

REVIEWER NOTES:

1. TRAFFIC CONTROL ALL INCLUSIVE WILL BE USED
2. EROSION CONTROL ALL INCLUSIVE WILL BE USED
3. ANY STRUCTURAL ELEMENTS SHOWN IN THE PLANS ARE CONCEPTUAL, AND HAVE NOT BEEN FULLY DESIGNED.
4. NO CHANNEL SECTIONS WILL BE PROVIDED FOR THIS PROJECT.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



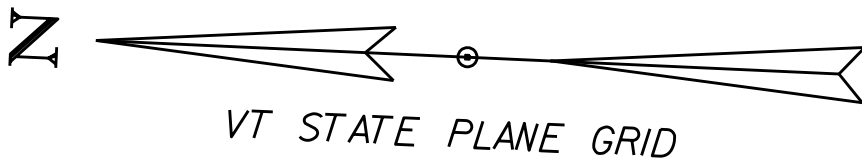
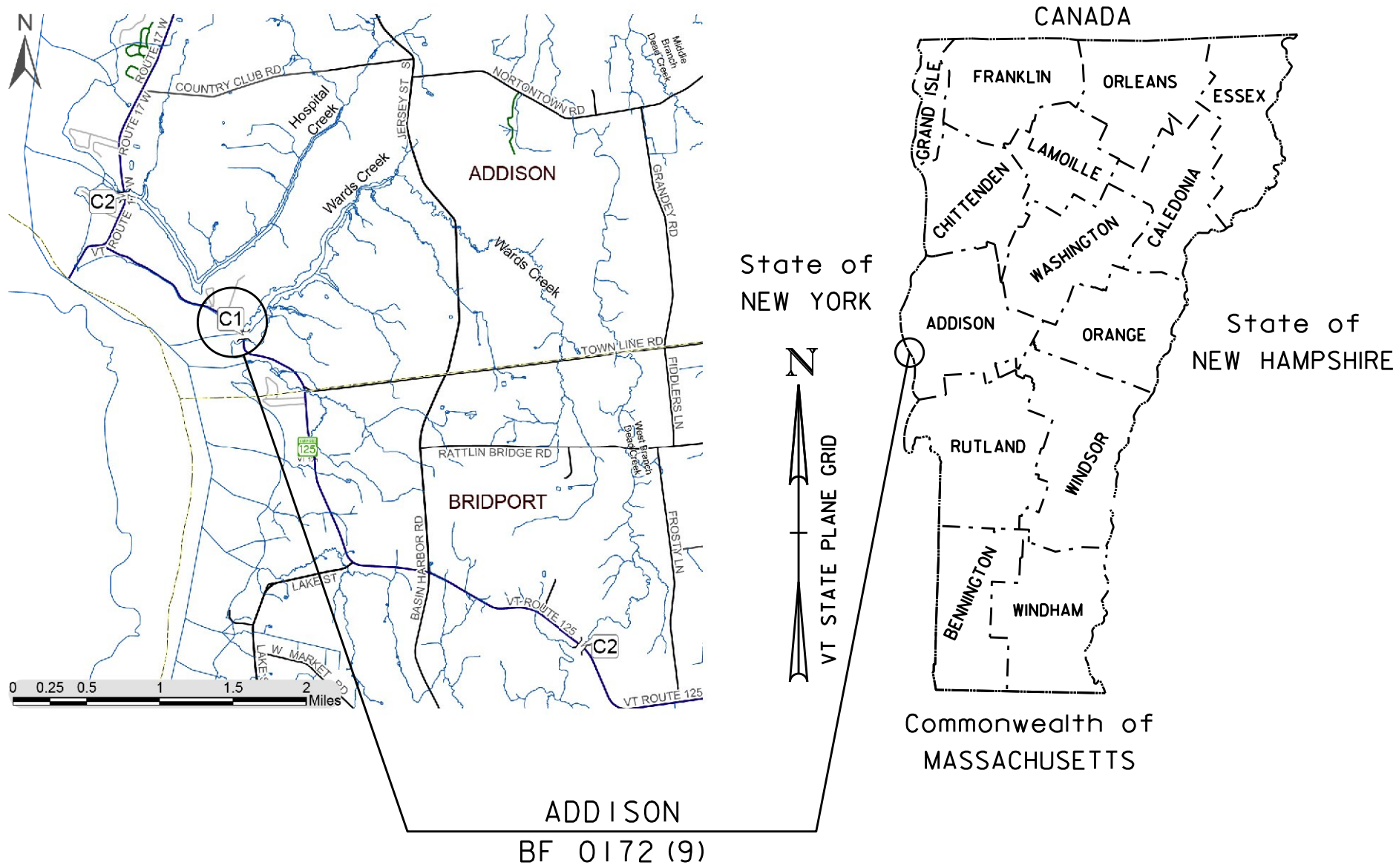
PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF ADDISON

COUNTY OF ADDISON

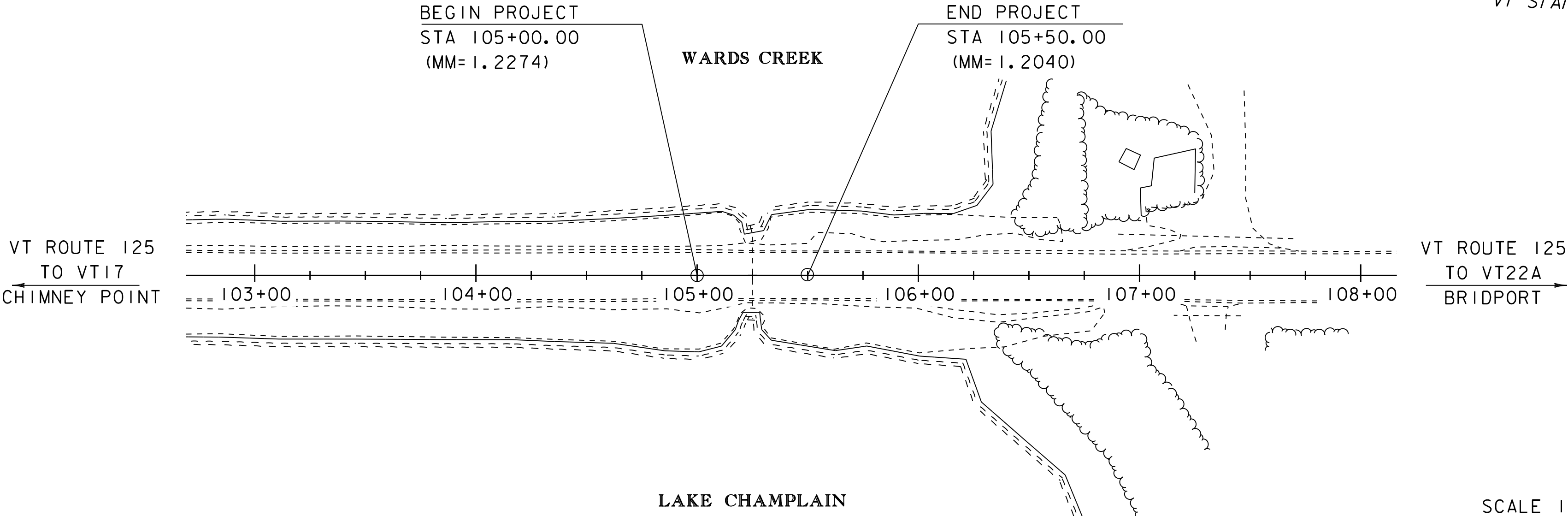
ROUTE NO : VT ROUTE 125 CULVERT NO : 1
PROJECT LOCATION : 1.3 MILES EAST OF THE JUNCTION OF VT ROUTE 125 AND VT ROUTE 17.
PROJECT DESCRIPTION : WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPLACEMENT OF EXISTING STRUCTURE (CULVERT #1) WITH A NEW STRUCTURE, ADJACENT ROADWAY APPROACHES, AND CHANNEL WORK.

LENGTH OF STRUCTURE : 9 FEET DIAMETER, 51.00 FEET LONG BURIED STRUCTURE.
LENGTH OF ROADWAY : 50.00 FEET.
LENGTH OF PROJECT : 50.00 FEET.



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 : | H. MCGOWAN PC |
| SURVEYED DATE : | 06-01-2016 |
| DATUM | |
| VERTICAL | NAVD88 |
| HORIZONTAL | NAD 83 (2007) |



FINAL PLANS

20-JAN-2021

| | |
|----------------------------------|-----------------------|
| HIGHWAY DIVISION, CHIEF ENGINEER | |
| APPROVED _____ | DATE _____ |
| PROJECT MANAGER : | ROBERT S. YOUNG, P.E. |
| PROJECT NAME : | ADDISON |
| PROJECT NUMBER : | BF 0172 (9) |
| SHEET 1 OF 17 SHEETS | |

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (CULVERT)

LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

DETAIL SHEETS

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

PROPOSED STRUCTURE

EXISTING STRUCTURE INFORMATION

UPSTREAM STRUCTURE

DOWNSTREAM STRUCTURE

LRFR LOAD RATING FACTORS

CULVERT DESIGN CRITERIA

TRAFFIC MAINTENANCE NOTES

DESIGN VALUES

SEISMIC DATA

AS BUILT "REBAR" DETAIL

LEVEL I

LEVEL II

LEVEL III

1/20/2021

216

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2017 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISIONS.
2. ALL SUBSURFACE INFORMATION THAT HAS BEEN OBTAINED IS CONTAINED WITHIN THIS PLAN SET. THE CONTRACTOR IS ALLOWED TO ACQUIRE ADDITIONAL SUBSURFACE INFORMATION IF DESIRED. MEANS, METHODS, AND COSTS ARE THE RESPONSIBILITY OF THE CONTRACTOR FOR ALL EXCAVATION OPERATIONS.

EARTHWORK

3. THE REMOVAL OF EXISTING STRUCTURE WILL BE PAID UNDER ITEM 529.15, REMOVAL OF STRUCTURE". THIS WORK SHALL INCLUDE REMOVAL OF THE ENTIRE SUPERSTRUCTURE AND ANY PORTIONS THAT FALL OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.
4. THE USE OF EQUIPMENT AND THE METHOD OF BACKFILLING AROUND THE BURIED STRUCTURE SHALL BE IN ACCORDANCE WITH THE FABRICATOR'S RECOMMENDATIONS. CARE SHALL BE TAKEN WHEN BACKFILLING AGAINST JOINT SEALING MATERIALS.

CULVERT AND WINGWALL NOTES

5. ALL WORK REQUIRED TO PROVIDE ACCESS TO THE CONSTRUCTION SITE AND/OR STAGING SITE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 105. ALL RESULTING DISTURBED EARTH SHALL BE STABILIZED AND RESTORED UPON COMPLETION OF CONSTRUCTION. PAYMENT FOR WORK SHALL BE PAID FOR UNDER ITEM 900.645 "SPECIAL PROVISION (LUMP SUM PROJECT)".
6. THE INSTALLATION OF ALL STRUCTURES AND ALL BEDDING AND BACKFILL SHALL BE DONE IN THE DRY AND PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION "LUMP SUM PROJECT". STANDING OR FLOWING WATER SHALL NOT BE PRESENT DURING INSTALLATION OR EARTHWORK OPERATIONS.

TRAFFIC CONTROL NOTES

7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, IMPLEMENTATION, AND SUBMITTAL OF A SITE-SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED. SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE-WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. ALL COSTS WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION "LUMP SUM PROJECT".
8. ALL TRAFFIC CONTROL FOR THIS PROJECT SHALL BE INSTALLED IN ACCORDANCE WITH THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE VERMONT STATE STANDARD DRAWINGS. WHERE CONFLICTS EXIST, MUTCD SHALL GOVERN.

EROSION CONTROL NOTES

9. THE CONTRACTOR SHALL PROVIDE A SITE-SPECIFIC EROSION PREVENTION AND SEDIMENT CONTROL PLAN IN ACCORDANCE WITH SECTION 653 OF THE STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION. ESTIMATED QUANTITIES FOR EPSC WORK HAVE BEEN INCLUDED IN THE CONTRACT FOR BIDDING PURPOSES. IF THE CONTRACTOR'S EPSC PLAN REQUIRE ITEMS OF WORK THAT ARE NOT INCLUDED IN THE PLANS IT SHALL BE PAID FOR AS PART OF ITEM 900.645 SPECIAL PROVISION "LUMP SUM PROJECT".
10. EROSION CONTROL AND SEDIMENT CONTROL MEASURES REQUIRED TO TEMPORARILY OR PERMANENTLY STABILIZE DISTURBED SOILS INCLUDING BUT NOT LIMITED TO TOPSOIL, SEED, FERTILIZER, LIMESTONE, EROSION MATTING, MULCH, AND SILT FENCE SHALL BE AS REQUIRED BY SECTION 653 "EROSION PREVENTION AND SEDIMENT CONTROL". PAYMENT SHALL BE MADE UNDER ITEM 900.545 SPECIAL PROVISION "LUMP SUM PROJECT".
11. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT SILTATION OR POLLUTION ESPECIALLY THE DISCHARGE OF RAW CONCRETE INTO THE WATERS OF THE STATE AS DIRECTED BY THE RESIDENT ENGINEER AND STANDARD SPECIFICATIONS SECTION 105. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN A TOTAL SITE DISTURBANCE OF MORE THAN ONE ACRE OR SHOULD THE PROJECT BECOME PART OF A LARGER DEVELOPMENT PLAN THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

| MAJOR ITEMS PAID FOR UNDER SPECIAL PROVISION (LUMP SUM PROJECT) | | | |
|---|---|-----|------|
| 203.15 | COMMON EXCAVATION | 180 | CY |
| 203.27 | UNCLASSIFIED CHANNEL EXCAVATION | 340 | CY |
| 203.30 | EARTH BORROW | 20 | CY |
| 203.31 | SAND BORROW | 60 | CY |
| 204.22 | TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.) | 60 | CY |
| 204.25 | STRUCTURE EXCAVATION | 160 | CY |
| 204.30 | GRANULAR BACKFILL FOR STRUCTURES | 160 | CY |
| 208.30 | COFFERDAM EXCAVATION, EARTH | 130 | CY |
| 301.35 | SUBBASE OF DENSE GRADED CRUSHED STONE | 170 | CY |
| 401.10 | AGGREGATE SURFACE COURSE | 20 | CY |
| 404.65 | EMULSIFIED ASPHALT | 2 | CWT |
| 529.15 | REMOVAL OF STRUCTURE (475 SF) | 1 | EACH |
| 613.13 | STONE FILL, TYPE IV | 330 | CY |
| 630.15 | FLAGGERS | 100 | HR |
| 633.10 | CPM SCHEDULE | 8 | EACH |
| 646.201 | 4 INCH WHITELINE, WATERBORNE PAINT | 200 | LF |
| 646.211 | 4 INCH YELLOWLINE, WATERBORNE PAINT | 200 | LF |
| 649.31 | GEOTEXTILE UNDER STONE FILL | 170 | SY |
| 649.61 | GEOTEXTILE FOR FILTER CURTAIN | 72 | SY |
| 653.01 | EPSC PLAN | 1 | LS |
| 653.02 | MONITORING EPSC PLAN | 100 | HR |
| 653.03 | MAINTENANCE OF EPSC PLAN (N.A.B.I.) | 1 | LU |
| 653.35 | STABILIZED CONSTRUCTION ENTRANCE | 30 | CY |
| 653.475 | SILT FENCE, TYPE I | 143 | LF |
| 653.50 | BARRIER FENCE | 143 | LF |
| 900.640 | SPECIAL PROVISION (108" CULVERT) | 50 | LF |
| 900.680 | SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY, (NABI) | 90 | TON |
| | | | |

