## INDEX OF SHEETS

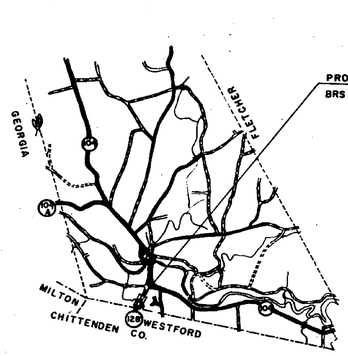

| | | | |
|---|---|---|---|
| 1. | TITLE SHEET | | |
| 2. | TIE SHEET | | |
| 3. | TYPICAL SHEET | | |
| 4. | QUANTITY SHEET | | |
| 5. | DRAINAGE & ITEM QUANTITY SHEET | | |
| 6. | EARTHWORKS SHEET | | |
| 7. | BLANK | | |
| 8-13. | ROW SHEETS | | |
| 14. | BLANK | | |
| 15-19. | PLAN & PROFILE SHEETS | | |
| 20. | BLANK | | |
| 21-35. | BR 800 SERIES VT 128 OVER BROWNS RIVER | | |
| 36-40. | BLANK | | |
| | STANDARDS | | |
| 41. | A-26 | ALL ADT 750+≥50 MPH | 06/17/82 |
| 42. | A-60 | SLOPES IN SOLID ROCK EXCAV.(50 MPH AND OVER) | 08/31/81 R |
| 43. | B-5 | SLOPE GRADING, EMBANKMENTS, MUCK | 12/06/71 |
| 44. | B-11 | UNDERDRAIN - ROCK SUBGRADE, SLOPE STABILIZATION | 12/12/71 R |
| 45. | BLANK | | |
| 46. | D-2 | CRM HEADWALLS, UNDERDRAIN | 12/16/76 R |
| 47. | D-3 | TREATED GUTTERS | 04/27/73 R |
| 48. | E-2 | APPROACH SIGNS, ROAD CONSTRUCTION | 03/04/81 R |
| 49. | E-6 | CONSTRUCTION SIGNS, ON PROJECT | 04/01/80 R |
| 50. | E-7 | DELINEATION, BARRICADES AND DETOURS | 02/02/83 R |
| 51. | E-7A | TYPE III BARRICADE BREAKAWAY | 02/03/85 R |
| 52. | G-1 | STEEL BEAM GUARD RAIL (50 MPH AND OVER) | 12/21/84 R |
| 53. | G-1D | GUARD RAIL STEEL BEAM W/STL & WOOD POSTS TYPE II | 12/21/84 R |
| 54. | G-14 | BREAKAWAY CABLE TERMINAL FOR GR STL BEAM W/WOOD POSTS | 12/21/84 R |
| 55. | J-1 | PROJECT AND BOUNDARY MARKERS | 06/27/80 |
| 56. | T-1 | DETAILS | 12/07/76 R |
| 57. | T-2 | DETAILS | 07/05/72 |
| 58. | SB-RHA-82 | BRIDGE RAILING, GALVANIZED BOX BEAM | 09/07/83 R |
| 59. | SCB-01-75 | GENERAL INFORMATION | 09/14/81 R |
| 60. | SCB-04-76 | PLAN & REINFORCEMENT LAYOUT AT ABUTMENT | 01/08/76 R |
| 61. | SCB-06-73 | DETAILS - SCUPPER, CURB, CONSTRUCTION, PILE | 01/03/79 R |
| 62. | SCB-07-71 | DETAILS - STRUCTURAL STL DIAPHRAGM, CUT OFF COVER PLATES | 12/15/76 R |
| 63-69. | BLANK | | |
| 70-91. | MAINLINE CROSS SECTIONS | | |
| 92-98. | CHANNEL SECTIONS | | |

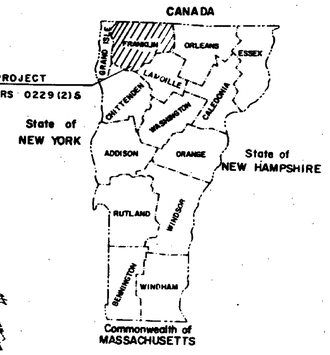

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

# PROPOSED IMPROVEMENT
# TOWN OF FAIRFAX
# COUNTY OF FRANKLIN
# VT RTE 128

BEGINNING AT A POINT ON VT. RTE. 128, APPROXIMATELY .006MI. NORTHERLY OF THE WESTFORD-FAIRFAX TOWN LINE AND EXTENDING NORTHEASTERLY FOR 0.255 MI.

| | | | |
|---|---|---|---|
| LENGTH OF ROADWAY | 1274.85 | FEET | 0.241 MILES |
| LENGTH OF BRIDGES | 74.00 | FEET | 0.014 MILES |
| LENGTH OF PROJECT | 1348.85 | FEET | 0.255 MILES |




0 5 0 1
SCALE : MILE

Date JUL 8 1985

Winterset Inc
Contractor

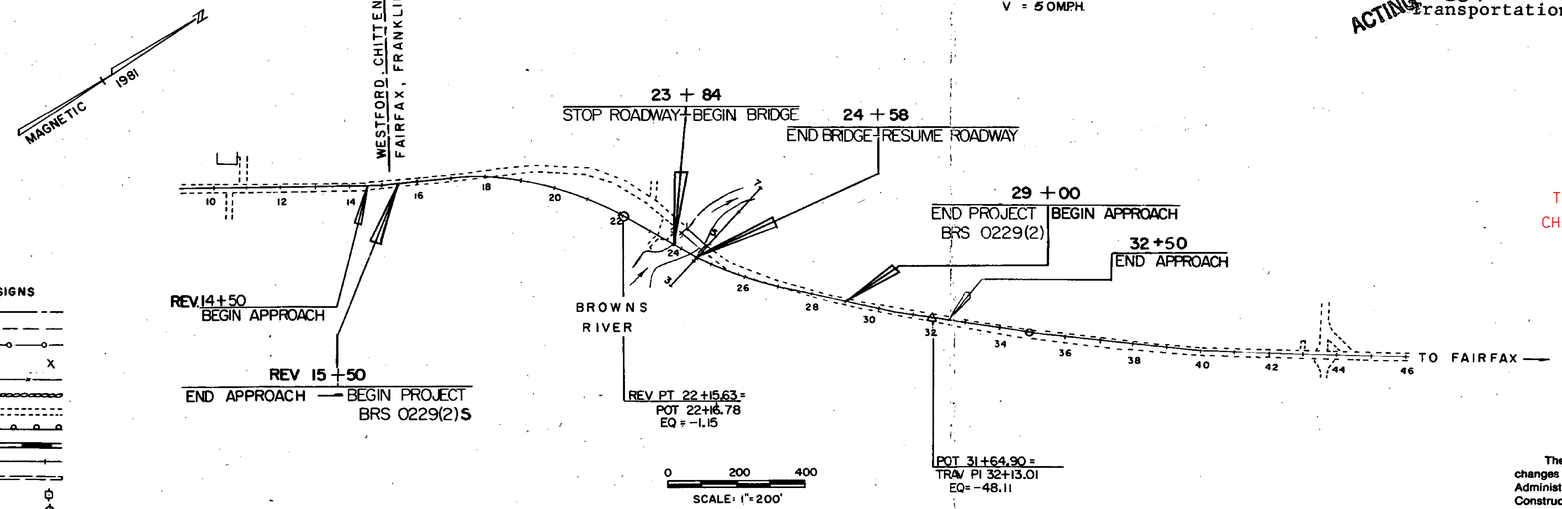
Signature

President
Title

ACTING Arthur G. Hull
Transportation Secretary's Signature

PROJECT CONSISTS OF REPLACEMENT OF BRIDGE No. 8 ON VT RTE 128 WITH APPROACHES INVOLVING GRADING, DRAINAGE AND BITUMINOUS CONCRETE SURFACE.

1985 ADT = 1230
2005 ADT = 1670
2005 DHV = 230
D = 70%
T = 5%
V = 50MPH




CONTRACT PLANS

THESE PLANS DO NOT REFLECT CHANGES MADE ON THE PROJECT.

### CONVENTIONAL SIGNS

COUNTY LINE
TOWN LINE
LIMITS OF ACCESS
POINT OF ACCESS
FENCE LINE
STONE WALL
TRAVELED WAY
GUARD RAIL
RAILROAD
SURVEY LINE
CULVERT
POWER POLE
TELEPHONE POLE
TREES
CONTROL OF ACCESS
PROPERTY LINE
R.O.W. TAKING LINE
SLOPE RIGHTS SR
TOP OF CUT
TOE OF SLOPE

DATUM
VERTICAL ASSUMED
HORIZONTAL N/A

These plans are subject to such engineering changes as may be required by the Federal Highway Administration or the Director of Engineering and Construction.

Construction is to be carried on in accordance with these plans and the Standard Specifications for Highway and Bridge Construction dated March, 1976, as approved by the Federal Highway Administration on October 27, 1976 for use on this project, including all subsequent revisions and such revised specifications and special provisions as are incorporated in these plans.

**PROJECT PROCESSED UNDER SECONDARY ROAD PLAN**

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED Frank E. Nitch DATE 3-15-85
DIRECTOR OF ENGINEERING AND CONSTRUCTION

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

PROJECT BRS № 0229(2)S

SHEET 1 OF 98 SHEETS

D-10 S.R.S. 12/17/70

BRUNING 44-131 A0592-1

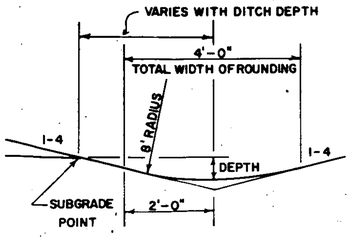
X8
8
97.54'
13
92.91'
X8A
NET
8A
PC 13+94.16=
Rev PC 13+94.16
Match Line "A"
magnetic
1981
N
PC 13+94.16=
Rev PC 13+94.16
rev
14
37.48'
25.82'
15" CGMP
Punch Holes in Top of Culv.
Match Line "A"
Guard Post
Town Line Post
mm
1280
090804
0000
51.48'
33.11'
rev
15
Nail in
8" CRM HDR
44.98'
29.90'
Rein. Rod
w/ X on top
POST 14+84.61
Rev PI 14+84.61=
14+84.56
Trav PI 15+39.70
Δ 5°49' Lt
PI 15+39.70=
15+39.45
Rev PT 15+75.01
rev
16
Trav 16+30.16
POT 16+29.98=
Rev POT 16+30.00
X7
7
66.28'
59.13'
PT 16+84.99
27.08'
Hub Tie at base
of Fence Post
26.50'
35.55'
38.41'
rev
17
613
X7-1
PC 17+02.50
Rev PC 17+36.41
rev
18
Trav PI 18+69.54
Δ 10°50' Rt
36.41'
23.25'
25.80'
13.1'
Hub
11.7'
Ties
rev
19
POST 19+25.63
Trav 19+30.76 =
Rev POST 19+29.73
Hub
13.8'
Ties
13.3
23.12'
26.40'
25.80'
PI 19+66.60=
19+46.96
Δ 38°08'30" Rt
D 7°30'
82.94'
X6
6
POST 19+68.98
Rev PI 19+84.20=
19+67.84
POST 19+86.79
Trav 20+00.45
44.75'
65.01'
2-4" Elm
12" Elm
rev
20
Match Line "D"
6" Willow
T-9.03'
6" Willow
T-12.53'
17.33'
6" Willow
Chan POT 6+59.98
Match Line "B"
Trav PI 22+06.09
Δ 38°53'30" Rt
33.04'
37.02'
44.49'
Paint Spots on Ledge
N
1981
magnetic
Trav POT 24+31.73
5
5+13
6.0
D
5.87'
Chan POT 5+00
39.55'
6
Trav POT 25+14.80
T-33.80'
Point on
Wingwall
Match Line "D"
Match Line "B"
rev
21
rev
22
12" Pine
T-1.57'
8" Pine
T-10.07'
22.99'
18" Pine
PT 22+11.06
Rev PT 22+15.63=
POT 22+16.78
Eq = -1.15
23
24
POT 24+54.44=
Chan POT 4+13.09
Δ 78°37' Lt
15.75'
9.31'
Spikes in
Wall
15.52'
15.88'
24" E.
18" I.
4
29.78'
2" Loc.
22.43'
6" Willow
PC 24+74.81
68.24'
72.89'
63.26'
12" Locust
25
26
Match Line "C"
PI 26+04.17=
26+01.75
Δ 19°13'20" Lt
D 7°30'
Trav PI 26+59.36
Δ 30°48'30" Lt
Match Line "C"
26
Conc. nail in
Edge of Pavement
14.36'
9.65'
59.45'
65.94'
POST 26+11.43
Trav PI 26+59.36
Δ 30°48'30" Lt
PI 26+04.17=
26+01.75
10" Elm
N
1981
magnetic
Match Line "A"
27
PT 27+31.11
30.65'
12" Elm
53.36'
8" Elm
79.17'
4" Elm
28
POT 29+02.30
29
30
31
Chan POT 3+73.65
32.84'
8" Thorn Apple
10" Elm
6" Elm
53.27'
36.63'
POT 31+64.90=
Trav PI 32+13.01
Δ 6°02' Lt
Eq = -48.11
6" Cherry
38.93'
3-6" Elms
25.45'
6" Cherry
25.80'
33
Trav. 32+78.99
45.15'
12" Elm

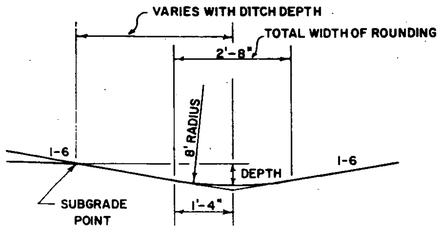
ALIGNMENT & TIE SHEET
1. Traverse Line, May 1979
2. Survey Line, Feb 1981
3. Revised Line Dec 1983
Note: Survey Line, May 1979 is not shown.

0 20 40
Scale in Feet

SURVEYED BY Fall DATE 2-81
DRAWN BY Toolan DATE 11-83
TRACED BY Toolan DATE 11-83
FAIRFAX
PROJ. BRS NO. 0229(2)15
SHEET 2 OF 98

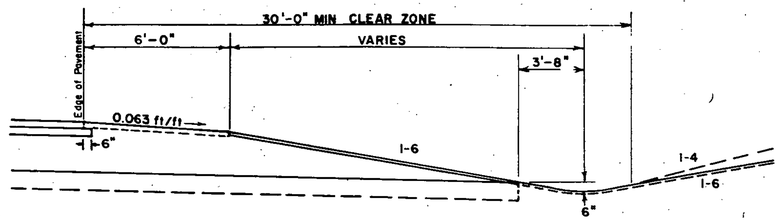
# TYPICAL SECTIONS



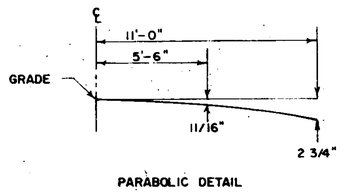




TYPICAL DITCH DETAILS

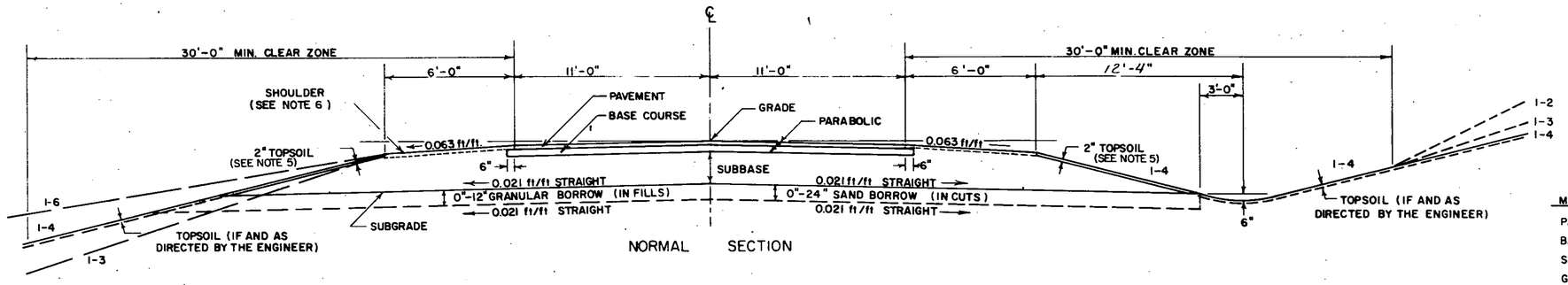
| | | |
|---|---|---|
| | 2" | BITUMINOUS CONCRETE PAVEMENT (TYPE II, TO BE PLACED IN ONE COURSE) |
| | 3" | PLANT MIXED BASE COURSE |
| | 24" | SUBBASE OF GRAVEL (301.15) |
| SHOULDERS | 2" | BITUMINOUS CONCRETE PAVEMENT (SEE GENERAL NOTE 6) |
| | 3" | GRAVEL SURFACE COURSE |
| | 0"-12" | GRANULAR BORROW (IN FILLS) } as indicated on the plans or |
| | 0"-24" | SAND BORROW (IN CUTS) } as directed by the Engineer. |




NORMAL SECTION IN CUT WITH 1-6 SLOPES

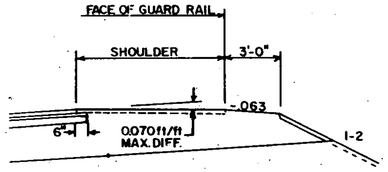



PARABOLIC DETAIL

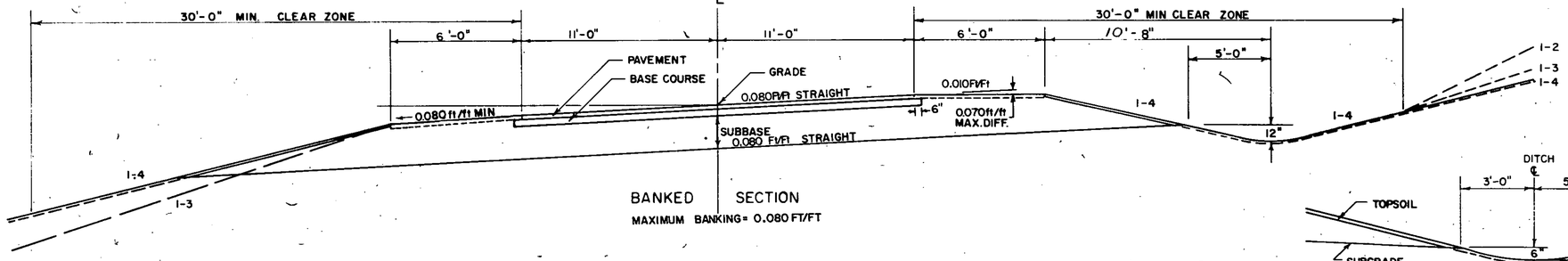



NORMAL SECTION

| MATERIAL ITEM | THICKNESS TOLERANCE |
|---|---|
| PAVEMENT | ± 1/4" |
| BASE COURSE | ± 1/2" |
| SUBBASE | ± 1" |
| GRANULAR BORROW | ± 1" |
| SAND BORROW | ± 1" |

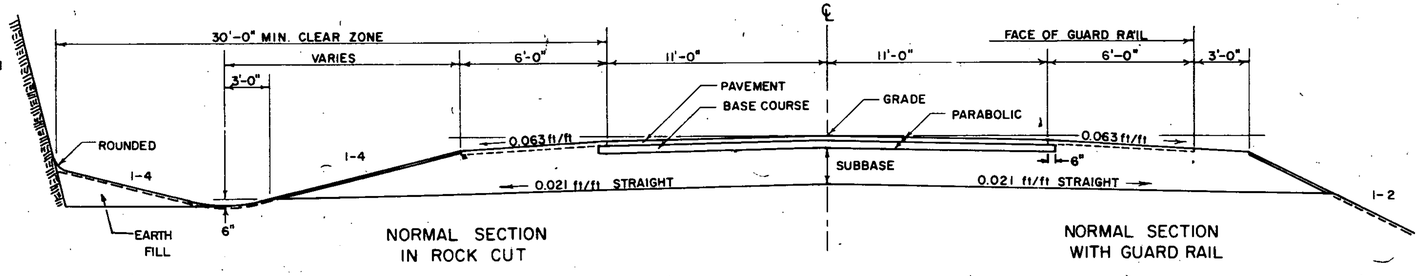



DETAIL OF GUARD RAIL ON HIGH SIDE OF BANKED SECTION




BANKED SECTION

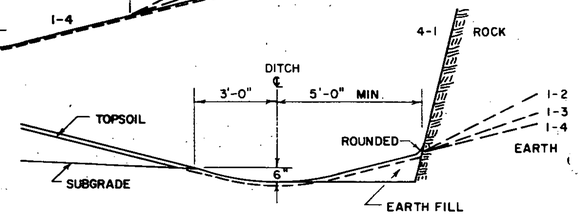
MAXIMUM BANKING = 0.080 FT/FT



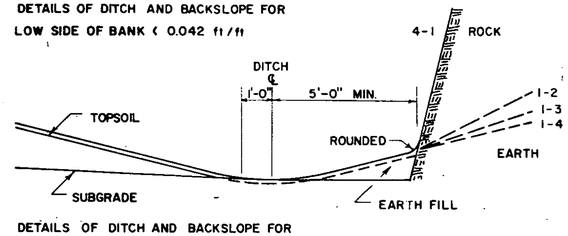

NORMAL SECTION IN ROCK CUT

NORMAL SECTION WITH GUARD RAIL

FOR SLOPES IN SOLID ROCK EXCAVATION AND DRILLING AND BLASTING OF SOLID ROCK SUBGRADE, SEE STANDARD SHEET A-60.




DETAILS OF DITCH AND BACKSLOPE FOR LOW SIDE OF BANK < 0.042 ft/ft




DETAILS OF DITCH AND BACKSLOPE FOR LOW SIDE OF BANK ≥ 0.042 ft/ft.

GENERAL NOTES

1. SEED- TO BE APPLIED PER SEEDING FORMULA AS DIRECTED BY THE ENGINEER.
2. FERTILIZER- FORMULA 10-20-10, TO BE APPLIED AT THE RATE OF 500 LBS/ACRE.
3. AGRICULTURAL LIMESTONE - TO BE APPLIED AT THE RATE OF 2 TONS/ACRE 4-1
4. HAY MULCH- TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE.
5. TOPSOIL- TO BE PLACED AS DIRECTED BY THE ENGINEER.
6. PAVEMENT ON SHOULDERS TO BE PLACED AS NOTED ON PLANS OR AS DIRECTED BY THE ENGINEER.

| % WT | LBS/A | SEEDING FORMULA NAME | PUR % | GERM % |
|---|---|---|---|---|
| 3.33 | 2 | CROWN VETCH | 97 | 75 |
| 50.00 | 30 | CREEPING RED FESCUE | 98 | 85 |
| 8.33 | 5 | TIMOTHY | 99 | 85 |
| 16.67 | 10 | PERENNIAL RYE (PENNFINE) | 95 | 85 |
| 8.34 | 5 | ALFALFA (SARANAC) | 99 | 85 |
| 8.33 | 5 | BIRDSFOOT TREFOIL (EMPIRE) | 98 | 85 |
| 5.00 | 3 | HIGHLAND BENT GRASS | 92 | 85 |
| 100.00 | 60 | | | |

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

FAIRFAX
BRS 0229(2)S

# QUANTITY SHEET

STATE OF VERMONT AGENCY OF TRANSPORTATION

FAIRFAX PROJECT NO. BRS 0229(2) S

SUMMARY SHEET NO. ____ OF ____ 19 84

APPROXIMATE SUMMARY OF QUANTITIES

| EROSION CONTROL | BRIDGE | ROADWAY | QUANTITY (GRAND TOTAL) | UNIT | ITEMS | ITEM NO. | EDG |
|---|---|---|---|---|---|---|---|
| | | 1 | 1 | LS | Clearing & Grubbing | 201.10 | |
| | | 80 | 80 | CY | Excavation & Removal of Road Surfaces & Pavements | 202.15 | 2 |
| | 1 | | 1 | Ea | Removal of Existing Superstructure | 202.20 | |
| | 1 | | 1 | Ea | Partial Removal of Structure | 202.30 | |
| | | 260 | 260 | LF | Removal & Disposal of Existing Guard Rail | 202.40 | 7 |
| | | 16000 | 16000 | CY | Common Excavation | 203.16 | 341 |
| | | 6000 | 6000 | CY | Solid Rock Excavation | 203.16 | 44 |
| | 110 | | 110 | CY | Unclassified Channel Excavation | 203.27 | |
| | | 2800 | 2800 | CY | Sand Borrow | 203.31 | 11 |
| | | 2700 | 2700 | CY | Granular Borrow | 203.32 | 49 |
| | | 8600 | 8600 | SY | Fine Grading-Subgrade | 203.40 | 78 |
| 26 | | 974 | 1000 | CY | Trench Excavation of Earth | 204.20 | |
| | | 450 | 450 | CY | Trench Excavation of Rock | 204.21 | 29 |
| | 460 | | 460 | CY | Structure Excavation | 204.25 | |
| | 490 | | 490 | CY | Granular Backfill for Structures | 204.30 | |
| | | 2400 | 2400 | SY | Drilling & Blasting of Solid Rock Subgrade | 206.10 | 56 |
| 128 | | 6072 | 6200 | CY | Subbase of Gravel | 301.15 | |
| | | 650 | 650 | Ton | Plant Mixed Base Course | 303.25 | |
| 26 | | 1374 | 1400 | CY | Stripping of Pits | 307.10 | 16 |
| | | 100 | 100 | CY | Gravel Surface Course | 401.10 | |
| | 10 | | 10 | Gal | Emulsified Asphalt | 404.66 | |
| | 38 | 542 | 580 | Ton | Bituminous Concrete Pavement | 406.25 | |
| | 92 | | 92 | CY | Concrete, Class A | 501.20 | |
| | 388 | | 388 | CY | Concrete, Class B | 501.25 | |
| | 1 | | 1 | LS | Furnishing Equiptment For Driving Piling | 504.10 | |
| | 400 | | 400 | LF | Steel Piling (HP 12 x 53) | 505.15 | |
| | 70,480 | | 70,480 | LB | Structural Steel (Rolled Beam) | 506.90 | |
| | 10 | | 10 | Ea | Bearing Device Assembly | 506.99 | |
| | 70,980 | | 70,980 | LB | Reinforcing Steel | 507.15 | |
| | 1 | | 1 | LS | Shear Connectors (830 7/8" Ø x 7") | 508.15 | |
| | 26 | | 26 | Gal | Water Repellent | 514.10 | |
| | 270 | | 270 | SY | Sheet Membrane Waterproofing | 519.20 | |
| | | 100 | 100 | LF | 18" ACCGMP (.064) | 601.1332 | |
| | | | | | OPTION PIPE | | |
| | | 242 | 242 | LF | 15" CGMP (.064) | 601.1342 | |
| | | 242 | 242 | LF | 15" CAACP (.060) | 601.1342 | |
| | | | | | End OPTION PIPE | | |
| | | 1300 | 1300 | LF | 6" Underdrain (Est.) | 605.701 | |
| | | 300 | 300 | LF | 6" Underdrain Carrier Pipe (Est.) | 605.751 | |
| | | 6 | 6 | Ea | Underdrain Flushing Basin (Est.) | 605.95 | |
| | | 25 | 25 | Hr | Roadway Patrol Maintenance | 607.10 | |
| | | 1 | 1 | Hr | Bulldozer Rental, Type I (NABI) | 608.10 | |
| | | 1 | 1 | Hr | All Purpose Excavator, Type I (NABI) | 608.25 | |
| | | 1 | 1 | Hr | Truck Rental (NABI) | 608.37 | |
| | | 64 | 64 | MGal | Dust Control With Water | 609.10 | |
| | | 1 | 1 | Ton | Dust & Ice Control With Calcium Chloride | 609.15 | |
| 110 | | | 110 | CY | Stone Fill, Type I | 613.10 | 4 |
| 190 | 210 | | 400 | CY | Stone Fill, Type II | 613.11 | 5 |
| | 132 | | 132 | LF | Granite Bridge Curb | 616.17 | |
| | 152 | | 152 | LF | Bridge Railing, Galvanized Box Beam | 617.30 | |
| | | 6 | 6 | Ea | Boundary Markers | 619.10 | |
| | | 7 | 7 | Ea | Wood Marker Posts | 619.15 | |

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | **Common Excavation** |
| 11379 | CY | Roadway |
| 404 | CY | Begin Approach |
| 213 | CY | End Approach |
| 326 | CY | Drives |
| 2800 | CY | From Est. Sand Borrow in Cuts |
| 195 | CY | From Est. 3" Granular Borrow in Ledge |
| 342 | CY | Gravel Turnout (19+30 Lt ~ 22+25 Lt) |
| 341 | CY | Rounding |
| 16000 | CY | Total |
| | | **Trench Excavation of Earth** |
| 510 | CY | Drainage |
| 349 | CY | Underdrain (Est.) |
| 72 | CY | Underdrain Carrier Pipe (Est) |
| 40 | CY | Test Trenchs |
| 3 | CY | Rounding |
| 974 | CY | Total |
| | | **Trench Excavation of Rock** |
| 349 | CY | Underdrain (Est) |
| 72 | CY | Underdrain Carrier Pipe (Est) |
| 4 | CY | Rounding |
| 425 | CY | Total |
| | | **Sub base of Gravel** |
| 4540 | CY | Roadway |
| 284 | CY | Begin Approach |
| 164 | CY | End Approach |
| 308 | CY | Drives |
| 73 | CY | Guard Rail Flare Slope Flattening |
| 50 | CY | Slope Flattening (22+57 Lt ~ 23+87 Lt) |
| 552 | CY | Turnout |
| 21 | CY | Extra for Approach Slab |
| 6072 | CY | Total |
| | | **Bituminous Concrete Pavement** |
| 435 | TON | Roadway |
| 27 | TON | Begin Approach |
| 14 | TON | End Approach |
| 7 | Ton | Aprons for Drives |
| 54 | Ton | Overlays |
| 5 | Ton | Rounding |
| 542 | | Total |
| | | **Plant Mixed Base Course** |
| 564 | Ton | Roadway |
| 44 | Ton | Begin Approach |
| 22 | Ton | End Approach |
| 20 | Ton | Rounding |
| 650 | Ton | Total |

DETAILED SUMMARY OF QUANTITIES

| QUANTITIES | UNIT | ITEMS |
|---|---|---|
| | | **Granular Borrow** |
| 1860 | CY | Bridge Approaches |
| 165 | CY | 3" Lift in Ledge Cuts |
| 96 | CY | 0"-12" To Cap Fills |
| 2121 | | Sub Total |
| 2651 | | (Factored 1.25) |
| 49 | | Rounding |
| 2700 | | Total |
| | | **Temporary Erosion Control** |
| 26 | CY | Trench Excavation of Earth |
| 128 | CY | Subbase of Gravel |
| 26 | CY | Stripping of Pits |
| 13 | CY | Stone Fill, Type I |
| 31 | LB | Seed, Winter Rye |
| 1 | Ton | Hay Mulch |
| 52 | SY | Erosion Matting |
| | | **Stone Fill Type I** |
| 93 | CY | Drainage Sheet |
| 10 | CY | Temporary Erosion Control |
| 7 | CY | Rounding |
| 110 | CY | Total |
| | | **Stone Fill Type II** |
| 185 | CY | Drainage Sheet |
| 210 | CY | Bridge |
| 5 | CY | Rounding |
| 400 | | Total |

TYPE OF CONSTRUCTION

| STATIONS FROM | STATIONS TO | PAVEMENT WIDTHS | | | EQUATIONS | | |
|---|---|---|---|---|---|---|---|
| 15+50 | 23+84 | 6 | 22 | 6 | | -7.15 | Roadway |
| 23+84 | 24+58 | | 34 | | | | Bridge |
| 24+58 | 29+00 | 6 | 22 | 6 | | | Roadway |
| TOTALS | | | | | | | |

LENGTH OF PROJECT

| STATIONS | | FEET | MILES | REMARKS |
|---|---|---|---|---|
| 15+50 | 23+84 | 832.85 | 0.157 | EQ -7.15 |
| 23+84 | 24+58 | 74.00 | 0.014 | Bridge |
| 24+58 | 29+00 | 442.00 | 0.084 | |
| TOTALS | | 1348.85 | 0.255 | |

FAIRFAX

No BRS 0229(2) Sheet S

Sheet 4 of 98 Sheets

BRUNING 40-105-40932

# DRAINAGE AND ITEM QUANTITY SHEET

STATE OF VERMONT DEPARTMENT OF HIGHWAYS

PROJECT FAIRFAX NO. BRS 0229(2)S

## APPROXIMATE SUMMARY OF QUANTITIES

| ROW CONTROL | BRIDGE | ROADWAY | GRAND TOTAL | UNIT | ITEM | RNDG. | ITEM NO. |
|---|---|---|---|---|---|---|---|
| | | 3 | 3 | Ea | Removing & Resetting Property Markers | | 619.20 |
| | | 238 | 238 | LF | Guard Rail, Standard Steel Beam with Wood Posts, Type II | | 621.28 |
| | | 4 | 4 | Ea | Breakaway Cable Terminal for Guard Rail, Standard Steel Beam with Wood Posts, Type II | | 621.77 |
| | | 4 | 4 | Ea | Guard Rail Approach Section, Type I | | 621.90 |
| | | 100 | 100 | Hr | Uniformed Traffic Officers | | 630.10 |
| | | 550 | 550 | Hr | Flagpersons | | 630.15 |
| | | 1 | 1 | LS | Field Office - Engineers | | 631.10 |
| | | 1 | 1 | LS | Mobilization | | 635.10 |
| | 1 | | 1 | LS | Maintenance of Traffic for Bridge Proj. | | 637.10 |
| | | 3800 | 3800 | LF | Temp 4" Reflect. White Lines | | 646.30 |
| | | 2672 | 2672 | LF | Temp 4" Reflect Yellow Lines | | 646.30 |
| 30 | | | 180 | LB | Seed | | 651.10 |
| 31 | | | 31 | LB | Seed, Winter Rye | | 651.12 |
| 1500 | | | 1500 | LB | Fertilizer | | 651.15 |
| 6 | | | 6 | Ton | Agricultural Limestone | | 651.20 |
| 7 | | | 7 | Ton | Hay Mulch | | 651.25 |
| 72 | | 28 | 100 | CY | Topsoil | | 653.10 |
| 400 | | | 400 | SY | Erosion Matting | 13 | 694.20 |
| | | 1 | 1 | LS | Removing Signs | | 675.30 |

## DETAILED SUMMARY OF QUANTITIES

| QUANTITY | UNIT | ITEM |
|---|---|---|

## DRAINAGE STRUCTURES

| STA. | POS. | OLD CULVERT | TYPE IN | TYPE OUT | A.C.C.G.M.P. D | A.C.C.G.M.P. L | A.C.C.G.M.P. TH. | C.G.M.P. D | C.G.M.P. L | C.G.M.P. TH. | C.A.A.C.P. D | C.A.A.C.P. L | C.A.A.C.P. TH. | R.C.P. D | R.C.P. L | R.C.P. CL. | STONE FILL TYPE II | STONE Fill TYPE I | Erosion matting | TRENCH EARTH | EXCAV. ROCK | MARKER POSTS LT. | MARKER POSTS RT. | ASKEW LT. | ASKEW RT. | CONC. B | REINF. STEEL | DI GRATE | DEPTH DI | DITCHES IN | DITCHES OUT | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Rev 13+95 | Lt | 6" Underdrain | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Retain |
| Rev 14+13 | Rt | 15" CGMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Retain |
| Rev 14+95.6 | Rt | 18" ACCGMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Retain |
| Rev 15+33 | Rt | 15" CGMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Remove Existing 15" CGMP |
| Rev 16+70 | Rt | — | | | | | | 15 | 38 | oval | 15 | 38 | oval | | | | | | | | | | | | | | | | | | | Drive Pipe ( Option Pipe) |
| Rev 16+92 | Rt | to Rev 17+66 Rt | | | | | | | | | | | | | | | | | 34 | | | | | | | | | | | | | |
| Rev 18+23 | Rt | to Rev 18+75 | | | | | | | | | | | | | | | | | 24 | | | | | | | | | | | | | |
| Rev 18+30 | Lt | | | | | | | 15 | 38 | oval | 15 | 38 | oval | | | | | | | | | | | | | | | | | | | Drive Pipe (Option Pipe) |
| Rev 18+00 | Rt | | | | | | | 15 | 38 | oval | 15 | 38 | oval | | | | | | | | | | | | | | | | | | | Drive Pipe (Option Pipe) |
| Rev 18+65 | Rt | 15" CGMP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | Remove Existing 15" CGMP |
| 22+50 | Rt | | | | 18 | 44 | oval | | | | | | | | | | | | | | | | | | | | | | | | | Drive Pipe |
| 22+50 | Lt | | | | 18 | 36 | oval | | | | | | | | | | | | | | | | | | | | | | | | | Drive Pipe |
| 22+50 | Lt | 8" CGMP | | | | | | 15 | 32 | oval | 15 | 32 | oval | | | | | | | 4 | | | | | | | | | | | | Remove Existing 8" CGMP |
| 22+50 | Rt | to 23+50 Rt | | | | | | | | | | | | | | | 41 | | | 52 | | | | | | | | | | | | Special Ditch with Stone Fill Type II |
| 22+77 | Lt | to 23+90 Lt | | | | | | | | | | | | | | | 144 | | | 284 | | | | | | | | | | | | Special Ditch with Stone Fill Type II |
| 24+75 | Rt | to 26+81 Rt | | | | | | | | | | | | | | | | | 92 | 77 | | | | | | | | | | | | Special Ditch with Erosion Matting |
| 24+90 | Lt | to 26+80 Lt | | | | | | | | | | | | | | | | | 84 | | | | | | | | | | | | | Special Ditch via 203.15 |
| 27+00 | Lt | | | | | | | 15 | 44 | oval | 15 | 44 | oval | | | | | | | | | | | | | | | | | | | Drive Pipe - (Option Pipe) |
| 27+00 | Rt | | | | | | | 15 | 32 | oval | 15 | 32 | oval | | | | | | | | | | | | | | | | | | | Drive Pipe (Option Pipe) |
| 27+23 | Lt | to 29+30 Lt | | | | | | | | | | | | | | | | | 101 | | | | | | | | | | | | | Special Ditch via 203.15 |
| 29+50 | Lt | Temp to 32+50 Lt | | | | | | | | | | | | | | | | 93 | | 93 | | | | | | | | | | | | Special Ditch with Stone Fill Type I |
| Total | | | | | 18 | 100 | oval | 15 | 242 | oval | 15 | 242 | oval | | | | 185 | 93 | 335 | 510 | | | | | | | | | | | | |

### Guard Rail, Standard Steel Beam With Wood Posts, Type II

| Station | Station | Length | Pos | G-14 |
|---|---|---|---|---|
| 22+90.5 | 23+28 | 37.5 | Rt | 1 |
| 22+87.5 | 23+37.5 | 50 | Lt | 1 |
| 25+04.5 | 25+79.5 | 75 | Rt | 1 |
| 25+14 | 25+84 | 75 | Lt | 1 |
| Totals | | 237.5 | | 4 |

### Guard Rail Approach Section Type I

| Station | Station | Length | PAY UNIT EACH |
|---|---|---|---|
| 23+28 Rt | 23+78 Rt | 50 | 1 |
| 23+37.5 Lt | 23+87.5 Lt | 50 | 1 |
| 24+54.5 Rt | 25+04.5 Rt | 50 | 1 |
| 24+64 Lt | 25+14 Lt | 50 | 1 |
| Total | | | 4 |

### Removal & Disposal of Existing Guard Rail

| Station | Station | Pos. | Length |
|---|---|---|---|
| 23+31 | 23+94 | Lt | 66 |
| 23+58 | 23+88 | Lt | 32 |
| 24+69 | 25+33 | Lt | 84 |
| 24+73 | 25+40 | Lt | 67 |
| 25+53 | 25+56 | Rt | 4 |
| Total | | | 253 |

### TYPE OF CONSTRUCTION:

| STATIONS FROM | STATIONS TO | PAVEMENT WIDTHS | | | EQUATIONS + | EQUATIONS − | REMARKS |
|---|---|---|---|---|---|---|---|
| 15+50 | 23+84 | 6 | 22 | 6 | | -1.15 | Roadway |
| 23+84 | 24+58 | | 34 | | | | Bridge |
| 24+58 | 29+00 | 6 | 22 | 6 | | | Roadway |

### LENGTH OF PROJECT

| STA. | STA. | FEET | MILES | REMARKS |
|---|---|---|---|---|
| 15+50 | 23+84 | 832.65 | 0.157 | Eq -1.15 |
| 23+84 | 24+58 | 74 | 0.014 | Bridge |
| 24+58 | 29+00 | 442 | 0.084 | |
| | | 1348.85 | 0.255 | |

FAIRFAX

PROJECT BRS NO. 0229(2)S

SHEET 5 OF 98

D-15

# EARTHWORK

| V.C. | % GRADE | STATION | GRADES ELEVATION ON TANGENT | GRADES ELEVATION ON V. CURVES | CORR. V.C. | DIST. | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | ROCK AREA | ROCK CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | BASE AREA | BASE CU. YDS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 12+00 | 403.18 | | | | | | | | | | | |
| | -3.6400% | +50 | 401.36 | 401.36 | 0.00 | | Begin Bituminous Concrete Overlay | | | | | | | |
| K=91 | | 13+00 | 399.54 | 399.68 | +0.14 | | | | | | | | | |
| | | +50 | 397.72 | 398.27 | +0.55 | | | | | | | | | |
| 200' VC | | PC 13+94.16 = Rev. PC 13+94.16 | | | | | | | | | | | | |
| | | Rev. 14+00 | 396.99 | 397.13 | +0.14 | | | | | | | | | |
| | | Rev. +04 | 396.94 | 397.06 | +0.12 | | | | | | | | | |
| | | Rev. +18 | 396.73 | 396.79 | +0.06 | | | | | | | | | |
| | | Rev. +24 | 396.64 | 396.68 | +0.04 | | | | | | | | | |
| | | Rev. +50 | 396.27 | 396.27 | 0.00 | | 67 | End Bituminous Concrete Overlay | | | | | | |
| | | Rev. +60 | 396.12 | | | | | | | | | | | |
| | -1.4533% | Rev. +95.60 | 395.60 | | | 50 | | 155 | | | | | C | 404 |
| | | Rev. 15+00 | 395.54 | | | | 100 | | | | | | E | 0 |
| | | Rev. +15 | 395.32 | 395.32 | 0.00 | | | | | | | | F.Fac. | 1.15 |
| | | Rev. +20.50 | 395.24 | 395.24 | 0.00 | | | | | | | | Ex.C | 404 |
| | | Rev. +35 | 395.03 | 395.01 | -0.02 | 50 | | 249 | | | | | | |
| | | Rev. +50 | 394.81 | 394.75 | -0.06 | | 169 | End Approach | | | | | | |
| | | Rev. 16+00 | 394.09 | 393.76 | -0.33 | 50 | 216 | 356 Begin Project BRS 0229(2) | | | | | | |
| K=108 | | Rev. +50 | 393.36 | 392.52 | -0.84 | 50.02 | | 473 | | | | | | |
| | | Rev. +50.02 | 393.36 | 392.52 | -0.84 | | 295 | | | | | | | |
| | | Rev. +75 | 392.37 | 391.81 | -0.56 | | | | | | | | | |
| | | Rev. +75.04 | 392.37 | 391.81 | -0.56 | | | | | | | | | |
| 270' VC | | Rev. 17+00 | 391.38 | 391.05 | -0.33 | 50.04 | | 643 | | | | | | |
| | | Rev. +00.06 | 391.38 | 391.05 | -0.33 | | 399 | | | | | | | |
| | | Rev. +49.86 | 389.42 | 389.36 | -0.06 | 49.80 | 578 | 901 | | | | | C | 10017 |
| | | Rev. +50 | 389.41 | 389.35 | -0.06 | | | | | | | | R | 1633 |
| | | Rev. +85 | 388.03 | 388.03 | 0.00 | 49.80 | | 1182 | | | | | R.Fac | 0.3 |
| | | Rev. +99.66 | 387.45 | | | | 704 | | | | | | E | 0 |
| | | Rev. 18+00 | 387.44 | | | | | | | | | | Ex.C | 10507 |
| | | Rev. +42.51 | 385.76 | | | | | | | | | | | |
| | | Rev. +43 | 385.74 | | | 49.82 | | 1330 | | | | | | |
| | | Rev. +49.48 | 385.49 | | | | 738 | | 0 | | | | | |
| | -3.9460% | Rev. +50 | 385.47 | | | 49.84 | | 1416 | | 51 | | | | |
| | | Rev. +99.32 | 383.52 | | | | 796 | | 55 | | | | | |
| | | Rev. 19+00 | 383.50 | | | 49.87 | | 1451 | | 287 | | | | |
| | | Rev. +49.19 | 381.55 | | | | 775 | | 256 | | | | | |
| | | Rev. +50 | 381.52 | | | 49.88 | | 1446 | | 714 | | | | |
| | | Rev. +99.07 | 379.59 | | | | 790 | | 517 | | | | | |
| | | Rev. 20+00 | 379.55 | | | 29.95 | | 819 | | 581 | | | | |
| | | Rev. +29.02 | 378.40 | | | | 687 | | 530 | | 0 | | | |
| | | Rev. +30 | 378.37 | | | 19.96 | | 469 | | 365 | | 2 | | |
| | | Rev. +89.8 | 377.62 | | | | 582 | | 458 | | 5 | | | |
| | | Rev. +50 | 377.58 | | | | | | | | | | | |
| | | Rev. +61.46 | 377.12 | | | | | | | | | | | |
| | | Rev. +62.50 | 377.08 | | | 49.94 | | 846 | | 604 | | 5 | | |
| | | Rev. +98.92 | 375.65 | | | | 333 | | 195 | | 0 | | | |
| | | CARRIED FORWARD | | | | | | 1315 | | 969 | | 7 | | |
| | | COLUMN FOOTINGS | | | | | | 11736 | | 2602 | | 7 | | |

