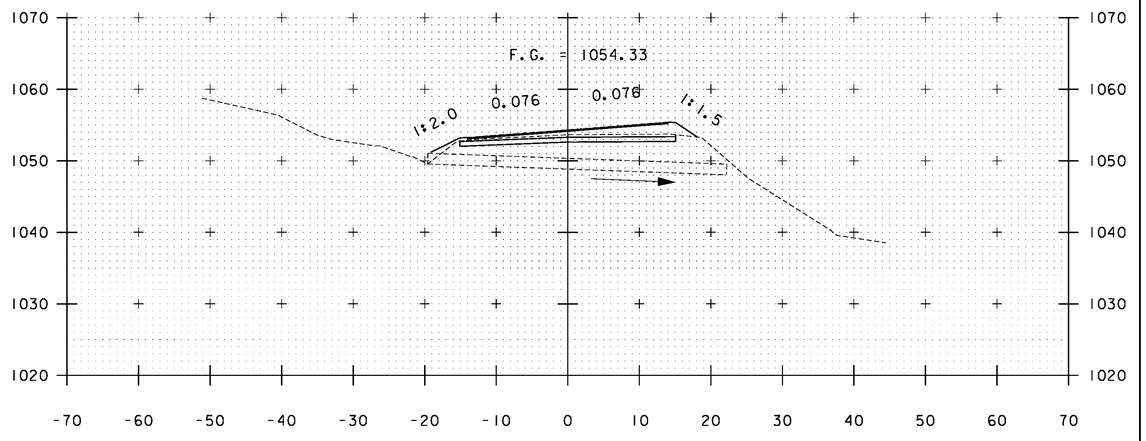

A 308+50




A 308+00




A 309+50



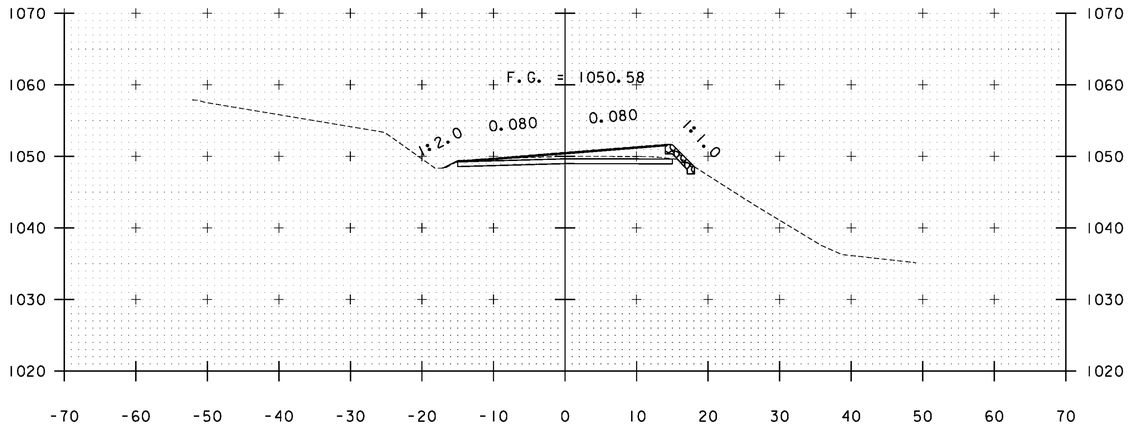

A 309+23

STA. A 308+00 TO STA. A 309+50

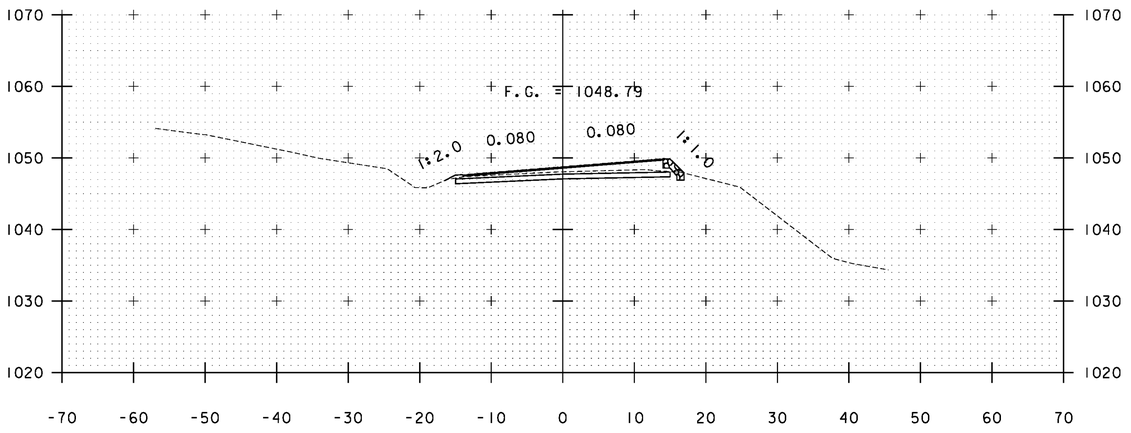
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

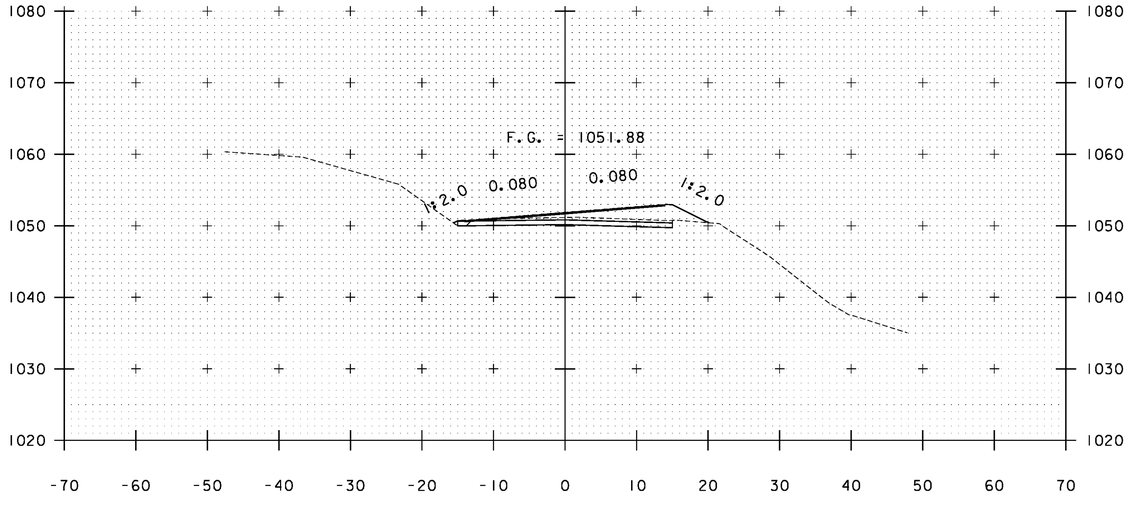
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 300 OF 444



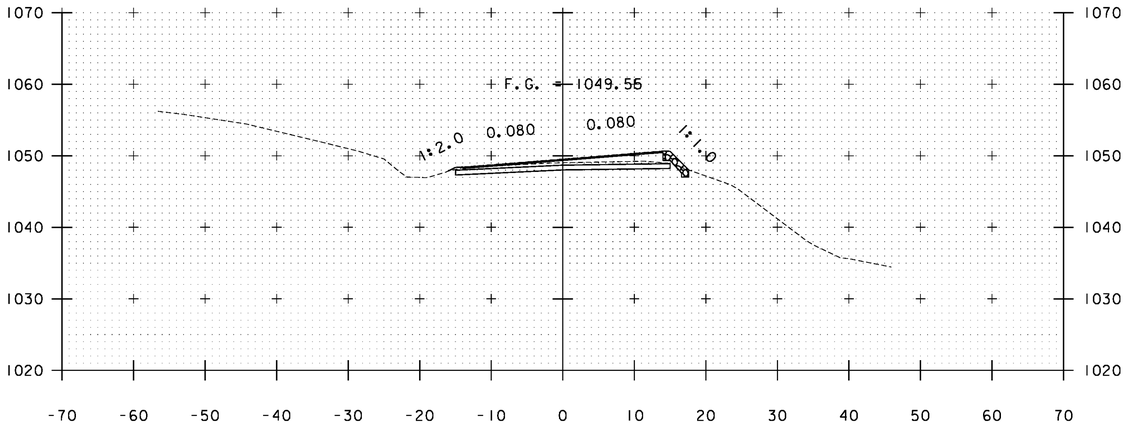

A 310+50




A 311+50




A 310+00



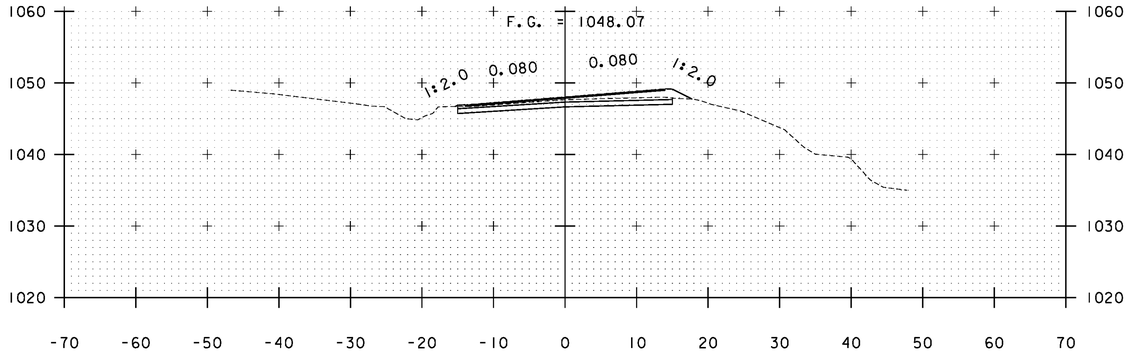

A 311+00

STA. A 310+00 TO STA. A 311+50

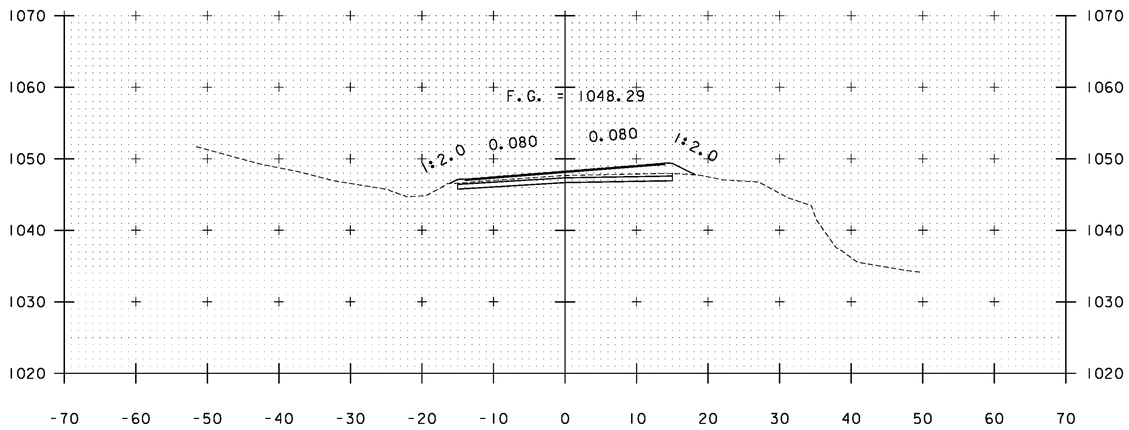
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

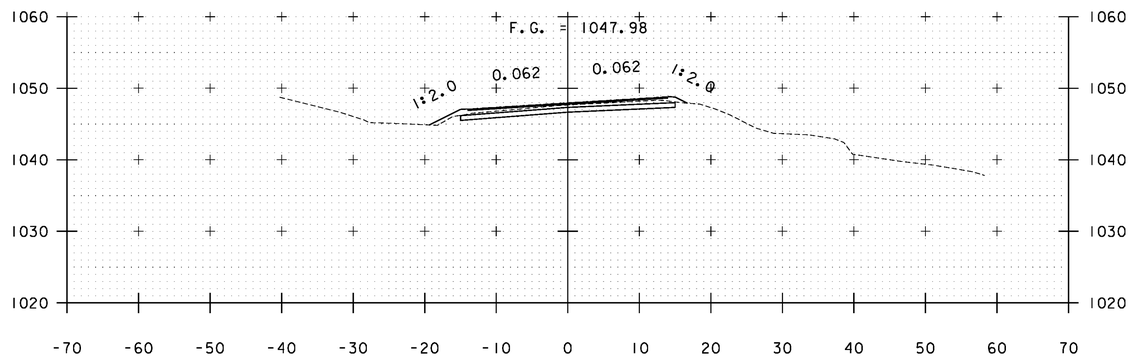
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 301 OF 444



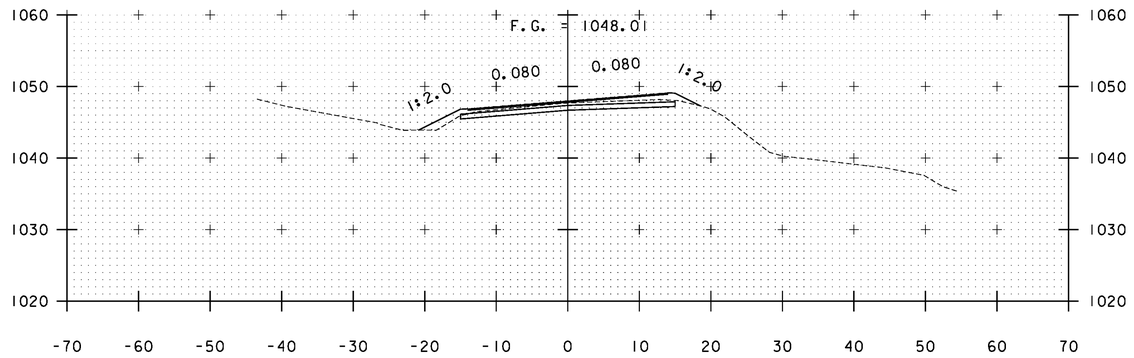

A 312+50



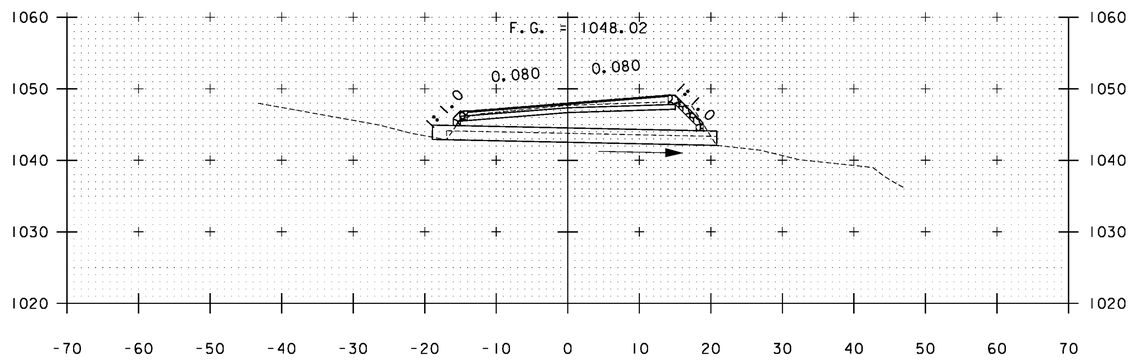

A 312+00




A 313+50




A 313+00



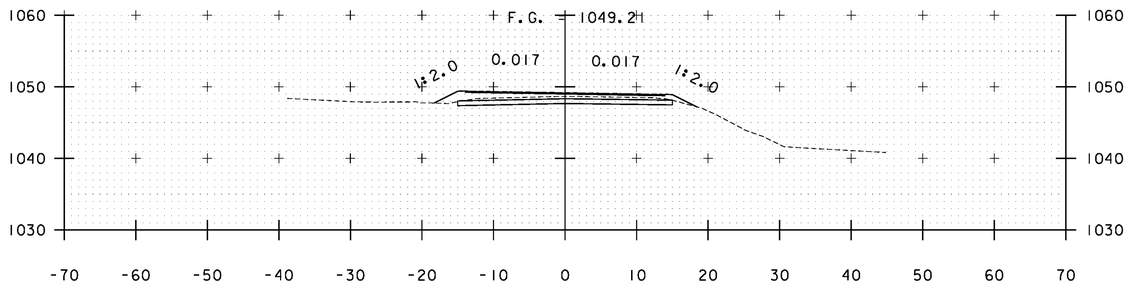

A 312+85

STA. A 312+00 TO STA. A 313+50

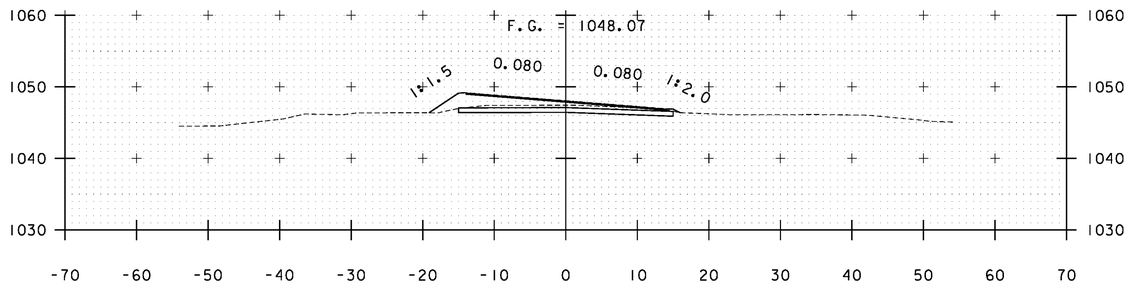
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

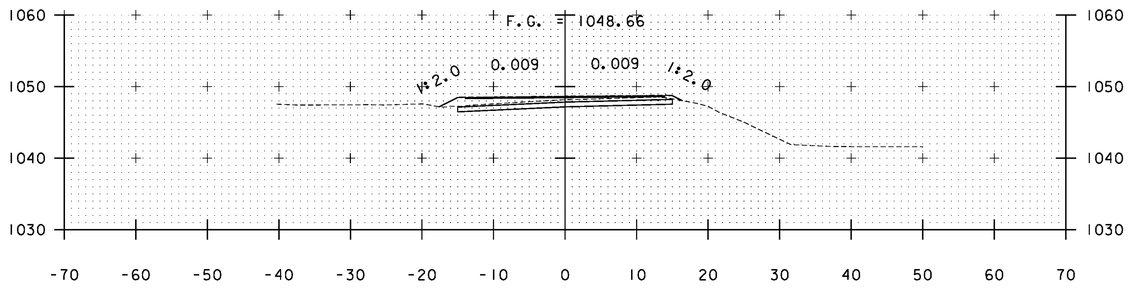
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 302 OF 444



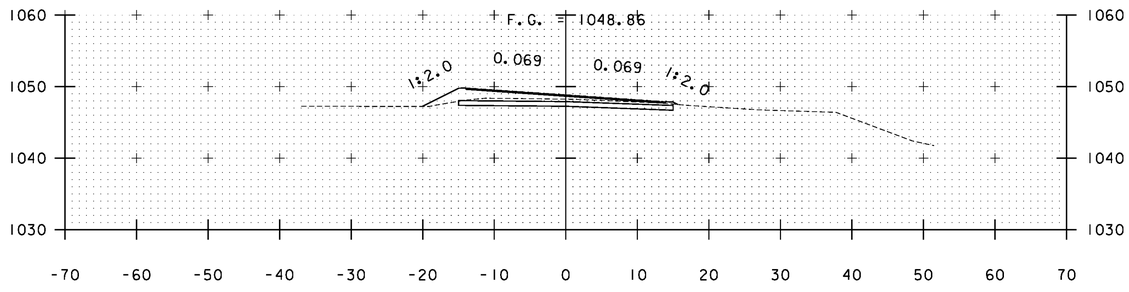

A 315+00



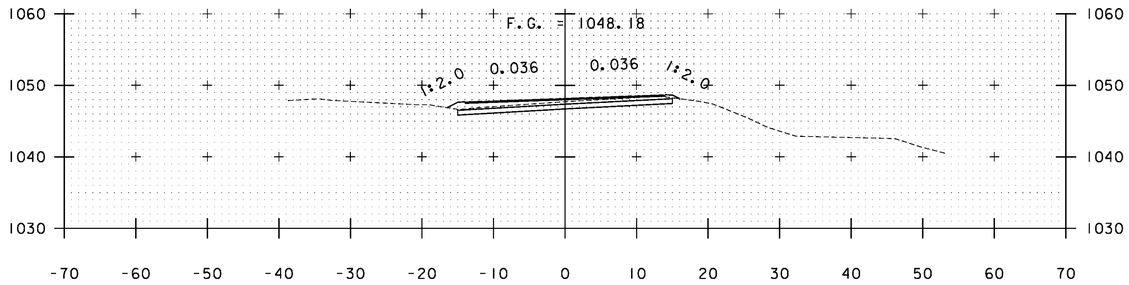

A 316+50



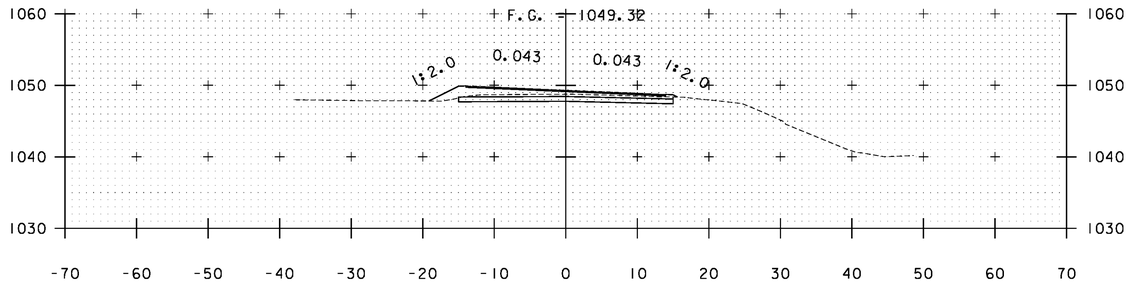

A 314+50




A 316+00




A 314+00



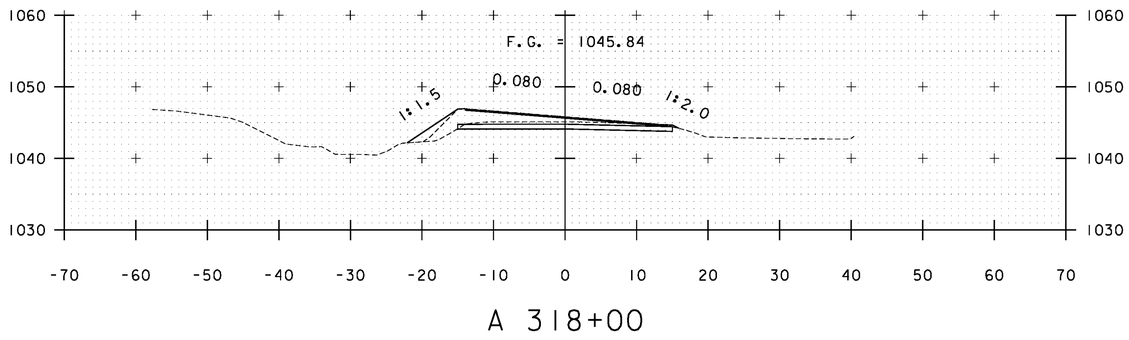

A 315+50

STA. A 314+00 TO STA. A 316+50

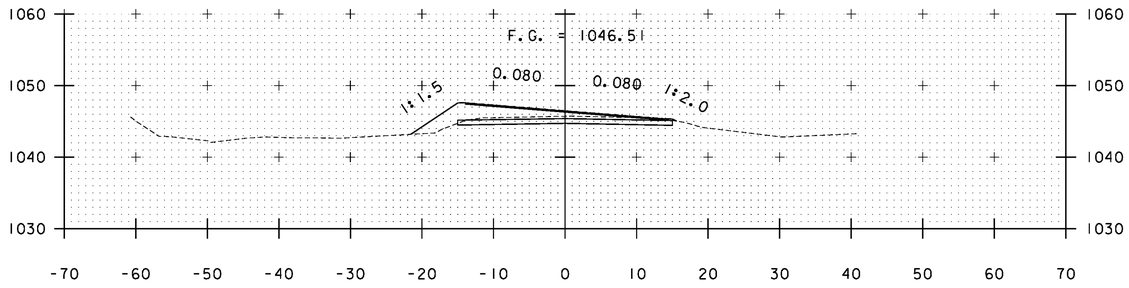
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

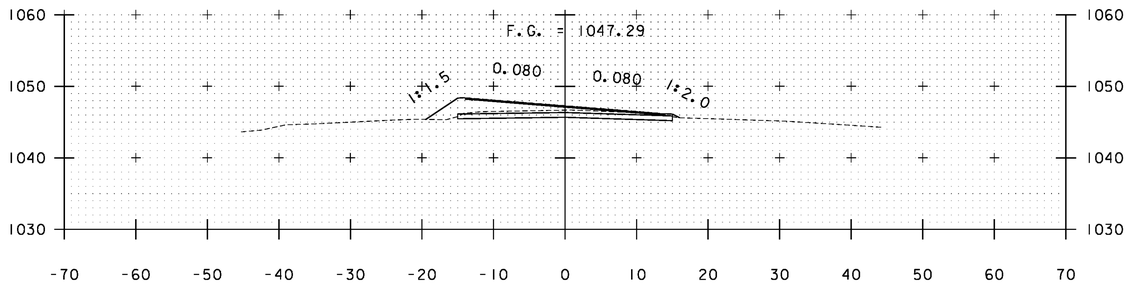
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 303 OF 444



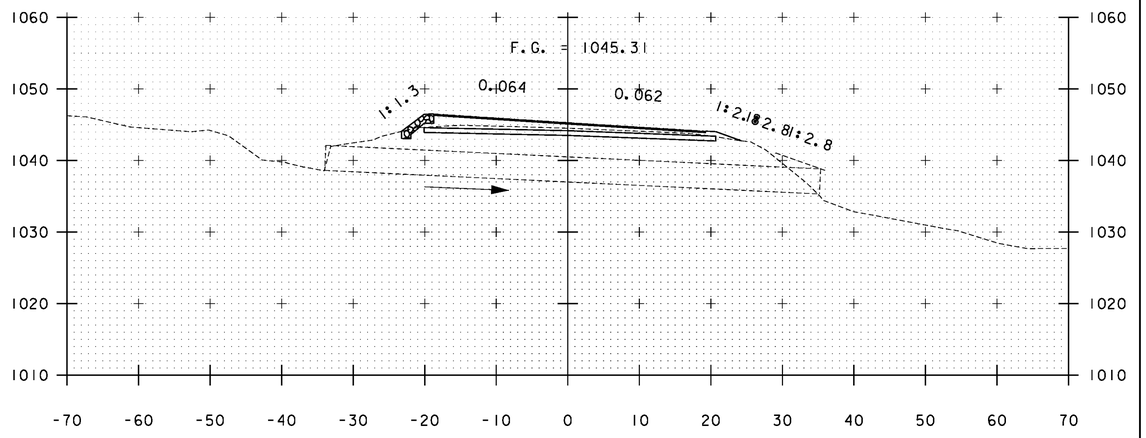

A 318+00



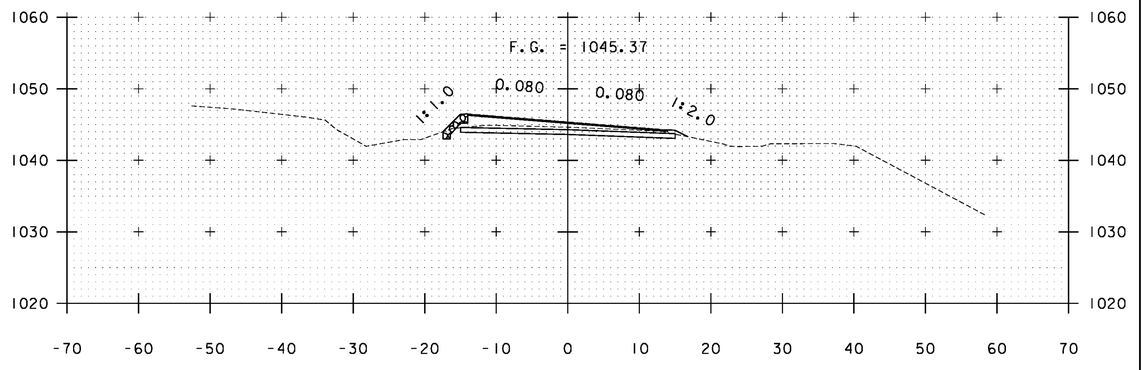

A 317+50




A 317+00




A 318+58



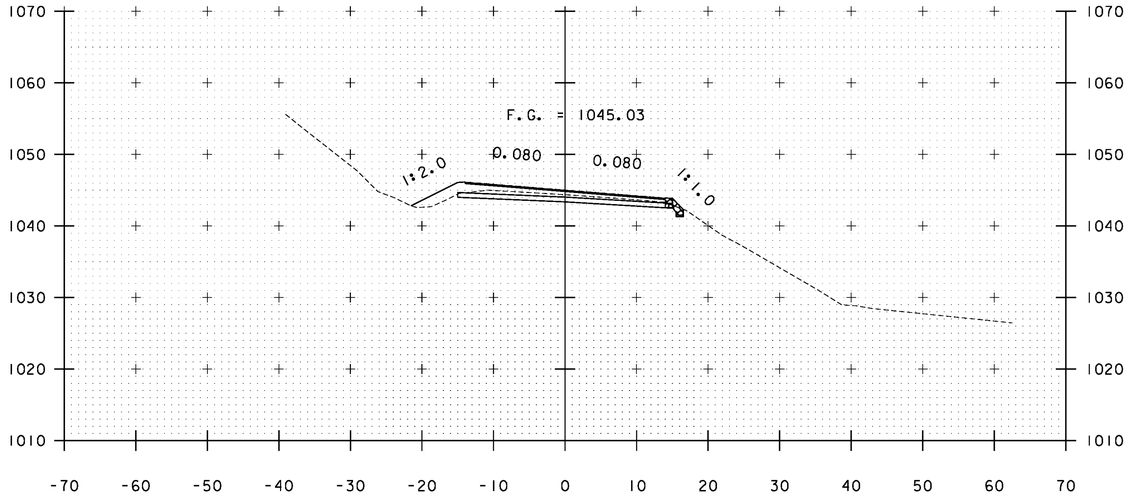

A 318+50

STA. A 317+00 TO STA. A 318+58

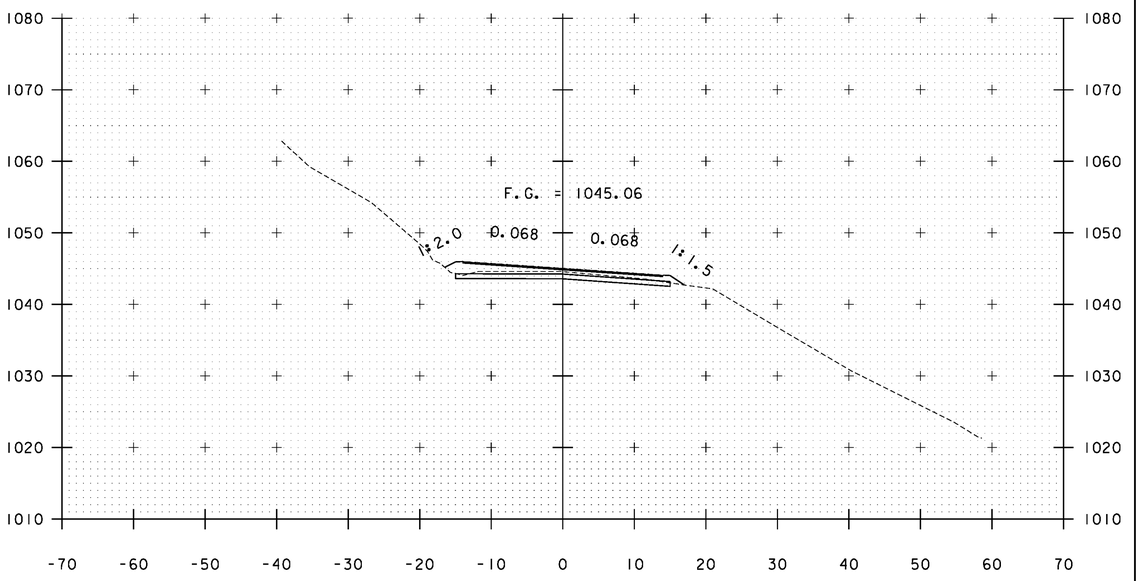
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

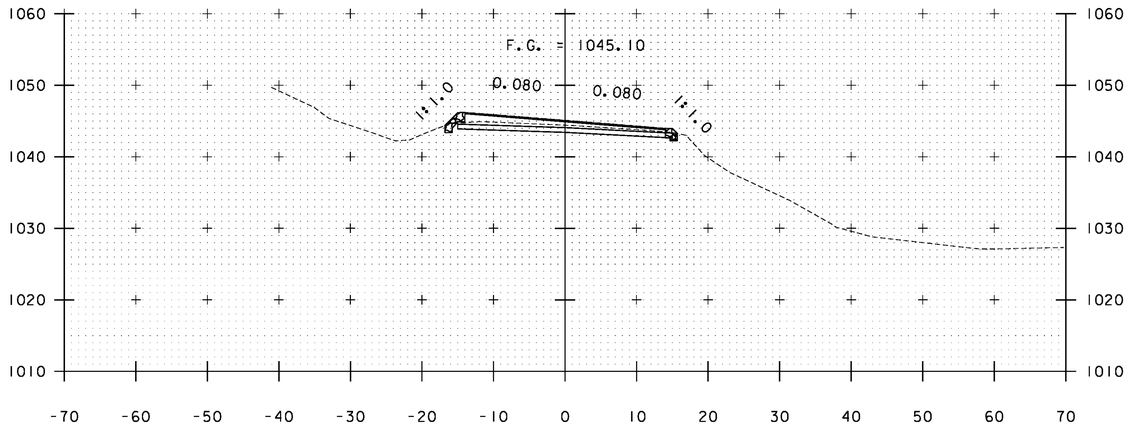
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 304 OF 444



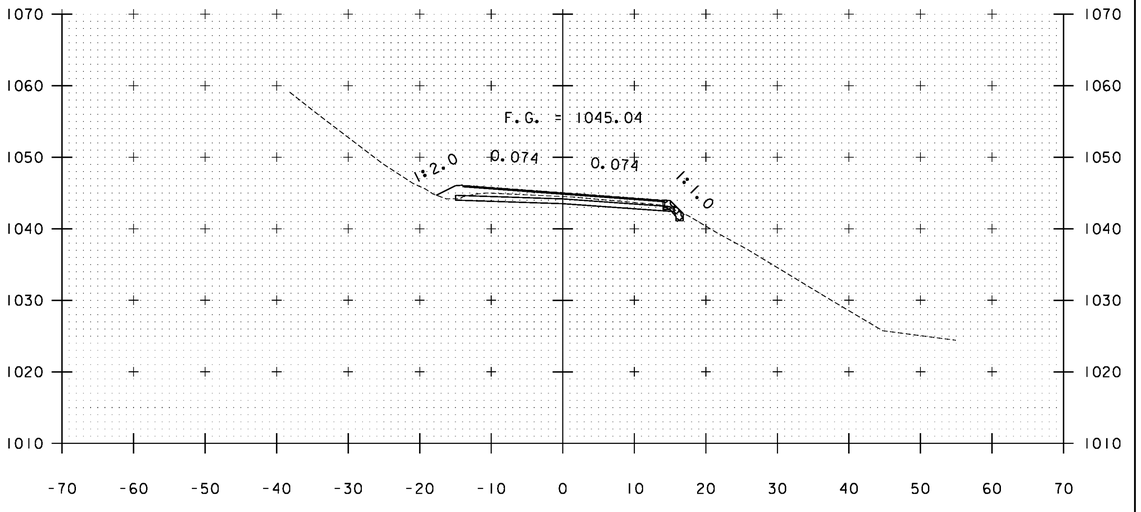

A 319+50




A 320+50




A 319+00



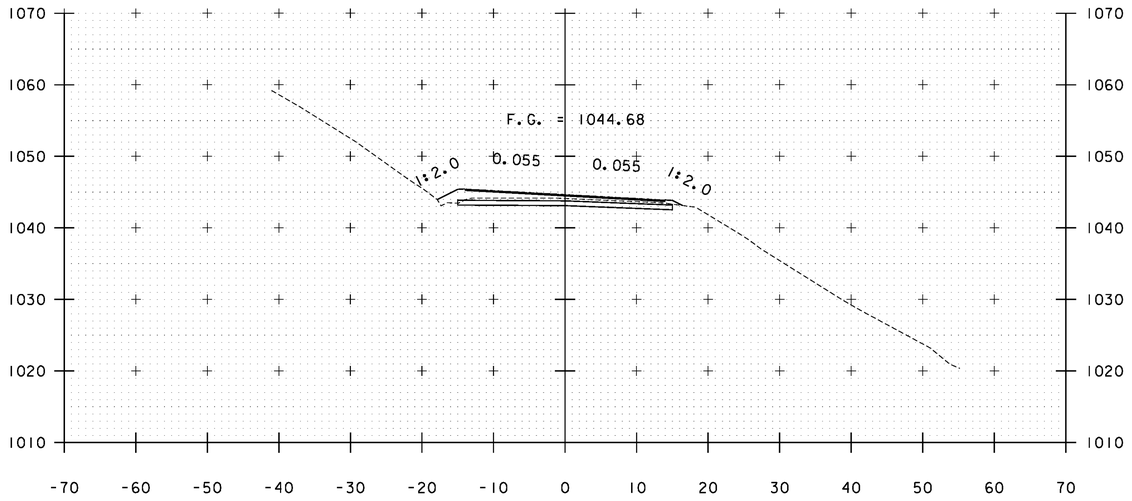

A 320+00

STA. A 319+00 TO STA. A 320+50

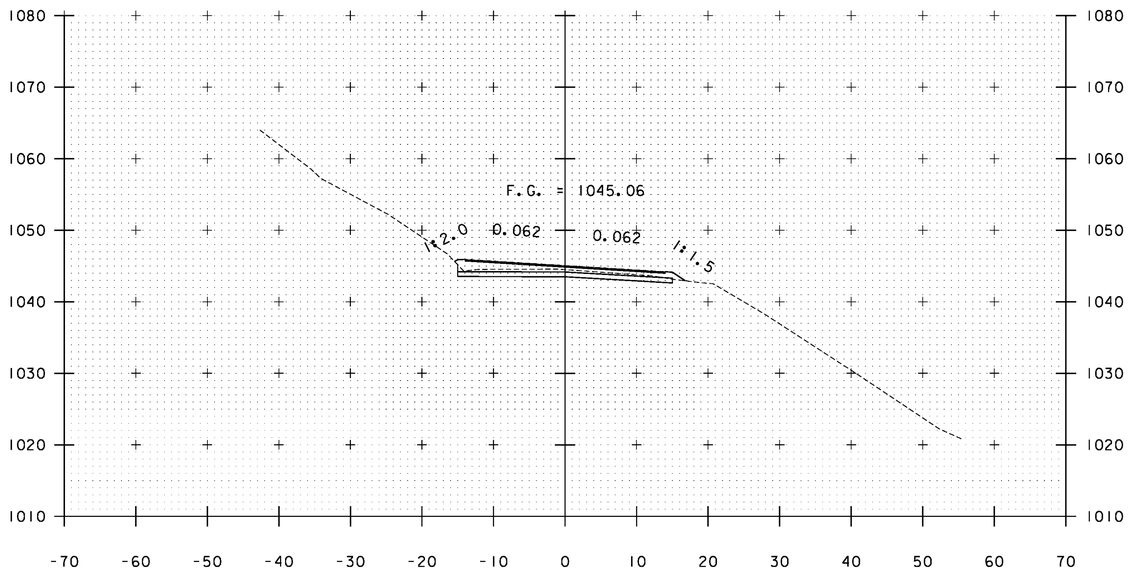
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

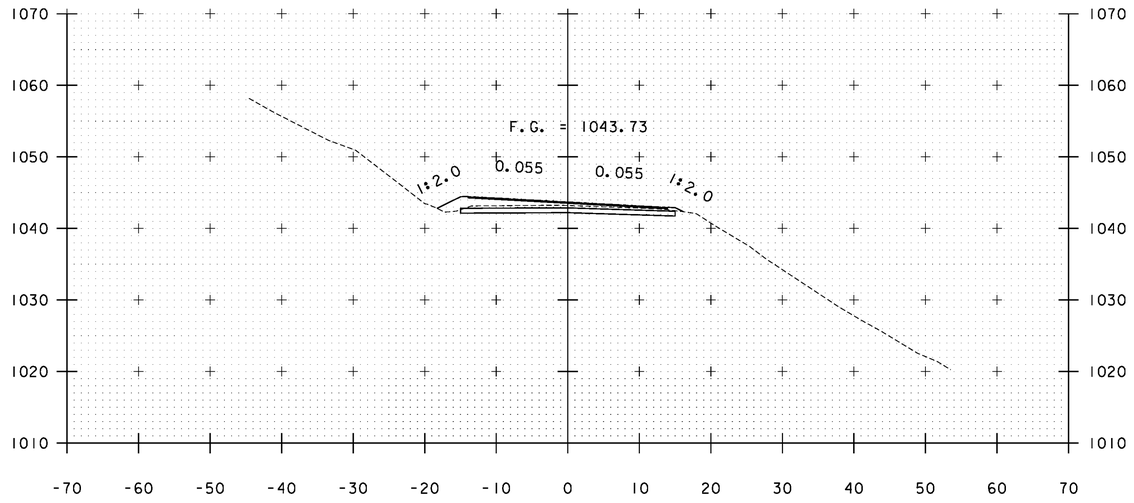
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 305 OF 444



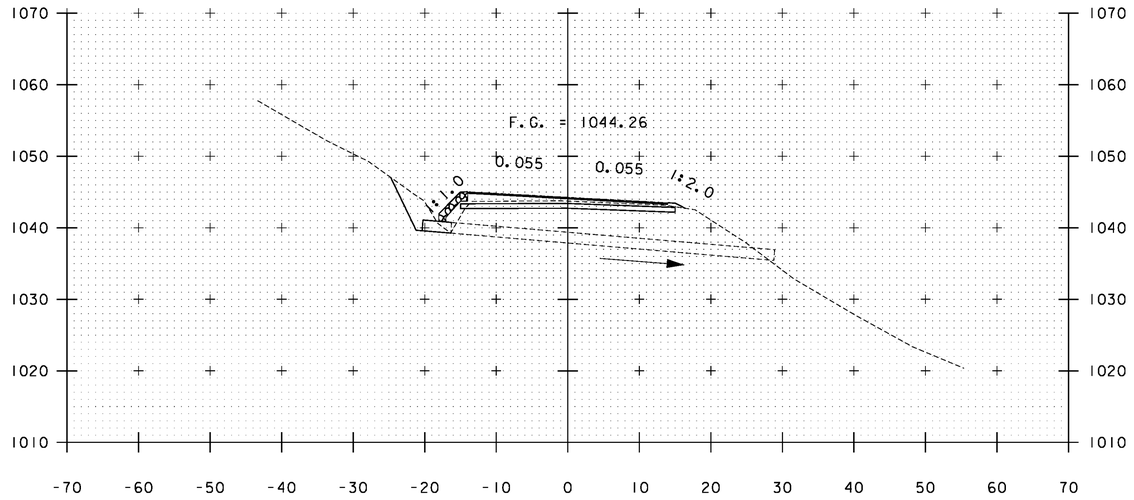

A 321+50




A 321+00



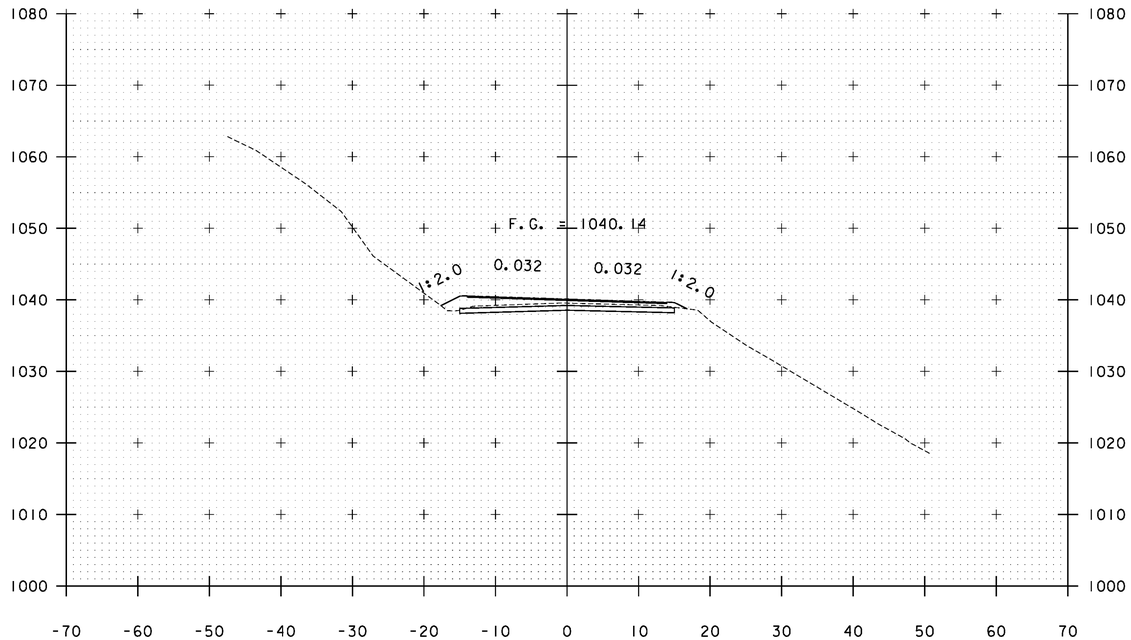

A 322+00



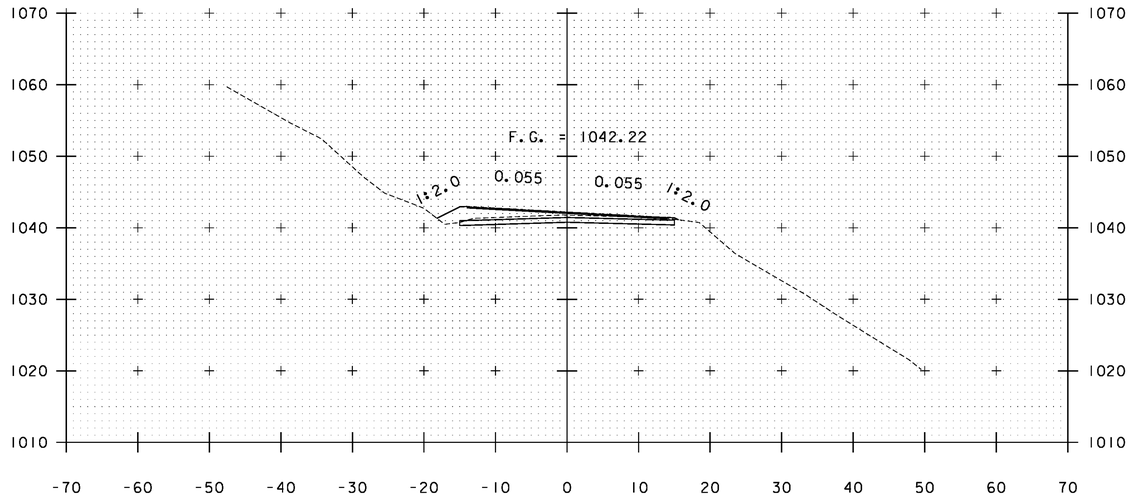

A 321+76

STA. A 321+00 TO STA. A 322+00

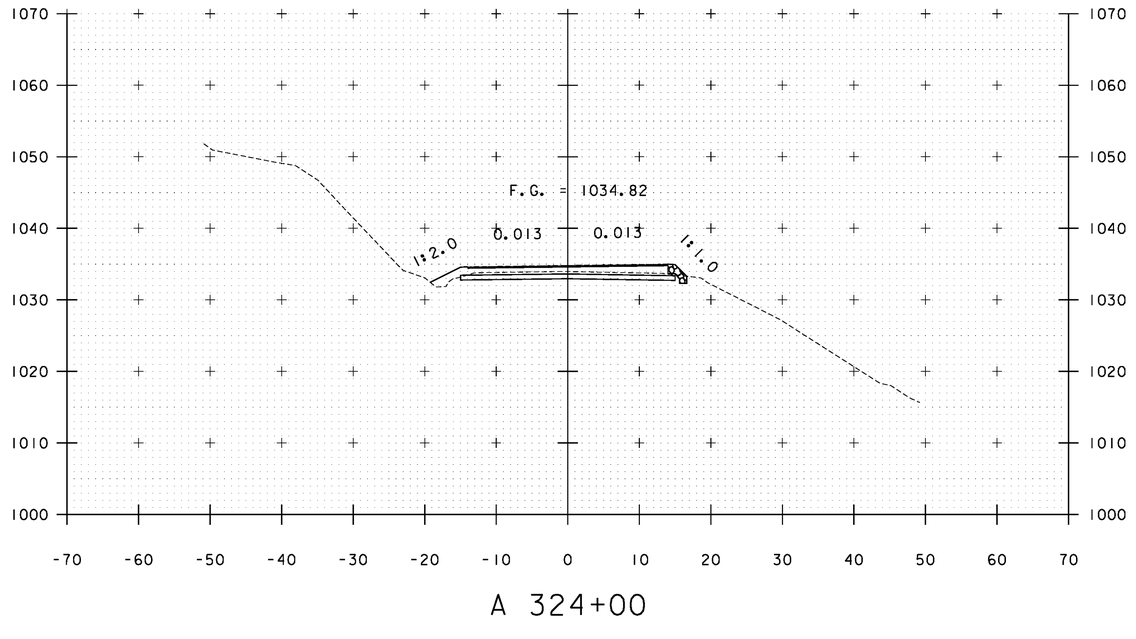
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 306 OF 444 |



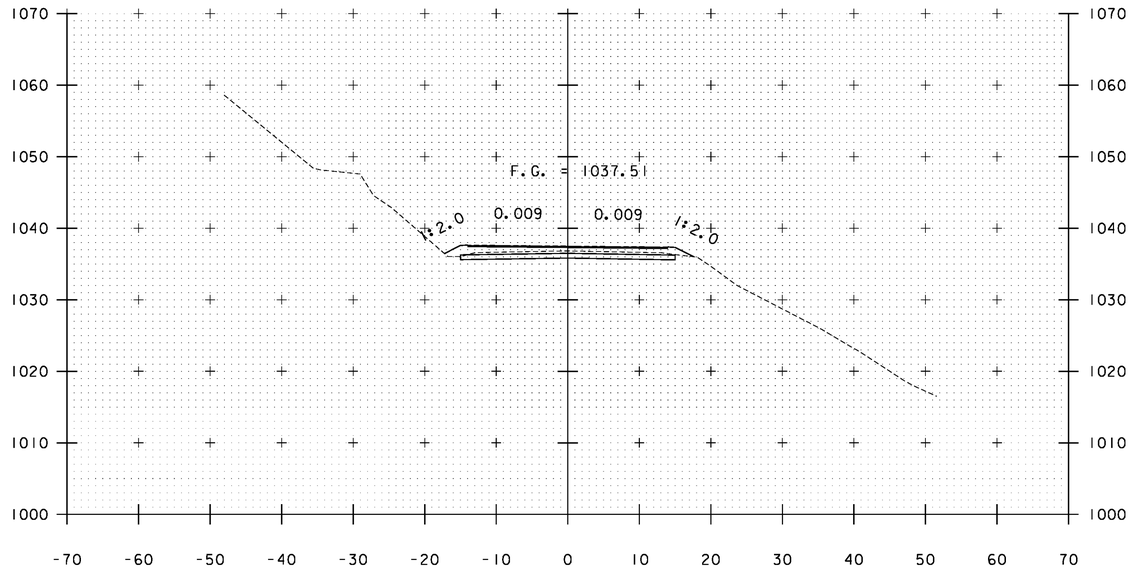

A 323+00




A 322+50



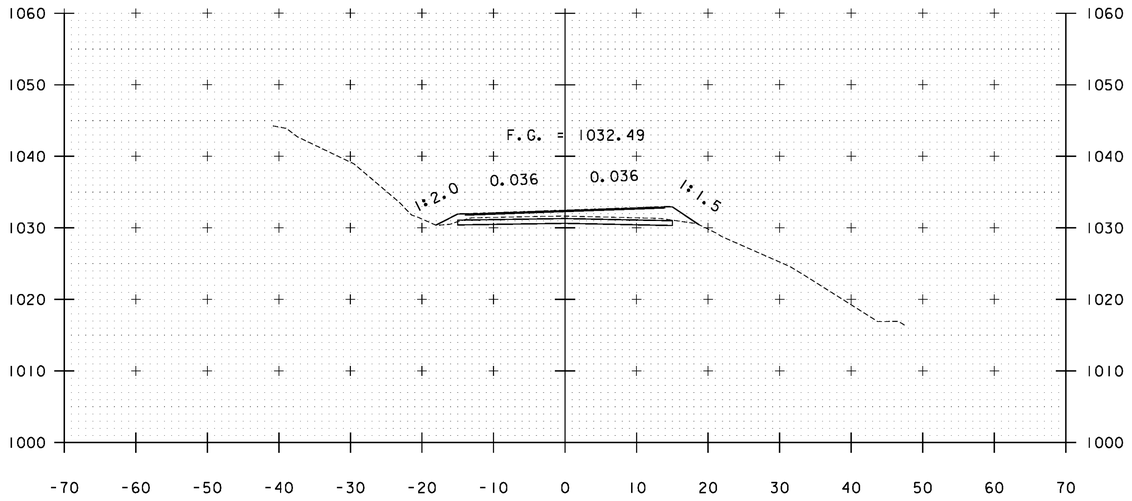

A 324+00



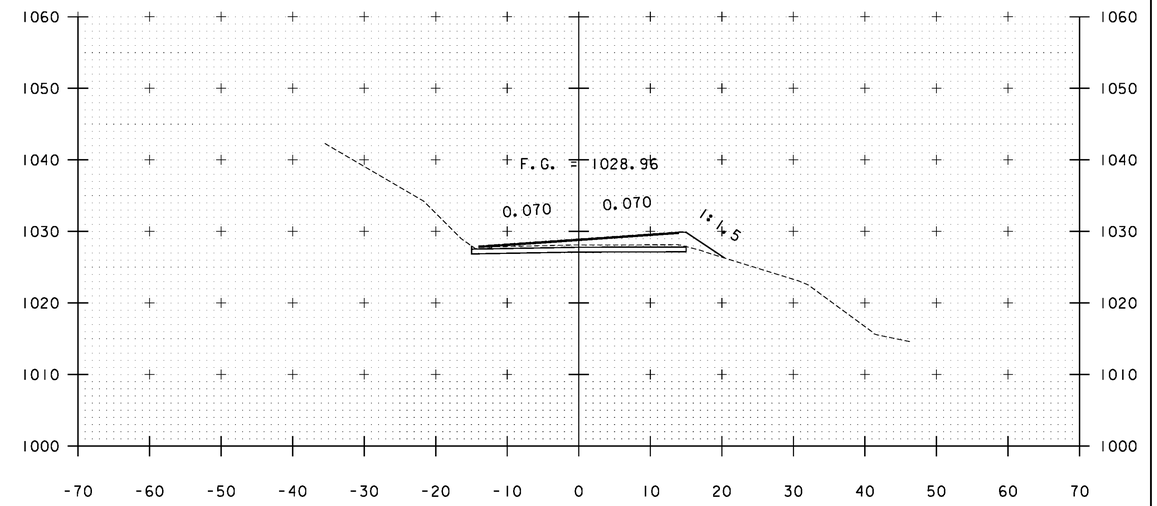

A 323+50

STA. A 322+50 TO STA. A 324+00

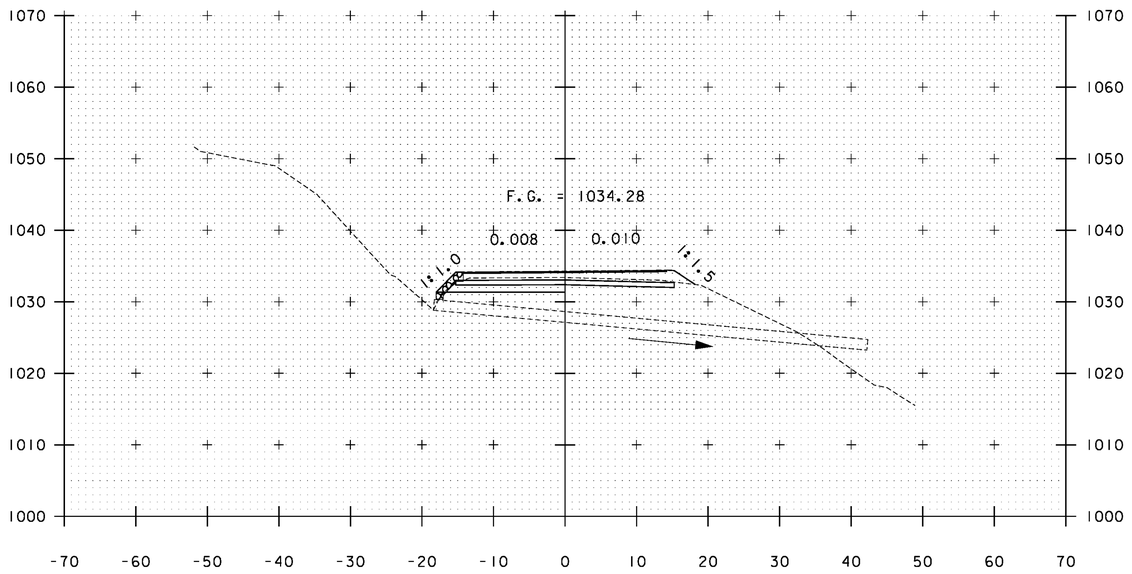
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 307 OF 444 |



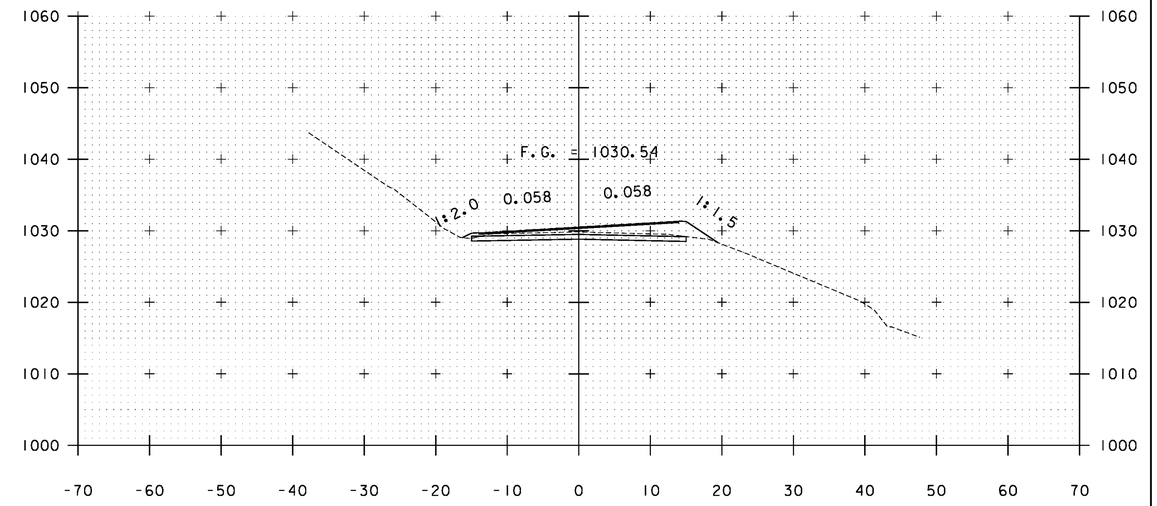

A 324+50




A 325+50




A 324+11



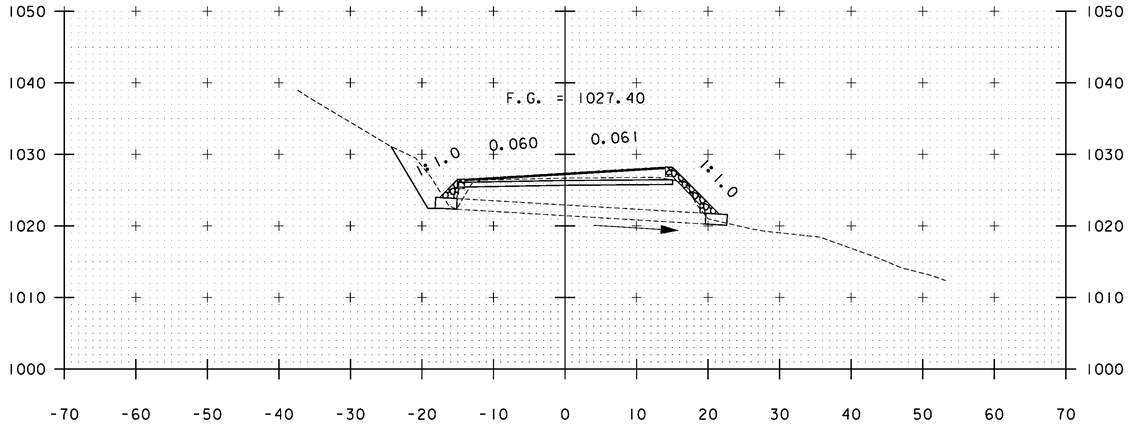

A 325+00

STA. A 324+11 TO STA. A 325+50

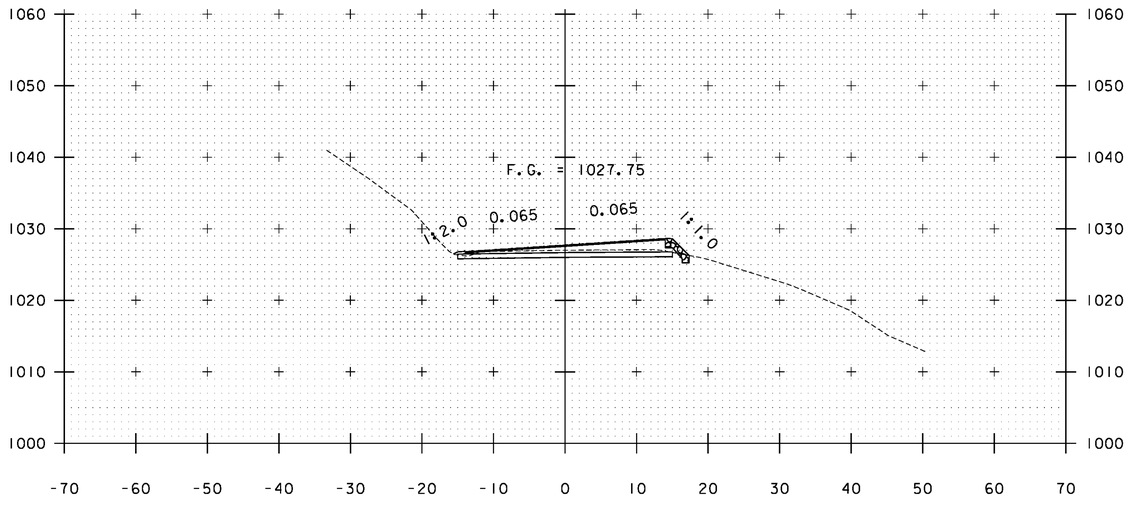
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

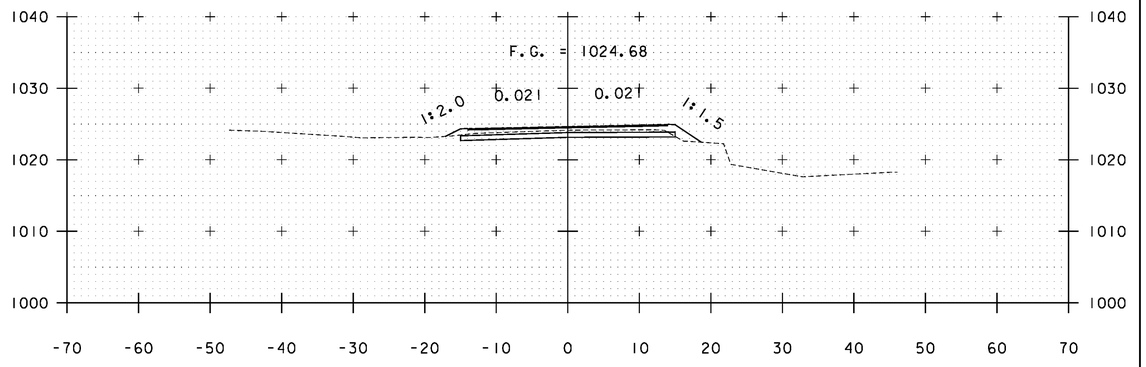
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 308 OF 444



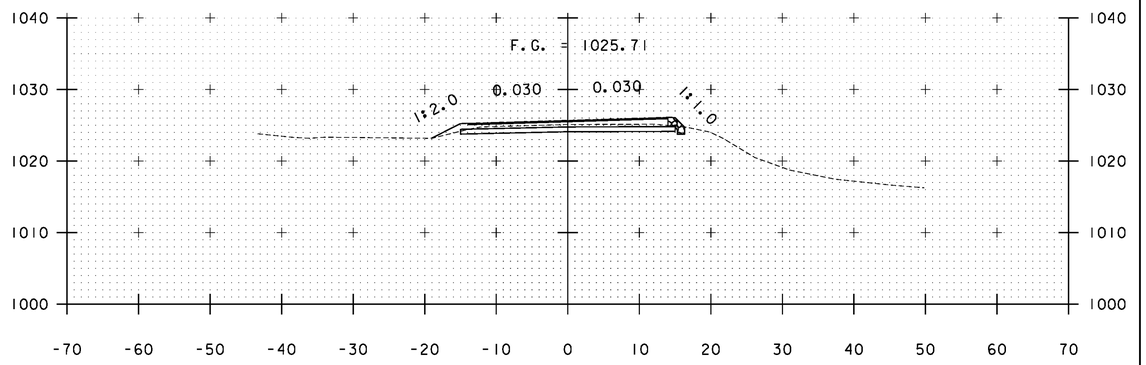

A 326+17



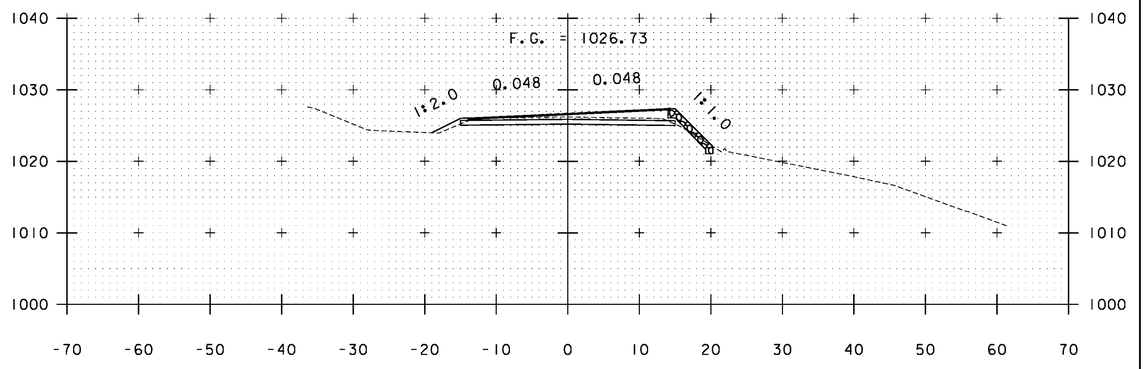

A 326+00




A 327+50




A 327+00



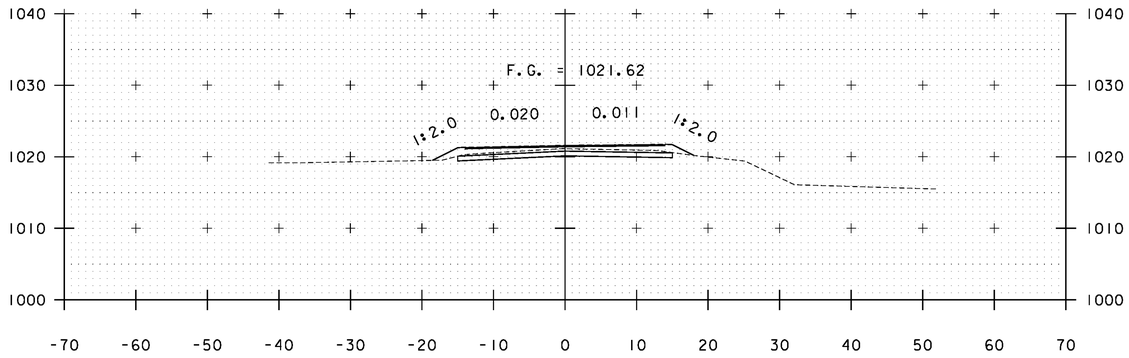

A 326+50

STA. A 326+00 TO STA. A 327+50

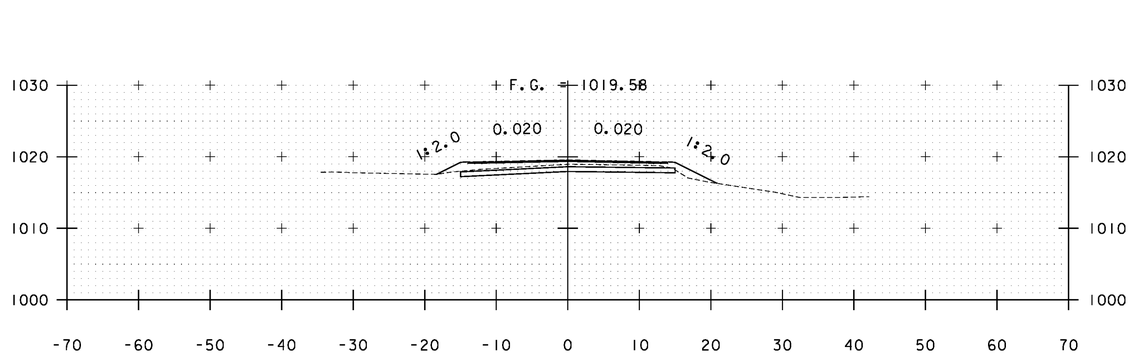
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

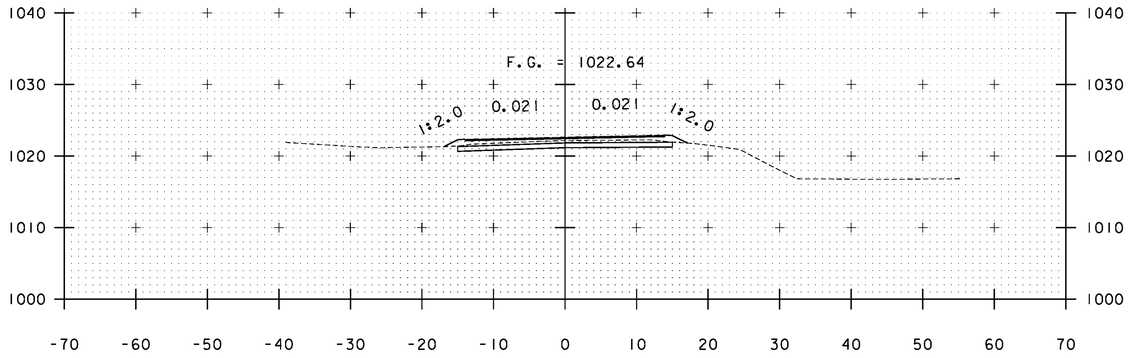
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 309 OF 444



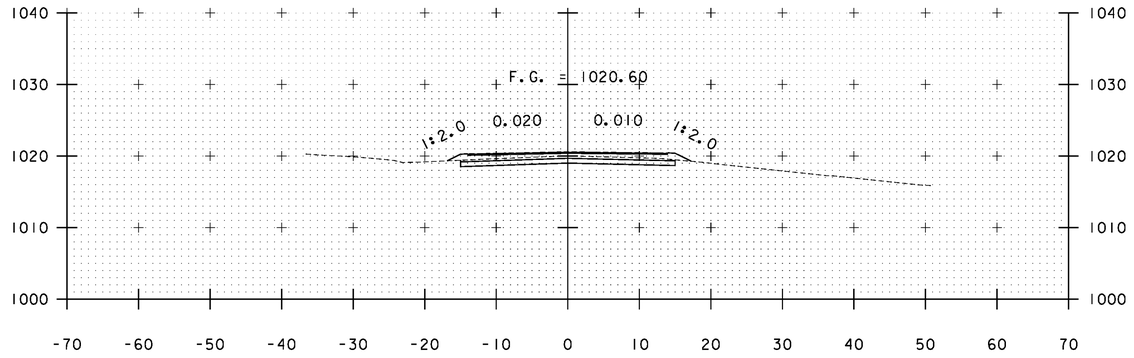

A 329+00



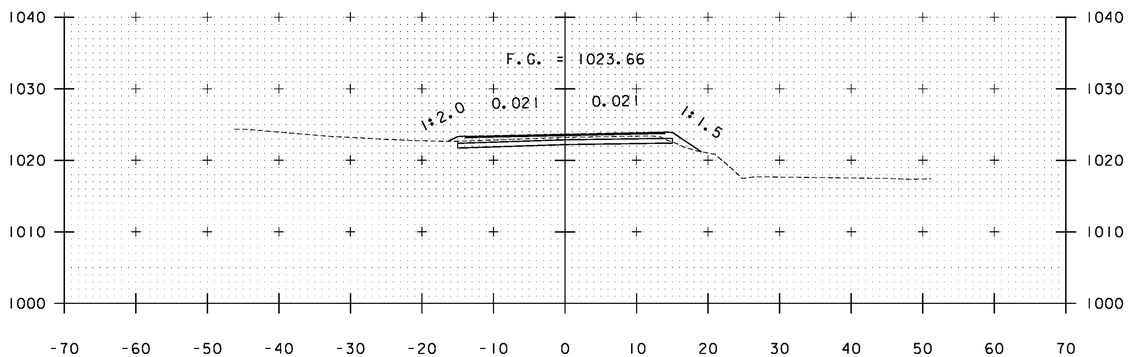

A 330+00



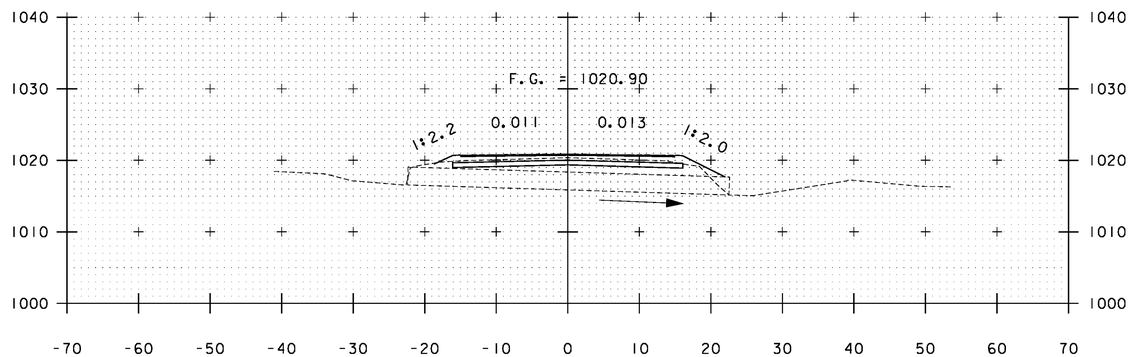

A 328+50




A 329+50




A 328+00



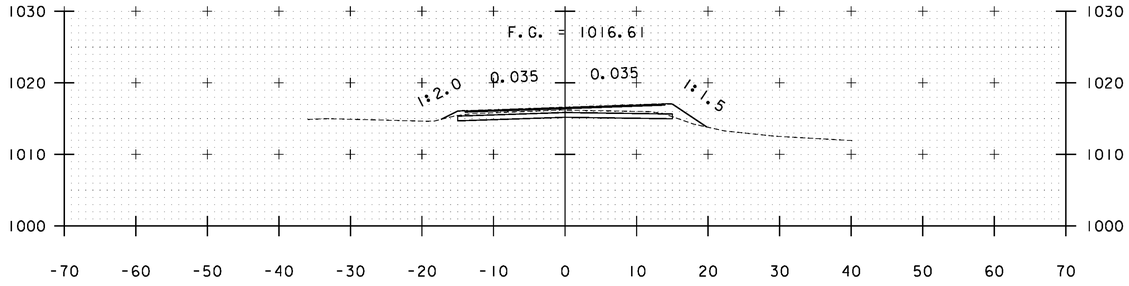

A 329+35

STA. A 328+00 TO STA. A 330+00

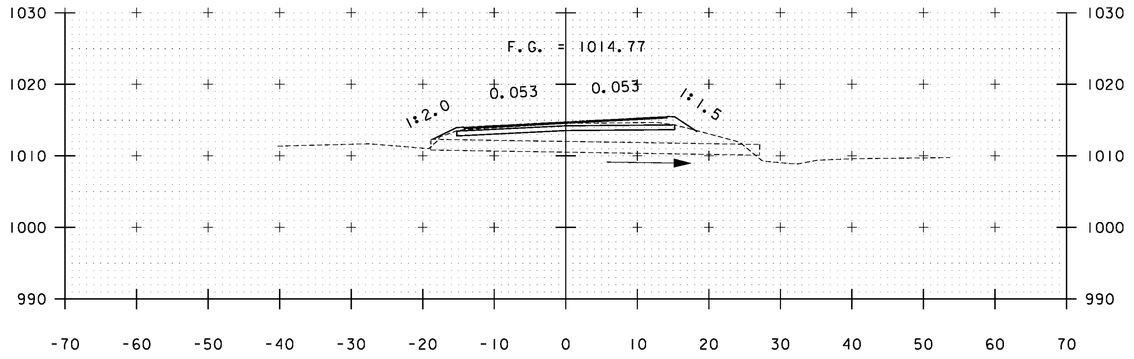
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

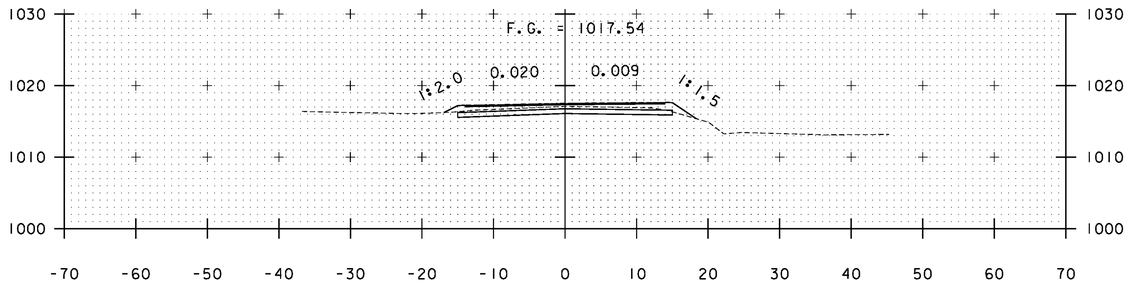
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 310 OF 444



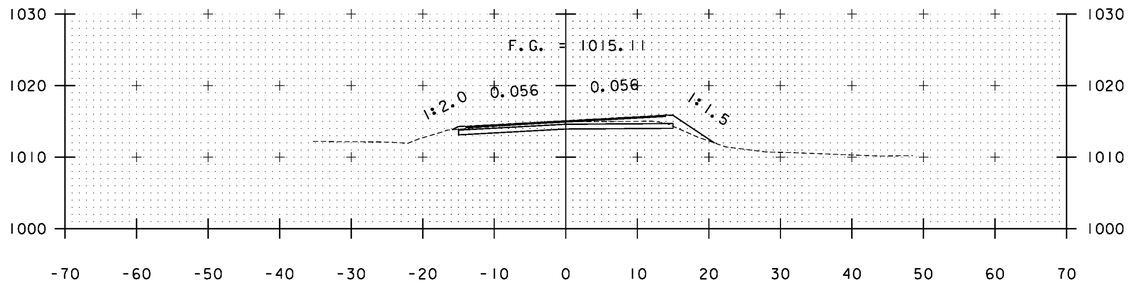

A 331+50



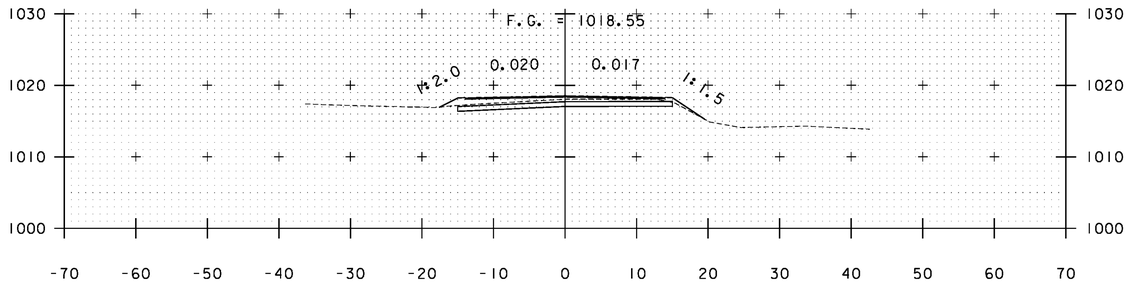

A 332+78



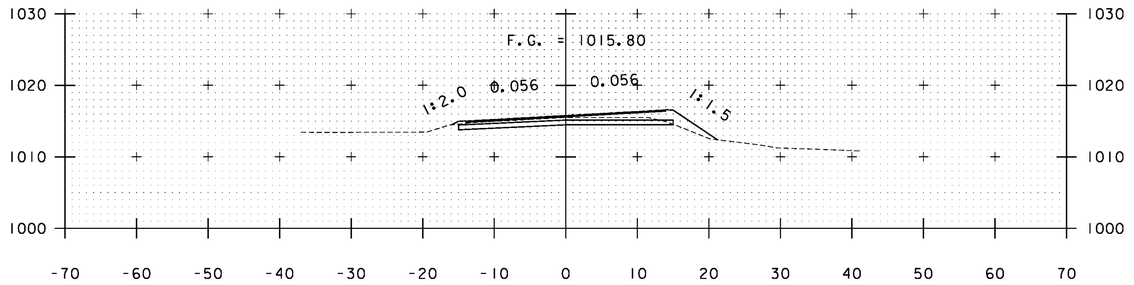

A 331+00




A 332+50




A 330+50



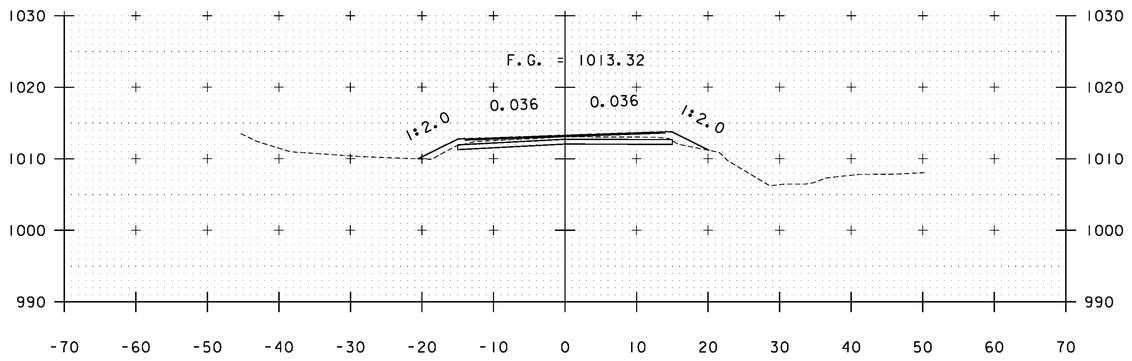

A 332+00

STA. A 330+50 TO STA. A 332+78

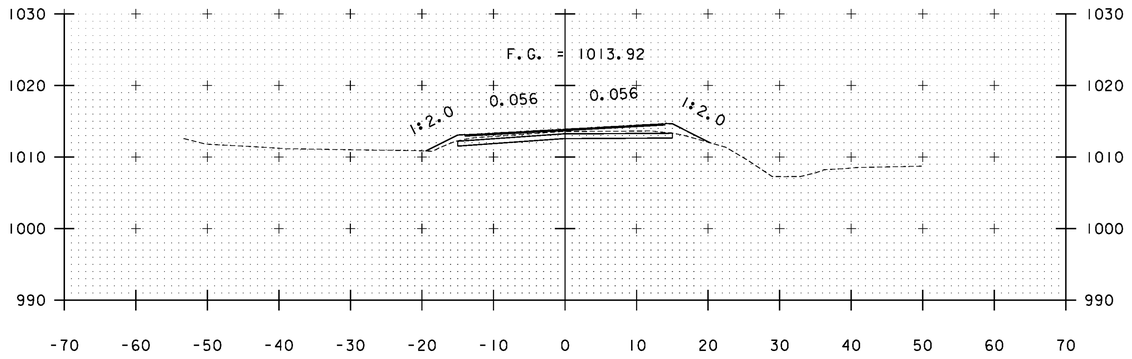
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

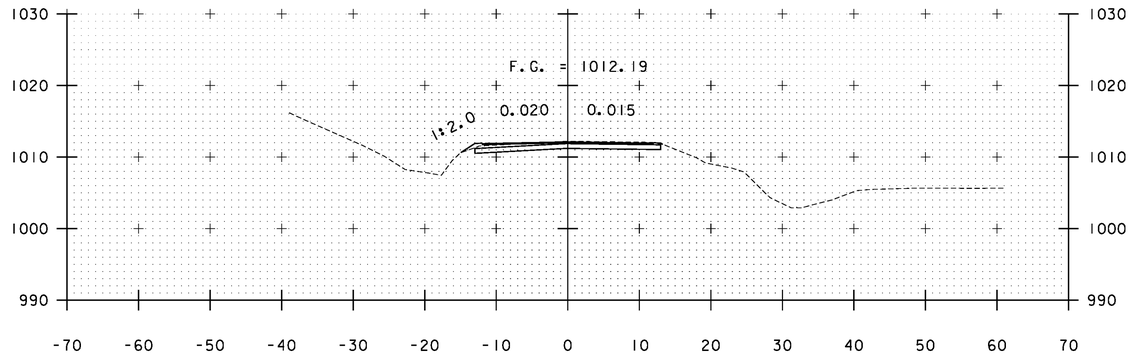
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 311 OF 444



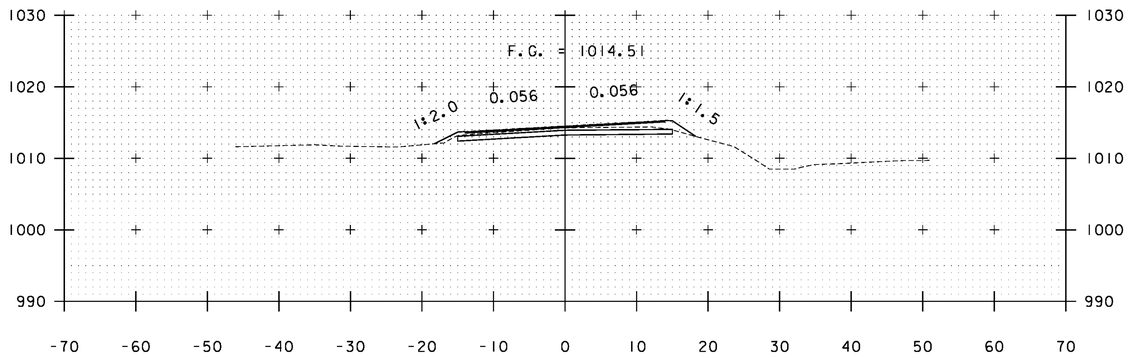

A 334+00



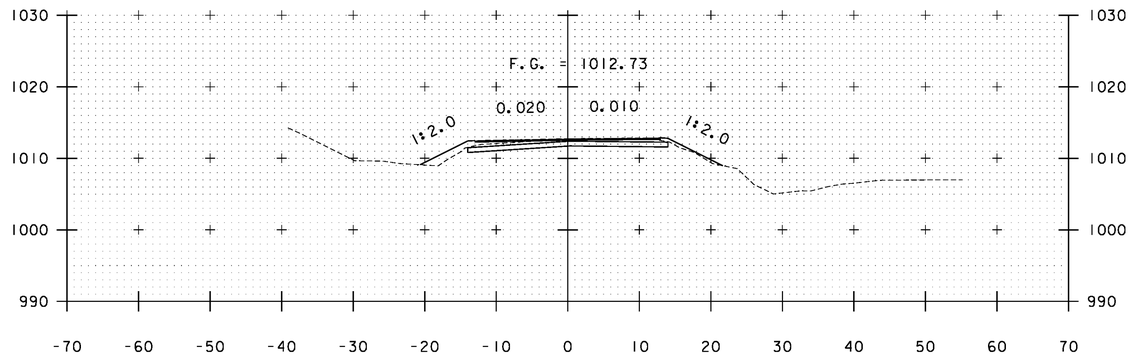

A 333+50




A 335+00




A 333+00



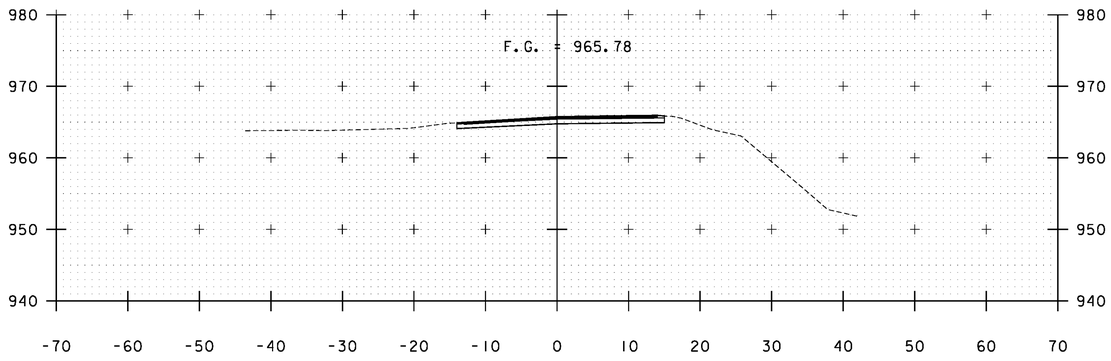

A 334+50

STA. A 333+00 TO STA. A 335+00

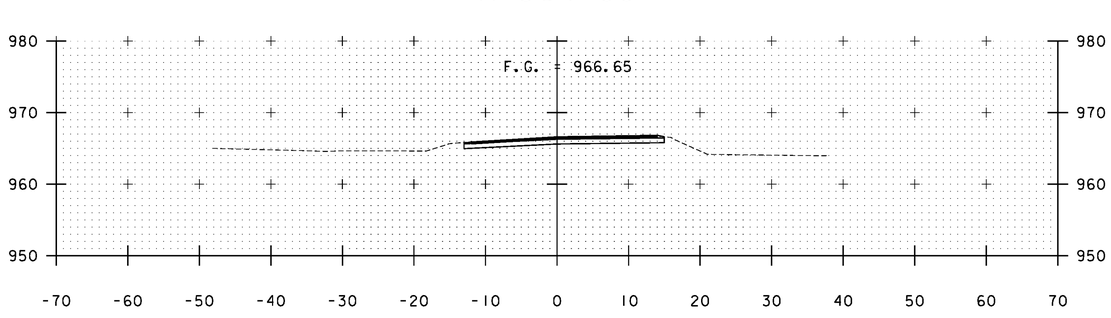
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

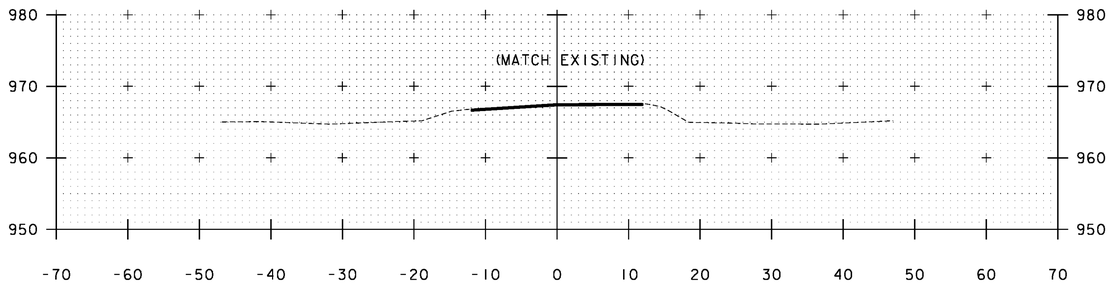
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 312 OF 444



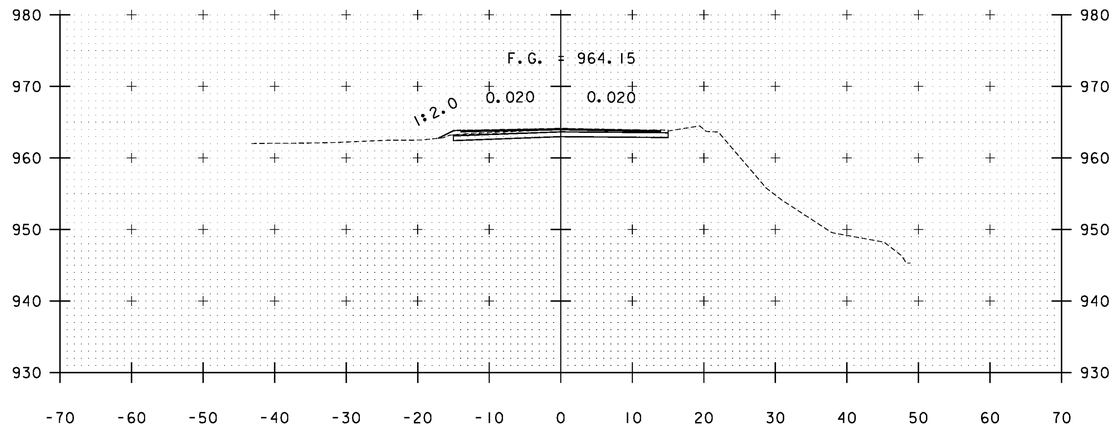

A 364+00



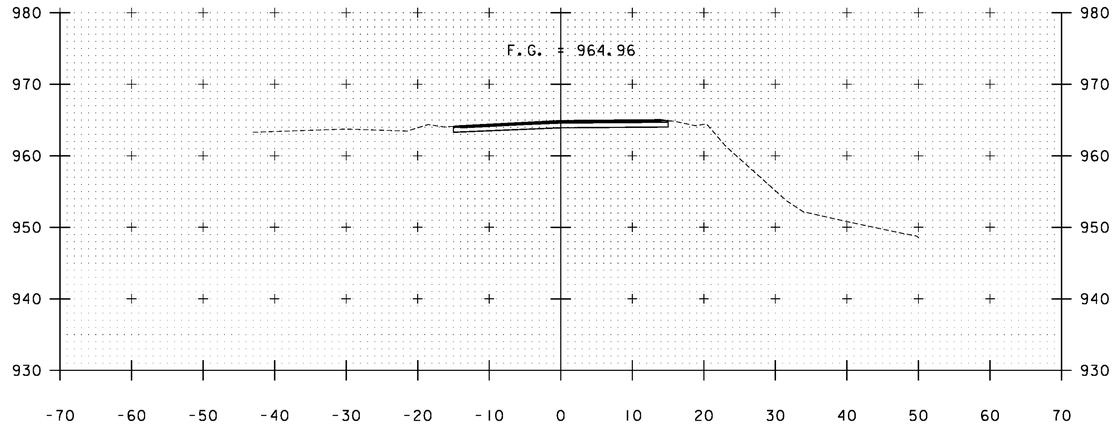

A 363+50




A 363+00



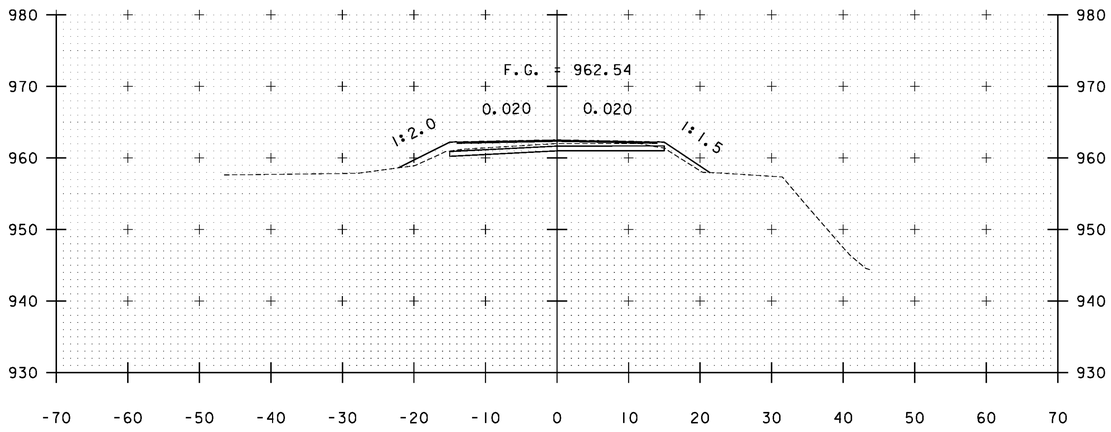

A 365+00



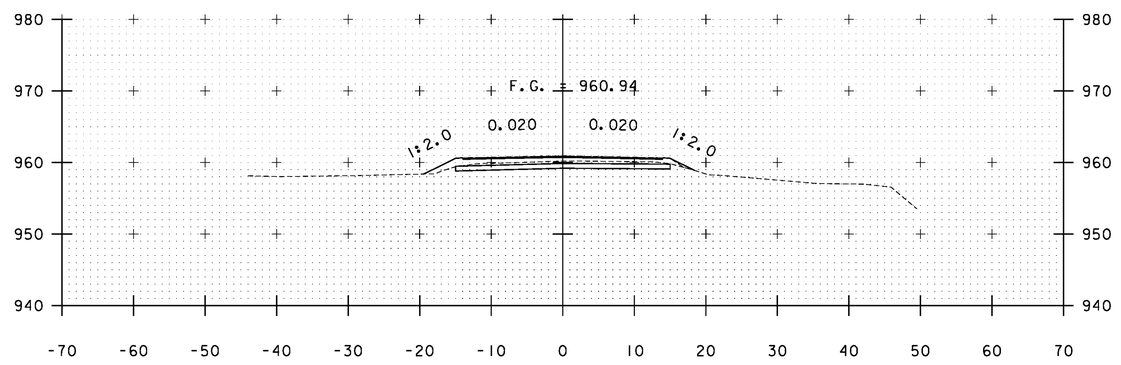

A 364+50

STA. A 363+00 TO STA. A 365+00

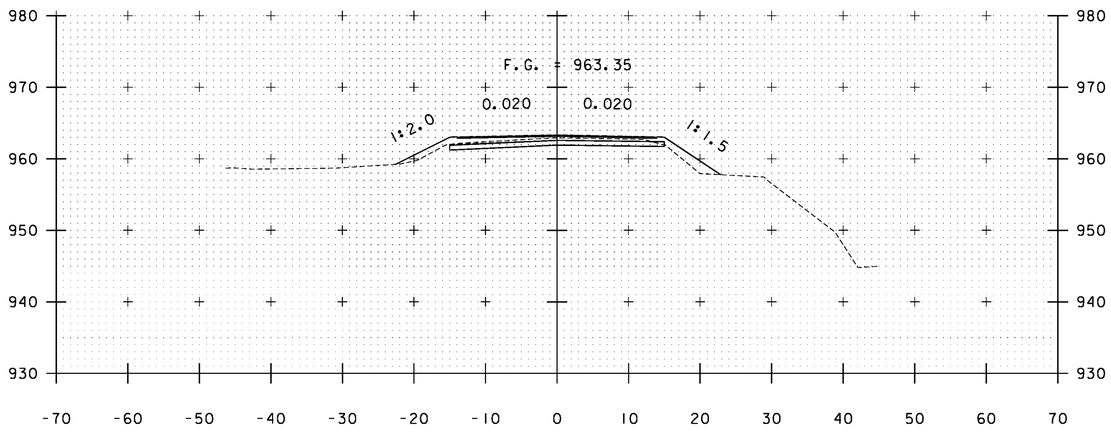
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 313 OF 444 |



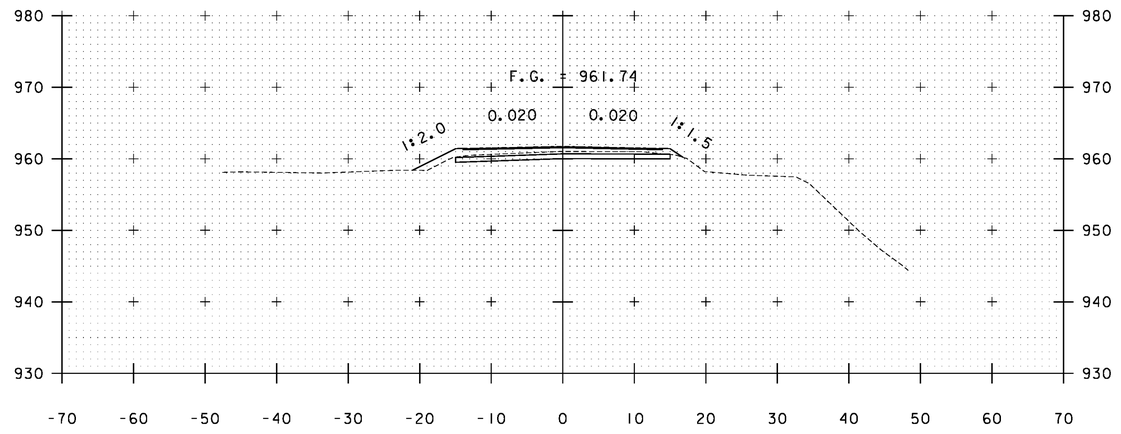

A 366+00




A 367+00




A 365+50



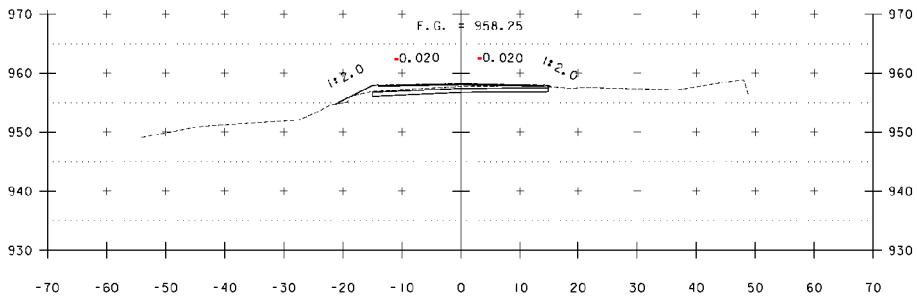

A 366+50

STA. A 365+50 TO STA. A 367+00

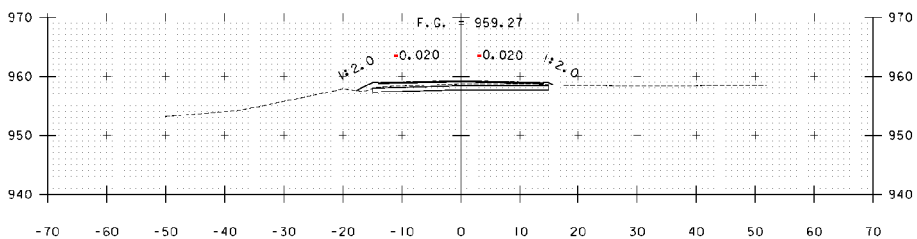
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

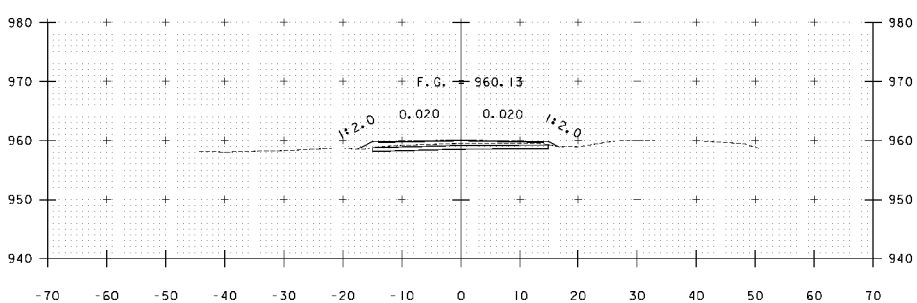
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 314 OF 444



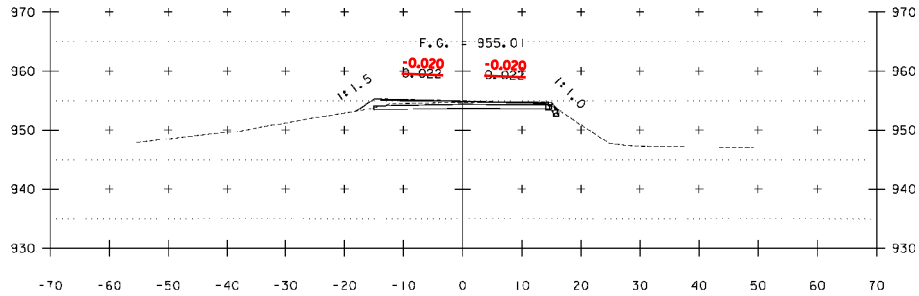

A 368+50



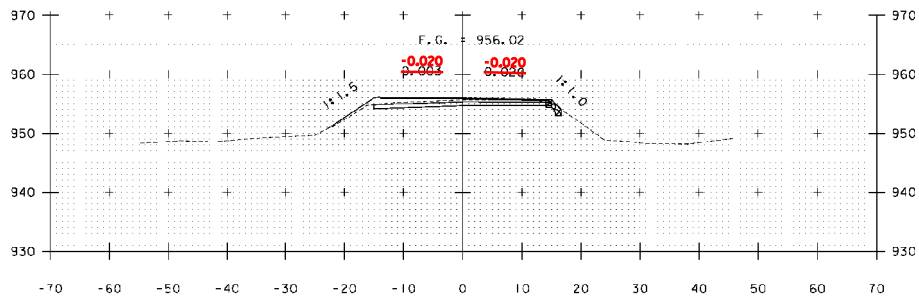

A 368+00



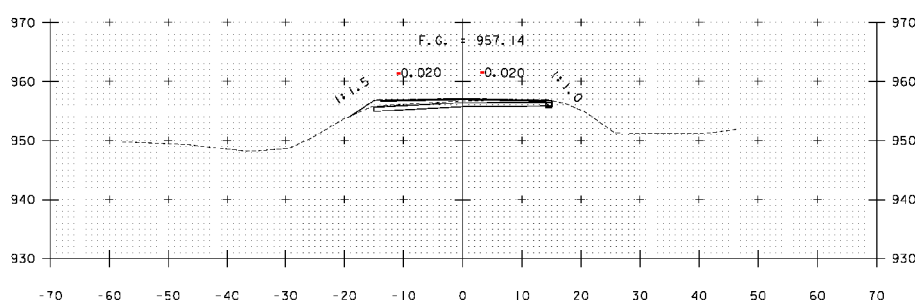

A 367+50




A 370+00




A 369+50



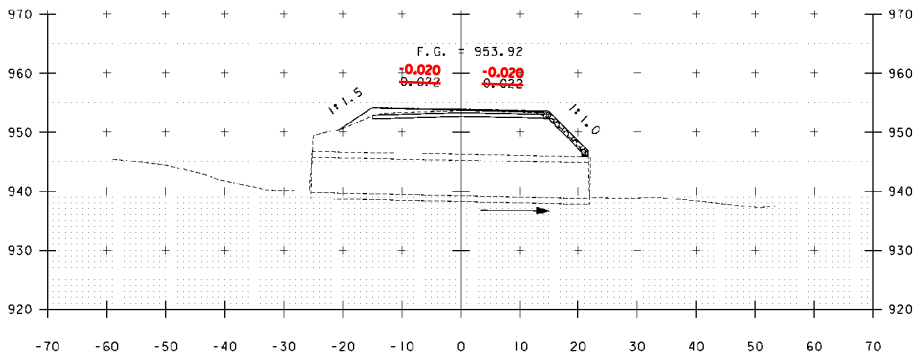

A 369+00

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

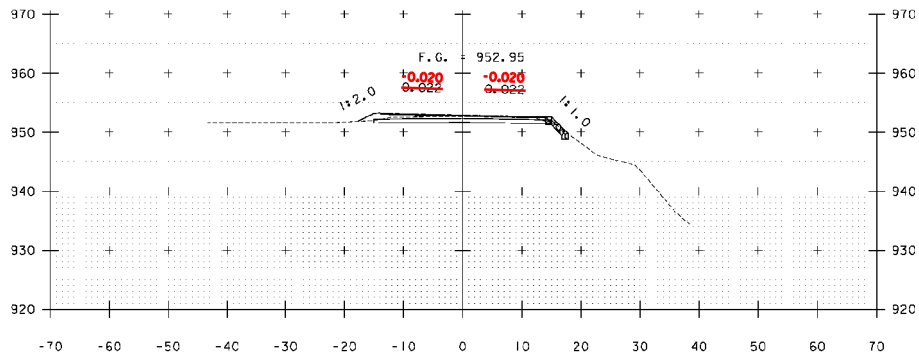
FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 315 OF 444

