| REVIEWER NOTES:  |     |
|--|-----|
| I. ATTEMPTS TO MINIMIZE PROJECT LIMITS HAVE BEEN MA<br>IN ORDER TO REDUCE IMPACTS TO EXISTING RESOURC<br>AND PROPERTY OWNERS.  |     |
| 2. THE BRIDGE WILL BE CLOSED DURING CONSTRUCTION AN<br>TRAFFIC WILL BE MAINTAINED ON A ONE-WAY TEMPORA<br>BRIDGE UPSTREAM. TEMPORARY TRAFFIC SIGNALS WILL<br>UTILIZED ON THE ONE-WAY TEMPORARY BRIDGE. | ARY |
| 3. FINAL HYDRAULICS HAS BEEN REQUESTED.  |     |

- 4. THIS PROJECT WILL UTILIZE THE VT DEC LOW RISK SITE HANDBOOK FOR EPSC. NO SITE-SPECIFIC EPSC PLAN IS INCLUDED. THE CONTRACTOR SHALL SUBMIT A SITE-SPECIFIC EPSC PLAT TO VTRANS UPON CONTRAT AWARD IN ACCORDANCE WITH THEIR MEANS AND METHODS.
- 5. UTILITIES WILL NEED TO BE RELOCATED DURING CONSTRUCTION. A REQUEST HAS BEEN SUBMITTED.
- 6. THIS PROJECT WILL BE COMBINED FOR ADVERTISEMENT IN A SINGLE CONTRACT WITH THE STOWE BO 1446(37) BRIDGE 51 PROJECT.

ROUTE NO : TOWN HIGHWAY 43 (CLASS 3 TOWN HIGHWAY) BRIDGE NO: 48

LENG LENG LENG

BEGIN PROJECT STA 12+00.00

TH-43 (NEBRASKA VALLEY RD) TO LAKE MANSFIELD TROUT CLUB (DEAD END)

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

QUALITY ASSURANCE PROGRAM : LEVEL 2 SURVEYED BY : R. GILMAN

SURVEYED DATE : 9/21/2009 DATUM VERTICAL NAVD88 HORIZONTAL NAD83 (96)

# STATE OF VERMONT AGENCY OF TRANSPORTATION



# PROPOSED IMPROVEMENT

## BRIDGE PROJECT

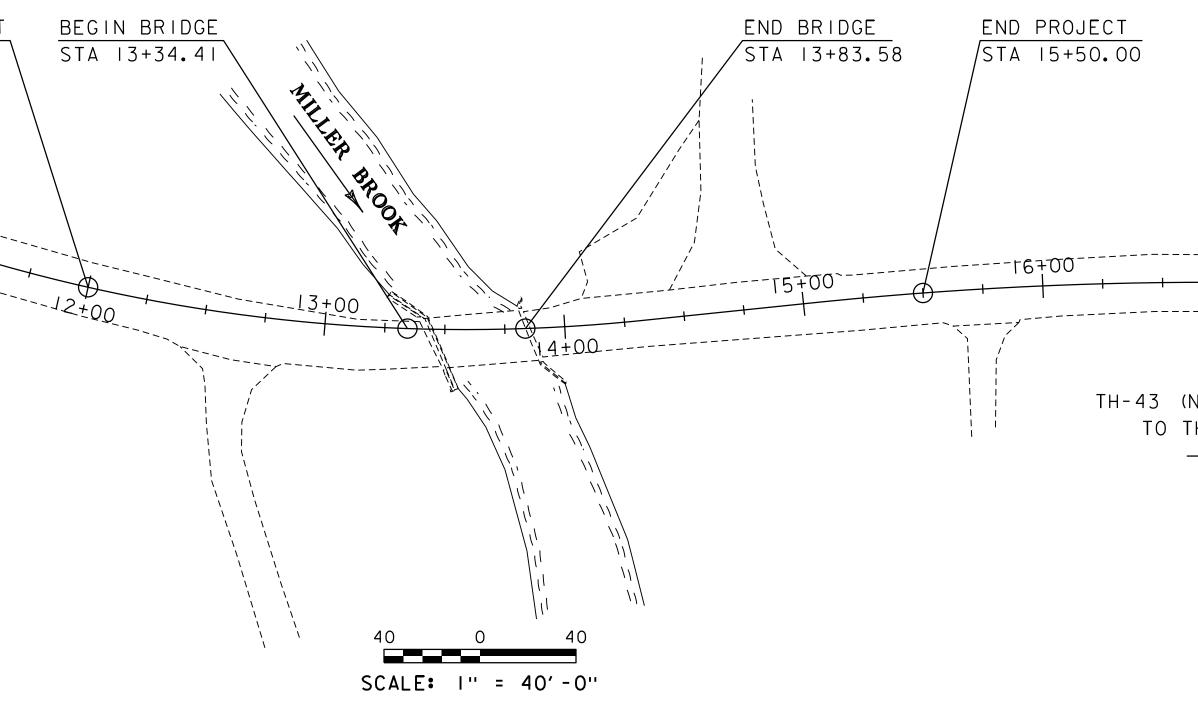
## TOWN OF STOWE

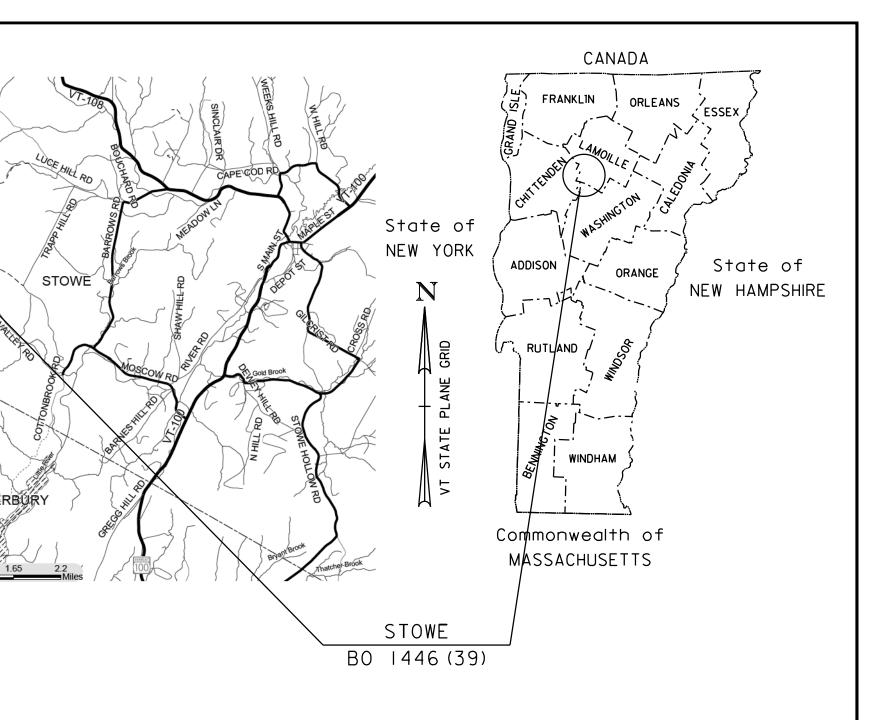
#### COUNTY OF LAMOILLE

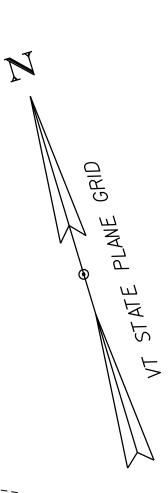
BRIDGE 48 IS LOCATED IN THE TOWN OF STOWE ON TH 43 (NEBRASKA VALLEY ROAD) PROJECT LOCATION : APPROXIMATELY 1.5 MILES NORTHWEST FROM ITS INTERSECTION WITH THI (MOSCOW ROAD) AND EXTENDING EASTERLY .066 MILES.

PROJECT DESCRIPTION : REPLACEMENT OF THE EXISTING BRIDGE WITH A NEW BRIDGE OFF ALIGNMENT INCLUDING RELATED APPROACH AND CHANNEL WORK.

| GTH OF | STRUCTURE : | 49.17  | FEET. |
|--------|-------------|--------|-------|
| GTH OF | ROADWAY :   | 300.83 | FEET. |
| GTH OF | PROJECT :   | 350.00 | FEET. |







-----16+00-----16+90------16+90------.\_\_\_\_\_

> TH-43 (NEBRASKA VALLEY RD) TO TH-I (MOSCOW RD)

#### **PRELIMINARY PLANS 20-SEP-2022**

|  | _ |
|--|---|
| HIGHWAY DIVISION, CHIEF ENGINEER                     |   |
| APPROVED DATE  |   |
| PROJECT MANAGER : CAROLYN COTA, P.E.                 |   |
| PROJECT NAME : STOWE<br>PROJECT NUMBER : BO 1446(39) |   |
| SHEET I OF 25 SHEETS                                 |   |

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



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| 2         | PRELIMINARY INFORMATION SHEET       |          | B-71a  | STANDARD FOR RESIDENTIAL DRIVES                        | 04-07-202 |
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| 9         | TH 43 PROFILE                       |          | G-1bM  | BOX BEAM GUARD RAIL                                    | 06-13-199 |
| 10        | TH 43 BANKING & MATERIAL TRANSITION |          | J-3    | MAIL BOX SUPPORT DETAILS                               | 08-07-199 |
| 11        | TH 45 PROFILE & MATERIAL TRANSITION |          | S-364A | BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM             | 02-17-202 |
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| 14 - 16   | BORING LOGS 1-3                     |          | S-364D | GUARDRAIL APPROACH SECTION, GALVANIZED 3 RAIL BOX BEAM | 02-17-202 |
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|           | DETAIL SHEETS                       |          | T-29   | CONSTRUCTION SIGN DETAILS                              | 08-06-201 |
| HSD-400.0 | 1 SAFETY EDGE DETAILS               | 1/5/2018 | T-30   | CONSTRUCTION SIGN DETAILS                              | 02-17-202 |
|           |                                     |          | T-40   | DELINEATORS AND MILEPOSTS                              | 01-02-201 |
|           |                                     |          | T-42   | BRIDGE NUMBER PLAQUE                                   | 04-09-201 |
|           |                                     |          | T-45   | SQUARE TUBE SIGN POST AND ANCHOR                       | 01-02-201 |

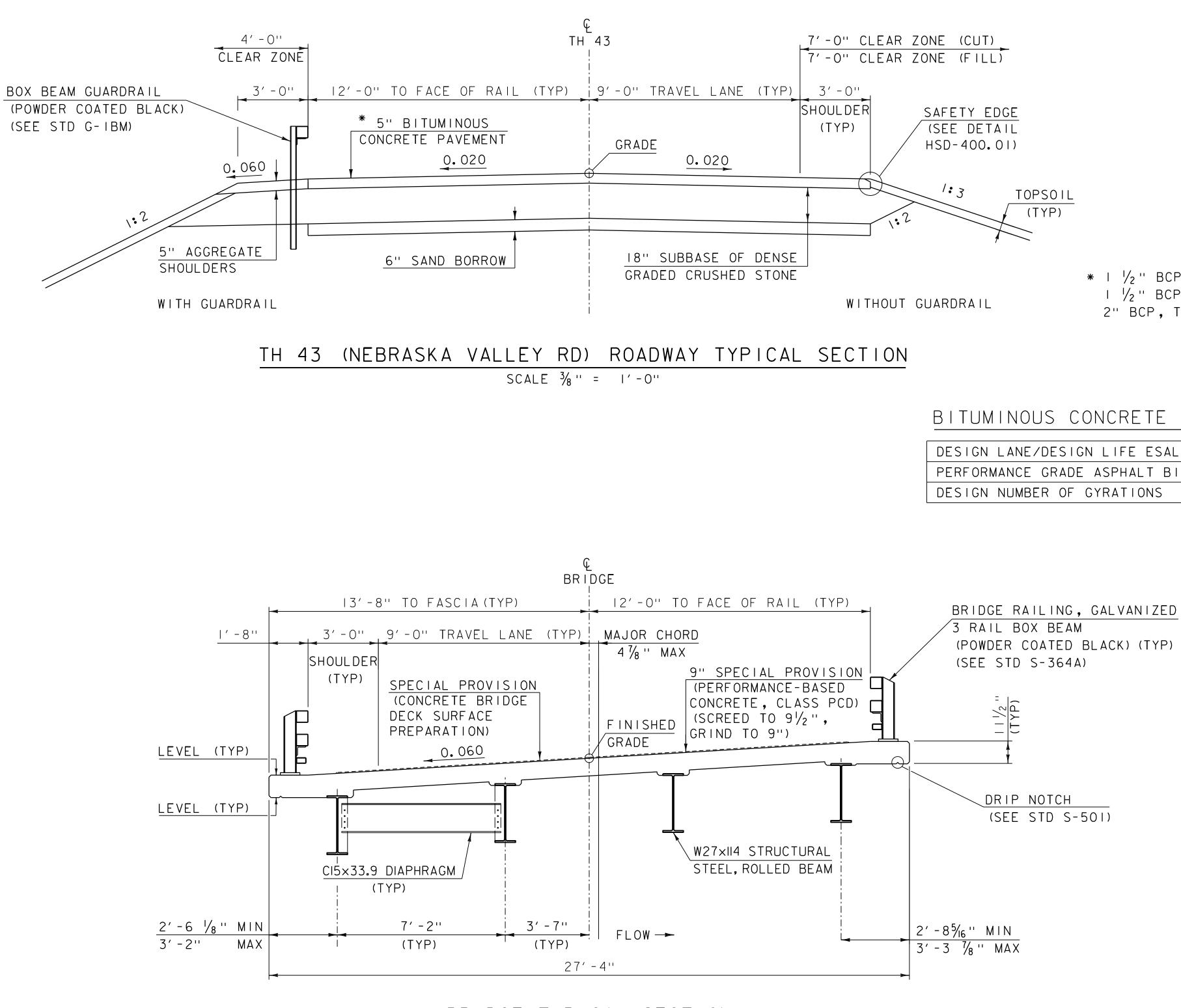
|      |     |     |     | т   | RAFFIC DAT | 4   |         | UILT "REBAR" D |           |
|------|-----|-----|-----|-----|------------|---|---------|----------------|-----------|
|      |     |     |     |     |            |   | LEVEL I | LEVEL II       | LEVEL III |
| YEAR | ADT | DHV | % D | % Т | ADTT       | 20 year ESAL for flexible pavement from 2024 to 2044 : 76000  | TYPE:   | TYPE:          | TYPE:     |
| 2024 | 400 | 60  | 54  | 1.5 | 35         | 40 year ESAL for flexible pavement from 2024 to 2064 : 160000 | GRADE:  | GRADE:         | GRADE:    |
| 2044 | 70  | 54  | 2   | 50  | 0          | Design Speed : 35 mph   |         |                |           |

# PRELIMINARY INFORMATION SHEET (BRIDGE)

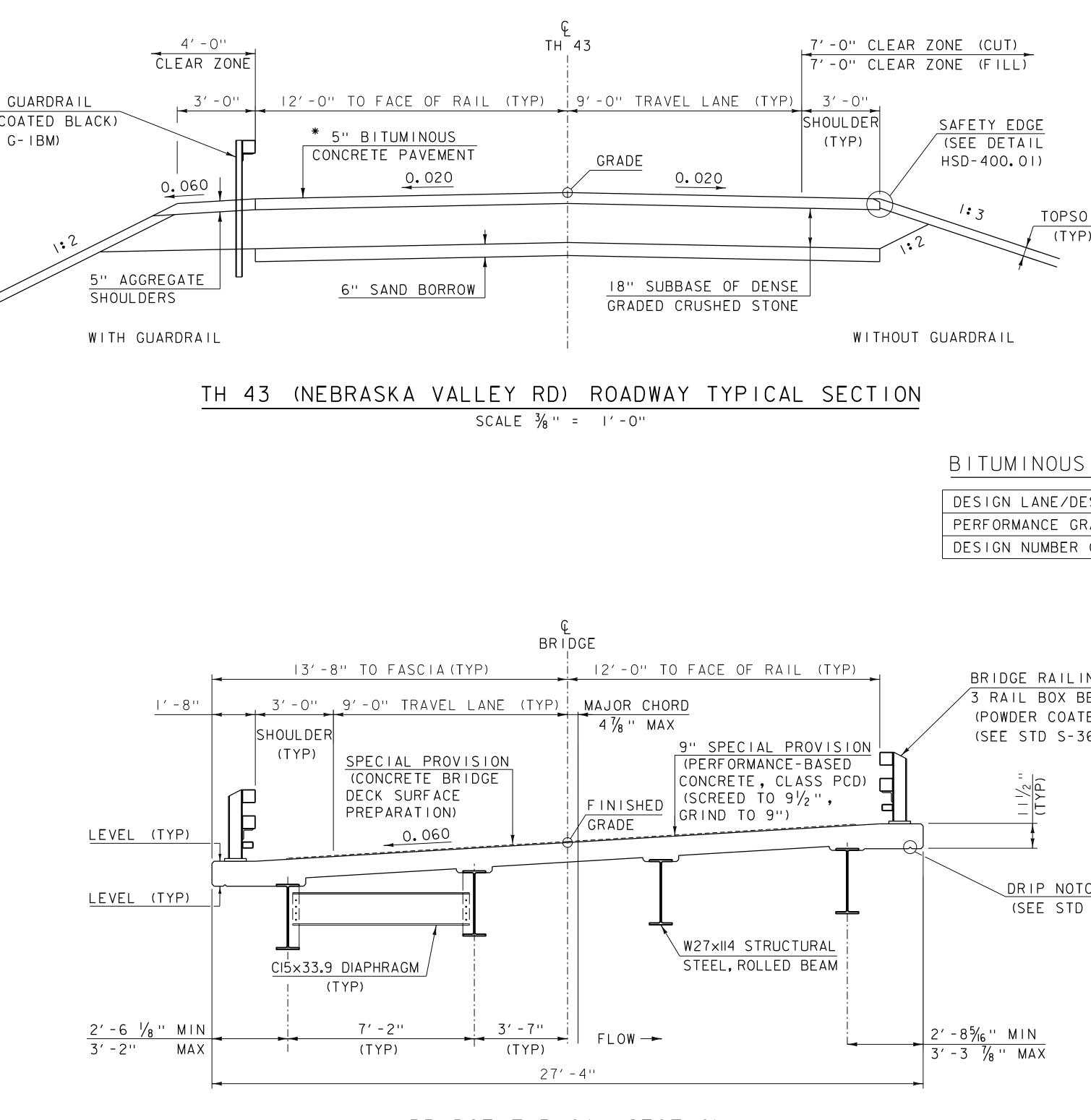
|                | LR   | FR LOAD | RATING | FACTOR | RS       |       |
|----------------|------|---------|--------|--------|----------|-------|
| LOADING LEVELS |      |         |        | TRUCK  |          |       |
|                | H-20 | HL-93   | 3S2    | 6 AXLE | 3A. STR. | 4A. S |
| TONNAGE        | 20   | 36      | 36     | 66     | 30       | 34.   |
| INVENTORY      |      |         |        |        |          |       |
| POSTING        |      |         |        |        |          |       |
| OPERATING      |      |         |        |        |          |       |
| COMMENTS:      |      |         |        |        |          |       |
|                |      |         |        |        |          |       |

| SHEET (BRIDGE)   | LRFD  |
|--|---|
| FINAL HYDRA  | ULIC REPORT   |
|  |   |
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|  |   |
|  | TRAFFIC MAINTENANCE NOTES           1. MAINTAIN ONE-WAY TRAFFIC ON A TEMPORARY BRIDGE.  |
|  | <ol> <li>INSTALL AND MAINTAIN TRAFFIC SIGNALS.</li> <li>SIDEWALKS ARE NOT NECESSARY</li> </ol>  |
|  | 4. THE APPROACHES FOR THE TEMPORARY BRIDGE SHALL BE PAVED.  |
|  | DESIGN VALUES           1. DESIGN LIVE LOAD         HL-93           2. FUTURE PAVEMENT         dp: 2.5 INCH   |
|  | 3. DESIGN SPAN L: 48.00 FT  |
|  | 4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)       Δ:         5. PRESTRESSING STRAND       fy:  |
|  | 6. PRESTRESSED CONCRETE STRENGTH       f'c:         7. PRESTRESSED CONCRETE RELEASE STRENGTH       f'ci:  |
|  | 8. SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE, CLASS PCD)       f'c: 4.0 KSI         9. SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE, CLASS PCS)       f'c: 3.5 KSI   |
|  | 10. SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE, CLASS SCC)       f'c: 4.0 KSI         11. CONCRETE, CLASS C       f'c: 3.0 KSI   |
|  | 12. REINFORCING STEEL         fy:         60 KSI           13. STRUCTURAL STEEL AASHTO M270 (GALVANIZED)         fy:         50 KSI   |
|  | 14. NOMINAL BEARING RESISTANCE OF SOIL <b>q</b> n:  |
|  | 15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)       \$\overline{\phi}\$:         16. NOMINAL BEARING RESISTANCE OF ROCK       \$\overline{\phi}\$:         17. DODI( DEADING DEDIDITANCE FACTOR)       \$\overline{\phi}\$: |
| DADING LEVELS  | 17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)       φ:          18. DUE DESISTANCE FACTOR       φ:  |
| H-20         HL-93         3S2         6 AXLE         3A. STR.         4A. STR.         5A. SEMI           ONNAGE         20         36         36         66         30         34.5         38 | 18. PILE RESISTANCE FACTOR         φ:            19. LATERAL PILE DEFLECTION         Δ:            20. BASIC WIND SPEED         V3s:  |
| IVENTORY<br>DSTING   | 20. BASIC WIND SPEED         V3s.            21. MINIMUM GROUND SNOW LOAD         pg:            22. SEISMIC DATA         PGA:  |
| PERATING OMMENTS:  | 22. <u>SEISWIC DATA</u><br>23. <u>St:</u>   |
|  | 24. <u></u><br>25   |
|  | 26  |
|  | project name: STOWE<br>project number: BO 1446(39)  |
|  | FILE NAME: sI2j658forms.dgn PLOT DATE: 20-SEP-2022  |
|  | PROJECT LEADER: C. COTA DRAWN BY: M. LONGSTREET   |
|  | DESIGNED BY: C.BURRALL CHECKED BY: C.BURRALL  |