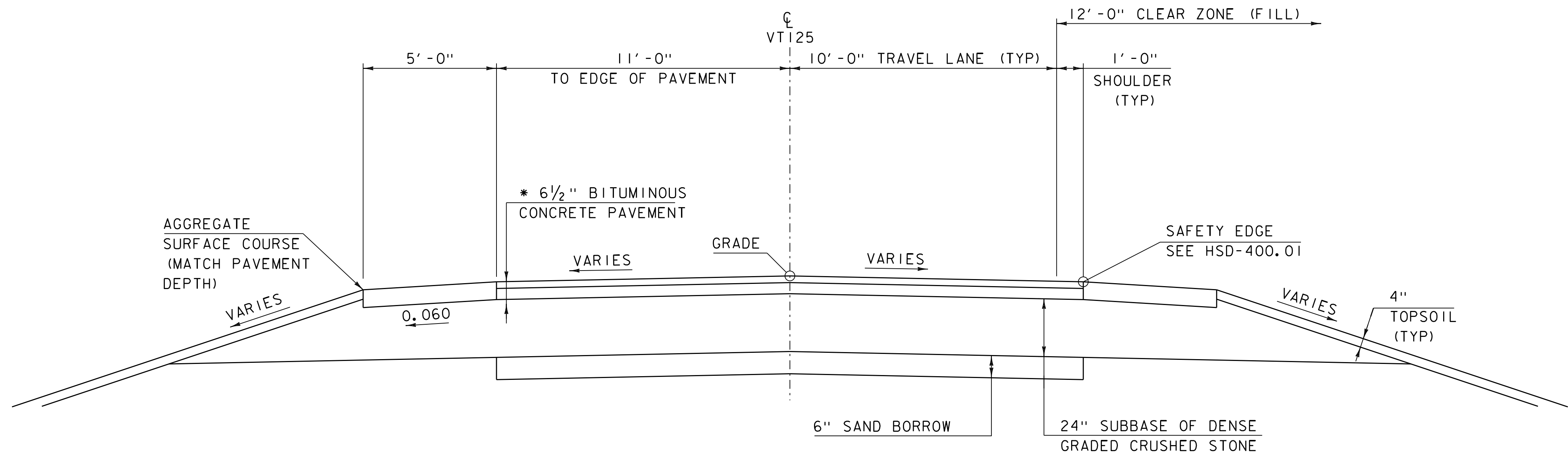
OR ITEMS PAID FOR UNDER SPECIAL PROVISION (TRAFFIC CONTROL ALL-INCLUS

| | | | |
|--------|--------------------------------|---|------|
| 641.11 | TRAFFIC CONTROL, ALL-INCLUSIVE | 1 | LS |
| 641.15 | PORTABLECHANGEABLEMESSAGE SIGN | 8 | EACH |
| | | | |

MAJOR ITEMS PAID FOR UNDER MOBILIZATION/DEMOBILIZATION

| | | | |
|--------|-----------------------------|---|----|
| 635.11 | MOBILIZATION/DEMOBILIZATION | 1 | LS |
| | | | |
| | | | |
| | | | |
| | | | |

| | |
|----------------------------|------------------------|
| PROJECT NAME: ADDISON | |
| PROJECT NUMBER: BF 0172(9) | |
| FILE NAME: sl5b092+yp.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| PROJECT NOTES | SHEET 3 OF 17 |

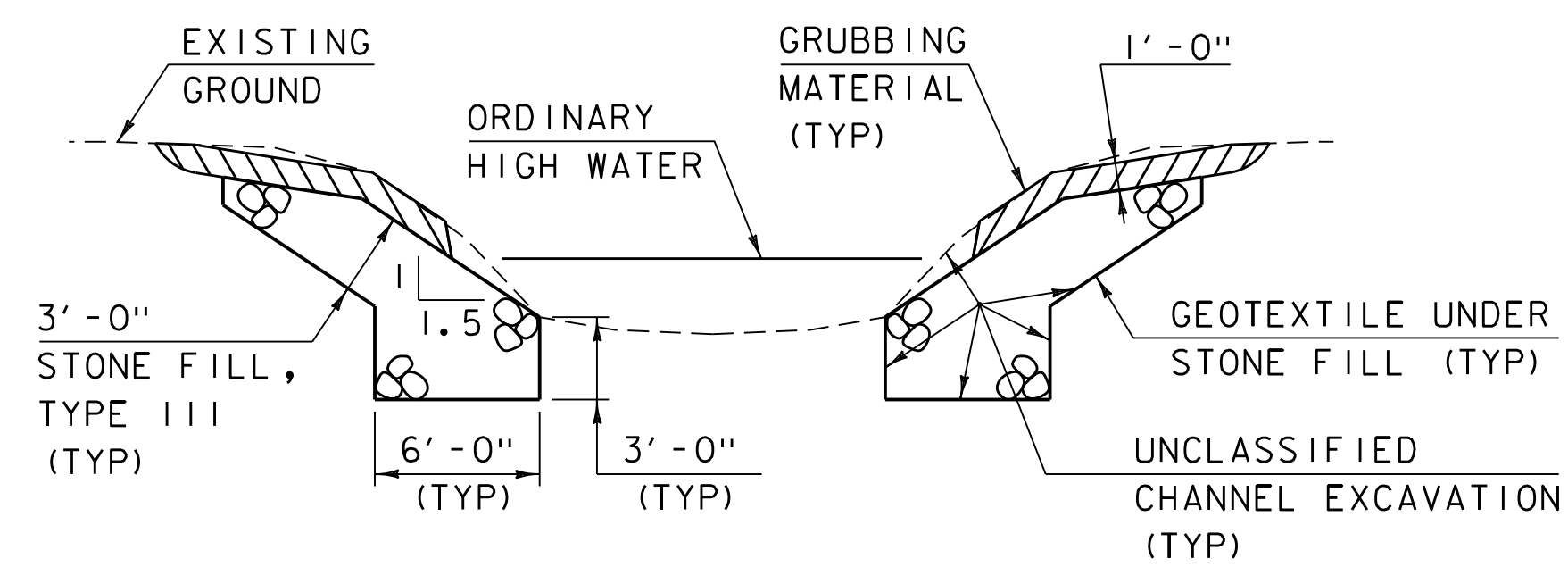


ROADWAY TYPICAL SECTION

SCALE: $\frac{3}{8}" = 1' - 0"$

*1 LIFT OF 1 1/2" BITUM. CONC. PAVEMENT TYPE IVS OVER
2 LIFTS OF 2 1/2" BITUM. CONC. PAVEMENT TYPE IIS

TYPE IIS SHALL BE PAID UNDER SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY).



TYPICAL CHANNEL SECTION

(NOT TO SCALE)

1. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

MATERIAL TOLERANCES

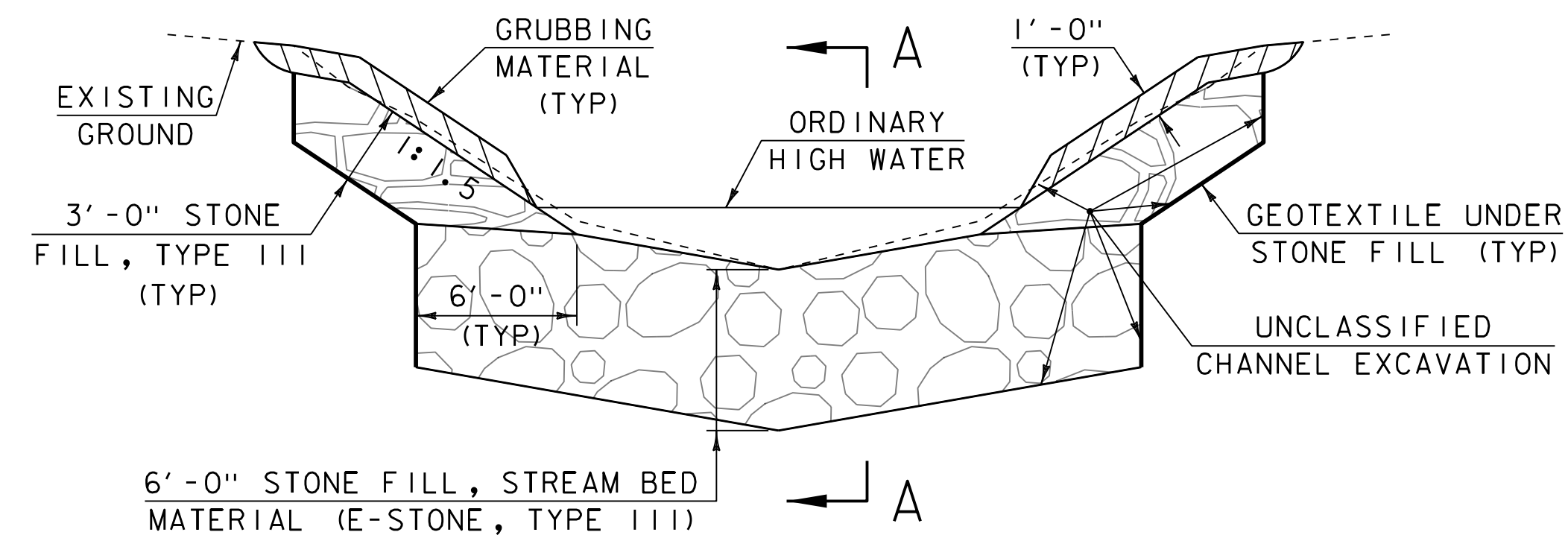
(IF USED ON PROJECT)

| | |
|------------------------------|----------|
| SURFACE | |
| - PAVEMENT (TOTAL THICKNESS) | +/- 1/4" |
| - AGGREGATE SURFACE COURSE | +/- 1/2" |
| SUBBASE | +/- 1" |
| SAND BORROW | +/- 1" |

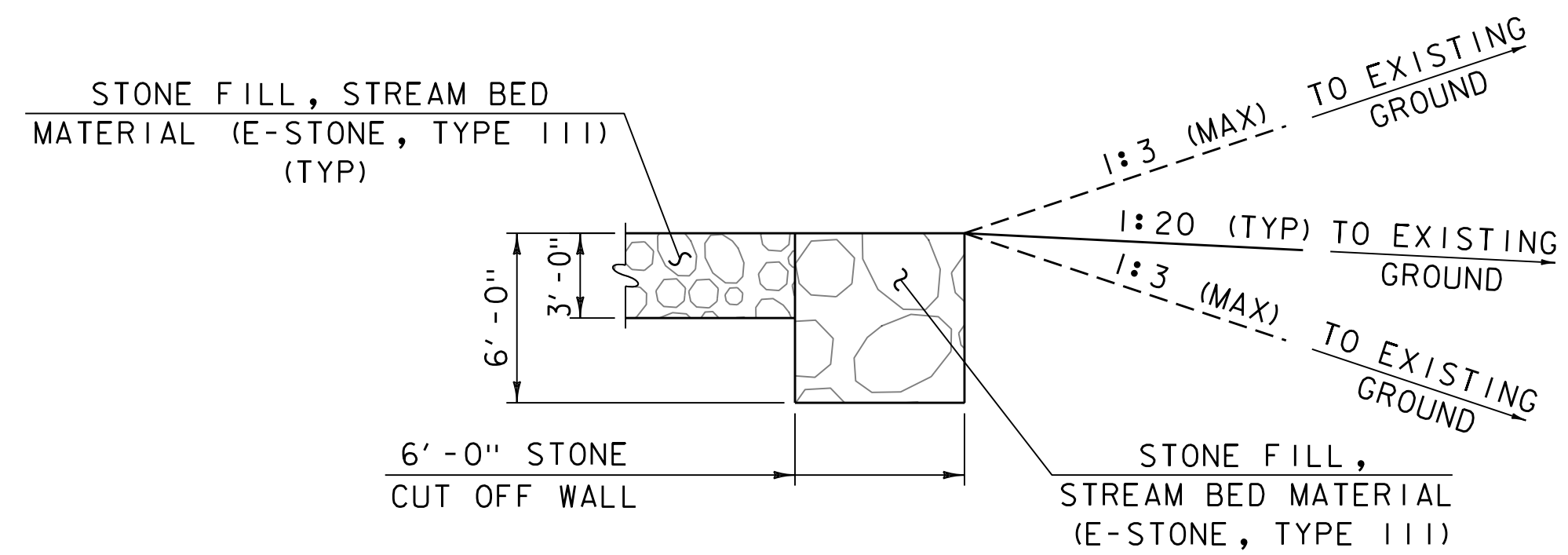
PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

FILE NAME: s15b092typ.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
TYPICAL SECTIONS 1

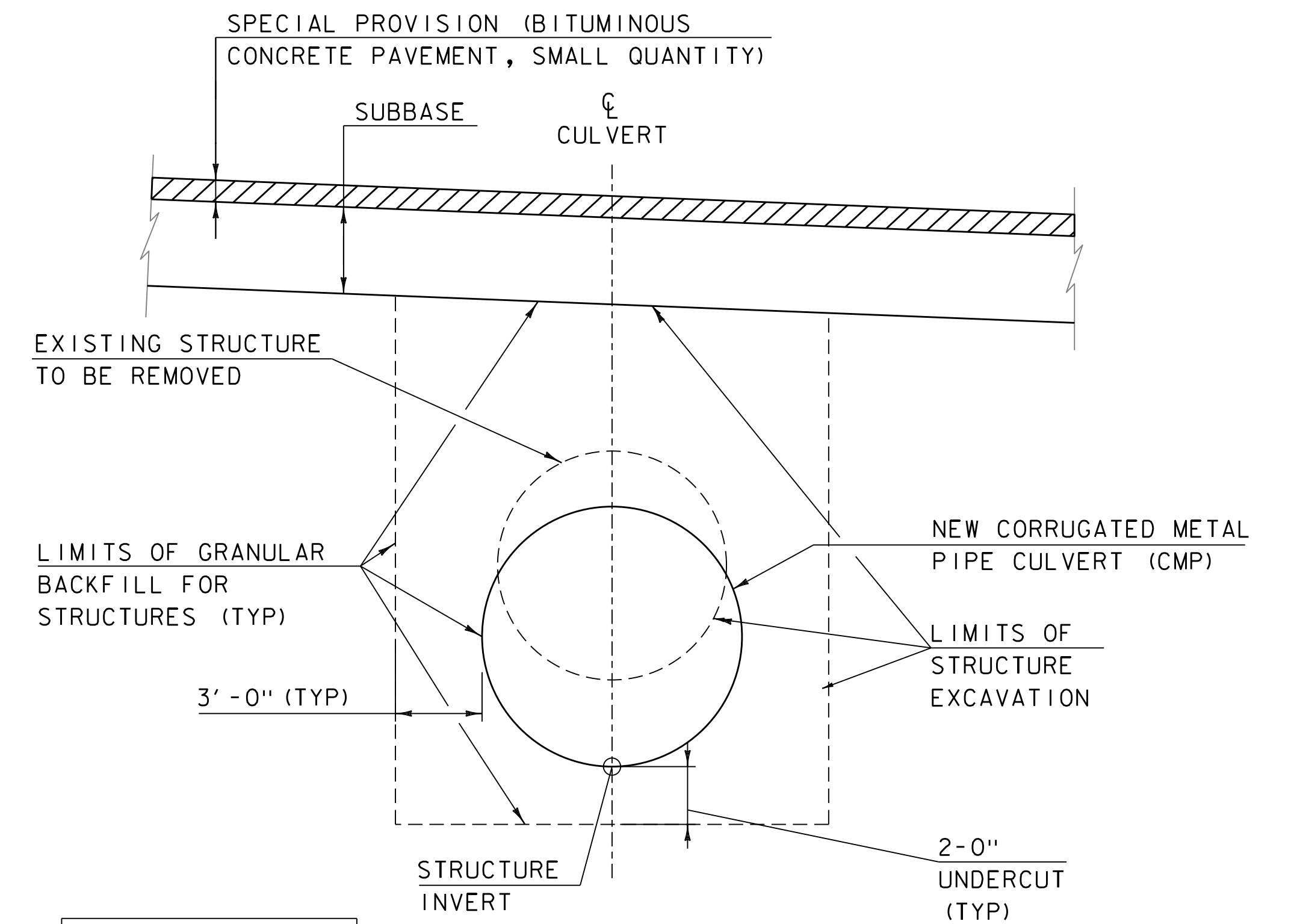
PLOT DATE: 20-JAN-2021
DRAWN BY: M.LONGSTREET
CHECKED BY: C. MOONEY
SHEET 4 OF 17



RIPRAP CUTOFF WALL DETAIL
(NOT TO SCALE)



SECTION "A-A"
(NOT TO SCALE)