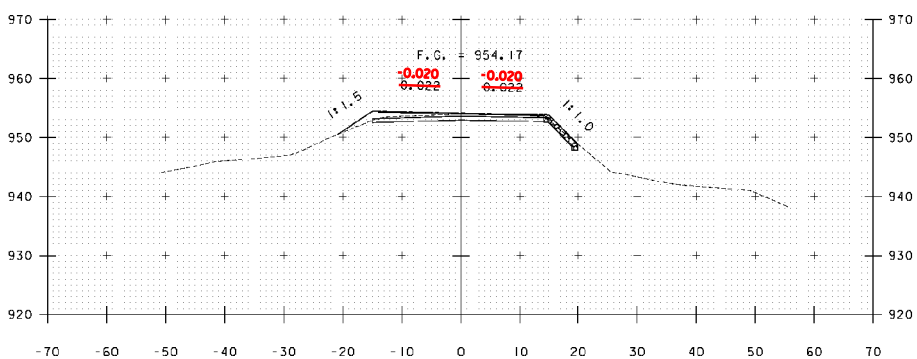
STA. A 367+50 TO STA. A 370+00



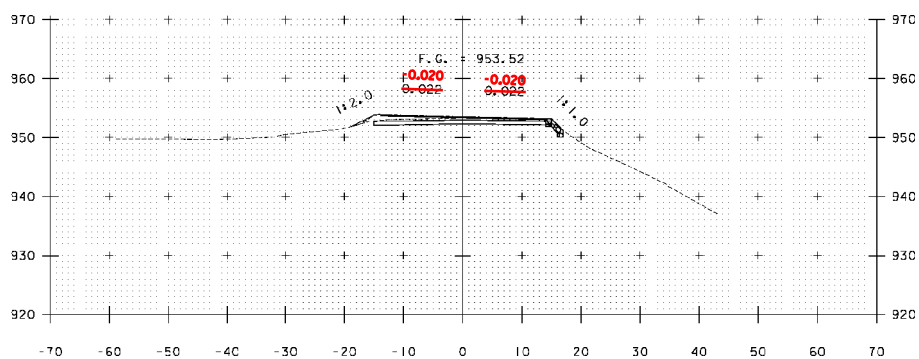

A 370+68




A 371+50



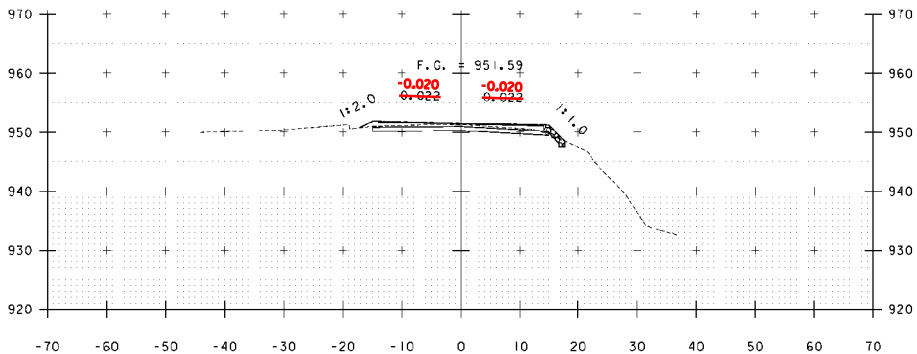

A 370+50



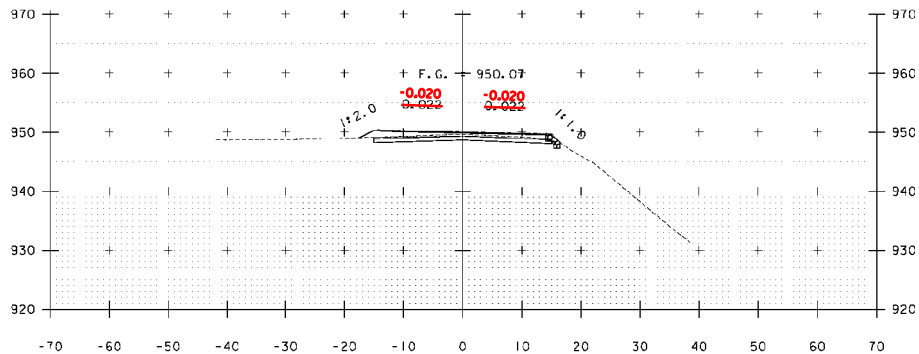

A 371+00

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 316 OF 444 |

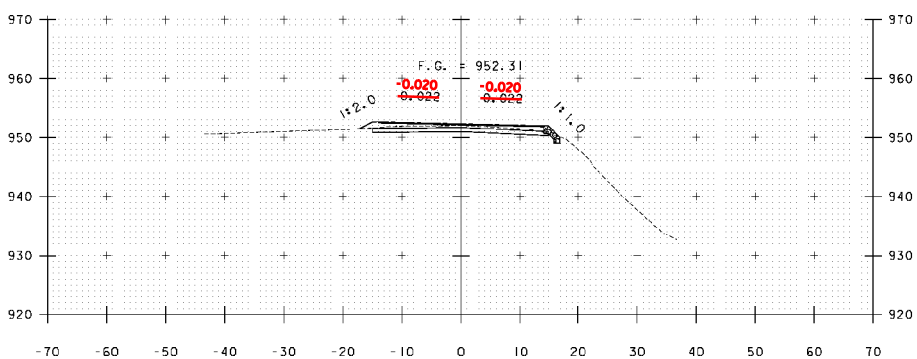
STA. A 370+50 TO STA. A 371+50



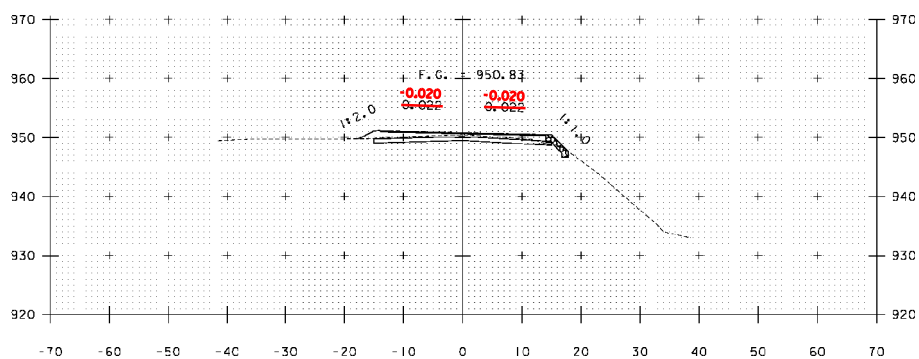

A 372+50




A 373+50



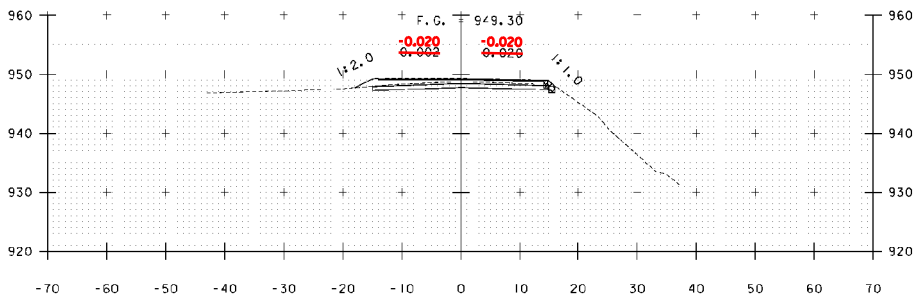

A 372+00



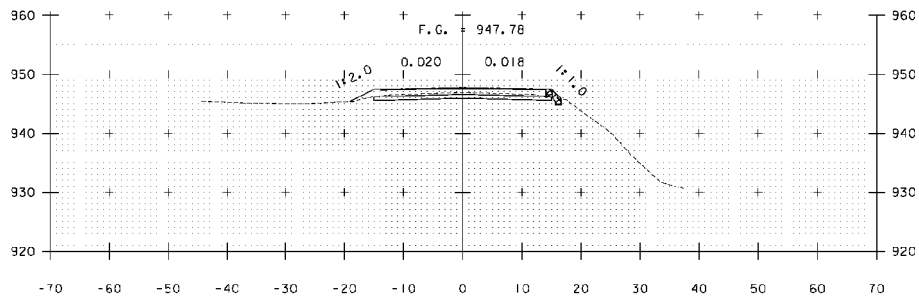

A 373+00

STA. A 372+00 TO STA. A 373+50

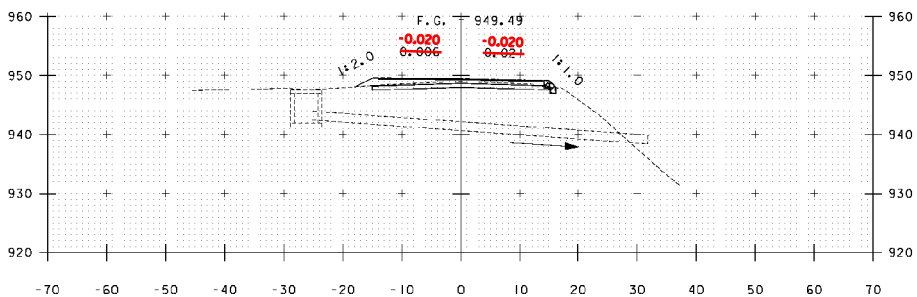
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 317 OF 444 |



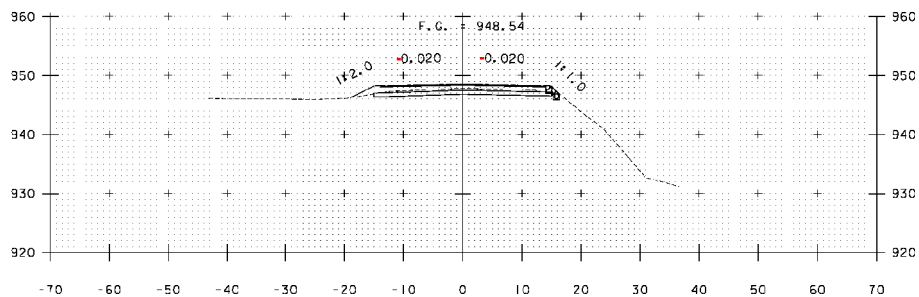

A 374+00




A 375+00




A 373+88



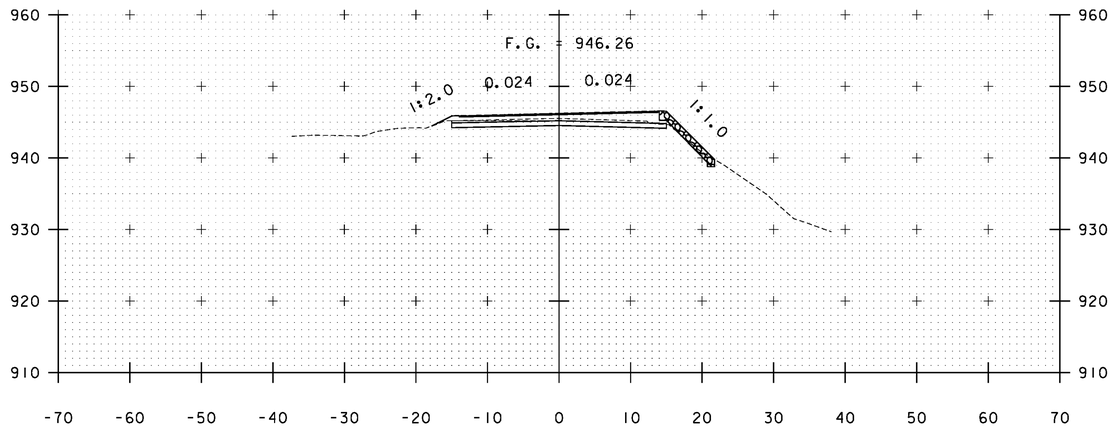

A 374+50

STA. A 373+88 TO STA. A 375+00

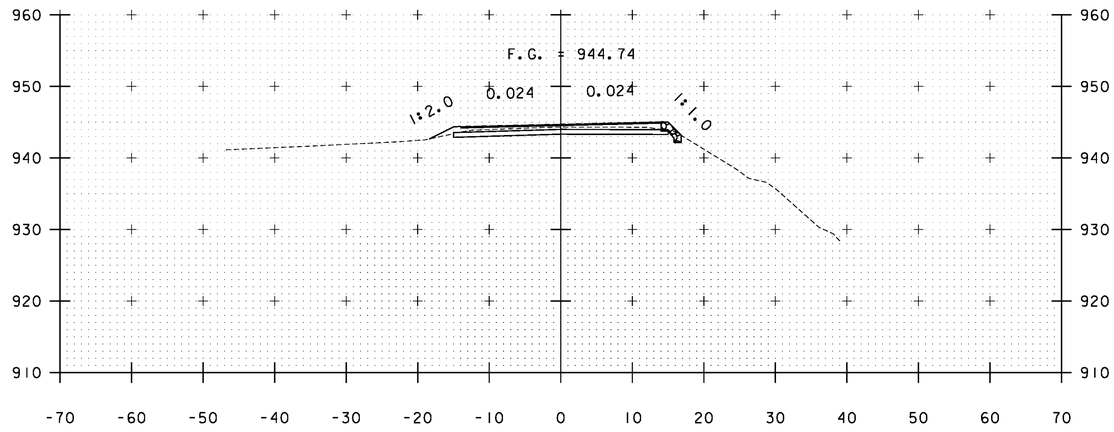
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

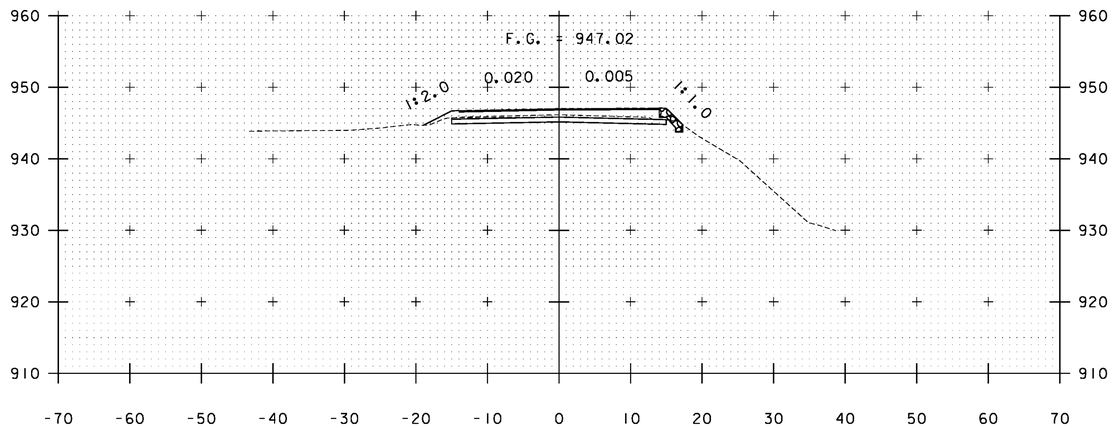
PLOT DATE: 3/18/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 318 OF 444



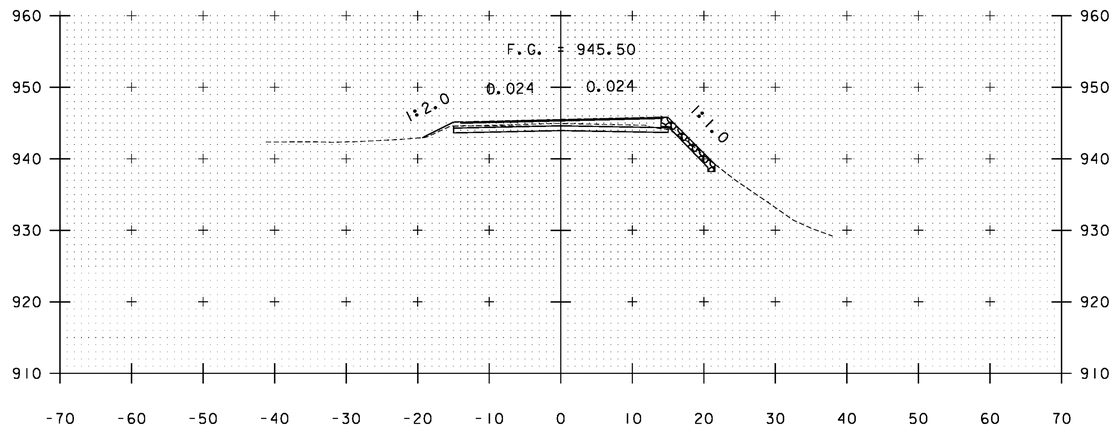

A 376+00




A 377+00




A 375+50



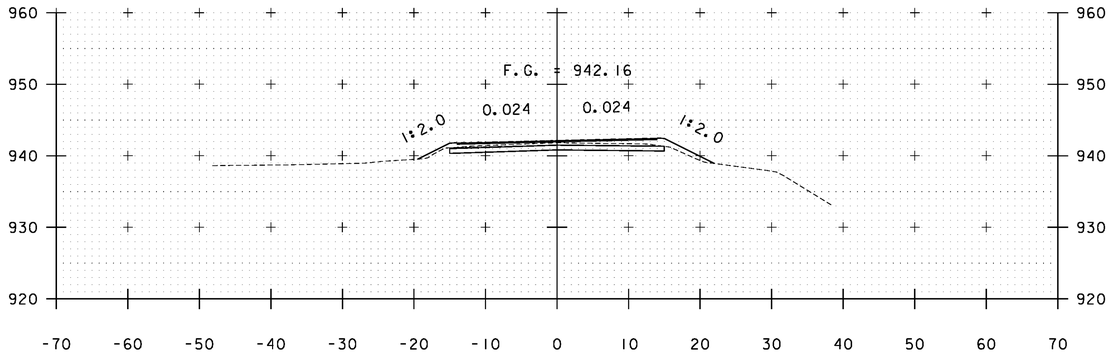

A 376+50

STA. A 375+50 TO STA. A 377+00

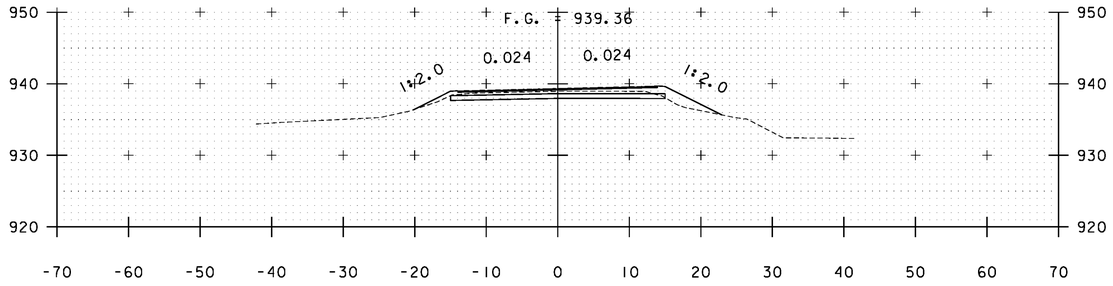
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

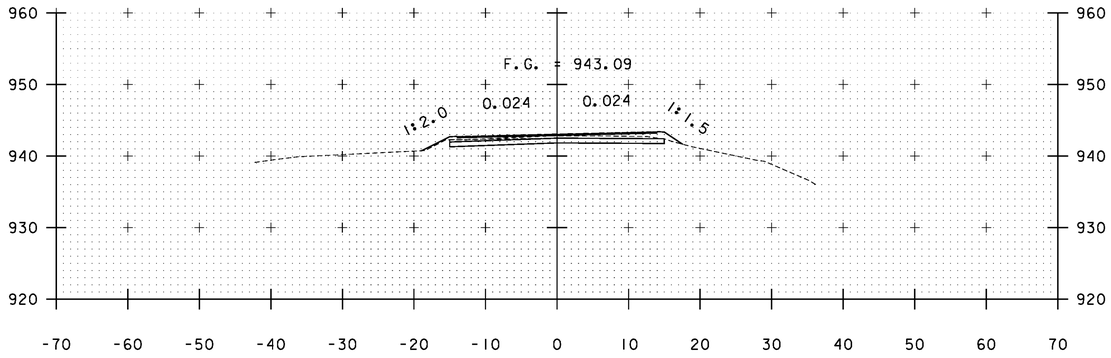
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 319 OF 444



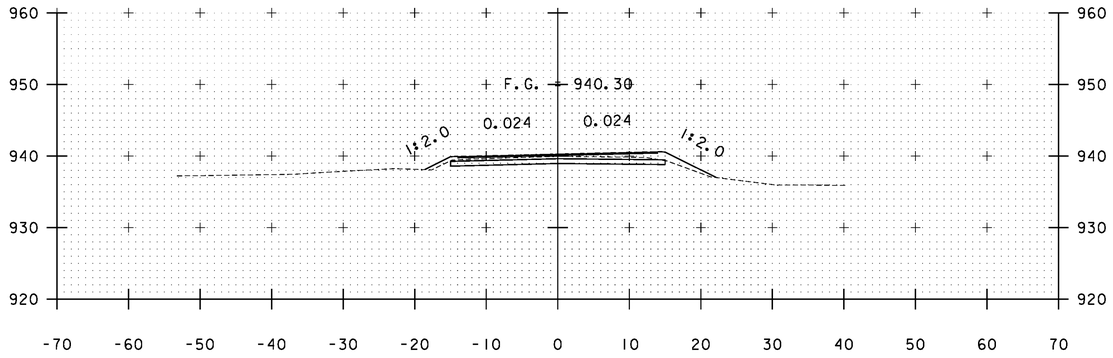

A 378+50



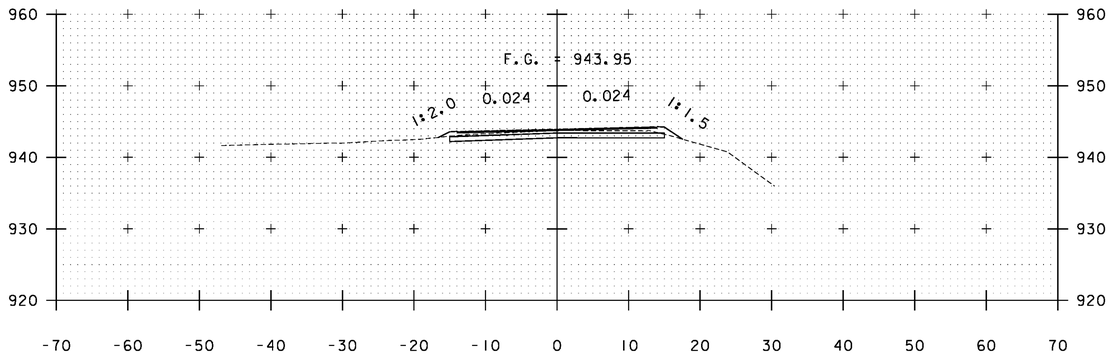

A 380+00



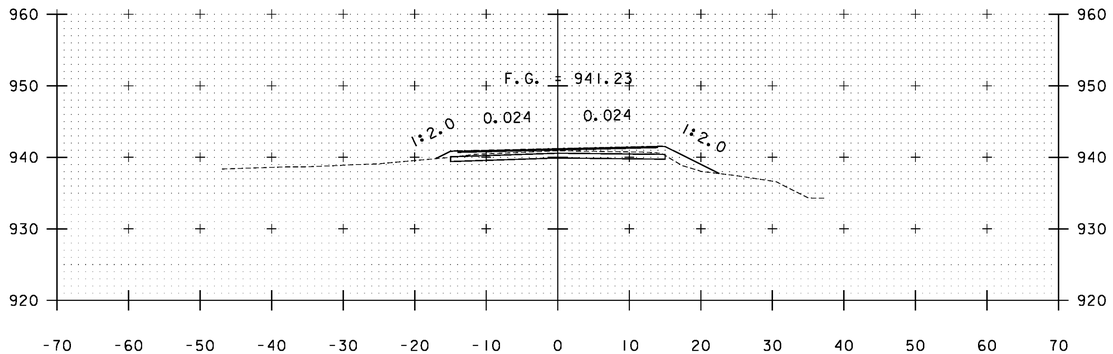

A 378+00




A 379+50




A 377+50



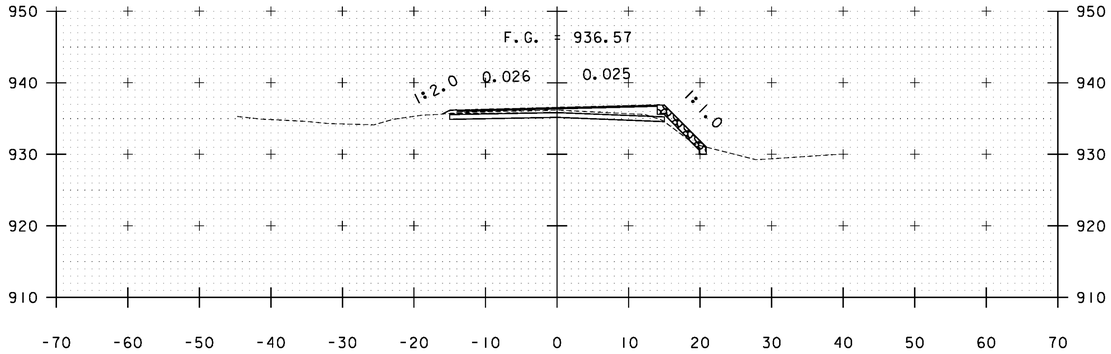

A 379+00

STA. A 377+50 TO STA. A 380+00

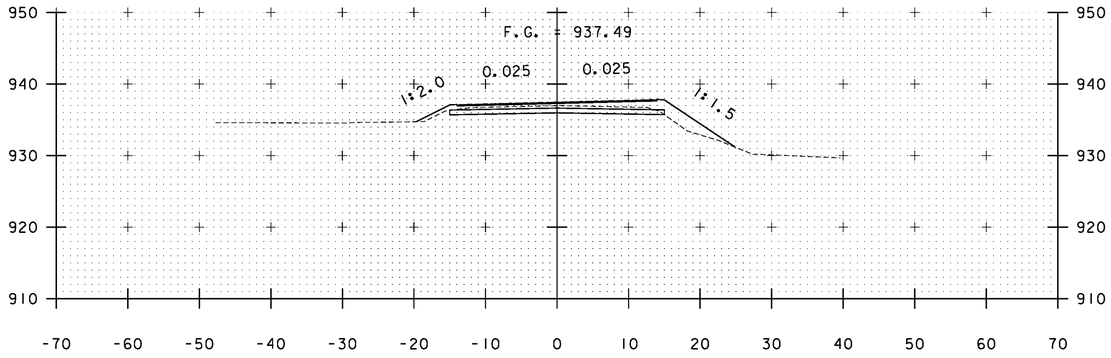
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

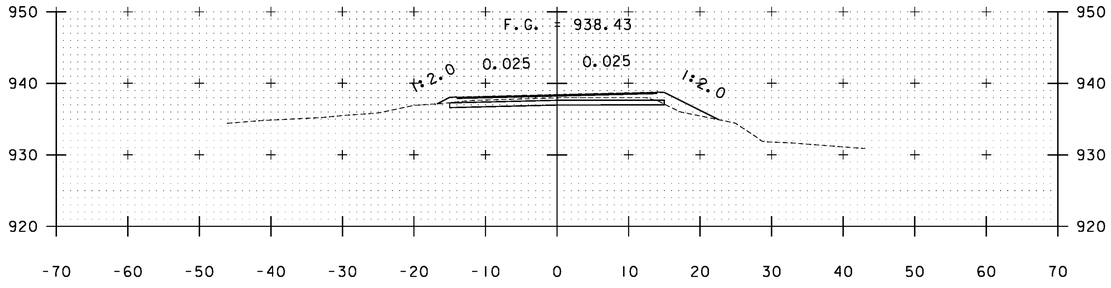
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 320 OF 444



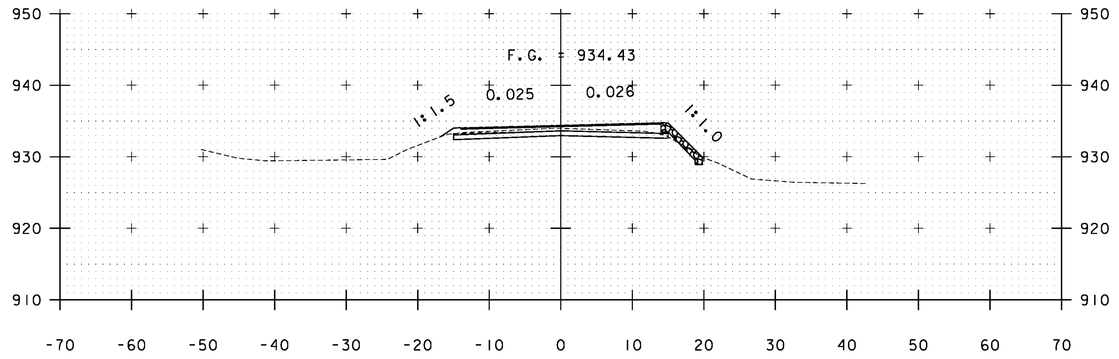

A 381+50



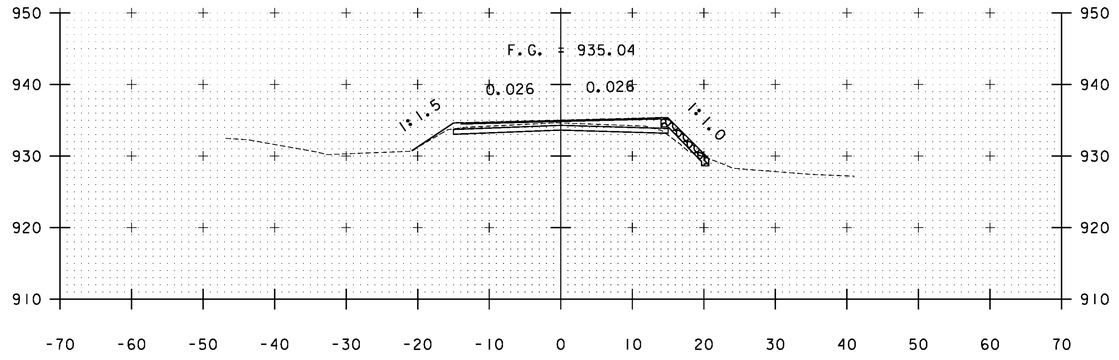

A 381+00



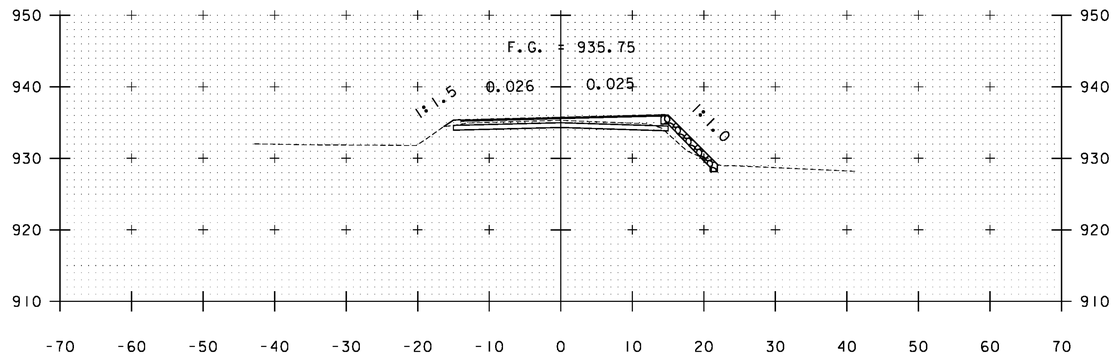

A 380+50




A 383+00




A 382+50



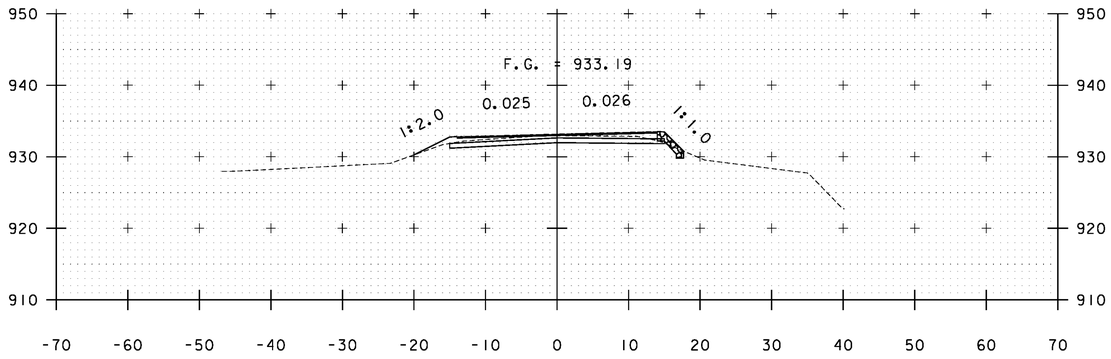

A 382+00

STA. A 380+50 TO STA. A 383+00

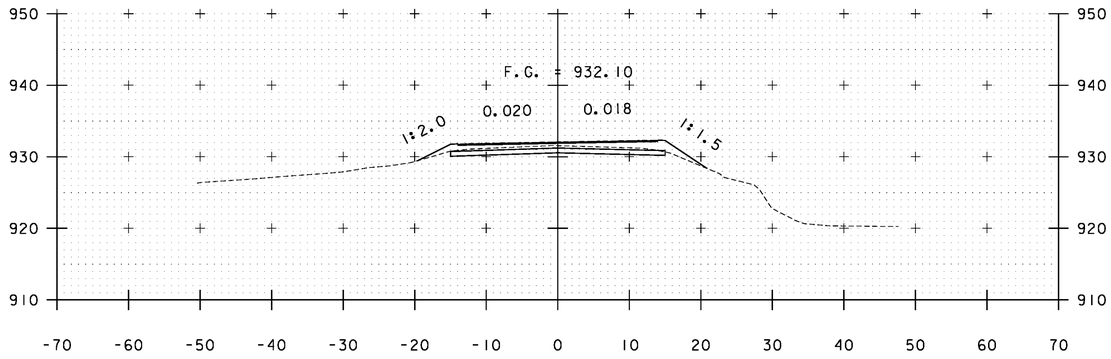
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

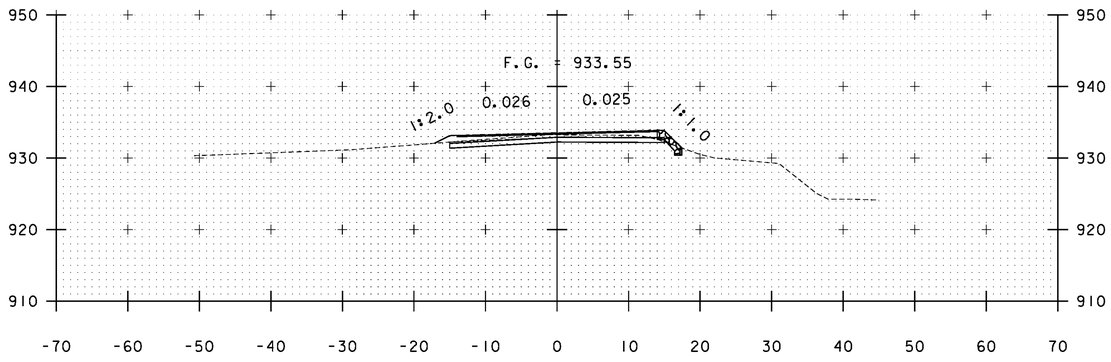
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 321 OF 444



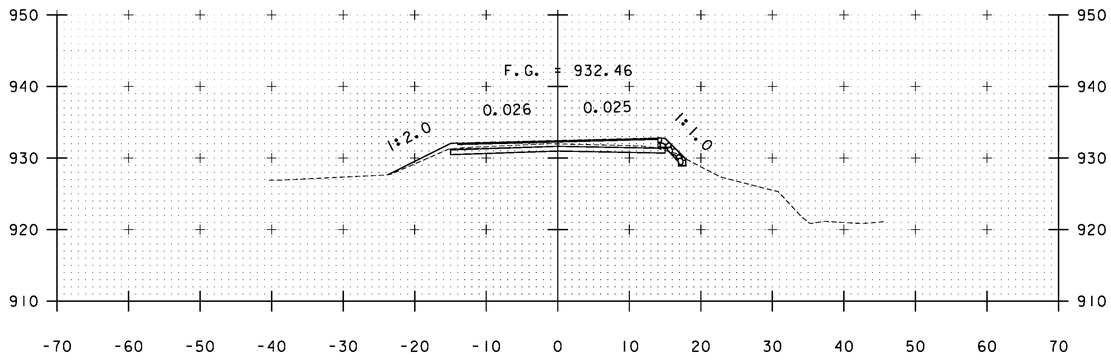

A 384+50



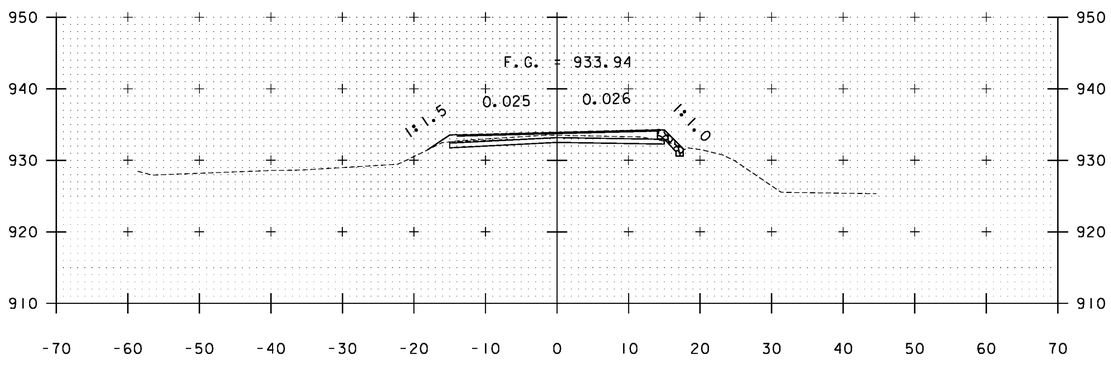

A 386+00



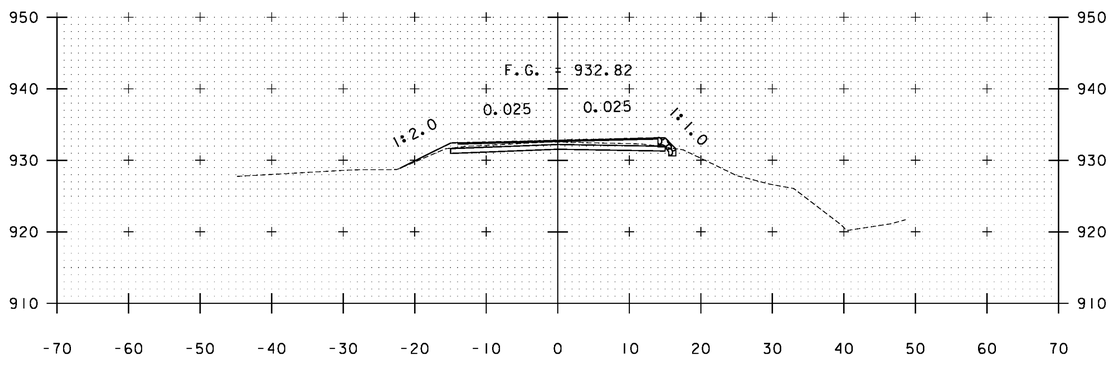

A 384+00




A 385+50




A 383+50



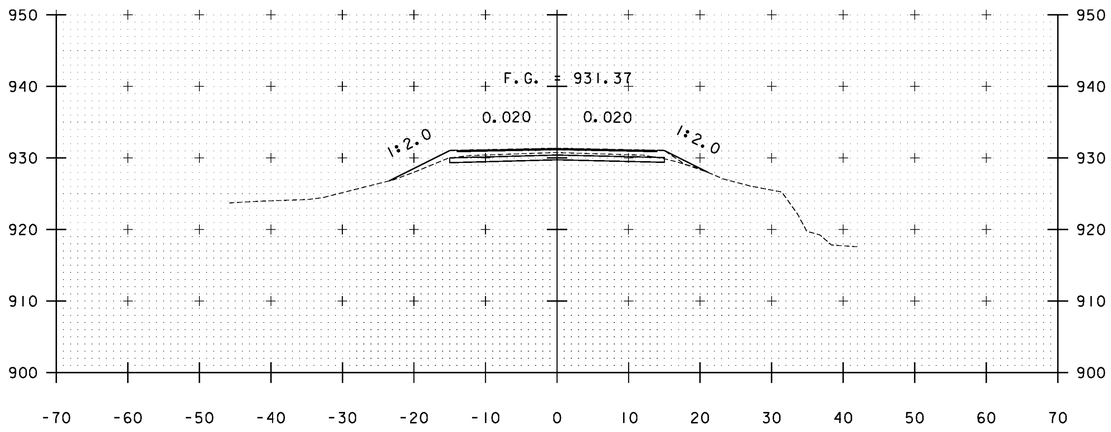

A 385+00

STA. A 383+50 TO STA. A 386+00

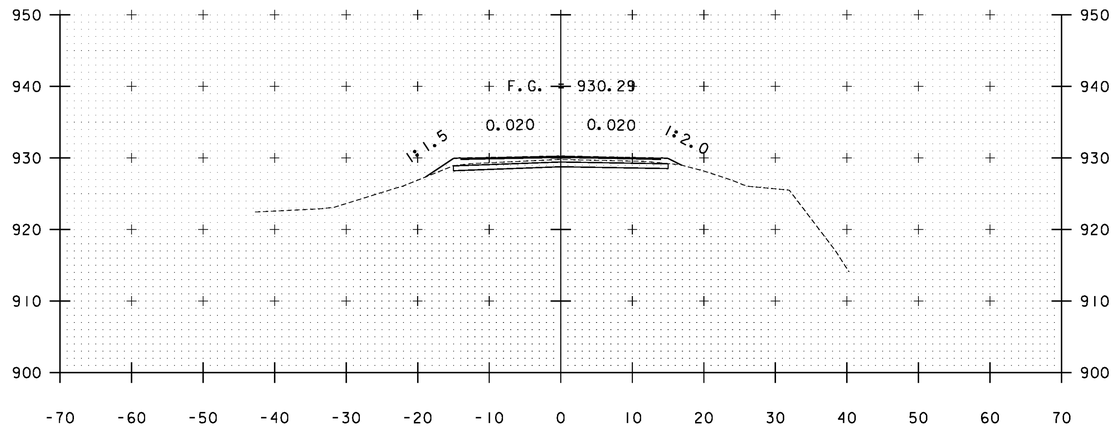
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

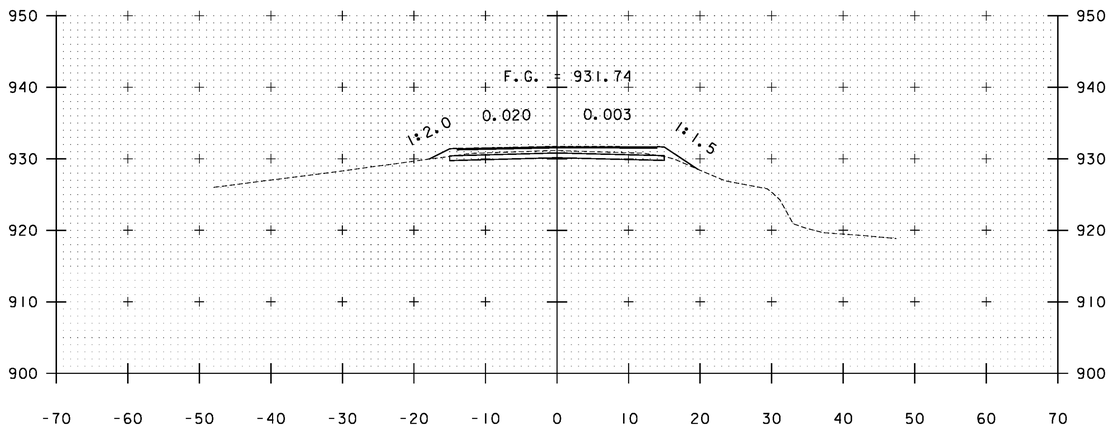
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 322 OF 444



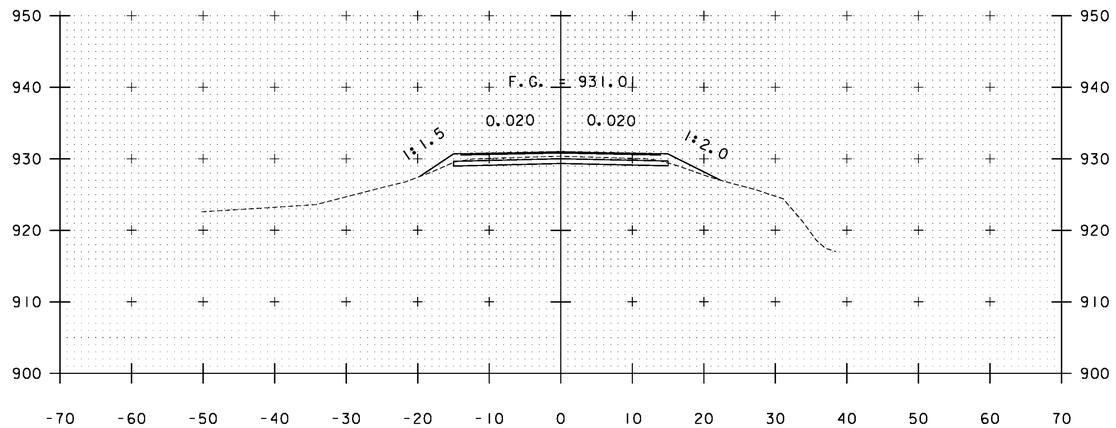

A 387+00




B 0+50




A 386+50



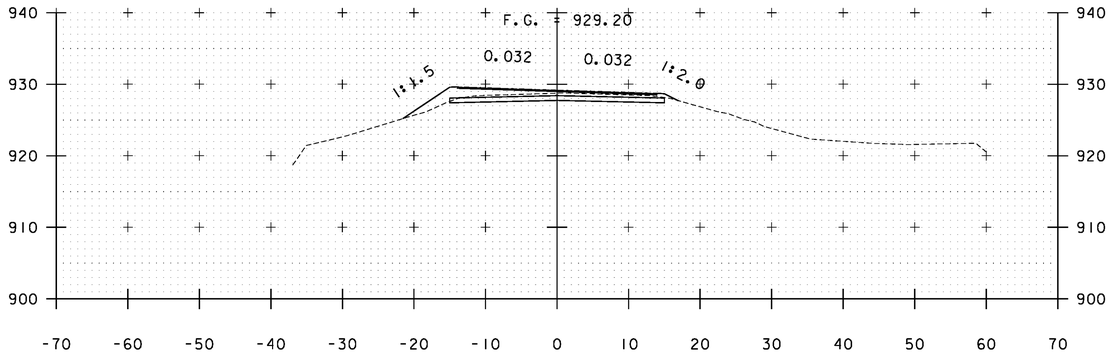

A 387+50

STA. A 386+50 TO STA. B 0+50

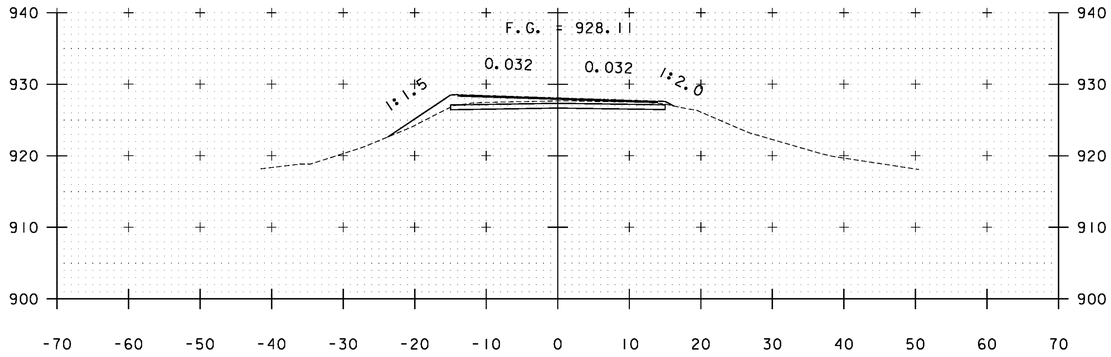
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

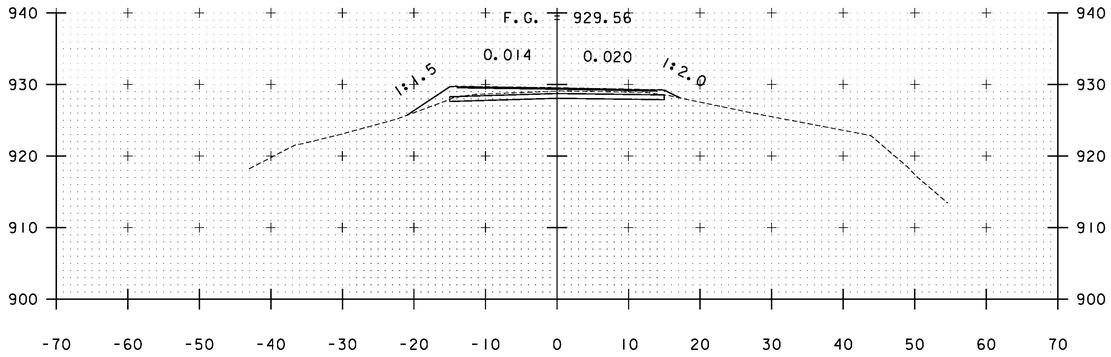
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 323 OF 444



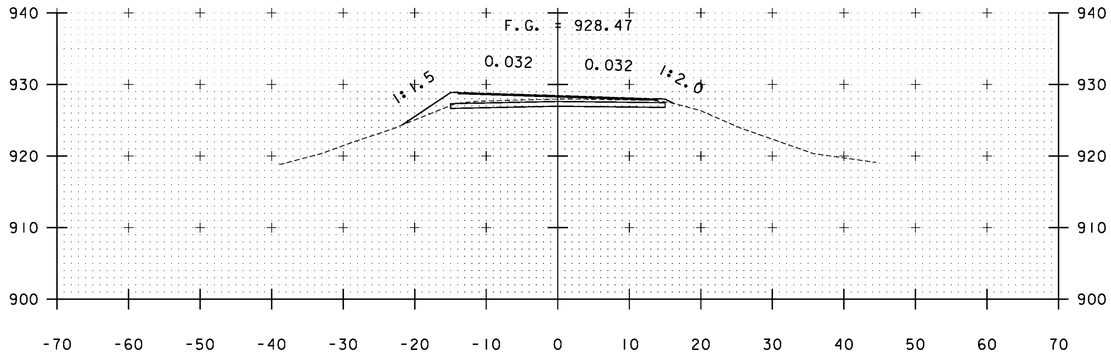

B 2+00



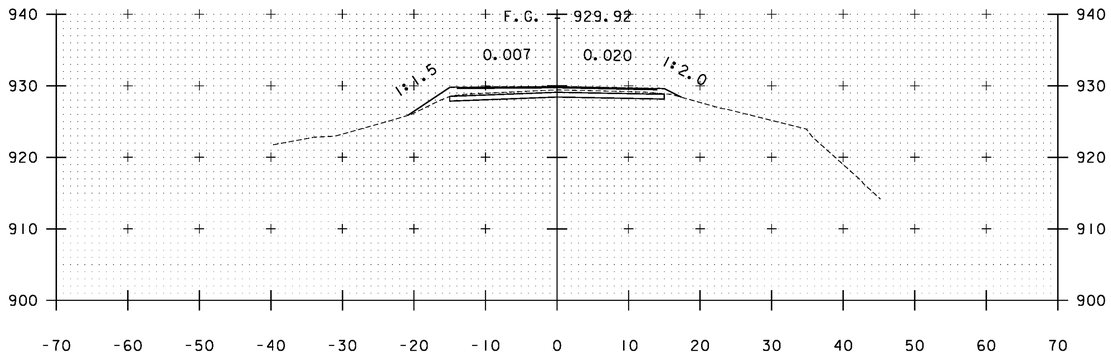

B 3+50



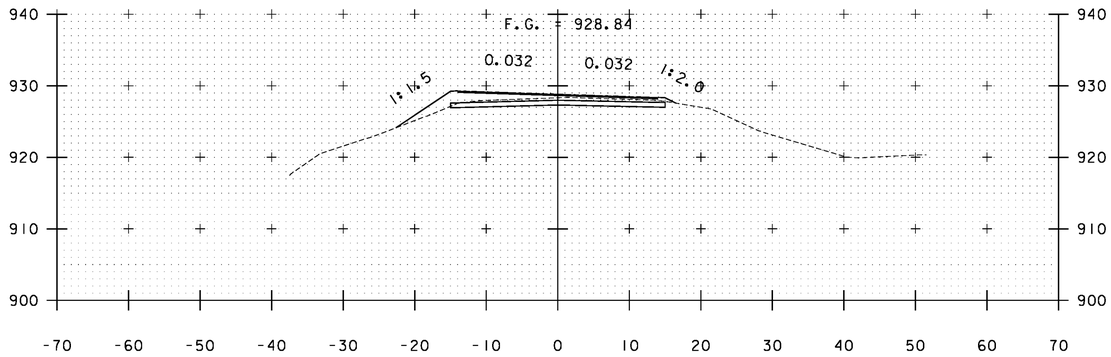

B 1+50




B 3+00




B 1+00



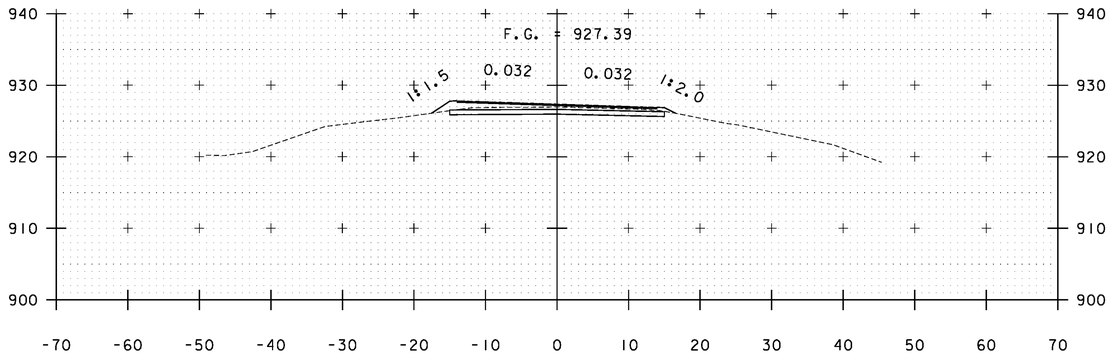

B 2+50

STA. B 1+00 TO STA. B 3+50

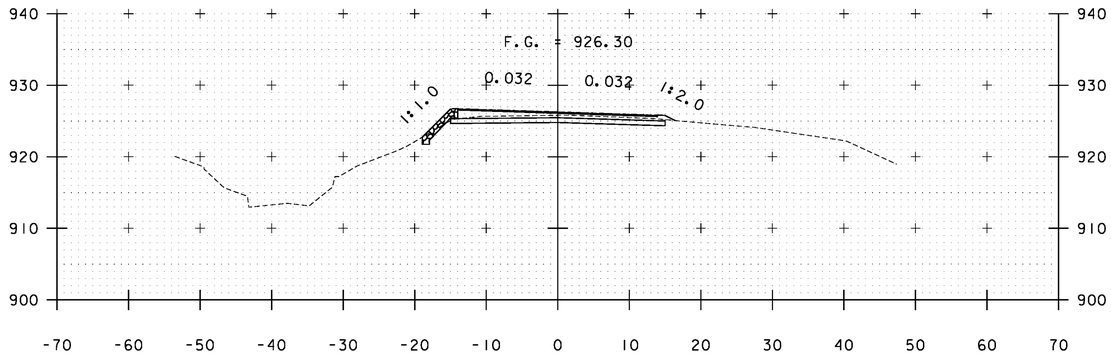
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

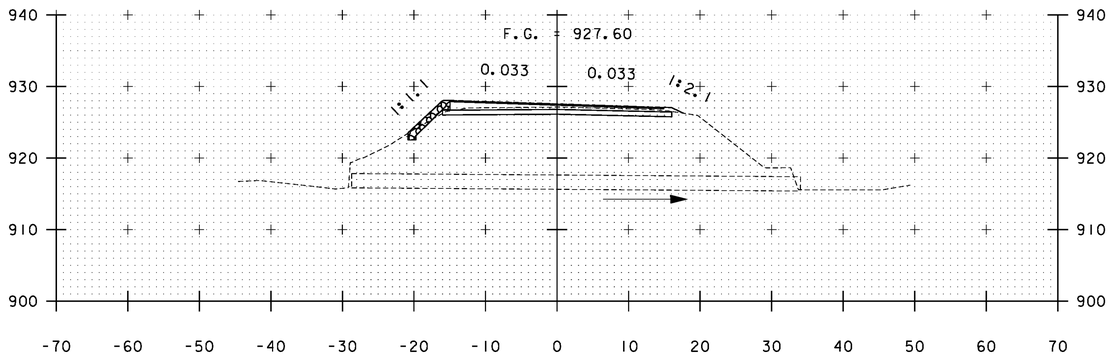
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 324 OF 444



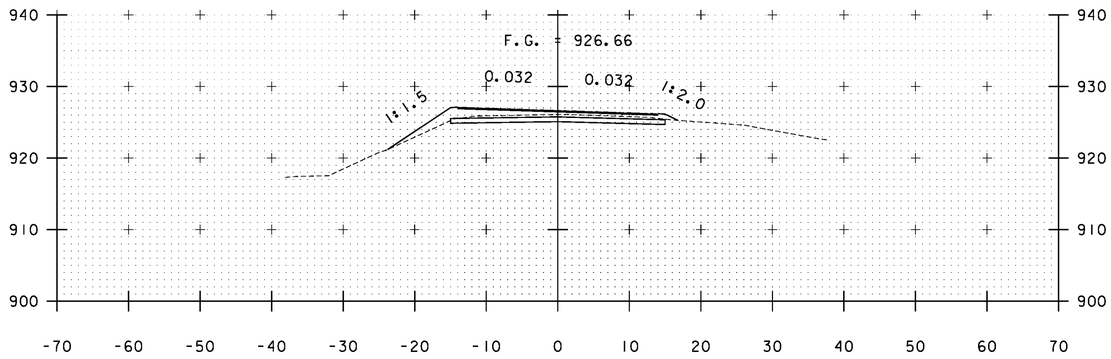

B 4+50



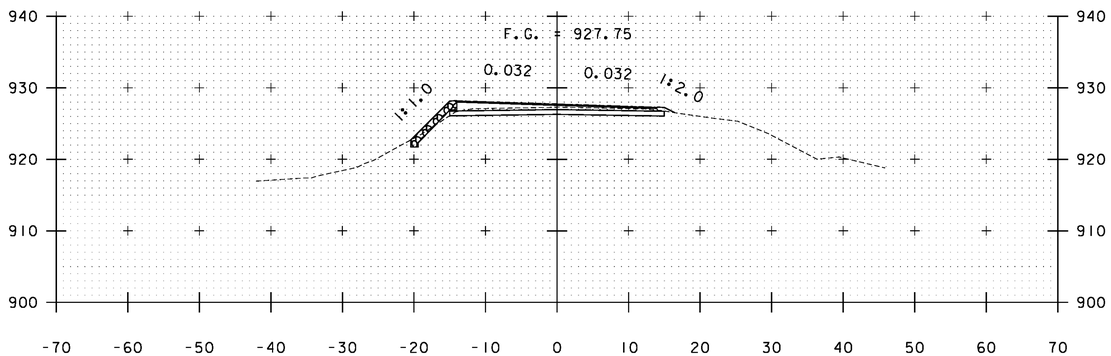

B 6+00



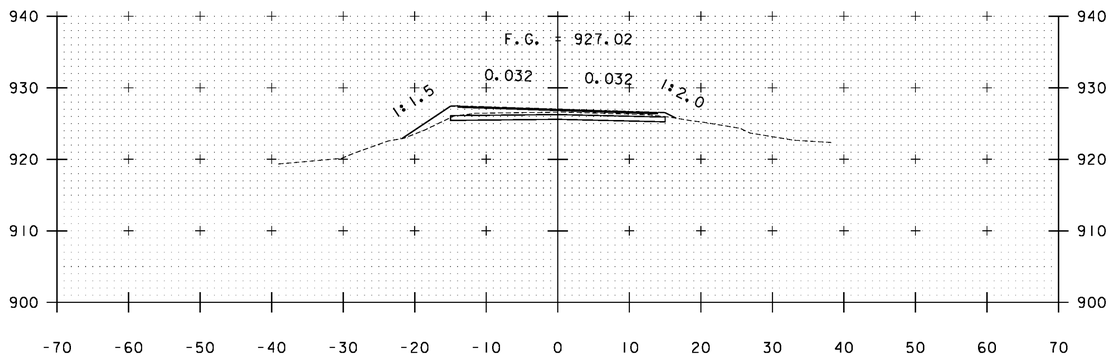

B 4+21




B 5+50



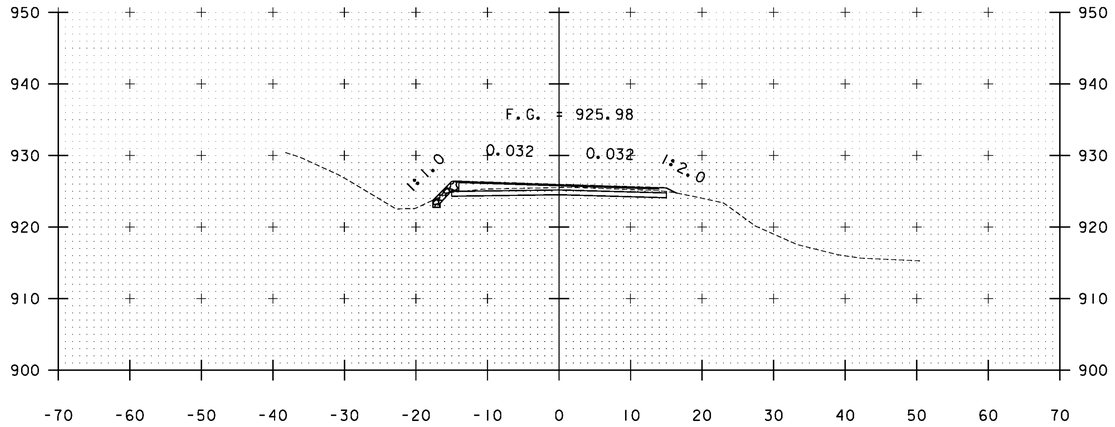

B 4+00



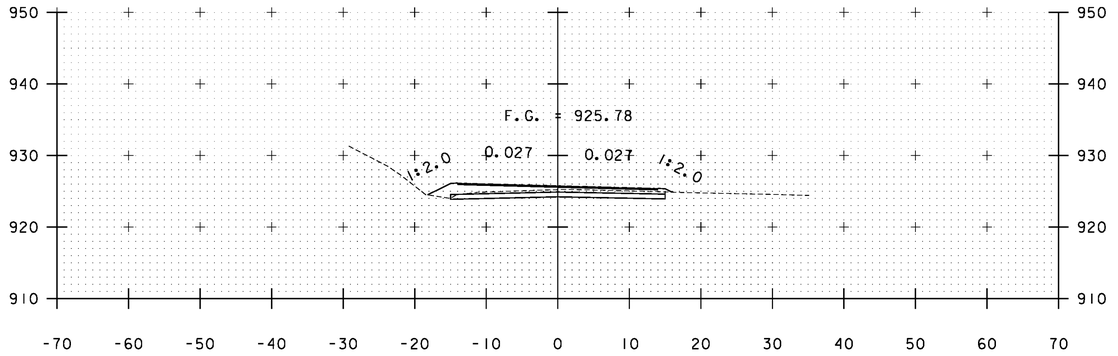

B 5+00

STA. B 4+00 TO STA. B 6+00

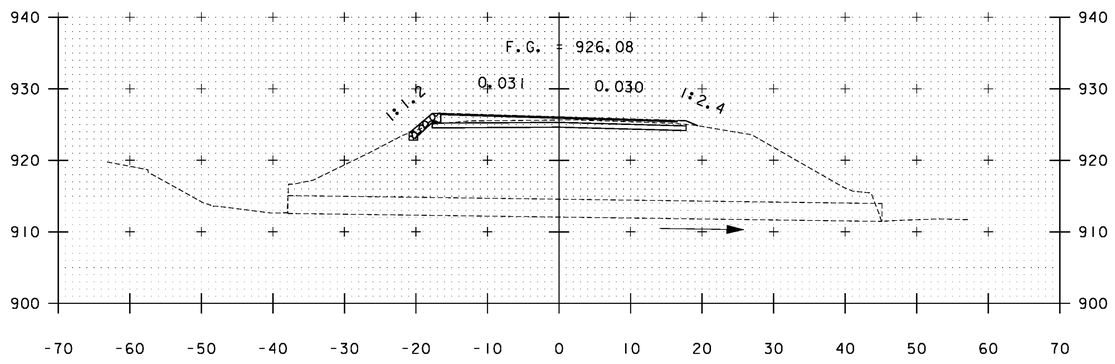
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 325 OF 444 |



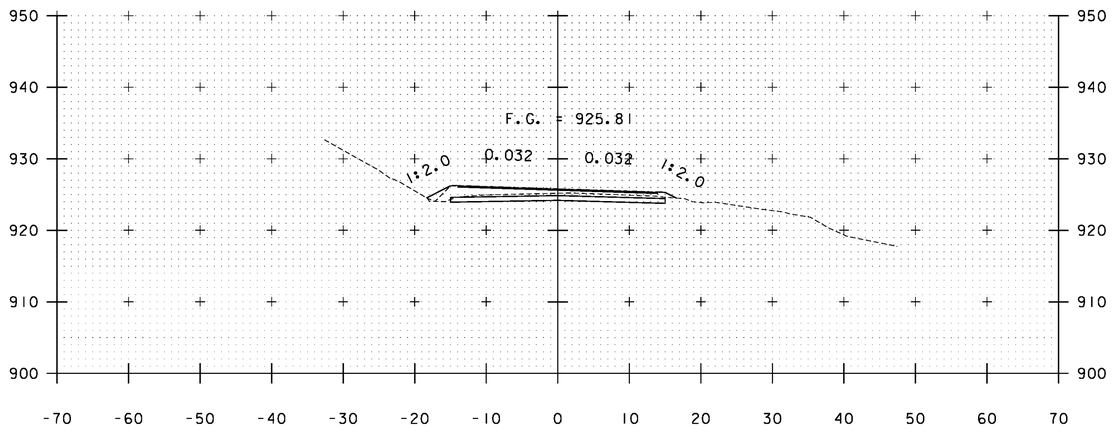

B 6+50




B 7+50




B 6+32



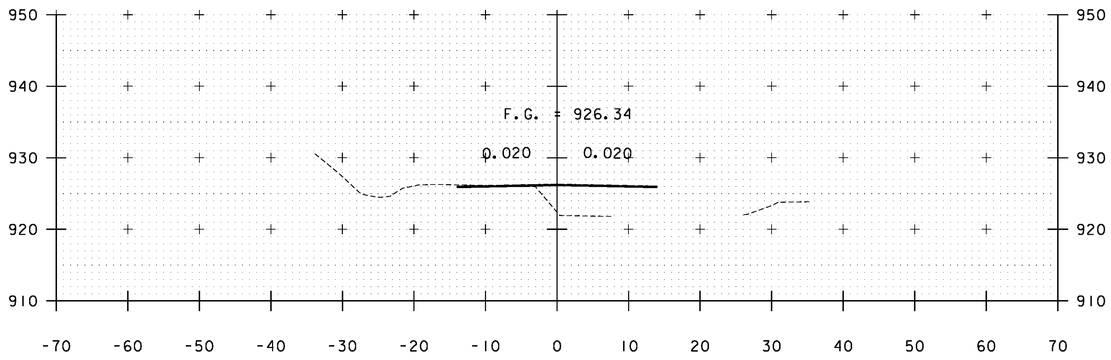

B 7+00

STA. B 6+32 TO STA. B 7+50

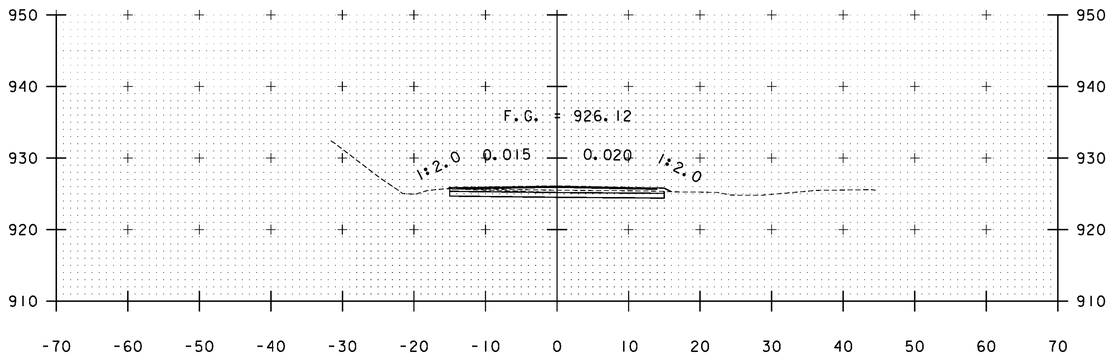
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

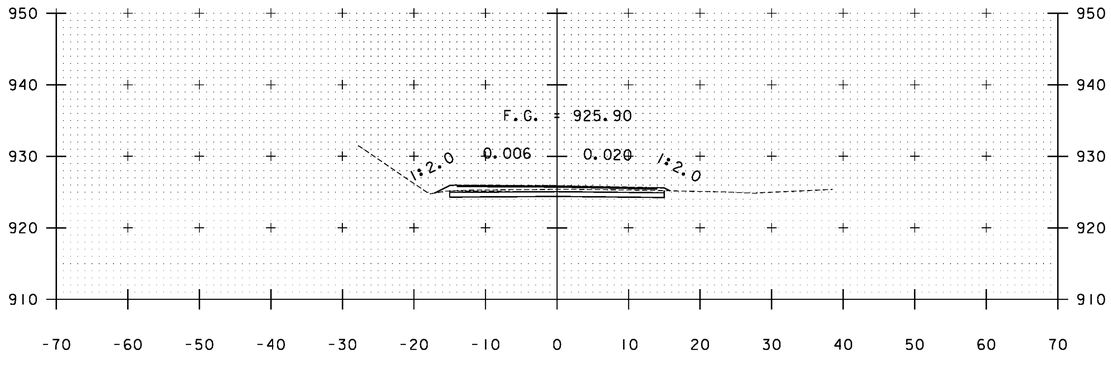
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 326 OF 444



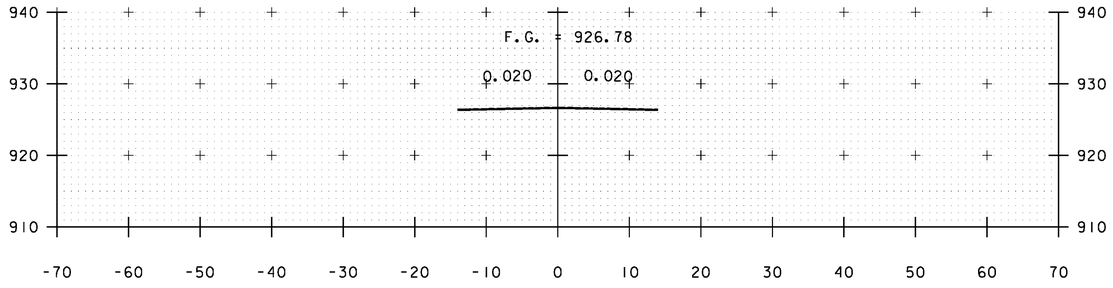

B 9+00




B 8+50



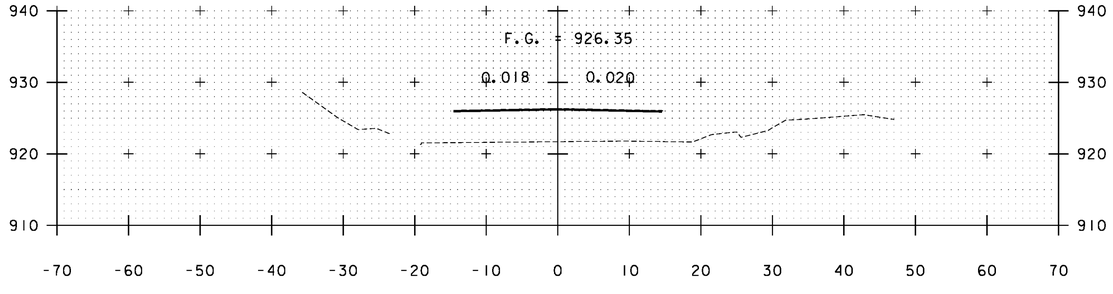

B 8+00




B 10+00



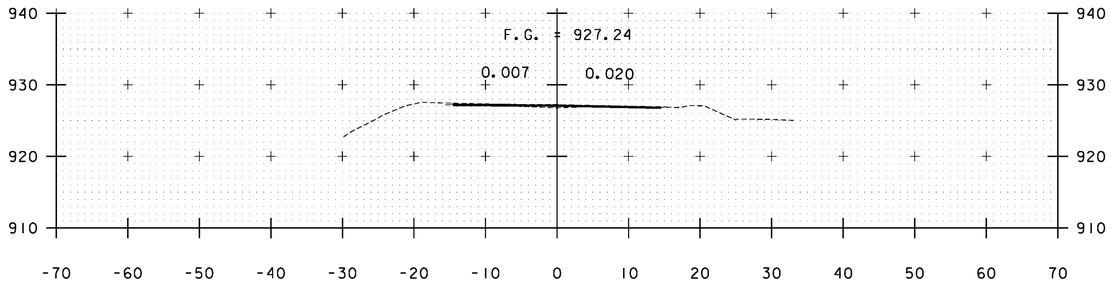

B 9+50



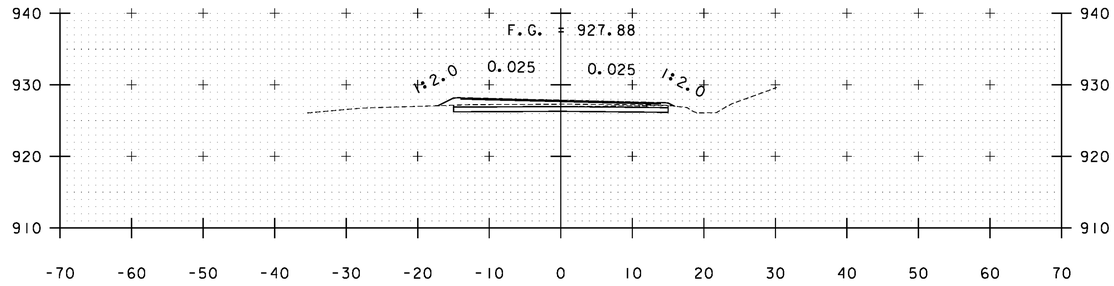

B 9+02

STA. B 8+00 TO STA. B 10+00

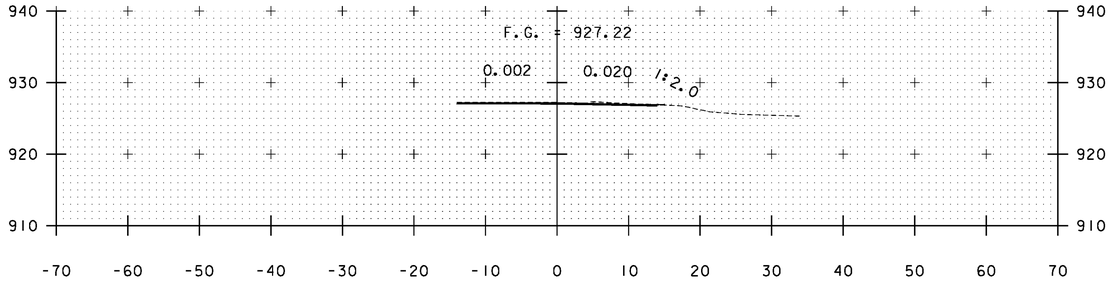
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 327 OF 444 |



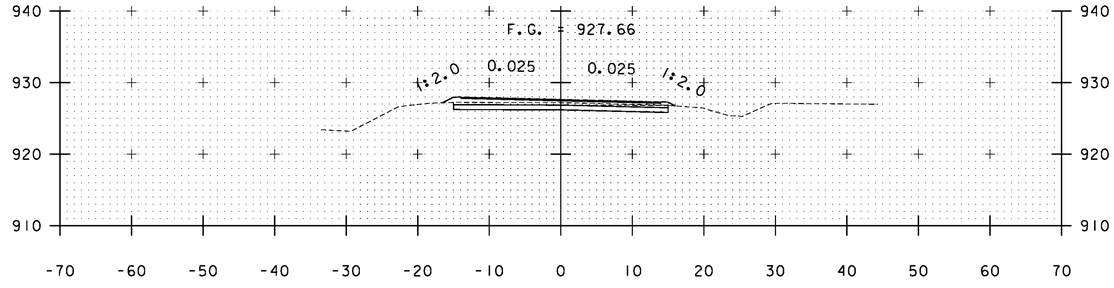

B 11+04



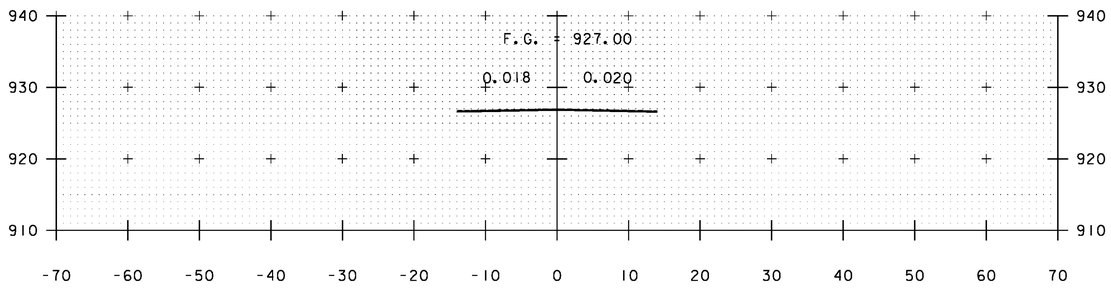

B 12+50



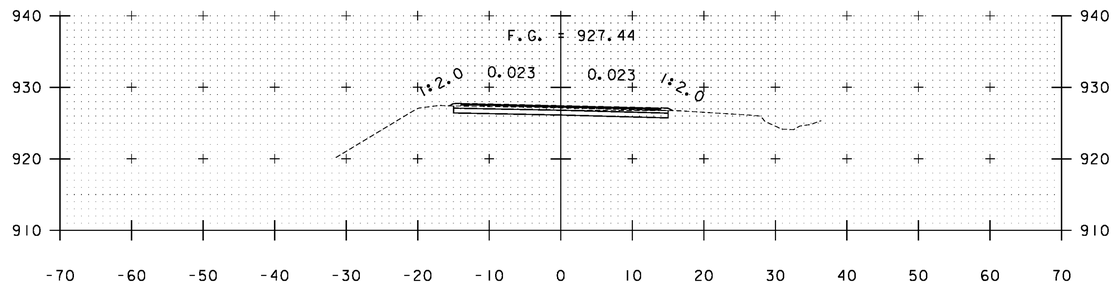

B 11+00




B 12+00



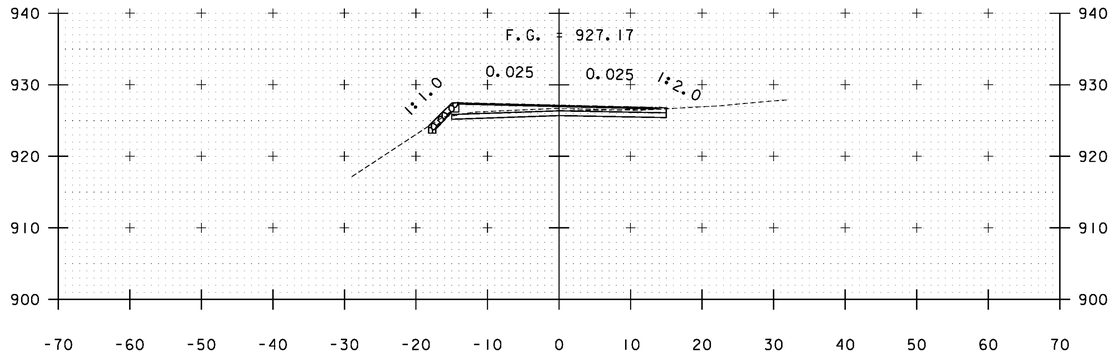

B 10+50



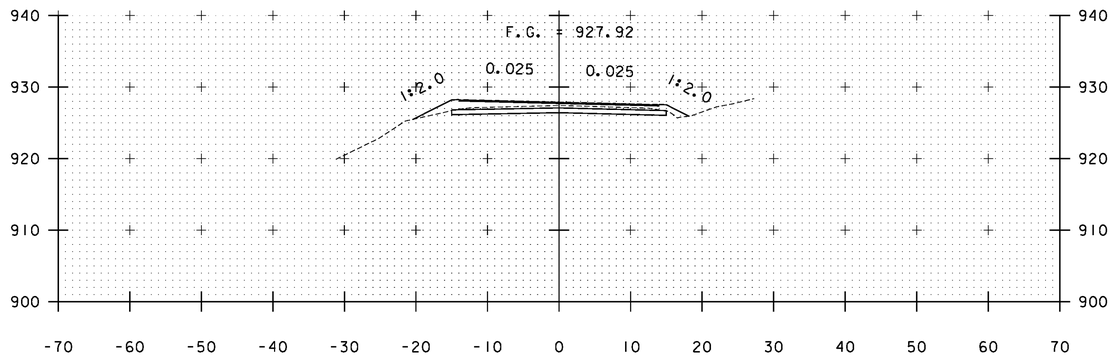

B 11+50

STA. B 10+50 TO STA. B 12+50

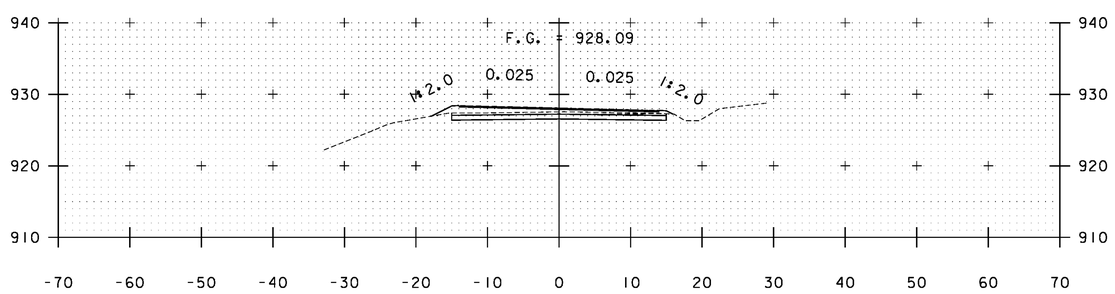
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 328 OF 444 |



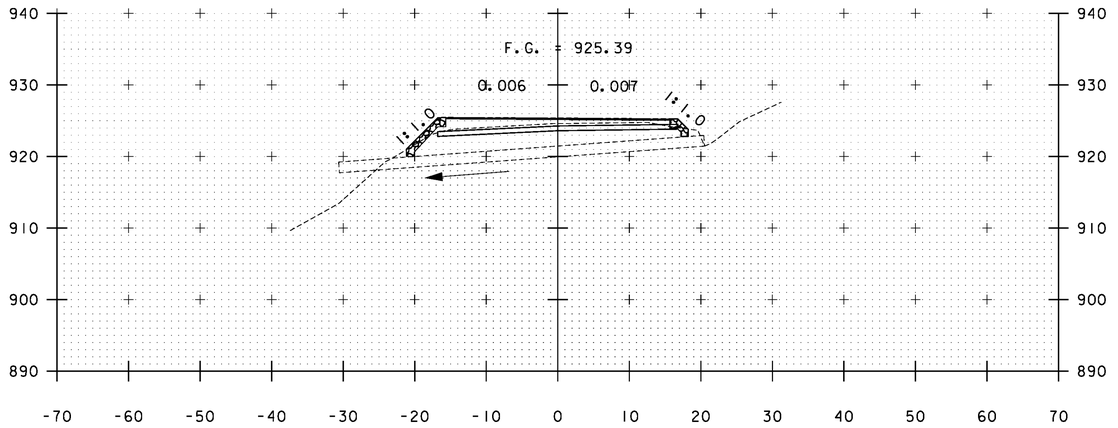

B 14+00



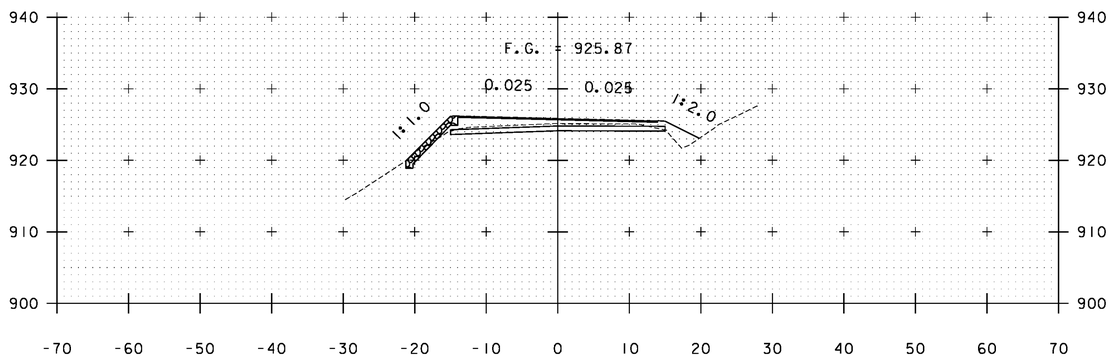

B 13+50




B 13+00




B 14+64



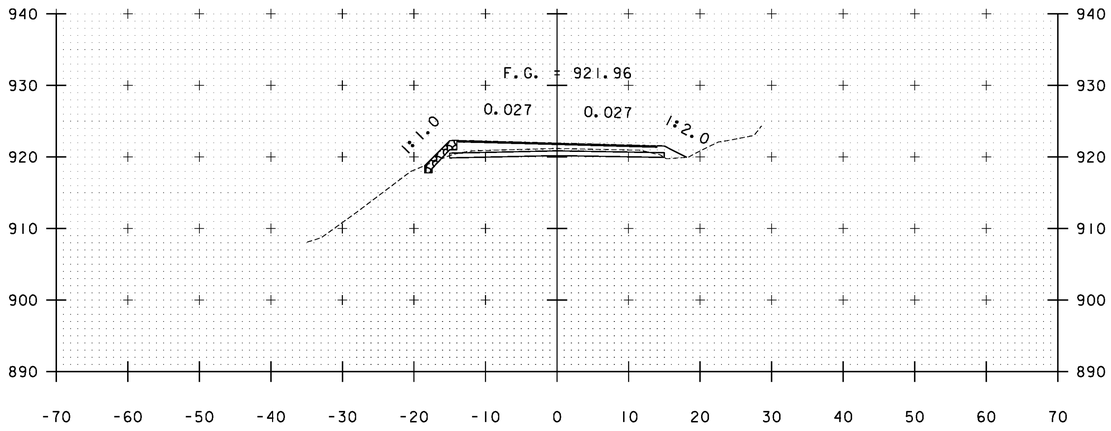

B 14+50

STA. B 13+00 TO STA. B 14+64

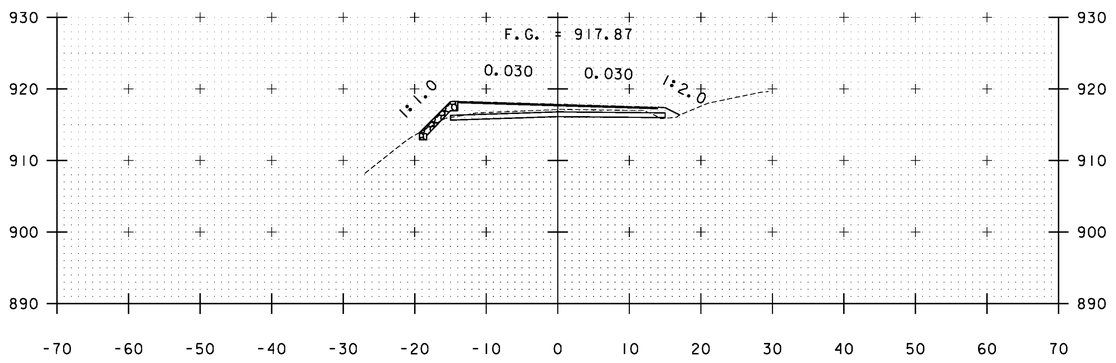
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

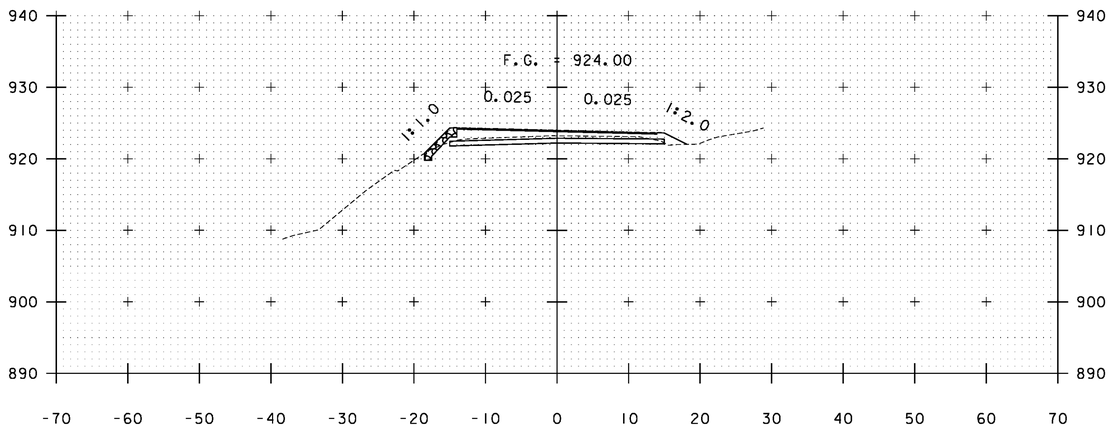
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 329 OF 444



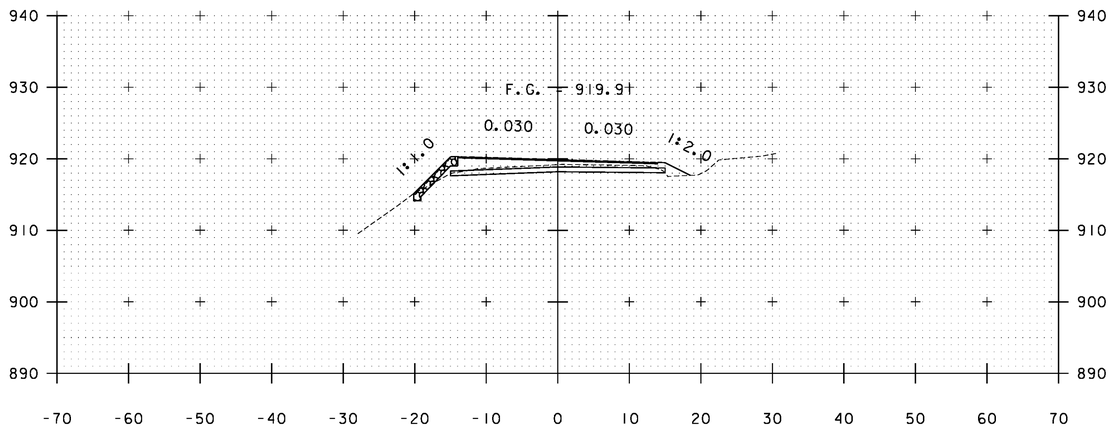

B 15+50




B 16+50




B 15+00



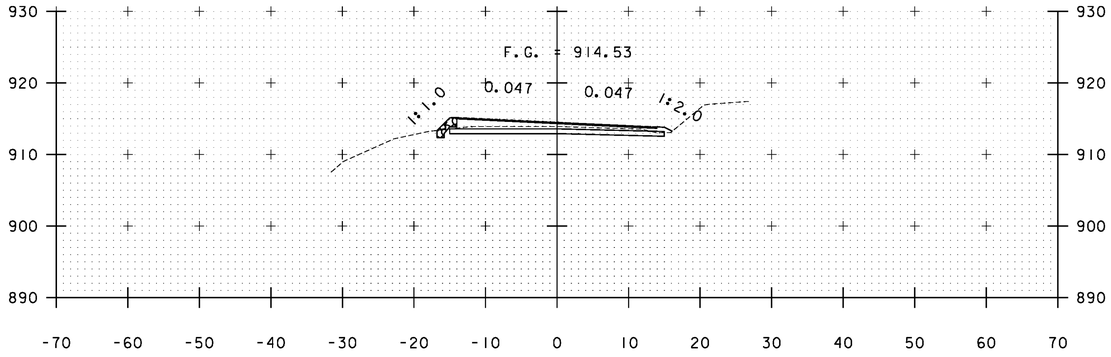

B 16+00

STA. B 15+00 TO STA. B 16+50

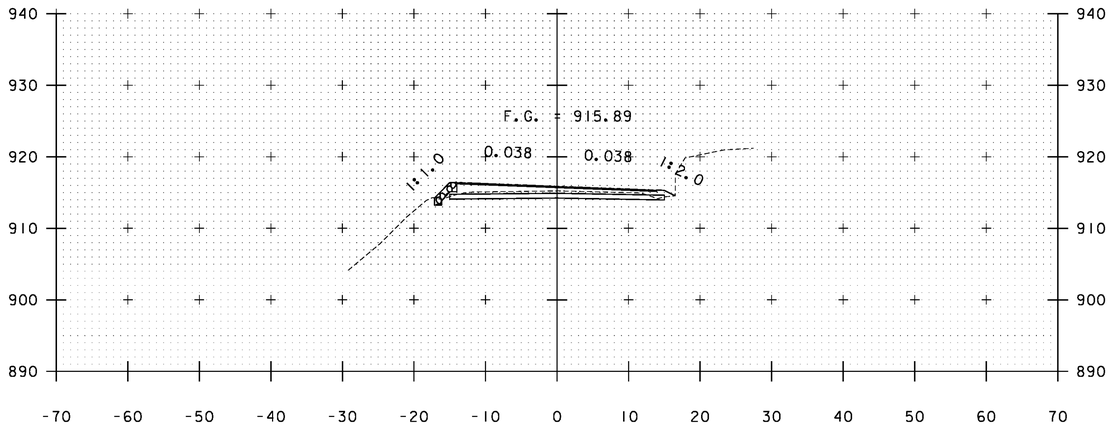
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

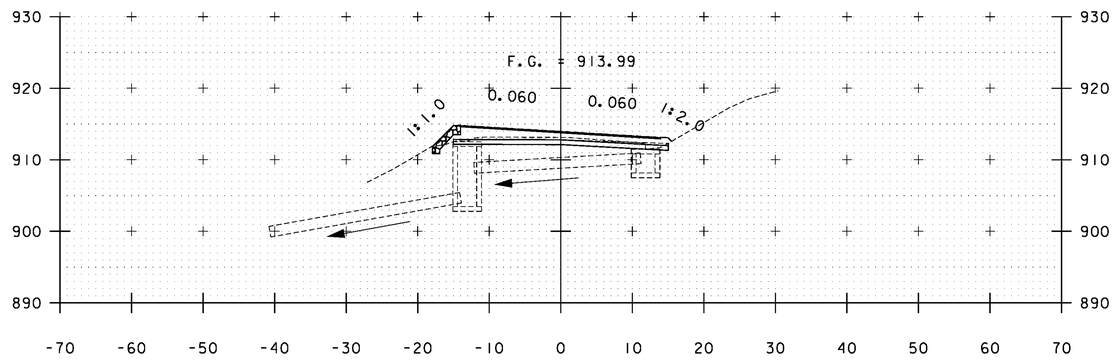
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 330 OF 444



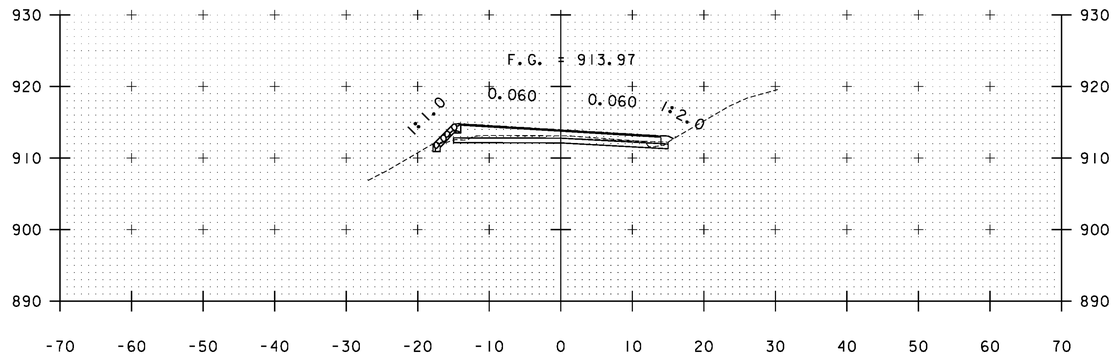

B 17+50



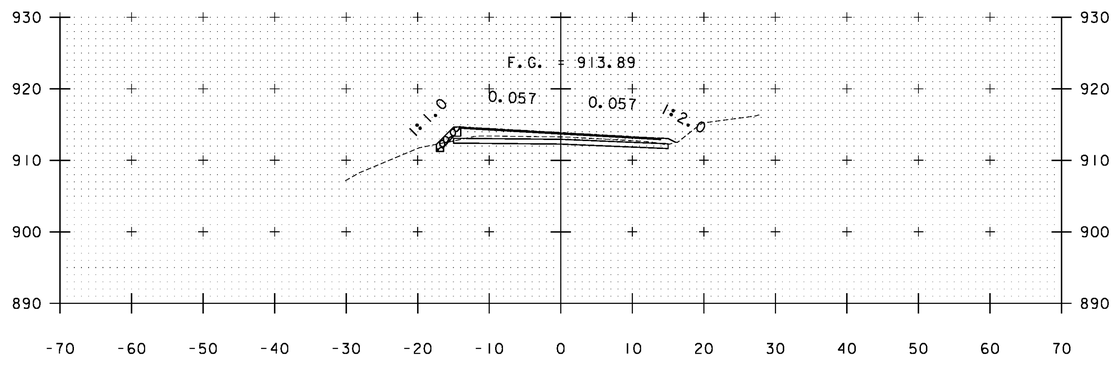

B 17+00




B 18+53




B 18+50



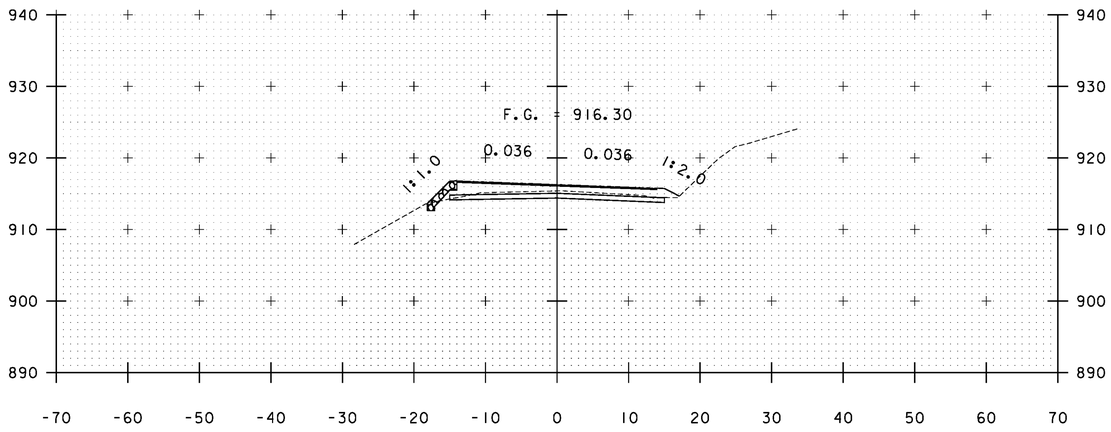

B 18+00

STA. B 17+00 TO STA. B 18+53

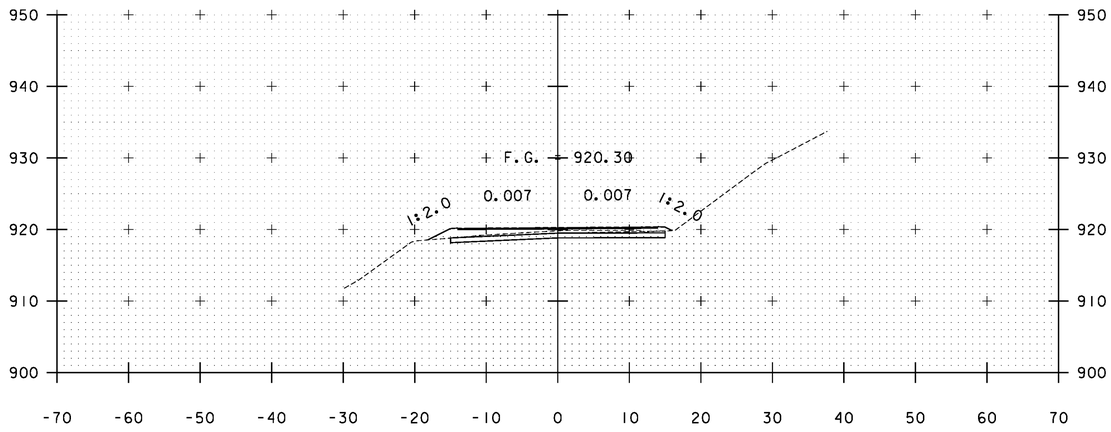
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

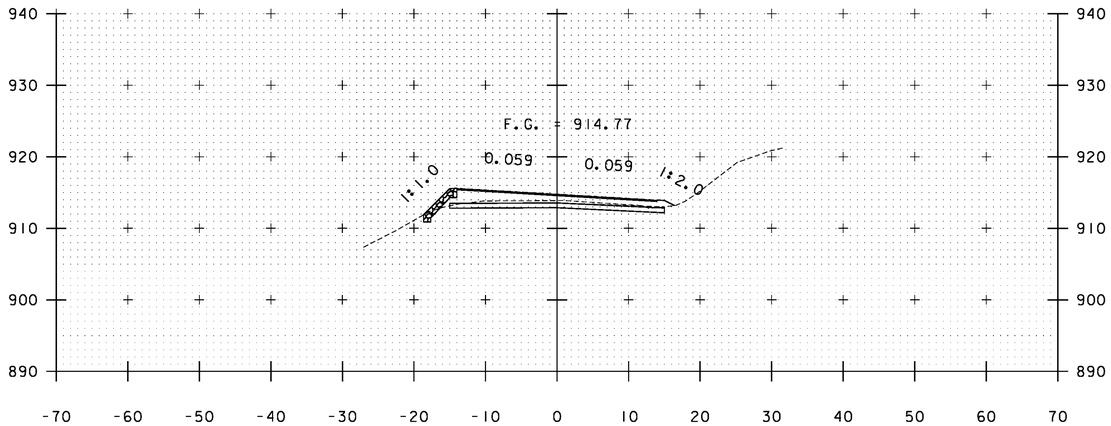
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 331 OF 444



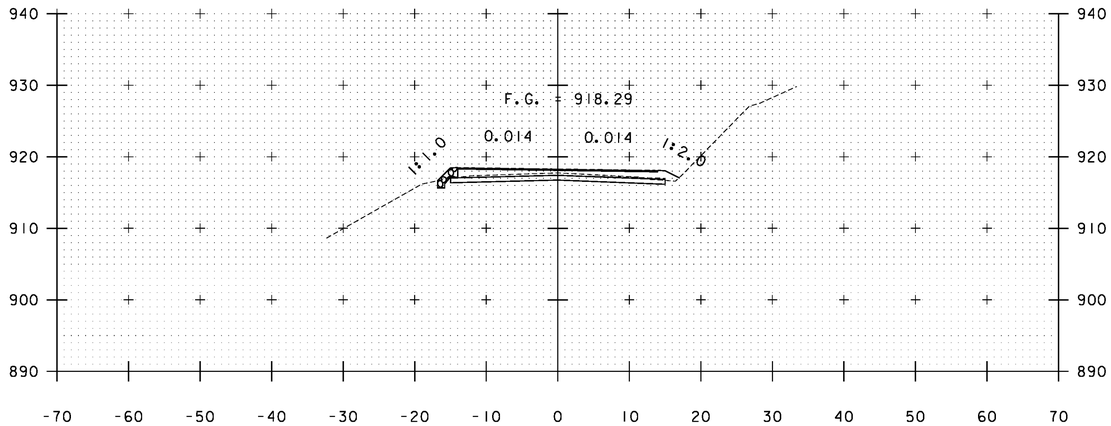

B 19+50




B 20+50




B 19+00



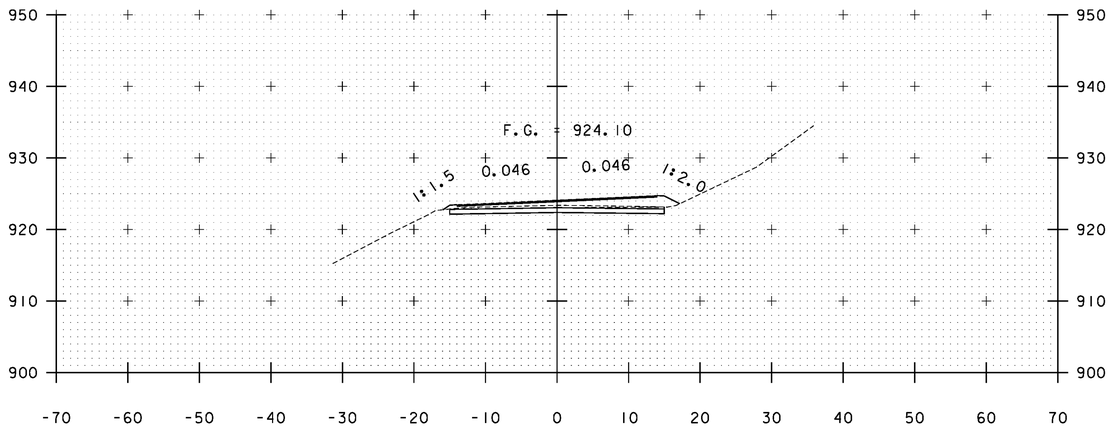

B 20+00

STA. B 19+00 TO STA. B 20+50

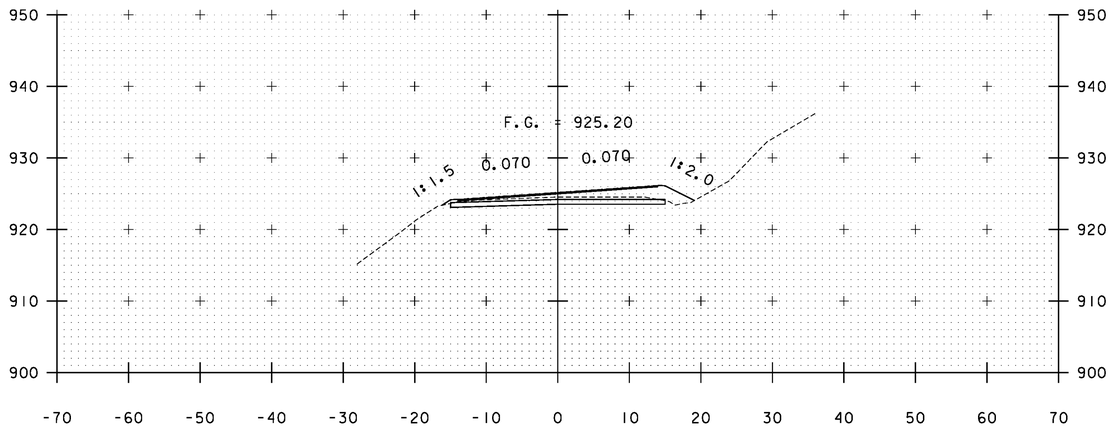
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