Version









SCALE <sup>3</sup>/<sub>8</sub> '' = 1'-0''

\* I 1/2" BCP, TYPE IVS OVER  $I \frac{1}{2}$ " BCP, TYPE IVS OVER 2" BCP, TYPE IIIS

#### BITUMINOUS CONCRETE PAVEMENT MATERIAL REQUIREMENTS

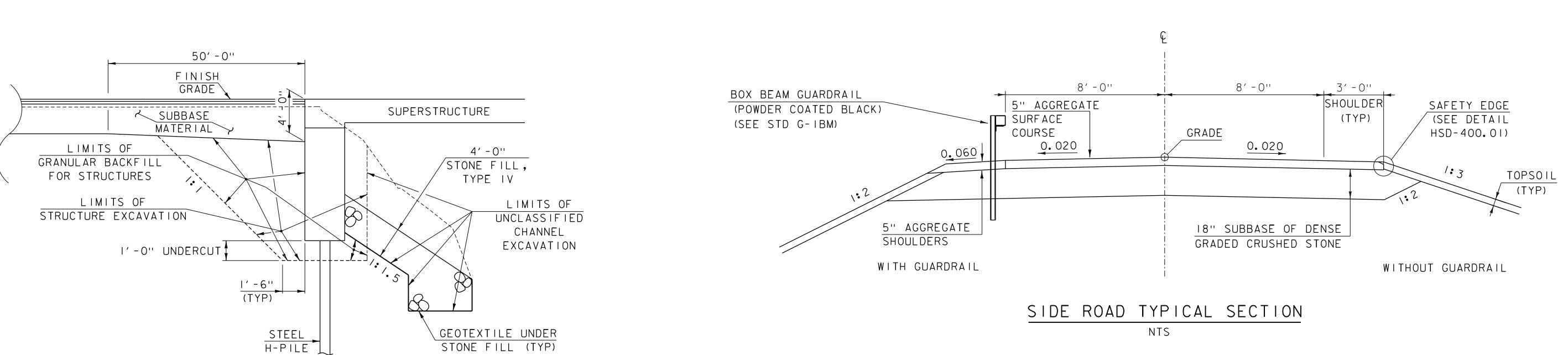
| SIGN LIFE ESALS     | 41,040 |
|---------------------|--------|
| RADE ASPHALT BINDER | 70-28  |
| OF GYRATIONS        | 50     |

(POWDER COATED BLACK) (TYP)

| MATERIAL TOLERANG            | CES                  |
|------------------------------|----------------------|
| (IF USED ON PROJECT)         |                      |
| SURFACE                      |                      |
| - PAVEMENT (TOTAL THICKNESS) | +/- <sup> </sup> /4" |
| - AGGREGATE SURFACE COURSE   | +/- 1/2"             |
| SUBBASE                      | +/-  "               |
| SAND BORROW                  | +/-  "               |

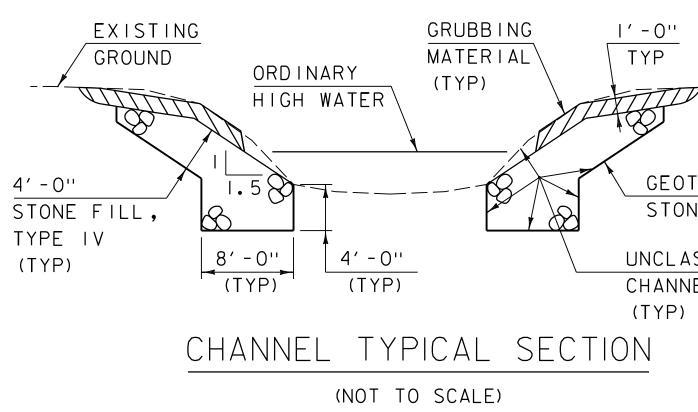
EMULSION SHALL BE APPLIED PER THE APPLICATION RATES IN TABLE 406.12A OF THE STANDARD SPECIFICATIONS.

| project name: STOWE         |                          |
|-----------------------------|--------------------------|
| project number: BO 1446(39) |                          |
| FILE NAME: sI2j658typ.dgn   | PLOT DATE: 20-SEP-2022   |
| PROJECT LEADER: C.COTA      | DRAWN BY: C.BURRALL      |
| DESIGNED BY: C.BURRALL      | CHECKED BY: M.LONGSTREET |
| TYPICAL SECTIONS I          | SHEET \$S#\$ OF \$T#\$   |



#### ABUTMENT EARTHWORK TYPICAL SECTION

(NOT TO SCALE)



- I. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.
- 2. GRUBBING MATERIAL SHALL BE PLACED UNDERNEATH STRUCTURES WHERE THERE IS MORE THAN 6 FEET VERTICALLY FROM ORDINARY HIGH WATER (OHW) TO THE BOTTOM OF SUPERSTRUCTURE AND MORE THAN 6 FEET HORIZONTALLY FROM OHW LINE TO FRONT FACE OF ABUTMENT. THIS MATERIAL SHALL START JUST ABOVE THE OHW ELEVATION AND TERMINATE 3 FEET HORIZONTALLY FROM THE FRONT FACE OF THE ABUTMENT. THIS MATERIAL SHALL NOT BE PLACED IN AREAS THAT WILL SEE CONCENTRATED FLOWS RESULTING FROM SURFACE WATER RUNOFF. GRUBBING MATERIAL MAY BE OMITTED IF LESS THAN 3 FEET IN WIDTH BENEATH A STRUCTURE. SEE CHANNEL SECTIONS FOR ADDITIONAL DETAILING.

GEOTEXTILE UNDER STONE FILL (TYP)

UNCLASSIFIED CHANNEL EXCAVATION

| PROJECT NAME: STOWE<br>PROJECT NUMBER: BO 144 |                         |
|---|-------------------------|
| FILE NAME: sI2j658typ.dgn                     | PLOT DATE: 20-SEP-2022  |
| PROJECT LEADER: C.COTA                        | DRAWN BY: C.BURRALL     |
| DESIGNED BY: C.BURRALL                        | CHECKED BY:M.LONGSTREET |
| TYPICAL SECTIONS 2                            | SHEET \$S#\$ OF \$T#\$  |

| GENER | RAL INFO  | RMATION   | COMMO   | N TOPOGI  | RAPHIC POINT SYMBOLS   |
|-------|---|---|---|---|--|
| SYMBC | )LOGY LE  | GEND NOTE   | POINT   | CODE  | DESCRIPTION  |
|       |   | Y ON THIS SHEET IS INTENDED TO COVER  | *   | APL   | BOUND APPARENT LOCATION  |
|       |   | VENTIONAL SYMBOLOGY. THE SYMBOLOGY IS   | Ū   | BM  | BENCHMARK  |
|       |   | TING & PROPOSED FEATURES WITH HEAVIER   | C   | BND   | BOUND  |
|       |   | COMBINATION WITH PROJECT ANNOTATION,<br>PROJECT PLAN SHEETS. THIS LEGEND  |   | СВ  | CATCH BASIN  |
|       |   | THE BASICS. SYMBOLOGY ON PLANS MAY  | ¢<br>— I  | COMB  | COMBINATION POLE   |
|       |   | NOTATIONS AND NOTES SHOULD BE   |   | DITHR   | DROP INLET THROATED DNC  |
| USED  | ) TO CLAR   | FY AS NEEDED.   | ¢<br>-  | EL  | ELECTRIC POWER POLE  |
|       |   |   | 0   | FPOLE   | FLAGPOLE   |
|       |   |   | $\odot$   | GASFIL<br>GP  | GAS FILLER   |
|       |   |   | ×   | GSO   | GUIDE POST<br>GAS SHUT OFF   |
|       |   |   | õ   | GUY   | GUY POLE   |
|       |   |   | O   | GUYW  | GUY WIRE   |
|       |   |   | M   | GV  | GATE VALVE   |
|       |   |   | Ê   | H   | TREE HARDWOOD  |
|       |   |   |   | HCTRL   | CONTROL HORIZONTAL   |
|       |   |   |   | HVCTRL  | CONTROL HORIZ. & VERTICAL  |
|       |   |   | $\diamond$  | HYD   | HYDRANT  |
|       |   |   | ۲   | IP  | IRON PIN   |
|       |   |   | ۲   | IPIPE   | IRON PIPE  |
|       |   |   | ¢<br>P  | LI  | LIGHT - STREET OR YARD   |
|       |   |   | ð   | MB  | MAILBOX  |
|       |   |   | O   | MH  | MANHOLE (MH)   |
|       |   |   |   | MM  | MILE MARKER  |
|       |   |   | θ   | PM<br>DMK   | PARKING METER  |
|       |   |   | 0   | PMK<br>POST   | PROJECT MARKER<br>POST STONE/WOOD  |
|       |   |   | ÿ   | RRSIG   | RAILROAD SIGNAL  |
|       |   |   | <ul><li>↔</li></ul>   | RRSL  | RAILROAD SWITCH LEVER  |
|       |   |   |   | S   | TREE SOFTWOOD  |
|       |   |   | ≣   | SAT   | SATELLITE DISH   |
|       |   |   | Ê   | SHRUB   | SHRUB  |
|       |   |   | रू<br>ठ   | SIGN  | SIGN   |
|       |   |   | ۶   | STUMP   | STUMP  |
|       |   |   | -0-   | TEL   | TELEPHONE POLE   |
| R.O.W | . ABBRE   | VIATIONS (CODES) & SYMBOLS  | O   | TIE   | TIE  |
|       |   |   | 0.0   | TSIGN   | SIGN W/DOUBLE POST   |
| PUINI |   | DESCRIPTION   | 人   | VCTRL   | CONTROL VERTICAL   |
|       | BF  | BARRIER FENCE   | o   | WELL  | WELL   |
|       | CH<br>CONST   | CHANNEL EASEMENT  | ×   | WSO   |  |
|       |   |   |   | 1100  | WATER SHUT OFF   |
|       |   | CONSTRUCTION EASEMENT   |   |   |  |
|       | CUL   | CULVERT EASEMENT  |   | ARE COMMO   | N VAOT SURVEY POINT SYMBOLS  |
|       |   | CULVERT EASEMENT<br>DISCONNECT & CONNECT  | FOR EX  | ARE COMMO<br>STING FEA  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED  |
|       | CUL<br>D&C  | CULVERT EASEMENT  | FOR EXI<br>FEATUR   | ARE COMMO<br>STING FEA<br>ES WITH HE  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION   |
|       | CUL<br>D&C<br>DIT   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT  | FOR EXI<br>FEATUR   | ARE COMMO<br>STING FEA<br>ES WITH HE  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED  |
|       | CUL<br>D&C<br>DIT<br>DR   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT   | FOR EX<br>FEATUR<br>WITH PR   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE  | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT   | FOR EX<br>FEATUR<br>WITH PR   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M  | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT  | FOR EX<br>FEATUR<br>WITH PR   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>SED GEOI   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND  | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT  | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>SED GEO<br>DESCR   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>SED GEO<br>DESCR<br>POINT (  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES  | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>SED GEO<br>DESCR<br>POINT O<br>POINT O   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET   | FOR EXI<br>FEATURI<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI  | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>SED GEO<br>DESCR<br>POINT O<br>POINT O<br>CENTER   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.& I.   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC  | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (<br>POINT (<br>POINT (<br>POINT (  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.& I.<br>SR   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT  | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC                                  | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.& I.   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB                           | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF BEGINNING   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.& I.<br>SR<br>UE   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT  | FOR EXI<br>FEATURI<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB<br>POE                   | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (<br>POINT (   | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF CURVATURE<br>OF CURVE<br>OF CURVE<br>OF CURVE<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)  | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT  | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA             | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (<br>POINT (  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>(T)   | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH       | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C)<br>POINT (C)  | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX<br>STATION SUFFIX   |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>T)<br>BNDNS<br>BNDNS                                      | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET<br>BOUND SET  | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH<br>BK | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C)<br>POINT (C)<br>POI  | IN VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX<br>STATION SUFFIX  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>T)<br>BNDNS<br>BNDNS<br>BNDNS<br>IPNF                     | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET<br>BOUND TO BE SET<br>IRON PIN FOUND  | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH<br>BK<br>D         | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C)<br>POINT (C<br>POINT (C)<br>POINT                                     | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVE<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX<br>STATION SUFFIX<br>TATION SUFFIX<br>DEGREE OF (IOOFT)  |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>BNDNS<br>BNDNS<br>BNDNS<br>IPNF<br>IPNS | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET<br>BOUND SET<br>BOUND TO BE SET<br>IRON PIN FOUND<br>IRON PIN TO BE SET   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH<br>BK | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C)<br>POINT (C)<br>P                                     | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX<br>STATION SUFFIX<br>TATION SUFFIX<br>TATION SUFFIX<br>DEGREE OF (IOOFT)<br>RADIUS OF |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>BNDNS<br>BNDNS<br>BNDNS<br>IPNF<br>IPNS<br>CALC           | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET<br>BOUND SET<br>BOUND TO BE SET<br>IRON PIN FOUND<br>IRON PIN TO BE SET<br>EXISTING ROW POINT | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH<br>BK<br>D         | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C<br>P | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF TANGENCY<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>N PREFIX<br>STATION SUFFIX<br>TATION SUFFIX<br>TATION SUFFIX<br>DEGREE OF (IOOFT)<br>RADIUS OF<br>TANGENT LENGTH    |
|       | CUL<br>D&C<br>DIT<br>DR<br>DRIVE<br>EC<br>HWY<br>I&M<br>LAND<br>PDF<br>R&RES<br>R&REP<br>R&RES<br>R&REP<br>R.T.&I.<br>SR<br>UE<br>(P)<br>(T)<br>BNDNS<br>BNDNS<br>BNDNS<br>IPNF<br>IPNS | CULVERT EASEMENT<br>DISCONNECT & CONNECT<br>DITCH EASEMENT<br>DRAINAGE EASEMENT<br>DRIVEWAY EASEMENT<br>EROSION CONTROL<br>HIGHWAY EASEMENT<br>INSTALL & MAINTAIN EASEMENT<br>LANDSCAPE EASEMENT<br>PROJECT DEMARCATION FENCE<br>REMOVE & RESET<br>REMOVE & REPLACE<br>RIGHT, TITLE, AND INTEREST<br>SLOPE RIGHT<br>UTILITY EASEMENT<br>PERMANENT EASEMENT<br>TEMPORARY EASEMENT<br>BOUND SET<br>BOUND SET<br>BOUND TO BE SET<br>IRON PIN FOUND<br>IRON PIN TO BE SET   | FOR EXI<br>FEATUR<br>WITH PR<br>PROPO<br>CODE<br>PC<br>PI<br>CC<br>PT<br>PCC<br>PRC<br>POB<br>POE<br>STA<br>AH<br>BK<br>D         | ARE COMMO<br>STING FEA<br>ES WITH HE<br>COPOSED A<br>DESCR<br>POINT (C<br>POINT (C<br>P | ON VAOT SURVEY POINT SYMBOLS<br>TURES, ALSO USED FOR PROPOSED<br>EAVIER LINEWEIGHT, IN COMBINATION<br>NNOTATION.<br>METRY CODES<br>IPTION<br>OF CURVATURE<br>OF CURVATURE<br>OF INTERSECTION<br>OF CURVE<br>OF COMPOUND CURVE<br>OF REVERSE CURVE<br>OF REVERSE CURVE<br>OF BEGINNING<br>OF ENDING<br>I PREFIX<br>STATION SUFFIX<br>TATION SUFFIX<br>TATION SUFFIX<br>DEGREE OF (IOOFT)<br>RADIUS OF |

# \_\_\_\_\_

#### UTILITY SYMBOLOGY

| UNDERGROUND UTILITIES                       |
|---|
|   |
|   |
|   |
|   |
|   |
|   |
|   |
|   |
| 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+TELEPHONE |
|   |
|   |
| PROJECT CONSTRUCTION SYMBOLOGY              |
|   |
| PROJECT DESIGN & LAYOUT SYMBOLOGY           |
| - $-$ cz $ -$ clear zone                    |
| PLAN LAYOUT MATCHLINE                       |
|   |
| PROJECT CONSTRUCTION FEATURES               |
| 🛆 🛆 🛆 TOP OF CUT SLOPE                      |
| O ─ O ─ O TOE OF FILL SLOPE                 |
| 87 87 87 87 87 STONE FILL                   |
|   |