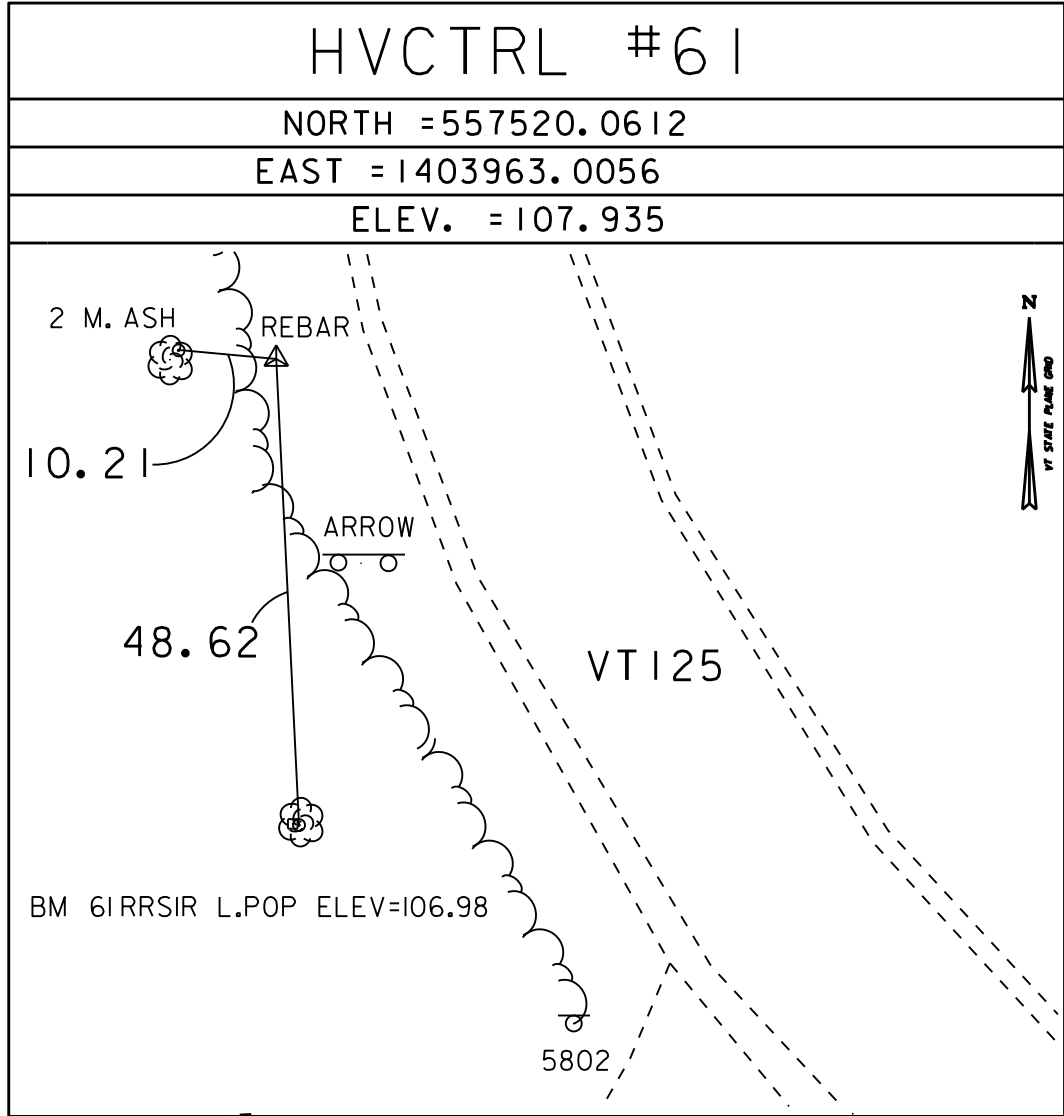
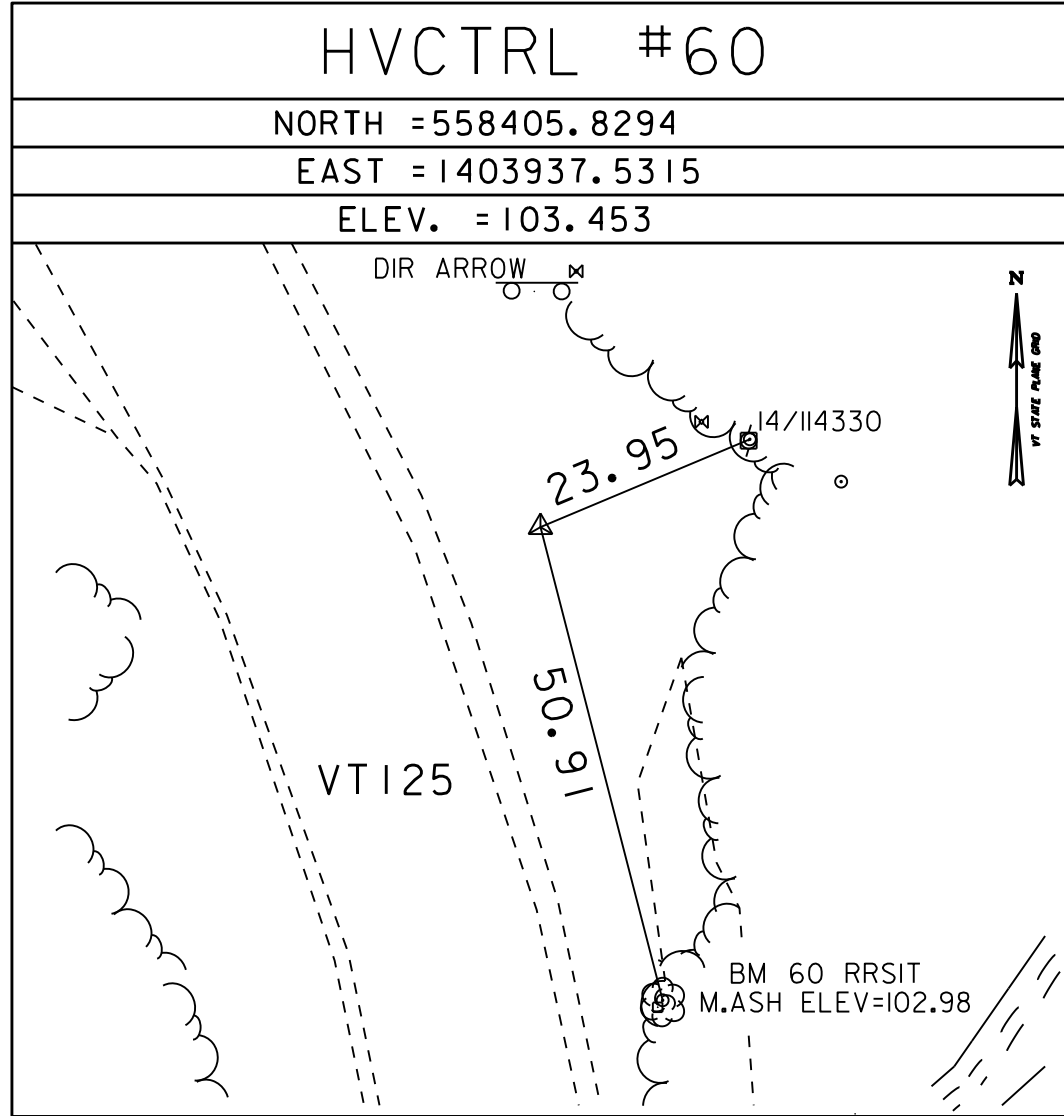
| PROPOSED STRUCTURE | |
|--------------------|--------|
| DIAMETER | 9'-0" |
| LENGTH | 51'-0" |

CULVERT TYPICAL SECTION
NOT TO SCALE

CONTROL POINTS

CONTROL POINTS 6 AND 7 RECOVERED FROM PROJECT 11X507

TRAVERSE TIES



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

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

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

ALIGNMENT TIES

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

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

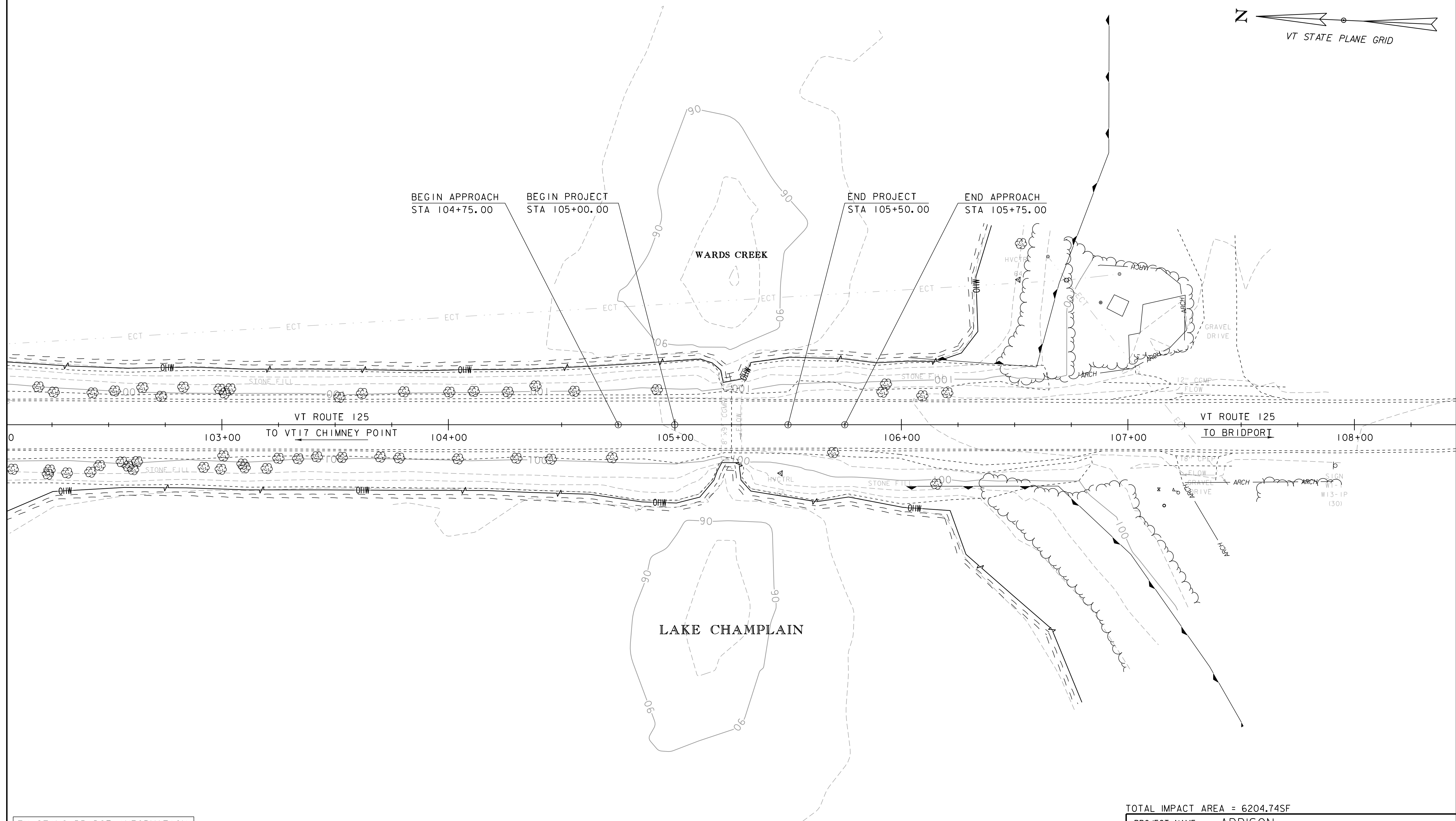
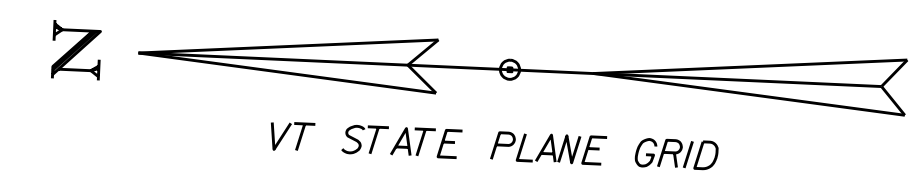
| |
|---------|
| |
| NORTH = |
| EAST = |
| ELEV. = |

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

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

| | |
|------------|--------------|
| DATUM | |
| VERTICAL | NAVD 88 |
| HORIZONTAL | NAD 83(2007) |
| ADJUSTMENT | COMPASS |

| | |
|----------------------------|------------------------|
| PROJECT NAME: ADDISON | |
| PROJECT NUMBER: BF 0172(9) | |
| FILE NAME: X15B092T1.DGN | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: J.FITCH | DRAWN BY: H.MCGOWAN |
| DESIGNED BY: VTRANS | CHECKED BY: P.BEYOR |
| TIE SHEET | SHEET 7 OF 17 |



EXISTING BRIDGE INFORMATION
8' X 9' CGMPP, 33' LONG
BUILT 1936
123 SQFT THROUGH CULVERT
2' AVERAGE COVER OVER PIPE

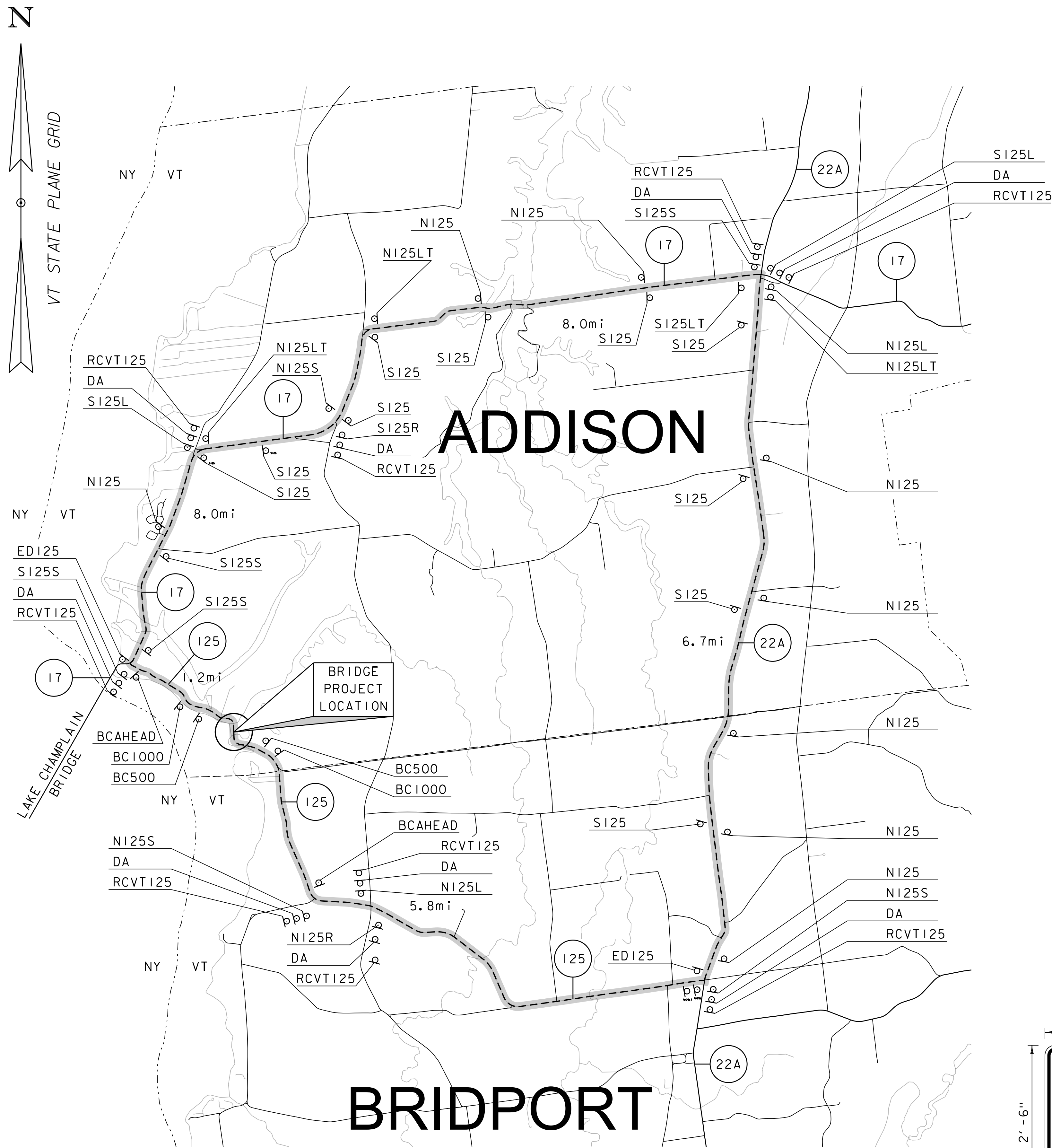
SCALE 1" = 20' - 0"
20 0 20

TOTAL IMPACT AREA = 6204.74SF

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

FILE NAME: s15b092bdrero.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
RESOURCE LAYOUT