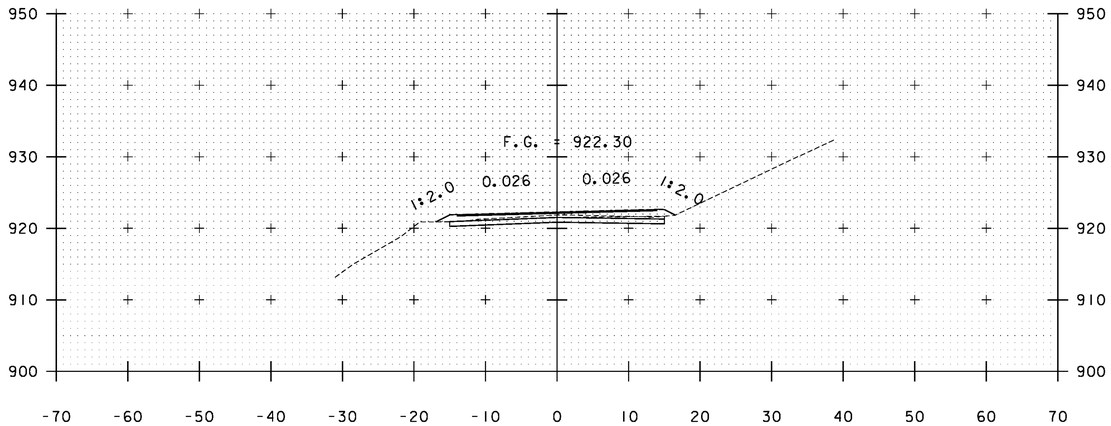
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 332 OF 444



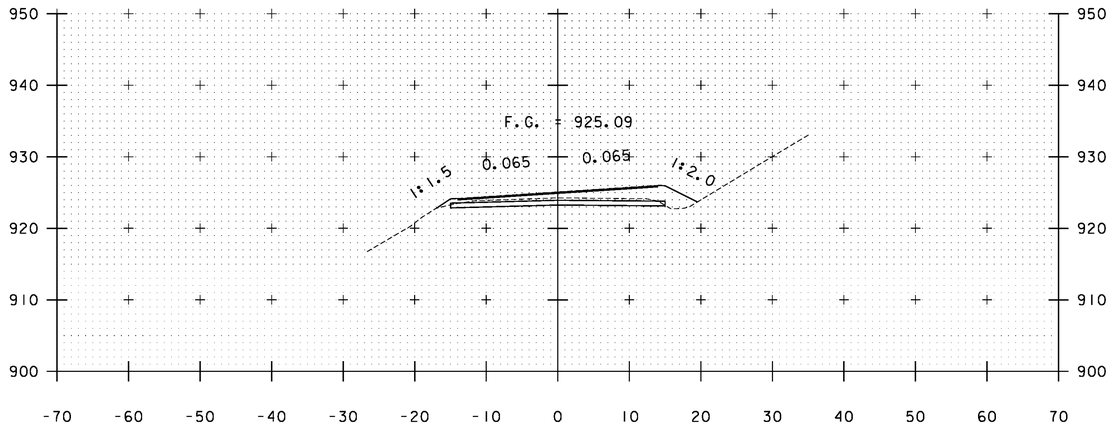

B 21+50




B 22+50




B 21+00



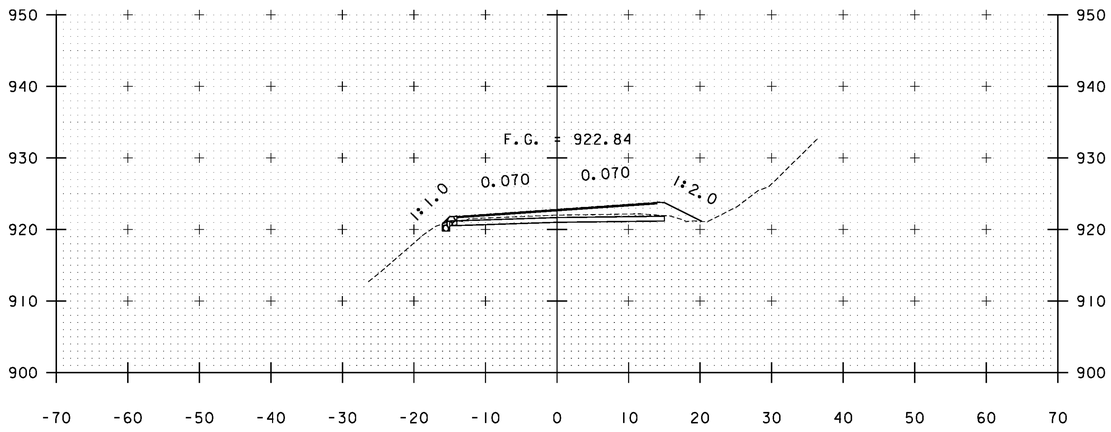

B 22+00

STA. B 21+00 TO STA. B 22+50

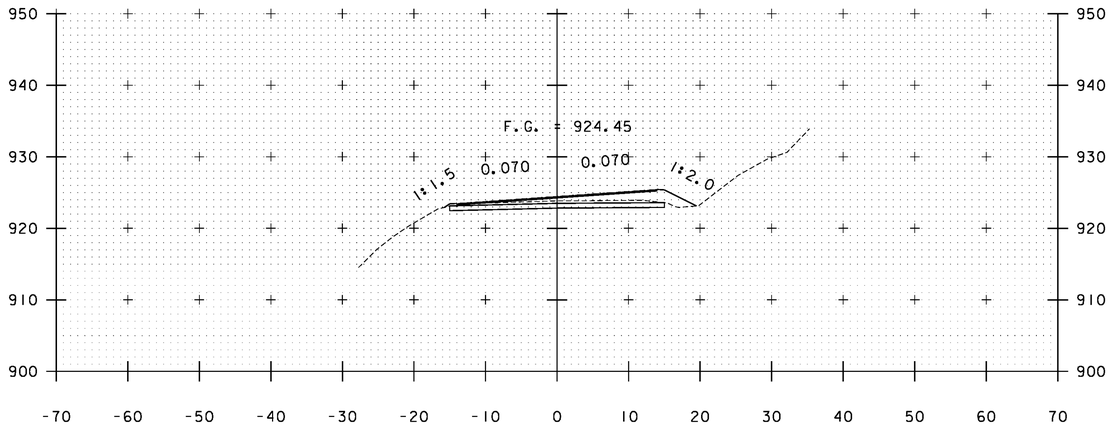
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

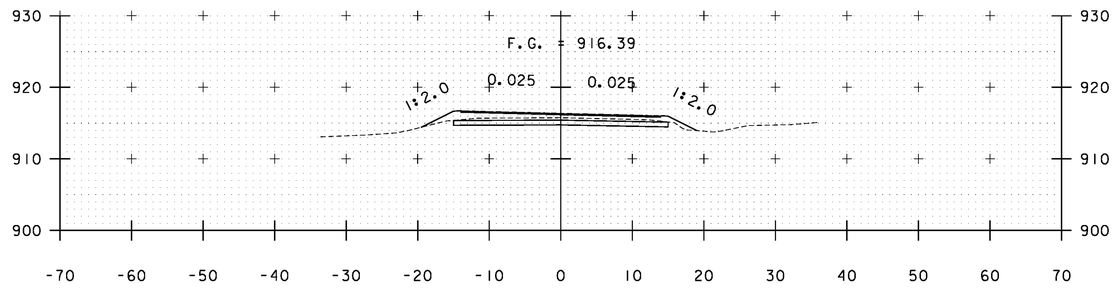
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 333 OF 444



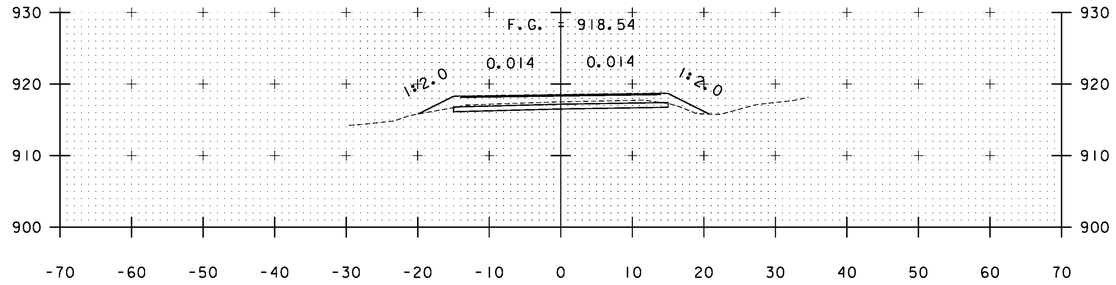

B 23+50



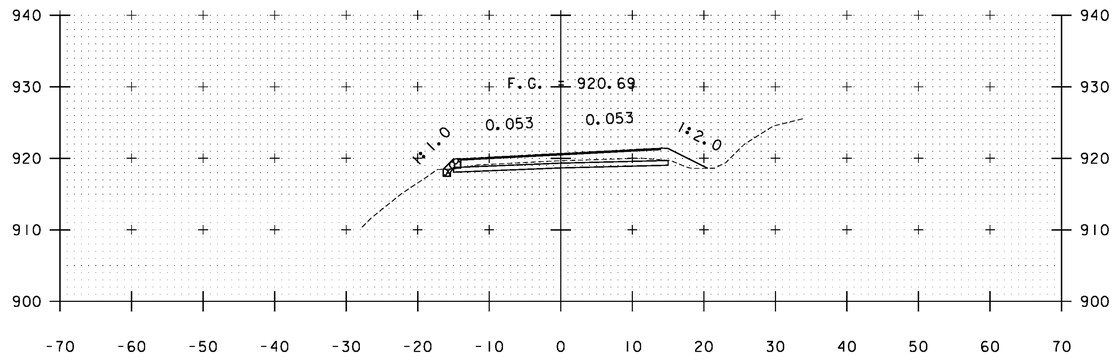

B 23+00




B 25+00



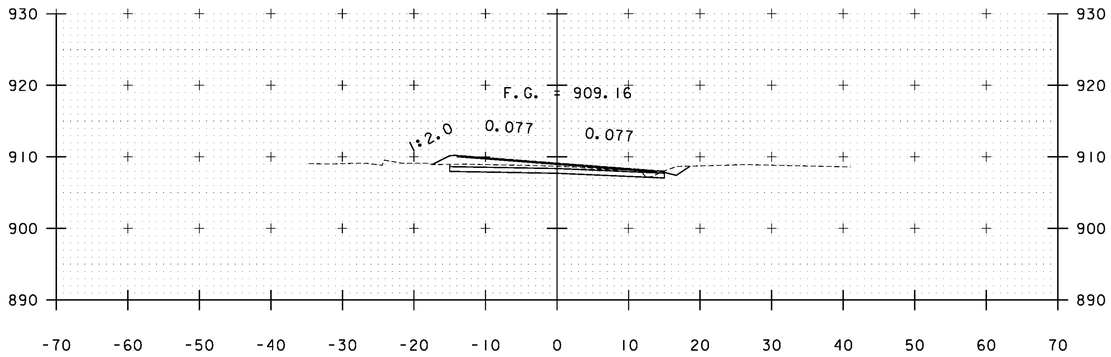

B 24+50



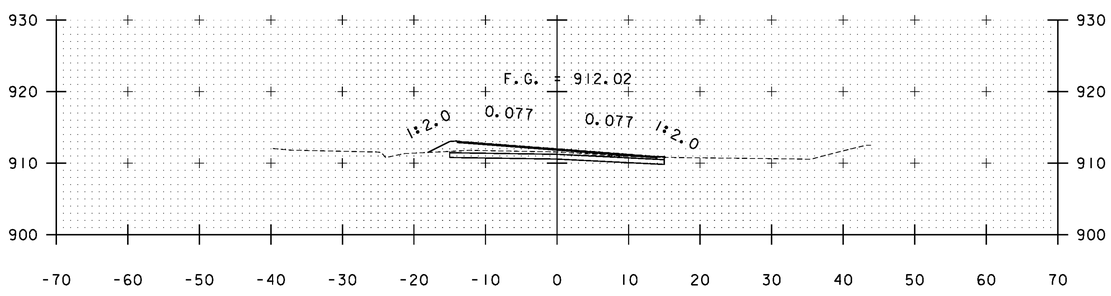

B 24+00

STA. B 23+00 TO STA. B 25+00

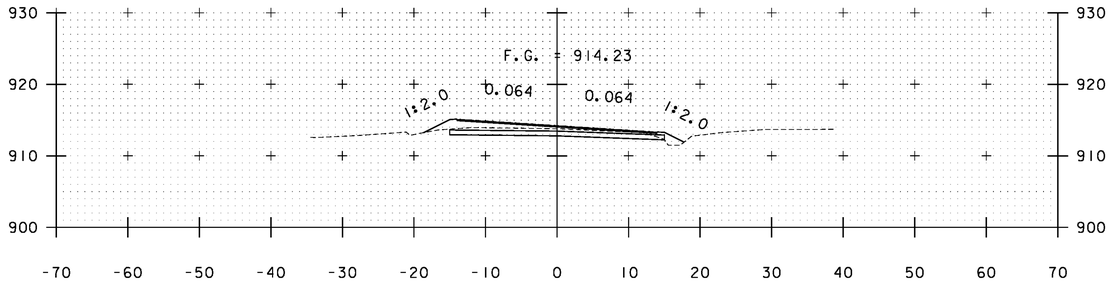
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 334 OF 444 |



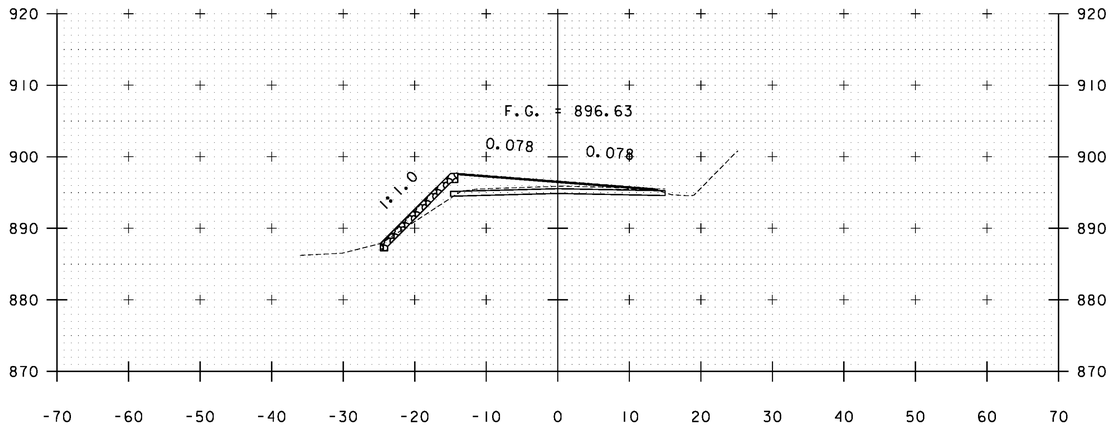

B 26+50



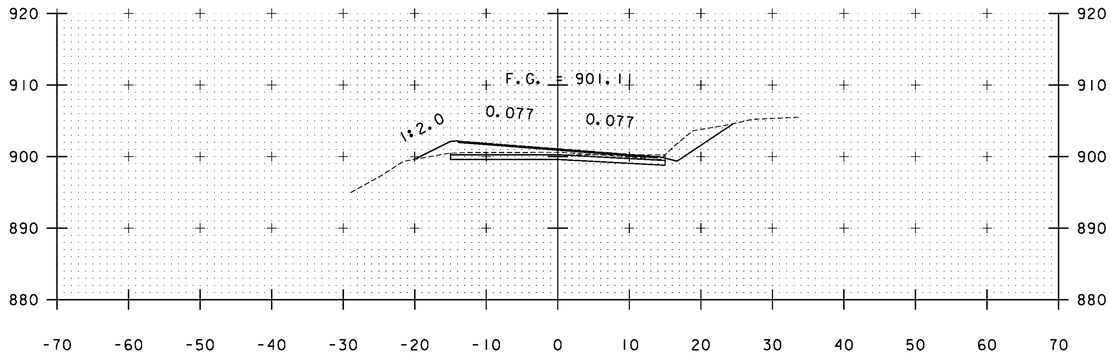

B 26+00



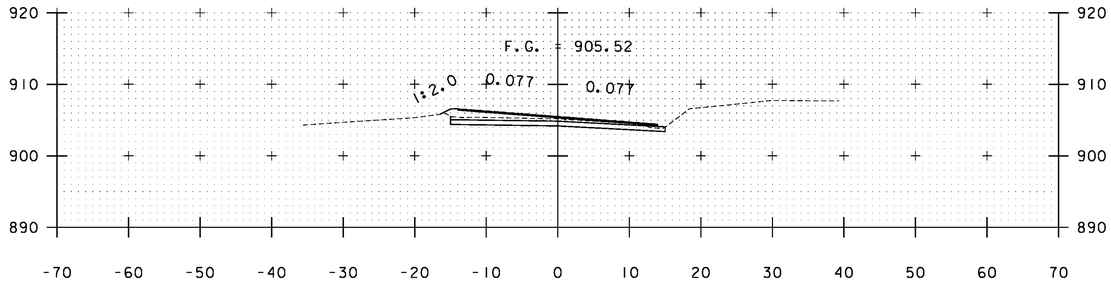

B 25+50




B 28+00




B 27+50



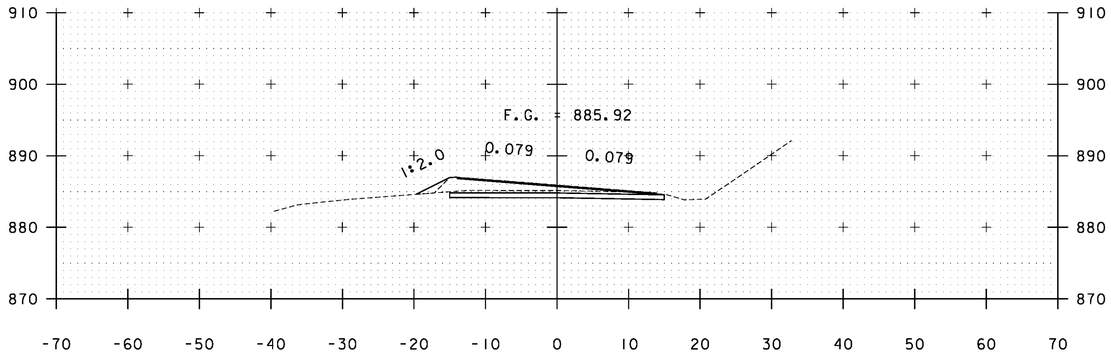

B 27+00

STA. B 25+50 TO STA. B 28+00

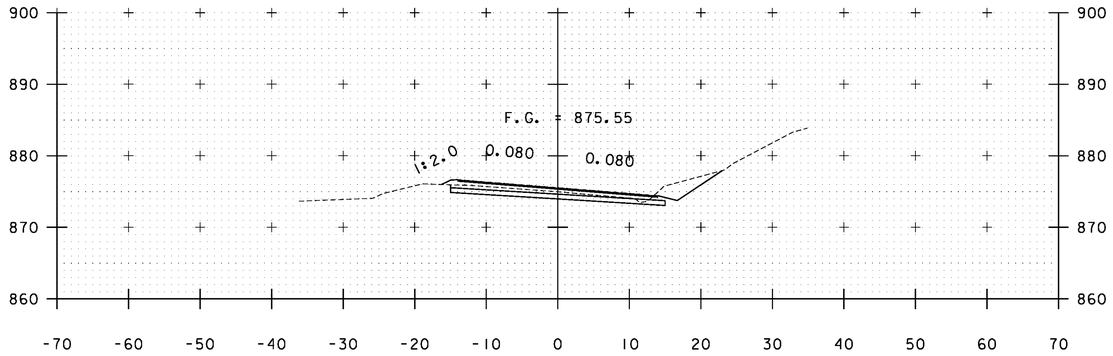
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

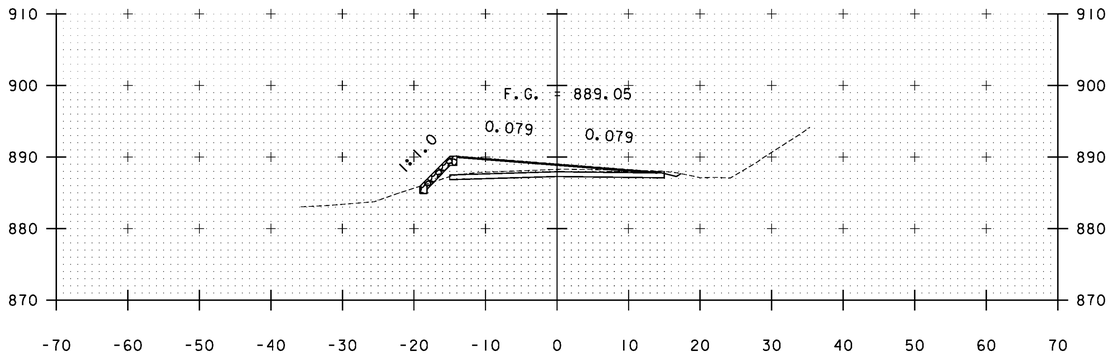
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 335 OF 444



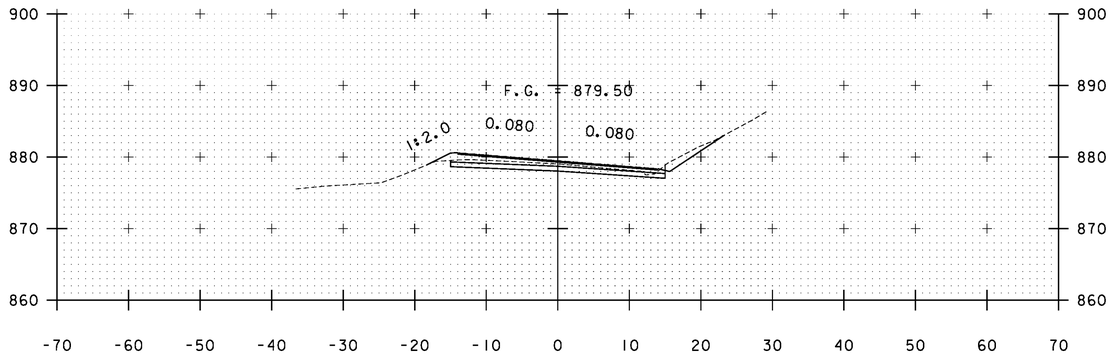

B 29+50



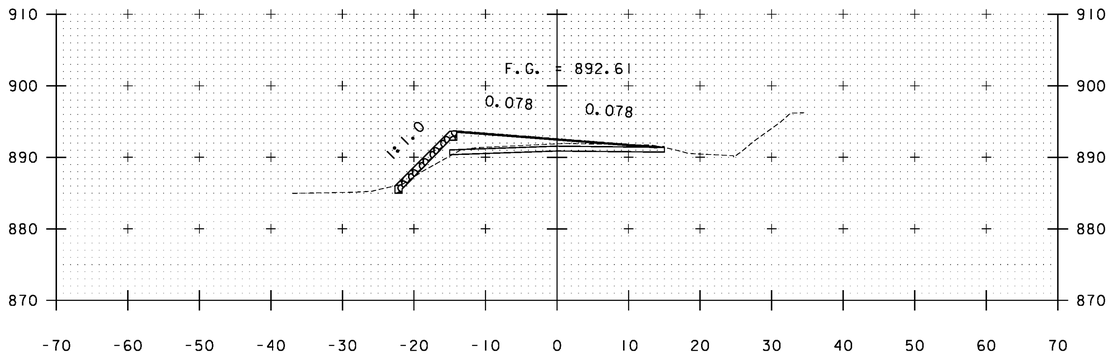

B 31+00



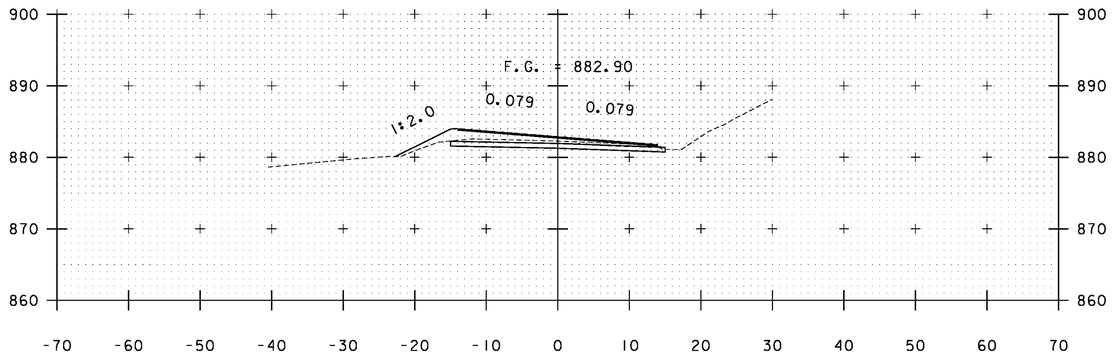

B 29+00




B 30+50




B 28+50



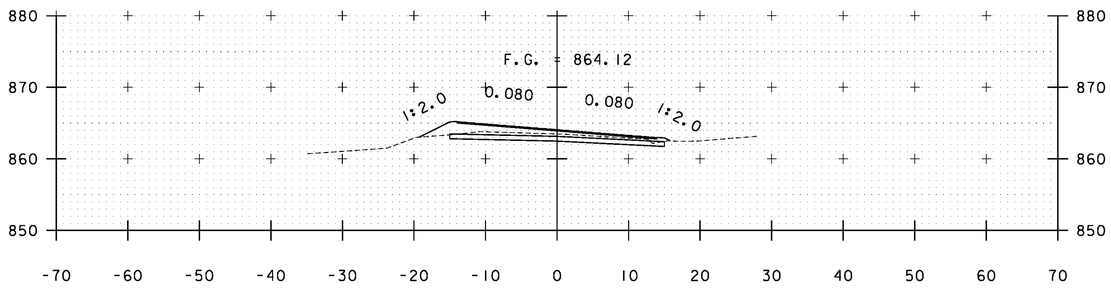

B 30+00

STA. B 28+50 TO STA. B 31+00

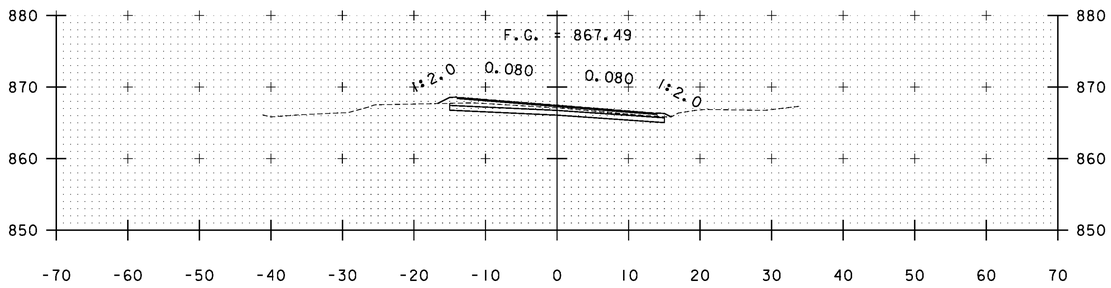
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

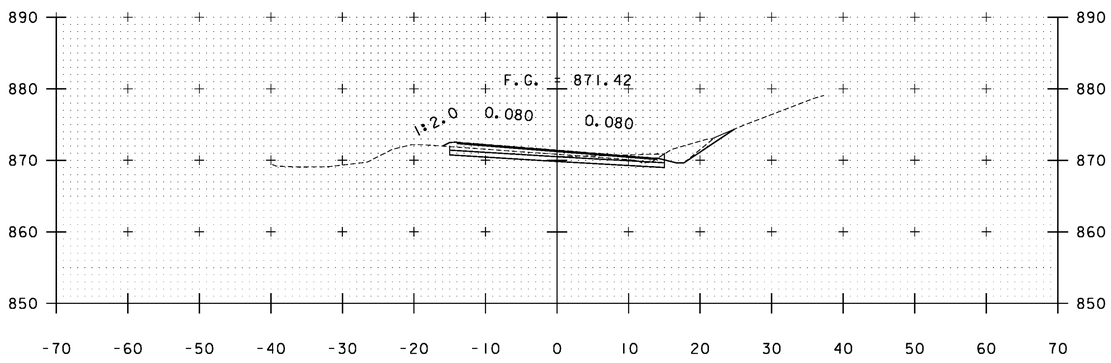
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 336 OF 444



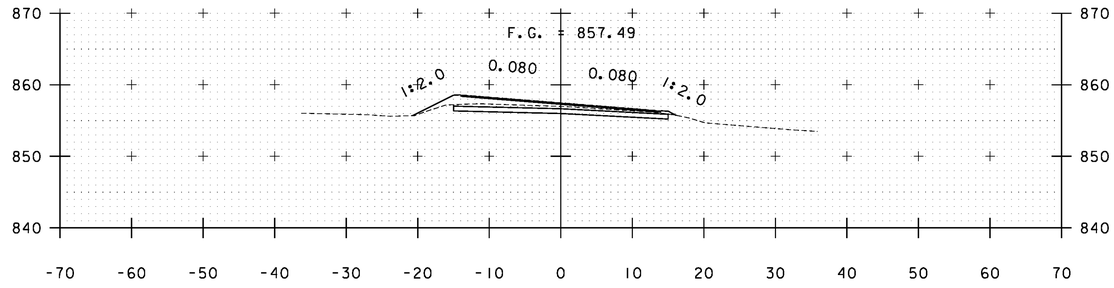

B 32+50



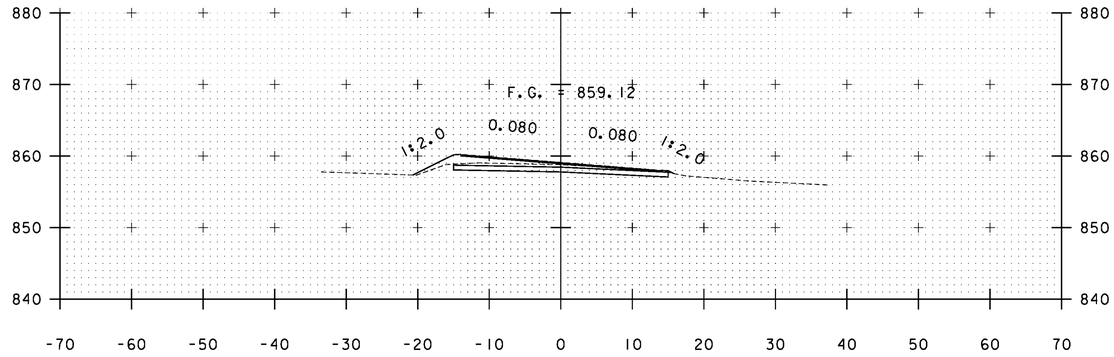

B 32+00



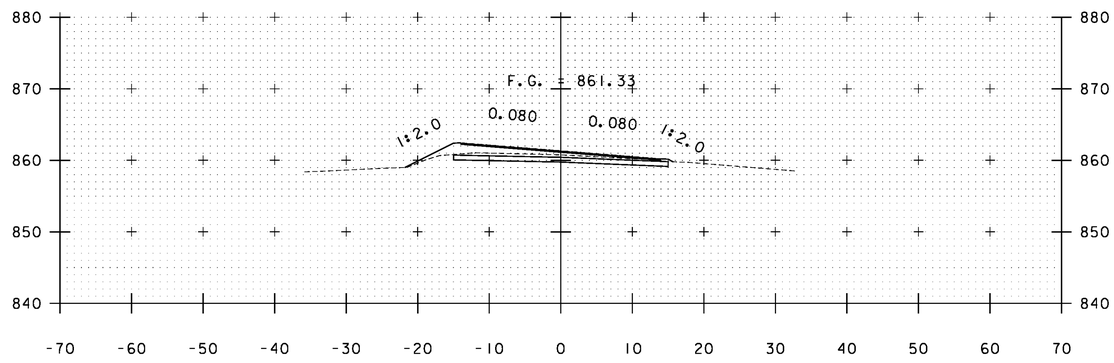

B 31+50




B 34+00




B 33+50



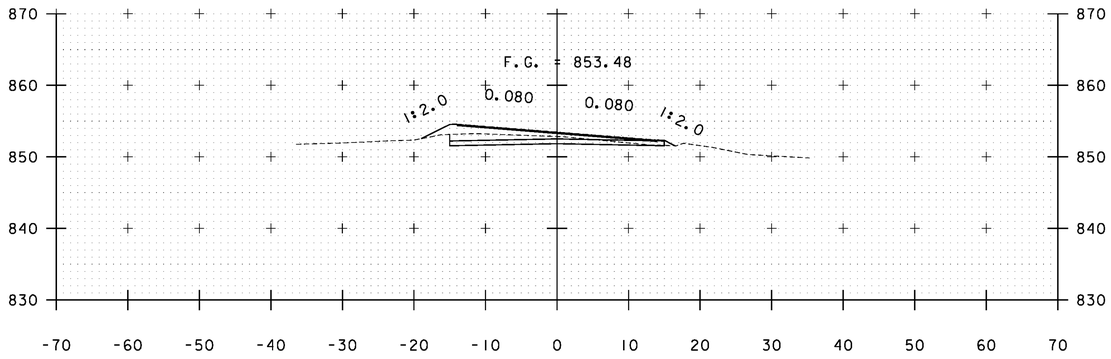

B 33+00

STA. B 31+50 TO STA. B 34+00

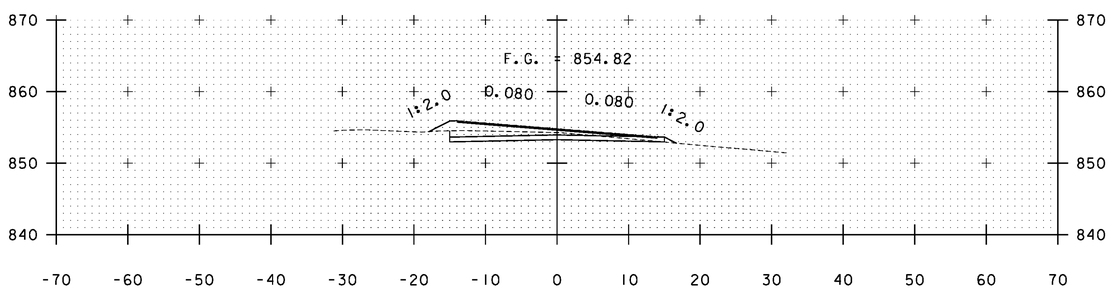
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

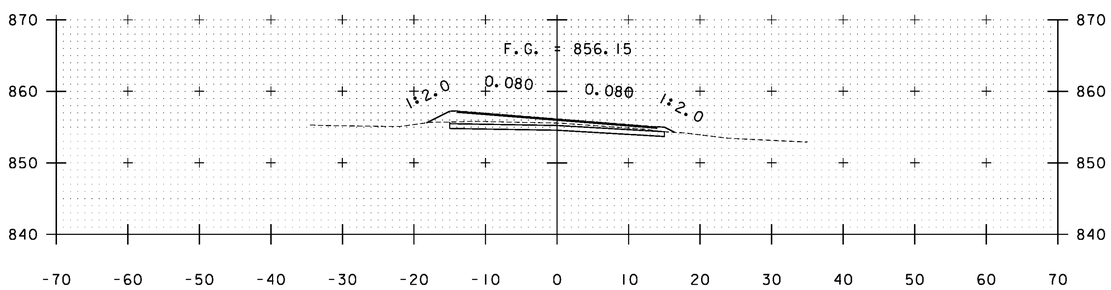
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 337 OF 444



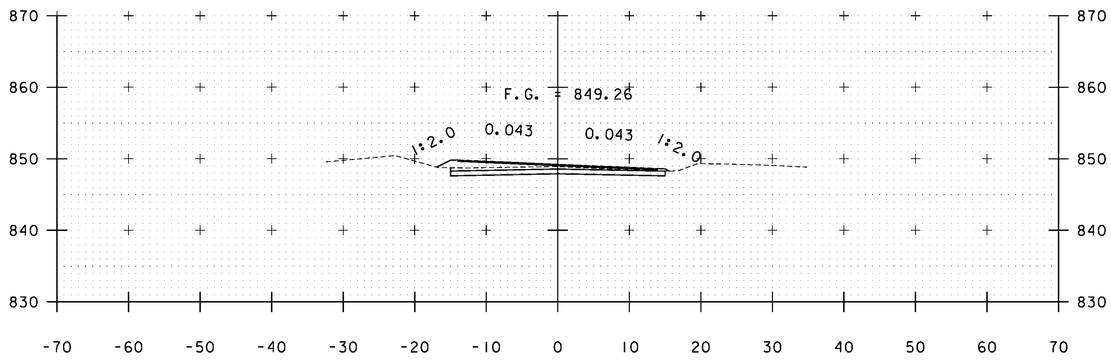

B 35+50



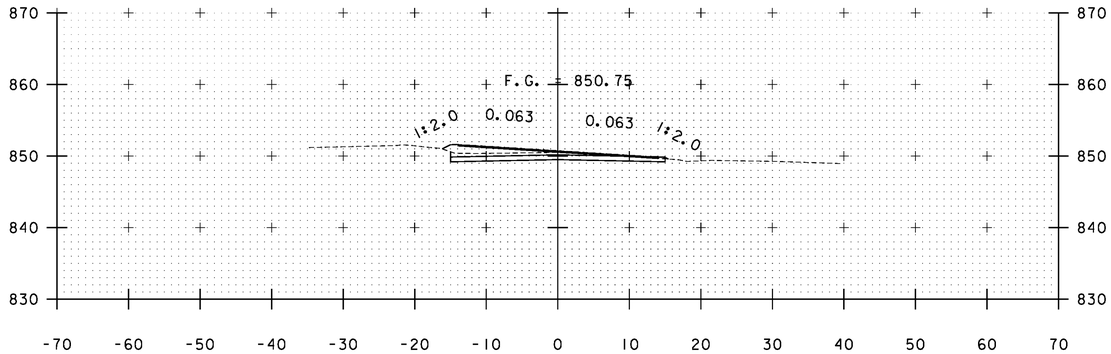

B 35+00



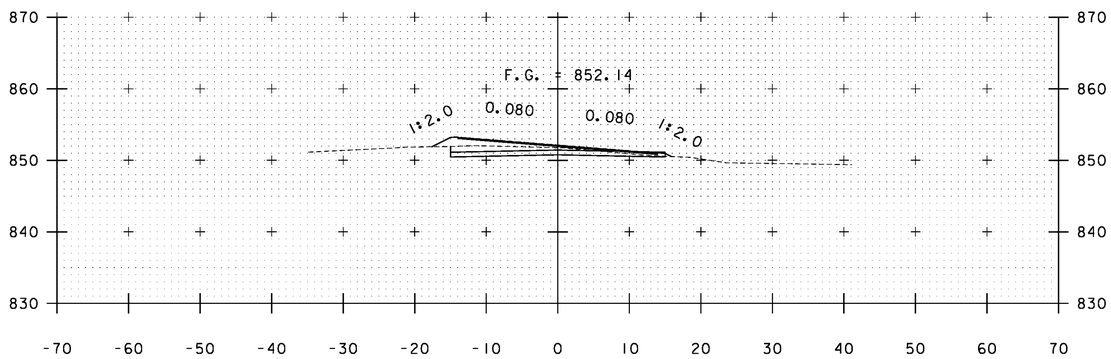

B 34+50




B 37+00




B 36+50



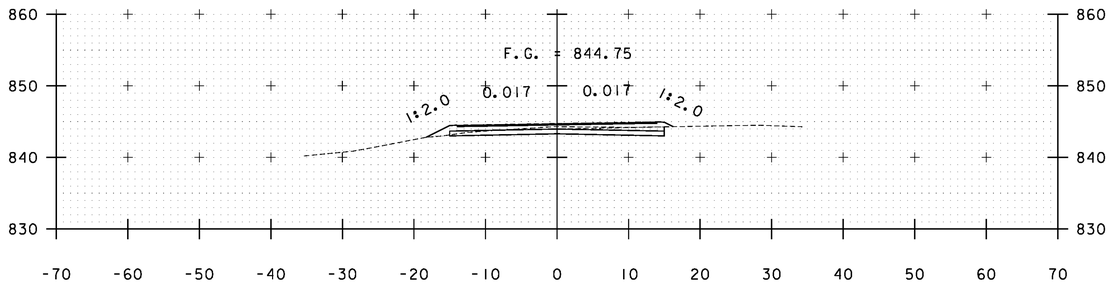

B 36+00

STA. B 34+50 TO STA. B 37+00

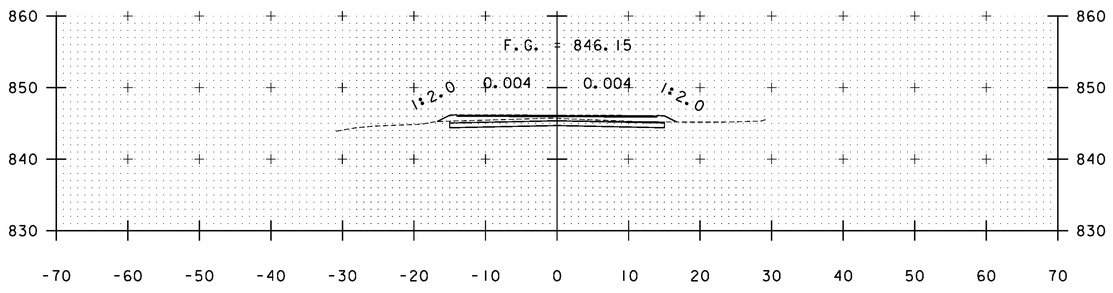
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

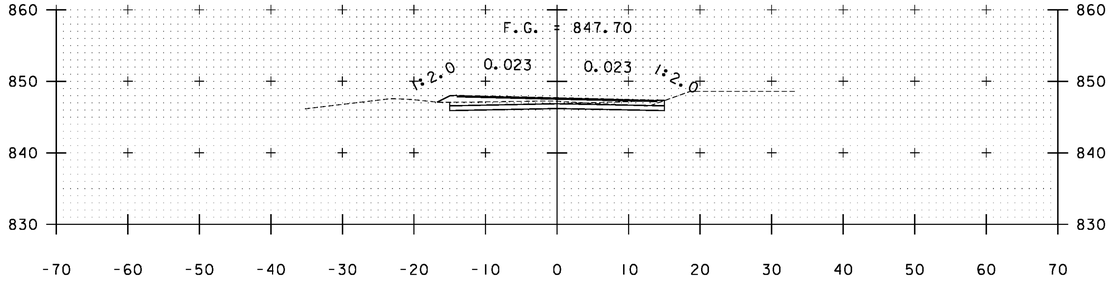
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 338 OF 444



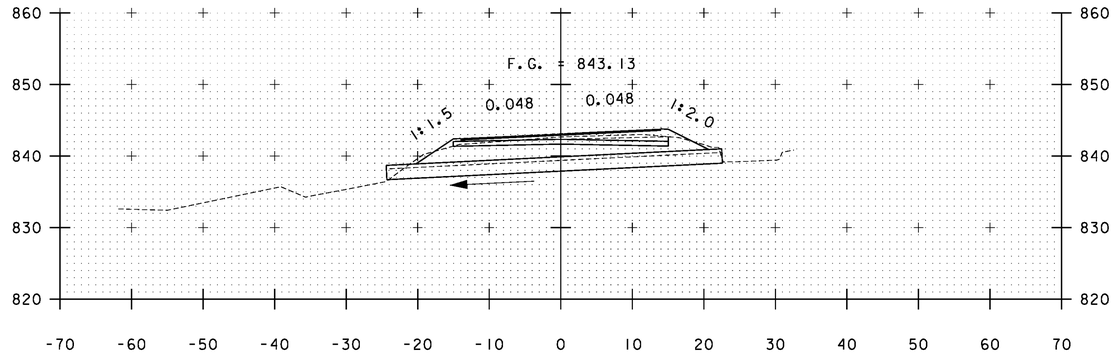

B 38+50



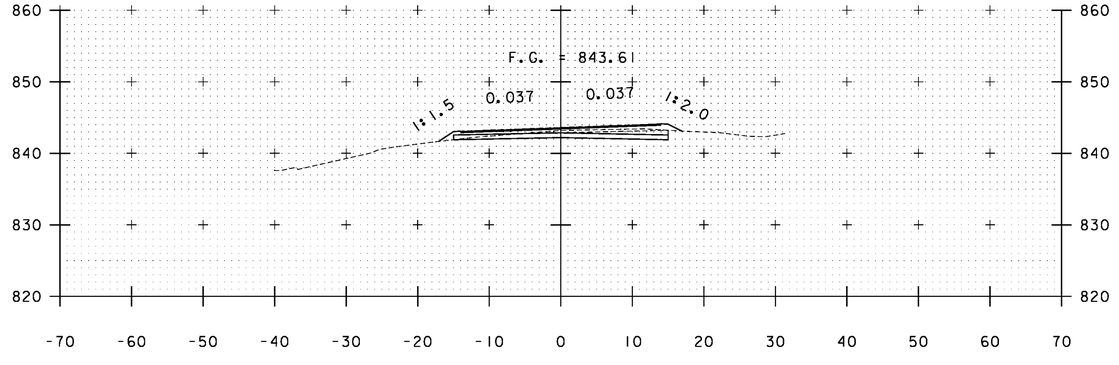

B 38+00




B 37+50



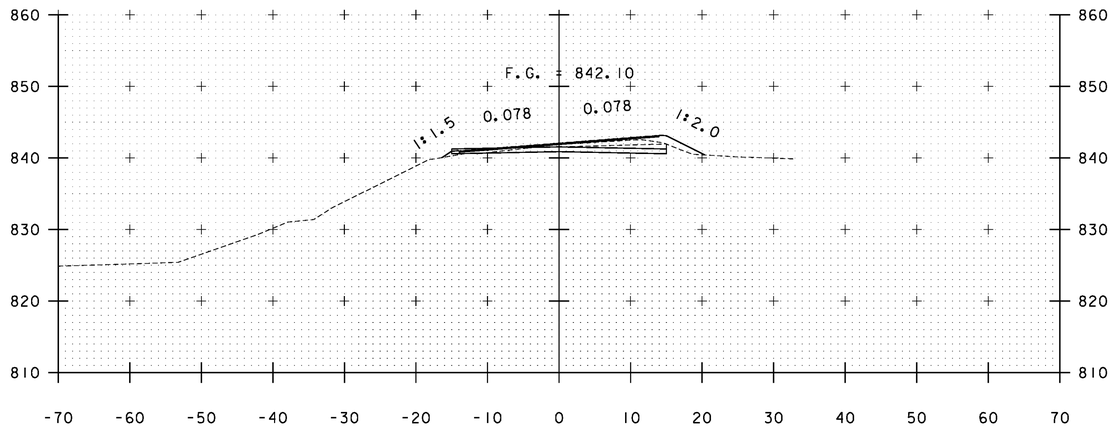

B 39+26



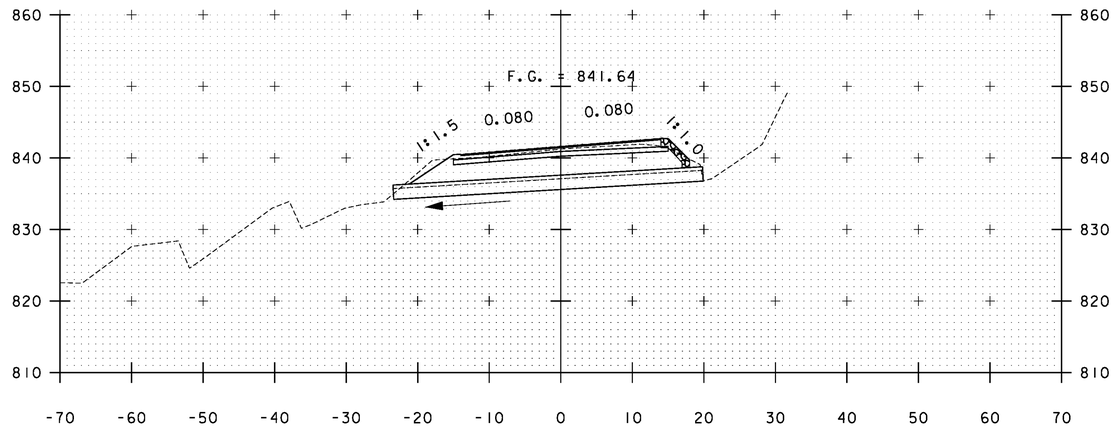

B 39+00

STA. B 37+50 TO STA. B 39+26

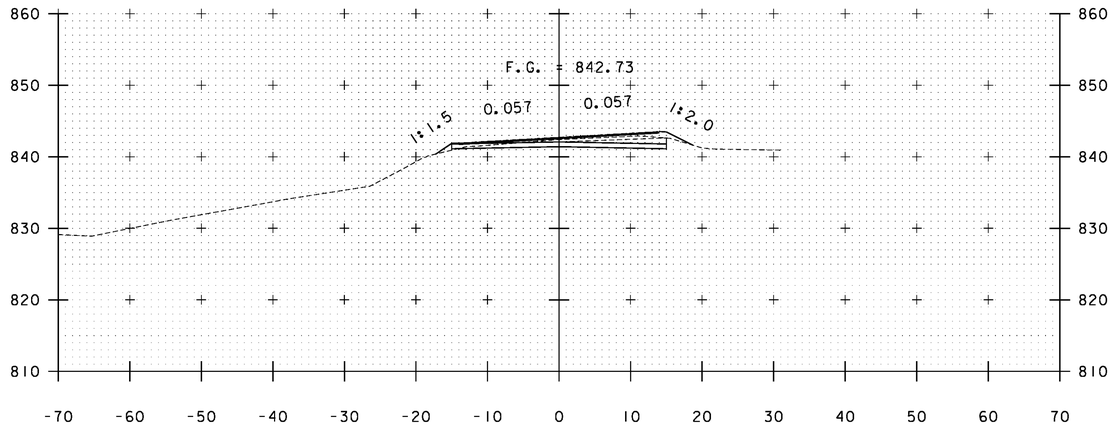
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 339 OF 444 |



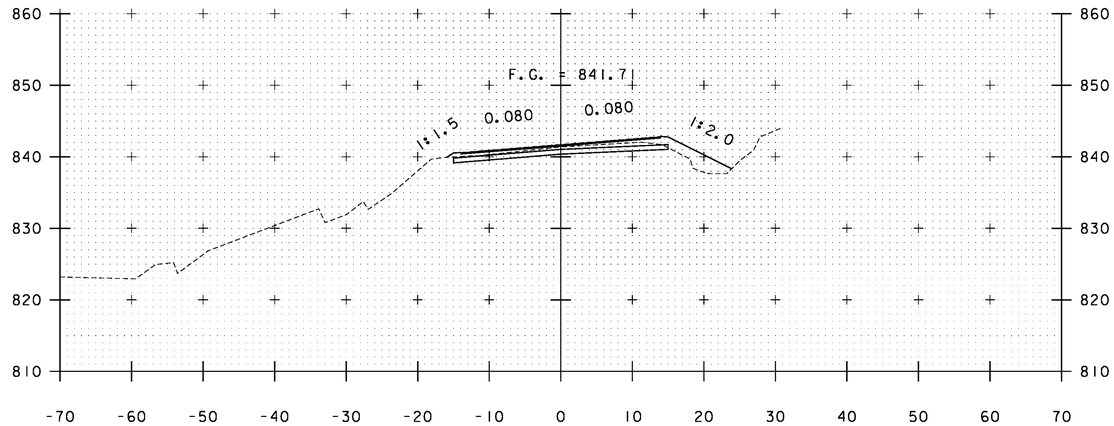

B 40+00




B 40+60




B 39+50



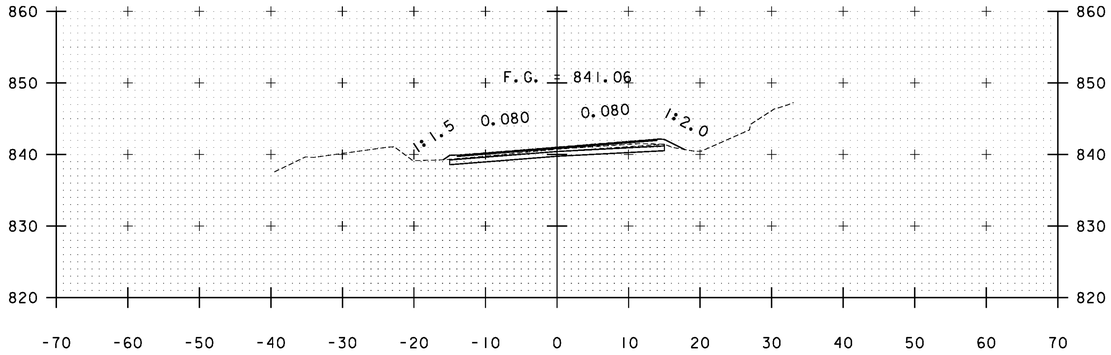

B 40+50

STA. B 39+50 TO STA. B 40+60

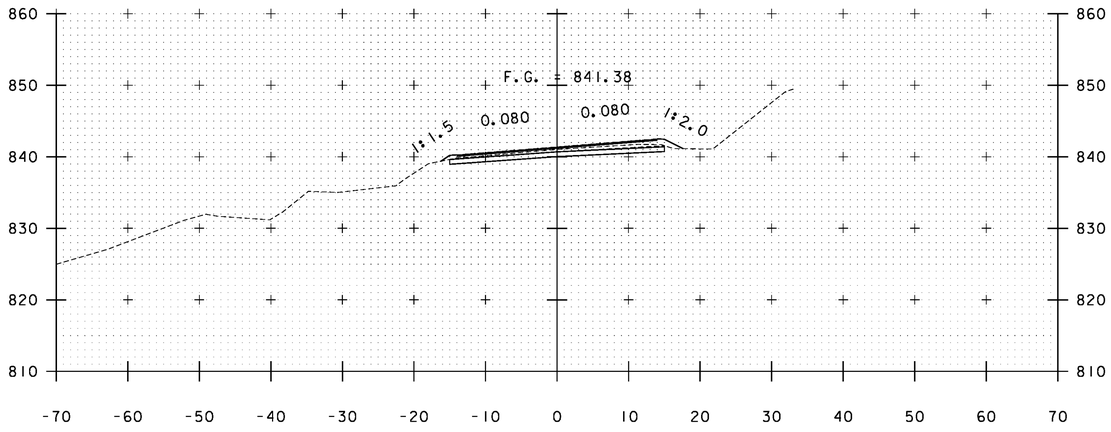
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

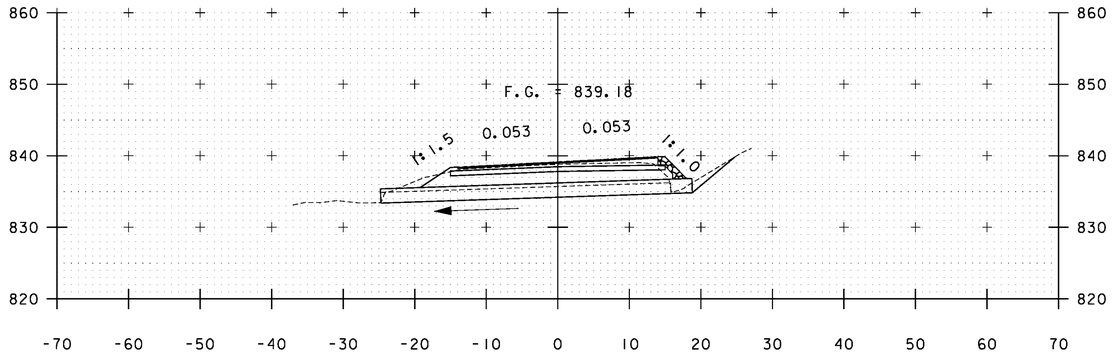
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 340 OF 444



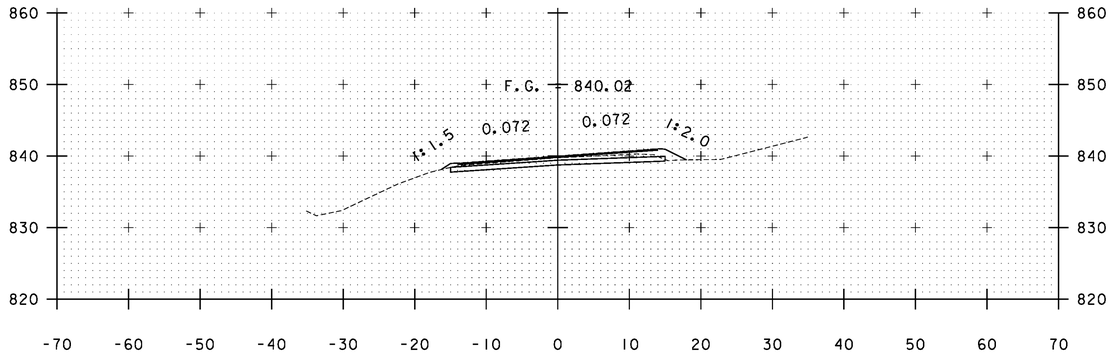

B 41+50



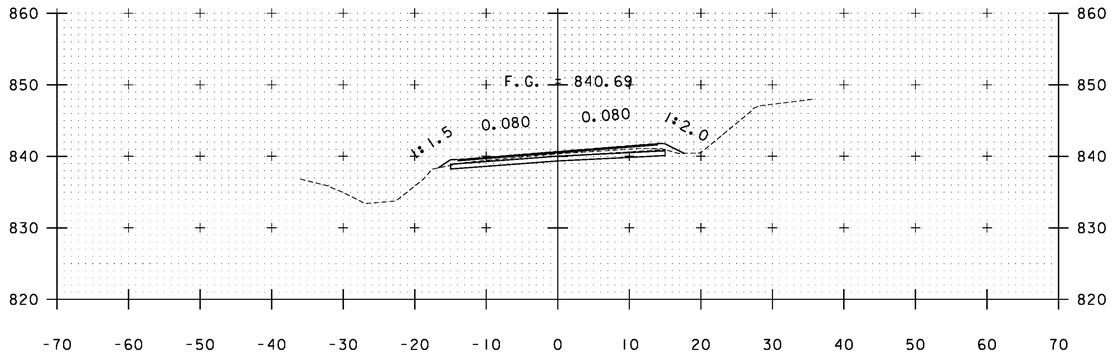

B 41+00




B 42+93



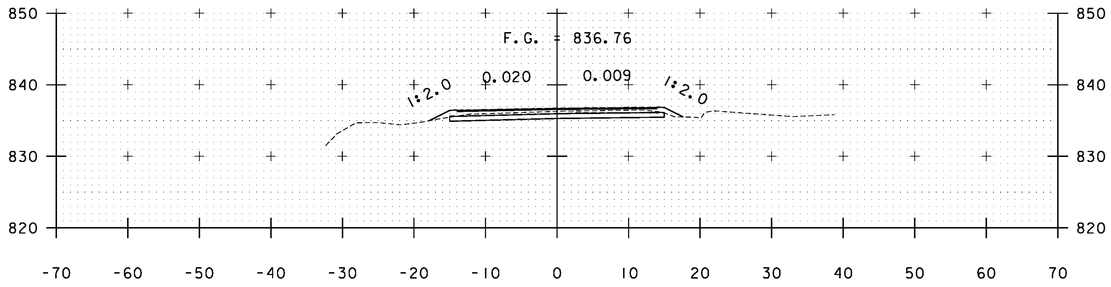

B 42+50



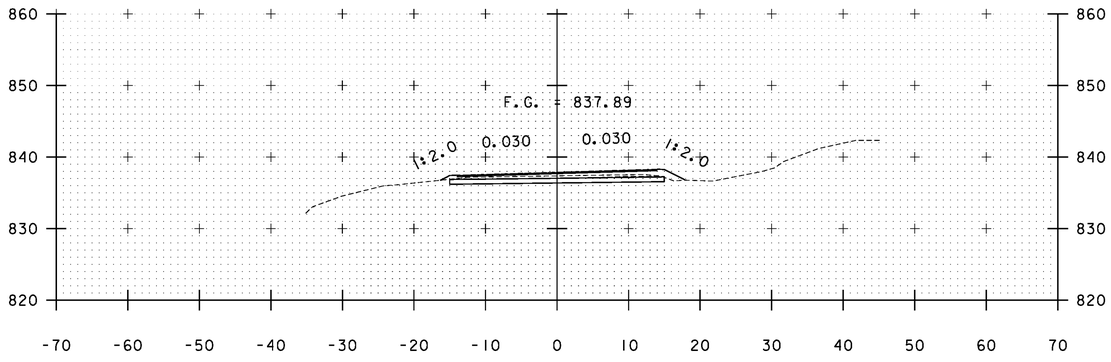

B 42+00

STA. B 41+00 TO STA. B 42+93

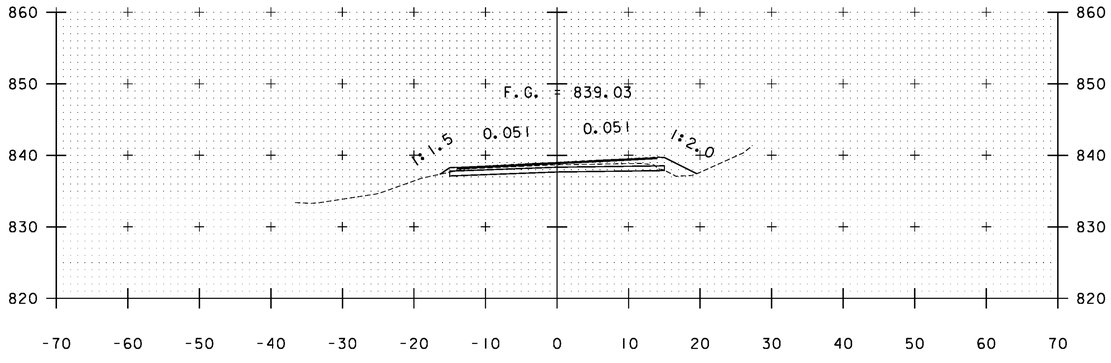
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 341 OF 444 |



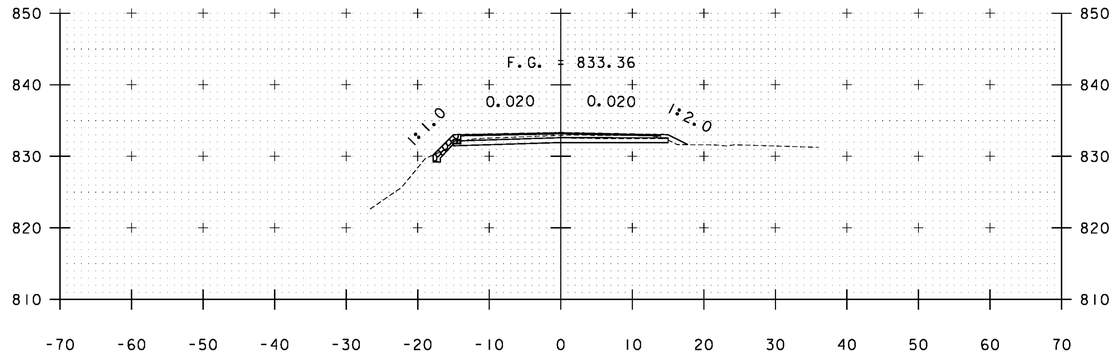

B 44+00



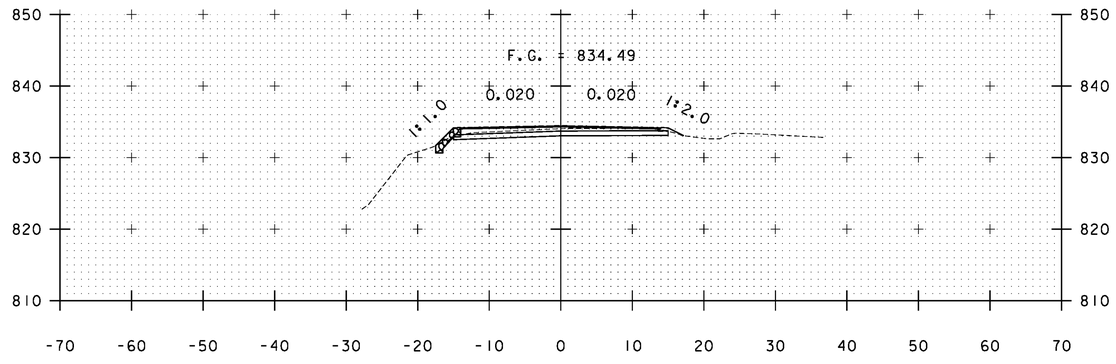

B 43+50



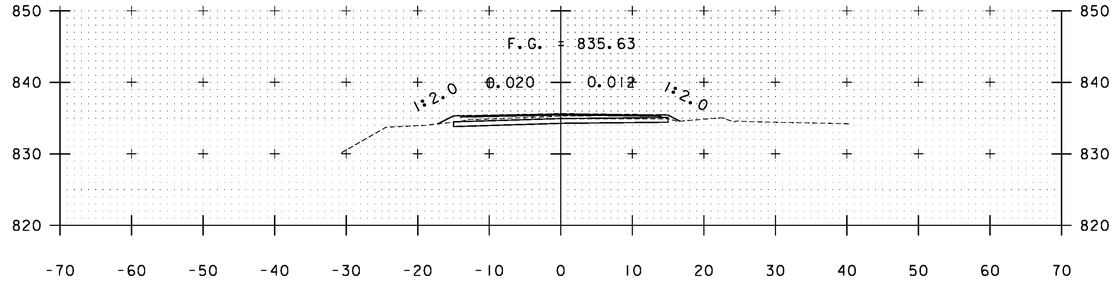

B 43+00




B 45+50



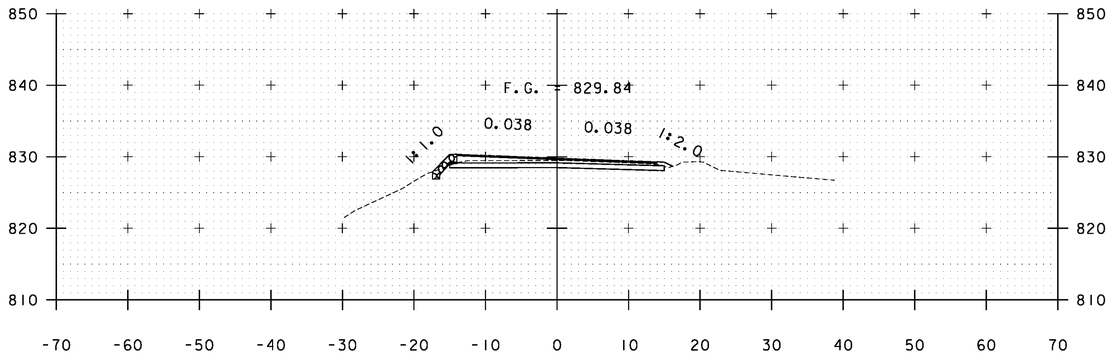

B 45+00



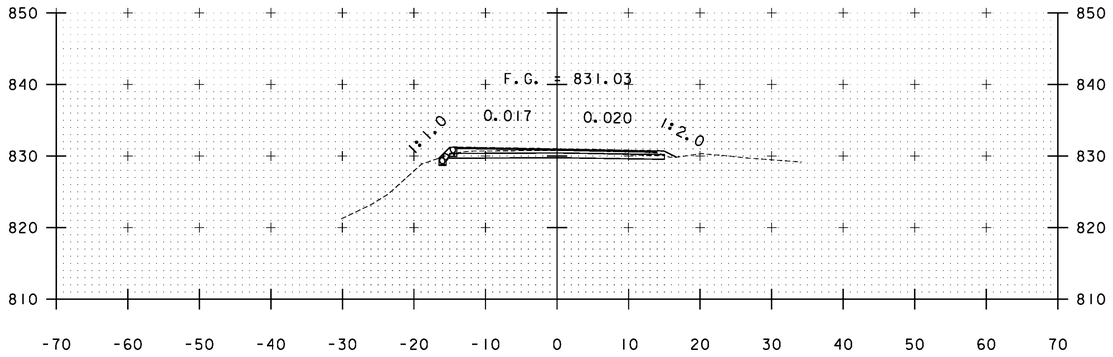

B 44+50

STA. B 43+00 TO STA. B 45+50

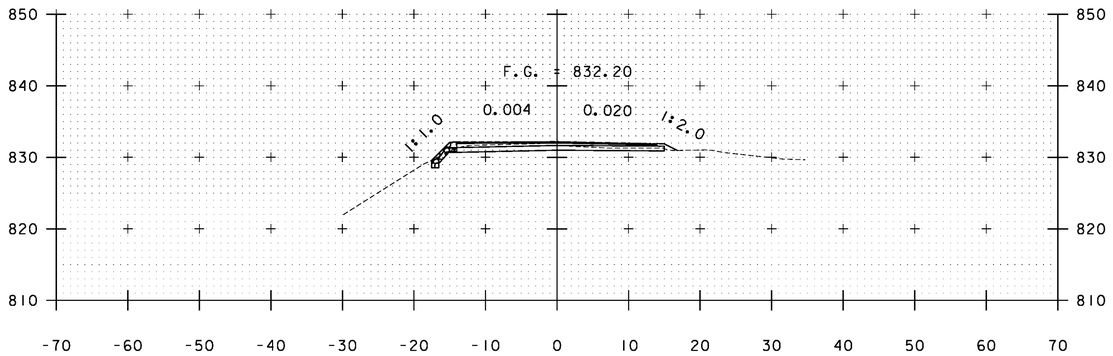
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 342 OF 444 |



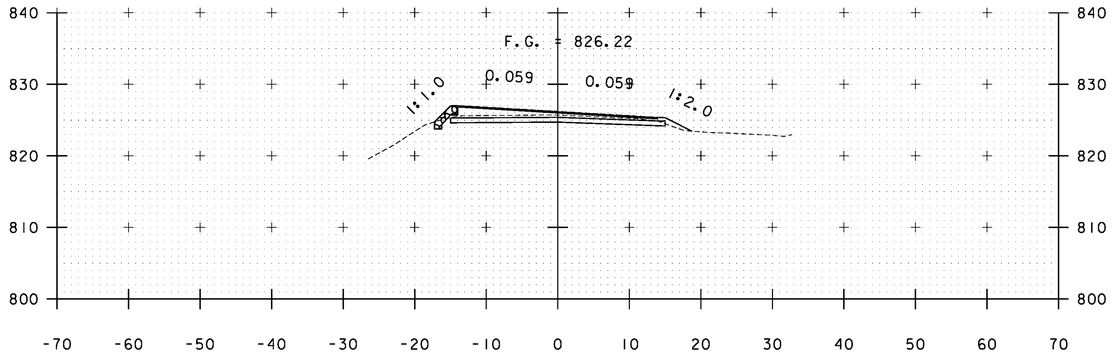

B 47+00



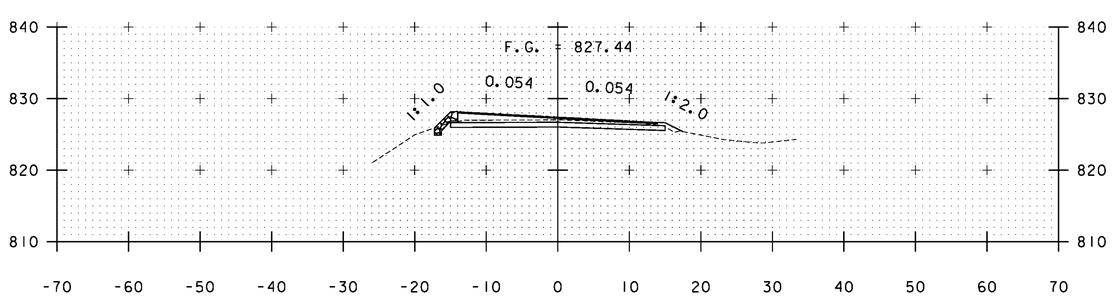

B 46+50



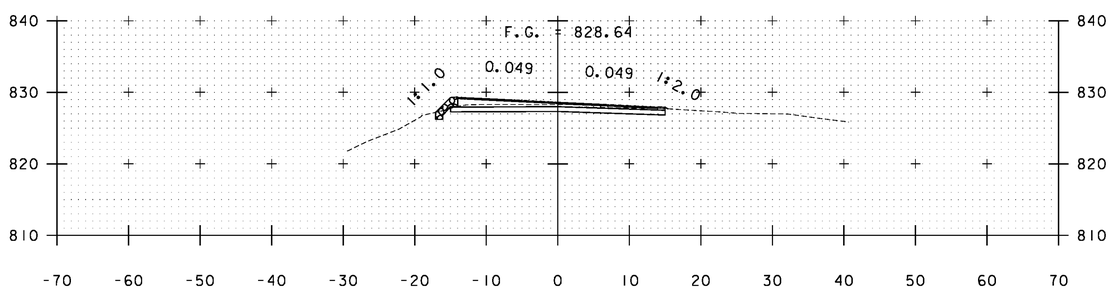

B 46+00




B 48+50




B 48+00



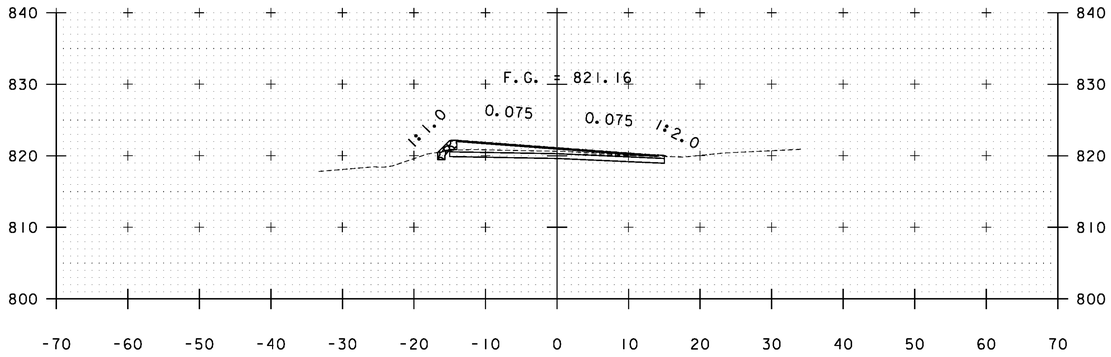

B 47+50

STA. B 46+00 TO STA. B 48+50

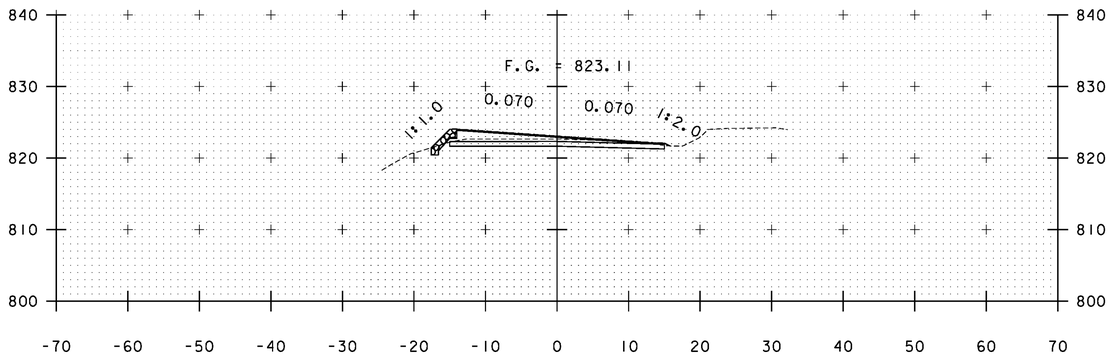
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

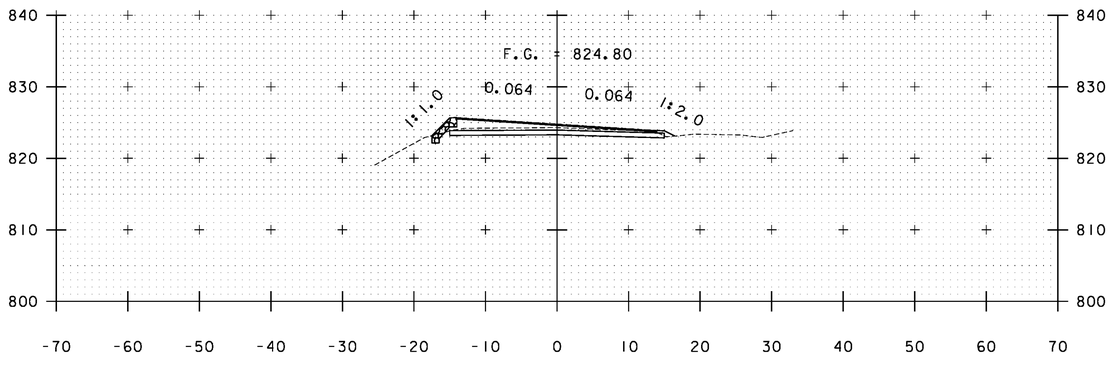
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 343 OF 444



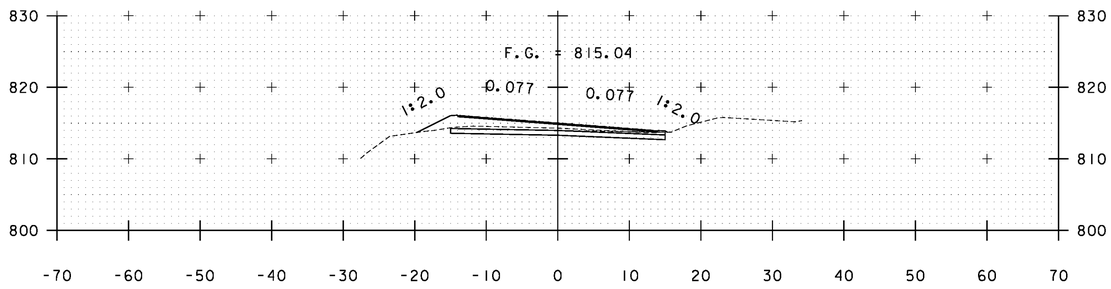

B 50+00



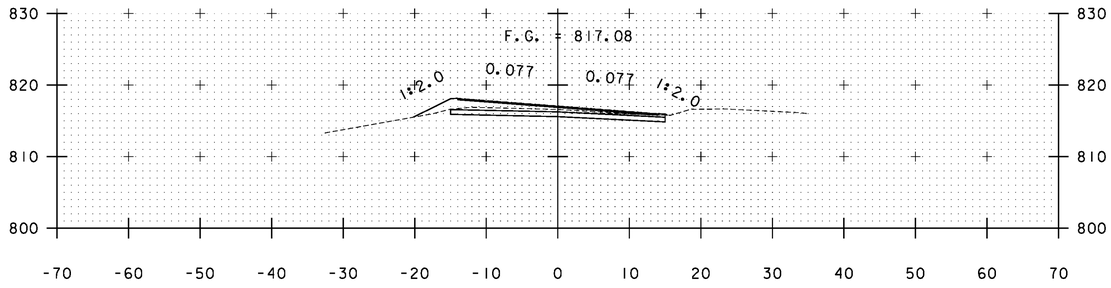

B 49+50



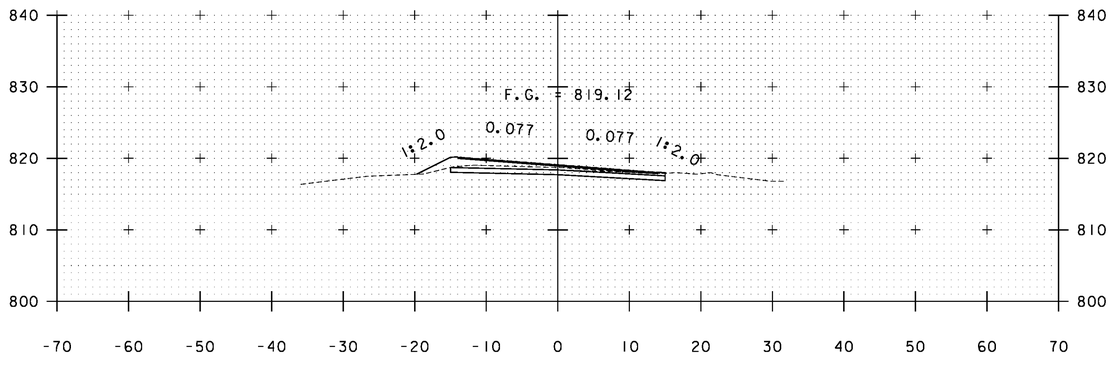

B 49+00




B 51+50




B 51+00



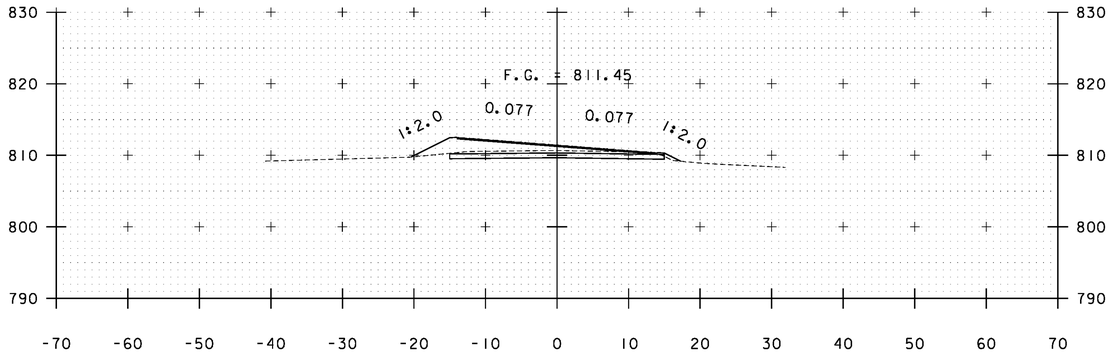

B 50+50

STA. B 49+00 TO STA. B 51+50

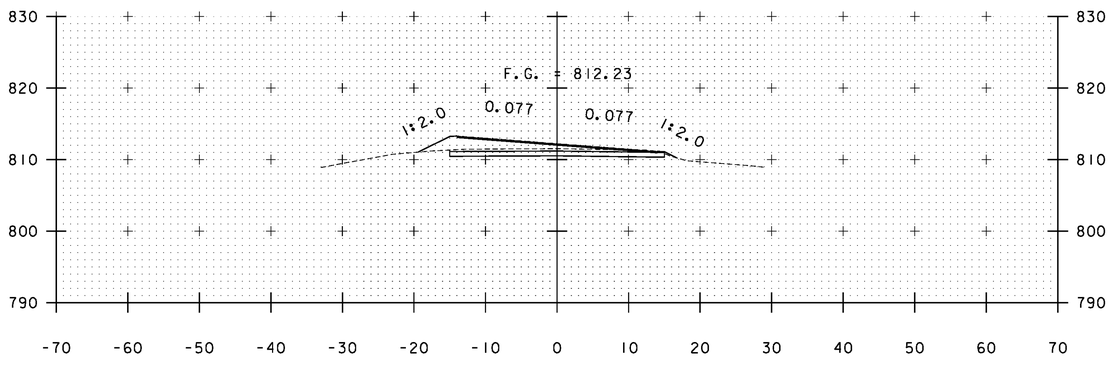
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

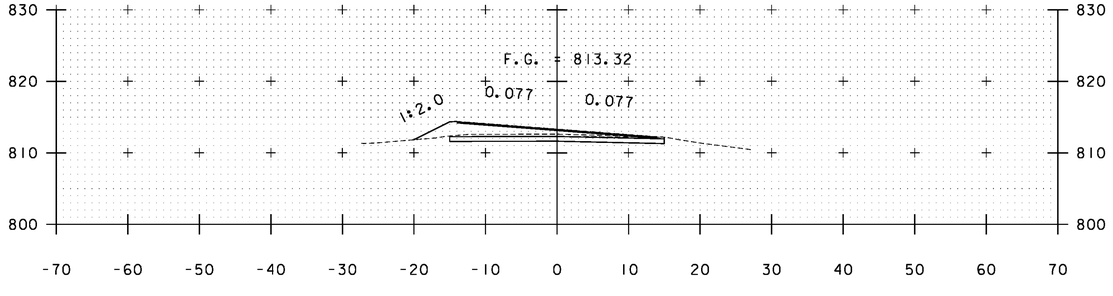
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 344 OF 444



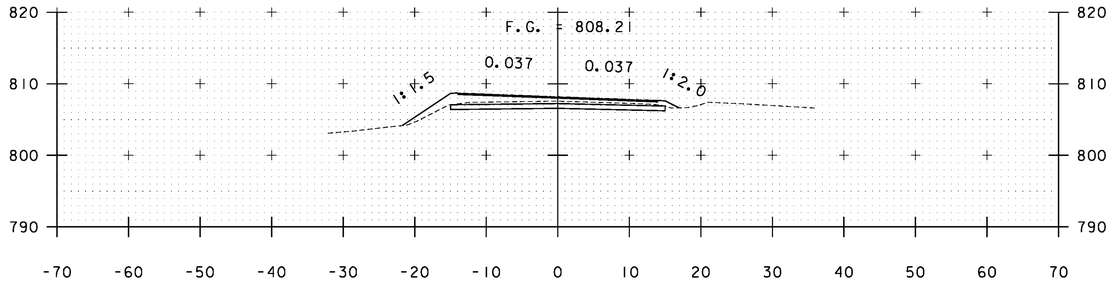

B 53+00



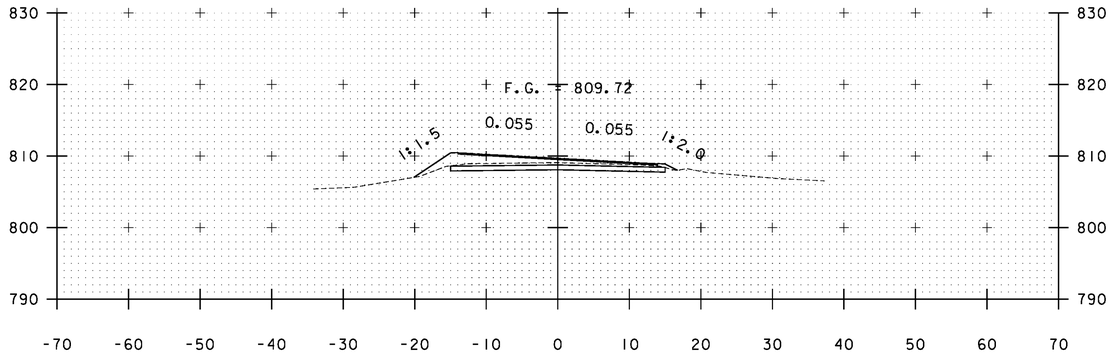

B 52+50



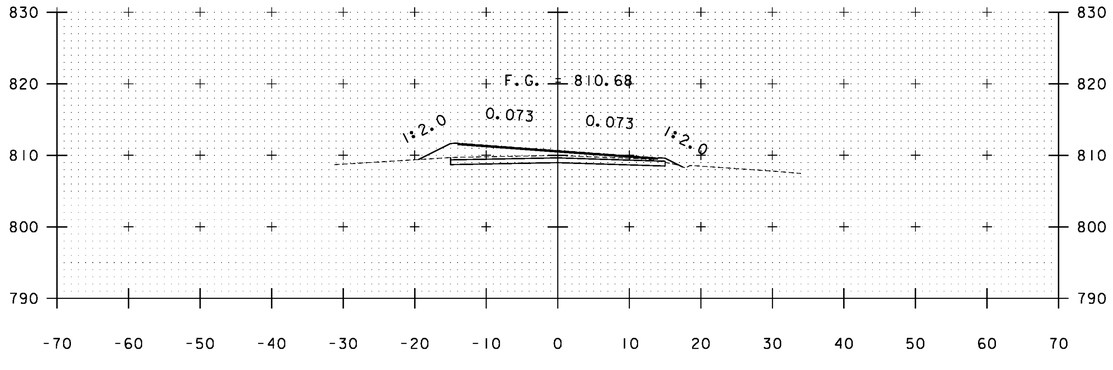

B 52+00




B 54+50



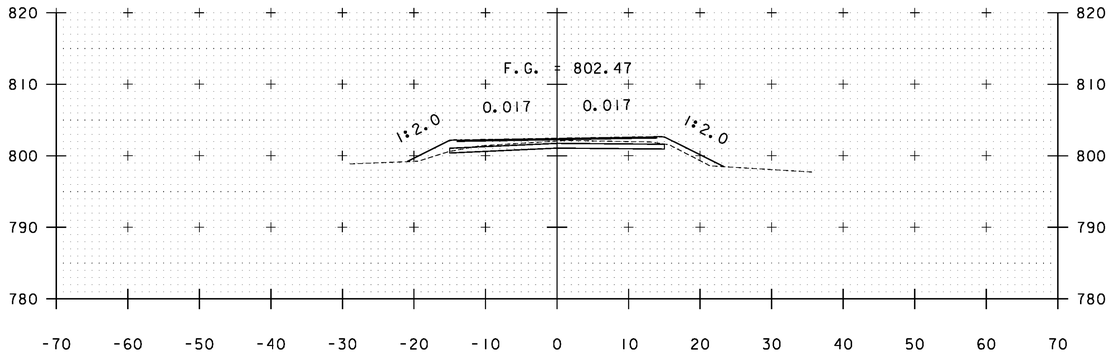

B 54+00



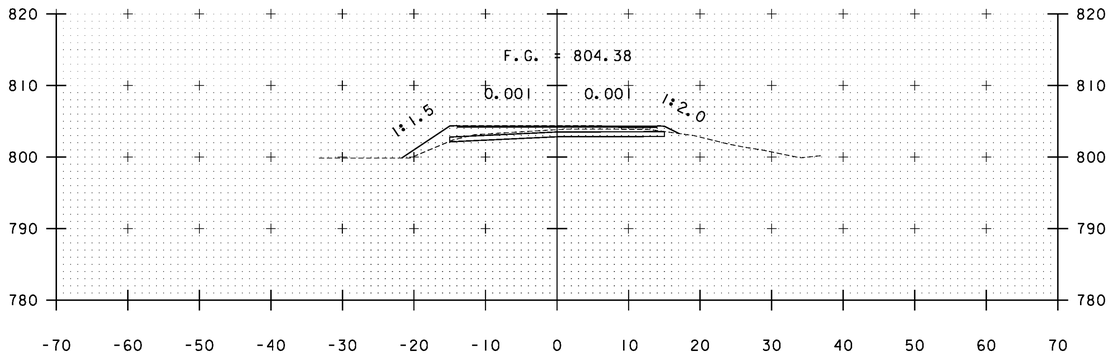

B 53+50

STA. B 52+00 TO STA. B 54+50

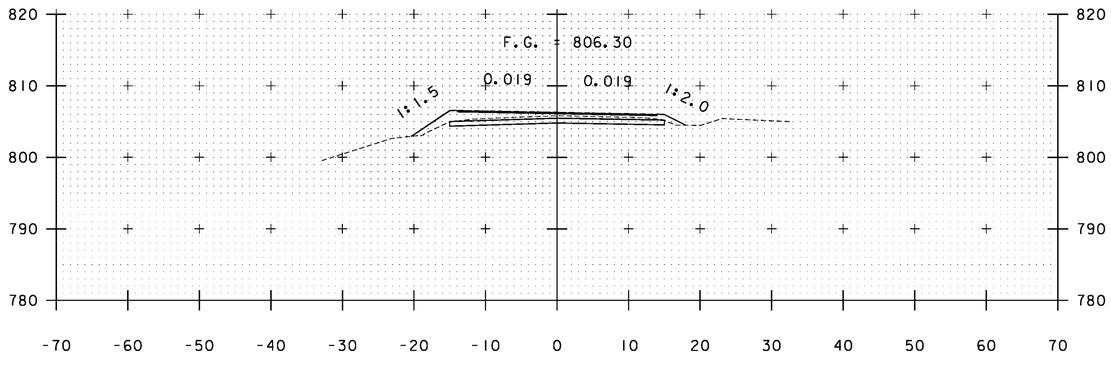
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 345 OF 444 |



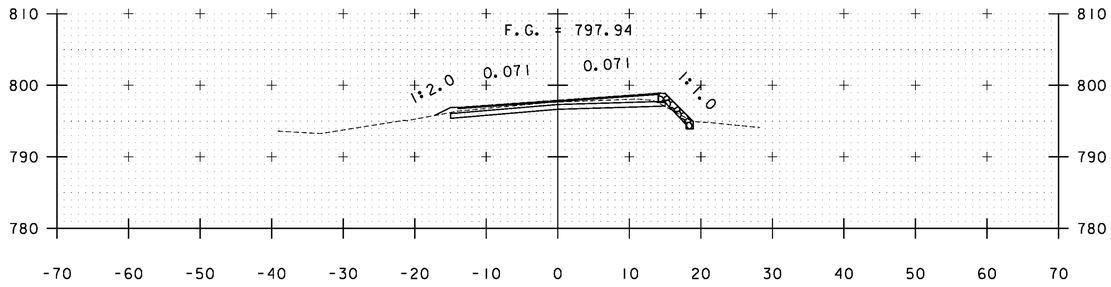

B 56+00



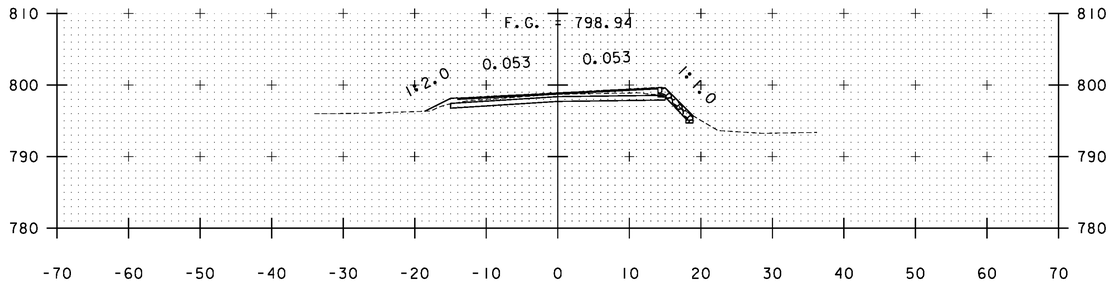

B 55+50



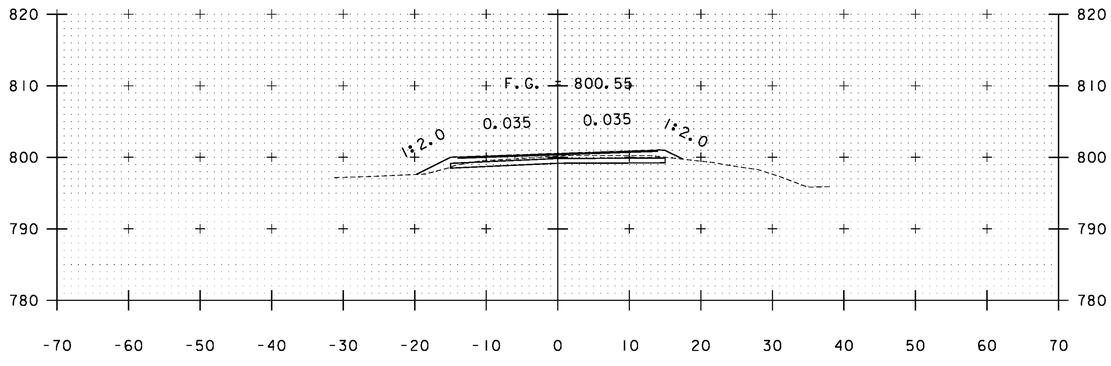

B 55+00




B 57+50




B 57+00



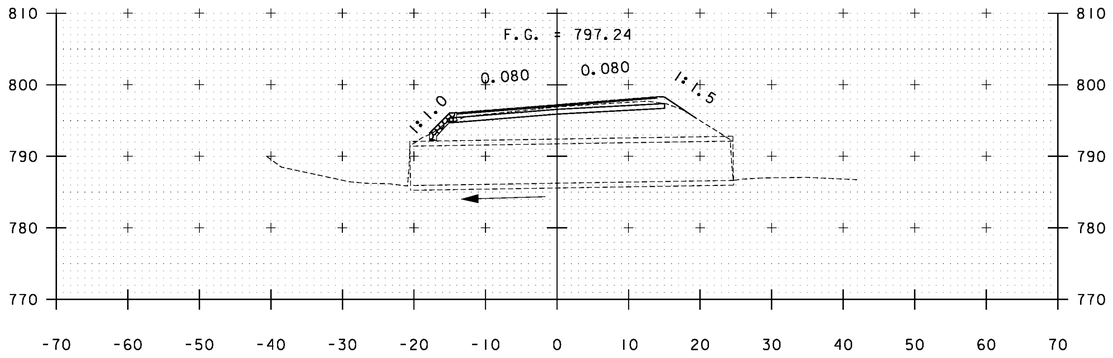

B 56+50

STA. B 55+00 TO STA. B 57+50

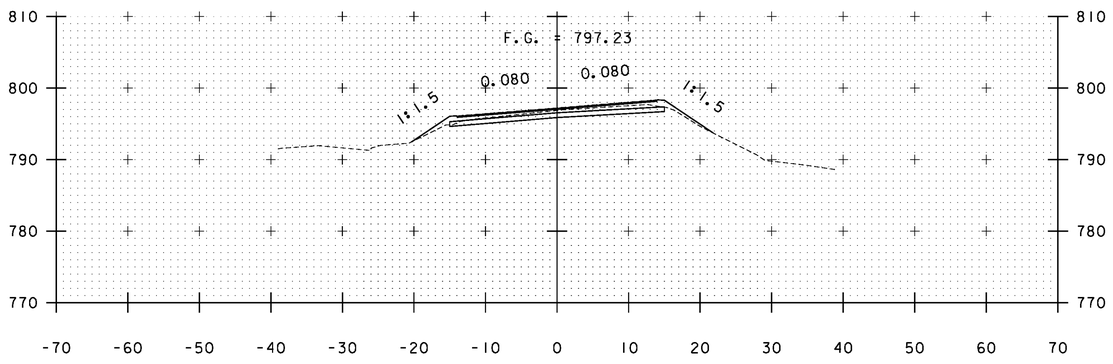
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

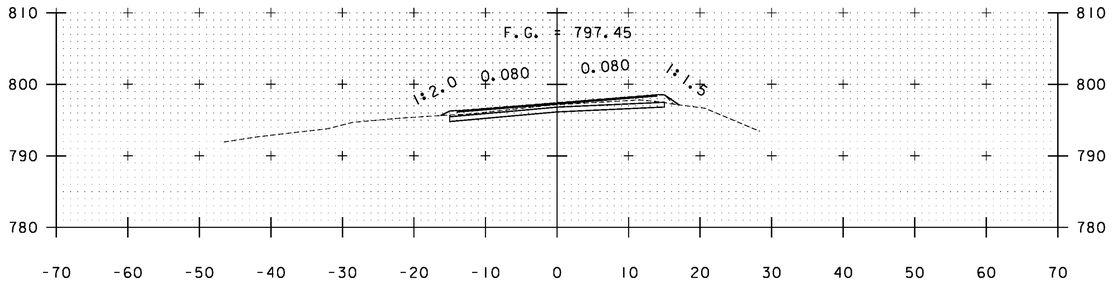
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 346 OF 444



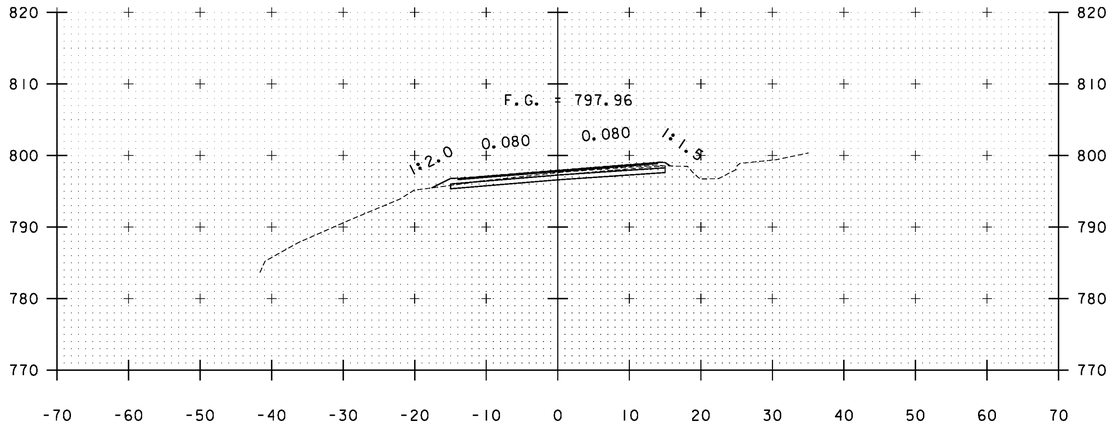

B 58+60



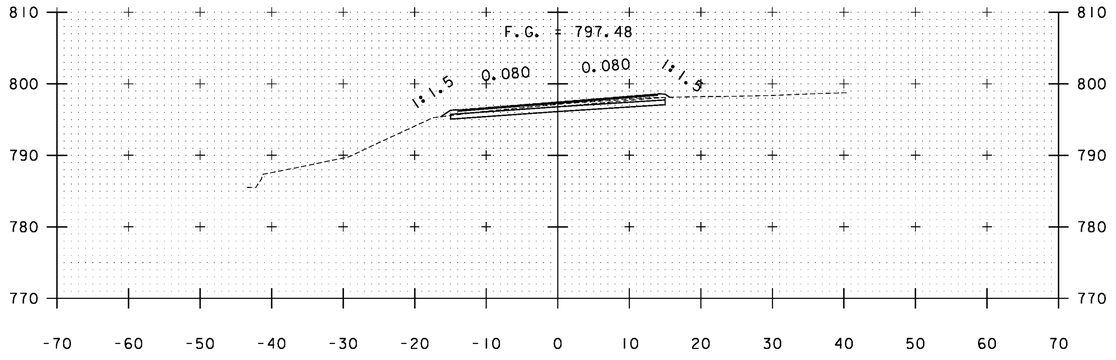

B 58+50




B 58+00




B 59+50



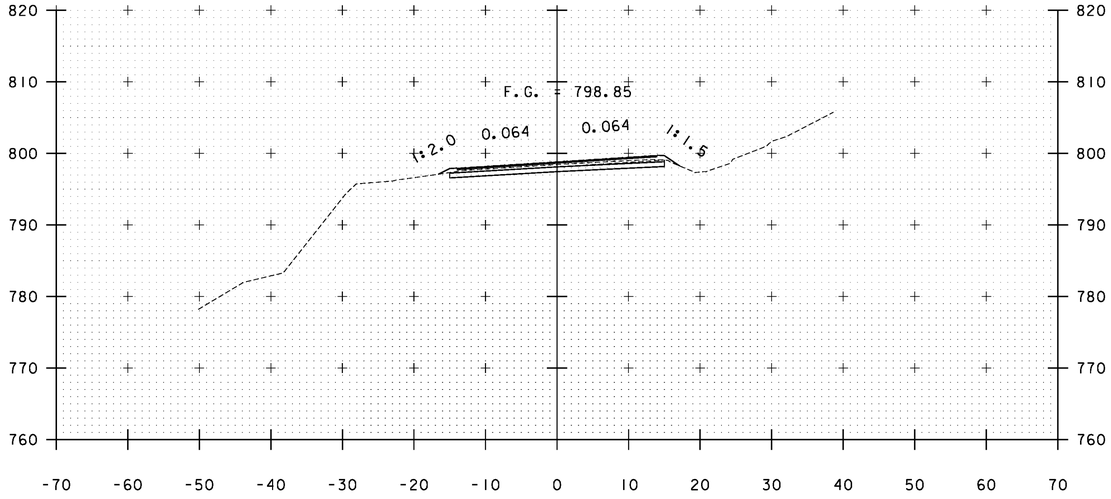

B 59+00

STA. B 58+00 TO STA. B 59+50

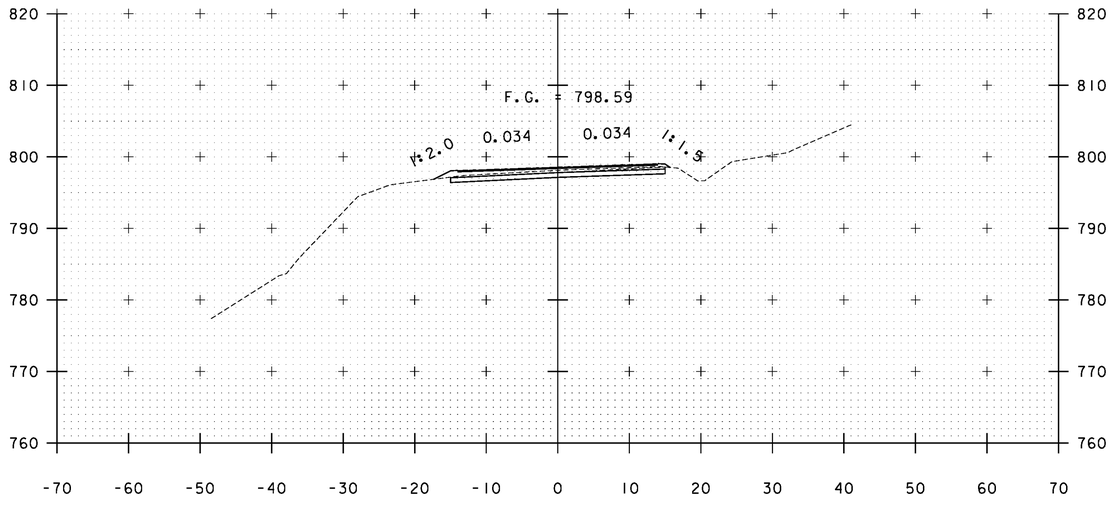
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

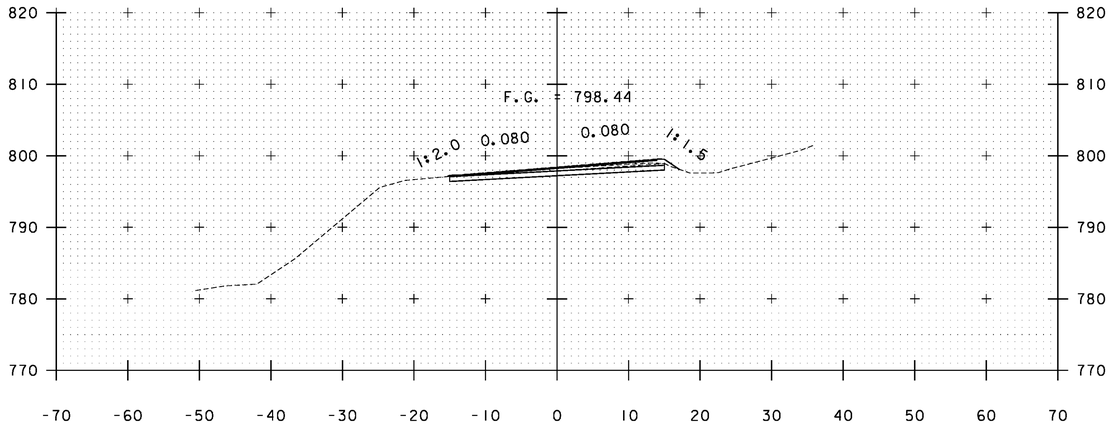
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 347 OF 444