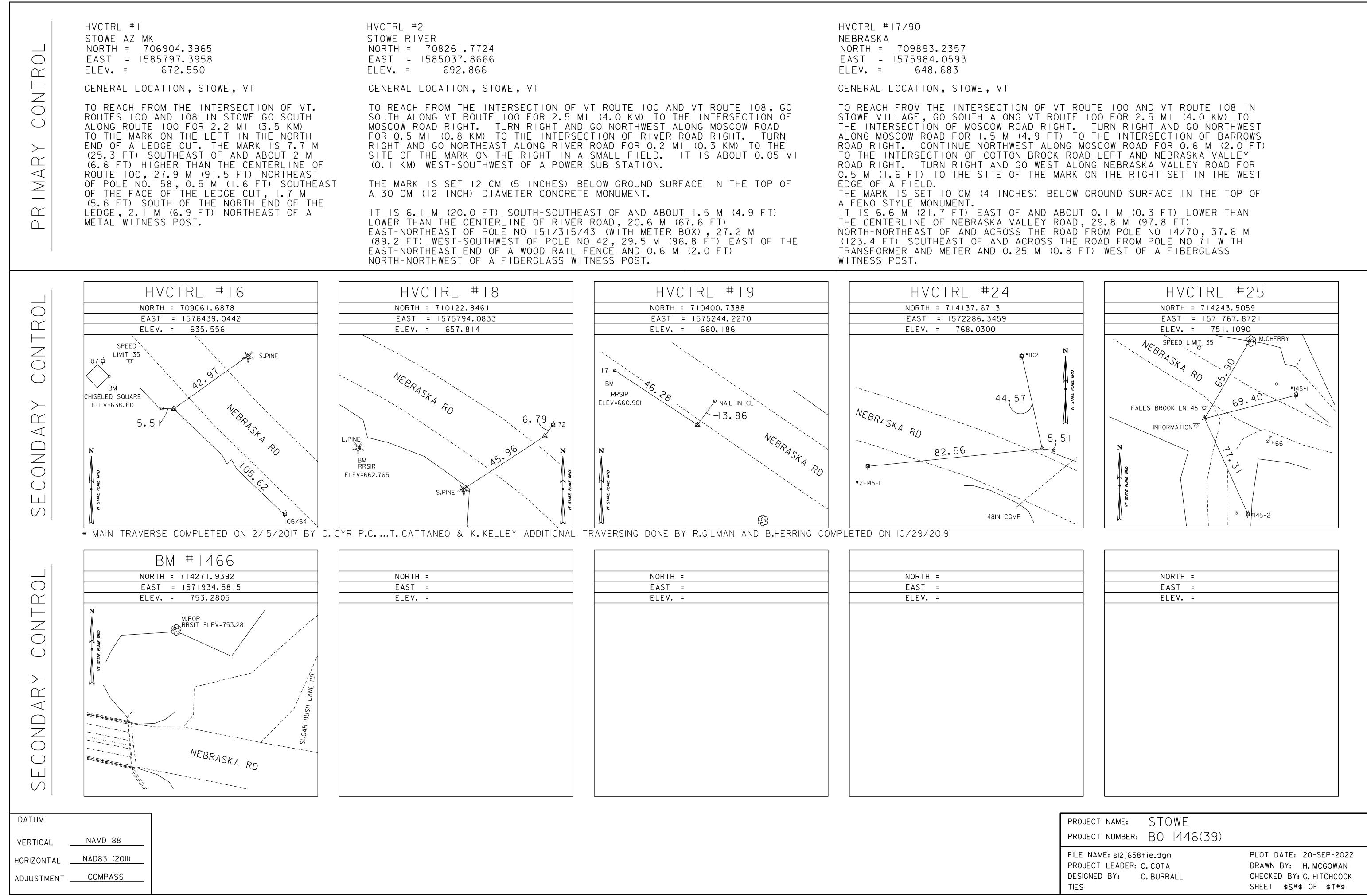
| Δ—       | <u>A</u>  | <u> </u>                                | TOP OF CUT SLOPE           |
|----------|---|---|----------------------------|
| Θ-       | <del></del> 0                                     | <del></del> 0                           | TOE OF FILL SLOPE          |
| 80       | 8° 8°   | <del>8</del> <del>8</del> <del>8</del>  | STONE FILL                 |
|          |   |   | BOTTOM OF DITCH €          |
| $\equiv$ |   | =====:                                  | CULVERT PROPOSED           |
|          |   |   | STRUCTURE SUBSURFACE       |
| РD       | F   | — PDF — — —                             | PROJECT DEMARCATION FENCE  |
| ΒF       | · <del>_                                   </del> | ← B F <del>- × - × -</del>              | BARRIER FENCE              |
| XXX      | ****  | ****                                    | TREE PROTECTION ZONE (TPZ) |
| 11       | //////  | /////////////////////////////////////// | STRIPING LINE REMOVAL      |
| $\frown$ | $\sim\sim$  | $\sim \sim \sim$                        | SHEET PILES                |

#### CONVENTIONAL BOUNDARY SYMBOLOGY

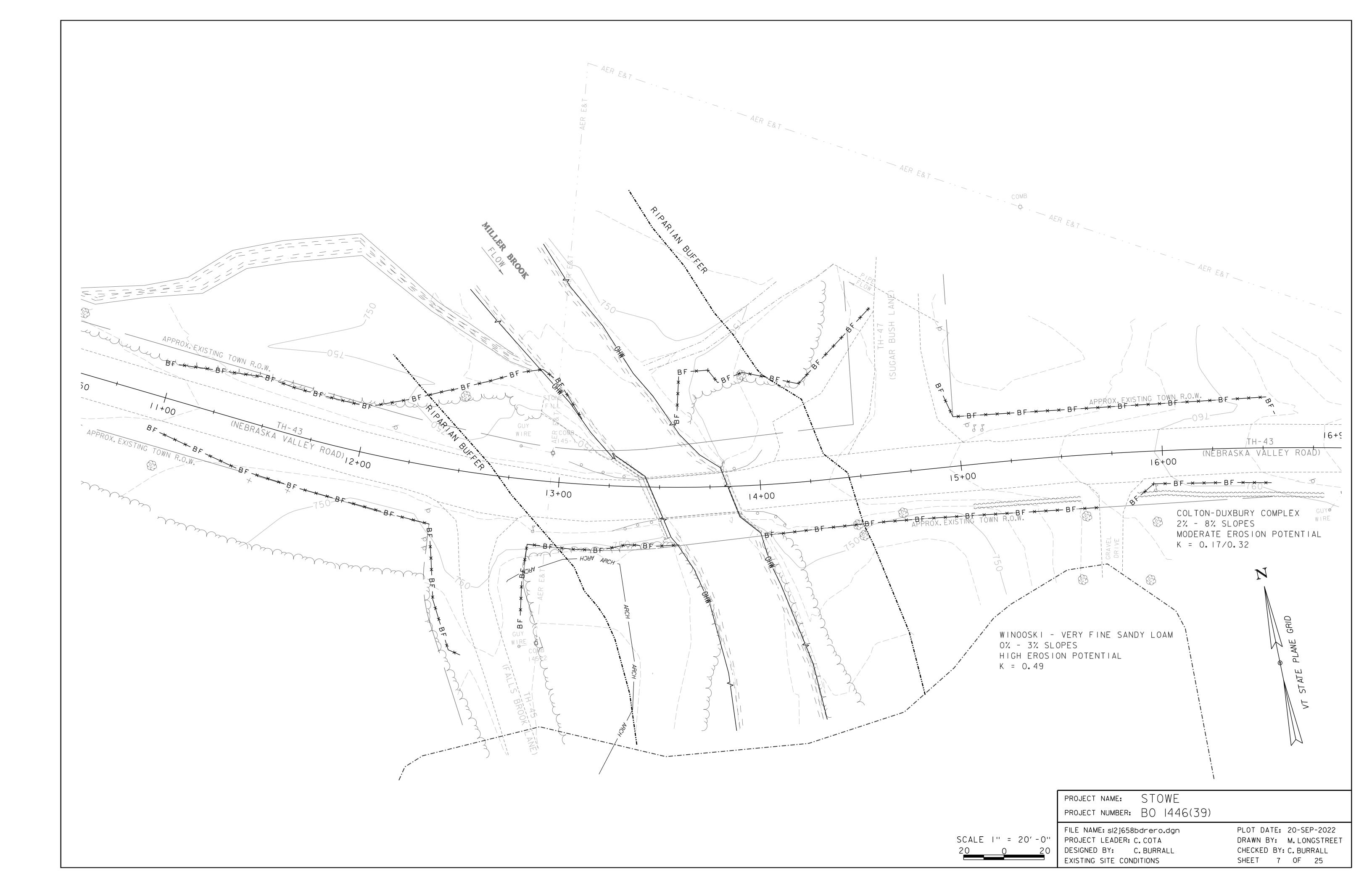
| BOUNDARY LINES                            |  |
|---|--|
| TOWN LINE                                 | TOWN BOUNDARY LINE                     |
| COUNTY LINE                               | COUNTY BOUNDARY LINE                   |
| STATE LINE                                | STATE BOUNDARY LINE                    |
| — <i>///</i> — — — <i>///</i>             | 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                            |
| $\frac{P}{L} - \frac{P}{L} - \frac{P}{L}$ | PROPERTY LINE (P/L)                    |
| <u>∧ SR ⊖ SR ∧ SR</u> ⊖                   | SLOPE RIGHTS                           |
| 6f 6f                                     | 6F PROPERTY BOUNDARY                   |
| 4f 4f                                     | 4F PROPERTY BOUNDARY                   |
| HAZ ———— HAZ ———                          | HAZARDOUS WASTE                        |

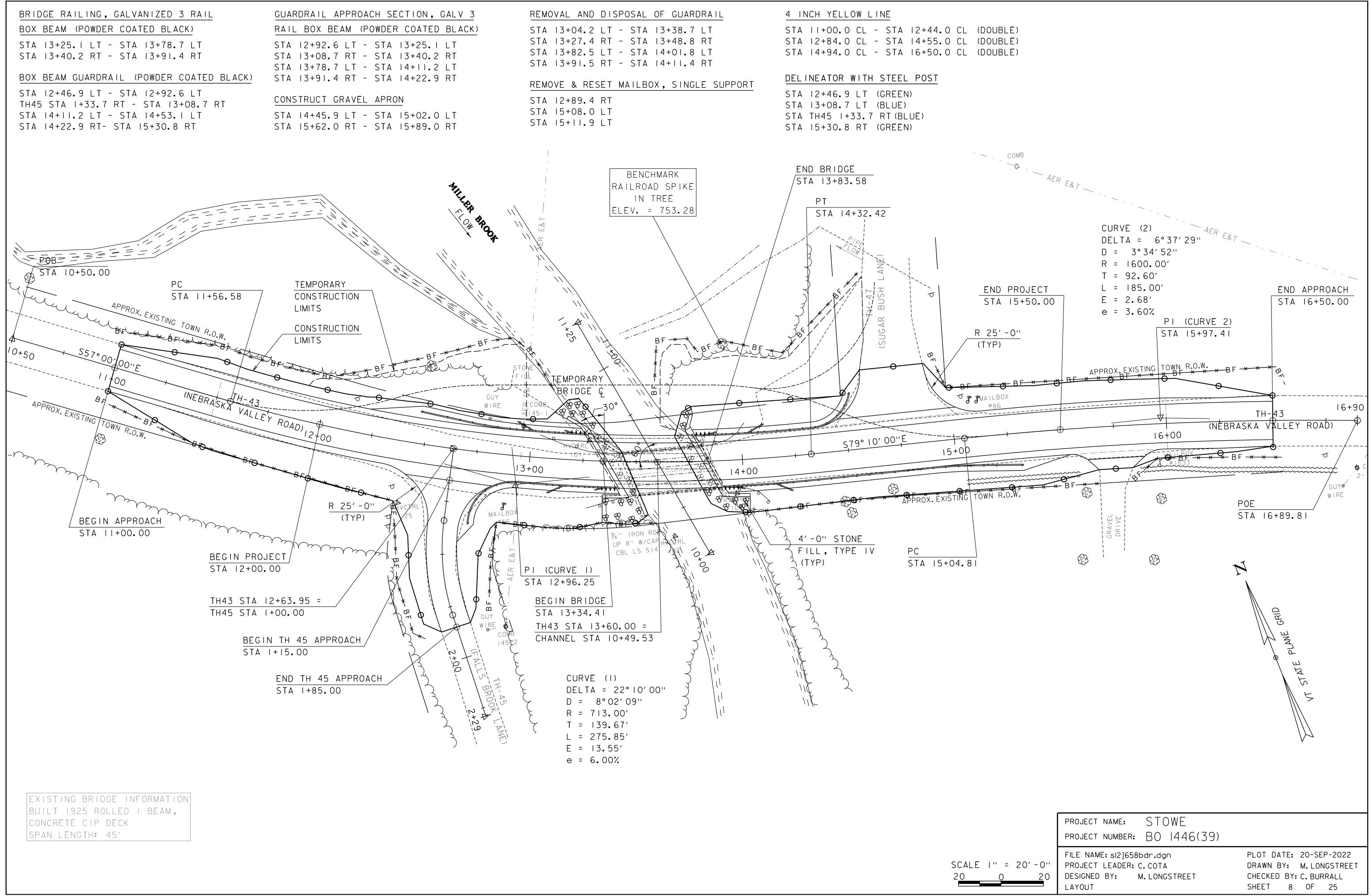
| ONNOONNOONNO                           | S<br>FILTER CURTAIN  |
|--|--|
|  | SILT FENCE   |
| ▫▫×▫×▫米₃<br>▶──▶──▶──                  | SILT FENCE WOVEN WIRE<br>CHECK DAM   |
|  | DISTURBED AREAS<br>REQUIRING RE-VEGETATION   |
|  | EROSION MATTING  |
| SEE EPSC DETAIL                        | SHEETS FOR ADDITIONAL SYMBOLOGY  |
|  |  |
|  | _ RESOURCES<br>WETLAND BOUNDARY  |
|  | RIPARIAN BUFFER ZONE   |
|  | WETLAND BUFFER ZONE<br>Soil Type Boundary  |
| T&E                                    | THREATENED & ENDANGERED SPECIES  |
| HAZ —— HAZ ——                          | HAZARDOUS WASTE AREA   |
| —————————————————————————————————————— | AGRICULTURAL LAND<br>FISH & WILDLIFE HABITAT   |
|  |  |
|  | ORDINARY HIGH WATER (OHW)  |
| •••••                                  | STORM WATER<br>USDA FOREST SERVICE LANDS   |
| <u> </u>                               | WILDLIFE HABITAT SUIT/CONN   |
| ARCHEOLOGICAL                          | - & HISTORIC   |
|  | ARCHEOLOGICAL BOUNDARY   |
| — HISTORIC DIST —<br>——— HISTORIC ———  | HISTORIC DISTRICT BOUNDARY<br>HISTORIC AREA  |
| Ĥ                                      | HISTORIC STRUCTURE   |
|  | TOPOGRAPHIC SYMBOLOGY  |
| CONVENTIONAL<br>EXISTING FEAT          | TURES<br>ROAD EDGE PAVEMENT  |
|  | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE   |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE<br>DITCH  |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE   |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE<br>DITCH<br>FOUNDATION<br>-× FENCE (EXISTING)<br>FENCE WOOD POST  |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE<br>DITCH<br>FOUNDATION<br>-× FENCE (EXISTING)<br>FENCE WOOD POST  |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE<br>DITCH<br>FOUNDATION<br>-× FENCE (EXISTING)<br>-□ FENCE WOOD POST<br>-○ FENCE STEEL POST<br>~~ GARDEN<br>ROAD CHARDDRAIL  |
| EXISTING FEAT                          | TURES<br>ROAD EDGE PAVEMENT<br>ROAD EDGE GRAVEL<br>DRIVEWAY EDGE<br>DITCH<br>FOUNDATION<br>-× FENCE (EXISTING)<br>FENCE WOOD POST<br>FENCE STEEL POST<br>GARDEN  |
| EXISTING FEAT                          | TURES          ROAD EDGE PAVEMENT          ROAD EDGE GRAVEL          DRIVEWAY EDGE          DITCH          FOUNDATION         -×       FENCE (EXISTING)         -□       FENCE WOOD POST         -o       FENCE STEEL POST         ~~       GARDEN          ROAD GUARDRAIL   |
| EXISTING FEAT                          | TURES          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   |
| EXISTING FEAT                          | TURES          ROAD EDGE PAVEMENT          ROAD EDGE GRAVEL          DRIVEWAY EDGE          DITCH          FOUNDATION          FENCE (EXISTING)          FENCE (EXISTING)          FENCE WOOD POST          GARDEN          ROAD GUARDRAIL          RAILROAD TRACKS          CULVERT (EXISTING)  |
| EXISTING FEAT                          | TURES          ROAD EDGE PAVEMENT          ROAD EDGE GRAVEL          DRIVEWAY EDGE          DITCH         FOUNDATION          DITCH         FOUNDATION          DITCH         FOUNDATION          FENCE (EXISTING)          FENCE WOOD POST          FENCE STEEL POST          GARDEN          RAILROAD TRACKS          WALL          WALL         WOOD LINE         WOOD LINE         BRUSH LINE  |
| EXISTING FEAT                          | TURES         Provide State         Provide                              |
| EXISTING FEAT                          | TURES         Provide Stress         Provide Stres </td |
| EXISTING FEAT                          | TURES         Provide State         Provide                              |
| EXISTING FEAT                          | TURES         Provide State         Provide                              |
| EXISTING FEAT                          | TURES         ROAD EDGE PAVEMENT         ROAD EDGE GRAVEL         DRIVEWAY EDGE         DITCH         FOUNDATION         ×       FENCE (EXISTING)          FENCE (EXISTING)          FENCE STEEL POST          GARDEN         ROAD GUARDRAIL       RAILROAD TRACKS          CULVERT (EXISTING)          WALL         WOOD LINE         BRUSH LINE         HEDGE         BOY OF WATER EDGE         LEDGE EXPOSED  |
| EXISTING FEAT                          | TURES         Provide State         Provide                              |
| EXISTING FEAT                          | TURES         Provember         ROAD EDGE PAVEMENT         ROAD EDGE GRAVEL         DRIVEWAY EDGE         DITCH         FOUNDATION         FENCE (EXISTING)         FENCE STEEL POST         GARDEN         ROAD GUARDRAIL         RAILROAD TRACKS         CULVERT (EXISTING)         STONE WALL         WOOD LINE         BRUSH LINE         HEDGE         BODY OF WATER EDGE         LEDGE EXPOSED         STOWE         BO 1446(39)         PLOT DATE: 20-SEP-200   |

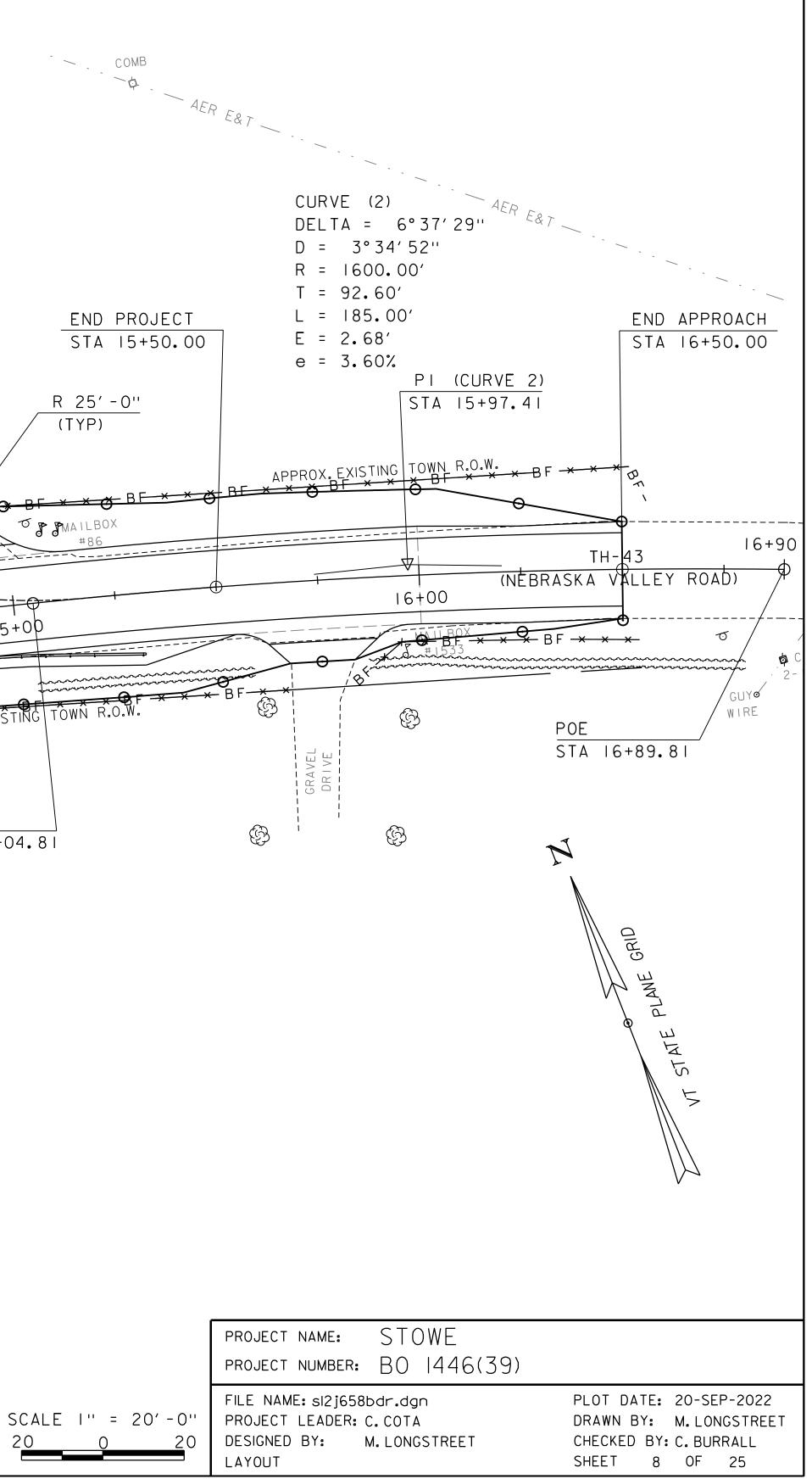
CCESS)