PLOT DATE: 20-JAN-2021
DRAWN BY: M.LONGSTREET
CHECKED BY: C. MOONEY
SHEET 8 OF 17



ROAD CLOSED
XX MILES AHEAD
VT 125
RCVT125

BRIDGE CLOSED
XX MILES AHEAD
NO THROUGH TRAFFIC
BCAHEAD
BCAHEAD

END
DETOUR
VERMONT
125
ED125

DETOUR
AHEAD
DA

BRIDGE
CLOSED
500 FT
BC500

BRIDGE
CLOSED
1000 FT
BC1000

TO
VERMONT
22A
←
T22AL

TO
VERMONT
22A
↑
T22AS

TO
VERMONT
22A
→
T22AR

DETOUR
NORTH
VERMONT
125
↙
NI25LT

DETOUR
NORTH
VERMONT
125
←
NI25L

DETOUR
NORTH
VERMONT
125
↑
NI25S

DETOUR
NORTH
VERMONT
125
→
NI25R

DETOUR
NORTH
VERMONT
125
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NI25RT

DETOUR
NORTH
VERMONT
125
NI25

DETOUR
SOUTH
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SOUTH
VERMONT
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SI25S

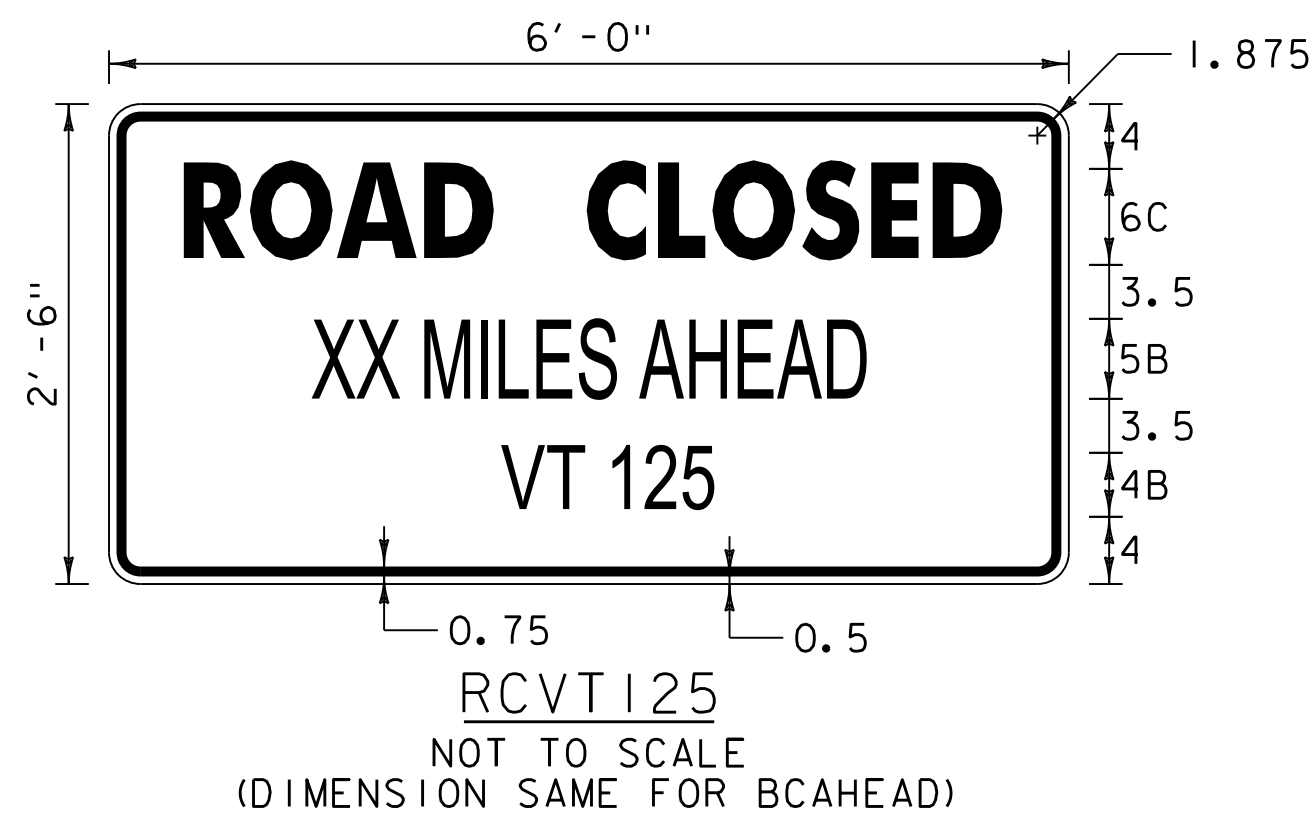
DETOUR
SOUTH
VERMONT
125
→
SI25R

DETOUR
SOUTH
VERMONT
125
↗
SI25RT

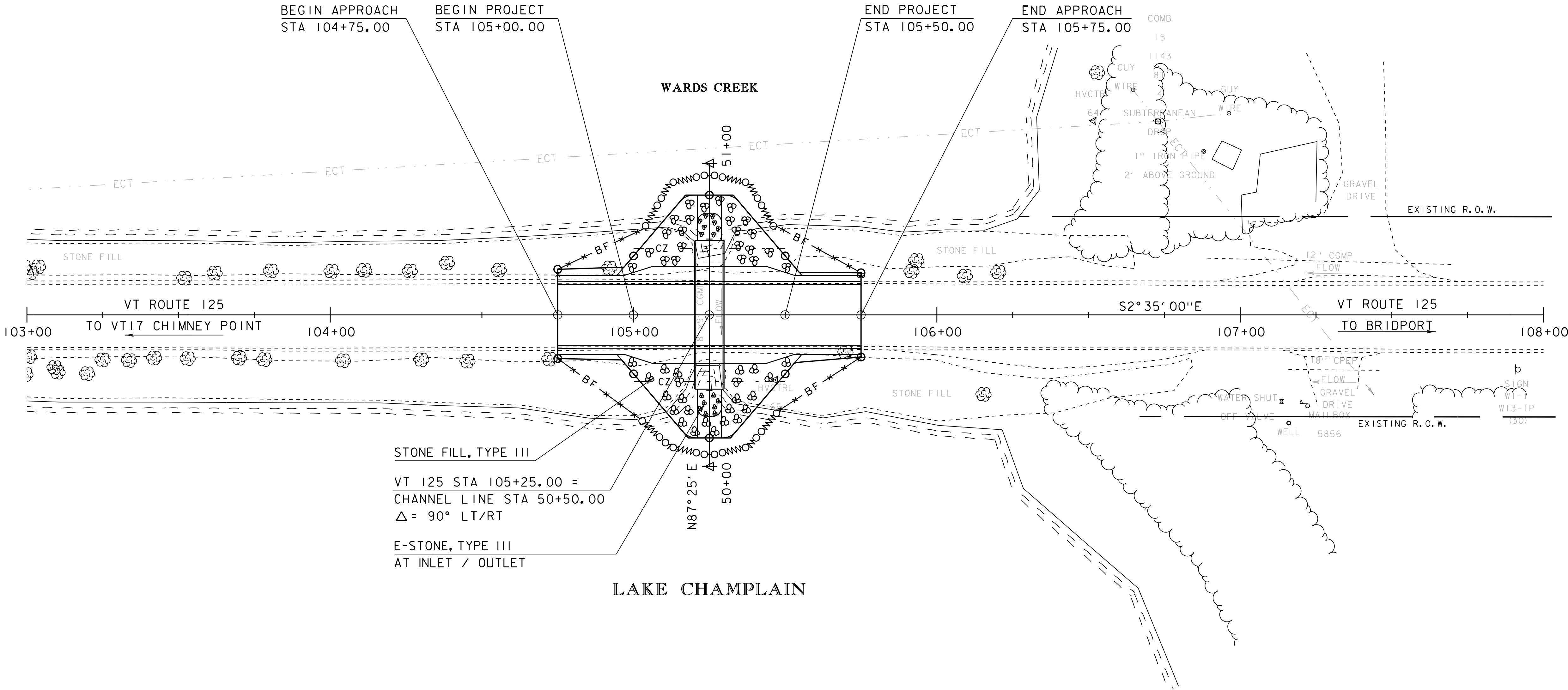
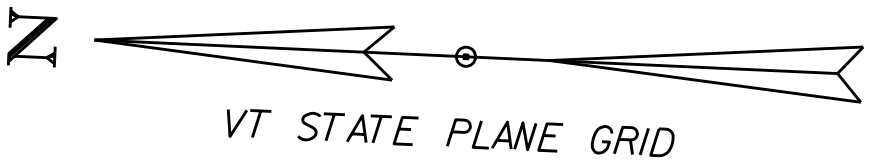
DETOUR
SOUTH
VERMONT
125
SI25

- NOTES:**
1. THE NUMBER OF TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL ROADWAY CLOSURE REQUIREMENTS.
 2. MULTI SIGN LOCATION SPACING SHALL BE 500 FEET UNLESS OTHERWISE DIMENTIONED OR NOTED ON THE MAP SHOWN HERE. SINGLE SIGNS LOACATED AS SHOWN
 3. SEE CONTRACT DOCUMENTS FOR CLOSURE DATES.

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)
FILE NAME: s15b092detour.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
DETOUR MAP
PLOT DATE: 20-JAN-2021
DRAWN BY: M.LONGSTREET
CHECKED BY: C. MOONEY
SHEET 9 OF 17



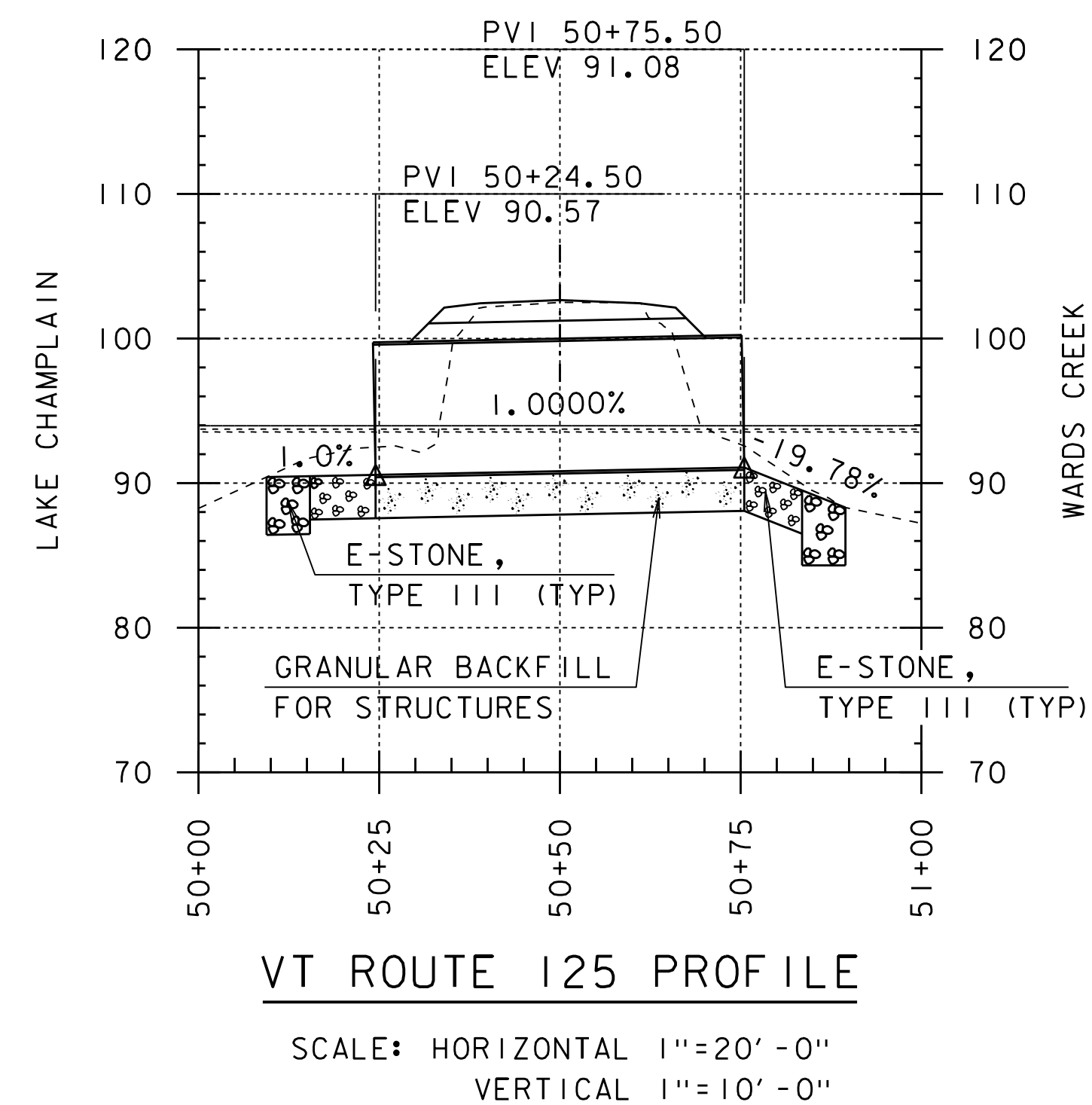
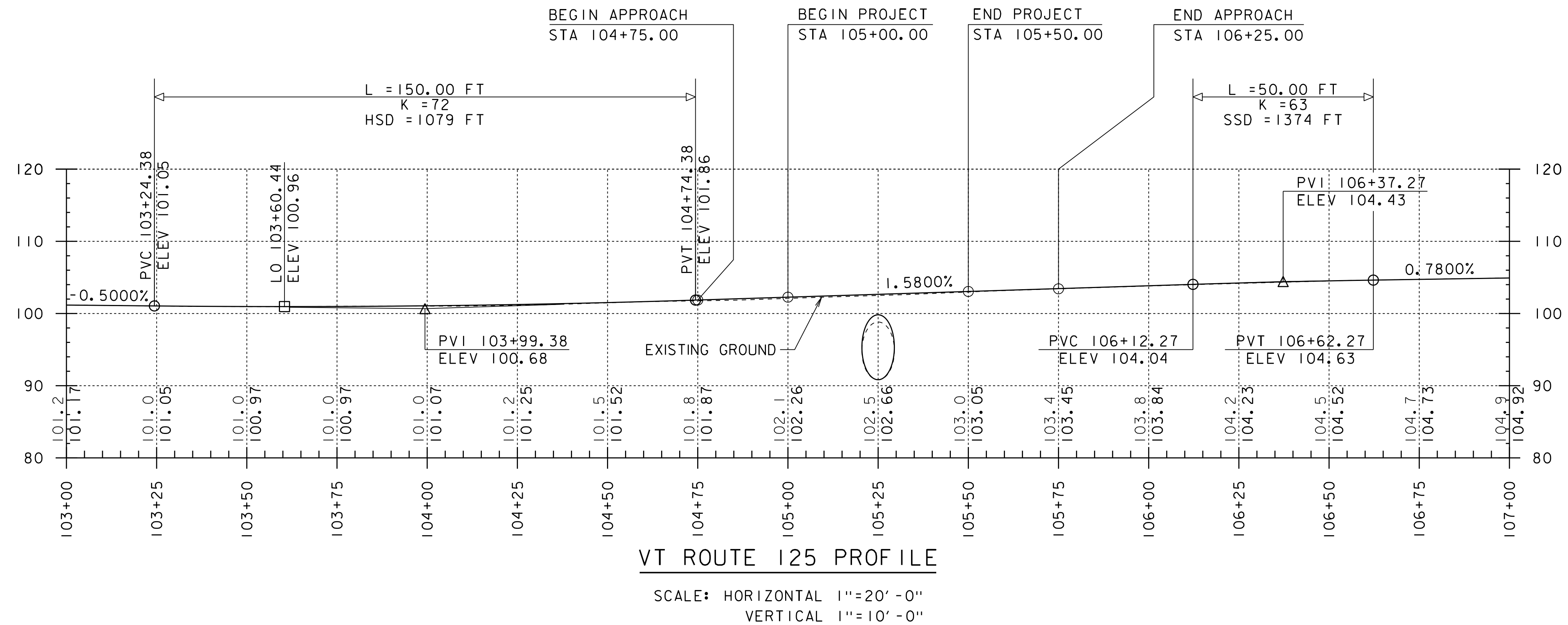
4" YELLOW LINE (DOUBLE) CL
STA 104+75.0- STA 105+75.0



