# STATE OF MAINE
# DEPARTMENT OF TRANSPORTATION

## PLAN LEGEND

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed
Culvert-Existing
Culvert Proposed
Curbing Existing Proposed
Type 1
Type 3
Type 5
Outline of Bodies of Water
Exposed Bedrock
Buildings
Trees Conifer Deciduous
Tree Line
Clearing Limit Line
Railroad

Catch Basins Existing Proposed
Manholes Existing Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utility Poles Existing Proposed
Fire Hydrants Existing Proposed
Existing Water Line
Existing San. Sewer
Existing San. Sewer Manhole
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other
Centerline-Existing
Centerline-Proposed 10+00
Travelway-Existing
Travelway-Proposed

Boring HB-XXX-###
Pavement Core PC-#
Test Pit TP-XXX-###

Probe P-#.#X
#.# = Depth
X = W (Weathered Rock)
R (Refusal)
NR (No Refusal)

# FORT FAIRFIELD

## AROOSTOOK COUNTY

FOREST AVENUE

## FEDERAL PROJECT NO. 2285900

PROJECT LENGTH: 0.095 MILES

## INDEX OF SHEETS


| Description | Sheet No. |
|---|---|
| Title Sheet | 1 |
| Typical Section, General Notes & Est. Quantities | 2 |
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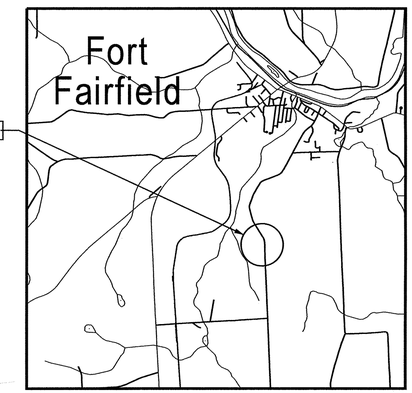
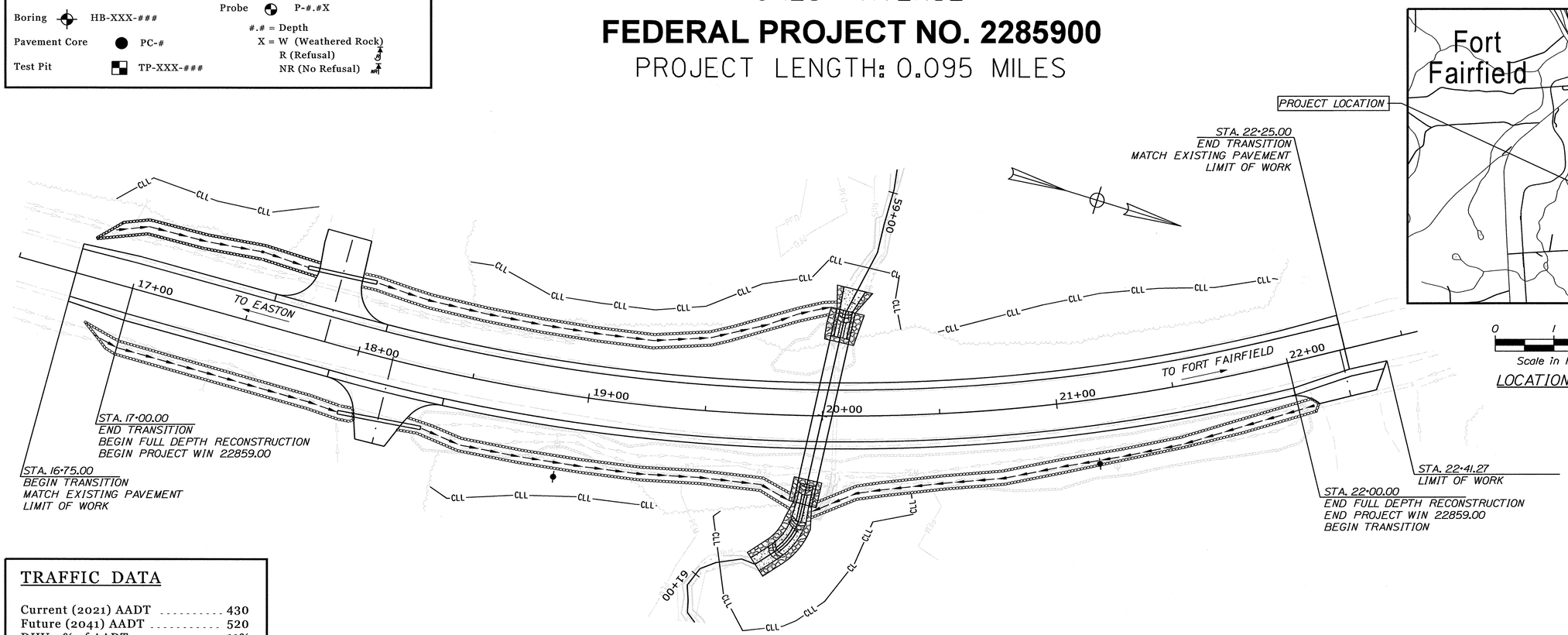
| Boring Location Plan & Interpretive Subsurface Profile | 4 |
| Boring Logs | 5 |
| Plan / Profile | 6 |
| Cross Sections | 7-17 |
| Detour Plan | 18 |
| Sign Summary | 19 |
| Right Of Way Map | 20 |


LOCATION MAP




LAYOUT SCALE

25 0 25 50
Scale of Feet

## TRAFFIC DATA

| | |
|---|---|
| Current (2021) AADT | 430 |
| Future (2041) AADT | 520 |
| DHV - % of AADT | 11% |
| Design Hour Volume | 57 |
| % Heavy Trucks (AADT) | 16% |
| % Heavy Trucks (DHV) | 16% |
| Directional Distribution (DHV) | 60% |
| 18-kip Equivalent P 2.0 | 91 |
| 18-kip Equivalent P 2.5 | 87 |
| Design Speed (mph) | 45 |
| Corridor Priority | 4 |

| | |
|---|---|
| PROJECT LOCATION: | IN THE TOWN OF FORT FAIRFIELD, ALONG FOREST AVENUE, LOCATED 1.43 MILES SOUTH OF DUMOND ROAD |
| PROGRAM AREA: | HIGHWAY PROGRAM |
| SCOPE OF WORK: | LARGE CULVERT REPLACEMENT |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

| | DATE |
|---|---|
| COMMISSIONER: | 11-3-21 |
| CHIEF ENGINEER: | 11-1-2021 |

STATE OF MAINE CHRISTOPHER L. HELSTROM 13550 LICENSED PROFESSIONAL ENGINEER

SIGNATURE
13550
P.E. NUMBER
11/16/2021
DATE

PROJECT INFORMATION

| | |
|---|---|
| PROGRAM | HIGHWAY |
| PROJECT MANAGER | ROGER SOUCY |
| DESIGNER | RAY HANF |
| CONSULTANT | HNTB |
| PROJECT RESIDENT | |
| CONTRACTOR | |
| PROJECT COMPLETION DATE | |

FEDERAL PROJECT NO. 2285900

WIN 22859.00

FORT FAIRFIELD
FOREST AVENUE

TITLE SHEET

SHEET NUMBER
1
OF 20

Filename: ...\00\HIGHWAY\MSTA\001_Title.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

| ESTIMATED QUANTITIES | | | |
|---|---|---|---|
| ITEM NO. | DESCRIPTION | UNIT | QUANTITY |
| | | | WIN 22859.00 FOREST AVE |
| 203.20 | COMMON EXCAVATION | CY | 880 |
| 203.25 | GRANULAR BORROW | CY | 180 |
| 203.33 | SPECIAL FILL | CY | 110 |
| 206.061 | STRUCTURAL EARTH EXCAVATION - DRAINAGE MINOR STRUCTURES BELOW GRADE | CY | 20 |
| 304.16 | AGGREGATE BASE COURSE - TYPE C | CY | 1200 |
| 403.208 | HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE | TON | 120 |
| 403.209 | HOT MIX ASPHALT, 9.5 MM (SIDEWALKS, DRIVES, & INCIDENTALS) | TON | 5 |
| 403.211 | HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SHIMMING) | TON | 20 |
| 403.213 | HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE (BASE AND INTERMEDIATE BASE COURSE) | TON | 190 |
| 409.15 | BITUMINOUS TACK COAT, APPLIED | GAL | 41 |
| 511.07 | COFFERDAM: UPSTREAM | LS | 1 |
| 511.07 | COFFERDAM: DOWNSTREAM | LS | 1 |
| 603.16 | 15 INCH CULVERT PIPE OPTION 1 | LF | 66 |
| 603.4077 | 8' ROUND X 84' LONG CORRUGATED METAL PIPE - POLYMER COATED | LF | 84 |
| 610.08 | PLAIN RIPRAP | CY | 30 |
| 610.18 | STONE DITCH PROTECTION | CY | 190 |
| 610.210 | STREAM CHANNEL ROCK | CY | 41 |
| 615.07 | LOAM | CY | 100 |
| 618.14 | SEEDING METHOD NUMBER 2 | UN | 16 |
| 619.12 | MULCH | UN | 16 |
| 620.58 | EROSION CONTROL GEOTEXTILE | SY | 830 |
| 627.733 | 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE | LF | 550 |
| 629.05 | HAND LABOR, STRAIGHT TIME | HR | 10 |
| 631.10 | AIR COMPRESSOR (INCLUDING OPERATOR) | HR | 10 |
| 631.11 | AIR TOOL (INCLUDING OPERATOR) | HR | 10 |
| 631.12 | ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR) | HR | 10 |
| 631.172 | TRUCK-LARGE (INCLUDING OPERATOR) | HR | 10 |
| 631.18 | CHAIN SAW RENTAL (INCLUDING OPERATOR) | HR | 10 |
| 639.20 | FIELD OFFICE, TYPE C | EA | 1 |
| 652.312 | TYPE III BARRICADES | EA | 8 |
| 652.33 | DRUM | EA | 10 |
| 652.34 | CONE | EA | 55 |
| 652.35 | CONSTRUCTION SIGNS | SF | 330 |
| 652.36 | MAINTENANCE OF TRAFFIC CONTROL DEVICES | CD | 45 |
| 652.38 | FLAGGERS | HR | 120 |
| 656.75 | TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL | LS | 1 |
| 659.10 | MOBILIZATION | LS | 1 |

## GENERAL NOTES

1. CLEARING LIMITS SHALL BE 10' BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT.

2. ALL CLEARING SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO SEPARATE PAYMENT WILL BE MADE. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AS INDICATED ON THE PLANS AND APPROVED BY THE RESIDENT.

3. THE CLEARING AND SELECTIVE CLEARING LINES SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LINES FOR CLEARING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE RESIDENT.

4. GRUBBING IN FILL AREAS HAS BEEN SHOWN ON THE CROSS SECTIONS AND THE QUANTITIES NOTED. THESE LIMITS ARE APPROXIMATE AND HAVE BEEN USED FOR ESTIMATING PURPOSES ONLY. ACTUAL GRUBBING LIMITS MAY VARY BASED ON FIELD CONDITIONS AS DIRECTED BY THE RESIDENT.

5. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.

6. DRIVEWAY FILL SIDE SLOPES SHALL BE THE SAME AS THE NON-GUARDRAIL FILL SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.

7. REQUIRED DITCH PROTECTION SHOWN ON THE PLANS OR IN THE CONSTRUCTION NOTES IS FOR ESTIMATING PURPOSES ONLY. THE ACTUAL TYPE AND LOCATION OF DITCH PROTECTION MAY BE ALTERED BY THE RESIDENT.

8. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1' ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL AS SPECIFIED IN STANDARD SPECIFICATION 703.19.

9. EXISTING INSLOPES IN PROPOSED FILL AREAS SHALL BE BENCHED BY EXCAVATING STEPS OF SUFFICIENT WIDTH TO PERMIT PLACING AND COMPACTING THE FILL MATERIAL ALONG WITH THE MATERIAL REMOVED.

10. GRAVEL ENTRANCES SHALL BE CONSTRUCTED WITH 14 INCHES AGGREGATE SUBBASE COURSE - GRAVEL OR 11 INCHES AGGREGATE SUBBASE COURSE - GRAVEL AND 3 INCHES UNTREATED AGGREGATE SURFACE COURSE UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

11. A 3 FOOT PLAVED LIP SHALL BE PLACED AT ALL UNPAVED ENTRANCES UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

12. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING (OR MILLING) SHALL BE INCIDENTAL TO THE RELATED PAVING (OR MILLING) ITEMS. THIS INCLUDES KILLING AND REMOVAL OF ALL VEGETATIVE MATTER.

13. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

14. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

## GENERAL NOTES (CON'T)

15. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL OTHER AREAS.

16. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.

17. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE MADE UNDER THE APPROPRIATE RENTAL ITEMS.

18. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.

19. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION, DITCH AND INSLOPE OR EQUIPMENT RENTAL AREAS.

20. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

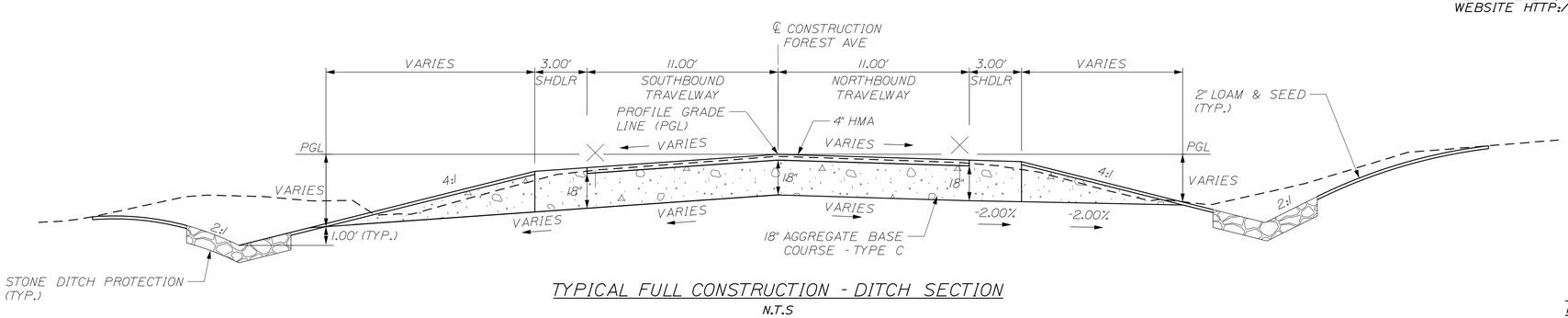
21. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT AND LAYOUT OF WORK BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

22. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.