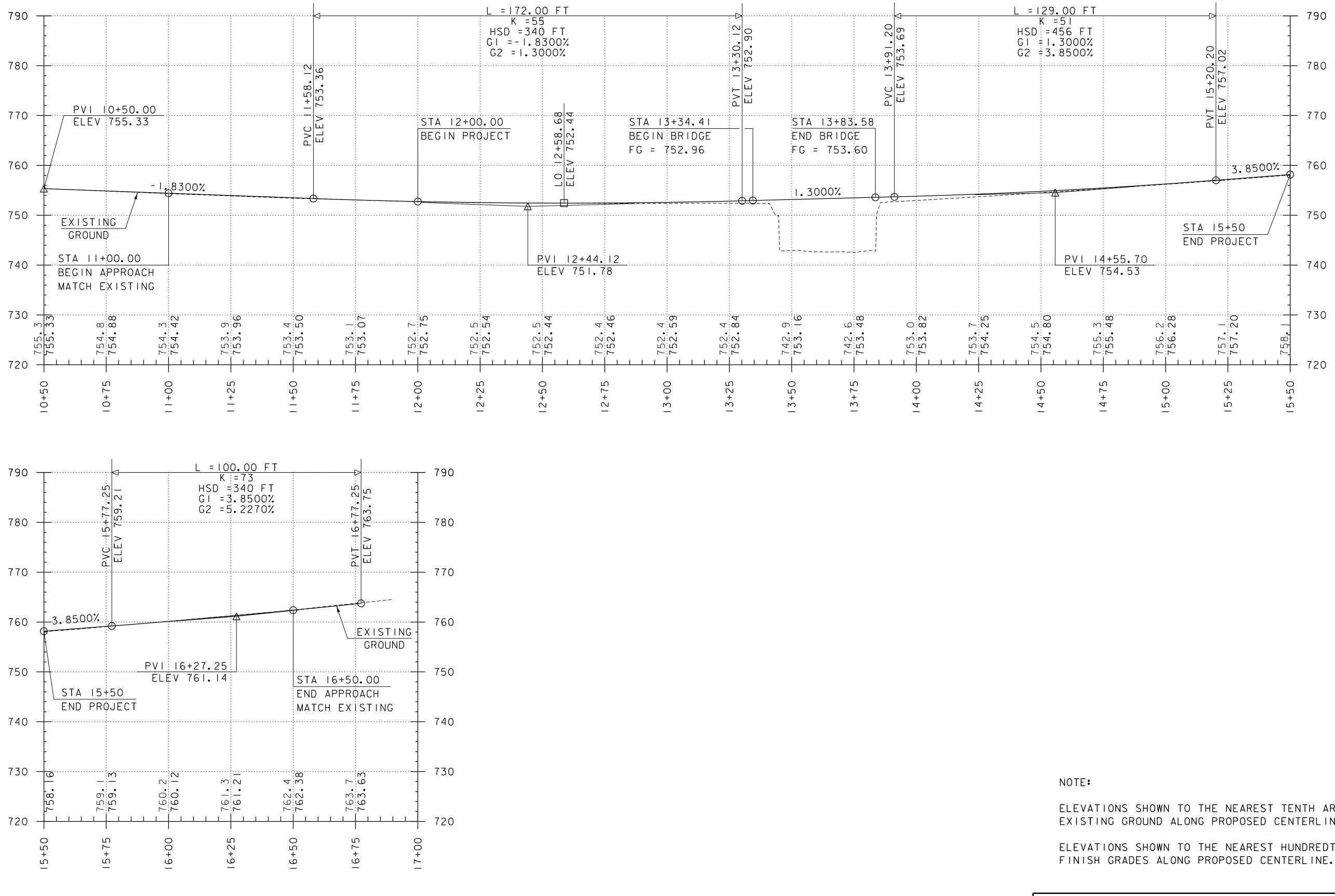
| PROJECT NAME:  | STOWE       |   |
|--|-------------|---|
| PROJECT NUMBER:  | BO 1446(39) |   |
| FILE NAME: SI2j658†<br>PROJECT LEADER: C<br>DESIGNED BY: C<br>TIES | . COTA      | PLOT DATE: 20-SEP-2022<br>DRAWN BY: H.MCGOWAN<br>CHECKED BY:G.HITCHCOCK<br>SHEET \$S*\$ OF \$T*\$ |











#### TH 43 (NEBRASKA VALLEY RD) PROFILE

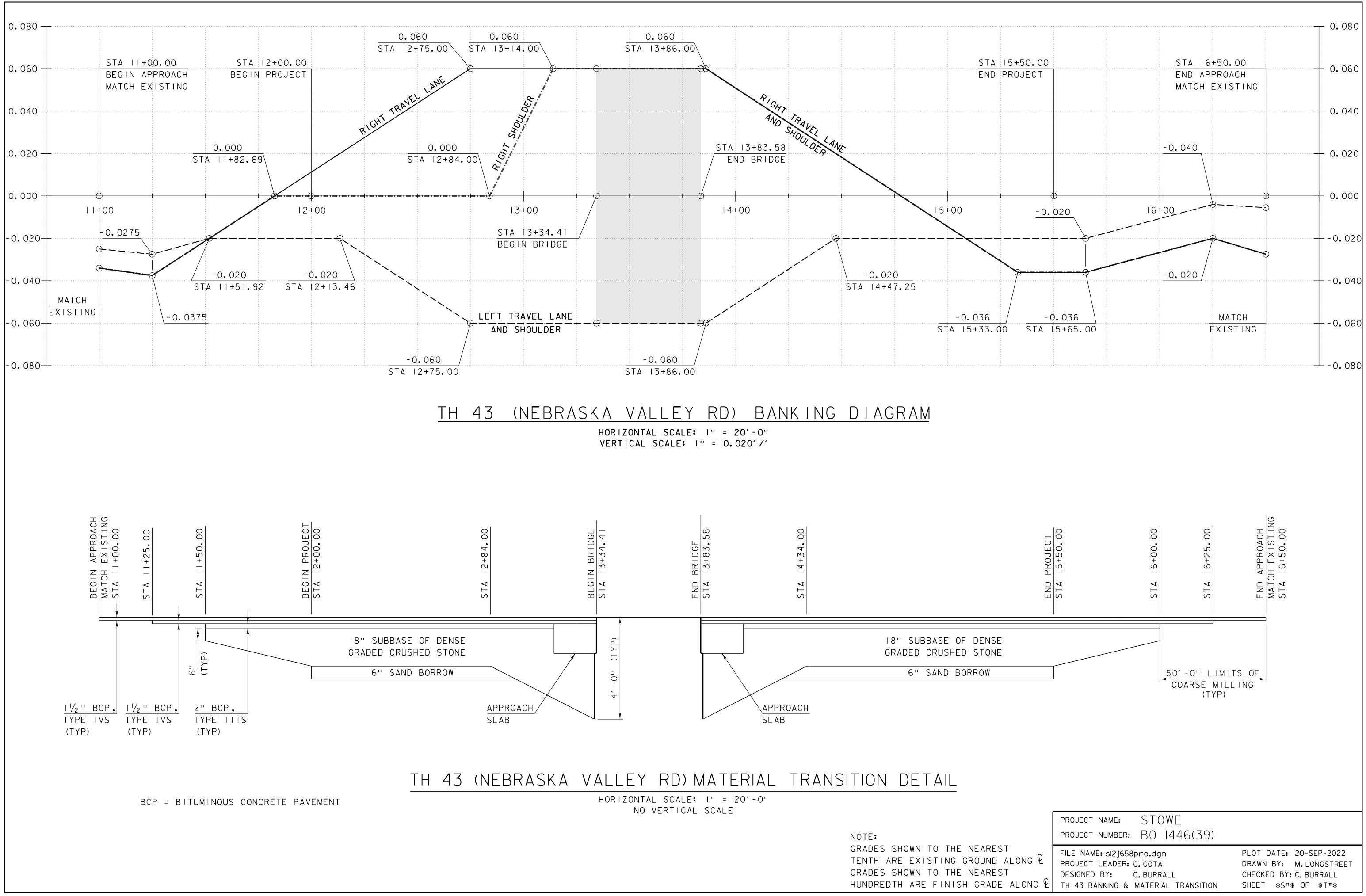
HORIZONTAL SCALE: I'' = 20'-0" VERTICAL SCALE: I'' = IO' - O''

ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

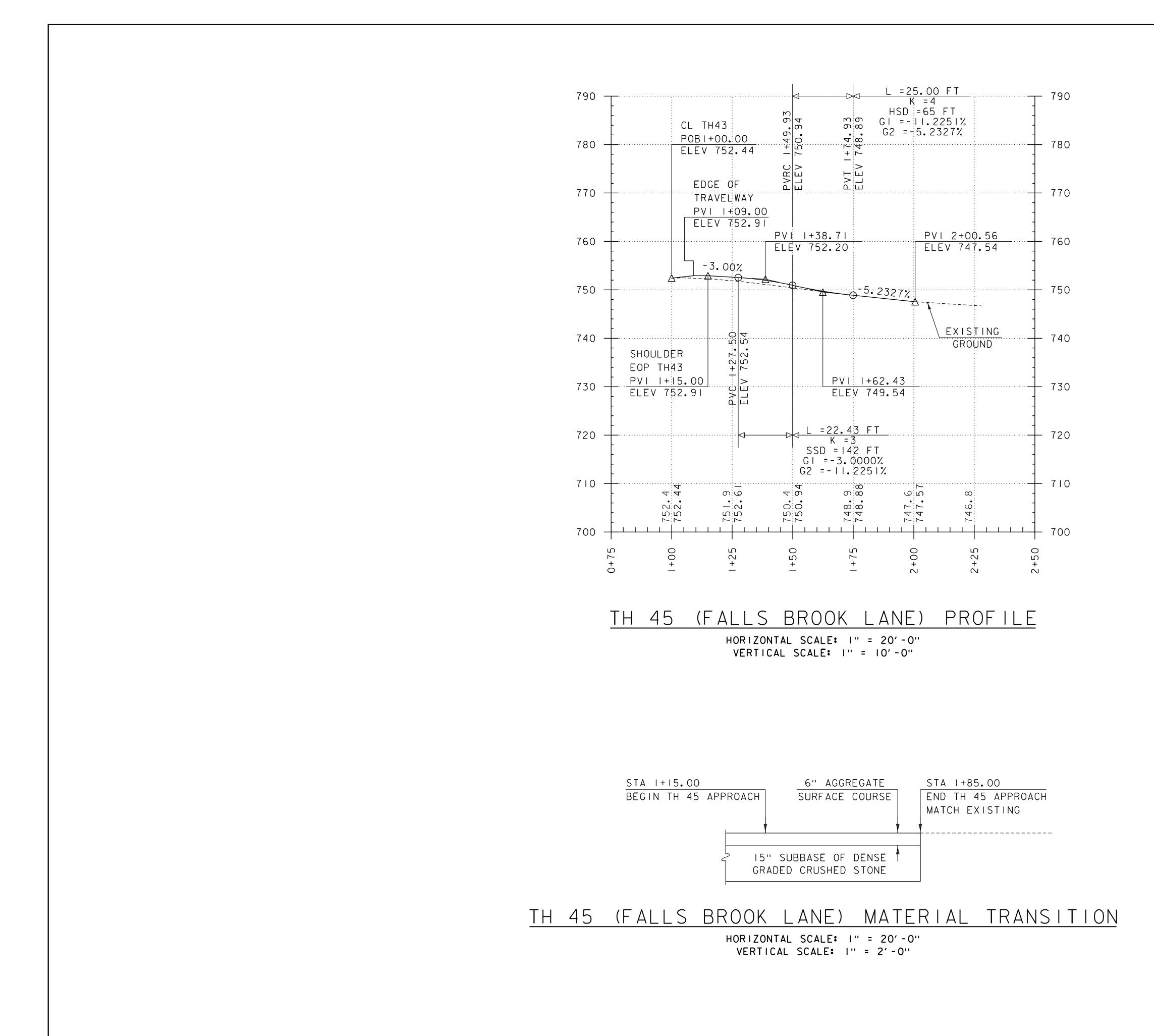
ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE

STOWE PROJECT NAME: PROJECT NUMBER: BO 1446(39)

PLOT DATE: 20-SEP-2022 FILE NAME: sl2j658pro.dgn PROJECT LEADER: C.COTA DRAWN BY: M.LONGSTREET DESIGNED BY: M.LONGSTREET CHECKED BY: C. BURRALL TH 43 PROFILE SHEET \$S#\$ OF \$T#\$



| RADES  | 200 | WIN | IU |       | NEARES |
|--------|-----|-----|----|-------|--------|
| UNDRED | ТН  | ARE | F  | INISH | GRADE  |



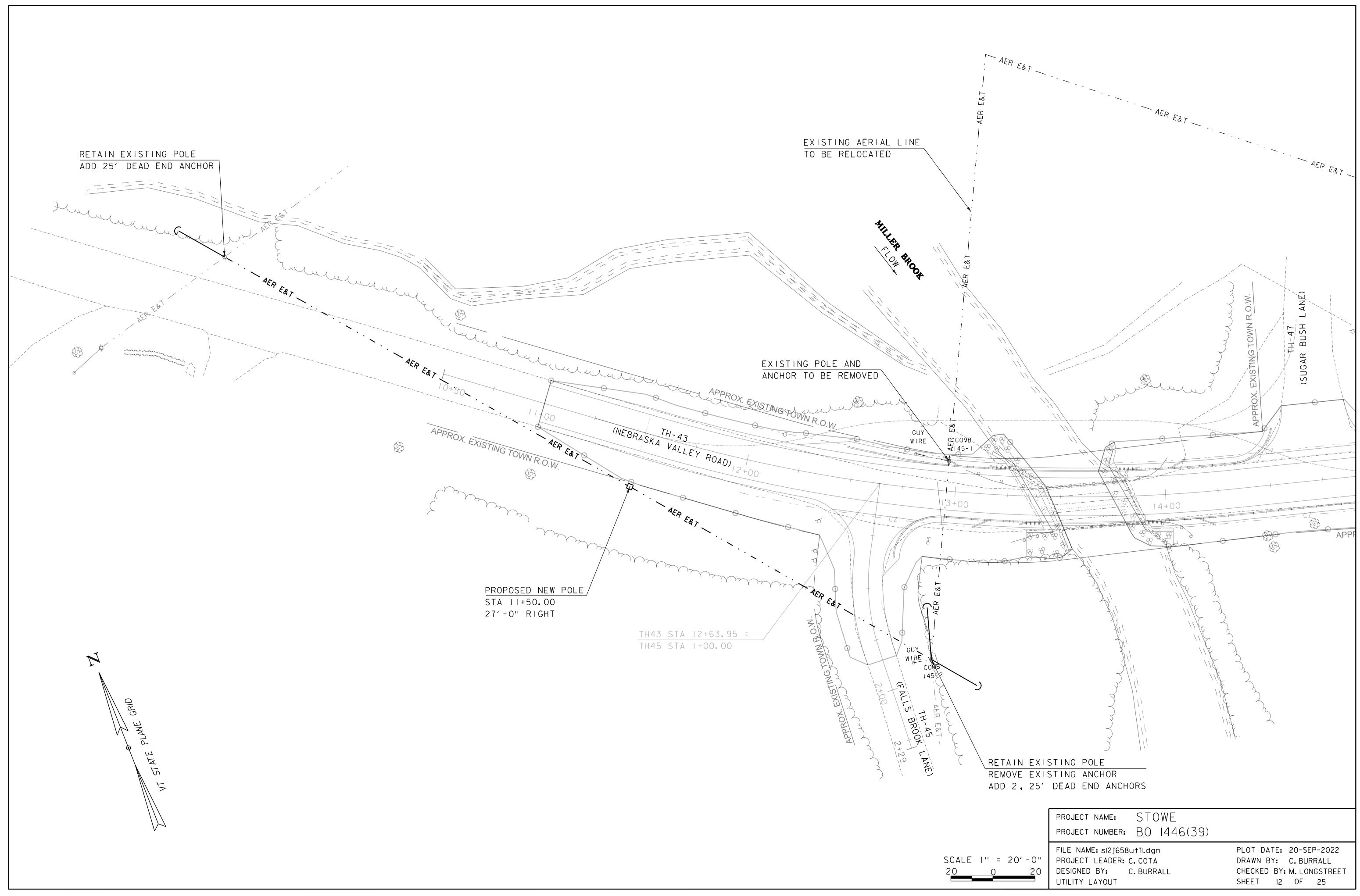
| PROJECT NUMBER: BO 1446(39)         |                        |
|-------------------------------------|------------------------|
| FILE NAME: sl2j658pro.dgn           | PLOT DATE: 20-SEP-2022 |
| PROJECT LEADER: C. COTA             | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C.BURRALL              | CHECKED BY: C. BURRALL |
| TH 45 PROFILE & MATERIAL TRANSITION | SHEET \$S#\$ OF \$T#\$ |

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

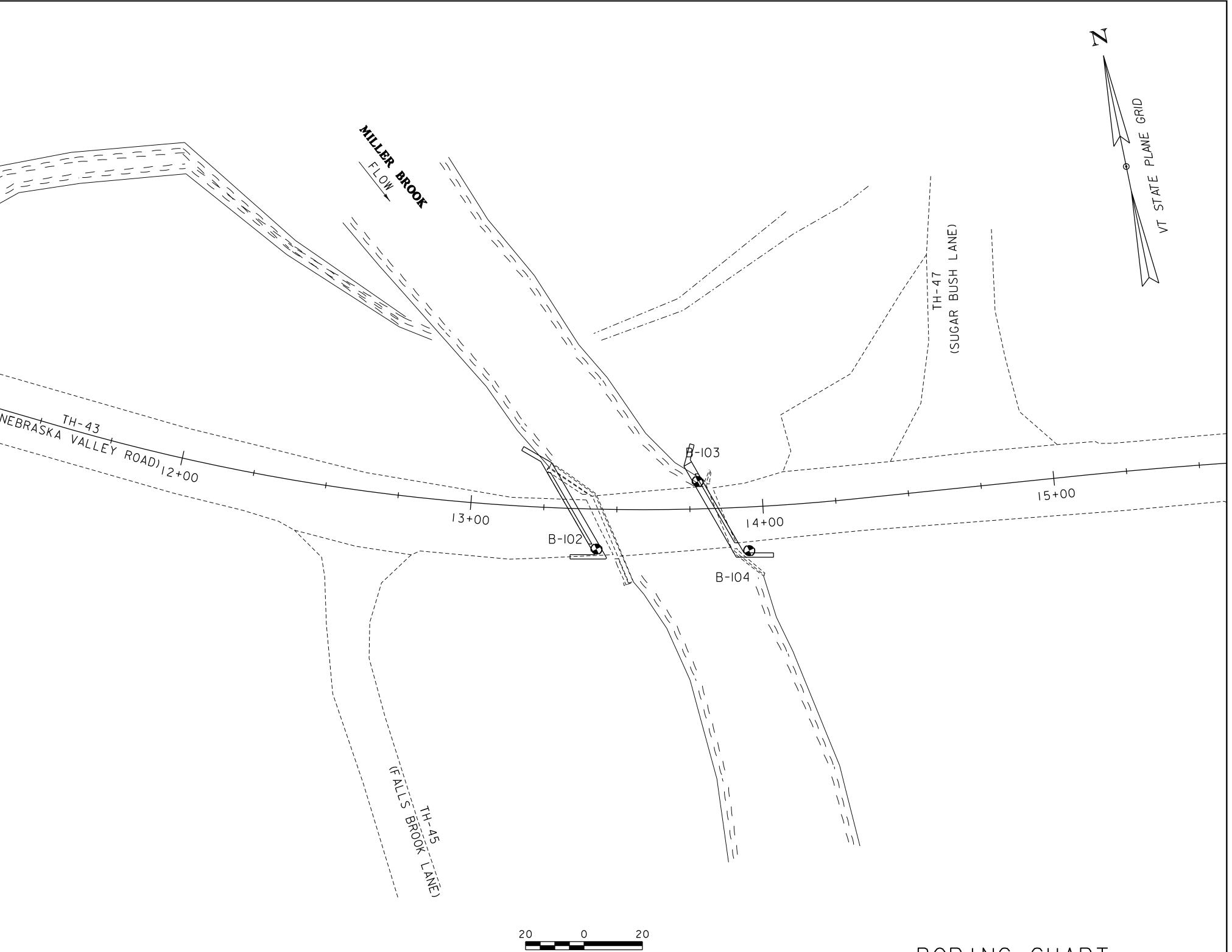
NOTE:

PROJECT NAME: STOWE



|   |   | 1  |
|---|---|--|
| SOIL CLASSIFICATION   | COMMONLY USED SYMBOLS   |  |
| AASHTO<br>AI Gravel and Sand<br>A3 Fine Sand<br>A2 Silty or Clayey Gravel and Sand<br>A4 Silty Soil - Low Compressibility<br>A5 Silty Soil - Highly Compressible<br>A6 Clayey Soil - Low Compressibility<br>A7 Clayey Soil - Highly Compressible  | <ul> <li>Water Elevation</li> <li>Standard Penetration Boring</li> <li>Auger Boring</li> <li>Rod Sounding</li> <li>Sample</li> <li>N Standard Penetration Test<br/>Blow Count Per Foot For:<br/>2" 0. D. Sampler<br/>I<sup>3</sup>/<sub>8</sub>" I. D. Sampler</li> <li>Hammer Weight Of I40 Lbs.<br/>Hammer Fall Of 30"</li> </ul>   |  |
| ROCK QUALITY DESIGNATIONR.O.D. (%)ROCK<25   | VS Field Vane Shear Test<br>US Undisturbed Soil Sample<br>B Blast<br>DC Diamond Core<br>MD Mud Drill<br>WA Wash Ahead<br>HSA Hollow Stem Auger<br>AX Core Size 1 <sup>1</sup> / <sub>8</sub> "<br>BX Core Size 1 <sup>5</sup> / <sub>8</sub> "<br>NX Core Size 2 <sup>1</sup> / <sub>8</sub> "<br>M Double Tube Core Barrel Used  |  |
| >90ExcellentSHEAR STRENGTHUNDRAINEDSHEAR STRENGTHIN P.S.F.CONSISTENCY<250   | LL Liquid Limit<br>PL Plastic Limit<br>Pl Plasticity Index<br>NP Non Plastic<br>W Moisture Content (Dry Wgt.Basis)<br>D Dry<br>M Moist<br>MTW Moist To Wet<br>W Wet<br>Sat Saturated<br>Bo Boulder<br>Gr Gravel<br>Sa Sand<br>Si Silt<br>Cl Clay<br>HP Hardpan<br>Le Ledge<br>NLTD No Ledge To Depth<br>CNPF Can Not Penetrate Further<br>TLOB Top of Ledge Or Boulder<br>NR No Recovery<br>Rec. Recovery<br>ZRec. Percent Recovery |  |
| CORRELATION GUIDE OF "N"<br>TO DENSITY (CONSISTENCY)         DENSITY<br>(GRANULAR SOILS)       CONSISTENCY<br>(COHESIVE SOILS)         DESCRIPTIVE<br>N       DESCRIPTIVE<br>TERM       DESCRIPTIVE<br>(COHESIVE SOILS)         N       TERM       N         <5   | ROD Rock Quality Designation<br>CBR California Bearing Ratio<br>( Less Than<br>Greater Than<br>R Refusal (N > 100)<br>VTSPG NAD83 - See Note 7<br><u>COLOR</u><br>blk Black pnk Pink<br>bl Blue pu Purple<br>brn Brown rd Red<br>dk Dark tn Tan<br>gry Gray wh White<br>gn Green yel Yellow<br>It Light mltc Multicolored<br>or Orange  |  |
| DEFINITION  | NS (AASHTO)   |  |
| <ul> <li>BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.</li> <li>BOULDER - A rock fragment with an average dimension &gt; 12 inches.</li> <li>COBBLE - Rock fragments with an average dimension between 3 and 12 inches.</li> <li>GRAVEL - Rounded particles of rock &lt; 3" and &gt; 0.0787" (#10 sieve).</li> <li>SAND - Particles of rock &lt; 0.0787" (#200 sieve).</li> <li>SILT - Soil &lt; 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.</li> <li>CLAY - Fine grained soil, exhibits plasticity when moist and consider-</li> </ul> | into drill casing during extraction<br>of wash rod.<br>STRIKE - Angle from magnetic north<br>to line of intersection of bed   | I. The<br>her<br>and<br>2. Soil<br>ties<br>eng<br>avc<br>the<br>ref<br>sur<br>enc<br>bor<br>3. Obs |

- plasticity when moist and considerable strength when air-dried.
  - DIP Inclination of bed with a horizontal plane.



ne subsurface explorations shown rein were made between 5/17/2021 nd 5/19/2021 by the Agency.

and rock classifications, properes and descriptions are based on gineering interpretation from vailable subsurface information by e Agency and may not necessarily flect actual variations in subrface conditions that may be countered between individual ring or sample locations.

served water levels and/or nditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.

#### GENERAL NOTES

- 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 the boring plan layout or profile are for illustrative only and may not accurate portray final contract det

SCALE: I'' = 20'-0''

- 6. Terminology used on boring describe the hardness, deg weathering, and spacing of fractures, joints and other discontinuities in the bedro defined in the AASHTO Manu Subsurface Investigations, I
- 7. Northing and Easting coord are shown in Vermont Stat Grid North American Datum meters and survey feet.

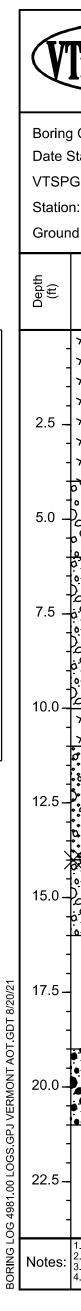
## BORING CHART

| shown on<br>soils<br>e purposes | HOLE<br>NO.         | STATION   | OFFSET   | GROUND<br>ELEVATION     | ELEVATION<br>TLOB   |  |  |  |  |
|---------------------------------|---------------------|---|----------|-------------------------|---|--|--|--|--|
| ely<br>tails.                   | B-102               | 13+43.33  | 13.67 RT | 752.40 698.40           |   |  |  |  |  |
| a loas to                       | B-103               | 13+77.93  | 9.39 LT  | 753.70                  | 710.20  |  |  |  |  |
| g logs to<br>gree of<br>f       | B-104               | 13+94.57  | 14.94 RT | 753.70                  | 709.70  |  |  |  |  |
| er<br>rock is                   |                     |   |          |                         |   |  |  |  |  |
| nual on<br>, 1988 <b>.</b>      | PROJECT             | NAME: ST  | OWE      |                         |   |  |  |  |  |
| dinates                         | PROJECT             | NUMBER: BO  | 1446(39) |                         |   |  |  |  |  |
| ite Plane<br>n 1983 in          | PROJECT<br>DESIGNED | E: SI2j658bor.do<br>LEADER: C.COT<br>BY: C.BUR<br>FORMATION | A        | DRAWN BY:<br>Checked by | 20-SEP-2022<br>C.BURRALL<br>:M.LONGSTREET<br>\$ OF \$T#\$ |  |  |  |  |

| VTr  | Ans the set of the set | STATE OF VERMONT<br>GENCY OF TRANSPORTATI<br>CONSTRUCTION AND<br>MATERIALS BUREAU<br>CENTRAL LABORATORY   | ION  | B<br>Nebraska Val  | -                         | E<br>39)<br>d Brid      | ge No                    | Pi<br>Pi   | oring N<br>age No<br>n No.:<br>hecked | .:       | <b>B-1</b><br>1 of<br>12j65<br><u>L. T</u> | 3<br>8  |
|--|--|---|--|--|---------------------------|-------------------------|--------------------------|--|---------------------------------------|----------|--|---------|
| Boring Cre<br>Date Start<br>VTSPG N/<br>Station:<br>Ground El                                    | ed: 5/17/21 Date Fini<br>AD83: N 714218.<br>13+43.33   | 59 ft E 1571870.08 ft<br>Offset: 13.67 RT   |  | WASH BO<br>4 in<br>9 Wt: 300   | 2<br>140<br>30<br>Auto/N\ | S<br>in<br>) Ib.<br>in. |                          | Ground<br>te Depth<br>(1<br>/21 8.0 a  | īt)                                   | N        | vations<br>lotes                           | ;<br>   |
| Depth<br>(ft)  | Strata (1)   | CLASSIFICATION OF MATE<br>(Description)   | RIALS  |  | Run<br>(Dip deg.)         | Core Rec. %<br>(RQD %)  | Drill Rate<br>minutes/ft | Blows/6"<br>(N Value)  | Moisture<br>Content %                 | Gravel % | Sand %                                     | Fines % |
|  | <ul> <li>Visual Descriptio<br/>trace Silt, brn, M</li> <li>Visual Descriptio</li> <li>Visual Descriptio</li> <li>Visual Descriptio</li> <li>Visual Descriptio</li> <li>Visual Descriptio</li> <li>Visual Descriptio</li> <li>Dense, fine to co</li> <li>8.0 ft, Rec.=1.6 ft</li> <li>Very dense, fine</li> <li>8.0 ft - 10.0 ft, Rec</li> </ul>  | n:, medium dense, fine to coa<br>, Moist, FILL. Rec.=1.1 ft<br>n:, dense, fine to coarse SAN<br>0.9 ft<br>parse GRAVEL, and Sand, trac<br>t, (A-1-a)<br>to coarse GRAVEL, some Silt<br>ec.=1.1 ft, (A-2-4)<br>n:, dense, fine to coarse GRA | ne Sand,<br>Irse SANE<br>D, some (<br>ce Silt, bri<br>, little Sar | trace Gravel,<br>D, some Silt,<br>Gravel, trace Silt<br>n, Moist, 6.0 ft - |                           |                         |                          | 15-12-<br>10/6"<br>(22)<br>6-11-14-<br>19<br>(25)<br>18-16-26<br>19<br>(42)<br>21-20-28<br>73<br>(48)<br>30-40-41<br>81<br>(81)<br>30-29-10<br>9<br>(39) | - 2.6<br>- 9.4                        | 53.6     | 37.6                                       | 8       |
| 12.5 -<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- | Visual Descriptio<br>Sand, brn, Wet, I   | n:, dense, fine to coarse GRA<br>Rec.=0.3 ft  | VEL, som   | ne Silt, little  |                           |                         |                          | 70-27-18<br>14<br>(45)   | -                                     |          |  |         |
| 20.0-0   |  | ine to coarse SAND, some Gr<br>Rec.=0.8 ft, (A-2-4)   | avel, little   | e Silt, brn, Moist,  |                           |                         |                          | 10-16-14<br>8<br>(30)  | - 13.9                                | 23.7 6   | 0.0 16                                     | 5.3     |
| Notes: 2 N V   | /alues have not been corrected for<br>ater level readings have been made   | ate boundary between material types. Tran<br>hammer energy. CE the hammer energy c<br>at times and under conditions stated. Fluc<br>d burmister system when no soil laborator   | orrection fact   | or.<br>occur due to other fact   | ors than tho              | se preser               | nt at the ti             | me measure   | ments we                              | re made. |  |         |

|                             | ~   | STATE OF VERMONT   |                                 | BC                                 | RING              | LOG                    |                          |                    | Borin                 | g No.:    |               | B-1(   | 02      |          |               |   |
|-----------------------------|---|--|---------------------------------|------------------------------------|-------------------|------------------------|--------------------------|--------------------|-----------------------|-----------|---------------|--------|---------|----------|---------------|---|
| (VTran                      | C Vinting in Carl Van Than                          | AGENCY OF TRANSPORTAT<br>CONSTRUCTION AND  | ION                             |                                    | STOW              | Ξ                      |                          | $\neg \uparrow$    | Page                  |           |               | 2 of 3 | 3       |          | (             | VTranc  |
|                             | Vermont Agency of Transportation                    | MATERIALS BUREAU<br>CENTRAL LABORATORY   | ,                               |                                    | 3O 1446(          |                        |                          | . 40               | Pin N                 | 0.:       | 12            | 2j658  | 3       |          |               |   |
|                             |   |  | 1                               | Nebraska Va                        | -                 |                        |                          |                    |                       | ked B     | _             | L. Tr  |         |          |               |   |
| -                           |   | ew England Boring Contractors  | Type:                           | WASH B                             | g Sampl<br>ORE S  |                        |                          |                    | undwat                | er Ob     | servat<br>Not |        |         |          |               | ring Crew: P                                      |
| Date Started:               | 5/17/21 Date  |  | I.D.:                           | 4 in                               |                   | in                     | Da                       | ite Dep            | oth<br>(ft)           |           | NOU           | 63     |         |          |               | ite Started:                                      |
| VTSPG NAD8                  |   | 218.59 ft E 1571870.08 ft  | Hamm<br>Hamm                    |                                    |                   | ) lb.<br>in.           | 05/17                    | 7/21 8.            | 0 after               | drillin   | 9             |        |         |          |               | SPG NAD83   |
| Station:<br>Ground Elevat   | 13+43.33<br>tion: 752.4                             | Offset: <u>13.67 RT</u>  | 1                               | er/Rod Type:                       | Auto/N            |                        |                          |                    |                       |           |               |        |         |          |               | ation: <u>1</u> :<br>ound Elevati                 |
|                             | uon. <u>752.4</u>                                   | +4 II  | Rig: S <u>t</u>                 | ratas Star 15                      |                   | = 1.44                 |                          |                    |                       |           |               |        |         |          |               |   |
| Depth<br>(ft)<br>Strata (1) |   | CLASSIFICATION OF MATE<br>(Description)  | ERIALS                          |                                    | Run<br>(Dip deg.) | Core Rec. %<br>(RQD %) | Drill Rate<br>minutes/ft | Blows/6"           | (N value)<br>Moisture | Content % | Gravel %      | Sand % | Fines % | 8.00     | Depth         | (ft)<br>Strata (1)                                |
| 25.0 <b>–</b>               | Visual Descri<br>little Silt, brn,<br>feet. Rec.=0. | ption:, medium dense, fine to coa<br>Moist, Field Note: Some iron sta<br>8 ft  | arse SAN<br>ining at a          | D, some Gravel,<br>pproximately 25 |                   |                        |                          | 24-14<br>18<br>(28 | 3                     |           |               |        |         | ELEV 69  | 50            | .0  |
| -<br>-<br>27.5 -            |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         | PILE TIP |               |   |
| 30.0 -                      | Visual Descri                                       | ption:, Field Note: No Recovery.   | Rec.= 0.0                       | ) ft                               |                   |                        |                          | 100<br>(>1(        |                       |           |               |        |         | EST      | 52            | .5<br>-<br>-                                      |
| -                           |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         |          | 55            | .0  |
| 32.5 -<br>-<br>-            |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         |          | 57            | .5 -  |
| 35.0 -0: 0:<br>-/-/-/       | o 34.0 ft - 36.0                                    | ine to coarse SAND, some Grav<br>ft, Rec.=1.2 ft, (A-2-4)  | el, some S                      | Silt, brn, Moist,                  |                   |                        |                          | 25-24<br>44<br>(66 | F                     | 3.2 22    | 2.8 55.       | 6 21   | .6      |          | 60            | .0-0-0  |
| 37.5 -<br>_                 |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         |          | 62            |   |
| 40.0 -                      |   | ption:, very dense, fine to coarse<br>wn, Moist, GLACIAL TILL. Rec.=   |                                 | race Gravel, trac                  | e                 |                        |                          | 100<br>(>10        |                       |           |               |        |         |          |               |   |
| -<br>-<br>-<br>42.5 —       |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         |          | .GDT 8/20/21  | 0<br><br>   |
|                             |   |  |                                 |                                    |                   |                        |                          |                    |                       |           |               |        |         |          | TONT AOL      | .5 _  |
| 45.0                        | approximatel  | ption:, Field Note: Hard drilling s<br>y 44 feet.44.0 ft - 49.0 ft, WEATH<br>k surface (may have been a bou  | IERED R                         |                                    | C-1               | 20<br>(0)              | 1.6                      |                    |                       |           |               |        |         |          | DGS.GPJ VERMO |   |
| 47.5                        |   |  |                                 |                                    |                   |                        | 1.5<br>1.5               |                    |                       |           |               |        |         |          | G 4981.00 LC  |   |
| Notoo 2 N Values            | s have not been corrected                           | oximate boundary between material types. Tra<br>d for hammer energy. C <b>is</b> the hammer energy<br>nade at times and under conditions stated. Flu | correction fac<br>ctuations may | tor.<br>/ occur due to other fac   | tors than tho     | se prese               | nt at the f              | time mea           | surement              | s were n  | nade.         |        |         |          | Not Not       | es: 1. Stratificat<br>2. N Values<br>3. Water lev |