EXISTING BRIDGE INFORMATION
8' X 9' CGMPP, 33' LONG
BUILT 1936
123 SQFT THROUGH CULVERT
2' AVERAGE COVER OVER PIPE

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

| | |
|----------------------------|------------------------|
| PROJECT NAME: ADDISON | |
| PROJECT NUMBER: BF 0172(9) | |
| FILE NAME: s15b092bdr.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| LAYOUT SHEET | SHEET 10 OF 17 |

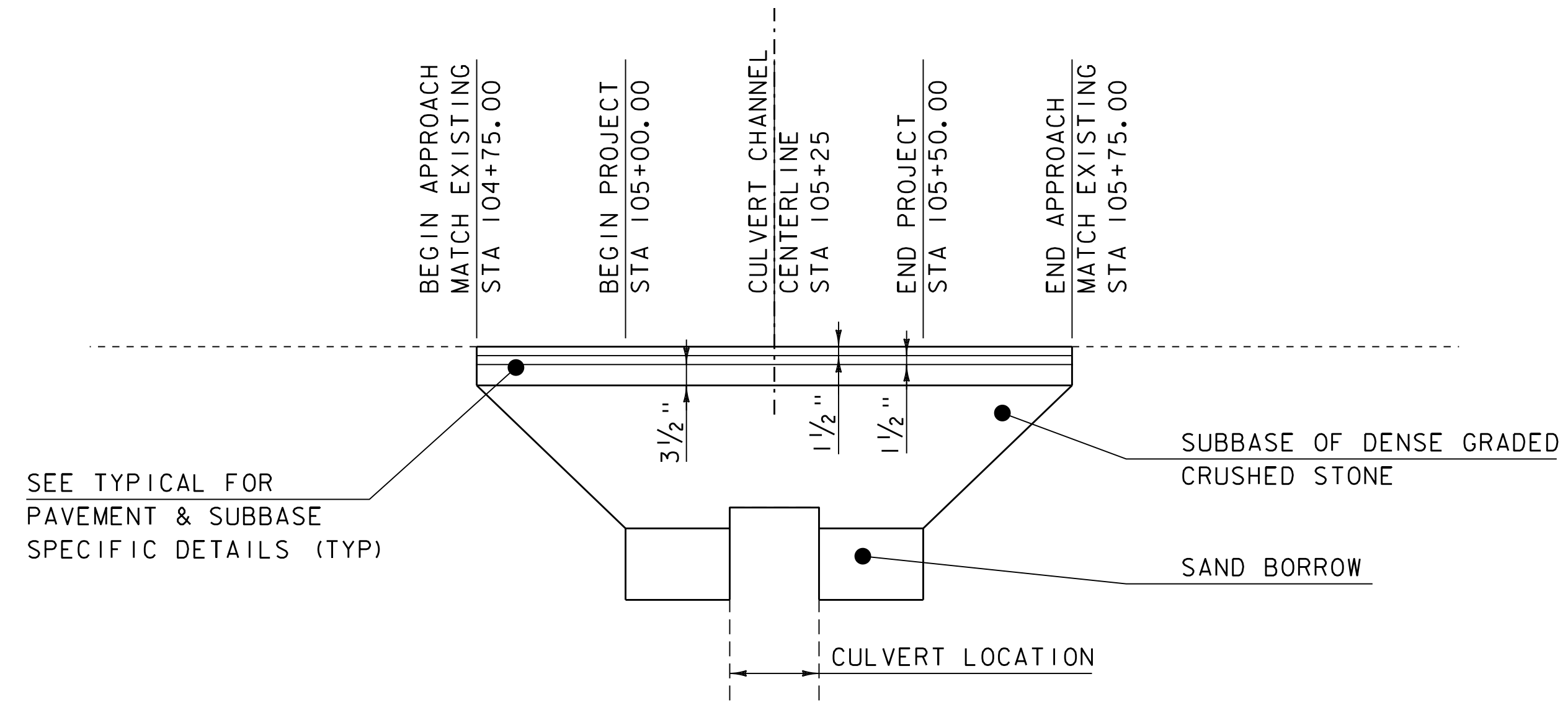


NOTE:
GRADES SHOWN TO THE NEAREST
TENTH ARE EXISTING GROUND ALONG CL
GRADES SHOWN TO THE NEAREST
HUNDREDTH ARE FINISH GRADE ALONG CL

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

FILE NAME: s15b092pro.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
PROFILE SHEET

PLOT DATE: 20-JAN-2021
DRAWN BY: M. LONGSTREET
CHECKED BY: C. MOONEY
SHEET 11 OF 17



VT 125 MATERIAL TRANSITION DETAIL

HORIZONTAL SCALE: 1" = 20'-0"
NO VERTICAL SCALE

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

| | |
|----------------------------|------------------------|
| FILE NAME: s15b092pro.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| MATERIAL TRANSITION DETAIL | SHEET 12 OF 17 |

SOIL CLASSIFICATION

| AASHTO | |
|--------|-----------------------------------|
| A1 | Gravel and Sand |
| A3 | Fine Sand |
| A2 | Silty or Clayey Gravel and Sand |
| A4 | Silty Soil - Low Compressibility |
| A5 | Silty Soil - Highly Compressible |
| A6 | Clayey Soil - Low Compressibility |
| A7 | Clayey Soil - Highly Compressible |

ROCK QUALITY DESIGNATION

| R.Q.D. (%) | ROCK DESCRIPTION |
|------------|------------------|
| <25 | Very Poor |
| 25 to 50 | Poor |
| 51 to 75 | Fair |
| 76 to 90 | Good |
| >90 | Excellent |

SHEAR STRENGTH

| UNDRAINED SHEAR STRENGTH IN P.S.F. | CONSISTENCY |
|------------------------------------|-------------|
| <250 | Very Soft |
| 250-500 | Soft |
| 500-1000 | Med. Stiff |
| 1000-2000 | Stiff |
| 2000-4000 | Very Stiff |
| >4000 | Hard |

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

| DENSITY (GRANULAR SOILS) | | CONSISTENCY (COHESIVE SOILS) | |
|--------------------------|------------------|------------------------------|------------------|
| N | DESCRIPTIVE TERM | N | DESCRIPTIVE TERM |
| <5 | Very Loose | <2 | Very Soft |
| 5-10 | Loose | 2-4 | Soft |
| 11-24 | Med. Dense | 5-8 | Med. Stiff |
| 25-50 | Dense | 9-15 | Stiff |
| >50 | Very Dense | 16-30 | Very Stiff |
| | | 31-60 | Hard |
| | | >60 | Very Hard |

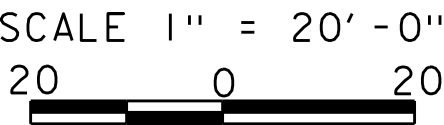
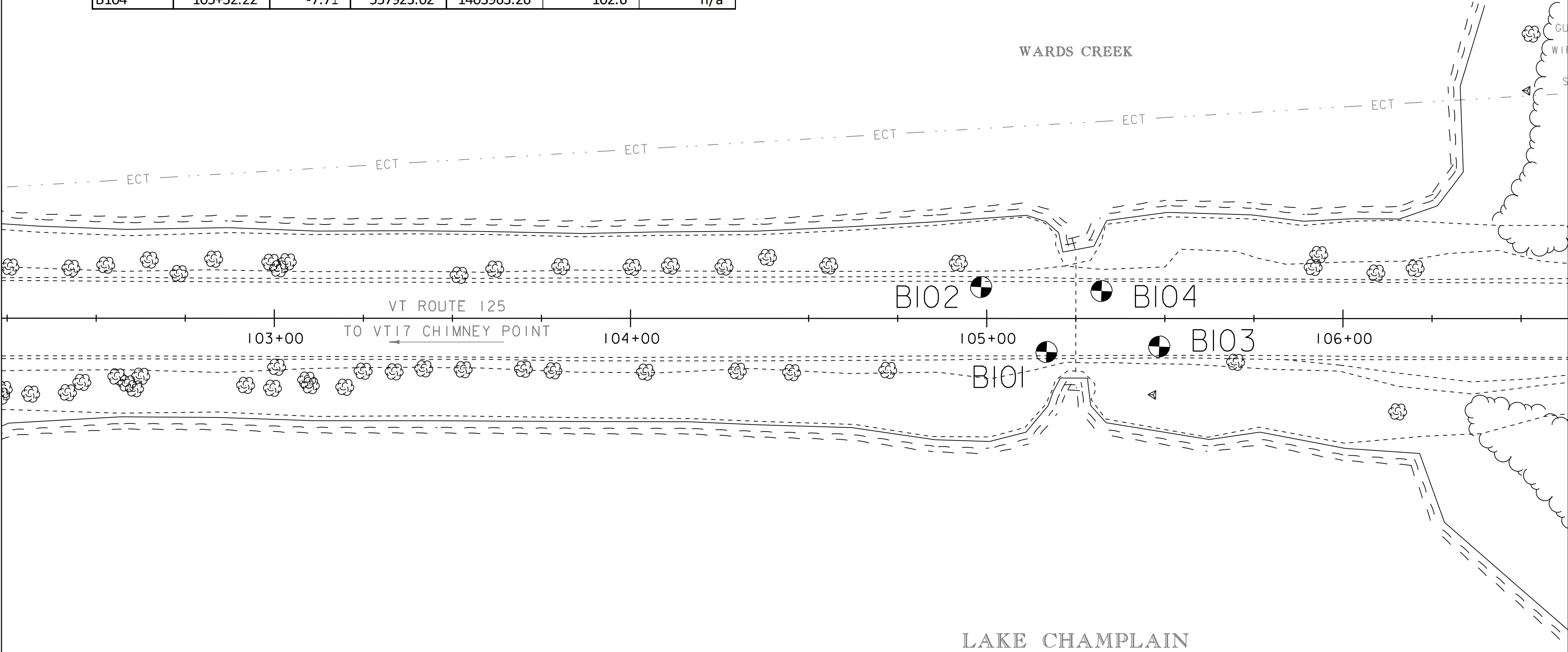
COMMONLY USED SYMBOLS

| | |
|-------|--|
| ▼ | Water Elevation |
| ⊕ | Standard Penetration Boring |
| ⊗ | Auger Boring |
| ⊙ | Rod Sounding |
| S | Sample |
| N | Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30" |
| VS | Field Vane Shear Test |
| US | Undisturbed Soil Sample |
| B | Blast |
| DC | Diamond Core |
| MD | Mud Drill |
| WA | Wash Ahead |
| HSA | Hollow Stem Auger |
| AX | Core Size 1 1/8" |
| BX | Core Size 1 5/8" |
| NX | Core Size 2 1/8" |
| M | Double Tube Core Barrel Used |
| LL | Liquid Limit |
| PL | Plastic Limit |
| PI | Plasticity Index |
| NP | Non Plastic |
| w | Moisture Content (Dry Wgt. Basis) |
| D | Dry |
| M | Moist |
| MTW | Moist To Wet |
| W | Wet |
| Sat | Saturated |
| Bo | Boulder |
| Gr | Gravel |
| Sa | Sand |
| Si | Silt |
| Cl | Clay |
| HP | Hardpan |
| Le | Ledge |
| NLTD | No Ledge To Depth |
| CNPF | Can Not Penetrate Further |
| TLOB | Top of Ledge Or Boulder |
| NR | No Recovery |
| Rec. | Recovery |
| %Rec. | Percent Recovery |
| ROD | Rock Quality Designation |
| CBR | California Bearing Ratio |
| < | Less Than |
| > | Greater Than |
| R | Refusal (N > 100) |
| VTSPG | NAD83 - See Note 7 |

COLOR

| | | | |
|------|--------|------|--------------|
| blk | Black | pnk | Pink |
| bl | Blue | pu | Purple |
| brn | Brown | rd | Red |
| dk | Dark | tn | Tan |
| gr'y | Gray | wh | White |
| gn | Green | yel | Yellow |
| lt | Light | mltc | Multicolored |
| or | Orange | | |

| BORING CHART | | | | | | |
|--------------|-----------|--------|--------------------------|------------|-----------|---------|
| Offset | Baseline | Offset | ----- Offset Point ----- | | | TOP OF |
| Point | Station | | Northing | Easting | Elevation | BEDROCK |
| B101 | 105+16.78 | 9.4 | 557938.27 | 1403945.47 | 102.1 | n/a |
| B102 | 104+98.41 | -8.8 | 557957.44 | 1403962.82 | 102.1 | n/a |
| B103 | 105+48.42 | 7.89 | 557906.73 | 1403948.41 | 102.8 | n/a |
| B104 | 105+32.22 | -7.71 | 557923.62 | 1403963.26 | 102.6 | n/a |



GENERAL NOTES

- The subsurface explorations shown herein were made between 3/30/2017 and 4/10/2017 by the Agency.
- Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
- Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
- 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.
- Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
- Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.
- Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.


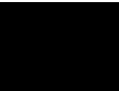


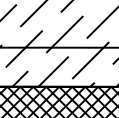



DEFINITIONS (AASHTO)

- BEDROCK (LEDGE)** - Rock in its native location of indefinite thickness.
- BOULDER** - A rock fragment with an average dimension > 12 inches.
- COBBLE** - Rock fragments with an average dimension between 3 and 12 inches.
- GRAVEL** - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).
- SAND** - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).
- SILT** - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.
- CLAY** - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.
- VARVED** - Alternate layers of silt and clay.
- HARDPAN** - Extremely dense soil, cemented layer, not softened when wet.
- MUCK** - Soft organic soil (containing > 10% organic material).
- MOISTURE CONTENT** - Weight of water divided by dry weight of soil.
- FLOWING SAND** - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.
- STRIKE** - Angle from magnetic north to line of intersection of bed with a horizontal plane.
- DIP** - Inclination of bed with a horizontal plane.