# EARTHWORK

| V.C. | % GRADE | STATION | GRADES ELEVATION ON TANGENT | GRADES ELEVATION ON V. CURVES | CORR. V.C. | DIST. | TOTAL EXCAVATION EARTH AND ROCK AREA | TOTAL EXCAVATION EARTH AND ROCK CU. YDS. | EMBANKMENT AREA | EMBANKMENT CU. YDS. | BASE AREA | BASE CU. YDS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Rev. +98.92 | 375.65 | | | | 333 | | 195 | | 0 | |
| | | Rev. 21+00 | 375.60 | | | 4.96 | | 740 | | 555 | | |
| | | Rev. +48.88 | 373.67 | | | | 467 | | 405 | | | |
| | | Rev. +50 | 373.63 | | | 4.98 | | 1173 | | 1041 | | |
| | | Rev. +98.86 | 371.70 | | | | 800 | | 720 | | | |
| | | Rev. 22+00 | 371.66 | | | 2.99 | | 740 | | 666 | | |
| | | Rev. 22+15.63 = 22+16.78 Equation = 7.15 | | | | | | | | | | |
| | | +25 | 370.72 | | | | 798 | | 720 | | | |
| | | | | | | 25 | | 541 | | 481 | | |
| | | +50 | 369.73 | | | | 570 | | 318 | | 0 | |
| | | | | | | 50 | | 343 | | 294 | | 593 |
| | | 23+00 | 367.76 | | | | 0 | | 0 | | 640 | |
| | | +18 | 367.05 | | | 18 | | | | | | 493 |
| | | +33 | 366.45 | | | 15 | | | | | 840 | |
| | | +50 | 365.78 | | | 17 | | | | | | 416 |
| | -3.9460% | +70 | 364.99 | | | 20 | | | | | 659 | |
| | | +84 | 364.44 | | | 14 | | | | | | 431 |
| | | +85 | 364.40 | | | | Stop Roadway - Begin Bridge | | | | 710 | |
| | | 24+00 | 363.81 | | | | | | | | | 386 |
| | | +45 | 362.03 | 362.03 | 0.00 | | | | | | 333 | |
| | | +50 | 361.84 | 361.84 | 0.00 | | | | | | | 116 |
| | | +58 | 361.52 | 361.53 | +0.01 | | End Bridge - Resume Roadway | | | | 115 | |
| | | +62 | 361.36 | 361.38 | +0.02 | 4 | 0 | | | | | |
| | | +74.81 | 360.86 | 360.92 | +0.06 | 12.81 | 20 | 5 | | | | |
| | | 25+00 | 359.86 | 360.05 | +0.19 | 25.19 | 55 | 35 | | | | |
| | | +50 | 357.89 | 358.58 | +0.69 | 50 | 46 | 94 | | 91 | 0 | |
| | | 26+00 | 355.92 | 357.41 | +1.49 | | 40 | 80 | | 239 | 98 | |
| | | +50 | 353.95 | 356.56 | +2.61 | | 95 | 125 | | 227 | 160 | |
| | | 27+00 | 351.97 | 356.01 | +4.04 | | 75 | 157 | | 116 | 85 | |
| K=80 | | +35 | 350.59 | 355.82 | +5.23 | | | 144 | | 51 | 40 | |
| | | +50 | 351.08 | 355.78 | +4.70 | | 80 | | | | | |
| 580' VC | | 28+00 | 352.72 | 355.87 | +3.15 | | 95 | 162 | | 17 | 15 | |
| | | +50 | 354.35 | 356.25 | +1.90 | | 105 | 185 | | 6 | 3 | |
| | | 29+00 | 355.99 | 356.96 | +0.97 | | 105 | 194 | | 3 | 3 | |
| | | +50 | 357.63 | 357.98 | +0.35 | 50 | 125 | 213 Begin Approach Begin Bituminous Concrete Overlay | | 2 | 2 | |
| | | 30+00 | 359.26 | 359.30 | +0.04 | | | | | | | |
| | +3.2730% | +25 | 360.08 | 360.08 | 0.00 | | | | | | | |
| | | +50 | 360.90 | | | | | | | | | |
| | | 31+00 | 362.90 | | | | | | | | | |
| | | 31+50 | 365.10 | | | | End Bituminous Concrete Overlay | | | | | |
| | | 31+64.90 = Trav 32+13.01 EQ. = -48.11 | | | | | | | | | | |
| | | 32+50 | 369.50 | | | | End Approach | | | | | |
| | | 33+00 | 373.00 | | | | | | | | | |
| | | CARRIED FORWARD | | | | | | 4931 | | 3037 | | 3187 |
| | | COLUMN FOOTINGS | | | | | | | | | | |

# EARTHWORK SUMMARY

STATE OF VERMONT
AGENCY OF TRANSPORTATION

| STATION TO STATION | SUMMARY OF BALANCES TOTAL EXCAV. EARTH & ROCK CUBIC YARDS | ROCK EXCAV. CUBIC YARDS | EMBANKMENT CUBIC YARDS | EXCESSES CUT | EXCESSES FILL | ACCUMULATIVE EXCESSES CUT | ACCUMULATIVE EXCESSES FILL | BASE CUBIC YARDS |
|---|---|---|---|---|---|---|---|---|
| Begin Approach | 404 | 0 | 0 | 404 | | 404 | | |
| Rev. 15+50 Rev. 20+00 | 10017 | 1633 | 0 | 10507 | | 10911 | | |
| Rev. 20+00 25+00 | 4892 | 4006 | 2442 | 3652 | | 14563 | | |
| 25+00 29+00 | 1141 | 0 | 750 | 391 | | 14954 | | |
| End Approach | 213 | 0 | 2 | 211 | | 15165 | | |
| Drives | 326 | 176 | 1213 | | 834 | 14331 | | |
| Turnout | 342 | 141 | 631 | | 247 | 14084 | | |
| | 17335 | 5956 | 5038 | | | | | |

| SHEET NO. | COL. NO. | SUMMARY BY COLUMNS EXCAVATION TOTAL CU. YDS. | EXCAVATION ROCK CU. YDS. | EMBANKMENT CUBIC YARDS | BASE CUBIC YARDS |
|---|---|---|---|---|---|
| 1 | 1 | 11736 | 2602 | 7 | |
| 1 | 2 | 4931 | 3037 | 3187 | |
| Drives | | 326 | 176 | 1213 | |
| Turnout | | 342 | 141 | 631 | |
| | | 17335 | 5956 | 5038 | |

| | C | 213 |
|---|---|---|
| | R | 0 |
| | F | 2 |
| | Ex.C | 211 |

REMARKS

| | |
|---|---|
| EARTH AND ROCK EXCAVATION | 17335 |
| SOLID ROCK EXCAVATION | 5956 |
| EARTH EXCAVATION | 11379 |
| PLANIMETERED FILL | 5038 |
| ~~SHRINKAGE~~ FACTORED SOLID ROCK (5956 x 1.3) | 7743 |
| LESS DISPLACEMENT OF ANY LARGE STRUCTURES | |
| ~~NET PLANIMETERED FILL~~ | |
| FACTOR | |
| PLANIMETERED FILL INCLUDING FACTOR | |
| Excess Rock | 2705 |
| MATERIALS AVAILABLE FOR FILLS | |
| EARTH EXCAVATION | 11379 |
| CHANNEL EXCAVATION | 110 |
| UNDERDRAIN EXCAVATION | |
| STRUCTURE EXCAVATION | 460 |
| Excess Rock | 2705 |
| TOTAL MATERIAL AVAILABLE FOR FILL | 14654 |
| TOTAL FILL INCLUDING FACTOR | |
| TOTAL MATERIAL FOR FILL | 14654 |
| BORROW | |
| Excess Excavation | 14654 |

PROJECT FAIRFAX

PROJECT BRS NO 0229(2)S
SHEET 6 OF 98 SHEETS

D-2

BRUNING 40592

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION
# RIGHT-OF-WAY PLANS
# DETAIL SHEET

## TABLE OF PROJECT PROPERTY ACQUISITION

| PARCEL NO. | GRANTOR | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKING | REM. | RIGHTS | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | MENARD, GERARD R. | 6 | REV. 14+50 ℄<br>REV. 14+83 LT.<br>REV. 15+15 RT. | REV. 15+20 LT.<br>REV. 15+20 LT.<br>REV. 15+18 RT. | 0.08 A± | | SLOPE (T) (240 S.F±)<br>SLOPE (T) (10 S.F±) | W.D.<br>OPT. | 6-26-84 | WESTFORD | 48 | 381 | (3450 S.F±) HWY. EASE. VT. RTE. 128 |
| 2A | CHAMBERLAIN, RICHARD J. & MARYANNE T. c/k/a MARIANNE | 6 | REV. 15+20 LT.<br>REV. 15+20 LT.<br>REV. 15+20 LT.<br>REV. 15+20 LT.<br>REV. 18+30 LT.<br>REV. 18+38 LT.<br>REV. 18+38 LT. | REV. 18+18 LT.<br>REV. 18+24 LT.<br>REV. 18+23 LT.<br>REV. 19+04 LT.<br>REV. 18+94 LT.<br>REV. 19+19 LT. | 0.04 A± | | SLOPE (T) (0.12 A±)<br>CONST. EASE. (T) (0.08 A±)<br>DRIVE (T)<br>SLOPE (T) (0.01 A±)<br>CONST. EASE. (T) (0.02 A±) | W.D.<br>COND. | 1-15-85 | FAIRFAX | 55 | 251-56 | (1500 S.F±)<br>(3280 S.F±)<br>FENCE<br>14' GRAVEL<br>(600 S.F±)<br>(750 S.F±) |
| 2B | | 6,7 | REV. 15+19 RT. | REV. 21+30 LT. | 0.37 A± | | | | | | | | HWY. EASE. VT. RTE. 128 |
| | | | | TOTAL | 0.41 A± | | | | | | | | |
| 3 | DELETED | | | | | | | | | | | | FORMERLY YANDOW-NOW PART OF PARCEL 2 |
| 4A | SCOTT, D. GORDON | 6 | REV. 17+00 RT.<br>REV. 15+18 RT. | REV. 17+77 RT.<br>REV. 17+77 RT. | 0.02 A± | 9.99 A± | | W.D.<br>COND. | 1-15-85 | FAIRFAX | 55 | 251-56 | (720 S.F±) |
| 4B | | | REV. 15+18 RT.<br>REV. 15+33 RT.<br>REV. 15+43 RT.<br>REV. 16+70 RT.<br>REV. 16+48 RT.<br>REV. 16+70 RT. | REV. 17+69 RT.<br><br>REV. 17+85 RT.<br><br>REV. 16+86 RT.<br>REV. 16+90 RT. | 0.14 A± | | DRIVE (T)<br>SLOPE (T) (0.13 A±)<br>DRIVE (T)<br>CULVERT (T) | | | | | | HWY. EASE. VT. RTE. 128<br>14' GRAVEL<br><br>14' GRAVEL<br><br>UNDERGROUND CABLE |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION OF REVISION | DATE | MADE BY | APPROVED BY |
|---|---|---|---|---|---|
| 1 | 5, 7 | Parcel #7 MANALICK, Deleted Drain. Rt. (P) At Sta. 25+40 Lt. Per C.O. # 6186 | 4-17-84 | B.R.M. | LwB |
| 2 | 4,7,8 | Parcel #6B BOISSONEAULT, Revised Following - Const. Ease. (T) 23+91 Rt ~ 24+38 Rt To 23+91 Rt ~ 26+99 Rt. Slope (T) 24+32 Rt ~ 26+98 Rt To Dit. (P) 24+32 Rt. ~ 26+98 Rt. Slope (T) 27+50 Rt. ~ 28+98 Rt. To 27+50 ~ 29+98 Rt. Drive (T) 24+00 Rt To 27+00 Rt. Deleted Slope Rt. At 24+08 Rt. Const. Ease. (T) 24+08 Rt 30+09 Rt To 27+06 Rt. 30+09 Rt. Revised Riprap Areas Per Revised Design ! C.O. 6194 | 5-7-84 | B.R.M. | JJM |
| 3 | 3,4,6,7 | Parcel #2, 3 & 5 Changed Title Of Parcel #2 To CHAMBERLAIN Combined Parcel #3 & Part Of Parcel #6A With Parcel #L. Deleted Drives & Rts. At Rev. 16+00 Lt Rev. 17+00 Lt. & Rev. 18+50 Lt. Added Drive & Rt. At Sta. Rev. 18+30 Lt. Per Revised Design ! C.O. #6207 & 6209 | 5-22-84 | B.R.M. | LwB |

MADE BY: B.A.M. DATE 2/27/84

CHECKED BY: L.W.B. DATE 2/27/84

DR. RT. — DRAINAGE RIGHT
DIT. RT. — DITCHING RIGHT
CH. RT. — CHANNEL RIGHT
DRIVE RT. — DRIVE RIGHT
CUL. RT. — CULVERT RIGHT
(D) — DEMOLITION OR REMOVAL
(W) — WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINES
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CONST. EASE. — CONST. EASEMENT
SR — SR — SLOPE RIGHTS
P/L — P/L — PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED Lawrence W. Bliss DATE 2/27/84
CHIEF OF PLANS & TITLES

PROJECT FAIRFAX
NO. BRS 0229 (2)S
SHEET 8 OF 98

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION
# RIGHT-OF-WAY PLANS
# DETAIL SHEET

## TABLE OF PROJECT PROPERTY ACQUISITION

| PARCEL NO. | GRANTOR | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKING | REM. | RIGHTS | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5A | WHITE, HAROLD R. | 6,7 | REV. 17+69 RT. | 24+26 LT. | 0.98 A± | | | W.D. | 1-15-85 | FAIRFAX | 55 | 251-56 | |
| | | | REV. 17+77 RT. | 22+43 RT. | | | SLOPE (T) (0.25 A±) | | | | | | |
| | | | REV. 17+82 RT. | 22+43 RT. | | | CONST. EASE. (T) (0.10 A±) | | | | | | |
| | | | REV. 18+00 RT. | | | | DRIVE (T) | | | | | | 14' GRAVEL |
| | | | 22+50 RT. | | | | DRIVE (T) | | | | | | 14' GRAVEL |
| | | | 22+50 RT. | 22+67 RT. | | | CULVERT (T) | | | | | | |
| | | | 22+57 RT. | 23+54 RT. | | | DITCH & DRAINAGE (P) (0.08 A±) | | | | | | (3700 S.F±) |
| | | | 23+49 RT. | 23+82 RT. | | | CHANNEL (P) (0.02 A±) | | | | | | (1070 S.F±) |
| | | | 22+56 RT. | 24+06 RT. | | | CONST. EASE. (T) (0.07 A±) | | | | | | (3140 S.F±) |
| | | | REV. 17+77 RT. | 23+96 RT. | | 7.02 A± | | | | | | | |
| 5B | | | REV. 17+66 LT. | 24+28 LT. | 0.40 A± | | | | | | | | HWY. EASE. VT. RTE. 128 |
| | | | | TOTAL | 1.38 A± | 7.02 A± | | | | | | | |
| 6A | BOISSONEAULT, RENE P. & BARBARA A. | 7 | REV. 21+27 LT. | 24+29 LT. | 0.18 A± | | | W.D. | 1-15-85 | FAIRFAX | 55 | 251-56 | HWY. EASE. VT. RTE. 128 |
| | | | 22+50 LT. | | | | DRIVE (T) | | | | | | 14' GRAVEL |
| | | | 22+28 LT. | 22+60 LT. | | | CULVERT (T) | | | | | | |
| | | | 23+50 LT. | 24+03 LT. | | | CONST. EASE. (T) (0.01 A±) | | | | | | (650 S.F±) |
| | | | 23+65 LT. | 23+93 LT. | | | DITCH & DRAINAGE (P) (0.01 A±) | | | | | | (270 S.F±) |
| | | | 23+87 LT. | | | | EASE. TO REMOVE (T) | | | | | | WING WALL |
| 6B | | 7,8 | 23+96 RT. | 27+50 RT. | 0.24 A± | | | | | | | | |
| | | | 23+91 RT. | 26+94 RT. | | | CONST. EASE. (T) (0.09 A±) | | | | | | (3740 S.F±) |
| | | | 24+20 RT. | 24+40 RT. | | | CHANNEL (P) (240 S.F±) | | | | | | |
| | | | 24+32 RT. | 26+72 RT. | | | DITCH (P) (0.11 A±) | | | | | | |
| | | | 27+50 RT. | 29+85 RT. | | | SLOPE (T) (0.08 A±) | | | | | | (2300 S.F±) |
| | | | 27+00 RT. | | | | DRIVE (T) | | | | | | 14' GRAVEL |
| | | | 26+83 RT. | 27+13 RT. | | | CULVERT (T) | | | | | | |
| | | | 27+06 RT. | 30+09 RT. | | | CONST. EASE. (T) (0.06 A±) | | | | | | (2680 S.F±) |
| 6C | | 7,8 | 24+26 RT. | 29+51 RT. | 0.30 A± | | | | | | | | HWY. EASE. VT. RTE. 128 |
| | | | | TOTAL | 0.72 A± | | | | | | | | |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION OF REVISION | DATE | MADE BY | APPROVED BY |
|---|---|---|---|---|---|

MADE BY: B.A.M. DATE 2/27/84

CHECKED BY: L.W.B. DATE 2/27/84

DR. RT. — DRAINAGE RIGHT
DIT. RT. — DITCHING RIGHT
CH. RT. — CHANNEL RIGHT
DRIVE RT. — DRIVE RIGHT
CUL. RT. — CULVERT RIGHT
(D) — DEMOLITION OR REMOVAL
[W] — WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINES
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND

CONST. EASE. — CONST. EASEMENT
SR — SR — SLOPE RIGHTS
P/L — P/L — PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED Lawrence B. Lisai DATE 8/22/84
CHIEF OF PLANS & TITLES

PROJECT FAIRFAX
NO. BRS 0229 (2) S
SHEET 9 OF 98

ROW

# STATE OF VERMONT
# AGENCY OF TRANSPORTATION
# RIGHT-OF-WAY PLANS
# DETAIL SHEET

## TABLE OF PROJECT PROPERTY ACQUISITION

| PARCEL NO. | GRANTOR | SHEET NO. | BEGINNING STATION | ENDING STATION | TAKING | REM. | RIGHTS | TITLE TAKEN | DATE | TOWN OR CITY RECORDED | BK. | PG. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7A | MAHALICK, ALBERT I. & AUGUSTE E. | 7,8 | 25+11 LT.<br>24+54 LT.<br>24+69 LT.<br>24+85 LT.<br>27+00 LT. | 28+00 LT.<br>TRAV. 32+62 LT.<br>TRAV. 32+39 LT. | 0.07 A± | | CONST. EASE. (T) (0.18 A±)<br>DITCH (P) (0.24 A±)<br>EASE. TO REMOVE (T)<br>DRIVE (T) | W.D.<br>COND. | 1-15-85 | FAIRFAX | | | (3100 S.F.±)<br><br>WING WALL<br>14' GRAVEL |
| 7B | | | 24+28 LT. | 29+51 LT.<br>TOTAL | 0.30 A±<br>0.37 A± | | | | | | | | HWY. EASE. VT. RTE. 128 |
| 8 | CENTRAL VERMONT PUBLIC SERVICE CORP. | | | | | | | | | | | | UTILITY |
| 9 | NEW ENGLAND TELEPHONE & TELEGRAPH CO. | | | | | | | | | | | | UTILITY |
| | RELINQUISHMENT NO. I | 6,7 | REV. 20+00 LT. | 23+50 LT. | | | | | | | | | |

## TABLE OF REVISIONS

| REVISION NO. | SHEET NO. | DESCRIPTION OF REVISION | DATE | MADE BY | APPROVED BY |
|---|---|---|---|---|---|
| | | | | | |

MADE BY: B.A.M. DATE 2/27/84

CHECKED BY: L.W.B. DATE 2/27/84

DR. RT. — DRAINAGE RIGHT
DIT. RT. — DITCHING RIGHT
CH. RT. — CHANNEL RIGHT
DRIVE RT. — DRIVE RIGHT
CUL. RT. — CULVERT RIGHT
(D) — DEMOLITION OR REMOVAL
[W] — WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINES
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
CONST. EASE — CONS'T. EASEMENT
SR SR — SLOPE RIGHTS
P/L — PROPERTY LINE
TOP OF CUT
TOE OF SLOPE

APPROVED Raymond Blair DATE 2/27/84
CHIEF OF PLANS & TITLES

PROJECT FAIRFAX
NO. BRS 0229 (2) S
SHEET 10 OF 98

ROW

# BEGIN R.O.W. PROJECT
# BRS 0229 (2)S STA. 14+50
# (24' LT.)

Rev 15+50
Construct Satisfactory Approach

Begin Project BRS 0229(2)

MENARD, GERARD R.

Fd 13+94.16
Rev PC 13+44.16

TOWN LINE
WESTFORD
FAIRFAX

Rev PT 15+75.01

BM 2
S.I.P.
Elev 393.62

Magnetic

CONST. EASE. (T)

SR (T)

REV. 15+20
30' LT.

REV. 15+20
25' LT.

REV. 15+19
1' RT.

REV. 14+50
26' RT.

REV. 15+18
25' RT.

DRIVE RT.(T)

REV. 16+70
31' LT.

REV. 17+66
6' LT.

REV. 18+17
42' LT.

REV. 18+18
37' LT.

REV. 20+00
77' LT.

REV. 17+00
23' RT.

REV. 17+69
20' RT.

REV. 17+77
40' RT.

CUL RT (T)

DRIVE RT.(F)

2A
2B
4A
4B
5A
5B

150'
300'
248'
182'
68'
76'
199'
245'
682'
596'

BEGIN RELINQUISHMENT NO. 1
STA. REV. 20+00 (52' LT.)

SEE SHEET NO. 7 OF 10

Rev Curve 2
Δ 35° 56' 30" Rt
D 7° 30'
R 763.94'
T 247.49'
L 479.22'
E 39.18'
Bnk 0.080 ft/ft

Trav 19+30.76
Rev POST 19+29.73

POST 19+68.98

Rev Pl 19+84.20 =
19+67.84

POST 19+25.62

CHAMBERLAIN, RICHARD J. & MARYANNE T.
a/k/a MARIANNE

18+30 Lt. New 15" x 30" Oval Pipe Comp. .06 or C.M.C.P. .060

Rev 15+33 Rt
New 15" CMP .060

MATCH LINE

MENARD, GERARD R.

POST 14+84.51

Rev Pl 14+84.61 =
14+84.56

14+13 Rt 15" CGMP relay

14+95.6 Lt 18" ACCGMP relay

15+33 Rt 15" CGMP remove

2 S.W.F.H.

Gravel Drive

Television Wire

Bridge

1½ S. Log H

SCOTT, D. GORDON

Rev PC 17+36.41

Rev 15+00 Rt
New 15" Option Pipe
(CGMP.064 or CMCP.060)

Rev 16+00 Rt
New 15" Option Pipe
(CGMP.064 or CMCP.060)

Trav 16+30.16
POT 16+29.98
Rev POT 16+30.00

Rev Curve 1
Δ 3° 37' 01" Lt
D 2° 00'
R 2864.79'
T 90.45'
L 180.85'
E 1.43'
Bnk 0.030 ft/ft

Curve 1
Δ 3° 37' 01" Lt
D 2° 00'
R (2864.79')
T 90.45'
L 180.85'
E 1.43'

Rev PC 15+39.70
5°49' Lt
Rev PT 15+39.70 =
15+39.45

N 30° E

WHITE, HAROLD R.

CONST. EASE. (T)

SR (T)

MATCH LINE

Erosion Matting
Rev 18+00 ~ Rev 18+75 Rt

Drilling & Blasting of Solid Rock Subgr
Rev 18+00 ~ Rev 20+00

Construct Gravel Turnout
Rev 19+30 Lt ~ Rev 20+00 Lt

Construct Drive

Rev 15+33 Rt (20' wide)
Rev 16+70 Rt
Rev 4+15 Rt (match existing)
Rev 18+00 Rt

Rev 19+20 Lt

Bituminous Concrete Overlay
12+50 ~ Rev 14+50

CHITTENDEN COUNTY
FRANKLIN COUNTY

THIS SHEET TO BE USED
FOR R.O.W. INFORMATION ONLY

Scale in Feet
0 10 20 40

General Note
Drives are to be constructed with a minimum width of 14' and a flare radius of at least 20' or as directed by the Engineer.

DATUM
VERTICAL Assumed
HORIZONTAL N/A

SURVEYED BY F.J. DATE 2-81
DRAWN BY Hodge & Sons DATE 4-8
TRACED BY Sugar DATE 83

FAIRFAX
PROJ. BRS NO. 0229 (2)S.
SHEET 11 OF 98

THIS SHEET TO BE USED FOR R.O.W. INFORMATION ONLY

Construct Special Ditch
(Excavation To Be Paid Under Item 204.20)
24+75 Rt. ~ 26+00 Rt.

CHAMBERLAIN, RICHARD J. & MARYANNE T.
d/b/a MARIANNE

BOISSONEAULT, RENE P. & BARBARA A.

MAHALICK, ALBERT I. & AUGUSTE E.

MATCH LINE

REV. 20+00
77' LT.
Steel Pin
30"S stump
142'

BEGIN RELINQUISHMENT NO. I
STA. REV. 20+00 (52' LT.)

2B

25'

P L 141'

REV. 21+27
99' LT.

Tray Pt 22+06.09
Δ 38° 53' 30" Rt

24'

REV. 21+30
76' LT.

5B

240'

3:1R

P L 230'

(682')

6A

N 35°01' E

6" Ctny

N62°19'30"E

12" E

15" stump

5A

20'R

rev 21

rev 22

BM 3
RR S ~ 15' Stump
Elev 375.56

POC 20+00

(596')

SR (T)

CONST. EASE. (T)

Excavation & Removal of Road Surfaces & Pavements
Rev 20+07 Lt ~ 23+38 Lt

WHITE, HAROLD R.

Drilling & Blasting of Solid Rock Subgrade
Rev 20+00 ~ 23+00

Transition from Gravel to Paved Shoulders
Rev 20+00 Lt ~ Rev 21+00 Lt
Rev 21+00 Rt ~ Rev 22+00 Rt

Paved Shoulders
Rev 21+00 Lt ~ 23+87.5 Lt
Rev 22+00 Rt ~ 23+78 Rt
24+64 Lt ~ 26+00 Lt
24+54.5 Rt ~ 26+00 Rt

Construct Drive
22+50 Lt
22+50 Rt

DRIVE RT.(T)

22+50 Rt
New 18+44 ACCGMP (064)

Rev PT 22+15.63
POT 22+16.78
Eq = 1.15

CUL RT. (T)

DRIVE RT.(T)
22+50 Lt 6" CGMP remove
New 15+32 Option Pipe
(CGMP 064 or CAACP 060)

22+50 Lt
New 18+56 ACCGMP (064)

CUL RT. (T)
Field Drive

23+84
Stop Roadway | Begin Bridge

END RELINQUISHMENT NO. I
STA. 23+50 (82' LT.)

Erosion Matting
24+90 Lt ~ 26+00 Lt
24+75 Rt. ~ 26+00 Rt.

Construct Special Ditch w/ Stone Fill Type II
22+66 Rt ~ 23+52 Rt
22+72 Lt ~ 23+90 Lt

Construct Special Ditch (to be paid under item 20315)
24+90 Lt ~ 26+00 Lt

CONST. EASE. (T)
DIT & DR. RT. (P)
CH. RT. (P)
DIT. RT. (P)

23+45
58' LT.

23+96
40' RT.

24+29
80' 66' LT.

24+28
41' LT.

24+26
6' LT.

25+11
50' LT.

Chan POT 24+3.32

Construct Gravel Turnout
Rev 20+00 Lt ~ 22+25 Lt

Removal & Disposal of Existing Guard Rail
23+31 Lt ~ 23+94 Lt
23+58 Lt ~ 23+88 Lt
24+69 Lt ~ 25+53 Lt
24+73 Lt ~ 25+40 Lt
25+53 Rt ~ 25+56 Rt

End Bridge | Resume Roadway

Guard Rail, Standard Steel Beam w/ Wood Posts, Type II
22+87.5 Lt ~ 23+37.5 Lt
22+40.5 Rt ~ 23+28 Rt
25+14 Lt ~ 25+69 Lt
25+04.5 Rt ~ 25+79.5 Rt

SEE SHEET NO. 8 OF 10

SEE SHEET NO. 6 OF 10

7A
7B
6C
6B

278'
282'
522'
332'
367'

Guard Rail Approach Section, Type I
23+75 Lt ~ 23+87.5 Lt
23+22 Rt ~ 23+78 Rt
24+64 Lt ~ 25+14 Lt
24+54.5 Rt ~ 25+04.5 Rt

POT 24+54.44
Char POT 4+13.09
Δ 78° 37' Lt

Char POT 3+73.65

BOISSONEAULT, RENE P. & BARBARA A.

MATCH LINE

DATUM
VERTICAL Assumed
HORIZONTAL N/A

SURVEYED BY ____ DATE ____
DRAWN BY ____ DATE ____
TRACED BY ____ DATE ____

FAIRFAX
PROJ. BRS NO. 0229(2)S
SHEET 12 OF 98

MAHALICK, ALBERT I. & AUGUSTE E.

MAHALICK, ALBERT I. & AUGUSTE E.

MATCH LINE

SEE SHEET NO. 7 OF 10

27+00 Lt
New 15"x44" Elliptical Pipe
(CGMP060 or CMACP060)

Gate

Magnetic

CONST. EASE. (T)

DIT. RT. (P)

DRIVE RT. (T)

PT 22+31.11

(278')

7A

(282')

PI 26+04.17=
26+01.75

28+00
24' LT.

151'

PCI 29+02.47

29+51
24' LT.

24'

29+51
1' RT.

26'

7B

(522')

6C

27+50
24' RT.

201'

29+51
26' RT.

SR (T)

N 43° 06' 10" E

(332')

6B

POST 26+11.43

(367')

Trav PF 26+59.36
Δ 30° 48' 30" Lt

N 0° 0' E

CUL. RT. (T)

DRIVE RT. (T)

27+50
40' RT.

BM 5
RRSIT 12"Elm
Elev 358.54

BOISSONEAULT, RENE P. & BARBARA A.

Curve 3
Δ 19° 13' 20" Lt
D 7° 30'
R 763.94'
T 129.36'
L 256.30'
E 10.88'
bnk 0.080 Ft/Ft

27+00 Rt.
15"x32" Elliptical
New Pipe (CGMP060 or CMACP060)

Construct Drive
27+00 Lt
27+00 Rt

Construct Special Ditch (To be paid under item 203.15)
26+00 Lt ~ 29+50 Lt

Paved Shoulders
26+00 Lt ~ 27+30 Lt
26+00 Rt ~ 26+25 Rt

Transition From Paved to Gravel Shoulder
27+30 Lt ~ 28+30 Lt
26+25 Rt ~ 28+25 Rt

Erosion Matting
26+00 Lt ~ 29+50 Lt
27+23 Lt, 29+50 Lt
26+00 Rt ~ 26+81 Rt

Construct Special Ditch w/ Stone Fill Type I
(Excavation to be Paid Under Item 204.15)
29+50 Lt, 32+00 Lt

End Project BRS 0229(2) | Construct Satisfactory Approach
29+00

Construct Special Ditch
(Excavation To Be Paid Under Item 204.20)
26+00 Rt ~ 26+81 Rt.

DATUM
VERTICAL Assumed
HORIZONTAL N/A

N 5° 04' 10" E.

TRAV. 33

PCI 32+11.01
Trav PI 32+11.01
E.I. = 46.11

Δ 6° 02' Lt

BM 4
RRS 12" Elm
Elev. 361.66

# END R.O.W. PROJECT
## BRS 0229 (2)S STA. 32+62 TRAV.

BOISSONEAULT, RENE P. & BARBARA A.

THIS SHEET TO BE USED
FOR R.O.W. INFORMATION ONLY

20 40
Scale in Feet

SURVEYED BY Fall DATE 2-81
DRAWN BY HODGE & LOHR DATE 3-81
TRACED BY TOOLAN DATE 11-83

FAIRFAX
PROJ. BRS NO. 0229 (2) S
SHEET 13 OF 98

Rev 15+50
End Approach

Begin Project
BRS 0229(2)S

Rev 14+50
Begin Approach
End Pavement
Overlay

Rev PC 13+94.16 =
PC 13+94.16

TOWN OF WESTFORD
TOWN OF FAIRFAX

Rev PT 15+75.01

BM 2
SIP
Elev 393.82

Magnetic
1981

Approximate Aerial Relocation R+e.
by CVPSC and N.E.T.

Rev Curve 2
Δ 35° 56' 30" Rt
D 7° 30'
R 763.94'
T 247.79'
L 479.22'
E 39.18'
Bnk 0.080 ft/ft

PT 16+84.99

Trav 19+30.76=
Rev POST 19+29.73

Curve 2
Δ 38° 08' 30" Rt
D 7° 30'
R 763.94'
T 264.10'
L 508.56'
E 44.36'

Trav PI 18+69.54
Δ 10° 50' Rt.

POST 19+68.98

Rev PI 19+84.20=
19+67.84

Possible Future House Site
Gravel Base

Gravel Drive

POST 19+25.63

PI 19+66.60=
19+46.96
Δ 38° 08' 30" Rt
D 7° 30'

18+30 Lt.
New 15"x38' Option Pipe
CGMP.064 or CAACP 060

Hub Tie

rev 14
rev 15
rev 16
rev 17
rev 18
rev 19

N 30° E
N 24° 11' E
N 35° 01' E
N 62° 18' 30" E

20'R
20'L
20'E
60'E

Match Line "A"
Match Line "B"

14+13 Rt 15"CGMP relay
14+39.6 Cl 18"ACCGMP relay
15+33 Rt 15"CGMP remove
15"CGMP remove

Gravel Drive
Artesian Well (under drive)
Garage
1-1/2 S. Log H.
2 S.W.F.H

CHITTENDEN COUNTY
FRANKLIN COUNTY

POST 14+84.61

Rev PI 14+84.61=
14+84.56

Trav PI 15+39.70
Δ 5° 49' Lt.

PI 15+39.70=
15+39.45

Curve 1
Δ 5° 49' Lt
D 2° 0'
R 2864.79'
T 145.54'
L 290.83'
E 3.69'

Bituminous Concrete Overlay
12+50 ~ Rev 14+50
Taper Overlay to Match
Existing Road Conditions

Rev Curve 1
Δ 3° 37' 01" Lt
D 2° 00'
R 2864.79'
T 90.45'
L 180.85'
E 1.43'
Bnk. 0.030 ft/ft

Underground Cable

PC 17+02.50

Rev PC 17+36.41

Rev 18+00 Rt
New 15"x38' Option Pipe
(CGMP 064 or CAACP 060)

16+70 Rt
New 15"x38' Option Pipe
(CGMP 064 or CAACP 060)

Trav 16+30.16
POT 16+29.98
Rev POT 16+30.00

13+95 Lt 6" Underdrain relay

PC 13+94.16 =
Rev PC 13+94.16

12+50
Begin Pavement
Overlay

13 N 30° E

Match Line "A"

18+65 Rt 15" CGMP remove

POC 20+00

Erosion Matting
Rev 16+92 Rt ~ Rev 17+66 Rt
Rev 18+23 Rt ~ Rev 18+75 Rt

Drilling & Blasting of Solid Rock Subgrade
Rev 18+00 ~ Rev 20+00

Construct Gravel Turnout
Rev 19+30 Lt ~ Rev 20+00 Lt

Construct Drive

Rev 15+33 Rt (20' wide)
Rev 16+70 Rt
Rev 14+13 Rt (match existing)
Rev 18+00 Rt
Rev. 18+30 Lt

Temporary 4" Reflectorized White Line
12+50 ~ 20+00 11' Lt
12+50 ~ 20+00 11' Rt

Temporary 4" Reflectorized Yellow Line
12+50 ~ 20+00 & Lt (solid)
12+50 ~ 18+21 & Rt (solid)
18+21 ~ 20+00 & Rt (dashed)

0 10 20 40
Scale in Feet

General Note:
Drives are to be constructed with a minimum width of 14' and a flare radius of at least 20' or as directed by the Engineer.

DATUM
VERTICAL Assumed
HORIZONTAL N/A

12-1-83 RJT

SURVEYED BY Fall DATE 2-81
DRAWN BY Hodge & Lohr DATE 3-81
TRACED BY Toolan DATE 11-83

FAIRFAX
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SHEET 15 OF 98

Construct Special Ditch
(Excavation To Be Paid Under Item 204.20)
24+75 Rt ~ 26+00 Rt

Magnetic 1981

Trav. PI 22+06.09
Δ 38° 53' 30" Rt.

Possible Future Drive

Steel Pin

30" Stump

IP

30'R

22+50 Lt 8" CCMP remove
New 15"x 32" Optional Pipe
(CGMP 064 or CAACP 060)

22+50 Lt
New 18"x 36" ACCCMP (064)

BM 4
Chisel on Bridge Haunch
Elev 359.81

23+84
Stop Roadway | Begin Bridge

Field

Field Drive

Trav POT 24+31.73

6" Chy

N 35°01' E

N62°19'30"E

4" E
12" E

18" Stump

rev 21

rev 22

6" M

BM 3
RR SIT 15" Stump
Elev. 375.56

POC 20+00

Match Line "B"

12" P

8" P

18" P

20'R

23

Excavation & Removal of Road Surfaces & Pavements
Rev 20+07 Lt ~ 23+38 Lt

Woods

Drilling & Blasting of Solid Rock Subgrade
Rev 20+00 ~ 23+00

Rock Fill
22+60 Rt ~ 23+73 Rt

Transition from Gravel to Paved Shoulders
Rev 20+00 Lt ~ Rev 21+00 Lt
Rev 21+00 Rt ~ Rev 22+00 Rt

Paved Shoulders
Rev 21+00 Lt ~ 23+87.5 Lt
Rev 22+00 Rt ~ 23+78 Rt
24+64 Lt ~ 26+00 Lt
24+54.5 Rt ~ 26+00 Rt

Construct Drive
22+50 Lt
22+50 Rt

Rev PT 22+15.63 =
POT 22+16.78
Eq = -1.15'

22+50 Rt
New 18"x 44" ACCCMP (064)

Erosion Matting
24+75 Rt ~ 26+00 Rt
24+90 Lt ~ 26+00 Lt

Construct Special Ditch w/ Stone Fill Type II
22+50 Rt ~ 23+50 Rt
22+77 Lt ~ 23+90 Lt

Construct Special Ditch (to be paid under item 20315)
24+90 Lt ~ 26+00 Lt

Construct Gravel Turnout
Rev 20+00 Lt ~ 22+25 Lt

Removal & Disposal of Existing Guard Rail
23+31 Lt ~ 23+94 Lt
23+58 Lt ~ 23+88 Lt
24+69 Lt ~ 25+53 Lt
24+73 Lt ~ 25+40 Lt
25+53 Rt ~ 25+56 Rt

Cut to Fill Transition
Sta 22+17 ~ 22+92

Temporary 4" Reflectorized White Line
20+00 ~ 26+00 11' Lt
20+00 ~ 26+00 11' Rt

Temporary 4" Reflectorized Yellow Line
20+00 ~ 25+71 ± Lt (solid)
25+71 ~ 26+00 ± Lt (dashed)
20+00 ~ 26+00 ± Rt (dashed)

Chan POT 6+59.98

Guard Rail, Standard Steel Beam w/ Wood Posts, Type II
22+87.5 Lt ~ 23+37.5 Lt
22+90.5 Rt ~ 23+28 Rt
25+14 Lt ~ 25+89 Lt
25+04.5 Rt ~ 25+79.5 Rt

6" W
6" W
6" W

6" E
10" App

2" E
WB

18" P

Brown's River

Chan. P.O.T. 5+00.0

24+58
End a Bridge | Resume Roadway

Q Sign

Gravel Drive

25

N62°19'30"E

6" Wm
15" Loc

12" Loc

12" Loc

Trav POT 25+14.80

24+74.81

POC 26+00

8" E
Dead
8" Thorn Apple

POT 24+54.44 =
Chan POT 4+13.09
Δ 78° 37' Lt

Chan POT 3+73.65

Guard Rail Approach Section, Type I
23+37.5 Lt ~ 23+87.5 Lt
23+28 Rt ~ 23+78 Rt
24+64 Lt ~ 25+14 Lt
24+54.5 Rt ~ 25+04.5 Rt

Extra Subgrade @ The Approach Slab
Sta 23+61 ~ 23+84

Match Line "C"

0 20 40
Scale in Feet

DATUM
VERTICAL Assumed
HORIZONTAL N/A

SURVEYED BY Fall DATE 2-81
DRAWN BY Hodge & Lohr DATE 3-81
TRACED BY Tooton DATE 11-83

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N

1981 Magnetic

27+00 Lt
New 15"x24" Oval Pipe
(CGMP.064 or
CAACP.060)

POT 29+02.30

Gate

PT 27+31.11

POC 26+00

10°E

6°E

N. 37° 04' 10" E.

TRAV. 33

31

30

29

28

27

12°E

POT 31+64.90 =
Trav Pt 32+13.01
Eq = -48.11

Δ 6°-02' Lt.

BM 6
RRSIT 12"Elm
Elev 366.56

N 43° 06' 10" E

8°E

4°E

wet

wet

Temporary 4" Reflectorized White Line
26+00 ~ 31+50 11' Lt.
26+00 ~ 31+50 11' Rt.