| Hading in Cal View There                      | STATE OF VERMONT<br>AGENCY OF TRANSPORTAT<br>CONSTRUCTION AND   | ION  | BO   | RING<br>stow      |                                   |                                 |                                 | Boring N<br>Page No         |                         | <b>B-1</b><br>3 of |          |
|---|---|--|--|-------------------|-----------------------------------|---------------------------------|---------------------------------|-----------------------------|-------------------------|--------------------|----------|
| tion to Get Van Trans                         | MATERIALS BUREAU<br>CENTRAL LABORATORY  |  |  | O 1446            | . ,                               |                                 |                                 | Pin No.:                    |                         | 12j65              | 8        |
|   |   |  | Nebraska Va  | g Sampl           |                                   | ge No.                          |                                 | Checked                     | -                       | L. Ti              |          |
|   | v England Boring Contractors  | Type:  | WASH BO  | ORE S             | S                                 |                                 | Groun<br>e Depth                | dwater (                    |                         | /ations<br>lotes   |          |
| 5/17/21 Date F                                | inished: 5/18/21<br>18.59 ft E 1571870.08 ft  | I.D.:<br>Hamme   | er Wt: 300   |                   | in<br>0 lb.                       |                                 |                                 | (ft)                        | •                       |                    |          |
| 13.33   | Offset: 13.67 RT  | Hamme  |  | 30                | ) in.                             | 05/17                           | /21  8.0                        | after dril                  | ling                    |                    |          |
| 752.44  |   |  | er/Rod Type:<br>ratas Star 15                          | Auto/N            | N<br>= 1.44                       |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   | » (                               | a tt                            |                                 |                             |                         |                    |          |
|   | CLASSIFICATION OF MATE  | ERIALS   |  | Run<br>(Dip deg.) | Core Rec. <sup>6</sup><br>(RQD %) | Drill Rate<br>minutes/ft        | Blows/6"<br>(N Value)           | Moisture<br>Content %       | Gravel %                | Sand %             | 11.00 0/ |
|   | (Description)   |  |  | P<br>(Dip         | Core<br>(RC                       | Dril<br>Min                     | Blo<br>N                        | Con                         | Gra                     | Sa                 |          |
|   |   |  |  |                   |                                   | 1.7                             |                                 |                             |                         |                    |          |
|   | tion:, very dense, fine to coarse   |  | ace Gravel, trac                                       | e                 |                                   |                                 | 100/2"<br>(>100)                |                             |                         |                    |          |
| Silt, gray/brow                               | n, Moist, GLACIAL TILL. Rec.=0  | ).2 ft   | ]  |                   |                                   |                                 | (2100)                          |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
| 54.0 ft - 59.0 ft<br>with joints spa          | t, Light gray, Fine-grained SCHI<br>ced 4 to 6 inches apart, modera   | ST, little o<br>tely dippi   | quartzite bedding<br>ng. Moderatelv                    | , C-2             | 96.7<br>(90.8)                    | 2.6                             |                                 |                             |                         |                    |          |
|   | /ery slightly weathered, slightly f   |  |  |                   | (,                                | 2.3                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 2.2                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 2.7                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 3.5                             |                                 |                             |                         |                    |          |
| 59 0 ft - 64 0 ft                             | t, Light gray, Fine-grained SCHI  | ST little o  | uartzite bedding                                       | C-3               | 100                               | 2.8                             |                                 |                             |                         |                    |          |
| with joints spa                               | ced 2 to 6 inches apart, modera   |  |  | ,                 | (71.7)                            |                                 |                                 |                             |                         |                    |          |
| nard to nard, v                               | /ery slightly weathered   |  |  |                   |                                   | 4.3                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 4.1                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 3.1                             |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   | 2                               |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   | Hole stopped @ 64.0 t   | ft   |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
|   |   |  |  |                   |                                   |                                 |                                 |                             |                         |                    |          |
| not been corrected                            | ximate boundary between material types. Tran<br>for hammer energy. C <b>E</b> the hammer energy of  | nsition may b  | tor.   | ors than the      |                                   | 2                               | me measur                       | ements we                   | re made                 |                    |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tra   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>ratory testin | re made.<br>g was po    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than tho      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>ratory testin | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than tho      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>ratory testin | re made.<br>g was po    | erformed.          |          |
| not been corrected t<br>dings have been ma    | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than tho      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>ratory testin | re made.<br>g was po    | erformed.          |          |
| not been corrected t<br>dings have been ma    | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>ratory testin | re made.<br>g was po    | erformed.          |          |
| not been corrected t<br>idings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements we<br>atory testin   | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than tho      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>atory testin  | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wer<br>atory testin  | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements we                   | re made.<br>g was pe    | erformed.          |          |
| e not been corrected t<br>adings have been ma | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements we                   | re made.<br>g was po    | erformed.          |          |
| e not been corrected t<br>adings have been ma | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact   | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements we<br>ratory testin  | re made.<br>g was po    | erformed.          |          |
| e not been corrected t<br>adings have been ma | ximate boundary between material types. Tran<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flu   | nsition may b<br>correction fact<br>ctuations may<br>ry testing was                                      | tor.<br>v occur due to other fact                      | ors than the      | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements we                   | re made.<br>g was po    | erformed.          |          |
| e not been corrected t<br>adings have been ma | kimate boundary between material types. Trac<br>for hammer energy. CB the hammer energy of<br>ade at times and under conditions stated. Flue<br>lified burmister system when no soil laborator  | nsition may b<br>correction fac<br>ctuations may<br>ry testing was                                       | tor.<br>performed. AASHTO c                            | lassification     | ose preser<br>s are inclu         | 2<br>It at the ti               | me measur<br>re soil labor      | ements wei<br>atory testin  | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | ximate boundary between material types. Tran<br>for hammer energy. CEs the hammer energy of<br>ade at times and under conditions stated. Flud<br>dified burmister system when no soil laborator   | nsition may b<br>correction fac<br>ctuations may<br>ry testing was                                       | tor.<br>occur due to other fact<br>performed. AASHTO c | lassification     | ose preser                        | 2<br>It at the ti               | me measur<br>re soil labor      | ements we<br>atory testin   | re made.<br>g was pe    | erformed.          |          |
| not been corrected t<br>adings have been ma   | kimate boundary between material types. Transfor hammer energy. Clis the hammer energy of ade at times and under conditions stated. Flud fified burmister system when no soil laborator stated burmister system when no soil laborator stated. FILE NAME: SI2 J65 | nsition may b<br>correction fac<br>ctuations may<br>ry testing was<br>ry testing was<br>s B C<br>58bor.c | Tor.<br>performed. AASHTO c<br>OWE<br>1446(3<br>Jgn    | lassification     | ose preser<br>s are inclu         | 2<br>It at the ti<br>ided when  | re soil labor                   | E: 20                       | g was pe                | P-20               | 22       |
| e not been corrected t<br>adings have been ma | ximate boundary between material types. Trai<br>for hammer energy. CE the hammer energy of<br>ade at times and under conditions stated. Flue<br>lified burmister system when no soil laborator  | nsition may b<br>correction fact<br>ctuations may<br>ry testing was<br>solved<br>Babor.co<br>Sabor.co    | Tor.<br>performed. AASHTO c<br>OWE<br>1446(3<br>Jgn    | lassification     | ose preser<br>s are inclu         | 2<br>Int at the ti<br>Ided when | re soil labor<br>F DAT<br>WN BY | E: 20                       | g was pe<br>)-SE<br>BUR | P-20<br>RALL       | 22       |



ABUT 2 BOT ELEV 742.00

| Trans Mining A  | STATE OF VERMONT<br>AGENCY OF TRANSPORTAT<br>CONSTRUCTION AND<br>MATERIALS BUREAU<br>CENTRAL LABORATORY  | STOWE<br>BO 1446(39)  | Pa<br>Pi   | oring N<br>age No<br>n No.:<br>necked | .:                   | <b>B-1</b><br>1 of<br>12j65a<br>L. Ti | 2       |                  | (V   | Frans   | AGE   |
|---|--|---|--|---------------------------------------|----------------------|---------------------------------------|---------|------------------|--|---|---|
|   | assiere, New England Boring Contractors         8/21 Date Finished:       5/18/21         N 714230.76 ft       E 1571909.92 ft         3       Offset:       9.39 LT         753.69 ft       E 1571909.92 ft   | Casing SamplerType:WASH BORESSI.D.:4 in2 inHammer Wt:300140 lb.Hammer Fall:N.A.30 in.Hammer/Rod Type:Auto/NWRig:Stratas Star 15CE | Ground<br>Date Depth<br>(1<br>05/18/21 4.0 a         | t)                                    | N                    | otes                                  |         |                  | Date S<br>VTSP<br>Station  | G NAD83:  | +77.93 Offs   |
| Strata (1)  |  | N OF MATERIALS<br>ription)  | Blows/6"<br>(N Value)                                | Moisture<br>Content %                 | Gravel %             | Sand %                                | Fines % |                  | Depth<br>(ft)  | Strata (1)  |   |
| $\begin{array}{c}                                     $ | ual Description:, medium dense, fine to coa<br>ganic particles, brn, Moist, FILL. Rec.=0.3 f<br>ual Description:, medium dense, fine to coa<br>ganic particles, brn, Moist, FILL. Rec.=1.1 f<br>ose, fine to coarse GRAVEL, and Sand, tra<br>1-a)          | t<br>arse SAND, little Gravel, trace Silt, very fe<br>t   | (21)<br>w 5-6-6-6<br>(12)<br>=0.3 ft 10-3-3-2<br>(6) |                                       | 54.2 3               | 6.3                                   | 9.5     |                  | 25.0<br>-<br>-<br>27.5<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>-<br>- |   | Loose, fine to coarse<br>Rec.=1.0 ft, (A-4). Fi<br>Visual Description:, o<br>ft   |
|   | ual Description:, loose, fine to coarse GRA<br>c.=0.5 ft<br>ose, fine to coarse SAND, and Gravel, little<br>1-b)<br>ual Description:, loose, fine to coarse SAN  | Silt, brn, Wet, 8.0 ft - 10.0 ft, FILL. Rec.=0  | (8)<br>ec.=0.4 5-4-2-1                               | 13.4                                  | 38.2 4               | 8.2 13                                | .6      |                  | -<br>-<br>-<br>32.5 –<br>-<br>-  |   | Very dense, fine to c   |
| Re-<br>Vis<br>Re-<br>apr                                | ual Description:, loose, fine to coarse SAN<br>c.=0.8 ft. Field Note: Smells oily.<br>ual Description:, dense, fine to coarse SAN<br>c.=0.8 ft. Field Note: Coarse gravel from ap<br>proximately 13 feet.  | ID, some Gravel, trace Silt, gray/brown, W<br>pproximately 12-12.5 feet. Slight oil smell t                                       | /et,<br>0 8-28-14-<br>13<br>(42)                     | 11.9                                  | 37.9 4               | 8.2 13                                | .9      | 00°602           | 35.0<br>-<br>-<br>37.5<br>-  |   | ft, (A-1-b)   |
|   | 1-b)   |   | (38)   |                                       |                      |                                       |         | ST PILE TIP ELEV | 401.GDT 8/20/21  |   | Visual Description:, v<br>GLACIAL TILL. Rec.  |
| Vis   | ual Description:, loose, fine to coarse GRA  | VEL, some Sand, trace Silt, brn, Wet, Rec   | c.=0.1 ft <sup>9-4-3-5</sup><br>(7)                  |                                       |                      |                                       |         |                  | LOG 4981.00 LOGS.GPJ VERMONT AO  |   |   |
| 2. N Values have not<br>3. Water level reading          | represent approximate boundary between material types. Tra<br>been corrected for hammer energy. <b>CIs</b> the hammer energy<br>gs have been made at times and under conditions stated. Flu<br>re based on modified burmister system when no soil laborato | correction factor.<br>ctuations may occur due to other factors than those present   | t at the time measure<br>ded where soil labora       | nents wei<br>tory testin              | re made.<br>g was pe | rformed.                              | 1       | ]                | ᠑<br>᠑   | <ol> <li>N Values h</li> <li>Water level</li> </ol> | I<br>on lines represent approximate bo<br>ave not been corrected for hamm<br>I readings have been made at tim<br>otions are based on modified bur |

| STATE OF VERMONT  |                  | BORING LOG  |            | Boriı       | ng N                  | 0.:    | B-10    | 3     |  |
|---|------------------|---|------------|-------------|-----------------------|--------|---------|-------|--|
| GENCY OF TRANSPORTAT  | ION              | STOWE   |            | Page        | •                     | -      | 2 of 2  |       |  |
| CONSTRUCTION AND<br>MATERIALS BUREAU  |                  | BO 1446(39)   |            | Pin I       |                       |        | 12j658  | 3     |  |
| CENTRAL LABORATORY  |                  | Nebraska Valley Road Bridg  | e No. 48   | Che         | cked                  |        | L. Tr   |       |  |
| Ingland Boring Contractors  |                  | Casing Sampler  | Gro        | undwa       |                       | -      |         |       |  |
| shed: 5/18/21   | Type:<br>I.D.:   | WASH BORE SS<br>4 in 2 in   | Date De    | •           |                       | N      | otes    |       |  |
| 76 ft E 1571909.92 ft   | Hamm             | er Wt <sup>.</sup> 300 140 lb   |            | (ft)        |                       |        |         |       |  |
| Offset: 9.39 LT   | Hamm             |   | 05/18/21 4 | .0 afte     | r arill               | ing    |         |       |  |
| t   |                  | er/Rod Type: <u>Auto/NW</u><br>ratas Star 15 <u>CE</u> = 1.44   |            |             |                       |        |         |       |  |
|   | Trig. 3 <u>1</u> |   |            |             |                       |        |         |       |  |
| CLASSIFICATION  |                  | ERIALS  | Blows/6"   | alue)       | Molsture<br>Content % | /el %  | % p     | % St  |  |
| (Descr  | iption)          |   | Blov       |             | Cont                  | Grave  | Sand    | Fines |  |
| arse SILT, and Sand, trace G  | ravel, gra       | y/brown, Moist, 24.0 ft - 26.0 ft,  | 5-5        | -5-6 2      | 24.7                  | 0.8    | 35.8    | 53.4  |  |
| ). Field Note: Some iron stain  |                  |   | (1         | 0)          |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   | _                |   |            |             |                       |        |         |       |  |
| n:, dense, fine to coarse SAN   | D, some          | Gravel, trace Silt, brn, Moist, Rec   |            | 6-28-<br>4  |                       |        |         |       |  |
|   |                  |   | (4         | 4)          |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
| to coarse GRAVEL, and Sand  | d, little Sil    | t, brn, Moist, 34.0 ft - 36.0 ft, Rec   |            | 4-28-       | 11.3                  | 45.5 4 | 1.0 13  | 5     |  |
|   |                  |   |            | 2)          |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   | 10         |             |                       |        |         |       |  |
| n:, very dense, fine to coarse<br>Rec.=0.3 ft                                       | SAND, ti         | ace Gravel, trace Silt, gray, Mois  | t,   100   | 0/4"<br>00) |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
| Hole stoppe   | ed @ 43 '        | 5 ft  |            |             |                       |        |         |       |  |
| Split spoon refusal. Refu   | usal is as       | sumed bedrock.  |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
| ate boundary between material types. Trai<br>nammer energy. Cls the hammer energy o | nsition may b    | e gradual.<br>tor.  |            |             |                       |        |         |       |  |
| at times and under conditions stated. Flue  | ctuations may    | or.<br>coccur due to other factors than those present is performed. AASHTO classifications are includ |            |             |                       |        | formed. |       |  |
|   | <u> </u>         |   |            | ,           |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |
|   |                  |   |            |             |                       |        |         |       |  |

| PROJECT NAME:   | STOWE       |  |
|---|-------------|--|
| PROJECT NUMBER:   | BO 1446(39) |  |
| FILE NAME: SI2j6581<br>PROJECT LEADER: (<br>DESIGNED BY: (<br>BORING LOGS 2 | C. COTA     | PLOT DATE: 20-SEP-2022<br>DRAWN BY: C.BURRALL<br>CHECKED BY:M.LONGSTREET<br>SHEET \$S#\$ OF \$T#\$ |
|   |             |  |

| VTrans Hiting & Get In The   | STATE OF VERMONT<br>AGENCY OF TRANSPORTATIC<br>CONSTRUCTION AND<br>MATERIALS BUREAU<br>CENTRAL LABORATORY  | DN<br>STO<br>BO 14<br>Nebraska Valley R                         | WE<br>46(39)                    | ge No                    | Pa<br>Pir                                    | ring N<br>ge No<br>n No.:<br>ecked | .:       | <b>B-10</b><br>1 of 3<br><u>12j658</u><br><u>L. Tra</u> | 3       |
|--|--|---|---------------------------------|--------------------------|--|------------------------------------|----------|---|---------|
| Station: 13+94.57  |  | Hammer Fall: N.A.<br>Hammer/Rod Type: Auto                      | SS<br>2 in<br>140 lb.<br>30 in. |                          | Groundw<br>te Depth<br>(ft<br>1/21 8.0 aft   | )                                  | N        | otes  |         |
| Depth<br>(ft)<br>Strata (1)  | CLASSIFICATION OF MA<br>(Description)  | TERIALS   | Run<br>(Dip deg.)               | Drill Rate<br>minutes/ft | Blows/6"<br>(N Value)                        | Moisture<br>Content %              | Gravel % | Sand %  | Fines % |
| $\begin{array}{c c} & \not & \not & \not & \\ \hline & \not & \not & \not & \\ & & & & \\ & & & & & \\ & & & &$                                | iption:, ASPHALT (6 inches)<br>iption:, fine to coarse SAND, little S<br>).9 ft<br>se, fine to coarse SAND, little Silt, l<br>Rec.=1.1 ft, (A-2-4)   |   | -                               |                          | 10-10-<br>10/6"<br>(20)<br>10-7-10-9<br>(17) | 9.6                                | 18.3     | 63.3 1  | 8.4     |
| $\begin{bmatrix} 5.0 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ 4 \\ $   | iption:, loose, fine to coarse SAND<br>Rec.=0.9 ft<br>o coarse SILT, some Sand, some C   |   |                                 |                          | 5-5-5-3<br>(10)<br>3-4-3-4                   | 14.4                               | 25.0 2   | 5.4 49  | .6      |
| FILL. Rec.=1<br>7.5 - $\checkmark \checkmark \checkmark$ Visual Description<br>$\checkmark \checkmark \checkmark \checkmark$ Wet, FILL. Rec.=1 | iption:, loose, fine to coarse SILT, s   |   |                                 |                          | (7)<br>5-7-8-12<br>(15)                      |                                    |          |   |         |
|  | se, fine to coarse GRAVEL, some \$<br>ec.=1.3 ft, (A-2-4)  | Silt, some Sand, brn, Wet, 10.0                                 |                                 |                          | 20-11-11-<br>16<br>(22)                      | 19.4                               | 52.3 2   | 0.2 27  | .5      |
|  | iption:, medium dense, fine to coar<br>/et, Rec.=0.6 ft  | se GRAVEL, some Silt, some                                      |                                 |                          | 15-12-8-9<br>(30)                            |                                    |          |   |         |
| 17.5   |  |   |                                 |                          |  |                                    |          |   |         |
|  | se, fine to coarse SAND, some Silt<br>ec.=0.8 ft, (A-2-4)  | , trace Gravel, brn, Moist, 19.0                                |                                 |                          | 6-5-6-5<br>(11)                              | 25.0                               | 0.1      | 68.3  | 31.0    |
|  |  |   |                                 |                          |  |                                    |          |   |         |
| 1. Stratification lines represent appr<br>2. N Values have not been correcte<br>3. Water level readings have been                              | roximate boundary between material types. Trans<br>ad for hammer energy. CEs the hammer energy co<br>made at times and under conditions stated. Fluctu<br>odified burmister system when no soil laboratory | rrection factor.<br>uations may occur due to other factors than | those preser                    | nt at the t              | ime measurem                                 | ients wer                          | re made. | rforma-'  |         |

EST PILE TIP ELEV 709.