23. FINAL STRIPING FOR THE PROJECT SHALL BE DONE BY THE CONTRACTOR PER THE STRIPING LAYOUT IN THE CONTRACT DOCUMENTS OR AS PROVIDED BY THE DEPARTMENT. PAYMENT SHALL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.

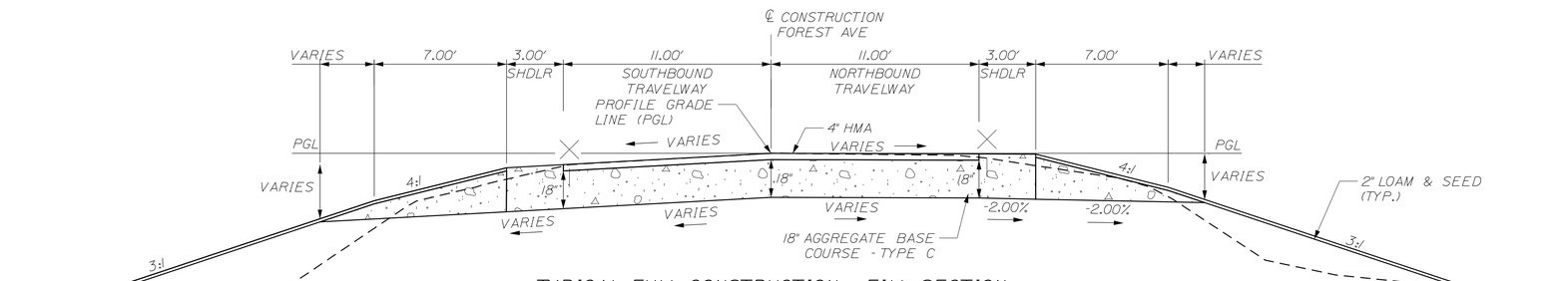
24. GEOTECHNICAL INFORMATION FURNISHED OR REFERRED TO IN THIS PLAN SET IS FOR THE USE OF THE BIDDERS AND THE CONTRACTOR. NO ASSURANCE IS GIVEN THAT THE INFORMATION OR INTERPRETATIONS WILL BE REPRESENTATIVE OF ACTUAL SUBSURFACE CONDITIONS AT THE CONSTRUCTION SITE. MAINEDOT SHALL NOT BE RESPONSIBLE FOR THE BIDDER'S OR CONTRACTOR'S INTERPRETATIONS OF OR CONCLUSIONS DRAWN FROM THE GEOTECHNICAL INFORMATION. THE BORING LOGS CONTAINED IN THE PLAN SET PRESENT FACTUAL AND INTERPRETIVE SUBSURFACE INFORMATION COLLECTED AT DISCRETE LOCATIONS. DATA PROVIDED MAY NOT BE REPRESENTATIVE OF THE SUBSURFACE CONDITIONS BETWEEN BORING LOCATIONS.

25. THE PROJECT GEOTECHNICAL REPORT TITLED "GEOTECHNICAL DESIGN REPORT FOR THE REPLACEMENT OF CROSS CULVERT #XC-97545", SOILS REPORT 2021-11, APRIL 5, 2021 CAN BE ACCESSED AT THE MAINEDOT WEBSITE HTTP://WWW.MAINE.GOV/MDOT/CONTRACTORS/.




## TYPICAL FULL CONSTRUCTION - DITCH SECTION

N.T.S




## TYPICAL FULL CONSTRUCTION - FILL SECTION

N.T.S

| AGGREGATE BASE COURSE - TYPE C | | |
|---|---|---|
| LEFT SHOULDER VARIES CY/100 LF | 11 FT. TRAVEL LANES 61.11 CY/100 LF | RIGHT SHOULDER VARIES CY/100 LF |
| STATION TO STATION | STATION TO STATION | STATION TO STATION |
| 17+00.00 TO 22+00.00 LT | 17+00.00 TO 22+00.00 | 17+00.00 TO 22+00.00 RT |

## TYPICAL FULL CONSTRUCTION NOTES:

1. THE PAVEMENT, BASE AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.

2. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE LOW SIDE SHOULDERS PAVEMENT SHALL HAVE THE SAME CROSS SLOPE AS THE TRAVEL WAY.

3. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF BASE AND PAVEMENT SHALL BE STRAIGHT.

4. THE GRAVEL QUANTITY CALCULATION IS BASED ON A 2" LOAM OR DIRTY BORROW DEPTH. THE ACTUAL DEPTH MAY VARY. SEE THE GENERAL NOTES.

5. THE ALGEBRAIC DIFFERENCE BETWEEN SHOULDER AND TRAVEL LANE CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.

6. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | BY | DATE |
|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL 04-2021 |
| DESIGN2-DETAILED2 | - | - |
| DESIGN3-DETAILED3 | - | - |
| REVISIONS 1 | - | - |
| REVISIONS 2 | - | - |
| REVISIONS 3 | - | - |
| REVISIONS 4 | - | - |
| FIELD CHANGES | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

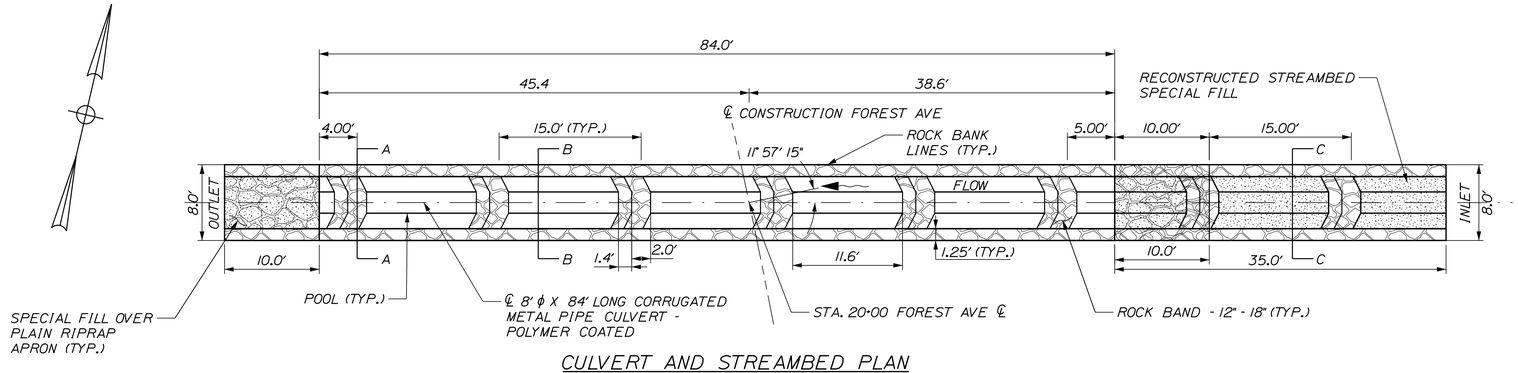
TYPICAL SECTIONS, GENERAL NOTES & EST. QUANTITIES

SHEET NUMBER

2

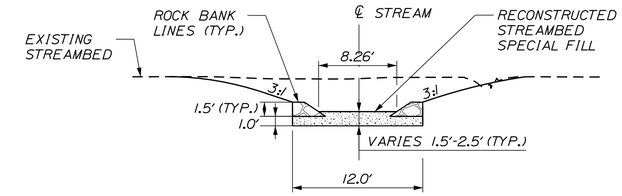
OF 20

Filename: ...\MSTA\002_GenNotesEstQty.dgn Division: HIGHWAY Username: chris.j.helstrom Date:11/4/2021



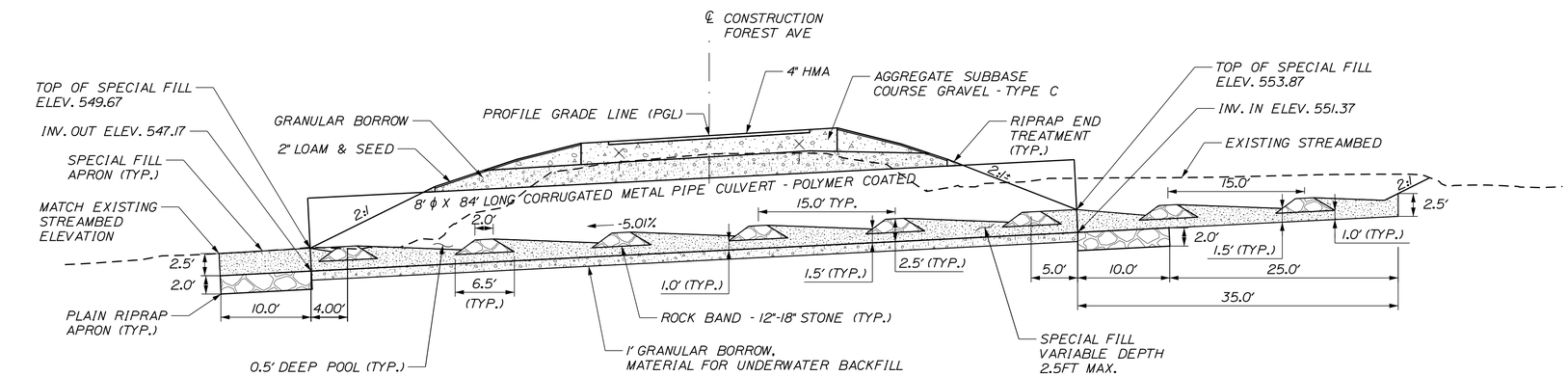

CULVERT AND STREAMBED PLAN

N.T.S



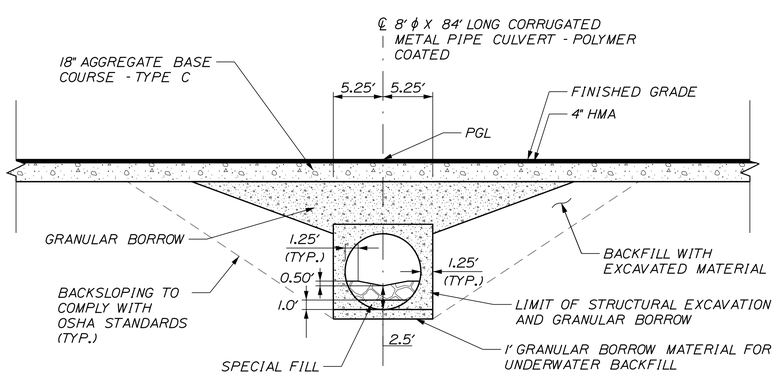

STREAM TYPICAL SECTION C-C

N.T.S



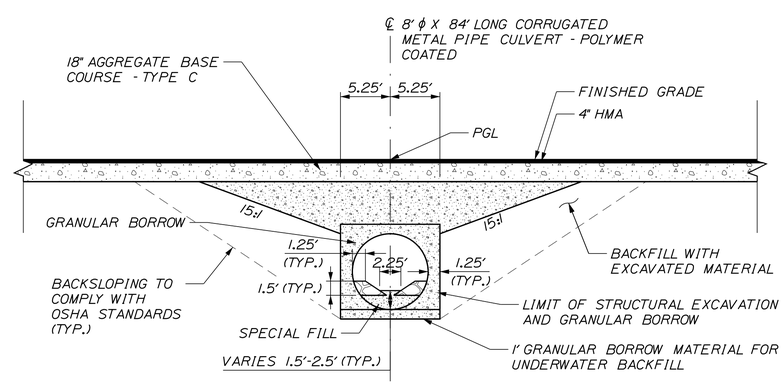

TRANSVERSE SECTION (SKEWED ALONG STREAM ALIGNMENT)

N.T.S




CULVERT SECTION A-A (THRU ROCKBAND)

N.T.S




CULVERT SECTION B-B

N.T.S

## CULVERT NOTES:

1. THE CULVERT SHALL BE LINED WITH 1.5'-2.5' (ON CENTERLINE OF STREAMBED BACKFILL MATERIAL ACCORDING TO SPECIAL PROVISION 203.33 - SPECIAL FILL. ROCK BANDS SHALL BE PAID FOR UNDER ITEM NO. 610.210. STREAM CHANNEL ROCKS.

2. THE CORRUGATED METAL PIPE CULVERT SHALL BE BEDDED ON A 1-FOOT LAYER OF COMPACTED GRANULAR BORROW MATERIAL FOR UNDERWATER BACKFILL.

3. LAYOUT AND CONFIGURATION FOR SPECIAL FILL, ROCK BANDS, AND ROCK BANK LINES SHALL BE APPROVED BY THE RESIDENT AND/OR MAINEDOT ENVIRONMENTAL STAFF.

4. COFFERDAMS ARE TO BE PLACED AT BOTH THE DOWNSTREAM AND UPSTREAM ENDS OF THE CORRUGATED METAL PIPE TO ALLOW WATER TO BE PUMPED AND REMOVED DURING CONSTRUCTION OF THE CORRUGATED METAL PIPE.