Temporary 4" Reflectorized Yellow Line
26+00 ~ 29+50 ℄ Lt (dashed)
26+00 ~ 29+50 ℄ Rt (dashed)
29+50 ~ 31+50 ℄ Rt
29+50 ~ 31+50 ℄ Lt

Trav. 32+50
End Approach

POST 26+11.43

Trav Pt 26+59.36
Δ 30° 48' 30" Lt

0°E

12°E

Match Line "C"

PI 26+04.17 =
26+01.75

BM 5
RRSIT 12"Elm
Elev. 353.54

End Project BRS 0229(2)S Begin Approach
29+00

Curve 3
Δ 19° 13' 20" Lt
D 7° 30'
R 763.94'
T 129.36'
L 256.30'
E 10.88'
bnk 0.080 Ft/Ft

27+00 Rt
New 15"x32" Oval Pipe
(CGMP.064 or
CAACP.060)

Construct Drive
27+00 Lt
27+00 Rt

Construct Special Ditch (to be paid under item 203.15)
26+00 Lt ~ 26+80 Lt
27+23 Lt ~ 29+50 Lt

Paved Shoulders
26+00 Lt ~ 27+30 Lt
26+00 Rt ~ 26+25 Rt

Transition From Paved to Gravel Shoulder
27+30 Lt ~ 28+30 Lt
26+25 Rt ~ 28+25 Rt

Erosion Matting
26+00 Lt ~ 26+80 Lt
26+00 Rt ~ 26+81 Rt
27+23 Lt ~ 29+50 Lt

Construct Special Ditch w/ Stone Fill Type I
(Excavation To Be Paid Under Item 203.15)
Trav.
29+50 Lt ~ 32+50 Lt

Construct Special Ditch
(Excavation To Be Paid Under Item 204.20)
26+00 Rt ~ 26+81 Rt

Bituminous Concrete Overlay
29+50 ~ 31+50
Taper Overlay to Match
Existing Road Condition

0 20 40
Scale in Feet

DATUM
VERTICAL Assumed
HORIZONTAL N/A

12-1-83 RJT

SURVEYED BY Fall DATE 2-81
DRAWN BY HODGE & LOHR DATE 3-81
TRACED BY TOOLAN DATE 11-83

FAIRFAX
PROJ. BRS NO. 0229(2)S
SHEET 17 OF 98

14+50
End Bit. Conc. Overlay
Begin Approach

PVI
16+50
393.36
270 VC
K=108
SSD=400

-1.4533 %

-3.9460 %

15+50
End Approach

Begin Project
BRS 0229(2)

405
400
395
390
385
380
375
370
365
360
355
350
345
340
335

14 15 16 17 18 19 20

21 22 23 24 25 26

23+84.00
Stop Roadway
Begin Bridge

24+58.00
End Bridge
Resume Roadway

-3.9460 %

SUBGRADE LINE
1:2
4'-0"
GRANULAR BORROW
10'
ROCK FILL (EMBANKMENT ON PROJECT)
1:2

GRANULAR BORROW

Sta 22+17 ~ 23+92
Cut to Fill Transition

Sta 23+61 ~ 23+84
Extra Subgrade @ the Approach Slab

Elev PT 1543.3 ft
Sta 22+46.78
Eq 7.15

Vertical Scale
10 5 0 10 20 30 40

20 10 0 20 40 60 80
Horizontal Scale in Feet

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
NOTE BOOK
NO.
STRUCTURE NOTATING CHKD

CHARLES BRUNING CO. INC. 1-73 | 5X28

PLATE 1 SINGLE PLAN - PROFILE
CHARLES BRUNING CO.

FAIRFAX
BRS 0229(2) S
Sheet 18 of 98

PLAN
SURVEYED
PLOTTED
NOTE BOOK
NO.
ALIGNMENT CHECKED
RT. OF WAY CHECKED

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
NOTE BOOK
NO.
STRUCTURE NO.&THS OMND

PVI
27+35
350.55
580'VC
K=80

End Project
BRS 0229(2)S

29+00

Construct Satisfactory
Approach

-3.9460 %

+3.2730%

POT 31+64.90 =

EQ. =
-48.11

TRAV PI 32+13.01

375
370
365
360
355
350
345

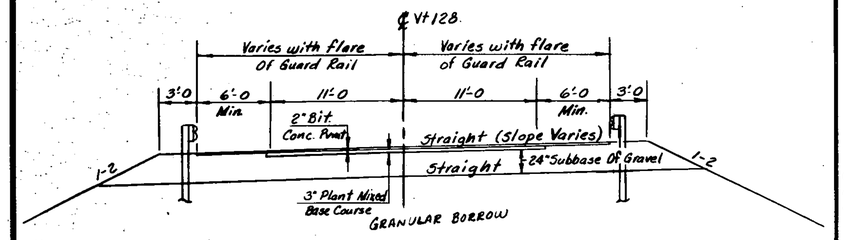
27 28 29 30 31 Trav 33

20 10 0 20 40 60 80

FAIRFAX
BRS 0229(2)S
Sheet 19 of 98

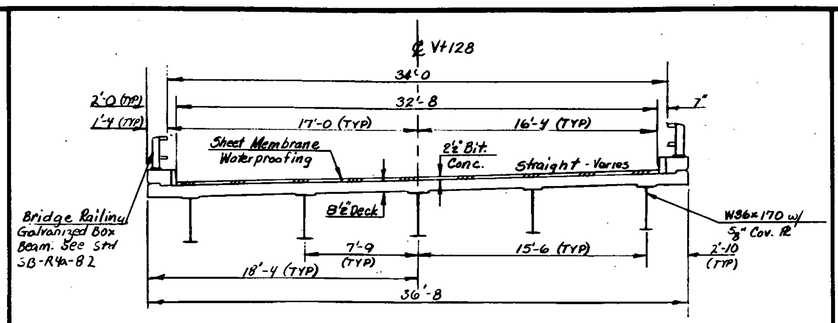
PLATE 1 SINGLE PLAN - PROFILE
CHARLES BRUNING CO.
MADE IN U.S.A.

BRUNING 44-131 5428



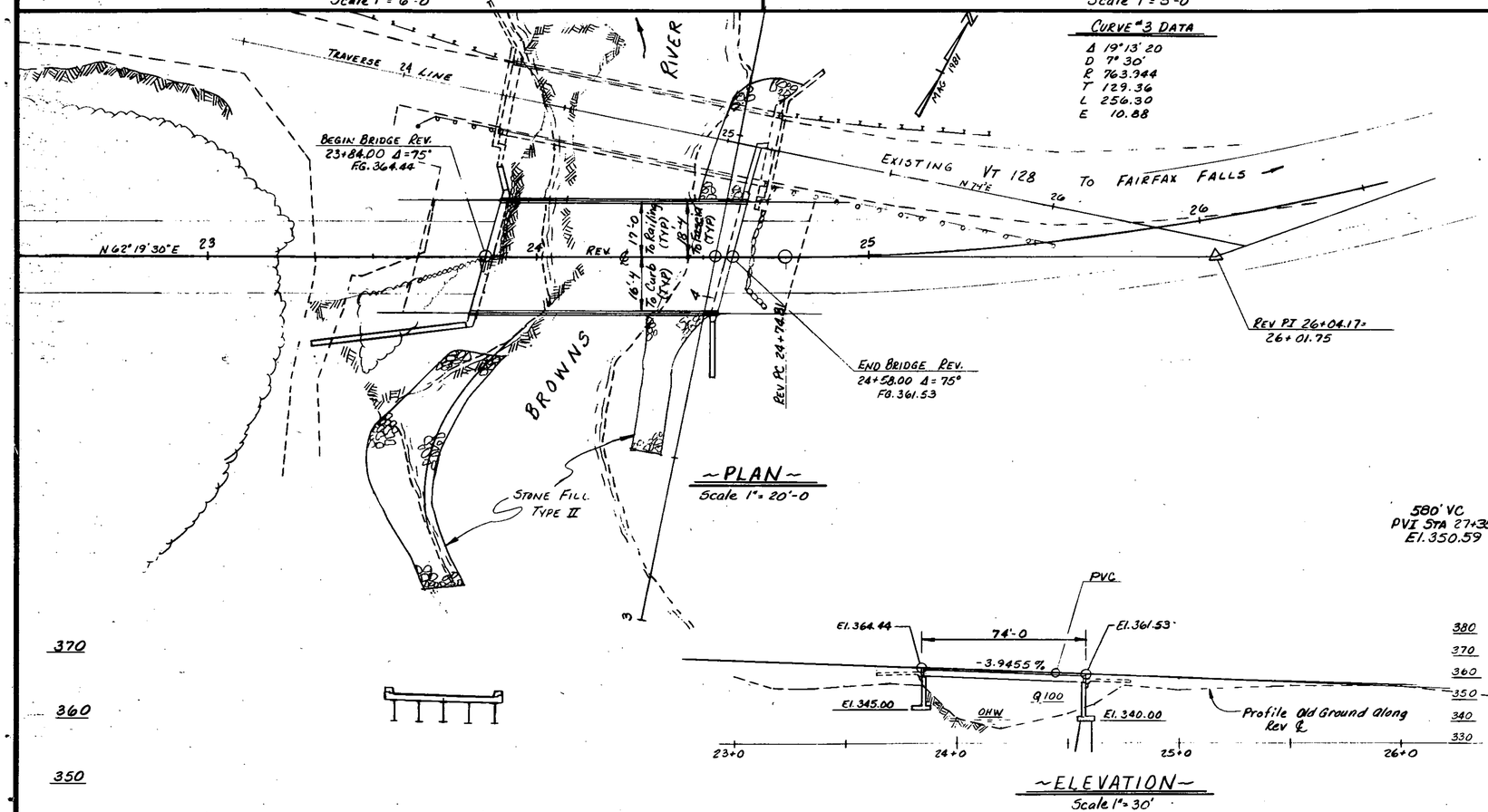

NEW HIGHWAY SECTION — BRIDGE APPROACHES

Scale 1"= 6'-0




BRIDGE TYPICAL SECTION

Scale 1"= 5'-0




## EXISTING STRUCTURE

1. STRUCTURE TYPE Steel Pony Truss, Concrete Deck OVERALL LENGTH 84' INVENTORY RATING Posted 20 Tons (3 Axle
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS 82'
3. CLEAR SPAN LENGTH(S) NORMAL TO STREAM 76
4. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM) 1200 Sq. Ft VERTICAL CLEARANCE ABOVE STREAMBED 15'
5. WATER SURFACE ELEVATION @ Q 2.33 WATER SURFACE ELEVATION @ Q 100 El. 349.0
6. WATER SURFACE ELEVATION AT FLOOD OF RECORD 1955 YEAR 1927 ESTIMATED DISCHARGE
7. DOES ALL WATER PASS THROUGH EXISTING STRUCTURE? YES IF NOT, AT WHAT FREQUENCY AND ELEVATION DOES RELIEF OCCUR? ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF
8. TYPE OF SUBSTRUCTURE FOUNDATION MATERIAL South West Abutment - Ledge Northeast Abutment - Sandy, Gravel
9. DISPOSITION OF STRUCTURE Removal, Shall Become the Property of the Contractor

## NEW STRUCTURE

STRUCTURE GEOMETRY:

1. STRUCTURE TYPE Single Span Rolled Beam, Comp. Conc. Deck OVERALL LENGTH 74'
2. SPAN LENGTH(S) CENTER TO CENTER OF BEARINGS 72'
3. VERTICAL CLEARANCE ABOVE STREAMBED OR ROAD UNDER 14' to 18'
4. CLEAR SPAN LENGTH(S) NORMAL TO STREAM 67'
5. WATERWAY AREA OF FULL OPENING (NORMAL TO STREAM) 1030 sq. Ft.
6. ARE PROVISIONS TO BE MADE FOR PUBLIC UTILITIES? NO

HYDRAULIC DATA:

1. Q 2.33 1600 CFS WATER ELEVATION 347.3 FT VELOCITY 5.6 FPS
   Q 10 3800 CFS WATER ELEVATION 348.0 FT VELOCITY 8.1 FPS
   Q 25 5200 CFS WATER ELEVATION 347.4 FT VELOCITY 9.4 FPS
   Q 50 6200 CFS WATER ELEVATION 348.3 FT VELOCITY 10.1 FPS
   Q 100 7200 CFS WATER ELEVATION 349.2 FT VELOCITY 10.8 FPS
2. DRAINAGE AREA 90.6 SQ. MI CHARACTER OF TERRAIN ROLLING TO MOUNTAINOUS
3. ARE THERE OBJECTIONS TO A PIER IN THE STREAM? NA
4. DOES STREAM REACH ITS MAXIMUM HIGH WATER ELEVATION RAPIDLY? YES IS ORDINARY RISE RAPID? YES
5. NATURE OF NATURAL STREAMBED Sandy Gravel, Some Ledge
6. ESTIMATED SCOUR DEPTH 2 FT - 4 FT COMMENT ON: DRIFT MOD. ICE MOD.
7. WILL ALL WATER PASS THROUGH NEW STRUCTURE? Yes IF NOT, WHAT FREQUENCY AND ELEVATION WILL RELIEF OCCUR? NA ADDITIONAL WATERWAY AREA PROVIDED BY RELIEF NA
8. VERTICAL CLEARANCE ABOVE Q 50 8.7 FT
9. ALLOWABLE WATER SURFACE ELEVATION 357.2 FT LIMITED BY Bottom of Rolled Beam
10. IS DESIGN STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? NO IF YES, DESCRIBE NA
11. AVERAGE DAILY LOW FLOW 20 CFS DEPTH 3.5 FT AVERAGE DAILY HIGH FLOW 300 CFS DEPTH 5.0 FT
12. STREAMBANK OR CHANNEL PROTECTION REQUIRED Stone Fill Type II
13. DISTANCE TO EXISTING UPSTREAM STRUCTURE 2.7 Mi. SPAN 90' WATERWAY AREA OF FULL OPENING 1400 Sq Ft ± Q
14. DISTANCE TO EXISTING DOWNSTREAM STRUCTURE ½ Mi. SPAN 112' WATERWAY AREA OF FULL OPENING 1700 Sq Ft ± Q

ALLOWABLE STRESSES:

1. DESIGN LIVE LOAD AASHTO HS 25
2. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL 4 KSF ON LEDGE 10 KSF
3. ALLOWABLE LOAD FOR PILING 70 TONS TYPE HP 12x53 ESTIMATED LENGTH 17-20FT
4. ALLOWABLE STRESS FOR STRUCTURAL STEEL ASTM A 588 TENSION 27,000 PSI
5. ALLOWABLE STRESS FOR REINFORCING STEEL GRADE 60 TENSION 24,000 PSI COMPRESSION 20,000 PSI
6. ALLOWABLE STRESS FOR CONCRETE CLASS A $f'_c$ 3,500 PSI $f_c$ 1,400 PSI
   CLASS B $f'_c$ 3,500 PSI $f_c$ 1,400 PSI

TRAFFIC MAINTENANCE:

1. IS TRAFFIC TO BE MAINTAINED? YES IF YES, ON EXISTING STRUCTURE YES OR ON TEMPORARY BRIDGE NO
2. TEMPORARY BRIDGE REQUIREMENTS: ONE OR TWO WAY Two Way TRAFFIC CONTROL SIGNALS REQUIRED NO
   MINIMUM CLEAR SPAN NA MINIMUM CLEAR HEIGHT NA MINIMUM WATERWAY AREA NA
   ARE SIDEWALKS REQUIRED? NA IF SO, ON WHAT SIDE? NA

## ADDITIONAL DESIGN CONSIDERATIONS

### LIST OF STANDARDS

| | |
|---|---|
| SB-R4A-82 | 6-18-82R |
| SCB-D1-75 | 9-14-81R |
| SCB-D4-76 | 1-8-76R |
| SCB-D6-73 | 1-3-79R |
| SCB-D7-71 | 12-15-76R |

### INDEX OF SHEETS


BR800 PRELIMINARY INFORMATION SHEET
BR801 PLAN AND ELEVATION
BR802 BRIDGE QUANTITY SHEET
BR803 THRU BR804 BORING LOGS
BR805 SUPERSTRUCTURE DETAILS
BR806 STRUCTURAL STEEL DETAILS
BR807 BEARING DEVICE DETAILS
BR808 ABUTMENT NO.1 DETAILS
BR809 WINGWALLS NO.1 AND NO.2 DETAILS
BR810 ABUTMENT NO.2 DETAILS
BR811 WINGWALLS NO.3 AND NO.4 DETAILS
BR812 PILE LAYOUT AND EARTHWORK DETAILS
BR813 APPROACH SLAB DETAILS
BR814 REINFORCING STEEL SCHEDULE
BR815 THRU BR821 CHANNEL SECTIONS


LOAD RATING (TONS)

| STRESS LEVELS | TRUCK H | HS | 3S2 | 6 AXLE | 3A. STR. | 4A. STR. | 5A. SEMI |
|---|---|---|---|---|---|---|---|
| INVENTORY 0.55 Fy = 27.5 ksi | 41 | 49 | | | | | |
| POSTED 0.67 Fy = 33.5 ksi | 60 | | 88 | | 64 | 66 | 79 |
| OPERATING 0.75 Fy = 37.5 ksi | | | 106 | 132 | | | |

RECOMMENDED FOR APPROVAL Warren B. Towse 4/11/83 STRUCTURES ENGINEER DATE

RECOMMENDED FOR APPROVAL Arthur J. Gross 4/11/83 CHIEF OF DESIGN DATE

APPROVED BY A. J. Gage 4-14-83 DIRECTOR OF ENGINEERING & CONSTRUCTION DATE

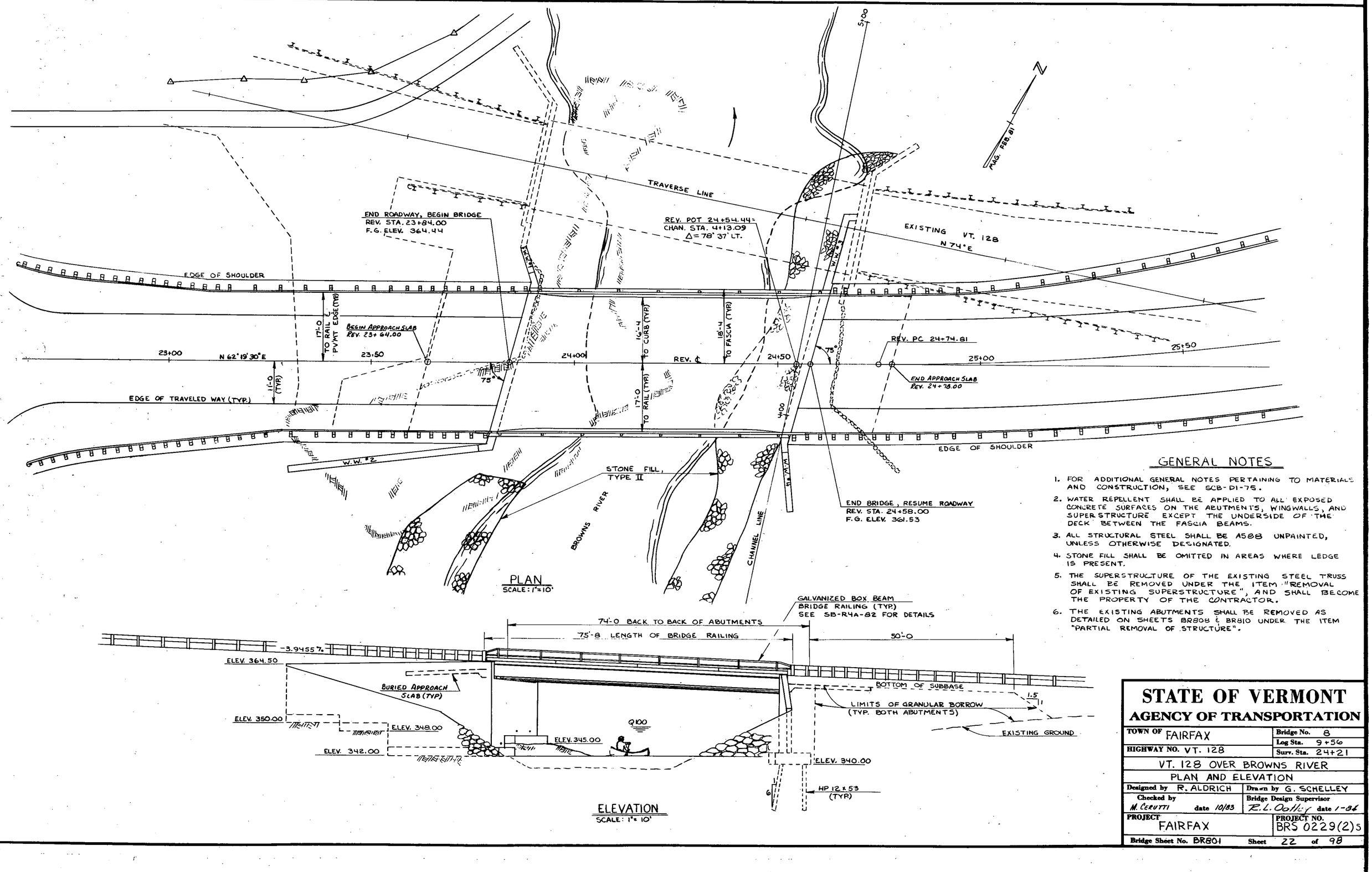
REVISIONS

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

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. Vt 128 | Surv. Sta. 24+21 |
| Vt 128 over Browns River | |
| ~PRELIMINARY INFORMATION~ | |
| Designed by R. ALDRICH | Drawn by M. CERUTTI |
| Checked by G. SCHELLEY date 11/83 | Bridge Design Supervisor R.L. Ootley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2)S |
| Bridge Sheet No. BR800 | Sheet 21 of 98 |

BRUNING 44-131 40151




## GENERAL NOTES

1. FOR ADDITIONAL GENERAL NOTES PERTAINING TO MATERIALS AND CONSTRUCTION, SEE SCB-D1-75.
2. WATER REPELLENT SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES ON THE ABUTMENTS, WINGWALLS, AND SUPERSTRUCTURE EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE FASCIA BEAMS.
3. ALL STRUCTURAL STEEL SHALL BE A588 UNPAINTED, UNLESS OTHERWISE DESIGNATED.
4. STONE FILL SHALL BE OMITTED IN AREAS WHERE LEDGE IS PRESENT.
5. THE SUPERSTRUCTURE OF THE EXISTING STEEL TRUSS SHALL BE REMOVED UNDER THE ITEM "REMOVAL OF EXISTING SUPERSTRUCTURE", AND SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
6. THE EXISTING ABUTMENTS SHALL BE REMOVED AS DETAILED ON SHEETS BR808 & BR810 UNDER THE ITEM "PARTIAL REMOVAL OF STRUCTURE".

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| PLAN AND ELEVATION | |
| Designed by R. ALDRICH | Drawn by G. SCHELLEY |
| Checked by M. CERUTTI date 10/83 | Bridge Design Supervisor R. L. Dolloff date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2)S |
| Bridge Sheet No. BR801 | Sheet 22 of 98 |

BRUNING 44-131 35084

8B-6-'83

# EARTHWORK

| V.C. | % GRD | STATION | GRADES ELEVATION ON TAN. | GRADES ELEVATION ON V.C. | CORR. V.C. | DIST. | AREA | CU. YDS. | AREA | CU. YDS. | AREA | CU. YDS. | AREA | CU. YDS. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | |

# BRIDGE QUANTITY SHEET

STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
BRIDGE DIVISION

| NO. | ITEM | UNIT | QUANTITY BREAKDOWN SUPER-STRUCTURE | ABUTMENT NO. 1 | ABUTMENT NO. 2 | APPROACH SLABS | CHANNEL | TOTAL | FINAL |
|---|---|---|---|---|---|---|---|---|---|
| 202.20 | REMOVAL OF EXISTING SUPERSTRUCTURE | EACH | 1 | | | | | 1 | |
| 202.30 | PARTIAL REMOVAL OF STRUCTURE | EACH | | | | | | 1 | |
| 203.27 | UNCLASSIFIED CHANNEL EXCAVATION | C.Y. | | | | | 110 | 110 | |
| *203.32 | GRANULAR BORROW | C.Y. | | | | | | 1860 | |
| 204.25 | STRUCTURE EXCAVATION | C.Y. | | 300 | 160 | | | 460 | |
| 204.30 | GRANULAR BACKFILL FOR STRUCTURES | C.Y. | | 355 | 135 | | | 490 | |
| 404.66 | EMULSIFIED ASPHALT | GAL. | 10 | | | | | 10 | |
| 406.25 | BITUMINOUS CONCRETE PAVEMENT | TON | 38 | | | | | 38 | |
| 501.20 | CONCRETE, CLASS A | C.Y. | 92 | | | | | 92 | |
| 501.25 | CONCRETE, CLASS B | C.Y. | | 193 | 141 | 54 | | 388 | |
| 504.10 | FURNISHING EQUIPMENT FOR DRIVING PILING | L.S. | | | | | | 1 | |
| 505.15 | STEEL PILING (HP 12 x 53) | L.F. | | | 400 | | | 400 | |
| 506.90 | STRUCTURAL STEEL (ROLLED BEAM) | LB. | 70,480 | | | | | 70,480 | |
| 506.99 | BEARING DEVICE ASSEMBLY | EACH | | 5 | 5 | | | 10 | |
| 507.15 | REINFORCING STEEL | LB. | 24,986 | 19,900 | 17,062 | 9,032 | | 70,980 | |
| 508.15 | SHEAR CONNECTORS (830 7/8"Ø x 7") | L.S. | 1 | | | | | 1 | |
| 514.10 | WATER REPELLENT | GAL. | 7 | 13 | 6 | | | 26 | |
| 519.20 | SHEET MEMBRANE WATERPROOFING | S.Y. | 270 | | | | | 270 | |
| 613.11 | STONE FILL, TYPE II | C.Y. | | | | | 210 | 210 | |
| 616.17 | GRANITE BRIDGE CURB | L.F. | 132 | | | | | 132 | |
| 617.30 | BRIDGE RAILING, GALVANIZED BOX BEAM | L.F. | 152 | | | | | 152 | |
| 637.10 | MAINTENANCE OF TRAFFIC FOR BRIDGE PROJECTS | L.S. | | | | | | 1 | |

* INDICATES ITEM TO BE INCLUDED IN ROADWAY QUANTITY

BRIDGE (S) AT STATION (S) REV. STA. 24+21.00
LOCATION (S) VT. 128 OVER BROWNS RIVER

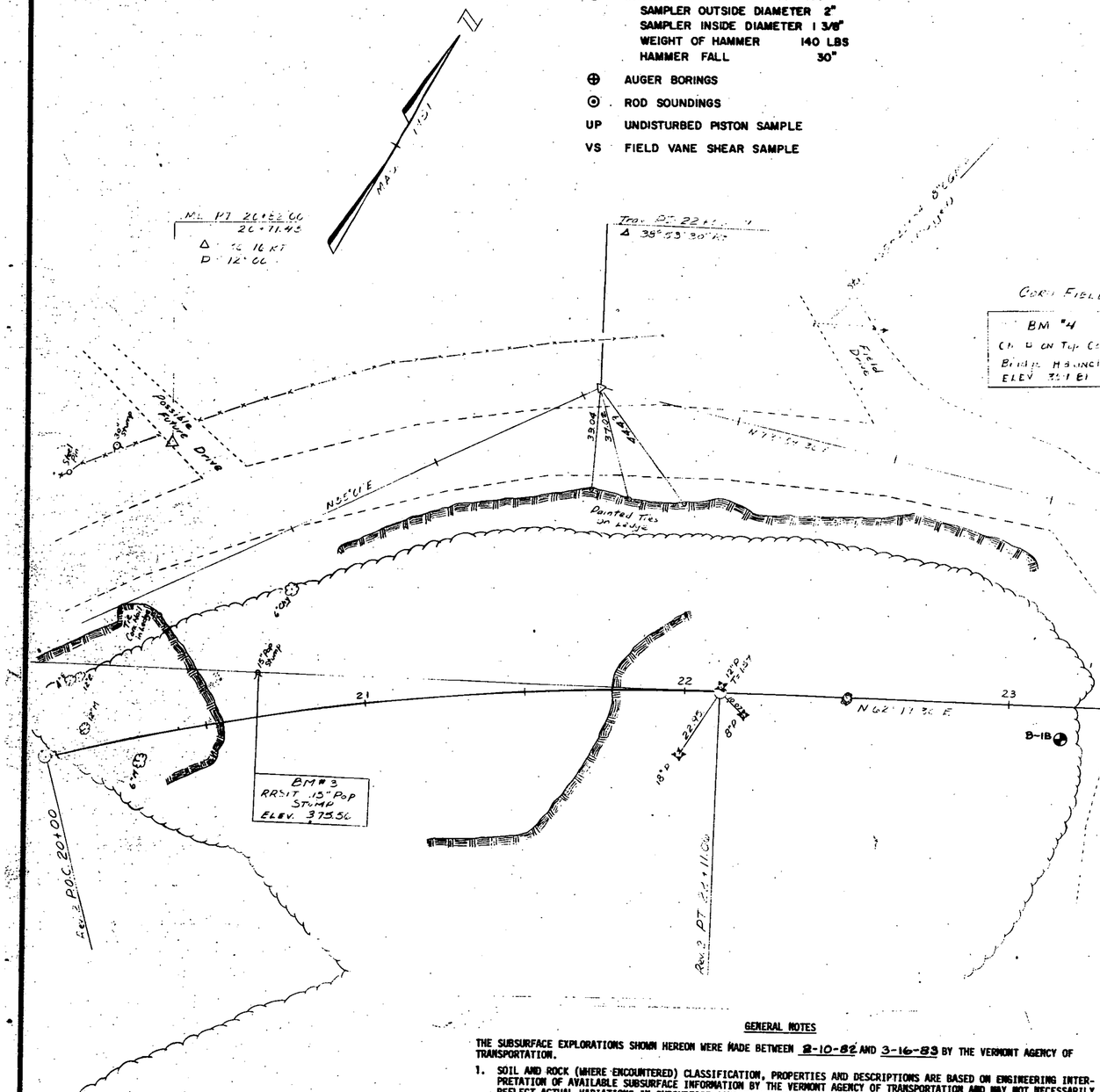
Prepared by: G. SCHELLEY | Checked by: M. EVANS
SUPERVISOR: R.L. Dolley 1-84

FAIRFAX
BR 802 OF

PROJECT NO. BRS 0229(2)S
SHEET NO. 23 OF 98

## BORING NOMENCLATURE

- ⊕ STANDARD PENETRATION BORINGS
  - SAMPLER OUTSIDE DIAMETER 2"
  - SAMPLER INSIDE DIAMETER 1 3/8"
  - WEIGHT OF HAMMER 140 LBS
  - HAMMER FALL 30"
- ⊕ AUGER BORINGS
- ⊙ ROD SOUNDINGS
- UP UNDISTURBED PISTON SAMPLE
- VS FIELD VANE SHEAR SAMPLE




| BORING | REV 2 STA. | OFFSET |
|---|---|---|
| B1 | 23+83 | 17 LT. |
| B2 | 23+77 | 5 LT |
| B3 | 23+80 | 17 RT. |
| B4 | 23+60 | 15 RT. |
| B5 | 24+79 | 22 RT. |
| B6 | 24+54 | 17 RT. |
| B7 | 24+59 | ℄ |
| B8 | 24+64 | 17 LT. |
| B-1B | 23+16 | 10 RT. |
| B-2B | 23+46 | 17 RT. |

## GENERAL NOTES

THE SUBSURFACE EXPLORATIONS SHOWN HEREON WERE MADE BETWEEN 2-10-82 AND 3-16-83 BY THE VERMONT AGENCY OF TRANSPORTATION.

1. SOIL AND ROCK (WHERE ENCOUNTERED) CLASSIFICATION, PROPERTIES AND DESCRIPTIONS ARE BASED ON ENGINEERING INTERPRETATION OF AVAILABLE SUBSURFACE INFORMATION BY THE VERMONT AGENCY OF TRANSPORTATION AND MAY NOT NECESSARILY REFLECT ACTUAL VARIATIONS IN SUBSURFACE CONDITIONS THAT MAY BE ENCOUNTERED BETWEEN INDIVIDUAL BORING OR SAMPLE LOCATIONS.
2. OBSERVED WATER LEVELS AND/OR WATER CONDITIONS INDICATED ARE AS RECORDED AT THE TIME OF EXPLORATION AND MAY VARY ACCORDING TO THE PREVAILING RAINFALL, METHODS OF EXPLORATION AND OTHER FACTORS.
3. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED HEREON. ANALYSIS AND INTERPRETATION OF SUBSURFACE DATA WAS PERFORMED AND INTENDED FOR AGENCY DESIGN AND ESTIMATE PURPOSES ONLY. PRESENTATION OF THE INFORMATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH 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 INTERPRETATIONS, INDEPENDENT ANALYSIS OR JUDGEMENT OF THE CONTRACTOR.
4. PICTORIAL STRUCTURE DETAILS SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT BE INDICATIVE OF THE FINAL DESIGN CONDITIONS SHOWN IN THE CONTRACT PLANS.

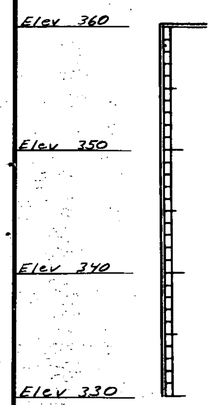
DATUM
VERTICAL ASSUMED
HORIZONTAL N/A

# BORING LAYOUT

SCALE: 1"=20'

SURVEYED BY FALLS DATE 2-81
DRAWN BY HOWE & LOHR DATE 3-24 91
TRACED BY C.E. LOHR DATE 3-25 91
FAIRFAX
PROJ. BR. NO. 0329(2)S
SHEET 24 OF 98 BR803

BRUNING 44-131 42592
07




BORING NO. B-1

ELEV. 357.0

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | | | | | Gr. Br | No Sample |
| | | | | | | Bedrock at 11' |
| 10 | | | | | | |
| | | | | | Gr. | AXDC 11-13.1 rec 2.0 |
| | | | | | | AXMDC 13.1-18.1 rec 5.0 |
| | | | | | | AXMDC 18.1-19.5 rec 1.4 |
| | | | | | | AXMDC 19.5-22 rec 2.5 |
| 20 | | | | | | |

EL. 345.0
BOT. OF FTG
ABUT. #1

BORING NO. B-2

ELEV. 357.5

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | | | | | | 0-10 Stone Abut. |
| | | | | | | Top of Bedrock @ 10' |
| 10 | | | | | | |
| | | | | | Gry | AXDC 10-12.5 rec. 2.1 |
| | | | | | | AXMDC 12.5-17.5 rec 5.2 |
| | | | | | | AXMDC 17.5-22.5 rec 5.1 |
| | | | | | | Hole stopped at 22.5' in bedrock |
| 20 | | | | | | |

EL. 345.0
BOT. OF FTG.
ABUT. #1

BORING NO. B-1B

| DEPTH | LABORATORY CLASSIFICATION OF SOIL |
|---|---|
| 355.2 | |
| | DECAYED ROCK 1'-2' TOP OF ROCK @ 2' |
| | AXMDC 2.0'-7.0' Rec. 5.2' |
| | AXMDC 7.0'-9.5', Rec. 2.5' |
| 10 | AXMDC 9.5'-12.0' Rec 2.5' |
| | HOLE STOPPED @ 12' IN BED ROCK |

EL. 350.0
BOT. OF FTG.
W.W. #2

BORING NO. B-2B

| DEPTH | |
|---|---|
| 354.3 | |
| | TOP OF DEC ROCK @ 0.0 |
| | AXMDC 0.0'-2.0', Rec 1.5' |
| | AXMDC 2.0'-7.0' Rec 5.0' |
| 10 | AXMDC 7.0'-10.5' Rec 3.5' |
| | HOLE STOPPED 6 10.5' IN BEDROCK |

EL. 348.0
BOT. OF FTG.
W.W. #2

BORING NO. B-4

ELEV. 347.7

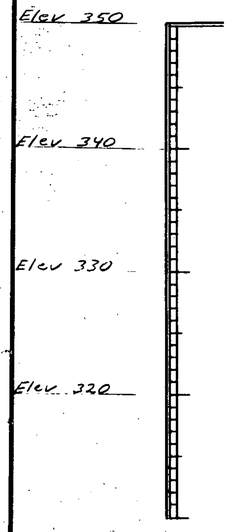
| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | | | | | Brn | Bedrock at 5.0' |
| | | | | | | AXMDC 5-9' rec 3.0 |
| | | | | | | AXMDC 9-14' rec 5.0 |
| | | | | | | Hole stopped at 14' |
| 10 | | | | | | |
| 20 | | | | | | |

EL. 342.0
BOT. OF FTG.
W.W. #2

BORING NO. B-3

SURFACE LEDGE @ 344±

ABUTMENT #1 BORING 1-4




BORING NO. B-5

ELEV. 348.6

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | 12 | | | M | Brn | No Sample |
| | | | | | | A-1-b Sandy Gravel |
| 10 | 8 | | | | | A-6 Silty Clay |
| | 5 | | | | | A-6 Silty Clay |
| 20 | 6 | | | M to W | gry | A-4 Silty Clay |
| | 21 | | | | | A-6 Silty Clay |
| | | | | | | Top of bedrock at 26' |
| 30 | | | | | | AXMDC 26-31' rec 5.0 |
| | | | | | | AXMDC 31-36' rec. 5.0 |
| | | | | | | Hole stopped at 36' in bedrock |
| 40 | | | | | | |

EL. 340.0
BOT. OF FTG
ABUT #2

BORING NO. B-6

ELEV. 346.5

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | 15 | | | M | BRN | A-2-4 Silty Sand |
| | | | | | | A-1-a Gravel |
| 10 | 42 | | | | | A-6 Silty Clay |
| | 8 | | | | | A-6 Silty Clay |
| 20 | 11 | | | | | A-6 Silty Clay |
| | 27 | | | | | A-6 Silty Clay |
| | 23 | | | M to W | Gry | A-1-b Gravelly Sand |
| | | | | | | Top of bedrock at 27' |
| 30 | | | | | | AXMDC 27-32 rec 4.6 |
| | | | | | | AXMDC 32-37 rec 4.6 Hole stopped at 37' in Bedrock |
| 40 | | | | | | |

EL. 340.0
BOT. OF FTG
ABUT #2

EST. PILE PENETRATION

BORING NO. B-7

ELEV. 345.5

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | 40 | | | M | Brn | A-1-b Gravel |
| | 9 | | | | | A-4 Silt |
| 10 | 10 | | | M to W | Gry | A-4 Clayey Silt |
| | 50 | | | | | No Sample |
| | | | | | | Top of bedrock at 21.6' |
| 20 | | | | | | AXMDC 21.6-26.6 rec 4.9 |
| | | | | | | AXMDC 26.6-31.1 rec 4.4 |
| | | | | | | Hole stopped at 31.1 in bedrock |
| 30 | | | | | | |

EL. 340.0
BOT. OF FTG
ABUT #2

EST. PILE PENETRATION

BORING NO. B-8

ELEV. 344.1

| DEPTH | BLOWS ON CASING | STANDARD PENETRATION | SAMPLE NUMBER | MOISTURE | COLOR | LABORATORY CLASSIFICATION OF SOIL |
|---|---|---|---|---|---|---|
| | 2 | | | M | Gry | A-4 Sandy Silt |
| | 5 | | | | | No Sample |
| 10 | 14 | | | | | A-4 Silt |
| | 22 | | | | | A-2-4 Silty Sand |
| | | | | | | Top of bedrock at 20.1' |
| 20 | | | | W | Brn | AXMDC 20.1-25.1 rec 5.0 |
| | | | | | | AXMDC 25.1-30.1 rec 5.0 |
| | | | | | | Hole stopped at 30.1' in bedrock |
| 30 | | | | | | |

EL. 340.0
BOT. OF FTG
ABUT #2

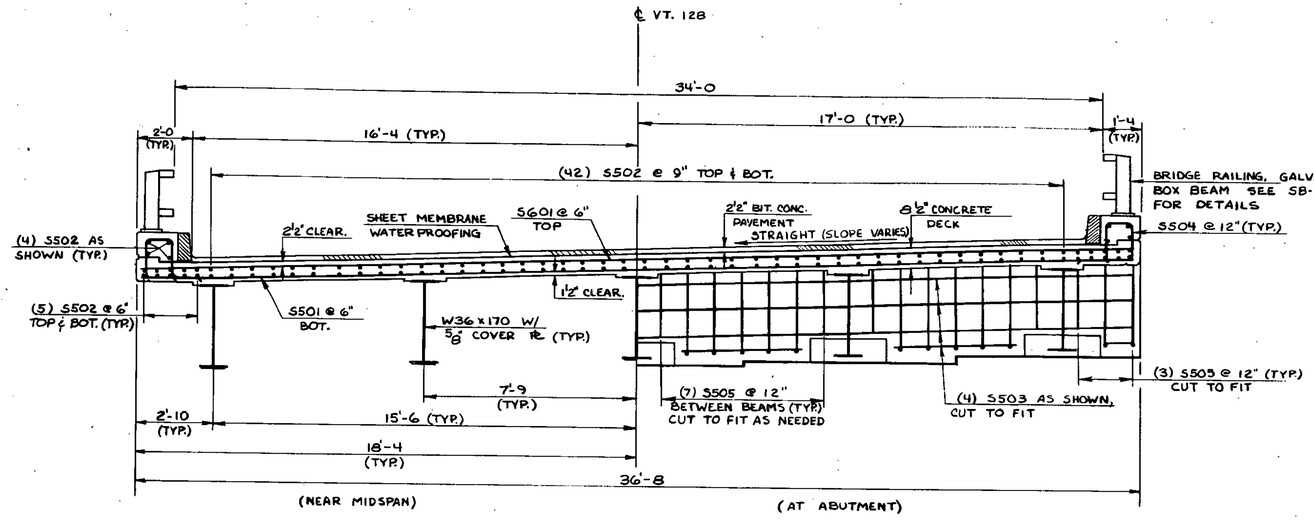
EST. PILE PENETRATION

ABUTMENT #2 BORINGS 5-8

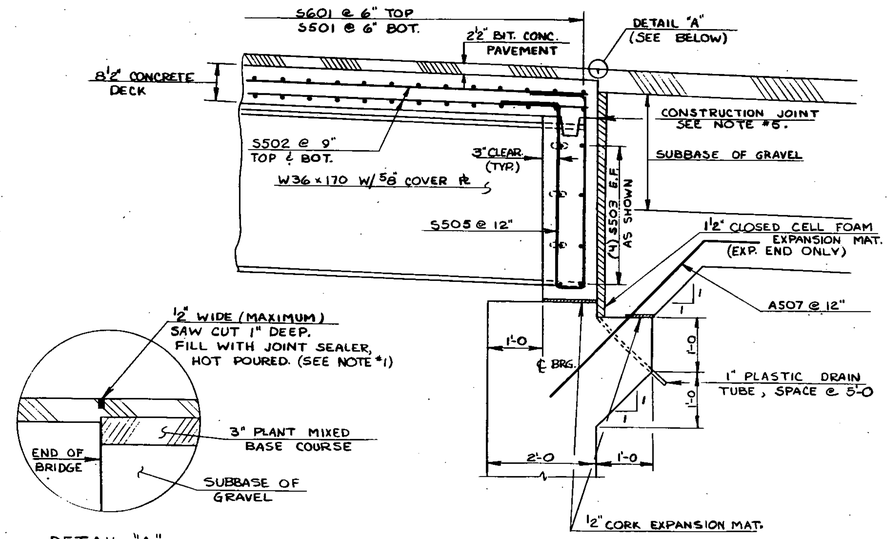
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| HIGHWAY NO. VT. RTE. 128 | Log Sta. 9+56 |
| | Surv. Sta. 24+21 |
| VT. RTE. 128 OVER BROWNS RIVER | |
| BORING LOGS. | |
| Designed by C. Benda | Drawn by W. Jarvis |
| Checked by G. SCHELLEY date 11/83 | Bridge Design Supervisor R.L. Oatley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2) |
| Bridge Sheet No. BR804 | Sheet 25 of 98 |

BRUNING 44-131 40151

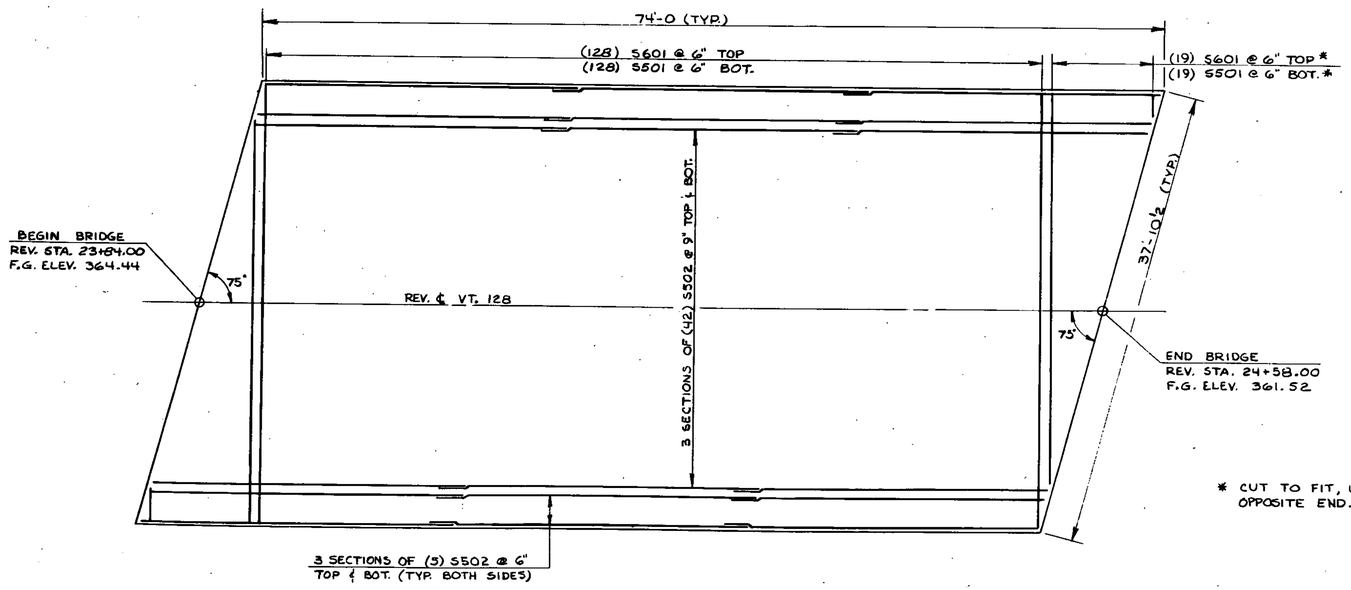



TYPICAL BRIDGE SECTION
SCALE : 3/8" = 1'-0




DETAIL "A"

CURTAIN WALL DETAILS
SCALE : 3/4" = 1'-0




* CUT TO FIT, USE CUTOFFS ON OPPOSITE END.