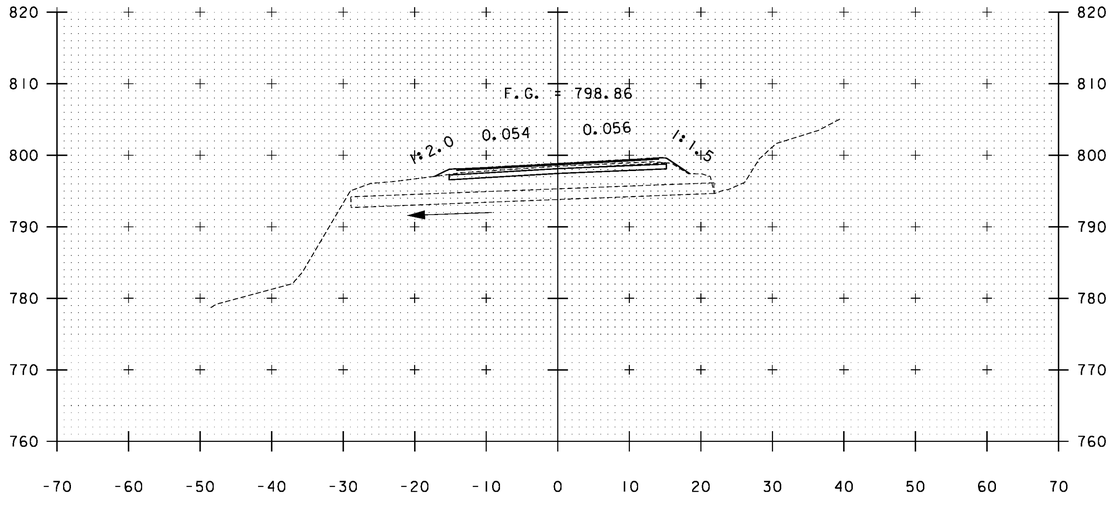

B 60+50




B 61+00



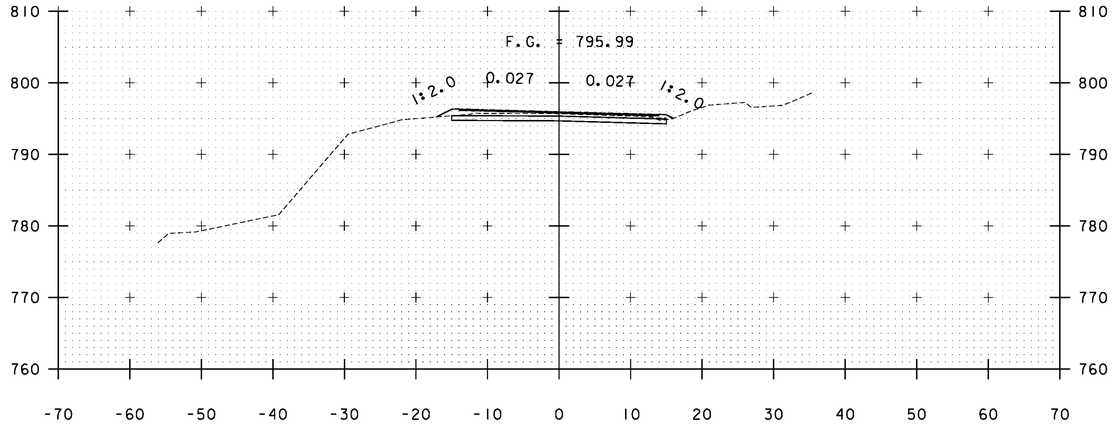

B 60+00



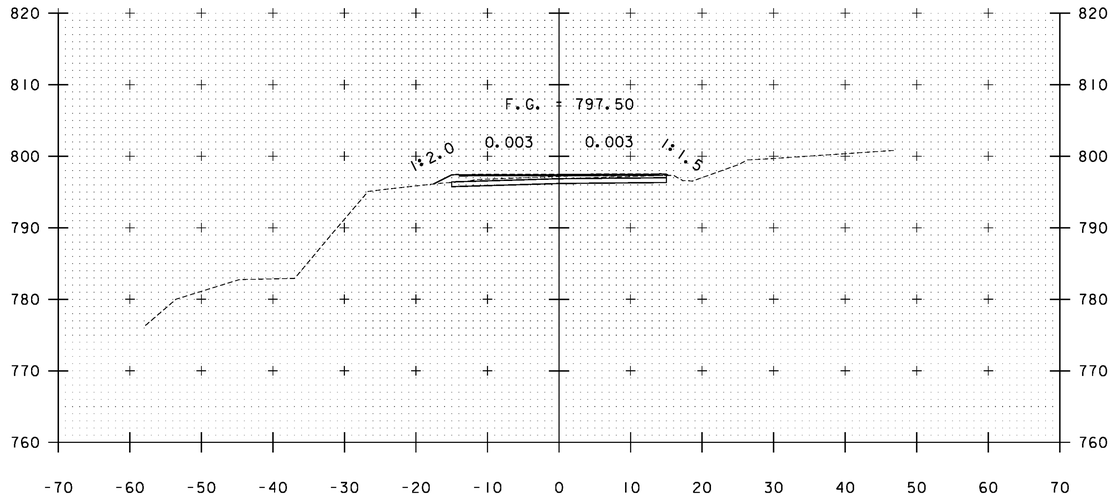

B 60+64

STA. B 60+00 TO STA. B 61+00

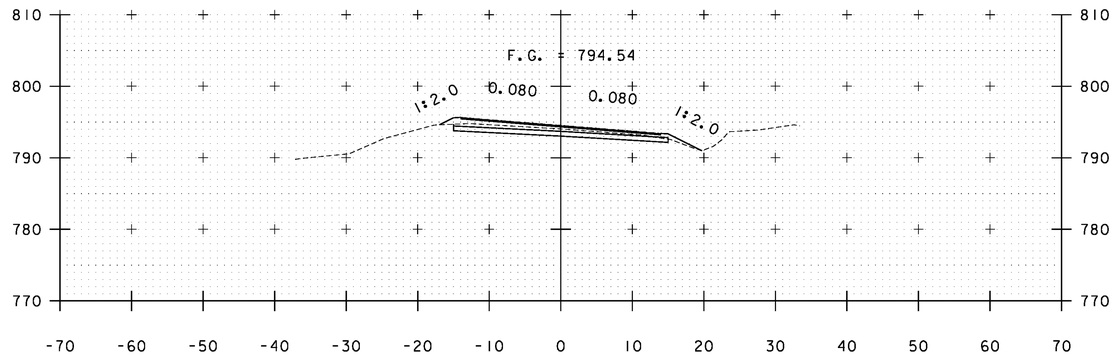
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 348 OF 444 |



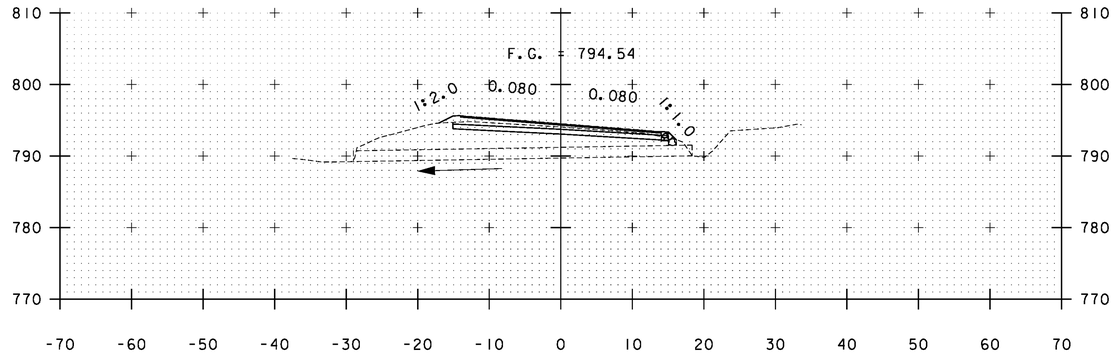

B 62+00



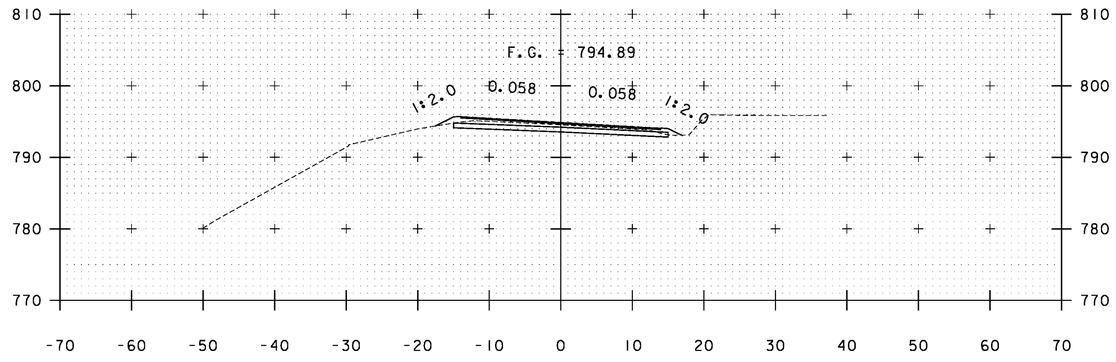

B 61+50




B 63+00




B 62+96



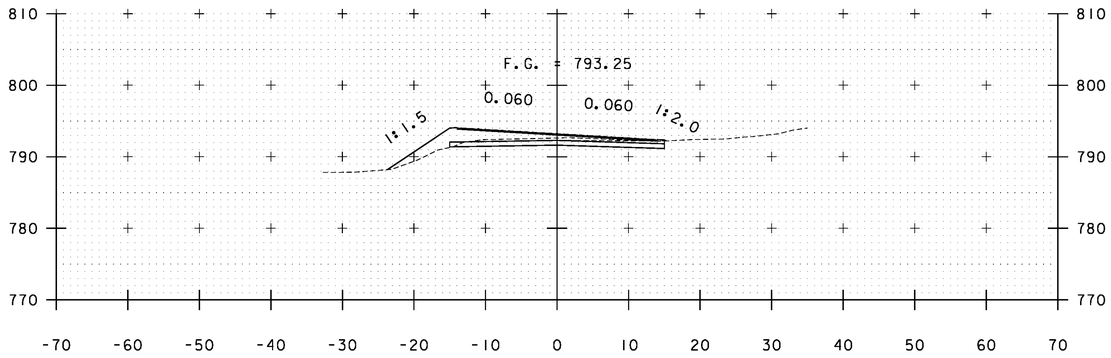

B 62+50

STA. B 61+50 TO STA. B 63+00

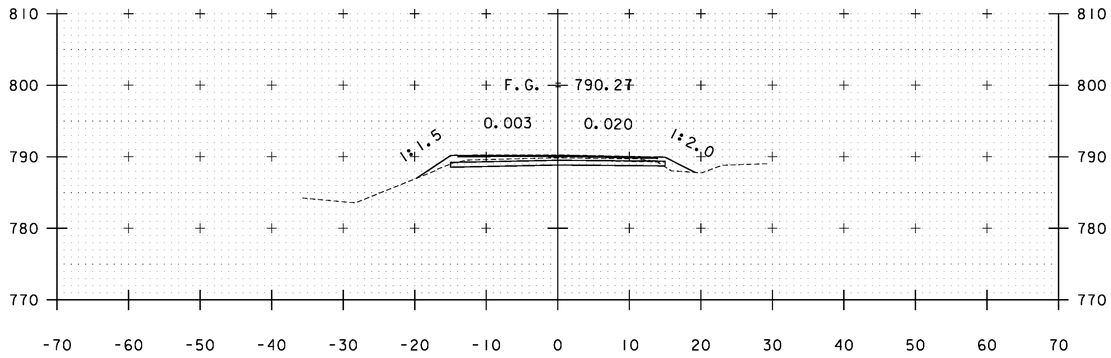
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

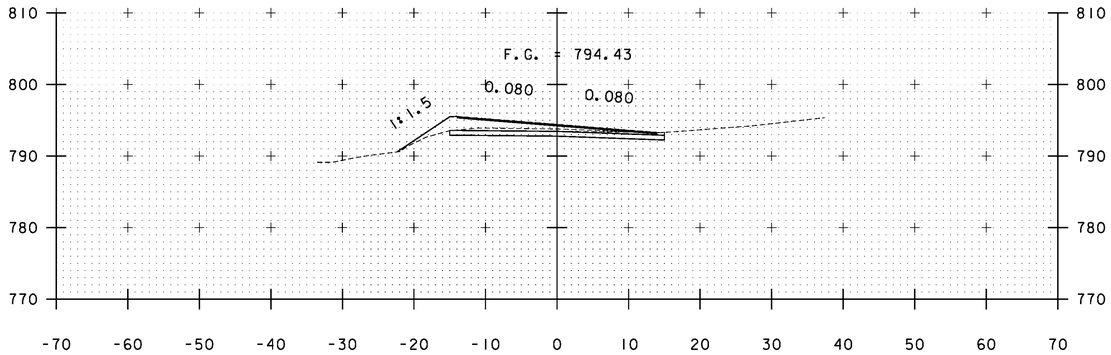
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 349 OF 444



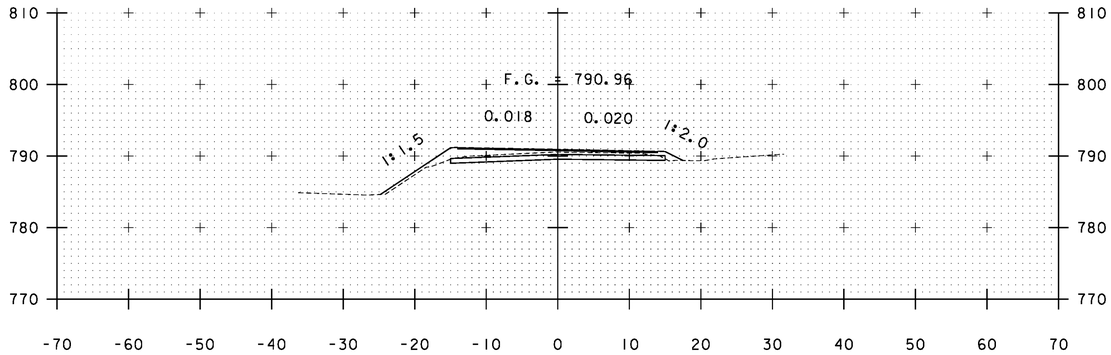

B 64+50



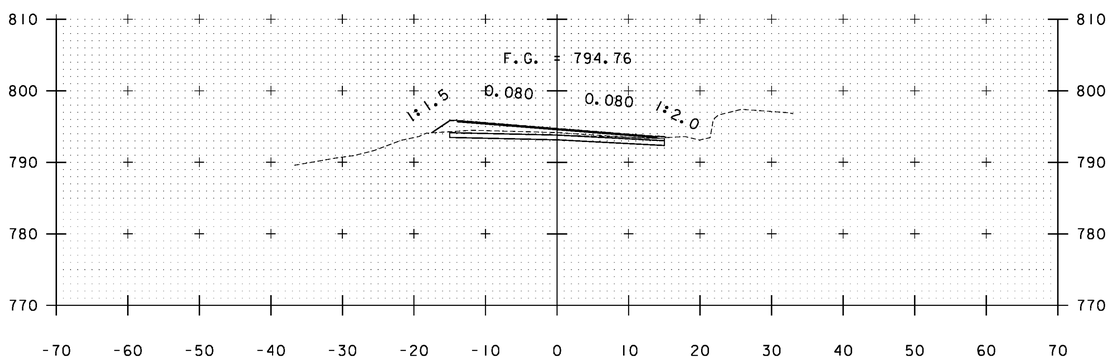

B 66+00



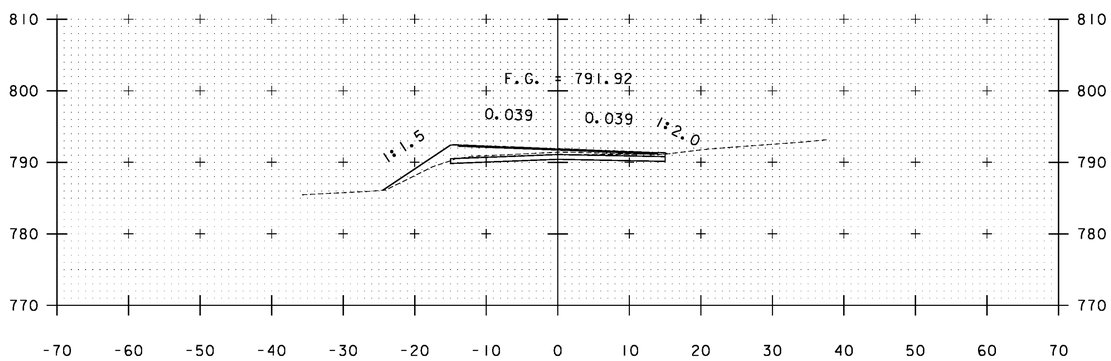

B 64+00




B 65+50




B 63+50



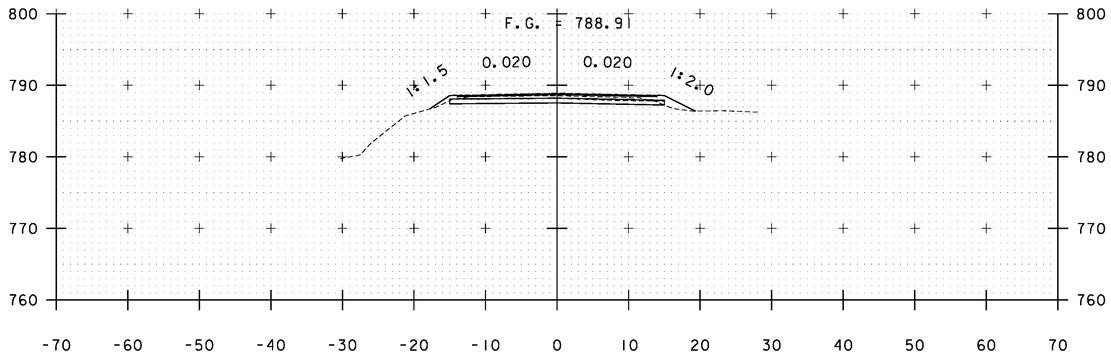

B 65+00

STA. B 63+50 TO STA. B 66+00

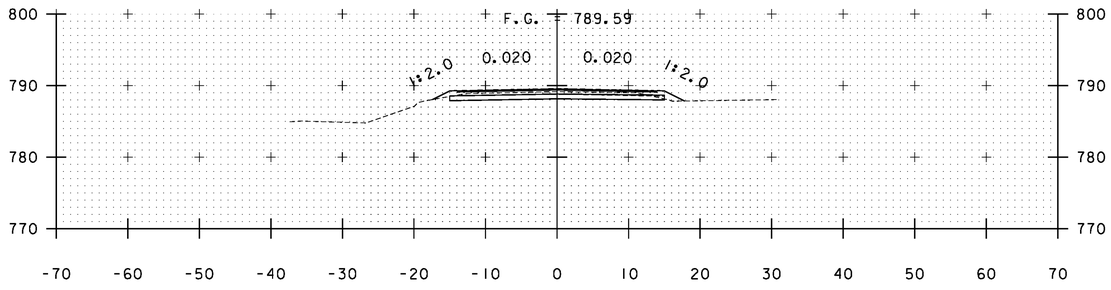
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

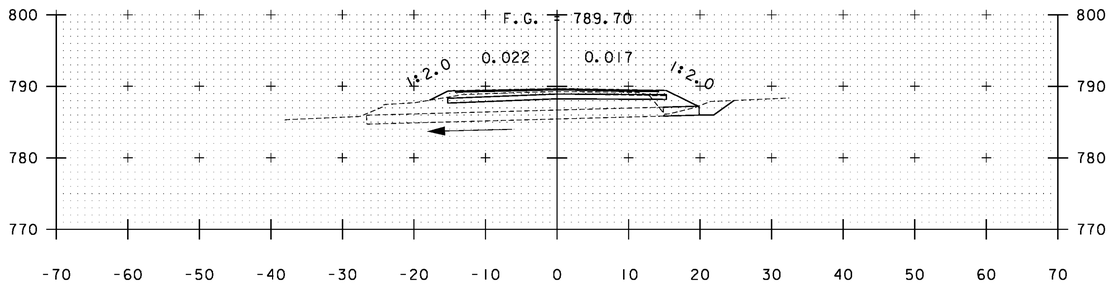
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 350 OF 444



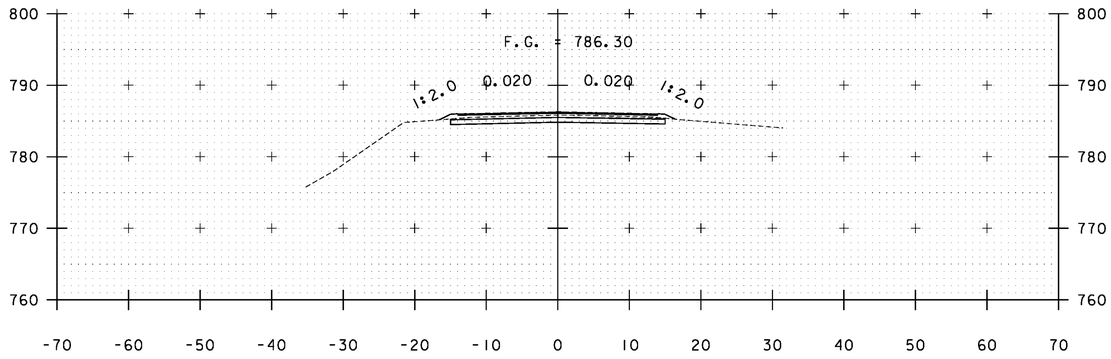

B 67+00



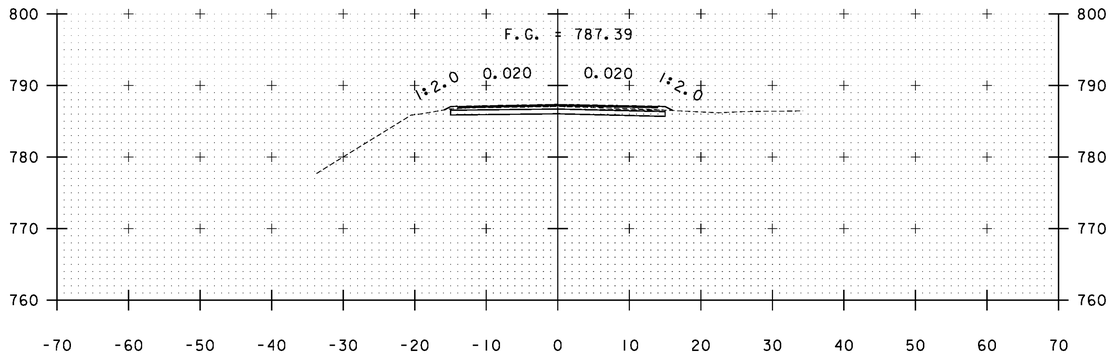

B 66+50



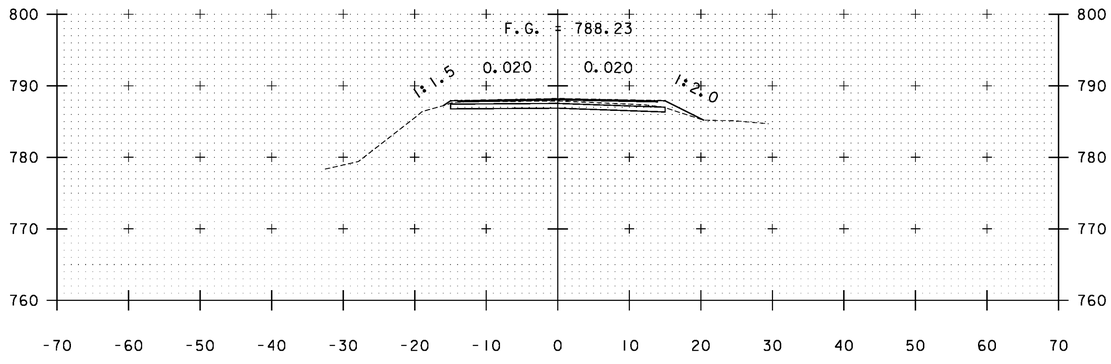

B 66+42




B 68+50




B 68+00



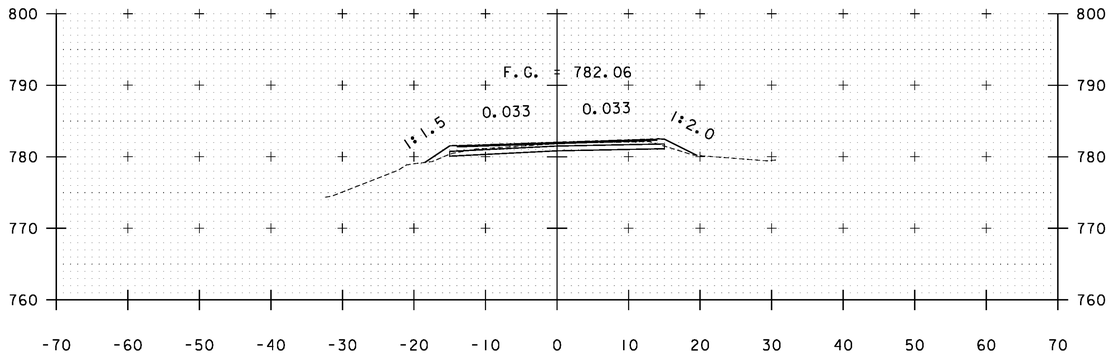

B 67+50

STA. B 66+42 TO STA. B 68+50

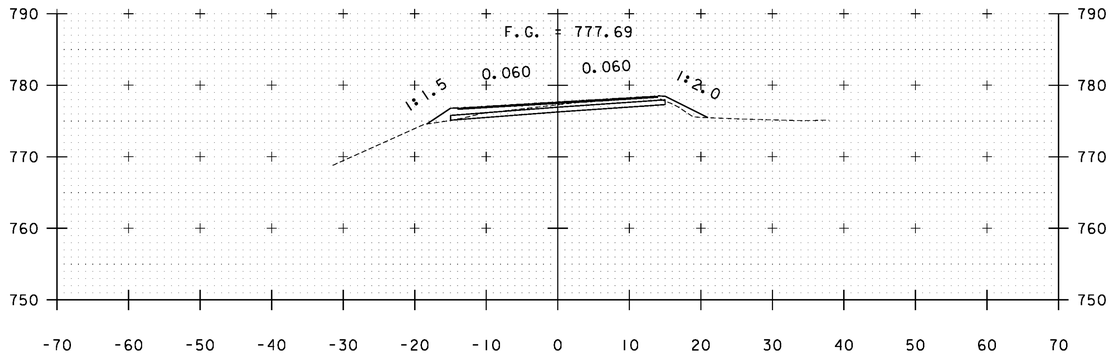
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

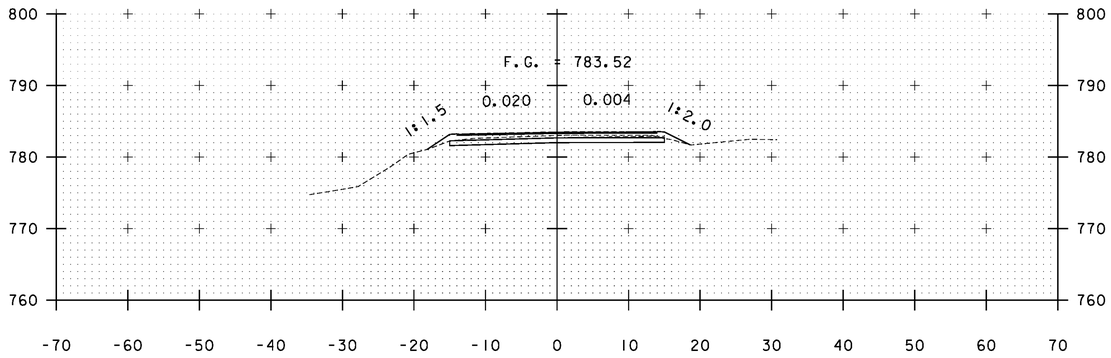
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 351 OF 444



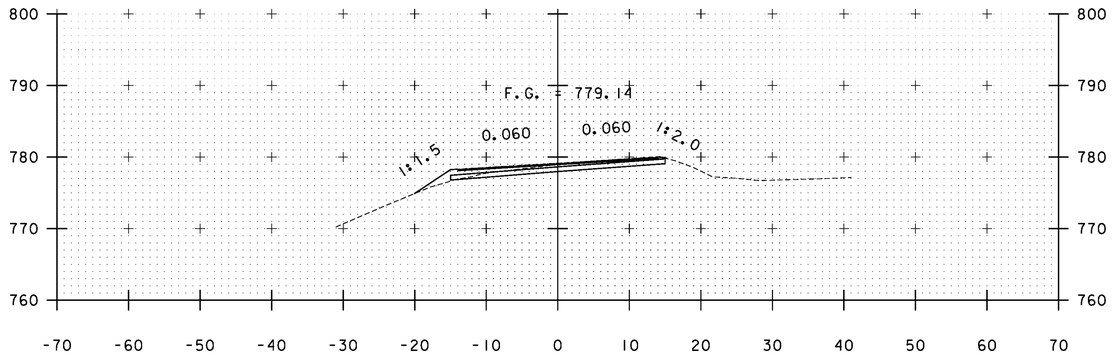

B 70+00



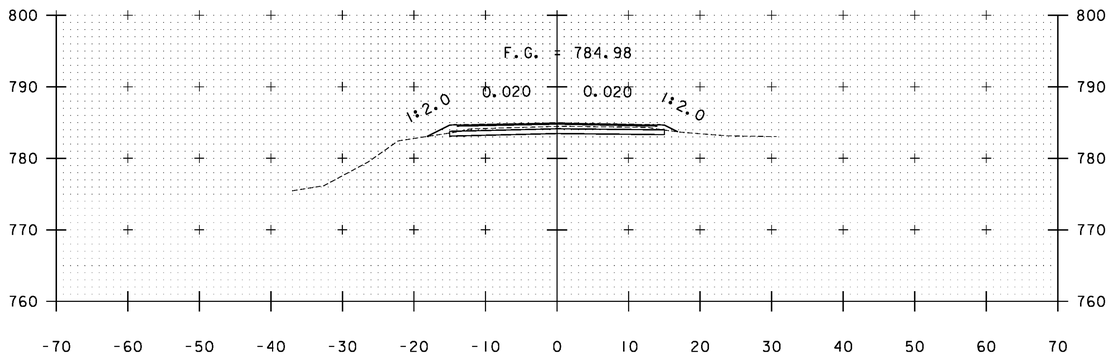

B 71+50



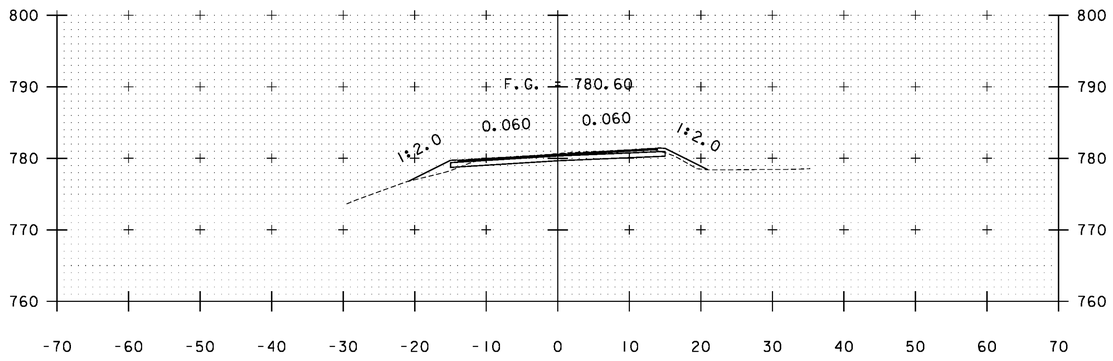

B 69+50




B 71+00




B 69+00



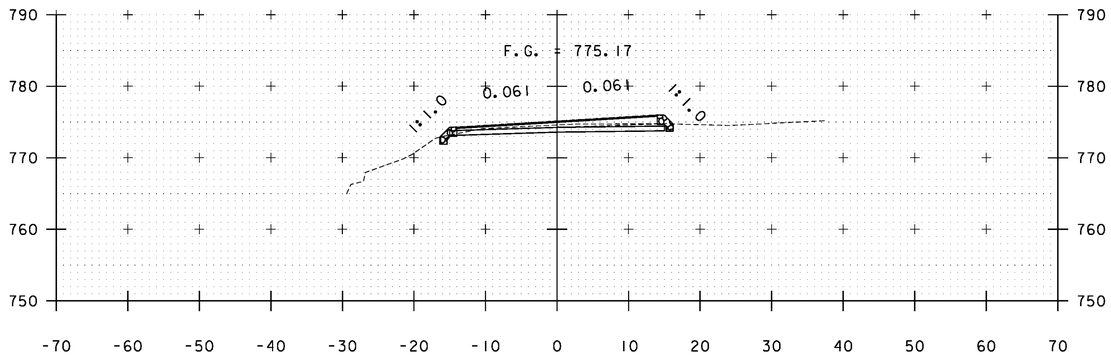

B 70+50

STA. B 69+00 TO STA. B 71+50

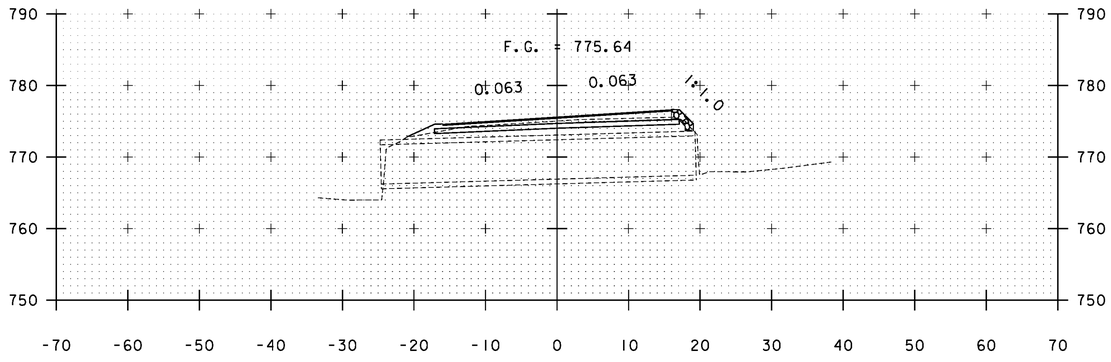
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

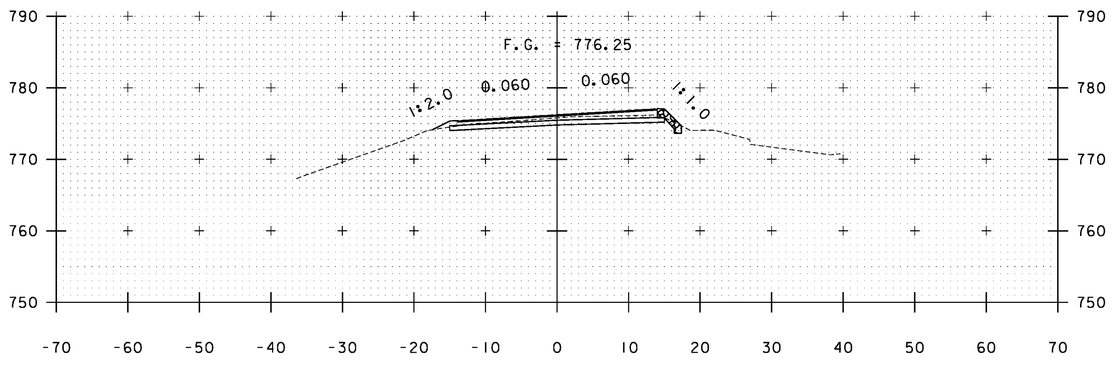
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 352 OF 444



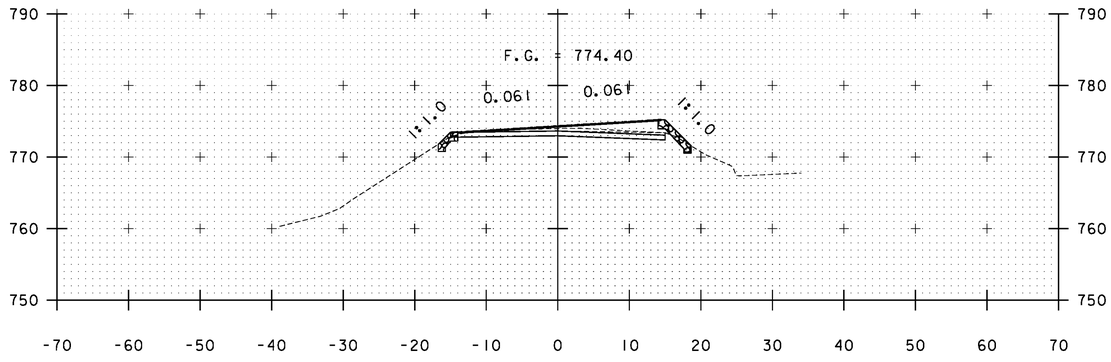

B 72+50



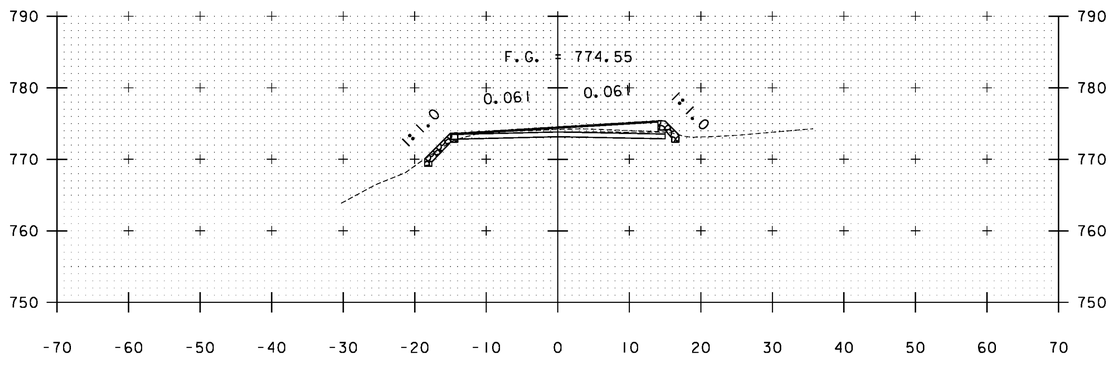

B 72+25




B 72+00




B 73+50



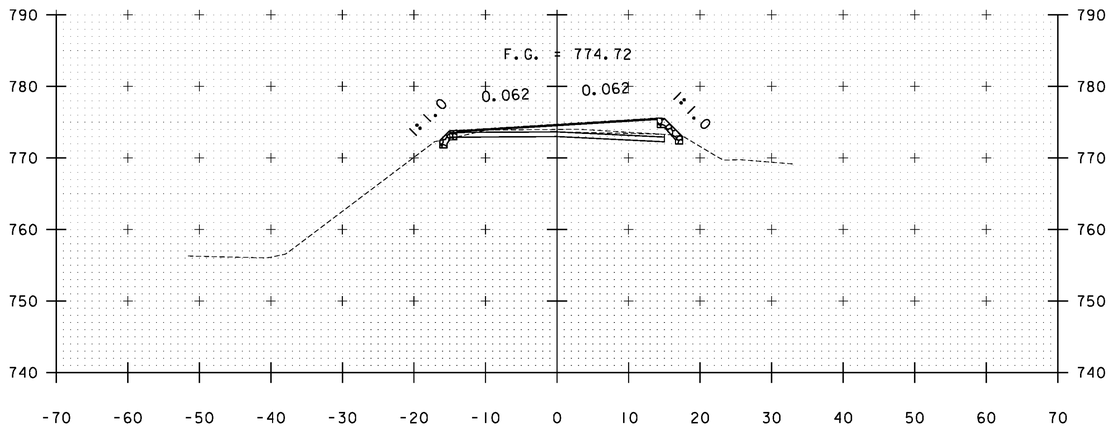

B 73+00

STA. B 72+00 TO STA. B 73+50

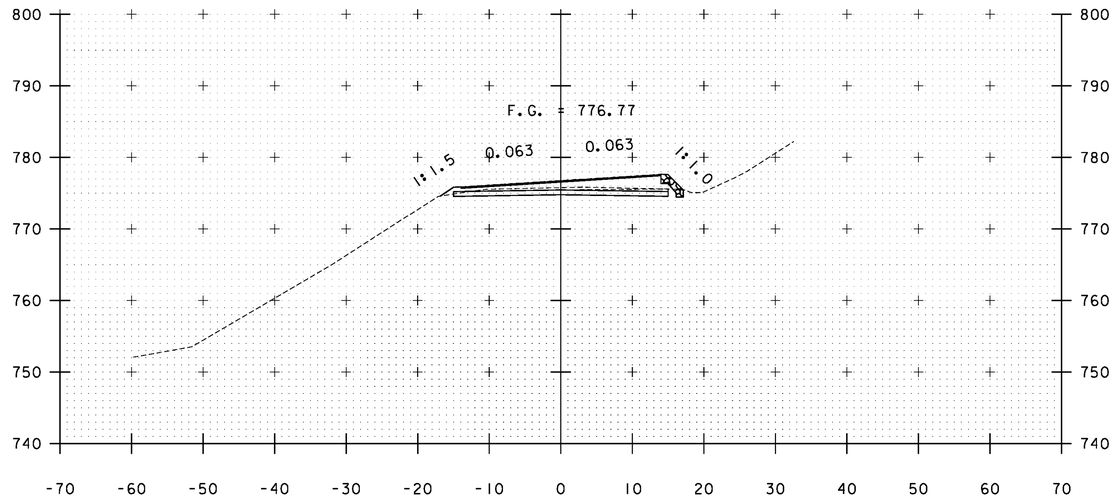
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

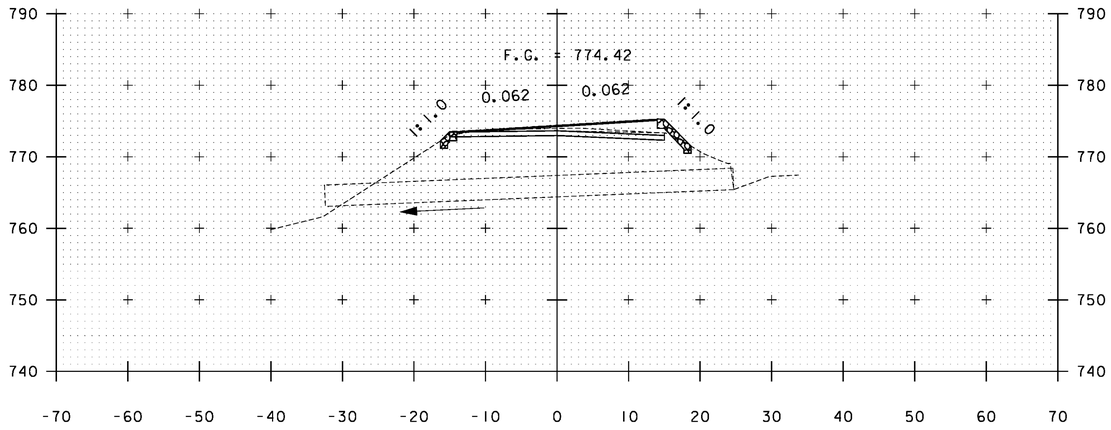
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 353 OF 444



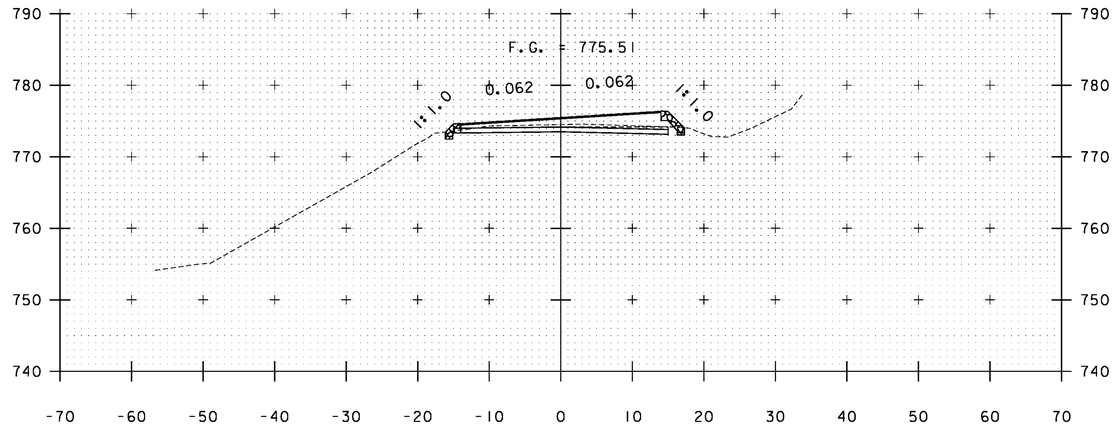

B 74+00




B 75+00




B 73+57



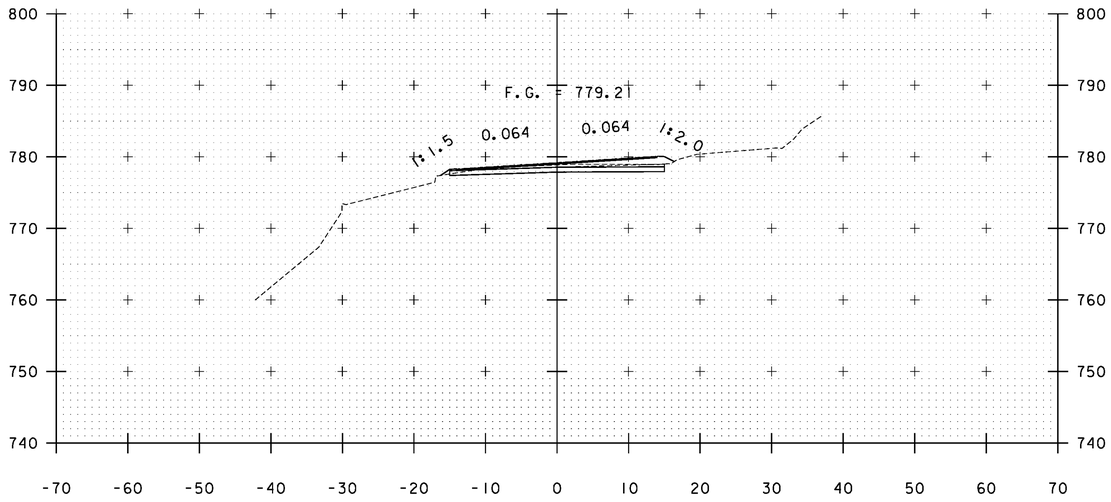

B 74+50

STA. B 73+57 TO STA. B 75+00

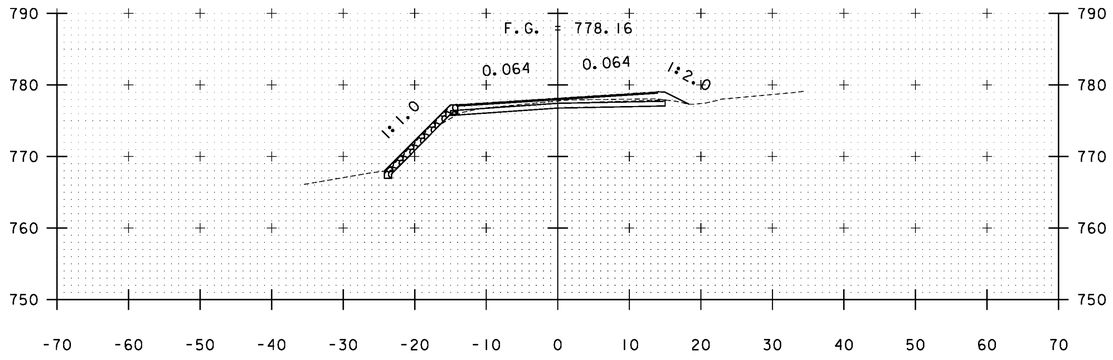
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

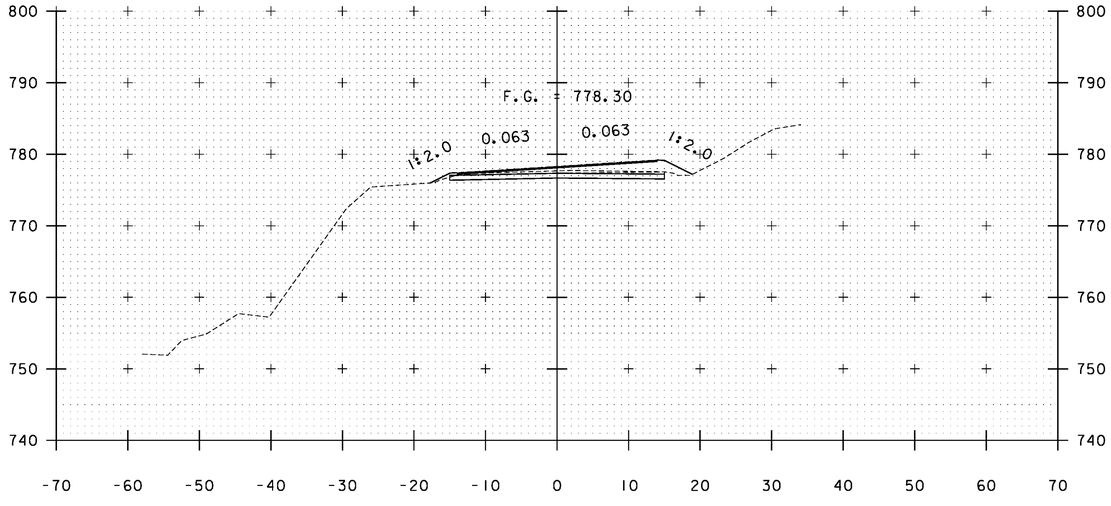
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 354 OF 444



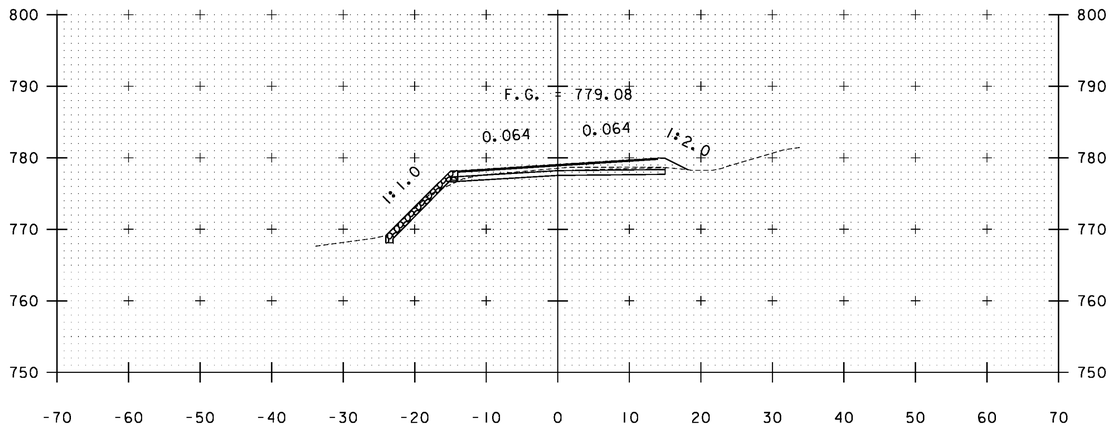

B 76+00




B 77+00




B 75+50



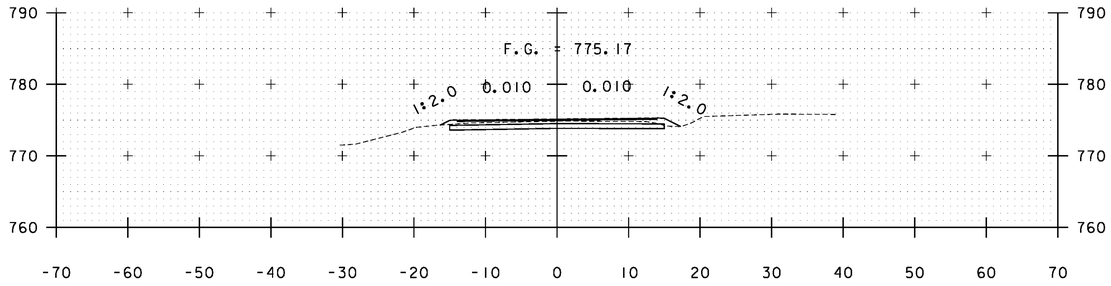

B 76+50

STA. B 75+50 TO STA. B 77+00

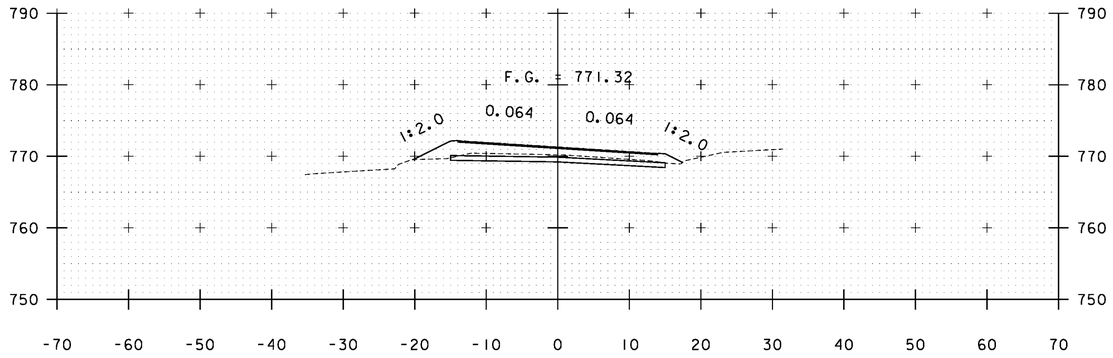
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

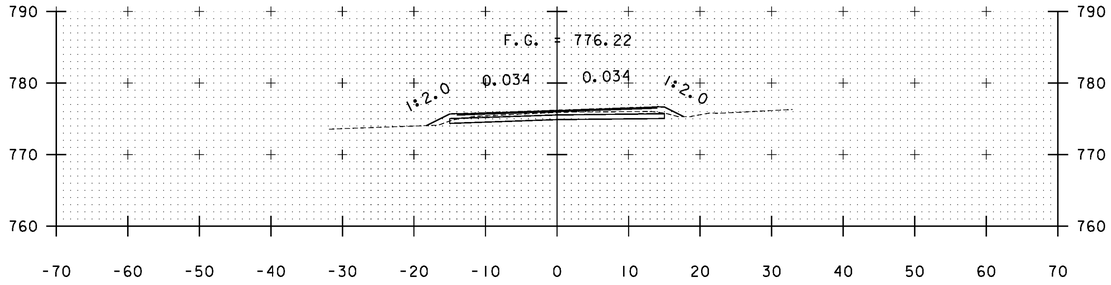
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 355 OF 444



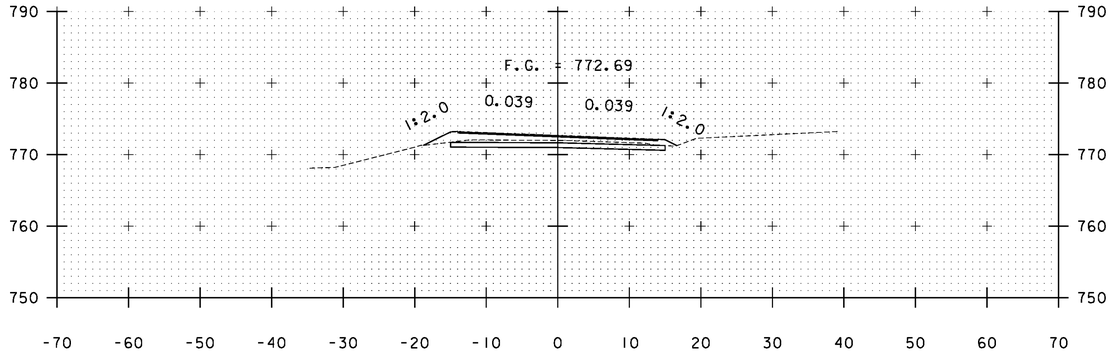

B 78+50



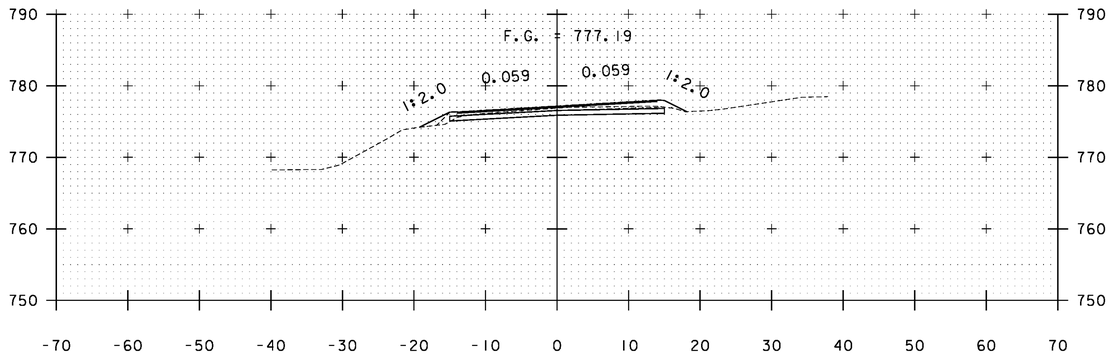

B 80+00



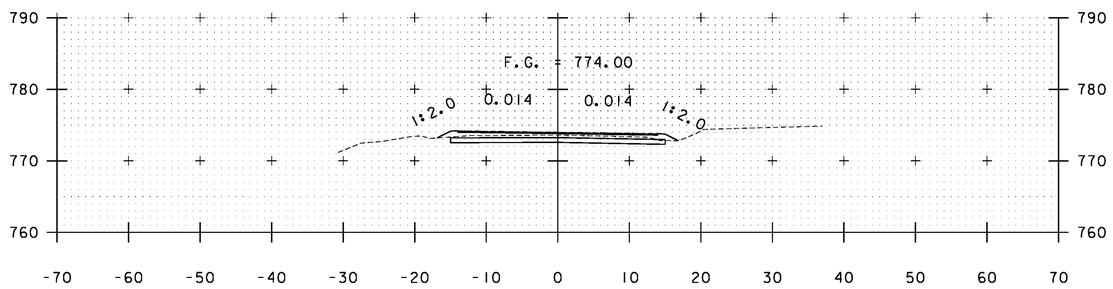

B 78+00




B 79+50




B 77+50



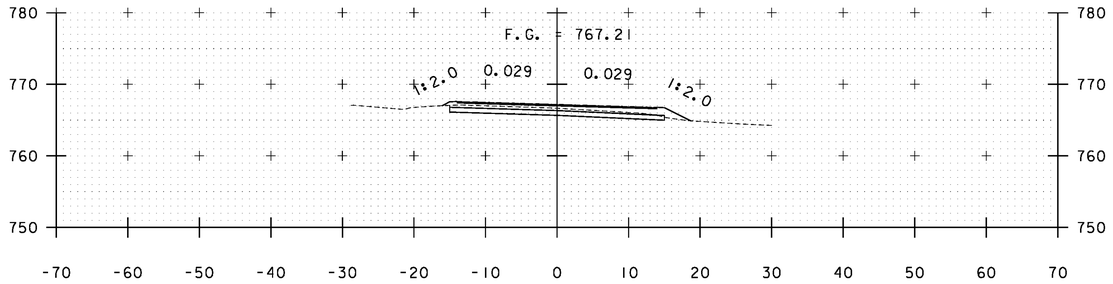

B 79+00

STA. B 77+50 TO STA. B 80+00

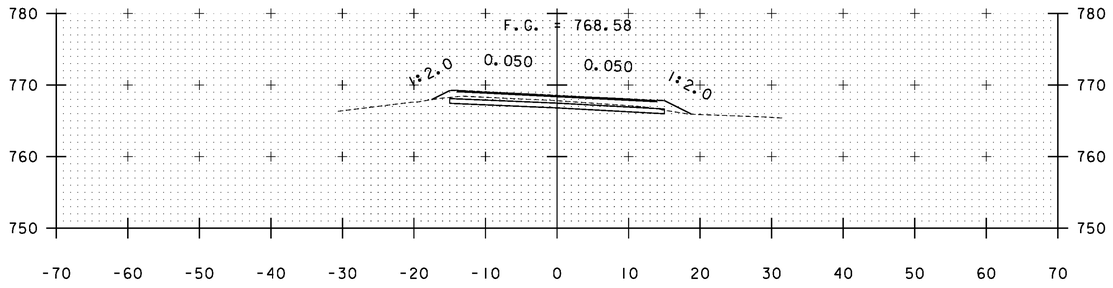
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

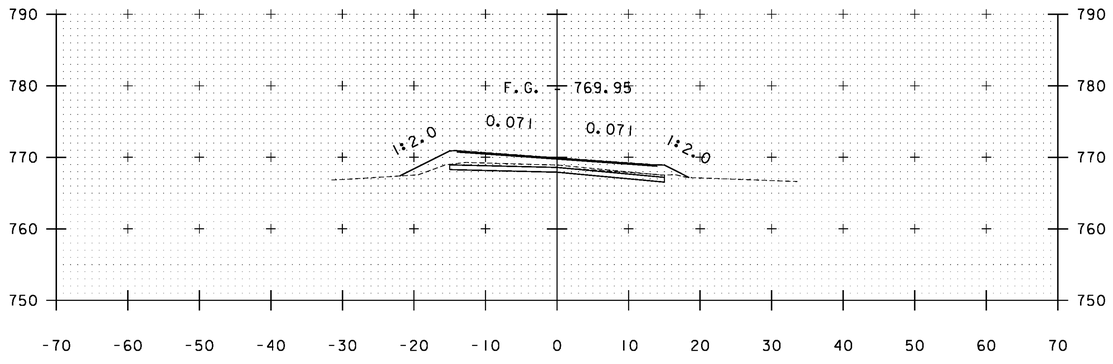
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 356 OF 444



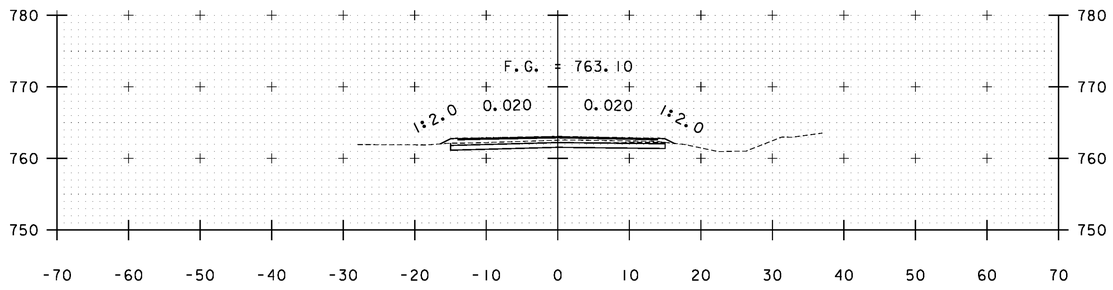

B 81+50



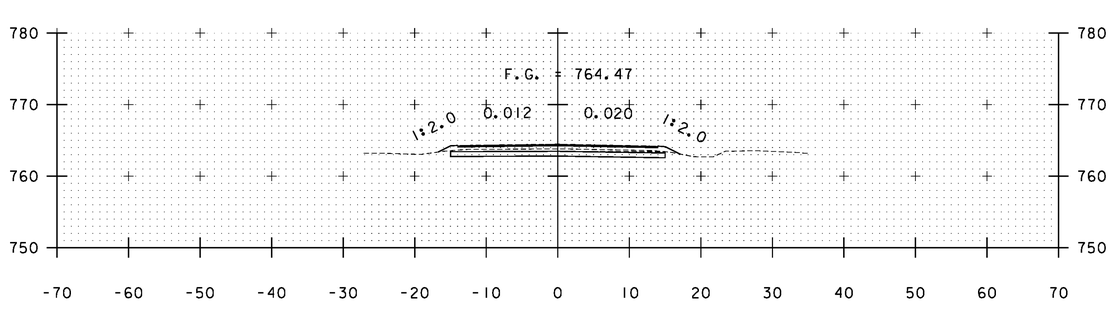

B 81+00



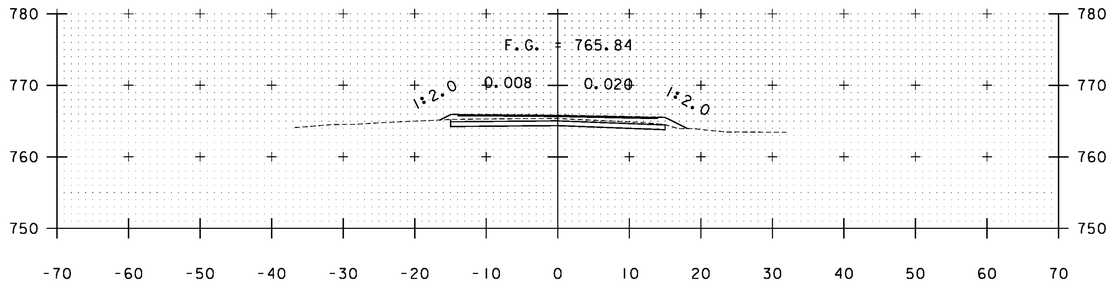

B 80+50




B 83+00




B 82+50



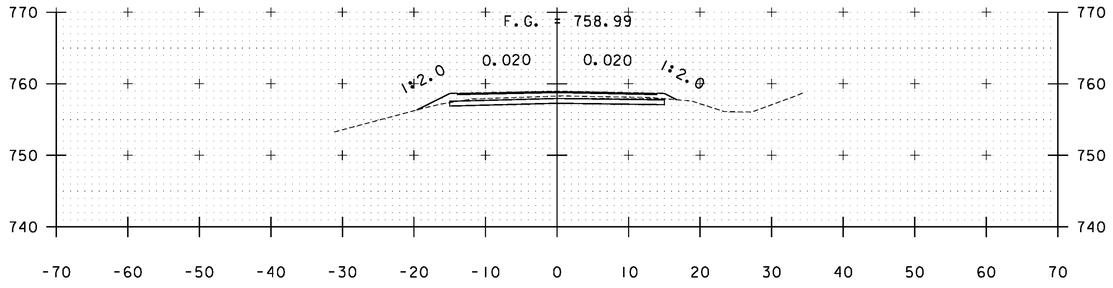

B 82+00

STA. B 80+50 TO STA. B 83+00

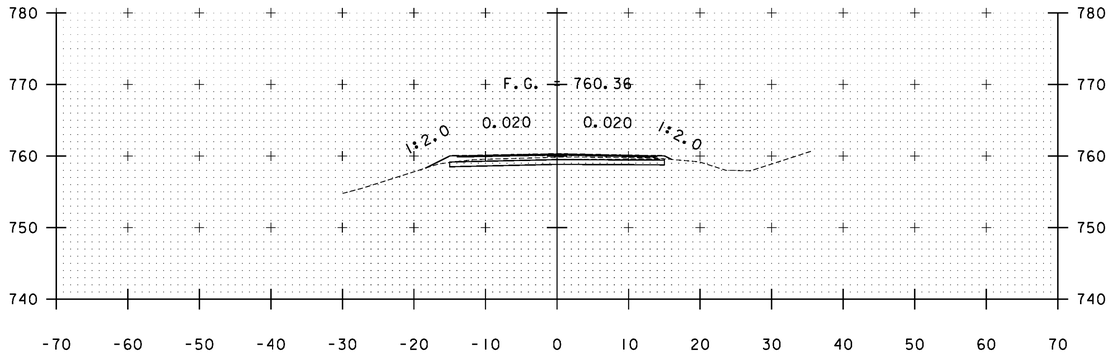
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

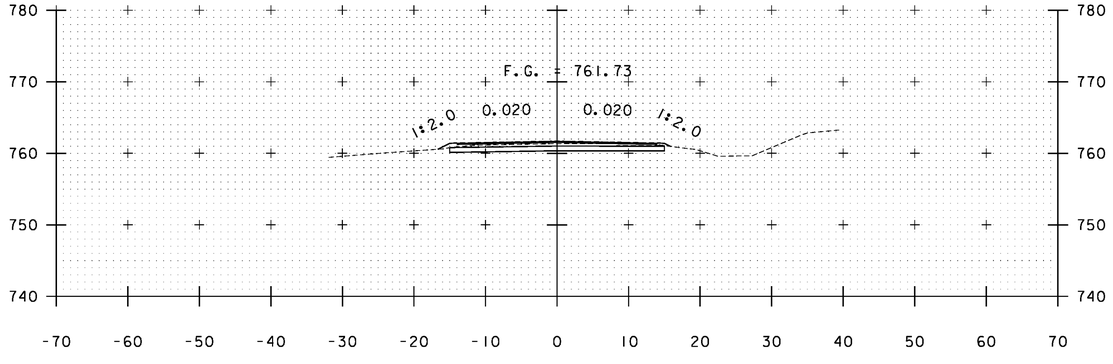
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 357 OF 444



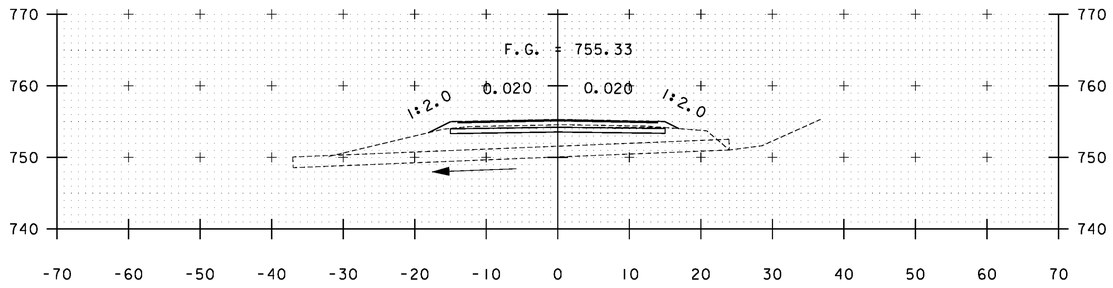

B 84+50



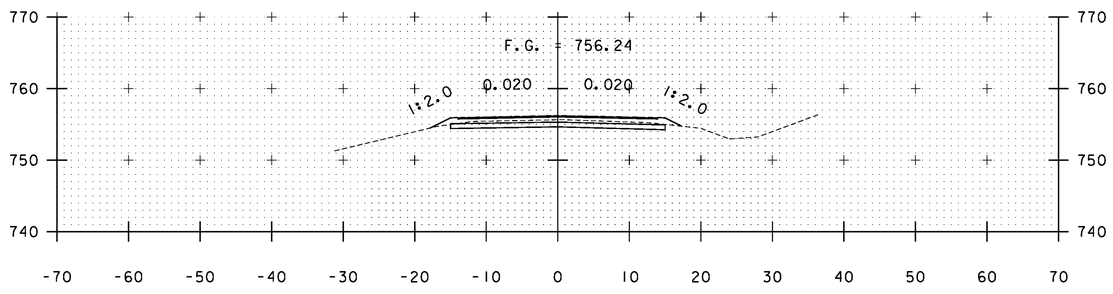

B 84+00



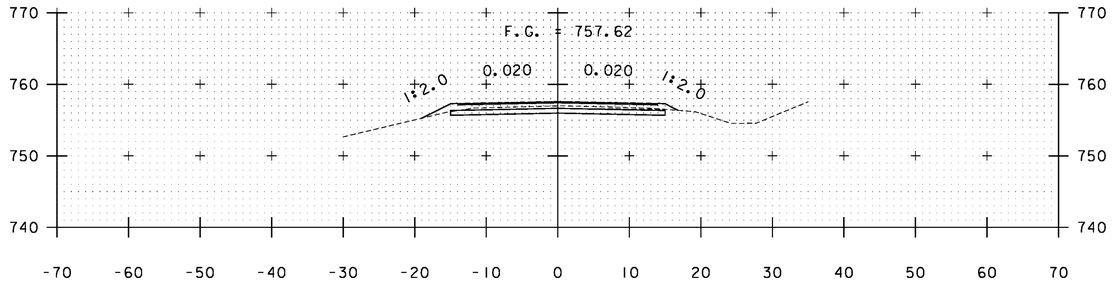

B 83+50




B 85+83




B 85+50



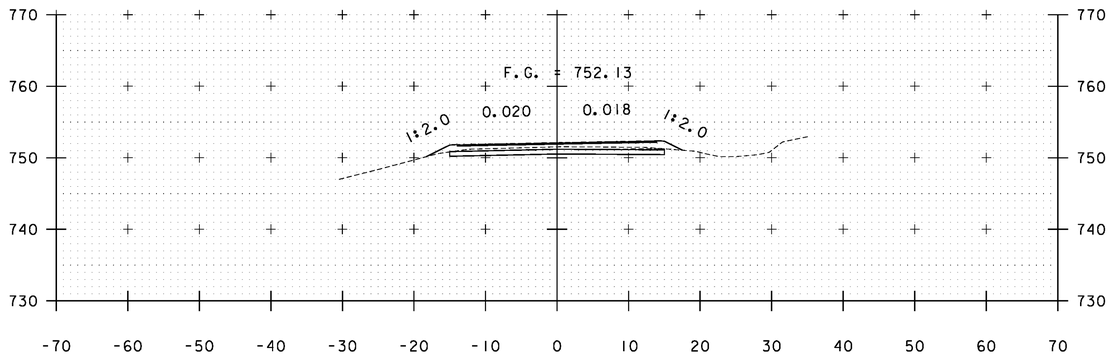

B 85+00

STA. B 83+50 TO STA. B 85+83

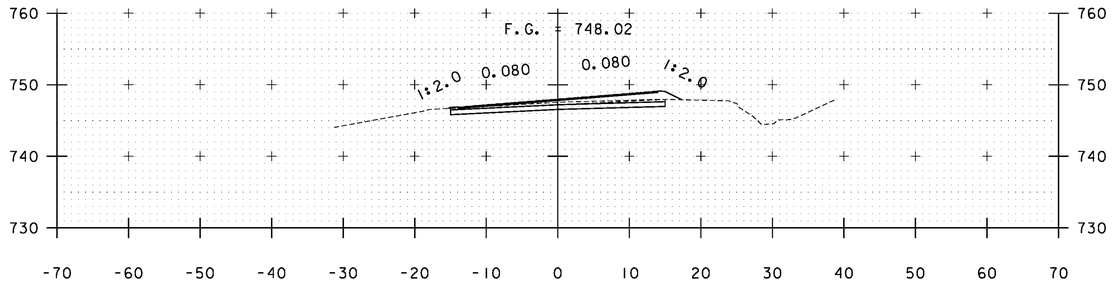
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

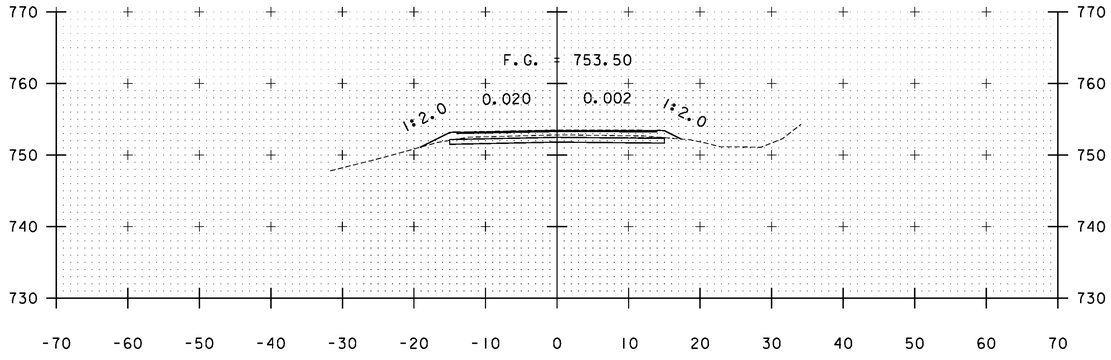
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 358 OF 444



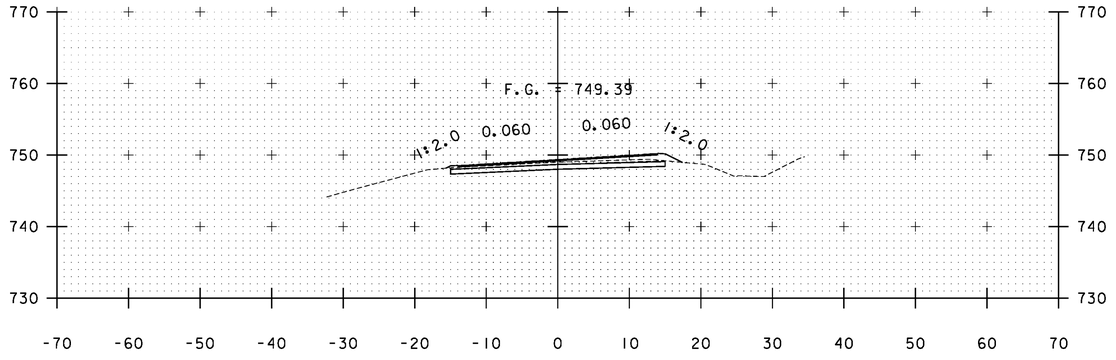

B 87+00



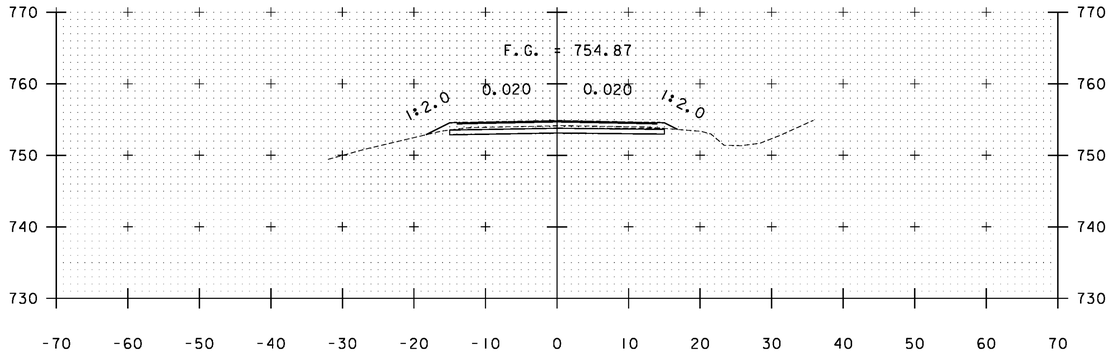

B 88+50



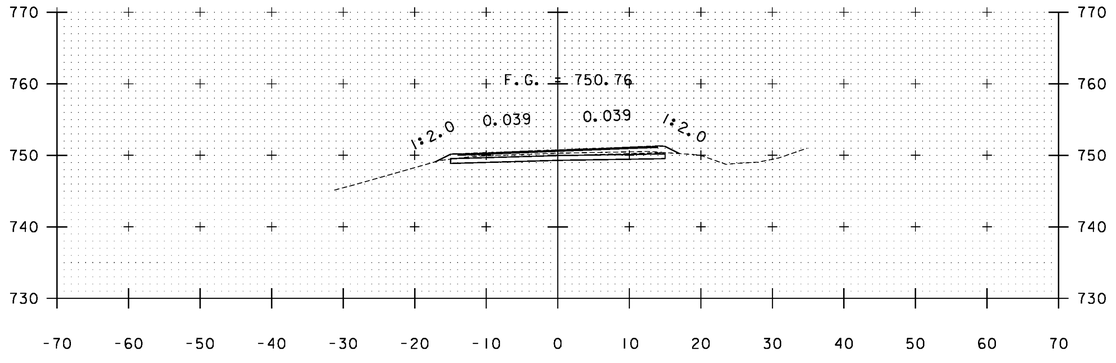

B 86+50




B 88+00




B 86+00



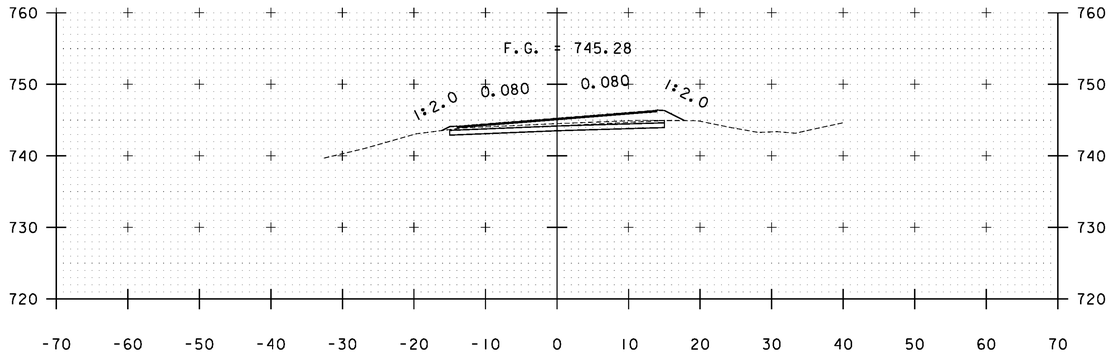

B 87+50

STA. B 86+00 TO STA. B 88+50

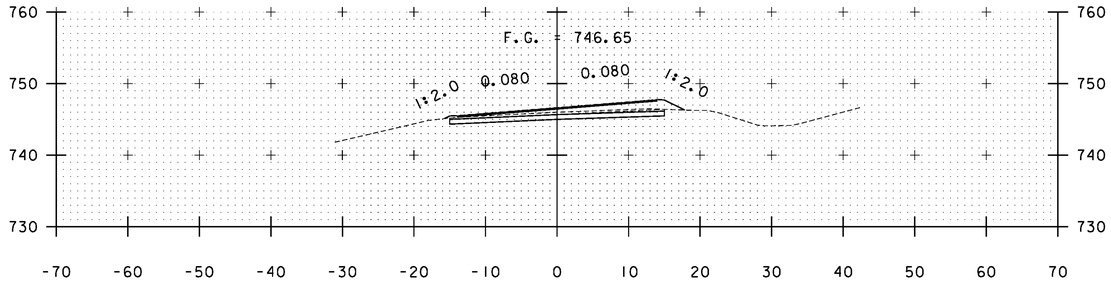
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

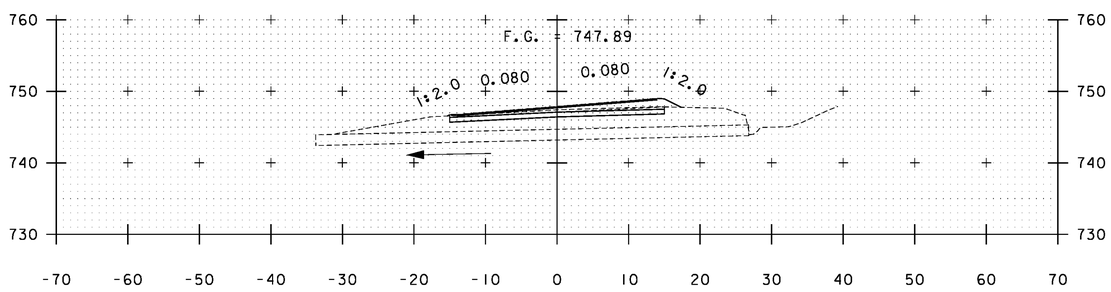
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 359 OF 444



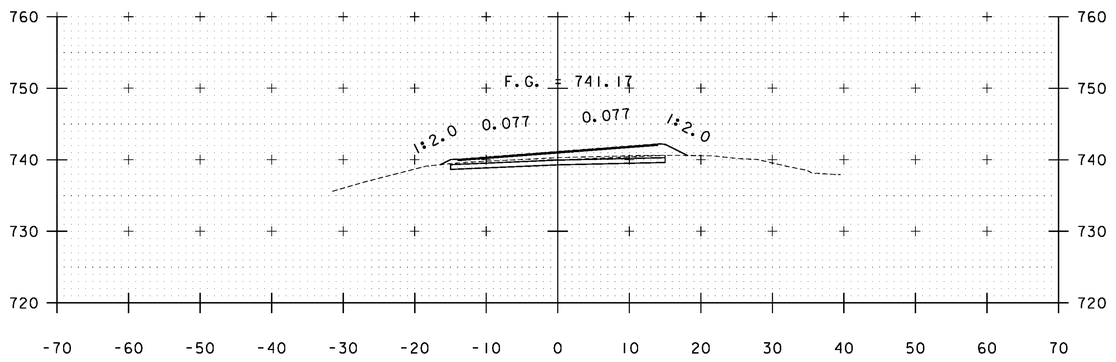

B 89+50



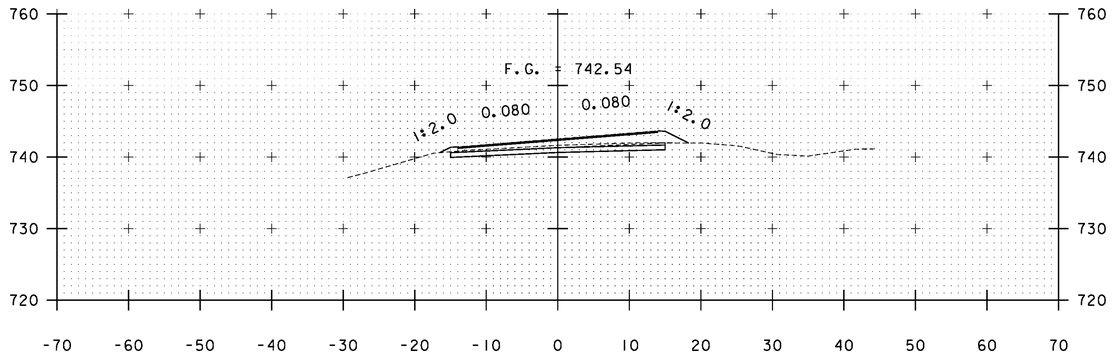

B 89+00



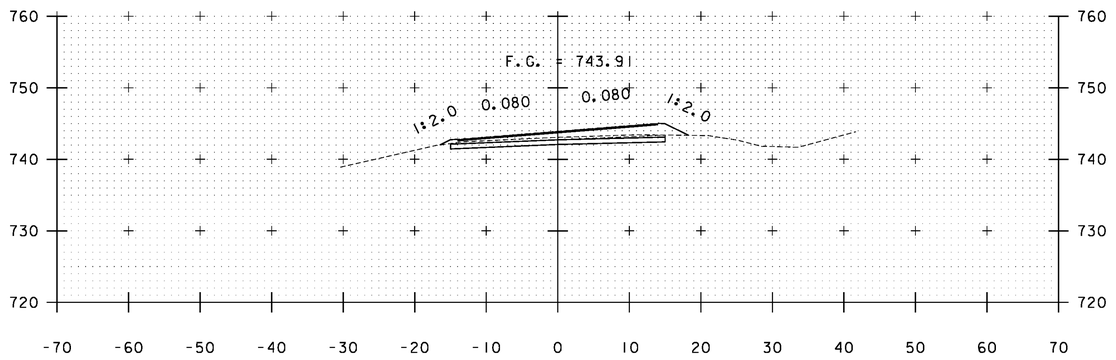

B 88+55




B 91+00




B 90+50



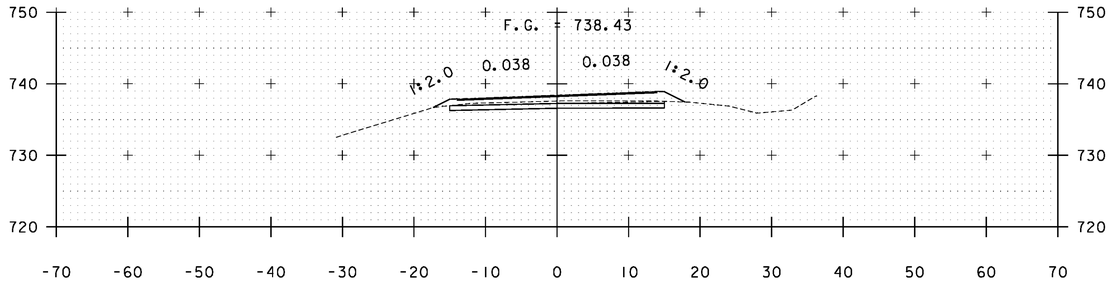

B 90+00

STA. B 88+55 TO STA. B 91+00

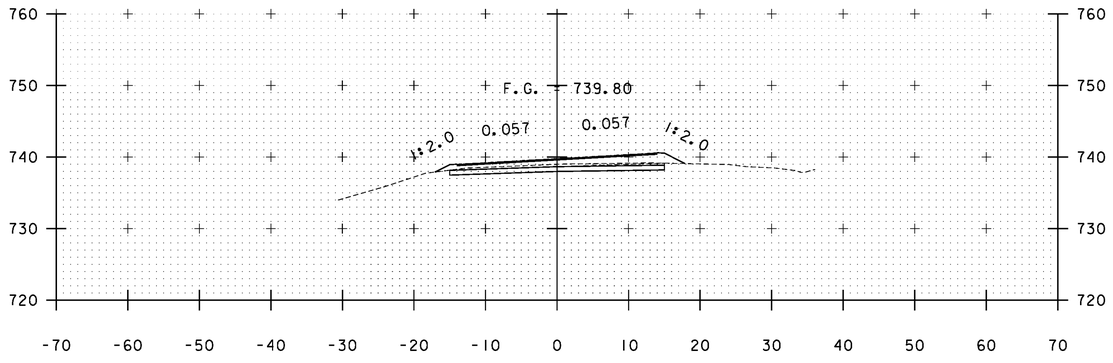
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

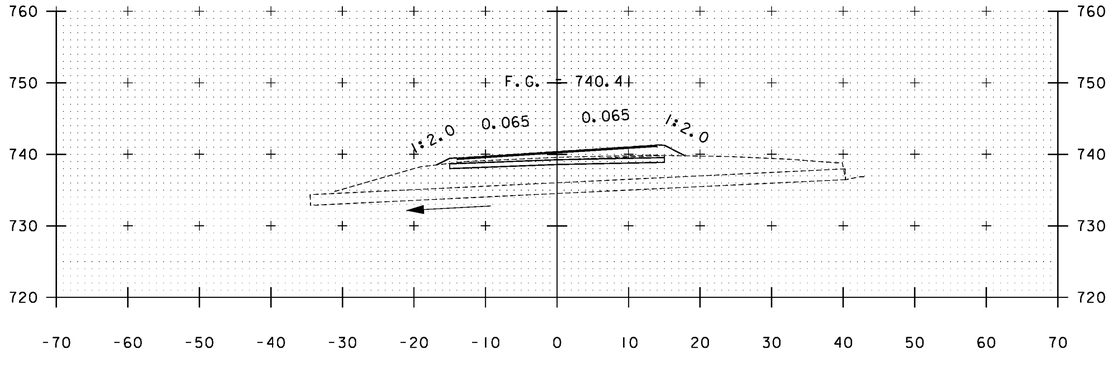
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 360 OF 444



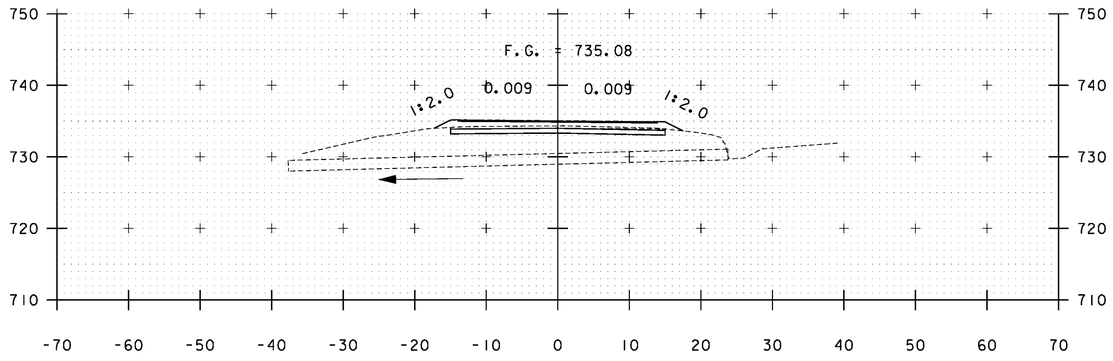

B 92+00



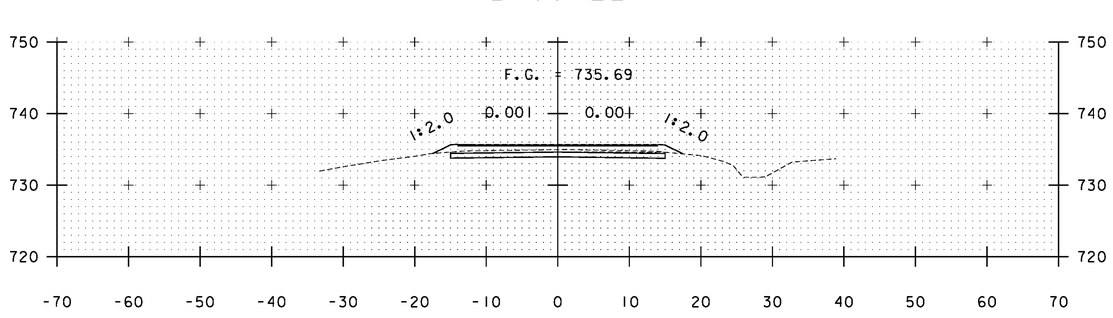

B 91+50



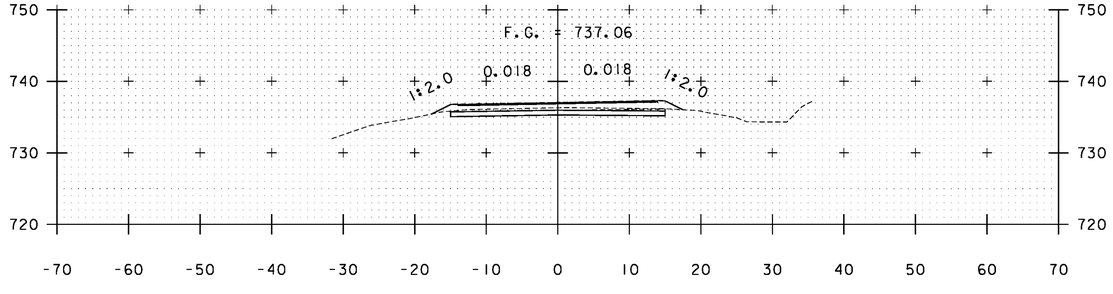

B 91+28




B 93+22




B 93+00



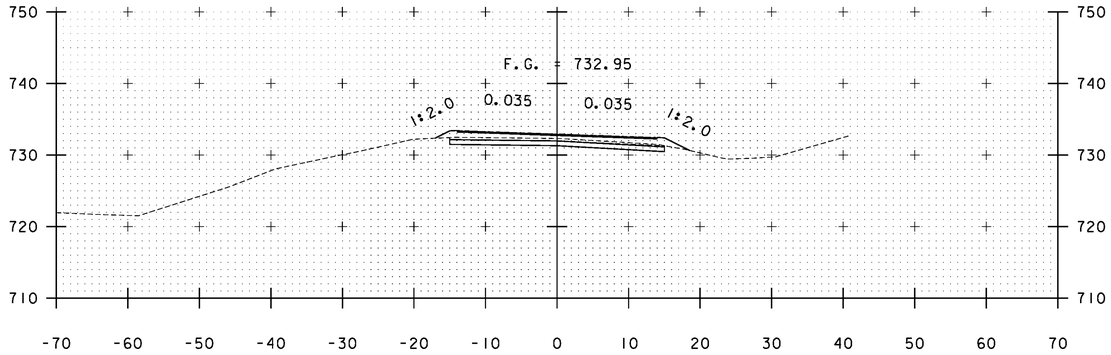

B 92+50

STA. B 91+28 TO STA. B 93+22

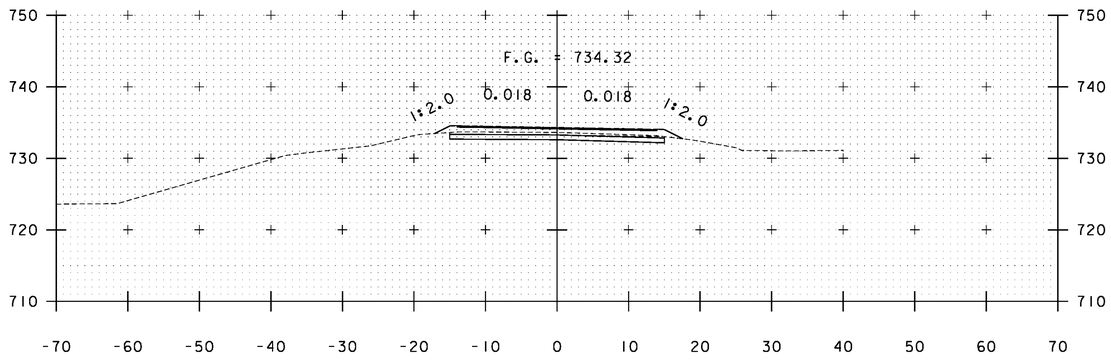
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

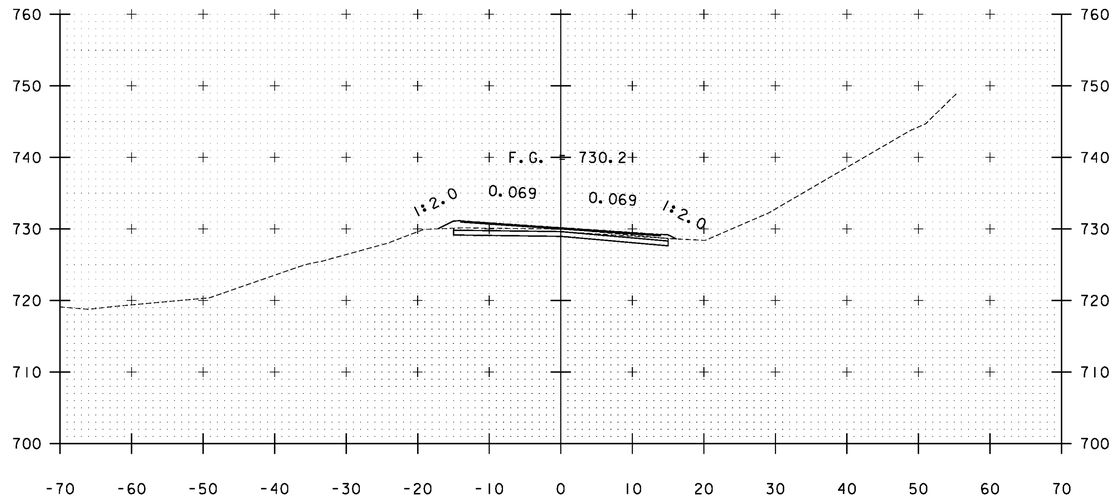
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 361 OF 444



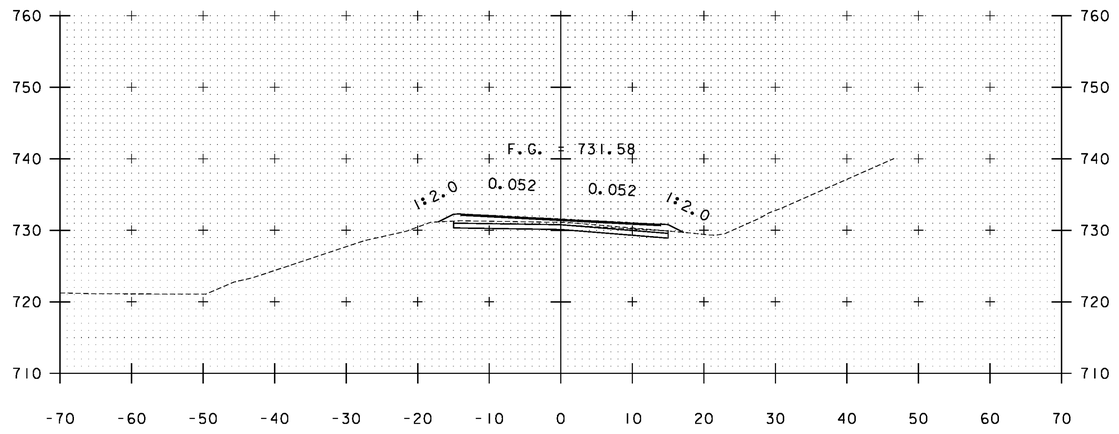

B 94+00




B 93+50




B 95+00



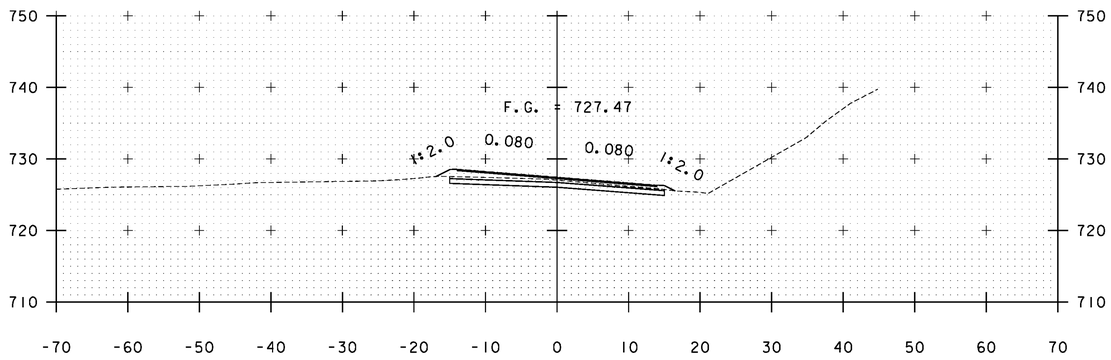

B 94+50

STA. B 93+50 TO STA. B 95+00

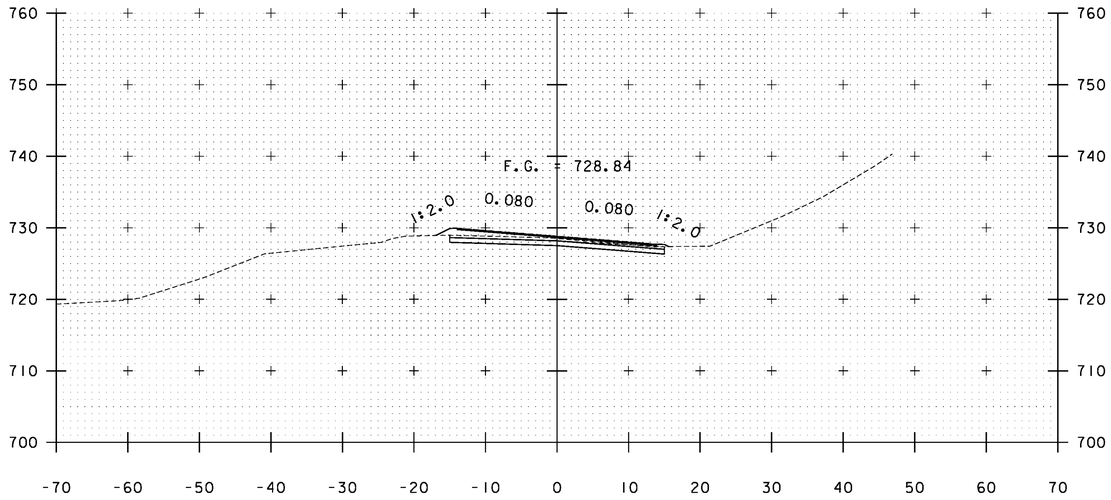
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

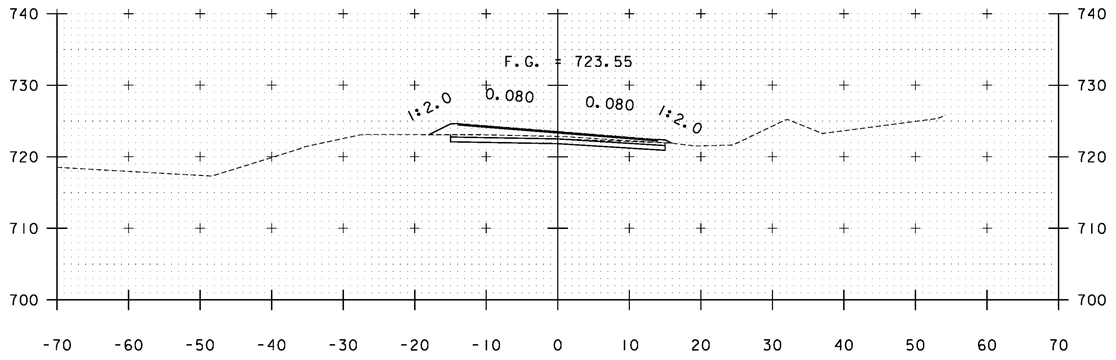
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 362 OF 444



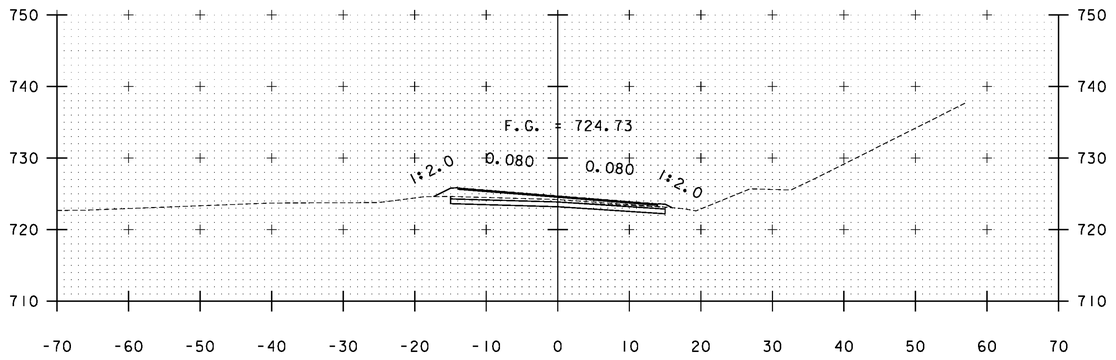

B 96+00



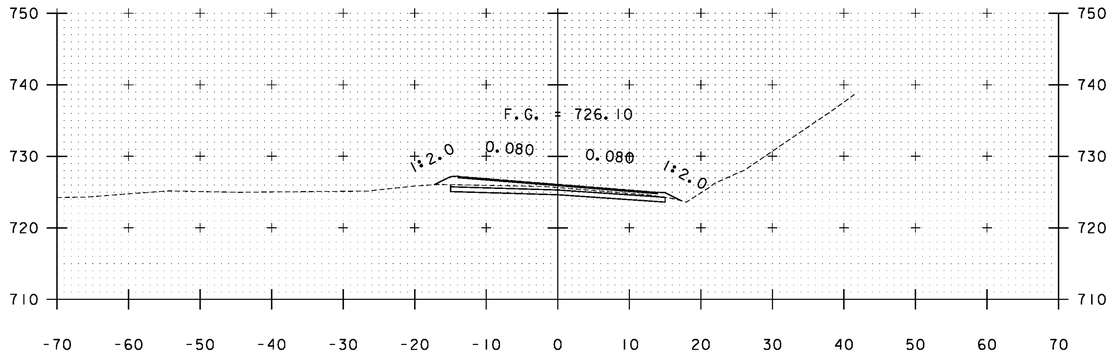

B 95+50




B 97+50




B 97+00



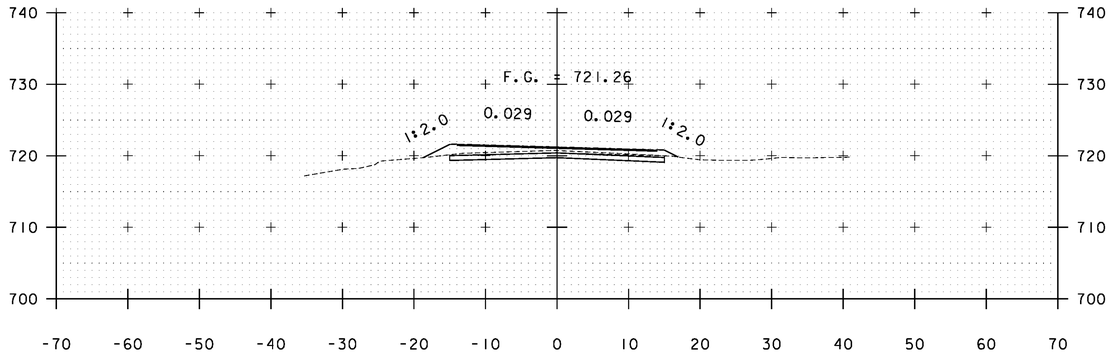

B 96+50

STA. B 95+50 TO STA. B 97+50

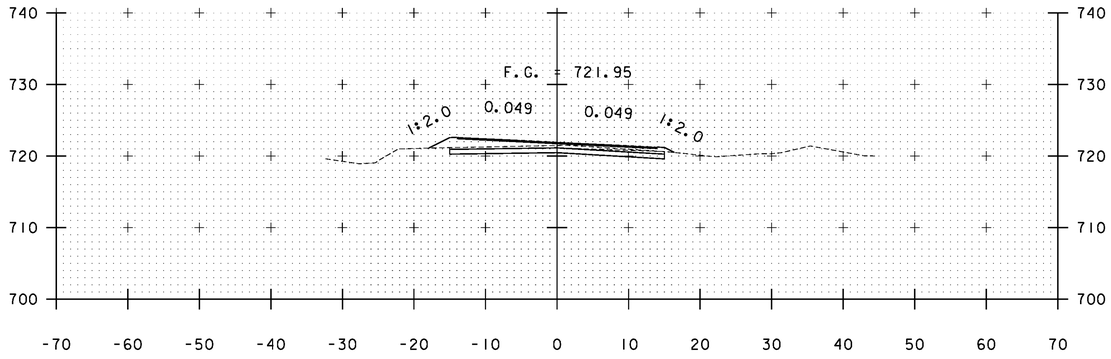
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

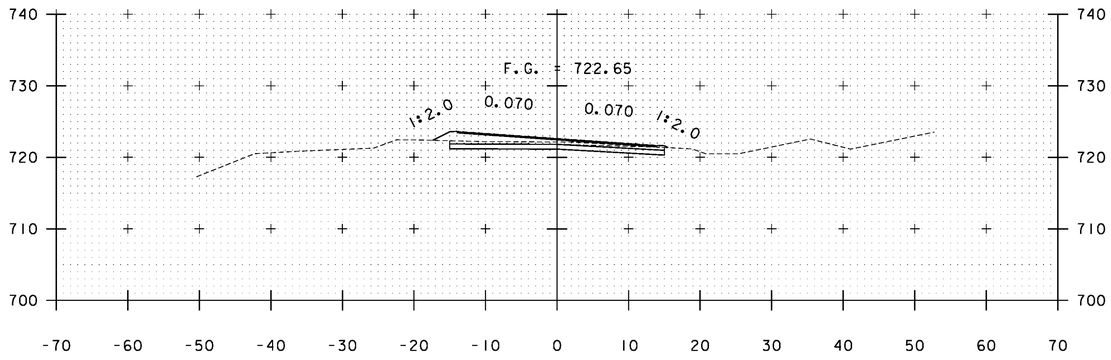
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 363 OF 444