5. RIPRAP WILL BE USED TO INSLOPE AROUND THE CULVERT ENDS AT BOTH THE INLET AND OUTLET. SEE PLAN FOR LOCATIONS.

6. VOIDS IN RIPRAP APRONS SHALL BE INFILLED WITH SPECIAL FILL WATERED-IN AND TAMPED.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | | - |
| REVISIONS 2 | - | | - |
| REVISIONS 3 | - | | - |
| REVISIONS 4 | - | | - |
| FIELD CHANGES | - | | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

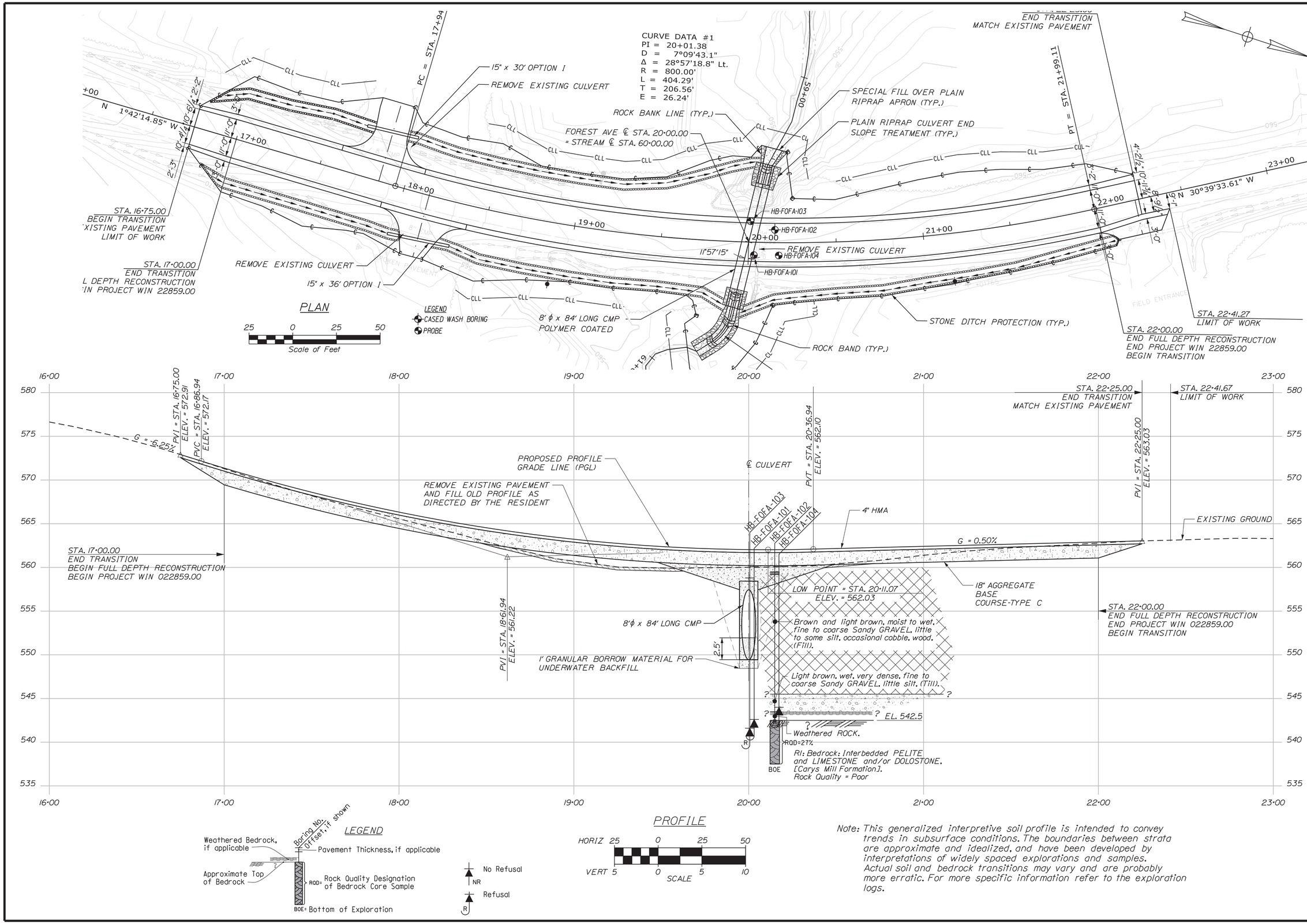
SPECIAL DETAILS

SHEET NUMBER

3

OF 20

Filename: ...\MSTA\003_SpecialDetail.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021




Note: This generalized interpretive soil profile is intended to convey trends in subsurface conditions. The boundaries between strata are approximate and idealized, and have been developed by interpretations of widely spaced explorations and samples. Actual soil and bedrock transitions may vary and are probably more erratic. For more specific information refer to the exploration logs.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

STATE OF MAINE
Cody A. Russell
15866
LICENSED PROFESSIONAL ENGINEER

Cody A. Russell

| | |
|---|---|
| SIGNATURE | |
| P.E. NUMBER | 15866 |
| DATE | 04/06/2021 |

| PROJ. MANAGER | | BY | DATE |
|---|---|---|---|
| DESIGN-DETAILED | | | |
| CHECKED-REVIEWED | | | |
| DESIGN2-DETAILED2 | C.RUSSELL | T.WHITE | FEB 2021 |
| DESIGN3-DETAILED3 | | | |
| REVISIONS 1 | | | |
| REVISIONS 2 | | | |
| REVISIONS 3 | | | |
| REVISIONS 4 | | | |
| FIELD CHANGES | | | |

FORT FAIRFIELD
FOREST AVENUE

BORING LOCATION PLAN &
INTERPRETIVE SUBSURFACE PROFILE

SHEET NUMBER
4
OF 20

Filename: ...\GEOTECH\MSTA\002_BLP&ISP1.dgn Division: GEOTECH Username: Cody.A.Russell Date:4/6/2021

Filename: ...\MSTA\003_BORING LOGS1.dgn Division: GEOTECH Username: Cody.A.Russell Date:4/6/2021

## Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Forest Avenue Large Culvert
Location: Fort Fairfield, Maine
Boring No.: HB-FOFA-101
WIN: 22859.00

| | | | |
|---|---|---|---|
| Drilling Contractor: MaineDOT | Elevation (ft.): 560.1 | Auger ID/OD: | 5" Dia. |
| Operator: Travis/Tyson | Datum: NAVD88 | Sampler: | N/A |
| Logged By: B. Wilder | Rig Type: CME 45C | Hammer Wt./Fall: | N/A |
| Date Start/Finish: 10/17/2017-10/17/2017 | Drilling Method: Solid Stem Auger | Core Barrel: | N/A |
| Boring Location: 20+03.1, 7.4 ft Rt. | Casing ID/OD: N/A | Water Level*: | None Observed |

Definitions: SS = Split Spoon Sample; S = Sample off Auger Flights; B = Bucket Sample off Auger Flights; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MV = Unsuccessful Field Vane Shear Test Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; WOH = Weight of Rods or Casing; WOR/C = Weight of Rods or Casing; WO1P = Weight of 1 Person; RC = Rock Core; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; RW = Rotary Wash; PH = Pushed; WOH = Weight of 140lb. Hammer; WH = Weight of Hammer; $S_{uv}$ = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{uv(60)}$ = Lab Vane Undrained Shear Strength (psf); $q_p$ = Unconfined Compressive Strength (ksf); N-value = Raw Field SPT N-value; $T_v$ = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; M = Similar or Equal too; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

| Depth (ft.) | Sample No. | Pen./Rec. (in.) | Sample Depth (ft.) | Blows (/6 in.) Shear Strength (psf) or RQD (%) | N-value | Casing Blows | Elevation (ft.) | Graphic Log | Visual Description and Remarks | Laboratory Testing Results/ AASHTO and Unified Class |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | SSA | | | Probe, no descriptions given. | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | 542.6 | | Bottom of Exploration at 17.5 feet below ground surface. REFUSAL | 17.5 |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-FOFA-101

## Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Forest Avenue Large Culvert
Location: Fort Fairfield, Maine
Boring No.: HB-FOFA-102
WIN: 22859.00

| | | | |
|---|---|---|---|
| Driller: MaineDOT | Elevation (ft.): 559.5 | Auger ID/OD: | 5" Dia Solid Stem |
| Operator: Travis/Tyson | Datum: NAVD88 | Sampler: | Standard Split Spoon |
| Logged By: B. Wilder | Rig Type: CME 45C | Hammer Wt./Fall: | 140#/30" |
| Date Start/Finish: 10/17/2017; 08:00-10:30 | Drilling Method: Cased Wash Boring | Core Barrel: | NQ-2" |
| Boring Location: 20+14.9, 7.3 ft Lt. | Casing ID/OD: NW-3" | Water Level*: | 9.5 ft bgs. |

Hammer Efficiency Factors: 0.854 — Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐

Definitions: SS = Split Spoon Sample; D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MV = Unsuccessful Field Vane Shear Test Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WO1P = Weight of One Person; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; $S_{uv}$ = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{uv(60)}$ = Lab Vane Undrained Shear Strength (psf); $q_p$ = Unconfined Compressive Strength (ksf); N-uncorrected = Raw Field SPT N-value; Hammer Efficiency Factor = Rig Specific Annual Calibration Value; $N_{60}$ = SPT N-uncorrected Corrected for Hammer Efficiency; $T_v$ = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test; LL = Liquid Limit; M = Similar or Equal too

| Depth (ft.) | Sample No. | Pen./Rec. (in.) | Sample Depth (ft.) | Blows (/6 in.) Shear Strength (psf) or RQD (%) | N-uncorrected | $N_{60}$ | Casing Blows | Elevation (ft.) | Graphic Log | Visual Description and Remarks | Laboratory Testing Results/ AASHTO and Unified Class |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | | SSA | 559.2 | | 4" HMA. 0.3 | |
| 5 | 10 | 24/19 | 5.00 - 7.00 | 5/9/12/20 | 21 | 30 | 38 | | | Brown, moist, medium dense, fine to coarse Sandy GRAVEL, little silt, occasional cobble. (Fill). | GM302634 A-1-a, GW WC=6.3% |
| | | | | | | | 84 | | | | |
| | | | | | | | 52 | | | | |
| | | | | | | | 24 | | | | |
| 10 | 20 | 24/4 | 10.00 - 12.00 | 4/5/8/8 | 13 | 19 | 26 | | | Light brown, wet, medium dense, fine to coarse Sandy GRAVEL, some silt, wood. (Fill). | GM302635 A-1-a, GW WC=13.9% |
| | | | | | | | 14 | | | | |
| | | | | | | | 14 | | | | |
| | | | | | | | 18 | | | | |
| | | | | | | | 27 | | | | |
| | | | | | | | 119 | 545.5 | | | |
| 15 | 30 | 18/13 | 15.00 - 16.50 | 42/48/70 | >113 | 161 | | 543.5 | | Light brown, wet, very dense, fine to coarse Sandy GRAVEL, little silt. (Till). Some Weathered Rock in Tip of Spoon. 16.0 | GM302637 A-1-a, GW WC=9.0% |
| | R1 | 60/59 | 17.00 - 22.00 | RQD = 27% | | | NQ-2 | 542.5 | | Weathered ROCK. Roller Coned ahead to 17.0 ft bgs. 17.0 | |
| 20 | | | | | | | | 537.5 | | Top of Bedrock at Elev. 542.5 ft. R1: Bedrock: Interbedded PELITE and LIMESTONE and/or GOLDSTONE [Carys Mill Formation]. Rock Quality = Poor. R1: Core Times (min:sec) 17.0-18.0 ft (2:34) 18.0-19.0 ft (2:50) 19.0-20.0 ft (3:16) 20.0-21.0 ft (3:22) 21.0-22.0 ft (3:31) 98% Recovery | |
| | | | | | | | | | | Bottom of Exploration at 22.0 feet below ground surface. 22.0 | |
| 25 | | | | | | | | | | | |

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-FOFA-102

## Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Forest Avenue Large Culvert
Location: Fort Fairfield, Maine
Boring No.: HB-FOFA-103
WIN: 22859.00

| | | | |
|---|---|---|---|
| Drilling Contractor: MaineDOT | Elevation (ft.): 558.8 | Auger ID/OD: | 5" Dia. |
| Operator: Travis/Tyson | Datum: NAVD88 | Sampler: | N/A |
| Logged By: B. Wilder | Rig Type: CME 45C | Hammer Wt./Fall: | N/A |
| Date Start/Finish: 10/17/2017-10/17/2017 | Drilling Method: Solid Stem Auger | Core Barrel: | N/A |
| Boring Location: 20+00.4, 12.0 ft Lt. | Casing ID/OD: N/A | Water Level*: | None Observed |

Definitions: SS = Split Spoon Sample; S = Sample off Auger Flights; B = Bucket Sample off Auger Flights; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MV = Unsuccessful Field Vane Shear Test Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WO1P = Weight of 1 Person; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WH = Weight of Hammer; $S_{uv}$ = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{uv(60)}$ = Lab Vane Undrained Shear Strength (psf); $q_p$ = Unconfined Compressive Strength (ksf); N-value = Raw Field SPT N-value; $T_v$ = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; M = Similar or Equal too; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

| Depth (ft.) | Sample No. | Pen./Rec. (in.) | Sample Depth (ft.) | Blows (/6 in.) Shear Strength (psf) or RQD (%) | N-value | Casing Blows | Elevation (ft.) | Graphic Log | Visual Description and Remarks | Laboratory Testing Results/ AASHTO and Unified Class |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | SSA | | | Probe, no descriptions given. | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | 541.6 | | Bottom of Exploration at 17.2 feet below ground surface. REFUSAL | 17.2 |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-FOFA-103

## Maine Department of Transportation — Soil/Rock Exploration Log — US CUSTOMARY UNITS

Project: Forest Avenue Large Culvert
Location: Fort Fairfield, Maine
Boring No.: HB-FOFA-104
WIN: 22859.00

| | | | |
|---|---|---|---|
| Drilling Contractor: MaineDOT | Elevation (ft.): 560.1 | Auger ID/OD: | 5" Dia. |
| Operator: Travis/Tyson | Datum: NAVD88 | Sampler: | N/A |
| Logged By: B. Wilder | Rig Type: CME 45C | Hammer Wt./Fall: | N/A |
| Date Start/Finish: 10/17/2017-10/17/2017 | Drilling Method: Solid Stem Auger | Core Barrel: | N/A |
| Boring Location: 20+17.3, 7.3 ft Rt. | Casing ID/OD: N/A | Water Level*: | None Observed |