DECK REINFORCING PLAN
SCALE : 1" = 6'

## NOTES

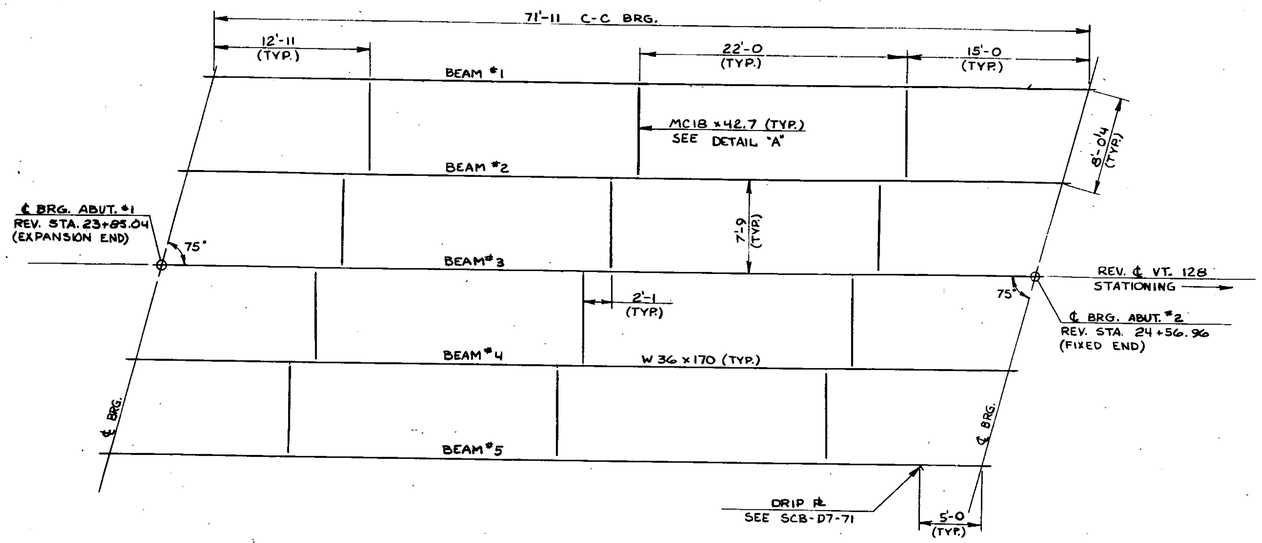
1. PAYMENT FOR ALL MATERIALS AND LABOR FOR PLACEMENT OF HOT POURED JOINT SEALER, AS DETAILED ON THIS SHEET, SHALL BE SUBSIDIARY TO ITEM 406.25, "BITUMINOUS CONCRETE PAVEMENT".
2. THE COST FOR FURNISHING AND INSTALLING ALL PREFORMED JOINT FILLING MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONCRETE, CLASS A.
3. SEE GENERAL SPECIAL PROVISION 707.23 FOR DETAILS OF CLOSED CELL FOAM EXPANSION MATERIAL.
4. SEE STD. SCB-D4-76 AND SCB-D6-72 FOR ADDITIONAL BRIDGE CURB DETAILS.
5. BOTH CURTAIN WALLS SHALL BE POURED AND ALLOWED TO CURE FOR 6 DAYS, OR TO A COMPRESSIVE STRENGTH OF 2000 PSI, BEFORE THE DECK IS POURED. COMPRESSIVE STRENGTH SHALL BE VERIFIED BY TEST CYLINDERS.
6. THE COST FOR FURNISHING AND INSTALLING CLOSED CELL FOAM EXPANSION MATERIAL SHALL BE CONSIDERED SUBSIDIARY TO THE UNIT PRICE BID FOR CONCRETE, CLASS A.

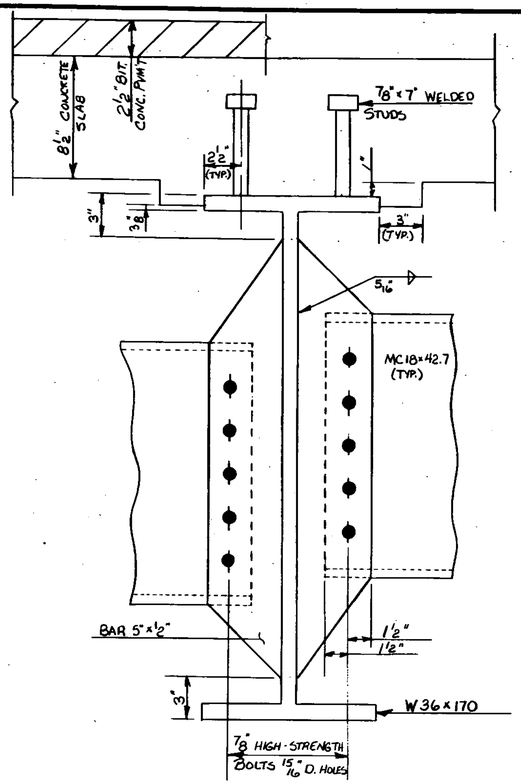
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| SUPERSTRUCTURE DETAILS | |
| Designed by R. ALDRICH | Drawn by G. SCHELLEY |
| Checked by M. CERUTTI date 10/83 | Bridge Design Supervisor R. L. Dolle date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2) S |
| Bridge Sheet No. BR805 | Sheet 26 of 98 |

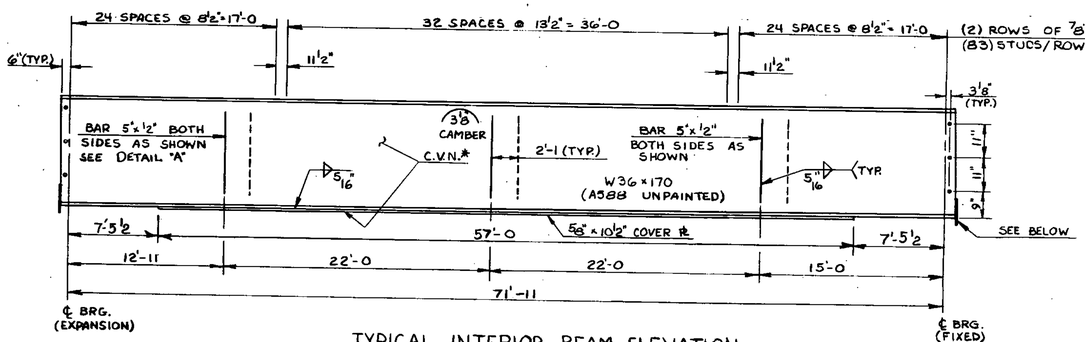
BRUNING 44-131 58304

BB-6-'83




DETAIL "A"
SCALE: 1"=5"

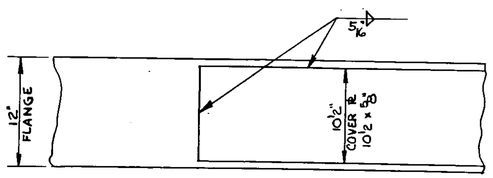



TYPICAL INTERIOR BEAM ELEVATION
SCALE: HORZ. - 1"= 6'
VERT. - 1"= 2'

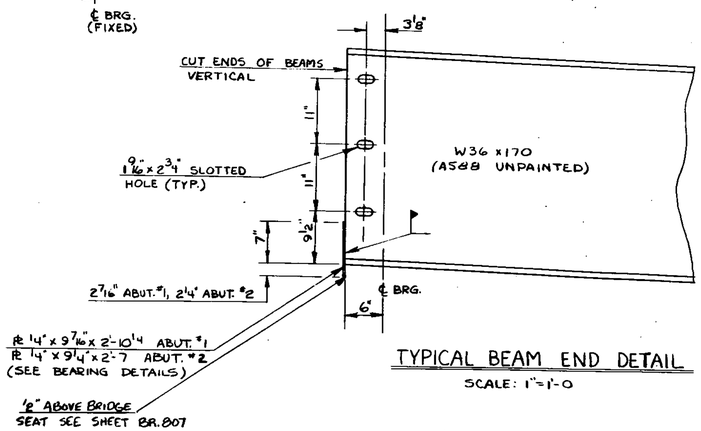
* ALL LOAD CARRYING MEMBER COMPONENTS SUBJECT TO TENSILE STRESS REQUIRE CHARPY V NOTCH TEST (CVN) AS SPECIFIED IN SUBSECTION 714.03.

## NOTES

1. BEAMS SHALL BE CAMBERED 3⅛" TOTAL; 2¼" FOR DEAD LOAD DEFLECTION, AND ⅞" FOR RESIDUAL CAMBER. THE CAMBER SHALL APPROXIMATE A CIRCULAR CURVE.
2. W 36 x 230's WITHOUT COVER PLATES MAY BE SUBSTITUTED FOR W 36 x 170's WITH COVER PLATES AS A CONTRACTOR'S OPTION. PAYMENT SHALL BE BASED ON BEAM AND PLATE AS SHOWN.




PLAN AT ENDS OF COVER PLATE
SCALE: 1½"=1'-0



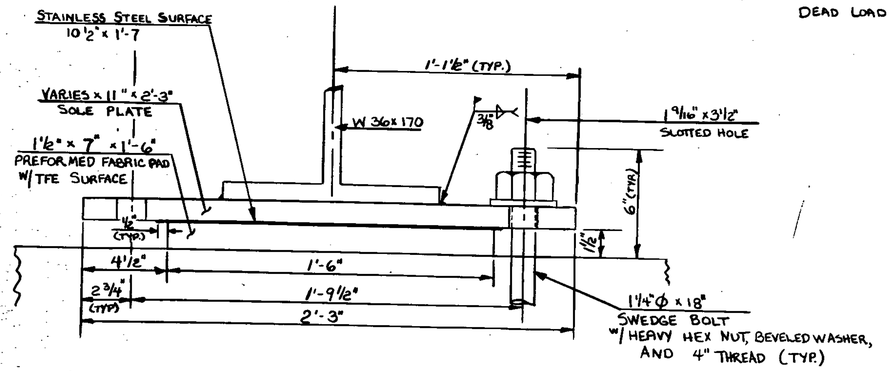

TYPICAL BEAM END DETAIL
SCALE: 1"=1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| HIGHWAY NO. VT. 128 | Log Sta. 9+56 |
| | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| STRUCTURAL STEEL DETAILS | |
| Designed by R. ALDRICH | Drawn by G. SCHELLEY |
| Checked by M. CERUTTI date 10/83 | Bridge Design Supervisor R. L. Ooms date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2)S |
| Bridge Sheet No. BR806 | Sheet 27 of 98 |

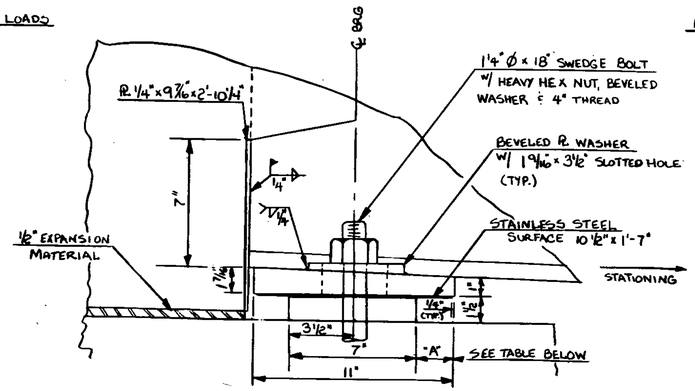
BRUNING 44-131 58384

8M-6-'83




FRONT VIEW - EXP. BRG.
SCALE: 3" = 1'-0

EXPANSION BEARING DESIGN LOADS
LIVE LOAD = 70ᴷ
DEAD LOAD = 55ᴷ



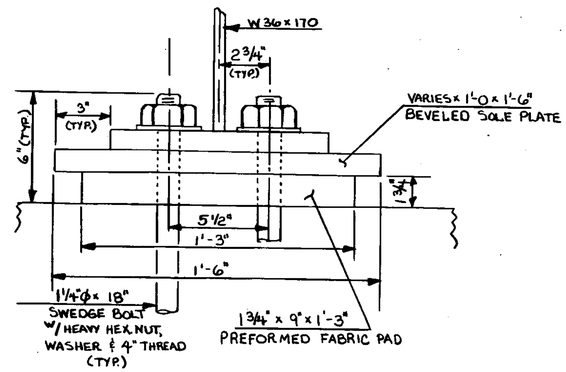

SIDE VIEW - EXP. BRG.
SCALE: 3" = 1'-0

* DIMENSION "A"

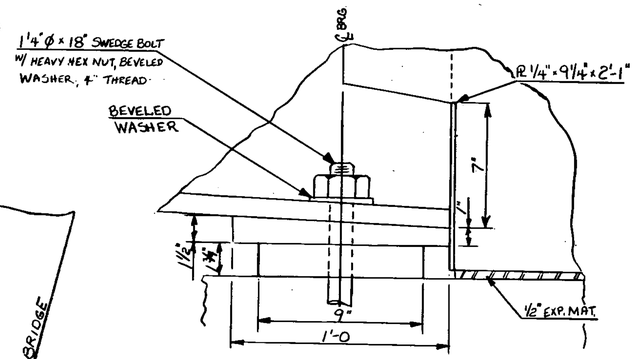
| °F | In. |
|---|---|
| 0 | 2 5/8 |
| 15 | 2 9/16 |
| 30 | 2 7/16 |
| 45 | 2 3/8 |
| 60 | 2 5/16 |
| 75 | 2 3/16 |
| 90 | 2 1/8 |

* MEASUREMENT "A" PRIOR TO POURING OF DECK, TAKES INTO ACCOUNT BOTTOM FLANGE ELONGATION DUE TO DEAD LOAD DEFLECTION.

FIXED BEARING DESIGN LOADS
LIVE LOAD = 70ᴷ
DEAD LOAD = 55ᴷ



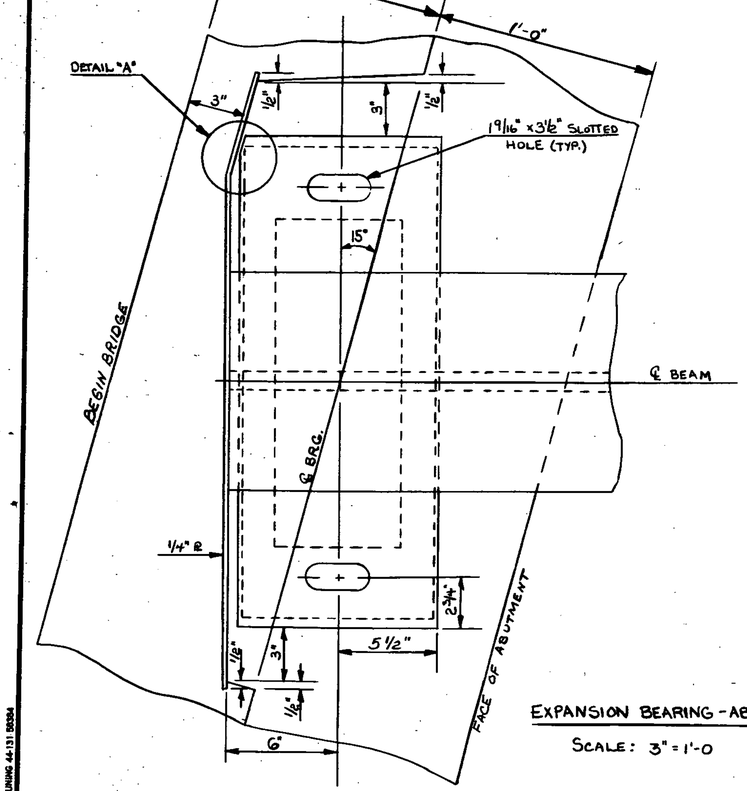

FRONT VIEW - FIXED BRG
SCALE: 3" = 1'-0



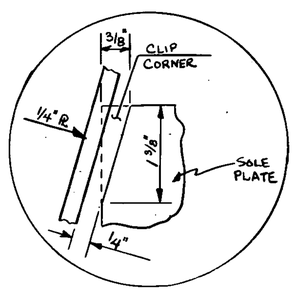

SIDE VIEW - FIXED BRG.
SCALE: 3" = 1'-0

NOTES

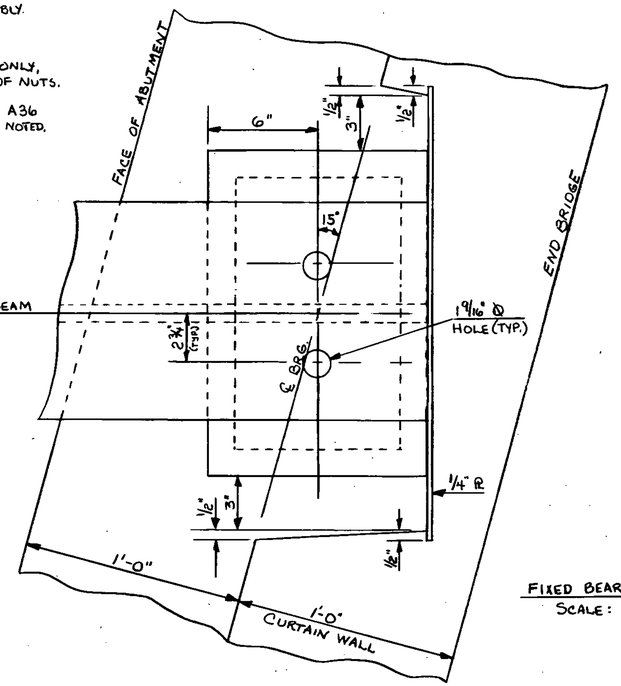
1. BEARINGS SHALL CONFORM TO APPLICABLE SECTIONS OF SUBSECTION 731.05. OMIT TFE AND STAINLESS STEEL SURFACE ON FIXED BEARINGS.
2. ALL BEARINGS SHALL BE PAID FOR AS BEARING DEVICE ASSEMBLY.
3. CONCRETE SURFACE UNDER BEARING SHALL BE LEVEL.
4. NUTS ON EXPANSION BEARINGS SHALL BE FINGER TIGHT ONLY, AND THREADS SHALL BE PEENED TO PREVENT REMOVAL OF NUTS.
5. ALL STEEL IN THE BEARING DEVICES SHALL BE A588 OR A36 GALVANIZED OR COATED AS PER BEARING SPECS., EXCEPT AS NOTED.




EXPANSION BEARING - ABUT. 1
SCALE: 3" = 1'-0




DETAIL "A"
SCALE: 1" = 1"



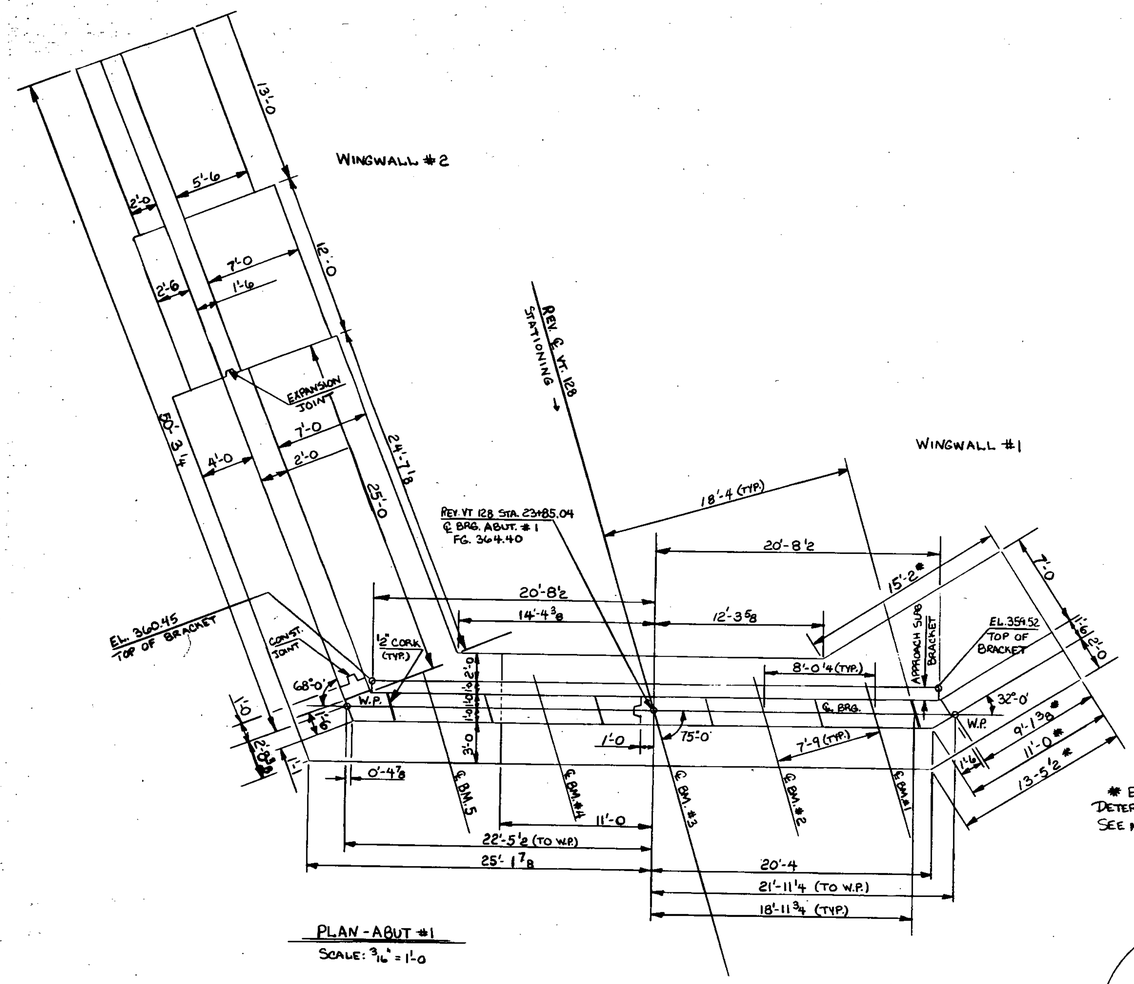

FIXED BEARING - ABUT. 2
SCALE: 3" = 1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| HIGHWAY NO. VT. 128 | Log Sta. 9+56 |
| | Surv. Sta. 24 +21 |
| VT. HIGHWAY 128 OVER BROWNS RIVER | |
| BEARING DEVICE DETAILS | |
| Designed by R. ALDRICH | Drawn by M. EVANS |
| Checked by M. CERUTTI date 10/83 | Bridge Design Supervisor P. L. Oatley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS-0229(2)S |
| Bridge Sheet No. BR807 | Sheet 28 of 98 |

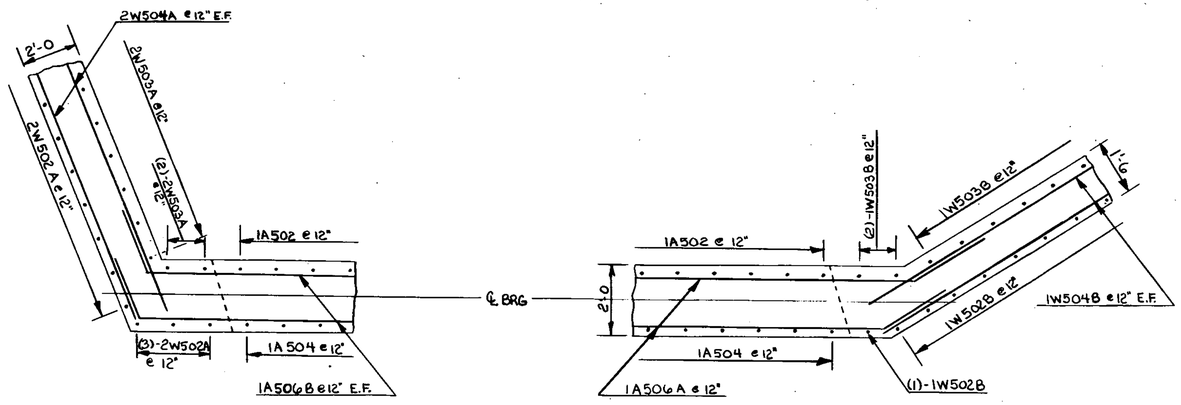
BRUNING 44-131 03284

BR-6-'83

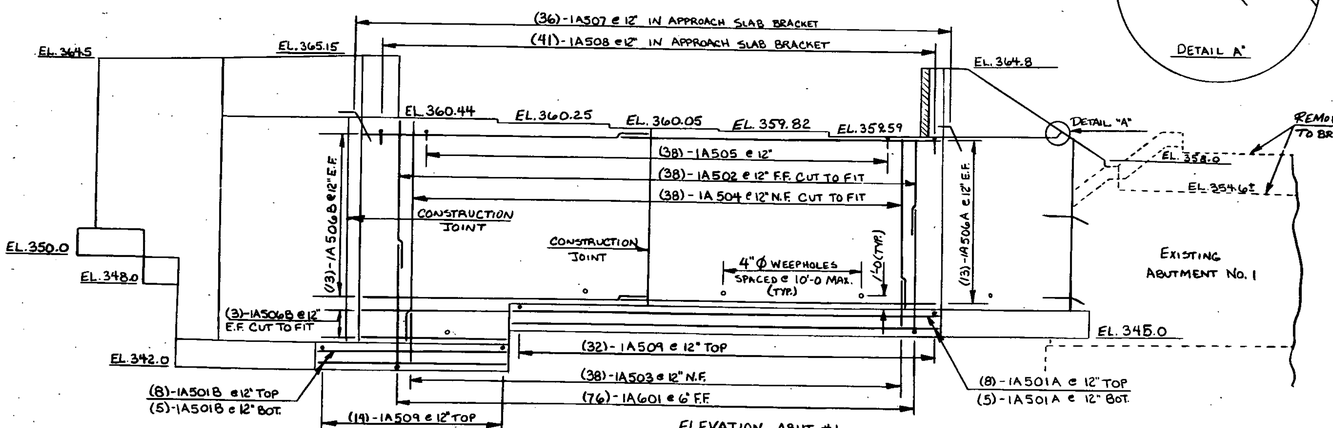



PLAN - ABUT #1
SCALE: 3/16" = 1'-0

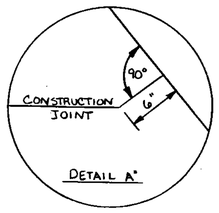
* EXACT DIMENSION TO BE DETERMINED IN THE FIELD. SEE NOTE #1.



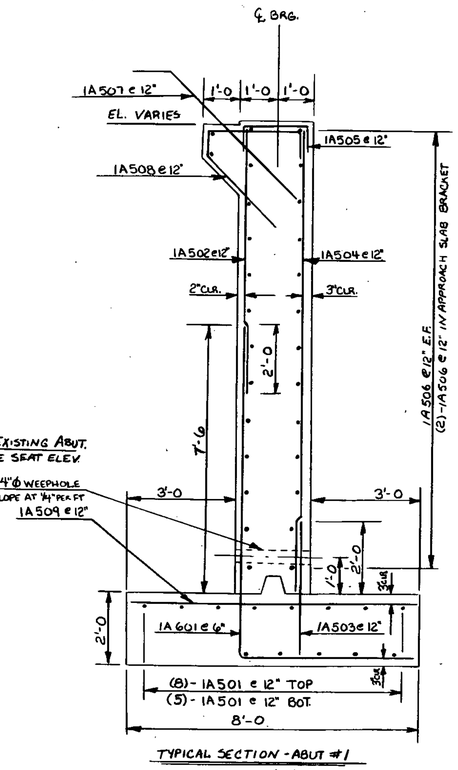

CORNER DETAILS ABOVE BRIDGE SEAT ELEV.
SCALE: ½" = 1'-0




ELEVATION - ABUT #1
SCALE: 3/16" = 1'-0




DETAIL 'A'




TYPICAL SECTION - ABUT #1
SCALE: 1/2" = 1'-0

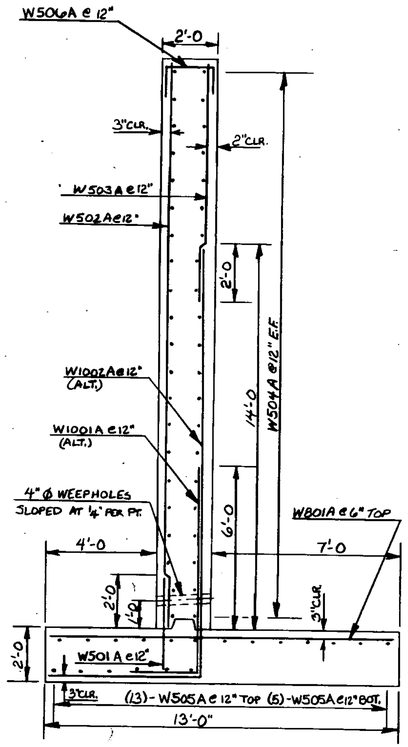
## NOTES

1. THE END OF WINGWALL No. 1 SHALL BUTT AGAINST THE END OF EXISTING ABUTMENT No. 1 AS DETAILED ON THIS SHEET. DOWELS SHALL BE DRILLED AND GROUTED INTO EXISTING ABUTMENT No. 1 AS SHOWN. DOWELS SHOULD EXTEND A MINIMUM OF 1'-6 INTO EXISTING CONCRETE. PAYMENT FOR DRILLING AND GROUTING OF DOWELS SHALL BE CONSIDERED SUBSIDIARY TO ALL OTHER CONTRACT ITEMS.
2. THE TOP OF EXISTING ABUTMENT No 1 SHALL BE REMOVED TO ELEVATION 354.6±, OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR REMOVAL SHALL BE AS "PARTIAL REMOVAL OF STRUCTURE".
3. SEE SHEET BR 812, NOTE 2 CONCERNING FOOTING ELEVATIONS AND LIMITS OF STRUCTURE EXCAVATION AND BLASTING OF LEDGE.

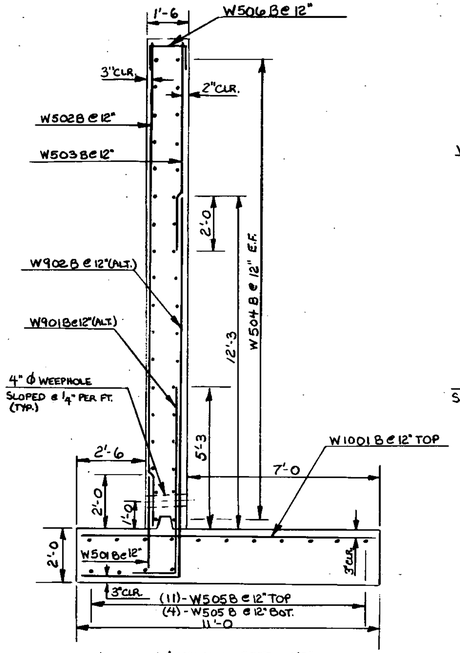
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| ABUTMENT #1 DETAILS | |
| Designed by R. ALDRICH | Drawn by M. EVANS |
| Checked by G. SCHELLEY date 10/83 | Bridge Design Supervisor R. L. Ootley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS-0229 (2)S |
| Bridge Sheet No. BR808 | Sheet 29 of 98 |

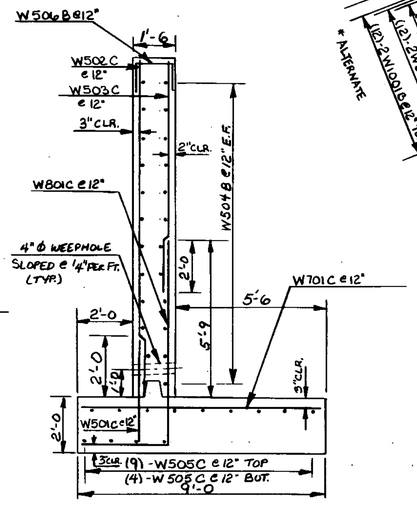
DRUMING 44-131 80284
8-6-'83



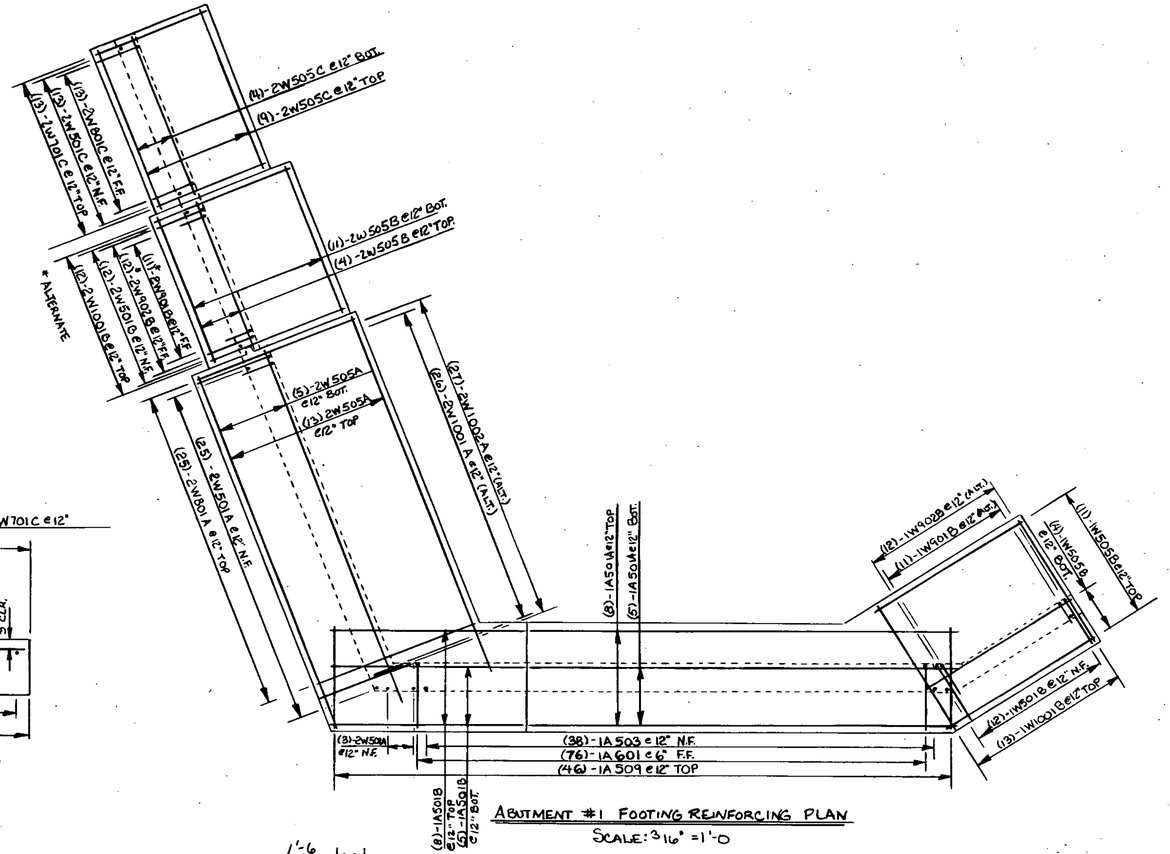

WINGWALL SECTION "A"
SCALE: 3/8" = 1'-0



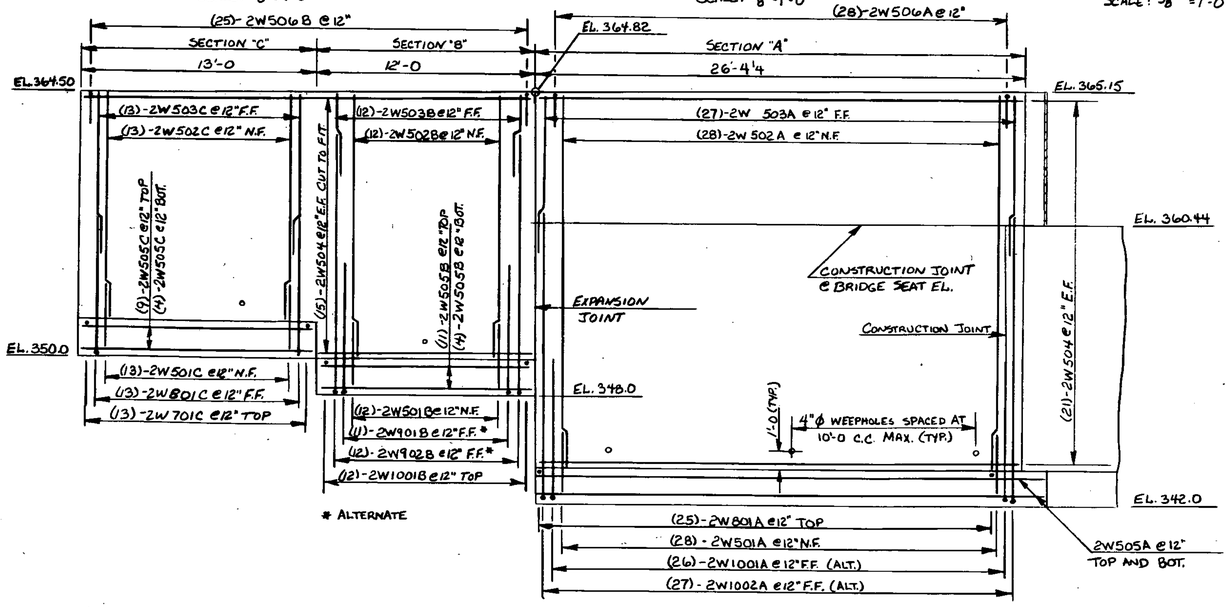

WINGWALL SECTION "B"
SCALE: 3/8" = 1'-0




WINGWALL SECTION "C"
SCALE: 3/8" = 1'-0

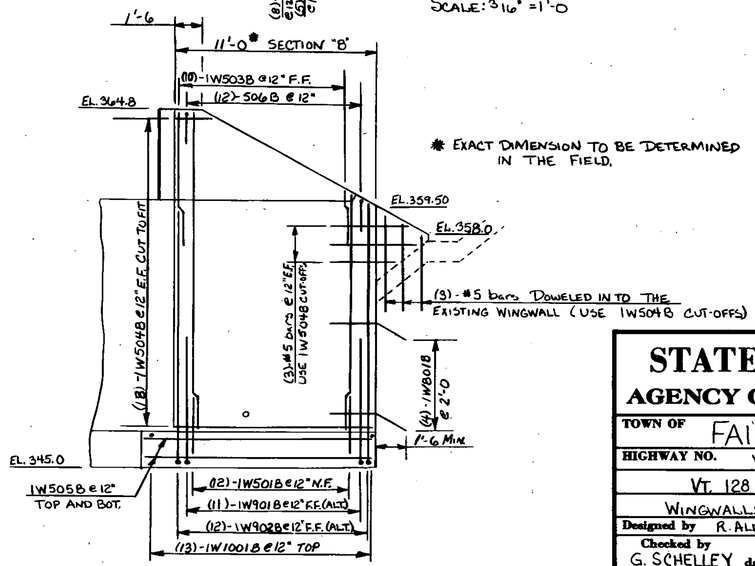



ABUTMENT #1 FOOTING REINFORCING PLAN
SCALE: 3/16" = 1'-0




* ALTERNATE

ELEVATION - WINGWALL #2
SCALE: 1/4" = 1'-0




* EXACT DIMENSION TO BE DETERMINED IN THE FIELD.