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|                  |                  |                                | STATE                               | E OF VERMONT                      |                 |                       | BOR                                   | ING        | LOG               |                          |                       | Boring        | g No      | ).:      | B-1          | 04       |
|------------------|------------------|--------------------------------|-------------------------------------|-----------------------------------|-----------------|-----------------------|---------------------------------------|------------|-------------------|--------------------------|-----------------------|---------------|-----------|----------|--------------|----------|
| (V               | Т                |                                | AGENCY O                            | F TRANSPORTA                      | TION            |                       |                                       | том        |                   |                          |                       | -<br>Page     | -         | -        | 2 of         | 3        |
| Y                | Irans            | mult Agency of Transportstan   | MATE                                | TRUCTION AND<br>RIALS BUREAU      |                 |                       |                                       | 1446       |                   |                          |                       | Pin N         | 0.:       |          | 12j658       | 8        |
|                  |                  |                                | CENTR                               | AL LABORATOR                      | Y               | Nebra                 | aska Valle                            | y Ro       | ad Brid           | lge No                   | . 48                  | Checl         | ked       | By:      | <u>L. Tr</u> | racy     |
| Borin            | n Crew: P        | aBossiere Ne                   | ew England Bo                       | ring Contractors                  |                 |                       | Casing S                              | -          |                   |                          | Groun                 | dwat          | ər O      | bserv    | ations       | <u> </u> |
|                  | Started:         | 5/19/21 Date                   |                                     | 5/19/21                           | Type:           | V                     | VASH BOF<br>4 in                      |            | SS<br>2 in        | Da                       | te Deptł              |               |           | N        | otes         |          |
| VTSP             |                  | N 7142                         | 203.02 ft E 15                      | <br>571919.99 ft                  | Hamm            | er Wt:                | 300                                   | 14         | 0 lb.             | 05/10                    | 0/21 8.0              | (ft)<br>oftor | 4.00      | <u> </u> |              |          |
| Statio           | n: 13+           | -94.57                         | Offset:                             | 14.94 RT                          | Hamm            |                       | N.A.                                  | 3<br>uto/N | 0 in.             | 05/18                    | π21 p.0               | aller         |           | ng       |              |          |
| Grour            | nd Elevatior     | n:753.                         | .69 ft                              |                                   |                 | er/Rod T<br>ratas Sta | , , , , , , , , , , , , , , , , , , , |            | = 1.44            |                          |                       |               |           |          |              |          |
| Depth<br>(ft)    | Strata (1)       |                                | CLASS                               | SIFICATION OF M<br>(Description)  |                 | S                     |                                       |            | Run<br>(Dip deg.) | Drill Rate<br>minutes/ft | Blows/6"<br>(N Value) | Aoisture      | Content % | Gravel % | Sand %       | Fines %  |
|                  | Ó                |                                |                                     |                                   |                 |                       |                                       |            | <u>(</u>          |                          | <u> </u>              | 2             | ŭ         | ڻ<br>ن   | 0,           |          |
| 25.0 –           |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| -<br>27.5 -      | -                |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| 30.0 –           |                  | Rec.=1.1 ft, (                 | (A-4)                               | ce Sand, gray/bro                 |                 |                       |                                       |            |                   |                          | 12-15-1<br>12<br>(31) | 6- 32         | 2.3       | ).1      |              | 99.9     |
| -                | X                | Silt, gray/bro                 | wn, Wet, Rec.=                      | n dense, fine to co<br>=1.1 ft    | barse GRA       | VEL, SOR              | ne Sand, t                            |            |                   |                          |                       |               |           |          |              |          |
|                  | -                |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| 32.5 -           |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| •                |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| 35.0 -           | -                |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| •                |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  | -                |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| 37.5 -           |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| -                |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  | Visual Descri<br>brn, Moist, R | iption:, very der<br>lec.=1.2 ft    | nse, fine to coars                | e SAND, s       | ome Gra               | avel, little S                        | Silt,      |                   |                          | 33-28-5<br>100/3      |               |           |          |              |          |
| 40.0-            |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          | (78)                  |               |           |          |              |          |
| -                | <u> <u> </u></u> |                                | iption:, very de<br>GLACIAL TILL.   | nse, fine to coars                | e SAND, li      | ttle Grav             | el, trace Si                          | ilt,       |                   |                          |                       |               |           |          |              |          |
| -                |                  | <u>(gray, moist, t</u>         | GLACIAL HLL.                        | Nec1.2 II                         |                 |                       |                                       | _/         |                   |                          |                       |               |           |          |              |          |
| 42.5 -           |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| -                |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  |                                | ft, Medium-gra<br>slightly fracture | ained QUARTZITE                   | E, horizont     | al joints.            | Hard to ve                            | ery        | C-1               | 8                        |                       |               |           |          |              |          |
| 45.0 <b>-</b>    |                  | Visual Descr                   | iption:, Field no                   | ote: Core barrel w                |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
|                  |                  |                                |                                     | worn down. The as consistently de |                 | r billea ii           | rom 45 TL IC                          | 0 50       |                   |                          |                       |               |           |          |              |          |
|                  | 1                |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| -                |                  |                                |                                     |                                   |                 |                       |                                       |            |                   |                          |                       |               |           |          |              |          |
| 47.5-            | 1 1              |                                |                                     |                                   |                 |                       |                                       |            |                   |                          | -                     |               |           |          |              |          |
| 47.5 -<br>Notes: | O NIValuas ha    | lines represent appr           | roximate boundary be                | etween material types. Tr         | ransition may b | e gradual.            |                                       |            |                   | 1                        |                       |               |           |          |              |          |

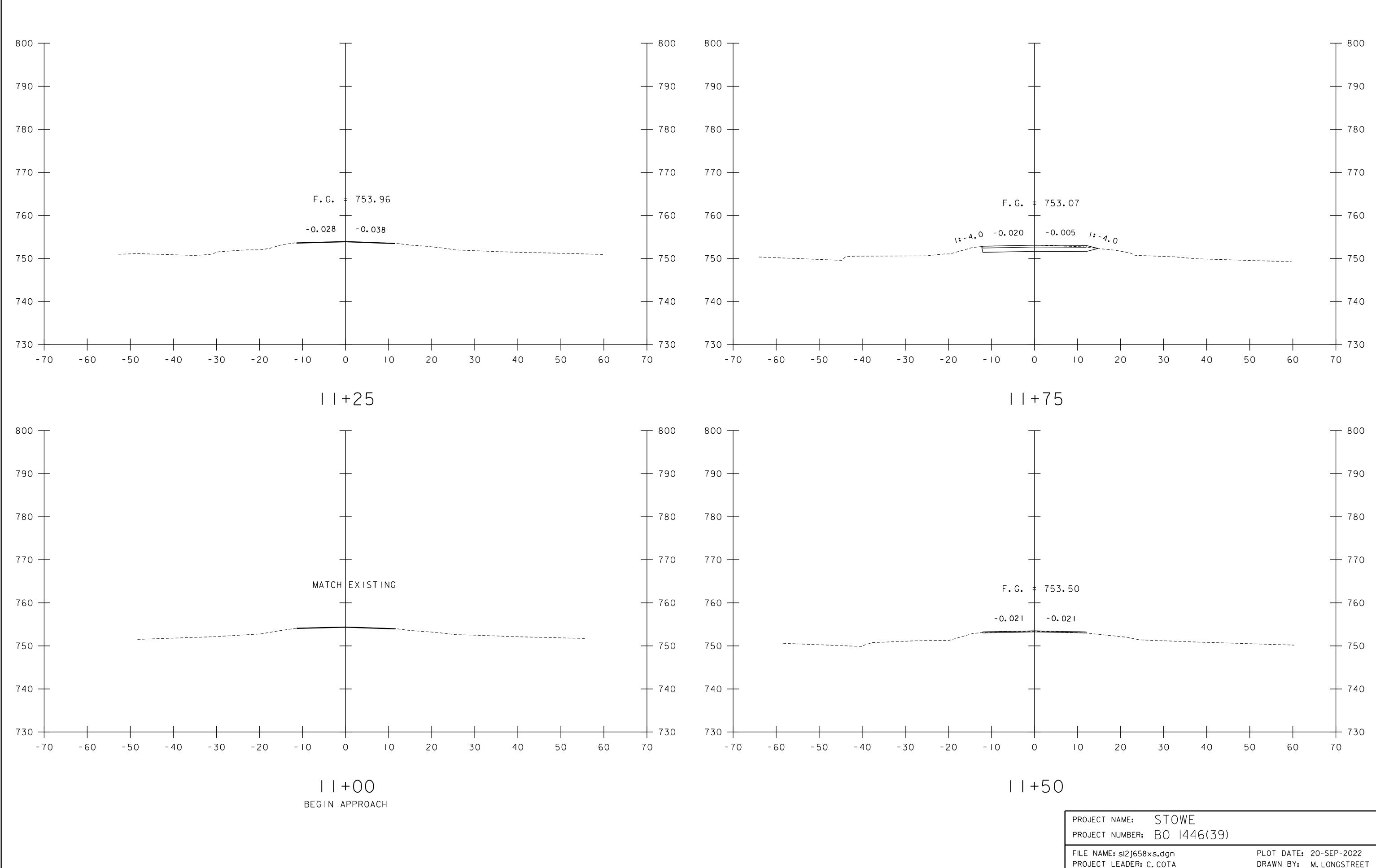
|  | Y                        | <b>Frans</b> !                                     | <b>Lining is Get Van The</b><br>Smart A <u>S</u> my of Foregoettelan            |
|--|--------------------------|--|---|
|  | Date S<br>VTSP<br>Statio | Started:<br>G NAD83:                               | +94.57  |
|  | Depth<br>(ft)            | Strata (1)   |   |
|  | -<br>-<br>50.0 –<br>-    |  |   |
|  | -<br>-<br>52.5 –<br>-    |  |   |
|  | -<br>-<br>55.0 –<br>-    |  |   |
|  | -<br>-<br>57.5 –         |  |   |
|  | -<br>-<br>60.0<br>-      |  |   |
|  | -<br>                    |  |   |
| ьт 8/20/21                               | -<br>-<br>65.0 –<br>-    |  |   |
| ERMONT AOT.GD                            | -<br>                    |  |   |
| 4981.00 LOGS.GPJ VERMONT AOT.GDT 8/20/21 | -<br>-<br>70.0<br>-      |  |   |
| BORING LOG 498                           | Notes:                   | <ol> <li>N Values ha<br/>3. Water level</li> </ol> | n lines represent<br>ave not been corr<br>readings have be<br>tions are based c |

| STATE OF VERMONT                      |                | BORING                             | G LOG             |                          | B                     | oring N               | o.:      | B-10     | )4      |
|---------------------------------------|----------------|------------------------------------|-------------------|--------------------------|-----------------------|-----------------------|----------|----------|---------|
| AGENCY OF TRANSPORTAT                 | ION            | STOWE                              |                   |                          |                       | Page No.:             |          | 3 of 3   |         |
| MATERIALS BUREAU                      |                | ВО 144                             | 6(39)             |                          | Pi                    | Pin No.:              |          | 12j658   |         |
| CENTRAL LABORATORY                    |                | Nebraska Valley Road Bridge No. 48 |                   |                          |                       | Checked By:           |          | L. Tracy |         |
| siere, New England Boring Contractors |                | Casing Sam                         | -                 |                          | Ground                | water 0               | Dbserv   | ations   |         |
| 21 Date Finished: 5/19/21             | Type:<br>I.D.: | WASH BORE                          | SS<br>2 in        | Dat                      | e Depth<br>(1         | t)                    | N        | otes     |         |
| N 714203.02 ft E 1571919.99 ft        | Hamm<br>Hamm   |                                    | 40 lb.<br>30 in.  | 05/19                    | /21 8.0 a             | ter dril              | ling     |          |         |
| Offset: 14.94 RT                      |                | er/Rod Type: Auto/                 |                   |                          |                       |                       |          |          |         |
| 753.69 ft                             |                | ratas Star 15                      | - 1 44            |                          |                       |                       |          |          |         |
| CLASSIFICATION OF MA<br>(Description) | ATERIAL:       | S                                  | Run<br>(Dip deg.) | Drill Rate<br>minutes/ft | Blows/6"<br>(N Value) | Moisture<br>Content % | Gravel % | Sand %   | Fines % |
|                                       |                |                                    |                   |                          |                       |                       |          |          |         |

Hole stopped @ 50.0 ft

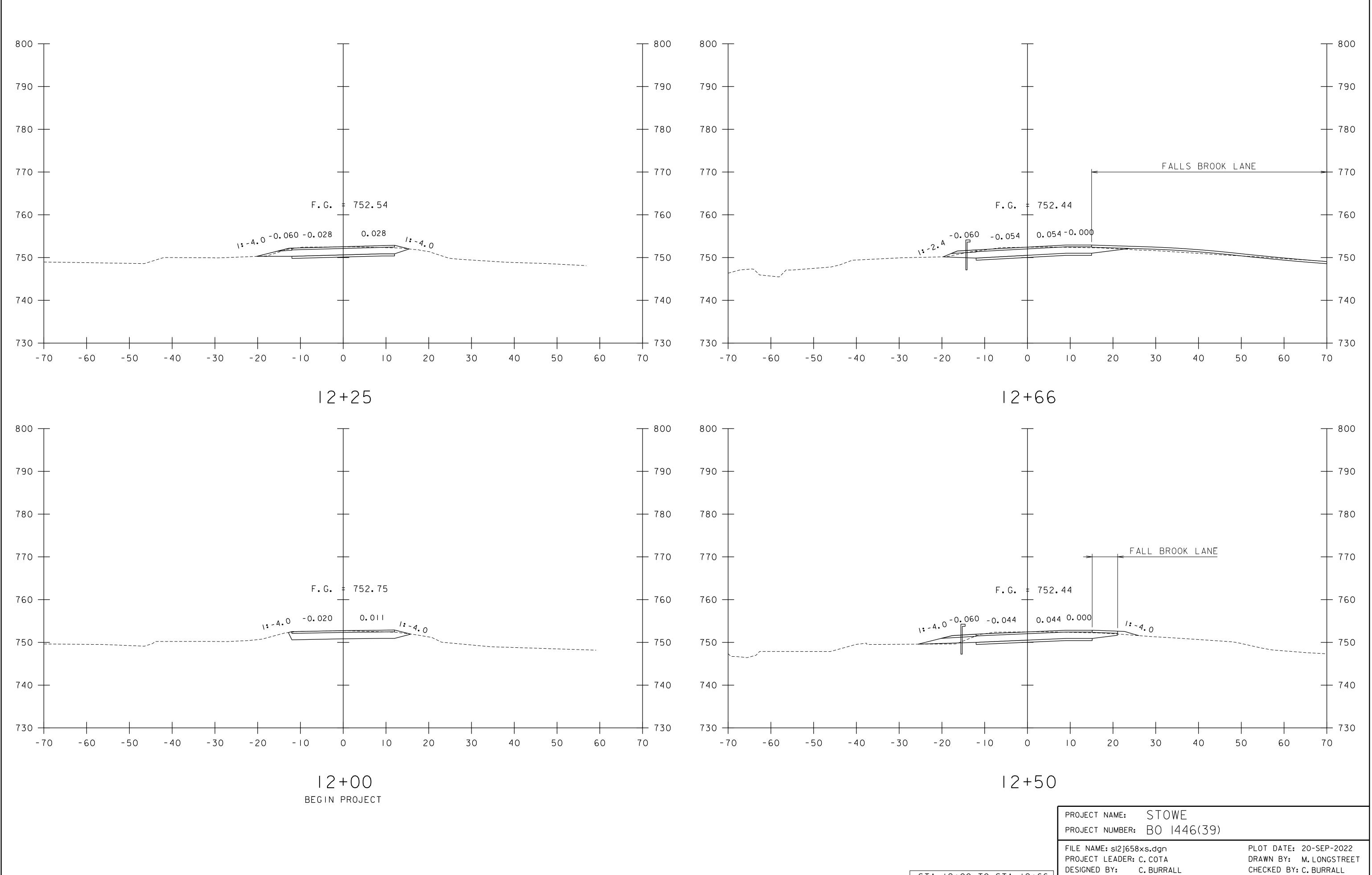
represent approximate boundary between material types. Transition may be gradual. been corrected for hammer energy. Cls the hammer energy correction factor. gs have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made. re based on modified burmister system when no soil laboratory testing was performed. AASHTO classifications are included where soil laboratory testing was performed.

| PROJECT NAME:      | STOWE       |                          |
|--------------------|-------------|--------------------------|
| PROJECT NUMBER:    | BO 1446(39) |                          |
| FILE NAME: SI2j658 | bor.dgn     | PLOT DATE: 20-SEP-2022   |
| PROJECT LEADER: (  | C. COTA     | DRAWN BY: C.BURRALL      |
| DESIGNED BY:       | C. BURRALL  | CHECKED BY: M.LONGSTREET |
| BORING LOGS 3      |             | SHEET \$S#\$ OF \$T#\$   |



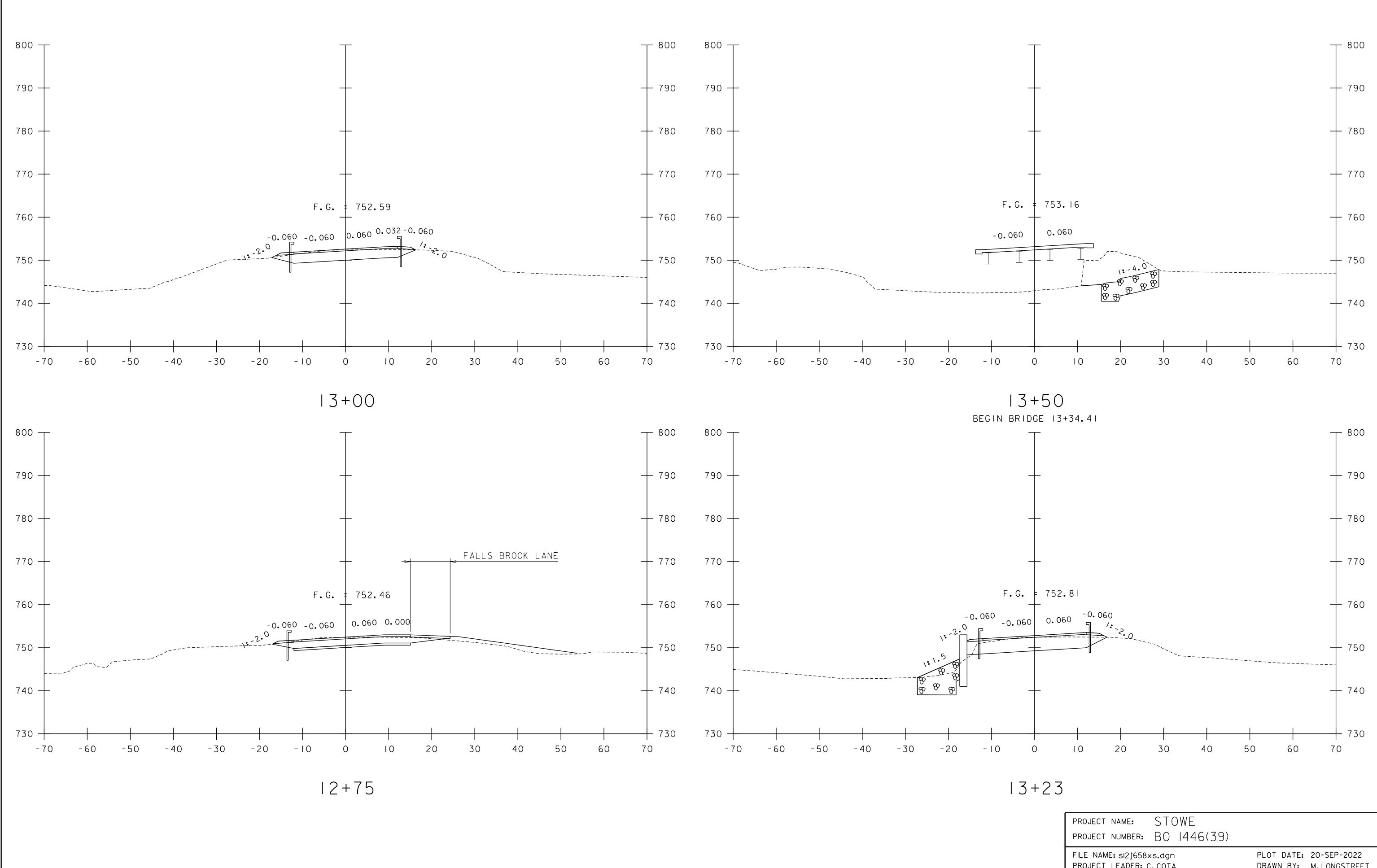
STA. 11+00 TO STA

|          | project name: STOWE<br>project number: BO 1446(39)   |  |
|----------|--|--|
| A. 11+75 | FILE NAME: sI2j658xs.dgn<br>PROJECT LEADER: C.COTA<br>DESIGNED BY: C.BURRALL<br>TH 43 CROSS SECTIONS I | PLOT DATE: 20-SEP-2022<br>DRAWN BY: M.LONGSTREET<br>CHECKED BY:C.BURRALL<br>SHEET \$S*\$ OF \$T*\$ |