Definitions: SS = Split Spoon Sample; S = Sample off Auger Flights; B = Bucket Sample off Auger Flights; MD = Unsuccessful Split Spoon Sample Attempt; U = Thin Wall Tube Sample; MV = Unsuccessful Field Vane Shear Test Attempt; V = Field Vane Shear Test, PP = Pocket Penetrometer; WOR/C = Weight of Rods or Casing; WO1P = Weight of 1 Person; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = Weight of 140lb. Hammer; WH = Weight of Hammer; $S_{uv}$ = Peak/Remolded Field Vane Undrained Shear Strength (psf); $S_{uv(60)}$ = Lab Vane Undrained Shear Strength (psf); $q_p$ = Unconfined Compressive Strength (ksf); N-value = Raw Field SPT N-value; $T_v$ = Pocket Torvane Shear Strength (psf); WC = Water Content, percent; M = Similar or Equal too; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

| Depth (ft.) | Sample No. | Pen./Rec. (in.) | Sample Depth (ft.) | Blows (/6 in.) Shear Strength (psf) or RQD (%) | N-value | Casing Blows | Elevation (ft.) | Graphic Log | Visual Description and Remarks | Laboratory Testing Results/ AASHTO and Unified Class |
|---|---|---|---|---|---|---|---|---|---|---|
| 0 | | | | | | SSA | | | Probe, no descriptions given. | |
| 5 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 15 | | | | | | | 544.0 | | Bottom of Exploration at 16.1 feet below ground surface. REFUSAL | 16.1 |
| 20 | | | | | | | | | | |
| 25 | | | | | | | | | | |

Remarks:

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1 — Boring No.: HB-FOFA-104

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

02285900

WIN 22859.00

HIGHWAY PLANS

STATE OF MAINE — Cody A. Russell 15866 — LICENSED PROFESSIONAL ENGINEER

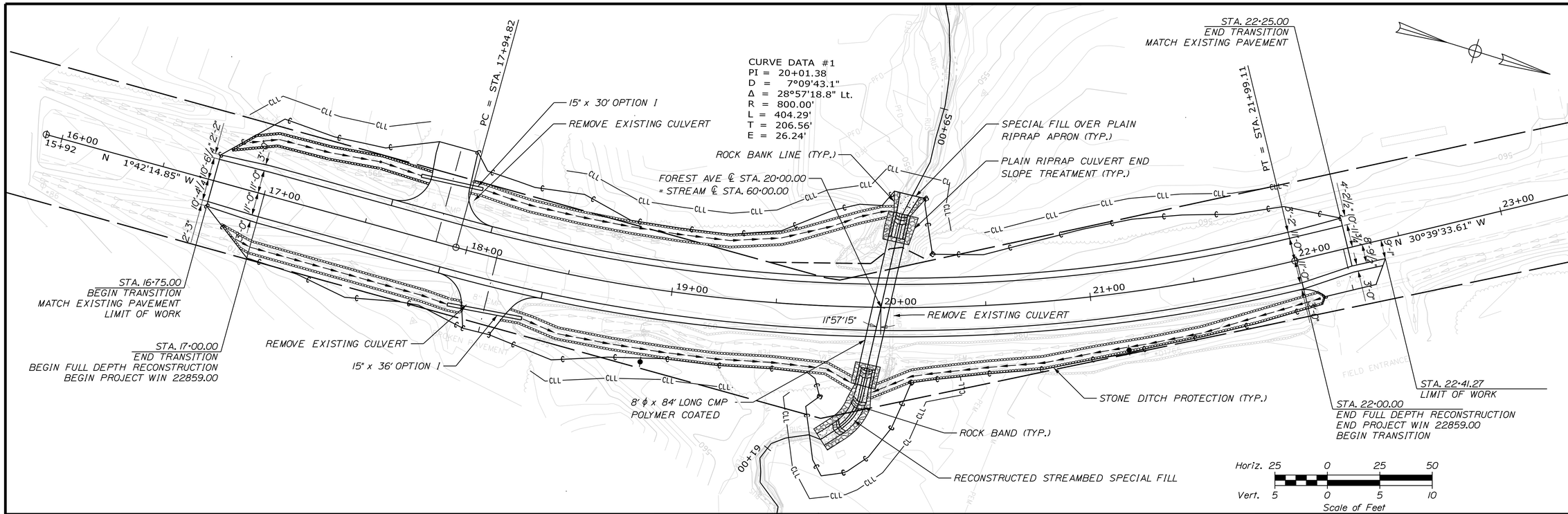
| | BY | DATE |
|---|---|---|
| PROJ. MANAGER | | |
| DESIGN-DETAILED | | |
| CHECKED-REVIEWED | | |
| DESIGN2-DETAILED2 | C.RUSSELL | |
| DESIGN3-DETAILED3 | | |
| REVISIONS: 1 | | |
| REVISIONS: 2 | | |
| REVISIONS: 3 | | |
| REVISIONS: 4 | | |
| FIELD CHANGES | | |

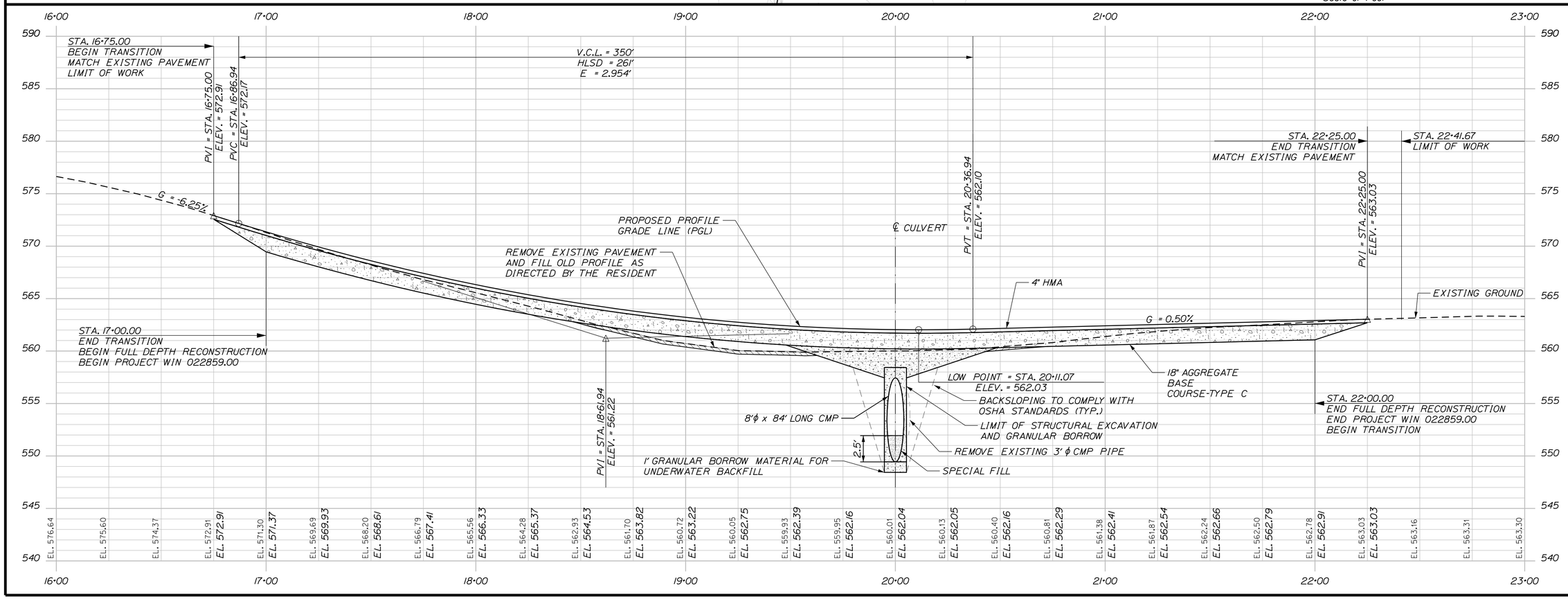
Cody A. Russell — SIGNATURE
15866 — P.E. NUMBER
T.WHITE — APR 2021
04/06/2021 — DATE

FORT FAIRFIELD
FOREST AVENUE

BORING LOGS

SHEET NUMBER
5
OF 20




STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| PROJ. MANAGER | ROGER SOUCY | BY | DATE |
|---|---|---|---|
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

# FORT FAIRFIELD FOREST AVENUE

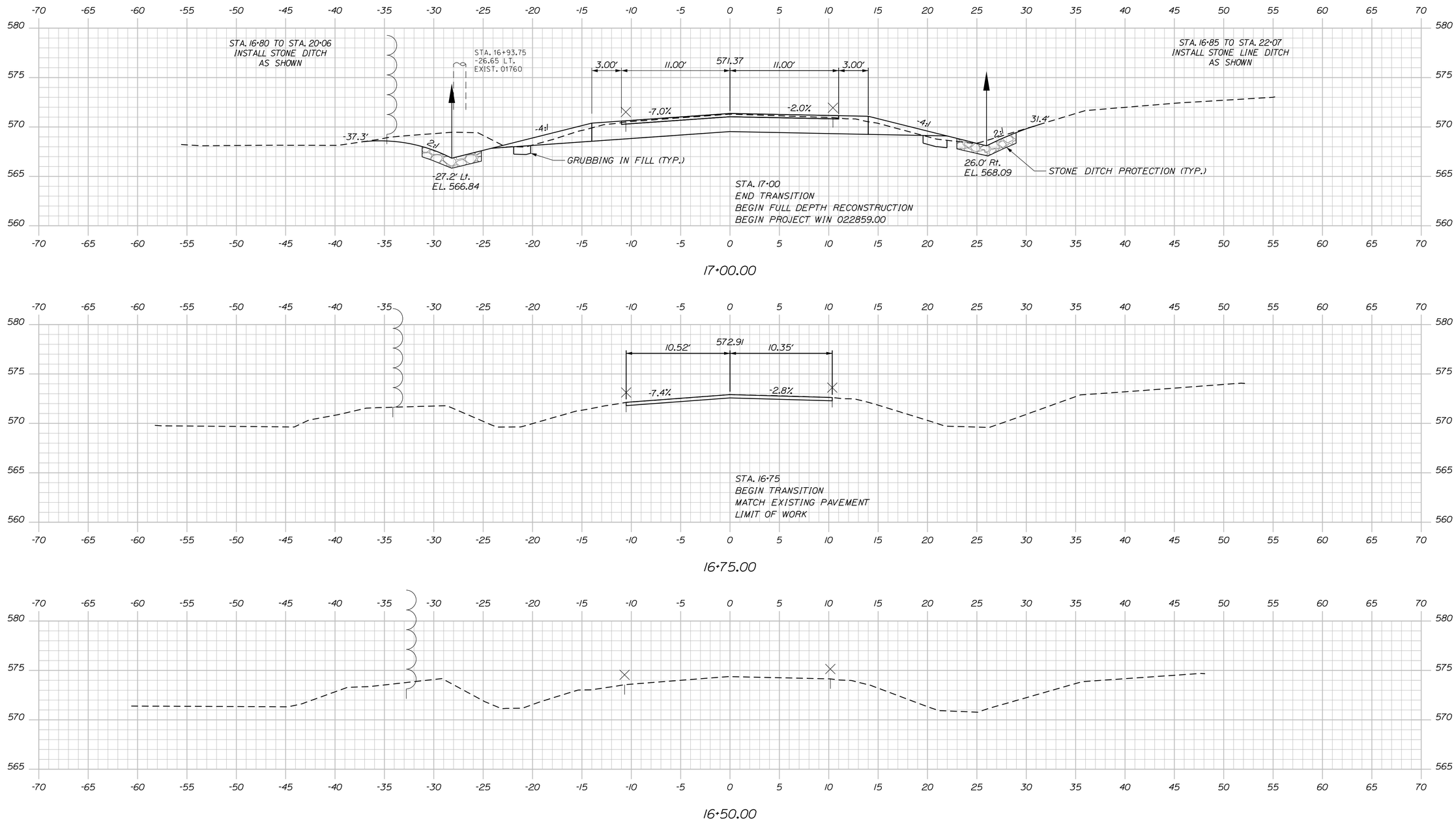
# PLAN / PROFILE

SHEET NUMBER

6

OF 20

Filename: ...\00\HIGHWAY\MSTA\006_HOPlan.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021




STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | | |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | BY | DATE |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

7

OF 20

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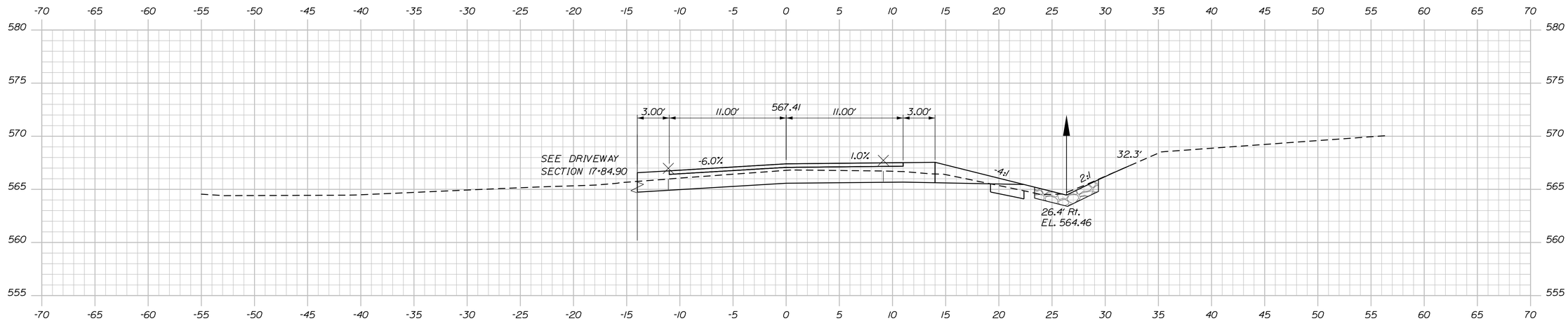