ELEVATION - WINGWALL #1
SCALE: 1/4" = 1'-0

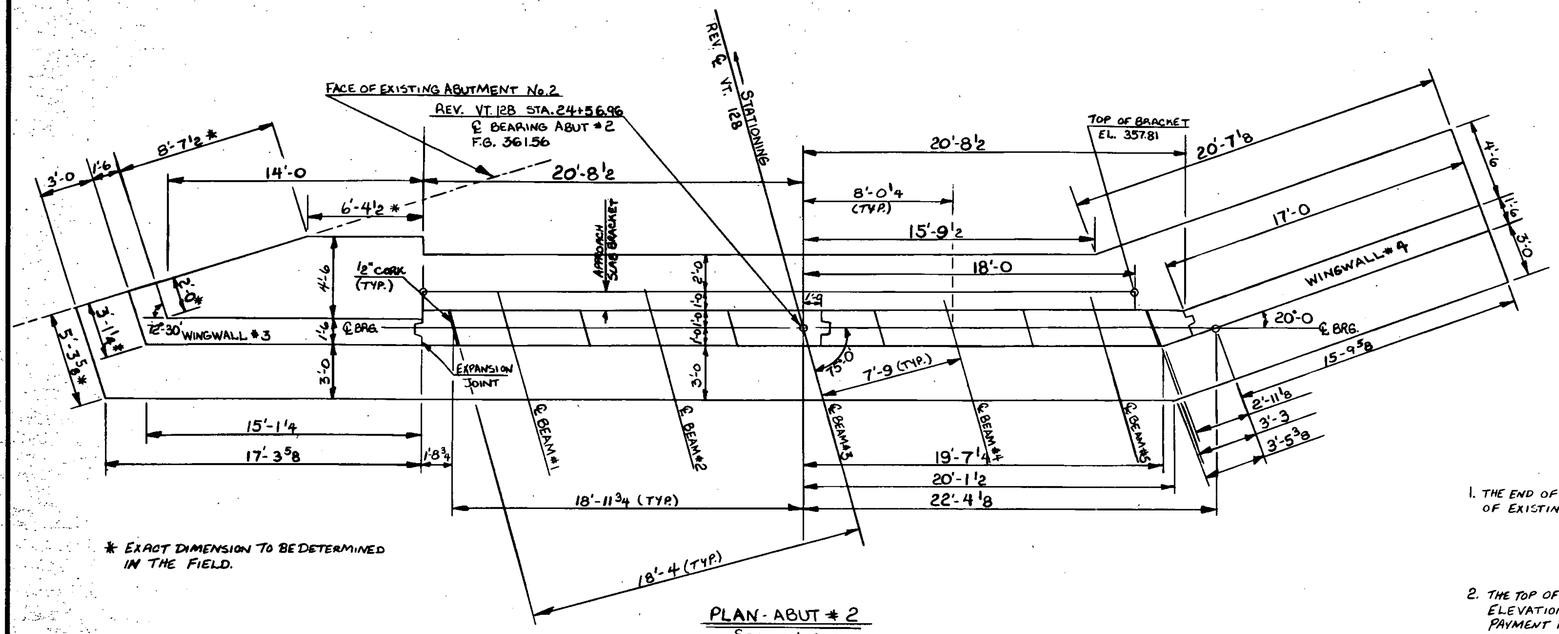
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| HIGHWAY NO. VT. 128 | Log Sta. 9+56 |
| | Surv. Sta. 24+21 |

VT. 128 OVER BROWNS RIVER
WINGWALLS #1 & #2, FOOTING REINFORCEMENT

| | |
|---|---|
| Designed by R. ALDRICH | Drawn by M. EVANS |
| Checked by G. SCHELLEY date 10/83 | Bridge Design Supervisor E.L. Ooffcy date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2) S |
| Bridge Sheet No. BR809 | Sheet 30 of 98 |

BRUNING 44-131-5084
BB-6-'83




* EXACT DIMENSION TO BE DETERMINED IN THE FIELD.

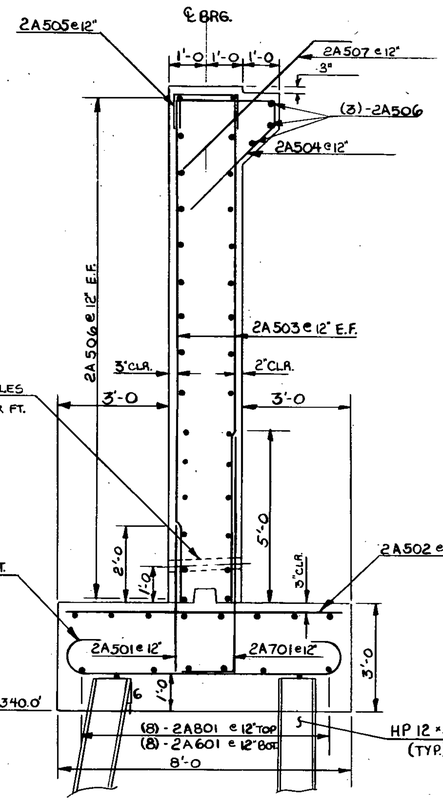
PLAN - ABUT # 2

SCALE: ¼" = 1'-0

NOTES

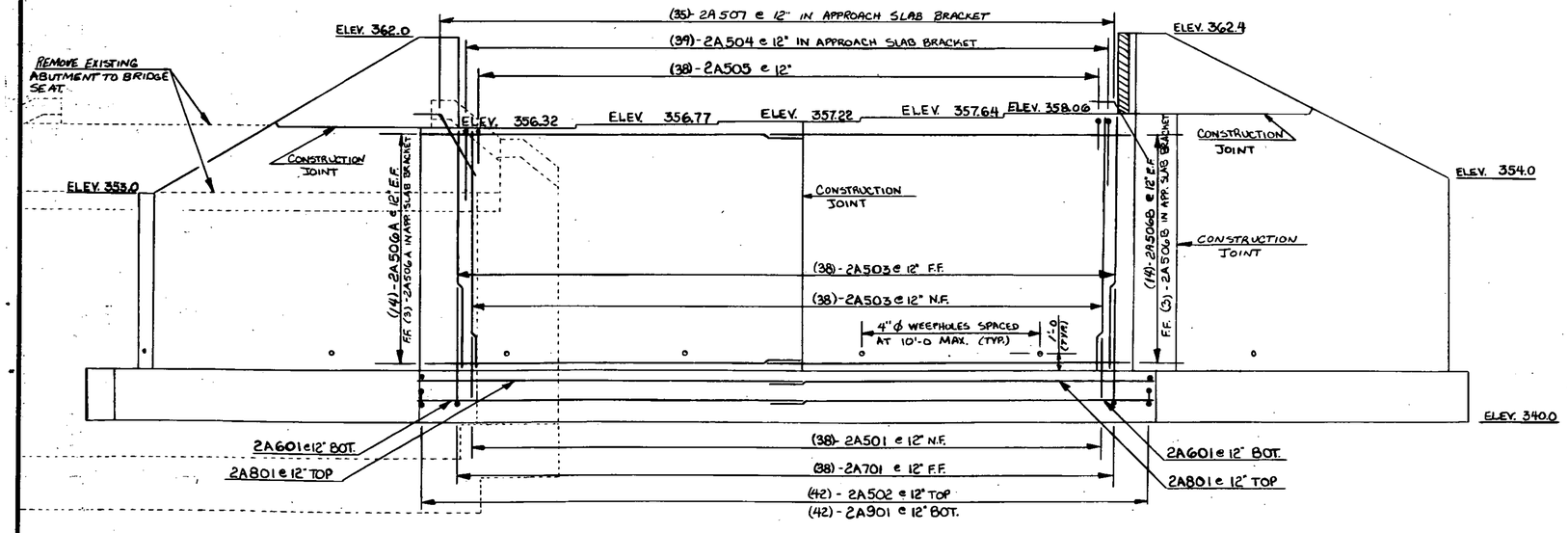
1. THE END OF WINGWALL No. 3 SHALL BUTT AGAINST THE FACE OF EXISTING ABUTMENT No. 2, AS DETAILED ON THIS SHEET.

2. THE TOP OF ABUTMENT No. 2 SHALL BE REMOVED TO ELEVATION 353.0 ±, OR AS DIRECTED BY THE ENGINEER. PAYMENT FOR REMOVAL SHALL BE AS "PARTIAL REMOVAL OF STRUCTURE".




TYPICAL SECTION - ABUT. # 2

SCALE: 1" = 1'-0




ELEVATION - ABUT # 2

SCALE: ¼" = 1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| HIGHWAY NO. VT. 128 | Log Sta. 9+56 |
| | Surv. Sta. 24+21 |

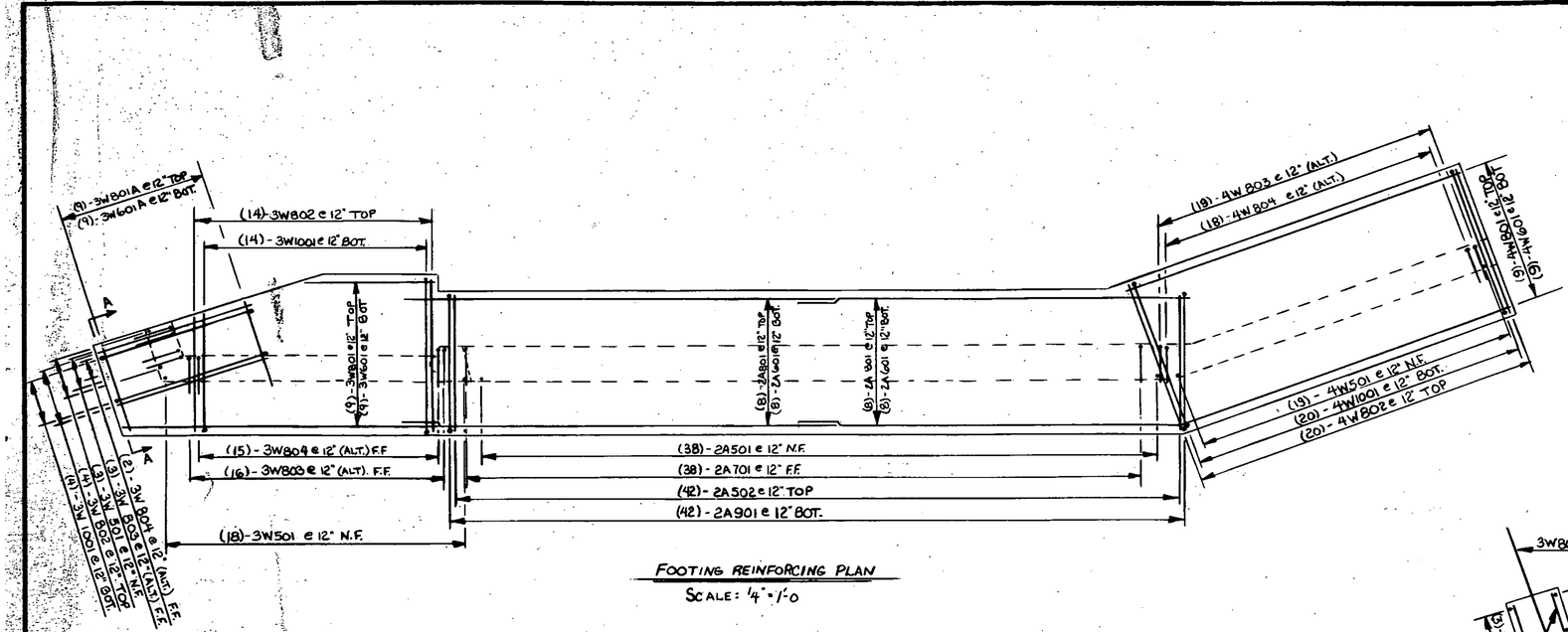
VT. 128 OVER BROWNS RIVER

ABUTMENT # 2 DETAILS

| | |
|---|---|
| Designed by R. ALDRICH | Drawn by M. EVANS 10/83 |
| Checked by G. SCHELLEY date 10/83 | Bridge Design Supervisor R. L. Dolley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS-0229(2)S |
| Bridge Sheet No. BR810 | Sheet 31 of 98 |

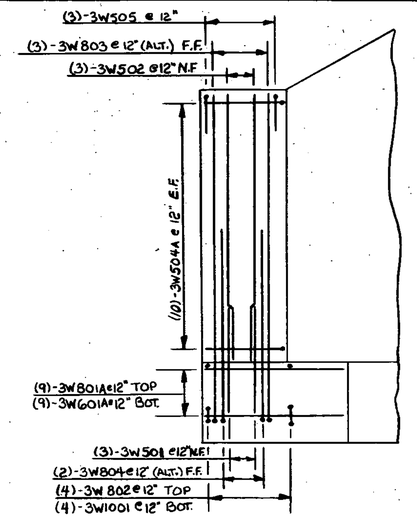
BRUNING 44-131 55304

BR-6-'83



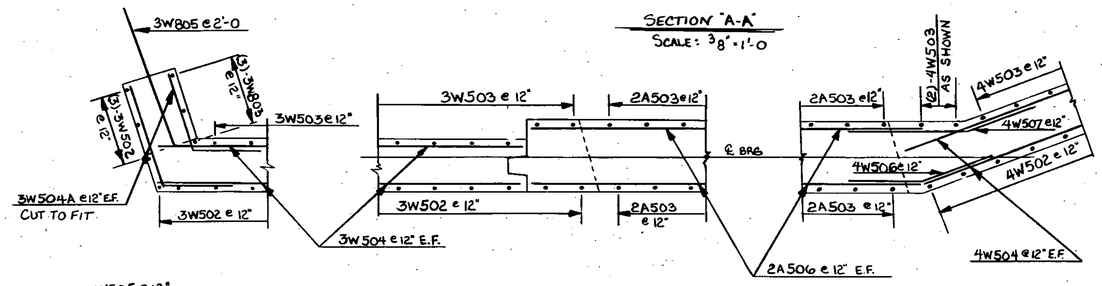

FOOTING REINFORCING PLAN

SCALE: 1/4" = 1'-0



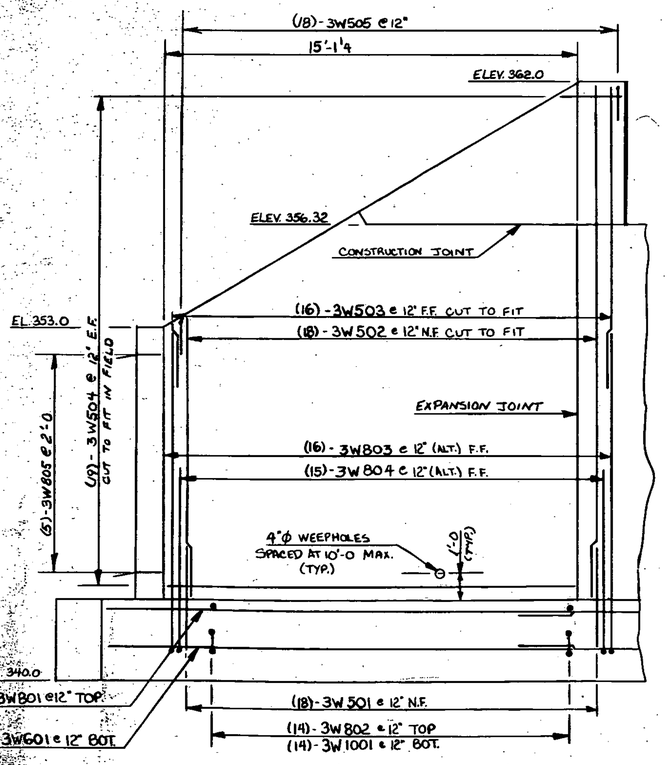

SECTION "A-A"

SCALE: 3/8" = 1'-0



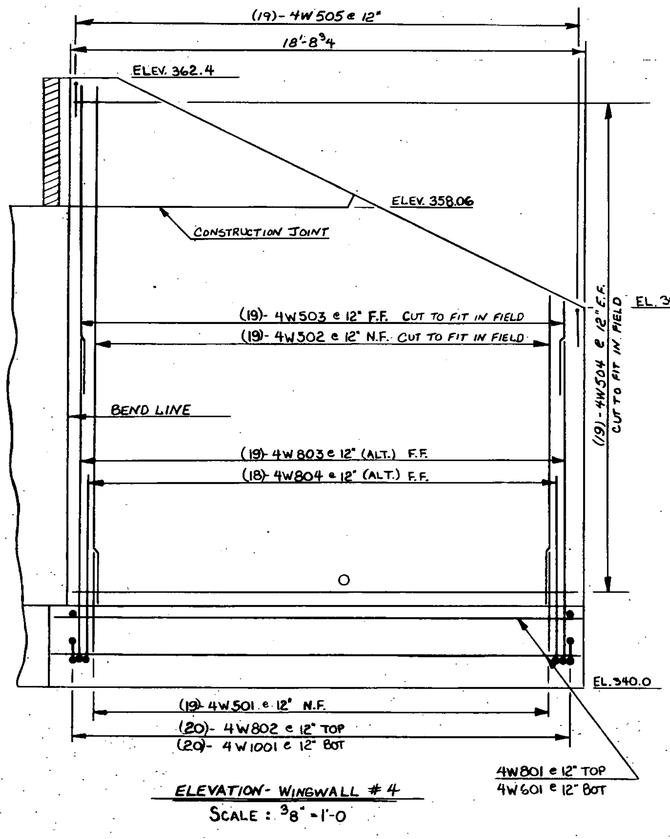

CORNER DETAILS

SCALE: 1/2" = 1'-0



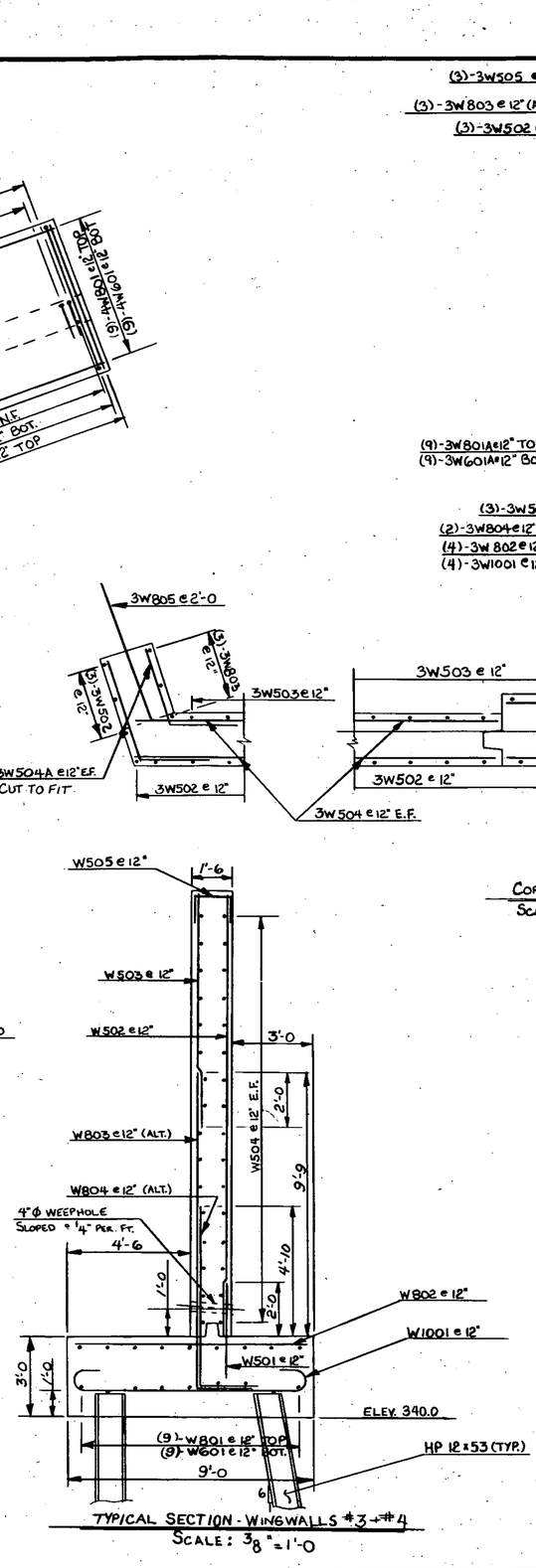

ELEVATION - WINGWALL # 3

SCALE: 3/8" = 1'-0




ELEVATION - WINGWALL # 4

SCALE: 3/8" = 1'-0

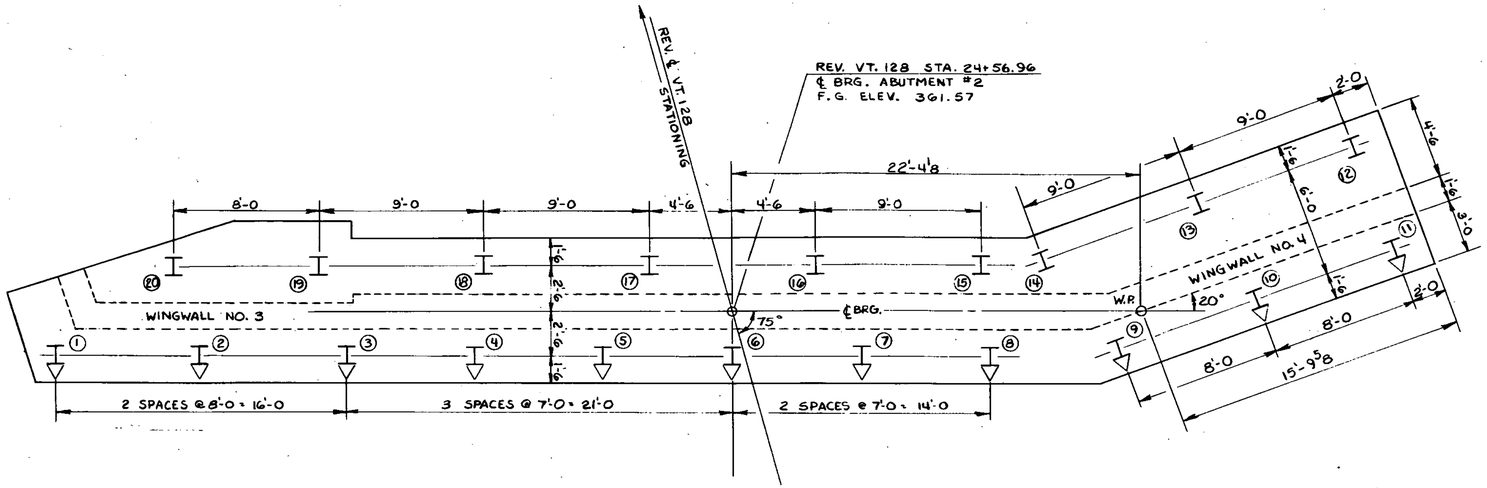



TYPICAL SECTION - WINGWALLS #3 & #4

SCALE: 3/8" = 1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| FOOTING REINFORCING PLAN & WINGWALLS 3 & 4 | |
| Designed by R. ALDRICH | Drawn by M. EVANS 10/83 |
| Checked by G. SCHELLEY date 10/83 | Bridge Design Supervisor R. L. Ostler date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS-0229 (2)S |
| Bridge Sheet No. BR811 | Sheet 32 of 98 |

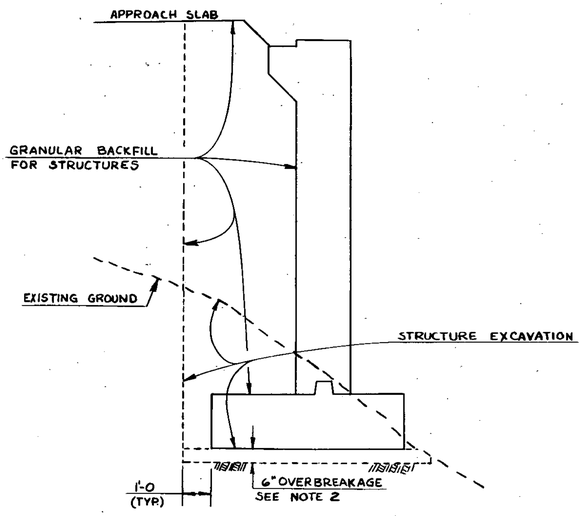



PILE LAYOUT

SCALE: 1/4"=1'-0

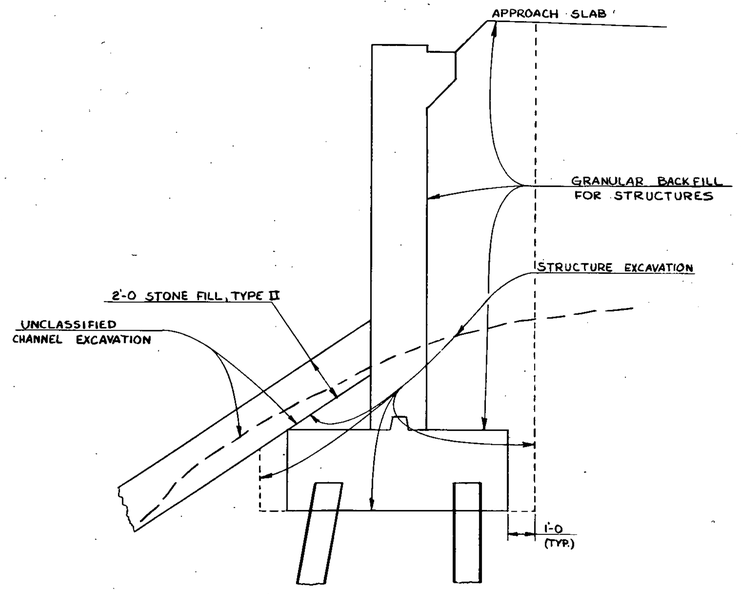
## NOTES

1. SEE BR801 FOR GRANULAR BORROW LIMITS BEHIND ABUTMENTS.
2. NO LEDGE SHALL PROJECT ABOVE INDICATED BOTTOM OF FOOTING ELEVATION. ALL OVERBREAKAGE BELOW INDICATED BOTTOM OF FOOTING SHALL BE REPLACED WITH CONCRETE, CLASS B. A MAXIMUM OF 6" AVERAGE DEPTH SHALL BE PAID FOR AS STRUCTURE EXCAVATION AND CONCRETE, CLASS B. ANY ADDITIONAL CONCRETE OR EXCAVATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
3. H INDICATES LOCATION OF A VERTICAL PILE.
4. H▷ INDICATES LOCATION AND DIRECTION OF A 1 ON 6 BATTERED PILE.
5. ALL PILES SHALL BE HP12×53, AND SHALL BE DRIVEN TO LEDGE. THE ESTIMATED PILE LENGTH IS 17' TO 20'.
6. AT ABUTMENT No. 1, IF SOUND LEDGE IS MORE THAN 2'-0 BELOW THE PLAN BOTTOM OF FOOTING ELEVATION THE STRUCTURES ENGINEER SHALL BE NOTIFIED. THE FOOTING SHALL NOT BE PLACED UNTIL A DESIGN REVISION IS ISSUED.
7. IF SOUND LEDGE IS HIGHER THAN THE DESIGN FOOTING ELEVATION THE FOOTINGS MAY BE RAISED AT THE DISCRETION OF THE ENGINEER. VERTICAL REINFORCEMENT MAY BE CUT TO FIT.
8. IF SOUND LEDGE IS BETWEEN DESIGN FOOTING ELEVATION AND 2' BELOW, A SUBFOOTING OF CONCRETE, CLASS "B" SHALL BE POURED WITH THE FOOTING.




ABUTMENT NO.1

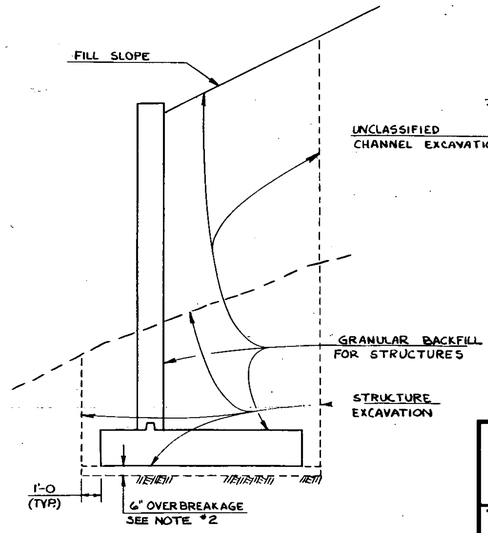
SCALE: 3/8"=1'-0




ABUTMENT NO. 2

SCALE: 3/8"=1'-0

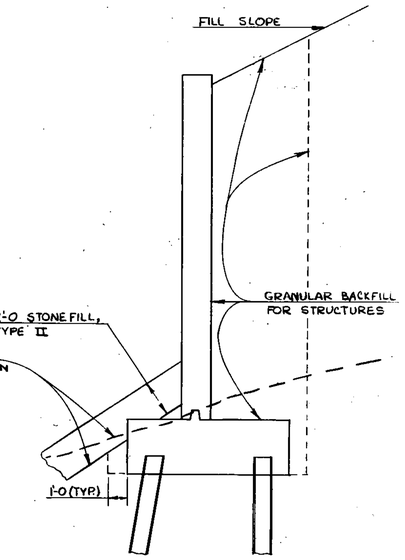
EARTHWORK DETAILS




WINGWALL NO. 2

(WINGWALL NO.1 SIMILAR)

SCALE: 1/4"=1'-0




WINGWALL NO.4

(WINGWALL NO.3 SIMILAR)

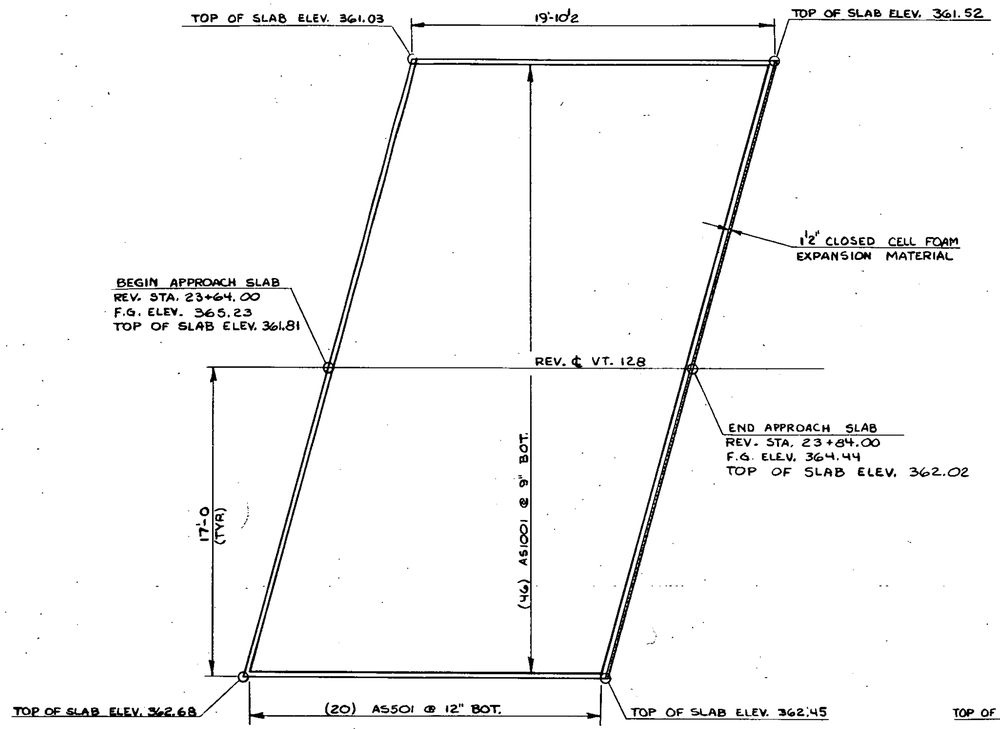
SCALE: 1/4"=1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

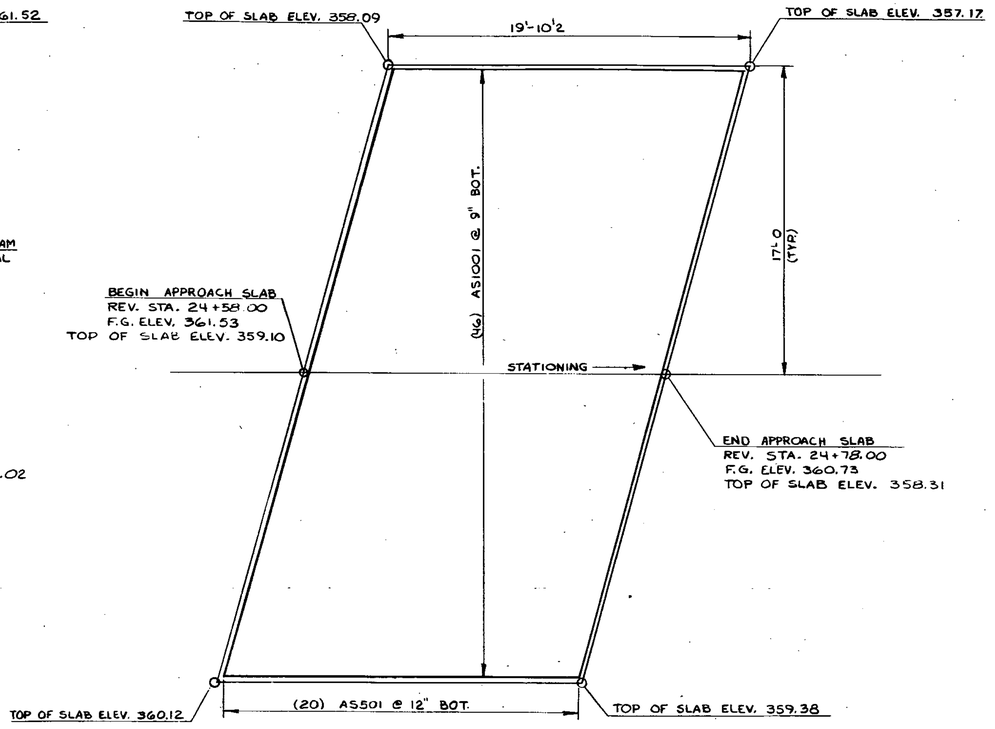
| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| PILE LAYOUT AND EARTHWORK DETAILS | |
| Designed by R. ALDRICH | Drawn by G. SCHELLEY |
| Checked by M. EVANS date 11/83 | Bridge Design Supervisor R. L. Ootley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229(2)S |
| Bridge Sheet No. BR812 | Sheet 33 of 98 |

BRUNING 44-131 55384

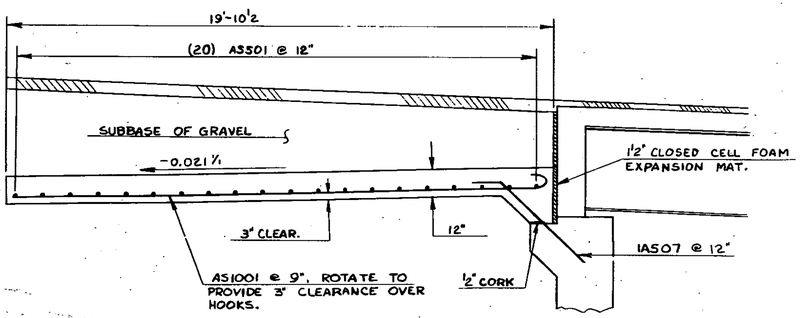
BR-6-'83



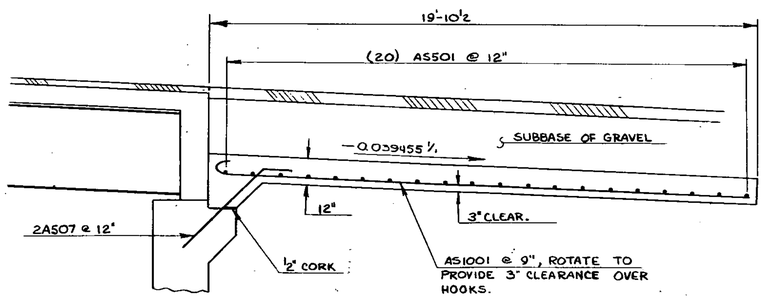

APPROACH SLAB #1 PLAN
SCALE : 1/4"=1'-0




APPROACH SLAB #2 PLAN
SCALE : 1/4"=1'-0




APPROACH SLAB 1# ELEVATION
SCALE : 3/8"=1'-0




APPROACH SLAB #2 ELEVATION
SCALE : 3/8"=1'-0

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | Bridge No. 8 |
| | Log Sta. 9+56 |
| HIGHWAY NO. VT. 128 | Surv. Sta. 24+21 |

VT. 128 OVER BROWNS RIVER
APPROACH SLAB DETAILS

| | |
|---|---|
| Designed by R. ALDRICH | Drawn by G. SCHELLEY |
| Checked by M. CERUTTI date 10/83 | Bridge Design Supervisor R.L. Oatley date 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS 0229 (2)S |
| Bridge Sheet No. BR813 | Sheet 34 of 98 |

BRUNING 44-131 58284
BR4-'83

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | | | | |
| 2 | | | | | | SUPERSTRUCTURE | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | 147 | 5 | 36-2 | S501 | STR | | | | | | | | | | | | |
| 5 | 336 | 5 | 25-10 | S502 | STR | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | 16 | 5 | 37-5 | S503 | STR | | | | | | | | | | | | |
| 8 | 148 | 5 | 5-10 | S504 | S5 | 1-0 | 1-5 | 1-0 | 1-5 | | | 1-0 | | | | | |
| 9 | 68 | 5 | 9-4 | S505 | S5 | 1-0 | 3-7 | 0-6 | 3-3 | | | 1-0 | | | | | |
| 10 | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | |
| 12 | 147 | 6 | 36-2 | S601 | STR | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | |
| 16 | | | | | | APPROACH SLABS | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | |
| 18 | 40 | 5 | 19-7 | AS501 | STR | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | |
| 21 | 92 | 10 | 20-9 | AS1001 | 1 | 1-5 | 19-4 | | | | | / | | | | | |
| 22 | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | |
| 25 | | | | | | ABUTMENT #1 | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | |
| 27 | 13 | 5 | 30-10 | 1A501A | STR | | | | | | | | | | | | |
| 28 | 13 | 5 | 13-11 | 1A501B | STR | | | | | | | | | | | | |
| 29 | 38 | 5 | 10-6 | 1A502 | STR | | | | | | | | | | | | |
| 30 | 38 | 5 | 3-9 | 1A503 | STR | | | | | | | | | | | | |
| 31 | 38 | 5 | 16-0 | 1A504 | STR | | | | | | | | | | | | |
| 32 | 38 | 5 | 3-6 | 1A505 | 17 | | 1-0 | 1-6 | 1-0 | | | | | | | | |
| 33 | 28 | 5 | 25-11 | 1A506A | 19 | | 23-11 | 2-0 | / | | | | 1-0¾ | | 1-8⅜ | | |
| 34 | 34 | 5 | 23-0 | 1A506B | 19 | | 21-0 | 2-0 | / | | | | 1-10¼ | | 0-9 | | |
| 35 | 36 | 5 | 5-5 | 1A507 | 19 | | 1-0 | 4-5 | / | | | | | | | | |
| 36 | 41 | 5 | 6-10 | 1A508 | 16 | 1-0 | 2-6 | 0-6 | 2-10 | | | | | | | | |
| 37 | 46 | 5 | 7-6 | 1A509 | STR | | | | | | | | | | | | |
| 38 | | | | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | | | |
| 40 | 77* | 6 | 13-10 | 1A601 | 2 | 4-7 | 9-3 | | | | | / | | | | | |
| 41 | | | | | | | | | | | | | | | | | |
| 42 | | | | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | | | |
| 44 | | | | | | WING WALL #1 | | | | | | | | | | | |
| 45 | | | | | | | | | | | | | | | | | |
| 46 | 12 | 5 | 3-9 | 1W501B | STR | | | | | | | | | | | | |
| 47 | 12 | 5 | 17-4 | 1W502B | STR | | | | | | | | | | | | |
| 48 | 10 | 5 | 7-7 | 1W503B | STR | | | | | | | | | | | | |
| 49 | 36 | 5 | 10-7 | 1W504B | STR | | | | | | | | | | | | |
| 50 | 15 | 5 | 11-6 | 1W505B | STR | | | | | | | | | | | | |
| 51 | 12 | 5 | 3-0 | 1W506B | S10 | | 1'-0 | 1'-0 | 1'-0 | | | | | | | | |
| 52 | | | | | | | | | | | | | | | | | |
| 53 | 4 | 8 | 3-6 | 1W801B | 19 | | 2-0 | 1-6 | / | | | | | | | | |
| 54 | | | | | | | | | | | | | | | | | |
| 55 | | | | | | | | | | | | | | | | | |
| 56 | 12* | 9 | 9-0 | 1W901B | 2 | 2-0 | 7-0 | | | | | / | | | | | |
| 57 | 12 | 9 | 17-6 | 1W902B | 2 | 3-6 | 14-0 | | | | | / | | | | | |
| 58 | | | | | | | | | | | | | | | | | |
| 59 | 14* | 10 | 10-6 | 1W1001B | STR | | | | | | | | | | | | |
| 60 | | | | | | | | | | | | | | | | | |
| 61 | | | | | | WING WALL #2 | | | | | | | | | | | |
| 62 | | | | | | | | | | | | | | | | | |
| 63 | 28 | 5 | 3-9 | 2W501A | STR | | | | | | | | | | | | |
| 64 | 28 | 5 | 20-10 | 2W502A | STR | | | | | | | | | | | | |
| 65 | 27 | 5 | 8-11 | 2W503A | STR | | | | | | | | | | | | |
| 66 | 42 | 5 | 25-11 | 2W504A | STR | | | | | | | | | | | | |
| 67 | 18 | 5 | 27-5 | 2W505A | STR | | | | | | | | | | | | |
| 68 | 12 | 5 | 3-9 | 2W501B | STR | | | | | | | | | | | | |
| 69 | 12 | 5 | 14-7 | 2W502B | STR | | | | | | | | | | | | |
| 70 | 13* | 5 | 4-4 | 2W503B | STR | | | | | | | | | | | | |
| 71 | 30 | 5 | 24-6 | 2W504B | STR | | | | | | | | | | | | |
| 72 | 15 | 5 | 11-6 | 2W505B | STR | | | | | | | | | | | | |
| 73 | 13 | 5 | 3-9 | 2W501C | STR. | | | | | | | | | | | | |
| 74 | 13 | 5 | 12-5 | 2W502C | STR | | | | | | | | | | | | |
| 75 | 13 | 5 | 8-8 | 2W503C | STR | | | | | | | | | | | | |
| 76 | 13 | 5 | 12-6 | 2W505C | STR | | | | | | | | | | | | |
| 77 | 25 | 5 | 3-6 | 2W506A | S10 | | 1'-0 | 1'-6 | 1'-0 | | | | | | | | |
| 78 | 25 | 5 | 3-0 | 2W506B | S10 | | 1'-0 | 1'-0 | 1'-0 | | | | | | | | |
| 79 | | | | | | | | | | | | | | | | | |
| 80 | 14* | 7 | 8-6 | 2W701C | STR. | | | | | | | | | | | | |