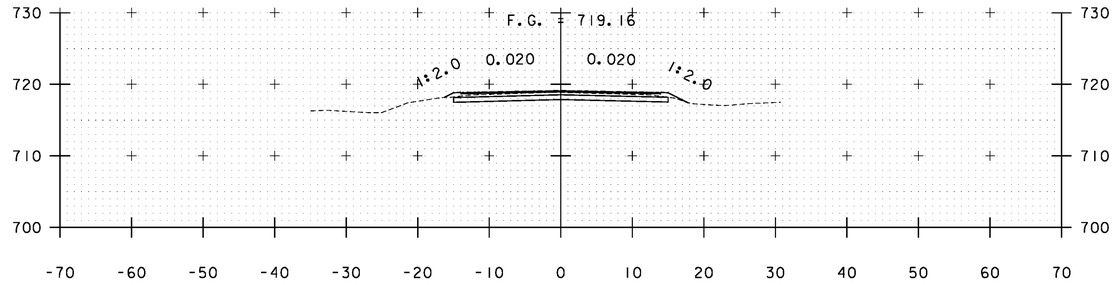

B 99+00



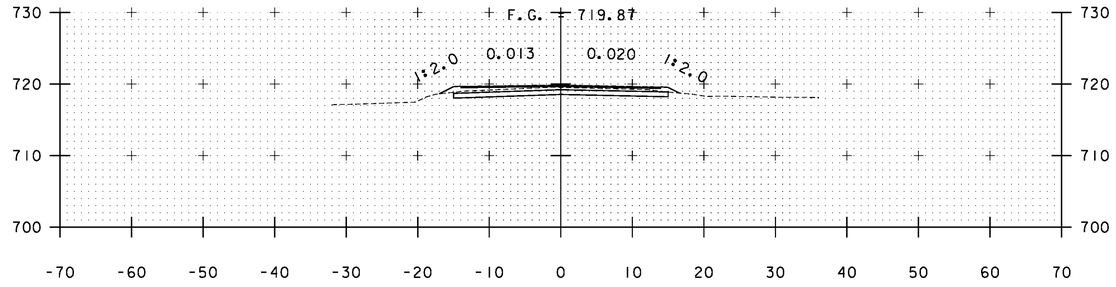

B 98+50



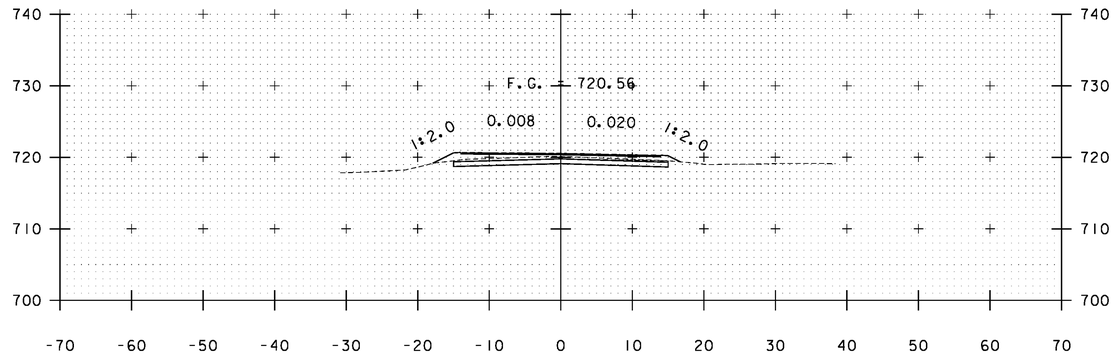

B 98+00




B 100+50




B 100+00



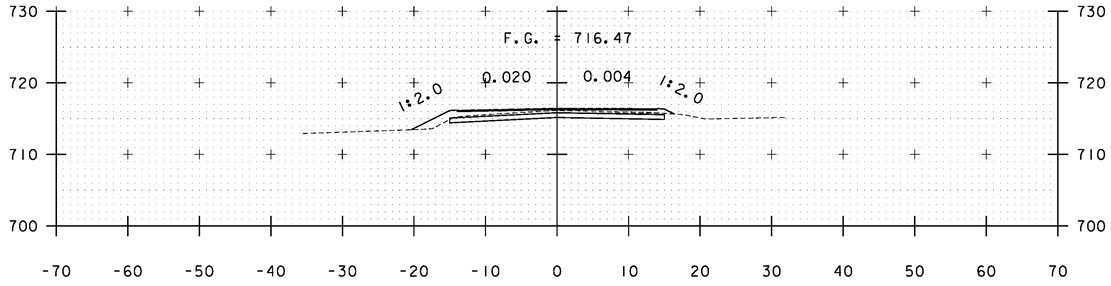

B 99+50

STA. B 98+00 TO STA. B 100+50

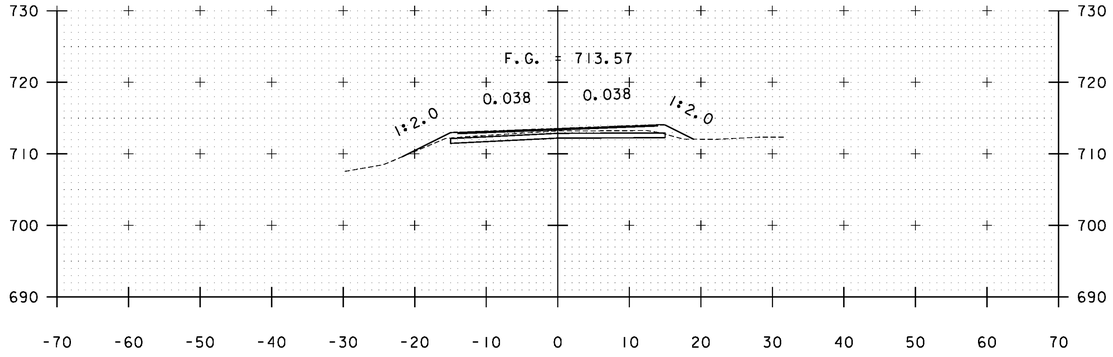
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

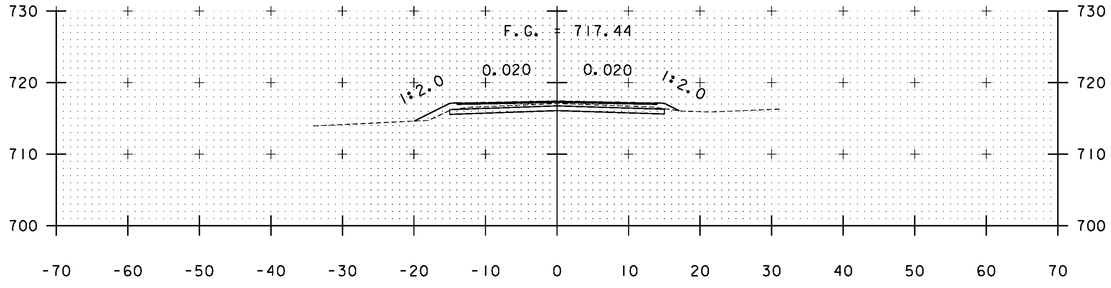
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 364 OF 444



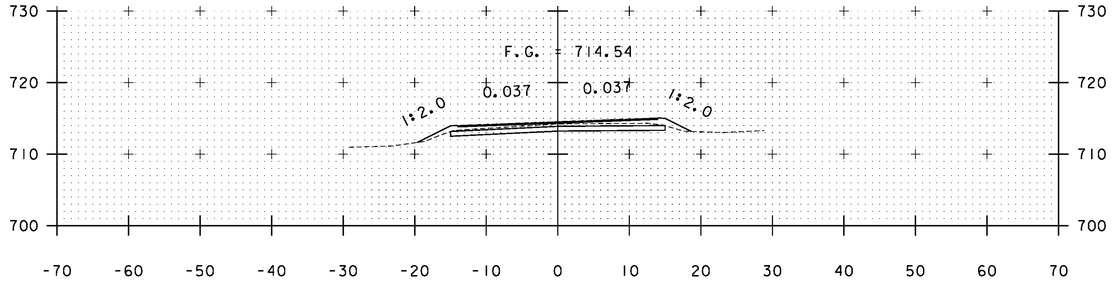

B 102+00



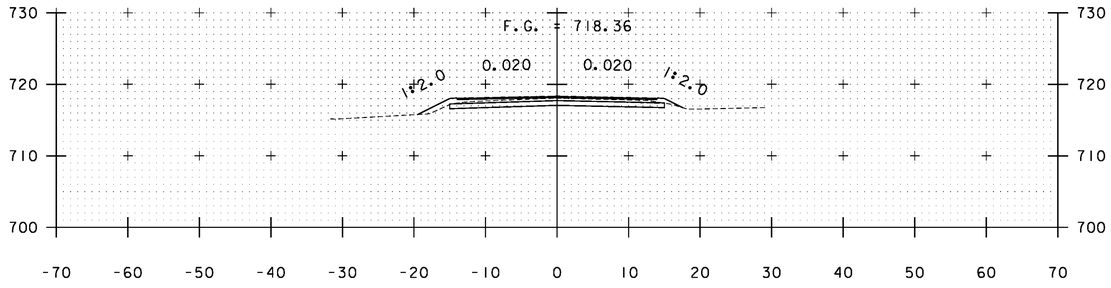

B 103+50



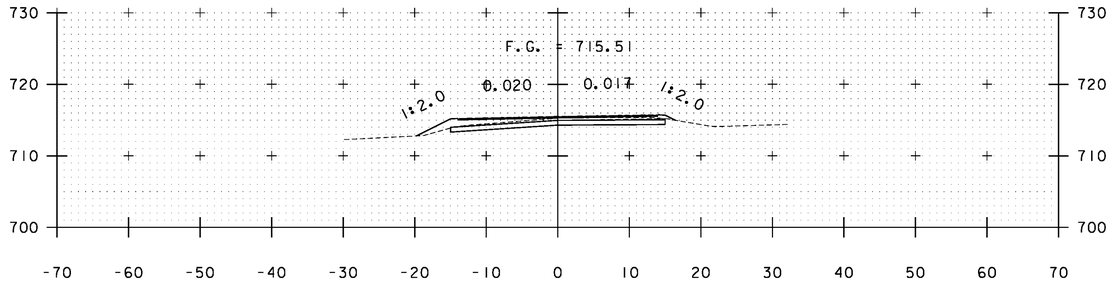

B 101+50




B 103+00




B 101+00



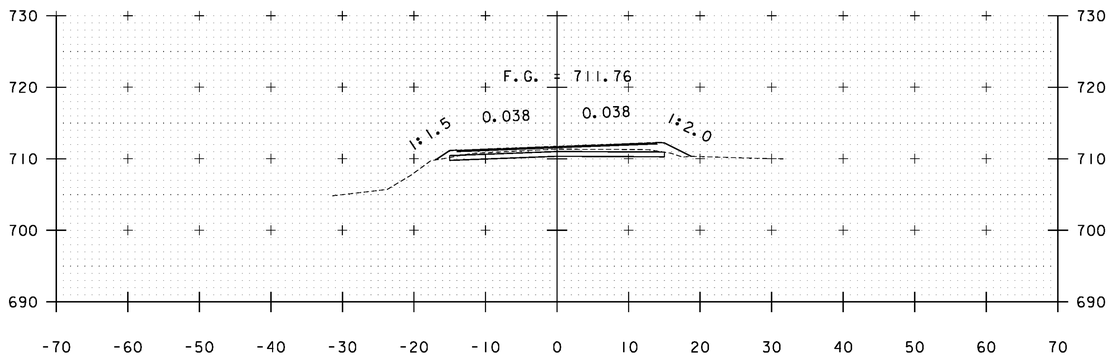

B 102+50

STA. B 101+00 TO STA. B 103+50

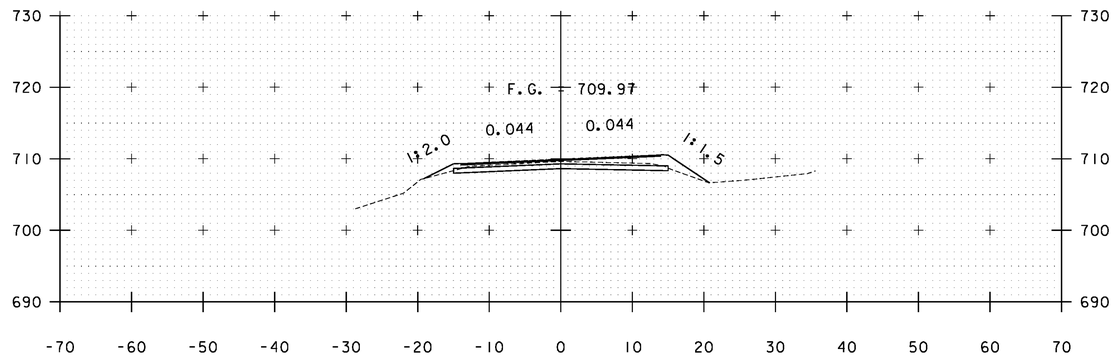
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

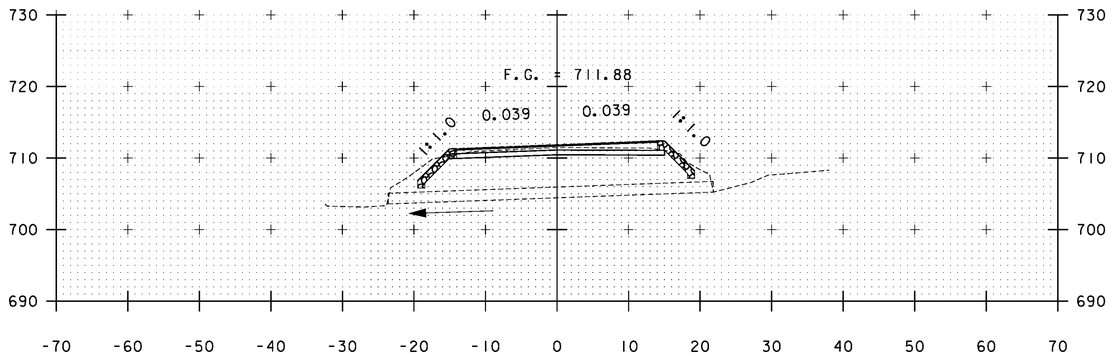
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 365 OF 444



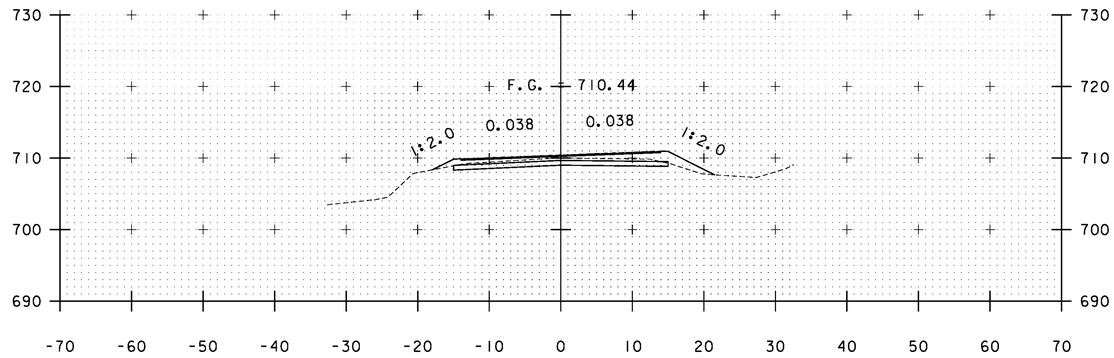

B 104+50



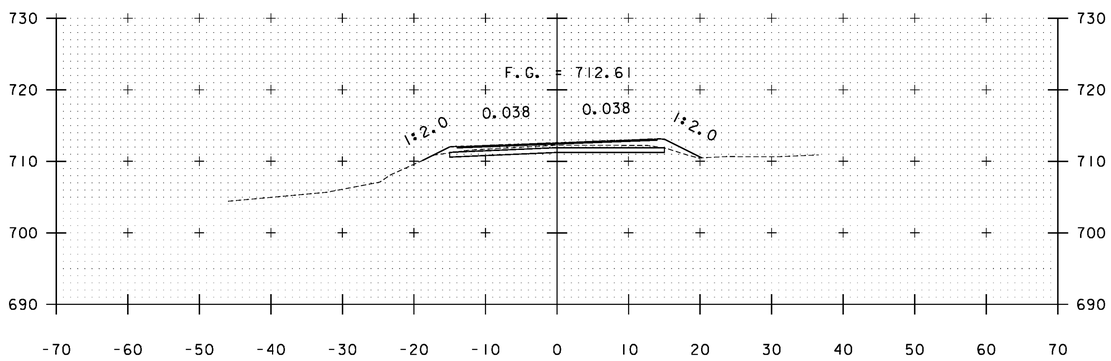

B 106+00



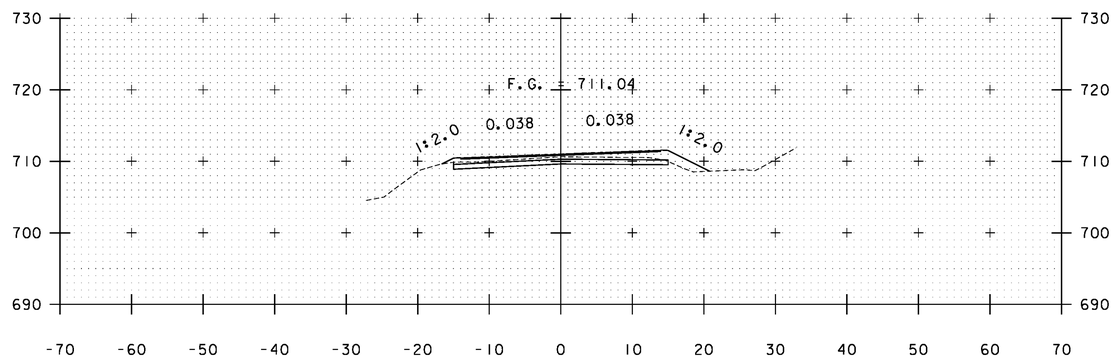

B 104+42




B 105+50



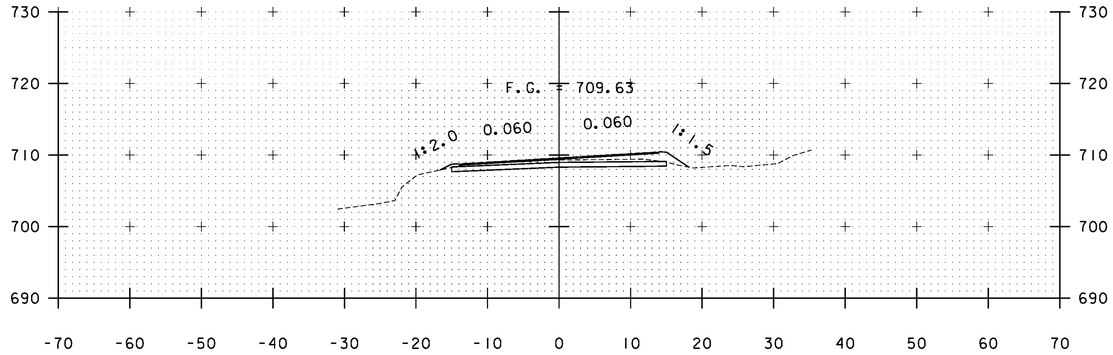

B 104+00



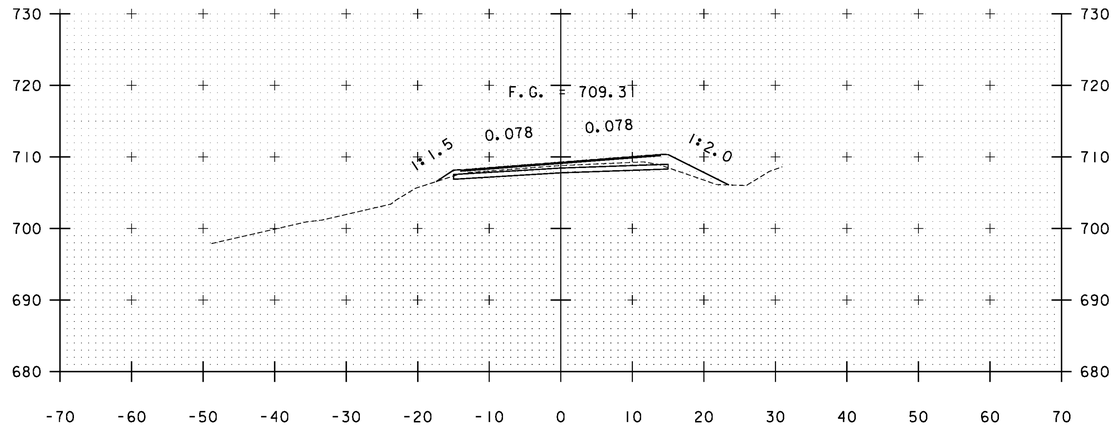

B 105+00

STA. B 104+00 TO STA. B 106+00

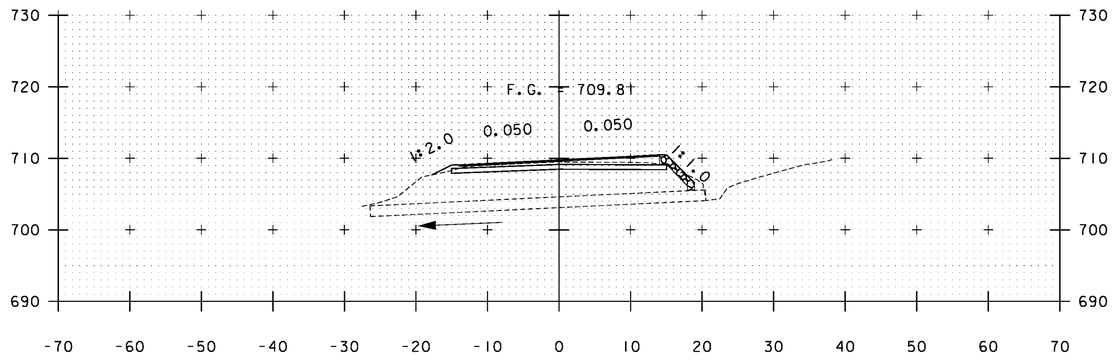
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 366 OF 444 |



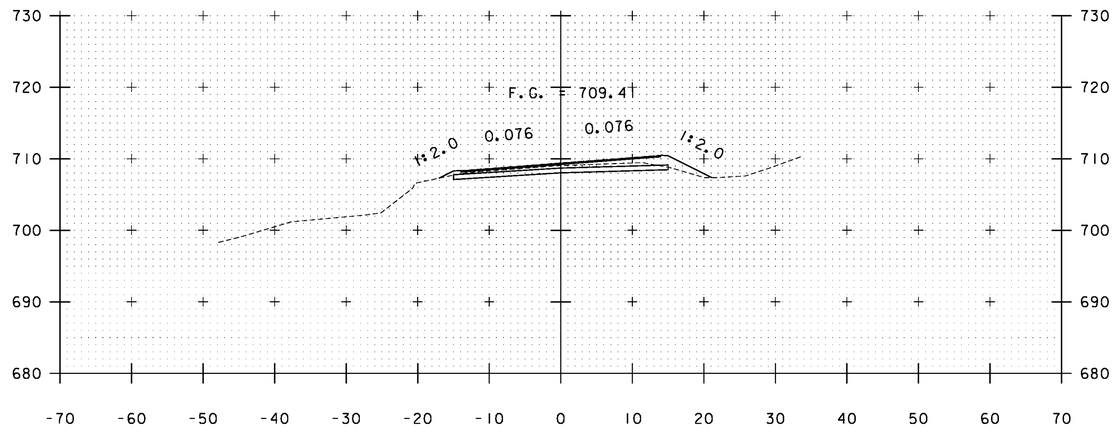

B 106+50




B 107+50




B 106+21



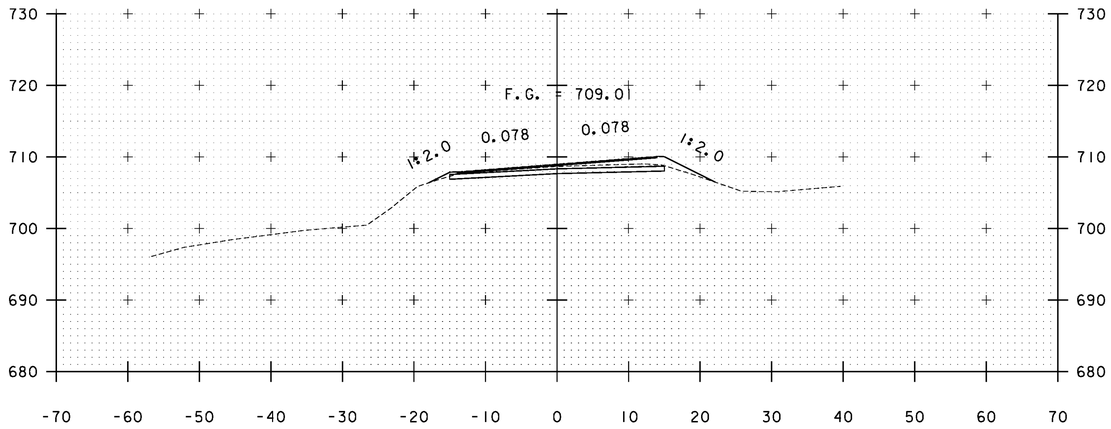

B 107+00

STA. B 106+21 TO STA. B 107+50

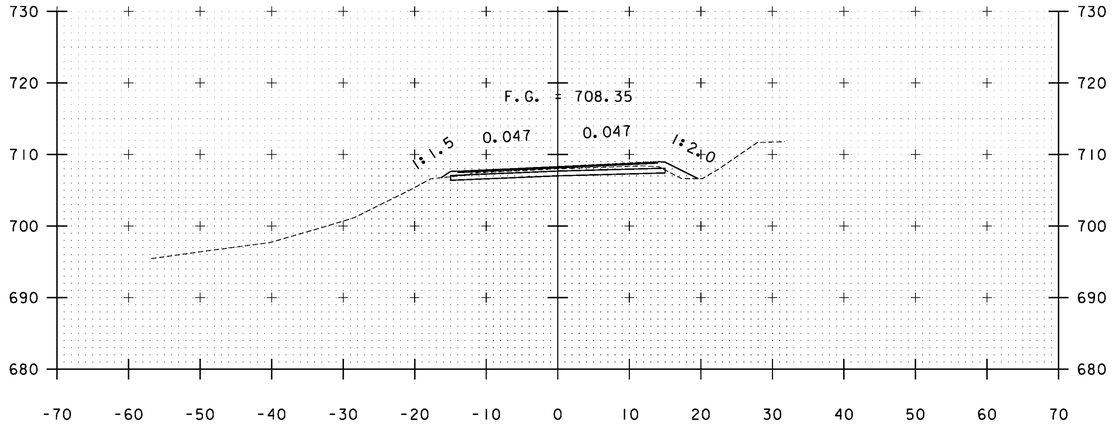
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

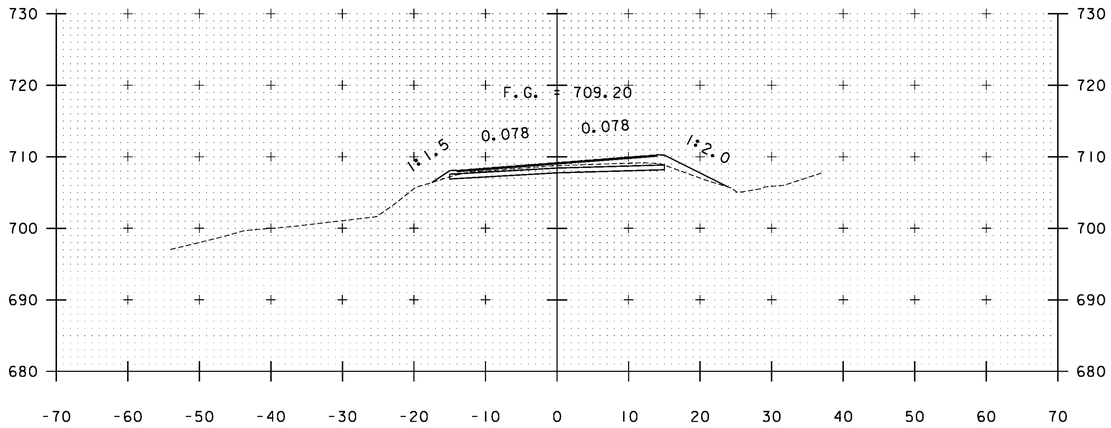
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 367 OF 444



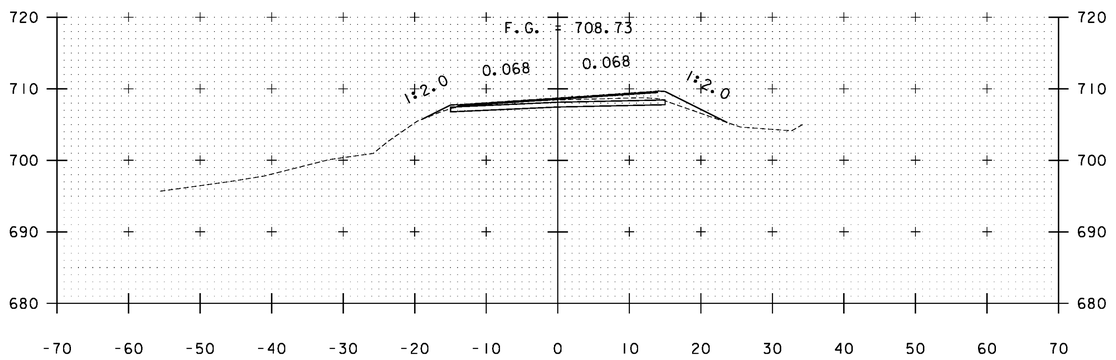

B 108+50




B 109+50



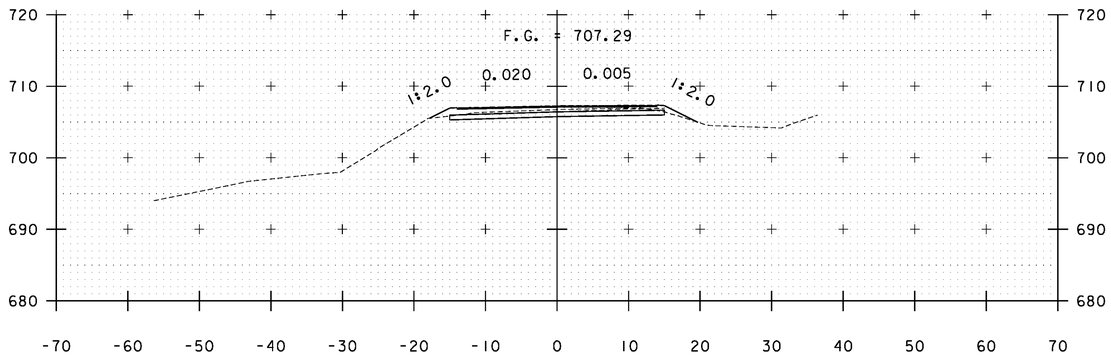

B 108+00



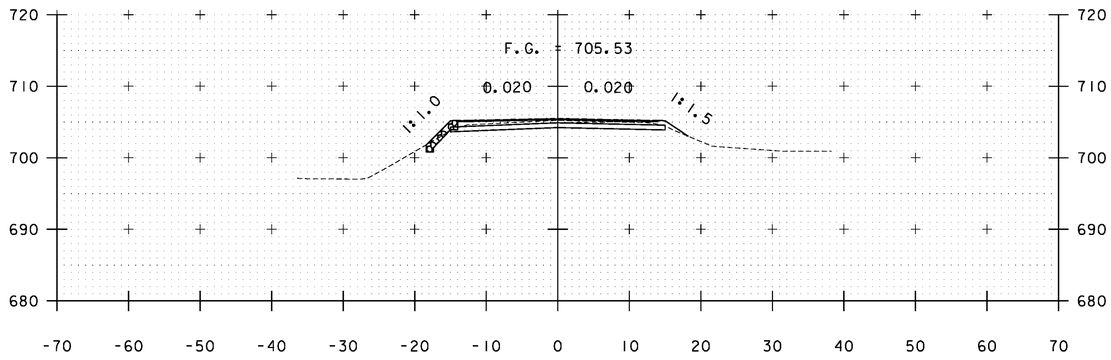

B 109+00

STA. B 108+00 TO STA. B 109+50

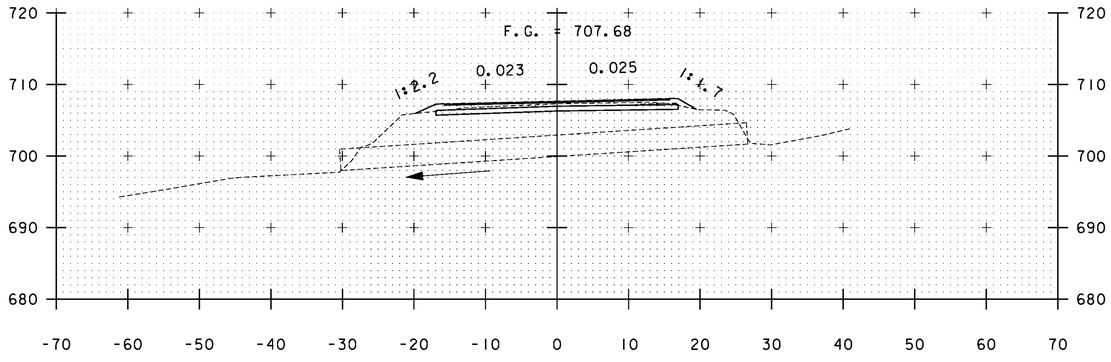
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 368 OF 444 |



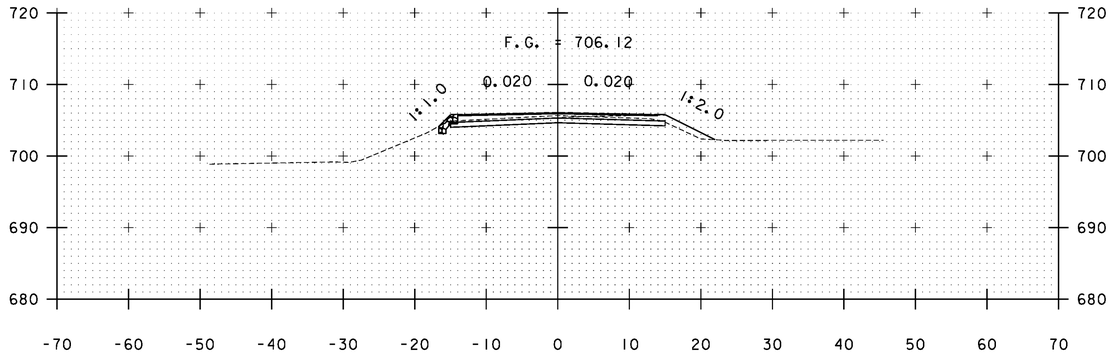

B 110+50



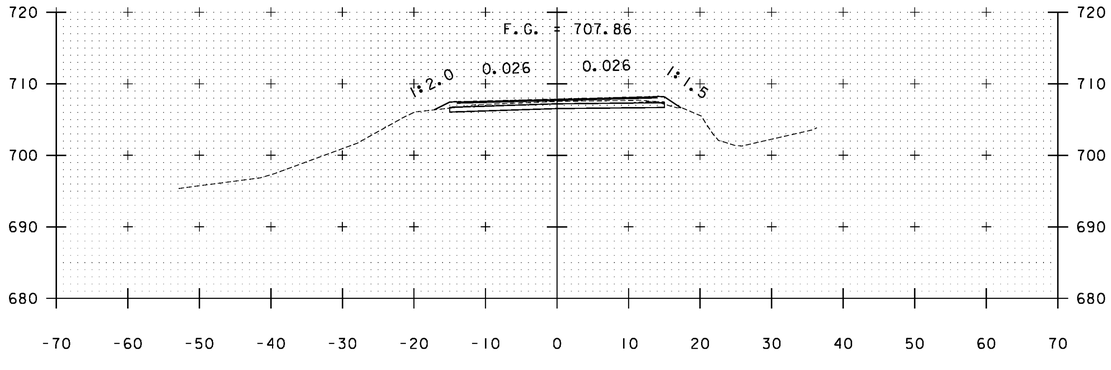

B 112+00



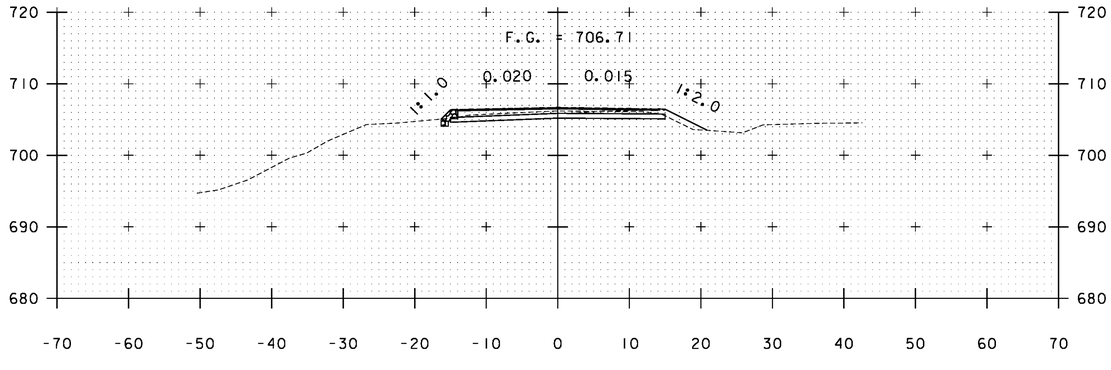

B 110+17




B 111+50



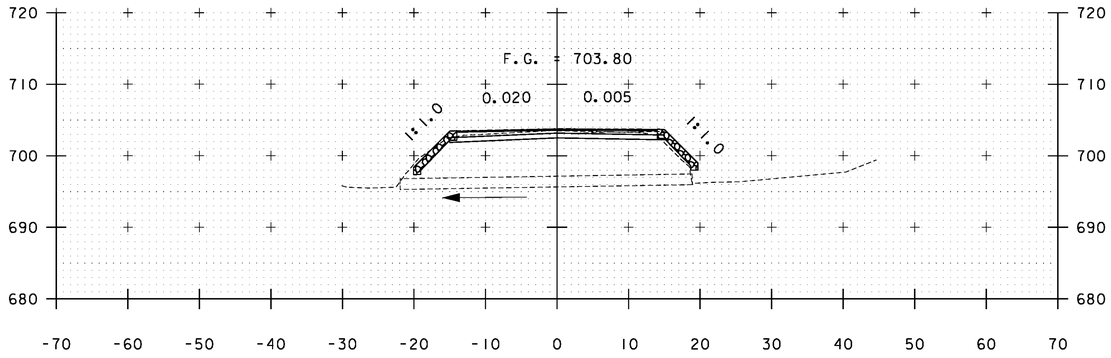

B 110+00



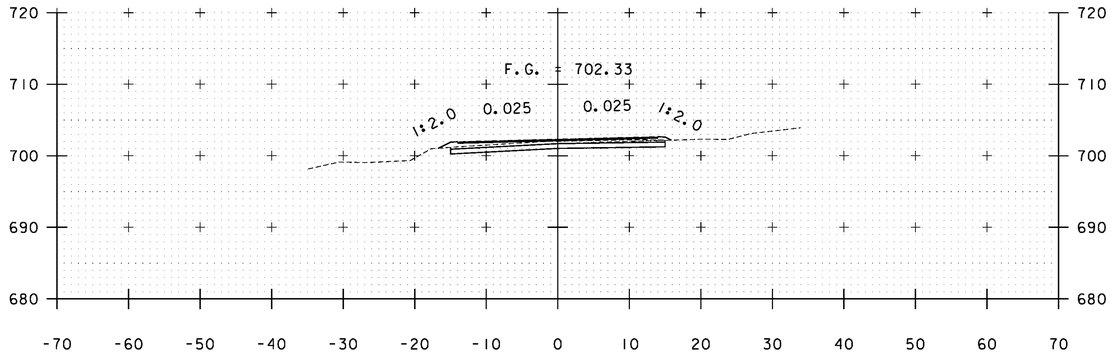

B 111+00

STA. B 110+00 TO STA. B 112+00

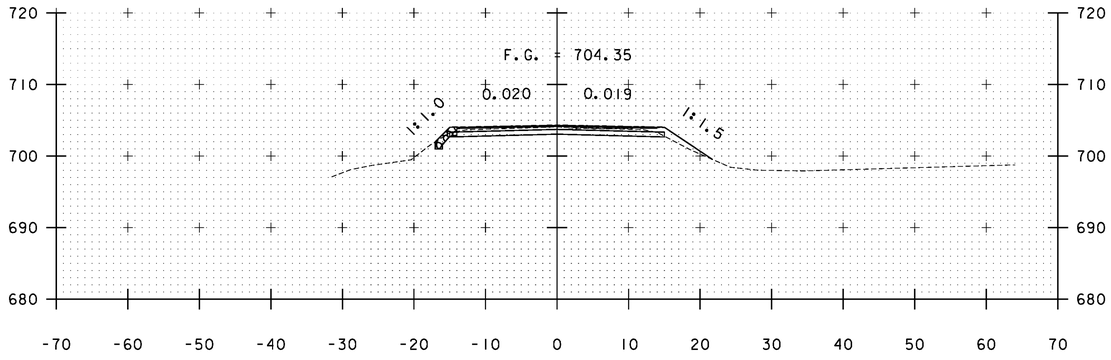
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 369 OF 444 |



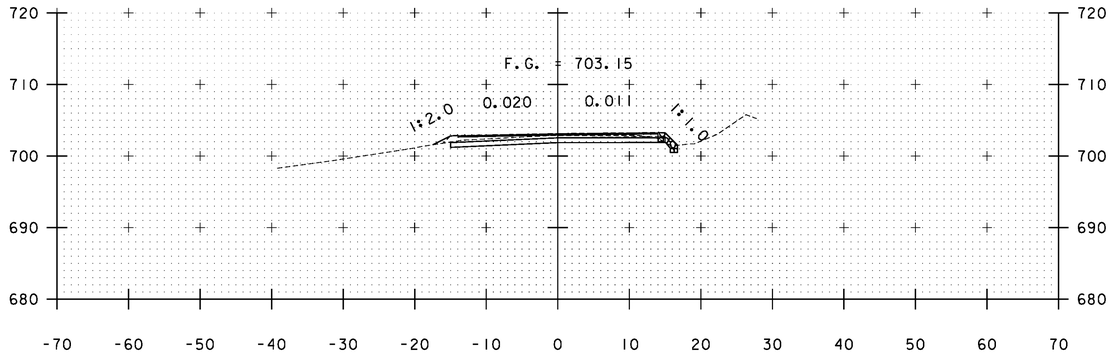

B 113+47



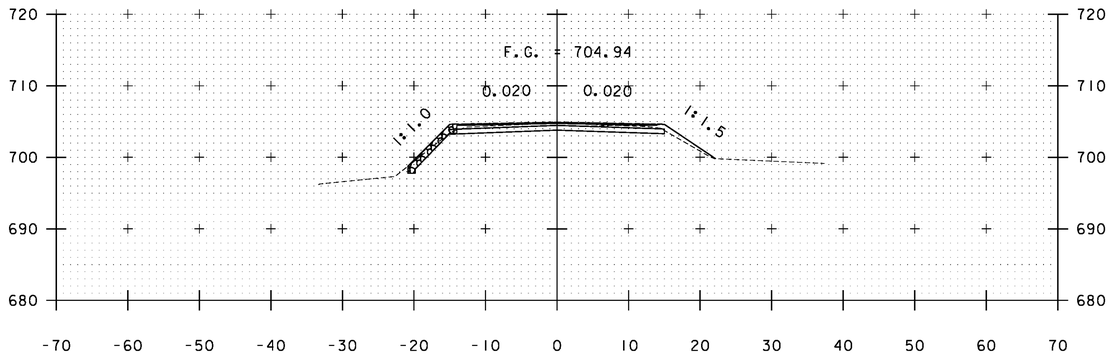

B 114+50



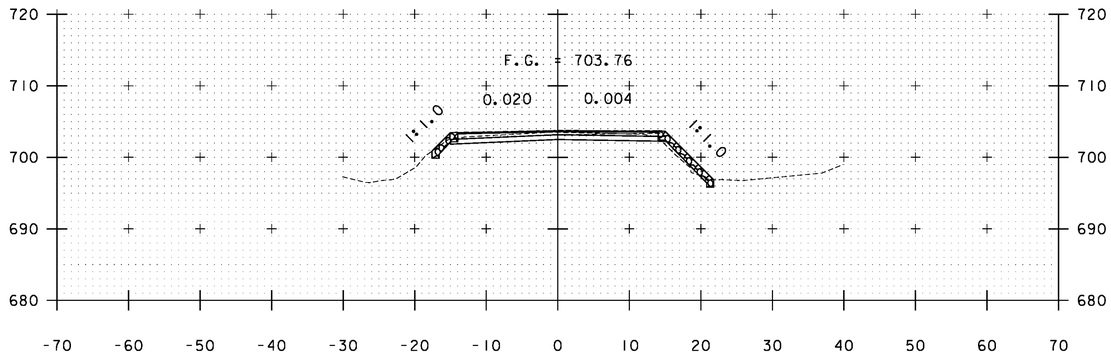

B 113+00




B 114+00




B 112+50



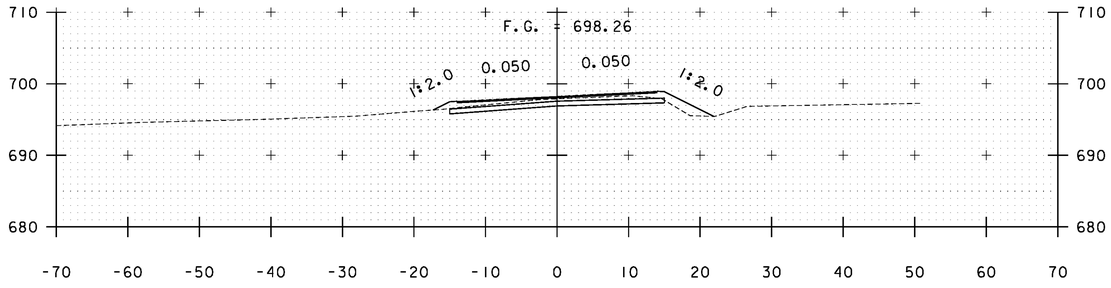

B 113+50

STA. B 112+50 TO STA. B 114+50

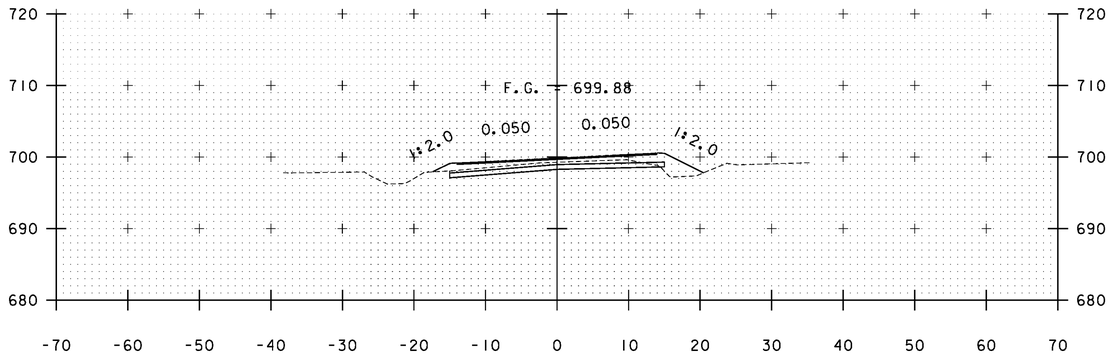
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

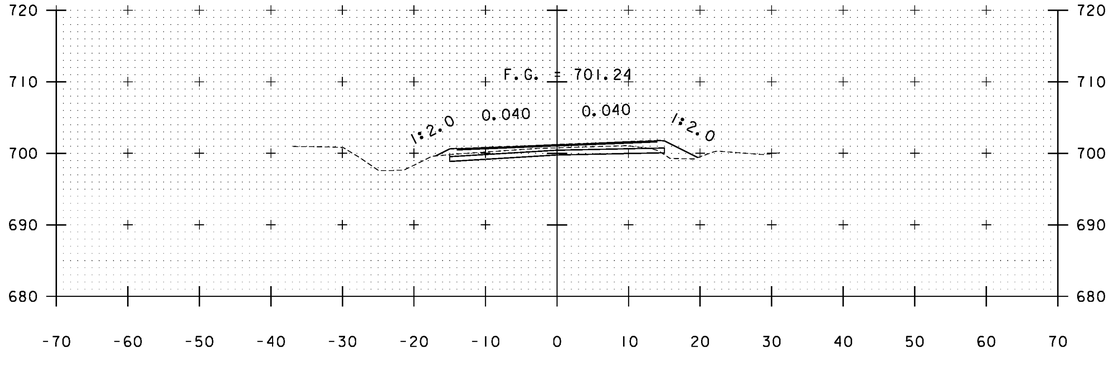
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 370 OF 444



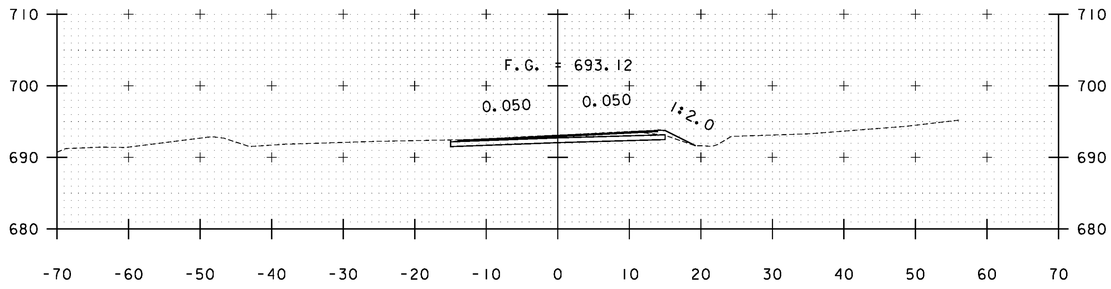

B 116+00



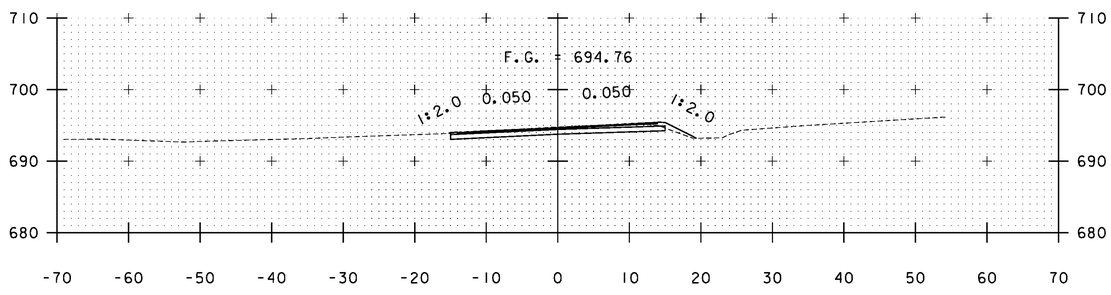

B 115+50



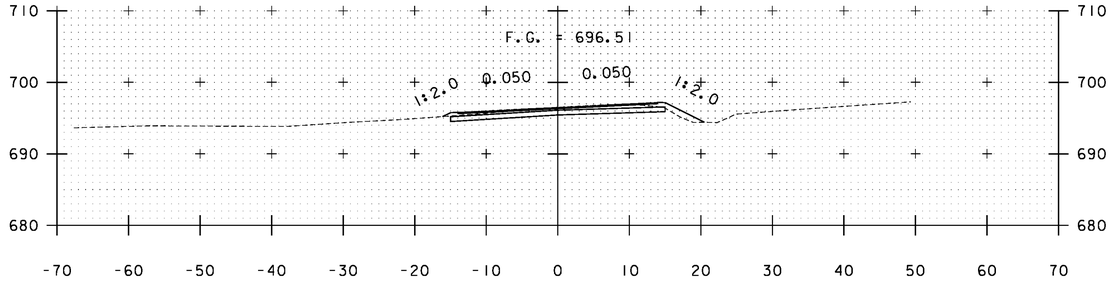

B 115+00




B 117+50



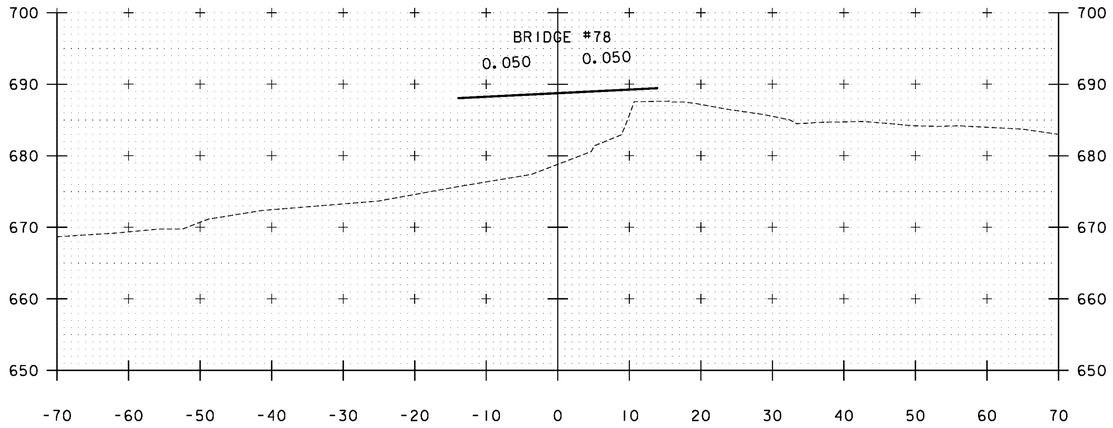

B 117+00



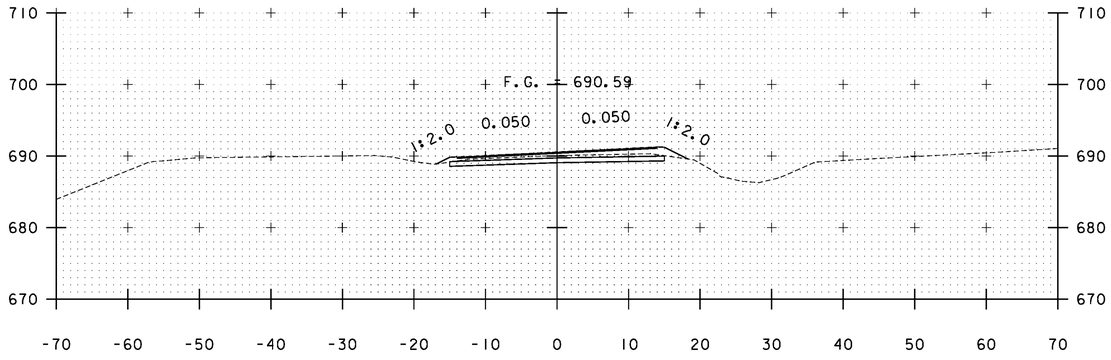

B 116+50

STA. B 115+00 TO STA. B 117+50

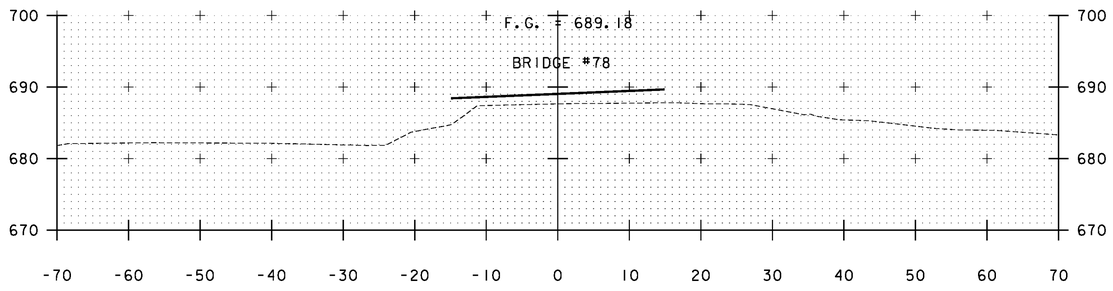
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 371 OF 444 |



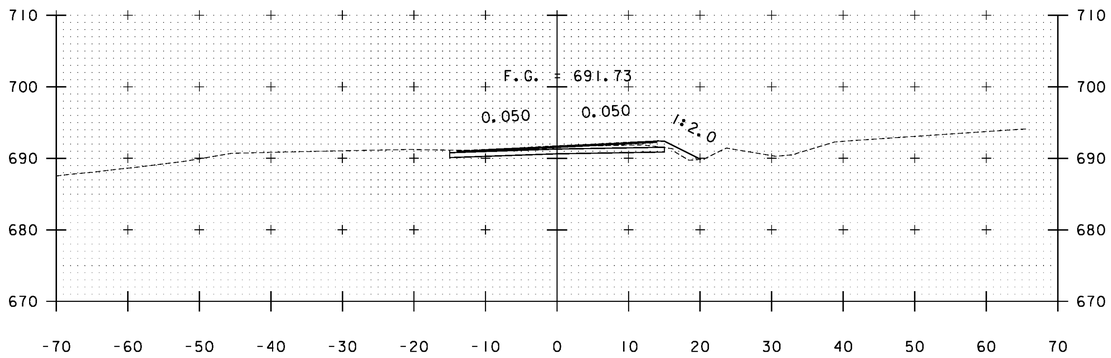

B 119+50



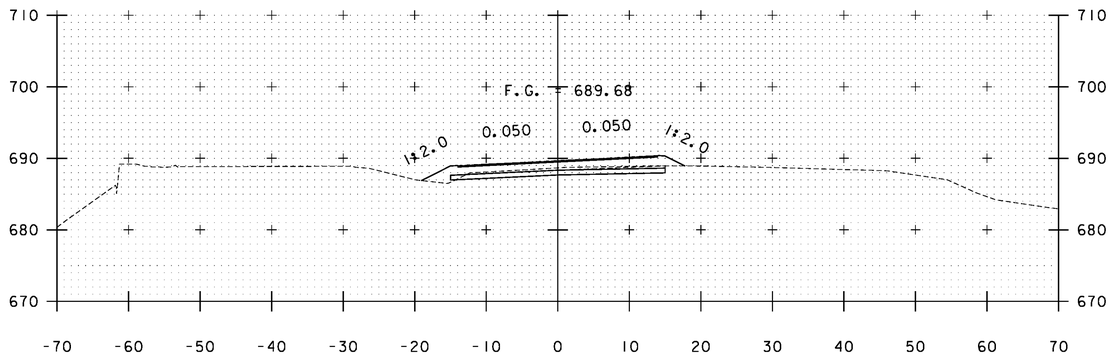

B 118+50




B 119+32




B 118+00



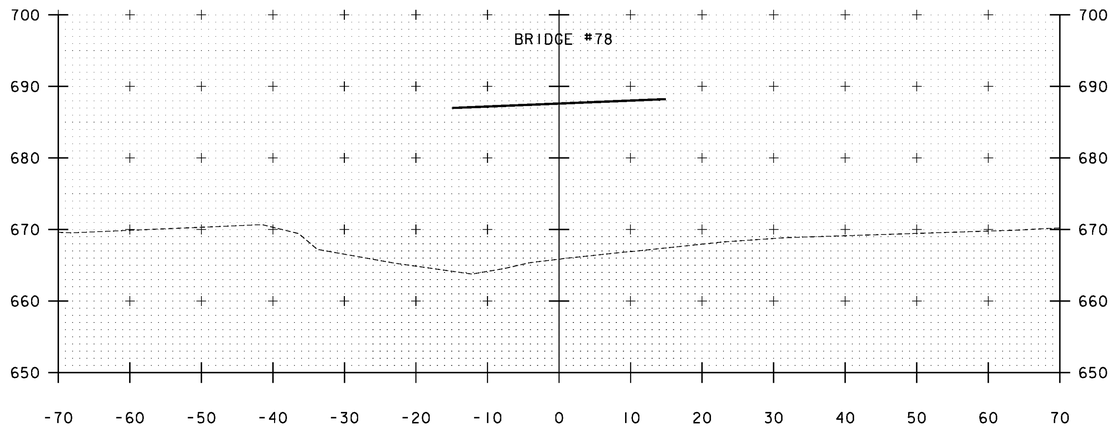

B 119+00

STA. B 118+00 TO STA. B 119+50

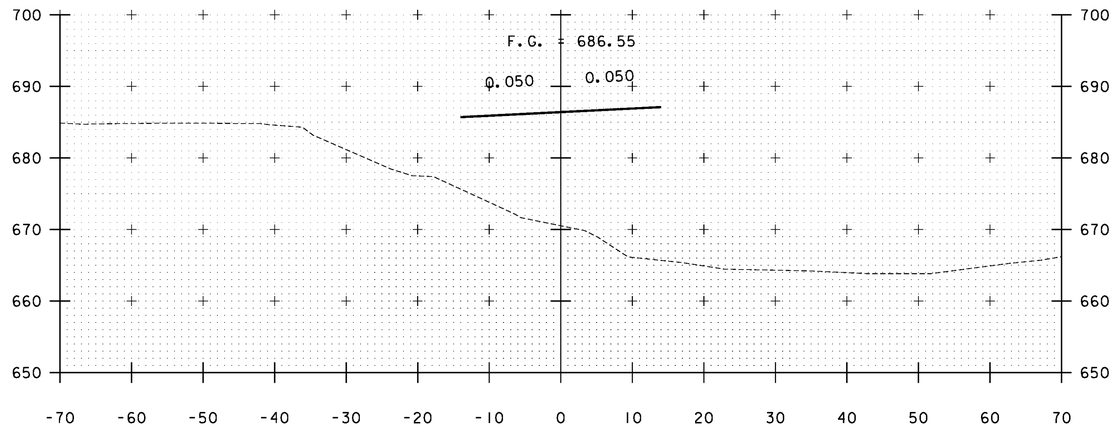
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

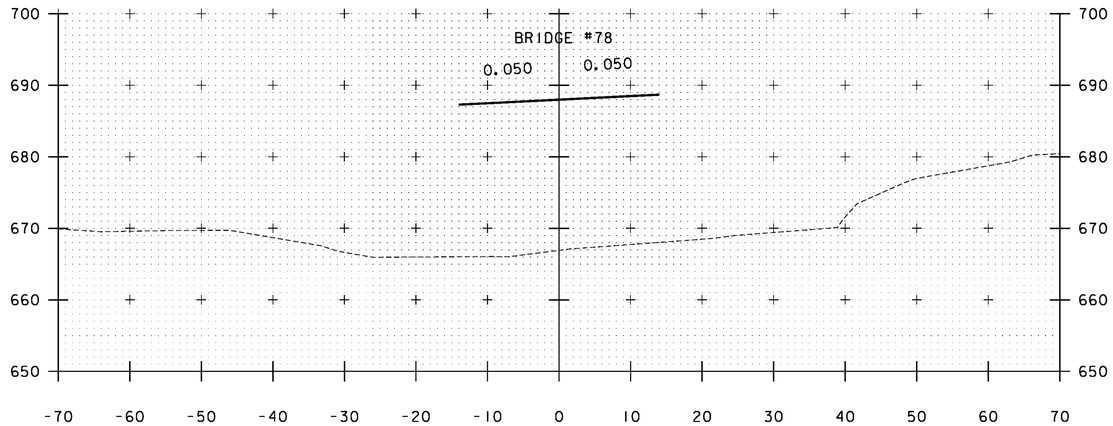
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 372 OF 444



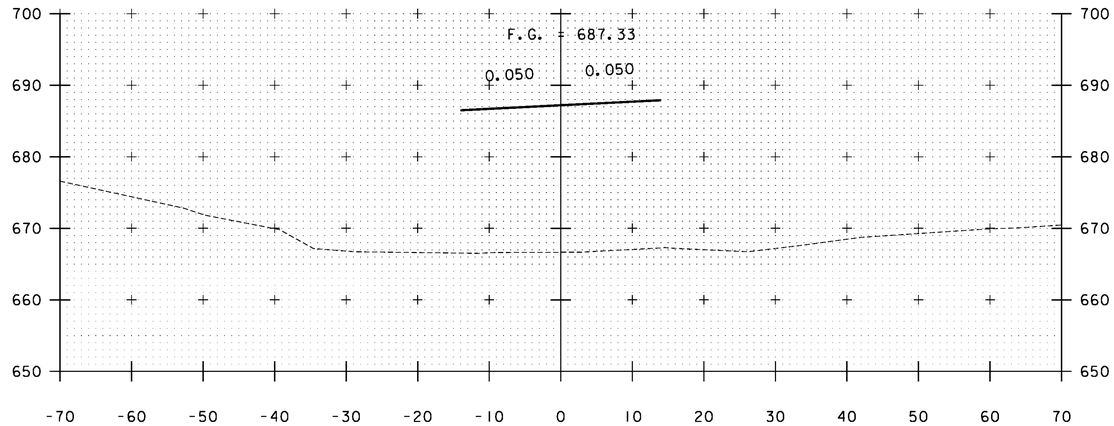

B 120+24




B 121+00



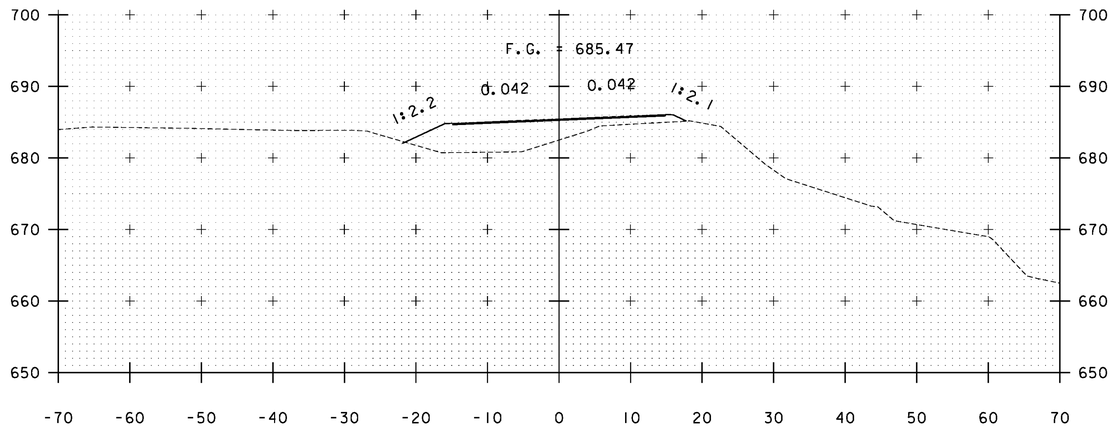

B 120+00



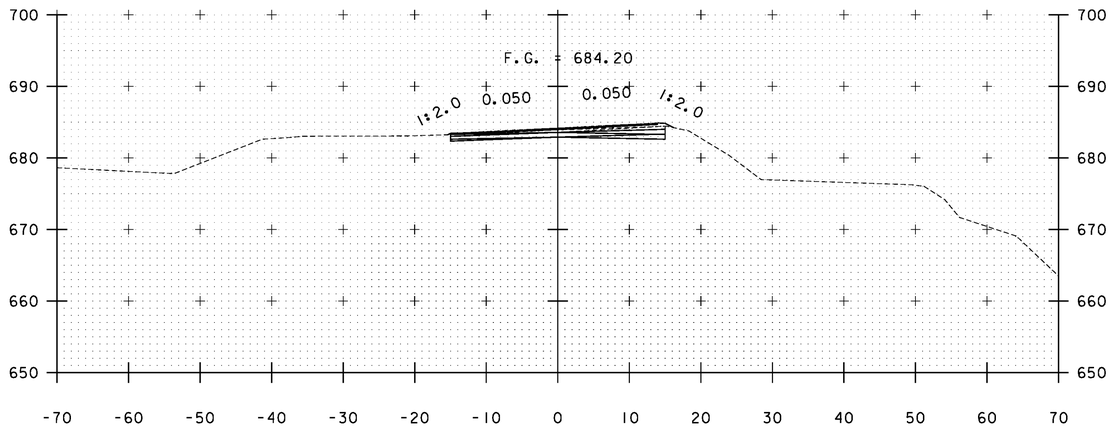

B 120+50

STA. B 120+00 TO STA. B 121+00

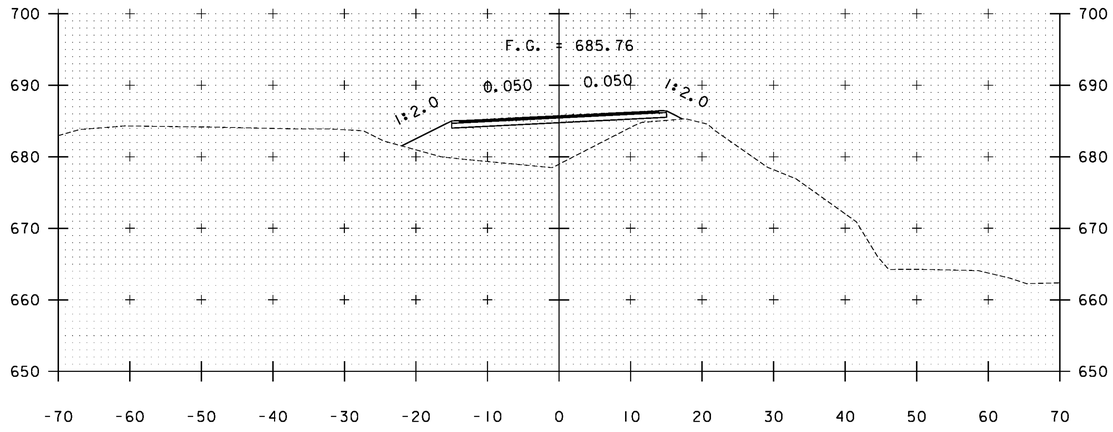
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 373 OF 444 |



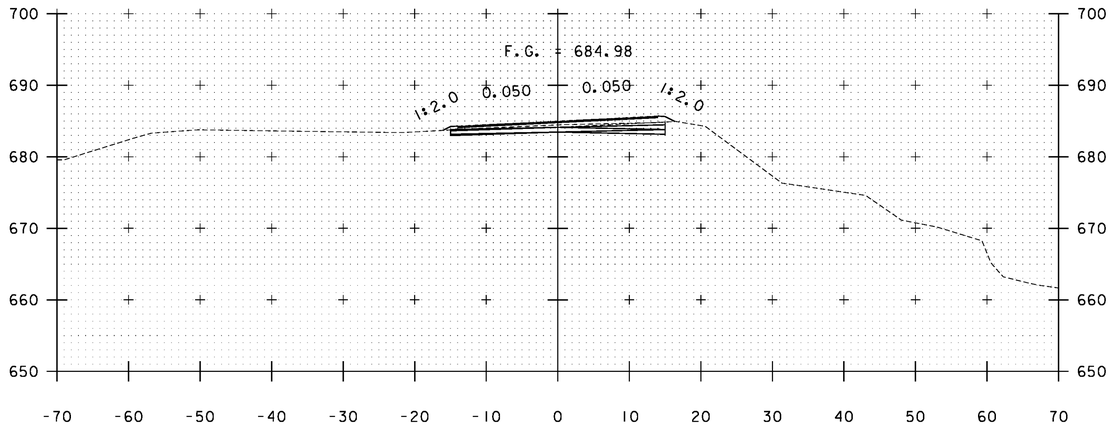

B 121+69




B 122+50




B 121+50



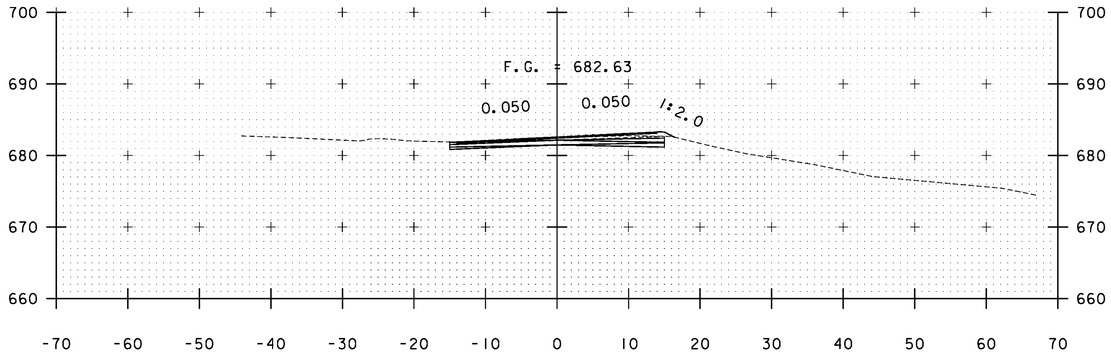

B 122+00

STA. B 121+50 TO STA. B 122+50

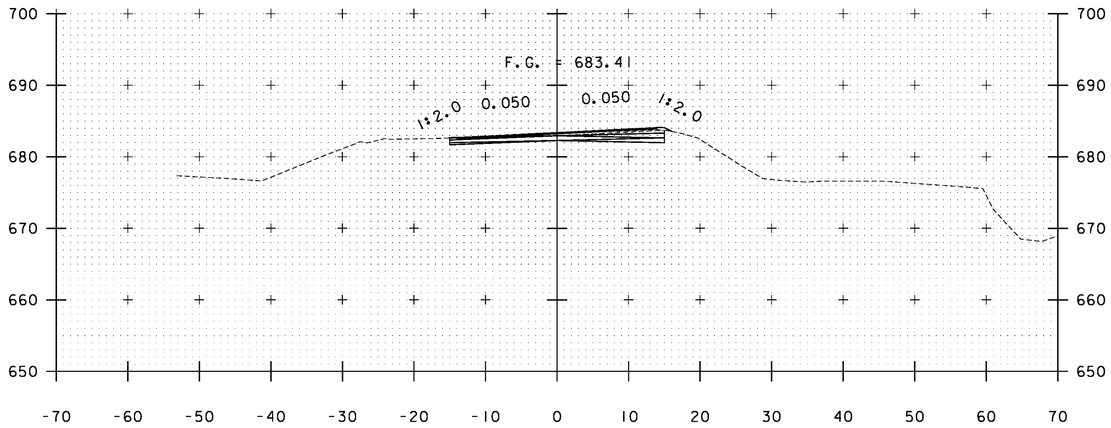
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

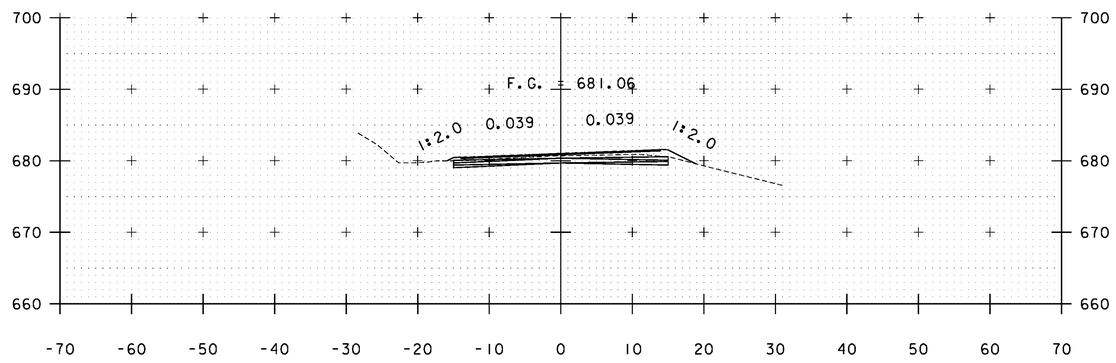
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 374 OF 444



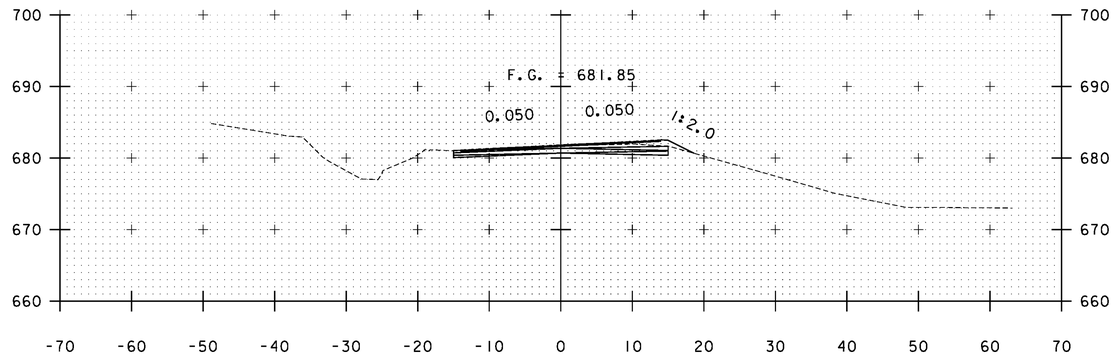

B 123+50



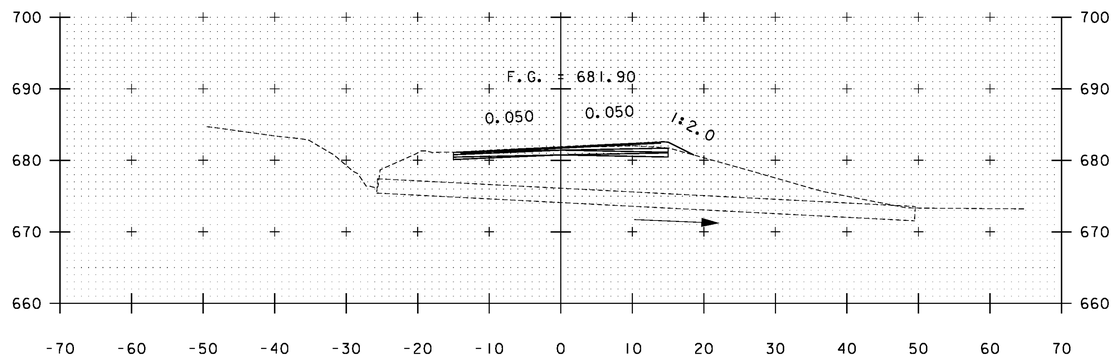

B 123+00




B 124+50




B 124+00



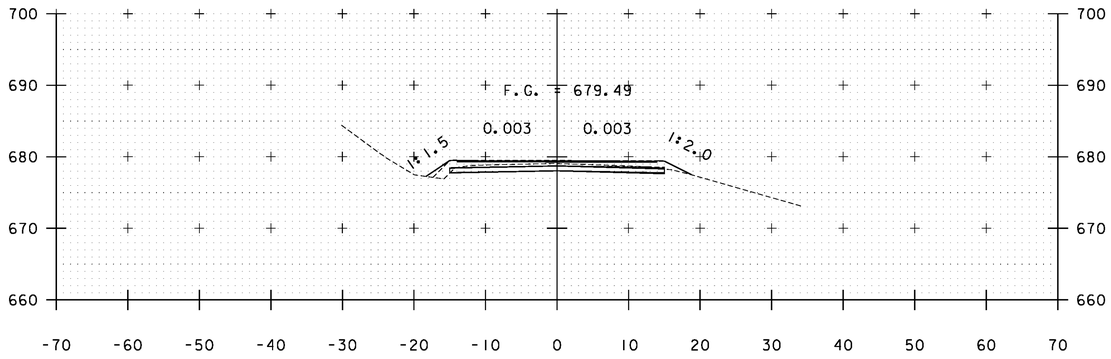

B 123+97

STA. B 123+00 TO STA. B 124+50

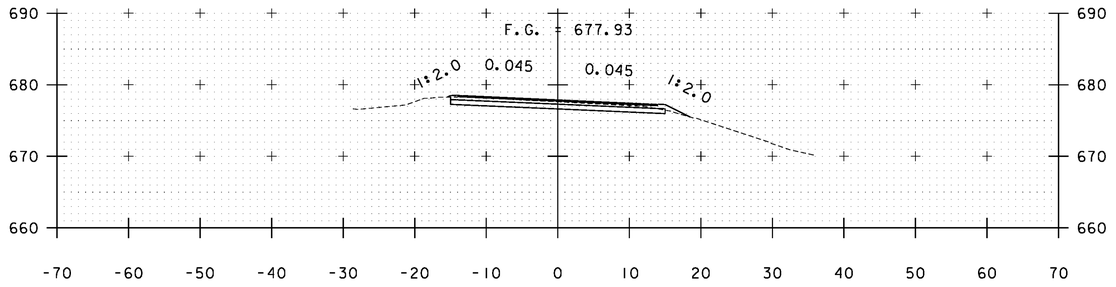
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

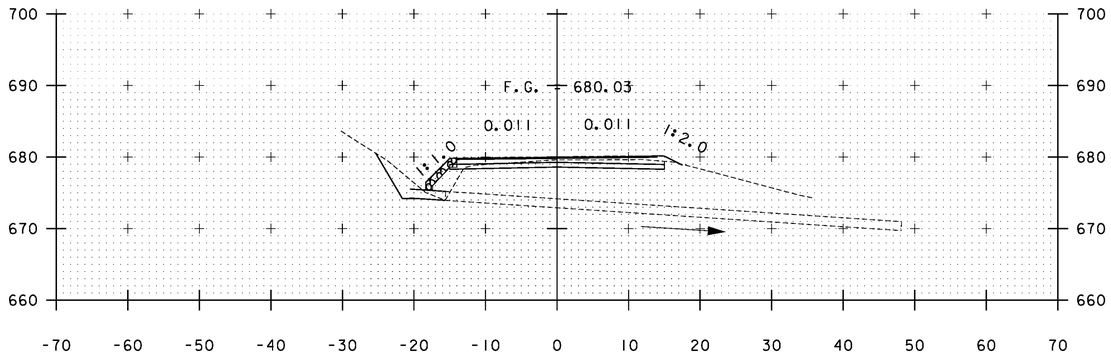
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 375 OF 444



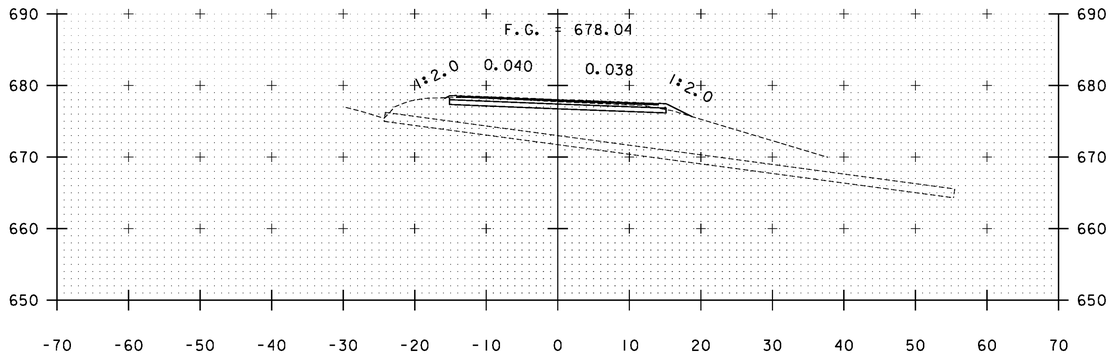

B 125+50



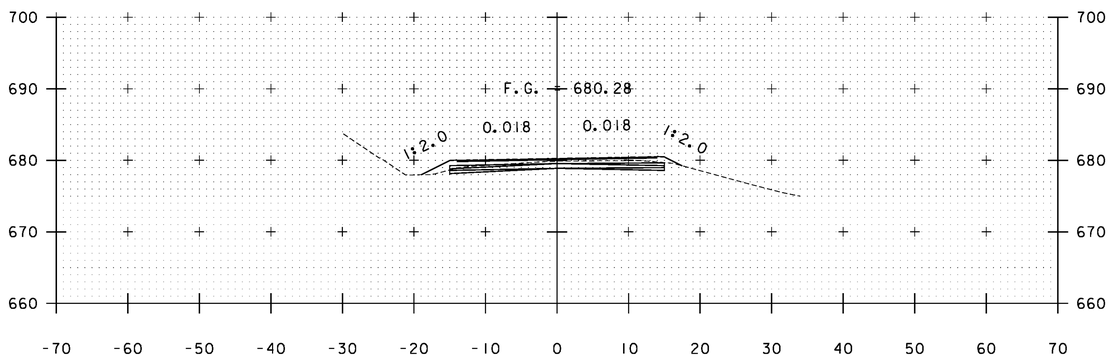

B 126+50



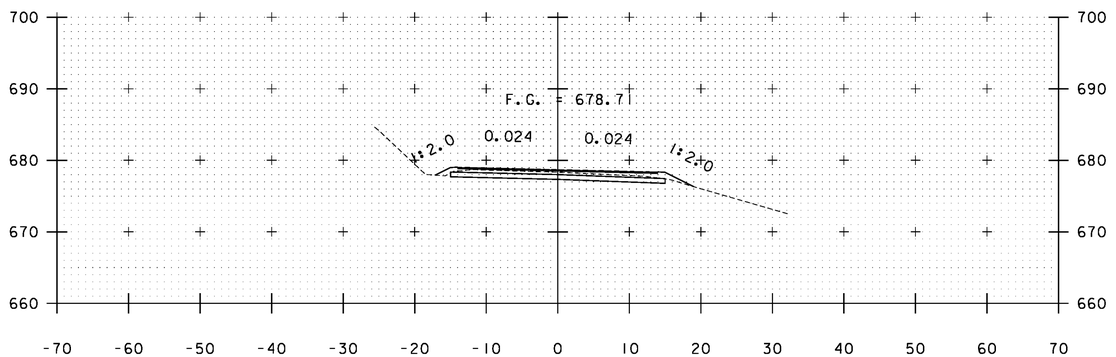

B 125+16




B 126+43




B 125+00



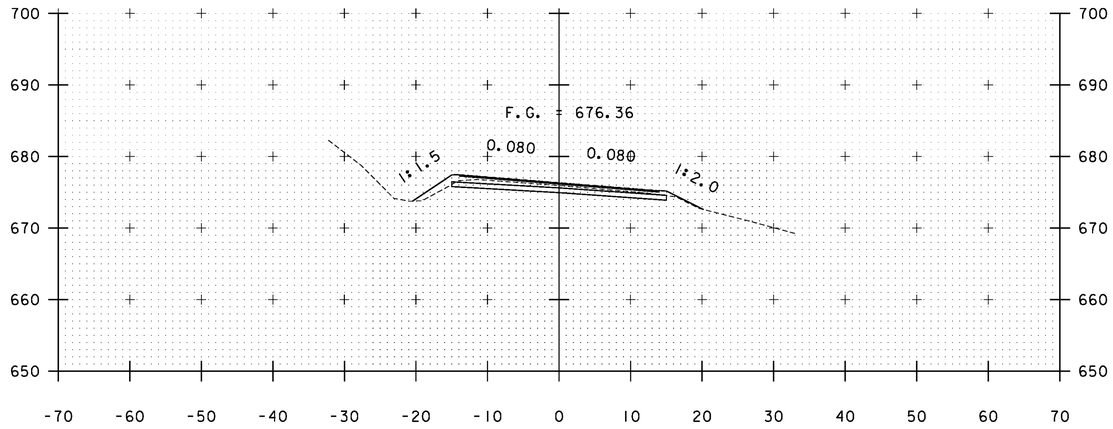

B 126+00

STA. B 125+00 TO STA. B 126+50

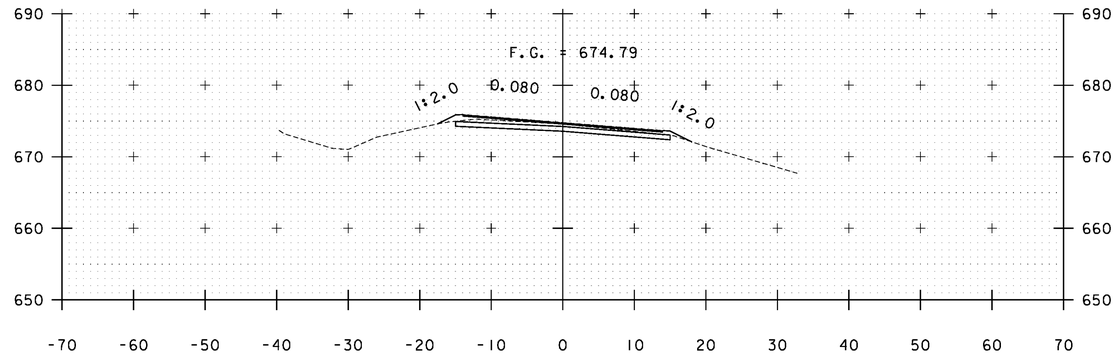
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

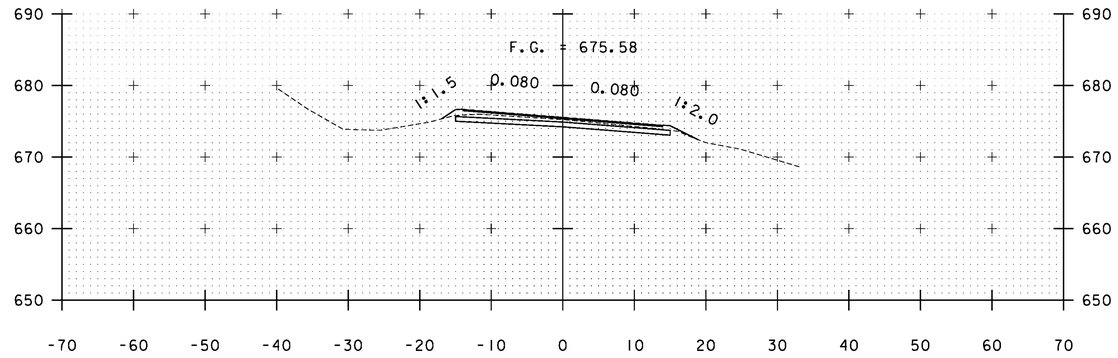
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 376 OF 444



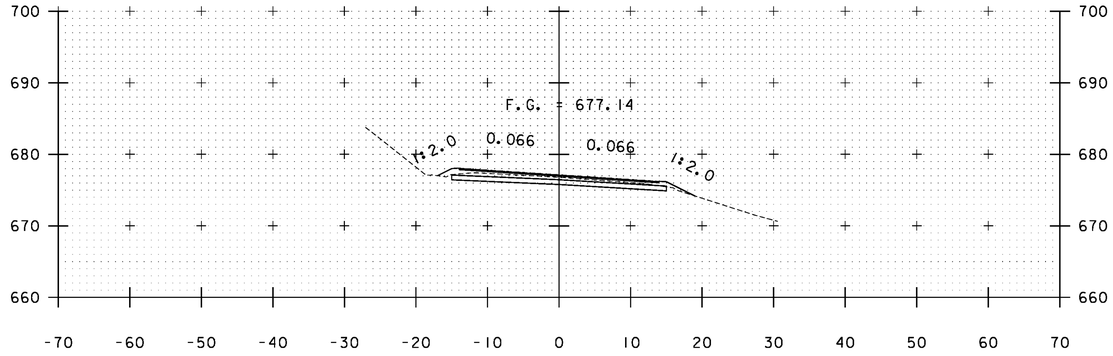

B 127+50



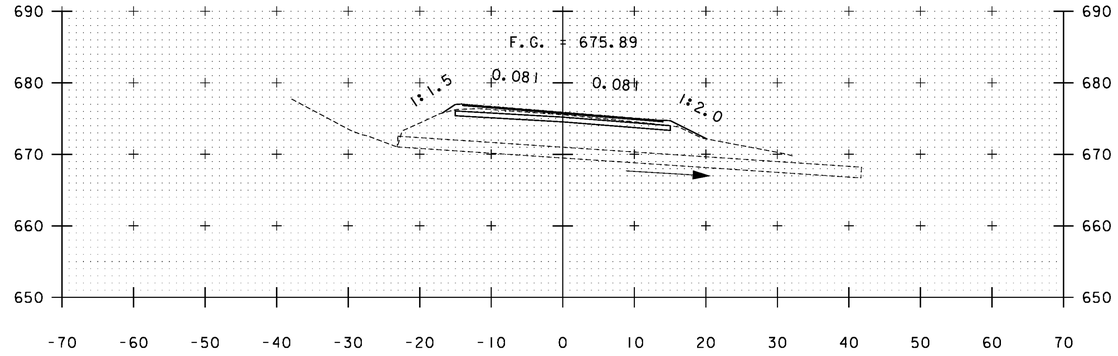

B 128+50




B 128+00



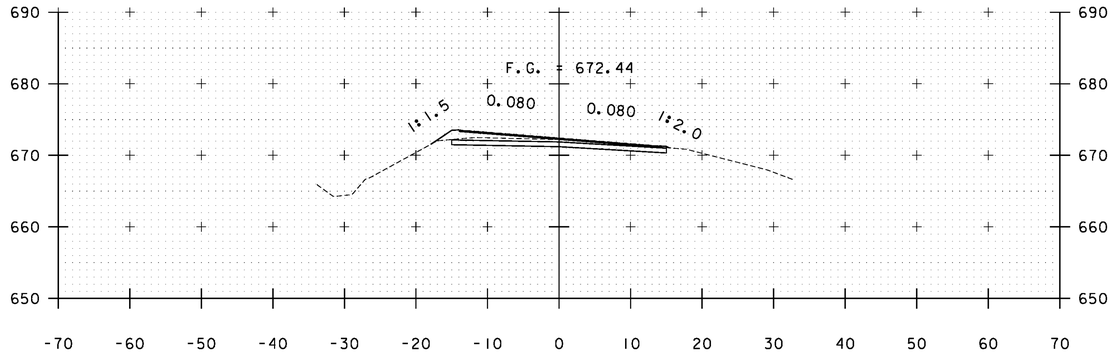

B 127+00



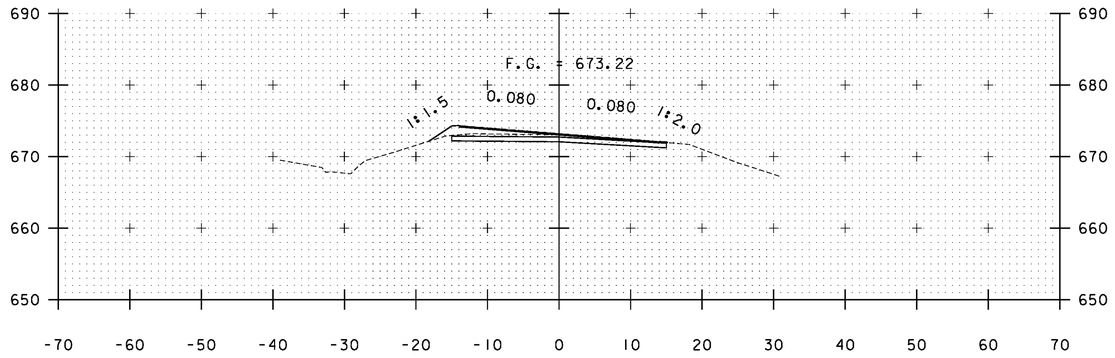

B 127+80

STA. B 127+00 TO STA. B 128+50

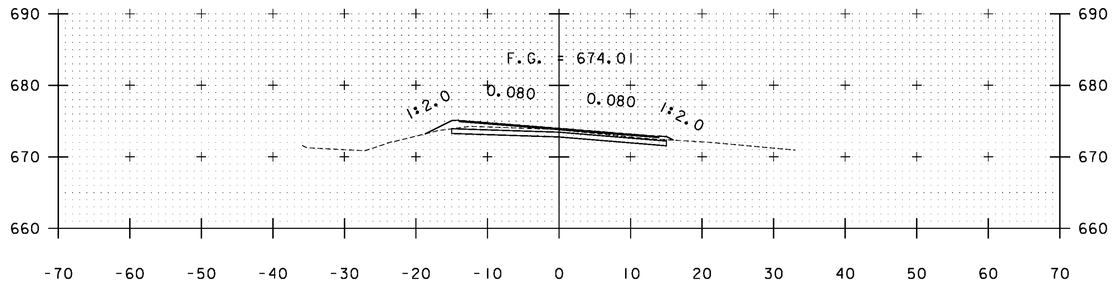
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 377 OF 444 |



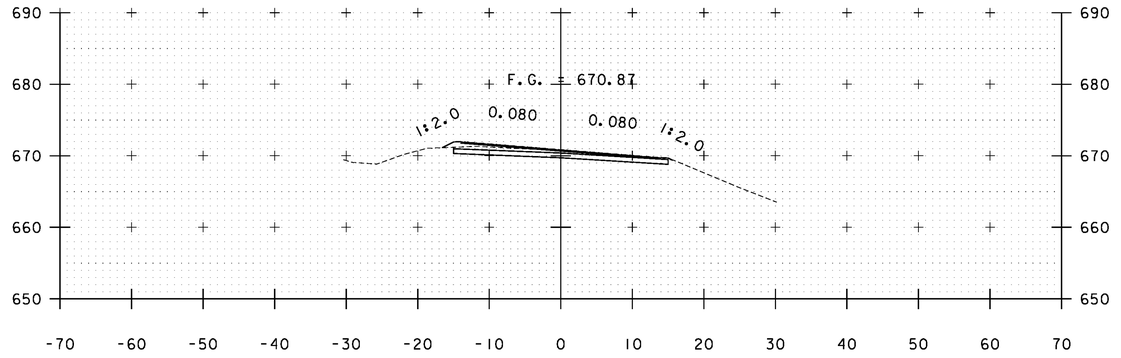

B 130+00



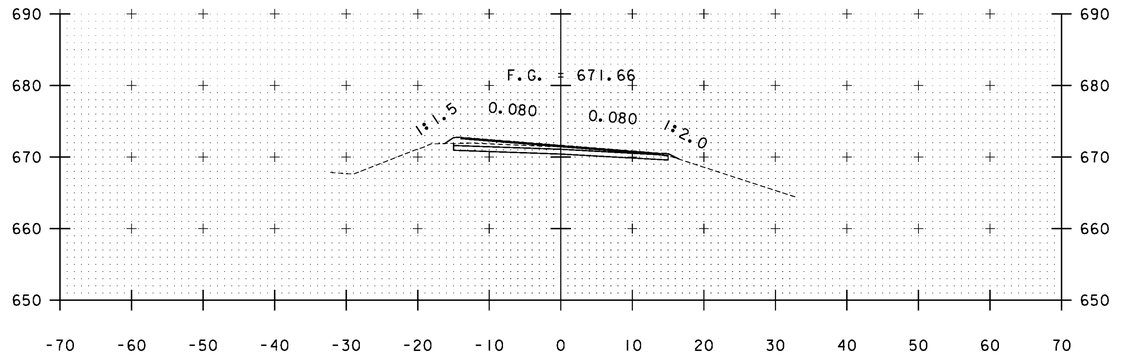

B 129+50



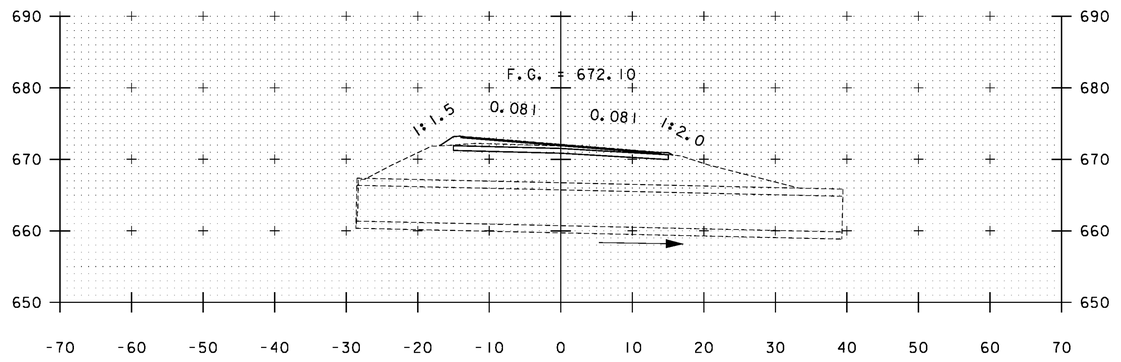

B 129+00




B 131+00




B 130+50



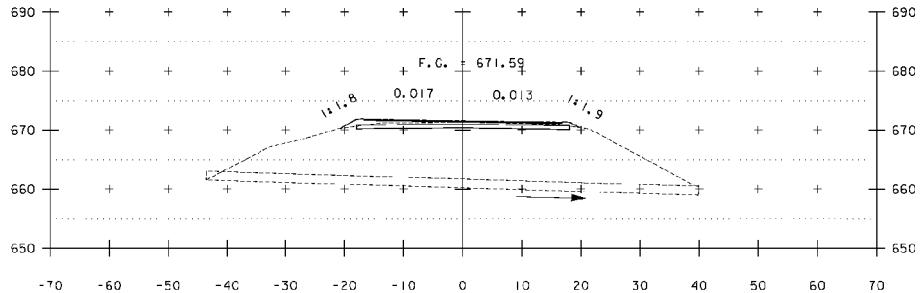

B 130+22

STA. B 129+00 TO STA. B 131+00

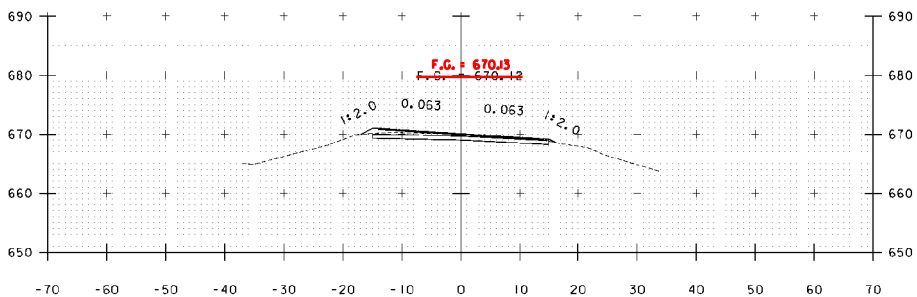
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

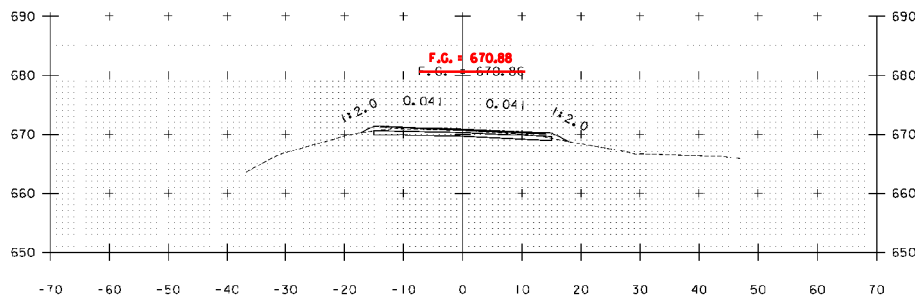
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 378 OF 444



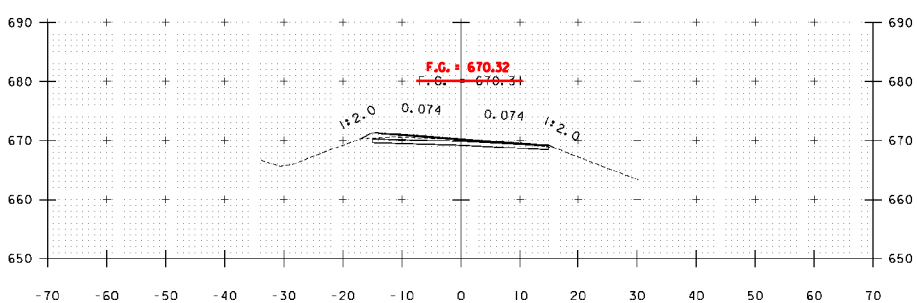

B 133+41



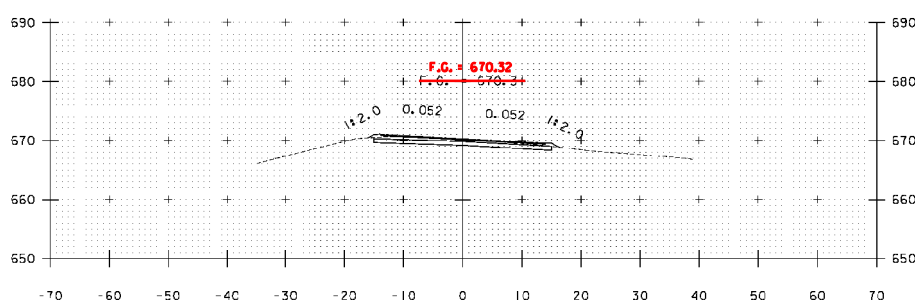

B 132+00




B 133+00




B 131+50



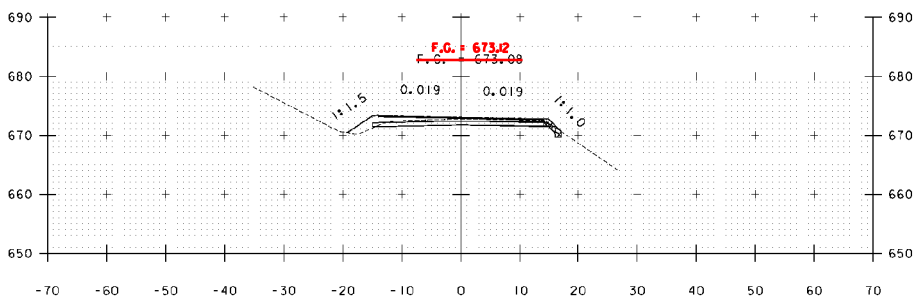

B 132+50

STA. B 131+50 TO STA. B 133+41

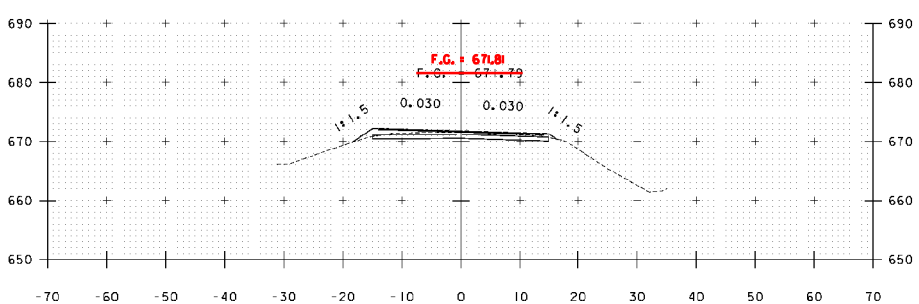
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

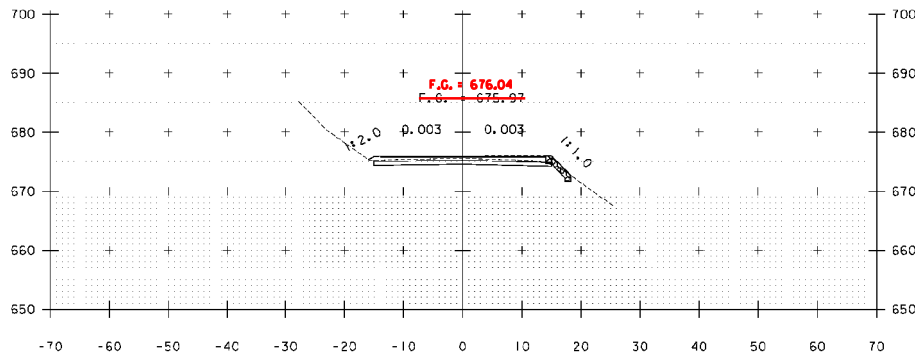
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 379 OF 444