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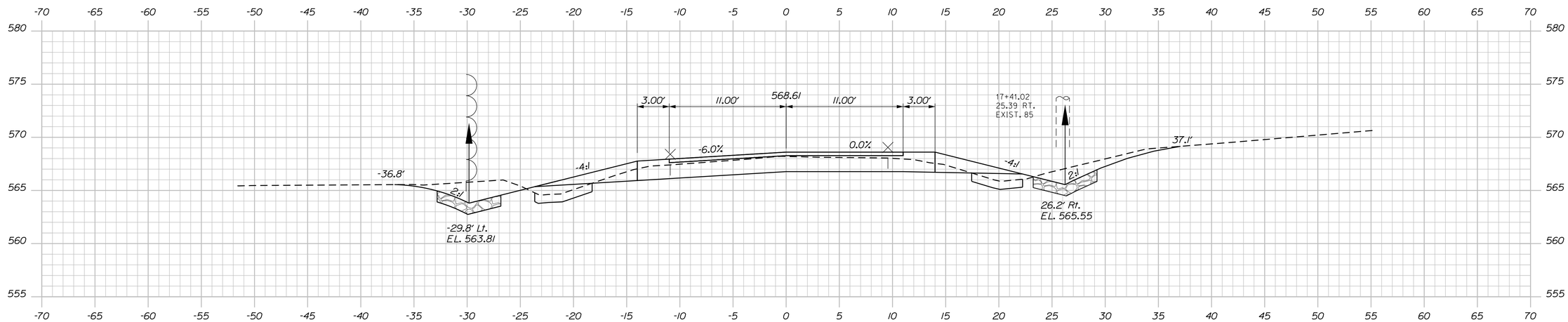


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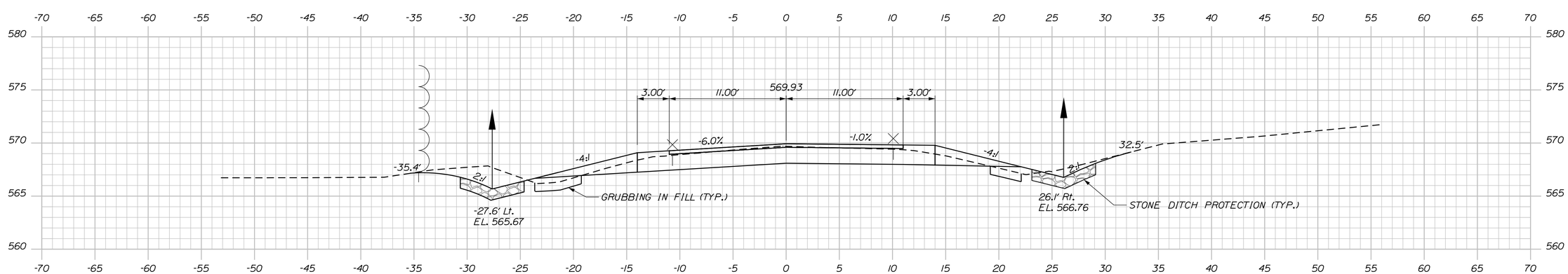


17+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN
22859.00

HIGHWAY PLANS

| PROJ. MANAGER | ROGER SOUCY | BY | DATE |
|---|---|---|---|
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
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| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

8

OF 20

Filename: ...\MSTA\008_XSECT_17+25_002.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

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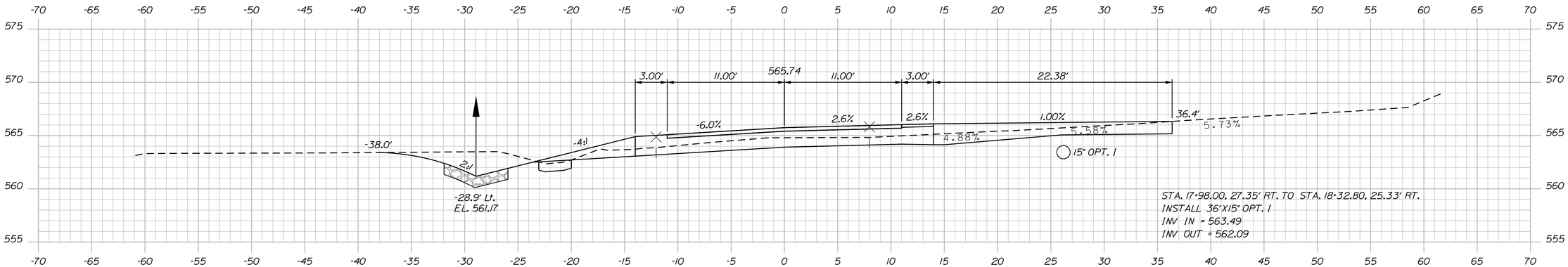


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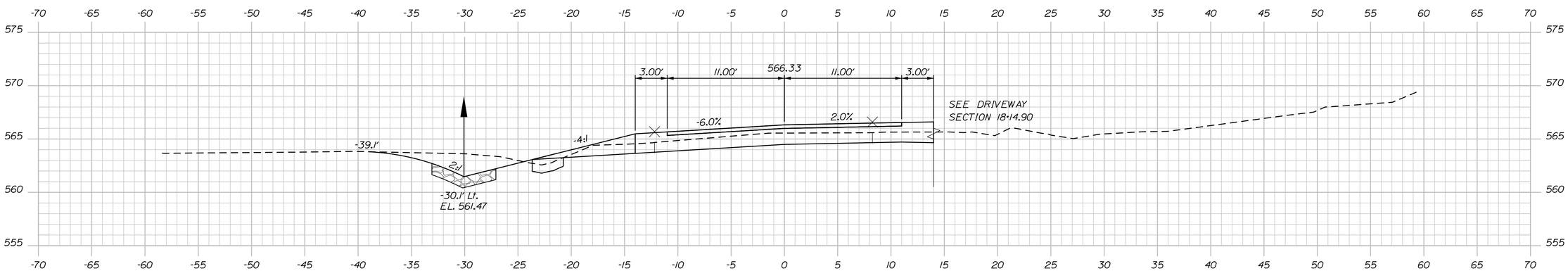


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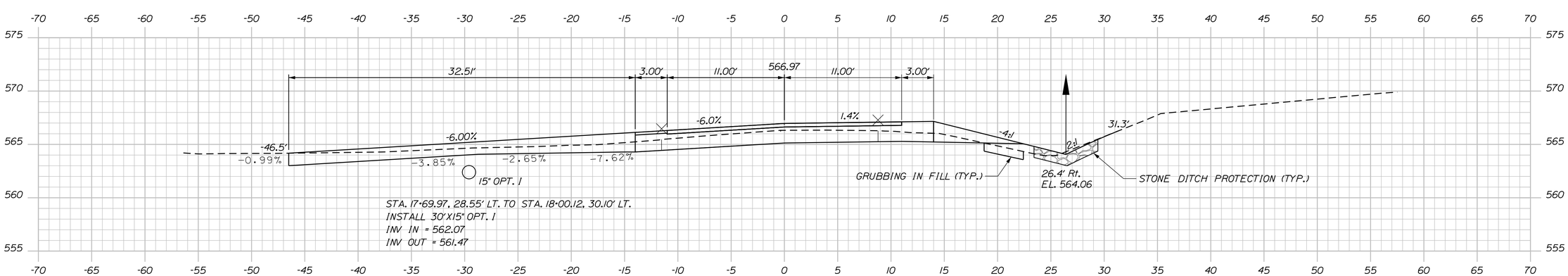


17+84.90

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN
22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
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| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

9

OF 20

Filename: ...\MSTA\009_XSECT_17+84_003.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

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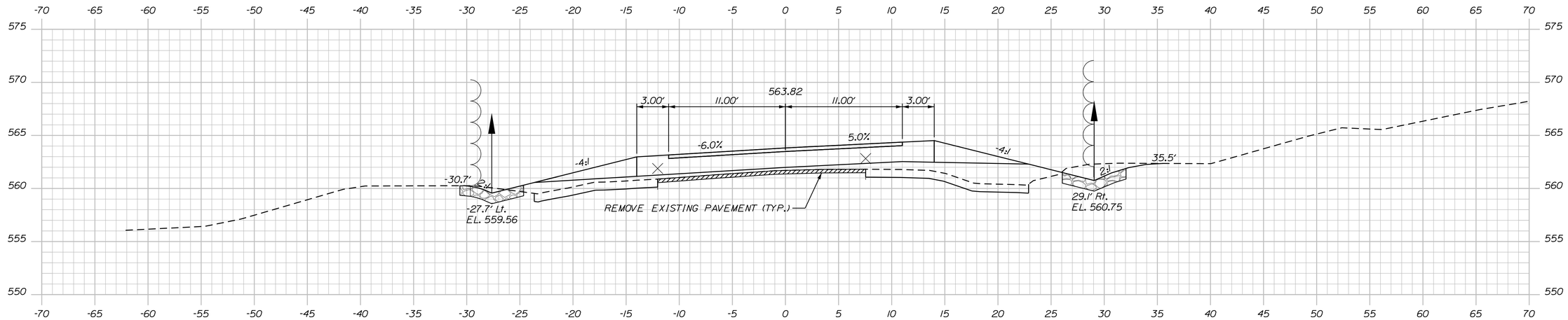


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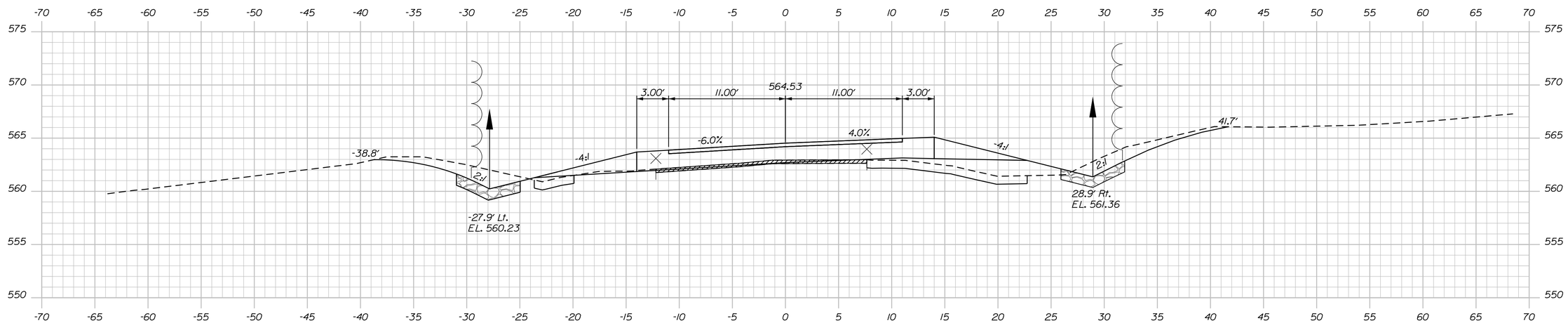


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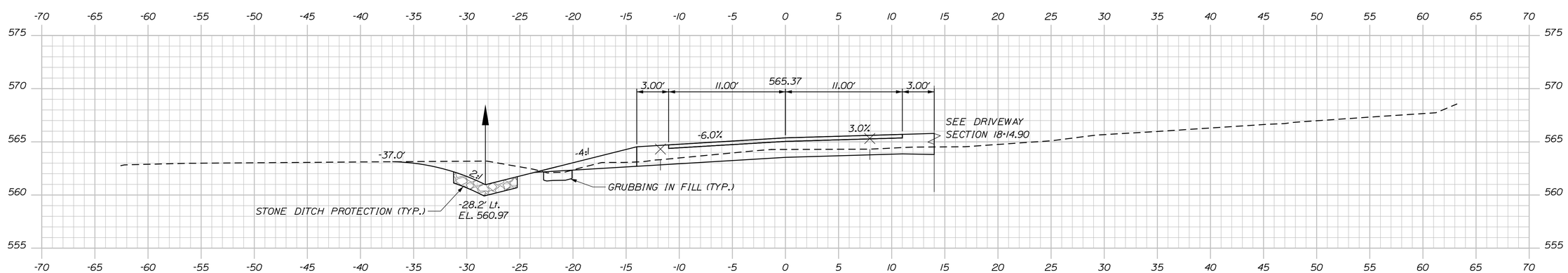


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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN
22859.00

HIGHWAY PLANS

| | | | |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
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| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

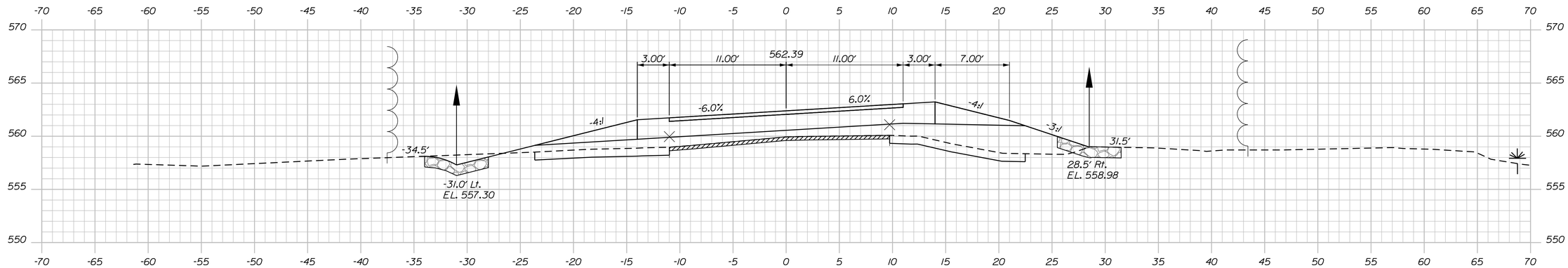
CROSS SECTIONS

SHEET NUMBER

10

OF 20

Sta. 18+25.00 to Sta. 18+75.00

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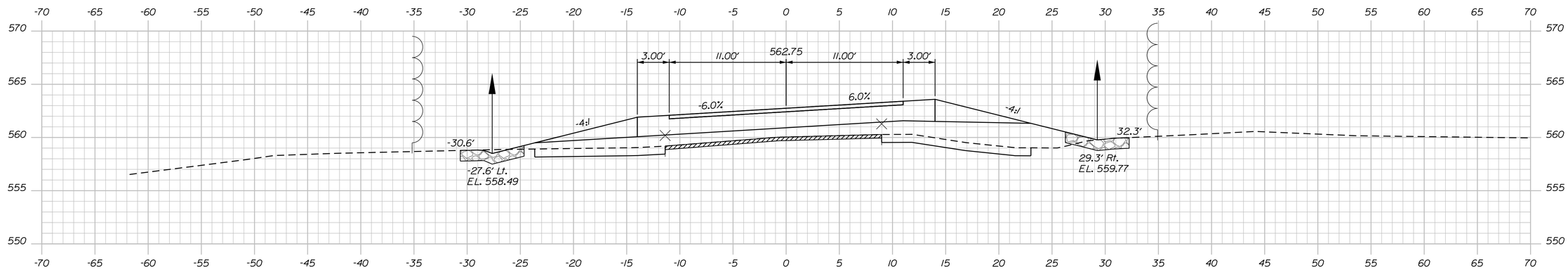