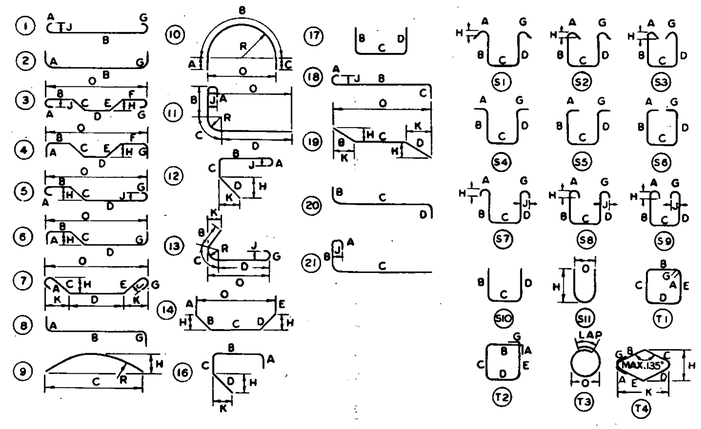
| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 81 | | | | | | | | | | | | | | | | | |
| 82 | | | | | | | | | | | | | | | | | |
| 83 | | | | | | | | | | | | | | | | | |
| 84 | 25 | 8 | 12-6 | 2WB01A | STR. | | | | | | | | | | | | |
| 85 | 13 | 8 | 10-7 | 2WB01C | 2 | 3-1 | 10-6 | | | | | / | | | | | |
| 86 | | | | | | | | | | | | | | | | | |
| 87 | | | | | | | | | | | | | | | | | |
| 88 | 12* | 9 | 9-0 | 2W901B | 2 | 2-0 | 7-0 | | | | | | | | | | |
| 89 | 12 | 9 | 17-6 | 2W902B | 2 | 3-6 | 14-0 | | | | | | | | | | |
| 90 | | | | | | | | | | | | | | | | | |
| 91 | | | | | | | | | | | | | | | | | |
| 92 | 27* | 10 | 9-9 | 2W1001A | 2 | 2-0 | 7-9 | | | | | | | | | | |
| 93 | 27 | 10 | 21-5 | 2W1002A | 2 | 5-7 | 15-9 | | | | | | | | | | |
| 94 | 12 | 10 | 10-6 | 2W1001B | STR | | | | | | | | | | | | |
| 95 | | | | | | | | | | | | | | | | | |
| 96 | | | | | | | | | | | | | | | | | |
| 97 | | | | | | | | | | | | | | | | | |
| 98 | | | | | | ABUTMENT #2 | | | | | | | | | | | |
| 99 | | | | | | | | | | | | | | | | | |
| 100 | 38 | 5 | 3-9 | 2A501 | STR | | | | | | | | | | | | |
| 101 | 42 | 5 | 7-6 | 2A502 | STR | | | | | | | | | | | | |
| 102 | 76 | 5 | 14-9 | 2A503 | STR | | | | | | | | | | | | |
| 103 | 39 | 5 | 6-10 | 2A504 | 16 | 1-0 | 2-6 | 0-6 | 2-10 | | | | | | | | |
| 104 | 38 | 5 | 3-6 | 2A505 | 17 | | 1-0 | 1-6 | 1-0 | | | | | | | | |
| 105 | 31 | 5 | 21-3 | 2A506A | STR | | | | | | | | | | | | |
| 106 | 31 | 5 | 20-7 | 2A506B | STR | | | | | | | | | | | | |
| 107 | 35 | 5 | 5-5 | 2A507 | 19 | | 1-0 | 4-5 | / | | | | | | | | |
| 108 | | | | | | | | | | | | | | | | | |
| 109 | | | | | | | | | | | | | | | | | |
| 110 | 16 | 6 | 21-6 | 2A601 | STR | | | | | | | | | | | | |
| 111 | | | | | | | | | | | | | | | | | |
| 112 | | | | | | | | | | | | | | | | | |
| 113 | 39* | 7 | 9-0 | 2A701 | 2 | 2-0 | 7-0 | | | | | / | | | | | |
| 114 | | | | | | | | | | | | | | | | | |
| 115 | | | | | | | | | | | | | | | | | |
| 116 | 16 | 8 | 21-6 | 2A801 | STR | | | | | | | | | | | | |
| 117 | | | | | | | | | | | | | | | | | |
| 118 | | | | | | | | | | | | | | | | | |
| 119 | 42 | 9 | 10-8 | 2A901 | 1 | 1-7 | 7-6 | | | | | 1-7 | | | | | |
| 120 | | | | | | | | | | | | | | | | | |
| 121 | | | | | | | | | | | | | | | | | |
| 122 | | | | | | | | | | | | | | | | | |
| 123 | | | | | | WING WALL #3 | | | | | | | | | | | |
| 124 | | | | | | | | | | | | | | | | | |
| 125 | 21 | 5 | 3-9 | 3W501 | STR | | | | | | | | | | | | |
| 126 | 21 | 5 | 18-9 | 3W502 | STR | | | | | | | | | | | | |
| 127 | 16 | 5 | 11-0 | 3W503 | STR | | | | | | | | | | | | |
| 128 | 38 | 5 | 14-7 | 3W504 | STR | | | | | | | | | | | | |
| 129 | 21* | 5 | 4-7 | 3W504A | 19 | | 2-7 | 2-0 | / | | | | 2-5½ | | 0-9⅜ | | |
| 130 | 21 | 5 | 3-0 | 3W505 | S10 | | 1'-0 | 1'-0 | 1'-0 | | | | | | | | |
| 131 | | | | | | | | | | | | | | | | | |
| 132 | 9 | 6 | 16-10 | 3W601 | STR | | | | | | | | | | | | |
| 133 | 10* | 6 | 4-10 | 3W601A | STR | | | | | | | | | | | | |
| 134 | | | | | | | | | | | | | | | | | |
| 135 | | | | | | | | | | | | | | | | | |
| 136 | 9 | 8 | 16-10 | 3WB01 | STR | | | | | | | | | | | | |
| 137 | 10* | 8 | 4-10 | 3WB01A | STR | | | | | | | | | | | | |
| 138 | 19* | 8 | 8-6 | 3WB02 | STR | | | | | | | | | | | | |
| 139 | 19 | 8 | 13-9 | 3WB03 | 2 | 2-0 | 11-9 | | | | | / | | | | | |
| 140 | 17 | 8 | 8-10 | 3WB04 | 2 | 2-0 | 6-10 | | | | | / | | | | | |
| 141 | | | | | | | | | | | | | | | | | |
| 142 | | | | | | | | | | | | | | | | | |
| 143 | | | | | | | | | | | | | | | | | |
| 144 | 18 | 10 | 12-2 | 3WJ1001 | 1 | 1-10 | 8-6 | | | | | 1-10 | | | | | |
| 145 | | | | | | | | | | | | | | | | | |
| 146 | | | | | | | | | | | | | | | | | |
| 147 | | | | | | | | | | | | | | | | | |
| 148 | | | | | | WING WALL #4 | | | | | | | | | | | |
| 149 | | | | | | | | | | | | | | | | | |
| 150 | 19 | 5 | 3-9 | 4W501 | STR | | | | | | | | | | | | |
| 151 | 19 | 5 | 19-2 | 4W502 | STR | | | | | | | | | | | | |
| 152 | 19 | 5 | 11-5 | 4W503 | STR | | | | | | | | | | | | |
| 153 | 38 | 5 | 18-3 | 4W504 | STR | | | | | | | | | | | | |
| 154 | 19 | 5 | 3-0 | 4W505 | S10 | | 1-0 | 1-0 | 1-0 | | | | | | | | |
| 155 | 14 | 5 | 4-0 | 4W506 | 19 | | 2-0 | 2-0 | | | | | 0-8¼ | | 1-10½ | | |
| 156 | 14 | 5 | 5-3 | 4W507 | 19 | | 3-3 | 2-0 | | | | | 0-8¼ | | 1-10½ | | |
| 157 | | | | | | | | | | | | | | | | | |
| 158 | 9 | 6 | 18-9 | 4W601 | STR | | | | | | | | | | | | |
| 159 | | | | | | | | | | | | | | | | | |
| 160 | 9 | 8 | 18-9 | 4W801 | STR | | | | | | | | | | | | |

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J | K | R | O |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 161 | 20 | 8 | 8-6 | 4WB02 | STR. | | | | | | | | | | | | |
| 162 | 19 | 8 | 13-9 | 4WB03 | 2 | 2-0 | 11-9 | | | | | / | | | | | |
| 163 | 18 | 8 | 8-10 | 4WB04 | 2 | 2-0 | 6-10 | | | | | / | | | | | |
| 164 | | | | | | | | | | | | | | | | | |
| 165 | | | | | | | | | | | | | | | | | |
| 166 | 20 | 10 | 12-2 | 4W1001 | 1 | 1-10 | 8-6 | | | | | | 1-10 | | | | |
| 167 | | | | | | | | | | | | | | | | | |
| 168 | | | | | | | | | | | | | | | | | |
| 169 | | | | | | | | | | | | | | | | | |
| 170 | | | | | | | | | | | | | | | | | |
| 171 | | | | | | | | | | | | | | | | | |
| 172 | | | | | | | | | | | | | | | | | |
| 173 | | | | | | | | | | | | | | | | | |
| 174 | | | | | | | | | | | | | | | | | |
| 175 | | | | | | | | | | | | | | | | | |
| 176 | | | | | | | | | | | | | | | | | |
| 177 | | | | | | | | | | | | | | | | | |
| 178 | | | | | | | | | | | | | | | | | |
| 179 | | | | | | | | | | | | | | | | | |
| 180 | | | | | | | | | | | | | | | | | |

## ASTM STANDARD REINFORCING BARS

| BAR SIZE DESIGNATION | WEIGHT POUNDS PER FOOT | NOMINAL DIMENSIONS ROUND SECTION | | |
|---|---|---|---|---|
| | | DIAMETER INCHES | CROSS SECTIONAL AREA SQ. INCHES | PERIMETER INCHES |
| #3 | .376 | .375 | .11 | 1.178 |
| #4 | .668 | .500 | .20 | 1.571 |
| #5 | 1.043 | .625 | .31 | 1.963 |
| #6 | 1.502 | .750 | .44 | 2.356 |
| #7 | 2.044 | .875 | .60 | 2.749 |
| #8 | 2.670 | 1.000 | .79 | 3.142 |
| #9 | 3.400 | 1.128 | 1.00 | 3.544 |
| #10 | 4.303 | 1.270 | 1.27 | 3.990 |
| #11 | 5.313 | 1.410 | 1.56 | 4.430 |
| #14 | 7.65 | 1.693 | 2.25 | 5.32 |
| #18 | 13.60 | 2.257 | 4.00 | 7.09 |

## TYPICAL BAR BENDS




## NOTES

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT," AASHTO M 31 (ASTM A 615-51), GRADE 60.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS AND OTHER STANDARD PRACTICE SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE."
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180° AND 135° HOOKS.
5. "J" DIMENSION ON 180° HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE, OTHERWISE STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45° DIMENSIONS "H" AND "K" MUST BE SHOWN.

* DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.

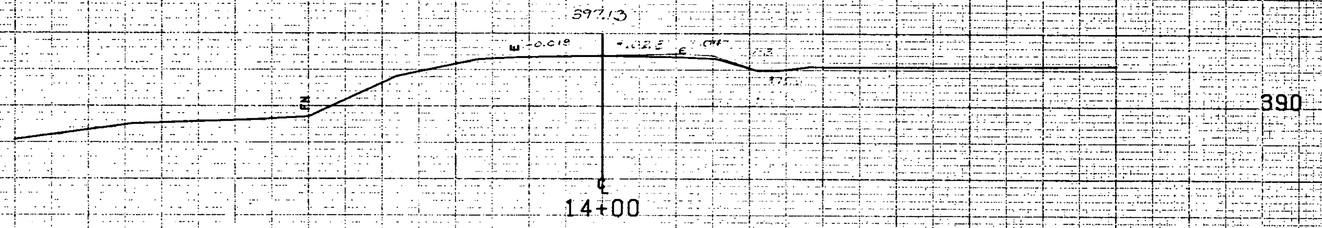
| REV. NO. | MADE BY | DATE | DESCRIPTION |
|---|---|---|---|
| | | | |

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF FAIRFAX | BRIDGE NO. 8 |
| HIGHWAY NO. VT. 128 | LOG STA. 9+56 |
| | SURV. STA. 24+21 |
| VT. 128 OVER BROWNS RIVER | |
| REINFORCING STEEL SCHEDULE | |
| DESIGNED BY R. ALDRICH | DRAWN BY M.EVANS |
| CHECKED BY G. SCHELLEY DATE 10/83 | BRIDGE DESIGN SUPERVISOR R.L. Corkery DATE 1-84 |
| PROJECT FAIRFAX | PROJECT NO. BRS-0229(2)S |
| BRIDGE SHEET NO. BR814 | SHEET 35 OF 98 |

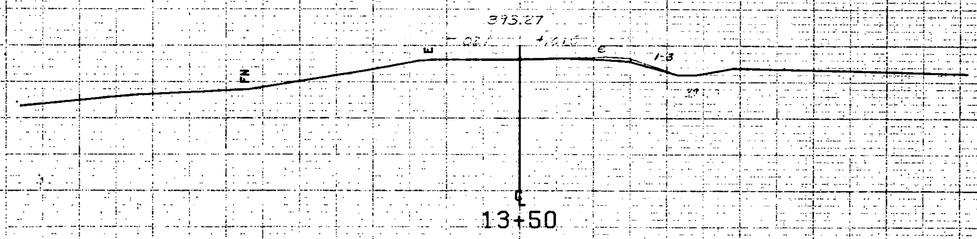
BRUNING 44-131 40151

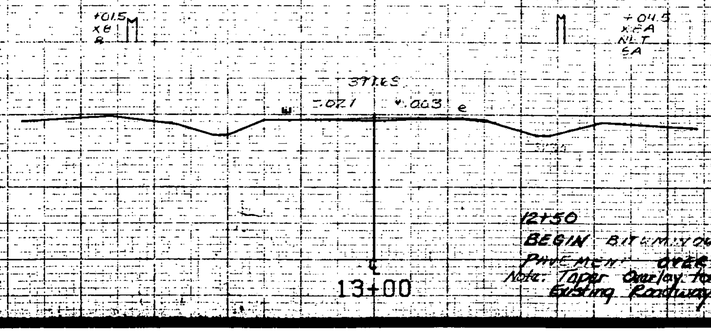
BR-5




13+75 Lt.
6" Underdrain - Retain

Rev. P.C. 13+94.16
D - 2°00' Lt
Full Banking .030 Mfft




12+50
BEGIN BITUMINOUS CONCRETE
PAVEMENT OVERLAY.
Note: Taper Overlay to Match
Existing Roadway Conditions

FROM STA. 13+00 TO STA. 14+00
PROJECT NAME FAIRFAX MAIN
NO. BRONZE(2)S PLOTTED 04/07/88
SURVEYED BY FALL MARCH 1988
SHEET 30 OF 99 SHEETS
SCALE 1" = 50'

396.68

394.2 Outlet Invert Existing 15 CGMP

390

℄ Rev 14+24

396.79

+.030

12" CMP = .040

18" CMP

CMP

390

℄ Rev 14+18

14+13 Rt.
15" CGMP - Retain
Construct Drive (Match Grade only)

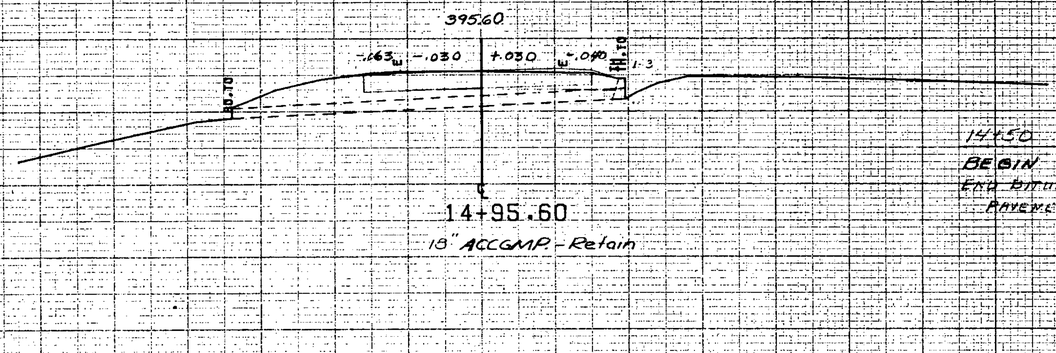
397.06

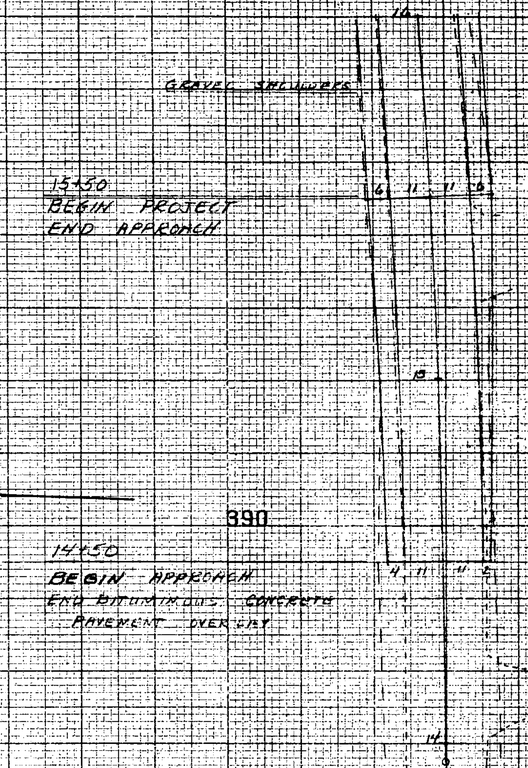
394.5 Inlet Invert Existing 15" CGMP

390

℄ Rev 14+04

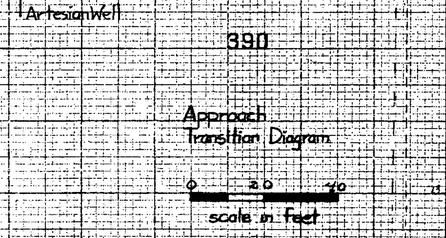
FROM STA. 14+04 TO STA. 14+24
PROJECT NAME FAIRFAX MAIN
NO. 51202231213 PLOTTED
SURVEYED BY FHWA MARCH 1994
SCALE: 10 FEET

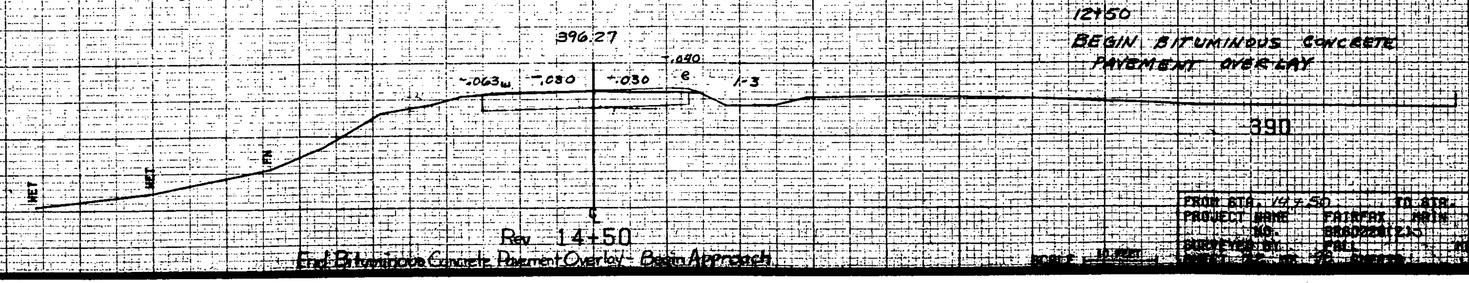




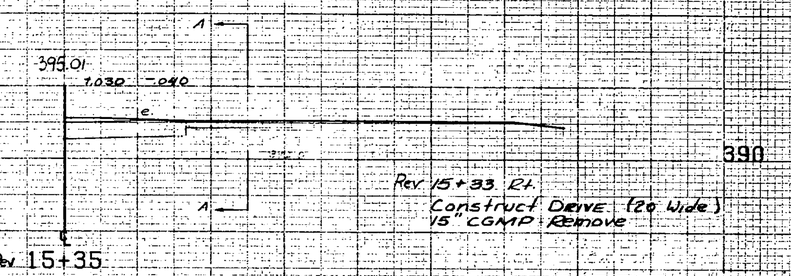


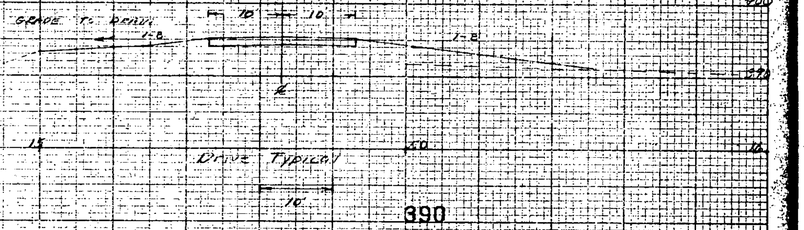


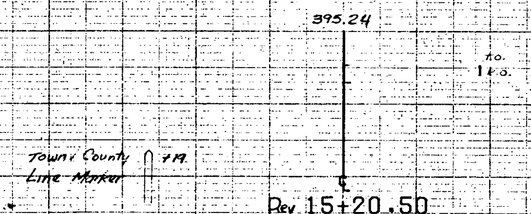



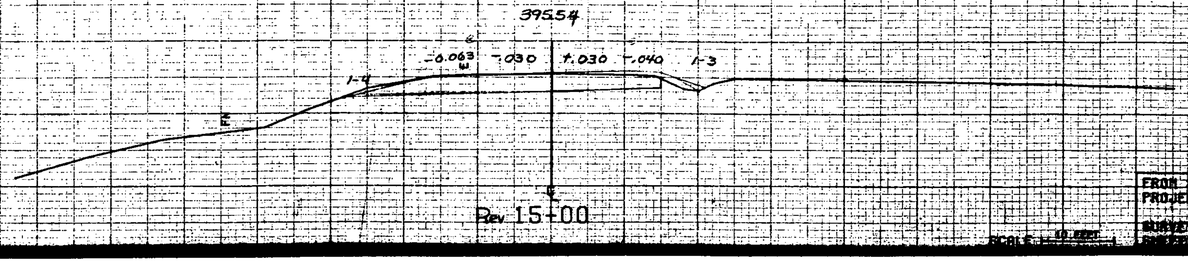

Final Bituminous Concrete Pavement Overlay - Begin Approach

FROM STA. 10+50 TO STA. 16+25.60
PROJECT NAME FAIRFAX NOTE
NO. 8860228(2) PLOTTED 04/09/91
SURVEYED BY FHA APPROVED

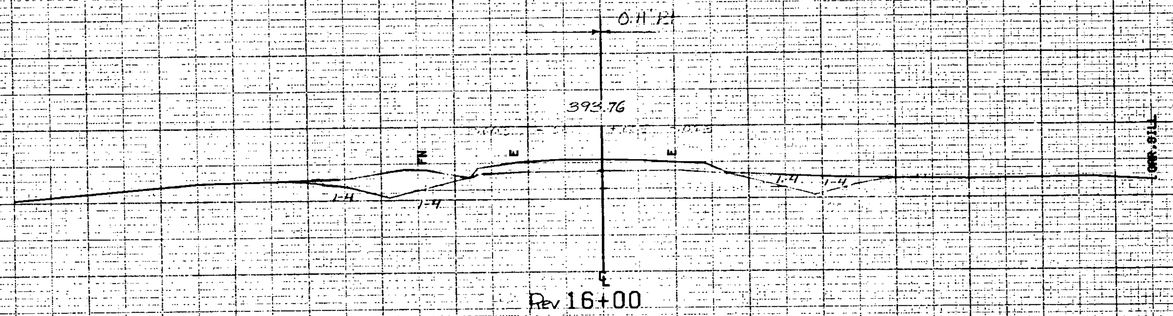


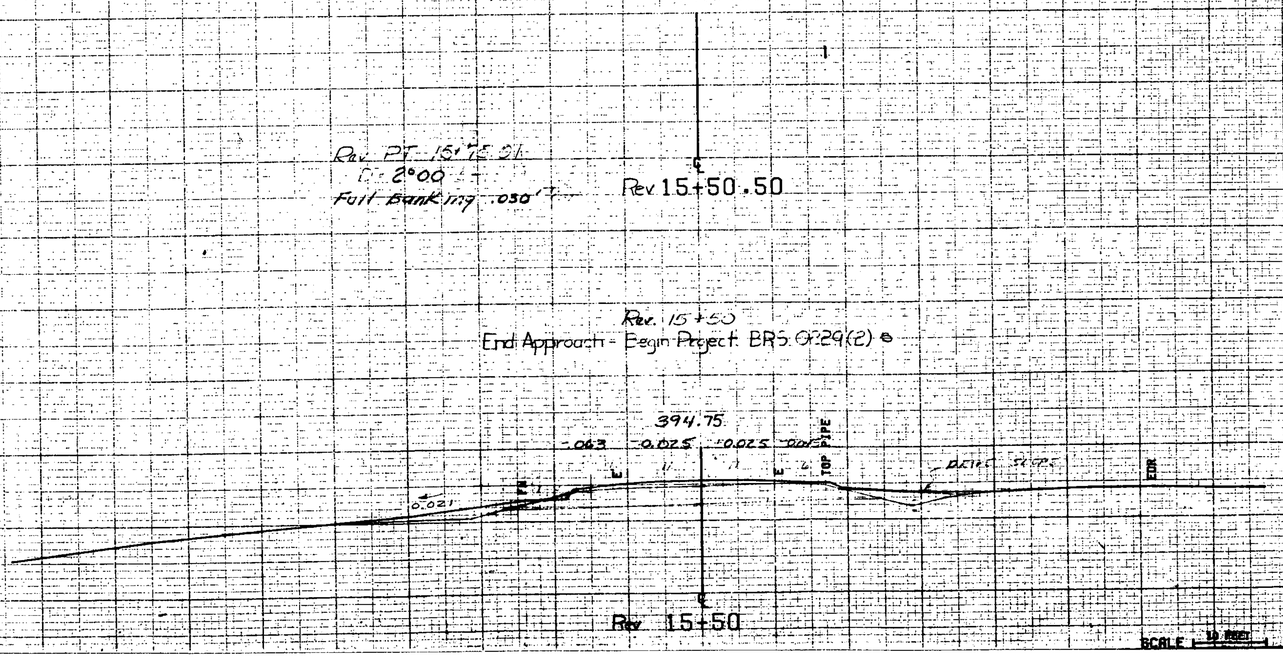



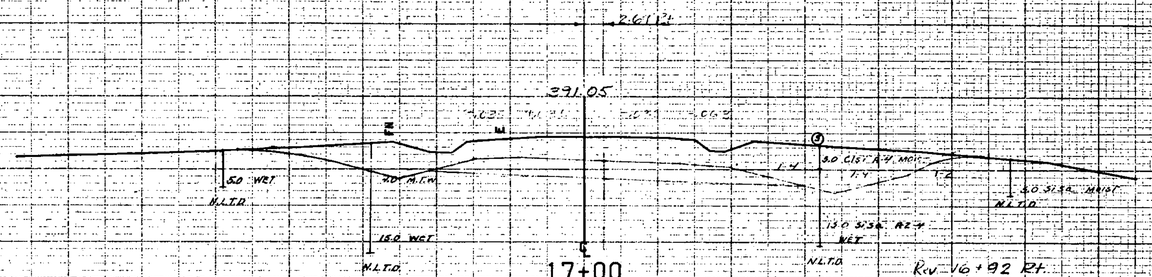




FROM STA. 15+00 TO STA. 15+35
PROJECT NAME EXTEND 15" MAIN
NO. 6666666615 PLOTTED 04/08/21
SURVEYED BY JOE DRAWN BY JOE


O.H. Pl
393.76
390
Rev 16+00


Rev PT 15°75 01
D= 2°00
Full Bank Hg .050'
Rev 15+50.50
Rev. 15+50
End Approach - Begin Project BRS-0129(2)
394.75
-.063
-0.025
-0.025
TOP PIPE
EOR
-0.021
Rev 15+50
390
390
FROM STA. 15+50
TO STA. 16+00
PROJECT NAME
FAIRFAX
DESIGNATION
SCALE
10 FEET

Rev P.C. 17+36.91
D=7°40' Rt.
F.B. 0.080 Ft./Ft.




17+00

Rev 17+2

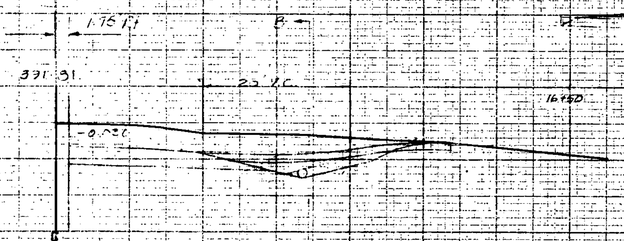
Rev 16+92 Rt.
Begin Erosion Matting

390

M +80.5
6/3
4/1

DRIVE @ 16+70



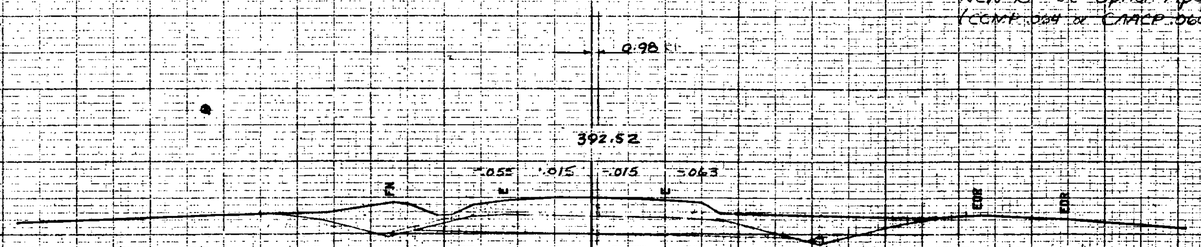




Section B-B
@ Rev Sta. 16+75.011 92 Rt.

16+75
Rev 16+75.011

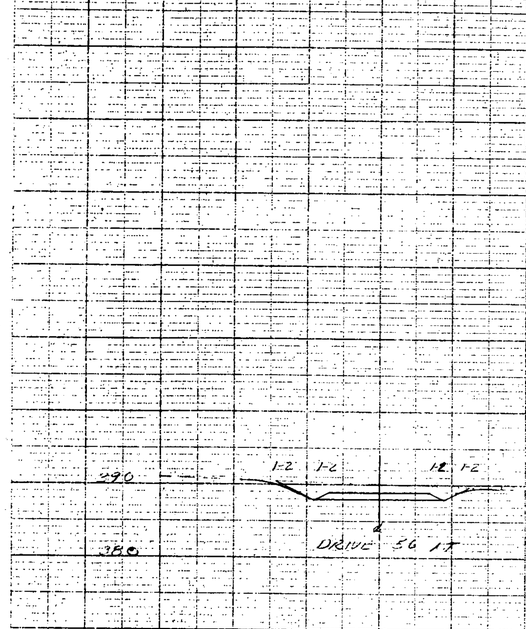
M +61
X7
7

16+70 Rt
Construct Drive (14' wide)
New 15"x31" Optiman Pipe
(CCMP.004 or CMCP.060)

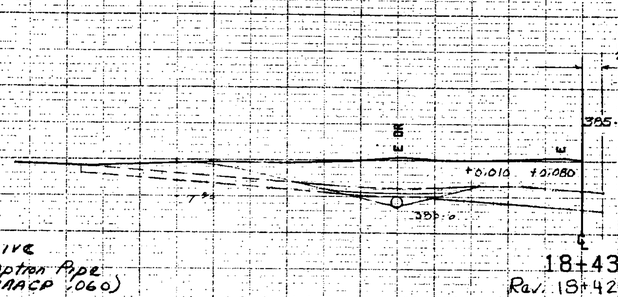



16+50
Rev 16+50.1

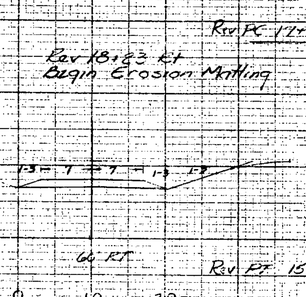
| | | | |
|---|---|---|---|
| FROM STA. 16+50 | | TO STA. 17+00 | |
| PROJECT NAME | FAIRFAX MAIN | | |
| NO. | ERR02981(3) | PLOTTED | 04/16/01 |
| SURVEYED BY | DATE | DRAWN BY | |
| SHEET 75 OF 92 SHEETS | | | |




18+30 Lt
Construct Drive
New 15"x38 Option Pipe
(CGMP .064 or CMACP .060)



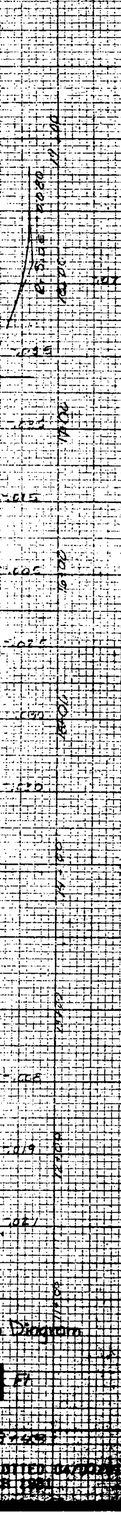

18+43
Rev. 18+42.51

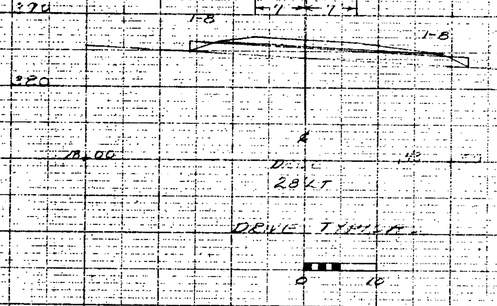


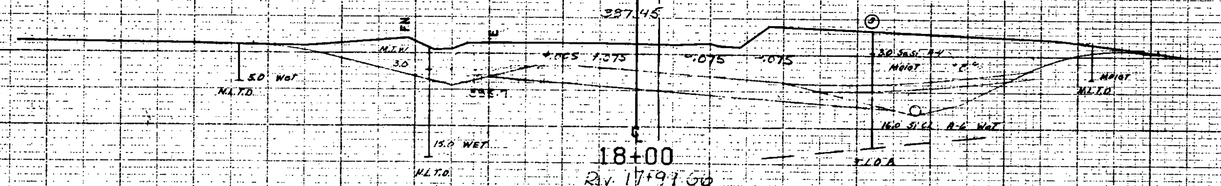

Rev PC 17+36.41
Rev 18+63 Lt
Begin Erosion Matting

66 RT
Rev PT 15+76.01

0 10 20
scale in feet



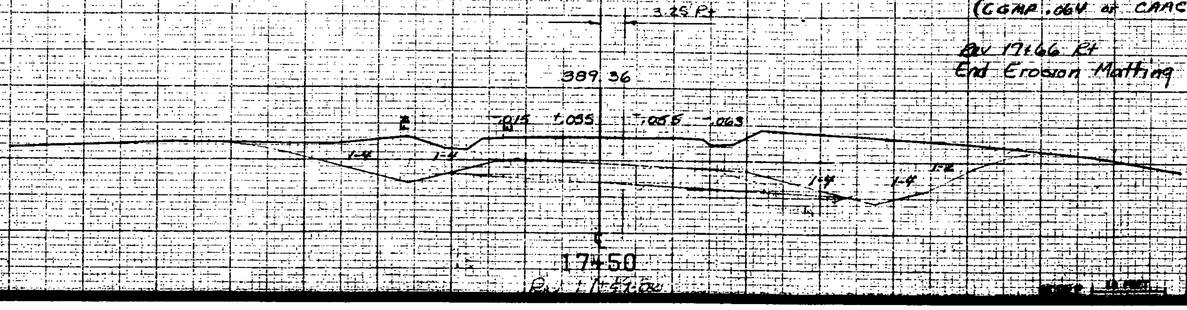




18+00
Rev 17+99.00

Rev 18+00
Begin Cutting and Blasting of Solid Rock Subgrade

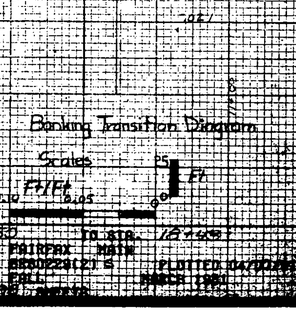


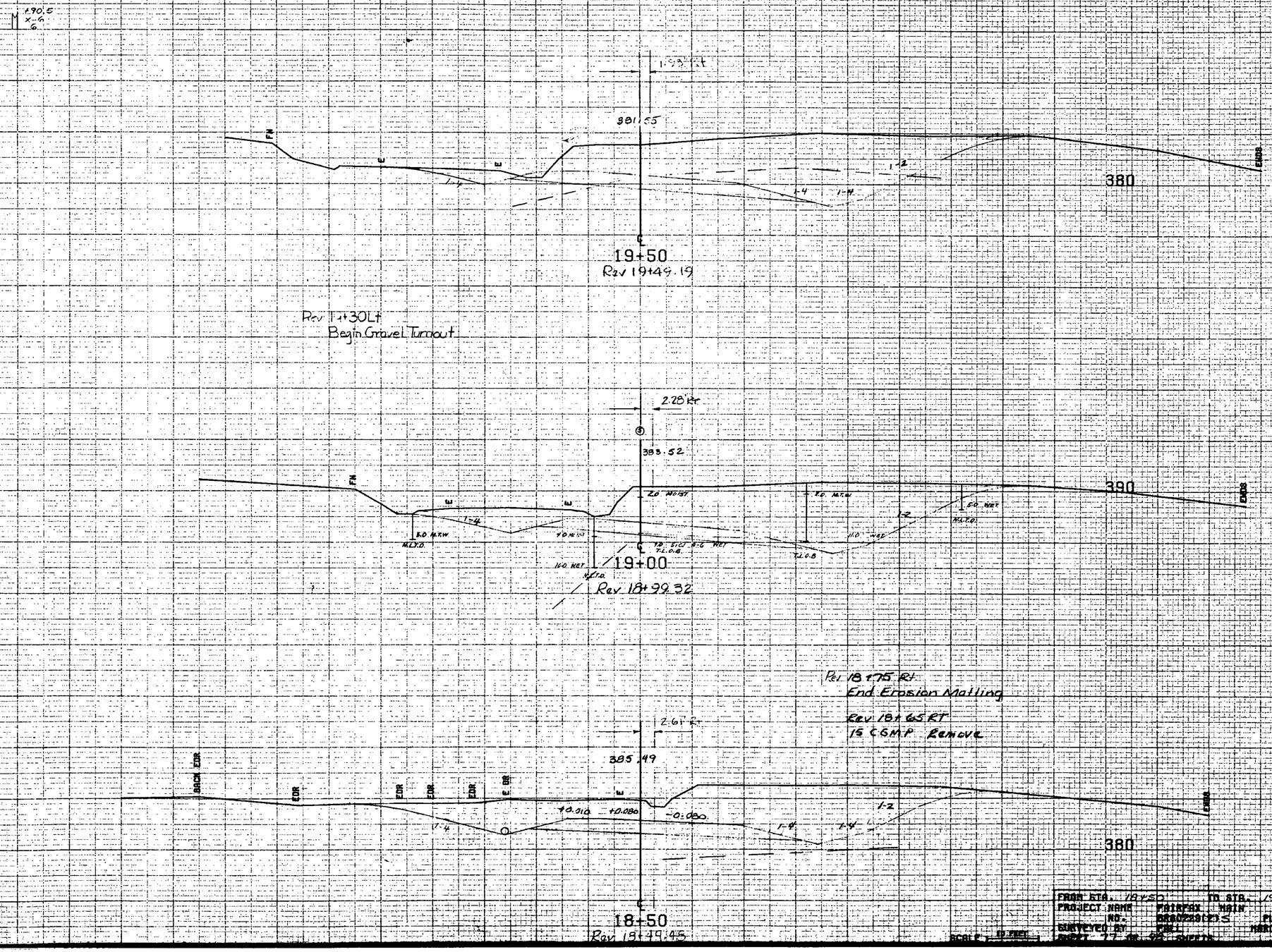

17+50
Rev 17+49.00

18+00 Rt
Construct Drive (N wide)
New 15"x58' Option Pipe
(CGMP .064 or CMACP .060)

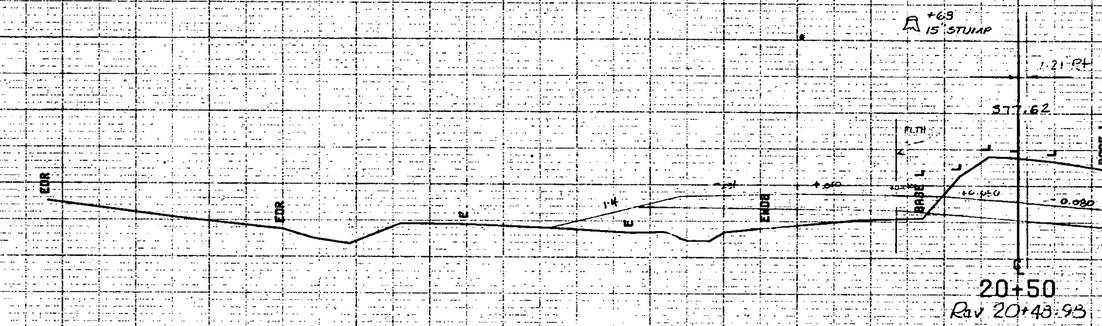
Rev 17+66 Rt
End Erosion Matting

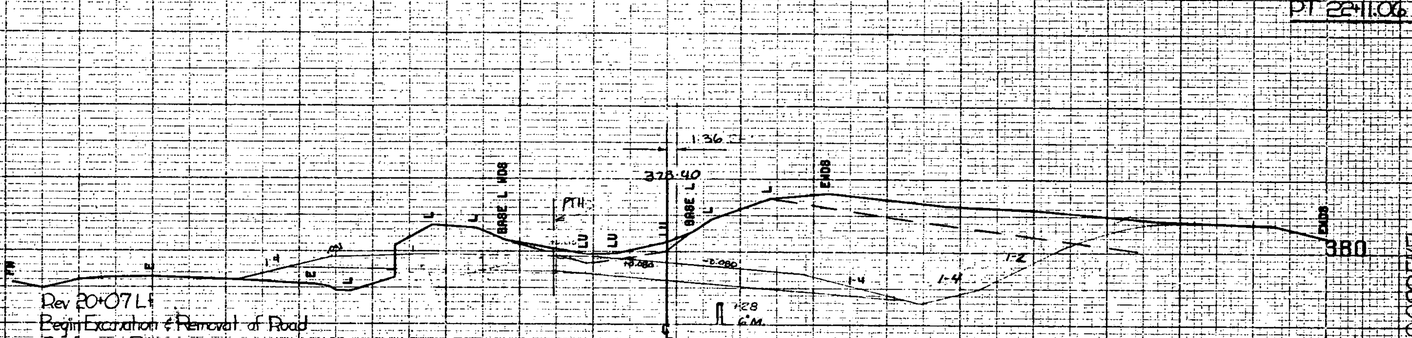


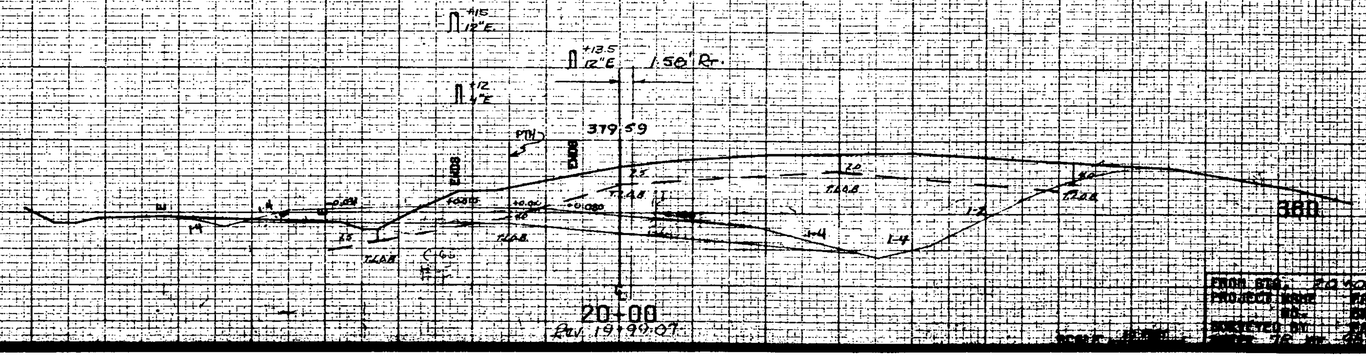

FROM STA. 17+50 TO STA. 18+43
PROJECT NAME FAIRFAX MAIN
NO. 0550229(2) S
SURVEYED BY FALL PLOTTED 04/10/2001
DRAWN BY [illegible] CHECKED BY [illegible]