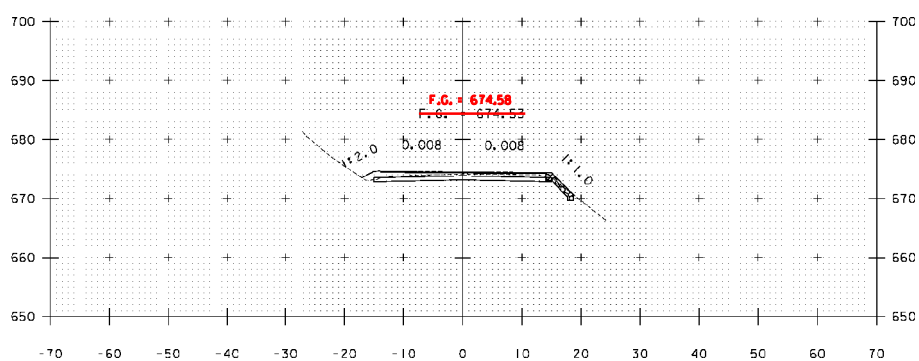

B 134+00




B 133+50



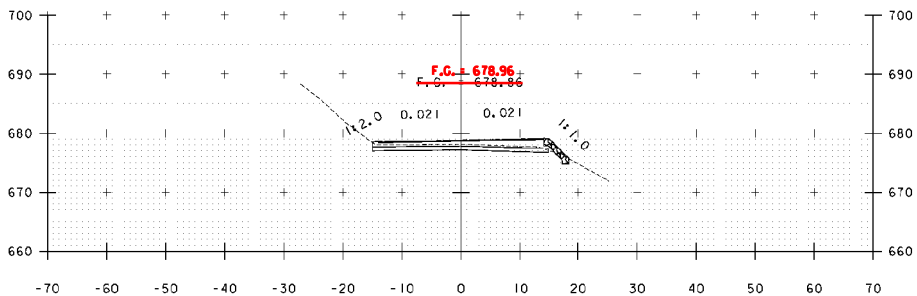

B 135+00



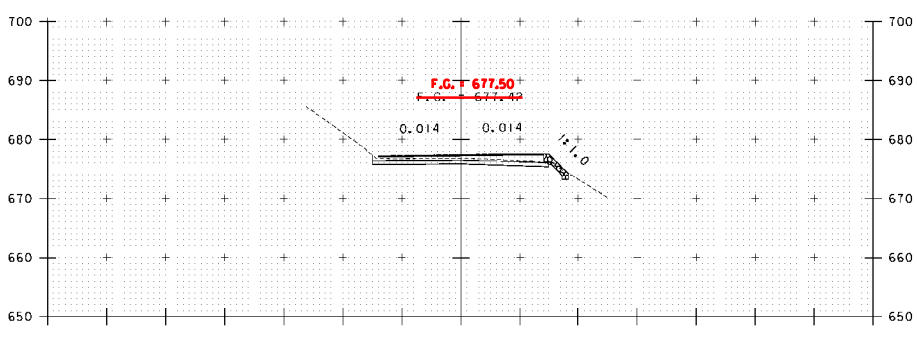

B 134+50

STA. B 133+50 TO STA. B 135+00

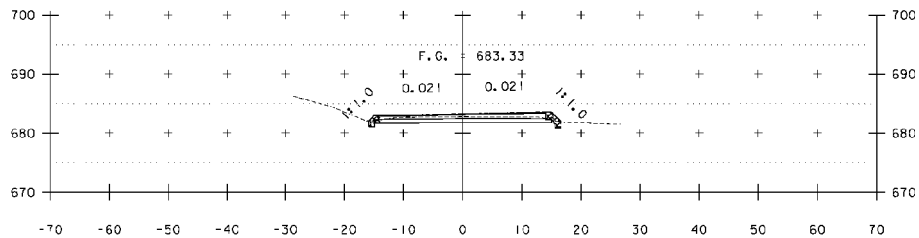
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 380 OF 444 |



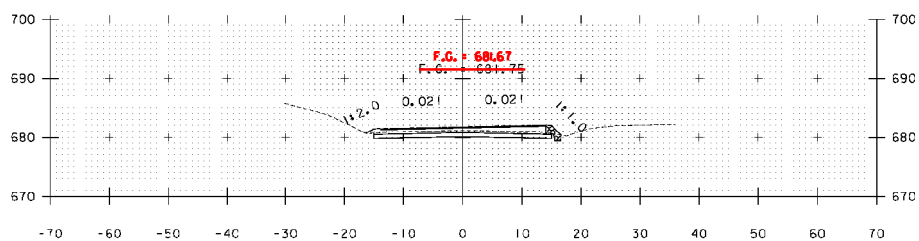

B 136+00



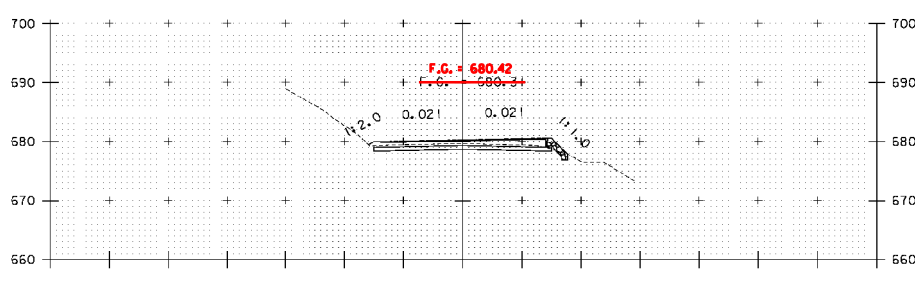

B 135+50




B 137+50



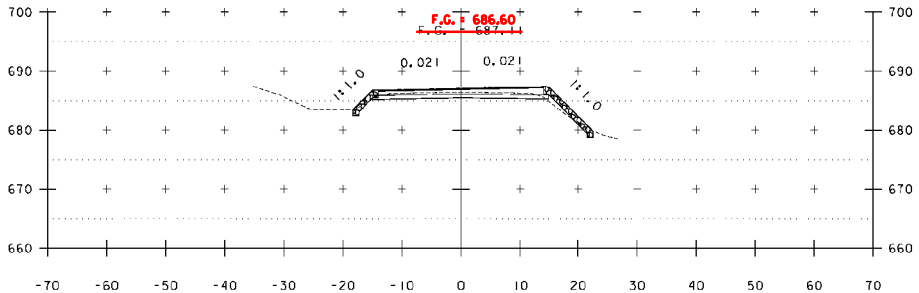

B 137+00



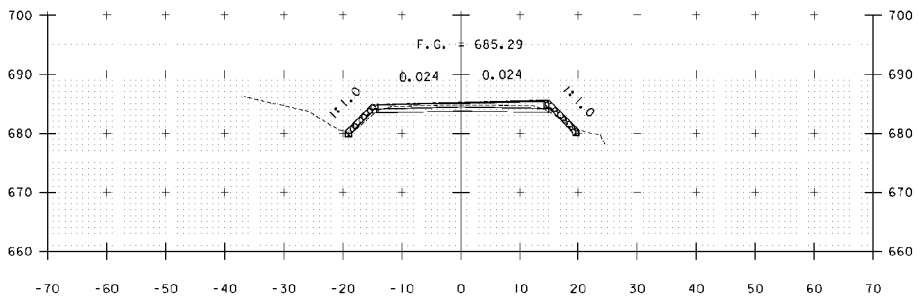

B 136+50

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 381 OF 444 |

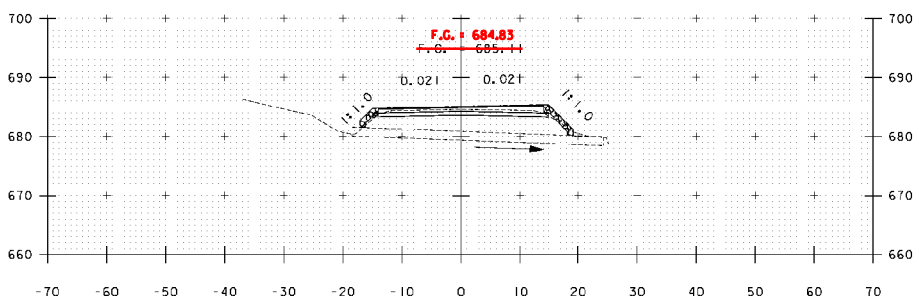
STA. B 135+50 TO STA. B 137+50



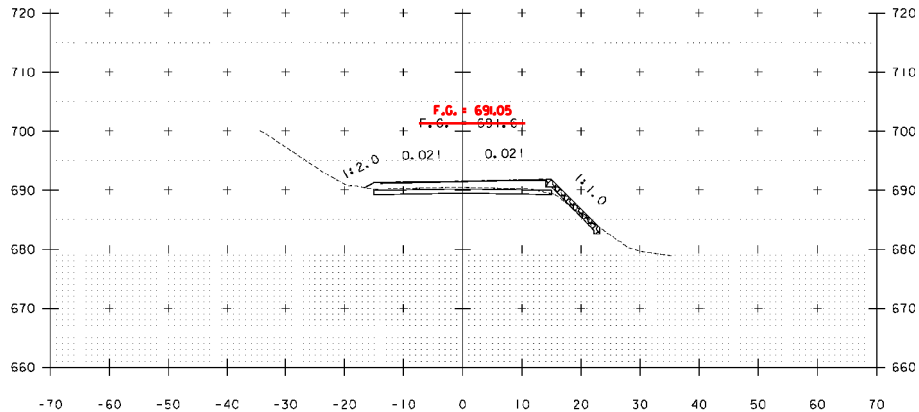

B 138+50



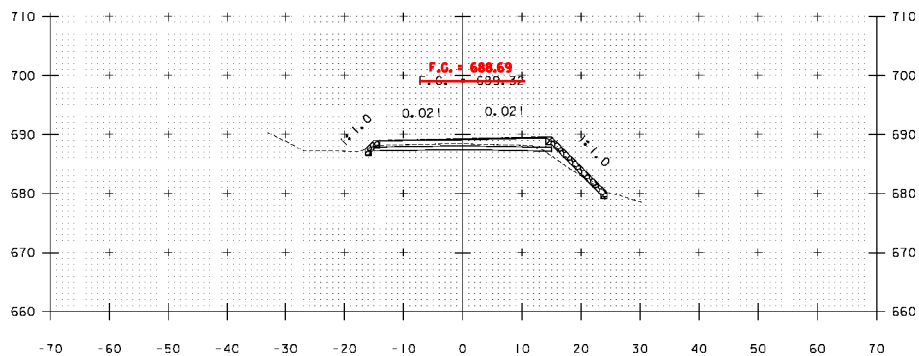

B 138+05




B 138+00



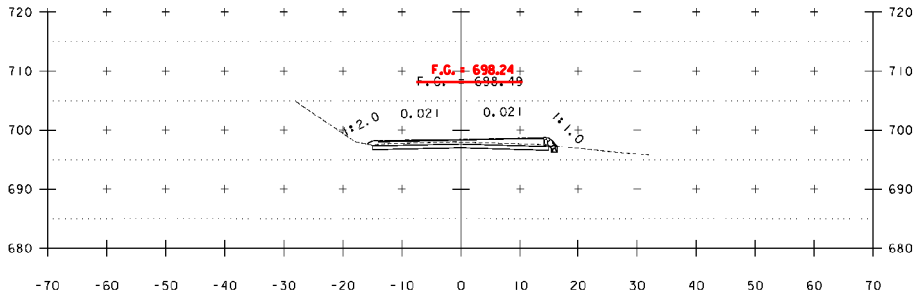

B 139+50



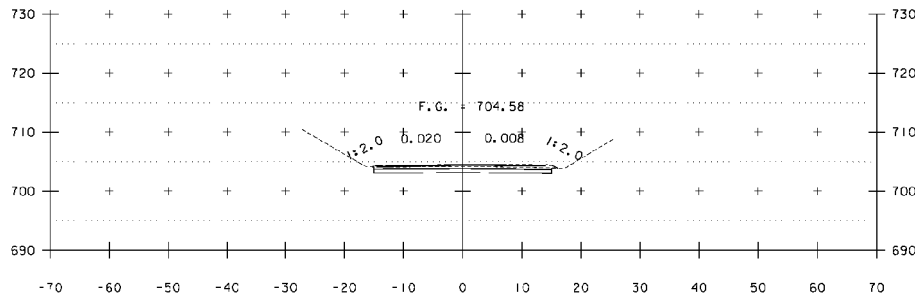

B 139+00

| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 382 OF 444 |

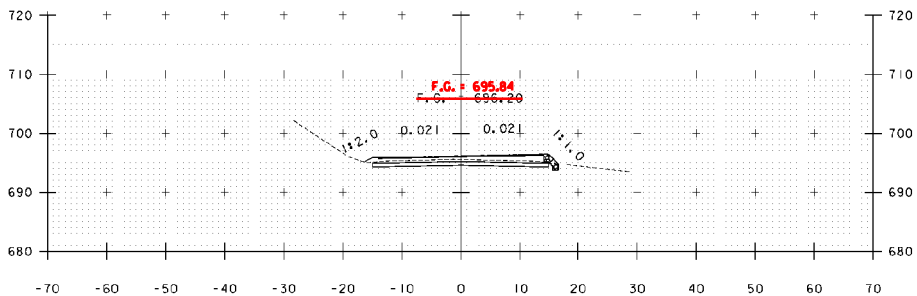
STA. B 138+00 TO STA. B 139+50



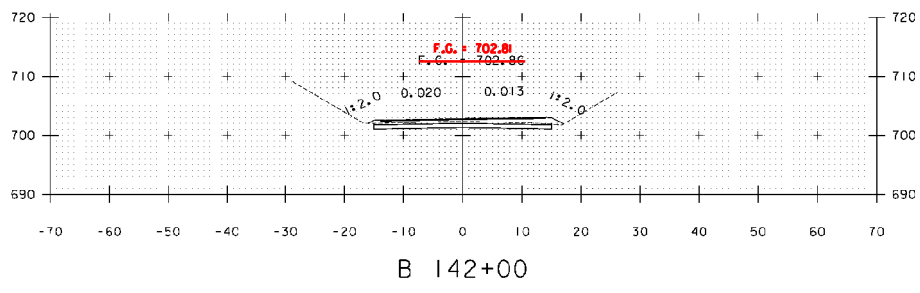

B 141+00



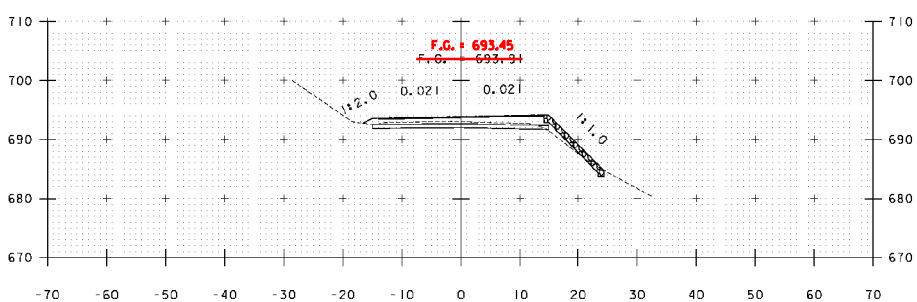

B 142+50



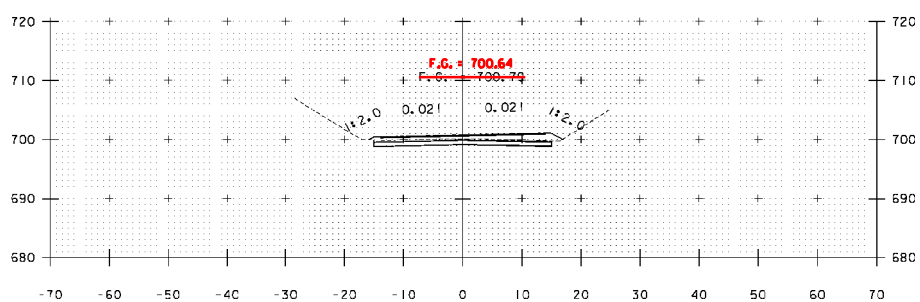

B 140+50




B 142+00




B 140+00



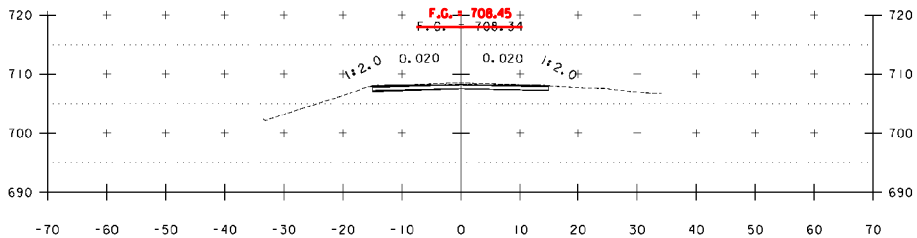

B 141+50

STA. B 140+00 TO STA. B 142+50

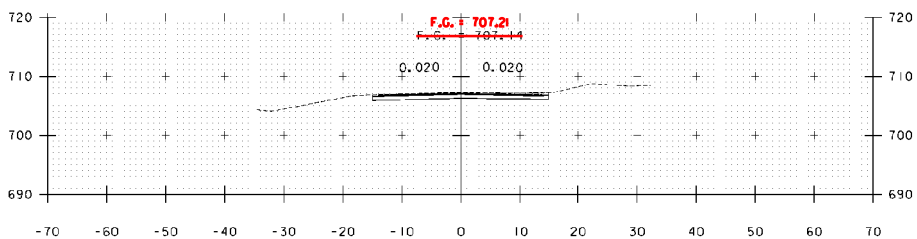
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

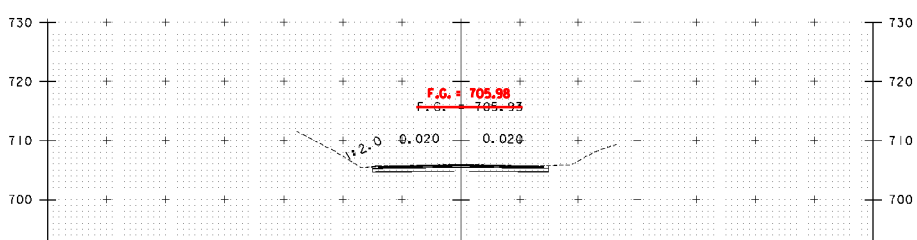
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 383 OF 444



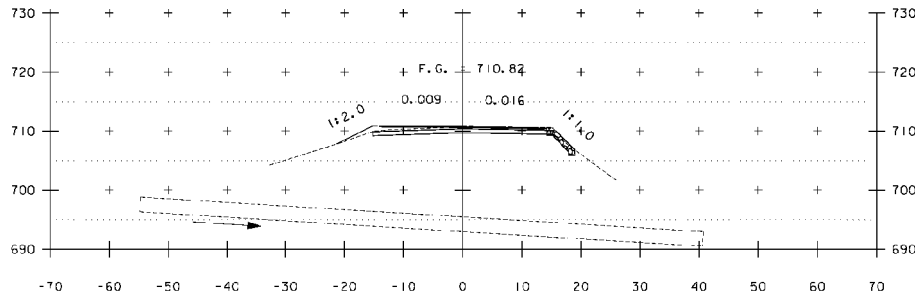

B 144+00



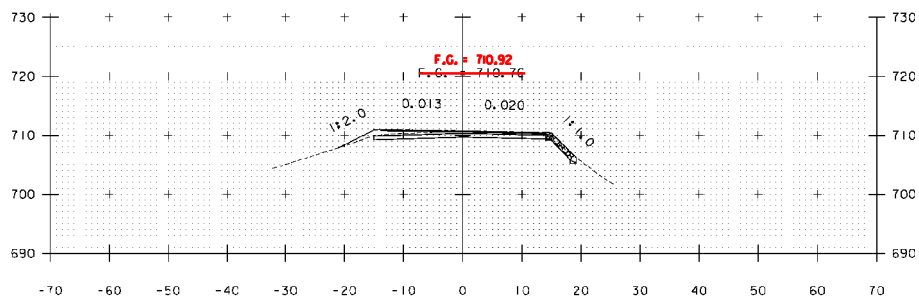

B 143+50



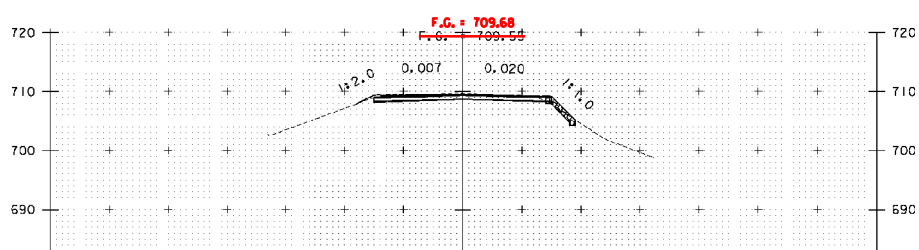

B 143+00




B 145+03




B 145+00



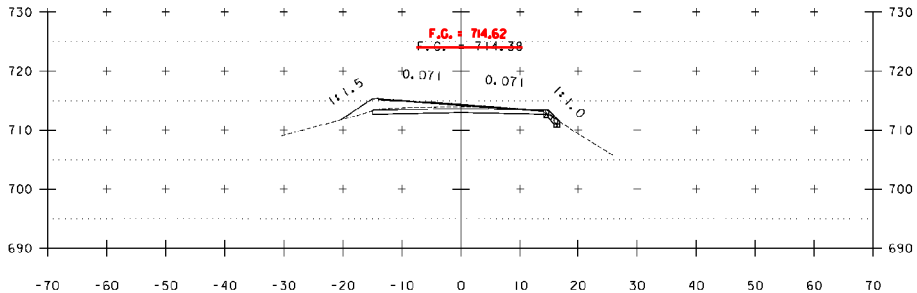

B 144+50

STA. B 143+00 TO STA. B 145+03

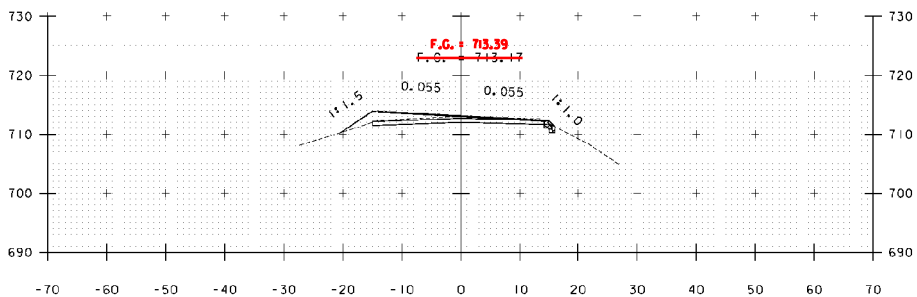
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

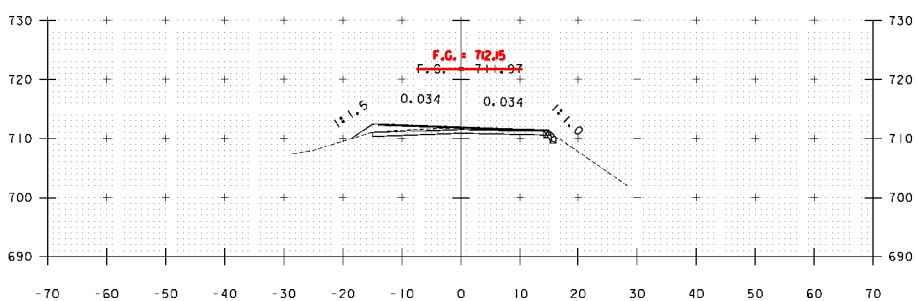
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 384 OF 444



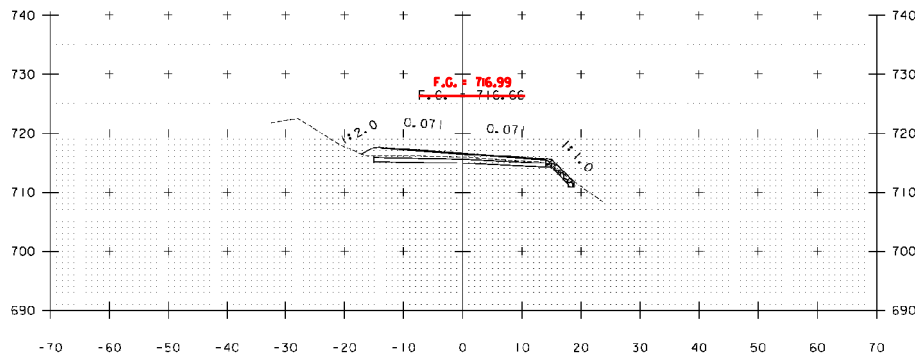

B 146+50



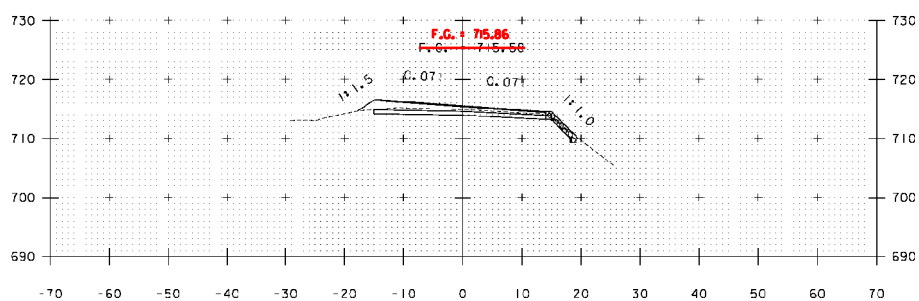

B 146+00




B 145+50




B 147+50



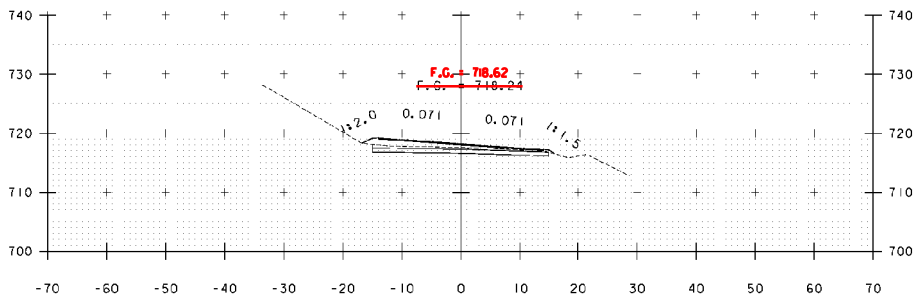

B 147+00

STA. B 145+50 TO STA. B 147+50

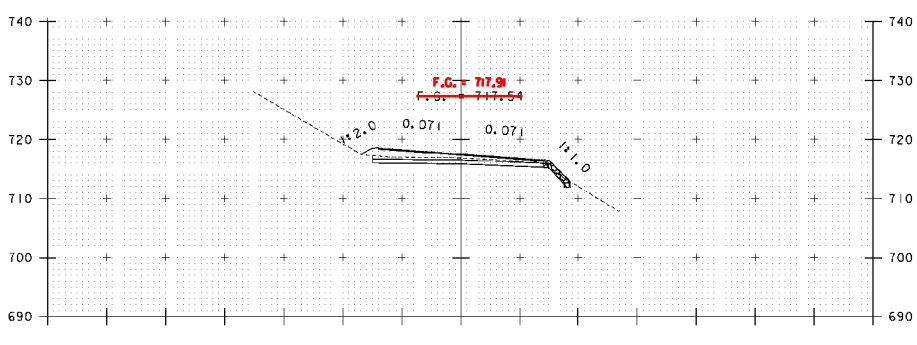
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

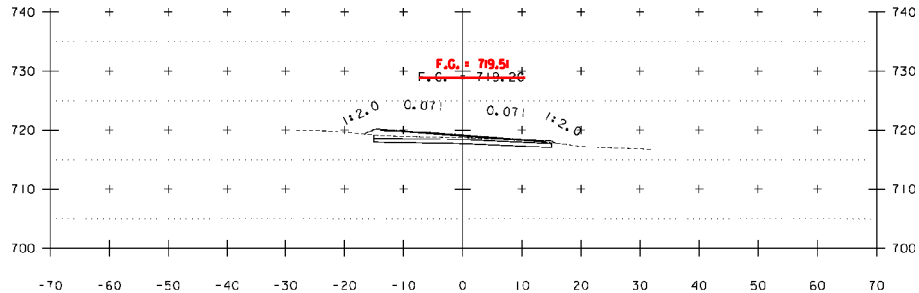
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 385 OF 444



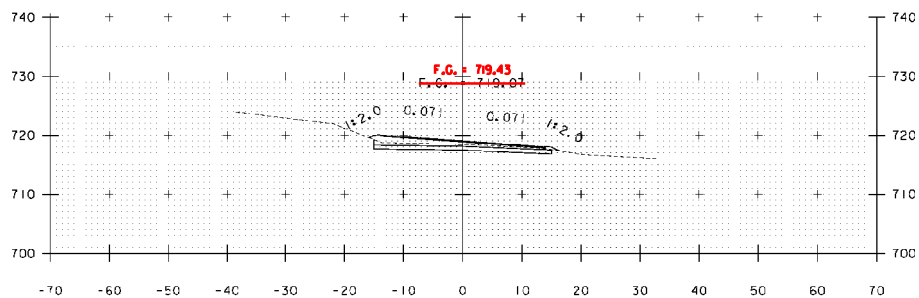

B 148+50



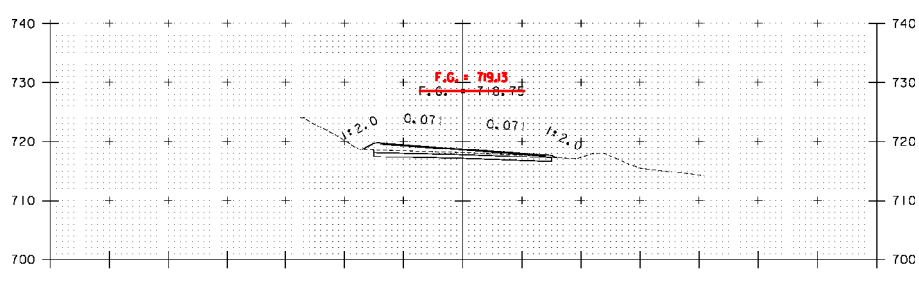

B 148+00




B 150+00



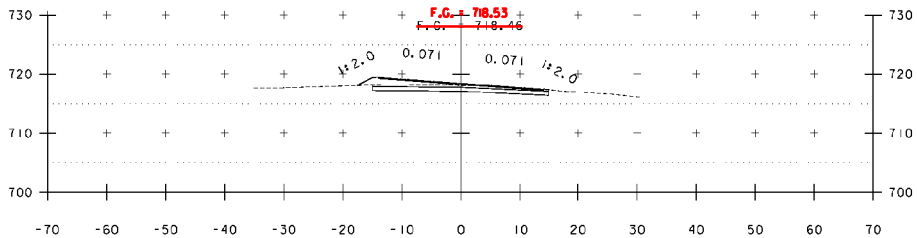

B 149+50



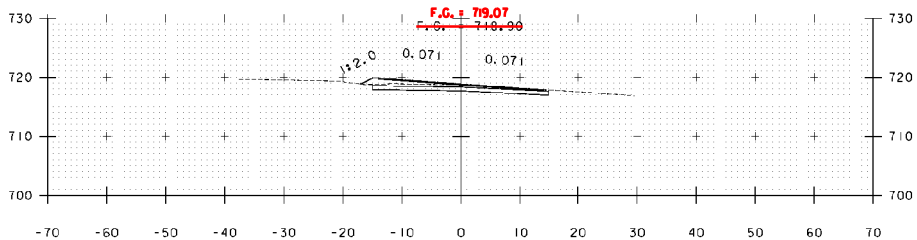

B 149+00

STA. B 148+00 TO STA. B 150+00

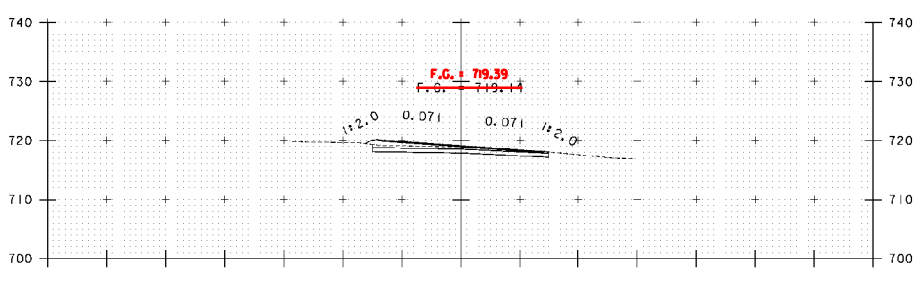
| | |
|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 386 OF 444 |



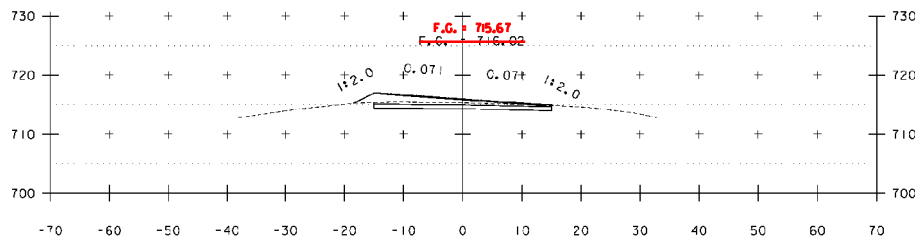

B 151+50



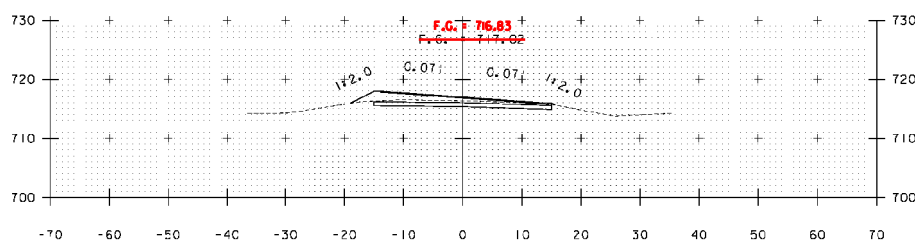

B 151+00



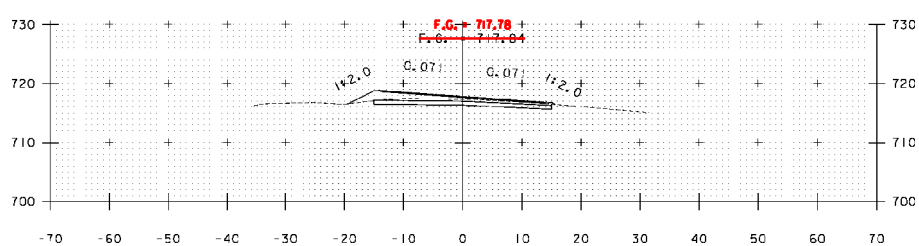

B 150+50




B 153+00




B 152+50



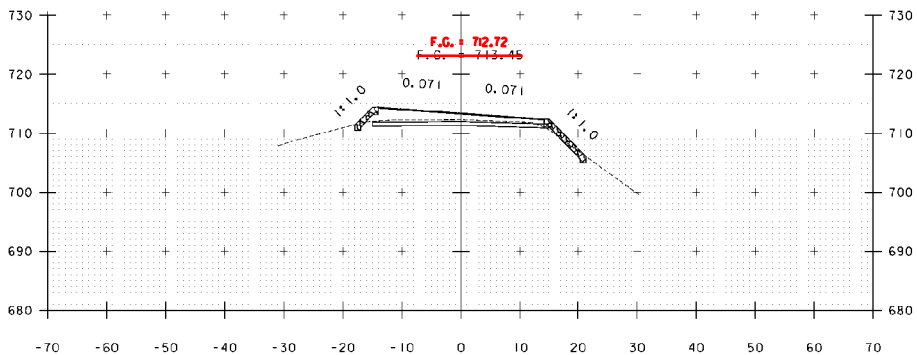

B 152+00

STA. B 150+50 TO STA. B 153+00

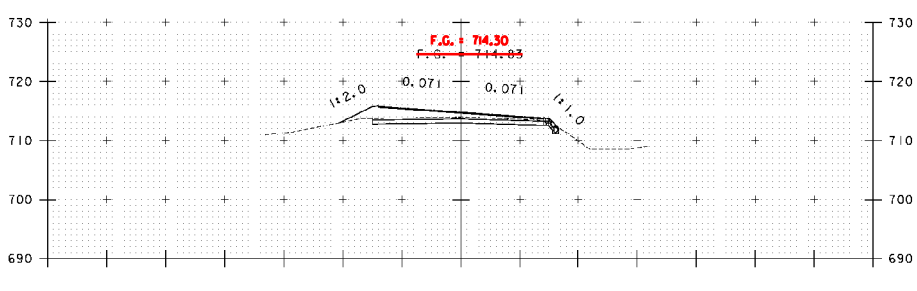
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

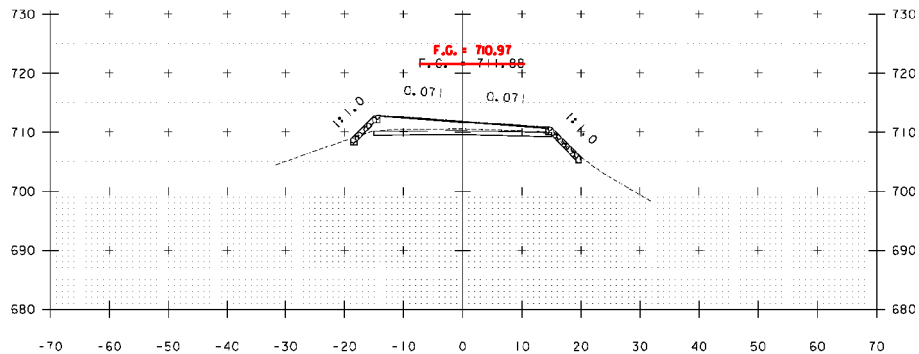
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 387 OF 444



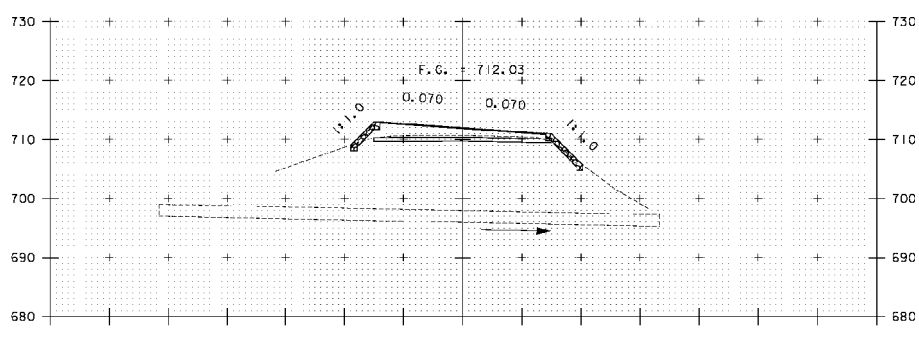

B 154+00




B 153+50




B 154+50



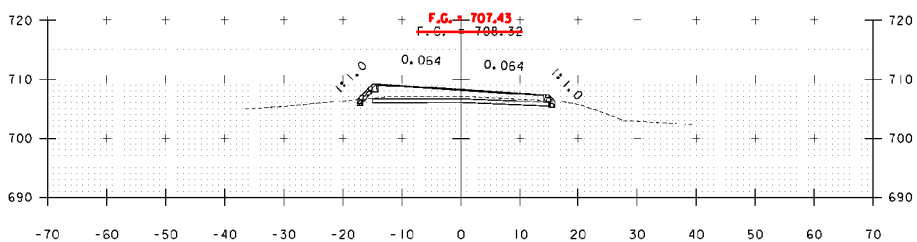

B 154+46

STA. B 153+50 TO STA. B 154+50

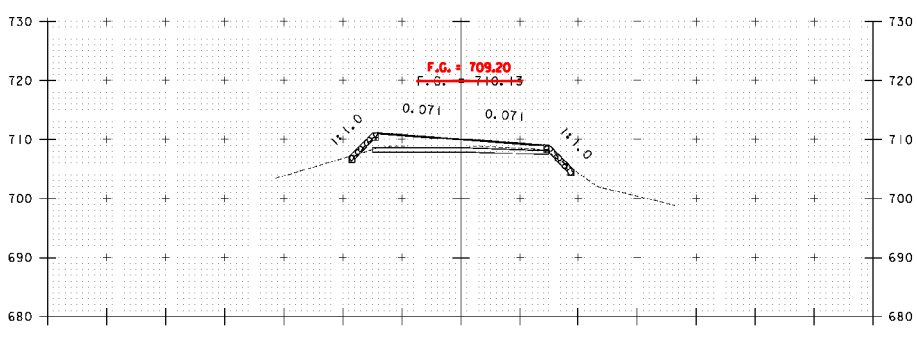
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

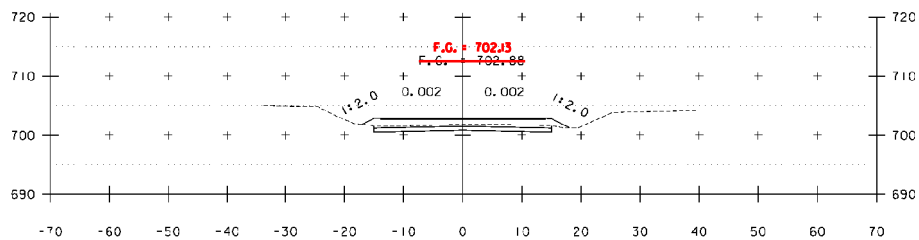
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 388 OF 444



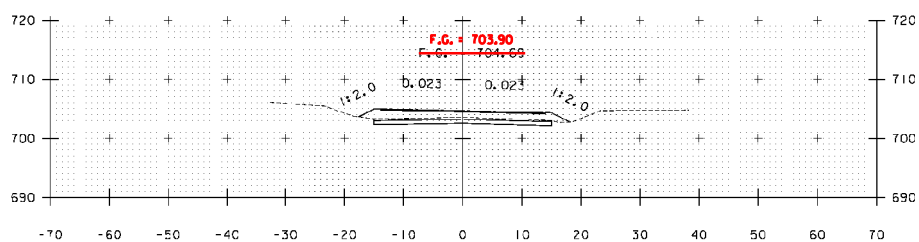

B 155+50



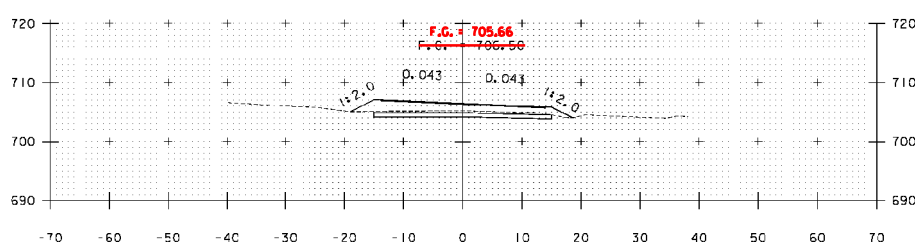

B 155+00




B 157+00




B 156+50



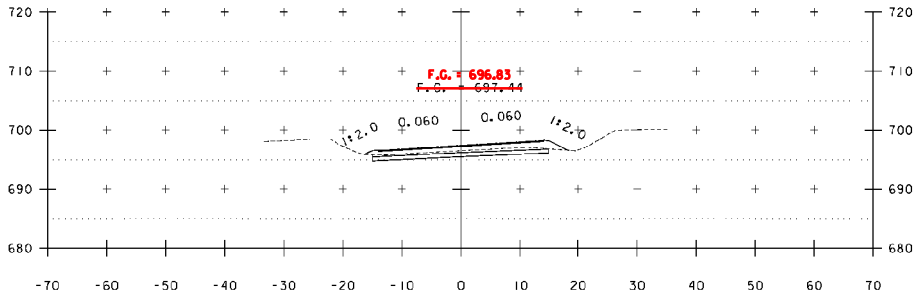

B 156+00

STA. B 155+00 TO STA. B 157+00

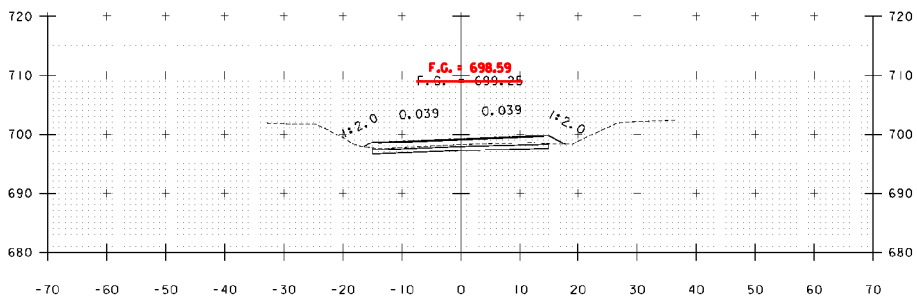
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

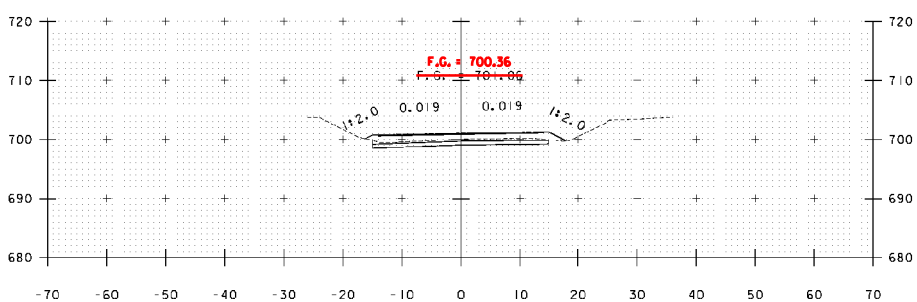
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 389 OF 444



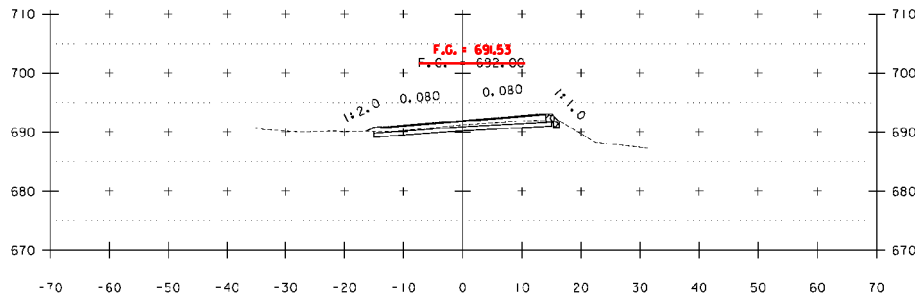

B 158+50



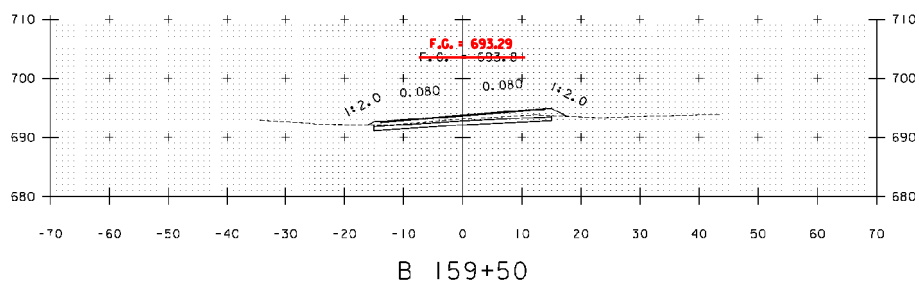

B 158+00



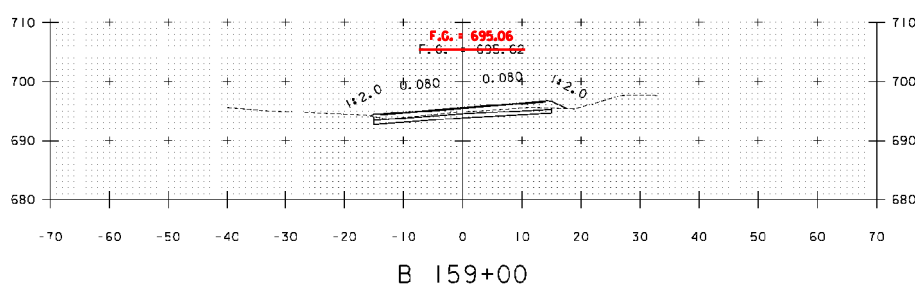

B 157+50




B 160+00




B 159+50



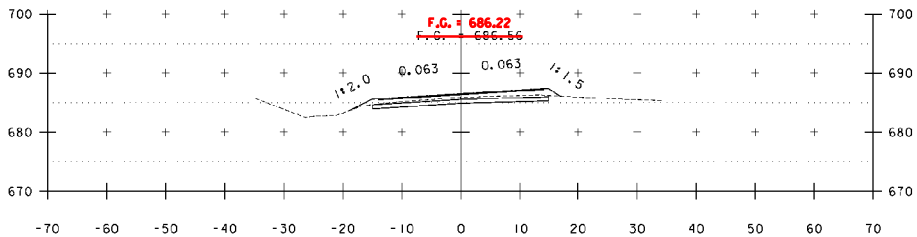

B 159+00

STA. B 157+50 TO STA. B 160+00

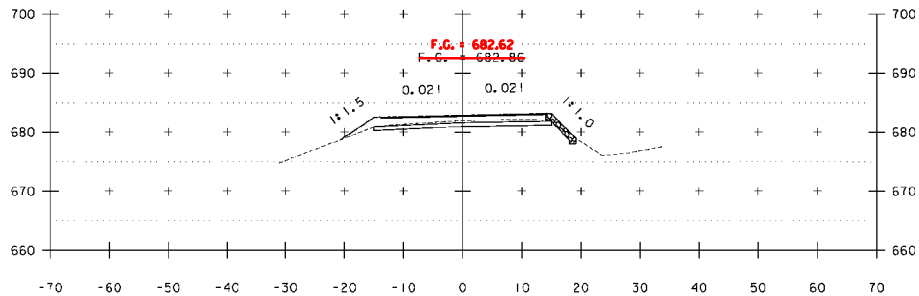
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

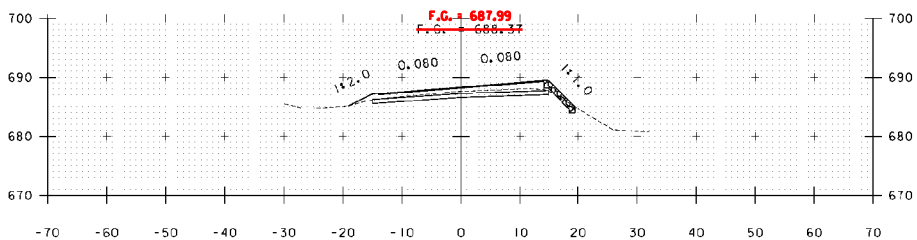
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 390 OF 444



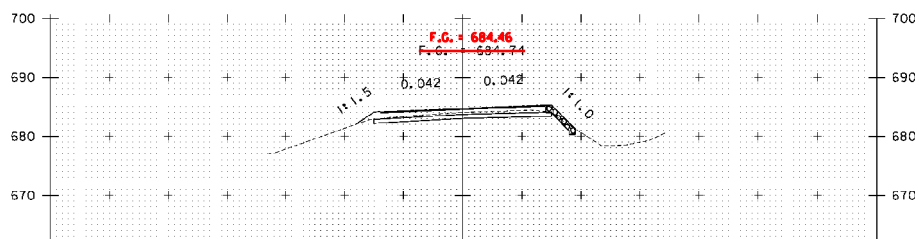

B 161+50



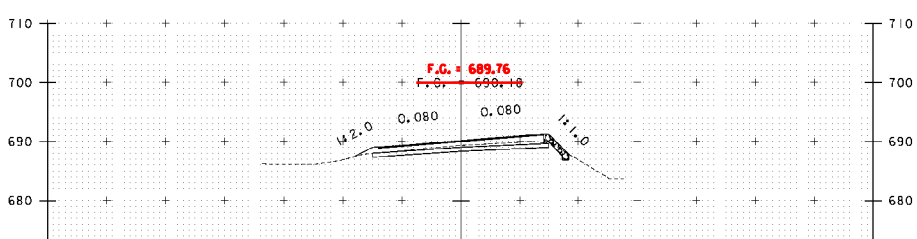

B 162+50




B 161+00



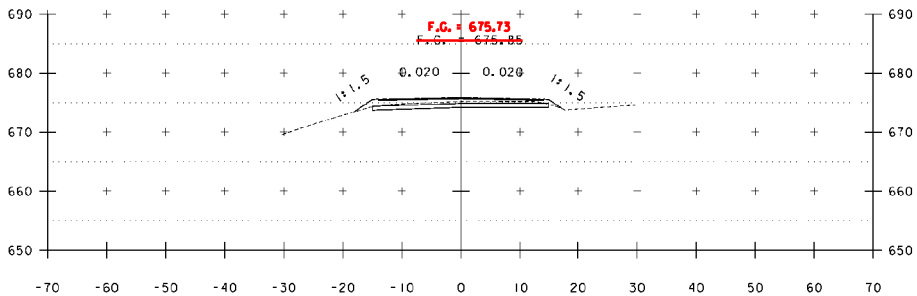

B 162+00



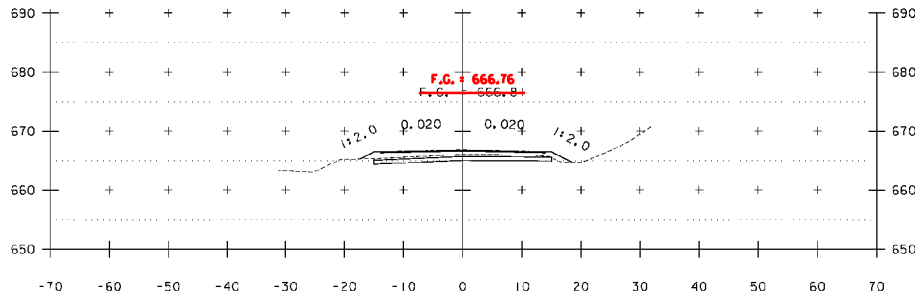

B 160+50

STA. B 160+50 TO STA. B 162+50

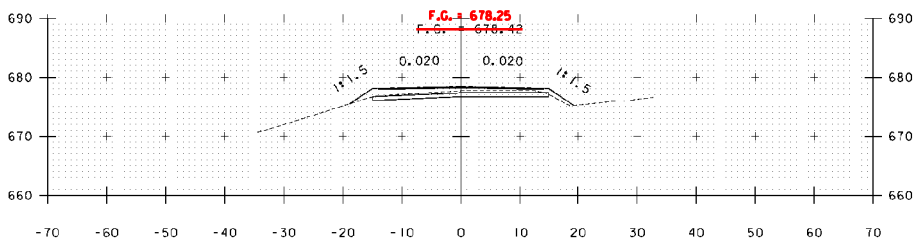
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|---|---|
| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 391 OF 444 |



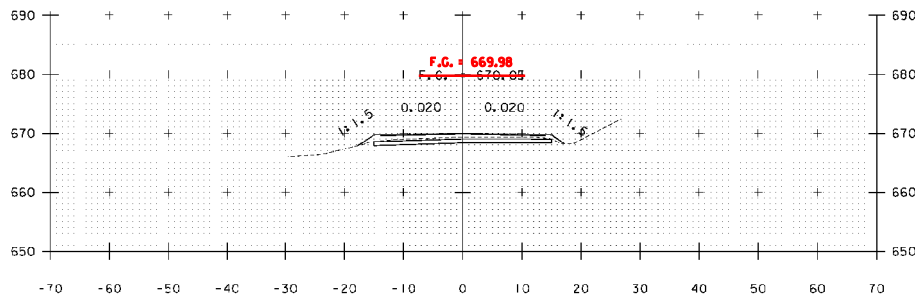

B 164+00



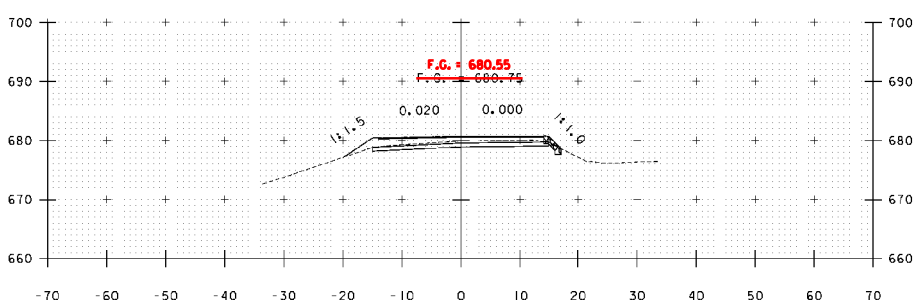

B 165+50



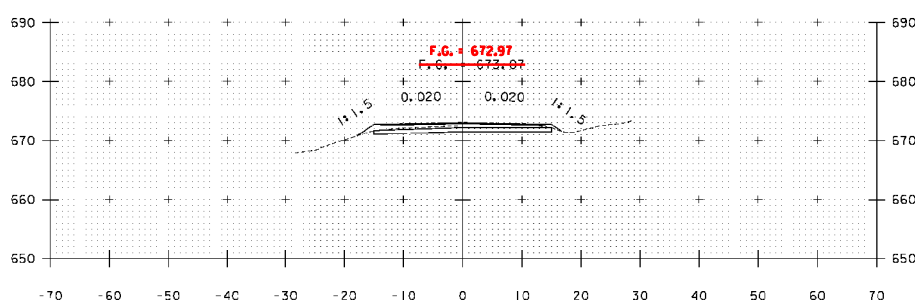

B 163+50




B 165+00




B 163+00



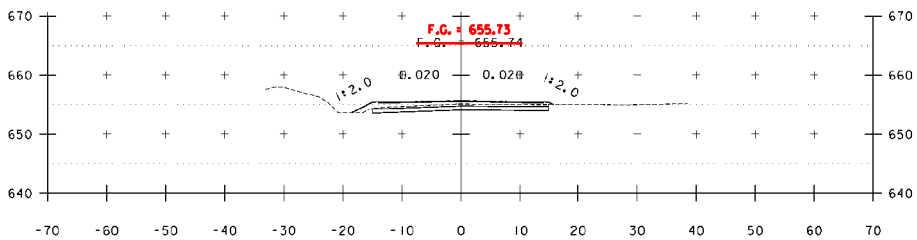

B 164+50

STA. B 163+00 TO STA. B 165+50

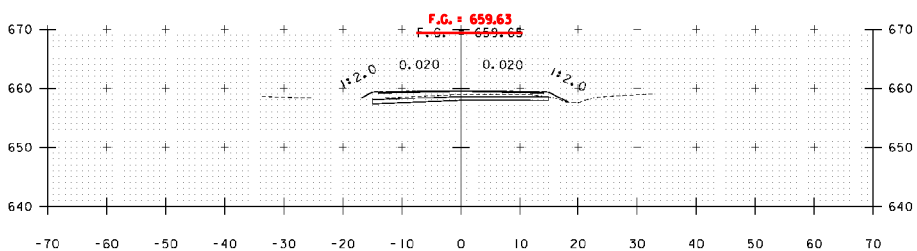
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

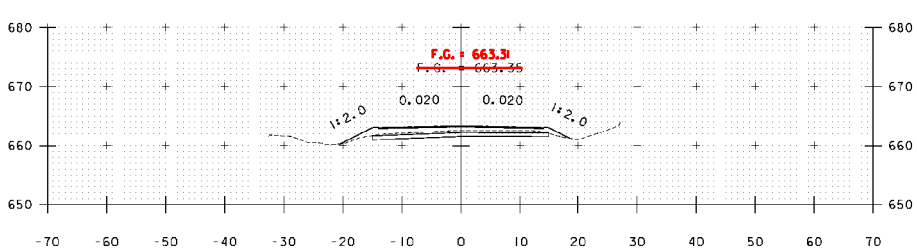
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 392 OF 444



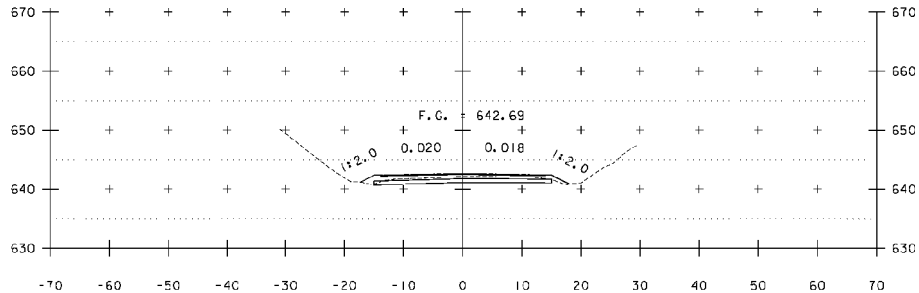

B 167+00



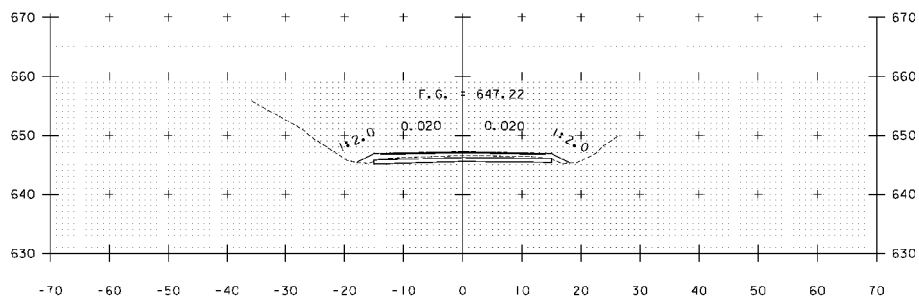

B 166+50



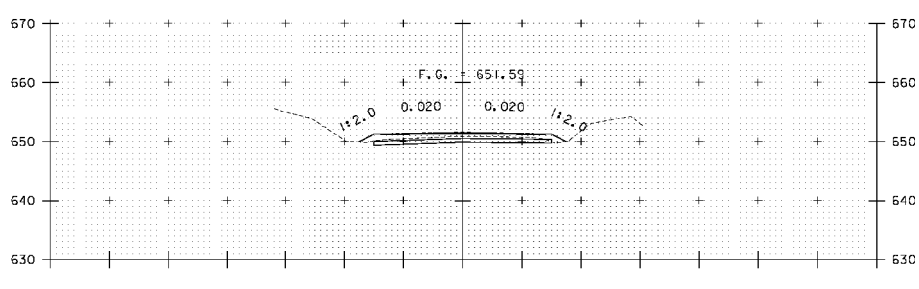

B 166+00




B 168+50




B 168+00



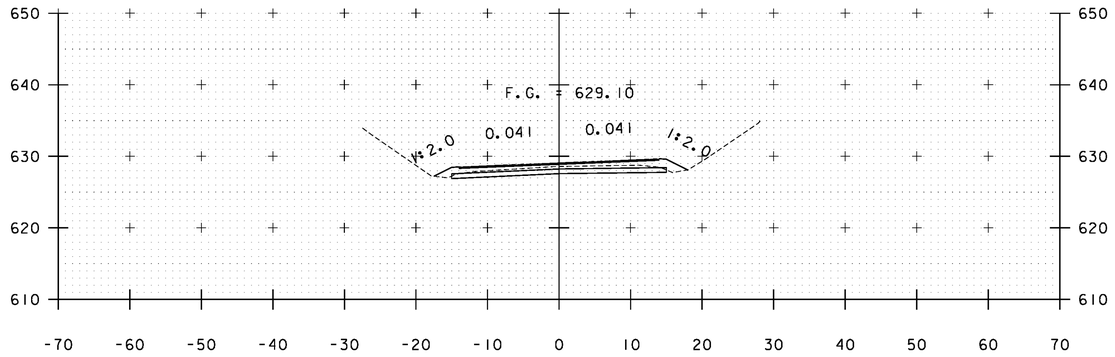

B 167+50

STA. B 166+00 TO STA. B 168+50

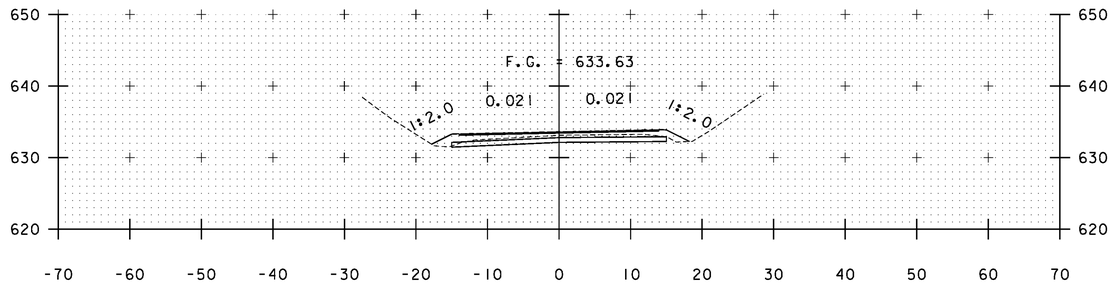
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

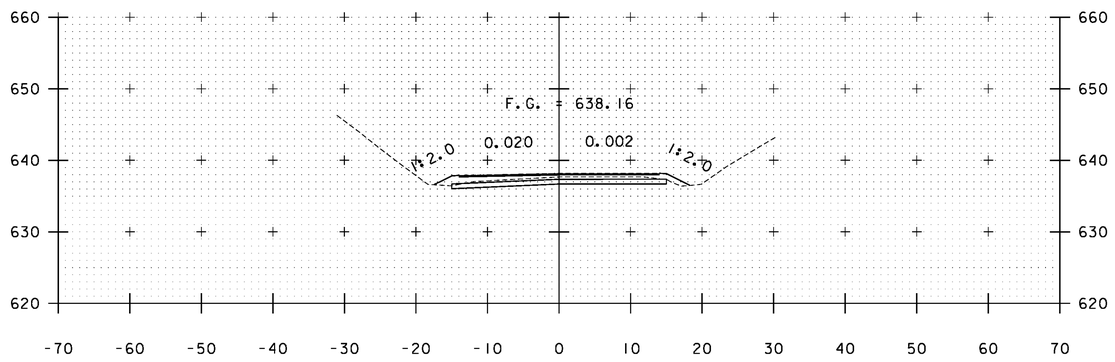
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 393 OF 444



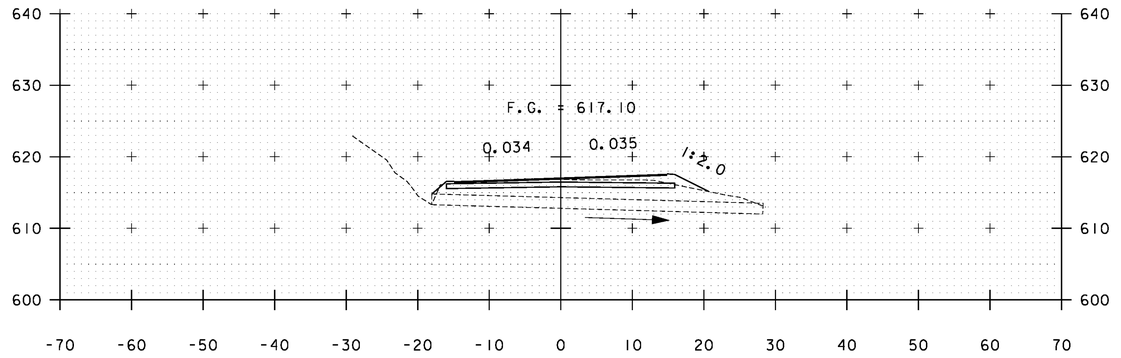

B 170+00



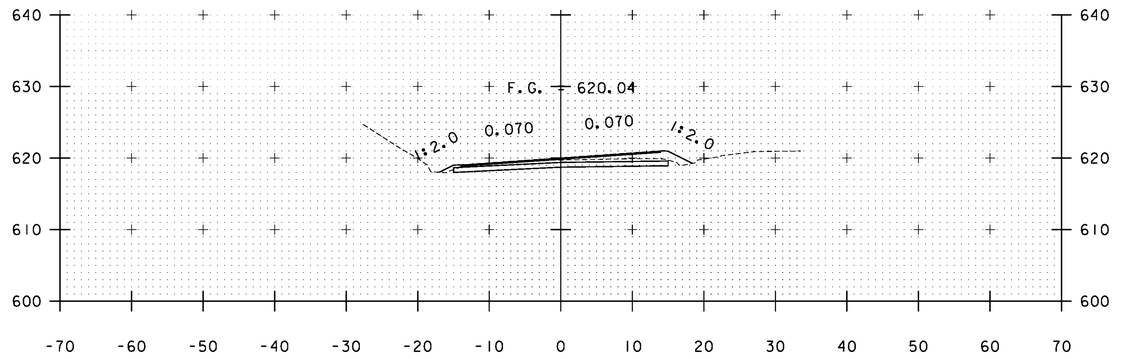

B 169+50



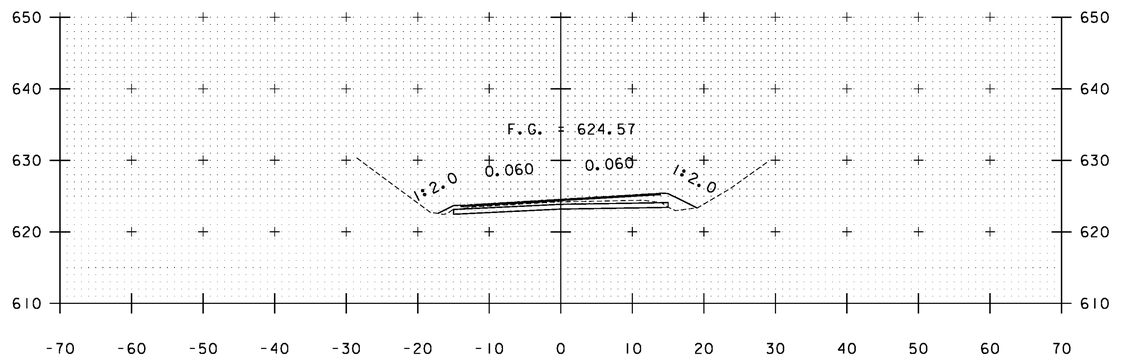

B 169+00




B 171+32



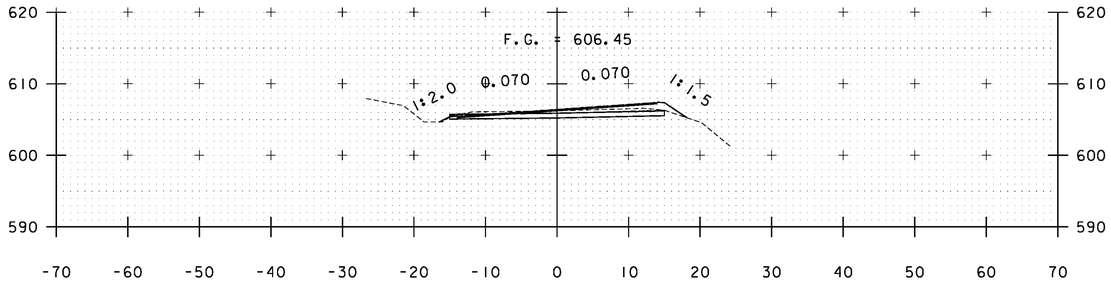

B 171+00



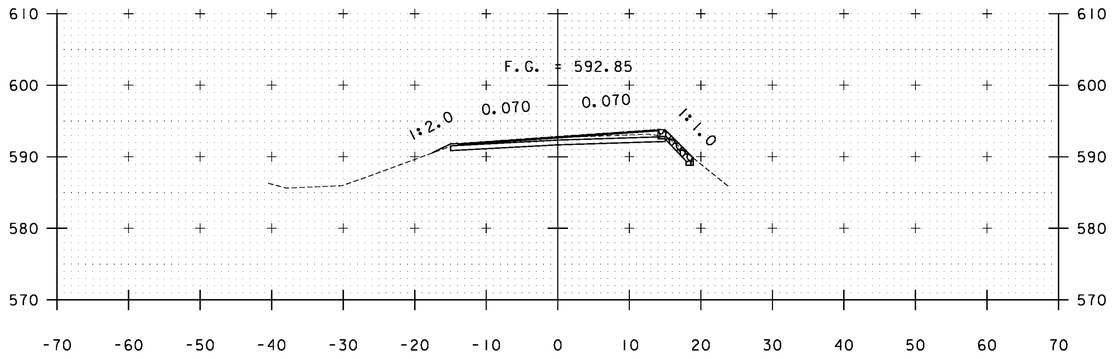

B 170+50

STA. B 169+00 TO STA. B 171+32

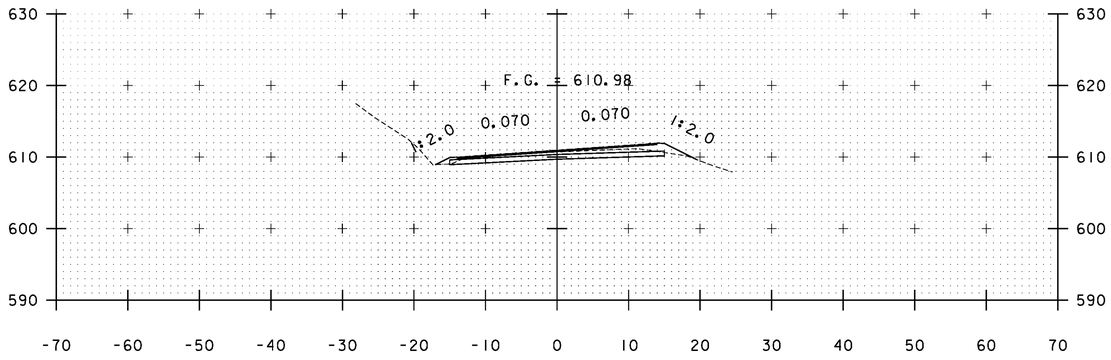
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| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 394 OF 444 |



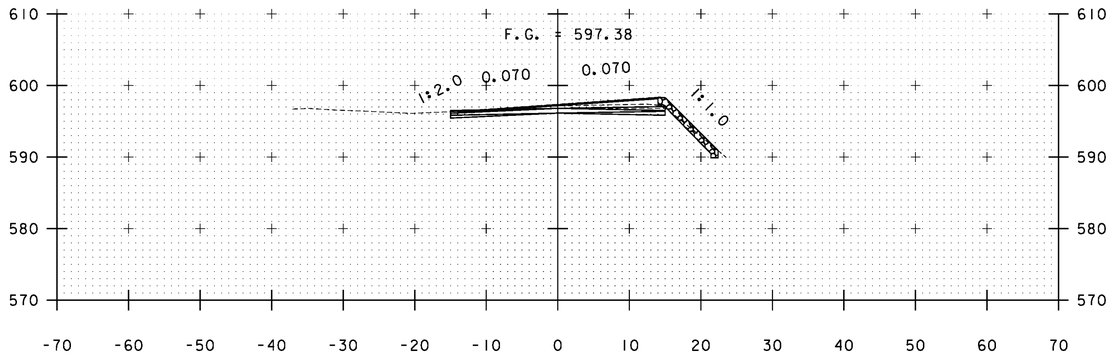

B 172+50



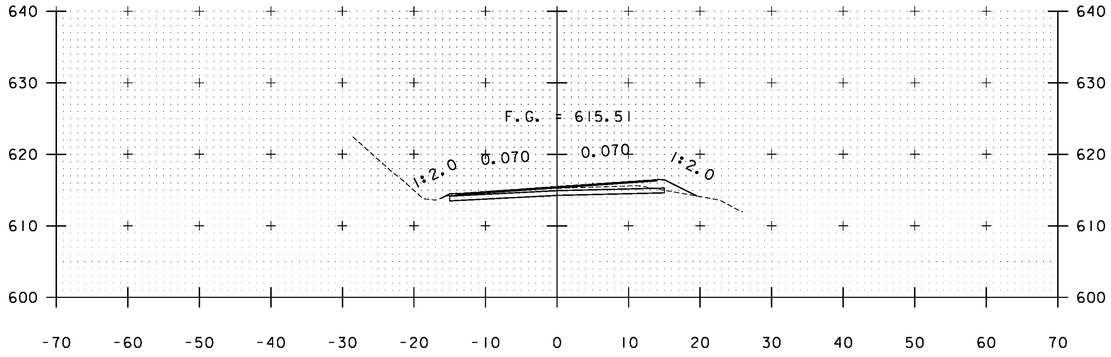

B 174+00



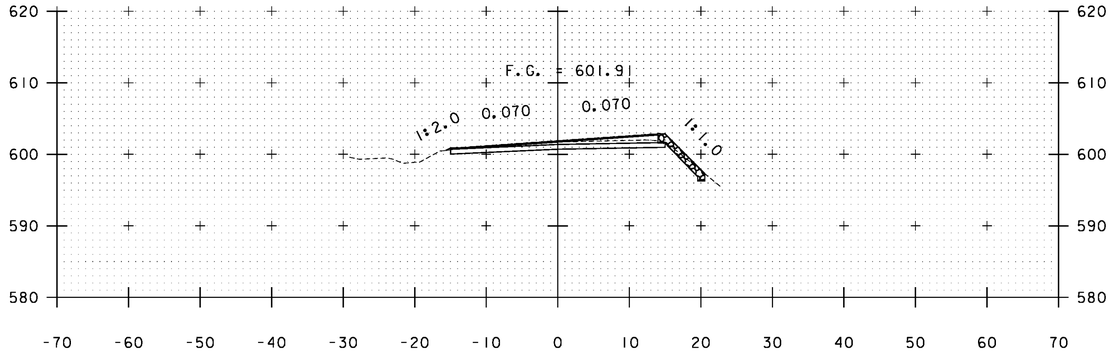

B 172+00




B 173+50




B 171+50



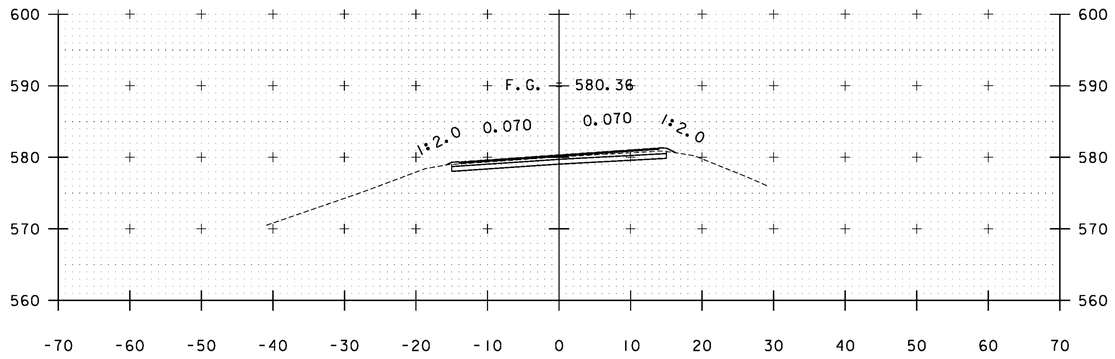

B 173+00

STA. B 171+50 TO STA. B 174+00

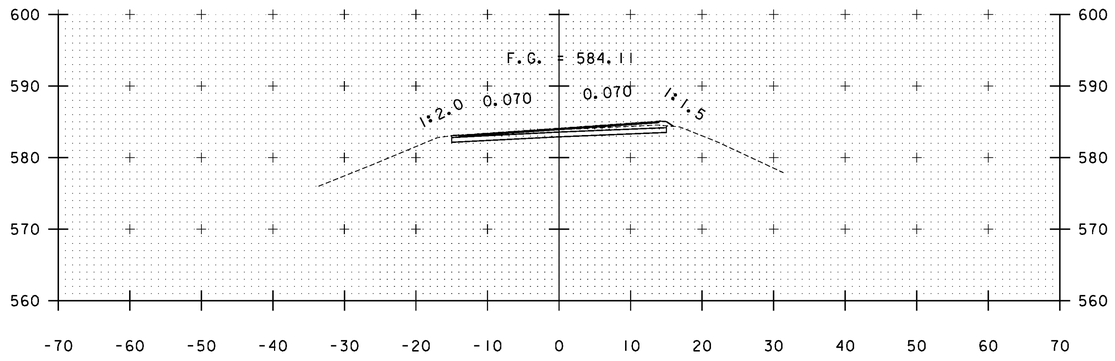
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

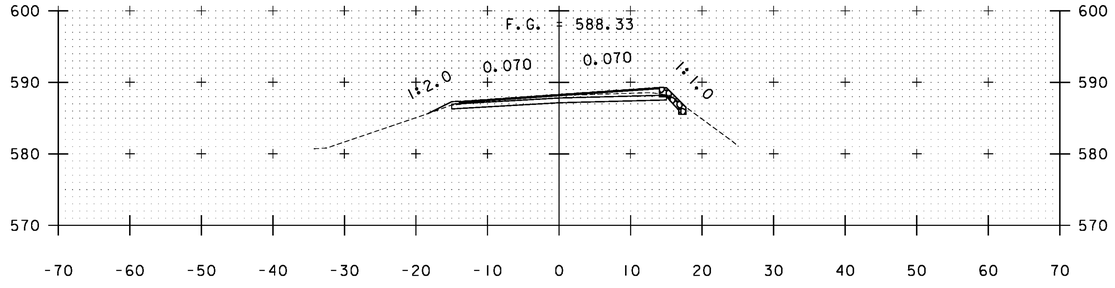
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 395 OF 444



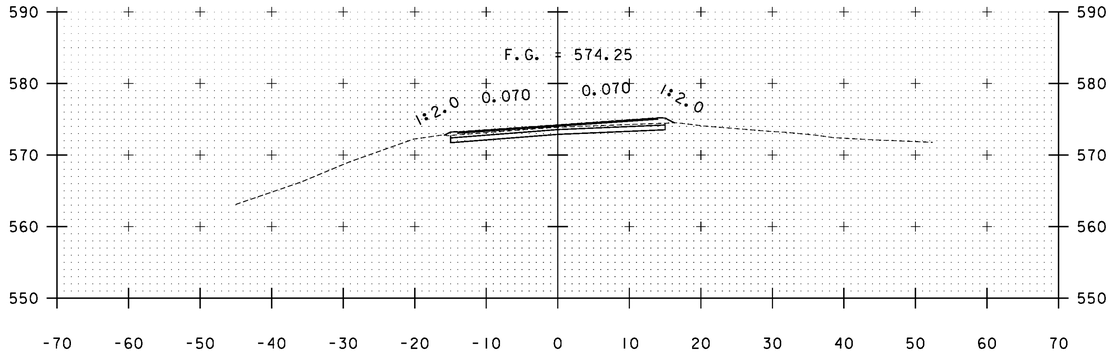

B 175+50



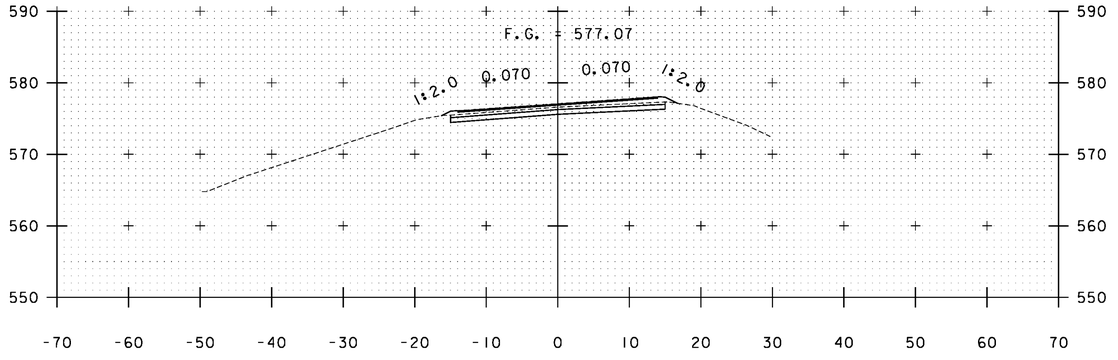

B 175+00




B 174+50



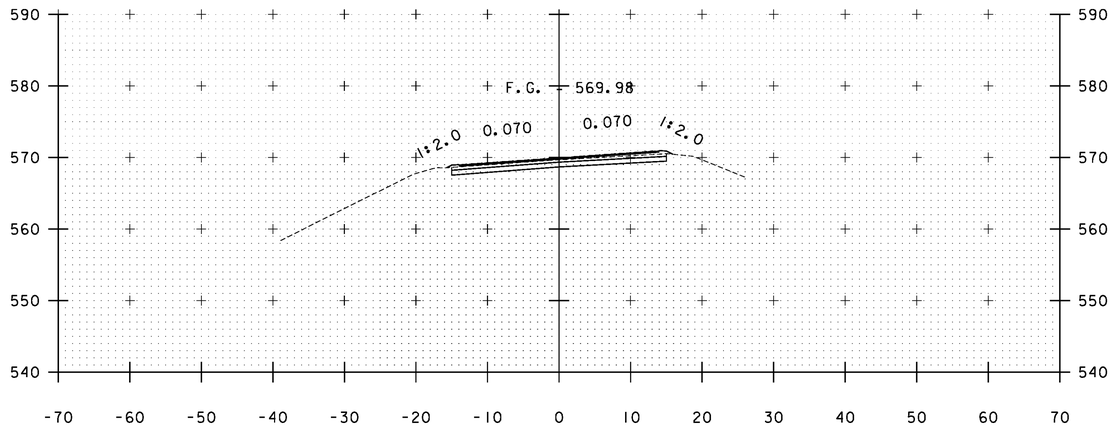

B 176+50




B 176+00

STA. B 174+50 TO STA. B 176+50

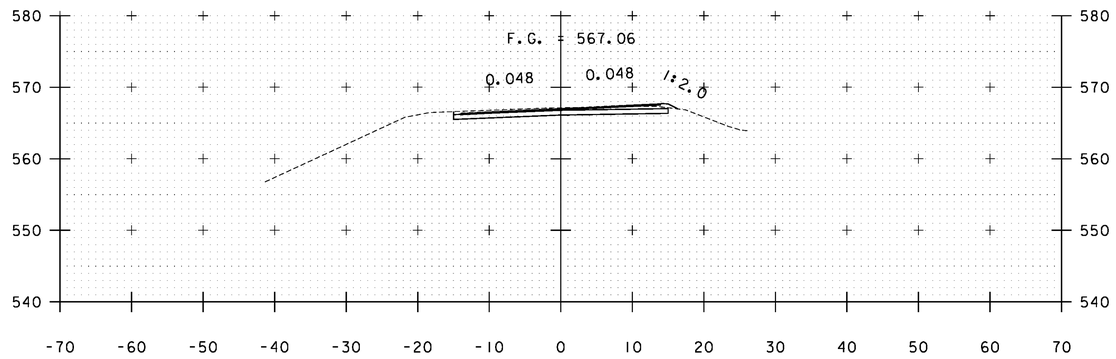
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| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 3/18/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 396 OF 444 |



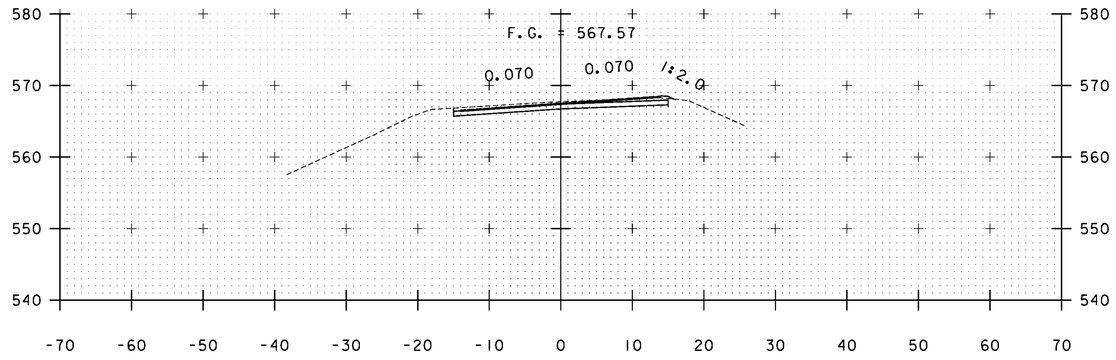

B 177+50



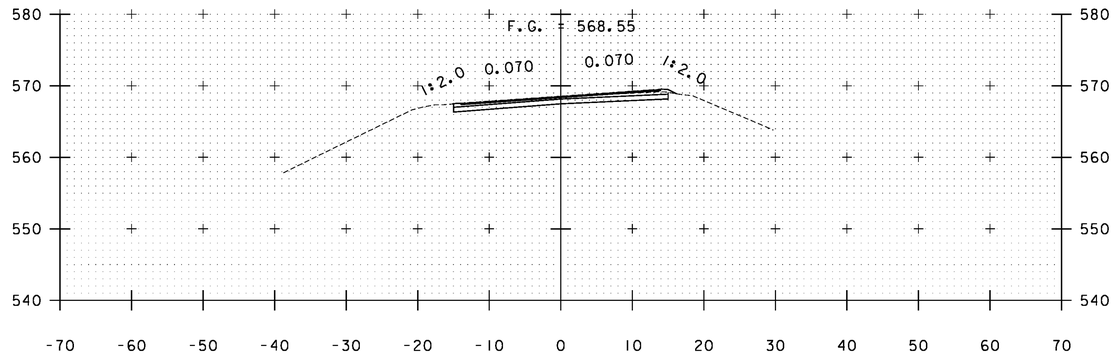

B 177+00




B 179+00



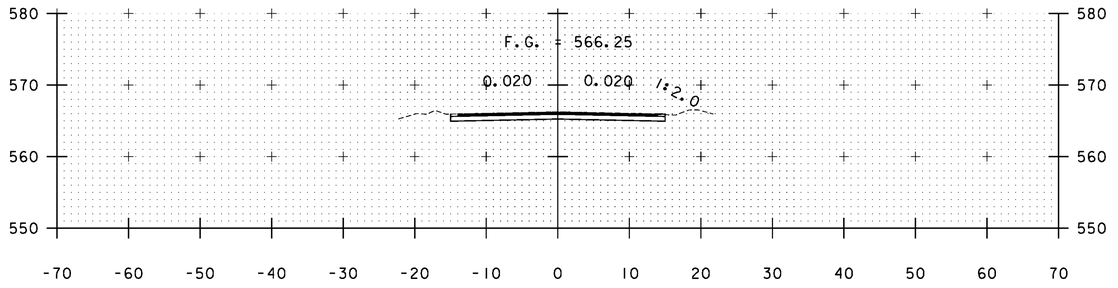

B 178+50



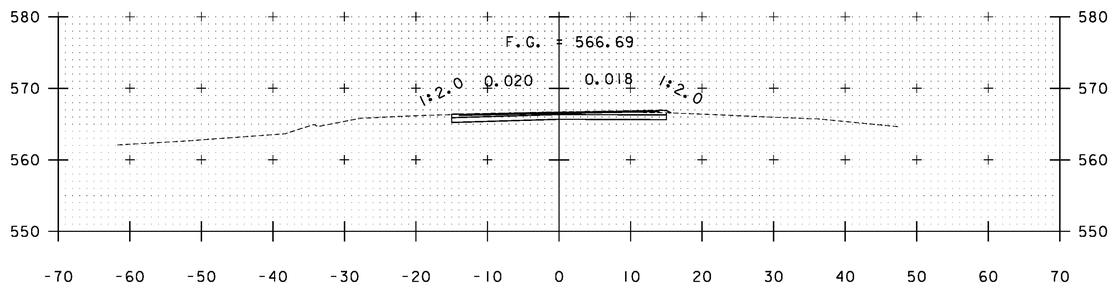

B 178+00

STA. B 177+00 TO STA. B 179+00

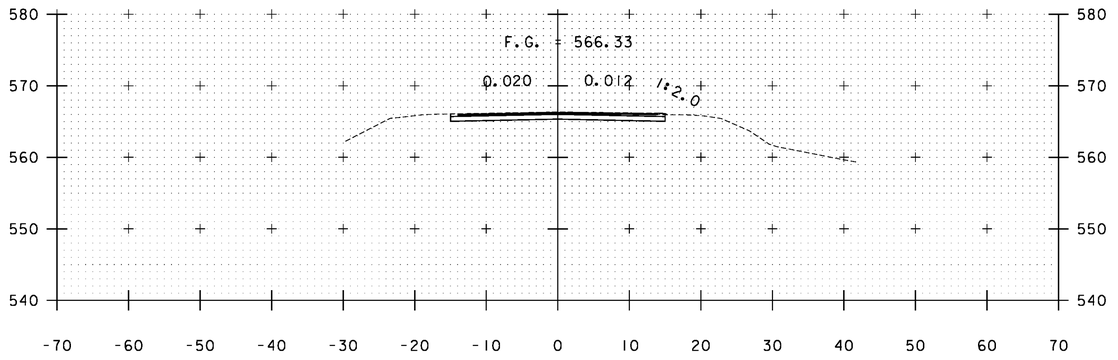
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| PROJECT NAME: | WARDSBORO-JAMAICA |
| PROJECT NUMBER: | ER STP 013-1(17) |
| FILE NAME: xs.dgn | PLOT DATE: 2/26/2014 |
| PROJECT LEADER: K. UPMAL | DRAWN BY: B. KIPP |
| DESIGNED BY: B. KIPP | CHECKED BY: HSD |
| CROSS SECTIONS | SHEET 397 OF 444 |




B 180+12




B 179+50




B 180+00

STA. B 179+50 TO STA. B 180+12

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

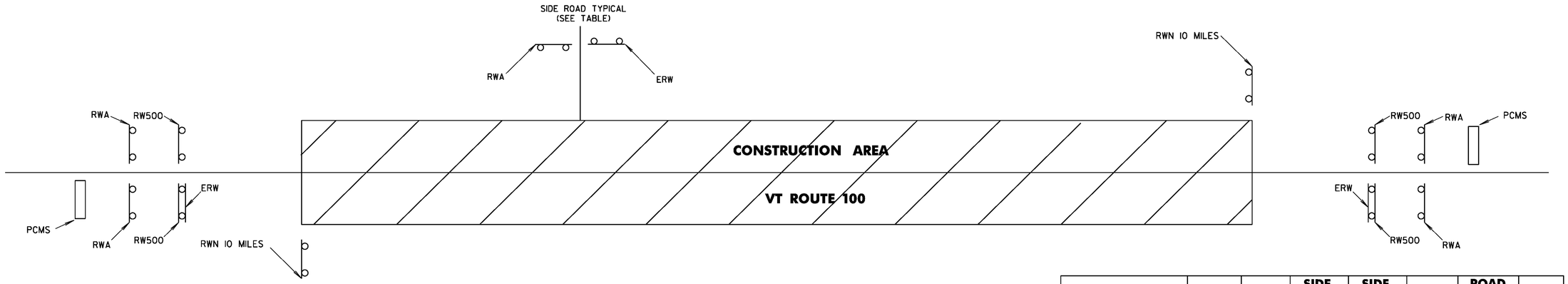
FILE NAME: xs.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CROSS SECTIONS

PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: HSD
SHEET 398 OF 444

# CONSTRUCTION APPROACH SIGNING

NOT TO SCALE

SEE STD T-10, T-17 AND T-28 TO T-31 FOR SIGN PLACEMENT




## NOTES:

1. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH THE TRAFFIC CONTROL NOTES AND PART 6 OF THE MUTCD. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL".

2. THE BID PRICE FOR "TRAFFIC CONTROL", ITEM 641.10, SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE RESIDENT ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY:

   646.600, 646.610, 646.682 AND 646.690 - TEMPORARY PAVEMENT MARKINGS
   646.76 - LINE STRIPING TARGETS
   630.10 UNIFORMED TRAFFIC OFFICER, 630.15 - FLAGGERS

3. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WILL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE RESIDENT ENGINEER. THESE SIGNS WILL BE PAID FOR UNDER ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN".

   PCMS SHOULD NOT REPLACE ANY OF THE SIGNING DETAILED IN THE MUTCD AND SHOULD NOT BE USED IF STANDARD TRAFFIC CONTROL DEVICES ADEQUATELY PROVIDE THE INFORMATION THE MOTORISTS NEED TO TRAVEL SAFELY.

4. THE PCMS SHALL CONSIST OF EITHER ONE OR TWO PHASES. TYPICALLY, A PHASE SHALL CONSIST OF UP TO THREE LINES OF EIGHT CHARACTERS PER LINE. THE PCMS SHOULD BE USED AS A SUPPLEMENT AND NOT AS A SUBSTITUTE FOR CONVENTIONAL SIGNS AND PAVEMENT MARKINGS.

   THE PCMS SHOULD COMMUNICATE WHAT INFORMATION MOTORISTS NEED TO KNOW. UNNECESSARY INFORMATION SHOULD BE AVOIDED. MESSAGES SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS.

   THE MUTCD 2009 SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS, SIGNALS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC CONTROL DEVICES ARE ERECTED OR PLACED OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.

5. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS.

6. CONES SHALL BE USED TO CLEARLY DEFINE THE TRAVEL SPACE AND PROVIDE SEPARATION FROM THE WORK SPACE ALONG ITS ENTIRE LENGTH.

7. AS THE PAVING OPERATION MOVES, THE FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 1000 FT FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY IF FLAGGING OPERATIONS CEASE FOR MORE THAN 15 MINUTES.

8. ALL PERMANENT SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED, THE PAYMENT FOR WHICH SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10 TRAFFIC CONTROL.

9. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE 2009 MUTCD.

10. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VAOT STANDARDS.

11. DIAMOND SHAPED SIGNS SHALL BE 4'X4' WITH BLACK TEXT AND BORDER ON A RETROREFLECTIVE FLOURESCENT ORANGE BACKGROUND.

12. RETROREFLECTIVE SHEETING SHALL BE AS SPECIFIED IN THE SPECIAL PROVISIONS.

13. CONSTRUCTION ZONE SIGNS SHALL BE INSTALLED AS SPECIFIED IN THE SPECIAL PROVISIONS.

14. WHERE TEMPORARY SIGNS ARE PLACED BEHIND GUARDRAIL, THEY SHALL BE ADJUSTED SUCH THAT THE BOTTOM OF THE SIGNS ARE ABOVE THE TOP OF GUARDRAIL.

| | ROAD WORK AHEAD | END ROAD WORK | SIDE ROAD WORK AHEAD | SIDE ROAD WORK 500 FT | ROAD WORK 500 FT | ROAD WORK NEXT 10 MILES | PCMS |
|---|---|---|---|---|---|---|---|
| **Wardsboro** | | | | | | | |
| BEGIN PROJECT (VT 100) | 2 | 2 | | | 2 | 1 | 1 |
| MEADOWWOOD LN | 1 | 1 | | | | | |
| TURKWOOD RD | 1 | 1 | | | | | |
| UPPER PODUNK RD | 1 | 1 | | | | | |
| STRATTON ARLINGTON RD | 1 | 1 | | | | | |
| GREEN MOUNTAIN DR | 1 | 1 | | | | | |
| SMEAD RD | 1 | 1 | | | | | |
| NEWALL HILL RD | 1 | 1 | | | | | |
| SHELDON HILL RD | 1 | 1 | | | | | |
| FITTS RD | 1 | 1 | | | | | |
| LOWER PODUNK RD | 1 | 1 | | | | | |
| BILLS RD | 1 | 1 | | | | | |
| BILLS RD | 1 | 1 | | | | | |
| GILFREATHER RD | 1 | 1 | | | | | |
| SCHOOL RD | 1 | 1 | | | | | |
| **Jamaica** | | | | | | | |
| SMITH RD | 1 | 1 | | | | | |
| HENDERSON RD | 1 | 1 | | | | | |
| OLD ROUTE 8 | 2 | 2 | | | | | |
| PINEAPPLE HILL LANE | 1 | 1 | | | | | |
| CUSHING LANE | 1 | 1 | | | | | |
| COBB LANE | 1 | 1 | | | | | |
| RIVER RD | 1 | 1 | | | | | |
| EATON RD | 1 | 1 | | | | | |
| END PROJECT (VT 100) | 2 | 2 | | | 2 | 1 | 1 |
| | | | | | | | |
| TOTALS | 27 | 27 | 0 | 0 | 4 | 2 | 2 |

LEGEND

RWA = ROAD WORK AHEAD
RW500 = ROAD WORK 500 FT
SRWA = SIDE ROAD WORK AHEAD
SRW500 = SIDE ROAD WORK 500 FT
ERW = END ROAD WORK
RWN = ROAD WORK NEXT 9 MILES
PCMS = PORTABLE CHANGEABLE MESSAGE SIGN

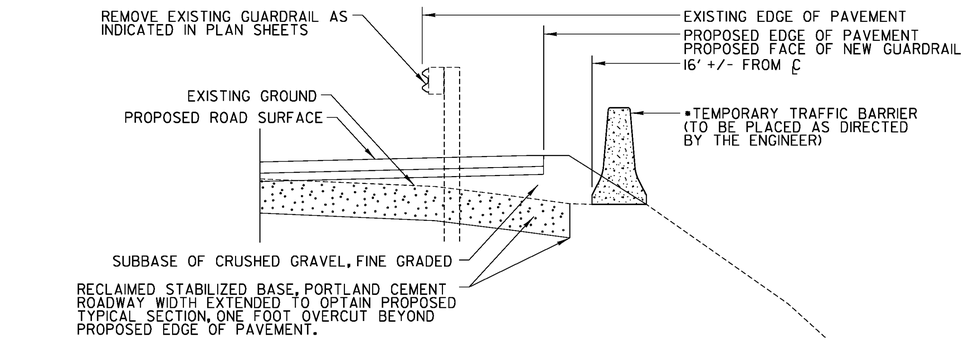
PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: d12b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
CONSTRUCTION APPROACH SIGNING SHEET

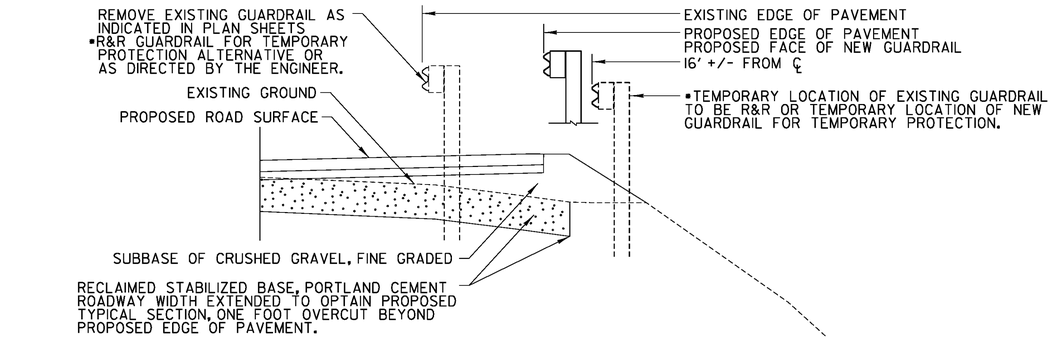
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON
SHEET 399 OF 444

# CONSTRUCTION OPERATIONS TRAFFIC PROTECTION PLAN

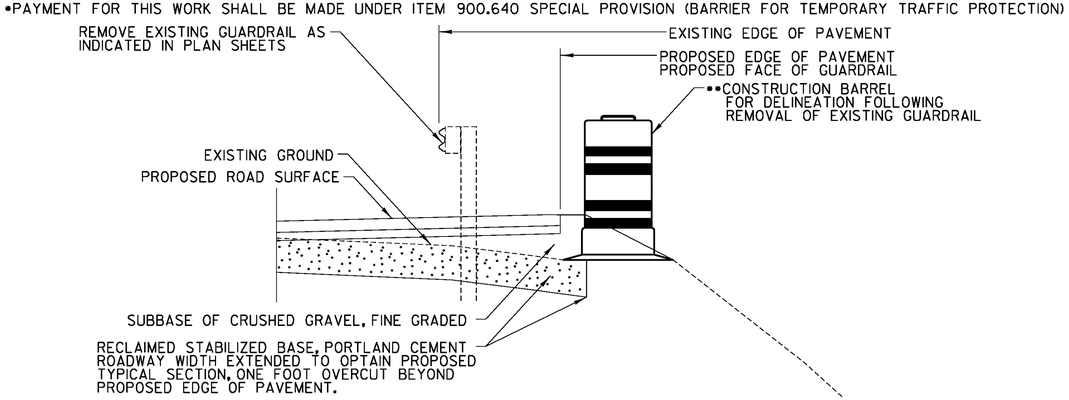
| GUARDRAIL RUN NO. | BEGIN GUARDRAIL | END GUARDRAIL | POS. | RECOMMENDED TEMPORARY TRAFFIC PROTECTION | 900.640 BARRIER FOR TEMPORARY TRAFFIC PROTECTION |
|---|---|---|---|---|---|
| WARDSBORO | | | | | (LF) |
| 1 | A 0+32 | A 6+03 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 2 | A 6+73 | A 9+91 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 3 | A 16+54 | A 24+35 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 4 | A 17+03 | A 23+97 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 5 | A 24+89 | A 33+98 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 6 | A 27+63 | A 31+90 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 7 | A 41+22 | A 47+52 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 630 |
| 8 | A 47+16 | A 51+85 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 9 | A 54+40 | A 58+69 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 10 | A 63+06 | A 84+14 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 11 | A 83+29 | A 101+00 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 12 | A 104+50 | A 107+45 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 13 | A 107+95 | A 111+48 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 14 | A 125+36 | A 127+11 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 15 | A 138+51 | A 147+87 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 16 | A 148+64 | A 152+32 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 17 | A 151+29 | A 151+44 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 18 | A 189+13 | A 189+87 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 19 | A 190+29 | A 200+23 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 20 | A 200+38 | A 211+89 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 21 | A 227+01 | A 230+06 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 22 | A 233+09 | A 234+83 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 23 | A 262+36 | A 269+72 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 24 | A 291+15 | A 304+27 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 25 | A 308+08 | A 310+00 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 140 |
| 26 | A 310+00 | A 315+59 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 27 | A 318+60 | A 327+00 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 840 |
| 28 | A 332+13 | A 340+12 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 29 | A 346+97 | A 347+90 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 30 | A 368+80 | A 378+77 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 997 |
| 31 | A 380+88 | A 383+61 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 32 | A 384+92 | A 388+00 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | |
| JAMAICA | | | | | |
| 32 | B 0+00 | B 0+43 | RT | | |
| 33 | B 12+87 | B 25+00 | LT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 1213 |
| 34 | B 39+17 | B 50+12 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 35 | B 58+19 | B 58+83 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 36 | B 58+19 | B 60+00 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| | B 60+00 | B 62+72 | LT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 272 |
| 37 | B 69+92 | B 73+00 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| | B 73+00 | B 77+44 | LT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 444 |
| 38 | B 133+25 | B 140+15 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 690 |
| 39 | B 144+19 | B 148+76 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 457 |
| 40 | B 153+10 | B 155+39 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 41 | B 154+13 | B 155+39 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 42 | B 159+80 | B 161+24 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 43 | B 161+89 | B 163+38 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 44 | B 171+27 | B 174+75 | RT | INSTALL TEMPORARY BARRIER, R&R EXISTING GR OR TEMP. INSTALL NEW GR. | 348 |
| | B 174+75 | B 176+25 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 45 | B 173+78 | B 179+61 | LT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| 46 | B 176+54 | B 179+55 | RT | DELINEATE WITH BARRELS DURING CONSTRUCTION | - |
| | | | | TOTALS | 6031 |




•PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 900.640 SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION)




•PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 900.640 SPECIAL PROVISION (BARRIER FOR TEMPORARY TRAFFIC PROTECTION)




••PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10

## TEMPORARY TRAFFIC PROTECTION AND DELINEATION DETAILS DURING CONSTRUCTION

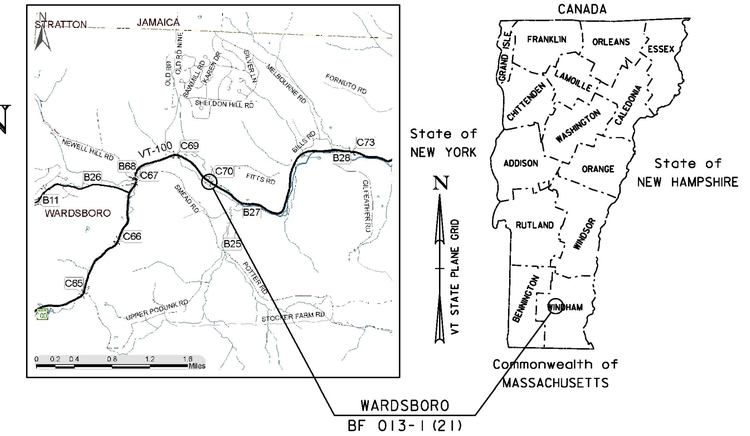
**NOT TO SCALE**

PROJECT NAME: WARDSBORO-JAMAICA
PROJECT NUMBER: ER STP 013-1(17)

FILE NAME: dl2b236_frm.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. KIPP
PLOT DATE: 2/26/2014
DRAWN BY: B. KIPP
CHECKED BY: A. KEMPTON

CONS. OPERATIONS TRAFFIC PROTECTION PLAN SHEET 400 OF 444

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION




# PROPOSED IMPROVEMENT
# BRIDGE PROJECT

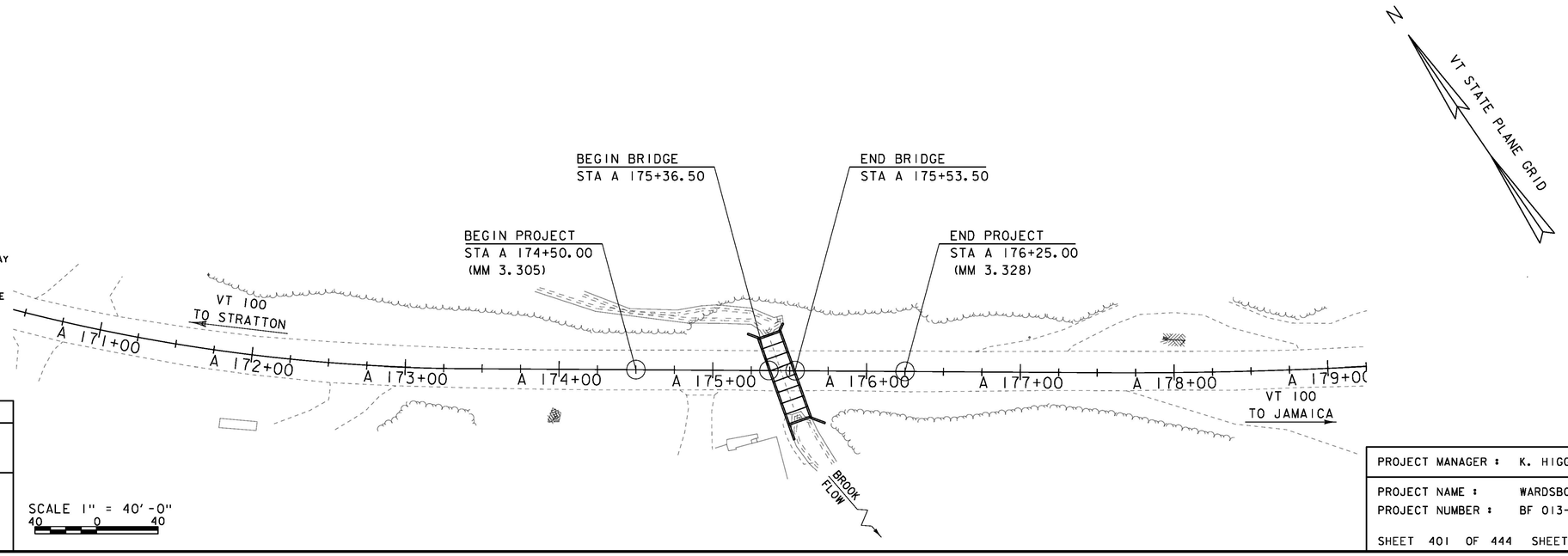
TOWN OF WARDSBORO
COUNTY OF WINDHAM

ROUTE NO : VT ROUTE 100, RURAL MINOR ARTERIAL. CULVERT NO : 70

PROJECT LOCATION: 7.7 MILES SOUTH OF THE JUNCTION OF VT ROUTE 100 AND VT ROUTE 30

PROJECT DESCRIPTION: REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A NEW PRECAST STRUCTURE.

| | |
|---|---|
| LENGTH OF STRUCTURE: | 17.00 FEET |
| LENGTH OF ROADWAY: | 158.00 FEET |
| LENGTH OF PROJECT: | 175.00 FEET |




THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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

| | |
|---|---|
| QUALITY ASSURANCE PROGRAM : LEVEL 2 | |
| SURVEYED BY : | L. ORVIS |
| SURVEYED DATE : | 09/19/2012 |
| DATUM | |
| VERTICAL | NAVD88 |
| HORIZONTAL | NAD 83 (2007) |

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

| | |
|---|---|
| PROJECT MANAGER : | K. HIGGINS, P.E. |
| PROJECT NAME : | WARDSBORO |
| PROJECT NUMBER : | BF 013-1(21) |
| SHEET 401 OF 444 SHEETS | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# PRELIMINARY INFORMATION SHEET (CULVERT)

Version 12.09.13

LRFD

## INDEX OF SHEETS

### PLAN SHEETS

SEE SHEET 2 FOR
INDEX OF SHEETS AND
LIST OF STANDARDS

### STANDARDS LIST

## FINAL HYDRAULIC REPORT

### HYDROLOGIC DATA

Date: Nov 2013

DRAINAGE AREA : 1.3 sq. mi.
CHARACTER OF TERRAIN : Mountainous, mostly forested, some development
STREAM CHARACTERISTICS : Sinuous and alluvial
NATURE OF STREAMBED : Boulders and gravel

PEAK FLOW DATA

| | | | |
|---|---|---|---|
| Q 2.33 = | 90 cfs | Q 50 = | 350 cfs |
| Q 10 = | 225 cfs | Q 100 = | 420 cfs |
| Q 25 = | 290 cfs | Q 500 = | 590 cfs |

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ Q50 = 11.7 fps
ICE CONDITIONS : Moderate
DEBRIS: 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: Multiplate Pipe Arch
YEAR BUILT: 1957
CLEAR SPAN(NORMAL TO STREAM): 8' - 10"
VERTICAL CLEARANCE ABOVE STREAMBED: 6' - 1"
WATERWAY OF FULL OPENING: 43 sq. ft.
DISPOSITION OF STRUCTURE: Remove and replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings

WATER SURFACE ELEVATIONS AT:

| | | | |
|---|---|---|---|
| Q2.33 = | 1289.9' | VELOCITY = | 7.5 fps |
| Q10 = | 1292.0' | " | 10.3 fps |
| Q25 = | 1293.0' | " | 11.1 fps |
| Q50 = | 1294.1' | " | 11.5 fps |
| Q100 = | 1295.6' | " | 12.4 fps |

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: N/A
RELIEF ELEVATION: 1296.4' @ arch
DISCHARGE OVER ROAD @Q100: N/A

### UPSTREAM STRUCTURE

TOWN: Wardsboro
DISTANCE: 500'
HIGHWAY # : TH 11
STRUCTURE #:
CLEAR SPAN:
CLEAR HEIGHT:
YEAR BUILT:
FULL WATERWAY: 12.6 sq. ft.
STRUCTURE TYPE: 4' boiler pipe

### DOWNSTREAM STRUCTURE

TOWN: Wardsboro
DISTANCE: 100'
HIGHWAY # :
STRUCTURE #:
CLEAR SPAN:
CLEAR HEIGHT:
YEAR BUILT:
FULL WATERWAY:
STRUCTURE TYPE: Confluence with Wardsboro Brook

### LRFR LOAD RATING FACTORS

| LOADING LEVELS | TRUCK | | | | | | |
|---|---|---|---|---|---|---|---|
| | H-20 | HL-93 | 3S2 | 6 AXLE | 3A STR | 4A STR | 5A SEMI |
| TONNAGE | 20 | 36 | 36 | 66 | 30 | 34.5 | 38 |
| INVENTORY | | | | | | | |
| POSTING | | | | | | | |
| OPERATING | | | | | | | |
| COMMENTS: | TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER | | | | | | |

### CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A PRECAST CONCRETE STRUCTURE (14'-0" X 8'-0" X 60'-0" BOX).
2. CULVERT ENDS ARE SKEWED BY AN ANGLE OF VARIES°
3. CULVERT WILL BE SET AT A SLOPE OF 36.00 IN. ON 100 FT.
4. CULVERT WILL REQUIRE FISH PASSAGE ACCOMMODATIONS
5. CULVERT CONSTRUCTION WILL REQUIRE A TEMPORARY PIPE

### PROPOSED STRUCTURE

STRUCTURE TYPE: Precast Concrete Box

CLEAR SPAN(NORMAL TO STREAM): 14'
VERTICAL CLEARANCE ABOVE STREAMBED: 6'
WATERWAY OF FULL OPENING: 84 sq. ft.