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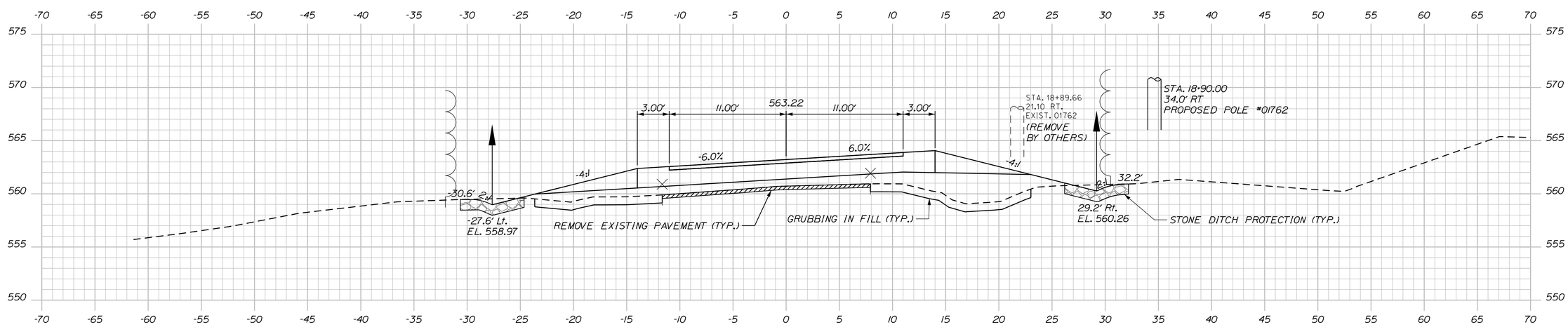



19+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN
22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | | - |
| REVISIONS 2 | - | | - |
| REVISIONS 3 | - | | - |
| REVISIONS 4 | - | | - |
| FIELD CHANGES | - | | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

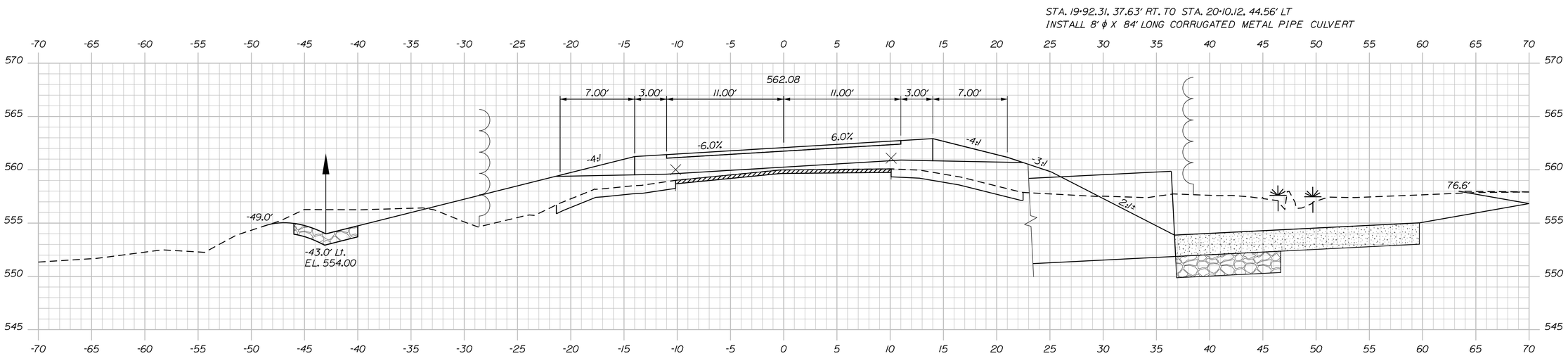
SHEET NUMBER

11

OF 20

Filename: ...\MSTA\011_XSECT_19+00_005.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

Sta. 19+00.00 to Sta. 19+50.00

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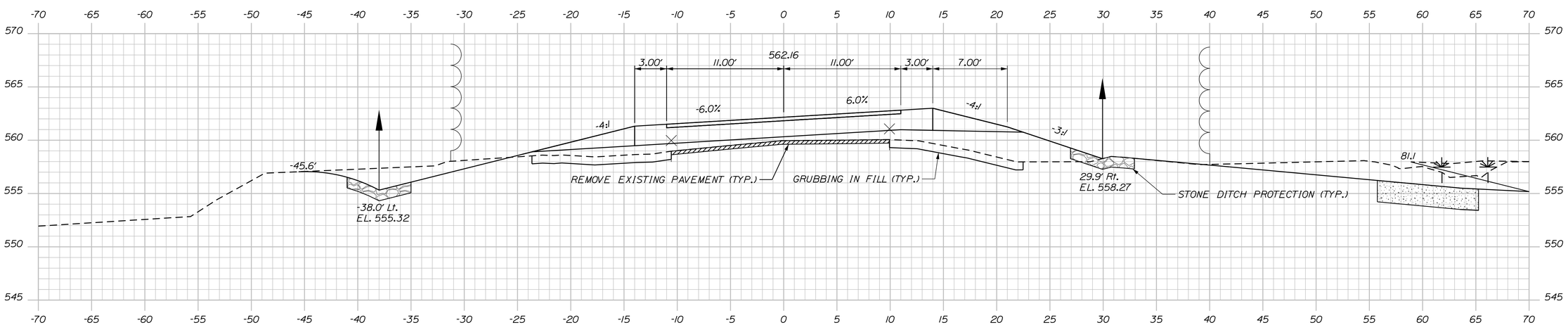


19+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN
22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

SHEET NUMBER

12

OF 20

Sta. 19+75.00 to Sta. 19+88.60

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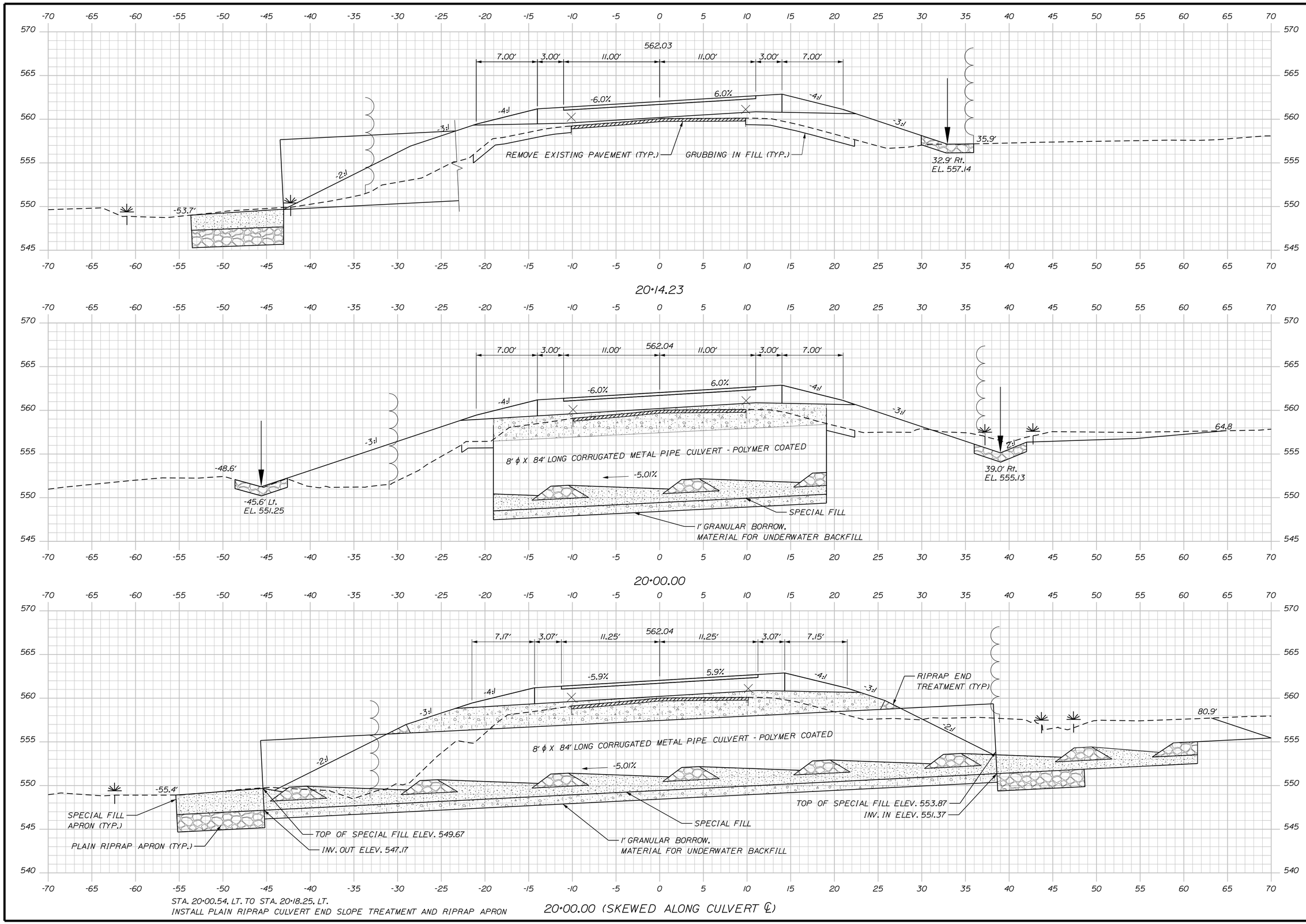



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

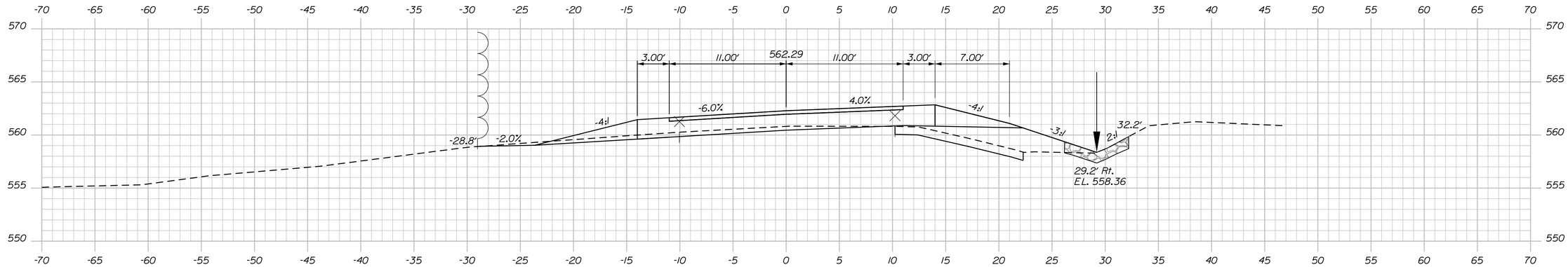
SHEET NUMBER

13

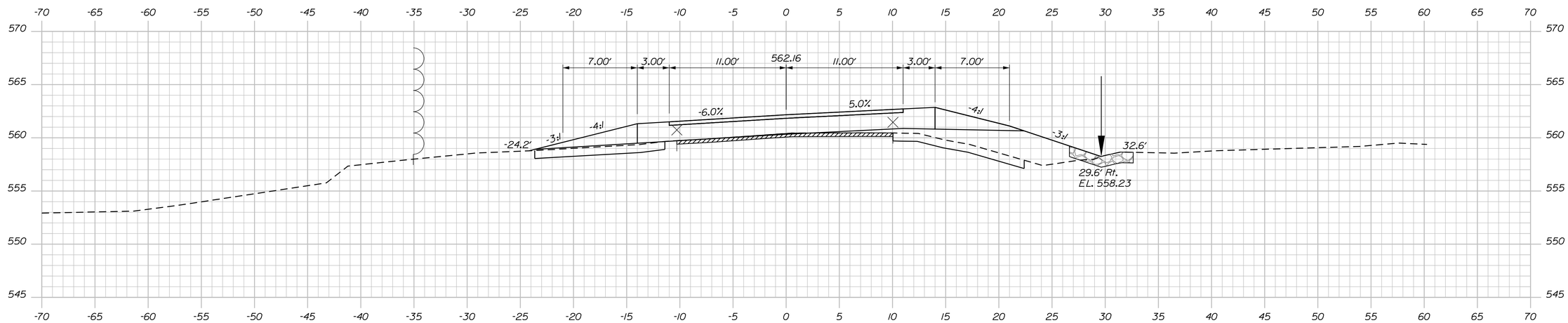
OF 20

Sta. 20+00.00 to Sta. 20+14.23

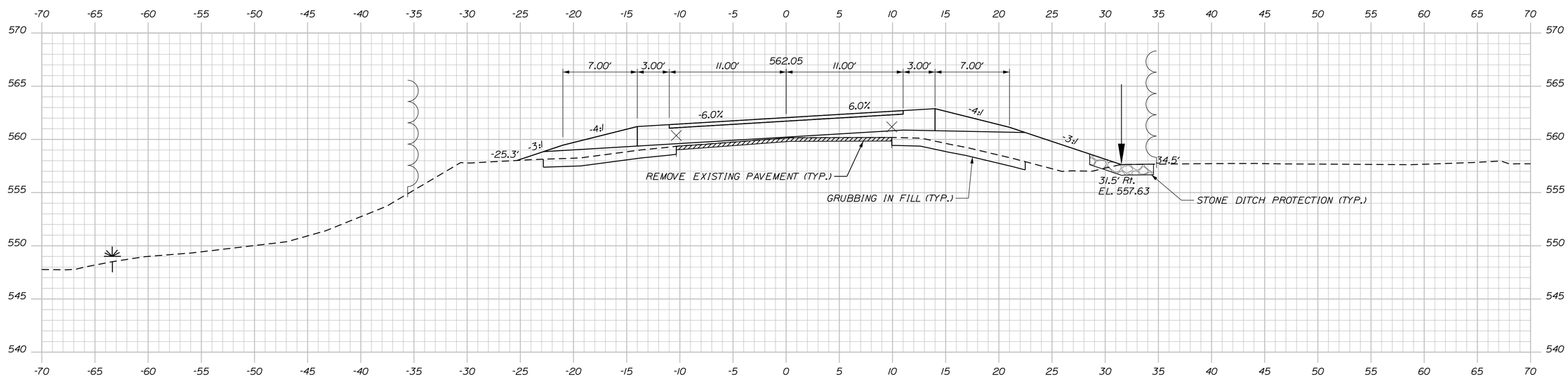
Filename: ...\MSTA\013_XSECT_20+00_006.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021