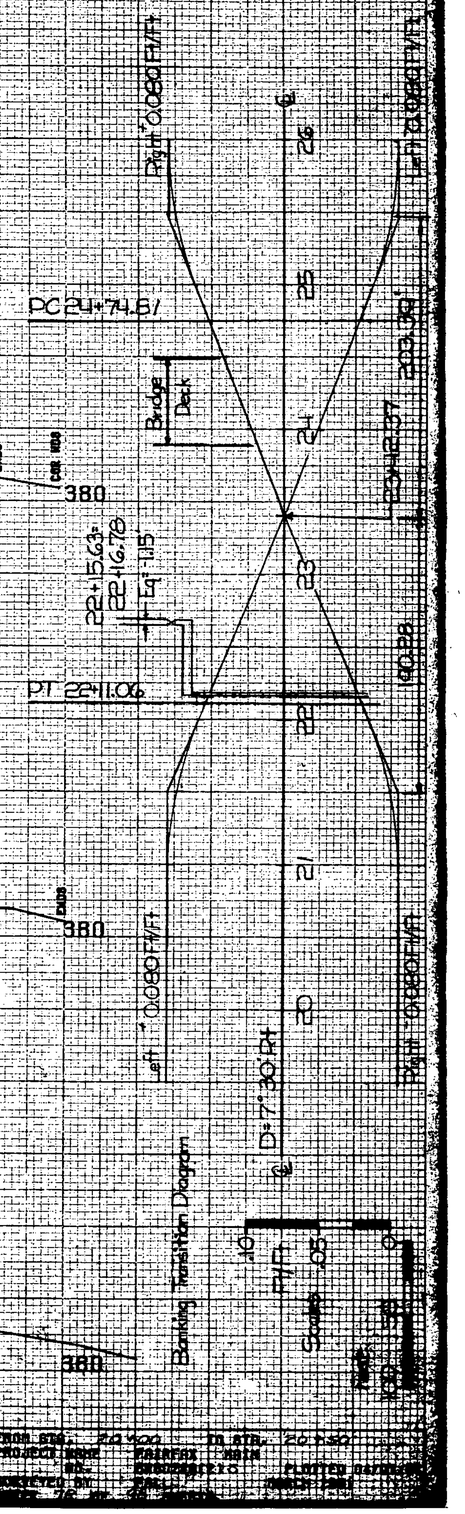


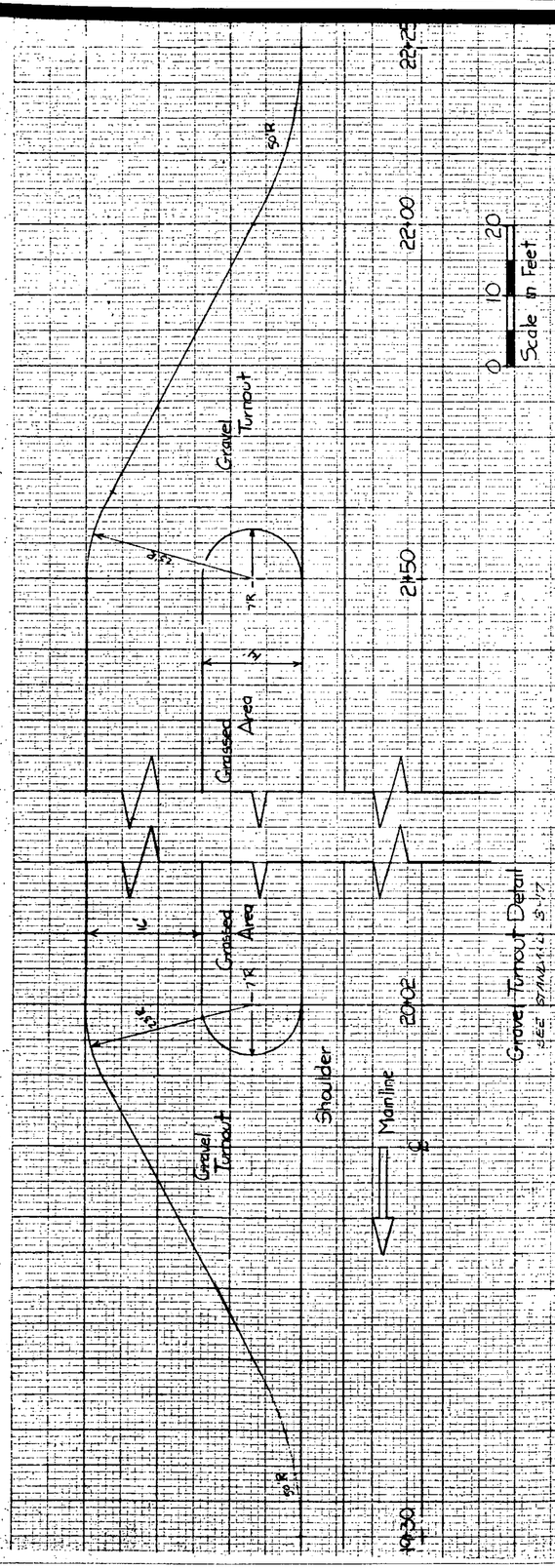

FROM STA. 18+50 TO STA. 19+50
PROJECT NAME FAIRFAX MAIN
NO. DR80239(2)S PLOTTED 04/01/81
SURVEYED BY CWL MARCH 1980
SHEET 27 OF 62 SHEETS
SCALE 10 FEET

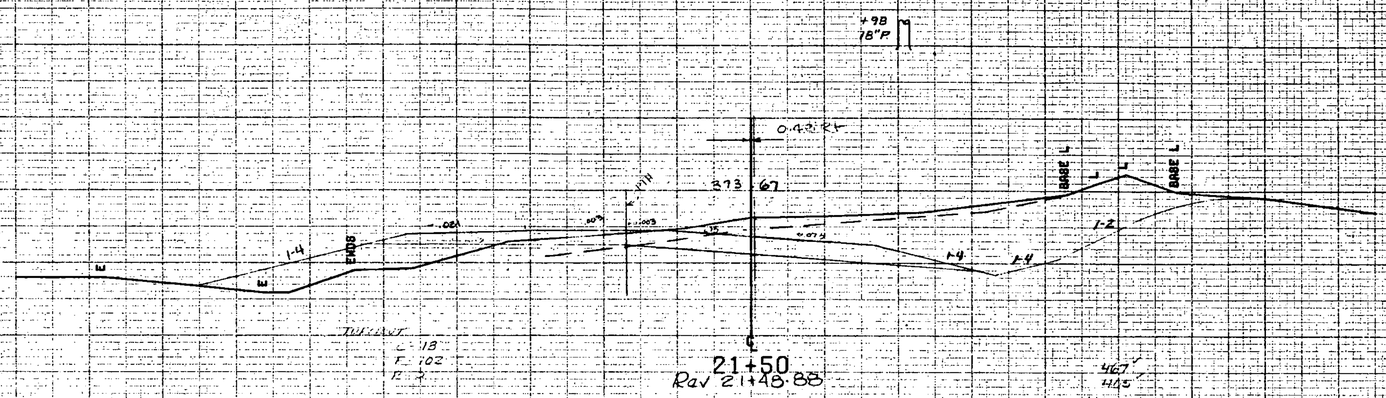

+69
15" STUMP
1.21 Rt
377.62
FILTH
EOR
EXOB
BRBZ L
20+50
Rev 20+43.93


1.36
373.40
PTH
EXOB
BRBE L
380
Rev 20+07 LT
Begin Excavation & Removal of Road
Surfaces & Pavements
Rev 20+00 LT
Begin Paved Shoulder Transition
1.28
C.M.
20+30
Rev 20+29.02

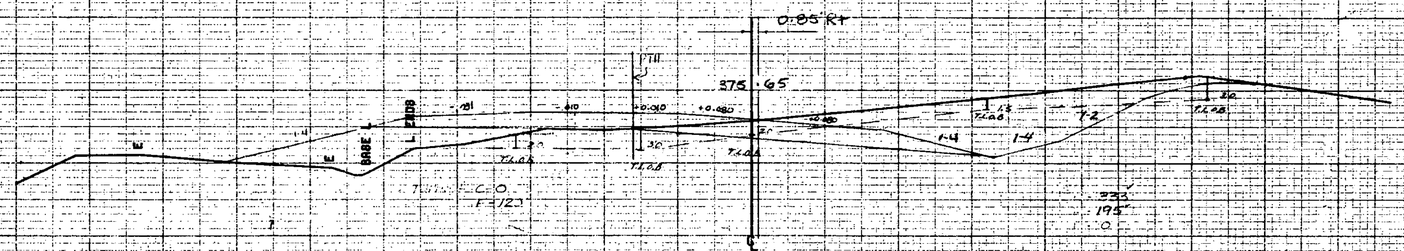

1.58' Rt
379.59
PTH
EXOB
380
20+00
Rev 19+99.07


Right 0.080 Ft/Ft
PC 24+74.61
Bridge Deck
22+15.63
22+46.78
Eq 1.15
PT 22+11.06
Left 0.080 Ft/Ft
D=7.30 Rt
Banking Transition Diagram
Scale 1"=5'

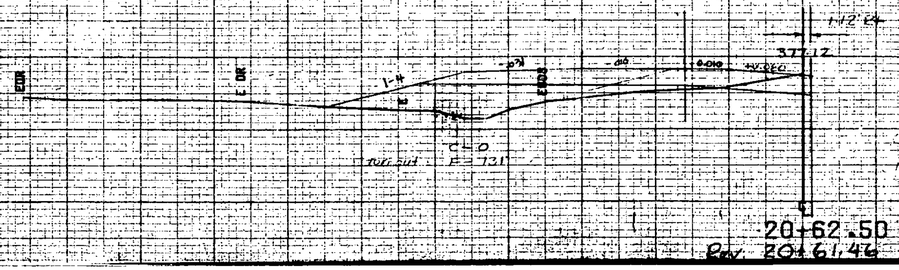


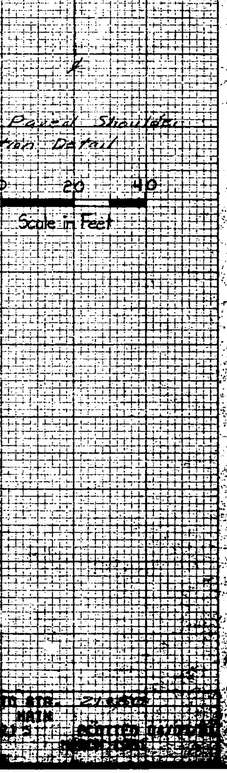




Rev 21+00 Rt
Begin Paved Shoulder Transition




Rev 21+00 Lt
End Paved Shoulder Transition
Begin Paved Shoulder Transition




Rev 21+00 Lt
Begin Paved Shoulder Transition

FROM STA. 820+42.5 TO STA. 21+48.88
PROJECT NAME FAIRWAY MAIN

DRIVE DETAIL

scale in feet 0 20 40

APPROX. LOC. DRIVE CULVERT

22+77 Lt.
Begin Special Ditch
Stone Fill, Type II

22+87.5 Lt.
Begin Guard Rail, Standard Steel Beam w/ Wood Posts, Type II

22+60 Rt.
Begin Rock Fill (Rock encountered on Project)
(Note: Rock Fill to extend back to protect slope where 18" ACCGMP outlets)

22+90.5 Rt.
Begin Guard Rail, Standard Steel Beam w/ Wood Posts, Type II

22+50 Rt.
Begin Special Ditch w/ Stone Fill, Type II

22+50 Rt.
Construct Drive w/
New 18" x 44' ACCGMP .064
Note: Drive to be constructed to extend to a point south of wet area in field

GUARD RAIL STRADDLE STEEL BEAM w/ WOOD POST TYPE II

APPROX LOCATION NEW DRIVE CULVERT

FIELD DRIVE

E PAVED SHLDR IN TRANSITION (0'@ 21+00, 6'@ 22+50)

DRIVE CURVED RATE DETAIL

Section E-E
@ Sta. 22+50, 116' Lt.
Scale 1"=10' Horiz & Vert
New 15"x32 Option Pipe
(CGMP.064 or CAACP.060)
(SEE LAYOUT FOR DRIVE CURVATURE)

22+50 Lt:
Construct Drive 114' Lt.
(60' Lt.) New 18"x54' ACCGMP.064
(116' Lt.) New 15"x32 Option Pipe
(CGMP.064 or CAACP.060)
8" CGMP Remove

NOTE: SEE LAYOUT FOR CURVATURE OF THIS DRIVE. SECTIONS R-R & X-X ARE ON SHEET 91 OF 98.

Section D-D
@ Sta. 22+50, 82' Lt.
Scale 1"=10' Horiz & Vert

22+25 Lt.
End Gravel Turnout

Section C-C
@ Sta. 22+50, 60' Lt.
Scale 1"=10' Horiz & Vert
New 18"x56 ACCGMP.064

Rev. 22+15.63 =
Surv. Pot 22+16.78
Eq = -1.15'

Rev. PI 22+15.63
D = 7° 30' Rt
Banking 0.080 ft/ft

Sta. 22+17 – 22+92
Cut to Fill Transition

Rev. 22+00 PT
End Paved Shoulders Transition
Begin Paved Shoulders (6' wide)

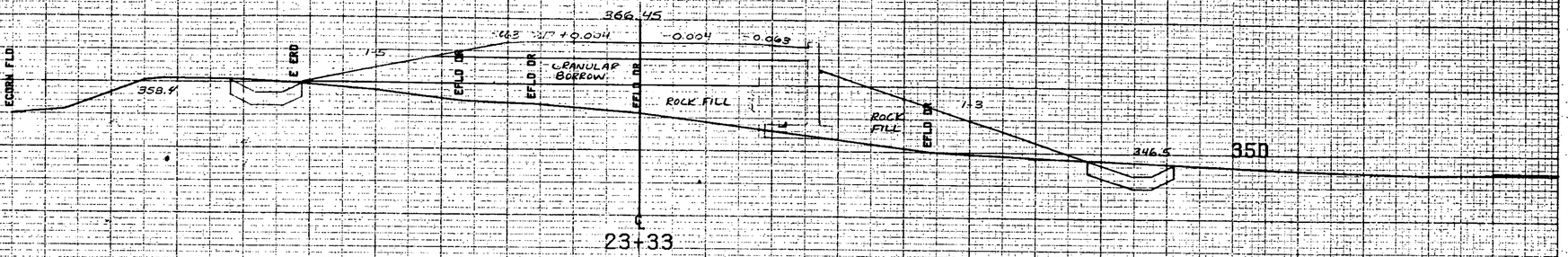
Section B-B
@ Sta. 22+50, 53' Lt.
Scale 1"=10' Horiz & Vert

Section A-A
@ Sta. 22+50, 31' Lt.
Scale 1"=10' Horiz & Vert

22+00
Rev. 21+98.86

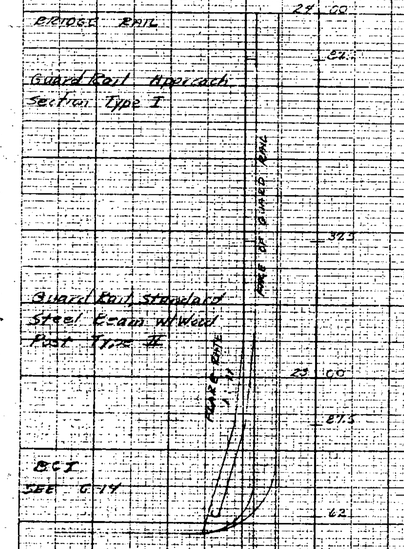
FROM STA. 22+00 TO STA. 22+50
PROJECT SCOPE: Pathway Paving
SURVEYED BY: DESIGNED BY(S): PLOTTED BY/DATE:
SHEET 89 OF 98 SHEETS

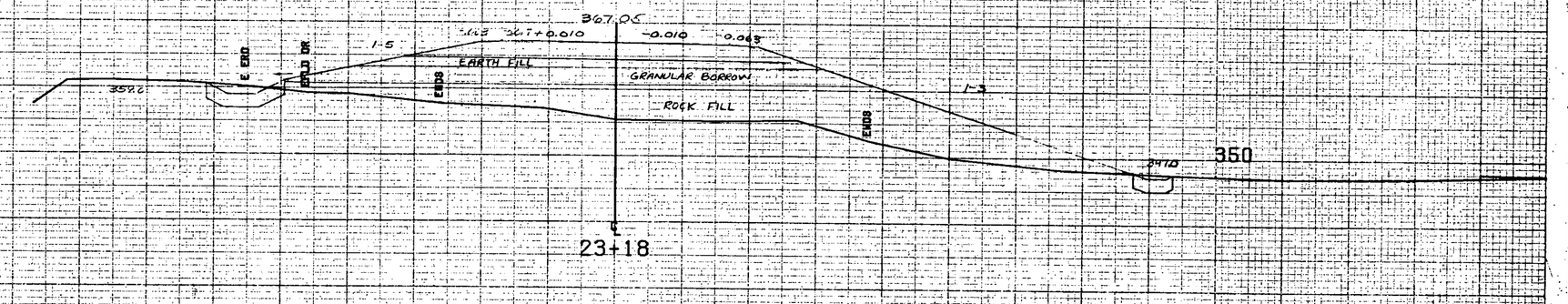
23+38 Lt
End Excavation & Removal of Road Surfaces & Pavements

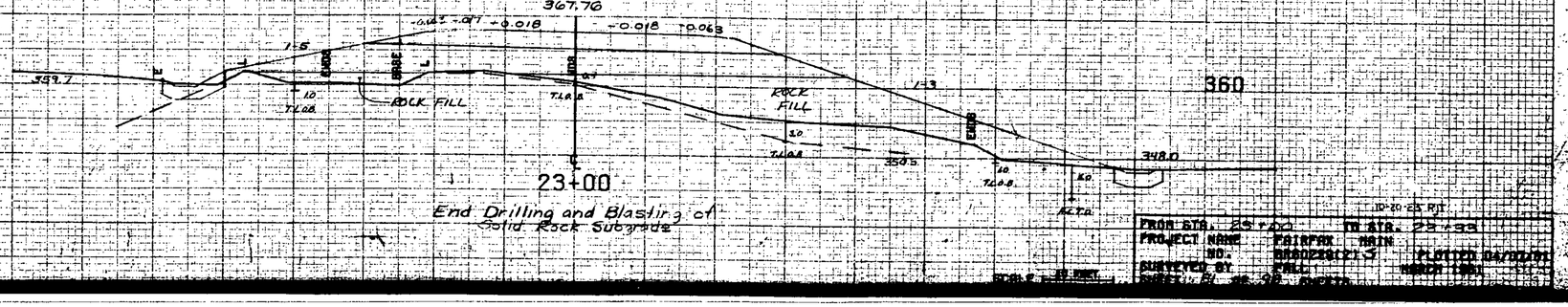



23+37.5 Lt
End Standard Steel Beam Guard Rail w/ Wood Posts, Type II
Begin Guard Rail Approach Section, Type I

23+28 Rt
End Standard Steel Beam Guard Rail w/ Wood Posts, Type II Item 621.28
Begin Guard Rail Approach Section, Type I Item 621.90



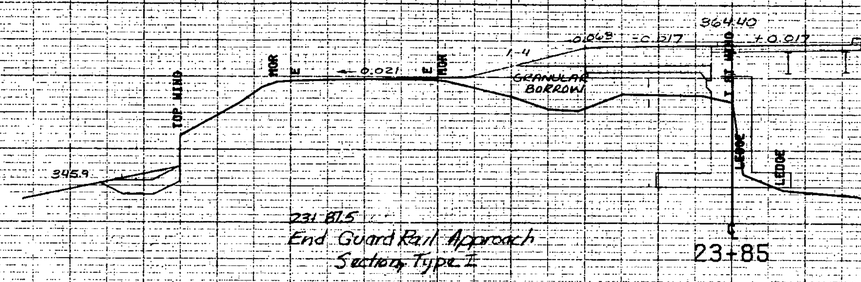

End Drilling and Blasting of Solid Rock Subgrade

10-20-23 RJT

PROJ. STA. 23+00 TO STA. 23+38
PROJECT NAME FAIRFAX MAIN
NO. BRO9(283)E13 PLOTTED 04/20/2021
SURVEYED BY FHWA MARCH 1961

23+90 ℄ Lt.
End Special Ditch @
Stone Fill, Type II

23+87.5 ℄ Lt
End Paved Shoulders



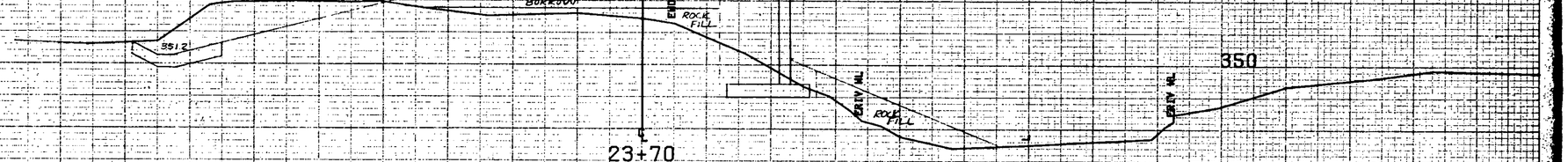

23+81.5 ℄
End Guard Rail Approach
Section, Type I

23+58 Lt - 23+88 Lt
Removal & Disposal of
Existing Guard Rail

23+84
STOP ROADWAY
BEGIN BRIDGE

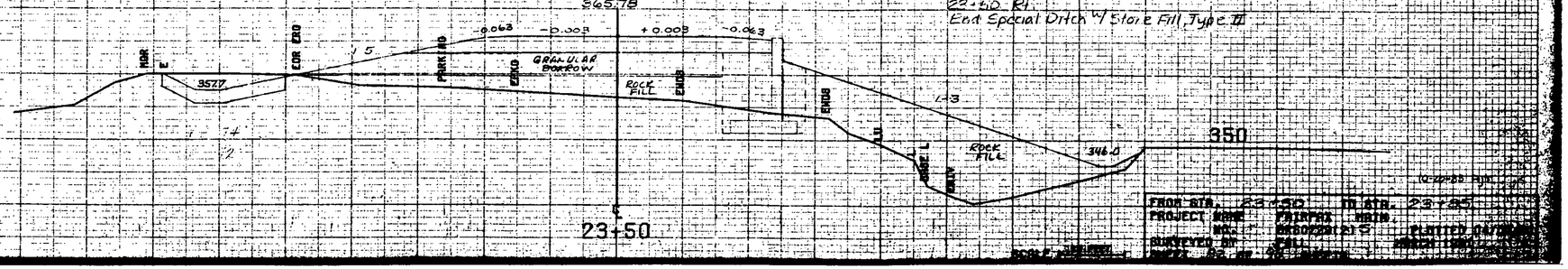
23+73
End Rock Fill
(Rock Encountered on Proj.)

23+78 Rt
End Guard Rail Approach Section
Type I
End Paved Shoulders




23+31 Lt - 23+94 Lt
Removal & Disposal of
Existing Guard Rail

23+61 ~ 23+64
Extra Subgrade @
Tie Approach Slope




22+50 Rt.
End Special Ditch w/ Stone Fill, Type III

Highway Diversion Extension
Roadway and Structure Quantities

Scales 50 Feet
0.0 0.05 0

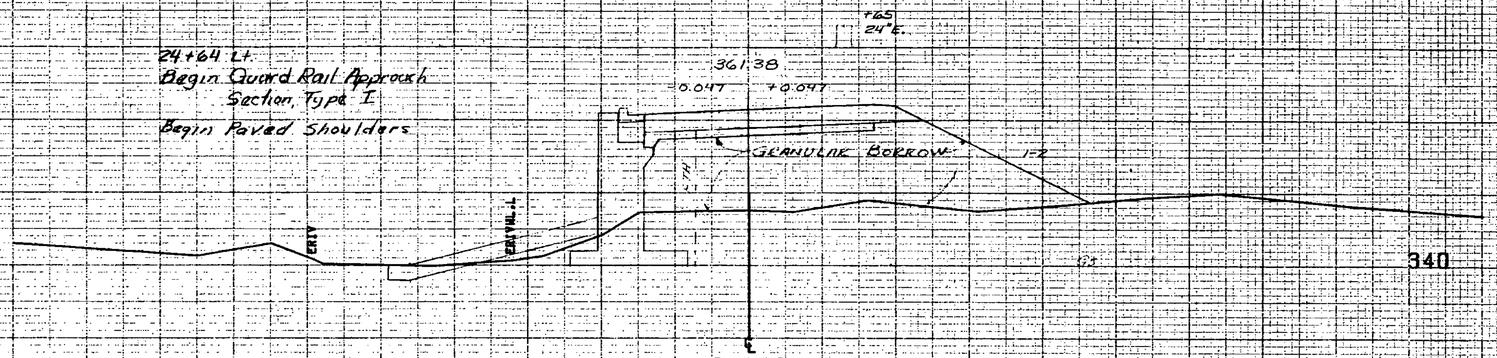
FHWA

FROM STA. 23+50 TO STA. 23+85
PROJECT NAME FAIRFAX NOTH
NO. BRO0025(21)C1
SURVEYED BY
CHECKED BY
PLOTTED ON

24+17.3 Lt. ~ 25+40 Lt.
Removal & Disposal of
Existing Guard Rail

24+69 Lt. ~ 25+33 Lt.
Removal and Disposal of
Existing Guard Rail

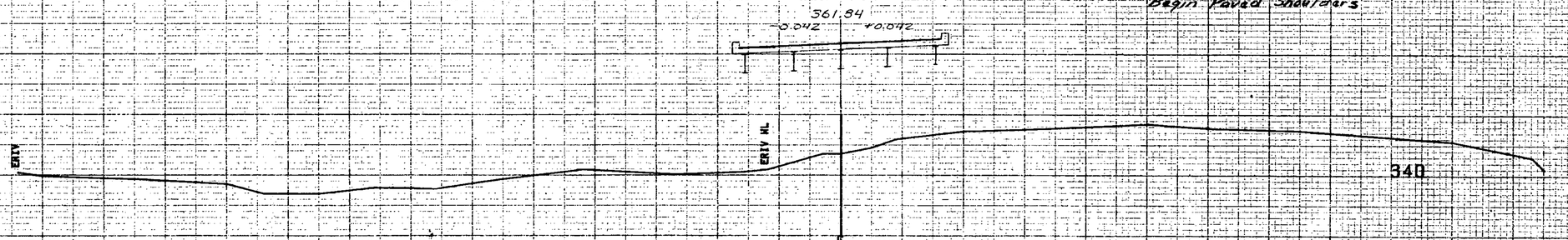
24+64 Lt.
Begin Guard Rail Approach
Section, Type I
Begin Paved Shoulders



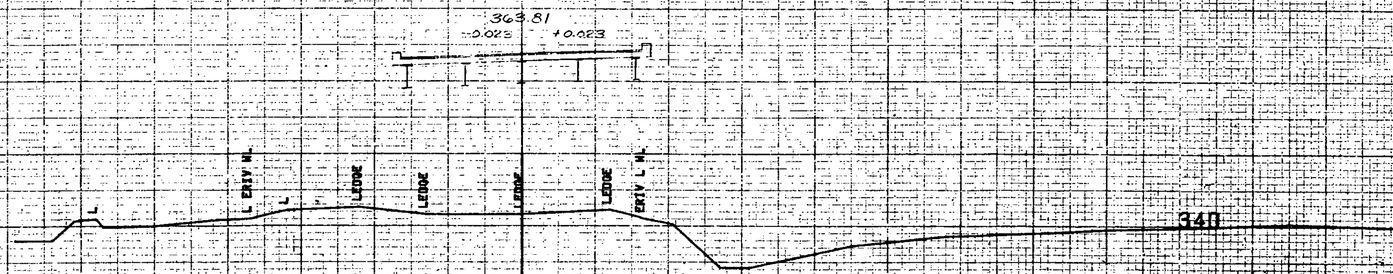

24+62

24+59.00
End Bridge
Resume Roadway

24+54.5 Rt
Begin Guard Rail Approach
Section Type I
Begin Paved Shoulders

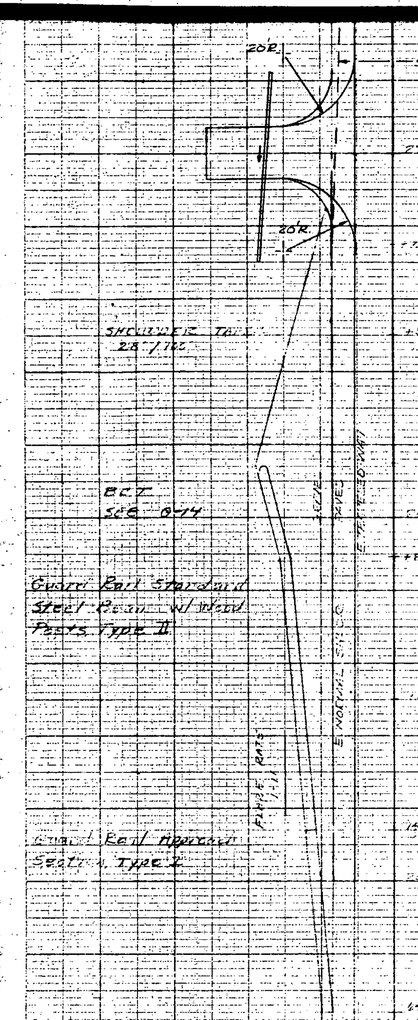



24+50

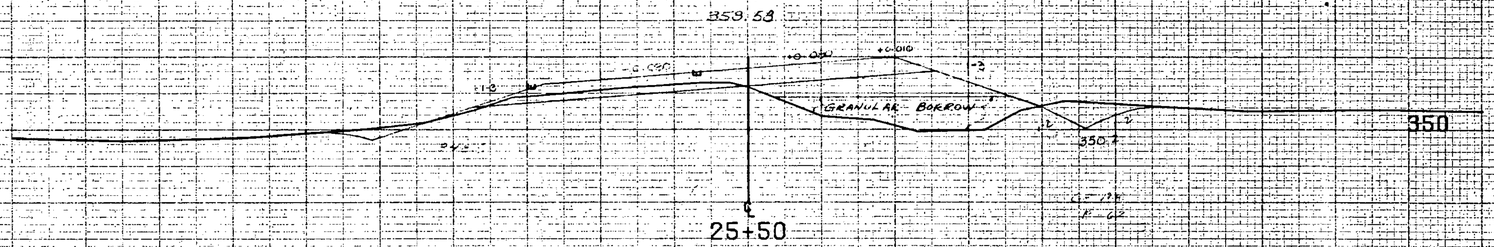



24+00

FROM STA. 24+00 TO STA. 24+62
PROJECT NAME FAIRFAX MAIN
NO. 0500(23)21
SURVEYED BY PWL



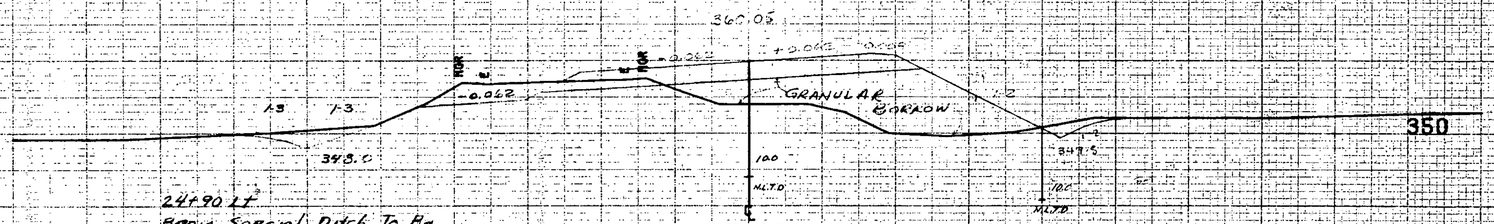

25+89 Lt
End Guard Rail, Standard Steel Beam
w/ Wood Posts, Type II




25+79.2 Rt
End Guard Rail Standard Steel Beam
w/ Wood Posts, Type II

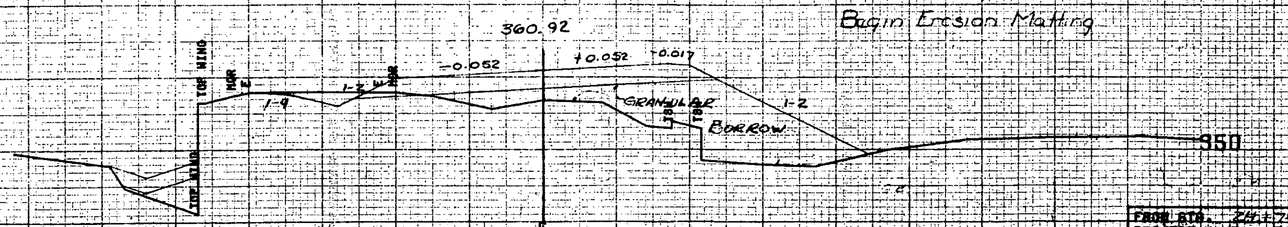
25+59 Rt ~ 25+56 Rt
Removal & Disposal of
Existing Guard Rail

25+14 Lt
End Guard Rail Approach
Section, Type I
Begin Guard Rail, Standard Steel Beam
w/ Wood Posts, Type II

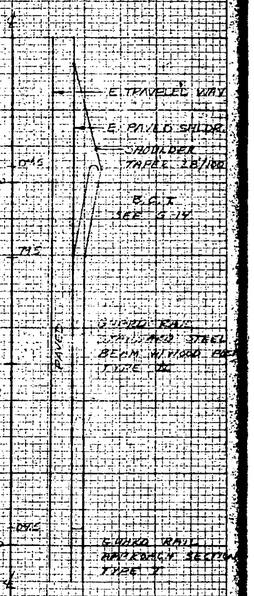



24+90 Lt
Begin Special Ditch To Be
Paid Under Item 203.15
Begin Erosion Matting

PC 24+74.81
D 7°-30' Lt
Bank 0.080 ft




25+04.5 Rt
End Guard Rail Approach Section Type I
Begin Guard Rail, Standard Steel Beam
w/ Wood Posts, Type II




24+73 Rt
Begin Special Ditch
(Item 204.20)
Begin Erosion Matting

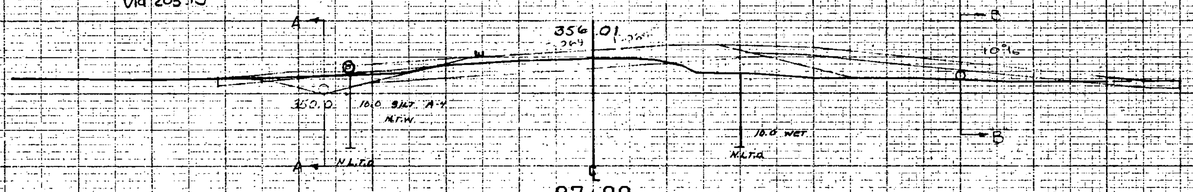
Guard Rail Details
Scale 1"=20' Hor'z & Vert.
(see STD. 3-14 end treatment)
0 20 40
Scale in Feet

FROM STA. 24+74.81 TO STA. 25+90
PROJECT NUMB
SURVEYED BY

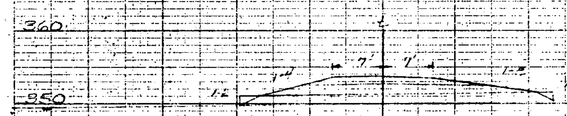
PT 27+31.11
D 7°30' Lt
Bank 0.080 ft/ft

27+30 Lt
End Paved Shoulder (6' Wide)
Begin Paved Shoulder Transition

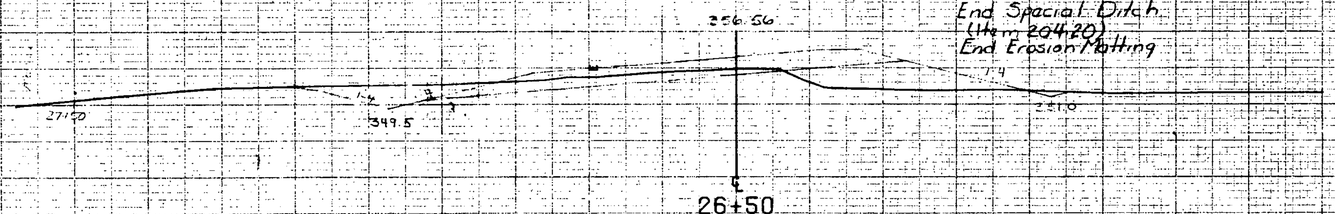
27+23 Lt
Begin Erosion Matting
Begin Special Ditch
Via 203.15




27+00 Lt Construct Drive
New 15" x 48' Option Pipe
(CGMP .064 or CMP .060)

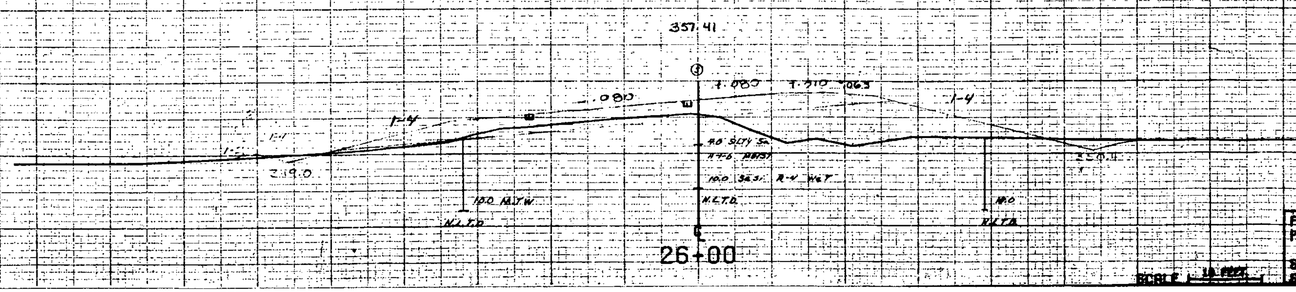



26+80 Lt
End Erosion Matting
End Special Ditch via 203.15

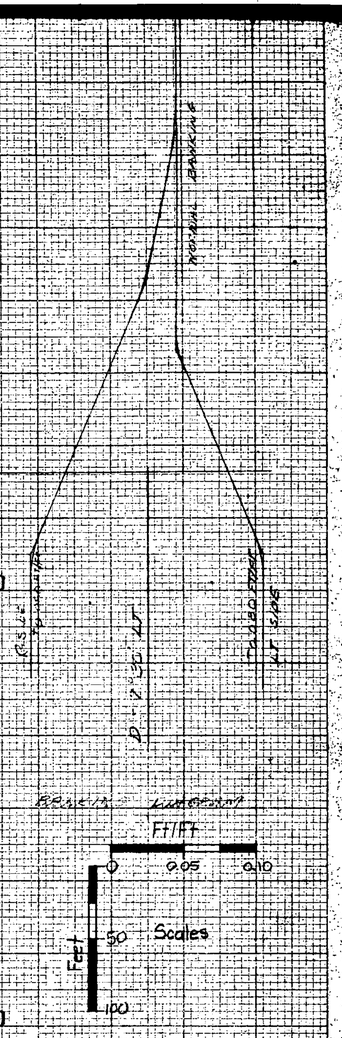



26+81 Rt
End Special Ditch
(Item 204.20)
End Erosion Matting

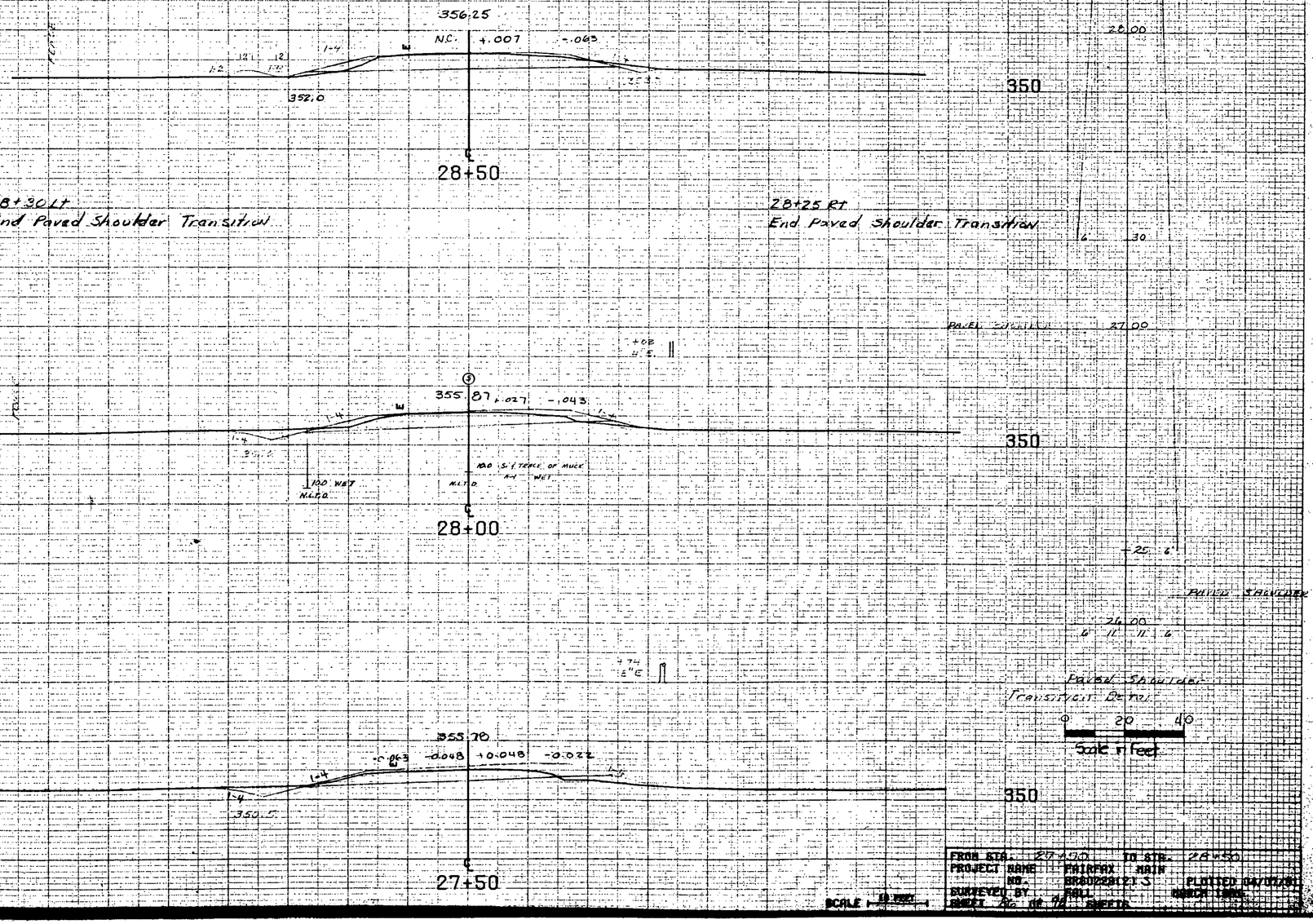
26+25 Rt
End Paved Shoulder (6' Wide)
Begin Paved Shoulder Transition



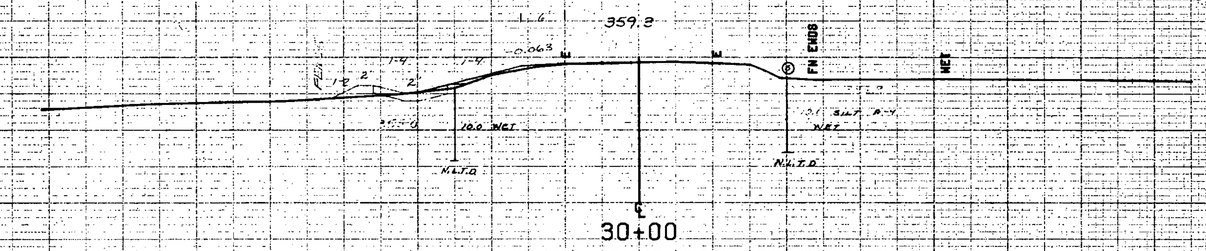

27.00 Rt
Construct Drive (14' Wide)
New 15" x 32' Option Pipe
(CGMP .064, CAACP .060)



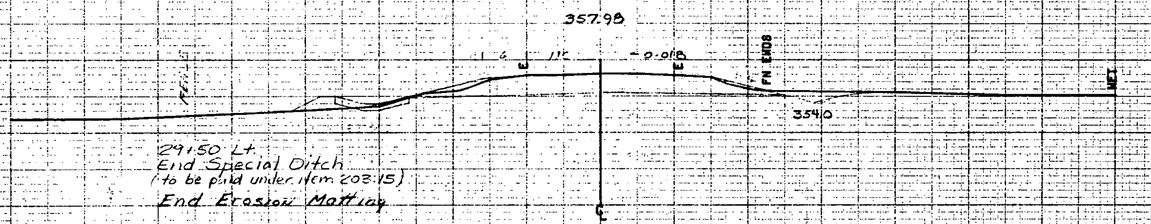

| | |
|---|---|
| FROM STA. 26+00 | TO STA. 27+00 |
| PROJECT NAME | FAIRFAX MAIN |
| NO. | BRS0228(12) S |
| SURVEYED BY | FALL |
| DRAWN BY | MRH |
| CHECKED BY | |
| PLOTTED DATE/TIME | |