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

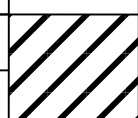




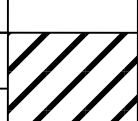
FILE NAME: s15b092bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
BORING INFORMATION SHEET

PLOT DATE: 20-JAN-2021
DRAWN BY: M.LONGSTREET
CHECKED BY: C. MOONEY
SHEET 13 OF 17

| | | | | | | | | | | | | | |
|---|---|--|--|--|--|---------------------|--------------------|--------------------------|------------|-----------------------------|---------|------|------|
|  | | STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY | | | BORING LOG | | | Boring No.: B-101 | | | | | |
| | | | | | Addison BF 0172(9) VT-125 Br. #1 | | | Page No.: 1 of 2 | | | | | |
| | | | | | | | | Pin No.: 15b092 | | | | | |
| | | | | | | | | Checked By: MLM | | | | | |
| Boring Crew: <u>Garrow, Judkins, Emerson</u> | | | | | Casing | | Sampler | Groundwater Observations | | | | | |
| Date Started: <u>3/30/17</u> Date Finished: <u>4/03/17</u> | | | | | Type: | <u>WB</u> | <u>SS</u> | Date | Depth (ft) | Notes | | | |
| VTSPG NAD83: <u>N 557938.27 ft E 1403945.47 ft</u> | | | | | I.D.: | <u>4 in</u> | <u>1.5 in</u> | | | | | | |
| Station: <u>65+18</u> Offset: <u>9.40</u> | | | | | Hammer Wt: | <u>N.A.</u> | <u>140 lb.</u> | <u>03/30/17</u> | <u>8.0</u> | <u>W.T. after drilling</u> | | | |
| Ground Elevation: <u>102.05 ft</u> | | | | | Hammer Fall: | <u>N.A.</u> | <u>30 in.</u> | <u>04/03/17</u> | <u>5.7</u> | <u>W.T. before drilling</u> | | | |
| | | | | | Hammer/Rod Type: | <u>Auto/AWJ</u> | | | | | | | |
| | | | | | Rig: | <u>CME 45C SKID</u> | <u>CE = 1.42</u> | | | | | | |
| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | | | | | Blows/gf (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
| 5 |  | Asphalt pavement, 0.0 ft - 1.7 ft | | | | | | | | | | | |
| |  | A-1-a, Gr, blk, Moist, Rec. = 0.7 ft, Lab Note: Broken rock was within sample | | | | | 7-6-4-8 (10) | 1.3 | 88.8 | 8.4 | 2.8 | | |
| | | Field Note:, NXDC, cleaned out casing, cobbles | | | | | | | | | | | |
| | | A-1-a, SaGr, brn, Moist, Rec. = 0.5 ft | | | | | 2-3-3-4 (6) | 9.2 | 58.1 | 34.0 | 7.9 | | |
| 10 |  | A-4, ClSi, gry, Moist, Rec. = 1.4 ft | | | | | 1-1-2-2 (3) | 25.8 | 2.8 | 17.1 | 80.1 | 25 | 9 |
| | | Field Note:, NXDC, cleaned out casing | | | | | | | | | | | |
| | | Field Note:, No Recovery | | | | | | | | | | | |
| | | Field Note:, NXDC, cleaned out casing | | | | | 2-2-2-2 (4) | | | | | | |
| 15 |  | Field Note:, Pushed 3" x 30" Shelby Tube, Rec. = 2.0 ft | | | | | | | | | | | |
| | | Field Note:, Pushed 3" x 30" Shelby Tube, Rec. = 1.6 ft | | | | | | | | | | | |
| | | A-6, SiCl, gry-brn, Moist, Rec. = 1.5 ft, Lab Note: Sample contained trace (4.3%) organic material (AASHTO T-267) | | | | | (WH) | 56.2 | 31.7 | 11.9 | 56.4 | 39 | 18 |
| | | A-4, GrSaSi, gry-brn, Moist, Rec. = 1.5 ft, Lab Note: Sample contained little (15.9%) organic material (AASHTO T-267), Plant material / sticks, broken concrete pieces, and a small amount of clay were within sample. Sample tested non-plastic | | | | | 2-3-4-1 (7) | 114.9 | 24.9 | 34.5 | 40.6 | | |
| 20 |  | A-8, SiGrSa, gry-brn, MTW, Rec. = 1.6 ft, Lab Note: Decomposing wood and wood fibers were within sample. Sample contained 20.6% organic material, AASHTO T-267 dictates soil type A-8 | | | | | WH-1-1 (1) | 161.4 | 27.6 | 48.7 | 23.7 | | |
| | | A-2-4, GrSiSa, brn, Moist, Rec. = 1.6 ft, Lab Note: Sample contained little (13.1%) organic material (AASHTO T-267) | | | | | (WH) | 117.4 | 24.1 | 41.4 | 34.5 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 25 |  | A-4, SaSi, gry-brn, Moist, Rec. = 2.0 ft, Lab Note: Wood, wood fibers, and a small amount of clay were within sample. Sample tested non-plastic | | | | | WH-1 (WH) | 25.6 | 0.1 | 20.3 | 79.6 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| 30 |  | A-6, SaSiCl, gry, Moist, Rec. = 2.0 ft, Lab Note: Similar to 35-37 ft. sample | | | | | 3-4-4-4 (8) | 24.8 | 0.1 | 21.5 | 78.4 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made. | | | | | | | | | | | | | |

BORING LOG 2 ADDISON BF0172(9).GPJ VERMONT AOT.GDT 5/6/17

BORING LOG 2 ADDISON BF0172(9).GPJ VERMONT AOT.GDT 5/6/17


| | | | | | | | | | | | | |
|---|---|---|--|---------------------|------------------|--------------------------|--------------------|----------------------|--------|---------|------|------|
| <div><div><div><div><div><div></div><div>VTrans</div></div></div><div><div><div>Working to Get You There</div><div>Vermont Agency of Transportation</div></div></div></div></div><div>STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY</div></div> | | | BORING LOG | | | Boring No.: B-101 | | | | | | |
| | | | Addison BF 0172(9) VT-125 Br. #1 | | | Page No.: 2 of 2 | | | | | | |
| | | | | | | Pin No.: 15b092 | | | | | | |
| | | | | | | Checked By: MLM | | | | | | |
| Boring Crew: <u>Garrow, Judkins, Emerson</u> | | | Casing | | Sampler | Groundwater Observations | | | | | | |
| Date Started: <u>3/30/17</u> Date Finished: <u>4/03/17</u> | | | Type: | <u>WB</u> | <u>SS</u> | Date | Depth (ft) | Notes | | | | |
| VTSPG NAD83: <u>N 557938.27 ft E 1403945.47 ft</u> | | | I.D.: | <u>4 in</u> | <u>1.5 in</u> | | | | | | | |
| Station: <u>65+18</u> Offset: <u>9.40</u> | | | Hammer Wt: | <u>N.A.</u> | <u>140 lb.</u> | 03/30/17 | 8.0 | W.T. after drilling | | | | |
| Ground Elevation: <u>102.05 ft</u> | | | Hammer Fall: | <u>N.A.</u> | <u>30 in.</u> | 04/03/17 | 5.7 | W.T. before drilling | | | | |
| | | | Hammer/Rod Type: | <u>Auto/AWJ</u> | | | | | | | | |
| | | | Rig: | <u>CME 45C SKID</u> | <u>CE = 1.42</u> | | | | | | | |
| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | | | | Blows/gf (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
| 35 |  | A-6, SiCl, gry, Moist, Rec. = 2.0 ft | | | | 1-1-2-2 (3) | 32.2 | 0.1 | 4.3 | 95.6 | 33 | 14 |
| 40 |  | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft, Lab Note: Similar to 50-52 ft. sample | | | | (WH) | 68.8 | 0.1 | 0.6 | 99.3 | | |
| 45 |  | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft, Lab Note: Similar to 50-52 ft. sample | | | | (WH) | 66.7 | 0.1 | 0.5 | 99.4 | | |
| 50 |  | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | | | | (WH) | 58.5 | 0.1 | 0.6 | 99.3 | 51 | 26 |
| 55 |  | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | | | | WR-WH (WR) | 46.6 | | 0.5 | 99.5 | 43 | 20 |
| 60 |  | A-6, SiCl, gry, Moist, Rec. = 2.0 ft | | | | (WR) | 47.0 | | 0.4 | 99.6 | 40 | 17 |
| Hole stopped @ 62.0 ft | | | | | | | | | | | | |
| 65 | | Remarks: Hole collapsed at 2.3 feet. | | | | | | | | | | |
| Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made. | | | | | | | | | | | | |

BORING LOG 2 ADDISON BF0172(9).GPJ VERMONT AOT.GDT 5/6/17

PROJECT NAME: ADDISON
PROJECT NUMBER: BF 0172(9)

FILE NAME: s15b092bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
BORING LOGS 1

PLOT DATE: 20-JAN-2021
DRAWN BY: M.LONGSTREET
CHECKED BY: C. MOONEY
SHEET 14 OF 17

| | | | | | | | | | | | | |
|---|------------|--|--|--|--|---|--------------------|---------------------|--------|---------|------|------|
|  | | STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY | | BORING LOG | | Boring No.: B-102 | | | | | | |
| | | | | Addison BF 0172(9) VT-125 Br. #1 | | Page No.: 1 of 1 Pin No.: 15b092 Checked By: MLM | | | | | | |
| Boring Crew: <u>Emerson, Judkins, Olden</u> Date Started: <u>4/10/17</u> Date Finished: <u>4/10/17</u> VTSPG NAD83: <u>N 557957.44 ft E 1403962.82 ft</u> Station: <u>65+00</u> Offset: <u>-8.80</u> Ground Elevation: <u>102.09 ft</u> | | | | Type: <u>WB</u> Sampler <u>SS</u> I.D.: <u>4 in</u> <u>1.5 in</u> Hammer Wt: <u>N.A.</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 in.</u> Hammer/Rod Type: <u>Auto/AWJ</u> Rig: <u>CME 45C SKID</u> <u>CE = 1.42</u> | | Groundwater Observations | | | | | | |
| | | | | | | Date | Depth (ft) | Notes | | | | |
| | | | | | | 04/10/17 | 5.4 | W.T. after drilling | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Depth (ft) | Strata (1) | CLASSIFICATION OF MATERIALS (Description) | | | | Blow(s) (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
| | | Asphalt pavement, 0.0 ft - 1.37 ft | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | A-1-b, GrSa, brn, Dry, Rec. = 0.6 ft | | | | 8-11-12-10 | 6.6 | 27.3 | 55.0 | 17.7 | | |
| | | Field Note: NXDC, cleanout, cobbles | | | | (23) | | | | | | |
| 5 | | A-4, SaGrSi, brn, Moist, Rec. = 0.7 ft | | | | 3-1-3-7 | 20.3 | 25.2 | 21.2 | 53.6 | | |
| | | | | | | (4) | | | | | | |
| | | Field Note: NXDC, cleanout, cobbles | | | | 1-2-1-2 | | | | | | |
| | | Field Note: No recovery, NXDC, cleanout, cobbles | | | | (3) | | | | | | |
| | | A-4, GrSi, gry, Wet, Rec. = 0.4 ft, Lab Note: Sample tested non-plastic | | | | WH-1-3 | 25.3 | 28.0 | 20.0 | 52.0 | | |
| 10 | | Field Note: NXDC, cleanout, cobbles | | | | (1) | | | | | | |
| | | Field Note: No recovery | | | | 2-3-5-3 | | | | | | |
| | | | | | | (8) | | | | | | |
| | | Field Note: NXDC, cleanout, cobbles | | | | | | | | | | |
| 15 | | A-2-4, SiGr, gry, Wet, Rec. = 0.3 ft, Lab Note: Broken rock was within sample. Sample tested non-plastic | | | | 9-6-2-4 | 34.9 | 54.7 | 16.6 | 28.7 | | |
| | | | | | | (8) | | | | | | |
| | | Field Note: NXDC, cleanout, cobbles | | | | | | | | | | |
| 20 | | A-1-a, SaGr, Dk/brn, Wet, Rec. = 0.7 ft, Lab Note: A lot of decomposing wood and wood fibers were within sample. Insufficient sample size for organics testing | | | | 6-1-3-3 | 207.0 | 51.9 | 41.0 | 7.1 | | |
| | | | | | | (4) | | | | | | |
| | | Field Note: NXDC, cleanout | | | | | | | | | | |
| 25 | | A-8, GrSa, Dk/brn, Moist, Rec. = 1.8 ft | | | | 1-1-1-1 | 132.3 | 34.3 | 53.0 | 12.7 | | |
| | | | | | | (2) | | | | | | |
| | | | | | | | | | | | | |
| 30 | | A-6, SiCl, gry, Moist, Rec. = 1.9 ft, Lab Note: A small amount of decomposing wood and wood fibers were within sample | | | | WH (WH) | 47.5 | 0.5 | 21.7 | 77.8 | 36 | 13 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| 35 | | A-4, CiSi, gry, Wet, Rec. = 2.0 ft | | | | 1-1-2-2 | 38.8 | 0.3 | 19.8 | 79.9 | 27 | 10 |
| | | | | | | (3) | | | | | | |
| | | | | | | | | | | | | |
| 40 | | A-6, SiCl, gry, Moist, Rec. = 2.0 ft | | | | WH-2-2 | 30.0 | | 2.1 | 97.9 | 33 | 14 |
| | | | | | | (2) | | | | | | |
| Hole stopped @ 42.0 ft | | | | | | | | | | | | |
| 45 | | Remarks: Hole collapsed at 17.1 feet. | | | | | | | | | | |
| Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made. | | | | | | | | | | | | |

VTTrans

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Vermont Agency of Transportation

STATE OF VERMONT
OFFICE OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Addison
BF 0172(9)
VT-125 Br. #1

Boring No.: B-103

Page No.: 1 of 1

Pin No.: 15b092

Checked By: MLM

Boring Crew: Garrow, Judkins, Olden

Date Started: 4/03/17 Date Finished: 4/03/17

VTSPG NAD83: N 557906.73 ft E 1403948.41 ft

Station: 65+50 Offset: 7.90

Ground Elevation: 102.76 ft

Type: WB SS

I.D.: 4 in 1.5 in

Hammer Wt: N.A. 140 lb.

Hammer Fall: N.A. 30 in.

Hammer/Rod Type: Auto/AWJ

Rig: CME 45C SKID CE = 1.42

Groundwater Observations

Date

Depth (ft)

Notes


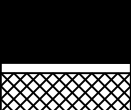
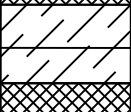

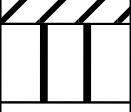

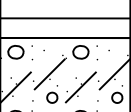
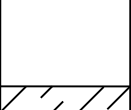
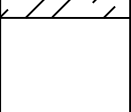