WATER SURFACE ELEVATIONS AT:

| | | | |
|---|---|---|---|
| Q2.33 = | 1288.9' | VELOCITY= | 6.6 fps |
| Q10 = | 1290.2' | " | 9.3 fps |
| Q25 = | 1290.8' | " | 10.3 fps |
| Q50 = | 1291.2' | " | 11.0 fps |
| Q100 = | 1291.8' | " | 11.9 fps |

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: N/A
RELIEF ELEVATION: 1296.4' at structure
DISCHARGE OVER ROAD @Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 1293.4' at inlet
VERTICAL CLEARANCE: @ Q50 = 2.2'

SCOUR: Scour not calculated for a box

REQUIRED CHANNEL PROTECTION: Stone Fill, Type III

### PERMIT INFORMATION

| | | |
|---|---|---|
| AVERAGE DAILY FLOW: | 3 cfs | DEPTH OR ELEVATION: |
| ORDINARY LOW WATER: | 1 cfs | ~0.5' |
| ORDINARY HIGH WATER: | 40 cfs | ~1.0' |

### TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None required - road closure
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

### ADDITIONAL INFORMATION

### TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

### DESIGN VALUES

| | | |
|---|---|---|
| 1. DESIGN LIVE LOAD | | HL-93 |
| 2. FUTURE PAVEMENT | $d_P$: | 3.0 INCH |
| 3. CULVERT OPENING | $D$: | 84.00 FT |
| 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) | $\Delta$: | --- |
| 5. PRESTRESSING STRAND | $f_y$: | --- |
| 6. PRESTRESSED CONCRETE STRENGTH | $f'_c$: | --- |
| 7. PRESTRESSED CONCRETE RELEASE STRENGTH | $f'_{ci}$: | --- |
| 8. CONCRETE, HIGH PERFORMANCE CLASS AA | $f'_c$: | --- |
| 9. CONCRETE, HIGH PERFORMANCE CLASS A | $f'_c$: | --- |
| 10. CONCRETE, HIGH PERFORMANCE CLASS B | $f'_c$: | --- |
| 11. CONCRETE, CLASS C | $f'_c$: | --- |
| 12. REINFORCING STEEL | $f_y$: | 60 KSI |
| 13. STRUCTURAL STEEL AASHTO M270 | $f_y$: | --- |
| 14. SOIL UNIT WEIGHT | $\gamma$: | --- |
| 15. NOMINAL BEARING RESISTANCE OF SOIL | $q_n$: | --- |
| 16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | --- |
| 17. NOMINAL BEARING RESISTANCE OF ROCK | $q_n$: | --- |
| 18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | --- |
| 19. NOMINAL AXIAL PILE RESISTANCE | $q_p$: | --- |
| 20. PILE YIELD STRENGTH ASTM A572 | $f_y$: | --- |
| 21. PILE SIZE | | --- |
| 22. EST. PILE LENGTH | $L_p$: | |
| 23. PILE RESISTANCE FACTOR | $\phi$: | --- |
| 24. LATERAL PILE DEFLECTION | $\Delta$: | --- |
| 25. BASIC WIND SPEED | $V_{3s}$: | --- |
| 26. MINIMUM GROUND SNOW LOAD | $p_g$: | --- |
| 27. SEISMIC DATA PGA: --- | $S_s$: | --- |
| | $S_1$: | --- |

### AS BUILT "REBAR" DETAIL

| LEVEL I | LEVEL II | LEVEL III |
|---|---|---|
| TYPE: | TYPE: | TYPE: |
| GRADE: | GRADE: | GRADE: |

### TRAFFIC DATA

| YEAR | ADT | DHV | % D | % T | ADTT |
|---|---|---|---|---|---|
| 2016 | 1100 | 150 | 55 | 13.7 | 130 |
| 2036 | 1200 | 170 | 55 | 20.4 | 210 |

20 year ESAL for flexible pavement from 2016 to 2036 : 898000
40 year ESAL for flexible pavement from 2016 to 2056 : 2056000
Design Speed : 50 mph

PROJECT NAME: **WARDSBORO**
PROJECT NUMBER: **BF 013-1(21)**

FILE NAME: **s13b072pi.dgn**
PROJECT LEADER: **K. HIGGINS**
DESIGNED BY: **J. SALVATORI**
**PRELIMINARY INFORMATION SHEET**

PLOT DATE: 2/13/2014
DRAWN BY: **J. SALVATORI**
CHECKED BY: **G. LAROCHE**
SHEET 402 OF 444

## GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 6th EDITION, AND ITS LATEST REVISIONS.

2. THE CONTRACTOR WILL BE ALLOWED TO CLOSE THE BRIDGE FOR ONE WEEKEND (TWO CONSECUTIVE DAYS) BEGINNING ON A FRIDAY AT 6PM AND ENDING THE FOLLOWING MONDAY AT 6 AM TO PERFORM REPLACEMENT OF THE EXISTING STRUCTURE. FOLLOWING THE CLOSURE PERIOD, THE PROJECT FACILITY SHALL BE REOPENED TO A MINIMUM OF ONE-LANE, TWO-WAY TRAFFIC. DURING THE BRIDGE CLOSURE PERIOD THE CONTRACTOR WILL BE ALLOWED TO WORK 24 HOURS PER DAY. THE CONTRACTOR SHALL SCHEDULE THEIR WORK SUCH THAT THE BRIDGE IS NOT CLOSED DURING HOLIDAY PERIODS. SEE SPECIAL PROVISIONS FOR FURTHER INFORMATION AND REQUIREMENTS.

3. THE CONTRACTOR IS TO COORDINATE THE ROAD CLOSURE PERIOD WITH ANY SCHEDULED ROAD CLOSURES OF VERMONT ROUTE 30 ASSOCIATED WITH THE BRATTLEBORO IM 091-1(65) PROJECT. FOR ARRANGEMENTS CONTACT CALEB LINN, PROJECT MANAGER, PCL CIVIL CONSTRUCTORS, INC AT 802-251-0709.

4. PREPARATION OF THE SITE WILL BE ALLOWED PRIOR TO THE BRIDGE CLOSURE PERIOD. HOWEVER, EXCAVATION FOR AND PLACEMENT OF BOX SECTIONS SHALL BE PERFORMED DURING BRIDGE CLOSURE PERIOD ONLY.

5. ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL BE USED FOR ALL WORK REQUIRED TO REMOVE THE EXISTING CGMPPA UNDER VT 100.

6. THE CONTRACTOR IS TO INSTALL TEMPORARY TRAFFIC BARRIER TO REMAIN IN PLACE UNTIL FINAL GRADE IS ESTABLISHED AND PROPOSED GUARDRAIL IS INSTALLED BETWEEN STATIONS 174+75 AND 176+00. PAYMENT WILL BE CONSIDERED INCLUDED IN THE BID PRICE FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

7. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F UNLESS OTHERWISE NOTED.

8. EXCAVATED STREAM BED MATERIAL SUPPLEMENTED WITH STONE FILL, TYPE III SHALL BE PLACED INSIDE THE BOX SECTIONS AND AS SHOWN IN THE PLANS. PAYMENT SHALL BE UNDER ITEM 900.608 SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL). SEE SPECIAL PROVISIONS.

9. CONTRACTOR IS TO CONTACT RIVER MANAGEMENT ENGINEER, TODD MENEES AT 802-345-3510, A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSURE PERIOD FOR APPROVAL OF STREAM BED MATERIAL AND FOR CONSULTATION REGARDING FINAL GRADING OF THE CHANNEL.

## TRAFFIC CONTROL

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED PRIOR TO, DURING AND AFTER THE BRIDGE CLOSURE PERIOD. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC CONTROL PLANS TO THE RESIDENT ENGINEER FOR APPROVAL PER SUBSECTION 105.03. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE). SEE SPECIAL PROVISIONS.

11. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). FOR ADDITIONAL SIGNING INSTRUCTIONS SEE THE T SERIES OF THE STANDARDS. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

12. INSTALLATION OF TEMPORARY TRAFFIC CONTROL SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL TRY TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.

13. ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN NOT PAID UNDER A SEPARATE CONTRACT ITEM WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCLUDED IN THE BID PRICE FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

14. DURING DAYLIGHT HOURS OF THE BRIDGE CLOSURE PERIOD, FLAGGERS ARE TO BE STATIONED AT THE INTERSECTIONS OF VT 100/SMEAD ROAD AND VT 100/LOWER PODUNK ROAD.

## PRECAST CONCRETE

15. DESIGN CRITERIA (PRECAST BOX):

    A. SOIL UNIT WEIGHT = 130 PCF
    B. DESIGN LIVE LOAD = HL-93
    C. NOMINAL BEARING RESISTANCE (BEDROCK) = 70 KSF
    D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 20 KSF
    E. BEARING RESISTANCE FACTOR = 0.45
    F. DESIGN FILL OVER BOX = 0-2 FEET
    G. AT-REST EARTH PRESSURE (Ko) = 0.398
    H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)

16. DESIGN CRITERIA (PRECAST WINGWALLS):

    A. SOIL UNIT WEIGHT = 130 PCF
    B. DESIGN LIVE LOAD = HL-93
    C. NOMINAL BEARING RESISTANCE (BEDROCK) = 8 KSF
    D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 20 KSF
    E. BEARING RESISTANCE FACTOR = 0.45
    F. DESIGN FILL OVER BOX = N/A
    G. AT-REST EARTH PRESSURE (Ko) = 0.398
    H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)

17. ALL CONCRETE SHALL BE PRECAST. ITEM 540.10 "PRECAST CONCRETE STRUCTURE" INCLUDES ALL BOX SEGMENTS, HEADWALLS, AND CUTOFF WALLS. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10.

18. THE PRECAST CONCRETE STRUCTURE SHALL BE DESIGNED FOR HYDROSTATIC PRESSURE UNLESS RAPID DRAINING MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 704.18 IS USED. IF USED, RAPID DRAINING MATERIAL SHALL BE PAID AT THE UNIT PRICE BID FOR ITEM 204.30. NO WEEPHOLES IN THE BOX SECTIONS WILL BE ALLOWED.

19. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR. THE MINIMUM INSIDE DIMENSIONS SHALL BE 8'-0" IN HEIGHT AND 14'-0" IN WIDTH. THE EXPOSED ENDS OF THE FIRST AND LAST UNITS SHALL BE VERTICAL.

20. ALL LIFTING HOLES AND BOLT POCKETS SHALL BE FILLED WITH MORTAR TYPE IV AFTER BEING SET IN THEIR FINAL POSITION. THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 540.10. FILLING THE JOINTS BETWEEN BOX SEGMENTS WITH GROUT IS NOT REQUIRED.

21. SHEET MEMBRANE WATERPROOFING MEETING THE REQUIREMENTS OF SUBSECTION 540.02 SHALL BE APPLIED TO THE ENTIRE TOP OF THE BOX AND A TWO (2) FOOT WIDE STRIP SHALL BE PLACED AT EACH VERTICAL JOINT. MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL HEIGHT. THE SIDES SHALL BE COVERED PRIOR TO THE TOP. ANY OVERLAPPING OF MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE TO SHED WATER AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR MEMBRANE WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

22. WATER REPELLENT, SILANE SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 514 AND SHALL BE SHOP APPLIED TO ALL EXPOSED EXTERIOR SURFACES OF THE PRECAST CONCRETE STRUCTURE. PAYMENT FOR SILANE WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

## REINFORCING STEEL

23. ALL REINFORCING STEEL SHALL BE LEVEL I (EPOXY COATED) REINFORCING STEEL IN ACCORDANCE WITH SECTION 507. PAYMENT FOR ALL REINFORCING STEEL WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

24. ALL REINFORCING STEEL SHALL HAVE A MINIMUM CLEAR COVER OF 2".

25. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:

    SPACING +/- 1"
    CLEARANCE +/- ¼"

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(21) |
| FILE NAME: sl3b072gen.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| PROJECT NOTES | SHEET 403 OF 444 |

STATE OF VERMONT
AGENCY OF TRANSPORTATION

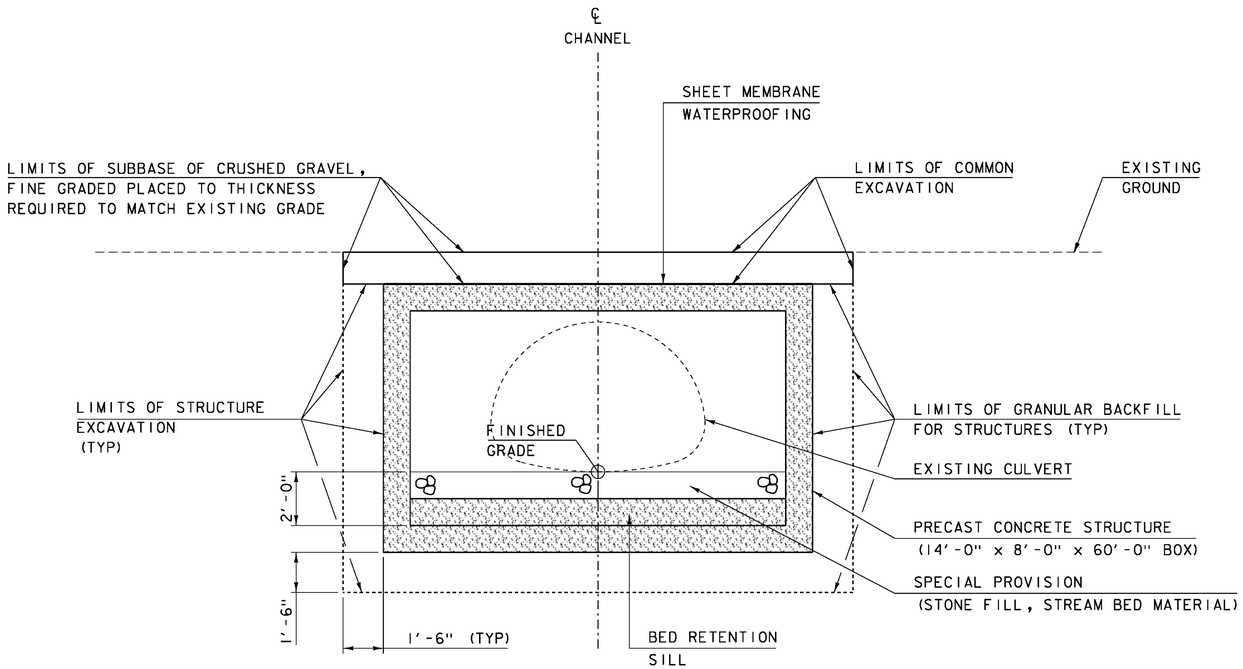
# QUANTITY SHEET 1

| SUMMARY OF ESTIMATED QUANTITIES | | | | | | | | | TOTALS | | DESCRIPTIONS | | | | DETAILED SUMMARY OF QUANTITIES | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | ROADWAY | BRIDGE | EROSION CONTROL | GRAND TOTAL | FINAL | UNIT | ITEMS | ITEM NUMBER | ROUND | QUANTITIES | UNIT | ITEMS |
| | | | | | | | 25 | | | 25 | | CY | COMMON EXCAVATION | 203.15 | | | | |
| | | | | | | | | 125 | | 125 | | CY | UNCLASSIFIED CHANNEL EXCAVATION | 203.27 | | | | |
| | | | | | | | | 575 | | 575 | | CY | STRUCTURE EXCAVATION | 204.25 | | | | |
| | | | | | | | | 310 | | 310 | | CY | GRANULAR BACKFILL FOR STRUCTURES | 204.30 | | | | |
| | | | | | | | 50 | | | 50 | | TON | SUBBASE OF CRUSHED GRAVEL, FINE GRADED | 301.28 | | | | |
| | | | | | | | | 1 | | 1 | | EACH | REMOVAL OF STRUCTURE (6'-1" x 8'-10" CGMPPA) | 529.15 | | | | |
| | | | | | | | | 1 | | 1 | | LS | PRECAST CONCRETE STRUCTURE (14'-0" x 8'-0" x 60'-0" BOX) | 540.10 | | | | |
| | | | | | | | | | 1 | 1 | | MGAL | DUST CONTROL WITH WATER | 609.10 | | | | |
| | | | | | | | | 50 | | 50 | | CY | STONE FILL, TYPE II | 613.11 | | | | |
| | | | | | | | | 75 | | 75 | | CY | STONE FILL, TYPE III | 613.12 | | | | |
| | | | | | | | 500 | | | 500 | | HR | FLAGGERS | 630.15 | | | | |
| | | | | | | | | 125 | | 125 | | SY | GEOTEXTILE UNDER STONE FILL | 649.31 | | | | |
| | | | | | | | | | 120 | 120 | | SY | GEOTEXTILE FOR SILT FENCE | 649.51 | | | | |
| | | | | | | | | | 40 | 40 | | SY | GEOTEXTILE FOR FILTER CURTAIN | 649.61 | | | | |
| | | | | | | | | | 5 | 5 | | LB | SEED | 651.15 | | | | |
| | | | | | | | | | 5 | 5 | | LB | SEED, WINTER RYE | 651.17 | | | | |
| | | | | | | | | | 40 | 40 | | LB | FERTILIZER | 651.18 | | | | |
| | | | | | | | | | 1 | 1 | | TON | AGRICULTURAL LIMESTONE | 651.20 | | | | |
| | | | | | | | | | 1 | 1 | | TON | HAY MULCH | 651.25 | | | | |
| | | | | | | | | | 40 | 40 | | CY | TOPSOIL | 651.35 | | | | |
| | | | | | | | | 125 | | 125 | | SY | GRUBBING MATERIAL | 651.40 | | | | |
| | | | | | | | | | 1 | 1 | | LS | EPSC PLAN (BF 013-1(21)) | 652.10 | | | | |
| | | | | | | | | | 40 | 40 | | HR | MONITORING EPSC PLAN | 652.20 | | | | |
| | | | | | | | | | 1 | 1 | | LU | MAINTENANCE OF EPSC PLAN (N.A.B.I.) (BF 013-1(21)) | 652.30 | | | | |
| | | | | | | | | | 350 | 350 | | SY | TEMPORARY EROSION MATTING | 653.20 | | | | |
| | | | | | | | | | 60 | 60 | | CY | VEHICLE TRACKING PAD | 653.35 | | | | |
| | | | | | | | | | 1 | 1 | | EACH | FILTER BAG | 653.45 | | | | |
| | | | | | | | | | 230 | 230 | | LF | BARRIER FENCE | 653.50 | | | | |
| | | | | | | | | | 80 | 80 | | LF | PROJECT DEMARCATION FENCE | 653.55 | | | | |
| | | | | | | | | 105 | | 105 | | CY | SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL) | 900.608 | | | | |
| | | | | | | | 1 | | | 1 | | LS | SPECIAL PROVISION (CPM SCHEDULE)(BF 013-1(21)) | 900.645 | | | | |
| | | | | | | | | 1 | | 1 | | LS | SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)(BF 013-1(21)) | 900.645 | | | | |
| | | | | | | | 1 | | | 1 | | LS | SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)(BF 013-1(21)) | 900.645 | | | | |
| | | | | | | | 1 | | | 1 | | LU | SPECIAL PROVISION (INCENTIVE/DISINCENTIVE)(N.A.B.I.)(BF 013-1(21)) | 900.650 | | | | |

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

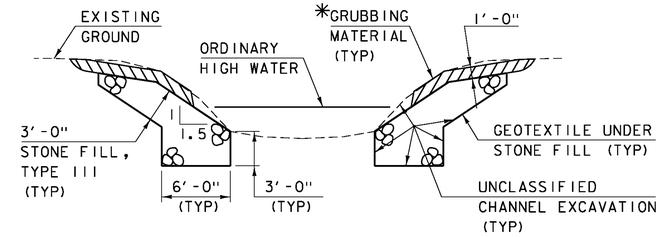
FILE NAME: s13b072qs.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
QUANTITY SHEET

PLOT DATE: 17-MAR-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 404 OF 444




## TYPICAL PRECAST BOX CULVERT SECTION

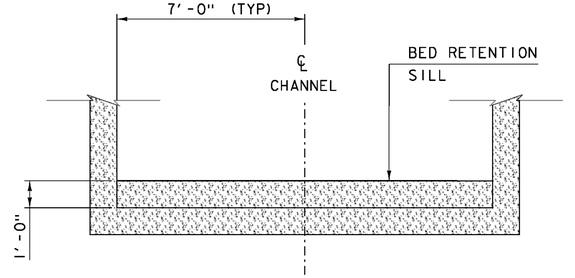
SCALE 3/8" = 1'-0"




## TYPICAL CHANNEL SECTION

(NOT TO SCALE)

*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL INSIDE THE BOX CULVERT. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.




NOTES:

1. SILLS TO BE SPACED A MAXIMUM OF EVERY 8'-0" AND AT THE INLET AND OUTLET.
2. FABRICATOR TO DETAIL SILL CONNECTION.

## BED RETENTION SILL DETAIL

NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: WARDSBORO | |
| PROJECT NUMBER: BF 013-1(21) | |
| FILE NAME: sl3b072typ.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| TYPICAL SECTIONS | SHEET 405 OF 444 |

N

VT STATE PLANE GRID

WILMINGTON VERY FINE SANDY LOAM
VERY STONY
2% - 8% SLOPES
K = 0.43

MONADNOCK FINE SANDY LOAM
VERY STONY
8% - 15% SLOPES
K = 0.28

**BRISSETTE, LAURA M.**

**N/F JOSLIN, JEAN M.**

P.L.

BENCH MARK
ELEV = 1295.96

WOODS

COMB
T/202/83

PROJMKR
VT/T95T/S/222/3

COMB
T/201/82

1290

1300

GRAVEL DRIVE

COMB
T/200/81

M.PINE

GUY

VT 100
TO STRATTON

VT 100
TO JAMAICA

495'

A 173+00

A 174+00

A 175+00

A 176+00

A 177+00

A 178+00

BROOK FLOW

HVCTRL
2/2

S.BALSUM

S.PINE

2-S.CEDAR

W.SPRUCE

S.CEDAR

S.HEMLOCK

GUY POLE

**HAYES, PATRICIA S.**
**SINNOTT, EDWARD F.**

**PETERSON, JOYCE D.**

COLTON LOAMY FINE SAND
2% - 8% SLOPES
K = 0.17

PODUNK FINE SANDY LOAM
0% - 3% SLOPES
K = 0.24

EXISTING BRIDGE DATA
6'-1"H X 8'-10"W CGMPPA
CULVERT BUILT IN 1957
CULVERT BARREL LENGTH = 46 FT.
WATERWAY AREA = 43 SF

# EXISTING CONDITIONS

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

| | |
|---|---|
| PROJECT NAME: WARDSBORO | |
| PROJECT NUMBER: BF 013-1(21) | |
| FILE NAME: sl3b072bdr_ex.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| EXISTING CONDITIONS | SHEET 406 OF 444 |

MAINLINE CURVE (25)
DELTA = 19°22'15"
D = 4°46'29"
R = 1200.00'
T = 204.80'
L = 405.70'
E = 17.35'

MAINLINE CURVE (26)
DELTA = 5°06'37"
D = 1°58'33"
R = 2900.00'
T = 129.41'
L = 258.65'
E = 2.89'

CHANNEL CURVE (1)
DELTA = 68°26'44"
D = 381°58'19"
R = 15.00'
T = 10.20'
L = 17.92'
E = 3.14'

CHANNEL CURVE (2)
DELTA = 18°59'07"
D = 114°35'30"
R = 50.00'
T = 8.36'
L = 16.57'
E = 0.69'

N

VT STATE PLANE GRID

PI#1 CHANNEL
STA 70+40.33
N=193314.5656
E=1550628.6160

PC#1 CHANNEL
STA 70+30.13
N=193320.5477
E=1550620.3511

PT#1 CHANNEL
STA 70+48.05
N=193304.6809
E=1550626.0886

BEGIN PROJECT
STA A 174+50.00

POB CHANNEL
STA 70+00.00
N=193338.2118
E=1550595.9464

MAINLINE STATION A 175+45.00
=CHANNEL STATION 70+75.00
Δ = 70° 0" 0' RT

MAINLINE PC#26
STA A 177+51.71
N=193161.9503
E=1550790.0858

END BRIDGE
STA A 175+53.50

BENCH MARK
ELEV = 1295.96

WOODS
ROW
GRAVEL DRIVE
PROJMKR
VT/1957/S/222/3
COMB
7/201/82
GUY
M. PINE
COMB
7/200/81
VT 100
TO STRATTON
VT 100
TO JAMAICA
S 55°39'27.07" E
49.5
A 173+00
A 174+00
A 175+00
A 176+00
A 177+00
A 178+00
70+00
71+00
71+40
HVCTRL
212
CZ
2-S. CEDAR
S. PINE
M. SPRUCE
S. CEDAR
S. BALSUM
S. HEMLOCK
GUY POLE
BROOK FLOW

MAINLINE PI#26
STA A 178+81.12
N=193088.9450
E=1550896.9373

BEGIN BRIDGE
STA A 175+36.50

PC#2 CHANNEL
STA 71+16.00
N=193238.8483
E=1550609.2561

END PROJECT
STA A 176+25.00

PI#2 CHANNEL
STA 71+24.36
N=193230.7484
E=1550607.1851

POE CHANNEL
STA 71+40.00
N=193213.6753
E=1550607.9967

PT#2 CHANNEL
STA 71+32.56
N=193222.4154
E=1550607.8618

## LAYOUT SHEET

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

STONE FILL, TYPE II

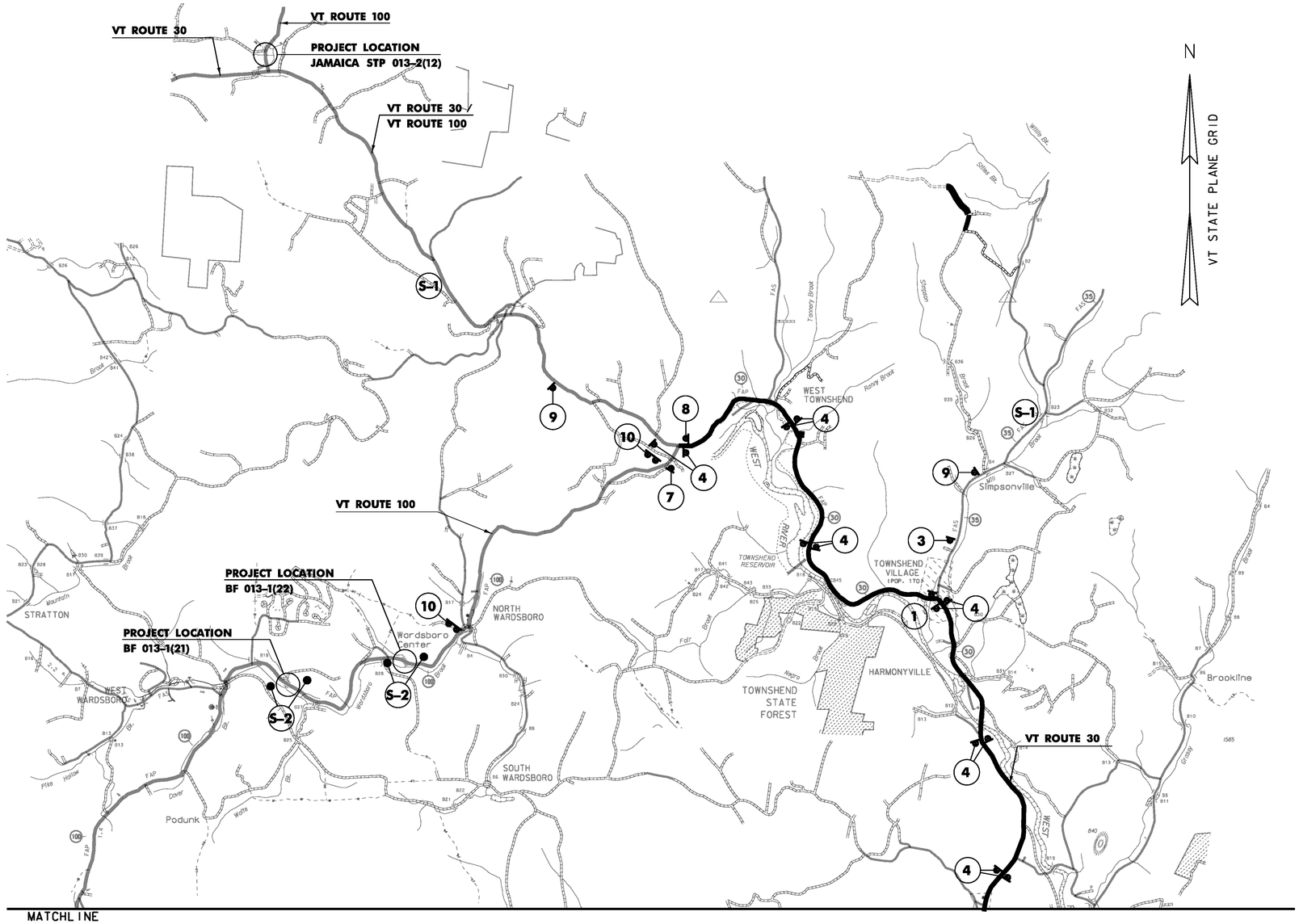
STONE FILL, TYPE III

SPECIAL PROVISION
(STONE FILL, STREAM
BED MATERIAL)

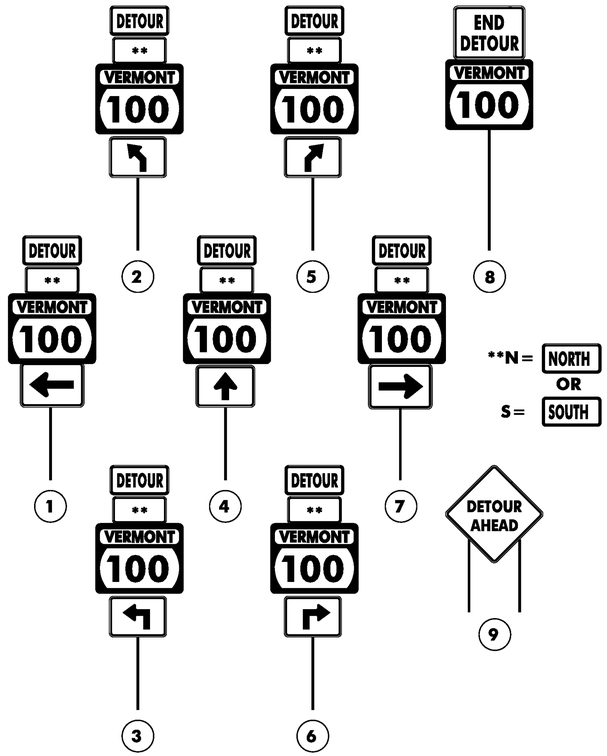
PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072bdr.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
LAYOUT SHEET

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 407 OF 444




DETOUR PLAN 1
NOT TO SCALE




| | | | | | | | |
|---|---|---|---|---|---|---|---|
| V | T | | 1 | 0 | 0 | | |
| C | L | O | S | E | D | | |
| | | | | | | | |

PHASE 1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| S | O | U | T | H | | O | F |
| W | A | R | D | S | - | | |
| B | O | R | O | | | | |

PHASE 2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| B | R | I | D | G | E | | |
| C | L | O | S | E | D | | |
| | | | | | | | |

PHASE 1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| * | F | R | I | | M | / | D | D |
| * | 6 | P | M | - | | M | O | N |
| | M | / | D | D | | 6 | A | M |

PHASE 3

* M = MONTH
D = DAY

S-1

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| * | F | R | I | | M | / | D | D |
| * | 6 | P | M | - | | M | O | N |
| | M | / | D | D | | 6 | A | M |

PHASE 2

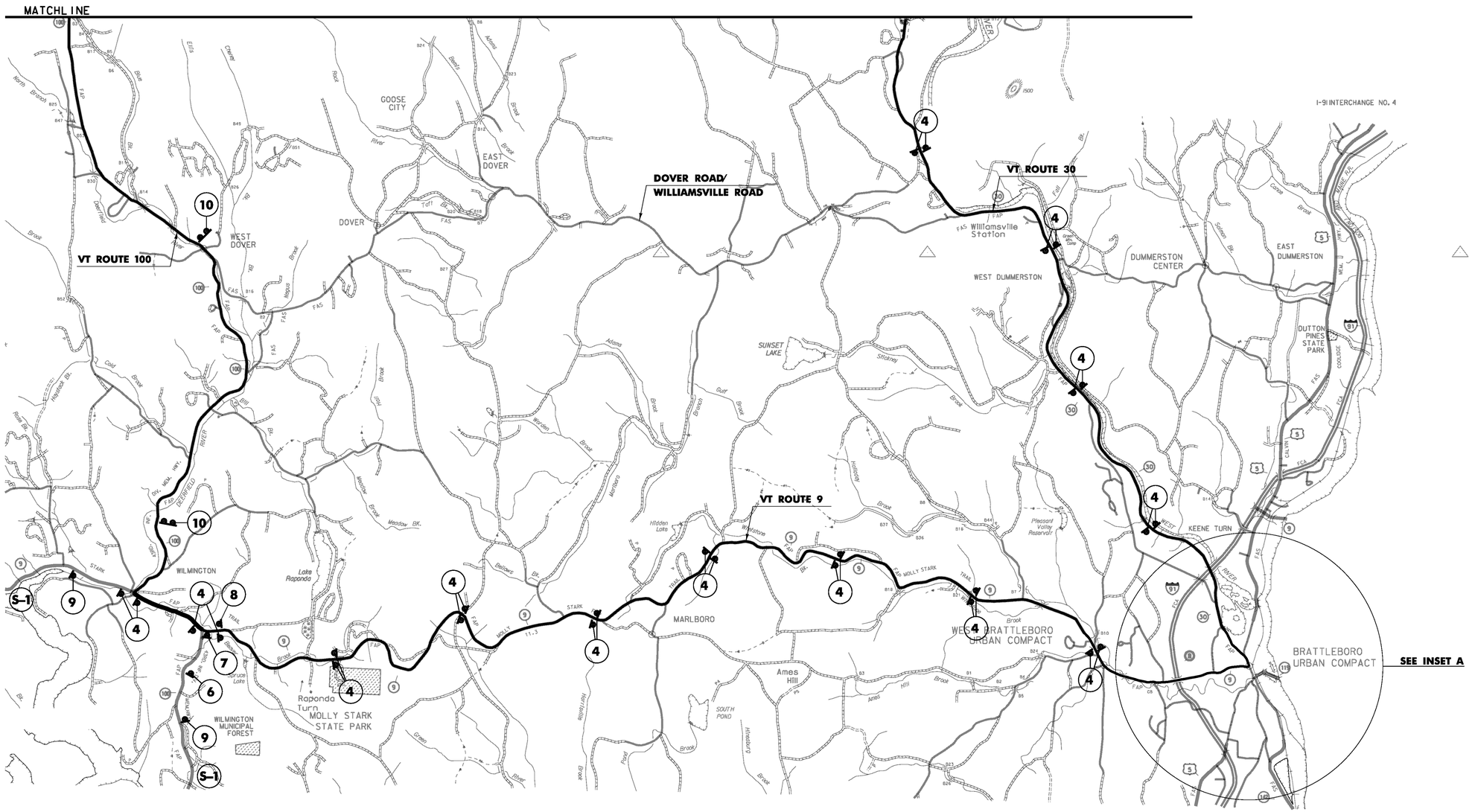
* M = MONTH
D = DAY

S-2

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| ROAD CLOSED | | | | | | | |
| XX MILES AHEAD | | | | | | | |
| NO THRU TRAFFIC | | | | | | | |

10

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(21) |
| FILE NAME: s13b074detour.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: M. MILLER |
| DETOUR PLAN 1 | SHEET 408 OF 444 |




NOTES:

1. SEE DETOUR PLAN SHEET 3 FOR INSET A.

## DETOUR PLAN 2

NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(21) |
| FILE NAME: sl3b074detour.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: M. MILLER |
| DETOUR PLAN 2 | SHEET 409 OF 444 |

| SIGN LEGEND | SIGN DIMENSIONS WIDTH (in) | SIGN DIMENSIONS HEIGHT (in) | SIGN COLOR |
|---|---|---|---|
| DETOUR M4-8 | 24 | 12 | B/FO |
| NORTH M3-1 SOUTH M3-3 | 24 | 12 | G/W |
| VERMONT 100 E-136B | 30 | 24 | G/W |
| M5-1L M5-1R M5-2L M5-2R | 21 | 15 | B/FO |
| M5-1L M5-1L M5-1L | 21 | 15 | B/FO |
| END DETOUR M4-8A | 24 | 18 | B/FO |
| DETOUR AHEAD W20-2 | 48 | 48 | B/FO |
| ROAD CLOSED XX MILES AHEAD NO THRU TRAFFIC R11-3A | 60 | 30 | B/W |

NOTES:

1. THE PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE FULLY OPERATIONAL A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSURE OF VT 100.

2. DURING ACTUAL CLOSURE, ELIMINATE PHASE 3 FOR S-1 (SEE DETOUR PLAN 1).

3. DETOUR SIGNS SHALL BE LOCATED ADJACENT TO EXISTING INTERSECTION ROUTE MARKER ASSEMBLIES WHERE APPLICABLE.

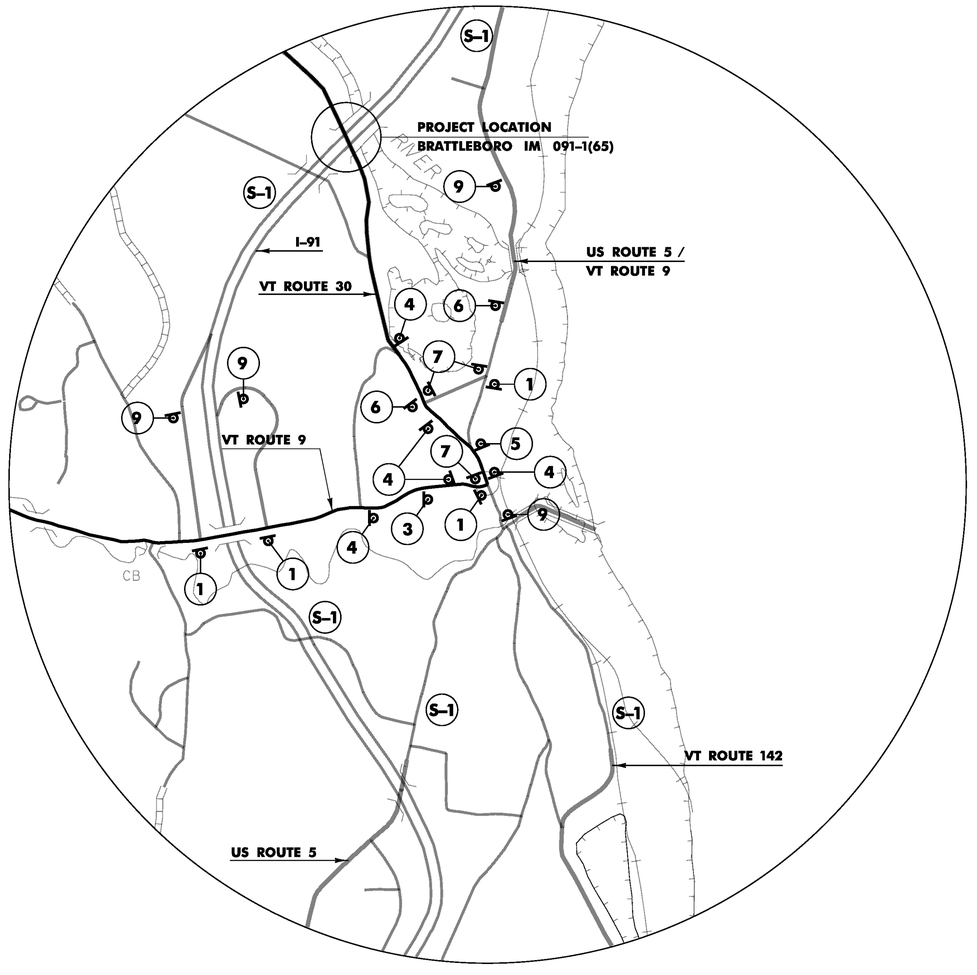
4. COVER ANY CONFLICTING EXISTING SIGNS AS DIRECTED BY THE ENGINEER.

5. CONFIRMATION ROUTE MARKERS (SIGN 4) SHALL BE INSTALLED IMMEDIATELY FOLLOWING EACH TURN AND AT ALL LOCATIONS ALONG DETOUR WHERE ROUTE MAKERS EXIST FOR THE PARENT ROUTE.

6. DETOUR SIGNING IS THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT FOR ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR IMPLEMENTING THE DETOUR, INCLUDING BUT NOT LIMITED TO SIGNS, BARRICADES AND MESSAGE BOARDS, WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL - INCLUSIVE).

N

VT STATE PLANE GRID




INSET "A"
NOT TO SCALE

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b074detour.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
DETOUR PLAN 3

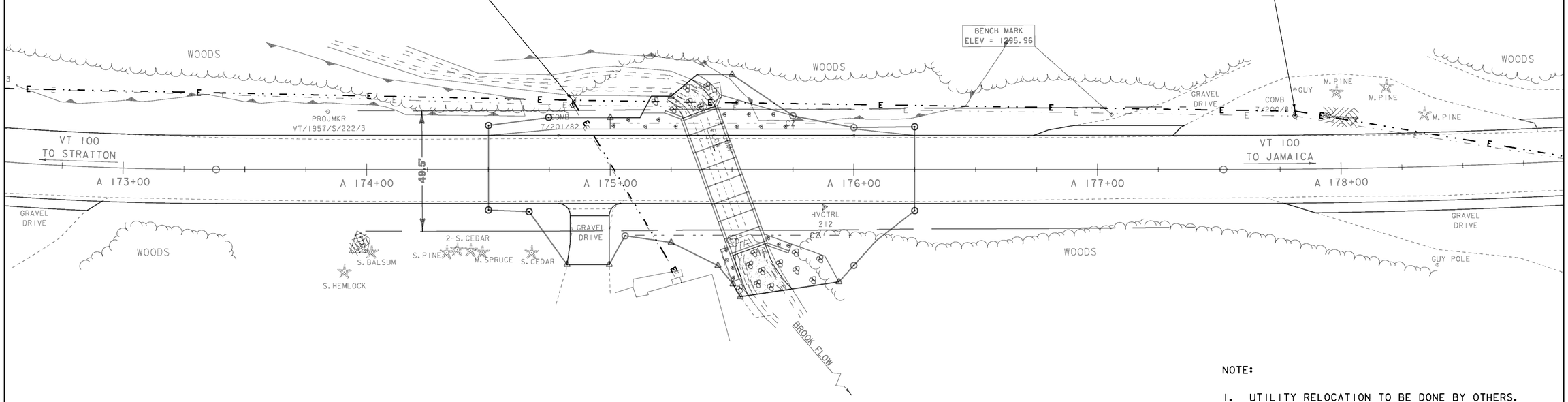
PLOT DATE: 17-MAR-2014
DRAWN BY: J. SALVATORI
CHECKED BY: M. MILLER
SHEET 410 OF 444

N

VT STATE PLANE GRID

TEMPORARILY INSTALL 4' TANGENT
ARM FOR ELECTRIC LINES ONLY.

TEMPORARILY INSTALL 4' TANGENT
ARM FOR ELECTRIC LINES ONLY.




NOTE:

1. UTILITY RELOCATION TO BE DONE BY OTHERS.

## TEMPORARY UTILITY RELOCATION

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

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(21) |
| FILE NAME: s13b072bdr_util.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: L. WHEELER |
| TEMPORARY UTILITY RELOCATION | SHEET 411 OF 444 |

## SOIL CLASSIFICATION

| AASHTO | |
|---|---|
| A1 | Gravel and Sand |
| A3 | Fine Sand |
| A2 | Silty or Clayey Gravel and Sand |
| A4 | Silty Soil - Low Compressibility |
| A5 | Silty Soil - Highly Compressible |
| A6 | Clayey Soil - Low Compressibility |
| A7 | Clayey Soil - Highly Compressible |

## ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|---|---|
| <25 | Very Poor |
| 25 to 50 | Poor |
| 51 to 75 | Fair |
| 76 to 90 | Good |
| >90 | Excellent |

## SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|---|---|
| <250 | Very Soft |
| 250-500 | Soft |
| 500-1000 | Med. Stiff |
| 1000-2000 | Stiff |
| 2000-4000 | Very Stiff |
| >4000 | Hard |

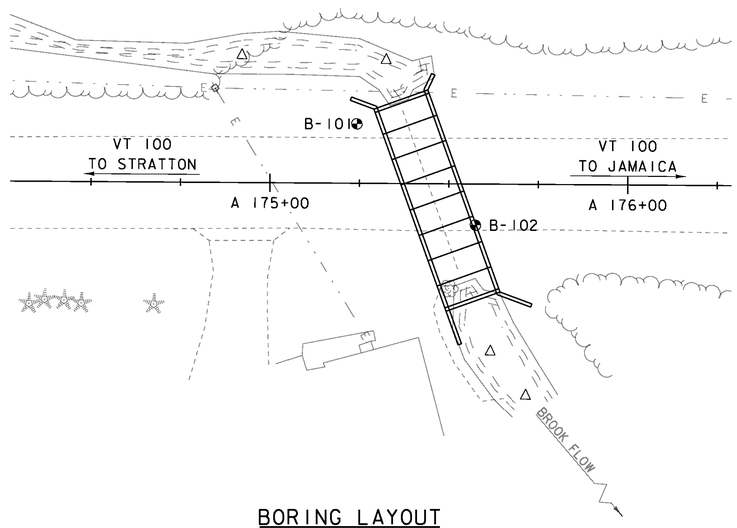
## CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

| DENSITY (GRANULAR SOILS) | | CONSISTENCY (COHESIVE SOILS) | |
|---|---|---|---|
| N | DESCRIPTIVE TERM | N | DESCRIPTIVE TERM |
| <5 | Very Loose | <2 | Very Soft |
| 5-10 | Loose | 2-4 | Soft |
| 11-24 | Med. Dense | 5-8 | Med. Stiff |
| 25-50 | Dense | 9-15 | Stiff |
| >50 | Very Dense | 16-30 | Very Stiff |
| | | 31-60 | Hard |
| | | >60 | Very Hard |

## COMMONLY USED SYMBOLS

| | |
|---|---|
| ▼ | Water Elevation |
| ⊙ | Standard Penetration Boring |
| ⊕ | Auger Boring |
| ⊙ | Rod Sounding |
| S | Sample |
| N | Standard Penetration Test<br>Blow Count Per Foot For:<br>2" O.D. Sampler<br>1 3/8" I.D. Sampler<br>Hammer Weight Of 140 Lbs.<br>Hammer Fall Of 30" |
| VS | Field Vane Shear Test |
| US | Undisturbed Soil Sample |
| B | Blast |
| DC | Diamond Core |
| MD | Mud Drill |
| WA | Wash Ahead |
| HSA | Hollow Stem Auger |
| AX | Core Size 1 1/8" |
| BX | Core Size 1 5/8" |
| NX | Core Size 2 1/8" |
| M | Double Tube Core Barrel Used |
| LL | Liquid Limit |
| PL | Plastic Limit |
| PI | Plasticity Index |
| NP | Non Plastic |
| w | Moisture Content (Dry Wgt. Basis) |
| D | Dry |
| M | Moist |
| MTW | Moist To Wet |
| W | Wet |
| Sat | Saturated |
| Bo | Boulder |
| Gr | Gravel |
| Sa | Sand |
| Si | Silt |
| Cl | Clay |
| HP | Hardpan |
| Le | Ledge |
| NLTD | No Ledge To Depth |
| CNPF | Can Not Penetrate Further |
| TLOB | Top of Ledge Or Boulder |
| NR | No Recovery |
| Rec. | Recovery |
| %Rec. | Percent Recovery |
| RQD | Rock Quality Designation |
| CBR | California Bearing Ratio |
| < | Less Than |
| > | Greater Than |
| R | Refusal (N > 100) |
| VTSPG | NAD83 - See Note 7 |

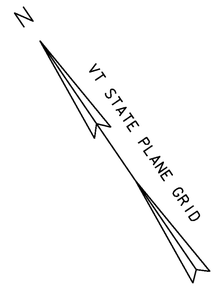
| COLOR | | | |
|---|---|---|---|
| blk | Black | pnk | Pink |
| bl | Blue | pu | Purple |
| brn | Brown | rd | Red |
| dk | Dark | tn | Tan |
| gry | Gray | wh | White |
| gn | Green | yel | Yellow |
| lt | Light | mltc | Multicolored |
| or | Orange | | |




BORING LAYOUT

SCALE 1" = 20'-0"

20 0 20




## DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

## GENERAL NOTES

1. The subsurface explorations shown herein were made between 12/6/13 and 12/10/13 by the Agency.

2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.

3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

PROJECT NAME: WARDSBORO

PROJECT NUMBER: BF 013-1(21)

FILE NAME: si3b072boring.dgn
PROJECT LEADER: K HIGGINS
DESIGNED BY: J. SALVATORI
BORING LAYOUT SHEET

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 412 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

# BORING LOG

**WARDSBORO**
**BF 013-1(21)**
**VT-100 BR-70**

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 13B072
Checked By: TDE

Boring Crew: DAIGNEAULT, JUDKINS, HOOK
Date Started: 12/06/13 Date Finished: 12/06/13
VTSPG NAD83: N 193304.08 ft E 1550611.56 ft
Station: 175+24.2 Offset: -16.60
Ground Elevation: 1291.0 ft

| | Casing | Sampler |
|---|---|---|
| Type: | WB | SS |
| I.D.: | 4 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 55 TRACK | $C_E$ = 1.46 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 12/06/13 | 5.9 | While drilling. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| | | A-1-a, SaGr, Dk/brn, Moist, Rec. = 1.0 ft, Lab Note: Lots of Broken Rock was within sample. | 7-8-5-16 (13) | 9.3 | 58.4 | 31.5 | 10.1 |
| | | A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Lots of Broken Rock was within sample. Cleaned out casing with roller cone. | 8-7-9-10 (16) | 4.4 | 55.9 | 34.4 | 9.7 |
| 5 | | A-1-b, GrSa, brn, MTW, Rec. = 0.6 ft, Lab Note: Broken Rock was within sample. NXDC, Cleaned out casing. | 4-3-12-14 (15) | 11.6 | 38.9 | 51.8 | 9.3 |
| | | No Recovery, 6.0 ft - 6.2 ft<br>Field Note:, NXDC, Cleaned out casing | R@2.5" | | | | |
| | | A-1-b, SaGr, brn-gry, MTW, Rec. = 0.6 ft, Lab Note: Lots of Broken Rock was within sample. NXDC, Cleaned out casing. | 11-12-11-16 (23) | 12.5 | 55.3 | 32.7 | 12.0 |
| 10 | | A-1-b, SiSaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Broken Rock was within sample. NXDC, Cleaned out casing. | 27-48-R@6.0" (R) | 10.6 | 38.1 | 37.3 | 24.6 |
| | | A-4, SaSi, Lt/brn, MTW, Rec. = 1.1 ft | 17-17-21-23 (38) | 19.4 | 6.1 | 39.3 | 54.6 |
| | | A-2-4, SiSa, brn, MTW, Rec. = 0.9 ft, Lab Note: Broken Rock was within sample. Cleaned out casing with roller cone. | 17-17-16-18 (33) | 16.6 | 16.5 | 56.3 | 27.2 |
| 15 | | A-2-4, GrSiSa, Lt/brn, Moist, Rec. = 0.9 ft, Lab Note: Broken Rock was within sample. | 9-33-45-R@2.5" (78) | 12.2 | 24.0 | 42.0 | 34.0 |
| | | A-2-4, SiGrSa, Lt/brn, MTW, Rec. = 1.0 ft, Lab Note: Broken Rock was within sample. NXDC, Cleaned out casing. | 34-41-R@5.0" (R) | 10.5 | 31.2 | 45.5 | 23.3 |
| 20 | | A-4, SaSi, Lt/brn, MTW, Rec. = 1.2 ft, Lab Note: Broken Rock was within sample. Cleaned out casing with roller cone. | 25-19-25-25 (44) | 17.4 | 12.8 | 39.1 | 48.1 |
| | | A-4, SiSa, Lt/brn, MTW, Rec. = 1.1 ft | 21-24-22-25 (46) | 17.8 | 6.1 | 53.1 | 40.8 |
| 25 | | A-2-4, Sa, Lt/brn, MTW, Rec. = 0.7 ft | 6-18-23-22 (41) | 16.8 | 12.7 | 70.3 | 17.0 |
| | | Hole stopped @ 26.0 ft | | | | | |

Remarks:
1. Hole collapsed at 4.6 ft.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WARDSBORO BF 013-1(21).GPJ VERMONT ACT.GDT 12/16/13

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

# BORING LOG

**WARDSBORO**
**BF 013-1(21)**
**VT-100 BR-70**

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 13B072
Checked By: TDE

Boring Crew: GARROW, JUDKINS
Date Started: 12/10/13 Date Finished: 12/10/13
VTSPG NAD83: N 193261.92 ft E 1550623.19 ft
Station: 175+57.5 Offset: 11.50
Ground Elevation: 1296.0 ft

| | Casing | Sampler |
|---|---|---|
| Type: | WB | SS |
| I.D.: | 4 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 55 TRACK | $C_E$ = 1.46 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 12/10/13 | 8.9 | While drilling. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| | | A-1-b, GrSa, Dk/brn, Moist, Rec. = 0.7 ft | 11-10-39-18 (49) | 13.1 | 27.9 | 56.5 | 15.6 |
| | | A-1-b, SaGr, white-brn, Moist, Rec. = 0.7 ft, Lab Note: Lots of Broken & Pulverized Rock (Granite) were within sample. Cleaned out casing with roller cone. | | 1.0 | 54.3 | 29.6 | 16.1 |
| | | A-1-b, SaGr, brn, Moist, Rec. = 0.6 ft, Lab Note: Lots of Broken Rock was within sample. | 4-7-8-10 (15) | 11.8 | 44.3 | 44.0 | 11.7 |
| 5 | | A-1-b, GrSa, brn, Moist, Rec. = 0.5 ft, Lost water return at 4.0 feet. Lab Note: Lots of Broken & Pulverized Rock (Granite) w | 6-3-2-3 (5) | 12.2 | 41.4 | 48.0 | 10.6 |
| | | Field Note:, No Recovery, Cleaned out casing with roller cone. | 7-4-4-2 (8) | | | | |
| | | Field Note:, No Recovery | 1-WH-1-1 (1) | | | | |
| 10 | | A-1-b, SaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Lots of Broken Rock was within sample. | 30-11-11-19 (22) | 10.7 | 49.8 | 34.9 | 15.3 |
| | | A-1-b, SiSaGr, brn, Moist, Rec. = 0.6 ft, Lab Note: Broken Rock was within sample. NXDC, Cleaned out casing. | 35-R@5.0" (R) | 9.2 | 41.2 | 34.5 | 24.3 |
| | | A-4, SiSa, brn, MTW, Rec. = 1.2 ft | 17-23-21-22 (44) | 18.1 | 9.3 | 52.2 | 38.5 |
| 15 | | A-2-4, SiSa, brn, MTW, Rec. = 1.5 ft | 13-30-30-R@5.0" (60) | 14.3 | 12.0 | 52.9 | 35.1 |
| | | A-2-4, SiGrSa, brn, MTW, Rec. = 1.5 ft, Lab Note: Broken Rock was within sample. | 25-24-22-23 (46) | 11.9 | 27.9 | 46.2 | 25.9 |
| 20 | | A-2-4, GrSiSa, brn, MTW, Rec. = 1.1 ft, Lab Note: Broken Rock was within sample. | 17-31-36-R@2.5" (67) | 13.0 | 24.2 | 42.8 | 33.0 |
| 25 | | A-2-4, SiGrSa, brn, MTW, Rec. = 1.3 ft | 17-23-30-R@2.5" (53) | 16.1 | 25.0 | 54.3 | 20.7 |
| | | Hole stopped @ 26.7 ft | | | | | |

Remarks:
1. Hole collapsed at 10.5 ft.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WARDSBORO BF 013-1(21).GPJ VERMONT ACT.GDT 12/16/13

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072boring.dgn
PROJECT LEADER: K HIGGINS
DESIGNED BY: J. SALVATORI
BORING LOGS

PLOT DATE: 26-FEB-2014
DRAWN BY: K. FRIEDLAND
CHECKED BY: J. SALVATORI
SHEET 413 OF 444

# EPSC PLAN NARRATIVE

## 1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF THE EXISTING CULVERT WITH A NEW REINFORCED PRECAST CONCRETE BOX CULVERT WITH RELATED APPROACH AND CHANNEL WORK.

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

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.23 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

## 1.2 SITE INVENTORY

### 1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A SADDLE THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS.

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

AN UNNAMED BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE BROOK IS CLASSIFIED AS STEEP, SINUOUS, NARROW, WITH A CONFINED AND ARMORED CHANNEL AT THE SITE. THE STREAM BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS.

### 1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE III AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

### 1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS ON THE PROJECT SITE ARE AS FOLLOWS:

COLTON LOAMY FINE SAND, WITH 2-8% SLOPES. “K” FACTOR = 0.17

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

### 1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: UNNAMED BROOK
WETLANDS: NO

## 1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

## 1.4 EROSION PREVENTION AND SEDIMENT CONTROL

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

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

### 1.4.1 MARK SITE BOUNDARIES

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

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

BARRIER FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

### 1.4.2 LIMIT DISTURBANCE AREA

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

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

### 1.4.3 SITE ENTRANCE/EXIT STABILIZATION

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

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

### 1.4.4 INSTALL SEDIMENT BARRIERS

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

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

FILTER CURTAINS SHALL BE INSTALLED ON THE INLET AND OUTLET ENDS OF THE PROPOSED BOX AS SHOWN IN THE EROSION CONTROL PLAN.

### 1.4.5 DIVERT UPLAND RUNOFF

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

NO DIVERSIONARY MEASURES ARE ANTICIPATED ON THIS PROJECT.

### 1.4.6 SLOW DOWN CHANNELIZED RUNOFF

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

NO CHECK STRUCTURES ARE ANTICIPATED ON THIS PROJECT.

### 1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

NO PERMANENT CONTROLS ARE ANTICIPATED ON THIS PROJECT.

### 1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

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

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

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

### 1.4.9 WINTER STABILIZATION

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

### 1.4.10 STABILIZE SOIL AT FINAL GRADE

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

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

### 1.4.11 DE-WATERING ACTIVITIES

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

TREATMENT OF DEWATERING DISCHARGE IS ANTICIPATED. A FILTER BAG LOCATION FOR TREATMENT HAS BEEN PROPOSED AND IS SHOWN ON THE PLANS. THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR AND WILL BE PAID FOR UNDER CONTRACT ITEM 653.45.

### 1.4.12 INSPECT YOUR SITE

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

## 1.5 SEQUENCE AND STAGING

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

### 1.5.1 CONSTRUCTION SEQUENCE

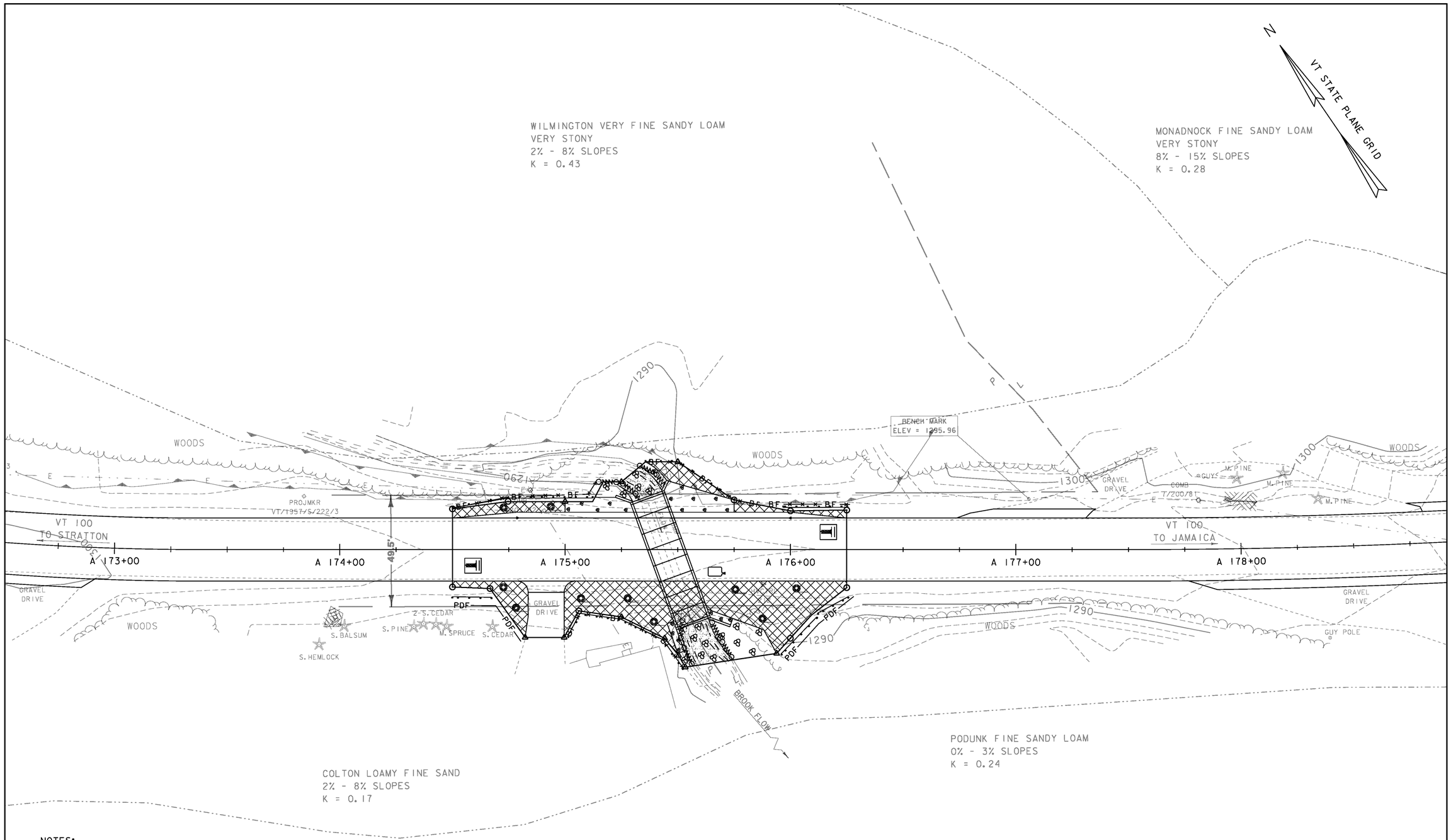
### 1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072epsc_nar.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
EPSC NARRATIVE

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 414 OF 444




NOTES:

1. EXISTING CONTOURS SHOWN. SEE CROSS SECTIONS FOR FINAL CONDITIONS.
2. FOR CLARITY, AREAS TO BE SEEDED AND MULCHED HAVE NOT BEEN INDICATED. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS APPLICABLE.

## EPSC PLAN

SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: WARDSBORO | |
| PROJECT NUMBER: BF 013-1(21) | |
| FILE NAME: s13b072bdr_epsc.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| EPSC PLAN | SHEET 415 OF 444 |

| VAOT RURAL AREA MIX | | | | | |
|---|---|---|---|---|---|
| | LBS/AC | | | | |
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 37.5% | 22.5 | 45 | CREEPING RED FESCUE | 85% | 98% |
| 37.5% | 22.5 | 45 | TALL FESCUE | 90% | 95% |
| 5.0% | 3 | 6 | RED TOP | 90% | 95% |
| 15.0% | 9 | 18 | BIRDSFOOT TREFOIL | 85% | 98% |
| 5.0% | 3 | 6 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 60 | 120 | | | |

| VAOT URBAN AREA MIX | | | | | |
|---|---|---|---|---|---|
| | LBS/AC | | | | |
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 42.5% | 34 | 68 | CREEPING RED FESCUE | 85% | 98% |
| 10.0% | 8 | 16 | PERENNIAL RYE GRASS | 90% | 95% |
| 42.5% | 34 | 68 | KENTUCKY BLUE GRASS | 85% | 85% |
| 5.0% | 4 | 8 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 80 | 160 | | | |

| SOIL AMENDMENT GUIDANCE | | | |
|---|---|---|---|
| FERTILIZER | | LIME | |
| BROADCAST | HYDROSEED | BROADCAST | HYDROSEED |
| 10-20-10 | *FOLLOW* | PELLETIZED | *FOLLOW* |
| 500 LBS/AC | *MANUFACTURER* | 2 TONS/AC | *MANUFACTURER* |

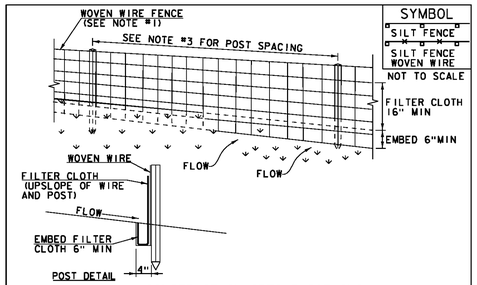
## CONSTRUCTION GUIDANCE

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

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

# TURF ESTABLISHMENT

| REVISIONS | | |
|---|---|---|
| JUNE 23, 2009 | WHF | |
| JANUARY 15, 2010 | WHF | |
| FEBRUARY 16, 2011 | WHF | |




SYMBOL
SILT FENCE
SILT FENCE WOVEN WIRE
NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

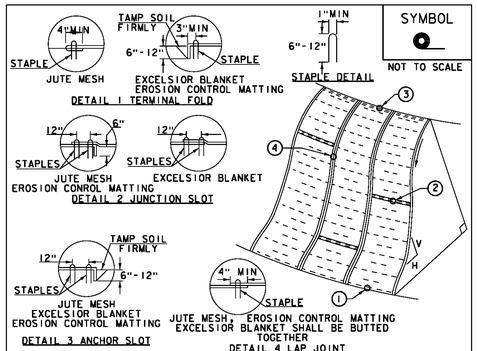
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# SILT FENCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE OR SILT FENCE OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED.

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




SYMBOL
NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

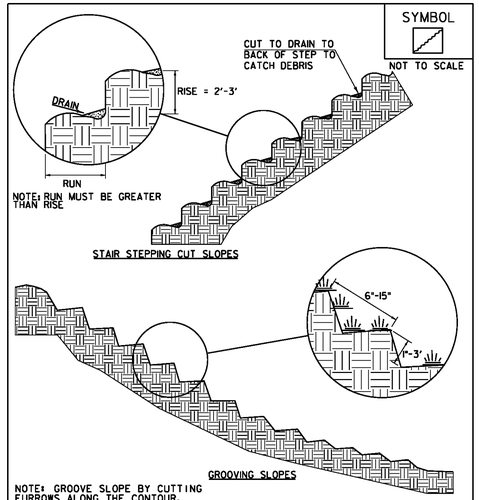
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

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

# ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY EROSION MATTING OR PERMANENT EROSION MATTING.

| REVISIONS | | |
|---|---|---|
| APRIL 16, 2007 | JMF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL
NOT TO SCALE

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

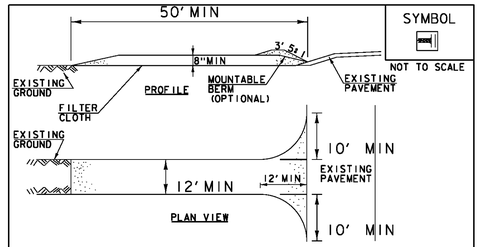
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# SURFACE ROUGHENING

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

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

| REVISIONS | | |
|---|---|---|
| APRIL 1, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL
NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

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

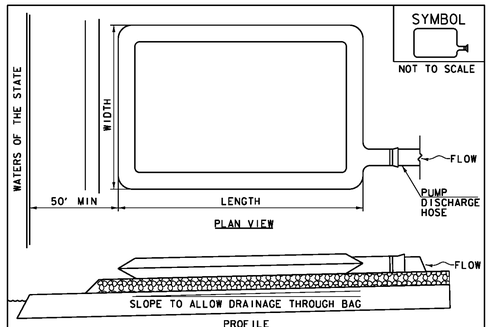
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# STABILIZED CONSTRUCTION ENTRANCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD.

| REVISIONS | | |
|---|---|---|
| MARCH 24, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL
NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

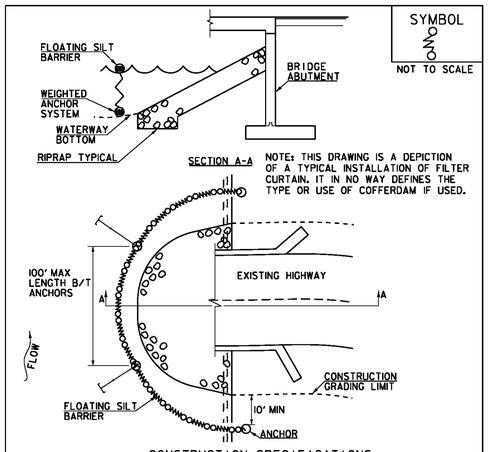
1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

# FILTER BAG

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

| REVISIONS | | |
|---|---|---|
| MARCH 24, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL
NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

# FILTER CURTAIN

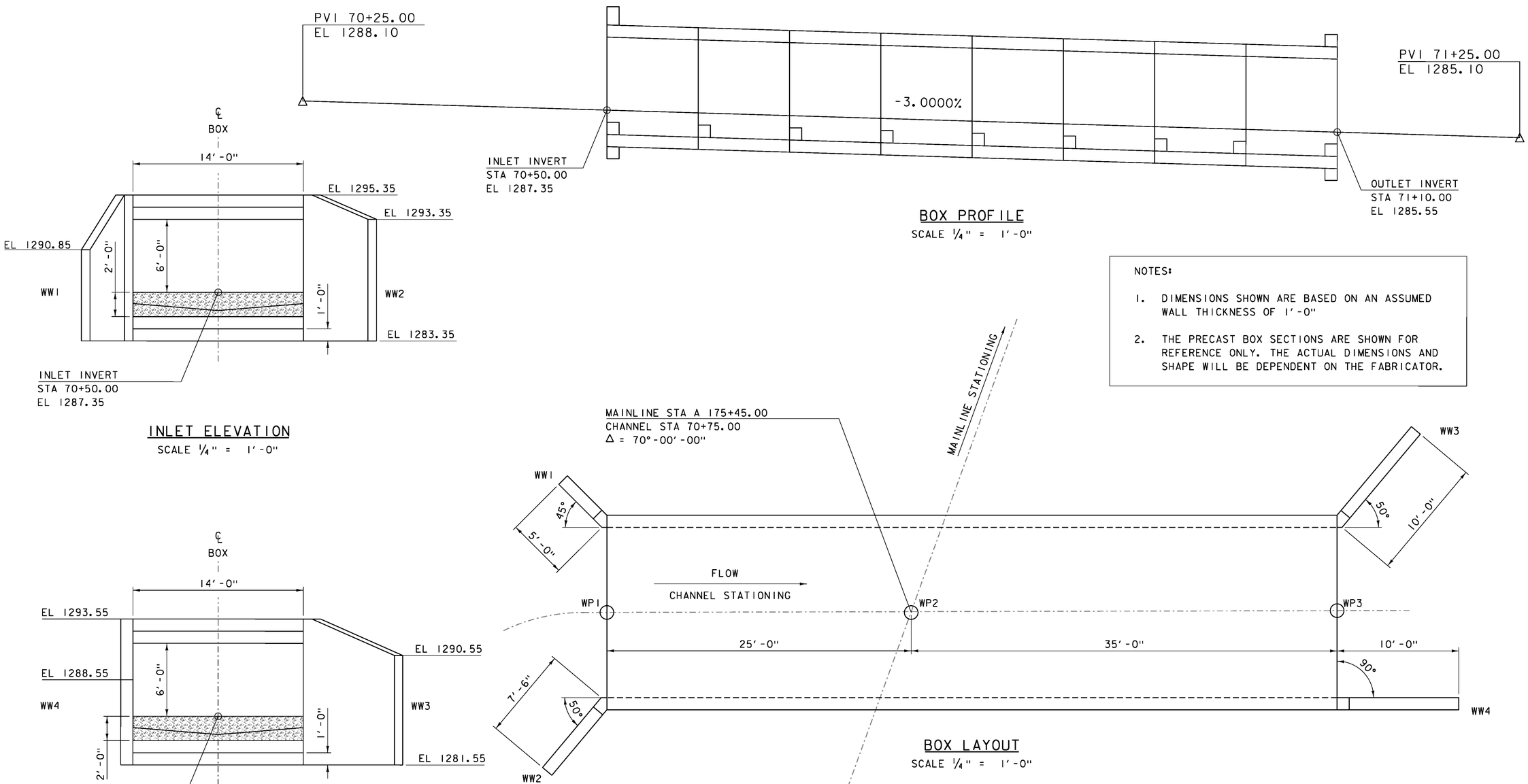
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

| REVISIONS | | |
|---|---|---|
| APRIL 1, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |
| SEPTEMBER 4, 2009 | WHF | |

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072epsc_det.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
EPSC DETAILS

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 416 OF 444




## BOX PROFILE

SCALE 1/4" = 1'-0"

NOTES:

1. DIMENSIONS SHOWN ARE BASED ON AN ASSUMED WALL THICKNESS OF 1'-0"
2. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR.

## INLET ELEVATION

SCALE 1/4" = 1'-0"

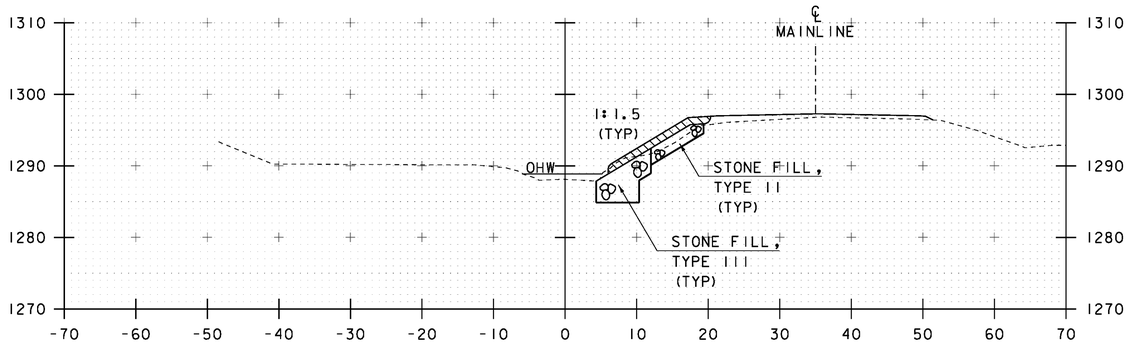
## OUTLET ELEVATION

SCALE 1/4" = 1'-0"

## BOX LAYOUT

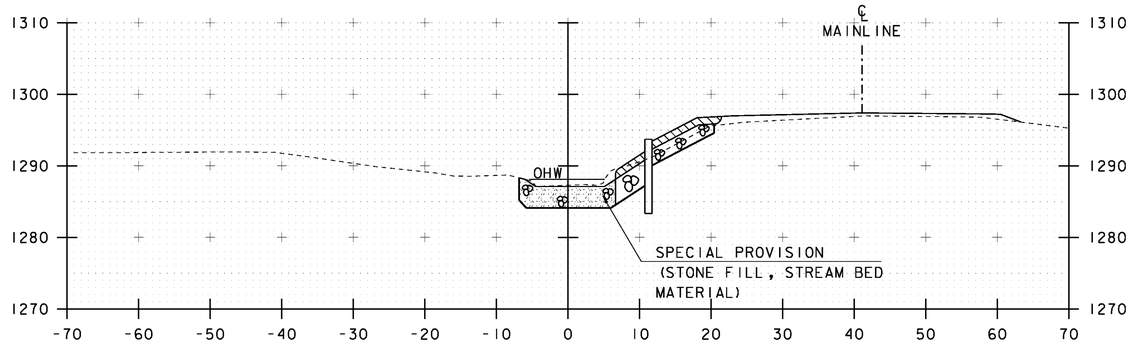
SCALE 1/4" = 1'-0"

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(21) |
| FILE NAME: sl3b072box.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| BOX LAYOUT | SHEET 417 OF 444 |



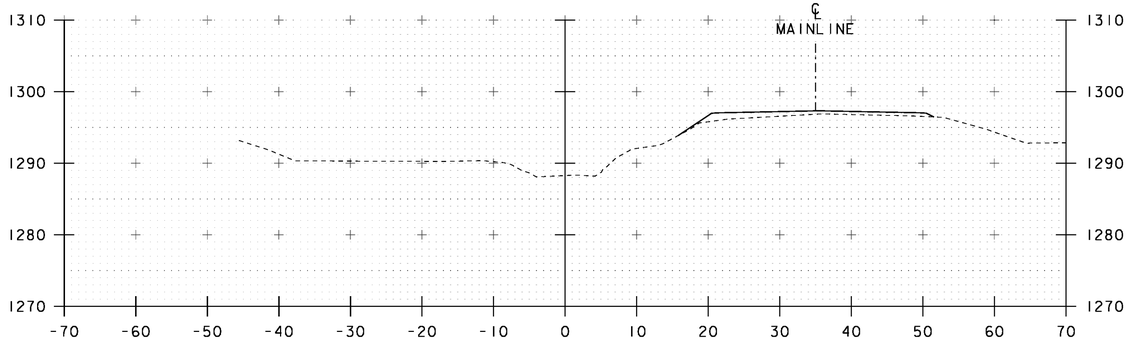

70+25

STA 70+25 RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL

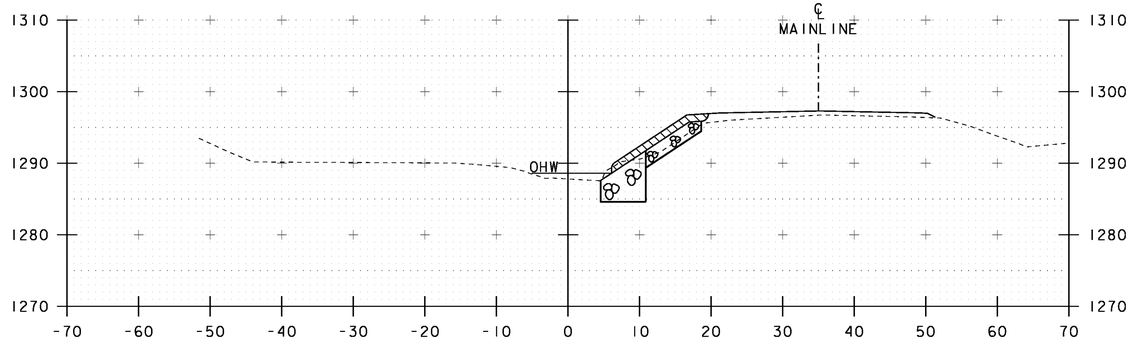



70+40

STA 70+40 LT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL




70+20



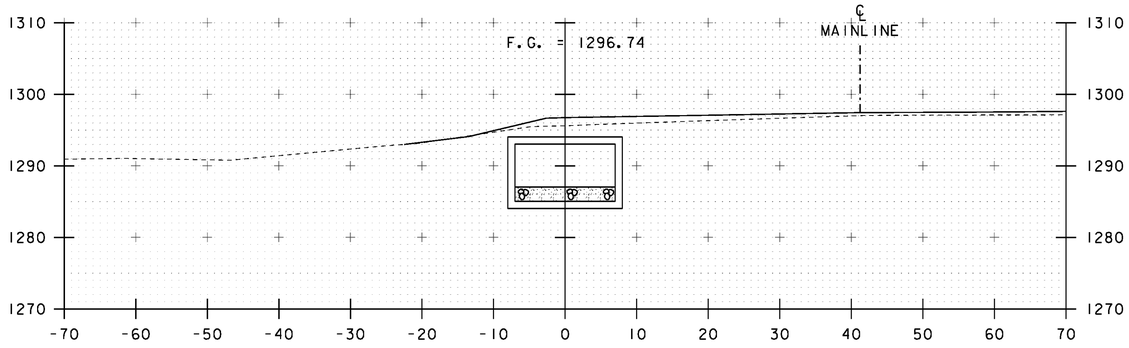

70+30

STA. 70+20 TO STA. 70+40

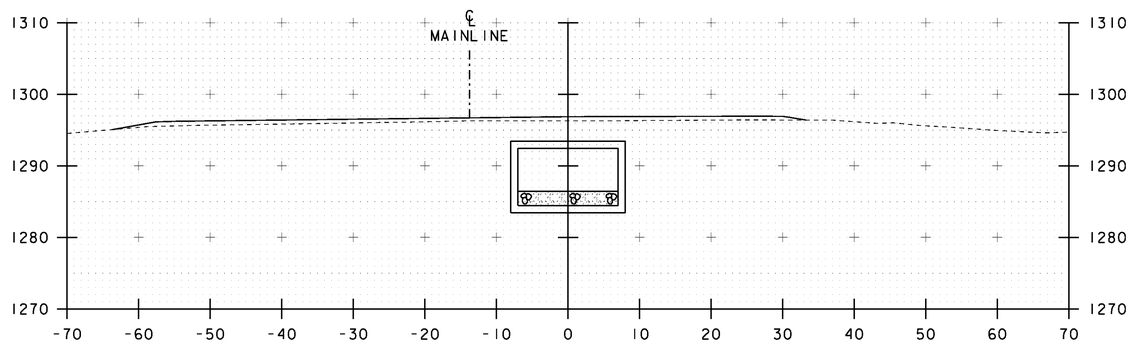
PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS 1

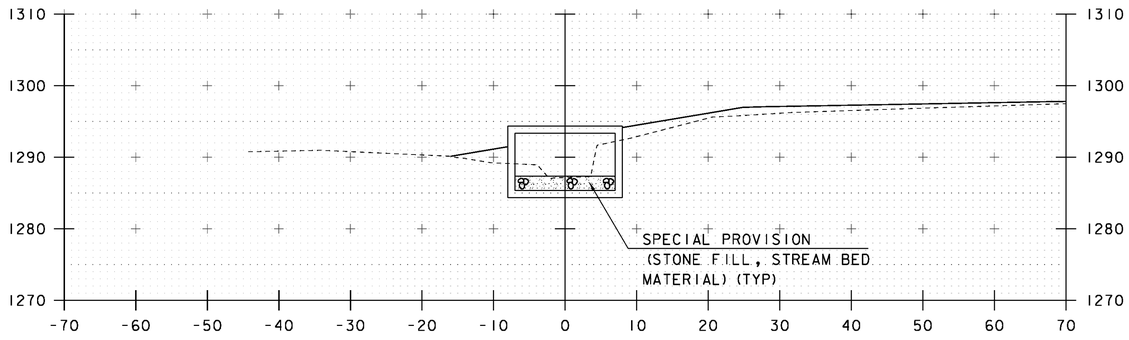
PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 418 OF 444



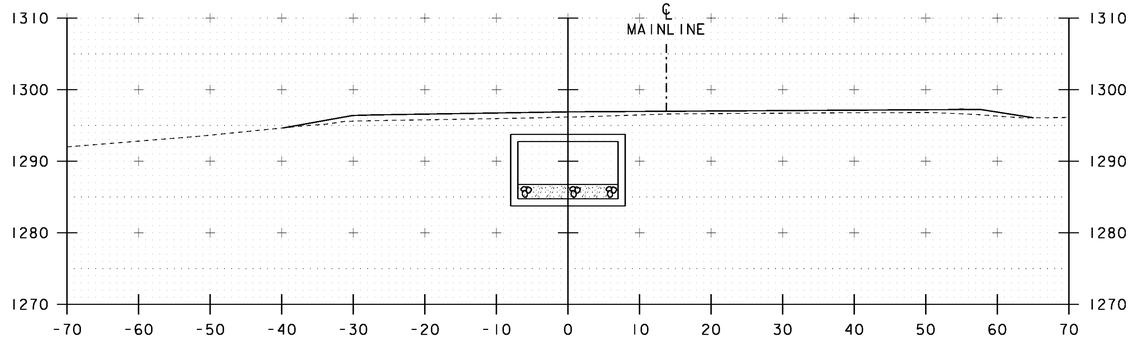

70+60




70+80




70+50




70+70

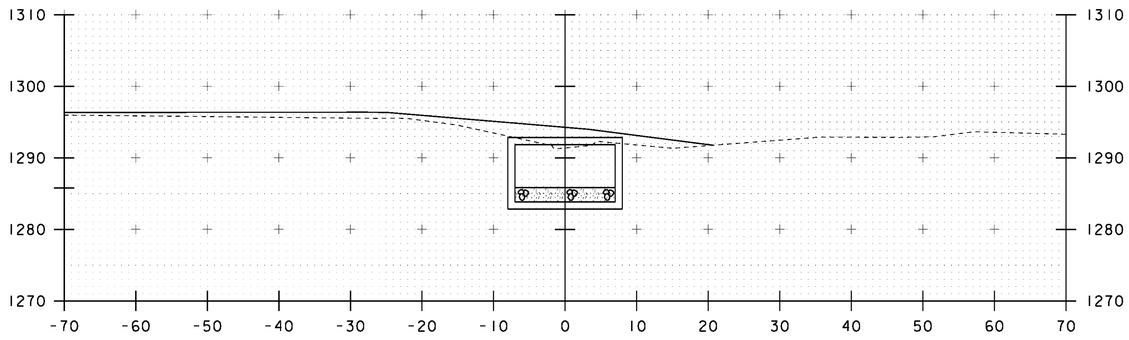
STA 70+50 LT/RT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

STA. 70+50 TO STA. 70+80

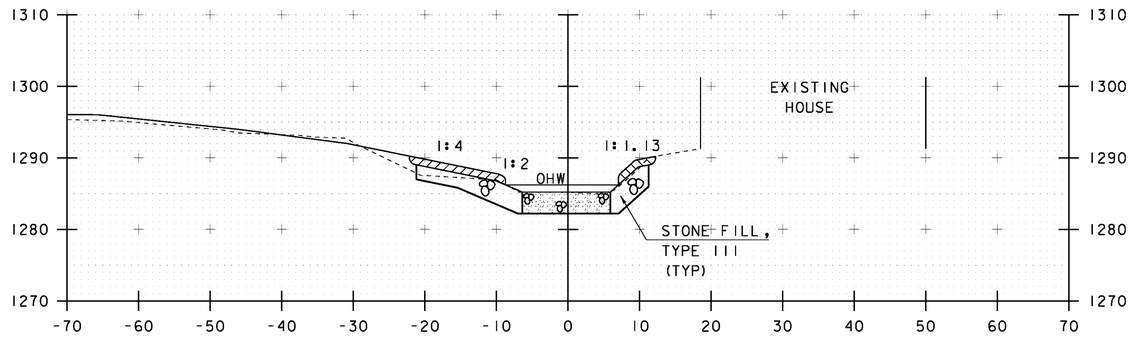
PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS 2

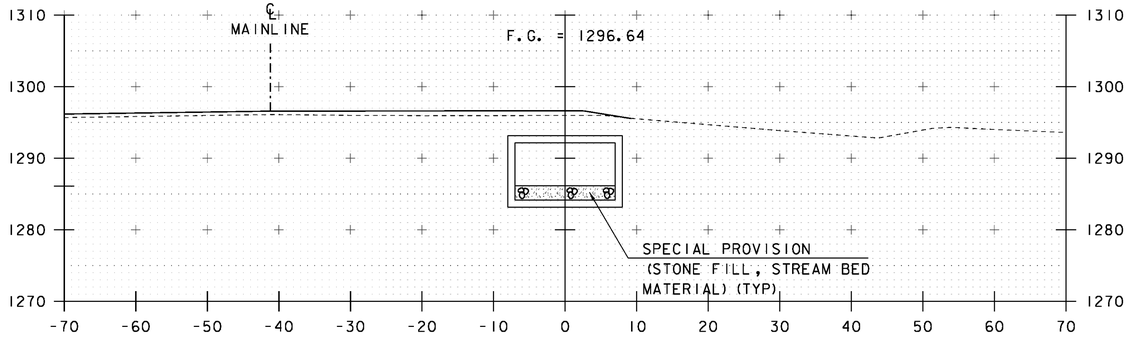
PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 419 OF 444



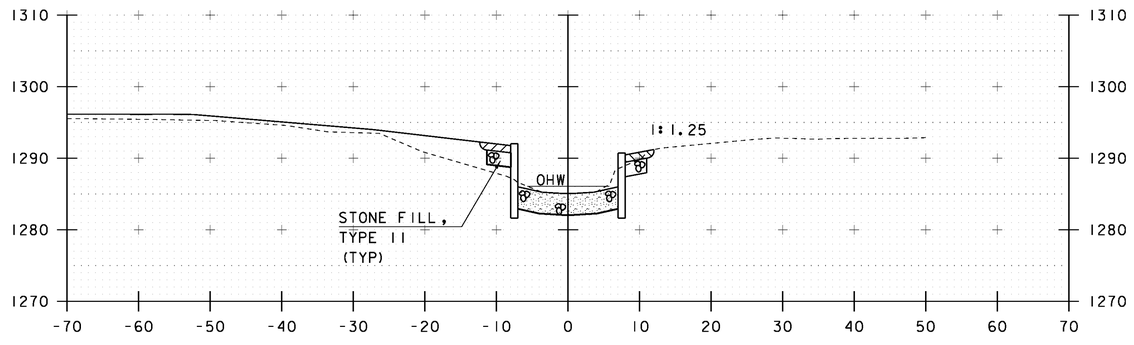

71+00




71+20




70+90




71+10

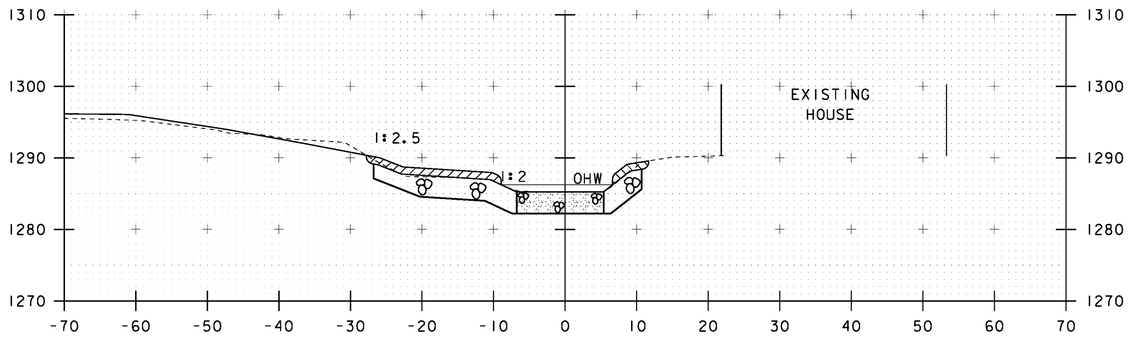
STA 71+10.00 LT/RT
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL

STA. 70+90 TO STA. 71+20

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS 3

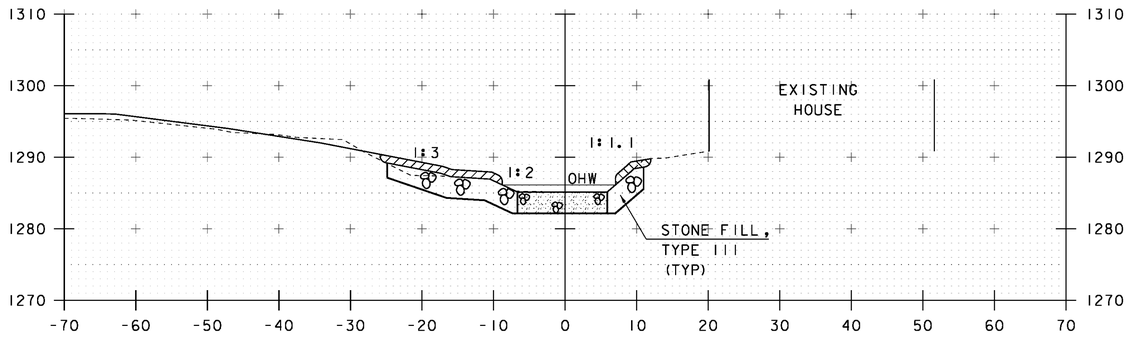
PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 420 OF 444



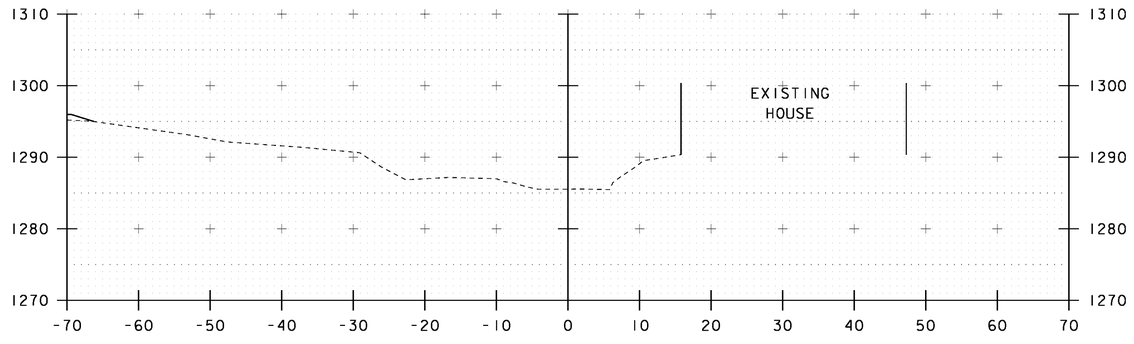

STA 71+37 LT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

71+30

STA 71+30 RT
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL




71+25



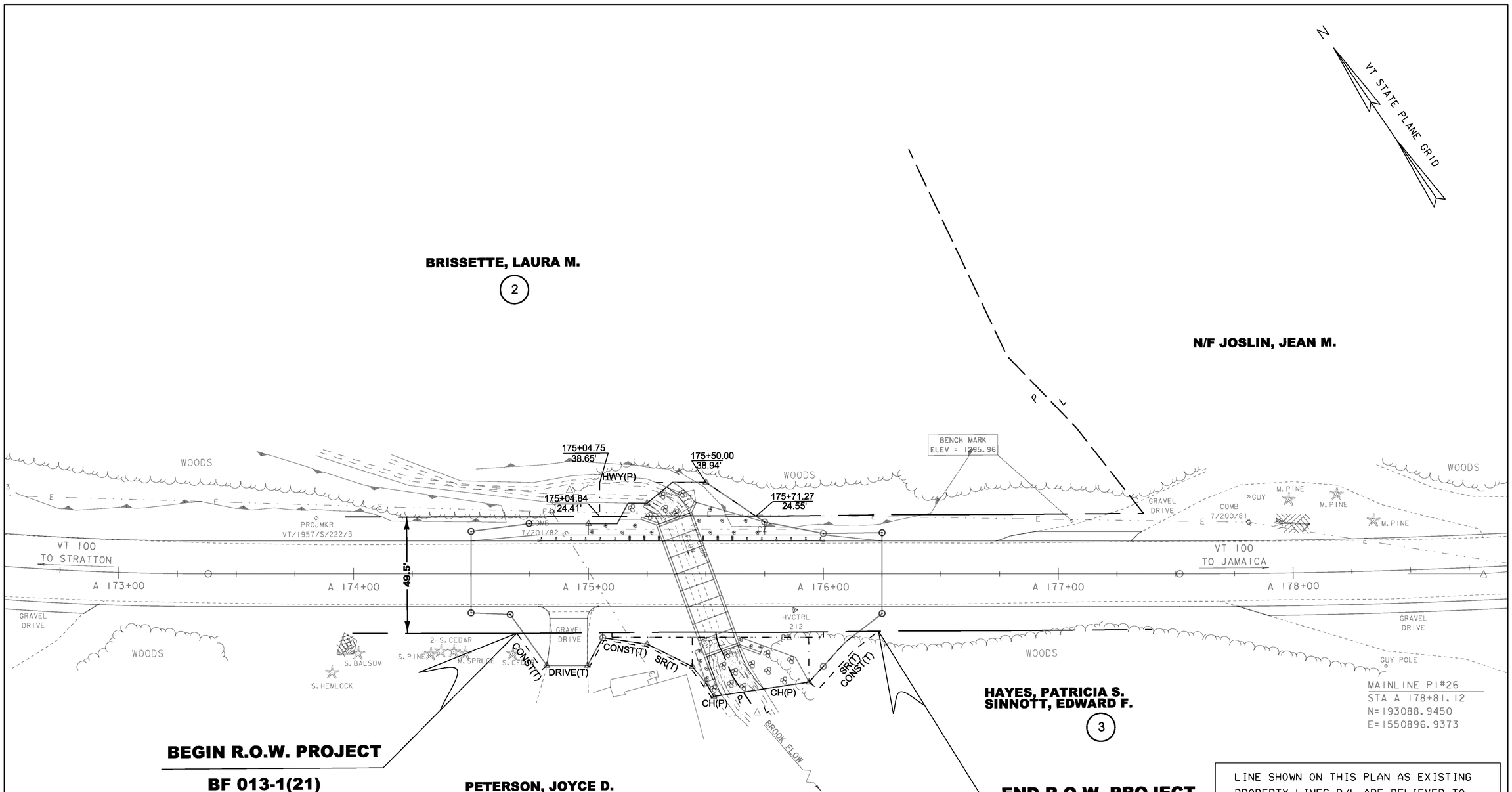

71+40

STA. 71+25 TO STA. 71+40

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: sl3b072xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS 4

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 421 OF 444




LINE 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 AQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

## ROW LAYOUT SHEET

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

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

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(21)

FILE NAME: r13b072zzz.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
ROW LAYOUT SHEET

PLOT DATE: 26-FEB-2014
DRAWN BY: MR
CHECKED BY: JB
SHEET 422 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# RIGHT - OF - WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 1 | PETERSON, JOYCE D. | 1 | 174+69 RT | 174+82 RT | | | CONST | T | 44 SF ± | WD | | WARDSBORO | | | INCL. PDF |
| | | | 175+00 RT | | | | DRIVE | T | | | | | | | 16' GRAVEL; MM 3.329 |
| | | | 175+00 RT | 175+44 RT | | | CONST | T | 535 SF ± | | | | | | INCL. PDF & EC |
| | | | 175+00 RT | 175+44 RT | | | SLOPE RIGHT | T | 308 SF ± | | | | | | |
| | | | 175+44 RT | 175+68 RT | | | CHANNEL | P | 439 SF ± | | | | | | INCL. STONE FILL, CULVERT |
| | | | | | | | | | | | | | | | & WINGWALLS |
| 2 | BRISSETTE, LAURA M. | 1 | 175+05 LT | 175+50 LT | | | CHANNEL | P | 643 SF ± | | | | | | INCL. CULVERET,WINGWALL, STONE FILL, |
| | | | | | | | | | | | | | | | BF & EC |
| | | | 175+50 LT | 175+71 LT | | | CONST | T | 151 SF ± | | | | | | INC. BF |
| 3 | HAYES, PATRICIA & | 1 | 175+53 RT | 175+94 RT | | | CHANNEL | P | 957 SF ± | | | | | | INCL. CULVERT, WINGWALLS & |
| | | | | | | | | | | | | | | | STONE FILL |
| | SINNOTT, EDWARD F. | | 175+94 RT | 176+15 RT | | | SLOPE RIGHT | T | 214 SF ± | | | | | | INCL. PDF & EC |
| | | | 175+94 RT | 176+23 RT | | | CONST | T | 165 SF ± | | | | | | |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION | DATE |
|---|---|---|---|

PLAN LEGEND

EXISTING RIGHT-OF-WAY
TAKING WITH ACCESS
TAKING WITHOUT ACCESS
CLEAR ZONE (CZ)
PROPERTY LINE (P/L)
TOE OF SLOPE
TOP OF CUT
SLOPE RIGHT (SR (P))
CONSTRUCTION RIGHT (CONST.(T))
PROJECT DEMARCATION FENCE (PDF)

EC -EROSION CONTROL
(P) -PERMANENT
(T) -TEMPORARY
DR. -DRAINAGE RIGHT
DIT. -DITCHING RIGHT
CH. -CHANNEL RIGHT
DRIVE -DRIVE RIGHT
CUL. -CULVERT RIGHT
C&T -CLEARING & TRIMMING RIGHT
SR -SLOPE RIGHT
UE -UTILITY EASEMENT

R & R - REMOVE & RESET
I & M - INSTALL & MAINTAIN

PLOT DATE 02/25/14

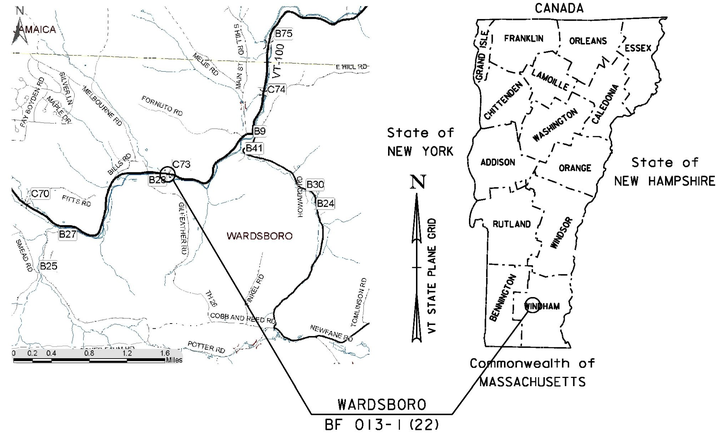
APPROVED: RYAN CLOUTIER DATE: 1-15-14
CHIEF, PLANS & TITLES

PROJECT NAME: **WARDSBORO**
PROJECT NUMBER: **BF 013-1 (21)**

FILE NAME: **r13B072detail.xls**
PROJECT LEADER: **K. HIGGINS**
DESIGNED BY: **J. SALVATORI**
**R.O.W. DETAIL SHEET**

PLOT DATE:
DRAWN BY: **MR**
CHECKED BY: **JB**
SHEET **423** OF **444**

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION




# PROPOSED IMPROVEMENT
# BRIDGE PROJECT

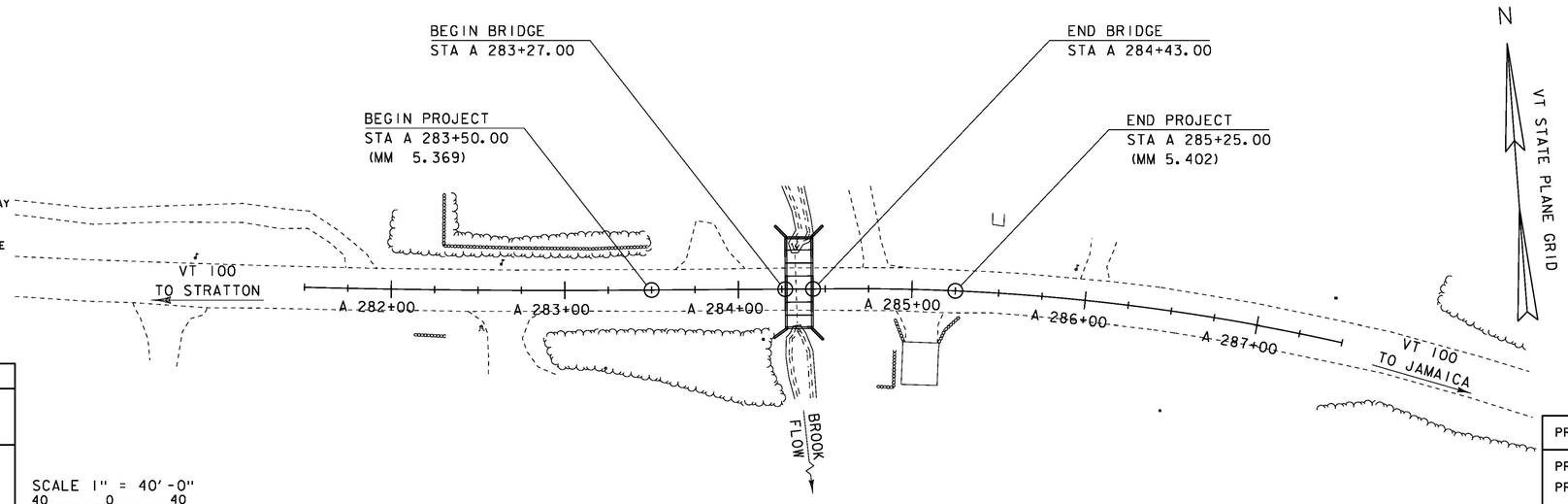
TOWN OF WARDSBORO
COUNTY OF WINDHAM

ROUTE NO : VT ROUTE 100, RURAL MINOR ARTERIAL. CULVERT NO : 73

PROJECT LOCATION: 5.6 MILES SOUTH OF THE JUNCTION OF VT ROUTE 100 AND VT ROUTE 30

PROJECT DESCRIPTION: REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A NEW PRECAST STRUCTURE.

| | |
|---|---|
| LENGTH OF STRUCTURE: | 16.00 FEET |
| LENGTH OF ROADWAY: | 159.00 FEET |
| LENGTH OF PROJECT: | 175.00 FEET |




THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

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

QUALITY ASSURANCE PROGRAM : LEVEL 2

| | |
|---|---|
| SURVEYED BY : | L. ORVIS |
| SURVEYED DATE : | 09/19/2012 |

DATUM

| | |
|---|---|
| VERTICAL | NAVD88 |
| HORIZONTAL | NAD 83 (2007) |

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

PROJECT MANAGER : K. HIGGINS, P.E.