FROM STA. 27+00 TO STA. 28+50
PROJECT NAME FAIRFAX MAIN
NO. BRO0228121S PLOTTED 04/07/81
SURVEYED BY BALL BENCH MARK
SHEET No. 06 OF 14 SHEETS
SCALE 1" = 10 FEET




Match Pavement and Shoulders
To Existing Roadway

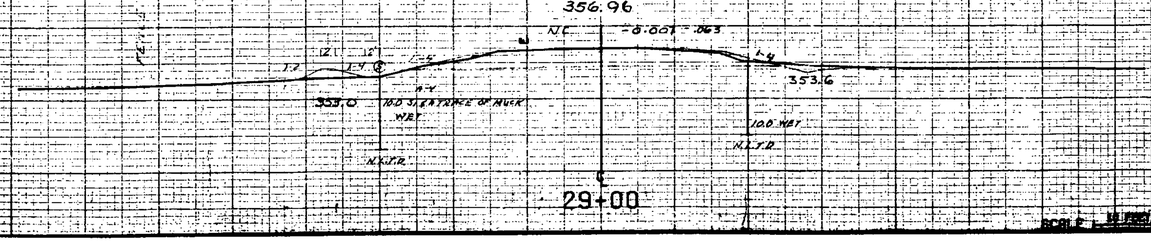


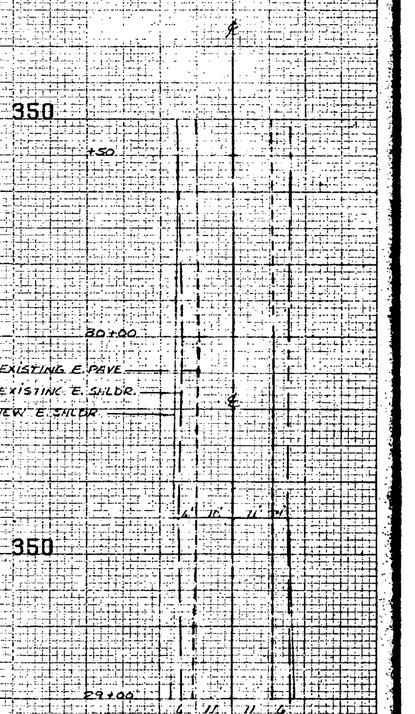

29+50 Lt.
End Special Ditch
(to be paid under Item 203.15)
End Erosion Matting

Begin Special Ditch @
Stone Fill Type I
(Excavation to be Paid For
Under Item 203.15)

29+50
Begin Bituminous Concrete Overlay
Note: Taper Overlay to Match Existing
Road Conditions

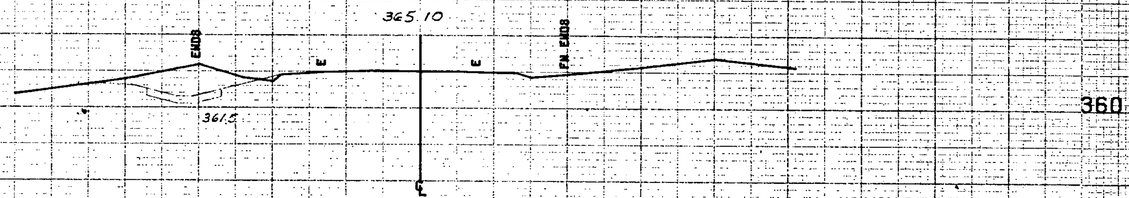
29+00
End Project BRS 0229(2),3
Begin Approach



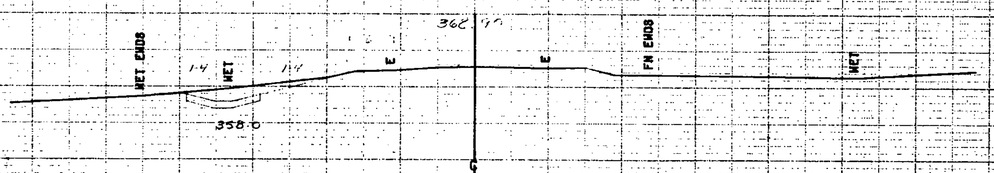

End Approach Detail
0 20 40
Scale in Feet

FROM STA. 29+00 TO STA. 30+00
PROJECT NAME FAIRFIELD MAIN PLOTTED (DATE/TIME)
CO. BRS-0229(2),3
SURVEYED BY DES
DRAWN BY DES
CHECKED BY
SCALE 1" = 10 Feet

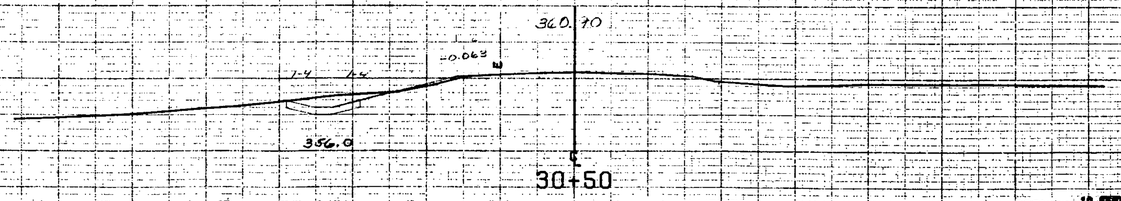



31+50

End Bituminous Concrete Overlay

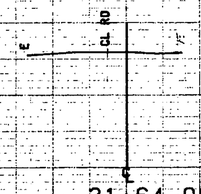



31+00




30+50

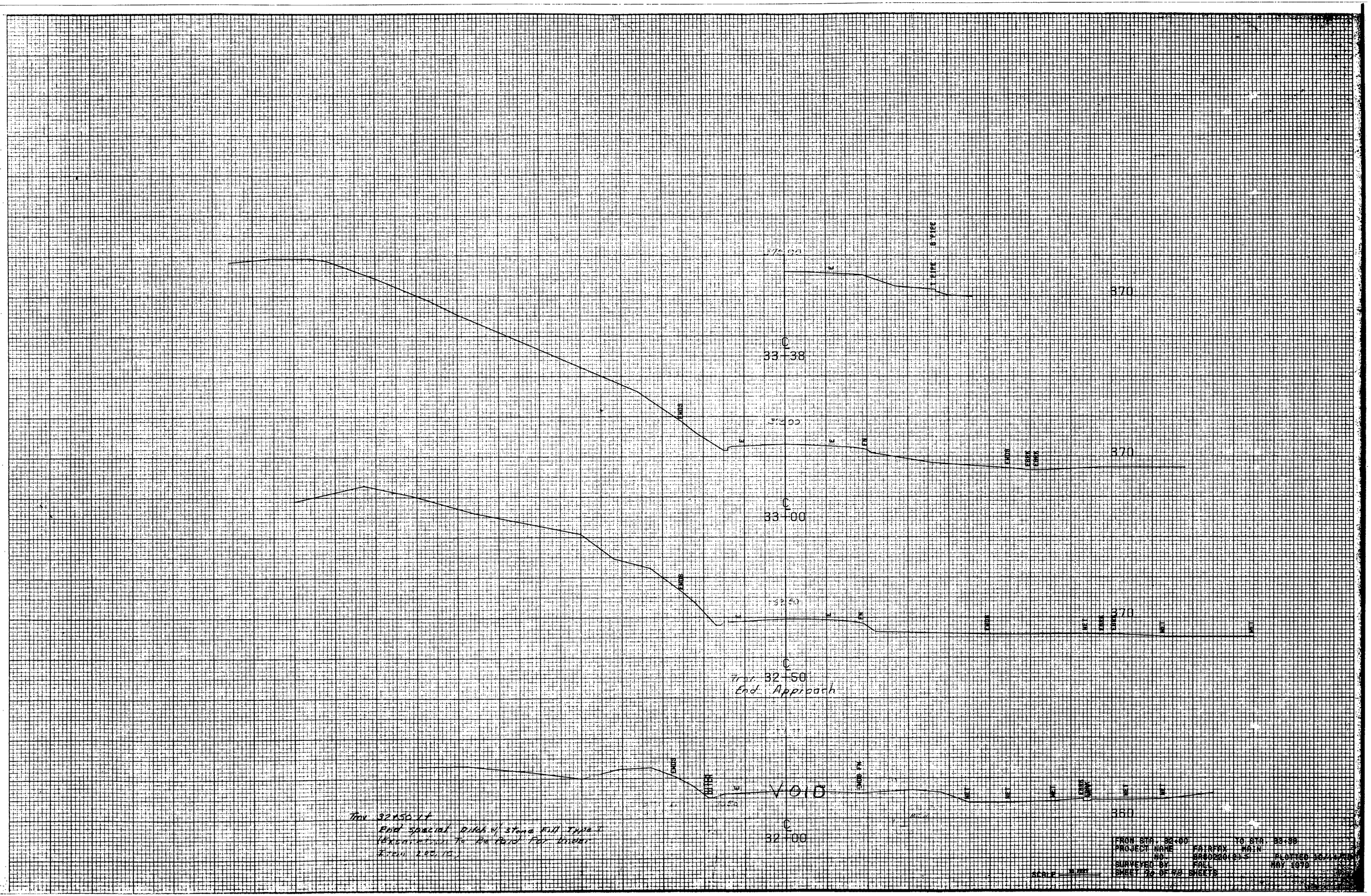
FROM STA. 30+50 TO STA. 31+50
PROJECT NAME FAIRFAX MAIN
NO. BR50223(2)S PLOTTED 04/07/81
SURVEYED BY FALL MARCH 1981
SHEET 26 OF 30 SHEETS
SCALE: 10 FEET

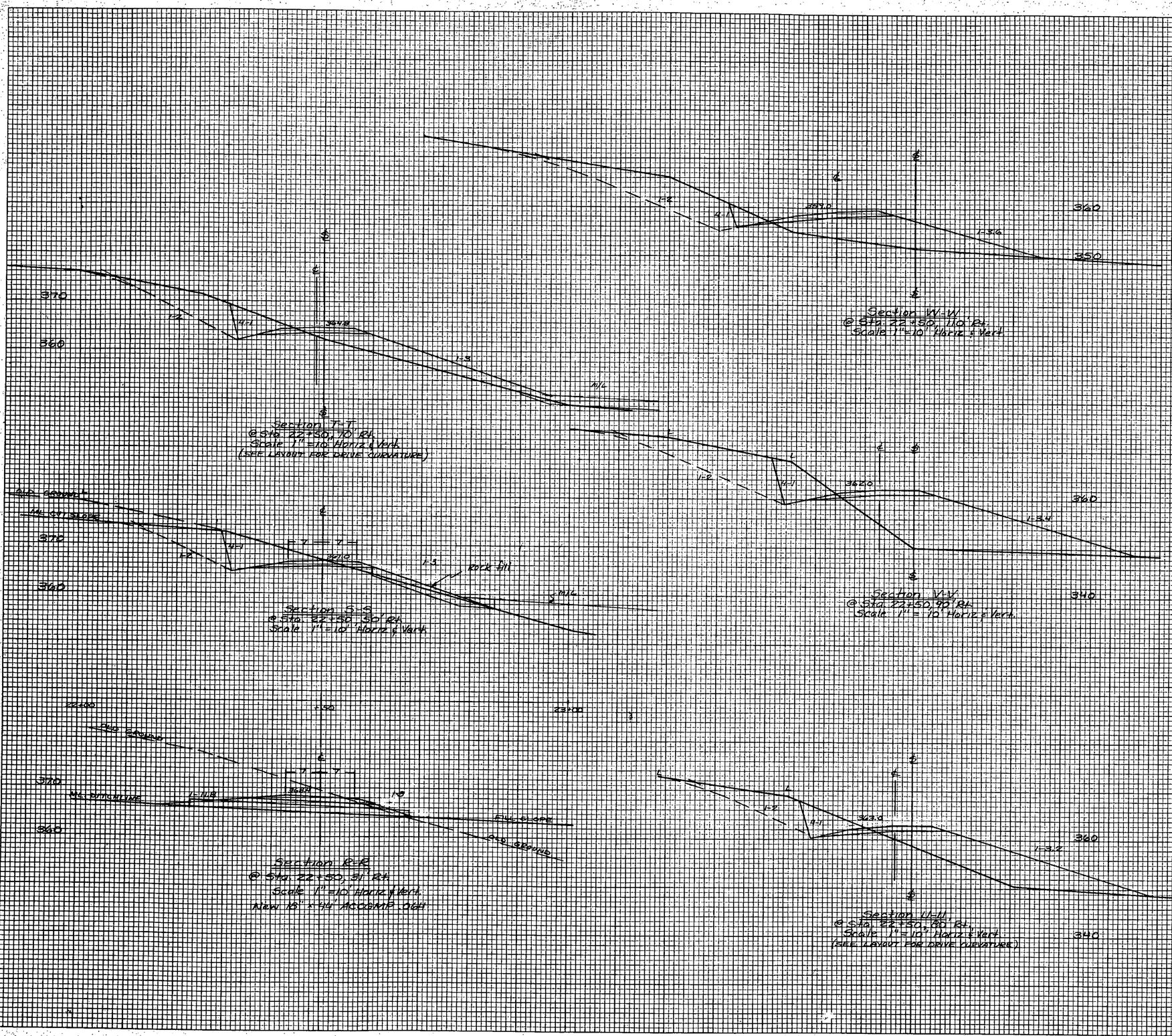



31+64.90 =
Trav 32+13.01 E Φ = 48.11'

360

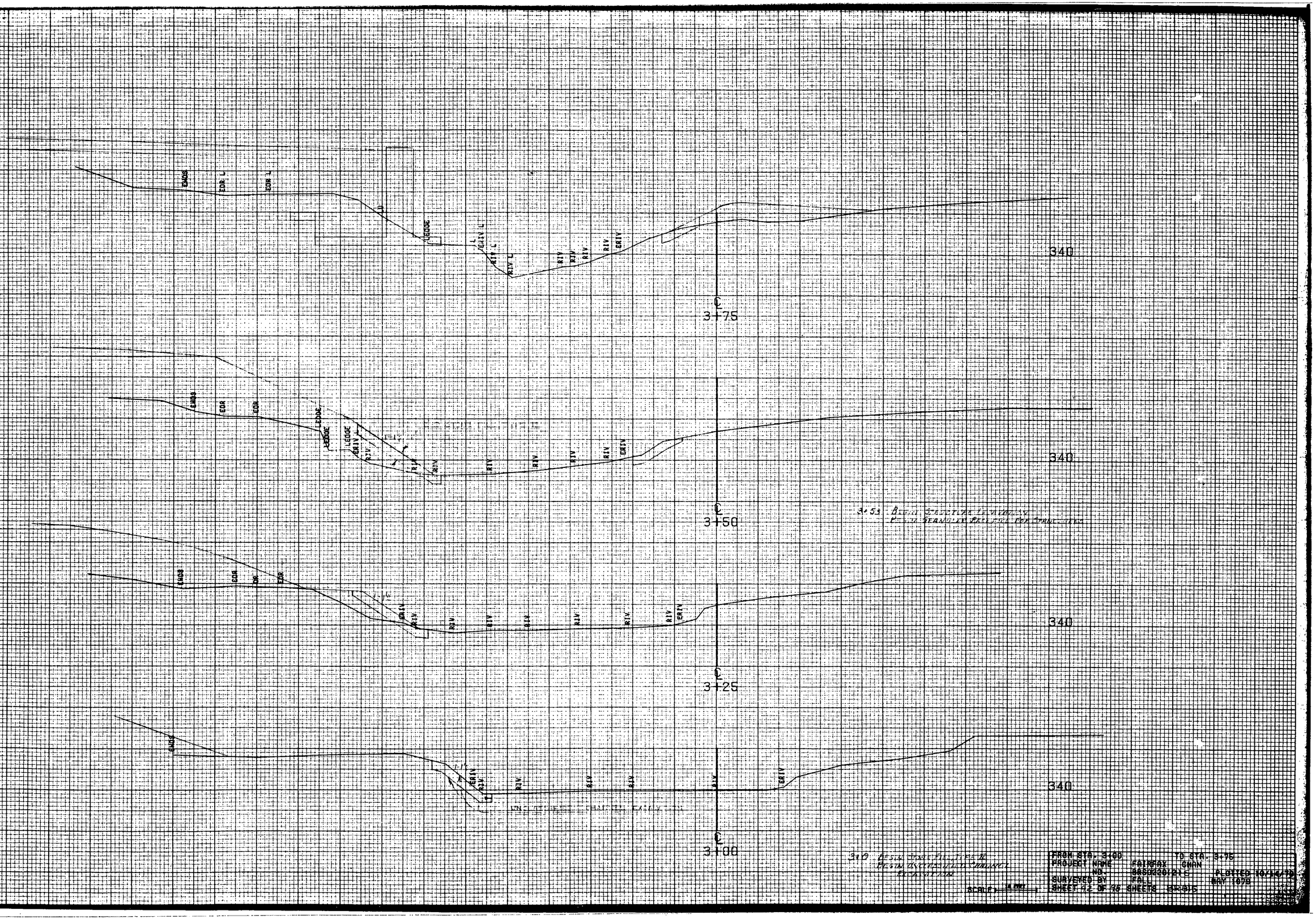
FROM STA. 31+64.90 TO STA.
PROJECT NAME FAIRFAX MAIN
NO. BRG0291213 PLOTTED 04/07/81
SURVEYED BY FALL MARCH 1981
SHEET 82 OF 98 SHEETS
SCALE 1" = 10 FEET


870
℄
33+38
370
℄
33+00
370
℄
32+50
End Approach
360
℄
32+00
From 32+50 LT
End Special Ditch w/ Stone Fill Type I
(Excavation To Be Paid For Under
Item 2.02.10.)
FROM STA. 32+00 TO STA. 33+99
PROJECT NAME FAIRFAX MAIN
NO. GR80280(01)S PLOTTED 10/14/80
SURVEYED BY FOLL MAY 1978
SHEET 26 OF 29 SHEETS
SCALE 1" = 50'




SURVEY PLOTTED
NOTE BOOK TEMPLATE
NO. AREAS
AREAS CHECKED

PLATE 3 CROSS SECTION O. P. R. & R. E. STANDARD
DIETZGEN CORPORATION

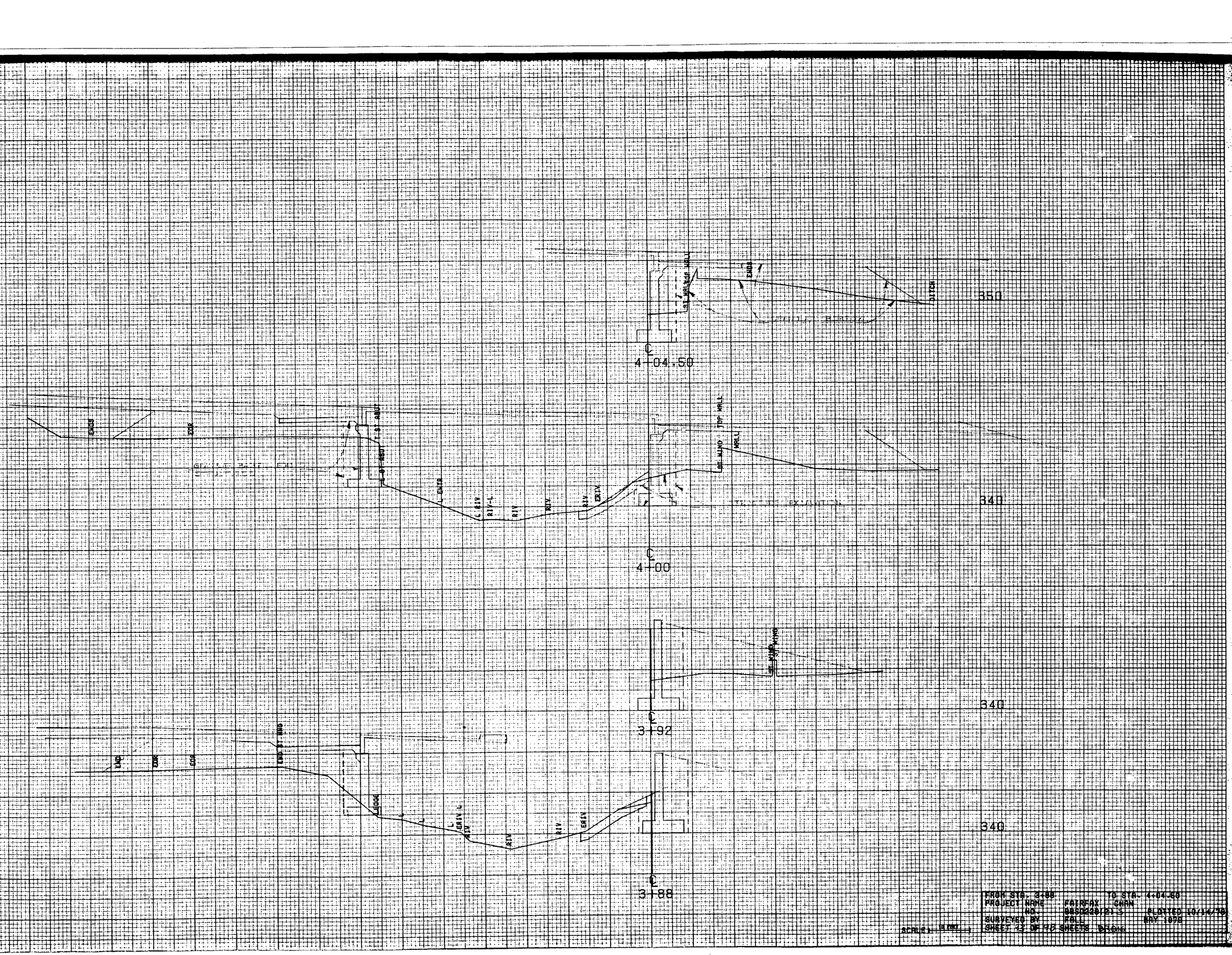


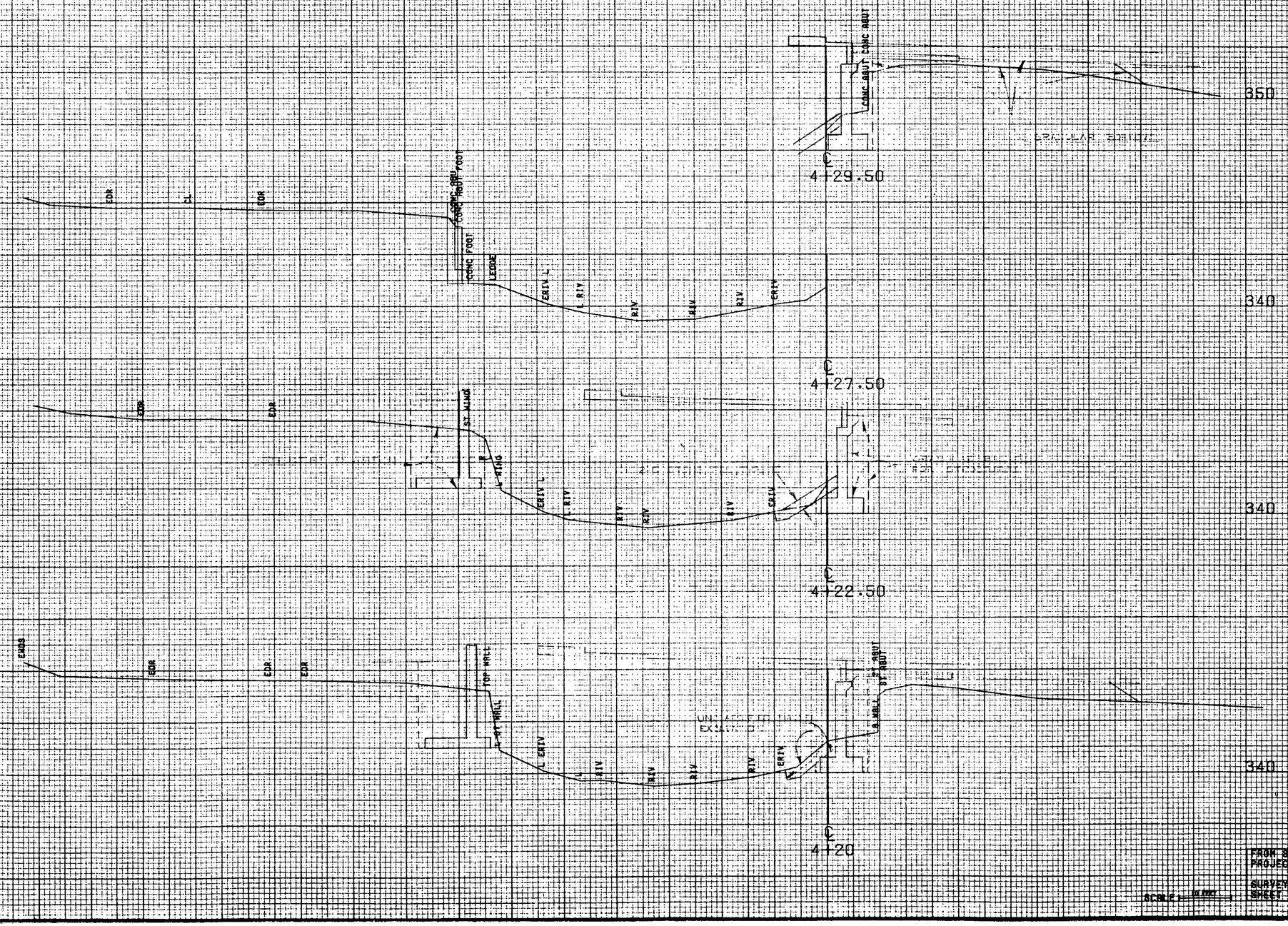

3.53 Basic Shoulder Treatment
Paved Standard Ballast for Structures

3.10 Basic Treatment for Fill Slopes
Basic Ditch and Shoulder
Elevation

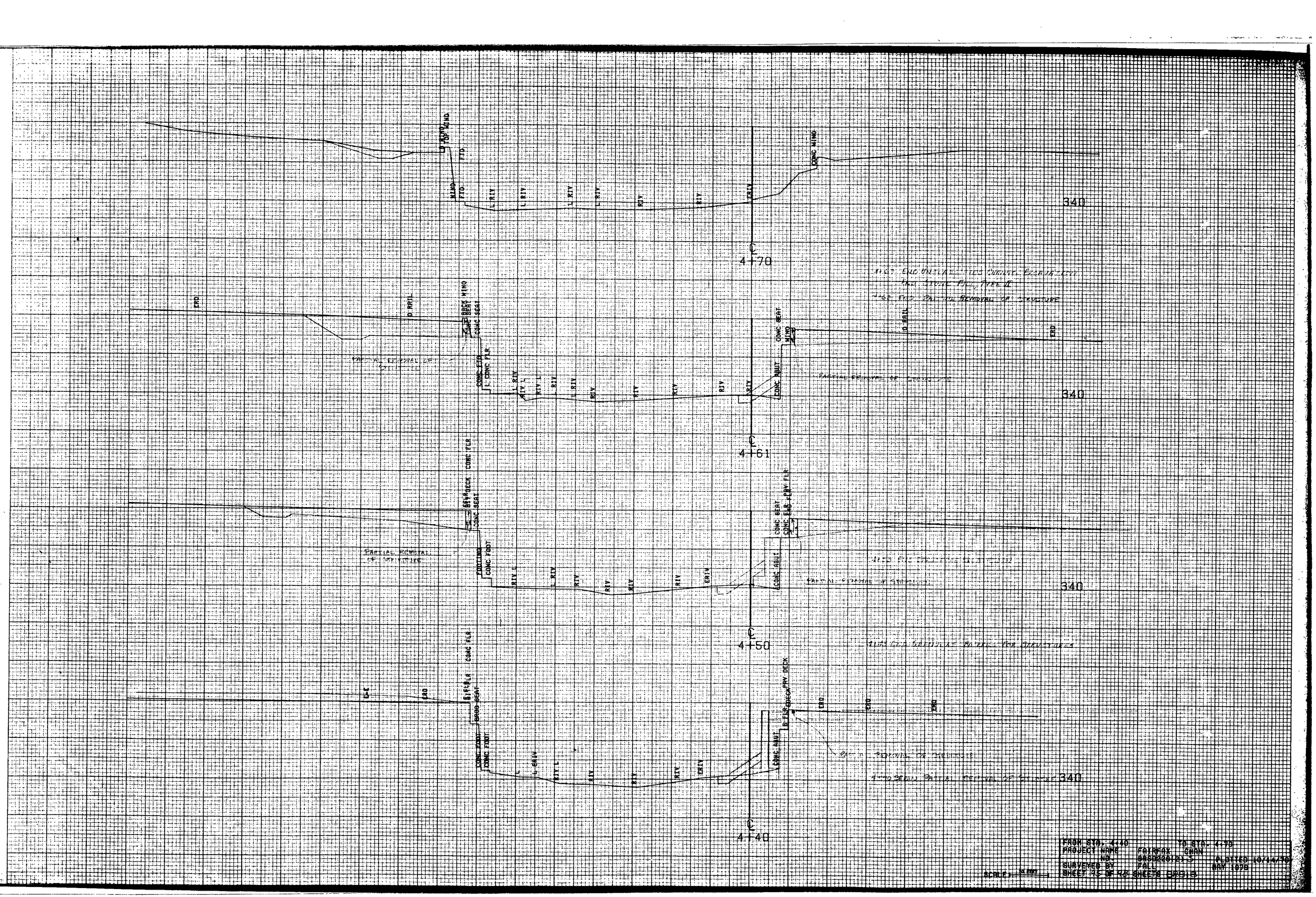
SCALE: 1 INCH

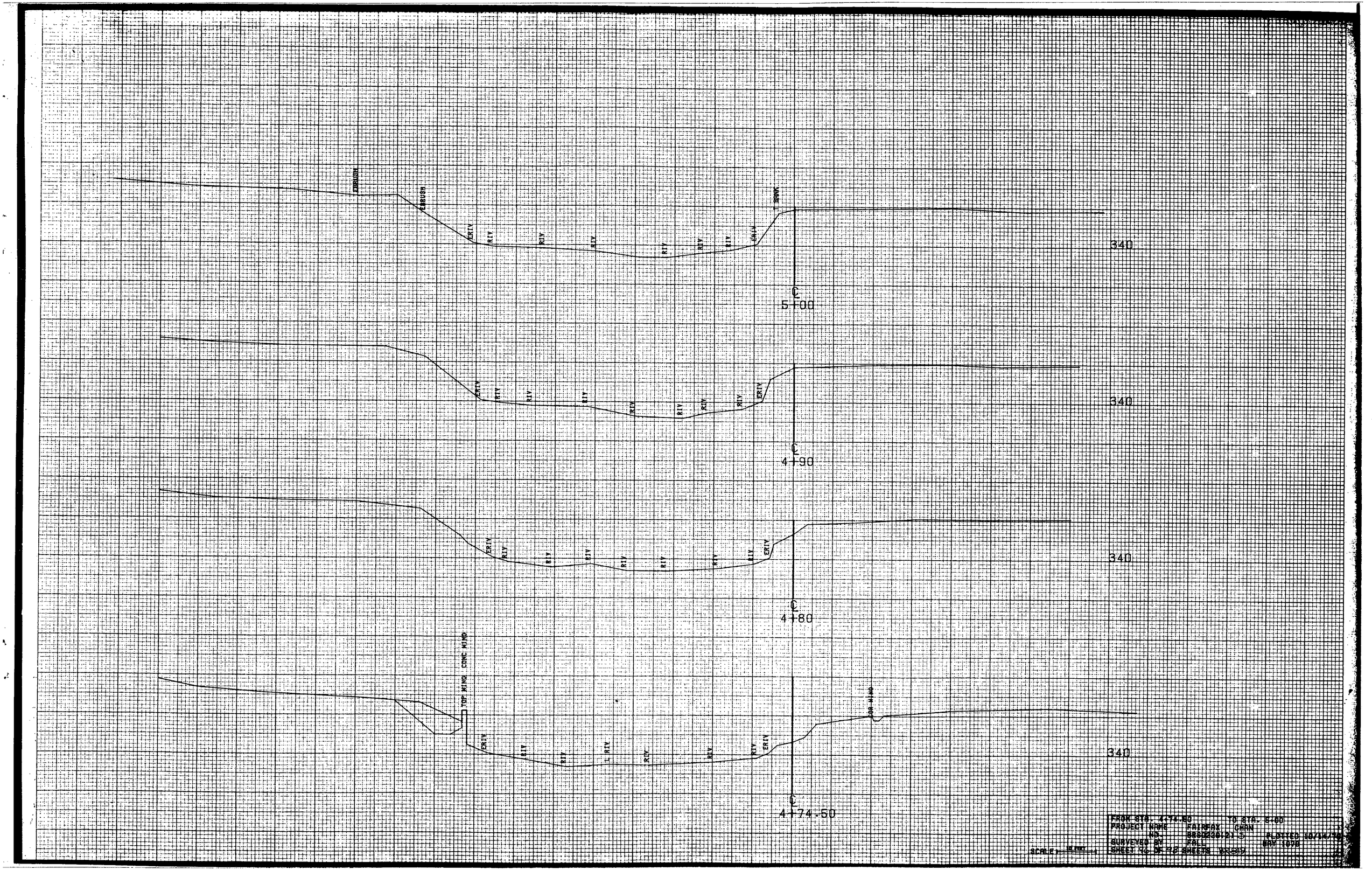
FROM STA. 3+00 TO STA. 3+75
PROJECT NAME FAIRFAX CNHW
NO. 0655(20)21E DATED 10/15/98
SURVEYED BY FCI BMW 1078
SHEET 12 OF 98 SHEETS BK-915

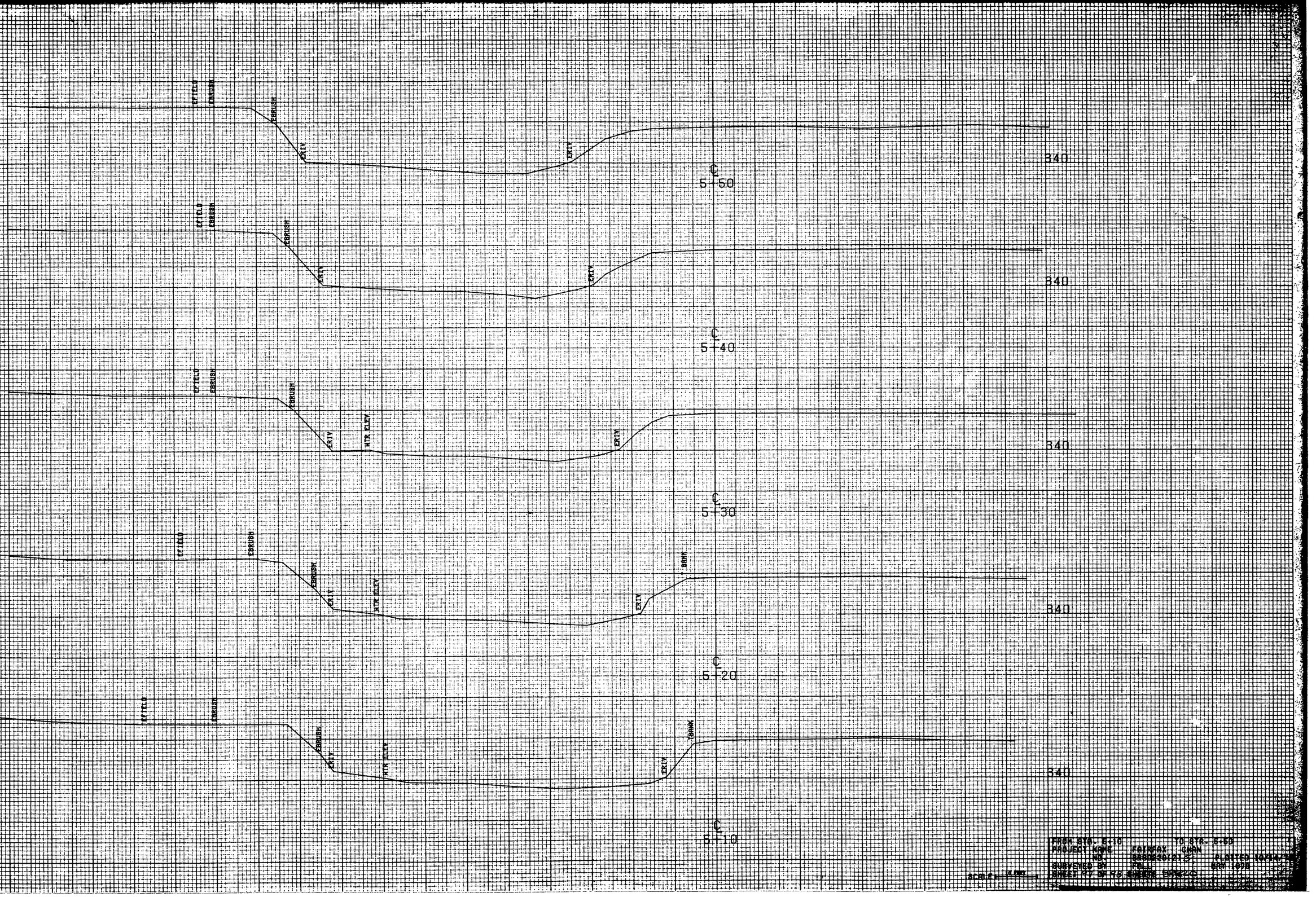

EXIST
EDGE
EXIST
EDGE
EXIST
EDGE

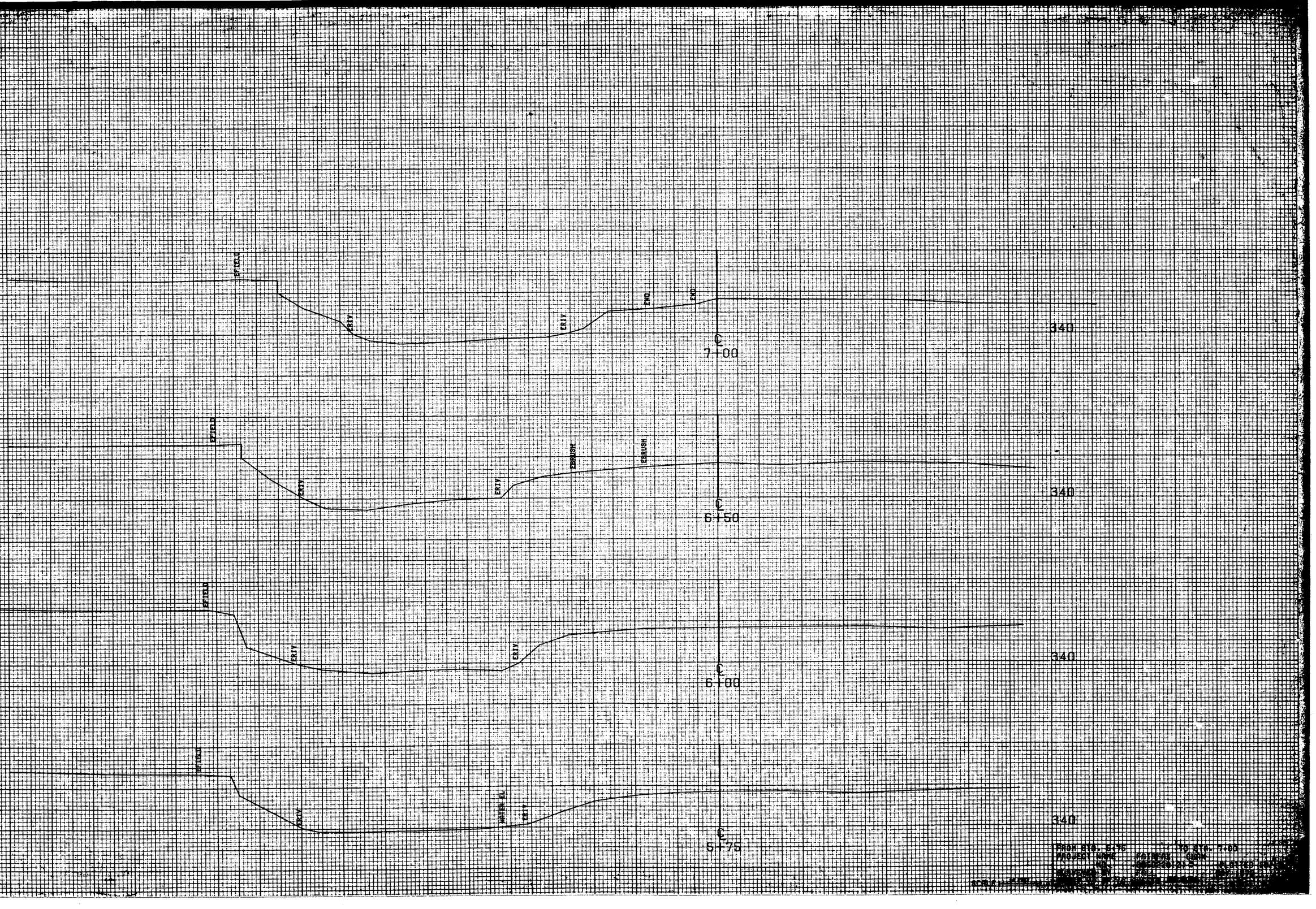



FROM STA. 4+20 TO STA. 4+29.50
PROJECT NAME FAIRFAX CMAN
NO. 8858238/215 PLOTTED 10/14/76
SURVEYED BY FAL MAY 1976
SHEET 22 OF 22 SHEETS DRAWN
SCALE 1" = 5'


4+70
4+61
4+50
4+40
340
340
340
340
END UNDER
CONC CURTAIN
CONC WING
CONC SEAT
CONC ABUT
CONC FOOT
CONC FLR
PRV DECK
R/V
L R/V
ERTH
D RAIL
END
PARTIAL REMOVAL OF STRUCTURE
PARTIAL REMOVAL OF STRUCTURE
PARTIAL REMOVAL OF STRUCTURE
PARTIAL REMOVAL OF STRUCTURE
FROM STA. 4+40
TO STA. 4+70
PROJECT NAME FAIRFAX CHAN
NO. 0650220121 S
PLOTTED 10/14/70
SURVEYED BY FALL
NOV 1970
SHEET 25 OF 48 SHEETS
SCALE


ERRUSH
ERRUSH
ERIV
RIV
RIV
RIV
RIV
RIV
RIV
ERIV
TSWK
340
5+00
℄
ERIV
RIV
RIV
RIV
RIV
RIV
RIV
RIV
ERIV
340
4+90
℄
ERIV
RIV
RIV
RIV
RIV
RIV
RIV
RIV
ERIV
340
4+80
℄
TOP WING
CONC WING
ERIV
RIV
RIV
RIV
RIV
RIV
RIV
ERIV
BOR WING
340
4+74.50
℄
FROM STA. 4+74.50 TO STA. 5+00
PROJECT NAME FAIRFAX CHAN
NO. 8850236121 S PLOTTED 10/14/94
SURVEYED BY FALL BRV 1078
SHEET 72 OF 78 SHEETS DRAWN
SCALE 1" = 5'


EFIELD
EBRUSH
EBRUSH
EXITY
EXITY
340
5+50
EFIELD
EBRUSH
EBRUSH
EXITY
EXITY
340
5+40
EFIELD
EBRUSH
EBRUSH
EXITY
MTR ELEV
EXITY
340
5+30
EFIELD
EBRUSH
EBRUSH
EXITY
MTR ELEV
BANK
EXITY
340
5+20
EFIELD
EBRUSH
EBRUSH
EXITY
MTR ELEV
BANK
EXITY
340
5+10


EP.EGL
ERIV
END
340
7+00
EP.EGL
ERIV
ERUSH
ERUSH
340
6+50
EP.EGL
ERIV
ERIV
340
6+00
EP.EGL
ERIV
WATER EL
ERIV
340
5+75