20+75.00




20+50.00




20+25.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | | - |
| REVISIONS 2 | - | | - |
| REVISIONS 3 | - | | - |
| REVISIONS 4 | - | | - |
| FIELD CHANGES | - | | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

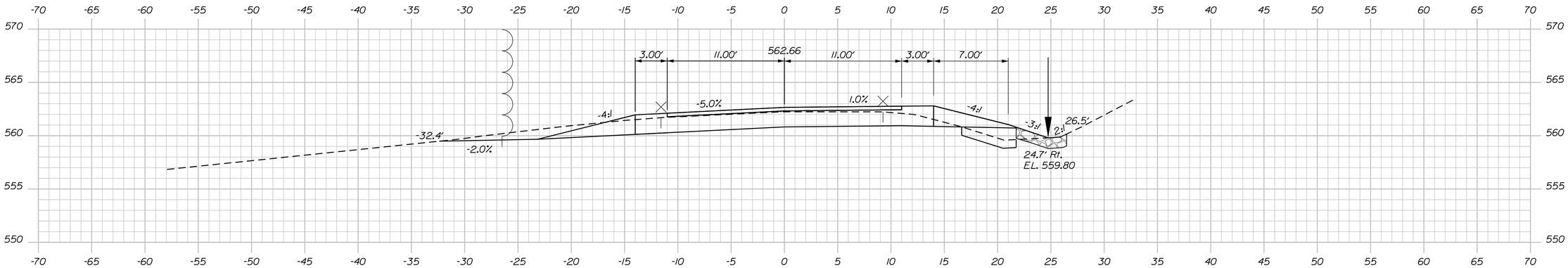
SHEET NUMBER

14

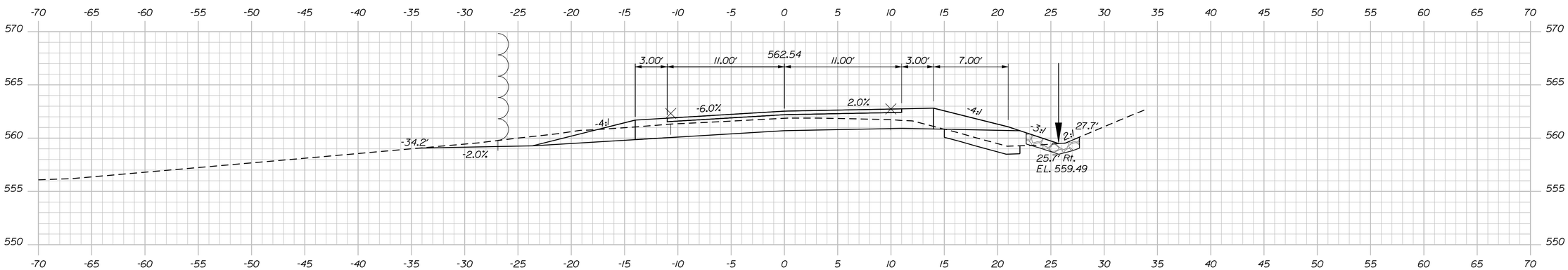
OF 20

Sta. 20+25.00 to Sta. 20+75.00

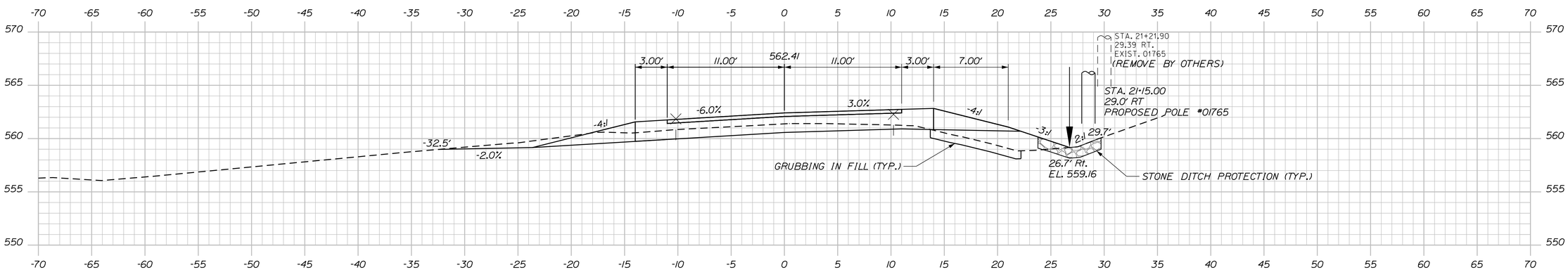
Filename: ...\MSTA\014_XSECT_20+25_007.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021




21+50.00




21+25.00




21+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

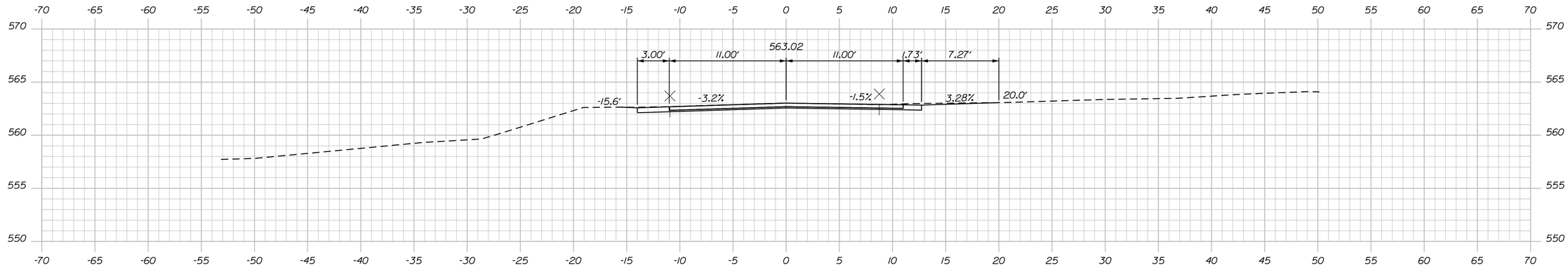
SHEET NUMBER

15

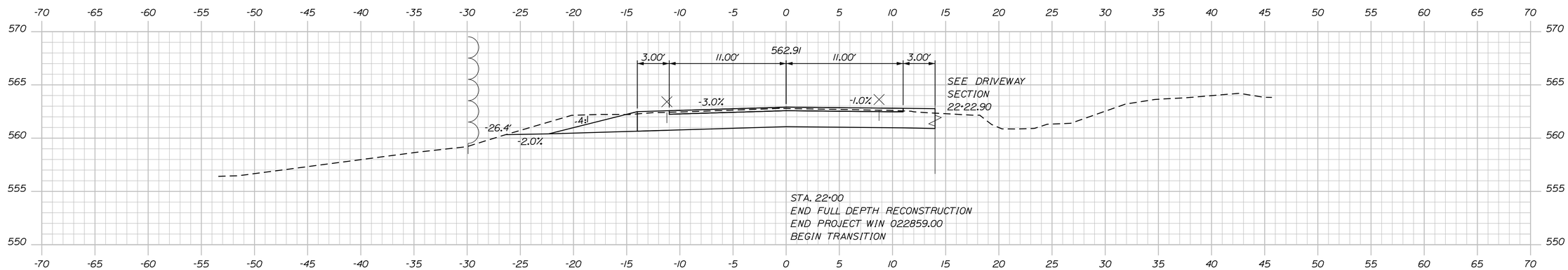
OF 20

Filename: ...\MSTA\015_XSECT_21+00_008.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

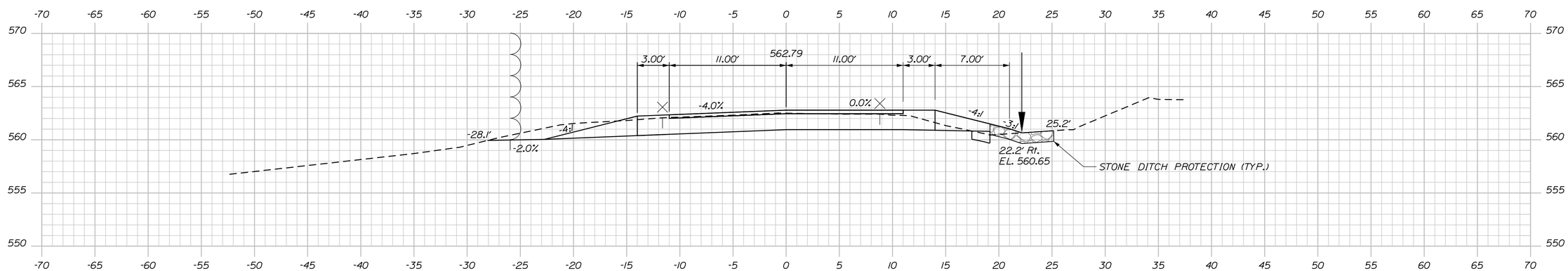
Sta. 21+00.00 to Sta. 21+50.00




22+22.90




22+00.00




21+75.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | | - |
| REVISIONS 2 | - | | - |
| REVISIONS 3 | - | | - |
| REVISIONS 4 | - | | - |
| FIELD CHANGES | - | | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

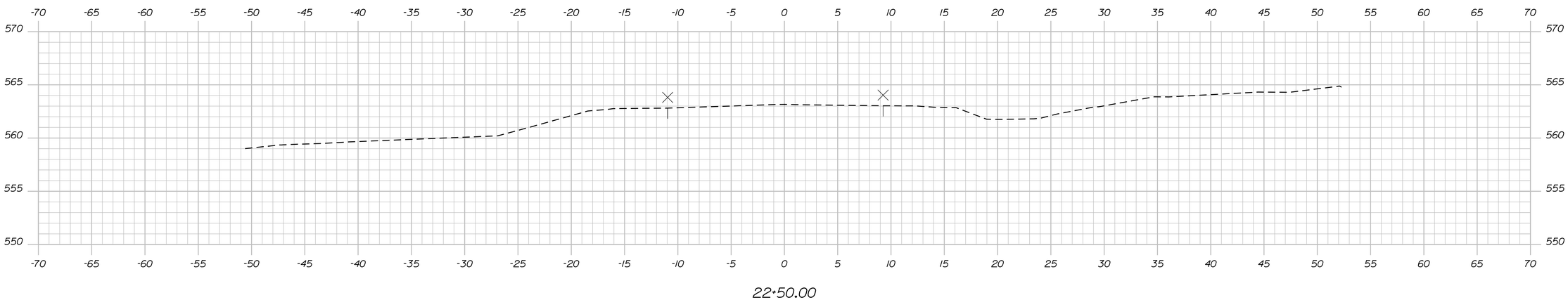
SHEET NUMBER

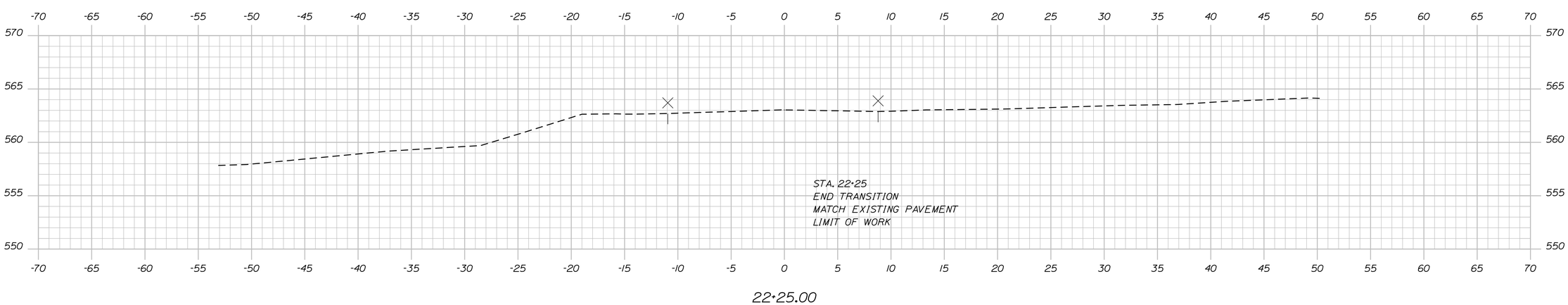
16

OF 20

Filename: ...\MSTA\016_XSECT_21+75_009.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

Sta. 21+75.00 to Sta. 22+22.90




STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | | - |
| REVISIONS 2 | - | | - |
| REVISIONS 3 | - | | - |
| REVISIONS 4 | - | | - |
| FIELD CHANGES | - | | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