PROJECT NAME : WARDSBORO
PROJECT NUMBER : BF 013-1(22)

SHEET 424 OF 444 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

# PRELIMINARY INFORMATION SHEET (CULVERT)

Version 12.09.13

LRFD

## INDEX OF SHEETS

### PLAN SHEETS

SEE SHEET 2 FOR
INDEX OF SHEETS AND
LIST OF STANDARDS

### STANDARDS LIST

## FINAL HYDRAULIC REPORT

### HYDROLOGIC DATA

Date: Nov 2013

DRAINAGE AREA : 1.2 sq. mi.
CHARACTER OF TERRAIN : Mountainous, mostly forested, some development
STREAM CHARACTERISTICS : Sinuous and alluvial
NATURE OF STREAMBED : Boulders, cobbles and gravel

PEAK FLOW DATA

| | | | |
|---|---|---|---|
| Q 2.33 = | 90 cfs | Q 50 = | 370 cfs |
| Q 10 = | 230 cfs | Q 100 = | 450 cfs |
| Q 25 = | 300 cfs | Q 500 = | 630 cfs |

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ Q50 = 8.3 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes
IS ORDINARY RISE RAPID? Yes
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: Multiplate Pipe Arch
YEAR BUILT: 1957
CLEAR SPAN(NORMAL TO STREAM): 8' - 2"
VERTICAL CLEARANCE ABOVE STREAMBED: 5' - 9"
WATERWAY OF FULL OPENING: 38 sq. ft.
DISPOSITION OF STRUCTURE: Remove and replace
TYPE OF MATERIAL UNDER SUBSTRUCTURE: See borings

WATER SURFACE ELEVATIONS AT:

| | | | |
|---|---|---|---|
| Q2.33 = | 1087.0' | VELOCITY = | 5.4 fps |
| Q10 = | 1089.7' | " | 9.9 fps |
| Q25 = | 1090.8' | " | 11.1 fps |
| Q50 = | 1092.0' | " | 11.9 fps |
| Q100 = | 1092.2' | " | 12.1 fps |

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW Q100: Yes
FREQUENCY: Below Q50
RELIEF ELEVATION: 1091.9' @ arch
DISCHARGE OVER ROAD @Q100: 90 cfs

### UPSTREAM STRUCTURE

TOWN: Wardsboro
DISTANCE: 1800'
HIGHWAY # : TH
STRUCTURE #:
CLEAR SPAN:
CLEAR HEIGHT:
YEAR BUILT:
FULL WATERWAY:
STRUCTURE TYPE:

### DOWNSTREAM STRUCTURE

TOWN: Wardsboro
DISTANCE: 600'
HIGHWAY # :
STRUCTURE #:
CLEAR SPAN:
CLEAR HEIGHT:
YEAR BUILT:
FULL WATERWAY:
STRUCTURE TYPE: Confluence with Wardsboro Brook

### PROPOSED STRUCTURE

STRUCTURE TYPE: Precast Concrete Box

CLEAR SPAN(NORMAL TO STREAM): 14'
VERTICAL CLEARANCE ABOVE STREAMBED: 6'
WATERWAY OF FULL OPENING: 84 sq. ft.

WATER SURFACE ELEVATIONS AT:

| | | | |
|---|---|---|---|
| Q2.33 = | 1086.2' | VELOCITY= | 7.5 fps |
| Q10 = | 1087.6' | " | 10.7 fps |
| Q25 = | 1088.1' | " | 11.7 fps |
| Q50 = | 1088.7' | " | 12.5 fps |
| Q100 = | 1089.3' | " | 13.4 fps |

IS THE ROADWAY OVERTOPPED BELOW Q100: No
FREQUENCY: N/A
RELIEF ELEVATION: 1091.9' at box
DISCHARGE OVER ROAD @Q100: N/A

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 1090.7' at inlet
VERTICAL CLEARANCE: @ Q50 = 2.0'

SCOUR: Scour not calculated for a box

REQUIRED CHANNEL PROTECTION: Stone Fill, Type III

### PERMIT INFORMATION

| | | |
|---|---|---|
| AVERAGE DAILY FLOW: | 3 cfs | DEPTH OR ELEVATION: |
| ORDINARY LOW WATER: | 1 cfs | < 0.5' |
| ORDINARY HIGH WATER: | 40 cfs | ~1.0' |

### TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: None required
CLEAR SPAN (NORMAL TO STREAM):
VERTICAL CLEARANCE ABOVE STREAMBED:
WATERWAY AREA OF FULL OPENING:

### ADDITIONAL INFORMATION

### TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR
2. TRAFFIC SIGNALS ARE NOT NECESSARY
3. SIDEWALKS ARE NOT NECESSARY

### DESIGN VALUES

| | | |
|---|---|---|
| 1. DESIGN LIVE LOAD | | HL-93 |
| 2. FUTURE PAVEMENT | $d_P$: | 3.0 INCH |
| 3. CULVERT OPENING | $D$: | 84.00 FT |
| 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) | $\Delta$: | --- |
| 5. PRESTRESSING STRAND | $f_y$: | --- |
| 6. PRESTRESSED CONCRETE STRENGTH | $f'_c$: | --- |
| 7. PRESTRESSED CONCRETE RELEASE STRENGTH | $f'_{ci}$: | --- |
| 8. CONCRETE, HIGH PERFORMANCE CLASS AA | $f'_c$: | --- |
| 9. CONCRETE, HIGH PERFORMANCE CLASS A | $f'_c$: | |
| 10. CONCRETE, HIGH PERFORMANCE CLASS B | $f'_c$: | --- |
| 11. CONCRETE, CLASS C | $f'_c$: | --- |
| 12. REINFORCING STEEL | $f_y$: | 60 KSI |
| 13. STRUCTURAL STEEL AASHTO M270 | $f_y$: | --- |
| 14. SOIL UNIT WEIGHT | $\gamma$: | --- |
| 15. NOMINAL BEARING RESISTANCE OF SOIL | $q_n$: | --- |
| 16. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | --- |
| 17. NOMINAL BEARING RESISTANCE OF ROCK | $q_n$: | --- |
| 18. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) | $\phi$: | --- |
| 19. NOMINAL AXIAL PILE RESISTANCE | $q_p$: | --- |
| 20. PILE YIELD STRENGTH ASTM A572 | $f_y$: | --- |
| 21. PILE SIZE | | --- |
| 22. EST. PILE LENGTH | $L_p$: | |
| 23. PILE RESISTANCE FACTOR | $\phi$: | --- |
| 24. LATERAL PILE DEFLECTION | $\Delta$: | --- |
| 25. BASIC WIND SPEED | $V_{3s}$: | --- |
| 26. MINIMUM GROUND SNOW LOAD | $p_g$: | --- |
| 27. SEISMIC DATA PGA : --- | $S_s$: | --- |
| | $S_1$: | --- |

### LRFR LOAD RATING FACTORS

| LOADING LEVELS | TRUCK | | | | | | |
|---|---|---|---|---|---|---|---|
| | H-20 | HL-93 | 3S2 | 6 AXLE | 3A STR | 4A STR | 5A SEMI |
| TONNAGE | 20 | 36 | 36 | 66 | 30 | 34.5 | 38 |
| INVENTORY | | | | | | | |
| POSTING | | | | | | | |
| OPERATING | | | | | | | |
| COMMENTS: | TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER | | | | | | |

### CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A PRECAST CONCRETE STRUCTURE (14'-0" x 8'-0" x 52'-6" BOX)
2. CULVERT ENDS ARE SKEWED BY AN ANGLE OF 90°
3. CULVERT WILL BE SET AT A SLOPE OF 41.60 IN. ON 100 FT.
4. CULVERT WILL REQUIRE FISH PASSAGE ACCOMMODATIONS
5. CULVERT CONSTRUCTION WILL REQUIRE A TEMPORARY PIPE

### AS BUILT "REBAR" DETAIL

| LEVEL I | LEVEL II | LEVEL III |
|---|---|---|
| TYPE: | TYPE: | TYPE: |
| GRADE: | GRADE: | GRADE: |

### TRAFFIC DATA

| YEAR | ADT | DHV | % D | % T | ADTT |
|---|---|---|---|---|---|
| 2016 | 1100 | 150 | 55 | 13.7 | 130 |
| 2036 | 1200 | 170 | 55 | 20.4 | 210 |

20 year ESAL for flexible pavement from 2016 to 2036 : 898000
40 year ESAL for flexible pavement from 2016 to 2056 : 2056000
Design Speed : 50 mph

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

FILE NAME: 13b074/s13b074excel.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
PRELIMINARY INFORMATION SHEET

PLOT DATE: 2/6/2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 425 OF 444

## GENERAL NOTES

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS 6th EDITION, AND ITS LATEST REVISIONS.

2. THE CONTRACTOR WILL BE ALLOWED TO CLOSE THE BRIDGE FOR ONE WEEKEND (TWO CONSECUTIVE DAYS) BEGINNING ON A FRIDAY AT 6PM AND ENDING THE FOLLOWING MONDAY AT 6 AM TO PERFORM REPLACEMENT OF THE EXISTING STRUCTURE. FOLLOWING THE BRIDGE CLOSURE PERIOD, THE PROJECT FACILITY SHALL BE REOPENED TO A MINIMUM OF ONE-LANE, TWO-WAY TRAFFIC. DURING THAT TIME THE CONTRACTOR WILL BE ALLOWED TO WORK 24 HOURS PER DAY. THE CONTRACTOR SHALL SCHEDULE THEIR WORK SUCH THAT THE BRIDGE IS NOT CLOSED DURING HOLIDAY PERIODS. SEE SPECIAL PROVISIONS FOR FURTHER INFORMATION AND REQUIREMENTS.

3. THE CONTRACTOR IS TO COORDINATE THE ROAD BRIDGE CLOSURE PERIOD WITH ANY SCHEDULED ROAD CLOSURES OF VERMONT ROUTE 30 ASSOCIATED WITH THE BRATTLEBORO IM 091-1(65) PROJECT. FOR ARRANGEMENTS CONTACT CALEB LINN, PROJECT MANAGER, PCL CIVIL CONSTRUCTORS, INC AT 802-251-0709.

4. PREPARATION OF THE SITE WILL BE ALLOWED PRIOR TO THE BRIDGE CLOSURE PERIOD. HOWEVER, EXCAVATION FOR AND PLACEMENT OF BOX SECTIONS SHALL BE PERFORMED DURING BRIDGE CLOSURE PERIOD ONLY.

5. ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL BE USED FOR ALL WORK REQUIRED TO REMOVE THE EXISTING CGMPPA UNDER VT 100.

6. THE CONTRACTOR IS TO INSTALL TEMPORARY TRAFFIC BARRIER TO REMAIN IN PLACE UNTIL FINAL GRADE IS ESTABLISHED AND PROPOSED GUARDRAIL IS INSTALLED BETWEEN STATIONS 283+50 AND 285+25. PAYMENT WILL BE CONSIDERED INCLUDED IN THE BID PRICE FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

7. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES F UNLESS OTHERWISE NOTED.

8. EXCAVATED STREAM BED MATERIAL SUPPLEMENTED WITH STONE FILL, TYPE III SHALL BE PLACED INSIDE THE BOX SECTIONS AND AS SHOWN IN THE PLANS. PAYMENT SHALL BE UNDER ITEM 900.608 SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL). SEE SPECIAL PROVISIONS.

9. CONTRACTOR IS TO CONTACT RIVER MANAGEMENT ENGINEER, TODD MENEES AT 802-345-3510, A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSURE PERIOD FOR APPROVAL OF STREAM BED MATERIAL AND FOR CONSULTATION REGARDING FINAL GRADING OF THE CHANNEL.

## TRAFFIC CONTROL

10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED PRIOR TO, DURING AND AFTER THE BRIDGE CLOSURE PERIOD. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT DETAILED TRAFFIC CONTROL PLANS TO THE RESIDENT ENGINEER FOR APPROVAL PER SUBSECTION 105.03. ALL COSTS SHALL BE INCLUDED IN ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE). SEE SPECIAL PROVISIONS.

11. ALL TEMPORARY TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). FOR ADDITIONAL SIGNING INSTRUCTIONS SEE THE T SERIES OF THE STANDARDS. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

12. INSTALLATION OF TEMPORARY TRAFFIC CONTROL SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL TRY TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.

13. ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN NOT PAID UNDER A SEPARATE CONTRACT ITEM WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCLUDED IN THE BID PRICE FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).

14. DURING DAYLIGHT HOURS OF THE CLOSURE PERIOD, FLAGGERS ARE TO BE STATIONED AT THE INTERSECTIONS OF VT 100/SMEAD ROAD AND SOUTH WARDBORO ROAD/COBB AND REED ROAD.

## PRECAST CONCRETE

15. DESIGN CRITERIA (PRECAST BOX):

    A. SOIL UNIT WEIGHT = 130 PCF
    B. DESIGN LIVE LOAD = HL-93
    C. NOMINAL BEARING RESISTANCE (BEDROCK) = 70 KSF
    D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 20 KSF
    E. BEARING RESISTANCE FACTOR = 0.45
    F. DESIGN FILL OVER BOX = 0-2 FEET
    G. AT-REST EARTH PRESSURE (Ko) = 0.398
    H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)

16. DESIGN CRITERIA (PRECAST WINGWALLS):

    A. SOIL UNIT WEIGHT = 130 PCF
    B. DESIGN LIVE LOAD = HL-93
    C. NOMINAL BEARING RESISTANCE (BEDROCK) = 8 KSF
    D. NOMINAL BEARING RESISTANCE (GRANULAR BACKFILL) = 20 KSF
    E. BEARING RESISTANCE FACTOR = 0.45
    F. DESIGN FILL OVER BOX = N/A
    G. AT-REST EARTH PRESSURE (Ko) = 0.398
    H. CONCRETE COMPRESSIVE STRENGTH = SEE SUBSECTION 540.05(e)

17. ALL CONCRETE SHALL BE PRECAST. ITEM 540.10 "PRECAST CONCRETE STRUCTURE" INCLUDES ALL BOX SEGMENTS, HEADWALLS, AND CUTOFF WALLS. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10.

18. THE PRECAST CONCRETE STRUCTURE SHALL BE DESIGNED FOR HYDROSTATIC PRESSURE UNLESS RAPID DRAINING MATERIAL MEETING THE REQUIREMENTS OF SUBSECTION 704.18 IS USED. IF USED, RAPID DRAINING MATERIAL SHALL BE PAID AT THE UNIT PRICE BID FOR ITEM 204.30. NO WEEPHOLES IN THE BOX SECTIONS WILL BE ALLOWED.

19. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR. THE MINIMUM INSIDE DIMENSIONS SHALL BE 8'-0" IN HEIGHT AND 14'-0" IN WIDTH. THE EXPOSED ENDS OF THE FIRST AND LAST UNITS SHALL BE VERTICAL.

20. ALL LIFTING HOLES AND BOLT POCKETS SHALL BE FILLED WITH MORTAR TYPE IV AFTER BEING SET IN THEIR FINAL POSITION. THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 540.10. FILLING THE JOINTS BETWEEN BOX SEGMENTS WITH GROUT IS NOT REQUIRED.

21. SHEET MEMBRANE WATERPROOFING MEETING THE REQUIREMENTS OF SUBSECTION 540.02 SHALL BE APPLIED TO THE ENTIRE TOP OF THE BOX AND A TWO (2) FOOT WIDE STRIP SHALL BE PLACED AT EACH VERTICAL JOINT. MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL HEIGHT. THE SIDES SHALL BE COVERED PRIOR TO THE TOP. ANY OVERLAPPING OF MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE TO SHED WATER AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR MEMBRANE WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

22. WATER REPELLENT, SILANE SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 514 AND SHALL BE SHOP APPLIED TO ALL EXPOSED EXTERIOR SURFACES OF THE PRECAST CONCRETE STRUCTURE. PAYMENT FOR SILANE WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

## REINFORCING STEEL

23. ALL REINFORCING STEEL SHALL BE LEVEL I (EPOXY COATED) REINFORCING STEEL IN ACCORDANCE WITH SECTION 507. PAYMENT FOR ALL REINFORCING STEEL WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 540.10.

24. ALL REINFORCING STEEL SHALL HAVE A MINIMUM CLEAR COVER OF 2".

25. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:

    SPACING +/- 1"
    CLEARANCE +/- ¼"

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

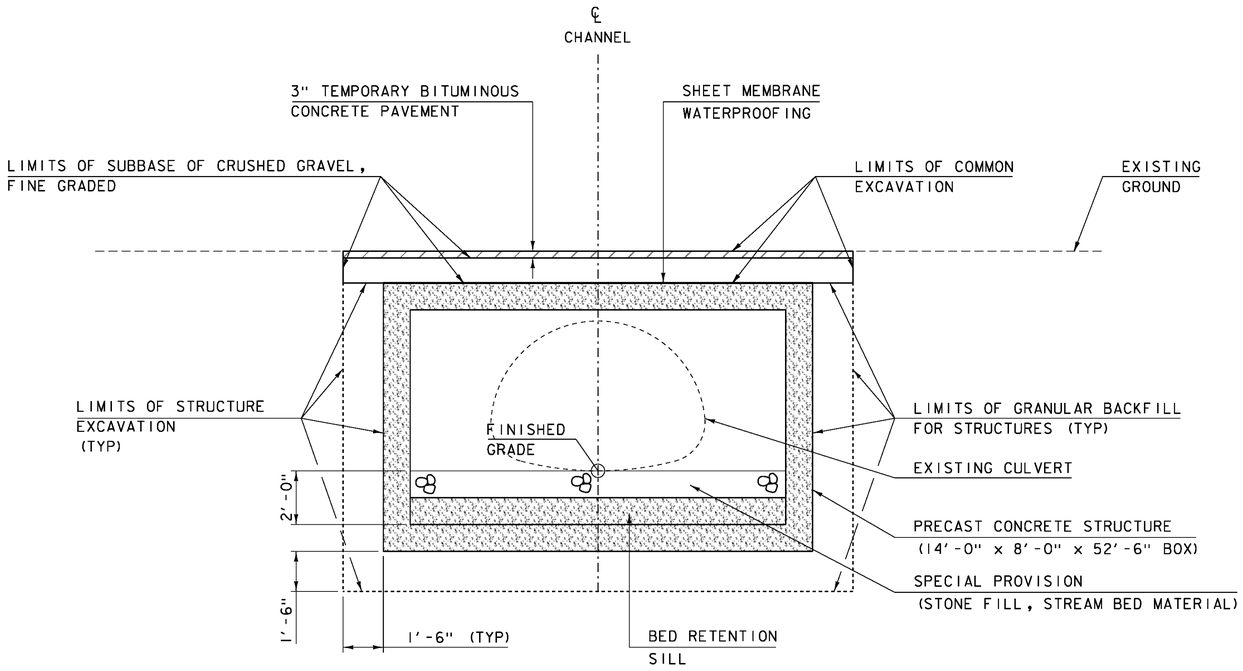
FILE NAME: sl3b074gen.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
PROJECT NOTES

PLOT DATE: 17-MAR-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 426 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION

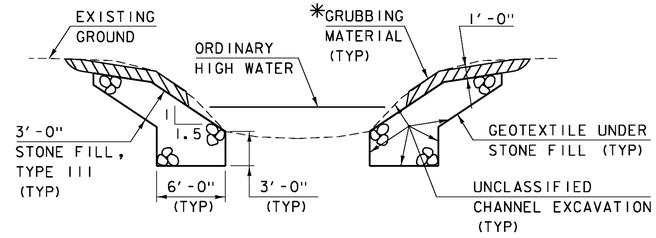
# QUANTITY SHEET 1

| SUMMARY OF ESTIMATED QUANTITIES | | |




## TYPICAL PRECAST BOX CULVERT SECTION

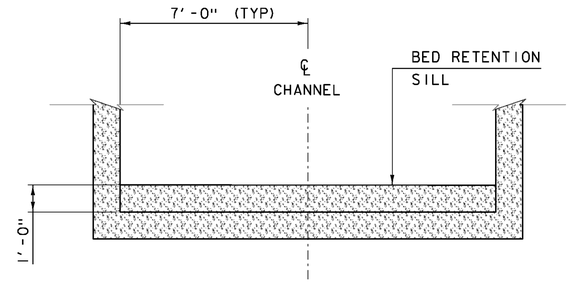
SCALE 3/8" = 1'-0"




## TYPICAL CHANNEL SECTION

(NOT TO SCALE)

*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL INSIDE THE BOX CULVERT. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.




NOTES:

1. SILLS TO BE SPACED A MAXIMUM OF EVERY 8'-0" AND AT THE INLET AND OUTLET.
2. FABRICATOR TO DETAIL SILL CONNECTION.

## BED RETENTION SILL DETAIL

NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22) |
| FILE NAME: sl3b074typ.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| TYPICAL SECTIONS | SHEET 428 OF 444 |

SHEEPSCOT FINE SANDY LOAM
3% - 8% SLOPES
K = 0.17

COLTON LOAMY FINE SAND
2% - 8% SLOPES
K = 0.17

N

VT STATE PLANE GRID

**DEWEY, PEARL G.**

APPROX LEACHFIELD

2-M. MAPLE

M. MAPLE (STUMP)

PAVED DRIVE

FIELD DRIVE

WOODS

0601

MAILBOX & M. ELM

M. MAPLE MAILBOX

HVCTRL 38

M. MAPLE

M. ASH

VT 100 TO STRATTON

A 282+00

A 283+00

A 284+00

A 285+00

A 286+00

VT 100 TO JAMAICA

A 287+00

3-ROD RIGHT OF WAY 49.50

27" CORR. FLOW

HVCTRL 235

M. ELM

M. CHERRY

M. ELM

M. MAPLE

M. MAPLE

M. ASH

M. MAPLE

GARAGE

1090

GRAVEL DRIVE

M. PINE

M. HEMLOCK

WELL 36" CONCRETE

**YOUNG, JR., RAYMOND P. & NANCY L.**

BROOK FLOW

**DEWEY, PEARL G.**

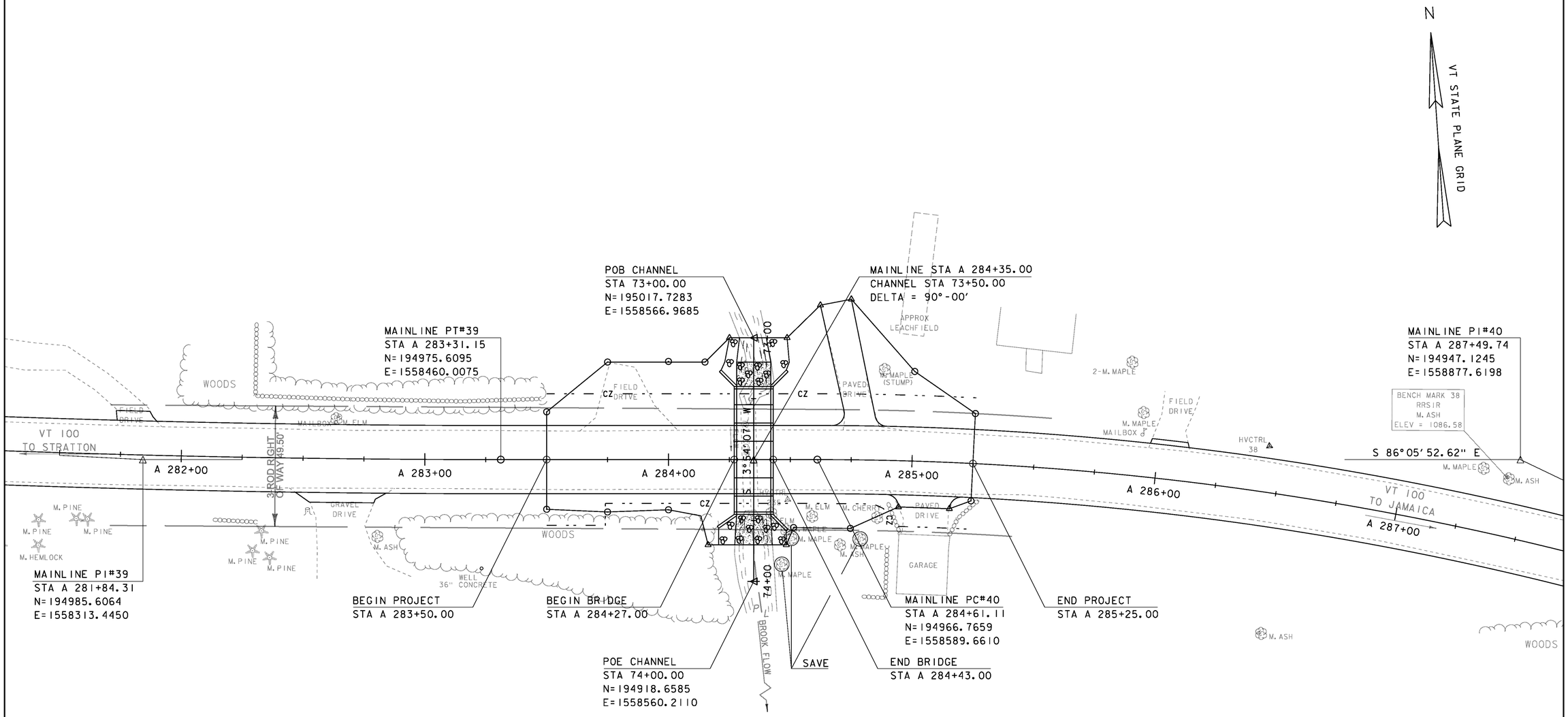
UDIFLUVENTS, LOAMY

## EXISTING CONDITIONS

SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22 101/100 |
| FILE NAME: sl3b074bdr_ex.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| EXISTING CONDITIONS | SHEET 429 OF 444 |




## LAYOUT SHEET

SCALE 1" = 20'-0"

20 0 20

MAINLINE CURVE (39)
DELTA = 2°56'14"
D = 1°00'00"
R = 5730.00'
T = 146.90'
L = 293.74'
E = 1.88'

MAINLINE CURVE (40)
DELTA = 25°36'28"
D = 4°30'41"
R = 1270.00'
T = 288.63'
L = 567.61'
E = 32.38'

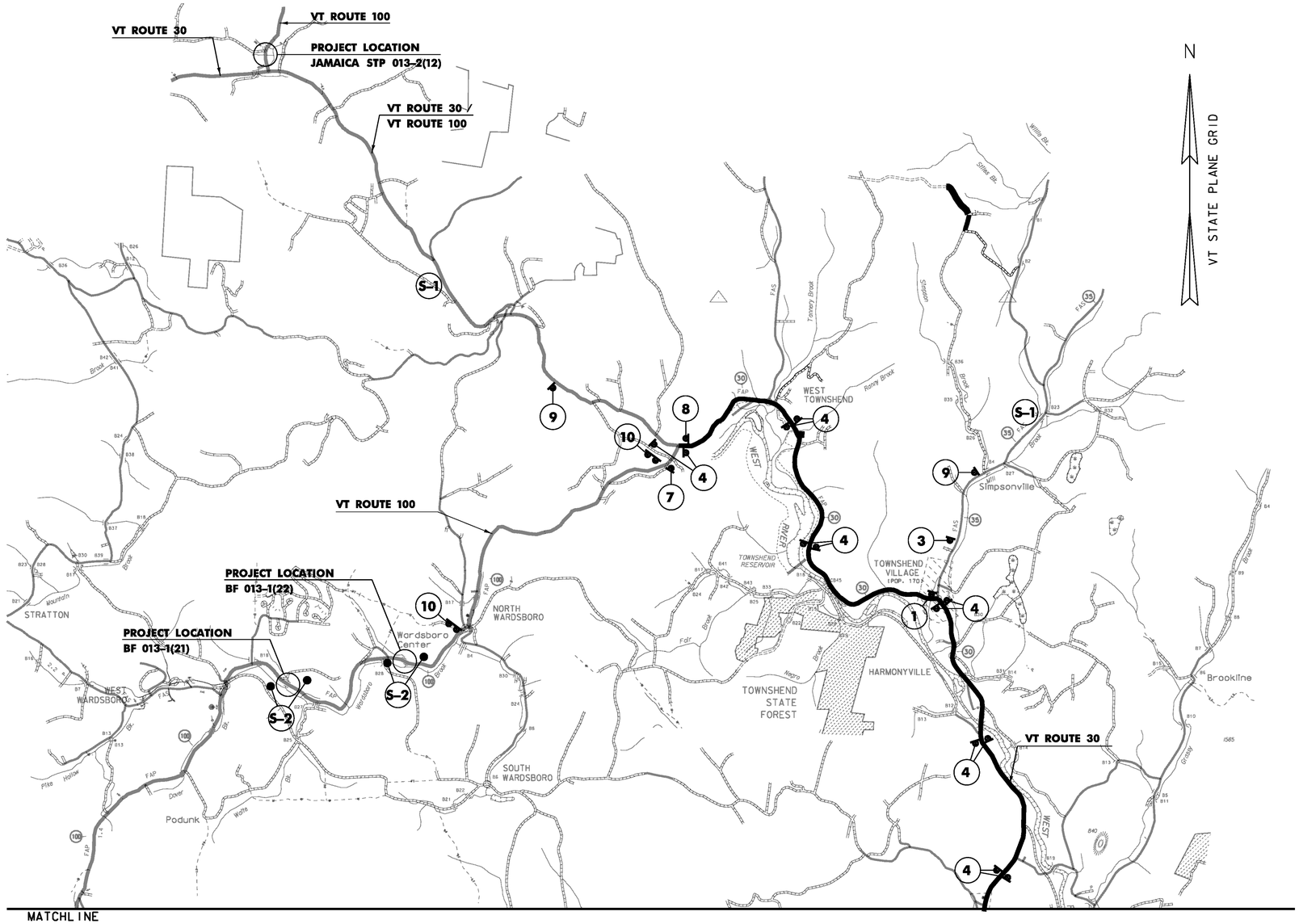
STONE FILL, TYPE III

SPECIAL PROVISION (STONE FILL, STREAM BED MATERIAL)

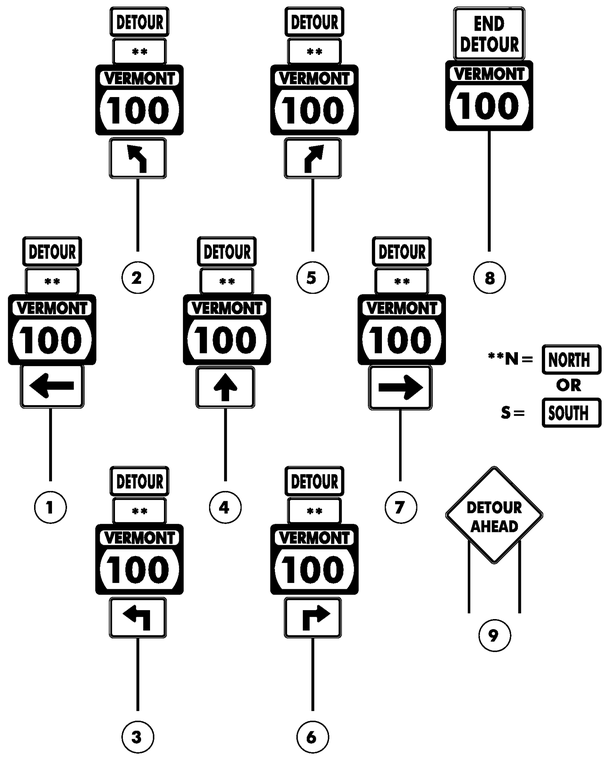
PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

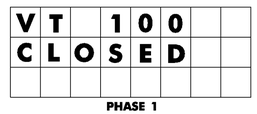
FILE NAME: sl3b074bdr.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
LAYOUT SHEET

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 430 OF 444

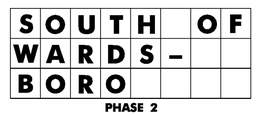



DETOUR PLAN 1
NOT TO SCALE

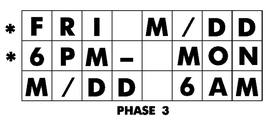


PHASE 1



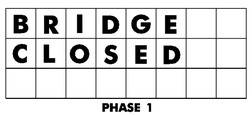
PHASE 2



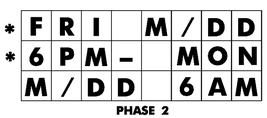
PHASE 3

* M=MONTH
D=DAY

S-1



PHASE 1



PHASE 2

* M=MONTH
D=DAY

S-2

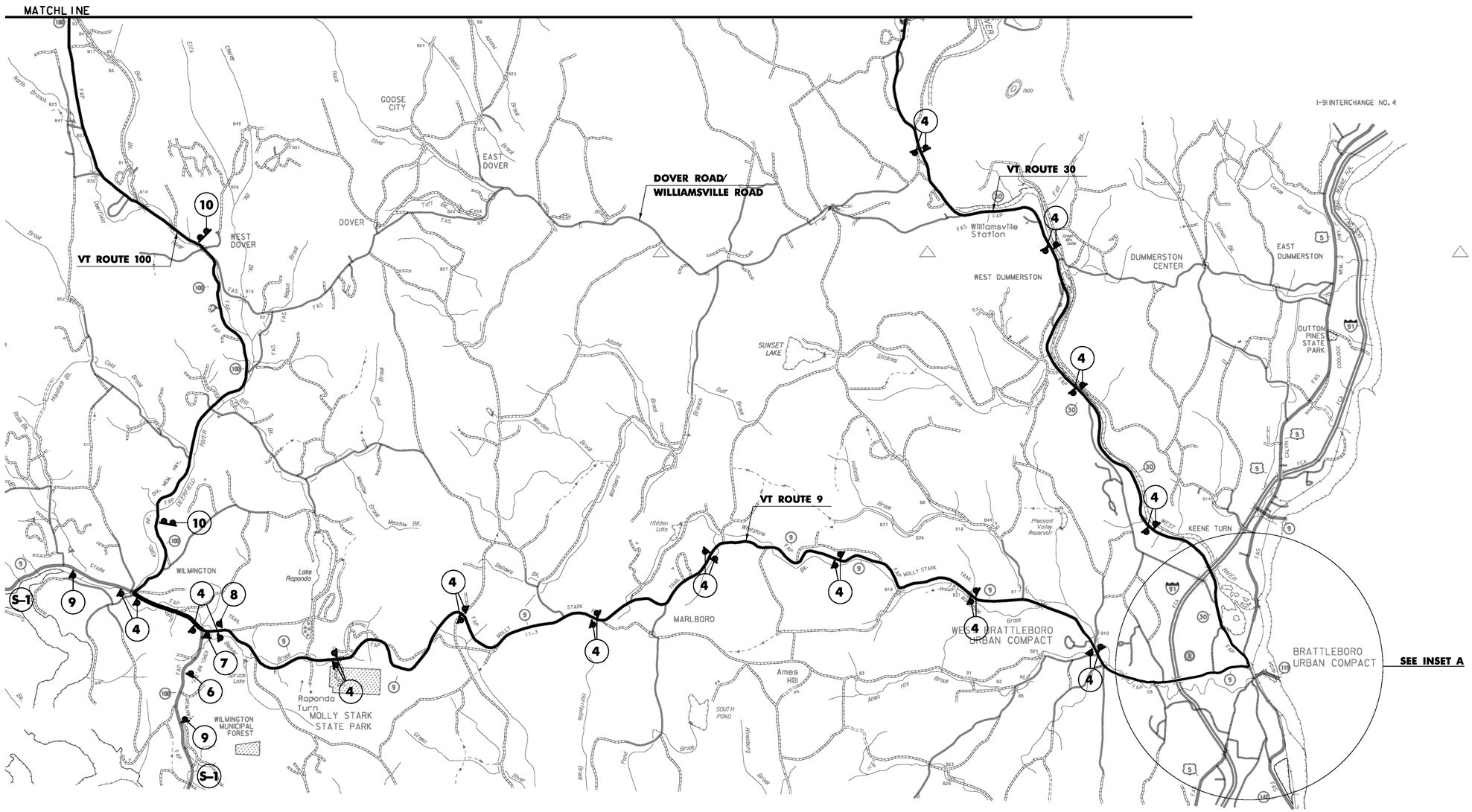



PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

FILE NAME: s13b074detour.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
DETOUR PLAN 1

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: M. MILLER
SHEET 431 OF 444

MATCHLINE




NOTES:

1. SEE DETOUR PLAN SHEET 3 FOR INSET A.

## DETOUR PLAN 2

NOT TO SCALE

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22) |
| FILE NAME: sl3b074detour.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: M. MILLER |
| DETOUR PLAN 2 | SHEET 432 OF 444 |

| SIGN LEGEND | SIGN DIMENSIONS WIDTH (in) | SIGN DIMENSIONS HEIGHT (in) | SIGN COLOR |
|---|---|---|---|
| DETOUR M4-8 | 24 | 12 | B/FO |
| NORTH M3-1 SOUTH M3-3 | 24 | 12 | G/W |
| VERMONT 100 E-136B | 30 | 24 | G/W |
| M5-1L M5-1R M5-2L M5-2R | 21 | 15 | B/FO |
| M5-1L M5-1L M5-1L | 21 | 15 | B/FO |
| END DETOUR M4-8A | 24 | 18 | B/FO |
| DETOUR AHEAD W20-2 | 48 | 48 | B/FO |
| ROAD CLOSED XX MILES AHEAD NO THRU TRAFFIC R11-3A | 60 | 30 | B/W |

NOTES:

1. THE PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE FULLY OPERATIONAL A MINIMUM OF TWO WEEKS PRIOR TO THE CLOSURE OF VT 100.

2. DURING ACTUAL CLOSURE, ELIMINATE PHASE 3 FOR S-1 (SEE DETOUR PLAN 1).

3. DETOUR SIGNS SHALL BE LOCATED ADJACENT TO EXISTING INTERSECTION ROUTE MARKER ASSEMBLIES WHERE APPLICABLE.

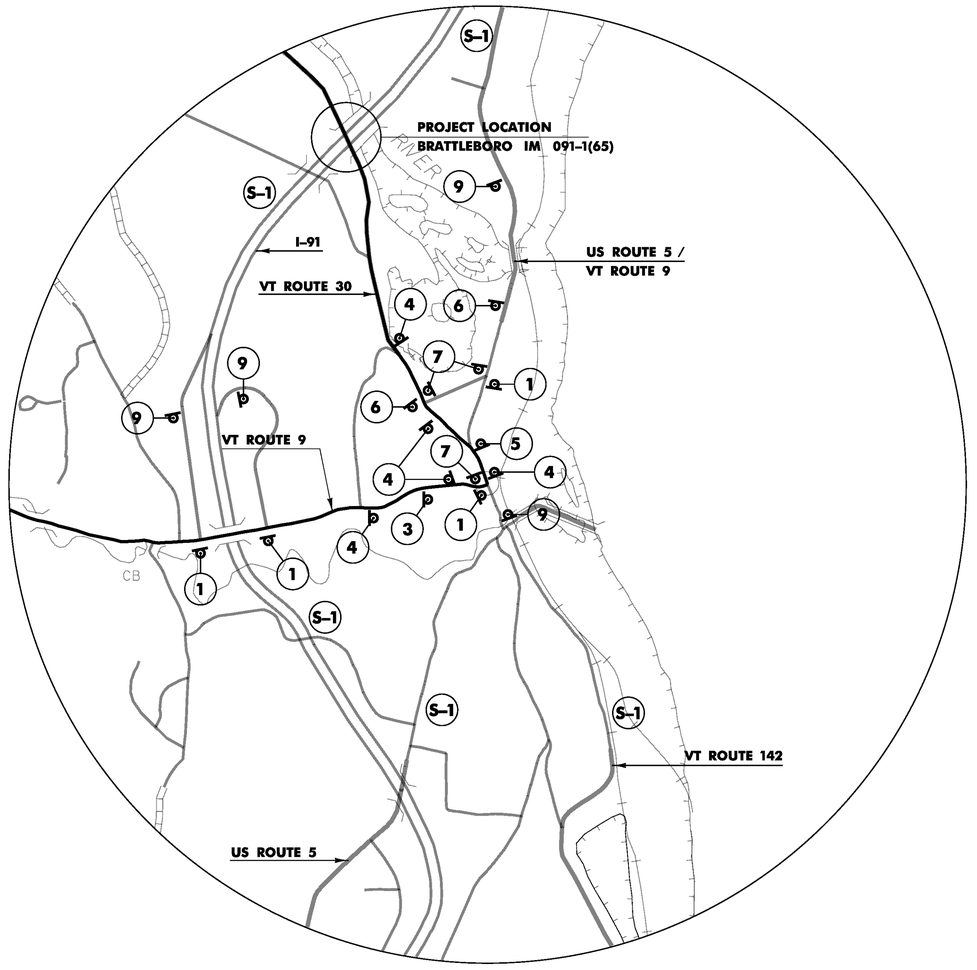
4. COVER ANY CONFLICTING EXISTING SIGNS AS DIRECTED BY THE ENGINEER.

5. CONFIRMATION ROUTE MARKERS (SIGN 4) SHALL BE INSTALLED IMMEDIATELY FOLLOWING EACH TURN AND AT ALL LOCATIONS ALONG DETOUR WHERE ROUTE MAKERS EXIST FOR THE PARENT ROUTE.

6. DETOUR SIGNING IS THE RESPONSIBILITY OF THE CONTRACTOR. PAYMENT FOR ALL TEMPORARY TRAFFIC CONTROL DEVICES FOR IMPLEMENTING THE DETOUR, INCLUDING BUT NOT LIMITED TO SIGNS, BARRICADES AND MESSAGE BOARDS, WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL - INCLUSIVE).

N

VT STATE PLANE GRID




INSET "A"
NOT TO SCALE

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

FILE NAME: s13b074detour.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
DETOUR PLAN 3

PLOT DATE: 17-MAR-2014
DRAWN BY: J. SALVATORI
CHECKED BY: M. MILLER
SHEET 433 OF 444

## SOIL CLASSIFICATION

| AASHTO | |
|---|---|
| A1 | Gravel and Sand |
| A3 | Fine Sand |
| A2 | Silty or Clayey Gravel and Sand |
| A4 | Silty Soil - Low Compressibility |
| A5 | Silty Soil - Highly Compressible |
| A6 | Clayey Soil - Low Compressibility |
| A7 | Clayey Soil - Highly Compressible |

## ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|---|---|
| <25 | Very Poor |
| 25 to 50 | Poor |
| 51 to 75 | Fair |
| 76 to 90 | Good |
| >90 | Excellent |

## SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|---|---|
| <250 | Very Soft |
| 250-500 | Soft |
| 500-1000 | Med. Stiff |
| 1000-2000 | Stiff |
| 2000-4000 | Very Stiff |
| >4000 | Hard |

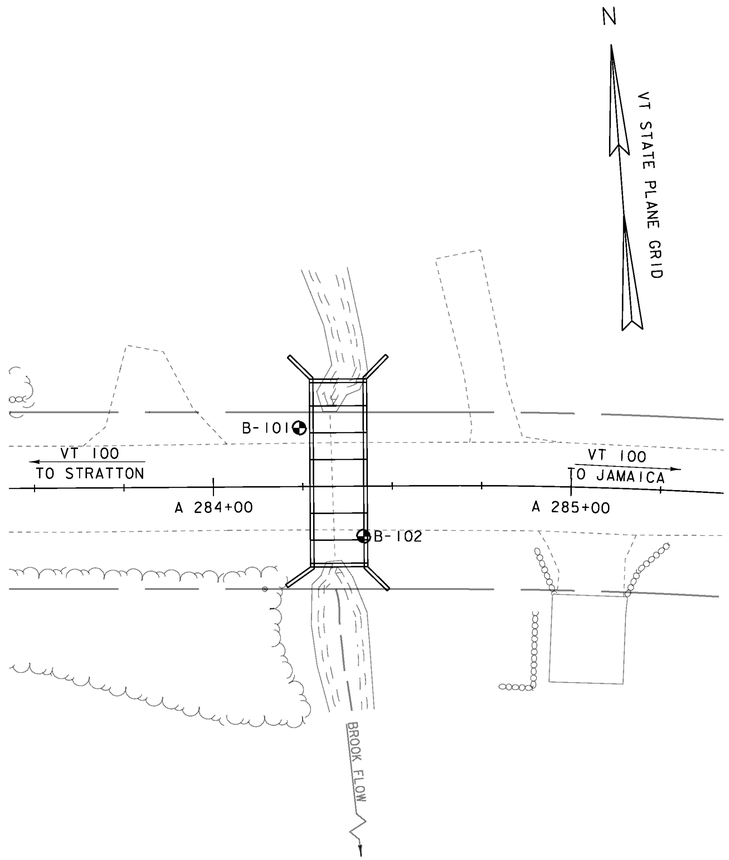
## CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

| DENSITY (GRANULAR SOILS) | | CONSISTENCY (COHESIVE SOILS) | |
|---|---|---|---|
| N | DESCRIPTIVE TERM | N | DESCRIPTIVE TERM |
| <5 | Very Loose | <2 | Very Soft |
| 5-10 | Loose | 2-4 | Soft |
| 11-24 | Med. Dense | 5-8 | Med. Stiff |
| 25-50 | Dense | 9-15 | Stiff |
| >50 | Very Dense | 16-30 | Very Stiff |
| | | 31-60 | Hard |
| | | >60 | Very Hard |

## COMMONLY USED SYMBOLS

| | |
|---|---|
| ▼ | Water Elevation |
| ⊛ | Standard Penetration Boring |
| ⊕ | Auger Boring |
| ⊙ | Rod Sounding |
| S | Sample |
| N | Standard Penetration Test<br>Blow Count Per Foot For:<br>2" O.D. Sampler<br>1 3/8" I.D. Sampler<br>Hammer Weight Of 140 Lbs.<br>Hammer Fall Of 30" |
| VS | Field Vane Shear Test |
| US | Undisturbed Soil Sample |
| B | Blast |
| DC | Diamond Core |
| MD | Mud Drill |
| WA | Wash Ahead |
| HSA | Hollow Stem Auger |
| AX | Core Size 1 1/8" |
| BX | Core Size 1 5/8" |
| NX | Core Size 2 1/8" |
| M | Double Tube Core Barrel Used |
| LL | Liquid Limit |
| PL | Plastic Limit |
| PI | Plasticity Index |
| NP | Non Plastic |
| w | Moisture Content (Dry Wgt. Basis) |
| D | Dry |
| M | Moist |
| MTW | Moist To Wet |
| W | Wet |
| Sat | Saturated |
| Bo | Boulder |
| Gr | Gravel |
| Sa | Sand |
| Si | Silt |
| Cl | Clay |
| HP | Hardpan |
| Le | Ledge |
| NLTD | No Ledge To Depth |
| CNPF | Can Not Penetrate Further |
| TLOB | Top of Ledge Or Boulder |
| NR | No Recovery |
| Rec. | Recovery |
| %Rec. | Percent Recovery |
| RQD | Rock Quality Designation |
| CBR | California Bearing Ratio |
| < | Less Than |
| > | Greater Than |
| R | Refusal (N > 100) |
| VTSPG | NAD83 - See Note 7 |

| COLOR | | | |
|---|---|---|---|
| blk | Black | pnk | Pink |
| bl | Blue | pu | Purple |
| brn | Brown | rd | Red |
| dk | Dark | tn | Tan |
| gry | Gray | wh | White |
| gn | Green | yel | Yellow |
| lt | Light | mltc | Multicolored |
| or | Orange | | |




## BORING LAYOUT

SCALE 1" = 20'-0"

20 0 20

## DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.

## GENERAL NOTES

1. The subsurface explorations shown herein were made between 12/4/13 and 12/5/13 by the Agency.

2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.

3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.

5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.

6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

FILE NAME: si3b074boring.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
BORING LAYOUT SHEET

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 434 OF 444

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

# BORING LOG

**WARDSBORO**
**BF 013-1(22)**
**VT-100 BR-73**

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 13B074
Checked By: TDE

Boring Crew: DAIGNEAULT, GARROW, JUDKINS
Date Started: 12/04/13 Date Finished: 12/04/13
VTSPG NAD83: N 194985.67 ft E 1558554.00 ft
Station: 284+24 Offset: -16.40
Ground Elevation: 1092.0 ft

| | Casing | Sampler |
|---|---|---|
| Type: | WB | SS |
| I.D.: | 4 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 55 TRACK | $C_E$ = 1.46 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 12/04/13 | 6.0 | While drilling. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| | | A-1-b, GrSa, brn, Moist, Rec. = 1.1 ft | 16-10-5-5 (15) | 10.1 | 25.1 | 62.0 | 12.9 |
| | | A-1-a, SaGr, Dk/brn, Moist, Rec. = 0.3 ft, Lab Note: Lots of Broken Rock was within sample. | 7-7-9-9 (16) | 9.0 | 50.5 | 40.5 | 9.0 |
| 5 | | A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft, Lab Note: Lots of Broken Rock was within sample. | 8-5-6-8 (11) | 6.9 | 46.7 | 37.6 | 15.7 |
| | | A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft, Lab Note: Lots of Broken Rock was within sample. | 6-8-10-10 (18) | 8.1 | 48.1 | 40.6 | 11.3 |
| | | Lab Note, Sample was mostly broken Rock, brn-gry, Moist, Rec. = 0.4 ft | 33-23-28-R@3.5" (51) | 7.2 | 64.3 | 27.1 | 8.6 |
| 10 | | Field Note:, Cleaned out with roller cone<br>A-1-b, SaGr, gry, Moist, Rec. = 0.3 ft, Lab Note: Lots of Broken Rock was within sample.<br>Field Note:, Cleaned out with NXDC | 14-R@1.0" (R) | 8.5 | 49.8 | 36.6 | 13.6 |
| | | A-1-b, SiSaGr, gry, Moist, Rec. = 0.3 ft, Lab Note: Lots of Broken Rock was within sample.<br>Field Note:, Cleaned out with NXDC | 23-R@1.0" (R) | 8.8 | 45.4 | 32.1 | 22.5 |
| 15 | | A-2-4, GrSiSa, gry, MTW, Rec. = 1.0 ft, Lab Note: Broken Rock was within sample. | 30-35-26-R@2.5" (61) | 14.4 | 24.3 | 48.6 | 27.1 |
| | | A-2-4, SiSa, gry, MTW, Rec. = 1.3 ft | 11-19-24-31 (43) | 20.1 | 2.8 | 65.1 | 32.1 |
| | | A-2-4, SiSa, gry, Moist, Rec. = 1.4 ft, Cleaned out with NXDC. | 4-16-25-30 (41) | 15.6 | 8.6 | 61.5 | 29.9 |
| 20 | | Field Note:, No Recovery<br>Field Note:, Cleaned out with NXDC, Cobbles in cleanout. | R@1.0" | | | | |
| | | A-4, SaSi, gry, Moist, Rec. = 0.3 ft<br>Field Note:, Cleaned out with NXDC | R@5.0" | 9.5 | 17.8 | 41.0 | 41.2 |
| | | A-4, GrSiSa (HP), gry, Moist, Rec. = 1.1 ft | 32-47-R@5.0" (R) | 9.3 | 21.0 | 40.1 | 38.9 |
| 25 | | Hole stopped @ 25.1 ft | | | | | |

Remarks:
1. Hole collapsed at 13.4 ft.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WARDSBORO BF 013-1(22)GPJ VERMONT AOT GDT 12/16/13

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

# BORING LOG

**WARDSBORO**
**BF 013-1(22)**
**VT-100 BR-73**

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 13B074
Checked By: TDE

Boring Crew: DAIGNEAULT, HOOK, JUDKINS
Date Started: 12/05/13 Date Finished: 12/05/13
VTSPG NAD83: N 194954.14 ft E 1558569.60 ft
Station: 284+42 Offset: 14.00
Ground Elevation: 1091.0 ft

| | Casing | Sampler |
|---|---|---|
| Type: | WB | SS |
| I.D.: | 4 in | 1.5 in |
| Hammer Wt: | N.A. | 140 lb. |
| Hammer Fall: | N.A. | 30 in. |
| Hammer/Rod Type: | Auto/AWJ | |
| Rig: | CME 55 TRACK | $C_E$ = 1.46 |

Groundwater Observations

| Date | Depth (ft) | Notes |
|---|---|---|
| 12/05/13 | | No water to depth. |

| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | Blows/6" (N Value) | Moisture Content % | Gravel % | Sand % | Fines % |
|---|---|---|---|---|---|---|---|
| | | Visual Description:, Broken Rock with sand, brn, Moist, Rec. = 0.4 ft, Insufficient sample for testing. | 10-3-3-16 (6) | 4.9 | | | |
| | | Visual Description:, Broken Rock with sand, brn, Moist, Rec. = 0.4 ft, Insufficient sample for testing. | 6-5-5-7 (10) | 11.0 | | | |
| 5 | | A-2-4, SiGrSa, brn, Moist, Rec. = 0.4 ft, Lab Note: Broken Rock was within sample. | 4-3-3-4 (6) | 11.3 | 28.2 | 50.3 | 21.5 |
| | | A-2-4, GrSa, brn, Moist, Rec. = 1.2 ft, Lab Note: Broken Rock was within sample. Cleaned out with roller cone. | 2-4-3-4 (7) | 12.6 | 31.4 | 53.0 | 15.6 |
| | | A-1-b, SaGr, Lt/brn, Moist, Rec. = 1.0 ft, Lab Note: Lots of Broken Rock was within sample. Cleaned out with roller cone. | 20-23-26-24 (49) | 9.0 | 57.1 | 30.8 | 12.1 |
| 10 | | A-1-a, SaGr, Lt/brn, Wet, Rec. = 0.4 ft, Lab Note: Lots of Broken Rock was within sample. Cleaned out with roller cone. | 20-38-25-R@2.5" (63) | 10.3 | 63.0 | 27.4 | 9.6 |
| | | A-1-b, GrSa, Lt/brn, Wet, Rec. = 0.9 ft, Lab Note: Broken Rock was within sample. | 11-16-13-11 (29) | 14.7 | 34.8 | 53.1 | 12.1 |
| 15 | | A-2-4, SiSa, Lt/brn, MTW, Rec. = 1.1 ft | 15-25-44-R@0.0" (69) | 14.6 | 13.7 | 59.5 | 26.8 |
| | | A-4, SiSa, brn-gry, MTW, Rec. = 1.2 ft | 37-39-R@2.5" (R) | 12.8 | 14.6 | 49.3 | 36.1 |
| | | A-2-4, GrSiSa, Lt/gry, Moist, Rec. = 0.2 ft, Lab Note: Broken Rock was within sample. | R@3.5" | 11.2 | 22.3 | 47.0 | 30.7 |
| 20 | | Visual Description:, GrSiSa, Lt/gry, Moist, Rec. = 0.2 ft, Insufficient sample for testing.<br>Field Note:, NXDC, Cleaned out casing. | R@3.5" | 10.0 | | | |
| | | A-2-4, SiSa, Lt/gry, Moist, Rec. = 1.3 ft, Lab Note: Broken Rock was within sample. | 35-22-28-R@2.5" (50) | 16.2 | 14.9 | 60.1 | 25.0 |
| | | A-4, SiSa, Lt/gry, Moist, Rec. = 1.2 ft | 15-28-R@5.0" (R) | 13.0 | 12.6 | 45.5 | 41.9 |
| 25 | | Hole stopped @ 25.4 ft | | | | | |

Remarks:
1. Hole collapsed at 25.4 ft.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. $C_E$ is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

BORING LOG 2 WARDSBORO BF 013-1(22)GPJ VERMONT AOT GDT 12/16/13

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22 101/100

FILE NAME: sl3b074boring.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
BORING LOGS

PLOT DATE: 17-MAR-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 435 OF 444

# EPSC PLAN NARRATIVE

## 1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REPLACEMENT OF THE EXISTING CULVERT WITH A NEW REINFORCED PRECAST CONCRETE BOX CULVERT WITH RELATED APPROACH AND CHANNEL WORK.

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

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.32 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

## 1.2 SITE INVENTORY

### 1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A SADDLE THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS.

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

AN UNNAMED BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE BROOK IS CLASSIFIED AS STEEP, SINUOUS, NARROW, WITH A CONFINED AND ARMORED CHANNEL AT THE SITE. THE STREAM BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS.

### 1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE III AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

### 1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDHAM, VERMONT. SOILS ON THE PROJECT SITE ARE AS FOLLOWS:

COLTON LOAMY FINE SAND, WITH 2-8% SLOPES. “K” FACTOR = 0.17

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

### 1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: UNNAMED BROOK
WETLANDS: NO

## 1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

## 1.4 EROSION PREVENTION AND SEDIMENT CONTROL

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

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

### 1.4.1 MARK SITE BOUNDARIES

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

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

### 1.4.2 LIMIT DISTURBANCE AREA

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

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

### 1.4.3 SITE ENTRANCE/EXIT STABILIZATION

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

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

### 1.4.4 INSTALL SEDIMENT BARRIERS

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

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

FILTER CURTAINS SHALL BE INSTALLED ON THE INLET AND OUTLET ENDS OF THE PROPOSED BOX AS SHOWN IN THE EROSION CONTROL PLAN.

### 1.4.5 DIVERT UPLAND RUNOFF

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

NO DIVERSIONARY MEASURES ARE ANTICIPATED ON THIS PROJECT.

### 1.4.6 SLOW DOWN CHANNELIZED RUNOFF

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

NO CHECK STRUCTURES ARE ANTICIPATED ON THIS PROJECT.

### 1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

NO PERMANENT CONTROLS ARE ANTICIPATED ON THIS PROJECT.

### 1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

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

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

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

### 1.4.9 WINTER STABILIZATION

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

### 1.4.10 STABILIZE SOIL AT FINAL GRADE

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

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

### 1.4.11 DE-WATERING ACTIVITIES

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

TREATMENT OF DEWATERING DISCHARGE IS ANTICIPATED. A FILTER BAG LOCATION FOR TREATMENT HAS BEEN PROPOSED AND IS SHOWN ON THE PLANS. THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR AND WILL BE PAID FOR UNDER CONTRACT ITEM 653.45.

### 1.4.12 INSPECT YOUR SITE

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

## 1.5 SEQUENCE AND STAGING

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

### 1.5.1 CONSTRUCTION SEQUENCE

### 1.5.2 OFF-SITE ACTIVITIES

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22) |
| FILE NAME: sl3b074epsc_nar.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| EPSC NARRATIVE | SHEET 436 OF 444 |

SHEEPSCOT FINE SANDY LOAM
3% - 8% SLOPES
K = 0.17

COLTON LOAMY FINE SAND
2% - 8% SLOPES
K = 0.17

N

VT STATE PLANE GRID

WOODS

FIELD DRIVE

VT 100
TO STRATTON

3 ROD RIGHT OF WAY 49.50

A 282+00

A 283+00

A 284+00

A 285+00

A 286+00

A 287+00

VT 100
TO JAMAICA

284+21
50.00' LT

283+50
27.00' LT

285+25
27.00' LT

284+10
28.58' RT

284+12
38+64 RT

284+26
38+40 RT

284+47
38.62' RT

PDF

PONDING

APPROX LEACHFIELD

PAVED DRIVE

GRAVEL DRIVE

GARAGE

WELL
36" CONCRETE

BROOK FLOW

2-M. MAPLE

M. MAPLE
MAILBOX

HVCTRL
38

M. MAPLE

M. ASH

M. PINE

M. HEMLOCK

1090

BEGIN PROJECT
STA A 283+50.00

BEGIN BRIDGE
STA A 284+27.00

END PROJECT
STA A 285+25.00

END BRIDGE
STA A 284+43.00

UDIFLUVENTS, LOAMY

NOTES:

1. EXISTING CONTOURS SHOWN. SEE CROSS SECTIONS FOR FINAL CONDITIONS.

2. FOR CLARITY, AREAS TO BE SEEDED AND MULCHED HAVE NOT BEEN INDICATED. ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS APPLICABLE.

## EPSC PLAN

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

| | |
|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22) 101/100 |
| FILE NAME: sl3b074bdr.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| EPSC PLAN | SHEET 437 OF 444 |

| VAOT RURAL AREA MIX | | | | | |
|---|---|---|---|---|---|
| | LBS/AC | | | | |
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 37.5% | 22.5 | 45 | CREEPING RED FESCUE | 85% | 98% |
| 37.5% | 22.5 | 45 | TALL FESCUE | 90% | 95% |
| 5.0% | 3 | 6 | RED TOP | 90% | 95% |
| 15.0% | 9 | 18 | BIRDSFOOT TREFOIL | 85% | 98% |
| 5.0% | 3 | 6 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 60 | 120 | | | |

| VAOT URBAN AREA MIX | | | | | |
|---|---|---|---|---|---|
| | LBS/AC | | | | |
| % WEIGHT | BROADCAST | HYDROSEED | NAME | GERM % | PURITY % |
| 42.5% | 34 | 68 | CREEPING RED FESCUE | 85% | 98% |
| 10.0% | 8 | 16 | PERENNIAL RYE GRASS | 90% | 95% |
| 42.5% | 34 | 68 | KENTUCKY BLUE GRASS | 85% | 85% |
| 5.0% | 4 | 8 | ANNUAL RYE GRASS | 85% | 95% |
| 100% | 80 | 160 | | | |

| SOIL AMENDMENT GUIDANCE | | | |
|---|---|---|---|
| FERTILIZER | | LIME | |
| BROADCAST | HYDROSEED | BROADCAST | HYDROSEED |
| 10-20-10 | *FOLLOW* | PELLETIZED | *FOLLOW* |
| 500 LBS/AC | *MANUFACTURER* | 2 TONS/AC | *MANUFACTURER* |

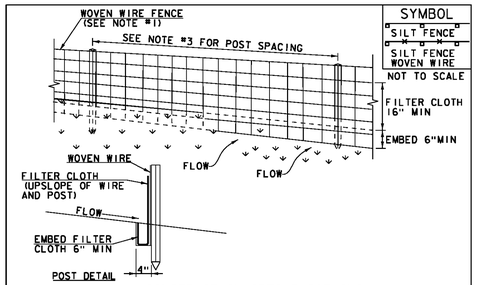
## CONSTRUCTION GUIDANCE

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

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

# TURF ESTABLISHMENT

| REVISIONS | | |
|---|---|---|
| JUNE 23, 2009 | WHF | |
| JANUARY 15, 2010 | WHF | |
| FEBRUARY 16, 2011 | WHF | |




SYMBOL

SILT FENCE

SILT FENCE WOVEN WIRE

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

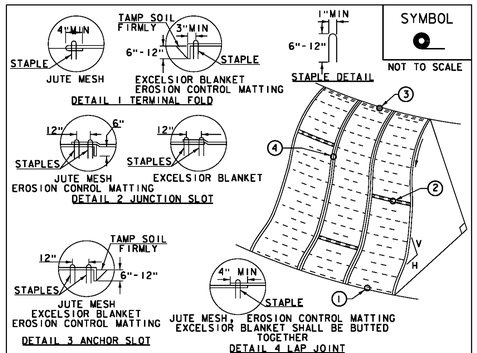
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# SILT FENCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE OR SILT FENCE OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED.

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




SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

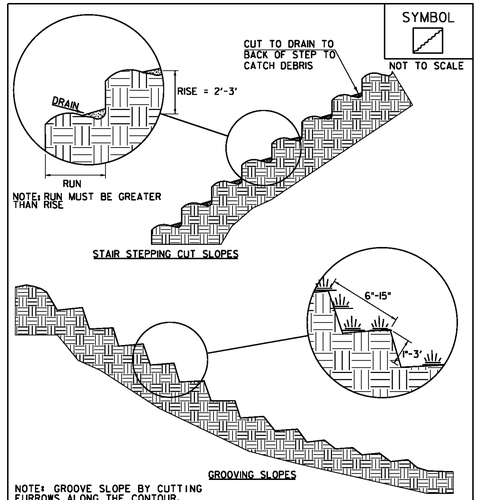
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

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

# ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR TEMPORARY EROSION MATTING OR PERMANENT EROSION MATTING.

| REVISIONS | | |
|---|---|---|
| APRIL 16, 2007 | JMF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL

NOT TO SCALE

NOTE: GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

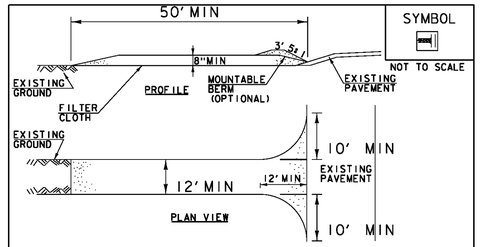
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# SURFACE ROUGHENING

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

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

| REVISIONS | | |
|---|---|---|
| APRIL 1, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

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

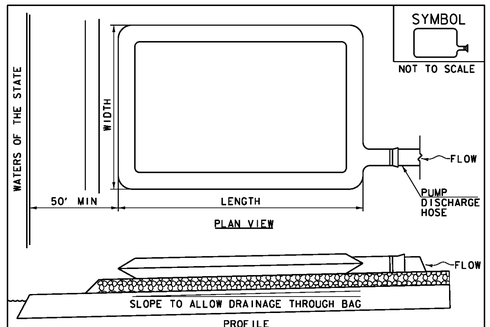
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

# STABILIZED CONSTRUCTION ENTRANCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD.

| REVISIONS | | |
|---|---|---|
| MARCH 24, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

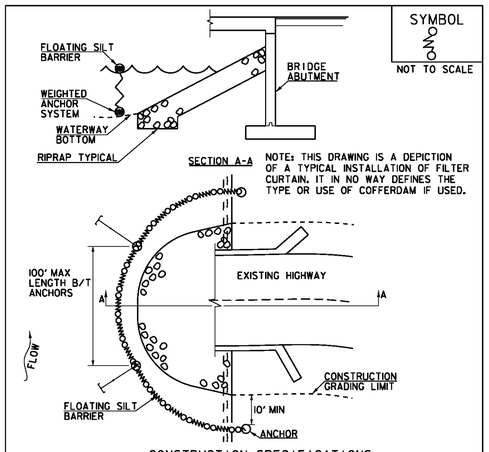
1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

# FILTER BAG

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

| REVISIONS | | |
|---|---|---|
| MARCH 24, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |




SYMBOL

NOT TO SCALE

## CONSTRUCTION SPECIFICATIONS

1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

# FILTER CURTAIN

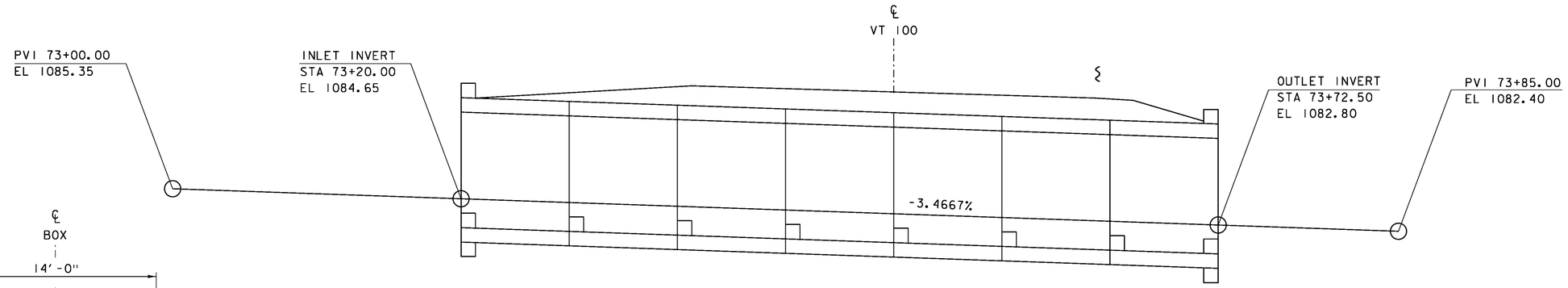
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

| REVISIONS | | |
|---|---|---|
| APRIL 1, 2008 | WHF | |
| JANUARY 13, 2009 | WHF | |
| SEPTEMBER 4, 2009 | WHF | |

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22) 101/100

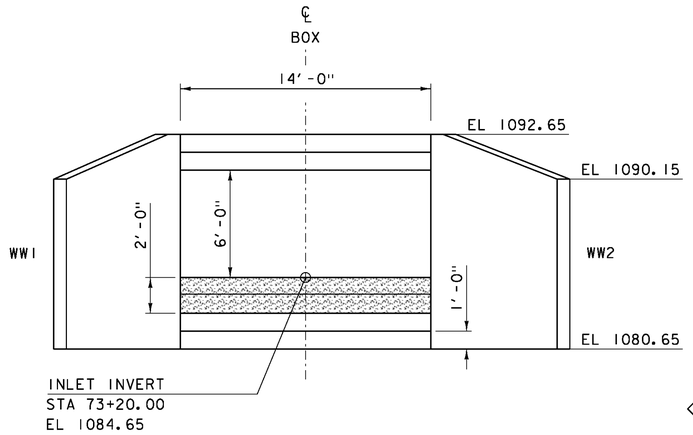
FILE NAME: sl3b074epsc_det.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
EPSC DETAILS

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 438 OF 444



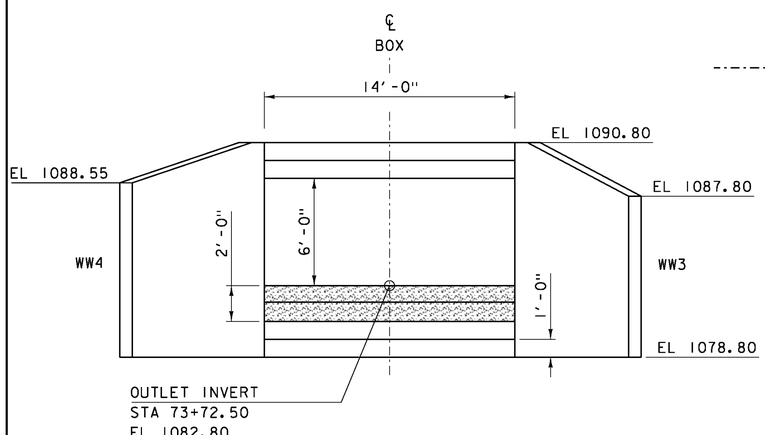

## BOX PROFILE

SCALE 1/4" = 1'-0"



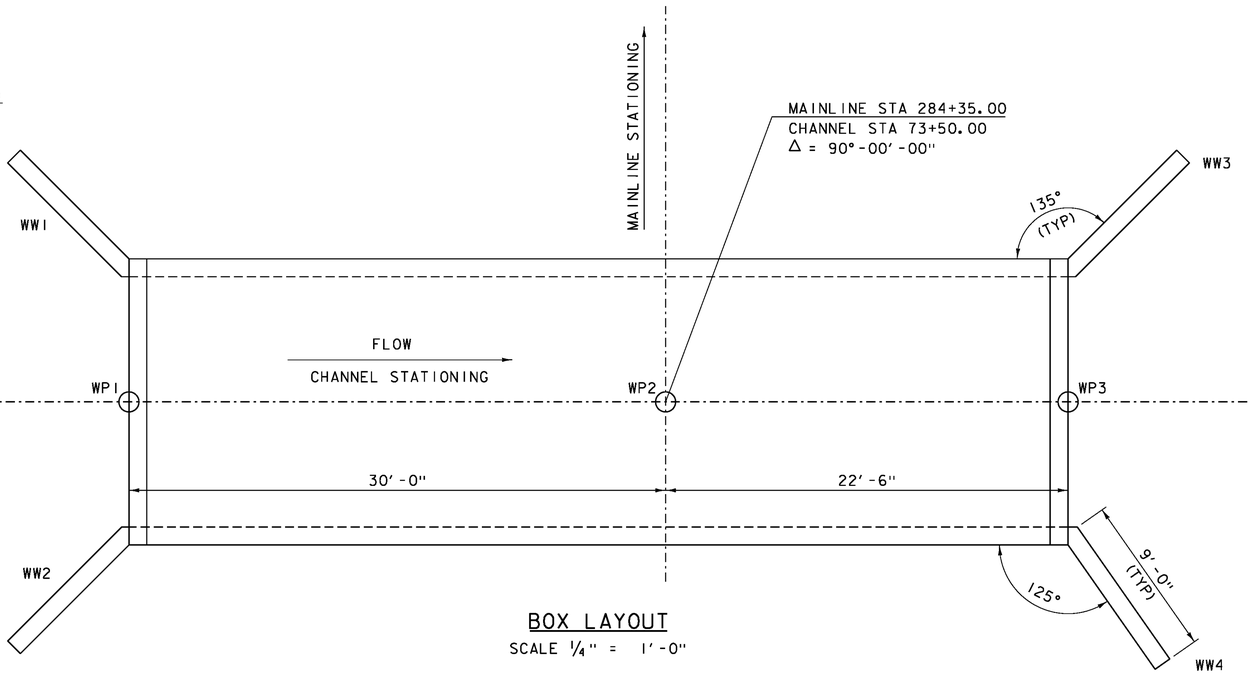

## INLET ELEVATION

SCALE 1/4" = 1'-0"




## OUTLET ELEVATION

SCALE 1/4" = 1'-0"



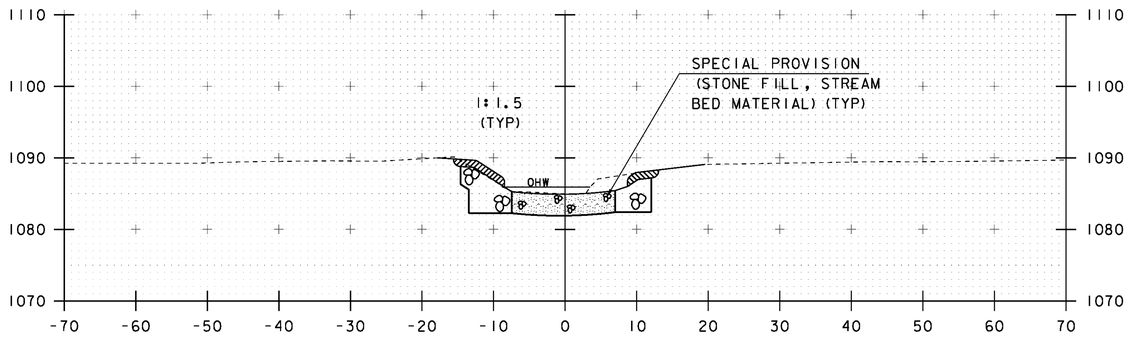

## BOX LAYOUT

SCALE 1/4" = 1'-0"

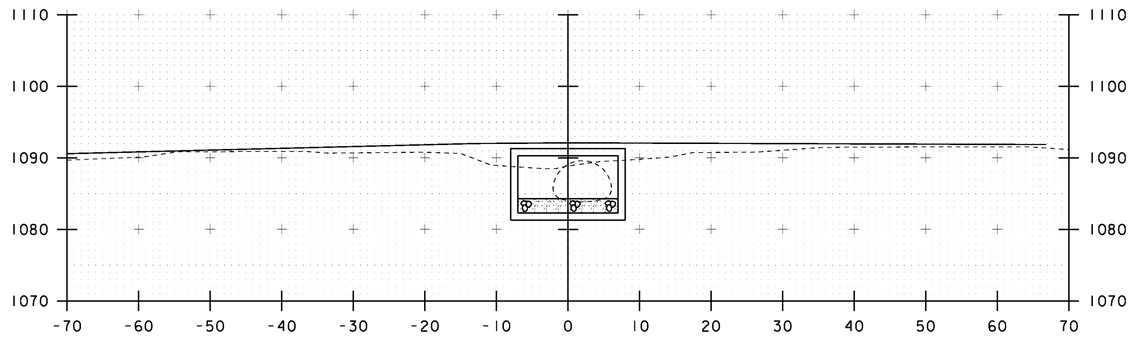
NOTES:

1. DIMENSIONS SHOWN ARE BASED ON AN ASSUMED WALL THICKNESS OF 1'-0"
2. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR.

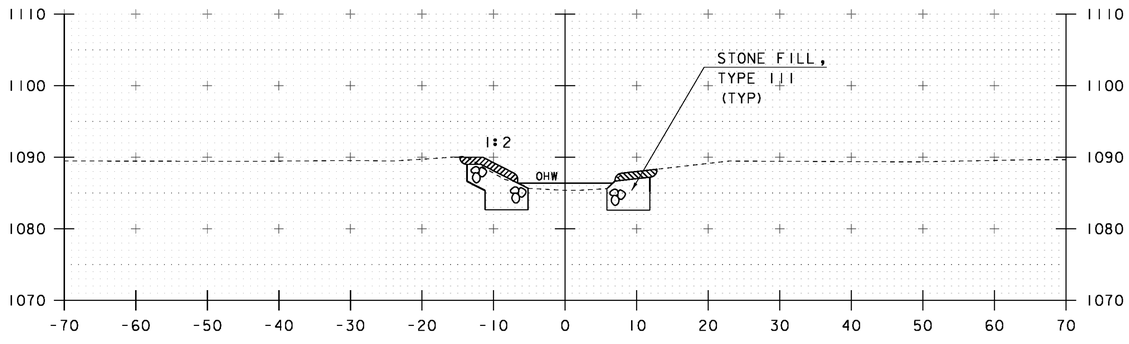
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|---|---|
| PROJECT NAME: | WARDSBORO |
| PROJECT NUMBER: | BF 013-1(22) |
| FILE NAME: sl3b074box.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. SALVATORI |
| DESIGNED BY: J. SALVATORI | CHECKED BY: G. LAROCHE |
| BOX LAYOUT | SHEET 439 OF 444 |




73+10

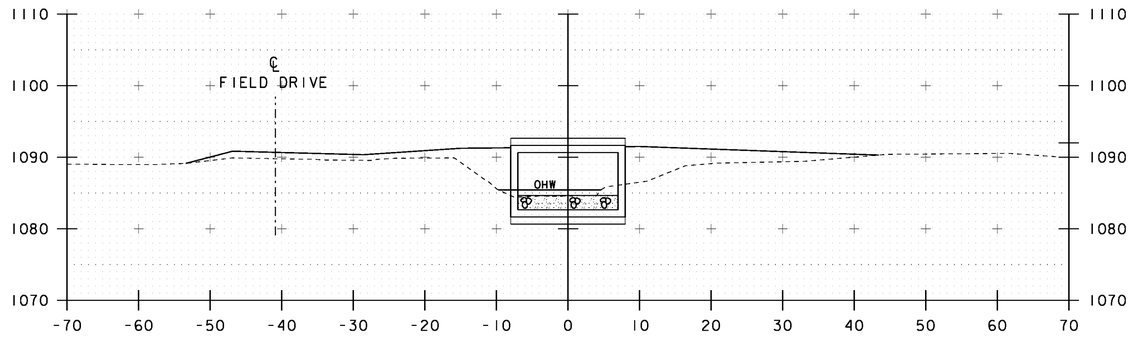



73+30




STA 73+00.00
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL

73+00




STA 73+20.00
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

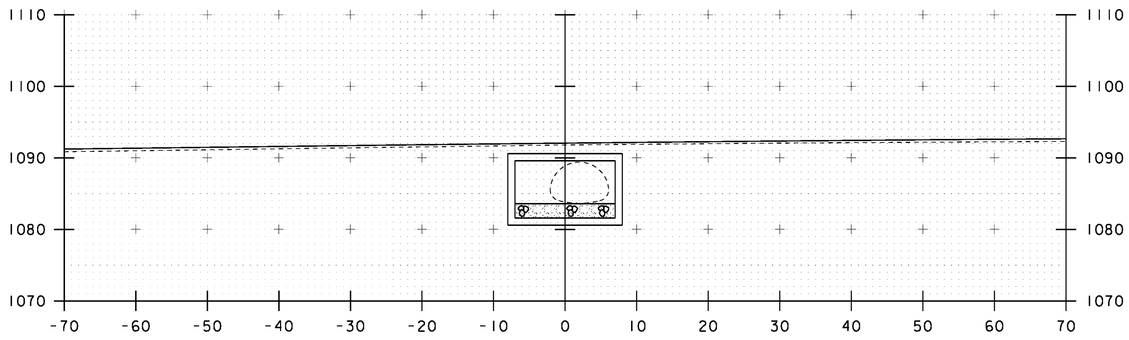
73+20

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

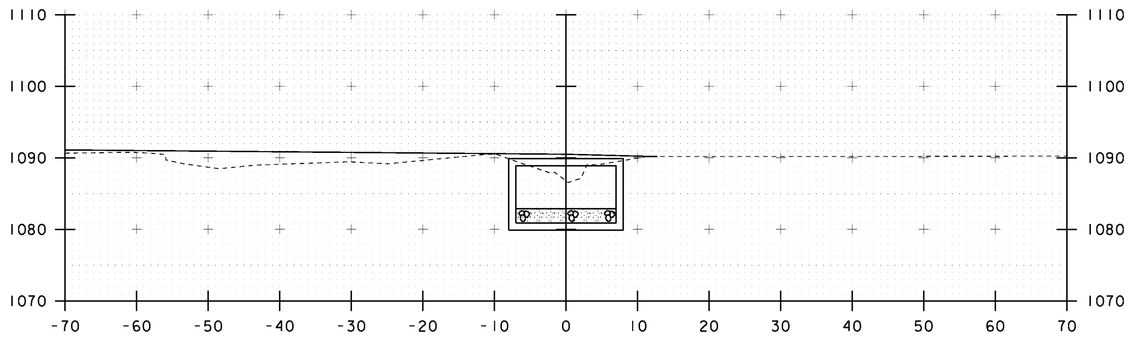
FILE NAME: sl3b074xs.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 440 OF 444

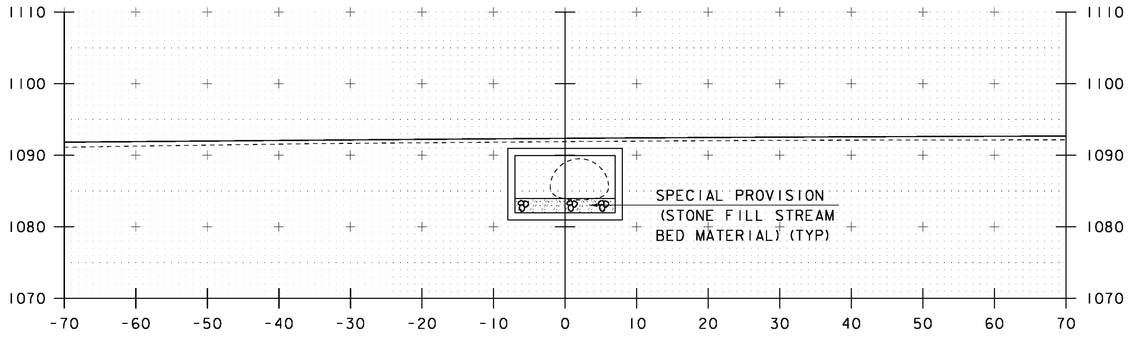
STA. 73+00 TO STA. 73+30



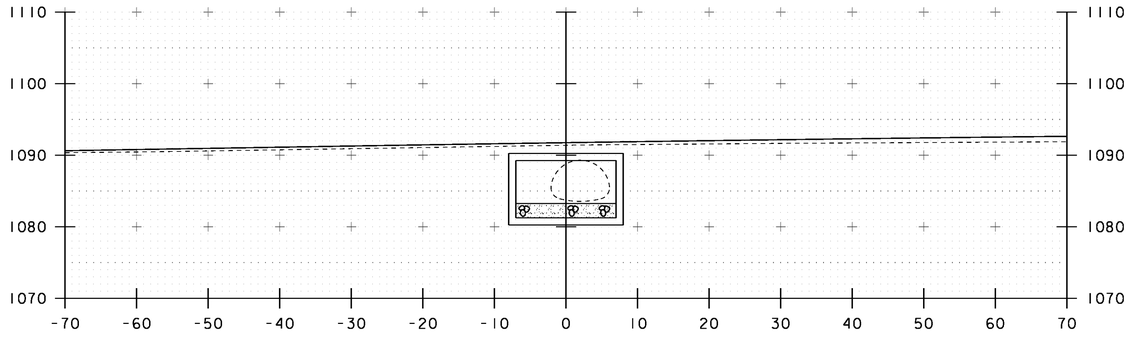

73+50




73+70




73+40



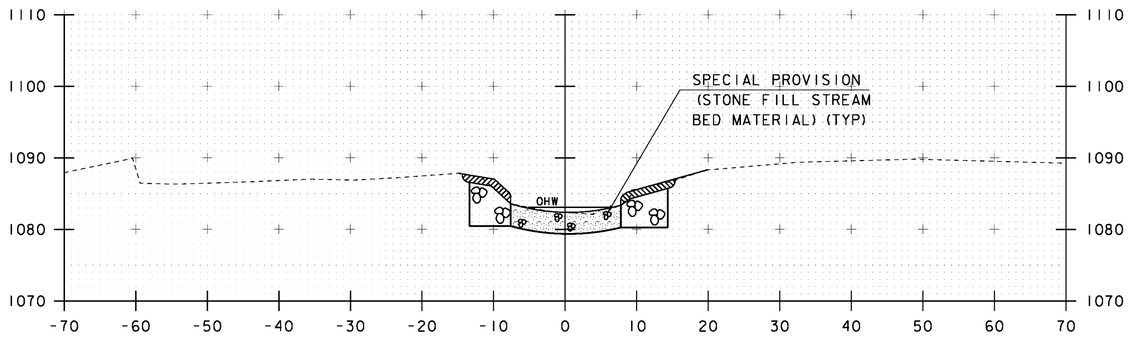

73+60

STA. 73+40 TO STA. 73+70

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

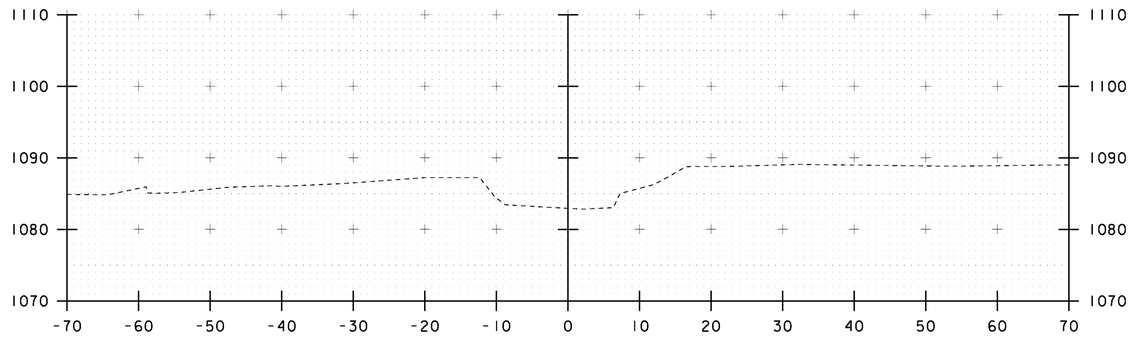
FILE NAME: sl3b074xs.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 441 OF 444

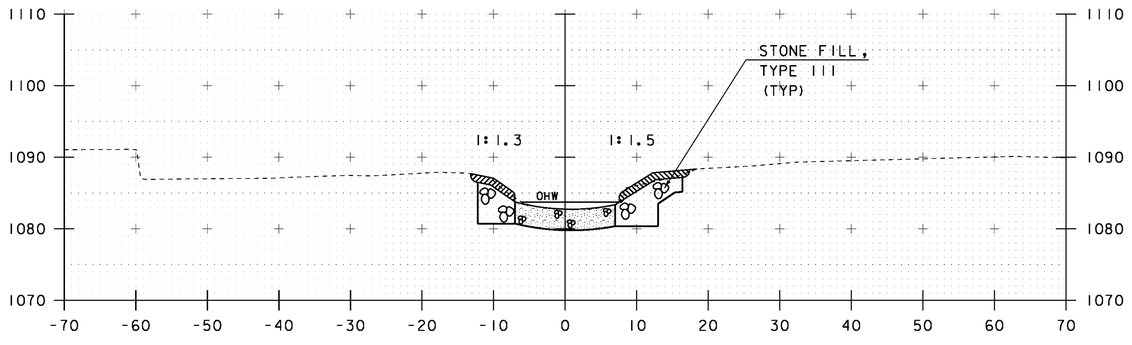



STA 73+85.00
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END STONE FILL, TYPE III
END GRUBBING MATERIAL

73+85

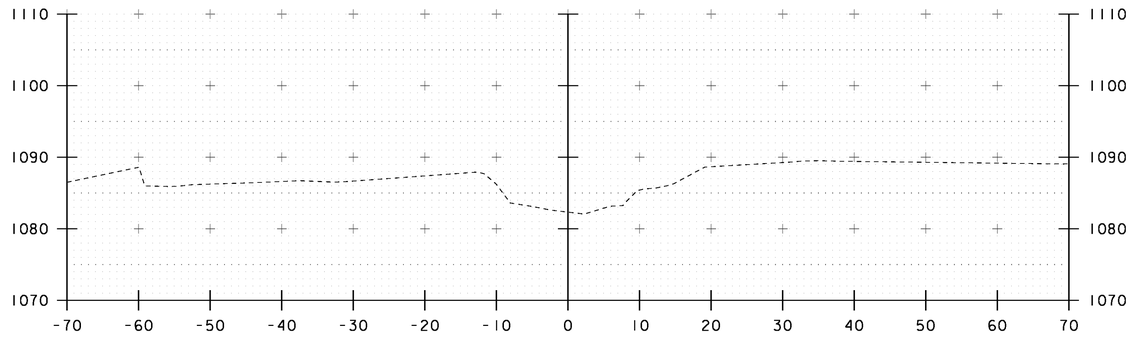



74+00




STA 73+72.50
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN STONE FILL, TYPE III
BEGIN GRUBBING MATERIAL

73+80



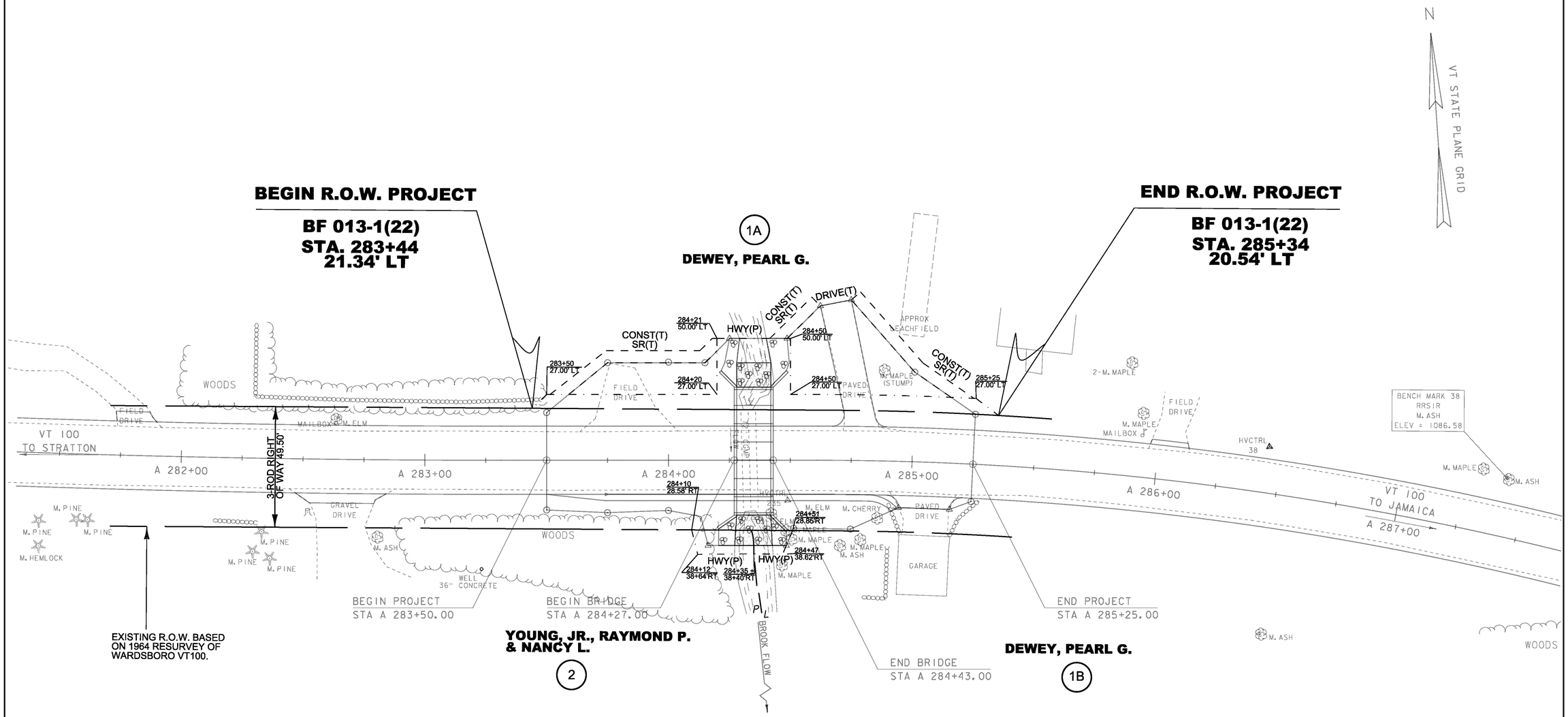

73+90

STA. 73+80 TO STA. 74+00

PROJECT NAME: WARDSBORO
PROJECT NUMBER: BF 013-1(22)

FILE NAME: sl3b074xs.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. SALVATORI
CHANNEL SECTIONS

PLOT DATE: 26-FEB-2014
DRAWN BY: J. SALVATORI
CHECKED BY: G. LAROCHE
SHEET 442 OF 444




## ROW LAYOUT SHEET

SCALE 1" = 20'-0"

20 0 20

| | |
|---|---|
| PROJECT NAME: WARDSBORO | |
| PROJECT NUMBER: BF 013-1(22) | |
| FILE NAME: sl3b074bdr.dgn | PLOT DATE: 26-FEB-2014 |
| PROJECT LEADER: K. HIGGINS | DRAWN BY: J. BLANCHARD |
| DESIGNED BY: J. SALVATORI | CHECKED BY: J. BLANCHARD |
| ROW LAYOUT SHEET | SHEET 443 OF 444 |

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

# RIGHT - OF - WAY DETAIL SHEET

## TABLE OF PROPERTY ACQUISITION

| PARCEL NO. | PROPERTY OWNER | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKE | REMAINDER | RIGHT | | | RECORDING DATA | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | AREA± | AREA± | TYPE | (T)/(P) | AREA ± | TITLE | DATE | TOWN / CITY | BOOK | PAGE | |
| 1A | DEWEY, PEARL G. | 1 | 283+44.11 LT | 285+34.37 LT | | | HIGHWAY EASEMENT | P | 1,833 SF± | WD | | WARDSBORO | | | |
| | | | 283+50.00 LT | 284+19.93 LT | | | CONST. EASEMENT | T | 342 SF ± | | | | | | INCL. PDF & EC |
| | | | 283+59 LT | 284+20 LT | | | SLOPE RIGHT | T | 696 SF ± | | | | | | |
| | | | 284+42 LT | 284+62 LT | | | CONST. EASEMENT | T | 108 SF ± | | | | | | INCL. PDF & EC |
| | | | 284+49 LT | 284+62 LT | | | SLOPE RIGHT | T | 523 SF ± | | | | | | |
| | | | 284+62 LT | 284+83 LT | | | DRIVE RIGHT | T | | | | | | | 13' WIDE PAVED; MM 5.41 |
| | | | 284+74 LT | 285+15 LT | | | SLOPE RIGHT | T | 523 SF ± | | | | | | |
| | | | 284+74 LT | 285+25 LT | | | CONST. EASEMENT | T | 302 SF ± | | | | | | INCL. PDF & EC |
| 1B | | | 284+34.01 RT | 284+50.97 RT | | | HIGHWAY EASEMENT | P | 137 SF± | | | | | | |
| | | | 285+05 RT | | | | | | | | | | | | 21' WIDE DRIVE APRON; MM 5.415 |
| 2 | YOUNG JR., RAYMOND & NANCY L. | 1 | 284+09.51 RT | 284+35± RT | | | HIGHWAY EASEMENT | P | 237 SF± | | | | | | |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION | DATE |
|---|---|---|---|

PLOT DATE 03/10/14

PLAN LEGEND

- EXISTING RIGHT-OF-WAY
- TAKING WITH ACCESS
- TAKING WITHOUT ACCESS
- CLEAR ZONE (CZ)
- PROPERTY LINE (PL)
- TOE OF SLOPE
- TOP OF CUT
- SLOPE RIGHT (SR (P))
- CONSTRUCTION RIGHT (CONST. (T))
- PROJECT DEMARCATION FENCE (PDF)

EC -EROSION CONTROL
(P) -PERMANENT
(T) -TEMPORARY
DR. -DRAINAGE RIGHT
DIT. -DITCHING RIGHT
CH. -CHANNEL RIGHT
DRIVE -DRIVE RIGHT
CUL. -CULVERT RIGHT
C&T -CLEARING & TRIMMING RIGHT
SR -SLOPE RIGHT
UE -UTILITY EASEMENT

APPROVED: RYAN CLOUTIER DATE: 1-01-2015
CHIEF, PLANS & TITLES

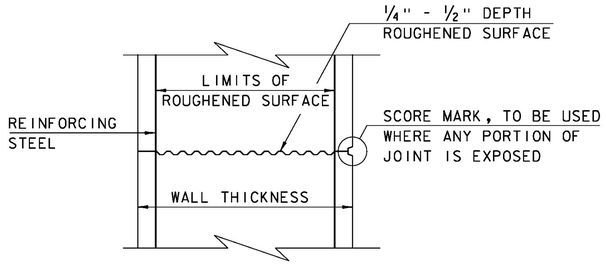
PROJECT NAME: **WARDSBORO**
PROJECT NUMBER: **BF 013-1 (22)**

FILE NAME: **r13b074detail.dgn**
PROJECT LEADER: **K. HIGGINS**
DESIGNED BY: **J. SALVATORI**
**R.O.W. DETAIL SHEET #1**

PLOT DATE:
DRAWN BY: **MR**
CHECKED BY: **JB**
SHEET 444 OF 444

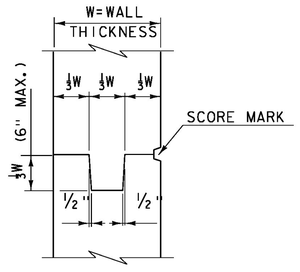
## CONCRETE GENERAL NOTES

1. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1"
2. REINFORCING STEEL SIZE AND SPACING SHOWN IN THE PLANS IS BASED ON 60 KSI STEEL, UNLESS NOTED OTHERWISE. WITH THE ENGINEER'S PERMISSION, BAR SIZE AND SPACING MAY BE MODIFIED ACCORDING TO THE LATEST AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND STRUCTURES DESIGN MANUAL WHEN USING HIGHER STRENGTH STEEL.

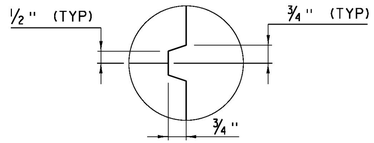



### TYPICAL HORIZONTAL CONSTRUCTION JOINT
(NOT TO SCALE)

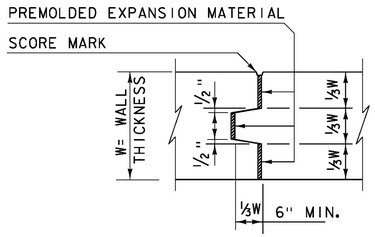
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



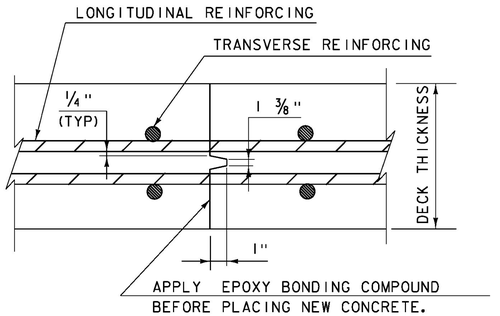

### TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



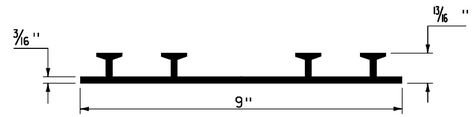

### SCORE MARK DETAIL
(NOT TO SCALE)




### TYPICAL CONCRETE EXPANSION JOINT
(NOT TO SCALE)



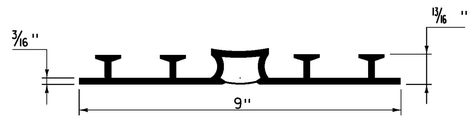

### TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)




### P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

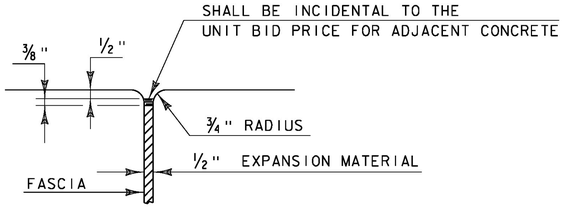
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.




### P.V.C. WATERSTOP FOR EXPANSION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



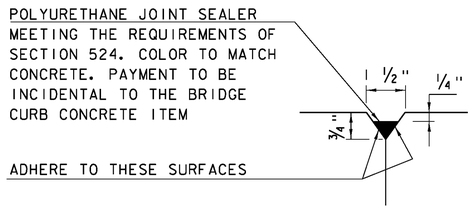

### JOINT BETWEEN FASCIA AND WINGWALL
(NOT TO SCALE)

| REVISIONS | |
|---|---|
| MAY 7, 2010 | APPROVED FOR USE BY VAOT STRUCTURES SECTION |
| FEBRUARY 9, 2012 | REBAR SUBSTITUTION ALLOWANCE ADDED TO CONCRETE GENERAL NOTES. |
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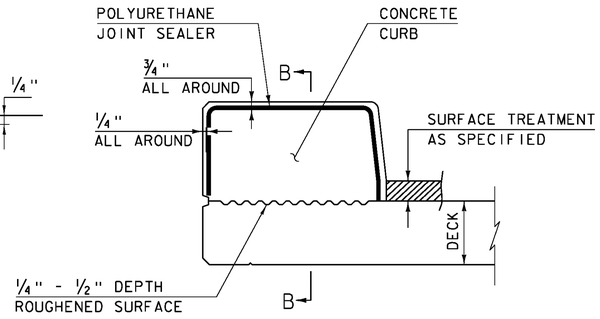
# CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

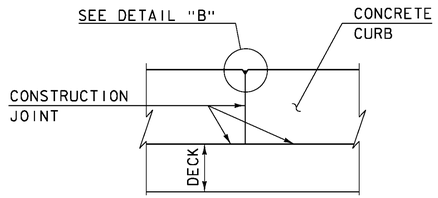
STRUCTURES DETAIL
SD-501.00



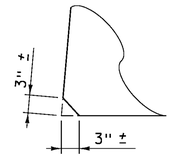

DETAIL "B"
(NOT TO SCALE)




CONCRETE CURB JOINT SECTION
(NOT TO SCALE)




SECTION B - B
(NOT TO SCALE)




ACUTE ANGLE CLIP DETAIL
(NOT TO SCALE)

1. SEE TYPICAL HORIZONTAL CONSTRUCTION JOINT DETAIL FOR ADDITIONAL INFORMATION

## CONCRETE CURB JOINT NOTES

1. CONCRETE CURBS MAY BE PLACED IN ONE CONTINUOUS OPERATION IF AN APPROVED SHRINKAGE REDUCING ADMIXTURE LISTED IN THE SPECIAL PROVISIONS IS USED WITH THE CONCRETE MIX DESIGN. PAYMENT FOR THE SHRINKAGE REDUCING ADMIXTURE WILL BE INCIDENTAL TO THE BRIDGE CURB CONCRETE ITEM.

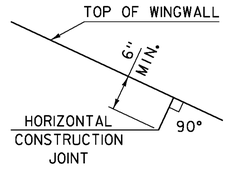
2. IF THE CONTRACTOR CHOOSES NOT TO USE AN APPROVED SHRINKAGE REDUCING ADMIXTURE, THE CURBS SHALL BE CONSTRUCTED WITH CONSTRUCTION JOINTS SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER AND 2'-0" MINIMUM FROM THE CENTER OF NEAREST BRIDGE RAILING POST.

3. ON MULTI-SPAN CONTINUOUS SUPERSTRUCTURES, REGARDLESS OF WHETHER APPROVED SHRINKAGE REDUCING ADMIXTURE IS USED, CURB JOINTS SHALL BE LOCATED OVER THE CENTERLINE OF PIERS AND 7'-0" EACH SIDE OF THE CENTERLINE OF EACH PIER.

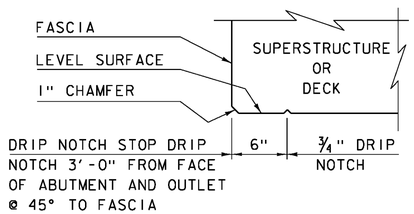
4. WHEN CURB JOINTS ARE USED THE CURBS SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOUR DELAY BETWEEN ADJACENT PLACEMENTS.

5. LONGITUDINAL REINFORCING SHALL BE CONTINUOUS THROUGH CURB CONSTRUCTION JOINTS. CURB STIRRUP BARS SHALL BE TURNED AS NECESSARY TO MAINTAIN COVER IN THE FLARED CURB ENDS.

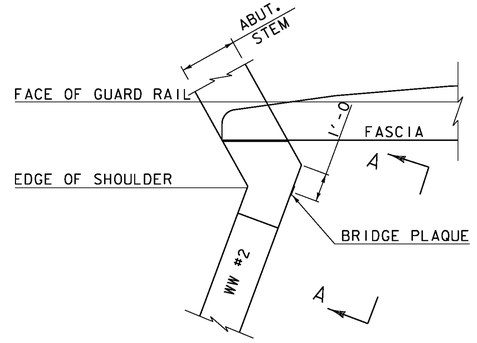
6. THE JOINT SPACING AND DETAILS SHOWN SHALL APPLY TO SIDEWALKS WHEN SHOWN IN THE PLANS.



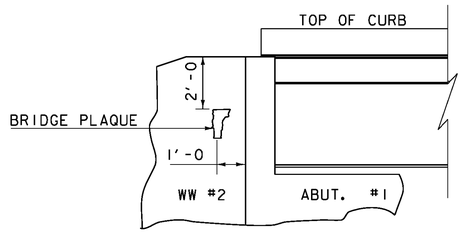

HORIZONTAL WINGWALL CONSTRUCTION JOINT
(NOT TO SCALE)




DRIP NOTCH DETAIL
(NOT TO SCALE)




PLAN




VIEW "A - A"

BRIDGE PLAQUE
(NOT TO SCALE)

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

PAYMENT FOR INSTALLATION OF THE BRIDGE PLAQUE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

| REVISIONS | |
|---|---|
| MAY 7, 2010 | APPROVED FOR USE BY VAOT STRUCTURES SECTION |
| JUNE 4, 2010 | MODIFIED AND ADDED TWO DETAILS |
| OCTOBER 10, 2012 | MODIFIED HORZ. JOINT WINGWALL ADD 6" MIN. DIMENSION |
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# CONCRETE DETAILS AND NOTES

VERMONT AGENCY OF TRANSPORTATION
STRUCTURES - SECTION

STRUCTURES DETAIL
SD-502.00