04/03/17

5.6

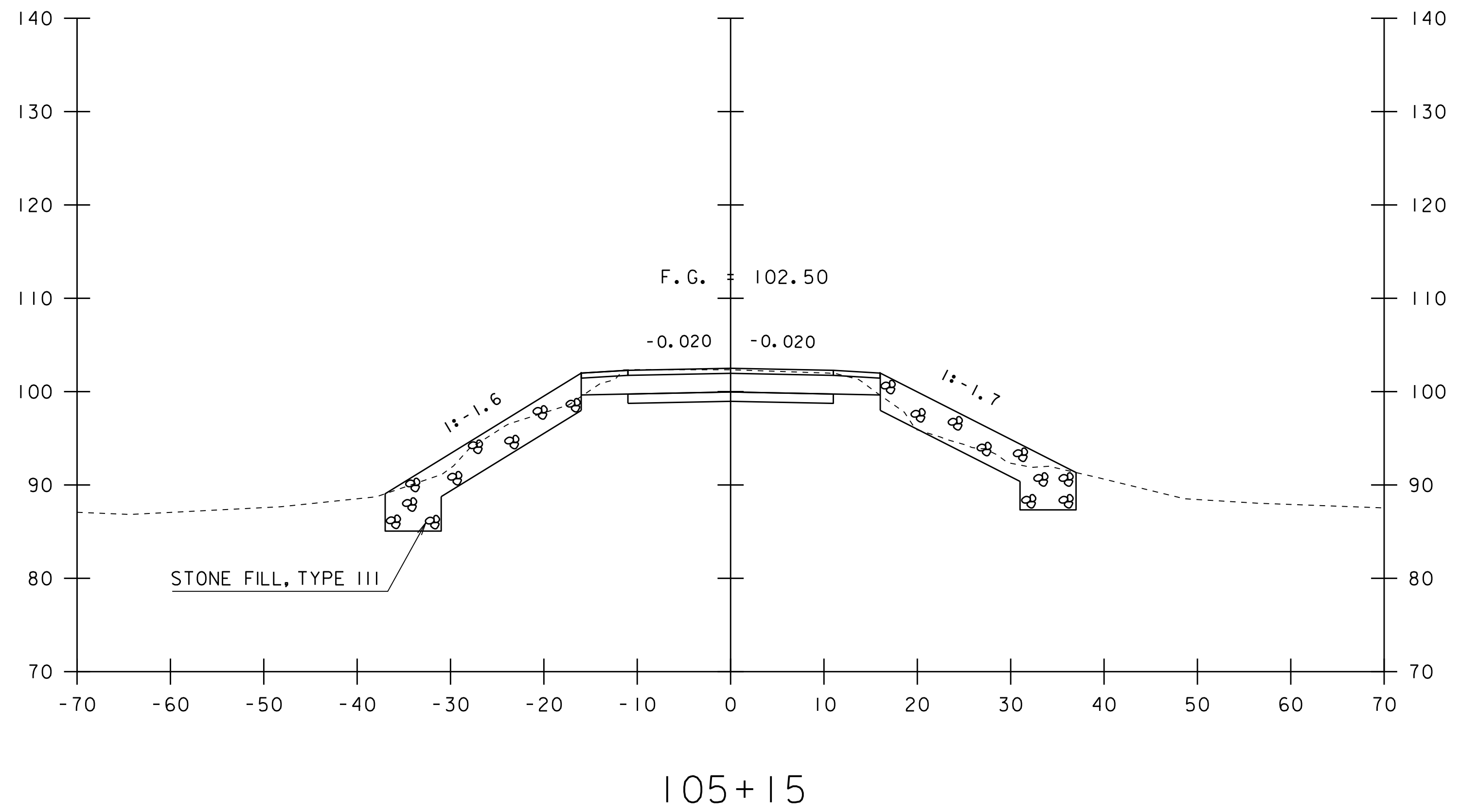
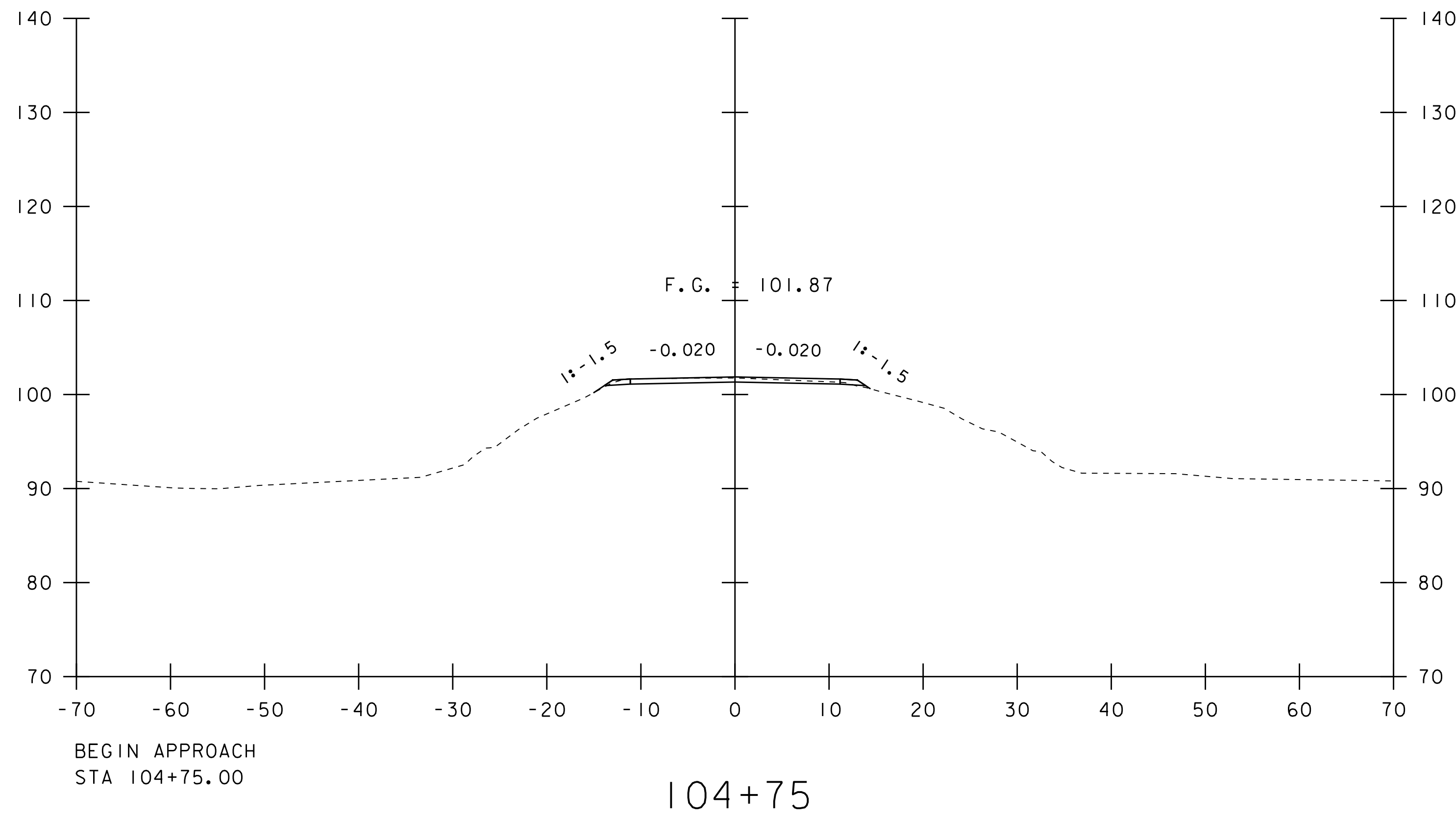
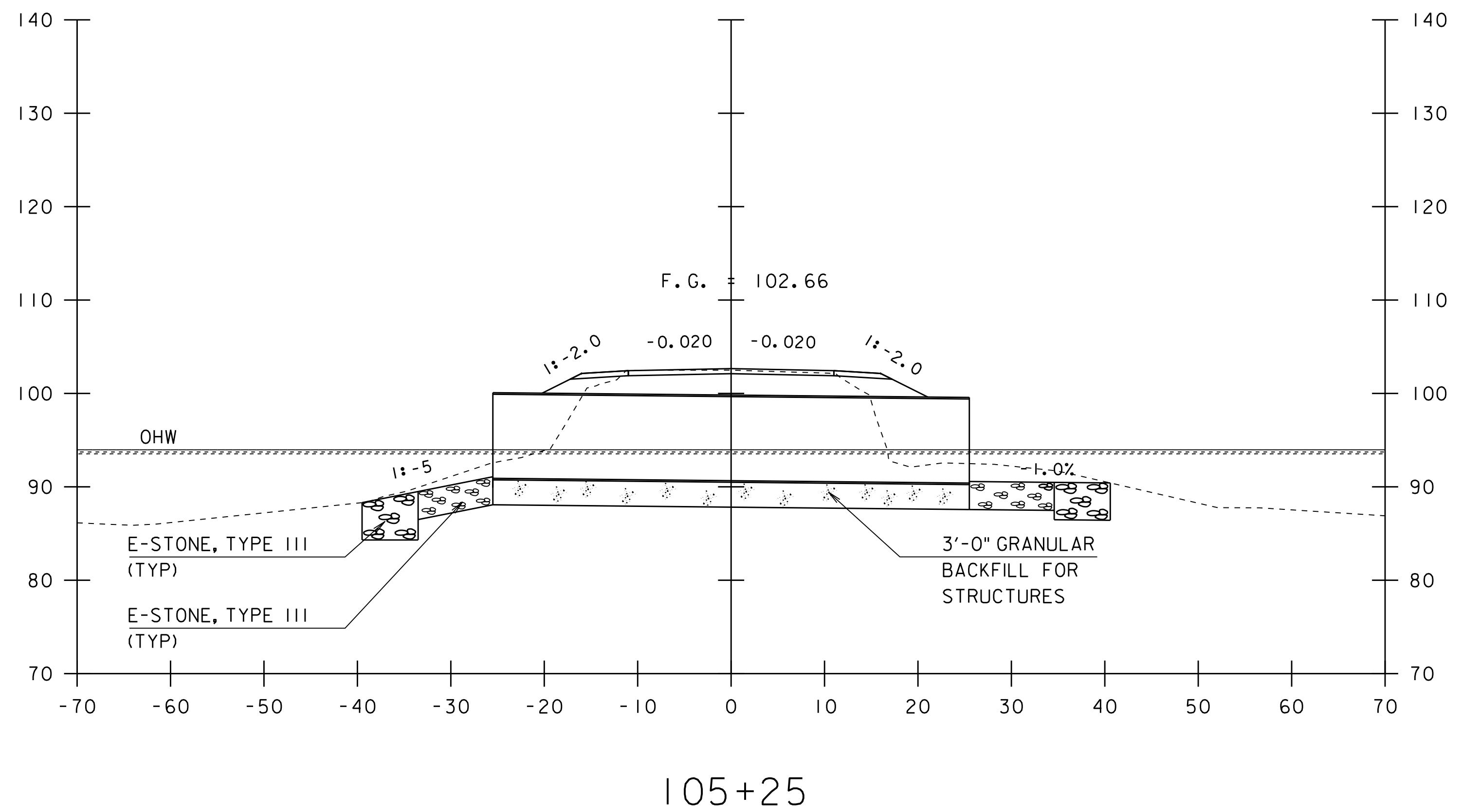
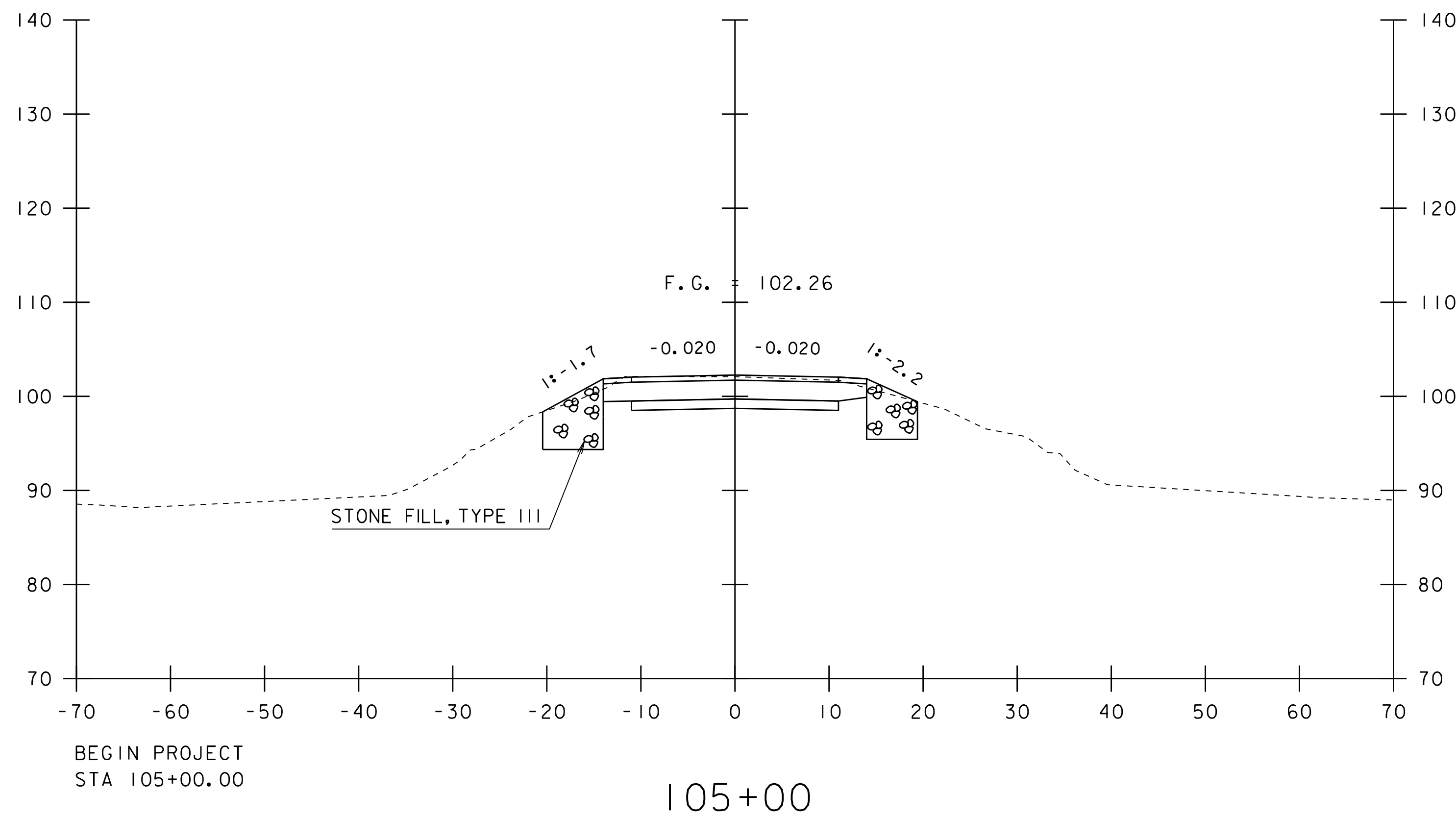
W.T. after drilling

| Depth (ft) | Strata (t) | CLASSIFICATION OF MATERIALS (Description) | Blows/ft (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
|------------------------|------------|--|--------------------|--------------------|----------|--------|---------|------|------|
| | | Asphalt Pavement, 0.0 ft - 0.85 ft | | | | | | | |
| 5 | | A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft, Lab Note: Broken rock was within sample | 6-7-6-8 (13) | 7.5 | 58.9 | 33.2 | 7.9 | 36 | 15 |
| | | A-1-b, SaGr, brn, Moist, Rec. = 0.6 ft, Lab Note: Broken rock was within sample | 9-8-3-4 (11) | 6.3 | 49.1 | 37.4 | 13.5 | | |
| | | A-4, SaSi, brn, Moist, Rec. = 0.3 ft, Lab Note: Some clay was within sample. Insufficient sample size to test Atterberg limits | 3-1-2-2 (3) | 23.1 | 1.5 | 28.2 | 70.3 | | |
| | | A-6, SiCl, brn, Moist, Rec. = 1.1 ft | 3-1-2-2 (3) | 30.1 | 2.5 | 10.1 | 87.4 | | |
| 10 | | A-6, SiCl, brn, Moist, Rec. = 1.3 ft, Lab Note: Similar Atterberg limits to 5-7' sample | 4-1-2-3 (3) | 32.2 | 3.9 | 12.5 | 83.6 | | |
| | | Field Note: NXDC, cleanout, cobbles Field Note: No recovery | 5-8-4-4 (12) | | | | | | |
| 15 | | Field Note: NXDC, cleanout, cobbles | | | | | | | |
| | | A-8, GrSa, Dk/brn, Moist, Rec. = 1.6 ft, Lab Note: Decomposing wood and wood fibers were within sample. Sample contained 24.0% organic materials (AASHTO T-267) | WH-1-WH-1 (1) | 164.5 | 26.3 | 55.8 | 17.9 | | |
| 20 | | Field Note: Rollercone, cleanout | | | | | | | |
| | | A-4, SaSi, Dk/brn, Moist, Rec. = 0.8 ft, Lab Note: Some clay was within sample. Sample tested non-plastic. Sample contained little (12.9%) organic material (AASHTO T-267) | 1-2-1-1 (3) | 83.1 | 12.4 | 34.6 | 53.0 | | |
| 25 | | A-7-5, SiCl, gry, Moist, Rec. = 2.0 ft | 2-2-1-2 (3) | 41.8 | 1.8 | 0.5 | 97.7 | 49 | 14 |
| | | | | | | | | | |
| 30 | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft, Lab Note: Similar Atterberg limits to 35-37' sample | WH (WH) | 51.0 | | 0.4 | 99.6 | | |
| | | | | | | | | | |
| 35 | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft | WH (WH) | 48.2 | | 0.4 | 99.6 | 46 | 23 |
| | | | | | | | | | |
| 40 | | A-7-6, Cl, gry, Moist, Rec. = 2.0 ft, Lab Note: Similar Atterberg limits to 35-37' sample | WR-WH (WH) | 70.8 | | 0.4 | 99.6 | | |
| | | | | | | | | | |
| Hole stopped @ 42.0 ft | | | | | | | | | |
| 45 | | Remarks: Hole collapsed at 26.1 feet. | | | | | | | |
| | | | | | | | | | |

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. <SUB><<SUB>>> is the hammer energy correction factor.
3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made.