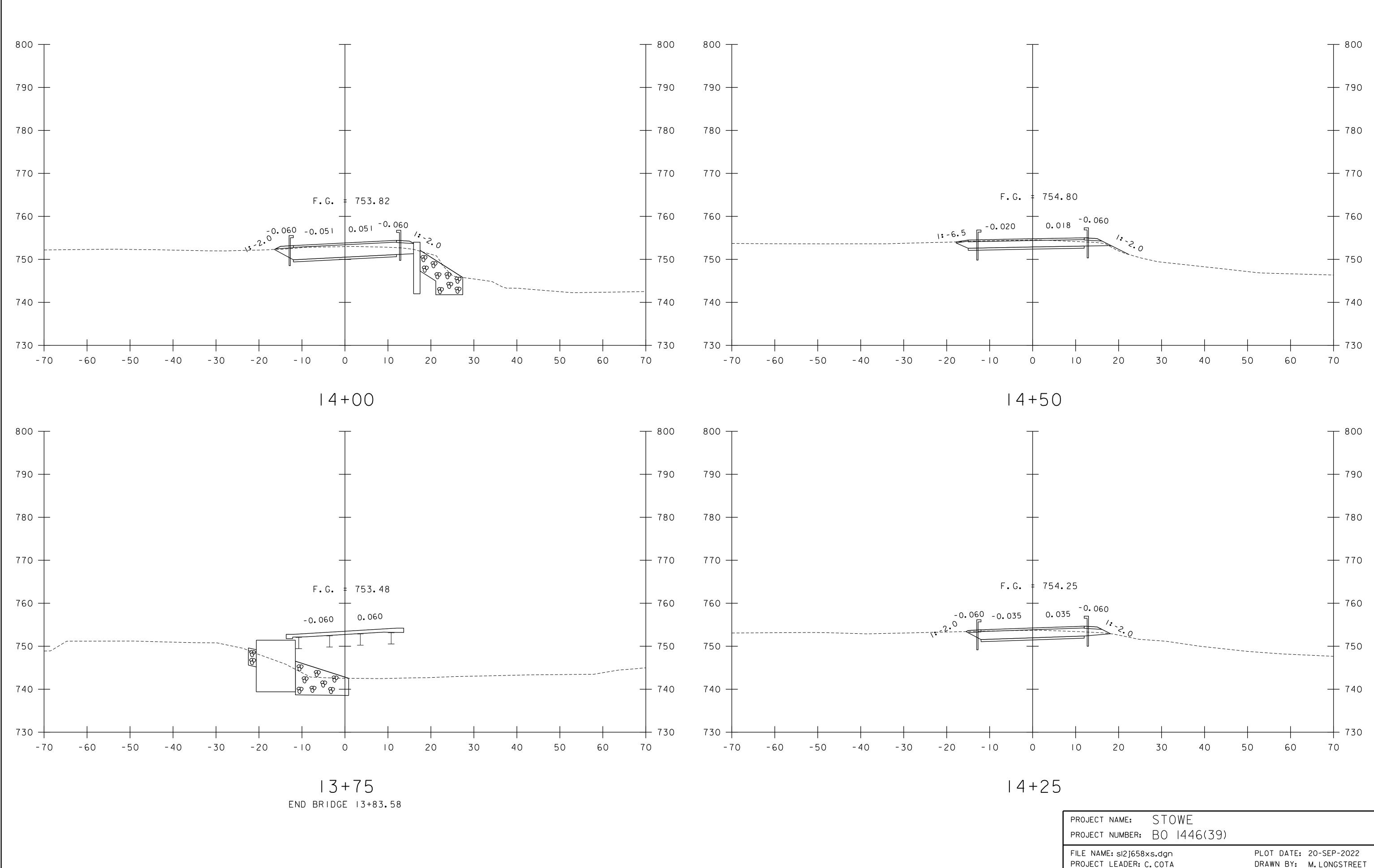


TH 43 CROSS SECTIONS 2

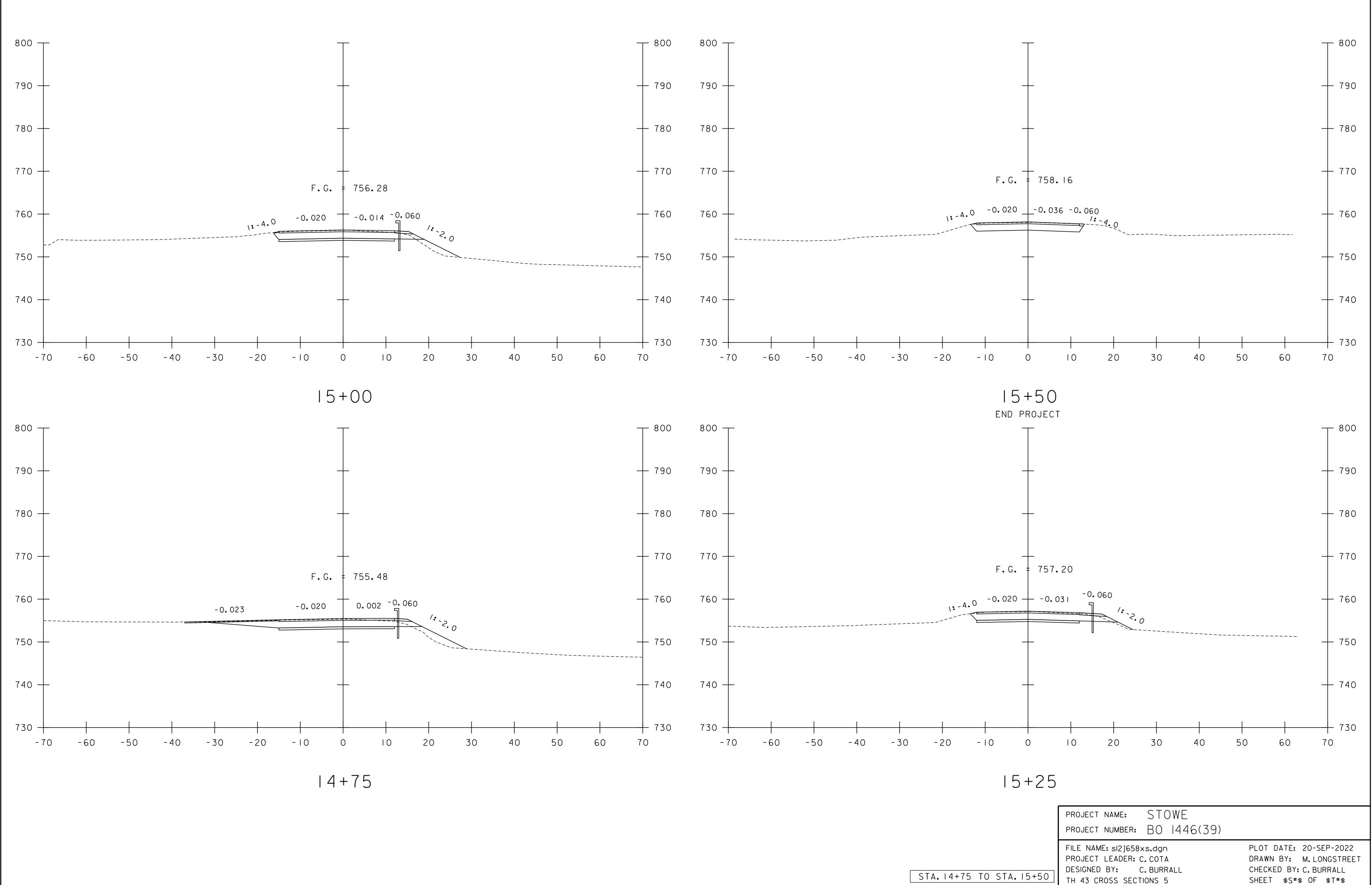
CHECKED BY: C. BURRALL SHEET \$S#\$ OF \$T#\$

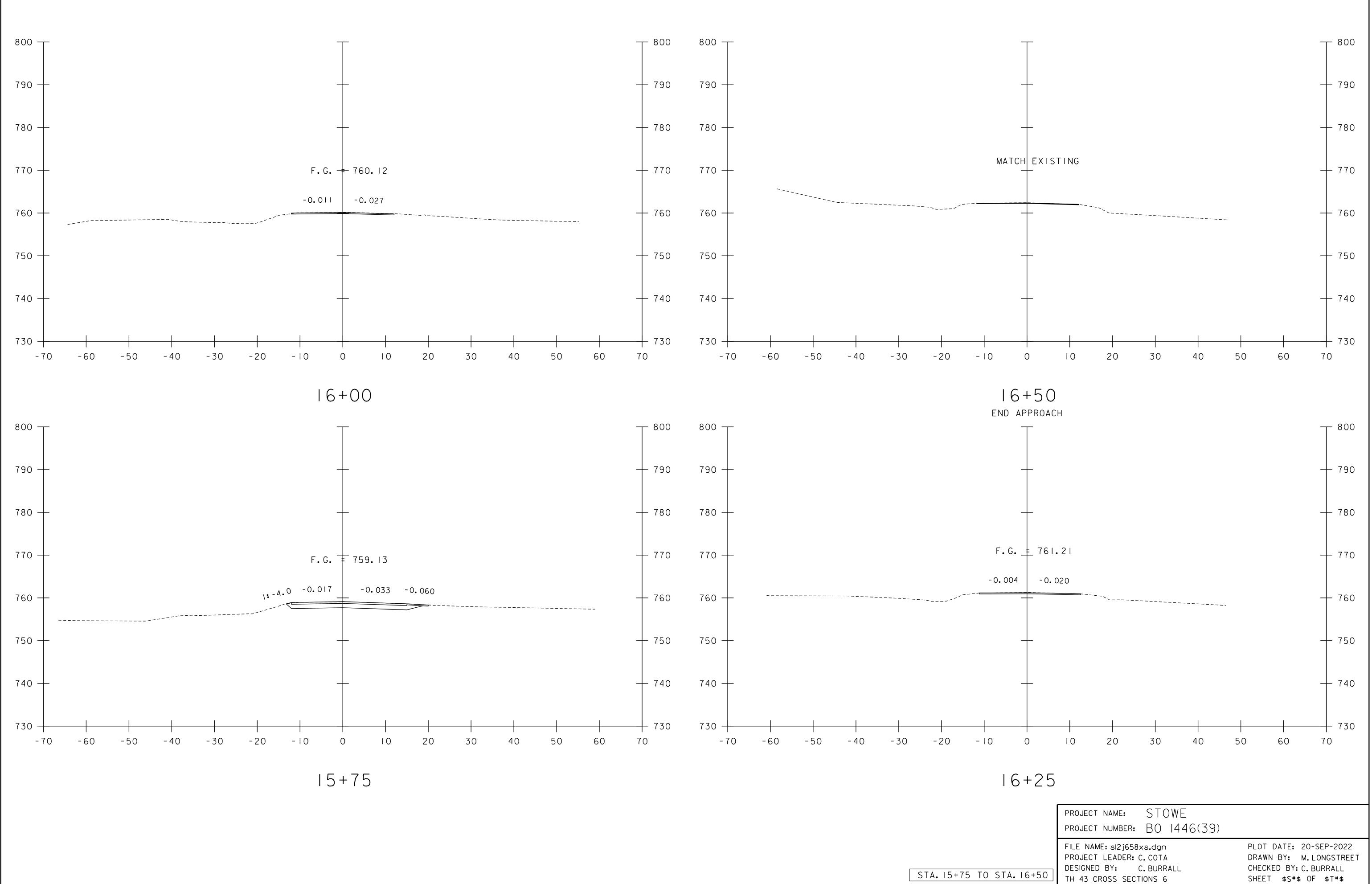


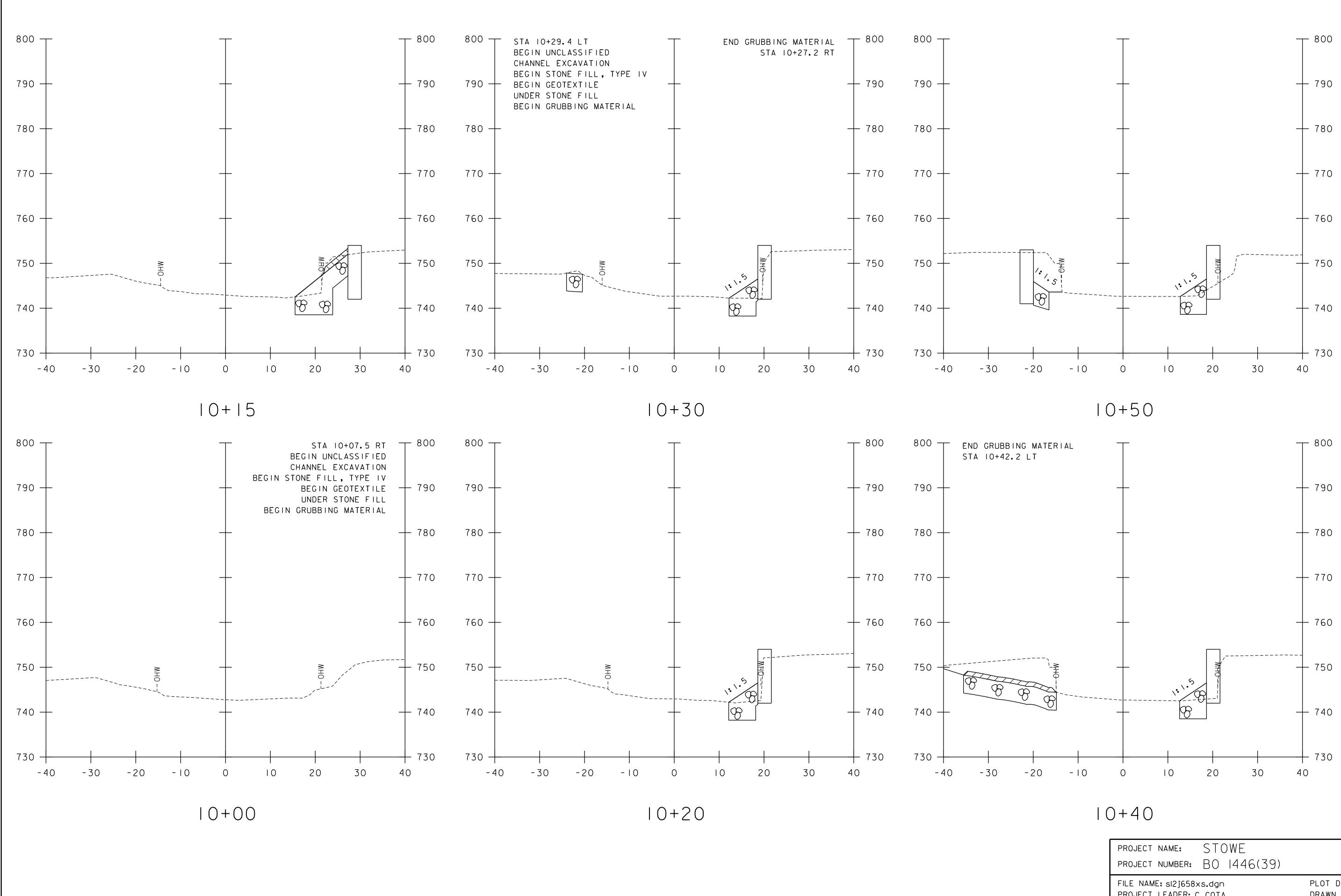
|        | project name: STOWE<br>project number: BO 1446(39)   |  |
|--------|--|--|
| .13+50 | FILE NAME: sI2j658xs.dgn<br>PROJECT LEADER: C.COTA<br>DESIGNED BY: C.BURRALL<br>TH 43 CROSS SECTIONS 3 | PLOT DATE: 20-SEP-2022<br>DRAWN BY: M.LONGSTREET<br>CHECKED BY:C.BURRALL<br>SHEET \$S#\$ OF \$T#\$ |



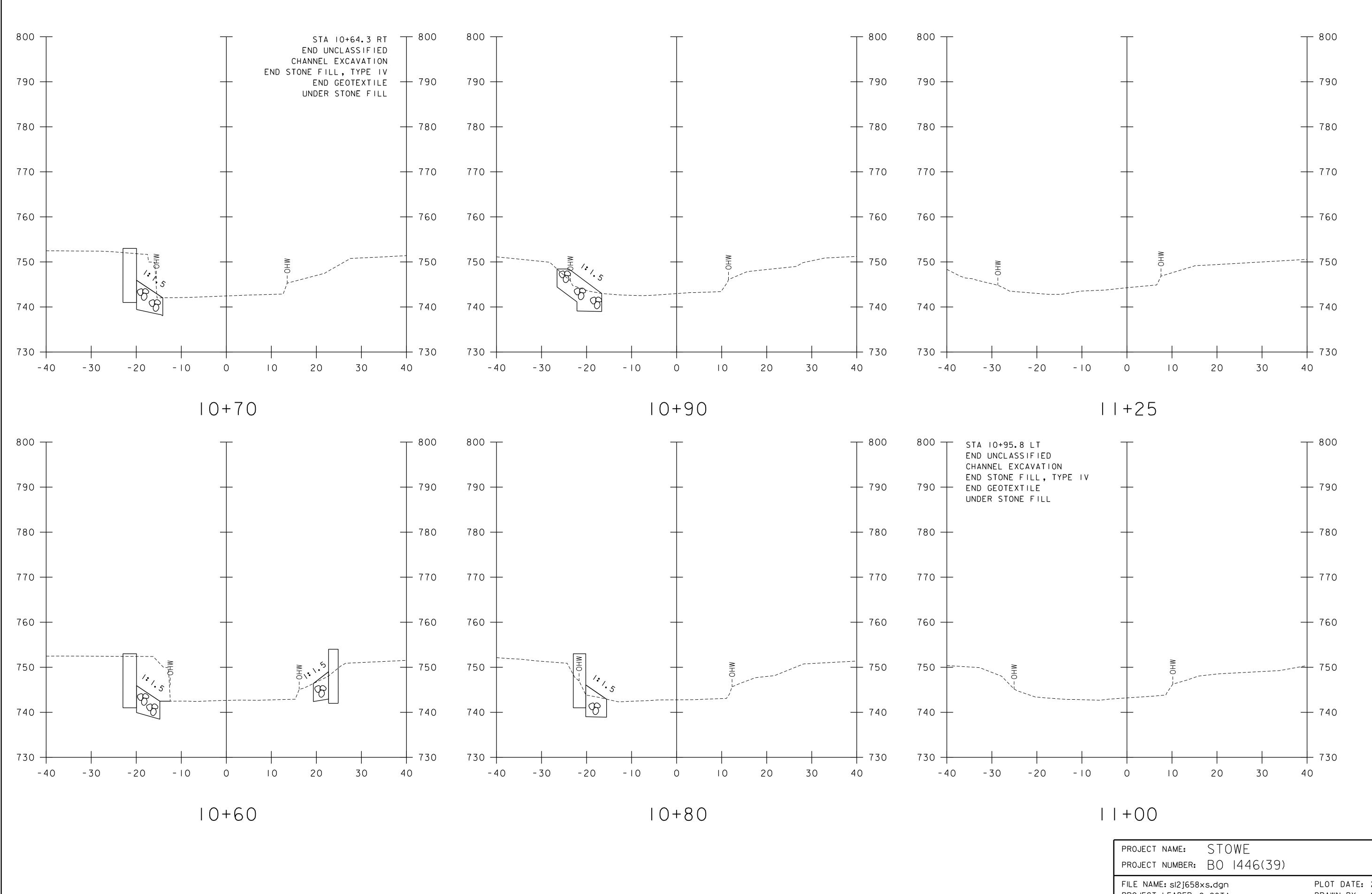
|          | project name: STOWE<br>project number: BO 1446(39)   |  |
|----------|--|--|
| A. 14+50 | FILE NAME: sI2j658xs.dgn<br>PROJECT LEADER: C.COTA<br>DESIGNED BY: C.BURRALL<br>TH 43 CROSS SECTIONS 4 | PLOT DATE: 20-SEP-2022<br>DRAWN BY: M.LONGSTREET<br>CHECKED BY:C.BURRALL<br>SHEET \$S*\$ OF \$T*\$ |







|          | project name: STOWE<br>project number: BO 1446(39)   |  |
|----------|--|--|
| A. 10+50 | FILE NAME: sI2j658xs.dgn<br>PROJECT LEADER: C.COTA<br>DESIGNED BY: C.BURRALL<br>CHANNEL CROSS SECTIONS I | PLOT DATE: 20-SEP-2022<br>DRAWN BY: M.LONGSTREET<br>CHECKED BY:C.BURRALL<br>SHEET \$S*\$ OF \$T*\$ |



|           | FILE NAME: sI2j658xs.dgn | PLOT DATE: 20-SEP-2022 |
|-----------|--------------------------|------------------------|
|           | PROJECT LEADER: C.COTA   | DRAWN BY: M.LONGSTREET |
|           | DESIGNED BY: C.BURRALL   | CHECKED BY: C. BURRALL |
| [A.   +25 | CHANNEL CROSS SECTIONS 2 | SHEET \$S#\$ OF \$T#\$ |
|           |                          |                        |