CROSS SECTIONS

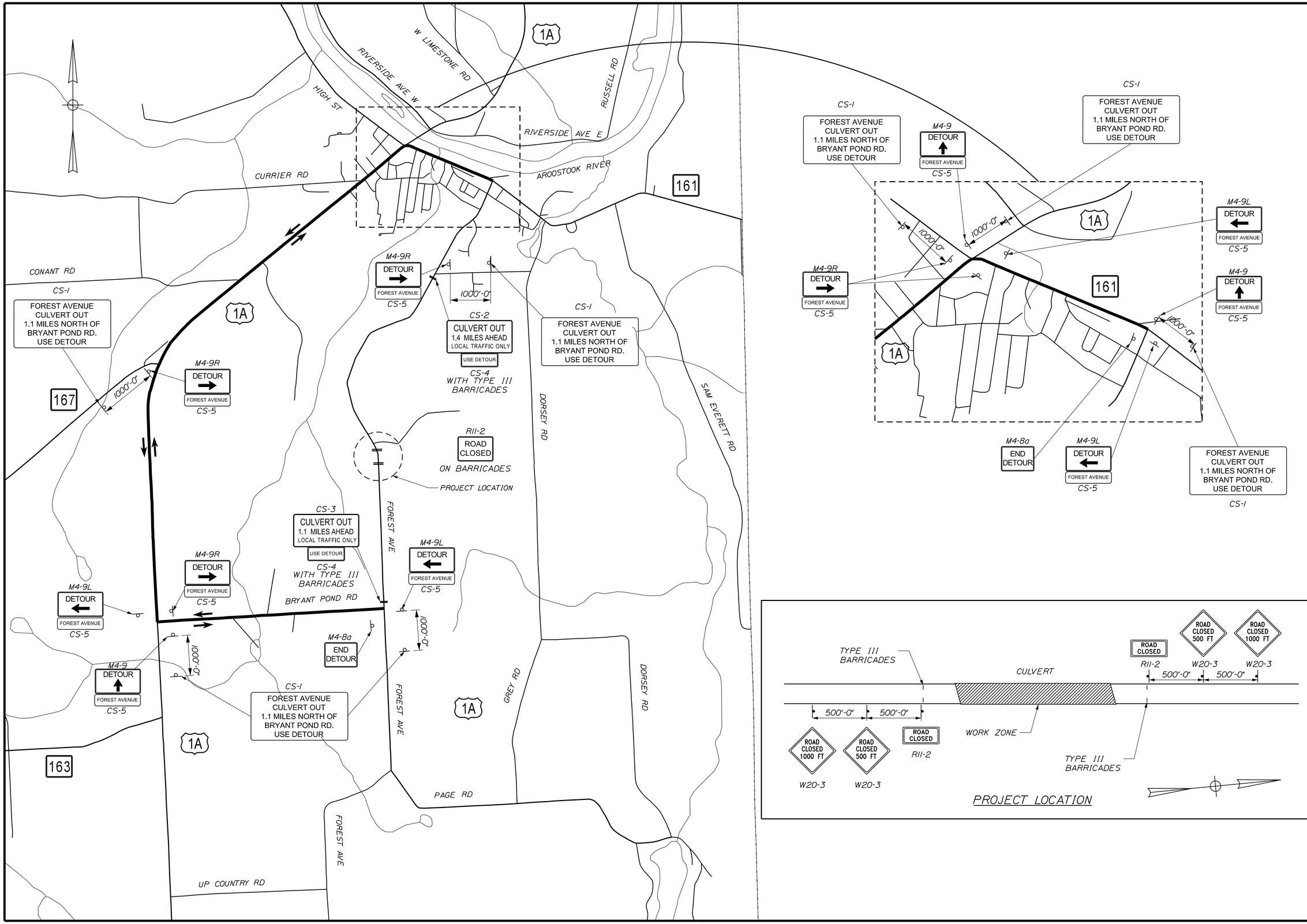
SHEET NUMBER

17

OF 20

Filename: ...\MSTA\017_XSECT_22+25_010.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

Sta. 22+25.00 to Sta. 22+50.00




STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | BY | DATE |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | | |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

DETOUR PLAN

SHEET NUMBER

18

OF 20

Filename: ...\MSTA\018_Detour Plan.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

# CONSTRUCTION SIGN SUMMARY

| ITEM NUMBER | IDENTIFI-CATION NUMBER | SIZE OF SIGN | | TEXT | TEXT DIMENSIONS (INCHES) | | | NUMBER OF SIGNS REQUIRED | COLOR | | AREA IN SQUARE FEET |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | WIDTH | HEIGHT | | LETTER HEIGHT | VERTICAL SPACING | ARROW RTE. MKR. | | BACK-GROUND | LEGEND BORDER | |
| 652.35 | CS-1 | 48" | 42" | FOREST AVENUE<br>CULVERT OUT<br>1.1 MILES NORTH OF<br>BRYANT POND RD.<br>USE DETOUR | 4"C<br>4"C<br>4"C | 3"<br>3" | | 7 | ORANGE | BLACK | 14.00<br>(98.00) |
| 652.35 | CS-2 | 60" | 30" | CULVERT OUT<br>1.4 MILES AHEAD<br>LOCAL TRAFFIC ONLY | 6"C<br>5"C<br>4"C | 3.4"<br>3.4" | | 1 | ORANGE | BLACK | 12.50<br>(12.50) |
| 652.35 | CS-3 | 60" | 30" | CULVERT OUT<br>1.1 MILES AHEAD<br>LOCAL TRAFFIC ONLY | 6"C<br>5"C<br>4"C | 3.4"<br>3.4" | | 1 | ORANGE | BLACK | 12.50<br>(12.50) |
| 652.35 | CS-4 | 36" | 12" | USE DETOUR | 4"D | | | 2 | ORANGE | BLACK | 3.00<br>(6.00) |
| 652.35 | M4-8a | 24" | 18" | END<br>DETOUR | TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS" | | | 2 | WHITE | BLACK | 3.00<br>(6.00) |
| 652.35 | M4-9 | 30" | 24" | DETOUR ↑ | | | | 3 | ORANGE | BLACK | 5.00<br>(15.00) |
| 652.35 | M4-9L | 30" | 24" | DETOUR ← | | | | 4 | ORANGE | BLACK | 5.00<br>(20.00) |
| 652.35 | M4-9R | 30" | 24" | DETOUR → | | | | 5 | ORANGE | BLACK | 5.00<br>(25.00) |
| 652.35 | R11-2 | 48" | 30" | ROAD<br>CLOSED | | | | 2 | WHITE | BLACK | 10.00<br>(20.00) |
| 652.35 | W20-3<br>(500 ft) | 48" | 48" | ROAD<br>CLOSED<br>500 FT | | | | 2 | ORANGE | BLACK | 16.00<br>(32.00) |
| 652.35 | W20-3<br>(1000 ft) | 48" | 48" | ROAD<br>CLOSED<br>1000 FT | | | | 2 | ORANGE | BLACK | 16.00<br>(32.00) |
| 652.35 | CS-5 | 48" | 12" | FOREST AVENUE | | | | 12 | ORANGE | BLACK | 4.00<br>(48.00) |

NOTES:

1. SIGN LOCATIONS ARE APPROXIMATE AND TO BE VERIFIED IN THE FIELD.
2. INFORMATION SHOWN REFLECTS SIGNAGE FOR DETOUR PLANS ONLY. ADDITIONAL SIGNAGE IS REQUIRED FOR HIGHWAY CONSTRUCTION WORK.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2285900

WIN 22859.00

HIGHWAY PLANS

| | | | |
|---|---|---|---|
| PROJ. MANAGER | ROGER SOUCY | BY | DATE |
| DESIGN-DETAILED | A.SWEET | E.RAYMOND | 04-2021 |
| CHECKED-REVIEWED | R.HANF | L.DRISCOLL | 04-2021 |
| DESIGN2-DETAILED2 | - | - | - |
| DESIGN3-DETAILED3 | - | - | - |
| REVISIONS 1 | - | - | - |
| REVISIONS 2 | - | - | - |
| REVISIONS 3 | - | - | - |
| REVISIONS 4 | - | - | - |
| FIELD CHANGES | - | - | - |

SIGNATURE

P.E. NUMBER

DATE

FORT FAIRFIELD
FOREST AVENUE

SIGN SUMMARY

SHEET NUMBER

19

OF 20

Filename: ...\MSTA\019_Sign Summary.dgn Division: HIGHWAY Username: David.Wardwell Date:4/5/2021

PLAN LEGEND

Town, County, State
Approx. Property Lines — P.L.
Existing Right of Way
Limits of Wrought Portion — L.O.W.P.
Control Of Access — C.O.A.
New Right of Way
New Easement
New Temporary Rights
New R/W Within Existing R/W

New R/W Along Existing R/W
Building
Clearing Limit Line
Trees — Conifer — Deciduous
Tree Line — Bush Line
Water Edge
Ledge — Rock/Boulder — Flag Pole
Fence — CHAIN LINK — BARB WIRE — STOCKADE
Sign — Well — WELL — Mailbox

| | Existing | Proposed |
|---|---|---|
| Sanitary Sewer | | |
| Telephone Line | | |
| Electric Line | E | E |
| Water Line | W | W |
| Underdrain Line | | |
| Gas Line | | |
| Guardrail | | |
| Culvert | | |

| | Existing | Proposed |
|---|---|---|
| Traveled Way | | |
| Ditch | | |
| Catch Basin | | |
| Manhole | | |
| Sewer Manhole | | |
| Utility Pole | | |
| Fire Hydrant | | |
| Curbing | | |

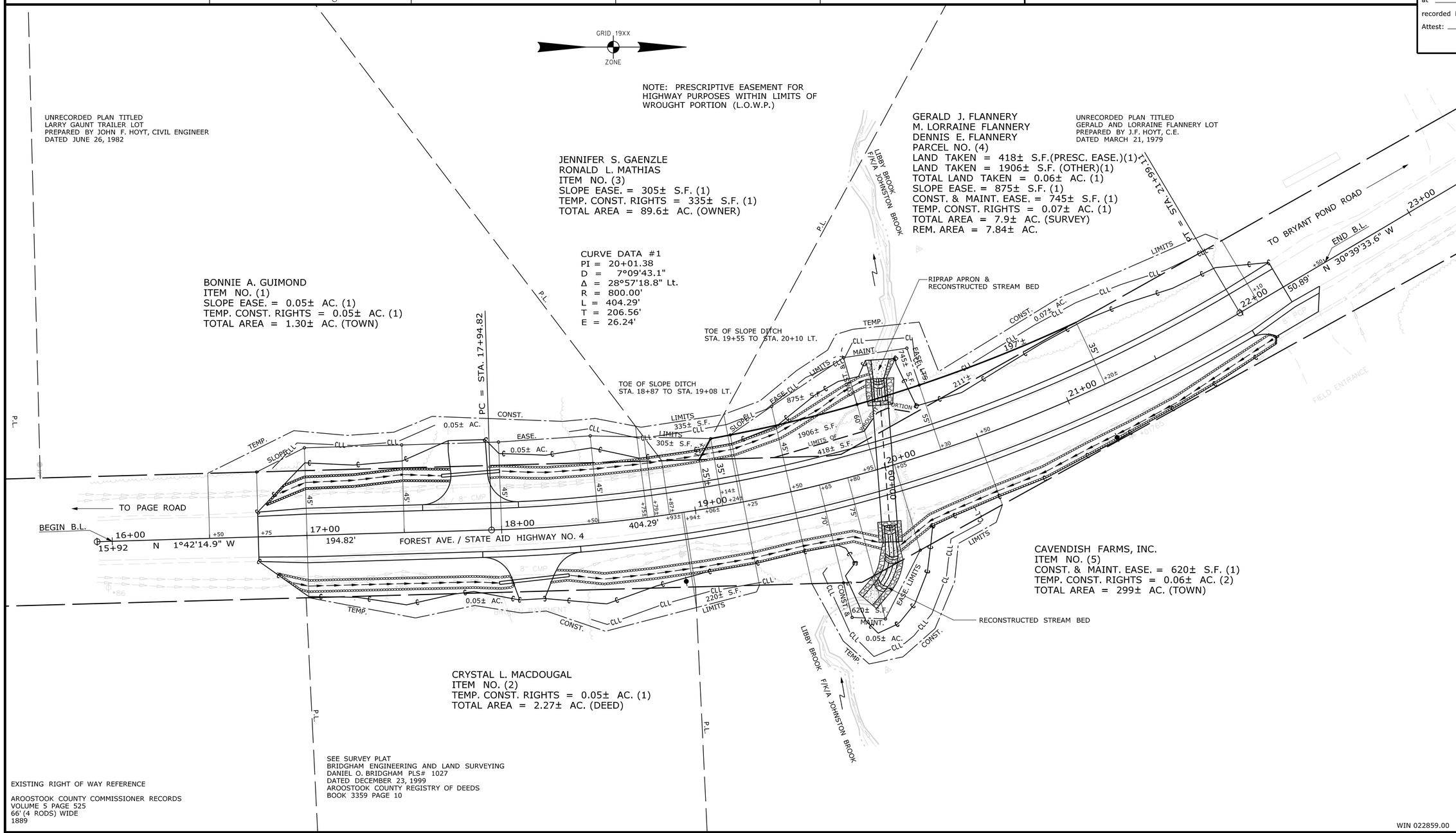
Cut Line — C — C — C
Fill Line — F — F — F
Stonewall
Retaining Wall
Baseline — 10+00 — 11+00 — 12+00
Monument
Traverse Point
Iron Rod Found — IRF
Pipe Found — IPF
Replacement Pin Set

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

25 0 25 50 75 100
Scale of Feet

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and
recorded in Plan Bk _____, Pg._____
Attest: _____
REGISTER




| ITEM | TECH | CHECKED |
|---|---|---|
| EXISTING CONDITION PLAN | T.L.B. | |
| FINAL RIGHT OF WAY | T.L.B. | D.S.G. |
| AREAS | T.L.B. | D.S.G. |

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460

FORT FAIRFIELD
RIGHT OF WAY MAP

**REVISIONS**

| NO. | DATE | DESCRIPTION | BY |
|---|---|---|---|
| | | | |

| PLAN FILED IN PLAN BOOK | PAGE | COUNTY RECORD | | | |
|---|---|---|---|---|---|
| NO. | GRANTOR | INSTRUMENT | DATE | BOOK | PAGE |
| | | | | | |

BRUCE A. VAN NOTE
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE AID HIGHWAY NO. 4
FOREST AVENUE
FORT FAIRFIELD AROOSTOOK COUNTY
FEDERAL AID PROJECT NO. 2285900

DECEMBER 2020 | RIGHT-OF-WAY MAP
SCALE 1" = 25' | SHEET 1 OF 1
D.O.T. FILE NO. 2-621

SHEET NUMBER
20
OF 20

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: ROW Username: Terri.L.Blair Date:4/6/2021