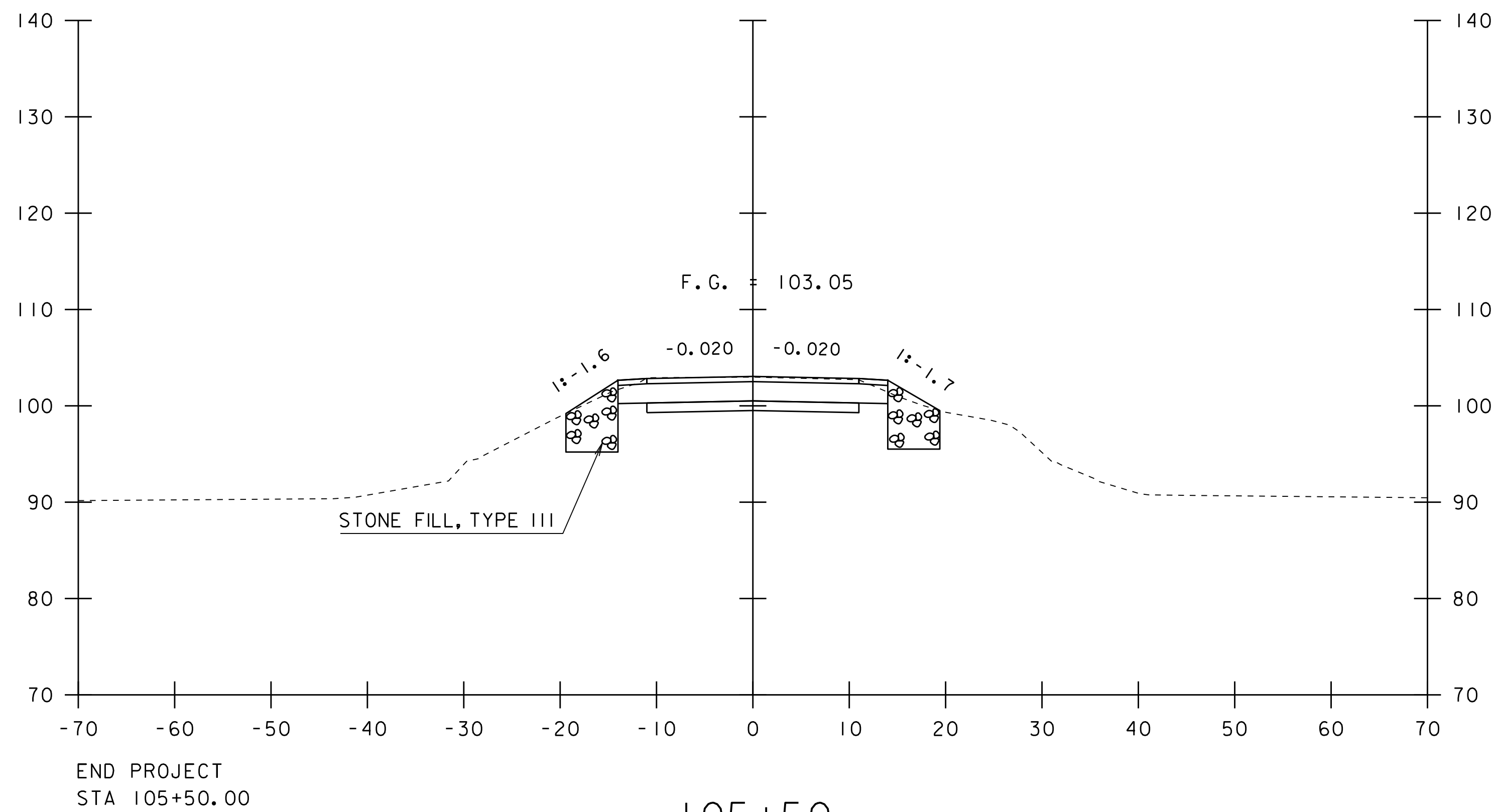
| | | | | | | | | | | | | |
|--|---|---|--|---|--|--|--------------------|----------------------|--------|---------|------|------|
|  | | STATE OF VERMONT AGENCY OF TRANSPORTATION CONSTRUCTION AND MATERIALS BUREAU CENTRAL LABORATORY | | BORING LOG | | Boring No.: B-104 | | | | | | |
| | | | | Addison BF 0172(9) VT-125 Br. #1 | | Page No.: 1 of 1 Pin No.: 15b092 Checked By: MLM | | | | | | |
| Boring Crew: Emerson, Judkins, Olden | | | | Type: WB SS I.D.: 4 in 1.5 in Hammer Wt: N.A. 140 lb. Hammer Fall: N.A. 30 in. Hammer/Rod Type: Auto/AWJ Rig: CME 45C SKID CE = 1.42 | | Groundwater Observations | | | | | | |
| Date Started: 4/05/17 Date Finished: 4/10/17 | | | | | | Date | Depth (ft) | Notes | | | | |
| VTSPG NAD83: N 557923.62 ft E 1403963.26 ft | | | | | | 04/05/17 | 6.1 | W.T. after drilling | | | | |
| Station: 65+34 Offset: -7.70 | | | | | | 04/10/17 | 4.0 | W.T. before drilling | | | | |
| Ground Elevation: 102.58 ft | | | | | | | | | | | | |
| Depth (ft) | Strata (f) | CLASSIFICATION OF MATERIALS (Description) | | | | Blows/ft (N Value) | Moisture Content % | Gravel % | Sand % | Fines % | LL % | PI % |
| 5 |  | Asphalt pavement, 0.0 ft - 1.74 ft | | | | 5-6-3-1 (9) | 16.3 | 18.6 | 4.7 | 76.7 | | |
| | | Field Note:., No recovery | | | | | | | | | | |
| 10 |  | A-4, Si, brn, Moist, Rec. = 0.3 ft | | | | 2-1-1-2 (2) | 23.2 | 6.6 | 7.5 | 85.9 | 34 | 15 |
| | | Field Note:., Cleanout with roller cone | | | | | | | | | | |
| 15 |  | Field Note:., No recovery | | | | 2-WH-1 (WH) | 26.2 | 0.3 | 7.0 | 92.7 | 35 | 17 |
| | | Field Note:., Cleanout with roller cone | | | | | | | | | | |
| 20 |  | A-6, SiCl, gry, Moist, Rec. = 1.3 ft | | | | 1-WH-2 (2) | 120.4 | 18.1 | 51.2 | 30.7 | | |
| | | Field Note:., Cleanout with roller cone | | | | | | | | | | |
| 25 |  | Field Note:., Pushed 3" x 30" Shelby Tube, Rec. = 1.5 ft | | | | WH-2-2-3 (4) | 27.3 | 0.1 | 8.2 | 91.7 | | |
| | | Field Note:., Attempted to push Shelby Tube - No penetration at 350 psi | | | | | | | | | | |
| 30 |  | Field Note:., Attempted to push Shelby Tube - No penetration at 350 psi | | | | | 25.3 | 7.4 | 92.6 | 28 | 11 | |
| | | | | | | | | | | | | |
| 35 |  | Field Note:., NXDC, cleaned out casing | | | | WH-1-1-1 (2) | 45.5 | 1.1 | 98.9 | | | |
| | | A-2-4, SiSa, Dk/brn, Moist, Rec. = 1.4 ft, Lab Note: A lot of decomposing wood and wood fibers were within sample | | | | | | | | | | |
| 40 |  | A-4, Si, gry, Moist, Rec. = 1.8 ft, Lab Note: Sample tested non-plastic. Sample contained little (18.6%) organic materials (AASHTO T-267) | | | | WH-1-WH (1) | 66.7 | 0.1 | 0.5 | 99.4 | 64 | 32 |
| | | | | | | | | | | | | |
| 45 |  | A-6, SiCl, gry, Moist, Rec. = 1.7 ft | | | | 1-1-1-3 (2) | 45.5 | 1.1 | 98.9 | | | |
| | | | | | | | | | | | | |
| 50 |  | A-7-5, Cl, gry, Wet, Rec. = 2.0 ft, Lab Note: Similar to 40-42 ft. sample | | | | WH (WH) | 66.7 | 0.1 | 0.5 | 99.4 | 64 | 32 |
| | | | | | | | | | | | | |
| 55 |  | A-7-5, Cl, gry, Wet, Rec. = 2.0 ft | | | | WH (WH) | 66.7 | 0.1 | 0.5 | 99.4 | 64 | 32 |
| | | | | | | | | | | | | |
| | | Hole stopped @ 42.0 ft | | | | | | | | | | |
| | | Remarks: Hole collapsed at 16.2 feet. | | | | | | | | | | |
| Notes: | | 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. <<SUB>>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations may occur due to other factors than those present at the time measurements were made. | | | | | | | | | | |

| | |
|----------------------------|------------------------|
| PROJECT NAME: ADDISON | |
| PROJECT NUMBER: BF 0172(9) | |
| FILE NAME: si5b092bor.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| BORING LOGS 2 | SHEET 15 OF 17 |

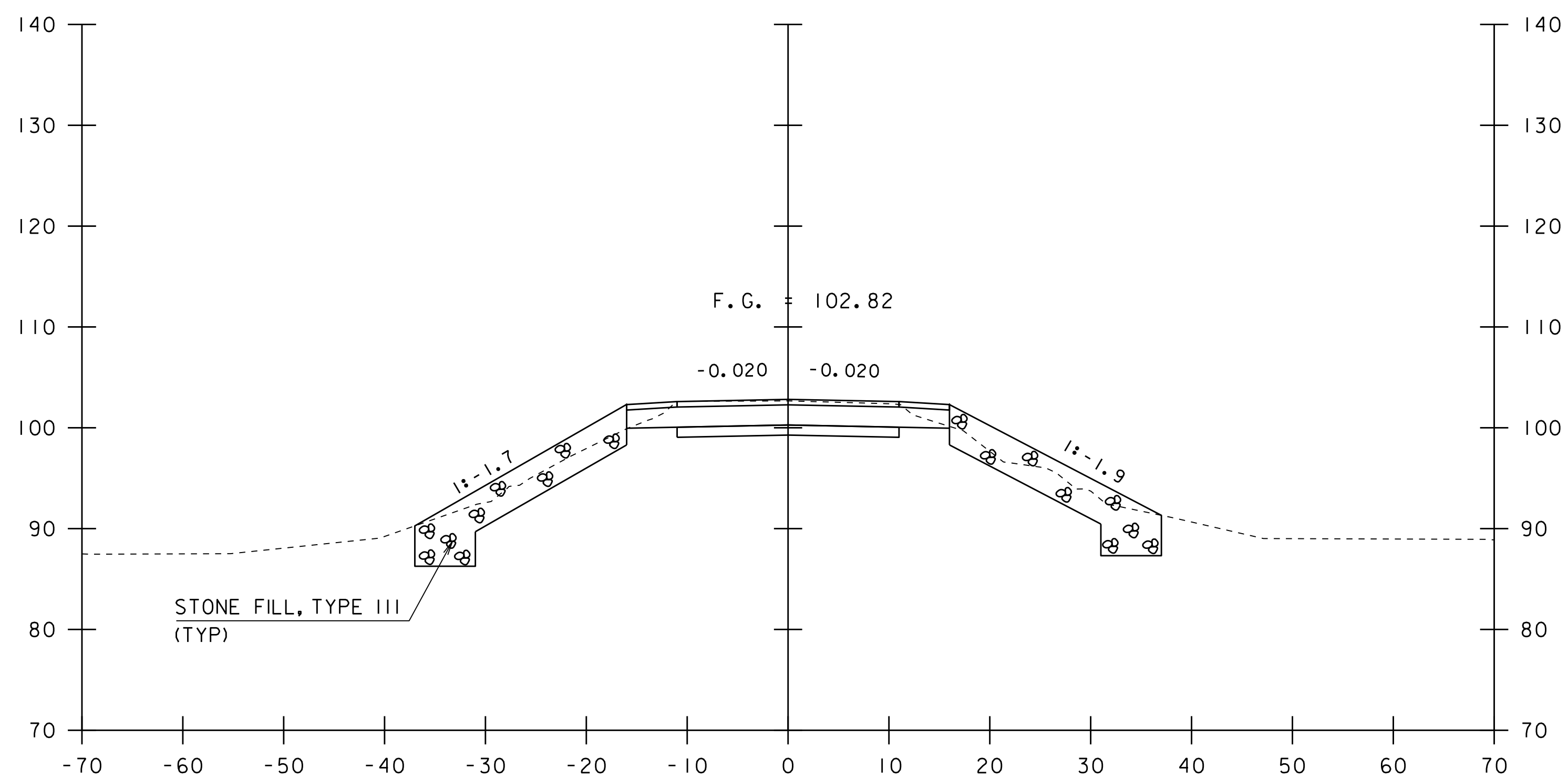


STA. 104+75 TO STA. 105+25

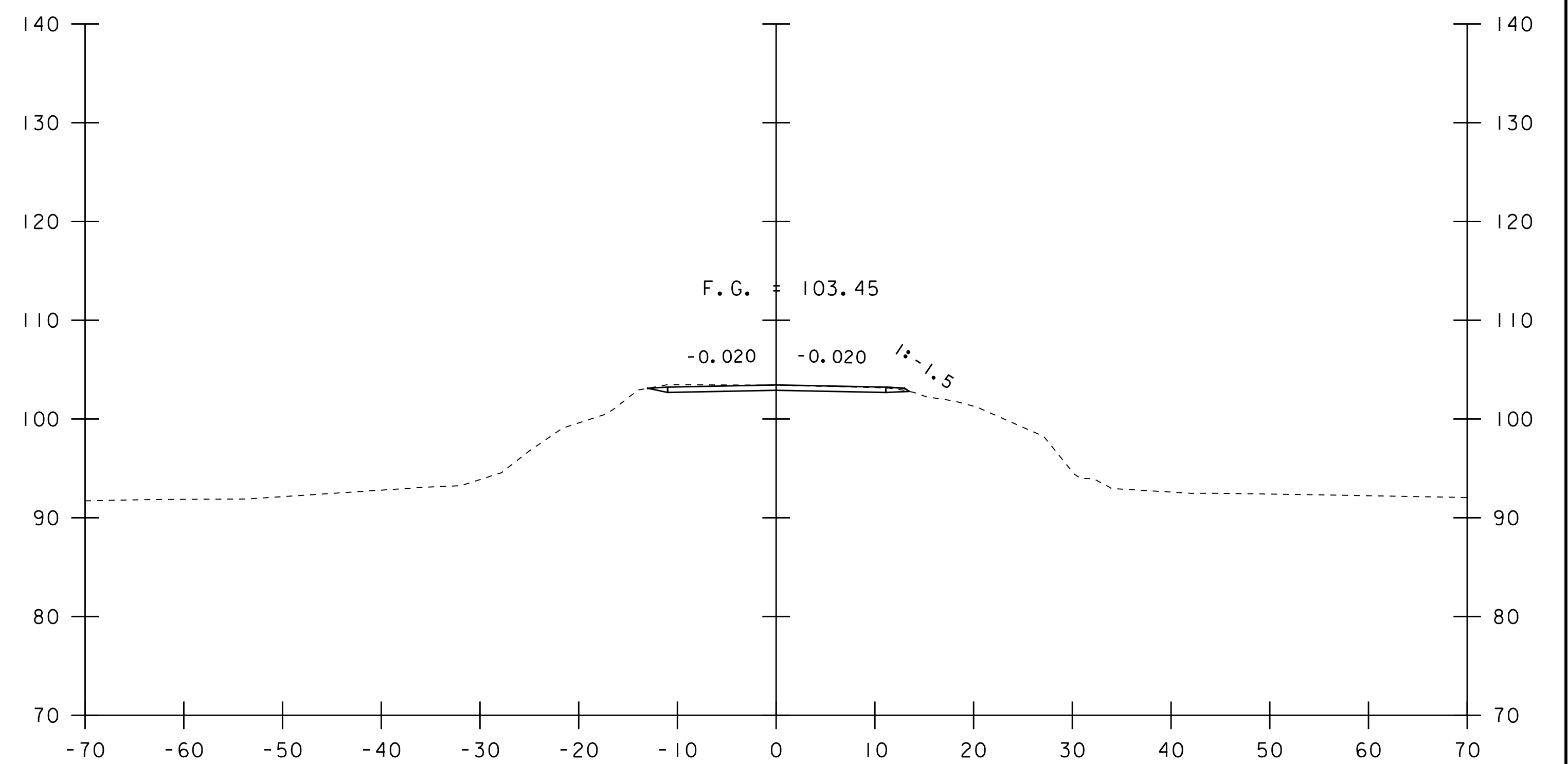
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| PROJECT NAME: ADDISON | |
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| FILE NAME: s15b092xs.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| VTI25 CROSS SECTIONS 1 | SHEET 16 OF 17 |



105+50



105+35



END APPROACH
STA 105+75.00

105+75

STA. 105+35 TO STA. 105+75

| | |
|----------------------------|------------------------|
| PROJECT NAME: ADDISON | |
| PROJECT NUMBER: BF 0172(9) | |
| FILE NAME: s15b092xs.dgn | PLOT DATE: 20-JAN-2021 |
| PROJECT LEADER: R. YOUNG | DRAWN BY: M.LONGSTREET |
| DESIGNED BY: C. MOONEY | CHECKED BY: C. MOONEY |
| VTI25 CROSS SECTIONS 2 | SHEET 17 OF 17 |